

Phytosociological Research Center

www.globalbioclimatics.org

Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

MAATSUYKER ISLAND (AUSTRALIA)

Altitude: 147 m.

Latitude: 43°39'S Longitude: 146°16'E

Temperature observation period.: 1936-1983 (48)

Rainfall observation period....: 1891-1988 (98)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	13.84	17.98	9.53	0.00	0.00	80.9	83.53
Feb.	14.10	18.98	9.23	0.00	0.00	70.4	70.89
Mar.	13.50	17.95	8.85	0.00	0.00	87.5	66.82
Apr.	11.91	16.83	7.08	0.00	0.00	113.7	49.76
May.	10.48	13.93	6.78	0.00	0.00	118.2	38.77
Jun.	9.27	12.83	5.68	0.00	0.00	119.5	30.03
Jul.	8.68	10.69	6.46	0.00	0.00	129.6	30.49
Aug.	8.76	11.95	5.45	0.00	0.00	123.8	34.23
Sep.	9.49	12.85	6.35	0.00	0.00	111.5	41.27
Oct.	10.40	13.23	7.38	0.00	0.00	108.2	53.71
Nov.	11.36	14.93	7.78	0.00	0.00	94.6	63.02
Dec.	12.65	16.98	8.53	0.00	0.00	91.9	77.09
Year	11.20	14.93	7.42	0.00	0.00	1250	639.61

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	284
Compensated thermicity index.....(Itc):	258
Simple continentality index.....(Ic):	5.4
Diurnality index.....(Id):	9.8
Annual ombrothermic index.....(Io):	9.30
Monthly estival ombrothermic index.....(Ios1):	4.99
Bimonthly estival ombrothermic index.....(Ios2):	5.42
Three monthly estival ombrothermic index.....(Ios3):	5.99
Four monthly estival ombrothermic index.....(Ios4):	6.50
Annual ombro-evaporation index.....(Ioe):	0.76
Annual positive temperature.....(Tp):	1344
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	406
Positive precipitation.....(Pp):	1250

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	12	0	0	0	0

Latitudinal Belt...: High eutemperate

Continentalty.....: Hyperoceanic - High Euhyperoceanic

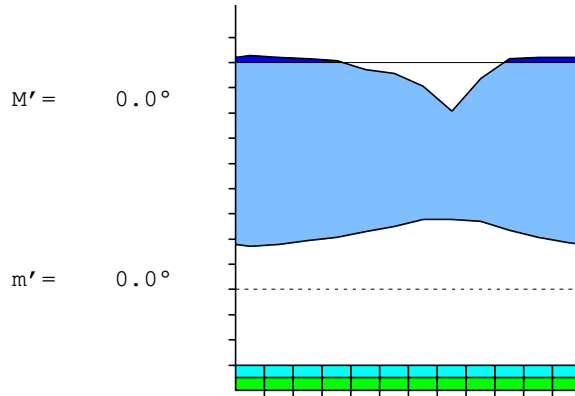
Bioclimate.....: TEMPERATE HYPEROCEANIC

Bioclimatic Belt...: LOW MESOTEMPERATE UPPER HUMID

MAATSUYKER ISLAND (AUSTRALIA)

147 m

P= 1250 43° 39'S 146° 16'E 48/98 y.
 T= 11.2° Ic= 5.4 Tp= 1344 Tn= 0
 m= 6.5° M= 10.7° Itc= 258 Io= 9.3



TEMPERATE HYPEROCEANIC
 LOW MESOTEMPERATE UPPER HUMID

WATER INDEX CARD MAATSUYKER ISLAND (AUSTRALIA)
 Altitude: 147 m. Latitude: 43° 39'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	8.7	30	130	0	100	30	0	99	87	3.2
Aug.	8.8	34	124	0	100	34	0	90	88	2.6
Sep.	9.5	41	111	0	100	41	0	70	79	1.7
Oct.	10.4	54	108	0	100	54	0	54	67	1.0
Nov.	11.4	63	95	0	100	63	0	32	49	0.5
Dec.	12.6	77	92	0	100	77	0	15	32	0.1
Jan.	13.8	84	81	-3	97	84	0	0	16	0.0
Feb.	14.1	71	70	-0	97	71	0	0	8	0.0
Mar.	13.5	67	87	3	100	67	0	18	13	0.3
Apr.	11.9	50	114	0	100	50	0	64	38	1.2
May.	10.5	39	118	0	100	39	0	79	59	2.0
Jun.	9.3	30	119	0	100	30	0	89	74	2.9
Year	11.2	640	1250	*	*	640	0	610	610	*

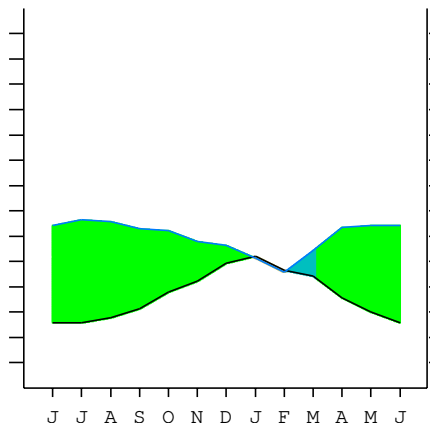
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

MAATSUYKER ISLAND (AUSTRALIA)

43°39'S 146°16'E 147 m 48/98 y.

T= 11.2 Ic= 5.4 TEMPERATE HYPEROCEANIC
 m= 6.5 Tp= 1344 LOW MESOTEMPERATE
 M= 10.7 Tn= 0 UPPER HUMID
 M' = 0.0 Itc= 258
 m' = 0.0 Io= 9.3
 P= 1250 mm ———
 PE= 640 mm ———

Imbibing	1 Feb.
Saturation	5 Mar.
Reserve Use	26 Dec.
Deficit	



MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A2a]
 + Type: A. Hyperoceanic
 + Subtype: 2. Euhyperoceanic
 + Variant: a. High
 Thermic types [B1.B4]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. High eutemperate
 + Thermic type: B. Temperate
 + Thermic subtype: 4. Temperate
 Bioclimatic types [C4.3b.7a]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 4. HYPEROCEANIC
 + Bioclimatic variant ..:
 + Thermic type.....: 3. MESOTEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 7. HUMID
 + Ombrothermic subtype : a. UPPER
 Bioclimatic Classification: Texe.Mte.Hum

MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 539
 Coldest semester of the year.....(Psw): 711
 Warmest four months period of the year.....(Pcm1): 331
 Following warmest four months period.....(Pcm2): 481
 Positive precipitation dryest 3 months.....(Ppd): 239
 Positive precipitation dryest 2 months.....(Ppd2): 151
 Positive precipitation dryest 1 month.....(Ppd1): 70
 Positive precipitation warmest 3 months.....(Pps): 239
 Positive precipitation warmest 2 months.....(Pps2): 151
 Positive precipitation warmest 1 month.....(Pps1): 70
 Positive precipitation coldest 3 months.....(Ppw): 373
 Positive precipitation coldest 2 months.....(Ppw2): 253
 Positive precipitation coldest 1 month.....(Ppw1): 130

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	372	314	243	319

Seasonal rainfall rhythms: W > F > P > S

MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 14.1
 Average coldest month [T].....(Tmin): 8.7
 Maximum temp. warmest month [M].....(Tmmax): 19.0
 Minimum temp. coldest month [m].....(Tmmin): 5.4
 Absolute Max.temp. warmest month [M'].....(Tamax): 0.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.0
 First warmest contrasted month [M].....(Tcmax): 19.0 (2)
 First coldest contrasted month [m].....(Tcmin): 9.2 (2)
 Estival temperature.....(Ts): 406
 Positive temperature dryest 3 months.....(Tpd): 414
 Positive temperature dryest 2 months.....(Tpd2): 279
 Positive temperature dryest 1 month.....(Tpd1): 141
 Positive temperature warmest 3 months.....(Tps): 414
 Positive temperature warmest 2 months.....(Tps2): 279
 Positive temperature warmest 1 month.....(Tps1): 141
 Positive temperature coldest 3 months.....(Tpw): 267
 Positive temperature coldest 2 months.....(Tpw2): 174
 Positive temperature coldest 1 month.....(Tpw1): 87

MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

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

MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.51
 Mediterranean index of January.....(Im1): 1.03
 Mediterranean index of January & February.....(Im2): 1.02
 Mediterranean index of December to February...(Im3): 0.95

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	919	809	704	875	1137	1182	1195	1296	1238	1115	1082	946
Tp	127	138	141	135	119	105	93	87	88	95	104	114
Io (Iom)	7.27	5.85	4.99	6.48	9.55	11.3	12.9	14.9	14.1	11.7	10.4	8.33
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	2432 / 406			3194 / 359			3728 / 267			3143 / 313		
Io (Iot)	5.993			8.898			13.96			10.06		
Semesters	December-May						June-November					
Pp(x10)/Tp	5626 / 765						6871 / 580					
Io (Iosm)	7.356						11.85					

MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

Aridity Value Index (AVI)

[10xPP/TP=IO]: 12497/1344=9.30 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	919	809	704	875	1137	1182	1195	1296	1238	1115	1082	946
Tp [T*10]	127	138	141	135	119	105	93	87	88	95	104	114
Iom [Pp/Tp]	727	585	499	648	955	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	833
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	2432 / 406			3194 / 359			3728 / 267			3143 / 313		
Iot [Pp/Tp]	599			890			1396			1006		
Avs E [Avm<200]	***			***			***			***		

MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 5.42
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: -7.05
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: -2.56
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.35
 + Hyperoceanic (0<CI<0.6)
 Rainfall Index of Lang (1925) [R=P/T]: 111.55
 + Temperate humid (160>R>100)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 58.94
 + Humid (60>Ia>30)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 378.08
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 0.90
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 1.95
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 13.44
 + Very low (K<60)

MAATSUYKER ISLAND (AUSTRALIA)

Latitude: 43°39'S Longitude: 146°16'E Altitude: 147 m

BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: A. Warm and temperate warm
 + Region: 7. Mesoaxeric (Axeric temperate)
 + Thermic type: 4. Mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.39	0.33	0.43	0.60	0.66	0.70	0.78	0.74	0.64	0.60	0.50	0.47
T-E ratio	6.23	6.35	6.07	5.36	4.72	4.17	3.91	3.94	4.27	4.68	5.11	5.69
Precipitation-effectiveness: 68.37						Temperature-efficiency: 60.50						
Moisture Index [MI=100*(P-PE)/PE]: 95.38 + B4.Humid highest-humid (80<MI<100)												
Index of dryness [DI=100*d/PE]: 0.00 + No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 95.37 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 639.61 + First mesothermic (570<PE<712)												

