



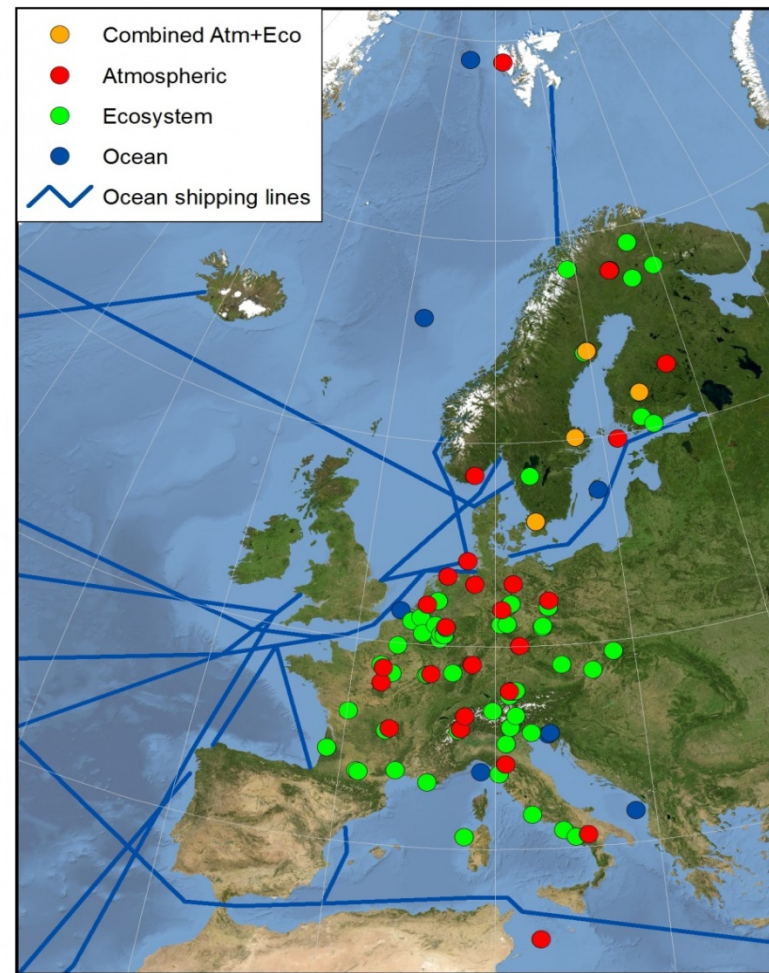
ICOS station labeling

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ICOS BELGIUM CONSORTIUM STUDY DAY – 04.05.2016 - Gembloux



Current and future state of ICOS RI





What?

Formal procedure for all candidate ICOS sites to receive ICOS label.

Why?

- High quality network with large investment needs visibility
- Harmonisation
- traceability



Before labeling can start

- GA representative needs to communicate the list of proposed sites to the HO
- Carbon Portal (CP) will generate account for station PI

Note: In case where the station is not located in country of applicant, a formal agreement with the local cooperating institution must be included in the station application including long-term access to the site, agreement about ICOS data policy, and financial agreements about the local support.



- Step 1: site characteristics
 - PI submit general station info to the CP.
 - Evaluation by Thematic Centers (TC)
 - Network design
 - General Station characteristics
 - Max 4 weeks after submission
 - recommendation from TC to the Director General (DG)
 - max 4 weeks after receiving report from TC
 - DG makes decision
 - Accept
 - Accept after revision
 - Reject
 - No data evaluation, only meta data



- Requested information:
 - Atmospheric station
 - Location, names and contacts staff
 - General description of surroundings
 - Characteristics of tower
 - Pictures





- Requested information
 - Ecosystem network
 - Location, names and contacts staff
 - General description of the tower
 - Detailed description of the surroundings (incl maps of vegetation and topography)
 - Pictures of tower and surroundings
 - Wind direction data





- Requested information
 - Ocean network
 - Location, names and contacts staff
 - Type and owner of station
 - Details on methods (references) and sensors (types, manufacturer, etc)





- Step 2:
 - After acceptance of step 1, station can be build
 - Submit data to TC according to ICOS protocols
 - Quick reponse to TC in case of problems with the data streams
 - Duration: 4-6 months with possible extension in case of request of PI or TC.
 - TC prepares a report to DG
 - DG makes a recommendation to the GA



Overview actors and tasks step 2

Responsible Actors	Tasks
PI	<ul style="list-style-type: none"> Constructs and equips the station according to ICOS protocols. Builds a data transmission facility according to requirements of the TC. Transmits data in the format provided by the TC. Reviews processed (L1 and L2) data and reports problems to the TC.
TC	<ul style="list-style-type: none"> Provides an online tool for data and metadata submission and information exchange with the PI. Provides a data receiving facility and defines data formats. Supports the PI in data acquisition if necessary also providing material for training and the protocols for measurements. Runs quality checks on data, processes them according to protocols and submits results. Reporting the station evaluation test and final recommendation to the DG.
CAL (atmosphere station only)	<ul style="list-style-type: none"> Provides calibration standards to the PI.
CP	<ul style="list-style-type: none"> Carbon Portal can support the metadata procedure. Lists "Proposed ICOS sites" in the Website and marks them on maps.



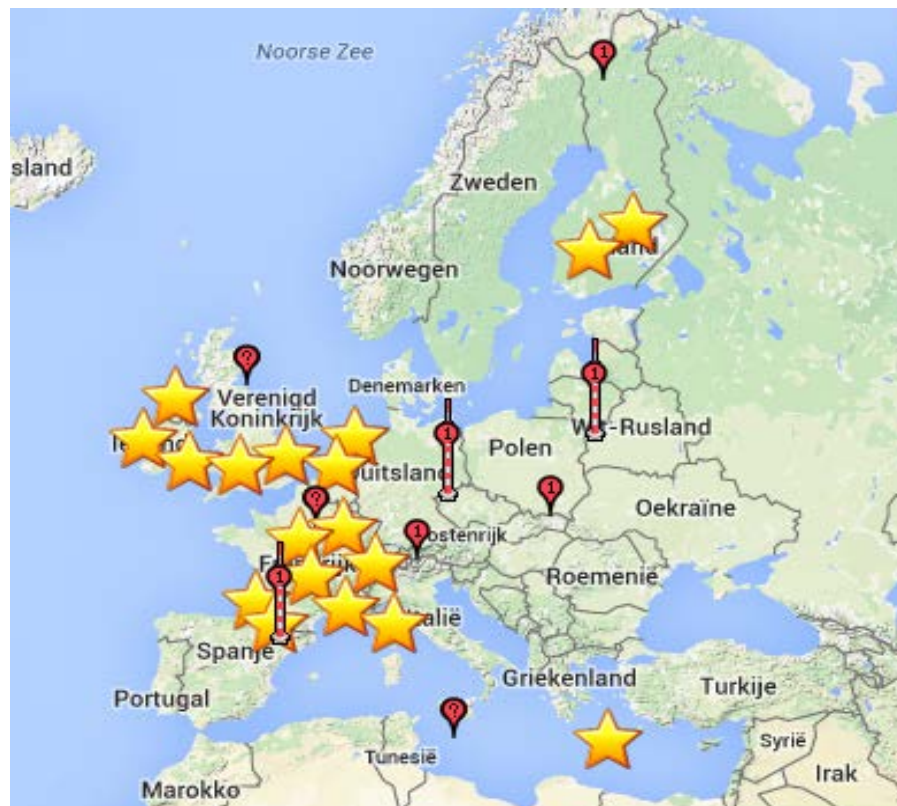
- Step 3: GA decides on ICOS label





Atmospheric network

- Proposed stations (31)
 - Belgium (1)
 - Czech Republic (1)
 - Finland (3)
 - France (4)
 - Germany (9)
 - Italy (4)
 - Netherlands (2)
 - Norway (2)
 - Sweden (4)
 - Switzerland (1)





ICOS Atmospheric network (status 03/05/2016)

Country	Site name	Status step 1
Finland	SMEAR II-ICOS Hyytiälä	accepted
Switzerland	Jungfraujoch	accepted
Czech Republic	Křešín u Pacova	Under review
Finland	Pallas	Under review
	Puijo	Under review
France	Obs Pérenne de l'Environnement	Under review
	Puy de Dome	Under review
	Trainou	Under review
Germany	Gartow	Under review
	Hohenpeißenberg	Under review
	Jülich	Under review
	Karlsruhe	Under review
	Lindenberg	Under review
Netherlands	Lujewad	Under review
Sweden	Hyltemossa	Under review
	Norunda	Under review
	Svartberget	Under review
Netherlands	Cabauw	submitted



Ecosystem network

- Proposed sites (35)
 - Belgium (6)
 - Czech Republic (2)
 - Finland (4)
 - France (9)
 - Germany (5)
 - Italy (4)
 - Netherlands (1)
 - Sweden (3)
 - Switzerland (1)





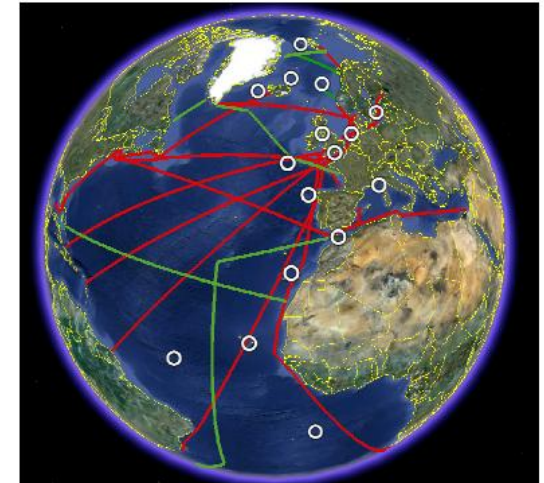
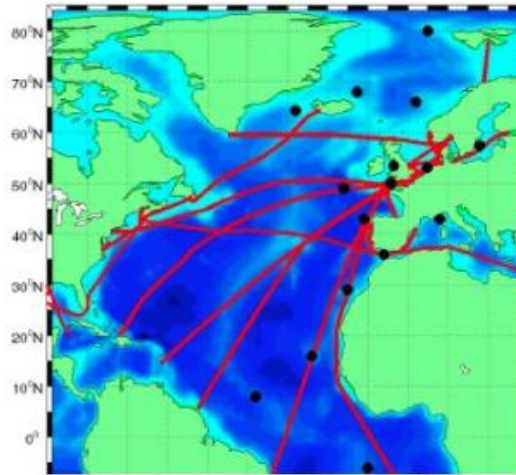
ICOS Ecosystem network (status 03/05/2016)

Country	Site name	Status step 1
France	Hesse	accepted
	Bilos - Salles	accepted
Switzerland	Davos	accepted
Sweden	Abisko-Stordalen Palsa Bog	Under review
	Hyltemossa	Under review
	Lanna	Under review
Belgium	Lochristi	submitted
Italy	Monte Bondone	submitted



Ocean network

- proposed stations (18)
 - Belgium (4)
 - France (1)
 - Germany (5)
 - Italy (4)
 - Norway (5)





ICOS Ocean network (status 03/05/2016)

Country	Site name	Status step 1
Belgium	North Sea Data and Monitoring time series station	submitted
	Research Vessel Simon Stevin	submitted
France	France-Brazil Voluntary Observing ship	submitted
Germany	HAUSGARTEN	submitted
Italy	E2M3A	submitted
	Miramare	submitted
	Piattaforma Avanzata LabOratorio Mare Adriatico	submitted
Norway	R/V G. O. Sars	submitted
	Ästergarnsholm	submitted



Questions?

Reference: station labeling document

ICOS

INTEGRATED
CARBON
OBSERVATION
SYSTEM

SCIENCE CONFERENCE
HELSINKI 2016
27-29 SEPT

www.icos-sc2016.eu

**Observing for
the future of
our planet**