

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

CABDELLA (ESP LERIDA)

Altitude: 1422 m.

Latitude: 42°28'N Longitude: 1°0'E

Temperature observation period.: 1934-1969 (36)

Rainfall observation period....: 1934-1969 (36)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	2.20	6.90	-2.50	14.40	-8.50	75.0	8.29
Feb.	2.70	7.70	-2.30	14.70	-8.90	80.0	10.26
Mar.	5.10	10.40	-0.10	17.40	-5.00	116.0	25.00
Apr.	7.60	12.80	2.40	20.10	-2.30	107.0	41.19
May.	10.90	16.30	5.40	23.20	0.00	131.0	67.47
Jun.	14.60	20.40	8.70	27.20	4.00	123.0	92.21
Jul.	17.60	24.00	11.20	29.40	6.90	94.0	112.92
Aug.	17.00	23.00	11.00	28.40	6.60	114.0	101.25
Sep.	14.20	19.70	8.80	25.40	3.90	136.0	73.36
Oct.	9.90	14.90	4.80	21.00	-0.90	110.0	46.02
Nov.	5.30	9.80	0.80	16.00	-4.10	139.0	20.71
Dec.	2.80	7.20	-1.60	14.10	-6.80	96.0	10.26
Year	9.16	14.42	3.88	20.94	-1.26	1321	608.94

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	136
Compensated thermicity index.....(Itc):	136
Simple continentality index.....(Ic):	15.4
Diurnality index.....(Id):	12.8
Annual ombrothermic index.....(Io):	12.02
Monthly estival ombrothermic index.....(Ios1):	5.34
Bimonthly estival ombrothermic index.....(Ios2):	6.01
Three monthly estival ombrothermic index.....(Ios3):	6.73
Four monthly estival ombrothermic index.....(Ios4):	7.69
Annual ombro-evaporation index.....(Ioe):	1.15
Annual positive temperature.....(Tp):	1099
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	492
Positive precipitation.....(Pp):	1321

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

Latitudinal Belt...: Low eutemperate

Continentalty.....: Oceanic - Low Euoceanic

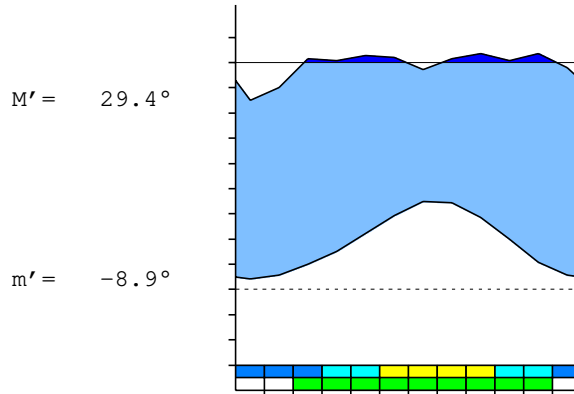
Bioclimate.....: TEMPERATE OCEANIC

Bioclimatic Belt...: LOW SUPRATEMPERATE LOW HYPERHUMID

CABDELLA (ESP LERIDA)

1422 m

P= 1321 42° 28'N 1° 0'E 36/36 y.
 T= 9.2° Ic= 15.4 Tp= 1099 Tn= 0
 m= -2.5° M= 6.9° Itc= 136 Io= 12.0



TEMPERATE OCEANIC
 LOW SUPRATEMPERATE LOW HYPERHUMID

WATER INDEX CARD CABDELLA (ESP LERIDA)

Altitude: 1422 m. Latitude: 42° 28'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	2.2	8	75	0	100	8	0	67	76	8.0
Feb.	2.7	10	80	0	100	10	0	70	73	6.7
Mar.	5.1	25	116	0	100	25	0	91	82	3.6
Apr.	7.6	41	107	0	100	41	0	66	74	1.5
May.	10.9	67	131	0	100	67	0	64	69	0.9
Jun.	14.6	92	123	0	100	92	0	31	50	0.3
Jul.	17.6	113	94	-19	81	113	0	0	25	-0.1
Aug.	17.0	101	114	13	94	101	0	0	12	0.1
Sep.	14.2	73	136	6	100	73	0	56	34	0.8
Oct.	9.9	46	110	0	100	46	0	64	49	1.3
Nov.	5.3	21	139	0	100	21	0	118	84	5.7
Dec.	2.8	10	96	0	100	10	0	86	85	8.3
Year	9.2	609	1321	*	*	609	0	712	712	*

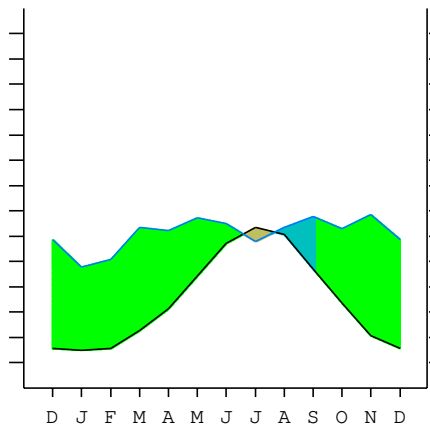
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

CABDELLA (ESP LERIDA)

42°28'N 1°0'E 1422 m 36/36 y.

T= 9.2 Ic= 15.4 TEMPERATE OCEANIC
 m= -2.5 Tp= 1099 LOW SUPRATEMPERATE
 M= 6.9 Tn= 0 LOW HYPERHUMID
 M' = 29.4 Itc= 136
 m' = -8.9 Io= 12.0
 P= 1321 mm ———
 PE= 609 mm ———

Imbibing	18 Jul.
Saturation	3 Sep.
Reserve Use	19 Jun.
Deficit	



CABDELLA (ESP LERIDA)

Latitude: 42°28'N Longitude: 1°0'E Altitude: 1422 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [B2b]
 + Type: B. Oceanic
 + Subtype: 2. Euoceanic
 + Variant: b. Low

Thermic types [B1.B5]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. Low eutemperate
 + Thermic type: B. Temperate
 + Thermic subtype: 5. Subtemperate

Bioclimatic types [C3.4b.8b]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 3. OCEANIC
 + Bioclimatic variant .:
 + Thermic type.....: 4. SUPRATEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 8. HYPERHUMID
 + Ombrothermic subtype : b. LOW
 Bioclimatic Classification: Teco.Ste.Hhu

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 708
 Coldest semester of the year.....(Psw): 613
 Warmest four months period of the year.....(Pcm1): 467
 Following warmest four months period.....(Pcm2): 420
 Positive precipitation dryest 3 months.....(Ppd): 251
 Positive precipitation dryest 2 months.....(Ppd2): 155
 Positive precipitation dryest 1 month.....(Ppd1): 75
 Positive precipitation warmest 3 months.....(Pps): 331
 Positive precipitation warmest 2 months.....(Pps2): 208
 Positive precipitation warmest 1 month.....(Pps1): 94
 Positive precipitation coldest 3 months.....(Ppw): 251
 Positive precipitation coldest 2 months.....(Ppw2): 155
 Positive precipitation coldest 1 month.....(Ppw1): 75

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	251	354	331	385

Seasonal rainfall rhythms: F > P > S > W

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 17.6
 Average coldest month [T].....(Tmin): 2.2
 Maximum temp. warmest month [M].....(Tmmax): 24.0
 Minimum temp. coldest month [m].....(Tmmin): -2.5
 Absolute Max.temp. warmest month [M'].....(Tamax): 29.4
 Absolute Min.temp. coldest month [m'].....(Tamin): -8.9
 First warmest contrasted month [M].....(Tcmax): 24.0 (7)
 First coldest contrasted month [m].....(Tcmin): 11.2 (7)
 Estival temperature.....(Ts): 492
 Positive temperature dryest 3 months.....(Tpd): 77
 Positive temperature dryest 2 months.....(Tpd2): 49
 Positive temperature dryest 1 month.....(Tpd1): 22
 Positive temperature warmest 3 months.....(Tps): 492
 Positive temperature warmest 2 months.....(Tps2): 346
 Positive temperature warmest 1 month.....(Tps1): 176
 Positive temperature coldest 3 months.....(Tpw): 77
 Positive temperature coldest 2 months.....(Tpw2): 49
 Positive temperature coldest 1 month.....(Tpw1): 22

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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	
Ultragelid...[M' <=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)												
Subgelid.....[m <=0] (Pf)	o	o	o									o
Pregelid.....[m' <=0] (Pf)	o	o	o	o	o					o	o	o
Agelid.....[m' > 0] (Pf)						o	o	o	o			
HiperAgelid..[all>0] (Pf)						o	o	o	o			

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.46
 Mediterranean index of July.[PE/P].....(Im1): 1.20
 Mediterranean index of July & August.....(Im2): 1.03
 Mediterranean index of June, July & August....(Im3): 0.93

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	960	750	800	1160	1070	1310	1230	940	1140	1360	1100	1390
Tp	28	22	27	51	76	109	146	176	170	142	99	53
Io (Iom)	34.3	34.1	29.6	22.7	14.1	12.0	8.42	5.34	6.71	9.58	11.1	26.2
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	2510 / 77			3540 / 236			3310 / 492			3850 / 294		
Io (Iot)	32.60			15.00			6.728			13.10		
Semesters	December-May						June-November					
Pp(x10)/Tp	6050 / 313						7160 / 786					
Io (Iosm)	19.33						9.109					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 13210/1099=12.02 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	960	750	800	1160	1070	1310	1230	940	1140	1360	1100	1390
Tp [T*10]	28	22	27	51	76	109	146	176	170	142	99	53
Iom [Pp/Tp]	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	842	534	671	958	\$\$	\$\$
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	2510 / 77			3540 / 236			3310 / 492			3850 / 294		
Iot [Pp/Tp]	\$\$			1500			673			1310		
Avs E[Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 15.40
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 18.38
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 19.01
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.02
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: 144.24
 + Temperate humid (160>R>100)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 68.95
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 231.86
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 0.69
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 2.17
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 14.63
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: A. Warm and temperate warm
 + Region: 7. Mesoaxeric (Axeric temperate)
 + Thermic type: 5. Meso-microthermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.54	0.57	0.78	0.65	0.73	0.61	0.41	0.52	0.69	0.62	0.95	0.70
T-E ratio	0.99	1.22	2.29	3.42	4.90	6.57	7.92	7.65	6.39	4.45	2.39	1.26
Precipitation-effectiveness: 77.89						Temperature-efficiency: 49.45						
Moisture Index [MI=100*(P-PE)/PE]: 116.93 + A.Extremely humid (MI>100) Index of dryness [DI=100*d/PE]: 0.00 + No deficit (0<DI<16.7) Index of humidity [HI=100*s/PE]: 116.92 + Strong surplus (20<HI) Potential Evapotranspiration PE: 608.94 + First mesothermic (570<PE<712)												

