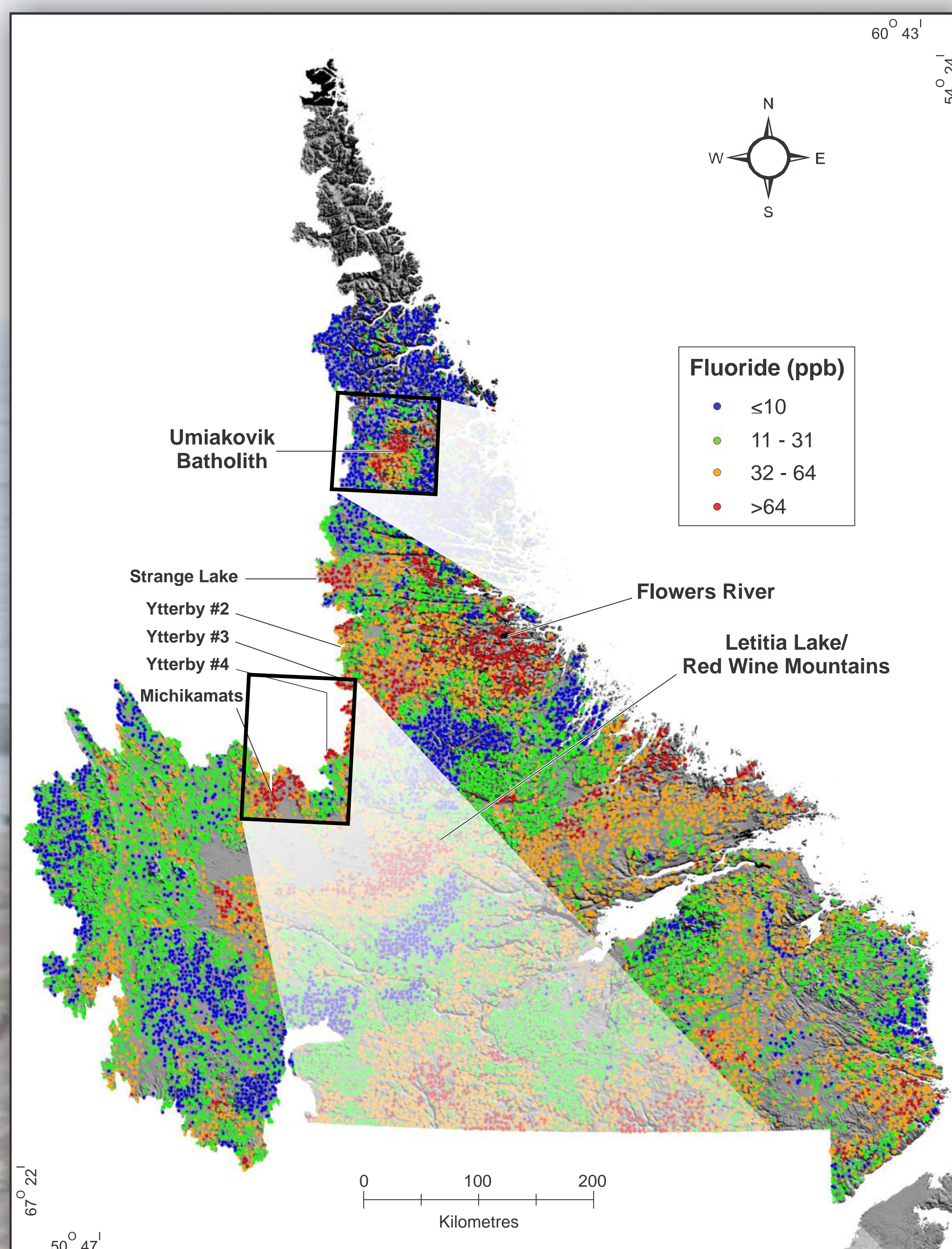


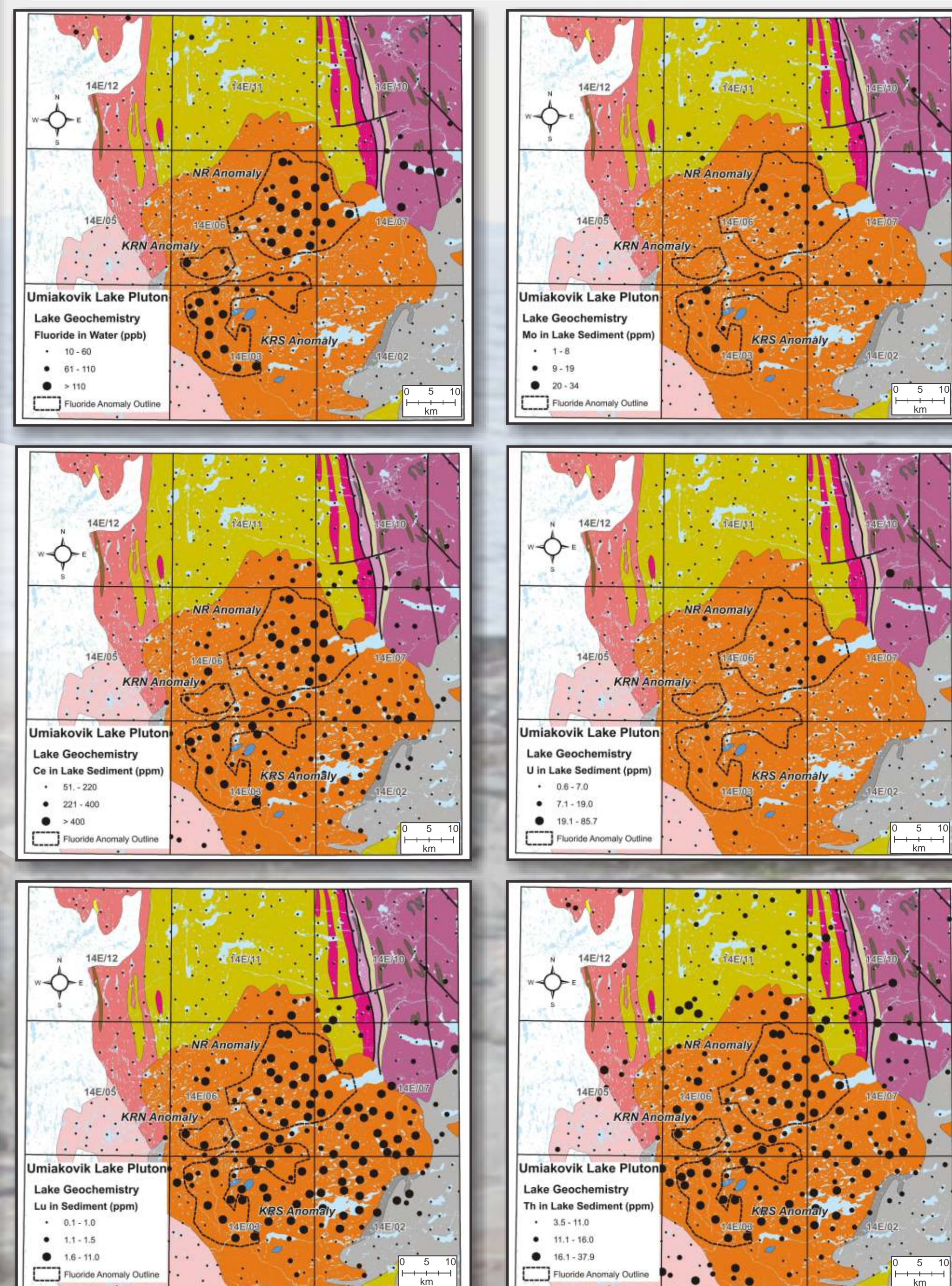
RARE EARTH ELEMENT TARGETS IN THE UMIAKOVIK LAKE BATHOLITH

Datamining the Provincial Government's Assessment Files and Geoscience Atlas

S. Amor, Geological Survey

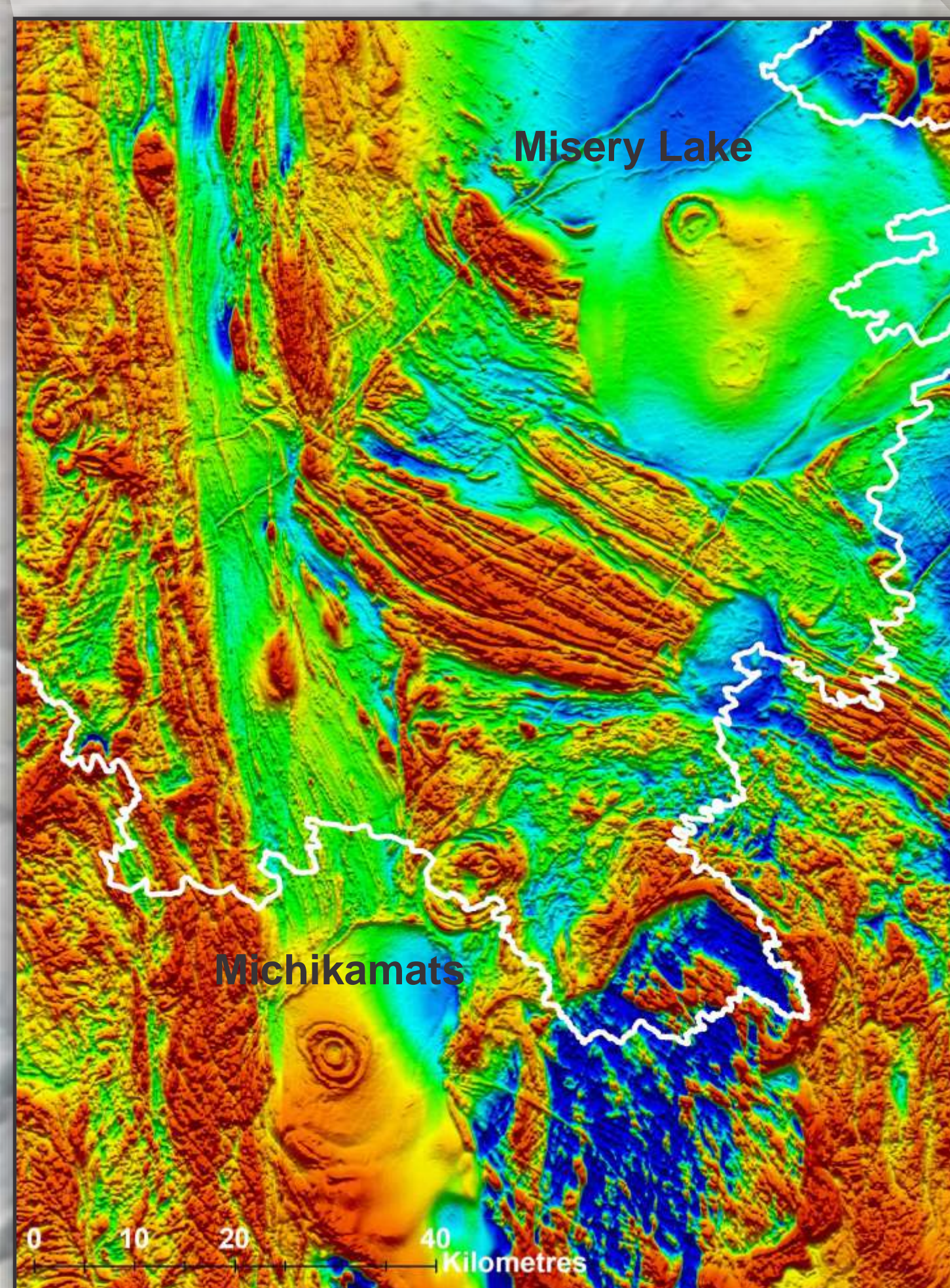


Geochemical data from the Geoscience Atlas indicate the presence of a fluoride anomaly in lake waters over the Umiakovich Lake Batholith in Nunatsiavut, northern Labrador. The anomaly is apparent on a regional scale, and associated with anomalous levels of rare earth elements (REE) and other elements such as Mo, U and Th. This element association in lake sediments and waters is present at many other REE deposits in Labrador, and elsewhere in the Canadian Shield.

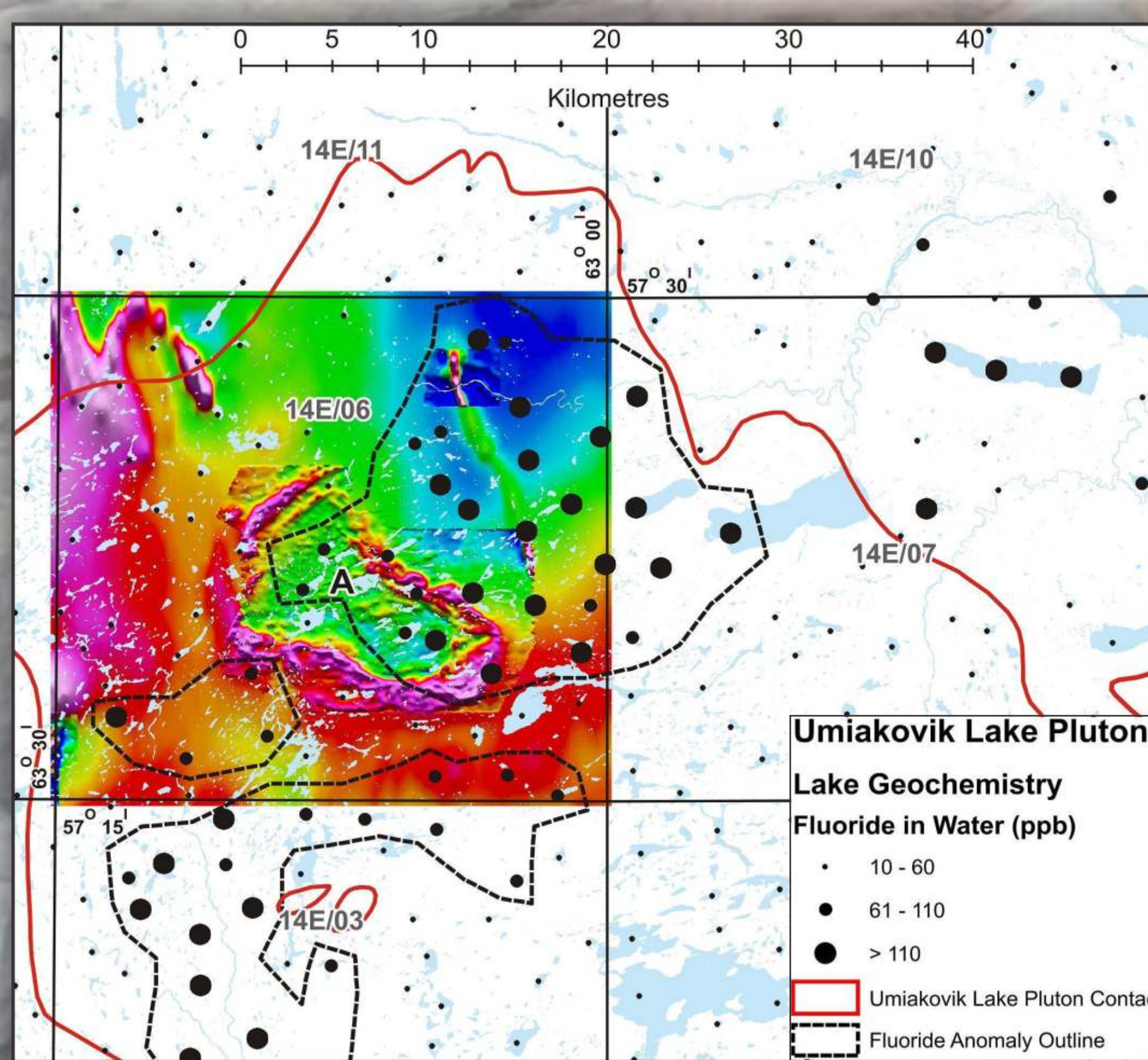


Northern Labrador was intensively prospected in the 1990s during the phase of exploration that followed the discovery of the Voisey's Bay nickel-copper-cobalt deposit. During this period, a detailed aeromagnetic survey in the North River area revealed a semicircular ring-shaped structure coinciding with the southwestern end of the fluoride anomaly. The structure is similar to that at Misery Lake in southeastern Nouveau-Québec and at Michikamats in the adjacent part of western Labrador, and is believed to be the source of the geochemical anomaly. The shape of the fluoride anomaly is consistent with a glacial dispersion train from the structure. It is believed that significant REE mineralization may be associated with the structure, since a similar dispersion train is present at Strange Lake, 120 km to the south.

These findings suggest that datamining of existing government files may well reveal other untested targets, particularly for commodities whose economic importance has increased since the original work was done.



Detailed residual total magnetic field, Labrador and Québec (from GSC Open File 6532)



Detailed residual total magnetic field, North River area, Umiakovich Lake Batholith (from NL Assessment File LAB/1197) with fluoride in water superimposed