

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

MT GAMBIER AIRPORT -M.O. (AUSTRALIA) Altitude: 65 m.
 Latitude: 37°44'S Longitude: 140°47'E
 Temperature observation period.: 1951-1993 (43)
 Rainfall observation period....: 1942-1990 (49)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	18.16	25.66	10.39	0.00	0.00	24.4	101.22
Feb.	18.20	24.24	12.21	0.00	0.00	27.1	86.09
Mar.	16.83	20.60	12.80	0.00	0.00	35.8	78.15
Apr.	14.24	19.09	9.66	0.00	0.00	56.7	54.16
May.	11.71	15.55	7.75	0.00	0.00	74.1	38.86
Jun.	9.77	12.16	7.29	0.00	0.00	79.8	27.96
Jul.	9.04	12.11	5.94	0.00	0.00	100.8	26.73
Aug.	9.70	12.85	6.35	0.00	0.00	92.7	32.18
Sep.	10.91	15.26	6.49	0.00	0.00	70.5	40.58
Oct.	12.44	15.75	9.25	0.00	0.00	64.1	55.27
Nov.	14.20	19.13	9.38	0.00	0.00	47.0	69.03
Dec.	16.29	22.25	10.55	0.00	0.00	37.6	89.45
Year	13.46	17.89	9.01	0.00	0.00	711	699.69

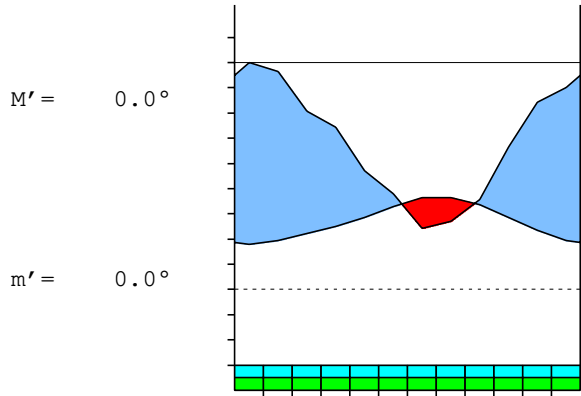
BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	315
Compensated thermicity index.....(Itc):	315
Simple continentality index.....(Ic):	9.2
Diurnality index.....(Id):	15.3
Annual ombrothermic index.....(Io):	4.40
Monthly estival ombrothermic index.....(Ios1):	1.34
Bimonthly estival ombrothermic index.....(Ios2):	1.42
Threemonthly estival ombrothermic index.....(Ios3):	1.69
Fourmonthly estival ombrothermic index.....(Ios4):	2.04
Annual ombro-evaporation index.....(Ioe):	0.47
Annual positive temperature.....(Tp):	1615
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	527
Positive precipitation.....(Pp):	711

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

Latitudinal Belt...: Low eutemperate
 Continentality.....: Hyperoceanic - High Subhyperoceanic
 Bioclimate.....: MEDITERRANEAN PLUVISEASONAL-OCEANIC
 Bioclimatic Belt...: LOW MESOMEDITERRANEAN LOW SUBHUMID

MT GAMBIER AIRPORT -M.O. (AUSTRALIA) 65 m
 P= 711 37° 44'S 140° 47'E 43/49 y.
 T= 13.5° Ic= 9.2 Tp= 1615 Tn= 0
 m= 5.9° M= 12.1° Itc= 315 Io= 4.4



MEDITERRANEAN PLUVISEASONAL-OCEANIC
 LOW MESOMEDITERRANEAN LOW SUBHUMID

WATER INDEX CARD MT GAMBIER AIRPORT -M.O. (AUSTRALIA)
 Altitude: 65 m. Latitude: 37° 44'S

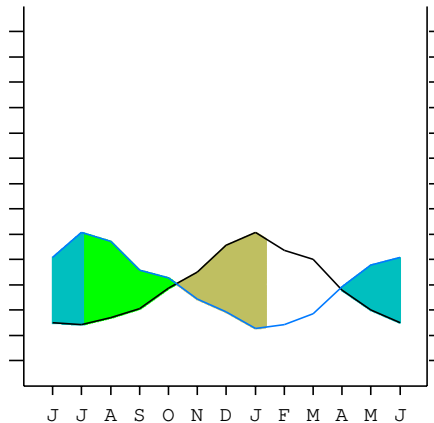
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	9.0	27	101	10	100	27	0	64	32	2.7
Aug.	9.7	32	93	0	100	32	0	61	46	1.8
Sep.	10.9	41	70	0	100	41	0	30	38	0.7
Oct.	12.4	55	64	0	100	55	0	9	23	0.1
Nov.	14.2	69	47	-22	78	69	0	0	12	-0.3
Dec.	16.3	89	38	-52	26	89	0	0	6	-0.5
Jan.	18.2	101	24	-26	0	50	51	0	3	-0.7
Feb.	18.2	86	27	0	0	27	59	0	1	-0.6
Mar.	16.8	78	36	0	0	36	42	0	1	-0.5
Apr.	14.2	54	57	3	3	54	0	0	0	0.0
May.	11.7	39	74	35	38	39	0	0	0	0.9
Jun.	9.8	28	80	52	90	28	0	0	0	1.8
Year	13.5	700	711	*	*	548	152	163	163	*

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

MT GAMBIER AIRPORT -M.O. (AUSTRALIA) 37°44'S 140°47'E 65 m 43/49 y.

T= 13.5 Ic= 9.2 MEDITERRANEAN PLUVISEASONAL-OCEANIC
 m= 5.9 Tp= 1615 LOW MESOMEDITERRANEAN
 M= 12.1 Tn= 0 LOW SUBHUMID
 M' = 0.0 Itc= 315
 m' = 0.0 Io= 4.4
 P= 711 mm ———
 PE= 700 mm ———

Imbibing	29 Mar.
Saturation	5 Jul.
Reserve Use	9 Oct.
Deficit	11 Jan.



MT GAMBIER AIRPORT -M.O. (AUSTRALIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A3a]
 + Type: A. Hyperoceanic
 + Subtype: 3. Subhyperoceanic
 + Variant: a. High

Thermic types [B1.B4]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. Low eutemperate
 + Thermic type: B. Temperate
 + Thermic subtype: 4. Temperate

Bioclimatic types [B8.3b.6b]
 + Macrobioclimate: B. MEDITERRANEAN
 + Bioclimate: 8. PLUVISEASONAL-OCEANIC
 + Bioclimatic variant ..:
 + Thermic type.....: 3. MESOMEDITERRANEAN
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW
 Bioclimatic Classification: Mehc.Mme.Shu

MT GAMBIER AIRPORT -M.O. (AUSTRALIA)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 229
 Coldest semester of the year.....(Psw): 482
 Warmest four months period of the year.....(Pcm1): 125
 Following warmest four months period.....(Pcm2): 311
 Positive precipitation dryest 3 months.....(Ppd): 87
 Positive precipitation dryest 2 months.....(Ppd2): 51
 Positive precipitation dryest 1 month.....(Ppd1): 24
 Positive precipitation warmest 3 months.....(Pps): 87
 Positive precipitation warmest 2 months.....(Pps2): 51
 Positive precipitation warmest 1 month.....(Pps1): 27
 Positive precipitation coldest 3 months.....(Ppw): 273
 Positive precipitation coldest 2 months.....(Ppw2): 194
 Positive precipitation coldest 1 month.....(Ppw1): 101

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	273	181	89	166

Seasonal rainfall rhythms: W > P > F > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 18.2
 Average coldest month [T].....(Tmin): 9.0
 Maximum temp. warmest month [M].....(Tmmax): 25.7
 Minimum temp. coldest month [m].....(Tmmin): 5.9
 Absolute Max.temp. warmest month [M'].....(Tamax): 0.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.0
 First warmest contrasted month [M].....(Tcmax): 25.7 (1)
 First coldest contrasted month [m].....(Tcmin): 10.4 (1)
 Estival temperature.....(Ts): 527
 Positive temperature dryest 3 months.....(Tpd): 532
 Positive temperature dryest 2 months.....(Tpd2): 364
 Positive temperature dryest 1 month.....(Tpd1): 182
 Positive temperature warmest 3 months.....(Tps): 532
 Positive temperature warmest 2 months.....(Tps2): 364
 Positive temperature warmest 1 month.....(Tps1): 182
 Positive temperature coldest 3 months.....(Tpw): 285
 Positive temperature coldest 2 months.....(Tpw2): 187
 Positive temperature coldest 1 month.....(Tpw1): 90

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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): 0.98
 Mediterranean index of January.....(Im1): 4.16
 Mediterranean index of January & February.....(Im2): 3.64
 Mediterranean index of December to February...(Im3): 3.11

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	376	244	271	358	567	741	798	1008	927	705	641	470
Tp	163	182	182	168	142	117	98	90	97	109	124	142
Io (Iom)	2.31	1.34	1.49	2.12	3.98	6.33	8.17	11.2	9.56	6.46	5.15	3.31
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	891 / 527			1666 / 428			2734 / 285			1816 / 376		
Io (Iot)	1.692			3.894			9.589			4.835		
Semesters	December-May						June-November					
Pp(x10)/Tp	2557 / 954						4549 / 661					
Io (Iosm)	2.679						6.887					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 7106/1615=4.40 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	376	244	271	358	567	741	798	1008	927	705	641	470
Tp [T*10]	163	182	182	168	142	117	98	90	97	109	124	142
Iom [Pp/Tp]	231	134	149	212	398	633	817	\$\$	956	646	515	331
Avm [200-Iom]	***	66	51	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	891 / 527			1666 / 428			2734 / 285			1816 / 376		
Iot [Pp/Tp]	169			389			959			484		
Avs E[Avm<200]	***			***			***			***		
Weak lower semiarid [2]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 9.16
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 5.04
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 7.04
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.67
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: 52.80
 + Semiarid (60>R>40)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 30.29
 + Humid (60>Ia>30)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 114.03
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 1.89
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 1.02
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 14.30
 + 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: 4. Mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.09	0.10	0.14	0.26	0.38	0.44	0.58	0.52	0.37	0.31	0.21	0.16
T-E ratio	8.17	8.19	7.57	6.41	5.27	4.40	4.07	4.36	4.91	5.60	6.39	7.33
Precipitation-effectiveness:	35.60					Temperature-efficiency: 72.67						
Moisture Index [MI=100*(P-PE)/PE]: 1.56 + C2.Subhumid humid (0<MI<20)												
Index of dryness [DI=100*d/PE]: 21.74 + Moderate deficit (16.7<DI<33.3)												
Index of humidity [HI=100*s/PE]: 23.30 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 699.69 + First mesothermic (570<PE<712)												

