

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

GILES (AUSTRALIA)

Altitude: 580 m.

Latitude: 25°2'S Longitude: 128°17'E

Temperature observation period.: 1973-1980 (8)

Rainfall observation period....: 1971-1980 (10)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	30.70	0.00	0.00	45.00	10.00	19.0	197.87
Feb.	39.70	0.00	0.00	46.10	12.20	21.0	243.56
Mar.	27.90	0.00	0.00	43.30	11.10	8.0	154.04
Apr.	23.30	0.00	0.00	39.40	5.00	12.0	88.20
May.	17.40	0.00	0.00	33.30	-0.60	19.0	35.65
Jun.	14.90	0.00	0.00	31.70	-2.80	10.0	20.86
Jul.	13.30	0.00	0.00	31.70	-4.40	15.0	15.63
Aug.	15.50	0.00	0.00	33.90	-1.70	18.0	26.45
Sep.	20.20	0.00	0.00	38.30	1.10	3.0	59.61
Oct.	24.40	0.00	0.00	40.00	3.90	7.0	116.22
Nov.	27.60	0.00	0.00	43.90	7.20	11.0	160.18
Dec.	28.70	0.00	0.00	43.90	9.40	31.0	180.67
Year	23.63	0.00	0.00	39.21	4.20	174	1298.9

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	502
Compensated thermicity index.....(Itc):	598
Simple continentality index.....(Ic):	26.4
Diurnality index.....(Id):	0.0
Annual ombrothermic index.....(Io):	0.61
Monthly dry ombrothermic index.....(Iod1):	0.15
Bimonthly dry ombrothermic index.....(Iod2):	0.22
Three monthly dry ombrothermic index.....(Iod3):	0.29
Four monthly dry ombrothermic index.....(Iod4):	0.44
Annual ombro-evaporation index.....(Ioe):	1.26
Annual positive temperature.....(Tp):	2836
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	722
Positive precipitation.....(Pp):	174

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

Latitudinal Belt...: Subtropical

Continentalty.....: Continental - High Subcontinental

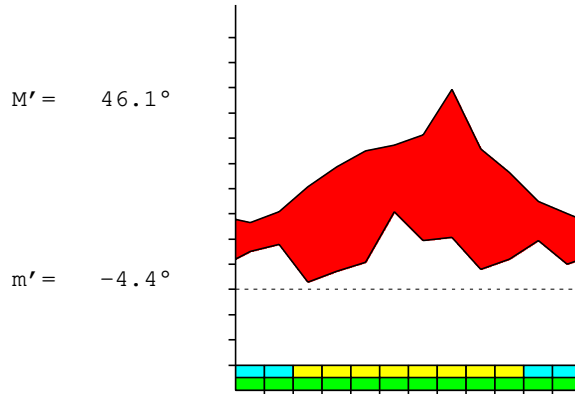
Bioclimate(Variant): TROPICAL DESERTIC (ARID)

Bioclimatic Belt...: LOW THERMOTROPICAL LOW ARID

GILES (AUSTRALIA)

580 m

P= 174 25° 2'S 128° 17'E 8/10 y.
 T= 23.6° Ic= 26.4 Tp= 2836 Tn= 0
 m= 13.3° M= 13.3° Itc= 598 Io= 0.6



TROPICAL DESERTIC (ARID)
 LOW THERMOTROPICAL LOW ARID

WATER INDEX CARD GILES (AUSTRALIA)
 Altitude: 580 m. Latitude: 25° 2'S

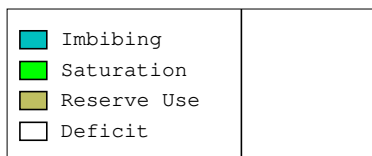
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	13.3	16	15	0	0	15	1	0	0	0.0
Aug.	15.5	26	18	0	0	18	8	0	0	-0.3
Sep.	20.2	60	3	0	0	3	57	0	0	-0.9
Oct.	24.4	116	7	0	0	7	109	0	0	-0.9
Nov.	27.6	160	11	0	0	11	149	0	0	-0.9
Dec.	28.7	181	31	0	0	31	150	0	0	-0.8
Jan.	30.7	198	19	0	0	19	179	0	0	-0.9
Feb.	39.7	244	21	0	0	21	223	0	0	-0.9
Mar.	27.9	154	8	0	0	8	146	0	0	-0.9
Apr.	23.3	88	12	0	0	12	76	0	0	-0.8
May.	17.4	36	19	0	0	19	17	0	0	-0.4
Jun.	14.9	21	10	0	0	10	11	0	0	-0.5
Year	23.6	1299	174	*	*	174	1125	0	0	*

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

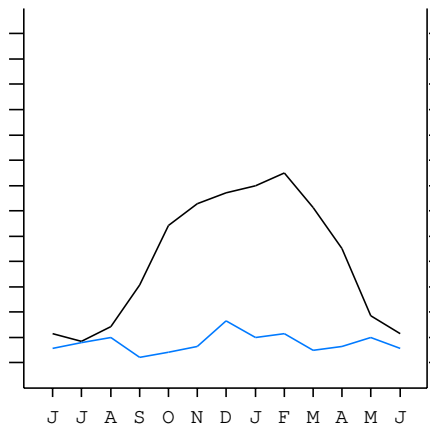
GILES (AUSTRALIA)

25°2'S 128°17'E 580 m 8/10 y.

T= 23.6 Ic= 26.4 TROPICAL DESERTIC (ARID)
 m= 13.3 Tp= 2836 LOW THERMOTROPICAL
 M= 13.3 Tn= 0 LOW ARID
 M' = 46.1 Itc= 598
 m' = -4.4 Io= 0.6
 P= 174 mm ———
 PE= 1299 mm ———



All over the year,
 there is hydric deficit



GILES (AUSTRALIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C2b]
 + Type: C. Continental
 + Subtype: 2. Subcontinental
 + Variant: b. High
 Thermic types [A3.A2]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 2. Warm
 Bioclimatic types [A2.2b.3b]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 2. DESERTIC
 + Bioclimatic variant ..:
 + Thermic type.....: 2. THERMOTROPICAL
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 3. ARID
 + Ombrothermic subtype : b. LOW
 Bioclimatic Classification: Trps.Ttr.Ari

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 97
 Coldest semester of the year.....(Psw): 77
 Warmest four months period of the year.....(Pcm1): 79
 Following warmest four months period.....(Pcm2): 56
 Positive precipitation dryest 3 months.....(Ppd): 21
 Positive precipitation dryest 2 months.....(Ppd2): 10
 Positive precipitation dryest 1 month.....(Ppd1): 3
 Positive precipitation warmest 3 months.....(Pps): 71
 Positive precipitation warmest 2 months.....(Pps2): 40
 Positive precipitation warmest 1 month.....(Pps1): 21
 Positive precipitation coldest 3 months.....(Ppw): 43
 Positive precipitation coldest 2 months.....(Ppw2): 25
 Positive precipitation coldest 1 month.....(Ppw1): 15

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	43	21	71	39

Seasonal rainfall rhythms: S > W > F > P

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 39.7
 Average coldest month [T].....(Tmin): 13.3
 Maximum temp. warmest month [M].....(Tmmax): 0.0
 Minimum temp. coldest month [m].....(Tmmin): 0.0
 Absolute Max.temp. warmest month [M'].....(Tamax): 46.1
 Absolute Min.temp. coldest month [m'].....(Tamin): -4.4
 First warmest contrasted month [M].....(Tcmax): 0.0 (0)
 First coldest contrasted month [m].....(Tcmin): 0.0 (0)
 Dry station temperature.....(Td): 722
 Positive temperature dryest 3 months.....(Tpd): 722
 Positive temperature dryest 2 months.....(Tpd2): 446
 Positive temperature dryest 1 month.....(Tpd1): 202
 Positive temperature warmest 3 months.....(Tps): 991
 Positive temperature warmest 2 months.....(Tps2): 704
 Positive temperature warmest 1 month.....(Tps1): 397
 Positive temperature coldest 3 months.....(Tpw): 437
 Positive temperature coldest 2 months.....(Tpw2): 282
 Positive temperature coldest 1 month.....(Tpw1): 133

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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): 7.47
 Mediterranean index of January.....(Im1): 10.41
 Mediterranean index of January & February.....(Im2): 11.04
 Mediterranean index of December to February...(Im3): 8.76

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	310	190	210	80	120	190	100	150	180	30	70	110
Tp	287	307	397	279	233	174	149	133	155	202	244	276
Io (Iom)	1.08	0.62	0.53	0.29	0.52	1.09	0.67	1.13	1.16	0.15	0.29	0.40
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	710 / 991			390 / 686			430 / 437			210 / 722		
Io (Iot)	0.716			0.569			0.984			0.291		
Semesters	December-May						June-November					
Pp(x10)/Tp	1100 / 1677						640 / 1159					
Io (Iosm)	0.656						0.552					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 1740/2836=0.61 Weak lower arid (6) [1608]

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	310	190	210	80	120	190	100	150	180	30	70	110
Tp [T*10]	287	307	397	279	233	174	149	133	155	202	244	276
Iom [Pp/Tp]	108	62	53	29	52	109	67	113	116	15	29	40
Avm [200-Iom]	92	138	147	171	148	91	133	87	84	185	171	160
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	710 / 991			390 / 686			430 / 437			210 / 722		
Iot [Pp/Tp]	72			57			98			29		
Avs E[Avm<200]	377			411			304			517		
Upper ultrahyperarid [1]						Lower hyperarid [3]						
Upper hyperarid [1]						Weak lower arid [5]						
Strong upper arid [1]						Weak upper arid [1]						
Strong lower semiarid [4]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	26.40
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		85.66
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		64.18
+ Continental (60<CI<80)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		2.83
+ Hypercontinental (2.3<CI<5)		
Rainfall Index of Lang (1925) [R=P/T]		7.36
+ Steppic (40>R>0)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		5.17
+ Arid -steppic- (15>Ia>5)		
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]		0.00
+ Arid (30>Q>0)		
I of Dantin & Revenga (1940) [DR=100*T/P]		13.58
+ Extremely arid (DR>6)		
Aridity Index of UNEP [I=P/PE]		0.13
+ Arid (0.2>Im>0.05)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		5.52
+ Very low (K<60)		

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)

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

Thornthwaite (1948)

	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
P-E ratio	0.05	0.05	0.02	0.04	0.07	0.04	0.06	0.07	0.01	0.02	0.03	0.09	
T-E ratio	13.82	17.87	12.55	10.48	7.83	6.70	5.99	6.97	9.09	10.98	12.42	12.92	
Precipitation-effectiveness:	5.46						Temperature-efficiency						127.62
Moisture Index [MI=100*(P-PE)/PE]	-86.60												
+ E.Dry (-110<MI<-66.7)													
Index of dryness [DI=100*d/PE]	86.60												
+ Strong deficit (33.3<DI)													
Index of humidity [HI=100*s/PE]	0.00												
+ No surplus (0<HI<10)													
Potential Evapotranspiration PE	1298.94												
+ Forth mesothermic (997<PE<1440)													

