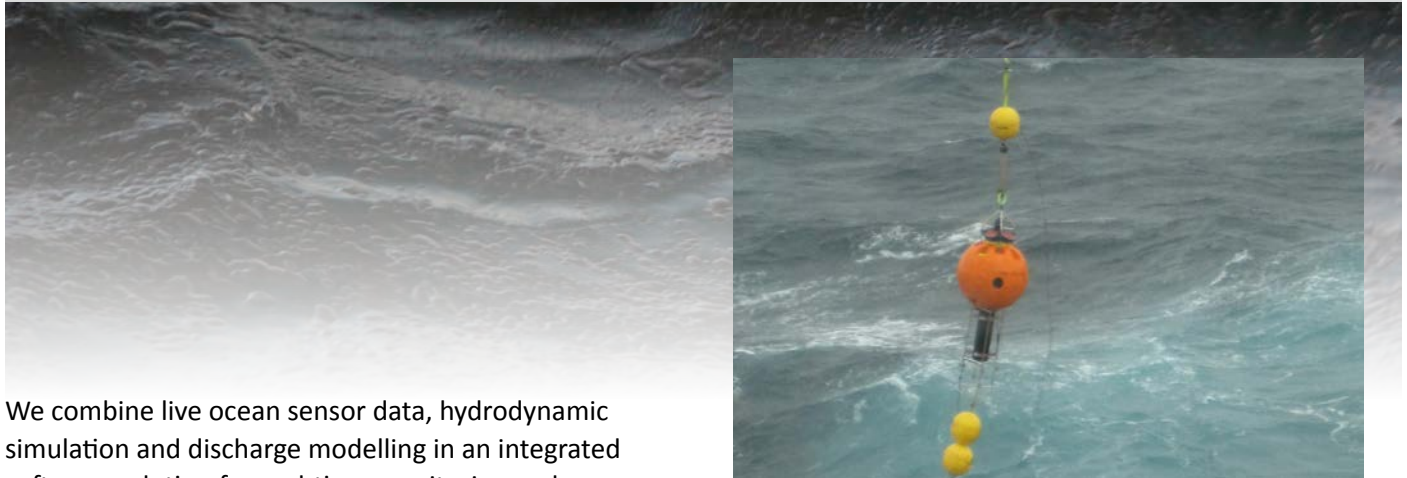


Real-time modelling

March 2015



We combine live ocean sensor data, hydrodynamic simulation and discharge modelling in an integrated software solution for real-time monitoring and modelling. Modelling results may be combined with or fed into other applications, e.g. risk assessment for endangered species in the monitored area.

The solution includes:

- DREAM for modelling regular discharges in real-time
- SINMOD (or other hydrodynamic model) for high-resolution current data and assimilation of real-time measurements.
- Sensor platform with ADCP and SeaGuard sensors to capture the entire current profile at the location of interest.
- Standardized interface to ArcGIS and other GIS solutions (under development).
- Interface to drilling information in real-time (under development).

Typical applications:

- Monitoring of drilling discharges, impact and risk assessment in area with sensitive habitats (deep-water corals).
- Monitoring of underwater installations (leakage propagation)
- Monitoring of fish farms

Projects:

- Pilot application for real-time monitoring and modelling of drilling discharges at an operational field in the North Sea. December 2011 - June 2012

Publication:

- SPE 164949 A Real-Time Discharge Modelling and Environmental Monitoring System for Drilling Operations (<http://toc.proceedings.com/18054webtoc.pdf>)
- Real-time environmental monitoring and modelling of drilling discharges in sensitive areas. April 2013 - August 2015

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