scope axis. Consequently, in any section, L_0 lamellae can be measured only in grains with a limited range of orientation. The range of orientation of grains in which two sets of L_0 lamellae can be measured is obviously further restricted. Thus, in order to obtain a reliable statistical estimate of the orientation of L_0 lamellae in a rock it is necessary to examine at least three sections with different orientation.

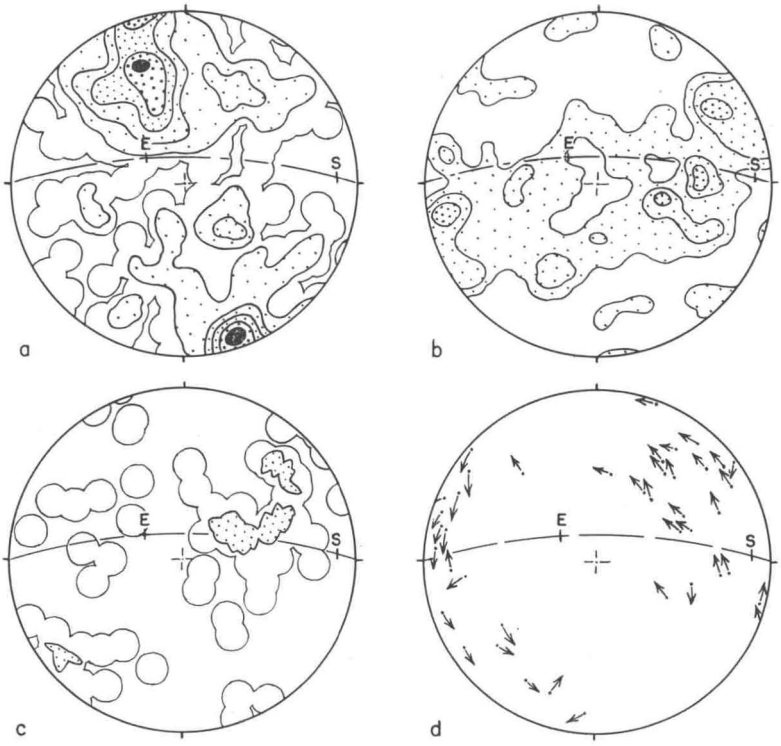


Fig. 2. Orientation data for the Loch Ailsh dolomite. All data are plotted on a lower hemisphere, equal area projection. Geographic orientation is given by the horizontal plane and east (E) and south (S) directions.

a. 310 [0001]-axes of dolomite. Contours: 1/3, 1, 2, 3, 4, 5% per 1% area.

b. 300 *a* crystallographic axes in 100 unselected grains. Contours: 1, 2, 3% per 1% area.

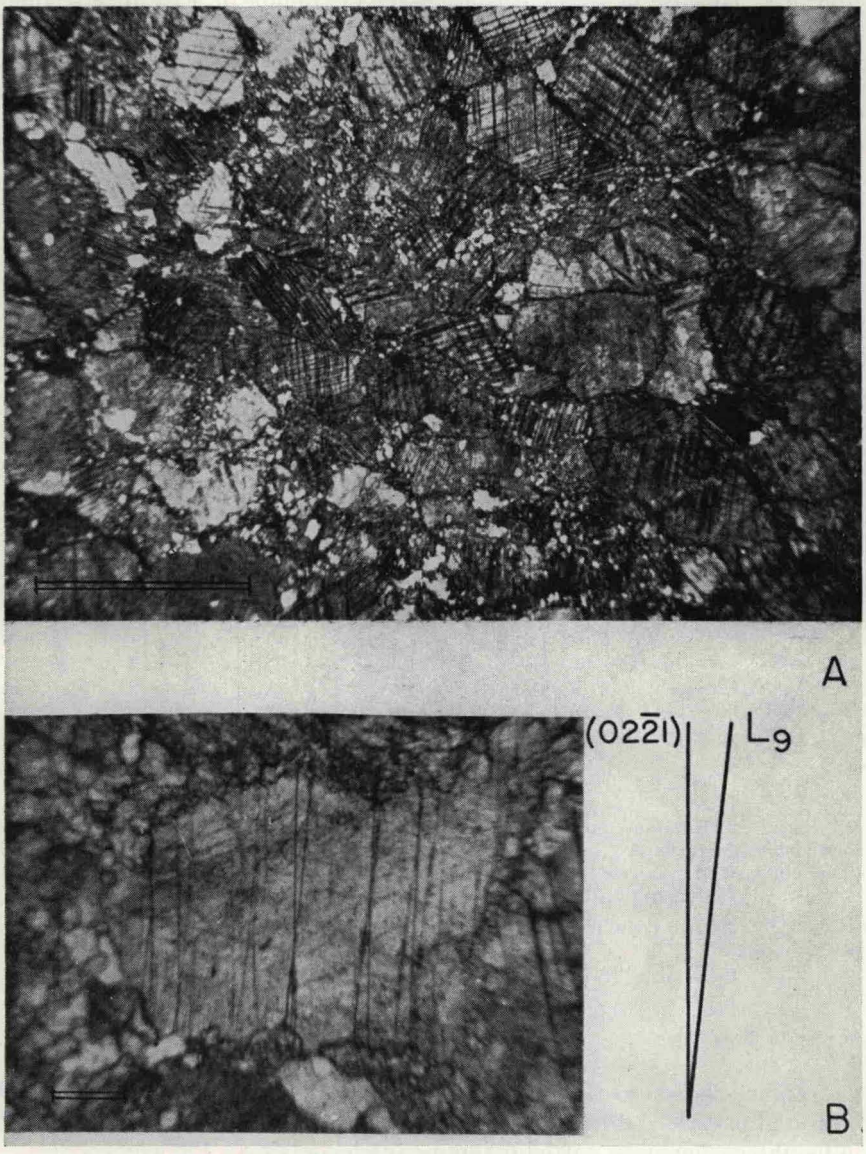
c. Poles of 60 twinned $\{02\bar{2}1\}$ lamellae. Contours: 1½, 5% per 1% area.

d. Poles of $\{02\bar{2}1\}$ lamellae (points) and associated L_0 lamellae (arrowheads) in 35 grains.

Figure 2a shows the preferred orientation of 300 [0001]-axes, 100 measured in each of three mutually perpendicular sections. A strong similarity in the three component partial diagrams (each containing 100 axes) indicates a high degree of homogeneity within the field of the specimen. There is a single area of concentration, containing two maxima of equal intensity approximately 30° apart, and there is some suggestion of a girdle, the axis of

which is nearly horizontal in figure 2a. The orientation of the *a* crystallographic axes (figure 2b) is restricted by the strong preferred orientation of the [0001]-axes: they are disposed in a broad zone normal to the maximum

PLATE 1



A. Photomicrograph showing the texture of the Loch Ailsh dolomite. Scale line represents 1mm.

B. Single grain showing L_9 lamellae intersected by later $\{02\bar{2}1\}$ lamellae. The intersection of the two sets of lamellae is vertical. Scale line represents .1mm.