



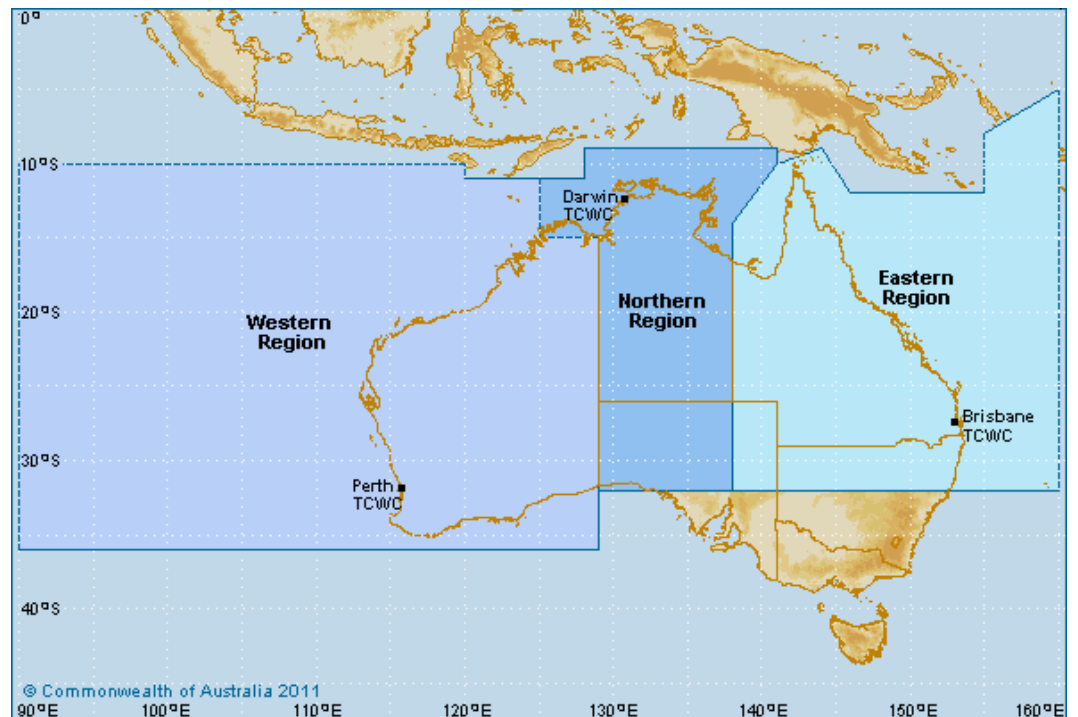
Tropical Cyclone Product Information

Information to assist users in interpreting Bureau of Meteorology tropical cyclone products.

Areas of Responsibility

The World Meteorological Organization divides the world into areas of responsibility for the purposes of tropical cyclone warning services.

The Australian area of responsibility is divided into three regions, with warnings issued from Perth, Darwin and Brisbane.



Product Issue Sequence

File name conventions

Bureau of Meteorology product IDs are allocated by area of responsibility.

- IDQ*: Eastern Region (Queensland);
- IDD*: Northern Region (Northern Territory);
- IDW*: Western Region (Western Australia).

System number

The files relevant to a particular tropical cyclone are determined by the area of responsibility and the cyclone's system number for that area. The Eastern and Western Regions can accommodate up to three tropical cyclones simultaneously; the Northern Region can accommodate two. The system number is seen at the end of the product description in the product listings below.

Within a Region, system numbers are filled numerically, so most tropical cyclones occupy system number 1. When a system is downgraded and products are no longer issued, other systems do not change their system number. For instance, when system 1 is cancelled, system 2 remains as system 2.

When a tropical cyclone crosses Regional boundaries, product IDs change to that of the new Region. The system number can change in this circumstance.

Tracking systems across products

Once named, systems can be programmatically tracked by the name of the system. The system name is found in all products once the system has been named.

In addition, each tropical cyclone/low is allocated an *identifier* value. This value remains constant for the life of the system. All systems identified by a Tropical Cyclone Warning Centre are allocated this identifier. The identifier is found in the tropical cyclone XML, GML/shapefile and technical bulletin products, but not the standard warning products.

Product Types

Tropical cyclone outlook

A daily forecast up to three days in advance of the probability of cyclone development in the seas around Australia. This product is issued between November and April (inclusive) in the Northern and Eastern Regions and every day in the Western Region.

<http://www.bom.gov.au/cyclone/about/warnings/outlook.shtml>

IDD10610	Tropical Cyclone Outlook - Darwin (NT)
IDQ10810	Tropical Cyclone Outlook for Coral Sea (QLD)
IDW10800	Tropical Cyclone 3 Day Outlook - Western Region (WA)

Formats: txt, html.

Tropical cyclone information bulletin

Issued when a cyclone is active in the Australian area of responsibility, but is not expected to cause winds in excess of 62 km/h (gale force) over land in Australia within 48 hours. Updated every six hours.

<http://www.bom.gov.au/cyclone/about/warnings/bulletin.shtml>

IDD20300	Tropical Cyclone Information Bulletin 1 (NT)
IDD20301	Tropical Cyclone Information Bulletin 2 (NT)
IDQ20065	Tropical Cyclone Information Bulletin 1 (QLD)
IDQ20066	Tropical Cyclone Information Bulletin 2 (QLD)
IDQ20067	Tropical Cyclone Information Bulletin 3 (QLD)
IDW24000	Tropical Cyclone Information Bulletin 1 (WA)
IDW24010	Tropical Cyclone Information Bulletin 2 (WA)
IDW24020	Tropical Cyclone Information Bulletin 3 (WA)

Formats: txt, xml.

Tropical cyclone advice

There are two types of tropical cyclone advice:

- Watch: Issued when gale force winds associated with a cyclone are expected to affect coastal communities within 48 hours, but not expected within 24 hours. Updated every six hours.
- Warning: Issued when gale force winds associated with a cyclone are affecting or expected to affect coastal communities within 24 hours. Updated every three hours, or hourly.

<http://www.bom.gov.au/cyclone/about/warnings/advice.shtml>

IDD20150	Tropical Cyclone Advice 1 (NT)
IDD20250	Tropical Cyclone Advice 2 (NT)
IDDP0007	QLD Tropical Cyclone Advice for System Affecting NT*
IDNP0004	QLD Tropical Cyclone Advice for System Affecting NSW*
IDQ20023	Tropical Cyclone Advice 1 (QLD)
IDQ20026	Tropical Cyclone Advice 2 (QLD)
IDQ20029	Tropical Cyclone Advice 3 (QLD)
IDQ20064	Tropical Cyclone Advice - Norfolk Island (QLD)
IDQP0004	NT Tropical Cyclone Advice for System Affecting QLD*
IDW24100	Tropical Cyclone Advice 1 (WA)
IDW24200	Tropical Cyclone Advice 2 (WA)
IDW24300	Tropical Cyclone Advice 3 (WA)
IDW24400	Tropical Cyclone Advice - Cocos Island and Christmas Island (WA)
IDWP0004	NT Tropical Cyclone Advice for System Affecting WA*

*These products duplicate warning information found in the main TC Advice product, but display the affected state's local time and emergency services advice.

Formats: txt, html, xml.

Technical bulletin

International-standard technical details about the cyclone, available in text and XML formats. Updated every six hours.

<http://www.bom.gov.au/cyclone/about/warnings/sample/technical.pdf>

IDD20020	Tropical Cyclone Technical Bulletin 1 (NT)
IDD20021	Tropical Cyclone Technical Bulletin 2 (NT)
IDD65441	Tropical Cyclone Technical Bulletin 1 - CXML (NT)
IDD65442	Tropical Cyclone Technical Bulletin 2 - CXML (NT)
IDQ20018	Tropical Cyclone Technical Bulletin 1 (QLD)
IDQ20068	Tropical Cyclone Technical Bulletin 2 (QLD)
IDQ20069	Tropical Cyclone Technical Bulletin 3 (QLD)
IDQ65255	Tropical Cyclone Technical Bulletin 1 - CXML (QLD)
IDQ65256	Tropical Cyclone Technical Bulletin 2 - CXML (QLD)
IDQ65257	Tropical Cyclone Technical Bulletin 3 - CXML (QLD)
IDW27600	Tropical Cyclone Technical Bulletin 1 (WA)
IDW27700	Tropical Cyclone Technical Bulletin 2 (WA)
IDW27800	Tropical Cyclone Technical Bulletin 3 (WA)
IDW60350	Tropical Cyclone Technical Bulletin 1 - CXML (WA)
IDW60351	Tropical Cyclone Technical Bulletin 2 - CXML (WA)
IDW60352	Tropical Cyclone Technical Bulletin 3 - CXML (WA)

Formats: txt, xml.

Tropical cyclone forecast track map

Issued with tropical cyclone advices to give a graphical representation of the cyclone's past track, forecast movement and its threat area. Updated with the tropical cyclone advice – hourly, three-hourly or six-hourly.

<http://www.bom.gov.au/cyclone/about/warnings/map.shtml>

IDD65001	Tropical Cyclone Forecast Track Map 1 - Graphic (NT)
IDD65002	Tropical Cyclone Forecast Track Map 2 - Graphic (NT)
IDD65011	Tropical Cyclone Forecast Track Map 1 (NT)
IDD65012	Tropical Cyclone Forecast Track Map 2 (NT)
IDDP0008	QLD Tropical Cyclone Forecast Track Map for System Affecting NT – Graphic*
IDDP0009	QLD Tropical Cyclone Forecast Track Map for System Affecting NT*
IDDP0010	WA Tropical Cyclone Forecast Track Map for System Affecting NT – Graphic*
IDDP0011	WA Tropical Cyclone Forecast Track Map for System Affecting NT*
IDQ65001	Tropical Cyclone Forecast Track Map 1 - Graphic (QLD)
IDQ65002	Tropical Cyclone Forecast Track Map 1 (QLD)
IDQ65003	Tropical Cyclone Forecast Track Map 2 - Graphic (QLD)
IDQ65004	Tropical Cyclone Forecast Track Map 2 (QLD)
IDQ65223	Tropical Cyclone Forecast Track Map 3 - Graphic (QLD)
IDQ65224	Tropical Cyclone Forecast Track Map 3 (QLD)
IDQ65230	Tropical Cyclone Forecast Track Map for NSW - Graphic (QLD)
IDQ65231	Tropical Cyclone Forecast Track Map for NSW (QLD)
IDQ65253	Tropical Cyclone Forecast Track Map - Norfolk Island (QLD)
IDQ65254	Tropical Cyclone Forecast Track Map - Norfolk Island - Graphic (QLD)
IDQP0011	NT Tropical Cyclone Forecast Track Map for System Affecting QLD – Graphic*
IDQP0012	NT Tropical Cyclone Forecast Track Map for System Affecting QLD*
IDW60280	Tropical Cyclone Forecast Track Map 1 - Graphic (WA)
IDW60281	Tropical Cyclone Forecast Track Map 1 (WA)
IDW60284	Tropical Cyclone Forecast Track Map 2 - Graphic (WA)
IDW60285	Tropical Cyclone Forecast Track Map 2 (WA)
IDW60287	Tropical Cyclone Forecast Track Map 3 - Graphic (WA)
IDW60288	Tropical Cyclone Forecast Track Map 3 (WA)
IDWP0005	NT Tropical Cyclone Forecast Track Map for System Affecting WA – Graphic*
IDWP0006	NT Tropical Cyclone Forecast Track Map for System Affecting WA*

*These products duplicate information found in the main TC track product, but display the affected state's local time and emergency services advice.

Formats: html, gif, jpg.

Technical bulletin XML

Technical Bulletin information in XML format. Updated with the technical bulletin – every six hours.

More information on CXML: <http://www.bom.gov.au/cyclone/cxmlinfo/index.shtml>

IDD65441	Tropical Cyclone Technical Bulletin 1 - CXML (NT)
IDD65442	Tropical Cyclone Technical Bulletin 2 - CXML (NT)
IDQ65255	Tropical Cyclone Technical Bulletin 1 - CXML (QLD)
IDQ65256	Tropical Cyclone Technical Bulletin 2 - CXML (QLD)
IDQ65257	Tropical Cyclone Technical Bulletin 3 - CXML (QLD)
IDW60350	Tropical Cyclone Technical Bulletin 1 - CXML (WA)
IDW60351	Tropical Cyclone Technical Bulletin 2 - CXML (WA)
IDW60352	Tropical Cyclone Technical Bulletin 3 - CXML (WA)

Format: xml.

Tropical cyclone forecast track maps: GML and shapefile

All current forecast map graphics available in GIS compatible format. These products show forecast tracks to 120 hours where the static images show 72 hours. Updated with the tropical cyclone advice – hourly, three-hourly or six-hourly.

These track maps are also available as web map service layers as part of the Bureau's GIS2Web service.

IDD65401	Tropical Cyclone Forecast Track Map 1 - GML (NT)
IDD65402	Tropical Cyclone Forecast Track Map 2 - GML (NT)
IDD65408	Tropical Cyclone Forecast Track Map for WA - GML (NT)
IDD65409	Tropical Cyclone Forecast Track Map for QLD - GML (NT)
IDQ65248	Tropical Cyclone Forecast Track Map 1 - GML (QLD)
IDQ65249	Tropical Cyclone Forecast Track Map 2 - GML (QLD)
IDQ65250	Tropical Cyclone Forecast Track Map 3 - GML (QLD)
IDQ65251	Tropical Cyclone Forecast Track Map for NT - GML (QLD)
IDQ65252	Tropical Cyclone Forecast Track Map for NSW - GML (QLD)
IDW60266	Tropical Cyclone Forecast Track Map 1 - GML (WA)
IDW60267	Tropical Cyclone Forecast Track Map 2 - GML (WA)
IDW60268	Tropical Cyclone Forecast Track Map 3 - GML (WA)
IDW60283	Tropical Cyclone Forecast Track Map for NT - GML (WA)

Formats: GML, ESRI shapefile (as zip).

Marine warnings

Existing marine warning products are issued for high seas and coastal waters threatened by cyclones. There are no additional marine warning products specifically for tropical cyclones.

CAP

Tropical cyclone advice products in Common Alerting Protocol (CAP) format are in development.

Sample Data

Samples of all product types can be found at:

<ftp://ftp.bom.gov.au/anon/sample/catalogue/Warnings/>.

Additional Resources

ACCESS-TC is a numerical weather prediction model run over a variable domain specifically targeting tropical cyclones. It contains forecasts of ten metre wind, mean sea level pressure and precipitation.

The Bureau of Meteorology's radar network is designed to provide coverage of all of the Australian coastline likely to experience a tropical cyclone crossing.

Visible and infra-red satellite images from the Himawari-8 satellite can be used to track tropical cyclones.

Observations from automatic weather stations can be used to observe parameters such as wind strength, rainfall amount and mean sea level pressure.

The Bureau's [GIS2Web service](#) displays tropical cyclone tracks as a single web map service layer showing all valid tropical cyclones.

Additional Information

Further information about tropical cyclone products can be found on the Bureau's website: <http://www.bom.gov.au/cyclone/about/warnings/>.

The Bureau's tropical cyclone FAQ explains many of the scientific concepts of tropical cyclones: <http://www.bom.gov.au/cyclone/faq/index.shtml>.