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Abstract: **The GOES-R Land Surface Temperature Product**

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The Geostationary Operational Environmental Satellite - R series (GOES-R), the follow-on to the current GOES system, is the next generation of geosynchronous environmental satellite. It is scheduled to launch in November 2016. The Advanced Baseline Imager (ABI) onboard GOES-R will be able to provide valuable data for a wide range of qualitative and quantitative weather, oceanographic, climate, and environmental applications. Compared to its predecessors from previous GOES satellites, ABI offers more spectral bands, higher spatial resolution, and faster imaging rate. It enables the monitoring of the earth at a finer time and space scales and provides significant advantages in retrieving many high level products including the Land Surface Temperature (LST).

At STAR/NOAA NESDIS, the GOES-R LST AWG is responsible for developing, improving, calibrating, and validating the GOES-R ABI LST product. Currently, two retrieval algorithms for ABI LST have been developed/evaluated and proposed to the GOES-R management, the "baseline" algorithm, which will be in operation after the satellite launch, and the "enterprise" one, which is currently being tested and will be implemented in the AIT framework. The final goal is to replace the former with the enterprise algorithm because of its multiple advantages. Information on related activities and accomplishments along with the most recent status of the LST algorithm development and evaluation will be presented.