

NPP VIIRS Land Product Status

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Several fundamental land surface data products - surface reflectance, vegetation index, surface albedo, land surface temperature, surface type and active fires - are generated from the NPP Visible Infrared Imager Radiometer Suite (VIIRS) on the Suomi National Polar-orbiting Partnership (NPP) satellite. Current operational algorithms build on heritage algorithms, including those for the NASA EOS Moderate Resolution Imaging Spectroradiometer (MODIS). Development and maintenance of the operational land products has transitioned to government-led Algorithm Teams supported by the Jpoint Polar Satellite System (JPSS) program. These activities, together with the refinement and execution of the previously established Land Product Validation program, are carried out in close coordination with and active participation by the NASA NPP Land Science Team and Land PEATE (Product Evaluation and Test Element). Pre-launch preparatory activities include detailed algorithm assessments, adoption and development of algorithm testing and evaluation systems, and the refinement and rehearsal of product validation during the post-launch intensive calibration and validation period. This presentation includes updates on the status of each NPP VIIRS land product, proposed enhancements and algorithm updates to improve product performance for real-time and long-term monitoring, and initial results from the immediate post-launch evaluation.