

an Internet-based Geographic Information System (WebGIS) for terrestrial analogue research and planetary databases at the CSA. The project has three objectives: (1) to promote and facilitate research at analogue sites in Canada; (2) forge stronger links with the international earth and planetary science community by sharing geospatial information and (3) give visibility to the CSA in the field of analogue and planetary database management.

For this project, we are testing an OpenGIS architecture made available on the Internet and built according to the international standards developed by the Open Geospatial Consortium. In addition to reducing costs, this approach allows: (1) flexibility in database management, (2) interoperability with a Web Map Service (WMS), (3) the ability to create multilayered databases and queries for comparative studies, and (4) regular updates to include data from ongoing terrestrial analogue and planetary missions. Similar solutions already exist but are largely dedicated to terrestrial databases except in a few cases for global planetary information. The particular feature of the proposed WebGIS solution will be to focus on a detailed comparison of terrestrial and planetary geospatial databases using a list of specific queries developed in collaboration with experts from the scientific community in Canada and internationally.

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### Geographic Information System for terrestrial analogue research and planetary databases

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The Canadian Space Agency (CSA) is involved in several space exploration research projects carried out through the Canadian Analogue Research Network (CARN). All these projects require the visualization, manipulation, analysis, and interpretation of geospatial terrestrial information for comparison with the existing planetary databases. The large amount of data gathered through these projects require easy access and processing ability for principal investigators and their students at Canadian universities, CSA staff, and stakeholders in government, industry, and at space agencies worldwide.

We present the results of a project in development to create