

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

KOMSOMOLSKAYA (ANTARCTICA TERR.) Altitude: 3540 m.

Latitude: 74°5'S Longitude: 97°29'E
 Temperature observation period.: 1991-1994 (4)
 Rainfall observation period....: 1993-1994 (2)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	-32.50	-27.22	-37.78	-22.22	-47.78	0.8	0.00
Feb.	-45.56	-39.44	-51.67	-25.56	-60.56	1.0	0.00
Mar.	-53.06	-48.33	-57.78	-30.00	-63.33	2.0	0.00
Apr.	-56.39	-52.78	-60.00	-36.11	-68.33	9.4	0.00
May.	-61.11	-58.89	-63.33	-28.33	-73.89	5.6	0.00
Jun.	-66.11	-63.33	-68.89	-51.11	-74.44	8.9	0.00
Jul.	-60.56	-54.44	-66.67	-40.56	-76.11	3.6	0.00
Aug.	-66.39	-61.11	-71.67	-46.67	-80.56	3.8	0.00
Sep.	-62.23	-57.78	-66.67	-45.56	-77.22	4.1	0.00
Oct.	-55.83	-49.44	-62.22	-41.67	-76.11	4.1	0.00
Nov.	-42.23	-35.56	-48.89	-28.33	-60.56	3.6	0.00
Dec.	-33.61	-27.22	-40.00	-19.44	-46.67	0.8	0.00
Year	-52.96	-47.96	-57.96	-34.63	-67.13	48	0.00

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It): -1857
 Compensated thermicity index.....(Itc): -1590
 Simple continentality index.....(Ic): 33.9
 Diurnality index.....(Id): 13.3
 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): 6356
 Estival temperature.....(Ts): 0
 Positive precipitation.....(Pp): 0

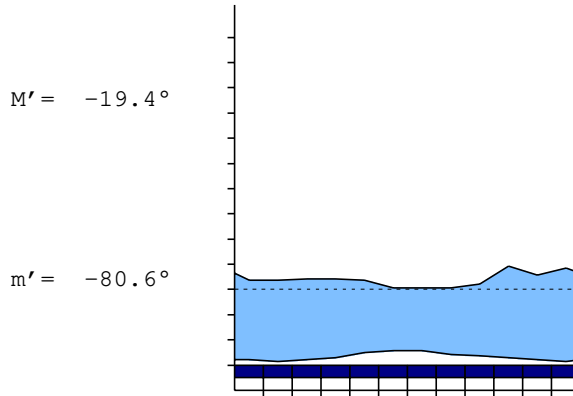
N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	0	0	0	0	12

Latitudinal Belt...: Low polar
 Continentality.....: Continental - Low Eucontinental
 Bioclimate.....: Polar Ultragelid
 Bioclimatic Belt...: Lower Ultragelid Un-Snowy

KOMSOMOLSKAYA (ANTARCTICA TERR.)

3540 m

P= 48 74° 5'S 97° 29'E 4/2 y.
 T= -53.0° Ic= 33.9 Tp= 0 Tn= 6356
 m= -71.7° M= -61.1° Itc= -1590 Io=9999.9



Polar Ultragelid
 Lower Ultragelid Un-Snowy

WATER INDEX CARD KOMSOMOLSKAYA (ANTARCTICA TERR.)

Altitude: 3540 m. Latitude: 74° 5'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-60.6	0	4	4	99	0	0	0	4	*
Aug.	-66.4	0	4	1	100	0	0	3	3	*
Sep.	-62.2	0	4	0	100	0	0	4	4	*
Oct.	-55.8	0	4	0	100	0	0	4	4	*
Nov.	-42.2	0	4	0	100	0	0	4	4	*
Dec.	-33.6	0	1	0	100	0	0	1	2	*
Jan.	-32.5	0	1	0	100	0	0	1	2	*
Feb.	-45.6	0	1	0	100	0	0	1	1	*
Mar.	-53.1	0	2	0	100	0	0	2	2	*
Apr.	-56.4	0	9	0	100	0	0	9	6	*
May.	-61.1	0	6	0	100	0	0	6	6	*
Jun.	-66.1	0	9	0	100	0	0	9	7	*
Year	-53.0	0	48	*	*	0	0	43	43	*

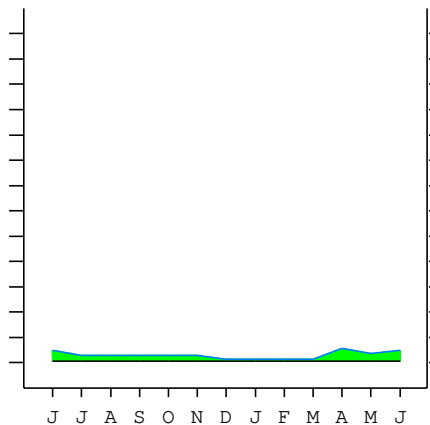
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

KOMSOMOLSKAYA (ANTARCTICA TERR.)

74°5'S 97°29'E 3540 m 4/2 y.

T= -53.0 Ic= 33.9 Polar Ultragelid
 m= -71.7 Tp= 0 Lower Ultragelid
 M= -61.1 Tn= 6356 Un-Snowy
 M' = -19.4 Itc= -1590
 m' = -80.6 Io=9999.9
 P= 48 mm
 PE= 0 mm

Imbibing	8 Aug.
Saturation	
Reserve Use	
Deficit	



KOMSOMOLSKAYA (ANTARCTICA TERR.)

Latitude: 74°5'S Longitude: 97°29'E Altitude: 3540 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C3a]
 + Type: C. Continental
 + Subtype: 3. Eucontinental
 + Variant: a. Low
 Thermic types [C2.D11]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. Low polar
 + Thermic type: D. Gelid
 + Thermic subtype: 11. Ultragelid
 Bioclimatic types [E5.7.1]
 + Macrobioclimate: E. Polar
 + Bioclimate: 5. Ultragelid
 + Bioclimatic variant ..:
 + Thermic type.....: 7. Lower Ultragelid
 + Thermic subtype.....:
 + Ombrothermic type ...: 1. Un-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

KOMSOMOLSKAYA (ANTARCTICA TERR.)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 12
 Coldest semester of the year.....(Psw): 35
 Warmest four months period of the year.....(Pcm1): 6
 Following warmest four months period.....(Pcm2): 26
 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	16	11	2	17

Seasonal rainfall rhythms: F > W > P > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): -32.5
 Average coldest month [T].....(Tmin): -66.4
 Maximum temp. warmest month [M].....(Tmmax): -27.2
 Minimum temp. coldest month [m].....(Tmmin): -71.7
 Absolute Max.temp. warmest month [M'].....(Tamax): -19.4
 Absolute Min.temp. coldest month [m'].....(Tamin): -80.6
 First warmest contrasted month [M].....(Tcmax): -35.6 (11)
 First coldest contrasted month [m].....(Tcmin): -48.9 (11)
 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): 33.89
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 39.51
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 43.92
 + Subcontinental (40<CI<60)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.32
 + Subcontinental (1.1<CI<1.7)
 Rainfall Index of Lang (1925) [R=P/T]: -0.90
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: -1.11
 +
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: -1.09
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]:-111.04
 +
 Aridity Index of UNEP [I=P/PE]: 0.00
 + Hyperarid (0.05>Im)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 1.85
 + 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	0.01	0.07	0.04	0.06	0.02	0.02	0.03	0.03	0.02	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: 3.14						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)												

