

## A04-P12

### ROSMIC: A PROJECT IN THE SCOSTEP VARSITI PROGRAM

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VarSITI (Variability of the Sun and Its Terrestrial Impact) is SCOSTEP new program for the 2014 to 2018 period. The four projects under this program are SEE (Solar evolution and Extrema), ISEST (International Study of Earth affecting Solar Transients/MiniMax24), SPeCIMEN (Specification and Prediction of the Coupled Inner-Magnetospheric Environment) and ROSMIC (Role Of the Sun and the Middle atmosphere/thermosphere/ionosphere In Climate). Of these projects, ROSMIC is the one which deals directly with terrestrial phenomena. It supports scientific investigations which contribute to our understanding of the impact of the Sun on the terrestrial middle atmosphere/lower thermosphere/ionosphere (MALTI) and Earth's climate and its importance relative to anthropogenic forcing over timescales from minutes to centuries. Close collaborations between the observation and modelling communities will be encouraged. Observational activities range from the analysis of existing data records, measurements from ground based, in situ and satellite instruments, the organization of coordinated observing campaigns, and the development and implementation of new instrumentation and observation techniques. Dedicated models directed toward particular phenomena as well as sophisticated whole atmosphere/ionosphere models are expected to play a vital role in this project.

The four sub-projects or themes which comprise ROSMIC are: 1) Coupling through solar variability (radiative, electrodynamics, ionospheric and photochemical effects), 2) Coupling by dynamics, 3) Trends in Mesosphere and Lower Thermosphere, 4) Trends and solar cycle effects in the thermosphere (including technological aspects). Collaborations between each theme and with the other VarSITI projects will be facilitated during this program. This presentation will provide an overview of VarSITI and details of the ROSMIC project.