

## METARs and TAFs

A **M**eteorological **A**viation **R**eport (METAR) is a snapshot of the current weather at an airport or reporting station. They are issued every hour, on the hour and are valid during that hourly period. They only cover the immediate area surrounding an airport or station. Cloud heights are listed in AGL.

METARs are coded weather “strips” made up of 8 important chunks of information:

1) Airport Identifier

- the location (airport or station ident)
- CYWG --> Winnipeg International Airport

2) Date and Time

- day of month + time of day (in zulu)
- 101400Z --> 10th day of the month at 1400hrs *zulu*

3) Wind

- wind direction (degrees magnetic for SDA) + wind speed (in knots)
- 33010KT --> wind is blowing from 330 degrees magnetic at a speed of 10 knots

4) Visibility

- expressed in statute miles (SM)
- 5SM --> 5 SM of visibility

5) Cloud heights

- amount in oktas + cloud base in feet AGL (always add 2 zeros)
- BKN050 --> broken clouds at 5000 feet (050 + 00 = 5000ft)

6) Temperature/Dew Point spread

- recorded temperature (in C) / recorded dew point (in C)
- 02/M05 --> temperature is +2C and the dewpoint is -5C (the spread is 7C)

7) Altimeter Setting

- expressed in “Hg (inches of mercury)
- A2992 --> Altimeter setting is 29.92 “Hg

8) Remarks (RMK)

a) cloud types

- type of clouds observed + oktas
- SC6 --> **stratocumulus** at 6 oktas (BKN)
- should match the reported cloud bases above

b) sea level pressure

- add a decimal between the last 2 numbers and add a 10 **or** 9 in front to get the number closest to 1000
- expressed in hectopascals (hPa)
- SLP178 --> **1017.8 hPa (not 917.8 hPa!)**

A **SPECI** metar is a special weather snapshot that is taken at times other than on the hour if the weather changes drastically enough within the hourly period.

---

A **T**erminal **A**rea **F**orecast (TAF) is a forecast or predication of what the weather will be like over a 24 hour period. They are issued every 6 hours and valid for 24 hours. They cover a radius of 5 nm around the airport or station. Cloud heights are listed in AGL.