Observations of Thunderstorms by the Atmosphere-Space Interactions Monitor (ASIM) on the International Space Station

Torsten Neubert[1], Olivier Chanrion[1], Dongshuai Li[1], Lasse Husbjerg[1], Joán Montanyá[2], O. Van der Velde[2], Nikolai Østgaard[3] and Victor Reglero[4]

1. Department of Space and Earth Science and Engineering, Technical University of Denmark (DTU Space) Kongens Lyngby, Denmark, neubert@space.dtu.dk
2. Polytechnic University of Catalonia, Spain
3. Birkeland Center for Space Science, University of Bergen, Norway
4. University of Valencia, Spain

ASIM was launched to the International Space Station on April 2, 2018 to measure thunderstorm electrical phenomena such as lightning, Transient Luminous Emissions (TLEs) in the stratosphere and mesosphere, and Terrestrial Gamma-ray Flashes (TGFs). The instruments are three photometers measuring in 180-235 nm (UV), 337 nm (blue) and 777.4 nm (red), and two cameras in the blue and red bands. X- and gamma-rays photons are measured at energies from 50 keV to ~20 MeV. I will present the instruments and the ideas behind the mission, and some selected results.