Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

THARGOMINDAH (AUSTRALIA) Altitude: 123 m.

Latitude: 27°58'S Longitude: 143°43'E
Temperature observation period.: 1949-1994 (46)
Rainfall observation period....: 1935-1994 (60)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	30.00	36.67	23.33	49.44	9.44	38.1	192.95
Feb.	29.45	36.11	22.78	48.33	10.56	35.6	162.29
Mar.	26.39	32.78	20.00	45.00	2.78	20.3	142.19
Apr.	21.39	27.78	15.00	38.89	2.22	17.8	75.07
May.	16.39	22.78	10.00	32.78	-2.22	20.3	37.57
Jun.	13.06	18.89	7.22	30.00	-3.33	20.3	19.84
Jul.	12.22	18.33	6.11	30.56	-4.44	12.7	17.55
Aug.	14.45	21.67	7.22	35.00	-2.22	12.7	28.53
Sep.	18.34	25.56	11.11	39.44	-1.67	12.7	53.63
Oct.	22.50	30.00	15.00	43.33	2.78	17.8	99.63
Nov.	26.39	33.33	19.44	47.78	5.00	25.4	151.58
Dec.	28.34	35.00	21.67	49.44	8.89	33.0	180.27
Year	21.58	28.24	14.91	40.83	2.32	267	1161.1

BIOCLIMATIC INDICES AND DIAGNOSIS

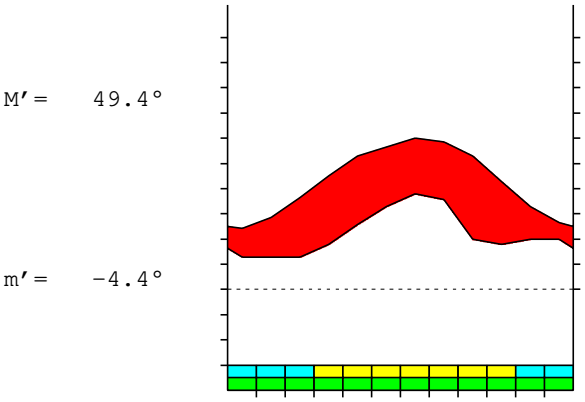
Thermicity index.....(It): 460
Compensated thermicity index.....(Itc): 460
Simple continentality index.....(Ic): 17.8
Diurnality index.....(Id): 15.0
Annual ombrothermic index.....(Io): 1.03
Monthly dry ombrothermic index.....(Iod1): 1.04
Bimonthly dry ombrothermic index.....(Iod2): 0.95
Threemonthly dry ombrothermic index.....(Iod3): 0.85
Fourmonthly dry ombrothermic index.....(Iod4): 1.01
Annual ombro-evaporation index.....(Ioe): 1.76
Annual positive temperature.....(Tp): 2589
Annual negative temperature.....(Tn): 0
Dry station temperature.....(Td): 450
Positive precipitation.....(Pp): 267

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

Latitudinal Belt...: Subtropical
Continentality.....: Oceanic - Low Semicontinental
Bioclimate(Variant): TROPICAL XERIC (SEMIARID)
Bioclimatic Belt...: LOW MESOTROPICAL LOW SEMIARID

THARGOMINDAH (AUSTRALIA) 123 m

P=	267	27° 58'S	143° 43'E	46/60 y.	
T=	21.6°	Ic=	17.8	Tp=	2589	Tn=	0
m=	6.1°	M=	18.3°	Itc=	460	Io=	1.0



TROPICAL XERIC (SEMIARID)
LOW MESOTROPICAL LOW SEMIARID

WATER INDEX CARD THARGOMINDAH (AUSTRALIA)

Altitude: 123 m. Latitude: 27° 58'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	12.2	18	13	-0	0	13	4	0	0	-0.2
Aug.	14.4	29	13	0	0	13	16	0	0	-0.5
Sep.	18.3	54	13	0	0	13	41	0	0	-0.7
Oct.	22.5	100	18	0	0	18	82	0	0	-0.8
Nov.	26.4	152	25	0	0	25	126	0	0	-0.8
Dec.	28.3	180	33	0	0	33	147	0	0	-0.8
Jan.	30.0	193	38	0	0	38	155	0	0	-0.8
Feb.	29.5	162	36	0	0	36	127	0	0	-0.7
Mar.	26.4	142	20	0	0	20	122	0	0	-0.8
Apr.	21.4	75	18	0	0	18	57	0	0	-0.7
May.	16.4	38	20	0	0	20	17	0	0	-0.4
Jun.	13.1	20	20	0	0	20	0	0	0	0.0
Year	21.6	1161	267	*	*	267	894	0	0	*

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

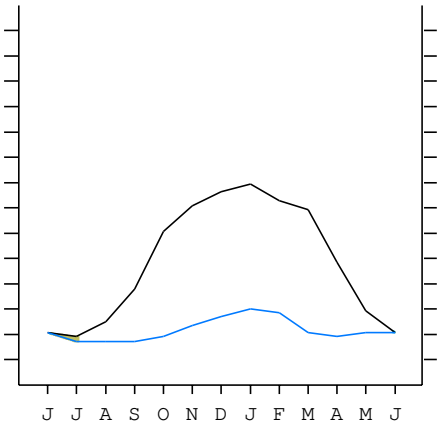
THARGOMINDAH (AUSTRALIA)

27°58'S 143°43'E 123 m 46/60 y.

T=	21.6	Ic=	17.8
m=	6.1	Tp=	2589
M=	18.3	Tn=	0
M'=	49.4	Itc=	460
m'=	-4.4	Io=	1.0
P=	267	mm	
PE=	1161	mm	

TROPICAL XERIC (SEMIARID)
LOW MESOTROPICAL
LOW SEMIARID

Imbibing	30 May.
Saturation	
Reserve Use	3 Jun.
Deficit	3 Jul.



THARGOMINDAH (AUSTRALIA)

Latitude: 27°58'S Longitude: 143°43'E Altitude: 123 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [B1a]
- + Type .....: B. Oceanic
- + Subtype .....: 1. Semicontinental
- + Variant .....: a. Low

Thermic types [A3.A2]
- + Latitudinal zone ....: A. Warm
- + Latitudinal belt ....: 3. Subtropical
- + Thermic type .....: A. Warm
- + Thermic subtype .....: 2. Warm

Bioclimatic types [A3.3b.4b]
- + Macrobioclimate .....: A. TROPICAL
- + Bioclimate .....: 3. XERIC
- + Bioclimatic variant .:
- + Thermic type.....: 3. MESOTROPICAL
- + Thermic subtype.....: b. LOW
- + Ombrothermic type ...: 4. SEMIARID
- + Ombrothermic subtype : b. LOW

Bioclimatic Classification .....: Trxe.Mtr.Sar

THARGOMINDAH (AUSTRALIA)

Latitude: 27°58'S Longitude: 143°43'E Altitude: 123 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 170
Coldest semester of the year.....(Psw): 97
Warmest four months period of the year.....(Pcm1): 132
Following warmest four months period.....(Pcm2): 79
Positive precipitation dryest 3 months.....(Ppd): 38
Positive precipitation dryest 2 months.....(Ppd2): 25
Positive precipitation dryest 1 month.....(Ppd1): 13
Positive precipitation warmest 3 months.....(Pps): 107
Positive precipitation warmest 2 months.....(Pps2): 74
Positive precipitation warmest 1 month.....(Pps1): 38
Positive precipitation coldest 3 months.....(Ppw): 46
Positive precipitation coldest 2 months.....(Ppw2): 33
Positive precipitation coldest 1 month.....(Ppw1): 13

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	45	55	106	58

Seasonal rainfall rhythms: S > F > P > W

THARGOMINDAH (AUSTRALIA)

Latitude: 27°58'S Longitude: 143°43'E Altitude: 123 m

TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 30.0
Average coldest month [T].....(Tmin): 12.2
Maximum temp. warmest month [M].....(Tmmax): 36.7
Minimum temp. coldest month [m].....(Tmmin): 6.1
Absolute Max.temp. warmest month [M'].....(Tamax): 49.4
Absolute Min.temp. coldest month [m'].....(Tamin): -4.4
First warmest contrasted month [M].....(Tcmax): 30.0 (10)
First coldest contrasted month [m].....(Tcmin): 15.0 (10)
Dry station temperature.....(Td): 450
Positive temperature dryest 3 months.....(Tpd): 450
Positive temperature dryest 2 months.....(Tpd2): 267
Positive temperature dryest 1 month.....(Tpd1): 122
Positive temperature warmest 3 months.....(Tps): 878
Positive temperature warmest 2 months.....(Tps2): 595
Positive temperature warmest 1 month.....(Tps1): 300
Positive temperature coldest 3 months.....(Tpw): 397
Positive temperature coldest 2 months.....(Tpw2): 253
Positive temperature coldest 1 month.....(Tpw1): 122

THARGOMINDAH (AUSTRALIA)

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

THARGOMINDAH (AUSTRALIA)

Latitude: 27°58'S Longitude: 143°43'E Altitude: 123 m

OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 4.35
Mediterranean index of January.....(Im1): 5.06
Mediterranean index of January & February.....(Im2): 4.82
Mediterranean index of December to February...(Im3): 5.02

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	330	381	356	203	178	203	203	127	127	127	178	254
Tp	283	300	295	264	214	164	131	122	145	183	225	264
Io (Iom)	1.16	1.27	1.21	0.77	0.83	1.24	1.55	1.04	0.88	0.69	0.79	0.96
Seasons	Summer			Automn			Winter			Spring		
Pp(x10)/Tp	1067 / 878			584 / 642			457 / 397			559 / 672		
Io (Iot)	1.215			0.910			1.150			0.831		
Semesters	December-May						June-November					
Pp(x10)/Tp	1651 / 1520						1016 / 1070					
Io (Iosm)	1.086						0.950					

THARGOMINDAH (AUSTRALIA)

Latitude: 27°58'S Longitude: 143°43'E Altitude: 123 m

Aridity Value Index (AVI)

[10xPP/TP=IO]: 2667/2589=1.03 Strong lower semiarid (9) [1160]

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	330	381	356	203	178	203	203	127	127	127	178	254
Tp [T*10]	283	300	295	264	214	164	131	122	145	183	225	264
Iom [Pp/Tp]	116	127	121	77	83	124	155	104	88	69	79	96
Avm [200-Iom]	84	73	79	123	117	76	45	96	112	131	121	104
Seasons	Summer			Automn			Winter			Spring		
Pp / Tp	1067 / 878			584 / 642			457 / 397			559 / 672		
Iot [Pp/Tp]	122			91			115			83		
Avs E[Avm<200]	236			316			253			355		

Weak lower arid [1]	Strong upper arid [2]
Weak upper arid [5]	Strong lower semiarid [3]
Weak lower semiarid [4]	Strong upper semiarid [1]

THARGOMINDAH (AUSTRALIA)

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin] .....(Sp): 17.78
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4] .....: 44.05
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14] .....: 35.13
  + Oceanic (20<CI<40)
CI of Currey (1974) [CI=Sp/(1+Lat/3)] .....: 1.72
  + Continental (1.7<CI<2.3)
Rainfall Index of Lang (1925) [R=P/T] .....: 12.36
  + Steppic (40>R>0)
Aridity Index of Martonne (1926) [Ia=P/(T+10)] .....: 8.45
  + Arid -steppic- (15>Ia>5)
I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)] .....: 20.40
  + Arid (30>Q>0)
I of Dantin & Revenga (1940) [DR=100*T/P] .....: 8.09
  + Extremely arid (DR>6)
Aridity Index of UNEP [I=P/PE] .....: 0.23
  + Semiarid (0.5>Im>0.2)
Potencial Erosion I of Fournier (1960) [K=Pi²/P].....: 5.44
  + Very low (K<60)

THARGOMINDAH (AUSTRALIA)

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BIOCLIMATIC INDICES II

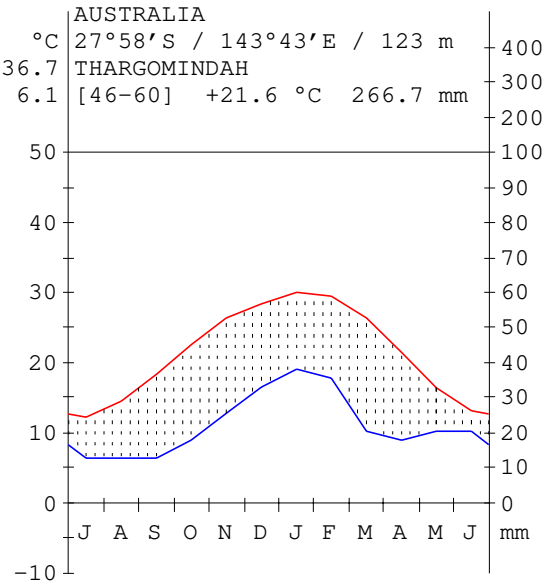
Bioclimatic classification of Gaussen & Bagnouls (1957)
  + Climate ....: A. Warm and temperate warm
  + Region .....: 1. Termoeremic (Desertic warm)
  + Thermic type: 2. Macrothermic

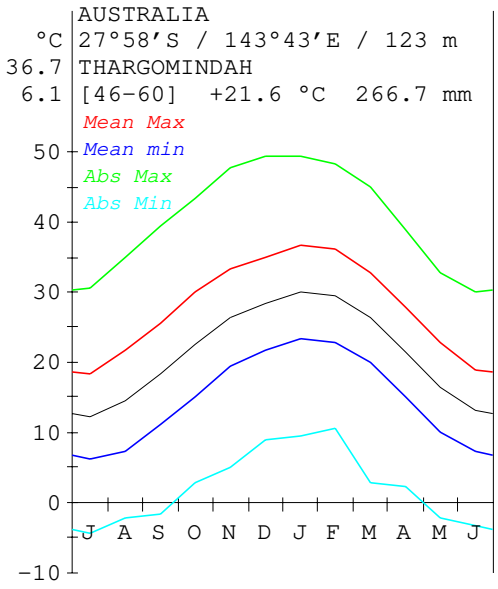
Thornthwaite (1948)

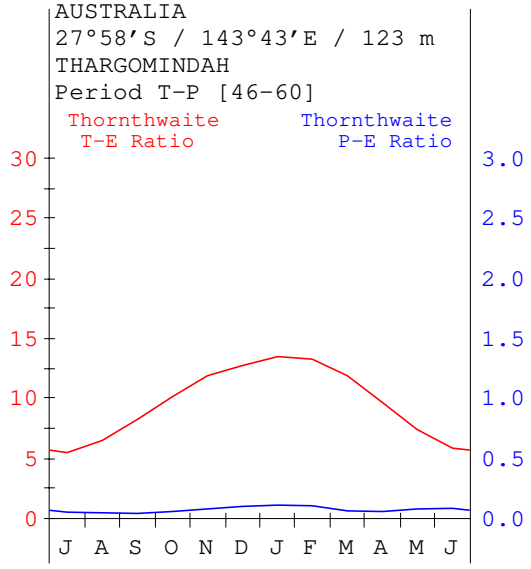
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.11	0.11	0.06	0.06	0.08	0.09	0.05	0.05	0.04	0.06	0.08	0.10
T-E ratio	13.50	13.25	11.88	9.63	7.38	5.88	5.50	6.50	8.25	10.13	11.88	12.75

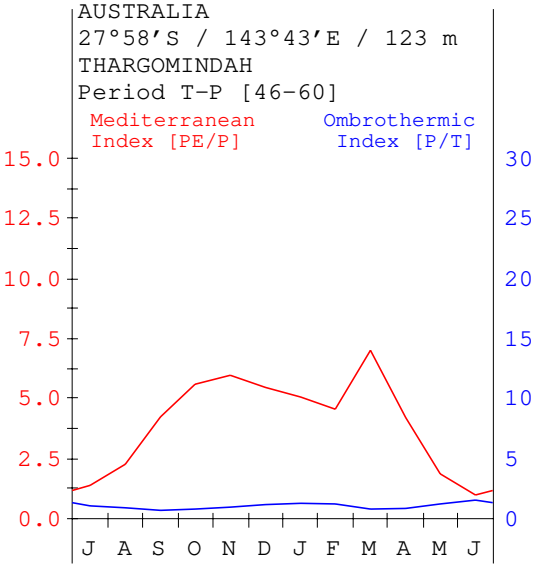
Precipitation-effectiveness: 8.84 Temperature-efficiency ....: 116.51

Moisture Index [MI=100*(P-PE)/PE] .....: -77.03
  + E.Dry (-110<MI<-66.7)
Index of dryness [DI=100*d/PE] .....: 77.03
  + Strong deficit (33.3<DI)
Index of humidity [HI=100*s/PE] .....: 0.00
  + No surplus (0<HI<10)
Potential Evapotranspiration PE .....: 1161.11
  + Forth mesothermic (997<PE<1440)




AUSTRALIA
°C 27°58'S / 143°43'E / 123 m
36.7 THARGOMINDAH
6.1 [46-60] +21.6 °C 266.7 mm
Mean Max
Mean min
Abs Max
Abs Min
50
40
30
20
10
0
-10
J A S O N D J F M A M J


AUSTRALIA
27°58'S / 143°43'E / 123 m
THARGOMINDAH
Period T-P [46-60]
Thornthwaite T-E Ratio
Thornthwaite P-E Ratio
30
25
20
15
10
5
0
3.0
2.5
2.0
1.5
1.0
0.5
0.0
J A S O N D J F M A M J


AUSTRALIA
27°58'S / 143°43'E / 123 m
THARGOMINDAH
Period T-P [46-60]
Mediterranean Index [PE/P]
Ombrothermic Index [P/T]
15.0
12.5
10.0
7.5
5.0
2.5
0.0
30
25
20
15
10
5
0
J A S O N D J F M A M J