

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

OAKEY (AUSTRALIA)

Altitude: 407 m.

Latitude: 27°24'S Longitude: 151°44'E

Temperature observation period.: 1963-1994 (32)

Rainfall observation period....: 1928-1994 (67)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	21.95	27.78	16.11	40.00	7.22	127.0	114.63
Feb.	21.67	27.22	16.11	38.33	7.78	114.3	96.91
Mar.	20.28	25.56	15.00	37.22	0.56	94.0	88.94
Apr.	17.22	23.33	11.11	31.11	-0.56	66.0	61.26
May.	13.61	19.44	7.78	28.89	-0.56	53.3	39.49
Jun.	11.12	16.67	5.56	27.22	-5.56	61.0	26.03
Jul.	10.56	16.11	5.00	25.56	-5.00	53.3	25.17
Aug.	11.94	18.33	5.56	27.78	-3.89	40.6	32.83
Sep.	15.00	21.67	8.33	31.67	-1.11	53.3	50.25
Oct.	17.77	24.44	11.11	35.56	1.11	66.0	74.79
Nov.	20.00	26.67	13.33	37.78	3.89	83.8	92.61
Dec.	21.39	27.78	15.00	40.56	6.11	114.3	110.54
Year	16.88	22.92	10.83	33.47	0.83	927	813.45

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	380
Compensated thermicity index.....(Itc):	380
Simple continentality index.....(Ic):	11.4
Diurnality index.....(Id):	13.3
Annual ombrothermic index.....(Io):	4.58
Monthly estival ombrothermic index.....(Ios1):	5.27
Bimonthly estival ombrothermic index.....(Ios2):	5.53
Threemonthly estival ombrothermic index.....(Ios3):	5.47
Fourmonthly estival ombrothermic index.....(Ios4):	5.17
Annual ombro-evaporation index.....(Ioe):	1.83
Annual positive temperature.....(Tp):	2025
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	650
Positive precipitation.....(Pp):	927

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	7	5	0	0	0

Latitudinal Belt...: Subtropical

Continentalty.....: Oceanic - High Semihyperoceanic

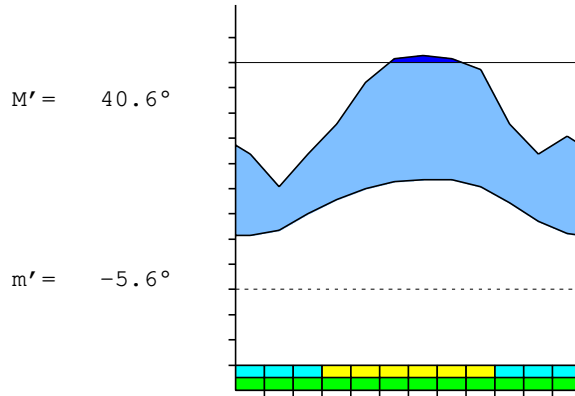
Bioclimate.....: TEMPERATE OCEANIC

Bioclimatic Belt...: LOW THERMOTEMPERATE LOW SUBHUMID

OAKEY (AUSTRALIA)

407 m

P= 927 27° 24' S 151° 44' E 32/67 y.
 T= 16.9° Ic= 11.4 Tp= 2025 Tn= 0
 m= 5.0° M= 16.1° Itc= 380 Io= 4.6



TEMPERATE OCEANIC
 LOW THERMOTEMPERATE LOW SUBHUMID

WATER INDEX CARD OAKEY (AUSTRALIA)
 Altitude: 407 m. Latitude: 27° 24' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	10.6	25	53	0	100	25	0	28	25	1.1
Aug.	11.9	33	41	0	100	33	0	8	17	0.2
Sep.	15.0	50	53	0	100	50	0	3	10	0.0
Oct.	17.8	75	66	-9	91	75	0	0	5	-0.1
Nov.	20.0	93	84	-9	82	93	0	0	2	0.0
Dec.	21.4	111	114	4	86	111	0	0	1	0.0
Jan.	22.0	115	127	12	99	115	0	0	1	0.1
Feb.	21.7	97	114	1	100	97	0	16	8	0.1
Mar.	20.3	89	94	0	100	89	0	5	7	0.0
Apr.	17.2	61	66	0	100	61	0	5	6	0.0
May.	13.6	39	53	0	100	39	0	14	10	0.3
Jun.	11.1	26	61	0	100	26	0	35	22	1.3
Year	16.9	813	927	*	*	813	0	113	113	*

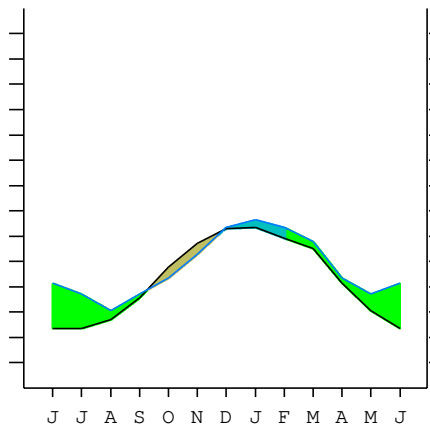
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

OAKEY (AUSTRALIA)

27°24' S 151°44' E 407 m 32/67 y.

T= 16.9 Ic= 11.4 TEMPERATE OCEANIC
 m= 5.0 Tp= 2025 LOW THERMOTEMPERATE
 M= 16.1 Tn= 0 LOW SUBHUMID
 M' = 40.6 Itc= 380
 m' = -5.6 Io= 4.6
 P= 927 mm ———
 PE= 813 mm ———

Imbibing	22 Nov.
Saturation	3 Feb.
Reserve Use	8 Sep.
Deficit	



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [B1a]
 + Type: B. Oceanic
 + Subtype: 1. Semihyperoceanic
 + Variant: a. High

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

Bioclimatic types [C3.2b.6b]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 3. OCEANIC
 + Bioclimatic variant ..:
 + Thermic type.....: 2. THERMOTEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW
 Bioclimatic Classification: Teco.Tte.Shu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 599
 Coldest semester of the year.....(Psw): 328
 Warmest four months period of the year.....(Pcm1): 450
 Following warmest four months period.....(Pcm2): 234
 Positive precipitation dryest 3 months.....(Ppd): 147
 Positive precipitation dryest 2 months.....(Ppd2): 94
 Positive precipitation dryest 1 month.....(Ppd1): 41
 Positive precipitation warmest 3 months.....(Pps): 356
 Positive precipitation warmest 2 months.....(Pps2): 241
 Positive precipitation warmest 1 month.....(Pps1): 127
 Positive precipitation coldest 3 months.....(Ppw): 155
 Positive precipitation coldest 2 months.....(Ppw2): 114
 Positive precipitation coldest 1 month.....(Ppw1): 53

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	154	203	355	213

Seasonal rainfall rhythms: S > F > P > W

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 22.0
 Average coldest month [T].....(Tmin): 10.6
 Maximum temp. warmest month [M].....(Tmmax): 27.8
 Minimum temp. coldest month [m].....(Tmmin): 5.0
 Absolute Max.temp. warmest month [M'].....(Tamax): 40.6
 Absolute Min.temp. coldest month [m'].....(Tamin): -5.6
 First warmest contrasted month [M].....(Tcmax): 21.7 (9)
 First coldest contrasted month [m].....(Tcmin): 8.3 (9)
 Estival temperature.....(Ts): 650
 Positive temperature dryest 3 months.....(Tpd): 375
 Positive temperature dryest 2 months.....(Tpd2): 225
 Positive temperature dryest 1 month.....(Tpd1): 119
 Positive temperature warmest 3 months.....(Tps): 650
 Positive temperature warmest 2 months.....(Tps2): 436
 Positive temperature warmest 1 month.....(Tps1): 220
 Positive temperature coldest 3 months.....(Tpw): 336
 Positive temperature coldest 2 months.....(Tpw2): 217
 Positive temperature coldest 1 month.....(Tpw1): 106

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

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.88
 Mediterranean index of January.....(Im1): 0.90
 Mediterranean index of January & February.....(Im2): 0.88
 Mediterranean index of December to February...(Im3): 0.91

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	1143	1270	1143	940	660	533	610	533	406	533	660	838
Tp	214	220	217	203	172	136	111	106	119	150	178	200
Io (Iom)	5.34	5.79	5.27	4.64	3.83	3.92	5.49	5.05	3.40	3.55	3.71	4.19
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	3556 / 650			2133 / 511			1549 / 336			2031 / 528		
Io (Iot)	5.470			4.173			4.607			3.849		
Semesters	December-May						June-November					
Pp(x10)/Tp	5689 / 1161						3580 / 864					
Io (Iosm)	4.899						4.144					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 9269/2025=4.58 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	1143	1270	1143	940	660	533	610	533	406	533	660	838
Tp [T*10]	214	220	217	203	172	136	111	106	119	150	178	200
Iom [Pp/Tp]	534	579	527	464	383	392	549	505	340	355	371	419
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	3556 / 650			2133 / 511			1549 / 336			2031 / 528		
Iot [Pp/Tp]	547			417			461			385		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp): 11.39
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]	21.68
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]	17.88
+ Hyperoceanic (-20<CI<20)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)]	1.12
+ Subcontinental (1.1<CI<1.7)	
Rainfall Index of Lang (1925) [R=P/T]	54.92
+ Semiarid (60>R>40)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)]	34.49
+ Humid (60>Ia>30)	
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]	124.13
+ Humid (Q>90)	
I of Dantin & Revenga (1940) [DR=100*T/P]	1.82
+ Humid (2>DR>0)	
Aridity Index of UNEP [I=P/PE]	1.14
+ Humid (I>0.65)	
Potential Erosion I of Fournier (1960) [K=Pi ² /P]	17.40
+ 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	0.52	0.46	0.39	0.28	0.25	0.31	0.27	0.19	0.24	0.28	0.34	0.47
T-E ratio	9.88	9.75	9.13	7.75	6.12	5.00	4.75	5.37	6.75	8.00	9.00	9.63
Precipitation-effectiveness: 39.96						Temperature-efficiency						91.13
Moisture Index [MI=100*(P-PE)/PE]												13.95
+ C2.Subhumid humid (0<MI<20)												
Index of dryness [DI=100*d/PE]												0.00
+ No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]												13.94
+ Moderate surplus (10<HI<20)												
Potential Evapotranspiration PE												813.45
+ Second mesothermic (712<PE<855)												

