

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

VOSTOK 2 (ANTARCTICA TERR.)

Altitude: 3420 m.

Latitude: 78°27'S Longitude: 106°52'E

Temperature observation period.: 1991-1994 (4)

Rainfall observation period....: 1992-1994 (3)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	-35.00	-30.00	-40.00	-22.22	-47.78	0.5	0.00
Feb.	-44.72	-39.44	-50.00	-25.00	-63.89	1.0	0.00
Mar.	-55.00	-51.11	-58.89	-37.78	-75.00	7.1	0.00
Apr.	-63.06	-59.44	-66.67	-43.33	-73.33	4.3	0.00
May.	-63.61	-60.00	-67.22	-42.78	-78.33	8.4	0.00
Jun.	-67.22	-63.89	-70.56	-47.22	-81.11	12.4	0.00
Jul.	-67.22	-63.33	-71.11	-43.89	-82.78	5.8	0.00
Aug.	-70.84	-66.67	-75.00	-52.22	-88.33	5.3	0.00
Sep.	-67.78	-63.33	-72.22	-44.44	-82.22	4.8	0.00
Oct.	-59.44	-54.44	-64.44	-40.56	-75.56	1.8	0.00
Nov.	-44.72	-39.44	-50.00	-33.33	-58.89	0.5	0.00
Dec.	-33.33	-28.33	-38.33	-25.56	-47.78	0.8	0.00
Year	-55.99	-51.62	-60.37	-38.19	-71.25	53	0.00

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-1977
Compensated thermicity index.....(Itc):	-1619
Simple continentality index.....(Ic):	37.5
Diurnality index.....(Id):	10.6
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):	6719
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

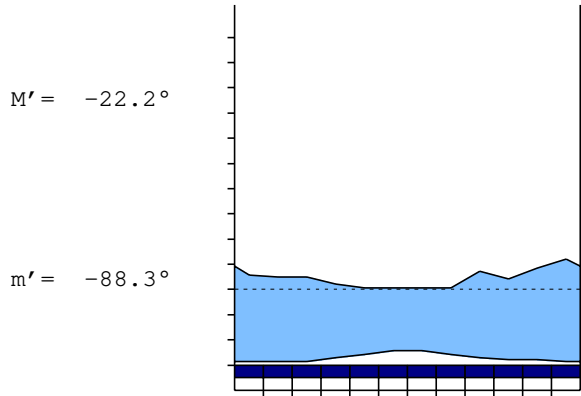
Latitudinal Belt...: High polar

Continentality.....: Continental - High Eucontinental

Bioclimate.....: Polar Ultragelid

Bioclimatic Belt...: Upper Ultragelid Scanty-Snowy

VOSTOK 2 (ANTARCTICA TERR.) 3420 m
 P= 53 78° 27'S 106° 52'E 4/3 y.
 T= -56.0° Ic= 37.5 Tp= 0 Tn= 6719
 m= -75.0° M= -66.7° Itc= -1619 Io=9999.9



Polar Ultragelid
 Upper Ultragelid Scanty-Snowy

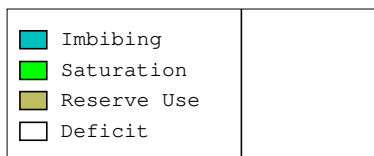
WATER INDEX CARD VOSTOK 2 (ANTARCTICA TERR.)
 Altitude: 3420 m. Latitude: 78° 27'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-67.2	0	6	0	100	0	0	6	8	*
Aug.	-70.8	0	5	0	100	0	0	5	6	*
Sep.	-67.8	0	5	0	100	0	0	5	6	*
Oct.	-59.4	0	2	0	100	0	0	2	4	*
Nov.	-44.7	0	1	0	100	0	0	1	2	*
Dec.	-33.3	0	1	0	100	0	0	1	1	*
Jan.	-35.0	0	1	0	100	0	0	1	1	*
Feb.	-44.7	0	1	0	100	0	0	1	1	*
Mar.	-55.0	0	7	0	100	0	0	7	4	*
Apr.	-63.1	0	4	0	100	0	0	4	4	*
May.	-63.6	0	8	0	100	0	0	8	6	*
Jun.	-67.2	0	12	0	100	0	0	12	9	*
Year	-56.0	0	53	*	*	0	0	53	53	*

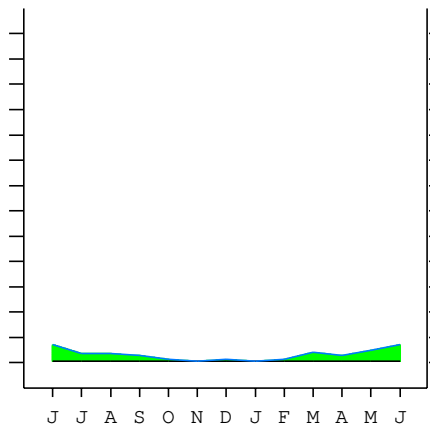
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

VOSTOK 2 (ANTARCTICA TERR.) 78°27'S 106°52'E 3420 m 4/3 y.

T= -56.0 Ic= 37.5 Polar Ultragelid
 m= -75.0 Tp= 0 Upper Ultragelid
 M= -66.7 Tn= 6719 Scanty-Snowy
 M' = -22.2 Itc= -1619
 m' = -88.3 Io=9999.9
 P= 53 mm
 PE= 0 mm



All over the year,
 there is no hydric deficit



VOSTOK 2 (ANTARCTICA TERR.)

Latitude: 78°27'S Longitude: 106°52'E Altitude: 3420 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C3b]
 + Type: C. Continental
 + Subtype: 3. Eucontinental
 + Variant: b. High

Thermic types [C2.D11]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. High polar
 + Thermic type: D. Gelid
 + Thermic subtype: 11. Ultragelid

Bioclimatic types [E5.7.2]
 + Macrobioclimate: E. Polar
 + Bioclimate: 5. Ultragelid
 + Bioclimatic variant ..:
 + Thermic type.....: 7. Upper Ultragelid
 + Thermic subtype.....:
 + Ombrothermic type ...: 2. Scanty-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 12
 Coldest semester of the year.....(Psw): 41
 Warmest four months period of the year.....(Pcm1): 3
 Following warmest four months period.....(Pcm2): 32
 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	23	7	2	19

Seasonal rainfall rhythms: W > F > P > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): -33.3
 Average coldest month [T].....(Tmin): -70.8
 Maximum temp. warmest month [M].....(Tmmax): -28.3
 Minimum temp. coldest month [m].....(Tmmin): -75.0
 Absolute Max.temp. warmest month [M'].....(Tamax): -22.2
 Absolute Min.temp. coldest month [m'].....(Tamin): -88.3
 First warmest contrasted month [M].....(Tcmax): -39.4 (2)
 First coldest contrasted month [m].....(Tcmin): -50.0 (2)
 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): 37.51
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 44.68
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 49.79
 + Subcontinental (40<CI<60)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.38
 + Subcontinental (1.1<CI<1.7)
 Rainfall Index of Lang (1925) [R=P/T]: -0.94
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: -1.15
 +
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: -1.09
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]:-106.25
 +
 Aridity Index of UNEP [I=P/PE]: 0.00
 + Hyperarid (0.05>Im)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 2.92
 + 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	0.00	0.01	0.05	0.03	0.06	0.09	0.04	0.04	0.03	0.01	0.00	0.00
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: 3.55						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)												

