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The COSMIC-2 payloads provide data that address two aspects of space weather: Ionospheric specification (e.g., TEC, in-situ density observations), and Ionospheric scintillation (specification & prediction). These data are derived from observations of TEC and scintillation from the primary payload, TGRS, and one of the two science payloads, the RF Beacon. In-situ ionospheric measurements of plasma density and ion drifts made by the IVM science payload provide context for physical interpretation of the TEC and scintillation observations.

The Space Weather Calibration and Validation effort, led by Aerospace, seeks to establish that the COSMIC-2 sensor products are ready for operational and scientific use. The calibration effort determines constants needed to develop accurate sensor data products, while the validation effort assesses the quality of sensor data products with respect to ground truth observations. Here we present the current Space Weather Cal/Val plans, including efforts focused on pre-launch algorithm assessment, ground truth scheduling, and an outline of post-launch Cal/Val activities. We discuss how the CalVal effort maps to the overarching goals of providing accurate, valuable space weather data for current and future operational models.

OSTS session

Regional and Global CAL/VAL for Assembling a Climate Data Record

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