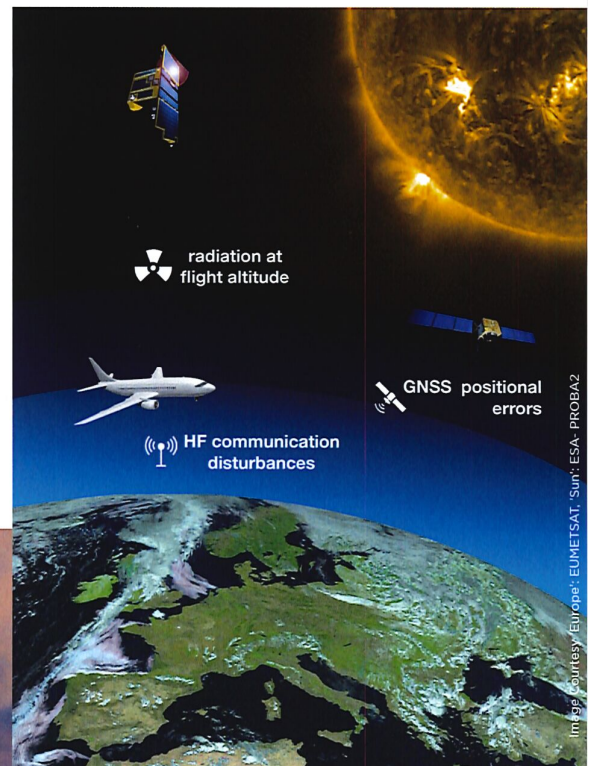


PECASUS

Providing civil aviation with information on space weather that has the potential to affect communications, navigation and the health of passengers and crew.

- Europe's leading space weather service centres
- Resilient 24/7 manned operational capability
- Extensive technical and scientific expertise across multiple European space weather institutions
- Collaboration based on a history of strong partnerships





Sporadic and massive eruptions of very high-energy matter and radiation from the Sun can have a pronounced impact on the aeronautical ability to aviate, navigate and communicate. In extreme cases, these eruptions pose a safety risk to passenger health. Periods of extreme solar activity are generally referred to as space weather.

The exposure of the aviation community to space weather has increased since the opening of the northern polar routes at the end of the 20th century and ICAO has acted to incorporate safety from space weather effects into its aviation regulations.

The PECASUS consortium has been established in response to the ICAO call for global space weather centres.

To meet the high quality standards of ICAO, PECASUS will:

- Deliver 24/7 manned observance of solar activity and its impact at Earth
- Issue appropriate ICAO advisories to the aviation sector
- Provide a guaranteed data flow and operational resilience
- Host ICAO approved training for space weather operators and aviation users
- Operate comprehensive and robust IT infrastructure

Excellent results from the WMO audit

The PECASUS consortium was audited in February 2018 by space weather and operational management experts, nominated by the World Meteorological Organisation (WMO). The audit addressed a broad spectrum of criteria including Institutional, Operational, Technical and Communication/Dissemination categories.

PECASUS was declared fully compliant in all criteria with no areas for improvement identified.



Institutes contributing to PECASUS and their main roles

Consortium Lead • Quality control • 24/7 message provision to aviation community
Finnish Meteorological Institute, Finland

Resilient operations
Met Office, United Kingdom

Main Data Hub • Validated 24/7 message generation • Observations
Solar Terrestrial Centre of Excellence, Belgium

Observation provision • Enhanced information generation • Independent product verification
Seibersdorf Laboratories, Austria
German Aerospace Center, Germany
Space Research Centre of Polish Academy of Sciences, Poland
Istituto Nazionale di Geofisica e Vulcanologia, Italy
Royal Netherlands Meteorological Institute, The Netherlands
Frederick University, Cyprus

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