

Project Details

ROSES ID: NRA-03-OSS-01

Selection Year: 2004

Program Element: Independent Investigation: LWS

Project Title:

A New Data Environment for Ionospheric Electrodynamics Based on AMIE results

PI Name: Aaron Ridley

PI Email: ridley@umich.edu

Affiliation: University of Michigan

Project Member(s):

- Randolph, James R; Authorizing Official; University of Michigan Ann Arbor

Summary:

In this proposal we seek funds to make a large database of ionospheric electrodynamic quantities available over the web. This database will be for the Northern and Southern polar regions (extending from the poles down to +/- 46 degrees magnetic latitude), and will include 1 minute assimilative mapping of ionospheric electrodynamics (AMIE) results for all of 1997-2001, or 5.25 million patterns. The patterns will be of ionosphere electric potential, Hall and Pedersen conductance, average and total electron energy flux, horizontal and field-aligned currents, electric fields, and Joule heating. In addition, AMIE provides the Auroral Electrojet (AE, AU, and AL) index and Dst index, which will also be provided. If funded, we will make a user friendly front end interface to the AMIE database.

Publication References:

Summary: "

Reference: Aaron Ridley / University of Michigan-A New Data Environment for Ionospheric Electrodynamics Based on AMIE Results