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Flares, Storms and Space Weather: Tracing solar eruptions and their journey to Earth



DATE: Wednesday, December 18, 2024

TIME: 11:00 AM – 12:00 PM MT (VIRTUAL)

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SUMMARY: The Sun is more than just a source of light; it's a dynamic, ever-changing star that shapes the space environment around us. This talk begins with an introduction to the basics of heliophysics, explaining the Sun's structure, the magnetic forces at work, and how these processes lead to solar eruptions like flares and coronal mass ejections (CMEs). From there, we'll explore how these solar events travel through the solar system, creating space weather that affects Earth's atmosphere, technology, and even our daily lives. Notable space weather events from history and the Sun's current activity will be discussed, as well as an overview of the current fleet of spacecraft observing the Sun. We'll end with a brief look at some of my current research on solar energetic particles (SEPs) and how they spread throughout the heliosphere.

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