

Dataset Title – NOAA Planetary Boundary Layer Heights (PBLH) derived from the NOAA/PSL 915-MHz Wind Profiler Radars.

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Time of Interest – Lakeland (WI) site (arv): Begin date: 2019/06/26 00:00:00 AM;
End date: 2019/10/30 23:59:59 PM.

Prentice (WI) site (prw): Begin date: 2019/06/26 00:00:00 AM;
End date: 2019/10/29 23:59:59 PM.

Area of Interest – Lakeland (WI) site: Lat: 45.924593; Lon: -89.727199.
Prentice (WI) site: Lat: 45.5391; Lon: -90.2803.

Data Frequency – Frequency of data collection: hourly.

Data Spatial Type – ISO metadata Spatial Representation: text Table

General Dataset Description –PBLH estimations derived from Wind Profiler Radars moments, for Lakeland (arv) and Prentice (prw) (year 2019, Julian days: ~177 to ~303). There is one zipped file for each site, and within the zip file there is one file for each day. The file name is in the form sidYYDDD.bln, where sid is the site identification (arv for Lakeland and prw for Prentice), YY is the year (19), and the DDD is the Julian day. In the files there are two columns. The first is the hour of the day (UTC), the second is the PBLH in km, agl. The data are centered on each hour, i.e., a value at 1900 UTC is an average of data between 1830 and 1930 UTC.

Some days have more estimations than others. For some hours it was impossible to accurately identify the PBLH, either because it was not well defined, or the quality of the data was too poor, or there was precipitation. PBLH estimation is performed only for daytime hours (i.e.: between sunrise and sunset).

A PBL automated algorithm was run on the wind profiler data. The results were then double checked by-eye to make sure the provided PBLH values are good.

Please, contact the author for further questions.

References:

Bianco, L., J. M. Wilczak, and A. B. White, 2008: Convective Boundary Layer Depth Estimation from Wind Profilers: Statistical comparison between an automated algorithm and expert estimations, *J. Atmos. Ocean. Tech.*, **25**, 1397–1413.

File Names – At each site the list names of file is: sidYYDDD.bln, where sid is the site identification (arv for Lakeland and prw for Prentice), YY is the year 20(19), and the DDD is the Julian day.

Digital Object Identifier (DOI) – <https://doi.org/10.26023/B4RJ-38H5-C812>

Data restrictions – N/A. Please see the [CHEESEHEAD Data Policy](#).

GCMD Keywords – Earth Science – Atmosphere; Earth Science - Atmosphere