



General Assembly

Distr.: Limited
2 February 2024

Original: English

**Committee on the Peaceful
Uses of Outer Space
Scientific and Technical Subcommittee
Sixty-first session
Vienna, 29 January–9 February 2024**

Draft report

Addendum

VI. Space weather

1. In accordance with General Assembly resolution [78/72](#), the Subcommittee considered agenda item 9, entitled “Space weather”.
2. The representatives of Argentina, Brazil, China, Colombia, France, India, Indonesia, Japan, Nigeria, the Republic of Korea, South Africa, Thailand, the United Kingdom and the United States made statements under agenda item 9. The observer for WMO also made a statement under the item. During the general exchange of views, statements relating to the item were made by representatives of other member States.
3. The Subcommittee had before it the report on the United Nations workshop on the International Space Weather Initiative: the Way Forward ([A/AC.105/1302](#)).
4. The Subcommittee heard the following scientific and technical presentations:
 - (a) “Comprehensive space weather monitoring and analysis in Brazil and neighbouring regions”, by the representative of Brazil;
 - (b) “Recent activities on space weather in China and perspectives on international collaboration”, by the representative of China;
 - (c) “Indonesia’s contribution to regional space weather research and observation”, by the representative of Indonesia;
 - (d) “Update on Japanese activities for operational space weather services”, by the representative of Japan;
 - (e) “Space weather activities in Kazakhstan in 2023”, by the representative of Kazakhstan;
 - (f) “National preparedness plan for the 25th solar maximum”, by the representative of the Republic of Korea;
 - (g) “Operations summary of the Russian segment of the China-Russia Consortium for space weather”, by the representative of the Russian Federation;



(h) “Recent scientific activities related to solar-terrestrial physics”, by the observer for SCOSTEP.

5. The Subcommittee noted that space weather, caused by solar variability, was an international concern that posed economic and societal risks owing to its potential threat to space systems, human space flight, ground- and space-based infrastructure and aviation activity, upon which society increasingly relied. It therefore needed to be addressed in a global manner, through international cooperation and coordination, in order to be able to predict potentially severe space weather events and mitigate their impact to guarantee the safety and sustainability of outer space activities.

6. The Subcommittee noted a number of national, regional and international activities undertaken in relation to space weather research and capacity-building to improve scientific and technical understanding of adverse space weather effects, with the aim of strengthening space weather resilience.

7. The Subcommittee also noted the importance of the work of WMO, including the development of its technical and regulatory framework for space weather, and the opportunities offered by its Integrated Global Observing System and related systems, as well as the importance of the engagement of Member States with COSPAR in developing international space weather action teams for scientific research in support of transitional efforts related to research for operations, and their engagement in the space weather-related work of ITU and the International Space Environment Service (ISES).

8. The Subcommittee noted that activities related to space weather could have an impact on aviation and, in particular, could potentially interrupt high-frequency communications and satellite navigation. In that regard, the Subcommittee noted the importance of the four ICAO global space weather information centres, which were tasked with providing the civil aviation sector with information about space weather that could potentially affect communications, navigation and the health of passengers and crew.

9. Some delegations expressed views on the importance of the implementation of the Guidelines for the Long-term Sustainability of Outer Space Activities of the Committee ([A/74/20](#), annex II), in particular guidelines B.6 and B.7, which addressed the safety of space operations.

10. The view was expressed that in order to improve research on and the predictability of space weather, further information-gathering would be beneficial. In that connection, the private sector could contribute to the monitoring of the upper atmosphere and the near-Earth space environment.

11. The Subcommittee noted the collaboration between COSPAR, WMO and ISES on space weather, as formalized in their joint Coimbra Declaration, and it noted that the collaboration represented action taken in response to the recommendations contained in the final report of the Expert Group on Space Weather ([A/AC.105/C.1/122](#)).

12. Some delegations expressed the view that there was a need to establish a dedicated international coordination group on space weather, which could significantly improve international collaboration and coordination, contributing to enhanced scientific knowledge of the space environment and increased global resilience to the adverse effects of space weather.