

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

ST HUBERT (BELGIUM)

Altitude: 558 m.

Latitude: 50°2'N Longitude: 5°24'E

Temperature observation period.: 1984-1994 (11)

Rainfall observation period....: 1984-1994 (11)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	Epi
Jan.	-0.83	1.67	-3.33	13.89	-17.78	94.0	0.00
Feb.	0.00	2.78	-2.78	13.89	-21.11	91.4	0.00
Mar.	3.61	7.78	-0.56	20.00	-12.78	66.0	21.55
Apr.	6.95	11.67	2.22	26.11	-5.00	76.2	44.67
May.	10.28	15.00	5.56	27.22	-2.78	78.7	74.35
Jun.	12.77	17.22	8.33	32.22	0.56	104.1	93.02
Jul.	15.00	19.44	10.56	32.22	2.78	91.4	108.83
Aug.	15.00	19.44	10.56	30.56	3.89	96.5	99.30
Sep.	12.78	16.67	8.89	29.44	-0.56	88.9	72.55
Oct.	8.06	11.67	4.44	22.22	-5.00	63.5	41.02
Nov.	3.61	6.11	1.11	16.67	-7.78	106.7	16.06
Dec.	0.55	2.78	-1.67	13.33	-18.33	114.3	2.57
Year	7.32	11.02	3.61	23.15	-6.99	1072	573.92

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	57
Compensated thermicity index.....(Itc):	57
Simple continentality index.....(Ic):	15.8
Diurnality index.....(Id):	9.4
Annual ombrothermic index.....(Io):	10.00
Monthly estival ombrothermic index.....(Ios1):	6.09
Bimonthly estival ombrothermic index.....(Ios2):	6.26
Three monthly estival ombrothermic index.....(Ios3):	6.83
Four monthly estival ombrothermic index.....(Ios4):	6.99
Annual ombro-evaporation index.....(Ioe):	0.95
Annual positive temperature.....(Tp):	886
Annual negative temperature.....(Tn):	8
Estival temperature.....(Ts):	428
Positive precipitation.....(Pp):	886

N. of	P>4T	P:2T-4T	PT-2T	P<T	T<0
Months	11	0	0	0	1

Latitudinal Belt...: High eutemperate

Continentalty.....: Oceanic - Low Euoceanic

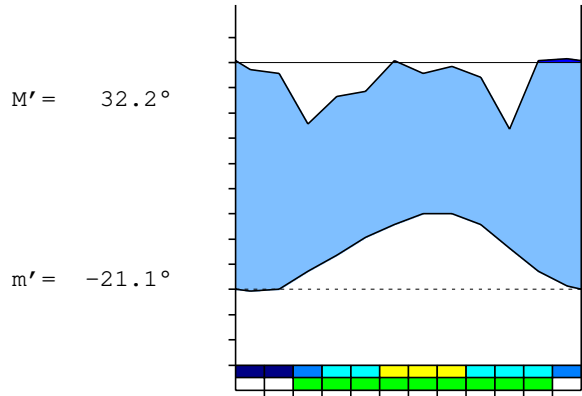
Bioclimate.....: TEMPERATE OCEANIC

Bioclimatic Belt...: UPPER SUPRATEMPERATE UPPER HUMID

ST HUBERT (BELGIUM)

558 m

P= 1072 50° 2'N 5° 24'E 11/11 y.
 T= 7.3° Ic= 15.8 Tp= 886 Tn= 8
 m= -3.3° M= 1.7° Itc= 57 Io= 10.0



TEMPERATE OCEANIC
 UPPER SUPRATEMPERATE UPPER HUMID

WATER INDEX CARD ST HUBERT (BELGIUM)
 Altitude: 558 m. Latitude: 50° 2'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	-0.8	0	94	0	100	0	0	94	88	*
Feb.	0.0	0	91	0	100	0	0	91	89	*
Mar.	3.6	22	66	0	100	22	0	44	67	2.0
Apr.	6.9	45	76	0	100	45	0	32	49	0.7
May.	10.3	74	79	0	100	74	0	4	27	0.0
Jun.	12.8	93	104	0	100	93	0	11	19	0.1
Jul.	15.0	109	91	-17	83	109	0	0	9	-0.1
Aug.	15.0	99	97	-3	80	99	0	0	5	0.0
Sep.	12.8	73	89	16	96	73	0	0	2	0.2
Oct.	8.1	41	64	4	100	41	0	19	10	0.5
Nov.	3.6	16	107	0	100	16	0	91	51	5.6
Dec.	0.6	3	114	0	100	3	0	112	81	43.4
Year	7.3	574	1072	*	*	574	0	498	498	*

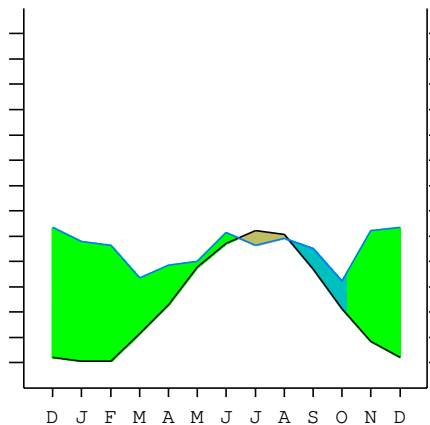
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

ST HUBERT (BELGIUM)

50°2'N 5°24'E 558 m 11/11 y.

T= 7.3 Ic= 15.8 TEMPERATE OCEANIC
 m= -3.3 Tp= 886 UPPER SUPRATEMPERATE
 M= 1.7 Tn= 8 UPPER HUMID
 M' = 32.2 Itc= 57
 m' = -21.1 Io= 10.0
 P= 1072 mm ———
 PE= 574 mm ———

Imbibing	5 Aug.
Saturation	6 Oct.
Reserve Use	12 Jun.
Deficit	



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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. High eutemperate
 + Thermic type: B. Temperate
 + Thermic subtype: 5. Subtemperate

Bioclimatic types [C3.4a.7a]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 3. OCEANIC
 + Bioclimatic variant ..:
 + Thermic type.....: 4. SUPRATEMPERATE
 + Thermic subtype.....: a. UPPER
 + Ombrothermic type ...: 7. HUMID
 + Ombrothermic subtype : a. UPPER

Bioclimatic Classification: Teco.Ste.Hum

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 523
 Coldest semester of the year.....(Psw): 549
 Warmest four months period of the year.....(Pcm1): 381
 Following warmest four months period.....(Pcm2): 379
 Positive precipitation dryest 3 months.....(Ppd): 221
 Positive precipitation dryest 2 months.....(Ppd2): 142
 Positive precipitation dryest 1 month.....(Ppd1): 64
 Positive precipitation warmest 3 months.....(Pps): 277
 Positive precipitation warmest 2 months.....(Pps2): 188
 Positive precipitation warmest 1 month.....(Pps1): 91
 Positive precipitation coldest 3 months.....(Ppw): 114
 Positive precipitation coldest 2 months.....(Ppw2): 0
 Positive precipitation coldest 1 month.....(Ppw1): 0

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	299	220	292	259

Seasonal rainfall rhythms: W > S > F > P

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 15.0
 Average coldest month [T].....(Tmin): -0.8
 Maximum temp. warmest month [M].....(Tmmax): 19.4
 Minimum temp. coldest month [m].....(Tmmin): -3.3
 Absolute Max.temp. warmest month [M'].....(Tamax): 32.2
 Absolute Min.temp. coldest month [m'].....(Tamin): -21.1
 First warmest contrasted month [M].....(Tcmax): 11.7 (4)
 First coldest contrasted month [m].....(Tcmin): 2.2 (4)
 Estival temperature.....(Ts): 428
 Positive temperature dryest 3 months.....(Tpd): 208
 Positive temperature dryest 2 months.....(Tpd2): 106
 Positive temperature dryest 1 month.....(Tpd1): 81
 Positive temperature warmest 3 months.....(Tps): 428
 Positive temperature warmest 2 months.....(Tps2): 300
 Positive temperature warmest 1 month.....(Tps1): 150
 Positive temperature coldest 3 months.....(Tpw): 6
 Positive temperature coldest 2 months.....(Tpw2): 0
 Positive temperature coldest 1 month.....(Tpw1): 0

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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)	o	o										
Subgelid.....[m <=0] (Pf)	o	o	o									o
Pregelid.....[m' <=0] (Pf)	o	o	o	o	o				o	o	o	o
Agelid.....[m' > 0] (Pf)						o	o	o				
HiperAgelid..[all>0] (Pf)						o	o	o				

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.54
 Mediterranean index of July.[PE/P].....(Im1): 1.19
 Mediterranean index of July & August.....(Im2): 1.11
 Mediterranean index of June, July & August....(Im3): 1.03

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	1143	*	*	660	762	787	1041	914	965	889	635	1067
Tp	6	*	*	36	70	103	128	150	150	128	81	36
Io (Iom)	208	*	*	18.3	11.0	7.66	8.15	6.09	6.43	6.96	7.88	29.6
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	*/*			2209 / 208			2920 / 428			2591 / 245		
Io (Iot)	*			10.60			6.827			10.60		
Semesters	December-May						June-November					
Pp(x10)/Tp	*/*						5511 / 672					
Io (Iosm)	*						8.198					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 8863/886=10.00 **There is No Yearly Aridity**

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	1143	*	*	660	762	787	1041	914	965	889	635	1067
Tp [T*10]	6	*	*	36	70	103	128	150	150	128	81	36
Iom [Pp/Tp]	\$\$!!	\$\$	\$\$	\$\$	766	815	609	643	696	788	\$\$
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	* / *			2209 / 208			2920 / 428			2591 / 245		
Iot [Pp/Tp]	**			1060			683			1060		
Avs E[Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 15.83
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 14.71
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 17.06
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.90
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: 146.51
 + Temperate humid (160>R>100)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 61.89
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: 292.16
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 0.68
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 1.87
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 12.19
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: B. Cold and temperate cold
 + Region: 11. Psicroaxeric (Axeric cold)
 + Thermic type: 5. Meso-microthermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.81	0.75	0.45	0.46	0.42	0.53	0.43	0.46	0.45	0.36	0.76	0.94
T-E ratio	0.00	0.00	1.62	3.13	4.63	5.75	6.75	6.75	5.75	3.63	1.62	0.25
Precipitation-effectiveness: 68.10						Temperature-efficiency: 39.87						
Moisture Index [MI=100*(P-PE)/PE]: 86.73 + B4.Humid highest-humid (80<MI<100)												
Index of dryness [DI=100*d/PE]: 0.00 + No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 86.72 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 573.92 + First mesothermic (570<PE<712)												

