

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

BRUNEI (BRUNEI)

Altitude: 3 m.

Latitude: 4°55'N Longitude: 114°55'E

Temperature observation period.: 1984-1994 (11)

Rainfall observation period....: 1984-1994 (11)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	26.67	30.00	23.33	32.78	20.56	425.5	139.60
Feb.	26.67	30.00	23.33	32.22	20.56	165.6	127.28
Mar.	26.95	30.56	23.33	33.89	19.44	140.5	143.28
Apr.	27.50	31.11	23.89	33.33	20.56	111.0	146.38
May.	27.50	31.11	23.89	33.89	21.67	208.5	152.12
Jun.	27.50	31.11	23.89	35.00	21.11	305.6	147.81
Jul.	27.22	31.11	23.33	33.89	21.11	215.7	149.74
Aug.	27.22	31.11	23.33	34.44	21.11	214.1	148.33
Sep.	26.95	30.56	23.33	33.89	20.56	299.5	140.49
Oct.	26.95	30.56	23.33	33.33	21.67	298.0	143.28
Nov.	26.95	30.56	23.33	33.33	20.56	367.0	137.71
Dec.	26.95	30.56	23.33	33.33	20.56	286.3	141.89
Year	27.09	30.70	23.47	33.61	20.79	3037	1717.9

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	804
Compensated thermicity index.....(Itc):	804
Simple continentality index.....(Ic):	0.8
Diurnality index.....(Id):	7.8
Annual ombrothermic index.....(Io):	9.34
Monthly dry ombrothermic index.....(Iod1):	4.04
Bimonthly dry ombrothermic index.....(Iod2):	4.62
Threemonthly dry ombrothermic index.....(Iod3):	5.14
Fourmonthly dry ombrothermic index.....(Iod4):	7.82
Annual ombro-evaporation index.....(Ioe):	1.77
Annual positive temperature.....(Tp):	3250
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	811
Positive precipitation.....(Pp):	3037

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

Latitudinal Belt...: Equatorial

Continentalty.....: Hyperoceanic - High Ultrahyperoceanic

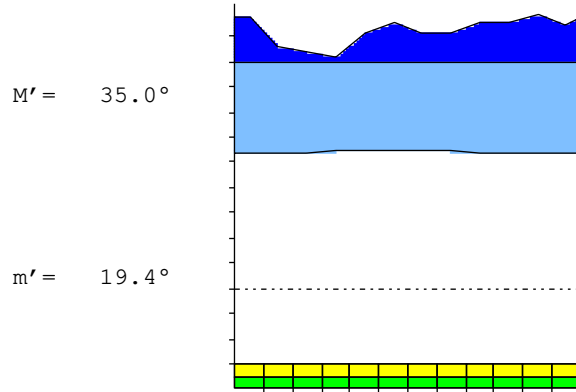
Bioclimate(Variant): TROPICAL PLUVIAL (HYGROPHYTIC)

Bioclimatic Belt...: UPPER INFRATROPICAL UPPER HUMID

BRUNEI (BRUNEI)

3 m

P= 3037 4° 55'N 114° 55'E 11/11 y.
 T= 27.1 ° Ic= 0.8 Tp= 3250 Tn= 0
 m= 23.3 ° M= 30.0 ° Itc= 804 Io= 9.3



TROPICAL PLUVIAL (HYGROPHYTIC)
 UPPER INFRATROPICAL UPPER HUMID

WATER INDEX CARD

BRUNEI (BRUNEI)

Altitude: 3 m.

Latitude: 4° 55'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	26.7	140	426	0	100	140	0	286	225	2.0
Feb.	26.7	127	166	0	100	127	0	38	131	0.3
Mar.	27.0	143	141	-3	97	143	0	0	66	0.0
Apr.	27.5	146	111	-35	62	146	0	0	33	-0.2
May.	27.5	152	209	38	100	152	0	18	26	0.3
Jun.	27.5	148	306	0	100	148	0	158	92	1.0
Jul.	27.2	150	216	0	100	150	0	66	79	0.4
Aug.	27.2	148	214	0	100	148	0	66	72	0.4
Sep.	27.0	140	300	0	100	140	0	159	116	1.1
Oct.	27.0	143	298	0	100	143	0	155	135	1.0
Nov.	27.0	138	367	0	100	138	0	229	182	1.6
Dec.	27.0	142	286	0	100	142	0	144	163	1.0
Year	27.1	1718	3037	*	*	1718	0	1319	1319	*

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

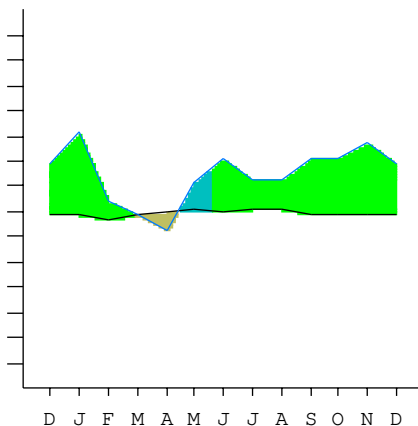
BRUNEI (BRUNEI)

4°55'N 114°55'E

3 m 11/11 y.

T= 27.1 Ic= 0.8 TROPICAL PLUVIAL (HYGROPHYTIC)
 m= 23.3 Tp= 3250 UPPER INFRATROPICAL
 M= 30.0 Tn= 0 UPPER HUMID
 M' = 35.0 Itc= 804
 m' = 19.4 Io= 9.3
 P= 3037 mm ———
 PE= 1718 mm ———

Imbibing	12 Apr.
Saturation	21 May.
Reserve Use	28 Feb.
Deficit	



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality 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.7a]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 5. PLUVIAL
 + Bioclimatic variant .: HYGROPHYTIC
 + Thermic type.....: 1. INFRATROPICAL
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 7. HUMID
 + Ombrothermic subtype : a. UPPER

Bioclimatic ClassificationTrpl(Hig).Itr.Hum.Uho

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 1195
 Coldest semester of the year.....(Psw): 1842
 Warmest four months period of the year.....(Pcm1): 841
 Following warmest four months period.....(Pcm2): 1179
 Positive precipitation dryest 3 months.....(Ppd): 417
 Positive precipitation dryest 2 months.....(Ppd2): 252
 Positive precipitation dryest 1 month.....(Ppd1): 111
 Positive precipitation warmest 3 months.....(Pps): 625
 Positive precipitation warmest 2 months.....(Pps2): 320
 Positive precipitation warmest 1 month.....(Pps1): 111
 Positive precipitation coldest 3 months.....(Ppw): 732
 Positive precipitation coldest 2 months.....(Ppw2): 591
 Positive precipitation coldest 1 month.....(Ppw1): 426

Seasons	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4
Rainfall	877	460	735	964

Tropical rainfall rhythms: 4 > 1 > 3 > 2

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 27.5
 Average coldest month [T].....(Tmin): 26.7
 Maximum temp. warmest month [M].....(Tmmax): 31.1
 Minimum temp. coldest month [m].....(Tmmin): 23.3
 Absolute Max.temp. warmest month [M'].....(Tamax): 35.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 19.4
 First warmest contrasted month [M].....(Tcmax): 31.1 (7)
 First coldest contrasted month [m].....(Tcmin): 23.3 (7)
 Dry station temperature.....(Td): 811
 Positive temperature dryest 3 months.....(Tpd): 811
 Positive temperature dryest 2 months.....(Tpd2): 545
 Positive temperature dryest 1 month.....(Tpd1): 275
 Positive temperature warmest 3 months.....(Tps): 825
 Positive temperature warmest 2 months.....(Tps2): 550
 Positive temperature warmest 1 month.....(Tps1): 275
 Positive temperature coldest 3 months.....(Tpw): 803
 Positive temperature coldest 2 months.....(Tpw2): 533
 Positive temperature coldest 1 month.....(Tpw1): 267

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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): 0.57
 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)	2863	4255	1656	1405	1110	2085	3056	2157	2141	2995	2980	3670
Tp	270	267	267	270	275	275	275	272	272	270	270	270
Io (Iom)	10.6	16.0	6.21	5.21	4.04	7.58	11.1	7.92	7.87	11.1	11.1	13.6
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	8774 / 803			4600 / 820			7354 / 819			9645 / 809		
Io (Iot)	10.93			5.613			8.975			11.93		
Semesters	December-May						June-November					
Pp(x10)/Tp	13374 / 1622						16999 / 1628					
Io (Iosm)	8.243						10.44					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 30373/3250=9.34 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	2863	4255	1656	1405	1110	2085	3056	2157	2141	2995	2980	3670
Tp [T*10]	270	267	267	270	275	275	275	272	272	270	270	270
Iom [Pp/Tp]	\$\$	\$\$	621	521	404	758	\$\$	792	787	\$\$	\$\$	\$\$
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	8774 / 803			4600 / 820			7354 / 819			9645 / 809		
Iot [Pp/Tp]	1093			561			897			1193		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 0.83
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: -3.94
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: -8.52
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.31
 + Hyperoceanic (0<CI<0.6)
 Rainfall Index of Lang (1925) [R=P/T]: 112.14
 + Temperate humid (160>R>100)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 81.90
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]: 717.12
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 0.89
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 1.77
 + Humid (I>0.65)
 Potencial Erosion I of Fournier (1960) [K=Pi²/P].....: 59.61
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: A. Warm and temperate warm
 + Region: 6. Termoaxeric (Axeric warm)
 + Thermic type: 1. Megathermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	1.78	0.62	0.52	0.39	0.79	1.21	0.82	0.82	1.19	1.19	1.50	1.14
T-E ratio	12.00	12.00	12.13	12.38	12.38	12.38	12.25	12.25	12.13	12.13	12.13	12.13
Precipitation-effectiveness: 119.59						Temperature-efficiency: 146.26						
Moisture Index [MI=100*(P-PE)/PE]: 76.80 + 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]: 76.80 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 1717.89 + Megathermic (PE>1440)												

