



The ISS SOLAR payload data preservation in the frame of the PERICLES FP-7 project: metadata aspects.

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PERICLES (Promoting and Enhancing the Reuse of Information throughout the Content Lifecycle exploiting Evolving Semantics) is an FP7 project started on February 2013. It aims at preserving by design large and complex data sets. PERICLES is coordinated by King's College London, UK and its partners are University of Borås (Sweden), CERTH- ITI (Greece), DotSoft (Greece), Georg-August-Universität Göttingen (Germany), University of Liverpool (UK), Space Application Services (Belgium), XEROX France and University of Edinburgh (UK). Two additional partners provide the two case studies: Tate Gallery (UK) brings the digital art and media case study and B.USOC (Belgian Users Support and Operations Centre) brings the space science case study .

PERICLES addresses the life-cycle of large and complex data sets in order to cater for the evolution of context of data sets and user communities, including groups unanticipated when the data was created. Semantics of data sets are thus also expected to evolve and the project includes elements which could address the reuse of data sets at periods where the data providers and even their institutions are not available any more. PERICLES uses the Linked Resources Model (LRM) which will be compared with the OAIS standard.

In this study we present the space science case associated with PERICLES. B.USOC supports experiments on the International Space Station and is the curator of the collected data and operations history. B.USOC has chosen to analyse the SOLAR payload flying since 2008 on the ESA COLUMBUS module of the ISS as the PERICLES prime space science case. Solar observation data are prime candidates for long term data preservation as variabilities of the solar spectral irradiance have an influence on earth climate.

The nature of the data to be preserved for the reuse of the current SOLAR series is much more extended than a simple set of time tagged tables of spectral irradiances, it is an important inventory of more than 50 classes of documents and/or metadata directly relevant to SOLAR, it includes not only the calibration elements and their evolution during SOLAR lifetime but also all tools used as the software's and versions used in interpretation. In order to foster potential user's present and future needs, there is an ongoing survey involving a community of practice. Its initial outcome will be presented here. The aspects of data appraisal and metadata constitution in the frame of the PERICLES project will be developed.