

HOURLY CLIMATE DATA



Exemplary Energy in co-operation with the Australian Bureau of Meteorology has compiled quality tested Hourly Climatic Data for over 200 Australian locations for use in air conditioning load estimation and building energy estimation computer programs and other applications like renewable energy generators that may require this information. Individual years are available or a Reference Meteorological Year of data (designated ERMV) comprising a concatenation of 12 most indicative months of data is also available.

THE DATA

The Data in these formats comprises for each hour:

	CSIRO (ACDB) 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 100 sites for use by a single user in the one office are as follows:

For ERMV files

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

For full 28 year hourly data sets (1990 to 2017 inclusive)

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

The same fees apply to the 101 supplementary sites but a 50% discount is available for owners of the primary sites.

For more than one user in an office add 50%. For 28 years in EPW format add 50%.

All prices include GST.

See below for other weather and climate data services.

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

OTHER DATA other formats, other weather sites (if available from BoM), Real Time Years to the end of last month, individual calendar years (or longer or shorter periods) and Ersatz Future Years (2030 and 2050) is also available on a fee for service basis. For details, contact Exemplary Energy on (02) 6291 3391 or 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 two sets of 100 locations within Australia as listed overleaf.

ACADS-BSG

Building Services Software

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ACADS-BSG Pty Ltd are agents for the licensing and distribution of this data. The data is supplied on CD ROM, USB memory or via email in CSIRO (ACDB), TMY2 or EPW format. Users of the ACADS-BSG computer program BEAVER when purchasing the ERMV files, will also be supplied with a Weather (.SWF) file in the format required by that program.

LOCATIONS (primary 100 sites)

W.M.O. INDEX	LOCATION	LAT (neg.=S)	LONG (E)	ELEV (m)	W.M.O. INDEX	LOCATION	LAT (neg.=S)	LONG (E)	ELEV (m)
QUEENSLAND					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	115.8	41
95551	Toowoomba	-27.6	151.9	691	95214	Wyndham	-15.5	128.1	11
94294	Townsville	-19.3	146.8	4	VICTORIA				
94170	Weipa	-12.7	141.9	11	94852	Ballarat	-37.5	143.8	435
NEW SOUTH WALES					94842	Cape Otway	-38.9	143.5	82
95896	Albury/Wodonga	-36.1	147	164	94907	East Sale AMO	-38.1	147.1	5
95773	Armidale	-30.5	151.7	1079	94868	Melbourne R.O	-37.8	145	31
94743	Blue Mountains	-21.5	149	1080	94693	Mildura AMO	-34.2	142.1	50
94703	Bourke	-30	146	107	94870	Moorabbin	-38	145.1	12
94691	Broken Hill	-32	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	SOUTH AUSTRALIA				
94791	Coffs Harbour MO	-30.3	153.1	5	94672	Adelaide AP	-35.0	138.5	48
94921	Cooma AP	-36.3	149	930	94675	Adelaide RO	-34.9	138.6	48
95708	Coonamble AP	-31	148.4	181	94653	Ceduna	-32.1	133.7	15
95719	Dubbo	-32.2	148.6	284	95458	Coober Pedy	-29	134.7	225
94791	Grafton	-29.8	153	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	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	55	94659	Woomera	-31.2	136.8	167
94753	Richmond	-33.6	150.8	19	TASMANIA				
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	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	Williamstown 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
WESTERN AUSTRALIA					NORTHERN TERRITORY				
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	136.5	14
95610	Bickley	-32	116.1	384	94152	Borroloola	-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	ACT				
94638	Esperance MO	-33.8	121.9	25	94926	Canberra AMO	-35.3	149.2	578
94646	Forrest AMO	-30.8	128.1	159					

LOCATIONS (supplementary 101 sites)

W.M.O. INDEX	LOCATION	LAT (neg.=S)	LONG (E)	ELEV (m)	W.M.O. INDEX	LOCATION	LAT (neg.=S)	LONG (E)	ELEV (m)
QUEENSLAND					948600	Kilmore	-37.4	145.0	528
945530	Applethorpe	-28.6	152.0	873	958330	Kyabram	-36.3	145.1	104
952960	Alva	-19.5	147.5	8	948650	Laverton Raaf	-37.9	144.8	20
954820	Birdsville	-25.9	139.4	48	949350	Mallacoota	-37.6	149.7	22
943870	Bundaberg	-24.9	152.3	27	948740	Mangalore	-36.9	145.2	141
942550	Camooweal	-19.9	138.1	231	948940	Mount Buller	-37.2	146.4	1707
942830	Cooktown	-15.4	145.2	9	948300	Port Fairy	-38.4	142.2	10
945920	Coolangatta	-28.2	153.5	6	948280	Portland (Cashmore)	-38.3	141.5	82
943630	Emerald	-23.6	148.2	190	948920	Rhyll	-38.5	145.3	14
945660	Gympie	-26.2	152.6	65	958370	Rutherglen	-36.1	146.5	175
943650	Proserpine	-20.5	148.5	25	958670	Scoresby	-37.9	145.3	90
945690	Maroochydore (S C)	-26.6	153.1	4	948750	Shepparton	-36.4	145.4	114
NEW SOUTH WALES					948360	Stawell	-37.1	142.7	235
947520	Badgerys Creek	-33.9	150.7	82	948430	Swan Hill	-35.4	143.5	71
945960	Ballina	-28.8	153.6	2	948890	Wangaratta	-36.4	146.3	153
947650	Bankstown	-33.9	150.0	9	SOUTH AUSTRALIA				
947290	Bathurst	-33.4	149.6	745	948170	Coonawarra	-37.3	140.8	58
959310	Bega	-36.7	149.9	42	956760	Edinburgh	-34.7	138.6	20
949290	Bombala	-36.9	149.2	762	954800	Marree	-29.7	138.1	51
945730	Casino	-28.9	153.1	22	954810	Moomba	-28.1	140.2	38
957710	Cessnock	-32.8	151.4	62	948200	Naracoorte	-37.0	140.7	50
957080	Condobolin	-33.1	147.2	194	946810	Nuriootpa	-34.5	139.0	276
947150	Forbes	-33.4	147.9	231	956610	Port Lincoln	-34.6	135.9	8
945880	Glen Innes	-29.7	151.8	1045	948110	Parawa	-35.6	138.3	342
947770	Gosford	-33.4	151.3	20	948200	Naracoorte	-37.0	140.7	50
957160	Goulburn	-34.8	149.7	641	946810	Nuriootpa	-34.5	139.0	276
957040	Griffith	-34.3	146.1	135	956610	Port Lincoln	-34.6	135.9	8
947270	Mudgee	-32.6	149.6	472	948110	Parawa	-35.6	138.3	342
947630	Penrith	-33.7	150.7	25	948140	Strathalbyn	-35.3	138.9	58
947860	Port Macquarie	-31.4	152.9	5	946550	Tarcoola	-30.7	134.6	124
957580	Scone	-32.0	150.8	223	946840	Yunta	-32.6	139.6	300
949380	Ulladulla	-35.4	150.5	37	TASMANIA				
957150	Walgett	-30.0	148.1	134	949740	Sorell	-42.2	145.2	20
947120	Young	-34.3	148.3	381	959690	Cressy	-41.7	147.1	150
WESTERN AUSTRALIA					959600	Devonport	-41.2	146.4	10
942170	Lake Argyle	-16.6	128.5	165	949800	Flinders Island	-40.1	148.0	10
946030	Badgingarra	-30.3	115.5	275	949870	Friendly Beaches	-42.0	148.3	56
956110	Busselton	-33.7	115.4	17	949770	Hartz Mt (Raminea)	-43.2	146.8	830
946010	Leeuwin	-34.4	115.1	14	959610	Low Rocky Point	-43.0	145.5	35
946000	Naturaliste	-33.5	115.0	110	959790	Mt Wellington (W Park)	-42.9	147.2	1261
942040	Derby (Curtin Aero)	-17.6	123.8	78	949570	Ouse	-42.5	146.7	91
946200	Dwellingup	-32.7	116.1	268	949550	Sheffield	-41.4	146.3	295
946470	Eucla	-31.7	128.9	102	949530	Smithton	-40.8	145.1	9
942060	Fitzroy Crossing	-18.2	125.6	115	949560	Strahan	-42.2	145.3	22
956120	Gingin	-31.5	115.9	75	949600	Tunnack	-42.5	147.5	462
946090	Jandakot	-32.1	115.9	31	959570	Wynyard	-41.0	145.7	12
944490	Laverton	-28.6	122.4	465	NORTHERN TERRITORY				
944170	Morawa	-29.2	116.0	272	941250	Batchelor	-13.1	131.0	105
946080	Perth Metro	-31.9	115.9	25	941280	Pine Creek	-13.8	131.2	43
VICTORIA					941500	Gove	-12.3	136.8	53
948540	Avalon	-38.0	144.5	8	941370	Jabiru	-12.7	132.9	28
948550	Bendigo	-36.7	144.3	209	941270	Point Stuart	-12.2	131.9	1
948810	Eildon	-37.2	145.8	638	942320	Victoria River Downs	-16.4	131.0	90
948710	Frankston	-38.2	145.1	6	944620	Yulara	-25.2	131.0	492
948570	Geelong (Breakwater)	-38.2	144.4	35	ACT				
948290	Hamilton	-37.7	142.1	242	949250	Tuggeranong	-35.4	149.1	609
958390	Horsham	-36.7	142.2	134					

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