



Keeping the Lights on During Solar Storms: Space Weather as an Energy Sector Hazard

The Geological Society of London

Tuesday 27 June 2023, 1:30pm – 5:30pm

Abstract

Space weather, through solar flares, geomagnetic storms, and high energy cosmic rays, presents a risk to critical energy infrastructure in the UK. This meeting will bring together industry, academics, and government representatives to present and discuss the risks posed by this hazard (Session 1), how industry can utilise space weather services and resilience strategies to protect against extreme space weather (Session 2), and a panel discussion to create a space for coordination of space weather resilience strategies (Session 3). This is particularly important given how widespread the impacts of severe space weather could be, potentially impacting many energy organisations simultaneously. As the Sun builds towards its maximum magnetic activity around 2025, now is an appropriate time to bring the UK energy sector (industry, academics, and government representatives) together. This also aligns with the UK Government's Severe Space Weather Preparedness Strategy, published last year, which outlined the need for a collaborative approach to resilience across the energy sector.

This event is jointly organised by RMetsS, EDF, and the Hazards Forum.

Meeting Organisers – Dafni Sifnioti, Matthew Allcock and Katie Fish

13:30	Registration, Tea and Coffee	
14:00	Welcome and Introduction Dafni Sifnioti, EDF & RMetsS Events Committee Member, Matthew Allcock, RHEA Group, Nick Shaw, Chair of the Hazards Forum and Joseph Eggington, EDF	
14:10	Met Office Space Weather Operations Centre – Space Weather Activities and Support to the Energy Sector	Mr Simon Machin, Met Office
	Session 1: Space Weather Impacts on the Energy Sector	
14:35	The Effects of Severe Space Weather on the Electricity Transmission System	Mr Mathew Hofton, National Grid ESO
15:00	Understanding Geomagnetically Induced Currents in the GB Power Network	Dr Gemma Richardson, British Geological Society
	Session 2: Space Weather Services and Resilience Strategies	
15:25	ESA's Space Weather Service System in Support of the Energy Sector	Alexi Glover, ESA
15:50	Developing our understanding of Severe Space Weather and its potential impacts on the UK	Mr Mark Prouse, BEIS
16:15	Refreshment Break	
	Session 3: Towards Coordinated Space Weather Resilience	
16:45	Panel Discussion Panellists: Simon Machin, Gemma Richardson, Alexi Glover, Mark Prouse	
17:30	Meeting close	

If you're posting on Twitter about this meeting, please use **#RMetsSMeet**

This meeting is part of the Royal Meteorological Society National Meetings programme, open to all, from expert to enthusiast, for topical discussions on the latest advances in weather and climate. Non-members are welcome to attend these meetings.