

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

NASSAU INTL (BAHAMAS ISLANDS)

Altitude: 2 m.

Latitude: 25°2'N Longitude: 77°28'W

Temperature observation period.: 1959-1994 (36)

Rainfall observation period....: 1937-1994 (58)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	21.67	25.00	18.33	29.44	5.00	35.6	66.04
Feb.	21.39	25.00	17.78	30.00	6.11	38.1	60.62
Mar.	22.50	26.11	18.89	31.11	7.78	35.6	82.51
Apr.	23.89	27.22	20.56	32.78	11.67	63.5	102.91
May.	25.28	28.89	21.67	33.33	11.67	116.8	133.85
Jun.	26.95	30.56	23.33	34.44	16.67	162.6	158.58
Jul.	27.50	31.11	23.89	34.44	19.44	147.3	167.90
Aug.	28.06	31.67	24.44	34.44	19.44	134.6	165.75
Sep.	27.50	31.11	23.89	33.33	18.33	175.3	146.38
Oct.	26.11	29.44	22.78	33.33	12.22	165.1	127.80
Nov.	24.17	27.22	21.11	31.67	9.44	71.1	91.71
Dec.	22.78	26.11	19.44	30.00	7.22	33.0	75.84
Year	24.82	28.29	21.34	32.36	12.08	1179	1379.9

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	676
Compensated thermicity index.....(Itc):	663
Simple continentality index.....(Ic):	6.7
Diurnality index.....(Id):	7.2
Annual ombrothermic index.....(Io):	3.96
Monthly dry ombrothermic index.....(Iod1):	1.45
Bimonthly dry ombrothermic index.....(Iod2):	1.54
Three monthly dry ombrothermic index.....(Iod3):	1.62
Four monthly dry ombrothermic index.....(Iod4):	1.98
Annual ombro-evaporation index.....(Ioe):	3.26
Annual positive temperature.....(Tp):	2978
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	658
Positive precipitation.....(Pp):	1179

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

Latitudinal Belt...: Subtropical

Continentality.....: Hyperoceanic - Low Euhyperoceanic

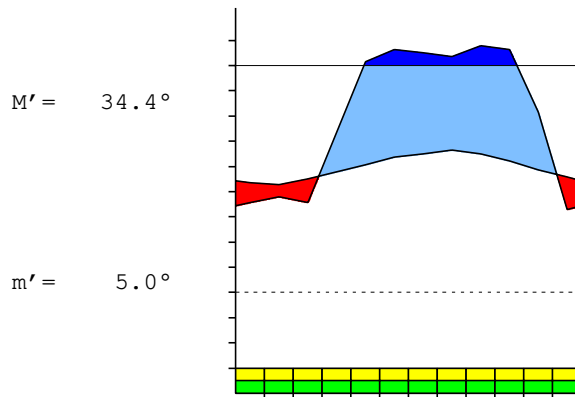
Bioclimate(Variant): TROPICAL PLUVISEASONAL (SUBMESOPHYTIC)

Bioclimatic Belt...: LOW THERMOTROPICAL LOW SUBHUMID

NASSAU INTL (BAHAMAS ISLANDS)

2 m

P= 1179 25° 2'N 77° 28'W 36/58 y.
 T= 24.8° Ic= 6.7 Tp= 2978 Tn= 0
 m= 17.8° M= 25.0° Itc= 663 Io= 4.0



TROPICAL PLUVISEASONAL (SUBMESOPHYTIC)
 LOW THERMOTROPICAL LOW SUBHUMID

WATER INDEX CARD

NASSAU INTL (BAHAMAS ISLANDS)

Altitude: 2 m.

Latitude: 25° 2'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	21.7	66	36	-3	0	38	28	0	0	-0.4
Feb.	21.4	61	38	0	0	38	23	0	0	-0.3
Mar.	22.5	83	36	0	0	36	47	0	0	-0.5
Apr.	23.9	103	64	0	0	64	39	0	0	-0.3
May.	25.3	134	117	0	0	117	17	0	0	-0.1
Jun.	27.0	159	163	4	4	159	0	0	0	0.0
Jul.	27.5	168	147	-4	0	151	17	0	0	-0.1
Aug.	28.1	166	135	0	0	135	31	0	0	-0.1
Sep.	27.5	146	175	29	29	146	0	0	0	0.1
Oct.	26.1	128	165	37	66	128	0	0	0	0.2
Nov.	24.2	92	71	-21	46	92	0	0	0	-0.2
Dec.	22.8	76	33	-43	3	76	0	0	0	-0.5
Year	24.8	1380	1179	*	*	1179	201	0	0	*

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

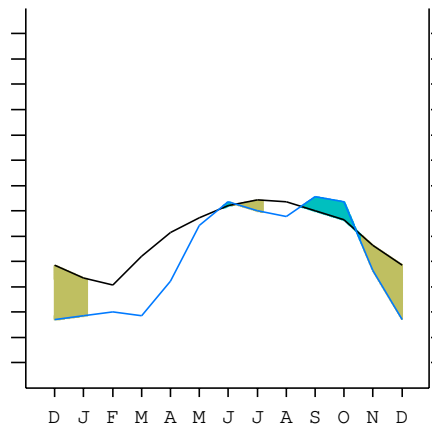
NASSAU INTL (BAHAMAS ISLANDS)

25°2'N 77°28'W

2 m 36/58 y.

T= 24.8 Ic= 6.7 TROPICAL PLUVISEASONAL (SUBMESOPHYTIC)
 m= 17.8 Tp= 2978 LOW THERMOTROPICAL
 M= 25.0 Tn= 0 LOW SUBHUMID
 M' = 34.4 Itc= 663
 m' = 5.0 Io= 4.0
 P= 1179 mm ———
 PE= 1380 mm ———

Imbibing	16 Aug.
Saturation	20 Oct.
Reserve Use	6 Jul.
Deficit	



NASSAU INTL (BAHAMAS ISLANDS)

Latitude: 25°2'N Longitude: 77°28'W Altitude: 2 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A2b]
 + Type: A. Hyperoceanic
 + Subtype: 2. Euhyperoceanic
 + Variant: b. Low

Thermic types [A3.A1]
 + Latitudinal zone: A. Warm
 + Latitudinal belt: 3. Subtropical
 + Thermic type: A. Warm
 + Thermic subtype: 1. Torrid

Bioclimatic types [A4.2b.6b]
 + Macrobioclimate: A. TROPICAL
 + Bioclimate: 4. PLUVISEASONAL
 + Bioclimatic variant ..:
 + Thermic type.....: 2. THERMOTROPICAL
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Trde.Ttr.Shu

NASSAU INTL (BAHAMAS ISLANDS)

Latitude: 25°2'N Longitude: 77°28'W Altitude: 2 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 902
 Coldest semester of the year.....(Psw): 277
 Warmest four months period of the year.....(Pcm1): 620
 Following warmest four months period.....(Pcm2): 305
 Positive precipitation dryest 3 months.....(Ppd): 107
 Positive precipitation dryest 2 months.....(Ppd2): 69
 Positive precipitation dryest 1 month.....(Ppd1): 33
 Positive precipitation warmest 3 months.....(Pps): 457
 Positive precipitation warmest 2 months.....(Pps2): 282
 Positive precipitation warmest 1 month.....(Pps1): 135
 Positive precipitation coldest 3 months.....(Ppw): 109
 Positive precipitation coldest 2 months.....(Ppw2): 74
 Positive precipitation coldest 1 month.....(Ppw1): 38

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	106	215	444	411

Seasonal rainfall rhythms: S > F > P > W

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 28.1
 Average coldest month [T].....(Tmin): 21.4
 Maximum temp. warmest month [M].....(Tmmax): 31.7
 Minimum temp. coldest month [m].....(Tmmin): 17.8
 Absolute Max.temp. warmest month [M'].....(Tamax): 34.4
 Absolute Min.temp. coldest month [m'].....(Tamin): 5.0
 First warmest contrasted month [M].....(Tcmax): 30.6 (6)
 First coldest contrasted month [m].....(Tcmin): 23.3 (6)
 Dry station temperature.....(Td): 658
 Positive temperature dryest 3 months.....(Tpd): 658
 Positive temperature dryest 2 months.....(Tpd2): 445
 Positive temperature dryest 1 month.....(Tpd1): 228
 Positive temperature warmest 3 months.....(Tps): 831
 Positive temperature warmest 2 months.....(Tps2): 556
 Positive temperature warmest 1 month.....(Tps1): 281
 Positive temperature coldest 3 months.....(Tpw): 656
 Positive temperature coldest 2 months.....(Tpw2): 431
 Positive temperature coldest 1 month.....(Tpw1): 214

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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

NASSAU INTL (BAHAMAS ISLANDS)

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 1.17
 Mediterranean index of July.[PE/P].....(Im1): 1.14
 Mediterranean index of July & August.....(Im2): 1.18
 Mediterranean index of June, July & August....(Im3): 1.11

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	330	356	381	356	635	1168	1626	1473	1346	1753	1651	711
Tp	228	217	214	225	239	253	270	275	281	275	261	242
Io (Iom)	1.45	1.64	1.78	1.58	2.66	4.62	6.03	5.36	4.80	6.37	6.32	2.94
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	1067 / 658			2159 / 717			4445 / 825			4115 / 778		
Io (Iot)	1.621			3.012			5.387			5.291		
Semesters	December-May						June-November					
Pp(x10)/Tp	3226 / 1375						8560 / 1603					
Io (Iosm)	2.346						5.340					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 11786/2978=3.96 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	330	356	381	356	635	1168	1626	1473	1346	1753	1651	711
Tp [T*10]	228	217	214	225	239	253	270	275	281	275	261	242
Iom [Pp/Tp]	145	164	178	158	266	462	603	536	480	637	632	294
Avm [200-Iom]	55	36	22	42	***	***	***	***	***	***	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	1067 / 658			2159 / 717			4445 / 825			4115 / 778		
Iot [Pp/Tp]	162			301			539			529		
Avs E[Avm<200]	113			***			***			***		
Weak lower semiarid [1]						Strong upper semiarid [3]						
Weak upper semiarid [1]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp):	6.67
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]		6.40
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]		5.75
+ Hyperoceanic (-20<CI<20)		
CI of Currey (1974) [CI=Sp/(1+Lat/3)]		0.71
+ Oceanic (0.6<CI<1.1)		
Rainfall Index of Lang (1925) [R=P/T]		47.49
+ Semiarid (60>R>40)		
Aridity Index of Martonne (1926) [Ia=P/(T+10)]		33.85
+ Humid (60>Ia>30)		
I of Emberger (1930) [Q=100*P/(Tmax ² -Tmin ²)]		171.59
+ Humid (Q>90)		
I of Dantin & Revenga (1940) [DR=100*T/P]		2.11
+ Semiarid (3>DR>2)		
Aridity Index of UNEP [I=P/PE]		0.85
+ Humid (I>0.65)		
Potential Erosion I of Fournier (1960) [K=Pi ² /P]		26.07
+ 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	0.13	0.14	0.12	0.23	0.44	0.61	0.54	0.48	0.65	0.63	0.26	0.11	
T-E ratio	9.75	9.63	10.13	10.75	11.38	12.13	12.38	12.63	12.38	11.75	10.88	10.25	
Precipitation-effectiveness:	43.25					Temperature-efficiency							134.01
Moisture Index [MI=100*(P-PE)/PE]	-14.59												
+ C1.Subhumid dry (-33.3<MI<0)													
Index of dryness [DI=100*d/PE]	14.58												
+ No deficit (0<DI<16.7)													
Index of humidity [HI=100*s/PE]	0.00												
+ No surplus (0<HI<10)													
Potential Evapotranspiration PE	1379.87												
+ Forth mesothermic (997<PE<1440)													

