

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

LITTLE AMERICA (ANTARCTICA TERR.) Altitude: 42 m.

Latitude: 78°11'S Longitude: 162°12'W
 Temperature observation period.: 1990-1994 (5)
 Rainfall observation period....: 1991-1994 (4)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	-6.94	-4.44	-9.44	5.56	-21.11	10.4	0.00
Feb.	-11.39	-7.78	-15.00	0.00	-37.78	33.8	0.00
Mar.	-22.78	-18.89	-26.67	-1.67	-46.67	41.4	0.00
Apr.	-28.34	-23.89	-32.78	-1.11	-50.00	19.8	0.00
May.	-29.44	-24.44	-34.44	-1.11	-52.78	27.2	0.00
Jun.	-29.17	-25.00	-33.33	-3.89	-51.11	21.3	0.00
Jul.	-34.45	-30.00	-38.89	-5.00	-56.67	16.8	0.00
Aug.	-36.95	-32.22	-41.67	-5.56	-61.11	12.2	0.00
Sep.	-33.06	-28.33	-37.78	-6.11	-58.33	23.4	0.00
Oct.	-25.28	-20.56	-30.00	-1.67	-47.22	21.1	0.00
Nov.	-14.45	-11.11	-17.78	-1.11	-36.67	12.2	0.00
Dec.	-5.56	-2.78	-8.33	3.89	-18.89	24.1	0.00
Year	-23.15	-19.12	-27.18	-1.48	-44.86	264	0.00

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-970
Compensated thermicity index.....(Itc):	-766
Simple continentality index.....(Ic):	31.4
Diurnality index.....(Id):	10.0
Annual ombrothermic index.....(Io):	No
Monthly estival ombrothermic index.....(Ios1):	No
Bimonthly estival ombrothermic index.....(Ios2):	No
Three monthly estival ombrothermic index.....(Ios3):	No
Four monthly estival ombrothermic index.....(Ios4):	No
Annual ombro-evaporation index.....(Ioe):	No
Annual positive temperature.....(Tp):	0
Annual negative temperature.....(Tn):	2778
Estival temperature.....(Ts):	0
Positive precipitation.....(Pp):	0

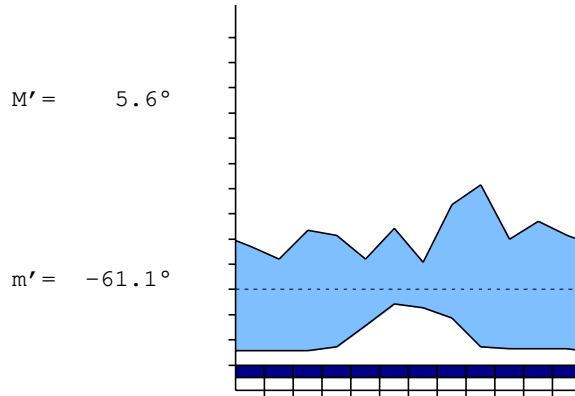
N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	0	0	0	0	12

Latitudinal Belt...: High polar
 Continentality.....: Continental - Low Eucontinental
 Bioclimate.....: Polar Hypogelid
 Bioclimatic Belt...: Upper Hypogelid Low-Snowy

LITTLE AMERICA (ANTARCTICA TERR.)

42 m

P= 264 78° 11'S 162° 12'W 5/4 y.
 T= -23.2° Ic= 31.4 Tp= 0 Tn= 2778
 m= -41.7° M= -32.2° Itc= -766 Io=9999.9



Polar Hypogelid
 Upper Hypogelid Low-Snowy

WATER INDEX CARD LITTLE AMERICA (ANTARCTICA TERR.)

Altitude: 42 m. Latitude: 78° 11'S

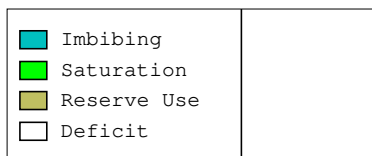
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-34.5	0	17	0	100	0	0	17	20	*
Aug.	-37.0	0	12	0	100	0	0	12	16	*
Sep.	-33.1	0	23	0	100	0	0	23	20	*
Oct.	-25.3	0	21	0	100	0	0	21	20	*
Nov.	-14.4	0	12	0	100	0	0	12	16	*
Dec.	-5.6	0	24	0	100	0	0	24	20	*
Jan.	-6.9	0	10	0	100	0	0	10	15	*
Feb.	-11.4	0	34	0	100	0	0	34	25	*
Mar.	-22.8	0	41	0	100	0	0	41	33	*
Apr.	-28.3	0	20	0	100	0	0	20	26	*
May.	-29.4	0	27	0	100	0	0	27	27	*
Jun.	-29.2	0	21	0	100	0	0	21	24	*
Year	-23.2	0	264	*	*	0	0	264	264	*

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

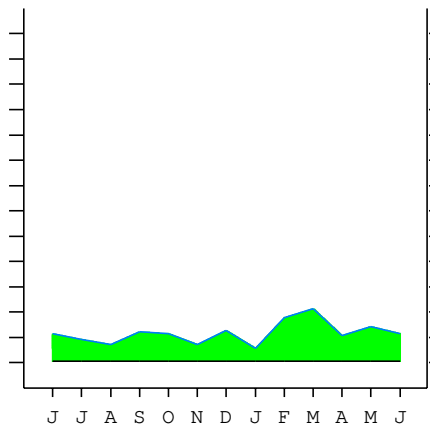
LITTLE AMERICA (ANTARCTICA TERR.)

78°11'S 162°12'W 42 m 5/4 y.

T= -23.2 Ic= 31.4 Polar Hypogelid
 m= -41.7 Tp= 0 Upper Hypogelid
 M= -32.2 Tn= 2778 Low-Snowy
 M' = 5.6 Itc= -766
 m' = -61.1 Io=9999.9
 P= 264 mm ———
 PE= 0 mm ———



All over the year,
 there is no hydric deficit



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C3a]
 + Type: C. Continental
 + Subtype: 3. Eucontinental
 + Variant: a. Low
 Thermic types [C2.D10]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. High polar
 + Thermic type: D. Gelid
 + Thermic subtype: 10. Hipergelid
 Bioclimatic types [E3.5.3]
 + Macrobioclimate: E. Polar
 + Bioclimate: 3. Hypogelid
 + Bioclimatic variant ..:
 + Thermic type.....: 5. Upper Hypogelid
 + Thermic subtype.....:
 + Ombrothermic type ...: 3. Low-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 143
 Coldest semester of the year.....(Psw): 121
 Warmest four months period of the year.....(Pcm1): 81
 Following warmest four months period.....(Pcm2): 110
 Positive precipitation dryest 3 months.....(Ppd): 0
 Positive precipitation dryest 2 months.....(Ppd2): 0
 Positive precipitation dryest 1 month.....(Ppd1): 0
 Positive precipitation warmest 3 months.....(Pps): 0
 Positive precipitation warmest 2 months.....(Pps2): 0
 Positive precipitation warmest 1 month.....(Pps1): 0
 Positive precipitation coldest 3 months.....(Ppw): 0
 Positive precipitation coldest 2 months.....(Ppw2): 0
 Positive precipitation coldest 1 month.....(Ppw1): 0

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	50	56	68	88

Seasonal rainfall rhythms: F > S > P > W

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): -5.6
 Average coldest month [T].....(Tmin): -37.0
 Maximum temp. warmest month [M].....(Tmmax): -2.8
 Minimum temp. coldest month [m].....(Tmmin): -41.7
 Absolute Max.temp. warmest month [M'].....(Tamax): 5.6
 Absolute Min.temp. coldest month [m'].....(Tamin): -61.1
 First warmest contrasted month [M].....(Tcmax): -24.4 (5)
 First coldest contrasted month [m].....(Tcmin): -34.4 (5)
 Estival temperature.....(Ts): 0
 Positive temperature dryest 3 months.....(Tpd): 0
 Positive temperature dryest 2 months.....(Tpd2): 0
 Positive temperature dryest 1 month.....(Tpd1): 0
 Positive temperature warmest 3 months.....(Tps): 0
 Positive temperature warmest 2 months.....(Tps2): 0
 Positive temperature warmest 1 month.....(Tps1): 0
 Positive temperature coldest 3 months.....(Tpw): 0
 Positive temperature coldest 2 months.....(Tpw2): 0
 Positive temperature coldest 1 month.....(Tpw1): 0

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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)												
Ultragelid...[M' <=0] (Pf)		o	o	o	o	o	o	o	o	o	o	
Hypergelid...[M <=0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
Gelid.....[T <=0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
Subgelid.....[m <=0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
Pregelid.....[m' <=0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
Agelid.....[m' > 0] (Pf)												
HiperAgelid..[all>0] (Pf)												

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.00
 Mediterranean index of January.....(Im1): 0.00
 Mediterranean index of January & February.....(Im2): 0.00
 Mediterranean index of December to February...(Im3): 0.00

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	*	*	*	*	*	*	*	*	*	*	*	*
Tp	*	*	*	*	*	*	*	*	*	*	*	*
Io (Iom)	*	*	*	*	*	*	*	*	*	*	*	*
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	*/*			*/*			*/*			*/*		
Io (Iot)	*			*			*			*		
Semesters	December-May						June-November					
Pp(x10)/Tp	*/*						*/*					
Io (Iosm)	*						*					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 0/0=9999.90 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	*	*	*	*	*	*	*	*	*	*	*	*
Tp [T*10]	*	*	*	*	*	*	*	*	*	*	*	*
Iom [Pp/Tp]	!!	!!	!!	!!	!!	!!	!!	!!	!!	!!	!!	!!
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	* / *			* / *			* / *			* / *		
Iot [Pp/Tp]	**			**			**			**		
Avs E[Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 31.39
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 34.12
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 39.39
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.16
 + Subcontinental (1.1<CI<1.7)
 Rainfall Index of Lang (1925) [R=P/T]: -11.39
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: -20.05
 +
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: -15.25
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]: -8.78
 +
 Aridity Index of UNEP [I=P/PE]: 0.00
 + Hyperarid (0.05>Im)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 6.50
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: C. Gelid
 + Region: 12. Criomeric (Gelid)
 + Thermic type: 10. Hipergelid

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.07	0.27	0.34	0.15	0.22	0.16	0.13	0.09	0.18	0.16	0.09	0.19
T-E ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Precipitation-effectiveness: 20.59						Temperature-efficiency: 0.00						
Moisture Index [MI=100*(P-PE)/PE]: 0.00											0.00	
+ C2.Subhumid humid (0<MI<20)												
Index of dryness [DI=100*d/PE]: 0.00											0.00	
+ No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 0.00											0.00	
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE: 0.00											0.00	
+ Ice climate (PE<142)												

