



Fig.1. AstroMeteoTectonics structure

Harmonic H-104, revealed by A.F. Kubyshen, correlates the date of specific variations of meteorological parameters at the Chelyabinsk weather station with the following strong earthquakes occruing in average after 104 days. Period of 104 days is close to the quarter of Chandler period (~438/4=109.5 days). This fact looks paradoxical, but the works of A. Sytinskiy and V. Bokov on the correlation of global atmospheric circulation and seismic events give a physical basis for this empirical fact. Also, 104 days is a quarter of a Chandler period so this fact gives insight on the correlation between the anomalies of Earth orientation parameters and seismic events.

Determination of days of possible earthquakes with M5.5+ is performed using astronomical data. Determination of days of potential earthquakes with M5.5+ is performed using astronomical data. Earthquakes occur on days of oppositions of Solar System planets (arranged in a single line). At that, the strongest earthquakes occur under the location of vector "Sun-Solar System barycenter" in the ecliptic plane. Also there is time coherence between earthquake date and oppositions of three and more planets.



Long-term predictability of regions and dates of strong earthquakes

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AstroMeteoTectonics in seismic prediction applications







Time interval	Predicted EQ	Actual EQ	Actual EQ
	count	count (USGS)	count (EMSC)
10.01-07.02	14	10	12
08.02-08.03	17	9	9
09.03-06.04	9	9	11
Predicted dates and actual events: 13 of total 28 event groups occurred on specified dates 19/28 events occurred with date uncertainty of +- 1 day			

Fig.7. Variations of X component of Chandler trajectory (a), Earth angular velocity (b)

Prediction presented in the EGU abstract submitted in Janury 2016 and its realization: Total expected and actual number of earthquakes with M6+ in the following time frames

22/28 of ~78.5% events occurred with date uncertainty of +- 2 days

Kamchatka earthquake. Four subscribers received operative prediction on 20.03.2016.

end of May 2016. 8. Long-term forecast of potential dates of strongest earthquakes: in the time-frame of 29.11.2016-26.01.2017 we are expecting EQ with M8 and a series of Eqs with M7-8, potential dates are 8, 16, 17, 23 of January 2017.

References

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7. Next powerful M7+ earthquake is possible at Kamchatka till the