

Hydrodynamic modeling of oil spills, using GNOME and ADIOS

Curaçao, 2014

Client info:

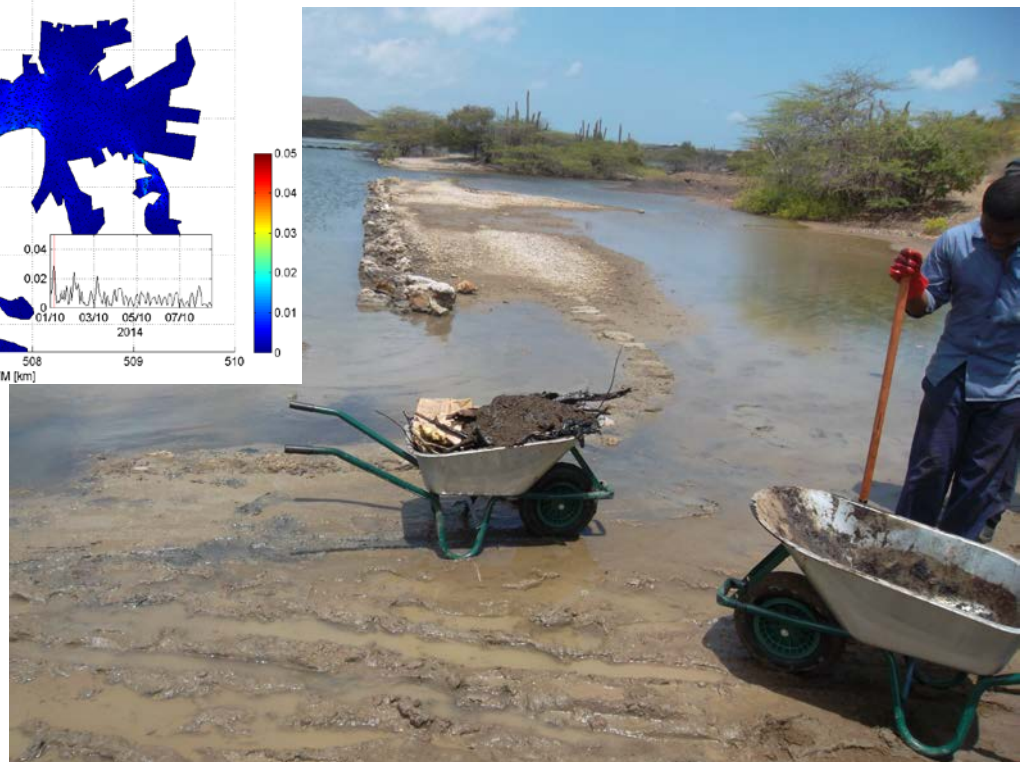
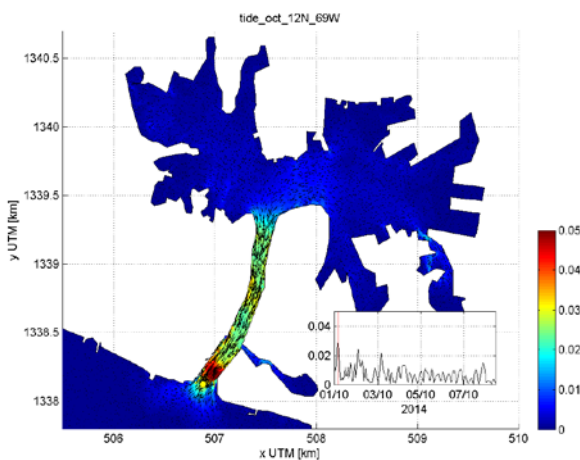


Name: Refineria Isla Curaçao BV (ISLA)

Sector: Oil and Gas

Location: Curaçao

ISLA is a medium conversion petroleum refinery located at the Schottegat bay in Curaçao. It has a nameplate capacity of 330,000 barrels per day. Since 1985, Refineria Isla is a subsidiary of Petroles de Venezuela SA (PDVSA.)



Rationale: After a number of oil spills that occurred in 2010 and 2012 the ISLA Refinery decided to set up a computer model that will help with the forecasting of oil spill trajectories. The model will help the refinery to respond early and adequately to future oil spills.

Approach: First step was to set up a Sensitivity Map for oil spills (ecological, economical) in GIS (Arcview) and to set up a database with oil characteristics (ADIOS). Secondly all needed information for the model GNOME was prepared, such as coast line and bathymetry, wind and current files. Project was ended with a training given to ISLA employees (ADIOS and GNOME)

Outcome: Training was successfully concluded.