



## The Copernicus Climate Change Service Global Land and Marine Observations Database

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Historical observational climate records are crucial in understanding, climatic variability, extreme past weather and climate events as well as how climate change signals are manifested. Historical observations are also important for derived reanalysis products and assist climate science to better understand, identify, predict and adapt to climate variability and change. This presentation shall outline the planned service provision for a new Copernicus Climate Change Service concerning the availability of in-situ fundamental climate data records. The service brings together a number of European parties working in tandem with NOAA NCEI to provide via the C3S Data Store improved access to land and marine surface meteorological records for climate research. This presentation shall provide a high-level overview of service aims, timelines and progress to date. On the marine side the service shall aim to improve the existing ICOADS holdings with improved quality flagging, duplicate removal etc. On the land side a set of integrated holdings across Essential Climate Variables and timescales is envisaged. Data shall be made available via the C3S data store under a common data model. The Service shall interact with sister lots concerned with data rescue, provision of baseline /reference network data, and provision of in-situ data products and the broader Copernicus Climate Change Service and Copernicus services. The Service aims to incorporate all available long and early instrumental series and make these available to users. I will outline the modalities of data ingestion and shall be urging you all to contribute the hugely valuable data that you have worked on. We shall ensure sharing and usage with e.g. reanalysis producers.

For full details on service please see link below:

<http://journals.ametsoc.org/doi/abs/10.1175/BAMS-D-16-0165.1>