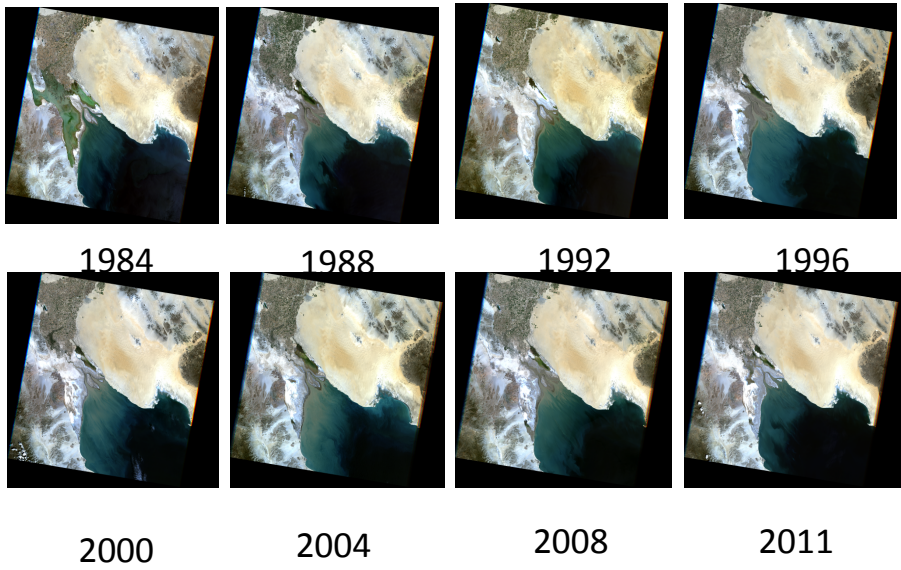
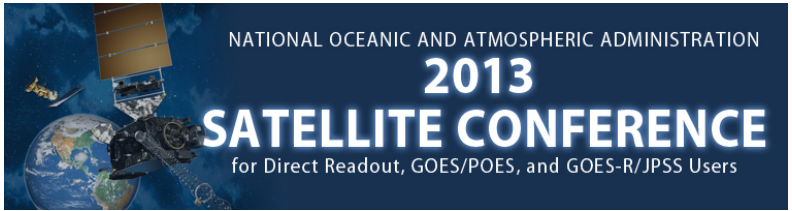
Sensor Calibration Inter-comparison using the Sonoran Desert

A. Angal [1], X. Xiong [2], A. Wu [3], G. Chander [4] and T. Choi [3]

[1] Science Systems and Application Inc. [2] NASA GSFC [3] Sigma Space Corp. [4] SGT/USGS EROS

The Sonoran Desert (+32.35°,-114.65°) is a large flat area, partially vegetated, with typical horizontal visibilities of around 30-45 km

- The goal of this work is to demonstrate the suitability and assess its temporal stability for sensor calibration intercomparison efforts
- Study uses measurements from Terra and Aqua MODIS, Landsat 7 Enhanced Thematic Mapper (ETM+), and Landsat 5 Thematic Mapper (TM)
- Landsat Climate Data Record (CDR) Surface Reflectance product generated using ETM+ has been used to assess the suitability of the Sonoran desert target for long-term radiometric calibration.



Sonoran Desert seen by Landsat 5 Thematic Mapper (RGB composite)