

Analysis of tropospheric variability of NO_2 emissions over India as observed by GEMS satellite

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Tropospheric nitrogen dioxide (NO_2) severely affects air quality and threatens human health. Systematic attempts to observe and analyse tropospheric NO_2 variability over India using Geostationary Environment Monitoring Satellite (GEMS) observations are very rare and perhaps not carried out so far. The present study reports variability analysis of tropospheric NO_2 over large emission areas located in the Indian tropical region using GEMS data. The comparison of NO_2 measurements from GEMS with polar orbiting TROPOMI-S5P points out that even with coarser spatial resolution of GEMS, it provides reasonable accuracy of NO_2 measurement.

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