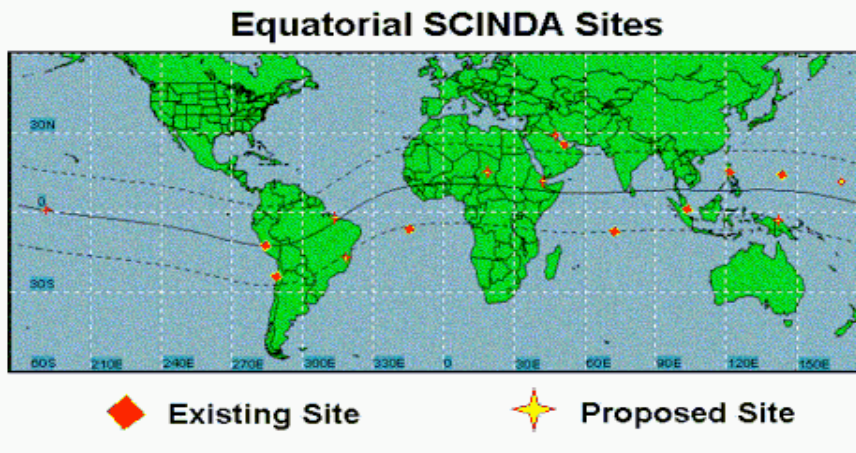


## First International Heliophysical Year SCINDA Workshop Cape Verde, July 10-14 2006

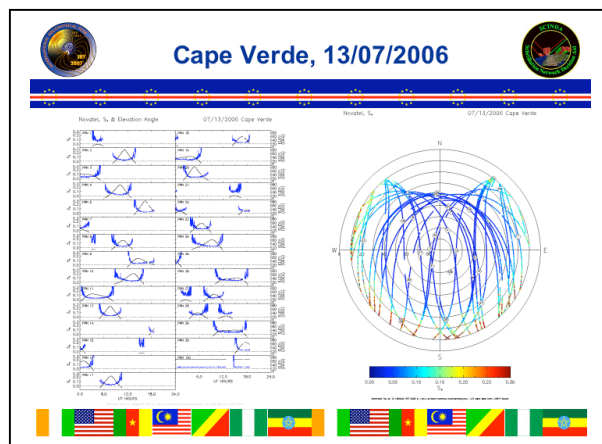
### Post conference report

The first International Heliophysical Year International SCINDA Workshop was held at Sal, Cape Verde, during the period of July 10-14, 2006. Support for the workshop was obtained from the European Office for Aerospace Research and Development (EOARD), the Capacity Building for Research and Education in Space Science (CBPRESS) program based at NC A&T State University and US Air Force Research Laboratory (AFRL). This 5-day workshop was organized by the Air Force Research Laboratory, NC A&T State University, the Instituto Nacional De Meteorologica E Geofisica Republico De Cabo Verde (INMG). Representatives from Nigeria, Ethiopia, Cape-Verde, Cote D'Ivoire, Malaysia and Congo Brazzaville participated in the workshop.



The overall goals of the workshop were to establish space science expertise and to install Scintillation Network Decision Aid (SCINDA) across Africa following the geomagnetic equator. SCINDA is a real-time, data driven communication outage forecast and alert system developed for the United States Air Force Space Command by the Air Force Research Laboratory (AFRL), Ionospheric Hazards Specification and Forecast Team, Hanscom AFB. Its purpose is to aid in the specification and prediction of satellite communication degradation due to ionospheric scintillation in the equatorial region. Ionospheric disturbances can cause rapid phase and amplitude fluctuations of satellite signals observed at or near the earth's surface; these fluctuations are known as scintillation. The present equatorial SCINDA sites are shown in figure below.

The workshop has provided instructions on the deployment, operation and interpretation of data from SCINDA sensors. These instructions were accompanied by talks by the participating scientists, and meal time discussions on how to advance space science research and



education in Africa in the future. At the end of the workshop, the participants learned to setup a GPS TEC/scintillation system on-line at their home institution. Low latitude ionospheric disturbances routinely degrade UHF SATCOM and other space-based RF systems. The workshop squarely addressed those impacts by providing the requisite training to install and operate sensors that provide real-time warnings of scintillation impacts on DoD systems. As many as 7 new observing sites will be established as a direct result of the workshop.

## Signatures

Dr. Abebe Kebde, USA \_\_\_\_\_

Dr. Benvenu Dinga, Congo-Brazzaville \_\_\_\_\_

Dr. Gizaw Mengistu, Ethiopia \_\_\_\_\_

Dr. Baylie Damtie, Ethiopia \_\_\_\_\_

Dr. Rabi Babatunde, Nigeria \_\_\_\_\_

Dr. Jyoti Nair, USA, \_\_\_\_\_

Dr. Keith Groves, USA, \_\_\_\_\_

Dr. Olivier Obrou, Cote d'Ivoire \_\_\_\_\_

Ing. Jose Pimenta, Cape Verde \_\_\_\_\_

Dr. Zainol, Malaysia \_\_\_\_\_

Mr. Ita Eyo, United Kingdom, \_\_\_\_\_

Dr. Oyedmi Oyekola, Nigeria \_\_\_\_\_

Mr. Sabino Batista, Cape Verde \_\_\_\_\_