The file “**SupplementaryData\_Gerosa\_et\_al.xlsx**” contains three datasets.   
The variables reported in each dataset are described in the following tables.

**DATASET #1 – Monthly data of ozone fluxes and deposition velocity**(storage corrected and partitioned with the 3rd method based on canopy transpiration)

|  |  |  |
| --- | --- | --- |
| Variable | unit | description |
| YEAR | Integer number | **Year** |
| MONTH | Integer number | **Month of the year** |
| F\_TotO3 STORAGE CORR | nmolO3 m-2 s-1 | **Total ozone flux (monthly mean, storage corrected)** |
| ST ERR F\_TotO3 STORAGE CORR | nmolO3 m-2 s-1 | standard error of the total ozone flux |
| F\_NonStomO3 STORAGE CORR | nmolO3 m-2 s-1 | **Non-stomatal part of ozone flux (monthly mean, storage corrected)** |
| ST ERR F\_NonStomO3 STORAGE CORR | nmolO3 m-2 s-1 | standard error of the non-stomatal ozone flux |
| F\_StomO3 STORAGE CORR | nmolO3 m-2 s-11 | **Stomatal part of ozone flux (monthly mean, storage corrected)** |
| ST ERR F\_StomO3 STORAGE CORR | nmolO3 m-2 s-11 | standard error of the stomatal ozone flux |
| VdepO3 | m s-1 | **Deposition velocity for ozone (monthly mean)** |
| ST ERR VdepO3 | m s-1 | standard error of the deposition velocity |

**DATASET #2 – Hourly means of ozone fluxes (storage corrected and not) averaged per each month over all years**   
(partitioned with the 3rd method based on canopy transpiration)

|  |  |  |
| --- | --- | --- |
| Variable | unit | description |
| MONTH | Integer number | **Month of the year** |
| F\_TotO3 | nmolO3 m-2 s-11 | **Total ozone flux (non storage corrected)** |
| ST ERR F\_TotO3 | nmolO3 m-2 s-11 | standard error of the total ozone flux, non storage corrected |
| F\_TotO3 STORAGE CORR | nmolO3 m-2 s-11 | **Total ozone flux (storage corrected)** |
| ST ERR F\_TotO3 STORAGE CORR | nmolO3 m-2 s-11 | standard error of the total ozone flux, storage corrected |
| F\_NonStomO3 | nmolO3 m-2 s-11 | **Non-stomatal part of ozone flux (non storage corrected)** |
| ST ERR F\_NonStomO3 | nmolO3 m-2 s-11 | standard error of the non-stomatal ozone flux, non storage corrected |
| F\_NonStomO3 STORAGE CORR | nmolO3 m-2 s-11 | **Non-stomatal part of ozone flux (storage corrected)** |
| ST ERR F\_NonStomO3 STORAGE CORR | nmolO3 m-2 s-11 | standard error of the non-stomatal ozone flux, storage corrected |
| F\_StomO3 | nmolO3 m-2 s-11 | **Stomatal part of ozone flux** |
| ST ERR F\_StomO3 | nmolO3 m-2 s-11 | standard error of the stomatal ozone flux |

**DATASET #3 – Hourly means of deposition velocity, conductances and main meteorological parameters, averaged over the summer months per each year**  
(storage corrected and partitioned with the 3rd method based on canopy transpiration)

|  |  |  |
| --- | --- | --- |
| Variable | unit | description |
| YEAR | Integer number | **Year** |
| HOUR | hh:mm:ss | **Hour of the day** |
| g\_StomO3 | m s-1 | **Stomatal conductance to O3** |
| ST ERR gstomO3 | m s-1 | standard error of g\_StomO3 |
| g\_NonStomO3 | m s-1 | **Non-stomatal conductance to O3** |
| ST ERR g\_NonStomO3 | m s-1 | standard error of g\_NonStomO3 |
| gc\_O3 | m s-1 | **Canopy conductance to O3** |
| ST ERR gc\_O3 | m s-1 | standard error of gc\_O3 |
| Vdep | m s-1 | **Deposition velocity for O3** |
| St ERR Vdep | m s-1 | standard error of Vdep |
| T\_air | °C | **Air temperature at 41m** |
| RH | % | **Relative humidity at 41m** |
| WindSpeed | m s-1 | **Horizontal wind speed at 41m** |
| ustar | m s-1 | **Friction velocity** |
| Prevailing stability class | label | **Most frequently observed stability class** (Stable, Very Stable, Neutral, Unstable, Very Unstable) |