### Title

Water Modelling-Palaeo Stochastic Climate Data-Greater Sydney-Silo Station (ii of xi) ID 063001-063070

#### **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 (063001-063070) houses Silo Station IDs:

- 063009 BLACKHEATH (LAWRENCE ST)
- 063012 RUNNING STREAM (BROOKLYN)
- 063013 BERAMBING
- 063028 FAULCONBRIDGE (ST GEORGES CRESCENT)
- 063030 OBERON (GINGKIN)
- 063033 GURNANG STATE FOREST (OBERON (YOUNG ADULT CORRECTIONAL CENTRE))
- 063036 OBERON (JENOLAN CAVES)
- 063039 KATOOMBA (MURRI ST)
- 063043 KURRAJONG HEIGHTS (BELLS LINE OF ROAD)
- 063044 LAWSON (WILSON STREET)
- 063049 LOWTHER PARK
- 063062 LITHGOW (NEWNES FOREST CENTRE)

Note: If you would like to ask a question, make any suggestions, or tell us how you are using this dataset, please visit the <u>NSW Water Hub which has an online forum</u> 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

063009\_BLACKHEATH (LAWRENCE ST)\_Rain Name: 063009\_BLACKHEATH (LAWRENCE ST)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063009 (BLACKHEATH (LAWRENCE ST)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063012\_RUNNING STREAM

(BROOKLYN)\_Rain

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Name: 063012\_RUNNING STREAM (BROOKLYN)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063012 (RUNNING STREAM (BROOKLYN)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063013\_BERAMBING\_Rain

Name: 063013 BERAMBING Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063013 (BERAMBING); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

Name: 063028\_FAULCONBRIDGE (ST GEORGES CRESCENT)\_Mwet 063028\_FAULCONBRIDGE (ST GEORGES Protocol: WWW:DOWNLOAD-1.0-http--download CRESCENT)\_Mwet Description: Paleo-Stochastic Mwet data for 3250 replicates for 063028 (FAULCONBRIDGE (ST GEORGES CRESCENT)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 063028 FAULCONBRIDGE (ST GEORGES CRESCENT) Rain 063028\_FAULCONBRIDGE (ST GEORGES Protocol: WWW:DOWNLOAD-1.0-http--download CRESCENT)\_Rain Description: Paleo-Stochastic Rain data for 3250 replicates for 063028 (FAULCONBRIDGE (ST GEORGES CRESCENT)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 063030\_OBERON (GINGKIN)\_Rain 063030\_OBERON (GINGKIN)\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download Description: Paleo-Stochastic Rain data for 3250 replicates for 063030 (OBERON (GINGKIN)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 063033 GURNANG STATE FOREST (OBERON (YOUNG ADULT 063033\_GURNANG STATE CORRECTIONAL CENTRE))\_Mwet **FOREST (OBERON** (YOUNG ADULT Protocol: WWW:DOWNLOAD-1.0-http--download **CORRECTIONAL** Description: CENTRE))\_Mwet Paleo-Stochastic Mwet data for 3250 replicates for 063033 (GURNANG STATE FOREST (OBERON (YOUNG ADULT CORRECTIONAL CENTRE))); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download 063033\_GURNANG STATE Name: 063033 GURNANG STATE FOREST (OBERON (YOUNG ADULT CORRECTIONAL CENTRE)) Rain **FOREST (OBERON** (YOUNG ADULT Protocol: WWW:DOWNLOAD-1.0-http--download CORRECTIONAL Description: CENTRE))\_Rain Paleo-Stochastic Rain data for 3250 replicates for 063033 (GURNANG STATE

FOREST (OBERON (YOUNG ADULT CORRECTIONAL CENTRE))); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

063036\_OBERON (JENOLAN CAVES)\_FA056

Name: 063036 OBERON (JENOLAN CAVES) FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 063036 (OBERON (JENOLAN CAVES)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063036\_OBERON (JENOLAN CAVES)\_Mlake Name: 063036 OBERON (JENOLAN CAVES) Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 063036 (OBERON

(JENOLAN CAVES)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063036\_OBERON (JENOLAN CAVES)\_Rain Name: 063036\_OBERON (JENOLAN CAVES)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063036 (OBERON (JENOLAN CAVES)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063036\_OBERON (JENOLAN CAVES)\_Mwet Name: 063036 OBERON (JENOLAN CAVES) Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063036 (OBERON (JENOLAN CAVES)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063039\_KATOOMBA (MURRI ST)\_Rain Name: 063039\_KATOOMBA (MURRI ST)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063039 (KATOOMBA (MURRI ST)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063039\_KATOOMBA (MURRI ST)\_Mwet Name: 063039\_KATOOMBA (MURRI ST)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063039 (KATOOMBA (MURRI ST)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063043\_KURRAJONG HEIGHTS (BELLS LINE OF ROAD)\_Rain Name: 063043 KURRAJONG HEIGHTS (BELLS LINE OF ROAD) Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063043 (KURRAJONG HEIGHTS (BELLS LINE OF ROAD)); each with 130 year daily timeseries;

including metadata and quality assurance pdfs.

Function: download

063043\_KURRAJONG HEIGHTS (BELLS LINE OF ROAD)\_Mwet Name: 063043\_KURRAJONG HEIGHTS (BELLS LINE OF ROAD)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063043 (KURRAJONG HEIGHTS (BELLS LINE OF ROAD)); each with 130 year daily timeseries;

including metadata and quality assurance pdfs.

Function: download

063044\_LAWSON (WILSON STREET)\_Rain Name: 063044\_LAWSON (WILSON STREET)\_Rain

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

Description: Paleo-Stochastic Rain data for 3250 replicates for 063044 (LAWSON (WILSON STREET)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 063049 LOWTHER PARK Rain 063049\_LOWTHER PARK\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download Description: Paleo-Stochastic Rain data for 3250 replicates for 063049 (LOWTHER PARK); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 063062\_LITHGOW (NEWNES FOREST CENTRE)\_Rain 063062\_LITHGOW (NEWNES FOREST Protocol: WWW:DOWNLOAD-1.0-http--download CENTRE)\_Rain Description: Paleo-Stochastic Rain data for 3250 replicates for 063062 (LITHGOW (NEWNES FOREST CENTRE)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 063062 LITHGOW (NEWNES FOREST CENTRE) Mwet 063062\_LITHGOW (NEWNES FOREST Protocol: WWW:DOWNLOAD-1.0-http--download CENTRE)\_Mwet Description: Paleo-Stochastic Mwet data for 3250 replicates for 063062 (LITHGOW (NEWNES FOREST CENTRE)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Map View for data Name: Map View for data download 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 22c335c4-bc22-4c2b-9883-24857b756cb2 Presentation form Table digital Edition 1.0 Dataset language **English** Metadata standard Name ISO 19115 Edition 2016 https://datasets.seed.nsw.gov.au/dataset/22c335c4-bc22-4c2b-9883-Dataset URI 24857b756cb2 Climate data is a fundamental input dataset required for water modelling. Purpose

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 (https://www.longpaddock.qld.gov.au/silo/), 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.

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	

Keyword set	
keyword value	WATER
Originating controlled vocabulary	
Title	ANZLIC Search Words
Reference date	2008-05-16
Geographic location	
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
Vertical extent information	
Minimum value	-100
Maximum value	2228
Coordinate reference system	
Authority code	urn:ogc:def:cs:EPSG::
Code identifying the coordinate reference system	5711
Temporal extent	
Begin position	0001-01-01
End position	N/A
Dataset reference date	
Resource maintenance	
Maintenance and update frequency	As needed
Contact info	
Contact position	Data Broker
Organisation name	NSW Department of Climate Change, Energy, the Environment and Water
Telephone number	131555
Email address	data.broker@environment.nsw.gov.au
Web address	https://www.nsw.gov.au/departments-and-agencies/dcceew
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 (<a href="https://www.longpaddock.qld.gov.au/silo/">https://www.longpaddock.qld.gov.au/silo/</a>), 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 <u>data.broker@environment.nsw.gov.au</u>

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

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Telephone number 131555

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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 2024-08-20T21:34:59.764318

### Metadata language