

METAR

A **METAR** is a coded weather report issued at a specific time for an aerodrome, providing real-time weather conditions along with a short-term trend forecast. These reports are typically updated every hour or at specified intervals, with **SPECI** reports issued for significant changes between METAR updates.

The trend section at the end of the METAR is valid for the next two hours.

Example METAR:

```
DAAG 301650Z AUTO 18008KT 140V220 9999 FEW030 25/15 Q1016 NOSIG
```

Decoding METAR Components

Location & Observation Time

The METAR starts with the ICAO code of the reporting airport (in this case, **DAAG** for Algiers Houari Boumediene Airport), followed by the day of the month and the **UTC time** of observation (**301650Z** indicates the 30th of the month at 1650 UTC).

Auto METAR

AUTO signifies that the report is automatically generated by meteorological instruments without human intervention.

Surface Wind

```
18008KT 140V220
```

- The first **three digits** (180) indicate the wind direction (180°).
- The following **two digits** (08) indicate the average wind speed in knots (08 KT).
- If the wind is variable beyond 60°, the fluctuation is indicated (e.g., **140V220** means the wind varies between 140° and 220°).
- Calm winds are reported as **00000KT**.

Gusts

```
18008G20KT
```

- **G** followed by a number indicates gusts exceeding the mean wind speed (e.g., 08 KT with gusts of 20 KT).

Variable Wind

VRB02KT

- **VRB** indicates a wind direction variation when speeds are below 3 KT.

Visibility

9999

- The maximum reported visibility.
- **9999** means visibility is **10 km or more**.
- If visibility varies, additional details may be provided (e.g., **1400N** indicates 1400 meters visibility in the north).

Runway Visual Range (RVR)

R09/1200U

- Reports **visibility down the runway** when visibility is **below 1500 meters**.
- The **runway number** is followed by the RVR in meters.
- **U/D/N** indicates whether the RVR is **increasing, decreasing, or stable**.

Weather Phenomena

-RA

- **RA** (Rain) preceded by - indicates **light rain**.
- **+TSRA** means **heavy thunderstorm rain**.

Common Weather Codes:

Code	Meaning
DZ	Drizzle
RA	Rain
SN	Snow
PL	Ice Pellets
GR	Hail
FG	Fog (Vis <1km)
BR	Mist (Vis 1-5 km)
TS	Thunderstorm

Cloud Cover

FEW030

- Cloud coverage is reported in **eighths (octas)** of the sky:

Abbreviation	Meaning
NSC	No significant clouds
FEW	1-2/8 coverage
SCT	3-4/8 coverage
BKN	5-7/8 coverage (ceiling)
OVC	8/8 (overcast)

- **FEW030** means a few clouds at **3000 feet AGL**.
- **CAVOK** (Ceiling And Visibility OK) replaces visibility, cloud, and weather information when visibility is **≥10 km**, no significant clouds exist, and no hazardous weather is reported.

Temperature & Dew Point

25/15

- **First number (25°C)**: Ambient temperature.
- **Second number (15°C)**: Dew point temperature.
- If temperatures are negative, an **M** is used (e.g., **M05** = -5°C).

QNH (Pressure)

Q1016

- **QNH** is the air pressure adjusted to sea level in **hPa**.
- **Q1016** means the pressure is **1016 hPa**.

Additional Information

NOSIG

- **NOSIG** (No Significant Change) means no expected changes in wind, visibility, weather, or clouds in the next two hours.
- Other possible codes:
 - **TEMPO**: Temporary weather changes.
 - **BECMG**: Gradual weather change.

Example METAR Analysis

DAAG 301650Z AUTO 18008KT 140V220 9999 FEW030 25/15 Q1016 NOSIG

- **Location**: DAAG (Algiers Houari Boumediene Airport)
- **Time**: 30th of the month, 1650 UTC
- **Wind**: 180° at 8 KT, variable between 140° and 220°
- **Visibility**: 10 km or more

- **Cloud Cover:** Few clouds at 3000 feet
 - **Temperature:** 25°C, Dew Point: 15°C
 - **Pressure:** 1016 hPa
 - **Trend:** No significant change expected
-

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