HELIO – The Heliophysics Integrated Observatory

R.D. Bentley (1), A. Csillaghy (2), J. Aboudarham (3) and the HELIO Team

(1) University College London, Mullard Space Science Laboratory, Dorking, Surrey, United Kingdom (rdb@mssl.ucl.ac.uk/ Fax: +44-1483-278312)
(2) Fachhochschule Nordwestschweiz, Brugg-Windisch, Switzerland (andre.csillaghy@fhnw.ch),
(3) Observatoire de Paris, LESIA, Paris, France (Jean.Aboudarham@obspm.fr)

Abstract

Heliophysics is a new discipline that explores the Sun-Solar System connection. It spans the existing domains of solar, heliospheric, magnetospheric and ionospheric physics and has close links with planetary science and geo-science.

HELIO, the Heliophysics Integrated Observatory, with provide integrated access to metadata from the domains that constitute heliophysics in order to identify interesting phenomena and track them as they propagate through inter planetary space and affect the planetary environments. It will provide services to locate and retrieve the desired observations and return them to the user in the format they require.

The resources that HELIO will provide will support the curation and search of metadata, data location and retrieval, and data processing and storage. They will be established as stand-alone services that can be used independently or bound into a system through a workflow capability. A semantic-driven approach will be used to describe the relationships between the domains and support the search and data retrieval capabilities.

The HELIO Consortium includes groups from the UK, France, Ireland, Italy, Switzerland and the US. The project has a strong Networking component and through this we wish to involve other groups and individuals who can help us achieve our goals.

Additional Information