

Sunphotometer Network

- Programmatic Issues
 - Current R&A funding ramping down to close in 1 year (FY 96:100k)
 - 96 / 97 budget needs for maintenance of the network and data system (@ \$ 375 k p.a. with no new NASA instrument buys)
 - The need for NASA management to push for interagency coordination (NSF / NOAA / DOE - CENR / Academy Aerosol Panel ?)
 - Need to include GMS for Asian coverage (Japan / NASA : Nakajima)
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Sunphotometer Network

- **Desired Evolution of 'AERONET'**
 - **Near Term (96/97)**
 - » **60 instruments (13 instrument requests pending for '96)**
 - » **Data System integration and management within ESDIS and DAAC system inc. archive and distribution**
 - » **Develop interagency coordination (AEROCE (NSF) / ARM (DOE) / NOAA Regional Monitoring Network)**
 - » **Explore international linkages (WMO / GAW)**
 - **Post Launch (1998 - 2000)**
 - » **100 instruments distributed globally**
 - » **EOS instrument validation tool**
 - » **NASA/EOS contribution to GCRP**
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Current Distribution of Photometers in the Network

- **Brazil 10**
- **Boreas 5**
- **E. Canada 2**
- **US LTER 4**
- **W. Africa 10**
- **Bermuda 1**
- **Barbados 1**
- **Hawaii 1**
- **Miami 1**
- **Arizona 1**
- **Zambia 1**

» **13 instrument requests pending for '96**

Sunphotometer Network

- **EOS Rationale**
 - Land /Ocean /Atmosphere Requirement
 - Multi-instrument EOS needs (MODIS / MISR)
 - Validation of surface reflectance / aerosol products / and developing an aerosol climatology
- **Current Status of the International Network**
 - 35 robotic CIMEL instruments (NASA funded 15)
 - Satellite communication (GOES / METEOSAT)
 - Data System (P.I. grown and based)
 - Activity growing beyond current capacity

Land Validation Plans

On-going community activities

- **MODIS Land Test Sites**

- multi-sensor acquisitions, long term monitoring, strong existing ground data program, infrastructure e.g. LTER network, IGBP BIG Transects
- initiated linkage to LP Global Land Cover Test Site Project, IGBP-DIS Global 1km land cover confidence sites - (TM, AVHRR, Land Cover, DEM data)
- need for additional MODIS ground related instrumentation and data collection on surface parameters and at wider range of type sites (parameters include directional reflectance, albedo, surface temperature, fire, LAI/FPAR, NPP) - potential for coordination with other USG programs e.g. ARM, GAP and NGO's
- need for additional sensor acquisitions e.g. MAS, Polder, SeaWifs
- larger distribution of low intensity test sites to supplement the small number of NASA intensive field campaigns e.g. FIFE, Boreas, HAPEX, LBA

- **Sunphotometer Network (Aeronet)**

- for land surface reflectance product validation

- **Airborne Campaigns (MAS / AVIRIS etc.)**

- need to support contemporaneous ground data collection e.g. LAI, radiometry - focus on MODIS resolution.
- simulate MODIS spectral bands.
- opportunity for SWAMP / IDS coordination (e.g. SCAR B)