

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

BYRD STATION (ANTARCTICA TERR.)

Altitude: 1553 m.

Latitude: 80°1'S Longitude: 119°32'W

Temperature observation period.: 1988-1994 (7)

Rainfall observation period....: 1988-1994 (7)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	-15.56	-12.22	-18.89	-0.56	-29.44	10.4	0.00
Feb.	-20.00	-16.11	-23.89	-3.33	-38.89	9.4	0.00
Mar.	-29.17	-24.44	-33.89	-11.11	-53.33	5.1	0.00
Apr.	-29.17	-23.89	-34.44	-7.22	-55.56	7.6	0.00
May.	-33.33	-28.33	-38.33	-6.67	-55.00	10.2	0.00
Jun.	-34.45	-28.89	-40.00	-14.44	-59.44	11.9	0.00
Jul.	-37.23	-31.67	-42.78	-13.89	-63.33	17.8	0.00
Aug.	-37.22	-32.22	-42.22	-13.33	-62.22	16.5	0.00
Sep.	-34.73	-30.56	-38.89	-15.56	-53.89	8.4	0.00
Oct.	-31.11	-26.11	-36.11	-11.11	-58.33	17.5	0.00
Nov.	-22.50	-18.33	-26.67	-4.44	-41.11	0.5	0.00
Dec.	-15.00	-11.67	-18.33	-2.78	-30.00	8.6	0.00
Year	-28.29	-23.70	-32.87	-8.70	-50.04	124	0.00

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-1027
Compensated thermicity index.....(Itc):	-994
Simple continentality index.....(Ic):	22.2
Diurnality index.....(Id):	11.1
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):	3395
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

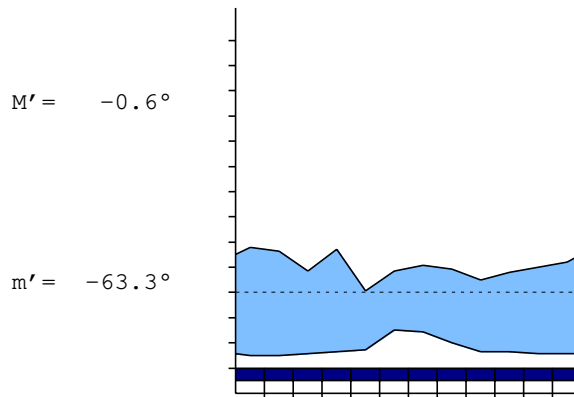
Latitudinal Belt...: High polar

Continentality.....: Continental - Low Subcontinental

Bioclimate.....: Polar Hypergelid

Bioclimatic Belt...: Lower Hypergelid Scanty-Snowy

BYRD STATION (ANTARCTICA TERR.) 1553 m
 P= 124 80° 1'S 119° 32'W 7/7 y.
 T= -28.3° Ic= 22.2 Tp= 0 Tn= 3395
 m= -42.8° M= -31.7° Itc= -994 Io=9999.9



Polar Hypergelid
 Lower Hypergelid Scanty-Snowy

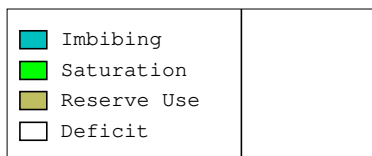
WATER INDEX CARD BYRD STATION (ANTARCTICA TERR.)
 Altitude: 1553 m. Latitude: 80° 1'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-37.2	0	18	0	100	0	0	18	14	*
Aug.	-37.2	0	17	0	100	0	0	17	15	*
Sep.	-34.7	0	8	0	100	0	0	8	12	*
Oct.	-31.1	0	18	0	100	0	0	18	15	*
Nov.	-22.5	0	1	0	100	0	0	1	8	*
Dec.	-15.0	0	9	0	100	0	0	9	8	*
Jan.	-15.6	0	10	0	100	0	0	10	9	*
Feb.	-20.0	0	9	0	100	0	0	9	9	*
Mar.	-29.2	0	5	0	100	0	0	5	7	*
Apr.	-29.2	0	8	0	100	0	0	8	7	*
May.	-33.3	0	10	0	100	0	0	10	9	*
Jun.	-34.5	0	12	0	100	0	0	12	10	*
Year	-28.3	0	124	*	*	0	0	124	124	*

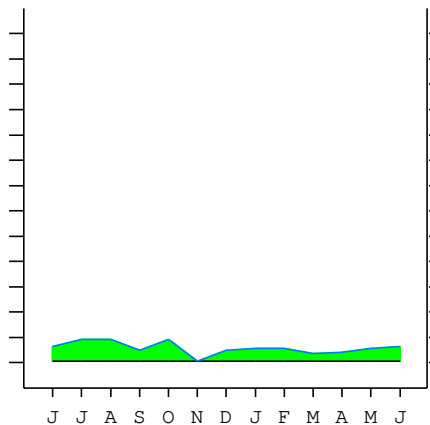
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

BYRD STATION (ANTARCTICA TERR.)
 80°1'S 119°32'W 1553 m 7/7 y.

T= -28.3 Ic= 22.2 Polar Hypergelid
 m= -42.8 Tp= 0 Lower Hypergelid
 M= -31.7 Tn= 3395 Scanty-Snowy
 M' = -0.6 Itc= -994
 m' = -63.3 Io=9999.9
 P= 124 mm
 PE= 0 mm



All over the year,
 there is no hydric deficit



BYRD STATION (ANTARCTICA TERR.)

Latitude: 80°1'S Longitude: 119°32'W Altitude: 1553 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C2a]
 + Type: C. Continental
 + Subtype: 2. Subcontinental
 + Variant: a. Low
 Thermic types [C2.D11]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. High polar
 + Thermic type: D. Gelid
 + Thermic subtype: 11. Ultragelid
 Bioclimatic types [E4.6.2]
 + Macrobioclimate: E. Polar
 + Bioclimate: 4. Hypergelid
 + Bioclimatic variant ..:
 + Thermic type.....: 6. Lower Hypergelid
 + Thermic subtype.....:
 + Ombrothermic type ...: 2. Scanty-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 42
 Coldest semester of the year.....(Psw): 82
 Warmest four months period of the year.....(Pcm1): 29
 Following warmest four months period.....(Pcm2): 35
 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	46	26	28	22

Seasonal rainfall rhythms: W > S > P > F

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): -15.0
 Average coldest month [T].....(Tmin): -37.2
 Maximum temp. warmest month [M].....(Tmmax): -11.7
 Minimum temp. coldest month [m].....(Tmmin): -42.8
 Absolute Max.temp. warmest month [M'].....(Tamax): -0.6
 Absolute Min.temp. coldest month [m'].....(Tamin): -63.3
 First warmest contrasted month [M].....(Tcmax): -28.9 (6)
 First coldest contrasted month [m].....(Tcmin): -40.0 (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

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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	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): 22.23
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 17.97
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 23.79
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.80
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: -4.38
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: -6.77
 +
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: -7.31
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]: -22.83
 +
 Aridity Index of UNEP [I=P/PE]: 0.00
 + Hyperarid (0.05>Im)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 2.56
 + 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: 11. Ultragelid

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.07	0.07	0.03	0.05	0.07	0.09	0.13	0.12	0.06	0.13	0.00	0.06
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: 8.95						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)												

