OSCAR Tutorial

http://oscar.wmo.int/surface

Exercise 1: Find data by country (GIS)

You are working in the agrimet agency of your country, and are doing a project with the World Bank. The World Bank wants to improve agrimet forecasting in your country and has agreed to fund 25 new agrimet stations. They want to know where to best put these stations. Can you help them?

- Go to OSCAR and find stations in your country:
- Check the result on the map
- Export the results and load it into QGIS / google earth for closer inspection.

Exercise 2: Find data (Excel)

You are working as a network manager and are preparing for a meeting the RA IV Regional Working Group on Infrastructure. This time, the meeting will focus on the Weather Radar network. To prepare for the meeting you want to have a look at all the Radars in RA IV and produce an excel sheet for your report.

- Go to OSCAR -> advanced search ->
 - Program / network affiliation: GOS>WRO
 - WMO RA / country: IV
- Check the results. Is this correct?
- Export as CSV and load into Excel



Exercise 3: Station details

You are working at the climatological branch of Environment Canada. For a research report, you are analysing a temperature data series from the GOS station "Medicine Bow, WY" in the United States. The data looks like reproduced in Annex I. You immediately suspect that something must be wrong.

OSCAR can help you finding out what happened and fixing the problem!

- Go to OSCAR -> search -> station name "Medicine Bow"
- Select Medicine bow, WY station
- Check the station report
 - o Observations / measurements
 - o Air temperature
 - o Data series segment

- o Instrument (check calibration events in "quality assurance")
- Find the station contact of the station in the station report and inform him about your investigation.

Exercise 4: Find data

In you new assignment at the IPCC you are working on a report on greenhouse gas emissions and you need a map depiction of capabilities to accompany your text. You want to use OSCAR to produce maps of the regional capabilities for measuring greenhouse gases (*use three different WMO Regions for the purpose of this exercise*).

- Go to OSCAR -> Search -> Data
- Select the (entire) subcategory "Greenhouse Gas"
- Select a WMO region (repeat for at least three regions)
- Search
- Export the Map as image and paste it into a Word Document.
- As a comparison, redo the search using Search -> Station. Use one of the regions previously chosen for the variable, the (entire) subcategory "Greenhouse Gas".

Exercise 5: Register with OSCAR

In order to make changes to OSCAR you need an account with OSCAR. An account has already been initialized for you by the training team, but you need to complete the registration.

- Go to OSCAR -> login
- click on "Register User"
- follow the instructions
 - use the same email as you provided to the course organizers
 - do not provide a phone number for text message verification
- create the account
- Logon to OSCAR

Exercise 6: Add new contacts

You have been promoted to serve as National Focal point for your country. Your first task is to add the colleagues of your team as contacts to OSCAR so that they can update selected stations. (for this exercise you should work with your neighbour or use a private email address that is not yet registered in OSCAR)

- Go to OSCAR -> login

- Go to contact -> add new contact
- Fill out the required fields, including email and country (Your country)
- Add the newly created contact to a station within your country as "Station manager". Document the name of this station for future steps.
- logout from OSCAR
- logon using the newly created account
- verify that you can edit the previously selected station

Exercise 7: Create a new Station

The World Bank(WB) has delivered the 25 agrimet stations for the Dominican Republic. You have been tasked to supervise the deployment of the stations, insert them into OSCAR and to document their deployment with a photo for the WB colleague. (For the purpose of this exercise suppose the stations were misdelivered to your country and that you are testing two of them there before sending them on. Please name them "test station #your name# 1" and "test station #your name# 2")

The stations will measure

- Air Temperature (using a thermometer)
- Precipitation (using a rain gauge)
- Upper Air Temperature (using sounding)
- Go to OSCAR > register new station
- Fill out the forms
 - o create new observations for air temperature, precipitation and upper air
 - o add photo
 - o complete other info as needed
- Save the station
 - o you will encounter problems saving the information due to "validation"
 - o identify the offending fields and fill them out with suitable values
- In order to create additional stations, create new stations by copying the old ones

Exercise 8: Instrument maintenance

You are a maintenance technician and have just paid a visit to a remote station (*use one of the stations you just created for the purpose of this exercise*). You replaced one instrument (thermometer), added a new one (wind) and calibrated another one (rain gauge). Back to the headquarter, you will input this important information into the OSCAR system.

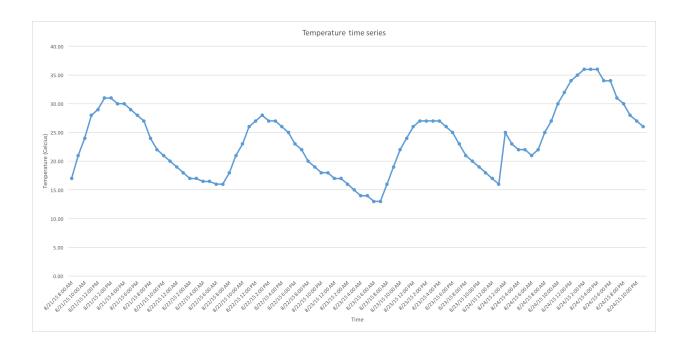
- Go to OSCAR
- Locate the station
- Logon and edit the station accordingly
 - o Replace instrument for temperature
 - o Add new observation (wind speed), including instrument
 - o Add calibration (for precipitation)
 - use "add quality assurance" dialogue

Exercise 9: attach to network/programme

The station you created earlier, has now been operating for a couple of years and become an international reference station. To reflect its status, it will become part of the Global Atmosphere Watch Network (GAW). Can you add the station (use one of the stations you created earlier) to the GAW network?

- go to OSCAR
- search your station
- edit station
 - observations
 - program/network affiliation
 - select GAW (input some ID)
 - save
- note that the station is not yet attached to GAW, as it has to be approved first
 - check station report or..
 - search by program/network
- Tell Shanna to approve the station
- note that the station is now part of GAW

Annex I - data series anomalies



Annex II - EIAM registration steps

See attached PDF: EIAM workflow