

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

HALLETT (ANTARCTICA TERR.)

Altitude: 5 m.

Latitude: 72°18'S Longitude: 170°18'E

Temperature observation period.: 1987-1994 (8)

Rainfall observation period....: 1987-1994 (8)

(C/mm)	Ti	Mi	mi	M'i	m'i	Pi	EPI
Jan.	-1.39	1.11	-3.89	5.56	-9.44	20.1	0.00
Feb.	-3.34	-1.67	-5.00	4.44	-8.89	25.1	0.00
Mar.	-10.28	-8.89	-11.67	-1.11	-22.78	38.9	0.00
Apr.	-17.78	-15.56	-20.00	-5.56	-31.11	14.5	0.00
May.	-22.50	-20.00	-25.00	-6.67	-35.00	20.1	0.00
Jun.	-23.06	-20.00	-26.11	-3.89	-36.67	10.4	0.00
Jul.	-26.39	-23.33	-29.44	-6.11	-40.56	22.6	0.00
Aug.	-26.67	-23.33	-30.00	-7.78	-47.78	13.5	0.00
Sep.	-24.72	-21.11	-28.33	-7.22	-40.00	8.4	0.00
Oct.	-19.17	-15.56	-22.78	-4.44	-37.22	8.1	0.00
Nov.	-8.34	-5.00	-11.67	1.67	-24.44	1.8	0.00
Dec.	-2.22	0.00	-4.44	5.00	-14.44	11.2	0.00
Year	-15.49	-12.78	-18.19	-2.18	-29.03	195	0.00

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-688
Compensated thermicity index.....(Itc):	-609
Simple continentality index.....(Ic):	25.3
Diurnality index.....(Id):	7.2
Annual ombrothermic index.....(Io):	No
Monthly estival ombrothermic index.....(Ios1):	No
Bimonthly estival ombrothermic index.....(Ios2):	No
Threemonthly estival ombrothermic index.....(Ios3):	No
Fourmonthly estival ombrothermic index.....(Ios4):	No
Annual ombro-evaporation index.....(Ioe):	No
Annual positive temperature.....(Tp):	0
Annual negative temperature.....(Tn):	1859
Estival temperature.....(Ts):	0
Positive precipitation.....(Pp):	0

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

Latitudinal Belt...: Low polar

Continentalty.....: Continental - High Subcontinental

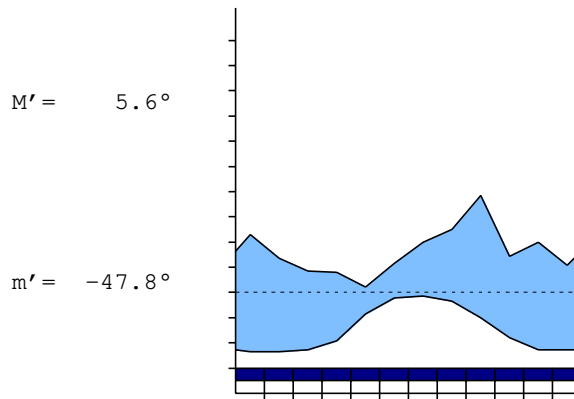
Bioclimate.....: Polar Hypogelid

Bioclimatic Belt...: Lower Hypogelid Scanty-Snowy

HALLETT (ANTARCTICA TERR.)

5 m

P= 195 72° 18' S 170° 18' E 8/8 y.
 T= -15.5° Ic= 25.3 Tp= 0 Tn= 1859
 m= -30.0° M= -23.3° Itc= -609 Io=9999.9



Polar Hypogelid
 Lower Hypogelid Scanty-Snowy

WATER INDEX CARD HALLETT (ANTARCTICA TERR.)
 Altitude: 5 m. Latitude: 72° 18' S

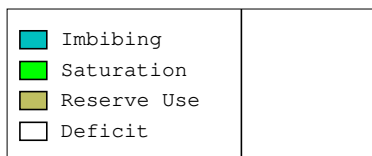
(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jul.	-26.4	0	23	0	100	0	0	23	19	*
Aug.	-26.7	0	14	0	100	0	0	14	16	*
Sep.	-24.7	0	8	0	100	0	0	8	12	*
Oct.	-19.2	0	8	0	100	0	0	8	10	*
Nov.	-8.3	0	2	0	100	0	0	2	6	*
Dec.	-2.2	0	11	0	100	0	0	11	9	*
Jan.	-1.4	0	20	0	100	0	0	20	14	*
Feb.	-3.3	0	25	0	100	0	0	25	20	*
Mar.	-10.3	0	39	0	100	0	0	39	29	*
Apr.	-17.8	0	15	0	100	0	0	15	22	*
May.	-22.5	0	20	0	100	0	0	20	21	*
Jun.	-23.1	0	10	0	100	0	0	10	16	*
Year	-15.5	0	195	*	*	0	0	195	195	*

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

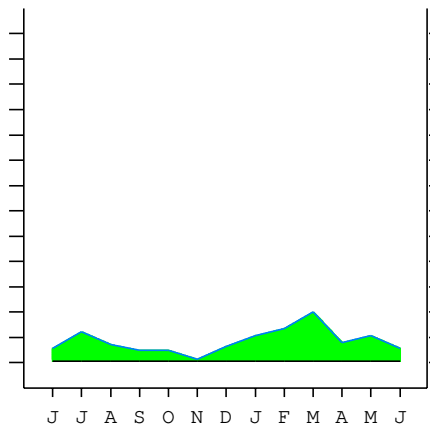
HALLETT (ANTARCTICA TERR.)

72°18' S 170°18' E 5 m 8/8 y.

T= -15.5 Ic= 25.3 Polar Hypogelid
 m= -30.0 Tp= 0 Lower Hypogelid
 M= -23.3 Tn= 1859 Scanty-Snowy
 M' = 5.6 Itc= -609
 m' = -47.8 Io=9999.9
 P= 195 mm ———
 PE= 0 mm ———



All over the year,
 there is no hydric deficit



HALLETT (ANTARCTICA TERR.)

Latitude: 72°18'S Longitude: 170°18'E Altitude: 5 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [C2b]
 + Type: C. Continental
 + Subtype: 2. Subcontinental
 + Variant: b. High

Thermic types [C2.D9]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. Low polar
 + Thermic type: D. Gelid
 + Thermic subtype: 9. Gelid

Bioclimatic types [E3.5.2]
 + Macrobioclimate: E. Polar
 + Bioclimate: 3. Hypogelid
 + Bioclimatic variant .:
 + Thermic type.....: 5. Lower Hypogelid
 + Thermic subtype.....:
 + Ombrothermic type ...: 2. Scanty-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

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PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 112
 Coldest semester of the year.....(Psw): 83
 Warmest four months period of the year.....(Pcm1): 58
 Following warmest four months period.....(Pcm2): 84
 Positive precipitation dryest 3 months.....(Ppd): 0
 Positive precipitation dryest 2 months.....(Ppd2): 0
 Positive precipitation dryest 1 month.....(Ppd1): 0
 Positive precipitation warmest 3 months.....(Pps): 0
 Positive precipitation warmest 2 months.....(Pps2): 0
 Positive precipitation warmest 1 month.....(Pps1): 0
 Positive precipitation coldest 3 months.....(Ppw): 0
 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	46	18	56	73

Seasonal rainfall rhythms: F > S > W > P

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): -1.4
 Average coldest month [T].....(Tmin): -26.7
 Maximum temp. warmest month [M].....(Tmmax): 1.1
 Minimum temp. coldest month [m].....(Tmmin): -30.0
 Absolute Max.temp. warmest month [M'].....(Tamax): 5.6
 Absolute Min.temp. coldest month [m'].....(Tamin): -47.8
 First warmest contrasted month [M].....(Tcmax): -21.1 (9)
 First coldest contrasted month [m].....(Tcmin): -28.3 (9)
 Estival temperature.....(Ts): 0
 Positive temperature dryest 3 months.....(Tpd): 0
 Positive temperature dryest 2 months.....(Tpd2): 0
 Positive temperature dryest 1 month.....(Tpd1): 0
 Positive temperature warmest 3 months.....(Tps): 0
 Positive temperature warmest 2 months.....(Tps2): 0
 Positive temperature warmest 1 month.....(Tps1): 0
 Positive temperature coldest 3 months.....(Tpw): 0
 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....(Cm2)									o	o	o	o
Vegetation Activity(Pav)												
Ultragelid...[M' <=0] (Pf)			o	o	o	o	o	o	o	o		
Hypergelid...[M <=0] (Pf)		o	o	o	o	o	o	o	o	o	o	o
Gelid.....[T <=0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
Subgelid.....[m <=0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
Pregelid.....[m' <=0] (Pf)	o	o	o	o	o	o	o	o	o	o	o	o
Agelid.....[m' > 0] (Pf)												
HiperAgelid..[all>0] (Pf)												

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.00
 Mediterranean index of January.....(Im1): 0.00
 Mediterranean index of January & February.....(Im2): 0.00
 Mediterranean index of December to February...(Im3): 0.00

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	*	*	*	*	*	*	*	*	*	*	*	*
Tp	*	*	*	*	*	*	*	*	*	*	*	*
Io (Iom)	*	*	*	*	*	*	*	*	*	*	*	*
Seasons	Summer			Autumn			Winter			Spring		
Pp(x10)/Tp	*/*			*/*			*/*			*/*		
Io (Iot)	*			*			*			*		
Semesters	December-May						June-November					
Pp(x10)/Tp	*/*						*/*					
Io (Iosm)	*						*					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 0/0=9999.90 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	*	*	*	*	*	*	*	*	*	*	*	*
Tp [T*10]	*	*	*	*	*	*	*	*	*	*	*	*
Iom [Pp/Tp]	!!	!!	!!	!!	!!	!!	!!	!!	!!	!!	!!	!!
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Summer			Autumn			Winter			Spring		
Pp / Tp	* / *			* / *			* / *			* / *		
Iot [Pp/Tp]	**			**			**			**		
Avs E[Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 25.28
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 24.71
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 29.37
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.01
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: -12.57
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: -35.48
 +
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]: -21.66
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]: -7.95
 +
 Aridity Index of UNEP [I=P/PE]: 0.00
 + Hyperarid (0.05>Im)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 7.77
 + Very low (K<60)

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BIOCLIMATIC INDICES II

Bioclimatic classification of Gaussen & Bagnouls (1957)
 + Climate: C. Gelid
 + Region: 12. Criomeric (Gelid)
 + Thermic type: 9. Gelid

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.15	0.20	0.32	0.11	0.15	0.07	0.18	0.10	0.06	0.06	0.01	0.08
T-E ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Precipitation-effectiveness: 14.82						Temperature-efficiency: 0.00						
Moisture Index [MI=100*(P-PE)/PE]: 0.00											0.00	
+ C2.Subhumid humid (0<MI<20)												
Index of dryness [DI=100*d/PE]: 0.00											0.00	
+ No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 0.00											0.00	
+ No surplus (0<HI<10)												
Potential Evapotranspiration PE: 0.00											0.00	
+ Ice climate (PE<142)												

