

# Phytosociological Research Center

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## Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

MOKMER (INDONESIA)

Altitude: 14 m.

Latitude: 1°12'S Longitude: 136°7'E

Temperature observation period.: 1992-1994 (3)

Rainfall observation period....: 1986-1994 (9)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	26.67	30.00	23.33	32.22	22.22	278.1	142.34
Feb.	26.39	29.44	23.33	31.11	21.11	208.5	122.35
Mar.	26.95	30.00	23.89	32.22	22.78	297.2	144.67
Apr.	26.95	30.00	23.89	32.22	22.78	210.8	140.49
May.	27.23	30.56	23.89	32.22	22.78	217.9	147.00
Jun.	27.23	30.56	23.89	32.22	22.22	267.7	142.76
Jul.	26.39	29.44	23.33	32.22	21.11	286.8	135.37
Aug.	26.95	30.00	23.89	32.22	21.11	283.2	144.67
Sep.	26.67	30.00	23.33	32.78	22.22	178.3	138.23
Oct.	27.23	30.56	23.89	32.78	22.22	155.5	147.00
Nov.	27.23	30.56	23.89	32.78	21.11	185.4	142.76
Dec.	26.95	30.00	23.89	32.22	22.22	318.0	144.67
Year	26.90	30.09	23.70	32.27	21.99	2887	1692.3

### BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	797
Compensated thermicity index.....(Itc):	797
Simple continentality index.....(Ic):	0.8
Diurnality index.....(Id):	6.7
Annual ombrothermic index.....(Io):	8.94
Monthly dry ombrothermic index.....(Iod1):	5.71
Bimonthly dry ombrothermic index.....(Iod2):	6.19
Three monthly dry ombrothermic index.....(Iod3):	6.40
Four monthly dry ombrothermic index.....(Iod4):	7.42
Annual ombro-evaporation index.....(Ioe):	1.05
Annual positive temperature.....(Tp):	3228
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	811
Positive precipitation.....(Pp):	2887

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	12	0	0	0	0

Latitudinal Belt...: Equatorial

Continentalty.....: Hyperoceanic - High Ultrahyperoceanic

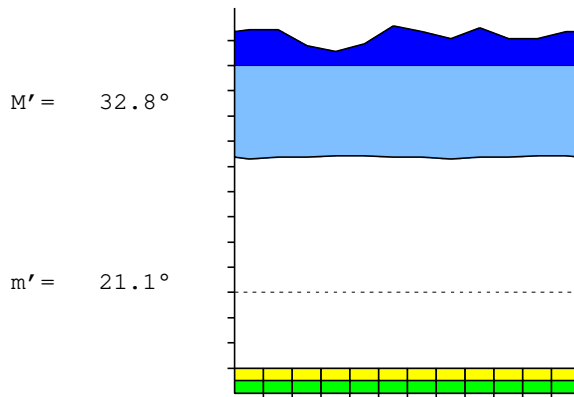
Bioclimate(Variant): TROPICAL PLUVIAL (HYGROPHYTIC)

Bioclimatic Belt...: UPPER INFRATROPICAL LOW HUMID

MOKMER (INDONESIA)

14 m

P= 2887      1° 12'S      136° 7'E      3/9 y.  
 T= 26.9°      Ic= 0.8      Tp= 3228      Tn= 0  
 m= 23.3°      M= 29.4°      Itc= 797      Io= 8.9



TROPICAL PLUVIAL (HYGROPHYTIC)  
 UPPER INFRATROPICAL LOW HUMID

WATER INDEX CARD

MOKMER (INDONESIA)

Altitude: 14 m.

Latitude: 1° 12'S

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	26.4	135	287	0	100	135	0	151	128	1.1
Aug.	27.0	145	283	0	100	145	0	139	133	0.9
Sep.	26.7	138	178	0	100	138	0	40	87	0.2
Oct.	27.2	147	156	0	100	147	0	9	48	0.0
Nov.	27.2	143	185	0	100	143	0	43	45	0.2
Dec.	27.0	145	318	0	100	145	0	173	109	1.1
Jan.	26.7	142	278	0	100	142	0	136	122	0.9
Feb.	26.4	122	209	0	100	122	0	86	104	0.7
Mar.	27.0	145	297	0	100	145	0	153	128	1.0
Apr.	27.0	140	211	0	100	140	0	70	99	0.5
May.	27.2	147	218	0	100	147	0	71	85	0.4
Jun.	27.2	143	268	0	100	143	0	125	105	0.8
Year	26.9	1692	2887	*	*	1692	0	1195	1195	*

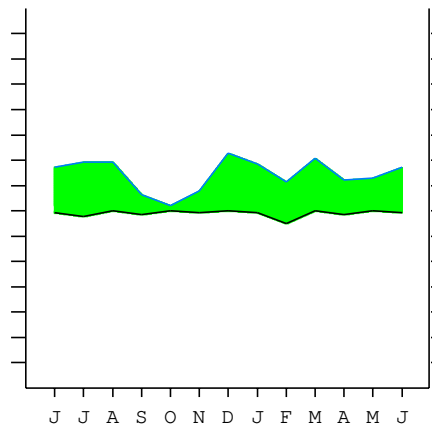
R = Reserve    VR = Variation of the reserve    RE = Real evapotranspiration  
 DR = Drainage    HC = Humidity coefficient    DF = Deficit    SP = Superavit

MOKMER (INDONESIA)

1°12'S    136°7'E    14 m    3/9 y.

T= 26.9      Ic= 0.8      TROPICAL PLUVIAL (HYGROPHYTIC)  
 m= 23.3      Tp= 3228      UPPER INFRATROPICAL  
 M= 29.4      Tn= 0      LOW HUMID  
 M' = 32.8      Itc= 797  
 m' = 21.1      Io= 8.9  
 P= 2887      mm    ———  
 PE= 1692      mm    ———

Imbibing	
Saturation	
Reserve Use	
Deficit	



All over the year,  
 there is no hydric deficit

MOKMER (INDONESIA)

Latitude: 1°12'S Longitude: 136°7'E Altitude: 14 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A1a]  
 + Type .....: A. Hyperoceanic  
 + Subtype .....: 1. Ultrahyperoceanic  
 + Variant .....: a. High

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

Bioclimatic types [A5.1a.7b]  
 + Macrobioclimate .....: A. TROPICAL  
 + Bioclimate .....: 5. PLUVIAL  
 + Bioclimatic variant ..:  
 + Thermic type.....: 1. INFRATROPICAL  
 + Thermic subtype.....: a. UPPER  
 + Ombrothermic type ...: 7. HUMID  
 + Ombrothermic subtype : b. LOW  
 Bioclimatic Classification .....: Trhd.Itr.Hum

MOKMER (INDONESIA)

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 1564  
 Coldest semester of the year.....(Psw): 1489  
 Warmest four months period of the year.....(Pcm1): 994  
 Following warmest four months period.....(Pcm2): 904  
 Positive precipitation dryest 3 months.....(Ppd): 519  
 Positive precipitation dryest 2 months.....(Ppd2): 334  
 Positive precipitation dryest 1 month.....(Ppd1): 156  
 Positive precipitation warmest 3 months.....(Pps): 696  
 Positive precipitation warmest 2 months.....(Pps2): 486  
 Positive precipitation warmest 1 month.....(Pps1): 218  
 Positive precipitation coldest 3 months.....(Ppw): 784  
 Positive precipitation coldest 2 months.....(Ppw2): 487  
 Positive precipitation coldest 1 month.....(Ppw1): 209

Seasons	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2
Rainfall	837	519	804	725

Tropical rainfall rhythms: 3 > 1 > 2 > 4

MOKMER (INDONESIA)

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 27.2  
 Average coldest month [T].....(Tmin): 26.4  
 Maximum temp. warmest month [M].....(Tmmax): 30.6  
 Minimum temp. coldest month [m].....(Tmmin): 23.3  
 Absolute Max.temp. warmest month [M'].....(Tamax): 32.8  
 Absolute Min.temp. coldest month [m'].....(Tamin): 21.1  
 First warmest contrasted month [M].....(Tcmax): 30.0 (1)  
 First coldest contrasted month [m].....(Tcmin): 23.3 (1)  
 Dry station temperature.....(Td): 811  
 Positive temperature dryest 3 months.....(Tpd): 811  
 Positive temperature dryest 2 months.....(Tpd2): 539  
 Positive temperature dryest 1 month.....(Tpd1): 272  
 Positive temperature warmest 3 months.....(Tps): 814  
 Positive temperature warmest 2 months.....(Tps2): 545  
 Positive temperature warmest 1 month.....(Tps1): 272  
 Positive temperature coldest 3 months.....(Tpw): 800  
 Positive temperature coldest 2 months.....(Tpw2): 531  
 Positive temperature coldest 1 month.....(Tpw1): 264

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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): 0.59  
 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)	3180	2781	2085	2972	2108	2179	2677	2868	2832	1783	1555	1854
Tp	270	267	264	270	270	272	272	264	270	267	272	272
Io (Iom)	11.8	10.4	7.90	11.0	7.82	8.00	9.83	10.9	10.5	6.69	5.71	6.81
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	8046 / 800			7259 / 811			8377 / 806			5192 / 811		
Io (Iot)	10.06			8.947			10.40			6.400		
Semesters	December-May						June-November					
Pp(x10)/Tp	15305 / 1611						13569 / 1617					
Io (Iosm)	9.498						8.391					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 28874/3228=8.94 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	3180	2781	2085	2972	2108	2179	2677	2868	2832	1783	1555	1854
Tp [T*10]	270	267	264	270	270	272	272	264	270	267	272	272
Iom [Pp/Tp]	\$\$	\$\$	790	\$\$	782	800	983	\$\$	\$\$	669	571	681
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	8046 / 800			7259 / 811			8377 / 806			5192 / 811		
Iot [Pp/Tp]	1006			895			1040			640		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin] .....	(Sp): 0.84
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4] .....	47.79
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14] .....	-6.65
+ Hyperoceanic (-20<CI<20)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)] .....	0.60
+ Oceanic (0.6<CI<1.1)	
Rainfall Index of Lang (1925) [R=P/T] .....	107.32
+ Temperate humid (160>R>100)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)] .....	78.24
+ Perhumid (Ia>60)	
I of Emberger (1930) [Q=100*P/(Tmax <sup>2</sup> -Tmin <sup>2</sup> )] .....	741.07
+ Humid (Q>90)	
I of Dantin & Revenga (1940) [DR=100*T/P] .....	0.93
+ Humid (2>DR>0)	
Aridity Index of UNEP [I=P/PE] .....	1.71
+ Humid (I>0.65)	
Potential Erosion I of Fournier (1960) [K=Pi <sup>2</sup> /P] .....	35.02
+ Very low (K<60)	

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)  
 + Climate .....

- + Climate .....
- + Region .....
- + Thermic type: 1. Megathermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	1.11	0.81	1.18	0.81	0.83	1.05	1.15	1.12	0.68	0.57	0.70	1.28
T-E ratio	12.00	11.88	12.13	12.13	12.25	12.25	11.88	12.13	12.00	12.25	12.25	12.13
Precipitation-effectiveness: 112.88						Temperature-efficiency .....						145.28
Moisture Index [MI=100*(P-PE)/PE] .....												70.62
+ B3.Humid high-humid (60<MI<80)												
Index of dryness [DI=100*d/PE] .....												0.00
+ No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE] .....												70.62
+ Strong surplus (20<HI)												
Potential Evapotranspiration PE .....												1692.30
+ Megathermic (PE>1440)												

