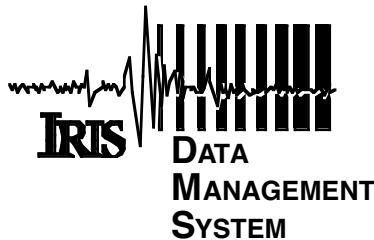# AGATE

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Assembled Data Set 04-015

IRIS DATA MANAGEMENT SYSTEM

Project AGATE

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Data summary

Project AGATE included five seismic profiles two of which recorded PNE AGATE. Locations and the approximate lengths of the profiles are (Figure 1):

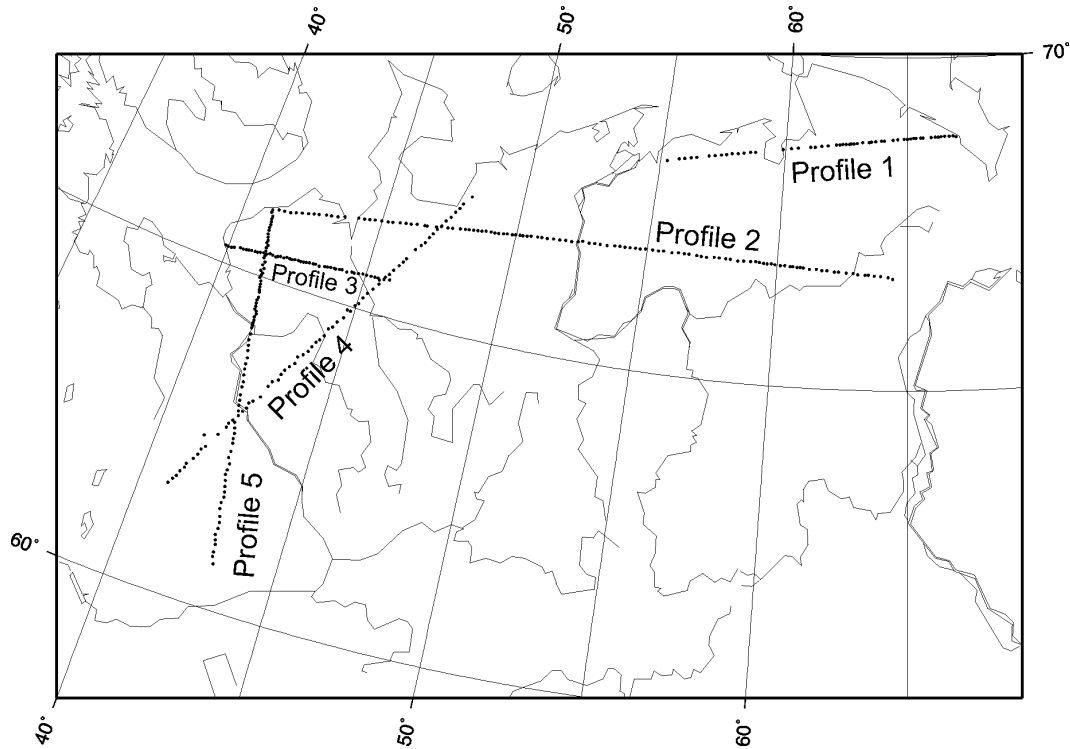Profile 1: Czech Lip – Pai-Hoi; 689 km; 3 shot points;

Figure 1. Chemical-explosion lines of project AGATE. Triangle indicate the locations of three-component recorders.

Profile 4: River Onega - Czech Lip; 715 km; 11 shot points;
Profile 5: River Vaga – White Sea, 730 km; 7 shot points.

PNE AGATE (Sultanov et al., 1999) was recorded by two of these lines (Figure 2). Note that for the PNE, profile 1 was laid out somewhat differently

Data were acquired by Center GEON in 1985.
Recording systems: Portable 3-component analogue systems TAIGA and
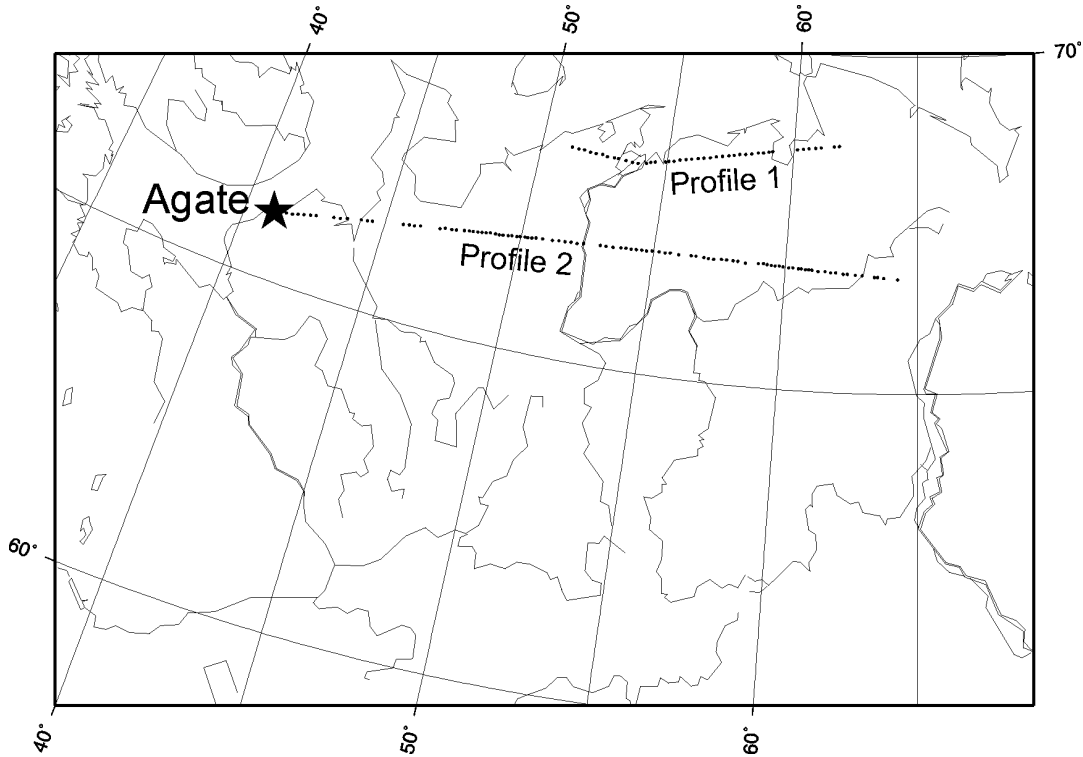CHEREPAKHA, 1-Hz sensors

Figure 2. Recording sites of PNE AGATE.

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 trace headers. Recording station numbers were loaded in SEGY headers as CHANNEL, and the FFIDs correspond to shot numbers. Each data file contains a single component of recordings from one shot.

For the PNE, file names follow the following convention:

```
agate-1-<profile_number>-<component_index>.segy
```

where `profile_number` is the number of recording line (Figure 2). For chemical shots, the files are named as follows:

```
agate-<profile_number>-<shot_number>-<component_index>.segy
```

where profile numbers are shown in Figure 1, and 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).

Reference

Sultanov, D. D., J. R. Murphy, and Kh. D. Rubinstein (1999). A seismic source summary for Soviet Peaceful Nuclear Explosions, Bull. Seism. Soc. Am., 89, 640-647.