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The GlobCurrent Value Chain

EO Data Processers

GlobWave Winds, Waves

Meteorological Service

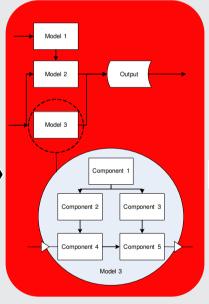
Winds, Waves

Marine Core Service
Currents, Temperature,
Salinity, Ocean Colour

GlobCurrent

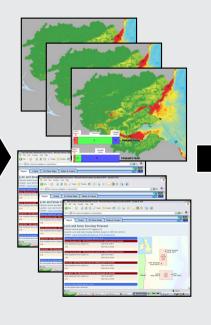


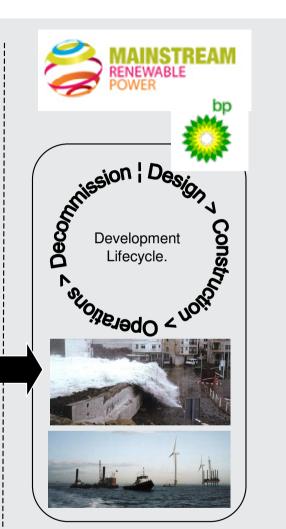
Modelling and Analysis





Information and Risk





What does the value chain want from GlobCurrent?



Market Sectors requiring better/more current data

> Energy

- > Oil and gas: design of offshore and coastal structures (breakwater, dredged channel, navigation), oil spill analysis...
- > Offshore wind: structural design
- > Nuclear: dispersion of thermal discharges
- > Tidal energy: resources assessment, impact studies

> Maritime

- > Design of port facilities
- > Navigation studies









Current data

> Available:

> Global to Regional model data, e.g. those provided by

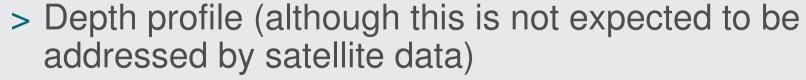
MyOcean, or HYCOM

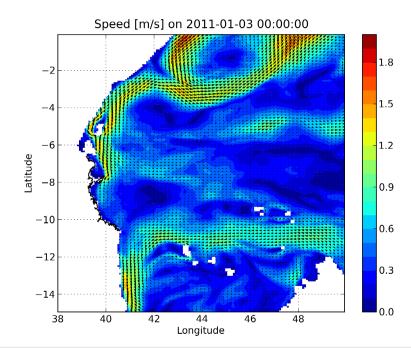
> Limited in-situ measurements

> Scientific literature

>Missing:

- > High resolution spatial data
- > Long time series (e.g. >10 years)







User examples: design criteria for floating platform (FSO/FPSO)

> Typical issues:

- > Rapidly changing current directions (eddies)
- > Correlation between winds/waves/currents to assess combined loading
- > Lack of long-term data to derive extreme values
- > Depth varying currents



User requirements - lessons learnt from MyOcean and GlobWave

- > Fast and reliable access to subset of the data (e.g. OpenDAP) easy AND flexible
- > Easy to use, i.e. requiring little expertise or internal developments (choice of data format and packaging)
- > Information on accuracy of the data, depending on location (not only global statistics)





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