

# Phytosociological Research Center

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## Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 30/08/2017)

TUI (ESP PONTEVEDRA)

Altitude: 58 m.

Latitude: 42°3'N Longitude: 8°39'W

Temperature observation period.: 1936-1960 (25)

Rainfall observation period....: 1936-1960 (25)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	8.00	11.40	4.60	16.50	-0.30	313.0	20.71
Feb.	9.40	13.50	5.30	19.70	0.50	211.0	25.96
Mar.	11.30	15.50	7.10	20.60	1.40	226.0	42.19
Apr.	13.50	18.50	8.60	25.30	3.50	141.0	58.85
May.	15.30	20.00	10.70	26.30	5.70	103.0	78.88
Jun.	18.00	23.10	12.80	31.30	7.70	95.0	99.82
Jul.	19.00	24.10	14.00	33.80	10.50	58.0	108.52
Aug.	19.90	25.30	14.50	33.70	11.20	68.0	107.64
Sep.	18.30	23.10	13.60	29.40	8.60	85.0	83.66
Oct.	14.50	18.40	10.70	25.20	5.60	164.0	55.17
Nov.	10.40	13.90	7.00	18.50	2.10	175.0	29.90
Dec.	7.80	10.90	4.70	14.80	0.00	269.0	19.26
Year	13.78	18.14	9.47	24.59	4.71	1908	730.55

### BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	294
Compensated thermicity index.....(Itc):	294
Simple continentality index.....(Ic):	12.1
Diurnality index.....(Id):	10.8
Annual ombrothermic index.....(Io):	11.54
Monthly estival ombrothermic index.....(Ios1):	3.05
Bimonthly estival ombrothermic index.....(Ios2):	3.24
Threemonthly estival ombrothermic index.....(Ios3):	3.88
Fourmonthly estival ombrothermic index.....(Ios4):	4.49
Annual ombro-evaporation index.....(Ioe):	0.43
Annual positive temperature.....(Tp):	1654
Annual negative temperature.....(Tn):	0
Estival temperature.....(Ts):	569
Positive precipitation.....(Pp):	1908

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	10	2	0	0	0

Latitudinal Belt...: Low eutemperate

Continentalty.....: Oceanic - Low Semihyperoceanic

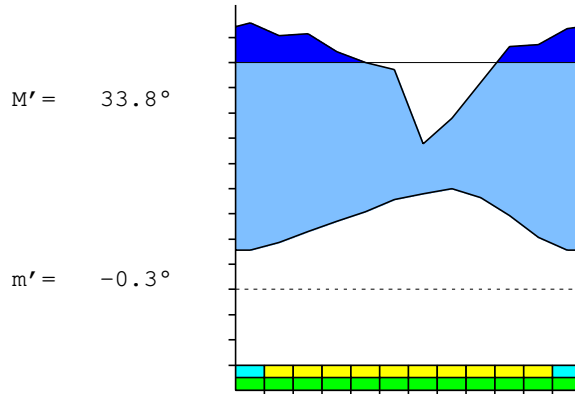
Bioclimate.....: TEMPERATE OCEANIC

Bioclimatic Belt...: UPPER THERMOTEMPERATE UPPER HUMID

TUI (ESP PONTEVEDRA)

58 m

P= 1908      42° 3'N      8° 39'W      25/25 y.  
 T= 13.8°      Ic= 12.1      Tp= 1654      Tn= 0  
 m= 4.7°      M= 10.9°      Itc= 294      Io= 11.5



TEMPERATE OCEANIC  
 UPPER THERMOTEMPERATE UPPER HUMID

WATER INDEX CARD      TUI (ESP PONTEVEDRA)  
 Altitude: 58 m.      Latitude: 42° 3'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	8.0	21	313	0	100	21	0	292	228	14.1
Feb.	9.4	26	211	0	100	26	0	185	207	7.1
Mar.	11.3	42	226	0	100	42	0	184	195	4.3
Apr.	13.5	59	141	0	100	59	0	82	139	1.3
May.	15.3	79	103	0	100	79	0	24	81	0.3
Jun.	18.0	100	95	-5	95	100	0	0	41	0.0
Jul.	19.0	109	58	-51	45	109	0	0	20	-0.4
Aug.	19.9	108	68	-40	5	108	0	0	10	-0.3
Sep.	18.3	84	85	1	6	84	0	0	5	0.0
Oct.	14.5	55	164	94	100	55	0	15	10	1.9
Nov.	10.4	30	175	0	100	30	0	145	78	4.8
Dec.	7.8	19	269	0	100	19	0	250	164	12.9
Year	13.8	731	1908	*	*	731	0	1177	1177	*

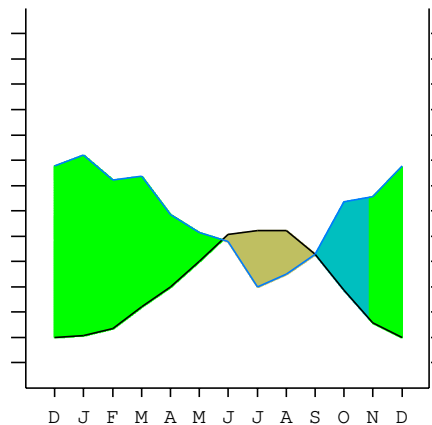
R = Reserve      VR = Variation of the reserve      RE = Real evapotranspiration  
 DR = Drainage      HC = Humidity coefficient      DF = Deficit      SP = Superavit

TUI (ESP PONTEVEDRA)

42°3'N      8°39'W      58 m 25/25 y.

T= 13.8      Ic= 12.1      TEMPERATE OCEANIC  
 m= 4.7      Tp= 1654      UPPER THERMOTEMPERATE  
 M= 10.9      Tn= 0      UPPER HUMID  
 M' = 33.8      Itc= 294  
 m' = -0.3      Io= 11.5  
 P= 1908      mm      ———  
 PE= 731      mm      ———

Imbibing	30 Aug.
Saturation	26 Oct.
Reserve Use	26 May.
Deficit	



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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

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

Thermic types [B1.B4]  
 + Latitudinal zone .....: B. Temperate  
 + Latitudinal belt .....: 1. Low eutemperate  
 + Thermic type .....: B. Temperate  
 + Thermic subtype .....: 4. Temperate

Bioclimatic types [C3.2a.7a]  
 + Macrobioclimate .....: C. TEMPERATE  
 + Bioclimate .....: 3. OCEANIC  
 + Bioclimatic variant ..:  
 + Thermic type.....: 2. THERMOTEMPERATE  
 + Thermic subtype.....: a. UPPER  
 + Ombrothermic type ...: 7. HUMID  
 + Ombrothermic subtype : a. UPPER

Bioclimatic Classification .....: Teco.Tte.Hum

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 573  
 Coldest semester of the year.....(Psw): 1335  
 Warmest four months period of the year.....(Pcm1): 306  
 Following warmest four months period.....(Pcm2): 921  
 Positive precipitation dryest 3 months.....(Ppd): 211  
 Positive precipitation dryest 2 months.....(Ppd2): 126  
 Positive precipitation dryest 1 month.....(Ppd1): 58  
 Positive precipitation warmest 3 months.....(Pps): 211  
 Positive precipitation warmest 2 months.....(Pps2): 126  
 Positive precipitation warmest 1 month.....(Pps1): 68  
 Positive precipitation coldest 3 months.....(Ppw): 793  
 Positive precipitation coldest 2 months.....(Ppw2): 582  
 Positive precipitation coldest 1 month.....(Ppw1): 269

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	793	470	221	424

Seasonal rainfall rhythms: W > P > F > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 19.9  
 Average coldest month [T].....(Tmin): 7.8  
 Maximum temp. warmest month [M].....(Tmmax): 25.3  
 Minimum temp. coldest month [m].....(Tmmin): 4.6  
 Absolute Max.temp. warmest month [M'].....(Tamax): 33.8  
 Absolute Min.temp. coldest month [m'].....(Tamin): -0.3  
 First warmest contrasted month [M].....(Tcmax): 25.3 (8)  
 First coldest contrasted month [m].....(Tcmin): 14.5 (8)  
 Estival temperature.....(Ts): 569  
 Positive temperature dryest 3 months.....(Tpd): 572  
 Positive temperature dryest 2 months.....(Tpd2): 389  
 Positive temperature dryest 1 month.....(Tpd1): 190  
 Positive temperature warmest 3 months.....(Tps): 572  
 Positive temperature warmest 2 months.....(Tps2): 389  
 Positive temperature warmest 1 month.....(Tps1): 199  
 Positive temperature coldest 3 months.....(Tpw): 252  
 Positive temperature coldest 2 months.....(Tpw2): 158  
 Positive temperature coldest 1 month.....(Tpw1): 78

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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)	o											o
Agelid.....[m' > 0] (Pf)		o	o	o	o	o	o	o	o	o	o	
HiperAgelid..[all>0] (Pf)		o	o	o	o	o	o	o	o	o	o	

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.38  
 Mediterranean index of July.[PE/P].....(Im1): 1.87  
 Mediterranean index of July & August.....(Im2): 1.72  
 Mediterranean index of June, July & August....(Im3): 1.43

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	2690	3130	2110	2260	1410	1030	950	580	680	850	1640	1750
Tp	78	80	94	113	135	153	180	190	199	183	145	104
Io (Iom)	34.5	39.1	22.4	20.0	10.4	6.73	5.28	3.05	3.42	4.64	11.3	16.8
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	7930 / 252			4700 / 401			2210 / 569			4240 / 432		
Io (Iot)	31.47			11.72			3.884			9.815		
Semesters	December-May						June-November					
Pp(x10)/Tp	12630 / 653						6450 / 1001					
Io (Iosm)	19.34						6.444					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 19080/1654=11.54 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	2690	3130	2110	2260	1410	1030	950	580	680	850	1640	1750
Tp [T*10]	78	80	94	113	135	153	180	190	199	183	145	104
Iom [Pp/Tp]	\$\$	\$\$	\$\$	\$\$	\$\$	673	528	305	342	464	\$\$	\$\$
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	7930 / 252			4700 / 401			2210 / 569			4240 / 432		
Iot [Pp/Tp]	\$\$			1172			388			981		
Avs E[Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin] .....(Sp): 12.10  
 CI of Gorezinski (1920) [1.7\*Sp/sin(Lat)-20.4] .....: 10.31  
 CI of Conrad (1946) [1.7\*Sp/sin(Lat+10)-14] .....: 12.09  
 + Hyperoceanic (-20<CI<20)  
 CI of Currey (1974) [CI=Sp/(1+Lat/3)] .....: 0.81  
 + Oceanic (0.6<CI<1.1)  
 Rainfall Index of Lang (1925) [R=P/T] .....: 138.43  
 + Temperate humid (160>R>100)  
 Aridity Index of Martonne (1926) [Ia=P/(T+10)] .....: 80.22  
 + Perhumid (Ia>60)  
 I of Emberger (1930) [Q=100\*P/(Tmax<sup>2</sup>-Tmin<sup>2</sup>)] .....: 308.27  
 + Humid (Q>90)  
 I of Dantin & Revenga (1940) [DR=100\*T/P] .....: 0.72  
 + Humid (2>DR>0)  
 Aridity Index of UNEP [I=P/PE] .....: 2.61  
 + Humid (I>0.65)  
 Potential Erosion I of Fournier (1960) [K=Pi<sup>2</sup>/P].....: 51.35  
 + 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: 4. Mesothermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	2.12	1.30	1.32	0.73	0.49	0.41	0.23	0.27	0.36	0.84	1.02	1.81
T-E ratio	3.60	4.23	5.09	6.07	6.89	8.10	8.55	8.95	8.23	6.52	4.68	3.51
Precipitation-effectiveness: 109.22						Temperature-efficiency .....: 74.43						
Moisture Index [MI=100*(P-PE)/PE] .....: 161.17 + 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] .....: 161.17 + Strong surplus (20<HI)												
Potential Evapotranspiration PE .....: 730.55 + Second mesothermic (712<PE<855)												

