

V. NET RADIATION AT THE SNOW SURFACE AT MIZUHO CAMP IN 1971 - 1972

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Net radiation at the snow surface at Mizuho Camp was measured by a Funk-type polyethylene-shielded net radiometer (for all waves) in the austral summer of 1971 - 1972.

The radiometer was set horizontally at a height of 1.5 m above a flat snow surface near the living quarters of the camp, where nothing shaded the radiometer from the sun all day long. Dry air was circulated inside the polyethylene dome (a dust-proof cover of the radiometer: sphere-shaped) to prevent icing.

Measurements were conducted during the following periods: October 28 - November 4, 1971, December 15 - 20, 1971, December 26, 1971 - January 15, 1972; measurements were not made on the following dates because of mechanical trouble; October 30, November 3, December 16, 19, 1971, and January 8, 9, 1972.

The results are given in Table 1; where the negative sign indicates the loss of heat at the surface, while the positive indicated the gain as a daily total.

Table 1. Net radiation at the snow surface at Mizuho Camp in 1971 - 1972.

| Date | Radiation (cal/cm ²) | | | Date | Radiation (cal/cm ²) | | |
|---------|----------------------------------|----------|-------------|--------|----------------------------------|----------|-------------|
| | Incoming | Outgoing | Daily total | | Incoming | Outgoing | Daily total |
| 1971 | | | | 1972 | | | |
| Oct. 28 | 11.23 | 69.55 | -58.32 | Jan. 1 | 24.05 | 37.73 | -13.68 |
| 29 | 14.11 | 36.86 | -22.75 | 2 | 31.10 | 87.26 | -56.16 |
| 31 | 17.14 | 34.42 | -17.14 | 3 | 30.38 | 54.43 | -24.05 |
| Nov. 1 | 17.42 | 91.87 | -74.30 | 4 | 34.27 | 41.33 | -7.20 |
| 2 | 21.89 | 90.72 | -68.83 | 5 | 21.02 | 18.00 | +3.02 |
| 4 | 17.28 | 31.97 | -14.69 | 6 | 36.29 | 58.61 | -22.32 |
| Dec. 15 | 33.55 | 85.97 | -52.42 | 7 | 31.68 | 65.95 | -34.13 |
| 17 | 43.06 | 84.38 | -41.18 | 10 | 15.98 | 37.44 | -21.31 |
| 18 | 36.43 | 30.53 | -5.90 | 11 | 38.30 | 51.55 | -13.10 |
| 20 | 42.34 | 55.58 | -13.39 | 12 | 36.14 | 57.02 | -21.02 |
| 26 | 44.50 | 33.26 | +11.23 | 13 | 32.54 | 48.67 | -16.13 |
| 27 | 31.54 | 75.02 | -43.49 | 14 | 33.84 | 51.55 | -17.86 |
| 28 | 33.26 | 91.58 | -58.32 | 15 | 46.80 | 24.77 | +22.03 |
| 29 | 40.18 | 93.17 | -52.99 | | | | |
| 30 | 39.74 | 89.74 | -49.68 | | | | |
| 31 | 21.74 | 68.69 | -46.94 | | | | |

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