X. MISCELLANEOUS OBSERVATIONS

1. Surface Topography of Mizuho Camp Area in 1970 - 1971

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The surface topography of the ice sheet of Mizuho Camp area was surveyed in 1970 and 1971 by JARE-11 (1970 - 1971) and -12 (1971 - 1972).

Yoshimura, JARE-11, carried out the first general survey in 1970 on an area of about 10 x 15 km around the Camp, by a simple method of leveling and barometric altimetry (Fig.1). Kimura, JARE-12, conducted a more precise survey on a small area (4 x 4km) in the central part of the Yoshimura's map (the area shown by a square in a broken line in Fig.1). The control point of the survey was selected at the base of the anemometer tower of the Camp, shown in Fig.B (folded map), the elevation of which was 2,169m above sea level (Shimizu et al., 1972). A square area, 4 x 4km, was selected for the survey so that the center of the square was at the base of the anemometer tower and its side was roughly parallel to the meridian. A rectangular lattice with a lattice spacing of 500 m was applied on it, as shown in Fig.B, and the specific elevation of the snow surface at each lattice point referring to the control point 0 was surveyed: 8 points (●) on line NS of Fig.B were surveyed by leveling, and 72 points (O) on the other lattice points by barometric altimetry. The results are given in Fig.2. The disagreement of the contour lines between Fig.1 and Fig.2 was caused by the density of survey; Fig.2 is more correct of the two.

Reference

Shimizu, H., R. Naruse, K. Omoto and A. Yoshimura (1972): Position of stations, surface elevation and thickness of ice sheet, and snow temperature at 10m depth in the Mizuho Plateau - West Enderby Land Area, East Antarctica, 1969 - 1971. JARE Data Rep., 17 (Glaciology), 12-37.

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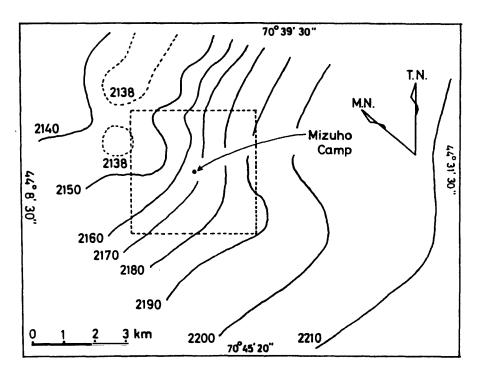


Fig. 1 Surface topography of Mizuho Camp area in 1970 (by Yoshimura). A square area in a broken line was precisely surveyed by Kimura in 1971 (See Fig. 2).

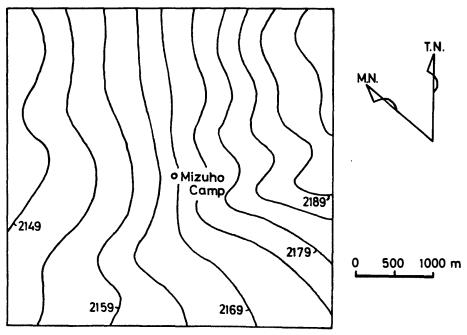


Fig. 2 Surface topography of Mizuho Camp area in 1971 (by Kimura).