Contribution ID: 84

Observations of TSI and OLR with CLARA onboard NorSat-1

Monday 16 September 2024 17:00 (20 minutes)

Solar variability varies on many timescales from minutes to decades and beyond. To determine the effect of solar irradiance on the Earth's system the knowledge of the incoming solar radiation needs to be known with high precision. We report on latest advances in measuring TSI with the CLARA radiometer onboard NorSat-1 and compare it to the latest TSI measurements. Besides TSI, CLARA also measures the terrestrial longwave outgoing radiation. The OLR measurements are a first step towards the measurement of the Earth Radiation Budget (ERB) from the top of the atmosphere with an SI-traceable radiometer. As such these measurements are an important step towards measuring the Earth Energy Imbalance from space.

Solicited or Contributed

Contributed

Presenting author

Margit Haberreiter

Author list and affiliations

Primary author: HABERREITER, Margit (PMOD/WRC, Davos, Switzerland)
Presenter: HABERREITER, Margit (PMOD/WRC, Davos, Switzerland)
Session Classification: Solar Irradiance and Particle Variability

Track Classification: Solar Irradiance and Particle Variability