

S2P SPACE WEATHER DATA POLICY

1. OBJECTIVES

The S2P Space Weather Data Policy (the “SW Data Policy”) applies to all measurement data fully owned by ESA from the spaceborne and ground-based space weather observation systems funded under the ESA Space Situational Awareness (SSA) and Space Safety (S2P) Programmes (the “S2P SW Data”) and implemented after the approval of this Data Policy on 4 June 2025. The SW Data Policy applies on a best effort basis to past and current missions,¹ without prejudice to agreements and other legal instruments concluded by ESA.

The SW Data Policy applies to all raw, uncalibrated and calibrated data, including ancillary data needed for the data utilisation (e.g. satellite position and attitude). It also applies to higher level data products, provided they are fully owned by ESA.

The SW Data Policy pursues the established objective of maximising the beneficial use of space weather data and of maintaining a balanced use of these data for a variety of applications, be it scientific, for public good, or commercial.

Furthermore, the SW Data Policy aims to:

- Allow for support of already established and new Space Weather applications and services including downstream commercial purposes;
- Allow for support to Space Weather service and scientific activities, in line with individual mission objectives;
- Encourage the evaluation of innovative technologies and instruments for monitoring Space Weather and the space environment;
- Create the conditions for the private sector to invest in derived products and services;
- Support the development of a globally competitive Space Weather industry in ESA S2P participating States;
- Foster collaboration by encouraging collaboration among international researchers, institutions, and organisations, leading to a more comprehensive understanding of space weather phenomena;
- Support education by providing educational institutions with valuable resources for training the next generation of scientists and engineers in space weather and related fields;
- Improve public awareness by making SW data accessible to the public and raising awareness about the importance of space weather monitoring and its impact on various aspects of daily life and technological infrastructure; and
- Ensure transparency in the collection, processing, and dissemination of SW data, building trust among stakeholders and the public.

¹ “Missions” is understood to include both space-based and ground-based measurement systems.

2. S2P SW DATA ACCESS CONDITIONS

The S2P SW Data, for which the SW Data Policy is applicable, is categorised as follows:

1. **Free Datasets:** contains any S2P SW Data not considered as Restrained Datasets and that can be directly accessed online.
2. **Restrained Datasets:** contains S2P SW Data that requires a review before distribution to third parties due to technical, legal, and/or financial constraints.

2.1. Free datasets

ESA provides full, open and free of charge access to the Free Datasets. To this end, ESA makes the Free Datasets available online to any interested user, subject to their acceptance of dedicated [terms and conditions for the utilisation of S2P SW Data](#), granting immediate access and the right to use the data.

Specific data requests not supported online, such as delivery of large volumes of data, will be handled via a Data Service Request.

2.2. Restrained datasets

Restrained Datasets require a review before distribution to third parties due to technical legal, and/or financial constraints. It includes:

- Large volumes of S2P SW Data that are not suitable for transfer via open commercial or other internet connection.
- S2P SW Data reserved to calibration/validation (cal/val) users.
- Raw data in Consultative Committee for Space Data Systems (CCSDS) packet, or equivalent format containing satellite housekeeping telemetry, or other propriety data, in addition to SW Data.

Access to the Restrained Dataset is initiated by the submission of a Data Service Request to ESA. After review of the request based on its relevance and feasibility, ESA notifies the user of the acceptance or decline of the request, possibly assigning a maximum quota for data delivery. In case ESA accepts the request, access and use of the Restrained Datasets is subject to the data user accepting the dedicated [terms and conditions for the utilisation of S2P SW Data](#).

Additional information is available through the ESA SWE Service Helpdesk (helpdesk.swe@esa.int)
