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The GOES-R Spacecraft Space Weather Instruments and Level 2+ Products

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Since their inception in the 1970s, the GOES satellites have monitored the sources of space weather on the sun and the effects of space weather at Earth. The space weather instruments on GOES-R will monitor: solar X-rays, UV light, solar energetic particles, magnetospheric energetic particles, galactic cosmic rays, and Earth's magnetic field. These measurements are important for providing alerts and warnings to many customers, including satellite operators, the power utilities, and NASA's human activities in space. This presentation reviews the capabilities of the GOES-R space weather instruments and describes the space weather Level 2+ products that are being developed for GOES-R. These new and continuing data products will be an integral part of NOAA space weather operations in the GOES-R era.