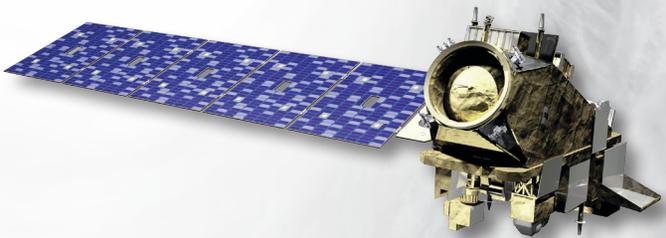


SATELLITE FLEET



▶ **SUOMI NPP**
Launch: 2011

▶ **JPSS-1**
Launch: 2017



▶ **JPSS-2**
Launch: 2021

▶ **JPSS-3**
Launch: 2026

▶ **JPSS-4**
Launch: 2031

JPSS BENEFITS

JPSS satellites simultaneously provide sophisticated meteorological data and observations of atmosphere, ocean and land for short-term, seasonal and long-term monitoring and forecasting.

JPSS increases the timeliness and accuracy of forecasts three to seven days in advance of a severe weather event.

NOAA's National Weather Service uses JPSS data as critical input for numerical forecast models, providing the basis for these mid-range forecasts. These forecasts allow for early warnings and enable emergency managers to make timely decisions to protect American lives and property, including ordering effective evacuations.

Information from JPSS supports every area of NOAA's mission, including ensuring a more "Weather-Ready Nation," healthy coasts, resilient coastal communities and understanding changes in climate.

JPSS satellites circle the Earth from pole-to-pole providing full global coverage twice a day. Polar satellites are considered the backbone of the weather forecast.



To learn more visit:
JPSS.NOAA.GOV

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JPSS

JOINT POLAR SATELLITE SYSTEM



THE NATION'S ADVANCED SERIES
OF POLAR-ORBITING OPERATIONAL
ENVIRONMENTAL SATELLITES



JPSS is a collaborative effort between NOAA and NASA.

ADVANCED TECHNOLOGY

JPSS represents significant technological and scientific advancements in observations used for severe weather prediction and environmental monitoring.

JPSS includes five polar-orbiting satellites with five instruments and versatile ground system. The satellites are the Suomi National Polar-orbiting Partnership (Suomi NPP), JPSS-1 or NOAA-20, as it will be known once on-orbit, JPSS-2, JPSS-3 and JPSS-4 satellites.

Suomi NPP, launched in October 2011, is a bridge between NOAA's legacy polar satellite fleet and JPSS. It was declared NOAA's primary weather satellite on May 1, 2014. The JPSS series will continue on the success of Suomi NPP, providing operational continuity of satellite based observations through 2038.

The JPSS program includes a ground system comprised of a global network of stations that control the spacecraft, ingest and process satellite instrument data and distribute the data and derived products to users worldwide.

The state-of-the-art instruments that fly on JPSS satellites provide critical data that enable accurate and timely forecasts. JPSS data and products support the National Weather Service Numerical Weather Prediction models and each of the 122 Weather Forecast Offices.

▶ ADVANCED TECHNOLOGY MICROWAVE SOUNDER (ATMS)

▶ CROSS-TRACK INFRARED SOUNDER (CrIS)

▶ VISIBLE INFRARED IMAGING RADIOMETER SUITE (VIIRS)

▶ OZONE MAPPING AND PROFILER SUITE (OMPS)

▶ THE CLOUDS AND THE EARTH'S RADIANT ENERGY SYSTEM (CERES)/NASA'S RADIATION BUDGET INSTRUMENT (RBI)

ADVANCED CAPABILITIES

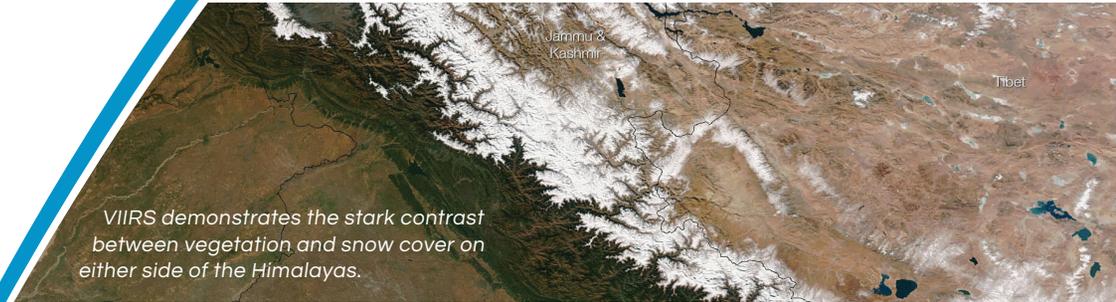
- ▶ Atmospheric temperature/moisture profiles
- ▶ Polar satellite derived winds (speed/direction/height)
- ▶ Vegetation greenness indices and health
- ▶ Alaska Region imagery for nowcasting
- ▶ Sea surface temperature, ocean color
- ▶ Sea ice extent and snow cover/depth
- ▶ Significant precipitation and floods
- ▶ Thunderstorms, tornado potential
- ▶ Hurricane intensity and position
- ▶ Dense fog
- ▶ Volcanic ash
- ▶ Fire and smoke
- ▶ Ozone
- ▶ Oil spills



Ice breakup on the Beaufort Sea north of Alaska poses commercial and navigation challenges.



Infrared detectors locate wildfires in Colorado and New Mexico.



VIIRS demonstrates the stark contrast between vegetation and snow cover on either side of the Himalayas.



Infrared light highlights deep convection within Hurricane Sandy.



Ocean color reveals plankton blooms in the Baltic Sea.