



1. INTRODUCTION

**FROGS (French Refinement Of Groundwater Scenarios)
UIPP Training**

Paris, 16 November 2011

UIPP Environmental Methodology Working Group



Agenda, 16 November 2011

- **10h: Welcome & Introduction**
 - **10h15: Methodology**
 - **Agronomic Units**
 - **Crop parameterization**
 - **Meteo & irrigation**
 - **Soil selection & parameterization**
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- **12h30: Lunch break**
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- **13h30: Implementation of FROGS in the French evaluation scheme**
 - **14h: Demo of the FROGS db and interface**
 - **14h30: Practical exercises**
 - **Data entry**
 - **Evaluation of results**
 - **16h30: Conclusions**
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UIPP Workgroup Members, November 2011

- **Claude Beigel (chair) - BASF**
- **Marie Cecchi - Syngenta**
- **Christian Guyot - Bayer CropScience**
- **Klaus Hammel - Bayer CropScience**
- **Gunnar Kahl - Dr. Knoell Consult**
- **Steve Knowles - Dow**
- **Ludovic Loiseau - Syngenta**
- **Haytham Shbaita - BASF**
- **Stefan Schubert - Dow**

Previous Members

- **Michael Berardozzi - Dow**
- **Nicolas Domange - Syngenta**
- **Laetitia Comoretti - Syngenta**

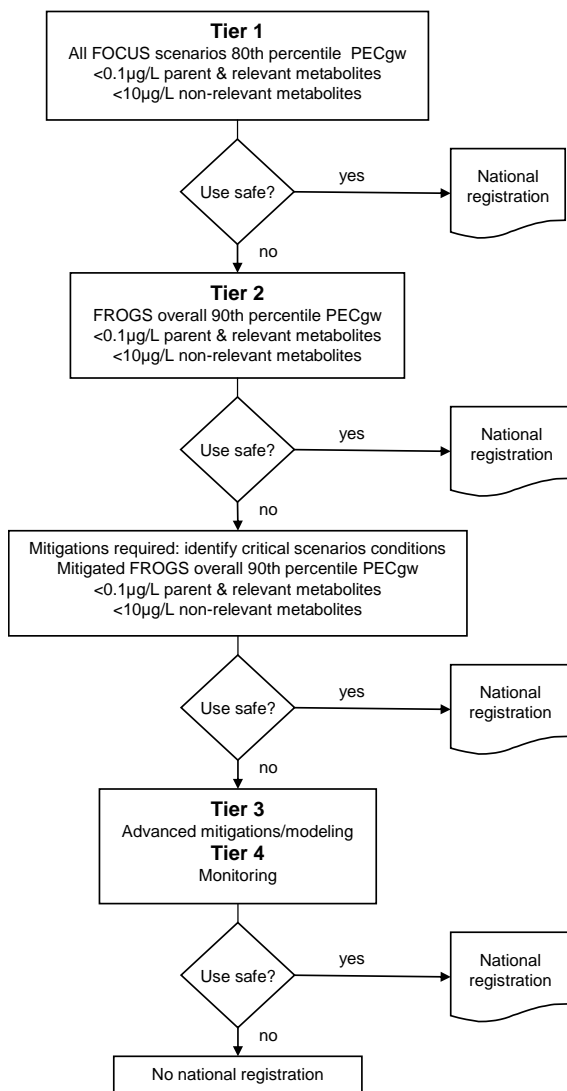


- **2000 : CET-SSM Environment working group brainstorming**
- **2004 : SSM - Environment WG / Groundwater subgroup**
 - Start of groundwater scenarios project
 - Proposal of a methodology for scenario construction (C. Brown, York Univ.)
 - Soil selection : INRA Infosol (Orléans), determination of typical soils
 - Concept and building of Agronomic Units
 - Gathering and compilation of crop data (emergence and harvest dates, rotations)
- **June 2006 : Last meeting of the SSM Groundwater subgroup**
 - First simulation tests
 - Presentation of B. Remy at 8th Fresenius AGRO conference
 - Project stopped uncompleted
- **2007-2011 : UIPP environmental methodology subgroup pursues work**
 - Finalization of data collection, database, interface, test simulations, report

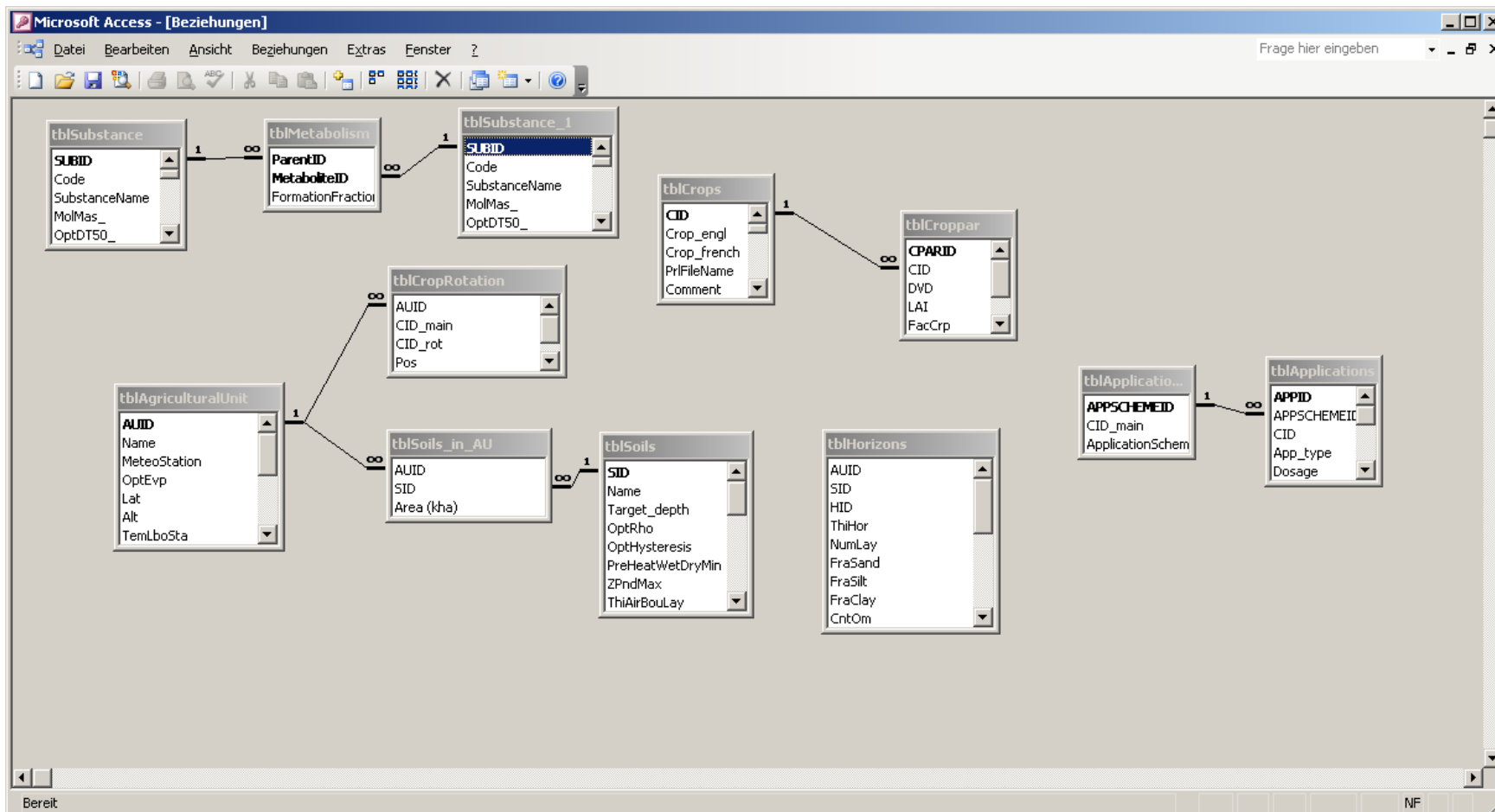


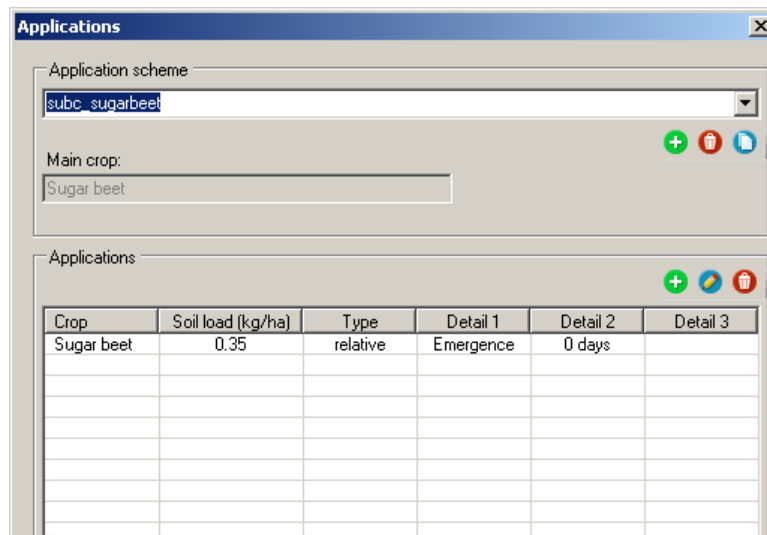
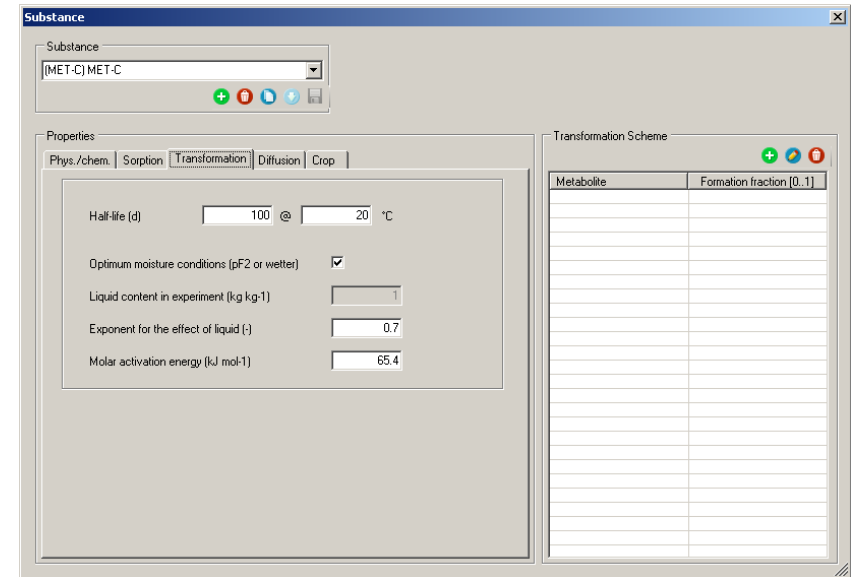
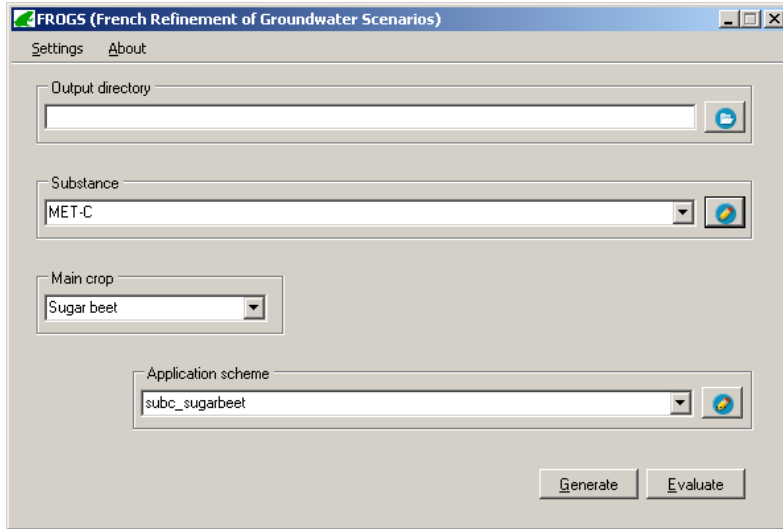
Higher-tier scenarios describing realistic conditions

- **Tier 2, national Scenarios only needed if standard European FOCUS scenarios show exceedances**
- **Variety of representative conditions rather than worst-cases**
 - Selection of real soil profiles of depth ranging between 40 – 140 cm
 - Crop rotations to be considered
 - Main field crops: wheat, barley, maize, oilseed rape, sugar beets, potatoes, sunflower
 - Choice of average values for parameterization (soil, meteo and crop parameters)



- **Implementation of FROGS into the national risk assessment procedure in line with EU / zonal assessment**
- **Protection goal: overall 90th areal percentile PECgw in line with existing focus recommendations**
- **Mitigation options possible**







- **Realistic environmental conditions in terms of climate, soils and management derived from readily available data**
- **Compliant with FOCUS principles (FOCUS-Pearl, 90th percentile threshold)**
- **Straightforward and easy-to-use tools**
- **Causal analysis of PEC_{gw} exceedances enables implementation of mitigation options**
- **Main limitations are due to limited availability of environmental data at sufficient spatial resolution; most severe is high aggregation of soil data**



- **FROGS v2.2.2.2 released 21/07/2011**
 - peer-reviewed by ANSES
- **Version control system in place,**
 - Consistency check, impact of changes on results + ANSES peer-review
 - all registered users will be informed of new releases and changes
- **Our webpage**
 - <http://frogs.eclosion-share.net/>



FROGS : French Refinement Of Groundwater Scenarios - Windows Internet Explorer

http://frogs.eclosion-share.net/#

Fichier Edition Affichage Favoris Outils ?

Favorites Web Slice Gallery Web Slice Gallery

FROGS : French Refinement Of Groundwater Scenarios

Page Sécurité Outils



French Refinement Of Groundwater Scenarios

The FROGS (French Refinement Of Groundwater Scenarios) groundwater scenarios and model interface have been developed as a higher-tier tool for the French pesticide registration procedure. These national scenarios are intended for the assessment of the risk of Plant Protection Products' active substances and their metabolites to leach to groundwater. They are currently available for use on winter wheat, winter barley, oilseed rape, maize fodder, maize grain, sugar beet, potato and sunflower. The scenarios were generated to reflect typical realistic conditions and practices under which arable crops are grown in France. They consist of the combination of a limited number of Agronomic Units (AU, homogeneous geographic entities which show common agricultural and physical conditions) associated to representative soil, weather, crop rotations and phenological information. The work was initiated by the INRA SSM ComTox precursor workgroup on French groundwater scenarios (Commission d'étude de la toxicité - Sous-groupe environnement - Atelier ESO), and continued by a dedicated UIPP workgroup who finalized the scenarios and produced a workable tool, including a database where all input parameters are stored in a transparent way and a user-friendly model interface to be used in combination with the groundwater model PEARL. FROGS has been peer-reviewed by the French regulatory authorities.

The FROGS (French Refinement Of Groundwater Scenarios) model interface, documentation and training material can be freely downloaded from this website.

[Documentation](#)
[Training material](#)
[Download FROGS](#)

Download FROGS

Instructions to download and install FROGS application

1. Make sure PEARL 3.3.3 is installed on your computer (FROGS simulations are run on the PEARL model). If not, [Download PEARL](#) and install first.
2. Download frogs_install.rar (click on link below and save to disk)
3. Extract frogs_install.rar in destination folder of your choice for the FROGS tool
4. Download frogs_pfo1 to frogs_pfo6 into the pfo subfolder of FROGS. Each file should be around 1.85 GB. The last file frogs_pfo6 should be around 900 MB.
5. Once all the frogs_pfoxx.rar have been saved to the subfolder, use winrar to extract frogs_pfo1 to this same pfo subfolder (do not create new folder, use extract here option). This will extract all pfo files contained in the six frogs_pfo_rar files (do not extract the other frogs_pfo.part files, this will be done automatically with winrar)
6. Delete all downloaded .rar files (not mandatory but will save disk space)
7. Double-click on FROGS.exe (frog icon) to start the interface

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Thank you very much for your kind attention