Contribution ID: **47** Type: **Oral Presentation**

Study of the time variation of geomagnetic field over southern Africa applying harmonic splines technique on CHAMP satellite data

Wednesday, 10 July 2013 10:30 (20 minutes)

Abstract content
   (Max 300 words)

The monitoring of the Earth's magnetic field requires a continuous recording of geomagnetic data. In the southern Africa, the ground recording stations are limited and the use of satellite data is needed for the studies where high spatial and temporal resolution data is required. The study of the fast time variation of geomagnetic field in the southern Africa region was conducted applying the harmonic splines technique on CHAMP satellite data that has been recorded between 2001 and 2005. The derived model, the Southern Africa Regional Model (SARM), was validated using the ground based data and the global model IGRF-11. The results of this study suggest that the southern Africa regional model can be improved combining the satellite data and ground data.

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

No

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

Yes

Primary author: Mr NAHAYO, Emmanuel (SANSA Space Science)

Co-authors: Dr MCCREADIE, Heather (University of KwaZulu-Natal); Dr KOTZE, Pieter B. (SANSA Space Science)

Presenter: Mr NAHAYO, Emmanuel (SANSA Space Science)

Session Classification: Space Science

Track Classification: Track D2 - Space Science