

## **CORRELATION OF DIFFERENT SAMPLING DATA FOR THE TESTING OF THE GLOBAL GEOCHEMICAL REFERENCE NETWORK APPROACH, EASTERN SIBERIA, CELL N36E46**

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The idea to create the Global Geochemical Reference Network (GRN) as a base for the primary geochemical assessment of the Earth's surface and correlation of geochemical data for environmental and resource purposes poses a set of questions related to representativity of GRN sampling procedure and data proper, as well as their comparability with results of common geochemical works on the same territory. The GRN cell N36E46, Eastern Siberia, was sampled and compared with the results of common geochemical mapping in the area. These are the mapping of 1 point per 13 km<sup>2</sup> (stream sediment, soils, water and vegetation were sampled), Baikal polygon subproject (1/100 km<sup>2</sup>, stream sediment, soils, water, bedrock, snow, vegetation), and the basic station of the latter (1/1000 km<sup>2</sup>). Elements common for the country OESA (Ba, Be, Zr, V, Cr, Ni, Co, Pb, Cu, Zn, Sn, Mo, Li, Y, Yb, La, Nb, Sr, Ga, B) and RFA (major elements) were mainly used. A good general agreement between average means for subsamples, samples and compiled samples of the unit proves the reliability of GRN procedures. A good comparability was obtained for stream sediment, soils and regolith samples of the same fraction (0.18 mm), except for alluvial soil which is enriched in Mn, Ti, Sr, B and decreased in V, Cr, Pb, and Mo. The correlation of data of different sampling approaches is more controversial and needs investigation in more detail. The most complicated picture is obtained for water.