

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

CANBERRA (AUSTRALIA)

Altitude: 575 m.

Latitude: 35°18'S Longitude: 149°11'E

Temperature observation period.: 1971-1994 (24)

Rainfall observation period....: 1969-1994 (26)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	20.28	27.78	12.78	42.78	1.67	48.3	115.50
Feb.	20.28	27.78	12.78	39.44	0.56	43.2	98.60
Mar.	17.50	24.44	10.56	37.22	-0.56	55.9	81.43
Apr.	13.06	19.44	6.67	32.78	-2.78	40.6	48.49
May.	9.17	15.56	2.78	22.78	-7.22	45.7	28.37
Jun.	6.39	11.67	1.11	20.00	-8.33	53.3	15.99
Jul.	5.84	11.11	0.56	18.33	-10.00	45.7	15.00
Aug.	7.23	12.78	1.67	22.78	-7.78	55.9	21.68
Sep.	9.72	16.11	3.33	28.33	-4.44	40.6	34.50
Oct.	13.06	20.00	6.11	34.44	-3.33	55.9	58.29
Nov.	16.39	23.89	8.89	36.67	-2.22	48.3	82.21
Dec.	19.17	26.67	11.67	39.44	0.00	50.8	108.72
Year	13.17	19.77	6.58	31.25	-3.70	584	708.78

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	248
Compensated thermicity index.....(Itc):	248
Simple continentality index.....(Ic):	14.4
Diurnality index.....(Id):	15.0
Annual ombrothermic index.....(Io):	3.70
Monthly estival ombrothermic index.....(Ios1):	2.13
Bimonthly estival ombrothermic index.....(Ios2):	2.26
Threemonthly estival ombrothermic index.....(Ios3):	2.38
Fourmonthly estival ombrothermic index.....(Ios4):	2.50
Annual ombro-evaporation index.....(Ioe):	1.07
Annual positive temperature.....(Tp):	1581
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	597
Positive precipitation.....(Pp):	584

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

Latitudinal Belt...: Subtropical

Continentalty.....: Oceanic - High Euoceanic

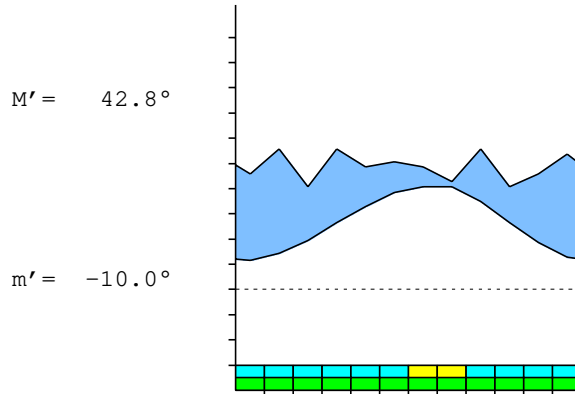
Bioclimate(Variant): TEMPERATE OCEANIC (SUBMEDITERRANEAN)

Bioclimatic Belt...: LOW MESOTEMPERATE LOW SUBHUMID

CANBERRA (AUSTRALIA)

575 m

P= 584 35° 18' S 149° 11' E 24/26 y.
 T= 13.2° Ic= 14.4 Tp= 1581 Tn= 0
 m= 0.6° M= 11.1° Itc= 248 Io= 3.7



TEMPERATE OCEANIC (SUBMEDITERRANEAN)
 LOW MESOTEMPERATE LOW SUBHUMID

WATER INDEX CARD
 Altitude: 575 m.

CANBERRA (AUSTRALIA)
 Latitude: 35° 18' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	5.8	15	46	31	85	15	0	0	0	2.0
Aug.	7.2	22	56	15	100	22	0	20	10	1.5
Sep.	9.7	35	41	0	100	35	0	6	8	0.1
Oct.	13.1	58	56	-2	98	58	0	0	4	0.0
Nov.	16.4	82	48	-34	64	82	0	0	2	-0.4
Dec.	19.2	109	51	-58	6	109	0	0	1	-0.5
Jan.	20.3	115	48	-6	0	54	61	0	0	-0.5
Feb.	20.3	99	43	0	0	43	55	0	0	-0.5
Mar.	17.5	81	56	0	0	56	26	0	0	-0.3
Apr.	13.1	48	41	0	0	41	8	0	0	-0.1
May.	9.2	28	46	17	17	28	0	0	0	0.6
Jun.	6.4	16	53	37	55	16	0	0	0	2.3
Year	13.2	709	584	*	*	559	150	26	26	*

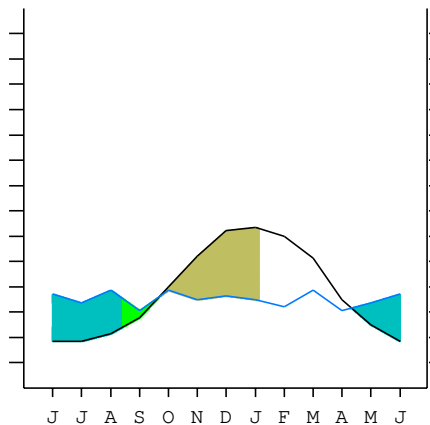
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

CANBERRA (AUSTRALIA)

35°18' S 149°11' E 575 m 24/26 y.

T= 13.2 Ic= 14.4 TEMPERATE OCEANIC (SUBMEDITERRANEAN)
 m= 0.6 Tp= 1581 LOW MESOTEMPERATE
 M= 11.1 Tn= 0 LOW SUBHUMID
 M' = 42.8 Itc= 248
 m' = -10.0 Io= 3.7
 P= 584 mm
 PE= 709 mm

Imbibing	10 Apr.
Saturation	13 Aug.
Reserve Use	22 Sep.
Deficit	3 Jan.



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [B2a]
 + Type: B. Oceanic
 + Subtype: 2. Euoceanic
 + Variant: a. High
 Thermic types [B1.B4]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. Subtropical
 + Thermic type: B. Temperate
 + Thermic subtype: 4. Temperate
 Bioclimatic types [C3b.3b.6b]
 + Macroclimate: C. TEMPERATE
 + Bioclimate: 3. OCEANIC
 + Bioclimatic variant .: b. SUBMEDITERRANEAN
 + Thermic type.....: 3. MESOTEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW
 Bioclimatic Classification: Teco (Sbm) .Mte.Shu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 302
 Coldest semester of the year.....(Psw): 282
 Warmest four months period of the year.....(Pcm1): 198
 Following warmest four months period.....(Pcm2): 185
 Positive precipitation dryest 3 months.....(Ppd): 140
 Positive precipitation dryest 2 months.....(Ppd2): 86
 Positive precipitation dryest 1 month.....(Ppd1): 41
 Positive precipitation warmest 3 months.....(Pps): 142
 Positive precipitation warmest 2 months.....(Pps2): 92
 Positive precipitation warmest 1 month.....(Pps1): 48
 Positive precipitation coldest 3 months.....(Ppw): 155
 Positive precipitation coldest 2 months.....(Ppw2): 99
 Positive precipitation coldest 1 month.....(Ppw1): 46

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	154	144	142	142

Seasonal rainfall rhythms: W > P > S > F

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 20.3
 Average coldest month [T].....(Tmin): 5.8
 Maximum temp. warmest month [M].....(Tmmax): 27.8
 Minimum temp. coldest month [m].....(Tmmin): 0.6
 Absolute Max.temp. warmest month [M'].....(Tamax): 42.8
 Absolute Min.temp. coldest month [m'].....(Tamin): -10.0
 First warmest contrasted month [M].....(Tcmax): 27.8 (1)
 First coldest contrasted month [m].....(Tcmin): 12.8 (1)
 Estival temperature.....(Ts): 597
 Positive temperature dryest 3 months.....(Tpd): 286
 Positive temperature dryest 2 months.....(Tpd2): 222
 Positive temperature dryest 1 month.....(Tpd1): 131
 Positive temperature warmest 3 months.....(Tps): 597
 Positive temperature warmest 2 months.....(Tps2): 406
 Positive temperature warmest 1 month.....(Tps1): 203
 Positive temperature coldest 3 months.....(Tpw): 195
 Positive temperature coldest 2 months.....(Tpw2): 122
 Positive temperature coldest 1 month.....(Tpw1): 58

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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)			o	o	o	o	o	o	o	o	o	o
Agelid.....[m' > 0] (Pf)	o	o										
HiperAgelid..[all>0] (Pf)	o	o										

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.21
 Mediterranean index of January.....(Im1): 2.39
 Mediterranean index of January & February.....(Im2): 2.34
 Mediterranean index of December to February...(Im3): 2.27

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	508	483	432	559	406	457	533	457	559	406	559	483
Tp	192	203	203	175	131	92	64	58	72	97	131	164
Io (Iom)	2.65	2.38	2.13	3.19	3.11	4.98	8.34	7.83	7.73	4.18	4.28	2.95
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	1423 / 597			1422 / 397			1549 / 195			1448 / 392		
Io (Iot)	2.382			3.579			7.960			3.697		
Semesters	December-May						June-November					
Pp(x10)/Tp	2845 / 995						2997 / 586					
Io (Iosm)	2.860						5.112					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 5842/1581=3.70 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	508	483	432	559	406	457	533	457	559	406	559	483
Tp [T*10]	192	203	203	175	131	92	64	58	72	97	131	164
Iom [Pp/Tp]	265	238	213	319	311	498	834	783	773	418	428	295
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	1423 / 597			1422 / 397			1549 / 195			1448 / 392		
Iot [Pp/Tp]	238			358			796			370		
Avs E[Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	14.44
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		22.08
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		20.54
+ Oceanic (20<CI<40)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		1.13
+ Subcontinental (1.1<CI<1.7)		
Rainfall Index of Lang (1925) [R=P/T]		44.34
+ Semiarid (60>R>40)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		25.21
+ Subhumid (30>Ia>20)		
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]		75.73
+ Subhumid (90>Q>50)		
I of Dantin & Revenga (1940) [DR=100*T/P]		2.26
+ Semiarid (3>DR>2)		
Aridity Index of UNEP [I=P/PE]		0.82
+ Humid (I>0.65)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		5.35
+ Very low (K<60)		

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 4. Mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.18	0.16	0.23	0.19	0.24	0.31	0.27	0.32	0.21	0.26	0.20	0.20
T-E ratio	9.13	9.13	7.88	5.88	4.13	2.88	2.63	3.25	4.37	5.88	7.38	8.63
Precipitation-effectiveness: 27.90						Temperature-efficiency						71.14
Moisture Index [MI=100*(P-PE)/PE]												-17.58
+ C1.Subhumid dry (-33.3<MI<0)												
Index of dryness [DI=100*d/PE]												21.19
+ Moderate deficit (16.7<DI<33.3)												
Index of humidity [HI=100*s/PE]												3.61
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												708.78
+ First mesothermic (570<PE<712)												

