

Phytosociological Research Center

www.globalbioclimatics.org

Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

EIGHTS STATION (ANTARCTICA TERR.) Altitude: 421 m.

Latitude: 75°14'S Longitude: 77°10'W
 Temperature observation period.: 1991-1994 (4)
 Rainfall observation period....: 1991-1994 (4)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	-10.28	-7.78	-12.78	1.11	-22.78	30.7	0.00
Feb.	-18.34	-15.56	-21.11	-1.67	-32.78	39.1	0.00
Mar.	-25.00	-21.67	-28.33	-2.22	-41.67	40.1	0.00
Apr.	-31.11	-27.78	-34.44	-6.67	-46.67	14.7	0.00
May.	-33.06	-28.89	-37.22	-9.44	-49.44	52.8	0.00
Jun.	-33.61	-28.89	-38.33	-1.11	-50.56	38.9	0.00
Jul.	-33.89	-30.00	-37.78	-9.44	-52.22	32.8	0.00
Aug.	-37.50	-33.33	-41.67	-13.33	-60.00	12.4	0.00
Sep.	-34.17	-30.00	-38.33	-8.33	-51.67	33.3	0.00
Oct.	-28.89	-25.56	-32.22	-3.33	-56.11	21.8	0.00
Nov.	-17.23	-13.89	-20.56	-4.44	-31.11	14.2	0.00
Dec.	-11.67	-8.33	-15.00	2.22	-28.33	20.8	0.00
Year	-26.23	-22.64	-29.81	-4.72	-43.61	352	0.00

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-1012
Compensated thermicity index.....(Itc):	-904
Simple continentality index.....(Ic):	27.2
Diurnality index.....(Id):	9.4
Annual ombrothermic index.....(Io):	No
Monthly estival ombrothermic index.....(Ios1):	No
Bimonthly estival ombrothermic index.....(Ios2):	No
Threemonthly estival ombrothermic index.....(Ios3):	No
Fourmonthly estival ombrothermic index.....(Ios4):	No
Annual ombro-evaporation index.....(Ioe):	No
Annual positive temperature.....(Tp):	0
Annual negative temperature.....(Tn):	3148
Estival temperature.....(Ts):	0
Positive precipitation.....(Pp):	0

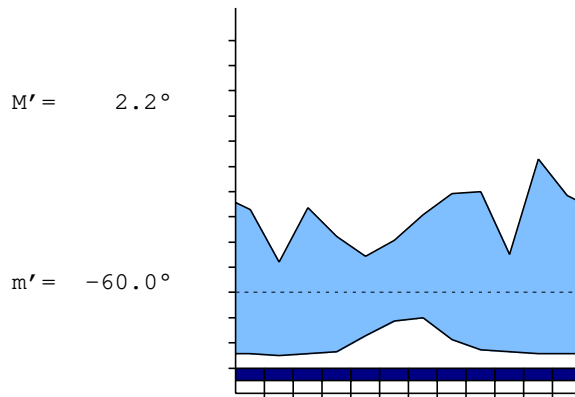
N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	0	0	0	0	12

Latitudinal Belt...: Low polar
 Continentality.....: Continental - High Subcontinental
 Bioclimate.....: Polar Hypergelid
 Bioclimatic Belt...: Lower Hypergelid Low-Snowy

EIGHTS STATION (ANTARCTICA TERR.)

421 m

P= 352 75° 14'S 77° 10'W 4/4 y.
 T= -26.2° Ic= 27.2 Tp= 0 Tn= 3148
 m= -41.7° M= -33.3° Itc= -904 Io=9999.9



Polar Hypergelid
 Lower Hypergelid Low-Snowy

WATER INDEX CARD EIGHTS STATION (ANTARCTICA TERR.)

Altitude: 421 m. Latitude: 75° 14'S

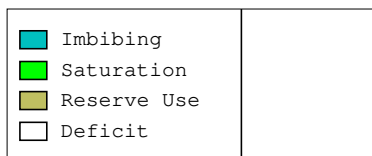
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-33.9	0	33	0	100	0	0	33	36	*
Aug.	-37.5	0	12	0	100	0	0	12	24	*
Sep.	-34.2	0	33	0	100	0	0	33	29	*
Oct.	-28.9	0	22	0	100	0	0	22	25	*
Nov.	-17.2	0	14	0	100	0	0	14	20	*
Dec.	-11.7	0	21	0	100	0	0	21	20	*
Jan.	-10.3	0	31	0	100	0	0	31	25	*
Feb.	-18.3	0	39	0	100	0	0	39	32	*
Mar.	-25.0	0	40	0	100	0	0	40	36	*
Apr.	-31.1	0	15	0	100	0	0	15	25	*
May.	-33.1	0	53	0	100	0	0	53	39	*
Jun.	-33.6	0	39	0	100	0	0	39	39	*
Year	-26.2	0	352	*	*	0	0	352	352	*

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

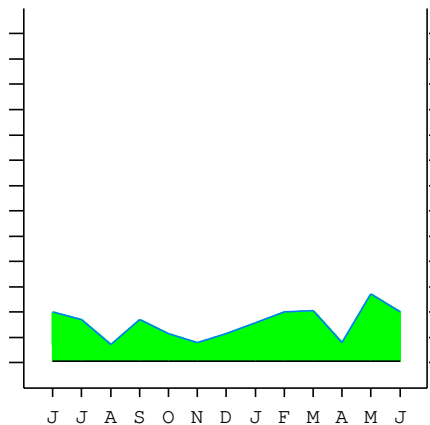
EIGHTS STATION (ANTARCTICA TERR.)

75°14'S 77°10'W 421 m 4/4 y.

T= -26.2 Ic= 27.2 Polar Hypergelid
 m= -41.7 Tp= 0 Lower Hypergelid
 M= -33.3 Tn= 3148 Low-Snowy
 M' = 2.2 Itc= -904
 m' = -60.0 Io=9999.9
 P= 352 mm ———
 PE= 0 mm ———



All over the year,
 there is no hydric deficit



EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C2b]
 + Type: C. Continental
 + Subtype: 2. Subcontinental
 + Variant: b. High
 Thermic types [C2.D10]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. Low polar
 + Thermic type: D. Gelid
 + Thermic subtype: 10. Hipergelid
 Bioclimatic types [E4.6.3]
 + Macrobioclimate: E. Polar
 + Bioclimate: 4. Hypergelid
 + Bioclimatic variant ..:
 + Thermic type.....: 6. Lower Hypergelid
 + Thermic subtype.....:
 + Ombrothermic type ...: 3. Low-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 167
 Coldest semester of the year.....(Psw): 185
 Warmest four months period of the year.....(Pcm1): 105
 Following warmest four months period.....(Pcm2): 147
 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	84	69	90	107

Seasonal rainfall rhythms: F > S > W > P

EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 m

TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): -10.3
 Average coldest month [T].....(Tmin): -37.5
 Maximum temp. warmest month [M].....(Tmmax): -7.8
 Minimum temp. coldest month [m].....(Tmmin): -41.7
 Absolute Max.temp. warmest month [M'].....(Tamax): 2.2
 Absolute Min.temp. coldest month [m'].....(Tamin): -60.0
 First warmest contrasted month [M].....(Tcmax): -28.9 (6)
 First coldest contrasted month [m].....(Tcmin): -38.3 (6)
 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

EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 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)												
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)												

EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 m

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			Automn			Winter			Spring		
Pp(x10)/Tp	*/*			*/*			*/*			*/*		
Io (Iot)	*			*			*			*		
Semesters	December-May						June-November					
Pp(x10)/Tp	*/*						*/*					
Io (Iosm)	*						*					

EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 m

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			Automn			Winter			Spring		
Pp / Tp	* / *			* / *			* / *			* / *		
Iot [Pp/Tp]	**			**			**			**		
Avs E[Avm<200]	***			***			***			***		

EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 m

BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 27.22
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 27.45
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 32.43
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.04
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: -13.40
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: -21.66
 +
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: -20.98
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]: -7.46
 +
 Aridity Index of UNEP [I=P/PE]: 0.00
 + Hyperarid (0.05>Im)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 7.93
 + Very low (K<60)

EIGHTS STATION (ANTARCTICA TERR.)

Latitude: 75°14'S Longitude: 77°10'W Altitude: 421 m

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	0.25	0.32	0.33	0.11	0.45	0.32	0.27	0.09	0.27	0.17	0.10	0.16
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: 28.38						Temperature-efficiency: 0.00						
Moisture Index [MI=100*(P-PE)/PE]: 0.00 + C2.Subhumid humid (0<MI<20)												
Index of dryness [DI=100*d/PE]: 0.00 + No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 0.00 + No surplus (0<HI<10)												
Potential Evapotranspiration PE: 0.00 + Ice climate (PE<142)												

