The Bureau of Meteorology

Satellite Images (GeoTIFF format)

User guide – version 1.1 – updated 21 July 2023

This user guide provides a summary of the satellite images in GeoTIFF format available to Registered Users via FTP, sourced from the Advanced Himawari Imager on the Himawari-9 satellite operated by the Japanese Meteorological Agency (JMA).

Products

Table 1 provides a list of products included in the Satellite GeoTIFF Bundle (IDBEA007).

Product Code	Product Description	Projection	Domain	Resolution
IDE00420	Cloud cover only	Geostationary	Full disk	2km
IDE00421	Infrared (Ch13) greyscale	Geostationary	Full disk	2km
IDE00422	Visible (Ch3) greyscale	Geostationary	Full disk	2km
IDE00423	Infrared (Ch13) Zehr false-colour enhancement	Geostationary	Full disk	2km
IDE00425	True colour/IR (Ch13) composite	Geostationary	Full disk	1km
IDE00426	True colour/IR (Ch13) composite	Geostationary	Full disk	2km
IDE00427	Water vapour (Ch8) with false-colour enhancement	Geostationary	Full disk	2km
IDE00430	Cloud cover only	Equirectangular	Australia	2km
IDE00431	Infrared (Ch13) greyscale	Equirectangular	Australia	2km
IDE00432	Visible (Ch3) greyscale	Equirectangular	Australia	2km
IDE00433	Infrared (Ch13) Zehr false-colour enhancement	Equirectangular	Australia	2km
IDE00435	True colour/IR (Ch13) composite	Equirectangular	Australia	1km
IDE00436	True colour/IR (Ch13) composite	Equirectangular	Australia	2km
IDE00437	Water vapour (Ch8) with false-colour enhancement	Equirectangular	Australia	2km

Table 1 List of satellite images included in the Satellite GeoTIFF Bundle (IDBEA007) with links to metadata from the Bureau's Data Catalogue where available.

The Australian domain is 55°S to 20°N and 85°E to 165°W.

Product Issue Time

Full disk scans are made by the satellite every 10 minutes, with the exception of daily maintenance carried out at 12:40 pm AEST (0240 UTC) and 12:40 am AEST (1440 UTC). Within each 10-minute period, there are multiple observations of Japan (4 x 2 sectors), multiple targeted observations (severe weather), and ~40 observations of landmarks to assist with navigation/registration. The Himawari-9 imager schedule is posted on the JMA's website.

File Location

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

Files are also available via anonymous FTP at: ftp://ftp.bom.gov.au/anon/gen/gms/. Please note that use of data from anonymous FTP should be in accordance with the copyright notice and disclaimer.

File Naming Convention

Product files conform to the following naming convention:

IDE004xx.*yyyymmddhhmm*.tif

File-name key	
IDE004*xx*	Product Code as listed in Table 1
yyyymmddhhmm	image validity time in UTC

Channel information

Himawari-9 has 16 channels in the range 0.4 - 13.3 μm with three spatial resolutions: one channel has 500 m resolution, three channels have 1000 m resolution, and 12 channels have 2000 m resolution.

JMA have made the SRF data and a report on AHI8 performance available.
Note that the "Dynamic Range" column within the performance report should be read as the saturation value (above which the detector is insensitive).

Additional Information

More information on satellite images and the Himawari-9 satellite is available on the Bureau's web site and on the website for the Meteorological Satellite Center of JMA.

Contact us

Connect with us via webreg@bom.gov.au