Project Details

ROSES ID: NNH05ZDA001N
Selection Year: 2006
Program Element: Cross-Discipline Infrastructure Building Programs

Topic: Solar wind plasma entry and transport in the magnetosphere

Project Title:
International Symposium on Recent Observations and Simulations of the Sun-Earth System

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Summary:
We propose to organize an International Symposium on Recent Observations and Simulations of the Sun-Earth System (ISROSES) in Varna, Bulgaria, from 18 to 22 September 2006. The main purpose is to create an international forum for scientists from solar, heliospheric, magnetospheric, and earth sciences communities to present and discuss recent advances in our understanding of the structure and complex interactions of the Sun-Earth System. The focused discussions will include, but are not limited to: (1) Solar Cycle variations in the Sun-Earth system; (2) Solar dynamics and the response of geospace; (3) Production, transport, and loss of energetic particles; (4) Sun-Earth system modeling and prediction. The main emphasis will be put on the integration of these studies -- ranging from observations to related interpretation, theory and numerical modeling -- across different temporal and spatial scales of the Sun-Earth system. Participants should come away with a better realization of the dynamic nature of the space environment, while appreciating the benefits of interdisciplinary approaches to understanding the dynamic Sun-Earth system.

ISROSES will include four full days of presentations and discussions; each day will be devoted to a primary topic with invited, contributed, and poster presentations. The invited presentations will cover the solar, magnetospheric, and ionospheric aspects of the topic to accomplish the cross-disciplinary objectives of the conference. The Principal Conveners Vania Jordanova and Ilia Roussev will be aided by a Scientific Organizing Committee (SOC) consisting of twelve well-established international scientists who will organize and lead the four days of individual sessions. The on-site coordination of the technical aspects of the conference will be planned by a Local Organizing Committee (LOC) consisting of eight distinguished Bulgarian scientists. The Conveners, in collaboration with the SOC will prepare a report on the meeting for publication in the Space Weather Journal. We seek support for students and young scientists to attend the symposium.

The proposed Symposium Themes are relevant to the NASA Strategic Objective to understand the effects of the Sun on Earth and the environmental conditions that will be experienced by astronauts, as defined in the NASA ROSES-2005. They mesh well with the Strategic Goals of the NASA Living With a Star (LWS) Program, and with the NSF Solar, Heliospheric, and INterplanetary Environment (SHINE) and Geospace Environment Modeling (GEM) Programs. Specifically, they address the NASA LWS Program Focused Topic T3c "Solar Wind Plasma Entry and Transport in the Magnetosphere". The third ILWS General Meeting on 24 April 2005 in Vienna, Austria, approved to sponsor ISROSES as an ILWS Workshop.

Publication References:

Summary: no summary

Reference: Jordanova, Vania; Roussev, Ilia; (2007), Recent Observations and Simulations of the Sun-Earth System, Eos, Transactions American Geophysical Union, Volume 88, Issue 5, p. 62-62, doi: 10.1029/2007EO050011