



Anisotropy in the South Atlantic Anomaly (Paperback)

By Shaun M Easley

Biblioscholar, United States, 2012. Paperback. Condition: New. Language: English . Brand New Book ****** Print on Demand ******. The South Atlantic Anomaly (SAA) is an area of increased radiation that poses a danger to satellites and manned spacecraft. From June 2000 through July 2006, the TSX-5 satellite measured proton fluxes in the SAA using its CEASE instrument. A review of the satellite data by scientists at AFRL/VSBX revealed an unanticipated, recurring bi-modal structure in histograms of the proton counts. This research identified the bi-modal behavior as anisotropic in nature, and the result of two separate processes. At low altitudes the anisotropy was well described by the classic East-West Effect. Comparisons of the satellite data to simple analytical models are presented. At high altitudes, the anisotropy was the result of the detector measuring protons at different pitch angles when looking east vs. west. The sampled pitch angles were also found to be function of location, leading to a latitudinal variation to this anisotropy. Finally, we also examined a series of unusually high readings that affected some of the statistics in this study. These anomalous counts were found to have a possible solar cycle dependence leading to questions about the suitability of...



Reviews

This is an amazing publication i actually have at any time go through. It is actually rally interesting through reading through period. Its been developed in an exceptionally straightforward way which is merely following i finished reading through this publication where actually altered me, modify the way in my opinion.

-- Noah Padberg

It in just one of the most popular ebook. It really is full of wisdom and knowledge You are going to like just how the blogger create this pdf.

-- Roosevelt O'Keefe