

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

ILES DE LA MADELEINEQUE. (CANADA) Altitude: 10 m.

Latitude: 47°25'N Longitude: 61°47'W

Temperature observation period.: 1933-1990 (58)

Rainfall observation period....: 1933-1990 (58)

(C/mm)	Ti	Mi	mi	M' i	m' i	Pi	EPI
Jan.	-6.32	3.74	-16.09	0.00	0.00	92.4	0.00
Feb.	-7.64	2.61	-17.86	0.00	0.00	68.8	0.00
Mar.	-4.23	5.33	-13.53	0.00	0.00	68.4	0.00
Apr.	0.48	5.38	-4.38	0.00	0.00	65.3	4.33
May.	5.96	11.15	0.75	0.00	0.00	69.7	46.45
Jun.	11.55	16.05	6.95	0.00	0.00	64.3	84.98
Jul.	16.65	20.88	12.43	0.00	0.00	59.0	118.56
Aug.	17.12	22.20	11.80	0.00	0.00	77.1	111.48
Sep.	13.15	17.65	8.55	0.00	0.00	78.1	75.87
Oct.	7.77	12.35	3.25	0.00	0.00	89.0	42.08
Nov.	2.63	8.28	-2.78	0.00	0.00	99.4	13.46
Dec.	-2.88	4.43	-10.53	0.00	0.00	102.1	0.00
Year	4.52	10.84	-1.79	0.00	0.00	934	497.21

BIOCLIMATIC INDICES AND DIAGNOSIS

Thermicity index.....(It):	-107
Compensated thermicity index.....(Itc):	-36
Simple continentality index.....(Ic):	24.8
Diurnality index.....(Id):	20.5
Annual ombrothermic index.....(Io):	7.99
Monthly estival ombrothermic index.....(Ios1):	3.54
Bimonthly estival ombrothermic index.....(Ios2):	4.03
Threemonthly estival ombrothermic index.....(Ios3):	4.42
Fourmonthly estival ombrothermic index.....(Ios4):	5.27
Annual ombro-evaporation index.....(Ioe):	1.88
Annual positive temperature.....(Tp):	753
Annual negative temperature.....(Tn):	211
Estival temperature.....(Ts):	453
Positive precipitation.....(Pp):	602

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

Latitudinal Belt...: High Eutemperate

Continentality.....: Continental - High Subcontinental

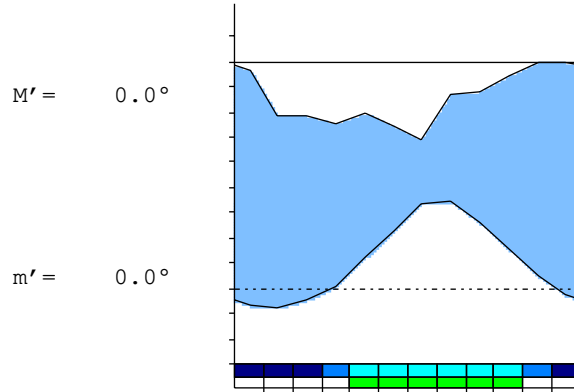
Bioclimate(Variant): TEMPERATE CONTINENTAL (HEMIBOREAL)

Bioclimatic Belt...: LOW OROTEMPERATE (HEMIBOREAL) LOW HUMID

ILES DE LA MADELEINEQUE. (CANADA)

10 m

P= 934 47° 25'N 61° 47'W 58/58 y.
 T= 4.5 ° Ic= 24.8 Tp= 753 Tn= 211
 m= -17.9 ° M= 2.6 ° Itc= -36 Io= 8.0



TEMPERATE CONTINENTAL (HEMIBOREAL)
 LOW OROTEMPERATE (HEMIBOREAL) LOW HUMID

WATER INDEX CARD ILES DE LA MADELEINEQUE. (CANADA)

Altitude: 10 m. Latitude: 47° 25'N

(C/mm)	T	PE	P	VR	R	RE	DF	SP	DR	HC
Jan.	-6.3	0	92	0	100	0	0	92	76	*
Feb.	-7.6	0	69	0	100	0	0	69	73	*
Mar.	-4.2	0	68	0	100	0	0	68	70	*
Apr.	0.5	4	65	0	100	4	0	61	66	14.0
May.	6.0	46	70	0	100	46	0	23	44	0.5
Jun.	11.6	85	64	-21	79	85	0	0	22	-0.2
Jul.	16.6	119	59	-60	20	119	0	0	11	-0.5
Aug.	17.1	111	77	-20	0	97	15	0	6	-0.3
Sep.	13.1	76	78	2	2	76	0	0	3	0.0
Oct.	7.8	42	89	47	49	42	0	0	1	1.1
Nov.	2.6	13	99	51	100	13	0	35	18	6.3
Dec.	-2.9	0	102	0	100	0	0	102	60	*
Year	4.5	497	934	*	*	483	15	451	451	*

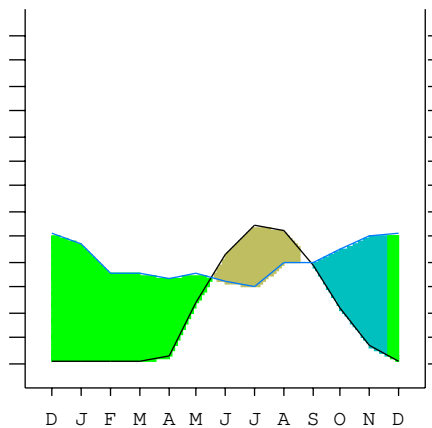
R = Reserve VR = Variation of the reserve RE = Real evapotranspiration
 DR = Drainage HC = Humidity coefficient DF = Deficit SP = Superavit

ILES DE LA MADELEINEQUE. (CANADA)

47°25'N 61°47'W 10 m 58/58 y.

T= 4.5 Ic= 24.8 TEMPERATE CONTINENTAL (HEMIBOREAL)
 m= -17.9 Tp= 753 LOW OROTEMPERATE (HEMIBOREAL)
 M= 2.6 Tn= 211 LOW HUMID
 M' = 0.0 Itc= -36
 m' = 0.0 Io= 8.0
 P= 934 mm ———
 PE= 497 mm ———

Imbibing	29 Aug.
Saturation	18 Nov.
Reserve Use	16 May.
Deficit	18 Aug.



ILES DE LA MADELEINEQUE. (CANADA)

Latitude: 47°25'N Longitude: 61°47'W Altitude: 10 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

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

Thermic types [B1.C6]
 + Latitudinal zone: B. Temperate
 + Latitudinal belt: 1. High Eutemperate
 + Thermic type: C. Cold
 + Thermic subtype: 6. Cool

Bioclimatic types [C2.5b.7b]
 + Macrobioclimate: C. TEMPERATE
 + Bioclimate: 2. CONTINENTAL
 + Bioclimatic variant .: HEMIBOREAL
 + Thermic type.....: 5. OROTEMPERATE (HEMIBOREAL)
 + Thermic subtype.....: b. LOW
 + Ombrothermic type ...: 7. HUMID
 + Ombrothermic subtype : b. LOW

Bioclimatic ClassificationTeco (Hem).Ote.Hum.Suc

ILES DE LA MADELEINEQUE. (CANADA)

Latitude: 47°25'N Longitude: 61°47'W Altitude: 10 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 437
 Coldest semester of the year.....(Psw): 496
 Warmest four months period of the year.....(Pcm1): 278
 Following warmest four months period.....(Pcm2): 383
 Positive precipitation dryest 3 months.....(Ppd): 193
 Positive precipitation dryest 2 months.....(Ppd2): 123
 Positive precipitation dryest 1 month.....(Ppd1): 59
 Positive precipitation warmest 3 months.....(Pps): 214
 Positive precipitation warmest 2 months.....(Pps2): 136
 Positive precipitation warmest 1 month.....(Pps1): 77
 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	263	203	200	266

Seasonal rainfall rhythms: F > W > P > S

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 17.1
 Average coldest month [T].....(Tmin): -7.6
 Maximum temp. warmest month [M].....(Tmax): 22.2
 Minimum temp. coldest month [m].....(Tmin): -17.9
 Absolute Max.temp. warmest month [M'].....(Tamax): 0.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.0
 First warmest contrasted month [M].....(Tcmax): 2.6 (2)
 First coldest contrasted month [m].....(Tcmin): -17.9 (2)
 Estival temperature.....(Ts): 453
 Positive temperature dryest 3 months.....(Tpd): 342
 Positive temperature dryest 2 months.....(Tpd2): 282
 Positive temperature dryest 1 month.....(Tpd1): 167
 Positive temperature warmest 3 months.....(Tps): 469
 Positive temperature warmest 2 months.....(Tps2): 338
 Positive temperature warmest 1 month.....(Tps1): 171
 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....(Cmd)				o	o	o	o					
Vegetation Activity(Pav)					o	o	o	o	o	o		
Ultragelid...[M'<=0] (Pf)												
Hypergelid...[M <=0] (Pf)												
Gelid.....[T <=0] (Pf)	o	o	o									o
Subgelid.....[m <=0] (Pf)	o	o	o	o							o	o
Pregelid.....[m'<=0] (Pf)												
Agelid.....[m'> 0] (Pf)												
HiperAgelid..[all>0] (Pf)					o	o	o	o	o	o		

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OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.53
 Mediterranean index of July.[PE/P].....(Im1): 2.01
 Mediterranean index of July & August.....(Im2): 1.69
 Mediterranean index of June, July & August....(Im3): 1.57

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp(x10)	*	*	*	*	653	697	643	590	771	781	890	994
Tp	*	*	*	*	5	60	116	167	171	132	78	26
Io (Iom)	*	*	*	*	136	11.7	5.57	3.54	4.50	5.94	11.5	37.8
Seasons	Winter			Spring			Summer			Autumn		
Pp(x10)/Tp	*/*			*/*			2003 / 453			2665 / 236		
Io (Iot)	*			*			4.421			11.31		
Semesters	December-May						June-November					
Pp(x10)/Tp	*/*						4668 / 689					
Io (Iosm)	*						6.778					

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Aridity Value Index (AVI)

[10xPP/TP=IO]: 6018/753=7.99 There is No Yearly Aridity

Months	Dec.	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.
Pp [P*10]	*	*	*	*	653	697	643	590	771	781	890	994
Tp [T*10]	*	*	*	*	5	60	116	167	171	132	78	26
Iom [Pp/Tp]	!!	!!	!!	!!	\$\$	\$\$	557	354	450	594	\$\$	\$\$
Avm [200-Iom]	***	***	***	***	***	***	***	***	***	***	***	***
Seasons	Winter			Spring			Summer			Autumn		
Pp / Tp	* / *			* / *			2003 / 453			2665 / 236		
Iot [Pp/Tp]	**			**			442			1131		
Avs E [Avm<200]	***			***			***			***		

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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 24.76
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 36.77
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 35.95
 + Oceanic (20<CI<40)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 1.47
 + Subcontinental (1.1<CI<1.7)
 Rainfall Index of Lang (1925) [R=P/T]: 206.55
 + Humid (R>160)
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 64.30
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]: 536.99
 + Humid (Q>90)
 I of Dantin & Revenga (1940) [DR=100*T/P]: 0.48
 + Humid (2>DR>0)
 Aridity Index of UNEP [I=P/PE]: 1.88
 + Humid (I>0.65)
 Potencial Erosion I of Fournier (1960) [K=Pi²/P].....: 11.17
 + 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: 6. Microthermic

Thornthwaite (1948)												
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
P-E ratio	0.84	0.60	0.60	0.50	0.43	0.32	0.25	0.34	0.38	0.53	0.73	0.94
T-E ratio	0.00	0.00	0.00	0.22	2.68	5.20	7.49	7.70	5.92	3.50	1.18	0.00
Precipitation-effectiveness: 64.74						Temperature-efficiency: 33.89						
Moisture Index [MI=100*(P-PE)/PE]: 87.77 + B4.Humid highest-humid (80<MI<100)												
Index of dryness [DI=100*d/PE]: 2.94 + No deficit (0<DI<16.7)												
Index of humidity [HI=100*s/PE]: 90.71 + Strong surplus (20<HI)												
Potential Evapotranspiration PE: 497.21 + Second microthermic (427<PE<570)												

