Geophysical Research Abstracts
Vol. 20, EGU2018-3498, 2018
EGU General Assembly 2018

Recent variability of the solar spectral irradiance by using SOLAR/SOLSPEC data

Mustapha Meftah (1), Luc Damé (1), Alain Hauchecorne (1), Abdanour Irbah (1), Slimane Bekki (1), David Bolsée (2), Nuno Pereira (2), Dominique Sluse (2), and Gael Cessateur (2)

(1) CNRS - LATMOS, Guyancourt, France (mustapha.meftah@latmos.ipsl.fr), (2) BIRA - IASB - Belgium

Accurate measurements of the solar spectral irradiance (SSI) and its temporal variation are of primary interest to better understand solar mechanisms and the links between solar variability and Earth's atmosphere and climate. We will present recent Ultra Violet (UV) SSI observations performed by the SOLAR/SOLSPEC spectrometer on board the International Space Station. SOLAR/SOLSPEC observations covered the essential of the solar cycle 24 from April 5, 2008 to February 15, 2017. We wish to provide evolution of solar spectral irradiance during Cycle 24 using the SOLAR/SOLSPEC data thanks to revised engineering corrections, improved calibrations, and advanced procedures to account for thermal and aging corrections of the instrument. The SOLAR/SOLSPEC observations will be directly compared with other measurements (SORCE/SOLSTICE, SORCE/SIM) and models (SATIRE-S, NRLSSI).