

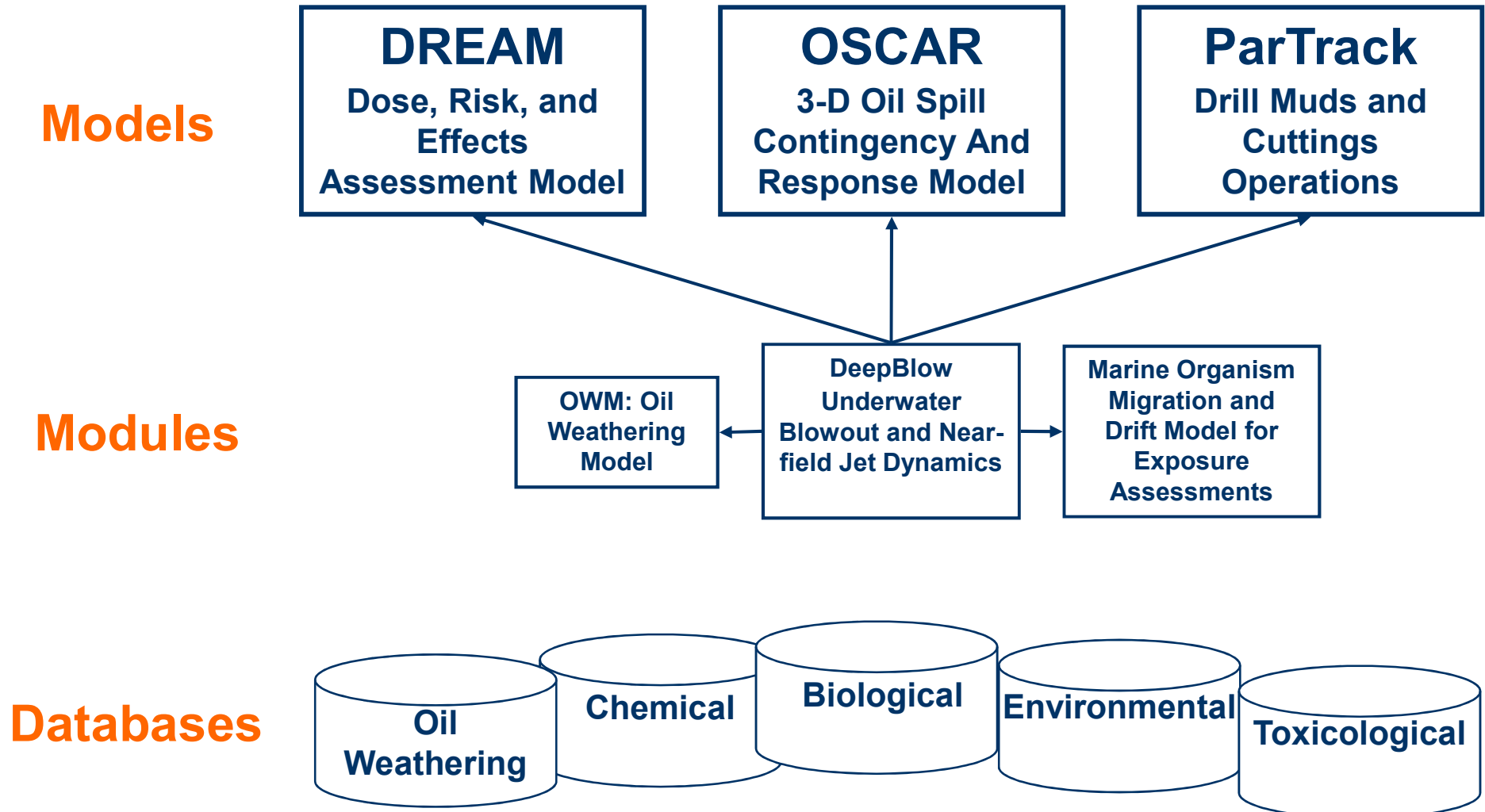
Use of the OSCAR model for deep water spills

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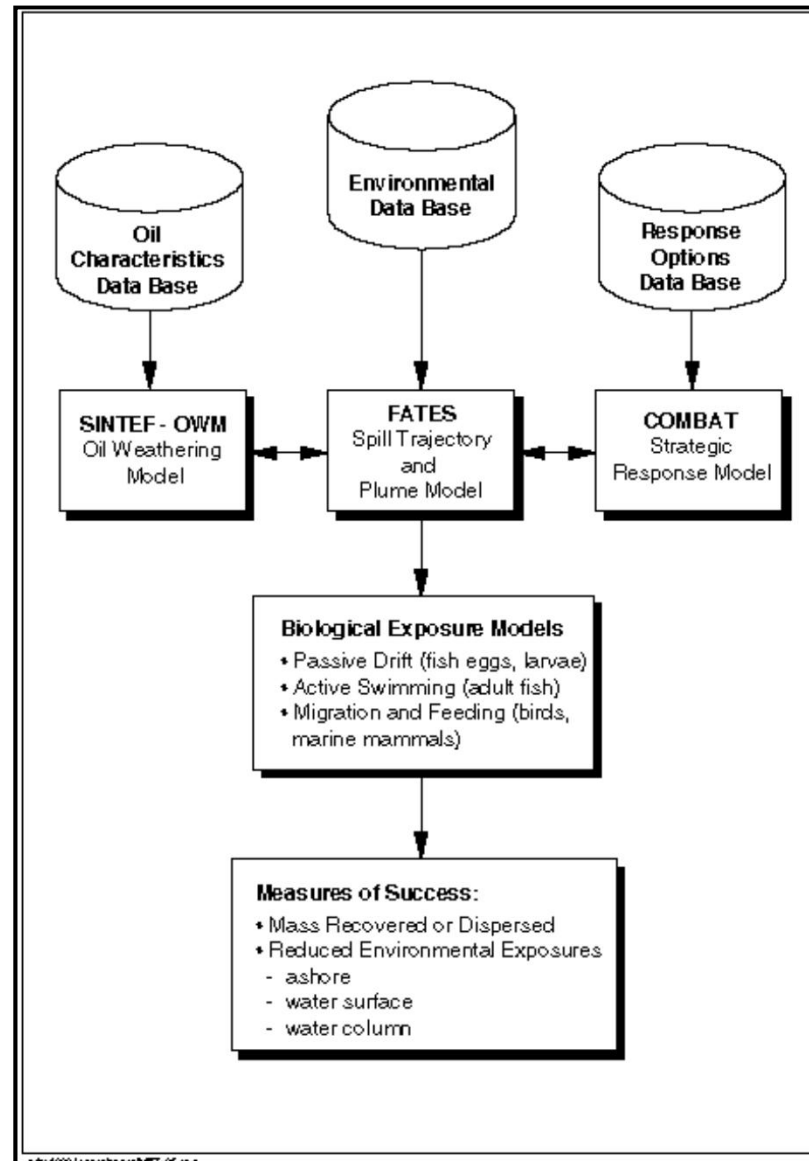
SINTEF

Marine Environmental Modelling Workbench

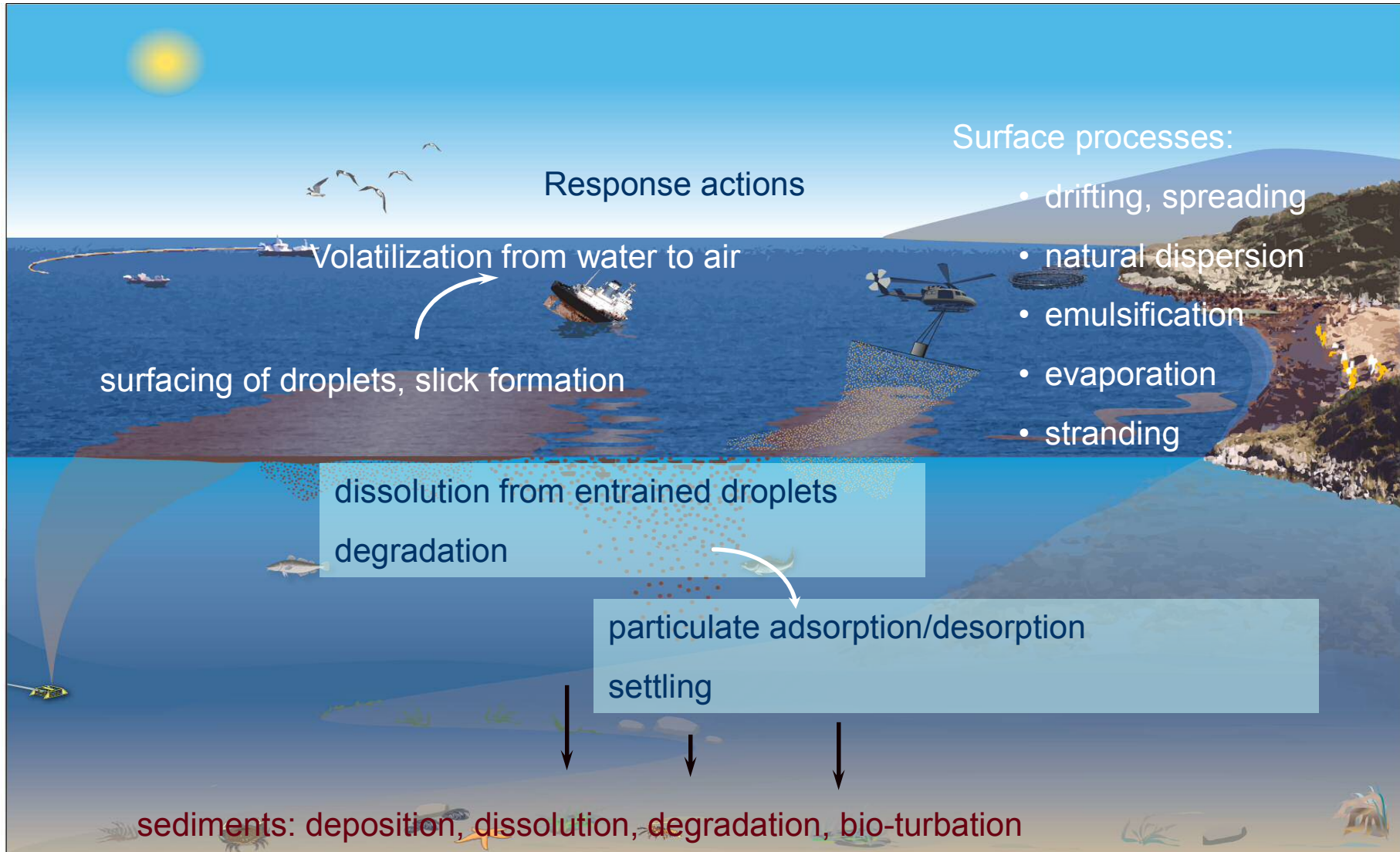


Overview of OSCAR Model System

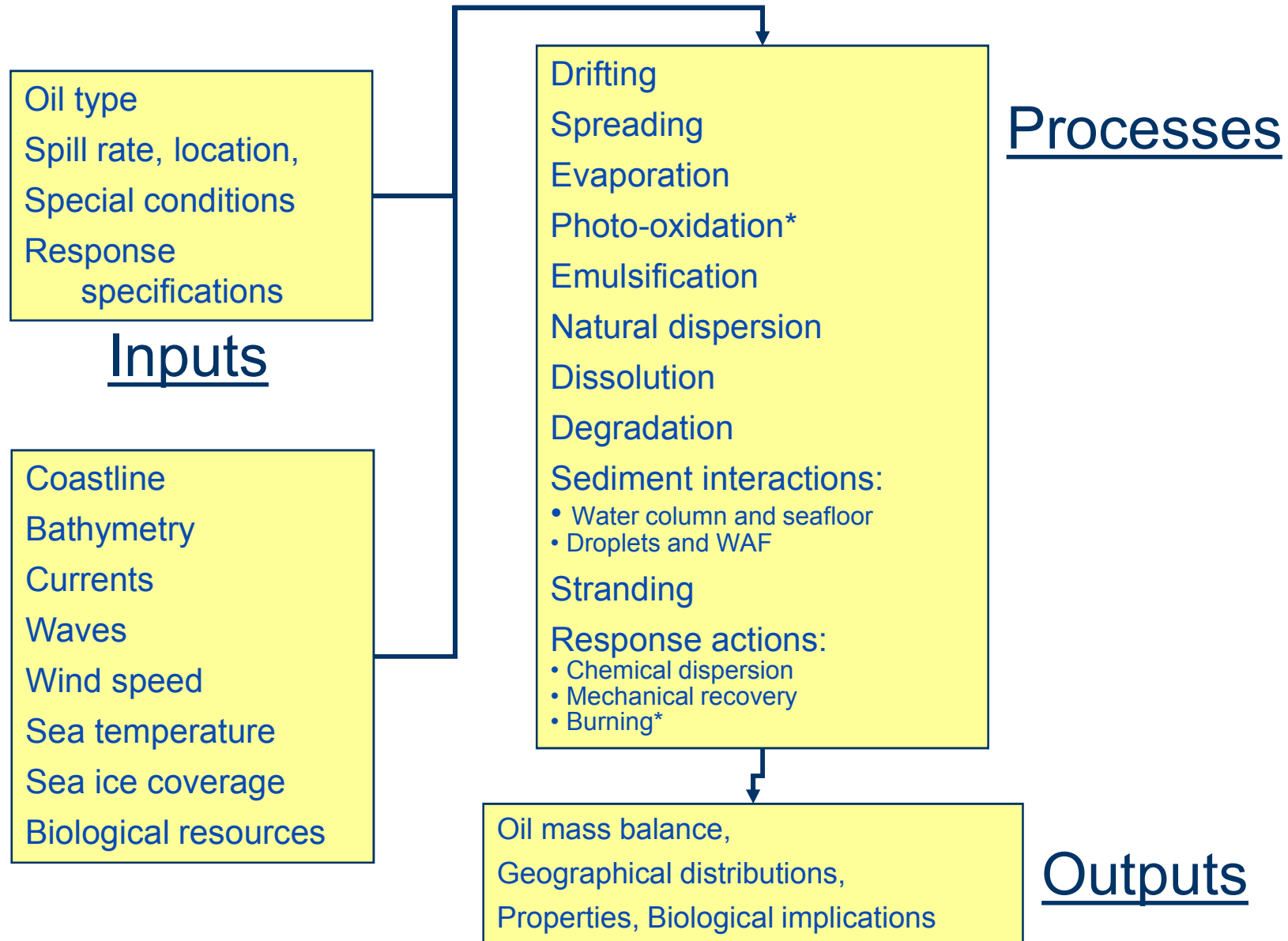
- Oil characteristics database
 - Water uptake
 - Emulsion viscosity, stability
 - Pour point, flash point
 - Composition data
- Environmental database
 - Currents
 - Winds
 - Shoreline
 - Bathymetry
- Response options
 - Mechanical recovery
 - Dispersant application



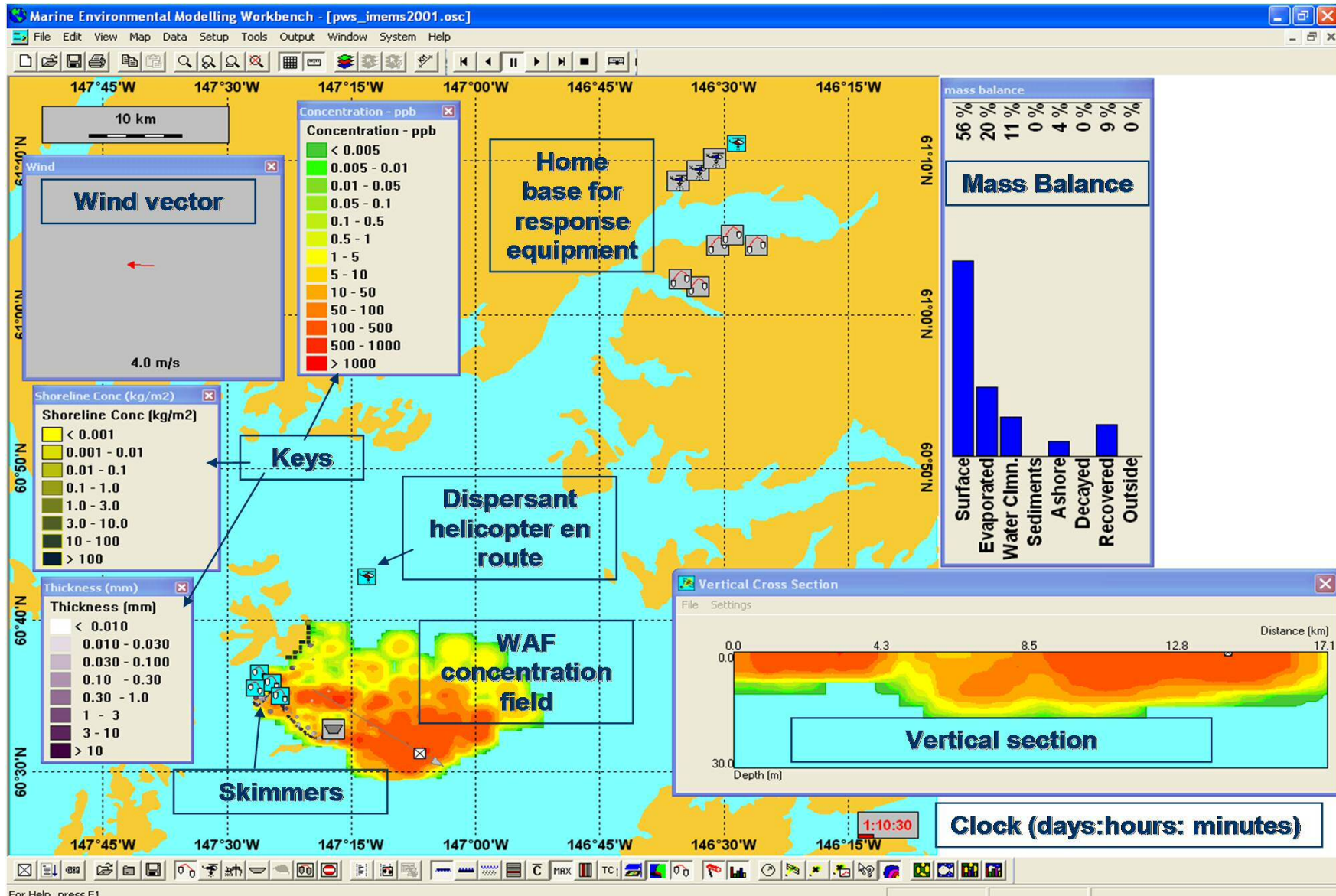
Processes included in OSCAR



General Model Structure

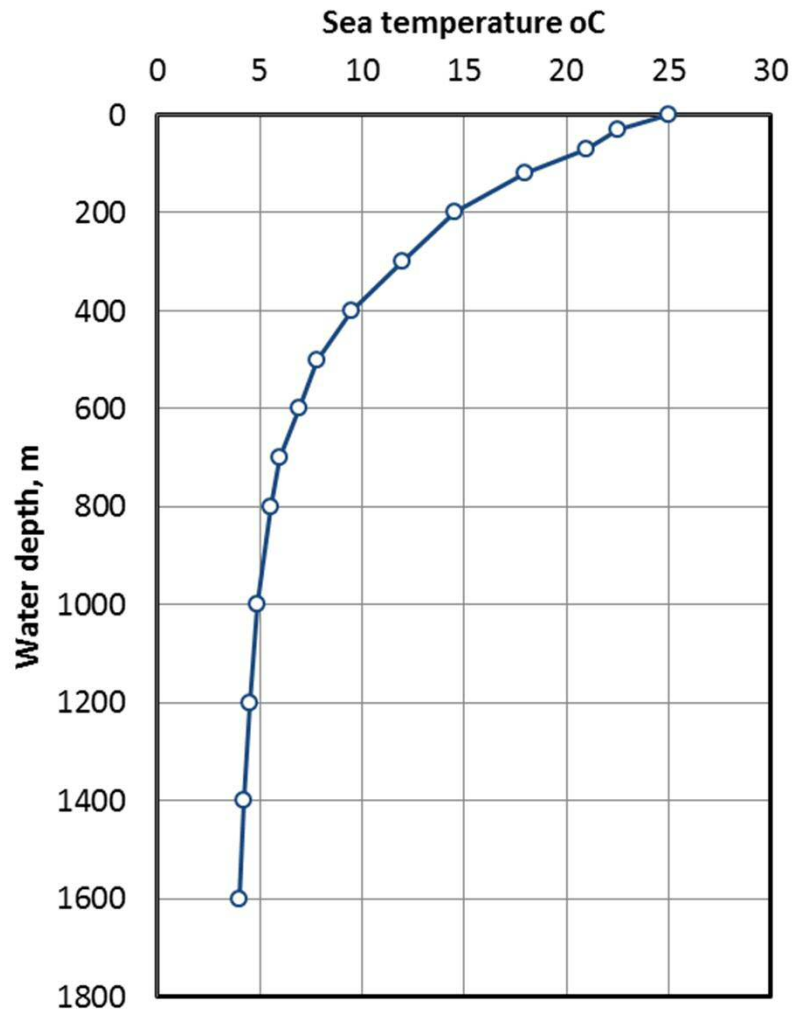


Snapshot of OSCAR screen



For Help, press F1

Example run – Gulf of Mexico



- Surface wind forecasts and ocean currents from 3D circulation model for the Gulf – downloaded from NOAA each day in the internet.
- Vertical temperature and salinity profiles from location
- A movie has been made showing the development of the plume of rising oil droplets and dissolved in the vicinity of the spill location
- Snapshots are shown at time intervals of 10 minutes during a 24 hours period
- [Show movie](#)