

Author's Note:

During the 18 months "in press" period for this paper two minor modifications have been applied to the "Small-Circle Net" technique.

(1) Intensities assigned (from x-ray data) to the small-circles are no longer summed and averaged at the net intersections (= arithmetic mean). The product and root is now taken of all intensities of small-circles passing through net intersections (= geometric mean). This procedure eliminates the element of non-rigor discussed on pp. 312-314 of the paper.

In spite of this more rigorous treatment the relative "high" and "low" of the diagrams are very nearly the same regardless of whether the arithmetic mean or geometric mean is used.

(2) Calculated intensities (from structure factor data, etc.) are now used entirely, or to modify standard intensity patterns for all minerals for which the intensities can be calculated. Even for a random fabric, however, calculated relative intensities will agree with the observed intensities only when the sample yielding the latter is larger than the x-ray beam. Therefore, at low angles (and with large slits) a simple correction must be applied to all intensities from peaks of such small 2θ value that the beam more than covers the sample. The observed intensity is simply multiplied by the ratio of beam area to irradiated area to obtain actual intensity.

Although the technique remains unchanged, except for the two items discussed above, it has also been found that only four rock surfaces (E, D, F, G, of Fig. 2-A) are quite sufficient to construct the net, as opposed to as many as six in previous studies.

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