

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

PANGKALPINANG/ PANGK (INDONESIA)

Altitude: 33 m.

Latitude: 2°10'S Longitude: 106°8'E

Temperature observation period.: 1961-1991 (31)

Rainfall observation period....: 1888-1991 (104)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPi
Jan.	25.58	26.80	24.20	0.00	0.00	288.0	121.61
Feb.	25.90	27.29	24.36	0.00	0.00	231.4	115.10
Mar.	26.24	27.23	25.28	0.00	0.00	244.6	133.65
Apr.	26.66	28.69	24.46	0.00	0.00	241.1	138.15
May.	26.92	28.81	25.24	0.00	0.00	204.1	143.03
Jun.	26.84	29.31	24.44	0.00	0.00	156.5	138.22
Jul.	26.76	29.68	23.83	0.00	0.00	140.9	143.09
Aug.	26.88	28.85	24.95	0.00	0.00	114.7	144.08
Sep.	26.94	29.23	24.68	0.00	0.00	115.5	140.41
Oct.	27.01	30.44	23.61	0.00	0.00	159.4	145.17
Nov.	26.33	27.98	24.73	0.00	0.00	233.7	132.76
Dec.	25.46	27.36	23.79	0.00	0.00	329.1	120.66
Year	26.46	28.47	24.46	0.00	0.00	2459	1615.9

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	776
Compensated thermicity index.....(Itc):	776
Simple continentality index.....(Ic):	1.6
Diurnality index.....(Id):	6.8
Annual ombrothermic index.....(Io):	7.74
Monthly dry ombrothermic index.....(Iod1):	4.27
Bimonthly dry ombrothermic index.....(Iod2):	4.28
Three monthly dry ombrothermic index.....(Iod3):	4.61
Four monthly dry ombrothermic index.....(Iod4):	4.91
Annual ombro-evaporation index.....(Ioe):	0.57
Annual positive temperature.....(Tp):	3175
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	806
Positive precipitation.....(Pp):	2459

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

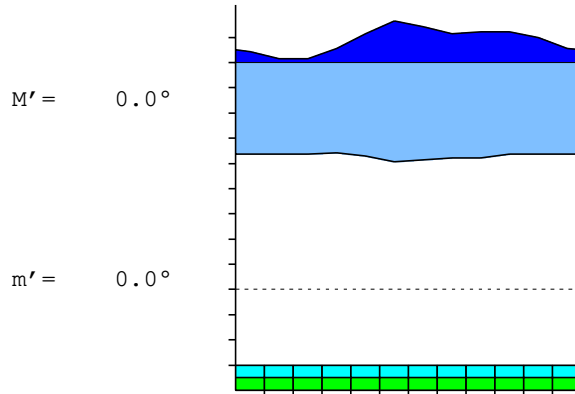
Latitudinal Belt...: Equatorial

Continentalty.....: Hyperoceanic - High Ultrahyperoceanic

Bioclimate(Variant): TROPICAL PLUVIAL (HYGROPHYTIC)

Bioclimatic Belt...: UPPER INFRATROPICAL LOW HUMID

PANGKALPINANG/ PANGK (INDONESIA) 33 m
 P= 2459 2° 10'S 106° 8'E 31/104 y.
 T= 26.5° Ic= 1.6 Tp= 3175 Tn= 0
 m= 23.8° M= 27.4° Itc= 776 Io= 7.7



TROPICAL PLUVIAL (HYGROPHYTIC)
 UPPER INFRATROPICAL LOW HUMID

WATER INDEX CARD PANGKALPINANG/ PANGK (INDONESIA)
 Altitude: 33 m. Latitude: 2° 10'S

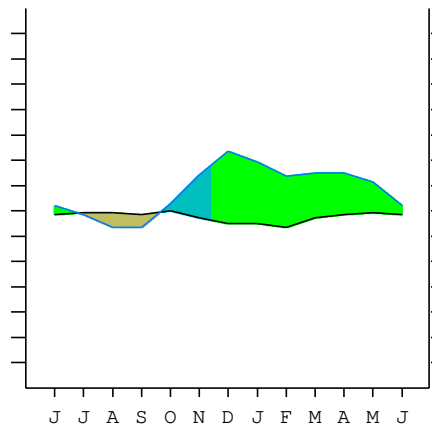
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	26.8	143	141	-2	98	143	0	0	26	0.0
Aug.	26.9	144	115	-29	68	144	0	0	13	-0.2
Sep.	26.9	140	116	-25	44	140	0	0	7	-0.1
Oct.	27.0	145	159	14	58	145	0	0	3	0.0
Nov.	26.3	133	234	42	100	133	0	59	31	0.7
Dec.	25.5	121	329	0	100	121	0	208	120	1.7
Jan.	25.6	122	288	0	100	122	0	166	143	1.3
Feb.	25.9	115	231	0	100	115	0	116	130	1.0
Mar.	26.2	134	245	0	100	134	0	111	120	0.8
Apr.	26.7	138	241	0	100	138	0	103	112	0.7
May.	26.9	143	204	0	100	143	0	61	86	0.4
Jun.	26.8	138	157	0	100	138	0	18	52	0.1
Year	26.5	1616	2459	*	*	1616	0	843	843	*

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

PANGKALPINANG/ PANGK (INDONESIA) 2°10'S 106°8'E 33 m 31/104 y.

T= 26.5 Ic= 1.6 TROPICAL PLUVIAL (HYGROPHYTIC)
 m= 23.8 Tp= 3175 UPPER INFRATROPICAL
 M= 27.4 Tn= 0 LOW HUMID
 M' = 0.0 Itc= 776
 m' = 0.0 Io= 7.7
 P= 2459 mm
 PE= 1616 mm

Imbibing	20 Sep.
Saturation	13 Nov.
Reserve Use	27 Jun.
Deficit	



PANGKALPINANG/ PANGK (INDONESIA)
 Latitude: 2°10'S Longitude: 106°8'E Altitude: 33 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

PANGKALPINANG/ PANGK (INDONESIA)
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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 891
 Coldest semester of the year.....(Psw): 1568
 Warmest four months period of the year.....(Pcm1): 531
 Following warmest four months period.....(Pcm2): 1082
 Positive precipitation dryest 3 months.....(Ppd): 371
 Positive precipitation dryest 2 months.....(Ppd2): 230
 Positive precipitation dryest 1 month.....(Ppd1): 115
 Positive precipitation warmest 3 months.....(Pps): 390
 Positive precipitation warmest 2 months.....(Pps2): 275
 Positive precipitation warmest 1 month.....(Pps1): 159
 Positive precipitation coldest 3 months.....(Ppw): 848
 Positive precipitation coldest 2 months.....(Ppw2): 617
 Positive precipitation coldest 1 month.....(Ppw1): 329

Seasons	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2
Rainfall	412	508	848	689

Tropical rainfall rhythms: 1 > 2 > 4 > 3

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 27.0
 Average coldest month [T].....(Tmin): 25.5
 Maximum temp. warmest month [M].....(Tmmax): 30.4
 Minimum temp. coldest month [m].....(Tmmin): 23.6
 Absolute Max.temp. warmest month [M'].....(Tamax): 0.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.0
 First warmest contrasted month [M].....(Tcmax): 30.4 (10)
 First coldest contrasted month [m].....(Tcmin): 23.6 (10)
 Dry station temperature.....(Td): 806
 Positive temperature dryest 3 months.....(Tpd): 806
 Positive temperature dryest 2 months.....(Tpd2): 538
 Positive temperature dryest 1 month.....(Tpd1): 269
 Positive temperature warmest 3 months.....(Tps): 808
 Positive temperature warmest 2 months.....(Tps2): 540
 Positive temperature warmest 1 month.....(Tps1): 270
 Positive temperature coldest 3 months.....(Tpw): 769
 Positive temperature coldest 2 months.....(Tpw2): 510
 Positive temperature coldest 1 month.....(Tpw1): 255

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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

PANGKALPINANG/ PANGK (INDONESIA)

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.66
 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)	3291	2880	2314	2446	2411	2041	1565	1409	1147	1155	1594	2337
Tp	255	256	259	262	267	269	268	268	269	269	270	263
Io (Iom)	12.9	11.3	8.93	9.32	9.05	7.58	5.83	5.27	4.27	4.29	5.90	8.88
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	8485 / 769			6899 / 798			4121 / 805			5087 / 803		
Io (Iot)	11.03			8.643			5.121			6.336		
Semesters	December-May						June-November					
Pp(x10)/Tp	15383 / 1568						9208 / 1608					
Io (Iosm)	9.813						5.728					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 24591/3175=7.74 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	3291	2880	2314	2446	2411	2041	1565	1409	1147	1155	1594	2337
Tp [T*10]	255	256	259	262	267	269	268	268	269	269	270	263
Iom [Pp/Tp]	\$\$	\$\$	893	932	905	758	583	527	427	429	590	888
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	8485 / 769			6899 / 798			4121 / 805			5087 / 803		
Iot [Pp/Tp]	1103			864			512			634		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp): 1.55
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]	49.30
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]	-1.50
+ Hyperoceanic (-20<CI<20)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)]	0.90
+ Oceanic (0.6<CI<1.1)	
Rainfall Index of Lang (1925) [R=P/T]	92.94
+ Temperate warm (100>R>60)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)]	67.45
+ Perhumid (Ia>60)	
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]	666.14
+ Humid (Q>90)	
I of Dantin & Revenga (1940) [DR=100*T/P]	1.08
+ Humid (2>DR>0)	
Aridity Index of UNEP [I=P/PE]	1.52
+ Humid (I>0.65)	
Potential Erosion I of Fournier (1960) [K=Pi ² /P]	44.03
+ 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	1.18	0.92	0.97	0.94	0.78	0.58	0.52	0.41	0.41	0.59	0.92	1.37	
T-E ratio	11.51	11.65	11.81	12.00	12.11	12.08	12.04	12.10	12.12	12.15	11.85	11.46	
Precipitation-effectiveness:	96.03					Temperature-efficiency							142.88
Moisture Index [MI=100*(P-PE)/PE]												52.18	
+ B2.Humid medium-humid (40<MI<60)													
Index of dryness [DI=100*d/PE]												0.00	
+ No deficit (0<DI<16.7)													
Index of humidity [HI=100*s/PE]												52.18	
+ Strong surplus (20<HI)													
Potential Evapotranspiration PE												1615.94	
+ Megathermic (PE>1440)													

