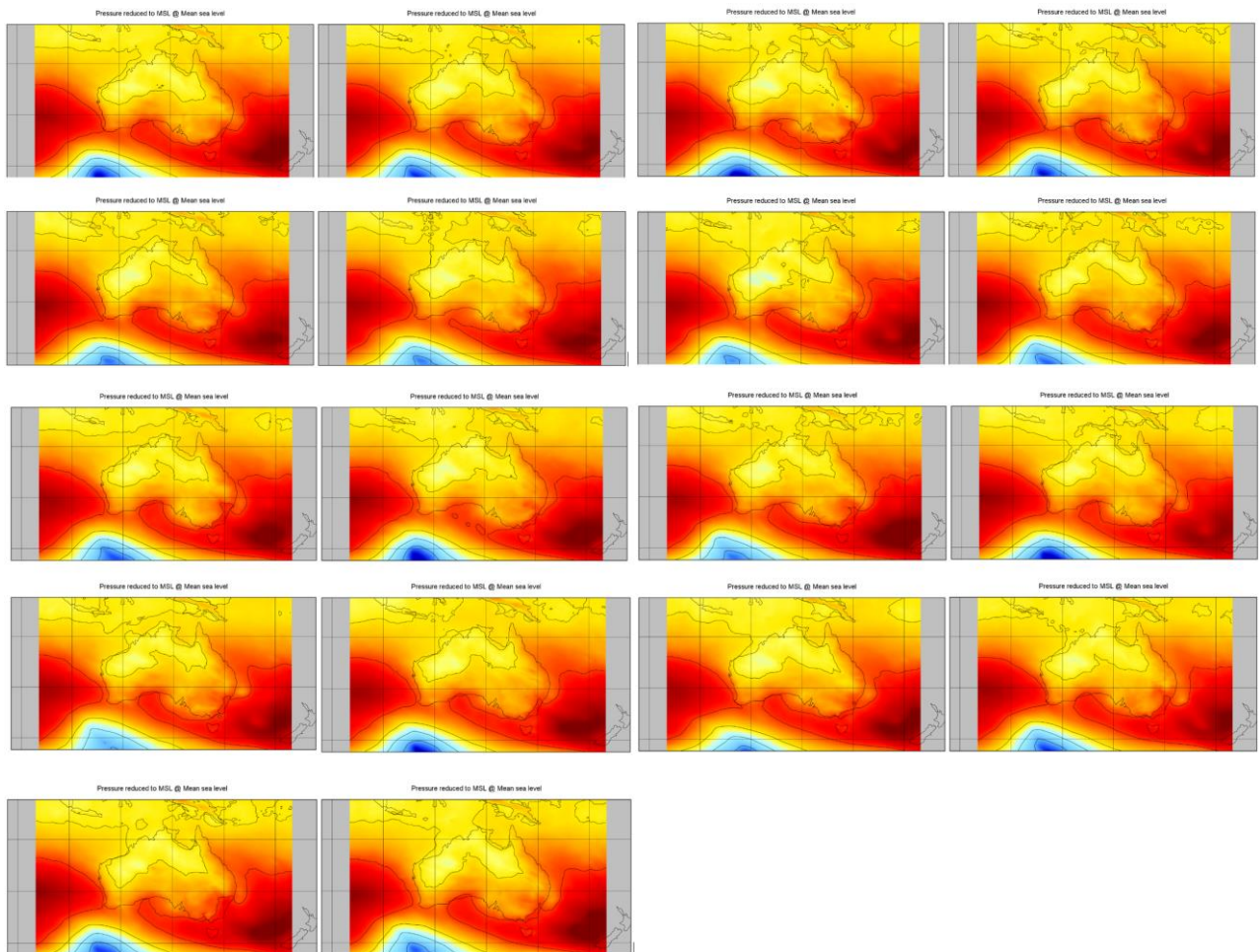


ACCESS-GE NWP Data

User Guide - Version 2.0 – updated 1 July 2025



This user guide provides a summary of the Australian Community Climate and Earth-System Simulator (ACCESS) Numerical Weather Prediction (NWP) data products from the ACCESS-GE (Global Ensemble) available to Registered Users via cloud FTP and SFTP.

Table of Contents

Model Overview.....	3
Model Domains	3
Model Summary	4
Product Subscription Options.....	4
File Location	4
File Naming Convention.....	5
Product Codes.....	5
Data Availability Times.....	6
Sample Files.....	7
Additional Information.....	7
Contact Us.....	7

Model Overview

ACCESS-GE is the Bureau of Meteorology's first global ensemble NWP system.

It is intended as a 36-member time-lagged ensemble, with 18 members in each six-hourly model run.

Model Domains

ACCESS-GE data is available for the global domain and Australian sub-domain, pictured in Figure 1 and defined in Table 1.

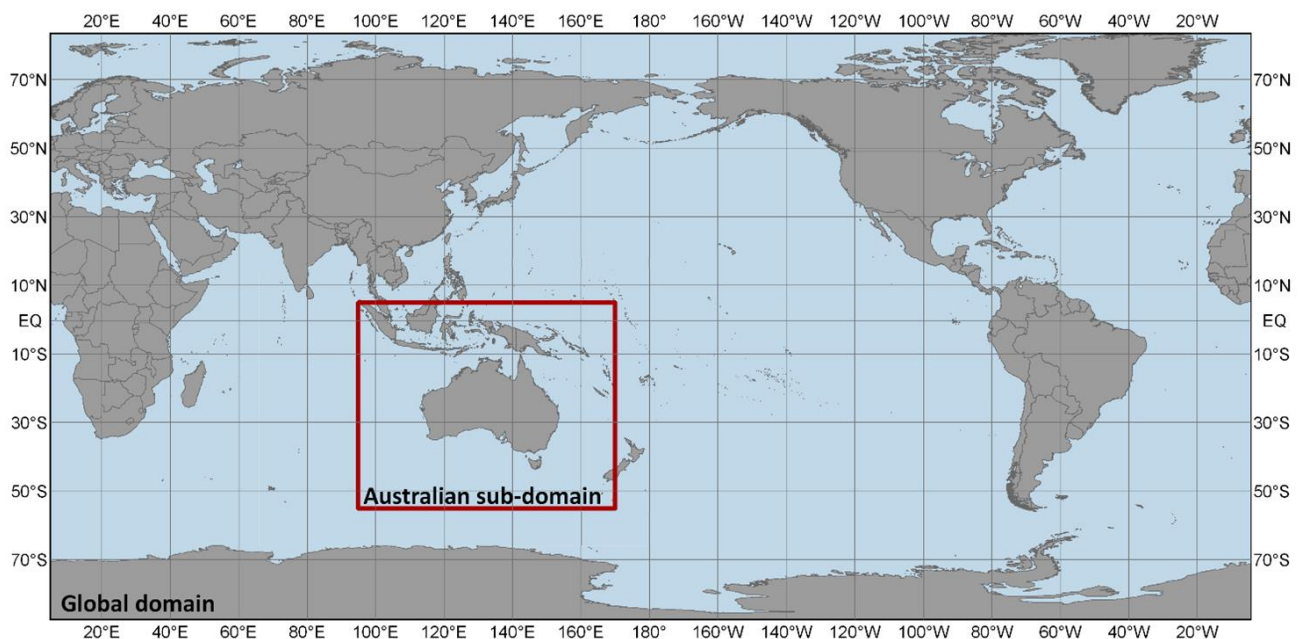


Figure 1 - ACCESS-GE Global domain and Australian sub-domain

Table 1 lists the coordinates of the domain and sub-domain limits pictured in Figure 1.

Domain	Domain limits [W to E, S to N]	Resolution (lat x lon)	Number of grid points (lat x lon)
Global	Full globe	0.3° x 0.45°	600 x 800
Australian sub-domain	95.010° to 169.893°, -54.902° to 4.980°	0.3° x 0.45°	200 x 167

Table 1 ACCESS-GE domains, resolution and number of grid points

Model Summary

Table 2 summarises the operational ACCESS-GE model.

Operational Model Version	Name	Domain	Resolution	Runs per day	Forecast Range	Time Steps
APS4	ACCESS-GE4	Global; Australian sub-domain	~33km	4	Up to 10 days	3 hours to 5 days; 6 hours thereafter

Table 2 Operational ACCESS-GE model

Product Subscription Options

Table 3 lists the available ACCESS-GE product subscription options. Please see our [Product Catalogue](#) for current prices.

Product/Bundle Code	Product/Bundle Description	Product Codes included
IDBY0070	ACCESS-GE Australian domain bundle	All Australian domain products in Table 4
IDBY0071	ACCESS-GE Global domain bundle	All Global domain products in Table 4
Variable (see Table 4)	Single Australian domain product	Any single Australian domain product in Table 4 (IDY25729 – Topography, land-sea mask Australian domain is automatically included)
Variable (see Table 4)	Single Global domain product	Any single Global domain product in Table 4 (IDY25779 – Topography, land-sea mask Global domain is automatically included)

Table 3 List of available ACCESS-GE product subscription options

File Location

Files are available in the following sub-directory of Registered Users' directories:

- /access_ge3_grib2

Please note that products are only available via cloud FTP (ftp-reg.cloud.bom.gov.au) and SFTP (sftp-reg.cloud.bom.gov.au) and not via ftp.bom.gov.au.

File Naming Convention

Product files are in [GRIB2](#) format (specifications are as per the Bureau's deterministic ACCESS models) and conform to the following naming convention:

IDY25NNN.version.fields.levels.base-time.forecast-step.grid-coords.ext

File-name key	
IDY25NNN	Product Code as listed in Table 4
version	Model version (fixed for all current products)
fields	Abbreviated field Name as listed in Table 4 (e.g. temp, dewpt)
levels	Alphanumeric descriptor of levels (e.g. scrn, 10m)
base-time	Model run's UTC base time in the format YYYYMMDDHH, where YYYY = year, MM = month, DD = day, HH = hour (e.g. 2024111012)
forecast-step	Model forecast step (001 to 246, incrementing by 1)
grid-coords	Descriptor of model grid co-ordinate level-type (surface)
ext	File-type extension (grb2)

Product Codes

Table 4 lists the available ACCESS-GE products.

Product Code	Field	Name	Domain	Level
IDY25700	Air temperature	temp	Australia	Screen
IDY25701	Dewpoint temperature	dewpt	Australia	Screen
IDY25702	Max temperature	tmax	Australia	Screen
IDY25703	Min temperature	tmin	Australia	Screen
IDY25704	Total precipitation	prec	Australia	Surface
IDY25705	Accum convective rainfall	convrain	Australia	Surface
IDY25705	Accum convective snowfall	convsnow	Australia	Surface
IDY25705	Accum large scale rainfall	lsrain	Australia	Surface
IDY25705	Accum large scale snowfall	lssnow	Australia	Surface
IDY25706	Wind - u, v	wind	Australia	10 m
IDY25706	Wind Gust	wndgust	Australia	10 m
IDY25707	Mean sea level pressure	pres	Australia	Single level
IDY25708	Cloud - Total	ttlcl	Australia	Single level

Product Code	Field	Name	Domain	Level
IDY25708	Cloud - Low	lowcld	Australia	Single level
IDY25708	Cloud - Medium	midcld	Australia	Single level
IDY25708	Cloud - High	hicld	Australia	Single level
IDY25713	Solar radiation	avswdown	Australia	Single level
IDY25714	Relative humidity	rh2m	Australia	Screen
IDY25715	Evaporation	evap	Australia	Single level
IDY25729	Topography	topog	Australia	Single level
IDY25729	Land-sea mask	mask	Australia	Single level
IDY25750	Air temperature	temp	Global	Screen
IDY25751	Dewpoint temperature	dewpt	Global	Screen
IDY25752	Max temperature	maxt	Global	Screen
IDY25753	Min temperature	mint	Global	Screen
IDY25754	Total precipitation	prec	Global	Surface
IDY25756	Wind - u, v	wind	Global	10m
IDY25756	Wind Gust	wndgust	Global	10m
IDY25757	Mean sea level pressure	pres	Global	MSL
IDY25764	Relative humidity	rh2m	Global	Screen
IDY25779	Topography	topog	Global	Single level
IDY25779	Land-sea mask	mask	Global	Single level

Table 4 List of ACCESS-GE products

Data Availability Times

Table 5 lists the expected approximate times for data files for the full-model run to be available on cloud (S)FTP for the ACCESS-GE APS4 model.

Model	00 UTC run		06 UTC run		12 UTC run		18 UTC run	
	UTC	AEST	UTC	AEST	UTC	AEST	UTC	AEST
ACCESS-GE APS4 +000 timestep	0915	7:15 PM	1430	12:30 AM	2115	7:15 AM	0230	12:30 PM
ACCESS-GE APS4 complete	1030	8:30 PM	1615	2:15 AM	2230	8:30 AM	0415	2:15 PM

Table 5 Data availability times *Please note these times may change (to be earlier) in coming weeks

Sample Files

Sample ACCESS-GE files are available via:

<ftp://ftp.bom.gov.au/anon/sample/catalogue/ACCESS/ensemble/GE3/>

Please note that due to most browsers no longer supporting FTP, it is generally necessary to use an FTP client such as Filezilla to retrieve the sample files. Alternatively, they can be accessed via Windows File Explorer by pasting the link into the address bar:

<ftp://ftp.bom.gov.au/anon/sample/catalogue/ACCESS/ensemble/GE3/>

Additional Information

Detailed information on ACCESS model data is provided on the Bureau's website in the following location: <http://www.bom.gov.au/nwp/doc/access/NWPData.shtml>

A Technical Report on the APS4 Global System Upgrade is available on the Bureau's website in the following location: [ACCESSG4GE4.pdf](#)

Contact Us

For enquiries about real-time data please email webreg@bom.gov.au