



Regional behavior and evolution of the Edwards aquifer (South-Central Texas).

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Karst aquifers are highly heterogeneous systems where flow regime is dominated by dissolution conduits. It is important to know the behavior of these conduit networks in order to being able to manage them correctly.

In this work we focus on the Edwards aquifer, one of the most prolific artesian aquifers in the world, that is located in south-central Texas, USA, and included in the Trinity-Edwards system.

A regional flow model for the Edwards aquifer has been developed using the code TRANSIN IV. For this purpose, It was necessary a reconceptualization of previous conceptual models of Edwards aquifer in order to include the contributing zone and evaluate the role that this area plays in the Edwards aquifer recharge.

Chemical data for major and trace elements in the study area have been used for evaluating the relations between Trinity and Edwards aquifers and the evolution of dissolution within the Edwards aquifer.