



CCI Open Data Portal

The CCI Open Data Portal

CLIPC GA June 2015

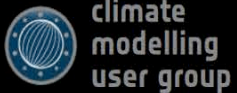




CCI ECVs



**CLIMATE
CHANGE
INITIATIVE**





CCI Open Data Portal

Implemented by the CCI

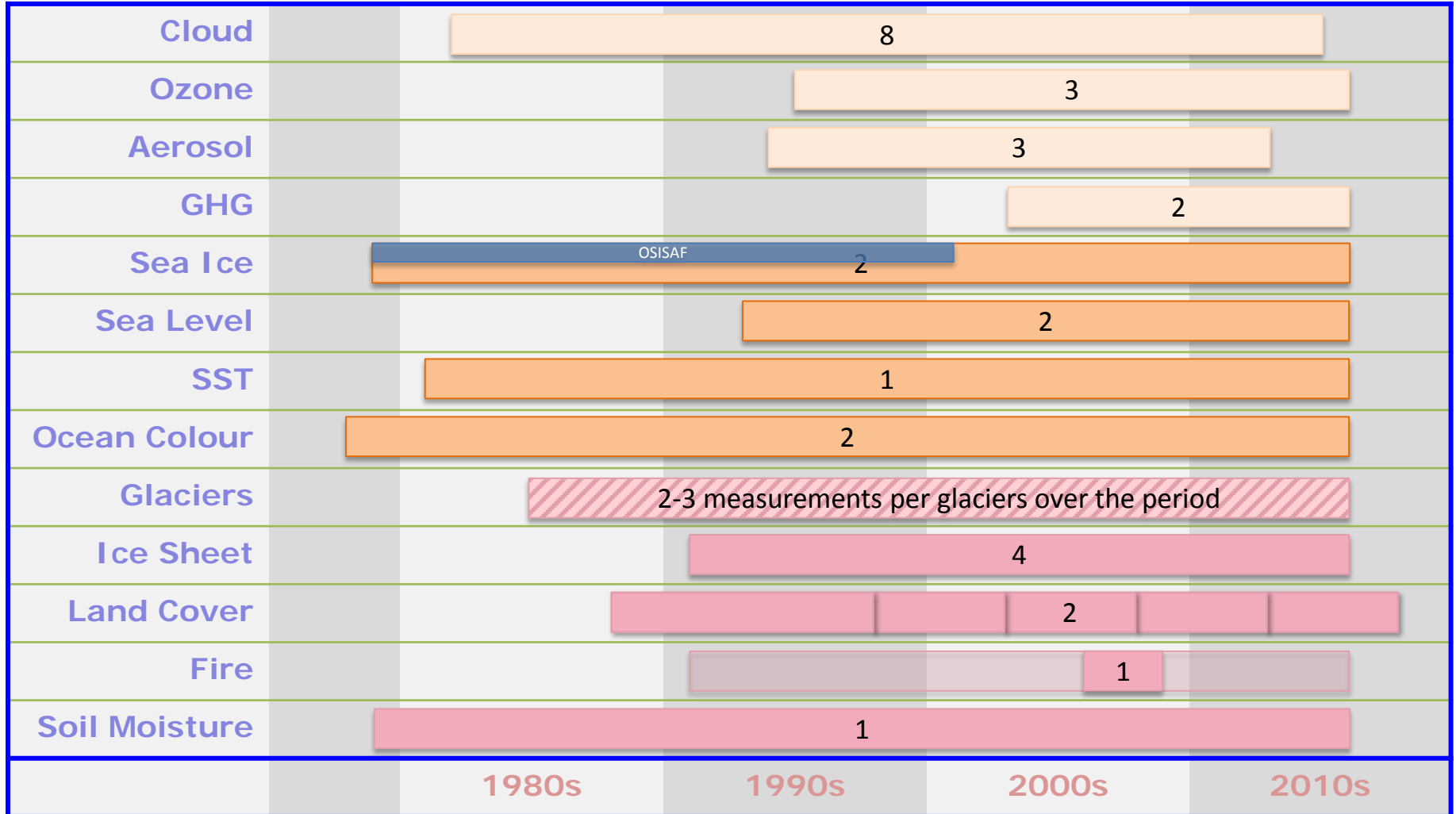
Atmosphere	Ocean	Terrestrial
Composition	Surface	
Aerosols Properties	Sea Surface Temperature	Land Cover
Carbon Dioxide & Methane	Sea Level	Fire Disturbance
Ozone	Sea Ice	Soil Moisture
Long-Lived GHGs	Ocean Color	Glacier and Ice Caps
Precursors (for Aerosols and O3)	Sea State	Ice Sheets
Upper Air	Current	Snow Cover
Cloud Properties	Sea Surface Salinity	Albedo
Temperature	Carbon Dioxide Partial Pressure	Leaf Area Index (LAI) (FAPAR)
Water Vapor	Phytoplankton	Lakes
Wind Speed and Direction	Ocean Acidity	Above Ground Biomass
Earth Radiation Budget	Sub Surface	Permafrost
Surface	Carbon	Ground Water
Surface Air Pressure	Current	River Discharge
Surface Air Temperature	Nutrients	Soil Carbon
Surface Precipitation	Ocean Acidity	
Surface Radiation Budget	Oxygen	
Water Vapour (Surface humidity)	Salinity	
Near-Surface Wind Speed, Dir	Temperature	
	Tracers	
	Global Ocean Heat Content	
CCI Scope	Started in CCI	





CCI Open Data Portal

CCI Products Time Coverage Phase 2





CCI Open Data Portal

CCI Portal and Tool Box

The CCI portal project kicked off May 2015:

- To be an uncomplicated web-based interface acting as the single dedicated point-of-access for all CCI data products and for all ESA Climate Change enquiries
- To incorporate search and data discovery tools for CCI data products and to facilitate efficient and expedient data access, including multiple ECV download
- To perform a central coordinating role by providing a comprehensive depository for information on the CCI and also housing a user forum for queries / discussion / feedback
- To interoperate with the Earth System Grid Federation (ESGF) as a services layer and to be based on Open Source to allow adaption and evolution (Obs4MIPS)
- To act as the physical host for a CCI toolbox dedicated to the discovery, interrogation and analysis of CCI data products



CCI Open Data Portal

Project Objectives

Primary objective - develop an Open Data Portal to provide a central point of harmonised access to mature CCI ECV datasets

- This is in addition to the data access mechanisms already provided by each CCI project – intended to compliment and unify the work of the individual CCI teams
- Will act as a “shop window” for the CCI programme (explore, discover and access data, request support, share and collaborate through the on-line community...)
- Key requirements: user-friendly, reliable, long-term availability
- Free and open access to data, but optional registration offering additional benefits



CCI Open Data Portal

Example early access interface

The screenshot shows the CCI Open Data Portal interface. At the top, there is a blue header with the 'cci climate change initiative' logo on the left and the 'esa' logo on the right. Below the header, the main content area is titled 'Get Data'. It includes a 'Username:' field with the text 'Not logged in', a 'Download multiple files' button, and a 'Depth: 1' dropdown menu. The 'Current directory:' is set to '/ neodc'. Below this, there is a list of folders and their descriptions:

- [aatsr_l1l](#)
- [aatsr_multimission](#) (A)ATSR multimission archive covering ATSR-1, ATSR-2 and AATSR in ENVISAT format
- [arc](#) (A)ATSR Reprocessing for Climate
- [arsf](#) NERC ARSF - Airborne Research and Survey Facility
- [atsrubt](#) ATSR-1 and -2 Ungridded Brightness Temperature (UBT) archive
- [avhrr-3](#) EPS Metop - Advanced Very High Resolution Radiometer-3 (AVHRR-3)
- [avhrr3_metop_b](#)
- [avhrr_fasir](#) AVHRR FASIR data
- [avhrr_gac](#) 4km resolution AVHRR GAC Level 1B data from 1978 - 2013 from NOAA satellites 06-12, 14-19, Tiros-N, and from N
- [caltop](#)
- [casix](#) CASIX - Centre for observation of Air-Sea Interactions & fluxes
- [esacci_sst](#) ESA CCI SST data
- [esasar](#) ESA (A)SAR dataset
- [globalbedo_modis_spectral_priors](#)
- [gome-2](#) EPS Metop - Global Ozone Monitoring Experiment-2 (GOME-2)
- [gome2_metop_b](#)
- [iasi](#) EPS Metop A - Infrared Atmospheric Sounding Interferometer (IASI)
- [iasi_metop_b](#) EPS Metop B - Infrared Atmospheric Sounding Interferometer (IASI)
- [iasi](#) Infrared Earth surface temperature, Autonomous Radiometer (IASI) data

ftp, http, ..



CCI Data Catalogues

CCI Open Data Portal

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ESA Search Cloud CMUG Fire GHG Glaciers Ice Sheets Land Cover

Hosted Catalogue
CCI Network

ESA CCI > HOME

5th CCI Collocation Meeting



cci
Climate Change Initiative

Free text search [Search]

Select Climate Variable [Selection]

Title
Project=CMIP5, model=MIU-CM5, Centre of Global Change and Earth System Science, Geog. Normal Dataset 2

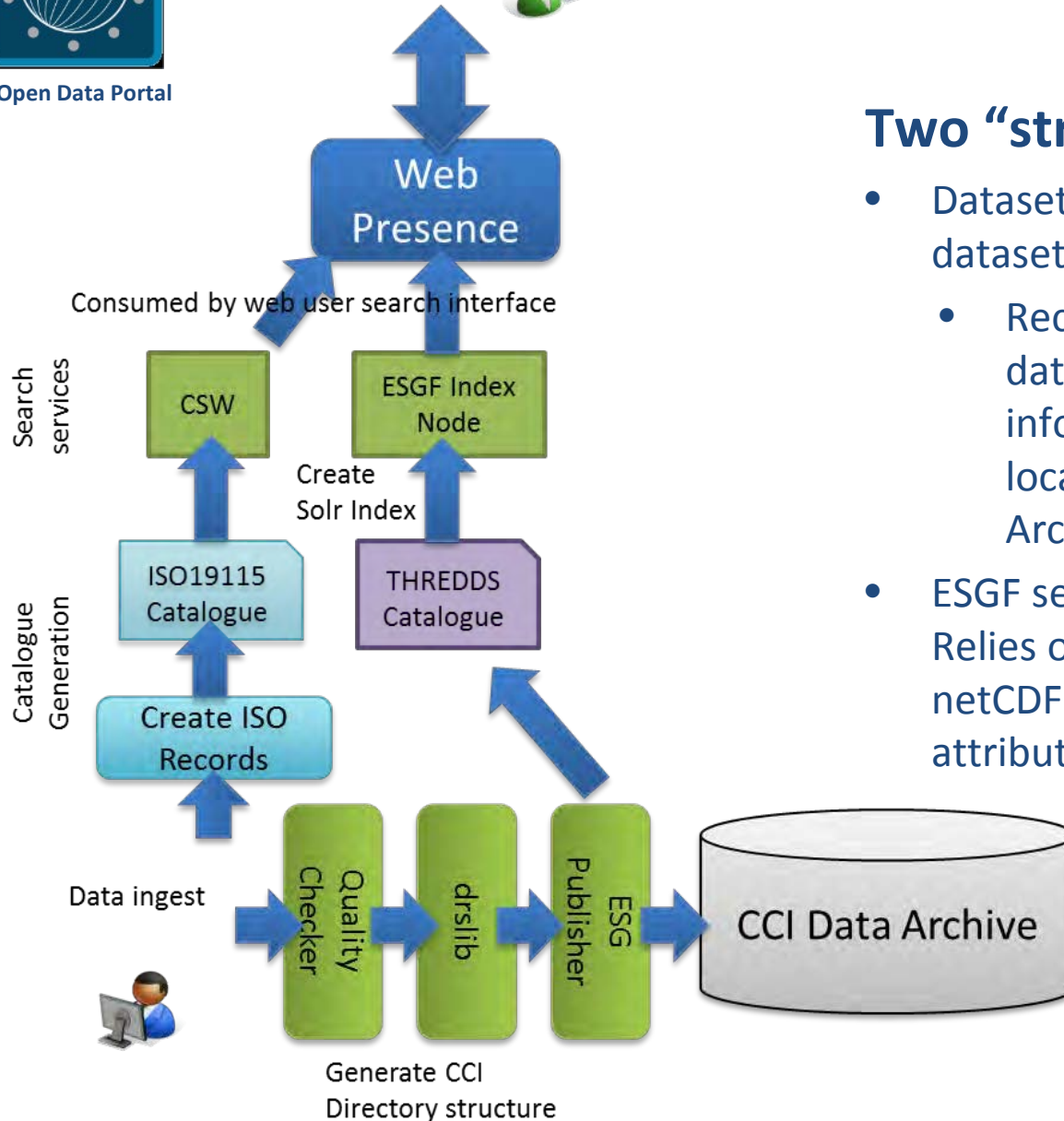


CCI Open Data Portal

Data discovery and other user services



CCI Data Catalogues




Two "strands"

- Dataset catalogue : one record per dataset, ISO19115 compliant records
 - Records can be created for any dataset, just need descriptive information and link to data location (in CCI Open Data Portal Archive, or elsewhere)
- ESGF services, faceted search etc. Relies on standards-compliant, netCDF with agreed metadata attributes for search facets




CCI Open Data Portal


ESGF interface to CCI data (example)



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ESA
Search
Cloud
CMUG
Fire
GHG
Glaciers
Ice Sheets
Land Cover
Ocean Colour
Ozone
Sea Ice
Sea Level
SST
Soil Moisture


Home
Search
Tools
Login
Help

Current Selections

- [\(x\) query:chlorophyll](#)

Examples: *temperature*, *"surface temperature"*, *climate AND project:CMIP5 AND variable:hus*.
To download data: add datasets to your Data Cart, then click on *Expand* or *wget*.

Search All Sites
 Show All Replicas
 Show All Versions

< 1 2 3 ... 117 118 > displaying 1 to 10 of 1178 search results

Display datasets per page

[Add All Displayed to Datacart](#)
[Remove All Displayed from Datacart](#)

[Temporal Search](#)
[Clear search](#)
[constraints and](#)
[datacart](#)
[Search Help](#)
[Search Controlled](#)
[Vocabulary](#)

Search Categories

- Project
- Institute
- Model
- SubModel
- Instrument
- Experiment Family
- Experiment
- SubExperiment
- Time Frequency
- Product

Results
Data Cart

[project=CMIP5](#). [model=NASA Goddard Institute for Space Studies](#). [GISS-E2-H-CC](#).
[experiment=historical](#). [time_frequency=mon](#). [modeling realm=ocnBgchem](#). [ensemble=r1i1p1](#).
[version=20120723](#)
 Data Node: [esgdata1.nccs.nasa.gov](#)
Version: 20120723
 Description: GISS-E2-H-CC model output prepared for CMIP5 historical
 Further options: [Add To Cart](#) [Visualize and Analyze](#) [Model Documentation](#)