

Delta Ray Road Trip: Measuring $\delta 13C,\,\delta 18O$ and concentration of CO_2 across Canada

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The Delta Ray Road Trip was conceived to demonstrate that there is now an instrument capable of being taken to the sample collection point and in fact taken to the samples along an 8000 km route across Canada. The concept was to drive a Thermo Scientific Delta Ray Isotope Ratio Infrared Spectrometer from coast to coast across the 2nd largest country in the world. This route took the Delta Ray from a coastal environment, through forests, arable farm land, urban and industrial centres, across prairies and over mountains. The vehicle was a standard RV with as few modifications as possible. Along the way there were stops at most of the major universities in Canada as well as the AGU-GAC-MAC conference in Montreal, where indoor measurements were performed. Date was uploaded in quasi realtime to a website.

We will present data acquired during the trip and discuss the lessons learned.