Reply to a Comment in G. Meinhold “Geochemical Discrimination of Rutile from the Belomorian Mobil Belt”¹

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Received July 16, 2013

DOI: 10.1134/S0016702914040090

The comment of G. Meinhold is concerned with the precise position of the dividing line between the eclogite and metapelite fields on the Cr–Nb discrimination diagram for rutile. To date it is a common knowledge that rutiles from metabasic rocks show higher Cr and lower Nb concentrations compared with rutiles from metapelitic rocks. It is hardly possible to determine the absolutely precise position of the dividing line between the eclogite and metapelite fields on the diagram for rutiles. The position is to be refined with the extension of the empirical database on rutile geochemistry. In fact the dividing line on the diagram for rutile in [1] is more consistent with the diagram from Meinhold's article [2]. However, the use of the diagram from the later publication of Zack et al. [3] does not change the position of points in the respective fields. Therefore,

a more correct variant of the capture of Fig. 1 in [3] is the following.

Fig. 1. Covariations of (a) Nb and Cr and (b) Nb and Ta in rutile. (a) The fields of rutile compositions from eclogites and metapelites are after Meinhold [2]; (b) the lines of constant Nb/Ta ratios are shown, and analysis 200 of sample 6 is omitted.

REFERENCES

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¹ The article was translated by the authors.