

GROUND TRUTH MEASUREMENTS IN SENEGAL

Skype sensors are being used in Senegal, West Africa by The University of Copenhagen who are developing methods for national and regional water resource and carbon biomass assessment and management.



Spatial distribution of water and vegetation status in the semi-arid region of Senegalese Sahel and Senegal River valley is being monitored where the variable rainfall, mainly droughts in recent years, is causing problems with the harvest of rain-dependant crops such as millet, sorghum and peanuts.

Data is collected from the Earth Observation satellites ENVISAT, MODIS and NOAA AVHRR and Ground Truth measurements are made using Skype 2 and 4 channel light sensors. Agroclimatological parameters are also being automatically collected, including data from

Skype's temperature and surface wetness probes.

A new enhanced Vegetation Index, designed to be resistance to atmospheric water vapour and aerosol contamination, is being tested and validated by the project. Reflective radiation from the Earth's surface is measured at similar wavelength intervals using Skype light sensors as those taken from the satellites, as well as the narrow aerosol absorption waveband in the blue spectrum.

Further information on the project can be found on the web at www.geogr.ku.dk/research/eovs/. We'd like to thank Rasmus Fensholt at the Institute of Geography, University of Copenhagen for his kind permission to pass on this interesting application.

