



Geomagnetic South Atlantic Anomaly space-time evolution over the past 400 years and core mantle boundary

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The South Atlantic magnetic Anomaly (SAA) is an important feature of the present geomagnetic field where the field is the lowest above the Earth's surface. In this study we model the space-time evolution of SAA over the past 400 years as the resultant from a decrease of a global axial dipole and an increase of a virtual local monopole source virtually placed at the CMB, in order to obtain some information regarding its deep source. Here, some characteristics of this evolution are investigated and some considerations are made about the core-mantle boundary (CMB). Among the possible speculations, one is made regarding the CMB topography and its possible aspect beneath the SAA region corresponding to simple sinusoidal undulations met by the monopole source during its centennial motion.