



The Electric Field Instrument (EFI) on board Swarm: update on the data quality and instrument status

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This poster will give an overview of the Electric Field Instrument (EFI) on board Swarm after four years operations focusing in particular on the most significant activities performed to support payload investigations to improve science quality.

The Electric Field Instrument (EFI) on board Swarm on each of the three-spacecraft consists of two instruments: two Langmuir Probes (LP) and two Thermal Ion Imagers (TII). The LPs measure the electron density and temperature in the ionosphere and the spacecraft potential which is auxiliary to the data processing of the TII instrument. The TII is dedicated to measure the velocity and temperature of the bulk O⁺ distribution in the ionosphere, and to infer the ionospheric Electric field.

Data validation activities and results are presented along with several tests run in-orbit to improve data quality.