Helmholtz Metadata Collaboration | Conference 2024



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Metadata for Ionospheric and Space Weather Observations (MISO)

Monday 4 November 2024 11:10 (20 minutes)

The focus of this project is the development of a standardized metadata vocabulary, essential for creating interoperable and easily discoverable data products across various research groups. By examining space weatherspecific data products and formats, the project addresses the need for consistent metadata standards that will enhance collaboration and data sharing on an international scale. This can lead to seamless integration and combination of data in space physics and space weather research.

Significant progress has been made in standardizing data formats related to space weather, including the magnetosphere, atmosphere, and ionosphere. Recent efforts include extensive collaboration with the COSPAR Panel on Radiation Belt Environment Modeling (PRBEM) to refine and update existing standards. These updates involve incorporating new variables, improvements to data uncertainty estimation, and enhanced naming conventions. These advancements are crucial for ensuring uniformity and accuracy in data representation across different domains.

Future work will focus on engaging international groups to further discuss and refine space weather metadata standards. We are conducting consultations within Committee on Space Research and WG4 for the ISO committee 4. The project will also explore compatibility with existing data standards such as SPASE and HAPI, with the ultimate goal of contributing to the development of future ISO standards that support a more integrated and accessible data ecosystem in space weather research.

Please specify "other"

In addition, please add 3 to 5 keywords.

space weather, space physics, radiation belt

Please specify "other"

For whom will your contribution be of most interest?

Researchers

Please assign yourself (presenting author) to one of the following groups.

Researchers

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