

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

HOBART (AUSTRALIA)

Altitude: 54 m.

Latitude: 42°53'S Longitude: 147°20'E

Temperature observation period.: 1910-1980 (71)

Rainfall observation period....: 1950-1980 (31)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	16.30	21.70	11.70	40.60	4.50	44.0	95.55
Feb.	16.10	21.70	11.70	40.20	3.90	45.0	78.78
Mar.	15.10	20.00	10.60	37.30	1.80	53.0	72.09
Apr.	12.40	17.20	8.90	30.60	0.70	61.0	48.55
May.	10.50	14.40	6.70	25.40	-1.60	47.0	36.07
Jun.	8.30	11.70	5.00	20.70	-1.60	62.0	24.06
Jul.	7.80	11.10	4.40	18.90	-2.40	51.0	24.06
Aug.	8.80	12.80	5.00	22.00	-1.70	50.0	31.39
Sep.	10.60	15.00	6.10	27.60	-0.60	51.0	43.01
Oct.	11.80	17.20	7.80	33.30	0.00	68.0	57.57
Nov.	13.60	18.90	8.90	36.80	1.70	58.0	72.20
Dec.	15.10	20.60	10.60	40.70	3.30	64.0	88.93
Year	12.20	16.86	8.12	31.17	0.67	654	672.27

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	277
Compensated thermicity index.....(Itc):	277
Simple continentality index.....(Ic):	8.5
Diurnality index.....(Id):	10.0
Annual ombrothermic index.....(Io):	4.47
Monthly estival ombrothermic index.....(Ios1):	2.70
Bimonthly estival ombrothermic index.....(Ios2):	2.75
Threemonthly estival ombrothermic index.....(Ios3):	3.22
Fourmonthly estival ombrothermic index.....(Ios4):	3.45
Annual ombro-evaporation index.....(Ioe):	0.99
Annual positive temperature.....(Tp):	1464
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	475
Positive precipitation.....(Pp):	654

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	9	3	0	0	0

Latitudinal Belt...: Low eutemperate

Continentalty.....: Hyperoceanic - High Subhyperoceanic

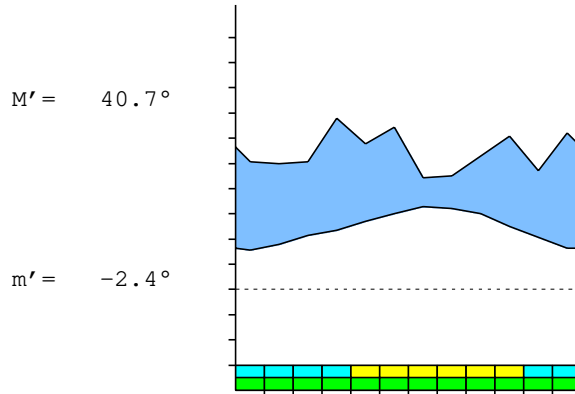
Bioclimate(Variant): TEMPERATE HYPEROCEANIC (SUBMEDITERRANEAN)

Bioclimatic Belt...: LOW MESOTEMPERATE LOW SUBHUMID

HOBART (AUSTRALIA)

54 m

P= 654 42° 53' S 147° 20' E 71/31 y.
 T= 12.2° Ic= 8.5 Tp= 1464 Tn= 0
 m= 4.4° M= 11.1° Itc= 277 Io= 4.5



TEMPERATE HYPEROCEANIC (SUBMEDITERRANEAN)
 LOW MESOTEMPERATE LOW SUBHUMID

WATER INDEX CARD

HOBART (AUSTRALIA)

Altitude: 54 m.

Latitude: 42° 53' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	7.8	24	51	27	88	24	0	0	0	1.1
Aug.	8.8	31	50	12	100	31	0	7	3	0.5
Sep.	10.6	43	51	0	100	43	0	8	6	0.1
Oct.	11.8	58	68	0	100	58	0	10	8	0.1
Nov.	13.6	72	58	-14	86	72	0	0	4	-0.1
Dec.	15.1	89	64	-25	61	89	0	0	2	-0.2
Jan.	16.3	96	44	-52	9	96	0	0	1	-0.5
Feb.	16.1	79	45	-9	0	54	24	0	1	-0.4
Mar.	15.1	72	53	0	0	53	19	0	0	-0.2
Apr.	12.4	49	61	12	12	49	0	0	0	0.2
May.	10.5	36	47	11	23	36	0	0	0	0.3
Jun.	8.3	24	62	38	61	24	0	0	0	1.5
Year	12.2	672	654	*	*	629	44	25	25	*

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

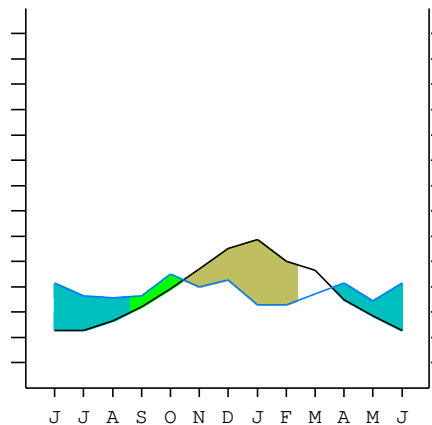
HOBART (AUSTRALIA)

42°53' S 147°20' E

54 m 71/31 y.

T= 12.2 Ic= 8.5 TEMPERATE HYPEROCEANIC (SUBMEDITERRANEAN)
 m= 4.4 Tp= 1464 LOW MESOTEMPERATE
 M= 11.1 Tn= 0 LOW SUBHUMID
 M' = 40.7 Itc= 277
 m' = -2.4 Io= 4.5
 P= 654 mm ———
 PE= 672 mm ———

Imbibing	19 Mar.
Saturation	19 Aug.
Reserve Use	13 Oct.
Deficit	9 Feb.



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [A3a]
 + Type: A. Hyperoceanic
 + Subtype: 3. Subhyperoceanic
 + Variant: a. High

Thermic types [B1.B4]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. Low eutemperate
 + Thermic type: B. Temperate
 + Thermic subtype: 4. Temperate

Bioclimatic types [C4b.3b.6b]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 4. HYPEROCEANIC
 + Bioclimatic variant .: b. SUBMEDITERRANEAN
 + Thermic type.....: 3. MESOTEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Texe (Sbm) .Mte.Shu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 325
 Coldest semester of the year.....(Psw): 329
 Warmest four months period of the year.....(Pcm1): 206
 Following warmest four months period.....(Pcm2): 221
 Positive precipitation dryest 3 months.....(Ppd): 142
 Positive precipitation dryest 2 months.....(Ppd2): 89
 Positive precipitation dryest 1 month.....(Ppd1): 44
 Positive precipitation warmest 3 months.....(Pps): 142
 Positive precipitation warmest 2 months.....(Pps2): 89
 Positive precipitation warmest 1 month.....(Pps1): 44
 Positive precipitation coldest 3 months.....(Ppw): 163
 Positive precipitation coldest 2 months.....(Ppw2): 113
 Positive precipitation coldest 1 month.....(Ppw1): 51

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	163	177	153	161

Seasonal rainfall rhythms: P > W > F > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 16.3
 Average coldest month [T].....(Tmin): 7.8
 Maximum temp. warmest month [M].....(Tmmax): 21.7
 Minimum temp. coldest month [m].....(Tmmin): 4.4
 Absolute Max.temp. warmest month [M'].....(Tamax): 40.7
 Absolute Min.temp. coldest month [m'].....(Tamin): -2.4
 First warmest contrasted month [M].....(Tcmax): 21.7 (1)
 First coldest contrasted month [m].....(Tcmin): 11.7 (1)
 Estival temperature.....(Ts): 475
 Positive temperature dryest 3 months.....(Tpd): 475
 Positive temperature dryest 2 months.....(Tpd2): 324
 Positive temperature dryest 1 month.....(Tpd1): 163
 Positive temperature warmest 3 months.....(Tps): 475
 Positive temperature warmest 2 months.....(Tps2): 324
 Positive temperature warmest 1 month.....(Tps1): 163
 Positive temperature coldest 3 months.....(Tpw): 249
 Positive temperature coldest 2 months.....(Tpw2): 161
 Positive temperature coldest 1 month.....(Tpw1): 78

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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): 1.03
 Mediterranean index of January.....(Im1): 2.17
 Mediterranean index of January & February.....(Im2): 1.96
 Mediterranean index of December to February...(Im3): 1.72

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	640	440	450	530	610	470	620	510	500	510	680	580
Tp	151	163	161	151	124	105	83	78	88	106	118	136
Io (Iom)	4.24	2.70	2.80	3.51	4.92	4.48	7.47	6.54	5.68	4.81	5.76	4.26
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	1530 / 475			1610 / 380			1630 / 249			1770 / 360		
Io (Iot)	3.221			4.237			6.546			4.917		
Semesters	December-May						June-November					
Pp(x10)/Tp	3140 / 855						3400 / 609					
Io (Iosm)	3.673						5.583					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 6540/1464=4.47 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	640	440	450	530	610	470	620	510	500	510	680	580
Tp [T*10]	151	163	161	151	124	105	83	78	88	106	118	136
Iom [Pp/Tp]	424	270	280	351	492	448	747	654	568	481	576	426
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	1530 / 475			1610 / 380			1630 / 249			1770 / 360		
Iot [Pp/Tp]	322			424			655			492		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	8.50
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		0.83
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		4.12
+ Hyperoceanic (-20<CI<20)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		0.56
+ Hyperoceanic (0<CI<0.6)		
Rainfall Index of Lang (1925) [R=P/T]		53.61
+ Semiarid (60>R>40)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		29.46
+ Subhumid (30>Ia>20)		
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]		144.84
+ Humid (Q>90)		
I of Dantin & Revenga (1940) [DR=100*T/P]		1.87
+ Humid (2>DR>0)		
Aridity Index of UNEP [I=P/PE]		0.97
+ Humid (I>0.65)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		7.07
+ Very low (K<60)		

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 4. Mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.18	0.19	0.24	0.30	0.24	0.35	0.28	0.27	0.26	0.34	0.27	0.29
T-E ratio	7.33	7.25	6.80	5.58	4.72	3.74	3.51	3.96	4.77	5.31	6.12	6.80
Precipitation-effectiveness: 32.09						Temperature-efficiency						65.88
Moisture Index [MI=100*(P-PE)/PE]												-2.72
+ C1.Subhumid dry (-33.3<MI<0)												
Index of dryness [DI=100*d/PE]												6.47
+ No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]												3.75
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												672.27
+ First mesothermic (570<PE<712)												

