

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

NORFOLK ISLAND (AUSTRALIA)

Altitude: 113 m.

Latitude: 29°3'S Longitude: 167°56'E

Temperature observation period.: 1974-1994 (21)

Rainfall observation period....: 1947-1994 (48)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	22.50	25.56	19.44	31.67	13.33	83.8	115.08
Feb.	22.50	25.00	20.00	31.67	13.33	109.2	98.64
Mar.	21.94	24.44	19.44	29.44	12.78	94.0	97.40
Apr.	20.56	22.78	18.33	28.33	12.22	127.0	76.52
May.	18.34	20.56	16.11	27.22	9.44	144.8	58.77
Jun.	17.50	19.44	15.56	23.33	7.22	139.7	49.96
Jul.	16.11	18.33	13.89	22.78	6.11	154.9	44.70
Aug.	15.83	18.33	13.33	26.67	7.78	137.2	45.50
Sep.	16.67	19.44	13.89	27.22	7.78	94.0	52.64
Oct.	18.06	20.56	15.56	25.56	9.44	94.0	68.73
Nov.	19.45	22.22	16.67	30.00	9.44	66.0	81.33
Dec.	21.11	23.89	18.33	30.56	11.67	86.4	101.97
Year	19.21	21.71	16.71	27.87	10.05	1331	891.24

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	509
Compensated thermicity index.....(Itc):	495
Simple continentality index.....(Ic):	6.7
Diurnality index.....(Id):	6.1
Annual ombrothermic index.....(Io):	5.77
Monthly dry ombrothermic index.....(Iod1):	3.39
Bimonthly dry ombrothermic index.....(Iod2):	3.76
Three monthly dry ombrothermic index.....(Iod3):	3.75
Four monthly dry ombrothermic index.....(Iod4):	4.07
Annual ombro-evaporation index.....(Ioe):	0.74
Annual positive temperature.....(Tp):	2306
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	631
Positive precipitation.....(Pp):	1331

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	10	2	0	0	0

Latitudinal Belt...: Subtropical

Continentalty.....: Hyperoceanic - Low Euhyperoceanic

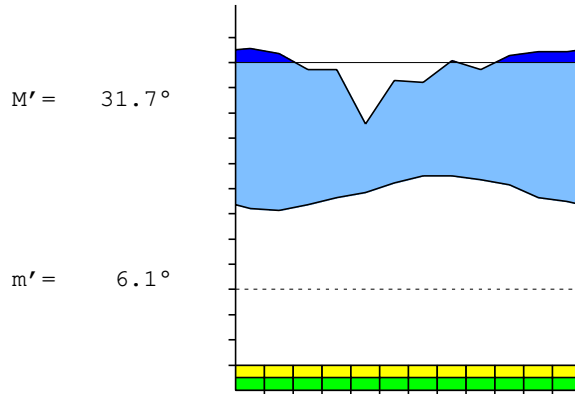
Bioclimate(Variant): TROPICAL PLUVIAL (HYGROPHYTIC)

Bioclimatic Belt...: UPPER THERMOTROPICAL UPPER SUBHUMID

NORFOLK ISLAND (AUSTRALIA)

113 m

P= 1331 29° 3'S 167° 56'E 21/48 y.
 T= 19.2° Ic= 6.7 Tp= 2306 Tn= 0
 m= 13.3° M= 18.3° Itc= 495 Io= 5.8



TROPICAL PLUVIAL (HYGROPHYTIC)
 UPPER THERMOTROPICAL UPPER SUBHUMID

WATER INDEX CARD NORFOLK ISLAND (AUSTRALIA)

Altitude: 113 m. Latitude: 29° 3'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	16.1	45	155	0	100	45	0	110	88	2.4
Aug.	15.8	46	137	0	100	46	0	92	90	2.0
Sep.	16.7	53	94	0	100	53	0	41	66	0.7
Oct.	18.1	69	94	0	100	69	0	25	45	0.3
Nov.	19.5	81	66	-15	85	81	0	0	23	-0.1
Dec.	21.1	102	86	-16	69	102	0	0	11	-0.1
Jan.	22.5	115	84	-31	38	115	0	0	6	-0.2
Feb.	22.5	99	109	11	48	99	0	0	3	0.1
Mar.	21.9	97	94	-3	45	97	0	0	1	0.0
Apr.	20.6	77	127	50	95	77	0	0	1	0.6
May.	18.3	59	145	5	100	59	0	81	41	1.4
Jun.	17.5	50	140	0	100	50	0	90	65	1.7
Year	19.2	891	1331	*	*	891	0	440	440	*

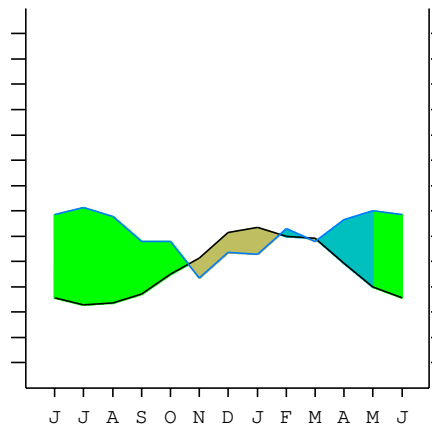
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

NORFOLK ISLAND (AUSTRALIA)

29°3'S 167°56'E 113 m 21/48 y.

T= 19.2 Ic= 6.7 TROPICAL PLUVIAL (HYGROPHYTIC)
 m= 13.3 Tp= 2306 UPPER THERMOTROPICAL
 M= 18.3 Tn= 0 UPPER SUBHUMID
 M' = 31.7 Itc= 495
 m' = 6.1 Io= 5.8
 P= 1331 mm ———
 PE= 891 mm ———

Imbibing	2 Mar.
Saturation	2 May.
Reserve Use	23 Feb.
Deficit	



NORFOLK ISLAND (AUSTRALIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [A2b]
 + Type: A. Hyperoceanic
 + Subtype: 2. Euhyperoceanic
 + Variant: b. Low
 Thermic types [A3.A2]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 2. Warm
 Bioclimatic types [A5.2a.6a]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 5. PLUVIAL
 + Bioclimatic variant .:
 + Thermic type.....: 2. THERMOTROPICAL
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : a. UPPER
 Bioclimatic Classification: Trhd.Ttr.Shu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 566
 Coldest semester of the year.....(Psw): 765
 Warmest four months period of the year.....(Pcm1): 373
 Following warmest four months period.....(Pcm2): 566
 Positive precipitation dryest 3 months.....(Ppd): 236
 Positive precipitation dryest 2 months.....(Ppd2): 152
 Positive precipitation dryest 1 month.....(Ppd1): 66
 Positive precipitation warmest 3 months.....(Pps): 287
 Positive precipitation warmest 2 months.....(Pps2): 193
 Positive precipitation warmest 1 month.....(Pps1): 84
 Positive precipitation coldest 3 months.....(Ppw): 386
 Positive precipitation coldest 2 months.....(Ppw2): 292
 Positive precipitation coldest 1 month.....(Ppw1): 137

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	431	254	279	365

Seasonal rainfall rhythms: W > F > S > P

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 22.5
 Average coldest month [T].....(Tmin): 15.8
 Maximum temp. warmest month [M].....(Tmmax): 25.6
 Minimum temp. coldest month [m].....(Tmmin): 13.3
 Absolute Max.temp. warmest month [M'].....(Tamax): 31.7
 Absolute Min.temp. coldest month [m'].....(Tamin): 6.1
 First warmest contrasted month [M].....(Tcmax): 25.6 (1)
 First coldest contrasted month [m].....(Tcmin): 19.4 (1)
 Dry station temperature.....(Td): 631
 Positive temperature dryest 3 months.....(Tpd): 631
 Positive temperature dryest 2 months.....(Tpd2): 406
 Positive temperature dryest 1 month.....(Tpd1): 195
 Positive temperature warmest 3 months.....(Tps): 669
 Positive temperature warmest 2 months.....(Tps2): 450
 Positive temperature warmest 1 month.....(Tps1): 225
 Positive temperature coldest 3 months.....(Tpw): 486
 Positive temperature coldest 2 months.....(Tpw2): 319
 Positive temperature coldest 1 month.....(Tpw1): 158

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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): 0.67
 Mediterranean index of January.....(Im1): 1.37
 Mediterranean index of January & February.....(Im2): 1.11
 Mediterranean index of December to February...(Im3): 1.13

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	864	838	1092	940	1270	1448	1397	1549	1372	940	940	660
Tp	211	225	225	219	206	183	175	161	158	167	181	195
Io (Iom)	4.09	3.72	4.85	4.28	6.18	7.90	7.98	9.62	8.67	5.64	5.20	3.39
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	2794 / 661			3658 / 608			4318 / 494			2540 / 542		
Io (Iot)	4.226			6.012			8.734			4.688		
Semesters	December-May						June-November					
Pp(x10)/Tp	6452 / 1270						6858 / 1036					
Io (Iosm)	5.082						6.618					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 13310/2306=5.77 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	864	838	1092	940	1270	1448	1397	1549	1372	940	940	660
Tp [T*10]	211	225	225	219	206	183	175	161	158	167	181	195
Iom [Pp/Tp]	409	372	485	428	618	790	798	962	867	564	520	339
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	2794 / 661			3658 / 608			4318 / 494			2540 / 542		
Iot [Pp/Tp]	423			601			873			469		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	6.67
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		2.95
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		4.00
+ Hyperoceanic (-20<CI<20)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		0.62
+ Oceanic (0.6<CI<1.1)		
Rainfall Index of Lang (1925) [R=P/T]		69.27
+ Temperate warm (100>R>60)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		45.56
+ Humid (60>Ia>30)		
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]		279.84
+ Humid (Q>90)		
I of Dantin & Revenga (1940) [DR=100*T/P]		1.44
+ Humid (2>DR>0)		
Aridity Index of UNEP [I=P/PE]		1.49
+ Humid (I>0.65)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		18.03
+ Very low (K<60)		

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 2. Macrothermic

Thornthwaite (1948)													
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
P-E ratio	0.32	0.43	0.37	0.54	0.66	0.65	0.75	0.66	0.43	0.41	0.27	0.34	
T-E ratio	10.13	10.13	9.87	9.25	8.25	7.88	7.25	7.12	7.50	8.13	8.75	9.50	
Precipitation-effectiveness:	58.20					Temperature-efficiency							103.76
Moisture Index [MI=100*(P-PE)/PE]												49.34	
+ B2.Humid medium-humid (40<MI<60)													
Index of dryness [DI=100*d/PE]												0.00	
+ No deficit (0<DI<16.7)													
Index of humidity [HI=100*s/PE]												49.34	
+ Strong surplus (20<HI)													
Potential Evapotranspiration PE												891.24	
+ Third mesothermic (855<PE<997)													

