

Announcement of Special Issue
Advances in Space Research

**The Powerful Solar-Terrestrial and Space Weather Event in May 2024 –
Observations, Data and Preliminary Analysis.**

Papers are invited for a special topical issue of *Advances in Space Research* (ASR) entitled “*The Powerful Solar-Terrestrial and Space Weather Event in May 2024 – Observations, Data and Preliminary Analysis*”

One of the largest and strongest solar storms of the space age occurred from 8-12 May 2024. Several X-class solar flares, halo coronal mass ejections, and a solar filament eruption occurred during the passage of NOAA active region 3664 resulting in a solar storm train traversing the heliosphere. There was major geomagnetic activity at Earth with a preliminary DST value of -412 nT and visual observations of the aurora reported in near equatorial regions. This event has something for everyone in the solar-terrestrial community.

This special publication aims to present the preliminary analysis of the data and observations recorded during this event. Manuscripts are solicited on the following topics:

- Solar and interplanetary phenomena
- Magnetospheric, ionospheric and atmospheric phenomena
- Radiation measurements particularly in the polar regions and aircraft altitudes
- Operational system irregularities
- Space Weather predictions, forecasts and/or alerts
- Comparison of this event with the 24-25 March 2024 activity and other past events including the 1859 Carrington event.

Reports of auroral sightings are separately requested, particularly observations in the mid and equatorward latitudes. These are not intended to be manuscripts. Visual observations including location, date and time together with descriptions (e.g. color, rays, etc.) should be sent directly to the editor (sssrc@msn.com) with a subject heading on the e-mail message of **May 2024 Auroral Observations**. These reports will be compiled in a single document similar to the Loomis reports of the aurora observed during the Carrington event. Attribution will be given to all individuals contributing to this listing.

Papers must be submitted electronically to <https://www.editorialmanager.com/aisr/>. To ensure that all manuscripts are correctly identified for inclusion into the special issue, **authors must select “SI: May 2024 STP and SW Event”** when they reach the "Article Type" step in the submission process.

The general format for submission of papers can be found on the *ASR* Elsevier web site at <http://www.journals.elsevier.com/advances-in-space-research/>

Submitted papers must be written in English and should include full affiliation postal addresses for all authors. Only full-length papers will be considered for publication, subject to peer review by a minimum of two reviewers. There are no page limits although the length of the paper should be appropriate for the material being presented. While the **deadline for submissions is 15 January 2025**, papers will be published electronically as soon as they are accepted. If a large number of papers are submitted, two

issues may be printed with the first issue containing the earliest accepted papers. All articles will be typeset at no cost to the author; there is a nominal charge for printing color figures although there is no charge for color figures on the electronic version.

The co-editor for Special Issues, Dr. Peggy Ann Shea (sssrc@msn.com) will be editing this issue together with the assistance of the ASR editorial board.