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Thermal neutrons' flux response to the earthquakes depending on the epicenter's direction

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Long-term observations near the Earth's crust have shown that thermal neutrons are very sensitive regarding different processes both in the near-Earth space and in the Earth's crust due to the dual nature of the thermal neutron flux. There are at least two sources of thermal neutrons: the first source is bound up with the high-energy particles of cosmic rays penetrating into the Earth's atmosphere and interacting with its elements, and the second source originates from the radioactive gases contained in the Earth's crust. So the variations of the thermal neutrons' flux reflect both the processes in the near-Earth space and the geodynamic processes. Taking into consideration high sensitivity of the thermal neutrons' flux regarding different processes and conditions of the atmosphere, one of the most important problems is how to separate the variations of geodynamic nature from the rest. It is proposed to use common analysis of the thermal neutrons' data and the charged particles' precipitation under the Earth's radiation belts in order to find the characteristics of geodynamic variations of the thermal neutrons' flux. The recent observations in the seismic-active area of Kamchatka have shown that most likely the thermal neutrons' flux response to the geodynamic processes (in particular, to the preparation processes before the earthquakes) depends not only on the magnitude of the following earthquake, remoteness of its epicenter from the experimental unit, but also on the direction from the epicenter to the unit. That is there are some preferable directions for which the response of the thermal neutrons' flux is the most clear and striking.