

# HOURLY CLIMATE DATA



Exemplary Energy in co-operation with the Australian Bureau of Meteorology have compiled quality tested Hourly Climatic Data for a number of Australian locations for use in air conditioning load estimation and building energy estimation computer programs and other applications that may require this information. Individual years of data are available or a Reference Meteorological Year of data (designated ERM) comprising a concatenation of 12 most indicative months of data is also available.

## THE DATA

The Data in CSIRO, EPW and TMY2 format comprises for each hour:

|   | CSIRO Format | EPW Format | TMY2 Format |
|---|--------------|------------|-------------|
| Dry bulb temperature  | •            | •          | •           |
| Dew Point temperature                                       |              | •          | •           |
| Relative Humidity   |              | •          | •           |
| Absolute moisture content                                   | •            |            |             |
| Atmospheric pressure  | •            | •          | •           |
| Wind speed  | •            | •          | •           |
| Wind direction  | •            | •          | •           |
| Total cloud cover   | •            | •          | •           |
| Global solar irradiance on a horizontal plane               | •            | •          | •           |
| Diffuse solar irradiance on a horizontal plane              | •            | •          | •           |
| Direct solar irradiance on a plane normal to the solar beam | •            | •          | •           |

## PRICES

The fees to license the data for use by a single user in the one office are as follows:

### For ERM files

\$110 per weather site, or  
\$440 per state group, or  
\$1320 for all the 100 sites.

### For full 24 year hourly data sets (1990 to 2013 inclusive)

\$110 per weather site, or  
\$440 per state group, or  
\$1320 for all the 100 sites.

For more than one user in an office add 50%.  
All prices include GST.

**A 50% discount applies for academic Institutes using the data for teaching purposes only or unpaid research.**

Data in other formats or for other weather sites (if available from BOM) and for Real Time Years to the end of last month or individual calendar years or longer or shorter periods is also available on a fee for service basis. For details, contact Exemplary Energy on 02 6175 5915 or [exemplary.energy@exemplary.com.au](mailto:exemplary.energy@exemplary.com.au).

Upon payment of invoiced fees, Exemplary Energy grants the client a licence allowing unlimited internal use of the data provided, but the data itself remains the property of the Bureau of Meteorology and the data selection for its typicality and its formatting remains the copyright and property of Exemplary Energy.

Data is available for 100 locations within Australia as listed overleaf.

## ACADS-BSG

*Building Services Software*

Tel (03) 9885 6586

email: [acadsbsg@ozemail.com.au](mailto:acadsbsg@ozemail.com.au)

ACADS-BSG Pty Ltd are agents for the licensing and distribution of this data. The data is supplied on CD ROM or via email in either CSIRO or EPW format. Users of the ACADS-BSG computer program BEAVER when purchasing the ERM files, will also be supplied with a Weather (.SWF) file in the format required by that program.

## LOCATIONS

| W.M.O. INDEX             | LOCATION         | LAT<br>(neg. = S) | LONG<br>(E) | ELEV<br>(m) | W.M.O. INDEX              | LOCATION          | LAT<br>(neg. = S) | LONG<br>(E) | ELEV<br>(m) |
|--------------------------|------------------|-------------------|-------------|-------------|---------------------------|-------------------|-------------------|-------------|-------------|
| <b>QUEENSLAND</b>        |                  |                   |             |             | 94403                     | Geraldton         | -28.8             | 114.7       | 33          |
| 94568                    | Amberley Aero    | -27.6             | 152.7       | 24          | 94461                     | Giles             | -25.0             | 128.3       | 598         |
| 94288                    | Atherton         | -17.3             | 145.5       | 752         | 94212                     | Halls Creek       | -18.2             | 127.7       | 422         |
| 94346                    | Blackall         | -24.4             | 145.5       | 281         | 94637                     | Kalgoorlie        | -30.8             | 121.5       | 365         |
| 94578                    | Brisbane AMO     | -27.4             | 153.1       | 4           | 94641                     | Kattaning         | -33.7             | 117.6       | 320         |
| 94287                    | Cairns AMO       | -16.9             | 145.8       | 3           | 94216                     | Kununurra         | -15.8             | 128.7       | 44          |
| 94510                    | Charleville AMO  | -26.4             | 146.3       | 302         | 94302                     | Learmonth MO      | -22.2             | 114.1       | 5           |
| 94380                    | Gladstone MO     | -23.9             | 151.3       | 75          | 94605                     | Mandurah          | -32.5             | 115.7       | 21          |
| 94346                    | Longreach        | -23.4             | 144.3       | 192         | 94617                     | Manjimup          | -34.2             | 116.2       | 287         |
| 94367                    | Mackay MO        | -21.1             | 149.2       | 30          | 94430                     | Meekatharra AMO   | -26.6             | 118.6       | 517         |
| 95566                    | Maleny           | -26.8             | 152.9       | 425         | 94317                     | Newman            | -23.4             | 119.7       | 544         |
| 94332                    | Mt Isa AMO       | -20.7             | 139.5       | 340         | 94316                     | Paraburdoo        | -23.2             | 117.8       | 424         |
| 94552                    | Oakey Army       | -27.4             | 151.7       | 406         | 94610                     | Perth AMO         | -31.9             | 115.9       | 15          |
| 94374                    | Rockhampton      | -23.4             | 150.5       | 10          | 94312                     | Pt Hedland AMO    | -20.4             | 118.6       | 6           |
| 94515                    | Roma             | -26.5             | 148.8       | 303         | 94614                     | Swanborne         | -32.0             | 115.8       | 41          |
| 95551                    | Toowoomba        | -27.6             | 151.9       | 691         | 95214                     | Wyndham           | -15.5             | 128.1       | 11          |
| 94294                    | Townsville       | -19.3             | 146.8       | 4           | <b>VICTORIA</b>           |                   |                   |             |             |
| 94170                    | Weipa            | -12.7             | 141.9       | 11          | 94852                     | Ballarat          | -37.5             | 143.8       | 435         |
| <b>NEW SOUTH WALES</b>   |                  |                   |             |             | 94842                     | Cape Otway        | -38.9             | 143.5       | 82          |
| 95896                    | Albury/Wodonga   | -36.1             | 147.0       | 164         | 94907                     | East Sale AMO     | -38.1             | 147.1       | 5           |
| 95773                    | Armidale         | -30.5             | 151.7       | 1079        | 94868                     | Melbourne R.O     | -37.8             | 145.0       | 31          |
| 94743                    | Blue Mountains   | -21.5             | 149.0       | 1080        | 94693                     | Mildura AMO       | -34.2             | 142.1       | 50          |
| 94703                    | Bourke           | -30.0             | 146.0       | 107         | 94870                     | Moorabbin         | -38.0             | 145.1       | 12          |
| 94691                    | Broken Hill      | -32.0             | 141.5       | 281         | 94866                     | Tullamarine       | -37.7             | 144.9       | 113         |
| 95916                    | Cabramurra       | -35.9             | 148.4       | 1482        | 94837                     | Warrnambool       | -38.3             | 142.4       | 75          |
| 94711                    | Cobar AMO        | -31.5             | 145.8       | 260         | <b>SOUTH AUSTRALIA</b>    |                   |                   |             |             |
| 94791                    | Coffs Harbour MO | -30.3             | 153.1       | 5           | 94672                     | Adelaide AP       | -35.0             | 138.5       | 48          |
| 94921                    | Cooma AP         | -36.3             | 149.0       | 930         | 94675                     | Adelaide RO       | -34.9             | 138.6       | 48          |
| 95708                    | Coonamble AP     | -31.0             | 148.4       | 181         | 94653                     | Ceduna            | -32.1             | 133.7       | 15          |
| 95719                    | Dubbo            | -32.2             | 148.6       | 284         | 95458                     | Cooper Pedy       | -29.0             | 134.7       | 225         |
| 94791                    | Grafton          | -29.8             | 153.0       | 25          | 94813                     | Kingscote         | -35.7             | 137.5       | 6           |
| 94592                    | Lismore          | -28.8             | 153.3       | 9           | 94659                     | Leigh Creek       | -30.6             | 138.4       | 259         |
| 94767                    | Mascot AMO       | -33.9             | 151.2       | 6           | 94821                     | Mt Gambier AMO    | -37.8             | 140.8       | 63          |
| 94527                    | Moree MD         | -29.5             | 149.9       | 213         | 95678                     | Mt Lofty          | -35.0             | 138.7       | 730         |
| 94750                    | Nowra RAN        | -35.0             | 150.5       | 109         | 94476                     | Oodnadatta AMO    | -27.6             | 135.5       | 117         |
| 94726                    | Orange AP        | -33.4             | 149.1       | 947         | 95658                     | Roxby Downs       | -30.5             | 136.9       | 99          |
| 94765                    | Parramatta       | -33.8             | 151.0       | 55          | 94659                     | Woomera           | -31.2             | 136.8       | 167         |
| 94753                    | Richmond         | -33.6             | 150.8       | 19          | <b>TASMANIA</b>           |                   |                   |             |             |
| 94768                    | Sydney RO        | -33.9             | 151.2       | 39          | 94954                     | Cape Grim         | -40.7             | 144.7       | 94          |
| 94762                    | Tamworth AMO     | -31.1             | 150.8       | 404         | 94983                     | Eddystone Point   | -41.0             | 148.4       | 20          |
| 95908                    | Thredbo          | -36.5             | 148.3       | 1380        | 94970                     | Hobart AMO        | -42.8             | 147.5       | 4           |
| 94910                    | Wagga AMO        | -35.2             | 147.5       | 212         | 95966                     | Launceston AP     | -41.6             | 147.2       | 166         |
| 94776                    | Williamtown AMO  | -32.8             | 151.8       | 9           | 94969                     | Launceston TTHill | -41.4             | 147.1       | 5           |
| 94767                    | Wollongong       | -34.4             | 150.9       | 10          | 95964                     | Low Head          | -41.1             | 146.8       | 3           |
| <b>WESTERN AUSTRALIA</b> |                  |                   |             |             | <b>NORTHERN TERRITORY</b> |                   |                   |             |             |
| 94802                    | Albany AMO       | -35.0             | 117.8       | 68          | 94326                     | Alice Springs     | -23.8             | 133.9       | 546         |
| 95307                    | Barrow Island    | -20.9             | 115.4       | 6           | 94151                     | Angurugu          | -14.0             | 136.5       | 14          |
| 95610                    | Bickley          | -32.0             | 116.1       | 384         | 94152                     | Borrooloola       | -16.1             | 136.3       | 16          |
| 94203                    | Broome AMO       | -18.0             | 122.2       | 7           | 94120                     | Darwin AP         | -12.4             | 130.9       | 30          |
| 95611                    | Bunbury          | -33.4             | 115.6       | 5           | 94131                     | Katherine         | -14.4             | 132.3       | 107         |
| 94300                    | Carnarvon AMO    | -24.9             | 113.7       | 4           | 94238                     | Tennant Creek     | -19.6             | 134.1       | 376         |
| 95205                    | Derby            | -17.4             | 123.7       | 6           | <b>ACT</b>                |                   |                   |             |             |
| 94638                    | Esperance MO     | -33.8             | 121.9       | 25          | 94926                     | Canberra AMO      | -35.3             | 149.2       | 578         |
| 94646                    | Forrest AMO      | -30.8             | 128.1       | 159         |                           |                   |                   |             |             |