

## GSFC's Earth Sciences (GES) Distributed Active Archive Center (DAAC) for MODIS data Status, Plans and Access

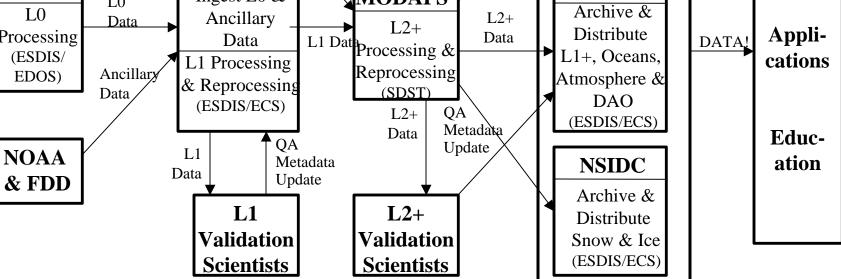
### Presentation to MODIS Science Team June 8, 2000

Greg Leptoukh 301-614-5253 Gregory.Leptoukh@gsfc.nasa.gov

http://daac.gsfc.nasa.gov



#### **At Launch MODIS Data Flow** (Development Team in parenthesis) DAACS **EDC** Archive & DAO Distribute **GES DAAC** DAO Data Land Data Ingest (ESDIS/ECS) DAO DAO Data Data GES **EDOS** Ingest L0 & MODAPS L0 Archive & L0 Ancillary L2+ Data L2+ Distribute Processing Data L1 Dat Processing & Data DATA! (ESDIS/ L1+, Oceans, L1 Processing Reprocessing Ancillar EDOS) Atmosphere & & Reprocessing (SDST) Data DAO (ESDIS/ECS) OA L2+



2

Science



### MODIS Data at the GES DAAC - Status

#### •Ingest - Level 0 data, L2+ data, DAO data

•Current capacity - 173 GB/day (optimal)

•Greatest load, thus far – 160 GB/day

### **Processing – DPREP, PGE01 - PGE03, ocean subsetter (not part of baseline)**

•Current capacity - (to produce 331 GB/day) - 32 CPUs on the floor

•Best throughput - 110%

### •Archive - MODIS Level 0+, DAO, ancillary data

•Current capacity - 2 silos X 500 TB

•About 35 TB archived, thus far (1.5 TB from MODAPS)

#### •Distribution

#### -- all data but MODAPS

•Current local network capacity - 430 GB/day electronically (best case -

subscriptions); 220 GB/day on tape

•Best distribution - 324 GB/day electronically (>250 GB/day sustained)

#### -- data to MODAPS

- •'96 baseline: 227 GB/day
- •Best distribution 280 GB/day



- •All baselined critical requirements met
- •All baselined essential requirements met except tape distribution
- •Stability issues are problematic and continue to be studied.
- •Approximately 87% of Level 0 data received has been successfully processed and products distributed to MODAPS for higher level processing



### MODIS Data at the GES DAAC -What's Coming

- More L2+ products ingested into the GES DAAC
- Additional CPUs to enhance processing throughput
- Maximum capacity tape distribution
- More products distributed publicly
- More distribution to the User Community
- Additional User Services person to help handle the load
- ECS drop 5B installation
- Preparations (functionality, performance, operations, etc.) for Aqua



# GES DAAC Data Access

Four Ways to Access MODIS Data From the GES DAAC:

### - EOS Data Gateway (EDG)

- Access via public and hidden (MODIS Science Team) EDG
- Data is sent by tape or pulled by requestor
- GES DAAC Search&Order Interface
  - Access via GES DAAC Home Page through Links button
  - Data is sent by tape or pulled by requestor

### - Anonymous FTP

- Access via GES DAAC Home Page through On-line FTP button
- Sample products first
- Plans for rolling archive of samples later
- Subscription (for a small number of well-equipped users)
  - Special request to User Services
  - Data automatically pushed to requestor



# GES DAAC User Support

**User Services** 

- HELP DESK 301-614-5473
  - Leena Snoddy
  - Cathy Hughes
  - Frances Bergmann (301-614-5224)
- daac\_usg@gsfcsrvr4.gsfcmo.ecs.nasa.gov or
- daacuso@daac.gsfc.nasa.gov
- MODIS Data Support Team
  - Lead: Greg Leptoukh 301-614-5253
  - Discipline specific science trained data specialists
- Special Data Processing Requests (i.e., reprioritize Level 1 processing)
  - Coordinate with discipline lead
  - Request goes to Ed Masuoka for cross discipline coordination, who will then make 'formal' request of GES DAAC, as appropriate



MODIS Data at the GES DAAC -Summary & Prognosis

- •Baseline functionality delivered by ECS development
  - •Highly manual
  - •Being automated by internal DAAC personnel and ECS development
- •Stability is still problematic but improving
  - •Troubleshooting continues
  - •Unscheduled down time being carefully tracked
- •User Services personnel keeping up with increasing demand
- •June 8, 2000 prognosis:
  - ECS will improve its performance very slowly over the next year
    Functionality will become more reliable (automated) freeing up personnel to perform other jobs, but major new functionality will be sparse
  - •Data not processed will most likely be picked up at reprocessing, when additional capacity is installed in ECS