# **The Astrological Investigators**

# Earthquakes in Japan

# A study of earthquakes greater than a 6 magnitude.

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#### **ABSTRACT**

This study will examine 6+ magnitude earthquakes in Japan from 1900 to 2017 to determine if any signatures will indicate a large earthquake. The focus will be only on planets in signs as an initial study prior to a more in-depth analysis to be performed at a later date.

#### **METHOD**

**DATA**: The earthquakes used were from 1900 to 2017. If there were multiple tremors over a six magnitude on the same day, only the first one was used. This was particularly important on 11 March 2011 as there were over 40 registered. Using this data skewed the analysis.

**SOFTWARE**: Air Software Fast Research program was used for the analysis but did not use the statistical modules for the purposes of this simple study. The only statistics used were the lines for a 3.84 chi-square limit.

Air Software Super Search was used to map the periods of planetary positions associated with strong earthquakes discovered in the Fast Research study.

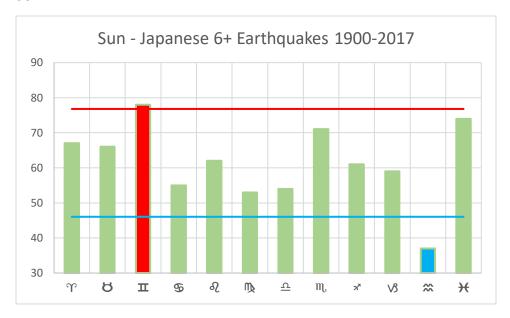
**CHI-SQUARE**: Chi-square is a measure of what is expected versus what is observed. It measures the significance of that measurement. For example, a chi-square of 3.84 equates to a p-value of 0.05, suggesting that an event will or will not occur with 95% confidence. A chi-square of 2.00 equates to a p-value of 0.15, equating to an 85% probability.

It was assumed that the planetary position across the zodiac would be evenly distributed since the orbits are roughly circular. Uranus was the only one where the length of time in a sign can vary by approximately 1.25 years between Pisces and Virgo.

**PLANETS**: The planets examined were: Sun through Uranus. Uranus had a complete cycle, but Neptune and Pluto have longer orbits.

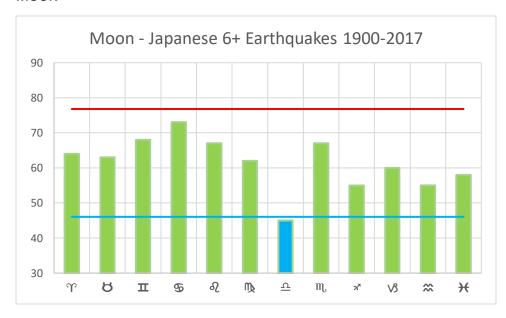
## **RESULTS**

## **SUN**



The Sun in Gemini often occurs, while the Sun in Aquarius occurs seldom.

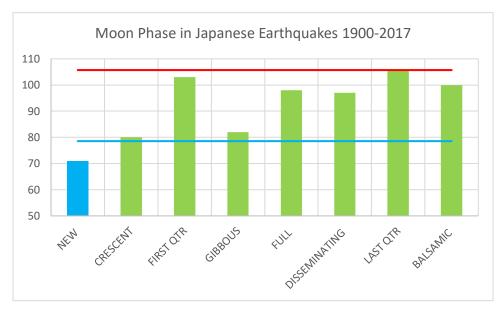
# MOON



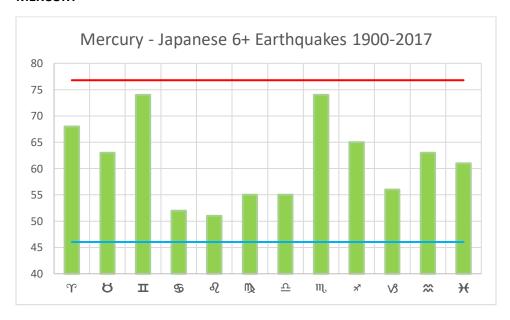
With the Moon, all the planets fell into their expected range except for the Moon in Libra which occurs less than the expected norm.

#### **EARTHQUAKES IN JAPAN**

The Moon affects the tides and, therefore, might affect earthquakes. However, the results show the phase of the Moon is not a factor. High magnitude earthquakes were not as likely to occur during the new moon phase.

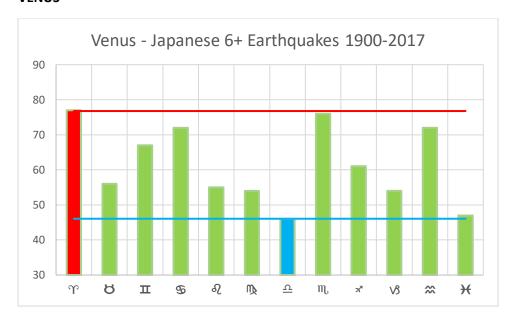


#### **MERCURY**



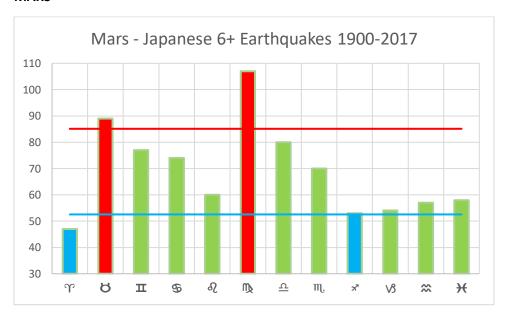
Mercury's placement in the signs fell into the expected range, although Gemini and Scorpio were higher than the other signs.

#### **VENUS**



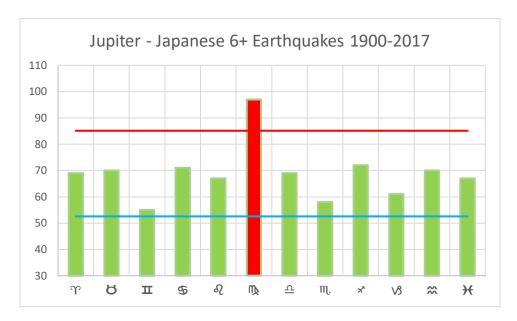
Earthquakes seldom occurred when Venus was in Libra during earthquakes, while when in Aries, they happened often. Venus in Pisces and Scorpio had higher and lower occurrences, respectively, but just below the 3.84 cutoff, a 95% probability. A chi-square of 3 is over 90%, and chi-square of 2 is over 85%.

## **MARS**



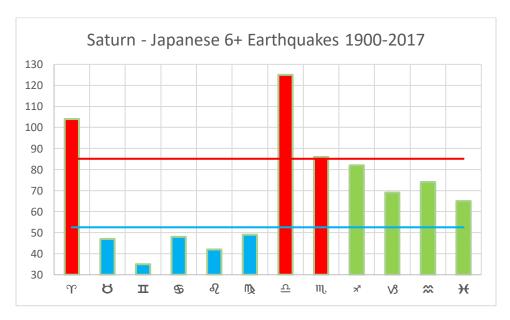
With Mars, we can see Taurus and Virgo score high for the probability of earthquakes while Sagittarius and Aries were low.

## **JUPITER**



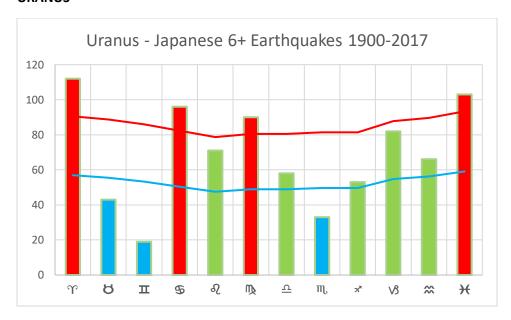
Only Jupiter in Virgo occurs more often than Jupiter in the other signs.

#### **SATURN**



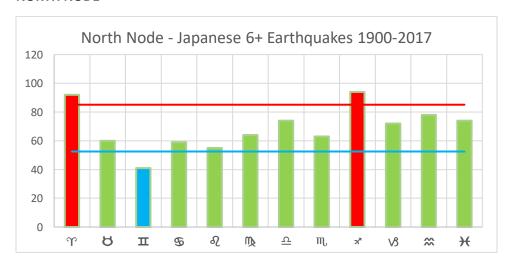
15.1% of the earthquakes occurred with Saturn in Libra, almost double the expected rate of 8.33%. Saturn in Aries and Scorpio have 12.59% and 10.41%, respectively. While Taurus through Virgo have only 26.8% versus the 41.67% they should have.

# **URANUS**

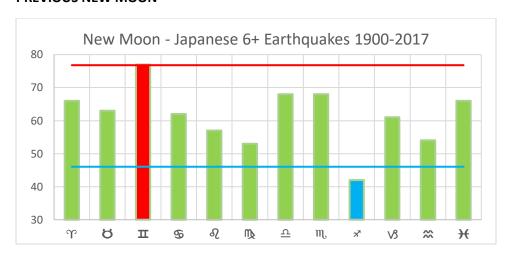


Uranus has an elliptical orbit, so the limit lines will be curved. As a result, Uranus in Aries, Cancer, Virgo and Pisces have values below the expected.

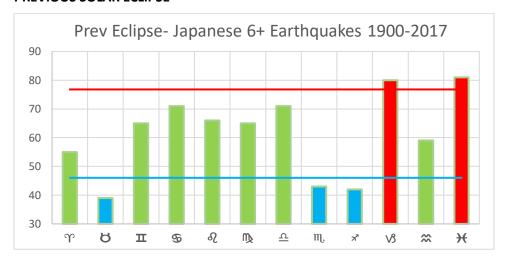
# **NORTH NODE**



# **PREVIOUS NEW MOON**



# **PREVIOUS SOLAR ECLIPSE**

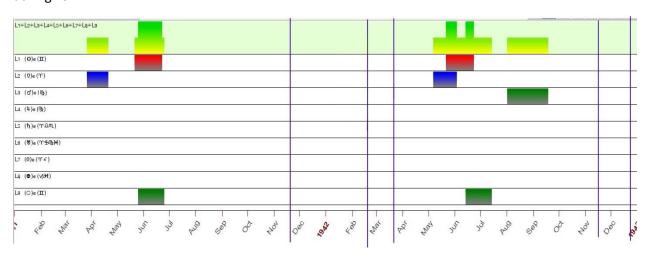


#### **PREDICTIONS**

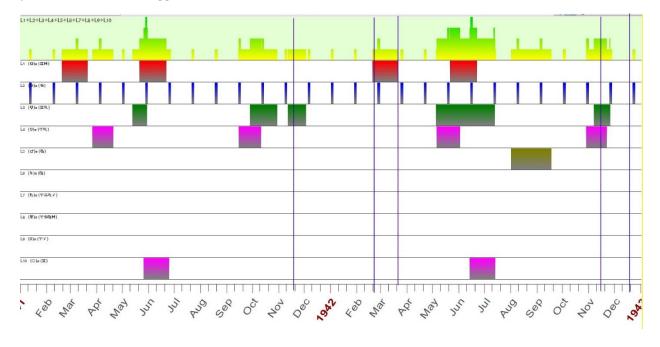
Can we determine if there is an earthquake by examining when the planets are in the sign by just using the ones with a 3.84 Chi-square value? While it is not 100% accurate, one can see the trends are depicted in the results. Below are some dates with the criteria discussed and dates when 6+ magnitude earthquakes occurred. For comparison sake, the same dates were examined for the 2 chi-square allowing for some additional factors.

#### 1941-1942

The occurrences of the high probability criteria do not happen often, and there are a few earthquakes during 1941-42.

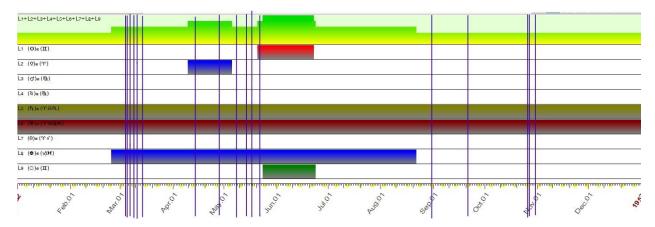


When chi-square limits are set to a chi-square of 2, this represents an 85% probability, and more sign placements become triggers.

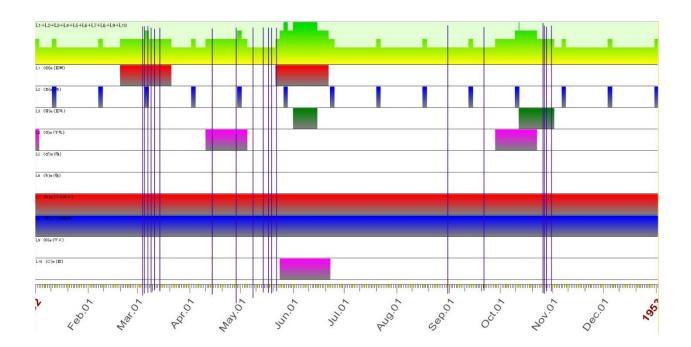


1952

The diagram has at least two of the events occurring all year, and it was a heavier year for earthquakes. Saturn and Uranus in these placements tend to have more earthquake occurrences.

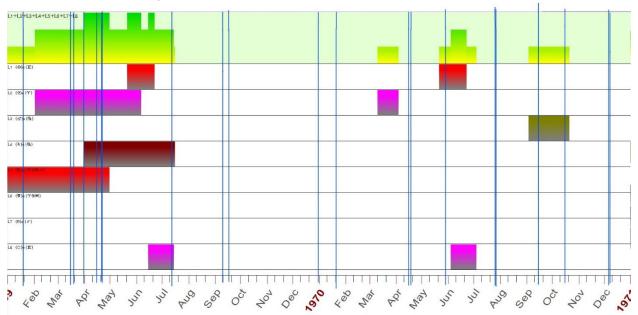


While the earthquakes seem to be showing an increase and a decrease later in the year, it does not exhibit a spike. However, if we lower the chi-square to 2, then the sudden rise is evident. The earthquakes tend to fall just before, during, or after the peaks of culmination. (See the top green curve).



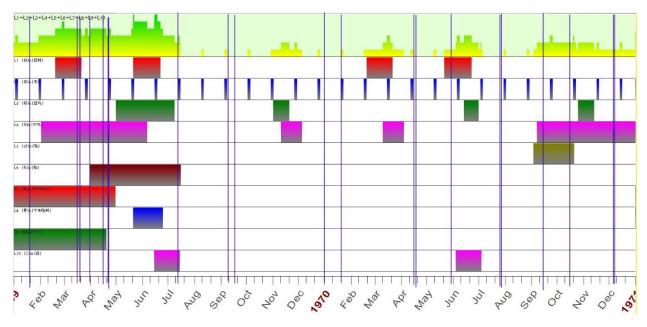
## 1969, 1970

The first half of the year suggested a high probability for earthquakes above 6.0, and it tapered off towards the latter half of 1969. The year 1970 has earthquakes spread out through the year with only three connections to the predicted times.



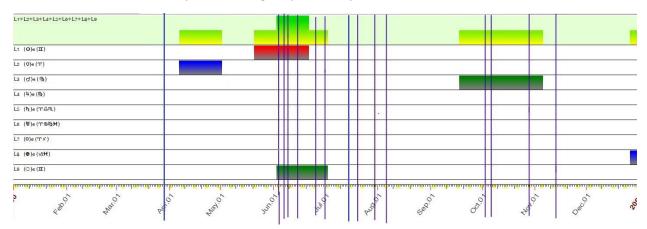
The lowering of the limit of the chi-square to 2 does pick up half the earthquakes that were not originally picked up.

but did not significantly enhance the results.

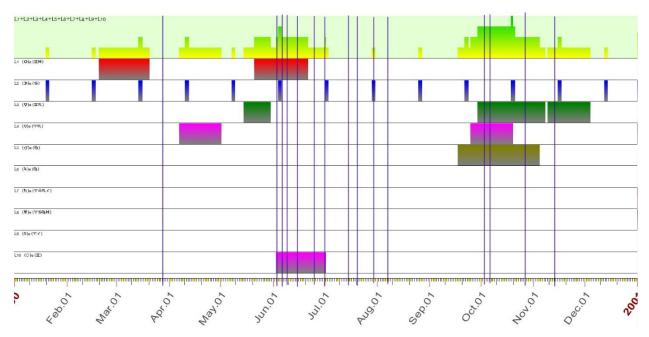


## 2000

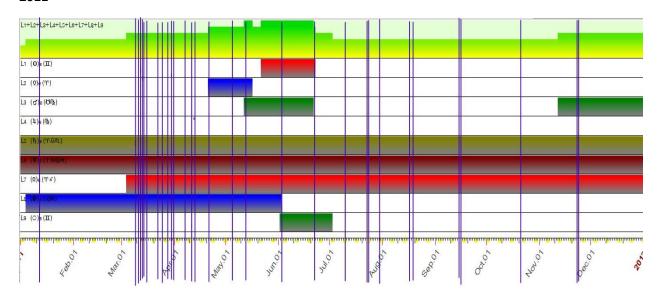
The year 2000 had a cluster of 6+ earthquakes clustered in the summer and late autumn, which correlated sum wat with the periods of higher probability.



The lowered chi-squared allowed more of the dates to be picked up but not fully.



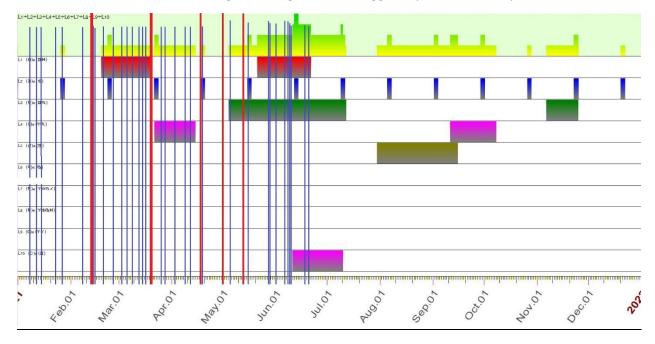
#### 2011



This year suggested there was a probability of strong earthquakes happening all year, and the data shows it.

## 2021

This article was written in late June, at which point Japan has had five 6+ earthquakes. Two of those were of a 7-magnitude. There is a chance they will see one before the end of the month. The figure below is the chi-square 2 chart. It shows earthquakes greater than a 6-magnitude in red and those less than a 6 in blue. The months of August through October suggest a period of earthquakes.



## **CONCLUSIONS**

Examining the sign position of the planets, eclipses, and new moons cannot accurately depict an earthquake. It does indicate when seismic activity can be expected. This study is far from complete and more work will be required to develop a Neural Net model which can be used to predict earthquakes.

The next step would be to build a model which includes:

- house positions
- aspects
- mid-points
- planetary speed
- planetary directions
- dispositors