2019-06-04

Presentation of PERSAM

EFSA info session 4/5 June 2019

Michael Stemmer

Trusted science for safe food

efsa
European Food Safety Authority

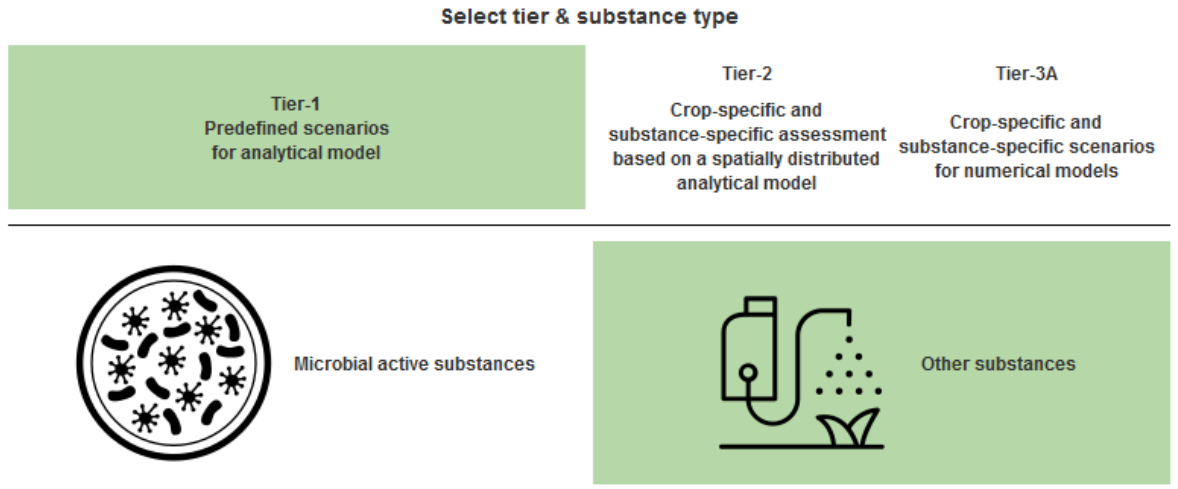
Content

- Start screen
- Features
- Settings
- Result options
- PERSAM transfer file (for Tier 3A)
- ESRI GIS data in external software

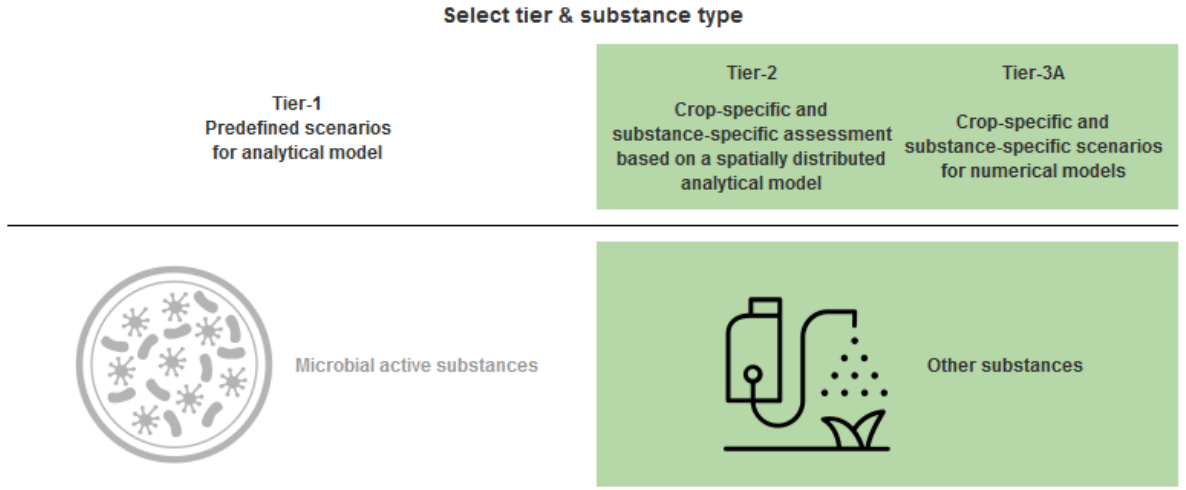
Start screen

Features - Tier & substance type

Tier 1: Microbial actives substances or other substances

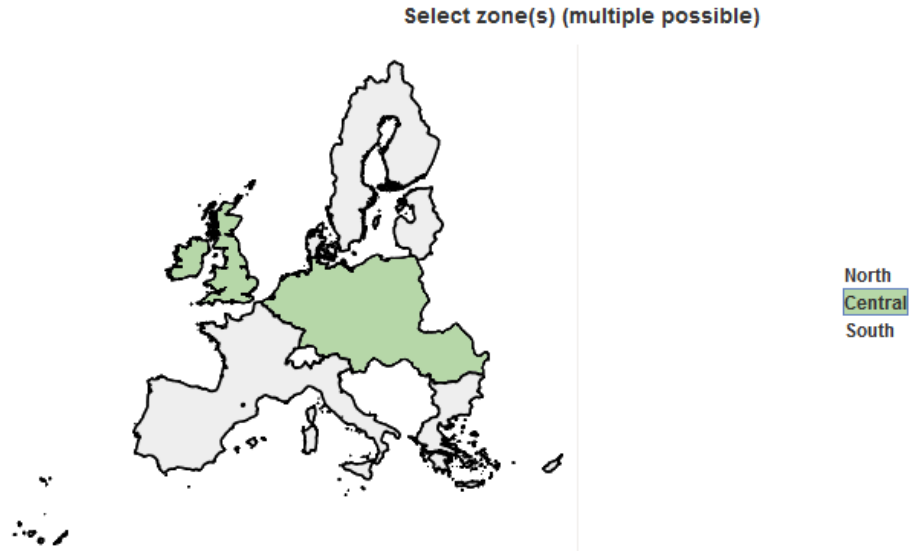


Tier 2/3A: Other substances only

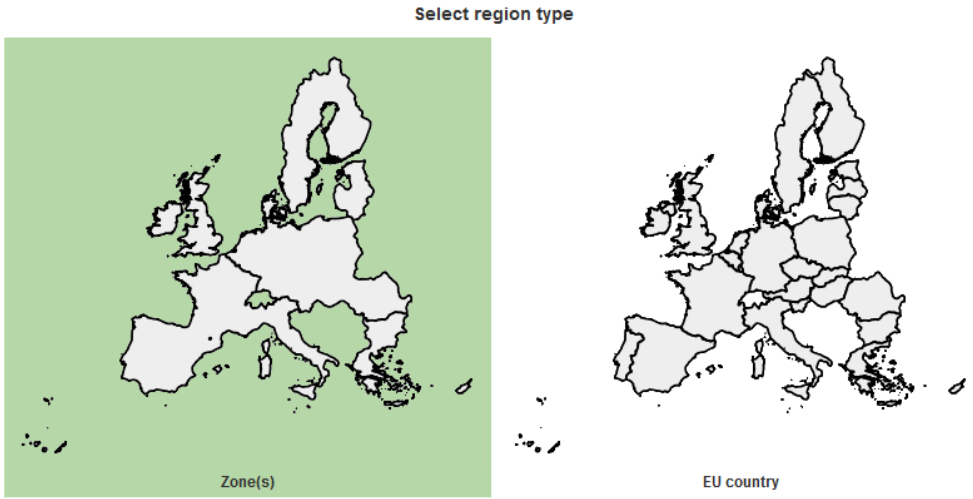


Features - Region

Tier 1: Regulatory zone

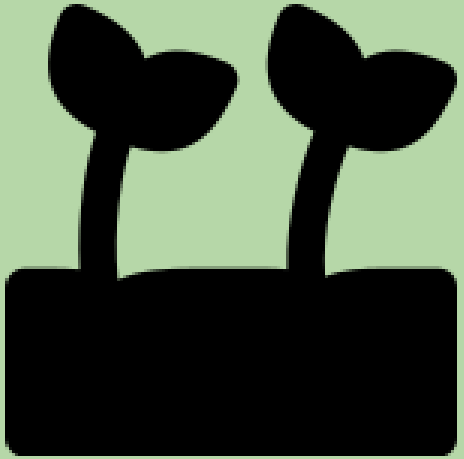


Tier 2/3A: Regulatory zone or Member state

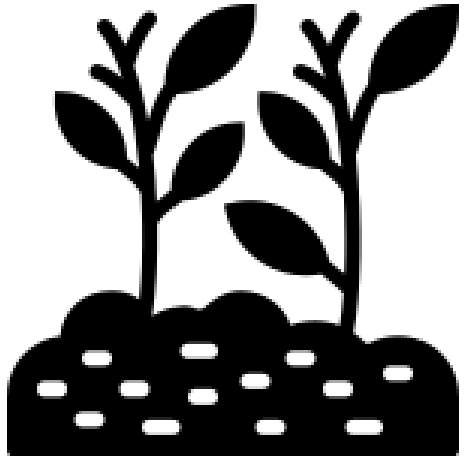


Features - Type of endpoints

Select endpoint(s) (multiple possible)



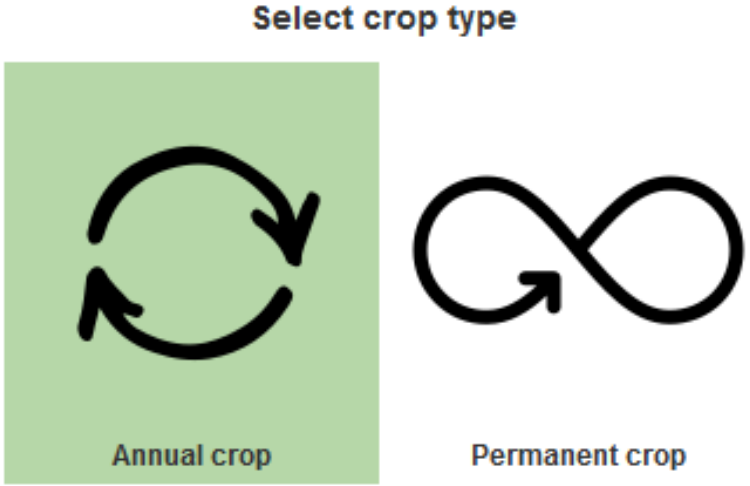
Concentration in total soil C_T



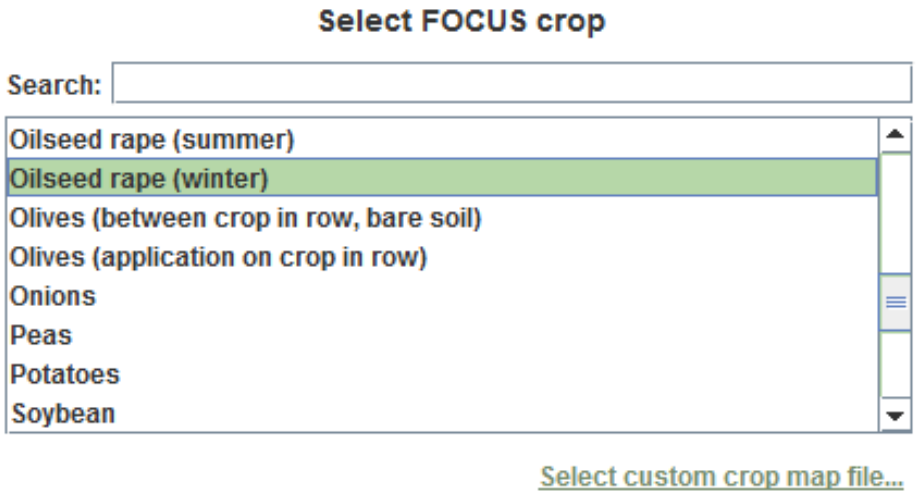
Concentration in pore water C_L

Features - Crop type & crop area

Tier 1: Crop type

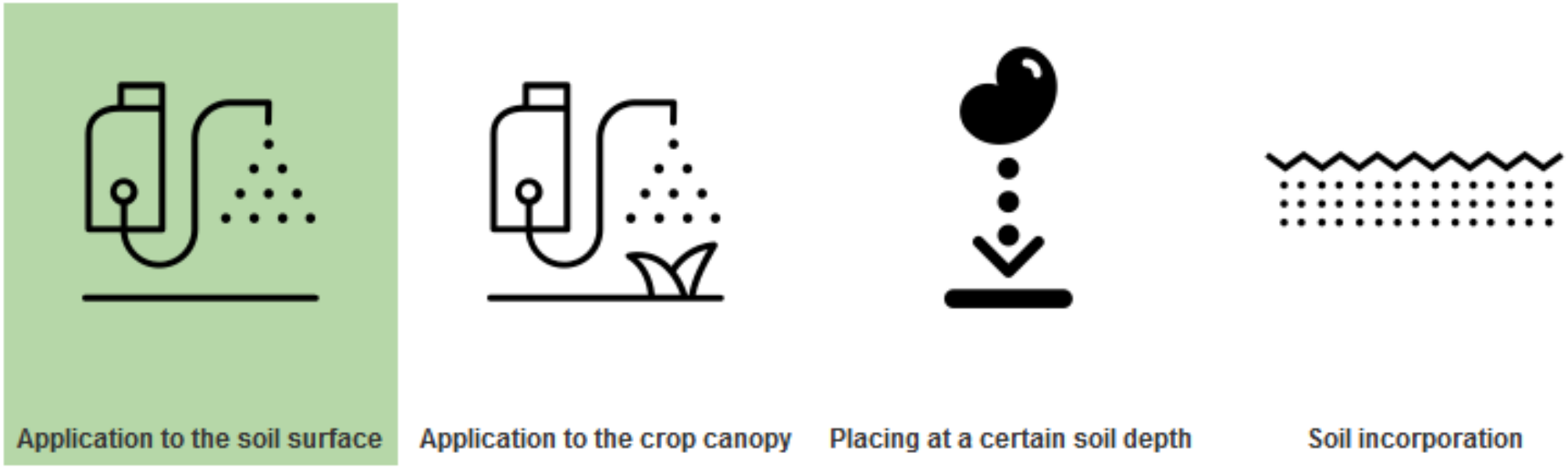


Tier 2/3A: Crop type & crop area

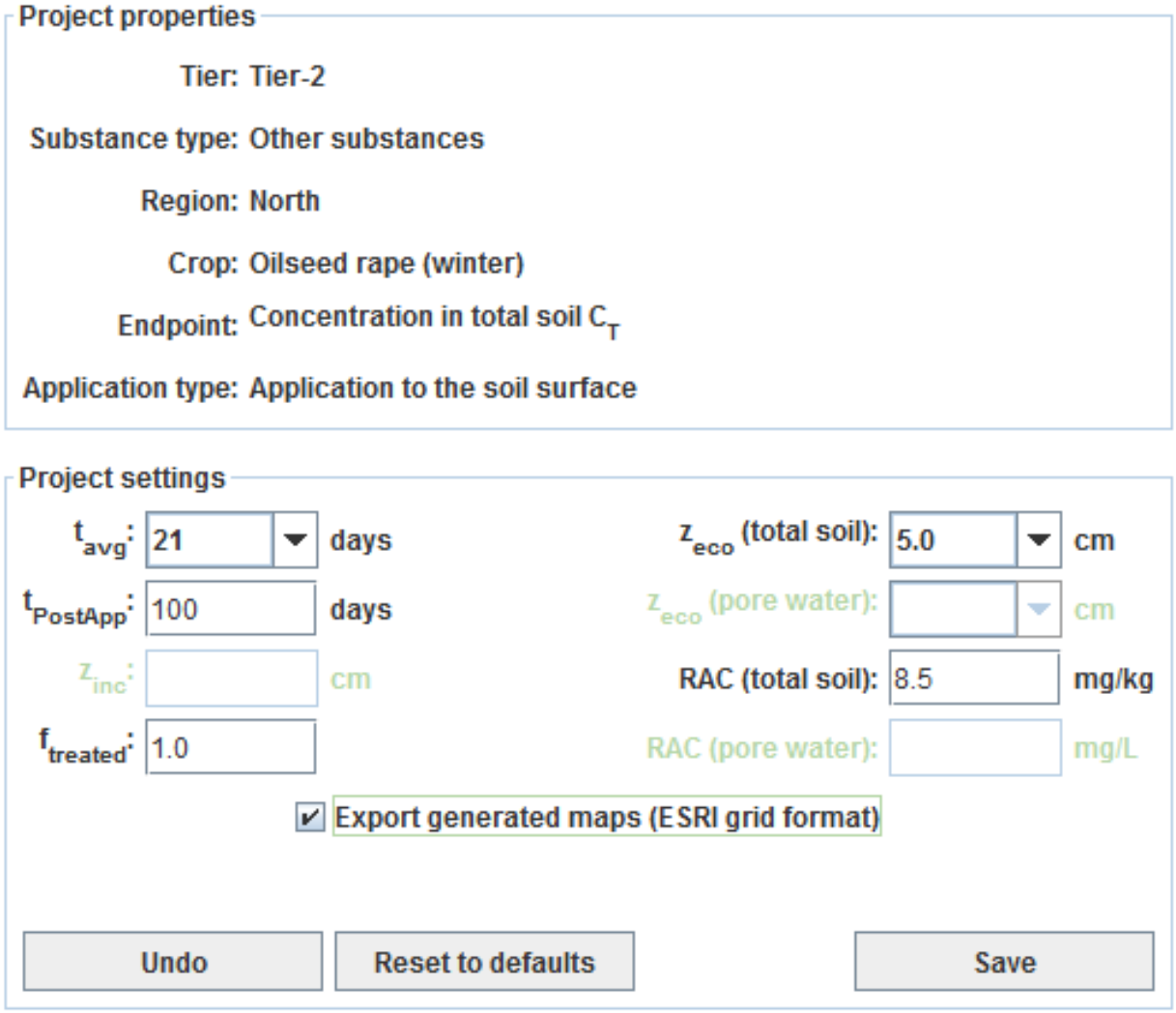


Features - Application type (Tier 2/3A)

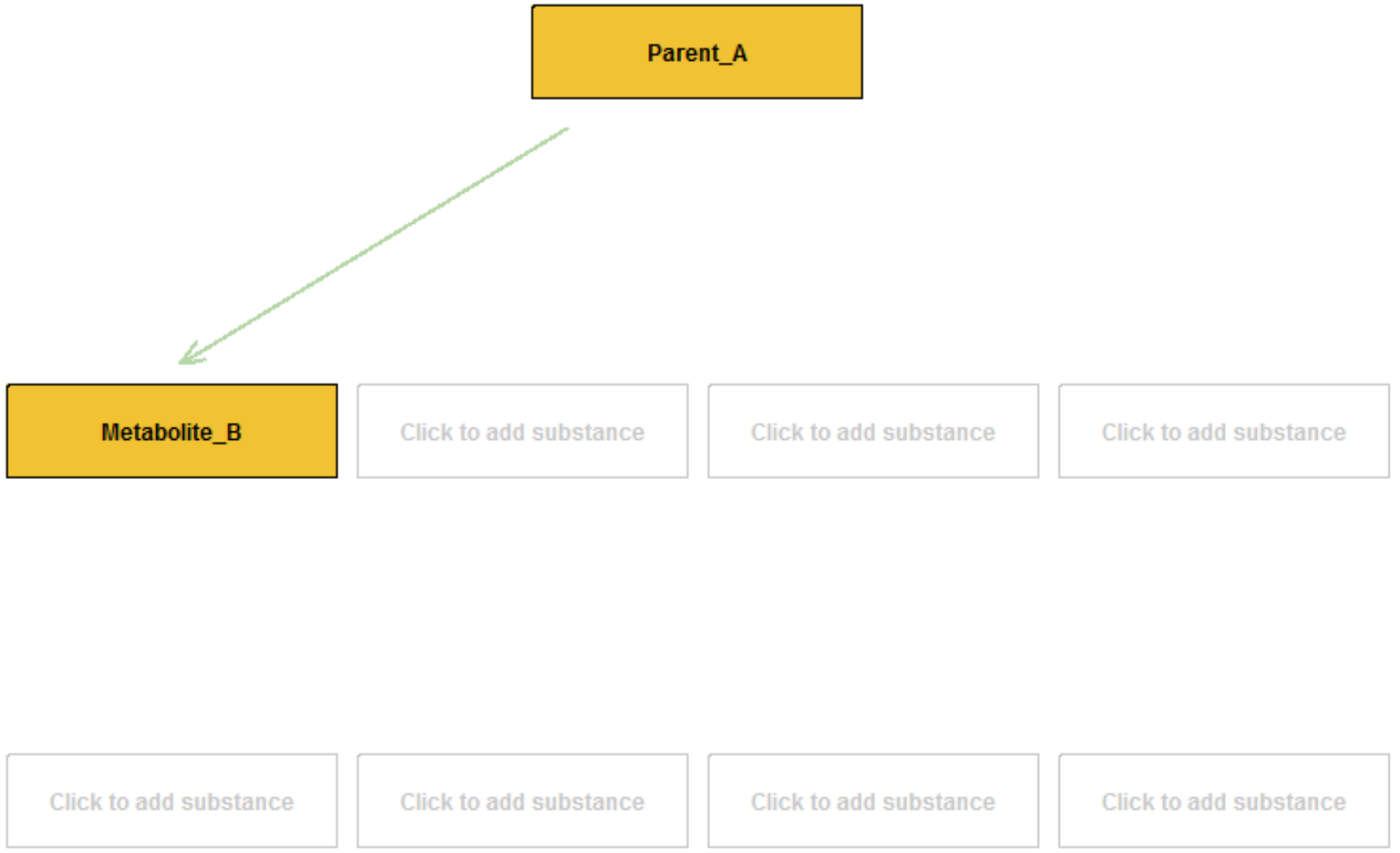
Select application type



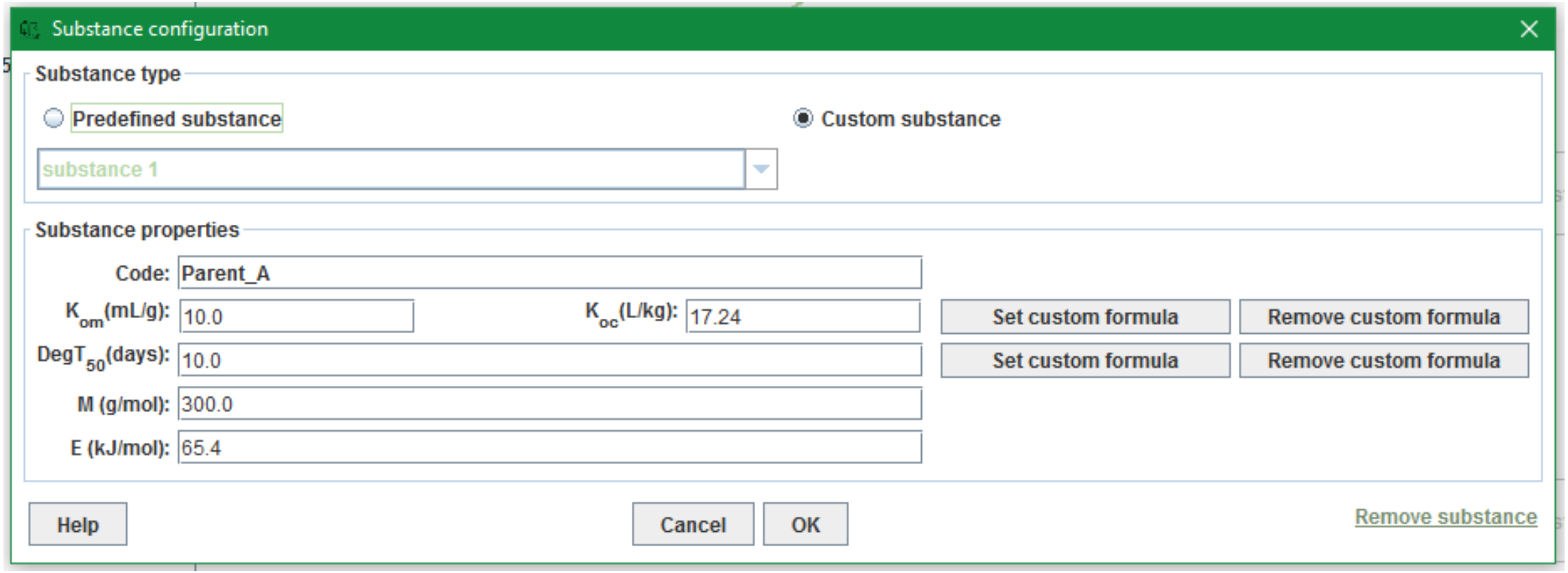
Settings - Basic



Settings - Substances



Settings - Substance properties



Settings - Application scheme

rate (kg/ha)	dt (days)	growth stage / season	Actions
1.0	0	BBCH 0-9	
1.5	14	BBCH 10-19	
2.0	28	BBCH 20-39	

Add application

application rate: >= 0 kg/ha

Time since first application (dt): 0 - 365 days

Crop development stage / season: BBCH 20-39

Add to table

Period of crop rotation

t_{cycle}: 1 years

Results - Tabulated

Tier-2 results

Plateau and peak concentrations

z_{eco}

	default (5.0 cm)	user
$C_{plateau}$	1.00E-5	
C_{peak}	7.92	

TWA concentrations

z_{eco}

t_{avg}	default (5.0 cm)	user
default (0 days)	7.92	
user (21 days)	6.42	

PEC to RAC ratios

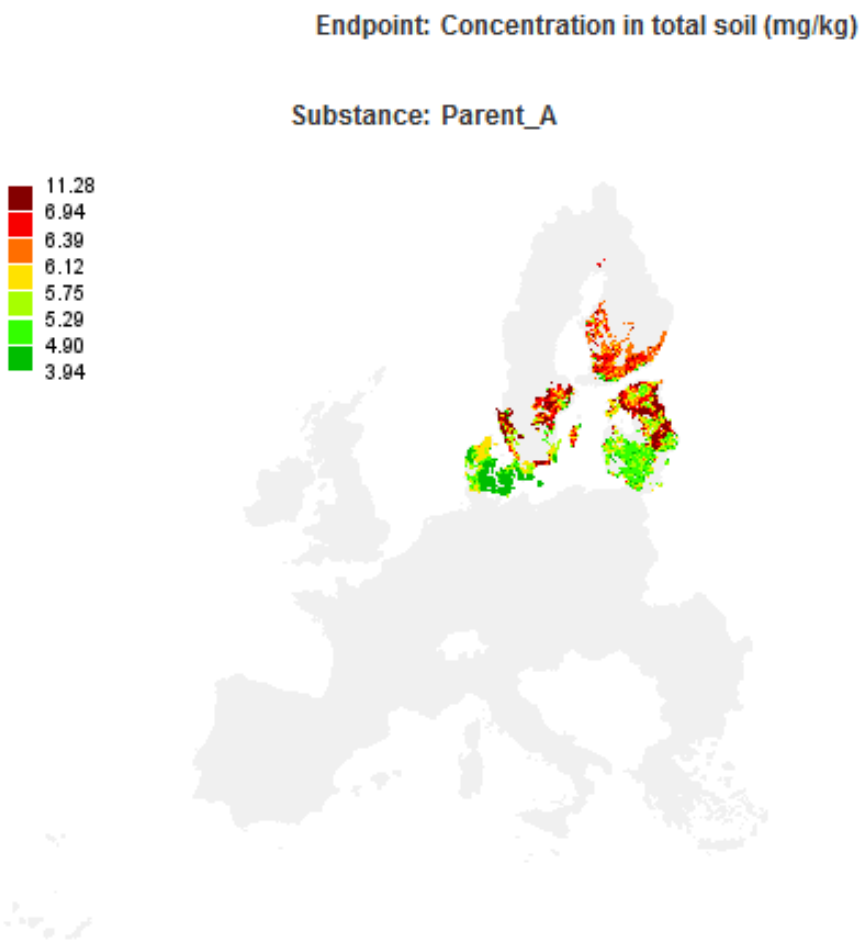
z_{eco}

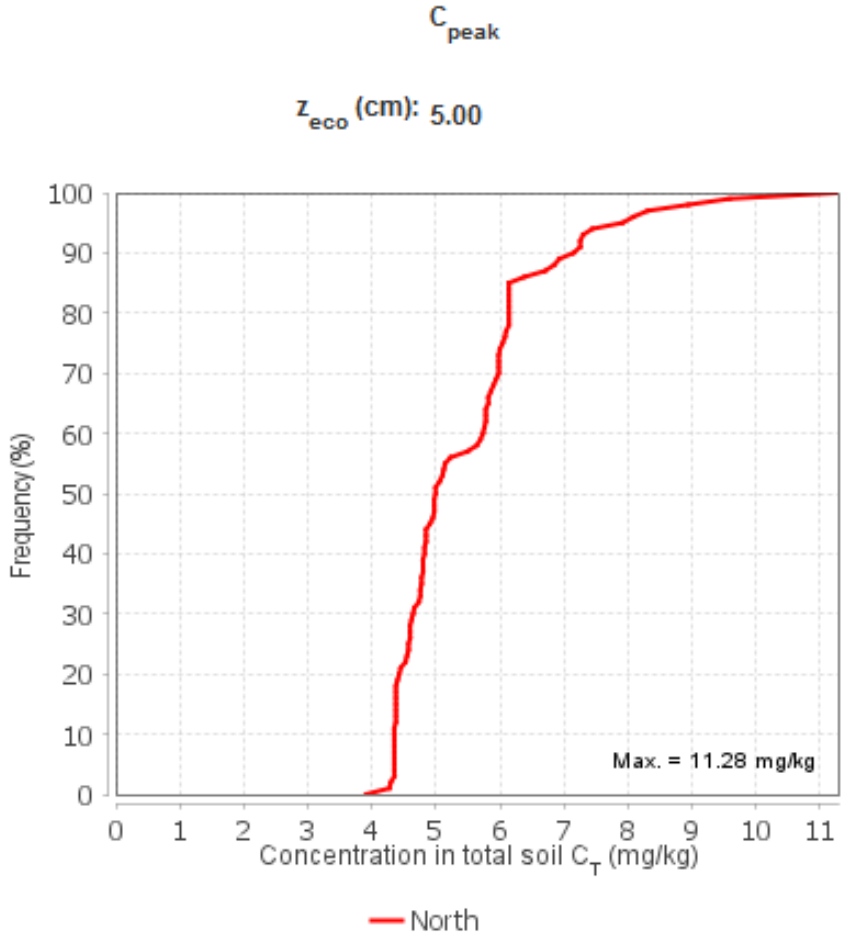
t_{avg}	default (5.0 cm)	user
default (0 days)	0.93	
user (21 days)	0.75	

Post-application concentrations

$t_{PostApp}$ (days)	100
z_{eco} (cm)	20.00
C_T (mg/kg)	0.21

Results - Map & frequency distribution (Tier 2)





Results - Scenario properties (Tier 2/3A)

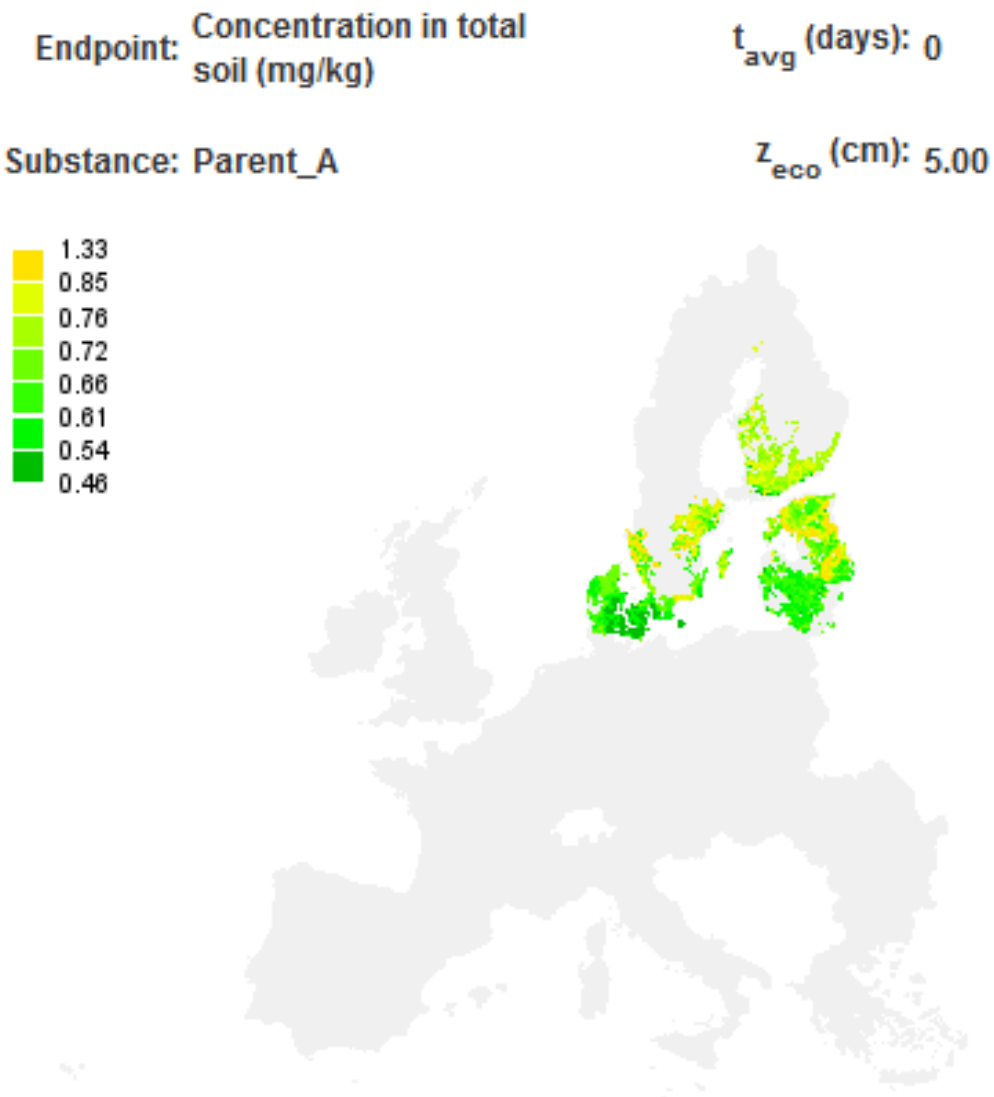
Endpoint: Concentration in total soil (mg/kg)

Substance: Parent_A

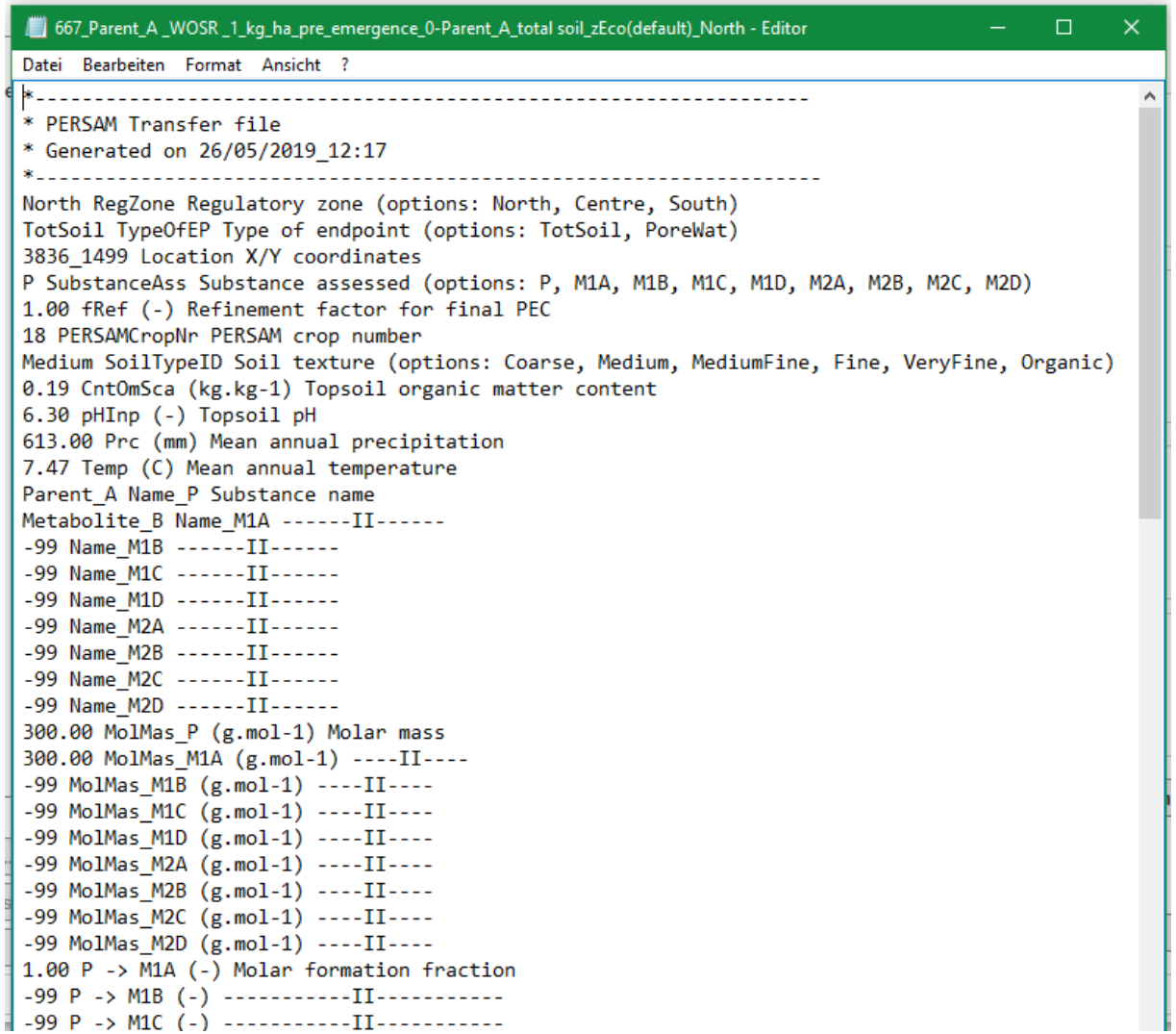
z_{eco} (cm): 5.00

	North
x (m)	5.34E6
y (m)	4.00E6
T_{Arr} (°C)	7.47
ρ (kg/L)	0.76
θ (m^3/m^3)	0.35
f_{om} (kg/kg)	0.19
pH	6.30
crop cover (ha/km^2)	5.50

Results - PEC-to-RAC ratio map (Tier 2)



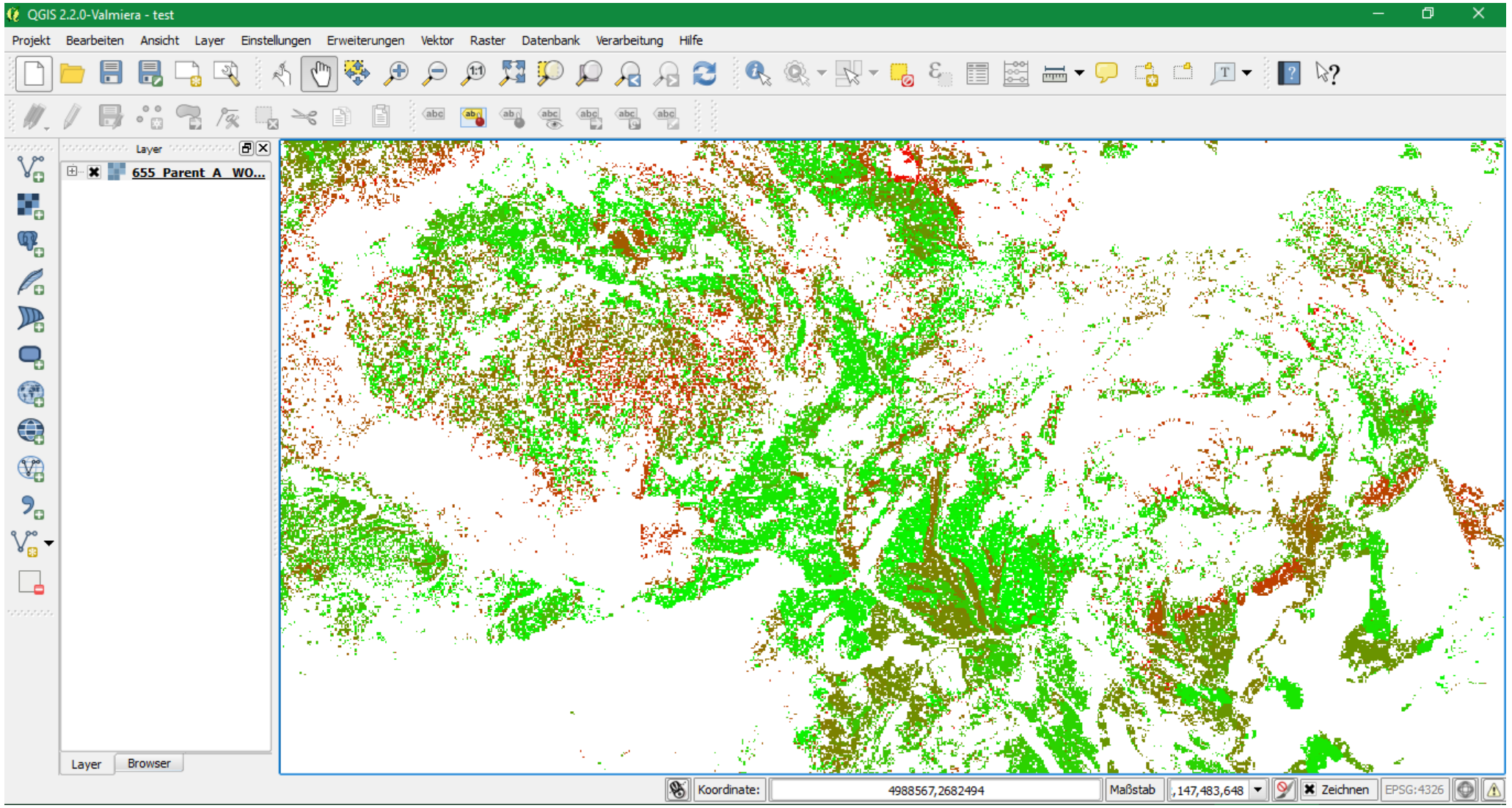
PERSAM transfer file (for Tier 3A)


667_Parent_A _WOSR _1_kg_ha_pre_emergence_0-Parent_A_total soil_zEco(default)_North - Editor

Datei Bearbeiten Format Ansicht ?

```
*---------------------------------------------------------------------
* PERSAM Transfer file
* Generated on 26/05/2019_12:17
*---------------------------------------------------------------------
North RegZone Regulatory zone (options: North, Centre, South)
TotSoil TypeOfEP Type of endpoint (options: TotSoil, PoreWat)
3836_1499 Location X/Y coordinates
P SubstanceAss Substance assessed (options: P, M1A, M1B, M1C, M1D, M2A, M2B, M2C, M2D)
1.00 fRef (-) Refinement factor for final PEC
18 PERSAMCropNr PERSAM crop number
Medium SoilTypeID Soil texture (options: Coarse, Medium, MediumFine, Fine, VeryFine, Organic)
0.19 CntOmSca (kg.kg-1) Topsoil organic matter content
6.30 pHInp (-) Topsoil pH
613.00 Prc (mm) Mean annual precipitation
7.47 Temp (C) Mean annual temperature
Parent_A Name_P Substance name
Metabolite_B Name_M1A ------II------
-99 Name_M1B ------II------
-99 Name_M1C ------II------
-99 Name_M1D ------II------
-99 Name_M2A ------II------
-99 Name_M2B ------II------
-99 Name_M2C ------II------
-99 Name_M2D ------II------
300.00 MolMas_P (g.mol-1) Molar mass
300.00 MolMas_M1A (g.mol-1) ----II----
-99 MolMas_M1B (g.mol-1) ----II----
-99 MolMas_M1C (g.mol-1) ----II----
-99 MolMas_M1D (g.mol-1) ----II----
-99 MolMas_M2A (g.mol-1) ----II----
-99 MolMas_M2B (g.mol-1) ----II----
-99 MolMas_M2C (g.mol-1) ----II----
-99 MolMas_M2D (g.mol-1) ----II----
1.00 P -> M1A (-) Molar formation fraction
-99 P -> M1B (-) -----------II-----------
-99 P -> M1C (-) -----------II-----------
```

ESRI GIS data in external software



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