

# European experts meet again in Brussels to predict the weather in space

## A European answer to a threat from space

For the fifth time, the European Space Weather Week takes place in Brussels. From November 17 to 21, scientists will discuss the newest findings, models and products.



Everyone is familiar with changes in the weather on Earth. But, 'weather' also occurs in space. Space weather is not about the amount of rainfall, the total hours of sunshine, but about the behavior of the Sun. Space weather ingredients: flares overwhelming the Earth suddenly with an overdose of radiation, enormous and heavy plasma clouds rushing through space and finally hitting Earth, high-energetic particles bombarding the earth's atmosphere and the North and South Pole.

### Space Weather is hot

Since the start of the space age, men understood that the Sun cannot be ignored. Europe offered an answer in the form of the ESA, European Space Agency. With European coordination, a fleet of space missions has been built. Space weather stations were installed all over the world. In Belgium, the Solar-Terrestrial Center of Excellence (STCE) belongs to this network of 'Regional Warning Centers' and has a worldwide recognized expertise on space weather science and services.

Space Weather has economic repercussions. Radio communication, satellites, critical power infrastructure, pipelines, aviation, navigation systems like GPS... are influenced and disturbed. Our technological systems and in fact the whole Earth are in the grip of the Sun.

The keywords of this year are: Space Situational Awareness, GNSS, offshore drilling, magnetic surveying en geomagnetism, space weather models, data-tools-services, solar weather.

During the conference, some special events are organized.

We have the honour to welcome the **ESA astronaut Dr Christer Fuglesang**. He became the first Swedish astronaut. During his presentation 'A European Weathering Space in a Week in Dec 2006', he will certainly address the extreme space weather he experienced during the Space Shuttle Discoveryflight STS-116 to the International Space Station, ISS. He is assigned to participate in another space flight to the ISS in 2009.



The lecture will take place in the Royal Belgian Institute of Natural Sciences, November 17, 18:30.

Tuesday 18 and Wednesday 19 November, end-users of space weather products can explore on a **space weather fair**. Space weather related industry and scientific institutes offer their know-how in the form of hands-on tools and presentations. The fair is an easy platform for scientists, users and industry to have informal contacts, possibly leading to collaborations.

More information: [www.sidc.be/esww5](http://www.sidc.be/esww5)