

[Home](#)

[Online Library](#)

- Recent Papers
- [Volumes and Issues](#)
- Special Issues
- Library Search
- Title and Author Search

[Alerts & RSS Feeds](#)

[General Information](#)

[Submission](#)

[Review](#)

[Production](#)

[Subscription](#)

[Book Reviews](#)

Journal Metrics



IF 1.357



5-year IF 1.781

SCOPUS[®] SNIP 0.616

SCOPUS[®] SJR 0.067

[Definitions](#)

ARCHIVED IN



PORTICO

[Volumes and Issues](#) [Contents of](#)

Nat. Hazards Earth Syst. Sci., 10, 1629-1633, 2010

www.nat-hazards-earth-syst-sci.net/10/1629/2010/

doi: 10.5194/nhess-10-1629-2010

© Author(s) 2010. This work is distributed under the Creative Commons Attribution 3.0 License.

Connection of large earthquakes occurring more with the movement of the Sun and the Moon and the Earth crust tectonic stress character

M. K. Kachakhidze¹, R. Kiladze², N. Kachakhidze¹, V. Kukhianidze¹, G. Ramishvili²

¹Department of Natural Sciences, St. Andrew The First-Called Georgian University of The Patriarchy of Georgia, Tbilisi, Georgia

²Department of Natural Sciences, Ilia State University, Abastumani Astro Observatory, Tbilisi, Georgia

Abstract. It is acceptable that earthquakes certain exogenous (cosmic) triggering factors may exist in every seismoactive (s/a) region and Caucasus among them. They have to correct earthquake occurring or play the triggering role in case when the region is at the limit of critical value of the geological medium of course.

Our aim is to reveal some exogenous factors possible to initiate earthquakes, on example of Caucasus s/a region, taking into account the region is very complex by the point of view of the tectonic stress distribution.

The compression stress directed from North to South (and vice versa) and the spread stress directed from East to West (and vice versa) are stresses acted in Caucasus region. No doubt that action of the same external stress may "work" as earthquakes triggering factor.

In the presented work the Moon and the Sun perturbations are revealed as initiative agents of earthquakes when the directions of corresponding exogenous forces coincide with the directions of the compression and the spreading tectonic stress in the region.

[Full Article](#) (PDF, 1869 KB)

Citation: Kachakhidze, M. K., Kiladze, R., Kachakhidze, N., Kukhianidze, V., Ramishvili, G.: Connection of large earthquakes occurring more with the movement of the Sun and the Moon and with the Earth crust tectonic stress character, Nat. Hazards Earth Syst. Sci., 10, 1629-1633, 2010. [Bibtex](#) [EndNote](#) [Reference Manager](#) [XML](#)