

GOES-16 Advanced Baseline Imager (ABI) On-Orbit Performance

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The GOES-16 Advanced Baseline Imager (ABI) is the first of the United States' next-generation geostationary imagers for weather and environmental monitoring. The design and capabilities are the same as Himawari-8 and -9, but with some differences in the spectral bands. With three times the spectral bands, four times the resolution, and five times the image collection rate, the GOES-16 ABI will significantly improve the quality and frequency of existing data products and provide many new weather and environmental products. It is currently undergoing post launch testing and is scheduled to become operational in November 2017.

The ABI post-launch test campaign takes place from January to June 2017. These tests verify compliance with requirements as well as thoroughly characterize the performance of the instrument, including long-term performance trending. This presentation provides measured, quantitative performance results showing the very high quality of ABI's imagery, including SNR and NEdT, MTF, line-of-sight stability, navigation and registration, and calibration stability. Although the post-launch testing will not be complete, all of these critical performance aspects will have been measured and trended. Understanding the quality of this imagery is the first step in assessing the quality of the many ABI-based L2+ data products.

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