

# Introduction to WMO/OSCAR

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## Introduction

[http://www.wmo.int/pages/prog/sat/spaceweather-intro\\_en.php](http://www.wmo.int/pages/prog/sat/spaceweather-intro_en.php)

-June 2008 - WMO Executive Council noted the potential synergy between meteorological and Space Weather services to operational users and agreed to support international coordination of Space Weather activities.

-June 2016 - the Executive Council approved the Four-year plan for WMO activities related to Space Weather (SW) in 2016-2019.

What has been done so far:

SW Observational Requirements

SW Product Portal

Statement of Guidance for SW Observations (May 2012, new version is currently under review)

In the nearest future:

To integrate Space weather into WMO Integrated Global Observing System (WIGOS)

## Introduction

WMO Global Observing System (WIGOS) Tools:

----RRR - Rolling Review of Requirements:

User requirements for observations are compared with the capabilities of present and planned observing systems. The output of this is reviewed by relevant experts and used to prepare a Statement of Guidance (SOG), the main aim of which is to identify the most important gaps between user requirements and system capabilities in order to guide the future developments.

-----OSCAR – Observing System Capability Analysis and Review

OSCAR-Space is the WMO repository of WIGOS metadata for all space-based observing missions (including space weather satellites)

OSCAR-Space is done (<https://www.wmo-sat.info/oscar/spacecapabilities> )

OSCAR-Surface is the WMO repository of WIGOS metadata for all surface-based observing stations and platforms, including space weather observations

- currently is under development

<https://oscar.wmo.int/surface//index.html#/>

**SW surface-metadata on WIGOS SW observing capabilities are missing**

## Welcome to OSCAR

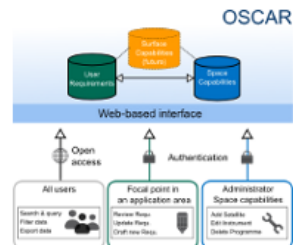
OSCAR is a resource developed by [WMO](#) in support of Earth Observation applications, studies and global coordination.

It contains quantitative user-defined requirements for observation of physical variables in application areas of WMO (i.e. related to weather, water and climate). OSCAR also provides detailed information on all earth observation satellites and instruments, and expert analyses of space-based capabilities.

The tool constitutes a building block of [WIGOS](#) and more specifically, the so-called [Rolling Requirements Review process](#). OSCAR targets all users interested in the status and the planning of global observing systems as well as data users looking for instrument specifications at platform level. To continue, please select one of the following modules:

- [Observation Requirements](#)
- [Satellite Capabilities](#)
- [Surface based Capabilities](#)

Each of the modules can be consulted individually, however, the tool is also designed with the goal to integrate user requirements with actual capabilities. This facilitates the Rolling Requirements Review process, comparing "what is required" with "what is, or will be available", in order to identify gaps and support the planning of integrated global observing systems.



OSCAR overview - click to enlarge

The tool is being further developed, and additional functionality and information will be added as appropriate. Please consult the [list of open issues](#) for a description of bugs affecting the system. One future objective is to automatically generate first-level analyses of compliance between the quantitative requirements and the actual capabilities (space- or surface-based).

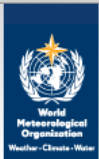
Please provide feedback to the WMO Space Programme Office [sat-help-desk@wmo.int](mailto:sat-help-desk@wmo.int)

### Getting started with OSCAR/Space and OSCAR/Requirements

- Watch the [10 minute OSCAR screen-cast](#) to get an overview of the application and learn how to use its functionalities
- Documents available for download
  - [OSCAR/Space and OSCAR/Requirements User manual](#) (413 kbyte)
  - [OSCAR/Requirements Focal Point manual](#) (200 kbyte) for user requirements editors
  - [OSCAR Flyer](#) (1.4 Mbyte)
- Please provide feedback to the WMO Space Programme Office [sat-help-desk@wmo.int](mailto:sat-help-desk@wmo.int)

### Getting started with OSCAR/Surface

- Read the [OSCAR/Surface User manual](#)
- The user support can be contacted via the [OSCAR/Surface feedback form](#).



# OSCAR

Observing Systems  
Capability Analysis  
and Review Tool

Schweizerische Eidgenossenschaft  
 Confédération suisse  
 Confederazione Svizzera  
 Confederaziun svizra  
 Swiss Confederation  
 Federal Department of Home Affairs FDHA  
 Federal Office of Meteorology and Climatology MeteoSwiss

[Home](#) | [Search](#) | [Critical review](#)

### Quick access

#### Generate station report by:

#### Generate station lists by:

#### Find people by:

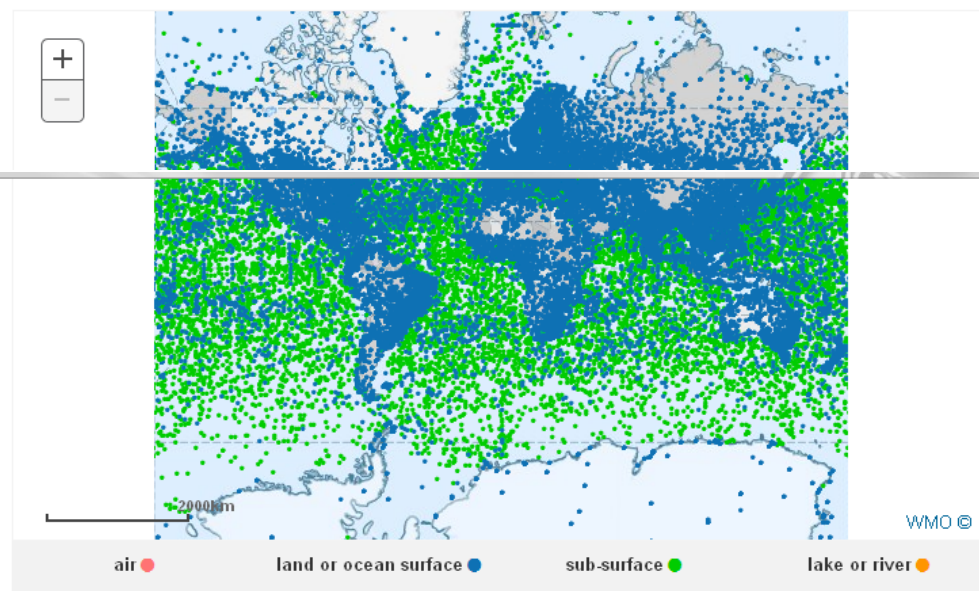
### Filter map

#### By program / network:

- WIGOS components
  - GOS
  - GAW
  - WHOS
  - GCW
- Co-sponsored components
  - GCOS
  - GOOS
  - GTOS
- Other components
  - Non affiliated

### 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](#).



### Latest news

- 2017-08-28**
[Scheduled maintenance, 30 August 2017](#)  
 GAWSIS and OSCAR will be temporary unavailable on 30 August 2017 between 18.00 and 23.30 UTC for scheduled maintenance of the authentication services. We apologise for any inconvenience.
- 2017-07-21**
[Scheduled maintenance, 26 July 2017](#)

# OSCAR-surface examples: Global Ocean Observing Systems

Sorting the stations by: WMO i.d., country, observation type, etc.

Filtering maps: WIGOS network, “co-sponsored” components, others

Final version is not ready yet: possibility to change the layout might exist

The screenshot displays the OSCAR-surface web application interface. At the top, a browser address bar shows the URL [https://oscar.wmo.int/surface/index.html/#/](https://oscar.wmo.int/surface/index.html#/). Below the browser, the interface is divided into several sections:

- WMO ID:** A dropdown menu for selecting a specific WMO ID.
- Generate station lists by:** Two dropdown menus for selecting 'Country' and 'Type'.
- Find people by:** A dropdown menu for selecting 'Contact name'.
- Filter map:** A section with a heading and a list of checkboxes for filtering stations by program/network:
  - WIGOS components
    - GOS
    - GAW
    - WHOS
    - GCW
  - Co-sponsored components

The main area of the interface is a global map showing the distribution of ocean observing stations. The map is populated with numerous colored dots representing different types of stations. A legend at the bottom of the map identifies the colors:

- air (red dot)
- land or ocean surface (blue dot)
- sub-surface (green dot)
- lake or river (orange dot)

The map also includes a scale bar indicating 2000 km and a WMO copyright notice (WMO ©). Navigation controls (back, forward, search, home, star, and a red 'ABP' button) are visible in the top right corner of the browser window.

# OSCAR-surface examples: Global Atmosphere Watch (GAW)

The screenshot displays the OSCAR-surface website interface. The browser address bar shows the URL <https://oscar.wmo.int/surface//index.html#/>. The page features several filter controls on the left side:

- WMO ID:** A search input field.
- Generate station lists by:** Three dropdown menus for "Country", "Type", and "Find people by:" (with "Contact name" selected).
- Filter map:** A section with the heading "By program / network:" containing four checkboxes:
  - WIGOS components
  - GOS
  - GAW
  - WHOS
  - GCW

The main content area is a world map showing the locations of GAW stations as blue dots. The map includes a scale bar for 2000 km and a WMO copyright notice. At the bottom, there are navigation options for "land surface", "sub-surface", and "lake surface".

Main searches:

**Station**  
(Chalk River)

Instrument

https://oscar.wmo.int/surface//index.html#/search/station/stationReportDetails/68

World Meteorological Organization  
Weather - Climate - Water

**OSCAR** Observing Systems  
Capability Analysis  
and Review Tool

Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra  
Swiss Confederation  
Federal Department of Home Affairs FDHA  
Federal Office of Meteorology and Climatology MeteoSwiss

Home Search Critical review Search

Homepage > Search > Station search > Station report details

[Edit](#) [Download](#)

**Chalk River (Canada)** Last updated: 2003-06-27  
in WMO Region IV - North America, Central America and the Caribbean

**Station characteristics**

Station name:	Chalk River
Station alias:	
Date established:	1978-01-11
Station type:	Land (fixed)
Station class(es):	
WMO index No:	0-20008-0-CHA
WMO region:	IV - North America, Central America and the Caribbean
Country / Territory:	> Canada
Coordinates:	> 46.0627784729°N, 77.4047164917°W, 184m

Time zone: > UTC-5  
Climate zone: > Snow climate, fully humid, warm summer  
Station URL:  
Other link (URL):  
Predominant surface cover:  
Surface roughness:  
Topography or bathymetry:  
Population in 10km / 50km (in thousands):  
Supervising organization:  
Site information: > The Chalk River, measurement site is located in the Ottawa River valley 1 km west of the River and 98 km northwest of the city of Ottawa in the province of Ontario. The area is predominately forested with a mixture of aspen, birch, white and red pine. The site is located on the grounds of the Atomic Energy of Canada Limited, Chalk River Research Laboratories. The immediate area is mainly tree covered rolling hills.

Event at station / platform:

**Photo gallery**




continued

Main searches:

**Station**  
(Chalk River)

Instrument

https://oscar.wmo.int/surface//index.html#/search/station/stationReportDetails/68



Programs / network affiliation:

Program / network affiliation	Program specific ID	Current recorded status	Declared status	From	To	Status
GAW Regional	CHA	Operational	Operational	1978-01-11		Approved
<a href="#">CAPMoN</a>	CHA	Operational	Operational	1978-01-11		Approved

▼ Observations / measurements

- ▼ Atmosphere > Aerosol
- > Atmosphere > Gas

> [Station contacts](#)

> [Bibliographic references](#)

> [Documents](#)

Main searches:

Station  
(Chalk River)

**Instrument**

The screenshot shows a web browser window with the URL <https://oscar.wmo.int/surface/index.html#/search/instrument/>. The browser's address bar and tabs are visible at the top. Below the browser, there is a navigation menu with 'Home', 'Search', and 'Critical review' tabs. A search box is located in the top right corner of the page.

The main content area is titled 'Homepage > Search > Instrument search'. On the left side, there is a vertical navigation menu with the following options: 'Station', 'Instrument' (which is highlighted with a blue bar), 'Contact', and 'Bibliographic Reference'.

The main search area is titled 'Search for instruments'. It includes the following fields and options:

- Criteria matching:  All  Any
- Search term:
- Manufacturer:
- Model:
- Serial number:
- Period of observation: From:  To:

At the bottom of the search area, there is a link for 'More search options'.

## Search results

 Download



Main searches:

Station  
(Chalk River)

**Instrument**

continued

Main searches:

Station  
(Chalk River)

Instrument



Download

Manufacturer ^	Model ^	Serial number ^	Used from ^	Used to ^	Variable ^	Station ^	Country ^	Actions
G. Luft GmbH	CHM 15k Nimbus for cloud base	999999	2016-06-26		Cloud amount	AHAUS	Germany	
G. Luft GmbH	CHM 15k Nimbus for cloud base	999999	2016-06-26		Height of cloud base	AHAUS	Germany	
G. Luft GmbH	CHM 15k Nimbus for cloud base		2011-09-21		Cloud amount	ALFELD	Germany	
G. Luft GmbH	CHM 15k Nimbus for cloud base		2016-07-18		Cloud amount	ARKONA	Germany	
G. Luft GmbH	CHM 15k Nimbus for cloud base		2016-07-18		Height of cloud base	ARKONA	Germany	
G. Luft GmbH	CHM 15k Nimbus for cloud	999999	2016-07-13		Cloud amount	BAD HERSFELD	Germany	

**INTERMAGNET at OSCAR**

**opportunity is here**