**MERRA2 Data Columns**

Station – Name of ground monitor for data row

Lat – Latitude (degrees north) of station

Lon – Longitude (degrees east) of station

SRadius – Search radius (km) for nearest MERRA grid point to station

MERRALat – Latitude (degrees north) of nearest MERRA grid point to station

MERRAlon – Longitude (degrees east) of nearest MERRA grid point to station

IDXi – I index of MERRA grid point

IDXj – J index of MERRA grid point

PS – Surface pressure (Pa)

QV10m – Specific humidity at 10 m above surface (kg/kg) (multiplied by 1000.0)

Q500 - Specific humidity at 500 mbar pressure (kg/kg) (multiplied by 1000.0)

Q850 – Specific humidity at 850 mbar pressure (kg/kg) (multiplied by 1000.0)

T10m – Temperature at 10 m above surface (Kelvin)

T500 – Temperature at 500 mbar pressure (Kelvin)

T850 – Temperature at 850 mbar pressure (Kelvin)

Wind – Surface wind speed (m/s)

BCSMASS – Black Carbon mass concentration at surface (μg/m3)

DUSMASS25 – Dust surface mass PM 2.5 concentration at surface (μg/m3)

OCSMASS – Organic carbon mass concentration at surface (μg/m3)

SO2SMASS – Sulphur dioxide mass concentration at surface (μg/m3)

SO4SMASS – Sulphate aerosol mass concentration at surface (μg/m3)

SSSMASS25 – Sea Salt surface mass concentration PM 2.5 (μg/m3)

TOTEXTTAU – Total aerosol extinction AOT @ 550 nm (unitless)

UTC\_DATE – YearMonthDay (GMT date)

UTC\_TIME – Time of sample (hours) (GMT time)