

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

MAPOON (AUSTRALIA)

Altitude: 6 m.

Latitude: 12°4'S Longitude: 141°55'E

Temperature observation period.: 1976-1994 (19)

Rainfall observation period....: 1956-1994 (39)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	29.17	33.33	25.00	38.33	19.44	457.2	172.56
Feb.	28.89	32.78	25.00	40.00	20.00	391.2	149.99
Mar.	28.89	32.78	25.00	38.89	18.89	307.4	162.36
Apr.	28.33	32.22	24.44	38.89	19.44	96.5	147.15
May.	27.22	31.11	23.33	36.67	18.89	17.8	141.26
Jun.	25.56	30.00	21.11	36.11	16.11	5.1	105.20
Jul.	25.28	30.00	20.56	35.00	14.44	2.5	104.62
Aug.	25.84	30.56	21.11	36.67	15.00	0.8	118.29
Sep.	27.22	32.22	22.22	37.22	18.33	5.1	141.26
Oct.	28.61	33.89	23.33	38.89	18.89	10.2	163.06
Nov.	29.72	35.00	24.44	40.00	19.44	61.0	169.34
Dec.	29.72	34.44	25.00	39.44	21.11	228.6	179.01
Year	27.87	32.36	23.38	38.01	18.33	1583	1754.1

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	784
Compensated thermicity index.....(Itc):	784
Simple continentality index.....(Ic):	4.4
Diurnality index.....(Id):	10.6
Annual ombrothermic index.....(Io):	4.73
Monthly dry ombrothermic index.....(Iod1):	0.03
Bimonthly dry ombrothermic index.....(Iod2):	0.06
Three monthly dry ombrothermic index.....(Iod3):	0.11
Four monthly dry ombrothermic index.....(Iod4):	0.25
Annual ombro-evaporation index.....(Ioe):	11.39
Annual positive temperature.....(Tp):	3345
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	767
Positive precipitation.....(Pp):	1583

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	4	2	0	6	0

Latitudinal Belt...: Eutropical

Continentalty.....: Hyperoceanic - High Euhyperoceanic

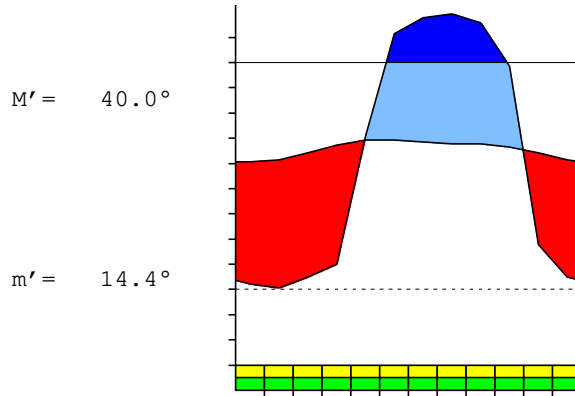
Bioclimate(Variant): TROPICAL PLUVISEASONAL (XEROPHYTIC)

Bioclimatic Belt...: UPPER INFRATROPICAL LOW SUBHUMID

MAPOON (AUSTRALIA)

6 m

P= 1583 12° 4'S 141° 55'E 19/39 y.
 T= 27.9° Ic= 4.4 Tp= 3345 Tn= 0
 m= 20.6° M= 30.0° Itc= 784 Io= 4.7



TROPICAL PLUVISEASONAL (XEROPHYTIC)
 UPPER INFRATROPICAL LOW SUBHUMID

WATER INDEX CARD

MAPOON (AUSTRALIA)

Altitude: 6 m.

Latitude: 12° 4'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	25.3	105	3	0	0	3	102	0	10	-0.9
Aug.	25.8	118	1	0	0	1	117	0	5	-0.9
Sep.	27.2	141	5	0	0	5	136	0	3	-0.9
Oct.	28.6	163	10	0	0	10	153	0	1	-0.9
Nov.	29.7	169	61	0	0	61	108	0	1	-0.6
Dec.	29.7	179	229	50	50	179	0	0	0	0.2
Jan.	29.2	173	457	50	100	173	0	234	117	1.6
Feb.	28.9	150	391	0	100	150	0	241	179	1.6
Mar.	28.9	162	307	0	100	162	0	145	162	0.8
Apr.	28.3	147	97	-51	49	147	0	0	81	-0.3
May.	27.2	141	18	-49	0	67	74	0	41	-0.8
Jun.	25.6	105	5	0	0	5	100	0	20	-0.9
Year	27.9	1754	1583	*	*	963	791	620	620	*

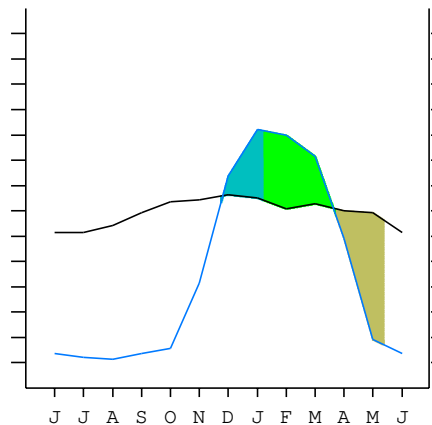
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

MAPOON (AUSTRALIA)

12°4'S 141°55'E 6 m 19/39 y.

T= 27.9 Ic= 4.4 TROPICAL PLUVISEASONAL (XEROPHYTIC)
 m= 20.6 Tp= 3345 UPPER INFRATROPICAL
 M= 30.0 Tn= 0 LOW SUBHUMID
 M' = 40.0 Itc= 784
 m' = 14.4 Io= 4.7
 P= 1583 mm ———
 PE= 1754 mm ———

Imbibing	21 Nov.
Saturation	6 Jan.
Reserve Use	23 Mar.
Deficit	12 May.



MAPOON (AUSTRALIA)

Latitude: 12°4'S Longitude: 141°55'E Altitude: 6 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [A2a]
 + Type: A. Hyperoceanic
 + Subtype: 2. Euhyperoceanic
 + Variant: a. High
 Thermic types [A2.A1]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 2. Eutropical
 + Thermic type: A. Warm
 + Thermic subtype: 1. Torrid
 Bioclimatic types [A4.1a.6b]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 4. PLUVISEASONAL
 + Bioclimatic variant .:
 + Thermic type.....: 1. INFRATROPICAL
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW
 Bioclimatic Classification: Trde.Itr.Shu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 1456
 Coldest semester of the year.....(Psw): 128
 Warmest four months period of the year.....(Pcm1): 1138
 Following warmest four months period.....(Pcm2): 427
 Positive precipitation dryest 3 months.....(Ppd): 8
 Positive precipitation dryest 2 months.....(Ppd2): 3
 Positive precipitation dryest 1 month.....(Ppd1): 1
 Positive precipitation warmest 3 months.....(Pps): 747
 Positive precipitation warmest 2 months.....(Pps2): 290
 Positive precipitation warmest 1 month.....(Pps1): 61
 Positive precipitation coldest 3 months.....(Ppw): 8
 Positive precipitation coldest 2 months.....(Ppw2): 8
 Positive precipitation coldest 1 month.....(Ppw1): 3

Seasons	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2
Rainfall	8	76	1077	421

Tropical rainfall rhythms: 1 > 2 > 4 > 3

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 29.7
 Average coldest month [T].....(Tmin): 25.3
 Maximum temp. warmest month [M].....(Tmmax): 35.0
 Minimum temp. coldest month [m].....(Tmmin): 20.6
 Absolute Max.temp. warmest month [M'].....(Tamax): 40.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 14.4
 First warmest contrasted month [M].....(Tcmax): 33.9 (10)
 First coldest contrasted month [m].....(Tcmin): 23.3 (10)
 Dry station temperature.....(Td): 767
 Positive temperature dryest 3 months.....(Tpd): 767
 Positive temperature dryest 2 months.....(Tpd2): 511
 Positive temperature dryest 1 month.....(Tpd1): 258
 Positive temperature warmest 3 months.....(Tps): 886
 Positive temperature warmest 2 months.....(Tps2): 594
 Positive temperature warmest 1 month.....(Tps1): 297
 Positive temperature coldest 3 months.....(Tpw): 767
 Positive temperature coldest 2 months.....(Tpw2): 508
 Positive temperature coldest 1 month.....(Tpw1): 253

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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)	o	o	o	o	o	o	o	o	o	o	o	o
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): 1.11
 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)	2286	4572	3912	3074	965	178	51	25	8	51	102	610
Tp	297	292	289	289	283	272	256	253	258	272	286	297
Io (Iom)	7.69	15.7	13.5	10.6	3.41	0.65	0.20	0.10	0.03	0.19	0.36	2.05
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	10770 / 878			4217 / 844			84 / 767			763 / 856		
Io (Iot)	12.27			4.994			0.110			0.892		
Semesters	December-May						June-November					
Pp(x10)/Tp	14987 / 1722						847 / 1622					
Io (Iosm)	8.702						0.522					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 15834/3345=4.73 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	2286	4572	3912	3074	965	178	51	25	8	51	102	610
Tp [T*10]	297	292	289	289	283	272	256	253	258	272	286	297
Iom [Pp/Tp]	769	\$\$	\$\$	\$\$	341	65	20	10	3	19	36	205
Avm [200-Iom]	***	***	***	***	***	135	180	190	197	181	164	***
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	10770 / 878			4217 / 844			84 / 767			763 / 856		
Iot [Pp/Tp]	1227			499			11			89		
Avs E[Avm<200]	***			***			567			***		
Lower ultrahyperarid [2]						Upper ultrahyperarid [3]						
Upper hyperarid [1]						Weak lower arid [1]						

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 4.44
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 15.71
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 6.09
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.88
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: 56.81
 + Semiarid (60>R>40)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 41.81
 + Humid (60>Ia>30)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 197.36
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 1.76
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 0.90
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 132.01
 + High (120<K<160)

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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: 1. Megathermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	1.82	1.54	1.18	0.33	0.05	0.01	0.01	0.00	0.01	0.03	0.19	0.83
T-E ratio	13.13	13.00	13.00	12.75	12.25	11.50	11.38	11.63	12.25	12.87	13.37	13.37
Precipitation-effectiveness:	60.09					Temperature-efficiency: 150.50						
Moisture Index [MI=100*(P-PE)/PE]: -9.73 + C1.Subhumid dry (-33.3<MI<0)												
Index of dryness [DI=100*d/PE]: 45.10 + Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]: 35.37 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 1754.10 + Megathermic (PE>1440)												

