

Program

Of the meeting of the ISSI team

“Effects of Interplanetary Disturbances on the Earth’s Atmosphere and Climate”

24-28 March 2014, Bern

MONDAY, 24 MARCH

Afternoon session

- 14:00-14:30 Welcome, introduction to ISSI, opening remarks
- 14:30-15:00 Introduction to the team’s tasks, discussion of the program
- 15:00-16:00 **Solar sources and long-term variations of interplanetary disturbances**
Katya Georgieva, Solar dynamo, types of interplanetary disturbances, and long-term evolution of their relative impact on the Earth
- 16:30-17:30 **TOSCA handbook discussion**
Kalevi Mursula

TUESDAY, 25 MARCH

Morning session

- 09:30-11:00 **Particle precipitation: observations and models**
Timo Asikainen, A New Statistical Model of Energetic Electron Precipitation Using Corrected NOAA/MEPED Data
- 11:30-13:00 **Effects of particle precipitation and ion chemistry in the middle atmosphere**
Pekka Verronen, Direct effects of particle precipitation and ion chemistry in the middle atmosphere

Afternoon session

- 14:30-16:00 **Effects of particle precipitation in the stratosphere and troposphere**
Annika Seppala, Energetic Particle Precipitation contribution to stratospheric and tropospheric variations
- 16:30-18:00 **The treatment of the energetic particles in climate-chemistry models**
Eugene Rozanov, The treatment of the energetic particles in climate-chemistry models

WEDNESDAY, 26 MARCH

Morning session

- 09:30-11:00 **Models of geomagnetic storms and particle precipitation effects in the polar regions**
Alexei Krivolutsky, 3D simulations of atmospheric response caused by precipitating electrons and solar protons at both polar regions induced by geomagnetic storms
- 11:30-13:00 **Energetics of the solar wind – tropospheric coupling**
Alan Aylward, The three-step radio/optical trigger mechanism for Solar-Tropospheric correlations

Afternoon session

- 14:30-16:00 **Solar wind, atmospheric electricity and cloud microphysics**
Brian A Tinsley, The solar wind – atmospheric electricity – cloud microphysics – atmospheric dynamics connection: the need to clarify and quantify the links
- 16:30-18:00 **Effects of changes in the global electric circuit in the polar regions**
Mai Mai Lam, Temporal response of the polar troposphere and stratosphere to changes in the global atmospheric electric circuit associated with solar wind variability

THURSDAY, 27 MARCH

Morning session

- 09:30-11:00 **Solar wind effects on tropospheric circulation**
Radan Huth, Issues in detecting the impacts of extra-terrestrial forcings on tropospheric circulation
- 11:30-13:00 **Solar wind effects in surface air temperature**
Kalevi Mursula, Spatial distribution of Northern Hemisphere winter temperatures over the solar cycle during the last 130 years

Afternoon session

14:30-16:00 **Solar wind dynamic pressure effects on atmospheric waves**
Hua Lu, Solar Wind Dynamic Pressure Effect on Planetary Wave Propagation and Synoptic-scale Rossby Wave Breaking

16:30-18:00 **Solar wind effects on large-scale atmospheric modes of variability**
Simeon Asenovski, Solar activity correlation with NAO and ENSO

FRIDAY, 28 MARCH

Morning session

09:00-10:30 Overview of the meeting results and general discussion

11:00-12:30 Planning the future activity and publications.