AN INTRODUCTORY MULTIDISCIPLINARY SET OF MODIS DATA PRODUCTS FOR THE EARTH SCIENCES COMMUNITY

- linear latitude/longitude (1deg Ocean, Atmosphere, 0.25deg Land)
- monthly or 32-day composites for some land products
- From Nov 2000 to Dec 2001
- HDF Format
- Tools are provided for quick analysis
- JPEG images are also provided

Atmosphere products

Aerosol (MOD04)

optical depth (land and ocean),

fine to course mode aerosols ratio (over oceans only).

Column water vapor (MOD 05):

(a) determined by a Near-Infrared (NIR) Method;

(b) determined by Thermal Infrared (TIR) Method

Cloud Properties (MOD 06)

Cirrus Fraction determined by TIR method

Cirrus Reflectance (NIR)

Cloud Top Pressure

Cloud Top Temperature

Cloud Particle Phase

Cloud Cover Fraction

Cloud Optical Thickness for combined ice/liquid phases

Cloud Particle Effective Radius for combined ice/liquid phases

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Cloud Optical Thickness for combined ice/liquid phases

Cloud Particle Effective Radius for combined ice/liquid phases

Ocean products

Sea Surface Temperature (MOD 28)

Ocean Color Sampler for December 2000 only

Water-leaving Radiances (MOD 18)

Chlorophyll-a Concentration (empirical) (MOD 19)

Chlorophyll-a Concentration (semianalytic) (MOD 21)

Chlorophyll-a Concentration (SeaWiFS analog) (MOD 21)

Fluorescence Line Height (MOD 20)

Fluorescence Efficiency (MOD 20)

Calcite Concentration (MOD 25)

Gelbstoff Absorption Coefficient (MOD 24)

Phytoplankton Absorption Coefficient (MOD 36)

Instantaneous PAR (MOD 22)

Instantaneous Absorbed Radiation by Phytoplankton (MOD 22)

Ocean Primary Productivity (MOD 27)

Primary Production Index (Behrenfeld-Falkowski model)

Primary Production Index (Howard-Yoder-Ryan model)

Mixed-layer Depth

Land products

Surface Reflectance (MOD 09)

Surface Temperature (MOD 11)

Normalized Difference Vegetation Index (MOD 13)

Leaf Area Index and Fraction of Photosynthetically Absorbed Radiation

(FPAR)(MOD 15)

Land Albedo (MOD 43)

Land Cover (MOD 12)

Fire occurrence (MOD 14)

Snowcover (MOD 10) at 8-day composited intervals

Tree Cover (part of MOD44B)