

Modis Team Member ( Combined Monthly Reports Jan/Feb/March and Quarterly Report-April 1992)

Justice, C.O. ( University of Maryland, Geography).

The MODIS team member contract activity has involved internal research and planning and collaborative research associated with the following MODIS N Products: Vegetation indices, Land cover, Fire product, Atmospheric Correction.

Due to the present funding levels collaborative research has been given a high priority by this project leading to cost sharing.

Specifically the project has addressed the following topics over the last three months:

- Development of the 6S Code (in collaboration with Tanre, U. Lille) .

- Initiation of the 6S Code testing phase using ASAS data ( in collaboration with the J. Irons and the ASAS team).

- Development of the specifications for an improved sun-photometer and designing the distribution of the Brazilian Network in support of the testing of the algorithms for MODIS Atmospheric Correction ( in collaboration with Holben, Tanre, Kaufman).

- Development of cloud screening for the AVHRR GAC data ( collaboration with GIMMS/UMd Geog/Sellers IDS).

- Analysis of the Pinatubo stratospheric aerosol effect on AVHRR data in the context of atmospheric correction.

- Initiation of global land cover classification using AVHRR data ( collaboration with Sellers IDS project, Townshend UMD Geography). Initiation of Southern African AVHRR fire monitoring (collaboration with USFS, UMD, GIMMS).

In addition the team has represented the project at a number of meetings relevant to the development of MODIS algorithms:

IGBP 1 km Processing Definition Meeting (UMd - January). IGBP GAIM/DIS Meeting on Vegetation Production Assessment by Remote Sensing (UMd - January).

Landsat Pathfinder Meeting (UCSB- February). Dahlem Conference on Fire in the Environment (Berlin- March) TRACE-A / SAFARI PLanning Meeting (Freiburg-March) MISR Team Meeting (JPL- March)

ISLSCP Americas Planning Meeting (GSFC- March)

Anticipated Future Actions:

Continued development of atmospheric correction procedures for the AVHRR.

Development of improved processing of AVHRR global data Continuation of land cover mapping (UMd) Continuation of fire algorithm development and community consensus algorithm for the AVHRR.

Collaboration with Holben/Markham on a Boreas sun photometer proposal to extend the atmospheric correction validation. Participation in the planning for Brazil '93 MAS Campaign. Participation in Trace-A/ SAFARI field program for fire algorithm validation (Aug 1992).

Planning for an IGBP AVHRR Consensus Fire Algorithm Meeting (July 1992). Planning for IGBP-DIS/IGBP IGAC Regional FIRE Workshop in Southern Africa (May 93).

Papers in progress:

Contrast Reduction Atmospheric Correction (IGARS'92 D. Tanre, E. Vermote) Satellite RemoteSensing of Fires (Dahlem: Justice, Malingreau, Setzer) Approach for considering

altitude of sensor and target in remote sensing (Remote Sensing of the Environment E. Vermote and D. Tanre) Vicarious calibration method for the AVHRR (E. Vermote in preparation)