Intro for episode page: Researchers and other satellite programs rely on the scientifically correct data from Landsat—every pixel and every spectral band that is measured.

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**Eyes on Earth Episode 134 – Data Accuracy: The Calibration and Validation of Landsat**

**Summary**: Landsat is the longest running, continuously operating record of Earth observations, and it’s the gold standard reference point that other civil and commercial satellite programs trust. If a researcher is studying multiple Landsat images of the same spot on Earth, and there is something in those images that suggests a change, that researcher needs to have the confidence that that change is a real change on the landscape and not because of something that changed or degraded in the sensor. Think of it this way. We are using a system to quantify changes on the Earth—we need to make sure the system itself is not changing.

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**Producer**: Tom Adamson (contractor for USGS EROS)

**Release date**: Monday, May 5, 2025

**More about Calibration and Validation**:

* [EROS CalVal Center of Excellence (ECCOE)](https://www.usgs.gov/calval)
* [ECCOE Test Sites Catalog](https://www.usgs.gov/tools/test-sites-catalog)
* [Joint Agency Commercial Imagery Evaluation (JACIE)](https://www.usgs.gov/calval/jacie)
* [Landsat Missions](https://www.usgs.gov/landsat-missions)

**Related Episodes:**

* [Episode 94 – EROS 50th: Collaborations with SDSU](https://www.usgs.gov/centers/eros/science/eyes-earth-episode-94-eros-50th-collaborations-sdsu)
* [Episode 74 – A Satellite Cross Calibration Mission](https://www.usgs.gov/centers/eros/science/eyes-earth-episode-74-a-satellite-cross-calibration-mission)
* [Episode 32 – Lunar Calibration](https://www.usgs.gov/centers/eros/eyes-earth-episode-32-lunar-calibration)

**Keywords**: Earth Resources Observation and Science (EROS) Center, Eyes on Earth, calibration, validation, Landsat, remote sensing, test sites, radiometry, radiometric calibration, geometric calibration, ECCOE, EROS Calibration and Validation Center of Excellence

<https://cms.usgs.gov/media/images/thumbnail-image-eoe-episode-134-data-accuracy-calibration-and-validation-landsat>

**Homepage descriptor**: This episode of our remote sensing podcast provides an overview of the work that goes into calibrating and validating Landsat data.

**Topics this could go in:** Data, EROS, Remote Sensing, Landsat

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