

## A reply: Alternative to the Finnmarkian–Scandian interpretation on Magerøya, northern Norway

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We thank Torgeir Andersen (this volume) for discussing our alternative interpretations (Krill et al. 1988) and for expressing those he prefers. We agree that our documentation was minimal, but publication of our interpretation was surely justified by the significance of the problem. We too look forward to the results of more detailed isotopic and field studies.

We are disappointed that Andersen does not suggest where the required faults might be found, since he apparently accepts the pre-Silurian isotopic dates. Neither does he consider our proposed correlation of the rocks near the base of the Magerøya Nappe with the Hellefjord Schists of the Molvikfjell Nappe. He has personally mapped these rocks in both areas (Andersen 1981, 1984; Ramsay et al. 1985) and knows them best. We consider the correlation of these rocks to have more regional significance than any other interpretation in our paper.

Our regional model may be called 'over-simplified', but it should not be ignored. It was this very simple model that was powerful enough to make several dramatic and apparently correct predictions: the Honningsvåg gabbros should be pre-Silurian in age, unmapped faults should be found between the gabbros and the fossiliferous rocks on Magerøya, and the Seiland igneous rocks should be older than Caledonian orogenesis. That

some of the Seiland rocks should be as old as 850 Ma was indeed a surprise, but even these dates might fit a relatively simple taphrogenic model rather than an orogenic one (Krill 1989).

We hope that Andersen's comment encourages prompt follow-up studies on the geology of Magerøya and Finnmark.

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