

**AGUAEX GEOCIENCIAS**

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## • **AQUIFER RECHARGE STUDY**

-> **Infiltration Pools / 50-60 lt/s**

-> **15 days / ON-OFF infiltration**

-> **Geological frame: Alluvial sediments / Vadose Zone**

## **2D ELECTRICAL RESISTIVITY TOMOGRAPHY vs. TIME**

-> **Gradient array**

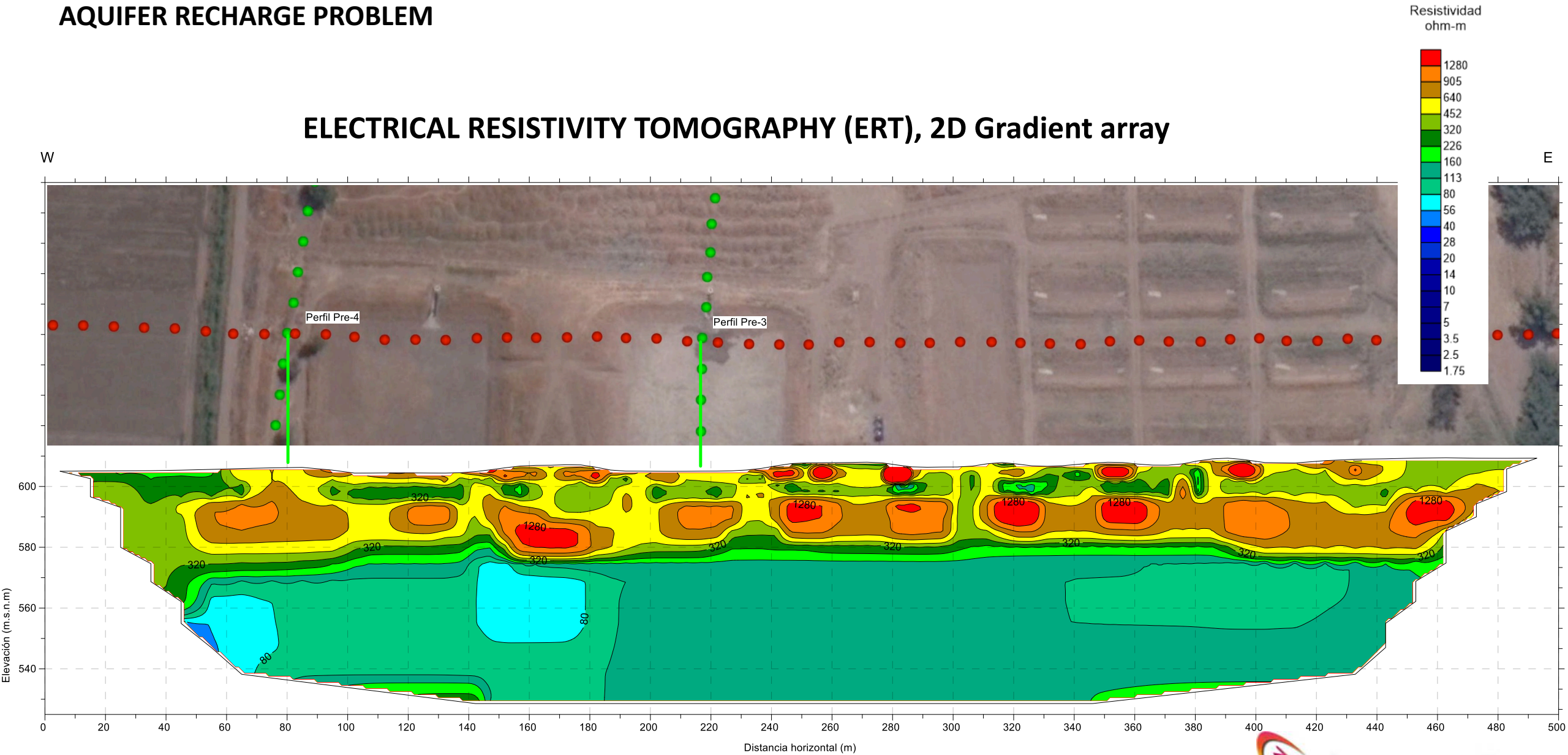
-> **Fast adquisition**

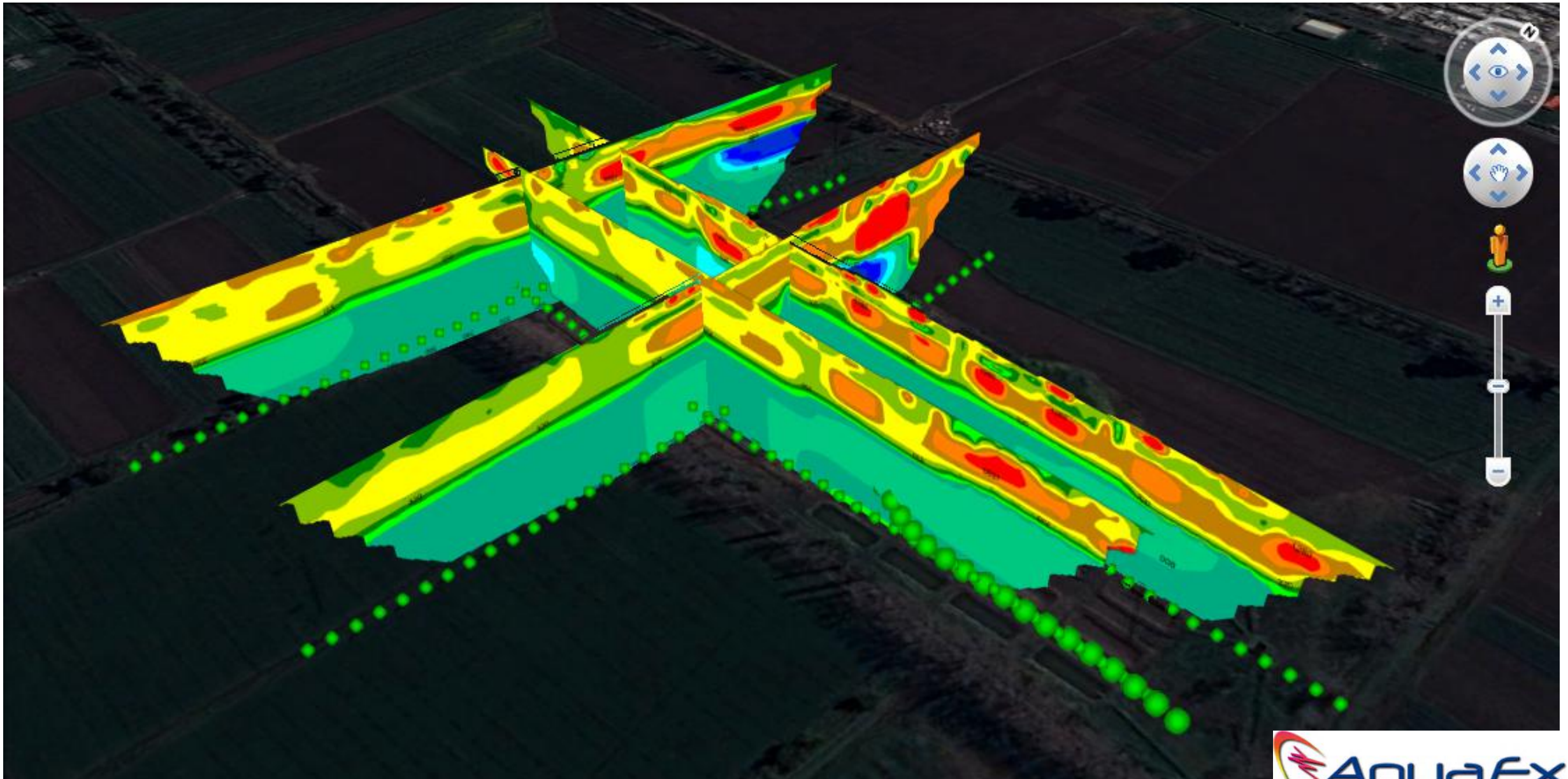
-> **High quality data**

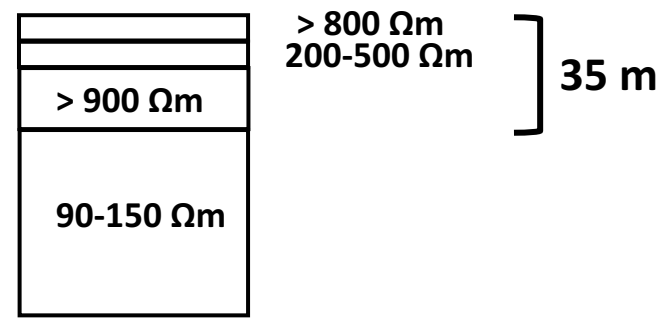
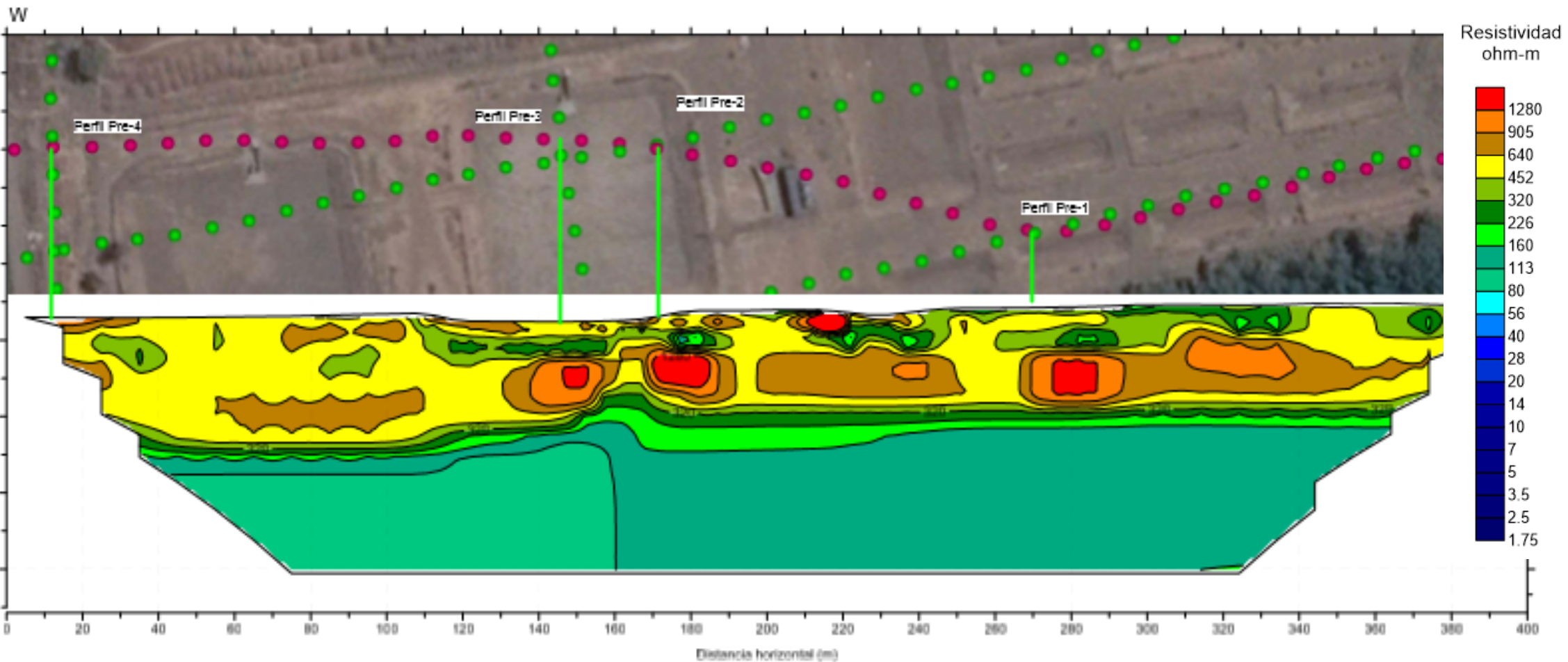


# AQUIFER RECHARGE PROBLEM

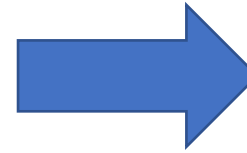
## ELECTRICAL RESISTIVITY TOMOGRAPHY (ERT), 2D Gradient array







# TIME LAPSE ERT PROFILING FOR MONITORING INFILTRATION



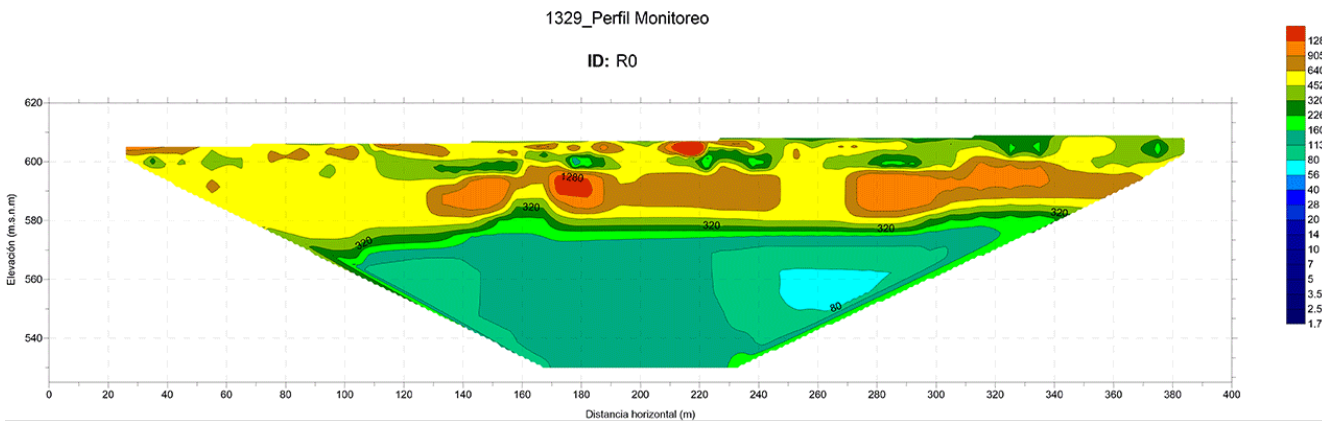
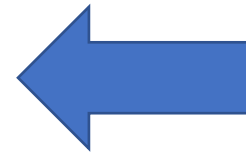
**7 DAYS**  
**1 ERT PROFILE PER HOUR**

**15 DAYS**  
**1 ERT PROFILE PER DAY**

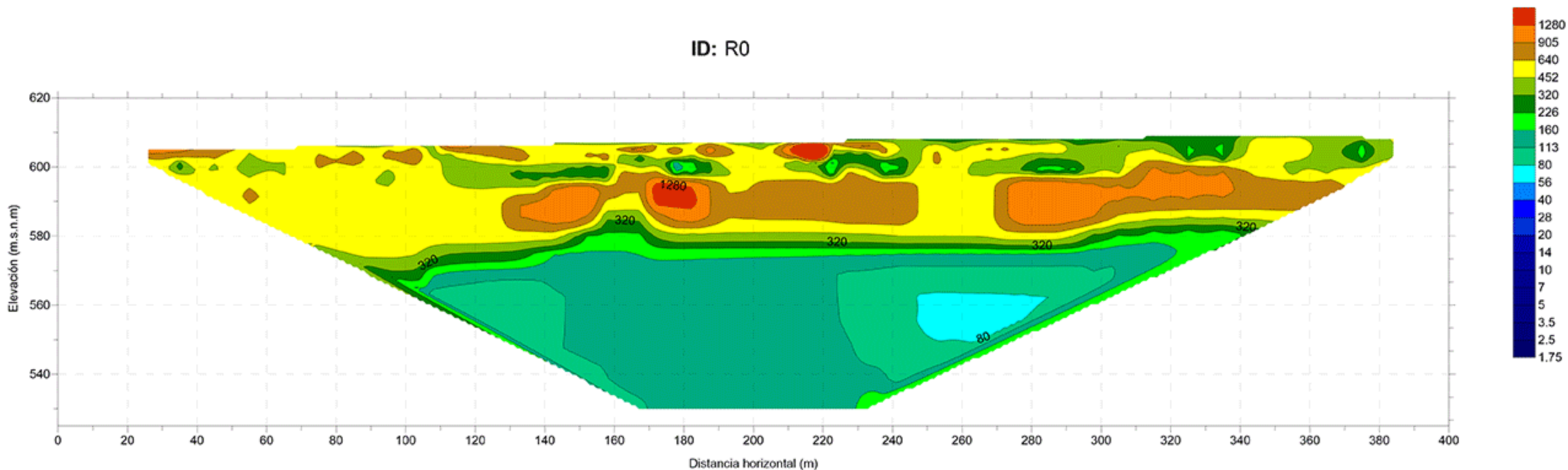


**DATA INVERSION**

**CONSTRAINED TIME LAPSE**  
**INVERSION**



# TIME LAPSE ERT PROFILING FOR MONITORING INFILTRATION

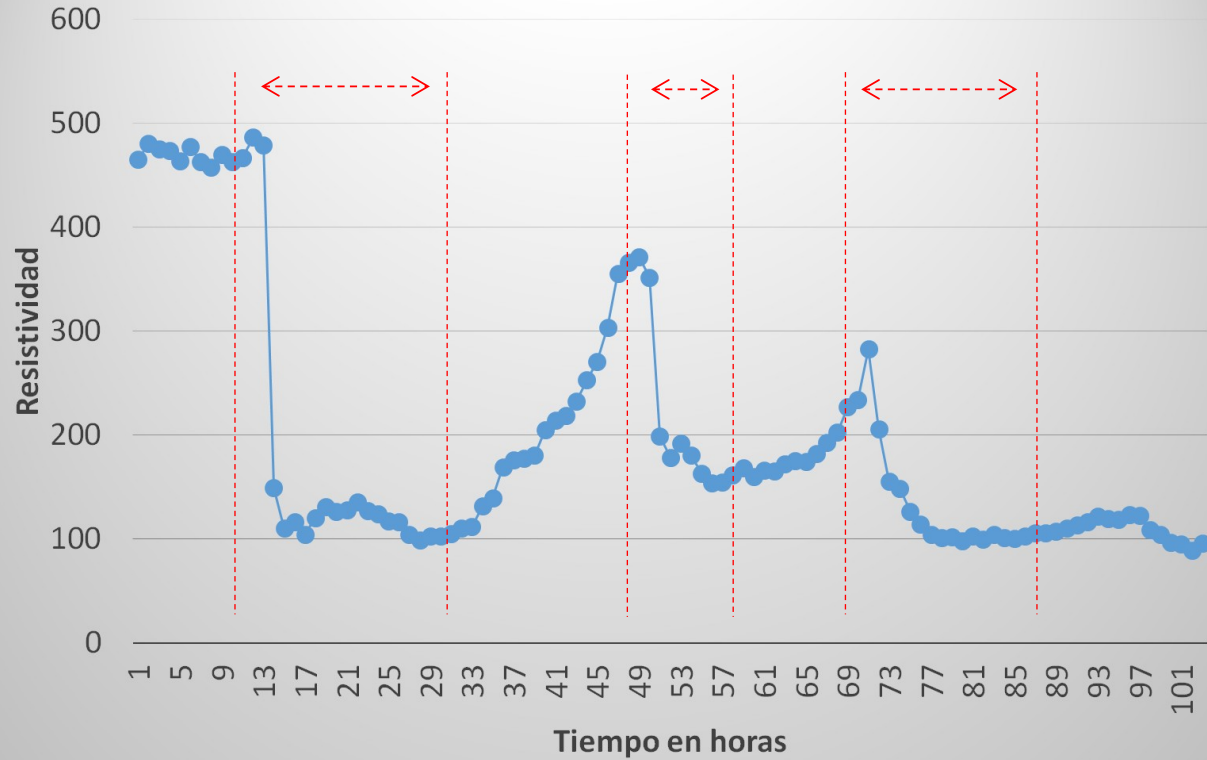




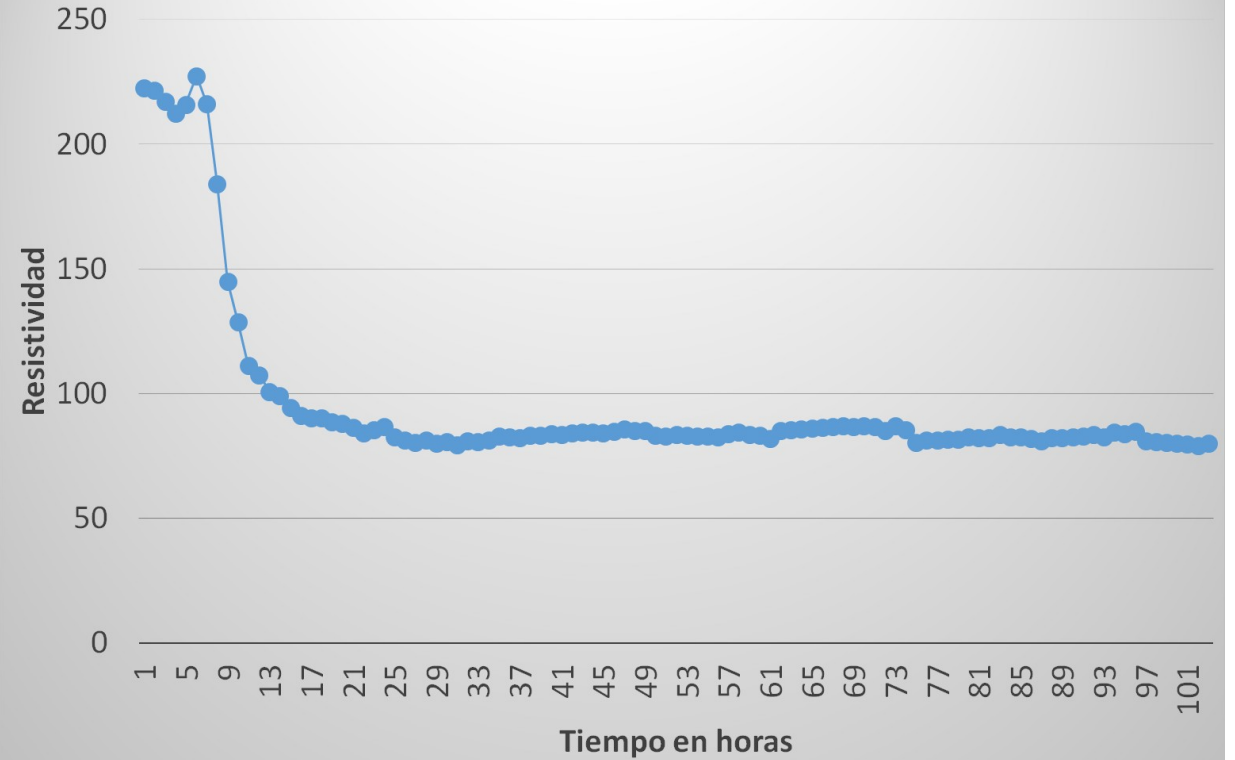


# RESISTIVITY ( $\Omega\text{m}$ ) FROM PIXEL vs TIME (hours)

## Piscina grande 1,3 m



## Segunda decantadora 1,3 m



# RESISTIVITY ( $\Omega\text{m}$ ) FROM PIXEL vs TIME (hours)

