Correlation between the position of the moon and the quake beneath the Metropolitan area in the past 400 years -2 The time-

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[1] none

1. Introduction

The author examined the tendency of earthquake-occurrence by using the difference of ecliptic longitude between the moon and the sun (LMS in this paper), which is the position of the moon against the sun. He reports, in the part 1, that certain tendencies are observed in the occurrence of earthquake against the position of the moon, which is equivalent to date of the lunar calendar. In the part 2, he reports the time of occurrence.

2. Results

There is a tendency in the time of occurrence for the earthquakes greater than M5.5, which is shown below.

LMS of 350-40 degrees, which is the new moon period, is period of the largest outbreak. Those of greater than M6.0, which have possibilities to produce severe damages, occurred during 9-15 o'clock and 22-6 o'clock. In summary, they occurred midday and midnight mostly. Many of them occurred at the time when the moon is within +/-1.5 hour of zenith or nadir.

LMS of 160-210 degrees, which is the full moon period, is period of large outbreak. Those of greater than M6.0 occurred during 10-17, 0-3 and around 6 o'clock. Many of them occurred at the time when the moon is within +/-1.5 hour of zenith or nadir.

For other LMSs, they have their own time of occurrence.

Since there is an clear dependency of earthquakes-occurrence on the time, there seems to be the relation between the tidal forces of the moon and the sun and the occurrence of earthquake.(Tanaka et al., 2004)

Reference

S. Tanaka, M. Ohtake, and H. Sato, 2004, Tidal triggering of earthquakes in Japan related to the regional tectonic stress, Earth Planets Space, Vol.56, No.5, pp.511-515.