



Contribution ID: 11

Type: Oral Presentation

Investigation of Pc5 pulsation events using Sanae radar and ground-based magnetometer data during northward interplanetary magnetic field (IMF) interval

Wednesday, 1 July 2015 14:20 (20 minutes)

Abstract content
 (Max 300 words)
Formatting &
Special chars

The Pc5 pulsation events presented here were monitored in the high-latitude ionosphere by Sanae radar and ground-based magnetometer arrays in Greenland and CARISMA stations that are in the same range of magnetic latitude, when the interplanetary magnetic field of the solar wind is northward. These two instrument types complement each other. The line-of-sight Doppler velocities from the radar can be used to measure ULF oscillations in the F-region plasma flow associated with Pc5 field line resonance. Ultra low frequency (ULF) pulsations have been observed for many years in magnetometer data and are endemic within the magnetosphere. Spectral analysis of the Pc5 pulsations from Sanae radar and magnetometers has been performed. This will help in determining the characteristic features of pulsations during northward interplanetary magnetic field interval.

Apply to be
 considered for a student
 award (Yes / No)?

No

Level for award
 (Hons, MSc,
 PhD, N/A)?

n/a

Main supervisor (name and email)
and his / her institution

Prof. M. Kosch and mkosch@sansa.org.za; South African National Space Agency (SANSA)

Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

No

Please indicate whether
this abstract may be
published online
(Yes / No)

Yes

Primary author: Dr MTUMELA, Zolile (SANSA)

Co-authors: Dr STEPHENSON, Judy (UKZN); Prof. KOSCH, Michael (SANSA)

Presenter: Dr MTUMELA, Zolile (SANSA)

Session Classification: Space

Track Classification: Track D2 - Space Science