

CALIBRATION WORKING GROUP RECOMMENDATIONS AND ACTION ITEMS

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May 3, 1996

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General concern about the truncated test and calibration schedule at SBRS. If time is made up by the cancellation of some activities (e.g. SRBC) or schedule slack is available, this should be used for expanded thermal vacuum testing to better establish stability and linearity by using more plateaus. (Weber)

There is concern regarding thermal radiation from the nadir aperture door, sun shade, and space-view-port surround falling on the scan mirror and blackbody. The effect should be simulated in T/V tests. (Weber)

Recommend that the work on Solar Radiation-Based Calibration (SRBC) be halted because of the inadequate quality of the heliostat mirror. (Weber)

Strongly recommend that SRBC be implemented for PM-1. (Barnes and Weber)

Require that SBRS measure the spectral BRDFs across the surfaces of the flight solar diffusers (not just the witness samples) for AM-1 and PM-1. (Weber and Butler)

Strongly recommend that SBRS participate in the Solar Diffuser and SIS Round-Robin comparisons, particularly now that SRBC has been canceled. (Weber and Butler)

Recommend that further study of the ScMA as a substitute for the SRBC be pursued and that the test should be implemented if the scheme is feasible. (Weber)

Recommend SBRS study the feasibility of measuring far-field stray light effects to validate the OARDAS model as a basis for determining L1B radiometric uncertainties. (Weber)

MCST must devise a method for monitoring far-field stray light in-flight. (Guenther)

For the ocean color bands, Esaias' study shows that about 56% of "clear" ocean pixels will have a scene dependent error greater than 1%. MCST should study, in consultation with the science team, the provision of an estimate of the radiometric error for the Level-1B product. (Guenther)

SBRS should employ the SRCA more frequently during test and calibration activities to check long-term stability of SRCA and MODIS. They should also perform system-level tests of stray light when the SRCA is in use. (Weber)

SBRS should run SRCA and BB with the earth view illumination by a "stray light" source and the SIS. (Weber)

Recommend that the Level-1B product should not be corrected for out-of-band spectral response effects (which are scene dependent).

FIRST JOINT VICARIOUS CALIBRATION FIELD CAMPAIGN

The aim is to compare TOA radiances predicted by the various participating groups when measuring the same playa area at the same time. Up to three such estimates will be made each day to simulate the acquisition times of the AM-1 platform sensors at the solstices and equinoxes.

To be conducted at Lunar Lake and Railroad playa, Nevada from May 30 to June 7, 1996.

Participants: MODIS, ASTER, and MISR calibration scientists, several team validation scientists, groups from LANL and SDSU.

Anticipated aircraft-sensor support: AAS, AVIRIS(?), HAUCSS, TIMS and a light aircraft.