Charter of the International Heliophysics Data Environment Alliance

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1. Mission Statement

The International Heliophysics Data Environment Alliance (IHDEA) is a collaborative organization whose goal is to guide the development of an open heliophysics data environment. The IHDEA vision entails enabling the international heliophysics research community to seamlessly find, access, and use all relevant electronically accessible data sets in accordance with the FAIR principles (Findable, Accessible, Interoperable, and Reusable).

The specific mission of the IHDEA is to facilitate global access to, and exchange of, high quality scientific model and data products managed across international boundaries. This is achieved by adhering to and promoting the use of a set of governing data standards, data exchange protocols, and data visualization and analysis tools.

The role of the IHDEA is to serve as the focal point to engage heliophysics data repositories, data tool developers, and the scientific community to foster communication, and to identify the standards and services that best serve the heliophysics science needs.

2. Scope

For the purpose of this document, the term heliophysics encompasses all studies of our Sun and its interactions with Solar System objects and beyond, their consequences for and feedback from those objects, including space weather and space climate. The scope of the IHDEA effort is to guarantee the long-term availability, accessibility, and independent usability of historical, current, and future heliophysics data. The IHDEA will focus on:

- 1) Enabling efficient exchange of and access to the diverse data products obtained from space missions, ground-based experiments, and models;
- 2) Fostering coordinated development of existing and future heliophysics standards for data, metadata, and services to enable interoperability; and
- 3) Promoting and assisting the adoption of the above standards.

The IHDEA recognizes standardization and interoperability efforts by international bodies in other domains and will coordinate and collaborate with them when appropriate.

3. Objectives

The IHDEA shall propose, discuss, and advocate standards for heliophysics data storage, exchange, and access with the following objectives:

- Active involvement of international heliophysics and space weather data providers
- Standards-based data systems with uniform and well-defined terminology
- Coordinated, user-friendly data access and analysis tools to serve diverse communities
- Adequate documentation of data products and sources
- Flexible, interoperable, and interconnected data archives, modeling centers, and virtual observatories
- Effective communication among national and international partners, data providers, data tool developers, and data users

4. Membership

The IHDEA is an open organization composed of national and international agencies, major data providers, scientific research institutes, universities and other organizations or individuals that endorse and participate in the IHDEA activities and support defining, implementing, and promoting the IHDEA standards.

5. Meetings

The IHDEA will conduct regular open meetings to discuss and build consensus on standards.

6. Intellectual Property

The IHDEA promotes an open-access working environment. Standards, data, software, protocols or any other products advocated by IHDEA should adhere to Open Data, Open Source, and FAIR principles. The IHDEA strongly encourages attribution through proper citation and acknowledgement.

7. Governance

The IHDEA is governed and operated according to a set of Bylaws.