

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

TAMWORTH (AUSTRALIA)

Altitude: 405 m.

Latitude: 31°5'S Longitude: 150°50'E

Temperature observation period.: 1963-1994 (32)

Rainfall observation period....: 1944-1994 (51)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	25.00	32.78	17.22	45.00	5.00	71.1	145.13
Feb.	24.72	32.22	17.22	41.67	7.22	67.1	122.02
Mar.	21.94	29.44	14.44	39.44	2.22	54.1	100.86
Apr.	17.50	25.00	10.00	34.44	-1.11	45.0	59.67
May.	13.34	20.56	6.11	30.56	-5.56	40.1	34.72
Jun.	10.28	16.67	3.89	28.89	-6.67	57.9	20.09
Jul.	9.17	15.56	2.78	25.56	-5.56	46.0	17.25
Aug.	10.56	17.78	3.33	30.56	-5.56	46.0	23.84
Sep.	13.89	22.22	5.56	33.89	-3.89	51.1	41.09
Oct.	18.06	26.11	10.00	37.22	-3.33	53.1	74.54
Nov.	21.39	29.44	13.33	41.67	2.22	68.1	103.53
Dec.	23.89	31.67	16.11	43.33	2.22	72.1	134.62
Year	17.48	24.95	10.00	36.02	-1.07	672	877.36

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	358
Compensated thermicity index.....(Itc):	358
Simple continentality index.....(Ic):	15.8
Diurnality index.....(Id):	16.7
Annual ombrothermic index.....(Io):	3.20
Monthly estival ombrothermic index.....(Ios1):	2.71
Bimonthly estival ombrothermic index.....(Ios2):	2.78
Threemonthly estival ombrothermic index.....(Ios3):	2.86
Fourmonthly estival ombrothermic index.....(Ios4):	2.93
Annual ombro-evaporation index.....(Ioe):	1.35
Annual positive temperature.....(Tp):	2097
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	736
Positive precipitation.....(Pp):	672

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	3	9	0	0	0

Latitudinal Belt...: Subtropical

Continentality.....: Oceanic - Low Euoceanic

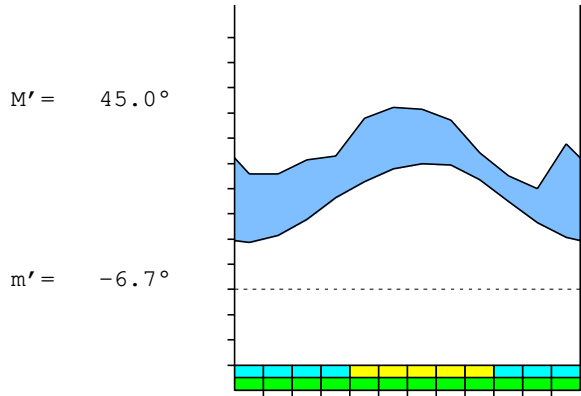
Bioclimate(Variant): TEMPERATE XERIC (SUBMEDITERRANEAN)

Bioclimatic Belt...: LOW THERMOTEMPERATE UPPER DRY

TAMWORTH (AUSTRALIA)

405 m

P= 672 31° 5' S 150° 50' E 32/51 y.
 T= 17.5° Ic= 15.8 Tp= 2097 Tn= 0
 m= 2.8° M= 15.6° Itc= 358 Io= 3.2



TEMPERATE XERIC (SUBMEDITERRANEAN)
 LOW THERMOTEMPERATE UPPER DRY

WATER INDEX CARD TAMWORTH (AUSTRALIA)
 Altitude: 405 m. Latitude: 31° 5' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	9.2	17	46	29	72	17	0	0	0	1.6
Aug.	10.6	24	46	22	94	24	0	0	0	0.9
Sep.	13.9	41	51	6	100	41	0	4	2	0.2
Oct.	18.1	75	53	-21	79	75	0	0	1	-0.2
Nov.	21.4	104	68	-35	43	104	0	0	1	-0.3
Dec.	23.9	135	72	-43	0	115	19	0	0	-0.4
Jan.	25.0	145	71	0	0	71	74	0	0	-0.5
Feb.	24.7	122	67	0	0	67	55	0	0	-0.4
Mar.	21.9	101	54	0	0	54	47	0	0	-0.4
Apr.	17.5	60	45	0	0	45	15	0	0	-0.2
May.	13.3	35	40	5	5	35	0	0	0	0.1
Jun.	10.3	20	58	38	43	20	0	0	0	1.8
Year	17.5	877	672	*	*	668	210	4	4	*

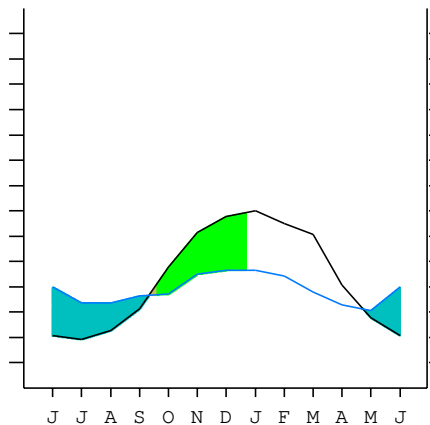
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

TAMWORTH (AUSTRALIA)

31°5' S 150°50' E 405 m 32/51 y.

T= 17.5 Ic= 15.8 TEMPERATE XERIC (SUBMEDITERRANEAN)
 m= 2.8 Tp= 2097 LOW THERMOTEMPERATE
 M= 15.6 Tn= 0 UPPER DRY
 M' = 45.0 Itc= 358
 m' = -6.7 Io= 3.2
 P= 672 mm ———
 PE= 877 mm ———

Imbibing	22 Apr.
Saturation	18 Sep.
Reserve Use	10 Sep.
Deficit	21 Dec.



TAMWORTH (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.A3]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 3. Subwarm
 Bioclimatic types [C1b.2b.5a]
 + Macroclimate: C. TEMPERATE
 + Bioclimate: 1. XERIC
 + Bioclimatic variant .: b. SUBMEDITERRANEAN
 + Thermic type.....: 2. THERMOTEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 5. DRY
 + Ombrothermic subtype : a. UPPER
 Bioclimatic Classification: Teho (Sbm).Tte.Dry

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 386
 Coldest semester of the year.....(Psw): 286
 Warmest four months period of the year.....(Pcm1): 264
 Following warmest four months period.....(Pcm2): 189
 Positive precipitation dryest 3 months.....(Ppd): 139
 Positive precipitation dryest 2 months.....(Ppd2): 85
 Positive precipitation dryest 1 month.....(Ppd1): 40
 Positive precipitation warmest 3 months.....(Pps): 210
 Positive precipitation warmest 2 months.....(Pps2): 138
 Positive precipitation warmest 1 month.....(Pps1): 71
 Positive precipitation coldest 3 months.....(Ppw): 150
 Positive precipitation coldest 2 months.....(Ppw2): 104
 Positive precipitation coldest 1 month.....(Ppw1): 46

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	149	172	210	139

Seasonal rainfall rhythms: S > P > W > F

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 25.0
 Average coldest month [T].....(Tmin): 9.2
 Maximum temp. warmest month [M].....(Tmmax): 32.8
 Minimum temp. coldest month [m].....(Tmmin): 2.8
 Absolute Max.temp. warmest month [M'].....(Tamax): 45.0
 Absolute Min.temp. coldest month [m'].....(Tamin): -6.7
 First warmest contrasted month [M].....(Tcmax): 22.2 (9)
 First coldest contrasted month [m].....(Tcmin): 5.6 (9)
 Estival temperature.....(Ts): 736
 Positive temperature dryest 3 months.....(Tpd): 528
 Positive temperature dryest 2 months.....(Tpd2): 308
 Positive temperature dryest 1 month.....(Tpd1): 133
 Positive temperature warmest 3 months.....(Tps): 736
 Positive temperature warmest 2 months.....(Tps2): 497
 Positive temperature warmest 1 month.....(Tps1): 250
 Positive temperature coldest 3 months.....(Tpw): 300
 Positive temperature coldest 2 months.....(Tpw2): 195
 Positive temperature coldest 1 month.....(Tpw1): 92

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

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.31
 Mediterranean index of January.....(Im1): 2.04
 Mediterranean index of January & February.....(Im2): 1.93
 Mediterranean index of December to February...(Im3): 1.91

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	721	711	671	541	450	401	579	460	460	511	531	681
Tp	239	250	247	219	175	133	103	92	106	139	181	214
Io (Iom)	3.02	2.84	2.71	2.47	2.57	3.01	5.63	5.02	4.36	3.68	2.94	3.18
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	2103 / 736			1392 / 528			1499 / 300			1723 / 533		
Io (Iot)	2.857			2.637			4.995			3.230		
Semesters	December-May						June-November					
Pp(x10)/Tp	3495 / 1264						3222 / 834					
Io (Iosm)	2.765						3.866					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 6717/2097=3.20 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	721	711	671	541	450	401	579	460	460	511	531	681
Tp [T*10]	239	250	247	219	175	133	103	92	106	139	181	214
Iom [Pp/Tp]	302	284	271	247	257	301	563	502	436	368	294	318
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	2103 / 736			1392 / 528			1499 / 300			1723 / 533		
Iot [Pp/Tp]	286			264			500			323		
Avs E[Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp): 15.83
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]	31.72
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]	26.95
+ Oceanic (20<CI<40)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)]	1.39
+ Subcontinental (1.1<CI<1.7)	
Rainfall Index of Lang (1925) [R=P/T]	38.43
+ Steppic (40>R>0)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)]	24.44
+ Subhumid (30>Ia>20)	
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]	62.96
+ Subhumid (90>Q>50)	
I of Dantin & Revenga (1940) [DR=100*T/P]	2.60
+ Semiarid (3>DR>2)	
Aridity Index of UNEP [I=P/PE]	0.77
+ Humid (I>0.65)	
Potential Erosion I of Fournier (1960) [K=Pi ² /P]	7.74
+ Very low (K<60)	

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 3. Macro-mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.25	0.24	0.20	0.18	0.18	0.30	0.24	0.23	0.23	0.22	0.26	0.26
T-E ratio	11.25	11.12	9.87	7.88	6.00	4.63	4.13	4.75	6.25	8.13	9.63	10.75
Precipitation-effectiveness: 28.07						Temperature-efficiency						94.38
Moisture Index [MI=100*(P-PE)/PE]												-23.44
+ C1.Subhumid dry (-33.3<MI<0)												
Index of dryness [DI=100*d/PE]												23.90
+ Moderate deficit (16.7<DI<33.3)												
Index of humidity [HI=100*s/PE]												0.47
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												877.36
+ Third mesothermic (855<PE<997)												

