Name of dataset or data source:	NARCliM climate projections
Custodian of the dataset or data source:	ED Science (E&H)
Description:	__What is NARCliM?__ The New South Wales and Australian Regional Climate Modelling (NARCliM) project develops high-resolution regional climate projections that cover NSW and South-eastern Australia at a higher resolution and the Australasian continent and beyond at a lower resolution (named the NARCliM and CORDEX domains, respectively). Computer modelled climate projections are the best information we have available on our future climate. NARCliM has been designed to help government, industry and community in NSW and Australia plan for our future with robust regional and local scale data. The NARCliM project uses currently available global climate models (GCM) and greenhouse gas (GHG) emissions scenarios from the latest Coupled Model Intercomparison Project (CMIP) used in the IPCC reports and applies regional dynamical downscaling using the latest Weather Research and Forecasting model (WRF). NARCliM generates critical climate indices for a broad range of applications and climate change adaptation and risk analysis. The NARCliM project is led by the NSW Government with support from the ACT, South Australian, Victorian, and Western Australian governments, National Computational Infrastructure, Murdoch University and the University of New South Wales. __NARCliM releases__ NARCliM2.0 was released in August 2024. It is the most detailed regional climate projections available in Australia to date at 4km for South-eastern Australia and 20km scale for Australasia. We recommend using NARCliM2.0 as it is the most current generation, benefitting from several design and technical enhancements. NARCliM2.0 simulates the climate using five CMIP6 GCMs and two RCMs with continuous data from 1950 to 2100. Three greenhouse gas emissions scenarios are available - SSP1-2.6, SSP2-4.5 and SSP3-7.0. NARCliM2.0 has been designed to WCRP-CORDEX standards and provides users with state-of-the-art climate projections for Australia. NARCliM1.0 was released in 2014. It contains simulations from four CMIP3

GCMs and three regional climate models (RCM) using WRF3.3 for one future GHG scenario (SRES A2). Time periods included are 1990 to 2009, 2020 to 2039 and 2060 to 2079, with a grid resolution of 10km for South-eastern Australia (NARCliM domain) nested within a 50km grid for Australasia (CORDEX domain). NARCliM1.0 data has been used for a range of NSW climate adaptation and impact studies and climate change visualisations. An enhanced set of climate projections (NARCliM1.5) were released in 2020. NARCliM1.5 contains simulations from three CMIP5 GCMs and two RCMs and two GHG scenarios (RCP4.5 and RCP8.5). The simulated time period is continuous from 1951 to 2100. NARCliM1.5 has the same grid resolution as NARCliM1.0 – a 10km grid nested within a 50km grid, and is useful for analysis of climate extremes, impact thresholds and stress testing. Each generation of NARCliM is based on best available climate modelling and scenarios at the time of release. Consequently, there are expected differences between projections/results of the modelling but there are mostly similarities in trends (across NSW and over time). For more information on NARCliM generations, please visit the AdaptNSW website (https://www.climatechange.environment.nsw.gov.au/narclim/using-narclim-data/narclim-generations-and-parameters). __Model output__ NARCliM2.0 climate projections are available on the NSW Climate Data Portal (https://www.climatechange.environment.nsw.gov.au/climate-data-portal). The data is also currently available at the National Computational Infrastructure at ANU (https://nci.org.au/). The Climate Data Portal provides users access to NARCliM2.0's "core variables" at daily and monthly frequencies. Additionally, the Interactive climate change projections map (https://www.climatechange.environment.nsw.gov.au/projections-map) on AdaptNSW website provide translated climate data to a broad audience of users. For more information, contact us through the NARCliM Mailbox, narclim@environment.nsw.gov.au.

Data quality rating:

Institutional Environment - 5
Accuracy - 5
Coherence - 5
Interpretability - 5
Accessibility - 5

INSTITUTIONAL ENVIRONMENT

Excellent

Does the information have the potential to enhance services or service delivery?

The data aligns with the Data Quality Framework, including:

- Legislation
- Policies
- Information Asset Governance
- Standards
- Data Management Plans

The following governance roles and responsibilities for this asset are clearly assigned:

- Information Asset Owner
- Information Asset Custodian
- Information Steward

Data collection is authorised by law, regulation or agreement

The Custodial agency has no commercial interest or conflict of interest in the data

ACCURACY

Excellent

Data has been subject to a data assurance process (for example: Checking for errors at each stage of data collection and processing, or verifying data entry and making corrections if necessary.)

Data is revised and the revision is published if errors are identified

There are no known gaps in the data or if there are gaps (for example: non-responses, missing records, data not collected), they have been identified in caveats attached to the dataset.

No changes have been made or other factors identified (for example: weighting, rounding, de-identification of data, changes or flaws in data collection or verification methods) that could affect the validity of the data; or any changes/factors have been identified in caveats attached to the asset.

The data collection met the objectives of the primary user. The data correctly represents what it was designed to measure, monitor or report.

i Find out more about the quality assurance processes from the NSW Government Standard for Data Quality Reporting. https://www.finance.nsw.gov.au/ict/resources/data-quality-standard

COHERENCE — Excellent

Standard definitions, common concepts, classifications and data recording practices have been used.

Elements within the data can be meaningfully compared.

This data is generally consistent with similar or related data sources from the same discipline

The data can be analysed over time (for example, there have not been any significant changes in the way items are defined, classified or counted over time).

The data does not form part of a collection or, if it is the latest in a series of data releases, there have not been any changes in methodology or external impacts since the last data release.

INTERPRETABILITY — Excellent

A data dictionary is available to explain the meaning of data elements, their origin, format and relationships

Information is available about the primary data sources and methods of data collection (e.g. instruments, forms, instructions).

Information is available to help users evaluate the accuracy of the data and any level of error

Information is available to explain concepts, help users correctly interpret the data and understand how it can be used

Information is available to explain ambiguous or technical terms used in the data

i Find out more about the data dictionary from the Custodian (contact details below).

i Find out more about the primary data sources and methods of data collection from the Custodian (contact details below).

i Find out more about concepts used in this dataset and how to understand or interpret the data from the Custodian (contact details below).

i Find out more about ambiguous or technical terms used in the data from the Custodian (contact details below).

ACCESSIBILITY	Excellent

Data is available online with an open licence

Data is available in machine-processable, structured form (e.g. CSV format instead of an image scan of a table)

Data is available in a non-proprietary format (e.g. CSV, XML)

Data is described using open standards (e.g. RDF, SPARQL) and persistent identifiers (URIs or DOIs)

Data is linked to other data, to provide context (e.g. employee ID is linked to employee name or species name is linked to genus)

DATA DISCLAIMER

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For more information about this dataset or data source, contact:	NSW Department of Climate Change, Energy, the Environment and Water
Data Broker email:	data.broker@environment.nsw.gov.au

Data Broker phone:	131555

Understanding the Data Quality Statement

The data quality statement aims to help you understand how a particular dataset could be used and whether it can be compared with other, similar datasets. It provides a description of the characteristics of the data to help you decide whether the data will be fit for your specific purpose.

About the quality rating:

The reporting questionnaire asks five questions for each of these data quality dimensions:

- Institutional Environment
- Accuracy
- Coherence
- Interpretability
- Accessibility

For each question: “yes” = 1 point; “no” = 0 points

The number of points determines the Quality Level for each dimension (high, medium, low).

Only dimensions with four or five points receive a star.

Points	Quality Level	Star / No Star
0	Poor	No Star
1	Poor	No Star
2	Fair	No Star
3	Good	No Star
4	Very Good	Star
5	Excellent	Star

Evaluating data quality

Quality relates to the data’s “fitness for purpose”. Users can make different assessments about the dataquality of the same data, depending on their “purpose” or the way they plan to use the data.

The following questions may help you evaluate data quality for your requirements. This list is not exhaustive.Generate your own questions to assess data quality according to your specific needs and environment.

- What was the primary purpose or aim for collecting the data?
- How well does the coverage (and exclusions) match your needs?
- How useful are these data at small levels of geography?
- Does the population presented by the data match your needs?
- To what extent does the method of data collection seem appropriate for the information being gathered?
- Have standard classifications (eg industry or occupation classifications) been used in the collection of the data?If not, why? Does this affect the ability to compare or bring together data from different sources?
- Have rates and percentages been calculated consistently throughout the data?

- Is there a time difference between your reference period, and the reference period of the data?
- What is the gap of time between the reference period (when the data were collected) and the release date of thedata?
- Will there be subsequent surveys or data collection exercises for this topic?
- Are there likely to be updates or revisions to the data after official release?