GEOS DAS
(Goddard EOS Data Assimilation System)

- GEOS-3 DAS Data

    Operational in June 1998 for EOS AM-1

    – Assimilation Configurations

    – Product Types

    – Product File Collections

    – Data File

- GEOS DAS Data for MODIS Version 2 Delivery

Assimilation Configurations

- First Look Analysis

  Basic configuration of GEOS DAS

- GCM Forecast/Simulation

  Objective analysis turned off from first look config.

- Final Platform Analysis

  New EOS observations added to the basic configuration

- Off-line Analysis

  GEOS DAS output assimilated with other observations to produce off-line products

- Pocket Analysis

  Selected instrument data excluded

Product Types

- ## Assimilation Type

  IAU (Incremental Analysis Update) used to combine
  GCM with observational analysis increments

- ## Forecast Type

  GCM runs without analysis increments

- ## Analysis Type

  Conventional analysis without IAU

Product Files Collections

- Prognostic Products (2)

  Prog2d, Prog3d

- Diagnostic Products (11)

diag3d_mom1	diag2d_stress
diag3d_mom2	diag2d_sfcflux
diag3d_temp	diag2d_topcloud
diag3d_moist	diag2d_1sm
diag3d_cloud	diag2d_mist
diag3d_transp	

Data File

Ž Formats

- HDF-EOS (EOSDIS toolkit)
- COARDS (Grads, FERRET, etc.)

Ž Grid

- Horizontal: 2° x 2.5° (l° x 1° by 1999)
- Vertical: 36-pressure and 70-sigma levels
- Temporal:

  - 3-hour for 2D; 6-hour for 3D;

  Ž Prognostic parameters are instantaneous. 3-hourly diagnostic parameters are up-stream time averaged and the 6-hourly centered time averaged.

• Metadata

- ECS Metadata
- COARDS Metadata

GEOS DAS Sample Data for MODIS
Version 2 Delivery

Ž **Product Information**

- GEOS-2 DAS data

- First look analysis configuration

- Time Period: July 31- Sept. 1, 1996

- Resolution: 2° x 2.5° lat-lon

                  70 sigma and 36 pressure levels

                  3 hourly (possible hourly for

                  diagnostic parameters)

-Sample parameters

Parameter	Description	Unit
UWIND	U-Wind	m/s
VWIND	V-Wind	m/s
SPHU	Specific humidity	g/kg
TMPU	Temperature	K
T2M	Temperature at 2 meters	Deg.
T10M	Temperature at 10 meters	Deg.
Q2M	Specific humidity at 2 meters	kg / kg
Q10M	Specific humidity at 10 meters	kg / kg
U2M	U wind at 2 meters	m/s
U10M	U wind at 10 meters	m/s
V2M	V wind at 2 meters	m/s
V10M	V wind at 10 meters	m/s
PS	Surface pressure	mb
LWI	Surface type from land surface model	

Ž When will the sample data set be available?