

# Space Weather Storms: Responding to Global Concerns of a 'Space Katrina'

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The Space Weather Prediction Center (SWPC), one of the nine NWS National Centers for Environmental Prediction, is the nation's official source for space weather alerts and warnings. The rapid advances in the technology sector and our fast growing dependency on space-based systems have resulted in an ever-increasing vulnerability to hazardous space weather. NWS efforts to support aviation, emergency response efforts, and electric power grids, now extend to space and solar storms. Other key sectors impacted by space weather include satellite communications, and GPS applications, which pervade modern society. The concerns are growing as we begin our ascent into the next solar maximum, expected to peak in 2013.

This presentation will address the different types of space weather events and how they impact our technological infrastructure. Special emphasis will be given to the electric power grid vulnerability and the potentially catastrophic consequences of an extreme geomagnetic storm.

## **PRESENTER'S BIO**

Bill Murtagh is the Program Coordinator for the National Oceanic and Atmospheric Administration (NOAA) Space Weather Prediction Center (SWPC) in Boulder, Colorado. The SWPC is the official source for space weather forecast and warning services in the United States. He is also the principal point of contact for NOAA's space weather customer and stakeholder activities. Bill works closely with private industry, national and international agencies, emergency managers, and government officials to ensure operational impacts of space weather are minimized through appropriate response and adequate preparedness plans.

Before joining NOAA, Bill was a meteorologist and space weather forecaster in the U.S. Air Force. Bill transferred to the SWPC in 1997 as a space weather forecaster and liaison between NOAA and the U.S. Air Force. He joined NOAA in 2003 after retiring from the Air Force with 23 years of service.

Bill is a regular guest speaker at universities, government agencies, and national and international conferences, and recently provided presentations in the House of Representatives in Washington D.C. and at the White House. He has provided numerous interviews to major media outlets in the U.S. and around the world, and was recently featured in the IMAX movie, *3D Sun*, which was shown in the National Air and Space Museum in Washington D.C. and in IMAX and 3D theaters around the world.