

Phytosociological Research Center

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Worldwide Bioclimatic Classification System

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(Adapted to Synoptical Table 14/02/2020)

MIRNY (ANTARCTICA)

Altitude: 30 m.

Latitude: 66°33'S Longitude: 93°1'E

Temperature observation period.: 1989-1994 (6)

Rainfall observation period....: 1990-1994 (5)

| (C/mm) | Ti | Mi | mi | M'i | m'i | Pi | Epi |
|--------|--------|--------|--------|-------|--------|-------|------|
| Jan. | -1.67 | 1.67 | -5.00 | 6.11 | -13.89 | 4.1 | 0.00 |
| Feb. | -6.11 | -2.78 | -9.44 | 5.56 | -18.33 | 8.9 | 0.00 |
| Mar. | -9.17 | -6.11 | -12.22 | 2.22 | -28.89 | 32.0 | 0.00 |
| Apr. | -11.67 | -8.33 | -15.00 | 1.11 | -26.67 | 33.0 | 0.00 |
| May. | -13.34 | -10.00 | -16.67 | 0.00 | -27.22 | 104.9 | 0.00 |
| Jun. | -16.11 | -12.78 | -19.44 | 0.00 | -32.78 | 66.0 | 0.00 |
| Jul. | -16.67 | -13.33 | -20.00 | -3.33 | -38.89 | 105.9 | 0.00 |
| Aug. | -17.77 | -14.44 | -21.11 | -3.89 | -40.56 | 78.0 | 0.00 |
| Sep. | -18.06 | -15.00 | -21.11 | -1.67 | -35.56 | 103.1 | 0.00 |
| Oct. | -12.78 | -8.89 | -16.67 | -1.67 | -32.22 | 49.0 | 0.00 |
| Nov. | -7.22 | -3.33 | -11.11 | 5.00 | -20.00 | 13.0 | 0.00 |
| Dec. | -2.22 | 0.56 | -5.00 | 5.00 | -11.67 | 27.9 | 0.00 |
| Year | -11.07 | -7.73 | -14.40 | 1.20 | -27.22 | 626 | 0.00 |

BIOCLIMATIC INDICES AND DIAGNOSIS

| | |
|---|------|
| Thermicity index.....(It): | -472 |
| Compensated thermicity index.....(Itc): | -472 |
| Simple continentality index.....(Ic): | 16.4 |
| Diurnality index.....(Id): | 7.8 |
| 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): | 1328 |
| Estival temperature.....(Ts): | 0 |
| Positive precipitation.....(Pp): | 0 |

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

Latitudinal Belt...: Low Polar

Continentality.....: Oceanic - Low Euoceanic

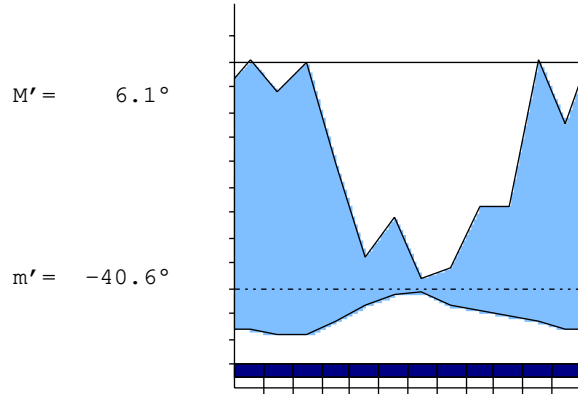
Bioclimate.....: POLAR-S HYPOGELID

Bioclimatic Belt...: Lower HYPOGELID HIGH-SNOWY

MIRNY (ANTARCTICA)

30 m

P= 626 66° 33'S 93° 1'E 6/5 y.
 T= -11.1 ° Ic= 16.4 Tp= 0 Tn= 1328
 m= -21.1 ° M= -15.0 ° Itc= -472 Io=9999.9



POLAR-S HYPOGELID
 Lower HYPOGELID HIGH-SNOWY

WATER INDEX CARD MIRNY (ANTARCTICA)
 Altitude: 30 m. Latitude: 66° 33'S

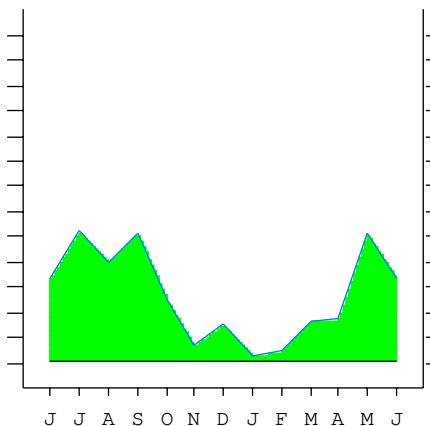
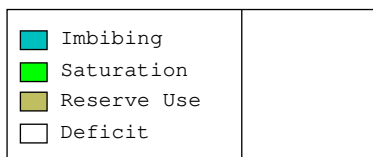
| (C/mm) | T | PE | P | VR | R | RE | DF | SP | DR | HC |
|--------|-------|----|-----|----|-----|----|----|-----|-----|----|
| Jul. | -16.7 | 0 | 106 | 0 | 100 | 0 | 0 | 106 | 86 | * |
| Aug. | -17.8 | 0 | 78 | 0 | 100 | 0 | 0 | 78 | 82 | * |
| Sep. | -18.1 | 0 | 103 | 0 | 100 | 0 | 0 | 103 | 93 | * |
| Oct. | -12.8 | 0 | 49 | 0 | 100 | 0 | 0 | 49 | 71 | * |
| Nov. | -7.2 | 0 | 13 | 0 | 100 | 0 | 0 | 13 | 42 | * |
| Dec. | -2.2 | 0 | 28 | 0 | 100 | 0 | 0 | 28 | 35 | * |
| Jan. | -1.7 | 0 | 4 | 0 | 100 | 0 | 0 | 4 | 19 | * |
| Feb. | -6.1 | 0 | 9 | 0 | 100 | 0 | 0 | 9 | 14 | * |
| Mar. | -9.2 | 0 | 32 | 0 | 100 | 0 | 0 | 32 | 23 | * |
| Apr. | -11.7 | 0 | 33 | 0 | 100 | 0 | 0 | 33 | 28 | * |
| May. | -13.3 | 0 | 105 | 0 | 100 | 0 | 0 | 105 | 66 | * |
| Jun. | -16.1 | 0 | 66 | 0 | 100 | 0 | 0 | 66 | 66 | * |
| Year | -11.1 | 0 | 626 | * | * | 0 | 0 | 626 | 626 | * |

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

MIRNY (ANTARCTICA)

66°33'S 93°1'E 30 m 6/5 y.

T= -11.1 Ic= 16.4 POLAR-S HYPOGELID
 m= -21.1 Tp= 0 Lower HYPOGELID
 M= -15.0 Tn= 1328 HIGH-SNOWY
 M' = 6.1 Itc= -472
 m' = -40.6 Io=9999.9
 P= 626 mm ———
 PE= 0 mm ———



All over the year,
 there is no hydric deficit

MIRNY (ANTARCTICA)

Latitude: 66°33'S Longitude: 93°1'E Altitude: 30 m

SUMMARY OF RIVAS-MARTINEZ CLASSIFICATION

Continentality Index [B2b]
 + Type: B. Oceanic
 + Subtype: 2. Euoceanic
 + Variant: b. Low

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

Bioclimatic types [E3.5.5]
 + Macrobioclimate: E. POLAR-S
 + Bioclimate: 3. HYPOGELID
 + Bioclimatic variant .:
 + Thermic type.....: 5. Lower HYPOGELID
 + Thermic subtype.....:
 + Ombrothermic type ...: 5. HIGH-SNOWY
 + Ombrothermic subtype :
 Bioclimatic ClassificationPoho.Opo.Dry.Euo

MIRNY (ANTARCTICA)

Latitude: 66°33'S Longitude: 93°1'E Altitude: 30 m

PRECIPITATION PARAMETERS

Warmest semester of the year.....(Pss): 119
 Coldest semester of the year.....(Psw): 507
 Warmest four months period of the year.....(Pcml): 54
 Following warmest four months period.....(Pcm2): 236
 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 | 249 | 165 | 40 | 169 |

Seasonal rainfall rhythms: W > F > P > S

MIRNY (ANTARCTICA)

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TEMPERATURE PARAMETERS

Average warmest month [T].....(Tmax): -1.7
 Average coldest month [T].....(Tmin): -18.1
 Maximum temp. warmest month [M].....(Tmmax): 1.7
 Minimum temp. coldest month [m].....(Tmmin): -21.1
 Absolute Max.temp. warmest month [M'].....(Tamax): 6.1
 Absolute Min.temp. coldest month [m'].....(Tamin): -40.6
 First warmest contrasted month [M].....(Tcmax): -8.9 (10)
 First coldest contrasted month [m].....(Tcmin): -16.7 (10)
 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

MIRNY (ANTARCTICA)

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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) | | | | | o | o | o | o | o | o | | |
| Hypergelid...[M <=0] (Pf) | | 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) | | | | | | | | | | | | |

MIRNY (ANTARCTICA)

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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) | * | | | | | | * | | | | | |

MIRNY (ANTARCTICA)

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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): 16.39
 CI of Gorezinski (1920) [1.7*Sp/sin(Lat)-20.4]: 9.97
 CI of Conrad (1946) [1.7*Sp/sin(Lat+10)-14]: 14.65
 + Hyperoceanic (-20<CI<20)
 CI of Currey (1974) [CI=Sp/(1+Lat/3)]: 0.71
 + Oceanic (0.6<CI<1.1)
 Rainfall Index of Lang (1925) [R=P/T]: -56.55
 +
 Aridity Index of Martonne (1926) [Ia=P/(T+10)]:-587.15
 +
 I of Emberger (1930) [Q=100*P/(Tmmax²-Tmmin²)]:-141.31
 +
 I of Dantin & Revenga (1940) [DR=100*T/P]: -1.77
 +
 Aridity Index of UNEP [I=P/PE]: 0.00
 + Hyperarid (0.05>Im)
 Potential Erosion I of Fournier (1960) [K=Pi²/P].....: 17.92
 + Very low (K<60)

MIRNY (ANTARCTICA)

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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 | 0.03 | 0.06 | 0.26 | 0.27 | 0.97 | 0.58 | 0.98 | 0.69 | 0.95 | 0.41 | 0.09 | 0.22 |
| 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: 55.04 | | | | | | Temperature-efficiency: 0.00 | | | | | | |
| Moisture Index [MI=100*(P-PE)/PE]: 0.00 | | | | | | | | | | | | |
| + C2.Subhumid humid (0<MI<20) | | | | | | | | | | | | |
| Index of dryness [DI=100*d/PE]: 0.00 | | | | | | | | | | | | |
| + No deficit (0<DI<16.7) | | | | | | | | | | | | |
| Index of humidity [HI=100*s/PE]: 0.00 | | | | | | | | | | | | |
| + No surplus (0<HI<10) | | | | | | | | | | | | |
| Potential Evapotranspiration PE: 0.00 | | | | | | | | | | | | |
| + Ice climate (PE<142) | | | | | | | | | | | | |

