

ON HOW THE GREAT INDONESIAN EARTHQUAKE AND ANDAMAN AFTERSHOCKS WERE PREDICTED

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This attempt aims at establishing planetary configuration as a definitive means of earthquake prediction. When two or more than two planets, Sun and Moon are aligned more or less in line (0° or 180°) with the Earth, then the Earth would be caught in the middle of huge gravity struggle between the Sun and the planets. The gravitational stresses would change the speed of the Earth in its orbit. When the speed of rotation of the earth changes the tectonic plate motion also gets affected. The total angular momentum of planets involving in earthquake triggering mechanism can be calculated and the total force acting at the epicenter in a direction opposite to that of the earth's rotation can also be determined. So the planetary forces in the opposite direction to the rotation of earth act as a triggering mechanism for the accumulated stress at faults and plate boundaries to be released abruptly. The other two parameters contributing to the triggering of an earthquake at a place are -a) distance of epicenter from the planet position and b) direction of force acting at the possible epicenter. From the analysis of "significant earthquakes" over the past 100 years, the relationship between (i) Latitude, Longitude, and Magnitude of the tremor and (ii) distance from the planet and direction of forces acting at any point can be inferred. Such inferences already made for different localities in other parts of world have unfolded an accuracy of 75% with regard to earthquake prediction.

We predicted that the Indonesian earthquake would occur on 26 December 2004 at 00:30 (UTC) with probable epicenter at 3.54° N latitude and 97.17° E longitude, which is located near the coast Banyak Island, Sumatra, Indonesia with magnitude around 7.0. The actual event occurred on the same day at 00:58 (UTC) with the actual epicenter at 3.298° N latitude and 95.779° E longitude. The difference in distance between the predicted and the actual epicenter was just 157 km and with time difference on only 28 minutes, which is highly significant in Earthquake prediction. Predictions of aftershocks were made from January 8th to 16th 2005. The success rate this time was >90%.

Keywords: Planetary Configuration, gravitational stress, angular momentum, earth's rotational speed, triggering mechanism, significant earthquakes, aftershocks.