

# Phytosociological Research Center

www.globalbioclimatics.org

## Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

DIEGO GARCIA (BR.I.O.T. -UK-)

Altitude: 2 m.

Latitude: 7°14'S Longitude: 72°26'E

Temperature observation period.: 1990-1994 (5)

Rainfall observation period....: 1990-1994 (5)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	27.50	30.00	25.00	32.78	22.78	326.1	153.55
Feb.	27.50	30.00	25.00	32.22	22.78	226.1	137.76
Mar.	28.34	31.11	25.56	33.89	22.22	165.1	156.24
Apr.	28.06	30.56	25.56	32.78	22.78	167.1	147.99
May.	27.22	29.44	25.00	32.22	22.22	151.1	144.09
Jun.	26.39	28.33	24.44	31.11	22.22	133.1	127.30
Jul.	25.84	27.78	23.89	30.00	22.22	131.1	120.86
Aug.	25.84	27.78	23.89	30.00	22.22	231.9	122.05
Sep.	25.84	27.78	23.89	30.00	22.22	224.0	119.66
Oct.	26.39	28.33	24.44	31.11	22.22	326.9	136.39
Nov.	27.22	29.44	25.00	32.22	22.78	149.1	146.91
Dec.	27.78	30.56	25.00	32.78	22.22	169.9	155.95
Year	26.99	29.26	24.72	31.76	22.41	2402	1668.8

### BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	787
Compensated thermicity index.....(Itc):	787
Simple continentality index.....(Ic):	2.5
Diurnality index.....(Id):	5.6
Annual ombrothermic index.....(Io):	7.41
Monthly dry ombrothermic index.....(Iod1):	5.07
Bimonthly dry ombrothermic index.....(Iod2):	5.06
Three monthly dry ombrothermic index.....(Iod3):	5.23
Four monthly dry ombrothermic index.....(Iod4):	5.42
Annual ombro-evaporation index.....(Ioe):	1.00
Annual positive temperature.....(Tp):	3239
Annual negative temperature.....(Tn):	0
Dry station temperature.....(Td):	795
Positive precipitation.....(Pp):	2402

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

Latitudinal Belt...: Eutropical

Continentalty.....: Hyperoceanic - Low Ultrahyperoceanic

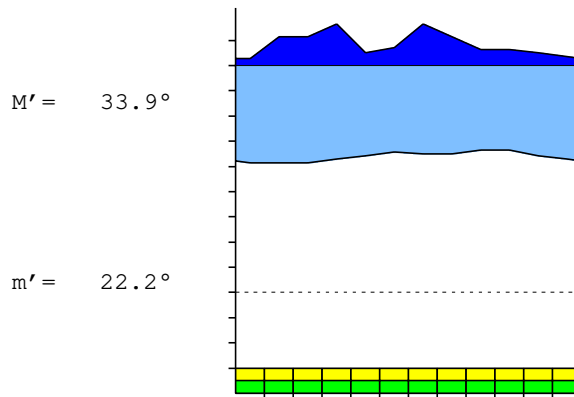
Bioclimate(Variant): TROPICAL PLUVIAL (HYGROPHYTIC)

Bioclimatic Belt...: UPPER INFRATROPICAL LOW HUMID

DIEGO GARCIA (BR.I.O.T. -UK-)

2 m

P= 2402      7° 14'S      72° 26'E      5/5 y.  
 T= 27.0°      Ic= 2.5      Tp= 3239      Tn= 0  
 m= 23.9°      M= 27.8°      Itc= 787      Io= 7.4



TROPICAL PLUVIAL (HYGROPHYTIC)  
 UPPER INFRATROPICAL LOW HUMID

WATER INDEX CARD      DIEGO GARCIA (BR.I.O.T. -UK-)  
 Altitude: 2 m.      Latitude: 7° 14'S

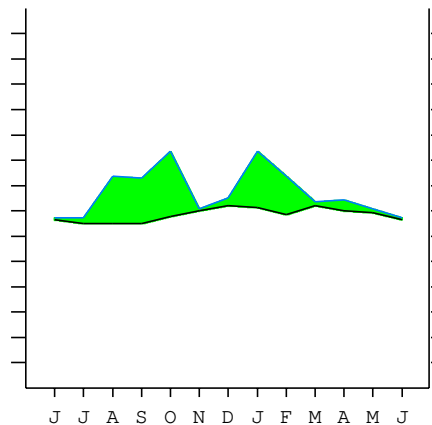
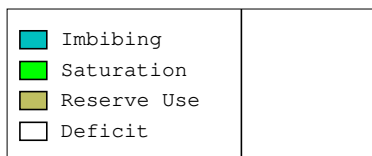
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	25.8	121	131	0	100	121	0	10	12	0.0
Aug.	25.8	122	232	0	100	122	0	110	61	0.8
Sep.	25.8	120	224	0	100	120	0	104	83	0.8
Oct.	26.4	136	327	0	100	136	0	191	137	1.3
Nov.	27.2	147	149	0	100	147	0	2	69	0.0
Dec.	27.8	156	170	0	100	156	0	14	42	0.0
Jan.	27.5	154	326	0	100	154	0	173	107	1.1
Feb.	27.5	138	226	0	100	138	0	88	98	0.6
Mar.	28.3	156	165	0	100	156	0	9	53	0.0
Apr.	28.1	148	167	0	100	148	0	19	36	0.1
May.	27.2	144	151	0	100	144	0	7	22	0.0
Jun.	26.4	127	133	0	100	127	0	6	14	0.0
Year	27.0	1669	2402	*	*	1669	0	733	733	*

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

DIEGO GARCIA (BR.I.O.T. -UK-)

7°14'S      72°26'E      2 m      5/5 y.

T= 27.0      Ic= 2.5      TROPICAL PLUVIAL (HYGROPHYTIC)  
 m= 23.9      Tp= 3239      UPPER INFRATROPICAL  
 M= 27.8      Tn= 0      LOW HUMID  
 M' = 33.9      Itc= 787  
 m' = 22.2      Io= 7.4  
 P= 2402      mm      ———  
 PE= 1669      mm      ———



All over the year,  
 there is no hydric deficit

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A1b]  
 + Type .....: A. Hyperoceanic  
 + Subtype .....: 1. Ultrahyperoceanic  
 + Variant .....: b. Low

Thermic types [A2.A1]  
 + Latitudinal zone .....: A. Warm  
 + Latitudinal belt .....: 2. Eutropical  
 + 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

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 1203  
 Coldest semester of the year.....(Psw): 1198  
 Warmest four months period of the year.....(Pcm1): 884  
 Following warmest four months period.....(Pcm2): 647  
 Positive precipitation dryest 3 months.....(Ppd): 415  
 Positive precipitation dryest 2 months.....(Ppd2): 264  
 Positive precipitation dryest 1 month.....(Ppd1): 131  
 Positive precipitation warmest 3 months.....(Pps): 558  
 Positive precipitation warmest 2 months.....(Pps2): 332  
 Positive precipitation warmest 1 month.....(Pps1): 165  
 Positive precipitation coldest 3 months.....(Ppw): 587  
 Positive precipitation coldest 2 months.....(Ppw2): 363  
 Positive precipitation coldest 1 month.....(Ppw1): 131

Seasons	Jun+Jul+Aug Ttr3-3	Sep+Oct+Nov Ttr4-4	Dec+Jan+Feb Ttr1-1	Mar+Apr+May Ttr2-2
Rainfall	496	700	722	483

Tropical rainfall rhythms: 1 > 4 > 3 > 2

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 28.3  
 Average coldest month [T].....(Tmin): 25.8  
 Maximum temp. warmest month [M].....(Tmmax): 31.1  
 Minimum temp. coldest month [m].....(Tmmin): 23.9  
 Absolute Max.temp. warmest month [M'].....(Tamax): 33.9  
 Absolute Min.temp. coldest month [m'].....(Tamin): 22.2  
 First warmest contrasted month [M].....(Tcmax): 30.6 (12)  
 First coldest contrasted month [m].....(Tcmin): 25.0 (12)  
 Dry station temperature.....(Td): 795  
 Positive temperature dryest 3 months.....(Tpd): 795  
 Positive temperature dryest 2 months.....(Tpd2): 522  
 Positive temperature dryest 1 month.....(Tpd1): 258  
 Positive temperature warmest 3 months.....(Tps): 839  
 Positive temperature warmest 2 months.....(Tps2): 564  
 Positive temperature warmest 1 month.....(Tps1): 283  
 Positive temperature coldest 3 months.....(Tpw): 775  
 Positive temperature coldest 2 months.....(Tpw2): 517  
 Positive temperature coldest 1 month.....(Tpw1): 258

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

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

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.69  
 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)	1699	3261	2261	1651	1671	1511	1331	1311	2319	2240	3269	1491
Tp	278	275	275	283	281	272	264	258	258	258	264	272
Io (Iom)	6.12	11.9	8.22	5.83	5.96	5.55	5.04	5.07	8.97	8.67	12.4	5.48
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp(x10)/Tp	7221 / 828			4833 / 836			4961 / 781			7000 / 794		
Io (Iot)	8.723			5.780			6.355			8.811		
Semesters	December-May						June-November					
Pp(x10)/Tp	12054 / 1664						11961 / 1575					
Io (Iosm)	7.244						7.593					

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

Aridity Value Index (AVI)

[10xPP/TP=IO]: 24015/3239=7.41 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	1699	3261	2261	1651	1671	1511	1331	1311	2319	2240	3269	1491
Tp [T*10]	278	275	275	283	281	272	264	258	258	258	264	272
Iom [Pp/Tp]	612	\$\$	822	583	596	555	504	507	897	867	\$\$	548
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Dec+Jan+Feb			Mar+Apr+May			Jun+Jul+Aug			Sep+Oct+Nov		
Pp / Tp	7221 / 828			4833 / 836			4961 / 781			7000 / 794		
Iot [Pp/Tp]	872			578			635			881		
Avs E [Avm<200]	***			***			***			***		

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin] .....(Sp): 2.50  
 CI of Gorezinski (1920) [1.7\*Sp/sin(Lat)-20.4] .....: 13.35  
 CI of Conrad (1946) [1.7\*Sp/sin(Lat+10)-14] .....: 0.35  
 + Hyperoceanic (-20<CI<20)  
 CI of Currey (1974) [CI=Sp/(1+Lat/3)] .....: 0.73  
 + Oceanic (0.6<CI<1.1)  
 Rainfall Index of Lang (1925) [R=P/T] .....: 88.97  
 + Temperate warm (100>R>60)  
 Aridity Index of Martonne (1926) [Ia=P/(T+10)] .....: 64.92  
 + Perhumid (Ia>60)  
 I of Emberger (1930) [Q=100\*P/(Tmax<sup>2</sup>-Tmin<sup>2</sup>)] .....: 604.76  
 + Humid (Q>90)  
 I of Dantin & Revenga (1940) [DR=100\*T/P] .....: 1.12  
 + Humid (2>DR>0)  
 Aridity Index of UNEP [I=P/PE] .....: 1.44  
 + Humid (I>0.65)  
 Potential Erosion I of Fournier (1960) [K=Pi<sup>2</sup>/P].....: 44.50  
 + Very low (K<60)

DIEGO GARCIA (BR.I.O.T. -UK-)

Latitude: 7°14'S Longitude: 72°26'E Altitude: 2 m

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	1.30	0.86	0.60	0.61	0.56	0.49	0.49	0.92	0.89	1.33	0.55	0.62
T-E ratio	12.38	12.38	12.75	12.63	12.25	11.88	11.63	11.63	11.63	11.88	12.25	12.50
Precipitation-effectiveness:	92.17					Temperature-efficiency .....: 145.76						
Moisture Index [MI=100*(P-PE)/PE] .....: 43.91 + 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] .....: 43.91 + Strong surplus (20<HI)												
Potential Evapotranspiration PE .....: 1668.75 + Megathermic (PE>1440)												

