

**Title** Water Modelling-Stochastic Climate Data-Greater Sydney-Silo Station (v of xi) ID 067021-068000

## 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 (067021-068000) houses Silo Station IDs:

- 067021 - RICHMOND - UWS HAWKESBURY
- 067024 - ST MARYS BOWLING CLUB
- 067026 - SEVEN HILLS (COLLINS ST)
- 067029 - WALLACIA POST OFFICE
- 067076 - QUAKERS HILL TREATMENT WORKS
- 067084 - ORCHARD HILLS TREATMENT WORKS
- 067086 - DURAL (OLD NORTHERN ROAD)
- 067089 - WEST PENNANT HILLS (CUMBERLAND)

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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

### [067021\\_RICHMOND - UWS HAWKESBURY\\_FA056](#)

Name: 067021\_RICHMOND - UWS HAWKESBURY\_FA056

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

Description:

Stochastic FA056 data for 3250 replicates for 067021 (RICHMOND - UWS HAWKESBURY); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

### [067021\\_RICHMOND - UWS HAWKESBURY\\_Mlake](#)

Name: 067021\_RICHMOND - UWS HAWKESBURY\_Mlake

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Description:

Stochastic Mlake data for 3250 replicates for 067021 (RICHMOND - UWS HAWKESBURY); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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Description:

Stochastic Rain data for 3250 replicates for 067021 (RICHMOND - UWS HAWKESBURY); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067024\\_ST MARYS BOWLING CLUB\\_FA056](#)

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Stochastic FA056 data for 3250 replicates for 067024 (ST MARYS BOWLING CLUB); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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Name: 067024\_ST MARYS BOWLING CLUB\_Rain

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Description:

Stochastic Rain data for 3250 replicates for 067024 (ST MARYS BOWLING CLUB); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067024\\_ST MARYS BOWLING CLUB\\_Mlake](#)

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Description:

Stochastic Mlake data for 3250 replicates for 067024 (ST MARYS BOWLING CLUB); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067026\\_SEVEN HILLS \(COLLINS ST\)\\_Rain](#)

Name: 067026\_SEVEN HILLS (COLLINS ST)\_Rain

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Stochastic Rain data for 3250 replicates for 067026 (SEVEN HILLS (COLLINS ST)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[067026\\_SEVEN HILLS \(COLLINS ST\)\\_Mwet](#)

Name: 067026\_SEVEN HILLS (COLLINS ST)\_Mwet

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Description:

Stochastic Mwet data for 3250 replicates for 067026 (SEVEN HILLS (COLLINS ST)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067029\\_WALLACIA POST OFFICE\\_FA056](#)

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Description:

Stochastic FA056 data for 3250 replicates for 067029 (WALLACIA POST OFFICE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067029\\_WALLACIA  
POST OFFICE\\_Rain](#)

Name: 067029\_WALLACIA POST OFFICE\_Rain

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Description:  
Stochastic Rain data for 3250 replicates for 067029 (WALLACIA POST OFFICE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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POST OFFICE\\_Mlake](#)

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Description:

Stochastic Mlake data for 3250 replicates for 067029 (WALLACIA POST OFFICE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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Description:

Stochastic Mwet data for 3250 replicates for 067029 (WALLACIA POST OFFICE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067076\\_QUAKERS  
HILL TREATMENT  
WORKS\\_FA056](#)

Name: 067076\_QUAKERS HILL TREATMENT WORKS\_FA056

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Description:

Stochastic FA056 data for 3250 replicates for 067076 (QUAKERS HILL TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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HILL TREATMENT  
WORKS\\_Rain](#)

Name: 067076\_QUAKERS HILL TREATMENT WORKS\_Rain

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Description:

Stochastic Rain data for 3250 replicates for 067076 (QUAKERS HILL TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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Stochastic Mlake data for 3250 replicates for 067076 (QUAKERS HILL TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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Description:

Stochastic Mwet data for 3250 replicates for 067076 (QUAKERS HILL TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

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[067084\\_ORCHARD  
HILLS TREATMENT  
WORKS\\_FA056](#)

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Description:

Stochastic FA056 data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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HILLS TREATMENT  
WORKS\\_Rain](#)

Name: 067084\_ORCHARD HILLS TREATMENT WORKS\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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HILLS TREATMENT  
WORKS\\_Mlake](#)

Name: 067084\_ORCHARD HILLS TREATMENT WORKS\_Mlake

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

Description:

Stochastic Mlake data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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HILLS TREATMENT  
WORKS\\_Mwet](#)

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Description:

Stochastic Mwet data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067086\\_DURAL \(OLD  
NORTHERN  
ROAD\)\\_FA056](#)

Name: 067086\_DURAL (OLD NORTHERN ROAD)\_FA056

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

Description:

Stochastic FA056 data for 3250 replicates for 067086 (DURAL (OLD NORTHERN ROAD)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067086\\_DURAL \(OLD  
NORTHERN  
ROAD\)\\_Rain](#)

Name: 067086\_DURAL (OLD NORTHERN ROAD)\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 067086 (DURAL (OLD NORTHERN ROAD)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

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[067086\\_DURAL \(OLD  
NORTHERN  
ROAD\)\\_Mwet](#)

Name: 067086\_DURAL (OLD NORTHERN ROAD)\_Mwet

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

Description:

Stochastic Mwet data for 3250 replicates for 067086 (DURAL (OLD NORTHERN ROAD)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[067086\\_DURAL \(OLD NORTHERN ROAD\)\\_Rain](#)

Name: 067086\_DURAL (OLD NORTHERN ROAD)\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 067086 (DURAL (OLD NORTHERN ROAD)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

[067089\\_WEST PENNANT HILLS \(CUMBERLAND STATE FOR\)\\_Rain](#)

Name: 067089\_WEST PENNANT HILLS (CUMBERLAND STATE FOR)\_Rain

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

Description:

Stochastic Rain data for 3250 replicates for 067089 (WEST PENNANT HILLS (CUMBERLAND STATE FOR)); 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 91828e5d-3c22-45f6-9114-362f38614969

Presentation form Table digital

Edition 1.0

Dataset language English

## Metadata standard

Name ISO 19115

Edition 2016

Dataset URI <https://datasets.seed.nsw.gov.au/dataset/91828e5d-3c22-45f6-9114-362f38614969>

## 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**

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

## 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 (<https://www.longpaddock.qld.gov.au/silo/>), 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	<a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>
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	<a href="mailto:data.broker@environment.nsw.gov.au">data.broker@environment.nsw.gov.au</a>
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** 2024-08-20T20:58:37.403049

**Metadata language**