

Interim Climate Data Records: From Climate Change Initiative to the Copernicus Climate Change Service

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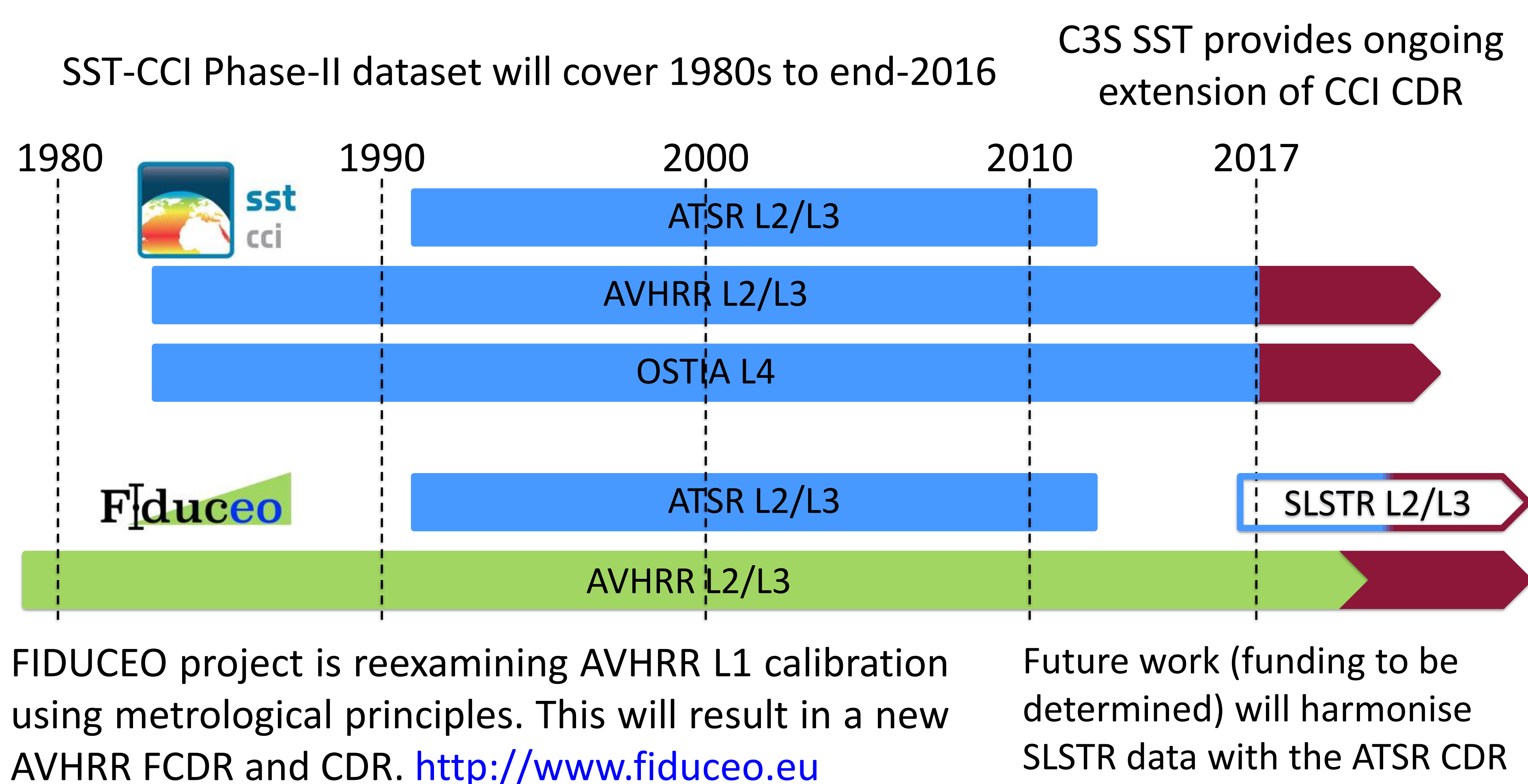
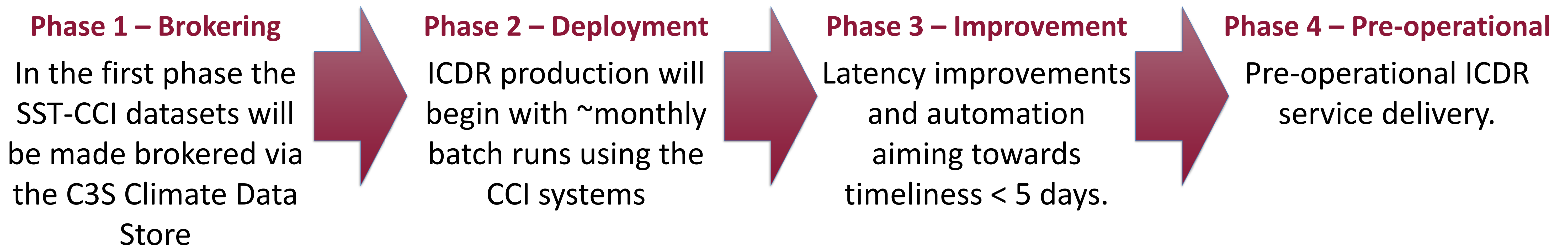
Climate Change Initiative

The ESA Climate Change Initiative (CCI) programme has produced Climate Data Records (CDR) for 13 Essential Climate Variables (ECVs) including Sea Surface Temperature (SST). The SST-CCI Phase-II dataset, to be released in early 2018, will be a 30+ year record of satellite SST measurements. Generation of this dataset has been a 4-year effort involving research and development in to cloud detection, SST retrieval, inter-satellite harmonization, SST analyses, and processing of ~150 TB of input data.

Climate Change Service

The Copernicus Climate Change Service (C3S), operated by ECMWF on behalf of the European Union, aims to be a trusted source of climate information and to facilitate the growth of climate services. As part of the C3S, CDR production services are providing operational production of various ECVs. The SST service is led by TVUK, with University of Reading, Met Office, STFC (CEDA), and Brockmann Consult.

The C3S SST project will take the software and systems developed under CCI and operationalize them for the routine, short-delay, generation of an Interim Climate Data Record (ICDR) extending the CCI CDR.



Future R&D

C3S will complement current and future CDR projects such as CCI and FIDUCEO by providing routine ICDR production.

Initial C3S products will take the SST-CCI processor and operate it in an ongoing basis. As research-led efforts such as FIDUCEO or NCEO enhance the SST-CCI processing software and generate new CDRs, the C3S team can make these product available through the Climate Data Store and update the C3S processing stream to extend them in ICDR form.

Acknowledgements

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