#### Name of dataset or data source:

#### Custodian of the dataset or data source:

### NARCliM1.5 climate projections

### ED Science (E&H)

Description:

\_What is NARCliM?\_\_ The New South Wales and Australian Regional Climate Modelling (NARCliM) project develops highresolution regional climate projections that cover NSW and South-eastern Australia at a higher resolution and the Australasian continent and beyond at another 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. \_\_NARCliM1.5\_\_ 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 10 km grid for South-eastern Australia (NARCliM domain) nested within a 50 km grid for Australasia (CORDEX domain), and is useful for analysis of climate extremes, impact thresholds and stress testing. The new projections offer enhancements to NARCliM1.0 (2014). These include: \* Global climate models (GCMs) from the Coupled Model Intercomparison Project-5 (CMIP5) \* Two future climate scenarios called Representative Concentration Pathways (RCPs) from CMIP5: RCP4.5 (some mitigation of greenhouse gas emissions); and RCP8.5 (very limited mitigation of greenhouse gas emissions) \* A continuous time period of 1951 to 2100 \* Daily, monthly and seasonal timesteps \* Post-processed data of fifteen core variables and bias-corrected data for three variables and data. \* Additionally, users can access two two ERA-Interim reanalysis forced simulations were run for 1979 to 2013. NARCliM1.5 has been designed as a supplement to NARCliM1.0 in order to provide broader range of future climate variability. Users are required to review and agree to the Terms and Conditions of use. Further, users are strongly advised that NARCliM1.5 is not a replacement for NARCliM1.0. rather, NARCliM1.5 complements NARCliM1.0. Therefore, both sets of models should be used to capture the range of future climate variability for South-eastern Australia. Additional information about the data is available on the AdaptNSW website \_\_Model output\_\_ For access to NARCliM1.5 climate projections data, please visit the NSW Climate Data Portal or the National Computational Infrastructure at ANU. Additional variables useful for specialist analysis are available upon request. For more information, visit the AdaptNSW website, or 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)

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| so | ource, contact:   | Environment and Water              |
|----|-------------------|------------------------------------|
| D  | ata Broker email: | data.broker@environment.nsw.gov.au |
| D  | ata 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?