

# **The Netherlands**

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## **Summary of Operational and Planned Oceanographic Observation Programs**

### **ARGO**

37 active 25 January 2012. To see latest status of floats go to:  
<http://wo.jcommops.org/cgi-bin/WebObjects/Argo.woa/wa/default>  
and select Monitoring and Countries.

### **Sea Level**

9 sites (through 2010) listed at PSMSL <http://www.psmsl.org/data/obtaining/>  
Ijmuiden, Vlissingen and West-Terschelling are GPS positioned  
<http://www.sonel.org/spip.php?page=cgps>

### **Time Series**

WOCE A1E bi-annually as part of CAMP (Clivarnet Atlantic Monitoring Program).  
Includes T, S, OXY, SIL, po4, no3 and trace metals.

### **TS Hydrography**

Latest and next Repeat Hydrographic sections (standard WOCE sampling).  
A1E/AR7E, Greenland to Ireland 2007 and 2011  
SR4, Antarctic Peninsula to Kapp Norvegia and edge of Weddell Gyre. 2008 and 2011  
with Germany. A12, Capetown to Antarctica with Germany, 2008 and 2011.  
[http://www.go-ship.org/RefSecs/Table&Meas\\_May2010b.pdf](http://www.go-ship.org/RefSecs/Table&Meas_May2010b.pdf)

### **Bio/Chem**

North Sea International Bottom Trawl Survey participant since 1965.  
Beam Trawl Survey Participant since 1987. Latest data posted for both is 2011  
[http://datras.ices.dk/Data\\_products/Submission\\_Status.aspx](http://datras.ices.dk/Data_products/Submission_Status.aspx)

### **Waves**

WaMos <http://www.oceanwaves.de/>

### **Coastal**

Realtime Ferry Observations  
[http://www.nioz.nl/nioz\\_nl/9d47a8435be9d28bba07efb502044ac5.php](http://www.nioz.nl/nioz_nl/9d47a8435be9d28bba07efb502044ac5.php)

Ferry Box project Den Helder/Texel Island: SST, salinity, Fluorescence,  
currents (ADC). <http://www.ferrybox.org/>  
<http://www.ferrybox.org/routes/index.html.en> Ferry Box community

Marsdiep tidal inlet – T, S, Currents and Phytoplankton

Macrofauna on tidal flats in the Wadden Sea

Real-time Jetty observations -T and S:

[http://www.nioz.nl/nioz\\_nl/ccba2464ba7985d1eb1906b951b1c7f6.php](http://www.nioz.nl/nioz_nl/ccba2464ba7985d1eb1906b951b1c7f6.php)

### **Carbon**

WOCE Line A1 (AR7E), 2000 and 2005. Planned - Irminger Sea- Iceland to Greenland.

[http://www.clivar.org/carbon\\_hydro/hydro\\_table.php](http://www.clivar.org/carbon_hydro/hydro_table.php)

Polar Oceans/transects to/from Antarctica with Germany 2007 onward.

JetSet, 53N, 4E46 weekly, Marsdiep tidal channel.

North Sea August 2001, 2005, 2008 underway surface pCO<sub>2</sub>.

Amsterdam – Bergen weekly.

Antarctic zero meridian, once every 2-3 years, since 1984.

<http://www.ioccp.org/>

### **VOS**

50 VOS and 16 VOSclim programs in operation 19 January 2012. Potential of VOSclim ships is 48

<http://osmc.noaa.gov/Monitor/OSMC/OSMC.html>

<http://www.ncdc.noaa.gov/oa/climate/vosclim/vosclim.html>

### **Moorings**

LOCO –3 profiling CTD/ADCP moorings and 1 Sediment Trap mooring in the Irminger Sea since 2003. Latest cruise reported June/July 2009.

[http://www.nioz.nl/nioz\\_nl/d1c718ca5ee31e2cb8dea0a4ddadf41a.php](http://www.nioz.nl/nioz_nl/d1c718ca5ee31e2cb8dea0a4ddadf41a.php)

LOCO Indian Ocean (Mozambique Channel). Current, temperature and salinity measurements. [http://en.wikipedia.org/wiki/Mozambique\\_Channel#Mozambique](http://en.wikipedia.org/wiki/Mozambique_Channel#Mozambique)

Start date of the timeseries, service interval: November 2003, serviced every 1.5-2 years

OceanSITES <http://www.oceansites.org/network/index.html>

Participant in the Meetnet Noordzee network of fixed stations in the North Sea.