Title

Water Modelling-Stochastic Climate Data-Greater Sydney-Silo Station (viii

of xi) ID 068071-069000

Abstract

The 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 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 (068070-069000) houses Silo Station IDs:

• 068071 - YERRINBOOL

• 068085 - NERRIGA (TOLWONG)

• 068089 - JOADJA (GREENWALK)

• 068108 - WOONONA (POPES RD)

• 068122 - CAWDOR (WOODBURN)

• 068166 - BUXTON (AMAROO)

• 068186 - BERRIMA WEST (MEDWAY(WOMBAT CREEK))

• 068190 - WATTAMOLLA (TAMOL)

• 068192 - CAMDEN AIRPORT

• 068209 - JAMBEROO (DRUEWALLA)

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

<u>Data Quality Statement</u> Name: Data Quality Statement

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

Description:

Data quality statement

Function: download

<u>068071\_YERRINBOOL\_FA056</u> Name: 068071\_YERRINBOOL\_FA056

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

Description:

Stochastic FAO56 data for 3250 replicates for 068071 (YERRINBOOL); each with 130 year daily timeseries; including metadata and quality assurance

odfs.

Function: download

<u>068071\_YERRINBOOL\_Mlake</u> Name: 068071\_YERRINBOOL\_Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 068071 (YERRINBOOL); each with 130 year daily timeseries; including metadata and quality assurance

pdfs.

Function: download

<u>068071\_YERRINBOOL\_Mwet</u> Name: 068071\_YERRINBOOL\_Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 068071 (YERRINBOOL); each with 130 year daily timeseries; including metadata and quality assurance

pdfs.

Function: download

<u>068071\_YERRINBOOL\_Rain</u> Name: 068071\_YERRINBOOL\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 068071 (YERRINBOOL); each with 130 year daily timeseries; including metadata and quality assurance  $\frac{1}{2}$ 

pdfs.

Function: download

068085\_NERRIGA (TOLWONG)\_FA056 Name: 068085\_NERRIGA (TOLWONG)\_FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 068085 (NERRIGA

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

quality assurance pdfs.

Function: download

068085\_NERRIGA (TOLWONG)\_Mlake Name: 068085 NERRIGA (TOLWONG) Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 068085 (NERRIGA

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

quality assurance pdfs.

Function: download

068085\_NERRIGA (TOLWONG)\_Rain Name: 068085 NERRIGA (TOLWONG) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 068085 (NERRIGA

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

quality assurance pdfs.

Function: download

068085\_NERRIGA (TOLWONG)\_Mwet Name: 068085 NERRIGA (TOLWONG) Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 068085 (NERRIGA

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

quality assurance pdfs.

Function: download

068089\_JOADJA (GREENWALK)\_Rain Name: 068089\_JOADJA (GREENWALK)\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 068089 (JOADJA

(GREENWALK)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

068089\_JOADJA (GREENWALK)\_Mwet Name: 068089\_JOADJA (GREENWALK)\_Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 068089 (JOADJA

(GREENWALK)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

068108\_WOONONA (POPES RD)\_Rain

Name: 068108\_WOONONA (POPES RD)\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 068108 (WOONONA (POPES RD)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

068122\_CAWDOR (WOODBURN)\_FAO56 Name: 068122\_CAWDOR (WOODBURN)\_FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 068122 (CAWDOR (WOODBURN)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

068122\_CAWDOR (WOODBURN)\_Rain Name: 068122 CAWDOR (WOODBURN) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 068122 (CAWDOR

(WOODBURN)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

068122\_CAWDOR (WOODBURN)\_Mlake Name: 068122 CAWDOR (WOODBURN) Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 068122 (CAWDOR (WOODBURN)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

068122 CAWDOR (WOODBURN)\_Mwet Name: 068122 CAWDOR (WOODBURN) Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 068122 (CAWDOR

(WOODBURN)); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

068166\_BUXTON (AMAROO)\_FA056 Name: 068166\_BUXTON (AMAROO)\_FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 068166 (BUXTON

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

quality assurance pdfs.

Function: download

068166\_BUXTON (AMAROO)\_Rain

Name: 068166 BUXTON (AMAROO) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 068166 (BUXTON (AMAROO));

each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

068166\_BUXTON (AMAROO)\_Mlake Name: 068166\_BUXTON (AMAROO)\_Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 068166 (BUXTON

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

quality assurance pdfs.

Function: download

068166\_BUXTON (AMAROO)\_Mwet Name: 068166 BUXTON (AMAROO) Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 068166 (BUXTON (AMAROO));

each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

068186\_BERRIMA WEST (MEDWAY (WOMBAT CREEK))\_FA056 Name: 068186 BERRIMA WEST (MEDWAY (WOMBAT CREEK)) FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 068186 (BERRIMA WEST (MEDWAY (WOMBAT CREEK))); each with 130 year daily timeseries;

including metadata and quality assurance pdfs.

Function: download

068186\_BERRIMA WEST (MEDWAY (WOMBAT CREEK))\_Mlake Name: 068186\_BERRIMA WEST (MEDWAY (WOMBAT CREEK))\_Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 068186 (BERRIMA WEST (MEDWAY (WOMBAT CREEK))); each with 130 year daily timeseries;

including metadata and quality assurance pdfs.

Function: download

068186\_BERRIMA WEST (MEDWAY (WOMBAT CREEK))\_Rain Name: 068186\_BERRIMA WEST (MEDWAY (WOMBAT CREEK))\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 068186 (BERRIMA WEST (MEDWAY (WOMBAT CREEK))); each with 130 year daily timeseries;

including metadata and quality assurance pdfs.

Function: download

068186\_BERRIMA WEST (MEDWAY (WOMBAT CREEK))\_Mwet Name: 068186\_BERRIMA WEST (MEDWAY (WOMBAT CREEK))\_Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 068186 (BERRIMA WEST (MEDWAY (WOMBAT CREEK))); each with 130 year daily timeseries;

including metadata and quality assurance pdfs.

Function: download

068190\_WATTAMOLLA (TAMOL)\_Mwet Name: 068190\_WATTAMOLLA (TAMOL)\_Mwet

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

Description: Stochastic Mwet data for 3250 replicates for 068190 (WATTAMOLLA (TAMOL)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download 068190\_WATTAMOLLA Name: 068190\_WATTAMOLLA (TAMOL)\_Rain (TAMOL)\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download Description: Stochastic Rain data for 3250 replicates for 068190 (WATTAMOLLA (TAMOL)); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 068192\_CAMDEN AIRPORT AWS\_Rain 068192\_CAMDEN AIRPORT AWS\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download Description: Stochastic Rain data for 3250 replicates for 068192 (CAMDEN AIRPORT AWS); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 068209 JAMBEROO (DRUEWALLA) Rain 068209\_JAMBEROO (DRUEWALLA)\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download Description: Stochastic Rain data for 3250 replicates for 068209 (JAMBEROO (DRUEWALLA)); 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 9b242896-e54d-406e-8299-e9f616a2bf17 Code Presentation form Table digital Edition 1.0 Dataset language **English** Metadata standard Name ISO 19115 Edition 2016 https://datasets.seed.nsw.gov.au/dataset/9b242896-e54d-406e-8299-Dataset URI e9f616a2bf17 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 longterm 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

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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 2024-08-20T21:04:43.261500

### Metadata language