



Multi-angle Imaging SpectroRadiometer (MISR) Calibration and Test Program

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Terry Reilly	Project Manager
Valerie Duval	Calibration Engineer
Carlos Jorquera	Photodiode assembly and test
Nadine Chrien	Radiometric model, polarization, BRF analysis
Barbara Gaitley	Radiometric and spectral data analysis
Ghobie Saghri	Radiometric and spectral facility design
Daniel Preston	Filters/ flight camera testing
Teré Smith	Integration and test
Eric Hochberg	Optical Characterization chamber
Robert Korechoff	MTF, focus, special studies
David Haner	Spectralon BRF testing
Brian Chafin	In-flight data processing software



OUTLINE



The MISR/ AirMISR instruments

Detector-based calibration

Manufacture of the laboratory and flight standards

Traceability to Système International Units

NIST verification (EOS round-robin experiment)

Test program

"Optical Characterization Chamber": MTF, PSF, focus

"Radiometric Characterization Chamber": Radiometric, Spectral Polarization

Instrument level tests: image verification, camera pointing, data fidelity

Special studies

Out-of-band spectral response, focal-plane scattering, offset video

In-flight calibration

On-board calibrator, vicarious calibration

Reconciling multiple calibrations

Data products

The Ancillary Radiometric Product



PUBLICATIONS LIST (SELECT PAPERS)



Complete publication list is available via the Internet

<http://www-misr.jpl.nasa.gov> ==> Publications

IEEE'98 EOS Special issue

Bruegge, et. al. See Calibration Overview.

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Diffuse panel studies

- T. R. O'Brian, E. A. Early, B. C. Johnson, J. J. Butler, C. J. Bruegge, S. Biggar, P. Spyak, and M. Pavlov, "Initial results of the bidirectional reflectance characterization round-robin in support of EOS AM-1," Conference issue: New Developments and Applications in Optical Radiometry (NEWRAD '97), *Metrologia*, in preparation.
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