



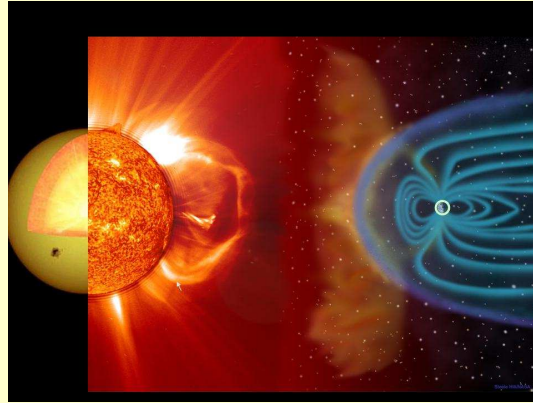
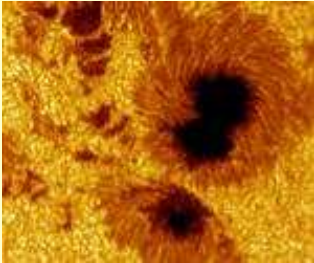
# SCHOOL ON SPACE WEATHER

## RABAT / MAROC [December 5-16, 2011]

Organized by the French ISWI national committee  
**CRASTE – EMI – MENESFCRS**



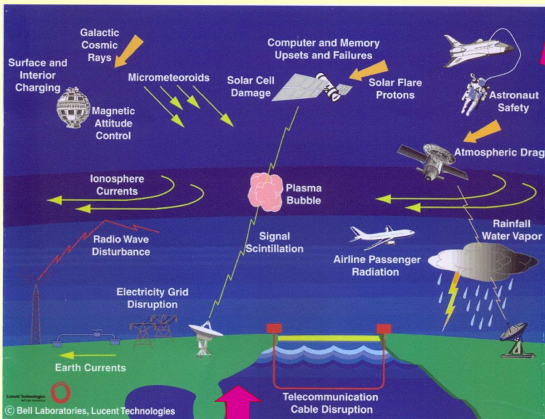
Moroccan Kingdom  
 Ministry of National Education of High Level Teaching  
 For Scientific Research Teachers  
 Direction for Technology



The Sun is the source of many physical processes (radiations, winds, mass ejections, energetic particles) that may affect the terrestrial environment

Northern Lights

Sunspot and magnetic loops at the surface of the Sun



The community of users of space weather products (from Bell Laboratories Lucent Technologies)

### Context of the school

International Space Weather Initiative (ISWI) 2010-2012

Registration before April 30, 2011 at the 2two addresses

[craste@emi.ac.ma](mailto:craste@emi.ac.ma)  
[christine.amory@lpp.polytechnique.fr](mailto:christine.amory@lpp.polytechnique.fr)

## Objectives

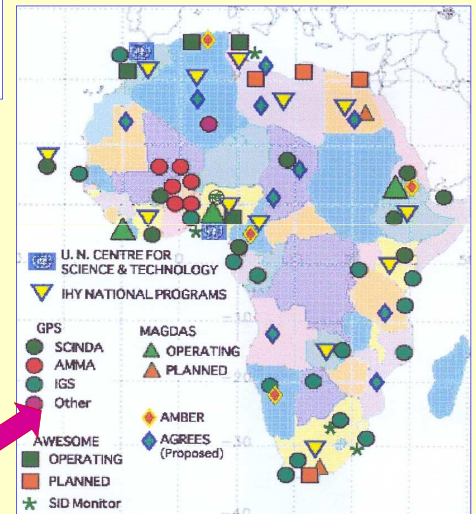
- To learn about the solar processes influencing the terrestrial environment
- To learn how to use data obtained with the network of instruments in Africa

## Program

Lectures and practical work

### First week

- Solar Physics:
  - Solar radiation and its variability
  - Solar cycle and activity
  - Solar flares, Coronal mass ejection and solar energetic particles
  - Solar wind and its perturbations
  - Magnetosphere and Ionosphere of the Earth
- Solar-terrestrial Physics and Space Weather



Instruments deployed in Africa in the context of the International Heliophysical Year IHY (2007-2009)

## Program

Lectures and practical work

### Second week

- Upper Atmosphere
- Ionospheric electric currents
- Earth's magnetic field
- Atmospheric electricity
- Precipitation Systems
- Chemistry and Transport in the atmosphere
- Sounding of the earth's atmosphere by microwave radio instruments