

Aerodrome actual weather METAR and SPECI decode

CODE ELEMENT	EXAMPLE	DECODE	NOTES
1 Identification*			
<i>METAR or SPECI</i>	METAR	METAR	METAR — aviation routine report, SPECI — selected special (not from UK civil aerodromes)
<i>Location indicator</i>	EGLL	London Heathrow	Station four-letter indicator
<i>Date/Time</i>	291020Z	'ten twenty Zulu on the 29th'	Usually omitted when METARS are presented in bulletin.
2 Wind			
<i>Wind direction/speed</i>	31015G27KT	'three one zero degrees, fifteen knots, max twenty seven knots'	Max only given if ≥ 10 KT greater than the mean. VRB = variable. 00000KT = calm.
<i>Extreme direction variance</i>	280V350	'varying between two eight zero and three five zero degrees'	Variation given in clockwise direction, but only when mean speed is greater than 3 KT.
3 Visibility			
<i>Minimum visibility</i>	1400SW	'one thousand four hundred metres to south-west'	0000 = 'less than 50 metres' 9999 = 'ten kilometres or more'. Direction (given by eight-point compass) is appended to the minimum visibility when minimum visibility is ≤ 5000 m and maximum is at least 50% greater than this. .
<i>Maximum visibility</i>	6000N	'six thousand metres to the north'	Given where minimum visibility < 1500 m and maximum > 5000 m.
4 RVR			
	R27R/1100	'RVR, runway two seven right, one thousand one hundred metres'	RVR tendency (U = increasing; D = decreasing; N = no change; not reported in UK at present) may be added after figure e.g. R27R/1100D P1500 = more than 1500 m; M0050 = less than 50 m. Significant variations — example : R24/0950V1100, i.e. varying between two values.
5 Present weather			
	+SHRA	'heavy rain showers'	+ = Heavy (well developed in the case of +FC and +PO); - = Light; no qualifier = Moderate. BC=Patches BL=Blowing BR=Mist DR=Drifting DS=Duststorm DU=Dust DZ=Drizzle FC=Funnel cloud FG=Fog FU=Smoke FZ=Freezing GR=Hail (>5mm) GS=Small hail HZ=Haze IC=Ice crystals MI=Shallow or snow pellets PL=Ice pellets PO=Dust devils PR=Banks RA=Rain SA=Sand SH=Showers SG=Snow grains SN=Snow SQ=Squalls SS=Sandstorm TS=Thunderstorm VA=Volcanic ash

			VC=In vicinity Up to three groups may be present, constructed by selecting and combining from the above. Group omitted if no weather to report.
6 Cloud			
	FEW005 BKN025 SCT010CB	'few at five hundred feet, scattered cumulonimbus at one thousand feet, broken at two thousand five hundred feet'	SKC=Sky clear (0 oktas), FEW='few' (1-2 oktas), SCT='Scattered' (3-4 oktas), BKN='Broken' (5-7 oktas), OVC='Overcast'. There are only two cloud types reported; TCU=towering cumulus and CB=cumulonimbus. W///='state of sky obscured' (cloud base not discernable): Figures in lieu of '///' give vertical visibility in hundreds of feet. Up to three, but occasionally more, cloud groups may be reported.
7 CAVOK#			
	CAVOK	'cav-oh-kay'	Visibility greater or equal to 10 km, no cumulonimbus, no cloud below 5000 ft or highest MSA (greater) and no weather significant to aviation.
8 Temp and dew point			
	10/03	'temperature ten degrees Celsius, dew point three degrees Celsius'	If dew point is missing, example would be reported as 10///.
9 QNH*			
	Q0995	'nine nine five'	Q indicates millibars. If the letter A is used QNH is in inches and hundredths.
10 Recent weather			
	RETS	'recent thunderstorm'	RE = Recent, weather codes given above. Up to three groups may be present.
11 Wind shear			
	WS RWY24	'wind shear runway two four'	Will not be reported at present for UK aerodromes.
12 Trend			
	BECMG FM1100 23035G50KT TEMPO FM0630 TL 0830 3000 SHRA	'becoming from 1100, 230 degrees 35 KT , max 50 KT, temporarily from 0630 until 0830, 3000 metres, Moderate rain shower's	BECMG=Becoming TEMPO=Temporarily NOSIG=No sig change NSW=No sig weather AT=At FM=From TL=Until NSC=No sig cloud Any of the wind forecast, visibility, weather or cloud groups may be used, and CAVOK. Multiple groups may be present.

*Indicates a mandatory code element #CAVOK will replace visibility and cloud groups

Example

SAUK02 EGGY 301220 METAR
EGLY 24015KT 200V280 8000 —RA FEW010 BKN025 OVC080 18/15
Q0983 TEMPO 3000 RA BKN008 OVC020=

An example of the above METAR for 1220 UTC on the 30th of the month, in plain language:

EGLY: Surface wind: mean 240 deg true, 15 kn; varying between 200 and 280 deg; minimum vis 8 km; light rain; cloud; 1-2 oktas base 1000 ft , 5-7 oktas 2500 ft, 8 oktas 8000 ft; temperature +18 °C, dew point

+15°C; QNH 983 mb; Trend: temporarily 3000 m in moderate rain with 5-7 oktas 800 ft, 8 oktas 2000 ft.

Example

SAUK02 EGGY 301220 METAR

EGPZ 30025G37KT 270V360 1200NE 6000S +SHSN SCT005 BKN010CB

03/M01 Q0999 RETS BECMG AT1300 NSW SCT015 BKN100=

An example of the above METAR for 1220 UTC on the 30th of the month, in plain language:

EGPZ: Surface wind: mean 300 deg true, 25 kn; maximum 37 kn, varying between 270 and 360 deg; minimum vis 1200 m (to north-east), maximum vis 6 km (to south); heavy shower of snow, Cloud; 3-4 oktas base 500 ft , 5-7 oktas CB base 1000 ft, temperature +3°C, dew point -1°C; QNH 999 mb; Thunderstorm since the previous report; Trend: improving at 1300 Zulu to 10 km or more, nil weather, 3-4 oktas 1500 ft, 5-7 oktas 10,000 ft.