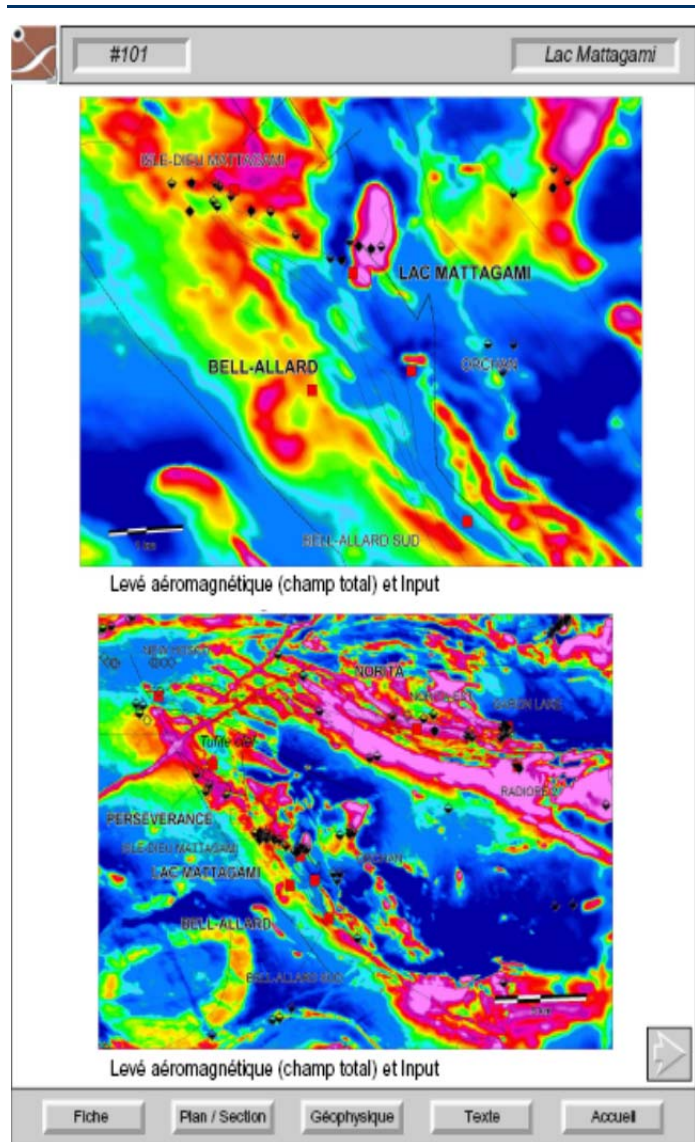


Project 2001-1: Comparison of the geophysical characteristics of Au and base metal deposits in the Abitibi

Even though geophysics has played and play a leading role in the exploration of Archean deposits, the geophysical signatures that led to several major discoveries are poorly known because the majority are from private sources. This project aims to produce a uniform document summarising the geophysical characteristics of base metal and gold mineralisations in tables and figures. The document will serve as a useful tool for the understanding and interpretation of the geophysical characteristics at the exploration stage.

This project is the continuation of **Project 2000-1**: "Characteristics of major Au and VMS deposits of the Superior Province". The work of compiling the features of the deposits in the Abitibi continues with the integration of geophysical data and extends to more deposits. Much data from CONSOREM's partners was essential in completing this project. All the ground-based and airborne magnetometric, gravimetric, electric and electromagnetic surveys were compiled and summed up on a surface plan. Profile views showing the results of the different geophysical methods in relation to a geological section are also presented. Finally, public data were also included from scientific publications and reports.

Projects 2000-1 and 2001-1 have led to the creation of a digital atlas that combines both geological data (sections, plans and cross-sections) and geophysical data (ground-based and aerial surveys). It is presented as a graphic document showing regional (airborne) and local (ground surveys or drilling) geophysical responses. The atlas is a document available on line on the CONSOREM website: [Atlas géologique et géophysique des gisements de l'Abitibi](#). It can be viewed and examined to better understand the relationship between the geological context and the geophysical response of the main deposits of the Abitibi Subprovince, in particular the massive sulphide, disseminated gold and vein-gold types of mineralisation.



Sample images from the atlas characterising the geophysical signature of a deposit (Mattagami Lake)

Summary: Project 2001-1

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| Objectives | <ul style="list-style-type: none">• To document the geophysical characteristics of gold and base metal deposits in the Abitibi.• To complete the compilation of the geological characteristics of the deposits in the Abitibi begun with project 2000-1. |
| Results | <ul style="list-style-type: none">• Compilation of the geological and geophysical characteristics of 53 disseminated and vein gold deposits, and 34 base metal deposits located in the Abitibi Subprovince.• Presentation of the characteristics as maps (plans, sections, cross-sections), fact sheets and summaries. |
| Tools and Innovations | <ul style="list-style-type: none">• Creation of a new tool (atlas) for graphically showing the geological and geophysical characteristics of gold and base metal deposits of the Abitibi. |