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TROPOMI on-ground calibration

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For the retrieval of absolute densities of atmospheric constituents, the TROPOMI instrument was calibrated with respect to known radiometric sources prior to launch of the Sentinel 5 Precursor. The calibration measurements were used to derive Calibration Key Data (CKD) that are required for the L01b processor to compute absolute geolocated radiance values from the raw instrument L0 data. A new methodology has been employed during the analysis of the obtained measurements to ensure the consistency and validity of the calibration. This was achieved by using the production grade Level 0 to 1b data processor in a closed-loop validation setup. We will report on the pre-launch calibration efforts and the achieved calibration status.