

Fig. 16. Structural data from the Loch Ailsh area. a. Orientation of bedding foliation (S_b) in dolomite. Crosses are poles of S_b . Contours of β -intersections: 2, 5, 8, 10 per cent per 1 per cent area. b. Fold axes (circles) and lineations (dots) in dolomite. c. Fold axes (32) in primary mylonitic rocks. d. Lineations in primary mylonitic rocks and Moine schists. Contours: 2.5, 20, 40 per cent per 1 per cent area.

defined by layers and lenticles of quartz and by slip surfaces coated with chlorite. Within a few feet of the thrust it is plicated on a very small scale.

The foliation in the primary mylonitic rocks and the granulitic schists dips at low angles to the east-southeast. Folding of the foliation is very common throughout the zone of primary mylonitic rocks but decreases upward and is absent in the slabby schists. The axes of a representative number of folds are shown in figure 16, c. The majority of the folds plunge toward the east and east-southeast (B), but there is a spread of the axes round the great circle corresponding to the foliation, and a few folds are inclined almost at right angles to the maximum. At one horizon in the "granulitic" schist, exposed in the burn that flows into Loch Ailsh,

quartz rodding (fig. 17, g) is developed. The axes of the quartz rods are parallel to the axes of folds in the primary mylonitic rocks. There is a single faint lineation on the s-surfaces in the primary mylonitic rocks and the Moine schists. The lineations show a very high degree of preferred orientation (fig. 16, d), and define a single strong maximum plunging slightly south of east, parallel to the maximum of fold axes (B).

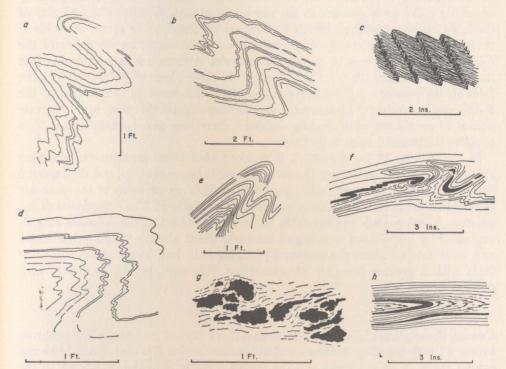


Fig. 17. Style of folding in the Loch Ailsh area. a-b. Profiles of folds in dolomite, viewed toward the east. o-f. Profiles of folds in primary mylonitic rocks, viewed toward the east-southeast. g. Profile of quartz rods in Moine schists, viewed toward the east-southeast. h. Profile of south-plunging fold in primary mylonitic rocks, viewed down plunge.

The style of the folding in the primary mylonitic rocks is illustrated by the profiles in figure 17, c-f, h. The commonest type is a simple recumbent fold (fig. 17, d) with or without minor drag folds on the limbs, but more complex types (fig. 17, f) occur. On a few folded outcrops the orientation of the axial planes of folds varies from place to place over the outcrop. This type of folding is not unlike that illustrated by Greenly from Anglesey (1919, pp. 190–191) and referred to by him as "polyclinal." Many of the smallest-scale folds are intrafolial and seem to have suffered a considerable degree of flattening normal to the foliation (fig. 17, f, h). On a few exposures small-scale kink zones are visible (fig. 17, c), the planes of the kink zones dipping steeply to the south. Although there is considerable diversity in the style of the folds, the general impression obtained is one of extreme mobility during the deformation; this is the style of deformation which has been loosely described as "plastic." A few folds, such as the kink zones illus-