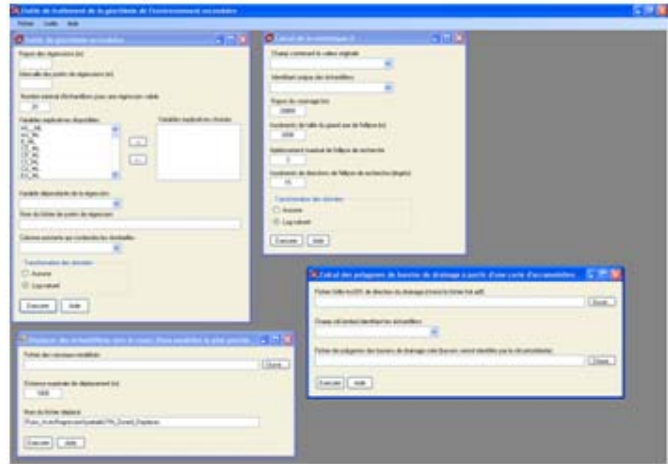


2008-10: Targeting tool for lake-bottom and stream sediment anomalies

Data from lake-bottom and stream sediments are usually underutilised in exploration. Firstly, they are often looked at as single elements. In addition, most commonly used anomaly delimitation methods in secondary geochemistry (percentiles, thresholds of statistical distribution, etc.) calculate fixed thresholds for an entire region. The fixed threshold methods are usually simplistic because the geochemical background noise can vary widely from one area to another and even from one sample to another. Furthermore, the methods do not take into account the spatial distribution of the samples that may influence anomaly definition depending on the looked for anomaly. Appropriate methods of anomaly enhancement were classified or up-dated to this effect in project 2005-03. However, the application of these statistical methods is at times complex and time consuming.



Software tool interface for targeting lake-bottom and stream sediment anomalies.

The objective of project 2008-10 was to develop a software tool using anomaly targeting methods proposed by CONSOREM for lake-bottom sediments (project 2005-03), such as spatial regression, Mahalanobis distance and U-statistic, and for stream sediments (project 2008-09).

One such tool was in fact created. It incorporates aspects of geochemical anomaly processing (project 2005-03), including spatial regression and U-statistic. An extra processing step for drainage basins was also included in the software (project 2008-09). It allows the movement of samples towards the nearest modelled stream. In closing, the software can be used to calculate the drainage basin as polygons from a drainage direction map.

Project 2008-10: Summary	
Objectives	<ul style="list-style-type: none"> To develop a software tool based on anomaly targeting methods developed by CONSOREM: spatial regression, Mahalanobis distance, U-statistic and other possible methods.
Results	<ul style="list-style-type: none"> Software tool for targeting lake-bottom and stream sediments.
Innovations	<ul style="list-style-type: none"> Assistive software for interpretation incorporating several innovative methods for processing and analysis.