

## WWLLN Lightning Dataset, Version R0 (20 April 2020)

World-Wide Lightning Location Network (WWLLN) data files are available for August-October of both 2018 and 2019.

Format of WWLLN data files:

Files are ascii text files labeled with the date and time of the data such as A20100202.loc for data from 2010/02/02. All data in UTC  
sample:

```
2010/02/02,15:00:00.215527, -6.6425, 158.7155, 16.1, 10  
2010/02/02,15:00:00.672314, -0.7045, 24.8195, 15.7, 10  
2010/02/02,15:00:01.063952, -6.6852, 158.8178, 10.4, 8  
2010/02/02,15:00:01.293111, 33.7345, 165.5077, 11.2, 6  
2010/02/02,15:00:02.220196, 32.9036, 164.0589, 6.7, 7  
2010/02/02,15:00:02.257362, 32.8227, 164.0399, 8.5, 6
```

...

Year/Mo/Da,Hr:Mn:Sec.fract, Lat , Long , Resid,Nsta

where:

Date and time are in UTC

Lat, Long in Fractional Degrees

Resid is the residual fit error in microseconds (always < 30 microseconds)

Nsta is the number of WWLLN stations which detected the stroke (always > 5)

*These data are archived at NASA Marshall Space Flight Center. If you wish to obtain these data, please contact the CAMP2Ex/PISTON lead for WWLLN, Timothy Lang ([timothy.j.lang@nasa.gov](mailto:timothy.j.lang@nasa.gov)). Due to the copyright rules of these lightning data, use of them in a presentation or publication **\*requires\*** adding Dr. Lang as a coauthor.*