

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

KENGTUNG (MYANMAR -BURMA-)

Altitude: 828 m.

Latitude: 21°18'N Longitude: 99°37'E

Temperature observation period.: 1986-1994 (9)

Rainfall observation period....: 1988-1994 (7)

| (C/mm) | Ti | Mi | mi | M'i | m'i | Pi | EPI |
|--------|-------|-------|-------|-------|-------|-------|--------|
| Jan. | 17.22 | 24.44 | 10.00 | 30.00 | 3.89 | 0.0 | 39.44 |
| Feb. | 19.17 | 27.78 | 10.56 | 32.22 | 5.00 | 4.8 | 50.58 |
| Mar. | 22.22 | 31.11 | 13.33 | 35.00 | 8.89 | 10.4 | 86.54 |
| Apr. | 25.84 | 33.89 | 17.78 | 40.00 | 13.89 | 9.4 | 133.09 |
| May. | 26.39 | 32.22 | 20.56 | 37.78 | 17.22 | 179.8 | 151.68 |
| Jun. | 26.12 | 30.56 | 21.67 | 35.00 | 17.78 | 207.5 | 144.88 |
| Jul. | 25.56 | 29.44 | 21.67 | 32.78 | 18.89 | 285.5 | 141.50 |
| Aug. | 25.28 | 28.89 | 21.67 | 32.78 | 17.78 | 262.6 | 132.54 |
| Sep. | 24.73 | 28.89 | 20.56 | 32.78 | 16.11 | 180.6 | 114.71 |
| Oct. | 23.34 | 27.78 | 18.89 | 33.89 | 12.78 | 7.9 | 96.07 |
| Nov. | 20.56 | 26.67 | 14.44 | 30.00 | 8.89 | 11.7 | 62.56 |
| Dec. | 18.06 | 25.00 | 11.11 | 32.22 | 2.78 | 5.8 | 44.90 |
| Year | 22.87 | 28.89 | 16.85 | 33.70 | 11.99 | 1166 | 1198.5 |

BIOCLIMATIC INDICES AND DIAGNOSIS

| | |
|---|------|
| Thermicity index.....(It): | 573 |
| Compensated thermicity index.....(Itc): | 573 |
| Simple continentality index.....(Ic): | 9.2 |
| Diurnality index.....(Id): | 17.8 |
| Annual ombrothermic index.....(Io): | 4.25 |
| Monthly dry ombrothermic index.....(Iod1): | No |
| Bimonthly dry ombrothermic index.....(Iod2): | 0.13 |
| Threemonthly dry ombrothermic index.....(Iod3): | 0.19 |
| Fourmonthly dry ombrothermic index.....(Iod4): | 0.30 |
| Annual ombro-evaporation index.....(Ioe): | 0.97 |
| Annual positive temperature.....(Tp): | 2745 |
| Annual negative temperature.....(Tn): | 0 |
| Dry station temperature.....(Td): | 545 |
| Positive precipitation.....(Pp): | 1166 |

| N. of Months | P>4T | P:2T-4T | PT-2T | P<T | T<0 |
|--------------|------|---------|-------|-----|-----|
| | 5 | 0 | 0 | 7 | 0 |

Latitudinal Belt...: Eutropical

Continentalty.....: Hyperoceanic - High Subhyperoceanic

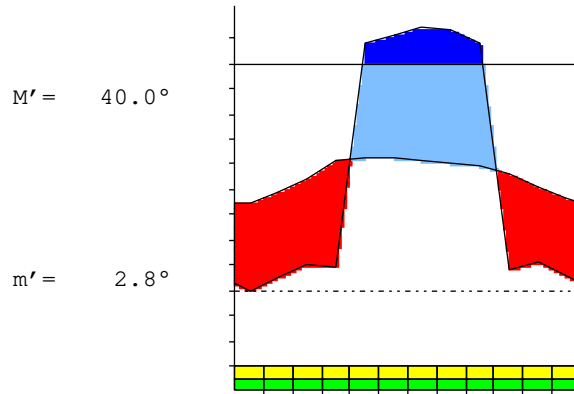
Bioclimate(Variant): TROPICAL PLUVISEASONAL (XEROPHYTIC)

Bioclimatic Belt...: UPPER THERMOTROPICAL LOW SUBHUMID

KENGTUNG (MYANMAR -BURMA-)

828 m

P= 1166 21° 18'N 99° 37'E 9/7 y.
 T= 22.9 ° Ic= 9.2 Tp= 2745 Tn= 0
 m= 10.0 ° M= 24.4 ° Itc= 573 Io= 4.2



TROPICAL PLUVISEASONAL (XEROPHYTIC)
 UPPER THERMOTROPICAL LOW SUBHUMID

WATER INDEX CARD KENGTUNG (MYANMAR -BURMA-)
 Altitude: 828 m. Latitude: 21° 18'N

| (C/mm) | T | PE | P | VR | R | RE | DF | SP | DR | HC |
|--------|------|------|------|-----|-----|-----|-----|-----|-----|------|
| Jan. | 17.2 | 39 | 0 | 0 | 0 | 0 | 39 | 0 | 5 | -1.0 |
| Feb. | 19.2 | 51 | 5 | 0 | 0 | 5 | 46 | 0 | 3 | -0.9 |
| Mar. | 22.2 | 87 | 10 | 0 | 0 | 10 | 76 | 0 | 1 | -0.8 |
| Apr. | 25.8 | 133 | 9 | 0 | 0 | 9 | 124 | 0 | 1 | -0.9 |
| May. | 26.4 | 152 | 180 | 28 | 28 | 152 | 0 | 0 | 0 | 0.1 |
| Jun. | 26.1 | 145 | 208 | 63 | 91 | 145 | 0 | 0 | 0 | 0.4 |
| Jul. | 25.6 | 141 | 286 | 9 | 100 | 141 | 0 | 135 | 67 | 1.0 |
| Aug. | 25.3 | 133 | 263 | 0 | 100 | 133 | 0 | 130 | 99 | 0.9 |
| Sep. | 24.7 | 115 | 181 | 0 | 100 | 115 | 0 | 66 | 82 | 0.5 |
| Oct. | 23.3 | 96 | 8 | -88 | 12 | 96 | 0 | 0 | 41 | -0.9 |
| Nov. | 20.6 | 63 | 12 | -12 | 0 | 24 | 39 | 0 | 21 | -0.8 |
| Dec. | 18.1 | 45 | 6 | 0 | 0 | 6 | 39 | 0 | 10 | -0.8 |
| Year | 22.9 | 1198 | 1166 | * | * | 835 | 363 | 331 | 331 | * |

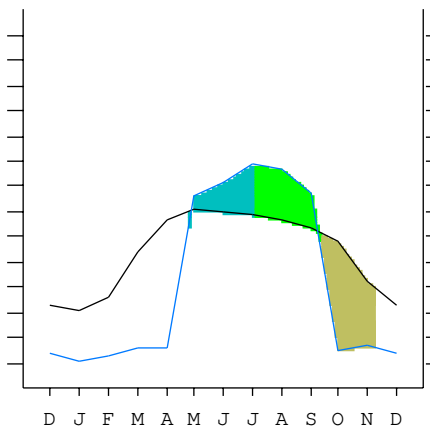
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

KENGTUNG (MYANMAR -BURMA-)

21°18'N 99°37'E 828 m 9/7 y.

T= 22.9 Ic= 9.2 TROPICAL PLUVISEASONAL (XEROPHYTIC)
 m= 10.0 Tp= 2745 UPPER THERMOTROPICAL
 M= 24.4 Tn= 0 LOW SUBHUMID
 M' = 40.0 Itc= 573
 m' = 2.8 Io= 4.2
 P= 1166 mm ———
 PE= 1198 mm ———

| | |
|-------------|---------|
| Imbibing | 25 Apr. |
| Saturation | 2 Jul. |
| Reserve Use | 13 Sep. |
| Deficit | 7 Nov. |



KENGTUNG (MYANMAR -BURMA-)

Latitude: 21°18'N Longitude: 99°37'E Altitude: 828 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [A3a]
+ Type: A. Hyperoceanic
+ Subtype: 3. Subhyperoceanic
+ Variant: a. High
Thermic types [A2.A2]
+ Latitudinal zone: A. Warm
+ Latitudinal belt: 2. Eutropical
+ Thermic type: A. Warm
+ Thermic subtype: 2. Warm
Bioclimatic types [A4.2a.6b]
+ Macrobioclimate: A. TROPICAL
+ Bioclimate: 4. PLUVISEASONAL
+ Bioclimatic variant .: XEROPHYTIC
+ Thermic type.....: 2. THERMOTROPICAL
+ Thermic subtype.....: a. UPPER
+ Ombrothermic type ...: 6. SUBHUMID
+ Ombrothermic subtype : b. LOW
Bioclimatic ClassificationTrps (Xer).Ttr.Shu.Sho

KENGTUNG (MYANMAR -BURMA-)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 1125
Coldest semester of the year.....(Psw): 41
Warmest four months period of the year.....(Pcm1): 682
Following warmest four months period.....(Pcm2): 463
Positive precipitation dryest 3 months.....(Ppd): 11
Positive precipitation dryest 2 months.....(Ppd2): 5
Positive precipitation dryest 1 month.....(Ppd1): 0
Positive precipitation warmest 3 months.....(Pps): 397
Positive precipitation warmest 2 months.....(Pps2): 387
Positive precipitation warmest 1 month.....(Pps1): 180
Positive precipitation coldest 3 months.....(Ppw): 11
Positive precipitation coldest 2 months.....(Ppw2): 6
Positive precipitation coldest 1 month.....(Ppw1): 0

| Seasons | Dec+Jan+Feb Ttr1-1 | Mar+Apr+May Ttr2-2 | Jun+Jul+Aug Ttr3-3 | Sep+Oct+Nov Ttr4-4 |
|----------|-----------------------|-----------------------|-----------------------|-----------------------|
| Rainfall | 10 | 199 | 755 | 200 |

Tropical rainfall rhythms: 3 > 4 > 2 > 1

KENGTUNG (MYANMAR -BURMA-)

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 26.4
Average coldest month [T].....(Tmin): 17.2
Maximum temp. warmest month [M].....(Tmmax): 33.9
Minimum temp. coldest month [m].....(Tmmin): 10.0
Absolute Max.temp. warmest month [M'].....(Tamax): 40.0
Absolute Min.temp. coldest month [m'].....(Tamin): 2.8
First warmest contrasted month [M].....(Tcmax): 31.1 (3)
First coldest contrasted month [m].....(Tcmin): 13.3 (3)
Dry station temperature.....(Td): 545
Positive temperature dryest 3 months.....(Tpd): 545
Positive temperature dryest 2 months.....(Tpd2): 364
Positive temperature dryest 1 month.....(Tpd1): 172
Positive temperature warmest 3 months.....(Tps): 784
Positive temperature warmest 2 months.....(Tps2): 525
Positive temperature warmest 1 month.....(Tps1): 264
Positive temperature coldest 3 months.....(Tpw): 545
Positive temperature coldest 2 months.....(Tpw2): 353
Positive temperature coldest 1 month.....(Tpw1): 172

KENGTUNG (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 |

KENGTUNG (MYANMAR -BURMA-)

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.03
 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) | 58 | 0 | 48 | 104 | 94 | 1798 | 2075 | 2855 | 2626 | 1806 | 79 | 117 |
| Tp | 181 | 172 | 192 | 222 | 258 | 264 | 261 | 256 | 253 | 247 | 233 | 206 |
| Io (Iom) | 0.32 | 0.00 | 0.25 | 0.47 | 0.36 | 6.81 | 7.94 | 11.2 | 10.4 | 7.30 | 0.34 | 0.57 |
| Seasons | Dec+Jan+Feb | | | Mar+Apr+May | | | Jun+Jul+Aug | | | Sep+Oct+Nov | | |
| Pp(x10)/Tp | 106 / 544 | | | 1996 / 744 | | | 7556 / 770 | | | 2002 / 686 | | |
| Io (Iot) | 0.195 | | | 2.681 | | | 9.818 | | | 2.917 | | |
| Semesters | December-May | | | | | | June-November | | | | | |
| Pp(x10)/Tp | 2102 / 1289 | | | | | | 9558 / 1456 | | | | | |
| Io (Iosm) | 1.631 | | | | | | 6.565 | | | | | |

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 11660/2745=4.25 There is No Yearly Aridity

| Months | Dec. | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. |
|--------------------------|-------------|------|------|-------------|------|--------------------------|-------------|------|------|-------------|------|------|
| Pp [P*10] | 58 | 0 | 48 | 104 | 94 | 1798 | 2075 | 2855 | 2626 | 1806 | 79 | 117 |
| Tp [T*10] | 181 | 172 | 192 | 222 | 258 | 264 | 261 | 256 | 253 | 247 | 233 | 206 |
| Iom [Pp/Tp] | 32 | 0 | 25 | 47 | 36 | 681 | 794 | \$\$ | \$\$ | 730 | 34 | 57 |
| Avm [200-Iom] | 168 | 200 | 175 | 153 | 164 | *** | *** | *** | *** | *** | 166 | 143 |
| Seasons | Dec+Jan+Feb | | | Mar+Apr+May | | | Jun+Jul+Aug | | | Sep+Oct+Nov | | |
| Pp / Tp | 106 / 544 | | | 1996 / 744 | | | 7556 / 770 | | | 2002 / 686 | | |
| Iot [Pp/Tp] | 19 | | | 268 | | | 982 | | | 292 | | |
| Avs E[Avm<200] | 543 | | | *** | | | *** | | | *** | | |
| Lower ultrahyperarid [1] | | | | | | Upper ultrahyperarid [1] | | | | | | |
| Lower hyperarid [1] | | | | | | Upper hyperarid [3] | | | | | | |
| Strong lower arid [1] | | | | | | Weak lower arid [1] | | | | | | |

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BIOCLIMATIC INDICES I

| | | |
|--|-------|--------|
| CI of Supan (1884) [Tmax-Tmin] | (Sp): | 9.17 |
| CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4] | | 22.52 |
| CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14] | | 16.01 |
| + Hyperoceanic (-20<CI<20) | | |
| CI of Currey (1974) [CI=Sp/(1+Lat/3)] | | 1.13 |
| + Subcontinental (1.1<CI<1.7) | | |
| Rainfall Index of Lang (1925) [R=P/T] | | 50.97 |
| + Semiarid (60>R>40) | | |
| Aridity Index of Martonne (1926) [Ia=P/(T+10)] | | 35.47 |
| + Humid (60>Ia>30) | | |
| I of Emberger (1930) [Q=100*P/(Tmmax ² -Tmmin ²)] | | 111.20 |
| + Humid (Q>90) | | |
| I of Dantin & Revenga (1940) [DR=100*T/P] | | 1.96 |
| + Humid (2>DR>0) | | |
| Aridity Index of UNEP [I=P/PE] | | 0.97 |
| + Humid (I>0.65) | | |
| Potencial Erosion I of Fournier (1960) [K=Pi ² /P]..... | | 69.91 |
| + Low (60<K<90) | | |

KENGTUNG (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: 2. Macrothermic

| Thornthwaite (1948) | | | | | | | | | | | | |
|---|------|------|-------|-------|-------|--------------------------------------|-------|-------|-------|-------|------|------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| P-E ratio | 0.00 | 0.01 | 0.03 | 0.03 | 0.69 | 0.81 | 1.17 | 1.07 | 0.72 | 0.02 | 0.04 | 0.02 |
| T-E ratio | 7.75 | 8.63 | 10.00 | 11.63 | 11.88 | 11.75 | 11.50 | 11.38 | 11.13 | 10.50 | 9.25 | 8.13 |
| Precipitation-effectiveness: 46.04 | | | | | | Temperature-efficiency: 123.52 | | | | | | |
| Moisture Index [MI=100*(P-PE)/PE] | | | | | | | | | | | | |
| + C1.Subhumid dry (-33.3<MI<0) | | | | | | | | | | | | |
| Index of dryness [DI=100*d/PE] | | | | | | | | | | | | |
| + Moderate deficit (16.7<DI<33.3) | | | | | | | | | | | | |
| Index of humidity [HI=100*s/PE] | | | | | | | | | | | | |
| + Strong surplus (20<HI) | | | | | | | | | | | | |
| Potential Evapotranspiration PE | | | | | | | | | | | | |
| + Forth mesothermic (997<PE<1440) | | | | | | | | | | | | |

