2014 JACIE Civil Commercial Imagery Evaluation Workshop
OMB-OSTP Direction to NASA

- $30 million in FY14 for NASA to study options for a future sustained land imaging system, in collaboration with USGS.

- The study shall define a system for sustained global land-imaging multispectral and thermal infrared information for an approximately 20-year period starting in 2018.

- The study should provide options which consider various weightings of near-term capability, continuity/gap risk mitigation, and technology infusion over the system's lifetime.

- While the basic system requirement is the continuation of global data and information having the quality of Landsat-8 products, the study should consider refined capabilities requested by the user communities.
Percentile Method
Welcome to JACIE
GLOBAL SCIENCE & TECHNOLOGY, INC.

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JACIE 2014
Operational Challenges to Contemporary Satellite Imagery Characterization

Joint 2014 JACIE Workshop and ASPRS 2014 Annual Conference

March 23 - 28, 2014
Louisville, Kentucky USA
Smaller detectors are needed to keep the sensor size down but decreases SNR.

\[ DN = g \tau A_d \frac{\pi}{4f^2} \int_0^\infty L(\lambda) S(\lambda) d\lambda \]

- Digital Number
- \( \lambda \) - Wavelength
- Spectral Radiance
- Spectral Response
- Integration Time
- Gain
- \( f \) - number

**Notes:**
- \( L(\lambda) \) - Spectral Radiance
- \( A_d \) - Detector Area
- \( f \# \) - F-number
Introduction

- For many years, Landsat data has been used to monitor land cover and deforestation in different parts of the world.
- Optical remote sensing was widely used instrument to classify land cover.
- In the tropics, image classification using optical remote sensing is difficult.
- This is due to lack of good quality Landsat or other optical data.
THE ABSOLUTE RADIG CALIBRATION OF EAR OBSERVING SENSORS GROUND-BASED TECH
Sensor interconsistency to achieve climate-quality measurements
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