

Abstract

You are free to download and use the data on this website for educational or research purposes. If the data or processing results are used in publications or educational materials, you should acknowledge their source by citing:

Hirsch, M., Bentley, L.R., and Dietrich, P., "A comparison of electrical resistivity, ground-penetrating radar and seismic refraction results at a river terrace site", *JEEG*, 13, 325-333, 2008.

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This web site contains raw data, surveying coordinate and borehole logs from a multi-method geophysical survey collected on Bow River terrace at the Pine Creek field site in city of Calgary, southern Alberta. Some of the data have been presented in paper entitled "A comparison of electrical resistivity, ground-penetrating radar and seismic refraction results at a river terrace site" by Hirsch, M., Bentley, L.R., and Dietrich, P. (*JEEG*, 13, 325-333, 2008). The entire survey is described in:

"Geophysical survey on Pine Creek field site Calgary, Alberta Canada, Hirsch, M., M.Sc. Thesis, University Tübingen (2004) which is available on this web site.

The geophysical survey includes collocated electrical resistivity imaging (ERI), ground penetrating radar (GPR), and seismic refraction along three relatively long profiles. Line locations in local and UTM coordinate systems as well as topographical data along the three profiles are also provided. The ERI data set includes ascii apparent resistivity values for Wenner configuration with different unit electrode spacings (2 m, 3 m, and 4 m). The GPR data set includes constant offset (1 m) time series using 100 MHz antennas as well as the CMPs experiments at several locations along the three profiles. The seismic refraction data set contains raw time series in SEG2 format as well as first-arrival travel-time picks along the three lines. Complementary information such as borehole logs along the survey lines is also included.

We envision that this high quality data set will be useful for educational purposes, such as processing and interpretation laboratories. It will also be useful as a test data set for processing computer code development in areas such as joint inversion of multiple types of geophysical data.

File "Summary" summarizes description of the data files, locations, formats and tools.