

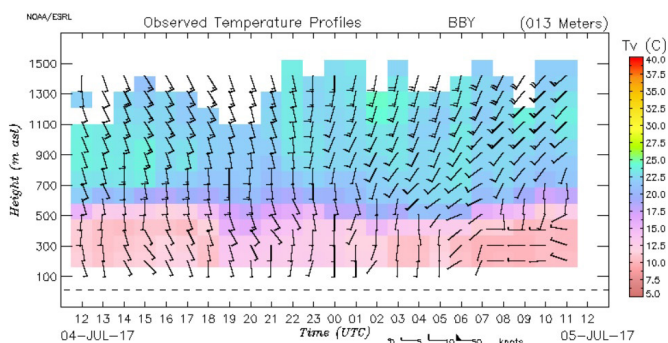


DATA ARCHIVE AND PORTAL

The Data Archive and Portal, or DAP, was established by the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy's Wind Energy Technologies Office. The DAP provides secure, timely, easy, and open access to all laboratory, field, and benchmark model data and offshore data produced by the Atmosphere to Electrons (A2e) initiative.

CAPABILITIES

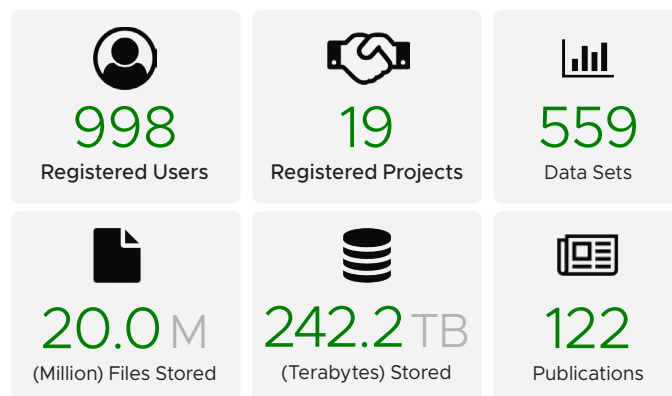
- Long-term data preservation
- Easy discovery and access to publicly available data
- Secure authorized access to proprietary data
- Automated data collection from field studies
- Data monitoring
- Data publishing using a digital object identifier to data.gov
- Standardized datasets for easy analysis
- Data visualization



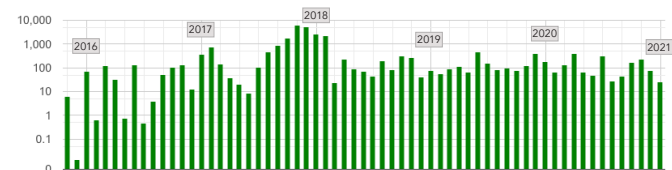
Enables collaboration by providing access to:

- 240 terabytes (TB) of current, ongoing, and historical field studies and model output*
- Standardized datasets
- More than 900 users, from researchers to wind plant owners, consultants, and wind turbine owners*

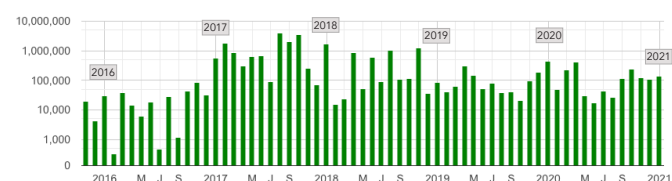
* DAP metrics as of January 2021



Downloaded Files (total gigabytes - GB)



Downloaded Files (total file count)



"The new look of the DAP site is really nice. I was able to order and download data very easily." —DAP User

IMPACT

The DAP's capabilities deliver impact by

- Increasing the confidence of the wind industry to share its proprietary data.
- Maximizing the use of federal resources by providing access to large field datasets.
- Leveraging the DAP framework to collect and disseminate data securely for projects funded by the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy's Vehicle and Buildings Technologies Offices, in addition to its original role as a data repository for the Wind Energy Technologies Office.

Date Range

2000-07-01 → 2019-07-03

Data Level

☐ Derived Data ⓘ

13

☐ Reviewed Data ⓘ

94

☐ Processed Data ⓘ

21

☐ Raw Data ⓘ

130

☐ 00

31

Instrument

☐ Surface Meteorological Station

77

☐ Sodar

57

☐ Radar

40

☐ Lidar

34

☐ Microbarograph

20

☐ Microwave Radiometer

11

☐ Shortwave, Longwave Radiometer

6

☐ Buoy Lidar

4

☐ Tower

3

☐ Aircraft Flight Data

1

[View all](#)

Measurement

☐ Pressure (mb)

36

☐ Wind Direction (degrees)

36

☐ date_time (UTC)

26

☐ direction (degrees)

26

☐ height (m)

26

☐ speed (m s⁻¹)

26

☐ turbulence (fraction)

26

☐ vert (m s⁻¹)

26

☐ Wind Speed (m/s)

25

☐ Temperature (C)

18

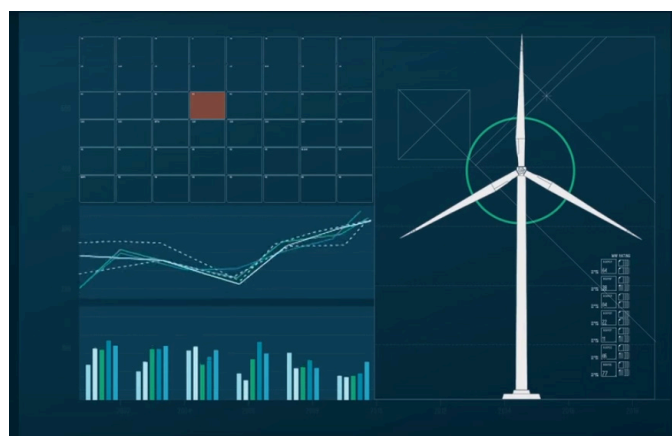
[View more](#)

Faceted data searching provides quick access for users.

WHO USES THE DAP?

Whether you are engaged in research and development, a wind plant developer or owner, a wind energy consultant, or a turbine manufacturer, the DAP can help you with your analyses. You do not need to download data for analysis; the DAP's tools provide analysis in the cloud.

The DAP helps bridge the knowledge gap between data collectors, modelers, and data users. The DAP can inform wind plant owners and consultants in decisions to locate wind turbines, optimizing energy production from wind, and wake effects of wind plants.



"So pleased to complete our Q2 milestone on time and, beyond that, thrilled to be leveraging the DAP to support our project goals!" —DAP Project Member

FOR MORE INFORMATION

Visit <https://a2e.energy.gov/>

or contact:

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U.S. DEPARTMENT OF
ENERGY

Office of **ENERGY EFFICIENCY
& RENEWABLE ENERGY**