

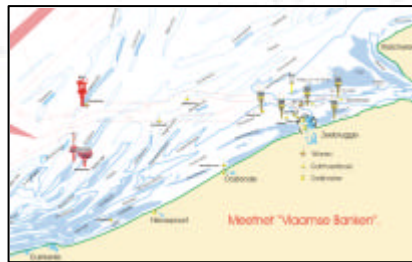
Ir G. Dumon, Waterways and Maritime Affairs Administration - Coastal Waterways (B)

Ing Ph. Hyde, Haecon n.v (B)

Wave buoys



The Hydro Meteo System consists of a Monitoring network and was set up for the acquisition of real-time oceanographical and meteorological data along the Belgian coast and continental shelf. The oceanographic parameters monitored are waves, tidal height, current and water temperature. The meteorological parameters are wind, air pressure, air temperature and rainfall. The network consists of 7 measuring platforms on the North Sea with hydro-meteo sensors, 11 wave buoys, 2 meteorological stations and 3 telemetric water level gauges on the coast.



Measuring Platforms



Westhinder Platform

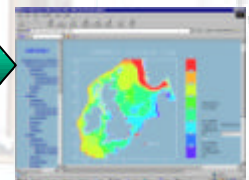
SeaNet
joining six national Monitoring Networks in the North Sea region for the exchange of data in near-real time.



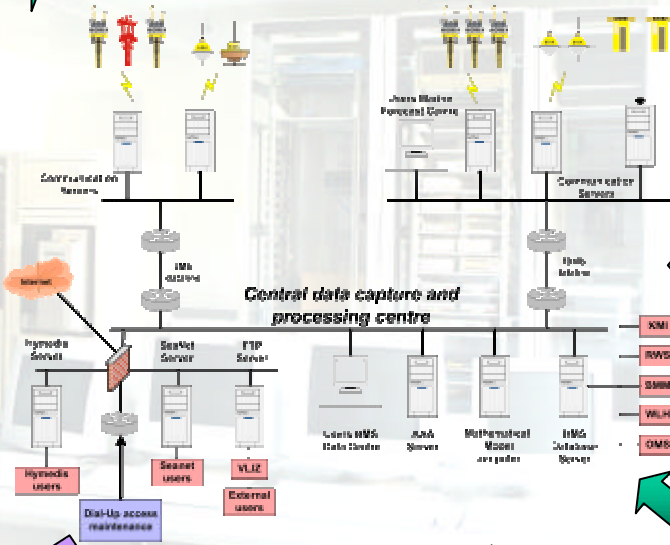
Local Acquisition centre
Measuring Platforms and
Wave buoys

Local Acquisition centre
Measuring Platforms and
Meteostations

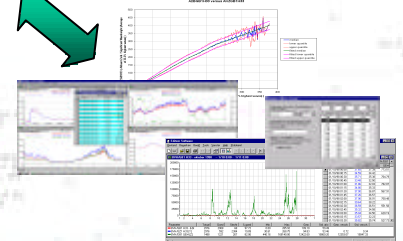
Hydrodynamic models running on a dedicated mathematical computer system to calculate forecasts for tidal elevation and wave conditions in the Southern North Sea and along the Belgian coast. The result are stored on the HMS database server.



HYMEDIS
is a real-time distribution system for Hydrometeo data. One of the datastreams is delivered by the monitoring network "Flemish Banks". These data are distributed through mobile data communication technology to mobile devices (GSM, laptop)



Quality Control of the data



Users of the the Hydro Meteo System

- Internal AWZ - Users:**
- Oceanographic Meteorological Station (OMS)
 - Storm Surge Warning service
 - Nautical Authorities (Shipping Assistance, Pilotage)
 - Scheldt Radar Chain (Hymedis)
 - Coastal Defence, Maritime Acces, Fleet,...
 - Hydraulic Information Centre (HIC)

- External Users:**
- Flanders Marine Institute
 - The Royal Meteorological Institute
 - Management Unit of the Mathematical Model
 - The Dutch Monitoring Networks
 - Seanel members

AWZ-VLIZ website
Offers public access to the most recent measurements.



Oceanographic Meteorological Station

The data resulting from the Monitoring Network are primarily intended for daily redaction of marine weather forecasts of tidal heights, waves, wind along the Belgian coast and in the shipping lanes to the coastal harbours and to the River Scheldt estuary.

These forecasts are produced by the Oceanographic Meteorological Station (OMS) of AWZ in Zeebrugge.