Geophysical Research Abstracts
Vol. 16, EGU2014-2782, 2014
EGU General Assembly 2014

Movement of the Earth pole and the seismic activity in 2001-2012

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The relationship between the parameters which characterize the movement of the Earth pole and seismic activity are considered. The correlation of the considered parameters is studied.
The discussions about the relationship of poles movement and irregularity in speed of Earth rotation with seismic activity were actively performed in 60- 70th years of last century. Mainly, the influence of seismicity on pole movement was considered in this works. In particular, the question about excitation of a pole by earthquakes chandler's fluctuations was studied. An interest in the similar researches continues till now. The chandler's movements investigations and their relation with rotation of the Earth and seismicity were proceeded. The correlation between appearance of earthquakes and abnormal evasion of time and latitude for the observatories located near an epicenter was also discussed.
What changes in position of the Earth pole do occur as a result of the strongest earthquakes? To answer on this question it is necessary to study variations of "an average pole", where the basic periodic components in movement of a pole having amplitude 0.1"-0.3" are accepted.
To perform the analysis of the pole co-ordinates (X and Y) the International service of the Earth rotation for 1995-2012 have been considered. Linear Orlov-Saharov transformation has been applied to an exception of the periodic movement. On the basis of this positions changes of an average pole (aperiodicity displacement and long periodical variations of an axis of rotation in a Earth body) have been calculated with an interval of 0.1 years.
Was found the changes of position of an average pole of the Earth was preceded the most considerable seismic events of the beginning of 21 century. As a whole, the increase of seismic activity has begun after 2002 only. For example, there were 2 strong earthquakes with magnitude 7 and more (Salvador, India) in 2001 , 2 earthquakes (Tajikistan, Taiwan) occurred in 2002, and 5 (including earthquake in Mountain Altai) were in 2003, 5 earthquakes (including near to an island Sumatra)were in 2004, 4 earthquakes (again Sumatra, Iran, Japan, Pakistan) occurred in 2005.
There is a correlation between of the strongest earthquakes and fluctuations in the movement of an average pole. Results of work (Ponamareva, O. V., 2008) say that such a dependence must exist. A detailed study of such a correlation would be useful for the forecast of the strongest earthquakes. Obviously, for an exact study of this question it is necessary to increase a time interval.
Another interesting aspect of interrelation of a pole movement and earth activity is revealed. It is appeared that the moments of earthquakes are closely related with a phase of a pole periodic movement on the given meridian, and occur more often near maxima or minima of this movement.
The change of velocities of the moving pole can be taken as an external factor to characterize the appearance of earthquake. This change of velocities can be a trigger, when earthquake has already "ripened". On the other hand, it is possible that the anomalous deflections in astronomical observations of the latitude before the strong earthquakes and concentration of the earthquake appearance near extreme of the moving pole on the given meridian are closely related. The anomalies are also correlated with the deforming of the terrestrial cortex, which exist before earthquakes.
This results can be useful in the prediction for the appearance of the forthcoming earthquakes.
Ponamareva, O. V. : http://www.kscnet.ru/ivs/publication/ volc day/2008/art27pdf, 2008