



## The VIIRS Collection: Calibration, Validation, and Application

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### Message from the Collection Editors

The Visible Infrared Imaging Radiometer Suite (VIIRS) stands as a pivotal instrument aboard the Suomi National Polar-Orbiting Partnership (SNPP), NOAA-20, NOAA-21, and future JPSS spacecrafts. Commencing with SNPP in 2011, VIIRS has consistently delivered high-quality global observations for more than a decade, extending its support to diverse applications. These applications encompass weather forecasting, environmental monitoring, ocean and land studies, climate change research, and the monitoring of hazards such as hurricanes, fires, volcanoes, floods, storms, and tornadoes, as well as facilitating disaster relief efforts. The calibration and validation teams supporting NOAA and NASA VIIRS sensor data record (SDR) products perform research and development using advanced calibration and validation algorithms and methodologies for both instrument prelaunch and postlaunch. The central purpose of this Special Issue is to present a range of research on VIIRS calibration and validation, and to explore the applications enabled by VIIRS onboard SNPP, NOAA-20, and NOAA-21; it also aims to provide an overview of the prelaunch activities for VIIRS on future JPSS missions.





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