Journée de rencontres "Dérèglement climatique et patrimoine"
Meeting "Climate change and heritage"
12 May 2023, Marseille

Climate change and drought in limestone Provence

Collège Pierre de Coubertin
Le Luc (France)

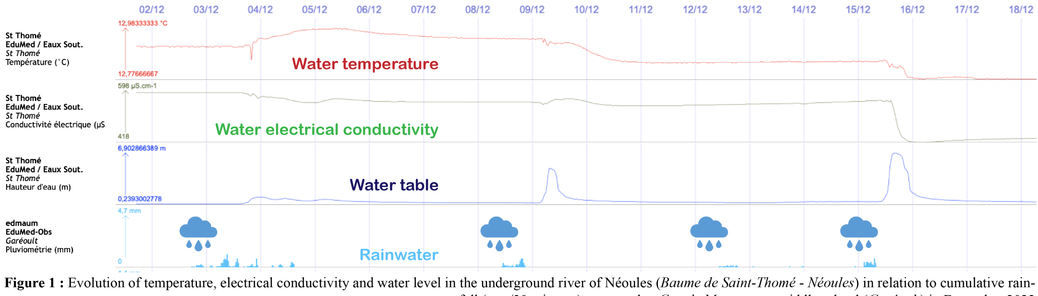


Figure 1 : Evolution of temperature, electrical conductivity and water level in the underground river of Néoules (*Baume de Saint-Thomé - Néoules*) in relation to cumulative rainfall (mm/30 minutes) measured at *Guy de Maupassant* middle school (*Garéoult*) in December 2022
Source : ERASMUS+ GROUNDWATER : learn to preserve the European underground environmant
http://edumed.unice.fr/data-center/hydro/

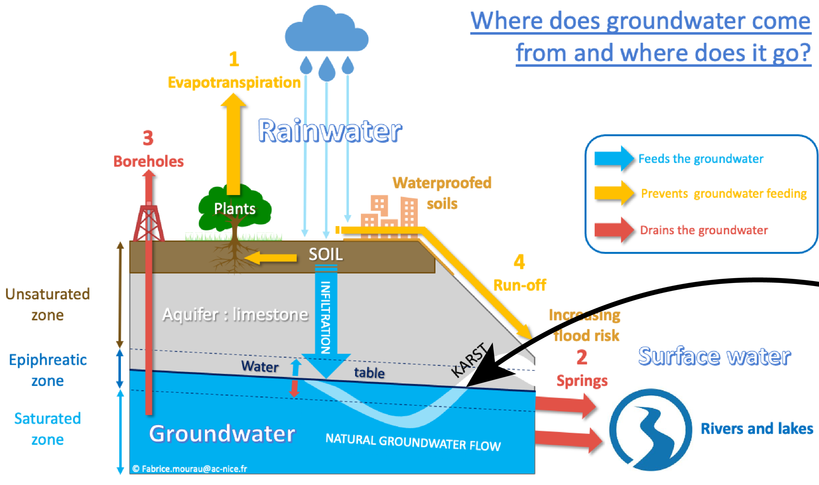
Rain gauge : *Guy de Maupassant* middle school (Garéoult)


Picture : F. Mourau, sept. 2022

CTD diver : *Baume de Saint-Thomé* (Néoules)


Picture : B. Arfib, may 2022

Where does groundwater come from and where does it go?



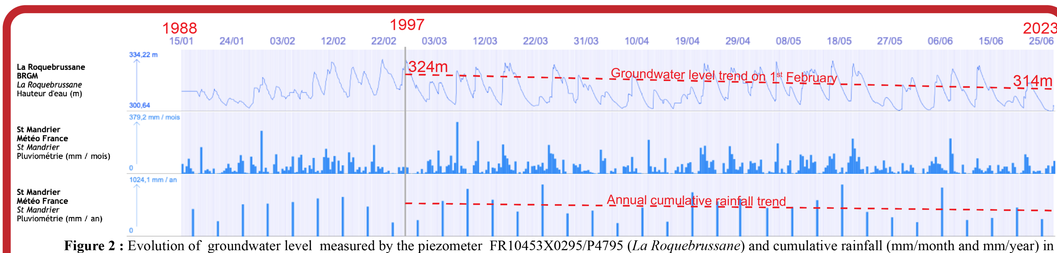
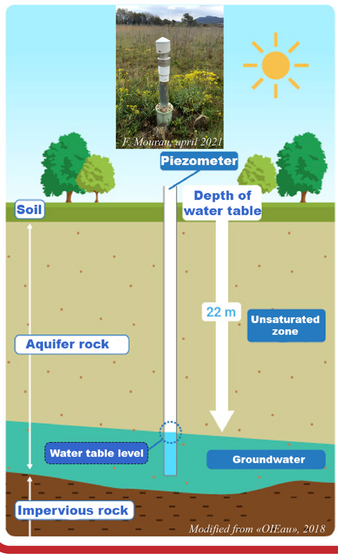


Figure 2 : Evolution of groundwater level measured by the piezometer FR10453X0295/P4795 (*La Roquebrussane*) and cumulative rainfall (mm/month and mm/year) in Weather Station of *Saint-Mandrier*
Source : Eau France (ADES portal : https://ades.eaufrance.fr) ; Météo France (on infoclimat website)
http://edumed.unice.fr/data-center/hydro/



(1) Regional rainfall in the watershed feeds the groundwater each year.

(2) It is raining less and less because of climate change and the level of the water tables is decreasing in limestone Provence.

(3) The groundwater supply surface water: lakes, rivers and the biodiversity they shelter.

We must therefore adapt our use of drinking water to secure our supply at the tap, to preserve a natural resource for the next generations and to protect aquatic biodiversity.