

# AVIATION WEATHER PRODUCTS

# Graphical SIGMET

Bureau of Meteorology › Aviation Weather Services

## SIGMET Phenomena

Code
OBSC TS
EMBD TS
FRQ TS
SQL TS
OBSC TSGR
EMBD TSGR
FRQ TSGR
SQL TSGR
TC
SEV TURB
SEV ICE
SEV ICE (FZRA)
SEV MTW
HVY DS
HVY SS
VA
RDOACT CLD

Description
Obscured thunderstorms
Embedded thunderstorms
Frequent thunderstorms
Squall line thunderstorms
Obscured thunderstorms with hail
Embedded thunderstorms with hail
Frequent thunderstorms with hail
Squall line thunderstorms with hail
Tropical cyclone
Severe turbulence
Severe icing
Severe icing due to freezing rain
Severe mountain wave
Heavy duststorm
Heavy sandstorm
Volcanic ash
Radioactive cloud

## Introduction

The Bureau of Meteorology issues graphical representations of their text SIGMETs.

The graphical SIGMET is intended to improve situational awareness. The text SIGMET should continue to be used for official flight planning purposes.

## General

Geographical coverage of the graphical product will be the same as the text product, which is limited to those areas in the Australian FIRs given in AIP Book GEN 3.5.

Users are to consider the product as being valid only for the issue time. Therefore users need to ensure they are looking at the latest product (the issue time is shown in the bottom left-hand corner of the graphic).

There will be multiple SIGMETs displayed for the one phenomenon when:

- an extended SIGMET is first issued and the previous SIGMET (for the same phenomenon) is yet to expire;
- a new SIGMET is first issued in response to a significant change to an event given in a previous SIGMET, and the previous SIGMET is yet to be cancelled;
- a SIGMET contains both observed and forecast positions (as in VA SIGMETs); and when
- two SIGMETs are issued when a phenomenon crosses the FIR boundary, one for YBBB FIR and one for YMMM FIR.

If a text SIGMET cannot be rendered graphically, it will be displayed in text format on the graphic.

## Frequency of Issue

The graphical SIGMET product will be issued every ten minutes plus whenever a text SIGMET is issued. It will show the following three images:

- Low level SIGMETs (affecting airspace below 10000FT above MSL)
- High level SIGMETs (affecting airspace above 10000FT above MSL)
- All SIGMETs

When the vertical extent of a phenomenon crosses 10000FT above MSL, the SIGMET will be shown on both the Low-level and the High-level graphics.

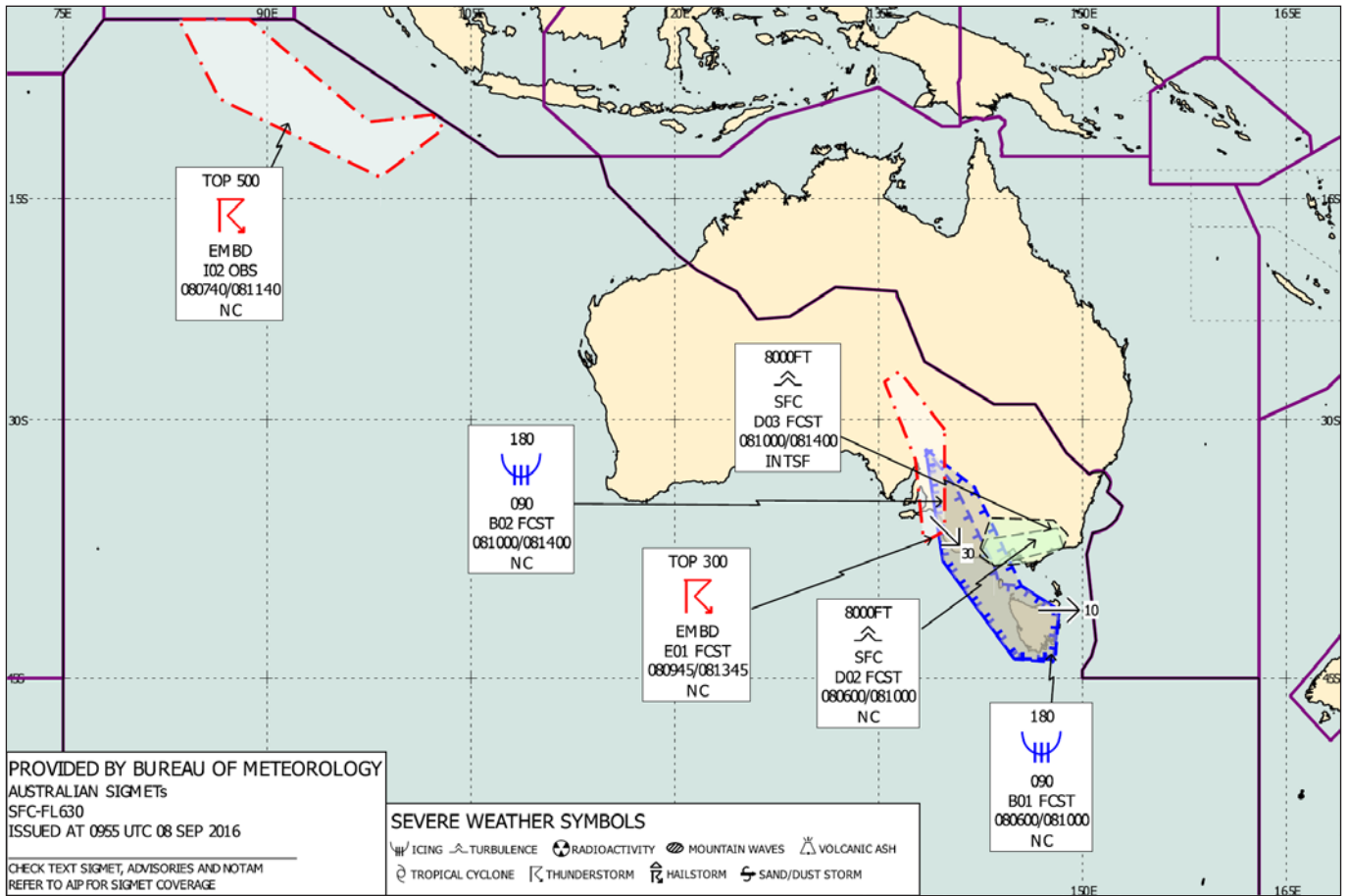
There will be a slight delay between the issuance of the text SIGMET and the subsequent update of the graphic.

Images will be issued even if there is no SIGMET current.

Each polygon describing the horizontal extent of the event will be accompanied by a box giving other information contained in the text product.



## Example of Graphical SIGMET



A decode of the information in the western-most box given in the graphic above is:

TOP 500	Upper limit of SIGMET (FL500)
⚡	Phenomenon symbol (Thunderstorm)
EMBD	Thunderstorm descriptor (Embedded)
I02	SIGMET number
OBS	Phenomenon (thunderstorms) observed
080740/081140	SIGMET validity
NC	Expected change in intensity (No change)

A full decode of the phenomenon symbols used in graphical SIGMETs can be found in AIP Book GEN 3.5.

The text SIGMETs from which the graphic was produced are:

YMMM SIGMET B02 VALID 081000/081400 YMRP -  
 YMMM MELBOURNE FIR SEV ICE FCST WI CRAY - YHAW - YMIA -  
 CAMUS - YSTH - S4400 E14800 - S4400 E14500 9000FT/FL180 MOV E  
 10KT NC  
 RMK: ME =

YMMM SIGMET D03 VALID 081000/081400 YMRP -  
 YMMM MELBOURNE FIR SEV TURB FCST WI YWYF - YCRG - YDEG -  
 YORB - WELS - YCTY - S3750 E14230 SFC/8000FT STNR INTSF  
 RMK: ME =

YMMM SIGMET E01 VALID 080945/081345 YPRM -  
 YMMM MELBOURNE FIR EMBD TS FCST WI YKIG - BUNGY - YPAG -  
 YOOD - TREBL - LFRO TOP FL300 MOV SE 30KT NC  
 RMK: ME =

YMMM SIGMET I02 VALID 080740/081140 YMMC -  
 YMMM MELBOURNE FIR EMBD TS OBS WI S0200 E08840 - S0930  
 E09730 - S0900 E10210 - S1000 E10300 - S1330 E09820 - S0750 E08630  
 - S0200 E08330 TOP FL500 STNR NC  
 RMK: MW =

YMMM SIGMET B01 VALID 080600/081000 YMRP -  
 YMMM MELBOURNE FIR SEV ICE FCST WI CRAY - YHAW - YREN -  
 YCTY - YKII - CAMUS - YSTH - S4410 E14750 - S4400 E14500 FL090/180  
 MOV E 10KT NC  
 RMK: ME =

YMMM SIGMET D02 VALID 080600/081000 YMRP -  
 YMMM MELBOURNE FIR SEV TURB FCST WI YARA - S3640 E14810 -  
 YORB - YCTY - YWBL SFC/8000FT STNR NC  
 RMK: ME =



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Other brochures produced by the Bureau of Meteorology's aviation weather services program can be found at [www.bom.gov.au/aviation/knowledge-centre](http://www.bom.gov.au/aviation/knowledge-centre).

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