TOPICAL DISCUSSION MEETING - HOW CAN IONOSPHERIC PRODUCTS BE ENHANCED TO REACH BETTER APPLICABILITY FOR USERS?

Claudia Borries (German Aerospace Center) Monday 27/11, 10:45 - 12:00, Mercator

This topical discussion meeting targeted the discussion of the applicability and enhancement of products provided by the ionosphere expert service centre (I-ESC) in the ESA SSA space weather network. Focal point of the discussion was the concept for a Global Navigation Satellite System (GNSS) performance indicator, which is planned to be implemented in near future. The meeting was opened by the I-ESC coordinator C. Borries, who gave an introduction into the status and operation of the I-ESC and emphasized the importance of user feedback for the proper progress of the I-ESC. K.S. Jacobsen presented a concept for the GNSS performance indicator and opened the discussion on its required capabilities. The user will receive the GNSS performance indicator for a given location, time and use case. A number of different use cases have been indicated in the meeting. It is expected that different algorithms for the generation of the GNSS performance indicator have to be implemented for each individual use case. The audience recommended that also maps with the indicator should be generated in order to avoid performance problems. Also the provision of time series was suggested as useful output. The combination with warnings based on solar wind data at the Lagrangean point L1 was suggested to enhance the GNSS performance indicator information. In additions, the availability of support from geostationary satellites (e.g. EGNOS) should be considered as use case for the GNSS performance indicator.

Finally, the discussion in this working meeting helped to enhance the concept for the development of the GNSS performance indicator, which is planned to be incorporated into the SSA space weather services.