

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

GEORGIA DEL SUR (ARGENTINA)

Altitude: 4 m.

Latitude: 54°14'S Longitude: 36°33'W

Temperature observation period.: 1901-1950 (50)

Rainfall observation period....: 1901-1950 (50)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	4.60	8.40	1.40	24.50	-4.10	92.0	87.72
Feb.	5.10	9.10	1.70	26.50	-3.70	114.0	75.33
Mar.	4.40	8.40	1.00	28.80	-6.30	136.0	66.26
Apr.	2.30	5.60	-0.80	19.10	-9.80	139.0	36.27
May.	0.00	2.90	-3.10	17.50	-11.40	137.0	0.00
Jun.	-1.60	0.90	-4.60	14.00	-14.60	135.0	0.00
Jul.	-1.50	1.20	-4.70	13.60	-15.20	149.0	0.00
Aug.	-1.80	1.50	-4.90	13.20	-19.20	139.0	0.00
Sep.	-0.10	3.50	-3.30	17.00	-18.40	92.0	0.00
Oct.	1.60	5.40	-1.80	20.00	-11.00	80.0	41.06
Nov.	2.70	6.50	-0.50	22.50	-6.40	93.0	60.73
Dec.	3.70	7.50	0.40	21.50	-5.40	88.0	79.72
Year	1.62	5.08	-1.60	19.85	-10.46	1394	447.10

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-18
Compensated thermicity index.....(Itc):	-29
Simple continentality index.....(Ic):	6.9
Diurnality index.....(Id):	7.4
Annual ombrothermic index.....(Io):	30.41
Monthly estival ombrothermic index.....(Ios1):	22.35
Bimonthly estival ombrothermic index.....(Ios2):	21.24
Threemonthly estival ombrothermic index.....(Ios3):	24.26
Fourmonthly estival ombrothermic index.....(Ios4):	24.16
Annual ombro-evaporation index.....(Ioe):	3.12
Annual positive temperature.....(Tp):	244
Annual negative temperature.....(Tn):	50
Estival temperature.....(Ts):	141
Positive precipitation.....(Pp):	742

N. of Months	P>4T	P:2T-4T	PT-2T	P<T	T<0
	8	0	0	0	4

Latitudinal Belt...: Low Subtemperate

Continentality.....: Hyperoceanic - Low Euhyperoceanic

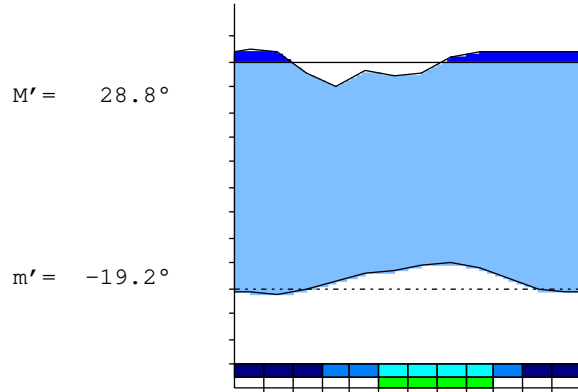
Bioclimate.....: POLAR-S SEMIPOLAR

Bioclimatic Belt...: Lower MESOPOLAR ULTRAHYPERHUMID

GEORGIA DEL SUR (ARGENTINA)

4 m

P= 1394 54° 14'S 36° 33'W 50/50 y.
 T= 1.6 ° Ic= 6.9 Tp= 244 Tn= 50
 m= -4.9 ° M= 1.5 ° Itc= -29 Io= 30.4



POLAR-S SEMIPOLAR
 Lower MESOPOLAR ULTRAHYPERHUMID

WATER INDEX CARD GEORGIA DEL SUR (ARGENTINA)
 Altitude: 4 m. Latitude: 54° 14'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-1.5	0	149	0	100	0	0	149	135	*
Aug.	-1.8	0	139	0	100	0	0	139	137	*
Sep.	-0.1	0	92	0	100	0	0	92	114	*
Oct.	1.6	41	80	0	100	41	0	39	77	0.9
Nov.	2.7	61	93	0	100	61	0	32	54	0.5
Dec.	3.7	80	88	0	100	80	0	8	31	0.1
Jan.	4.6	88	92	0	100	88	0	4	18	0.0
Feb.	5.1	75	114	0	100	75	0	39	28	0.5
Mar.	4.4	66	136	0	100	66	0	70	49	1.0
Apr.	2.3	36	139	0	100	36	0	103	76	2.8
May.	0.0	0	137	0	100	0	0	137	106	*
Jun.	-1.6	0	135	0	100	0	0	135	121	*
Year	1.6	447	1394	*	*	447	0	947	947	*

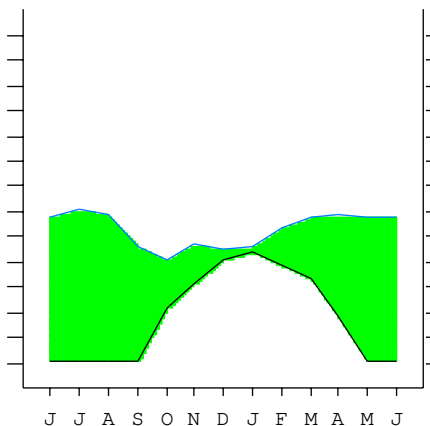
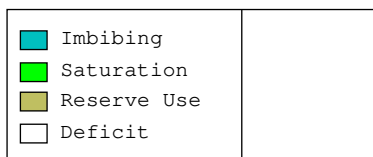
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

GEORGIA DEL SUR (ARGENTINA)

54°14'S 36°33'W

4 m 50/50 y.

T= 1.6 Ic= 6.9 POLAR-S SEMIPOLAR
 m= -4.9 Tp= 244 Lower MESOPOLAR
 M= 1.5 Tn= 50 ULTRAHYPERHUMID
 M' = 28.8 Itc= -29
 m' = -19.2 Io= 30.4
 P= 1394 mm ———
 PE= 447 mm ———



All over the year,
 there is no hydric deficit

GEORGIA DEL SUR (ARGENTINA)

Latitude: 54°14'S Longitude: 36°33'W Altitude: 4 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A2b]
 + Type: A. Hyperoceanic
 + Subtype: 2. Euhyperoceanic
 + Variant: b. Low
 Thermic types [B3.C7]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 3. Low Subtemperate
 + Thermic type: C. Cold
 + Thermic subtype: 7. Cold
 Bioclimatic types [E1.3.9]
 + Macrobioclimate: E. POLAR-S
 + Bioclimate: 1. SEMIPOLAR
 + Bioclimatic variant .:
 + Thermic type.....: 3. Lower MESOPOLAR
 + Thermic subtype.....:
 + Ombrothermic type ...: 9. ULTRAHYPERHUMID
 + Ombrothermic subtype :
 Bioclimatic ClassificationPose.Mpo.Uhh.Eho

GEORGIA DEL SUR (ARGENTINA)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 662
 Coldest semester of the year.....(Psw): 732
 Warmest four months period of the year.....(Pcm1): 430
 Following warmest four months period.....(Pcm2): 560
 Positive precipitation dryest 3 months.....(Ppd): 261
 Positive precipitation dryest 2 months.....(Ppd2): 80
 Positive precipitation dryest 1 month.....(Ppd1): 80
 Positive precipitation warmest 3 months.....(Pps): 342
 Positive precipitation warmest 2 months.....(Pps2): 206
 Positive precipitation warmest 1 month.....(Pps1): 114
 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	423	265	294	412

Seasonal rainfall rhythms: W > F > S > P

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 5.1
 Average coldest month [T].....(Tmin): -1.8
 Maximum temp. warmest month [M].....(Tmax): 9.1
 Minimum temp. coldest month [m].....(Tmin): -4.9
 Absolute Max.temp. warmest month [M'].....(Tamax): 28.8
 Absolute Min.temp. coldest month [m'].....(Tamin): -19.2
 First warmest contrasted month [M].....(Tcmax): 9.1 (2)
 First coldest contrasted month [m].....(Tcmin): 1.7 (2)
 Estival temperature.....(Ts): 141
 Positive temperature dryest 3 months.....(Tpd): 80
 Positive temperature dryest 2 months.....(Tpd2): 16
 Positive temperature dryest 1 month.....(Tpd1): 16
 Positive temperature warmest 3 months.....(Tps): 141
 Positive temperature warmest 2 months.....(Tps2): 97
 Positive temperature warmest 1 month.....(Tps1): 51
 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)	o	o	o									o
Ultragelid...[M' <=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)					o	o	o	o	o			
Subgelid.....[m <=0] (Pf)				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): 0.32
 Mediterranean index of January.....(Im1): 0.95
 Mediterranean index of January & February.....(Im2): 0.79
 Mediterranean index of December to February...(Im3): 0.83

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp (x10)	880	920	1140	1360	1390	*	*	*	*	*	800	930
Tp	37	46	51	44	23	*	*	*	*	*	16	27
Io (Iom)	23.8	20.0	22.4	30.9	60.4	*	*	*	*	*	50.0	34.4
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	2940 / 134			*/*			*/*			*/*		
Io (Iot)	21.94			*			*			*		
Semesters	December-May						June-November					
Pp(x10)/Tp	*/*						*/*					
Io (Iosm)	*						*					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 7420/244=30.41 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	880	920	1140	1360	1390	*	*	*	*	*	800	930
Tp [T*10]	37	46	51	44	23	*	*	*	*	*	16	27
Iom [Pp/Tp]	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$!!	!!	!!	!!	\$\$	\$\$
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	2940 / 134			4120 / 67			* / *			* / *		
Iot [Pp/Tp]	2194			\$\$			**			**		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 6.90
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: -5.94
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: -0.97
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.36
 + Hyperoceanic (0<CI<0.6)
 Rainfall Index of Lang (1925) [R=P/T]: 862.27
 + Humid (R>160)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 120.00
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]:2370.75
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 0.12
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 3.12
 + Humid (I>0.65)
 Potencial Erosion I of Fournier (1960) [K=Pi²/P].....: 15.93
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: B. Cold and temperate cold
 + Region: 11. Psicroaxeric (Axeric cold)
 + Thermic type: 7. Hipermicrothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.62	0.77	0.96	1.08	1.18	1.25	1.39	1.31	0.76	0.60	0.68	0.61
T-E ratio	2.07	2.29	1.98	1.03	0.00	0.00	0.00	0.00	0.00	0.72	1.22	1.67
Precipitation-effectiveness: 111.97						Temperature-efficiency: 10.98						
Moisture Index [MI=100*(P-PE)/PE]: 211.79 + A.Extremely humid (MI>100)												
Index of dryness [DI=100*d/PE]: 0.00 + No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 211.79 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 447.10 + Second microthermic (427<PE<570)												

