Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

MOULMEIN (MYANMAR -BURMA-) Altitude: 46 m.

Latitude: 16°26'N Longitude: 97°39'E
Temperature observation period.: 1958-1994 (37)
Rainfall observation period....: 1962-1994 (33)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	25.28	31.67	18.89	37.22	12.78	7.6	106.54
Feb.	26.67	33.33	20.00	37.22	12.22	5.1	125.91
Mar.	28.61	34.44	22.78	39.44	16.67	10.2	156.96
Apr.	29.72	35.00	24.44	38.33	19.44	76.2	167.72
May.	28.06	31.67	24.44	38.89	16.67	515.6	164.27
Jun.	26.67	29.44	23.89	36.11	21.11	904.3	149.18
Jul.	26.11	28.33	23.89	33.89	18.89	1176.1	139.53
Aug.	26.11	28.33	23.89	36.67	18.89	1102.4	135.80
Sep.	26.67	29.44	23.89	35.00	21.11	713.8	139.60
Oct.	27.50	31.11	23.89	37.22	19.44	215.9	144.94
Nov.	27.23	31.67	22.78	37.22	15.00	53.3	134.28
Dec.	25.28	30.56	20.00	36.11	11.11	2.5	105.44
Year	26.99	31.25	22.73	36.94	16.94	4783	1670.2

BIOCLIMATIC INDICES AND DIAGNOSIS

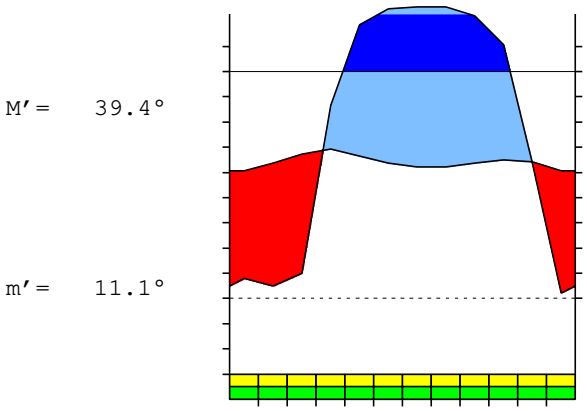
Thermicity index.....(It): 776
Compensated thermicity index.....(Itc): 776
Simple continentality index.....(Ic): 4.4
Diurnality index.....(Id): 13.3
Annual ombrothermic index.....(Io): 14.77
Monthly dry ombrothermic index.....(Iod1): 0.10
Bimonthly dry ombrothermic index.....(Iod2): 0.20
Threemonthly dry ombrothermic index.....(Iod3): 0.20
Fourmonthly dry ombrothermic index.....(Iod4): 0.66
Annual ombro-evaporation index.....(Ioe): 1.28
Annual positive temperature.....(Tp): 3239
Annual negative temperature.....(Tn): 0
Dry station temperature.....(Td): 772
Positive precipitation.....(Pp): 4783

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	6	1	1	4	0

Latitudinal Belt...: Eutropical
Continentality.....: Hyperoceanic - High Euhyperoceanic
Bioclimate(Variant): TROPICAL PLUVISEASONAL (SUBXEROPHYTIC)
Bioclimatic Belt...: UPPER INFRATROPICAL LOW HYPERHUMID

MOULMEIN (MYANMAR –BURMA–) 46 m

P= 4783 16° 26'N 97° 39'E 37/33 y.
T= 27.0° Ic= 4.4 Tp= 3239 Tn= 0
m= 18.9° M= 31.7° Itc= 776 Io= 14.8



TROPICAL PLUVISEASONAL (SUBXEROPHYTIC)
UPPER INFRATROPICAL LOW HYPERHUMID

WATER INDEX CARD MOULMEIN (MYANMAR –BURMA–)
Altitude: 46 m. Latitude: 16° 26'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	25.3	107	8	0	0	8	99	0	49	-0.9
Feb.	26.7	126	5	0	0	5	121	0	25	-0.9
Mar.	28.6	157	10	0	0	10	147	0	12	-0.9
Apr.	29.7	168	76	0	0	76	92	0	6	-0.5
May.	28.1	164	516	100	100	164	0	251	129	2.1
Jun.	26.7	149	904	0	100	149	0	755	442	5.0
Jul.	26.1	140	1176	0	100	140	0	1037	739	7.4
Aug.	26.1	136	1102	0	100	136	0	967	853	7.1
Sep.	26.7	140	714	0	100	140	0	574	714	4.1
Oct.	27.5	145	216	0	100	145	0	71	392	0.4
Nov.	27.2	134	53	-81	19	134	0	0	196	-0.6
Dec.	25.3	105	3	-19	0	22	84	0	98	-0.9
Year	27.0	1670	4783	*	*	1128	542	3277	3277	*

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

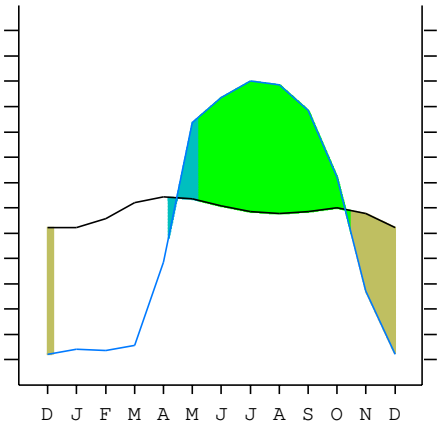
MOULMEIN (MYANMAR –BURMA–)

16°26'N 97°39'E 46 m 37/33 y.

T= 27.0 Ic= 4.4
m= 18.9 Tp= 3239
M= 31.7 Tn= 0
M'= 39.4 Itc= 776
m'= 11.1 Io= 14.8
P= 4783 mm
PE= 1670 mm

TROPICAL PLUVISEASONAL (SUBXEROPHYTIC)
UPPER INFRATROPICAL
LOW HYPERHUMID

Imbibing	7 Apr.
Saturation	9 May.
Reserve Use	15 Oct.
Deficit	6 Dec.



MOULMEIN (MYANMAR -BURMA-)

Latitude: 16°26'N Longitude: 97°39'E Altitude: 46 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality 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.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

MOULMEIN (MYANMAR -BURMA-)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 2688
Coldest semester of the year.....(Psw): 2096
Warmest four months period of the year.....(Pcm1): 607
Following warmest four months period.....(Pcm2): 3897
Positive precipitation dryest 3 months.....(Ppd): 15
Positive precipitation dryest 2 months.....(Ppd2): 10
Positive precipitation dryest 1 month.....(Ppd1): 3
Positive precipitation warmest 3 months.....(Pps): 602
Positive precipitation warmest 2 months.....(Pps2): 86
Positive precipitation warmest 1 month.....(Pps1): 76
Positive precipitation coldest 3 months.....(Ppw): 15
Positive precipitation coldest 2 months.....(Ppw2): 10
Positive precipitation coldest 1 month.....(Ppw1): 8

Seasons	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4
Rainfall	15	602	3182	983

Tropical rainfall rhythms: 3 > 4 > 2 > 1

MOULMEIN (MYANMAR -BURMA-)

Latitude: 16°26'N Longitude: 97°39'E Altitude: 46 m

TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 29.7
Average coldest month [T].....(Tmin): 25.3
Maximum temp. warmest month [M].....(Tmmax): 35.0
Minimum temp. coldest month [m].....(Tmmin): 18.9
Absolute Max.temp. warmest month [M']....(Tamax): 39.4
Absolute Min.temp. coldest month [m']....(Tamin): 11.1
First warmest contrasted month [M].....(Tcmax): 33.3 (2)
First coldest contrasted month [m].....(Tcmin): 20.0 (2)
Dry station temperature.....(Td): 772
Positive temperature dryest 3 months.....(Tpd): 772
Positive temperature dryest 2 months.....(Tpd2): 506
Positive temperature dryest 1 month.....(Tpd1): 253
Positive temperature warmest 3 months.....(Tps): 864
Positive temperature warmest 2 months.....(Tps2): 583
Positive temperature warmest 1 month.....(Tps1): 297
Positive temperature coldest 3 months.....(Tpw): 772
Positive temperature coldest 2 months.....(Tpw2): 506
Positive temperature coldest 1 month.....(Tpw1): 253

MOULMEIN (MYANMAR -BURMA-)

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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

MOULMEIN (MYANMAR -BURMA-)

Latitude: 16°26'N Longitude: 97°39'E Altitude: 46 m

OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.35
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)	25	76	51	102	762	5156	9043	11761	11024	7138	2159	533
Tp	253	253	267	286	297	281	267	261	261	267	275	272
Io (Iom)	0.10	0.30	0.19	0.36	2.56	18.4	33.9	45.0	42.2	26.8	7.85	1.96
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	152 / 772			6020 / 864			31828 / 789			9830 / 814		
Io (Iot)	0.197			6.968			40.34			12.08		
Semesters	December-May						June-November					
Pp(x10)/Tp	6172 / 1636						41658 / 1603					
Io (Iosm)	3.772						25.99					

MOULMEIN (MYANMAR -BURMA-)

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 47830/3239=14.77 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	25	76	51	102	762	5156	9043	11761	11024	7138	2159	533
Tp [T*10]	253	253	267	286	297	281	267	261	261	267	275	272
Iom [Pp/Tp]	10	30	19	36	256	$$	$$	$$	$$	$$	785	196
Avm [200-Iom]	190	170	181	164	***	***	***	***	***	***	***	4
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	152 / 772			6020 / 864			31828 / 789			9830 / 814		
Iot [Pp/Tp]	20			697			$$			1208		
Avs E[Avm<200]	541			***			***			***		

Lower ultrahyperarid [1]	Upper ultrahyperarid [2]
Upper hyperarid [2]	Weak upper semiarid [1]

MOULMEIN (MYANMAR -BURMA-)

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin] .....(Sp): 4.44
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4] .....: 6.28
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14] .....: 2.96
  + Hyperoceanic (-20<CI<20)
CI of Currey (1974) [CI=Sp/(1+Lat/3)] .....: 0.69
  + Oceanic (0.6<CI<1.1)
Rainfall Index of Lang (1925) [R=P/T] .....: 177.20
  + Humid (R>160)
Aridity Index of Martonne (1926) [Ia=P/(T+10)] .....: 129.30
  + Perhumid (Ia>60)
I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)] .....: 550.93
  + Humid (Q>90)
I of Dantin & Revenga (1940) [DR=100*T/P] .....: 0.56
  + Humid (2>DR>0)
Aridity Index of UNEP [I=P/PE] .....: 2.86
  + Humid (I>0.65)
Potencial Erosion I of Fournier (1960) [K=Pi²/P].....: 289.19
  + Very high (160<K)

MOULMEIN (MYANMAR -BURMA-)

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BIOCLIMATIC INDICES II

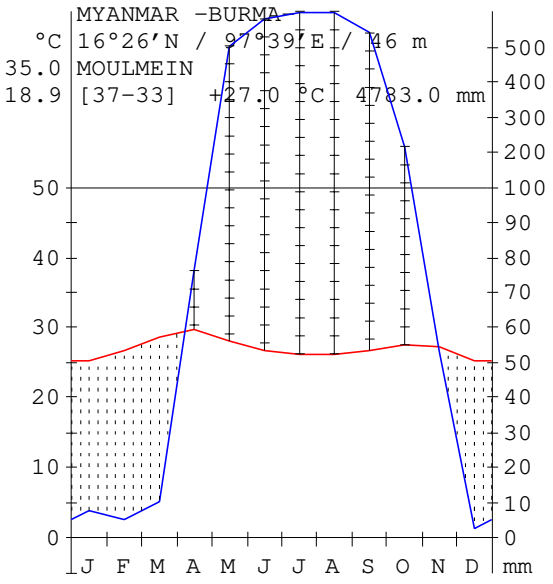
Bioclimatic classification of Gaussen & Bagnouls (1957)
  + Climate ....: A. Warm and temperate warm
  + Region .....: 3. Termoxeroteric (Mediterranean warm)
  + Thermic type: 1. Megathermic

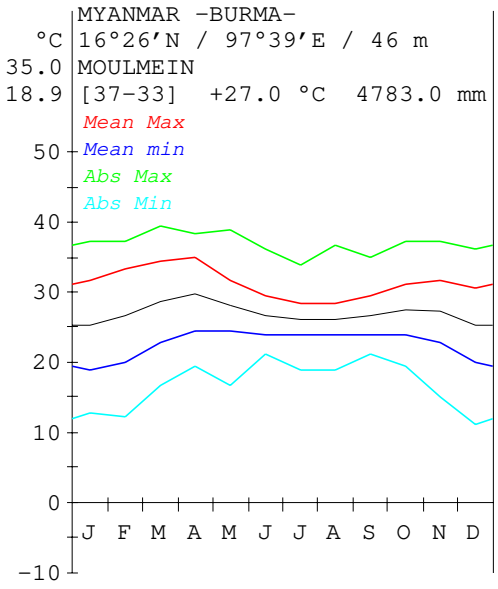
Thornthwaite (1948)

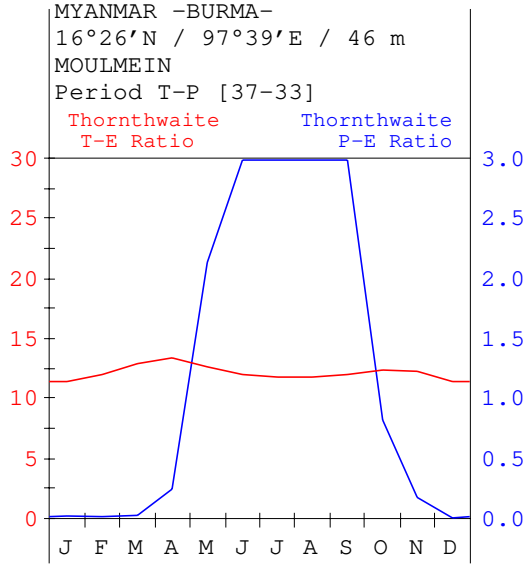
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.02	0.01	0.03	0.25	2.13	4.10	5.56	5.18	3.15	0.82	0.17	0.01
T-E ratio	11.38	12.00	12.87	13.37	12.63	12.00	11.75	11.75	12.00	12.38	12.25	11.38

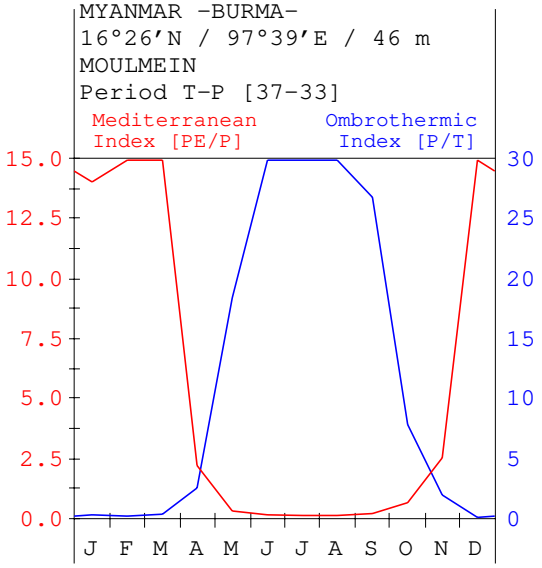
Precipitation-effectiveness: 214.41 Temperature-efficiency ....: 145.76

Moisture Index [MI=100*(P-PE)/PE] .....: 186.38
  + A.Extremely humid (MI>100)
Index of dryness [DI=100*d/PE] .....: 32.45
  + Moderate deficit (16.7<DI<33.3)
Index of humidity [HI=100*s/PE] .....: 196.19
  + Strong surplus (20<HI)
Potential Evapotranspiration PE .....: 1670.18
  + Megathermic (PE>1440)




MYANMAR -BURMA-
16°26'N / 97°39'E / 46 m
MOULMEIN
[37-33] +27.0 °C 4783.0 mm
°C
35.0
18.9
Mean Max
Mean min
Abs Max
Abs Min
50
40
30
20
10
0
-10
J F M A M J J A S O N D


MYANMAR -BURMA-
16°26'N / 97°39'E / 46 m
MOULMEIN
Period T-P [37-33]
Thornthwaite T-E Ratio
Thornthwaite P-E Ratio
30
25
20
15
10
5
0
3.0
2.5
2.0
1.5
1.0
0.5
0.0
J F M A M J J A S O N D


MYANMAR -BURMA-
16°26'N / 97°39'E / 46 m
MOULMEIN
Period T-P [37-33]
Mediterranean Index [PE/P]
Ombrothermic Index [P/T]
15.0
12.5
10.0
7.5
5.0
2.5
0.0
30
25
20
15
10
5
0
J F M A M J J A S O N D