

VECTORS



This is a temporary VECTORS page. The page is created for the purpose of the 2nd anual workshop in Portorož, Slovenia 19-23 march 2012.

Open Earth sprint session

Content

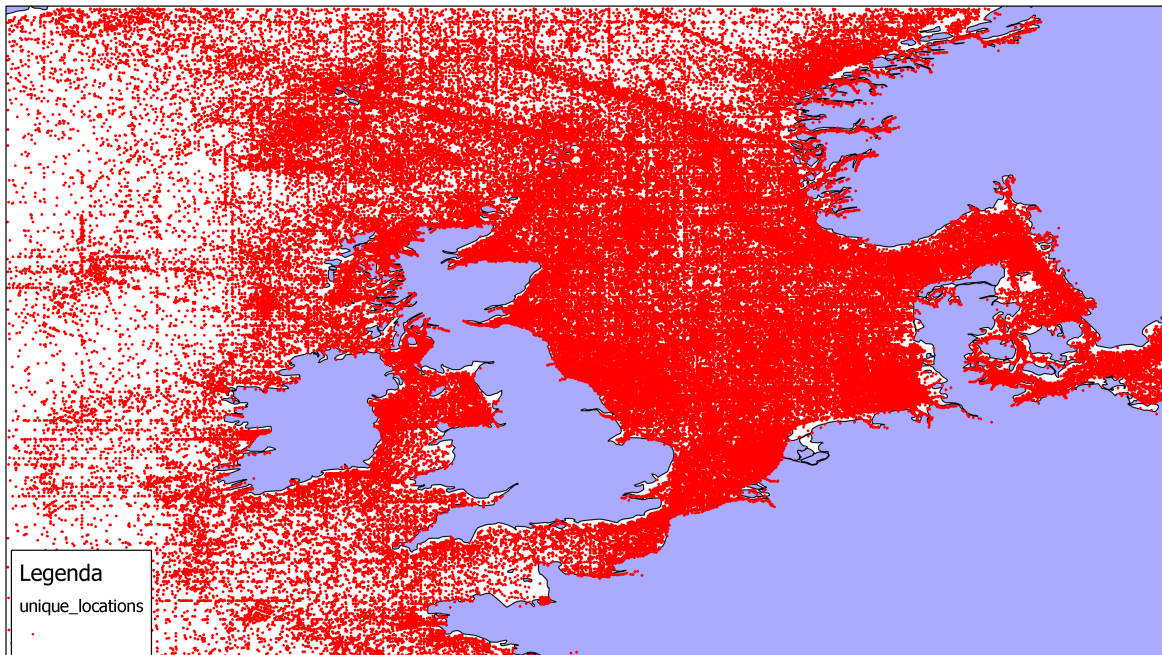
During the open earth sprint session several applications will be used and there are locations that will be referred to. In order to give every participant the opportunity to install necessary software all addresses are collected in a document.

The session is prepared with open source software which is listed below.

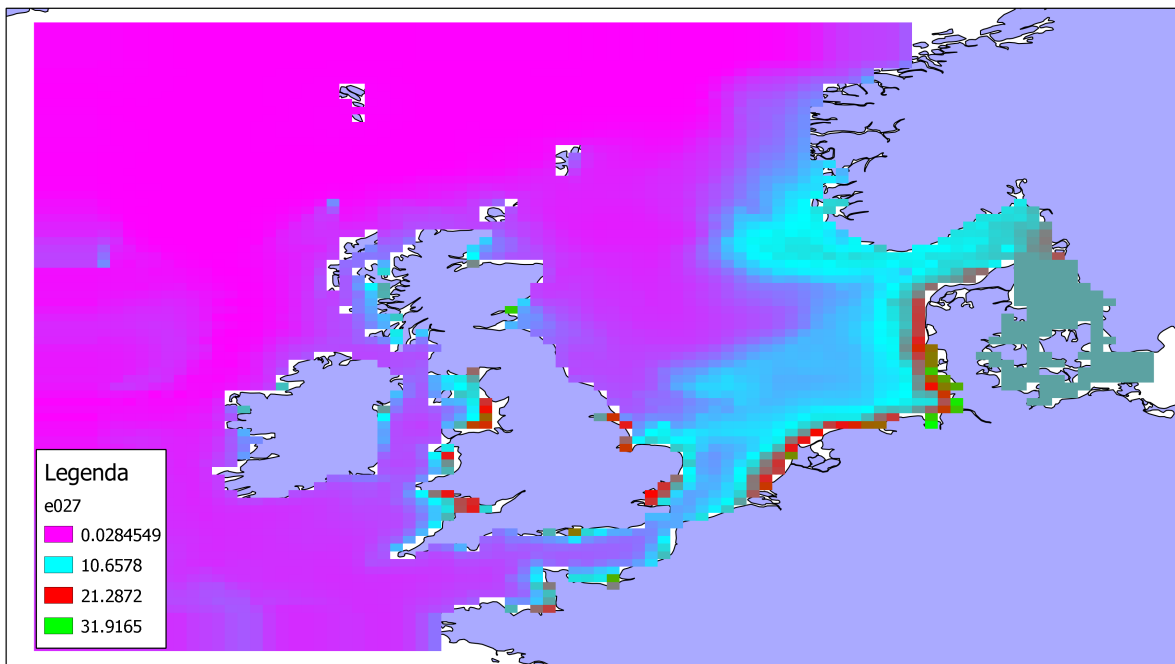
Available data

Below there are some examples shown of data available for the sprint session. The can be found on Deltares resources listed below.

- Online ICES database with over 400000 unique locations over a large part of Atlantic ocean. Below an example of the ICES observations (at least the locations for which observations are available in part of the Atlantic Ocean and North Sea.



- Output of the ECOHAM model of UHAM (with special thanks to Johannes Pätsch, UHAM). The output is build of 31 timesteps of chlorophyll content for the North Sea area and can be found on an OPeNDAP server of Deltares



Software

- QuantumGIS for visualisation (<http://qgis.org>), if you manage also install the third party OpenLayers plugin (after installing qgis use the plugin manager to install the third party plugin OpenLayers). You can load third party plugins on the repository tab). This plugin enables overlays with Google Earth, Bing Layers, OpenLayers and Yahoo Layers. Above images are created by QGIS.
- Python2.7 for programming (<http://code.google.com/p/pythonxy/wiki/Downloads>, download part1, part2 and part3)
- netCDF4 module (please perform the advanced install of PythonXY and check netCDF4 and HDF modules).
- pycpg2 module (<http://www.stickpeople.com/projects/python/win-psycpg/psycpg2-2.4.4.win32-py2.7-pg9.1.2-release.exe>)
- The R Project for Statistical Computing (<http://www.r-project.org/>)

URL's to data sources

Below you find some URL's to the data sources used.

- online database (postgres03.infra.xtr.deltares.nl, database = ICES, username = dbices, password = vectors (restricted to read))
- OPeNDAP to model output from ecoham (<http://opendap.deltares.nl/thredds/catalog/opendap/test/uham/catalog.html>, check the ec27.nc)
- OPeNDAP to MODIS images (in HDF) (<http://opendap.deltares.nl/thredds/catalog/opendap/nasa/modis/catalog.html>) Also check the daily aggregated images

Usefull documents

- [VECTORS Data policy](#)
- [D70.3 VECTORS Guidelines on OpenEarth](#)
- [Poster on Open Earth](#)

Snippets

- [Code snippet to read netCDF file from OPeNDAP server and visualise time serie for specific point\(s\)](#)
- [Code snippet to query PostgreSQL/PostGIS database and display time series](#)
- Code snippet to read netCDF and PostGresSQL database for same location and plot time series measured vs. modelled. (We challenge you to provide the necessary steps to create this snippet)
- [2 code snippets to extract data from the PostgreSQL/PostGIS database, one using R and one using Python](#)