# Profile RIFT

Igor B. Morozov[1], Elena A. Morozova, and Scott B. Smithson

*Department of Geology and Geophysics, University of Wyoming, Laramie WY, 82071-3006, morozov@uwyo.edu*
*[1]Also at: Department of Geological Sciences, University of Saskatchewan, 114 Science Place, Saskatoon, SK S7N5E2 Canada, igor.morozov@usask.ca*

Leonid N. Solodilov

*Centre for Regional Geophysical and Geoecological Research (GEON), Moscow, Russia*

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## Data summary

Location: Yamal-Peninsula — town Kyahta (Lake Baikal; Figure 1)
Acquired by Center GEON, 1982-1983
Profile length: approximately 2980 km
3 PNEs and 36 chemical explosions of 3000-5000 kg
Recording systems: Portable 3-component analogue systems TAIGA and CHEREPAKHA, 1-Hz sensors

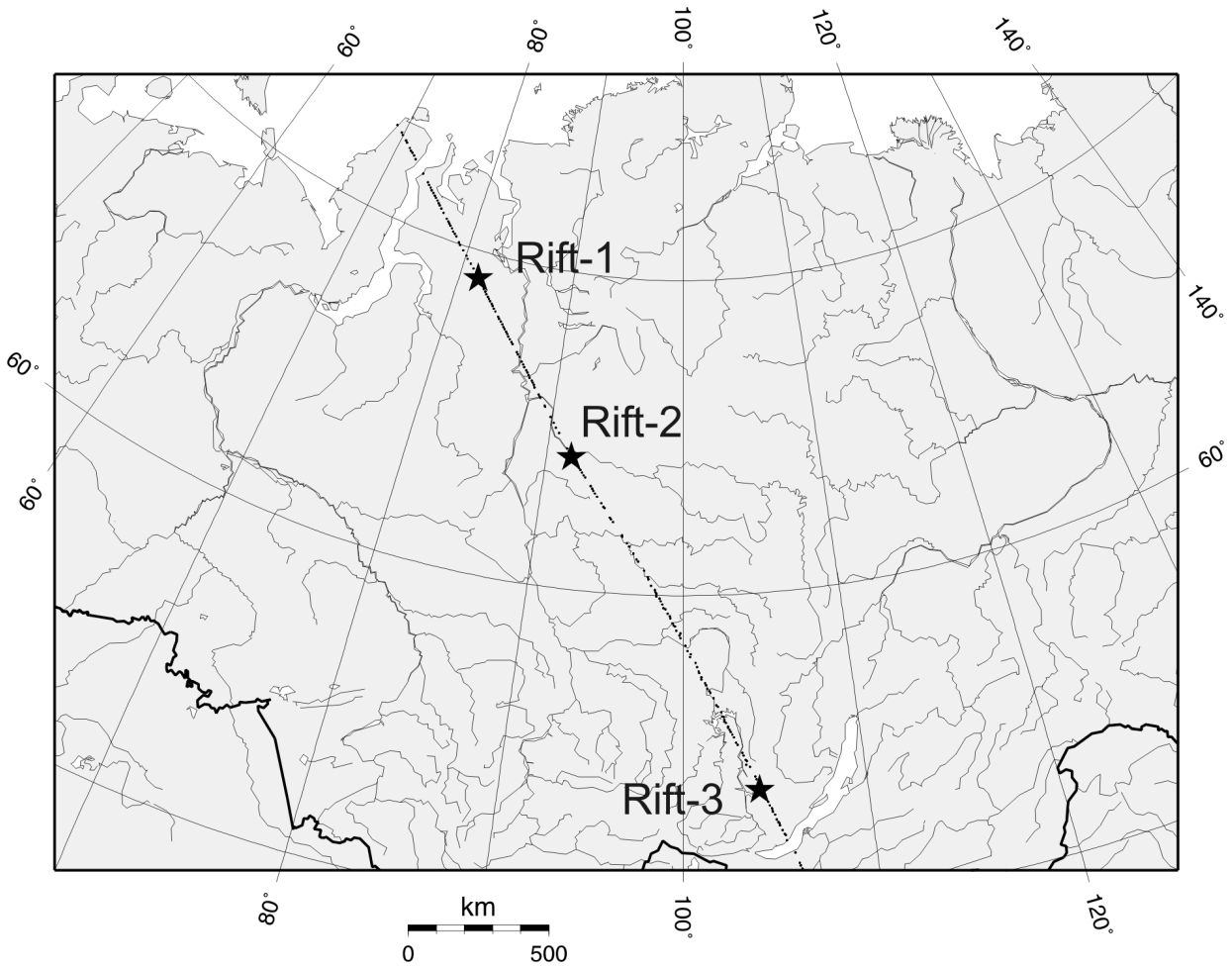


*Figure 1 Location map of profile RIFT. Stars indicate the PNEs, small triangles are 3-component recording sites.*

## Data format

Data format is identical to that of QUARTZ records delivered earlier. The data are provided in standard SEGY format using IBM floating point representation of data values. Geographic coordinates of shots and receivers (in degrees), and offsets (in meters) are loaded in data headers. Recording station numbers (numbering starting from the West, Figure 1) are loaded in SEGY headers as `CHANNEL, and the FFID`s correspond to shot numbers. Each data file contains a single component of recordings from one shot. File names follow the following convention:

```
rift-<shot_number>-<component_index>.segy
```

where shot_`number` is the number of the shot. Shot numbers are 1,2,3 for the PNEs (RIFT-1, 2, and 3, respectively; Figure 1). Fir chemical shots, shot numbers correspond to the number of

the nearest receiver. The `component_index` is `'v'` for the vertical (upward), `'r'` for radial (directed away from the shot), and `'t'` for the transverse (directed to the right when looking away from the shot point).

## Selected recent publications using Rift records

The following list is incomplete and gives only the most recent publications.


Cipar J. J, K. F. Priestley, A. V. Egorkin, and N. I. Pavlenkova, The Yamal Peninsula-Lake Baikal deep seismic sounding profile. Geophysical Research Letters. 20; 15, Pages 1631-1634. 1993.

Cipar, J. and K. Priestley, Central Siberia upper mantle cross-section from deep seismic sounding explosions, In: Upper mantle heterogeneities from active and passive seismology, Fuchs-Karl (editor), NATO Science Series. Partnership Sub-series 1, Disarmament Technologies. 17; Kluwer Academic Publishers. Dordrecht, Netherlands. 1997.pp 75-87, 1997.

Pavlenkova, G. A., K. Priestley, and J. Cipar, 2D model of the crust and uppermost mantle along Rift profile, Siberian Craton, Tectonophysics. 355, 171-186. 2002.