

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

CORONEL MOLDES (ARGENTINA)

Altitude: 1143 m.

Latitude: 25°16'S Longitude: 66°29'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.	22.80	29.90	16.00	38.10	10.10	123.0	118.18
Feb.	22.10	28.60	15.80	40.00	7.50	98.0	96.12
Mar.	20.40	26.80	14.50	35.00	2.60	74.0	85.75
Apr.	18.40	25.20	11.60	35.10	-1.00	13.0	64.37
May.	15.20	22.80	7.80	37.20	-4.60	3.0	43.75
Jun.	11.90	20.40	3.10	34.50	-8.20	1.0	25.65
Jul.	11.40	20.60	2.40	34.40	-7.00	1.0	24.98
Aug.	14.60	23.90	4.50	36.20	-8.60	0.0	42.66
Sep.	17.40	26.10	7.90	38.70	-4.00	9.0	60.26
Oct.	20.10	28.20	11.30	39.00	1.10	13.0	87.32
Nov.	21.90	29.40	13.90	37.80	5.70	66.0	103.81
Dec.	23.00	30.50	15.40	41.00	7.20	88.0	121.19
Year	18.27	26.03	10.35	37.25	0.07	489	874.04

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	413
Compensated thermicity index.....(Itc):	413
Simple continentality index.....(Ic):	11.6
Diurnality index.....(Id):	19.4
Annual ombrothermic index.....(Io):	2.23
Monthly dry ombrothermic index.....(Iod1):	No
Bimonthly dry ombrothermic index.....(Iod2):	0.04
Three monthly dry ombrothermic index.....(Iod3):	0.05
Four monthly dry ombrothermic index.....(Iod4):	0.09
Annual ombro-evaporation index.....(Ioe):	17.11
Annual positive temperature.....(Tp):	2192
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	379
Positive precipitation.....(Pp):	489

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	2	3	0	7	0

Latitudinal Belt...: Subtropical

Continentality.....: Oceanic - High Semihyperoceanic

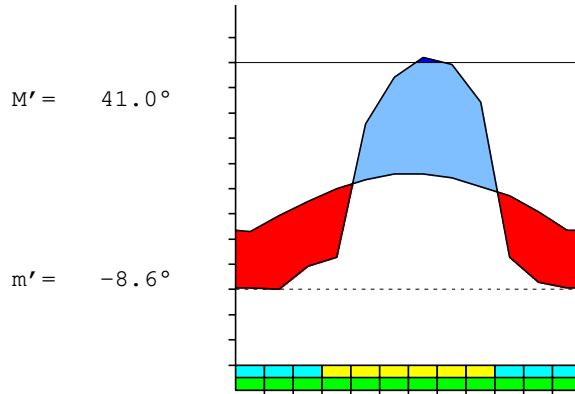
Bioclimate(Variant): TROPICAL XERIC (DRY)

Bioclimatic Belt...: LOW MESOTROPICAL LOW DRY

CORONEL MOLDES (ARGENTINA)

1143 m

P= 489 25° 16' S 66° 29' W 10/10 y.
 T= 18.3° Ic= 11.6 Tp= 2192 Tn= 0
 m= 2.4° M= 20.6° Itc= 413 Io= 2.2



TROPICAL XERIC (DRY)
 LOW MESOTROPICAL LOW DRY

WATER INDEX CARD CORONEL MOLDES (ARGENTINA)
 Altitude: 1143 m. Latitude: 25° 16' S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	11.4	25	1	0	0	1	24	0	0	-0.9
Aug.	14.6	43	0	0	0	0	43	0	0	-1.0
Sep.	17.4	60	9	0	0	9	51	0	0	-0.8
Oct.	20.1	87	13	0	0	13	74	0	0	-0.8
Nov.	21.9	104	66	0	0	66	38	0	0	-0.3
Dec.	23.0	121	88	0	0	88	33	0	0	-0.2
Jan.	22.8	118	123	5	5	118	0	0	0	0.0
Feb.	22.1	96	98	2	7	96	0	0	0	0.0
Mar.	20.4	86	74	-7	0	81	5	0	0	-0.1
Apr.	18.4	64	13	0	0	13	51	0	0	-0.7
May.	15.2	44	3	0	0	3	41	0	0	-0.9
Jun.	11.9	26	1	0	0	1	25	0	0	-0.9
Year	18.3	874	489	*	*	489	385	0	0	*

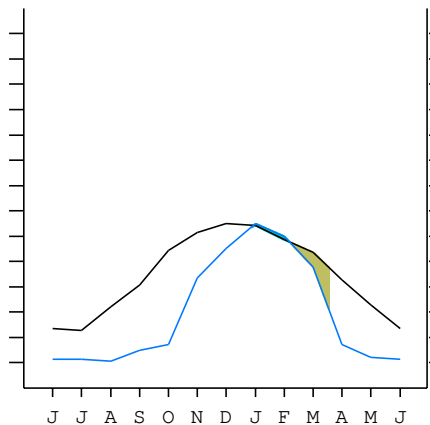
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

CORONEL MOLDES (ARGENTINA)

25°16' S 66°29' W 1143 m 10/10 y.

T= 18.3 Ic= 11.6 TROPICAL XERIC (DRY)
 m= 2.4 Tp= 2192 LOW MESOTROPICAL
 M= 20.6 Tn= 0 LOW DRY
 M' = 41.0 Itc= 413
 m' = -8.6 Io= 2.2
 P= 489 mm ———
 PE= 874 mm ———

Imbibing	27 Dec.
Saturation	5 Feb.
Reserve Use	18 Mar.
Deficit	



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [B1a]
 + Type: B. Oceanic
 + Subtype: 1. Semihyperoceanic
 + Variant: a. High
 Thermic types [A3.A3]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 3. Subwarm
 Bioclimatic types [A3.3b.5b]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 3. XERIC
 + Bioclimatic variant ..:
 + Thermic type.....: 3. MESOTROPICAL
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 5. DRY
 + Ombrothermic subtype : b. LOW
 Bioclimatic Classification: Trxe.Mtr.Dry

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 462
 Coldest semester of the year.....(Psw): 27
 Warmest four months period of the year.....(Pcm1): 375
 Following warmest four months period.....(Pcm2): 91
 Positive precipitation dryest 3 months.....(Ppd): 2
 Positive precipitation dryest 2 months.....(Ppd2): 1
 Positive precipitation dryest 1 month.....(Ppd1): 0
 Positive precipitation warmest 3 months.....(Pps): 309
 Positive precipitation warmest 2 months.....(Pps2): 211
 Positive precipitation warmest 1 month.....(Pps1): 88
 Positive precipitation coldest 3 months.....(Ppw): 2
 Positive precipitation coldest 2 months.....(Ppw2): 2
 Positive precipitation coldest 1 month.....(Ppw1): 1

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	2	88	309	90

Seasonal rainfall rhythms: S > F > P > W

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 23.0
 Average coldest month [T].....(Tmin): 11.4
 Maximum temp. warmest month [M].....(Tmmax): 30.5
 Minimum temp. coldest month [m].....(Tmmin): 2.4
 Absolute Max.temp. warmest month [M'].....(Tamax): 41.0
 Absolute Min.temp. coldest month [m'].....(Tamin): -8.6
 First warmest contrasted month [M].....(Tcmax): 23.9 (8)
 First coldest contrasted month [m].....(Tcmin): 4.5 (8)
 Dry station temperature.....(Td): 379
 Positive temperature dryest 3 months.....(Tpd): 379
 Positive temperature dryest 2 months.....(Tpd2): 260
 Positive temperature dryest 1 month.....(Tpd1): 146
 Positive temperature warmest 3 months.....(Tps): 679
 Positive temperature warmest 2 months.....(Tps2): 458
 Positive temperature warmest 1 month.....(Tps1): 230
 Positive temperature coldest 3 months.....(Tpw): 379
 Positive temperature coldest 2 months.....(Tpw2): 233
 Positive temperature coldest 1 month.....(Tpw1): 114

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

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.79
 Mediterranean index of January.....(Im1): 0.96
 Mediterranean index of January & February.....(Im2): 0.97
 Mediterranean index of December to February...(Im3): 1.09

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	880	1230	980	740	130	30	10	10	0	90	130	660
Tp	230	228	221	204	184	152	119	114	146	174	201	219
Io (Iom)	3.83	5.39	4.43	3.63	0.71	0.20	0.08	0.09	0.00	0.52	0.65	3.01
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	3090 / 679			900 / 540			20 / 379			880 / 594		
Io (Iot)	4.551			1.667			0.053			1.481		
Semesters	December-May						June-November					
Pp(x10)/Tp	3990 / 1219						900 / 973					
Io (Iosm)	3.273						0.925					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 4890/2192=2.23 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	880	1230	980	740	130	30	10	10	0	90	130	660
Tp [T*10]	230	228	221	204	184	152	119	114	146	174	201	219
Iom [Pp/Tp]	383	539	443	363	71	20	8	9	0	52	65	301
Avm [200-Iom]	***	***	***	***	129	180	192	191	200	148	135	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	3090 / 679			900 / 540			20 / 379			880 / 594		
Iot [Pp/Tp]	455			167			5			148		
Avs E[Avm<200]	***			***			583			***		
Lower ultrahyperarid [4]						Upper ultrahyperarid [1]						
Weak lower arid [2]						Strong upper arid [1]						

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 11.60
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 25.80
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 20.15
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.23
 + Subcontinental (1.1<CI<1.7)
 Rainfall Index of Lang (1925) [R=P/T]: 26.77
 + Steppic (40>R>0)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 17.30
 + Semiarid -mediterranean- (20>Ia>15)
 I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]: 52.89
 + Subhumid (90>Q>50)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 3.74
 + Arid (6>DR>3)
 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].....: 30.94
 + 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	0.49	0.39	0.30	0.05	0.01	0.00	0.00	0.00	0.03	0.04	0.25	0.34
T-E ratio	10.26	9.95	9.18	8.28	6.84	5.35	5.13	6.57	7.83	9.05	9.85	10.35
Precipitation-effectiveness: 18.91						Temperature-efficiency: 98.64						
Moisture Index [MI=100*(P-PE)/PE]: -44.05 + D.Semiarid (-66.7<MI<-33.3)												
Index of dryness [DI=100*d/PE]: 44.05 + Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]: 0.00 + No surplus (0<HI<10)												
Potential Evapotranspiration PE: 874.04 + Third mesothermic (855<PE<997)												

