



## **Towards an Italian Space Weather Infrastructure: the ASPIS project**

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Circumterrestrial space weather has its main origins at the Sun being driven by the effects of the variability of the solar activity in the Earth's magnetosphere and upper atmosphere. Better understanding of space weather phenomena through cross-analysis of different datasets, sets the basis for the development of reliable nowcast and forecast services. Italian teams have been involved several times in observational campaigns from space and from the ground related to space weather, often with lead roles, contributing to scientific progress at national and international level.

In this paper, we propose the development of a national scientific space weather data center, the ASI SPace weather InfraStructure (ASPIS), to host all the existing space weather tools and related data archives obtained by the Italian space weather assets. Optimization of observational coverage by coordinated measurements by the existing ground-based and space resources, standardization of the meta-data and harmonization of the access to data archives would be the first aims of the related project.

ASPIS can have a key role in the related activities coordinated also at international level. Its development can be an important propaedeutic step for the future implementation of nowcasting and forecasting services. ASPIS will be a resource for the national research institutes, but also for the national industry that wants to set up and commercialize new tools, being a reference point for the players, stakeholders, and industries. In this context, monitoring facilities constitute the core capacity for this infrastructure.