

The New Maxar WorldView Legion Constellation – Imagery Calibration and Operational Integration into a European Ground Station Environment

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EUSI stands at the forefront of Earth observation, offering state-of-the-art technological solutions for Very High Resolution (VHR) satellite imagery, 2D & 3D products, and geospatial applications.

In this presentation, we will delve into EUSI's groundbreaking capabilities offering direct access to Maxar's satellite constellation, including the new WorldView Legion satellites through its local ground station and global network.

With a mixed MIO (Mid-Inclined Orbit) and SSO (Sun-Synchronous Orbit) constellation of currently 6 and future 8 Legion satellites, plus the legacy WorldView-3, WorldView Legion is the first one to offer multiple intraday access for 30 cm imagery, opening completely new possibilities for the Earth Observation community.

Calibration, including its interoperability and consistency, is essential for the data quality of the complete Maxar satellite constellation. This presentation will

- Discuss methods used within the process of absolute radiometric calibration at Maxar, including fieldwork, and how to achieve consistency
- Address the Radiometric Performance of Maxar Legion Earth-Observing Sensors
- Point out specific challenges concerning MIO Optical sensors compared to sensors in SSO