



## **The Measurement of the Solar Spectral Irradiance Variability at 782 nm during the Solar Cycle 24 using the SES on-board PICARD**

Mustapha Meftah, Alain Hauchecorne, Abdanour Irbah, and Slimane Bekki  
CNRS - LATMOS, Guyancourt, France (mustapha.meftah@latmos.ipsl.fr)

A Sun Ecartometry Sensor (SES) was developed to provide the stringent pointing requirements of the PICARD satellite. The SES sensor produced an image of the Sun at  $782\pm 5$  nm. From the SES data, we obtained a new time series of the solar spectral irradiance at 782nm from 2010 to 2014. SES observations provided a qualitatively consistent evolution of the solar spectral irradiance variability at 782 nm during the solar cycle 24. Comparisons will be made with Spectral And Total Irradiance REconstruction for the Satellite era (SATIRE-S) semi-empirical model and with the Spectral Irradiance Monitor instrument (SIM) on-board the Solar Radiation and Climate Experiment satellite (SORCE). These data will help to improve the representation of the solar forcing in the IPSL Global Circulation Model.