

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

OASIS (ANTARCTICA TERR.)

Altitude: 28 m.

Latitude: 66°18'S Longitude: 100°43'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.	1.94	4.44	-0.56	10.00	-7.78	3.0	212.33
Feb.	-2.22	0.56	-5.00	6.67	-14.44	3.0	0.00
Mar.	-5.84	-2.78	-8.89	2.78	-17.78	14.0	0.00
Apr.	-7.50	-4.44	-10.56	1.67	-22.78	5.1	0.00
May.	-11.11	-7.22	-15.00	5.00	-31.11	31.0	0.00
Jun.	-20.56	-16.67	-24.44	1.67	-35.56	9.9	0.00
Jul.	-16.95	-12.22	-21.67	-2.22	-42.78	27.9	0.00
Aug.	-16.39	-12.22	-20.56	-2.78	-38.89	29.0	0.00
Sep.	-16.11	-12.22	-20.00	-2.22	-36.67	69.1	0.00
Oct.	-11.11	-7.78	-14.44	1.67	-30.56	13.0	0.00
Nov.	-4.17	-0.56	-7.78	9.44	-13.33	1.0	0.00
Dec.	1.11	3.89	-1.67	11.67	-5.56	9.9	174.37
Year	-9.08	-5.60	-12.55	3.61	-24.77	216	386.70

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-502
Compensated thermicity index.....(Itc):	-464
Simple continentality index.....(Ic):	22.5
Diurnality index.....(Id):	9.4
Annual ombrothermic index.....(Io):	4.23
Monthly estival ombrothermic index.....(Ios1):	1.55
Bimonthly estival ombrothermic index.....(Ios2):	4.23
Threemonthly estival ombrothermic index.....(Ios3):	19.16
Fourmonthly estival ombrothermic index.....(Ios4):	No
Annual ombro-evaporation index.....(Ioe):	0.20
Annual positive temperature.....(Tp):	31
Annual negative temperature.....(Tn):	1120
Estival temperature.....(Ts):	8
Positive precipitation.....(Pp):	13

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	1	0	1	0	10

Latitudinal Belt...: Low polar

Continentality.....: Continental - Low Subcontinental

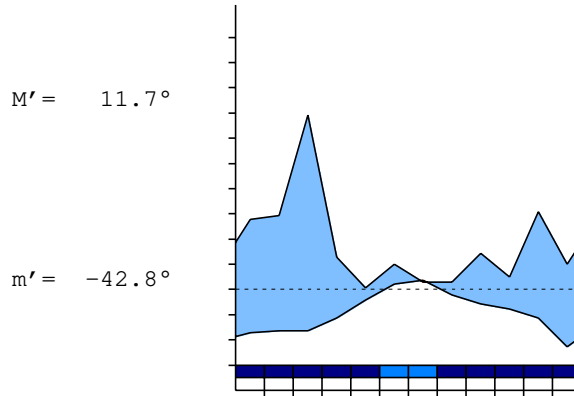
Bioclimate.....: Polar Suprapolar

Bioclimatic Belt...: Upper Suprapolar Low-Snowy

OASIS (ANTARCTICA TERR.)

28 m

P= 216 66° 18' S 100° 43' E 4/3 y.
 T= -9.1° Ic= 22.5 Tp= 31 Tn= 1120
 m= -24.4° M= -16.7° Itc= -464 Io= 4.2



Polar Suprapolar
 Upper Suprapolar Low-Snowy

WATER INDEX CARD OASIS (ANTARCTICA TERR.)
 Altitude: 28 m. Latitude: 66° 18' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-17.0	0	28	28	91	0	0	0	0	*
Aug.	-16.4	0	29	9	100	0	0	20	10	*
Sep.	-16.1	0	69	0	100	0	0	69	40	*
Oct.	-11.1	0	13	0	100	0	0	13	26	*
Nov.	-4.2	0	1	0	100	0	0	1	14	*
Dec.	1.1	174	10	-100	0	110	64	0	7	-0.9
Jan.	1.9	212	3	0	0	3	209	0	3	-0.9
Feb.	-2.2	0	3	3	3	0	0	0	2	*
Mar.	-5.8	0	14	14	17	0	0	0	1	*
Apr.	-7.5	0	5	5	22	0	0	0	0	*
May.	-11.1	0	31	31	53	0	0	0	0	*
Jun.	-20.6	0	10	10	63	0	0	0	0	*
Year	-9.1	387	216	*	*	113	274	103	103	*

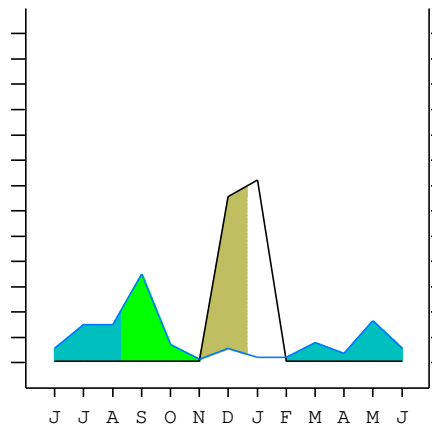
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

OASIS (ANTARCTICA TERR.)

66°18' S 100°43' E 28 m 4/3 y.

T= -9.1 Ic= 22.5 Polar Suprapolar
 m= -24.4 Tp= 31 Upper Suprapolar
 M= -16.7 Tn= 1120 Low-Snowy
 M' = 11.7 Itc= -464
 m' = -42.8 Io= 4.2
 P= 216 mm ———
 PE= 387 mm ———

Imbibing	30 Jan.
Saturation	10 Aug.
Reserve Use	1 Nov.
Deficit	19 Dec.



OASIS (ANTARCTICA TERR.)

Latitude: 66°18'S Longitude: 100°43'E Altitude: 28 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C2a]
 + Type: C. Continental
 + Subtype: 2. Subcontinental
 + Variant: a. Low

Thermic types [C2.D8]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. Low polar
 + Thermic type: D. Gelid
 + Thermic subtype: 8. Ultramicrothermic

Bioclimatic types [E2.4.3]
 + Macrobioclimate: E. Polar
 + Bioclimate: 2. Suprapolar
 + Bioclimatic variant ..:
 + Thermic type.....: 4. Upper Suprapolar
 + Thermic subtype.....:
 + Ombrothermic type ...: 3. Low-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 36
 Coldest semester of the year.....(Psw): 180
 Warmest four months period of the year.....(Pcm1): 17
 Following warmest four months period.....(Pcm2): 60
 Positive precipitation dryest 3 months.....(Ppd): 13
 Positive precipitation dryest 2 months.....(Ppd2): 3
 Positive precipitation dryest 1 month.....(Ppd1): 0
 Positive precipitation warmest 3 months.....(Pps): 13
 Positive precipitation warmest 2 months.....(Pps2): 13
 Positive precipitation warmest 1 month.....(Pps1): 3
 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	66	83	15	50

Seasonal rainfall rhythms: P > W > F > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 1.9
 Average coldest month [T].....(Tmin): -20.6
 Maximum temp. warmest month [M].....(Tmmax): 4.4
 Minimum temp. coldest month [m].....(Tmmin): -24.4
 Absolute Max.temp. warmest month [M'].....(Tamax): 11.7
 Absolute Min.temp. coldest month [m'].....(Tamin): -42.8
 First warmest contrasted month [M].....(Tcmax): -12.2 (7)
 First coldest contrasted month [m].....(Tcmin): -21.7 (7)
 Estival temperature.....(Ts): 8
 Positive temperature dryest 3 months.....(Tpd): 31
 Positive temperature dryest 2 months.....(Tpd2): 19
 Positive temperature dryest 1 month.....(Tpd1): 0
 Positive temperature warmest 3 months.....(Tps): 31
 Positive temperature warmest 2 months.....(Tps2): 31
 Positive temperature warmest 1 month.....(Tps1): 19
 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			
Hypergelid...[M <=0] (Pf)			o	o	o	o	o	o	o	o	o	
Gelid.....[T <=0] (Pf)		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): 1.79
 Mediterranean index of January.....(Im1): 70.78
 Mediterranean index of January & February.....(Im2): 35.39
 Mediterranean index of December to February...(Im3): 24.32

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	99	30	*	*	*	*	*	*	*	*	*	*
Tp	11	19	*	*	*	*	*	*	*	*	*	*
Io (Iom)	8.92	1.55	*	*	*	*	*	*	*	*	*	*
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]: 129/31=4.23 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	99	30	*	*	*	*	*	*	*	*	*	*
Tp [T*10]	11	19	*	*	*	*	*	*	*	*	*	*
Iom [Pp/Tp]	892	155	!!	!!	!!	!!	!!	!!	!!	!!	!!	!!
Avm [200-Iom]	***	45	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	* / *			* / *			* / *			* / *		
Iot [Pp/Tp]	**			**			**			**		
Avs E[Avm<200]	***			***			***			***		
Strong upper semiarid [1]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 22.50
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 21.37
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 25.37
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.97
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: -23.79
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 233.62
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: -37.38
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]: -4.20
 +
 Aridity Index of UNEP [I=P/PE]: 0.56
 + Subhumid - dry (0.65>I>0.5)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 22.12
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: B. Cold and temperate cold
 + Region: 10. Psicroxeroteric (Submediterranean)
 + Thermic type: 8. Ultramicrothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.02	0.02	0.10	0.03	0.25	0.07	0.22	0.23	0.61	0.09	0.01	0.06
T-E ratio	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.50
Precipitation-effectiveness: 17.11						Temperature-efficiency: 1.37						
Moisture Index [MI=100*(P-PE)/PE]: -44.17 + D.Semiarid (-66.7<MI<-33.3)												
Index of dryness [DI=100*d/PE]: 70.80 + Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]: 26.61 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 386.70 + First microthermic (285<PE<427)												

