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| <b>Title</b>  | Water Modelling-Greater Sydney Stochastic and Palaeo Stochastic Climate Data   |
| <b>Abstract</b>   | <p>The fundamental input data of work undertaken by Water Modelling Team is climate data in the form of daily rainfall and potential evapotranspiration. This data is input 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.</p> <p>The stochastic climate data and 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.</p> <p>Stochastic Climate data and palaeo stochastic climate data are available to download for Greater Sydney region from the Related Datasets section below.</p> <hr/> <p>Note: If you would like to ask a question, make any suggestions, or tell us how you are using this dataset, please visit the <a href="#">NSW Water Hub which has an online forum</a> you can join.</p> |
| <b>Resource locator</b>   |  |
| <a href="#">Data Quality Statement</a>  | <p>Name: Data Quality Statement</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Data quality statement for Stochastic Climate Data</p> <p>Function: download</p>   |
| <a href="#">Metadata Statement - Questionnaire - Greater Sydney Stochastic and Palaeo Stochastic Climate Data</a> | <p>Name: Metadata Statement - Questionnaire - Greater Sydney Stochastic and Palaeo Stochastic Climate Data</p> <p>Protocol: WWW:DOWNLOAD-1.0-http--download</p> <p>Description:</p> <p>Metadata Statement - Applies to all included valley files</p> <p>Function: download</p>   |
| <b>Unique resource identifier</b>   |  |
| Code  | 80128937-7cdf-4421-82f6-812604ae6ed1   |
| Presentation form   | Table digital  |
| Edition   | 1.0  |
| Dataset language  | English  |
| <b>Metadata standard</b>  |  |
| Name  | ISO 19115  |
| Edition   | 2016   |
| <b>Dataset URI</b>  | <a href="https://datasets.seed.nsw.gov.au/dataset/80128937-7cdf-4421-82f6-812604ae6ed1">https://datasets.seed.nsw.gov.au/dataset/80128937-7cdf-4421-82f6-812604ae6ed1</a>  |
| <b>Purpose</b>  | 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                          | 141   |
| East bounding longitude                          | 154   |
| North bounding latitude                          | -37.7   |
| South bounding latitude                          | -28   |
| NSW Place Name                                   | NSW   |
| <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   |
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| 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

|                        |   |
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## Metadata point of contact

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| Responsible party role | pointOfContact  |

**Metadata date** 2024-06-20T00:51:35.663908

**Metadata language**