

PANDORA

Data_format_description

The exact parameters of the installation site are listed below.

Full location name:	National Observatory of Athens, Thiseio
Short location name:	Athens-NOA
Country of location:	Greece
Location latitude [deg]:	37.9878
Location longitude [deg]:	23.7750
Location altitude [m]:	130

This document describes data products as obtained with the Blick processing software (BlickP) (version used: BlickP v1.8.17).

The above-mentioned data sets for Athens station are publicly available via ASPIRE's website (<https://aspire.geol.uoa.gr/>) but also from the website of the PANDONIA global network (<http://data.pandonia-global-network.org/>).

Output products

A comma-separated string for each output product contains the information in each case as described in detail below.

Column 1: Includes fractional days since 1-Dec-2020 UT midnight until month 18 (Nov-2021)

Column 2: Solar zenith angle for measurement center (in degrees)

Column 3: Data Quality Flags

There are 9 possible data quality flags: DQ0, DQ1, DQ2, DQ10, DQ11, DQ12, DQ20, DQ21 and DQ22. L2 data quality flag both for Ozone and Nitrogen Dioxide: 0=assured high quality, 1=assured medium quality, 2=assured low quality, 10=not-assured high quality, 11=not-assured medium quality, 12=not-assured low quality, 20=unusable high quality, 21=unusable medium quality, 22=unusable low quality.

Column 4:

- Total Ozone Column (TOC): amount (in Dobson Units, DU)
- Nitrogen Dioxide (NO₂): total vertical column amount (moles per square meter). Algorithm for NO₂ retrieval from direct sun measurements is using measured spectra at 370-500nm.
- Tropospheric Nitrogen Dioxide: vertical column amount (moles per square meter).

In any of the afore-mentioned retrievals, value 9e99= retrieval not successful.