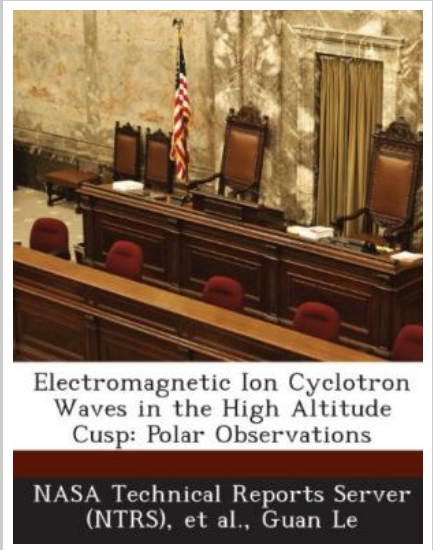

DOWNLOAD PDF

Electromagnetic Ion Cyclotron Waves in the High Altitude Cusp: Polar Observations

By Guan Le

BiblioGov. Paperback. Book Condition: New. This item is printed on demand. Paperback. 36 pages. Dimensions: 9.7in. x 7.4in. x 0.1in.High-resolution magnetic field data from the Polar Magnetic Field Experiment (MFE) show that narrow band waves at frequencies approximately 0. 2 to 3 Hz are a permanent feature in the vicinity of the polar cusp. The waves have been found in the magnetosphere adjacent to the cusp (both poleward and equatorward of the cusp) and in the cusp itself. The occurrence of waves is coincident with depression of magnetic field strength associated with enhanced plasma density, indicating the entry of magnetosheath plasma into the cusp region. The wave frequencies are generally scaled by the local proton cyclotron frequency, and vary between 0. 2 and 1. 7 times local proton cyclotron frequency. This suggests that the waves are generated in the cusp region by the precipitating magnetosheath plasma. The properties of the waves are highly variable. The waves exhibit both lefthanded and right-handed polarization in the spacecraft frame. The propagation angles vary from nearly parallel to nearly perpendicular to the magnetic field. We find no correlation among wave frequency, propagation angle and polarization. Combined magnetic field and electric field data for the...

READ ONLINE
[7.89 MB]

Reviews

It in one of the most popular publication. It really is writter in easy words and not difficult to understand. You are going to like how the author write this book.

-- ***Prof. Evans Balistreri DDS***

Completely essential go through book. This is for all who statte there had not been a worthy of reading through. It is extremely difficult to leave it before concluding, once you begin to read the book.

-- ***Lydia Legros***