

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

MERGUI (MYANMAR -BURMA-)

Altitude: 23 m.

Latitude: 12° 26'N Longitude: 98° 37'E

Temperature observation period.: 1934-1994 (61)

Rainfall observation period....: 1934-1994 (61)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	25.56	30.56	20.56	35.00	11.67	25.4	115.33
Feb.	26.67	31.67	21.67	36.11	15.56	53.3	125.91
Mar.	27.50	32.22	22.78	37.22	16.11	78.7	147.81
Apr.	28.34	32.78	23.89	37.22	18.89	124.5	156.24
May.	27.78	31.67	23.89	36.67	19.44	424.2	158.86
Jun.	26.39	29.44	23.33	36.67	19.44	762.0	140.37
Jul.	25.84	28.89	22.78	33.89	18.89	835.7	133.44
Aug.	25.84	28.89	22.78	33.89	18.89	762.0	129.80
Sep.	25.84	28.89	22.78	32.78	18.89	632.5	123.74
Oct.	26.39	30.00	22.78	35.56	17.22	307.4	132.50
Nov.	26.12	30.56	21.67	34.44	15.00	96.5	122.48
Dec.	25.56	30.56	20.56	36.11	12.78	20.3	114.17
Year	26.49	30.51	22.46	35.46	16.90	4122	1600.7

— BIOCLIMATIC INDICES AND DIAGNOSIS —

Thermicity index.....(It):	776
Compensated thermicity index.....(Itc):	776
Simple continentality index.....(Ic):	2.8
Diurnality index.....(Id):	10.0
Annual ombrothermic index.....(Io):	12.97
Monthly dry ombrothermic index.....(Iod1):	0.79
Bimonthly dry ombrothermic index.....(Iod2):	0.89
Threemonthly dry ombrothermic index.....(Iod3):	1.27
Fourmonthly dry ombrothermic index.....(Iod4):	1.88
Annual ombro-evaporation index.....(Ioe):	2.58
Annual positive temperature.....(Tp):	3178
Annual negative temperature.....(Tn):	-0
Dry station temperature.....(Td):	778
Positive precipitation.....(Pp):	4122

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0°
Months	7	2	1	2	0

Latitudinal Belt...: Eutropical

Continentalty.....: Hyperoceanic - Low Ultrahyperoceanic

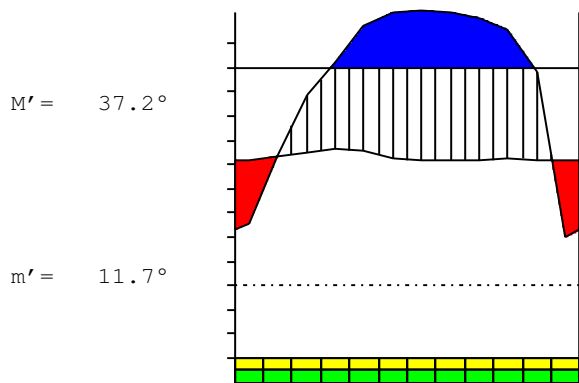
Bioclimate(Variant): TROPICAL PLUVISEASONAL (SUBMESOPHYTIC)

Bioclimatic belt...: UPPER INFRATROPICAL LOW HYPERHUMID

MERGUI (MYANMAR -BURMA-)

23 m

P= 4122 12° 26'N 98° 37'E 61/61 y.
 T= 26.5 ° Ic= 2.8 Tp= 3178 Tn= -0
 m= 20.6 ° M= 30.6 ° Itc= 776 Io= 13.0



**TROPICAL PLUVISEASONAL (SUBMESOPHYTIC)
 UPPER INFRATROPICAL LOW HYPERHUMID**

WATER INDEX CARD

MERGUI (MYANMAR -BURMA-)

Altitude: 23 m.

Latitude: 12° 26'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	25.6	115	25	0	0	25	90	0	45	-0.7
Feb.	26.7	126	53	0	0	53	73	0	22	-0.5
Mar.	27.5	148	79	0	0	79	69	0	11	-0.4
Apr.	28.3	156	124	0	0	124	32	0	6	-0.2
May.	27.8	159	424	100	100	159	0	165	85	1.6
Jun.	26.4	140	762	0	100	140	0	622	354	4.4
Jul.	25.8	133	836	0	100	133	0	702	528	5.2
Aug.	25.8	130	762	0	100	130	0	632	580	4.8
Sep.	25.8	124	632	0	100	124	0	509	544	4.1
Oct.	26.4	133	307	0	100	132	0	175	360	1.3
Nov.	26.1	122	96	-26	74	122	0	0	180	-0.2
Dec.	25.6	114	20	-74	0	94	20	0	90	-0.8
Year	26.5	1601	4122	*	*	1317	283	2805	2805	*

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

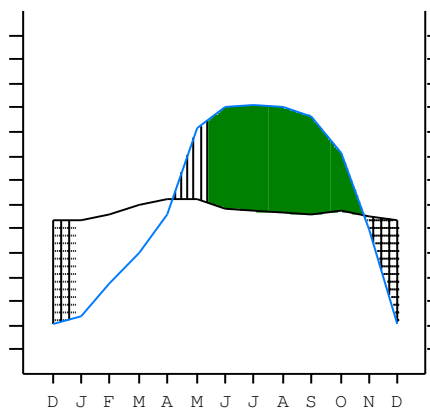
MERGUI (MYANMAR -BURMA-)

12°26'N 98°37'E 23 m 61/61 y.

T= 26.5 Ic= 2.8
 m= 20.6 Tp= 3178
 M= 30.6 Tn= -0
 M' = 37.2 Itc= 776
 m' = 11.7 Io= 13.0
 P= 4122 mm ———
 PE= 1601 mm ———

**TROPICAL PLUVISEASONAL (SUBMESOPHYTIC)
 UPPER INFRATROPICAL
 LOW HYPERHUMID**

	Imbibing	4 Apr.
■	Saturation	12 May.
▣	Reserve Use	27 Oct.
□	Deficit	24 Dec.



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A1b]
 + Type: A. Hyperoceanic
 + Subtype: 1. Ultrahyperoceanic
 + Variant: b. Low

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

Bioclimatic types [A4.1a.8b]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 4. PLUVISEASONAL
 + Bioclimatic variant .:
 + Thermic type.....: 1. INFRATROPICAL
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 8. HYPERHUMID
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Trde.Itr.Hhu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 2278
 Coldest semester of the year.....(Psw): 1844
 Warmest four months period of the year.....(Pcm1): 681
 Following warmest four months period.....(Pcm2): 2992
 Positive precipitation dryest 3 months.....(Ppd): 99
 Positive precipitation dryest 2 months.....(Ppd2): 46
 Positive precipitation dryest 1 month.....(Ppd1): 20
 Positive precipitation warmest 3 months.....(Pps): 627
 Positive precipitation warmest 2 months.....(Pps2): 549
 Positive precipitation warmest 1 month.....(Pps1): 124
 Positive precipitation coldest 3 months.....(Ppw): 142
 Positive precipitation coldest 2 months.....(Ppw2): 46
 Positive precipitation coldest 1 month.....(Ppw1): 25

Seasons	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4
Rainfall	99	627	2359	1036

Tropical rainfall rhythms: 3 > 4 > 2 > 1

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 28.3
 Average coldest month [T].....(Tmin): 25.6
 Maximum temp. warmest month [M].....(Tmmax): 32.8
 Minimum temp. coldest month [m].....(Tmmin): 20.6
 Absolute Max.temp. warmest month [M'].....(Tamax): 37.2
 Absolute Min.temp. coldest month [m'].....(Tamin): 11.7
 First warmest contrasted month [M].....(Tcmax): 30.6 (1)
 First coldest contrasted month [m].....(Tcmin): 20.6 (1)
 Dry station temperature.....(Td): 778
 Positive temperature dryest 3 months.....(Tpd): 778
 Positive temperature dryest 2 months.....(Tpd2): 511
 Positive temperature dryest 1 month.....(Tpd1): 256
 Positive temperature warmest 3 months.....(Tps): 836
 Positive temperature warmest 2 months.....(Tps2): 561
 Positive temperature warmest 1 month.....(Tps1): 283
 Positive temperature coldest 3 months.....(Tpw): 772
 Positive temperature coldest 2 months.....(Tpw2): 511
 Positive temperature coldest 1 month.....(Tpwl): 256

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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)	o	o	o	o	o	o	o	o	o	o	o	o
HiperAgelid..[all>0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.39
 Mediterranean index of July.[PE/P].....(Im1): No
 Mediterranean index of July & August.....(Im2): No
 Mediterranean index of June, July & August....(Im3): No

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	203	254	533	787	1245	4242	7620	8357	7620	6325	3074	965
Tp	256	256	267	275	283	278	264	258	258	258	264	261
Io (Iom)	0.79	0.99	2.00	2.86	4.39	15.3	28.9	32.3	29.5	24.5	11.6	3.69
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	990 / 778			6274 / 836			23597 / 781			10364 / 784		
Io (Iot)	1.273			7.503			30.23			13.23		
Semesters	December-May						June-November					
Pp(x10)/Tp	7264 / 1614						33961 / 1564					
Io (Iosm)	4.500						21.71					

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 2.78
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 1.55
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: -1.62
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.54
 + Hyperoceanic (0<CI<0.6)
 Rainfall Index of Lang (1925) [R=P/T]: 155.65
 + Temperate humid (160>R>100)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 112.99
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]: 632.46
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 0.64
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 2.58
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 169.41
 + Very high (160<K)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)

- + Climate: A. Warm and temperate warm
- + Region: 3. Termoxerotic (Mediterranean warm)
- + Thermic type: 1. Megathermic

Thorntwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.08	0.18	0.27	0.44	1.73	3.41	3.83	3.46	2.81	1.25	0.35	0.06
T-E ratio	11.50	12.00	12.38	12.75	12.50	11.88	11.63	11.63	11.63	11.88	11.75	11.50
Precipitation-effectiveness: 178.50						Temperature-efficiency: 143.02						
Moisture Index [MI=100*(P-PE)/PE]: 157.55 + A.Extremely humid (MI>100) Index of dryness [DI=100*d/PE]: 17.69 + Moderate deficit (16.7<DI<33.3) Index of humidity [HI=100*s/PE]: 175.24 + Strong surplus (20<HI) Potential Evapotranspiration PE: 1600.66 + Megathermic (PE>1440)												

