

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

PINE ISLET (AUSTRALIA)

Altitude: 58 m.

Latitude: 21°39'S Longitude: 150°13'E

Temperature observation period.: 1941-1987 (47)

Rainfall observation period....: 1934-1986 (53)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	27.25	29.80	24.60	0.00	0.00	159.9	162.73
Feb.	26.94	31.18	22.73	0.00	0.00	170.4	139.02
Mar.	26.29	29.55	23.05	0.00	0.00	130.2	139.25
Apr.	24.71	27.95	21.45	0.00	0.00	70.3	106.05
May.	22.26	25.28	19.43	0.00	0.00	81.9	77.14
Jun.	19.94	22.36	17.49	0.00	0.00	55.8	52.83
Jul.	19.26	21.80	16.60	0.00	0.00	34.9	49.81
Aug.	20.10	23.35	16.85	0.00	0.00	21.2	59.49
Sep.	21.96	23.95	20.05	0.00	0.00	15.6	78.01
Oct.	24.14	25.68	22.43	0.00	0.00	24.6	113.43
Nov.	25.99	28.98	23.13	0.00	0.00	41.8	141.02
Dec.	27.07	30.35	23.85	0.00	0.00	74.9	162.47
Year	23.83	26.69	20.97	0.00	0.00	881	1281.2

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	622
Compensated thermicity index.....(Itc):	622
Simple continentality index.....(Ic):	8.0
Diurnality index.....(Id):	8.5
Annual ombrothermic index.....(Io):	3.08
Monthly dry ombrothermic index.....(Iod1):	0.71
Bimonthly dry ombrothermic index.....(Iod2):	0.87
Three monthly dry ombrothermic index.....(Iod3):	0.93
Four monthly dry ombrothermic index.....(Iod4):	1.13
Annual ombro-evaporation index.....(Ioe):	2.77
Annual positive temperature.....(Tp):	2859
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	662
Positive precipitation.....(Pp):	881

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	3	4	4	1	0

Latitudinal Belt...: Eutropical

Continentality.....: Hyperoceanic - Low Euhyperoceanic

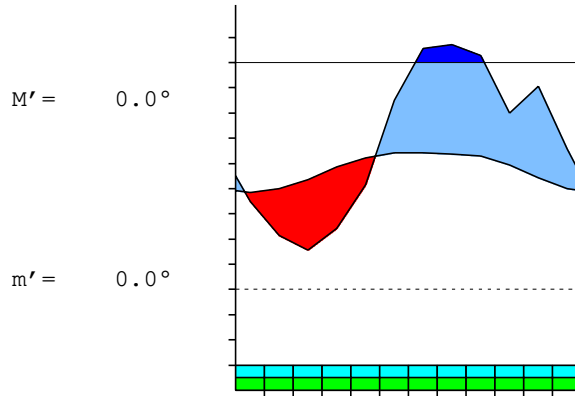
Bioclimate(Variant): TROPICAL XERIC (DRY)

Bioclimatic Belt...: LOW THERMOTROPICAL UPPER DRY

PINE ISLET (AUSTRALIA)

58 m

P= 881 21° 39' S 150° 13' E 47/53 y.
 T= 23.8° Ic= 8.0 Tp= 2859 Tn= 0
 m= 16.6° M= 21.8° Itc= 622 Io= 3.1



TROPICAL XERIC (DRY)
 LOW THERMOTROPICAL UPPER DRY

WATER INDEX CARD PINE ISLET (AUSTRALIA)
 Altitude: 58 m. Latitude: 21° 39' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	19.3	50	35	-8	0	43	7	0	0	-0.2
Aug.	20.1	59	21	0	0	21	38	0	0	-0.6
Sep.	22.0	78	16	0	0	16	62	0	0	-0.8
Oct.	24.1	113	25	0	0	25	89	0	0	-0.7
Nov.	26.0	141	42	0	0	42	99	0	0	-0.7
Dec.	27.1	162	75	0	0	75	88	0	0	-0.5
Jan.	27.3	163	160	0	0	160	3	0	0	0.0
Feb.	26.9	139	170	31	31	139	0	0	0	0.2
Mar.	26.3	139	130	-9	22	139	0	0	0	0.0
Apr.	24.7	106	70	-22	0	93	13	0	0	-0.3
May.	22.3	77	82	5	5	77	0	0	0	0.0
Jun.	19.9	53	56	3	8	53	0	0	0	0.0
Year	23.8	1281	881	*	*	881	400	0	0	*

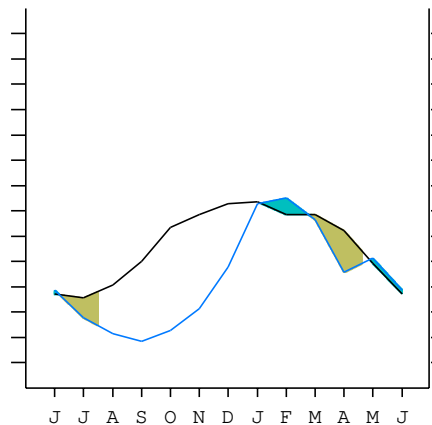
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

PINE ISLET (AUSTRALIA)

21°39' S 150°13' E 58 m 47/53 y.

T= 23.8 Ic= 8.0 TROPICAL XERIC (DRY)
 m= 16.6 Tp= 2859 LOW THERMOTROPICAL
 M= 21.8 Tn= 0 UPPER DRY
 M' = 0.0 Itc= 622
 m' = 0.0 Io= 3.1
 P= 881 mm ———
 PE= 1281 mm ———

Imbibing	27 Apr.
Saturation	24 Feb.
Reserve Use	19 Apr.
Deficit	



PINE ISLET (AUSTRALIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A2b]
 + Type: A. Hyperoceanic
 + Subtype: 2. Euhyperoceanic
 + Variant: b. Low
 Thermic types [A2.A2]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 2. Eutropical
 + Thermic type: A. Warm
 + Thermic subtype: 2. Warm
 Bioclimatic types [A3.2b.5a]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 3. XERIC
 + Bioclimatic variant ..:
 + Thermic type.....: 2. THERMOTROPICAL
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 5. DRY
 + Ombrothermic subtype : a. UPPER
 Bioclimatic Classification: Trxe.Ttr.Dry

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 648
 Coldest semester of the year.....(Psw): 234
 Warmest four months period of the year.....(Pcm1): 535
 Following warmest four months period.....(Pcm2): 243
 Positive precipitation dryest 3 months.....(Ppd): 61
 Positive precipitation dryest 2 months.....(Ppd2): 37
 Positive precipitation dryest 1 month.....(Ppd1): 16
 Positive precipitation warmest 3 months.....(Pps): 405
 Positive precipitation warmest 2 months.....(Pps2): 235
 Positive precipitation warmest 1 month.....(Pps1): 160
 Positive precipitation coldest 3 months.....(Ppw): 112
 Positive precipitation coldest 2 months.....(Ppw2): 91
 Positive precipitation coldest 1 month.....(Ppw1): 35

Seasons	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2
Rainfall	111	81	405	282

Tropical rainfall rhythms: 1 > 2 > 3 > 4

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 27.3
 Average coldest month [T].....(Tmin): 19.3
 Maximum temp. warmest month [M].....(Tmmax): 31.2
 Minimum temp. coldest month [m].....(Tmmin): 16.6
 Absolute Max.temp. warmest month [M'].....(Tamax): 0.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.0
 First warmest contrasted month [M].....(Tcmax): 31.2 (2)
 First coldest contrasted month [m].....(Tcmin): 22.7 (2)
 Dry station temperature.....(Td): 662
 Positive temperature dryest 3 months.....(Tpd): 662
 Positive temperature dryest 2 months.....(Tpd2): 421
 Positive temperature dryest 1 month.....(Tpd1): 220
 Positive temperature warmest 3 months.....(Tps): 813
 Positive temperature warmest 2 months.....(Tps2): 543
 Positive temperature warmest 1 month.....(Tps1): 273
 Positive temperature coldest 3 months.....(Tpw): 593
 Positive temperature coldest 2 months.....(Tpw2): 392
 Positive temperature coldest 1 month.....(Tpw1): 193

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SEASONAL PARAMETERS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Warmest semester...(Sms)	o	o	o	o							o	o
Dryest semester....(Smd)						o	o	o	o	o	o	
Warmest 4 months...(Cm1)	o	o	o									o
Dryest 4 months....(Cmd)							o	o	o	o		
Vegetation Activity(Pav)	o	o	o	o	o	o	o	o	o	o	o	o
Ultragelid...[M' <=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)												
Subgelid.....[m <=0] (Pf)												
Pregelid.....[m' <=0] (Pf)												
Agelid.....[m' > 0] (Pf)												
HiperAgelid..[all>0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.45
 Mediterranean index of January.....(Im1): No
 Mediterranean index of January & February.....(Im2): No
 Mediterranean index of December to February...(Im3): No

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	749	1599	1704	1302	703	819	558	349	212	156	246	418
Tp	271	273	269	263	247	223	199	193	201	220	241	260
Io (Iom)	2.77	5.87	6.33	4.95	2.85	3.68	2.80	1.81	1.05	0.71	1.02	1.61
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	4052 / 813			2824 / 733			1119 / 593			819 / 721		
Io (Iot)	4.987			3.855			1.886			1.136		
Semesters	December-May						June-November					
Pp(x10)/Tp	6877 / 1545						1937 / 1314					
Io (Iosm)	4.450						1.475					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 8814/2859=3.08 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	749	1599	1704	1302	703	819	558	349	212	156	246	418
Tp [T*10]	271	273	269	263	247	223	199	193	201	220	241	260
Iom [Pp/Tp]	277	587	633	495	285	368	280	181	105	71	102	161
Avm [200-Iom]	***	***	***	***	***	***	***	19	95	129	98	39
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	4052 / 813			2824 / 733			1119 / 593			819 / 721		
Iot [Pp/Tp]	499			386			189			114		
Avs E[Avm<200]	***			***			***			267		
Strong upper arid [1]						Strong lower semiarid [3]						
Strong upper semiarid [1]						Weak upper semiarid [1]						

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 7.99
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 16.42
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 11.89
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.97
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: 36.99
 + Steppic (40>R>0)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 26.06
 + Subhumid (30>Ia>20)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 126.52
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 2.70
 + Semiarid (3>DR>2)
 Aridity Index of UNEP [I=P/PE]: 0.69
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 32.96
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: A. Warm and temperate warm
 + Region: 3. Termoxeroteric (Mediterranean warm)
 + Thermic type: 2. Macrothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.59	0.64	0.48	0.25	0.32	0.22	0.13	0.07	0.05	0.08	0.14	0.26
T-E ratio	12.26	12.12	11.83	11.12	10.02	8.97	8.67	9.05	9.88	10.86	11.70	12.18
Precipitation-effectiveness:	32.22					Temperature-efficiency: 128.66						
Moisture Index [MI=100*(P-PE)/PE]: -31.21 + C1.Subhumid dry (-33.3<MI<0) Index of dryness [DI=100*d/PE]: 31.20 + Moderate deficit (16.7<DI<33.3) Index of humidity [HI=100*s/PE]: 0.00 + No surplus (0<HI<10) Potential Evapotranspiration PE: 1281.25 + Forth mesothermic (997<PE<1440)												

