

**Table 1. Data description**

	<b>Parameter</b>	<b>Description</b>	<b>Source</b>	<b>Unit</b>	<b>Temporal resolution</b>	<b>Spatial resolution</b>	<b>% of missing values in modelling dataset</b>
1	Precipitation	Precipitation	CHIRPS <sup>1</sup>	mm/d	daily	5566m	0%
2	LST	Daily Land Surface Temperature	NOAA <sup>2</sup>	K	daily	1000m	46%
3	AAI	Aerosol index (at wavelengths 354/388)	TROPOMI <sup>3</sup>	/	daily	1 113.2m	15%
4	CloudFraction	Effective cloud fraction	TROPOMI	Fraction	daily	1 113.2m	15%
5	NO2_strat	Stratospheric vertical column of NO <sub>2</sub>	TROPOMI	mol/m <sup>2</sup>	daily	1 113.2m	15%
6	NO2_total	Total vertical column of NO <sub>2</sub>	TROPOMI	mol/m <sup>2</sup>	daily	1 113.2m	15%
7	NO2_trop	Tropospheric vertical column of NO <sub>2</sub>	TROPOMI	mol/m <sup>2</sup>	daily	1 113.2m	41%
8	TropopausePressure	Tropopause Pressure	TROPOMI	Pa	daily	1 113.2m	15%
	GT_NO2	Ground-level NO <sub>2</sub> from the station	ARPA	µg/m <sup>3</sup>	daily	/	5%

<sup>1</sup>CHIRPS: [https://developers.google.com/earth-engine/datasets/catalog/UCSB-CHG\\_CHIRPS\\_DAILY#bands](https://developers.google.com/earth-engine/datasets/catalog/UCSB-CHG_CHIRPS_DAILY#bands)

<sup>2</sup>NOAA: [https://developers.google.com/earth-engine/datasets/catalog/NOAA\\_VIIRS\\_001\\_VNP21A1D#bands](https://developers.google.com/earth-engine/datasets/catalog/NOAA_VIIRS_001_VNP21A1D#bands)

<sup>3</sup>TROPOMI: [https://developers.google.com/earth-engine/datasets/catalog/COPERNICUS\\_S5P\\_OFFL\\_L3\\_NO2](https://developers.google.com/earth-engine/datasets/catalog/COPERNICUS_S5P_OFFL_L3_NO2)