



Features

- Displays vertical windshear data
- Configurable lower and upper limits of measured airspace
- Alerts of sudden changes in wind speed or direction in the measured airspace
- Data available in table format and as a vertical profile

AviMet® Vertical Windshear Display allows air traffic control to monitor vertical windshear data and alerts of any sudden changes in vertical windshear of the monitored airspace.

Vertical Windshear Data for Improved Safety

Vertical windshear is not only related to topography, land and sea breezes, and low jet streams, but also to microbursts potentially hazardous to flight. With access to information about vertical windshear, air traffic control (ATC) can inform pilots of windshear conditions, make more informed decisions on the choice of runway, and make appropriate changes to arrival and departure routes to ensure the safety of flights.

Designed for Air Traffic Control

To provide air traffic control with vertical windshear data and alerts, Vaisala has integrated a wind profiler into the AviMet® system. Designed especially for ATC, the vertical windshear measurement and reporting system comes with a user-friendly display and various data display options.

The wind profiler can measure wind speed up to height of 3000 m (980 ft) at intervals of about 100 m (328 ft).

Configurable Display of Data

The user can configure the lower and upper limits of the measured vertical airspace and the wind difference amount, add vertical shear warning layers, and set the duration of warnings on display. The high-low altitude levels are set at the height levels used by the wind profiler. Windshear is identified as a significant change in speed or direction between the pre-set upper and lower limits.

Between the defined limits the data is measured in a minimum of five layers that can overlap totally or partially. Data can be shown in table format with wind data and windshear warnings, or as a vertical profile of wind barbs for every layer measured on separate rows.

Windshear Alerts

Alerts are triggered when the wind difference between two height levels exceeds the pre-set limit.

The vertical windshear display alerts:

- when wind difference between two height levels exceed pre-set wind limits
- of cross-wind and headwind/ tailwind vertical windshear separately
- of temporal changes in vertical windshear
- of turbulence

Color-coding and audible alarms are used to easily identify the severity of the windshear.