

44th SYMPOSIUM ON SAFETY AND QUALITY IN SPACE ACTIVITIES (D5)
Space Weather Prediction and Protection of Space Missions from Its Effects (3)

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SPACE WEATHER SERVICES FROM THE SOUTH AFRICAN NATIONAL SPACE AGENCY

Abstract

The Space Science Directorate of the South African National Space Agency (SANSA: Space Science) located in Hermanus, South Africa was appointed as the Regional Warning Center (RWC) for Space Weather in Africa by the International Space Environment Service (ISES) in 2007. Since this mandate was received the center has strived towards providing services and products as well as education to partners, clients and collaborators in the field of Space Weather. A Space Weather Center located within the Space Science directorate was opened by the Minister of Science and Technology in December 2010, and a Space Weather Unit has been operational within the Space Science structure since April 2010. Until recently the emphasis has been on developing services for the defense industry in the field of High Frequency communications, however, this has now been expanded to include other industries and science advancement. The data collected by the national research infrastructure platform maintained and operated by SANSA: Space Science contributes significantly to the space weather information provided. SANSA has access to a wide range of data from different geophysical instrumentation mostly rolled out and operated by its directorates. Data is the key to being able to provide real time access to Space Weather information that will allow for the mitigation of effects particularly as the next solar maximum approaches. Technologies affected include those in the communications, navigation, aviation and defense industries. The Space Science Space Weather Center has also created an amazing science advancement opportunity that has already attracted a significant amount of interest. This presentation will include a background to Space Weather in Africa, the nature of the services provided by this center and an overview of the applications of this information. In addition, this presentation will provide some insight into the science advancement aspects and a glimpse into the future plans that SANSA has for Space Weather over Africa.