



## **AFFECTS - Advanced Forecast For Ensuring Communications Through Space**

Volker Bothmer and the AFFECTS Team

University Göttingen, Institute for Astrophysics, Göttingen, Germany (bothmer@astro.physik.uni-goettingen.de, +49 551 39-5043)

Through the AFFECTS project funded by the European Union's 7th Framework Programme, European and US scientists develop an advanced proto-type space weather warning system to safeguard the operation of telecommunication and navigation systems on Earth to the threat of solar storms. The project is led by the University of Göttingen's Institute for Astrophysics and comprises worldwide leading research and academic institutions and industrial enterprises from Germany, Belgium, Ukraine, Norway and the United States.

The key objectives of the AFFECTS project are:

State-of-the-art analysis and modelling of the Sun-Earth chain of effects on the Earth's ionosphere and their subsequent impacts on communication systems based on multipoint space observations and complementary ground-based data. Development of a prototype space weather early warning system and reliable space weather forecasts, with specific emphasis on ionospheric applications.

Dissemination of new space weather products and services to end users, the scientific community and general public. [U+FFFC] The presentation summarizes the project highlights, with special emphasis on the developed space weather forecast tools.