

Bill Murtagh

Program Coordinator, NOAA Space Weather Prediction Center

Speaker Bio:

Bill Murtagh currently serves as the Program Coordinator for the National Oceanic and Atmospheric Administration (NOAA) Space Weather Prediction Center (SWPC) in Boulder, Colorado. Bill is NOAA's space weather lead in coordinating preparedness and response efforts with industry, emergency managers, and government officials around the world. Bill is NOAA's lead in White House committees responsible for the development and implementation of the National Space Weather Strategy and Action Plan, and Executive Order 13865 - Coordinating National Resilience to Electromagnetic Pulses. He regularly briefs the White House, Congress, and other government leadership on building national preparedness for space weather storms.

Presentation:

Solar Maximum is here - Is the U.S. Ready?

In December 2023, the NOAA Space Weather Prediction Center issued a revised prediction for Solar Cycle 25 that concludes the cycle will peak at a higher level than that predicted by an expert panel in 2019. The updated prediction now calls for Solar Cycle 25 to peak between January and October of 2024. The prediction gives a rough idea of the frequency and severity of space weather events and hazards, which can interfere with the electrical grid, degrade GPS signals, cause havoc with satellites, and pose radiation hazards to airlines and astronauts. Stronger solar cycles produce more solar storms with greater intensity and therefore pose a larger hazard for these critical technologies and services.

In December 2023, the White House Office of Science and Technology Policy released the Space Weather Implementation Plan which identifies actions to protect national security, and commercial assets and operations against the effects of space weather. The Plan serves as a roadmap for a coordinated, whole-of-Nation approach, to enhance national preparedness for and resilience to the effects of space weather. As we transition through the solar cycle maximum, we provide a mid-cycle assessment of the major space weather events and their effects on our

technology infrastructure. We also highlight the progress and challenges of meeting the objectives of the Implementation Plan in our goal to mitigate the effects of space weather on the people, economy, and security of the Nation.