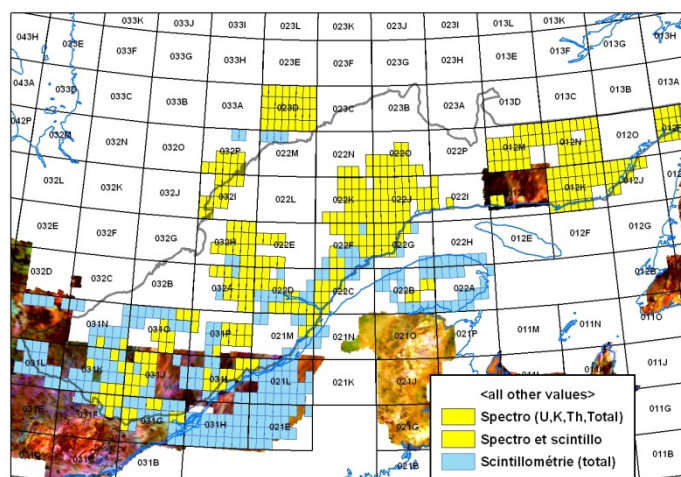


Project 2005-5: Opportunity for U mineralisation in the Grenville Province

The Grenville Province in Quebec is known as a fertile territory for uranium mineralisation, particularly with respect to uranium-bearing migmatites that show excellent potential. However, the low coverage of critical data for this type of evaluation, such as radiometric data, is an obstacle to the evaluation of uranium potential and to the targeting of promising areas.

The project had a successful conclusion with the evaluation of a set of proprietary radiometric data belonging to SOQUEM, a member of CONSOREM. The surveys cover a large part of the Grenville Province in Quebec mostly in analog form, such as profiles on paper, making their usefulness difficult and of limited value.

A new software acquisition and digitisation method of paper maps using image analysis was developed during the year. A first test was carried out on a 1: 50 000 sheet to numerically represent the data from hundreds of profiles. It generated significant results and showed the viability of this new acquisition method and especially its potential for use. Because there is a substantial amount of available profiles, the acquisition phase will continue in 2006-2007 as project 2006-5.



The scope of the new data is considered to be substantial. It suggests applications for other substances and other geological contexts.

Coverage of available radiometric surveys, such as CGC and SOQUEM (yellow and blue).

Summary: Project 2005-5	
Objectives	<ul style="list-style-type: none"> To establish a first map showing uranium potential of the Grenville Province based on the U/Th ratio of the established deposits. Limit the territory to be able to subsequently initiate the search for the best exploration targets based on the type of showing.
Results	<ul style="list-style-type: none"> Weak correlation between the elements U and Th in lake-bottom sediments and radiometric measurements; Difficulty in showing uranium potential without additional radiometric information; Software method for digitising analog radiometric data.
Tools and Innovations	<ul style="list-style-type: none"> Integration of a new set of proprietary radiometric data (SOQUEM); Development of a new method of digitisation using image analysis; New layers of strategic data for the Grenville Province.
Special collaboration	<ul style="list-style-type: none"> Michel Gauthier, UQAM