

## Opening Remarks

by  
Michel Guérin

It is my pleasure to welcome you to ESTEC, to this Workshop on Space Weather organised by the Space Environments & Effects Analysis Section. I also take the opportunity to thank the main organisers of the workshop: Norma Crosby, a Research Fellow in that section, and Alain Hilgers, for their considerable efforts and energy.

This workshop has been set up in a novel way to allow complete review of the issues and full debate of them. I encourage you to take full advantage of this opportunity to help define a European approach to this subject.

As head of the *Electrical Engineering* department at ESTEC, I am aware of many effects of the space environment, such as radiation effects, electrostatic charging, communications' interference, and so on. Spacecraft are becoming more sensitive and we must make sure our missions are able to do their ever-more-demanding jobs.

But we must also ensure that European space industry and space assets are protected from possible environmental hazards - that commercial competitiveness does not suffer in the move to make spacecraft "smarter-faster-cheaper".

As a support unit, ESA's *Space Environments and Effects Analysis Section* is particularly concerned with how the Space Weather concept can lead to products which enhance the performance and reliability of ESA and European space systems.

Thus there are two goals of this Space Weather workshop:

One is to investigate at what stage the different European (and other) groups are at and how best to co-ordinate efforts to provide the best services for potential users.

The other goal is to put together a global picture concerning all scientific, technological, economical and environmental issues concerning Space Weather with the emphasis placed on defining potential user requirements of European Space Weather services.

So I wish you an enjoyable and fruitful three days, and look forward to seeing the results of your efforts.