Title Water Modelling-Palaeo Stochastic Climate Data-Greater Sydney-Silo Station (v of

xi) ID 067021-068000

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 (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)

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

<u>067021_RICHMOND -</u> <u>UWS</u> Name: 067021_RICHMOND - UWS HAWKESBURY_FAO56

HAWKESBURY_FA056

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 067021 (RICHMOND - UWS HAWKESBURY); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

<u>067021_RICHMOND -</u> UWS

Name: 067021_RICHMOND - UWS HAWKESBURY_Mlake

HAWKESBURY_Mlake

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

Description:

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

quality assurance pdfs.

Function: download

<u>067021_RICHMOND -</u> UWS Name: 067021_RICHMOND - UWS HAWKESBURY_Rain

HAWKESBURY_Rain

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

Description:

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

quality assurance pdfs.

Function: download

<u>067021_RICHMOND -</u> UWS Name: 067021_RICHMOND - UWS HAWKESBURY_Mwet

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

Description:

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

Function: download

067024_ST MARYS BOWLING CLUB_Rain Name: 067024_ST MARYS BOWLING CLUB_Rain

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

Description:

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

assurance pdfs.

Function: download

067024_ST MARYS BOWLING CLUB_FA056 Name: 067024_ST MARYS BOWLING CLUB_FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 067024 (ST MARYS BOWLING CLUB); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

067024_ST MARYS BOWLING CLUB_Mlake Name: 067024_ST MARYS BOWLING CLUB_Mlake

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

Description:

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

assurance pdfs.

Function: download

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

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

Description:

Paleo-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

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 067026 (SEVEN HILLS (COLLINS ST)); each with 130 year daily timeseries; including metadata and

quality assurance pdfs.

Function: download

067029_WALLACIA POST OFFICE_FA056 Name: 067029_WALLACIA POST OFFICE_FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 067029 (WALLACIA POST OFFICE); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

assarance pars.

Function: download

067029_WALLACIA POST OFFICE_Rain Name: 06/029_WALLACIA POST OFFICE_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 067029 (WALLACIA POST OFFICE); each with 130 year daily timeseries; including metadata and quality

assurance pdfs.

Function: download

067029_WALLACIA POST OFFICE_Mlake Name: 067029_WALLACIA POST OFFICE_Mlake

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

Description:

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

assurance pdfs.

Function: download

067029_WALLACIA POST OFFICE_Mwet Name: 067029_WALLACIA POST OFFICE_Mwet

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

Description:

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

assurance pdfs.

Function: download

067076_QUAKERS HILL TREATMENT WORKS_FA056 Name: 067076 QUAKERS HILL TREATMENT WORKS FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 067076 (QUAKERS HILL TREATMENT WORKS); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

067076_QUAKERS HILL TREATMENT WORKS_Mlake Name: 067076 QUAKERS HILL TREATMENT WORKS Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 067076 (QUAKERS HILL TREATMENT WORKS); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

067076_QUAKERS HILL TREATMENT WORKS_Rain Name: 067076_QUAKERS HILL TREATMENT WORKS_Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 067076 (QUAKERS HILL TREATMENT WORKS); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

067076_QUAKERS HILL TREATMENT WORKS_Mwet Name: 067076 QUAKERS HILL TREATMENT WORKS Mwet

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

Description:

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

and quality assurance pdfs.

Function: download

067084_ORCHARD HILLS TREATMENT WORKS_Rain Name: 067084 ORCHARD HILLS TREATMENT WORKS Rain

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

Description:

Paleo-Stochastic Rain data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

067084_ORCHARD HILLS TREATMENT WORKS_FA056 Name: 067084 ORCHARD HILLS TREATMENT WORKS FAO56

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

Description:

Paleo-Stochastic FAO56 data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

067084_ORCHARD HILLS TREATMENT WORKS_Mlake Name: 067084 ORCHARD HILLS TREATMENT WORKS Mlake

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

Description:

Paleo-Stochastic Mlake data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); each with 130 year daily timeseries; including metadata

and quality assurance pdfs.

Function: download

067084_ORCHARD HILLS TREATMENT WORKS_Mwet Name: 067084 ORCHARD HILLS TREATMENT WORKS Mwet

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

Description:

Paleo-Stochastic Mwet data for 3250 replicates for 067084 (ORCHARD HILLS TREATMENT WORKS); 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:

Paleo-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

067086_DURAL (OLD NORTHERN ROAD)_Mlake Name: 067086 DURAL (OLD NORTHERN ROAD) Mlake

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

Description:

Paleo-Stochastic Mlake 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)_FA056 Name: 067086 DURAL (OLD NORTHERN ROAD) FAO56

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

Description:

NORTHERN ROAD)); each with 130 year daily timeseries; including metadata and quality assurance pdfs.

Function: download

067086_DURAL (OLD NORTHERN

ROAD)_Mwet

Name: 067086_DURAL (OLD NORTHERN ROAD)_Mwet

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

Description:

Paleo-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

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:

Paleo-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

Unique resource identifier

Code 9a541b78-c1b6-4837-8136-dffe3ce766bb

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/9a541b78-c1b6-4837-8136-

dffe3ce766bb

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 1889present 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 (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 <u>data.broker@environment.nsw.gov.au</u>

Web address https://www.nsw.gov.au/departments-and-agencies/dcceew

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 https://www.nsw.gov.au/departments-and-agencies/dcceew

Responsible party role pointOfContact

Metadata date 2024-06-19T05:51:47.469582

Metadata language