

AERODROME ACTUAL WEATHER - METAR AND SPECI DECODE



Code Element	Example	Decode	Notes/Alternative Coding
1. IDENTIFICATION * a. METAR or SPECI b. Location Indicator c. Time	METAR EGLL 1020Z	"METAR" "London Heathrow" "at ten twenty zulu"	METAR - aviation routine report, SPECI - selected special, not used in UK Station 4-letter ICAO indicator Usually omitted when METARs are presented in a Bulletin
2. WIND * a. Wind direction/speed b. Extreme direction variance	31015G27KT 280V350	"three one zero degrees, fifteen knots, max twenty seven knots" "varying between two eight zero degrees and three five zero degrees"	Max only given if ≥ 10 kts than mean. VRB = "Variable" 00000 = "Calm" Variation given in clockwise direction and only in extreme cases
3. VISIBILITY a. Minimum Visibility * b. Maximum Visibility	1400SW 6000N	"one thousand four hundred metres to the South West" "six thousand metres to the North"	0000 = "less than 50 metres" 9999 = "ten kilometres or more" Direction of min visibility given by eight points of compass when required. Given when min visibility <1500m and max >5000m
4. RVR	R27R/1100	"RVR, runway two seven right one thousand one hundred metres"	RVR tendency (U = increasing D = decreasing N = No Change) may be added after fig ie R27R/1100D P1500 = more than 1500m M0050 = less than 50 Significant variations - example: R24.0950V1100 ie varying between two values.
5. PRESENT WEATHER	+SHRA	"heavy rain showers"	+ = Heavy - = Slight no qualifier = Moderate VC = in Vicinity MI = Shallow BC = Patches DR = Drifting SH = Showers TS = Thunderstorms DZ = Drizzle RA = Rain SN = Snow PE = Ice pellets GR/GS = hail BR = Mist FG = Fog HZ = Haze SQ = Squalls FU = Smoke BL = Blowing DU = Dust FZ = Freezing SA = Sand SS = Sandstorm Weather Groups (up to 3 may be present) constructed by selecting from above.
6. CLOUD	SCT005 SCT010CB BKN025	"scattered at five hundred feet, scattered cumulonimbus at one thousand feet, broken at two thousand five hundred feet"	SCT = Scattered (4 oktas or less) BKN = Broken (5-7 oktas) OVC = Overcast (entire sky covered) SKC = Sky clear VVlll = Sky obscured Only cloud types reported - CB = Cumulonimbus TCU = Towering Cumulonimbus Up to 4 groups may be given.
7. CAVOK ¹	CAVOK	"Cav-ok-kay"	Vis ≥ 10 km, no cumulonimbus cloud and no cloud below 5000' or highest MSA (greater), no precipitation, thunderstorm, shallow fog or low drifting snow.
8. TEMP & DEW POINT *	10/03	"Temperature ten, dew point three"	Degrees centigrade, if dew point missing example temperature 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 Thunderstorms"	RE = recent weather codes given above
11. WIND SHEAR	WS TKOF RWY24	"Windshear take off path runway two four"	Also LDG = Approach path Will not be reported at present for UK aerodromes.
12. TREND	BECMG FM1100 25035G50KT TEMPO FM0630 TL 0830 3000 SHRA	"Becoming from 1100, 250 ⁰ 35 knots max 50 knots, temporarily from 0630 until 0830 3000 metres Moderate rain showers"	BECMG = Becoming TEMPO = temporarily NOSIG = No sig change NSW = No sig weather AT = At FM = From TL = Until Any of the wind forecast, visibility, weather or cloud groups may be used, and CAVOK. Multiple groups may be present.

Examples of METARs in Code as they would appear in a Bulletin;

* Indicates a mandatory code element

¹ The Visibility and CAVOK groups are either /or ie one or the other must be present

SAUK02 EGGY 301220

METAR

EGLY 24015KT 200V280 8000 -RA SCT010 BKN025 0VC080 18/15 Q0983 TEMPO 3000 RA BKN008 0VC020=

EGPZ 30025G37KT 270V360 1200NE 6000S +SHSN SCT005 BKN010CB 03/M01 Q0999 RETS WS LDG RWY27 BECMG AT1300 9999 NSW SCT015 BKN100=

The above METARs for 1220 UTC on the 30th of the month, in plain language:

EGLY: Surface wind: mean 240 deg true, 15kt; varying between 200 and 280 deg; minimum vis 8km; slight rain; cloud: 1-4 oktas base 1000ft, 5-7 oktas 2500ft, 8 oktas 8000ft; Temperature +18°C, Dew Point +15°C; QNH 983 mb; Trend: temporarily 3000m in moderate rain with 5-7 oktas 800ft, 8 oktas 2000ft.

EGPZ: Surface wind: mean 300 deg true, 25kt; maximum 37kt, varying between 270 and 360 deg; minimum vis 1200m (to northeast), maximum vis 6km (to south); heavy shower of snow, Cloud: 1-4 oktas base 500ft, 5-7 oktas CB base 1000ft; Temperature +3°C, Dew Point -1°C; QNH 999 mb; thunderstorm since previous report; windshear reported on approach to runway 27; Trend: improving at 1300 Zulu to 10km or more, nil weather, 1-4 oktas 1500ft, 5-7 oktas 10000ft.

AERODROME FORECAST - TAF DECODE



Code Element	Example	Decode	Notes
1. REPORT TYPE*	TAF	"TAF"	Name for an Aerodrome Forecast
2. LOCATION *	EGSS	"London Stansted"	Station 4 letter ICAO indicator
3. DATE/TIME OF ORIGIN	130600Z	"For the 13th at six zulu"	Usually omitted
4. VALIDITY TIME	0716	"Valid from seven hundred to sixteen hundred"	Zulu
5. WIND *	31015G25KT	"Three one zero degrees fifteen max twenty five knots"	VRB = Variable 00000 = calm
6. MIN VISIBILITY or CAVOK *	8000	"Eight kilometres"	9999 = 10km or more 0000 = less than 50 metres
7. SIGNIFICANT WEATHER	-SHRA	"Slight rain shower"	See present weather table on other side for details NSW = No significant weather
8. CLOUD	SCT005 SCT010 SCT018CB BKN025	"Scattered at five hundred feet, scattered at one thousand feet, scattered cumulonimbus at one thousand eight hundred feet. Broken at two thousand five hundred feet"	Same rules as overleaf SKC = Sky Clear NSC = No significant cloud (none below 5000ft & no CB)
9. SIGNIFICANT CHANGES a. Probability b. Time c. Change Indicator d. Met Groups	PROB30 1416 a. BECMG 1416 b. FM 14 TSRA BKN010CB	"PROB thirty" "From fourteen hundred to sixteen hundred" or "becoming from fourteen hundred to sixteen hundred" or "From fourteen hundred" followed by "Thunderstorm with rain, broken cumulonimbus at one thousand feet"	Normally only 30% or 40% Probability should be used. May or may not be present. Indicates beginning and end of forecast period in Zulu time. Also TEMPO = Temporarily may be used. Met group follows indicating a change in some or all of the elements forecast in the first part of the TAF.

EXAMPLES

* Indicates mandatory code elements

1. 18-hr TAF

FTUK31 EGGY 102200Z

EGLL 0624 13010KT 9000 BKN010 BECMG 0608 SCT015 BKN020 PROB30 TEMPO 0816 17025G40KT 4000 TSRA SCT010 BKN015CB BECMG 1821 3000 BR SKC=

Decode

Eighteen hour TAF issued at 2200 Zulu on the 10th, London Heathrow Valid from six hundred to midnight zulu the next day. Wind one three zero degrees ten knots. Nine kilometres. Broken at one thousand feet. Becoming from oh six hundred to oh eight hundred. Scattered at one thousand five hundred feet. Broken at two thousand feet. Prob thirty, temporary oh eight hundred to oh sixteen hundred, wind one seven zero degrees twenty five knots max forty knots. Four thousand metres. Thunderstorm with rain. Scattered at one thousand feet. Broken cumulonimbus at one thousand five hundred feet. Becoming from eighteen hundred to twenty one hundred. Three thousand metres. Mist. Sky Clear.

2. 9-Hr - TAF

FCUK33 EGGY 300900Z

EGGW 1019 23010KT 9999 SCT010 BKN018 BECMG 1114 6000 -RA BKN012 TEMPO 1418 2000 OZ OVC004 FM16 30020G30KT 9999 -SHRA BKN015CB=

Decode

Nine hour TAF issued at 0900 Zulu on the 13th, Luton Valid from ten hundred to nineteen hundred. Wind two three zero degree ten knots. Ten kilometres or more. Scattered at one thousand feet. Broken one thousand eight hundred feet. Becoming from eleven hundred to fourteen hundred. Six kilometres. Slight Rain. Broken one thousand two hundred feet. Temporarily fourteen hundred to eighteen hundred. Two thousand metres. Moderate Drizzle. Overcast four hundred feet. From eighteen hundred. Three zero zero degrees, twenty knots max thirty knots. Ten kilometres or more. Slight rain showers. Broken CB one thousand five hundred feet.