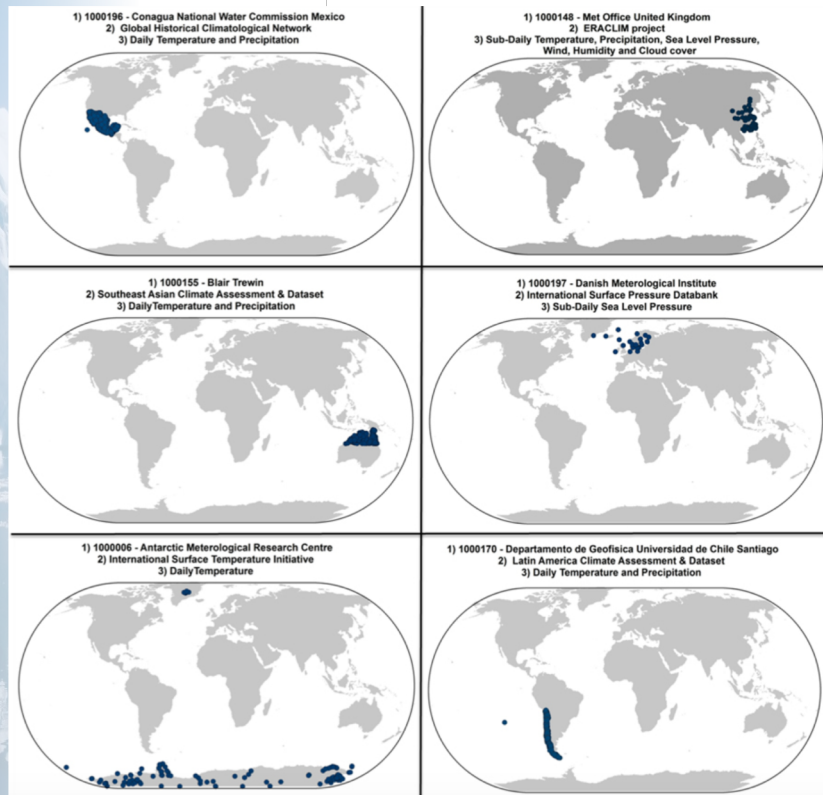




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# Global Land and Marine Observations Database



- Collect, merge and harmonise all sub-daily, daily and monthly observations in a single data model
- Ensure compliance with WMO metadata standards (e.g. WIGOS station IDs)
- Strong collaboration with NOAA/NCEI
- *Land*: mining and merging >300 sources of station data
- *Marine*: Modernisation and improved quality control based on ICOADS

**C3S Data Rescue Metadata Service portal - beta version**

**C3S Data Rescue Service Portal**

The Service  
The C3S Data Rescue Service Portal is a web-based user-operable system to coordinate and facilitate global data rescue activities. It provides searchable access to information and metadata on data, services, and planned data rescue projects, as well as tools, software, and guidelines to facilitate all stages of the data rescue process.

The Registry  
C3S Data Rescue Services includes an online Registry for users to upload metadata information related to rescued data. The Registry metadata includes information for Local Surface Stations, together with Field and Moving Platforms and Marine Platforms.

The first manual Guidelines for inventory metadata standards and formats can be downloaded here. It is used in writing and formatting metadata information for Local Stations, together with Field and Moving Platforms and Marine Platforms.

With the Registry containing many previous inventories for several CDMR projects and activities, such as ERA-CLM/ERA-CLM2, CLM2, WMO2 and other CDMR major activities, it is possible to search the Registry for metadata such as Country, Station name, ECV, Time span, and other options. Clicked on the metadata, users will be able to see the possibility to plot the station location on a world-map. It is also possible to download the search results as CSV files and the location images to jpg.

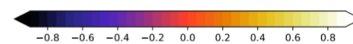
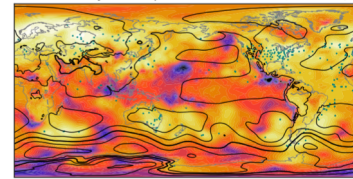
Users can also download this service to provide the most comprehensive metadata profiles for rescued data, in order to create applications of global climate. With this service the user is also informed about the CDMR status of the past, present and planned activities, from the existence of a dataset in hardware format, to mapping, replication, quality control and inclusion in a global database. Through an CDMR online Registry explore the list and content of the data sources/registries, and links to data digital images if available. The user with rescued data is also helped to submit their set to global databases.

The C3S Data Rescue Service Registry is being developed taking as a model the ERA-CLM/ERA-CLM2 Portal which is available at <http://climate.ecmwf.int/registry/> (© European Centre for Medium-Range Weather Forecasts)

**LSO**  
Form: LSO - 1005017

Field	Value
ID	1005017
Report title	LSO 0804062E Argentina
Collection name	DMR C3S DELACRE Argentina
Original Country/Region	Argentina
Original City/Town/Village	
Station Name	C. Rosales
Platform	
Altitude_msl	
Original Latitude Units	
Original Longitude Units	
Original Altitude Units	
Local ID/Key	
Last modified	2019-01-29T12:41:16.000Z+01:00
Original Location/Relocation	
Start Station Year/Month/Day	
End Station Year/Month/Day	
Start Record Year/Month/Day	1902-02-21
End Record Year/Month/Day	1902-12-31
EMO Region	South America

Normalized analysis SLP spread for 1920080100, 20CRv3 (461)



**Services and Impacts**

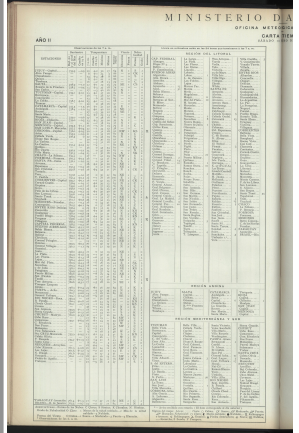
Climate reanalysis and other use cases

**CDS users, climate change assessments**

Portal

Registry

**C3S data rescue service**



Raw transcriptions.xls

Station	Country	Region	Province	City	Altitude	Coordinates	Instrumentation	Operational Period	Notes
...	...	...	...	...	...	...	...	...	...

Exchange format.sef

```

REP S_P_1
ID DMS_Arjan
Name Arjan
LAT -33.433333
LONG -62.41666700000004
Alt
Source
RepID
Year
Meta
Unit
Name PFC-T_POC-?
Month
Day
Time
Value
Meta
1902 2 21 1817 0 1008.4505579400002 Original+754.4mm
1902 2 22 1817 0 1012.8501669000010 Original+759.7mm
1902 2 23 1817 0 1013.5148087800004 Original+760.2mm
1902 2 24 1817 0 1009.2504902000002 Original+751.0mm
1902 2 25 1817 0 1006.3804840000002 Original+750.5mm
1902 2 26 1817 0 1013.3837890000003 Original+761.0mm
1902 2 27 1817 0 1008.3638903000003 Original+756.5mm
1902 2 28 1817 0 1013.3647790000003 Original+760.0mm
1902 3 1 1817 0 1014.4506651000003 Original+760.0mm
1902 3 2 1817 0 1007.4506262000002 Original+754.0mm
1902 3 3 1817 0 1006.1720140000003 Original+756.4mm
1902 3 4 1817 0 1009.2504902000002 Original+751.0mm
1902 3 5 1817 0 1013.3837890000003 Original+761.0mm
1902 3 6 1817 0 1000.1845887800003 Original+750.2mm
1902 3 7 1817 0 1014.3633500000003 Original+761.0mm
1902 3 8 1817 0 1013.7834535000002 Original+760.4mm
1902 3 9 1817 0 1012.8501669000010 Original+759.4mm
1902 3 10 1817 0 1013.5148087800004 Original+760.2mm
1902 3 12 1817 0 1005.7841210000002 Original+756.0mm
1902 3 13 1817 0 1013.3838400000003 Original+760.1mm
1902 3 14 1817 0 1014.4506651000003 Original+760.0mm
1902 3 15 1817 0 1012.8501669000010 Original+759.7mm
1902 3 16 1817 0 1012.8501669000010 Original+759.7mm
1902 3 19 1817 0 1016.1165797000003 Original+762.0mm
1902 3 21 1817 0 1014.4892941000003 Original+761.0mm
1902 3 22 1817 0 1012.3635050000003 Original+759.5mm
1902 3 23 1817 0 1013.3637890000003 Original+761.0mm
1902 3 24 1817 0 1004.0406461700002 Original+751.0mm
1902 3 25 1817 0 1006.4806114700002 Original+750.5mm
1902 3 26 1817 0 1017.5144880800004 Original+762.0mm

```

**“Big hopper” with original data sources**

**Merged and harmonised data holdings**

**C3S global database**

Images

Raw transcriptions.xls

Exchange format.sef



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## Managing the CDS catalogue of datasets

- What are the criteria for including a dataset?
  - User requirements, quality, documentation, reliable access ...
- If users want non-C3S data, can we support this?
- What about research datasets? (latest CCI, ERA-20C, ...)
- What about data from other Copernicus services? SAFs?
- How many datasets can we handle? 100? 1000?
- How many datasets can users handle?



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# Introducing C3S support levels

Data access	Toolbox compliance	Quality assurance	User support		Examples
Fast, reliable; old versions are archived, permanently available	All data can be used in the toolbox	Full QA following C3S standards, independent assessments	Expert support, fast response		Most C3S funded datasets (ERA5, ECVs)  Some datasets from operational providers (NOAA?)
Speed depends on contention; not always reliable	Some of the data can be used in the toolbox	Limited QA following C3S standards	Limited support, best effort		Some datasets from operational providers (EFAS, SAFs, Hadley Centre?)  Some research data (CCI?)
May be slow; availability cannot be guaranteed	Limited toolbox functionality, not interoperable	Best effort	Knowledge base & user forum		Research datasets (ERA-20C, latest CCI, ...)