

Weather Card

UTC calculation table		
UTC	NZST	NZDT
0000	1200	1300
0100	1300	1400
0200	1400	1500
0300	1500	1600
0400	1600	1700
0500	1700	1800
0600	1800	1900
0700	1900	2000
0800	2000	2100
0900	2100	2200
1000	2200	2300
1100	2300	0000
1200	0000	0100
1300	0100	0200
1400	0200	0300
1500	0300	0400
1600	0400	0500
1700	0500	0600
1800	0600	0700
1900	0700	0800
2000	0800	0900
2100	0900	1000
2200	1000	1100
2300	1100	1200

SIGMET	
SIGMETs provide information on observed or forecast hazardous weather conditions.	
Issue times	As required
Validity	Four hours (six hours for volcanic ash and tropical cyclones), reviewed after three hours or when further information available
Heights	Feet above mean sea level up to 10,000 feet, flight levels from FL 100
Area	New Zealand FIR (NZZC) and Auckland Oceanic FIR (NZZO)

ARFOR		
Area forecasts are forecasts for a specific region. They are intended for domestic VFR and IFR flights below 10,000 feet. The 17 ARFOR areas are designated by two-letter codes.		
Issue times	0530-0610 and 1130-1210 local time	
Heights	Feet above mean sea level	
Area	Within the named area, eg TA (Tamaki)	
Wind	Speed	Knots
	Direction	Degrees true
Visibility	Up to 9999 metres – in metres, eg 7000 Above 9999 metres – in kilometres, eg 20KM	
Cloud	Type	AS, AC, NS, SC, ST, TCU, CB
	Amount	SKC, FEW, SCT, BKN, OVC
Temperature	Degrees Celsius	

TAF and TREND		
A TAF is an aerodrome forecast provided for a specific aerodrome presented in code.		
A TREND is a forecast, valid for two hours, attached to the end of a METAR or SPECI (NZWP, NZOH only) and METAR AUTO (NZAA, NZWN, NZCH only), stating any significant changes from those described. While the TREND is valid it supersedes the aerodrome TAF.		
Issue times	NZAA, NZWN and NZCH: 2300, 0500, 1100, and 1700 UTC All other aerodromes: 0230-0430, 0930-1015, and 1400-1445 local time	
Validity	1921/2012 = valid from 2100 UTC on the 19th to 1200 UTC on the 20th	
Heights	Feet above aerodrome level	
Area	Within 8 km of the aerodrome reference point	
Wind	Speed	Knots
	Direction	Degrees true
Visibility	Up to 9999 metres – in metres, eg 7000 Above 9999 metres – in kilometres, eg 20KM CAVOK and 9999 used at Auckland, Wellington and Christchurch only	
Cloud	Type	CB, TCU
	Amount	NSC, SKC, FEW, SCT, BKN, OVC

MetFlight GA – <http://metflight.metra.co.nz>

IFIS – www.ifs.airways.co.nz

METAR, METAR AUTO and SPECI		
A METAR is a routine meteorological report, compiled manually, provided for a specific aerodrome, and presented in code.		
A METAR AUTO is a routine meteorological report provided by an automatic weather station (AWS) for a specific aerodrome, also presented in code.		
A SPECI is a METAR issued outside of the routine issue time of a METAR (NZWP, NZOH and NZMF only).		
Issue times	METARs issued hourly, on the hour METAR AUTOs issued every half hour, 24 hours a day SPECIs issued when required and will have issue time other than on the hour SPECIs not issued at Metar Auto aerodrome	
Heights	Feet above aerodrome level	
Area	Within 8 km of the aerodrome reference point When the term VC is used this applies to the area between 8 and 16 km from the aerodrome reference point	
Wind	Speed	Knots
	Direction	Degrees true. When direction varies by 60 degrees or more, the extreme directions are given, separated by the letter V, e.g. 260V330
Visibility	Up to 9999 metres – in metres, eg 7000 Above 9999 metres – in kilometres, eg 20KM Visibility variation shown by adding the direction, eg 2000SW – visibility variation not reported in METAR AUTO CAVOK and 9999 (10 KM or more) used at Auckland, Wellington and Christchurch only	
Cloud	Type	CB, TCU
	Amount	NSC, SKC, FEW, SCT, BKN, OVC
Temperature/ Dew Point	Degrees Celsius	
Pressure (QNH)	Hectopascals (hPa)	

ATIS		
The ATIS is a continuous plain language broadcast of the current conditions at an aerodrome, on a discrete frequency.		
Issue times	Irregularly, when conditions change or deteriorate	
Heights	Feet above aerodrome level	
Wind	Speed	Knots
	Direction	Degrees magnetic
Visibility	Less than 5000 metres – in metres, eg 3000 5000 metres or more – in kilometres, eg 5KM	
Cloud	Type	CB, TCU
	Amount	SKC, FEW, SCT, BKN, OVC
Temperature/ Dew Point	Degrees Celsius	
Pressure (QNH for ATIS only)	Hectopascals (hPa)	

When Cumulonimbus cloud (CB) is included in meteorological information this implies that there may be associated thunderstorms and the occurrence of severe icing, turbulence and hail.

Met Abbreviations

//*	Weather not detected due sensor temporarily inoperative
///*	Cloud is detected (unable to determine TCU/CB)
////*	Visibility not reported
-	Light
(blank space)	Moderate (when included before a weather phenomenon)
+	Heavy
9999	Visibility 10 km or more
ABT	About
AC	Altostratus
AGL	Above ground level
AIP	Aeronautical Information Publication
AIREP	Routine air report from aircraft in flight
AIREP SPECIAL	Special (non routine) air report from aircraft in flight
AMD	Amended
AMSL	Above mean sea level
ARFOR	Area forecast
AS	Altostratus
ATIS	Automatic terminal information service
ATS	Air traffic services
AWIB	Aerodrome and weather information broadcast
AWS	Automatic weather station (produces METAR AUTO)
BC	Patches
BECMG	Becoming
BKN	Broken (5–7 oktas)
BL	Blowing
BLW	Below
BR	Mist (1000–5000 m vis)
BTN	Between
CAT	Clear air turbulence
CAVOK	Cloud and visibility OK
CB	Cumulonimbus

CLD	Cloud
COR	Corrected
CU	Cumulus
DP	Dew point temperature
DR	Low drifting
DS	Dust storm
DU	Dust
DZ	Drizzle
EMBD	Embedded
FC	Funnel cloud
FCST	Forecast
FEW	Few (1–2 oktas)
FG	Fog (visibility less than 1000 m)
FIR	Flight information region
FISB	Flight information service broadcast
FL	Flight level
FM	From
FRQ	Frequent
FU	Smoke
FZ	Freezing
FZL	Freezing level
G	Gusts
GR	Hail (5 mm or more)
GS	Small hail (smaller than 5 mm)
HVY	Heavy
HZ	Haze (visibility less than 5000 m)
ICAO	International Civil Aviation Organization
ICE	Icing
IFR	Instrument flight rules
IMC	Instrument meteorological conditions
INTSF	Intensifying
ISOL	Isolated
KM	Kilometres
KT	Knots
LYR	Layer
M	Metres
METAR	Aerodrome routine meteorological report

METAR	Automatic aerodrome routine meteorological report
AUTO	Automatic aerodrome routine meteorological report
MI	Shallow
MOD	Moderate
MOV	Moving
MS	Minus
MTW	Mountain waves
NC	No change
NCD*	No cloud detected
NDV ****	No directional variation available
NM	Nautical miles
NOSIG	No significant change
NOTAM	Notice to airmen
NS	Nimbostratus
NSC**	No significant cloud
NSW	Nil significant weather
NZZC	New Zealand FIR
NZZO	NZ Oceanic FIR
OBSC	Obscured
OCNL	Occasional
OVC	Overcast (8 oktas)
PIREP	Pilot report (AIREP)
PL	Ice pellets
PO	Dust/sand whirls
PR	Partial
PROB	Probability
PS	Plus
QNH	Altimeter sub-scale setting
RA	Rain
RE	Recent
RMK	Remark
RVR	Runway visual range
SA	Sand
SC	Stratocumulus
SCT	Scattered (3–4 oktas)
SEV	Severe
SFC	Surface
SG	Snow grains
SH	Shower

SIG	Significant
SIGMET	Significant meteorological information
SKC***	Sky clear
SN	Snow
SPECI	Aerodrome special meteorological report
SQ	Squall
SS	Sandstorm
ST	Stratus
STNR	Stationary
T	Temperature, in degrees Celcius
TAF	Aerodrome forecast
TC	Tropical cyclone
TCU	Towering cumulus
TEMPO	Temporarily
TIL	Until
TL	Till
TREND	Trend forecast
TS	Thunderstorm
TURB	Turbulence
UTC	Coordinated Universal Time
V	Variations from mean wind direction
VA	Volcanic ash
VC	Vicinity of the aerodrome
VFR	Visual flight rules
VIS	Visibility
VMC	Visual meteorological conditions
VRB	Variable
WKN	Weakening
WDSR	Widespread
WS	Windshear
WX	Weather
Z	Coordinated Universal Time

* used in METAR AUTO only.
 ** used only in METAR/TAF for NZAA, NZWN, NZCH.
 *** not used in METAR/TAF for NZAA, NZWN, NZCH.
 **** used in METAR AUTO except at NZAA, NZWN, NZCH