

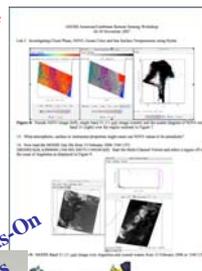
GEOSS Americas/Caribbean Remote Sensing Workshop - Transforming Data into Products 26-30 November 2007

CPTEC/INPE Cachoeira Paulista - São Paulo, Brazil



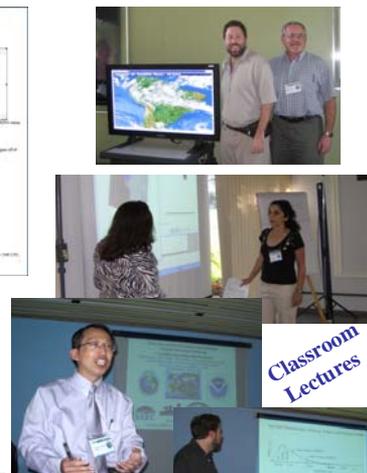
GEOSS Americas/Caribbean Remote Sensing Workshop - Transforming Data into Products 26-30 November 2007 CPTEC/INPE Cachoeira Paulista - São Paulo		
Agenda	Morning	Afternoon
Day 1 Monday 26 Nov.	9:00-9:15 Workshop Opening 9:15-9:45 Overview of Workshop 9:45-10:30 Review of Remote Sensing Fundamentals I 10:30-11:00 Multispectral Imager and Sounder Measurement Information Content 11:00-11:30 Coffee/Tea Break 11:30-12:30 Multispectral Imager and Sounder Measurement Information Content (con't)	12:30-14:00 Lunch Break 14:00-17:30 MODIS Data/Imagery (Lab Session) 15:30-16:00 Coffee/Tea Break 18:00 - 19:30 Reception
Day 2 Tuesday 27 Nov.	8:30-9:30 Review of Remote Sensing Fundamentals II 9:30-10:30 MODIS Atmosphere, Land & Marine Products 10:30-11:00 Coffee/Tea Break 11:00-12:15 Ordering of MODIS Products 12:15-12:30 Direct Broadcast CIMSS Regional Assimilation System (DB-CRAS)	12:30-14:00 Lunch Break 14:00-17:30 MODIS Products (Lab Session) 15:30-16:00 Coffee/Tea Break 17:30 Q/A Session
Day 3 Wednesday 28 Nov.	8:30-9:30 Review of Remote Sensing Fundamentals III 9:30-10:00 Overview of NOAA Geo-Program 10:00-10:30 SSEC Remote Sensing Expertise 10:30-11:00 Coffee/Tea Break 11:00-12:30 Review of GOES-10 Imager	12:30-14:00 Lunch Break 14:00-17:30 GOES-10 Images/ Products (Lab Session) 15:30-16:00 Coffee/Tea Break 17:30 Q/A Session
Day 4 Thursday 29 Nov.	8:30-9:30 Review of Remote Sensing Fundamentals IV 9:30-10:30 Review of GOES-10 Sounder I 10:30-11:00 Coffee/Tea Break 11:00-12:30 Review of GOES-10 Sounder II	12:30-14:00 Lunch Break 14:00-17:30 GOES-10 Soundings (Lab Session) 15:30-16:00 Coffee/Tea Break 17:30 Q/A Session 20:00 - 23:00 Banquet

HYDRA Visualization software used in the Workshop Lab
<http://www.ssec.wisc.edu/hydra/>



Hands-On Labs

HYperspectral-viewer for Development of Research Applications (HYDRA), a free visualization software developed at CIMSS/UW-Madison, was used in the laboratory to assist participants to interrogate and manipulate GOES and MODIS imagery and derived products.



Classroom Lectures

This first tier of the 3-tier NOAA GEOSS regional training workshop was successfully held at the Center for Weather Forecast and Climatic Analysis/National Institute for Space Research (CPTEC/INPE) in Cachoeira Paulista - São Paulo, Brazil. The workshop topics included measurement concepts for the GOES Imager, Sounder, and MODIS; general principles of remote sensing of the land, ocean, and atmosphere; GOES & MODIS algorithms for cloud detection, SST, fire detection, fogs, winds, NDVI, temperature and water vapor profiling, cloud and aerosol optical property retrieval; and synergy of GEO/LEO measurements.

The 44 hours of classroom work included (1) lectures that provided a detailed understanding of GOES and MODIS earth observations along with data to products processing algorithms, and (2) laboratory exercises that allowed hands-on exploration of individual GOES, MODIS and combined GOES / MODIS images along with derived products. The NOAA NESDIS and CIMSS UW-Madison lecture team included Tim Schmit and Gary Wade of NOAA/NESDIS and Allen Huang, Kathy Strabala, and Tom Rink of CIMSS/SSEC from UW-Madison. Each participant was given a certificate of participation for their successful completion of this workshop. CPTEC's formal and CIMSS anonymous survey results (see pie charts) indicate that 95% of participants evaluated the instructors as excellent or good and 92% of the participants definitely would attend this kind of workshop in the future.

This workshop demonstrated the effectiveness of combining classroom lectures and hands-on laboratory exercises for explaining remote sensing theory, GEOSS capabilities, transforming digital data into products, and the utility (as well as the limitation) of satellite imagery and derived products. The strong positive feedback from the participants also provides the tier 1 training team with a valuable experience as well as a strong motivation to continue to conduct this type of training events. The information provided in this workshop and the access to GOES-10 data were greatly appreciated by the southern hemisphere participants; there was considerable interest in continued interactions and support.

Rodrigo Souza and Luiz Machado of CPTEC/INPE, the local organizers of the workshop, did an excellent job of hosting. Especially important was the selection of the students with diverse backgrounds (researcher, forecaster, academic) and nationalities, the students brought scientific curiosity, professional manners, and an enthusiasm to learn.

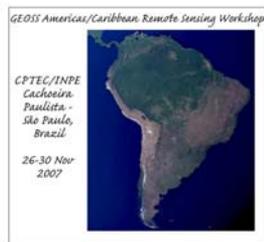
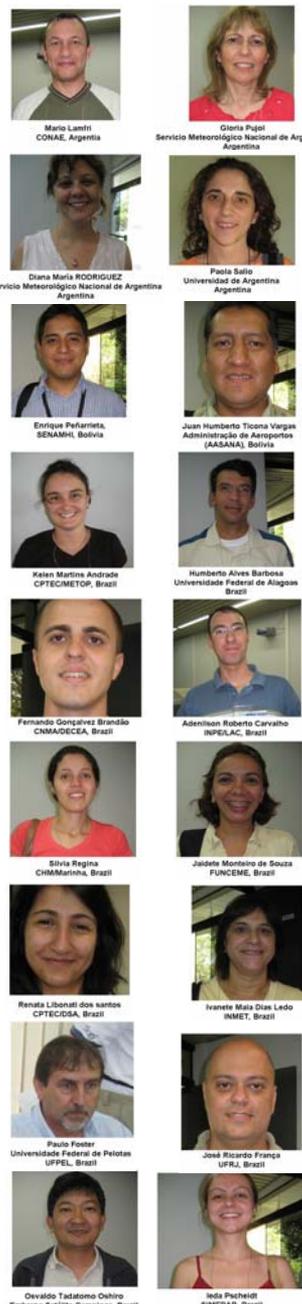
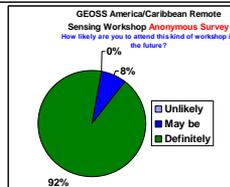
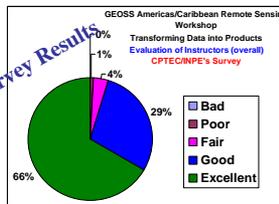


33 Participants from 12 Countries including Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, México, Paraguay, Peru, Uruguay and Venezuela

Anonymous survey of the workshop participants included such comments as:

- > "excellent"
- > "wonderful team"
- > "really good"
- > "very interesting information"
- > "appreciate the invitation"
- > "the topics were very useful, the instructors were kind and receptive"
- > "very professional workshop"
- > "good job"
- > "this was high level workshop"
- > "not only good teachers but also good people -- keep going"
- > "I enjoy every lecture"
- > "The workshop was much important to improve my understanding about satellite products"
- > "not just a workshop, but like a family"
- > "lab sections were the best"
- > "All was very good"
- > "One week long is very short, maybe two weeks would be better"

Workshop Survey Results



Workshop Website
<http://www.ssec.wisc.edu/rss/SaoPaulo2007/>

