

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

GILET (ESP VALENCIA)

Altitude: 180 m.

Latitude: 39°40'N Longitude: 0°21'W

Temperature observation period.: 1950-1969 (20)

Rainfall observation period....: 1950-1969 (20)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	10.10	14.70	5.50	21.40	0.90	34.0	21.72
Feb.	10.40	15.30	5.50	22.30	0.30	34.0	22.56
Mar.	12.80	17.80	7.90	24.90	3.00	39.0	39.94
Apr.	14.50	19.40	9.60	25.90	5.40	39.0	53.27
May.	17.90	23.10	12.70	29.10	8.40	42.0	85.33
Jun.	20.90	25.90	15.90	31.80	11.50	26.0	112.12
Jul.	24.00	29.00	19.00	34.20	15.50	11.0	144.31
Aug.	24.10	29.00	19.20	34.50	15.80	25.0	135.04
Sep.	22.00	26.90	17.10	32.10	12.80	62.0	101.84
Oct.	17.40	21.70	13.10	27.30	7.80	105.0	62.93
Nov.	13.60	18.10	9.00	23.30	4.00	45.0	35.70
Dec.	11.30	15.70	6.90	20.50	1.60	52.0	25.38
Year	16.58	21.38	11.78	27.27	7.25	514	840.13

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	368
Compensated thermicity index.....(Itc):	368
Simple continentality index.....(Ic):	14.0
Diurnality index.....(Id):	10.4
Annual ombrothermic index.....(Io):	2.58
Monthly estival ombrothermic index.....(Ios1):	0.46
Bimonthly estival ombrothermic index.....(Ios2):	0.75
Threemonthly estival ombrothermic index.....(Ios3):	0.90
Fourmonthly estival ombrothermic index.....(Ios4):	1.20
Annual ombro-evaporation index.....(Ioe):	1.12
Annual positive temperature.....(Tp):	1990
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	690
Positive precipitation.....(Pp):	514

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	2	7	2	1	0

Latitudinal Belt...: Low eutemperate

Continentalty.....: Oceanic - Low Semihyperoceanic

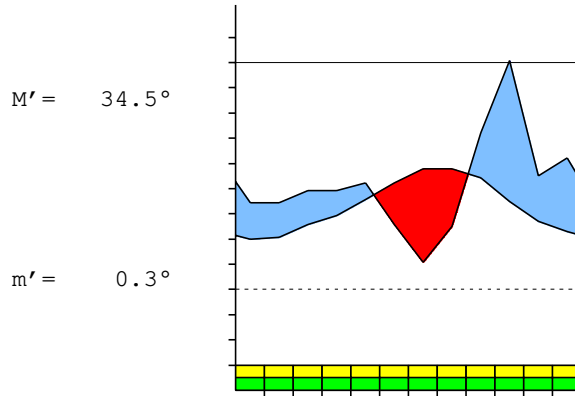
Bioclimate.....: MEDITERRANEAN PLUVISEASONAL-OCEANIC

Bioclimatic Belt...: UPPER THERMOMEDITERRANEAN LOW DRY

GILET (ESP VALENCIA)

180 m

P= 514 39° 40'N 0° 21'W 20/20 y.
 T= 16.6° Ic= 14.0 Tp= 1990 Tn= 0
 m= 5.5° M= 14.7° Itc= 368 Io= 2.6



MEDITERRANEAN PLUVISEASONAL-OCEANIC
 UPPER THERMOMEDITERRANEAN LOW DRY

WATER INDEX CARD
 Altitude: 180 m.

GILET (ESP VALENCIA)
 Latitude: 39° 40'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	10.1	22	34	12	90	22	0	0	0	0.5
Feb.	10.4	23	34	10	100	23	0	2	1	0.5
Mar.	12.8	40	39	-1	99	40	0	0	0	0.0
Apr.	14.5	53	39	-14	85	53	0	0	0	-0.2
May.	17.9	85	42	-43	41	85	0	0	0	-0.5
Jun.	20.9	112	26	-41	0	67	45	0	0	-0.7
Jul.	24.0	144	11	0	0	11	133	0	0	-0.9
Aug.	24.1	135	25	0	0	25	110	0	0	-0.8
Sep.	22.0	102	62	0	0	62	40	0	0	-0.3
Oct.	17.4	63	105	42	42	63	0	0	0	0.6
Nov.	13.6	36	45	9	51	36	0	0	0	0.2
Dec.	11.3	25	52	27	78	25	0	0	0	1.0
Year	16.6	840	514	*	*	512	328	2	2	*

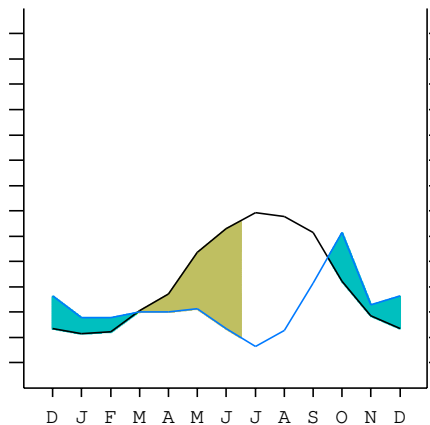
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

GILET (ESP VALENCIA)

39°40'N 0°21'W 180 m 20/20 y.

T= 16.6 Ic= 14.0 MEDITERRANEAN PLUVISEASONAL-OCEANIC
 m= 5.5 Tp= 1990 UPPER THERMOMEDITERRANEAN
 M= 14.7 Tn= 0 LOW DRY
 M' = 34.5 Itc= 368
 m' = 0.3 Io= 2.6
 P= 514 mm ———
 PE= 840 mm ———

Imbibing	15 Sep.
Saturation	26 Feb.
Reserve Use	28 Feb.
Deficit	15 Jun.



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [B1b]
 + Type: B. Oceanic
 + Subtype: 1. Semihyperoceanic
 + Variant: b. Low

Thermic types [B1.A3]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. Low eutemperate
 + Thermic type: A. Warm
 + Thermic subtype: 3. Subwarm

Bioclimatic types [B8.2a.5b]
 + Macrobioclimate: B. MEDITERRANEAN
 + Bioclimate: 8. PLUVISEASONAL-OCEANIC
 + Bioclimatic variant ..:
 + Thermic type.....: 2. THERMOMEDITERRANEAN
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 5. DRY
 + Ombrothermic subtype : b. LOW

Bioclimatic Classification: Mehc.Tme.Dry

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 271
 Coldest semester of the year.....(Psw): 243
 Warmest four months period of the year.....(Pcm1): 124
 Following warmest four months period.....(Pcm2): 236
 Positive precipitation dryest 3 months.....(Ppd): 62
 Positive precipitation dryest 2 months.....(Ppd2): 36
 Positive precipitation dryest 1 month.....(Ppd1): 11
 Positive precipitation warmest 3 months.....(Pps): 98
 Positive precipitation warmest 2 months.....(Pps2): 36
 Positive precipitation warmest 1 month.....(Pps1): 25
 Positive precipitation coldest 3 months.....(Ppw): 120
 Positive precipitation coldest 2 months.....(Ppw2): 68
 Positive precipitation coldest 1 month.....(Ppw1): 34

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	120	120	62	212

Seasonal rainfall rhythms: F > P > W > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 24.1
 Average coldest month [T].....(Tmin): 10.1
 Maximum temp. warmest month [M].....(Tmmax): 29.0
 Minimum temp. coldest month [m].....(Tmmin): 5.5
 Absolute Max.temp. warmest month [M'].....(Tamax): 34.5
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.3
 First warmest contrasted month [M].....(Tcmax): 23.1 (5)
 First coldest contrasted month [m].....(Tcmin): 12.7 (5)
 Estival temperature.....(Ts): 690
 Positive temperature dryest 3 months.....(Tpd): 690
 Positive temperature dryest 2 months.....(Tpd2): 481
 Positive temperature dryest 1 month.....(Tpd1): 240
 Positive temperature warmest 3 months.....(Tps): 701
 Positive temperature warmest 2 months.....(Tps2): 481
 Positive temperature warmest 1 month.....(Tps1): 241
 Positive temperature coldest 3 months.....(Tpw): 318
 Positive temperature coldest 2 months.....(Tpw2): 205
 Positive temperature coldest 1 month.....(Tpw1): 101

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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): 1.63
 Mediterranean index of July.[PE/P].....(Im1): 13.12
 Mediterranean index of July & August.....(Im2): 7.76
 Mediterranean index of June, July & August....(Im3): 6.31

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	520	340	340	390	390	420	260	110	250	620	1050	450
Tp	113	101	104	128	145	179	209	240	241	220	174	136
Io (Iom)	4.60	3.37	3.27	3.05	2.69	2.35	1.24	0.46	1.04	2.82	6.03	3.31
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	1200 / 318			1200 / 452			620 / 690			2120 / 530		
Io (Iot)	3.774			2.655			0.899			4.000		
Semesters	December-May						June-November					
Pp(x10)/Tp	2400 / 770						2740 / 1220					
Io (Iosm)	3.117						2.246					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 5140/1990=2.58 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	520	340	340	390	390	420	260	110	250	620	1050	450
Tp [T*10]	113	101	104	128	145	179	209	240	241	220	174	136
Iom [Pp/Tp]	460	337	327	305	269	235	124	46	104	282	603	331
Avm [200-Iom]	***	***	***	***	***	***	76	154	96	***	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	1200 / 318			1200 / 452			620 / 690			2120 / 530		
Iot [Pp/Tp]	377			265			90			400		
Avs E[Avm<200]	***			***			326			***		
Strong lower arid [1]						Weak upper arid [1]						
Strong lower semiarid [1]						Weak lower semiarid [1]						

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp): 14.00
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]	16.89
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]	17.22
+ Hyperoceanic (-20<CI<20)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)]	0.98
+ Oceanic (0.6<CI<1.1)	
Rainfall Index of Lang (1925) [R=P/T]	30.99
+ Steppic (40>R>0)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)]	19.34
+ Semiarid -mediterranean- (20>Ia>15)	
I of Emberger (1930) [Q=100*P/(Tmmax ² -Tmmin ²)]	63.40
+ Subhumid (90>Q>50)	
I of Dantin & Revenga (1940) [DR=100*T/P]	3.23
+ Arid (6>DR>3)	
Aridity Index of UNEP [I=P/PE]	0.61
+ Subhumid - dry (0.65>I>0.5)	
Potential Erosion I of Fournier (1960) [K=Pi ² /P]	21.45
+ Very low (K<60)	

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate

- + Climate
- + Region
- + Thermic type: 3. Macro-mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.17	0.17	0.18	0.17	0.17	0.09	0.03	0.08	0.23	0.47	0.20	0.26
T-E ratio	4.55	4.68	5.76	6.52	8.05	9.40	10.80	10.85	9.90	7.83	6.12	5.09
Precipitation-effectiveness: 22.22						Temperature-efficiency						89.55
Moisture Index [MI=100*(P-PE)/PE]												-38.82
+ D.Semiarid (-66.7<MI<-33.3)												
Index of dryness [DI=100*d/PE]												39.02
+ Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]												0.20
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												840.13
+ Second mesothermic (712<PE<855)												

