



# **MODIS Science Team Meeting**

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## What's New/FY05 and FY06 Budget

- Mission Science Team Reductions
- Originally:
  - Terra, Aqua Science Data Analysis – 5% (0%)
  - Terra, Aqua Algorithm Refinement – 7.5% (0%)
  - MODIS Team Lead – 12.5% (3%)
- Solution: savings from incremental funding (FY07 installment, ROSES impact) – not needed, full amount (with exception of Team Lead) given upon satisfactory renewals
- Contracts: Theresa Mautino
- Renewals – grants and contracts 90d ahead of award annual end date





## Mission Extension/Senior Review Process

- Effort lead by Chuck Holmes at NASA HQ
- Mimics former Space Science process for extending missions beyond the prime life
- 2-year cycle
- Approved for renewal:
  - Terra (CERES, MOPITT, MISR, ASTER, MODIS)
- Aqua next year





## Future Research....

### **Prior MODIS Team Challenge - reap the full scientific benefits of MODIS, Terra, Aqua, & EOS**

- Make/keep existing data products the best they can be
- Develop new data products to enable important, new scientific and applied uses
- Utilize MODIS (and Terra, EOS) data products to create new scientific understanding of planet Earth and how it is changing – and new applications of this knowledge for decision support





## Outcome of the Challenge – Future Research

### The Continuity and Evolution of Earth System Science

- How does MODIS/EOS fit into a changing world?
- NASA Mission: understand and protect our home planet
- NASA is in the process of advance planning at agency, Directorate, Earth Science levels
- Earth Science is changing from mission science teams to measurement-oriented science teams (ESDRs)
  - Oceans up and running, land in development, atmosphere status
- Modeling, Analysis, Prediction Program (Don Anderson)
- Development of and Linkage to Global Earth Observing System of Systems (GEOSS) – land, ocean, atm
- U.S. Commission on Ocean Policy/National Academy of Sciences – R2O
- NRC Decadal Survey – recommendations in 2006
- Merged products (NPP); new products (land)





## Issues for MODIS Team

- More interdisciplinary algorithm development approaches; share expertise
- Certain algorithm developers and validation investigators should address important deficiencies in key data products (e.g., cloud mask, atmospheric correction)
- Algorithm developers need to represent broader community needs by working with them
- Algorithm refinement PIs need to provide compelling justification for the importance/utility of the algorithm improvements and/or new data products
- MODIS Land, Ocean, & Atmosphere Groups work interactions across the team







# New EOS Data Review Needed

## We need:

- A plan for review of ATBDs for the new and alternative EOS algorithms – after 2-3 years
  - Assess quality and importance of data product suites (and their components)
  - Prioritize EOS data products relative to each other and relative to other needs of the community they serve
  - Recommend changes, improvements, level of service by data systems and archives
  - Must involve community
  - Must take into account NASA (or other) resources / program components required to support the products; involve data system and archive management, NASA HQ Focus Area Leads (program/project managers)
  - [Suggestions Welcome](#)





## Measurement Teams

**Continuing/evolving measurement streams, there will be one science team, competed periodically, that provides scientific guidance to present and future missions and for the utilization of past data sets**

- Support and focus on Climate Data Records
- One data system to ensure a “seamless” time series
- Scientific guidance and priorities must represent broad user community
- Terra and Aqua Science Team Meetings?







## MODIS Team Meeting – March 2005

- Update on “new” team (PI) progress, integration
  - Algorithm Refinement and Validation
  - Science Data Analysis Results
- Issues encountered
  - **Oceans** – data processing, cal/val, annual reviews, meas. team (PI) progress, future planning
  - **Land** – measurement team spin-up (CDRs, ESDRs), instrument update, prod. distribution/archive, future planning
  - **Atmosphere** – calibration, cloud radiative properties, future planning, aerosols, DB, interdisc. science, atm. correction
  - **MCST** – land/ocean/atm, cal/val, striping, earthshine, cross-sensor calibration

