

This adjusted dataset uses only one satellite for each time period defined as follows:

Satellite	Satellite dates
Nimbus 7	10/31/78 – 5/31/89
NOAA 11	6/1/89 – 12/31/93
NOAA 9	1/1/94 – 6/30/97
NOAA 11d	7/15/97 – 12/31/00
NOAA 16	1/1/01 – 12/31/03
NOAA 17	1/1/04 – 12/31/05
NOAA 18	1/1/06 – 12/31/10
NOAA 19	1/1/11 – 12/31/13
NPP/OMPS	1/1/14 – present

Daily zonal averages appear one file per year. File names contain satellite name and year of data.

COH construction:

The files are homogenized using the adjustment scheme developed for zonal datasets.

Data Selection Method:

Files used as input:

SBUV NASA v8.6 pmf styled files.

OMPS SNPP files from NESDIS one file per granule.

These files provide profiles in the granularity as measured, every 32 secs, approximately one profile every 1.85 degrees latitude, and orbits approximately 15 deg longitude apart.

We collect all profiles (with error codes 0,10, 100 or 110) within a lat/lon box of +/- 2 deg lat, and +/- 20 deg long. This picks up either one centrally placed orbit, or two straddling orbits per day, with about 1-2 points in each orbit. This totals 1-4 points in the box for each site per day.

The daily weighted files are a 1/dist average of all points per day in the 4x40 deg box.

Daily overpass Dobson layer files are organized as:

Latitude Longitude SiteName

Five lines of column headers

Year, Day of year, Average time, Distance to site, # data profiles included in zonal average, Average latitude of profiles, average solar zenith angle, average total ozone

Profile data (21 layers)

etc

Missing data indicator for total ozone is 999.9

Missing data indicator for layer profile data is:999.

Dobson layer bottoms are:

1013, 640, 404, 255, 160, 101, 64, 41, 25, 16, 10, 6.0, 4.0, 2.5, 1.6, 1.0, .64, .41, .25, .16 .1hPa

Data below approx. 30 hPa is less reliable than other layers. These may be best used as a summed quantity.