Title

Water Modelling-Stochastic Climate Data-Greater Sydney-Silo Station (xi of xi) ID 070101-070330

#### **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 (070101-070330) houses Silo Station IDs:

- 070105 MOUNT FAIRY (MERIGAN)
- 070119 BIG HILL (GLEN DUSK)
- 070124 RICHLANDS (BOUVERIE)
- 070131 WOODHOUSELEE (LEESTON)
- 070135 MUMMELL (KANGAROOBIE)
- 070143 BRAYTON (LONGREACH)
- 070144 TARALGA (CIRCLE C)
- 070147 GOULBURN (HILLWOOD)
- 070183 WINDELLIMA (BUDJONG)
- 070261 JERRABATTGULLA (GILSTON)
- 070263 GOULBURN TAFE
- 070330 GOULBURN AIRPORT

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

070105\_MOUNT FAIRY (MERIGAN)\_FA056 Name: 070105\_MOUNT FAIRY (MERIGAN)\_FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 070105 (MOUNT FAIRY (MERIGAN)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

070105\_MOUNT FAIRY (MERIGAN)\_Mwet Name: 070105\_MOUNT FAIRY (MERIGAN)\_Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 070105 (MOUNT FAIRY (MERIGAN)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070105\_MOUNT FAIRY (MERIGAN)\_Rain Name: 070105\_MOUNT FAIRY (MERIGAN)\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070105 (MOUNT FAIRY (MERIGAN)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

<u>070119\_BIG HILL (GLEN</u> Name: 0/0119\_BIG HILL (GLEN DUSK)\_Rain DUSK)\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070119 (BIG HILL (GLEN DUSK)); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

070124\_RICHLANDS (BOUVERIE)\_Rain

Name: 070124 RICHLANDS (BOUVERIE) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070124 (RICHLANDS

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

quality assurance pdfs.

Function: download

070131\_WOODHOUSELEE (LEESTON)\_Rain

Name: 070131 WOODHOUSELEE (LEESTON) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070131 (WOODHOUSELEE (LEESTON)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070135\_MUMMELL (KANGAROOBIE)\_Rain Name: 070135 MUMMELL (KANGAROOBIE) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070135 (MUMMELL

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

and quality assurance pdfs.

Function: download

070143\_BRAYTON (LONGREACH)\_FA056 Name: 070143 BRAYTON (LONGREACH) FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 070143 (BRAYTON

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

quality assurance pdfs.

Function: download

070143\_BRAYTON (LONGREACH)\_Mlake Name: 070143\_BRAYTON (LONGREACH)\_Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 070143 (BRAYTON

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

quality assurance pdfs.

Function: download

070143\_BRAYTON (LONGREACH)\_Rain Name: 070143 BRAYTON (LONGREACH) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070143 (BRAYTON

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

quality assurance pdfs.

Function: download

070143\_BRAYTON (LONGREACH)\_Mwet Name: 070143\_BRAYTON (LONGREACH)\_Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 070143 (BRAYTON

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

quality assurance pdfs.

Function: download

070144\_TARALGA (CIRCLE C)\_Rain

Name: 070144 TARALGA (CIRCLE C) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070144 (TARALGA (CIRCLE C));

each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

070147\_GOULBURN (HILLWOOD)\_FAO56 Name: 070147\_GOULBURN (HILLWOOD)\_FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 070147 (GOULBURN

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

quality assurance pdfs.

Function: download

070147\_GOULBURN (HILLWOOD)\_Rain Name: 070147 GOULBURN (HILLWOOD) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070147 (GOULBURN

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

quality assurance pdfs.

Function: download

070147\_GOULBURN (HILLWOOD)\_Mwet Name: 070147\_GOULBURN (HILLWOOD)\_Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 070147 (GOULBURN

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

quality assurance pdfs.

Function: download

070183\_WINDELLIMA (BUDJONG)\_Rain Name: 070183 WINDELLIMA (BUDJONG) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070183 (WINDELLIMA (BUDJONG)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070183\_WINDELLIMA (BUDJONG)\_FA056

Name: 070183 WINDELLIMA (BUDJONG) FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 0/0183 (WINDELLIMA (BUDJONG)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070183\_WINDELLIMA (BUDJONG)\_Mwet

Name: 070183 WINDELLIMA (BUDJONG) Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 070183 (WINDELLIMA (BUDJONG)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070261\_JERRABATTGULLA (GILSTON)\_FA056

Name: 070261 JERRABATTGULLA (GILSTON) FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 070261 (JERRABATTGULLA (GILSTON)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070261\_JERRABATTGULLA (GILSTON)\_Rain

Name: 070261 JERRABATTGULLA (GILSTON) Rain

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

Description:

Stochastic Rain data for 3250 replicates for 070261 (JERRABATTGULLA (GILSTON)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070261\_JERRABATTGULLA (GILSTON)\_Mlake

Name: 070261 JERRABATTGULLA (GILSTON) Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 070261 (JERRABATTGULLA (GILSTON)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070261\_JERRABATTGULLA (GILSTON)\_Mwet

Name: 070261 JERRABATTGULLA (GILSTON) Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 070261 (JERRABATTGULLA (GILSTON)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

070263\_GOULBURN TAFE\_FA056

Name: 070263\_GOULBURN TAFE\_FAO56

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

Description:

Stochastic FAO56 data for 3250 replicates for 070263 (GOULBURN TAFE);

each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

070263\_GOULBURN

Name: 070263 GOULBURN TAFE Rain

TAFE\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download

Description: Stochastic Rain data for 3250 replicates for 070263 (GOULBURN TAFE); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 070263 GOULBURN TAFE Mlake 070263\_GOULBURN TAFE\_Mlake Protocol: WWW:DOWNLOAD-1.0-http--download Description: Stochastic Mlake data for 3250 replicates for 070263 (GOULBURN TAFE); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download Name: 070263\_GOULBURN TAFE\_Mwet 070263\_GOULBURN TAFE\_Mwet Protocol: WWW:DOWNLOAD-1.0-http--download Description: Stochastic Mwet data for 3250 replicates for 070263 (GOULBURN TAFE); each with 130 year daily timeseries; including metadata and quality assurance pdfs. Function: download 070330\_GOULBURN Name: 070330 GOULBURN AIRPORT AWS Rain AIRPORT AWS\_Rain Protocol: WWW:DOWNLOAD-1.0-http--download Description: Stochastic Rain data for 3250 replicates for 070330 (GOULBURN AIRPORT AWS); each with 130 year daily timeseries; including metadata and quality assurance pdfs. 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 64622273-05a0-4efb-8b67-f9d2a61ed84e Presentation form Table digital Edition 1.0 Dataset language **English** Metadata standard ISO 19115 Name Edition 2016

https://datasets.seed.nsw.gov.au/dataset/64622273-05a0-4efb-8b67-

Dataset URI https://dataset f9d2a61ed84e

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 2024-08-20T21:04:12.473948

## Metadata language