

ATMOSPHERIC GROUP REPORT

MODIS SCIENCE TEAM MEETING OCT., 1994

* ATBD update, integration of products and delivery

- Intelligent combination of the water vapor products (NIR - operational and IR - research),
- Validation of water vapor products: Comparison with the sunphotometer network, comparison of NIR and IR methods.
- Combination of cloud phase from NIR and IR techniques

- CLOUD MASK simulation: application of the cloud mask to real scene data (MAS-50 ch) and subsequent application to MODIS algorithms (may require a semi-natural / semi-simulated scenes).

- ATMOSPHERIC CORRECTIONS - improving the validation, aerosol climatology parts.

- FIRES - SCAR-C data base for algorithm derivation.

* SCAR-C (B?)

- Fires
- Smoke
- Burn scars

Wild Prescribed

* Cirrus Clouds

- Tri spectral Phase indicator: 8, 11, 12 μm
Kathy Strabala, Wisconsin
- Cirrus optical properties and RT: phase function and polarization calculations and comparison with measurements. Particle shape and size
K. N. Liou, Utah
- Atmospheric correction for thin cirrus:
Correction based on information in the image itself, further steps require theory.
Bo-Cai Gao and Yoram Kaufman

* Focus group: Aerosol over ocean and correction

- Measurements: sun/sky radiometers
- black carbon and absorption measurements
- revisits by aircraft (MAS), satellite data
- lidar

- MODIS/MISR - Gordon, Kaufman, Tanre
- POLDER - Tanre
- OCTS/GLI - Nakajima
- HQR - Frouin

- assumptions made in the remote sensing
- dust/no dust - absorption
- actual phase function