

Contribution of groundwater observatories to the monitoring of some key hydrodynamic and geochemical processes in the critical zone

Bruno Mougin, Yvan Caballero, Jean-Christophe Maréchal, Nadia Amraoui, Vincent Bailly-Comte, Jean-Baptiste Charlier, Laure Ducreux, Adrien Selles, Benjamin Lopez, Jérôme Nicolas, et al.

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Contribution of groundwater observatories to the monitoring of some key hydrodynamic and geochemical processes in the critical zone.

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SUMMARY

Groundwater can represent a boundary condition for the dynamics of water into the critical zone. Groundwater level fluctuations influence several hydrodynamic and geochemical processes in the non-saturated zone such as, droughts and floods, rock-water interactions, surface water and soils quality, climate variability and change impacts... Several different types of groundwater observatories will be presented that allow the monitoring of some of these processes in different types of hydrogeological contexts over France, overseas and India. The data acquisition, storage and dissemination strategies and issues, and the scientific questions that can be explored using these observatories will be discussed.

KEYWORDS

Groundwater ; observatories ; data base ; rock-water interaction ; global change