

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

S.Rivas-Martinez(+) & S.Rivas-Saenz

(Adapted to Synoptical Table 14/02/2020)

CORONEL J.J.GOMEZ (ARGENTINA)

Altitude: 242 m.

Latitude: 39°1'S Longitude: 67°39'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.	22.50	31.60	13.10	40.80	1.00	26.0	134.09
Feb.	21.00	30.20	11.90	39.80	1.00	13.0	103.01
Mar.	17.00	26.60	8.80	37.20	-2.30	14.0	75.79
Apr.	13.00	22.40	5.50	32.20	-6.10	14.0	44.61
May.	8.70	16.70	2.40	26.70	-7.20	29.0	23.29
Jun.	5.70	13.70	-0.80	24.50	-11.60	10.0	11.44
Jul.	5.40	13.20	-1.40	22.60	-11.70	16.0	11.38
Aug.	7.00	15.90	-0.30	27.60	-12.70	11.0	18.15
Sep.	11.00	19.60	3.10	32.80	-8.10	14.0	37.63
Oct.	15.40	24.30	6.40	34.70	-3.30	8.0	70.56
Nov.	18.90	27.50	9.50	38.50	-1.70	8.0	98.31
Dec.	21.80	30.60	11.90	40.00	2.00	10.0	130.11
Year	13.95	22.69	5.84	33.12	-5.06	173	758.37

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	258
Compensated thermicity index.....(Itc):	258
Simple continentality index.....(Ic):	17.1
Diurnality index.....(Id):	18.7
Annual ombrothermic index.....(Io):	1.03
Monthly estival ombrothermic index.....(Ios1):	0.46
Bimonthly estival ombrothermic index.....(Ios2):	0.90
Threemonthly estival ombrothermic index.....(Ios3):	0.75
Fourmonthly estival ombrothermic index.....(Ios4):	0.68
Annual ombro-evaporation index.....(Ioe):	0.23
Annual positive temperature.....(Tp):	1674
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	653
Positive precipitation.....(Pp):	173

N. of Months	P>4T	P:2T-4T	PT-2T	P<T	T<0
	0	2	5	5	0

Latitudinal Belt...: Low Eutemperate

Continentality.....: Oceanic - Low Semicontinental

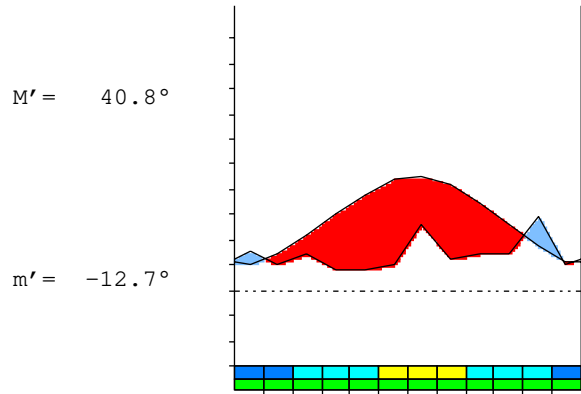
Bioclimate(Variant): MEDITERRANEAN XERIC-OCEANIC (STEPIC)

Bioclimatic Belt...: UPPER MESOMEDITERRANEAN LOW SEMIARID

CORONEL J.J.GOMEZ (ARGENTINA)

242 m

P= 173 39° 1'S 67° 39'W 10/10 y.
 T= 13.9 ° Ic= 17.1 Tp= 1674 Tn= 0
 m= -1.4 ° M= 13.2 ° Itc= 258 Io= 1.0



MEDITERRANEAN XERIC-OCEANIC (STEPPIC)
 UPPER MESOMEDITERRANEAN LOW SEMIARID

WATER INDEX CARD CORONEL J.J.GOMEZ (ARGENTINA)

Altitude: 242 m. Latitude: 39° 1'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	5.4	11	16	5	9	11	0	0	0	0.4
Aug.	7.0	18	11	-7	2	18	0	0	0	-0.3
Sep.	11.0	38	14	-2	0	16	22	0	0	-0.6
Oct.	15.4	71	8	0	0	8	63	0	0	-0.8
Nov.	18.9	98	8	0	0	8	90	0	0	-0.9
Dec.	21.8	130	10	0	0	10	120	0	0	-0.9
Jan.	22.5	134	26	0	0	26	108	0	0	-0.8
Feb.	21.0	103	13	0	0	13	90	0	0	-0.8
Mar.	17.0	76	14	0	0	14	62	0	0	-0.8
Apr.	13.0	45	14	0	0	14	31	0	0	-0.6
May.	8.7	23	29	6	6	23	0	0	0	0.2
Jun.	5.7	11	10	-1	4	11	0	0	0	-0.1
Year	13.9	758	173	*	*	173	585	0	0	*

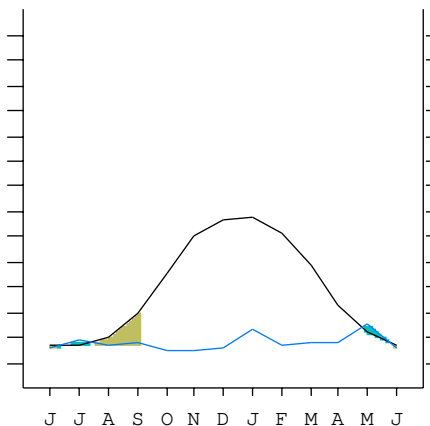
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coeficient DF = Deficit SP = Superavit

CORONEL J.J.GOMEZ (ARGENTINA)

39°1'S 67°39'W 242 m 10/10 y.

T= 13.9 Ic= 17.1 MEDITERRANEAN XERIC-OCEANIC (STEPPIC)
 m= -1.4 Tp= 1674 UPPER MESOMEDITERRANEAN
 M= 13.2 Tn= 0 LOW SEMIARID
 M' = 40.8 Itc= 258
 m' = -12.7 Io= 1.0
 P= 173 mm ———
 PE= 758 mm ———

Imbibing	26 Apr.
Saturation	24 May.
Reserve Use	3 Sep.
Deficit	



CORONEL J.J.GOMEZ (ARGENTINA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [B1a]
 + Type: B. Oceanic
 + Subtype: 1. Semicontinental
 + Variant: a. Low

Thermic types [B1.B4]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. Low Eutemperate
 + Thermic type: B. Temperate
 + Thermic subtype: 4. Temperate

Bioclimatic types [B6a.3a.4b]
 + Macrobioclimate: B. MEDITERRANEAN
 + Bioclimate: 6. XERIC-OCEANIC
 + Bioclimatic variant .: STEPPIC
 + Thermic type.....: 3. MESOMEDITERRANEAN
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 4. SEMIARID
 + Ombrothermic subtype : b. LOW

Bioclimatic ClassificationMexo(Stp).Mme.Sar.Sec

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 79
 Coldest semester of the year.....(Psw): 94
 Warmest four months period of the year.....(Pcml): 57
 Following warmest four months period.....(Pcm2): 67
 Positive precipitation dryest 3 months.....(Ppd): 26
 Positive precipitation dryest 2 months.....(Ppd2): 16
 Positive precipitation dryest 1 month.....(Ppd1): 8
 Positive precipitation warmest 3 months.....(Pps): 49
 Positive precipitation warmest 2 months.....(Pps2): 36
 Positive precipitation warmest 1 month.....(Pps1): 26
 Positive precipitation coldest 3 months.....(Ppw): 37
 Positive precipitation coldest 2 months.....(Ppw2): 26
 Positive precipitation coldest 1 month.....(Ppw1): 16

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	37	30	49	57

Seasonal rainfall rhythms: F > S > W > P

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 22.5
 Average coldest month [T].....(Tmin): 5.4
 Maximum temp. warmest month [M].....(Tmmax): 31.6
 Minimum temp. coldest month [m].....(Tmmin): -1.4
 Absolute Max.temp. warmest month [M'].....(Tamax): 40.8
 Absolute Min.temp. coldest month [m'].....(Tamin): -12.7
 First warmest contrasted month [M].....(Tcmax): 30.6 (12)
 First coldest contrasted month [m].....(Tcmin): 11.9 (12)
 Estival temperature.....(Ts): 653
 Positive temperature dryest 3 months.....(Tpd): 561
 Positive temperature dryest 2 months.....(Tpd2): 343
 Positive temperature dryest 1 month.....(Tpd1): 154
 Positive temperature warmest 3 months.....(Tps): 653
 Positive temperature warmest 2 months.....(Tps2): 443
 Positive temperature warmest 1 month.....(Tps1): 225
 Positive temperature coldest 3 months.....(Tpw): 181
 Positive temperature coldest 2 months.....(Tpw2): 111
 Positive temperature coldest 1 month.....(Tpw1): 54

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

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 4.38
 Mediterranean index of January.....(Im1): 5.16
 Mediterranean index of January & February....(Im2): 6.08
 Mediterranean index of December to February...(Im3): 7.49

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	100	260	130	140	140	290	100	160	110	140	80	80
Tp	218	225	210	170	130	87	57	54	70	110	154	189
Io (Iom)	0.46	1.16	0.62	0.82	1.08	3.33	1.75	2.96	1.57	1.27	0.52	0.42
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	490 / 653			570 / 387			370 / 181			300 / 453		
Io (Iot)	0.750			1.473			2.044			0.662		
Semesters	December-May						June-November					
Pp(x10)/Tp	1060 / 1040						670 / 634					
Io (Iosm)	1.019						1.057					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 1730/1674=1.03 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	100	260	130	140	140	290	100	160	110	140	80	80
Tp [T*10]	218	225	210	170	130	87	57	54	70	110	154	189
Iom [Pp/Tp]	46	116	62	82	108	333	175	296	157	127	52	42
Avm [200-Iom]	154	84	138	118	92	***	25	***	43	73	148	158
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	490 / 653			570 / 387			370 / 181			300 / 453		
Iot [Pp/Tp]	75			147			204			66		
Avs E[Avm<200]	377			***			***			378		
Strong lower arid [2]						Weak lower arid [2]						
Strong upper arid [2]						Weak upper arid [1]						
Strong lower semiarid [2]						Weak lower semiarid [1]						
Strong upper semiarid [1]						Weak upper semiarid [1]						

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 17.10
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 25.78
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 24.51
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.22
 + Subcontinental (1.1<CI<1.7)
 Rainfall Index of Lang (1925) [R=P/T]: 12.40
 + Steppic (40>R>0)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 7.22
 + Arid -steppic- (15>Ia>5)
 I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]: 17.36
 + Arid (30>Q>0)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 8.06
 + Extremely arid (DR>6)
 Aridity Index of UNEP [I=P/PE]: 0.23
 + Semiarid (0.5>Im>0.2)
 Potencial Erosion I of Fournier (1960) [K=Pi²/P].....: 4.86
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: A. Warm and temperate warm
 + Region: 5. Bixeric (Bixeric)
 + Thermic type: 4. Mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.09	0.04	0.05	0.06	0.15	0.05	0.09	0.05	0.06	0.03	0.03	0.03
T-E ratio	10.13	9.45	7.65	5.85	3.91	2.56	2.43	3.15	4.95	6.93	8.50	9.81
Precipitation-effectiveness: 7.20						Temperature-efficiency: 75.33						
Moisture Index [MI=100*(P-PE)/PE]: -77.19 + E.Dry (-110<MI<-66.7)												
Index of dryness [DI=100*d/PE]: 77.18 + Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]: 0.00 + No surplus (0<HI<10)												
Potential Evapotranspiration PE: 758.37 + Second mesothermic (712<PE<855)												

