

**Title** Water Modelling-Palaeo Stochastic Climate Data-Greater Sydney-Silo Station (vi of xi) ID 068001-068020

## Abstract

The palaeo stochastic climate data include 10,000 replicates of 130-yr daily data sets of rainfall and potential evapotranspiration generated using observed data sets without and with combined palaeo climate data. This work has been undertaken by researchers at the University of Newcastle and used in modelling for Greater Sydney Water Strategy.

This particular Asset (068001-068020) houses Silo Station IDs:

- 068002 - AVON DAM
- 068003 - BERRY MASONIC VILLAGE
- 068007 - CAMDEN (BROWNLOW HILL)
- 068008 - BUNDANOON (BALLYMENA)
- 068009 - BURRAWANG (RANGE STREET)
- 068013 - MENANGLE
- 068016 - CATARACT DAM
- 068018 - CORDEAUX NO.1 DAM

Note: If you would like to ask a question, make any suggestions, or tell us how you are using this dataset, please visit the [NSW Water Hub which has an online forum](#) you can join.

## Resource locator

### [Data Quality Statement](#)

Name: Data Quality Statement

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Data quality statement

Function: download

### [068002\\_AVON DAM MWSDB\\_FAO56](#)

Name: 068002\_AVON DAM MWSDB\_FAO56

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 068002 (AVON DAM MWSDB); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

### [068002\\_AVON DAM MWSDB\\_Mlake](#)

Name: 068002\_AVON DAM MWSDB\_Mlake

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 068002 (AVON DAM MWSDB); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

### [068002\\_AVON DAM MWSDB\\_Mwet](#)

Name: 068002\_AVON DAM MWSDB\_Mwet

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 068002 (AVON DAM MWSDB); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

### [068002\\_AVON DAM MWSDB\\_Rain](#)

Name: 068002\_AVON DAM MWSDB\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068002 (AVON DAM MWSDB); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068003\\_BERRY  
MASONIC  
VILLAGE\\_Rain](#)

Name: 068003\_BERRY MASONIC VILLAGE\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068003 (BERRY MASONIC VILLAGE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068007\\_CAMDEN  
\(BROWNLOW  
HILL\)\\_FAO56](#)

Name: 068007\_CAMDEN (BROWNLOW HILL)\_FAO56

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 068007 (CAMDEN (BROWNLOW HILL)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068007\\_CAMDEN  
\(BROWNLOW  
HILL\)\\_Rain](#)

Name: 068007\_CAMDEN (BROWNLOW HILL)\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068007 (CAMDEN (BROWNLOW HILL)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068007\\_CAMDEN  
\(BROWNLOW  
HILL\)\\_Mlake](#)

Name: 068007\_CAMDEN (BROWNLOW HILL)\_Mlake

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 068007 (CAMDEN (BROWNLOW HILL)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068007\\_CAMDEN  
\(BROWNLOW  
HILL\)\\_Mwet](#)

Name: 068007\_CAMDEN (BROWNLOW HILL)\_Mwet

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 068007 (CAMDEN (BROWNLOW HILL)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068008\\_BUNDANOON  
\(BALLYMENA\)\\_FAO56](#)

Name: 068008\_BUNDANOON (BALLYMENA)\_FAO56

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 068008 (BUNDANOON (BALLYMENA)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068008\\_BUNDANOON](#)

Name: 068008\_BUNDANOON (BALLYMENA)\_Mlake

[\(BALLYMENA\)\\_Mlake](#)

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 068008 (BUNDANOON (BALLYMENA)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[068008\\_BUNDANOON \(BALLYMENA\)\\_Rain](#)

Name: 068008\_BUNDANOON (BALLYMENA)\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068008 (BUNDANOON (BALLYMENA)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[068008\\_BUNDANOON \(BALLYMENA\)\\_Mwet](#)

Name: 068008\_BUNDANOON (BALLYMENA)\_Mwet

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 068008 (BUNDANOON (BALLYMENA)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[068009\\_BURRAWANG \(RANGE STREET\)\\_FA056](#)

Name: 068009\_BURRAWANG (RANGE STREET)\_FA056

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic FA056 data for 3250 replicates for 068009 (BURRAWANG (RANGE STREET)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068009\\_BURRAWANG \(RANGE STREET\)\\_Rain](#)

Name: 068009\_BURRAWANG (RANGE STREET)\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068009 (BURRAWANG (RANGE STREET)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068009\\_BURRAWANG \(RANGE STREET\)\\_Rain](#)

Name: 068009\_BURRAWANG (RANGE STREET)\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068009 (BURRAWANG (RANGE STREET)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068009\\_BURRAWANG \(RANGE STREET\)\\_Mwet](#)

Name: 068009\_BURRAWANG (RANGE STREET)\_Mwet

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 068009 (BURRAWANG (RANGE STREET)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068013\\_MENANGLE  
JMAI\\_Rain](#)

Name: 068013\_MENANGLE JMAI\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068013 (MENANGLE JMAI); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068013\\_MENANGLE  
JMAI\\_FAO56](#)

Name: 068013\_MENANGLE JMAI\_FAO56

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 068013 (MENANGLE JMAI); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068013\\_MENANGLE  
JMAI\\_Rain](#)

Name: 068013\_MENANGLE JMAI\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068013 (MENANGLE JMAI); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068013\\_MENANGLE  
JMAI\\_Mwet](#)

Name: 068013\_MENANGLE JMAI\_Mwet

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 068013 (MENANGLE JMAI); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068016\\_CATARACT  
DAM\\_Rain](#)

Name: 068016\_CATARACT DAM\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068016 (CATARACT DAM); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068016\\_CATARACT  
DAM\\_Mlake](#)

Name: 068016\_CATARACT DAM\_Mlake

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 068016 (CATARACT DAM); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068016\\_CATARACT  
DAM\\_Mwet](#)

Name: 068016\_CATARACT DAM\_Mwet

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 068016 (CATARACT DAM);

each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068018\\_CORDEAUX  
NO.1 DAM\\_FA056](#)

Name: 068018\_CORDEAUX NO.1 DAM\_FA056

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic FA056 data for 3250 replicates for 068018 (CORDEAUX NO.1 DAM); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068018\\_CORDEAUX  
NO.1 DAM\\_Rain](#)

Name: 068018\_CORDEAUX NO.1 DAM\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068018 (CORDEAUX NO.1 DAM); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068018\\_CORDEAUX  
NO.1 DAM\\_Mwet](#)

Name: 068018\_CORDEAUX NO.1 DAM\_Mwet

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 068018 (CORDEAUX NO.1 DAM); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[068018\\_CORDEAUX  
NO.1 DAM\\_Rain](#)

Name: 068018\_CORDEAUX NO.1 DAM\_Rain

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Rain data for 3250 replicates for 068018 (CORDEAUX NO.1 DAM); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[Map View for data  
download](#)

Name: Map View for data download

Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

All the stations in Greater Sydney area are shown in this State level map (ESRI Rest Map Service Format), and the data can be downloaded by clicking each station.

Function: download

## Unique resource identifier

Code 8ff642c3-9f31-407c-ac2f-8543cd1eb4dc

Presentation form Table digital

Edition 1.0

Dataset language English

Metadata standard

|   |  |
|---|--|
| Name  | ISO 19115  |
| Edition                                       | 2016   |
| Dataset URI                                   | <a href="https://datasets.seed.nsw.gov.au/dataset/8ff642c3-9f31-407c-ac2f-8543cd1eb4dc">https://datasets.seed.nsw.gov.au/dataset/8ff642c3-9f31-407c-ac2f-8543cd1eb4dc</a>  |
| Purpose                                       | <p>Climate data is a fundamental input dataset required for water modelling. The stochastic climate data is 10,000 years of daily data representing the variability of the long-term climate at a location generated. The primary purpose of the stochastic climate data is to be used as input data for water modelling to analysis water related outcomes of river basins under long-term climate and inform the development of water policies, planning and strategies for water management. Climate data is a fundamental input dataset required for water modelling. Rainfall and potential evapotranspiration are the two main types of climate required for the types of water models used for water planning. Temperature data is used in some of the water models (in particular for snowmelt modelling, water demand modelling). Climate data in daily temporal resolution is used as input data to water models of varying types, purposes, and complexity. The water models transform this input data to produce a range of water related modelled data. Stochastic climate data has been generated based on observed climate dataset combined with paleo-climatic information. The observed data is downloaded from the SILO data-base of Australian climate data (<a href="https://www.longpaddock.qld.gov.au/silo/">https://www.longpaddock.qld.gov.au/silo/</a>), which has climate data from 1889-present based on instrumental records at thousands of climate stations. The stochastic data are 10,000-year daily data sets of each climate data at different climate stations.</p> |
| Status  | On going   |
| Spatial representation type                   | textTable  |
| Spatial reference system                      |  |
| Code identifying the spatial reference system | 4283   |
| Spatial resolution                            | 1 km   |
| Additional information source                 | Raw data series commenced 01/01/0000 to 31/12/9999   |
| Topic category                                |  |

|  |   |
|--|---|
| <b>Keyword set</b>                               |   |
| keyword value                                    | WATER   |
| <b>Originating controlled vocabulary</b>         |   |
| Title  | ANZLIC Search Words   |
| Reference date                                   | 2008-05-16  |
| <b>Geographic location</b>                       |   |
| West bounding longitude                          | 150.2   |
| East bounding longitude                          | 151.5   |
| North bounding latitude                          | -34.23  |
| South bounding latitude                          | -33.35  |
| NSW Place Name                                   | Greater Sydney  |
| <b>Vertical extent information</b>               |   |
| Minimum value                                    | -100  |
| Maximum value                                    | 2228  |
| <b>Coordinate reference system</b>               |   |
| Authority code                                   | urn:ogc:def:cs:EPSG::   |
| Code identifying the coordinate reference system | 5711  |
| <b>Temporal extent</b>                           |   |
| Begin position                                   | 0001-01-01  |
| End position                                     | N/A   |
| <b>Dataset reference date</b>                    |   |
| <b>Resource maintenance</b>                      |   |
| Maintenance and update frequency                 | As needed   |
| <b>Contact info</b>                              |   |
| Contact position                                 | Data Broker   |
| Organisation name                                | NSW Department of Climate Change, Energy, the Environment and Water   |
| Telephone number                                 | 131555  |
| Email address                                    | <a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>                                  |
| Web address                                      | <a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a> |
| Responsible party role                           | pointOfContact  |

## Lineage

The stochastic data are 10,000-year daily data sets at different climate stations, which were generated using observed or derived data sets combined with palaeo-logical climate data information. This work was undertaken by researchers at University of Adelaide and University of Newcastle and used in Regional Water Strategies. The stochastic data were generated region by region with spatial and temporal consistency of the data between regions maintained. Stochastic datasets were generated using the observed climate data and paleo-climatic information. The observed and derived data is downloaded from the SILO data-base of Australian climate data (<https://www.longpaddock.qld.gov.au/silo/>), which has climate data from 1889-present.

## Limitations on public access

## Responsible party

|                        |   |
|------------------------|---|
| Contact position       | Data Broker   |
| Organisation name      | NSW Department of Climate Change, Energy, the Environment and Water   |
| Telephone number       | 131555  |
| Email address          | <a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>                                  |
| Web address            | <a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a> |
| Responsible party role | pointOfContact  |

## Metadata point of contact

|                        |   |
|------------------------|---|
| Contact position       | Data Broker   |
| Organisation name      | NSW Department of Climate Change, Energy, the Environment and Water   |
| Telephone number       | 131555  |
| Email address          | <a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>                                  |
| Web address            | <a href="https://www.nsw.gov.au/departments-and-agencies/dcceew">https://www.nsw.gov.au/departments-and-agencies/dcceew</a> |
| Responsible party role | pointOfContact  |

**Metadata date** 2024-08-20T21:36:58.287815

**Metadata language**