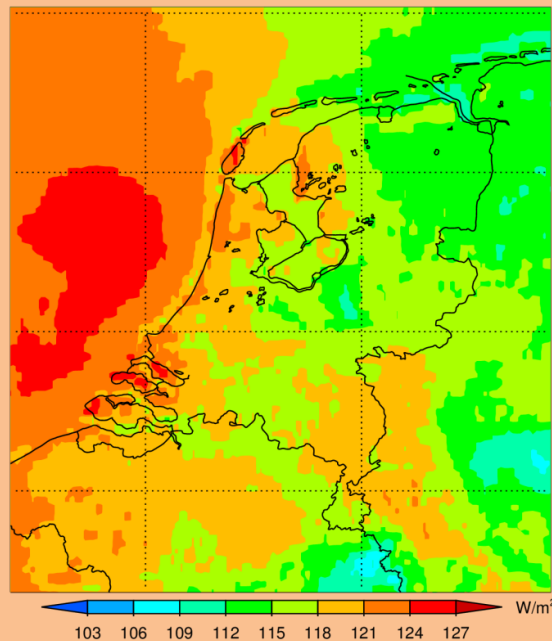# Open Seminar Series
Geoscience & Remote Sensing

Retrieving cloud properties and surface solar irradiance from passive imagery for climate and weather applications

Jan Fokke Meirink – KNMI
February 25, 2016
12:40-13:30
CiTG room G

Annual mean surface solar irradiance derived from Meteosat

Clouds play a central role in the Earth's atmosphere, and satellite observations are crucial to monitor and understand their impact on the energy and water cycles. Passive imagery provides such observations with high spatial and temporal resolution. In this talk the activities at KNMI related to the retrieval of cloud properties and surface solar irradiance (SSI) from passive imagers will be outlined. A major goal is the generation of long-term climate data records (CDRs): first editions of a global polar-orbiting-satellite based CDR (CLARA-A1) and a regional geostationary-satellite based CDR (CLAAS-1) are available, and currently updates to these data records are being prepared. Another focus is near-real time processing of Meteosat data (see msgcpp.knmi.nl). The presentation will include a brief introduction to the retrieval principles, an overview of the data records, and examples of their application. Specific attention is paid to the use of SSI observations for the evaluation of a weather model.