

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

Prof.Dr. Salvador Rivas-Martinez

(Adapted to Synoptical Table 30/08/2017)

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.) Altitude: 10 m.

Latitude: 63°18'S Longitude: 57°54'W

Temperature observation period.: 1966-1985 (20)

Rainfall observation period....: 1966-1985 (20)

| (C/mm) | Ti | Mi | mi | M'i | m'i | Pi | Epi |
|--------|-------|-------|--------|------|------|------|--------|
| Jan. | 0.91 | 3.10 | -2.10 | 0.00 | 0.00 | 27.1 | 247.78 |
| Feb. | 0.12 | 2.25 | -1.65 | 0.00 | 0.00 | 46.8 | 70.08 |
| Mar. | -1.22 | 2.41 | -5.06 | 0.00 | 0.00 | 51.2 | 0.00 |
| Apr. | -3.54 | 1.53 | -8.23 | 0.00 | 0.00 | 48.2 | 0.00 |
| May. | -6.32 | 2.41 | -15.46 | 0.00 | 0.00 | 25.8 | 0.00 |
| Jun. | -7.54 | -1.30 | -14.30 | 0.00 | 0.00 | 34.3 | 0.00 |
| Jul. | -8.06 | 6.28 | -22.98 | 0.00 | 0.00 | 39.2 | 0.00 |
| Aug. | -8.32 | -1.18 | -16.13 | 0.00 | 0.00 | 54.2 | 0.00 |
| Sep. | -5.32 | 2.60 | -13.00 | 0.00 | 0.00 | 50.4 | 0.00 |
| Oct. | -3.78 | 0.44 | -7.69 | 0.00 | 0.00 | 44.8 | 0.00 |
| Nov. | -2.06 | 3.48 | -7.58 | 0.00 | 0.00 | 39.8 | 0.00 |
| Dec. | 0.36 | 2.53 | -2.03 | 0.00 | 0.00 | 26.9 | 166.19 |
| Year | -3.73 | 2.05 | -9.68 | 0.00 | 0.00 | 489 | 484.06 |

BIOCLIMATIC INDICES AND DIAGNOSIS

| | |
|---|-------|
| Thermicity index.....(It): | -210 |
| Compensated thermicity index.....(Itc): | -210 |
| Simple continentality index.....(Ic): | 9.2 |
| Diurnality index.....(Id): | 29.3 |
| Annual ombrothermic index.....(Io): | 72.53 |
| Monthly estival ombrothermic index.....(Ios1): | 29.79 |
| Bimonthly estival ombrothermic index.....(Ios2): | 42.53 |
| Threemonthly estival ombrothermic index.....(Ios3): | 72.53 |
| Fourmonthly estival ombrothermic index.....(Ios4): | No |
| Annual ombro-evaporation index.....(Ioe): | 0.96 |
| Annual positive temperature.....(Tp): | 14 |
| Annual negative temperature.....(Tn): | 462 |
| Estival temperature.....(Ts): | 14 |
| Positive precipitation.....(Pp): | 101 |

| N. of | P>4T | P:2T-4T | PT-2T | P<T | T<0 |
|--------|------|---------|-------|-----|-----|
| Months | 3 | 0 | 0 | 0 | 9 |

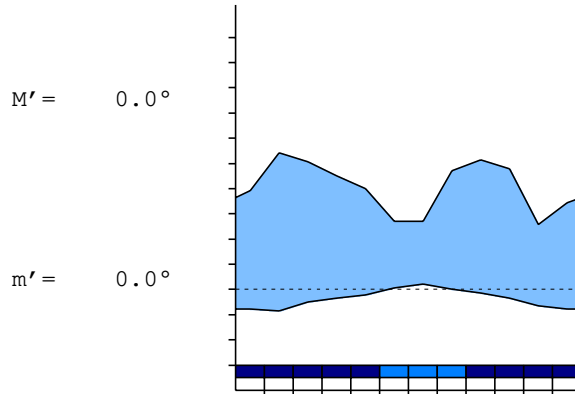
Latitudinal Belt...: High subtemperate

Continentality.....: Hyperoceanic - High Subhyperoceanic

Bioclimate(Variant): Polar Suprapolar (Hyperoceanic)

Bioclimatic Belt...: Upper Suprapolar Medium-Snowy

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.) 10 m
 P= 489 63° 18' S 57° 54' W 20/20 y.
 T= -3.7° Ic= 9.2 Tp= 14 Tn= 462
 m= -16.1° M= -1.2° Itc= -210 Io= 72.5



Polar Suprapolar (Hyperoceanic)
 Upper Suprapolar Medium-Snowy

WATER INDEX CARD BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)
 Altitude: 10 m. Latitude: 63° 18' S

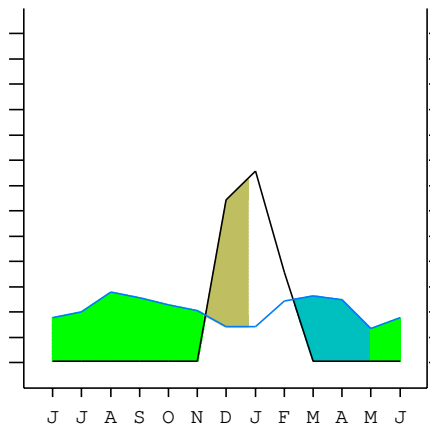
| (C/mm) | T | PE | P | VR | R | RE | DF | SP | DR | HC |
|--------|------|-----|-----|------|-----|-----|-----|-----|-----|------|
| Jul. | -8.1 | 0 | 39 | 0 | 100 | 0 | 0 | 39 | 32 | * |
| Aug. | -8.3 | 0 | 54 | 0 | 100 | 0 | 0 | 54 | 43 | * |
| Sep. | -5.3 | 0 | 50 | 0 | 100 | 0 | 0 | 50 | 47 | * |
| Oct. | -3.8 | 0 | 45 | 0 | 100 | 0 | 0 | 45 | 46 | * |
| Nov. | -2.1 | 0 | 40 | 0 | 100 | 0 | 0 | 40 | 43 | * |
| Dec. | 0.4 | 166 | 27 | -100 | 0 | 127 | 39 | 0 | 21 | -0.8 |
| Jan. | 0.9 | 248 | 27 | 0 | 0 | 27 | 221 | 0 | 11 | -0.8 |
| Feb. | 0.1 | 70 | 47 | 0 | 0 | 47 | 23 | 0 | 5 | -0.3 |
| Mar. | -1.2 | 0 | 51 | 51 | 51 | 0 | 0 | 0 | 3 | * |
| Apr. | -3.5 | 0 | 48 | 48 | 99 | 0 | 0 | 0 | 1 | * |
| May. | -6.3 | 0 | 26 | 1 | 100 | 0 | 0 | 25 | 13 | * |
| Jun. | -7.5 | 0 | 34 | 0 | 100 | 0 | 0 | 34 | 24 | * |
| Year | -3.7 | 484 | 489 | * | * | 201 | 283 | 288 | 288 | * |

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

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)
 63°18' S 57°54' W 10 m 20/20 y.

T= -3.7 Ic= 9.2 Polar Suprapolar (Hyperoceanic)
 m= -16.1 Tp= 14 Upper Suprapolar
 M= -1.2 Tn= 462 Medium-Snowy
 M' = 0.0 Itc= -210
 m' = 0.0 Io= 72.5
 P= 489 mm
 PE= 484 mm

| | |
|-------------|---------|
| Imbibing | 10 Feb. |
| Saturation | 1 May. |
| Reserve Use | 7 Nov. |
| Deficit | 22 Dec. |



BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)
 Latitude: 63°18'S Longitude: 57°54'W Altitude: 10 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continental Index [A3a]
 + Type: A. Hyperoceanic
 + Subtype: 3. Subhyperoceanic
 + Variant: a. High
 Thermic types [C2.D11]
 + Latitudinal zone: C. Cold
 + Latitudinal belt: 2. High subtemperate
 + Thermic type: D. Gelid
 + Thermic subtype: 11. Ultragelid
 Bioclimatic types [E2.4.4]
 + Macrobioclimate: E. Polar
 + Bioclimate: 2. Suprapolar
 + Bioclimatic variant ..:
 + Thermic type.....: 4. Upper Suprapolar
 + Thermic subtype.....:
 + Ombrothermic type ...: 4. Medium-Snowy
 + Ombrothermic subtype :
 Bioclimatic Classification

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)
 Latitude: 63°18'S Longitude: 57°54'W Altitude: 10 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 240
 Coldest semester of the year.....(Psw): 249
 Warmest four months period of the year.....(Pcm1): 152
 Following warmest four months period.....(Pcm2): 148
 Positive precipitation dryest 3 months.....(Ppd): 54
 Positive precipitation dryest 2 months.....(Ppd2): 54
 Positive precipitation dryest 1 month.....(Ppd1): 0
 Positive precipitation warmest 3 months.....(Pps): 101
 Positive precipitation warmest 2 months.....(Pps2): 54
 Positive precipitation warmest 1 month.....(Pps1): 27
 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 | 127 | 134 | 100 | 125 |

Seasonal rainfall rhythms: P > W > F > S

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)
 Latitude: 63°18'S Longitude: 57°54'W Altitude: 10 m

TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): 0.9
 Average coldest month [T].....(Tmin): -8.3
 Maximum temp. warmest month [M].....(Tmmax): 6.3
 Minimum temp. coldest month [m].....(Tmmin): -23.0
 Absolute Max.temp. warmest month [M'].....(Tamax): 0.0
 Absolute Min.temp. coldest month [m'].....(Tamin): 0.0
 First warmest contrasted month [M].....(Tcmax): 6.3 (7)
 First coldest contrasted month [m].....(Tcmin): -23.0 (7)
 Estival temperature.....(Ts): 14
 Positive temperature dryest 3 months.....(Tpd): 13
 Positive temperature dryest 2 months.....(Tpd2): 13
 Positive temperature dryest 1 month.....(Tpd1): 0
 Positive temperature warmest 3 months.....(Tps): 14
 Positive temperature warmest 2 months.....(Tps2): 13
 Positive temperature warmest 1 month.....(Tps1): 9
 Positive temperature coldest 3 months.....(Tpw): 0
 Positive temperature coldest 2 months.....(Tpw2): 0
 Positive temperature coldest 1 month.....(Tpw1): 0

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)

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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) | | | | | | | | | | | | |
| Ultragelid...[M' <=0] (Pf) | | | | | | | | | | | | |
| Hypergelid...[M <=0] (Pf) | | | | | | o | | o | | | | |
| Gelid.....[T <=0] (Pf) | | | 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) | | | | | | | | | | | | |
| Agelid.....[m' > 0] (Pf) | | | | | | | | | | | | |
| HiperAgelid..[all>0] (Pf) | | | | | | | | | | | | |

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)

Latitude: 63°18'S Longitude: 57°54'W Altitude: 10 m

OMBROTHERMIC PARAMETERS

Annual aridity index.[PE/P].....(Iar): 0.99
 Mediterranean index of January.....(Im1): 9.14
 Mediterranean index of January & February.....(Im2): 4.30
 Mediterranean index of December to February...(Im3): 4.80

| Months | Dec. | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. |
|------------|--------------|------|------|--------|------|------|---------------|------|------|--------|------|------|
| Pp(x10) | 269 | 271 | 468 | * | * | * | * | * | * | * | * | * |
| Tp | 4 | 9 | 1 | * | * | * | * | * | * | * | * | * |
| Io (Iom) | 74.7 | 29.8 | 390 | * | * | * | * | * | * | * | * | * |
| Seasons | Summer | | | Autumn | | | Winter | | | Spring | | |
| Pp(x10)/Tp | 1008 / 14 | | | */* | | | */* | | | */* | | |
| Io (Iot) | 72.53 | | | * | | | * | | | * | | |
| Semesters | December-May | | | | | | June-November | | | | | |
| Pp(x10)/Tp | */* | | | | | | */* | | | | | |
| Io (Iosm) | * | | | | | | * | | | | | |

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)

Latitude: 63°18'S Longitude: 57°54'W Altitude: 10 m

Aridity Value Index (AVI)

[10xPP/TP=IO]: 1008/14=72.53 **There is No Yearly Aridity**

| Months | Dec. | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. |
|----------------|-----------|------|------|--------|------|------|--------|------|------|--------|------|------|
| Pp [P*10] | 269 | 271 | 468 | * | * | * | * | * | * | * | * | * |
| Tp [T*10] | 4 | 9 | 1 | * | * | * | * | * | * | * | * | * |
| Iom [Pp/Tp] | \$\$ | \$\$ | \$\$ | !! | !! | !! | !! | !! | !! | !! | !! | !! |
| Avm [200-Iom] | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** |
| Seasons | Summer | | | Autumn | | | Winter | | | Spring | | |
| Pp / Tp | 1008 / 14 | | | * / * | | | * / * | | | * / * | | |
| Iot [Pp/Tp] | \$\$ | | | ** | | | ** | | | ** | | |
| Avs E[Avm<200] | *** | | | *** | | | *** | | | *** | | |
| | | | | | | | | | | | | |
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BIOCLIMATIC INDICES I

CI of Supan (1884) [Tmax-Tmin](Sp): 9.23
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: -2.84
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 2.38
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.42
 + Hyperoceanic (0<CI<0.6)
 Rainfall Index of Lang (1925) [R=P/T]:-131.01
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]: 77.96
 + Perhumid (Ia>60)
 I of Emberger (1930) [Q=100*P/(Tmax²-Tmin²)]:-100.02
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]: -0.76
 +
 Aridity Index of UNEP [I=P/PE]: 1.01
 + Humid (I>0.65)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 6.01
 + Very low (K<60)

BERNARDO O HIGGINS B A S (ANTARCTICA TERR.)

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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: 11. Ultragelid

| Thornthwaite (1948) | | | | | | | | | | | | |
|---|------|------|------|------|------|------------------------------------|------|------|------|------|------|------|
| | Jan. | Feb. | Mar. | Apr. | May. | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
| P-E ratio | 0.19 | 0.35 | 0.42 | 0.41 | 0.20 | 0.28 | 0.32 | 0.46 | 0.43 | 0.38 | 0.33 | 0.19 |
| T-E ratio | 0.41 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 |
| Precipitation-effectiveness: 39.56 | | | | | | Temperature-efficiency: 0.63 | | | | | | |
| Moisture Index [MI=100*(P-PE)/PE]: 0.97 + C2.Subhumid humid (0<MI<20) | | | | | | | | | | | | |
| Index of dryness [DI=100*d/PE]: 58.51 + Strong deficit (33.3<DI) | | | | | | | | | | | | |
| Index of humidity [HI=100*s/PE]: 59.48 + Strong surplus (20<HI) | | | | | | | | | | | | |
| Potential Evapotranspiration PE: 484.06 + Second microthermic (427<PE<570) | | | | | | | | | | | | |

