

Microstructural analysis of metacherts from Isua, W Greenland

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We analysed microstructural development of quartz and lineation intensity of amphibole grains in metacherts from Isua, W Greenland. Quartz aggregates exhibit polygonal, duplex and irregular microstructures with increasing metamorphic grade, whereas lineation intensity denoted by k -value shows similar values to those of the Sambagawa metamorphic belt. We discuss the duration time of the Isua metamorphism by comparing the microstructural development of quartz with respect to metamorphic temperature, and conclude that duration time of the Isua metamorphism is longer than that of contact metamorphism at Kasuga and the Ryoke metamorphism.