



Department of Geography,
Environmental Management & Energy Studies
University of Johannesburg

in association with
CSIR MERAKA



UNIVERSITY
OF
JOHANNESBURG



NASA GSFC and University Wisconsin

Sponsored by DST



MODIS/AIRS Training and Applications Course
Monday 3 – Friday 7 April 2006

Day one will consist of a high level overview of the Nasa Earth Observation System, focusing on applications and relevance of the MODIS Earth Observation experimental sensors, and the successor NPP and NPOESS instruments that will maintain this capability as longer term. This first day will constitute also a stand-alone seminar aimed at decision makers in government agencies and industry who need to gain insight into the capabilities and relevance of satellite observations.

The following four days will be a professional development course aimed at remote sensing practitioners and students. The schedule will comprise of morning lectures followed by afternoon practical sessions. Computers with the IMAPP software will be provided for students to complete practical exercises. Students will work in groups of 2-3 with intensive tutoring and assistance from the team of lecturers.

COURSE SCHEDULE AND CURRICULUM

Course meeting times are normally 09:00 to 17:00 daily. Note different starting time on Monday 3 (11:00 a.m.)rd.

| Date | Component | Lecturer |
|-------------------------------|--|--|
| 3 April 2006 | MODIS/NPP & NPOESS Seminar for Decision Makers Applications, relevance and future for Africa | |
| Monday 3 11:00 to 16:30 | We would like to use this opportunity to invite managers and decision makers to a one-day high level seminar targeted at decision makers. The focus will be on the applications and relevance to South Africa and Africa of Earth Observation System satellite imagery such as MODIS, and future NPP and NPOESS satellite | Dr. Michael King Liam Gumley Allen Huang |
| April 2006 | MODIS/AIRS Training and Applications course | |
| Tuesday 4 09:00 to 17:00 | <ul style="list-style-type: none"> • Overview of IMAPP and IPOP • Direct Broadcast Capability Overview • MODIS Measurement Characteristics & Information Content • MODIS Data/Imagery (Lab Session) | Allen Huang Liam Gumley |
| Wednesday 5 09:00 to 17:00 | <ul style="list-style-type: none"> • MODIS Products (Land/Atmosphere & Marine) <ul style="list-style-type: none"> □ MODIS Atmosphere Products Clouds; Atmospheric Profiles; Aerosol Optical Thickness □ MODIS Land Products Fire Detection; Surface Reflectance □ MODIS Ocean Products Sea Surface Temperature SeaDAS (Ocean) • MODIS Products (Lab Session) | Kathleen Strabala, Liam Gumley, Tom Rink |
| Thursday 6 09:00 to 17:00 | <ul style="list-style-type: none"> • AIRS Introduction • Hyperspectral/AIRS • Hyperspectral (Lab Session) | Allen Huang, Paolo Antonelli, Tom Rink |
| Friday 7 09:00 to 17:00 | <ul style="list-style-type: none"> • Hyperspectral/AIRS • Hyperspectral (Lab Session) | Allen Huang, Paolo Antonelli, Tom Rink |