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Campaign for Vicarious Calibration of SumbandilaSat in Argentina

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The importance of calibrating satellite imagers has been explained in literature such as K Arai (2007) and K J Thome (2001). Calibration of satellite sensors (imagers) is crucial for data consistency, reliability and comparability. To perform a meaningful analysis of a satellite image, the Digital Numbers (DNs) of the image are first converted to absolute radiance by using the sensor-specific radiometric calibration coefficients. Satellite imagers are calibrated pre-launch and for continuous assessment, they are also calibrated post-launch. Various post-launch techniques exist including cross-sensor, solar, lunar and vicarious calibration. Vicarious calibration relies on in-situ measurements of surface reflectance and atmospheric transmittance to estimate Top-Of-Atmosphere (TOA) spectral radiance. A vicarious calibration field campaign was executed in Argentina to support monitoring of the radiometric response of the multispectral imager aboard SumbandilaSat. Results obtained using two Radiative Transfer Codes (RTCs) MODTRAN and 6S are presented.

Level (Hons, MSc,
   PhD, other)?

MSc

Consider for a student
   award (Yes / No)?

No

Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

Yes

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