

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

MOYA -LAS PALMAS- (ESP LAS PALMAS) Altitude: 485 m.

Latitude: 28°7'N Longitude: 15°35'W
 Temperature observation period.: 1953-1964 (12)
 Rainfall observation period....: 1953-1964 (12)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	14.50	18.20	10.80	22.80	8.70	73.0	40.56
Feb.	14.60	18.70	10.60	23.80	8.40	55.0	39.72
Mar.	15.20	19.30	11.10	26.30	8.60	44.0	50.05
Apr.	16.20	19.80	12.70	24.90	10.80	26.0	58.44
May.	17.80	21.30	14.40	28.60	12.30	9.0	75.94
Jun.	18.20	21.40	15.10	24.80	12.90	11.0	78.42
Jul.	20.20	24.20	16.10	31.00	14.10	7.0	96.57
Aug.	21.50	25.80	17.20	33.00	15.10	14.0	103.68
Sep.	20.20	24.90	15.60	32.70	13.40	17.0	84.30
Oct.	19.40	23.80	15.00	27.40	13.00	58.0	74.48
Nov.	19.20	22.60	15.90	26.80	13.30	82.0	67.11
Dec.	17.20	22.00	12.30	22.60	10.20	86.0	54.86
Year	17.85	21.83	13.90	27.06	11.73	482	824.12

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	469
Compensated thermicity index.....(Itc):	459
Simple continentality index.....(Ic):	7.0
Diurnality index.....(Id):	9.7
Annual ombrothermic index.....(Io):	2.25
Monthly estival ombrothermic index.....(Ios1):	0.35
Bimonthly estival ombrothermic index.....(Ios2):	0.50
Threemonthly estival ombrothermic index.....(Ios3):	0.53
Fourmonthly estival ombrothermic index.....(Ios4):	0.53
Annual ombro-evaporation index.....(Ioe):	0.58
Annual positive temperature.....(Tp):	2142
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	599
Positive precipitation.....(Pp):	482

N. of Months	P>4T	P:2T-4T	PT-2T	P<T	T<0
	3	3	1	5	0

Latitudinal Belt...: Subtropical

Continentality.....: Hyperoceanic - Low Euhyperoceanic

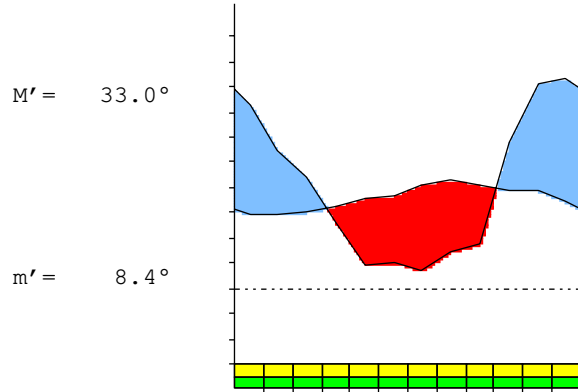
Bioclimate.....: MEDITERRANEAN PLUVISEASONAL-OCEANIC

Bioclimatic Belt...: UPPER INFRAMEDITERRANEAN LOW DRY

MOYA -LAS PALMAS- (ESP LAS PALMAS)

485 m

P= 482 28° 7'N 15° 35'W 12/12 y.
 T= 17.8 ° Ic= 7.0 Tp= 2142 Tn= 0
 m= 10.8 ° M= 18.2 ° Itc= 459 Io= 2.3



MEDITERRANEAN PLUVISEASONAL-OCEANIC
 UPPER INFRAMEDITERRANEAN LOW DRY

WATER INDEX CARD

MOYA -LAS PALMAS- (ESP LAS PALMAS)

Altitude: 485 m.

Latitude: 28° 7'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	14.5	41	73	32	78	41	0	0	0	0.7
Feb.	14.6	40	55	15	94	40	0	0	0	0.3
Mar.	15.2	50	44	-6	88	50	0	0	0	-0.1
Apr.	16.2	58	26	-32	55	58	0	0	0	-0.5
May.	17.8	76	9	-55	0	64	12	0	0	-0.8
Jun.	18.2	78	11	0	0	11	67	0	0	-0.8
Jul.	20.2	97	7	0	0	7	90	0	0	-0.9
Aug.	21.5	104	14	0	0	14	90	0	0	-0.8
Sep.	20.2	84	17	0	0	17	67	0	0	-0.7
Oct.	19.4	74	58	0	0	58	16	0	0	-0.2
Nov.	19.2	67	82	15	15	67	0	0	0	0.2
Dec.	17.2	55	86	31	46	55	0	0	0	0.5
Year	17.8	824	482	*	*	482	342	0	0	*

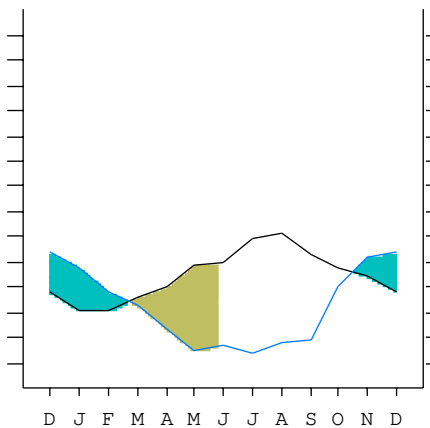
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coeficient DF = Deficit SP = Superavit

MOYA -LAS PALMAS- (ESP LAS PALMAS)

28°7'N 15°35'W 485 m 12/12 y.

T= 17.8 Ic= 7.0 MEDITERRANEAN PLUVISEASONAL-OCEANIC
 m= 10.8 Tp= 2142 UPPER INFRAMEDITERRANEAN
 M= 18.2 Tn= 0 LOW DRY
 M' = 33.0 Itc= 459
 m' = 8.4 Io= 2.3
 P= 482 mm ———
 PE= 824 mm ———

Imbibing	16 Oct.
Saturation	
Reserve Use	22 Feb.
Deficit	25 May.



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

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

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

Bioclimatic types [B8.1a.5b]
 + Macrobioclimate: B. MEDITERRANEAN
 + Bioclimate: 8. PLUVISEASONAL-OCEANIC
 + Bioclimatic variant .:
 + Thermic type.....: 1. INFRAMEDITERRANEAN
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 5. DRY
 + Ombrothermic subtype : b. LOW

Bioclimatic ClassificationMepo.Ime.Dry.Eho

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 189
 Coldest semester of the year.....(Psw): 293
 Warmest four months period of the year.....(Pcm1): 96
 Following warmest four months period.....(Pcm2): 296
 Positive precipitation dryest 3 months.....(Ppd): 27
 Positive precipitation dryest 2 months.....(Ppd2): 18
 Positive precipitation dryest 1 month.....(Ppd1): 7
 Positive precipitation warmest 3 months.....(Pps): 38
 Positive precipitation warmest 2 months.....(Pps2): 21
 Positive precipitation warmest 1 month.....(Pps1): 14
 Positive precipitation coldest 3 months.....(Ppw): 172
 Positive precipitation coldest 2 months.....(Ppw2): 128
 Positive precipitation coldest 1 month.....(Ppw1): 73

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	214	79	32	157

Seasonal rainfall rhythms: W > F > P > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 21.5
 Average coldest month [T].....(Tmin): 14.5
 Maximum temp. warmest month [M].....(Tmmax): 25.8
 Minimum temp. coldest month [m].....(Tmmin): 10.6
 Absolute Max.temp. warmest month [M'].....(Tamax): 33.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 8.4
 First warmest contrasted month [M].....(Tcmax): 22.0 (12)
 First coldest contrasted month [m].....(Tcmin): 12.3 (12)
 Estival temperature.....(Ts): 599
 Positive temperature dryest 3 months.....(Tpd): 562
 Positive temperature dryest 2 months.....(Tpd2): 384
 Positive temperature dryest 1 month.....(Tpd1): 202
 Positive temperature warmest 3 months.....(Tps): 619
 Positive temperature warmest 2 months.....(Tps2): 417
 Positive temperature warmest 1 month.....(Tps1): 215
 Positive temperature coldest 3 months.....(Tpw): 443
 Positive temperature coldest 2 months.....(Tpw2): 291
 Positive temperature coldest 1 month.....(Tpw1): 145

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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): 1.71
 Mediterranean index of July.[PE/P].....(Im1): 13.80
 Mediterranean index of July & August.....(Im2): 9.54
 Mediterranean index of June, July & August....(Im3): 8.71

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	860	730	550	440	260	90	110	70	140	170	580	820
Tp	172	145	146	152	162	178	182	202	215	202	194	192
Io (Iom)	5.00	5.03	3.77	2.89	1.60	0.51	0.60	0.35	0.65	0.84	2.99	4.27
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	2140 / 463			790 / 492			320 / 599			1570 / 588		
Io (Iot)	4.622			1.606			0.534			2.670		
Semesters	December-May						June-November					
Pp(x10)/Tp	2930 / 955						1890 / 1187					
Io (Iosm)	3.068						1.592					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 4820/2142=2.25 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	860	730	550	440	260	90	110	70	140	170	580	820
Tp [T*10]	172	145	146	152	162	178	182	202	215	202	194	192
Iom [Pp/Tp]	500	503	377	289	160	51	60	35	65	84	299	427
Avm [200-Iom]	***	***	***	***	40	149	140	165	135	116	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	2140 / 463			790 / 492			320 / 599			1570 / 588		
Iot [Pp/Tp]	462			161			53			267		
Avs E[Avm<200]	***			***			440			***		
Upper hyperarid [1]							Weak lower arid [4]					
Weak upper arid [1]							Strong upper semiarid [1]					

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 7.00
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 4.85
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 5.28
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.67
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: 27.00
 + Steppic (40>R>0)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 17.31
 + Semiarid -mediterranean- (20>Ia>15)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 87.12
 + Subhumid (90>Q>50)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 3.70
 + Arid (6>DR>3)
 Aridity Index of UNEP [I=P/PE]: 0.58
 + Subhumid - dry (0.65>I>0.5)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 15.34
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: A. Warm and temperate warm
 + Region: 3. Termoxeroteric (Mediterranean warm)
 + Thermic type: 3. Macro-mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.34	0.25	0.19	0.10	0.03	0.04	0.02	0.05	0.06	0.23	0.34	0.38
T-E ratio	6.52	6.57	6.84	7.29	8.01	8.19	9.09	9.67	9.09	8.73	8.64	7.74
Precipitation-effectiveness: 20.28						Temperature-efficiency: 96.39						
Moisture Index [MI=100*(P-PE)/PE]: -41.51 + D.Semiarid (-66.7<MI<-33.3)												
Index of dryness [DI=100*d/PE]: 41.51 + Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]: 0.00 + No surplus (0<HI<10)												
Potential Evapotranspiration PE: 824.12 + Second mesothermic (712<PE<855)												

