

# Phytosociological Research Center

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## Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

PORT GEORGE IV (AUSTRALIA)

Altitude: 59 m.

Latitude: 15°25'S Longitude: 124°43'E

Temperature observation period.: 1972-1994 (23)

Rainfall observation period....: 1969-1994 (26)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	28.89	32.78	25.00	39.44	16.11	375.9	173.19
Feb.	28.61	32.78	24.44	39.44	17.22	289.6	149.34
Mar.	28.34	32.78	23.89	38.33	15.56	243.8	157.74
Apr.	26.95	33.89	20.00	38.89	8.33	55.9	136.32
May.	24.45	32.22	16.67	37.78	5.00	22.9	97.25
Jun.	22.23	30.56	13.89	37.78	2.22	12.7	65.72
Jul.	20.84	30.00	11.67	35.56	2.78	7.6	53.48
Aug.	22.78	31.67	13.89	37.22	5.00	0.8	78.02
Sep.	25.56	33.89	17.22	39.44	8.89	2.5	116.85
Oct.	27.78	34.44	21.11	41.11	13.89	10.2	155.95
Nov.	29.45	35.00	23.89	42.22	15.00	50.8	170.25
Dec.	29.72	34.44	25.00	41.11	16.67	198.1	180.63
Year	26.30	32.87	19.72	39.03	10.56	1271	1534.7

### BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	680
Compensated thermicity index.....(Itc):	680
Simple continentality index.....(Ic):	8.9
Diurnality index.....(Id):	18.3
Annual ombrothermic index.....(Io):	4.03
Monthly dry ombrothermic index.....(Iod1):	0.04
Bimonthly dry ombrothermic index.....(Iod2):	0.07
Three monthly dry ombrothermic index.....(Iod3):	0.16
Four monthly dry ombrothermic index.....(Iod4):	0.26
Annual ombro-evaporation index.....(Ioe):	11.41
Annual positive temperature.....(Tp):	3156
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	692
Positive precipitation.....(Pp):	1271

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	4	1	1	6	0

Latitudinal Belt...: Eutropical

Continentalty.....: Hyperoceanic - High Subhyperoceanic

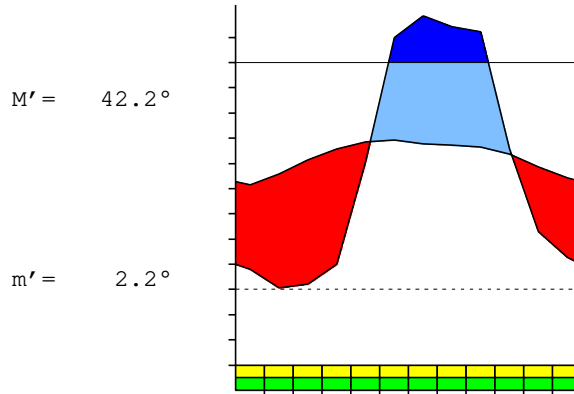
Bioclimate(Variant): TROPICAL PLUVISEASONAL (XEROPHYTIC)

Bioclimatic Belt...: UPPER INFRATROPICAL LOW SUBHUMID

PORT GEORGE IV (AUSTRALIA)

59 m

P= 1271      15° 25' S      124° 43' E      23/26 y.  
 T= 26.3°      Ic= 8.9      Tp= 3156      Tn= 0  
 m= 11.7°      M= 30.0°      Itc= 680      Io= 4.0



TROPICAL PLUVISEASONAL (XEROPHYTIC)  
 UPPER INFRATROPICAL LOW SUBHUMID

WATER INDEX CARD      PORT GEORGE IV (AUSTRALIA)  
 Altitude: 59 m.      Latitude: 15° 25' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	20.8	53	8	0	0	8	46	0	6	-0.8
Aug.	22.8	78	1	0	0	1	77	0	3	-0.9
Sep.	25.6	117	3	0	0	3	114	0	1	-0.9
Oct.	27.8	156	10	0	0	10	146	0	1	-0.9
Nov.	29.5	170	51	0	0	51	119	0	0	-0.7
Dec.	29.7	181	198	17	17	181	0	0	0	0.0
Jan.	28.9	173	376	83	100	173	0	120	60	1.1
Feb.	28.6	149	290	0	100	149	0	140	100	0.9
Mar.	28.3	158	244	0	100	158	0	86	93	0.5
Apr.	27.0	136	56	-80	20	136	0	0	47	-0.5
May.	24.5	97	23	-20	0	42	55	0	23	-0.7
Jun.	22.2	66	13	0	0	13	53	0	12	-0.8
Year	26.3	1535	1271	*	*	924	610	347	347	*

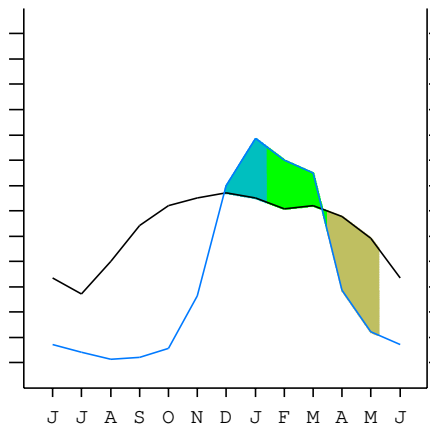
R = Reserve      VR = Variation of the reserve      RE = Real evapotranspiration  
 DR = Drainage      HC = Humidity coefficient      DF = Deficit      SP = Superavit

PORT GEORGE IV (AUSTRALIA)

15°25' S 124°43' E      59 m 23/26 y.

T= 26.3      Ic= 8.9      TROPICAL PLUVISEASONAL (XEROPHYTIC)  
 m= 11.7      Tp= 3156      UPPER INFRATROPICAL  
 M= 30.0      Tn= 0      LOW SUBHUMID  
 M' = 42.2      Itc= 680  
 m' = 2.2      Io= 4.0  
 P= 1271      mm      ———  
 PE= 1535      mm      ———

Imbibing	27 Nov.
Saturation	13 Jan.
Reserve Use	16 Mar.
Deficit	8 May.



PORT GEORGE IV (AUSTRALIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A3a]  
 + Type .....: A. Hyperoceanic  
 + Subtype .....: 3. Subhyperoceanic  
 + Variant .....: a. High  
 Thermic types [A2.A1]  
 + Latitudinal zone ....: A. Warm  
 + Latitudinal belt ....: 2. Eutropical  
 + Thermic type .....: A. Warm  
 + Thermic subtype .....: 1. Torrid  
 Bioclimatic types [A4.1a.6b]  
 + Macrobioclimate .....: A. TROPICAL  
 + Bioclimate .....: 4. PLUVISEASONAL  
 + Bioclimatic variant ..:  
 + Thermic type.....: 1. INFRATROPICAL  
 + Thermic subtype.....: a. UPPER  
 + Ombrothermic type ...: 6. SUBHUMID  
 + Ombrothermic subtype : b. LOW  
 Bioclimatic Classification .....: Trde.Itr.Shu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 1168  
 Coldest semester of the year.....(Psw): 102  
 Warmest four months period of the year.....(Pcm1): 914  
 Following warmest four months period.....(Pcm2): 335  
 Positive precipitation dryest 3 months.....(Ppd): 11  
 Positive precipitation dryest 2 months.....(Ppd2): 3  
 Positive precipitation dryest 1 month.....(Ppd1): 1  
 Positive precipitation warmest 3 months.....(Pps): 625  
 Positive precipitation warmest 2 months.....(Pps2): 249  
 Positive precipitation warmest 1 month.....(Pps1): 198  
 Positive precipitation coldest 3 months.....(Ppw): 21  
 Positive precipitation coldest 2 months.....(Ppw2): 20  
 Positive precipitation coldest 1 month.....(Ppw1): 8

Seasons	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2
Rainfall	21	63	863	322

Tropical rainfall rhythms: 1 > 2 > 4 > 3

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 29.7  
 Average coldest month [T].....(Tmin): 20.8  
 Maximum temp. warmest month [M].....(Tmmax): 35.0  
 Minimum temp. coldest month [m].....(Tmmin): 11.7  
 Absolute Max.temp. warmest month [M'].....(Tamax): 42.2  
 Absolute Min.temp. coldest month [m'].....(Tamin): 2.2  
 First warmest contrasted month [M].....(Tcmax): 30.0 (7)  
 First coldest contrasted month [m].....(Tcmin): 11.7 (7)  
 Dry station temperature.....(Td): 692  
 Positive temperature dryest 3 months.....(Tpd): 692  
 Positive temperature dryest 2 months.....(Tpd2): 483  
 Positive temperature dryest 1 month.....(Tpd1): 228  
 Positive temperature warmest 3 months.....(Tps): 881  
 Positive temperature warmest 2 months.....(Tps2): 592  
 Positive temperature warmest 1 month.....(Tps1): 297  
 Positive temperature coldest 3 months.....(Tpw): 659  
 Positive temperature coldest 2 months.....(Tpw2): 431  
 Positive temperature coldest 1 month.....(Tpw1): 208

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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)	o	o	o	o	o	o	o	o	o	o	o	o
HiperAgelid..[all>0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.21  
 Mediterranean index of January.....(Im1): No  
 Mediterranean index of January & February.....(Im2): No  
 Mediterranean index of December to February...(Im3): No

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	1981	3759	2896	2438	559	229	127	76	8	25	102	508
Tp	297	289	286	283	270	245	222	208	228	256	278	295
Io (Iom)	6.67	13.0	10.1	8.60	2.07	0.94	0.57	0.36	0.04	0.10	0.37	1.72
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	8636 / 872			3226 / 797			211 / 659			635 / 828		
Io (Iot)	9.901			4.046			0.320			0.767		
Semesters	December-May						June-November					
Pp(x10)/Tp	11862 / 1670						846 / 1486					
Io (Iosm)	7.105						0.569					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 12708/3156=4.03 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	1981	3759	2896	2438	559	229	127	76	8	25	102	508
Tp [T*10]	297	289	286	283	270	245	222	208	228	256	278	295
Iom [Pp/Tp]	667	\$\$\$	\$\$\$	860	207	94	57	36	4	10	37	172
Avm [200-Iom]	***	***	***	***	***	106	143	164	196	190	163	28
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	8636 / 872			3226 / 797			211 / 659			635 / 828		
Iot [Pp/Tp]	990			405			32			77		
Avs E[Avm<200]	***			***			503			381		
Lower ultrahyperarid [2]						Upper hyperarid [3]						
Weak lower arid [1]						Strong upper arid [1]						
Weak upper arid [1]						Weak upper semiarid [1]						

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin] .....(Sp): 8.88  
 CI of Gorezinski (1920) [1.7\*Sp/sin(Lat)-20.4] .....: 36.39  
 CI of Conrad (1946) [1.7\*Sp/sin(Lat+10)-14] .....: 21.17  
 + Oceanic (20<CI<40)  
 CI of Currey (1974) [CI=Sp/(1+Lat/3)] .....: 1.45  
 + Subcontinental (1.1<CI<1.7)  
 Rainfall Index of Lang (1925) [R=P/T] .....: 48.32  
 + Semiarid (60>R>40)  
 Aridity Index of Martonne (1926) [Ia=P/(T+10)] .....: 35.01  
 + Humid (60>Ia>30)  
 I of Emberger (1930) [Q=100\*P/(Tmax<sup>2</sup>-Tmin<sup>2</sup>)] .....: 116.71  
 + Humid (Q>90)  
 I of Dantin & Revenga (1940) [DR=100\*T/P] .....: 2.07  
 + Semiarid (3>DR>2)  
 Aridity Index of UNEP [I=P/PE] .....: 0.83  
 + Humid (I>0.65)  
 Potential Erosion I of Fournier (1960) [K=Pi<sup>2</sup>/P].....: 111.19  
 + Moderate (90<K<120)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)  
 + Climate .....: A. Warm and temperate warm  
 + Region .....: 3. Termoxeroteric (Mediterranean warm)  
 + Thermic type: 1. Megathermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	1.47	1.11	0.92	0.19	0.07	0.04	0.02	0.00	0.01	0.03	0.16	0.71
T-E ratio	13.00	12.87	12.75	12.13	11.00	10.00	9.38	10.25	11.50	12.50	13.25	13.37
Precipitation-effectiveness:	47.31					Temperature-efficiency .....: 142.02						
Moisture Index [MI=100*(P-PE)/PE] .....	-17.20											
+ C1.Subhumid dry (-33.3<MI<0)												
Index of dryness [DI=100*d/PE] .....	39.77											
+ Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE] .....	22.58											
+ Strong surplus (20<HI)												
Potential Evapotranspiration PE .....	1534.73											
+ Megathermic (PE>1440)												

