

METAR (METeoro logical Aerodrome Report) - Aviation routine weather report written in aeronautical meteorological code. Routine METAR includes information on temperature, pressure, dew point temperature, wind speed and wind direction, precipitation, cloud cover, the height of cloud base, visibility, it may also include other information (for example the state of the runway).

Code group	Code group specifications	Meaning	Examples
METAR	Message indicator	Message name	METAR
EPGD	Aerodrome code	ICAO location indicator	EPWA, EPLL, EPGD, EPPO, EPBY, EPSC, EPKK, EPKT, EPWR, EPZG
COR	Optional group	Indicates that it is a repeated message for the same observation period, it uses code word COR (for correction)	METAR COR
042030Z	Date and time of observation	The first two numbers indicate the day of a month (04 - fourth day), next four numbers indicate the formal time of observation (2030-half past eight pm), letter Z stands for UTC	042030Z 140100Z 302330Z 310000Z
32008G20KT	Group used for surface wind- wind direction and wind speed in the main landing zone at aerodrome threshold	First three numbers indicate the mean wind direction from true north (360°). In the case of variable wind direction numerical values shall be encoded as VRB when the mean wind speed is less than 3KT unless a thunderstorm passes over the aerodrome. Two next numbers indicate the mean wind speed (08 knots). In the case of wind gusts after letter G a maximum wind gust shall be reported (G20 stands for a wind gust speed of 20 knots). KT stands for "knots".	VRB02KT VRB02G25KT 01003KT 13023KT 27013G30KT
300V040	Optional group, indicates variable wind direction over the 10 minute period preceding the observation	Applies when it is possible to determine wind mean direction and when maximum variation in wind direction is more than 60° but less than 180°. Then two extreme directions between which the wind has varied shall be given.	04015KT 360V090 11012G23KT 080V150
3500	Aerodrome representative or minimum visibility	The lowest prevailing visibility or the minimum visibility. Prevailing visibility is the visibility observed at least at the half of the aerodrome area. Visibility value is given in metres, number 9999 indicates the visibility of 10 km or more.	0100 0350 4500 7000 9999

1300SE	Optional group, minimal visibility	If it is possible to report the prevailing visibility for a given aerodrome but in different directions one can observe the visibility lower than prevailing visibility, then the minimum visibility is reported with this direction indicator to which it is observed by Aerodrome Meteorological Station.	2300 1100NE 0800 0650SW
R29/1100D	Runaway Visual Range RVR	Group given for visibility < 1500m. Observed or estimated visibility for the runway which number is given right after the letter R . If at the end of a group letters D , U or N are given, it means that RVR is estimated only by the tools (D stand for downward, U stands for upward, N stands for no distinct change during 10-minute period preceding the observation). If letter M is given after a slash and before a numerical value, it means that the system is not able to estimate visibility below a given value. If letter P is given after a slash and before a numerical value, it means that estimated visibility is greater than a given value. RVR value is given in metres for the main threshold of a runway. Only for EPWA aerodrome two RVR groups are given (one for threshold 33 and one for threshold 11).	R11/0450N R29/0375I R26/0900D R29/0800 R27/M0350 R33/P2000N R11/1300D
R29/0900V1400	Extreme RVR values along the runway	Group used instead of the previous group, when sudden RVR changes occur. Extreme visibility values, the lowest and the greatest along the runway are estimated for one-minute-period. It is acceptable to use letters M and P , according to the description above. Letters D , U and N are not used.	R29/M0350V0750 R27/0800VP2000 R33/0900V1600
+SHRASN BR VCFC	Groups for present weather phenomena	Report the state of the weather at an aerodrome or in it area. One can use up to three groups in one message. Groups are separated with a space key. All types of precipitation, occurring at the time of observation, are reported in one group. The order reporting each type of precipitation depends on their intensity. Intensity reported in the group is a sum of component intensities (+SHRASN- heavy shower with snow, the intensity of precipitation is greater than the intensity of snow fall). If there is a (-) before a precipitation group, then the intensity of precipitation is low. If there is no	SNRA BR TSRA SHSN DRSN BR FZDZ FZFG -DZ BCFG BR -SHRA BR VCTS

		sign before this group then the intensity is moderate. If there is a (+) before a precipitation group, then the intensity of precipitation is high. If a group contains four letters and two first letters are VC, it means that a phenomenon occurs near the aerodrome and not at the aerodrome. All acceptable abbreviations used in METAR are listed in Appendix 3 to Annex 3 ICAO.	
FEW005 SCT013CB BKN035	Groups used for reporting clouds and the height of cloud base	In METAR clouds are reported for the whole aerodrome area. The number of cloud groups in METAR shall not exceed three. The height of the base of each cloud layer shall be reported. When significant convective clouds CB or TCU occur they shall always be reported. METAR reports the occurrence of only two types of clouds that is CB and TCU , no regardless of the amount of clouds and the height of the cloud base. When an individual layer is composed of CB clouds and TCU clouds with a common cloud base, the type of cloud shall be reported as CB and the amount of clouds shall be encoded as the sum of the CB and TCU amounts. METAR reports clouds which base is below 5000 ft (1500 m), except for the EPKK aerodrome (here the base is 6600 ft - 2000 m). The cloud amount shall be reported as FEW (1 to 2 oktas), SCT (3 to 4 oktas), BKN (5 to 7 oktas) and OVC (8 oktas). The height of the cloud base shall be reported in steps of 100 ft (001 stands for 100 ft that is 30 m).	FEW002 SCT005 BKN013 FEW002 SCT007 BKN011 SCT011CB SCT013 OVC033 FEW009 SCT015TCU BKN006 BKN017CB
NSC	Nil significant clouds	Group used instead of groups described, above when CAVOK is not appropriate and there are no CB or TCB clouds.	NSC
VV002	Vertical visibility	When the sky is obscured and information on vertical visibility is available, this group shall be reported in METAR. When the sky is obscured and information on vertical visibility is not available, the group shall read VV///. This group replaces cloud groups or the abbreviation NSC . Vertical visibility shall be reported in steps of 100 ft.	VV003 VV///
CAVOK	CAVOK stands for Ceiling And Visibility OK. This group may replace visibility,	The code word CAVOK shall be used when: <ul style="list-style-type: none"> • Minimal visibility is not lower than 10 km • There are no significant weather 	CAVOK

	RVR, current weather and clouds	phenomena (Code table 4678) ☞ There are no clouds below 5000ft (1500m) and there are no convective clouds (CB and TCU) ☞ There are no limitations of vertical visibility	
01/M01	Air temperature and dew point temperature	If one or both temperatures are minus then each value (given in full degrees Celsius) should be preceded by letter M .	14/08 03/M00
Q1007	Pressure value QNH	The observed QNH value at an aerodrome, rounded down to AMSL in accordance with ICAO atmosphere standards. QNH value shall be reported in hectopascals (always rounded down)	Q1016 Q0956
RESHRA REFZDZ	Recent weather	Groups used for reporting weather phenomena of operational significance which were observed and reported in METAR message of present weather and are no longer observed. Recent weather includes information on precipitation which intensity was: a) heavy, now it is moderate, weak or over b) moderate, now it is weak or over. Up to three group of information on recent weather shall be given. Types of precipitation are not grouped (except for freezing precipitation with drizzle) and their intensity is not included in the group. All abbreviations used for METAR messages and their explanations are listed in Annex 3 ICAO.	RESHRA REFC RETSRA RESHGR REFZDZRA
R11/590155	Optional group - state of the runway	Group used only in winter time. It reports on the type of runway contamination, its extend, the depth of deposit and the friction coefficient/braking action. Runway designator is given after letter R . Information is available in aerodrome duty officers'™ office.	R11/590155