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## Metis In-Flight performance: Door Reflection Analysis

Metis is the coronagraph on-board Solar Orbiter; it comprehends two channels: the ultraviolet H I (121.6 nm) and visible light (580-640 nm). With a specific focus on the latter spectral range, radiometric capabilities were assessed on-ground using a flat-field panel for uniform illumination. We examined stability in-flight by analysing the light reflected from the instrument door.

When sunlight interacts with the spacecraft shield, a portion is reflected toward the door, which, in turn, partially reflects it into Metis. Inspection of door images validates its integrity and that of subsequent optical components, as the reflected intensity remains to the expected  $1/r^2$  law, with 'r' being the Sun-spacecraft distance. To achieve this, in every image we have chosen 4 reference boxes 100x100 px each. Within each box, we calculate the mean value, normalize it for the integration time, and assess the trend. Ongoing analyses of these images aim to confirm the operational status of various Metis elements. In addition, complementary studies are underway that involve ray-tracing simulations to investigate further retro-reflectivity properties of the door.

**Primary author:** CASINI, Chiara (Istituto Nazionale di Astrofisica (INAF))

**Co-authors:** CHIOETTO, Paolo (Istituto Nazionale di Astrofisica (INAF)); Dr COMISSO, Antonela (CNR); Dr FRASSETTO, Fabio (CNR); Dr ZUPPELLA, Paola (CNR); DA DEPPO, Vania (Istituto Nazionale di Astrofisica (INAF))

**Presenter:** CASINI, Chiara (Istituto Nazionale di Astrofisica (INAF))