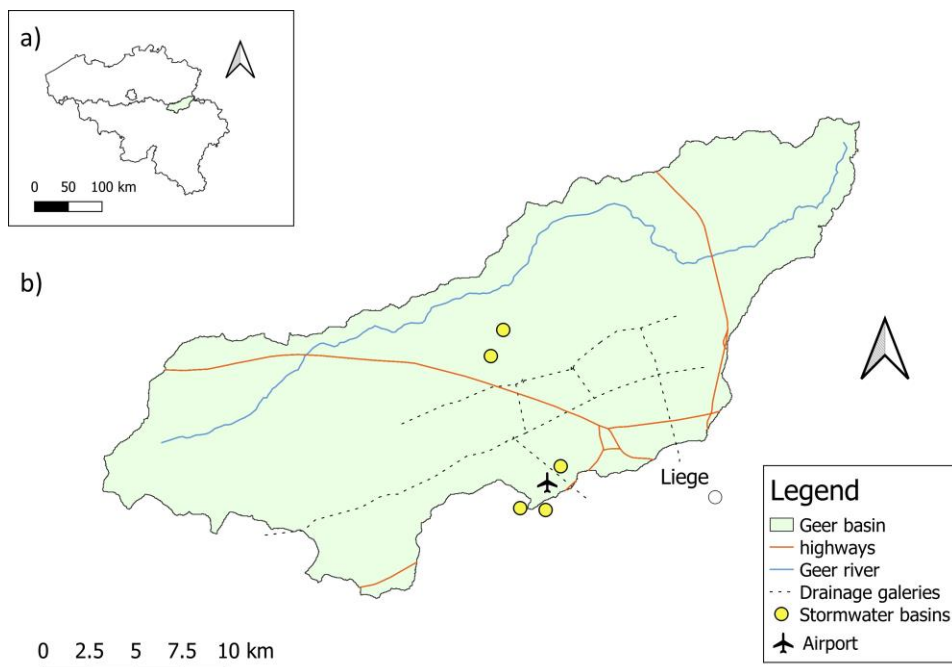


Batch experiments as a tool to evaluate MAR impacts on groundwater quality

Robin Glaude - Groundwater and hydrogeochemistry

A. Jurado, E. Pujades, S. Lacorte, S. Brouyère

Research objective



Decrease of the recharge
(Hesbaye chalk aquifer, Belgium)



Managed Aquifer recharge (MAR)



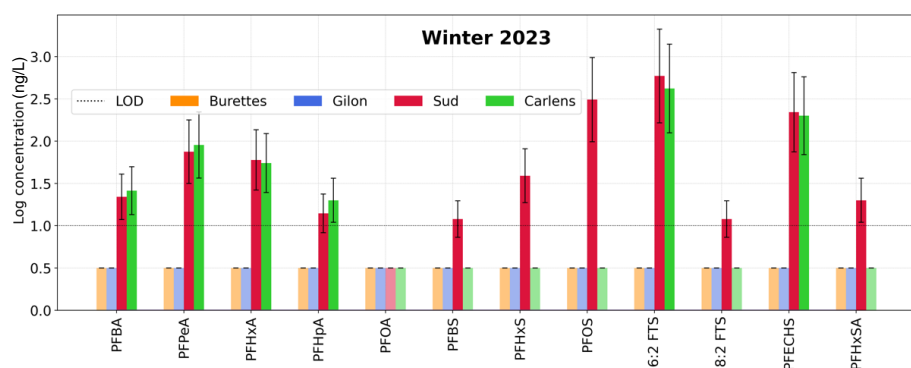
Runoff water as a source of recharge water
BUT potential contaminants of emerging
concerns (CECs)



Objective:

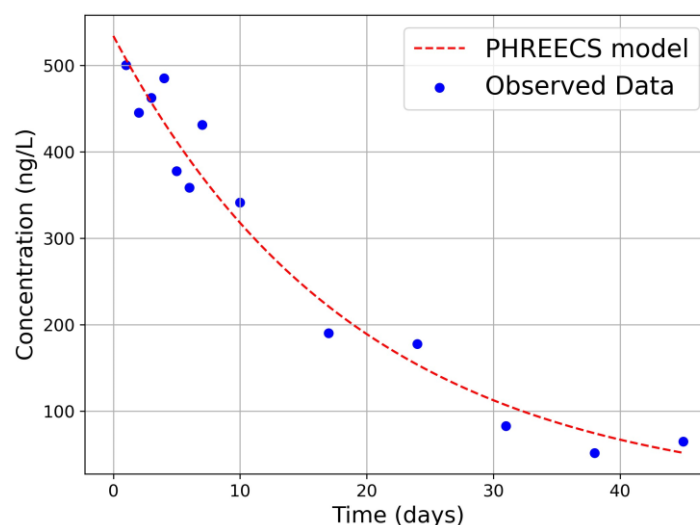
study interaction of identified CECs and soil
with **batch experiments**

Sampling campaign



Detected CECs: Alkylphenols, benzotriazoles, PFAS

Batch experiment modeling



Coefficient of **sorption** K_d and
degradation rate λ estimated for every
studied CEC by fitting PHREEQC model



Conclusion

Key parameters obtained to study the transport
of these CECs through **groundwater modeling**
and evaluate the **risk of GW contamination**

Batch experimental set-up

