



National Oceanic and Atmospheric Administration

U.S. Department of Commerce

IOCCG Announcement of JPSS NOAA-20 Launch

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The Joint Polar Satellite System (JPSS)-1 was successfully launched from Vandenberg Air Force Base, California on 18 November 2017 at 1:47 AM PST. JPSS-1 will be renamed NOAA-20 when it reaches its final orbit. JPSS-1 hosts several instruments, including the Visible Infrared Imaging Radiometric Suite (VIIRS), which will routinely provide global ocean color data products (same as VIIRS on SNPP). Both VIIRS on JPSS-1/NOAA-20 and SNPP are in an afternoon orbit, complementary to the morning orbit for ESA/EUMETSAT OLCI on Sentinel-3A and 3B.

That said, JPSS-1/NOAA-20 has been purposely shifted 50 minutes from SNPP, thus the two VIIRS are also complementary to each other for providing more complete daily global ocean color coverage, i.e., gaps due to sun glint, large sensor-zenith angles, etc. can be better covered by two sensors. This is an unprecedented and exciting time for ocean color remote sensing, with at least four *operational* satellite sensors for global ocean color measurements presently on-orbit (VIIRS on SNPP and JPSS-1/NOAA-20, OLCI on Sentinel-3A and 3B).

The VIIRS-JPSS-1 orbit testing and evaluation will occur in two phases. The first phase will be at L + 25 days (12/13/2017), after the door is opened for visible to NIR bands. Thus, the visible and NIR radiance data will be following in after that. The second phase will be at L + 48 days (1/5/2018), after the cryoradiator is opened and stabilized for the SWIR/MWIR, LWIR, and DNB data. NOAA is responsible for processing and distributing the VIIRS global ocean color data. The NOAA Ocean Color team is ready and awaiting data from VIIRS on JPSS-1/NOAA-20. True Color images are expected for viewing in [OCView](#), the OC-EDR online viewing tool, as soon as data are available (e.g., in mid-December 2017). The NOAA Ocean Color Team will begin processing the JPSS-1/NOAA-20 ocean color data products through NOAA's MSL12 processing system from launch. The standard VIIRS ocean color products include normalized water-leaving radiance spectra, chlorophyll-a, diffuse attenuation coefficient at 490 nm and at the domain of the PAR, and QA Score (for measuring data quality), as well as many experimental products, e.g., inherent optical properties (IOPs). VIIRS global ocean color product imagery will also be shown in [OCView](#); all the data products are freely available through [NOAA CoastWatch/OceanWatch](#).

Release of the JPSS-1/NOAA-20 ocean color data products is estimated at about launch plus 90 days, but will depend on sensor performance. When available, JPSS-1/NOAA-20 ocean color data products will be distributed through [NOAA CoastWatch/OceanWatch](#). It is also noted that VIIRS-SNPP global ocean color data are being routinely produced by the NOAA Ocean Color Team, with imagery readily available for viewing in [OCView](#), and all the VIIRS ocean data, including the most recent mission-long reprocessed VIIRS-SNPP ocean color data set, freely available through [NOAA CoastWatch/OceanWatch](#).