

AVIATION WEATHER PRODUCTS

Route Sector Winds and Temperatures

Bureau of Meteorology › Weather Meteorological Services



Route sector wind and temperature forecasts are derived from WAFS data. They are provided for various sectors of frequently used domestic air routes.

Route Sector Winds and Temperatures

The Bureau of Meteorology derives route sector wind and temperature (RSWT) forecasts from data supplied by the International Civil Aviation Organization's (ICAO) World Area Forecast System (WAFS).

The forecasts are given in three sets, covering eastern, central and western regions.

Forecasts are provided for six flight levels in sectors of frequently used domestic air routes, e.g. YMML/YSSY. On some of the longer routes, the information is sub-divided into segments, with the subdivision points indicated in the title of the data block. Where an ICAO location indicator is unavailable, geographical coordinates are used, e.g. 19S133E.

Forecasts are issued twice a day, at approximately 05 and 17 UTC. Each issue provides forecasts for time points 0000, 0600, 1200 and 1800 UTC, which are valid for use for periods 2100-0300, 0300-0900, 0900-1500 and 1500-2100 respectively.

FL	ISA	YMML/ YSSY	YSSY/ YBBN	YMML/ YPAD	YMML/ YMHB	YPAD/YPOD/ YMHB
445	-56	2309064	2005064	2409064	2509059	2409064 2509559
385	-56	2410054	2007054	2409553	2509051	2409553 2510051
340	-52	2508043	2005044	2509042	2509043	2509041 2510043
300	-45	2507033	2004033	2508532	2608536	2508532 2509036
235	-32	2606018	2002017	2507017	2607024	2507517 2607024
185	21	2605008	2002506	2606507	2606012	2503507 2605006

A row of RSWT data contains the following information:

- Flight level
- The ICAO Standard Atmosphere (ISA) temperature at the given flight level
- A seven-digit block showing the forecast wind direction, wind speed and temperature for the flight level in the given sector, where:
 - the first two digits give the wind direction, to the nearest 10 degrees, in degrees True;
 - the next three digits give the wind speed to the nearest 5 knots; and
 - the last two digits give the air temperature in negative degrees Celsius.

example: 2309064, where 23 = 230°, 090 = 90 knots, 64 = -64°C

Route sector wind and temperature forecasts are available from Airservices Australia's:

- NAIPS Pilot Briefing Service under the Charts Directory link, where they are labelled as RSWT 1/2/3 (eastern/central/western).
- AVFAX Service, where the codes are 81410-81413 (eastern), 81420-81423 (central) and 81430-81433 (western).

Receipt of a forecast for a particular validity time will automatically supersede any prior issues for that time.



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Example of RSWT

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BUREAU of METEOROLOGY - BRISBANE				03:52 UTC, 19/01/2011			
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ISSUE 190343				VALID 192100 - 200300			

FL -ISA	YMML/YSSY	YSSY/YBBN	YMML/YPAD	YMML/YMHB	YPAD/YPOD	YMHB	
445	-56	2307559	2206059	2508561	2507058	2609061	2507558
385	-56	2309549	2207547	2509550	2407553	2510050	2508553
340	-52	2205546	2304542	2409541	2505049	2509541	2606048
300	-45	2303039	2402536	2405037	2604042	2506037	2604542
235	-32	2301025	2501023	2502524	2703526	2603024	2704026
185	-21	2301012	2401011	2802011	2702513	2802511	2803013
FL -ISA	YMML/YMDG/YBBN	YMML/YGTH/YWLG	YSSY/YMCO/YMHB	YSSY/YGTH/YPAD			
445	-56	2308059	2206060	2408560	2306561	2306557	2405557
385	-56	2309548	2207547	2310049	2208048	2207550	2405554
340	-52	2207543	2206039	2309042	2208538	2303048	2603551
300	-45	2203538	2303535	2304538	2105532	2302040	2703043
235	-32	2201025	2501023	2402025	2002022	2201025	2603026
185	-21	2101012	2500512	2401012	1701011	2101012	2602514
FL -ISA	YBBN/YBMK/YBCS	YWLG/27S148E/YBPNYSSY/28S149E28S149E/YEML/YBTL					
445	-56	2104063	1501566	2205062	1903564	2206560	2004563
385	-56	2204549	1701551	2206048	2103550	2208048	2105050
340	-52	2305038	1902038	2207038	2104538	2106540	2105538
300	-45	2404529	2202028	2106028	2204027	2204034	2205027
235	-32	2603017	2502014	2202020	2502516	2201023	2402017
185	-21	2501507	2502004	2100509	2401506	2100512	2401008
FL -ISA	YBBN/25S148E/YBMAYBMA/YPDN	YSSY/YTAM/YBMK	YBCS/YBMA	YBCS/YHID			
445	-56	2105062	1703065	1003067	2206060	1904064	1302066
385	-56	2205549	1902551	1102052	2107548	2104050	1501551
340	-52	2206038	2002538	1001039	2106039	2204538	1601038
300	-45	2305030	2102027	1100529	2204033	2304527	2000528
235	-32	2502019	2502514	2600514	2401022	2603016	2501513
185	-21	2601009	2402006	2700504	2400511	2502006	2301004
FL -ISA	YBBN/YSDU	YSDU/VENEL/YPAD	YSSY/APOMA	APOMA/27S138E/YBAS			
445	-56	2206060	2307061	2507562	2306061	2304063	2101564
385	-56	2207547	2308048	2508049	2207548	2405050	2402050
340	-52	2207038	2208539	2408539	2207040	2404038	2402038
300	-45	2304034	2105533	2306033	2105033	2304027	2201527
235	-32	2401523	2002023	2202023	2001522	2103015	2001513
185	-21	2500512	1701011	2401010	1701511	1901509	1801506
FL -ISA	YMML/VENEL/YLEC	YLEC/YBASYBAS/19S133E/YPDNYBBN/YWLG					
445	-56	2408060	2406062	2402564	1102065	0903067	2206061
385	-56	2409549	2406549	2503550	1001051	0901552	2207048
340	-52	2309041	2406539	2503038	0900538	0801039	2207037
300	-45	2304537	2305530	2402528	1700028	0600529	2304532
235	-32	2302025	2102520	2102514	2200514	3200514	2402021
185	-21	2401011	1901510	1801506	1601004	3200504	2600511



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Airservices Australia is the official distributor of aviation forecasts, warnings and observations issued by the Bureau of Meteorology. Airservices' flight briefing services are available at www.airservicesaustralia.com. Telephone contact details for elaborative briefings are contained in Airservices' Aeronautical Information Publication Australia (AIP), which is available online through their website.

Other brochures produced by the Bureau of Meteorology's aviation meteorological services program can be found at www.bom.gov.au/aviation/knowledge-centre.

A vertical line in the margin indicates a text amendment since last update.