



Geological structures exposed.

Ductility of the Structures

Nigel:

And we're now in Argyll, Kilmory Bay, and the rocks all around us are from the Dalradian super group. Now these are thick, sedimented sequence with some volcanic, which was deposited between the later Proterozoic and the Ordovician. Now you'll notice the structures are something rather different from what we were looking at with the Moine Thrust Belt. Instead of seeing thrusts, we see lots of folds, perhaps at first sight these seem chaotic folds. This is an indication of ductile deformation so the rocks were fairly warm. Now a metamorphic petrologist would notice the green colour in some of these metamorphose sediments, and that's from the mineral Chlorite, so we know from that information that the rocks were something like 350-400 degrees centigrade, so not particularly hot in metamorphic terms, but in terms of deformation quite hot enough to produce the ductile structures that we can see. Now we'll be returning to look at this location in a bit more detail later on, but for now all we want to point out is the ductility of the structures compared to what we saw in the Moine Thrust Belt.