

ВОЗМОЖНОСТИ ПРОГНОЗА СИЛЬНЫХ ЗЕМЛЕТРЯСЕНИЙ
**FORECASTING OF LARGE EARTHQUAKES BASED ON RADON MONITORING
IN THE PETROPAVLOVSK-KAMCHATSKY GEODYNAMICAL TESTING AREA**

P.P. Firstov

*Kamchatka Branch, Geophysical Survey, the Russian Academy of Sciences
Petropavlovsk-Kamchatsky, 683006; e-mail: firstov@emsd.ru*

The paper presents the results from monitoring of soil radon in loose deposits within a network of observational sites in Petropavlovsk-Kamchatskiy geodynamical testing area. The paper describes the basic of radon technique for a short-term forecast of large earthquakes of $M > 5.5$ for southern Kamchatka. The monitoring of seasonal component in volumetric radon activity in the saturation zone for the period 2000-2003 at Paratunka site allowed us to suggest the medium-term forecast of a $M > 7.5$ earthquake for the 2014 autumn-winter period in southern Kamchatka and the Northern Kuriles.

Keywords: Kamchatka, soil radon, seismicity, the forecast of earthquake.