ICOS Carbon Portal Newsletter

October 2016

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SC2015

The ICOS Science conference, Helsinki 27-29 September 2016, was a big success. ICOS Carbon Portal was prominently visible at the conference by references from many speakers, as co-author of talks and posters, and with a plenary talk by Ingrid van der Laan and a poster by Ute Karstens showcasing the elaborate products currently developed at the Carbon Portal. Ute Karstens presented a demo of the atmospheric station footprint tool.
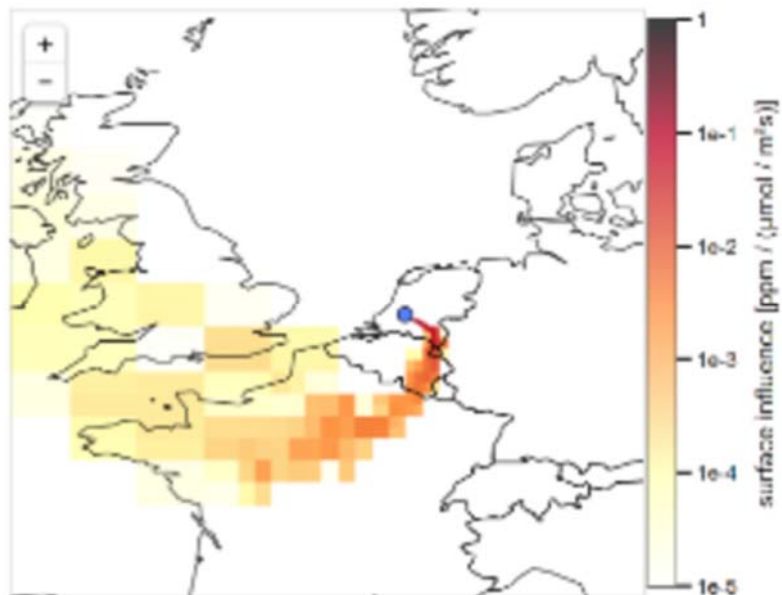
Footprint tool

This tool, available at https://data.icos-cp.eu/stilt/, demonstrates the combination of several data streams and data types in a user friendly interactive application.

It combines observational time series with modelled time series and with spatial data products, here the modelled sensitivity to surface emissions.
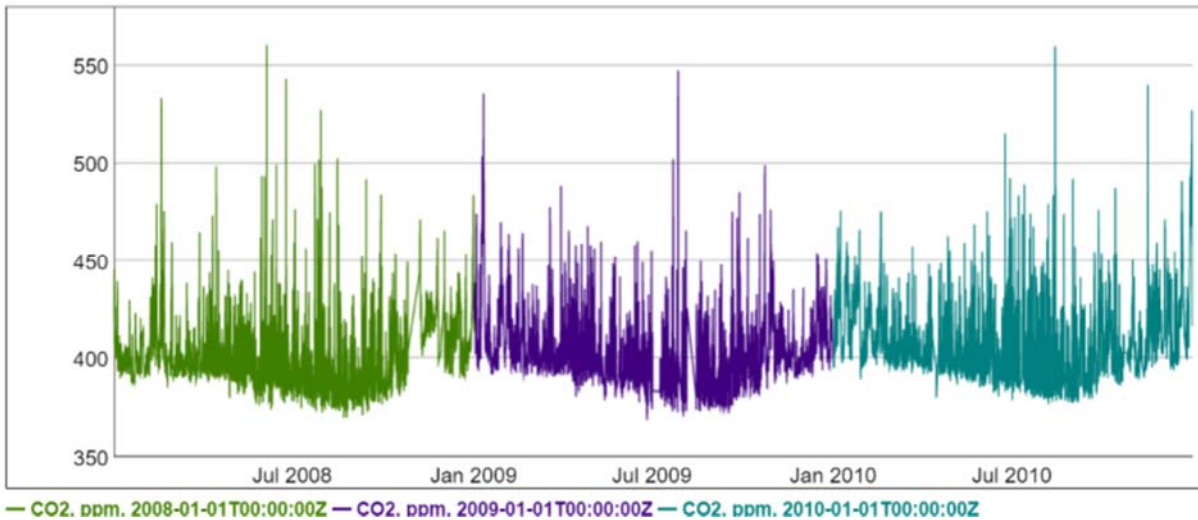
Next step for this tool will be to add footprint data from other models, actual ICOS observation data as soon as it is released, footprints at request, NRT footprint data and prognostic footprints for measurement campaign or flask sampling planning.

Parts of the interface have been developed for other services at Carbon Portal and now could be linked together into the footprint tool. The times series graph component and the station map component are both also part of the

Time series explorer.

This other recent development at the Carbon Portal is the time series explorer, which can be found at https://data.icos-cp.eu/portal/#search.

The time series explorer allows you to browse the time series data at the Carbon Portal and select on basis of coordinates (through interactive map), time, compound, station name, country etc.

The metadata store behind this is in 'simple' terms an ontology based versionable triple store, but please just remember that it is very flexible and will allow many functions in the future. This database is the basis of the Carbon Portal metadata store, and was also used in the station labelling app.

The user definable filters are responsive and dynamically indicate how many datasets fulfill the selection. In a next step you can then browse the timeseries by a view on the metadata and a graph of the timeseries. One can save a selection of the datasets, and after repeating the search with different criteria you can add these to the selection and display the selected data together in the graph.

The idea is that soon you will be able to add the datasets you selected this way to your shopping basket for later download. At this moment you can access the datasets through their metadata.

As there is no official ICOS data release yet, we filled the (metadata) database with contents of the WDCGG data from the WMO GAW network. This proves the scalability of our approach. The download link for this data will guide you to the WDCGG website as the data license of WMO GAW does not allow redistribution.

CP User registration real soon now

Within 1-2 weeks you will be able to login/register at the renewed single-sign-on interface from Carbon Portal at https://cpauth.icos-cp.eu/home/. From this place you can now request an account in case you do not have one already, and access your personal preferences for using the Carbon Portal products, like your one-time-for-always acceptance of the ICOS Data License (CC4.0BY). After the registration you can seamlessly and easily login to most CP services (Alfresco is still being worked on), like

the data service, the station labelling interface, the Drupal website (for authorized editors) and the ICOS discussion fora.

The basic idea is that YOU will be in control of your user data, including for example your recorded queries and preferences. For PI's we would like to link to your ORCID ID's so that we can notify you with releases of your data and the citations and usage statistics of your data and automatically update this info with your ORCID records (with your permission of course). More on ORCID in the next newsletter!

The system will support SAML Edugain for login, but if that does not work for your institute (unfortunately this happens still a lot) also standard username/password login is possible. Accounts can be obtained automatically by self registration after verification of your email address and there will be a forgotten password procedure.

After verification by ICOS HO a user can be assigned one or more roles in ICOS (like station PI for a domain, moderator in a discussion forum) and this will give you the required authorisation for certain tasks like applying for step 1 in the station labelling interface.

Discussion and mailing lists...

To facilitate the lively discussions in the ICOS community there are next to the normal email lists now also discussion fora available! It supports both open and closed discussions. By default we made a set of fora that are open, but please tell us what you want and we can add moderation, group fora with possibility for fine-grained authorisation. For this to work, you should make use of the CP authentication. See the article on the user registration. Take a look at the discussion forum and initiate and/or take part in the discussions at:

https://fora.icos-cp.eu/bb/index.php

Questions or feedback? Please contact us