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One of the types of natural radioactivity is a heavy inert radioactive gas radon, which is colorless, odorless, soluble in water [1]. Radon sources are connected with uranium deposits, granite massifs and tectonic zones. Isotopes of radon actinon, radon, thoron are formed by radioactive transformations of radium and give yourself new decay chains. The risk of human exposure from radon and its decay daughter products according to the UN is 43% [2], which makes monitoring of radon actual in different environments.

Seismic radon station SRS-05 is designed for monitoring radon, thoron and other parameters of the subsoil air and air of indoors [3]. SRS-05 station bured into the subsoil can be accumulate the data of measurements in the internal memory for a long time and transfer them to a computer connected to station in time intervals free from measurements.

The goal of hardware and software complex is the expansion of communications capabilities of station such as the remote control and the transfer of measurement data. These functions are implemented through a minicomputer and communications devices, providing access to the Internet network and data transmission to separate users and to server.

SRS-05 station measures the volumetric activity of radon and thoron, pressure, temperature, humidity, battery voltage, which feed the station. Battery voltage for work of the station is 10.6-13.2 V. Due to the low consumption: in measurement mode current is 500 mA, in standby mode — 100 mA, the station can operate without recharging the battery for a few weeks.

Manage device of the complex is represented by a minicomputer «Raspberry Pl» Model B + companies Raspberry PI Foundation [4]. Minicomputer has 4 connectors USB 2.0, Ethernet jack, 512 MB RAM, 40 user GPIO pins. To power the minicomputer from the battery adapter with the output voltage of 5 V is used . The maximum permissible current consumption of the mini computer is 2.5 A. The interaction between the station and the mini computer is organized in periods between measurements. Data formatted from the internal memory station in the form of on-demand transmitted to the minicomputer, which creates the file for transmition. At the end of the day this file over the Internet using FTP transferred to the Community Access server.

Minicomputer running under the Linux operating system. The core modules of the program are written in the Python programming language. Additional helper scripts are written in bash. The software of the complex works in three modes: obtaining data from the station without spectrum, receiving data from the station with spectrum and remote management station. For running a communications program to the station, data backup procedure and them transfer to ftp-server the apropriative scripts in a programming language and bash Linux shell had been developed. Planning and establishment of scripts launch schedule is set using a standard system utility crontab, which is a part of dynamic task scheduler included in the number of standard Unix operating system and means class of systems that is used to run jobs at a specific time.

At the end of the day the received data are archived and via the Internet is transmitted to ftp-server of the data acquisition. Internet Connection was performed using a cable system, wireless Wi-Fi net and GSM networks.

The complex is a self-contained device, does not affect the station measurement mode, allows to receive and process the data, conduct diagnostics and make decisions. Hardware and software complex was tested in basements Pitkaranta, during the month of passing the data to the server of the Institute of Geology of Karelian Research Centre of Russian Academy of Sciences in Petrozavodsk.

Due data processing of the series of radon volumetric activity by the methods of wavelet analysis and maximum entropy [5, 6] the cyclicity of radon degassing had been estimated and the intervals of the change of the mode of this process had been revealed.

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