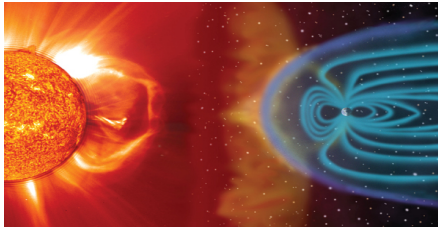


Global Socio-economic Risks, Impacts, and Recommendations for Space Weather Policies and Initiatives

Emma Kiele Fry, Department of Political Science

Overview

Space weather is the dynamic conditions on the Sun and in the space environment and their impacts on society.



Solar wind and the aurora borealis



Images courtesy of NASA

Impact

A major space weather event could have a potential global economic impact of **\$2 trillion** on our technology dependent society.

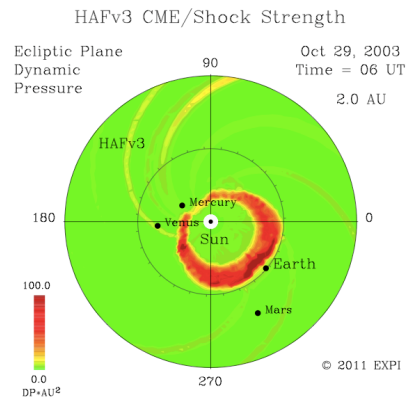


Permanent Transformer Damage in South Africa - 2003 ESKOM

Key Findings

Space weather can:

- Cause widespread blackouts
- Damage communication and GPS satellites
- Pose radiation hazards to humans



Simulation of the 2003 Solar Storms Impacting Earth

Recommendations

- The space weather community must make public education and outreach a top priority.
- Social media is the most effective vehicle for space weather awareness today.
- Social media should be used to provide forecasts and promote awareness and public support for further research.



Facebook: over 800 million worldwide users



Twitter: over 175 million worldwide users

Acknowledgements

Dr. Craig D. "Ghee" Fry, faculty advisor. The Office of the VP for Research at UAHuntsville for funding this project. Exploration Physics International, Inc. in Huntsville, AL for providing the HAFv3 simulation.

