NARCliM

Climate projections for our future

The NSW and Australian Regional Climate Modelling (NARCliM) project brings together globally recognised science and multidisciplinary expertise to deliver high-quality climate change projections.

About NARCliM

To understand and plan for the likely impacts of climate change, we need trusted data and tools. For over a decade, NARCliM has been a trusted source of climate data in research, planning and decision-making used by NSW Government agencies, local councils, climate scientists, businesses, and communities to prepare and adapt to climate change.

What's new?

Since 2014, 3 generations of NARCliM data have been released. NARCliM2.0 delivers the highest resolution climate projections currently available in Australia with 4km grid cells for all of NSW, ACT, Victoria, and parts of South Australia, Queensland, and the Northern Territory.

Climate projections at 4km resolution are better able to capture the influence of local topography on atmospheric processes that influence storms and extreme rainfall. Projections are also available at 20km resolution for Australasia.

Users can now explore a range of climate variables, such as rainfall and temperature, in unprecedented detail on the AdaptNSW website.

Temperature
average, maximum, and minimum

Rainfall
annual and seasonal change

Climate change
hot days and cold nights

Hazards
severe fire weather days

NSW GOVERNMENT

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Emissions scenarios

NARCliM projections broadly describe the range of plausible future climate conditions.

NARCliM2.0 provides projections for the Shared Socioeconomic Pathways (SSPs) used in the most recent Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (2021). These are the latest 'what if' scenarios used across the world to explore how the climate may change under different levels of global greenhouse gases in the atmosphere.

The scenarios consider the driving factors of development including population growth, technology, energy sources, and land use, and their resulting emissions.

NARCliM2.0 currently delivers projections for a low (SSP1-2.6), medium (SSP2-4.5) and a high (SSP3-7.0) emissions scenario.

Visit AdaptNSW for more information about **NARCliM emissions scenarios**.

Low-emissions scenario SSP1-2.6

Reducing emissions

Using renewables, biofuels

Limited global warming

Medium-emissions scenario SSP2-4.5

Current emissions until 2050

Uneven global progress

Moderate global warming

High-emissions scenario SSP3-7.0

Increasing emissions

Reliance on fossil fuels

Continued global warming

Using NARCliM for planning

Local governments, businesses, and households can use the resources and information on the AdaptNSW website to see how climate change will affect their area between now and 2100. These include:

- Interactive climate change projections map
- Region-specific climate change snapshots
- NARCliM user case studies
- Climate Risk Ready NSW Guide
- Resources to help understand and adapt to climate change

NARCliM data is appropriate for use in climate change risk, impact, and adaptation assessments, research and reports.

Find out more

Visit the AdaptNSW website for climate change data and information for your region, as well as data summaries, case studies, and guidance for using climate projections.

Expert users with specific data needs can access and download NARCliM data from the NSW Climate Data Portal. For technical NARCliM enquiries, contact narclim@environment.nsw.gov.au