### Title

Water Modelling-Palaeo Stochastic Climate Data-Greater Sydney-Silo Station (iii of xi) ID 063071-066000

#### 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 (063071-066000) houses Silo Station IDs:

- 063071 PORTLAND (JAMIESON ST)
- 063072 LITTLE HARTLEY (LITTLE GATES)
- 063077 SPRINGWOOD (VALLEY HEIGHTS)
- 063092 WENTWORTH FALLS POST OFFICE
- 063095 YERRANDERIE (PRIVATE TOWN)
- 063118 BILPIN (FERN GROVE)
- 063132 LIDSDALE (MADDOX LANE)
- 063164 LITHGOW (KYLIE PARK)
- 063185 GLENBROOK BOWLING CLUB
- 063226 LITHGOW (COOERWULL)
- 063227 WENTWORTH FALLS COUNTRY CLUB
- 063246 MOUNT WILSON (CLARINE)
- 063247 GLENARA
- 063301 BOWEN MOUNTAIN (GRANDVIEW LANE)
- 063307 TARALGA (KIRIWIN)

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

063071\_PORTLAND (JAMIESON ST)\_Rain Name: 063071\_PORTLAND (JAMIESON ST)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063071 (PORTLAND (JAMIESON ST)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063072\_LITTLE **HARTLEY (LITTLE** GATES)\_FA056

Name: 063072 LITTLE HARTLEY (LITTLE GATES) FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 063072 (LITTLE HARTLEY (LITTLE GATES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063072\_LITTLE **HARTLEY (LITTLE** GATES)\_Mlake

Name: 063072 LITTLE HARTLEY (LITTLE GATES) Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 063072 (LITTLE HARTLEY (LITTLE GATES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063072\_LITTLE HARTLEY (LITTLE GATES) Mwet

Name: 063072\_LITTLE HARTLEY (LITTLE GATES)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063072 (LITTLE HARTLEY (LITTLE GATES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063072\_LITTLE **HARTLEY (LITTLE** GATES)\_Rain

Name: 063072\_LITTLE HARTLEY (LITTLE GATES)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063072 (LITTLE HARTLEY (LITTLE GATES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063077\_SPRINGWOOD

Name: 063077 SPRINGWOOD (VALLEY HEIGHTS) FAO56

(VALLEY HEIGHTS)\_FA056

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 063077 (SPRINGWOOD (VALLEY HEIGHTS)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063077\_SPRINGWOOD

(VALLEY

HEIGHTS)\_Rain

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

Name: 063077 SPRINGWOOD (VALLEY HEIGHTS) Rain

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063077 (SPRINGWOOD (VALLEY HEIGHTS)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

<u>063077\_SPRINGWOOD</u>

(VALLEY

HEIGHTS)\_Mlake

Name: 063077 SPRINGWOOD (VALLEY HEIGHTS) Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 063077 (SPRINGWOOD (VALLEY HEIGHTS)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063077\_SPRINGWOOD

Name: 063077 SPRINGWOOD (VALLEY HEIGHTS) Mwet

(VALLEY

HEIGHTS)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063077 (SPRINGWOOD (VALLEY HEIGHTS)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

063092\_WENTWORTH

**FALLS POST** OFFICE\_Rain Name: 063092\_WENTWORTH FALLS POST OFFICE\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063092 (WENTWORTH FALLS

POST OFFICE); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063093\_WOMBEYAN CAVES\_Rain Name: 063093\_WOMBEYAN CAVES\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063093 (WOMBEYAN CAVES); each with 130 year daily timeseries; including metadata and quality assurance

pdfs.

Function: download

063093\_WOMBEYAN CAVES\_Mlake Name: 063093 WOMBEYAN CAVES Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 063093 (WOMBEYAN CAVES); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

063093\_WOMBEYAN CAVES\_Mwet

Name: 063093\_WOMBEYAN CAVES\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063093 (WOMBEYAN CAVES); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

063095\_YERRANDERIE (PRIVATE TOWN)\_Rain Name: 063095\_YERRANDERIE (PRIVATE TOWN)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063095 (YERRANDERIE (PRIVATE TOWN)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063095\_YERRANDERIE (PRIVATE TOWN)\_Mlake Name: 063095 YERRANDERIE (PRIVATE TOWN) Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 063095 (YERRANDERIE (PRIVATE TOWN)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063095\_YERRANDERIE (PRIVATE TOWN)\_FA056 Name: 063095 YERRANDERIE (PRIVATE TOWN) FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 063095 (YERRANDERIE (PRIVATE TOWN)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063095\_YERRANDERIE (PRIVATE TOWN)\_Mwet Name: 063095 YERRANDERIE (PRIVATE TOWN) Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063095 (YERRANDERIE (PRIVATE TOWN)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063118\_BILPIN (FERN GROVE)\_Rain

Name: 063118\_BILPIN (FERN GROVE)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063118 (BILPIN (FERN GROVE)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

063132\_LIDSDALE (MADDOX LANE)\_Rain Name: 063132\_LIDSDALE (MADDOX LANE)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063132 (LIDSDALE (MADDOX LANE)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

063164\_LITHGOW (KYLIE PARK)\_Rain Name: 063164\_LITHGOW (KYLIE PARK)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063164 (LITHGOW (KYLIE PARK)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

063185\_GLENBROOK BOWLING CLUB\_Rain Name: 063185\_GLENBROOK BOWLING CLUB\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063185 (GLENBROOK BOWLING CLUB); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063185\_GLENBROOK BOWLING CLUB\_FA056 Name: 063185 GLENBROOK BOWLING CLUB FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 063185 (GLENBROOK BOWLING CLUB); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063185\_GLENBROOK BOWLING CLUB\_Mwet Name: 063185\_GLENBROOK BOWLING CLUB\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063185 (GLENBROOK BOWLING CLUB); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

Name: 063185 GLENBROOK BOWLING CLUB Mlake

063185\_GLENBROOK BOWLING CLUB\_Mlake Protocol: WWW:DOWNLOAD-1.0-http--download

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 063185 (GLENBROOK BOWLING CLUB); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063226\_LITHGOW (COOERWULL)\_Rain  $Name: 063226\_LITHGOW \ (COOERWULL)\_Rain$ 

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063226 (LITHGOW

(COOERWULL)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063226\_LITHGOW (COOERWULL)\_Mwet Name: 063226\_LITHGOW (COOERWULL)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 063226 (LITHGOW (COOERWULL)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063227\_WENTWORTH FALLS COUNTRY CLUB\_Rain Name: 063227 WENTWORTH FALLS COUNTRY CLUB Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063227 (WENTWORTH FALLS COUNTRY CLUB); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

063246\_MOUNT WILSON (CLARINE)\_Rain Name: 063246\_MOUNT WILSON (CLARINE)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063246 (MOUNT WILSON (CLARINE)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

063247\_GLENARA\_Rain

Name: 063247\_GLENARA\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063247 (GLENARA); each with

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

Function: download

063301\_BOWEN MOUNTAIN (GRANDVIEW LANE)\_Rain Name: 063301 BOWEN MOUNTAIN (GRANDVIEW LANE) Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 063301 (BOWEN MOUNTAIN (GRANDVIEW LANE)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download 063307\_TARALGA Name: 063307\_TARALGA (KIRIWIN)\_Rain (KIRIWIN)\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download Description: Paleo-Stochastic Rain data for 3250 replicates for 063307 (TARALGA (KIRIWIN)); each with 130 year daily timeseries; including metadata and quality assurance Function: download Name: Map View for data download 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 42d41ee5-203a-482b-bfa6-d82f996bfb09 Presentation form Table digital Edition 1.0 Dataset language English Metadata standard Name ISO 19115 Edition 2016 https://datasets.seed.nsw.gov.au/dataset/42d41ee5-203a-482b-bfa6-**Dataset URI** d82f996bfb09 Climate data is a fundamental input dataset required for water modelling. The Purpose 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 textTable representation type 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

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 date 2024-08-20T21:36:02.385927

### Metadata language