

Panel Discussion: SCOSTEP VarSITI activities in 2014-2018 and future space weather researches and applications

*Kazuo Shiokawa¹, Katya Georgieva²

1. Institute for Space-Earth Environmental Research, Nagoya University, 2. Space Research and Technologies Institute, Bulgarian Academy of Sciences

VarSITI (Variability of the Sun and Its Terrestrial Impact, (<http://www.varsiti.org/>) is the 5-year international program of SCOSTEP (Scientific Committee On Solar-TERrestrial Physics) in 2014-2018. VarSITI focuses on the recent and expected future solar activity and its consequences for the Earth, for various time scales from the order of thousands years to milliseconds, and for various locations and their connections from the solar interior to the Earth's atmosphere. Four scientific projects are being carried out under the VarSITI program: (1) Solar Evolution and Extrema (SEE), (2) International Study of Earth-Affecting Solar Transients (ISEST/MiniMax24), (3) Specification and Prediction of the Coupled Inner-Magnetospheric Environment (SPeCIMEN), and (4) Role Of the Sun and the Middle atmosphere / thermosphere / ionosphere In Climate (ROSMIC). These four projects will be carried out in collaboration with relevant satellite and ground-based missions as well as modeling efforts to facilitate the implementation of these projects. We also collaborate with other on-going international projects like the UN-based space weather activities, particularly for promoting VarSITI-related science in developing countries, and ICSU World Data System (ICSU-WDS). This year (2018) is the last year of the VarSITI Program. In the panel discussion, we will discuss future direction on the solar-terrestrial physics including the next program of the SCOSTEP, and its relation to the space weather researches and applications.

Keywords: VarSITI, SCOSTEP, Variability of the Sun and Its Terrestrial Impact