Advanced techniques for groundwater investigation of seawater intrusion in a coastal sedimentary aquifer

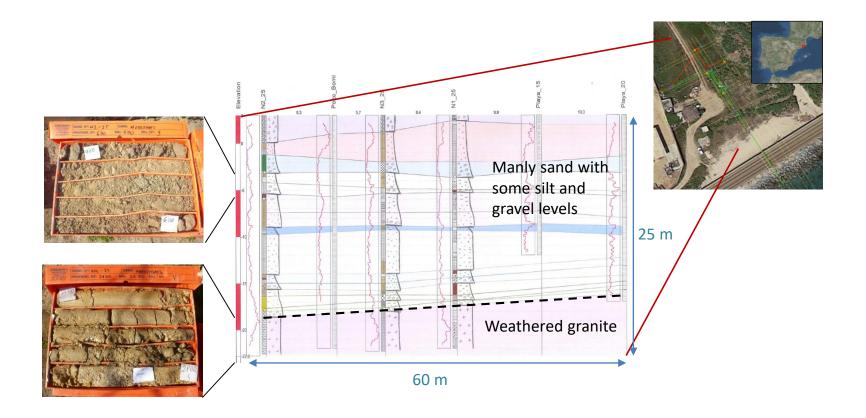
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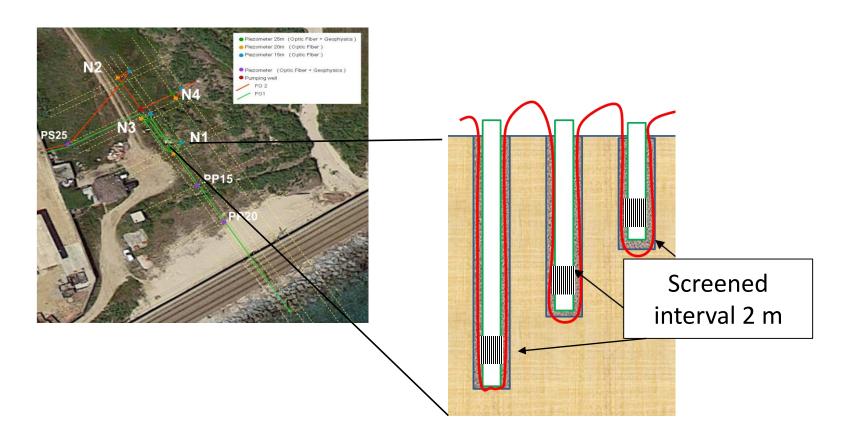


An experimental site has been set up at the alluvial aquifer of Riera Argentona (Barcelona) to study seawater intrusion (SWI) and submarine groundwater discharge (SGO).





16 piezometers were drilled, most gathered in groups of three (N1, N2, N3 and N4) with deeps around 15, 20 and 25 meters

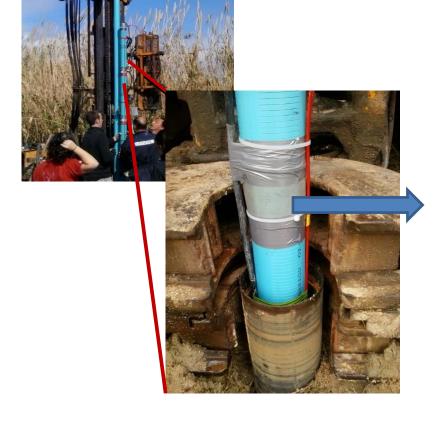








The deepest piezometers of each group are equipped with electrodes to perform cross hole vertical electrical resistivity tomography (CHERT).





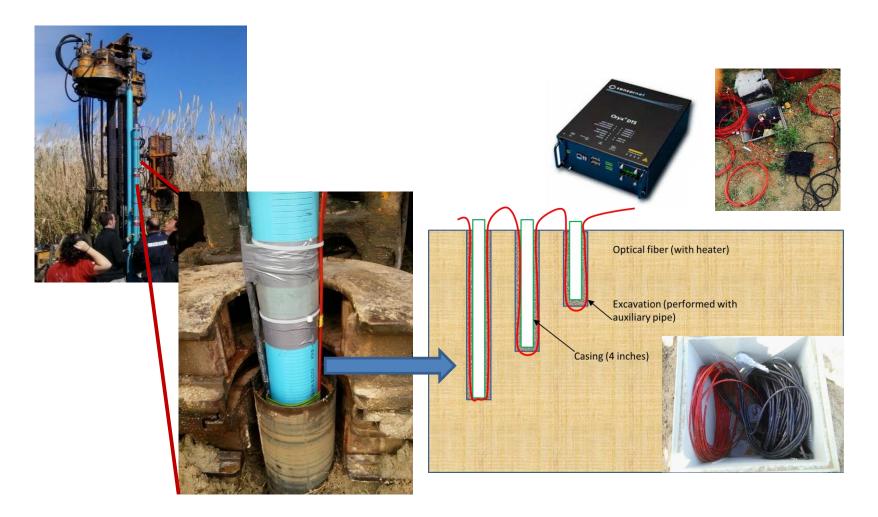








All piezometers are equipped with Fiber Optic (FO) cable, aimed to perform distributed temperature measurements



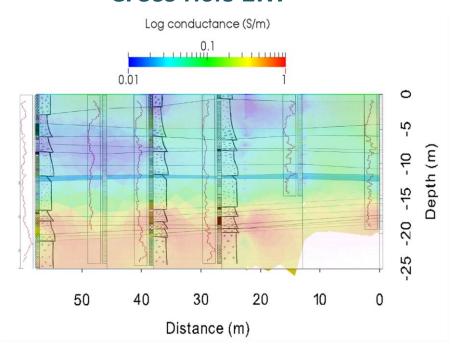






What we are presenting are the results obtained from both methods before and after the dry season (June and September)

Cross Hole ERT



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Distributed temperature

