

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

VICTORICA (ARGENTINA)

Altitude: 312 m.

Latitude: 36°13'S Longitude: 65°26'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.	24.30	33.40	15.20	44.00	2.00	62.0	144.91
Feb.	22.80	31.90	14.30	43.00	0.00	68.0	110.54
Mar.	19.70	28.30	11.90	39.00	-0.20	67.0	87.84
Apr.	15.40	23.70	8.20	36.40	-6.30	37.0	52.04
May.	11.20	18.80	4.30	31.40	-8.90	25.0	29.25
Jun.	7.60	15.40	1.50	26.00	-11.30	15.0	14.10
Jul.	7.40	15.40	1.00	27.70	-15.30	10.0	14.50
Aug.	9.30	17.60	1.80	32.20	-11.30	15.0	22.78
Sep.	12.60	20.60	4.90	37.10	-8.00	29.0	39.85
Oct.	16.10	24.10	8.10	41.10	-6.10	68.0	67.88
Nov.	19.90	28.40	11.10	42.80	-2.10	56.0	98.57
Dec.	23.10	31.70	14.00	43.10	1.30	65.0	134.45
Year	15.78	24.11	8.03	36.98	-5.52	517	816.71

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	322
Compensated thermicity index.....(Itc):	322
Simple continentality index.....(Ic):	16.9
Diurnality index.....(Id):	18.2
Annual ombrothermic index.....(Io):	2.73
Monthly estival ombrothermic index.....(Ios1):	2.55
Bimonthly estival ombrothermic index.....(Ios2):	2.76
Threemonthly estival ombrothermic index.....(Ios3):	2.78
Fourmonthly estival ombrothermic index.....(Ios4):	2.79
Annual ombro-evaporation index.....(Ioe):	0.63
Annual positive temperature.....(Tp):	1894
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	702
Positive precipitation.....(Pp):	517

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

Latitudinal Belt...: Low Eutemperate

Continentality.....: Oceanic - Low Euoceanic

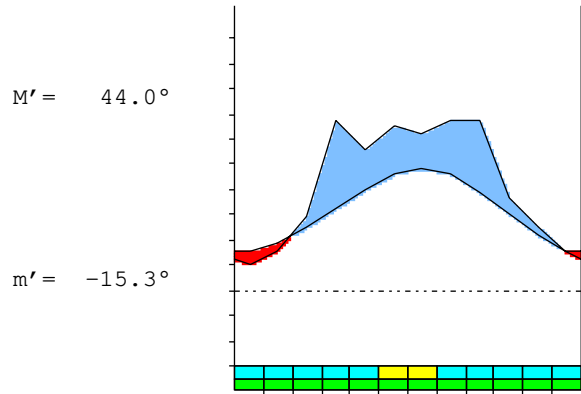
Bioclimate(Variant): TEMPERATE XERIC (SUBMEDITERRANEAN)

Bioclimatic Belt...: UPPER THERMOTEMPERATE LOW DRY

VICTORICA (ARGENTINA)

312 m

P= 517 36° 13'S 65° 26'W 50/50 y.
 T= 15.8 ° Ic= 16.9 Tp= 1894 Tn= 0
 m= 1.0 ° M= 15.4 ° Itc= 322 Io= 2.7



TEMPERATE XERIC (SUBMEDITERRANEAN)
 UPPER THERMOTEMPERATE LOW DRY

WATER INDEX CARD VICTORICA (ARGENTINA)
 Altitude: 312 m. Latitude: 36° 13'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	7.4	15	10	-1	0	11	4	0	0	-0.3
Aug.	9.3	23	15	0	0	15	8	0	0	-0.3
Sep.	12.6	40	29	0	0	29	11	0	0	-0.2
Oct.	16.1	68	68	0	0	68	0	0	0	0.0
Nov.	19.9	99	56	-0	0	56	42	0	0	-0.4
Dec.	23.1	134	65	0	0	65	69	0	0	-0.5
Jan.	24.3	145	62	0	0	62	83	0	0	-0.5
Feb.	22.8	111	68	0	0	68	43	0	0	-0.3
Mar.	19.7	88	67	0	0	67	21	0	0	-0.2
Apr.	15.4	52	37	0	0	37	15	0	0	-0.2
May.	11.2	29	25	0	0	25	4	0	0	-0.1
Jun.	7.6	14	15	1	1	14	0	0	0	0.0
Year	15.8	817	517	*	*	517	300	0	0	*

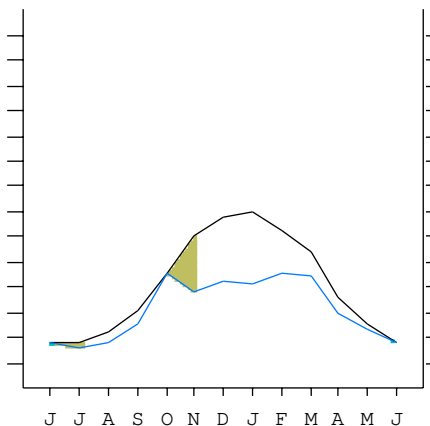
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

VICTORICA (ARGENTINA)

36°13'S 65°26'W 312 m 50/50 y.

T= 15.8 Ic= 16.9 TEMPERATE XERIC (SUBMEDITERRANEAN)
 m= 1.0 Tp= 1894 UPPER THERMOTEMPERATE
 M= 15.4 Tn= 0 LOW DRY
 M' = 44.0 Itc= 322
 m' = -15.3 Io= 2.7
 P= 517 mm ———
 PE= 817 mm ———

Imbibing	25 May.
Saturation	
Reserve Use	1 Oct.
Deficit	1 Nov.



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [B2b]
 + Type: B. Oceanic
 + Subtype: 2. Euoceanic
 + Variant: b. Low
 Thermic types [B1.A3]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. Low Eutemperate
 + Thermic type: A. Warm
 + Thermic subtype: 3. Subwarm
 Bioclimatic types [C1b.2a.5b]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 1. XERIC
 + Bioclimatic variant .: SUBMEDITERRANEAN
 + Thermic type.....: 2. THERMOTEMPERATE
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 5. DRY
 + Ombrothermic subtype : b. LOW
 Bioclimatic ClassificationTexe (Sbm) .Tte.Dry.Euo

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 386
 Coldest semester of the year.....(Psw): 131
 Warmest four months period of the year.....(Pcm1): 251
 Following warmest four months period.....(Pcm2): 144
 Positive precipitation dryest 3 months.....(Ppd): 40
 Positive precipitation dryest 2 months.....(Ppd2): 25
 Positive precipitation dryest 1 month.....(Ppd1): 10
 Positive precipitation warmest 3 months.....(Pps): 195
 Positive precipitation warmest 2 months.....(Pps2): 127
 Positive precipitation warmest 1 month.....(Pps1): 62
 Positive precipitation coldest 3 months.....(Ppw): 40
 Positive precipitation coldest 2 months.....(Ppw2): 25
 Positive precipitation coldest 1 month.....(Ppw1): 10

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	40	153	195	129

Seasonal rainfall rhythms: S > P > F > W

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 24.3
 Average coldest month [T].....(Tmin): 7.4
 Maximum temp. warmest month [M].....(Tmmax): 33.4
 Minimum temp. coldest month [m].....(Tmmin): 1.0
 Absolute Max.temp. warmest month [M'].....(Tamax): 44.0
 Absolute Min.temp. coldest month [m'].....(Tamin): -15.3
 First warmest contrasted month [M].....(Tcmax): 33.4 (1)
 First coldest contrasted month [m].....(Tcmin): 15.2 (1)
 Estival temperature.....(Ts): 702
 Positive temperature dryest 3 months.....(Tpd): 243
 Positive temperature dryest 2 months.....(Tpd2): 150
 Positive temperature dryest 1 month.....(Tpd1): 74
 Positive temperature warmest 3 months.....(Tps): 702
 Positive temperature warmest 2 months.....(Tps2): 474
 Positive temperature warmest 1 month.....(Tps1): 243
 Positive temperature coldest 3 months.....(Tpw): 243
 Positive temperature coldest 2 months.....(Tpw2): 150
 Positive temperature coldest 1 month.....(Tpw1): 74

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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	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	o	o	o	o	o	o	o	
Agelid.....[m' > 0] (Pf)	o											o
HiperAgelid..[all>0] (Pf)	o											o

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.58
 Mediterranean index of January.....(Im1): 2.34
 Mediterranean index of January & February.....(Im2): 1.96
 Mediterranean index of December to February...(Im3): 2.00

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	650	620	680	670	370	250	150	100	150	290	680	560
Tp	231	243	228	197	154	112	76	74	93	126	161	199
Io (Iom)	2.81	2.55	2.98	3.40	2.40	2.23	1.97	1.35	1.61	2.30	4.22	2.81
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	1950 / 702			1290 / 463			400 / 243			1530 / 486		
Io (Iot)	2.778			2.786			1.646			3.148		
Semesters	December-May						June-November					
Pp(x10)/Tp	3240 / 1165						1930 / 729					
Io (Iosm)	2.781						2.647					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 5170/1894=2.73 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	650	620	680	670	370	250	150	100	150	290	680	560
Tp [T*10]	231	243	228	197	154	112	76	74	93	126	161	199
Iom [Pp/Tp]	281	255	298	340	240	223	197	135	161	230	422	281
Avm [200-Iom]	***	***	***	***	***	***	3	65	39	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	1950 / 702			1290 / 463			400 / 243			1530 / 486		
Iot [Pp/Tp]	278			279			165			315		
Avs E[Avm<200]	***			***			106			***		
Weak lower semiarid [1]							Strong upper semiarid [2]					
Weak upper semiarid [1]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp): 16.90
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]	28.23
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]	25.79
+ Oceanic (20<CI<40)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)]	1.29
+ Subcontinental (1.1<CI<1.7)	
Rainfall Index of Lang (1925) [R=P/T]	32.76
+ Steppic (40>R>0)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)]	20.05
+ Subhumid (30>Ia>20)	
I of Emberger (1930) [Q=100*P/(Tmmax ² -Tmmin ²)]	46.39
+ Semiarid (50>Q>30)	
I of Dantin & Revenga (1940) [DR=100*T/P]	3.05
+ Arid (6>DR>3)	
Aridity Index of UNEP [I=P/PE]	0.63
+ Subhumid - dry (0.65>I>0.5)	
Potencial Erosion I of Fournier (1960) [K=Pi ² /P].....	8.94
+ Very low (K<60)	

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate A. Warm and temperate warm
 + Region 3. Termoxeroteric (Mediterranean warm)
 + Thermic type: 3. Macro-mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.22	0.25	0.27	0.16	0.11	0.07	0.05	0.07	0.13	0.30	0.22	0.24
T-E ratio	10.93	10.26	8.87	6.93	5.04	3.42	3.33	4.19	5.67	7.25	8.95	10.40
Precipitation-effectiveness: 20.93						Temperature-efficiency: 85.23						
Moisture Index [MI=100*(P-PE)/PE]												
+ D.Semiarid (-66.7<MI<-33.3)												
Index of dryness [DI=100*d/PE]												
+ Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]												
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												
+ Second mesothermic (712<PE<855)												

