Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

FORREST AIRPORT (AUSTRALIA) Altitude: 156 m.

Latitude: 30°50'S Longitude: 128°6'E
Temperature observation period.: 1951-1993 (43)
Rainfall observation period....: 1930-1990 (61)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	23.97	29.63	18.58	0.00	0.00	15.4	134.28
Feb.	23.45	30.36	16.39	0.00	0.00	16.5	110.69
Mar.	21.56	26.70	16.30	0.00	0.00	16.3	97.59
Apr.	18.34	23.50	13.10	0.00	0.00	16.0	64.93
May.	14.55	19.43	9.68	0.00	0.00	15.1	40.61
Jun.	12.18	16.65	7.55	0.00	0.00	16.8	27.34
Jul.	11.14	14.73	7.58	0.00	0.00	13.7	24.56
Aug.	12.15	15.81	8.34	0.00	0.00	15.0	30.74
Sep.	14.93	19.95	9.55	0.00	0.00	13.7	46.80
Oct.	17.61	24.28	10.63	0.00	0.00	16.8	71.03
Nov.	20.28	25.13	15.38	0.00	0.00	14.7	93.77
Dec.	22.22	28.88	15.23	0.00	0.00	14.7	117.75
Year	17.70	22.92	12.36	0.00	0.00	185	860.10

BIOCLIMATIC INDICES AND DIAGNOSIS

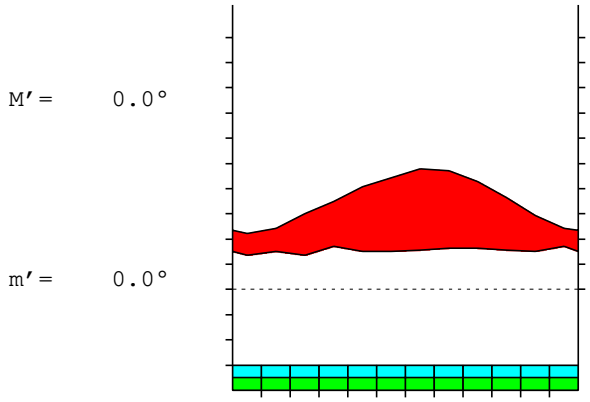
Thermicity index.....(It): 400
Compensated thermicity index.....(Itc): 400
Simple continentality index.....(Ic): 12.8
Diurnality index.....(Id): 14.0
Annual ombrothermic index.....(Io): 0.87
Monthly estival ombrothermic index.....(Ios1): 0.64
Bimonthly estival ombrothermic index.....(Ios2): 0.67
Threemonthly estival ombrothermic index.....(Ios3): 0.67
Fourmonthly estival ombrothermic index.....(Ios4): 0.68
Annual ombro-evaporation index.....(Ioe): 1.03
Annual positive temperature.....(Tp): 2124
Annual negative temperature.....(Tn): 0
Estival temperature.....(Ts): 696
Positive precipitation.....(Pp): 185

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

Latitudinal Belt...: Subtropical
Continentality.....: Oceanic - Low Semihyperoceanic
Bioclimate.....: MEDITERRANEAN DESERTIC-OCEANIC
Bioclimatic Belt...: LOW THERMOMEDITERRANEAN UPPER ARID

FORREST AIRPORT (AUSTRALIA) 156 m

P=	185	30° 50'S		128° 6'E		43/61 y.	
T=	17.7°	Ic=	12.8	Tp=	2124	Tn=	0
m=	7.6°	M=	14.7°	Itc=	400	Io=	0.9



MEDITERRANEAN DESERTIC-OCEANIC
LOW THERMOMEDITERRANEAN UPPER ARID

WATER INDEX CARD FORREST AIRPORT (AUSTRALIA)
Altitude: 156 m. Latitude: 30° 50'S

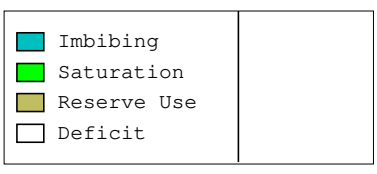
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	11.1	25	14	0	0	14	11	0	0	-0.4
Aug.	12.1	31	15	0	0	15	16	0	0	-0.5
Sep.	14.9	47	14	0	0	14	33	0	0	-0.7
Oct.	17.6	71	17	0	0	17	54	0	0	-0.7
Nov.	20.3	94	15	0	0	15	79	0	0	-0.8
Dec.	22.2	118	15	0	0	15	103	0	0	-0.8
Jan.	24.0	134	15	0	0	15	119	0	0	-0.8
Feb.	23.5	111	16	0	0	16	94	0	0	-0.8
Mar.	21.6	98	16	0	0	16	81	0	0	-0.8
Apr.	18.3	65	16	0	0	16	49	0	0	-0.7
May.	14.6	41	15	0	0	15	26	0	0	-0.6
Jun.	12.2	27	17	0	0	17	11	0	0	-0.3
Year	17.7	860	185	*	*	185	675	0	0	*

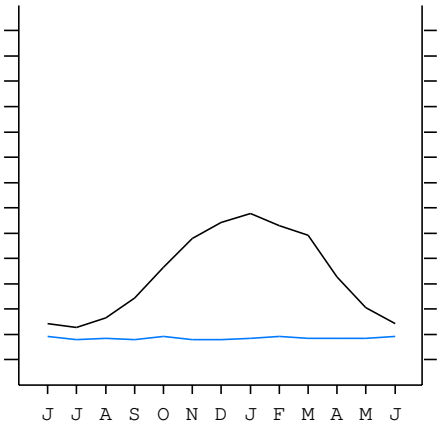
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
DR = Drainage HC = Humidity coeficient DF = Deficit SP = Superavit

FORREST AIRPORT (AUSTRALIA)
30°50'S 128°6'E 156 m 43/61 y.

T=	17.7	Ic=	12.8
m=	7.6	Tp=	2124
M=	14.7	Tn=	0
M'=	0.0	Itc=	400
m'=	0.0	Io=	0.9
P=	185	mm	
PE=	860	mm	

MEDITERRANEAN DESERTIC-OCEANIC
LOW THERMOMEDITERRANEAN
UPPER ARID





All over the year,
there is hydric deficit

FORREST AIRPORT (AUSTRALIA)

Latitude: 30°50'S Longitude: 128°6'E Altitude: 156 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [B1b]
- + Type .....: B. Oceanic
- + Subtype .....: 1. Semihyperoceanic
- + 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 [B4.2b.3a]
- + Macrobioclimate .....: B. MEDITERRANEAN
- + Bioclimate .....: 4. DESERTIC-OCEANIC
- + Bioclimatic variant .:
- + Thermic type.....: 2. THERMOMEDITERRANEAN
- + Thermic subtype.....: b. LOW
- + Ombrothermic type ...: 3. ARID
- + Ombrothermic subtype : a. UPPER

Bioclimatic Classification .....: Mexc.Tme.Ari

FORREST AIRPORT (AUSTRALIA)

Latitude: 30°50'S Longitude: 128°6'E Altitude: 156 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss):	94	
Coldest semester of the year.....(Psw):	91	
Warmest four months period of the year.....(Pcm1):	63	
Following warmest four months period.....(Pcm2):	62	
Positive precipitation dryest 3 months.....(Ppd):	42	
Positive precipitation dryest 2 months.....(Ppd2):	29	
Positive precipitation dryest 1 month.....(Ppd1):	14	
Positive precipitation warmest 3 months.....(Pps):	47	
Positive precipitation warmest 2 months.....(Pps2):	32	
Positive precipitation warmest 1 month.....(Pps1):	15	
Positive precipitation coldest 3 months.....(Ppw):	46	
Positive precipitation coldest 2 months.....(Ppw2):	29	
Positive precipitation coldest 1 month.....(Ppw1):	14	

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	45	45	46	47

Seasonal rainfall rhythms: F > S > P > W

FORREST AIRPORT (AUSTRALIA)

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax):	24.0	
Average coldest month [T].....(Tmin):	11.1	
Maximum temp. warmest month [M].....(Tmmax):	30.4	
Minimum temp. coldest month [m].....(Tmmin):	7.6	
Absolute Max.temp. warmest month [M'].....(Tamax):	0.0	
Absolute Min.temp. coldest month [m'].....(Tamin):	0.0	
First warmest contrasted month [M].....(Tcmax):	30.4	(2)
First coldest contrasted month [m].....(Tcmin):	16.4	(2)
Estival temperature.....(Ts):	696	
Positive temperature dryest 3 months.....(Tpd):	382	
Positive temperature dryest 2 months.....(Tpd2):	271	
Positive temperature dryest 1 month.....(Tpd1):	149	
Positive temperature warmest 3 months.....(Tps):	696	
Positive temperature warmest 2 months.....(Tps2):	474	
Positive temperature warmest 1 month.....(Tps1):	240	
Positive temperature coldest 3 months.....(Tpw):	355	
Positive temperature coldest 2 months.....(Tpw2):	233	
Positive temperature coldest 1 month.....(Tpw1):	111	

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

FORREST AIRPORT (AUSTRALIA)

Latitude: 30°50'S Longitude: 128°6'E Altitude: 156 m

OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 4.66
Mediterranean index of January.....(Im1): 8.71
Mediterranean index of January & February.....(Im2): 7.69
Mediterranean index of December to February...(Im3): 7.79

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	147	154	165	163	160	151	168	137	150	137	168	147
Tp	222	240	235	216	183	146	122	111	122	149	176	203
Io (Iom)	0.66	0.64	0.70	0.75	0.87	1.04	1.38	1.23	1.24	0.92	0.96	0.73
Seasons	Summer			Automn			Winter			Spring		
Pp(x10)/Tp	465 / 696			473 / 545			456 / 355			453 / 528		
Io (Iot)	0.668			0.869			1.285			0.857		
Semesters	December-May						June-November					
Pp(x10)/Tp	939 / 1241						909 / 883					
Io (Iosm)	0.757						1.029					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 1847/2124=0.87 Weak upper arid (8) [1288]

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	147	154	165	163	160	151	168	137	150	137	168	147
Tp [T*10]	222	240	235	216	183	146	122	111	122	149	176	203
Iom [Pp/Tp]	66	64	70	75	87	104	138	123	124	92	96	73
Avm [200-Iom]	134	136	130	125	113	96	62	77	76	108	104	127
Seasons	Summer			Automn			Winter			Spring		
Pp / Tp	465 / 696			473 / 545			456 / 355			453 / 528		
Iot [Pp/Tp]	67			87			128			86		
Avs E[Avm<200]	399			334			215			340		

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

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin] .....(Sp): 12.83
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4] .....: 22.15
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14] .....: 19.36
  + Hyperoceanic (-20<CI<20)
CI of Currey (1974) [CI=Sp/(1+Lat/3)] .....: 1.14
  + Subcontinental (1.1<CI<1.7)
Rainfall Index of Lang (1925) [R=P/T] .....: 10.44
  + Steppic (40>R>0)
Aridity Index of Martonne (1926) [Ia=P/(T+10)] .....: 6.67
  + Arid -steppic- (15>Ia>5)
I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)] .....: 21.36
  + Arid (30>Q>0)
I of Dantin & Revenga (1940) [DR=100*T/P] .....: 9.58
  + Extremely arid (DR>6)
Aridity Index of UNEP [I=P/PE] .....: 0.21
  + Semiarid (0.5>Im>0.2)
Potencial Erosion I of Fournier (1960) [K=Pi²/P].....: 1.53
  + Very low (K<60)

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BIOCLIMATIC INDICES II

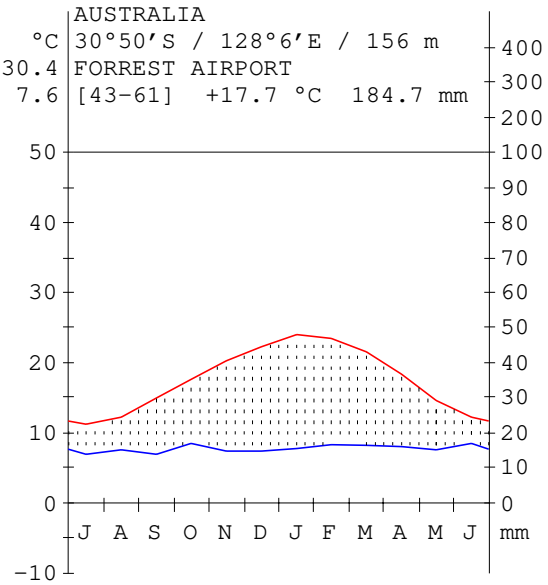
Bioclimatic classification of Gaussen & Bagnouls (1957)
  + Climate ....: A. Warm and temperate warm
  + Region .....: 1. Termoeremic (Desertic warm)
  + Thermic type: 3. Macro-mesothermic

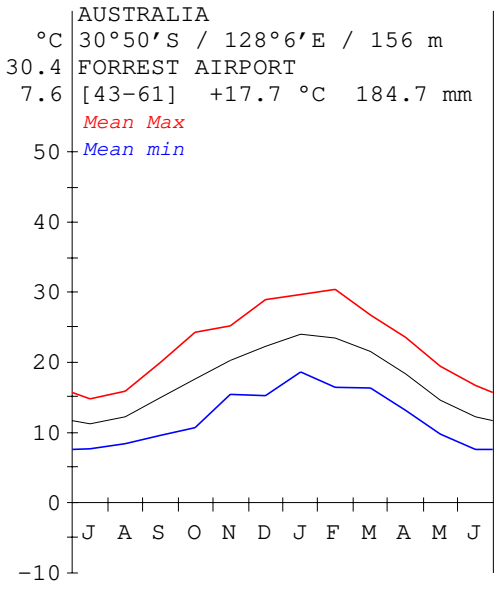
Thornthwaite (1948)

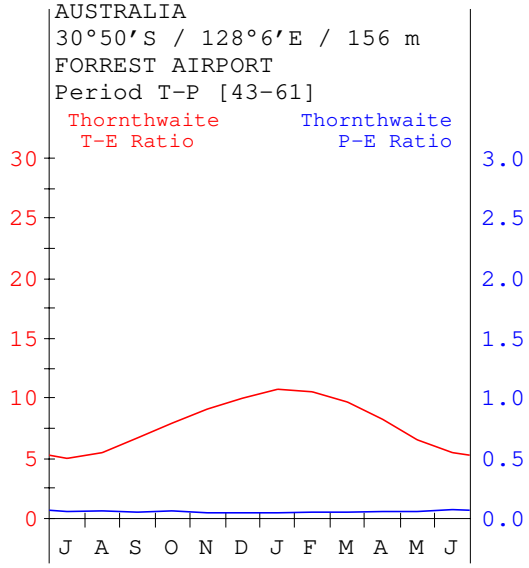
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.05	0.05	0.05	0.06	0.06	0.07	0.06	0.06	0.05	0.06	0.05	0.05
T-E ratio	10.79	10.55	9.70	8.25	6.55	5.48	5.01	5.47	6.72	7.92	9.13	10.00

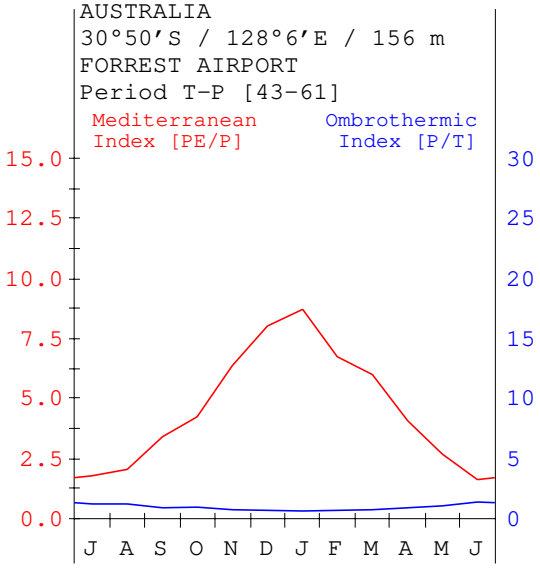
Precipitation-effectiveness: 6.72 Temperature-efficiency ....: 95.57

Moisture Index [MI=100*(P-PE)/PE] .....: -78.52
  + E.Dry (-110<MI<-66.7)
Index of dryness [DI=100*d/PE] .....: 78.51
  + Strong deficit (33.3<DI)
Index of humidity [HI=100*s/PE] .....: 0.00
  + No surplus (0<HI<10)
Potential Evapotranspiration PE .....: 860.10
  + Third mesothermic (855<PE<997)




AUSTRALIA
°C
30°50'S / 128°6'E / 156 m
30.4
FORREST AIRPORT
7.6
[43-61] +17.7 °C 184.7 mm
Mean Max
Mean min
50
40
30
20
10
0
-10
J A S O N D J F M A M J


AUSTRALIA
30°50'S / 128°6'E / 156 m
FORREST AIRPORT
Period T-P [43-61]
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
30°50'S / 128°6'E / 156 m
FORREST AIRPORT
Period T-P [43-61]
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