



WARPS WESTERN AFRICA REAL-TIME PORTS SYSTEM

COASTAL ENVIRONMENTAL ASSESSMENT

Combining technologies and environmental expertise to transform data into information over the time

WARPS is a coastal environmental assessment system that combines several technologies and expertise for achieving a comprehensive knowledge of the coastal environment of the Western African Ports and infrastructures.

The combination of **in situ measurements**, **remote sensing** and **numerical modeling** makes possible to represent environmental conditions in the past, present and assess the future at different time and space scales. The **visualizing tool** is the entry point that allows the users to benefit from the combination of the **processed data**.

WARPS aim to provide an assessment of the impact of **ports operations**, infrastructure development and **environmental policies** on the coastal surroundings. It also allows to have a **real time knowledge** of environmental parameters and to anticipate and **prevent accidents**. The project is being developed to monitor the coastal environment in the context of monitoring the impacts of **climate change** and human activities.

Applications:

Infrastructure monitoring - Coastal erosion - Environmental mapping - Environmental risk analysis - Oil spill simulation - Navigation support - Flood monitoring - Sediment transportation - Floating garbage management - Water quality - Climate change - Ground displacement - Dredging disposal



Satellite Data



MONITORING & ANALYSIS



In-situ measurement



Numerical Modeling



Visualisation tool

www.energyoffshore-cls.com

CLS – 11 rue Hermès – Parc Technologique du Canal – 31620 Ramonville Saint-Agne

Contact: bmavoungou@groupcls.com