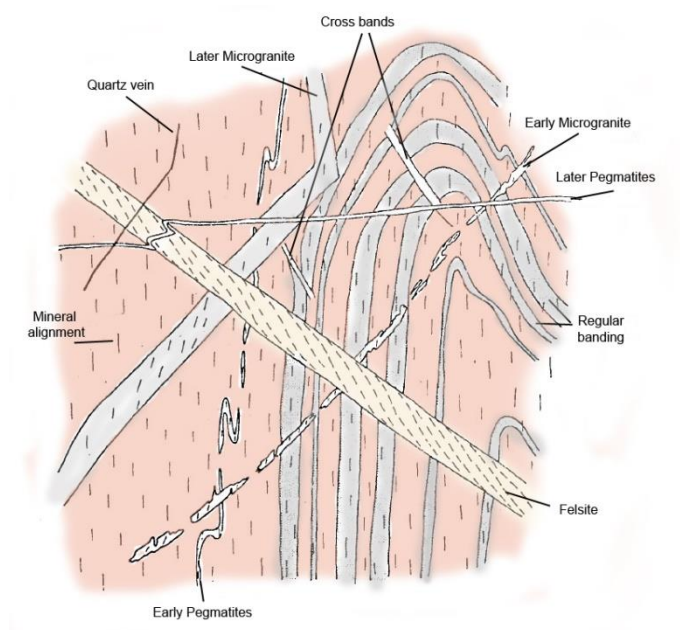


Blasts from the past: 1. Age relations

This activity was produced by Mike Tuke (Tuke, 1985). The original diagram for this exercise has been updated and three additional photographs have been added to extend the activity.

Figure 1 is a schematic diagram showing the various dykes and veins which cut the Donegal granite. Try giving your students a copy of this diagram and ask them to list in order all of the geological events which are represented in this diagram.

Figure 1 Schematic diagram of dykes and veins cutting the Donegal Granite.



Figures 2, 3 and 4 are photographs taken in Ataa, West Greenland and show veins cutting the Archean migmatitic gneisses described by Escher et al. (1999). For this exercise give your students a copy of one of these three photographs and ask them to look at the cross-cutting relationships shown in the photograph and draw a labelled sketch that shows the order in which the veins formed.

Figure 2 Photograph of cross-cutting veins at locality1, Ataa, West Greenland. (Photo: M. Williams)



Figure 3 Photograph of cross-cutting veins at locality 2, Ataa, West Greenland. (Photo: M. Williams)



Figure 4 Photograph of cross-cutting veins at locality 3, Ataa, West Greenland. (Photo: P. Williams)



References

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