

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

SCHWECHAT (AUSTRIA)

Altitude: 188 m.

Latitude: 48°7'N Longitude: 16°34'E

Temperature observation period.: 1989-1994 (6)

Rainfall observation period....: 1989-1994 (6)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	0.28	2.22	-1.67	12.22	-12.22	49.8	0.53
Feb.	-1.11	1.11	-3.33	12.22	-22.22	21.8	0.00
Mar.	3.06	7.78	-1.67	17.22	-12.22	23.4	11.38
Apr.	11.67	17.78	5.56	27.22	-3.89	39.6	59.77
May.	13.61	18.89	8.33	30.00	0.00	44.5	82.04
Jun.	17.77	23.33	12.22	28.89	3.89	73.9	113.38
Jul.	21.11	27.22	15.00	35.00	7.78	51.1	139.40
Aug.	20.00	26.11	13.89	37.22	7.78	33.3	120.21
Sep.	15.56	20.56	10.56	31.11	1.11	32.8	76.77
Oct.	10.56	15.00	6.11	25.00	-3.89	25.4	43.44
Nov.	3.34	6.11	0.56	13.89	-10.00	41.4	9.50
Dec.	1.11	3.33	-1.11	15.00	-11.11	15.0	2.49
Year	9.75	14.12	5.37	23.75	-4.58	452	658.92

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	75
Compensated thermicity index.....(Itc):	109
Simple continentality index.....(Ic):	22.2
Diurnality index.....(Id):	12.2
Annual ombrothermic index.....(Io):	3.64
Monthly estival ombrothermic index.....(Ios1):	1.66
Bimonthly estival ombrothermic index.....(Ios2):	2.05
Threemonthly estival ombrothermic index.....(Ios3):	2.69
Fourmonthly estival ombrothermic index.....(Ios4):	2.80
Annual ombro-evaporation index.....(Ioe):	0.69
Annual positive temperature.....(Tp):	1181
Annual negative temperature.....(Tn):	11
Estival temperature.....(Ts):	589
Positive precipitation.....(Pp):	430

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

Latitudinal Belt...: High Eutemperate

Continentality.....: Continental - Low Subcontinental

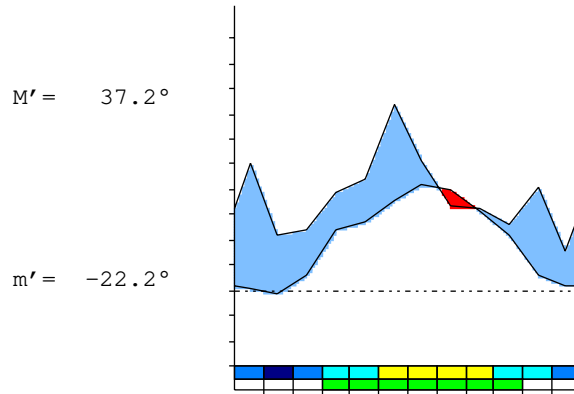
Bioclimate(Variant): TEMPERATE CONTINENTAL (STEPPIC)

Bioclimatic Belt...: LOW SUPRATEMPERATE LOW SUBHUMID

SCHWECHAT (AUSTRIA)

188 m

P= 452 48° 7'N 16° 34'E 6/6 y.
 T= 9.7 ° Ic= 22.2 Tp= 1181 Tn= 11
 m= -3.3 ° M= 1.1 ° Itc= 109 Io= 3.6



TEMPERATE CONTINENTAL (STEPPIC)
 LOW SUPRATEMPERATE LOW SUBHUMID

WATER INDEX CARD SCHWECHAT (AUSTRIA)
 Altitude: 188 m. Latitude: 48° 7'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	0.3	1	50	49	94	1	0	0	0	*
Feb.	-1.1	0	22	6	100	0	0	15	8	*
Mar.	3.1	11	23	0	100	11	0	12	10	1.0
Apr.	11.7	60	40	-20	80	60	0	0	5	-0.3
May.	13.6	82	45	-38	42	82	0	0	2	-0.4
Jun.	17.8	113	74	-39	3	113	0	0	1	-0.3
Jul.	21.1	139	51	-3	0	54	85	0	1	-0.6
Aug.	20.0	120	33	0	0	33	87	0	0	-0.7
Sep.	15.6	77	33	0	0	33	44	0	0	-0.5
Oct.	10.6	43	25	0	0	25	18	0	0	-0.4
Nov.	3.3	10	41	32	32	10	0	0	0	3.3
Dec.	1.1	2	15	13	44	2	0	0	0	5.0
Year	9.7	659	452	*	*	425	234	27	27	*

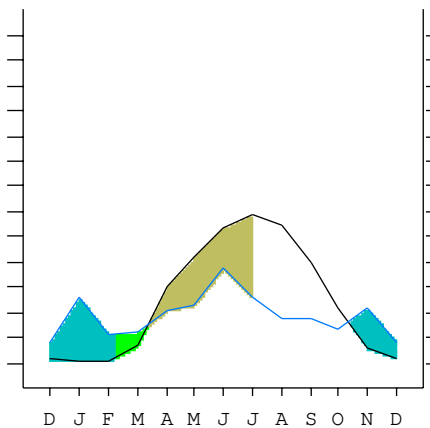
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

SCHWECHAT (AUSTRIA)

48°7'N 16°34'E 188 m 6/6 y.

T= 9.7 Ic= 22.2 TEMPERATE CONTINENTAL (STEPPIC)
 m= -3.3 Tp= 1181 LOW SUPRATEMPERATE
 M= 1.1 Tn= 11 LOW SUBHUMID
 M' = 37.2 Itc= 109
 m' = -22.2 Io= 3.6
 P= 452 mm ———
 PE= 659 mm ———

Imbibing	11 Oct.
Saturation	9 Feb.
Reserve Use	12 Mar.
Deficit	1 Jul.



SCHWECHAT (AUSTRIA)

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SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [C2a]
 + Type: C. Continental
 + Subtype: 2. Subcontinental
 + Variant: a. Low
 Thermic types [B1.B5]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. High Eutemperate
 + Thermic type: B. Temperate
 + Thermic subtype: 5. Subtemperate
 Bioclimatic types [C2a.4b.6b]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 2. CONTINENTAL
 + Bioclimatic variant .: STEPPIC
 + Thermic type.....: 4. SUPRATEMPERATE
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 6. SUBHUMID
 + Ombrothermic subtype : b. LOW
 Bioclimatic ClassificationTeco(Stp).Ste.Shu.Suc

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 275
 Coldest semester of the year.....(Psw): 177
 Warmest four months period of the year.....(Pcm1): 191
 Following warmest four months period.....(Pcm2): 132
 Positive precipitation dryest 3 months.....(Ppd): 82
 Positive precipitation dryest 2 months.....(Ppd2): 23
 Positive precipitation dryest 1 month.....(Ppd1): 15
 Positive precipitation warmest 3 months.....(Pps): 158
 Positive precipitation warmest 2 months.....(Pps2): 84
 Positive precipitation warmest 1 month.....(Pps1): 51
 Positive precipitation coldest 3 months.....(Ppw): 65
 Positive precipitation coldest 2 months.....(Ppw2): 50
 Positive precipitation coldest 1 month.....(Ppw1): 0

Seasons	Winter Tr1-W	Spring Tr2-P	Summer Tr3-S	Automn Tr4-F
Rainfall	86	107	158	99

Seasonal rainfall rhythms: S > P > F > W

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 21.1
 Average coldest month [T].....(Tmin): -1.1
 Maximum temp. warmest month [M].....(Tmax): 27.2
 Minimum temp. coldest month [m].....(Tmin): -3.3
 Absolute Max.temp. warmest month [M'].....(Tamax): 37.2
 Absolute Min.temp. coldest month [m'].....(Tamin): -22.2
 First warmest contrasted month [M].....(Tcmax): 17.8 (4)
 First coldest contrasted month [m].....(Tcmin): 5.6 (4)
 Estival temperature.....(Ts): 589
 Positive temperature dryest 3 months.....(Tpd): 150
 Positive temperature dryest 2 months.....(Tpd2): 31
 Positive temperature dryest 1 month.....(Tpd1): 11
 Positive temperature warmest 3 months.....(Tps): 589
 Positive temperature warmest 2 months.....(Tps2): 411
 Positive temperature warmest 1 month.....(Tps1): 211
 Positive temperature coldest 3 months.....(Tpw): 14
 Positive temperature coldest 2 months.....(Tpw2): 3
 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		
Ultragelid...[M'<=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)		o										
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): 1.46
 Mediterranean index of July.[PE/P].....(Im1): 2.73
 Mediterranean index of July & August.....(Im2): 3.08
 Mediterranean index of June, July & August....(Im3): 2.36

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	150	498	*	234	396	445	739	511	333	328	254	414
Tp	11	3	*	31	117	136	178	211	200	156	106	33
Io (Iom)	13.5	178	*	7.65	3.39	3.27	4.16	2.42	1.67	2.11	2.41	12.4
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	*/*			1075 / 283			1583 / 589			996 / 295		
Io (Iot)	*			3.793			2.689			3.381		
Semesters	December-May						June-November					
Pp(x10)/Tp	*/*						2579 / 883					
Io (Iosm)	*						2.919					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 4302/1181=3.64 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	150	498	*	234	396	445	739	511	333	328	254	414
Tp [T*10]	11	3	*	31	117	136	178	211	200	156	106	33
Iom [Pp/Tp]	\$\$	\$\$!!	765	339	327	416	242	167	211	241	\$\$
Avm [200-Iom]	***	***	***	***	***	***	***	***	34	***	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	* / *			1075 / 283			1583 / 589			996 / 295		
Iot [Pp/Tp]	**			379			269			338		
Avs E[Avm<200]	***			***			***			***		
Strong upper semiarid [1]												

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin]	(Sp): 22.22
CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]	30.34
CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]	30.49
+ Oceanic (20<CI<40)	
CI of Currey (1974) [CI=Sp/(1+Lat/3)]	1.30
+ Subcontinental (1.1<CI<1.7)	
Rainfall Index of Lang (1925) [R=P/T]	46.37
+ Semiarid (60>R>40)	
Aridity Index of Martonne (1926) [Ia=P/(T+10)]	22.89
+ Subhumid (30>Ia>20)	
I of Emberger (1930) [Q=100*P/(Tmmax ² -Tmmin ²)]	61.93
+ Subhumid (90>Q>50)	
I of Dantin & Revenga (1940) [DR=100*T/P]	2.16
+ Semiarid (3>DR>2)	
Aridity Index of UNEP [I=P/PE]	0.69
+ Humid (I>0.65)	
Potencial Erosion I of Fournier (1960) [K=Pi ² /P].....	12.08
+ Very low (K<60)	

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: B. Cold and temperate cold
 + Region: 10. Psicroxeroterico (Submediterranean)
 + Thermic type: 5. Meso-microthermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.38	0.16	0.14	0.19	0.20	0.32	0.19	0.12	0.14	0.12	0.27	0.10
T-E ratio	0.13	0.00	1.38	5.25	6.12	8.00	9.50	9.00	7.00	4.75	1.50	0.50
Precipitation-effectiveness: 23.22						Temperature-efficiency: 53.13						
Moisture Index [MI=100*(P-PE)/PE]												
+ C1.Subhumid dry (-33.3<MI<0)												
Index of dryness [DI=100*d/PE]												
+ Strong deficit (33.3<DI)												
Index of humidity [HI=100*s/PE]												
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE												
+ First mesothermic (570<PE<712)												

