

**INTERNATIONAL SPACE UNIVERSITY STRASBOURG WORKING GROUP ON SPACE
WEATHER EFFECTS ON BIOLOGICAL SYSTEMS –UPDATE NOVEMBER 2004.**

The group formally established in spring 2004

Main topics and steps:

1 Website, including ftp server, will become operational in the first quartal of 2005, contents still open to discussion, feedback and input welcome.

2. Mailing list of working group participants with their areas of expertise and interest will be updated. The participation is open to experts from any relevant field.

3. Coherent investigation strategy with definition of physical and physiologic parameters to be observed.

3.1. Continuous literature survey :

Work by S. Palmer at Cranfield University investigated the significance of the results from different studies using independent criteria. Results will be ready for distribution by end of 2004 or in early 2005.

3.2. Collaboration with leading Russian institutions has been agreed upon (Izmiran, Institute of Medical and Biological Problems, Russian Academy of Sciences, Ministry of Railways, Moscow State University, Cardio-Centre Moscow, Russian Arctic and Antarctic Survey etc.)

3.3. Workshop on SW and effects on health will be held in Moscow December 2004 or January 2005. The topics shall cover effects on ground as well as onboard spacecraft.

3.4. Workshop at the ISU Strasbourg under consideration.

3.5. Retrospective and prospective study with different medical centres and industrial facilities at high and low geomagnetic latitudes and with polar research stations is being prepared, draft will be distributed for comments and input by January 2005. The final study design is still open to discussion. Agreement shall be reached on observational parameters and on significance of co-factors in the investigation.

4. Search for plausible mechanism of action

Identification of the most plausible mechanisms and theories, study design will depend on results of previous investigation, possibly end 2005.

3. Classification of SW as health risk

Will be important for further funding. Some of the most important questions :

Is it a risk at all?

Can it be proven?

If yes, how significant is it?

Can onset and effect be predicted?

What is the spatial and temporal extent?

Can the risk be mitigated?

Is it cumulative with other health risks?

What are the economic consequences?

The answer to some of these questions seems to be affirmative, but there is a need for statistical proof. Education and increased public awareness will be needed.