



LTDP/FIRST Earth Science User Requirements

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ESSI17 - Data Preservation and Long Term Data Access

LTDP/FIRST Abstract

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Analysis and understanding of our Earth, of its complex behaviour and implication of changes to human activities is one of the major challenges for scientists and researchers.

This requires more and more scientific data from different sources to be delivered to different users and purposes. The long term preservation of Earth Science data is a major issue today as monitoring of global change processes has lead to increasing demand for long-term time series of data spanning 20 years or more also in support to international initiatives such for example the United Nations Framework Convention on Climate Change (UNFCCC), the ESA Climate Change Initiative (CCI) and the GMES programme.

ESA in this context is running for a period of three years a Long Term Data Preservation (LTDP) Programme targeted to Earth Observation space data. ESA is also coordinating an initiative for the set-up of a European EO Long Term Data Preservation (LTDP) Framework, with the involvement of major European Earth Observation stakeholders, and aimed at guaranteeing the preservation and access to European Earth Observation space data with possible enlargement to Earth Science data. LTDP/FIRST project, started in June 2010, is aimed at collecting and understanding user requirements having an impact on the long-term preservation of Earth Science data, at reviewing and updating accordingly the European LTDP Common Guidelines and at assessing the capabilities of the current European Infrastructure to satisfy those requirements.

FIRST has confirmed the necessity of the long-term preservation of all the different categories of Earth Science data, of a common preservation policy, and of a cooperative and harmonised collective approach in this field. At the same time it has opened the door to other aspects like the preservation and accessibility of supportive information (e.g. documents, auxiliary data), the qualification of scientific data and their traceability as key issues to be considered in the LTDP context. Preserved data sets are fundamental references supporting scientific and professional activities and at the same time new and old scientific data samples routinely produce new knowledge and new business opportunities. This paper presents the results of the requirements collection phase of the project, where more than 1000 users were targeted with questionnaires and interviews, and the preliminary results of the capability assessment phase. The project final results will also consist in the drafting of a European Earth Science LTDP Framework implementation roadmap.