

## PREFACE

This special issue of Sun and Geosphere Journal contains selected papers on Heliosphere and Cosmic Rays, Ionosphere, Thermosphere and Mesosphere, Climate Studies, Data Analysis and Image Processing Methods, Atmospheric Physics, Space Weather Modeling and Space Weather Effects on Global Navigation Satellite Systems (GNSS), as well as follow-up projects in astronomy.

Originally, these papers were presented at the United Nations/Ecuador Workshop on the International Space Weather Initiative (ISWI) organized by the United Nations and the Quito Astronomical Observatory of National Polytechnic School. The Workshop was held in Quito, from 8 to 12 October 2012, in particular for the benefit of countries in Latin America and the Caribbean. Additionally, as a valuable result of this workshop, the Solar Physics Phenomena Division was established at the Ecuadorian Astronomical Observatory, where the Earth's atmosphere and its interaction with the Sun studies are carried out in close collaboration with academic institutions of Japan, Brazil and the United States.

The Scientific Organizing Committee (SOC) was chaired by E.D.Lopez (Ecuador) and co-chaired by Gadimova, S., (United Nations) and Gopalswamy, N., (USA) and consisted of representatives of Armenia, Bulgaria, Brazil, Egypt, France, Japan, Nigeria and USA. The Local Organizing Committee (LOC) consisted of Lopez, E. [Chair], Haubold, H.J., (United Nations), Abedrabbo S., Espinosa A., Ishitsuka J. (Perú), Lasso O., Semanate J., Vasconez C. [Co-Chair], Vasquez N. [Co-Chair], Vicente K.

The purpose of these proceedings is to introduce the most recent studies carried out in space science, space weather modeling and forecasting to students and the scientific community at large in contribution to the future development of space science. Although some time has elapsed since the 2012 ISWI Workshop, the papers presented in these proceedings continue to be relevant.

We hope that the space weather space science schools and the workshops will continue in the future strengthening existing research projects and fostering new research studies to help us to precise the foreground knowledge and understanding the complex phenomena that occur in the natural environment to which we belong.

Ericson D. Lopez  
Guest Editor