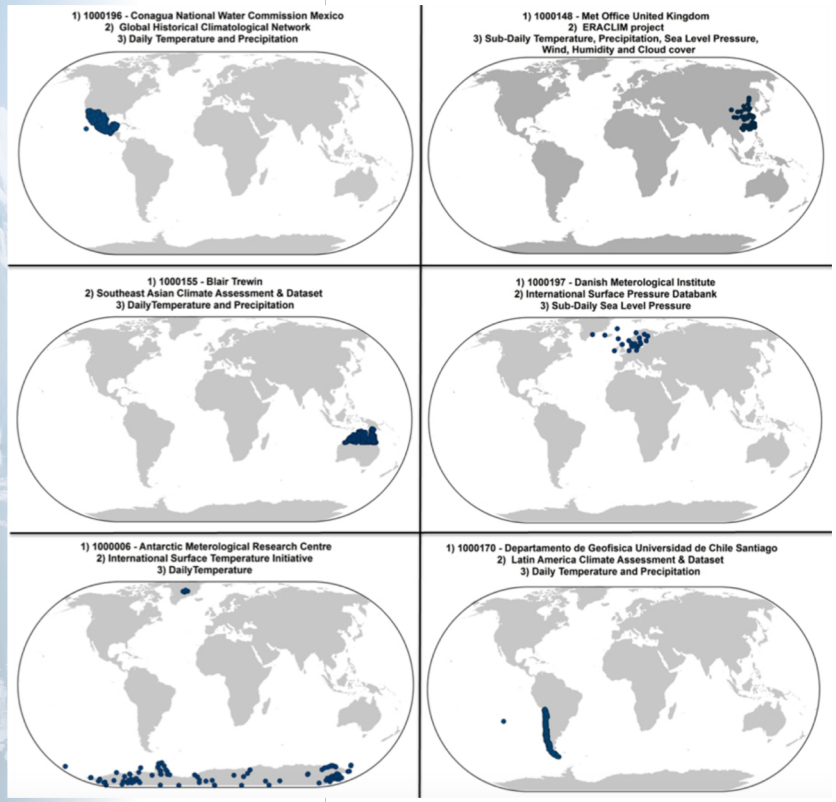
Climate Change

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

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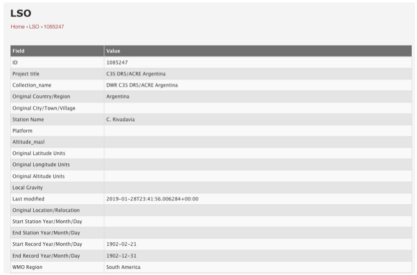
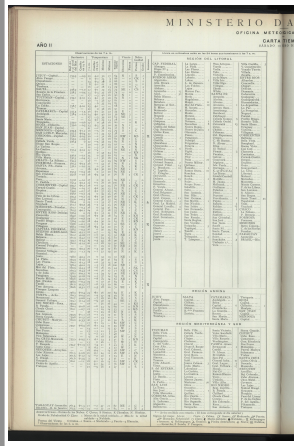
Portal

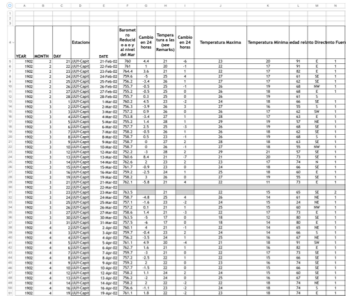


Registry

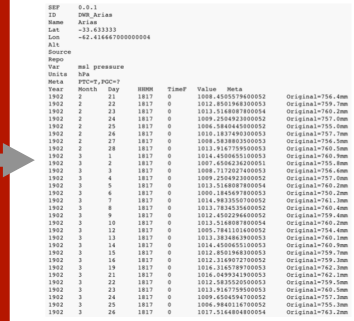
C3S data rescue service



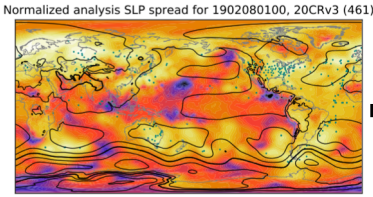
Images



Raw transcriptions.xls



Exchange format.sef



Climate reanalysis and other use cases

Services and Impacts

CDS users, climate change assessments

“Big hopper” with original data sources

Merged and harmonised data holdings

C3S global database

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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, …)

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