

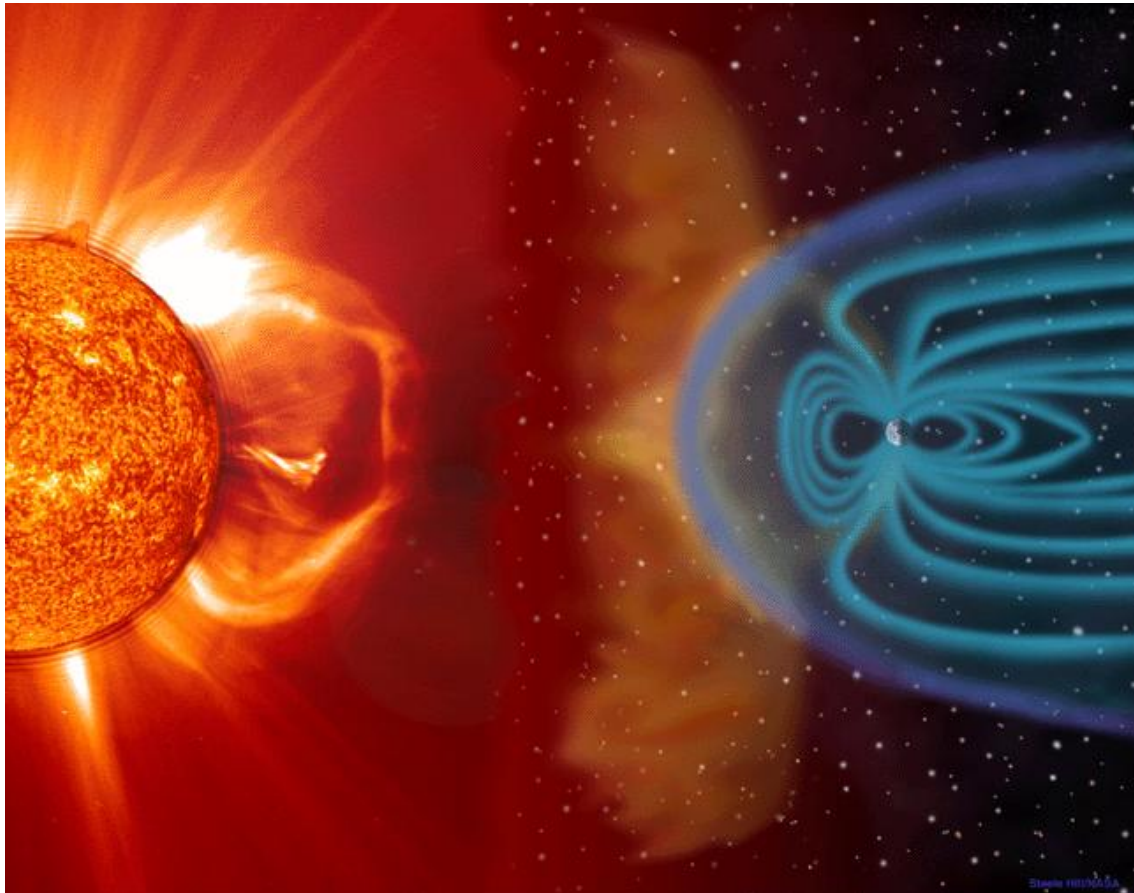


Solar Impacts on Earth: Revealed by NASA's Solar Dynamics Observatory & STEREO Missions

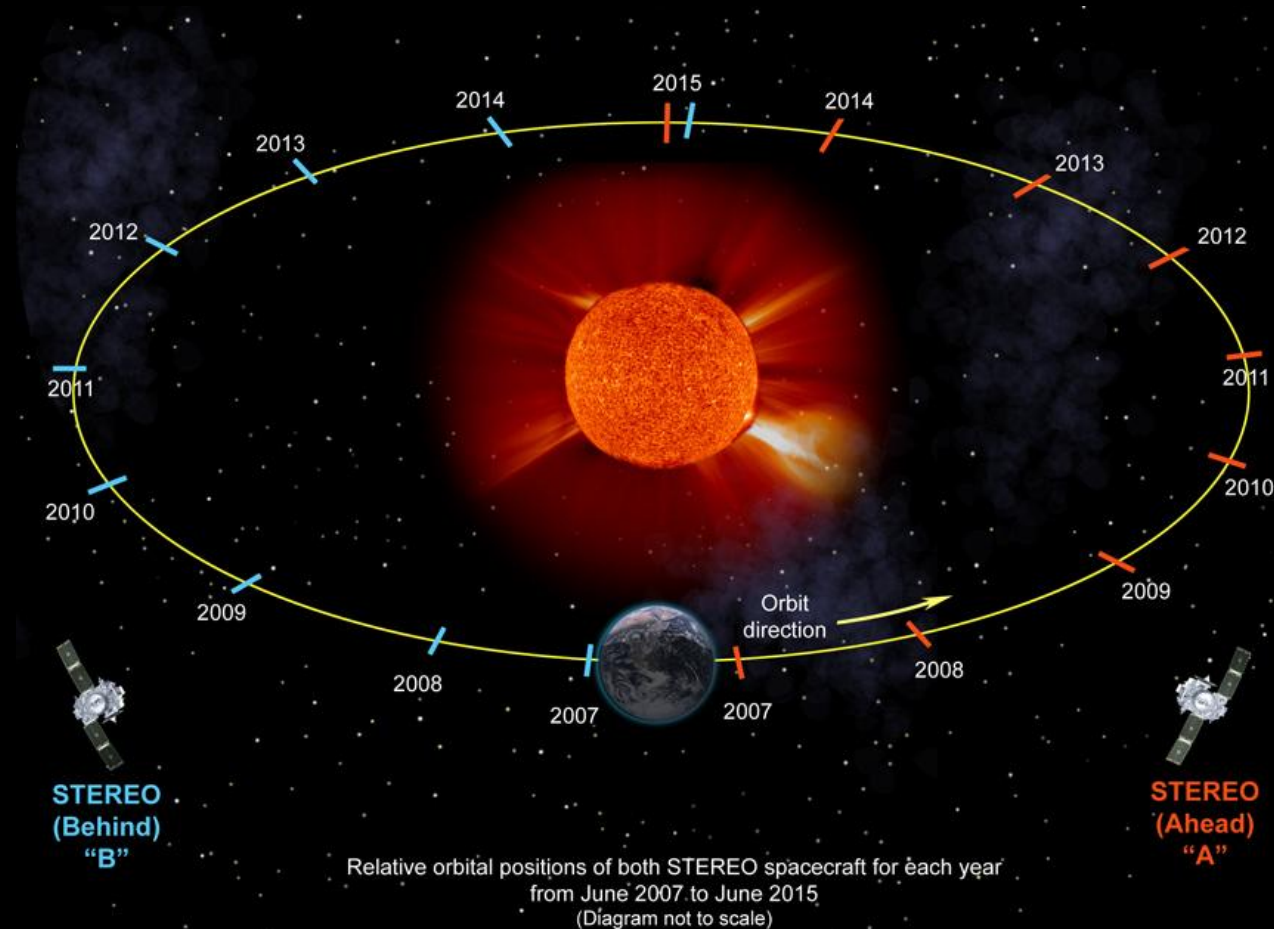
Prof Richard Harrison
Head of Space Physics
RAL Space
Rutherford Appleton Laboratory



Deepest minimum for a century:



- Why? What happened?
- What does that mean for the Earth?
- Will the next build up of activity and maximum be extreme?

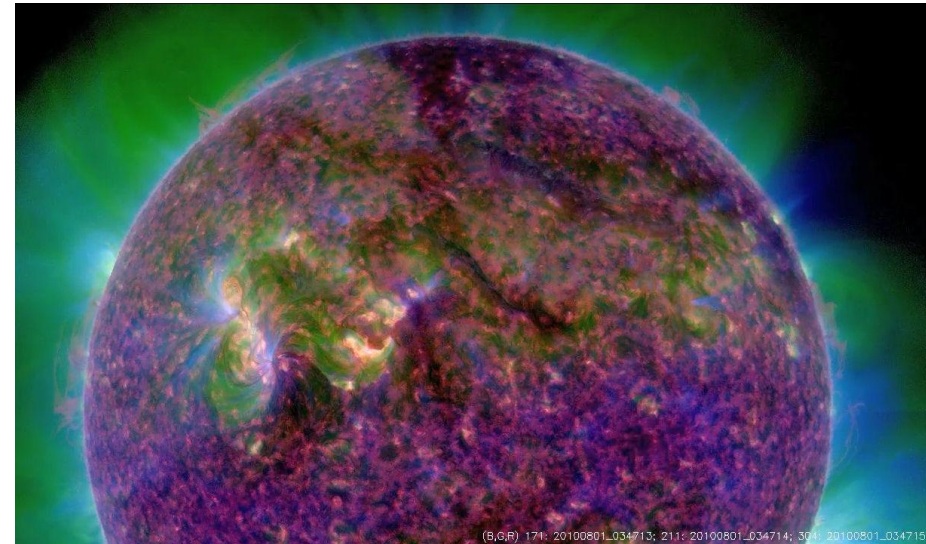
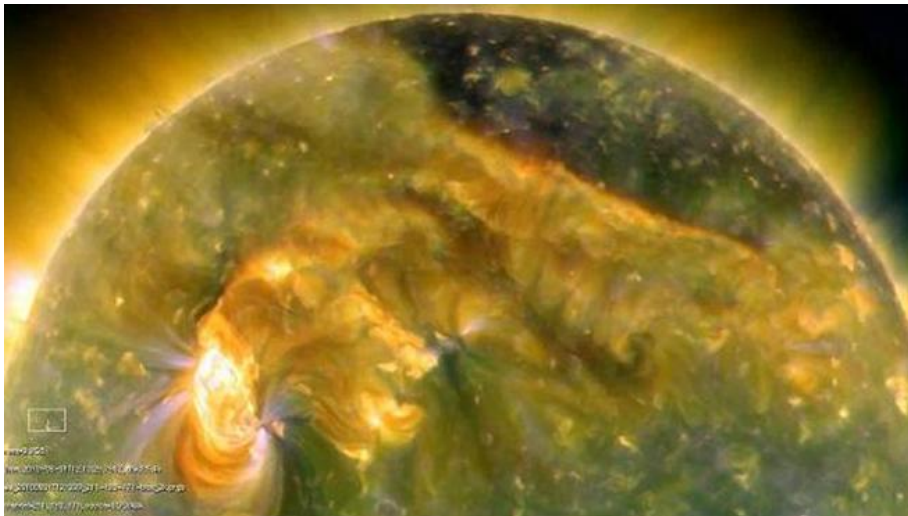


The NASA STEREO
& SDO Missions:
UK hardware &
UK science

The new cycle begins...

The Events of 1–4 August 2010: A Close Shave for the Earth!

1 August 2010 – The day the solar
northern hemisphere erupted

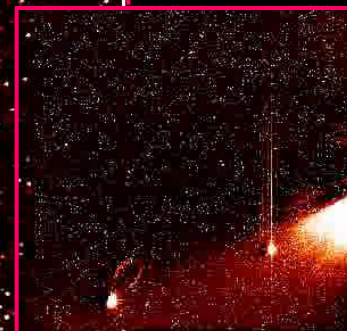


STEREO A/HI

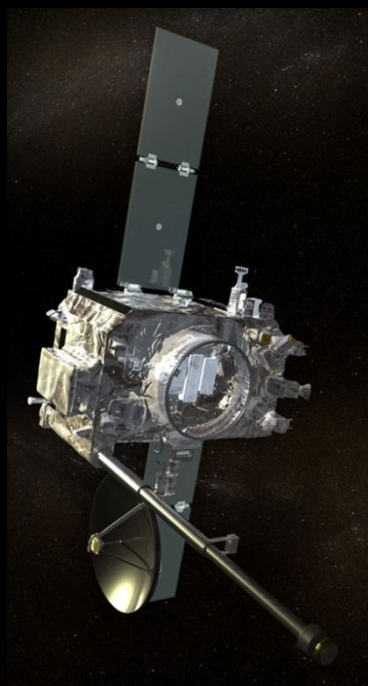
You are here!



Smile – we are
photographing you
every 2 hours!

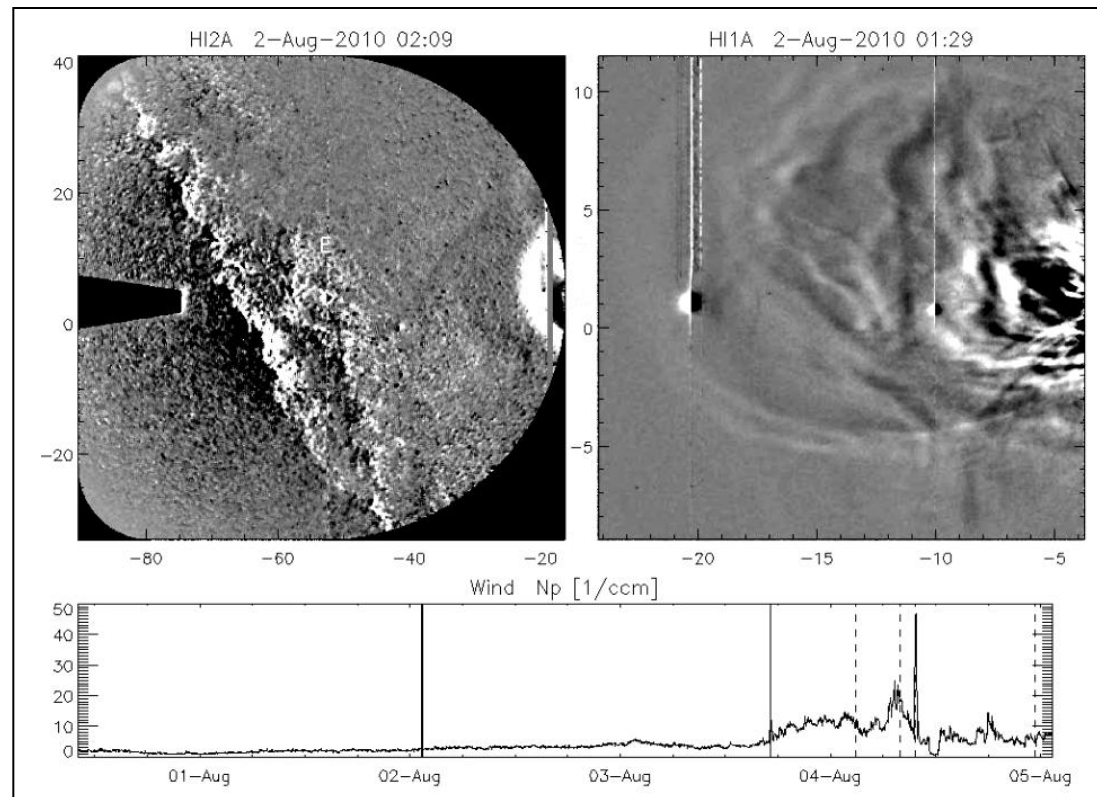


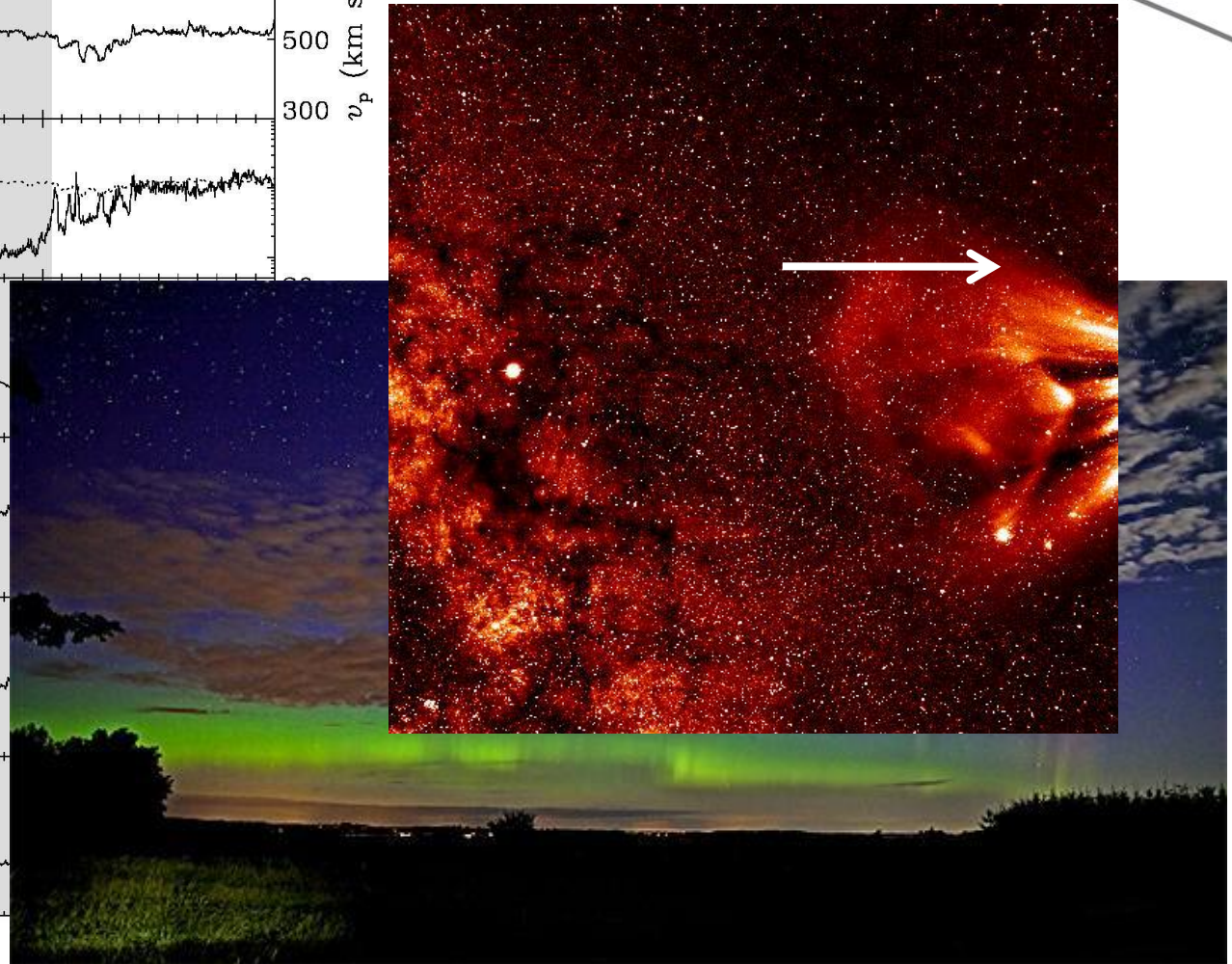
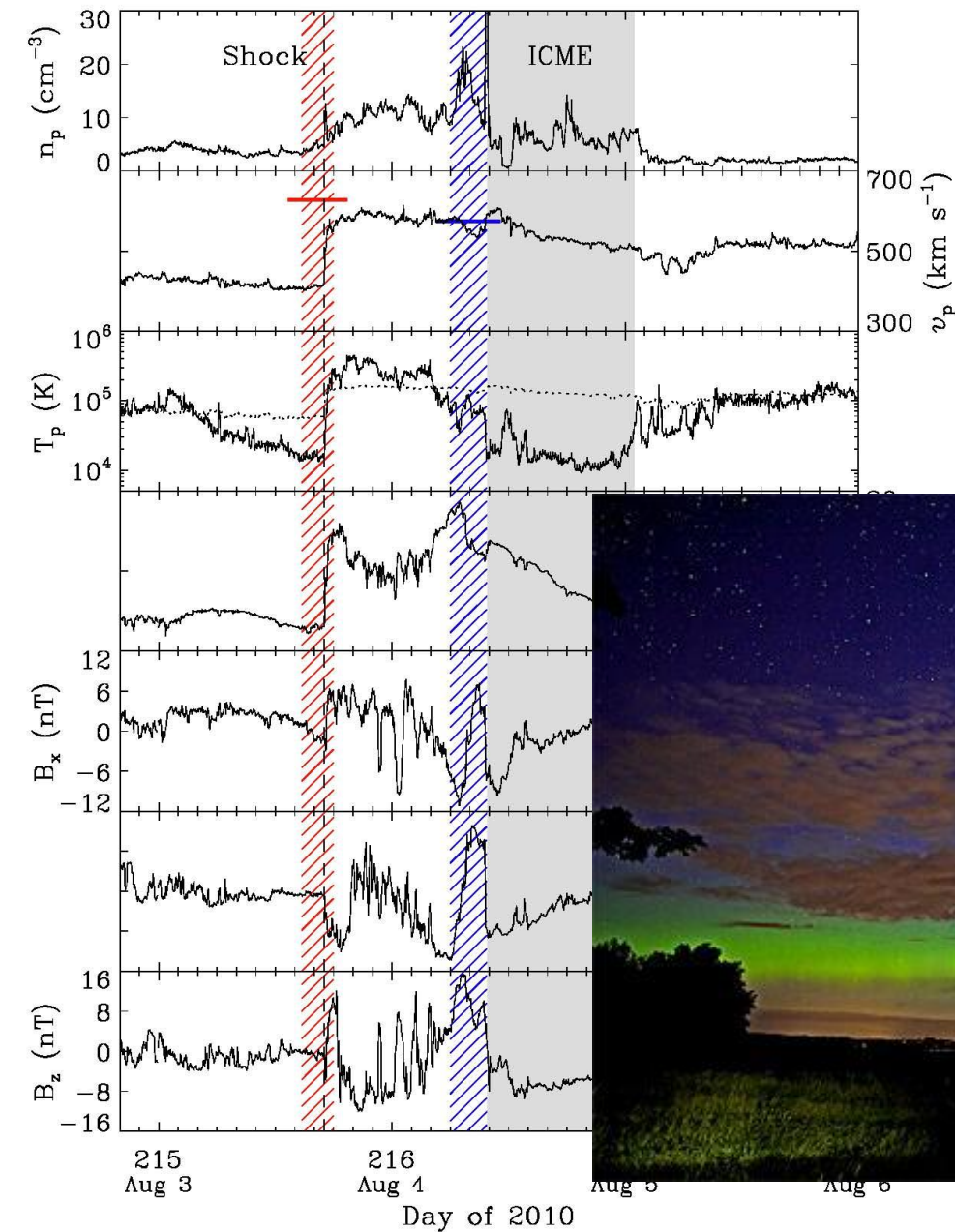
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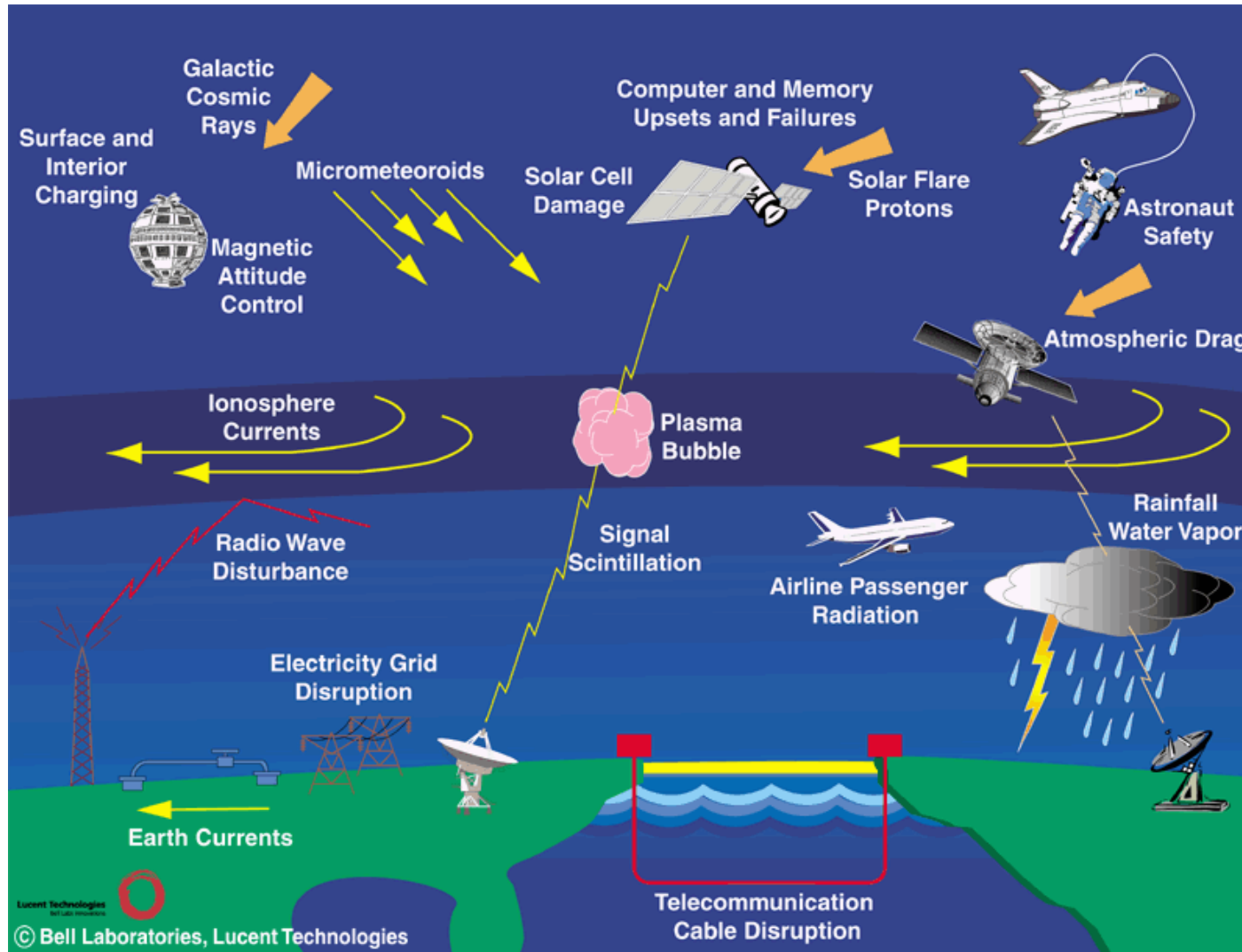


The Events of 1–4 August 2010: A Close Shave for the Earth!

The view from STEREO









Scientific aim:

- To understand and predict impacts on our environment and activities

Recent activities bringing this into the public/business domain:

- House of Commons Select C'tee – evidence on Space Weather (10 Nov)
- Lloyds briefing on Space Weather impacts on business (8 Nov)
- National expert group in discussion with Cabinet Office – forming group to assess national risk/impacts