



Comparison of two different modeling approaches simulating seawater intrusion: Case study of Hersonissos coastal aquifer in Crete

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The development of computer algorithms that simulate physical systems helped the scientific community to better understand and analyze the complexity that governs these systems. In this analysis, the coastal aquifer of the City of Hersonissos has been simulated using two different groundwater simulation algorithms, in order to accurately represent the magnitude and the extend of the seawater front along the coastal line. For comparison reasons only one simulation algorithm considers the dispersion phenomenon due to density variability between salt and fresh water. A preliminary analysis of the results from the two different simulation models of the coastal aquifer in Hersonissos has been presented in this paper.