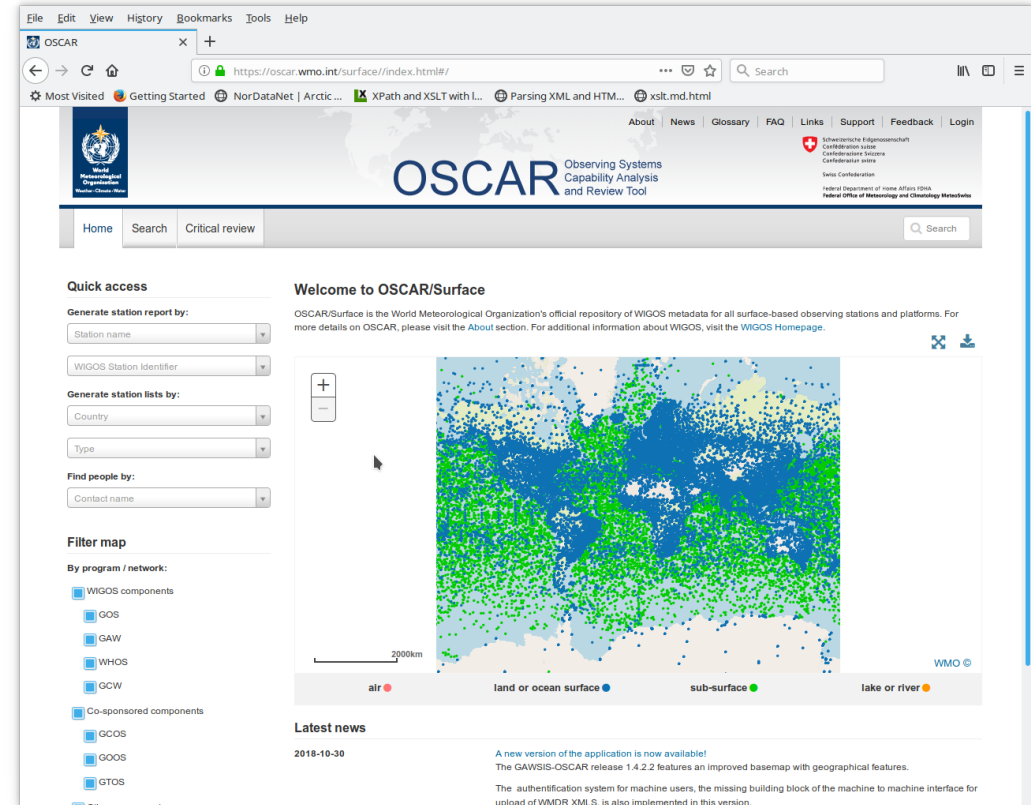


# GCW, the scientific community and WIGOS

Øystein Godøy

# GCW challenges with WIGOS

- GCW is depending on scientific communities
  - Interactions has to be simple and cost efficient with a clear benefit
  - WMO governance structure can sometimes cause issues
- Within GCW (and SIOS) the data portal will offer an interface between the science community and WMO
- Need the science community to provide information
  - Understanding of benefit, recognition of terminology, ...
- Need to reuse technology and interfaces
  - For documentation and communication
- Need transparency in glossaries



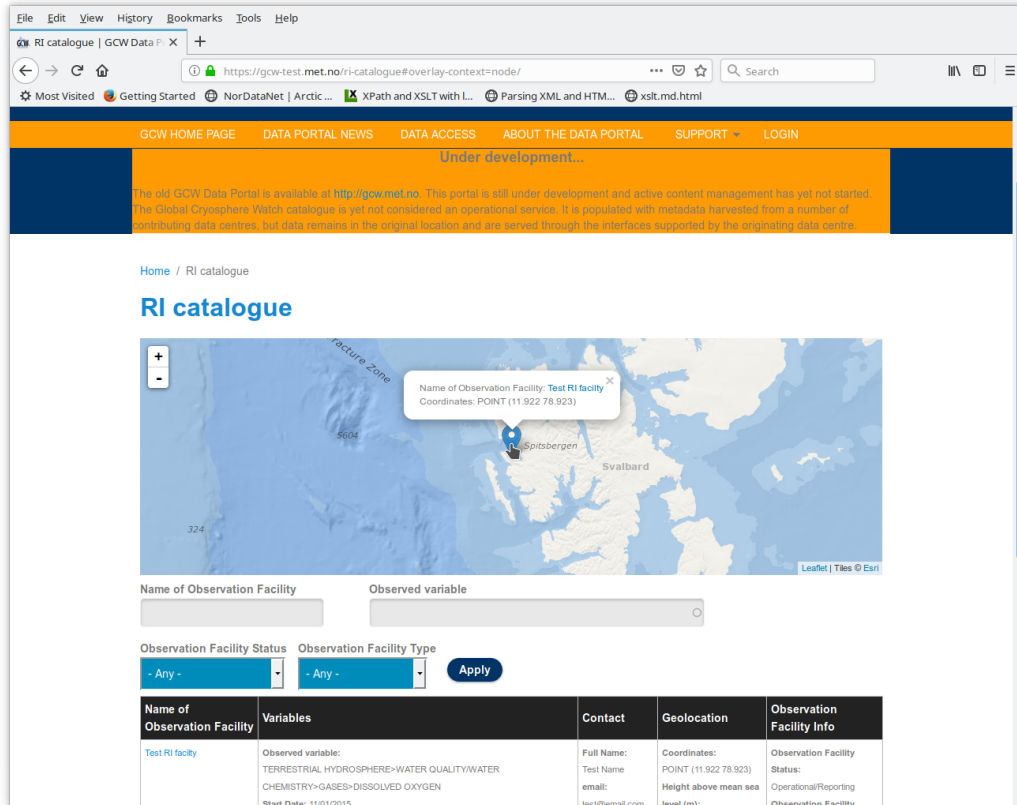
OSCAR Observing Systems Capability Analysis and Review Tool

Welcome to OSCAR/Surface

OSCAR/Surface is the World Meteorological Organization's official repository of WIGOS metadata for all surface-based observing stations and platforms. For more details on OSCAR, please visit the [About](#) section. For additional information about WIGOS, visit the [WIGOS Homepage](#).

2018-10-30

A new version of the application is now available!  
The GAWIS-OSCAR release 1.4.2.2 features an improved basemap with geographical features.  
The authentication system for machine users, the missing building block of the machine to machine interface for upload of WMDR XMLS, is also implemented in this version.



The screenshot shows a web browser displaying the GCW RI catalogue. The browser address bar shows the URL: `https://gcw-test.met.no/ri-catalogue#overlay-context=node/`. The page has a navigation bar with links: GCW HOME PAGE, DATA PORTAL NEWS, DATA ACCESS, ABOUT THE DATA PORTAL, SUPPORT, and LOGIN. Below the navigation bar, there is a message: "Under development..." and a note: "The old GCW Data Portal is available at <http://gcw.met.no>. This portal is still under development and active content management has yet not started. The Global Cryosphere Watch catalogue is yet not considered an operational service. It is populated with metadata harvested from a number of contributing data centres, but data remains in the original location and are served through the interfaces supported by the originating data centre."

The main content area is titled "RI catalogue" and features a map of the Arctic region. A tooltip on the map displays the following information:

- Name of Observation Facility: **Test RI facility**
- Coordinates: POINT (11.922 78.923)

Below the map, there are input fields for "Name of Observation Facility" and "Observed variable". There are also dropdown menus for "Observation Facility Status" (set to "Any") and "Observation Facility Type" (set to "Any"), with an "Apply" button next to them.

At the bottom of the page, there is a table with the following data:

| Name of Observation Facility | Variables                                                                                                                      | Contact                                          | Geolocation                                                               | Observation Facility Info                                                     |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| Test RI facility             | Observed variable:<br>TERRESTRIAL HYDROSPHERE-WATER QUALITYWATER<br>CHEMISTRY-GASES-DISSOLVED OXYGEN<br>Start Date: 11/01/2015 | Full Name:<br>Test Name<br>email:<br>test@met.no | Coordinates:<br>POINT (11.922 78.923)<br>Height above mean sea level (m): | Observation Facility Status:<br>Operational/Reporting<br>Observation Facility |

- When discussing the standard with scientists
  - Immediate pushback
  - Too complicated/time consuming
- Solution
  - Small steps
  - Lightweight implementation
    - To show the benefit
    - Jointly developed with Svalbard Integrated Arctic Earth Observing System (SIOS)
  - The portal to bridge between scientists and WMO requirements

File Edit View History Bookmarks Tools Help

RI catalogue | GCW Data | X +

https://gcw-test.met.no/ri-catalogue#overlay-context=node/

Most Visited Getting Started NorDataNet | Arctic ... XPath and XSLT with L... Parsing XML and HTM... xslt.md.html



Name of Observation Facility Observed variable

Observation Facility Status Observation Facility Type

- Any - - Any - Apply

Planned

Pre-operational

Operational/Reporting

Partly reporting

Temporarily suspended

Closed

| Observation Facility Status | Observation Facility Type | Contact                                                                                     | Geolocation                                                                        | Observation Facility Info                                                                                                                |
|-----------------------------|---------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Operational/Reporting       | land station              | Full Name:<br>Test Name<br>email:<br>test@email.com<br>Institution:<br>Stockholm University | Coordinates:<br>POINT (11.922 78.923)<br>Height above mean sea level (m):<br>13.00 | Observation Facility Status:<br>Operational/Reporting<br>Observation Facility Type:<br>land station<br>Site Information:<br>Info on Site |

Observed variable:  
ATMOSPHERE>ATMOSPHERIC CHEMISTRY>WATER QUALITY>WATER QUALITY>GASES>DISSOLVED OXYGEN  
Start Date: 01/01/2015  
End Date: 11/30/2021  
Instrument model and serial number: Instrument Model and NUMBER  
Instrument routine maintenance: Text on Maintenance  
Sampling procedures: Text on Sampling Procedure

Observed variable:  
ATMOSPHERE>ATMOSPHERIC CHEMISTRY>NITROGEN COMPOUNDS>DINITROGEN PENTOXIDE  
Start Date: 01/01/2017  
End Date: 11/30/2021  
Instrument model and serial number: Ins Mod & SN  
Instrument routine maintenance: My routine for maintenance  
Sampling procedures: The procedure we use

CSV

File Edit View History Bookmarks Tools Help

RI catalogue | GCW Data | X +

https://gcw-test.met.no/ri-catalogue#overlay-context=node/

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Name of Observation Facility Observed variable

Observation Facility Status Observation Facility Type

- Any - - Any - Apply

land station

sea station

aircraft

satellite

underwater platform

| Name of Observation Facility | Variable                                                                                                                                                                                                                                                                                                        | Contact                                                                                     | Geolocation                                                                        | Observation Facility Info                                                                                                                |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| Test RI facility             | Observed variable:<br>ATMOSPHERE>ATMOSPHERIC CHEMISTRY>NITROGEN COMPOUNDS>DINITROGEN PENTOXIDE<br>Start Date: 01/01/2017<br>End Date: 11/30/2021<br>Instrument model and serial number: Ins Mod & SN<br>Instrument routine maintenance: My routine for maintenance<br>Sampling procedures: The procedure we use | Full Name:<br>Test Name<br>email:<br>test@email.com<br>Institution:<br>Stockholm University | Coordinates:<br>POINT (11.922 78.923)<br>Height above mean sea level (m):<br>13.00 | Observation Facility Status:<br>Operational/Reporting<br>Observation Facility Type:<br>land station<br>Site Information:<br>Info on Site |

Observed variable:  
ATMOSPHERE>ATMOSPHERIC CHEMISTRY>NITROGEN COMPOUNDS>DINITROGEN PENTOXIDE  
Start Date: 01/01/2017  
End Date: 11/30/2021  
Instrument model and serial number: Ins Mod & SN  
Instrument routine maintenance: My routine for maintenance  
Sampling procedures: The procedure we use

CSV

File Edit View History Bookmarks Tools Help

Test RI facility | GCW Data | X

https://gcw-test.met.no/node/20

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Home / Test RI facility

## Test RI facility

LAST UPDATED: NOVEMBER 28, 2018



**Observed Variable(s)** Info Environment Contact Geospatial location

Observed variable:  
TERRESTRIAL HYDROSPHERE>WATER QUALITY>WATER CHEMISTRY>GASES>DISSOLVED OXYGEN  
Start Date:  
11/01/2015  
DOI or URL:  
<http://gcw-test.met.no>  
Instrument model and serial number:  
Instrument Model and NUMBER  
Instrument routine maintenance:  
Text on Maintenance  
Sampling procedures:  
Text on Sampling Procedure

Observed variable:  
ATMOSPHERE>ATMOSPHERIC CHEMISTRY>NITROGEN COMPOUNDS>DINITROGEN PENTOXIDE  
Start Date:  
01/01/2017  
End Date:  
11/30/2021  
Instrument model and serial number:  
Ins Mod & SN  
Instrument routine maintenance:  
My routine for maintenance  
Sampling procedures:  
The procedure we use

File Edit View History Bookmarks Tools Help

Edit RI entry Test RI facility | X

https://gcw-test.met.no/node/20#overlay=node/20/edit

Most Visited Getting Started NorDataNet | Arctic ... XPath and XSLT with L... Parsing XML and HTM... xslt.md.html

Dashboard Content Structure Appearance People Modules Configuration Reports Help

Add content Find content Performance Blocks

Hello steingod Log out

Edit shortcuts

### Edit RI entry Test RI facility

VIEW EDIT

Home » Test RI facility

**Name of Observation Facility \***

Test RI facility

**OBSERVED VARIABLE(S)**

**OBSERVATION FACILITY**

**GEOSPATIAL LOCATION**

**Coordinates \***

POINT (11.922 78.923)

Enter coordinates in Well Known Text (WKT) format as either a point, linestring or polygon. Please use decimal degrees with a minimum of four decimal points, e.g. POINT (11.8276 78.9018). Note: WKT uses x,y as standard, therefore the format is (LONG LAT). Examples: POINT (Long1 Lat1); LINESTRING (Long1 Lat1, Long2 Lat2); POLYGON (Long1 Lat1, Long2 Lat2, Long3 Lat3).

**Height above mean sea level (m) \***

13

Enter height above mean sea level to the nearest metre. Use negative values for underwater facilities.

**ENVIRONMENT**

**CONTACT**

**Full Name \***

Test Name

Principal contact (Nominated Focal Point, FP) for resource

**email \***

test@email.com

email of the principal contact (Nominated Focal Point, FP) for resource

# WIGOS Glossaries

- Transparency is extremely important in the context of vocabularies describing the parameters measured
  - Coordination with other activities beneficial
    - Resources already stretched too thin
  - Transparency and coordination required to ensure proper mapping with other relevant glossaries
    - GCMD, CF, ...



How can the science community be engaged in  
WIGOS?