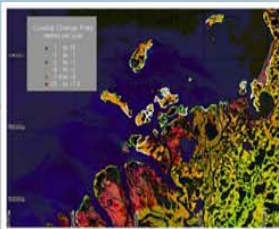


ABSTRACT

The coastline of Canada is significant in the world because of its length, varied physical character, and range of climatic zones it covers. In Canada it is a place for people to live, work and play. Shorelines are constantly changing in response to a complex array of marine, geomorphic and climatic factors. It is not a simple task to differentiate the signals of climate change from other natural factors without having a longer term record of the type and magnitude of changes that can occur within different coastal environments and along different shore types.

The Geological Survey of Canada (GSC), since the mid 1970s, has established a network of coastal sites in Canada where repetitive observations and surveys provide a reference level of anticipated change.

Coastal sites were selected as representative of a specific shore type, coastal environment, or locations where specific natural processes or human activities dominate. Information has been collected using aerial surveys, detailed ground transects, sampling and monitoring of specific processes. For the future it is critical to maintain a few key sites along each coastline of Canada, to summarize the state of the coasts and their sensitivity to change and to begin to use this reference database for identifying the signals and impacts of climate change.



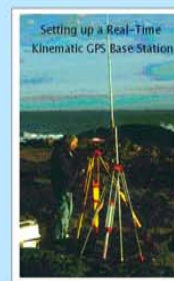
Regional Analysis of Rates of Coastal Change (Beaufort Sea, Northwest Territories)

Geological Survey of Canada Coastal Monitoring Network

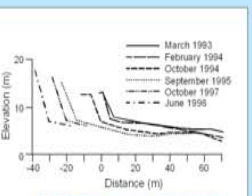
R.B. Taylor, D.L. Forbes, D. Frobel, G.K. Manson, S.M. Solomon and J.V. Barrie



Monitoring Impacts of Sea Ice On Arctic Coasts (Somerset Island, Nunavut)

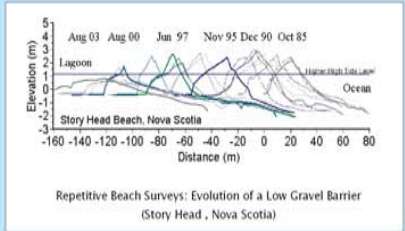


Setting up a Real-Time Kinematic GPS Base-Station



Repetitive Cliff Surveys (Haida Gwaii, British Columbia)

Surveying a Tundra Cliff Edge with the RTK Rover (Tuktoyaktuk Island, Northwest Territories)



Repetitive Beach Surveys: Evolution of a Low Gravel Barrier (Story Head, Nova Scotia)



Photographic Evidence of Cyclic Changes (Crescent Beach, Nova Scotia)



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