

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

BUENOS AIRES-DARSENA SUD (ARGENTINA)

Altitude: 5 m.

Latitude: 34°38'S Longitude: 58°21'W

Temperature observation period.: 1941-1950 (10)

Rainfall observation period....: 1941-1950 (10)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	22.90	28.10	18.70	39.30	8.50	77.0	128.95
Feb.	22.80	27.70	18.80	37.80	9.20	75.0	109.26
Mar.	19.90	24.80	16.20	34.50	6.90	105.0	87.38
Apr.	17.30	21.90	13.60	32.60	3.80	87.0	60.97
May.	13.80	18.00	10.50	27.00	0.70	75.0	39.20
Jun.	11.20	14.90	7.80	22.50	-2.00	50.0	25.26
Jul.	10.30	14.20	6.90	24.70	-4.00	43.0	23.22
Aug.	11.30	15.60	7.60	28.80	-2.00	7.0	29.40
Sep.	13.40	17.80	9.80	30.50	0.40	86.0	41.88
Oct.	16.30	22.00	12.50	29.80	4.00	91.0	66.19
Nov.	19.20	24.20	15.20	33.50	6.10	76.0	90.71
Dec.	21.70	27.30	17.20	38.50	6.80	87.0	119.51
Year	16.67	21.38	12.90	31.63	3.20	859	821.92

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	378
Compensated thermicity index.....(Itc):	378
Simple continentality index.....(Ic):	12.6
Diurnality index.....(Id):	10.1
Annual ombrothermic index.....(Io):	4.29
Monthly estival ombrothermic index.....(Ios1):	3.29
Bimonthly estival ombrothermic index.....(Ios2):	3.33
Three monthly estival ombrothermic index.....(Ios3):	3.55
Four monthly estival ombrothermic index.....(Ios4):	3.64
Annual ombro-evaporation index.....(Ioe):	1.44
Annual positive temperature.....(Tp):	2001
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	674
Positive precipitation.....(Pp):	859

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	8	3	0	1	0

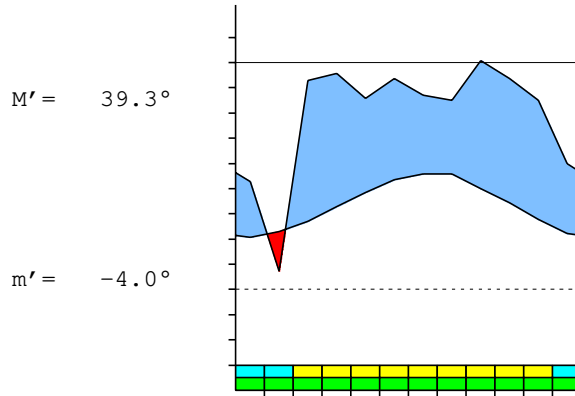
Latitudinal Belt...: Subtropical

Continentalty.....: Oceanic - Low Semihyperoceanic

Bioclimate.....: TEMPERATE OCEANIC

Bioclimatic Belt...: LOW THERMOTEMPERATE LOW SUBHUMID

BUENOS AIRES-DARSENA SUD (ARGENTINA) 5 m
 P= 859 34° 38' S 58° 21' W 10/10 y.
 T= 16.7° Ic= 12.6 Tp= 2001 Tn= 0
 m= 6.9° M= 14.2° Itc= 378 Io= 4.3



TEMPERATE OCEANIC
 LOW THERMOTEMPERATE LOW SUBHUMID

WATER INDEX CARD BUENOS AIRES-DARSENA SUD (ARGENTINA)
 Altitude: 5 m. Latitude: 34° 38' S

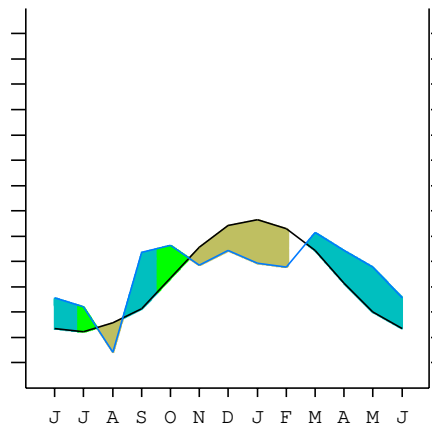
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	10.3	23	43	0	100	23	0	20	11	0.8
Aug.	11.3	29	7	-22	78	29	0	0	5	-0.7
Sep.	13.4	42	86	22	100	42	0	22	14	1.0
Oct.	16.3	66	91	0	100	66	0	25	19	0.3
Nov.	19.2	91	76	-15	85	91	0	0	10	-0.1
Dec.	21.7	120	87	-33	53	120	0	0	5	-0.2
Jan.	22.9	129	77	-52	1	129	0	0	2	-0.4
Feb.	22.8	109	75	-1	0	76	33	0	1	-0.3
Mar.	19.9	87	105	18	18	87	0	0	1	0.2
Apr.	17.3	61	87	26	44	61	0	0	0	0.4
May.	13.8	39	75	36	79	39	0	0	0	0.9
Jun.	11.2	25	50	21	100	25	0	4	2	0.9
Year	16.7	822	859	*	*	788	33	71	71	*

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

BUENOS AIRES-DARSENA SUD (ARGENTINA) 34°38' S 58°21' W 5 m 10/10 y.

T= 16.7 Ic= 12.6 TEMPERATE OCEANIC
 m= 6.9 Tp= 2001 LOW THERMOTEMPERATE
 M= 14.2 Tn= 0 LOW SUBHUMID
 M' = 39.3 Itc= 378
 m' = -4.0 Io= 4.3
 P= 859 mm
 PE= 822 mm

Imbibing	20 Feb.
Saturation	16 Sep.
Reserve Use	19 Oct.
Deficit	1 Feb.



BUENOS AIRES-DARSENAL SUD (ARGENTINA)

Latitude: 34°38'S Longitude: 58°21'W Altitude: 5 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [B1b]
 + Type: B. Oceanic
 + Subtype: 1. Semihyperoceanic
 + Variant: b. Low

Thermic types [A3.A3]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 3. Subwarm

Bioclimatic types [C3.2b.6b]
 + Macroclimate: C. TEMPERATE
 + Bioclimate: 3. OCEANIC
 + Bioclimatic variant ..:
 + Thermic type.....: 2. THERMOTEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Teco.Tte.Shu

BUENOS AIRES-DARSENAL SUD (ARGENTINA)

Latitude: 34°38'S Longitude: 58°21'W Altitude: 5 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 507
 Coldest semester of the year.....(Psw): 352
 Warmest four months period of the year.....(Pcm1): 344
 Following warmest four months period.....(Pcm2): 255
 Positive precipitation dryest 3 months.....(Ppd): 100
 Positive precipitation dryest 2 months.....(Ppd2): 50
 Positive precipitation dryest 1 month.....(Ppd1): 7
 Positive precipitation warmest 3 months.....(Pps): 239
 Positive precipitation warmest 2 months.....(Pps2): 152
 Positive precipitation warmest 1 month.....(Pps1): 77
 Positive precipitation coldest 3 months.....(Ppw): 100
 Positive precipitation coldest 2 months.....(Ppw2): 93
 Positive precipitation coldest 1 month.....(Ppw1): 43

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Autumn Tr4-F
Rainfall	100	253	239	267

Seasonal rainfall rhythms: F > P > S > W

BUENOS AIRES-DARSENAL SUD (ARGENTINA)

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 22.9
 Average coldest month [T].....(Tmin): 10.3
 Maximum temp. warmest month [M].....(Tmmax): 28.1
 Minimum temp. coldest month [m].....(Tmmin): 6.9
 Absolute Max.temp. warmest month [M'].....(Tamax): 39.3
 Absolute Min.temp. coldest month [m'].....(Tamin): -4.0
 First warmest contrasted month [M].....(Tcmax): 27.3 (12)
 First coldest contrasted month [m].....(Tcmin): 17.2 (12)
 Estival temperature.....(Ts): 674
 Positive temperature dryest 3 months.....(Tpd): 328
 Positive temperature dryest 2 months.....(Tpd2): 216
 Positive temperature dryest 1 month.....(Tpd1): 113
 Positive temperature warmest 3 months.....(Tps): 674
 Positive temperature warmest 2 months.....(Tps2): 457
 Positive temperature warmest 1 month.....(Tps1): 229
 Positive temperature coldest 3 months.....(Tpw): 328
 Positive temperature coldest 2 months.....(Tpw2): 215
 Positive temperature coldest 1 month.....(Tpw1): 103

BUENOS AIRES-DARSENIA SUD (ARGENTINA)

Latitude: 34°38'S Longitude: 58°21'W Altitude: 5 m

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	o	o	o	o	o	o	o	o
Ultragelid...[M' <=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)												
Subgelid.....[m <=0] (Pf)												
Pregelid.....[m' <=0] (Pf)						o	o	o				
Agelid.....[m' > 0] (Pf)	o	o	o	o	o				o	o	o	o
HiperAgelid..[all>0] (Pf)	o	o	o	o	o				o	o	o	o

BUENOS AIRES-DARSENIA SUD (ARGENTINA)

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.96
 Mediterranean index of January.....(Im1): 1.67
 Mediterranean index of January & February.....(Im2): 1.57
 Mediterranean index of December to February...(Im3): 1.50

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	870	770	750	1050	870	750	500	430	70	860	910	760
Tp	217	229	228	199	173	138	112	103	113	134	163	192
Io (Iom)	4.01	3.36	3.29	5.28	5.03	5.43	4.46	4.17	0.62	6.42	5.58	3.96
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	2390 / 674			2670 / 510			1000 / 328			2530 / 489		
Io (Iot)	3.546			5.235			3.049			5.174		
Semesters	December-May						June-November					
Pp(x10)/Tp	5060 / 1184						3530 / 817					
Io (Iosm)	4.274						4.321					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 8590/2001=4.29 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	870	770	750	1050	870	750	500	430	70	860	910	760
Tp [T*10]	217	229	228	199	173	138	112	103	113	134	163	192
Iom [Pp/Tp]	401	336	329	528	503	543	446	417	62	642	558	396
Avm [200-Iom]	***	***	***	***	***	***	***	***	138	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	2390 / 674			2670 / 510			1000 / 328			2530 / 489		
Iot [Pp/Tp]	355			524			305			517		
Avs E[Avm<200]	***			***			***			***		
Weak lower arid [1]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp): 12.60
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]	17.29
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]	16.49
+ Hyperoceanic (-20<CI<20)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)]	1.00
+ Oceanic (0.6<CI<1.1)	
Rainfall Index of Lang (1925) [R=P/T]	51.51
+ Semiarid (60>R>40)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)]	32.20
+ Humid (60>Ia>30)	
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]	115.77
+ Humid (Q>90)	
I of Dantin & Revenga (1940) [DR=100*T/P]	1.94
+ Humid (2>DR>0)	
Aridity Index of UNEP [I=P/PE]	1.05
+ Humid (I>0.65)	
Potential Erosion I of Fournier (1960) [K=Pi ² /P]	12.83
+ Very low (K<60)	

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 3. Macro-mesothermic

Thornthwaite (1948)													
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	
P-E ratio	0.29	0.28	0.44	0.38	0.36	0.25	0.22	0.03	0.42	0.41	0.31	0.34	
T-E ratio	10.30	10.26	8.95	7.78	6.21	5.04	4.64	5.09	6.03	7.33	8.64	9.77	
Precipitation-effectiveness:	37.41						Temperature-efficiency						90.04
Moisture Index [MI=100*(P-PE)/PE]												4.51	
+ C2.Subhumid humid (0<MI<20)													
Index of dryness [DI=100*d/PE]												4.06	
+ No deficit (0<DI<16.7)													
Index of humidity [HI=100*s/PE]												8.58	
+ No surplus (0<HI<10)													
Potential Evapotranspiration PE												821.92	
+ Second mesothermic (712<PE<855)													

