

Text-based Ultraviolet (UV) Index Forecasts

User guide – version 1.0 – updated 15 May 2023

This user guide provides a summary of the text-based forecasts of sun protection times and maximum UV Index available to Registered Users via FTP. These forecasts are provided for more than 600 locations around Australia out to 4 days ahead.

Products

Table 1 provides a list of UV Index forecast data products included in the UV Index forecast bundle (IDBZ0024).

Product Code	Product Description	Product Format
IDZ00107	UV Index data for New South Wales	XML
IDZ00108	UV Index data for Northern Territory	XML
IDZ00109	UV Index data for Queensland	XML
IDZ00110	UV Index data for South Australia	XML
IDZ00111	UV Index data for Tasmania	XML
IDZ00112	UV Index data for Victoria	XML
IDZ00113	UV Index data for Western Australia	XML
IDZ75006	UV Index – all forecast locations	TXT

Table 1 UV Index forecast data products included in the UV Index forecast bundle (IDBZ0024)

Product Issue Time

Products are issued at around 1050 UTC daily.

File Location

Files appear in the /fwo subdirectory of Registered Users' directories.

Files are also available via anonymous FTP at: <ftp://ftp.bom.gov.au/anon/gen/fwo/>. Please note that use of data from anonymous FTP should be in accordance with the [copyright notice](#) and [disclaimer](#).

File Naming Convention

Files are overwritten with each issue and file names are unchanging allowing for direct addressing. Product files conform to the following naming convention:

IDZnnnnn.ext

File-name key	
IDZnnnnn	Product Code as listed in Table 1
ext	file-type extension (xml or txt)

Fields

IDZ00107-13

Refer to XML schema in first line of product.

Location shapefiles, referred to in the `<area aac=>` element, are available via ftp://ftp.bom.gov.au/anon/home/adfd/spatial/IDM00013.*.

`<text type="uv_alert">` contains written text describing sun protection times (i.e. when UV Index is 3 or greater) and the peak UV Index value, e.g. "Sun protection recommended from 10:40 am to 1:30 pm, UV Index predicted to reach 4 [Moderate]".

IDZ75006

Table 2 lists the elements included in the UV Index – all forecast locations (IDZ75006) file.

Element	Example	Comments
Lat	-34.92	Forecast location latitude (minus sign indicates degrees south) to two decimal places
Long	138.62	Forecast location longitude to two decimal places
Region	SA	Forecast location state or territory abbreviation
Location	Albury-Wodonga	Forecast location placename
DayMonYear	28 04 2023	Forecast valid date in format dd mm yyyy
UV Alert period (local time)	Sun protection recommended from 11:00 am to 3:00 pm, Or Sun protection not recommended.	Sun protection times when the UV Index is 3 and above. Previously called UV Alert. In am/pm format and in local time. If the UV Index is not expected to reach 3 during the day then the words "Sun protection not recommended" are used.
UVI max	UV Index predicted to reach 4 [Moderate]	Predicted maximum UV Index value, in format "UV Index predicted to reach <i>n</i> [<i>qualitative descriptor</i>]".

Table 2 Elements included in the UV Index – all forecast locations (IDZ75006)

Additional information

The UV Index is a simple and informative way of describing the danger of solar UV radiation intensity. Each point on the Index scale is equivalent to 25 milliWatts/square metre of UV radiation.

A computer model is used to forecast the UV radiation at ground level. The model takes into account information on the time of day, date, latitude, altitude and ozone concentrations.

Users should be aware that these products forecast **clear sky** UV Index. Cloud is not accounted for in these forecasts. The maximum UV Index is calculated for midday assuming cloud-free skies.

Qualitative values are as follows:

- Low: 0-2
- Moderate: 3-5
- High: 6-7
- Very High: 8-10
- Extreme: 11+

Further information available via: http://www.bom.gov.au/uv/about_uv_index.shtml.

For more complex systems such as GIS tools or mapping tools we recommended that [gridded UV information](#) is used.

Attribution

Please note that the information is supplied by the Bureau of Meteorology but produced by the European Centre for Medium Range Weather Forecasts (ECMWF) Copernicus Atmosphere Monitoring Service (CAMS).

Users are requested to acknowledge the ECMWF CAMS in any product or service derived from these data using the following or any similar notice 'Generated using Copernicus Atmosphere Monitoring Service Information [Year]'.

Contact us

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