

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

TRINIDAD -BENI- (BOLIVIA)

Altitude: 155 m.

Latitude: 14°49'S Longitude: 64°55'W

Temperature observation period.: 1972-1996 (25)

Rainfall observation period....: 1972-1996 (25)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	26.90	30.90	22.90	0.00	0.00	298.9	155.35
Feb.	27.00	30.80	23.20	0.00	0.00	268.5	136.71
Mar.	27.10	31.10	23.10	0.00	0.00	225.5	147.32
Apr.	26.10	30.60	21.60	0.00	0.00	123.9	125.39
May.	24.50	29.10	19.90	0.00	0.00	114.6	101.06
Jun.	22.80	38.40	17.10	0.00	0.00	33.9	75.86
Jul.	22.60	29.00	16.20	0.00	0.00	32.1	75.97
Aug.	24.00	30.80	17.20	0.00	0.00	52.2	98.05
Sep.	24.70	30.60	18.90	0.00	0.00	123.3	106.02
Oct.	26.70	32.60	20.90	0.00	0.00	139.2	146.70
Nov.	26.90	31.90	22.00	0.00	0.00	226.8	148.41
Dec.	27.00	31.40	22.60	0.00	0.00	275.0	156.24
Year	25.53	31.43	20.47	0.00	0.00	1914	1473.1

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	707
Compensated thermicity index.....(Itc):	707
Simple continentality index.....(Ic):	4.5
Diurnality index.....(Id):	21.3
Annual ombrothermic index.....(Io):	6.25
Monthly dry ombrothermic index.....(Iod1):	1.42
Bimonthly dry ombrothermic index.....(Iod2):	1.45
Three monthly dry ombrothermic index.....(Iod3):	1.70
Four monthly dry ombrothermic index.....(Iod4):	2.48
Annual ombro-evaporation index.....(Ioe):	2.99
Annual positive temperature.....(Tp):	3063
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	694
Positive precipitation.....(Pp):	1914

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	9	1	2	0	0

Latitudinal Belt...: Eutropical

Continentalty.....: Hyperoceanic - High Euhyperoceanic

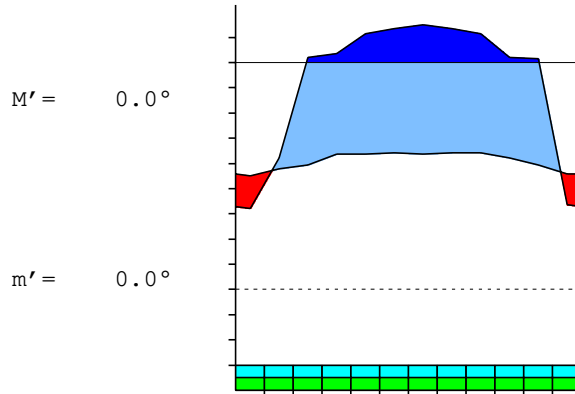
Bioclimate(Variant): TROPICAL PLUVISEASONAL (MESOPHYTIC)

Bioclimatic Belt...: UPPER INFRATROPICAL LOW HUMID

TRINIDAD -BENI- (BOLIVIA)

155 m

P= 1914 14° 49'S 64° 55'W 25/25 y.
 T= 25.5° Ic= 4.5 Tp= 3063 Tn= 0
 m= 16.2° M= 29.0° Itc= 707 Io= 6.2



TROPICAL PLUVISEASONAL (MESOPHYTIC)
 UPPER INFRATROPICAL LOW HUMID

WATER INDEX CARD TRINIDAD -BENI- (BOLIVIA)
 Altitude: 155 m. Latitude: 14° 49'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	22.6	76	32	-44	14	76	0	0	8	-0.5
Aug.	24.0	98	52	-14	0	66	32	0	4	-0.4
Sep.	24.7	106	123	17	17	106	0	0	2	0.1
Oct.	26.7	147	139	-7	10	147	0	0	1	0.0
Nov.	26.9	148	227	78	88	148	0	0	0	0.5
Dec.	27.0	156	275	12	100	156	0	107	54	0.7
Jan.	26.9	155	299	0	100	155	0	144	99	0.9
Feb.	27.0	137	269	0	100	137	0	132	115	0.9
Mar.	27.1	147	226	0	100	147	0	78	97	0.5
Apr.	26.1	125	124	-1	99	125	0	0	48	0.0
May.	24.5	101	115	1	100	101	0	12	30	0.1
Jun.	22.8	76	34	-42	58	76	0	0	15	-0.5
Year	25.5	1473	1914	*	*	1441	32	472	472	*

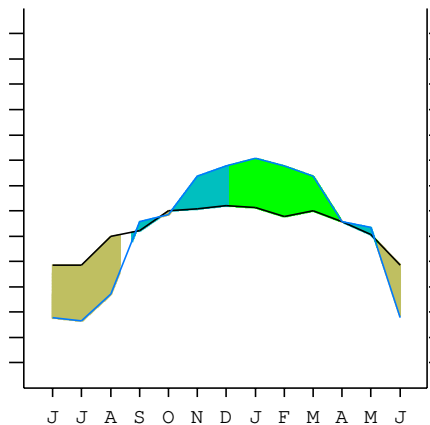
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

TRINIDAD -BENI- (BOLIVIA)

14°49'S 64°55'W 155 m 25/25 y.

T= 25.5 Ic= 4.5 TROPICAL PLUVISEASONAL (MESOPHYTIC)
 m= 16.2 Tp= 3063 UPPER INFRATROPICAL
 M= 29.0 Tn= 0 LOW HUMID
 M' = 0.0 Itc= 707
 m' = 0.0 Io= 6.2
 P= 1914 mm ———
 PE= 1473 mm ———

Imbibing	3 Apr.
Saturation	4 May.
Reserve Use	8 May.
Deficit	10 Aug.



TRINIDAD -BENI- (BOLIVIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A2a]
 + Type: A. Hyperoceanic
 + Subtype: 2. Euhyperoceanic
 + Variant: a. High

Thermic types [A2.A1]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 2. Eutropical
 + Thermic type: A. Warm
 + Thermic subtype: 1. Torrid

Bioclimatic types [A4.1a.7b]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 4. PLUVISEASONAL
 + Bioclimatic variant ..:
 + Thermic type.....: 1. INFRATROPICAL
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 7. HUMID
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Trde.Itr.Hum

TRINIDAD -BENI- (BOLIVIA)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 1434
 Coldest semester of the year.....(Psw): 480
 Warmest four months period of the year.....(Pcm1): 1068
 Following warmest four months period.....(Pcm2): 305
 Positive precipitation dryest 3 months.....(Ppd): 118
 Positive precipitation dryest 2 months.....(Ppd2): 66
 Positive precipitation dryest 1 month.....(Ppd1): 32
 Positive precipitation warmest 3 months.....(Pps): 793
 Positive precipitation warmest 2 months.....(Pps2): 494
 Positive precipitation warmest 1 month.....(Pps1): 226
 Positive precipitation coldest 3 months.....(Ppw): 118
 Positive precipitation coldest 2 months.....(Ppw2): 66
 Positive precipitation coldest 1 month.....(Ppw1): 32

Seasons	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2
Rainfall	118	489	842	464

Tropical rainfall rhythms: 1 > 4 > 2 > 3

TRINIDAD -BENI- (BOLIVIA)

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 27.1
 Average coldest month [T].....(Tmin): 22.6
 Maximum temp. warmest month [M].....(Tmmax): 38.4
 Minimum temp. coldest month [m].....(Tmmin): 16.2
 Absolute Max.temp. warmest month [M'].....(Tamax): 0.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.0
 First warmest contrasted month [M].....(Tcmax): 38.4 (6)
 First coldest contrasted month [m].....(Tcmin): 17.1 (6)
 Dry station temperature.....(Td): 694
 Positive temperature dryest 3 months.....(Tpd): 694
 Positive temperature dryest 2 months.....(Tpd2): 454
 Positive temperature dryest 1 month.....(Tpd1): 226
 Positive temperature warmest 3 months.....(Tps): 810
 Positive temperature warmest 2 months.....(Tps2): 541
 Positive temperature warmest 1 month.....(Tps1): 271
 Positive temperature coldest 3 months.....(Tpw): 694
 Positive temperature coldest 2 months.....(Tpw2): 454
 Positive temperature coldest 1 month.....(Tpw1): 226

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

TRINIDAD -BENI- (BOLIVIA)

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.77
 Mediterranean index of January.....(Im1): No
 Mediterranean index of January & February.....(Im2): No
 Mediterranean index of December to February...(Im3): No

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	2750	2989	2685	2255	1239	1146	339	321	522	1233	1392	2268
Tp	270	269	270	271	261	245	228	226	240	247	267	269
Io (Iom)	10.2	11.1	9.94	8.32	4.75	4.68	1.49	1.42	2.18	4.99	5.21	8.43
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	8424 / 809			4640 / 777			1182 / 694			4893 / 783		
Io (Iot)	10.41			5.972			1.703			6.249		
Semesters	December-May						June-November					
Pp(x10)/Tp	13064 / 1586						6075 / 1477					
Io (Iosm)	8.237						4.113					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 19139/3063=6.25 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	2750	2989	2685	2255	1239	1146	339	321	522	1233	1392	2268
Tp [T*10]	270	269	270	271	261	245	228	226	240	247	267	269
Iom [Pp/Tp]	\$\$	\$\$	994	832	475	468	149	142	218	499	521	843
Avm [200-Iom]	***	***	***	***	***	***	51	58	***	***	***	***
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	8424 / 809			4640 / 777			1182 / 694			4893 / 783		
Iot [Pp/Tp]	1041			597			170			625		
Avs E[Avm<200]	***			***			***			***		
Weak lower semiarid [2]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 4.50
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 9.51
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 4.23
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.76
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: 74.98
 + Temperate warm (100>R>60)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 53.87
 + Humid (60>Ia>30)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 157.90
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 1.33
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 1.30
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 46.68
 + 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: 1. Megathermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	1.19	1.06	0.87	0.46	0.43	0.12	0.11	0.18	0.47	0.51	0.88	1.09
T-E ratio	12.10	12.15	12.20	11.75	11.02	10.26	10.17	10.80	11.12	12.02	12.10	12.15
Precipitation-effectiveness:	73.65					Temperature-efficiency: 137.84						
Moisture Index [MI=100*(P-PE)/PE]: 29.93 + B1.Humid low-humid (20<MI<40)												
Index of dryness [DI=100*d/PE]: 2.15 + No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 32.07 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 1473.08 + Megathermic (PE>1440)												

