CORRESPONDENCE

The Editor,

Journal of Glaciology

Calculated patterns of accumulation on the Greenland ice sheet: comments on Mr S. 7. Mock's paper

The method of analysing accumulation measurements employed by Mock (1967) resulted in a map with curves of equal accumulation for the Greenland ice sheet. This analytical method represents a considerable advance over previously available data (Bader, 1961). Despite the legitimate reservations expressed by the author, I nevertheless suspect that such a map is intended for the determination of total accumulation for the accumulation zone of the ice sheet.

I have made such a calculation by measuring the areas of equal accumulation with a planimeter for the accumulation zone of the Greenland ice sheet, a zone which I have defined elsewhere (Bauer, [1956], 1966). The map at my disposal was of small scale, so that my calculation only gives the order of magnitude. For an accumulation area of 1 471 800 km2, the sum of the partial accumulations is 480 km3 water equivalent; the mean accumulation deduced from this is 32 g cm-2, or somewhat smaller than the values assumed by other authors.

Centre d'Études Glaciologiques des Régions Arctiques et Antarctiques, Face au 22, Quai Carnot, 92-Saint-Cloud, France 4 December 1967

A. BAUER

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