Pinoxaden

Pinoxaden – A Leaching Assessment for Parent and Metabolites M2, M3, M11, M52, M54, M55 and M56 using the PEARL 5.5.5, PELMO 6.6.4 and MACRO 5.5.4 Groundwater Models Following Spray Application to Winter and Spring Cereals

Modelling Assessment

TEST GUIDELINE(S): (EC) No. 1107/2009

AUTHOR(S): Vincenzo Padricello, Benjamin Jones and Martin Hilton

COMPLETION DATE: 25th January 2023

PERFORMING FACILITY: Exponent International Ltd.
The Lenz, Hornbeam Business Park
Harrogate, HG2 8RE, UK

PROJECT ID: Report Number: 2101400.UK0 – 6516a
Project Number: PI0017197
Syngenta Task Number: TK0534959

SPONSOR(S): Syngenta Ltd
Jealott's Hill International Research Centre
Bracknell, Berkshire, RG42 6EY, United Kingdom

STATEMENT OF DATA CONFIDENTIALITY CLAIMS

In accordance with Article 63 'Confidentiality', of Commission Regulation (EC) No 1107/2009 of 21 October 2009, this document contains information confidential and trade secret to Syngenta. It should not be released in any form to an outside party, nor should information contained herein be used by registration authority to support registration of any other product without written permission of Syngenta.

GENERAL INFORMATION

Contributors

The following contributed to this report in the capacities indicated:

Name	Title
Vincenzo Padricello	Modeller - Modelling
Benjamin Jones	Modeller - Modelling
Martin Hilton	Technical Lead – Environmental Fate

TABLE OF CONTENTS

1.0 SUMMARY

This report summarises the groundwater modelling results for pinoxaden and its metabolites M2, M3, M11, M52, M54, M55 and M56 following application to winter or spring cereals at a rate of either 45 or 60 g/ha at either growth stage BBCH 11 or BBCH 21. Groundwater modelling was performed considering simulations in acidic soil condition (Tier 1a) and neutral/ alkaline soil conditions (Tier 1b). All parameters are presented in a format compatible for use in a draft registration report (dRR).

2.0 GUIDELINES

The modelling simulations were carried out in accordance with the FOCUS groundwater scenarios workgroup guidelines:

EFSA (2014). Guidance Document for evaluating laboratory and field dissipation studies to obtain DegT50 values of active substances of plant protection products and transformation products of these active substances in soil. EFSA Journal, 12(5): 3662.

EC (2014). Assessing potential for movement of active substances and their metabolites to groundwater in the EU. Report of the FOCUS Groundwater Work Group, EC Document Reference Sanco/13144/2010 version 3, 613 pp.

FOCUS (2000). FOCUS groundwater scenarios in the EU review of active substances. Report of the FOCUS groundwater scenarios workgroup, EC document reference Sanco/321/2000 rev. 2, 202 pp.

FOCUS (2014). Generic guidance for Tier 1 FOCUS groundwater assessments, version 2.2 FOCUS groundwater scenarios working group.

FOCUS (2021). Generic Guidance for Tier 1 FOCUS Ground Water Assessments, Version: 2.3 Date: June 2021

GLP: Not applicable

3.0 MATERIALS AND METHODS

This report describes a FOCUS groundwater modelling study that examined the potential for pinoxaden and its metabolites M2, M3, M11, M52, M54, M55 and M56 to reach groundwater following application to winter or spring cereals. The FOCUS simulation models FOCUS PEARL (v5.5.5), FOCUS PELMO (v6.6.4) and MACRO (v5.5.4) were used in the modelling study.

A single foliar application made at a rate of 60 or 45 g a.s./ha, from BBCH 11 or BBCH 21 was considered. The input parameters relating to application are shown in Table 1.

Applications of pinoxaden were considered for the FOCUS scenarios Châteaudun, Hamburg, Jokioinen, Kremsmünster, Okehampton, Piacenza, Porto, Sevilla and Thiva in FOCUS PEARL and FOCUS PELMO. For FOCUS MACRO, only the scenario Châteaudun is defined. Application dates are presented in Table 2. The dates were selected with the tool AppDate (v3.06). For winter cereals, absolute dates for Châteaudun, Hamburg, Jokioinen, Kremsmünster, Okehampton and Piacenza were selected based on the end of winter dormancy of winter cereals corresponding to a spring application. For Porto, Sevilla and Thiva, a winter dormancy period is not implemented in AppDate hence the 1st March was selected as a representative application date for early spring applications. This selected date is earlier than for any of the other scenarios modelled for which a winter dormancy period is implemented in AppDate. AppDate was used for selection of an absolute date for spring cereals.

Simulations were carried out using the FOCUS standard crops of winter or spring cereals in FOCUS PEARL, FOCUS PELMO and FOCUS MACRO. Simulations were carried out over 26 years, as proposed by FOCUS for pesticides that are applied annually. The first 6 years are intended to be a

‘warm up’ period, thus the following 20 years were taken into account for the assessment of the leaching behaviour.

Table 1: Application patterns of Pinoxaden to Winter and Spring cereals used in modelling

Use No.	1	2	3	4	5	6	7	8
Crop	Winter Cereals	Spring Cereals	Winter Cereals	Spring Cereals	Winter Cereals	Spring Cereals	Winter Cereals	Spring Cereals
Application rate (g as/ha)	60	60	45	45	60	60	45	45
Number of applications/ interval (d)	1/-	1/-	1/-	1/-	1/-	1/-	1/-	1/-
BBCH growth stage	11	11	11	11	21	21	21	21
Crop interception (%)	0	0	0	0	20	20	20	20
Frequency of application	Annual	Annual	Annual	Annual	Annual	Annual	Annual	Annual
Models used for calculation	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4	FOCUS PEARL v5.5.5, FOCUS PELMO v6.6.4, MACRO v5.5.4

Table 2: Application dates of Pinoxaden to Winter and Spring Cereals used in modelling

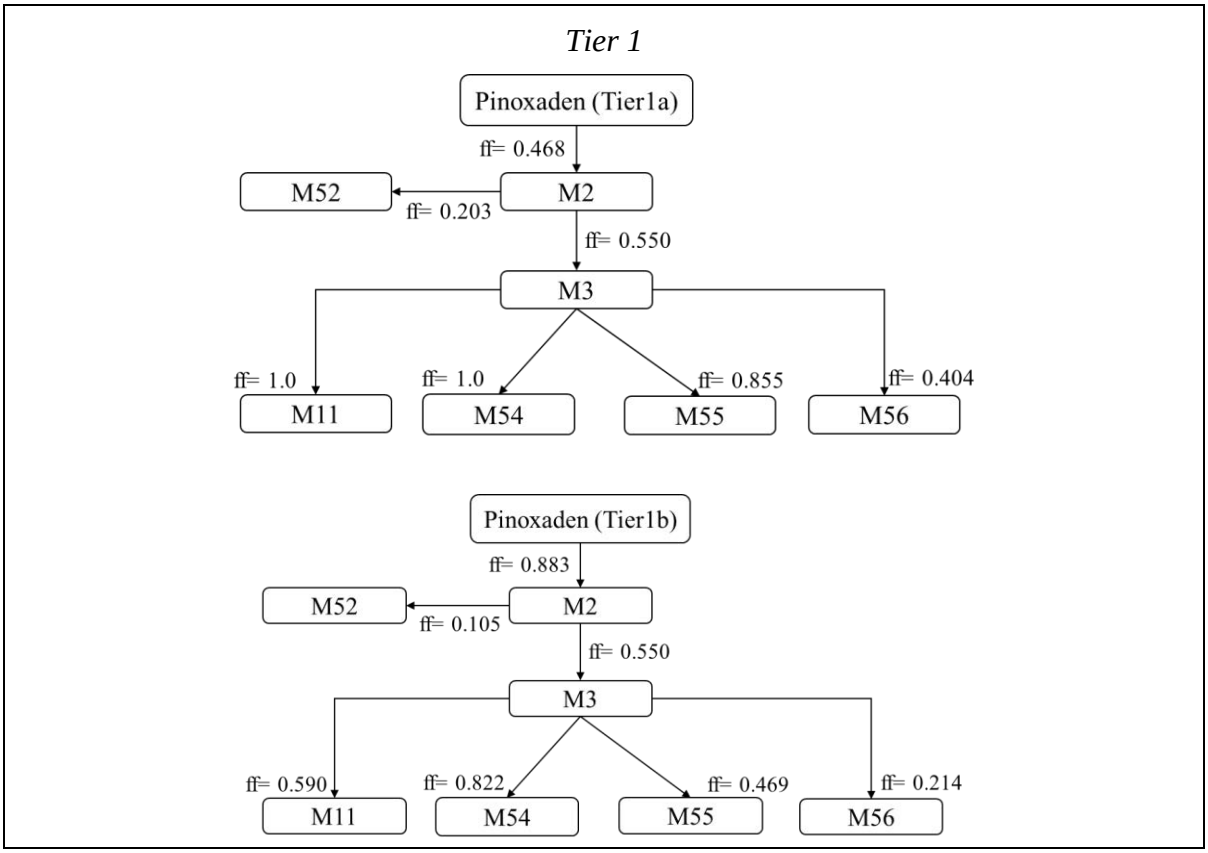
Crop	**Scenario**	**Application dates (absolute)**	
		BBCH 11	**BBCH 21**
Winter Cereals Use No.1, 3, 5, 7	Châteaudun	06 Apr (96)	06 Apr (96)
	Hamburg	25 Apr	25 Apr
	Jokioinen	05 May	05 May
	Kremsmünster	15 Apr	15 Apr
	Okehampton	12 Apr	12 Apr
	Piacenza	10 Mar	10 Mar
	Porto	01 Mar	01 Mar
	Sevilla	01 Mar	01 Mar
	Thiva	01 Mar	01 Mar

Crop	Scenario	Application dates (absolute)	
		BBCH 11	BBCH 21
Spring Cereals Use No.2, 4, 6, 8	Châteaudun	13 Mar (72)	31 Mar (90)
	Hamburg	03 Apr	16 Apr
	Jokioinen	20 May	28 May
	Kremsmünster	3 Apr	16 Apr
	Okehampton	3 Apr	13 Apr
	Porto	13 Mar	31 Mar

Note: Julian date in brackets

Groundwater modelling was performed considering simulations in acidic soil condition and neutral/ alkaline soil conditions at Tier 1a and Tier 1b, respectively. Schematic diagrams of the modelled route of degradation of pinoxaden in soil for those different tiers are shown in Figure 1. Although the modelled routes of degradation are the same in acidic and neutral/ basic soils the formation fractions differ for some metabolites.

Figure 1: Schematic diagram of the modelled routes of degradation of Pinoxaden for Tier 1a and 1b.



In FOCUS PELMO simulations, since at Tier 1a the metabolite M3 degrades to M55 and M56 with a worst-case molar formation fraction of 1 for each metabolite, Tier 1a has been divided in four different models to calculate PEC_{gw} of M11, M54, M55 and M56. Tier 1b was modelled in four different models as for Tier 1a. Figure 2 displays the four different degradation schemes implemented in modelling performed with FOCUS PELMO.

MACRO can only handle one parent compound and one metabolite in a single simulation, therefore, when the degradation pathway includes a chain of degradation where a metabolite is formed from another metabolite, the PEC_{gw} for the metabolite of concern is simulated by using its precursor metabolite as "parent" adjusting the applied dose by the ratio of molar masses and the molar formation fractions, see the equation 1 below:

(eq.1) $\text{Adjusted dose} = \text{Applied Dose} \times \left(1\text{-}\%CI^{1}\right) \times ff_{met,A} \times ff_{met,B} \times \left(Mw_{met,B} \div Mw_{par}\right)$

The application rates and simulations pathway used MACRO are presented in Table 3.

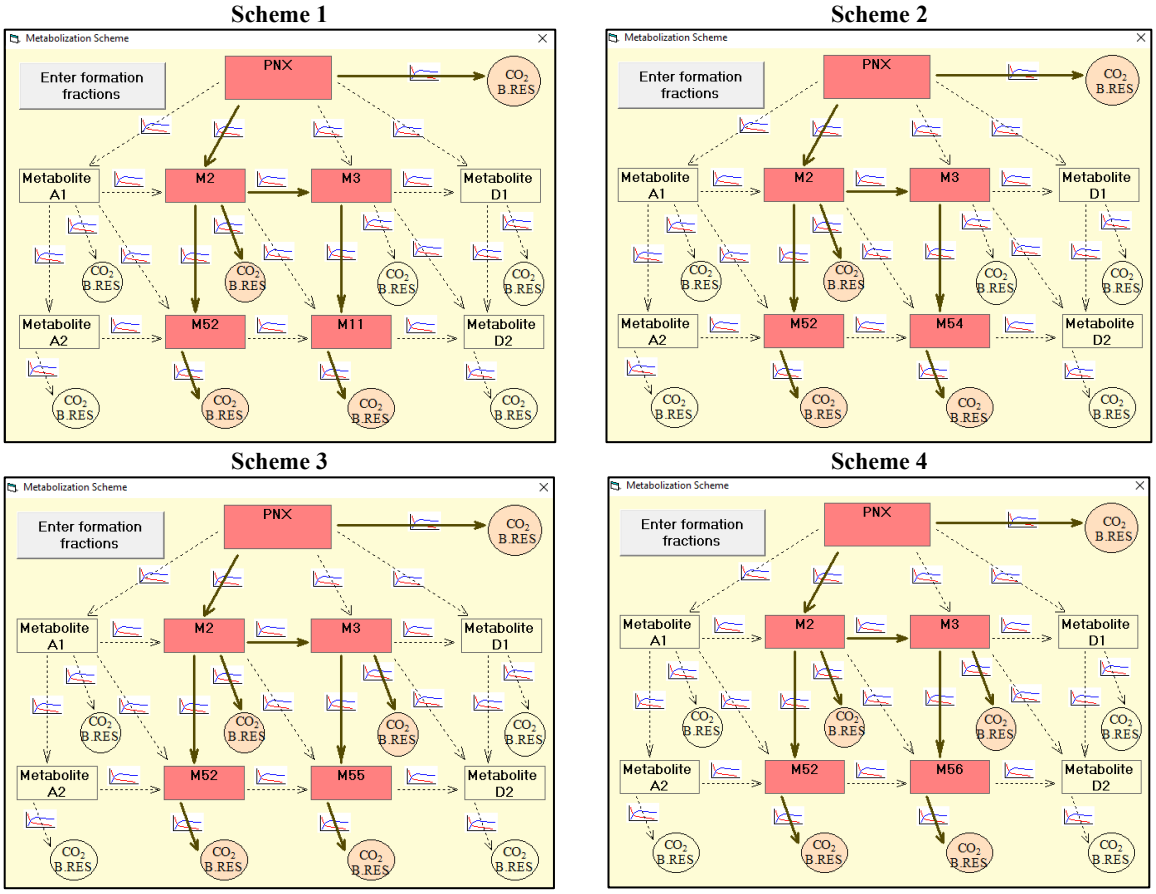
[1] CI = Crop Interception

Table 3: Simulation pathway used in MACRO 5.5.4 for Pinoxaden and its metabolites for Winter and Spring Cereals at BBCH11 and BBCH 21.

Tier(s)	Equivalent Application Rate, ($g_{a.s. \text{ or precursor metabolite}}$ / ha)	Simulation Pathway	Conversion factor	Used result for the compound of concern
Tier 1a	Use No. 1, 2 = 60 Use No. 3, 4 = 45 Use No. 5, 6 = 48 Use No. 7, 8 = 36	PXD → M2	0.370	Pinoxaden, M2
Tier 1b		PXD → M2	0.698	Pinoxaden, M2
Tier 1a	Use No. 1, 2 = 22.18 Use No. 3, 4 = 16.64 Use No. 5, 6 = 17.75 Use No. 7, 8 = 13.31	M2 → M3	0.578	M3
		M2 → M52	0.231	M52
	Use No. 1, 2 = 12.82 Use No. 3, 4 = 9.61 Use No. 5, 6 = 10.25 Use No. 7, 8 = 7.69	M3 → M11	1.090	M11
		M3 → M54	1.090	M54
		M3 → M55	0.968	M55
		M3 → M56	0.438	M56
Tier 1b	Use No. 1, 2 = 41.85 Use No. 3, 4 = 31.39 Use No. 5, 6 = 33.48 Use No. 7, 8 = 25.11	M2 → M3	0.578	M3
		M2 → M52	0.120	M52
	Use No. 1, 2 = 24.18 Use No. 3, 4 = 18.14 Use No. 5, 6 = 19.35 Use No. 7, 8 = 14.51	M3 → M11	0.643	M11
		M3 → M54	0.896	M54
		M3 → M55	0.531	M55
		M3 → M56	0.232	M56

Note: the equivalent application rate represents the simulation of a metabolite applied as parent but correcting the application dose by the formation of the metabolite from the parent and the ratio of molar masses. See equation 1 above.

Figure 2 - PELMO degradation schemes for Tier 1a and Tier 1b.



Note: In figure 2 is displayed the Tier 1a scheme

The input parameters of pinoxaden and its metabolites M2, M3, M11, M52, M54, M55 and M56 used in modelling are shown in Table 4, below. All other input values were set at the default values unless otherwise stated.

Table 4: Summary of input parameters for Pinoxaden, M2, M3, M11, M52, M54, M55 and M56 for PEC_{gw} calculations

Compound	Pinoxaden	M2	M3	M11	M52	M54	M55	M56	Comment
Molar mass (g/mol)	400.5	316.4	332.4	362.4	360.3	362.4	376.4	360.4	
Water solubility (mg/L) (at 25°C)	200	380000	370	1000	1000	1000	1000	1000	PXD: Das (2002a); M2: Das (2002b); M3: Das (2001); M11, M52, M54, M55, M56: default
Water solubility at 20°C (mg/L)[(a)]	166.1[(a)]	n.a	n.a	n.a	n.a	n.a	n.a	n.a	[(a)] PELMO input

Compound	Pinoxaden	M2	M3	M11	M52	M54	M55	M56	Comment
Water solubility at 30°C (mg/L)	332.2 (at 30°C)	n.a	n.a	n.a	n.a	n.a	n.a	n.a	PELMO input; 2 × water solubility at 20°C
Saturated vapour pressure at 20°C (Pa)	0	0	0	0	0	0	0	0	Worst case
Saturated vapour pressure at 30°C (Pa)	0	0	0	0	0	0	0	0	PELMO Input
DT_{50} in soil (d) lab/field	**Tier 1a:** pH <= 6.5: 1.15 d (geomean; lab; n = 4) **Tier 1b:** pH > 6.5: 0.216 d (geomean; lab; n= 14)	**Tier 1a/1b:** 3.39 days (geomean; field; n=6)	**Tier 1a/1b:** 39.6 days (geomean; field; n=9)	**Tier 1a/1b:** 11.7 days (geomean; lab; n = 3)	**Tier 1a/1b:** 8.43 days (geomean; lab; n = 3)	**Tier 1a/1b:** 7.52 days (geomean; lab; n = 3)	**Tier 1a/1b:** 16.4 days (geomean; lab; n = 3)	**Tier 1a/1b:** 72.1 days (geomean; lab; n = 3)	Pool et al. (2022)
Transformation rate	**Tier 1a** 0.282081 to M2 0.320656 to CO_2 **Tier 1b** 2.83356 to M2 0.375455 to CO_2	**Tier 1a** 0.041507 to M52 0.112458 to M3 0.050504 to CO_2 **Tier 1b** 0.112458 to M3 0.021469 to M52 0.070542 to CO_2	**Tier 1a** *0.017504 to M11 *0.017504 to M54 *[0.014966 to M55 0.002538 to CO_2] * [0.007072 to M56 0.010432 to CO_2] **Tier 1b** * [0.010327 to M11 0.007177 to CO_2] * [0.014388 to M54 0.003116 to CO_2] * [0.008209 to M55 0.009294 to CO_2] * [0.003746 to M56 0.013758 to CO_2]	**Tier 1a/1b** 0.059243 to CO_2	**Tier 1a/1b** 0.082224 to CO_2	**Tier 1a/1b** 0.092174 to CO_2	**Tier 1a/1b** 0.042265 to CO_2	**Tier 1a/1b** 0.009614 to CO_2	PELMO input – derived from DT50 and formation fraction

Compound	Pinoxaden	M2	M3	M11	M52	M54	M55	M56	Comment
Formation fraction	n.a.	**Tier 1a** (pH <= 6.5): 0.468 (from parent) **Tier 1b** (pH >6.5) 0.883 (from parent)	**Tier 1a/1b:** 0.550 (field; n=5; from M2)	**Tier 1a:** 1 **Tier 1b:** 0.590 (from M3)	**Tier 1a:** 0.203 **Tier 1b:** 0.105 (from M2)	**Tier 1a**: 1 **Tier 1b**: 0.822 (from M3)	**Tier 1a**: 0.855 **Tier 1b**: 0.469 (from M3)	**Tier 1a**: 0.404 **Tier 1b**: 0.214 (from M3)	
K_{foc} / [c]K_{fom} (mL/g)	132 / 76.6 (geomean; lab; n=5)	1.54 / 0.893 (geomean; lab; n=4)	32.1 / 18.6[d] (geomean; n=8)	5.71 / 3.31 (geomean; lab; n=3)	81.1 / 47.1 (geomean; lab; n=3)	7.96 / 4.62 (geomean; lab; n=3)	3.12 / 1.81 (geomean; lab; n=3)	13.5 / 7.83 (geomean; lab; n=3)	PXD: Button (2022); M2: Santos Kron (2022a); M3: Adam (2003), Spare (2003); M11: Santos Kron (2022b); M52: Kurlaviciene (2023); M54: Santos Kron (2022c); M55: Santos Kron (2022d); M56: Santos Kron (2022e)
1/n	1.06 (arithmetic mean; lab; n=4)	1.01 (arithmetic mean; lab; n=4)	0.96 (median, n=8)	0.96 (arithmetic mean; lab; n=3)	0.89 (arithmetic mean; lab; n=3)	0.92 (arithmetic mean; lab; n=3)	0.90 (arithmetic mean; lab; n=3)	0.92 (arithmetic mean; lab; n=3)	same as for K_{foc}
Plant uptake factor	0	0	0.784[b]	0	0	0	0	0	Default
Washoff Factor (1/m) (PEARL)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	Default
Foliar DT_{50} (d)	10^6	10^6	10^6	10^6	10^6	10^6	10^6	10^6	Default

[a] Refined from 25°C to 20 °C with EVA3 – Exposure Via Air (rev.2h of 20.09.2017)

[b] A reliable log Pow with a value of 1.8 can be derived for the metabolite M3 (Das, 2001; VV-381106). With this, the Briggs equation is applicable in line with FOCUS (2021). The TSCF calculates as: TSCF = 0.784 exp{(-[log(Pow) - 1.78]2 / 2.44)}. Using the log Pow value of 1.8 in the Briggs equation gives a calculated TSCF value of 0.784. This is the maximum value possible and so strongly indicates that plant uptake of M3 occurs. FOCUS (2021) does not explicitly specify a maximum value of 0.5 for the PUF. Therefore, even the maximum value of 0.784 can be considered in groundwater modelling.

n.a. not applicable

[C] Calculated as $K_{FOC} \div 1.724$

[d] Considering current guideline criteria for batch adsorption studies, the soils 'Plaza (ND loamy sand)' and 'Ephrata (WA sand)' from the study Spare (2003) are considered to have substantial deficiencies. Excluding these soils from the dataset would result in a geomean Kfoc value of 33.4 mL/g. The geomean Kfoc value of 32.1 mL/g used in this report is not expected to make a substantial difference to the modelling results.

*) These metabolites were run separately in PELMO modelling (M11 – Scheme 1, M54 Scheme 2, M55 -Scheme 3 and M56 Scheme 4). NOTE = In the square brackets It is represented the transformation rate from parent to metabolite and transformation rate of metabolite to the sink.

4.0 RESULTS

Predicted environmental concentrations for pinoxaden and its metabolites M2, M3, M11, M52, M54, M55 and M56 in groundwater (PEC_{GW}) were calculated for the use pinoxaden on winter and spring cereals in Europe in accordance with FOCUS guidelines (FOCUS, 2000, 2014, 2021).

PEC_{GW} results for the 80th percentile (at 1 m soil depth) generated by the FOCUS PEARL, FOCUS PELMO and MACRO simulations at Tier 1a are given from Table 5 to Table 16, and simulations at Tier 1b are given from Table 17 to Table 28. Summary tables of maximum PEC_{GW} across all models are presented in Table 29.

Table 5: Tier 1a – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Winter Cereals at BBCH 11 with application every year.

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	**M2**	**M3**	**M11**	**M52**	**M54**	**M55**	**M56**
Use No. 1 Winter Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.093	0.099	<0.001	0.037	0.165	0.485
	Hamburg	<0.001	<0.001	0.257	0.321	<0.001	0.125	0.496	0.703
	Jokioinen	<0.001	0.003	0.309	0.568	0.001	0.188	0.880	0.856
	Kremsmünster	<0.001	0.001	0.311	0.253	0.001	0.110	0.382	0.588
	Okehampton	<0.001	0.003	0.343	0.274	0.001	0.129	0.375	0.463
	Piacenza	<0.001	0.010	0.196	0.172	0.001	0.082	0.240	0.534
	Porto	<0.001	0.015	0.182	0.151	<0.001	0.068	0.212	0.386
	Sevilla	<0.001	<0.001	0.009	0.020	<0.001	0.006	0.032	0.151
	Thiva	<0.001	<0.001	0.035	0.044	<0.001	0.016	0.071	0.303
Use No. 3 Winter Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.069	0.073	<0.001	0.027	0.122	0.361
	Hamburg	<0.001	<0.001	0.191	0.240	<0.001	0.092	0.370	0.525
	Jokioinen	<0.001	0.003	0.228	0.423	<0.001	0.138	0.654	0.634
	Kremsmünster	<0.001	0.001	0.232	0.189	0.001	0.082	0.285	0.438
	Okehampton	<0.001	0.002	0.255	0.205	0.001	0.096	0.280	0.345
	Piacenza	<0.001	0.008	0.146	0.129	0.001	0.060	0.180	0.397
	Porto	<0.001	0.011	0.135	0.113	<0.001	0.050	0.157	0.287
	Sevilla	<0.001	<0.001	0.007	0.015	<0.001	0.004	0.024	0.112
	Thiva	<0.001	<0.001	0.026	0.033	<0.001	0.012	0.052	0.224

Table 6: **Tier 1a – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PEARL v5.5.5) on Winter Cereals at BBCH 11 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 1 Winter Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.122	0.135	<0.001	0.051	0.227	0.594
	Hamburg	<0.001	0.002	0.361	0.512	0.001	0.194	0.761	0.947
	Jokioinen	<0.001	0.002	0.332	0.613	<0.001	0.189	1.091	1.246
	Kremsmünster	<0.001	0.001	0.342	0.282	0.001	0.124	0.417	0.614
	Okehampton	<0.001	0.002	0.382	0.296	0.001	0.137	0.422	0.530
	Piacenza	<0.001	0.002	0.202	0.147	0.001	0.069	0.213	0.467
	Porto	<0.001	0.002	0.151	0.151	<0.001	0.062	0.250	0.426
	Sevilla	<0.001	<0.001	0.007	0.020	<0.001	0.005	0.033	0.132
	Thiva	<0.001	<0.001	0.035	0.050	<0.001	0.019	0.087	0.466
Use No. 3 Winter Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	< 0.001	0.090	0.101	<0.001	0.038	0.168	0.439
	Hamburg	<0.001	0.001	0.268	0.382	0.001	0.143	0.568	0.702
	Jokioinen	<0.001	0.001	0.245	0.454	<0.001	0.139	0.806	0.917
	Kremsmünster	<0.001	0.001	0.254	0.210	0.001	0.092	0.311	0.458
	Okehampton	<0.001	0.002	0.284	0.222	0.001	0.102	0.315	0.396
	Piacenza	<0.001	0.001	0.150	0.110	0.001	0.051	0.159	0.347
	Porto	<0.001	0.002	0.111	0.112	<0.001	0.045	0.185	0.314
	Sevilla	<0.001	<0.001	0.005	0.015	<0.001	0.004	0.024	0.099
	Thiva	<0.001	<0.001	0.026	0.037	<0.001	0.014	0.064	0.344

Table 7: **Tier 1a - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Winter Cereals at BBCH 11 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 1 Winter Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	< 0.001	0.084	0.069	0.017	0.024	0.123	0.419
Winter Cereals Use No. 3 (45 $g_{a.s}$ /ha)	Châteaudun	<0.001	< 0.001	0.062	0.051	0.013	0.018	0.091	0.310

Table 8: **Tier 1a – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Spring Cereals at BBCH 11 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 2 Spring Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.066	0.071	<0.001	0.028	0.120	0.364
	Hamburg	<0.001	<0.001	0.241	0.293	<0.001	0.112	0.455	0.680
	Jokioinen	<0.001	0.006	0.347	0.530	0.001	0.203	0.829	0.770
	Kremsmünster	<0.001	0.001	0.314	0.255	0.001	0.110	0.395	0.607
	Okehampton	<0.001	0.002	0.311	0.258	<0.001	0.121	0.355	0.424
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.132	0.119	<0.001	0.061	0.161	0.271
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 4 Spring Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.049	0.052	<0.001	0.020	0.089	0.270
	Hamburg	<0.001	<0.001	0.179	0.220	<0.001	0.083	0.339	0.507
	Jokioinen	<0.001	0.004	0.257	0.395	0.001	0.149	0.614	0.564
	Kremsmünster	<0.001	0.001	0.234	0.190	0.001	0.082	0.295	0.452
	Okehampton	<0.001	0.002	0.232	0.193	<0.001	0.090	0.265	0.317
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.099	0.090	<0.001	0.045	0.121	0.203
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

"-" scenario not relevant

Table 9: **Tier 1a – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PEARL v5.5.5) on Spring Cereals at BBCH 11 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 2 Spring Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.114	0.128	<0.001	0.049	0.210	0.487
	Hamburg	<0.001	0.001	0.359	0.551	0.001	0.210	0.885	1.122
	Jokioinen	<0.001	0.002	0.303	0.554	<0.001	0.184	0.942	0.973
	Kremsmünster	<0.001	0.001	0.311	0.269	<0.001	0.115	0.410	0.638
	Okehampton	<0.001	<0.001	0.290	0.269	<0.001	0.114	0.393	0.508
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.098	0.095	<0.001	0.045	0.136	0.288
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 4 Spring Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.084	0.095	<0.001	0.036	0.156	0.361
	Hamburg	<0.001	0.001	0.266	0.412	<0.001	0.155	0.659	0.835
	Jokioinen	<0.001	0.002	0.223	0.412	<0.001	0.136	0.691	0.719
	Kremsmünster	<0.001	<0.001	0.231	0.201	<0.001	0.086	0.306	0.476
	Okehampton	<0.001	<0.001	0.216	0.201	<0.001	0.085	0.294	0.379
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.074	0.071	<0.001	0.034	0.102	0.215
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

Table 10: **Tier 1a - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Spring Cereals at BBCH 11 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 2 Spring Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.109	0.075	<0.001	0.027	0.128	0.348
Spring Cereals Use No. 4 (45 $g_{a.s}$ /ha)	Châteaudun	<0.001	<0.001	0.081	0.056	<0.001	0.020	0.094	0.257

Table 11: **Tier 1a – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Winter Cereals at BBCH 21 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 5 Winter Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.074	0.078	<0.001	0.029	0.131	0.386
	Hamburg	<0.001	<0.001	0.204	0.256	<0.001	0.099	0.395	0.561
	Jokioinen	<0.001	0.003	0.244	0.452	<0.001	0.148	0.699	0.679
	Kremsmünster	<0.001	0.001	0.247	0.202	0.001	0.087	0.304	0.468
	Okehampton	<0.001	0.002	0.273	0.219	0.001	0.102	0.299	0.369
	Piacenza	<0.001	0.008	0.156	0.138	0.001	0.065	0.192	0.424
	Porto	<0.001	0.012	0.145	0.120	<0.001	0.054	0.168	0.307
	Sevilla	<0.001	<0.001	0.007	0.016	<0.001	0.005	0.025	0.120
	Thiva	<0.001	<0.001	0.028	0.035	<0.001	0.013	0.056	0.240
Use No. 7 Winter Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.054	0.058	<0.001	0.022	0.097	0.287
	Hamburg	<0.001	<0.001	0.151	0.192	<0.001	0.073	0.295	0.419
	Jokioinen	<0.001	0.002	0.181	0.337	<0.001	0.109	0.519	0.503
	Kremsmünster	<0.001	0.001	0.185	0.151	<0.001	0.065	0.227	0.349
	Okehampton	<0.001	0.002	0.203	0.164	<0.001	0.076	0.224	0.275
	Piacenza	<0.001	0.006	0.116	0.103	0.001	0.048	0.143	0.315
	Porto	<0.001	0.009	0.108	0.090	<0.001	0.040	0.124	0.228
	Sevilla	<0.001	<0.001	0.005	0.012	<0.001	0.003	0.019	0.089
	Thiva	<0.001	<0.001	0.021	0.026	<0.001	0.009	0.042	0.177

Table 12: **Tier 1a – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PEARL v5.5.5) on Winter Cereals at BBCH 21 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 5 Winter Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.096	0.108	<0.001	0.040	0.180	0.470
	Hamburg	<0.001	0.002	0.287	0.408	0.001	0.153	0.606	0.751
	Jokioinen	<0.001	0.001	0.262	0.486	<0.001	0.149	0.862	0.982
	Kremsmünster	<0.001	0.001	0.271	0.225	<0.001	0.098	0.332	0.489
	Okehampton	<0.001	0.002	0.304	0.236	0.001	0.109	0.336	0.423
	Piacenza	<0.001	0.002	0.161	0.117	0.001	0.055	0.170	0.371
	Porto	<0.001	0.002	0.119	0.120	< 0.001	0.049	0.198	0.336
	Sevilla	<0.001	<0.001	0.005	0.016	<0.001	0.004	0.026	0.105
	Thiva	<0.001	<0.001	0.028	0.040	<0.001	0.015	0.069	0.368
Use No. 7 Winter Cereals (45$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.071	0.080	<0.001	0.030	0.133	0.347
	Hamburg	<0.001	0.001	0.213	0.305	0.001	0.113	0.452	0.557
	Jokioinen	<0.001	0.001	0.193	0.359	<0.001	0.110	0.637	0.723
	Kremsmünster	<0.001	0.001	0.201	0.168	0.001	0.073	0.247	0.365
	Okehampton	<0.001	0.001	0.226	0.177	0.001	0.081	0.251	0.316
	Piacenza	<0.001	0.001	0.120	0.087	0.001	0.041	0.127	0.276
	Porto	<0.001	0.001	0.088	0.089	<0.001	0.036	0.146	0.248
	Sevilla	<0.001	<0.001	0.004	0.012	<0.001	0.003	0.019	0.079
	Thiva	<0.001	<0.001	0.021	0.030	<0.001	0.011	0.051	0.271

Table 13: **Tier 1a - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Winter Cereals at BBCH 21 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 5 Winter Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	< 0.001	0.066	0.055	0.014	0.019	0.097	0.331
Winter Cereals Use No. 7 (45 $g_{a.s}$ /ha)	Châteaudun	<0.001	< 0.001	0.049	0.041	0.010	0.014	0.072	0.245

Table 14: **Tier 1a – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Spring Cereals at BBCH 21 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 6 Spring Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.052	0.056	<0.001	0.022	0.095	0.288
	Hamburg	<0.001	<0.001	0.191	0.234	<0.001	0.088	0.363	0.542
	Jokioinen	<0.001	0.005	0.275	0.422	0.001	0.160	0.657	0.605
	Kremsmünster	<0.001	0.001	0.250	0.203	0.001	0.088	0.315	0.483
	Okehampton	<0.001	0.002	0.247	0.206	<0.001	0.096	0.283	0.339
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.106	0.096	<0.001	0.048	0.129	0.217
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 8 Spring Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.038	0.042	<0.001	0.016	0.071	0.214
	Hamburg	<0.001	<0.001	0.142	0.175	<0.001	0.066	0.270	0.404
	Jokioinen	<0.001	0.004	0.204	0.314	0.001	0.118	0.487	0.443
	Kremsmünster	<0.001	0.001	0.186	0.152	<0.001	0.065	0.235	0.358
	Okehampton	<0.001	0.001	0.184	0.154	<0.001	0.072	0.212	0.254
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.079	0.072	<0.001	0.036	0.097	0.162
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

"-" scenario not relevant

Table 15: **Tier 1a - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with PEARL v5.5.5) for Spring Cereals at BBCH 21 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 6 Spring Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.083	0.097	<0.001	0.036	0.161	0.388
	Hamburg	<0.001	0.001	0.290	0.465	0.001	0.172	0.733	0.918
	Jokioinen	<0.001	0.003	0.276	0.468	0.001	0.157	0.771	0.788
	Kremsmünster	<0.001	0.001	0.265	0.231	0.001	0.097	0.343	0.520
	Okehampton	<0.001	<0.001	0.254	0.212	<0.001	0.094	0.315	0.410
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	<0.001	0.079	0.086	<0.001	0.037	0.131	0.248
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 8 Spring Cereals (45$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.061	0.072	<0.001	0.026	0.120	0.287
	Hamburg	<0.001	0.001	0.215	0.348	0.001	0.127	0.542	0.682
	Jokioinen	<0.001	0.002	0.203	0.347	0.001	0.116	0.565	0.582
	Kremsmünster	<0.001	<0.001	0.197	0.173	0.001	0.072	0.256	0.388
	Okehampton	<0.001	<0.001	0.189	0.159	<0.001	0.070	0.235	0.306
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	<0.001	0.059	0.065	<0.001	0.027	0.098	0.185
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

Table 16: **Tier 1a - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Spring Cereals at BBCH 21 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 6 Spring Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.065	0.052	<0.001	0.018	0.091	0.270
Spring Cereals Use No. 8 (45 $g_{a.s}$ /ha)	Châteaudun	<0.001	<0.001	0.048	0.039	<0.001	0.014	0.068	0.200

Table 17: **Tier 1b – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Winter Cereals at BBCH 11 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 1 Winter Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.178	0.106	<0.001	0.057	0.167	0.475
	Hamburg	<0.001	<0.001	0.477	0.341	<0.001	0.186	0.491	0.682
	Jokioinen	<0.001	0.006	0.568	0.629	0.001	0.298	0.890	0.835
	Kremsmünster	<0.001	0.003	0.544	0.282	0.001	0.173	0.394	0.574
	Okehampton	<0.001	0.005	0.602	0.296	0.001	0.196	0.382	0.453
	Piacenza	<0.001	0.016	0.358	0.178	0.001	0.118	0.233	0.518
	Porto	<0.001	0.030	0.357	0.167	<0.001	0.103	0.216	0.376
	Sevilla	<0.001	<0.001	0.017	0.022	<0.001	0.009	0.033	0.148
	Thiva	<0.001	<0.001	0.071	0.050	<0.001	0.026	0.075	0.304
Use No. 3 Winter Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.132	0.079	<0.001	0.042	0.124	0.354
	Hamburg	<0.001	<0.001	0.353	0.255	<0.001	0.138	0.366	0.510
	Jokioinen	<0.001	0.004	0.420	0.468	<0.001	0.218	0.661	0.619
	Kremsmünster	<0.001	0.002	0.405	0.210	<0.001	0.128	0.294	0.428
	Okehampton	<0.001	0.004	0.448	0.222	<0.001	0.146	0.285	0.338
	Piacenza	<0.001	0.012	0.266	0.133	0.001	0.087	0.174	0.386
	Porto	<0.001	0.022	0.265	0.125	<0.001	0.076	0.161	0.279
	Sevilla	<0.001	<0.001	0.013	0.016	<0.001	0.007	0.024	0.109
	Thiva	<0.001	<0.001	0.052	0.037	<0.001	0.019	0.055	0.225

Table 18: **Tier 1b – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PEARL v5.5.5) on Winter Cereals at BBCH 11 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 1 Winter Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.236	0.153	<0.001	0.084	0.237	0.586
	Hamburg	<0.001	0.003	0.673	0.571	0.001	0.302	0.784	0.938
	Jokioinen	<0.001	0.003	0.631	0.670	<0.001	0.293	1.115	1.238
	Kremsmünster	<0.001	0.003	0.621	0.306	0.001	0.190	0.424	0.609
	Okehampton	<0.001	0.003	0.688	0.327	<0.001	0.212	0.433	0.523
	Piacenza	<0.001	0.003	0.397	0.162	0.001	0.109	0.222	0.462
	Porto	<0.001	0.003	0.276	0.167	<0.001	0.095	0.257	0.427
	Sevilla	<0.001	< 0.001	0.012	0.022	<0.001	0.008	0.032	0.128
	Thiva	<0.001	< 0.001	0.075	0.060	<0.001	0.033	0.094	0.463
Use No. 3 Winter Cereals (45$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.174	0.114	<0.001	0.062	0.176	0.433
	Hamburg	<0.001	0.002	0.500	0.426	0.001	0.223	0.585	0.696
	Jokioinen	<0.001	0.002	0.465	0.496	<0.001	0.216	0.824	0.911
	Kremsmünster	<0.001	0.002	0.461	0.228	0.001	0.141	0.316	0.454
	Okehampton	<0.001	0.003	0.511	0.245	0.001	0.158	0.324	0.391
	Piacenza	<0.001	0.003	0.295	0.121	0.001	0.081	0.166	0.343
	Porto	<0.001	0.002	0.204	0.125	<0.001	0.070	0.191	0.315
	Sevilla	<0.001	< 0.001	0.009	0.016	<0.001	0.006	0.024	0.095
	Thiva	<0.001	< 0.001	0.056	0.045	<0.001	0.024	0.070	0.342

Table 19: **Tier 1b - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Winter Cereals at BBCH 11 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 1 Winter Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	< 0.001	0.164	0.078	0.008	0.038	0.128	0.418
Winter Cereals Use No. 3 (45 $g_{a.s}$ /ha)	Châteaudun	<0.001	< 0.001	0.121	0.058	0.006	0.028	0.095	0.309

Table 20: **Tier 1b – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Spring Cereals at BBCH 11 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	**M2**	**M3**	**M11**	**M52**	**M54**	**M55**	**M56**
Use No. 2 Spring Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.176	0.096	<0.001	0.041	0.143	0.377
	Hamburg	<0.001	0.001	0.444	0.318	<0.001	0.185	0.452	0.624
	Jokioinen	<0.001	0.014	0.651	0.624	0.001	0.296	0.872	0.767
	Kremsmünster	<0.001	0.002	0.509	0.241	<0.001	0.167	0.353	0.562
	Okehampton	<0.001	0.004	0.573	0.269	<0.001	0.180	0.351	0.429
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.013	0.283	0.138	<0.001	0.144	0.171	0.264
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 4 Spring Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.131	0.072	<0.001	0.030	0.107	0.281
	Hamburg	<0.001	<0.001	0.330	0.239	<0.001	0.137	0.338	0.466
	Jokioinen	<0.001	0.011	0.482	0.466	<0.001	0.217	0.647	0.567
	Kremsmünster	<0.001	0.002	0.379	0.181	<0.001	0.124	0.263	0.419
	Okehampton	<0.001	0.003	0.427	0.201	<0.001	0.134	0.263	0.320
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.009	0.210	0.104	<0.001	0.107	0.128	0.199
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

"-" scenario not relevant

Table 21: **Tier 1b – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PEARL v5.5.5) on Spring Cereals at BBCH 11 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 2 Spring Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.225	0.146	<0.001	0.080	0.218	0.478
	Hamburg	<0.001	0.001	0.691	0.597	<0.001	0.322	0.892	1.100
	Jokioinen	<0.001	0.004	0.573	0.615	<0.001	0.289	0.960	0.962
	Kremsmünster	<0.001	0.001	0.599	0.292	<0.001	0.181	0.416	0.629
	Okehampton	<0.001	0.001	0.550	0.291	<0.001	0.184	0.395	0.504
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.002	0.180	0.103	<0.001	0.069	0.134	0.281
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 4 Spring Cereals (45$g_{a.s.}$/ha)	Châteaudun	<0.001	< 0.001	0.166	0.109	<0.001	0.059	0.162	0.354
	Hamburg	<0.001	0.001	0.511	0.446	<0.001	0.238	0.665	0.818
	Jokioinen	<0.001	0.003	0.422	0.458	<0.001	0.213	0.704	0.712
	Kremsmünster	<0.001	0.001	0.446	0.218	<0.001	0.135	0.310	0.469
	Okehampton	<0.001	0.001	0.410	0.218	<0.001	0.137	0.295	0.376
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.134	0.077	<0.001	0.051	0.100	0.211
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

Table 22: **Tier 1b - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Spring Cereals at BBCH 11 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 2 Spring Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.213	0.085	<0.001	0.043	0.133	0.348
Spring Cereals Use No. 4 (45 $g_{a.s}$ /ha)	Châteaudun	<0.001	<0.001	0.158	0.063	<0.001	0.030	0.099	0.257

Table 23: **Tier 1b – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Winter Cereals at BBCH 21 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 5 Winter Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.141	0.085	<0.001	0.045	0.132	0.378
	Hamburg	<0.001	<0.001	0.378	0.272	<0.001	0.148	0.391	0.544
	Jokioinen	<0.001	0.005	0.449	0.500	<0.001	0.234	0.706	0.662
	Kremsmünster	<0.001	0.002	0.433	0.225	<0.001	0.137	0.314	0.457
	Okehampton	<0.001	0.004	0.479	0.237	<0.001	0.156	0.304	0.361
	Piacenza	<0.001	0.013	0.284	0.142	0.001	0.093	0.186	0.412
	Porto	<0.001	0.024	0.283	0.133	<0.001	0.082	0.172	0.299
	Sevilla	<0.001	<0.001	0.014	0.017	<0.001	0.007	0.026	0.117
	Thiva	<0.001	<0.001	0.056	0.040	<0.001	0.021	0.059	0.241
Use No. 7 Winter Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.104	0.063	<0.001	0.033	0.098	0.281
	Hamburg	<0.001	<0.001	0.280	0.204	<0.001	0.109	0.292	0.406
	Jokioinen	<0.001	0.003	0.332	0.373	<0.001	0.172	0.524	0.490
	Kremsmünster	<0.001	0.002	0.323	0.168	<0.001	0.102	0.235	0.341
	Okehampton	<0.001	0.003	0.356	0.177	<0.001	0.116	0.227	0.270
	Piacenza	<0.001	0.010	0.212	0.106	0.001	0.069	0.139	0.306
	Porto	<0.001	0.018	0.211	0.100	<0.001	0.060	0.128	0.222
	Sevilla	<0.001	<0.001	0.010	0.013	<0.001	0.005	0.019	0.086
	Thiva	<0.001	<0.001	0.041	0.030	<0.001	0.015	0.044	0.178

Table 24: **Tier 1b – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PEARL v5.5.5) on Winter Cereals at BBCH 21 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 5 Winter Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.186	0.122	<0.001	0.066	0.188	0.463
	Hamburg	<0.001	0.002	0.534	0.455	0.001	0.239	0.625	0.744
	Jokioinen	<0.001	0.002	0.498	0.530	<0.001	0.232	0.882	0.975
	Kremsmünster	<0.001	0.002	0.493	0.244	0.001	0.151	0.337	0.485
	Okehampton	<0.001	0.003	0.547	0.262	0.001	0.169	0.346	0.417
	Piacenza	<0.001	0.003	0.315	0.129	0.001	0.086	0.177	0.367
	Porto	<0.001	0.003	0.218	0.133	<0.001	0.075	0.204	0.337
	Sevilla	<0.001	<0.001	0.010	0.017	<0.001	0.006	0.026	0.102
	Thiva	<0.001	<0.001	0.059	0.048	<0.001	0.026	0.074	0.366
Use No. 7 Winter Cereals (45$g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.137	0.091	<0.001	0.049	0.140	0.342
	Hamburg	<0.001	0.002	0.397	0.340	0.001	0.176	0.466	0.551
	Jokioinen	<0.001	0.002	0.368	0.392	<0.001	0.171	0.651	0.717
	Kremsmünster	<0.001	0.002	0.366	0.182	<0.001	0.112	0.251	0.362
	Okehampton	<0.001	0.002	0.407	0.196	<0.001	0.125	0.259	0.311
	Piacenza	<0.001	0.002	0.234	0.097	0.001	0.064	0.132	0.273
	Porto	<0.001	0.002	0.161	0.099	<0.001	0.055	0.151	0.248
	Sevilla	<0.001	<0.001	0.007	0.013	<0.001	0.005	0.019	0.076
	Thiva	<0.001	<0.001	0.044	0.036	<0.001	0.019	0.055	0.270

Table 25: **Tier 1b - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Winter Cereals at BBCH 21 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 5 Winter Cereals (60$g_{a.s.}$/ha)	Châteaudun	<0.001	< 0.001	0.130	0.062	0.006	0.030	0.101	0.331
Winter Cereals Use No. 7 (45 $g_{a.s}$ /ha)	Châteaudun	<0.001	< 0.001	0.096	0.046	0.005	0.022	0.075	0.245

Table 26: **Tier 1b – PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54 M55, M56 (with FOCUS PELMO v6.6.4) on Spring Cereals at BBCH 21 with application every year.**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 6 Spring Cereals (60 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.108	0.064	<0.001	0.034	0.100	0.287
	Hamburg	<0.001	<0.001	0.353	0.246	<0.001	0.133	0.357	0.526
	Jokioinen	<0.001	0.007	0.480	0.447	0.001	0.235	0.653	0.588
	Kremsmünster	<0.001	0.002	0.444	0.229	<0.001	0.133	0.322	0.471
	Okehampton	<0.001	0.003	0.440	0.222	<0.001	0.145	0.283	0.335
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.002	0.214	0.104	<0.001	0.077	0.131	0.217
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 8 Spring Cereals (45 $g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.081	0.047	<0.001	0.025	0.075	0.212
	Hamburg	<0.001	<0.001	0.262	0.184	<0.001	0.098	0.267	0.392
	Jokioinen	<0.001	0.005	0.356	0.333	<0.001	0.173	0.483	0.430
	Kremsmünster	<0.001	0.002	0.331	0.171	<0.001	0.099	0.240	0.350
	Okehampton	<0.001	0.002	0.328	0.167	<0.001	0.108	0.212	0.250
	Piacenza	-	-	-	-	-	-	-	-
	Porto	<0.001	0.001	0.160	0.078	<0.001	0.058	0.098	0.162
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

"-" scenario not relevant

Table 27: **Tier 1b - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with PEARL v5.5.5) for Spring Cereals at BBCH 21 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 6 Spring Cereals ($60g_{a.s.}$/ha)	Châteaudun	< 0.001	< 0.001	0.163	0.107	< 0.001	0.056	0.166	0.382
	Hamburg	< 0.001	0.002	0.563	0.511	0.001	0.269	0.740	0.906
	Jokioinen	< 0.001	0.004	0.498	0.504	0.001	0.239	0.781	0.777
	Kremsmünster	< 0.001	0.001	0.486	0.249	0.001	0.149	0.348	0.514
	Okehampton	< 0.001	0.001	0.464	0.234	< 0.001	0.142	0.321	0.404
	Piacenza	-	-	-	-	-	-	-	-
	Porto	< 0.001	< 0.001	0.152	0.094	< 0.001	0.057	0.131	0.243
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-
Use No. 8 Spring Cereals ($45g_{a.s.}$/ha)	Châteaudun	< 0.001	< 0.001	0.120	0.080	< 0.001	0.042	0.123	0.283
	Hamburg	< 0.001	0.001	0.416	0.382	0.001	0.199	0.548	0.674
	Jokioinen	< 0.001	0.003	0.367	0.374	< 0.001	0.178	0.573	0.574
	Kremsmünster	< 0.001	0.001	0.362	0.186	< 0.001	0.110	0.259	0.383
	Okehampton	< 0.001	0.001	0.346	0.175	< 0.001	0.105	0.240	0.301
	Piacenza	-	-	-	-	-	-	-	-
	Porto	< 0.001	< 0.001	0.113	0.070	< 0.001	0.042	0.098	0.181
	Sevilla	-	-	-	-	-	-	-	-
	Thiva	-	-	-	-	-	-	-	-

Table 28: **Tier 1b - PEC_{GW} for Pinoxaden, M2, M3, M11, M52, M54, M55, M56 (with MACRO v5.5.4) for Spring Cereals at BBCH 21 with application every year**

Crop	Scenario	80th Percentile PEC_{GW} at 1 m Soil Depth (µg/L)							
		Pinoxaden	M2	M3	M11	M52	M54	M55	M56
Use No. 6 Spring Cereals ($60g_{a.s.}$/ha)	Châteaudun	<0.001	<0.001	0.126	0.059	<0.001	0.032	0.095	0.269
Spring Cereals Use No. 8 ($45\ g_{a.s}$ /ha)	Châteaudun	<0.001	<0.001	0.094	0.044	<0.001	0.022	0.071	0.199

Table 29: Summary of maximum PEC_{GW} across all models for pinoxaden and its metabolites M2, M3, M11, M52, M55, M55 and M56

Growth Stage	Compounds	PEC (µg/L)	Crop	Model	Scenario
Application rate 60 g/ha					
BBCH 11 Use 1,2 (Winter and Spring Cereals)	Pinoxaden	<0.001	all	all	all
	M2	0.030	Winter Cereals	PELMO	Porto
	M3	0.691	Spring Cereals	PEARL	Hamburg
	M11	0.670	Winter Cereals	PEARL	Jokioinen
	M52	0.008	Winter Cereals	MACRO	Châteaudun
	M54	0.322	Spring Cereals	PEARL	Hamburg
	M55	1.115	Winter Cereals	PEARL	Jokioinen
	M56	1.246	Winter Cereals	PEARL	Jokioinen
BBCH 21 Use 5,6 (Winter and Spring Cereals)	Pinoxaden	<0.001	all	all	all
	M2	0.024	Winter Cereals	PELMO	Porto
	M3	0.563	Spring Cereals	PEARL	Hamburg
	M11	0.511	Spring Cereals	PEARL	Hamburg
	M52	0.014	Winter Cereals	MACRO	Châteaudun
	M54	0.269	Spring Cereals	PEARL	Hamburg
	M55	0.862	Winter Cereals	PEARL	Jokioinen
	M56	0.982	Winter Cereals	PEARL	Jokioinen
Application rate 45 g/ha					
BBCH 11 Use 3,4 (Winter and Spring Cereals)	Pinoxaden	<0.001	all	all	all
	M2	0.022	Winter Cereals	PELMO	Porto
	M3	0.511	Winter Cereals	PEARL	Okehampton
	M11	0.496	Winter Cereals	PEARL	Jokioinen
	M52	0.013	Winter Cereals	MACRO	Châteaudun
	M54	0.238	Spring Cereals	PEARL	Hamburg
	M55	0.824	Winter Cereals	PEARL	Jokioinen
	M56	0.917	Winter Cereals	PEARL	Jokioinen
BBCH 21 Use 7,8 (Winter and Spring Cereals)	Pinoxaden	<0.001	all	all	all
	M2	0.018	Winter Cereals	PELMO	Porto
	M3	0.416	Spring Cereals	PEARL	Hamburg
	M11	0.382	Winter Cereals	PEARL	Hamburg
	M52	0.010	Winter Cereals	MACRO	Châteaudun
	M54	0.199	Spring Cereals	PEARL	Hamburg
	M55	0.637	Winter Cereals	PEARL	Jokioinen
	M56	0.723	Winter Cereals	PEARL	Thiva

5.0 FURTHER DETAILS ON ENDPOINT SELECTION.

The selection of degradation rates and formation fractions used in this report is presented in detail in the report Pool *et al.* (2022, VV-971745). Details of the soils data for parent and all metabolites from which the adsorption input parameters are derived are presented in Tables 30 to 37. Data from all soils presented in these tables are used to derive the geometric mean K_{FOC} and arithmetic mean 1/n values. For M3, the current guideline criteria for batch adsorption studies mean that the soils 'Plaza (ND loamy sand)' and 'Ephrata (WA sand)' from the study Spare (2003) are considered to have substantial deficiencies and that therefore in accordance with this guidance these two soils should be excluded from the calculation of the geometric mean K_{FOC} and arithmetic mean 1/n input values for M52. Excluding these soils from the dataset would result in a geometric mean K_{FOC} value of 33.4 mL/g for M52. The geometric mean K_{FOC} value of 32.1 mL/g used in this report (derived from all soils' data) is not expected to make a substantial difference to the modelling results.

Table 30: Overview of available adsorption parameters for pinoxaden

Pinoxaden							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH (CaCl2)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Button (2022)	18 Acres	Sandy loam	2.3	5.6	4.49	195	1.075
	Borstel	Loamy sand	0.83	5.9	0.922	111	1.087
	Sarpy	Loam	2.1	6.2	6.31	301	1.037
	Gartenacker	Silt loam	2.3	7.1	0.546	23.7	1.020
	Marsillargues	Clay	1.0	7.8	2.56	256	1.084
Geometric mean (n=5)						**132**	
Arithmetic mean (n=5)							**1.06**
pH dependence, Yes or No						**No**	

Table 31: Overview of available adsorption parameters for M2

Metabolite A							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH ($CaCl_2$)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Santos Kron (2022a)	RefeSol 01-A	Loamy sand	0.83	5.9	0.0342	4.1	1.104
	Vetroz	Loam	2	7.8	0.0114	0.6	0.948
	Gartenacker	Silt loam	2.3	7.1	0.0231	1.0	1.009
	Sarpy	Loam	2.1	6.2	0.0479	2.3	0.975
Geometric mean (n=4)						**1.54**	
Arithmetic mean (n=4)							**1.01**
pH dependence, Yes or No						**No**	

Table 32: Overview of available adsorption parameters for M3

M3							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH (CaCl2)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Adam (2003a)	Borstel	loamy sand	1.0	5.3	0.38	37.8	1.046
	Marsillargues	silty clay loam	1.4	7.4	0.59	43.5	1.070
	Gartenacker	loam/silt loam	2.4	7.2	0.62	26.2	1.028
Spare (2003)	Plaza	loamy sand	1.2	7.2	0.28	23	0.904
	Northwood	loam	3.0	6.3	0.76	26	0.914
	Ephrata	sandy clay loam	0.3	6.5	0.12	35	0.916
	Minto	loam	3.2	7.3	0.86	26	0.900
	Larned	silty clay loam	1.0	5.9	0.50	48	0.915
Geometric mean (n=8)						**32.1***	
Arithmetic mean (n=8)							**0.961**
pH dependence, Yes or No						**No**	

* Considering current guideline criteria for batch adsorption studies, the soils 'Plaza (ND loamy sand)' and 'Ephrata (WA sand)' from the study Spare (2003) are considered to have substantial deficiencies. Excluding these soils from the dataset would result in a geomean K_{FOC} value of 33.4 mL/g. The geomean K_{FOC} value of 32.1 mL/g used in this report is not expected to make a substantial difference to the modelling results.

Table 33: Overview of available adsorption parameters for M11

Metabolite A							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH ($CaCl_2$)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Santos Kron (2022b)	Hepler	Silt Loam	2.8	5.2	0.549	19.6	0.946
	Sarpy	Loam	1.8	6.4	0.069	3.8	0.912
	Vetroz	Loam	2.3	7.5	0.056	2.5	1.012
Geometric mean (n=3)						**5.71**	
Arithmetic mean (n=3)							**0.96**
pH dependence						**No**	

Table 34: Overview of available adsorption parameters for M52

Metabolite A							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH ($CaCl_2$)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Kurlaviciene (2023)	Hepler	Silt loam	2.9	5.6	10.1	349	0.855
	Sarpy	Silty clay loam	2.0	6.4	2.01	100	0.919
	Vetroz	Loam	2.3	7.7	0.352	15.3	0.904
Geometric mean (n=3)						**81.1**	
Arithmetic mean (n=3)							**0.89**
pH dependence, Yes or No						**No**	

Table 35: Overview of available adsorption parameters for M54

Metabolite A							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH ($CaCl_2$)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Santos Kron (2022c)	Hepler	Silt Loam	2.8	5.2	0.683	24	0.925
	Sarpy	Loam	1.8	6.4	0.134	7.5	0.937
	Vetroz	Loam	2.3	7.5	0.064	2.8	0.902
Geometric mean (n=3)						**7.96**	
Arithmetic mean (n=3)							**0.92**
pH dependence, Yes or No						**No**	

Table 36: Overview of available adsorption parameters for M55

Metabolite A							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH ($CaCl_2$)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Santos Kron (2022d)	Hepler	Silt Loam	2.8	5.2	0.323	11.5	0.921
	Sarpy	Loam	1.8	6.4	0.080	4.4	0.958
	Vetroz	Loam	2.3	7.5	0.013	0.6	0.831
Geometric mean (n=3)						**3.12**	
Arithmetic mean (n=3)							**0.90**
pH dependence, Yes or No						**No**	

Table 37: Overview of available adsorption parameters for M56

Metabolite A							
Reference	**Soil name**	**Soil type**	**OC (%)**	**pH ($CaCl_2$)**	**K_F (mL/g)**	**K_{FOC} (mL/g)**	**1/n (-)**
Santos Kron (2022e)	Hepler	Silt Loam	2.8	5.2	0.432	15.4	0.922
	Sarpy	Loam	1.8	6.4	0.376	20.9	0.939
	Vetroz	Loam	2.3	7.5	0.176	7.6	0.897
Geometric mean (n=3)						**13.5**	
Arithmetic mean (n=3)							**0.92**
pH dependence, Yes or No						**No**	

6.0 DATA STORAGE

The full set of results, containing all data output by the models, is available on request.

7.0 REFERENCES

Adam D. (2003). Adsorption/Desorption of [Pyrazole-7-14C]-NOA447204 in Various Soils. Study No: 02DA02. Syngenta Crop Protection AG, Basel, Switzerland. Syngenta File No: VV-330905.

AppDate v3.06 Estimation of application dates based on crop development. Michael Klein, Fraunhofer-Institut für Molekularbiologie und Angewandte Ökologie, D-57392 Schmallenberg, Germany.

Button S. (2022). NOA407855 – Adsorption of [14C]-NOA407855; Report No. 8455273. Labcorp Early Development Laboratories Limited, Cambridgeshire, UK. Syngenta File No.: VV-971034.

Carnall J., Ford S. (2022a). Pinoxaden – Kinetic Modelling Evaluation of Data from Laboratory Soil Degradation Studies for Calculation of Modelling and Trigger Endpoints for Parent and Metabolites. Report No: NC/22/017A. Battelle UK Limited. Chelmsford, UK. Syngenta File No: VV-962641.

Carnall J., Ford S. (2022b). Pinoxaden – Kinetic Modelling Evaluation of Data from Laboratory Soil Degradation Studies for Calculation of Modelling and Trigger Endpoints for Metabolite M3 (NOA447204). Report No: NC/22/017B. Battelle UK Limited. Chelmsford, UK. Syngenta File No: VV-962645.

Das R. (2002a). Water solubility of NOA 407855. Study No: 107876. Syngenta Crop Protection Münchwilen AG, Switzerland. Syngenta File No: VV-295712.

Das R. (2002b). Water solubility of NOA 407854. Study No: 108005. Syngenta Crop Protection Münchwilen AG, Switzerland. Syngenta File No: VV-381224.

Das R. (2001). Water solubility of NOA 447204. Study No: 108009. Syngenta Crop Protection Münchwilen AG, Switzerland. Syngenta File No: VV-381008.

EFSA (2014). Guidance Document for evaluating laboratory and field dissipation studies to obtain DegT50 values of active substances of plant protection products and transformation products of these active substances in soil. EFSA Journal, 12(5): 3662.

EC (2014). Assessing potential for movement of active substances and their metabolites to groundwater in the EU. Report of the FOCUS Groundwater Work Group, EC Document Reference Sanco/13144/2010 version 3, 613 pp.

FOCUS (2000). FOCUS groundwater scenarios in the EU plant protection product review process. – Report of the FOCUS Groundwater Scenarios Workgroup, EC Document Reference Sanco/321/2000 rev. 2, 202 pp.

FOCUS (2014). Generic guidance for Tier 1 FOCUS groundwater assessments, version 2.2 FOCUS groundwater scenarios working group.

FOCUS (2021). Generic Guidance for Tier 1 FOCUS Ground Water Assessments, Version: 2.3 Date: June 2021

Meteo data provided courtesy of the Joint Research Centre of the European Commission; ©European Communities, 2000

Ford S. (2022a). Pinoxaden – Kinetic Modelling Evaluation of Data from Laboratory Aerobic Soil Degradation Studies for Lysimeter Metabolites SYN546105, SYN546106, SYN546107, SYN546108 and SYN504574. Report No: NC/22/017D. Battelle UK Limited. Chelmsford, UK. Syngenta File No: VV-962653.

Ford S. (2022b). Pinoxaden – Kinetic Modelling Evaluation of Data from Field Soil Degradation Studies for Calculation of Modelling Endpoints for Metabolite M3 (NOA447204). Report No: NC/22/017E. Battelle UK Limited. Chelmsford, UK. Syngenta File No: VV-962656.

Ford S. (2022c). Pinoxaden – Kinetic Modelling Evaluation of Data from M2 (NOA407854) Applied Field Soil Degradation Studies for Calculation of Modelling Endpoints for Metabolites M2 and M3 (NOA447204). Report No: NC/22/017F. Battelle UK Limited. Chelmsford, UK. Syngenta File No: VV-962658.

Kurlaviciene, A. (2023). SYN546105 – Adsorption and Desorption of [14C]-SYN546105. Report No: 8484073. Labcorp Early Development Laboratories Limited, Cambridgeshire, United Kingdom. Syngenta File No: VV-974999.

Pool F., Strehmel A., Von Brasch M. (2022). Pinoxaden – Summary of Soil Degradation Input Parameters for Use in Regulatory Modelling of Predicted Environmental Concentrations - Position Statement. Report No: RAJ1490B. Syngena Ltd, United Kingdom. Syngenta File No: VV-971745.

Santos Kron A. (2022a). NOA407854 – Adsorption and Desorption of ^{14}C-NOA407854 in Five Soils. Report No: 20200412. IES Ltd, Switzerland. Syngenta File No: VV-959699.

Santos Kron A. (2022b). SYN504574 – Adsorption and Desorption of ^{14}C-SYN504574 in Three Soils. Report No: 20210355. IES Ltd, Switzerland. Syngenta File No: VV-962226.

Santos Kron A. (2022c). SYN546106 – Adsorption and Desorption of ^{14}C-SYN546106 in Three Soils. Report No: 20210356. IES Ltd, Switzerland. Syngenta File No: VV-959374.

Santos Kron A. (2022d). SYN546107 – Adsorption and Desorption of ^{14}C-SYN546107 in Three Soils. Report No: 20210397. IES Ltd, Switzerland. Syngenta File No: VV-962659.

Santos Kron A. (2022e). SYN546108 – Adsorption and Desorption of ^{14}C-SYN546108 in Three Soils. Report No: 20210398. IES Ltd, Switzerland. Syngenta File No: VV-959734.

Spare W. (2003). Adsorption and Desorption Study to Determine the Mobility and Distribution of ^{14}C-NOA447204 in soil. Study No: 136-01. Exygen Research, PA, USA. Syngenta File No: VV-337971.

8.0 APPENDIX 1

Example Input and Output Files

Listing 1: Tier 1a – Representative *.prl input file for PEARL v5.5.5 – 60 g/ha to Winter Cereals at BBCH 11 for the Châteaudun scenario

```
*-------------------------------------------------------------------------------
* INPUT FILE for PEARL
* Generated by user interface version FOCUSPEARL 5.5.5 (build : 5.5.5) (October 2020) on
10/11/2022 16:59:53
*-------------------------------------------------------------------------------
* This file is intended to be used by expert users.
*
* Contact addresses:
* -----------------
* Aaldrik Tiktak                        Erik van den Berg
* Environmental Assessment Agency (PBL) Wageningen Environmental Research (WENR)
* PO BOX 30314                          PO BOX 47
* 2500 GH The Hague                     6700 AA Wageningen
* The Netherlands                       The Netherlands
* e-mail: aaldrik.tiktak@pbl.nl         erik.vandenberg@wur.nl
*
* (c) 2020 RIVM, PBL, WENR

*-------------------------------------------------------------------------------
* Section 1: Control section
*-------------------------------------------------------------------------------

FOCUSPEARL        CallingProgram
5.5.5             CallingProgramVersion
Groundwater       ExposureType
6                 InitYears (y)
0                 NumRep (-)
01-Jan-1901       TimStart
31-Dec-1926       TimEnd
0.001             ThetaTol (m3.m-3)
Month             OptDelTimPrn
30                DelTimPrn  (d)
OnLine            OptHyd
1E-5              DelTimSwaMin (d)
0.2               DelTimSwaMax (d)
Yes               PrintCumulatives
1.0               GWLTol (m)
30                MaxItSwa
No                OptHysteresis
0.2               PreHeaWetDryMin (cm)
All               OptSys
Yes               OptScreen
No                OptPaddy
No                OptMacropore
None              OptAux

*-------------------------------------------------------------------------------
* Section 2: Soil section
*-------------------------------------------------------------------------------

CHAT-S_Soil SoilTypeID
CHATEAUDUN Location
table SoilProfile
ThiHor NumLay
(m)
0.01     5
0.24     24
0.05     5
0.2      16
0.1      4
```

```
0.4      16
0.2      4
0.3      6
0.4      4
2.6      26
end_table
table  horizon SoilProperties
Nr     FraSand    FraSilt    FraClay    CntOm         pH
       (kg.kg-1)  (kg.kg-1)  (kg.kg-1)  (kg.kg-1)     (-)
1      0.03       0.67       0.3        0.024         8
2      0.03       0.67       0.3        0.024         8
3      0.02       0.67       0.31       0.016         8.1
4      0.02       0.67       0.31       0.016         8.1
5      0.08       0.67       0.25       0.012         8.2
6      0.3        0.44       0.26       0.005         8.5
7      0.3        0.44       0.26       0.005         8.5
8      0.38       0.38       0.24       0.0046        8.5
9      0.38       0.38       0.24       0.0046        8.5
10     0.08       0.61       0.31       0.0036        8.3
end_table
table  horizon VanGenuchtenPar
Nr     ThetaSat    ThetaRes    AlphaDry    AlphaWet    n       KSat      l
       (m3.m-3)    (m3.m-3)    (cm-1)      (cm-1)      (-)     (m.d-1)   (-)
1      0.43        0           0.05        0.1         1.08    1.728     0.5
2      0.43        0           0.05        0.1         1.08    1.728     0.5
3      0.44        0           0.05        0.1         1.095   2.592     0.5
4      0.44        0           0.05        0.1         1.095   2.592     0.5
5      0.44        0           0.05        0.1         1.095   4.32      2.5
6      0.44        0           0.015       0.03        1.16    1.0368    -2
7      0.44        0           0.015       0.03        1.16    1.0368    -2
8      0.49        0           0.0107      0.0214      1.28    0.7828    -1.5
9      0.49        0           0.0107      0.0214      1.28    0.7828    -1.5
10     0.42        0           0.0191      0.0382      1.152   1.2796    -1.18
end_table
Input              OptRho
table horizon      Rho              (kg.m-3)
1    1300.0
2    1300.0
3    1410.0
4    1410.0
5    1410.0
6    1370.0
7    1370.0
8    1410.0
9    1410.0
10   1490.0
end_table

0.002              ZPndMax          (m)

* Soil evaporation parameters
Boesten            OptSolEvp
1                  FacEvpSol        (-)
0.79               CofRedEvp        (cm1/2)
0.01               PrcMinEvp        (m.d-1)

Table horizon LenDisLiq (m)
1  0.05
2  0.05
3  0.05
4  0.05
5  0.05
6  0.05
7  0.05
8  0.05
9  0.05
10 0.05
end_table
MillingtonQuirk    OptCofDifRel
2                  ExpDifLiqMilNom (-)
0.6667             ExpDifLiqMilDen (-)
```

```
2                 ExpDifGasMilNom (-)
0.6667            ExpDifGasMilDen (-)
Constant          OptPnd

*-------------------------------------------------------------------------------
* Section 3: Weather and irrigation section
*-------------------------------------------------------------------------------

chat-m            MeteoStation
Input             OptEvp
2.35              TemLboSta       (C)
No                OptIrr
No                IrrigationScheme
1.0               FacPrc (-)
1.0               FacEvp (-)
0.0               DifTem (C)
Laminar           OptTraRes
Daily             OptMetInp
No                OptRainfallEvents
No                OptSnow

*-------------------------------------------------------------------------------
* Section 4a: Lower boundary flux
*-------------------------------------------------------------------------------

-1200             ZGrwLevSta (cm)

FreeDrain         OptLbo
*-------------------------------------------------------------------------------
* Section 4b: Drainage/infiltration section
*-------------------------------------------------------------------------------

No                OptDra
No                OptSurDra
0                 NumDraLev

*-------------------------------------------------------------------------------
* Section 5: Compound section
*-------------------------------------------------------------------------------

PXDa3 SubstanceName
table compounds
PXDa3
M3a3
M4a3
M2a3
M5a3
M52a3
M1a3
M6a3
end_table
EqlDom_Input        OptDT50_PXDa3
EqlDom_Input        OptDT50_M3a3
EqlDom_Input        OptDT50_M4a3
EqlDom_Input        OptDT50_M2a3
EqlDom_Input        OptDT50_M5a3
EqlDom_Input        OptDT50_M52a3
EqlDom_Input        OptDT50_M1a3
EqlDom_Input        OptDT50_M6a3
400.5               MolMas_PXDa3 (g.mol-1)
332.4               MolMas_M3a3 (g.mol-1)
362.4               MolMas_M4a3 (g.mol-1)
316.4               MolMas_M2a3 (g.mol-1)
376.4               MolMas_M5a3 (g.mol-1)
360.3               MolMas_M52a3 (g.mol-1)
362.4               MolMas_M1a3 (g.mol-1)
360.4               MolMas_M6a3 (g.mol-1)
table FraPrtDau (mol.mol-1)
0.468 PXDa3 -> M2a3
1. M3a3 -> M4a3
0.855 M3a3 -> M5a3
```

```
1. M3a3 -> M1a3
0.404 M3a3 -> M6a3
0.55 M2a3 -> M3a3
0.203 M2a3 -> M52a3
end_table
OptimumConditions   OptCntLiqTraRef_PXDa3
1.15                DT50Ref_PXDa3 (d)
20.                 TemRefTra_PXDa3 (C)
0.7                 ExpLiqTra_PXDa3 (-)
65.4                MolEntTra_PXDa3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M3a3
39.6                DT50Ref_M3a3 (d)
20.                 TemRefTra_M3a3 (C)
0.7                 ExpLiqTra_M3a3 (-)
65.4                MolEntTra_M3a3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M4a3
7.52                DT50Ref_M4a3 (d)
20.                 TemRefTra_M4a3 (C)
0.7                 ExpLiqTra_M4a3 (-)
65.4                MolEntTra_M4a3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M2a3
3.39                DT50Ref_M2a3 (d)
20.                 TemRefTra_M2a3 (C)
0.7                 ExpLiqTra_M2a3 (-)
65.4                MolEntTra_M2a3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M5a3
16.4                DT50Ref_M5a3 (d)
20.                 TemRefTra_M5a3 (C)
0.7                 ExpLiqTra_M5a3 (-)
65.4                MolEntTra_M5a3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M52a3
8.43                DT50Ref_M52a3 (d)
20.                 TemRefTra_M52a3 (C)
0.7                 ExpLiqTra_M52a3 (-)
65.4                MolEntTra_M52a3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M1a3
11.7                DT50Ref_M1a3 (d)
20.                 TemRefTra_M1a3 (C)
0.7                 ExpLiqTra_M1a3 (-)
65.4                MolEntTra_M1a3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M6a3
72.1                DT50Ref_M6a3 (d)
20.                 TemRefTra_M6a3 (C)
0.7                 ExpLiqTra_M6a3 (-)
65.4                MolEntTra_M6a3 (kJ.mol-1)
table horizon FacZTra (-)
hor PXDa3 M3a3 M4a3 M2a3 M5a3 M52a3 M1a3 M6a3
1 1 1 1 1 1 1 1
2 1 1 1 1 1 1 1
3 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
4 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
6 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3
7 0 0 0 0 0 0 0 0
8 0 0 0 0 0 0 0 0
9 0 0 0 0 0 0 0 0
10 0 0 0 0 0 0 0 0
end_table
table horizon FacZSor (-)
hor PXDa3 M3a3 M4a3 M2a3 M5a3 M52a3 M1a3 M6a3
1 -99 -99 -99 -99 -99 -99 -99 -99
2 -99 -99 -99 -99 -99 -99 -99 -99
3 -99 -99 -99 -99 -99 -99 -99 -99
4 -99 -99 -99 -99 -99 -99 -99 -99
5 -99 -99 -99 -99 -99 -99 -99 -99
6 -99 -99 -99 -99 -99 -99 -99 -99
7 -99 -99 -99 -99 -99 -99 -99 -99
8 -99 -99 -99 -99 -99 -99 -99 -99
9 -99 -99 -99 -99 -99 -99 -99 -99
10 -99 -99 -99 -99 -99 -99 -99 -99
end_table
```

```
0.                  MolEntSor_PXDa3 (kJ.mol-1)
20.                 TemRefSor_PXDa3 (C)
pH-independent      OptCofFre_PXDa3
76.6                KomEql_PXDa3 (L.kg-1)
7660.               KomEqlMax_PXDa3 (L.kg-1)
1.                  ConLiqRef_PXDa3 (mg.L-1)
1.06                ExpFre_PXDa3 (-)
0.                  MolEntSor_M3a3 (kJ.mol-1)
20.                 TemRefSor_M3a3 (C)
pH-independent      OptCofFre_M3a3
18.6                KomEql_M3a3 (L.kg-1)
1860.               KomEqlMax_M3a3 (L.kg-1)
1.                  ConLiqRef_M3a3 (mg.L-1)
0.96                ExpFre_M3a3 (-)
0.                  MolEntSor_M4a3 (kJ.mol-1)
20.                 TemRefSor_M4a3 (C)
pH-independent      OptCofFre_M4a3
4.62                KomEql_M4a3 (L.kg-1)
462.                KomEqlMax_M4a3 (L.kg-1)
1.                  ConLiqRef_M4a3 (mg.L-1)
0.92                ExpFre_M4a3 (-)
0.                  MolEntSor_M2a3 (kJ.mol-1)
20.                 TemRefSor_M2a3 (C)
pH-independent      OptCofFre_M2a3
0.893               KomEql_M2a3 (L.kg-1)
89.3                KomEqlMax_M2a3 (L.kg-1)
1.                  ConLiqRef_M2a3 (mg.L-1)
1.01                ExpFre_M2a3 (-)
0.                  MolEntSor_M5a3 (kJ.mol-1)
20.                 TemRefSor_M5a3 (C)
pH-independent      OptCofFre_M5a3
1.81                KomEql_M5a3 (L.kg-1)
181.                KomEqlMax_M5a3 (L.kg-1)
1.                  ConLiqRef_M5a3 (mg.L-1)
0.9                 ExpFre_M5a3 (-)
0.                  MolEntSor_M52a3 (kJ.mol-1)
20.                 TemRefSor_M52a3 (C)
pH-independent      OptCofFre_M52a3
47.1                KomEql_M52a3 (L.kg-1)
4710.               KomEqlMax_M52a3 (L.kg-1)
1.                  ConLiqRef_M52a3 (mg.L-1)
0.89                ExpFre_M52a3 (-)
0.                  MolEntSor_M1a3 (kJ.mol-1)
20.                 TemRefSor_M1a3 (C)
pH-independent      OptCofFre_M1a3
3.31                KomEql_M1a3 (L.kg-1)
331.                KomEqlMax_M1a3 (L.kg-1)
1.                  ConLiqRef_M1a3 (mg.L-1)
0.96                ExpFre_M1a3 (-)
0.                  MolEntSor_M6a3 (kJ.mol-1)
20.                 TemRefSor_M6a3 (C)
pH-independent      OptCofFre_M6a3
7.83                KomEql_M6a3 (L.kg-1)
783.                KomEqlMax_M6a3 (L.kg-1)
1.                  ConLiqRef_M6a3 (mg.L-1)
0.92                ExpFre_M6a3 (-)
0.                  PreVapRef_PXDa3 (Pa)
20.                 TemRefVap_PXDa3 (C)
200.                SlbWatRef_PXDa3 (mg.L-1)
25.                 TemRefSlb_PXDa3 (C)
27.                 MolEntSlb_PXDa3 (kJ.mol-1)
95.                 MolEntVap_PXDa3 (kJ.mol-1)
0.                  PreVapRef_M3a3 (Pa)
20.                 TemRefVap_M3a3 (C)
370.                SlbWatRef_M3a3 (mg.L-1)
25.                 TemRefSlb_M3a3 (C)
27.                 MolEntSlb_M3a3 (kJ.mol-1)
95.                 MolEntVap_M3a3 (kJ.mol-1)
0.                  PreVapRef_M4a3 (Pa)
20.                 TemRefVap_M4a3 (C)
1000.               SlbWatRef_M4a3 (mg.L-1)
```

```
25.                 TemRefSlb_M4a3 (C)
27.                 MolEntSlb_M4a3 (kJ.mol-1)
95.                 MolEntVap_M4a3 (kJ.mol-1)
0.                  PreVapRef_M2a3 (Pa)
20.                 TemRefVap_M2a3 (C)
380000.             SlbWatRef_M2a3 (mg.L-1)
25.                 TemRefSlb_M2a3 (C)
27.                 MolEntSlb_M2a3 (kJ.mol-1)
95.                 MolEntVap_M2a3 (kJ.mol-1)
0.                  PreVapRef_M5a3 (Pa)
20.                 TemRefVap_M5a3 (C)
1000.               SlbWatRef_M5a3 (mg.L-1)
25.                 TemRefSlb_M5a3 (C)
27.                 MolEntSlb_M5a3 (kJ.mol-1)
95.                 MolEntVap_M5a3 (kJ.mol-1)
0.                  PreVapRef_M52a3 (Pa)
20.                 TemRefVap_M52a3 (C)
1000.               SlbWatRef_M52a3 (mg.L-1)
25.                 TemRefSlb_M52a3 (C)
27.                 MolEntSlb_M52a3 (kJ.mol-1)
95.                 MolEntVap_M52a3 (kJ.mol-1)
0.                  PreVapRef_M1a3 (Pa)
20.                 TemRefVap_M1a3 (C)
1000.               SlbWatRef_M1a3 (mg.L-1)
25.                 TemRefSlb_M1a3 (C)
27.                 MolEntSlb_M1a3 (kJ.mol-1)
95.                 MolEntVap_M1a3 (kJ.mol-1)
0.                  PreVapRef_M6a3 (Pa)
20.                 TemRefVap_M6a3 (C)
1000.               SlbWatRef_M6a3 (mg.L-1)
25.                 TemRefSlb_M6a3 (C)
27.                 MolEntSlb_M6a3 (kJ.mol-1)
95.                 MolEntVap_M6a3 (kJ.mol-1)
0.                  CofDesRat_PXDa3 (d-1)
0.                  FacSorNeqEql_PXDa3 (-)
0.                  CofDesRat_M3a3 (d-1)
0.                  FacSorNeqEql_M3a3 (-)
0.                  CofDesRat_M4a3 (d-1)
0.                  FacSorNeqEql_M4a3 (-)
0.                  CofDesRat_M2a3 (d-1)
0.                  FacSorNeqEql_M2a3 (-)
0.                  CofDesRat_M5a3 (d-1)
0.                  FacSorNeqEql_M5a3 (-)
0.                  CofDesRat_M52a3 (d-1)
0.                  FacSorNeqEql_M52a3 (-)
0.                  CofDesRat_M1a3 (d-1)
0.                  FacSorNeqEql_M1a3 (-)
0.                  CofDesRat_M6a3 (d-1)
0.                  FacSorNeqEql_M6a3 (-)
0.                  FacUpt_PXDa3 (-)
0.784               FacUpt_M3a3 (-)
0.                  FacUpt_M4a3 (-)
0.                  FacUpt_M2a3 (-)
0.                  FacUpt_M5a3 (-)
0.                  FacUpt_M52a3 (-)
0.                  FacUpt_M1a3 (-)
0.                  FacUpt_M6a3 (-)
0.01                ThiAirBouLay (m)
Lumped              OptDspCrp_PXDa3
1000000.            DT50DspCrp_PXDa3 (d)
0.0001              FacWasCrp_PXDa3 (m-1)
Lumped              OptDspCrp_M3a3
1000000.            DT50DspCrp_M3a3 (d)
0.0001              FacWasCrp_M3a3 (m-1)
Lumped              OptDspCrp_M4a3
1000000.            DT50DspCrp_M4a3 (d)
0.0001              FacWasCrp_M4a3 (m-1)
Lumped              OptDspCrp_M2a3
1000000.            DT50DspCrp_M2a3 (d)
0.0001              FacWasCrp_M2a3 (m-1)
Lumped              OptDspCrp_M5a3
```

```
1000000.            DT50DspCrp_M5a3 (d)
0.0001              FacWasCrp_M5a3 (m-1)
Lumped              OptDspCrp_M52a3
1000000.            DT50DspCrp_M52a3 (d)
0.0001              FacWasCrp_M52a3 (m-1)
Lumped              OptDspCrp_M1a3
1000000.            DT50DspCrp_M1a3 (d)
0.0001              FacWasCrp_M1a3 (m-1)
Lumped              OptDspCrp_M6a3
1000000.            DT50DspCrp_M6a3 (d)
0.0001              FacWasCrp_M6a3 (m-1)
20.                 TemRefDif_PXDa3 (C)
4.3E-5              CofDifWatRef_PXDa3 (m2.d-1)
0.43                CofDifAirRef_PXDa3 (m2.d-1)
20.                 TemRefDif_M3a3 (C)
4.3E-5              CofDifWatRef_M3a3 (m2.d-1)
0.43                CofDifAirRef_M3a3 (m2.d-1)
20.                 TemRefDif_M4a3 (C)
4.3E-5              CofDifWatRef_M4a3 (m2.d-1)
0.43                CofDifAirRef_M4a3 (m2.d-1)
20.                 TemRefDif_M2a3 (C)
4.3E-5              CofDifWatRef_M2a3 (m2.d-1)
0.43                CofDifAirRef_M2a3 (m2.d-1)
20.                 TemRefDif_M5a3 (C)
4.3E-5              CofDifWatRef_M5a3 (m2.d-1)
0.43                CofDifAirRef_M5a3 (m2.d-1)
20.                 TemRefDif_M52a3 (C)
4.3E-5              CofDifWatRef_M52a3 (m2.d-1)
0.43                CofDifAirRef_M52a3 (m2.d-1)
20.                 TemRefDif_M1a3 (C)
4.3E-5              CofDifWatRef_M1a3 (m2.d-1)
0.43                CofDifAirRef_M1a3 (m2.d-1)
20.                 TemRefDif_M6a3 (C)
4.3E-5              CofDifWatRef_M6a3 (m2.d-1)
0.43                CofDifAirRef_M6a3 (m2.d-1)
*-------------------------------------------------------------------------------
* Section 6: Management section
*-------------------------------------------------------------------------------

PXD-WCereals-BBCH11-60app-CHAT ApplicationScheme
1.0               ZTgt (m)
0.0               ZEADTop (m)
0.2               ZEADBot (m)
1                 DelTimEvt (a)
table Applications
06-Apr-1901  AppSolSur 0.06
end_table
table TillageDates
end_table
table interpolate CntSysEql (mg.kg-1)
0.0      0.0
50.0     0.0
end_table
table interpolate CntSysNeq (mg.kg-1)
0.0      0.0
50.0     0.0
end_table
No DepositionScheme
table    FlmDep   (kg.ha-1.d-1)
end_table
*-------------------------------------------------------------------------------
* Section 7: Crop section
*-------------------------------------------------------------------------------

CHAT-WCEREALS CropCalendar
Yes               RepeatCrops
Fixed             OptLenCrp
LAI    OptCov

table  Crops
26-Oct           15-Jul        wcereals1
```

```
end_table
table  CrpPar_wcereals1
0.0    0.0    1.05   0.0    0.0
0.65   0.1    1.05   0.2    0.0
0.828  7.5    1.05   0.8    0.0
0.831  7.5    1.1    0.8    0.0
0.904  7.5    1.1    0.8    0.0
0.908  7.5    0.7    0.8    0.0
1.0    7.5    0.7    0.8    0.0
end_table
table  RootDensity_wcereals1
0.0    1.0
1.0    1.0
end_table
0.0               HLim1_wcereals1 (cm)
-1.0              HLim2_wcereals1 (cm)
-500.0            HLim3U_wcereals1 (cm)
-900.0            HLim3L_wcereals1 (cm)
-16000.0          HLim4_wcereals1 (cm)
70.0              RstEvpCrp_wcereals1 (s.m-1)
0.39              CofExtDif_wcereals1 (-)
1.0               CofExtDir_wcereals1 (-)
0.0001            CofIntCrp_wcereals1 (cm)
0.0               TemSumSta_wcereals1 (C)
0.0               TemSumEmgAnt_wcereals1 (C)
0.0               TemSumAntMat_wcereals1 (C)
0.2               ZTensiometer_wcereals1 (m)
0.0               FraCovStm_wcereals1 (-)
-100.0            PreHeaIrrSta_wcereals1 (cm)
15.0              IrgThreshold_wcereals1 (mm)
*-------------------------------------------------------------------------------
* Section 8: Output control
*-------------------------------------------------------------------------------

DaysFromSta       DateFormat
No                OptDelOutFiles
Yes               PrintCumulatives
Yes               LeachingReport
80.0              TargetPercentile (%)
No                DrainageReport
No                AirReport
No                SoilReport
0.2               ThiLayPer (m)
table VerticalProfiles
end_table
G12.4             RealFormat
table OutputDepths (m)
0.05
0.1
0.2
0.3
0.4
0.5
0.75
1.0
2.0
end_table
Yes               print_AmaAppCrp
Yes               print_AmaAppSol
Yes               print_AmaCrp
Yes               print_AmaDra_1
Yes               print_AmaDra_2
Yes               print_AmaDra_3
Yes               print_AmaDra_4
Yes               print_AmaDra_5
Yes               print_AmaEqlTgt
Yes               print_AmaEqlPro
Yes               print_AmaEqlTil
Yes               print_AmaErrMic
Yes               print_AmaForPro
Yes               print_AmaHarCrp
```

```
Yes             print_AmaNeqTgt
Yes             print_AmaNeqPro
Yes             print_AmaNeqTil
Yes             print_AmaSysTgt
Yes             print_AmaSysPro
Yes             print_AmaSysTil
Yes             print_AmaTraPro
Yes             print_AmaUptPro
Yes             print_AmaDspCrp
Yes             print_AmaWasCrp
Yes             print_ConGas
Yes             print_ConLiq
Yes             print_ConLiqLbo
Yes             print_ConLiqSatAvg
Yes             print_ConSys
Yes             print_ConSysEql
Yes             print_ConSysNeq
Yes             print_DelTimPrl
Yes             print_Eps
Yes             print_FacCrpEvp
Yes             print_FlmDepCrp
Yes             print_FlmGas
Yes             print_FlmGasVol
Yes             print_FlmLiq
Yes             print_FlmLiqInfSys
Yes             print_FlmLiqLbo
Yes             print_FlmSys
Yes             print_FlvLiq
Yes             print_FlvLiqDra_3
Yes             print_FlvLiqDra_4
Yes             print_FlvLiqDra_5
Yes             print_FlvLiqEvpIntIrr
Yes             print_FlvLiqEvpIntPrc
Yes             print_FlvLiqEvpSol
Yes             print_FlvLiqEvpSolPot
Yes             print_FlvLiqIrr
Yes             print_FlvLiqLbo
Yes             print_FlvLiqGrw
Yes             print_FlvLiqTrp
Yes             print_FlvLiqTrpPot
Yes             print_FraCovCrp
Yes             print_GrwLev
Yes             print_LAI
Yes             print_PreHea
Yes             print_Theta
Yes             print_StoCap
Yes             print_FlvLiqGrwSur
Yes             print_VvrLiqDra
Yes             print_VvrLiqUpt
Yes             print_ZRoot
Yes             print_FlvLiqDra_1
Yes             print_FlvLiqDra_2
Yes             print_FlvLiqPrc
Yes             print_Tem
Yes             print_ConLiqDra_1
Yes             print_ConLiqDra_2
Yes             print_ConLiqDra_3
Yes             print_ConLiqDra_4
Yes             print_ConLiqDra_5
Yes             print_ConLiqDra
Yes             print_ZPnd
Yes             print_AvoLiqSol
Yes             print_ConGas_VPrf
Yes             print_ConLiq_VPrf
Yes             print_ConSys_VPrf
Yes             print_ConSysEql_VPrf
Yes             print_ConSysNeq_VPrf
Yes             print_PreHea_VPrf
Yes             print_Tem_VPrf
Yes             print_Theta_VPrf
Yes             print_AvoLiqErr
```

```
Yes               print_FlvLiqInf
Yes               print_RstAirLam
Yes               print_AmaRunOff
Yes               print_AmaSolSur
Yes               print_VelWnd
Yes               print_TemAir
Yes               print_FlvLiqCanDrp
Yes               print_ConLiqPer
Yes               print_CntSysPer
Yes               print_ConLiqTWA2D
Yes               print_ConLiqTWA3D
Yes               print_ConLiqTWA4D
Yes               print_CntSysTWA2D
Yes               print_CntSysTWA3D
Yes               print_CntSysTWA4D
Yes               print_ConLiqTWA1D
Yes               print_CntSysTWA1D
Yes               print_ConLiqPer
Yes               print_CntSysPer
*-------------------------------------------------------------------------------
* End of FOCUSPEARL 5.5.5 input file
*-------------------------------------------------------------------------------
```

Listing 2: Tier 1a – Representative *.sum report file for PEARL v5.5.5 – 60 g/ha to Winter Cereals at BBCH 11 for the Châteaudun scenario

```
* ----------------------------------------------------------------------------
* PEARL REPORT: Header
* Results from the PEARL model  (c) WENR, PBL and RIVM
* PEARL kernel version       : 3.2.20
* SWAP kernel version        : swap3237
* PEARL created on           : 14-Sep-2020
*
* PEARL was called from      : FOCUSPEARL,version 5.5.5
* Working directory          :
D:\Documents\WorkProjects\MartinProjects\PinoxadenModelling\GW\PEARLMACRO_GW\FOCUSPEARL\490
* Run ID                     : 490
* Input file generated on    : 10-11-2022
* ----------------------------------------------------------------------------
*
* ExposureType          : Groundwater
* Scenario data subset  : FOCUS Groundwater version 5
* Location              : CHATEAUDUN
* Meteo station         : chat-m
* Soil type             : CHAT-S_Soil
* Crop calendar         : CHAT-WCEREALS
* Substance             : PXDa3
* Application scheme    : PXD-WCereals-BBCH11-60app-CHAT
* Deposition scheme     : No
* Irrigation scheme     : No
*
* End of PEARL REPORT: Header
* ----------------------------------------------------------------------------

* Key to the annual water balances in the soil system
* ----------------------------------------------------------------------------
* DelLiq        Net storage change of water in profile       (m.a-1)
* Prc           Precipitation                                (m.a-1)
* Irr           Irrigation                                   (m.a-1)
* LeaLbo        Seepage at the lower boundary                (m.a-1)
* LeaGrw        Groundwater recharge                         (m.a-1)
* LeaTgt        Flux at lower boundary of the target layer   (m.a-1)
* EvpInt        Evaporation of intercepted water             (m.a-1)
* SolAct        Actual soil evaporation                      (m.a-1)
* TrpAct        Actual transpiration                         (m.a-1)
* Dra           Total discharge to drains and channels       (m.a-1)
* Dra_1         Lateral discharge to primary system          (m.a-1)
* Dra_2         Lateral discharge to secondary system        (m.a-1)
* Dra_3         Lateral discharge to tertiary system         (m.a-1)
* Dra_4         Lateral discharge to tile drains             (m.a-1)
* Dra_5         Lateral discharge to surface drainage system (m.a-1)
* RunOff        Run-off                                      (m.a-1)
* EvpPnd        Evaporation of ponded water                  (m.a-1)
* CanDrp        Canopy drip                                  (m.a-1)
* SolPot        Potential soil evaporation                   (m.a-1)
* TrpPot        Potential transpiration                      (m.a-1)

* Key to the annual mass balance of substance at the crop
* ----------------------------------------------------------------------------
* AmaAppCrp     Areic mass applied to the crop canopy        (kg.ha-1.a-1)
* DelAmaCrp     Change of areic mass at the crop canopy      (kg.ha-1.a-1)
* AmaVol        Areic mass volatilised from the crop canopy  (kg.ha-1.a-1)
* AmaPen        Areic mass penetrated into the plant tissue  (kg.ha-1.a-1)
* AmaTra        Areic mass transformed at the crop canopy    (kg.ha-1.a-1)
* AmaDep        Areic mass deposited at the crop canopy      (kg.ha-1.a-1)
* AmaDsp        Areic mass dissipated at the crop canopy     (kg.ha-1.a-1)
* AmaWas        Areic mass washed from the cropy canopy      (kg.ha-1.a-1)
* AmaHar        Areic mass removed by harvesting             (kg.ha-1.a-1)

* Key to the annual mass balance of substance in the soil system
* ----------------------------------------------------------------------------
* AmaAppSol     Areic mass applied to the soil system        (kg.ha-1.a-1)
```

```
* DelAma        Change of mass in the soil system           (kg.ha-1.a-1)
* DelAmaEql     Change of mass in the equilibrium domain    (kg.ha-1.a-1)
* DelAmaNeq     Change of mass in the non-equilibrium domain (kg.ha-1.a-1)
* AmaTra        Areic mass transformed in the soil system   (kg.ha-1.a-1)
* AmaFor        Areic mass formed in the soil system        (kg.ha-1.a-1)
* AmaUpt        Areic mass taken-up from the soil system    (kg.ha-1.a-1)
* AmaDra        Areic mass drained from the soil system     (kg.ha-1.a-1)
* AmaDra_1      Areic mass drained to the primary system    (kg.ha-1.a-1)
* AmaDra_2      Areic mass drained to the secunary system   (kg.ha-1.a-1)
* AmaDra_3      Areic mass drained to the tertiary system   (kg.ha-1.a-1)
* AmaDra_4      Areic mass drained to tube drains           (kg.ha-1.a-1)
* AmaDra_5      Areic mass drained to surface drain system  (kg.ha-1.a-1)
* AmaDep        Areic mass deposited at the soil surface    (kg.ha-1.a-1)
* AmaVol        Areic mass volatized from the soil surface  (kg.ha-1.a-1)
* AmaLea        Areic mass leached from the soil system     (kg.ha-1.a-1)
* AmaLeaAqf     Areic mass leached to the deep acquifer     (kg.ha-1.a-1)

* Key to the output per summary period
* ------------------------------------------------------------------------------
* AmaLeaTgt     Areic mass leached from the target layer      (kg.ha-1)
* FlvLeaTgt     Volume of water leached from the target layer (m3.m-2)
* ConLeaTgt     Concentration in water leached from the target layer (ug.L-1)
* ------------------------------------------------------------------------------


* Annual water balance of the target layer
* ------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
------
* yr Identifier        DelLiq      Prc      Irr   LeaLbo   LeaTgt   EvpInt   SolAct   TrpAct
Dra    Dra_1    Dra_2    Dra_3    Dra_4    Dra_5      Run   EvpPnd   CanDrp   SolPot   TrpPot
1901 BalWatTgt         0.0511   0.5227   0.0000   0.0264   0.1333   0.0000   0.3351   0.0032
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0010   0.8785
0.0033
1902 BalWatTgt         0.0049   0.4133   0.0000   0.0582   0.0265   0.0000   0.1965   0.1854
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.5845
0.2658
1903 BalWatTgt        -0.0235   0.5070   0.0000   0.0611   0.0850   0.0000   0.2712   0.1743
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.4978
0.2308
1904 BalWatTgt         0.0104   0.5926   0.0000   0.0504   0.1027   0.0000   0.2550   0.2244
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1762   0.4992
0.2660
1905 BalWatTgt         0.0201   0.5541   0.0000   0.0940   0.0610   0.0000   0.2382   0.2349
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1408   0.4930
0.2505
1906 BalWatTgt        -0.0093   0.6045   0.0000   0.1044   0.0919   0.0000   0.3086   0.2133
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0944   0.5072
0.2859
1907 BalWatTgt        -0.0036   0.7325   0.0000   0.0923   0.2115   0.0000   0.2838   0.2409
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1693   0.4768
0.2628
1908 BalWatTgt         0.0092   0.4733   0.0000   0.1440   0.0551   0.0000   0.2440   0.1649
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0373   0.5561
0.3514
1909 BalWatTgt         0.0026   0.7586   0.0000   0.1601   0.2235   0.0000   0.2989   0.2336
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2344   0.4724
0.2349
1910 BalWatTgt         0.0255   0.7063   0.0000   0.2535   0.2024   0.0000   0.2658   0.2125
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1409   0.4882
0.2286
1911 BalWatTgt        -0.0207   0.7866   0.0000   0.2188   0.2888   0.0000   0.2865   0.2320
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1442   0.4739
0.2439
1912 BalWatTgt         0.0014   0.6903   0.0000   0.2324   0.2149   0.0000   0.2743   0.1999
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1846   0.4916
0.2364
1913 BalWatTgt         0.0222   0.8047   0.0000   0.2239   0.2382   0.0000   0.3165   0.2276
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2039   0.5011
0.2313
```

```
1914 BalWatTgt        -0.0281   0.7277   0.0000   0.1898   0.2336   0.0000   0.3047   0.2175
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1140   0.5294
0.2894
1915 BalWatTgt        -0.0210   0.6683   0.0000   0.2576   0.1276   0.0000   0.3353   0.2264
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1241   0.5242
0.2618
1916 BalWatTgt         0.0213   0.8461   0.0000   0.1523   0.2960   0.0000   0.2865   0.2422
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1869   0.5109
0.2663
1917 BalWatTgt        -0.0087   0.5936   0.0000   0.2421   0.0860   0.0000   0.2649   0.2514
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1912   0.5377
0.2547
1918 BalWatTgt         0.0096   0.6340   0.0000   0.1082   0.1181   0.0000   0.2927   0.2135
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1039   0.4978
0.2697
1919 BalWatTgt        -0.0025   0.6577   0.0000   0.0932   0.1897   0.0000   0.2720   0.1986
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1308   0.4590
0.2436
1920 BalWatTgt        -0.0150   0.6951   0.0000   0.2797   0.2294   0.0000   0.2533   0.2272
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2016   0.4726
0.2341
1921 BalWatTgt         0.0044   0.5227   0.0000   0.1183   0.0533   0.0000   0.2656   0.1993
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0985   0.5735
0.3049
1922 BalWatTgt         0.0055   0.4133   0.0000   0.0592   0.0262   0.0000   0.1964   0.1852
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.5845
0.2658
1923 BalWatTgt        -0.0234   0.5070   0.0000   0.0607   0.0850   0.0000   0.2712   0.1743
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.4978
0.2308
1924 BalWatTgt         0.0104   0.5926   0.0000   0.0503   0.1027   0.0000   0.2550   0.2244
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1762   0.4992
0.2660
1925 BalWatTgt         0.0201   0.5541   0.0000   0.0939   0.0610   0.0000   0.2382   0.2349
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1408   0.4930
0.2505
1926 BalWatTgt        -0.0086   0.6045   0.0000   0.1044   0.0933   0.0000   0.3089   0.2109
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0937   0.5075
0.2834

* Annual water balance of the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
------
* yr Identifier        DelLiq      Prc      Irr   LeaLbo   LeaGrw   EvpInt   SolAct   TrpAct
Dra    Dra_1    Dra_2    Dra_3    Dra_4    Dra_5      Run   EvpPnd   CanDrp   SolPot   TrpPot
1901 BalWatSol         0.1580   0.5227   0.0000   0.0264   0.0264   0.0000   0.3351   0.0032
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0010   0.8785
0.0033
1902 BalWatSol        -0.0268   0.4133   0.0000   0.0582   0.0582   0.0000   0.1965   0.1854
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.5845
0.2658
1903 BalWatSol         0.0004   0.5070   0.0000   0.0611   0.0611   0.0000   0.2712   0.1743
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.4978
0.2308
1904 BalWatSol         0.0627   0.5926   0.0000   0.0504   0.0504   0.0000   0.2550   0.2244
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1762   0.4992
0.2660
1905 BalWatSol        -0.0129   0.5541   0.0000   0.0940   0.0940   0.0000   0.2382   0.2349
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1408   0.4930
0.2505
1906 BalWatSol        -0.0218   0.6045   0.0000   0.1044   0.1044   0.0000   0.3086   0.2133
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0944   0.5072
0.2859
1907 BalWatSol         0.1156   0.7325   0.0000   0.0923   0.0923   0.0000   0.2838   0.2409
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1693   0.4768
0.2628
1908 BalWatSol        -0.0796   0.4733   0.0000   0.1440   0.1440   0.0000   0.2440   0.1649
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0373   0.5561
0.3514
```

```
1909 BalWatSol         0.0660   0.7586   0.0000   0.1601   0.1601   0.0000   0.2989   0.2336
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2344   0.4724
0.2349
1910 BalWatSol        -0.0256   0.7063   0.0000   0.2535   0.2535   0.0000   0.2658   0.2125
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1409   0.4882
0.2286
1911 BalWatSol         0.0492   0.7866   0.0000   0.2188   0.2188   0.0000   0.2865   0.2320
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1442   0.4739
0.2439
1912 BalWatSol        -0.0161   0.6903   0.0000   0.2324   0.2324   0.0000   0.2743   0.1999
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1846   0.4916
0.2364
1913 BalWatSol         0.0366   0.8047   0.0000   0.2239   0.2239   0.0000   0.3165   0.2276
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2039   0.5011
0.2313
1914 BalWatSol         0.0156   0.7277   0.0000   0.1898   0.1898   0.0000   0.3047   0.2175
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1140   0.5294
0.2894
1915 BalWatSol        -0.1510   0.6683   0.0000   0.2576   0.2576   0.0000   0.3353   0.2264
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1241   0.5242
0.2618
1916 BalWatSol         0.1651   0.8461   0.0000   0.1523   0.1523   0.0000   0.2865   0.2422
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1869   0.5109
0.2663
1917 BalWatSol        -0.1649   0.5936   0.0000   0.2421   0.2421   0.0000   0.2649   0.2514
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1912   0.5377
0.2547
1918 BalWatSol         0.0196   0.6340   0.0000   0.1082   0.1082   0.0000   0.2927   0.2135
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1039   0.4978
0.2697
1919 BalWatSol         0.0939   0.6577   0.0000   0.0932   0.0932   0.0000   0.2720   0.1986
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1308   0.4590
0.2436
1920 BalWatSol        -0.0653   0.6951   0.0000   0.2797   0.2797   0.0000   0.2533   0.2272
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2016   0.4726
0.2341
1921 BalWatSol        -0.0606   0.5227   0.0000   0.1183   0.1183   0.0000   0.2656   0.1993
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0985   0.5735
0.3049
1922 BalWatSol        -0.0275   0.4133   0.0000   0.0592   0.0592   0.0000   0.1964   0.1852
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.5845
0.2658
1923 BalWatSol         0.0009   0.5070   0.0000   0.0607   0.0607   0.0000   0.2712   0.1743
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1040   0.4978
0.2308
1924 BalWatSol         0.0628   0.5926   0.0000   0.0503   0.0503   0.0000   0.2550   0.2244
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1762   0.4992
0.2660
1925 BalWatSol        -0.0128   0.5541   0.0000   0.0939   0.0939   0.0000   0.2382   0.2349
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1408   0.4930
0.2505
1926 BalWatSol        -0.0196   0.6045   0.0000   0.1044   0.1044   0.0000   0.3089   0.2109
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0937   0.5075
0.2834

* Annual mass balance of substance at the crop canopy
* ------------------------------------------------------------------------------
* yr Identifier     AmaApp    DelAmaCrp     AmaDep     AmaDsp     AmaWas     AmaHar
1901 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1902 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1903 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1904 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1905 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1906 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1907 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1908 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1909 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1910 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1911 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1912 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1913 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
```

```
1914 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1915 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1916 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1917 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1918 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1919 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1920 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1921 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1922 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1923 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1924 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1925 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1926 BalCrp_PXDa3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000

* Annual mass balance (kg.ha-1) of compound PXDa3 in the target layer
* ----------------------------------------------------------------------------------------
----------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1907 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1908 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1909 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2117E-17  0.9472E-15
1910 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1911 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1912 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1913 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1914 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1915 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7076E-17  0.5544E-14
1916 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5101E-17  0.1723E-14
```

```
1917 BalTgt_PXDa3  0.6000E-01  0.1040E-19  0.1040E-19   0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4489E-17  0.5222E-14
1918 BalTgt_PXDa3  0.6000E-01 -0.1040E-19 -0.1040E-19   0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.7259E-20   0.000
1919 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1920 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1921 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1922 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1923 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1924 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1925 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1926 BalTgt_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000

* Annual mass balance (kg.ha-1) of compound M3a3 in the target layer
* ----------------------------------------------------------------------------------------
----------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M3a3   0.000      0.8845E-03  0.8845E-03   0.000      0.1193E-01  0.1282E-01
0.6416E-05   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9766E-09  0.7328E-06
1902 BalTgt_M3a3   0.000      0.3229E-05  0.3229E-05   0.000      0.1098E-01  0.1282E-01
0.1836E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1606E-06  0.6064E-03
1903 BalTgt_M3a3   0.000      0.1862E-03  0.1862E-03   0.000      0.1096E-01  0.1282E-01
0.1667E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3425E-05  0.4027E-02
1904 BalTgt_M3a3   0.000      0.2411E-03  0.2411E-03   0.000      0.1053E-01  0.1282E-01
0.2033E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1341E-04  0.1306E-01
1905 BalTgt_M3a3   0.000      0.3161E-03  0.3161E-03   0.000      0.1038E-01  0.1282E-01
0.2095E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2996E-04  0.4911E-01
1906 BalTgt_M3a3   0.000     -0.6291E-03 -0.6291E-03   0.000      0.1130E-01  0.1282E-01
0.2091E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5331E-04  0.5801E-01
1907 BalTgt_M3a3   0.000      0.3853E-03  0.3853E-03   0.000      0.1014E-01  0.1282E-01
0.2192E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1025E-03  0.4847E-01
1908 BalTgt_M3a3   0.000     -0.3316E-03 -0.3316E-03   0.000      0.1193E-01  0.1282E-01
0.1185E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3915E-04  0.7105E-01
1909 BalTgt_M3a3   0.000      0.8047E-03  0.8047E-03   0.000      0.9918E-02  0.1282E-01
0.1968E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1270E-03  0.5683E-01
1910 BalTgt_M3a3   0.000     -0.1427E-04 -0.1427E-04   0.000      0.1056E-01  0.1282E-01
0.1958E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3114E-03  0.1539
1911 BalTgt_M3a3   0.000     -0.3370E-03 -0.3370E-03   0.000      0.1071E-01  0.1282E-01
0.2074E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3666E-03  0.1270
```

```
1912 BalTgt_M3a3   0.000      0.8597E-04  0.8597E-04   0.000      0.1041E-01  0.1282E-01
0.2078E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2465E-03  0.1147
1913 BalTgt_M3a3   0.000     -0.4582E-04 -0.4582E-04   0.000      0.1061E-01  0.1282E-01
0.2011E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2420E-03  0.1016
1914 BalTgt_M3a3   0.000     -0.5122E-03 -0.5122E-03   0.000      0.1101E-01  0.1282E-01
0.2091E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2327E-03  0.9961E-01
1915 BalTgt_M3a3   0.000      0.3813E-03  0.3813E-03   0.000      0.1040E-01  0.1282E-01
0.1914E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1206E-03  0.9447E-01
1916 BalTgt_M3a3   0.000      0.2560E-03  0.2560E-03   0.000      0.1029E-01  0.1282E-01
0.1961E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3120E-03  0.1054
1917 BalTgt_M3a3   0.000      0.3294E-03  0.3294E-03   0.000      0.1007E-01  0.1282E-01
0.2219E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1984E-03  0.2308
1918 BalTgt_M3a3   0.000     -0.3160E-03 -0.3160E-03   0.000      0.1091E-01  0.1282E-01
0.2084E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1374E-03  0.1163
1919 BalTgt_M3a3   0.000     -0.2354E-03 -0.2354E-03   0.000      0.1109E-01  0.1282E-01
0.1808E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1585E-03  0.8358E-01
1920 BalTgt_M3a3   0.000      0.1039E-03  0.1039E-03   0.000      0.1046E-01  0.1282E-01
0.1947E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3085E-03  0.1345
1921 BalTgt_M3a3   0.000     -0.4624E-03 -0.4624E-03   0.000      0.1143E-01  0.1282E-01
0.1830E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2242E-04  0.4207E-01
1922 BalTgt_M3a3   0.000     -0.1266E-03 -0.1266E-03   0.000      0.1110E-01  0.1282E-01
0.1856E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.7630E-05   0.000
1923 BalTgt_M3a3   0.000      0.1295E-03  0.1295E-03   0.000      0.1100E-01  0.1282E-01
0.1673E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1526E-04  0.1795E-01
1924 BalTgt_M3a3   0.000      0.2238E-03  0.2238E-03   0.000      0.1055E-01  0.1282E-01
0.2035E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1390E-04  0.1353E-01
1925 BalTgt_M3a3   0.000      0.3136E-03  0.3136E-03   0.000      0.1038E-01  0.1282E-01
0.2095E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2826E-04  0.4631E-01
1926 BalTgt_M3a3   0.000     -0.6292E-03 -0.6292E-03   0.000      0.1130E-01  0.1282E-01
0.2089E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5358E-04  0.5742E-01

* Annual mass balance (kg.ha-1) of compound M4a3 in the target layer
* ---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M4a3   0.000      0.2350E-03  0.2350E-03   0.000      0.1277E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1833E-08  0.1375E-05
1902 BalTgt_M4a3   0.000      0.3126E-05  0.3126E-05   0.000      0.1197E-01  0.1197E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1024E-06  0.3866E-03
1903 BalTgt_M4a3   0.000      0.4838E-04  0.4838E-04   0.000      0.1190E-01  0.1195E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1845E-05  0.2170E-02
1904 BalTgt_M4a3   0.000      0.6741E-04  0.6741E-04   0.000      0.1140E-01  0.1148E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9240E-05  0.8997E-02
1905 BalTgt_M4a3   0.000      0.8586E-04  0.8586E-04   0.000      0.1122E-01  0.1131E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1268E-04  0.2078E-01
1906 BalTgt_M4a3   0.000     -0.1721E-03 -0.1721E-03   0.000      0.1247E-01  0.1232E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2208E-04  0.2403E-01
```

```
1907 BalTgt_M4a3   0.000      0.1001E-03  0.1001E-03   0.000      0.1090E-01  0.1105E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4888E-04  0.2311E-01
1908 BalTgt_M4a3   0.000     -0.8852E-04 -0.8852E-04   0.000      0.1308E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1032E-04  0.1873E-01
1909 BalTgt_M4a3   0.000      0.2140E-03  0.2140E-03   0.000      0.1055E-01  0.1081E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5176E-04  0.2316E-01
1910 BalTgt_M4a3   0.000     -0.1027E-04 -0.1027E-04   0.000      0.1139E-01  0.1152E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1383E-03  0.6834E-01
1911 BalTgt_M4a3   0.000     -0.8243E-04 -0.8243E-04   0.000      0.1162E-01  0.1168E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1482E-03  0.5131E-01
1912 BalTgt_M4a3   0.000      0.2223E-04  0.2223E-04   0.000      0.1122E-01  0.1135E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1035E-03  0.4815E-01
1913 BalTgt_M4a3   0.000     -0.1271E-04 -0.1271E-04   0.000      0.1148E-01  0.1157E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1023E-03  0.4295E-01
1914 BalTgt_M4a3   0.000     -0.1375E-03 -0.1375E-03   0.000      0.1204E-01  0.1200E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9590E-04  0.4105E-01
1915 BalTgt_M4a3   0.000      0.9777E-04  0.9777E-04   0.000      0.1119E-01  0.1134E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5015E-04  0.3929E-01
1916 BalTgt_M4a3   0.000      0.5928E-04  0.5928E-04   0.000      0.1101E-01  0.1122E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1498E-03  0.5059E-01
1917 BalTgt_M4a3   0.000      0.8931E-04  0.8931E-04   0.000      0.1081E-01  0.1098E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7585E-04  0.8825E-01
1918 BalTgt_M4a3   0.000     -0.7120E-04 -0.7120E-04   0.000      0.1192E-01  0.1190E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4856E-04  0.4111E-01
1919 BalTgt_M4a3   0.000     -0.6044E-04 -0.6044E-04   0.000      0.1208E-01  0.1209E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6566E-04  0.3462E-01
1920 BalTgt_M4a3   0.000      0.2236E-04  0.2236E-04   0.000      0.1125E-01  0.1140E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1335E-03  0.5820E-01
1921 BalTgt_M4a3   0.000     -0.1216E-03 -0.1216E-03   0.000      0.1257E-01  0.1246E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7421E-05  0.1393E-01
1922 BalTgt_M4a3   0.000     -0.3016E-04 -0.3016E-04   0.000      0.1213E-01  0.1210E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.3071E-05   0.000
1923 BalTgt_M4a3   0.000      0.3409E-04  0.3409E-04   0.000      0.1195E-01  0.1199E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5971E-05  0.7020E-02
1924 BalTgt_M4a3   0.000      0.6306E-04  0.6306E-04   0.000      0.1142E-01  0.1150E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9506E-05  0.9255E-02
1925 BalTgt_M4a3   0.000      0.8541E-04  0.8541E-04   0.000      0.1122E-01  0.1132E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1246E-04  0.2042E-01
1926 BalTgt_M4a3   0.000     -0.1723E-03 -0.1723E-03   0.000      0.1248E-01  0.1233E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2244E-04  0.2405E-01

* Annual mass balance (kg.ha-1) of compound M2a3 in the target layer
* ---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M2a3   0.000      0.5378E-10  0.5378E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8885E-11  0.6666E-08
```

```
1902 BalTgt_M2a3   0.000     -0.3192E-10 -0.3192E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.2574E-11   0.000
1903 BalTgt_M2a3   0.000      0.6075E-10  0.6075E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4908E-11  0.5773E-08
1904 BalTgt_M2a3   0.000      0.1000E-08  0.1000E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1699E-08  0.1654E-05
1905 BalTgt_M2a3   0.000      0.5110E-08  0.5110E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2415E-09  0.3958E-06
1906 BalTgt_M2a3   0.000     -0.6108E-08 -0.6108E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6562E-09  0.7140E-06
1907 BalTgt_M2a3   0.000      0.2413E-08  0.2413E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9754E-08  0.4611E-05
1908 BalTgt_M2a3   0.000     -0.2474E-08 -0.2474E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.2767E-08   0.000
1909 BalTgt_M2a3   0.000      0.3396E-07  0.3396E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6302E-07  0.2820E-04
1910 BalTgt_M2a3   0.000     -0.2826E-07 -0.2826E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1538E-07  0.7599E-05
1911 BalTgt_M2a3   0.000     -0.4145E-08 -0.4145E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3376E-08  0.1169E-05
1912 BalTgt_M2a3   0.000      0.3051E-09  0.3051E-09   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3060E-08  0.1424E-05
1913 BalTgt_M2a3   0.000      0.2235E-08  0.2235E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1004E-07  0.4215E-05
1914 BalTgt_M2a3   0.000     -0.4102E-08 -0.4102E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1577E-09   0.000
1915 BalTgt_M2a3   0.000      0.4122E-08  0.4122E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2000E-08  0.1567E-05
1916 BalTgt_M2a3   0.000      0.1123E-08  0.1123E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1314E-06  0.4440E-04
1917 BalTgt_M2a3   0.000      0.2238E-07  0.2238E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5936E-09  0.6906E-06
1918 BalTgt_M2a3   0.000     -0.2338E-07 -0.2338E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3312E-08  0.2804E-05
1919 BalTgt_M2a3   0.000     -0.3603E-08 -0.3603E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3133E-08  0.1652E-05
1920 BalTgt_M2a3   0.000      0.5173E-08  0.5173E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5422E-08  0.2364E-05
1921 BalTgt_M2a3   0.000     -0.5720E-08 -0.5720E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.9417E-09   0.000
1922 BalTgt_M2a3   0.000     -0.7838E-10 -0.7838E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.4955E-09   0.000
1923 BalTgt_M2a3   0.000      0.4960E-10  0.4960E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.9447E-10   0.000
1924 BalTgt_M2a3   0.000      0.9982E-09  0.9982E-09   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1651E-08  0.1607E-05
```

```
1925 BalTgt_M2a3   0.000      0.5110E-08  0.5110E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2300E-09  0.3769E-06
1926 BalTgt_M2a3   0.000     -0.6109E-08 -0.6109E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6526E-09  0.6993E-06

* Annual mass balance (kg.ha-1) of compound M5a3 in the target layer
* ----------------------------------------------------------------------------------------------
----------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M5a3   0.000      0.6399E-03  0.6399E-03   0.000      0.1091E-01  0.1155E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5997E-07  0.4500E-04
1902 BalTgt_M5a3   0.000      0.3773E-04  0.3773E-04   0.000      0.1059E-01  0.1063E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2078E-05  0.7849E-02
1903 BalTgt_M5a3   0.000      0.1609E-03  0.1609E-03   0.000      0.1043E-01  0.1061E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2264E-04  0.2663E-01
1904 BalTgt_M5a3   0.000      0.1416E-03  0.1416E-03   0.000      0.9973E-02  0.1020E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8097E-04  0.7884E-01
1905 BalTgt_M5a3   0.000      0.2543E-03  0.2543E-03   0.000      0.9713E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7965E-04  0.1305
1906 BalTgt_M5a3   0.000     -0.4379E-03 -0.4379E-03   0.000      0.1125E-01  0.1094E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1285E-03  0.1398
1907 BalTgt_M5a3   0.000      0.1477E-03  0.1477E-03   0.000      0.9384E-02  0.9815E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2840E-03  0.1343
1908 BalTgt_M5a3   0.000     -0.1539E-03 -0.1539E-03   0.000      0.1166E-01  0.1155E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4122E-04  0.7481E-01
1909 BalTgt_M5a3   0.000      0.5299E-03  0.5299E-03   0.000      0.8786E-02  0.9602E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2861E-03  0.1280
1910 BalTgt_M5a3   0.000     -0.1903E-04 -0.1903E-04   0.000      0.9678E-02  0.1023E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5683E-03  0.2809
1911 BalTgt_M5a3   0.000     -0.2308E-03 -0.2308E-03   0.000      0.9985E-02  0.1037E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6196E-03  0.2146
1912 BalTgt_M5a3   0.000      0.1121E-03  0.1121E-03   0.000      0.9498E-02  0.1008E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4670E-03  0.2174
1913 BalTgt_M5a3   0.000     -0.7455E-04 -0.7455E-04   0.000      0.9848E-02  0.1027E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4999E-03  0.2099
1914 BalTgt_M5a3   0.000     -0.4013E-03 -0.4013E-03   0.000      0.1059E-01  0.1066E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4708E-03  0.2015
1915 BalTgt_M5a3   0.000      0.3015E-03  0.3015E-03   0.000      0.9553E-02  0.1007E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2163E-03  0.1695
1916 BalTgt_M5a3   0.000     -0.1680E-04 -0.1680E-04   0.000      0.9280E-02  0.9961E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6979E-03  0.2358
1917 BalTgt_M5a3   0.000      0.3803E-03  0.3803E-03   0.000      0.9110E-02  0.9751E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2605E-03  0.3030
1918 BalTgt_M5a3   0.000     -0.1566E-03 -0.1566E-03   0.000      0.1053E-01  0.1057E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1888E-03  0.1598
1919 BalTgt_M5a3   0.000     -0.1607E-03 -0.1607E-03   0.000      0.1054E-01  0.1073E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3582E-03  0.1888
```

```
1920 BalTgt_M5a3   0.000      0.9786E-04  0.9786E-04   0.000      0.9465E-02  0.1013E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5624E-03  0.2452
1921 BalTgt_M5a3   0.000     -0.3272E-03 -0.3272E-03   0.000      0.1135E-01  0.1106E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4252E-04  0.7980E-01
1922 BalTgt_M5a3   0.000     -0.8598E-04 -0.8598E-04   0.000      0.1084E-01  0.1074E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1140E-04   0.000
1923 BalTgt_M5a3   0.000      0.1151E-03  0.1151E-03   0.000      0.1050E-01  0.1065E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3656E-04  0.4299E-01
1924 BalTgt_M5a3   0.000      0.1290E-03  0.1290E-03   0.000      0.1000E-01  0.1021E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8053E-04  0.7840E-01
1925 BalTgt_M5a3   0.000      0.2531E-03  0.2531E-03   0.000      0.9719E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7867E-04  0.1290
1926 BalTgt_M5a3   0.000     -0.4394E-03 -0.4394E-03   0.000      0.1125E-01  0.1095E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1302E-03  0.1395

* Annual mass balance (kg.ha-1) of compound M52a3 in the target layer
* ----------------------------------------------------------------------------------------
----------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M52a3   0.000      0.1184E-06  0.1184E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8765E-13  0.6577E-10
1902 BalTgt_M52a3   0.000     -0.8521E-07 -0.8521E-07   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2171E-12  0.8201E-09
1903 BalTgt_M52a3   0.000      0.4217E-07  0.4217E-07   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2986E-13  0.3511E-10
1904 BalTgt_M52a3   0.000      0.2775E-06  0.2775E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2269E-10  0.2210E-07
1905 BalTgt_M52a3   0.000      0.1178E-05  0.1178E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3655E-10  0.5991E-07
1906 BalTgt_M52a3   0.000     -0.1472E-05 -0.1472E-05   0.000      0.5130E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5463E-10  0.5945E-07
1907 BalTgt_M52a3   0.000      0.1503E-05  0.1503E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3290E-09  0.1555E-06
1908 BalTgt_M52a3   0.000     -0.1536E-05 -0.1536E-05   0.000      0.5130E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6166E-10  0.1119E-06
1909 BalTgt_M52a3   0.000      0.2510E-05  0.2510E-05   0.000      0.5126E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6197E-08  0.2773E-05
1910 BalTgt_M52a3   0.000     -0.5521E-06 -0.5521E-06   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2901E-07  0.1434E-04
1911 BalTgt_M52a3   0.000     -0.1281E-05 -0.1281E-05   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1281E-08   0.000
1912 BalTgt_M52a3   0.000     -0.4936E-06 -0.4936E-06   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.9712E-09   0.000
1913 BalTgt_M52a3   0.000      0.8316E-06  0.8316E-06   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3945E-10  0.1656E-07
1914 BalTgt_M52a3   0.000     -0.1007E-05 -0.1007E-05   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1997E-10  0.8548E-08
```

```
1915 BalTgt_M52a3   0.000      0.2084E-05  0.2084E-05   0.000      0.5126E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8871E-11  0.6950E-08
1916 BalTgt_M52a3   0.000      0.2106E-06  0.2106E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2075E-07  0.7009E-05
1917 BalTgt_M52a3   0.000      0.1214E-05  0.1214E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1260E-07  0.1466E-04
1918 BalTgt_M52a3   0.000     -0.9642E-06 -0.9642E-06   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.2786E-08   0.000
1919 BalTgt_M52a3   0.000     -0.2429E-05 -0.2429E-05   0.000      0.5131E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1951E-08   0.000
1920 BalTgt_M52a3   0.000      0.4319E-06  0.4319E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.8532E-10   0.000
1921 BalTgt_M52a3   0.000     -0.3798E-06 -0.3798E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.5726E-09   0.000
1922 BalTgt_M52a3   0.000     -0.1666E-06 -0.1666E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.7530E-09   0.000
1923 BalTgt_M52a3   0.000      0.4215E-07  0.4215E-07   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.5620E-09   0.000
1924 BalTgt_M52a3   0.000      0.2775E-06  0.2775E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.3942E-09   0.000
1925 BalTgt_M52a3   0.000      0.1178E-05  0.1178E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.3078E-09   0.000
1926 BalTgt_M52a3   0.000     -0.1473E-05 -0.1473E-05   0.000      0.5130E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.2854E-09   0.000

* Annual mass balance (kg.ha-1) of compound M1a3 in the target layer
* ---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M1a3   0.000      0.4325E-03  0.4325E-03   0.000      0.1257E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3445E-07  0.2585E-04
1902 BalTgt_M1a3   0.000      0.1370E-04  0.1370E-04   0.000      0.1195E-01  0.1197E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7574E-06  0.2861E-02
1903 BalTgt_M1a3   0.000      0.1001E-03  0.1001E-03   0.000      0.1184E-01  0.1195E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9191E-05  0.1081E-01
1904 BalTgt_M1a3   0.000      0.1140E-03  0.1140E-03   0.000      0.1133E-01  0.1148E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3867E-04  0.3765E-01
1905 BalTgt_M1a3   0.000      0.1721E-03  0.1721E-03   0.000      0.1110E-01  0.1131E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3935E-04  0.6450E-01
1906 BalTgt_M1a3   0.000     -0.3196E-03 -0.3196E-03   0.000      0.1258E-01  0.1232E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6655E-04  0.7242E-01
1907 BalTgt_M1a3   0.000      0.1491E-03  0.1491E-03   0.000      0.1075E-01  0.1105E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1524E-03  0.7202E-01
1908 BalTgt_M1a3   0.000     -0.1410E-03 -0.1410E-03   0.000      0.1312E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1974E-04  0.3583E-01
1909 BalTgt_M1a3   0.000      0.3962E-03  0.3962E-03   0.000      0.1026E-01  0.1081E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1538E-03  0.6879E-01
```

```
1910 BalTgt_M1a3   0.000     -0.2578E-04 -0.2578E-04   0.000      0.1119E-01  0.1152E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3521E-03  0.1740
1911 BalTgt_M1a3   0.000     -0.1552E-03 -0.1552E-03   0.000      0.1146E-01  0.1168E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3756E-03  0.1301
1912 BalTgt_M1a3   0.000      0.6249E-04  0.6249E-04   0.000      0.1101E-01  0.1135E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2750E-03  0.1280
1913 BalTgt_M1a3   0.000     -0.4041E-04 -0.4041E-04   0.000      0.1132E-01  0.1157E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2852E-03  0.1197
1914 BalTgt_M1a3   0.000     -0.2699E-03 -0.2699E-03   0.000      0.1201E-01  0.1200E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2644E-03  0.1132
1915 BalTgt_M1a3   0.000      0.1978E-03  0.1978E-03   0.000      0.1101E-01  0.1134E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1290E-03  0.1011
1916 BalTgt_M1a3   0.000      0.4589E-04  0.4589E-04   0.000      0.1075E-01  0.1122E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4170E-03  0.1409
1917 BalTgt_M1a3   0.000      0.2170E-03  0.2170E-03   0.000      0.1059E-01  0.1098E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1707E-03  0.1986
1918 BalTgt_M1a3   0.000     -0.1207E-03 -0.1207E-03   0.000      0.1190E-01  0.1190E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1136E-03  0.9618E-01
1919 BalTgt_M1a3   0.000     -0.1105E-03 -0.1105E-03   0.000      0.1201E-01  0.1209E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1916E-03  0.1010
1920 BalTgt_M1a3   0.000      0.5670E-04  0.5670E-04   0.000      0.1100E-01  0.1140E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3405E-03  0.1485
1921 BalTgt_M1a3   0.000     -0.2364E-03 -0.2364E-03   0.000      0.1267E-01  0.1246E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2054E-04  0.3855E-01
1922 BalTgt_M1a3   0.000     -0.5497E-04 -0.5497E-04   0.000      0.1216E-01  0.1210E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.7948E-05   0.000
1923 BalTgt_M1a3   0.000      0.7300E-04  0.7300E-04   0.000      0.1190E-01  0.1199E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1747E-04  0.2054E-01
1924 BalTgt_M1a3   0.000      0.1062E-03  0.1062E-03   0.000      0.1135E-01  0.1150E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3872E-04  0.3770E-01
1925 BalTgt_M1a3   0.000      0.1714E-03  0.1714E-03   0.000      0.1111E-01  0.1132E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3893E-04  0.6380E-01
1926 BalTgt_M1a3   0.000     -0.3201E-03 -0.3201E-03   0.000      0.1258E-01  0.1233E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6750E-04  0.7233E-01

* Annual mass balance (kg.ha-1) of compound M6a3 in the target layer
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M6a3   0.000      0.2011E-02  0.2011E-02   0.000      0.3213E-02  0.5224E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1778E-08  0.1334E-05
1902 BalTgt_M6a3   0.000      0.5467E-03  0.5467E-03   0.000      0.4259E-02  0.4809E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2791E-05  0.1054E-01
1903 BalTgt_M6a3   0.000      0.5339E-03  0.5339E-03   0.000      0.4181E-02  0.4801E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8619E-04  0.1014
1904 BalTgt_M6a3   0.000      0.1089E-03  0.1089E-03   0.000      0.4174E-02  0.4613E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3295E-03  0.3208
```

```
1905 BalTgt_M6a3   0.000      0.5067E-03  0.5067E-03   0.000      0.3705E-02  0.4545E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3343E-03  0.5478
1906 BalTgt_M6a3   0.000     -0.2607E-03 -0.2607E-03   0.000      0.4680E-02  0.4951E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5313E-03  0.5782
1907 BalTgt_M6a3   0.000     -0.5656E-03 -0.5656E-03   0.000      0.3834E-02  0.4441E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1173E-02  0.5544
1908 BalTgt_M6a3   0.000      0.3548E-03  0.3548E-03   0.000      0.4553E-02  0.5224E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3156E-03  0.5727
1909 BalTgt_M6a3   0.000     -0.5458E-04 -0.5458E-04   0.000      0.3231E-02  0.4344E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1168E-02  0.5225
1910 BalTgt_M6a3   0.000      0.1969E-03  0.1969E-03   0.000      0.3222E-02  0.4627E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1208E-02  0.5970
1911 BalTgt_M6a3   0.000     -0.3673E-03 -0.3673E-03   0.000      0.3514E-02  0.4693E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1546E-02  0.5355
1912 BalTgt_M6a3   0.000      0.6701E-04  0.6701E-04   0.000      0.3280E-02  0.4559E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1212E-02  0.5639
1913 BalTgt_M6a3   0.000     -0.9360E-04 -0.9360E-04   0.000      0.3494E-02  0.4648E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1248E-02  0.5239
1914 BalTgt_M6a3   0.000     -0.4922E-03 -0.4922E-03   0.000      0.3981E-02  0.4821E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1332E-02  0.5703
1915 BalTgt_M6a3   0.000      0.5123E-03  0.5123E-03   0.000      0.3374E-02  0.4556E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6696E-03  0.5246
1916 BalTgt_M6a3   0.000     -0.4125E-03 -0.4125E-03   0.000      0.3343E-02  0.4507E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1576E-02  0.5325
1917 BalTgt_M6a3   0.000      0.8497E-03  0.8497E-03   0.000      0.2992E-02  0.4411E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5697E-03  0.6628
1918 BalTgt_M6a3   0.000      0.2606E-03  0.2606E-03   0.000      0.3903E-02  0.4780E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6164E-03  0.5219
1919 BalTgt_M6a3   0.000     -0.4567E-03 -0.4567E-03   0.000      0.4140E-02  0.4856E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1173E-02  0.6183
1920 BalTgt_M6a3   0.000     -0.2077E-03 -0.2077E-03   0.000      0.3264E-02  0.4581E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1524E-02  0.6646
1921 BalTgt_M6a3   0.000      0.2810E-03  0.2810E-03   0.000      0.4524E-02  0.5006E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2006E-03  0.3764
1922 BalTgt_M6a3   0.000     -0.1248E-04 -0.1248E-04   0.000      0.4804E-02  0.4860E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6885E-04  0.2631
1923 BalTgt_M6a3   0.000      0.8432E-04  0.8432E-04   0.000      0.4411E-02  0.4818E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3234E-03  0.3803
1924 BalTgt_M6a3   0.000     -0.1025E-03 -0.1025E-03   0.000      0.4294E-02  0.4619E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4276E-03  0.4163
1925 BalTgt_M6a3   0.000      0.4679E-03  0.4679E-03   0.000      0.3737E-02  0.4547E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3418E-03  0.5603
1926 BalTgt_M6a3   0.000     -0.2948E-03 -0.2948E-03   0.000      0.4695E-02  0.4952E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5516E-03  0.5911

* Annual mass balance (kg.ha-1) of compound PXDa3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
```

```
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1907 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1908 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1909 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1910 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1911 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1912 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1913 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1914 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1915 BalSol_PXDa3  0.6000E-01  0.2518E-19  0.2518E-19   0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1916 BalSol_PXDa3  0.6000E-01 -0.2518E-19 -0.2518E-19   0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1917 BalSol_PXDa3  0.6000E-01  0.5413E-19  0.5413E-19   0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1918 BalSol_PXDa3  0.6000E-01 -0.5413E-19 -0.5413E-19   0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1919 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1920 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1921 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1922 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
```

```
1923 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1924 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1925 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1926 BalSol_PXDa3  0.6000E-01   0.000       0.000       0.000      0.6000E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000

* Annual mass balance (kg.ha-1) of compound M3a3 in the soil profile
* ---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M3a3   0.000      0.8845E-03  0.8845E-03   0.000      0.1193E-01  0.1282E-01
0.6416E-05   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M3a3   0.000      0.3389E-05  0.3389E-05   0.000      0.1098E-01  0.1282E-01
0.1836E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M3a3   0.000      0.1896E-03  0.1896E-03   0.000      0.1096E-01  0.1282E-01
0.1667E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M3a3   0.000      0.2545E-03  0.2545E-03   0.000      0.1053E-01  0.1282E-01
0.2033E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M3a3   0.000      0.3461E-03  0.3461E-03   0.000      0.1038E-01  0.1282E-01
0.2095E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M3a3   0.000     -0.5757E-03 -0.5757E-03   0.000      0.1130E-01  0.1282E-01
0.2091E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1907 BalSol_M3a3   0.000      0.4878E-03  0.4878E-03   0.000      0.1014E-01  0.1282E-01
0.2192E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9799E-16  0.9799E-16
1908 BalSol_M3a3   0.000     -0.2925E-03 -0.2925E-03   0.000      0.1193E-01  0.1282E-01
0.1185E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4181E-12  0.4181E-12
1909 BalSol_M3a3   0.000      0.9317E-03  0.9317E-03   0.000      0.9918E-02  0.1282E-01
0.1968E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1624E-09  0.1624E-09
1910 BalSol_M3a3   0.000      0.2971E-03  0.2971E-03   0.000      0.1056E-01  0.1282E-01
0.1958E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6219E-07  0.6219E-07
1911 BalSol_M3a3   0.000      0.2820E-04  0.2820E-04   0.000      0.1071E-01  0.1282E-01
0.2074E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1399E-05  0.1399E-05
1912 BalSol_M3a3   0.000      0.3215E-03  0.3215E-03   0.000      0.1041E-01  0.1282E-01
0.2078E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1097E-04  0.1097E-04
1913 BalSol_M3a3   0.000      0.1612E-03  0.1612E-03   0.000      0.1061E-01  0.1282E-01
0.2011E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3492E-04  0.3492E-04
1914 BalSol_M3a3   0.000     -0.3369E-03 -0.3369E-03   0.000      0.1101E-01  0.1282E-01
0.2091E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5745E-04  0.5745E-04
1915 BalSol_M3a3   0.000      0.3712E-03  0.3712E-03   0.000      0.1040E-01  0.1282E-01
0.1914E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1307E-03  0.1307E-03
1916 BalSol_M3a3   0.000      0.4536E-03  0.4536E-03   0.000      0.1029E-01  0.1282E-01
0.1961E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1144E-03  0.1144E-03
1917 BalSol_M3a3   0.000      0.2899E-03  0.2899E-03   0.000      0.1007E-01  0.1282E-01
0.2219E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2379E-03  0.2379E-03
```

```
1918 BalSol_M3a3   0.000     -0.3001E-03 -0.3001E-03   0.000      0.1091E-01  0.1282E-01
0.2084E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1215E-03  0.1215E-03
1919 BalSol_M3a3   0.000     -0.1848E-03 -0.1848E-03   0.000      0.1109E-01  0.1282E-01
0.1808E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1080E-03  0.1080E-03
1920 BalSol_M3a3   0.000      0.9040E-04  0.9040E-04   0.000      0.1046E-01  0.1282E-01
0.1947E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3220E-03  0.3220E-03
1921 BalSol_M3a3   0.000     -0.5706E-03 -0.5706E-03   0.000      0.1143E-01  0.1282E-01
0.1830E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1307E-03  0.1307E-03
1922 BalSol_M3a3   0.000     -0.1978E-03 -0.1978E-03   0.000      0.1110E-01  0.1282E-01
0.1856E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6359E-04  0.6359E-04
1923 BalSol_M3a3   0.000      0.8069E-04  0.8069E-04   0.000      0.1100E-01  0.1282E-01
0.1673E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6409E-04  0.6409E-04
1924 BalSol_M3a3   0.000      0.1854E-03  0.1854E-03   0.000      0.1055E-01  0.1282E-01
0.2035E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5230E-04  0.5230E-04
1925 BalSol_M3a3   0.000      0.2456E-03  0.2456E-03   0.000      0.1038E-01  0.1282E-01
0.2095E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9627E-04  0.9627E-04
1926 BalSol_M3a3   0.000     -0.6823E-03 -0.6823E-03   0.000      0.1130E-01  0.1282E-01
0.2089E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1067E-03  0.1067E-03

* Annual mass balance (kg.ha-1) of compound M4a3 in the soil profile
* ---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra    AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M4a3   0.000      0.2350E-03  0.2350E-03   0.000      0.1277E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M4a3   0.000      0.3228E-05  0.3228E-05   0.000      0.1197E-01  0.1197E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M4a3   0.000      0.5022E-04  0.5022E-04   0.000      0.1190E-01  0.1195E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M4a3   0.000      0.7665E-04  0.7665E-04   0.000      0.1140E-01  0.1148E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M4a3   0.000      0.9854E-04  0.9854E-04   0.000      0.1122E-01  0.1131E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M4a3   0.000     -0.1501E-03 -0.1501E-03   0.000      0.1247E-01  0.1232E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3593E-17  0.3593E-17
1907 BalSol_M4a3   0.000      0.1490E-03  0.1490E-03   0.000      0.1090E-01  0.1105E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2357E-13  0.2357E-13
1908 BalSol_M4a3   0.000     -0.7820E-04 -0.7820E-04   0.000      0.1308E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4318E-10  0.4318E-10
1909 BalSol_M4a3   0.000      0.2658E-03  0.2658E-03   0.000      0.1055E-01  0.1081E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6758E-08  0.6758E-08
1910 BalSol_M4a3   0.000      0.1273E-03  0.1273E-03   0.000      0.1139E-01  0.1152E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7500E-06  0.7500E-06
1911 BalSol_M4a3   0.000      0.5940E-04  0.5940E-04   0.000      0.1162E-01  0.1168E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6353E-05  0.6353E-05
1912 BalSol_M4a3   0.000      0.1041E-03  0.1041E-03   0.000      0.1122E-01  0.1135E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2160E-04  0.2160E-04
```

```
1913 BalSol_M4a3   0.000      0.5153E-04  0.5153E-04   0.000      0.1148E-01  0.1157E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3807E-04  0.3807E-04
1914 BalSol_M4a3   0.000     -0.8986E-04 -0.8986E-04   0.000      0.1204E-01  0.1200E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4828E-04  0.4828E-04
1915 BalSol_M4a3   0.000      0.4767E-04  0.4767E-04   0.000      0.1119E-01  0.1134E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1003E-03  0.1003E-03
1916 BalSol_M4a3   0.000      0.1347E-03  0.1347E-03   0.000      0.1101E-01  0.1122E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7438E-04  0.7438E-04
1917 BalSol_M4a3   0.000      0.4224E-04  0.4224E-04   0.000      0.1081E-01  0.1098E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1229E-03  0.1229E-03
1918 BalSol_M4a3   0.000     -0.7564E-04 -0.7564E-04   0.000      0.1192E-01  0.1190E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5301E-04  0.5301E-04
1919 BalSol_M4a3   0.000     -0.3890E-04 -0.3890E-04   0.000      0.1208E-01  0.1209E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4412E-04  0.4412E-04
1920 BalSol_M4a3   0.000      0.3212E-04  0.3212E-04   0.000      0.1125E-01  0.1140E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1237E-03  0.1237E-03
1921 BalSol_M4a3   0.000     -0.1631E-03 -0.1631E-03   0.000      0.1257E-01  0.1246E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4890E-04  0.4890E-04
1922 BalSol_M4a3   0.000     -0.5739E-04 -0.5739E-04   0.000      0.1213E-01  0.1210E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2415E-04  0.2415E-04
1923 BalSol_M4a3   0.000      0.1497E-04  0.1497E-04   0.000      0.1195E-01  0.1199E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2509E-04  0.2509E-04
1924 BalSol_M4a3   0.000      0.5120E-04  0.5120E-04   0.000      0.1142E-01  0.1150E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2137E-04  0.2137E-04
1925 BalSol_M4a3   0.000      0.5584E-04  0.5584E-04   0.000      0.1122E-01  0.1132E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4203E-04  0.4203E-04
1926 BalSol_M4a3   0.000     -0.2003E-03 -0.2003E-03   0.000      0.1248E-01  0.1233E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5044E-04  0.5044E-04

* Annual mass balance (kg.ha-1) of compound M2a3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra    AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M2a3   0.000      0.6267E-10  0.6267E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M2a3   0.000     -0.3449E-10 -0.3449E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M2a3   0.000      0.6566E-10  0.6566E-10   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M2a3   0.000      0.2699E-08  0.2699E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M2a3   0.000      0.5351E-08  0.5351E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M2a3   0.000     -0.5452E-08 -0.5452E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1617E-15  0.1617E-15
1907 BalSol_M2a3   0.000      0.1217E-07  0.1217E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5279E-14  0.5279E-14
```

```
1908 BalSol_M2a3   0.000     -0.5241E-08 -0.5241E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3624E-12  0.3624E-12
1909 BalSol_M2a3   0.000      0.9697E-07  0.9697E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1491E-10  0.1491E-10
1910 BalSol_M2a3   0.000     -0.1326E-07 -0.1326E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3764E-09  0.3764E-09
1911 BalSol_M2a3   0.000     -0.2237E-08 -0.2237E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1468E-08  0.1468E-08
1912 BalSol_M2a3   0.000     -0.1327E-08 -0.1327E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4692E-08  0.4692E-08
1913 BalSol_M2a3   0.000     -0.4821E-08 -0.4821E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1710E-07  0.1710E-07
1914 BalSol_M2a3   0.000     -0.3120E-07 -0.3120E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2694E-07  0.2694E-07
1915 BalSol_M2a3   0.000     -0.2249E-07 -0.2249E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2861E-07  0.2861E-07
1916 BalSol_M2a3   0.000      0.1248E-06  0.1248E-06   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7752E-08  0.7752E-08
1917 BalSol_M2a3   0.000      0.1666E-07  0.1666E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6316E-08  0.6316E-08
1918 BalSol_M2a3   0.000     -0.2259E-07 -0.2259E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2529E-08  0.2529E-08
1919 BalSol_M2a3   0.000     -0.2694E-08 -0.2694E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2224E-08  0.2224E-08
1920 BalSol_M2a3   0.000      0.4789E-09  0.4789E-09   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1012E-07  0.1012E-07
1921 BalSol_M2a3   0.000     -0.2042E-07 -0.2042E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1376E-07  0.1376E-07
1922 BalSol_M2a3   0.000     -0.1131E-07 -0.1131E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1073E-07  0.1073E-07
1923 BalSol_M2a3   0.000     -0.1329E-07 -0.1329E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1324E-07  0.1324E-07
1924 BalSol_M2a3   0.000     -0.9343E-08 -0.9343E-08   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1199E-07  0.1199E-07
1925 BalSol_M2a3   0.000     -0.1726E-07 -0.1726E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2260E-07  0.2260E-07
1926 BalSol_M2a3   0.000     -0.2756E-07 -0.2756E-07   0.000      0.2218E-01  0.2218E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2210E-07  0.2210E-07

* Annual mass balance (kg.ha-1) of compound M5a3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M5a3   0.000      0.6400E-03  0.6400E-03   0.000      0.1091E-01  0.1155E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M5a3   0.000      0.3981E-04  0.3981E-04   0.000      0.1059E-01  0.1063E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
```

```
1903 BalSol_M5a3   0.000      0.1835E-03  0.1835E-03   0.000      0.1043E-01  0.1061E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M5a3   0.000      0.2226E-03  0.2226E-03   0.000      0.9973E-02  0.1020E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M5a3   0.000      0.3339E-03  0.3339E-03   0.000      0.9713E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3932E-19  0.3932E-19
1906 BalSol_M5a3   0.000     -0.3094E-03 -0.3094E-03   0.000      0.1125E-01  0.1094E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1360E-12  0.1360E-12
1907 BalSol_M5a3   0.000      0.4317E-03  0.4317E-03   0.000      0.9384E-02  0.9815E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4855E-10  0.4855E-10
1908 BalSol_M5a3   0.000     -0.1127E-03 -0.1127E-03   0.000      0.1166E-01  0.1155E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1285E-07  0.1285E-07
1909 BalSol_M5a3   0.000      0.8155E-03  0.8155E-03   0.000      0.8786E-02  0.9602E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5748E-06  0.5748E-06
1910 BalSol_M5a3   0.000      0.5293E-03  0.5293E-03   0.000      0.9678E-02  0.1023E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2004E-04  0.2004E-04
1911 BalSol_M5a3   0.000      0.3003E-03  0.3003E-03   0.000      0.9985E-02  0.1037E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8854E-04  0.8854E-04
1912 BalSol_M5a3   0.000      0.3846E-03  0.3846E-03   0.000      0.9498E-02  0.1008E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1945E-03  0.1945E-03
1913 BalSol_M5a3   0.000      0.1599E-03  0.1599E-03   0.000      0.9848E-02  0.1027E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2654E-03  0.2654E-03
1914 BalSol_M5a3   0.000     -0.2286E-03 -0.2286E-03   0.000      0.1059E-01  0.1066E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2981E-03  0.2981E-03
1915 BalSol_M5a3   0.000     -0.3699E-05 -0.3699E-05   0.000      0.9553E-02  0.1007E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5215E-03  0.5215E-03
1916 BalSol_M5a3   0.000      0.3439E-03  0.3439E-03   0.000      0.9280E-02  0.9961E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3371E-03  0.3371E-03
1917 BalSol_M5a3   0.000      0.1075E-03  0.1075E-03   0.000      0.9110E-02  0.9751E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5333E-03  0.5333E-03
1918 BalSol_M5a3   0.000     -0.2000E-03 -0.2000E-03   0.000      0.1053E-01  0.1057E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2321E-03  0.2321E-03
1919 BalSol_M5a3   0.000      0.1297E-05  0.1297E-05   0.000      0.1054E-01  0.1073E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1962E-03  0.1962E-03
1920 BalSol_M5a3   0.000      0.1003E-03  0.1003E-03   0.000      0.9465E-02  0.1013E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5600E-03  0.5600E-03
1921 BalSol_M5a3   0.000     -0.5087E-03 -0.5087E-03   0.000      0.1135E-01  0.1106E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2241E-03  0.2241E-03
1922 BalSol_M5a3   0.000     -0.2105E-03 -0.2105E-03   0.000      0.1084E-01  0.1074E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1132E-03  0.1132E-03
1923 BalSol_M5a3   0.000      0.3181E-04  0.3181E-04   0.000      0.1050E-01  0.1065E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1199E-03  0.1199E-03
1924 BalSol_M5a3   0.000      0.1062E-03  0.1062E-03   0.000      0.1000E-01  0.1021E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1033E-03  0.1033E-03
1925 BalSol_M5a3   0.000      0.1295E-03  0.1295E-03   0.000      0.9719E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2023E-03  0.2023E-03
```

```
1926 BalSol_M5a3   0.000     -0.5440E-03 -0.5440E-03   0.000      0.1125E-01  0.1095E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2348E-03  0.2348E-03

* Annual mass balance (kg.ha-1) of compound M52a3 in the soil profile
* ---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M52a3   0.000      0.1184E-06  0.1184E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M52a3   0.000     -0.8521E-07 -0.8521E-07   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M52a3   0.000      0.4217E-07  0.4217E-07   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M52a3   0.000      0.2775E-06  0.2775E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M52a3   0.000      0.1178E-05  0.1178E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M52a3   0.000     -0.1472E-05 -0.1472E-05   0.000      0.5130E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1907 BalSol_M52a3   0.000      0.1503E-05  0.1503E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1908 BalSol_M52a3   0.000     -0.1536E-05 -0.1536E-05   0.000      0.5130E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1909 BalSol_M52a3   0.000      0.2516E-05  0.2516E-05   0.000      0.5126E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1910 BalSol_M52a3   0.000     -0.5231E-06 -0.5231E-06   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1911 BalSol_M52a3   0.000     -0.1283E-05 -0.1283E-05   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1912 BalSol_M52a3   0.000     -0.4946E-06 -0.4946E-06   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1913 BalSol_M52a3   0.000      0.8317E-06  0.8317E-06   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1914 BalSol_M52a3   0.000     -0.1007E-05 -0.1007E-05   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1915 BalSol_M52a3   0.000      0.2084E-05  0.2084E-05   0.000      0.5126E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1916 BalSol_M52a3   0.000      0.2313E-06  0.2313E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1917 BalSol_M52a3   0.000      0.1227E-05  0.1227E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1918 BalSol_M52a3   0.000     -0.9670E-06 -0.9670E-06   0.000      0.5129E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1919 BalSol_M52a3   0.000     -0.2431E-05 -0.2431E-05   0.000      0.5131E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1920 BalSol_M52a3   0.000      0.4318E-06  0.4318E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
```

```
1921 BalSol_M52a3   0.000     -0.3803E-06 -0.3803E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1922 BalSol_M52a3   0.000     -0.1674E-06 -0.1674E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1923 BalSol_M52a3   0.000      0.4159E-07  0.4159E-07   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1924 BalSol_M52a3   0.000      0.2771E-06  0.2771E-06   0.000      0.5128E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1925 BalSol_M52a3   0.000      0.1178E-05  0.1178E-05   0.000      0.5127E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1926 BalSol_M52a3   0.000     -0.1473E-05 -0.1473E-05   0.000      0.5130E-02  0.5128E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000

* Annual mass balance (kg.ha-1) of compound M1a3 in the soil profile
* ---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M1a3   0.000      0.4325E-03  0.4325E-03   0.000      0.1257E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M1a3   0.000      0.1445E-04  0.1445E-04   0.000      0.1195E-01  0.1197E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M1a3   0.000      0.1092E-03  0.1092E-03   0.000      0.1184E-01  0.1195E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M1a3   0.000      0.1527E-03  0.1527E-03   0.000      0.1133E-01  0.1148E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M1a3   0.000      0.2115E-03  0.2115E-03   0.000      0.1110E-01  0.1131E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2040E-15  0.2040E-15
1906 BalSol_M1a3   0.000     -0.2531E-03 -0.2531E-03   0.000      0.1258E-01  0.1232E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5707E-12  0.5707E-12
1907 BalSol_M1a3   0.000      0.3015E-03  0.3015E-03   0.000      0.1075E-01  0.1105E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6156E-10  0.6156E-10
1908 BalSol_M1a3   0.000     -0.1213E-03 -0.1213E-03   0.000      0.1312E-01  0.1300E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8091E-08  0.8091E-08
1909 BalSol_M1a3   0.000      0.5497E-03  0.5497E-03   0.000      0.1026E-01  0.1081E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2806E-06  0.2806E-06
1910 BalSol_M1a3   0.000      0.3170E-03  0.3170E-03   0.000      0.1119E-01  0.1152E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9264E-05  0.9264E-05
1911 BalSol_M1a3   0.000      0.1783E-03  0.1783E-03   0.000      0.1146E-01  0.1168E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4212E-04  0.4212E-04
1912 BalSol_M1a3   0.000      0.2407E-03  0.2407E-03   0.000      0.1101E-01  0.1135E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9677E-04  0.9677E-04
1913 BalSol_M1a3   0.000      0.1064E-03  0.1064E-03   0.000      0.1132E-01  0.1157E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1383E-03  0.1383E-03
1914 BalSol_M1a3   0.000     -0.1697E-03 -0.1697E-03   0.000      0.1201E-01  0.1200E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1641E-03  0.1641E-03
1915 BalSol_M1a3   0.000      0.2135E-04  0.2135E-04   0.000      0.1101E-01  0.1134E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3054E-03  0.3054E-03
```

```
1916 BalSol_M1a3   0.000      0.2602E-03  0.2602E-03   0.000      0.1075E-01  0.1122E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2027E-03  0.2027E-03
1917 BalSol_M1a3   0.000      0.6897E-04  0.6897E-04   0.000      0.1059E-01  0.1098E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3188E-03  0.3188E-03
1918 BalSol_M1a3   0.000     -0.1437E-03 -0.1437E-03   0.000      0.1190E-01  0.1190E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1366E-03  0.1366E-03
1919 BalSol_M1a3   0.000     -0.3329E-04 -0.3329E-04   0.000      0.1201E-01  0.1209E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1144E-03  0.1144E-03
1920 BalSol_M1a3   0.000      0.7414E-04  0.7414E-04   0.000      0.1100E-01  0.1140E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3231E-03  0.3231E-03
1921 BalSol_M1a3   0.000     -0.3451E-03 -0.3451E-03   0.000      0.1267E-01  0.1246E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1292E-03  0.1292E-03
1922 BalSol_M1a3   0.000     -0.1284E-03 -0.1284E-03   0.000      0.1216E-01  0.1210E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6548E-04  0.6548E-04
1923 BalSol_M1a3   0.000      0.2077E-04  0.2077E-04   0.000      0.1190E-01  0.1199E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6970E-04  0.6970E-04
1924 BalSol_M1a3   0.000      0.8448E-04  0.8448E-04   0.000      0.1135E-01  0.1150E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6043E-04  0.6043E-04
1925 BalSol_M1a3   0.000      0.9071E-04  0.9071E-04   0.000      0.1111E-01  0.1132E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1196E-03  0.1196E-03
1926 BalSol_M1a3   0.000     -0.3931E-03 -0.3931E-03   0.000      0.1258E-01  0.1233E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1405E-03  0.1405E-03

* Annual mass balance (kg.ha-1) of compound M6a3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M6a3   0.000      0.2011E-02  0.2011E-02   0.000      0.3213E-02  0.5224E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M6a3   0.000      0.5495E-03  0.5495E-03   0.000      0.4259E-02  0.4809E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M6a3   0.000      0.6200E-03  0.6200E-03   0.000      0.4181E-02  0.4801E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M6a3   0.000      0.4384E-03  0.4384E-03   0.000      0.4174E-02  0.4613E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M6a3   0.000      0.8409E-03  0.8409E-03   0.000      0.3705E-02  0.4545E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M6a3   0.000      0.2707E-03  0.2707E-03   0.000      0.4680E-02  0.4951E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1219E-18  0.1219E-18
1907 BalSol_M6a3   0.000      0.6071E-03  0.6071E-03   0.000      0.3834E-02  0.4441E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3733E-13  0.3733E-13
1908 BalSol_M6a3   0.000      0.6703E-03  0.6703E-03   0.000      0.4553E-02  0.5224E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3116E-09  0.3116E-09
1909 BalSol_M6a3   0.000      0.1113E-02  0.1113E-02   0.000      0.3231E-02  0.4344E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9452E-07  0.9452E-07
1910 BalSol_M6a3   0.000      0.1391E-02  0.1391E-02   0.000      0.3222E-02  0.4627E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1368E-04  0.1368E-04
```

```
1911 BalSol_M6a3   0.000      0.1050E-02  0.1050E-02   0.000      0.3514E-02  0.4693E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1290E-03  0.1290E-03
1912 BalSol_M6a3   0.000      0.8012E-03  0.8012E-03   0.000      0.3280E-02  0.4559E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4774E-03  0.4774E-03
1913 BalSol_M6a3   0.000      0.3057E-03  0.3057E-03   0.000      0.3494E-02  0.4648E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8487E-03  0.8487E-03
1914 BalSol_M6a3   0.000     -0.7779E-04 -0.7779E-04   0.000      0.3981E-02  0.4821E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9180E-03  0.9180E-03
1915 BalSol_M6a3   0.000     -0.1931E-03 -0.1931E-03   0.000      0.3374E-02  0.4556E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1375E-02  0.1375E-02
1916 BalSol_M6a3   0.000      0.3260E-03  0.3260E-03   0.000      0.3343E-02  0.4507E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8377E-03  0.8377E-03
1917 BalSol_M6a3   0.000      0.8424E-04  0.8424E-04   0.000      0.2992E-02  0.4411E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1335E-02  0.1335E-02
1918 BalSol_M6a3   0.000      0.2831E-03  0.2831E-03   0.000      0.3903E-02  0.4780E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5939E-03  0.5939E-03
1919 BalSol_M6a3   0.000      0.2060E-03  0.2060E-03   0.000      0.4140E-02  0.4856E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5102E-03  0.5102E-03
1920 BalSol_M6a3   0.000     -0.2091E-03 -0.2091E-03   0.000      0.3264E-02  0.4581E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1526E-02  0.1526E-02
1921 BalSol_M6a3   0.000     -0.1611E-03 -0.1611E-03   0.000      0.4524E-02  0.5006E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6427E-03  0.6427E-03
1922 BalSol_M6a3   0.000     -0.2631E-03 -0.2631E-03   0.000      0.4804E-02  0.4860E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3195E-03  0.3195E-03
1923 BalSol_M6a3   0.000      0.8108E-04  0.8108E-04   0.000      0.4411E-02  0.4818E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3267E-03  0.3267E-03
1924 BalSol_M6a3   0.000      0.5487E-04  0.5487E-04   0.000      0.4294E-02  0.4619E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2702E-03  0.2702E-03
1925 BalSol_M6a3   0.000      0.3046E-03  0.3046E-03   0.000      0.3737E-02  0.4547E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5051E-03  0.5051E-03
1926 BalSol_M6a3   0.000     -0.3100E-03 -0.3100E-03   0.000      0.4695E-02  0.4952E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5669E-03  0.5669E-03

* Intermediate target output for compound PXDa3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_PXDa3      0.0000             0.21153      0.0000
1908 Target_PXDa3      0.0000             0.05510      0.0000
1909 Target_PXDa3     0.21171E-17         0.22351     0.94720E-15
1910 Target_PXDa3      0.0000             0.20235      0.0000
1911 Target_PXDa3      0.0000             0.28878      0.0000
1912 Target_PXDa3      0.0000             0.21486      0.0000
1913 Target_PXDa3      0.0000             0.23823      0.0000
1914 Target_PXDa3      0.0000             0.23362      0.0000
1915 Target_PXDa3     0.70761E-17         0.12763     0.55443E-14
1916 Target_PXDa3     0.51006E-17         0.29599     0.17232E-14
1917 Target_PXDa3     0.44889E-17         0.08596     0.52223E-14
1918 Target_PXDa3    -0.72590E-20         0.11813      0.0000
1919 Target_PXDa3      0.0000             0.18968      0.0000
1920 Target_PXDa3      0.0000             0.22936      0.0000
1921 Target_PXDa3      0.0000             0.05328      0.0000
1922 Target_PXDa3      0.0000             0.02617      0.0000
1923 Target_PXDa3      0.0000             0.08505      0.0000
```

```
1924 Target_PXDa3      0.0000             0.10271      0.0000
1925 Target_PXDa3      0.0000             0.06101      0.0000
1926 Target_PXDa3      0.0000             0.09332      0.0000

* Intermediate target output for compound M3a3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)            (m)      (ug/L)
1907 Target_M3a3     0.10253E-03         0.21153     0.48470E-01
1908 Target_M3a3     0.39148E-04         0.05510     0.71049E-01
1909 Target_M3a3     0.12702E-03         0.22351     0.56828E-01
1910 Target_M3a3     0.31138E-03         0.20235     0.15388
1911 Target_M3a3     0.36664E-03         0.28878     0.12696
1912 Target_M3a3     0.24645E-03         0.21486     0.11470
1913 Target_M3a3     0.24198E-03         0.23823     0.10157
1914 Target_M3a3     0.23271E-03         0.23362     0.99612E-01
1915 Target_M3a3     0.12058E-03         0.12763     0.94473E-01
1916 Target_M3a3     0.31200E-03         0.29599     0.10541
1917 Target_M3a3     0.19842E-03         0.08596     0.23084
1918 Target_M3a3     0.13743E-03         0.11813     0.11634
1919 Target_M3a3     0.15853E-03         0.18968     0.83581E-01
1920 Target_M3a3     0.30850E-03         0.22936     0.13450
1921 Target_M3a3     0.22419E-04         0.05328     0.42073E-01
1922 Target_M3a3    -0.76299E-05         0.02617      0.0000
1923 Target_M3a3     0.15263E-04         0.08505     0.17947E-01
1924 Target_M3a3     0.13902E-04         0.10271     0.13535E-01
1925 Target_M3a3     0.28256E-04         0.06101     0.46313E-01
1926 Target_M3a3     0.53583E-04         0.09332     0.57416E-01

* Intermediate target output for compound M4a3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)            (m)      (ug/L)
1907 Target_M4a3     0.48879E-04         0.21153     0.23108E-01
1908 Target_M4a3     0.10318E-04         0.05510     0.18725E-01
1909 Target_M4a3     0.51764E-04         0.22351     0.23160E-01
1910 Target_M4a3     0.13829E-03         0.20235     0.68340E-01
1911 Target_M4a3     0.14818E-03         0.28878     0.51314E-01
1912 Target_M4a3     0.10345E-03         0.21486     0.48148E-01
1913 Target_M4a3     0.10231E-03         0.23823     0.42946E-01
1914 Target_M4a3     0.95897E-04         0.23362     0.41049E-01
1915 Target_M4a3     0.50147E-04         0.12763     0.39291E-01
1916 Target_M4a3     0.14975E-03         0.29599     0.50595E-01
1917 Target_M4a3     0.75852E-04         0.08596     0.88246E-01
1918 Target_M4a3     0.48564E-04         0.11813     0.41112E-01
1919 Target_M4a3     0.65661E-04         0.18968     0.34617E-01
1920 Target_M4a3     0.13349E-03         0.22936     0.58201E-01
1921 Target_M4a3     0.74209E-05         0.05328     0.13927E-01
1922 Target_M4a3    -0.30707E-05         0.02617      0.0000
1923 Target_M4a3     0.59705E-05         0.08505     0.70202E-02
1924 Target_M4a3     0.95064E-05         0.10271     0.92551E-02
1925 Target_M4a3     0.12460E-04         0.06101     0.20423E-01
1926 Target_M4a3     0.22445E-04         0.09332     0.24050E-01

* Intermediate target output for compound M2a3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)            (m)      (ug/L)
1907 Target_M2a3     0.97543E-08         0.21153     0.46114E-05
1908 Target_M2a3    -0.27669E-08         0.05510      0.0000
1909 Target_M2a3     0.63021E-07         0.22351     0.28196E-04
1910 Target_M2a3     0.15376E-07         0.20235     0.75987E-05
1911 Target_M2a3     0.33764E-08         0.28878     0.11692E-05
1912 Target_M2a3     0.30596E-08         0.21486     0.14240E-05
1913 Target_M2a3     0.10041E-07         0.23823     0.42147E-05
1914 Target_M2a3    -0.15774E-09         0.23362      0.0000
1915 Target_M2a3     0.20000E-08         0.12763     0.15671E-05
1916 Target_M2a3     0.13142E-06         0.29599     0.44401E-04
```

```
1917 Target_M2a3     0.59358E-09         0.08596     0.69058E-06
1918 Target_M2a3     0.33124E-08         0.11813     0.28041E-05
1919 Target_M2a3     0.31329E-08         0.18968     0.16517E-05
1920 Target_M2a3     0.54224E-08         0.22936     0.23641E-05
1921 Target_M2a3    -0.94171E-09         0.05328      0.0000
1922 Target_M2a3    -0.49549E-09         0.02617      0.0000
1923 Target_M2a3    -0.94471E-10         0.08505      0.0000
1924 Target_M2a3     0.16509E-08         0.10271     0.16073E-05
1925 Target_M2a3     0.22997E-09         0.06101     0.37694E-06
1926 Target_M2a3     0.65258E-09         0.09332     0.69926E-06

* Intermediate target output for compound M5a3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M5a3     0.28399E-03         0.21153     0.13426
1908 Target_M5a3     0.41219E-04         0.05510     0.74808E-01
1909 Target_M5a3     0.28609E-03         0.22351     0.12800
1910 Target_M5a3     0.56833E-03         0.20235     0.28086
1911 Target_M5a3     0.61964E-03         0.28878     0.21458
1912 Target_M5a3     0.46703E-03         0.21486     0.21736
1913 Target_M5a3     0.49993E-03         0.23823     0.20986
1914 Target_M5a3     0.47077E-03         0.23362     0.20152
1915 Target_M5a3     0.21632E-03         0.12763     0.16949
1916 Target_M5a3     0.69785E-03         0.29599     0.23577
1917 Target_M5a3     0.26047E-03         0.08596     0.30303
1918 Target_M5a3     0.18878E-03         0.11813     0.15981
1919 Target_M5a3     0.35819E-03         0.18968     0.18884
1920 Target_M5a3     0.56239E-03         0.22936     0.24519
1921 Target_M5a3     0.42521E-04         0.05328     0.79799E-01
1922 Target_M5a3    -0.11404E-04         0.02617      0.0000
1923 Target_M5a3     0.36560E-04         0.08505     0.42988E-01
1924 Target_M5a3     0.80531E-04         0.10271     0.78402E-01
1925 Target_M5a3     0.78674E-04         0.06101     0.12895
1926 Target_M5a3     0.13016E-03         0.09332     0.13947

* Intermediate target output for compound M52a3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M52a3     0.32896E-09         0.21153     0.15552E-06
1908 Target_M52a3     0.61656E-10         0.05510     0.11190E-06
1909 Target_M52a3     0.61974E-08         0.22351     0.27727E-05
1910 Target_M52a3     0.29010E-07         0.20235     0.14336E-04
1911 Target_M52a3    -0.12814E-08         0.28878      0.0000
1912 Target_M52a3    -0.97122E-09         0.21486      0.0000
1913 Target_M52a3     0.39450E-10         0.23823     0.16560E-07
1914 Target_M52a3     0.19970E-10         0.23362     0.85481E-08
1915 Target_M52a3     0.88708E-11         0.12763     0.69505E-08
1916 Target_M52a3     0.20747E-07         0.29599     0.70094E-05
1917 Target_M52a3     0.12597E-07         0.08596     0.14656E-04
1918 Target_M52a3    -0.27860E-08         0.11813      0.0000
1919 Target_M52a3    -0.19510E-08         0.18968      0.0000
1920 Target_M52a3    -0.85323E-10         0.22936      0.0000
1921 Target_M52a3    -0.57262E-09         0.05328      0.0000
1922 Target_M52a3    -0.75304E-09         0.02617      0.0000
1923 Target_M52a3    -0.56202E-09         0.08505      0.0000
1924 Target_M52a3    -0.39416E-09         0.10271      0.0000
1925 Target_M52a3    -0.30777E-09         0.06101      0.0000
1926 Target_M52a3    -0.28540E-09         0.09332      0.0000

* Intermediate target output for compound M1a3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M1a3     0.15235E-03         0.21153     0.72024E-01
1908 Target_M1a3     0.19744E-04         0.05510     0.35833E-01
1909 Target_M1a3     0.15376E-03         0.22351     0.68791E-01
```

```
1910 Target_M1a3     0.35208E-03         0.20235     0.17399
1911 Target_M1a3     0.37559E-03         0.28878     0.13006
1912 Target_M1a3     0.27499E-03         0.21486     0.12799
1913 Target_M1a3     0.28515E-03         0.23823     0.11970
1914 Target_M1a3     0.26437E-03         0.23362     0.11317
1915 Target_M1a3     0.12899E-03         0.12763     0.10106
1916 Target_M1a3     0.41695E-03         0.29599     0.14087
1917 Target_M1a3     0.17074E-03         0.08596     0.19863
1918 Target_M1a3     0.11361E-03         0.11813     0.96175E-01
1919 Target_M1a3     0.19163E-03         0.18968     0.10103
1920 Target_M1a3     0.34053E-03         0.22936     0.14847
1921 Target_M1a3     0.20542E-04         0.05328     0.38552E-01
1922 Target_M1a3    -0.79485E-05         0.02617      0.0000
1923 Target_M1a3     0.17466E-04         0.08505     0.20537E-01
1924 Target_M1a3     0.38724E-04         0.10271     0.37701E-01
1925 Target_M1a3     0.38926E-04         0.06101     0.63803E-01
1926 Target_M1a3     0.67497E-04         0.09332     0.72326E-01

* Intermediate target output for compound M6a3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                             (kg/ha)            (m)      (ug/L)
1907 Target_M6a3     0.11727E-02         0.21153     0.55440
1908 Target_M6a3     0.31557E-03         0.05510     0.57273
1909 Target_M6a3     0.11679E-02         0.22351     0.52254
1910 Target_M6a3     0.12080E-02         0.20235     0.59698
1911 Target_M6a3     0.15463E-02         0.28878     0.53545
1912 Target_M6a3     0.12116E-02         0.21486     0.56390
1913 Target_M6a3     0.12480E-02         0.23823     0.52386
1914 Target_M6a3     0.13324E-02         0.23362     0.57034
1915 Target_M6a3     0.66959E-03         0.12763     0.52464
1916 Target_M6a3     0.15762E-02         0.29599     0.53254
1917 Target_M6a3     0.56968E-03         0.08596     0.66277
1918 Target_M6a3     0.61645E-03         0.11813     0.52186
1919 Target_M6a3     0.11729E-02         0.18968     0.61835
1920 Target_M6a3     0.15244E-02         0.22936     0.66461
1921 Target_M6a3     0.20059E-03         0.05328     0.37644
1922 Target_M6a3     0.68854E-04         0.02617     0.26311
1923 Target_M6a3     0.32344E-03         0.08505     0.38030
1924 Target_M6a3     0.42758E-03         0.10271     0.41627
1925 Target_M6a3     0.34183E-03         0.06101     0.56028
1926 Target_M6a3     0.55162E-03         0.09332     0.59108

* Leaching summary per summary period:
* ------------------------------------------------------------------------------------------
--------------------------------------

* Rank Identifier       Percent     DateSta     DateEnd       ConLeaTgt Year
*  (-)                     (%)                                  (ug/L)  (a)
     1 ConLea_PXDa3      2.50 01-Jan-1907 31-Dec-1907           0.00 1907
     2 ConLea_PXDa3      7.50 01-Jan-1908 31-Dec-1908           0.00 1908
     3 ConLea_PXDa3     12.50 01-Jan-1910 31-Dec-1910           0.00 1910
     4 ConLea_PXDa3     17.50 01-Jan-1911 31-Dec-1911           0.00 1911
     5 ConLea_PXDa3     22.50 01-Jan-1912 31-Dec-1912           0.00 1912
     6 ConLea_PXDa3     27.50 01-Jan-1913 31-Dec-1913           0.00 1913
     7 ConLea_PXDa3     32.50 01-Jan-1914 31-Dec-1914           0.00 1914
     8 ConLea_PXDa3     37.50 01-Jan-1918 31-Dec-1918           0.00 1918
     9 ConLea_PXDa3     42.50 01-Jan-1919 31-Dec-1919           0.00 1919
    10 ConLea_PXDa3     47.50 01-Jan-1920 31-Dec-1920           0.00 1920
    11 ConLea_PXDa3     52.50 01-Jan-1921 31-Dec-1921           0.00 1921
    12 ConLea_PXDa3     57.50 01-Jan-1922 31-Dec-1922           0.00 1922
    13 ConLea_PXDa3     62.50 01-Jan-1923 31-Dec-1923           0.00 1923
    14 ConLea_PXDa3     67.50 01-Jan-1924 31-Dec-1924           0.00 1924
    15 ConLea_PXDa3     72.50 01-Jan-1925 31-Dec-1925           0.00 1925
    16 ConLea_PXDa3     77.50 01-Jan-1926 31-Dec-1926           0.00 1926
    17 ConLea_PXDa3     82.50 01-Jan-1909 31-Dec-1909      0.9472E-15 1909
    18 ConLea_PXDa3     87.50 01-Jan-1916 31-Dec-1916      0.1723E-14 1916
    19 ConLea_PXDa3     92.50 01-Jan-1917 31-Dec-1917      0.5222E-14 1917
    20 ConLea_PXDa3     97.50 01-Jan-1915 31-Dec-1915      0.5544E-14 1915
```

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)
1	ConLea_M3a3	2.50	01-Jan-1922	31-Dec-1922	0.00	1922
2	ConLea_M3a3	7.50	01-Jan-1924	31-Dec-1924	0.1353E-01	1924
3	ConLea_M3a3	12.50	01-Jan-1923	31-Dec-1923	0.1795E-01	1923
4	ConLea_M3a3	17.50	01-Jan-1921	31-Dec-1921	0.4207E-01	1921
5	ConLea_M3a3	22.50	01-Jan-1925	31-Dec-1925	0.4631E-01	1925
6	ConLea_M3a3	27.50	01-Jan-1907	31-Dec-1907	0.4847E-01	1907
7	ConLea_M3a3	32.50	01-Jan-1909	31-Dec-1909	0.5683E-01	1909
8	ConLea_M3a3	37.50	01-Jan-1926	31-Dec-1926	0.5742E-01	1926
9	ConLea_M3a3	42.50	01-Jan-1908	31-Dec-1908	0.7105E-01	1908
10	ConLea_M3a3	47.50	01-Jan-1919	31-Dec-1919	0.8358E-01	1919
11	ConLea_M3a3	52.50	01-Jan-1915	31-Dec-1915	0.9447E-01	1915
12	ConLea_M3a3	57.50	01-Jan-1914	31-Dec-1914	0.9961E-01	1914
13	ConLea_M3a3	62.50	01-Jan-1913	31-Dec-1913	0.1016E+00	1913
14	ConLea_M3a3	67.50	01-Jan-1916	31-Dec-1916	0.1054E+00	1916
15	ConLea_M3a3	72.50	01-Jan-1912	31-Dec-1912	0.1147E+00	1912
16	ConLea_M3a3	77.50	01-Jan-1918	31-Dec-1918	0.1163E+00	1918
17	ConLea_M3a3	82.50	01-Jan-1911	31-Dec-1911	0.1270E+00	1911
18	ConLea_M3a3	87.50	01-Jan-1920	31-Dec-1920	0.1345E+00	1920
19	ConLea_M3a3	92.50	01-Jan-1910	31-Dec-1910	0.1539E+00	1910
20	ConLea_M3a3	97.50	01-Jan-1917	31-Dec-1917	0.2308E+00	1917

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)
1	ConLea_M4a3	2.50	01-Jan-1922	31-Dec-1922	0.00	1922
2	ConLea_M4a3	7.50	01-Jan-1923	31-Dec-1923	0.7020E-02	1923
3	ConLea_M4a3	12.50	01-Jan-1924	31-Dec-1924	0.9255E-02	1924
4	ConLea_M4a3	17.50	01-Jan-1921	31-Dec-1921	0.1393E-01	1921
5	ConLea_M4a3	22.50	01-Jan-1908	31-Dec-1908	0.1873E-01	1908
6	ConLea_M4a3	27.50	01-Jan-1925	31-Dec-1925	0.2042E-01	1925
7	ConLea_M4a3	32.50	01-Jan-1907	31-Dec-1907	0.2311E-01	1907
8	ConLea_M4a3	37.50	01-Jan-1909	31-Dec-1909	0.2316E-01	1909
9	ConLea_M4a3	42.50	01-Jan-1926	31-Dec-1926	0.2405E-01	1926
10	ConLea_M4a3	47.50	01-Jan-1919	31-Dec-1919	0.3462E-01	1919
11	ConLea_M4a3	52.50	01-Jan-1915	31-Dec-1915	0.3929E-01	1915
12	ConLea_M4a3	57.50	01-Jan-1914	31-Dec-1914	0.4105E-01	1914
13	ConLea_M4a3	62.50	01-Jan-1918	31-Dec-1918	0.4111E-01	1918
14	ConLea_M4a3	67.50	01-Jan-1913	31-Dec-1913	0.4295E-01	1913
15	ConLea_M4a3	72.50	01-Jan-1912	31-Dec-1912	0.4815E-01	1912
16	ConLea_M4a3	77.50	01-Jan-1916	31-Dec-1916	0.5059E-01	1916
17	ConLea_M4a3	82.50	01-Jan-1911	31-Dec-1911	0.5131E-01	1911
18	ConLea_M4a3	87.50	01-Jan-1920	31-Dec-1920	0.5820E-01	1920
19	ConLea_M4a3	92.50	01-Jan-1910	31-Dec-1910	0.6834E-01	1910
20	ConLea_M4a3	97.50	01-Jan-1917	31-Dec-1917	0.8825E-01	1917

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)
1	ConLea_M2a3	2.50	01-Jan-1908	31-Dec-1908	0.00	1908
2	ConLea_M2a3	7.50	01-Jan-1914	31-Dec-1914	0.00	1914
3	ConLea_M2a3	12.50	01-Jan-1921	31-Dec-1921	0.00	1921
4	ConLea_M2a3	17.50	01-Jan-1922	31-Dec-1922	0.00	1922
5	ConLea_M2a3	22.50	01-Jan-1923	31-Dec-1923	0.00	1923
6	ConLea_M2a3	27.50	01-Jan-1925	31-Dec-1925	0.3769E-06	1925
7	ConLea_M2a3	32.50	01-Jan-1917	31-Dec-1917	0.6906E-06	1917
8	ConLea_M2a3	37.50	01-Jan-1926	31-Dec-1926	0.6993E-06	1926
9	ConLea_M2a3	42.50	01-Jan-1911	31-Dec-1911	0.1169E-05	1911
10	ConLea_M2a3	47.50	01-Jan-1912	31-Dec-1912	0.1424E-05	1912
11	ConLea_M2a3	52.50	01-Jan-1915	31-Dec-1915	0.1567E-05	1915
12	ConLea_M2a3	57.50	01-Jan-1924	31-Dec-1924	0.1607E-05	1924
13	ConLea_M2a3	62.50	01-Jan-1919	31-Dec-1919	0.1652E-05	1919
14	ConLea_M2a3	67.50	01-Jan-1920	31-Dec-1920	0.2364E-05	1920
15	ConLea_M2a3	72.50	01-Jan-1918	31-Dec-1918	0.2804E-05	1918
16	ConLea_M2a3	77.50	01-Jan-1913	31-Dec-1913	0.4215E-05	1913
17	ConLea_M2a3	82.50	01-Jan-1907	31-Dec-1907	0.4611E-05	1907
18	ConLea_M2a3	87.50	01-Jan-1910	31-Dec-1910	0.7599E-05	1910
19	ConLea_M2a3	92.50	01-Jan-1909	31-Dec-1909	0.2820E-04	1909
20	ConLea_M2a3	97.50	01-Jan-1916	31-Dec-1916	0.4440E-04	1916

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)

1	ConLea_M5a3	2.50	01-Jan-1922	31-Dec-1922	0.00	1922
2	ConLea_M5a3	7.50	01-Jan-1923	31-Dec-1923	0.4299E-01	1923
3	ConLea_M5a3	12.50	01-Jan-1908	31-Dec-1908	0.7481E-01	1908
4	ConLea_M5a3	17.50	01-Jan-1924	31-Dec-1924	0.7840E-01	1924
5	ConLea_M5a3	22.50	01-Jan-1921	31-Dec-1921	0.7980E-01	1921
6	ConLea_M5a3	27.50	01-Jan-1909	31-Dec-1909	0.1280E+00	1909
7	ConLea_M5a3	32.50	01-Jan-1925	31-Dec-1925	0.1290E+00	1925
8	ConLea_M5a3	37.50	01-Jan-1907	31-Dec-1907	0.1343E+00	1907
9	ConLea_M5a3	42.50	01-Jan-1926	31-Dec-1926	0.1395E+00	1926
10	ConLea_M5a3	47.50	01-Jan-1918	31-Dec-1918	0.1598E+00	1918
11	ConLea_M5a3	52.50	01-Jan-1915	31-Dec-1915	0.1695E+00	1915
12	ConLea_M5a3	57.50	01-Jan-1919	31-Dec-1919	0.1888E+00	1919
13	ConLea_M5a3	62.50	01-Jan-1914	31-Dec-1914	0.2015E+00	1914
14	ConLea_M5a3	67.50	01-Jan-1913	31-Dec-1913	0.2099E+00	1913
15	ConLea_M5a3	72.50	01-Jan-1911	31-Dec-1911	0.2146E+00	1911
16	ConLea_M5a3	77.50	01-Jan-1912	31-Dec-1912	0.2174E+00	1912
17	ConLea_M5a3	82.50	01-Jan-1916	31-Dec-1916	0.2358E+00	1916
18	ConLea_M5a3	87.50	01-Jan-1920	31-Dec-1920	0.2452E+00	1920
19	ConLea_M5a3	92.50	01-Jan-1910	31-Dec-1910	0.2809E+00	1910
20	ConLea_M5a3	97.50	01-Jan-1917	31-Dec-1917	0.3030E+00	1917

* Rank	Identifier	Percent	DateSta	DateEnd	ConLeaTgt	Year
* (-)		(%)			(ug/L)	(a)
1	ConLea_M52a3	2.50	01-Jan-1911	31-Dec-1911	0.00	1911
2	ConLea_M52a3	7.50	01-Jan-1912	31-Dec-1912	0.00	1912
3	ConLea_M52a3	12.50	01-Jan-1918	31-Dec-1918	0.00	1918
4	ConLea_M52a3	17.50	01-Jan-1919	31-Dec-1919	0.00	1919
5	ConLea_M52a3	22.50	01-Jan-1920	31-Dec-1920	0.00	1920
6	ConLea_M52a3	27.50	01-Jan-1921	31-Dec-1921	0.00	1921
7	ConLea_M52a3	32.50	01-Jan-1922	31-Dec-1922	0.00	1922
8	ConLea_M52a3	37.50	01-Jan-1923	31-Dec-1923	0.00	1923
9	ConLea_M52a3	42.50	01-Jan-1924	31-Dec-1924	0.00	1924
10	ConLea_M52a3	47.50	01-Jan-1925	31-Dec-1925	0.00	1925
11	ConLea_M52a3	52.50	01-Jan-1926	31-Dec-1926	0.00	1926
12	ConLea_M52a3	57.50	01-Jan-1915	31-Dec-1915	0.6950E-08	1915
13	ConLea_M52a3	62.50	01-Jan-1914	31-Dec-1914	0.8548E-08	1914
14	ConLea_M52a3	67.50	01-Jan-1913	31-Dec-1913	0.1656E-07	1913
15	ConLea_M52a3	72.50	01-Jan-1908	31-Dec-1908	0.1119E-06	1908
16	ConLea_M52a3	77.50	01-Jan-1907	31-Dec-1907	0.1555E-06	1907
17	ConLea_M52a3	82.50	01-Jan-1909	31-Dec-1909	0.2773E-05	1909
18	ConLea_M52a3	87.50	01-Jan-1916	31-Dec-1916	0.7009E-05	1916
19	ConLea_M52a3	92.50	01-Jan-1910	31-Dec-1910	0.1434E-04	1910
20	ConLea_M52a3	97.50	01-Jan-1917	31-Dec-1917	0.1466E-04	1917

* Rank	Identifier	Percent	DateSta	DateEnd	ConLeaTgt	Year
* (-)		(%)			(ug/L)	(a)
1	ConLea_M1a3	2.50	01-Jan-1922	31-Dec-1922	0.00	1922
2	ConLea_M1a3	7.50	01-Jan-1923	31-Dec-1923	0.2054E-01	1923
3	ConLea_M1a3	12.50	01-Jan-1908	31-Dec-1908	0.3583E-01	1908
4	ConLea_M1a3	17.50	01-Jan-1924	31-Dec-1924	0.3770E-01	1924
5	ConLea_M1a3	22.50	01-Jan-1921	31-Dec-1921	0.3855E-01	1921
6	ConLea_M1a3	27.50	01-Jan-1925	31-Dec-1925	0.6380E-01	1925
7	ConLea_M1a3	32.50	01-Jan-1909	31-Dec-1909	0.6879E-01	1909
8	ConLea_M1a3	37.50	01-Jan-1907	31-Dec-1907	0.7202E-01	1907
9	ConLea_M1a3	42.50	01-Jan-1926	31-Dec-1926	0.7233E-01	1926
10	ConLea_M1a3	47.50	01-Jan-1918	31-Dec-1918	0.9618E-01	1918
11	ConLea_M1a3	52.50	01-Jan-1919	31-Dec-1919	0.1010E+00	1919
12	ConLea_M1a3	57.50	01-Jan-1915	31-Dec-1915	0.1011E+00	1915
13	ConLea_M1a3	62.50	01-Jan-1914	31-Dec-1914	0.1132E+00	1914
14	ConLea_M1a3	67.50	01-Jan-1913	31-Dec-1913	0.1197E+00	1913
15	ConLea_M1a3	72.50	01-Jan-1912	31-Dec-1912	0.1280E+00	1912
16	ConLea_M1a3	77.50	01-Jan-1911	31-Dec-1911	0.1301E+00	1911
17	ConLea_M1a3	82.50	01-Jan-1916	31-Dec-1916	0.1409E+00	1916
18	ConLea_M1a3	87.50	01-Jan-1920	31-Dec-1920	0.1485E+00	1920
19	ConLea_M1a3	92.50	01-Jan-1910	31-Dec-1910	0.1740E+00	1910
20	ConLea_M1a3	97.50	01-Jan-1917	31-Dec-1917	0.1986E+00	1917

* Rank	Identifier	Percent	DateSta	DateEnd	ConLeaTgt	Year
* (-)		(%)			(ug/L)	(a)
1	ConLea_M6a3	2.50	01-Jan-1922	31-Dec-1922	0.2631E+00	1922
2	ConLea_M6a3	7.50	01-Jan-1921	31-Dec-1921	0.3764E+00	1921

```
     3 ConLea_M6a3    12.50 01-Jan-1923 31-Dec-1923      0.3803E+00 1923
     4 ConLea_M6a3    17.50 01-Jan-1924 31-Dec-1924      0.4163E+00 1924
     5 ConLea_M6a3    22.50 01-Jan-1918 31-Dec-1918      0.5219E+00 1918
     6 ConLea_M6a3    27.50 01-Jan-1909 31-Dec-1909      0.5225E+00 1909
     7 ConLea_M6a3    32.50 01-Jan-1913 31-Dec-1913      0.5239E+00 1913
     8 ConLea_M6a3    37.50 01-Jan-1915 31-Dec-1915      0.5246E+00 1915
     9 ConLea_M6a3    42.50 01-Jan-1916 31-Dec-1916      0.5325E+00 1916
    10 ConLea_M6a3    47.50 01-Jan-1911 31-Dec-1911      0.5355E+00 1911
    11 ConLea_M6a3    52.50 01-Jan-1907 31-Dec-1907      0.5544E+00 1907
    12 ConLea_M6a3    57.50 01-Jan-1925 31-Dec-1925      0.5603E+00 1925
    13 ConLea_M6a3    62.50 01-Jan-1912 31-Dec-1912      0.5639E+00 1912
    14 ConLea_M6a3    67.50 01-Jan-1914 31-Dec-1914      0.5703E+00 1914
    15 ConLea_M6a3    72.50 01-Jan-1908 31-Dec-1908      0.5727E+00 1908
    16 ConLea_M6a3    77.50 01-Jan-1926 31-Dec-1926      0.5911E+00 1926
    17 ConLea_M6a3    82.50 01-Jan-1910 31-Dec-1910      0.5970E+00 1910
    18 ConLea_M6a3    87.50 01-Jan-1919 31-Dec-1919      0.6183E+00 1919
    19 ConLea_M6a3    92.50 01-Jan-1917 31-Dec-1917      0.6628E+00 1917
    20 ConLea_M6a3    97.50 01-Jan-1920 31-Dec-1920      0.6646E+00 1920

* ----------------------------------------------------------------------------------------------
-------------------------------------
* PEARL REPORT: Leaching
* Start date      :   01-Jan-1901
* End date        :   31-Dec-1926
* Target depth    :   1.00 m
* Annual application to the soil surface at 06-Apr; dosage =     0.0600 kg.ha-1

* Leaching summary for compound PXDa3
* Molar mass (g.mol-1)                                :    400.5
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :   200.    ; measured at (C)  25.0
* Half-life (d) in soil                               :      1.1; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :     76.6
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :      1.01
* Freundlich exponent (-)                             :     1.06
* Plant uptake factor (-)                             :     0.00
* ----------------------------------------------------------------------------------------------
-------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------
-------------------------------------
   1     01-Jan-1907 31-Dec-1907                       211.526
0.0000000                          0.000
   2     01-Jan-1908 31-Dec-1908                        55.100
0.0000000                          0.000
   3     01-Jan-1909 31-Dec-1909                       223.512
0.0000000                          0.000
   4     01-Jan-1910 31-Dec-1910                       202.354
0.0000000                          0.000
   5     01-Jan-1911 31-Dec-1911                       288.776
0.0000000                          0.000
   6     01-Jan-1912 31-Dec-1912                       214.862
0.0000000                          0.000
   7     01-Jan-1913 31-Dec-1913                       238.227
0.0000000                          0.000
   8     01-Jan-1914 31-Dec-1914                       233.616
0.0000000                          0.000
   9     01-Jan-1915 31-Dec-1915                       127.629
0.0000000                          0.000
  10     01-Jan-1916 31-Dec-1916                       295.987
0.0000000                          0.000
  11     01-Jan-1917 31-Dec-1917                        85.955
0.0000000                          0.000
  12     01-Jan-1918 31-Dec-1918                       118.126                     -
0.0000000                          0.000
```

```
  13     01-Jan-1919 31-Dec-1919                         189.678
0.0000000                          0.000
  14     01-Jan-1920 31-Dec-1920                         229.364
0.0000000                          0.000
  15     01-Jan-1921 31-Dec-1921                          53.285
0.0000000                          0.000
  16     01-Jan-1922 31-Dec-1922                          26.169
0.0000000                          0.000
  17     01-Jan-1923 31-Dec-1923                          85.048
0.0000000                          0.000
  18     01-Jan-1924 31-Dec-1924                         102.715
0.0000000                          0.000
  19     01-Jan-1925 31-Dec-1925                          61.010
0.0000000                          0.000
  20     01-Jan-1926 31-Dec-1926                          93.324
0.0000000                          0.000

* The average concentration of PXDa3 closest to the 80th percentile is      0.000000 ug/L

* Leaching summary for compound M3a3
* Molar mass (g.mol-1)                                :    332.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :   370.    ; measured at (C)  25.0
* Half-life (d) in soil                               :     39.6; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :     18.6
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.246
* Freundlich exponent (-)                             :     0.96
* Plant uptake factor (-)                             :     0.78
* ----------------------------------------------------------------------------------------------------
---------------------------------------
* Period        From          To              Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
---------------------------------------
   1     01-Jan-1907 31-Dec-1907                         211.526
0.0001025                          0.048
   2     01-Jan-1908 31-Dec-1908                          55.100
0.0000391                          0.071
   3     01-Jan-1909 31-Dec-1909                         223.512
0.0001270                          0.057
   4     01-Jan-1910 31-Dec-1910                         202.354
0.0003114                          0.154
   5     01-Jan-1911 31-Dec-1911                         288.776
0.0003666                          0.127
   6     01-Jan-1912 31-Dec-1912                         214.862
0.0002465                          0.115
   7     01-Jan-1913 31-Dec-1913                         238.227
0.0002420                          0.102
   8     01-Jan-1914 31-Dec-1914                         233.616
0.0002327                          0.100
   9     01-Jan-1915 31-Dec-1915                         127.629
0.0001206                          0.094
  10     01-Jan-1916 31-Dec-1916                         295.987
0.0003120                          0.105
  11     01-Jan-1917 31-Dec-1917                          85.955
0.0001984                          0.231
  12     01-Jan-1918 31-Dec-1918                         118.126
0.0001374                          0.116
  13     01-Jan-1919 31-Dec-1919                         189.678
0.0001585                          0.084
  14     01-Jan-1920 31-Dec-1920                         229.364
0.0003085                          0.135
  15     01-Jan-1921 31-Dec-1921                          53.285
0.0000224                          0.042
  16     01-Jan-1922 31-Dec-1922                          26.169                    -
0.0000076                          0.000
```

```
  17     01-Jan-1923 31-Dec-1923                          85.048
0.0000153                          0.018
  18     01-Jan-1924 31-Dec-1924                         102.715
0.0000139                          0.014
  19     01-Jan-1925 31-Dec-1925                          61.010
0.0000283                          0.046
  20     01-Jan-1926 31-Dec-1926                          93.324
0.0000536                          0.057

* The average concentration of M3a3 closest to the 80th percentile is      0.121651 ug/L

* Leaching summary for compound M4a3
* Molar mass (g.mol-1)                                 :    362.4
* Saturated vapour pressure (Pa)                       :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                         :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                                :      7.5; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      4.6
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.610E-01
* Freundlich exponent (-)                              :     0.92
* Plant uptake factor (-)                              :     0.00
* ----------------------------------------------------------------------------------------------------
-------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
-------------------------------------
   1     01-Jan-1907 31-Dec-1907                         211.526
0.0000489                          0.023
   2     01-Jan-1908 31-Dec-1908                          55.100
0.0000103                          0.019
   3     01-Jan-1909 31-Dec-1909                         223.512
0.0000518                          0.023
   4     01-Jan-1910 31-Dec-1910                         202.354
0.0001383                          0.068
   5     01-Jan-1911 31-Dec-1911                         288.776
0.0001482                          0.051
   6     01-Jan-1912 31-Dec-1912                         214.862
0.0001035                          0.048
   7     01-Jan-1913 31-Dec-1913                         238.227
0.0001023                          0.043
   8     01-Jan-1914 31-Dec-1914                         233.616
0.0000959                          0.041
   9     01-Jan-1915 31-Dec-1915                         127.629
0.0000501                          0.039
  10     01-Jan-1916 31-Dec-1916                         295.987
0.0001498                          0.051
  11     01-Jan-1917 31-Dec-1917                          85.955
0.0000759                          0.088
  12     01-Jan-1918 31-Dec-1918                         118.126
0.0000486                          0.041
  13     01-Jan-1919 31-Dec-1919                         189.678
0.0000657                          0.035
  14     01-Jan-1920 31-Dec-1920                         229.364
0.0001335                          0.058
  15     01-Jan-1921 31-Dec-1921                          53.285
0.0000074                          0.014
  16     01-Jan-1922 31-Dec-1922                          26.169                         -
0.0000031                          0.000
  17     01-Jan-1923 31-Dec-1923                          85.048
0.0000060                          0.007
  18     01-Jan-1924 31-Dec-1924                         102.715
0.0000095                          0.009
  19     01-Jan-1925 31-Dec-1925                          61.010
0.0000125                          0.020
  20     01-Jan-1926 31-Dec-1926                          93.324
0.0000224                          0.024
```

```
* The average concentration of M4a3 closest to the 80th percentile is      0.050955 ug/L

* Leaching summary for compound M2a3
* Molar mass (g.mol-1)                                :    316.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.380E+06; measured at (C)  25.0
* Half-life (d) in soil                               :      3.4; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      0.9
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.118E-01
* Freundlich exponent (-)                             :     1.01
* Plant uptake factor (-)                             :     0.00
* ----------------------------------------------------------------------------------------------------
---------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
---------------------------------------
   1     01-Jan-1907 31-Dec-1907                        211.526
0.0000000                          0.000
   2     01-Jan-1908 31-Dec-1908                         55.100                      -
0.0000000                          0.000
   3     01-Jan-1909 31-Dec-1909                        223.512
0.0000001                          0.000
   4     01-Jan-1910 31-Dec-1910                        202.354
0.0000000                          0.000
   5     01-Jan-1911 31-Dec-1911                        288.776
0.0000000                          0.000
   6     01-Jan-1912 31-Dec-1912                        214.862
0.0000000                          0.000
   7     01-Jan-1913 31-Dec-1913                        238.227
0.0000000                          0.000
   8     01-Jan-1914 31-Dec-1914                        233.616                      -
0.0000000                          0.000
   9     01-Jan-1915 31-Dec-1915                        127.629
0.0000000                          0.000
  10     01-Jan-1916 31-Dec-1916                        295.987
0.0000001                          0.000
  11     01-Jan-1917 31-Dec-1917                         85.955
0.0000000                          0.000
  12     01-Jan-1918 31-Dec-1918                        118.126
0.0000000                          0.000
  13     01-Jan-1919 31-Dec-1919                        189.678
0.0000000                          0.000
  14     01-Jan-1920 31-Dec-1920                        229.364
0.0000000                          0.000
  15     01-Jan-1921 31-Dec-1921                         53.285                      -
0.0000000                          0.000
  16     01-Jan-1922 31-Dec-1922                         26.169                      -
0.0000000                          0.000
  17     01-Jan-1923 31-Dec-1923                         85.048                      -
0.0000000                          0.000
  18     01-Jan-1924 31-Dec-1924                        102.715
0.0000000                          0.000
  19     01-Jan-1925 31-Dec-1925                         61.010
0.0000000                          0.000
  20     01-Jan-1926 31-Dec-1926                         93.324
0.0000000                          0.000

* The average concentration of M2a3 closest to the 80th percentile is      0.000004 ug/L

* Leaching summary for compound M5a3
* Molar mass (g.mol-1)                                :    376.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                               :     16.4; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      1.8
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.239E-01
```

```
* Freundlich exponent (-)                                :     0.90
* Plant uptake factor (-)                                :     0.00
* ----------------------------------------------------------------------------------------------
---------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                  below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------
---------------------------------------
   1     01-Jan-1907 31-Dec-1907                        211.526
0.0002840                          0.134
   2     01-Jan-1908 31-Dec-1908                         55.100
0.0000412                          0.075
   3     01-Jan-1909 31-Dec-1909                        223.512
0.0002861                          0.128
   4     01-Jan-1910 31-Dec-1910                        202.354
0.0005683                          0.281
   5     01-Jan-1911 31-Dec-1911                        288.776
0.0006196                          0.215
   6     01-Jan-1912 31-Dec-1912                        214.862
0.0004670                          0.217
   7     01-Jan-1913 31-Dec-1913                        238.227
0.0004999                          0.210
   8     01-Jan-1914 31-Dec-1914                        233.616
0.0004708                          0.202
   9     01-Jan-1915 31-Dec-1915                        127.629
0.0002163                          0.169
  10     01-Jan-1916 31-Dec-1916                        295.987
0.0006979                          0.236
  11     01-Jan-1917 31-Dec-1917                         85.955
0.0002605                          0.303
  12     01-Jan-1918 31-Dec-1918                        118.126
0.0001888                          0.160
  13     01-Jan-1919 31-Dec-1919                        189.678
0.0003582                          0.189
  14     01-Jan-1920 31-Dec-1920                        229.364
0.0005624                          0.245
  15     01-Jan-1921 31-Dec-1921                         53.285
0.0000425                          0.080
  16     01-Jan-1922 31-Dec-1922                         26.169                       -
0.0000114                          0.000
  17     01-Jan-1923 31-Dec-1923                         85.048
0.0000366                          0.043
  18     01-Jan-1924 31-Dec-1924                        102.715
0.0000805                          0.078
  19     01-Jan-1925 31-Dec-1925                         61.010
0.0000787                          0.129
  20     01-Jan-1926 31-Dec-1926                         93.324
0.0001302                          0.139

* The average concentration of M5a3 closest to the 80th percentile is      0.226568 ug/L

* Leaching summary for compound M52a3
* Molar mass (g.mol-1)                                  :    360.3
* Saturated vapour pressure (Pa)                        :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                          :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                                 :      8.4; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :     47.1
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.622
* Freundlich exponent (-)                               :     0.89
* Plant uptake factor (-)                               :     0.00
* ----------------------------------------------------------------------------------------------
---------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                  below target depth (mm)     below target depth
(kg/ha)         concentration in water
```

```
*
at target depth (ug/L)
* ------------------------------------------------------------------------------------------
-------------------------------------
   1     01-Jan-1907 31-Dec-1907                      211.526
0.0000000                         0.000
   2     01-Jan-1908 31-Dec-1908                       55.100
0.0000000                         0.000
   3     01-Jan-1909 31-Dec-1909                      223.512
0.0000000                         0.000
   4     01-Jan-1910 31-Dec-1910                      202.354
0.0000000                         0.000
   5     01-Jan-1911 31-Dec-1911                      288.776                      -
0.0000000                         0.000
   6     01-Jan-1912 31-Dec-1912                      214.862                      -
0.0000000                         0.000
   7     01-Jan-1913 31-Dec-1913                      238.227
0.0000000                         0.000
   8     01-Jan-1914 31-Dec-1914                      233.616
0.0000000                         0.000
   9     01-Jan-1915 31-Dec-1915                      127.629
0.0000000                         0.000
  10     01-Jan-1916 31-Dec-1916                      295.987
0.0000000                         0.000
  11     01-Jan-1917 31-Dec-1917                       85.955
0.0000000                         0.000
  12     01-Jan-1918 31-Dec-1918                      118.126                      -
0.0000000                         0.000
  13     01-Jan-1919 31-Dec-1919                      189.678                      -
0.0000000                         0.000
  14     01-Jan-1920 31-Dec-1920                      229.364                      -
0.0000000                         0.000
  15     01-Jan-1921 31-Dec-1921                       53.285                      -
0.0000000                         0.000
  16     01-Jan-1922 31-Dec-1922                       26.169                      -
0.0000000                         0.000
  17     01-Jan-1923 31-Dec-1923                       85.048                      -
0.0000000                         0.000
  18     01-Jan-1924 31-Dec-1924                      102.715                      -
0.0000000                         0.000
  19     01-Jan-1925 31-Dec-1925                       61.010                      -
0.0000000                         0.000
  20     01-Jan-1926 31-Dec-1926                       93.324                      -
0.0000000                         0.000

* The average concentration of M52a3 closest to the 80th percentile is      0.000001 ug/L

* Leaching summary for compound M1a3
* Molar mass (g.mol-1)                                :    362.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                               :     11.7; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      3.3
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.437E-01
* Freundlich exponent (-)                             :     0.96
* Plant uptake factor (-)                             :     0.00
* ------------------------------------------------------------------------------------------
-------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                              below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ------------------------------------------------------------------------------------------
-------------------------------------
   1     01-Jan-1907 31-Dec-1907                      211.526
0.0001524                         0.072
   2     01-Jan-1908 31-Dec-1908                       55.100
0.0000197                         0.036
```

```
   3     01-Jan-1909 31-Dec-1909                         223.512
0.0001538                          0.069
   4     01-Jan-1910 31-Dec-1910                         202.354
0.0003521                          0.174
   5     01-Jan-1911 31-Dec-1911                         288.776
0.0003756                          0.130
   6     01-Jan-1912 31-Dec-1912                         214.862
0.0002750                          0.128
   7     01-Jan-1913 31-Dec-1913                         238.227
0.0002852                          0.120
   8     01-Jan-1914 31-Dec-1914                         233.616
0.0002644                          0.113
   9     01-Jan-1915 31-Dec-1915                         127.629
0.0001290                          0.101
  10     01-Jan-1916 31-Dec-1916                         295.987
0.0004170                          0.141
  11     01-Jan-1917 31-Dec-1917                          85.955
0.0001707                          0.199
  12     01-Jan-1918 31-Dec-1918                         118.126
0.0001136                          0.096
  13     01-Jan-1919 31-Dec-1919                         189.678
0.0001916                          0.101
  14     01-Jan-1920 31-Dec-1920                         229.364
0.0003405                          0.148
  15     01-Jan-1921 31-Dec-1921                          53.285
0.0000205                          0.039
  16     01-Jan-1922 31-Dec-1922                          26.169                      -
0.0000079                          0.000
  17     01-Jan-1923 31-Dec-1923                          85.048
0.0000175                          0.021
  18     01-Jan-1924 31-Dec-1924                         102.715
0.0000387                          0.038
  19     01-Jan-1925 31-Dec-1925                          61.010
0.0000389                          0.064
  20     01-Jan-1926 31-Dec-1926                          93.324
0.0000675                          0.072

* The average concentration of M1a3 closest to the 80th percentile is      0.135466 ug/L

* Leaching summary for compound M6a3
* Molar mass (g.mol-1)                                :    360.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                               :     72.1; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      7.8
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.103
* Freundlich exponent (-)                             :     0.92
* Plant uptake factor (-)                             :     0.00
* ----------------------------------------------------------------------------------------------------
----------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
----------------------------------------
   1     01-Jan-1907 31-Dec-1907                         211.526
0.0011727                          0.554
   2     01-Jan-1908 31-Dec-1908                          55.100
0.0003156                          0.573
   3     01-Jan-1909 31-Dec-1909                         223.512
0.0011679                          0.523
   4     01-Jan-1910 31-Dec-1910                         202.354
0.0012080                          0.597
   5     01-Jan-1911 31-Dec-1911                         288.776
0.0015463                          0.535
   6     01-Jan-1912 31-Dec-1912                         214.862
0.0012116                          0.564
```

```
   7     01-Jan-1913 31-Dec-1913                       238.227
0.0012480                         0.524
   8     01-Jan-1914 31-Dec-1914                       233.616
0.0013324                         0.570
   9     01-Jan-1915 31-Dec-1915                       127.629
0.0006696                         0.525
  10     01-Jan-1916 31-Dec-1916                       295.987
0.0015762                         0.533
  11     01-Jan-1917 31-Dec-1917                        85.955
0.0005697                         0.663
  12     01-Jan-1918 31-Dec-1918                       118.126
0.0006164                         0.522
  13     01-Jan-1919 31-Dec-1919                       189.678
0.0011729                         0.618
  14     01-Jan-1920 31-Dec-1920                       229.364
0.0015244                         0.665
  15     01-Jan-1921 31-Dec-1921                        53.285
0.0002006                         0.376
  16     01-Jan-1922 31-Dec-1922                        26.169
0.0000689                         0.263
  17     01-Jan-1923 31-Dec-1923                        85.048
0.0003234                         0.380
  18     01-Jan-1924 31-Dec-1924                       102.715
0.0004276                         0.416
  19     01-Jan-1925 31-Dec-1925                        61.010
0.0003418                         0.560
  20     01-Jan-1926 31-Dec-1926                        93.324
0.0005516                         0.591

* The average concentration of M6a3 closest to the 80th percentile is      0.594030 ug/L

* End of PEARL REPORT: Leaching
* ------------------------------------------------------------------------------------------------
---------------------------------------

* ------------------------------------------------------------------------------------------------
---------------------------------------
* PEARL REPORT: Project_Summary
* Report_type           Leaching
* Result_text           Concentration closest to the 80th percentile (ug/L)
* Run_Id                490
* ExposureType          Groundwater
* Scenario data subset  FOCUS Groundwater version 5
* Location              CHATEAUDUN
* Meteo_station         chat-m
* Soil_type             CHAT-S_Soil
* Crop_calendar         CHAT-WCEREALS
* Substance             PXDa3
* Application_scheme    PXD-WCereals-BBCH11-60app-CHAT
* Irrigation_scheme     No
* Deposition_scheme     No
* Result_PXDa3           0.000000
* Result_M3a3           0.121651
* Result_M4a3           0.050955
* Result_M2a3           0.000004
* Result_M5a3           0.226568
* Result_M52a3           0.000001
* Result_M1a3           0.135466
* Result_M6a3           0.594030

* End of PEARL REPORT: Project_Summary
* ------------------------------------------------------------------------------------------------
---------------------------------------

*
*  The run time was 107 minutes and 10 seconds
```

Listing 3: Tier 1a – Representative *.psm file for PELMO 6.6.4 – 60 g/ha to Winter Cereals at BBCH 11 (Scheme 1)

```
<COMMENT>
GW simulations     <PNX>
<END COMMENT>
<NUMBER OF SOIL HORIZONS>
 0
<END NUMBER OF SOIL HORIZONS>
<APPLICATION>
 10    0    0    <number of locations absolute app/relative app>
026            <number of application location>
01  01  01   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  02   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  03   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  04   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  05   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  06   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  07   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  08   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  09   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  10   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  11   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  12   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  13   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  14   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  15   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  16   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  17   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  18   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  19   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  20   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  21   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  22   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  23   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  24   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  25   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  26   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         C   <number of application location>
06  04  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
06  04  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
06  04  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         H   <number of application location>
25  04  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
25  04  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
25  04  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         J   <number of application location>
05  05  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
05  05  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
05  05  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         K   <number of application location>
15  04  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
15  04  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         N   <number of application location>
12  04  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
12  04  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
12  04  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         P   <number of application location>
10  03  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
10  03  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
10  03  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         O   <number of application location>
01  03  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
01  03  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         S   <number of application location>
01  03  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         T   <number of application location>
01  03  01   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  02   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
01  03  03   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  04   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  05   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  06   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  07   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  08   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  09   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  10   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  11   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  12   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  13   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  14   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  15   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  16   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  17   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  18   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  19   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  20   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  21   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  22   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  23   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  24   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  25   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  03  26   0.06    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
 1    <pesticide appl. flag: 1=soil 2 =linear 3=exp. foliar 4=manually
<END APPLICATION>
<FLAGS>
 1   1   <henry(0=direct 1=calc.)  kd_flag(0=direct 1=calc.)>
<END FLAGS>
<VOLATILIZATION>
<henry       solub.      molmass     vap.press   diff air    depth volat.  Hv
Temperature>
  3.33E-04   166.1    400.5     0.00E+00   0.0498    0.1    98400    20
  6.67E-10   332.2    400.5     0.00E+00   0.0498    0.1    98400    30
<END VOLATILIZATION>
<PLANT UPTAKE>
 0      <plant uptake factor
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp   rel deg neq sites
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met A1>
 0.2820808   20          2.58        0           100         0.7       0         1
<Met B1>
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met C1>
```

```
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D1>
 0.3206559   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<PHOTODEGRADATION>
<rate 1/n>  <I_Ref W/m²>
 0   100  0   0  0   0  0   0  0   100
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2 f_neq       kdes>
 132         1.06       -99          20         0.00E+00          0      0     100    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met A1   Met B1   Met C1   Met D1   BR/CO2 >
<END DEPTH DEPENDENT>
################################################
<COMMENT>
METABOLITE B1     M2
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 316.4
<END MOLMASS>
<PLANT UPTAKE>
 0      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
 0.1124575   20          2.58        0           100         0.7       0         1
<Met C1>
 0.0415070   20          2.58        0           100         0.7       0         1
<Met B2>
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met C2>
 0.0505036   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
 1.54        1.01       -99          20          1E-20            0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met C1   Met B2   Met C2   BR/CO2 >
<END DEPTH DEPENDENT>
################################################
<COMMENT>
METABOLITE C1     M3
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 332.4
<END MOLMASS>
<PLANT UPTAKE>
 0.784      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
```

```
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D1>
 0.0175037   20          2.58        0           100         0.7       0         1
<Met C2>
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D2>
  0.00E+00   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
 32.1        0.96       -99          20          1E-20            0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met D1   Met C2   Met D2   BR/CO2 >
<END DEPTH DEPENDENT>
################################################
<COMMENT>
METABOLITE B2     M52
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 360.3
<END MOLMASS>
<PLANT UPTAKE>
 0      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met C2>
 0.0822239   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
 81.1        0.89       -99          20          1E-20            0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met C2   BR/CO2 >
<END DEPTH DEPENDENT>
################################################
<COMMENT>
METABOLITE C2     M11
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 362.4
<END MOLMASS>
<PLANT UPTAKE>
 0      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
```

```
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D2>
 0.0592433   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                 <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
 5.71        0.96       -99          20          1E-20            0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met D2   BR/CO2 >
<END DEPTH DEPENDENT>
<THE FOLLOWING SECTION IS USED BY THE SHELL ONLY NOT BY PELMO>
<FORMATION FRACTIONS ENTERED BY THE USER (0=NO,1=YES)>
 0
<END FORMATION FRACTIONS>
<END PSM>
```

Listing 4: Tier 1a – Representative FOCUS Summary Output File for PELMO 6.6.4, 60 g/ha to Winter Cereals at BBCH 11 (Scheme 1)

FOCUS Summary Output File

Model Version: FOCUSPELMO 6.6.4
Date of this simulation: 29/11/2022 12:00:58
Pesticide input file: TIER3a_PNXM11_WC60_BBCH11
Simulated crop: Winter cereals

PECgw for ACTIVE SUBSTANCE (PNX)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(4/15)	2.63E-11	277.910	0.000
Hamburg (H)	(16/9)	4.38E-10	433.070	0.000
Jokioinen (J)	(8/19)	6.08E-10	370.100	0.000
Kremsmünster (K)	(15/12)	9.74E-08	549.300	0.000
Okehampton (N)	(17/5)	3.15E-07	1116.40	0.000
Piacenza (P)	(16/6)	2.27E-06	532.900	0.000
Porto (O)	(11/17)	6.16E-05	1145.40	0.000
Sevilla (S)	(12/1)	3.43E-10	133.220	0.000
Thiva (T)	(14/10)	5.05E-07	326.200	0.000

PECgw for METABOLITE B1 (M2)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(12/1)	1.01E-05	275.040	0.000
Hamburg (H)	(7/9)	4.75E-04	803.200	0.000
Jokioinen (J)	(7/1)	0.0214670	600.500	0.003
Kremsmünster (K)	(12/6)	0.0067090	553.200	0.001
Okehampton (N)	(9/6)	0.0224320	736.300	0.003
Piacenza (P)	(8/10)	0.1189100	1121.40	0.010
Porto (O)	(13/3)	1.7578000	1847.40	0.095
Sevilla (S)	(3/1)	5.62E-05	312.610	0.000
Thiva (T)	(14/17)	0.0012377	310.570	0.000

PECgw for METABOLITE C1 (M3)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(6/12)	0.2873500	305.740	0.093
Hamburg (H)	(11/8)	0.9110000	353.800	0.257
Jokioinen (J)	(8/5)	1.2687000	411.800	0.309
Kremsmünster (K)	(5/4)	2.9600000	953.300	0.311
Okehampton (N)	(7/4)	3.2830000	943.700	0.343
Piacenza (P)	(16/8)	1.7151000	893.200	0.196
Porto (O)	(7/12)	2.6800000	1128.10	0.239
Sevilla (S)	(16/15)	0.0473400	422.670	0.012
Thiva (T)	(9/6)	0.1843800	347.400	0.052

PECgw for METABOLITE B2 (M52)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(9/5)	1.77E-06	378.100	0.000
Hamburg (H)	(19/10)	5.23E-04	775.100	0.000
Jokioinen (J)	(20/8)	0.0016340	329.200	0.001
Kremsmünster (K)	(13/11)	0.0054990	719.100	0.001
Okehampton (N)	(4/7)	0.0073520	943.700	0.001

Piacenza (P)	(8/16)	0.0100120	893.200	0.001
Porto (O)	(9/7)	0.0093210	955.900	0.001
Sevilla (S)	(3/1)	3.20E-07	312.610	0.000
Thiva (T)	(8/2)	1.05E-05	249.300	0.000

PECgw for METABOLITE C2 (M11)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(6/4)	0.4214000	427.700	0.099
Hamburg (H)	(11/13)	1.4135000	442.200	0.321
Jokioinen (J)	(17/3)	4.2040000	737.600	0.568
Kremsmünster (K)	(12/11)	1.4492000	574.000	0.253
Okehampton (N)	(10/7)	3.2510000	1188.40	0.274
Piacenza (P)	(19/17)	0.8265000	479.300	0.172
Porto (O)	(2/4)	3.0730000	1550.70	0.199
Sevilla (S)	(3/9)	0.1244100	510.700	0.025
Thiva (T)	(9/6)	0.2367800	347.400	0.065

Listing 5: Tier 1b – Representative *.prl input file for PEARL v5.5.5 – 45 g/ha to Spring Cereals at BBCH 21 for the Châteaudun scenario

```
*-------------------------------------------------------------------------------
* INPUT FILE for PEARL
* Generated by user interface version FOCUSPEARL 5.5.5 (build : 5.5.5) (October 2020) on
18/11/2022 18:00:01
*-------------------------------------------------------------------------------
* This file is intended to be used by expert users.
*
* Contact addresses:
* ----------------
* Aaldrik Tiktak                        Erik van den Berg
* Environmental Assessment Agency (PBL) Wageningen Environmental Research (WENR)
* PO BOX 30314                          PO BOX 47
* 2500 GH The Hague                     6700 AA Wageningen
* The Netherlands                       The Netherlands
* e-mail: aaldrik.tiktak@pbl.nl         erik.vandenberg@wur.nl
*
* (c) 2020 RIVM, PBL, WENR

*-------------------------------------------------------------------------------
* Section 1: Control section
*-------------------------------------------------------------------------------

FOCUSPEARL        CallingProgram
5.5.5             CallingProgramVersion
Groundwater       ExposureType
6                 InitYears (y)
0                 NumRep (-)
01-Jan-1901       TimStart
31-Dec-1926       TimEnd
0.001             ThetaTol (m3.m-3)
Month             OptDelTimPrn
30                DelTimPrn  (d)
OnLine            OptHyd
1E-5              DelTimSwaMin (d)
0.2               DelTimSwaMax (d)
Yes               PrintCumulatives
1.0               GWLTol (m)
30                MaxItSwa
No                OptHysteresis
0.2               PreHeaWetDryMin (cm)
All               OptSys
Yes               OptScreen
No                OptPaddy
No                OptMacropore
None              OptAux

*-------------------------------------------------------------------------------
* Section 2: Soil section
*-------------------------------------------------------------------------------

CHAT-S_Soil SoilTypeID
CHATEAUDUN Location
table SoilProfile
ThiHor NumLay
(m)
0.01     5
0.24     24
0.05     5
0.2      16
0.1      4
0.4      16
0.2      4
0.3      6
0.4      4
2.6      26
end_table
```

```
table  horizon SoilProperties
Nr     FraSand    FraSilt    FraClay    CntOm         pH
       (kg.kg-1)  (kg.kg-1)  (kg.kg-1)  (kg.kg-1)     (-)
1      0.03       0.67       0.3        0.024         8
2      0.03       0.67       0.3        0.024         8
3      0.02       0.67       0.31       0.016         8.1
4      0.02       0.67       0.31       0.016         8.1
5      0.08       0.67       0.25       0.012         8.2
6      0.3        0.44       0.26       0.005         8.5
7      0.3        0.44       0.26       0.005         8.5
8      0.38       0.38       0.24       0.0046        8.5
9      0.38       0.38       0.24       0.0046        8.5
10     0.08       0.61       0.31       0.0036        8.3
end_table
table  horizon VanGenuchtenPar
Nr     ThetaSat    ThetaRes    AlphaDry    AlphaWet    n       KSat      l
       (m3.m-3)    (m3.m-3)    (cm-1)      (cm-1)      (-)     (m.d-1)   (-)
1      0.43        0           0.05        0.1         1.08    1.728     0.5
2      0.43        0           0.05        0.1         1.08    1.728     0.5
3      0.44        0           0.05        0.1         1.095   2.592     0.5
4      0.44        0           0.05        0.1         1.095   2.592     0.5
5      0.44        0           0.05        0.1         1.095   4.32      2.5
6      0.44        0           0.015       0.03        1.16    1.0368    -2
7      0.44        0           0.015       0.03        1.16    1.0368    -2
8      0.49        0           0.0107      0.0214      1.28    0.7828    -1.5
9      0.49        0           0.0107      0.0214      1.28    0.7828    -1.5
10     0.42        0           0.0191      0.0382      1.152   1.2796    -1.18
end_table
Input              OptRho
table horizon      Rho              (kg.m-3)
1    1300.0
2    1300.0
3    1410.0
4    1410.0
5    1410.0
6    1370.0
7    1370.0
8    1410.0
9    1410.0
10   1490.0
end_table

0.002              ZPndMax          (m)

* Soil evaporation parameters
Boesten            OptSolEvp
1                  FacEvpSol        (-)
0.79               CofRedEvp        (cm1/2)
0.01               PrcMinEvp        (m.d-1)

Table horizon LenDisLiq (m)
1  0.05
2  0.05
3  0.05
4  0.05
5  0.05
6  0.05
7  0.05
8  0.05
9  0.05
10 0.05
end_table
MillingtonQuirk    OptCofDifRel
2                  ExpDifLiqMilNom (-)
0.6667             ExpDifLiqMilDen (-)
2                  ExpDifGasMilNom (-)
0.6667             ExpDifGasMilDen (-)
Constant           OptPnd

*-------------------------------------------------------------------------------
* Section 3: Weather and irrigation section
```

```
*-------------------------------------------------------------------------------

chat-m            MeteoStation
Input             OptEvp
2.35              TemLboSta       (C)
No                OptIrr
No                IrrigationScheme
1.0               FacPrc (-)
1.0               FacEvp (-)
0.0               DifTem (C)
Laminar           OptTraRes
Daily             OptMetInp
No                OptRainfallEvents
No                OptSnow

*-------------------------------------------------------------------------------
* Section 4a: Lower boundary flux
*-------------------------------------------------------------------------------

-1200             ZGrwLevSta (cm)

FreeDrain         OptLbo
*-------------------------------------------------------------------------------
* Section 4b: Drainage/infiltration section
*-------------------------------------------------------------------------------

No                OptDra
No                OptSurDra
0                 NumDraLev

*-------------------------------------------------------------------------------
* Section 5: Compound section
*-------------------------------------------------------------------------------

PXDb3 SubstanceName
table compounds
PXDb3
M2b3
M3b3
M5b3
M6b3
M4b3
M52b3
M1b3
end_table
EqlDom_Input        OptDT50_PXDb3
EqlDom_Input        OptDT50_M2b3
EqlDom_Input        OptDT50_M3b3
EqlDom_Input        OptDT50_M5b3
EqlDom_Input        OptDT50_M6b3
EqlDom_Input        OptDT50_M4b3
EqlDom_Input        OptDT50_M52b3
EqlDom_Input        OptDT50_M1b3
400.5               MolMas_PXDb3 (g.mol-1)
316.4               MolMas_M2b3 (g.mol-1)
332.4               MolMas_M3b3 (g.mol-1)
376.4               MolMas_M5b3 (g.mol-1)
360.4               MolMas_M6b3 (g.mol-1)
362.4               MolMas_M4b3 (g.mol-1)
360.3               MolMas_M52b3 (g.mol-1)
362.4               MolMas_M1b3 (g.mol-1)
table FraPrtDau (mol.mol-1)
0.883 PXDb3 -> M2b3
0.55 M2b3 -> M3b3
0.105 M2b3 -> M52b3
0.469 M3b3 -> M5b3
0.214 M3b3 -> M6b3
0.822 M3b3 -> M4b3
0.59 M3b3 -> M1b3
end_table
OptimumConditions   OptCntLiqTraRef_PXDb3
```

```
0.216               DT50Ref_PXDb3 (d)
20.                 TemRefTra_PXDb3 (C)
0.7                 ExpLiqTra_PXDb3 (-)
65.4                MolEntTra_PXDb3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M2b3
3.39                DT50Ref_M2b3 (d)
20.                 TemRefTra_M2b3 (C)
0.7                 ExpLiqTra_M2b3 (-)
65.4                MolEntTra_M2b3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M3b3
39.6                DT50Ref_M3b3 (d)
20.                 TemRefTra_M3b3 (C)
0.7                 ExpLiqTra_M3b3 (-)
65.4                MolEntTra_M3b3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M5b3
16.4                DT50Ref_M5b3 (d)
20.                 TemRefTra_M5b3 (C)
0.7                 ExpLiqTra_M5b3 (-)
65.4                MolEntTra_M5b3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M6b3
72.1                DT50Ref_M6b3 (d)
20.                 TemRefTra_M6b3 (C)
0.7                 ExpLiqTra_M6b3 (-)
65.4                MolEntTra_M6b3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M4b3
7.52                DT50Ref_M4b3 (d)
20.                 TemRefTra_M4b3 (C)
0.7                 ExpLiqTra_M4b3 (-)
65.4                MolEntTra_M4b3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M52b3
8.43                DT50Ref_M52b3 (d)
20.                 TemRefTra_M52b3 (C)
0.7                 ExpLiqTra_M52b3 (-)
65.4                MolEntTra_M52b3 (kJ.mol-1)
OptimumConditions   OptCntLiqTraRef_M1b3
11.7                DT50Ref_M1b3 (d)
20.                 TemRefTra_M1b3 (C)
0.7                 ExpLiqTra_M1b3 (-)
65.4                MolEntTra_M1b3 (kJ.mol-1)
table horizon FacZTra (-)
hor PXDb3 M2b3 M3b3 M5b3 M6b3 M4b3 M52b3 M1b3
1 1 1 1 1 1 1 1
2 1 1 1 1 1 1 1
3 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
4 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
6 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3
7 0 0 0 0 0 0 0 0
8 0 0 0 0 0 0 0 0
9 0 0 0 0 0 0 0 0
10 0 0 0 0 0 0 0 0
end_table
table horizon FacZSor (-)
hor PXDb3 M2b3 M3b3 M5b3 M6b3 M4b3 M52b3 M1b3
1 -99 -99 -99 -99 -99 -99 -99 -99
2 -99 -99 -99 -99 -99 -99 -99 -99
3 -99 -99 -99 -99 -99 -99 -99 -99
4 -99 -99 -99 -99 -99 -99 -99 -99
5 -99 -99 -99 -99 -99 -99 -99 -99
6 -99 -99 -99 -99 -99 -99 -99 -99
7 -99 -99 -99 -99 -99 -99 -99 -99
8 -99 -99 -99 -99 -99 -99 -99 -99
9 -99 -99 -99 -99 -99 -99 -99 -99
10 -99 -99 -99 -99 -99 -99 -99 -99
end_table
0.                  MolEntSor_PXDb3 (kJ.mol-1)
20.                 TemRefSor_PXDb3 (C)
pH-independent      OptCofFre_PXDb3
76.6                KomEql_PXDb3 (L.kg-1)
7660.               KomEqlMax_PXDb3 (L.kg-1)
1.                  ConLiqRef_PXDb3 (mg.L-1)
```

```
1.06                ExpFre_PXDb3 (-)
0.                  MolEntSor_M2b3 (kJ.mol-1)
20.                 TemRefSor_M2b3 (C)
pH-independent      OptCofFre_M2b3
0.893               KomEql_M2b3 (L.kg-1)
89.3                KomEqlMax_M2b3 (L.kg-1)
1.                  ConLiqRef_M2b3 (mg.L-1)
1.01                ExpFre_M2b3 (-)
0.                  MolEntSor_M3b3 (kJ.mol-1)
20.                 TemRefSor_M3b3 (C)
pH-independent      OptCofFre_M3b3
18.6                KomEql_M3b3 (L.kg-1)
1860.               KomEqlMax_M3b3 (L.kg-1)
1.                  ConLiqRef_M3b3 (mg.L-1)
0.96                ExpFre_M3b3 (-)
0.                  MolEntSor_M5b3 (kJ.mol-1)
20.                 TemRefSor_M5b3 (C)
pH-independent      OptCofFre_M5b3
1.81                KomEql_M5b3 (L.kg-1)
181.                KomEqlMax_M5b3 (L.kg-1)
1.                  ConLiqRef_M5b3 (mg.L-1)
0.9                 ExpFre_M5b3 (-)
0.                  MolEntSor_M6b3 (kJ.mol-1)
20.                 TemRefSor_M6b3 (C)
pH-independent      OptCofFre_M6b3
7.83                KomEql_M6b3 (L.kg-1)
783.                KomEqlMax_M6b3 (L.kg-1)
1.                  ConLiqRef_M6b3 (mg.L-1)
0.92                ExpFre_M6b3 (-)
0.                  MolEntSor_M4b3 (kJ.mol-1)
20.                 TemRefSor_M4b3 (C)
pH-independent      OptCofFre_M4b3
4.62                KomEql_M4b3 (L.kg-1)
462.                KomEqlMax_M4b3 (L.kg-1)
1.                  ConLiqRef_M4b3 (mg.L-1)
0.92                ExpFre_M4b3 (-)
0.                  MolEntSor_M52b3 (kJ.mol-1)
20.                 TemRefSor_M52b3 (C)
pH-independent      OptCofFre_M52b3
47.1                KomEql_M52b3 (L.kg-1)
4710.               KomEqlMax_M52b3 (L.kg-1)
1.                  ConLiqRef_M52b3 (mg.L-1)
0.89                ExpFre_M52b3 (-)
0.                  MolEntSor_M1b3 (kJ.mol-1)
20.                 TemRefSor_M1b3 (C)
pH-independent      OptCofFre_M1b3
3.31                KomEql_M1b3 (L.kg-1)
331.                KomEqlMax_M1b3 (L.kg-1)
1.                  ConLiqRef_M1b3 (mg.L-1)
0.96                ExpFre_M1b3 (-)
0.                  PreVapRef_PXDb3 (Pa)
20.                 TemRefVap_PXDb3 (C)
200.                SlbWatRef_PXDb3 (mg.L-1)
25.                 TemRefSlb_PXDb3 (C)
27.                 MolEntSlb_PXDb3 (kJ.mol-1)
95.                 MolEntVap_PXDb3 (kJ.mol-1)
0.                  PreVapRef_M2b3 (Pa)
20.                 TemRefVap_M2b3 (C)
380000.             SlbWatRef_M2b3 (mg.L-1)
25.                 TemRefSlb_M2b3 (C)
27.                 MolEntSlb_M2b3 (kJ.mol-1)
95.                 MolEntVap_M2b3 (kJ.mol-1)
0.                  PreVapRef_M3b3 (Pa)
20.                 TemRefVap_M3b3 (C)
370.                SlbWatRef_M3b3 (mg.L-1)
25.                 TemRefSlb_M3b3 (C)
27.                 MolEntSlb_M3b3 (kJ.mol-1)
95.                 MolEntVap_M3b3 (kJ.mol-1)
0.                  PreVapRef_M5b3 (Pa)
20.                 TemRefVap_M5b3 (C)
1000.               SlbWatRef_M5b3 (mg.L-1)
```

```
25.                 TemRefSlb_M5b3 (C)
27.                 MolEntSlb_M5b3 (kJ.mol-1)
95.                 MolEntVap_M5b3 (kJ.mol-1)
0.                  PreVapRef_M6b3 (Pa)
20.                 TemRefVap_M6b3 (C)
1000.               SlbWatRef_M6b3 (mg.L-1)
25.                 TemRefSlb_M6b3 (C)
27.                 MolEntSlb_M6b3 (kJ.mol-1)
95.                 MolEntVap_M6b3 (kJ.mol-1)
0.                  PreVapRef_M4b3 (Pa)
20.                 TemRefVap_M4b3 (C)
1000.               SlbWatRef_M4b3 (mg.L-1)
25.                 TemRefSlb_M4b3 (C)
27.                 MolEntSlb_M4b3 (kJ.mol-1)
95.                 MolEntVap_M4b3 (kJ.mol-1)
0.                  PreVapRef_M52b3 (Pa)
20.                 TemRefVap_M52b3 (C)
1000.               SlbWatRef_M52b3 (mg.L-1)
25.                 TemRefSlb_M52b3 (C)
27.                 MolEntSlb_M52b3 (kJ.mol-1)
95.                 MolEntVap_M52b3 (kJ.mol-1)
0.                  PreVapRef_M1b3 (Pa)
20.                 TemRefVap_M1b3 (C)
1000.               SlbWatRef_M1b3 (mg.L-1)
25.                 TemRefSlb_M1b3 (C)
27.                 MolEntSlb_M1b3 (kJ.mol-1)
95.                 MolEntVap_M1b3 (kJ.mol-1)
0.                  CofDesRat_PXDb3 (d-1)
0.                  FacSorNeqEql_PXDb3 (-)
0.                  CofDesRat_M2b3 (d-1)
0.                  FacSorNeqEql_M2b3 (-)
0.                  CofDesRat_M3b3 (d-1)
0.                  FacSorNeqEql_M3b3 (-)
0.                  CofDesRat_M5b3 (d-1)
0.                  FacSorNeqEql_M5b3 (-)
0.                  CofDesRat_M6b3 (d-1)
0.                  FacSorNeqEql_M6b3 (-)
0.                  CofDesRat_M4b3 (d-1)
0.                  FacSorNeqEql_M4b3 (-)
0.                  CofDesRat_M52b3 (d-1)
0.                  FacSorNeqEql_M52b3 (-)
0.                  CofDesRat_M1b3 (d-1)
0.                  FacSorNeqEql_M1b3 (-)
0.                  FacUpt_PXDb3 (-)
0.                  FacUpt_M2b3 (-)
0.784               FacUpt_M3b3 (-)
0.                  FacUpt_M5b3 (-)
0.                  FacUpt_M6b3 (-)
0.                  FacUpt_M4b3 (-)
0.                  FacUpt_M52b3 (-)
0.                  FacUpt_M1b3 (-)
0.01                ThiAirBouLay (m)
Lumped              OptDspCrp_PXDb3
1000000.            DT50DspCrp_PXDb3 (d)
0.0001              FacWasCrp_PXDb3 (m-1)
Lumped              OptDspCrp_M2b3
1000000.            DT50DspCrp_M2b3 (d)
0.0001              FacWasCrp_M2b3 (m-1)
Lumped              OptDspCrp_M3b3
1000000.            DT50DspCrp_M3b3 (d)
0.0001              FacWasCrp_M3b3 (m-1)
Lumped              OptDspCrp_M5b3
1000000.            DT50DspCrp_M5b3 (d)
0.0001              FacWasCrp_M5b3 (m-1)
Lumped              OptDspCrp_M6b3
1000000.            DT50DspCrp_M6b3 (d)
0.0001              FacWasCrp_M6b3 (m-1)
Lumped              OptDspCrp_M4b3
1000000.            DT50DspCrp_M4b3 (d)
0.0001              FacWasCrp_M4b3 (m-1)
Lumped              OptDspCrp_M52b3
```

```
1000000.            DT50DspCrp_M52b3 (d)
0.0001              FacWasCrp_M52b3 (m-1)
Lumped              OptDspCrp_M1b3
1000000.            DT50DspCrp_M1b3 (d)
0.0001              FacWasCrp_M1b3 (m-1)
20.                 TemRefDif_PXDb3 (C)
4.3E-5              CofDifWatRef_PXDb3 (m2.d-1)
0.43                CofDifAirRef_PXDb3 (m2.d-1)
20.                 TemRefDif_M2b3 (C)
4.3E-5              CofDifWatRef_M2b3 (m2.d-1)
0.43                CofDifAirRef_M2b3 (m2.d-1)
20.                 TemRefDif_M3b3 (C)
4.3E-5              CofDifWatRef_M3b3 (m2.d-1)
0.43                CofDifAirRef_M3b3 (m2.d-1)
20.                 TemRefDif_M5b3 (C)
4.3E-5              CofDifWatRef_M5b3 (m2.d-1)
0.43                CofDifAirRef_M5b3 (m2.d-1)
20.                 TemRefDif_M6b3 (C)
4.3E-5              CofDifWatRef_M6b3 (m2.d-1)
0.43                CofDifAirRef_M6b3 (m2.d-1)
20.                 TemRefDif_M4b3 (C)
4.3E-5              CofDifWatRef_M4b3 (m2.d-1)
0.43                CofDifAirRef_M4b3 (m2.d-1)
20.                 TemRefDif_M52b3 (C)
4.3E-5              CofDifWatRef_M52b3 (m2.d-1)
0.43                CofDifAirRef_M52b3 (m2.d-1)
20.                 TemRefDif_M1b3 (C)
4.3E-5              CofDifWatRef_M1b3 (m2.d-1)
0.43                CofDifAirRef_M1b3 (m2.d-1)
*-------------------------------------------------------------------------------
* Section 6: Management section
*-------------------------------------------------------------------------------

PXD-SCereals-BBCH21-45app-CHAT ApplicationScheme
1.0               ZTgt (m)
0.0               ZEADTop (m)
0.2               ZEADBot (m)
1                 DelTimEvt (a)
table Applications
31-Mar-1901  AppSolSur 0.036
end_table
table TillageDates
end_table
table interpolate CntSysEql (mg.kg-1)
0.0      0.0
50.0     0.0
end_table
table interpolate CntSysNeq (mg.kg-1)
0.0      0.0
50.0     0.0
end_table
No DepositionScheme
table    FlmDep   (kg.ha-1.d-1)
end_table
*-------------------------------------------------------------------------------
* Section 7: Crop section
*-------------------------------------------------------------------------------

CHAT-SCEREALS CropCalendar
Yes               RepeatCrops
Fixed             OptLenCrp
LAI    OptCov

table  Crops
10-Mar           20-Jul        scereals1
end_table
table  CrpPar_scereals1
0.0    0.0    1.05   0.0    0.0
0.695  5.0    1.05   0.6    0.0
0.702  5.0    1.1    0.6    0.0
0.847  5.0    1.1    0.6    0.0
```

```
0.855  5.0    0.7    0.6    0.0
1.0    5.0    0.7    0.6    0.0
end_table
table  RootDensity_scereals1
0.0    1.0
1.0    1.0
end_table
0.0               HLim1_scereals1 (cm)
-1.0              HLim2_scereals1 (cm)
-500.0            HLim3U_scereals1 (cm)
-900.0            HLim3L_scereals1 (cm)
-16000.0          HLim4_scereals1 (cm)
70.0              RstEvpCrp_scereals1 (s.m-1)
0.39              CofExtDif_scereals1 (-)
1.0               CofExtDir_scereals1 (-)
0.0001            CofIntCrp_scereals1 (cm)
0.0               TemSumSta_scereals1 (C)
0.0               TemSumEmgAnt_scereals1 (C)
0.0               TemSumAntMat_scereals1 (C)
0.2               ZTensiometer_scereals1 (m)
0.0               FraCovStm_scereals1 (-)
-100.0            PreHeaIrrSta_scereals1 (cm)
15.0              IrgThreshold_scereals1 (mm)
*-------------------------------------------------------------------------------
* Section 8: Output control
*-------------------------------------------------------------------------------

DaysFromSta       DateFormat
No                OptDelOutFiles
Yes               PrintCumulatives
Yes               LeachingReport
80.0              TargetPercentile (%)
No                DrainageReport
No                AirReport
No                SoilReport
0.2               ThiLayPer (m)
table VerticalProfiles
end_table
G12.4             RealFormat
table OutputDepths (m)
0.05
0.1
0.2
0.3
0.4
0.5
0.75
1.0
2.0
end_table
Yes               print_AmaAppCrp
Yes               print_AmaAppSol
Yes               print_AmaCrp
Yes               print_AmaDra_1
Yes               print_AmaDra_2
Yes               print_AmaDra_3
Yes               print_AmaDra_4
Yes               print_AmaDra_5
Yes               print_AmaEqlTgt
Yes               print_AmaEqlPro
Yes               print_AmaEqlTil
Yes               print_AmaErrMic
Yes               print_AmaForPro
Yes               print_AmaHarCrp
Yes               print_AmaNeqTgt
Yes               print_AmaNeqPro
Yes               print_AmaNeqTil
Yes               print_AmaSysTgt
Yes               print_AmaSysPro
Yes               print_AmaSysTil
Yes               print_AmaTraPro
```

```
Yes             print_AmaUptPro
Yes             print_AmaDspCrp
Yes             print_AmaWasCrp
Yes             print_ConGas
Yes             print_ConLiq
Yes             print_ConLiqLbo
Yes             print_ConLiqSatAvg
Yes             print_ConSys
Yes             print_ConSysEql
Yes             print_ConSysNeq
Yes             print_DelTimPrl
Yes             print_Eps
Yes             print_FacCrpEvp
Yes             print_FlmDepCrp
Yes             print_FlmGas
Yes             print_FlmGasVol
Yes             print_FlmLiq
Yes             print_FlmLiqInfSys
Yes             print_FlmLiqLbo
Yes             print_FlmSys
Yes             print_FlvLiq
Yes             print_FlvLiqDra_3
Yes             print_FlvLiqDra_4
Yes             print_FlvLiqDra_5
Yes             print_FlvLiqEvpIntIrr
Yes             print_FlvLiqEvpIntPrc
Yes             print_FlvLiqEvpSol
Yes             print_FlvLiqEvpSolPot
Yes             print_FlvLiqIrr
Yes             print_FlvLiqLbo
Yes             print_FlvLiqGrw
Yes             print_FlvLiqTrp
Yes             print_FlvLiqTrpPot
Yes             print_FraCovCrp
Yes             print_GrwLev
Yes             print_LAI
Yes             print_PreHea
Yes             print_Theta
Yes             print_StoCap
Yes             print_FlvLiqGrwSur
Yes             print_VvrLiqDra
Yes             print_VvrLiqUpt
Yes             print_ZRoot
Yes             print_FlvLiqDra_1
Yes             print_FlvLiqDra_2
Yes             print_FlvLiqPrc
Yes             print_Tem
Yes             print_ConLiqDra_1
Yes             print_ConLiqDra_2
Yes             print_ConLiqDra_3
Yes             print_ConLiqDra_4
Yes             print_ConLiqDra_5
Yes             print_ConLiqDra
Yes             print_ZPnd
Yes             print_AvoLiqSol
Yes             print_ConGas_VPrf
Yes             print_ConLiq_VPrf
Yes             print_ConSys_VPrf
Yes             print_ConSysEql_VPrf
Yes             print_ConSysNeq_VPrf
Yes             print_PreHea_VPrf
Yes             print_Tem_VPrf
Yes             print_Theta_VPrf
Yes             print_AvoLiqErr
Yes             print_FlvLiqInf
Yes             print_RstAirLam
Yes             print_AmaRunOff
Yes             print_AmaSolSur
Yes             print_VelWnd
Yes             print_TemAir
Yes             print_FlvLiqCanDrp
```

```
Yes               print_ConLiqPer
Yes               print_CntSysPer
Yes               print_ConLiqTWA2D
Yes               print_ConLiqTWA3D
Yes               print_ConLiqTWA4D
Yes               print_CntSysTWA2D
Yes               print_CntSysTWA3D
Yes               print_CntSysTWA4D
Yes               print_ConLiqTWA1D
Yes               print_CntSysTWA1D
Yes               print_ConLiqPer
Yes               print_CntSysPer
*-------------------------------------------------------------------------------
* End of FOCUSPEARL 5.5.5 input file
*-------------------------------------------------------------------------------
```

Listing 6: Tier 1b – Representative *.sum report file for PEARL v5.5.5 – 45 g/ha to Spring Cereals at BBCH 21 for the Châteaudun scenario

```
* ----------------------------------------------------------------------------
* PEARL REPORT: Header
* Results from the PEARL model  (c) WENR, PBL and RIVM
* PEARL kernel version       : 3.2.20
* SWAP kernel version        : swap3237
* PEARL created on           : 14-Sep-2020
*
* PEARL was called from      : FOCUSPEARL,version 5.5.5
* Working directory          :
D:\Documents\WorkProjects\MartinProjects\PinoxadenModelling\GW\PEARLMACRO_GW\FOCUSPEARL\589
* Run ID                     : 589
* Input file generated on    : 18-11-2022
* ----------------------------------------------------------------------------
*
* ExposureType          : Groundwater
* Scenario data subset  : FOCUS Groundwater version 5
* Location              : CHATEAUDUN
* Meteo station         : chat-m
* Soil type             : CHAT-S_Soil
* Crop calendar         : CHAT-SCEREALS
* Substance             : PXDb3
* Application scheme    : PXD-SCereals-BBCH21-45app-CHAT
* Deposition scheme     : No
* Irrigation scheme     : No
*
* End of PEARL REPORT: Header
* ----------------------------------------------------------------------------

* Key to the annual water balances in the soil system
* ----------------------------------------------------------------------------
* DelLiq        Net storage change of water in profile       (m.a-1)
* Prc           Precipitation                                (m.a-1)
* Irr           Irrigation                                   (m.a-1)
* LeaLbo        Seepage at the lower boundary                (m.a-1)
* LeaGrw        Groundwater recharge                         (m.a-1)
* LeaTgt        Flux at lower boundary of the target layer   (m.a-1)
* EvpInt        Evaporation of intercepted water             (m.a-1)
* SolAct        Actual soil evaporation                      (m.a-1)
* TrpAct        Actual transpiration                         (m.a-1)
* Dra           Total discharge to drains and channels       (m.a-1)
* Dra_1         Lateral discharge to primary system          (m.a-1)
* Dra_2         Lateral discharge to secondary system        (m.a-1)
* Dra_3         Lateral discharge to tertiary system         (m.a-1)
* Dra_4         Lateral discharge to tile drains             (m.a-1)
* Dra_5         Lateral discharge to surface drainage system (m.a-1)
* RunOff        Run-off                                      (m.a-1)
* EvpPnd        Evaporation of ponded water                  (m.a-1)
* CanDrp        Canopy drip                                  (m.a-1)
* SolPot        Potential soil evaporation                   (m.a-1)
* TrpPot        Potential transpiration                      (m.a-1)

* Key to the annual mass balance of substance at the crop
* ----------------------------------------------------------------------------
* AmaAppCrp     Areic mass applied to the crop canopy        (kg.ha-1.a-1)
* DelAmaCrp     Change of areic mass at the crop canopy      (kg.ha-1.a-1)
* AmaVol        Areic mass volatilised from the crop canopy  (kg.ha-1.a-1)
* AmaPen        Areic mass penetrated into the plant tissue  (kg.ha-1.a-1)
* AmaTra        Areic mass transformed at the crop canopy    (kg.ha-1.a-1)
* AmaDep        Areic mass deposited at the crop canopy      (kg.ha-1.a-1)
* AmaDsp        Areic mass dissipated at the crop canopy     (kg.ha-1.a-1)
* AmaWas        Areic mass washed from the cropy canopy      (kg.ha-1.a-1)
* AmaHar        Areic mass removed by harvesting             (kg.ha-1.a-1)

* Key to the annual mass balance of substance in the soil system
* ----------------------------------------------------------------------------
* AmaAppSol     Areic mass applied to the soil system        (kg.ha-1.a-1)
```

```
* DelAma        Change of mass in the soil system           (kg.ha-1.a-1)
* DelAmaEql     Change of mass in the equilibrium domain    (kg.ha-1.a-1)
* DelAmaNeq     Change of mass in the non-equilibrium domain (kg.ha-1.a-1)
* AmaTra        Areic mass transformed in the soil system   (kg.ha-1.a-1)
* AmaFor        Areic mass formed in the soil system        (kg.ha-1.a-1)
* AmaUpt        Areic mass taken-up from the soil system    (kg.ha-1.a-1)
* AmaDra        Areic mass drained from the soil system     (kg.ha-1.a-1)
* AmaDra_1      Areic mass drained to the primary system    (kg.ha-1.a-1)
* AmaDra_2      Areic mass drained to the secunary system   (kg.ha-1.a-1)
* AmaDra_3      Areic mass drained to the tertiary system   (kg.ha-1.a-1)
* AmaDra_4      Areic mass drained to tube drains           (kg.ha-1.a-1)
* AmaDra_5      Areic mass drained to surface drain system  (kg.ha-1.a-1)
* AmaDep        Areic mass deposited at the soil surface    (kg.ha-1.a-1)
* AmaVol        Areic mass volatized from the soil surface  (kg.ha-1.a-1)
* AmaLea        Areic mass leached from the soil system     (kg.ha-1.a-1)
* AmaLeaAqf     Areic mass leached to the deep acquifer     (kg.ha-1.a-1)

* Key to the output per summary period
* ------------------------------------------------------------------------------
* AmaLeaTgt     Areic mass leached from the target layer      (kg.ha-1)
* FlvLeaTgt     Volume of water leached from the target layer (m3.m-2)
* ConLeaTgt     Concentration in water leached from the target layer (ug.L-1)
* ------------------------------------------------------------------------------


* Annual water balance of the target layer
* ------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------
------
* yr Identifier        DelLiq      Prc      Irr   LeaLbo   LeaTgt   EvpInt   SolAct   TrpAct
Dra    Dra_1    Dra_2    Dra_3    Dra_4    Dra_5      Run   EvpPnd   CanDrp   SolPot   TrpPot
1901 BalWatTgt         0.0463   0.5227   0.0000   0.0216   0.0615   0.0000   0.2500   0.1649
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1178   0.5515
0.3247
1902 BalWatTgt         0.0088   0.4133   0.0000   0.0316   0.0529   0.0000   0.1952   0.1564
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1077   0.5561
0.2931
1903 BalWatTgt        -0.0207   0.5070   0.0000   0.0582   0.1082   0.0000   0.2683   0.1512
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1065   0.4763
0.2535
1904 BalWatTgt         0.0101   0.5926   0.0000   0.0611   0.1186   0.0000   0.2503   0.2136
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1801   0.4837
0.2838
1905 BalWatTgt         0.0206   0.5541   0.0000   0.1151   0.0876   0.0000   0.2407   0.2052
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1460   0.4757
0.2713
1906 BalWatTgt        -0.0076   0.6045   0.0000   0.1340   0.1354   0.0000   0.3003   0.1763
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1239   0.4894
0.3087
1907 BalWatTgt        -0.0058   0.7325   0.0000   0.1411   0.2432   0.0000   0.2747   0.2205
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1940   0.4639
0.2746
1908 BalWatTgt         0.0108   0.4733   0.0000   0.1738   0.1108   0.0000   0.2295   0.1221
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0888   0.5439
0.3822
1909 BalWatTgt        -0.0006   0.7586   0.0000   0.2004   0.2123   0.0000   0.3024   0.2445
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2278   0.4553
0.2513
1910 BalWatTgt         0.0261   0.7063   0.0000   0.2579   0.2192   0.0000   0.2564   0.2046
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1568   0.4688
0.2460
1911 BalWatTgt        -0.0205   0.7866   0.0000   0.2351   0.3081   0.0000   0.2768   0.2223
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1566   0.4517
0.2671
1912 BalWatTgt         0.0012   0.6903   0.0000   0.2545   0.2359   0.0000   0.2696   0.1835
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1986   0.4740
0.2543
1913 BalWatTgt         0.0221   0.8047   0.0000   0.2355   0.2425   0.0000   0.3118   0.2283
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2042   0.4790
0.2519
```

```
1914 BalWatTgt        -0.0277   0.7277   0.0000   0.2072   0.2687   0.0000   0.3105   0.1762
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1116   0.5007
0.3162
1915 BalWatTgt        -0.0191   0.6683   0.0000   0.2928   0.1621   0.0000   0.3187   0.2066
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1853   0.5060
0.2758
1916 BalWatTgt         0.0191   0.8461   0.0000   0.1877   0.3198   0.0000   0.2882   0.2190
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1804   0.4886
0.2926
1917 BalWatTgt        -0.0082   0.5936   0.0000   0.2556   0.0977   0.0000   0.2578   0.2463
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2137   0.5143
0.2761
1918 BalWatTgt         0.0106   0.6340   0.0000   0.1249   0.1563   0.0000   0.2810   0.1860
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1348   0.4814
0.2931
1919 BalWatTgt        -0.0035   0.6577   0.0000   0.1237   0.2103   0.0000   0.2609   0.1900
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1944   0.4404
0.2655
1920 BalWatTgt        -0.0156   0.6951   0.0000   0.3009   0.2334   0.0000   0.2525   0.2249
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1920   0.4525
0.2562
1921 BalWatTgt         0.0061   0.5227   0.0000   0.1273   0.0861   0.0000   0.2510   0.1795
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1178   0.5515
0.3247
1922 BalWatTgt         0.0061   0.4133   0.0000   0.0786   0.0480   0.0000   0.1954   0.1637
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1077   0.5561
0.2931
1923 BalWatTgt        -0.0229   0.5070   0.0000   0.0840   0.1077   0.0000   0.2685   0.1537
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1065   0.4763
0.2535
1924 BalWatTgt         0.0092   0.5926   0.0000   0.0688   0.1187   0.0000   0.2505   0.2143
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1801   0.4837
0.2838
1925 BalWatTgt         0.0203   0.5541   0.0000   0.1193   0.0876   0.0000   0.2407   0.2053
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1460   0.4757
0.2713
1926 BalWatTgt        -0.0076   0.6045   0.0000   0.1347   0.1354   0.0000   0.3003   0.1763
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1239   0.4894
0.3087

* Annual water balance of the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
------
* yr Identifier        DelLiq      Prc      Irr   LeaLbo   LeaGrw   EvpInt   SolAct   TrpAct
Dra    Dra_1    Dra_2    Dra_3    Dra_4    Dra_5      Run   EvpPnd   CanDrp   SolPot   TrpPot
1901 BalWatSol         0.0862   0.5227   0.0000   0.0216   0.0216   0.0000   0.2500   0.1649
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1178   0.5515
0.3247
1902 BalWatSol         0.0301   0.4133   0.0000   0.0316   0.0316   0.0000   0.1952   0.1564
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1077   0.5561
0.2931
1903 BalWatSol         0.0293   0.5070   0.0000   0.0582   0.0582   0.0000   0.2683   0.1512
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1065   0.4763
0.2535
1904 BalWatSol         0.0676   0.5926   0.0000   0.0611   0.0611   0.0000   0.2503   0.2136
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1801   0.4837
0.2838
1905 BalWatSol        -0.0069   0.5541   0.0000   0.1151   0.1151   0.0000   0.2407   0.2052
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1460   0.4757
0.2713
1906 BalWatSol        -0.0061   0.6045   0.0000   0.1340   0.1340   0.0000   0.3003   0.1763
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1239   0.4894
0.3087
1907 BalWatSol         0.0962   0.7325   0.0000   0.1411   0.1411   0.0000   0.2747   0.2205
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1940   0.4639
0.2746
1908 BalWatSol        -0.0522   0.4733   0.0000   0.1738   0.1738   0.0000   0.2295   0.1221
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0888   0.5439
0.3822
```

```
1909 BalWatSol         0.0113   0.7586   0.0000   0.2004   0.2004   0.0000   0.3024   0.2445
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2278   0.4553
0.2513
1910 BalWatSol        -0.0126   0.7063   0.0000   0.2579   0.2579   0.0000   0.2564   0.2046
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1568   0.4688
0.2460
1911 BalWatSol         0.0525   0.7866   0.0000   0.2351   0.2351   0.0000   0.2768   0.2223
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1566   0.4517
0.2671
1912 BalWatSol        -0.0173   0.6903   0.0000   0.2545   0.2545   0.0000   0.2696   0.1835
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1986   0.4740
0.2543
1913 BalWatSol         0.0290   0.8047   0.0000   0.2355   0.2355   0.0000   0.3118   0.2283
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2042   0.4790
0.2519
1914 BalWatSol         0.0338   0.7277   0.0000   0.2072   0.2072   0.0000   0.3105   0.1762
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1116   0.5007
0.3162
1915 BalWatSol        -0.1498   0.6683   0.0000   0.2928   0.2928   0.0000   0.3187   0.2066
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1853   0.5060
0.2758
1916 BalWatSol         0.1512   0.8461   0.0000   0.1877   0.1877   0.0000   0.2882   0.2190
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1804   0.4886
0.2926
1917 BalWatSol        -0.1661   0.5936   0.0000   0.2556   0.2556   0.0000   0.2578   0.2463
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.2137   0.5143
0.2761
1918 BalWatSol         0.0420   0.6340   0.0000   0.1249   0.1249   0.0000   0.2810   0.1860
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1348   0.4814
0.2931
1919 BalWatSol         0.0831   0.6577   0.0000   0.1237   0.1237   0.0000   0.2609   0.1900
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1944   0.4404
0.2655
1920 BalWatSol        -0.0832   0.6951   0.0000   0.3009   0.3009   0.0000   0.2525   0.2249
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1920   0.4525
0.2562
1921 BalWatSol        -0.0351   0.5227   0.0000   0.1273   0.1273   0.0000   0.2510   0.1795
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1178   0.5515
0.3247
1922 BalWatSol        -0.0244   0.4133   0.0000   0.0786   0.0786   0.0000   0.1954   0.1637
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1077   0.5561
0.2931
1923 BalWatSol         0.0008   0.5070   0.0000   0.0840   0.0840   0.0000   0.2685   0.1537
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1065   0.4763
0.2535
1924 BalWatSol         0.0591   0.5926   0.0000   0.0688   0.0688   0.0000   0.2505   0.2143
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1801   0.4837
0.2838
1925 BalWatSol        -0.0113   0.5541   0.0000   0.1193   0.1193   0.0000   0.2407   0.2053
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1460   0.4757
0.2713
1926 BalWatSol        -0.0068   0.6045   0.0000   0.1347   0.1347   0.0000   0.3003   0.1763
0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.0000   0.1239   0.4894
0.3087

* Annual mass balance of substance at the crop canopy
* ------------------------------------------------------------------------------
* yr Identifier     AmaApp    DelAmaCrp     AmaDep     AmaDsp     AmaWas     AmaHar
1901 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1902 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1903 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1904 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1905 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1906 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1907 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1908 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1909 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1910 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1911 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1912 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1913 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
```

```
1914 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1915 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1916 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1917 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1918 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1919 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1920 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1921 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1922 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1923 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1924 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1925 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000
1926 BalCrp_PXDb3     0.0000     0.0000     0.0000     0.0000     0.0000     0.0000

* Annual mass balance (kg.ha-1) of compound PXDb3 in the target layer
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1907 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1908 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1909 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1910 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1911 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1912 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1913 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1914 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1915 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8868E-18  0.5472E-15
1916 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
```

```
1917 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1918 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1919 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1920 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1921 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1922 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1923 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1924 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1925 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1926 BalTgt_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000

* Annual mass balance (kg.ha-1) of compound M2b3 in the target layer
* ----------------------------------------------------------------------------------------
----------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M2b3   0.000      0.4921E-09  0.4921E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3902E-11  0.6348E-08
1902 BalTgt_M2b3   0.000     -0.4817E-09 -0.4817E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5909E-11  0.1117E-07
1903 BalTgt_M2b3   0.000      0.6150E-11  0.6150E-11   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4067E-12  0.3760E-09
1904 BalTgt_M2b3   0.000      0.6909E-09  0.6909E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4513E-09  0.3804E-06
1905 BalTgt_M2b3   0.000      0.2480E-08  0.2480E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1556E-09  0.1777E-06
1906 BalTgt_M2b3   0.000     -0.3115E-08 -0.3115E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5079E-09  0.3750E-06
1907 BalTgt_M2b3   0.000      0.2612E-08  0.2612E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8453E-08  0.3476E-05
1908 BalTgt_M2b3   0.000     -0.2671E-08 -0.2671E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.8807E-09   0.000
1909 BalTgt_M2b3   0.000      0.4343E-08  0.4343E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1904E-08  0.8971E-06
1910 BalTgt_M2b3   0.000     -0.1785E-08 -0.1785E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1974E-08  0.9005E-06
1911 BalTgt_M2b3   0.000     -0.1437E-08 -0.1437E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1348E-08  0.4375E-06
```

```
1912 BalTgt_M2b3   0.000     -0.6665E-09 -0.6665E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7387E-09  0.3132E-06
1913 BalTgt_M2b3   0.000      0.3576E-09  0.3576E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6991E-09  0.2882E-06
1914 BalTgt_M2b3   0.000     -0.8215E-09 -0.8215E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2210E-09  0.8226E-07
1915 BalTgt_M2b3   0.000      0.1912E-07  0.1912E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7577E-07  0.4675E-04
1916 BalTgt_M2b3   0.000     -0.1655E-07 -0.1655E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3938E-07  0.1231E-04
1917 BalTgt_M2b3   0.000      0.9469E-08  0.9469E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1323E-08  0.1355E-05
1918 BalTgt_M2b3   0.000     -0.5385E-08 -0.5385E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2639E-08  0.1688E-05
1919 BalTgt_M2b3   0.000     -0.6150E-08 -0.6150E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2270E-08  0.1079E-05
1920 BalTgt_M2b3   0.000      0.5123E-09  0.5123E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4534E-09  0.1943E-06
1921 BalTgt_M2b3   0.000     -0.7298E-09 -0.7298E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5355E-10  0.6221E-07
1922 BalTgt_M2b3   0.000     -0.2800E-09 -0.2800E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1758E-10   0.000
1923 BalTgt_M2b3   0.000      0.5920E-11  0.5920E-11   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.2331E-11   0.000
1924 BalTgt_M2b3   0.000      0.6810E-09  0.6810E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4431E-09  0.3733E-06
1925 BalTgt_M2b3   0.000      0.2481E-08  0.2481E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1553E-09  0.1772E-06
1926 BalTgt_M2b3   0.000     -0.3105E-08 -0.3105E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5063E-09  0.3739E-06

* Annual mass balance (kg.ha-1) of compound M3b3 in the target layer
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M3b3   0.000      0.9873E-03  0.9873E-03   0.000      0.1120E-01  0.1451E-01
0.2327E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1803E-09  0.2933E-06
1902 BalTgt_M3b3   0.000     -0.1889E-04 -0.1889E-04   0.000      0.1194E-01  0.1451E-01
0.2588E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3739E-06  0.7066E-03
1903 BalTgt_M3b3   0.000      0.1169E-03  0.1169E-03   0.000      0.1201E-01  0.1451E-01
0.2380E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6369E-05  0.5888E-02
1904 BalTgt_M3b3   0.000      0.2098E-03  0.2098E-03   0.000      0.1129E-01  0.1451E-01
0.3003E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1142E-04  0.9628E-02
1905 BalTgt_M3b3   0.000      0.3214E-03  0.3214E-03   0.000      0.1122E-01  0.1451E-01
0.2945E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2852E-04  0.3257E-01
1906 BalTgt_M3b3   0.000     -0.5325E-03 -0.5325E-03   0.000      0.1235E-01  0.1451E-01
0.2624E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6496E-04  0.4797E-01
```

```
1907 BalTgt_M3b3   0.000      0.4430E-03  0.4430E-03   0.000      0.1086E-01  0.1451E-01
0.3091E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1182E-03  0.4861E-01
1908 BalTgt_M3b3   0.000     -0.3644E-03 -0.3644E-03   0.000      0.1353E-01  0.1451E-01
0.1251E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9188E-04  0.8291E-01
1909 BalTgt_M3b3   0.000      0.5487E-03  0.5487E-03   0.000      0.1077E-01  0.1451E-01
0.3057E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1332E-03  0.6276E-01
1910 BalTgt_M3b3   0.000      0.4865E-04  0.4865E-04   0.000      0.1134E-01  0.1451E-01
0.2868E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2522E-03  0.1151
1911 BalTgt_M3b3   0.000     -0.2170E-03 -0.2170E-03   0.000      0.1141E-01  0.1451E-01
0.2978E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3397E-03  0.1102
1912 BalTgt_M3b3   0.000      0.4903E-05  0.4903E-05   0.000      0.1139E-01  0.1451E-01
0.2858E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2611E-03  0.1107
1913 BalTgt_M3b3   0.000     -0.1304E-03 -0.1304E-03   0.000      0.1144E-01  0.1451E-01
0.2983E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2206E-03  0.9097E-01
1914 BalTgt_M3b3   0.000     -0.3628E-03 -0.3628E-03   0.000      0.1189E-01  0.1451E-01
0.2768E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2203E-03  0.8196E-01
1915 BalTgt_M3b3   0.000      0.8922E-03  0.8922E-03   0.000      0.1079E-01  0.1451E-01
0.2682E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1424E-03  0.8784E-01
1916 BalTgt_M3b3   0.000     -0.1493E-03 -0.1493E-03   0.000      0.1164E-01  0.1451E-01
0.2570E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4470E-03  0.1398
1917 BalTgt_M3b3   0.000      0.2601E-03  0.2601E-03   0.000      0.1073E-01  0.1451E-01
0.3289E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2340E-03  0.2396
1918 BalTgt_M3b3   0.000     -0.1437E-03 -0.1437E-03   0.000      0.1176E-01  0.1451E-01
0.2698E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1965E-03  0.1257
1919 BalTgt_M3b3   0.000     -0.2911E-03 -0.2911E-03   0.000      0.1201E-01  0.1451E-01
0.2594E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1926E-03  0.9159E-01
1920 BalTgt_M3b3   0.000     -0.1167E-03 -0.1167E-03   0.000      0.1147E-01  0.1451E-01
0.2783E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3788E-03  0.1623
1921 BalTgt_M3b3   0.000     -0.2933E-03 -0.2933E-03   0.000      0.1227E-01  0.1451E-01
0.2475E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5506E-04  0.6396E-01
1922 BalTgt_M3b3   0.000     -0.1831E-03 -0.1831E-03   0.000      0.1208E-01  0.1451E-01
0.2606E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6590E-05  0.1372E-01
1923 BalTgt_M3b3   0.000      0.6939E-04  0.6939E-04   0.000      0.1203E-01  0.1451E-01
0.2386E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2281E-04  0.2117E-01
1924 BalTgt_M3b3   0.000      0.1982E-03  0.1982E-03   0.000      0.1129E-01  0.1451E-01
0.3005E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1359E-04  0.1145E-01
1925 BalTgt_M3b3   0.000      0.3200E-03  0.3200E-03   0.000      0.1122E-01  0.1451E-01
0.2945E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2849E-04  0.3251E-01
1926 BalTgt_M3b3   0.000     -0.5330E-03 -0.5330E-03   0.000      0.1235E-01  0.1451E-01
0.2624E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6516E-04  0.4812E-01

* Annual mass balance (kg.ha-1) of compound M5b3 in the target layer
* ---------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M5b3   0.000      0.3888E-03  0.3888E-03   0.000      0.5558E-02  0.5946E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2122E-07  0.3452E-04
```

```
1902 BalTgt_M5b3   0.000      0.6843E-05  0.6843E-05   0.000      0.6333E-02  0.6342E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2231E-05  0.4216E-02
1903 BalTgt_M5b3   0.000      0.6290E-04  0.6290E-04   0.000      0.6299E-02  0.6377E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1517E-04  0.1403E-01
1904 BalTgt_M5b3   0.000      0.8285E-04  0.8285E-04   0.000      0.5880E-02  0.5994E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3073E-04  0.2591E-01
1905 BalTgt_M5b3   0.000      0.1274E-03  0.1274E-03   0.000      0.5778E-02  0.5957E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5110E-04  0.5835E-01
1906 BalTgt_M5b3   0.000     -0.2113E-03 -0.2113E-03   0.000      0.6684E-02  0.6561E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8853E-04  0.6538E-01
1907 BalTgt_M5b3   0.000      0.1033E-03  0.1033E-03   0.000      0.5497E-02  0.5766E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1660E-03  0.6828E-01
1908 BalTgt_M5b3   0.000     -0.9011E-04 -0.9011E-04   0.000      0.7198E-02  0.7186E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7855E-04  0.7088E-01
1909 BalTgt_M5b3   0.000      0.2188E-03  0.2188E-03   0.000      0.5361E-02  0.5721E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1406E-03  0.6624E-01
1910 BalTgt_M5b3   0.000     -0.8472E-05 -0.8472E-05   0.000      0.5742E-02  0.6023E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2895E-03  0.1321
1911 BalTgt_M5b3   0.000     -0.7754E-04 -0.7754E-04   0.000      0.5820E-02  0.6060E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3169E-03  0.1028
1912 BalTgt_M5b3   0.000      0.3378E-04  0.3378E-04   0.000      0.5746E-02  0.6047E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2680E-03  0.1136
1913 BalTgt_M5b3   0.000     -0.6096E-04 -0.6096E-04   0.000      0.5893E-02  0.6074E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2421E-03  0.9982E-01
1914 BalTgt_M5b3   0.000     -0.1762E-03 -0.1762E-03   0.000      0.6240E-02  0.6312E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2484E-03  0.9245E-01
1915 BalTgt_M5b3   0.000      0.2989E-03  0.2989E-03   0.000      0.5286E-02  0.5732E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1471E-03  0.9077E-01
1916 BalTgt_M5b3   0.000     -0.1029E-03 -0.1029E-03   0.000      0.5825E-02  0.6183E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4614E-03  0.1443
1917 BalTgt_M5b3   0.000      0.1698E-03  0.1698E-03   0.000      0.5351E-02  0.5697E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1766E-03  0.1808
1918 BalTgt_M5b3   0.000     -0.3972E-04 -0.3972E-04   0.000      0.6143E-02  0.6245E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1419E-03  0.9080E-01
1919 BalTgt_M5b3   0.000     -0.9523E-04 -0.9523E-04   0.000      0.6262E-02  0.6381E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2144E-03  0.1019
1920 BalTgt_M5b3   0.000     -0.1653E-04 -0.1653E-04   0.000      0.5760E-02  0.6089E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3461E-03  0.1483
1921 BalTgt_M5b3   0.000     -0.1315E-03 -0.1315E-03   0.000      0.6606E-02  0.6518E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4445E-04  0.5164E-01
1922 BalTgt_M5b3   0.000     -0.6436E-04 -0.6436E-04   0.000      0.6474E-02  0.6416E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7068E-05  0.1471E-01
1923 BalTgt_M5b3   0.000      0.4404E-04  0.4404E-04   0.000      0.6322E-02  0.6390E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2402E-04  0.2230E-01
1924 BalTgt_M5b3   0.000      0.7916E-04  0.7916E-04   0.000      0.5887E-02  0.5998E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3169E-04  0.2670E-01
```

```
1925 BalTgt_M5b3   0.000      0.1272E-03  0.1272E-03   0.000      0.5779E-02  0.5957E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5112E-04  0.5834E-01
1926 BalTgt_M5b3   0.000     -0.2113E-03 -0.2113E-03   0.000      0.6684E-02  0.6561E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8862E-04  0.6544E-01

* Annual mass balance (kg.ha-1) of compound M6b3 in the target layer
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M6b3   0.000      0.1055E-02  0.1055E-02   0.000      0.1543E-02  0.2598E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2222E-09  0.3614E-06
1902 BalTgt_M6b3   0.000      0.4116E-03  0.4116E-03   0.000      0.2357E-02  0.2771E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1962E-05  0.3708E-02
1903 BalTgt_M6b3   0.000      0.2694E-03  0.2694E-03   0.000      0.2466E-02  0.2786E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5062E-04  0.4680E-01
1904 BalTgt_M6b3   0.000      0.6476E-04  0.6476E-04   0.000      0.2418E-02  0.2619E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1359E-03  0.1145
1905 BalTgt_M6b3   0.000      0.2473E-03  0.2473E-03   0.000      0.2163E-02  0.2602E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1920E-03  0.2193
1906 BalTgt_M6b3   0.000     -0.1776E-03 -0.1776E-03   0.000      0.2697E-02  0.2867E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3475E-03  0.2566
1907 BalTgt_M6b3   0.000     -0.2322E-03 -0.2322E-03   0.000      0.2146E-02  0.2519E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6054E-03  0.2489
1908 BalTgt_M6b3   0.000      0.1630E-03  0.1630E-03   0.000      0.2673E-02  0.3140E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3036E-03  0.2740
1909 BalTgt_M6b3   0.000      0.1805E-04  0.1805E-04   0.000      0.1955E-02  0.2499E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5260E-03  0.2478
1910 BalTgt_M6b3   0.000      0.5574E-04  0.5574E-04   0.000      0.1916E-02  0.2632E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6599E-03  0.3011
1911 BalTgt_M6b3   0.000     -0.1753E-03 -0.1753E-03   0.000      0.2015E-02  0.2647E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8074E-03  0.2620
1912 BalTgt_M6b3   0.000      0.2517E-04  0.2517E-04   0.000      0.1949E-02  0.2642E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6676E-03  0.2830
1913 BalTgt_M6b3   0.000     -0.4906E-04 -0.4906E-04   0.000      0.2088E-02  0.2654E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6145E-03  0.2534
1914 BalTgt_M6b3   0.000     -0.2524E-03 -0.2524E-03   0.000      0.2304E-02  0.2758E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7062E-03  0.2628
1915 BalTgt_M6b3   0.000      0.2772E-03  0.2772E-03   0.000      0.1788E-02  0.2504E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4387E-03  0.2707
1916 BalTgt_M6b3   0.000     -0.1636E-03 -0.1636E-03   0.000      0.1968E-02  0.2701E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8969E-03  0.2804
1917 BalTgt_M6b3   0.000      0.3837E-03  0.3837E-03   0.000      0.1741E-02  0.2489E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3647E-03  0.3735
1918 BalTgt_M6b3   0.000      0.1294E-03  0.1294E-03   0.000      0.2189E-02  0.2729E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4097E-03  0.2621
1919 BalTgt_M6b3   0.000     -0.1722E-03 -0.1722E-03   0.000      0.2363E-02  0.2788E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5964E-03  0.2836
```

```
1920 BalTgt_M6b3   0.000     -0.1662E-03 -0.1662E-03   0.000      0.1957E-02  0.2660E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8697E-03  0.3727
1921 BalTgt_M6b3   0.000      0.1110E-03  0.1110E-03   0.000      0.2560E-02  0.2848E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1771E-03  0.2057
1922 BalTgt_M6b3   0.000      0.7131E-05  0.7131E-05   0.000      0.2727E-02  0.2803E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6858E-04  0.1427
1923 BalTgt_M6b3   0.000      0.3526E-04  0.3526E-04   0.000      0.2586E-02  0.2792E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1710E-03  0.1588
1924 BalTgt_M6b3   0.000     -0.2810E-04 -0.2810E-04   0.000      0.2469E-02  0.2621E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1800E-03  0.1516
1925 BalTgt_M6b3   0.000      0.2251E-03  0.2251E-03   0.000      0.2175E-02  0.2603E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2025E-03  0.2311
1926 BalTgt_M6b3   0.000     -0.1881E-03 -0.1881E-03   0.000      0.2700E-02  0.2867E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3545E-03  0.2618

* Annual mass balance (kg.ha-1) of compound M4b3 in the target layer
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M4b3   0.000      0.2151E-03  0.2151E-03   0.000      0.9819E-02  0.1003E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8592E-09  0.1398E-05
1902 BalTgt_M4b3   0.000     -0.2263E-05 -0.2263E-05   0.000      0.1070E-01  0.1070E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1994E-06  0.3769E-03
1903 BalTgt_M4b3   0.000      0.2466E-04  0.2466E-04   0.000      0.1073E-01  0.1076E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2502E-05  0.2313E-02
1904 BalTgt_M4b3   0.000      0.5061E-04  0.5061E-04   0.000      0.1006E-01  0.1011E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5457E-05  0.4600E-02
1905 BalTgt_M4b3   0.000      0.6998E-04  0.6998E-04   0.000      0.9971E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1101E-04  0.1257E-01
1906 BalTgt_M4b3   0.000     -0.1208E-03 -0.1208E-03   0.000      0.1117E-01  0.1107E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2253E-04  0.1664E-01
1907 BalTgt_M4b3   0.000      0.9437E-04  0.9437E-04   0.000      0.9591E-02  0.9731E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4555E-04  0.1873E-01
1908 BalTgt_M4b3   0.000     -0.7985E-04 -0.7985E-04   0.000      0.1218E-01  0.1213E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2704E-04  0.2440E-01
1909 BalTgt_M4b3   0.000      0.1219E-03  0.1219E-03   0.000      0.9489E-02  0.9654E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4227E-04  0.1992E-01
1910 BalTgt_M4b3   0.000      0.4454E-05  0.4454E-05   0.000      0.1006E-01  0.1016E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9759E-04  0.4453E-01
1911 BalTgt_M4b3   0.000     -0.4061E-04 -0.4061E-04   0.000      0.1015E-01  0.1023E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1133E-03  0.3677E-01
1912 BalTgt_M4b3   0.000     -0.5179E-06 -0.5179E-06   0.000      0.1011E-01  0.1020E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9098E-04  0.3857E-01
1913 BalTgt_M4b3   0.000     -0.2715E-04 -0.2715E-04   0.000      0.1020E-01  0.1025E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7456E-04  0.3074E-01
1914 BalTgt_M4b3   0.000     -0.8001E-04 -0.8001E-04   0.000      0.1066E-01  0.1065E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7511E-04  0.2795E-01
```

```
1915 BalTgt_M4b3   0.000      0.1847E-03  0.1847E-03   0.000      0.9438E-02  0.9673E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5012E-04  0.3092E-01
1916 BalTgt_M4b3   0.000     -0.3419E-04 -0.3419E-04   0.000      0.1031E-01  0.1043E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1613E-03  0.5045E-01
1917 BalTgt_M4b3   0.000      0.5653E-04  0.5653E-04   0.000      0.9482E-02  0.9614E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7507E-04  0.7687E-01
1918 BalTgt_M4b3   0.000     -0.2180E-04 -0.2180E-04   0.000      0.1050E-01  0.1054E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5756E-04  0.3683E-01
1919 BalTgt_M4b3   0.000     -0.6167E-04 -0.6167E-04   0.000      0.1076E-01  0.1077E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6487E-04  0.3084E-01
1920 BalTgt_M4b3   0.000     -0.2848E-04 -0.2848E-04   0.000      0.1017E-01  0.1028E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1323E-03  0.5668E-01
1921 BalTgt_M4b3   0.000     -0.6343E-04 -0.6343E-04   0.000      0.1105E-01  0.1100E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1557E-04  0.1809E-01
1922 BalTgt_M4b3   0.000     -0.3635E-04 -0.3635E-04   0.000      0.1086E-01  0.1083E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2211E-05  0.4603E-02
1923 BalTgt_M4b3   0.000      0.1497E-04  0.1497E-04   0.000      0.1076E-01  0.1078E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7042E-05  0.6537E-02
1924 BalTgt_M4b3   0.000      0.4830E-04  0.4830E-04   0.000      0.1007E-01  0.1012E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6180E-05  0.5207E-02
1925 BalTgt_M4b3   0.000      0.6981E-04  0.6981E-04   0.000      0.9972E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1111E-04  0.1268E-01
1926 BalTgt_M4b3   0.000     -0.1209E-03 -0.1209E-03   0.000      0.1117E-01  0.1107E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2262E-04  0.1671E-01

* Annual mass balance (kg.ha-1) of compound M52b3 in the target layer
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M52b3   0.000      0.4071E-06  0.4071E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2718E-14  0.4422E-11
1902 BalTgt_M52b3   0.000     -0.3889E-06 -0.3889E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1627E-12  0.3075E-09
1903 BalTgt_M52b3   0.000      0.5286E-08  0.5286E-08   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1352E-13  0.1250E-10
1904 BalTgt_M52b3   0.000      0.1211E-06  0.1211E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1322E-11  0.1114E-08
1905 BalTgt_M52b3   0.000      0.3336E-06  0.3336E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4637E-11  0.5295E-08
1906 BalTgt_M52b3   0.000     -0.4067E-06 -0.4067E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9927E-11  0.7331E-08
1907 BalTgt_M52b3   0.000      0.8925E-06  0.8925E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1462E-09  0.6012E-07
1908 BalTgt_M52b3   0.000     -0.9518E-06 -0.9518E-06   0.000      0.3004E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4746E-10  0.4283E-07
1909 BalTgt_M52b3   0.000      0.6012E-06  0.6012E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5927E-11  0.2792E-08
```

```
1910 BalTgt_M52b3   0.000      0.1386E-06  0.1386E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9962E-10  0.4545E-07
1911 BalTgt_M52b3   0.000     -0.4643E-06 -0.4643E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6219E-11  0.2018E-08
1912 BalTgt_M52b3   0.000     -0.2245E-06 -0.2245E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4522E-11  0.1917E-08
1913 BalTgt_M52b3   0.000      0.1906E-06  0.1906E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6150E-11  0.2536E-08
1914 BalTgt_M52b3   0.000     -0.2374E-06 -0.2374E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1490E-11  0.5545E-09
1915 BalTgt_M52b3   0.000      0.3597E-05  0.3597E-05   0.000      0.2999E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7498E-08  0.4626E-05
1916 BalTgt_M52b3   0.000     -0.2901E-05 -0.2901E-05   0.000      0.3006E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8723E-08  0.2728E-05
1917 BalTgt_M52b3   0.000      0.1064E-05  0.1064E-05   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5307E-09  0.5434E-06
1918 BalTgt_M52b3   0.000      0.4266E-06  0.4266E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.5690E-09   0.000
1919 BalTgt_M52b3   0.000     -0.2038E-05 -0.2038E-05   0.000      0.3005E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.4076E-09   0.000
1920 BalTgt_M52b3   0.000     -0.2885E-07 -0.2885E-07   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1353E-09   0.000
1921 BalTgt_M52b3   0.000      0.1994E-06  0.1994E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1691E-09   0.000
1922 BalTgt_M52b3   0.000     -0.3174E-06 -0.3174E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1378E-09   0.000
1923 BalTgt_M52b3   0.000      0.5415E-08  0.5415E-08   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.1103E-09   0.000
1924 BalTgt_M52b3   0.000      0.1206E-06  0.1206E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.8680E-10   0.000
1925 BalTgt_M52b3   0.000      0.3338E-06  0.3338E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.6536E-10   0.000
1926 BalTgt_M52b3   0.000     -0.4062E-06 -0.4062E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000     -0.5501E-10   0.000

* Annual mass balance (kg.ha-1) of compound M1b3 in the target layer
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  ConLeaTgt
1901 BalTgt_M1b3   0.000      0.2843E-03  0.2843E-03   0.000      0.6918E-02  0.7202E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1521E-07  0.2475E-04
1902 BalTgt_M1b3   0.000     -0.9884E-06 -0.9884E-06   0.000      0.7681E-02  0.7681E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1001E-05  0.1891E-02
1903 BalTgt_M1b3   0.000      0.3954E-04  0.3954E-04   0.000      0.7677E-02  0.7724E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7403E-05  0.6844E-02
1904 BalTgt_M1b3   0.000      0.6623E-04  0.6623E-04   0.000      0.7178E-02  0.7260E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1615E-04  0.1362E-01
```

```
1905 BalTgt_M1b3   0.000      0.9609E-04  0.9609E-04   0.000      0.7091E-02  0.7215E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2715E-04  0.3101E-01
1906 BalTgt_M1b3   0.000     -0.1625E-03 -0.1625E-03   0.000      0.8059E-02  0.7947E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4995E-04  0.3688E-01
1907 BalTgt_M1b3   0.000      0.1027E-03  0.1027E-03   0.000      0.6782E-02  0.6984E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9964E-04  0.4098E-01
1908 BalTgt_M1b3   0.000     -0.8961E-04 -0.8961E-04   0.000      0.8746E-02  0.8704E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4781E-04  0.4315E-01
1909 BalTgt_M1b3   0.000      0.1681E-03  0.1681E-03   0.000      0.6677E-02  0.6929E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8424E-04  0.3969E-01
1910 BalTgt_M1b3   0.000     -0.4367E-05 -0.4367E-05   0.000      0.7112E-02  0.7295E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1881E-03  0.8583E-01
1911 BalTgt_M1b3   0.000     -0.5378E-04 -0.5378E-04   0.000      0.7185E-02  0.7339E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2083E-03  0.6762E-01
1912 BalTgt_M1b3   0.000      0.1247E-04  0.1247E-04   0.000      0.7139E-02  0.7324E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1729E-03  0.7328E-01
1913 BalTgt_M1b3   0.000     -0.4207E-04 -0.4207E-04   0.000      0.7250E-02  0.7357E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1488E-03  0.6135E-01
1914 BalTgt_M1b3   0.000     -0.1195E-03 -0.1195E-03   0.000      0.7613E-02  0.7645E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1514E-03  0.5633E-01
1915 BalTgt_M1b3   0.000      0.2378E-03  0.2378E-03   0.000      0.6610E-02  0.6943E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9495E-04  0.5859E-01
1916 BalTgt_M1b3   0.000     -0.6599E-04 -0.6599E-04   0.000      0.7249E-02  0.7489E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3063E-03  0.9578E-01
1917 BalTgt_M1b3   0.000      0.1023E-03  0.1023E-03   0.000      0.6674E-02  0.6900E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1237E-03  0.1266
1918 BalTgt_M1b3   0.000     -0.2819E-04 -0.2819E-04   0.000      0.7497E-02  0.7564E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9521E-04  0.6091E-01
1919 BalTgt_M1b3   0.000     -0.7756E-04 -0.7756E-04   0.000      0.7676E-02  0.7728E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1300E-03  0.6180E-01
1920 BalTgt_M1b3   0.000     -0.2502E-04 -0.2502E-04   0.000      0.7168E-02  0.7375E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2325E-03  0.9961E-01
1921 BalTgt_M1b3   0.000     -0.9438E-04 -0.9438E-04   0.000      0.7963E-02  0.7895E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2711E-04  0.3149E-01
1922 BalTgt_M1b3   0.000     -0.4682E-04 -0.4682E-04   0.000      0.7814E-02  0.7771E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3943E-05  0.8207E-02
1923 BalTgt_M1b3   0.000      0.2692E-04  0.2692E-04   0.000      0.7699E-02  0.7740E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1367E-04  0.1269E-01
1924 BalTgt_M1b3   0.000      0.6350E-04  0.6350E-04   0.000      0.7184E-02  0.7265E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1704E-04  0.1436E-01
1925 BalTgt_M1b3   0.000      0.9596E-04  0.9596E-04   0.000      0.7092E-02  0.7215E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2725E-04  0.3110E-01
1926 BalTgt_M1b3   0.000     -0.1625E-03 -0.1625E-03   0.000      0.8059E-02  0.7947E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5004E-04  0.3695E-01

* Annual mass balance (kg.ha-1) of compound PXDb3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
```

```
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1907 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1908 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1909 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1910 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1911 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1912 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1913 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1914 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1915 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1916 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1917 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1918 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1919 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1920 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1921 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1922 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
```

```
1923 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1924 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1925 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1926 BalSol_PXDb3  0.3600E-01   0.000       0.000       0.000      0.3600E-01   0.000
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000

* Annual mass balance (kg.ha-1) of compound M2b3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M2b3   0.000      0.4960E-09  0.4960E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M2b3   0.000     -0.4758E-09 -0.4758E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M2b3   0.000      0.6556E-11  0.6556E-11   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M2b3   0.000      0.1142E-08  0.1142E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M2b3   0.000      0.2636E-08  0.2636E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M2b3   0.000     -0.2607E-08 -0.2607E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1835E-14  0.1835E-14
1907 BalSol_M2b3   0.000      0.1106E-07  0.1106E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7933E-13  0.7933E-13
1908 BalSol_M2b3   0.000     -0.3553E-08 -0.3553E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1810E-11  0.1810E-11
1909 BalSol_M2b3   0.000      0.6213E-08  0.6213E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3414E-10  0.3414E-10
1910 BalSol_M2b3   0.000     -0.1410E-09 -0.1410E-09   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3300E-09  0.3300E-09
1911 BalSol_M2b3   0.000     -0.1504E-08 -0.1504E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1415E-08  0.1415E-08
1912 BalSol_M2b3   0.000     -0.3530E-08 -0.3530E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3602E-08  0.3602E-08
1913 BalSol_M2b3   0.000     -0.2186E-08 -0.2186E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3243E-08  0.3243E-08
1914 BalSol_M2b3   0.000     -0.2846E-08 -0.2846E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2246E-08  0.2246E-08
1915 BalSol_M2b3   0.000      0.9282E-07  0.9282E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2068E-08  0.2068E-08
1916 BalSol_M2b3   0.000      0.2199E-07  0.2199E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8347E-09  0.8347E-09
1917 BalSol_M2b3   0.000      0.9929E-08  0.9929E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8636E-09  0.8636E-09
```

```
1918 BalSol_M2b3   0.000     -0.3384E-08 -0.3384E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6376E-09  0.6376E-09
1919 BalSol_M2b3   0.000     -0.6481E-08 -0.6481E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2601E-08  0.2601E-08
1920 BalSol_M2b3   0.000     -0.3303E-07 -0.3303E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3399E-07  0.3399E-07
1921 BalSol_M2b3   0.000     -0.2439E-07 -0.2439E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2371E-07  0.2371E-07
1922 BalSol_M2b3   0.000     -0.1427E-07 -0.1427E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1397E-07  0.1397E-07
1923 BalSol_M2b3   0.000     -0.1294E-07 -0.1294E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1294E-07  0.1294E-07
1924 BalSol_M2b3   0.000     -0.7568E-08 -0.7568E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8692E-08  0.8692E-08
1925 BalSol_M2b3   0.000     -0.8369E-08 -0.8369E-08   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1100E-07  0.1100E-07
1926 BalSol_M2b3   0.000     -0.1001E-07 -0.1001E-07   0.000      0.2511E-01  0.2511E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7414E-08  0.7414E-08

* Annual mass balance (kg.ha-1) of compound M3b3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra    AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M3b3   0.000      0.9873E-03  0.9873E-03   0.000      0.1120E-01  0.1451E-01
0.2327E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M3b3   0.000     -0.1852E-04 -0.1852E-04   0.000      0.1194E-01  0.1451E-01
0.2588E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M3b3   0.000      0.1233E-03  0.1233E-03   0.000      0.1201E-01  0.1451E-01
0.2380E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M3b3   0.000      0.2212E-03  0.2212E-03   0.000      0.1129E-01  0.1451E-01
0.3003E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M3b3   0.000      0.3499E-03  0.3499E-03   0.000      0.1122E-01  0.1451E-01
0.2945E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M3b3   0.000     -0.4676E-03 -0.4676E-03   0.000      0.1235E-01  0.1451E-01
0.2624E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7457E-17  0.7457E-17
1907 BalSol_M3b3   0.000      0.5612E-03  0.5612E-03   0.000      0.1086E-01  0.1451E-01
0.3091E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9050E-13  0.9050E-13
1908 BalSol_M3b3   0.000     -0.2726E-03 -0.2726E-03   0.000      0.1353E-01  0.1451E-01
0.1251E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7654E-10  0.7654E-10
1909 BalSol_M3b3   0.000      0.6819E-03  0.6819E-03   0.000      0.1077E-01  0.1451E-01
0.3057E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1028E-07  0.1028E-07
1910 BalSol_M3b3   0.000      0.3003E-03  0.3003E-03   0.000      0.1134E-01  0.1451E-01
0.2868E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5456E-06  0.5456E-06
1911 BalSol_M3b3   0.000      0.1173E-03  0.1173E-03   0.000      0.1141E-01  0.1451E-01
0.2978E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5435E-05  0.5435E-05
1912 BalSol_M3b3   0.000      0.2392E-03  0.2392E-03   0.000      0.1139E-01  0.1451E-01
0.2858E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2678E-04  0.2678E-04
```

```
1913 BalSol_M3b3   0.000      0.2927E-04  0.2927E-04   0.000      0.1144E-01  0.1451E-01
0.2983E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6098E-04  0.6098E-04
1914 BalSol_M3b3   0.000     -0.2311E-03 -0.2311E-03   0.000      0.1189E-01  0.1451E-01
0.2768E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8850E-04  0.8850E-04
1915 BalSol_M3b3   0.000      0.8515E-03  0.8515E-03   0.000      0.1079E-01  0.1451E-01
0.2682E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1830E-03  0.1830E-03
1916 BalSol_M3b3   0.000      0.1419E-03  0.1419E-03   0.000      0.1164E-01  0.1451E-01
0.2570E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1557E-03  0.1557E-03
1917 BalSol_M3b3   0.000      0.2441E-03  0.2441E-03   0.000      0.1073E-01  0.1451E-01
0.3289E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2500E-03  0.2500E-03
1918 BalSol_M3b3   0.000     -0.7753E-04 -0.7753E-04   0.000      0.1176E-01  0.1451E-01
0.2698E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1304E-03  0.1304E-03
1919 BalSol_M3b3   0.000     -0.2279E-03 -0.2279E-03   0.000      0.1201E-01  0.1451E-01
0.2594E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1295E-03  0.1295E-03
1920 BalSol_M3b3   0.000     -0.3974E-04 -0.3974E-04   0.000      0.1147E-01  0.1451E-01
0.2783E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3018E-03  0.3018E-03
1921 BalSol_M3b3   0.000     -0.3584E-03 -0.3584E-03   0.000      0.1227E-01  0.1451E-01
0.2475E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1201E-03  0.1201E-03
1922 BalSol_M3b3   0.000     -0.2496E-03 -0.2496E-03   0.000      0.1208E-01  0.1451E-01
0.2606E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7300E-04  0.7300E-04
1923 BalSol_M3b3   0.000      0.1362E-04  0.1362E-04   0.000      0.1203E-01  0.1451E-01
0.2386E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7858E-04  0.7858E-04
1924 BalSol_M3b3   0.000      0.1456E-03  0.1456E-03   0.000      0.1129E-01  0.1451E-01
0.3005E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6622E-04  0.6622E-04
1925 BalSol_M3b3   0.000      0.2263E-03  0.2263E-03   0.000      0.1122E-01  0.1451E-01
0.2945E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1221E-03  0.1221E-03
1926 BalSol_M3b3   0.000     -0.6213E-03 -0.6213E-03   0.000      0.1235E-01  0.1451E-01
0.2624E-02   0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1535E-03  0.1535E-03

* Annual mass balance (kg.ha-1) of compound M5b3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra    AmaDra_1    AmaDra_2    AmaDra_3    AmaDra_4    AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M5b3   0.000      0.3888E-03  0.3888E-03   0.000      0.5558E-02  0.5946E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M5b3   0.000      0.9073E-05  0.9073E-05   0.000      0.6333E-02  0.6342E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M5b3   0.000      0.7807E-04  0.7807E-04   0.000      0.6299E-02  0.6377E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M5b3   0.000      0.1136E-03  0.1136E-03   0.000      0.5880E-02  0.5994E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M5b3   0.000      0.1785E-03  0.1785E-03   0.000      0.5778E-02  0.5957E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9461E-16  0.9461E-16
1906 BalSol_M5b3   0.000     -0.1228E-03 -0.1228E-03   0.000      0.6684E-02  0.6561E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5485E-11  0.5485E-11
1907 BalSol_M5b3   0.000      0.2693E-03  0.2693E-03   0.000      0.5497E-02  0.5766E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2284E-08  0.2284E-08
```

```
1908 BalSol_M5b3   0.000     -0.1173E-04 -0.1173E-04   0.000      0.7198E-02  0.7186E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1613E-06  0.1613E-06
1909 BalSol_M5b3   0.000      0.3564E-03  0.3564E-03   0.000      0.5361E-02  0.5721E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3066E-05  0.3066E-05
1910 BalSol_M5b3   0.000      0.2511E-03  0.2511E-03   0.000      0.5742E-02  0.6023E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2995E-04  0.2995E-04
1911 BalSol_M5b3   0.000      0.1600E-03  0.1600E-03   0.000      0.5820E-02  0.6060E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7936E-04  0.7936E-04
1912 BalSol_M5b3   0.000      0.1618E-03  0.1618E-03   0.000      0.5746E-02  0.6047E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1399E-03  0.1399E-03
1913 BalSol_M5b3   0.000      0.1436E-04  0.1436E-04   0.000      0.5893E-02  0.6074E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1668E-03  0.1668E-03
1914 BalSol_M5b3   0.000     -0.1084E-03 -0.1084E-03   0.000      0.6240E-02  0.6312E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1806E-03  0.1806E-03
1915 BalSol_M5b3   0.000      0.1402E-03  0.1402E-03   0.000      0.5286E-02  0.5732E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3058E-03  0.3058E-03
1916 BalSol_M5b3   0.000      0.1513E-03  0.1513E-03   0.000      0.5825E-02  0.6183E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2072E-03  0.2072E-03
1917 BalSol_M5b3   0.000      0.6920E-04  0.6920E-04   0.000      0.5351E-02  0.5697E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2771E-03  0.2771E-03
1918 BalSol_M5b3   0.000     -0.2652E-04 -0.2652E-04   0.000      0.6143E-02  0.6245E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1287E-03  0.1287E-03
1919 BalSol_M5b3   0.000     -0.2888E-05 -0.2888E-05   0.000      0.6262E-02  0.6381E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1221E-03  0.1221E-03
1920 BalSol_M5b3   0.000      0.4455E-04  0.4455E-04   0.000      0.5760E-02  0.6089E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2851E-03  0.2851E-03
1921 BalSol_M5b3   0.000     -0.2163E-03 -0.2163E-03   0.000      0.6606E-02  0.6518E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1292E-03  0.1292E-03
1922 BalSol_M5b3   0.000     -0.1464E-03 -0.1464E-03   0.000      0.6474E-02  0.6416E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8912E-04  0.8912E-04
1923 BalSol_M5b3   0.000     -0.3615E-04 -0.3615E-04   0.000      0.6322E-02  0.6390E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1042E-03  0.1042E-03
1924 BalSol_M5b3   0.000      0.2017E-04  0.2017E-04   0.000      0.5887E-02  0.5998E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9068E-04  0.9068E-04
1925 BalSol_M5b3   0.000      0.1759E-04  0.1759E-04   0.000      0.5779E-02  0.5957E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1607E-03  0.1607E-03
1926 BalSol_M5b3   0.000     -0.2989E-03 -0.2989E-03   0.000      0.6684E-02  0.6561E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1762E-03  0.1762E-03

* Annual mass balance (kg.ha-1) of compound M6b3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M6b3   0.000      0.1055E-02  0.1055E-02   0.000      0.1543E-02  0.2598E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M6b3   0.000      0.4135E-03  0.4135E-03   0.000      0.2357E-02  0.2771E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
```

```
1903 BalSol_M6b3   0.000      0.3200E-03  0.3200E-03   0.000      0.2466E-02  0.2786E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M6b3   0.000      0.2006E-03  0.2006E-03   0.000      0.2418E-02  0.2619E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M6b3   0.000      0.4394E-03  0.4394E-03   0.000      0.2163E-02  0.2602E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M6b3   0.000      0.1699E-03  0.1699E-03   0.000      0.2697E-02  0.2867E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1925E-15  0.1925E-15
1907 BalSol_M6b3   0.000      0.3732E-03  0.3732E-03   0.000      0.2146E-02  0.2519E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8262E-11  0.8262E-11
1908 BalSol_M6b3   0.000      0.4667E-03  0.4667E-03   0.000      0.2673E-02  0.3140E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9369E-08  0.9369E-08
1909 BalSol_M6b3   0.000      0.5431E-03  0.5431E-03   0.000      0.1955E-02  0.2499E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9655E-06  0.9655E-06
1910 BalSol_M6b3   0.000      0.6874E-03  0.6874E-03   0.000      0.1916E-02  0.2632E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2825E-04  0.2825E-04
1911 BalSol_M6b3   0.000      0.4872E-03  0.4872E-03   0.000      0.2015E-02  0.2647E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1449E-03  0.1449E-03
1912 BalSol_M6b3   0.000      0.3185E-03  0.3185E-03   0.000      0.1949E-02  0.2642E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3743E-03  0.3743E-03
1913 BalSol_M6b3   0.000      0.5734E-04  0.5734E-04   0.000      0.2088E-02  0.2654E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5081E-03  0.5081E-03
1914 BalSol_M6b3   0.000     -0.5981E-04 -0.5981E-04   0.000      0.2304E-02  0.2758E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5136E-03  0.5136E-03
1915 BalSol_M6b3   0.000     -0.6261E-04 -0.6261E-04   0.000      0.1788E-02  0.2504E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7786E-03  0.7786E-03
1916 BalSol_M6b3   0.000      0.2204E-03  0.2204E-03   0.000      0.1968E-02  0.2701E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5130E-03  0.5130E-03
1917 BalSol_M6b3   0.000      0.5000E-04  0.5000E-04   0.000      0.1741E-02  0.2489E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6984E-03  0.6984E-03
1918 BalSol_M6b3   0.000      0.2013E-03  0.2013E-03   0.000      0.2189E-02  0.2729E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3378E-03  0.3378E-03
1919 BalSol_M6b3   0.000      0.9368E-04  0.9368E-04   0.000      0.2363E-02  0.2788E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3306E-03  0.3306E-03
1920 BalSol_M6b3   0.000     -0.8913E-04 -0.8913E-04   0.000      0.1957E-02  0.2660E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7927E-03  0.7927E-03
1921 BalSol_M6b3   0.000     -0.4523E-04 -0.4523E-04   0.000      0.2560E-02  0.2848E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3333E-03  0.3333E-03
1922 BalSol_M6b3   0.000     -0.1312E-03 -0.1312E-03   0.000      0.2727E-02  0.2803E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2069E-03  0.2069E-03
1923 BalSol_M6b3   0.000     -0.1770E-04 -0.1770E-04   0.000      0.2586E-02  0.2792E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2240E-03  0.2240E-03
1924 BalSol_M6b3   0.000     -0.3535E-04 -0.3535E-04   0.000      0.2469E-02  0.2621E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1872E-03  0.1872E-03
1925 BalSol_M6b3   0.000      0.9395E-04  0.9395E-04   0.000      0.2175E-02  0.2603E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3337E-03  0.3337E-03
```

```
1926 BalSol_M6b3   0.000     -0.2223E-03 -0.2223E-03   0.000      0.2700E-02  0.2867E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3887E-03  0.3887E-03

* Annual mass balance (kg.ha-1) of compound M4b3 in the soil profile
* ---------------------------------------------------------------------------------------------
---------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M4b3   0.000      0.2151E-03  0.2151E-03   0.000      0.9819E-02  0.1003E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M4b3   0.000     -0.2064E-05 -0.2064E-05   0.000      0.1070E-01  0.1070E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M4b3   0.000      0.2717E-04  0.2717E-04   0.000      0.1073E-01  0.1076E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M4b3   0.000      0.5606E-04  0.5606E-04   0.000      0.1006E-01  0.1011E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M4b3   0.000      0.8099E-04  0.8099E-04   0.000      0.9971E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M4b3   0.000     -0.9829E-04 -0.9829E-04   0.000      0.1117E-01  0.1107E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2672E-14  0.2672E-14
1907 BalSol_M4b3   0.000      0.1399E-03  0.1399E-03   0.000      0.9591E-02  0.9731E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9653E-11  0.9653E-11
1908 BalSol_M4b3   0.000     -0.5281E-04 -0.5281E-04   0.000      0.1218E-01  0.1213E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2685E-08  0.2685E-08
1909 BalSol_M4b3   0.000      0.1640E-03  0.1640E-03   0.000      0.9489E-02  0.9654E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1267E-06  0.1267E-06
1910 BalSol_M4b3   0.000      0.9948E-04  0.9948E-04   0.000      0.1006E-01  0.1016E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2565E-05  0.2565E-05
1911 BalSol_M4b3   0.000      0.6130E-04  0.6130E-04   0.000      0.1015E-01  0.1023E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1140E-04  0.1140E-04
1912 BalSol_M4b3   0.000      0.6188E-04  0.6188E-04   0.000      0.1011E-01  0.1020E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2859E-04  0.2859E-04
1913 BalSol_M4b3   0.000      0.5495E-05  0.5495E-05   0.000      0.1020E-01  0.1025E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4192E-04  0.4192E-04
1914 BalSol_M4b3   0.000     -0.5421E-04 -0.5421E-04   0.000      0.1066E-01  0.1065E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4931E-04  0.4931E-04
1915 BalSol_M4b3   0.000      0.1407E-03  0.1407E-03   0.000      0.9438E-02  0.9673E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9411E-04  0.9411E-04
1916 BalSol_M4b3   0.000      0.5738E-04  0.5738E-04   0.000      0.1031E-01  0.1043E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6977E-04  0.6977E-04
1917 BalSol_M4b3   0.000      0.3651E-04  0.3651E-04   0.000      0.9482E-02  0.9614E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9509E-04  0.9509E-04
1918 BalSol_M4b3   0.000     -0.8142E-05 -0.8142E-05   0.000      0.1050E-01  0.1054E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4390E-04  0.4390E-04
1919 BalSol_M4b3   0.000     -0.3787E-04 -0.3787E-04   0.000      0.1076E-01  0.1077E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4106E-04  0.4106E-04
1920 BalSol_M4b3   0.000      0.1087E-04  0.1087E-04   0.000      0.1017E-01  0.1028E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9293E-04  0.9293E-04
```

```
1921 BalSol_M4b3   0.000     -0.8828E-04 -0.8828E-04   0.000      0.1105E-01  0.1100E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4042E-04  0.4042E-04
1922 BalSol_M4b3   0.000     -0.6157E-04 -0.6157E-04   0.000      0.1086E-01  0.1083E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2743E-04  0.2743E-04
1923 BalSol_M4b3   0.000     -0.1048E-04 -0.1048E-04   0.000      0.1076E-01  0.1078E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.3249E-04  0.3249E-04
1924 BalSol_M4b3   0.000      0.2517E-04  0.2517E-04   0.000      0.1007E-01  0.1012E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2931E-04  0.2931E-04
1925 BalSol_M4b3   0.000      0.2554E-04  0.2554E-04   0.000      0.9972E-02  0.1005E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5538E-04  0.5538E-04
1926 BalSol_M4b3   0.000     -0.1635E-03 -0.1635E-03   0.000      0.1117E-01  0.1107E-01
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6527E-04  0.6527E-04

* Annual mass balance (kg.ha-1) of compound M52b3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
--------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M52b3   0.000      0.4071E-06  0.4071E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M52b3   0.000     -0.3889E-06 -0.3889E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M52b3   0.000      0.5286E-08  0.5286E-08   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M52b3   0.000      0.1211E-06  0.1211E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M52b3   0.000      0.3336E-06  0.3336E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1906 BalSol_M52b3   0.000     -0.4067E-06 -0.4067E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1907 BalSol_M52b3   0.000      0.8926E-06  0.8926E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1908 BalSol_M52b3   0.000     -0.9518E-06 -0.9518E-06   0.000      0.3004E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1909 BalSol_M52b3   0.000      0.6012E-06  0.6012E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1910 BalSol_M52b3   0.000      0.1387E-06  0.1387E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1911 BalSol_M52b3   0.000     -0.4643E-06 -0.4643E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1912 BalSol_M52b3   0.000     -0.2245E-06 -0.2245E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1913 BalSol_M52b3   0.000      0.1906E-06  0.1906E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1914 BalSol_M52b3   0.000     -0.2374E-06 -0.2374E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1915 BalSol_M52b3   0.000      0.3605E-05  0.3605E-05   0.000      0.2999E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
```

```
1916 BalSol_M52b3   0.000     -0.2893E-05 -0.2893E-05   0.000      0.3006E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1917 BalSol_M52b3   0.000      0.1065E-05  0.1065E-05   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1918 BalSol_M52b3   0.000      0.4260E-06  0.4260E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1919 BalSol_M52b3   0.000     -0.2039E-05 -0.2039E-05   0.000      0.3005E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1920 BalSol_M52b3   0.000     -0.2898E-07 -0.2898E-07   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1921 BalSol_M52b3   0.000      0.1992E-06  0.1992E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1922 BalSol_M52b3   0.000     -0.3176E-06 -0.3176E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1923 BalSol_M52b3   0.000      0.5305E-08  0.5305E-08   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1924 BalSol_M52b3   0.000      0.1205E-06  0.1205E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1925 BalSol_M52b3   0.000      0.3337E-06  0.3337E-06   0.000      0.3002E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1926 BalSol_M52b3   0.000     -0.4063E-06 -0.4063E-06   0.000      0.3003E-02  0.3003E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000

* Annual mass balance (kg.ha-1) of compound M1b3 in the soil profile
* ------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------
---------------------
* yr Identifier       AmaAppSol     DelAma  DelAmaEql  DelAmaNeq     AmaTra     AmaFor
AmaUpt     AmaDra   AmaDra_1   AmaDra_2   AmaDra_3   AmaDra_4   AmaDra_5     AmaDep
AmaVol     AmaLea  AmaLeaAqf
1901 BalSol_M1b3   0.000      0.2843E-03  0.2843E-03   0.000      0.6918E-02  0.7202E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1902 BalSol_M1b3   0.000      0.1253E-07  0.1253E-07   0.000      0.7681E-02  0.7681E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1903 BalSol_M1b3   0.000      0.4694E-04  0.4694E-04   0.000      0.7677E-02  0.7724E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1904 BalSol_M1b3   0.000      0.8238E-04  0.8238E-04   0.000      0.7178E-02  0.7260E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000       0.000       0.000
1905 BalSol_M1b3   0.000      0.1232E-03  0.1232E-03   0.000      0.7091E-02  0.7215E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4645E-14  0.4645E-14
1906 BalSol_M1b3   0.000     -0.1125E-03 -0.1125E-03   0.000      0.8059E-02  0.7947E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1340E-10  0.1340E-10
1907 BalSol_M1b3   0.000      0.2024E-03  0.2024E-03   0.000      0.6782E-02  0.6984E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.2152E-08  0.2152E-08
1908 BalSol_M1b3   0.000     -0.4190E-04 -0.4190E-04   0.000      0.8746E-02  0.8704E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1011E-06  0.1011E-06
1909 BalSol_M1b3   0.000      0.2507E-03  0.2507E-03   0.000      0.6677E-02  0.6929E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1647E-05  0.1647E-05
1910 BalSol_M1b3   0.000      0.1680E-03  0.1680E-03   0.000      0.7112E-02  0.7295E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1571E-04  0.1571E-04
```

```
1911 BalSol_M1b3   0.000      0.1116E-03  0.1116E-03   0.000      0.7185E-02  0.7339E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.4294E-04  0.4294E-04
1912 BalSol_M1b3   0.000      0.1056E-03  0.1056E-03   0.000      0.7139E-02  0.7324E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7975E-04  0.7975E-04
1913 BalSol_M1b3   0.000      0.7480E-05  0.7480E-05   0.000      0.7250E-02  0.7357E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.9923E-04  0.9923E-04
1914 BalSol_M1b3   0.000     -0.7920E-04 -0.7920E-04   0.000      0.7613E-02  0.7645E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1111E-03  0.1111E-03
1915 BalSol_M1b3   0.000      0.1369E-03  0.1369E-03   0.000      0.6610E-02  0.6943E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1959E-03  0.1959E-03
1916 BalSol_M1b3   0.000      0.1058E-03  0.1058E-03   0.000      0.7249E-02  0.7489E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1345E-03  0.1345E-03
1917 BalSol_M1b3   0.000      0.4793E-04  0.4793E-04   0.000      0.6674E-02  0.6900E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1781E-03  0.1781E-03
1918 BalSol_M1b3   0.000     -0.1435E-04 -0.1435E-04   0.000      0.7497E-02  0.7564E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8137E-04  0.8137E-04
1919 BalSol_M1b3   0.000     -0.2397E-04 -0.2397E-04   0.000      0.7676E-02  0.7728E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.7637E-04  0.7637E-04
1920 BalSol_M1b3   0.000      0.2914E-04  0.2914E-04   0.000      0.7168E-02  0.7375E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1783E-03  0.1783E-03
1921 BalSol_M1b3   0.000     -0.1496E-03 -0.1496E-03   0.000      0.7963E-02  0.7895E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.8230E-04  0.8230E-04
1922 BalSol_M1b3   0.000     -0.1003E-03 -0.1003E-03   0.000      0.7814E-02  0.7771E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5745E-04  0.5745E-04
1923 BalSol_M1b3   0.000     -0.2734E-04 -0.2734E-04   0.000      0.7699E-02  0.7740E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.6793E-04  0.6793E-04
1924 BalSol_M1b3   0.000      0.2080E-04  0.2080E-04   0.000      0.7184E-02  0.7265E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.5975E-04  0.5975E-04
1925 BalSol_M1b3   0.000      0.1621E-04  0.1621E-04   0.000      0.7092E-02  0.7215E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1070E-03  0.1070E-03
1926 BalSol_M1b3   0.000     -0.2301E-03 -0.2301E-03   0.000      0.8059E-02  0.7947E-02
0.000       0.000       0.000       0.000       0.000       0.000       0.000       0.000
0.000      0.1176E-03  0.1176E-03

* Intermediate target output for compound PXDb3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_PXDb3      0.0000              0.24317      0.0000
1908 Target_PXDb3      0.0000              0.11081      0.0000
1909 Target_PXDb3      0.0000              0.21226      0.0000
1910 Target_PXDb3      0.0000              0.21916      0.0000
1911 Target_PXDb3      0.0000              0.30814      0.0000
1912 Target_PXDb3      0.0000              0.23590      0.0000
1913 Target_PXDb3      0.0000              0.24253      0.0000
1914 Target_PXDb3      0.0000              0.26872      0.0000
1915 Target_PXDb3     0.88680E-18          0.16207     0.54719E-15
1916 Target_PXDb3      0.0000              0.31982      0.0000
1917 Target_PXDb3      0.0000              0.09766      0.0000
1918 Target_PXDb3      0.0000              0.15630      0.0000
1919 Target_PXDb3      0.0000              0.21031      0.0000
1920 Target_PXDb3      0.0000              0.23338      0.0000
1921 Target_PXDb3      0.0000              0.08608      0.0000
1922 Target_PXDb3      0.0000              0.04805      0.0000
1923 Target_PXDb3      0.0000              0.10772      0.0000
```

```
1924 Target_PXDb3      0.0000             0.11870      0.0000
1925 Target_PXDb3      0.0000             0.08762      0.0000
1926 Target_PXDb3      0.0000             0.13542      0.0000

* Intermediate target output for compound M2b3
* ---------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M2b3     0.84529E-08         0.24317     0.34761E-05
1908 Target_M2b3    -0.88067E-09         0.11081      0.0000
1909 Target_M2b3     0.19041E-08         0.21226     0.89706E-06
1910 Target_M2b3     0.19736E-08         0.21916     0.90051E-06
1911 Target_M2b3     0.13482E-08         0.30814     0.43752E-06
1912 Target_M2b3     0.73872E-09         0.23590     0.31315E-06
1913 Target_M2b3     0.69906E-09         0.24253     0.28824E-06
1914 Target_M2b3     0.22104E-09         0.26872     0.82256E-07
1915 Target_M2b3     0.75770E-07         0.16207     0.46753E-04
1916 Target_M2b3     0.39376E-07         0.31982     0.12312E-04
1917 Target_M2b3     0.13231E-08         0.09766     0.13548E-05
1918 Target_M2b3     0.26391E-08         0.15630     0.16884E-05
1919 Target_M2b3     0.22696E-08         0.21031     0.10792E-05
1920 Target_M2b3     0.45341E-09         0.23338     0.19428E-06
1921 Target_M2b3     0.53546E-10         0.08608     0.62207E-07
1922 Target_M2b3    -0.17577E-10         0.04805      0.0000
1923 Target_M2b3    -0.23307E-11         0.10772      0.0000
1924 Target_M2b3     0.44311E-09         0.11870     0.37332E-06
1925 Target_M2b3     0.15528E-09         0.08762     0.17721E-06
1926 Target_M2b3     0.50634E-09         0.13542     0.37390E-06

* Intermediate target output for compound M3b3
* ---------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M3b3     0.11822E-03         0.24317     0.48614E-01
1908 Target_M3b3     0.91881E-04         0.11081     0.82914E-01
1909 Target_M3b3     0.13322E-03         0.21226     0.62762E-01
1910 Target_M3b3     0.25224E-03         0.21916     0.11509
1911 Target_M3b3     0.33971E-03         0.30814     0.11025
1912 Target_M3b3     0.26112E-03         0.23590     0.11069
1913 Target_M3b3     0.22062E-03         0.24253     0.90968E-01
1914 Target_M3b3     0.22025E-03         0.26872     0.81964E-01
1915 Target_M3b3     0.14235E-03         0.16207     0.87837E-01
1916 Target_M3b3     0.44699E-03         0.31982     0.13976
1917 Target_M3b3     0.23403E-03         0.09766     0.23964
1918 Target_M3b3     0.19653E-03         0.15630     0.12574
1919 Target_M3b3     0.19263E-03         0.21031     0.91595E-01
1920 Target_M3b3     0.37880E-03         0.23338     0.16231
1921 Target_M3b3     0.55057E-04         0.08608     0.63963E-01
1922 Target_M3b3     0.65900E-05         0.04805     0.13716E-01
1923 Target_M3b3     0.22806E-04         0.10772     0.21172E-01
1924 Target_M3b3     0.13590E-04         0.11870     0.11450E-01
1925 Target_M3b3     0.28487E-04         0.08762     0.32511E-01
1926 Target_M3b3     0.65163E-04         0.13542     0.48118E-01

* Intermediate target output for compound M5b3
* ---------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M5b3     0.16603E-03         0.24317     0.68277E-01
1908 Target_M5b3     0.78546E-04         0.11081     0.70881E-01
1909 Target_M5b3     0.14059E-03         0.21226     0.66235E-01
1910 Target_M5b3     0.28950E-03         0.21916     0.13210
1911 Target_M5b3     0.31687E-03         0.30814     0.10284
1912 Target_M5b3     0.26799E-03         0.23590     0.11361
1913 Target_M5b3     0.24209E-03         0.24253     0.99821E-01
1914 Target_M5b3     0.24843E-03         0.26872     0.92449E-01
1915 Target_M5b3     0.14711E-03         0.16207     0.90769E-01
1916 Target_M5b3     0.46139E-03         0.31982     0.14427
```

```
1917 Target_M5b3     0.17658E-03         0.09766     0.18082
1918 Target_M5b3     0.14193E-03         0.15630     0.90803E-01
1919 Target_M5b3     0.21439E-03         0.21031     0.10194
1920 Target_M5b3     0.34614E-03         0.23338     0.14831
1921 Target_M5b3     0.44448E-04         0.08608     0.51637E-01
1922 Target_M5b3     0.70678E-05         0.04805     0.14710E-01
1923 Target_M5b3     0.24022E-04         0.10772     0.22300E-01
1924 Target_M5b3     0.31690E-04         0.11870     0.26698E-01
1925 Target_M5b3     0.51118E-04         0.08762     0.58338E-01
1926 Target_M5b3     0.88616E-04         0.13542     0.65437E-01

* Intermediate target output for compound M6b3
* ------------------------------------------------------------------------------------------
-------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M6b3     0.60537E-03         0.24317     0.24895
1908 Target_M6b3     0.30363E-03         0.11081     0.27400
1909 Target_M6b3     0.52600E-03         0.21226     0.24781
1910 Target_M6b3     0.65989E-03         0.21916     0.30110
1911 Target_M6b3     0.80743E-03         0.30814     0.26204
1912 Target_M6b3     0.66765E-03         0.23590     0.28303
1913 Target_M6b3     0.61447E-03         0.24253     0.25336
1914 Target_M6b3     0.70620E-03         0.26872     0.26280
1915 Target_M6b3     0.43875E-03         0.16207     0.27072
1916 Target_M6b3     0.89689E-03         0.31982     0.28044
1917 Target_M6b3     0.36471E-03         0.09766     0.37346
1918 Target_M6b3     0.40972E-03         0.15630     0.26213
1919 Target_M6b3     0.59645E-03         0.21031     0.28360
1920 Target_M6b3     0.86975E-03         0.23338     0.37267
1921 Target_M6b3     0.17706E-03         0.08608     0.20570
1922 Target_M6b3     0.68576E-04         0.04805     0.14272
1923 Target_M6b3     0.17102E-03         0.10772     0.15876
1924 Target_M6b3     0.17996E-03         0.11870     0.15161
1925 Target_M6b3     0.20252E-03         0.08762     0.23112
1926 Target_M6b3     0.35449E-03         0.13542     0.26177

* Intermediate target output for compound M4b3
* ------------------------------------------------------------------------------------------
-------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M4b3     0.45551E-04         0.24317     0.18732E-01
1908 Target_M4b3     0.27043E-04         0.11081     0.24404E-01
1909 Target_M4b3     0.42274E-04         0.21226     0.19916E-01
1910 Target_M4b3     0.97593E-04         0.21916     0.44530E-01
1911 Target_M4b3     0.11331E-03         0.30814     0.36772E-01
1912 Target_M4b3     0.90984E-04         0.23590     0.38569E-01
1913 Target_M4b3     0.74561E-04         0.24253     0.30743E-01
1914 Target_M4b3     0.75110E-04         0.26872     0.27951E-01
1915 Target_M4b3     0.50117E-04         0.16207     0.30924E-01
1916 Target_M4b3     0.16134E-03         0.31982     0.50446E-01
1917 Target_M4b3     0.75071E-04         0.09766     0.76873E-01
1918 Target_M4b3     0.57563E-04         0.15630     0.36828E-01
1919 Target_M4b3     0.64866E-04         0.21031     0.30843E-01
1920 Target_M4b3     0.13228E-03         0.23338     0.56679E-01
1921 Target_M4b3     0.15574E-04         0.08608     0.18093E-01
1922 Target_M4b3     0.22115E-05         0.04805     0.46027E-02
1923 Target_M4b3     0.70418E-05         0.10772     0.65372E-02
1924 Target_M4b3     0.61803E-05         0.11870     0.52069E-02
1925 Target_M4b3     0.11115E-04         0.08762     0.12685E-01
1926 Target_M4b3     0.22623E-04         0.13542     0.16706E-01

* Intermediate target output for compound M52b3
* ------------------------------------------------------------------------------------------
-------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                            (kg/ha)             (m)      (ug/L)
1907 Target_M52b3     0.14619E-09         0.24317     0.60119E-07
1908 Target_M52b3     0.47464E-10         0.11081     0.42832E-07
1909 Target_M52b3     0.59272E-11         0.21226     0.27924E-08
```

```
1910 Target_M52b3     0.99619E-10         0.21916     0.45455E-07
1911 Target_M52b3     0.62187E-11         0.30814     0.20182E-08
1912 Target_M52b3     0.45221E-11         0.23590     0.19170E-08
1913 Target_M52b3     0.61498E-11         0.24253     0.25357E-08
1914 Target_M52b3     0.14900E-11         0.26872     0.55450E-09
1915 Target_M52b3     0.74977E-08         0.16207     0.46264E-05
1916 Target_M52b3     0.87232E-08         0.31982     0.27276E-05
1917 Target_M52b3     0.53071E-09         0.09766     0.54345E-06
1918 Target_M52b3    -0.56897E-09         0.15630      0.0000
1919 Target_M52b3    -0.40763E-09         0.21031      0.0000
1920 Target_M52b3    -0.13533E-09         0.23338      0.0000
1921 Target_M52b3    -0.16906E-09         0.08608      0.0000
1922 Target_M52b3    -0.13781E-09         0.04805      0.0000
1923 Target_M52b3    -0.11026E-09         0.10772      0.0000
1924 Target_M52b3    -0.86799E-10         0.11870      0.0000
1925 Target_M52b3    -0.65357E-10         0.08762      0.0000
1926 Target_M52b3    -0.55015E-10         0.13542      0.0000

* Intermediate target output for compound M1b3
* ------------------------------------------------------------------------------------------
--------------------------------------
* yr Identifier               AmaLea          FlvLea      ConLea
*                             (kg/ha)            (m)      (ug/L)
1907 Target_M1b3     0.99643E-04         0.24317     0.40976E-01
1908 Target_M1b3     0.47813E-04         0.11081     0.43147E-01
1909 Target_M1b3     0.84244E-04         0.21226     0.39689E-01
1910 Target_M1b3     0.18811E-03         0.21916     0.85833E-01
1911 Target_M1b3     0.20835E-03         0.30814     0.67616E-01
1912 Target_M1b3     0.17285E-03         0.23590     0.73276E-01
1913 Target_M1b3     0.14878E-03         0.24253     0.61346E-01
1914 Target_M1b3     0.15138E-03         0.26872     0.56335E-01
1915 Target_M1b3     0.94947E-04         0.16207     0.58585E-01
1916 Target_M1b3     0.30633E-03         0.31982     0.95782E-01
1917 Target_M1b3     0.12367E-03         0.09766     0.12664
1918 Target_M1b3     0.95208E-04         0.15630     0.60913E-01
1919 Target_M1b3     0.12997E-03         0.21031     0.61798E-01
1920 Target_M1b3     0.23247E-03         0.23338     0.99609E-01
1921 Target_M1b3     0.27105E-04         0.08608     0.31489E-01
1922 Target_M1b3     0.39435E-05         0.04805     0.82074E-02
1923 Target_M1b3     0.13674E-04         0.10772     0.12694E-01
1924 Target_M1b3     0.17042E-04         0.11870     0.14358E-01
1925 Target_M1b3     0.27251E-04         0.08762     0.31100E-01
1926 Target_M1b3     0.50043E-04         0.13542     0.36953E-01

* Leaching summary per summary period:
* ------------------------------------------------------------------------------------------
--------------------------------------

* Rank Identifier       Percent     DateSta     DateEnd       ConLeaTgt Year
*  (-)                     (%)                                  (ug/L)  (a)
     1 ConLea_PXDb3     2.50 01-Jan-1907 31-Dec-1907           0.00 1907
     2 ConLea_PXDb3     7.50 01-Jan-1908 31-Dec-1908           0.00 1908
     3 ConLea_PXDb3    12.50 01-Jan-1909 31-Dec-1909           0.00 1909
     4 ConLea_PXDb3    17.50 01-Jan-1910 31-Dec-1910           0.00 1910
     5 ConLea_PXDb3    22.50 01-Jan-1911 31-Dec-1911           0.00 1911
     6 ConLea_PXDb3    27.50 01-Jan-1912 31-Dec-1912           0.00 1912
     7 ConLea_PXDb3    32.50 01-Jan-1913 31-Dec-1913           0.00 1913
     8 ConLea_PXDb3    37.50 01-Jan-1914 31-Dec-1914           0.00 1914
     9 ConLea_PXDb3    42.50 01-Jan-1916 31-Dec-1916           0.00 1916
    10 ConLea_PXDb3    47.50 01-Jan-1917 31-Dec-1917           0.00 1917
    11 ConLea_PXDb3    52.50 01-Jan-1918 31-Dec-1918           0.00 1918
    12 ConLea_PXDb3    57.50 01-Jan-1919 31-Dec-1919           0.00 1919
    13 ConLea_PXDb3    62.50 01-Jan-1920 31-Dec-1920           0.00 1920
    14 ConLea_PXDb3    67.50 01-Jan-1921 31-Dec-1921           0.00 1921
    15 ConLea_PXDb3    72.50 01-Jan-1922 31-Dec-1922           0.00 1922
    16 ConLea_PXDb3    77.50 01-Jan-1923 31-Dec-1923           0.00 1923
    17 ConLea_PXDb3    82.50 01-Jan-1924 31-Dec-1924           0.00 1924
    18 ConLea_PXDb3    87.50 01-Jan-1925 31-Dec-1925           0.00 1925
    19 ConLea_PXDb3    92.50 01-Jan-1926 31-Dec-1926           0.00 1926
    20 ConLea_PXDb3    97.50 01-Jan-1915 31-Dec-1915     0.5472E-15 1915
```

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)
1	ConLea_M2b3	2.50	01-Jan-1908	31-Dec-1908	0.00	1908
2	ConLea_M2b3	7.50	01-Jan-1922	31-Dec-1922	0.00	1922
3	ConLea_M2b3	12.50	01-Jan-1923	31-Dec-1923	0.00	1923
4	ConLea_M2b3	17.50	01-Jan-1921	31-Dec-1921	0.6221E-07	1921
5	ConLea_M2b3	22.50	01-Jan-1914	31-Dec-1914	0.8226E-07	1914
6	ConLea_M2b3	27.50	01-Jan-1925	31-Dec-1925	0.1772E-06	1925
7	ConLea_M2b3	32.50	01-Jan-1920	31-Dec-1920	0.1943E-06	1920
8	ConLea_M2b3	37.50	01-Jan-1913	31-Dec-1913	0.2882E-06	1913
9	ConLea_M2b3	42.50	01-Jan-1912	31-Dec-1912	0.3132E-06	1912
10	ConLea_M2b3	47.50	01-Jan-1924	31-Dec-1924	0.3733E-06	1924
11	ConLea_M2b3	52.50	01-Jan-1926	31-Dec-1926	0.3739E-06	1926
12	ConLea_M2b3	57.50	01-Jan-1911	31-Dec-1911	0.4375E-06	1911
13	ConLea_M2b3	62.50	01-Jan-1909	31-Dec-1909	0.8971E-06	1909
14	ConLea_M2b3	67.50	01-Jan-1910	31-Dec-1910	0.9005E-06	1910
15	ConLea_M2b3	72.50	01-Jan-1919	31-Dec-1919	0.1079E-05	1919
16	ConLea_M2b3	77.50	01-Jan-1917	31-Dec-1917	0.1355E-05	1917
17	ConLea_M2b3	82.50	01-Jan-1918	31-Dec-1918	0.1688E-05	1918
18	ConLea_M2b3	87.50	01-Jan-1907	31-Dec-1907	0.3476E-05	1907
19	ConLea_M2b3	92.50	01-Jan-1916	31-Dec-1916	0.1231E-04	1916
20	ConLea_M2b3	97.50	01-Jan-1915	31-Dec-1915	0.4675E-04	1915

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)
1	ConLea_M3b3	2.50	01-Jan-1924	31-Dec-1924	0.1145E-01	1924
2	ConLea_M3b3	7.50	01-Jan-1922	31-Dec-1922	0.1372E-01	1922
3	ConLea_M3b3	12.50	01-Jan-1923	31-Dec-1923	0.2117E-01	1923
4	ConLea_M3b3	17.50	01-Jan-1925	31-Dec-1925	0.3251E-01	1925
5	ConLea_M3b3	22.50	01-Jan-1926	31-Dec-1926	0.4812E-01	1926
6	ConLea_M3b3	27.50	01-Jan-1907	31-Dec-1907	0.4861E-01	1907
7	ConLea_M3b3	32.50	01-Jan-1909	31-Dec-1909	0.6276E-01	1909
8	ConLea_M3b3	37.50	01-Jan-1921	31-Dec-1921	0.6396E-01	1921
9	ConLea_M3b3	42.50	01-Jan-1914	31-Dec-1914	0.8196E-01	1914
10	ConLea_M3b3	47.50	01-Jan-1908	31-Dec-1908	0.8291E-01	1908
11	ConLea_M3b3	52.50	01-Jan-1915	31-Dec-1915	0.8784E-01	1915
12	ConLea_M3b3	57.50	01-Jan-1913	31-Dec-1913	0.9097E-01	1913
13	ConLea_M3b3	62.50	01-Jan-1919	31-Dec-1919	0.9159E-01	1919
14	ConLea_M3b3	67.50	01-Jan-1911	31-Dec-1911	0.1102E+00	1911
15	ConLea_M3b3	72.50	01-Jan-1912	31-Dec-1912	0.1107E+00	1912
16	ConLea_M3b3	77.50	01-Jan-1910	31-Dec-1910	0.1151E+00	1910
17	ConLea_M3b3	82.50	01-Jan-1918	31-Dec-1918	0.1257E+00	1918
18	ConLea_M3b3	87.50	01-Jan-1916	31-Dec-1916	0.1398E+00	1916
19	ConLea_M3b3	92.50	01-Jan-1920	31-Dec-1920	0.1623E+00	1920
20	ConLea_M3b3	97.50	01-Jan-1917	31-Dec-1917	0.2396E+00	1917

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)
1	ConLea_M5b3	2.50	01-Jan-1922	31-Dec-1922	0.1471E-01	1922
2	ConLea_M5b3	7.50	01-Jan-1923	31-Dec-1923	0.2230E-01	1923
3	ConLea_M5b3	12.50	01-Jan-1924	31-Dec-1924	0.2670E-01	1924
4	ConLea_M5b3	17.50	01-Jan-1921	31-Dec-1921	0.5164E-01	1921
5	ConLea_M5b3	22.50	01-Jan-1925	31-Dec-1925	0.5834E-01	1925
6	ConLea_M5b3	27.50	01-Jan-1926	31-Dec-1926	0.6544E-01	1926
7	ConLea_M5b3	32.50	01-Jan-1909	31-Dec-1909	0.6624E-01	1909
8	ConLea_M5b3	37.50	01-Jan-1907	31-Dec-1907	0.6828E-01	1907
9	ConLea_M5b3	42.50	01-Jan-1908	31-Dec-1908	0.7088E-01	1908
10	ConLea_M5b3	47.50	01-Jan-1915	31-Dec-1915	0.9077E-01	1915
11	ConLea_M5b3	52.50	01-Jan-1918	31-Dec-1918	0.9080E-01	1918
12	ConLea_M5b3	57.50	01-Jan-1914	31-Dec-1914	0.9245E-01	1914
13	ConLea_M5b3	62.50	01-Jan-1913	31-Dec-1913	0.9982E-01	1913
14	ConLea_M5b3	67.50	01-Jan-1919	31-Dec-1919	0.1019E+00	1919
15	ConLea_M5b3	72.50	01-Jan-1911	31-Dec-1911	0.1028E+00	1911
16	ConLea_M5b3	77.50	01-Jan-1912	31-Dec-1912	0.1136E+00	1912
17	ConLea_M5b3	82.50	01-Jan-1910	31-Dec-1910	0.1321E+00	1910
18	ConLea_M5b3	87.50	01-Jan-1916	31-Dec-1916	0.1443E+00	1916
19	ConLea_M5b3	92.50	01-Jan-1920	31-Dec-1920	0.1483E+00	1920
20	ConLea_M5b3	97.50	01-Jan-1917	31-Dec-1917	0.1808E+00	1917

* Rank	Identifier	Percent (%)	DateSta	DateEnd	ConLeaTgt (ug/L)	Year (a)

1	ConLea_M6b3	2.50	01-Jan-1922	31-Dec-1922	0.1427E+00	1922
2	ConLea_M6b3	7.50	01-Jan-1924	31-Dec-1924	0.1516E+00	1924
3	ConLea_M6b3	12.50	01-Jan-1923	31-Dec-1923	0.1588E+00	1923
4	ConLea_M6b3	17.50	01-Jan-1921	31-Dec-1921	0.2057E+00	1921
5	ConLea_M6b3	22.50	01-Jan-1925	31-Dec-1925	0.2311E+00	1925
6	ConLea_M6b3	27.50	01-Jan-1909	31-Dec-1909	0.2478E+00	1909
7	ConLea_M6b3	32.50	01-Jan-1907	31-Dec-1907	0.2489E+00	1907
8	ConLea_M6b3	37.50	01-Jan-1913	31-Dec-1913	0.2534E+00	1913
9	ConLea_M6b3	42.50	01-Jan-1926	31-Dec-1926	0.2618E+00	1926
10	ConLea_M6b3	47.50	01-Jan-1911	31-Dec-1911	0.2620E+00	1911
11	ConLea_M6b3	52.50	01-Jan-1918	31-Dec-1918	0.2621E+00	1918
12	ConLea_M6b3	57.50	01-Jan-1914	31-Dec-1914	0.2628E+00	1914
13	ConLea_M6b3	62.50	01-Jan-1915	31-Dec-1915	0.2707E+00	1915
14	ConLea_M6b3	67.50	01-Jan-1908	31-Dec-1908	0.2740E+00	1908
15	ConLea_M6b3	72.50	01-Jan-1916	31-Dec-1916	0.2804E+00	1916
16	ConLea_M6b3	77.50	01-Jan-1912	31-Dec-1912	0.2830E+00	1912
17	ConLea_M6b3	82.50	01-Jan-1919	31-Dec-1919	0.2836E+00	1919
18	ConLea_M6b3	87.50	01-Jan-1910	31-Dec-1910	0.3011E+00	1910
19	ConLea_M6b3	92.50	01-Jan-1920	31-Dec-1920	0.3727E+00	1920
20	ConLea_M6b3	97.50	01-Jan-1917	31-Dec-1917	0.3735E+00	1917

* Rank	Identifier	Percent	DateSta	DateEnd	ConLeaTgt	Year
* (-)		(%)			(ug/L)	(a)
1	ConLea_M4b3	2.50	01-Jan-1922	31-Dec-1922	0.4603E-02	1922
2	ConLea_M4b3	7.50	01-Jan-1924	31-Dec-1924	0.5207E-02	1924
3	ConLea_M4b3	12.50	01-Jan-1923	31-Dec-1923	0.6537E-02	1923
4	ConLea_M4b3	17.50	01-Jan-1925	31-Dec-1925	0.1268E-01	1925
5	ConLea_M4b3	22.50	01-Jan-1926	31-Dec-1926	0.1671E-01	1926
6	ConLea_M4b3	27.50	01-Jan-1921	31-Dec-1921	0.1809E-01	1921
7	ConLea_M4b3	32.50	01-Jan-1907	31-Dec-1907	0.1873E-01	1907
8	ConLea_M4b3	37.50	01-Jan-1909	31-Dec-1909	0.1992E-01	1909
9	ConLea_M4b3	42.50	01-Jan-1908	31-Dec-1908	0.2440E-01	1908
10	ConLea_M4b3	47.50	01-Jan-1914	31-Dec-1914	0.2795E-01	1914
11	ConLea_M4b3	52.50	01-Jan-1913	31-Dec-1913	0.3074E-01	1913
12	ConLea_M4b3	57.50	01-Jan-1919	31-Dec-1919	0.3084E-01	1919
13	ConLea_M4b3	62.50	01-Jan-1915	31-Dec-1915	0.3092E-01	1915
14	ConLea_M4b3	67.50	01-Jan-1911	31-Dec-1911	0.3677E-01	1911
15	ConLea_M4b3	72.50	01-Jan-1918	31-Dec-1918	0.3683E-01	1918
16	ConLea_M4b3	77.50	01-Jan-1912	31-Dec-1912	0.3857E-01	1912
17	ConLea_M4b3	82.50	01-Jan-1910	31-Dec-1910	0.4453E-01	1910
18	ConLea_M4b3	87.50	01-Jan-1916	31-Dec-1916	0.5045E-01	1916
19	ConLea_M4b3	92.50	01-Jan-1920	31-Dec-1920	0.5668E-01	1920
20	ConLea_M4b3	97.50	01-Jan-1917	31-Dec-1917	0.7687E-01	1917

* Rank	Identifier	Percent	DateSta	DateEnd	ConLeaTgt	Year
* (-)		(%)			(ug/L)	(a)
1	ConLea_M52b3	2.50	01-Jan-1918	31-Dec-1918	0.00	1918
2	ConLea_M52b3	7.50	01-Jan-1919	31-Dec-1919	0.00	1919
3	ConLea_M52b3	12.50	01-Jan-1920	31-Dec-1920	0.00	1920
4	ConLea_M52b3	17.50	01-Jan-1921	31-Dec-1921	0.00	1921
5	ConLea_M52b3	22.50	01-Jan-1922	31-Dec-1922	0.00	1922
6	ConLea_M52b3	27.50	01-Jan-1923	31-Dec-1923	0.00	1923
7	ConLea_M52b3	32.50	01-Jan-1924	31-Dec-1924	0.00	1924
8	ConLea_M52b3	37.50	01-Jan-1925	31-Dec-1925	0.00	1925
9	ConLea_M52b3	42.50	01-Jan-1926	31-Dec-1926	0.00	1926
10	ConLea_M52b3	47.50	01-Jan-1914	31-Dec-1914	0.5545E-09	1914
11	ConLea_M52b3	52.50	01-Jan-1912	31-Dec-1912	0.1917E-08	1912
12	ConLea_M52b3	57.50	01-Jan-1911	31-Dec-1911	0.2018E-08	1911
13	ConLea_M52b3	62.50	01-Jan-1913	31-Dec-1913	0.2536E-08	1913
14	ConLea_M52b3	67.50	01-Jan-1909	31-Dec-1909	0.2792E-08	1909
15	ConLea_M52b3	72.50	01-Jan-1908	31-Dec-1908	0.4283E-07	1908
16	ConLea_M52b3	77.50	01-Jan-1910	31-Dec-1910	0.4545E-07	1910
17	ConLea_M52b3	82.50	01-Jan-1907	31-Dec-1907	0.6012E-07	1907
18	ConLea_M52b3	87.50	01-Jan-1917	31-Dec-1917	0.5434E-06	1917
19	ConLea_M52b3	92.50	01-Jan-1916	31-Dec-1916	0.2728E-05	1916
20	ConLea_M52b3	97.50	01-Jan-1915	31-Dec-1915	0.4626E-05	1915

* Rank	Identifier	Percent	DateSta	DateEnd	ConLeaTgt	Year
* (-)		(%)			(ug/L)	(a)
1	ConLea_M1b3	2.50	01-Jan-1922	31-Dec-1922	0.8207E-02	1922
2	ConLea_M1b3	7.50	01-Jan-1923	31-Dec-1923	0.1269E-01	1923

```
     3 ConLea_M1b3    12.50 01-Jan-1924 31-Dec-1924      0.1436E-01 1924
     4 ConLea_M1b3    17.50 01-Jan-1925 31-Dec-1925      0.3110E-01 1925
     5 ConLea_M1b3    22.50 01-Jan-1921 31-Dec-1921      0.3149E-01 1921
     6 ConLea_M1b3    27.50 01-Jan-1926 31-Dec-1926      0.3695E-01 1926
     7 ConLea_M1b3    32.50 01-Jan-1909 31-Dec-1909      0.3969E-01 1909
     8 ConLea_M1b3    37.50 01-Jan-1907 31-Dec-1907      0.4098E-01 1907
     9 ConLea_M1b3    42.50 01-Jan-1908 31-Dec-1908      0.4315E-01 1908
    10 ConLea_M1b3    47.50 01-Jan-1914 31-Dec-1914      0.5633E-01 1914
    11 ConLea_M1b3    52.50 01-Jan-1915 31-Dec-1915      0.5859E-01 1915
    12 ConLea_M1b3    57.50 01-Jan-1918 31-Dec-1918      0.6091E-01 1918
    13 ConLea_M1b3    62.50 01-Jan-1913 31-Dec-1913      0.6135E-01 1913
    14 ConLea_M1b3    67.50 01-Jan-1919 31-Dec-1919      0.6180E-01 1919
    15 ConLea_M1b3    72.50 01-Jan-1911 31-Dec-1911      0.6762E-01 1911
    16 ConLea_M1b3    77.50 01-Jan-1912 31-Dec-1912      0.7328E-01 1912
    17 ConLea_M1b3    82.50 01-Jan-1910 31-Dec-1910      0.8583E-01 1910
    18 ConLea_M1b3    87.50 01-Jan-1916 31-Dec-1916      0.9578E-01 1916
    19 ConLea_M1b3    92.50 01-Jan-1920 31-Dec-1920      0.9961E-01 1920
    20 ConLea_M1b3    97.50 01-Jan-1917 31-Dec-1917      0.1266E+00 1917

* ---------------------------------------------------------------------------------------------
--------------------------------------
* PEARL REPORT: Leaching
* Start date      :   01-Jan-1901
* End date        :   31-Dec-1926
* Target depth    :   1.00 m
* Annual application to the soil surface at 31-Mar; dosage =     0.0360 kg.ha-1

* Leaching summary for compound PXDb3
* Molar mass (g.mol-1)                                :    400.5
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :   200.    ; measured at (C)  25.0
* Half-life (d) in soil                               :      0.2; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :     76.6
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :      1.01
* Freundlich exponent (-)                             :     1.06
* Plant uptake factor (-)                             :     0.00
* ---------------------------------------------------------------------------------------------
--------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ---------------------------------------------------------------------------------------------
--------------------------------------
   1     01-Jan-1907 31-Dec-1907                       243.172
0.0000000                          0.000
   2     01-Jan-1908 31-Dec-1908                       110.815
0.0000000                          0.000
   3     01-Jan-1909 31-Dec-1909                       212.263
0.0000000                          0.000
   4     01-Jan-1910 31-Dec-1910                       219.163
0.0000000                          0.000
   5     01-Jan-1911 31-Dec-1911                       308.137
0.0000000                          0.000
   6     01-Jan-1912 31-Dec-1912                       235.896
0.0000000                          0.000
   7     01-Jan-1913 31-Dec-1913                       242.528
0.0000000                          0.000
   8     01-Jan-1914 31-Dec-1914                       268.719
0.0000000                          0.000
   9     01-Jan-1915 31-Dec-1915                       162.066
0.0000000                          0.000
  10     01-Jan-1916 31-Dec-1916                       319.817
0.0000000                          0.000
  11     01-Jan-1917 31-Dec-1917                        97.656
0.0000000                          0.000
  12     01-Jan-1918 31-Dec-1918                       156.302
0.0000000                          0.000
```

```
  13     01-Jan-1919 31-Dec-1919                         210.310
0.0000000                         0.000
  14     01-Jan-1920 31-Dec-1920                         233.383
0.0000000                         0.000
  15     01-Jan-1921 31-Dec-1921                          86.077
0.0000000                         0.000
  16     01-Jan-1922 31-Dec-1922                          48.048
0.0000000                         0.000
  17     01-Jan-1923 31-Dec-1923                         107.720
0.0000000                         0.000
  18     01-Jan-1924 31-Dec-1924                         118.696
0.0000000                         0.000
  19     01-Jan-1925 31-Dec-1925                          87.624
0.0000000                         0.000
  20     01-Jan-1926 31-Dec-1926                         135.422
0.0000000                         0.000

* The average concentration of PXDb3 closest to the 80th percentile is      0.000000 ug/L

* Leaching summary for compound M2b3
* Molar mass (g.mol-1)                                :    316.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.380E+06; measured at (C)  25.0
* Half-life (d) in soil                               :      3.4; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      0.9
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.118E-01
* Freundlich exponent (-)                             :     1.01
* Plant uptake factor (-)                             :     0.00
* ----------------------------------------------------------------------------------------------------
---------------------------------------
* Period        From          To              Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
---------------------------------------
   1     01-Jan-1907 31-Dec-1907                         243.172
0.0000000                         0.000
   2     01-Jan-1908 31-Dec-1908                         110.815                       -
0.0000000                         0.000
   3     01-Jan-1909 31-Dec-1909                         212.263
0.0000000                         0.000
   4     01-Jan-1910 31-Dec-1910                         219.163
0.0000000                         0.000
   5     01-Jan-1911 31-Dec-1911                         308.137
0.0000000                         0.000
   6     01-Jan-1912 31-Dec-1912                         235.896
0.0000000                         0.000
   7     01-Jan-1913 31-Dec-1913                         242.528
0.0000000                         0.000
   8     01-Jan-1914 31-Dec-1914                         268.719
0.0000000                         0.000
   9     01-Jan-1915 31-Dec-1915                         162.066
0.0000001                         0.000
  10     01-Jan-1916 31-Dec-1916                         319.817
0.0000000                         0.000
  11     01-Jan-1917 31-Dec-1917                          97.656
0.0000000                         0.000
  12     01-Jan-1918 31-Dec-1918                         156.302
0.0000000                         0.000
  13     01-Jan-1919 31-Dec-1919                         210.310
0.0000000                         0.000
  14     01-Jan-1920 31-Dec-1920                         233.383
0.0000000                         0.000
  15     01-Jan-1921 31-Dec-1921                          86.077
0.0000000                         0.000
  16     01-Jan-1922 31-Dec-1922                          48.048                       -
0.0000000                         0.000
```

```
  17     01-Jan-1923 31-Dec-1923                          107.720                      -
0.0000000                          0.000
  18     01-Jan-1924 31-Dec-1924                          118.696
0.0000000                          0.000
  19     01-Jan-1925 31-Dec-1925                           87.624
0.0000000                          0.000
  20     01-Jan-1926 31-Dec-1926                          135.422
0.0000000                          0.000

* The average concentration of M2b3 closest to the 80th percentile is      0.000002 ug/L

* Leaching summary for compound M3b3
* Molar mass (g.mol-1)                                 :    332.4
* Saturated vapour pressure (Pa)                       :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                         :   370.    ; measured at (C)  25.0
* Half-life (d) in soil                                :     39.6; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :     18.6
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.246
* Freundlich exponent (-)                              :     0.96
* Plant uptake factor (-)                              :     0.78
* ----------------------------------------------------------------------------------------------------
--------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
--------------------------------------
   1     01-Jan-1907 31-Dec-1907                          243.172
0.0001182                          0.049
   2     01-Jan-1908 31-Dec-1908                          110.815
0.0000919                          0.083
   3     01-Jan-1909 31-Dec-1909                          212.263
0.0001332                          0.063
   4     01-Jan-1910 31-Dec-1910                          219.163
0.0002522                          0.115
   5     01-Jan-1911 31-Dec-1911                          308.137
0.0003397                          0.110
   6     01-Jan-1912 31-Dec-1912                          235.896
0.0002611                          0.111
   7     01-Jan-1913 31-Dec-1913                          242.528
0.0002206                          0.091
   8     01-Jan-1914 31-Dec-1914                          268.719
0.0002203                          0.082
   9     01-Jan-1915 31-Dec-1915                          162.066
0.0001424                          0.088
  10     01-Jan-1916 31-Dec-1916                          319.817
0.0004470                          0.140
  11     01-Jan-1917 31-Dec-1917                           97.656
0.0002340                          0.240
  12     01-Jan-1918 31-Dec-1918                          156.302
0.0001965                          0.126
  13     01-Jan-1919 31-Dec-1919                          210.310
0.0001926                          0.092
  14     01-Jan-1920 31-Dec-1920                          233.383
0.0003788                          0.162
  15     01-Jan-1921 31-Dec-1921                           86.077
0.0000551                          0.064
  16     01-Jan-1922 31-Dec-1922                           48.048
0.0000066                          0.014
  17     01-Jan-1923 31-Dec-1923                          107.720
0.0000228                          0.021
  18     01-Jan-1924 31-Dec-1924                          118.696
0.0000136                          0.011
  19     01-Jan-1925 31-Dec-1925                           87.624
0.0000285                          0.033
  20     01-Jan-1926 31-Dec-1926                          135.422
0.0000652                          0.048
```

```
* The average concentration of M3b3 closest to the 80th percentile is      0.120415 ug/L

* Leaching summary for compound M5b3
* Molar mass (g.mol-1)                                :    376.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                               :    16.4; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      1.8
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.239E-01
* Freundlich exponent (-)                             :     0.90
* Plant uptake factor (-)                             :     0.00
* ----------------------------------------------------------------------------------------------------
---------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
---------------------------------------
   1     01-Jan-1907 31-Dec-1907                        243.172
0.0001660                          0.068
   2     01-Jan-1908 31-Dec-1908                        110.815
0.0000785                          0.071
   3     01-Jan-1909 31-Dec-1909                        212.263
0.0001406                          0.066
   4     01-Jan-1910 31-Dec-1910                        219.163
0.0002895                          0.132
   5     01-Jan-1911 31-Dec-1911                        308.137
0.0003169                          0.103
   6     01-Jan-1912 31-Dec-1912                        235.896
0.0002680                          0.114
   7     01-Jan-1913 31-Dec-1913                        242.528
0.0002421                          0.100
   8     01-Jan-1914 31-Dec-1914                        268.719
0.0002484                          0.092
   9     01-Jan-1915 31-Dec-1915                        162.066
0.0001471                          0.091
  10     01-Jan-1916 31-Dec-1916                        319.817
0.0004614                          0.144
  11     01-Jan-1917 31-Dec-1917                         97.656
0.0001766                          0.181
  12     01-Jan-1918 31-Dec-1918                        156.302
0.0001419                          0.091
  13     01-Jan-1919 31-Dec-1919                        210.310
0.0002144                          0.102
  14     01-Jan-1920 31-Dec-1920                        233.383
0.0003461                          0.148
  15     01-Jan-1921 31-Dec-1921                         86.077
0.0000444                          0.052
  16     01-Jan-1922 31-Dec-1922                         48.048
0.0000071                          0.015
  17     01-Jan-1923 31-Dec-1923                        107.720
0.0000240                          0.022
  18     01-Jan-1924 31-Dec-1924                        118.696
0.0000317                          0.027
  19     01-Jan-1925 31-Dec-1925                         87.624
0.0000511                          0.058
  20     01-Jan-1926 31-Dec-1926                        135.422
0.0000886                          0.065

* The average concentration of M5b3 closest to the 80th percentile is      0.122850 ug/L

* Leaching summary for compound M6b3
* Molar mass (g.mol-1)                                :    360.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                               :    72.1; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      7.8
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.103
```

```
* Freundlich exponent (-)                                :     0.92
* Plant uptake factor (-)                                :     0.00
* ----------------------------------------------------------------------------------------------------
-------------------------------------
* Period        From          To               Water percolated              Substance
leached             Average substance
* number                                  below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
-------------------------------------
   1     01-Jan-1907 31-Dec-1907                        243.172
0.0006054                          0.249
   2     01-Jan-1908 31-Dec-1908                        110.815
0.0003036                          0.274
   3     01-Jan-1909 31-Dec-1909                        212.263
0.0005260                          0.248
   4     01-Jan-1910 31-Dec-1910                        219.163
0.0006599                          0.301
   5     01-Jan-1911 31-Dec-1911                        308.137
0.0008074                          0.262
   6     01-Jan-1912 31-Dec-1912                        235.896
0.0006676                          0.283
   7     01-Jan-1913 31-Dec-1913                        242.528
0.0006145                          0.253
   8     01-Jan-1914 31-Dec-1914                        268.719
0.0007062                          0.263
   9     01-Jan-1915 31-Dec-1915                        162.066
0.0004387                          0.271
  10     01-Jan-1916 31-Dec-1916                        319.817
0.0008969                          0.280
  11     01-Jan-1917 31-Dec-1917                         97.656
0.0003647                          0.373
  12     01-Jan-1918 31-Dec-1918                        156.302
0.0004097                          0.262
  13     01-Jan-1919 31-Dec-1919                        210.310
0.0005964                          0.284
  14     01-Jan-1920 31-Dec-1920                        233.383
0.0008697                          0.373
  15     01-Jan-1921 31-Dec-1921                         86.077
0.0001771                          0.206
  16     01-Jan-1922 31-Dec-1922                         48.048
0.0000686                          0.143
  17     01-Jan-1923 31-Dec-1923                        107.720
0.0001710                          0.159
  18     01-Jan-1924 31-Dec-1924                        118.696
0.0001800                          0.152
  19     01-Jan-1925 31-Dec-1925                         87.624
0.0002025                          0.231
  20     01-Jan-1926 31-Dec-1926                        135.422
0.0003545                          0.262

* The average concentration of M6b3 closest to the 80th percentile is      0.283315 ug/L

* Leaching summary for compound M4b3
* Molar mass (g.mol-1)                                  :    362.4
* Saturated vapour pressure (Pa)                        :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                          :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                                 :      7.5; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      4.6
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.610E-01
* Freundlich exponent (-)                                :     0.92
* Plant uptake factor (-)                                :     0.00
* ----------------------------------------------------------------------------------------------------
-------------------------------------
* Period        From          To               Water percolated              Substance
leached             Average substance
* number                                  below target depth (mm)     below target depth
(kg/ha)         concentration in water
```

```
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------
-------------------------------------
   1     01-Jan-1907 31-Dec-1907                       243.172
0.0000456                         0.019
   2     01-Jan-1908 31-Dec-1908                       110.815
0.0000270                         0.024
   3     01-Jan-1909 31-Dec-1909                       212.263
0.0000423                         0.020
   4     01-Jan-1910 31-Dec-1910                       219.163
0.0000976                         0.045
   5     01-Jan-1911 31-Dec-1911                       308.137
0.0001133                         0.037
   6     01-Jan-1912 31-Dec-1912                       235.896
0.0000910                         0.039
   7     01-Jan-1913 31-Dec-1913                       242.528
0.0000746                         0.031
   8     01-Jan-1914 31-Dec-1914                       268.719
0.0000751                         0.028
   9     01-Jan-1915 31-Dec-1915                       162.066
0.0000501                         0.031
  10     01-Jan-1916 31-Dec-1916                       319.817
0.0001613                         0.050
  11     01-Jan-1917 31-Dec-1917                        97.656
0.0000751                         0.077
  12     01-Jan-1918 31-Dec-1918                       156.302
0.0000576                         0.037
  13     01-Jan-1919 31-Dec-1919                       210.310
0.0000649                         0.031
  14     01-Jan-1920 31-Dec-1920                       233.383
0.0001323                         0.057
  15     01-Jan-1921 31-Dec-1921                        86.077
0.0000156                         0.018
  16     01-Jan-1922 31-Dec-1922                        48.048
0.0000022                         0.005
  17     01-Jan-1923 31-Dec-1923                       107.720
0.0000070                         0.007
  18     01-Jan-1924 31-Dec-1924                       118.696
0.0000062                         0.005
  19     01-Jan-1925 31-Dec-1925                        87.624
0.0000111                         0.013
  20     01-Jan-1926 31-Dec-1926                       135.422
0.0000226                         0.017

* The average concentration of M4b3 closest to the 80th percentile is      0.041550 ug/L

* Leaching summary for compound M52b3
* Molar mass (g.mol-1)                                :    360.3
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                               :      8.4; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :     47.1
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.622
* Freundlich exponent (-)                             :     0.89
* Plant uptake factor (-)                             :     0.00
* ----------------------------------------------------------------------------------------------
-------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                              below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------
-------------------------------------
   1     01-Jan-1907 31-Dec-1907                       243.172
0.0000000                         0.000
   2     01-Jan-1908 31-Dec-1908                       110.815
0.0000000                         0.000
```

```
   3     01-Jan-1909 31-Dec-1909                        212.263
0.0000000                          0.000
   4     01-Jan-1910 31-Dec-1910                        219.163
0.0000000                          0.000
   5     01-Jan-1911 31-Dec-1911                        308.137
0.0000000                          0.000
   6     01-Jan-1912 31-Dec-1912                        235.896
0.0000000                          0.000
   7     01-Jan-1913 31-Dec-1913                        242.528
0.0000000                          0.000
   8     01-Jan-1914 31-Dec-1914                        268.719
0.0000000                          0.000
   9     01-Jan-1915 31-Dec-1915                        162.066
0.0000000                          0.000
  10     01-Jan-1916 31-Dec-1916                        319.817
0.0000000                          0.000
  11     01-Jan-1917 31-Dec-1917                         97.656
0.0000000                          0.000
  12     01-Jan-1918 31-Dec-1918                        156.302                      -
0.0000000                          0.000
  13     01-Jan-1919 31-Dec-1919                        210.310                      -
0.0000000                          0.000
  14     01-Jan-1920 31-Dec-1920                        233.383                      -
0.0000000                          0.000
  15     01-Jan-1921 31-Dec-1921                         86.077                      -
0.0000000                          0.000
  16     01-Jan-1922 31-Dec-1922                         48.048                      -
0.0000000                          0.000
  17     01-Jan-1923 31-Dec-1923                        107.720                      -
0.0000000                          0.000
  18     01-Jan-1924 31-Dec-1924                        118.696                      -
0.0000000                          0.000
  19     01-Jan-1925 31-Dec-1925                         87.624                      -
0.0000000                          0.000
  20     01-Jan-1926 31-Dec-1926                        135.422                      -
0.0000000                          0.000

* The average concentration of M52b3 closest to the 80th percentile is      0.000000 ug/L

* Leaching summary for compound M1b3
* Molar mass (g.mol-1)                                :    362.4
* Saturated vapour pressure (Pa)                      :   0.00    ; measured at (C)  20.0
* Solubility in water (mg.L-1)                        :  0.100E+04; measured at (C)  25.0
* Half-life (d) in soil                               :     11.7; measured at (C)  20.0
* Kom (coef. for sorption on soil organic matter) (L.kg-1) :      3.3
* KF    (overall sorption coefficient of the soil target layer) (L.kg-1) :     0.437E-01
* Freundlich exponent (-)                             :     0.96
* Plant uptake factor (-)                             :     0.00
* ----------------------------------------------------------------------------------------------------
--------------------------------------
* Period        From          To               Water percolated              Substance
leached              Average substance
* number                                 below target depth (mm)     below target depth
(kg/ha)         concentration in water
*
at target depth (ug/L)
* ----------------------------------------------------------------------------------------------------
--------------------------------------
   1     01-Jan-1907 31-Dec-1907                        243.172
0.0000996                          0.041
   2     01-Jan-1908 31-Dec-1908                        110.815
0.0000478                          0.043
   3     01-Jan-1909 31-Dec-1909                        212.263
0.0000842                          0.040
   4     01-Jan-1910 31-Dec-1910                        219.163
0.0001881                          0.086
   5     01-Jan-1911 31-Dec-1911                        308.137
0.0002083                          0.068
   6     01-Jan-1912 31-Dec-1912                        235.896
0.0001729                          0.073
```

```
   7     01-Jan-1913 31-Dec-1913                       242.528
0.0001488                         0.061
   8     01-Jan-1914 31-Dec-1914                       268.719
0.0001514                         0.056
   9     01-Jan-1915 31-Dec-1915                       162.066
0.0000949                         0.059
  10     01-Jan-1916 31-Dec-1916                       319.817
0.0003063                         0.096
  11     01-Jan-1917 31-Dec-1917                        97.656
0.0001237                         0.127
  12     01-Jan-1918 31-Dec-1918                       156.302
0.0000952                         0.061
  13     01-Jan-1919 31-Dec-1919                       210.310
0.0001300                         0.062
  14     01-Jan-1920 31-Dec-1920                       233.383
0.0002325                         0.100
  15     01-Jan-1921 31-Dec-1921                        86.077
0.0000271                         0.031
  16     01-Jan-1922 31-Dec-1922                        48.048
0.0000039                         0.008
  17     01-Jan-1923 31-Dec-1923                       107.720
0.0000137                         0.013
  18     01-Jan-1924 31-Dec-1924                       118.696
0.0000170                         0.014
  19     01-Jan-1925 31-Dec-1925                        87.624
0.0000273                         0.031
  20     01-Jan-1926 31-Dec-1926                       135.422
0.0000500                         0.037

* The average concentration of M1b3 closest to the 80th percentile is      0.079555 ug/L

* End of PEARL REPORT: Leaching
* ------------------------------------------------------------------------------------------------
---------------------------------------

* ------------------------------------------------------------------------------------------------
---------------------------------------
* PEARL REPORT: Project_Summary
* Report_type           Leaching
* Result_text           Concentration closest to the 80th percentile (ug/L)
* Run_Id                589
* ExposureType          Groundwater
* Scenario data subset  FOCUS Groundwater version 5
* Location              CHATEAUDUN
* Meteo_station         chat-m
* Soil_type             CHAT-S_Soil
* Crop_calendar         CHAT-SCEREALS
* Substance             PXDb3
* Application_scheme    PXD-SCereals-BBCH21-45app-CHAT
* Irrigation_scheme     No
* Deposition_scheme     No
* Result_PXDb3           0.000000
* Result_M2b3           0.000002
* Result_M3b3           0.120415
* Result_M5b3           0.122850
* Result_M6b3           0.283315
* Result_M4b3           0.041550
* Result_M52b3           0.000000
* Result_M1b3           0.079555

* End of PEARL REPORT: Project_Summary
* ------------------------------------------------------------------------------------------------
---------------------------------------

*
*  The run time was 111 minutes and 28 seconds
```

Listing 7: Tier 1b – Representative *.psm file for PELMO 6.6.4 – 45 g/ha to Spring Cereals at BBCH 21 (Scheme 2).

```
<COMMENT>
GW simulations     <PNX>
<END COMMENT>
<NUMBER OF SOIL HORIZONS>
 0
<END NUMBER OF SOIL HORIZONS>
<APPLICATION>
 7    0    0    <number of locations absolute app/relative app>
026            <number of application location>
01  01  01   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  02   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  03   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  04   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  05   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  06   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  07   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  08   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  09   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  10   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  11   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  12   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  13   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  14   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  15   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  16   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  17   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  18   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  19   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  20   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  21   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  22   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  23   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  24   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  25   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
01  01  26   0    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         C   <number of application location>
31  03  01   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  02   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
31  03  03   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  04   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  05   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  06   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  07   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  08   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  09   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  10   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  11   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  12   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  13   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  14   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  15   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  16   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  17   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  18   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  19   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  20   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  21   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  22   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  23   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  24   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  25   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  26   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         H   <number of application location>
16  04  01   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  02   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  03   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  04   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  05   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  06   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  07   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  08   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  09   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  10   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  11   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
16  04  12   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  13   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  14   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  15   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  16   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  17   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  18   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  19   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  20   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  21   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  22   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  23   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  24   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  25   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  26   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         J   <number of application location>
28  05  01   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  02   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  03   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  04   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  05   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  06   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  07   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  08   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  09   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  10   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  11   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  12   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  13   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  14   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  15   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  16   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  17   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  18   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  19   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  20   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
28  05  21   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  22   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  23   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  24   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  25   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
28  05  26   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         K   <number of application location>
16  04  01   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  02   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  03   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  04   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  05   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  06   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  07   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  08   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  09   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  10   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  11   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  12   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  13   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  14   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  15   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  16   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  17   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  18   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  19   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  20   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  21   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  22   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  23   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  24   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  25   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
16  04  26   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         N   <number of application location>
13  04  01   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  02   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
13  04  03   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  04   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  05   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  06   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  07   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  08   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  09   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  10   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  11   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  12   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  13   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  14   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  15   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  16   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  17   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  18   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  19   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  20   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  21   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  22   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  23   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  24   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  25   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
13  04  26   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
026         O   <number of application location>
31  03  01   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  02   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  03   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  04   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  05   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  06   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  07   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  08   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  09   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  10   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  11   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
```

```
31  03  12   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  13   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  14   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  15   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  16   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  17   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  18   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  19   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  20   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  21   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  22   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  23   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  24   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  25   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
31  03  26   0.036    0    0    0    0    0    0   <day month year app_rate obere und untere
app_Tiefe Ffield frpex time>
 1    <pesticide appl. flag: 1=soil 2 =linear 3=exp. foliar 4=manually
<END APPLICATION>
<FLAGS>
 1   1   <henry(0=direct 1=calc.)  kd_flag(0=direct 1=calc.)>
<END FLAGS>
<VOLATILIZATION>
<henry       solub.      molmass     vap.press   diff air    depth volat.  Hv
Temperature>
  3.33E-04   166.1    400.5     0.00E+00   0.0498    0.1    98400    20
  6.67E-10   332.2    400.5     0.00E+00   0.0498    0.1    98400    30
<END VOLATILIZATION>
<PLANT UPTAKE>
 0      <plant uptake factor
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp   rel deg neq sites
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met A1>
 2.8335600   20          2.58        0           100         0.7       0         1
<Met B1>
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met C1>
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D1>
 0.3754547   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<PHOTODEGRADATION>
<rate 1/n>  <I_Ref W/m²>
 0   100  0   0  0   0  0   0  0   100
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2 f_neq       kdes>
 132         1.06       -99          20         0.00E+00          0      0     100    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
```

```
<Kd          Fr.exp.     Met A1   Met B1   Met C1   Met D1   BR/CO2 >
<END DEPTH DEPENDENT>
##############################################
<COMMENT>
METABOLITE B1     M2
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 316.4
<END MOLMASS>
<PLANT UPTAKE>
 0      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
 0.1124575   20          2.58        0           100         0.7       0         1
<Met C1>
 0.0214692   20          2.58        0           100         0.7       0         1
<Met B2>
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met C2>
 0.0705415   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
 1.54        1.01       -99          20          1E-20           0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met C1   Met B2   Met C2   BR/CO2 >
<END DEPTH DEPENDENT>
##############################################
<COMMENT>
METABOLITE C1     M3
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 332.4
<END MOLMASS>
<PLANT UPTAKE>
 0.784      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D1>
 0.0143880   20          2.58        0           100         0.7       0         1
<Met C2>
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D2>
 0.0031160   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
```

```
 32.1        0.96       -99          20          1E-20            0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met D1   Met C2   Met D2   BR/CO2 >
<END DEPTH DEPENDENT>
################################################
<COMMENT>
METABOLITE B2     M52
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 360.3
<END MOLMASS>
<PLANT UPTAKE>
 0      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met C2>
 0.0822239   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
 81.1        0.89       -99          20          1E-20            0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met C2   BR/CO2 >
<END DEPTH DEPENDENT>
################################################
<COMMENT>
METABOLITE C2     M54
<END COMMENT>
<FLAGS>
 1   <kd_flag(0=direct 1=calc.)>
<END FLAGS>
<MOLMASS>
 362.4
<END MOLMASS>
<PLANT UPTAKE>
 0      <plant uptake factor>
<END PLANT UPTAKE>
<DEGRADATION>
<degrate    degtemp     q10         moist-abs   moist-rel   moist-exp  <rel deg in neq sites>
stoichiometric factor
  0.00E+00   20          2.58        0           100         0.7       0         1
<Met D2>
 0.0921738   20          2.58        0           100         0.7       0         1
<BR/CO2>
 0                <0 = degradation according to degradation factors, 1 = constant with
depth,2 individual,3 = degradation according to degradation factors, 4 = constant with
depth,5 individual, >2 deg in liquid phase only)
<END DEGRADATION>
<ADSORPTION>
<Koc-value    Fr.exp.Koc  pH          pKa     limit for Freundl.  ann.incr.> <k_doc> <%
change> KOC2      pH2    f_neq       kdes>
 7.96        0.92       -99          20          1E-20            0      0     1000    -99
-99     0     0
<END ADSORPTION>
<DEPTH DEPENDENT SORPTION AND TRANSFORMATION VALUES>
<Kd          Fr.exp.     Met D2   BR/CO2 >
```

```
<END DEPTH DEPENDENT>
<THE FOLLOWING SECTION IS USED BY THE SHELL ONLY NOT BY PELMO>
<FORMATION FRACTIONS ENTERED BY THE USER (0=NO,1=YES)>
 0
<END FORMATION FRACTIONS>
<END PSM>
```

Listing 8: Tier 1b – Representative FOCUS Summary Output File for PELMO 6.6.4, 45 g/ha to Spring Cereals at BBCH 21 (Scheme 2).

FOCUS Summary Output File

Model Version: FOCUSPELMO 6.6.4
Date of this simulation: 29/11/2022 12:14:39
Pesticide input file: TIER3b_PNXM54_SC45_BBCH21
Simulated crop: Spring cereals

PECgw for ACTIVE SUBSTANCE (PNX)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(12/5)	1.21E-13	447.700	0.000
Hamburg (H)	(9/10)	2.19E-15	648.800	0.000
Jokioinen (J)	(20/4)	7.18E-19	583.900	0.000
Kremsmünster (K)	(2/4)	1.45E-12	721.900	0.000
Okehampton (N)	(4/12)	4.47E-11	826.600	0.000
Porto (O)	(3/4)	2.67E-10	1860.90	0.000

PECgw for METABOLITE B1 (M2)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(13/18)	1.23E-05	333.000	0.000
Hamburg (H)	(18/9)	8.44E-04	634.700	0.000
Jokioinen (J)	(7/2)	0.0395090	553.300	0.005
Kremsmünster (K)	(12/6)	0.0084720	531.800	0.002
Okehampton (N)	(13/6)	0.0227820	1006.30	0.002
Porto (O)	(14/3)	0.0171870	1353.50	0.001

PECgw for METABOLITE C1 (M3)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(10/5)	0.5155000	633.500	0.081
Hamburg (H)	(14/10)	1.5705000	598.900	0.262
Jokioinen (J)	(10/19)	1.9753000	552.300	0.356
Kremsmünster (K)	(5/14)	2.3119000	691.800	0.331
Okehampton (N)	(7/18)	3.5620000	1083.80	0.328
Porto (O)	(5/17)	2.2941000	1435.40	0.160

PECgw for METABOLITE B2 (M52)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(12/1)	3.56E-06	397.100	0.000
Hamburg (H)	(10/15)	1.16E-04	448.100	0.000
Jokioinen (J)	(8/7)	0.0023910	682.100	0.000
Kremsmünster (K)	(13/11)	0.0022590	701.500	0.000
Okehampton (N)	(4/18)	0.0016650	778.100	0.000
Porto (O)	(4/14)	1.43E-04	1292.20	0.000

PECgw for METABOLITE C2 (M54)

Location	Selected Period	Flux (g/ha)	Percolate (L/m²)	Conc. (µg/L)
Châteaudun (C)	(12/5)	0.1121600	447.700	0.025

Hamburg (H)	(11/18)	0.4407000	451.100	0.098
Jokioinen (J)	(2/18)	1.0550000	612.400	0.173
Kremsmünster (K)	(3/5)	0.9392000	948.300	0.099
Okehampton (N)	(12/7)	1.2209000	1132.30	0.108
Porto (O)	(17/4)	0.8497000	1469.60	0.058

Listing 9: Tier 1a – Representative *.par file for Pinoxaden to M2 for MACRO 5.5.4 – 60 g/ha to Winter Cereals at BBCH 11 for the Châteaudun scenario

```
NUMERICAL LAYERS       200
GENERAL PARAMETERS
RUNID   1
NUMERICAL LAYERS       200
NHORIZON       6
NLAYER  200
*************************
******
PHYSICAL PARAMETERS
NHORIZONS      6
ALPHA   1      0.05
ALPHA   2      0.05
ALPHA   3      0.05
ALPHA   4      0.015
ALPHA   5      0.015
ALPHA   6      0.0107
ASCALE  1      10
ASCALE  2      75
ASCALE  3      75
ASCALE  4      1
ASCALE  5      1
ASCALE  6      4
CTEN    1      20
CTEN    2      20
CTEN    3      20
CTEN    4      40
CTEN    5      40
CTEN    6      30
GAMMA   1      1.3
GAMMA   2      1.41
GAMMA   3      1.41
GAMMA   4      1.37
GAMMA   5      1.37
GAMMA   6      1.41
KSATMIN 1      72
KSATMIN 2      108
KSATMIN 3      180
KSATMIN 4      43
KSATMIN 5      43
KSATMIN 6      33
KSM     1      0.25
KSM     2      0.5
KSM     3      1
KSM     4      1
KSM     5      1
KSM     6      3.25
N       1      1.07
N       2      1.09
N       3      1.09
N       4      1.14
N       5      1.14
N       6      1.19
RESID   1      0
RESID   2      0
RESID   3      0
RESID   4      0
RESID   5      0
RESID   6      0
STONE   1      0
STONE   2      0
STONE   3      0
STONE   4      0
STONE   5      0
STONE   6      0
TPORV   1      43
TPORV   2      44
TPORV   3      44
TPORV   4      44
TPORV   5      44
TPORV   6      49
TRAPAIR 1      0
TRAPAIR 2      0
TRAPAIR 3      0
TRAPAIR 4      0
TRAPAIR 5      0
TRAPAIR 6      0
WILT    1      25.8
WILT    2      23.7
WILT    3      23.7
WILT    4      18.8
WILT    5      18.8
WILT    6      15
XMPOR   1      41
XMPOR   2      43
XMPOR   3      43
XMPOR   4      43
XMPOR   5      43
XMPOR   6      47
ZA      1      1
ZA      2      1
ZA      3      1
ZA      4      1
ZA      5      1
ZA      6      1
ZM      1      -0.5
ZM      2      -0.5
ZM      3      1.5
ZM      4      -4
ZM      5      -4
ZM      6      -3.5
ZN      1      3
ZN      2      3
ZN      3      3
ZN      4      2
ZN      5      2
ZN      6      2
ZP      1      0
ZP      2      0
ZP      3      0
ZP      4      0
ZP      5      0
ZP      6      0
*************************
******
PROPERTIES
NHORIZONS      6
CLAY    1      30
CLAY    2      31
CLAY    3      25
CLAY    4      26
CLAY    5      24
CLAY    6      31
HTICK   1      25
HTICK   2      25
HTICK   3      10
HTICK   4      40
HTICK   5      20
HTICK   6      70
NLAYER  1      26
NLAYER  2      26
NLAYER  3      10
NLAYER  4      42
NLAYER  5      21
NLAYER  6      75
ORGC    1      1.39
ORGC    2      0.93
ORGC    3      0.7
ORGC    4      0.3
ORGC    5      0.3
ORGC    6      0.27
THICKNESS      1      25
THICKNESS      2      25
THICKNESS      3      10
THICKNESS      4      40
THICKNESS      5      20
THICKNESS      6      70
*************************
******
OPTIONS
AVERAGET       1
AVERAGEX       2
BOUNDARY       4
CHAPAR  0
CROP    2
CRUST   0
DEGKIN  0
DRIVING 0
EVAPORATE      1
INITIAL 1
IRRIGATE       1
KINETIC 0
MASSUNITS      2
METABOLITE     0
RAINFALL       1
SOLUTE  2
TEMPINI 0
TILEDRAIN      2
VARTENSION     0
*************************
******
SOLUTE PARAMETERS
CANDEG  0.2
CONC    0
DIFF    4.976852E-10
DV      5
EXPB    0.49
FCONVERT       0
FEXT    0
FRACEQ  0
FRACK   0
FRACMAC 0.02
FSTAR   0
PF1     2
PF2     0
SORPRATE       0
TREF    20
TRESP   0.0948
KOC     132.0584
ZMIX    1
NHORIZONS      6
AEXC    1      0
AEXC    2      0
AEXC    3      0
AEXC    4      0
AEXC    5      0
```

```
AEXC    6       0
DEGMAL  1       0.6027367
DEGMAL  2       0.3013684
DEGMAL  3       0.3013684
DEGMAL  4       0.180821
DEGMAL  5       0
DEGMAL  6       0
DEGMAS  1       0.6027367
DEGMAS  2       0.3013684
DEGMAS  3       0.3013684
DEGMAS  4       0.180821
DEGMAS  5       0
DEGMAS  6       0
DEGMIL  1       0.6027367
DEGMIL  2       0.3013684
DEGMIL  3       0.3013684
DEGMIL  4       0.180821
DEGMIL  5       0
DEGMIL  6       0
DEGMIS  1       0.6027367
DEGMIS  2       0.3013684
DEGMIS  3       0.3013684
DEGMIS  4       0.180821
DEGMIS  5       0
DEGMIS  6       0
FREUND  1       1.06
FREUND  2       1.06
FREUND  3       1.06
FREUND  4       1.06
FREUND  5       1.06
FREUND  6       1.06
ZKD     1       1.835612
ZKD     2       1.228143
ZKD     3       0.9244087
ZKD     4       0.3961752
ZKD     5       0.3961752
ZKD     6       0.3565577
*************************
******
CROP PARAMETERS
NCROPS  1
ATTEN   1       0.6
BETA    1       0.1
CANCAP  1       3
CFORM   1       2
CRITAIR 1       5
DFORM   1       0.2
FAWC    1       0.7800209
HCROP   1       0
HMAX    1       0
IDMAX   1       151
IDMAX2  1       0
IDSTART 1       299
IDSTART2        1       0
IHARV   1       196
IHARV2  1       0
LAIC    1       0
LAIHAR  1       2
LAIMAX  1       7.5
LAIMIN  1       0.1
NCROP   1       1
RI50    1       50
ROOTDEP 1       0
ROOTINIT        1       0.2
ROOTMAX 1       0.8
RPIN    1       60
RSMIN   1       0
RSURF   1       0
WATEN   1       50
VPD50   1       50
ZALP    1       1
ZDATEMIN        1       90
ZDATEMIN2       1       0
ZHMIN   1       0
*************************
******
SITE PARAMETERS
ALBEDO  0.25
ANNAMP  7.7
ANNTAV  11.9
DRAINDEP        0
DWRL    0
LAYERD  0
PHI     48.1
RAINCO  1
RGWFLOW 0
RINTEN  2
SNOWCO  1
SNOWMF  4.5
SPACE   0
ZMET    10
*************************
******
IRRIGATION PARAMETERS
IRRSAME True
CRITDEF -1
IRRYEARS        26
IRRYEAR 1
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 2
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 3
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 4
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 5
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 6
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 7
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 8
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 9
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 10
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 11
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 12
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 13
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
```

```
ZFINT   0
IRRYEAR 14
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 15
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 16
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 17
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 18
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 19
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 20
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 21
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 22
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 23
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 24
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 25
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
IRRYEAR 26
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   60000
ZFINT   0
************************
******
SETUP
DATEFILE
DRIVINGFILE
        C:\swash\macro\mac
ro999.bin
DRIVINGPERIOD  01-Jan-
1901-01-Jan-1927
ENDDATE 1927-01-01 00:00
OUTPUTFILE
        macro001.bin
METFILE
        C:\SWASH\macro\Mul
ti_GW\Pa3M2_ID001\bin\cdm6
et.BIN
METPERIOD       1901-01-01
00:00-1927-01-01 00:00
NUMLAYERS       0
OUTINTD 1
OUTINTM 0
PERIODFILE10    (none)
STARTDATE       1901-01-01
00:00
RAINFALLFILE
        C:\SWASH\macro\Mul
ti_GW\Pa3M2_ID001\bin\cdm6
p.BIN
TENSIONFILE     (none)
TOTPHYSLAYER    200
************************
******
TILLAGE PARAMETERS
CRUSTSTA        0
DUMMY   0
GAMMASEAL       0
GAMMATILL       0
HALFCRUS        0
HALFRAIN        0
KSMSEAL 0
KSMTILLE        0
MACDCH  0
MACPCH  0
NTILL   0
XMPORSEAL       0
ZNSEAL  0
************************
******
OUTPUTS
NSINGLE 81
RRNRAIN -1      0       X
ACCMELT -1      0       X
PWT     -1      0       X
INFILMI -1      0       X
INFILMA -1      0       X
CINFIL  -1      0       X
RAIN    -1      0       X
CETA    -1      0       T
EPOT    -1      0       T
CCEPOT  -1      0       T
CCETA   -1      0       T
TPRECIP -1      0       T
TTPRECIP        -1      0
        T
SSEEP   0       0       T
TSEEP   0       0       T
CRES    -1      0       T
SRUNOFF -1      0       T
WWW     -1      0       T
TRUNOFF -1      1       T
TFLOWOUT        -1      1
        T
TFLOW   -1      0       T
TSTOREMI        -1      1
        T
TSTOREMA        -1      1
        T
PRECIRR -1      0       T
PRECIRA -1      1       T
SEEPMI  0       0       T
SEEPMIAC        0       0
        T
PSOIL   -1      0       T
UPT     -1      0       T
CPSOIL  -1      0       T
CUPT    -1      0       T
ESOIL   -1      0       T
ETA     -1      0       T
WETACT  -1      0       T
CESOIL  -1      0       T
CETC    -1      0       T
CCET    -1      1       T
GSRAT   0       0       T
GSTOT   0       0       T
WATEREQ -1      0       T
```

```
BOTFLOW -1      0       G
DRAINCON        0       0
        G
TMAX    -1      0       G
TMIN    -1      0       G
SMICIN  -1      0       G
SMACIN  -1      0       G
GRCON   0       0       G
TAV     -1      0       G
GLOBAL  -1      0       G
TSOUT   -1      1       D
TSS     -1      0       D
SSS     -1      0       D
TSRUN   -1      1       D
TPAM    -1      1       D
TCAM    -1      1       D
TADMI   -1      1       D
TADMA   -1      1       D
TDEG    -1      1       D
TUPT    -1      1       D
SAMS    -1      0       D
CDEG    -1      0       D
DRAINLOS        0       0
        D
DSOLTOSS        0       0
        D
DSOLTMIC        0       0
        D
TSOLTMIC        0       0
        D
ELOSS   0       0       D
SSRAT   0       0       D
SSTOT   0       0       D
CFOUT   0       0       D
ACFOUT  0       0       D
TCOLLMA 0       0       D
TCOLLMI 0       0       D
CFDRAIN 0       0       D
ACFDRAIN        0       0
        D
TDEC    0       0       D
TIMMOB  0       0       D
GENERATE        0       0
        D
GSINK   -1      0       D
CFDRS   0       0       D
ACFDRS  0       0       D
PC      0       0       D
NLAYERED        49
THETA   -1      0       X
THETI   -1      0       X
THETT   -1      0       X
TMPOR   -1      0       X
CPSI    -1      0       X
ZUPTAKE -1      0       X
WOUT    -1      1       X
1       0       3176
2       0       3176
3       0       3176
4       0       3176
5       0       3176
6       0       3176
7       0       3176
8       0       3176
9       0       3176
10      0       3176
11      0       3176
12      0       3176
13      0       3176
14      0       3176
15      0       3176
16      0       3176
17      0       3176
18      0       3176
19      0       3176
20      0       3176
21      0       3176
22      0       3176
23      0       3176
24      0       3176
25      0       3176
26      0       3176
27      0       3176
28      0       3176
29      0       3176
30      0       3176
31      0       3176
32      0       3176
33      0       3176
34      0       3176
35      0       3176
36      0       3176
37      0       3176
38      0       3176
39      0       3176
40      0       3176
41      0       3176
42      0       3176
43      0       3176
44      0       3176
45      0       3176
46      0       3176
47      0       3176
48      0       3176
49      0       3176
50      0       3176
51      0       3176
52      0       3176
53      0       3176
54      0       3176
55      0       3176
56      0       3176
57      0       3176
58      0       3176
59      0       3176
60      0       3176
61      0       3176
62      0       3176
63      0       3176
64      0       3176
65      0       3176
66      0       3176
67      0       3176
68      0       3176
69      0       3176
70      0       3176
71      0       3176
72      0       3176
73      0       3176
74      0       3176
75      0       3176
76      0       3176
77      0       3176
78      0       3176
79      0       3176
80      0       3176
81      0       3176
82      0       3176
83      0       3176
84      0       3176
85      0       3176
86      0       3176
87      0       3176
88      0       3176
89      0       3176
90      0       3176
91      0       3176
92      0       3176
93      0       3176
94      0       3176
95      0       3176
96      0       3176
97      0       3176
98      0       3176
99      0       3176
100     0       3176
101     0       3176
102     0       3176
103     0       3176
104     1       3176
105     0       3176
106     0       3176
107     0       3176
108     0       3176
109     0       3176
110     0       3176
111     0       3176
112     0       3176
113     0       3176
114     0       3176
115     0       3176
116     0       3176
117     0       3176
118     0       3176
119     0       3176
120     0       3176
121     0       3176
122     0       3176
123     0       3176
124     0       3176
125     0       3176
126     0       3176
127     0       3176
128     0       3176
129     0       3176
130     0       3176
131     0       3176
132     0       3176
133     0       3176
134     0       3176
135     0       3176
136     0       3176
137     0       3176
138     0       3176
139     0       3176
140     0       3176
141     0       3176
142     0       3176
143     0       3176
144     0       3176
145     0       3176
146     0       3176
147     0       3176
148     0       3176
149     0       3176
150     0       3176
151     0       3176
152     0       3176
153     0       3176
154     0       3176
155     0       3176
156     0       3176
157     0       3176
```

```
158     0       3176
159     0       3176
160     0       3176
161     0       3176
162     0       3176
163     0       3176
164     0       3176
165     0       3176
166     0       3176
167     0       3176
168     0       3176
169     0       3176
170     0       3176
171     0       3176
172     0       3176
173     0       3176
174     0       3176
175     0       3176
176     0       3176
177     0       3176
178     0       3176
179     0       3176
180     0       3176
181     0       3176
182     0       3176
183     0       3176
184     0       3176
185     0       3176
186     0       3176
187     0       3176
188     0       3176
189     0       3176
190     0       3176
191     0       3176
192     0       3176
193     0       3176
194     0       3176
195     0       3176
196     0       3176
197     0       3176
198     0       3176
199     0       3176
200     0       3176
EXCHANGE        -1      0
        X
THETAMA -1      0       X
WFLOWOUT        -1      1
        X
1       0       3179
2       0       3179
3       0       3179
4       0       3179
5       0       3179
6       0       3179
7       0       3179
8       0       3179
9       0       3179
10      0       3179
11      0       3179
12      0       3179
13      0       3179
14      0       3179
15      0       3179
16      0       3179
17      0       3179
18      0       3179
19      0       3179
20      0       3179
21      0       3179
22      0       3179
23      0       3179
24      0       3179
25      0       3179
26      0       3179
27      0       3179
28      0       3179
29      0       3179
30      0       3179
31      0       3179
32      0       3179
33      0       3179
34      0       3179
35      0       3179
36      0       3179
37      0       3179
38      0       3179
39      0       3179
40      0       3179
41      0       3179
42      0       3179
43      0       3179
44      0       3179
45      0       3179
46      0       3179
47      0       3179
48      0       3179
49      0       3179
50      0       3179
51      0       3179
52      0       3179
53      0       3179
54      0       3179
55      0       3179
56      0       3179
57      0       3179
58      0       3179
59      0       3179
60      0       3179
61      0       3179
62      0       3179
63      0       3179
64      0       3179
65      0       3179
66      0       3179
67      0       3179
68      0       3179
69      0       3179
70      0       3179
71      0       3179
72      0       3179
73      0       3179
74      0       3179
75      0       3179
76      0       3179
77      0       3179
78      0       3179
79      0       3179
80      0       3179
81      0       3179
82      0       3179
83      0       3179
84      0       3179
85      0       3179
86      0       3179
87      0       3179
88      0       3179
89      0       3179
90      0       3179
91      0       3179
92      0       3179
93      0       3179
94      0       3179
95      0       3179
96      0       3179
97      0       3179
98      0       3179
99      0       3179
100     0       3179
101     0       3179
102     0       3179
103     0       3179
104     1       3179
105     0       3179
106     0       3179
107     0       3179
108     0       3179
109     0       3179
110     0       3179
111     0       3179
112     0       3179
113     0       3179
114     0       3179
115     0       3179
116     0       3179
117     0       3179
118     0       3179
119     0       3179
120     0       3179
121     0       3179
122     0       3179
123     0       3179
124     0       3179
125     0       3179
126     0       3179
127     0       3179
128     0       3179
129     0       3179
130     0       3179
131     0       3179
132     0       3179
133     0       3179
134     0       3179
135     0       3179
136     0       3179
137     0       3179
138     0       3179
139     0       3179
140     0       3179
141     0       3179
142     0       3179
143     0       3179
144     0       3179
145     0       3179
146     0       3179
147     0       3179
148     0       3179
149     0       3179
150     0       3179
151     0       3179
152     0       3179
153     0       3179
154     0       3179
155     0       3179
156     0       3179
157     0       3179
158     0       3179
159     0       3179
160     0       3179
161     0       3179
162     0       3179
163     0       3179
164     0       3179
165     0       3179
```

```
166     0       3179            29      0       3186            100     0       3186
167     0       3179            30      0       3186            101     0       3186
168     0       3179            31      0       3186            102     0       3186
169     0       3179            32      0       3186            103     0       3186
170     0       3179            33      0       3186            104     1       3186
171     0       3179            34      0       3186            105     0       3186
172     0       3179            35      0       3186            106     0       3186
173     0       3179            36      0       3186            107     0       3186
174     0       3179            37      0       3186            108     0       3186
175     0       3179            38      0       3186            109     0       3186
176     0       3179            39      0       3186            110     0       3186
177     0       3179            40      0       3186            111     0       3186
178     0       3179            41      0       3186            112     0       3186
179     0       3179            42      0       3186            113     0       3186
180     0       3179            43      0       3186            114     0       3186
181     0       3179            44      0       3186            115     0       3186
182     0       3179            45      0       3186            116     0       3186
183     0       3179            46      0       3186            117     0       3186
184     0       3179            47      0       3186            118     0       3186
185     0       3179            48      0       3186            119     0       3186
186     0       3179            49      0       3186            120     0       3186
187     0       3179            50      0       3186            121     0       3186
188     0       3179            51      0       3186            122     0       3186
189     0       3179            52      0       3186            123     0       3186
190     0       3179            53      0       3186            124     0       3186
191     0       3179            54      0       3186            125     0       3186
192     0       3179            55      0       3186            126     0       3186
193     0       3179            56      0       3186            127     0       3186
194     0       3179            57      0       3186            128     0       3186
195     0       3179            58      0       3186            129     0       3186
196     0       3179            59      0       3186            130     0       3186
197     0       3179            60      0       3186            131     0       3186
198     0       3179            61      0       3186            132     0       3186
199     0       3179            62      0       3186            133     0       3186
200     0       3179            63      0       3186            134     0       3186
DRAINFLO        -1      0       64      0       3186            135     0       3186
        X                       65      0       3186            136     0       3186
DRAINMI -1      0       X       66      0       3186            137     0       3186
THETAM  -1      0       X       67      0       3186            138     0       3186
TEMP    -1      0       G       68      0       3186            139     0       3186
SOLMIC  -1      0       G       69      0       3186            140     0       3186
SOLMAC  -1      0       G       70      0       3186            141     0       3186
SFLOW   -1      1       G       71      0       3186            142     0       3186
1       0       3186            72      0       3186            143     0       3186
2       0       3186            73      0       3186            144     0       3186
3       0       3186            74      0       3186            145     0       3186
4       0       3186            75      0       3186            146     0       3186
5       0       3186            76      0       3186            147     0       3186
6       0       3186            77      0       3186            148     0       3186
7       0       3186            78      0       3186            149     0       3186
8       0       3186            79      0       3186            150     0       3186
9       0       3186            80      0       3186            151     0       3186
10      0       3186            81      0       3186            152     0       3186
11      0       3186            82      0       3186            153     0       3186
12      0       3186            83      0       3186            154     0       3186
13      0       3186            84      0       3186            155     0       3186
14      0       3186            85      0       3186            156     0       3186
15      0       3186            86      0       3186            157     0       3186
16      0       3186            87      0       3186            158     0       3186
17      0       3186            88      0       3186            159     0       3186
18      0       3186            89      0       3186            160     0       3186
19      0       3186            90      0       3186            161     0       3186
20      0       3186            91      0       3186            162     0       3186
21      0       3186            92      0       3186            163     0       3186
22      0       3186            93      0       3186            164     0       3186
23      0       3186            94      0       3186            165     0       3186
24      0       3186            95      0       3186            166     0       3186
25      0       3186            96      0       3186            167     0       3186
26      0       3186            97      0       3186            168     0       3186
27      0       3186            98      0       3186            169     0       3186
28      0       3186            99      0       3186            170     0       3186
```

```
171     0       3186
172     0       3186
173     0       3186
174     0       3186
175     0       3186
176     0       3186
177     0       3186
178     0       3186
179     0       3186
180     0       3186
181     0       3186
182     0       3186
183     0       3186
184     0       3186
185     0       3186
186     0       3186
187     0       3186
188     0       3186
189     0       3186
190     0       3186
191     0       3186
192     0       3186
193     0       3186
194     0       3186
195     0       3186
196     0       3186
197     0       3186
198     0       3186
199     0       3186
200     0       3186
SFLOWOUT        -1      1
        G
1       0       3187
2       0       3187
3       0       3187
4       0       3187
5       0       3187
6       0       3187
7       0       3187
8       0       3187
9       0       3187
10      0       3187
11      0       3187
12      0       3187
13      0       3187
14      0       3187
15      0       3187
16      0       3187
17      0       3187
18      0       3187
19      0       3187
20      0       3187
21      0       3187
22      0       3187
23      0       3187
24      0       3187
25      0       3187
26      0       3187
27      0       3187
28      0       3187
29      0       3187
30      0       3187
31      0       3187
32      0       3187
33      0       3187
34      0       3187
35      0       3187
36      0       3187
37      0       3187
38      0       3187
39      0       3187
40      0       3187
41      0       3187
42      0       3187
43      0       3187
44      0       3187
45      0       3187
46      0       3187
47      0       3187
48      0       3187
49      0       3187
50      0       3187
51      0       3187
52      0       3187
53      0       3187
54      0       3187
55      0       3187
56      0       3187
57      0       3187
58      0       3187
59      0       3187
60      0       3187
61      0       3187
62      0       3187
63      0       3187
64      0       3187
65      0       3187
66      0       3187
67      0       3187
68      0       3187
69      0       3187
70      0       3187
71      0       3187
72      0       3187
73      0       3187
74      0       3187
75      0       3187
76      0       3187
77      0       3187
78      0       3187
79      0       3187
80      0       3187
81      0       3187
82      0       3187
83      0       3187
84      0       3187
85      0       3187
86      0       3187
87      0       3187
88      0       3187
89      0       3187
90      0       3187
91      0       3187
92      0       3187
93      0       3187
94      0       3187
95      0       3187
96      0       3187
97      0       3187
98      0       3187
99      0       3187
100     0       3187
101     0       3187
102     0       3187
103     0       3187
104     1       3187
105     0       3187
106     0       3187
107     0       3187
108     0       3187
109     0       3187
110     0       3187
111     0       3187
112     0       3187
113     0       3187
114     0       3187
115     0       3187
116     0       3187
117     0       3187
118     0       3187
119     0       3187
120     0       3187
121     0       3187
122     0       3187
123     0       3187
124     0       3187
125     0       3187
126     0       3187
127     0       3187
128     0       3187
129     0       3187
130     0       3187
131     0       3187
132     0       3187
133     0       3187
134     0       3187
135     0       3187
136     0       3187
137     0       3187
138     0       3187
139     0       3187
140     0       3187
141     0       3187
142     0       3187
143     0       3187
144     0       3187
145     0       3187
146     0       3187
147     0       3187
148     0       3187
149     0       3187
150     0       3187
151     0       3187
152     0       3187
153     0       3187
154     0       3187
155     0       3187
156     0       3187
157     0       3187
158     0       3187
159     0       3187
160     0       3187
161     0       3187
162     0       3187
163     0       3187
164     0       3187
165     0       3187
166     0       3187
167     0       3187
168     0       3187
169     0       3187
170     0       3187
171     0       3187
172     0       3187
173     0       3187
174     0       3187
175     0       3187
176     0       3187
177     0       3187
178     0       3187
179     0       3187
180     0       3187
181     0       3187
```

```
182     0       3187                SOLINIT 10      0                   SOLINIT 81      0
183     0       3187                SOLINIT 11      0                   SOLINIT 82      0
184     0       3187                SOLINIT 12      0                   SOLINIT 83      0
185     0       3187                SOLINIT 13      0                   SOLINIT 84      0
186     0       3187                SOLINIT 14      0                   SOLINIT 85      0
187     0       3187                SOLINIT 15      0                   SOLINIT 86      0
188     0       3187                SOLINIT 16      0                   SOLINIT 87      0
189     0       3187                SOLINIT 17      0                   SOLINIT 88      0
190     0       3187                SOLINIT 18      0                   SOLINIT 89      0
191     0       3187                SOLINIT 19      0                   SOLINIT 90      0
192     0       3187                SOLINIT 20      0                   SOLINIT 91      0
193     0       3187                SOLINIT 21      0                   SOLINIT 92      0
194     0       3187                SOLINIT 22      0                   SOLINIT 93      0
195     0       3187                SOLINIT 23      0                   SOLINIT 94      0
196     0       3187                SOLINIT 24      0                   SOLINIT 95      0
197     0       3187                SOLINIT 25      0                   SOLINIT 96      0
198     0       3187                SOLINIT 26      0                   SOLINIT 97      0
199     0       3187                SOLINIT 27      0                   SOLINIT 98      0
200     0       3187                SOLINIT 28      0                   SOLINIT 99      0
CEXCH   -1      0       D           SOLINIT 29      0                   SOLINIT 100     0
DEGMIC  -1      0       G           SOLINIT 30      0                   SOLINIT 101     0
DEGMAC  -1      0       G           SOLINIT 31      0                   SOLINIT 102     0
SOLIMOB -1      0       G           SOLINIT 32      0                   SOLINIT 103     0
PAM     -1      0       D           SOLINIT 33      0                   SOLINIT 104     0
CAM     -1      0       D           SOLINIT 34      0                   SOLINIT 105     0
ADMI    -1      0       D           SOLINIT 35      0                   SOLINIT 106     0
ADMA    -1      0       D           SOLINIT 36      0                   SOLINIT 107     0
PAMT    -1      0       D           SOLINIT 37      0                   SOLINIT 108     0
CAMT    -1      0       D           SOLINIT 38      0                   SOLINIT 109     0
PCAA    -1      0       D           SOLINIT 39      0                   SOLINIT 110     0
COLCMI  -1      0       D           SOLINIT 40      0                   SOLINIT 111     0
COLCMA  -1      0       D           SOLINIT 41      0                   SOLINIT 112     0
SFDMI   -1      0       D           SOLINIT 42      0                   SOLINIT 113     0
SFDMA   -1      0       D           SOLINIT 43      0                   SOLINIT 114     0
ZAM     -1      0       D           SOLINIT 44      0                   SOLINIT 115     0
SFSDMA  -1      0       D           SOLINIT 45      0                   SOLINIT 116     0
SFSDMI  -1      0       D           SOLINIT 46      0                   SOLINIT 117     0
GAMMA   -1      0       GP          SOLINIT 47      0                   SOLINIT 118     0
Z       -1      0       GP          SOLINIT 48      0                   SOLINIT 119     0
XMPOR   -1      0       GP          SOLINIT 49      0                   SOLINIT 120     0
ALPHA   -1      0       GP          SOLINIT 50      0                   SOLINIT 121     0
KSM     -1      0       GP          SOLINIT 51      0                   SOLINIT 122     0
ZN      -1      0       GP          SOLINIT 52      0                   SOLINIT 123     0
ASCALE  -1      0       GP          SOLINIT 53      0                   SOLINIT 124     0
TRAP_AIR        -1      0           SOLINIT 54      0                   SOLINIT 125     0
        GP                          SOLINIT 55      0                   SOLINIT 126     0
TSEXT   -1      0       GP          SOLINIT 56      0                   SOLINIT 127     0
KSATMIN -1      0       GP          SOLINIT 57      0                   SOLINIT 128     0
TPORV   -1      0       GP          SOLINIT 58      0                   SOLINIT 129     0
ADMI_KIN        -1      0           SOLINIT 59      0                   SOLINIT 130     0
        D                           SOLINIT 60      0                   SOLINIT 131     0
*************************           SOLINIT 61      0                   SOLINIT 132     0
******                              SOLINIT 62      0                   SOLINIT 133     0
BOUNDARY AND INITIAL                SOLINIT 63      0                   SOLINIT 134     0
CONDITIONS                          SOLINIT 64      0                   SOLINIT 135     0
AREA    0                           SOLINIT 65      0                   SOLINIT 136     0
BGRAD   0                           SOLINIT 66      0                   SOLINIT 137     0
BOTEN   1010                        SOLINIT 67      0                   SOLINIT 138     0
CONCIN  0                           SOLINIT 68      0                   SOLINIT 139     0
CONSTSTA        0                   SOLINIT 69      0                   SOLINIT 140     0
GWFLUX  0                           SOLINIT 70      0                   SOLINIT 141     0
IASCALE 0                           SOLINIT 71      0                   SOLINIT 142     0
SOLINIT 1       0                   SOLINIT 72      0                   SOLINIT 143     0
SOLINIT 2       0                   SOLINIT 73      0                   SOLINIT 144     0
SOLINIT 3       0                   SOLINIT 74      0                   SOLINIT 145     0
SOLINIT 4       0                   SOLINIT 75      0                   SOLINIT 146     0
SOLINIT 5       0                   SOLINIT 76      0                   SOLINIT 147     0
SOLINIT 6       0                   SOLINIT 77      0                   SOLINIT 148     0
SOLINIT 7       0                   SOLINIT 78      0                   SOLINIT 149     0
SOLINIT 8       0                   SOLINIT 79      0                   SOLINIT 150     0
SOLINIT 9       0                   SOLINIT 80      0                   SOLINIT 151     0
```

```
SOLINIT 152     0
SOLINIT 153     0
SOLINIT 154     0
SOLINIT 155     0
SOLINIT 156     0
SOLINIT 157     0
SOLINIT 158     0
SOLINIT 159     0
SOLINIT 160     0
SOLINIT 161     0
SOLINIT 162     0
SOLINIT 163     0
SOLINIT 164     0
SOLINIT 165     0
SOLINIT 166     0
SOLINIT 167     0
SOLINIT 168     0
SOLINIT 169     0
SOLINIT 170     0
SOLINIT 171     0
SOLINIT 172     0
SOLINIT 173     0
SOLINIT 174     0
SOLINIT 175     0
SOLINIT 176     0
SOLINIT 177     0
SOLINIT 178     0
SOLINIT 179     0
SOLINIT 180     0
SOLINIT 181     0
SOLINIT 182     0
SOLINIT 183     0
SOLINIT 184     0
SOLINIT 185     0
SOLINIT 186     0
SOLINIT 187     0
SOLINIT 188     0
SOLINIT 189     0
SOLINIT 190     0
SOLINIT 191     0
SOLINIT 192     0
SOLINIT 193     0
SOLINIT 194     0
SOLINIT 195     0
SOLINIT 196     0
SOLINIT 197     0
SOLINIT 198     0
SOLINIT 199     0
SOLINIT 200     0
TEMPINI 1       10
TEMPINI 2       10
TEMPINI 3       10
TEMPINI 4       10
TEMPINI 5       10
TEMPINI 6       10
TEMPINI 7       10
TEMPINI 8       10
TEMPINI 9       10
TEMPINI 10      10
TEMPINI 11      10
TEMPINI 12      10
TEMPINI 13      10
TEMPINI 14      10
TEMPINI 15      10
TEMPINI 16      10
TEMPINI 17      10
TEMPINI 18      10
TEMPINI 19      10
TEMPINI 20      10
TEMPINI 21      10
TEMPINI 22      10
TEMPINI 23      10
TEMPINI 24      10
TEMPINI 25      10
TEMPINI 26      10
TEMPINI 27      10
TEMPINI 28      10
TEMPINI 29      10
TEMPINI 30      10
TEMPINI 31      10
TEMPINI 32      10
TEMPINI 33      10
TEMPINI 34      10
TEMPINI 35      10
TEMPINI 36      10
TEMPINI 37      10
TEMPINI 38      10
TEMPINI 39      10
TEMPINI 40      10
TEMPINI 41      10
TEMPINI 42      10
TEMPINI 43      10
TEMPINI 44      10
TEMPINI 45      10
TEMPINI 46      10
TEMPINI 47      10
TEMPINI 48      10
TEMPINI 49      10
TEMPINI 50      10
TEMPINI 51      10
TEMPINI 52      10
TEMPINI 53      10
TEMPINI 54      10
TEMPINI 55      10
TEMPINI 56      10
TEMPINI 57      10
TEMPINI 58      10
TEMPINI 59      10
TEMPINI 60      10
TEMPINI 61      10
TEMPINI 62      10
TEMPINI 63      10
TEMPINI 64      10
TEMPINI 65      10
TEMPINI 66      10
TEMPINI 67      10
TEMPINI 68      10
TEMPINI 69      10
TEMPINI 70      10
TEMPINI 71      10
TEMPINI 72      10
TEMPINI 73      10
TEMPINI 74      10
TEMPINI 75      10
TEMPINI 76      10
TEMPINI 77      10
TEMPINI 78      10
TEMPINI 79      10
TEMPINI 80      10
TEMPINI 81      10
TEMPINI 82      10
TEMPINI 83      10
TEMPINI 84      10
TEMPINI 85      10
TEMPINI 86      10
TEMPINI 87      10
TEMPINI 88      10
TEMPINI 89      10
TEMPINI 90      10
TEMPINI 91      10
TEMPINI 92      10
TEMPINI 93      10
TEMPINI 94      10
TEMPINI 95      10
TEMPINI 96      10
TEMPINI 97      10
TEMPINI 98      10
TEMPINI 99      10
TEMPINI 100     10
TEMPINI 101     10
TEMPINI 102     10
TEMPINI 103     10
TEMPINI 104     10
TEMPINI 105     10
TEMPINI 106     10
TEMPINI 107     10
TEMPINI 108     10
TEMPINI 109     10
TEMPINI 110     10
TEMPINI 111     10
TEMPINI 112     10
TEMPINI 113     10
TEMPINI 114     10
TEMPINI 115     10
TEMPINI 116     10
TEMPINI 117     10
TEMPINI 118     10
TEMPINI 119     10
TEMPINI 120     10
TEMPINI 121     10
TEMPINI 122     10
TEMPINI 123     10
TEMPINI 124     10
TEMPINI 125     10
TEMPINI 126     10
TEMPINI 127     10
TEMPINI 128     10
TEMPINI 129     10
TEMPINI 130     10
TEMPINI 131     10
TEMPINI 132     10
TEMPINI 133     10
TEMPINI 134     10
TEMPINI 135     10
TEMPINI 136     10
TEMPINI 137     10
TEMPINI 138     10
TEMPINI 139     10
TEMPINI 140     10
TEMPINI 141     10
TEMPINI 142     10
TEMPINI 143     10
TEMPINI 144     10
TEMPINI 145     10
TEMPINI 146     10
TEMPINI 147     10
TEMPINI 148     10
TEMPINI 149     10
TEMPINI 150     10
TEMPINI 151     10
TEMPINI 152     10
TEMPINI 153     10
TEMPINI 154     10
TEMPINI 155     10
TEMPINI 156     10
TEMPINI 157     10
TEMPINI 158     10
TEMPINI 159     10
TEMPINI 160     10
TEMPINI 161     10
TEMPINI 162     10
TEMPINI 163     10
TEMPINI 164     10
```

```
TEMPINI 165    10              THETAINI      36     0          THETAINI      107    0
TEMPINI 166    10              THETAINI      37     0          THETAINI      108    0
TEMPINI 167    10              THETAINI      38     0          THETAINI      109    0
TEMPINI 168    10              THETAINI      39     0          THETAINI      110    0
TEMPINI 169    10              THETAINI      40     0          THETAINI      111    0
TEMPINI 170    10              THETAINI      41     0          THETAINI      112    0
TEMPINI 171    10              THETAINI      42     0          THETAINI      113    0
TEMPINI 172    10              THETAINI      43     0          THETAINI      114    0
TEMPINI 173    10              THETAINI      44     0          THETAINI      115    0
TEMPINI 174    10              THETAINI      45     0          THETAINI      116    0
TEMPINI 175    10              THETAINI      46     0          THETAINI      117    0
TEMPINI 176    10              THETAINI      47     0          THETAINI      118    0
TEMPINI 177    10              THETAINI      48     0          THETAINI      119    0
TEMPINI 178    10              THETAINI      49     0          THETAINI      120    0
TEMPINI 179    10              THETAINI      50     0          THETAINI      121    0
TEMPINI 180    10              THETAINI      51     0          THETAINI      122    0
TEMPINI 181    10              THETAINI      52     0          THETAINI      123    0
TEMPINI 182    10              THETAINI      53     0          THETAINI      124    0
TEMPINI 183    10              THETAINI      54     0          THETAINI      125    0
TEMPINI 184    10              THETAINI      55     0          THETAINI      126    0
TEMPINI 185    10              THETAINI      56     0          THETAINI      127    0
TEMPINI 186    10              THETAINI      57     0          THETAINI      128    0
TEMPINI 187    10              THETAINI      58     0          THETAINI      129    0
TEMPINI 188    10              THETAINI      59     0          THETAINI      130    0
TEMPINI 189    10              THETAINI      60     0          THETAINI      131    0
TEMPINI 190    10              THETAINI      61     0          THETAINI      132    0
TEMPINI 191    10              THETAINI      62     0          THETAINI      133    0
TEMPINI 192    10              THETAINI      63     0          THETAINI      134    0
TEMPINI 193    10              THETAINI      64     0          THETAINI      135    0
TEMPINI 194    10              THETAINI      65     0          THETAINI      136    0
TEMPINI 195    10              THETAINI      66     0          THETAINI      137    0
TEMPINI 196    10              THETAINI      67     0          THETAINI      138    0
TEMPINI 197    10              THETAINI      68     0          THETAINI      139    0
TEMPINI 198    10              THETAINI      69     0          THETAINI      140    0
TEMPINI 199    10              THETAINI      70     0          THETAINI      141    0
TEMPINI 200    10              THETAINI      71     0          THETAINI      142    0
THETAINI       1      0        THETAINI      72     0          THETAINI      143    0
THETAINI       2      0        THETAINI      73     0          THETAINI      144    0
THETAINI       3      0        THETAINI      74     0          THETAINI      145    0
THETAINI       4      0        THETAINI      75     0          THETAINI      146    0
THETAINI       5      0        THETAINI      76     0          THETAINI      147    0
THETAINI       6      0        THETAINI      77     0          THETAINI      148    0
THETAINI       7      0        THETAINI      78     0          THETAINI      149    0
THETAINI       8      0        THETAINI      79     0          THETAINI      150    0
THETAINI       9      0        THETAINI      80     0          THETAINI      151    0
THETAINI       10     0        THETAINI      81     0          THETAINI      152    0
THETAINI       11     0        THETAINI      82     0          THETAINI      153    0
THETAINI       12     0        THETAINI      83     0          THETAINI      154    0
THETAINI       13     0        THETAINI      84     0          THETAINI      155    0
THETAINI       14     0        THETAINI      85     0          THETAINI      156    0
THETAINI       15     0        THETAINI      86     0          THETAINI      157    0
THETAINI       16     0        THETAINI      87     0          THETAINI      158    0
THETAINI       17     0        THETAINI      88     0          THETAINI      159    0
THETAINI       18     0        THETAINI      89     0          THETAINI      160    0
THETAINI       19     0        THETAINI      90     0          THETAINI      161    0
THETAINI       20     0        THETAINI      91     0          THETAINI      162    0
THETAINI       21     0        THETAINI      92     0          THETAINI      163    0
THETAINI       22     0        THETAINI      93     0          THETAINI      164    0
THETAINI       23     0        THETAINI      94     0          THETAINI      165    0
THETAINI       24     0        THETAINI      95     0          THETAINI      166    0
THETAINI       25     0        THETAINI      96     0          THETAINI      167    0
THETAINI       26     0        THETAINI      97     0          THETAINI      168    0
THETAINI       27     0        THETAINI      98     0          THETAINI      169    0
THETAINI       28     0        THETAINI      99     0          THETAINI      170    0
THETAINI       29     0        THETAINI      100    0          THETAINI      171    0
THETAINI       30     0        THETAINI      101    0          THETAINI      172    0
THETAINI       31     0        THETAINI      102    0          THETAINI      173    0
THETAINI       32     0        THETAINI      103    0          THETAINI      174    0
THETAINI       33     0        THETAINI      104    0          THETAINI      175    0
THETAINI       34     0        THETAINI      105    0          THETAINI      176    0
THETAINI       35     0        THETAINI      106    0          THETAINI      177    0
```

```
THETAINI       178     0          THETAINI       194     0          Scenario : Chateaudun
THETAINI       179     0          THETAINI       195     0          Groundwater
THETAINI       180     0          THETAINI       196     0
THETAINI       181     0          THETAINI       197     0          Simulation from 19010101
THETAINI       182     0          THETAINI       198     0          to 19270101, application
THETAINI       183     0          THETAINI       199     0          every year
THETAINI       184     0          THETAINI       200     0          (6 year warm-up)
THETAINI       185     0          *************
THETAINI       186     0          INFORMATION                       Crop : Cereals, winter,
THETAINI       187     0          MACRO in FOCUS Version            irrigated
THETAINI       188     0          5.5.4
THETAINI       189     0          Output File =                     Number of applications : 1
THETAINI       190     0          C:\SWASH\macro\Multi_GW\Pa
THETAINI       191     0          3M2_ID001\macro001.bin            Application 1 : 60 g/ha of
THETAINI       192     0          Type of compound = parent         Pa3M2 on day 96
THETAINI       193     0          Compound : Pa3M2
```

Listing 10: Tier 1a – Representative *.par file for M2 (metabolite) for MACRO 5.5.4 – 60 g/ha to Spring Cereals at BBCH 11 for Châteaudun scenario

```
NUMERICAL LAYERS       200
GENERAL PARAMETERS
RUNID   3
NUMERICAL LAYERS       200
NHORIZON       6
NLAYER  200
*************************
******
PHYSICAL PARAMETERS
NHORIZONS      6
ALPHA   1      0.05
ALPHA   2      0.05
ALPHA   3      0.05
ALPHA   4      0.015
ALPHA   5      0.015
ALPHA   6      0.0107
ASCALE  1      10
ASCALE  2      75
ASCALE  3      75
ASCALE  4      1
ASCALE  5      1
ASCALE  6      4
CTEN    1      20
CTEN    2      20
CTEN    3      20
CTEN    4      40
CTEN    5      40
CTEN    6      30
GAMMA   1      1.3
GAMMA   2      1.41
GAMMA   3      1.41
GAMMA   4      1.37
GAMMA   5      1.37
GAMMA   6      1.41
KSATMIN 1      72
KSATMIN 2      108
KSATMIN 3      180
KSATMIN 4      43
KSATMIN 5      43
KSATMIN 6      33
KSM     1      0.25
KSM     2      0.5
KSM     3      1
KSM     4      1
KSM     5      1
KSM     6      3.25
N       1      1.07
N       2      1.09
N       3      1.09
N       4      1.14
N       5      1.14
N       6      1.19
RESID   1      0
RESID   2      0
RESID   3      0
RESID   4      0
RESID   5      0
RESID   6      0
STONE   1      0
STONE   2      0
STONE   3      0
STONE   4      0
STONE   5      0
STONE   6      0
TPORV   1      43
TPORV   2      44
TPORV   3      44
TPORV   4      44
TPORV   5      44
TPORV   6      49
TRAPAIR 1      0
TRAPAIR 2      0
TRAPAIR 3      0
TRAPAIR 4      0
TRAPAIR 5      0
TRAPAIR 6      0
WILT    1      25.8
WILT    2      23.7
WILT    3      23.7
WILT    4      18.8
WILT    5      18.8
WILT    6      15
XMPOR   1      41
XMPOR   2      43
XMPOR   3      43
XMPOR   4      43
XMPOR   5      43
XMPOR   6      47
ZA      1      1
ZA      2      1
ZA      3      1
ZA      4      1
ZA      5      1
ZA      6      1
ZM      1      -0.5
ZM      2      -0.5
ZM      3      1.5
ZM      4      -4
ZM      5      -4
ZM      6      -3.5
ZN      1      3
ZN      2      3
ZN      3      3
ZN      4      2
ZN      5      2
ZN      6      2
ZP      1      0
ZP      2      0
ZP      3      0
ZP      4      0
ZP      5      0
ZP      6      0
*************************
******
PROPERTIES
NHORIZONS      6
CLAY    1      30
CLAY    2      31
CLAY    3      25
CLAY    4      26
CLAY    5      24
CLAY    6      31
HTICK   1      25
HTICK   2      25
HTICK   3      10
HTICK   4      40
HTICK   5      20
HTICK   6      70
NLAYER  1      26
NLAYER  2      26
NLAYER  3      10
NLAYER  4      42
NLAYER  5      21
NLAYER  6      75
ORGC    1      1.39
ORGC    2      0.93
ORGC    3      0.7
ORGC    4      0.3
ORGC    5      0.3
ORGC    6      0.27
THICKNESS      1      25
THICKNESS      2      25
THICKNESS      3      10
THICKNESS      4      40
THICKNESS      5      20
THICKNESS      6      70
*************************
******
OPTIONS
AVERAGET       1
AVERAGEX       2
BOUNDARY       4
CHAPAR  0
CROP    2
CRUST   0
DEGKIN  0
DRIVING 1
EVAPORATE      1
INITIAL 1
IRRIGATE       1
KINETIC 0
MASSUNITS      2
METABOLITE     0
RAINFALL       1
SOLUTE  2
TEMPINI 0
TILEDRAIN      2
VARTENSION     0
*************************
******
SOLUTE PARAMETERS
CANDEG  0
CONC    0
DIFF    4.976852E-10
DV      5
EXPB    0.49
FCONVERT       0.3697259
FEXT    0
FRACEQ  0
FRACK   0
FRACMAC 0.02
FSTAR   0
PF1     2
PF2     0
SORPRATE       0
TREF    20
TRESP   0.0948
KOC     1.539532
ZMIX    1
NHORIZONS      6
AEXC    1      0
AEXC    2      0
AEXC    3      0
AEXC    4      0
AEXC    5      0
AEXC    6      0
DEGMAL  1      0.2044682
DEGMAL  2      0.1022341
```

```
DEGMAL  3       0.1022341
DEGMAL  4       0.06134046
DEGMAL  5       0
DEGMAL  6       0
DEGMAS  1       0.2044682
DEGMAS  2       0.1022341
DEGMAS  3       0.1022341
DEGMAS  4       0.06134046
DEGMAS  5       0
DEGMAS  6       0
DEGMIL  1       0.2044682
DEGMIL  2       0.1022341
DEGMIL  3       0.1022341
DEGMIL  4       0.06134046
DEGMIL  5       0
DEGMIL  6       0
DEGMIS  1       0.2044682
DEGMIS  2       0.1022341
DEGMIS  3       0.1022341
DEGMIS  4       0.06134046
DEGMIS  5       0
DEGMIS  6       0
FREUND  1       1.01
FREUND  2       1.01
FREUND  3       1.01
FREUND  4       1.01
FREUND  5       1.01
FREUND  6       1.01
ZKD     1       0.02139949
ZKD     2       0.01431765
ZKD     3       0.01077672
ZKD     4       0.004618596
ZKD     5       0.004618596
ZKD     6       0.004156736
*************************
******
CROP PARAMETERS
NCROPS  1
ATTEN   1       0.6
BETA    1       0.2
CANCAP  1       2
CFORM   1       2
CRITAIR 1       5
DFORM   1       0.3
FAWC    1       0.6536142
HCROP   1       0
HMAX    1       0
IDMAX   1       161
IDMAX2  1       0
IDSTART 1       69
IDSTART2        1       0
IHARV   1       201
IHARV2  1       0
LAIC    1       0
LAIHAR  1       2
LAIMAX  1       5
LAIMIN  1       0.01
NCROP   1       1
RI50    1       50
ROOTDEP 1       0
ROOTINIT        1
        0.01
ROOTMAX 1       0.6
RPIN    1       60
RSMIN   1       0
RSURF   1       0
WATEN   1       20
VPD50   1       50
ZALP    1       1
ZDATEMIN        1       70
ZDATEMIN2       1       0
ZHMIN   1       0
*************************
******
SITE PARAMETERS
ALBEDO  0.25
ANNAMP  7.7
ANNTAV  11.9
DRAINDEP        0
DWRL    0
LAYERD  0
PHI     48.1
RAINCO  1
RGWFLOW 0
RINTEN  2
SNOWCO  1
SNOWMF  4.5
SPACE   0
ZMET    10
*************************
******
IRRIGATION PARAMETERS
IRRSAME True
CRITDEF -1
IRRYEARS        26
IRRYEAR 1
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 2
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 3
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 4
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 5
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 6
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 7
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 8
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 9
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 10
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 11
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 12
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 13
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  72
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 14
```

```
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 15
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 16
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 17
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 18
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 19
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 20
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 21
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 22
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 23
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 24
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 25
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 26
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  72
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
************************
******
SETUP
DATEFILE
DRIVINGFILE
       macro002.bin
DRIVINGPERIOD  01/01/1901-
01/01/1927
ENDDATE 1927-01-01 00:00
OUTPUTFILE
       macro003.bin
METFILE
       C:\SWASH\macro\Mul
ti_GW\M2_3a_ID003\bin\ckm6
et.BIN
METPERIOD      1901-01-01
00:00-1927-01-01 00:00
NUMLAYERS      0
OUTINTD 1
OUTINTM 0
PERIODFILE10   (none)
STARTDATE      1901-01-01
00:00
RAINFALLFILE
       C:\SWASH\macro\Mul
ti_GW\M2_3a_ID003\bin\ckm6
p.BIN
TENSIONFILE    (none)
TOTPHYSLAYER   200
************************
******
TILLAGE PARAMETERS
CRUSTSTA       0
DUMMY   0
GAMMASEAL      0
GAMMATILL      0
HALFCRUS       0
HALFRAIN       0
KSMSEAL 0
KSMTILLE       0
MACDCH  0
MACPCH  0
NTILL   0
XMPORSEAL      0
ZNSEAL  0
************************
******
OUTPUTS
NSINGLE 81
RRNRAIN -1      0       X
ACCMELT -1      0       X
PWT     -1      0       X
INFILMI -1      0       X
INFILMA -1      0       X
CINFIL  -1      0       X
RAIN    -1      0       X
CETA    -1      0       T
EPOT    -1      0       T
CCEPOT  -1      0       T
CCETA   -1      0       T
TPRECIP -1      0       T
TTPRECIP       -1      0
       T
SSEEP   0       0       T
TSEEP   0       0       T
CRES    -1      0       T
SRUNOFF -1      0       T
WWW     -1      0       T
TRUNOFF -1      1       T
TFLOWOUT       -1      1
       T
TFLOW   -1      0       T
TSTOREMI       -1      1
       T
TSTOREMA       -1      1
       T
PRECIRR -1      0       T
PRECIRA -1      1       T
SEEPMI  0       0       T
SEEPMIAC       0       0
       T
PSOIL   -1      0       T
UPT     -1      0       T
CPSOIL  -1      0       T
CUPT    -1      0       T
ESOIL   -1      0       T
ETA     -1      0       T
WETACT  -1      0       T
CESOIL  -1      0       T
CETC    -1      0       T
CCET    -1      1       T
GSRAT   0       0       T
GSTOT   0       0       T
WATEREQ -1      0       T
BOTFLOW -1      0       G
```

```
DRAINCON       0      0          17     0      3323           88     0      3323
       G                         18     0      3323           89     0      3323
TMAX   -1      0      G          19     0      3323           90     0      3323
TMIN   -1      0      G          20     0      3323           91     0      3323
SMICIN -1      0      G          21     0      3323           92     0      3323
SMACIN -1      0      G          22     0      3323           93     0      3323
GRCON  0       0      G          23     0      3323           94     0      3323
TAV    -1      0      G          24     0      3323           95     0      3323
GLOBAL -1      0      G          25     0      3323           96     0      3323
TSOUT  -1      1      D          26     0      3323           97     0      3323
TSS    -1      0      D          27     0      3323           98     0      3323
SSS    -1      0      D          28     0      3323           99     0      3323
TSRUN  -1      1      D          29     0      3323           100    0      3323
TPAM   -1      1      D          30     0      3323           101    0      3323
TCAM   -1      1      D          31     0      3323           102    0      3323
TADMI  -1      1      D          32     0      3323           103    0      3323
TADMA  -1      1      D          33     0      3323           104    1      3323
TDEG   -1      1      D          34     0      3323           105    0      3323
TUPT   -1      1      D          35     0      3323           106    0      3323
SAMS   -1      0      D          36     0      3323           107    0      3323
CDEG   -1      0      D          37     0      3323           108    0      3323
DRAINLOS       0      0          38     0      3323           109    0      3323
       D                         39     0      3323           110    0      3323
DSOLTOSS       0      0          40     0      3323           111    0      3323
       D                         41     0      3323           112    0      3323
DSOLTMIC       0      0          42     0      3323           113    0      3323
       D                         43     0      3323           114    0      3323
TSOLTMIC       0      0          44     0      3323           115    0      3323
       D                         45     0      3323           116    0      3323
ELOSS  0       0      D          46     0      3323           117    0      3323
SSRAT  0       0      D          47     0      3323           118    0      3323
SSTOT  0       0      D          48     0      3323           119    0      3323
CFOUT  0       0      D          49     0      3323           120    0      3323
ACFOUT 0       0      D          50     0      3323           121    0      3323
TCOLLMA 0      0      D          51     0      3323           122    0      3323
TCOLLMI 0      0      D          52     0      3323           123    0      3323
CFDRAIN 0      0      D          53     0      3323           124    0      3323
ACFDRAIN       0      0          54     0      3323           125    0      3323
       D                         55     0      3323           126    0      3323
TDEC   0       0      D          56     0      3323           127    0      3323
TIMMOB 0       0      D          57     0      3323           128    0      3323
GENERATE       0      0          58     0      3323           129    0      3323
       D                         59     0      3323           130    0      3323
GSINK  -1      0      D          60     0      3323           131    0      3323
CFDRS  0       0      D          61     0      3323           132    0      3323
ACFDRS 0       0      D          62     0      3323           133    0      3323
PC     0       0      D          63     0      3323           134    0      3323
NLAYERED       49                64     0      3323           135    0      3323
THETA  -1      0      X          65     0      3323           136    0      3323
THETI  -1      0      X          66     0      3323           137    0      3323
THETT  -1      0      X          67     0      3323           138    0      3323
TMPOR  -1      0      X          68     0      3323           139    0      3323
CPSI   -1      0      X          69     0      3323           140    0      3323
ZUPTAKE -1     0      X          70     0      3323           141    0      3323
WOUT   -1      1      X          71     0      3323           142    0      3323
1      0       3323              72     0      3323           143    0      3323
2      0       3323              73     0      3323           144    0      3323
3      0       3323              74     0      3323           145    0      3323
4      0       3323              75     0      3323           146    0      3323
5      0       3323              76     0      3323           147    0      3323
6      0       3323              77     0      3323           148    0      3323
7      0       3323              78     0      3323           149    0      3323
8      0       3323              79     0      3323           150    0      3323
9      0       3323              80     0      3323           151    0      3323
10     0       3323              81     0      3323           152    0      3323
11     0       3323              82     0      3323           153    0      3323
12     0       3323              83     0      3323           154    0      3323
13     0       3323              84     0      3323           155    0      3323
14     0       3323              85     0      3323           156    0      3323
15     0       3323              86     0      3323           157    0      3323
16     0       3323              87     0      3323           158    0      3323
```

```
159     0       3323                25      0       3326                96      0       3326
160     0       3323                26      0       3326                97      0       3326
161     0       3323                27      0       3326                98      0       3326
162     0       3323                28      0       3326                99      0       3326
163     0       3323                29      0       3326                100     0       3326
164     0       3323                30      0       3326                101     0       3326
165     0       3323                31      0       3326                102     0       3326
166     0       3323                32      0       3326                103     0       3326
167     0       3323                33      0       3326                104     1       3326
168     0       3323                34      0       3326                105     0       3326
169     0       3323                35      0       3326                106     0       3326
170     0       3323                36      0       3326                107     0       3326
171     0       3323                37      0       3326                108     0       3326
172     0       3323                38      0       3326                109     0       3326
173     0       3323                39      0       3326                110     0       3326
174     0       3323                40      0       3326                111     0       3326
175     0       3323                41      0       3326                112     0       3326
176     0       3323                42      0       3326                113     0       3326
177     0       3323                43      0       3326                114     0       3326
178     0       3323                44      0       3326                115     0       3326
179     0       3323                45      0       3326                116     0       3326
180     0       3323                46      0       3326                117     0       3326
181     0       3323                47      0       3326                118     0       3326
182     0       3323                48      0       3326                119     0       3326
183     0       3323                49      0       3326                120     0       3326
184     0       3323                50      0       3326                121     0       3326
185     0       3323                51      0       3326                122     0       3326
186     0       3323                52      0       3326                123     0       3326
187     0       3323                53      0       3326                124     0       3326
188     0       3323                54      0       3326                125     0       3326
189     0       3323                55      0       3326                126     0       3326
190     0       3323                56      0       3326                127     0       3326
191     0       3323                57      0       3326                128     0       3326
192     0       3323                58      0       3326                129     0       3326
193     0       3323                59      0       3326                130     0       3326
194     0       3323                60      0       3326                131     0       3326
195     0       3323                61      0       3326                132     0       3326
196     0       3323                62      0       3326                133     0       3326
197     0       3323                63      0       3326                134     0       3326
198     0       3323                64      0       3326                135     0       3326
199     0       3323                65      0       3326                136     0       3326
200     0       3323                66      0       3326                137     0       3326
EXCHANGE        -1      0           67      0       3326                138     0       3326
        X                           68      0       3326                139     0       3326
THETAMA -1      0       X           69      0       3326                140     0       3326
WFLOWOUT        -1      1           70      0       3326                141     0       3326
        X                           71      0       3326                142     0       3326
1       0       3326                72      0       3326                143     0       3326
2       0       3326                73      0       3326                144     0       3326
3       0       3326                74      0       3326                145     0       3326
4       0       3326                75      0       3326                146     0       3326
5       0       3326                76      0       3326                147     0       3326
6       0       3326                77      0       3326                148     0       3326
7       0       3326                78      0       3326                149     0       3326
8       0       3326                79      0       3326                150     0       3326
9       0       3326                80      0       3326                151     0       3326
10      0       3326                81      0       3326                152     0       3326
11      0       3326                82      0       3326                153     0       3326
12      0       3326                83      0       3326                154     0       3326
13      0       3326                84      0       3326                155     0       3326
14      0       3326                85      0       3326                156     0       3326
15      0       3326                86      0       3326                157     0       3326
16      0       3326                87      0       3326                158     0       3326
17      0       3326                88      0       3326                159     0       3326
18      0       3326                89      0       3326                160     0       3326
19      0       3326                90      0       3326                161     0       3326
20      0       3326                91      0       3326                162     0       3326
21      0       3326                92      0       3326                163     0       3326
22      0       3326                93      0       3326                164     0       3326
23      0       3326                94      0       3326                165     0       3326
24      0       3326                95      0       3326                166     0       3326
```

```
167     0       3326                30      0       3333                101     0       3333
168     0       3326                31      0       3333                102     0       3333
169     0       3326                32      0       3333                103     0       3333
170     0       3326                33      0       3333                104     1       3333
171     0       3326                34      0       3333                105     0       3333
172     0       3326                35      0       3333                106     0       3333
173     0       3326                36      0       3333                107     0       3333
174     0       3326                37      0       3333                108     0       3333
175     0       3326                38      0       3333                109     0       3333
176     0       3326                39      0       3333                110     0       3333
177     0       3326                40      0       3333                111     0       3333
178     0       3326                41      0       3333                112     0       3333
179     0       3326                42      0       3333                113     0       3333
180     0       3326                43      0       3333                114     0       3333
181     0       3326                44      0       3333                115     0       3333
182     0       3326                45      0       3333                116     0       3333
183     0       3326                46      0       3333                117     0       3333
184     0       3326                47      0       3333                118     0       3333
185     0       3326                48      0       3333                119     0       3333
186     0       3326                49      0       3333                120     0       3333
187     0       3326                50      0       3333                121     0       3333
188     0       3326                51      0       3333                122     0       3333
189     0       3326                52      0       3333                123     0       3333
190     0       3326                53      0       3333                124     0       3333
191     0       3326                54      0       3333                125     0       3333
192     0       3326                55      0       3333                126     0       3333
193     0       3326                56      0       3333                127     0       3333
194     0       3326                57      0       3333                128     0       3333
195     0       3326                58      0       3333                129     0       3333
196     0       3326                59      0       3333                130     0       3333
197     0       3326                60      0       3333                131     0       3333
198     0       3326                61      0       3333                132     0       3333
199     0       3326                62      0       3333                133     0       3333
200     0       3326                63      0       3333                134     0       3333
DRAINFLO        -1      0           64      0       3333                135     0       3333
        X                           65      0       3333                136     0       3333
DRAINMI -1      0       X           66      0       3333                137     0       3333
THETAM  -1      0       X           67      0       3333                138     0       3333
TEMP    -1      0       G           68      0       3333                139     0       3333
SOLMIC  -1      0       G           69      0       3333                140     0       3333
SOLMAC  -1      0       G           70      0       3333                141     0       3333
SFLOW   -1      1       G           71      0       3333                142     0       3333
1       0       3333                72      0       3333                143     0       3333
2       0       3333                73      0       3333                144     0       3333
3       0       3333                74      0       3333                145     0       3333
4       0       3333                75      0       3333                146     0       3333
5       0       3333                76      0       3333                147     0       3333
6       0       3333                77      0       3333                148     0       3333
7       0       3333                78      0       3333                149     0       3333
8       0       3333                79      0       3333                150     0       3333
9       0       3333                80      0       3333                151     0       3333
10      0       3333                81      0       3333                152     0       3333
11      0       3333                82      0       3333                153     0       3333
12      0       3333                83      0       3333                154     0       3333
13      0       3333                84      0       3333                155     0       3333
14      0       3333                85      0       3333                156     0       3333
15      0       3333                86      0       3333                157     0       3333
16      0       3333                87      0       3333                158     0       3333
17      0       3333                88      0       3333                159     0       3333
18      0       3333                89      0       3333                160     0       3333
19      0       3333                90      0       3333                161     0       3333
20      0       3333                91      0       3333                162     0       3333
21      0       3333                92      0       3333                163     0       3333
22      0       3333                93      0       3333                164     0       3333
23      0       3333                94      0       3333                165     0       3333
24      0       3333                95      0       3333                166     0       3333
25      0       3333                96      0       3333                167     0       3333
26      0       3333                97      0       3333                168     0       3333
27      0       3333                98      0       3333                169     0       3333
28      0       3333                99      0       3333                170     0       3333
29      0       3333                100     0       3333                171     0       3333
```

```
172     0       3333
173     0       3333
174     0       3333
175     0       3333
176     0       3333
177     0       3333
178     0       3333
179     0       3333
180     0       3333
181     0       3333
182     0       3333
183     0       3333
184     0       3333
185     0       3333
186     0       3333
187     0       3333
188     0       3333
189     0       3333
190     0       3333
191     0       3333
192     0       3333
193     0       3333
194     0       3333
195     0       3333
196     0       3333
197     0       3333
198     0       3333
199     0       3333
200     0       3333
SFLOWOUT        -1      1
        G
1       0       3334
2       0       3334
3       0       3334
4       0       3334
5       0       3334
6       0       3334
7       0       3334
8       0       3334
9       0       3334
10      0       3334
11      0       3334
12      0       3334
13      0       3334
14      0       3334
15      0       3334
16      0       3334
17      0       3334
18      0       3334
19      0       3334
20      0       3334
21      0       3334
22      0       3334
23      0       3334
24      0       3334
25      0       3334
26      0       3334
27      0       3334
28      0       3334
29      0       3334
30      0       3334
31      0       3334
32      0       3334
33      0       3334
34      0       3334
35      0       3334
36      0       3334
37      0       3334
38      0       3334
39      0       3334
40      0       3334
41      0       3334
42      0       3334
43      0       3334
44      0       3334
45      0       3334
46      0       3334
47      0       3334
48      0       3334
49      0       3334
50      0       3334
51      0       3334
52      0       3334
53      0       3334
54      0       3334
55      0       3334
56      0       3334
57      0       3334
58      0       3334
59      0       3334
60      0       3334
61      0       3334
62      0       3334
63      0       3334
64      0       3334
65      0       3334
66      0       3334
67      0       3334
68      0       3334
69      0       3334
70      0       3334
71      0       3334
72      0       3334
73      0       3334
74      0       3334
75      0       3334
76      0       3334
77      0       3334
78      0       3334
79      0       3334
80      0       3334
81      0       3334
82      0       3334
83      0       3334
84      0       3334
85      0       3334
86      0       3334
87      0       3334
88      0       3334
89      0       3334
90      0       3334
91      0       3334
92      0       3334
93      0       3334
94      0       3334
95      0       3334
96      0       3334
97      0       3334
98      0       3334
99      0       3334
100     0       3334
101     0       3334
102     0       3334
103     0       3334
104     1       3334
105     0       3334
106     0       3334
107     0       3334
108     0       3334
109     0       3334
110     0       3334
111     0       3334
112     0       3334
113     0       3334
114     0       3334
115     0       3334
116     0       3334
117     0       3334
118     0       3334
119     0       3334
120     0       3334
121     0       3334
122     0       3334
123     0       3334
124     0       3334
125     0       3334
126     0       3334
127     0       3334
128     0       3334
129     0       3334
130     0       3334
131     0       3334
132     0       3334
133     0       3334
134     0       3334
135     0       3334
136     0       3334
137     0       3334
138     0       3334
139     0       3334
140     0       3334
141     0       3334
142     0       3334
143     0       3334
144     0       3334
145     0       3334
146     0       3334
147     0       3334
148     0       3334
149     0       3334
150     0       3334
151     0       3334
152     0       3334
153     0       3334
154     0       3334
155     0       3334
156     0       3334
157     0       3334
158     0       3334
159     0       3334
160     0       3334
161     0       3334
162     0       3334
163     0       3334
164     0       3334
165     0       3334
166     0       3334
167     0       3334
168     0       3334
169     0       3334
170     0       3334
171     0       3334
172     0       3334
173     0       3334
174     0       3334
175     0       3334
176     0       3334
177     0       3334
178     0       3334
179     0       3334
180     0       3334
181     0       3334
182     0       3334
```

```
183     0       3334
184     0       3334
185     0       3334
186     0       3334
187     0       3334
188     0       3334
189     0       3334
190     0       3334
191     0       3334
192     0       3334
193     0       3334
194     0       3334
195     0       3334
196     0       3334
197     0       3334
198     0       3334
199     0       3334
200     0       3334
CEXCH   -1      0       D
DEGMIC  1       0       G
DEGMAC  1       0       G
SOLIMOB -1      0       G
PAM     -1      0       D
CAM     -1      0       D
ADMI    -1      0       D
ADMA    -1      0       D
PAMT    -1      0       D
CAMT    -1      0       D
PCAA    -1      0       D
COLCMI  -1      0       D
COLCMA  -1      0       D
SFDMI   -1      0       D
SFDMA   -1      0       D
ZAM     -1      0       D
SFSDMA  -1      0       D
SFSDMI  -1      0       D
GAMMA   -1      0       GP
Z       -1      0       GP
XMPOR   -1      0       GP
ALPHA   -1      0       GP
KSM     -1      0       GP
ZN      -1      0       GP
ASCALE  -1      0       GP
TRAP_AIR        -1      0
        GP
TSEXT   -1      0       GP
KSATMIN -1      0       GP
TPORV   -1      0       GP
ADMI_KIN        -1      0
        D
*************************
******
BOUNDARY AND INITIAL
CONDITIONS
AREA    0
BGRAD   0
BOTEN   1010
CONCIN  0
CONSTSTA        0
GWFLUX  0
IASCALE 0
SOLINIT 1       0
SOLINIT 2       0
SOLINIT 3       0
SOLINIT 4       0
SOLINIT 5       0
SOLINIT 6       0
SOLINIT 7       0
SOLINIT 8       0
SOLINIT 9       0
SOLINIT 10      0
SOLINIT 11      0
SOLINIT 12      0
SOLINIT 13      0
SOLINIT 14      0
SOLINIT 15      0
SOLINIT 16      0
SOLINIT 17      0
SOLINIT 18      0
SOLINIT 19      0
SOLINIT 20      0
SOLINIT 21      0
SOLINIT 22      0
SOLINIT 23      0
SOLINIT 24      0
SOLINIT 25      0
SOLINIT 26      0
SOLINIT 27      0
SOLINIT 28      0
SOLINIT 29      0
SOLINIT 30      0
SOLINIT 31      0
SOLINIT 32      0
SOLINIT 33      0
SOLINIT 34      0
SOLINIT 35      0
SOLINIT 36      0
SOLINIT 37      0
SOLINIT 38      0
SOLINIT 39      0
SOLINIT 40      0
SOLINIT 41      0
SOLINIT 42      0
SOLINIT 43      0
SOLINIT 44      0
SOLINIT 45      0
SOLINIT 46      0
SOLINIT 47      0
SOLINIT 48      0
SOLINIT 49      0
SOLINIT 50      0
SOLINIT 51      0
SOLINIT 52      0
SOLINIT 53      0
SOLINIT 54      0
SOLINIT 55      0
SOLINIT 56      0
SOLINIT 57      0
SOLINIT 58      0
SOLINIT 59      0
SOLINIT 60      0
SOLINIT 61      0
SOLINIT 62      0
SOLINIT 63      0
SOLINIT 64      0
SOLINIT 65      0
SOLINIT 66      0
SOLINIT 67      0
SOLINIT 68      0
SOLINIT 69      0
SOLINIT 70      0
SOLINIT 71      0
SOLINIT 72      0
SOLINIT 73      0
SOLINIT 74      0
SOLINIT 75      0
SOLINIT 76      0
SOLINIT 77      0
SOLINIT 78      0
SOLINIT 79      0
SOLINIT 80      0
SOLINIT 81      0
SOLINIT 82      0
SOLINIT 83      0
SOLINIT 84      0
SOLINIT 85      0
SOLINIT 86      0
SOLINIT 87      0
SOLINIT 88      0
SOLINIT 89      0
SOLINIT 90      0
SOLINIT 91      0
SOLINIT 92      0
SOLINIT 93      0
SOLINIT 94      0
SOLINIT 95      0
SOLINIT 96      0
SOLINIT 97      0
SOLINIT 98      0
SOLINIT 99      0
SOLINIT 100     0
SOLINIT 101     0
SOLINIT 102     0
SOLINIT 103     0
SOLINIT 104     0
SOLINIT 105     0
SOLINIT 106     0
SOLINIT 107     0
SOLINIT 108     0
SOLINIT 109     0
SOLINIT 110     0
SOLINIT 111     0
SOLINIT 112     0
SOLINIT 113     0
SOLINIT 114     0
SOLINIT 115     0
SOLINIT 116     0
SOLINIT 117     0
SOLINIT 118     0
SOLINIT 119     0
SOLINIT 120     0
SOLINIT 121     0
SOLINIT 122     0
SOLINIT 123     0
SOLINIT 124     0
SOLINIT 125     0
SOLINIT 126     0
SOLINIT 127     0
SOLINIT 128     0
SOLINIT 129     0
SOLINIT 130     0
SOLINIT 131     0
SOLINIT 132     0
SOLINIT 133     0
SOLINIT 134     0
SOLINIT 135     0
SOLINIT 136     0
SOLINIT 137     0
SOLINIT 138     0
SOLINIT 139     0
SOLINIT 140     0
SOLINIT 141     0
SOLINIT 142     0
SOLINIT 143     0
SOLINIT 144     0
SOLINIT 145     0
SOLINIT 146     0
SOLINIT 147     0
SOLINIT 148     0
SOLINIT 149     0
SOLINIT 150     0
SOLINIT 151     0
SOLINIT 152     0
```

```
SOLINIT 153     0               TEMPINI 24      10              TEMPINI 95      10
SOLINIT 154     0               TEMPINI 25      10              TEMPINI 96      10
SOLINIT 155     0               TEMPINI 26      10              TEMPINI 97      10
SOLINIT 156     0               TEMPINI 27      10              TEMPINI 98      10
SOLINIT 157     0               TEMPINI 28      10              TEMPINI 99      10
SOLINIT 158     0               TEMPINI 29      10              TEMPINI 100     10
SOLINIT 159     0               TEMPINI 30      10              TEMPINI 101     10
SOLINIT 160     0               TEMPINI 31      10              TEMPINI 102     10
SOLINIT 161     0               TEMPINI 32      10              TEMPINI 103     10
SOLINIT 162     0               TEMPINI 33      10              TEMPINI 104     10
SOLINIT 163     0               TEMPINI 34      10              TEMPINI 105     10
SOLINIT 164     0               TEMPINI 35      10              TEMPINI 106     10
SOLINIT 165     0               TEMPINI 36      10              TEMPINI 107     10
SOLINIT 166     0               TEMPINI 37      10              TEMPINI 108     10
SOLINIT 167     0               TEMPINI 38      10              TEMPINI 109     10
SOLINIT 168     0               TEMPINI 39      10              TEMPINI 110     10
SOLINIT 169     0               TEMPINI 40      10              TEMPINI 111     10
SOLINIT 170     0               TEMPINI 41      10              TEMPINI 112     10
SOLINIT 171     0               TEMPINI 42      10              TEMPINI 113     10
SOLINIT 172     0               TEMPINI 43      10              TEMPINI 114     10
SOLINIT 173     0               TEMPINI 44      10              TEMPINI 115     10
SOLINIT 174     0               TEMPINI 45      10              TEMPINI 116     10
SOLINIT 175     0               TEMPINI 46      10              TEMPINI 117     10
SOLINIT 176     0               TEMPINI 47      10              TEMPINI 118     10
SOLINIT 177     0               TEMPINI 48      10              TEMPINI 119     10
SOLINIT 178     0               TEMPINI 49      10              TEMPINI 120     10
SOLINIT 179     0               TEMPINI 50      10              TEMPINI 121     10
SOLINIT 180     0               TEMPINI 51      10              TEMPINI 122     10
SOLINIT 181     0               TEMPINI 52      10              TEMPINI 123     10
SOLINIT 182     0               TEMPINI 53      10              TEMPINI 124     10
SOLINIT 183     0               TEMPINI 54      10              TEMPINI 125     10
SOLINIT 184     0               TEMPINI 55      10              TEMPINI 126     10
SOLINIT 185     0               TEMPINI 56      10              TEMPINI 127     10
SOLINIT 186     0               TEMPINI 57      10              TEMPINI 128     10
SOLINIT 187     0               TEMPINI 58      10              TEMPINI 129     10
SOLINIT 188     0               TEMPINI 59      10              TEMPINI 130     10
SOLINIT 189     0               TEMPINI 60      10              TEMPINI 131     10
SOLINIT 190     0               TEMPINI 61      10              TEMPINI 132     10
SOLINIT 191     0               TEMPINI 62      10              TEMPINI 133     10
SOLINIT 192     0               TEMPINI 63      10              TEMPINI 134     10
SOLINIT 193     0               TEMPINI 64      10              TEMPINI 135     10
SOLINIT 194     0               TEMPINI 65      10              TEMPINI 136     10
SOLINIT 195     0               TEMPINI 66      10              TEMPINI 137     10
SOLINIT 196     0               TEMPINI 67      10              TEMPINI 138     10
SOLINIT 197     0               TEMPINI 68      10              TEMPINI 139     10
SOLINIT 198     0               TEMPINI 69      10              TEMPINI 140     10
SOLINIT 199     0               TEMPINI 70      10              TEMPINI 141     10
SOLINIT 200     0               TEMPINI 71      10              TEMPINI 142     10
TEMPINI 1       10              TEMPINI 72      10              TEMPINI 143     10
TEMPINI 2       10              TEMPINI 73      10              TEMPINI 144     10
TEMPINI 3       10              TEMPINI 74      10              TEMPINI 145     10
TEMPINI 4       10              TEMPINI 75      10              TEMPINI 146     10
TEMPINI 5       10              TEMPINI 76      10              TEMPINI 147     10
TEMPINI 6       10              TEMPINI 77      10              TEMPINI 148     10
TEMPINI 7       10              TEMPINI 78      10              TEMPINI 149     10
TEMPINI 8       10              TEMPINI 79      10              TEMPINI 150     10
TEMPINI 9       10              TEMPINI 80      10              TEMPINI 151     10
TEMPINI 10      10              TEMPINI 81      10              TEMPINI 152     10
TEMPINI 11      10              TEMPINI 82      10              TEMPINI 153     10
TEMPINI 12      10              TEMPINI 83      10              TEMPINI 154     10
TEMPINI 13      10              TEMPINI 84      10              TEMPINI 155     10
TEMPINI 14      10              TEMPINI 85      10              TEMPINI 156     10
TEMPINI 15      10              TEMPINI 86      10              TEMPINI 157     10
TEMPINI 16      10              TEMPINI 87      10              TEMPINI 158     10
TEMPINI 17      10              TEMPINI 88      10              TEMPINI 159     10
TEMPINI 18      10              TEMPINI 89      10              TEMPINI 160     10
TEMPINI 19      10              TEMPINI 90      10              TEMPINI 161     10
TEMPINI 20      10              TEMPINI 91      10              TEMPINI 162     10
TEMPINI 21      10              TEMPINI 92      10              TEMPINI 163     10
TEMPINI 22      10              TEMPINI 93      10              TEMPINI 164     10
TEMPINI 23      10              TEMPINI 94      10              TEMPINI 165     10
```

```
TEMPINI 166    10              THETAINI      37     0          THETAINI      108    0
TEMPINI 167    10              THETAINI      38     0          THETAINI      109    0
TEMPINI 168    10              THETAINI      39     0          THETAINI      110    0
TEMPINI 169    10              THETAINI      40     0          THETAINI      111    0
TEMPINI 170    10              THETAINI      41     0          THETAINI      112    0
TEMPINI 171    10              THETAINI      42     0          THETAINI      113    0
TEMPINI 172    10              THETAINI      43     0          THETAINI      114    0
TEMPINI 173    10              THETAINI      44     0          THETAINI      115    0
TEMPINI 174    10              THETAINI      45     0          THETAINI      116    0
TEMPINI 175    10              THETAINI      46     0          THETAINI      117    0
TEMPINI 176    10              THETAINI      47     0          THETAINI      118    0
TEMPINI 177    10              THETAINI      48     0          THETAINI      119    0
TEMPINI 178    10              THETAINI      49     0          THETAINI      120    0
TEMPINI 179    10              THETAINI      50     0          THETAINI      121    0
TEMPINI 180    10              THETAINI      51     0          THETAINI      122    0
TEMPINI 181    10              THETAINI      52     0          THETAINI      123    0
TEMPINI 182    10              THETAINI      53     0          THETAINI      124    0
TEMPINI 183    10              THETAINI      54     0          THETAINI      125    0
TEMPINI 184    10              THETAINI      55     0          THETAINI      126    0
TEMPINI 185    10              THETAINI      56     0          THETAINI      127    0
TEMPINI 186    10              THETAINI      57     0          THETAINI      128    0
TEMPINI 187    10              THETAINI      58     0          THETAINI      129    0
TEMPINI 188    10              THETAINI      59     0          THETAINI      130    0
TEMPINI 189    10              THETAINI      60     0          THETAINI      131    0
TEMPINI 190    10              THETAINI      61     0          THETAINI      132    0
TEMPINI 191    10              THETAINI      62     0          THETAINI      133    0
TEMPINI 192    10              THETAINI      63     0          THETAINI      134    0
TEMPINI 193    10              THETAINI      64     0          THETAINI      135    0
TEMPINI 194    10              THETAINI      65     0          THETAINI      136    0
TEMPINI 195    10              THETAINI      66     0          THETAINI      137    0
TEMPINI 196    10              THETAINI      67     0          THETAINI      138    0
TEMPINI 197    10              THETAINI      68     0          THETAINI      139    0
TEMPINI 198    10              THETAINI      69     0          THETAINI      140    0
TEMPINI 199    10              THETAINI      70     0          THETAINI      141    0
TEMPINI 200    10              THETAINI      71     0          THETAINI      142    0
THETAINI       1      0        THETAINI      72     0          THETAINI      143    0
THETAINI       2      0        THETAINI      73     0          THETAINI      144    0
THETAINI       3      0        THETAINI      74     0          THETAINI      145    0
THETAINI       4      0        THETAINI      75     0          THETAINI      146    0
THETAINI       5      0        THETAINI      76     0          THETAINI      147    0
THETAINI       6      0        THETAINI      77     0          THETAINI      148    0
THETAINI       7      0        THETAINI      78     0          THETAINI      149    0
THETAINI       8      0        THETAINI      79     0          THETAINI      150    0
THETAINI       9      0        THETAINI      80     0          THETAINI      151    0
THETAINI       10     0        THETAINI      81     0          THETAINI      152    0
THETAINI       11     0        THETAINI      82     0          THETAINI      153    0
THETAINI       12     0        THETAINI      83     0          THETAINI      154    0
THETAINI       13     0        THETAINI      84     0          THETAINI      155    0
THETAINI       14     0        THETAINI      85     0          THETAINI      156    0
THETAINI       15     0        THETAINI      86     0          THETAINI      157    0
THETAINI       16     0        THETAINI      87     0          THETAINI      158    0
THETAINI       17     0        THETAINI      88     0          THETAINI      159    0
THETAINI       18     0        THETAINI      89     0          THETAINI      160    0
THETAINI       19     0        THETAINI      90     0          THETAINI      161    0
THETAINI       20     0        THETAINI      91     0          THETAINI      162    0
THETAINI       21     0        THETAINI      92     0          THETAINI      163    0
THETAINI       22     0        THETAINI      93     0          THETAINI      164    0
THETAINI       23     0        THETAINI      94     0          THETAINI      165    0
THETAINI       24     0        THETAINI      95     0          THETAINI      166    0
THETAINI       25     0        THETAINI      96     0          THETAINI      167    0
THETAINI       26     0        THETAINI      97     0          THETAINI      168    0
THETAINI       27     0        THETAINI      98     0          THETAINI      169    0
THETAINI       28     0        THETAINI      99     0          THETAINI      170    0
THETAINI       29     0        THETAINI      100    0          THETAINI      171    0
THETAINI       30     0        THETAINI      101    0          THETAINI      172    0
THETAINI       31     0        THETAINI      102    0          THETAINI      173    0
THETAINI       32     0        THETAINI      103    0          THETAINI      174    0
THETAINI       33     0        THETAINI      104    0          THETAINI      175    0
THETAINI       34     0        THETAINI      105    0          THETAINI      176    0
THETAINI       35     0        THETAINI      106    0          THETAINI      177    0
THETAINI       36     0        THETAINI      107    0          THETAINI      178    0
```

```
THETAINI       179     0          THETAINI       195     0          Scenario : Chateaudun
THETAINI       180     0          THETAINI       196     0          Groundwater
THETAINI       181     0          THETAINI       197     0
THETAINI       182     0          THETAINI       198     0          Simulation from 19010101
THETAINI       183     0          THETAINI       199     0          to 19270101, application
THETAINI       184     0          THETAINI       200     0          every year
THETAINI       185     0          *************                     (6 year warm-up)
THETAINI       186     0          INFORMATION
THETAINI       187     0          MACRO in FOCUS Version            Crop : Cereals, spring,
THETAINI       188     0          5.5.4                             irrigated
THETAINI       189     0          Output File =
THETAINI       190     0          C:\SWASH\macro\Multi_GW\M2         Number of applications : 1
THETAINI       191     0          _3a_ID003\macro003.bin
THETAINI       192     0          Type of compound =                Application 1 : 60 g/ha of
THETAINI       193     0          metabolite                        M2_3a on day 72
THETAINI       194     0          Compound : M2_3a
```

Listing 11: Tier 1b – Representative *.par file for M3 to M54 for MACRO 5.5.4 – 45 g/ha to Winter Cereals at BBCH 21 for the Châteaudun scenario

```
NUMERICAL LAYERS      200
GENERAL PARAMETERS
RUNID   142
NUMERICAL LAYERS      200
NHORIZON      6
NLAYER  200
*************************
******
PHYSICAL PARAMETERS
NHORIZONS     6
ALPHA   1     0.05
ALPHA   2     0.05
ALPHA   3     0.05
ALPHA   4     0.015
ALPHA   5     0.015
ALPHA   6     0.0107
ASCALE  1     10
ASCALE  2     75
ASCALE  3     75
ASCALE  4     1
ASCALE  5     1
ASCALE  6     4
CTEN    1     20
CTEN    2     20
CTEN    3     20
CTEN    4     40
CTEN    5     40
CTEN    6     30
GAMMA   1     1.3
GAMMA   2     1.41
GAMMA   3     1.41
GAMMA   4     1.37
GAMMA   5     1.37
GAMMA   6     1.41
KSATMIN 1     72
KSATMIN 2     108
KSATMIN 3     180
KSATMIN 4     43
KSATMIN 5     43
KSATMIN 6     33
KSM     1     0.25
KSM     2     0.5
KSM     3     1
KSM     4     1
KSM     5     1
KSM     6     3.25
N       1     1.07
N       2     1.09
N       3     1.09
N       4     1.14
N       5     1.14
N       6     1.19
RESID   1     0
RESID   2     0
RESID   3     0
RESID   4     0
RESID   5     0
RESID   6     0
STONE   1     0
STONE   2     0
STONE   3     0
STONE   4     0
STONE   5     0
STONE   6     0
TPORV   1     43
TPORV   2     44
TPORV   3     44
TPORV   4     44
TPORV   5     44
TPORV   6     49
TRAPAIR 1     0
TRAPAIR 2     0
TRAPAIR 3     0
TRAPAIR 4     0
TRAPAIR 5     0
TRAPAIR 6     0
WILT    1     25.8
WILT    2     23.7
WILT    3     23.7
WILT    4     18.8
WILT    5     18.8
WILT    6     15
XMPOR   1     41
XMPOR   2     43
XMPOR   3     43
XMPOR   4     43
XMPOR   5     43
XMPOR   6     47
ZA      1     1
ZA      2     1
ZA      3     1
ZA      4     1
ZA      5     1
ZA      6     1
ZM      1     -0.5
ZM      2     -0.5
ZM      3     1.5
ZM      4     -4
ZM      5     -4
ZM      6     -3.5
ZN      1     3
ZN      2     3
ZN      3     3
ZN      4     2
ZN      5     2
ZN      6     2
ZP      1     0
ZP      2     0
ZP      3     0
ZP      4     0
ZP      5     0
ZP      6     0
*************************
******
PROPERTIES
NHORIZONS     6
CLAY    1     30
CLAY    2     31
CLAY    3     25
CLAY    4     26
CLAY    5     24
CLAY    6     31
HTICK   1     25
HTICK   2     25
HTICK   3     10
HTICK   4     40
HTICK   5     20
HTICK   6     70
NLAYER  1     26
NLAYER  2     26
NLAYER  3     10
NLAYER  4     42
NLAYER  5     21
NLAYER  6     75
ORGC    1     1.39
ORGC    2     0.93
ORGC    3     0.7
ORGC    4     0.3
ORGC    5     0.3
ORGC    6     0.27
THICKNESS     1     25
THICKNESS     2     25
THICKNESS     3     10
THICKNESS     4     40
THICKNESS     5     20
THICKNESS     6     70
*************************
******
OPTIONS
AVERAGET      1
AVERAGEX      2
BOUNDARY      4
CHAPAR  0
CROP    2
CRUST   0
DEGKIN  0
DRIVING 0
EVAPORATE     1
INITIAL 1
IRRIGATE      1
KINETIC 0
MASSUNITS     2
METABOLITE    0
RAINFALL      1
SOLUTE  2
TEMPINI 0
TILEDRAIN     2
VARTENSION    0
*************************
******
SOLUTE PARAMETERS
CANDEG  0.2
CONC    0
DIFF    4.976852E-10
DV      5
EXPB    0.49
FCONVERT      0
FEXT    0
FRACEQ  0
FRACK   0
FRACMAC 0.02
FSTAR   0.784
PF1     2
PF2     0
SORPRATE      0
TREF    20
TRESP   0.0948
KOC     32.0664
ZMIX    1
NHORIZONS     6
AEXC    1     0
AEXC    2     0
AEXC    3     0
AEXC    4     0
AEXC    5     0
AEXC    6     0
DEGMAL  1     0.01750372
DEGMAL  2     0.008751859
```

```
DEGMAL  3       0.008751859
DEGMAL  4       0.005251116
DEGMAL  5       0
DEGMAL  6       0
DEGMAS  1       0.01750372
DEGMAS  2       0.008751859
DEGMAS  3       0.008751859
DEGMAS  4       0.005251116
DEGMAS  5       0
DEGMAS  6       0
DEGMIL  1       0.01750372
DEGMIL  2       0.008751859
DEGMIL  3       0.008751859
DEGMIL  4       0.005251116
DEGMIL  5       0
DEGMIL  6       0
DEGMIS  1       0.01750372
DEGMIS  2       0.008751859
DEGMIS  3       0.008751859
DEGMIS  4       0.005251116
DEGMIS  5       0
DEGMIS  6       0
FREUND  1       0.96
FREUND  2       0.96
FREUND  3       0.96
FREUND  4       0.96
FREUND  5       0.96
FREUND  6       0.96
ZKD     1       0.4457229
ZKD     2       0.2982175
ZKD     3       0.2244648
ZKD     4       0.0961992
ZKD     5       0.0961992
ZKD     6       0.08657928
*************************
******
CROP PARAMETERS
NCROPS  1
ATTEN   1       0.6
BETA    1       0.1
CANCAP  1       3
CFORM   1       2
CRITAIR 1       5
DFORM   1       0.2
FAWC    1       0.7800209
HCROP   1       0
HMAX    1       0
IDMAX   1       151
IDMAX2  1       0
IDSTART 1       299
IDSTART2        1       0
IHARV   1       196
IHARV2  1       0
LAIC    1       0
LAIHAR  1       2
LAIMAX  1       7.5
LAIMIN  1       0.1
NCROP   1       1
RI50    1       50
ROOTDEP 1       0
ROOTINIT        1       0.2
ROOTMAX 1       0.8
RPIN    1       60
RSMIN   1       0
RSURF   1       0
WATEN   1       50
VPD50   1       50
ZALP    1       1
ZDATEMIN        1       90
ZDATEMIN2       1       0
ZHMIN   1       0
*************************
******
SITE PARAMETERS
ALBEDO  0.25
ANNAMP  7.7
ANNTAV  11.9
DRAINDEP        0
DWRL    0
LAYERD  0
PHI     48.1
RAINCO  1
RGWFLOW 0
RINTEN  2
SNOWCO  1
SNOWMF  4.5
SPACE   0
ZMET    10
*************************
******
IRRIGATION PARAMETERS
IRRSAME True
CRITDEF -1
IRRYEARS        26
IRRYEAR 1
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 2
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 3
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 4
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 5
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 6
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 7
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 8
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 9
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 10
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 11
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 12
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 13
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  96
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 14
NIRRIGATIONS    1
```

```
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 15
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 16
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 17
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 18
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 19
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 20
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 21
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 22
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 23
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 24
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 25
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
IRRYEAR 26
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  96
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   14510.57
ZFINT   0
**************************
******
SETUP
DATEFILE
DRIVINGFILE
        C:\swash\macro\mac
ro999.bin
DRIVINGPERIOD  01-Jan-
1901-01-Jan-1927
ENDDATE 1927-01-01 00:00
OUTPUTFILE
        macro142.bin
METFILE
        C:\SWASH\macro\Mul
ti_GW\M3B34_ID142\bin\cdm6
et.BIN
METPERIOD      1901-01-01
00:00-1927-01-01 00:00
NUMLAYERS      0
OUTINTD 1
OUTINTM 0
PERIODFILE10   (none)
STARTDATE      1901-01-01
00:00
RAINFALLFILE
        C:\SWASH\macro\Mul
ti_GW\M3B34_ID142\bin\cdm6
p.BIN
TENSIONFILE    (none)
TOTPHYSLAYER   200
**************************
******
TILLAGE PARAMETERS
CRUSTSTA       0
DUMMY   0
GAMMASEAL      0
GAMMATILL      0
HALFCRUS       0
HALFRAIN       0
KSMSEAL 0
KSMTILLE       0
MACDCH  0
MACPCH  0
NTILL   0
XMPORSEAL      0
ZNSEAL  0
**************************
******
OUTPUTS
NSINGLE 81
RRNRAIN -1      0       X
ACCMELT -1      0       X
PWT     -1      0       X
INFILMI -1      0       X
INFILMA -1      0       X
CINFIL  -1      0       X
RAIN    -1      0       X
CETA    -1      0       T
EPOT    -1      0       T
CCEPOT  -1      0       T
CCETA   -1      0       T
TPRECIP -1      0       T
TTPRECIP       -1      0
        T
SSEEP   0       0       T
TSEEP   0       0       T
CRES    -1      0       T
SRUNOFF -1      0       T
WWW     -1      0       T
TRUNOFF -1      1       T
TFLOWOUT       -1      1
        T
TFLOW   -1      0       T
TSTOREMI       -1      1
        T
TSTOREMA       -1      1
        T
PRECIRR -1      0       T
PRECIRA -1      1       T
SEEPMI  0       0       T
SEEPMIAC       0       0
        T
PSOIL   -1      0       T
UPT     -1      0       T
CPSOIL  -1      0       T
CUPT    -1      0       T
ESOIL   -1      0       T
ETA     -1      0       T
WETACT  -1      0       T
CESOIL  -1      0       T
CETC    -1      0       T
CCET    -1      1       T
GSRAT   0       0       T
GSTOT   0       0       T
WATEREQ -1      0       T
BOTFLOW -1      0       G
```

```
DRAINCON       0      0          17     0      3176          88     0      3176
       G                         18     0      3176          89     0      3176
TMAX    -1     0      G          19     0      3176          90     0      3176
TMIN    -1     0      G          20     0      3176          91     0      3176
SMICIN  -1     0      G          21     0      3176          92     0      3176
SMACIN  -1     0      G          22     0      3176          93     0      3176
GRCON   0      0      G          23     0      3176          94     0      3176
TAV     -1     0      G          24     0      3176          95     0      3176
GLOBAL  -1     0      G          25     0      3176          96     0      3176
TSOUT   -1     1      D          26     0      3176          97     0      3176
TSS     -1     0      D          27     0      3176          98     0      3176
SSS     -1     0      D          28     0      3176          99     0      3176
TSRUN   -1     1      D          29     0      3176          100    0      3176
TPAM    -1     1      D          30     0      3176          101    0      3176
TCAM    -1     1      D          31     0      3176          102    0      3176
TADMI   -1     1      D          32     0      3176          103    0      3176
TADMA   -1     1      D          33     0      3176          104    1      3176
TDEG    -1     1      D          34     0      3176          105    0      3176
TUPT    -1     1      D          35     0      3176          106    0      3176
SAMS    -1     0      D          36     0      3176          107    0      3176
CDEG    -1     0      D          37     0      3176          108    0      3176
DRAINLOS       0      0          38     0      3176          109    0      3176
       D                         39     0      3176          110    0      3176
DSOLTOSS       0      0          40     0      3176          111    0      3176
       D                         41     0      3176          112    0      3176
DSOLTMIC       0      0          42     0      3176          113    0      3176
       D                         43     0      3176          114    0      3176
TSOLTMIC       0      0          44     0      3176          115    0      3176
       D                         45     0      3176          116    0      3176
ELOSS   0      0      D          46     0      3176          117    0      3176
SSRAT   0      0      D          47     0      3176          118    0      3176
SSTOT   0      0      D          48     0      3176          119    0      3176
CFOUT   0      0      D          49     0      3176          120    0      3176
ACFOUT  0      0      D          50     0      3176          121    0      3176
TCOLLMA 0      0      D          51     0      3176          122    0      3176
TCOLLMI 0      0      D          52     0      3176          123    0      3176
CFDRAIN 0      0      D          53     0      3176          124    0      3176
ACFDRAIN       0      0          54     0      3176          125    0      3176
       D                         55     0      3176          126    0      3176
TDEC    0      0      D          56     0      3176          127    0      3176
TIMMOB  0      0      D          57     0      3176          128    0      3176
GENERATE       0      0          58     0      3176          129    0      3176
       D                         59     0      3176          130    0      3176
GSINK   -1     0      D          60     0      3176          131    0      3176
CFDRS   0      0      D          61     0      3176          132    0      3176
ACFDRS  0      0      D          62     0      3176          133    0      3176
PC      0      0      D          63     0      3176          134    0      3176
NLAYERED       49                64     0      3176          135    0      3176
THETA   -1     0      X          65     0      3176          136    0      3176
THETI   -1     0      X          66     0      3176          137    0      3176
THETT   -1     0      X          67     0      3176          138    0      3176
TMPOR   -1     0      X          68     0      3176          139    0      3176
CPSI    -1     0      X          69     0      3176          140    0      3176
ZUPTAKE -1     0      X          70     0      3176          141    0      3176
WOUT    -1     1      X          71     0      3176          142    0      3176
1       0      3176              72     0      3176          143    0      3176
2       0      3176              73     0      3176          144    0      3176
3       0      3176              74     0      3176          145    0      3176
4       0      3176              75     0      3176          146    0      3176
5       0      3176              76     0      3176          147    0      3176
6       0      3176              77     0      3176          148    0      3176
7       0      3176              78     0      3176          149    0      3176
8       0      3176              79     0      3176          150    0      3176
9       0      3176              80     0      3176          151    0      3176
10      0      3176              81     0      3176          152    0      3176
11      0      3176              82     0      3176          153    0      3176
12      0      3176              83     0      3176          154    0      3176
13      0      3176              84     0      3176          155    0      3176
14      0      3176              85     0      3176          156    0      3176
15      0      3176              86     0      3176          157    0      3176
16      0      3176              87     0      3176          158    0      3176
```

```
159     0       3176                25      0       3179                96      0       3179
160     0       3176                26      0       3179                97      0       3179
161     0       3176                27      0       3179                98      0       3179
162     0       3176                28      0       3179                99      0       3179
163     0       3176                29      0       3179                100     0       3179
164     0       3176                30      0       3179                101     0       3179
165     0       3176                31      0       3179                102     0       3179
166     0       3176                32      0       3179                103     0       3179
167     0       3176                33      0       3179                104     1       3179
168     0       3176                34      0       3179                105     0       3179
169     0       3176                35      0       3179                106     0       3179
170     0       3176                36      0       3179                107     0       3179
171     0       3176                37      0       3179                108     0       3179
172     0       3176                38      0       3179                109     0       3179
173     0       3176                39      0       3179                110     0       3179
174     0       3176                40      0       3179                111     0       3179
175     0       3176                41      0       3179                112     0       3179
176     0       3176                42      0       3179                113     0       3179
177     0       3176                43      0       3179                114     0       3179
178     0       3176                44      0       3179                115     0       3179
179     0       3176                45      0       3179                116     0       3179
180     0       3176                46      0       3179                117     0       3179
181     0       3176                47      0       3179                118     0       3179
182     0       3176                48      0       3179                119     0       3179
183     0       3176                49      0       3179                120     0       3179
184     0       3176                50      0       3179                121     0       3179
185     0       3176                51      0       3179                122     0       3179
186     0       3176                52      0       3179                123     0       3179
187     0       3176                53      0       3179                124     0       3179
188     0       3176                54      0       3179                125     0       3179
189     0       3176                55      0       3179                126     0       3179
190     0       3176                56      0       3179                127     0       3179
191     0       3176                57      0       3179                128     0       3179
192     0       3176                58      0       3179                129     0       3179
193     0       3176                59      0       3179                130     0       3179
194     0       3176                60      0       3179                131     0       3179
195     0       3176                61      0       3179                132     0       3179
196     0       3176                62      0       3179                133     0       3179
197     0       3176                63      0       3179                134     0       3179
198     0       3176                64      0       3179                135     0       3179
199     0       3176                65      0       3179                136     0       3179
200     0       3176                66      0       3179                137     0       3179
EXCHANGE        -1      0           67      0       3179                138     0       3179
        X                           68      0       3179                139     0       3179
THETAMA -1      0       X           69      0       3179                140     0       3179
WFLOWOUT        -1      1           70      0       3179                141     0       3179
        X                           71      0       3179                142     0       3179
1       0       3179                72      0       3179                143     0       3179
2       0       3179                73      0       3179                144     0       3179
3       0       3179                74      0       3179                145     0       3179
4       0       3179                75      0       3179                146     0       3179
5       0       3179                76      0       3179                147     0       3179
6       0       3179                77      0       3179                148     0       3179
7       0       3179                78      0       3179                149     0       3179
8       0       3179                79      0       3179                150     0       3179
9       0       3179                80      0       3179                151     0       3179
10      0       3179                81      0       3179                152     0       3179
11      0       3179                82      0       3179                153     0       3179
12      0       3179                83      0       3179                154     0       3179
13      0       3179                84      0       3179                155     0       3179
14      0       3179                85      0       3179                156     0       3179
15      0       3179                86      0       3179                157     0       3179
16      0       3179                87      0       3179                158     0       3179
17      0       3179                88      0       3179                159     0       3179
18      0       3179                89      0       3179                160     0       3179
19      0       3179                90      0       3179                161     0       3179
20      0       3179                91      0       3179                162     0       3179
21      0       3179                92      0       3179                163     0       3179
22      0       3179                93      0       3179                164     0       3179
23      0       3179                94      0       3179                165     0       3179
24      0       3179                95      0       3179                166     0       3179
```

```
167     0       3179                30      0       3186                101     0       3186
168     0       3179                31      0       3186                102     0       3186
169     0       3179                32      0       3186                103     0       3186
170     0       3179                33      0       3186                104     1       3186
171     0       3179                34      0       3186                105     0       3186
172     0       3179                35      0       3186                106     0       3186
173     0       3179                36      0       3186                107     0       3186
174     0       3179                37      0       3186                108     0       3186
175     0       3179                38      0       3186                109     0       3186
176     0       3179                39      0       3186                110     0       3186
177     0       3179                40      0       3186                111     0       3186
178     0       3179                41      0       3186                112     0       3186
179     0       3179                42      0       3186                113     0       3186
180     0       3179                43      0       3186                114     0       3186
181     0       3179                44      0       3186                115     0       3186
182     0       3179                45      0       3186                116     0       3186
183     0       3179                46      0       3186                117     0       3186
184     0       3179                47      0       3186                118     0       3186
185     0       3179                48      0       3186                119     0       3186
186     0       3179                49      0       3186                120     0       3186
187     0       3179                50      0       3186                121     0       3186
188     0       3179                51      0       3186                122     0       3186
189     0       3179                52      0       3186                123     0       3186
190     0       3179                53      0       3186                124     0       3186
191     0       3179                54      0       3186                125     0       3186
192     0       3179                55      0       3186                126     0       3186
193     0       3179                56      0       3186                127     0       3186
194     0       3179                57      0       3186                128     0       3186
195     0       3179                58      0       3186                129     0       3186
196     0       3179                59      0       3186                130     0       3186
197     0       3179                60      0       3186                131     0       3186
198     0       3179                61      0       3186                132     0       3186
199     0       3179                62      0       3186                133     0       3186
200     0       3179                63      0       3186                134     0       3186
DRAINFLO        -1      0           64      0       3186                135     0       3186
        X                           65      0       3186                136     0       3186
DRAINMI -1      0       X           66      0       3186                137     0       3186
THETAM  -1      0       X           67      0       3186                138     0       3186
TEMP    -1      0       G           68      0       3186                139     0       3186
SOLMIC  -1      0       G           69      0       3186                140     0       3186
SOLMAC  -1      0       G           70      0       3186                141     0       3186
SFLOW   -1      1       G           71      0       3186                142     0       3186
1       0       3186                72      0       3186                143     0       3186
2       0       3186                73      0       3186                144     0       3186
3       0       3186                74      0       3186                145     0       3186
4       0       3186                75      0       3186                146     0       3186
5       0       3186                76      0       3186                147     0       3186
6       0       3186                77      0       3186                148     0       3186
7       0       3186                78      0       3186                149     0       3186
8       0       3186                79      0       3186                150     0       3186
9       0       3186                80      0       3186                151     0       3186
10      0       3186                81      0       3186                152     0       3186
11      0       3186                82      0       3186                153     0       3186
12      0       3186                83      0       3186                154     0       3186
13      0       3186                84      0       3186                155     0       3186
14      0       3186                85      0       3186                156     0       3186
15      0       3186                86      0       3186                157     0       3186
16      0       3186                87      0       3186                158     0       3186
17      0       3186                88      0       3186                159     0       3186
18      0       3186                89      0       3186                160     0       3186
19      0       3186                90      0       3186                161     0       3186
20      0       3186                91      0       3186                162     0       3186
21      0       3186                92      0       3186                163     0       3186
22      0       3186                93      0       3186                164     0       3186
23      0       3186                94      0       3186                165     0       3186
24      0       3186                95      0       3186                166     0       3186
25      0       3186                96      0       3186                167     0       3186
26      0       3186                97      0       3186                168     0       3186
27      0       3186                98      0       3186                169     0       3186
28      0       3186                99      0       3186                170     0       3186
29      0       3186                100     0       3186                171     0       3186
```

```
172     0       3186
173     0       3186
174     0       3186
175     0       3186
176     0       3186
177     0       3186
178     0       3186
179     0       3186
180     0       3186
181     0       3186
182     0       3186
183     0       3186
184     0       3186
185     0       3186
186     0       3186
187     0       3186
188     0       3186
189     0       3186
190     0       3186
191     0       3186
192     0       3186
193     0       3186
194     0       3186
195     0       3186
196     0       3186
197     0       3186
198     0       3186
199     0       3186
200     0       3186
SFLOWOUT        -1      1
        G
1       0       3187
2       0       3187
3       0       3187
4       0       3187
5       0       3187
6       0       3187
7       0       3187
8       0       3187
9       0       3187
10      0       3187
11      0       3187
12      0       3187
13      0       3187
14      0       3187
15      0       3187
16      0       3187
17      0       3187
18      0       3187
19      0       3187
20      0       3187
21      0       3187
22      0       3187
23      0       3187
24      0       3187
25      0       3187
26      0       3187
27      0       3187
28      0       3187
29      0       3187
30      0       3187
31      0       3187
32      0       3187
33      0       3187
34      0       3187
35      0       3187
36      0       3187
37      0       3187
38      0       3187
39      0       3187
40      0       3187
41      0       3187
42      0       3187
43      0       3187
44      0       3187
45      0       3187
46      0       3187
47      0       3187
48      0       3187
49      0       3187
50      0       3187
51      0       3187
52      0       3187
53      0       3187
54      0       3187
55      0       3187
56      0       3187
57      0       3187
58      0       3187
59      0       3187
60      0       3187
61      0       3187
62      0       3187
63      0       3187
64      0       3187
65      0       3187
66      0       3187
67      0       3187
68      0       3187
69      0       3187
70      0       3187
71      0       3187
72      0       3187
73      0       3187
74      0       3187
75      0       3187
76      0       3187
77      0       3187
78      0       3187
79      0       3187
80      0       3187
81      0       3187
82      0       3187
83      0       3187
84      0       3187
85      0       3187
86      0       3187
87      0       3187
88      0       3187
89      0       3187
90      0       3187
91      0       3187
92      0       3187
93      0       3187
94      0       3187
95      0       3187
96      0       3187
97      0       3187
98      0       3187
99      0       3187
100     0       3187
101     0       3187
102     0       3187
103     0       3187
104     1       3187
105     0       3187
106     0       3187
107     0       3187
108     0       3187
109     0       3187
110     0       3187
111     0       3187
112     0       3187
113     0       3187
114     0       3187
115     0       3187
116     0       3187
117     0       3187
118     0       3187
119     0       3187
120     0       3187
121     0       3187
122     0       3187
123     0       3187
124     0       3187
125     0       3187
126     0       3187
127     0       3187
128     0       3187
129     0       3187
130     0       3187
131     0       3187
132     0       3187
133     0       3187
134     0       3187
135     0       3187
136     0       3187
137     0       3187
138     0       3187
139     0       3187
140     0       3187
141     0       3187
142     0       3187
143     0       3187
144     0       3187
145     0       3187
146     0       3187
147     0       3187
148     0       3187
149     0       3187
150     0       3187
151     0       3187
152     0       3187
153     0       3187
154     0       3187
155     0       3187
156     0       3187
157     0       3187
158     0       3187
159     0       3187
160     0       3187
161     0       3187
162     0       3187
163     0       3187
164     0       3187
165     0       3187
166     0       3187
167     0       3187
168     0       3187
169     0       3187
170     0       3187
171     0       3187
172     0       3187
173     0       3187
174     0       3187
175     0       3187
176     0       3187
177     0       3187
178     0       3187
179     0       3187
180     0       3187
181     0       3187
182     0       3187
```

```
183     0       3187
184     0       3187
185     0       3187
186     0       3187
187     0       3187
188     0       3187
189     0       3187
190     0       3187
191     0       3187
192     0       3187
193     0       3187
194     0       3187
195     0       3187
196     0       3187
197     0       3187
198     0       3187
199     0       3187
200     0       3187
CEXCH   -1      0       D
DEGMIC  -1      0       G
DEGMAC  -1      0       G
SOLIMOB -1      0       G
PAM     -1      0       D
CAM     -1      0       D
ADMI    -1      0       D
ADMA    -1      0       D
PAMT    -1      0       D
CAMT    -1      0       D
PCAA    -1      0       D
COLCMI  -1      0       D
COLCMA  -1      0       D
SFDMI   -1      0       D
SFDMA   -1      0       D
ZAM     -1      0       D
SFSDMA  -1      0       D
SFSDMI  -1      0       D
GAMMA   -1      0       GP
Z       -1      0       GP
XMPOR   -1      0       GP
ALPHA   -1      0       GP
KSM     -1      0       GP
ZN      -1      0       GP
ASCALE  -1      0       GP
TRAP_AIR        -1      0
        GP
TSEXT   -1      0       GP
KSATMIN -1      0       GP
TPORV   -1      0       GP
ADMI_KIN        -1      0
        D
*************************
******
BOUNDARY AND INITIAL
CONDITIONS
AREA    0
BGRAD   0
BOTEN   1010
CONCIN  0
CONSTSTA        0
GWFLUX  0
IASCALE 0
SOLINIT 1       0
SOLINIT 2       0
SOLINIT 3       0
SOLINIT 4       0
SOLINIT 5       0
SOLINIT 6       0
SOLINIT 7       0
SOLINIT 8       0
SOLINIT 9       0
SOLINIT 10      0
SOLINIT 11      0
SOLINIT 12      0
SOLINIT 13      0
SOLINIT 14      0
SOLINIT 15      0
SOLINIT 16      0
SOLINIT 17      0
SOLINIT 18      0
SOLINIT 19      0
SOLINIT 20      0
SOLINIT 21      0
SOLINIT 22      0
SOLINIT 23      0
SOLINIT 24      0
SOLINIT 25      0
SOLINIT 26      0
SOLINIT 27      0
SOLINIT 28      0
SOLINIT 29      0
SOLINIT 30      0
SOLINIT 31      0
SOLINIT 32      0
SOLINIT 33      0
SOLINIT 34      0
SOLINIT 35      0
SOLINIT 36      0
SOLINIT 37      0
SOLINIT 38      0
SOLINIT 39      0
SOLINIT 40      0
SOLINIT 41      0
SOLINIT 42      0
SOLINIT 43      0
SOLINIT 44      0
SOLINIT 45      0
SOLINIT 46      0
SOLINIT 47      0
SOLINIT 48      0
SOLINIT 49      0
SOLINIT 50      0
SOLINIT 51      0
SOLINIT 52      0
SOLINIT 53      0
SOLINIT 54      0
SOLINIT 55      0
SOLINIT 56      0
SOLINIT 57      0
SOLINIT 58      0
SOLINIT 59      0
SOLINIT 60      0
SOLINIT 61      0
SOLINIT 62      0
SOLINIT 63      0
SOLINIT 64      0
SOLINIT 65      0
SOLINIT 66      0
SOLINIT 67      0
SOLINIT 68      0
SOLINIT 69      0
SOLINIT 70      0
SOLINIT 71      0
SOLINIT 72      0
SOLINIT 73      0
SOLINIT 74      0
SOLINIT 75      0
SOLINIT 76      0
SOLINIT 77      0
SOLINIT 78      0
SOLINIT 79      0
SOLINIT 80      0
SOLINIT 81      0
SOLINIT 82      0
SOLINIT 83      0
SOLINIT 84      0
SOLINIT 85      0
SOLINIT 86      0
SOLINIT 87      0
SOLINIT 88      0
SOLINIT 89      0
SOLINIT 90      0
SOLINIT 91      0
SOLINIT 92      0
SOLINIT 93      0
SOLINIT 94      0
SOLINIT 95      0
SOLINIT 96      0
SOLINIT 97      0
SOLINIT 98      0
SOLINIT 99      0
SOLINIT 100     0
SOLINIT 101     0
SOLINIT 102     0
SOLINIT 103     0
SOLINIT 104     0
SOLINIT 105     0
SOLINIT 106     0
SOLINIT 107     0
SOLINIT 108     0
SOLINIT 109     0
SOLINIT 110     0
SOLINIT 111     0
SOLINIT 112     0
SOLINIT 113     0
SOLINIT 114     0
SOLINIT 115     0
SOLINIT 116     0
SOLINIT 117     0
SOLINIT 118     0
SOLINIT 119     0
SOLINIT 120     0
SOLINIT 121     0
SOLINIT 122     0
SOLINIT 123     0
SOLINIT 124     0
SOLINIT 125     0
SOLINIT 126     0
SOLINIT 127     0
SOLINIT 128     0
SOLINIT 129     0
SOLINIT 130     0
SOLINIT 131     0
SOLINIT 132     0
SOLINIT 133     0
SOLINIT 134     0
SOLINIT 135     0
SOLINIT 136     0
SOLINIT 137     0
SOLINIT 138     0
SOLINIT 139     0
SOLINIT 140     0
SOLINIT 141     0
SOLINIT 142     0
SOLINIT 143     0
SOLINIT 144     0
SOLINIT 145     0
SOLINIT 146     0
SOLINIT 147     0
SOLINIT 148     0
SOLINIT 149     0
SOLINIT 150     0
SOLINIT 151     0
SOLINIT 152     0
```

```
SOLINIT 153     0               TEMPINI 24      10              TEMPINI 95      10
SOLINIT 154     0               TEMPINI 25      10              TEMPINI 96      10
SOLINIT 155     0               TEMPINI 26      10              TEMPINI 97      10
SOLINIT 156     0               TEMPINI 27      10              TEMPINI 98      10
SOLINIT 157     0               TEMPINI 28      10              TEMPINI 99      10
SOLINIT 158     0               TEMPINI 29      10              TEMPINI 100     10
SOLINIT 159     0               TEMPINI 30      10              TEMPINI 101     10
SOLINIT 160     0               TEMPINI 31      10              TEMPINI 102     10
SOLINIT 161     0               TEMPINI 32      10              TEMPINI 103     10
SOLINIT 162     0               TEMPINI 33      10              TEMPINI 104     10
SOLINIT 163     0               TEMPINI 34      10              TEMPINI 105     10
SOLINIT 164     0               TEMPINI 35      10              TEMPINI 106     10
SOLINIT 165     0               TEMPINI 36      10              TEMPINI 107     10
SOLINIT 166     0               TEMPINI 37      10              TEMPINI 108     10
SOLINIT 167     0               TEMPINI 38      10              TEMPINI 109     10
SOLINIT 168     0               TEMPINI 39      10              TEMPINI 110     10
SOLINIT 169     0               TEMPINI 40      10              TEMPINI 111     10
SOLINIT 170     0               TEMPINI 41      10              TEMPINI 112     10
SOLINIT 171     0               TEMPINI 42      10              TEMPINI 113     10
SOLINIT 172     0               TEMPINI 43      10              TEMPINI 114     10
SOLINIT 173     0               TEMPINI 44      10              TEMPINI 115     10
SOLINIT 174     0               TEMPINI 45      10              TEMPINI 116     10
SOLINIT 175     0               TEMPINI 46      10              TEMPINI 117     10
SOLINIT 176     0               TEMPINI 47      10              TEMPINI 118     10
SOLINIT 177     0               TEMPINI 48      10              TEMPINI 119     10
SOLINIT 178     0               TEMPINI 49      10              TEMPINI 120     10
SOLINIT 179     0               TEMPINI 50      10              TEMPINI 121     10
SOLINIT 180     0               TEMPINI 51      10              TEMPINI 122     10
SOLINIT 181     0               TEMPINI 52      10              TEMPINI 123     10
SOLINIT 182     0               TEMPINI 53      10              TEMPINI 124     10
SOLINIT 183     0               TEMPINI 54      10              TEMPINI 125     10
SOLINIT 184     0               TEMPINI 55      10              TEMPINI 126     10
SOLINIT 185     0               TEMPINI 56      10              TEMPINI 127     10
SOLINIT 186     0               TEMPINI 57      10              TEMPINI 128     10
SOLINIT 187     0               TEMPINI 58      10              TEMPINI 129     10
SOLINIT 188     0               TEMPINI 59      10              TEMPINI 130     10
SOLINIT 189     0               TEMPINI 60      10              TEMPINI 131     10
SOLINIT 190     0               TEMPINI 61      10              TEMPINI 132     10
SOLINIT 191     0               TEMPINI 62      10              TEMPINI 133     10
SOLINIT 192     0               TEMPINI 63      10              TEMPINI 134     10
SOLINIT 193     0               TEMPINI 64      10              TEMPINI 135     10
SOLINIT 194     0               TEMPINI 65      10              TEMPINI 136     10
SOLINIT 195     0               TEMPINI 66      10              TEMPINI 137     10
SOLINIT 196     0               TEMPINI 67      10              TEMPINI 138     10
SOLINIT 197     0               TEMPINI 68      10              TEMPINI 139     10
SOLINIT 198     0               TEMPINI 69      10              TEMPINI 140     10
SOLINIT 199     0               TEMPINI 70      10              TEMPINI 141     10
SOLINIT 200     0               TEMPINI 71      10              TEMPINI 142     10
TEMPINI 1       10              TEMPINI 72      10              TEMPINI 143     10
TEMPINI 2       10              TEMPINI 73      10              TEMPINI 144     10
TEMPINI 3       10              TEMPINI 74      10              TEMPINI 145     10
TEMPINI 4       10              TEMPINI 75      10              TEMPINI 146     10
TEMPINI 5       10              TEMPINI 76      10              TEMPINI 147     10
TEMPINI 6       10              TEMPINI 77      10              TEMPINI 148     10
TEMPINI 7       10              TEMPINI 78      10              TEMPINI 149     10
TEMPINI 8       10              TEMPINI 79      10              TEMPINI 150     10
TEMPINI 9       10              TEMPINI 80      10              TEMPINI 151     10
TEMPINI 10      10              TEMPINI 81      10              TEMPINI 152     10
TEMPINI 11      10              TEMPINI 82      10              TEMPINI 153     10
TEMPINI 12      10              TEMPINI 83      10              TEMPINI 154     10
TEMPINI 13      10              TEMPINI 84      10              TEMPINI 155     10
TEMPINI 14      10              TEMPINI 85      10              TEMPINI 156     10
TEMPINI 15      10              TEMPINI 86      10              TEMPINI 157     10
TEMPINI 16      10              TEMPINI 87      10              TEMPINI 158     10
TEMPINI 17      10              TEMPINI 88      10              TEMPINI 159     10
TEMPINI 18      10              TEMPINI 89      10              TEMPINI 160     10
TEMPINI 19      10              TEMPINI 90      10              TEMPINI 161     10
TEMPINI 20      10              TEMPINI 91      10              TEMPINI 162     10
TEMPINI 21      10              TEMPINI 92      10              TEMPINI 163     10
TEMPINI 22      10              TEMPINI 93      10              TEMPINI 164     10
TEMPINI 23      10              TEMPINI 94      10              TEMPINI 165     10
```

```
TEMPINI 166    10              THETAINI      37     0          THETAINI      108    0
TEMPINI 167    10              THETAINI      38     0          THETAINI      109    0
TEMPINI 168    10              THETAINI      39     0          THETAINI      110    0
TEMPINI 169    10              THETAINI      40     0          THETAINI      111    0
TEMPINI 170    10              THETAINI      41     0          THETAINI      112    0
TEMPINI 171    10              THETAINI      42     0          THETAINI      113    0
TEMPINI 172    10              THETAINI      43     0          THETAINI      114    0
TEMPINI 173    10              THETAINI      44     0          THETAINI      115    0
TEMPINI 174    10              THETAINI      45     0          THETAINI      116    0
TEMPINI 175    10              THETAINI      46     0          THETAINI      117    0
TEMPINI 176    10              THETAINI      47     0          THETAINI      118    0
TEMPINI 177    10              THETAINI      48     0          THETAINI      119    0
TEMPINI 178    10              THETAINI      49     0          THETAINI      120    0
TEMPINI 179    10              THETAINI      50     0          THETAINI      121    0
TEMPINI 180    10              THETAINI      51     0          THETAINI      122    0
TEMPINI 181    10              THETAINI      52     0          THETAINI      123    0
TEMPINI 182    10              THETAINI      53     0          THETAINI      124    0
TEMPINI 183    10              THETAINI      54     0          THETAINI      125    0
TEMPINI 184    10              THETAINI      55     0          THETAINI      126    0
TEMPINI 185    10              THETAINI      56     0          THETAINI      127    0
TEMPINI 186    10              THETAINI      57     0          THETAINI      128    0
TEMPINI 187    10              THETAINI      58     0          THETAINI      129    0
TEMPINI 188    10              THETAINI      59     0          THETAINI      130    0
TEMPINI 189    10              THETAINI      60     0          THETAINI      131    0
TEMPINI 190    10              THETAINI      61     0          THETAINI      132    0
TEMPINI 191    10              THETAINI      62     0          THETAINI      133    0
TEMPINI 192    10              THETAINI      63     0          THETAINI      134    0
TEMPINI 193    10              THETAINI      64     0          THETAINI      135    0
TEMPINI 194    10              THETAINI      65     0          THETAINI      136    0
TEMPINI 195    10              THETAINI      66     0          THETAINI      137    0
TEMPINI 196    10              THETAINI      67     0          THETAINI      138    0
TEMPINI 197    10              THETAINI      68     0          THETAINI      139    0
TEMPINI 198    10              THETAINI      69     0          THETAINI      140    0
TEMPINI 199    10              THETAINI      70     0          THETAINI      141    0
TEMPINI 200    10              THETAINI      71     0          THETAINI      142    0
THETAINI       1      0        THETAINI      72     0          THETAINI      143    0
THETAINI       2      0        THETAINI      73     0          THETAINI      144    0
THETAINI       3      0        THETAINI      74     0          THETAINI      145    0
THETAINI       4      0        THETAINI      75     0          THETAINI      146    0
THETAINI       5      0        THETAINI      76     0          THETAINI      147    0
THETAINI       6      0        THETAINI      77     0          THETAINI      148    0
THETAINI       7      0        THETAINI      78     0          THETAINI      149    0
THETAINI       8      0        THETAINI      79     0          THETAINI      150    0
THETAINI       9      0        THETAINI      80     0          THETAINI      151    0
THETAINI       10     0        THETAINI      81     0          THETAINI      152    0
THETAINI       11     0        THETAINI      82     0          THETAINI      153    0
THETAINI       12     0        THETAINI      83     0          THETAINI      154    0
THETAINI       13     0        THETAINI      84     0          THETAINI      155    0
THETAINI       14     0        THETAINI      85     0          THETAINI      156    0
THETAINI       15     0        THETAINI      86     0          THETAINI      157    0
THETAINI       16     0        THETAINI      87     0          THETAINI      158    0
THETAINI       17     0        THETAINI      88     0          THETAINI      159    0
THETAINI       18     0        THETAINI      89     0          THETAINI      160    0
THETAINI       19     0        THETAINI      90     0          THETAINI      161    0
THETAINI       20     0        THETAINI      91     0          THETAINI      162    0
THETAINI       21     0        THETAINI      92     0          THETAINI      163    0
THETAINI       22     0        THETAINI      93     0          THETAINI      164    0
THETAINI       23     0        THETAINI      94     0          THETAINI      165    0
THETAINI       24     0        THETAINI      95     0          THETAINI      166    0
THETAINI       25     0        THETAINI      96     0          THETAINI      167    0
THETAINI       26     0        THETAINI      97     0          THETAINI      168    0
THETAINI       27     0        THETAINI      98     0          THETAINI      169    0
THETAINI       28     0        THETAINI      99     0          THETAINI      170    0
THETAINI       29     0        THETAINI      100    0          THETAINI      171    0
THETAINI       30     0        THETAINI      101    0          THETAINI      172    0
THETAINI       31     0        THETAINI      102    0          THETAINI      173    0
THETAINI       32     0        THETAINI      103    0          THETAINI      174    0
THETAINI       33     0        THETAINI      104    0          THETAINI      175    0
THETAINI       34     0        THETAINI      105    0          THETAINI      176    0
THETAINI       35     0        THETAINI      106    0          THETAINI      177    0
THETAINI       36     0        THETAINI      107    0          THETAINI      178    0
```

```
THETAINI       179    0          THETAINI       195    0          Groundwater
THETAINI       180    0          THETAINI       196    0
THETAINI       181    0          THETAINI       197    0          Simulation from 19010101
THETAINI       182    0          THETAINI       198    0          to 19270101, application
THETAINI       183    0          THETAINI       199    0          every year
THETAINI       184    0          THETAINI       200    0          (6 year warm-up)
THETAINI       185    0          ************
THETAINI       186    0          INFORMATION                      Crop : Cereals, winter,
THETAINI       187    0          MACRO in FOCUS Version           irrigated
THETAINI       188    0          5.5.4
THETAINI       189    0          Output File =                    Number of applications : 1
THETAINI       190    0          C:\SWASH\macro\Multi_GW\M3
THETAINI       191    0          B34_ID142\macro142.bin           Application 1 :
THETAINI       192    0          Type of compound = parent        14.5105693359375 g/ha of
THETAINI       193    0          Compound : M3B34                 M3B34 on day 96
THETAINI       194    0          Scenario : Chateaudun
```

Listing 12: Tier 1b – Representative *.par file for M3 (metabolite) for MACRO 5.5.4 – 60 g/ha to Spring Cereals at BBCH 21 for Châteaudun scenario

```
NUMERICAL LAYERS       200
GENERAL PARAMETERS
RUNID   135
NUMERICAL LAYERS       200
NHORIZON       6
NLAYER  200
*************************
******
PHYSICAL PARAMETERS
NHORIZONS      6
ALPHA   1      0.05
ALPHA   2      0.05
ALPHA   3      0.05
ALPHA   4      0.015
ALPHA   5      0.015
ALPHA   6      0.0107
ASCALE  1      10
ASCALE  2      75
ASCALE  3      75
ASCALE  4      1
ASCALE  5      1
ASCALE  6      4
CTEN    1      20
CTEN    2      20
CTEN    3      20
CTEN    4      40
CTEN    5      40
CTEN    6      30
GAMMA   1      1.3
GAMMA   2      1.41
GAMMA   3      1.41
GAMMA   4      1.37
GAMMA   5      1.37
GAMMA   6      1.41
KSATMIN 1      72
KSATMIN 2      108
KSATMIN 3      180
KSATMIN 4      43
KSATMIN 5      43
KSATMIN 6      33
KSM     1      0.25
KSM     2      0.5
KSM     3      1
KSM     4      1
KSM     5      1
KSM     6      3.25
N       1      1.07
N       2      1.09
N       3      1.09
N       4      1.14
N       5      1.14
N       6      1.19
RESID   1      0
RESID   2      0
RESID   3      0
RESID   4      0
RESID   5      0
RESID   6      0
STONE   1      0
STONE   2      0
STONE   3      0
STONE   4      0
STONE   5      0
STONE   6      0
TPORV   1      43
TPORV   2      44
TPORV   3      44
TPORV   4      44
TPORV   5      44
TPORV   6      49
TRAPAIR 1      0
TRAPAIR 2      0
TRAPAIR 3      0
TRAPAIR 4      0
TRAPAIR 5      0
TRAPAIR 6      0
WILT    1      25.8
WILT    2      23.7
WILT    3      23.7
WILT    4      18.8
WILT    5      18.8
WILT    6      15
XMPOR   1      41
XMPOR   2      43
XMPOR   3      43
XMPOR   4      43
XMPOR   5      43
XMPOR   6      47
ZA      1      1
ZA      2      1
ZA      3      1
ZA      4      1
ZA      5      1
ZA      6      1
ZM      1      -0.5
ZM      2      -0.5
ZM      3      1.5
ZM      4      -4
ZM      5      -4
ZM      6      -3.5
ZN      1      3
ZN      2      3
ZN      3      3
ZN      4      2
ZN      5      2
ZN      6      2
ZP      1      0
ZP      2      0
ZP      3      0
ZP      4      0
ZP      5      0
ZP      6      0
*************************
******
PROPERTIES
NHORIZONS      6
CLAY    1      30
CLAY    2      31
CLAY    3      25
CLAY    4      26
CLAY    5      24
CLAY    6      31
HTICK   1      25
HTICK   2      25
HTICK   3      10
HTICK   4      40
HTICK   5      20
HTICK   6      70
NLAYER  1      26
NLAYER  2      26
NLAYER  3      10
NLAYER  4      42
NLAYER  5      21
NLAYER  6      75
ORGC    1      1.39
ORGC    2      0.93
ORGC    3      0.7
ORGC    4      0.3
ORGC    5      0.3
ORGC    6      0.27
THICKNESS      1      25
THICKNESS      2      25
THICKNESS      3      10
THICKNESS      4      40
THICKNESS      5      20
THICKNESS      6      70
*************************
******
OPTIONS
AVERAGET       1
AVERAGEX       2
BOUNDARY       4
CHAPAR  0
CROP    2
CRUST   0
DEGKIN  0
DRIVING 1
EVAPORATE      1
INITIAL 1
IRRIGATE       1
KINETIC 0
MASSUNITS      2
METABOLITE     0
RAINFALL       1
SOLUTE  2
TEMPINI 0
TILEDRAIN      2
VARTENSION     0
*************************
******
SOLUTE PARAMETERS
CANDEG  0
CONC    0
DIFF    4.976852E-10
DV      5
EXPB    0.49
FCONVERT       0.5778129
FEXT    0
FRACEQ  0
FRACK   0
FRACMAC 0.02
FSTAR   0.784
PF1     2
PF2     0
SORPRATE       0
TREF    20
TRESP   0.0948
KOC     32.0664
ZMIX    1
NHORIZONS      6
AEXC    1      0
AEXC    2      0
AEXC    3      0
AEXC    4      0
AEXC    5      0
AEXC    6      0
DEGMAL  1      0.01750372
DEGMAL  2      0.008751859
```

```
DEGMAL  3       0.008751859
DEGMAL  4       0.005251116
DEGMAL  5       0
DEGMAL  6       0
DEGMAS  1       0.01750372
DEGMAS  2       0.008751859
DEGMAS  3       0.008751859
DEGMAS  4       0.005251116
DEGMAS  5       0
DEGMAS  6       0
DEGMIL  1       0.01750372
DEGMIL  2       0.008751859
DEGMIL  3       0.008751859
DEGMIL  4       0.005251116
DEGMIL  5       0
DEGMIL  6       0
DEGMIS  1       0.01750372
DEGMIS  2       0.008751859
DEGMIS  3       0.008751859
DEGMIS  4       0.005251116
DEGMIS  5       0
DEGMIS  6       0
FREUND  1       0.96
FREUND  2       0.96
FREUND  3       0.96
FREUND  4       0.96
FREUND  5       0.96
FREUND  6       0.96
ZKD     1       0.4457229
ZKD     2       0.2982175
ZKD     3       0.2244648
ZKD     4       0.0961992
ZKD     5       0.0961992
ZKD     6       0.08657928
*************************
******
CROP PARAMETERS
NCROPS  1
ATTEN   1       0.6
BETA    1       0.2
CANCAP  1       2
CFORM   1       2
CRITAIR 1       5
DFORM   1       0.3
FAWC    1       0.6536142
HCROP   1       0
HMAX    1       0
IDMAX   1       161
IDMAX2  1       0
IDSTART 1       69
IDSTART2        1       0
IHARV   1       201
IHARV2  1       0
LAIC    1       0
LAIHAR  1       2
LAIMAX  1       5
LAIMIN  1       0.01
NCROP   1       1
RI50    1       50
ROOTDEP 1       0
ROOTINIT        1
        0.01
ROOTMAX 1       0.6
RPIN    1       60
RSMIN   1       0
RSURF   1       0
WATEN   1       20
VPD50   1       50
ZALP    1       1
ZDATEMIN        1       70
ZDATEMIN2       1       0
ZHMIN   1       0
*************************
******
SITE PARAMETERS
ALBEDO  0.25
ANNAMP  7.7
ANNTAV  11.9
DRAINDEP        0
DWRL    0
LAYERD  0
PHI     48.1
RAINCO  1
RGWFLOW 0
RINTEN  2
SNOWCO  1
SNOWMF  4.5
SPACE   0
ZMET    10
*************************
******
IRRIGATION PARAMETERS
IRRSAME True
CRITDEF -1
IRRYEARS        26
IRRYEAR 1
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 2
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 3
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 4
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 5
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 6
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 7
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 8
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 9
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 10
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 11
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 12
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 13
NIRRIGATIONS    1
IRRIGNO 1
IRRDAY  90
IRRSTART        9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 14
```

```
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 15
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 16
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 17
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 18
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 19
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 20
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 21
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 22
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 23
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 24
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 25
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
IRRYEAR 26
NIRRIGATIONS   1
IRRIGNO 1
IRRDAY  90
IRRSTART       9
IRREND  9.2
AMIR    0.1
CONCI   0
ZFINT   0
************************
******
SETUP
DATEFILE
DRIVINGFILE
       macro131.bin
DRIVINGPERIOD  01/01/1901-
01/01/1927
ENDDATE 1927-01-01 00:00
OUTPUTFILE
       macro135.bin
METFILE
       C:\SWASH\macro\Mul
ti_GW\M3_3b_ID135\bin\ckm6
et.BIN
METPERIOD      1901-01-01
00:00-1927-01-01 00:00
NUMLAYERS      0
OUTINTD 1
OUTINTM 0
PERIODFILE10   (none)
STARTDATE      1901-01-01
00:00
RAINFALLFILE
       C:\SWASH\macro\Mul
ti_GW\M3_3b_ID135\bin\ckm6
p.BIN
TENSIONFILE    (none)
TOTPHYSLAYER   200
************************
******
TILLAGE PARAMETERS
CRUSTSTA       0
DUMMY   0
GAMMASEAL      0
GAMMATILL      0
HALFCRUS       0
HALFRAIN       0
KSMSEAL 0
KSMTILLE       0
MACDCH  0
MACPCH  0
NTILL   0
XMPORSEAL      0
ZNSEAL  0
************************
******
OUTPUTS
NSINGLE 81
RRNRAIN -1      0       X
ACCMELT -1      0       X
PWT     -1      0       X
INFILMI -1      0       X
INFILMA -1      0       X
CINFIL  -1      0       X
RAIN    -1      0       X
CETA    -1      0       T
EPOT    -1      0       T
CCEPOT  -1      0       T
CCETA   -1      0       T
TPRECIP -1      0       T
TTPRECIP       -1      0
       T
SSEEP   0       0       T
TSEEP   0       0       T
CRES    -1      0       T
SRUNOFF -1      0       T
WWW     -1      0       T
TRUNOFF -1      1       T
TFLOWOUT       -1      1
       T
TFLOW   -1      0       T
TSTOREMI       -1      1
       T
TSTOREMA       -1      1
       T
PRECIRR -1      0       T
PRECIRA -1      1       T
SEEPMI  0       0       T
SEEPMIAC       0       0
       T
PSOIL   -1      0       T
UPT     -1      0       T
CPSOIL  -1      0       T
CUPT    -1      0       T
ESOIL   -1      0       T
ETA     -1      0       T
WETACT  -1      0       T
CESOIL  -1      0       T
CETC    -1      0       T
CCET    -1      1       T
GSRAT   0       0       T
GSTOT   0       0       T
WATEREQ -1      0       T
BOTFLOW -1      0       G
```

```
DRAINCON        0       0           17      0       3323            88      0       3323
        G                           18      0       3323            89      0       3323
TMAX    -1      0       G           19      0       3323            90      0       3323
TMIN    -1      0       G           20      0       3323            91      0       3323
SMICIN  -1      0       G           21      0       3323            92      0       3323
SMACIN  -1      0       G           22      0       3323            93      0       3323
GRCON   0       0       G           23      0       3323            94      0       3323
TAV     -1      0       G           24      0       3323            95      0       3323
GLOBAL  -1      0       G           25      0       3323            96      0       3323
TSOUT   -1      1       D           26      0       3323            97      0       3323
TSS     -1      0       D           27      0       3323            98      0       3323
SSS     -1      0       D           28      0       3323            99      0       3323
TSRUN   -1      1       D           29      0       3323            100     0       3323
TPAM    -1      1       D           30      0       3323            101     0       3323
TCAM    -1      1       D           31      0       3323            102     0       3323
TADMI   -1      1       D           32      0       3323            103     0       3323
TADMA   -1      1       D           33      0       3323            104     1       3323
TDEG    -1      1       D           34      0       3323            105     0       3323
TUPT    -1      1       D           35      0       3323            106     0       3323
SAMS    -1      0       D           36      0       3323            107     0       3323
CDEG    -1      0       D           37      0       3323            108     0       3323
DRAINLOS        0       0           38      0       3323            109     0       3323
        D                           39      0       3323            110     0       3323
DSOLTOSS        0       0           40      0       3323            111     0       3323
        D                           41      0       3323            112     0       3323
DSOLTMIC        0       0           42      0       3323            113     0       3323
        D                           43      0       3323            114     0       3323
TSOLTMIC        0       0           44      0       3323            115     0       3323
        D                           45      0       3323            116     0       3323
ELOSS   0       0       D           46      0       3323            117     0       3323
SSRAT   0       0       D           47      0       3323            118     0       3323
SSTOT   0       0       D           48      0       3323            119     0       3323
CFOUT   0       0       D           49      0       3323            120     0       3323
ACFOUT  0       0       D           50      0       3323            121     0       3323
TCOLLMA 0       0       D           51      0       3323            122     0       3323
TCOLLMI 0       0       D           52      0       3323            123     0       3323
CFDRAIN 0       0       D           53      0       3323            124     0       3323
ACFDRAIN        0       0           54      0       3323            125     0       3323
        D                           55      0       3323            126     0       3323
TDEC    0       0       D           56      0       3323            127     0       3323
TIMMOB  0       0       D           57      0       3323            128     0       3323
GENERATE        0       0           58      0       3323            129     0       3323
        D                           59      0       3323            130     0       3323
GSINK   -1      0       D           60      0       3323            131     0       3323
CFDRS   0       0       D           61      0       3323            132     0       3323
ACFDRS  0       0       D           62      0       3323            133     0       3323
PC      0       0       D           63      0       3323            134     0       3323
NLAYERED        49                  64      0       3323            135     0       3323
THETA   -1      0       X           65      0       3323            136     0       3323
THETI   -1      0       X           66      0       3323            137     0       3323
THETT   -1      0       X           67      0       3323            138     0       3323
TMPOR   -1      0       X           68      0       3323            139     0       3323
CPSI    -1      0       X           69      0       3323            140     0       3323
ZUPTAKE -1      0       X           70      0       3323            141     0       3323
WOUT    -1      1       X           71      0       3323            142     0       3323
1       0       3323                72      0       3323            143     0       3323
2       0       3323                73      0       3323            144     0       3323
3       0       3323                74      0       3323            145     0       3323
4       0       3323                75      0       3323            146     0       3323
5       0       3323                76      0       3323            147     0       3323
6       0       3323                77      0       3323            148     0       3323
7       0       3323                78      0       3323            149     0       3323
8       0       3323                79      0       3323            150     0       3323
9       0       3323                80      0       3323            151     0       3323
10      0       3323                81      0       3323            152     0       3323
11      0       3323                82      0       3323            153     0       3323
12      0       3323                83      0       3323            154     0       3323
13      0       3323                84      0       3323            155     0       3323
14      0       3323                85      0       3323            156     0       3323
15      0       3323                86      0       3323            157     0       3323
16      0       3323                87      0       3323            158     0       3323
```

```
159     0       3323                25      0       3326                96      0       3326
160     0       3323                26      0       3326                97      0       3326
161     0       3323                27      0       3326                98      0       3326
162     0       3323                28      0       3326                99      0       3326
163     0       3323                29      0       3326                100     0       3326
164     0       3323                30      0       3326                101     0       3326
165     0       3323                31      0       3326                102     0       3326
166     0       3323                32      0       3326                103     0       3326
167     0       3323                33      0       3326                104     1       3326
168     0       3323                34      0       3326                105     0       3326
169     0       3323                35      0       3326                106     0       3326
170     0       3323                36      0       3326                107     0       3326
171     0       3323                37      0       3326                108     0       3326
172     0       3323                38      0       3326                109     0       3326
173     0       3323                39      0       3326                110     0       3326
174     0       3323                40      0       3326                111     0       3326
175     0       3323                41      0       3326                112     0       3326
176     0       3323                42      0       3326                113     0       3326
177     0       3323                43      0       3326                114     0       3326
178     0       3323                44      0       3326                115     0       3326
179     0       3323                45      0       3326                116     0       3326
180     0       3323                46      0       3326                117     0       3326
181     0       3323                47      0       3326                118     0       3326
182     0       3323                48      0       3326                119     0       3326
183     0       3323                49      0       3326                120     0       3326
184     0       3323                50      0       3326                121     0       3326
185     0       3323                51      0       3326                122     0       3326
186     0       3323                52      0       3326                123     0       3326
187     0       3323                53      0       3326                124     0       3326
188     0       3323                54      0       3326                125     0       3326
189     0       3323                55      0       3326                126     0       3326
190     0       3323                56      0       3326                127     0       3326
191     0       3323                57      0       3326                128     0       3326
192     0       3323                58      0       3326                129     0       3326
193     0       3323                59      0       3326                130     0       3326
194     0       3323                60      0       3326                131     0       3326
195     0       3323                61      0       3326                132     0       3326
196     0       3323                62      0       3326                133     0       3326
197     0       3323                63      0       3326                134     0       3326
198     0       3323                64      0       3326                135     0       3326
199     0       3323                65      0       3326                136     0       3326
200     0       3323                66      0       3326                137     0       3326
EXCHANGE        -1      0           67      0       3326                138     0       3326
        X                           68      0       3326                139     0       3326
THETAMA -1      0       X           69      0       3326                140     0       3326
WFLOWOUT        -1      1           70      0       3326                141     0       3326
        X                           71      0       3326                142     0       3326
1       0       3326                72      0       3326                143     0       3326
2       0       3326                73      0       3326                144     0       3326
3       0       3326                74      0       3326                145     0       3326
4       0       3326                75      0       3326                146     0       3326
5       0       3326                76      0       3326                147     0       3326
6       0       3326                77      0       3326                148     0       3326
7       0       3326                78      0       3326                149     0       3326
8       0       3326                79      0       3326                150     0       3326
9       0       3326                80      0       3326                151     0       3326
10      0       3326                81      0       3326                152     0       3326
11      0       3326                82      0       3326                153     0       3326
12      0       3326                83      0       3326                154     0       3326
13      0       3326                84      0       3326                155     0       3326
14      0       3326                85      0       3326                156     0       3326
15      0       3326                86      0       3326                157     0       3326
16      0       3326                87      0       3326                158     0       3326
17      0       3326                88      0       3326                159     0       3326
18      0       3326                89      0       3326                160     0       3326
19      0       3326                90      0       3326                161     0       3326
20      0       3326                91      0       3326                162     0       3326
21      0       3326                92      0       3326                163     0       3326
22      0       3326                93      0       3326                164     0       3326
23      0       3326                94      0       3326                165     0       3326
24      0       3326                95      0       3326                166     0       3326
```

```
167     0       3326                30      0       3333                101     0       3333
168     0       3326                31      0       3333                102     0       3333
169     0       3326                32      0       3333                103     0       3333
170     0       3326                33      0       3333                104     1       3333
171     0       3326                34      0       3333                105     0       3333
172     0       3326                35      0       3333                106     0       3333
173     0       3326                36      0       3333                107     0       3333
174     0       3326                37      0       3333                108     0       3333
175     0       3326                38      0       3333                109     0       3333
176     0       3326                39      0       3333                110     0       3333
177     0       3326                40      0       3333                111     0       3333
178     0       3326                41      0       3333                112     0       3333
179     0       3326                42      0       3333                113     0       3333
180     0       3326                43      0       3333                114     0       3333
181     0       3326                44      0       3333                115     0       3333
182     0       3326                45      0       3333                116     0       3333
183     0       3326                46      0       3333                117     0       3333
184     0       3326                47      0       3333                118     0       3333
185     0       3326                48      0       3333                119     0       3333
186     0       3326                49      0       3333                120     0       3333
187     0       3326                50      0       3333                121     0       3333
188     0       3326                51      0       3333                122     0       3333
189     0       3326                52      0       3333                123     0       3333
190     0       3326                53      0       3333                124     0       3333
191     0       3326                54      0       3333                125     0       3333
192     0       3326                55      0       3333                126     0       3333
193     0       3326                56      0       3333                127     0       3333
194     0       3326                57      0       3333                128     0       3333
195     0       3326                58      0       3333                129     0       3333
196     0       3326                59      0       3333                130     0       3333
197     0       3326                60      0       3333                131     0       3333
198     0       3326                61      0       3333                132     0       3333
199     0       3326                62      0       3333                133     0       3333
200     0       3326                63      0       3333                134     0       3333
DRAINFLO        -1      0           64      0       3333                135     0       3333
        X                           65      0       3333                136     0       3333
DRAINMI -1      0       X           66      0       3333                137     0       3333
THETAM  -1      0       X           67      0       3333                138     0       3333
TEMP    -1      0       G           68      0       3333                139     0       3333
SOLMIC  -1      0       G           69      0       3333                140     0       3333
SOLMAC  -1      0       G           70      0       3333                141     0       3333
SFLOW   -1      1       G           71      0       3333                142     0       3333
1       0       3333                72      0       3333                143     0       3333
2       0       3333                73      0       3333                144     0       3333
3       0       3333                74      0       3333                145     0       3333
4       0       3333                75      0       3333                146     0       3333
5       0       3333                76      0       3333                147     0       3333
6       0       3333                77      0       3333                148     0       3333
7       0       3333                78      0       3333                149     0       3333
8       0       3333                79      0       3333                150     0       3333
9       0       3333                80      0       3333                151     0       3333
10      0       3333                81      0       3333                152     0       3333
11      0       3333                82      0       3333                153     0       3333
12      0       3333                83      0       3333                154     0       3333
13      0       3333                84      0       3333                155     0       3333
14      0       3333                85      0       3333                156     0       3333
15      0       3333                86      0       3333                157     0       3333
16      0       3333                87      0       3333                158     0       3333
17      0       3333                88      0       3333                159     0       3333
18      0       3333                89      0       3333                160     0       3333
19      0       3333                90      0       3333                161     0       3333
20      0       3333                91      0       3333                162     0       3333
21      0       3333                92      0       3333                163     0       3333
22      0       3333                93      0       3333                164     0       3333
23      0       3333                94      0       3333                165     0       3333
24      0       3333                95      0       3333                166     0       3333
25      0       3333                96      0       3333                167     0       3333
26      0       3333                97      0       3333                168     0       3333
27      0       3333                98      0       3333                169     0       3333
28      0       3333                99      0       3333                170     0       3333
29      0       3333                100     0       3333                171     0       3333
```

```
172     0       3333            41      0       3334            112     0       3334
173     0       3333            42      0       3334            113     0       3334
174     0       3333            43      0       3334            114     0       3334
175     0       3333            44      0       3334            115     0       3334
176     0       3333            45      0       3334            116     0       3334
177     0       3333            46      0       3334            117     0       3334
178     0       3333            47      0       3334            118     0       3334
179     0       3333            48      0       3334            119     0       3334
180     0       3333            49      0       3334            120     0       3334
181     0       3333            50      0       3334            121     0       3334
182     0       3333            51      0       3334            122     0       3334
183     0       3333            52      0       3334            123     0       3334
184     0       3333            53      0       3334            124     0       3334
185     0       3333            54      0       3334            125     0       3334
186     0       3333            55      0       3334            126     0       3334
187     0       3333            56      0       3334            127     0       3334
188     0       3333            57      0       3334            128     0       3334
189     0       3333            58      0       3334            129     0       3334
190     0       3333            59      0       3334            130     0       3334
191     0       3333            60      0       3334            131     0       3334
192     0       3333            61      0       3334            132     0       3334
193     0       3333            62      0       3334            133     0       3334
194     0       3333            63      0       3334            134     0       3334
195     0       3333            64      0       3334            135     0       3334
196     0       3333            65      0       3334            136     0       3334
197     0       3333            66      0       3334            137     0       3334
198     0       3333            67      0       3334            138     0       3334
199     0       3333            68      0       3334            139     0       3334
200     0       3333            69      0       3334            140     0       3334
SFLOWOUT        -1      1       70      0       3334            141     0       3334
        G                       71      0       3334            142     0       3334
1       0       3334            72      0       3334            143     0       3334
2       0       3334            73      0       3334            144     0       3334
3       0       3334            74      0       3334            145     0       3334
4       0       3334            75      0       3334            146     0       3334
5       0       3334            76      0       3334            147     0       3334
6       0       3334            77      0       3334            148     0       3334
7       0       3334            78      0       3334            149     0       3334
8       0       3334            79      0       3334            150     0       3334
9       0       3334            80      0       3334            151     0       3334
10      0       3334            81      0       3334            152     0       3334
11      0       3334            82      0       3334            153     0       3334
12      0       3334            83      0       3334            154     0       3334
13      0       3334            84      0       3334            155     0       3334
14      0       3334            85      0       3334            156     0       3334
15      0       3334            86      0       3334            157     0       3334
16      0       3334            87      0       3334            158     0       3334
17      0       3334            88      0       3334            159     0       3334
18      0       3334            89      0       3334            160     0       3334
19      0       3334            90      0       3334            161     0       3334
20      0       3334            91      0       3334            162     0       3334
21      0       3334            92      0       3334            163     0       3334
22      0       3334            93      0       3334            164     0       3334
23      0       3334            94      0       3334            165     0       3334
24      0       3334            95      0       3334            166     0       3334
25      0       3334            96      0       3334            167     0       3334
26      0       3334            97      0       3334            168     0       3334
27      0       3334            98      0       3334            169     0       3334
28      0       3334            99      0       3334            170     0       3334
29      0       3334            100     0       3334            171     0       3334
30      0       3334            101     0       3334            172     0       3334
31      0       3334            102     0       3334            173     0       3334
32      0       3334            103     0       3334            174     0       3334
33      0       3334            104     1       3334            175     0       3334
34      0       3334            105     0       3334            176     0       3334
35      0       3334            106     0       3334            177     0       3334
36      0       3334            107     0       3334            178     0       3334
37      0       3334            108     0       3334            179     0       3334
38      0       3334            109     0       3334            180     0       3334
39      0       3334            110     0       3334            181     0       3334
40      0       3334            111     0       3334            182     0       3334
```

```
183     0       3334
184     0       3334
185     0       3334
186     0       3334
187     0       3334
188     0       3334
189     0       3334
190     0       3334
191     0       3334
192     0       3334
193     0       3334
194     0       3334
195     0       3334
196     0       3334
197     0       3334
198     0       3334
199     0       3334
200     0       3334
CEXCH   -1      0       D
DEGMIC  1       0       G
DEGMAC  1       0       G
SOLIMOB -1      0       G
PAM     -1      0       D
CAM     -1      0       D
ADMI    -1      0       D
ADMA    -1      0       D
PAMT    -1      0       D
CAMT    -1      0       D
PCAA    -1      0       D
COLCMI  -1      0       D
COLCMA  -1      0       D
SFDMI   -1      0       D
SFDMA   -1      0       D
ZAM     -1      0       D
SFSDMA  -1      0       D
SFSDMI  -1      0       D
GAMMA   -1      0       GP
Z       -1      0       GP
XMPOR   -1      0       GP
ALPHA   -1      0       GP
KSM     -1      0       GP
ZN      -1      0       GP
ASCALE  -1      0       GP
TRAP_AIR        -1      0
        GP
TSEXT   -1      0       GP
KSATMIN -1      0       GP
TPORV   -1      0       GP
ADMI_KIN        -1      0
        D
*************************
******
BOUNDARY AND INITIAL
CONDITIONS
AREA    0
BGRAD   0
BOTEN   1010
CONCIN  0
CONSTSTA        0
GWFLUX  0
IASCALE 0
SOLINIT 1       0
SOLINIT 2       0
SOLINIT 3       0
SOLINIT 4       0
SOLINIT 5       0
SOLINIT 6       0
SOLINIT 7       0
SOLINIT 8       0
SOLINIT 9       0
SOLINIT 10      0
SOLINIT 11      0
SOLINIT 12      0
SOLINIT 13      0
SOLINIT 14      0
SOLINIT 15      0
SOLINIT 16      0
SOLINIT 17      0
SOLINIT 18      0
SOLINIT 19      0
SOLINIT 20      0
SOLINIT 21      0
SOLINIT 22      0
SOLINIT 23      0
SOLINIT 24      0
SOLINIT 25      0
SOLINIT 26      0
SOLINIT 27      0
SOLINIT 28      0
SOLINIT 29      0
SOLINIT 30      0
SOLINIT 31      0
SOLINIT 32      0
SOLINIT 33      0
SOLINIT 34      0
SOLINIT 35      0
SOLINIT 36      0
SOLINIT 37      0
SOLINIT 38      0
SOLINIT 39      0
SOLINIT 40      0
SOLINIT 41      0
SOLINIT 42      0
SOLINIT 43      0
SOLINIT 44      0
SOLINIT 45      0
SOLINIT 46      0
SOLINIT 47      0
SOLINIT 48      0
SOLINIT 49      0
SOLINIT 50      0
SOLINIT 51      0
SOLINIT 52      0
SOLINIT 53      0
SOLINIT 54      0
SOLINIT 55      0
SOLINIT 56      0
SOLINIT 57      0
SOLINIT 58      0
SOLINIT 59      0
SOLINIT 60      0
SOLINIT 61      0
SOLINIT 62      0
SOLINIT 63      0
SOLINIT 64      0
SOLINIT 65      0
SOLINIT 66      0
SOLINIT 67      0
SOLINIT 68      0
SOLINIT 69      0
SOLINIT 70      0
SOLINIT 71      0
SOLINIT 72      0
SOLINIT 73      0
SOLINIT 74      0
SOLINIT 75      0
SOLINIT 76      0
SOLINIT 77      0
SOLINIT 78      0
SOLINIT 79      0
SOLINIT 80      0
SOLINIT 81      0
SOLINIT 82      0
SOLINIT 83      0
SOLINIT 84      0
SOLINIT 85      0
SOLINIT 86      0
SOLINIT 87      0
SOLINIT 88      0
SOLINIT 89      0
SOLINIT 90      0
SOLINIT 91      0
SOLINIT 92      0
SOLINIT 93      0
SOLINIT 94      0
SOLINIT 95      0
SOLINIT 96      0
SOLINIT 97      0
SOLINIT 98      0
SOLINIT 99      0
SOLINIT 100     0
SOLINIT 101     0
SOLINIT 102     0
SOLINIT 103     0
SOLINIT 104     0
SOLINIT 105     0
SOLINIT 106     0
SOLINIT 107     0
SOLINIT 108     0
SOLINIT 109     0
SOLINIT 110     0
SOLINIT 111     0
SOLINIT 112     0
SOLINIT 113     0
SOLINIT 114     0
SOLINIT 115     0
SOLINIT 116     0
SOLINIT 117     0
SOLINIT 118     0
SOLINIT 119     0
SOLINIT 120     0
SOLINIT 121     0
SOLINIT 122     0
SOLINIT 123     0
SOLINIT 124     0
SOLINIT 125     0
SOLINIT 126     0
SOLINIT 127     0
SOLINIT 128     0
SOLINIT 129     0
SOLINIT 130     0
SOLINIT 131     0
SOLINIT 132     0
SOLINIT 133     0
SOLINIT 134     0
SOLINIT 135     0
SOLINIT 136     0
SOLINIT 137     0
SOLINIT 138     0
SOLINIT 139     0
SOLINIT 140     0
SOLINIT 141     0
SOLINIT 142     0
SOLINIT 143     0
SOLINIT 144     0
SOLINIT 145     0
SOLINIT 146     0
SOLINIT 147     0
SOLINIT 148     0
SOLINIT 149     0
SOLINIT 150     0
SOLINIT 151     0
SOLINIT 152     0
```

```
SOLINIT 153     0               TEMPINI 24      10              TEMPINI 95      10
SOLINIT 154     0               TEMPINI 25      10              TEMPINI 96      10
SOLINIT 155     0               TEMPINI 26      10              TEMPINI 97      10
SOLINIT 156     0               TEMPINI 27      10              TEMPINI 98      10
SOLINIT 157     0               TEMPINI 28      10              TEMPINI 99      10
SOLINIT 158     0               TEMPINI 29      10              TEMPINI 100     10
SOLINIT 159     0               TEMPINI 30      10              TEMPINI 101     10
SOLINIT 160     0               TEMPINI 31      10              TEMPINI 102     10
SOLINIT 161     0               TEMPINI 32      10              TEMPINI 103     10
SOLINIT 162     0               TEMPINI 33      10              TEMPINI 104     10
SOLINIT 163     0               TEMPINI 34      10              TEMPINI 105     10
SOLINIT 164     0               TEMPINI 35      10              TEMPINI 106     10
SOLINIT 165     0               TEMPINI 36      10              TEMPINI 107     10
SOLINIT 166     0               TEMPINI 37      10              TEMPINI 108     10
SOLINIT 167     0               TEMPINI 38      10              TEMPINI 109     10
SOLINIT 168     0               TEMPINI 39      10              TEMPINI 110     10
SOLINIT 169     0               TEMPINI 40      10              TEMPINI 111     10
SOLINIT 170     0               TEMPINI 41      10              TEMPINI 112     10
SOLINIT 171     0               TEMPINI 42      10              TEMPINI 113     10
SOLINIT 172     0               TEMPINI 43      10              TEMPINI 114     10
SOLINIT 173     0               TEMPINI 44      10              TEMPINI 115     10
SOLINIT 174     0               TEMPINI 45      10              TEMPINI 116     10
SOLINIT 175     0               TEMPINI 46      10              TEMPINI 117     10
SOLINIT 176     0               TEMPINI 47      10              TEMPINI 118     10
SOLINIT 177     0               TEMPINI 48      10              TEMPINI 119     10
SOLINIT 178     0               TEMPINI 49      10              TEMPINI 120     10
SOLINIT 179     0               TEMPINI 50      10              TEMPINI 121     10
SOLINIT 180     0               TEMPINI 51      10              TEMPINI 122     10
SOLINIT 181     0               TEMPINI 52      10              TEMPINI 123     10
SOLINIT 182     0               TEMPINI 53      10              TEMPINI 124     10
SOLINIT 183     0               TEMPINI 54      10              TEMPINI 125     10
SOLINIT 184     0               TEMPINI 55      10              TEMPINI 126     10
SOLINIT 185     0               TEMPINI 56      10              TEMPINI 127     10
SOLINIT 186     0               TEMPINI 57      10              TEMPINI 128     10
SOLINIT 187     0               TEMPINI 58      10              TEMPINI 129     10
SOLINIT 188     0               TEMPINI 59      10              TEMPINI 130     10
SOLINIT 189     0               TEMPINI 60      10              TEMPINI 131     10
SOLINIT 190     0               TEMPINI 61      10              TEMPINI 132     10
SOLINIT 191     0               TEMPINI 62      10              TEMPINI 133     10
SOLINIT 192     0               TEMPINI 63      10              TEMPINI 134     10
SOLINIT 193     0               TEMPINI 64      10              TEMPINI 135     10
SOLINIT 194     0               TEMPINI 65      10              TEMPINI 136     10
SOLINIT 195     0               TEMPINI 66      10              TEMPINI 137     10
SOLINIT 196     0               TEMPINI 67      10              TEMPINI 138     10
SOLINIT 197     0               TEMPINI 68      10              TEMPINI 139     10
SOLINIT 198     0               TEMPINI 69      10              TEMPINI 140     10
SOLINIT 199     0               TEMPINI 70      10              TEMPINI 141     10
SOLINIT 200     0               TEMPINI 71      10              TEMPINI 142     10
TEMPINI 1       10              TEMPINI 72      10              TEMPINI 143     10
TEMPINI 2       10              TEMPINI 73      10              TEMPINI 144     10
TEMPINI 3       10              TEMPINI 74      10              TEMPINI 145     10
TEMPINI 4       10              TEMPINI 75      10              TEMPINI 146     10
TEMPINI 5       10              TEMPINI 76      10              TEMPINI 147     10
TEMPINI 6       10              TEMPINI 77      10              TEMPINI 148     10
TEMPINI 7       10              TEMPINI 78      10              TEMPINI 149     10
TEMPINI 8       10              TEMPINI 79      10              TEMPINI 150     10
TEMPINI 9       10              TEMPINI 80      10              TEMPINI 151     10
TEMPINI 10      10              TEMPINI 81      10              TEMPINI 152     10
TEMPINI 11      10              TEMPINI 82      10              TEMPINI 153     10
TEMPINI 12      10              TEMPINI 83      10              TEMPINI 154     10
TEMPINI 13      10              TEMPINI 84      10              TEMPINI 155     10
TEMPINI 14      10              TEMPINI 85      10              TEMPINI 156     10
TEMPINI 15      10              TEMPINI 86      10              TEMPINI 157     10
TEMPINI 16      10              TEMPINI 87      10              TEMPINI 158     10
TEMPINI 17      10              TEMPINI 88      10              TEMPINI 159     10
TEMPINI 18      10              TEMPINI 89      10              TEMPINI 160     10
TEMPINI 19      10              TEMPINI 90      10              TEMPINI 161     10
TEMPINI 20      10              TEMPINI 91      10              TEMPINI 162     10
TEMPINI 21      10              TEMPINI 92      10              TEMPINI 163     10
TEMPINI 22      10              TEMPINI 93      10              TEMPINI 164     10
TEMPINI 23      10              TEMPINI 94      10              TEMPINI 165     10
```

```
TEMPINI 166    10              THETAINI      37     0          THETAINI      108    0
TEMPINI 167    10              THETAINI      38     0          THETAINI      109    0
TEMPINI 168    10              THETAINI      39     0          THETAINI      110    0
TEMPINI 169    10              THETAINI      40     0          THETAINI      111    0
TEMPINI 170    10              THETAINI      41     0          THETAINI      112    0
TEMPINI 171    10              THETAINI      42     0          THETAINI      113    0
TEMPINI 172    10              THETAINI      43     0          THETAINI      114    0
TEMPINI 173    10              THETAINI      44     0          THETAINI      115    0
TEMPINI 174    10              THETAINI      45     0          THETAINI      116    0
TEMPINI 175    10              THETAINI      46     0          THETAINI      117    0
TEMPINI 176    10              THETAINI      47     0          THETAINI      118    0
TEMPINI 177    10              THETAINI      48     0          THETAINI      119    0
TEMPINI 178    10              THETAINI      49     0          THETAINI      120    0
TEMPINI 179    10              THETAINI      50     0          THETAINI      121    0
TEMPINI 180    10              THETAINI      51     0          THETAINI      122    0
TEMPINI 181    10              THETAINI      52     0          THETAINI      123    0
TEMPINI 182    10              THETAINI      53     0          THETAINI      124    0
TEMPINI 183    10              THETAINI      54     0          THETAINI      125    0
TEMPINI 184    10              THETAINI      55     0          THETAINI      126    0
TEMPINI 185    10              THETAINI      56     0          THETAINI      127    0
TEMPINI 186    10              THETAINI      57     0          THETAINI      128    0
TEMPINI 187    10              THETAINI      58     0          THETAINI      129    0
TEMPINI 188    10              THETAINI      59     0          THETAINI      130    0
TEMPINI 189    10              THETAINI      60     0          THETAINI      131    0
TEMPINI 190    10              THETAINI      61     0          THETAINI      132    0
TEMPINI 191    10              THETAINI      62     0          THETAINI      133    0
TEMPINI 192    10              THETAINI      63     0          THETAINI      134    0
TEMPINI 193    10              THETAINI      64     0          THETAINI      135    0
TEMPINI 194    10              THETAINI      65     0          THETAINI      136    0
TEMPINI 195    10              THETAINI      66     0          THETAINI      137    0
TEMPINI 196    10              THETAINI      67     0          THETAINI      138    0
TEMPINI 197    10              THETAINI      68     0          THETAINI      139    0
TEMPINI 198    10              THETAINI      69     0          THETAINI      140    0
TEMPINI 199    10              THETAINI      70     0          THETAINI      141    0
TEMPINI 200    10              THETAINI      71     0          THETAINI      142    0
THETAINI       1      0        THETAINI      72     0          THETAINI      143    0
THETAINI       2      0        THETAINI      73     0          THETAINI      144    0
THETAINI       3      0        THETAINI      74     0          THETAINI      145    0
THETAINI       4      0        THETAINI      75     0          THETAINI      146    0
THETAINI       5      0        THETAINI      76     0          THETAINI      147    0
THETAINI       6      0        THETAINI      77     0          THETAINI      148    0
THETAINI       7      0        THETAINI      78     0          THETAINI      149    0
THETAINI       8      0        THETAINI      79     0          THETAINI      150    0
THETAINI       9      0        THETAINI      80     0          THETAINI      151    0
THETAINI       10     0        THETAINI      81     0          THETAINI      152    0
THETAINI       11     0        THETAINI      82     0          THETAINI      153    0
THETAINI       12     0        THETAINI      83     0          THETAINI      154    0
THETAINI       13     0        THETAINI      84     0          THETAINI      155    0
THETAINI       14     0        THETAINI      85     0          THETAINI      156    0
THETAINI       15     0        THETAINI      86     0          THETAINI      157    0
THETAINI       16     0        THETAINI      87     0          THETAINI      158    0
THETAINI       17     0        THETAINI      88     0          THETAINI      159    0
THETAINI       18     0        THETAINI      89     0          THETAINI      160    0
THETAINI       19     0        THETAINI      90     0          THETAINI      161    0
THETAINI       20     0        THETAINI      91     0          THETAINI      162    0
THETAINI       21     0        THETAINI      92     0          THETAINI      163    0
THETAINI       22     0        THETAINI      93     0          THETAINI      164    0
THETAINI       23     0        THETAINI      94     0          THETAINI      165    0
THETAINI       24     0        THETAINI      95     0          THETAINI      166    0
THETAINI       25     0        THETAINI      96     0          THETAINI      167    0
THETAINI       26     0        THETAINI      97     0          THETAINI      168    0
THETAINI       27     0        THETAINI      98     0          THETAINI      169    0
THETAINI       28     0        THETAINI      99     0          THETAINI      170    0
THETAINI       29     0        THETAINI      100    0          THETAINI      171    0
THETAINI       30     0        THETAINI      101    0          THETAINI      172    0
THETAINI       31     0        THETAINI      102    0          THETAINI      173    0
THETAINI       32     0        THETAINI      103    0          THETAINI      174    0
THETAINI       33     0        THETAINI      104    0          THETAINI      175    0
THETAINI       34     0        THETAINI      105    0          THETAINI      176    0
THETAINI       35     0        THETAINI      106    0          THETAINI      177    0
THETAINI       36     0        THETAINI      107    0          THETAINI      178    0
```

```
THETAINI       179    0          THETAINI       195    0          Scenario : Chateaudun
THETAINI       180    0          THETAINI       196    0          Groundwater
THETAINI       181    0          THETAINI       197    0
THETAINI       182    0          THETAINI       198    0          Simulation from 19010101
THETAINI       183    0          THETAINI       199    0          to 19270101, application
THETAINI       184    0          THETAINI       200    0          every year
THETAINI       185    0          *************                    (6 year warm-up)
THETAINI       186    0          INFORMATION
THETAINI       187    0          MACRO in FOCUS Version           Crop : Cereals, spring,
THETAINI       188    0          5.5.4                            irrigated
THETAINI       189    0          Output File =
THETAINI       190    0          C:\SWASH\macro\Multi_GW\M3       Number of applications : 1
THETAINI       191    0          _3b_ID135\macro135.bin
THETAINI       192    0          Type of compound =               Application 1 : 33.48 g/ha
THETAINI       193    0          metabolite                       of M3_3b on day 90
THETAINI       194    0          Compound : M3_3b
```