

## Introduction of the SCOSTEP' s VarSITI program - Variability of the Sun and Its Terrestrial Impact

### Introduction of the SCOSTEP's VarSITI program - Variability of the Sun and Its Terrestrial Impact

塩川 和夫<sup>1\*</sup>; Georgieva Katya<sup>2</sup>  
SHIOKAWA, Kazuo<sup>1\*</sup>; GEORGIEVA, Katya<sup>2</sup>

<sup>1</sup> 名古屋大学太陽地球環境研究所, <sup>2</sup>Space Research and Technologies Institute, Bulgarian Academy of Sciences

<sup>1</sup>Solar-Terrestrial Environment Laboratory, Nagoya University, <sup>2</sup>Space Research and Technologies Institute, Bulgarian Academy of Sciences

The Scientific Committee on Solar Terrestrial Physics (SCOSTEP) is an interdisciplinary body of the International Council for Science (ICSU) to run international interdisciplinary scientific programs and promotes solar-terrestrial physics research. The last solar minimum in 2008-2009 and the current solar maximum of sunspot cycle 24 show much lower activities compared with the previous two solar cycles 22 and 23. The scientists in the solar-terrestrial physics are watching very low solar activities and their consequences on Earth, which have never been observed since modern scientific measurements become available. The SCOSTEP program "Variability of the Sun and Its Terrestrial Impact (VarSITI)" (2014-2018) will focus on this particular low solar activity and their consequences on Earth, for various times 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. In order to elucidate various sun-earth connections, we encourage communication between solar scientists (solar interior, sun, and the heliosphere) and geospace scientists (magnetosphere, ionosphere, and atmosphere). Campaign observations will be promoted for particular interval in collaboration with relevant satellite and ground-based missions as well as modeling efforts. Four scientific projects will be carried out in VarSITI as (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). In this presentation we introduce the VarSITI program and its four projects to promote interdisciplinary studies among different fields.

キーワード: VarSITI, 太陽活動, 気候変動, 大気圏, 電磁気圏, 太陽圏

Keywords: VarSITI, solar activity, climate change, atmosphere, magnetosphere and ionosphere, heliosphere