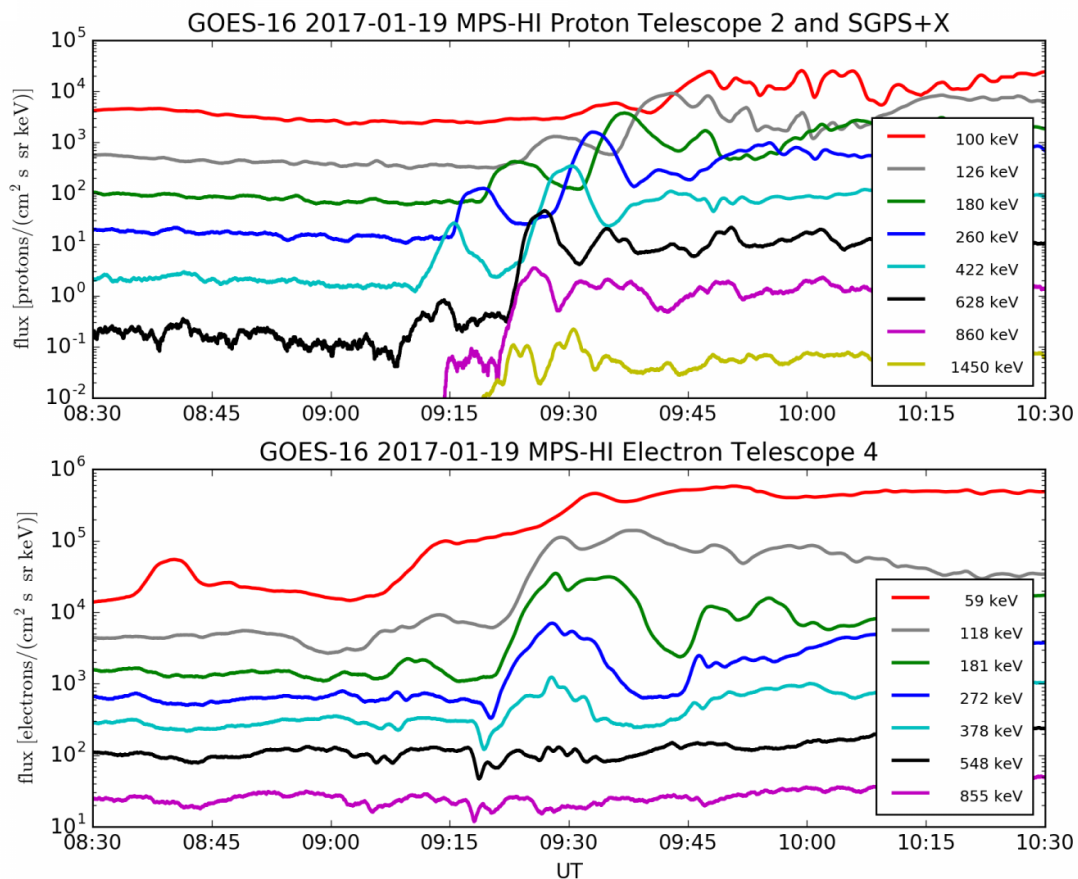


New data from NOAA GOES-16's Space Environment In-Situ Suite (SEISS) instrument

February 10 2017



This plot of SEISS data shows injections of protons and electrons observed by the Magnetospheric Particle Sensors MPS-HI and Solar and Galactic Proton Sensor (SGPS) on Jan. 19, 2017. MPS-HI and SGPS are two of the individual

sensor units on SEISS. The fluxes shown are from the MPS-HI telescopes that look radially outward from the Earth, and from the lowest-energy channel observed by the eastward-looking SGPS. Credit: NOAA/NASA

The new Space Environment In-Situ Suite (SEISS) instrument onboard NOAA's GOES-16 is working and successfully sending data back to Earth.

A plot from SEISS data showed how fluxes of charged particles increased over a few minutes around the satellite on January 19, 2017. These particles are often associated with brilliant displays of [aurora borealis](#) at northern latitudes and australis at southern latitudes; however, they can pose a radiation hazard to astronauts and other satellites, and threaten radio communications.

Information from SEISS will help NOAA's Space Weather Prediction Center provide early warning of these high flux events, so astronauts, satellite operators and others can take action to protect lives and equipment.

SEISS is composed of five energetic particle sensor units. The SEISS sensors have been collecting data continuously since January 8, 2017, with an amplitude, energy and time resolution that is greater than earlier generations of NOAA's [geostationary satellites](#).

SEISS was built by Assurance Technology Corporation and its subcontractor, the University of New Hampshire.

NASA successfully launched GOES-R at 6:42 p.m. EST on November 19, 2016 from Cape Canaveral Air Force Station in Florida and it was renamed GOES-16 when it achieved orbit. GOES-16 is now observing

the planet from an equatorial view approximately 22,300 miles above the surface of the Earth.

NOAA's satellites are the backbone of its life-saving weather forecasts. GOES-16 will build upon and extend the more than 40-year legacy of satellite observations from NOAA that the American public has come to rely upon.



Artist's concept of the GOES-16 aircraft is shown. Credit: NASA

Provided by NASA's Goddard Space Flight Center

Citation: New data from NOAA GOES-16's Space Environment In-Situ Suite (SEISS) instrument (2017, February 10) retrieved 16 July 2024 from <https://phys.org/news/2017-02-noaa-goes-space-environment-in-situ.html>

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