NO_x 2022

DWD Hohenpeissenberg

Hohenpeissenberg Site

NO_x :
- **CLD AL 770 ppt + BLC**
- CLD AL 770 ppt + PLC
- NO_2 CAPS (Aerodyne)
- *nCLD 899 + BLC (test mode)*

GAW measurement facility for reactive inorganic trace gases and aerosols

1781 start of weather (systematic) observations

Since 1952 Observatory of the German Meteorological Service (Deutscher Wetterdienst)

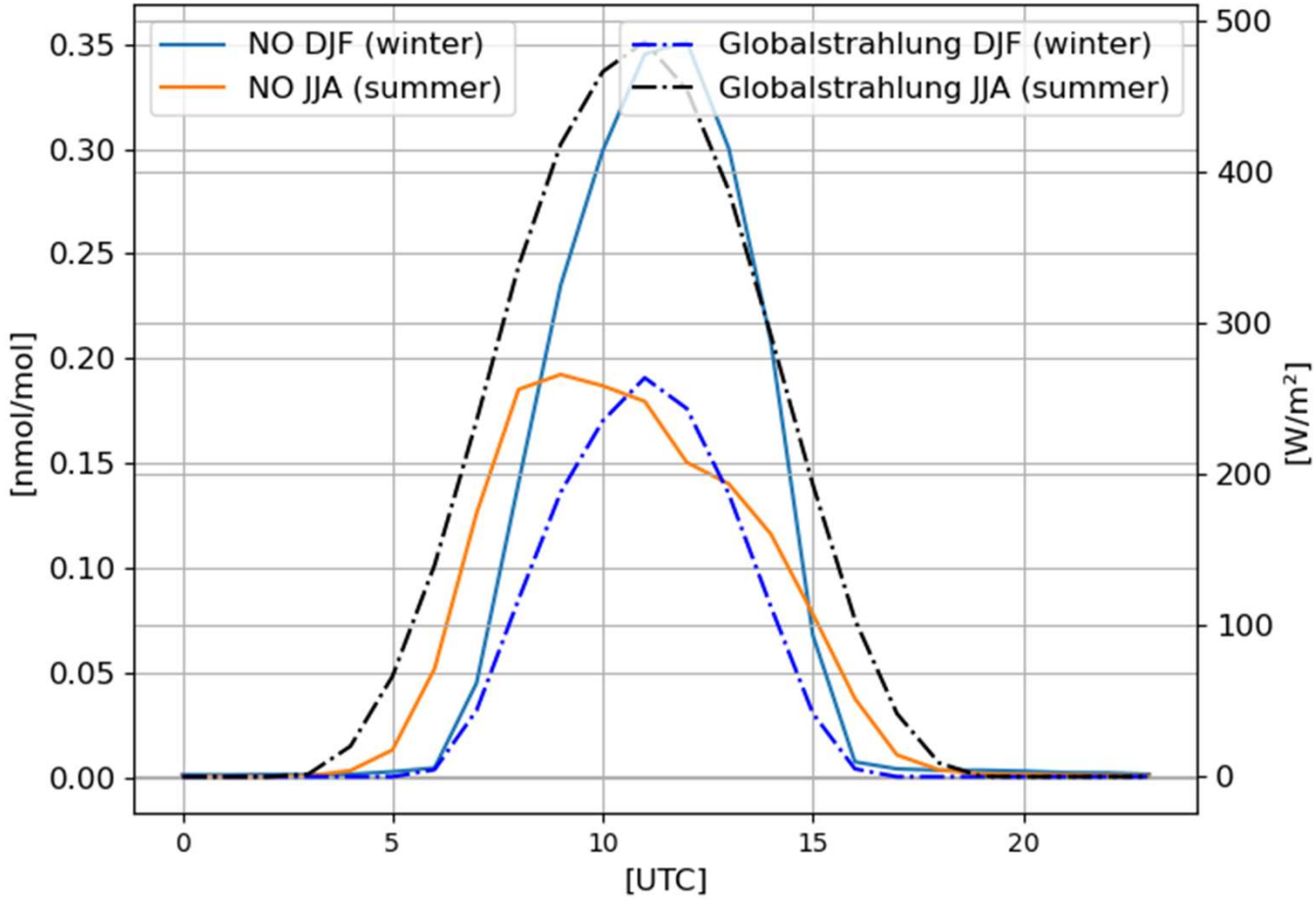
Since 1994 WMO GAW site

65km SW of Munich, Southern Germany

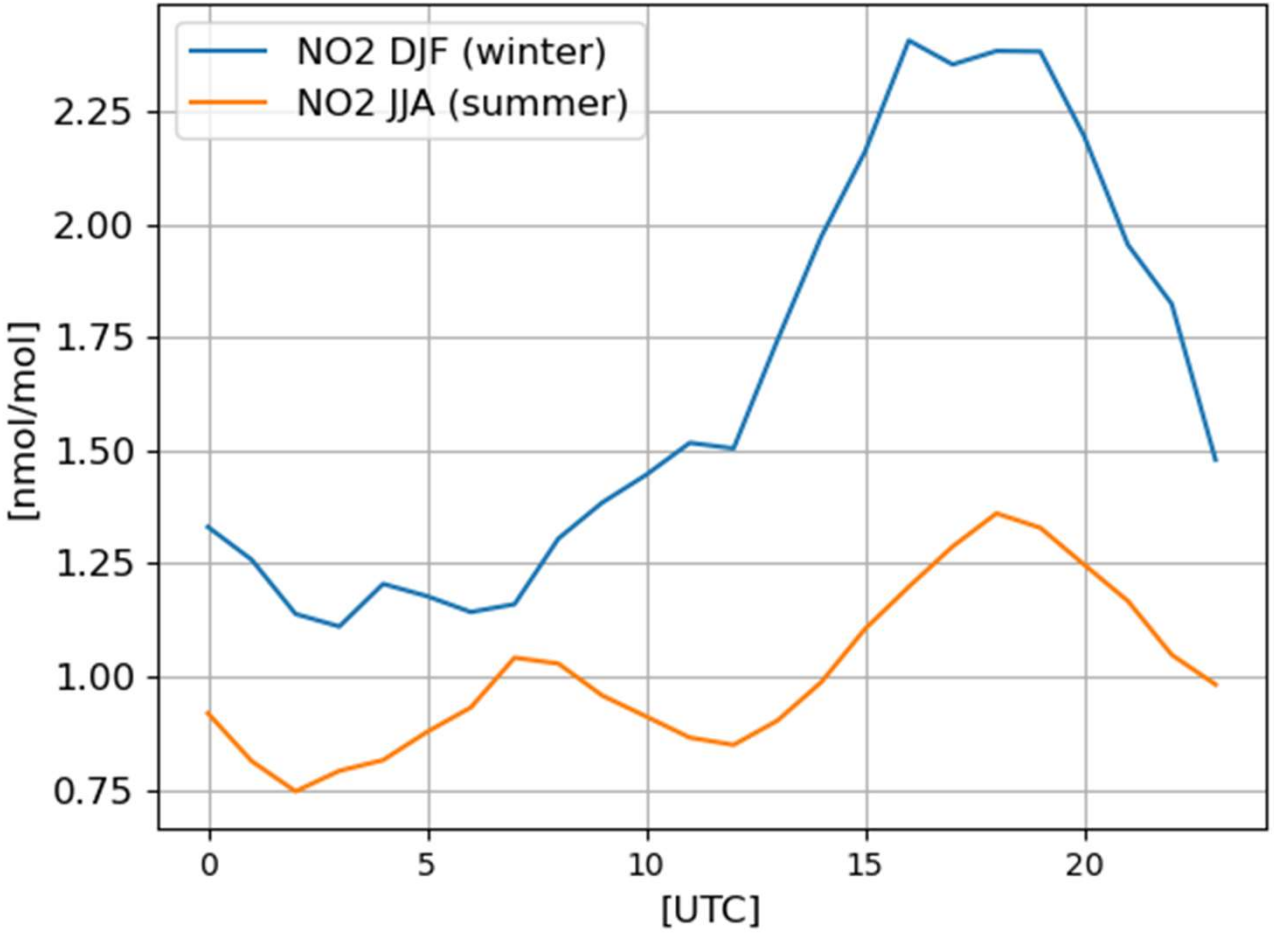
submitted NOx data („CLD1“ Ecophysics CLD AL 770 ppt with BLC)

- ➔ lvl0: NO raw, NO2 raw
- ➔ lvl2: NO/NO2 valid, NO/NO2 valid with local influence

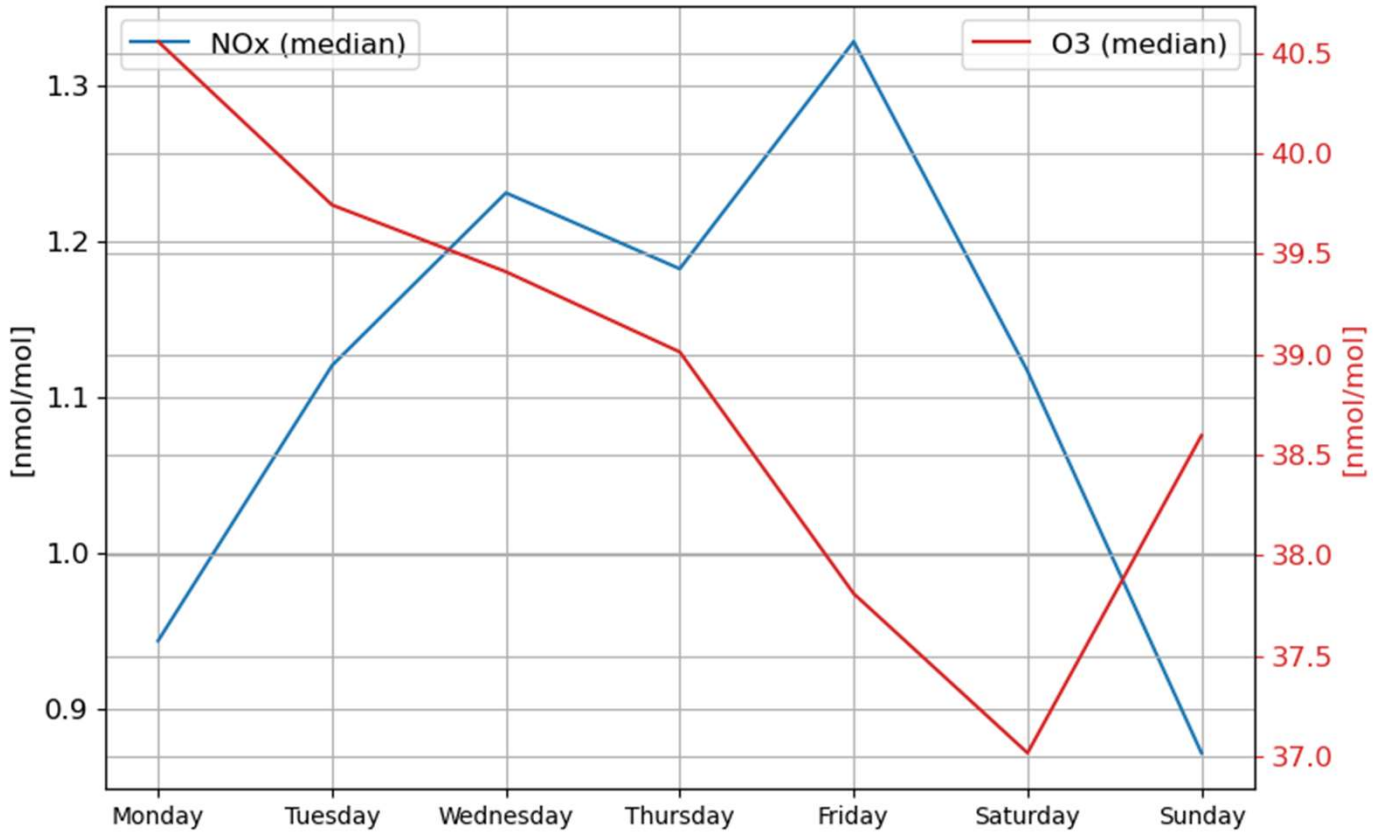
median diurnal variation NO



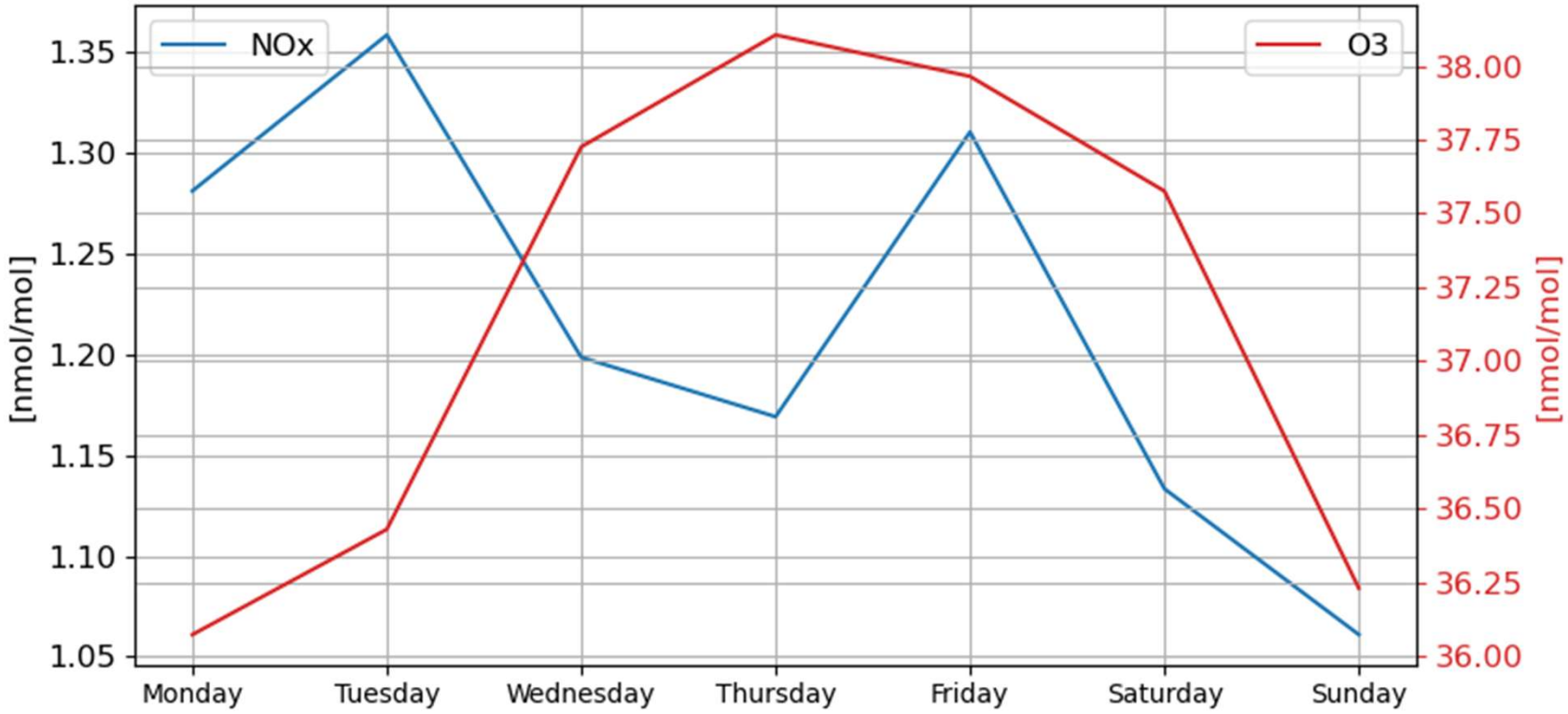
median diurnal variation NO_2



median weekly variation



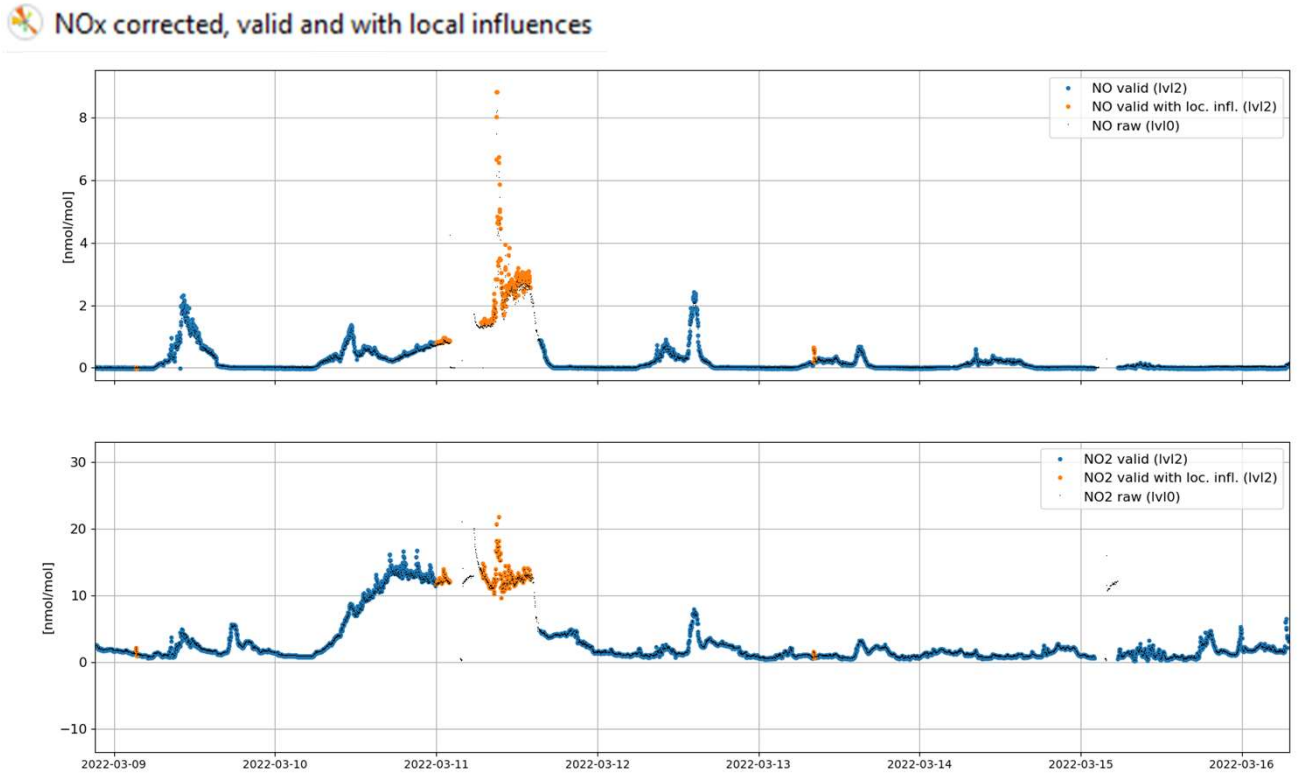
median weekly variation NOx, 2021



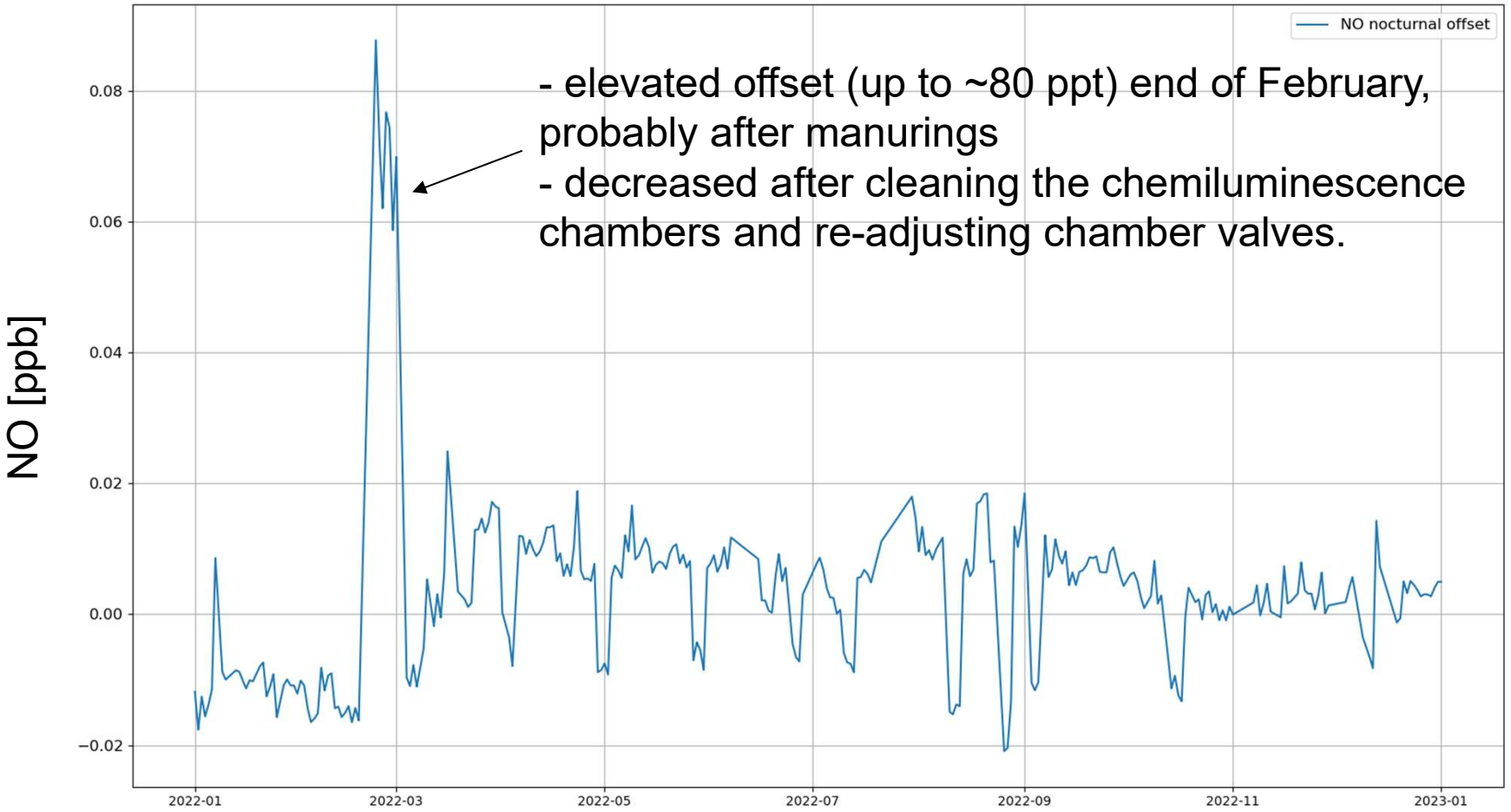
special event

➔ 10./11. March 2022

- elevated NOx for ~40 hours
- brownish haze
- not a Saharan dust event, but during the following days
- CO also elevated but less pronounced, SO2 and aerosols (black carbon, mass concentration) not unusual
- trajectories from eastern europe



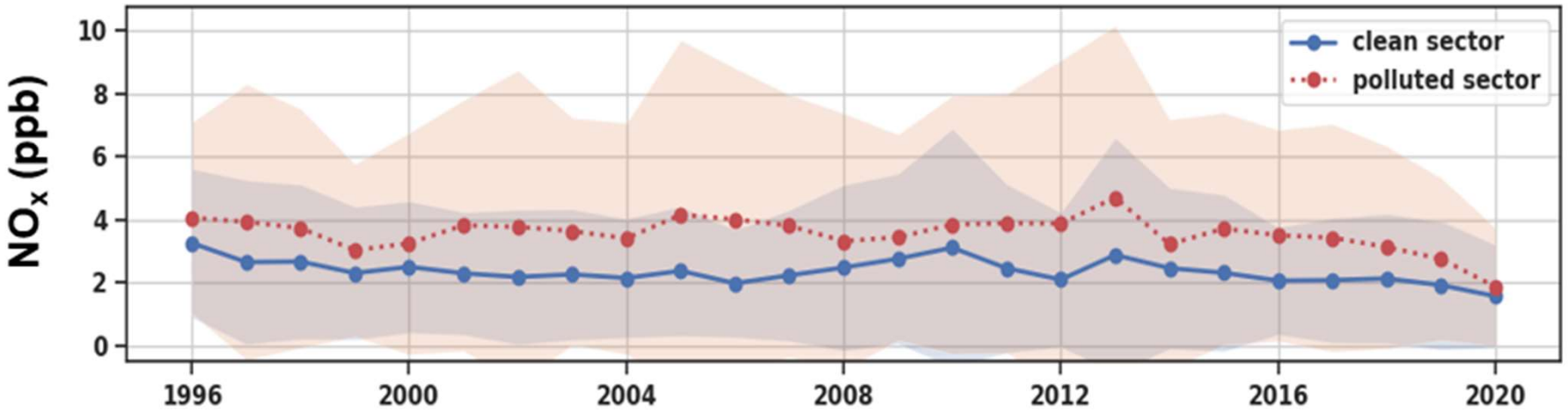
NO nocturnal offset



comparison to previous year

year	NOx annual median	NOx annual mean
2021	1.2 ppb	1.9 ppb
2022	1.1 ppb	1.7 ppb

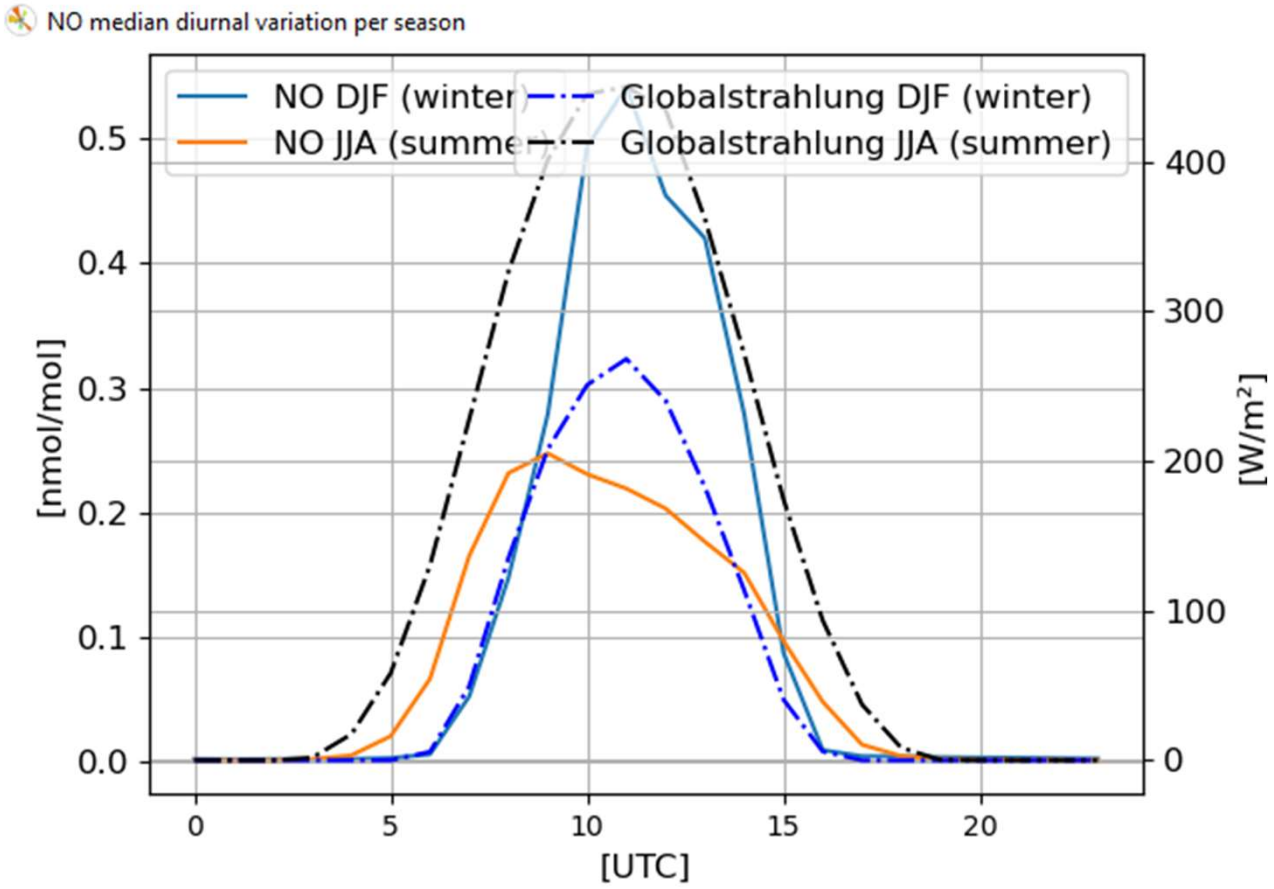
- mean NOx 2022 is possibly slightly below values of previous years ≤ 2020



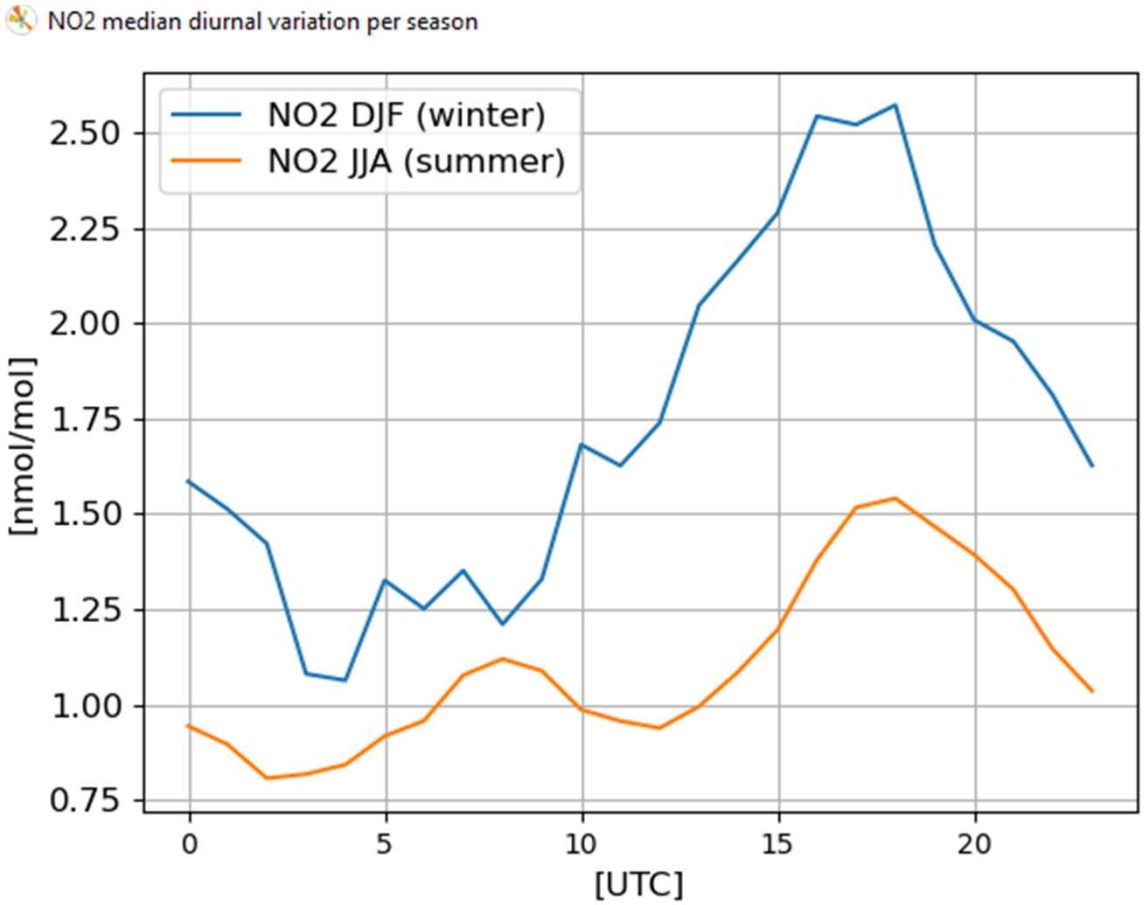
[GAWTec Kubistin, 2021]

Thanks for your attention!

median diurnal variation NO, 2021



median diurnal variation NO_2, 2021



median weekly variation NOx, 2021