### Title

Water Modelling-Palaeo Stochastic Climate Data-Greater Sydney-Silo Station (i of xi) ID 061001-063000

#### **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 (061001-063000) houses Silo Station IDs:

- 061030 HOWES VALLEY (KINDARUN)
- 061119 WISEMANS FERRY (OLD PO)
- 061164 LAGUNA (MURRAYS RUN)
- 061211 COLO HEIGHTS (MOUNTAIN PINES)
- 061215 RYLSTONE (KELGOOLA)
- 061217 ST ALBANS (ESPIE ST)
- 061309 MILBRODALE (HILLSDALE)
- 061334 GLEN ALICE
- 061351 PEATS RIDGE (WARATAH ROAD)
- 062029 ILFORD (TARA)

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

061030\_HOWES VALLEY

(KINDARUN)\_Mwet

Name: 061030\_HOWES VALLEY (KINDARUN)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 061030 (HOWES VALLEY (KINDARUN)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061030\_HOWES VALLEY

(KINDARUN)\_Rain

Name: 061030 HOWES VALLEY (KINDARUN) Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061030 (HOWES VALLEY (KINDARUN)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

O61119\_WISEMANS FERRY (OLD PO)\_FAO56 Name: 061119\_WISEMANS FERRY (OLD PO)\_FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 061119 (WISEMANS FERRY (OLD PO)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

<u>061119\_WISEMANS</u> Name: 061119\_WISEMANS FERRY (OLD PO)\_Mlake

Protocol: WWW:DOWNLOAD-1.0-nttp--download
PO)\_Mlake

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 061119 (WISEMANS FERRY (OLD PO)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

061119\_WISEMANS FERRY (OLD PO)\_Mwet Name: 061119\_WISEMANS FERRY (OLD PO)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 061119 (WISEMANS FERRY (OLD PO)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061119\_WISEMANS FERRY (OLD PO)\_Rain Name: 061119\_WISEMANS FERRY (OLD PO)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061119 (WISEMANS FERRY (OLD PO)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061164\_LAGUNA (MURRAYS RUN)\_Rain Name: 061164\_LAGUNA (MURRAYS RUN)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061164 (LAGUNA (MURRAYS RUN)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061211\_COLO HEIGHTS (MOUNTAIN PINES)\_FA056 Name: 061211 COLO HEIGHTS (MOUNTAIN PINES) FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 061211 (COLO HEIGHTS (MOUNTAIN PINES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

061211\_COLO HEIGHTS (MOUNTAIN PINES)\_Mwet Name: 061211 COLO HEIGHTS (MOUNTAIN PINES) Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 061211 (COLO HEIGHTS (MOUNTAIN PINES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

061211\_COLO HEIGHTS (MOUNTAIN PINES)\_Mlake Name: 061211 COLO HEIGHTS (MOUNTAIN PINES) Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 061211 (COLO HEIGHTS (MOUNTAIN PINES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

061211\_COLO HEIGHTS (MOUNTAIN PINES)\_Rain Name: 061211\_COLO HEIGHTS (MOUNTAIN PINES)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061211 (COLO HEIGHTS (MOUNTAIN PINES)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

061215\_RYLSTONE (KELGOOLA)\_Rain Name: 061215\_RYLSTONE (KELGOOLA)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061215 (RYLSTONE

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

assurance pdfs.

Function: download

<u>061217\_ST ALBANS</u> (ESPIE ST)\_FA056 Name: 061217\_ST ALBANS (ESPIE ST)\_FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 061217 (ST ALBANS (ESPIE

ST)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061217\_ST ALBANS (ESPIE ST)\_Rain Name: 061217 ST ALBANS (ESPIE ST) Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061217 (ST ALBANS (ESPIE ST)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061217\_ST ALBANS (ESPIE ST)\_Mlake Name: 061217\_ST ALBANS (ESPIE ST)\_Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 061217 (ST ALBANS (ESPIE ST)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061217\_ST ALBANS (ESPIE ST)\_Mwet Name: 061217\_ST ALBANS (ESPIE ST)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 061217 (ST ALBANS (ESPIE ST)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

061309\_MILBRODALE (HILLSDALE)\_Rain Name: 061309\_MILBRODALE (HILLSDALE)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061309 (MILBRODALE

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

assurance pdfs.

Function: download

061334\_GLEN ALICE\_Rain Name: 061334 GLEN ALICE Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 061334 (GLEN ALICE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

061334\_GLEN ALICE\_Mwet Name: 061334 GLEN ALICE Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 061334 (GLEN ALICE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

061351\_PEATS RIDGE (WARATAH ROAD)\_Mwet Name: 061351\_PEATS RIDGE (WARATAH ROAD)\_Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 061351 (PEATS RIDGE (WARATAH ROAD)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

061351\_PEATS RIDGE (WARATAH ROAD)\_Mlake Name: 061351 PEATS RIDGE (WARATAH ROAD) Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 061351 (PEATS RIDGE (WARATAH ROAD)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

062029\_ILFORD (TARA)\_Rain

Name: 062029\_ILFORD (TARA)\_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 062029 (ILFORD (TARA)); 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 dca18f33-6837-4a2d-9916-1703a7060bd0

Presentation

Table digital

form		
Edition	1.0	
Dataset language	English	
Metadata standard		
Name	ISO 19115	
Edition	2016	
Dataset URI	https://datasets.seed.nsw.gov.au/dataset/dca18f33-6837-4a2d-9916- 1703a7060bd0	
Purpose	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 (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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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 2024-08-20T21:36:29.557305

### Metadata language