



REFERENCES

ScaldWIN Project

an Interreg IVB NWE project for a better quality of surface and groundwater bodies in the Scheldt International River Basin District (IRBD)

→ WP3 include **Study of the Carboniferous aquifer**



Team of « Carboniferous » project

- France : MEL (ex-LMCU), AEAP, DREAL
 - + technical: BRGM
- Belgium : Walloon region, Flemish region, Brussels
 - + technical: University of Mons



SITUATION

a transboundary aquifer

Aquifère partagé entre 3 régions:

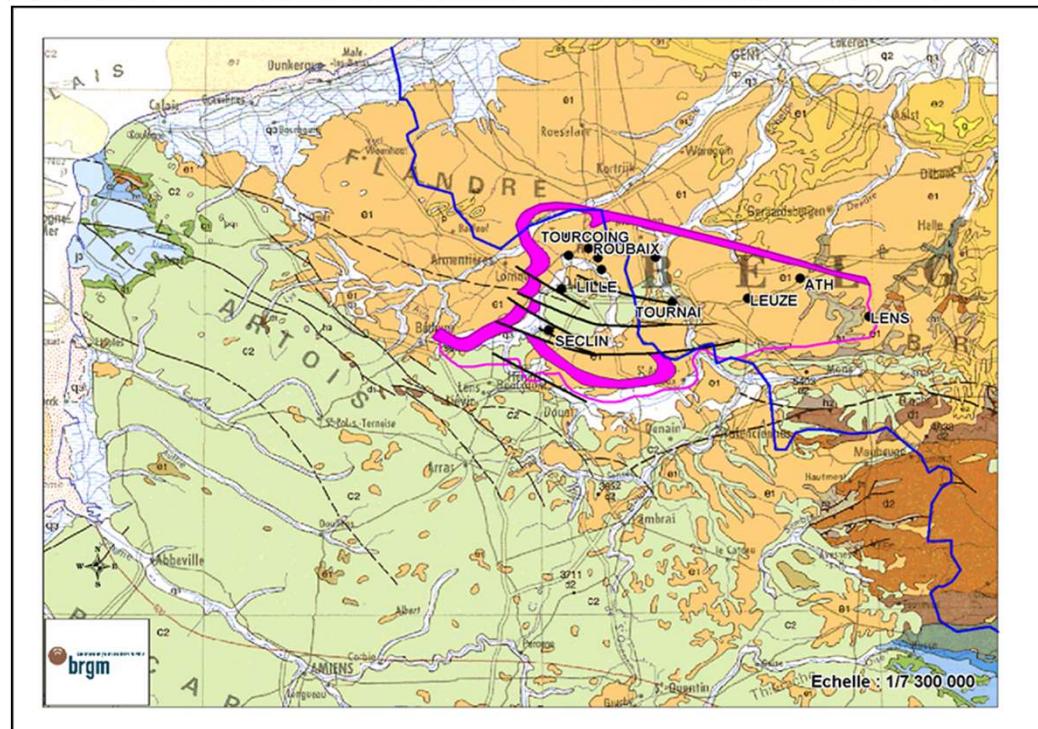
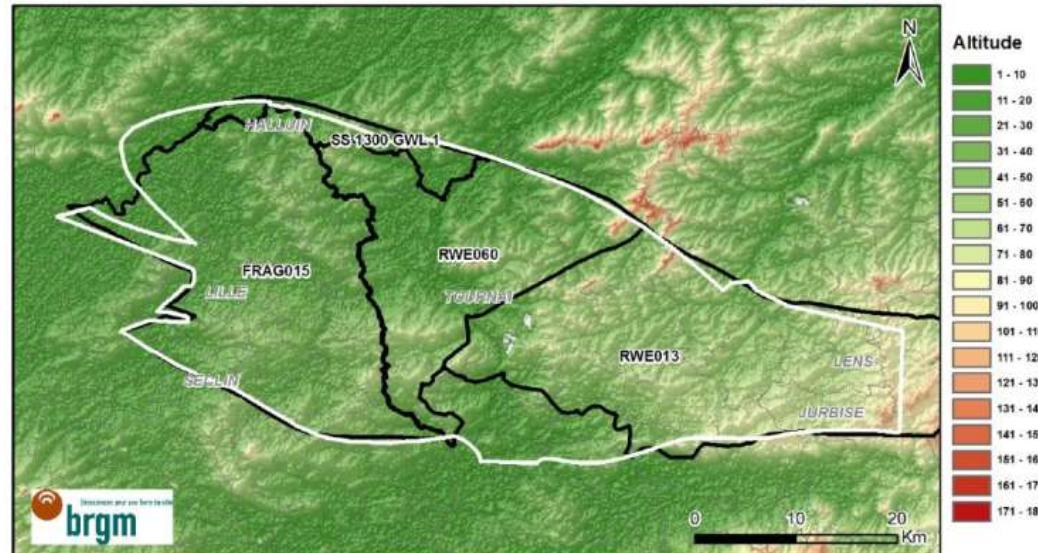
- Nord
- Walloon region
- And Flemish region

Surface area \approx 1400 km²

4 groundwater body (DCE):

- Les Calcaires de Péruwelz-Ath-Soignies (RWE013),
- Les Calcaires du Tournaisis (RWE060),
- Les calcaires carbonifères de Roubaix-Tourcoing (FRAG015),
- Kolenkalk (SS 1300 GWL 1).

several agglomerations: Lille-Roubaix-Tourcoing, Mouscron, Tournai...

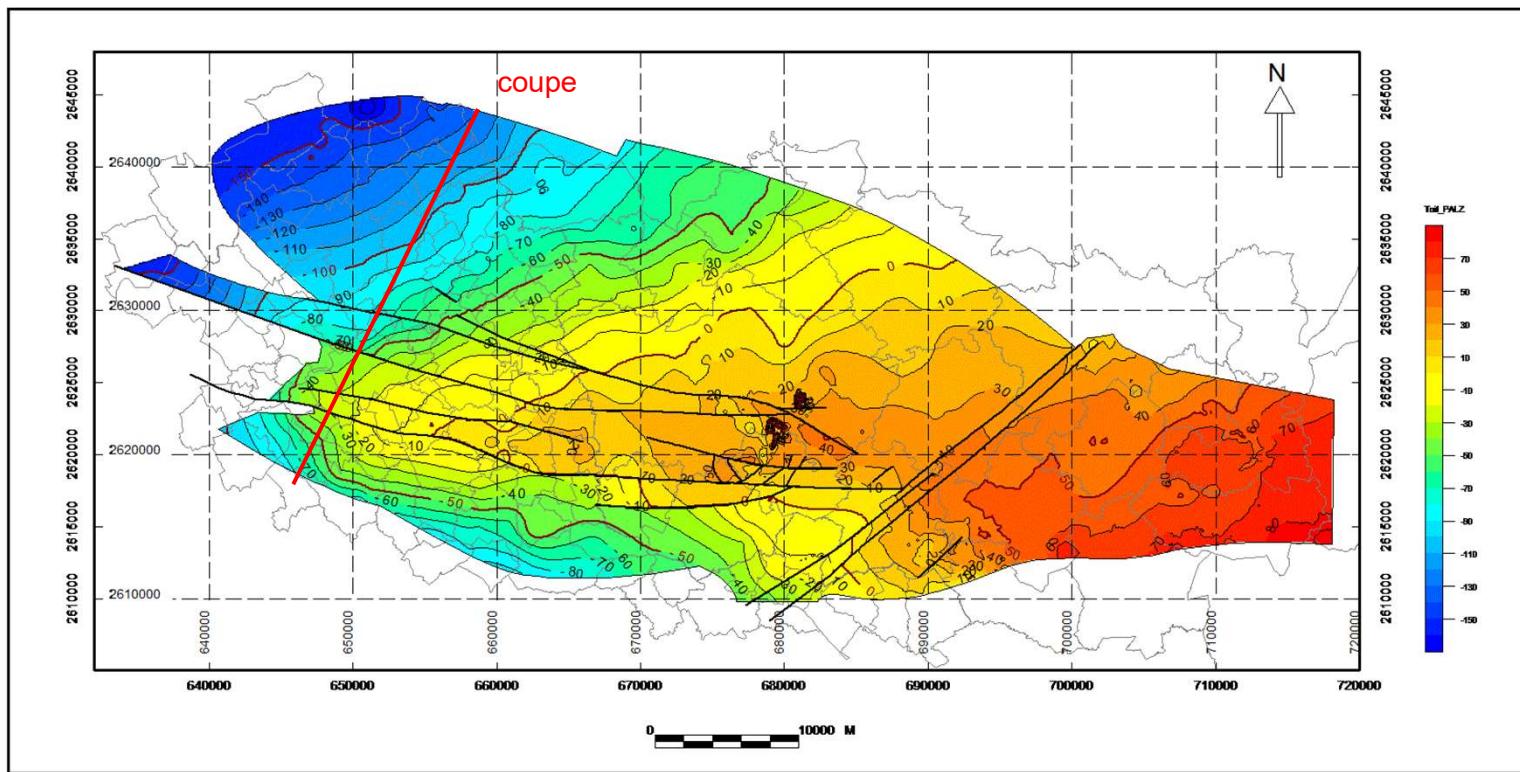
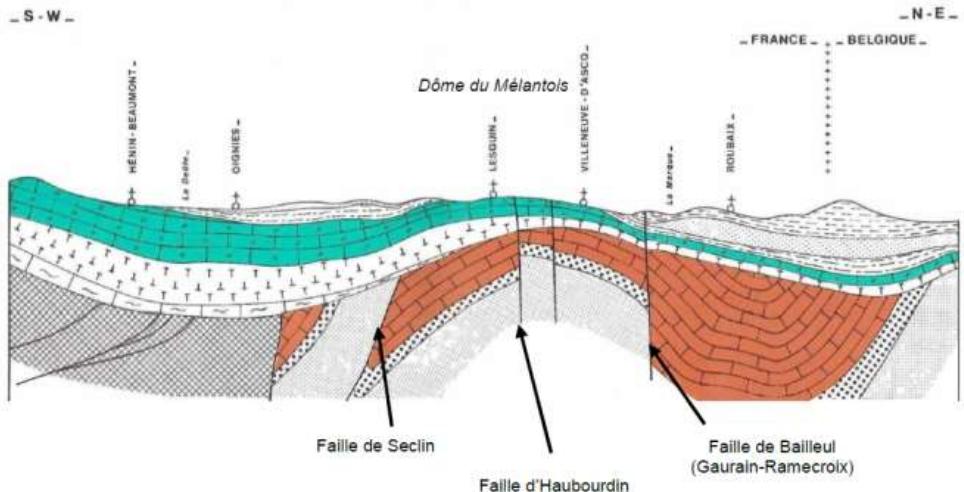


GEOLOGY

Aquifer contained in folded and faulted limestone layers

East outcrop (Wallonia) where the recharge is located

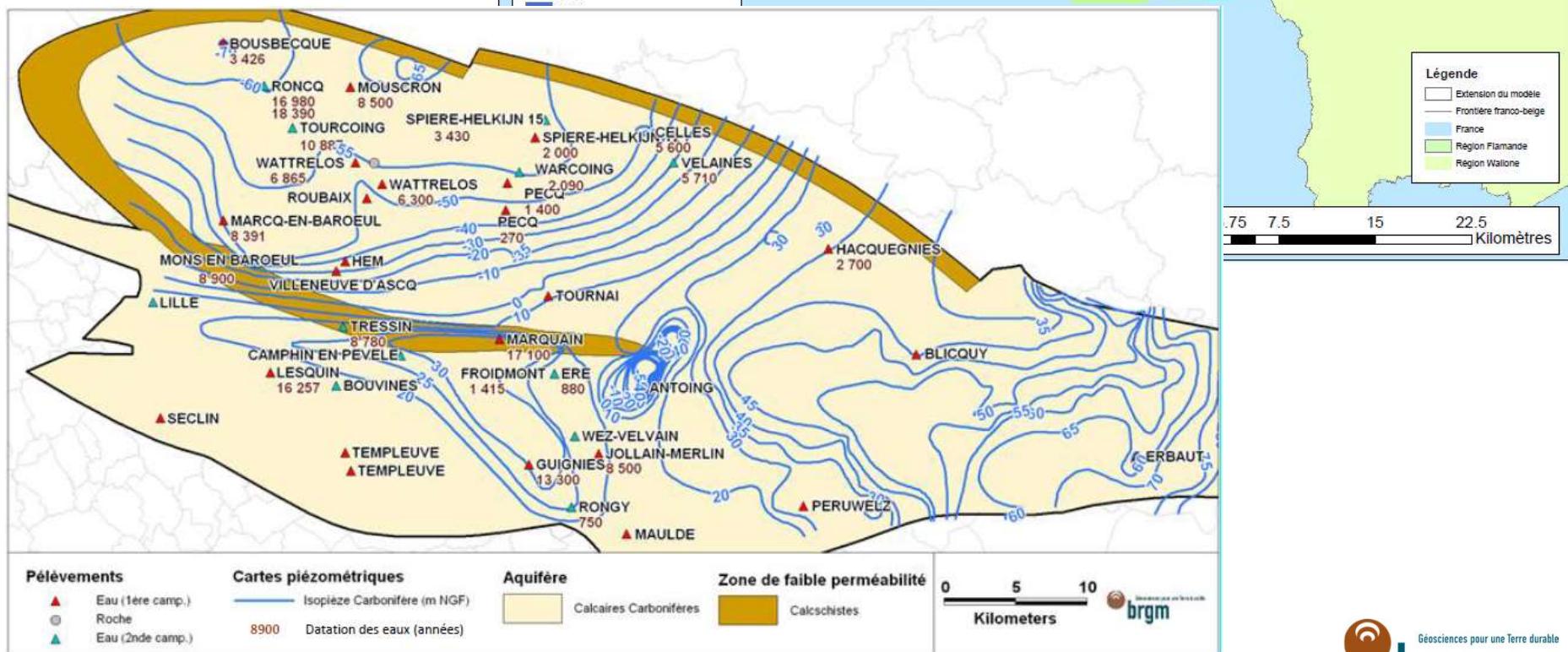
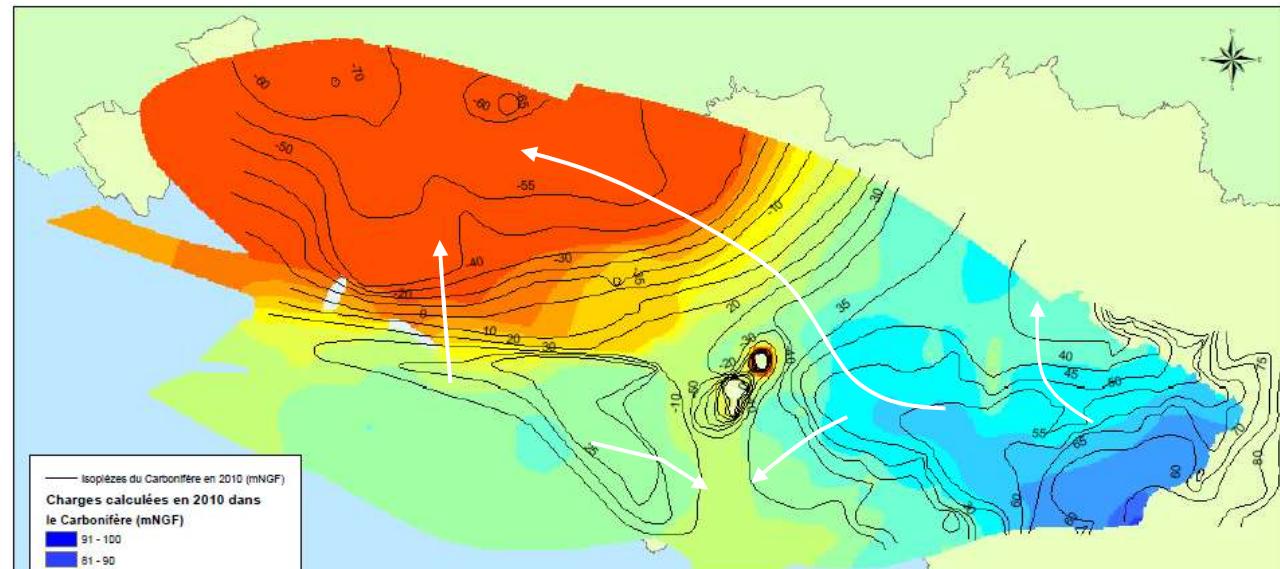
Undercover in the West



HYDROGEOLOGY

Recharge at East

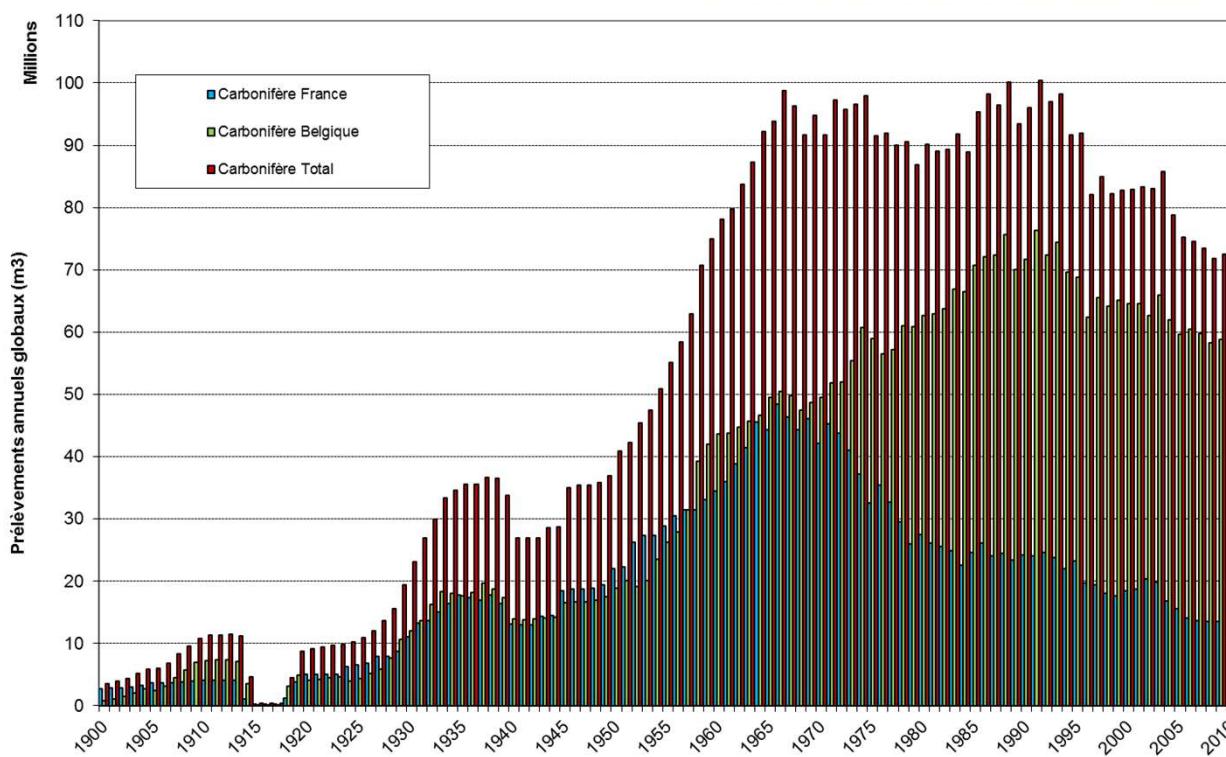
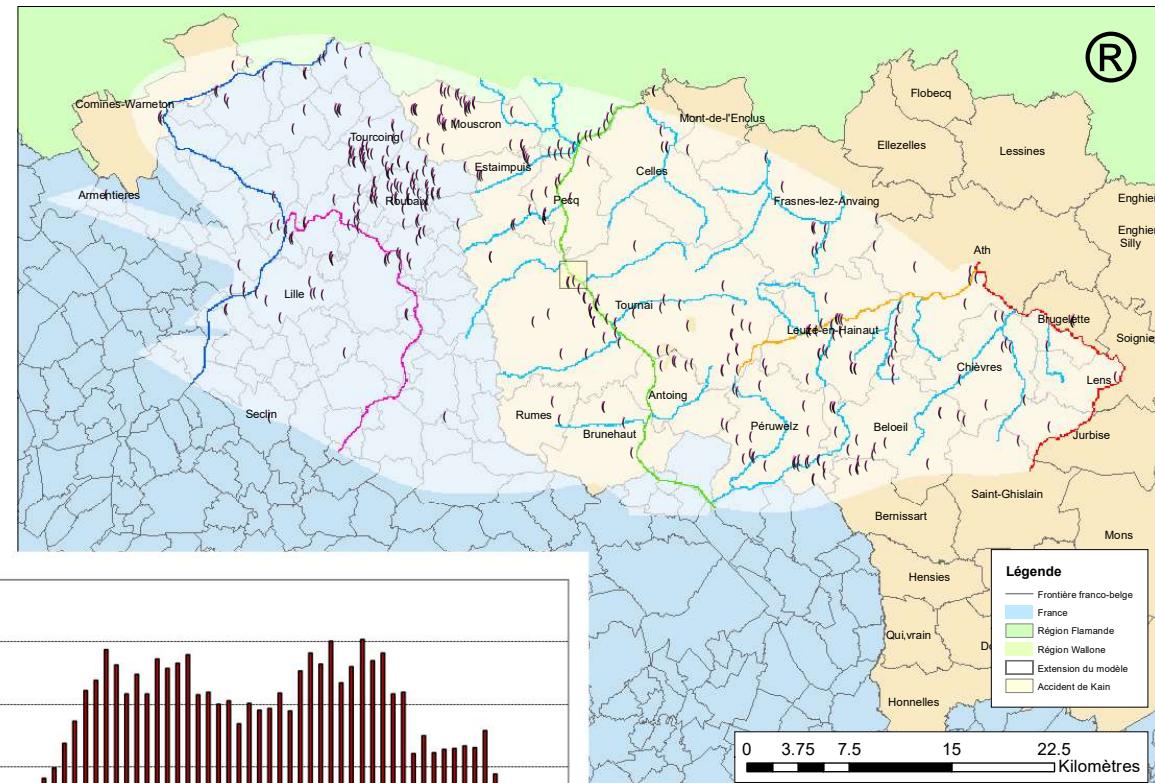
Groundwater runoff
towards West



PUMPING

Uses :

- drinking water supply
- Industries
- Quarry

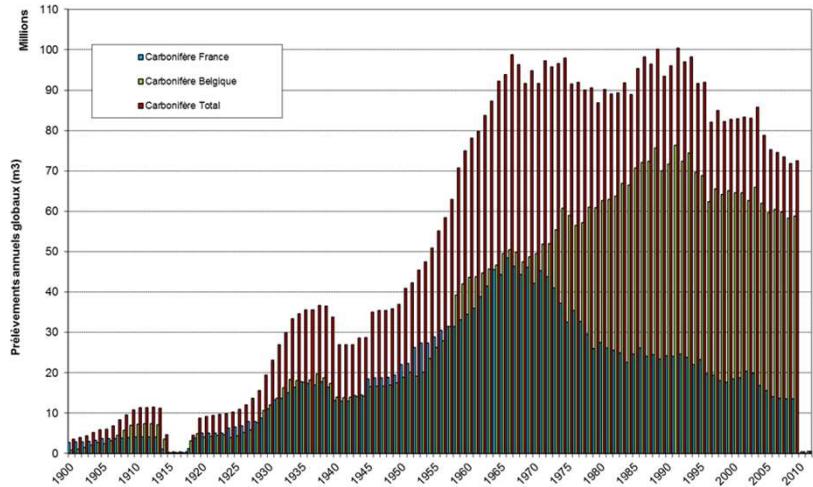
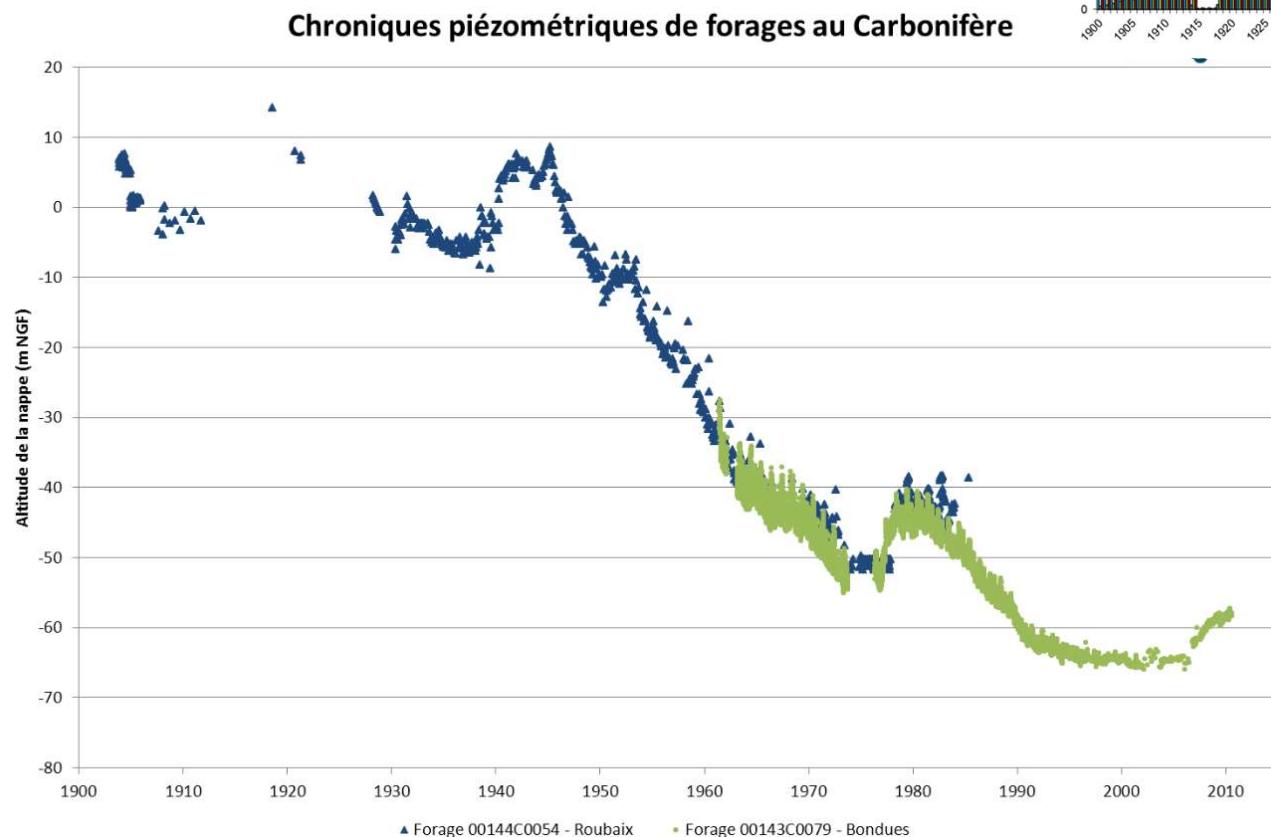


ANNUALS VOLUMES
PUMPED

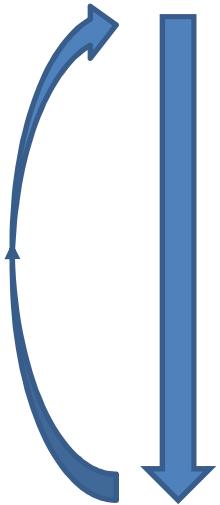
PIEZOMETRY

overexploitation

Aquifer overexploited during the twentieth century. In some places, the drop in its piezometric level was of the order of 70 to 90 m.



PERSPECTIVES



- **Improvement of knowledge** (geology, hydrogeology, geochemistry, etc.)
- **update / construction / use of management tools** (data exchange, update of models, simulation of predictive scenarios)
- **Communication, dissemination, vulgarization** (towards the public, managers, politicians, decision-makers)

THE THANETIAN SANDS

Another transboundary aquifer

used for agriculture and drinking water supply,

Outcrop in South (France) where the recharge is located

Undercover in the North

overexploitation ?

