

# Winds and temperature charts

Upper level wind and temperature forecast charts are derived using data from the World Area Forecast System.

## Wind and temperature forecast charts

A wind and temperature chart provides a graphical display of forecast wind and temperature data for a specific flight level.

The Bureau of Meteorology generates these charts from World Area Forecast System (WAFS) datasets from one of the 2 World Area Forecast Centres (WAFS).

Charts are issued every 6 hours for forecast times valid at 00Z, 06Z, 12Z, 18Z and +30hrs. They are produced for the following areas and flight levels:

Australia	Area E	Area F	Area K
Equator to 50°S, 100°E to 180°E	44°55'N to 53°55'S, 24°46'E to 180°E	50°00'N to 52°42'S, 100°E to 110°W	Southern Indian Ocean & Southern Ocean
Mercator projection	Mercator projection	Mercator projection	Polar stereographic projection
FL050 850hpa	FL050 850hpa	FL050 850hpa	FL050 850hpa
FL100 700hpa	FL100 700hpa	FL100 700hpa	FL100 700hpa
FL140 600hpa	FL140 600hpa	FL140 600hpa	FL140 600hpa
FL180 500hpa	FL180 500hpa	FL180 500hpa	FL180 500hpa
FL240 400hpa	FL240 400hpa	FL240 400hpa	FL240 400hpa
FL270 350hpa			
FL300 300hpa	FL300 300hpa	FL300 300hpa	FL300 300hpa
FL320 275hpa			
FL340 250hpa	FL340 250hpa	FL340 250hpa	FL340 250hpa
FL360 225hpa			
FL390 200hpa	FL390 200hpa	FL390 200hpa	FL390 200hpa
FL410 175hpa			
FL450 150hpa	FL450 150hpa	FL450 150hpa	FL450 150hpa
FL530 100hpa	FL530 100hpa	FL530 100hpa	FL530 100hpa

The data is presented in 5° grids on a geographic background.

Winds are indicated by arrows, where the arrow alignment gives the direction from which the wind is blowing, and the barb gives the speed, where:

- a pennant barb (  ) represents 50 knots
- a feather barb (  ) represents 10 knots
- a half feather barb (  ) represents 5 knots

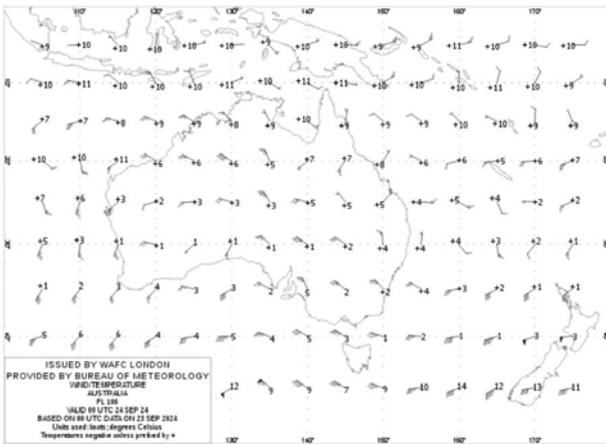
Temperatures are given in whole degrees Celsius, and are negative unless preceded by the plus sign (+).

 indicates a westerly wind at 15 knots with a temperature of plus 3 degrees Celsius

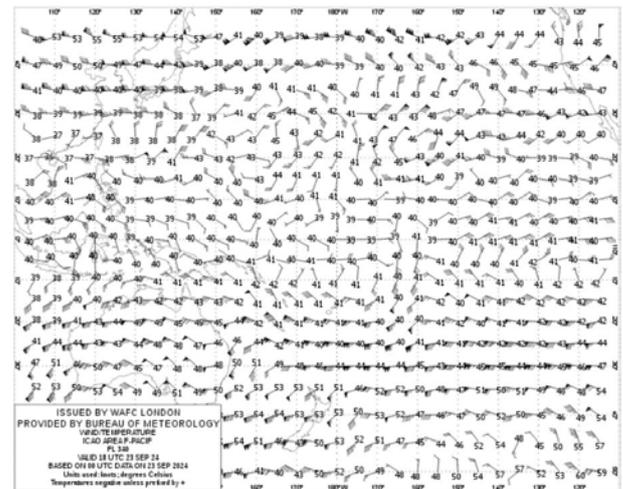
 indicates a north-westerly wind at 65 knots with a temperature of minus 55 degrees Celsius

## Examples

### Australian region (FL100)



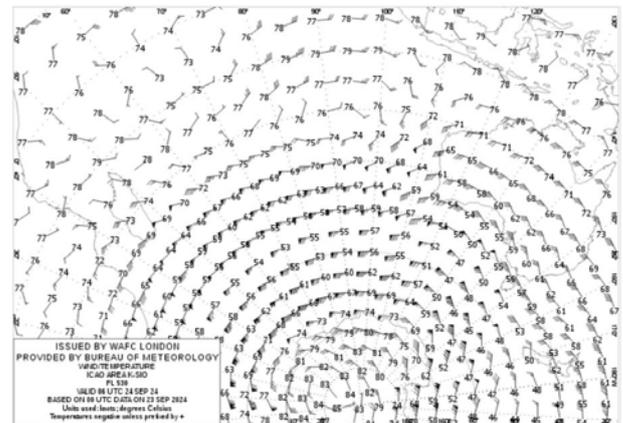
### Area F (FL340)



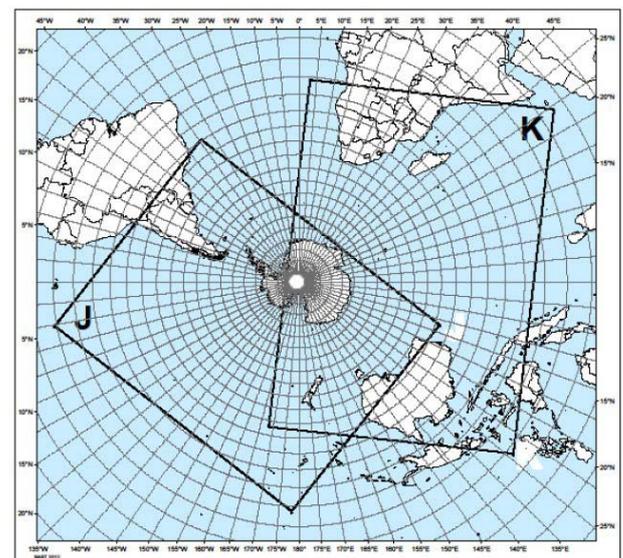
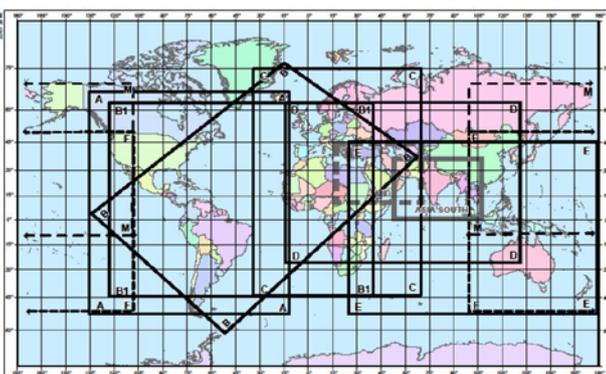
### Area E (FL240)



### Area K (FL530)



### Areas of coverage



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| A vertical line in the margin indicates a change or addition since last update.

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