

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

YALGOO (AUSTRALIA)

Altitude: 318 m.

Latitude: 28°21'S Longitude: 116°41'E

Temperature observation period.: 1947-1980 (34)

Rainfall observation period....: 1950-1980 (31)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	28.80	36.70	20.60	46.10	10.00	14.0	181.61
Feb.	28.60	36.10	20.60	46.80	10.60	20.0	155.36
Mar.	26.10	32.80	18.30	43.90	8.90	24.0	138.37
Apr.	21.60	28.90	14.40	40.60	4.40	21.0	79.70
May.	16.60	22.80	10.00	34.40	0.60	28.0	42.18
Jun.	13.40	18.90	7.80	28.90	-1.10	40.0	23.92
Jul.	12.40	18.30	6.10	27.20	-1.70	38.0	20.88
Aug.	13.50	19.40	6.70	33.90	-0.60	26.0	27.14
Sep.	16.60	23.90	8.30	35.60	1.10	9.0	45.35
Oct.	19.60	27.20	11.10	40.00	-1.10	7.0	74.21
Nov.	23.90	32.20	15.00	42.80	6.10	9.0	120.08
Dec.	27.10	35.60	18.30	45.00	9.40	10.0	168.36
Year	20.68	27.73	13.10	38.77	3.88	246	1077.2

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	451
Compensated thermicity index.....(Itc):	451
Simple continentality index.....(Ic):	16.4
Diurnality index.....(Id):	17.3
Annual ombrothermic index.....(Io):	0.99
Monthly estival ombrothermic index.....(Ios1):	0.37
Bimonthly estival ombrothermic index.....(Ios2):	0.59
Three monthly estival ombrothermic index.....(Ios3):	0.52
Four monthly estival ombrothermic index.....(Ios4):	0.49
Annual ombro-evaporation index.....(Ioe):	0.66
Annual positive temperature.....(Tp):	2482
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	845
Positive precipitation.....(Pp):	246

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	0	2	2	8	0

Latitudinal Belt...: Subtropical

Continentality.....: Oceanic - Low Euoceanic

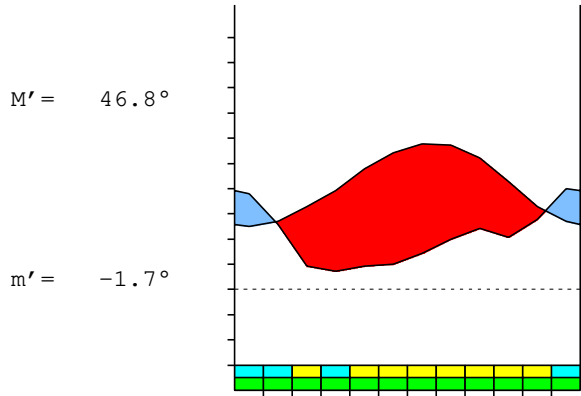
Bioclimate.....: MEDITERRANEAN DESERTIC-OCEANIC

Bioclimatic Belt...: UPPER INFRAMEDITERRANEAN UPPER ARID

YALGOO (AUSTRALIA)

318 m

P= 246 28° 21'S 116° 41'E 34/31 y.
 T= 20.7° Ic= 16.4 Tp= 2482 Tn= 0
 m= 6.1° M= 18.3° Itc= 451 Io= 1.0



MEDITERRANEAN DESERTIC-OCEANIC
 UPPER INFRAMEDITERRANEAN UPPER ARID

WATER INDEX CARD

YALGOO (AUSTRALIA)

Altitude: 318 m.

Latitude: 28° 21'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	12.4	21	38	17	33	21	0	0	0	0.8
Aug.	13.5	27	26	-1	32	27	0	0	0	0.0
Sep.	16.6	45	9	-32	0	41	4	0	0	-0.8
Oct.	19.6	74	7	0	0	7	67	0	0	-0.9
Nov.	23.9	120	9	0	0	9	111	0	0	-0.9
Dec.	27.1	168	10	0	0	10	158	0	0	-0.9
Jan.	28.8	182	14	0	0	14	168	0	0	-0.9
Feb.	28.6	155	20	0	0	20	135	0	0	-0.8
Mar.	26.1	138	24	0	0	24	114	0	0	-0.8
Apr.	21.6	80	21	0	0	21	59	0	0	-0.7
May.	16.6	42	28	0	0	28	14	0	0	-0.3
Jun.	13.4	24	40	16	16	24	0	0	0	0.6
Year	20.7	1077	246	*	*	246	831	0	0	*

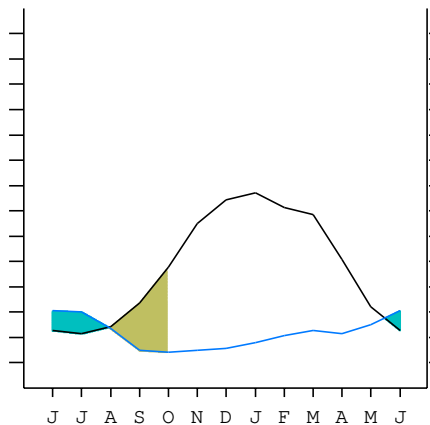
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

YALGOO (AUSTRALIA)

28°21'S 116°41'E 318 m 34/31 y.

T= 20.7 Ic= 16.4 MEDITERRANEAN DESERTIC-OCEANIC
 m= 6.1 Tp= 2482 UPPER INFRAMEDITERRANEAN
 M= 18.3 Tn= 0 UPPER ARID
 M' = 46.8 Itc= 451
 m' = -1.7 Io= 1.0
 P= 246 mm ———
 PE= 1077 mm ———

Imbibing	15 May.
Saturation	29 Jul.
Reserve Use	27 Sep.
Deficit	



YALGOO (AUSTRALIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [B2b]
 + Type: B. Oceanic
 + Subtype: 2. Euoceanic
 + Variant: b. Low
 Thermic types [A3.A2]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 2. Warm
 Bioclimatic types [B4.1a.3a]
 + Macrobioclimate: B. MEDITERRANEAN
 + Bioclimate: 4. DESERTIC-OCEANIC
 + Bioclimatic variant ..:
 + Thermic type.....: 1. INFRAMEDITERRANEAN
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 3. ARID
 + Ombrothermic subtype : a. UPPER
 Bioclimatic Classification: Mexc.Ime.Ari

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 98
 Coldest semester of the year.....(Psw): 148
 Warmest four months period of the year.....(Pcm1): 68
 Following warmest four months period.....(Pcm2): 127
 Positive precipitation dryest 3 months.....(Ppd): 25
 Positive precipitation dryest 2 months.....(Ppd2): 16
 Positive precipitation dryest 1 month.....(Ppd1): 7
 Positive precipitation warmest 3 months.....(Pps): 44
 Positive precipitation warmest 2 months.....(Pps2): 34
 Positive precipitation warmest 1 month.....(Pps1): 14
 Positive precipitation coldest 3 months.....(Ppw): 104
 Positive precipitation coldest 2 months.....(Ppw2): 78
 Positive precipitation coldest 1 month.....(Ppw1): 38

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	104	25	44	73

Seasonal rainfall rhythms: W > F > S > P

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 28.8
 Average coldest month [T].....(Tmin): 12.4
 Maximum temp. warmest month [M].....(Tmmax): 36.7
 Minimum temp. coldest month [m].....(Tmmin): 6.1
 Absolute Max.temp. warmest month [M'].....(Tamax): 46.8
 Absolute Min.temp. coldest month [m'].....(Tamin): -1.7
 First warmest contrasted month [M].....(Tcmax): 35.6 (12)
 First coldest contrasted month [m].....(Tcmin): 18.3 (12)
 Estival temperature.....(Ts): 845
 Positive temperature dryest 3 months.....(Tpd): 601
 Positive temperature dryest 2 months.....(Tpd2): 362
 Positive temperature dryest 1 month.....(Tpd1): 196
 Positive temperature warmest 3 months.....(Tps): 845
 Positive temperature warmest 2 months.....(Tps2): 574
 Positive temperature warmest 1 month.....(Tps1): 288
 Positive temperature coldest 3 months.....(Tpw): 393
 Positive temperature coldest 2 months.....(Tpw2): 258
 Positive temperature coldest 1 month.....(Tpw1): 124

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

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 4.38
 Mediterranean index of January.....(Im1): 12.97
 Mediterranean index of January & February.....(Im2): 9.91
 Mediterranean index of December to February...(Im3): 11.48

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	100	140	200	240	210	280	400	380	260	90	70	90
Tp	271	288	286	261	216	166	134	124	135	166	196	239
Io (Iom)	0.37	0.49	0.70	0.92	0.97	1.69	2.99	3.06	1.93	0.54	0.36	0.38
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	440 / 845			730 / 643			1040 / 393			250 / 601		
Io (Iot)	0.521			1.135			2.646			0.416		
Semesters	December-May						June-November					
Pp(x10)/Tp	1170 / 1488						1290 / 994					
Io (Iosm)	0.786						1.298					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 2460/2482=0.99 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	100	140	200	240	210	280	400	380	260	90	70	90
Tp [T*10]	271	288	286	261	216	166	134	124	135	166	196	239
Iom [Pp/Tp]	37	49	70	92	97	169	299	306	193	54	36	38
Avm [200-Iom]	163	151	130	108	103	31	***	***	7	146	164	162
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	440 / 845			730 / 643			1040 / 393			250 / 601		
Iot [Pp/Tp]	52			114			265			42		
Avs E[Avm<200]	445			242			***			472		
Upper hyperarid [3]							Strong lower arid [2]					
Weak lower arid [3]							Weak upper arid [2]					
Strong lower semiarid [1]							Strong upper semiarid [1]					
Weak upper semiarid [1]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	16.40
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		38.31
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		30.93
+ Oceanic (20<CI<40)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		1.57
+ Subcontinental (1.1<CI<1.7)		
Rainfall Index of Lang (1925) [R=P/T]		11.89
+ Steppic (40>R>0)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		8.02
+ Arid -steppic- (15>Ia>5)		
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]		18.78
+ Arid (30>Q>0)		
I of Dantin & Revenga (1940) [DR=100*T/P]		8.41
+ Extremely arid (DR>6)		
Aridity Index of UNEP [I=P/PE]		0.23
+ Semiarid (0.5>Im>0.2)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		6.50
+ Very low (K<60)		

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 2. Macrothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.04	0.06	0.07	0.07	0.11	0.18	0.18	0.11	0.03	0.02	0.03	0.03
T-E ratio	12.96	12.87	11.75	9.72	7.47	6.03	5.58	6.07	7.47	8.82	10.75	12.20
Precipitation-effectiveness: 9.26						Temperature-efficiency						111.69
Moisture Index [MI=100*(P-PE)/PE]												-77.16
+ E.Dry (-110<MI<-66.7)												
Index of dryness [DI=100*d/PE]												77.16
+ Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]												0.00
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												1077.17
+ Forth mesothermic (997<PE<1440)												

