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2. **ABSTRACT TITLE**
Radiometric calibration of the Multi-angle Imaging Spectro-Radiometer

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4. **PRESENTATION**
Oral Presentation

5. **ABSTRACT TEXT**
The EOS/ MISR instrument has completed preflight calibration and characterization of it's nine cameras. The radiometric calibration requirements includes absolute radiometric accuracy to 3% (1σ confidence). To meet this challenging requirement MISR has employed detector based calibration methodology. The source, a 1,65 **m** integrating sphere, is spatially and spectrally featureless. I'bus, when viewing scenes that arc likewise homogeneous, the sensor incident radiance is easily retrieved to high accuracy. To enhance the radiance product for arbitrary scene

types, however, MISR is planning to incorporate spectral out-of-hand, point-spread function deconvolution, and pixel nonuniformity of response corrections. A summary of the preflight calibration is presented in this paper, as well as the error uncertainties for specific scene types with and without these processing corrections.

6. **KEY WORDS**

Radiometric calibration, EOS, MISR

7. **BRIEF BIOGRAPHY**

Carol J. (Kastner) Bruegge received BA and MS degrees in Applied Physics at the University of California, San Diego, in 1978, and MS and Ph.D. degrees in Optical Sciences at the University of Arizona, Tucson, in 1985. Her experience is in the areas of terrestrial remote sensing, calibration of remote sensing sensors, radiative transfer, and use of ground-truth measurements for validation and calibration of airborne or in-orbit sensors and sensor data, Presently employed by JPL, she serves as the instrument Scientist for the Earth Observing System (EOS)/ Multi-angle imaging SpectroRadiometer (MISR). Additionally, she has provided support in the absolute radiometric calibration of the Landsat Thematic Mapper, and other airborne and spaceborne instruments. She has been a Principal investigator in the First International Satellite Land Surface Climatology Program (ISLSCP) Field Experiment (FIFE), a ground-truth hydrology experiment conducted from 1987 through 1989.