The Fourth European Space Weather Week Nov 5-9, 2007

Space Weather: a threat? The tempers of the sun

A weather journal about space, like we know it from the daily weather talks on radio and television? It seems to be futuristic and fiction. Not al all, 24/24h, the sun is monitored and on a daily basis forecasts and alerts for upcoming solar storms and eruptions are spread. The earth with its space-borne and ground-based technological infrastructure, fall under the spell of the sun and the surrounding space. From November 5 to 9, 2007, scientists from all over the world gather in Brussels to discuss the young scientific discipline 'space weather' and its influence on earth.

The study of the sun allows us to understand in a better way the universe and its laws. Different domains of the society, like economics, climate studies and protection against radiation, gain much through a profound study of space weather. A sudden increased dose of radiation emitted by the sun, a charged plasma cloud, a continuous solar wind blowing over the earth atmosphere, have a negative effect on satellites and astronauts in space as they can receive a deadly amount of radiation if they don't look for shelter. This is an example of what can happen in space, but there are more closely effects, right here on earth, Radio communication falls out. GPS measurements become less accurate, navigation systems fail, pipe lines corrode and electrical power distribution grids stop working. Aviation thoroughly has to take space weather into account. Communication problems can pop up because of a solar storm. If you fly above the North Pole while a proton storm is going on, you will receive an additional amount of radiation.



Space weather is a hot item. An international panel of experts was set up by the American space agency NASA. The director of the Royal Observatory of Belgium (ROB) is part of this commission that is taking care of the question how strong the solar activity will increase the coming years. 'It is important for companies to know how high the peak of the coming solar cycle will be. The height of this peak tells you something about the frequency and the intensity of solar storms and disturbances because of space weather.', says Dr. R. Van der Linden.

During the European Space Weather Week, the SIDC, Solar Influences Data analysis Center, part of the ROB, welcomes more then 200 scientists who will have the chance to exchange and discuss their ideas and knowledge about space weather. Brussels is the décor of new collaborations between institutes, persons and companies bridging the gap between scientific activities and applications.

During the press conference with representatives from ESA, we invite you to interrogate the specialists from different fields of society, companies involved as well as people with a scientific background. We kindly invite you for the keynote lecture after the conference, by F. Lefeuvre and the following welcome reception that will take place in the Musical Instruments Museum, MIM near the heart of Brussels.

More information can be found on: www.sidc.be/esww4

Practical:

The press conference will take place on November 6, 2007, 17:30u in the Royal Library of Belgium-Bvd De l'Empereur 2, B-1000 Brussel, Lippens auditorium.

Contact:

SIDC, Observatoire Royale du Belgique Avenue Circulaire, 3 B-1180 Brussel

 R. Van der Linden
 P. Vanlommel

 +0032(0)2/373 0249
 +0032(0)474/59 22 23

 Ronald.VanderLinden@oma.be
 Petra.Vanlommel@oma.be