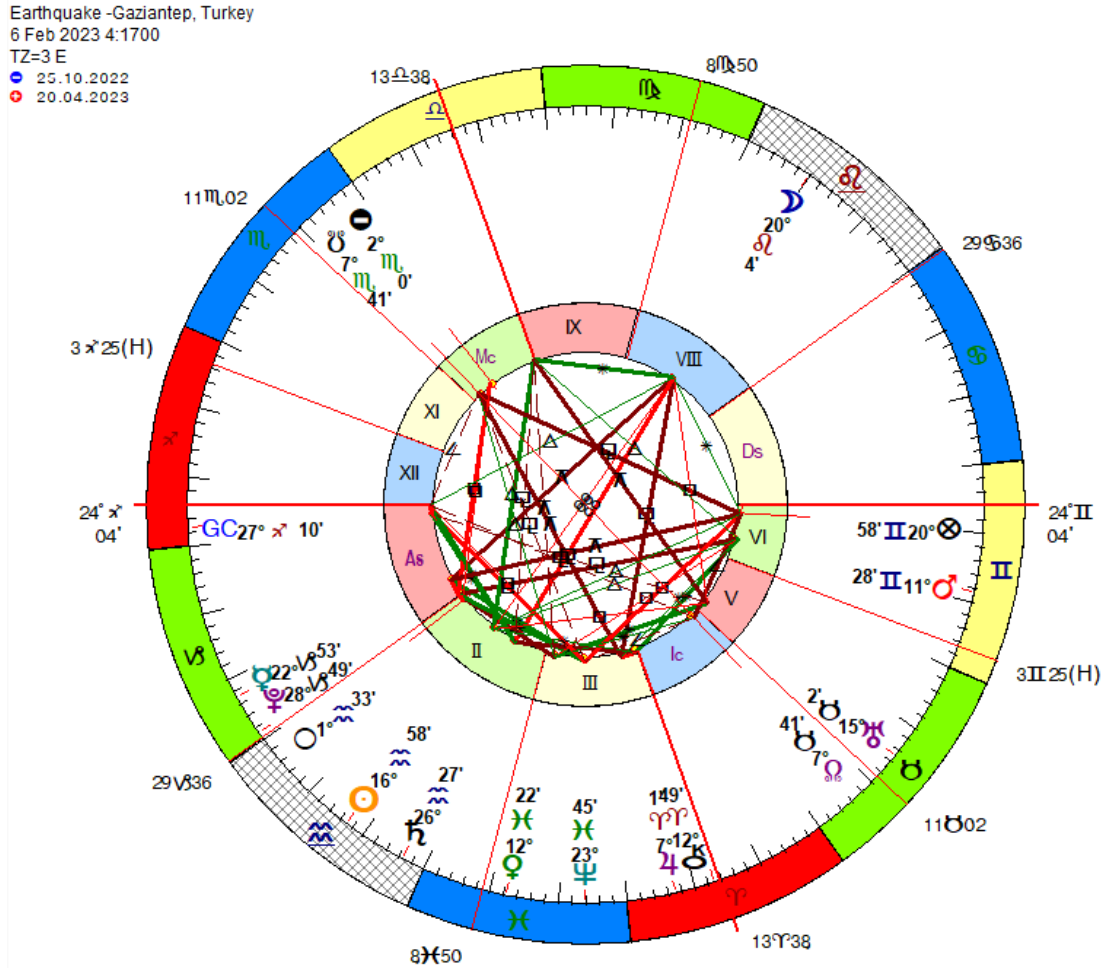


Introduction

On 6 February 2023, parts of Türkiye and Syria were rocked by a 7.8 magnitude earthquake. This earthquake was equivalent to 7.2 million metric tonnes of TNT. There was massive destruction, and over 33,000 people have died so far.

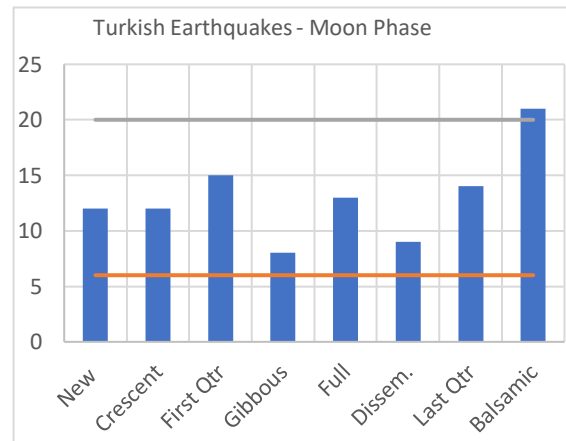
Here is the chart of the Gaziantep earthquake. (Note Türkiye moved to UTC +3 in 2016)



Since 1900, Türkiye has experienced 104 earthquakes of a magnitude of 6 or greater. In this study, we are examining if there are any astrological trends in these earthquakes. We will examine the characteristics of the charts themselves and the chart of the earthquakes to the national chart of Türkiye.

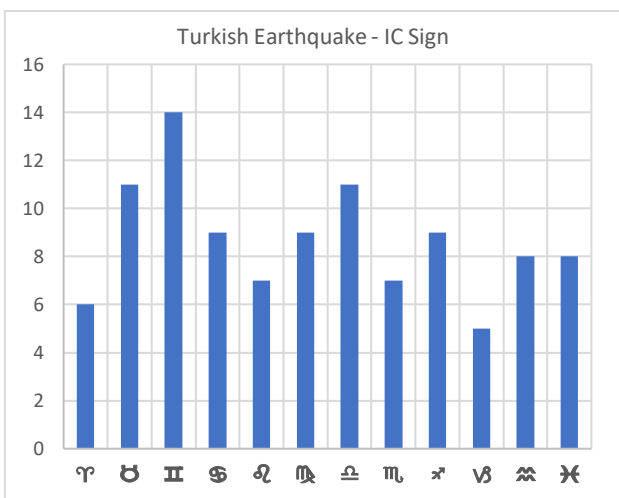
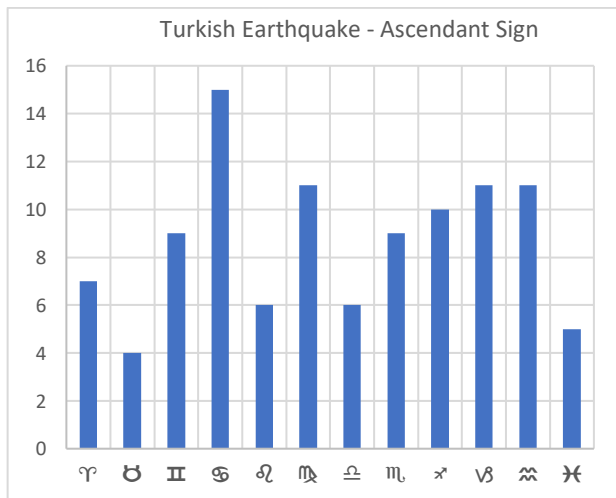
Results – Moon Phase

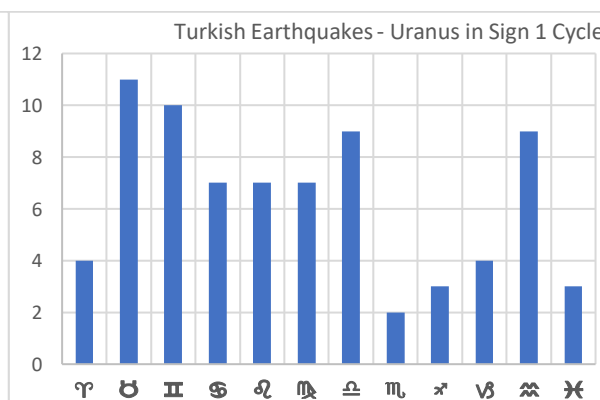
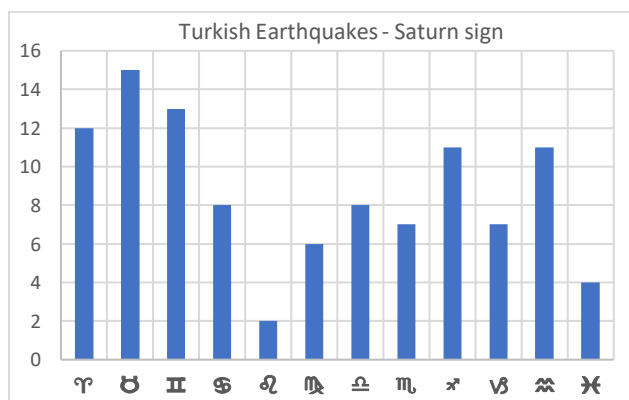
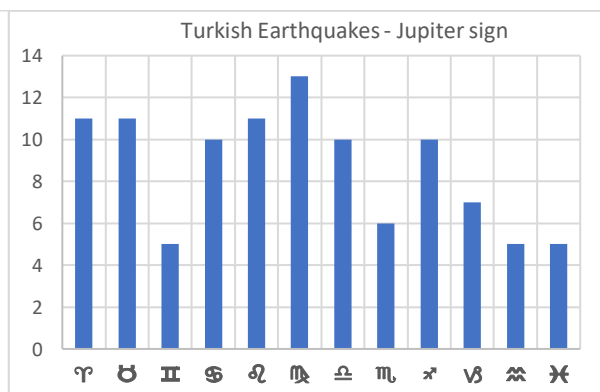
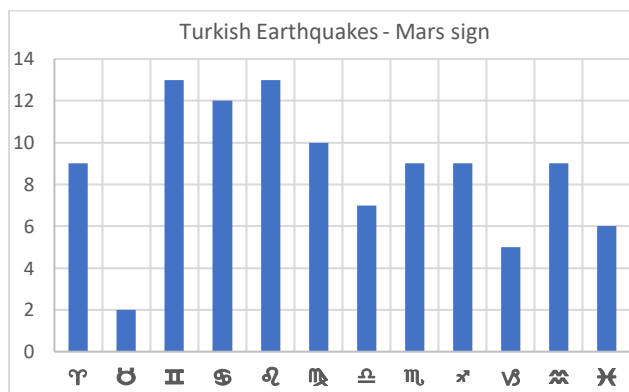
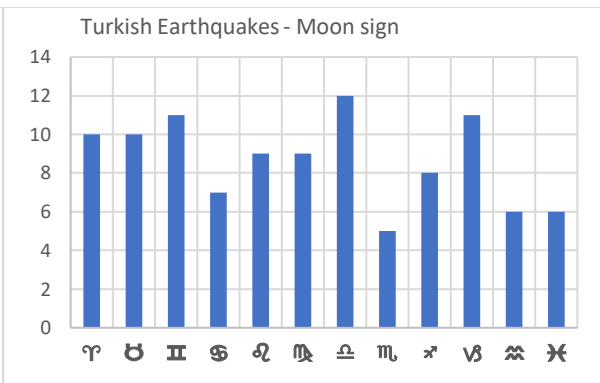
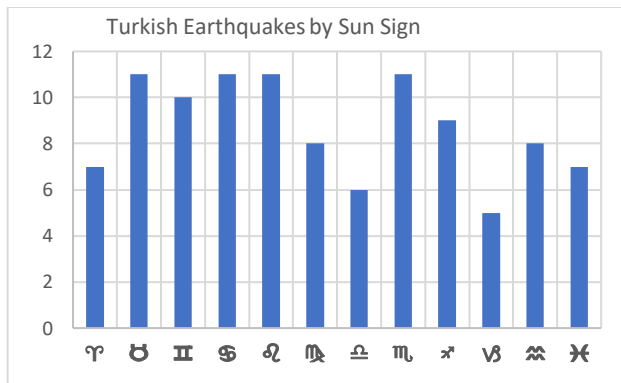
The moon phases that earthquakes occurred more often in the balsamic phase as well as from the last quarter to the new Moon.



Results - Signs

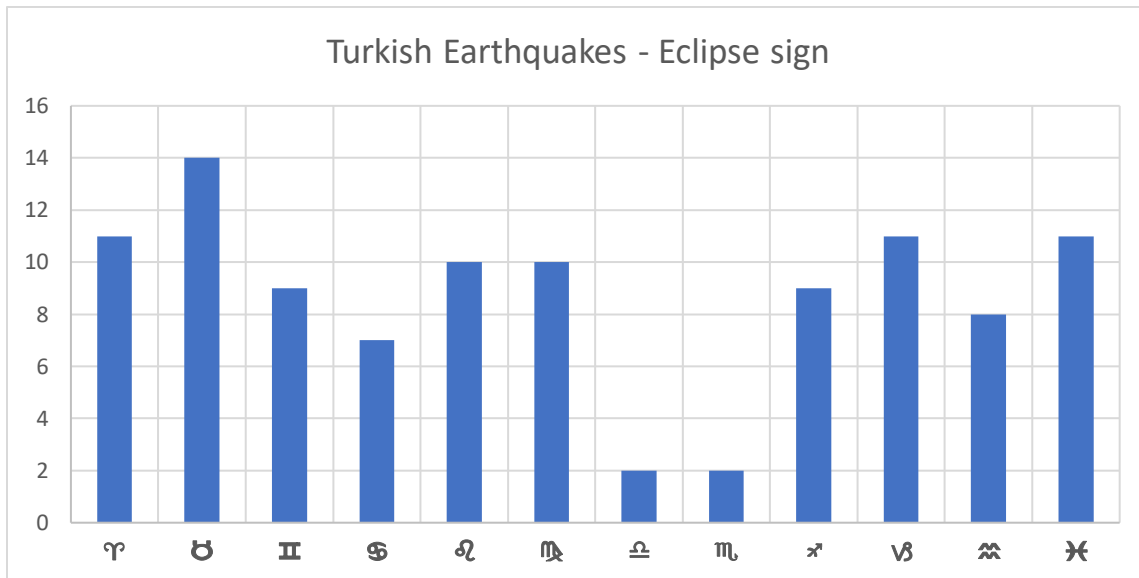
The positions of planets in signs were examined for the times of the earthquakes.



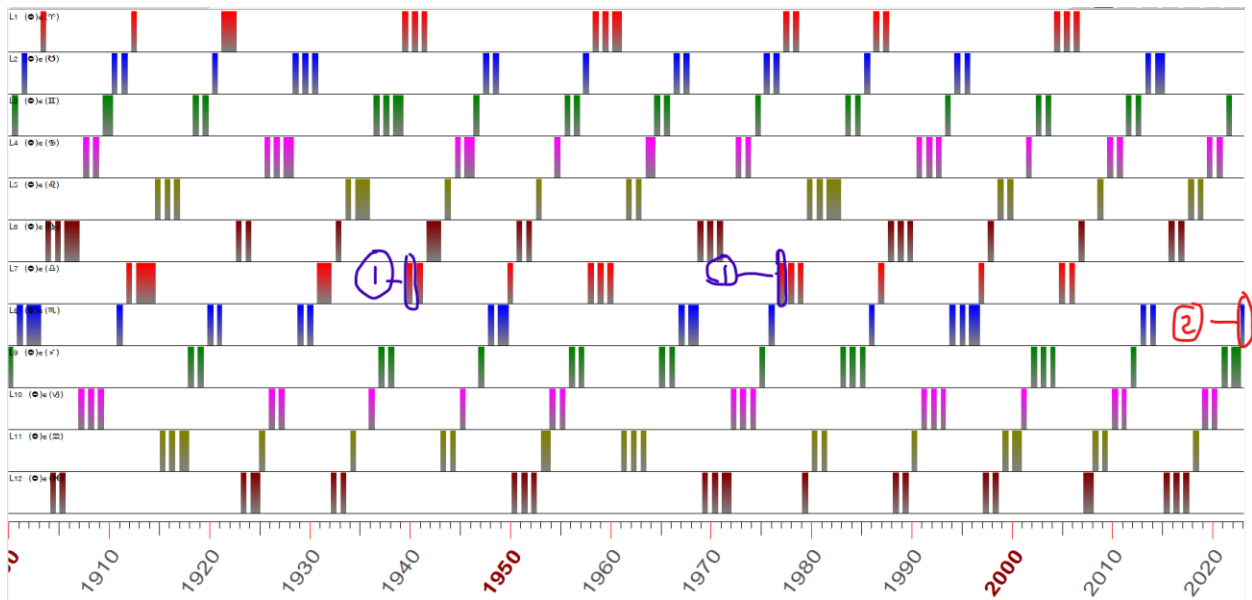


Previous Solar Eclipse Sign

The previous solar eclipse is also another factor that can be examined.

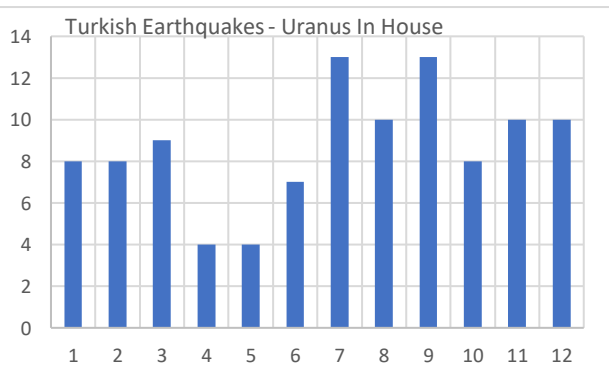
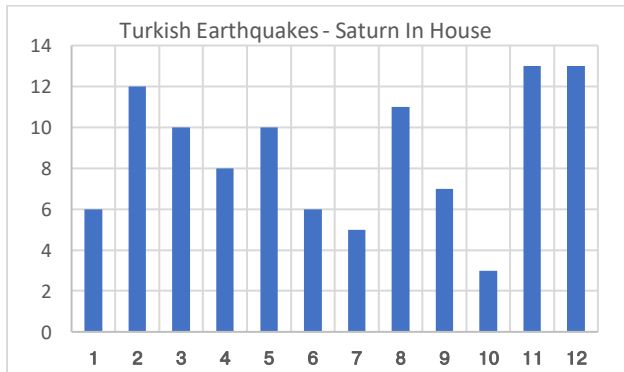
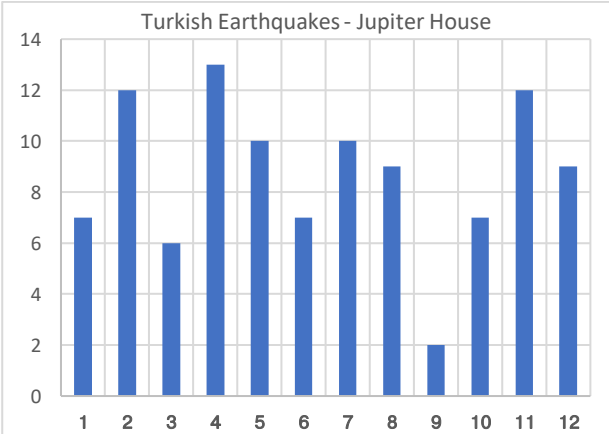
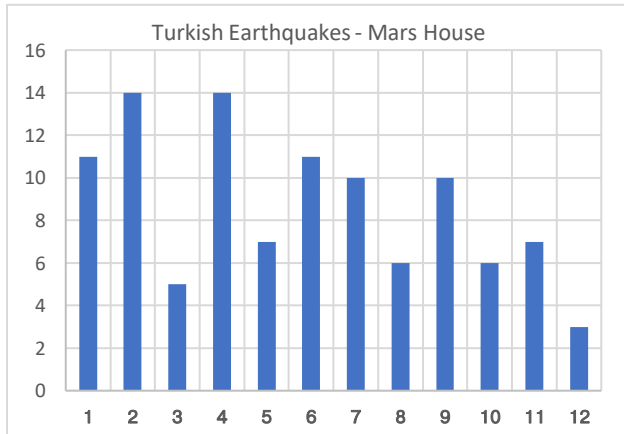
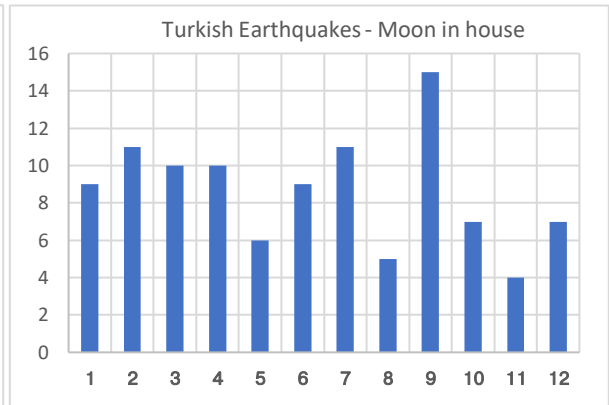
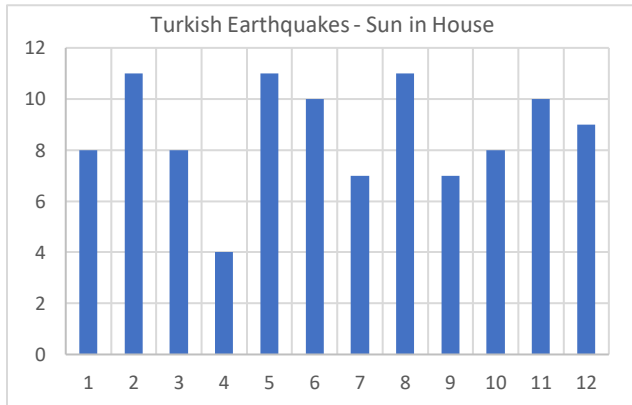


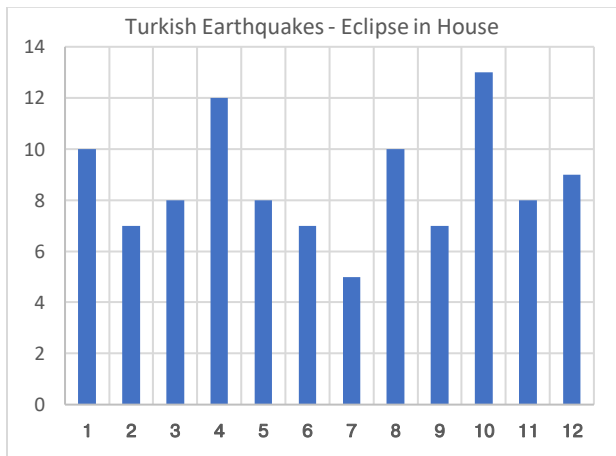
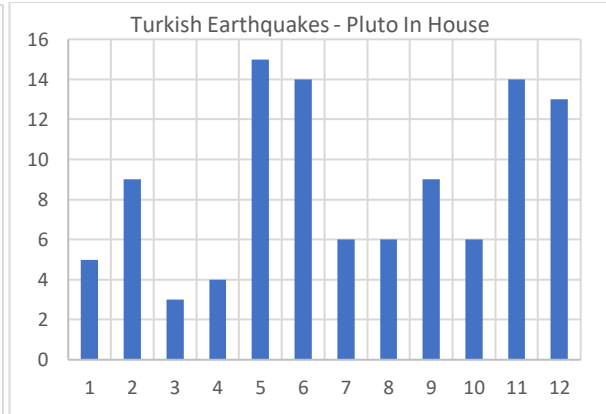
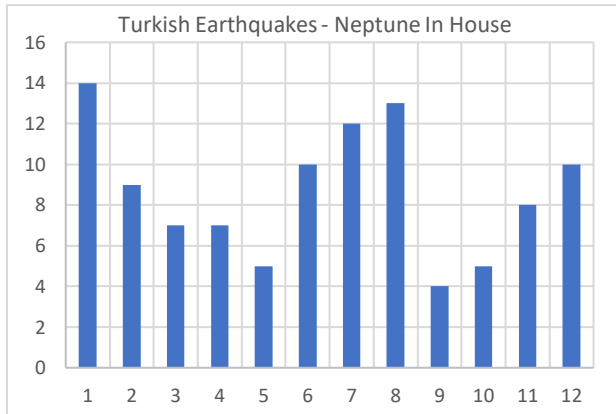
The February earthquake occurred during a Scorpio previous eclipse making it one of the rarer occurrences of major earthquakes. To illustrate the occurrences of solar eclipses in the signs, I used Alphee Lavoie's Super Search to find the eclipse signs from 1900-2023. See the figure below. (Signs are Aries on top to Pisces on the bottom). The 2 in Scorpio occurred in 2022,2023 and the ones in Libra occurred in 1939 and in 1976.



Results - Houses

The charts are calculated for the Placidus house system.





Chi-Square

Understanding the chi-square distribution value is important to understand some of the values listed in this study. Chi-square is calculated by observing the value measured and compared to what was expected. A chi-square value of 3.84 equals a 95% probability of an event happening. Keep in mind that if an event has a characteristic with a 100% probability, it will be very likely but not guaranteed, as several factors must be considered.

Earthquake Chart

This study looked at several criteria, such as planets and asteroids in sign, house (Placidus), and declination. Moon phases, aspects of planetary phases and the speed of planets were also examined using statistical analysis and chi-square values against a control group.

The control group was a group of 25 randomly generated charts for every earthquake chart, with the results normalised to 104 to align with the earthquake charts.

Below is a list of significant events that happen often in Turkish earthquakes.

EVENT	OCCURRENCE	AVERAGE CONTROL	CHI SQ.	PROB	STAT
NAT ♂ * NAT ♁ MAXORB 08°	20	7.7	12.7	100.00%	OFTEN
NAT RULER OF As IN ♀	18	8.1	8.5	99.70%	OFTEN
NAT ♀ ♂ NAT ○ MAXORB 08°	14	5.5	8.1	99.60%	OFTEN
NAT ○ ♂ NAT ♃ MAXORB 08°	12	4.4	7.5	99.40%	OFTEN
NAT RULER OF ♁ IN ☽	17	8	7.4	99.40%	OFTEN
NAT MOON MAKES LAST ASPECT □ TO ♃	8	2.2	7.1	99.20%	OFTEN
NAT (♀) ∈ (V NAT)	15	6.8	6.8	99.10%	OFTEN
NAT ♂ * NAT ● MAXORB 08°	18	9.2	6.6	99.00%	OFTEN
NAT ○ ♂ NAT ♀ DECLIN MAXORB 02°	30	19	6.4	98.90%	OFTEN
NAT ♃ * NAT ♄ MAXORB 08°	21	11.6	6.4	98.90%	OFTEN
NAT RULE OF As IN FIRE SIGNS	38	26.3	6.2	98.70%	OFTEN
NAT ♂ ∟ NAT ♃ MAXORB 03°	10	3.8	6.1	98.60%	OFTEN
NAT ♀ π NAT ♄ MAXORB 03°	9	3.1	6.1	98.60%	OFTEN
NAT (♃) (FAST)	67	54.7	6	98.60%	OFTEN
NAT 5 ♀ PHASE	32	21.3	5.8	98.40%	OFTEN
NAT (♃) ∈ (MUTABLE SIGNS)	46	34.1	5.7	98.30%	OFTEN
NAT (♃) ∈ (♁)	15	7.4	5.7	98.30%	OFTEN
NAT ♂ ♂ NAT ♄ DECLIN MAXORB 02°	21	12.1	5.7	98.30%	OFTEN
♃ FIRST RISING BEFORE ○	14	6.8	5.6	98.20%	OFTEN
NAT (♀) ∈ (FIRE SIGNS)	37	26	5.6	98.20%	OFTEN
NAT (♀) ∈ (CARDINAL SIGNS)	45	33.5	5.4	98.00%	OFTEN
NAT (♀) ∈ (II V VIII XI NAT)	44	32.6	5.3	97.90%	OFTEN
NAT ♃ π NAT ○ MAXORB 03°	9	3.4	5.3	97.80%	OFTEN
NAT ♄ ∟ NAT ♃ MAXORB 03°	7	2.2	5.1	97.70%	OFTEN
NAT ♀ ♂ NAT ♃ MAXORB 08°	9	3.6	5	97.50%	OFTEN
NAT ♃ ♂ NAT ○ MAXORB 08°	9	3.6	5	97.50%	OFTEN
NAT RULE OF ♁ IN WATER SIGNS	35	24.7	5	97.40%	OFTEN
NAT (♄) ∈ (23°40'..31°) DECLIN	16	8.8	4.8	97.20%	OFTEN
NAT (♃) ∈ (II V VIII XI NAT)	46	35.2	4.7	97.10%	OFTEN
NAT (♀) ∈ (♁)	20	12	4.7	96.90%	OFTEN
NAT ♂ ♂ NAT ♁ MAXORB 08°	11	5.2	4.6	96.70%	OFTEN
NAT ♂ ♂ NAT ♂ MAXORB 08°	11	5.2	4.6	96.70%	OFTEN
NAT ♃ □ NAT As MAXORB 08°	17	9.7	4.6	96.70%	OFTEN
NAT WANING CRESCENT MOON	21	13	4.5	96.70%	OFTEN
NAT 1 ♃ PHASE	19	11.4	4.5	96.60%	OFTEN
NAT MOON MAKES LAST ASPECT * TO ○	6	1.9	4.5	96.60%	OFTEN
NAT ♃ □ NAT ♁ MAXORB 08°	16	9	4.4	96.40%	OFTEN
NAT ♄ ♂ NAT ♃ MAXORB 08°	12	6	4.4	96.30%	OFTEN
NAT ♁ ♂ NAT ♁ MAXORB 08°	10	4.6	4.3	96.20%	OFTEN
NAT ♁ ♂ NAT ♂ MAXORB 08°	10	4.6	4.3	96.20%	OFTEN
NAT ♃ ♂ NAT As MAXORB 08°	10	4.6	4.2	96.00%	OFTEN
NAT ♄ □ NAT ♁ MAXORB 08°	15	8.4	4.2	95.90%	OFTEN
NAT ♄ ♂ NAT ♄ DECLIN MAXORB 02°	15	8.4	4.2	95.90%	OFTEN
NAT ○ ∟ NAT ♃ MAXORB 03°	8	3.3	4.2	95.90%	OFTEN
NAT (♄) ∈ (FIXED SIGNS)	47	36.8	4.1	95.80%	OFTEN
NAT ♂ π NAT ♃ MAXORB 03°	8	3.4	3.9	95.30%	OFTEN
NAT ♃ Δ NAT ♁ MAXORB 08°	16	9.4	3.9	95.20%	OFTEN
NAT ♃ □ NAT ♃ MAXORB 03°	8	3.4	3.8	95.00%	OFTEN
NAT (♃) (↑)	62	52.1	3.8	94.90%	OFTEN
NAT (♄) ∈ (♁)	13	7.1	3.8	94.90%	OFTEN

Below is a list of significant events that happen seldom in Turkish earthquakes.

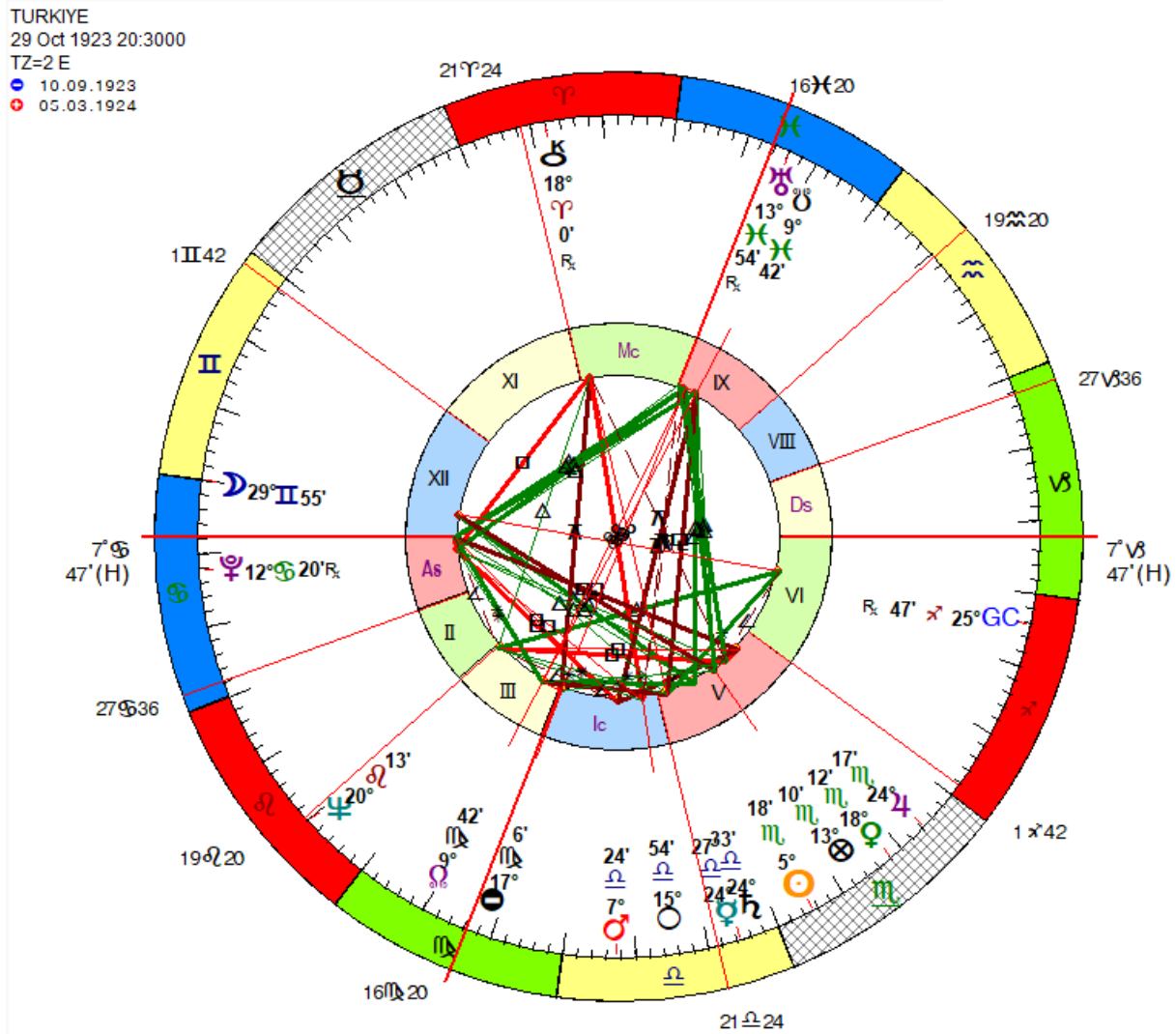
EVENT	OCCURRENCE	AVERAGE CONTROL	CHI SQ.	PROB	STAT
NAT (♁) ∈ (AslcDslMc NAT)	21	36.6	11.7	99.90%	SELDOM
NAT ● ⌘ NAT ○ MAXORB 03°	0	5.6	11.4	99.90%	SELDOM
NAT (♁) ∈ (II)	0	5.4	11.2	99.90%	SELDOM
NAT (♁) ∈ (IX NAT)	2	9.2	9.8	99.80%	SELDOM
NAT (♁) ∈ (CARDINAL SIGNS)	21	34.8	9.3	99.80%	SELDOM
NAT (♁) ∈ (II NAT)	2	8.9	9.2	99.80%	SELDOM
NAT (♁) ∈ (lc NAT)	2	8.6	8.7	99.70%	SELDOM
♂ FIRST RISING BEFORE Ω	3	10.2	8.4	99.60%	SELDOM
NAT ♁ ♂ NAT ♂ MAXORB 08°	1	6.2	7.8	99.50%	SELDOM
NAT (♁) ∈ (VIII NAT)	2	8.1	7.7	99.40%	SELDOM
NAT RULE OF lc IN V	2	8	7.6	99.40%	SELDOM
NAT (♁) ∈ (AslcDslMc NAT)	22	34.3	7.4	99.30%	SELDOM
NAT ♁ □ NAT ○ MAXORB 08°	3	9.6	7.3	99.30%	SELDOM
NAT ♁ ♂ NAT ♁ DECLIN MAXORB 02°	3	9.4	7.1	99.20%	SELDOM
NAT (♁) ∈ (♁)	2	7.7	7.1	99.20%	SELDOM
NAT (♁) ∈ (♁)	2	7.6	6.8	99.10%	SELDOM
NAT ♂ Δ NAT ○ MAXORB 08°	2	7.6	6.8	99.10%	SELDOM
NAT ● □ NAT lc MAXORB 08°	4	10.8	6.7	99.10%	SELDOM
NAT (♁) ∈ (♁)	3	9.2	6.7	99.10%	SELDOM
NAT (♁) ∈ (III NAT)	3	9.2	6.6	99.00%	SELDOM
NAT (♁) ∈ (II V VIII XI NAT)	23	34.4	6.3	98.80%	SELDOM
NAT (♁) ∈ (Mc NAT)	3	8.9	6.2	98.70%	SELDOM
NAT ♁ Δ NAT ○ MAXORB 08°	3	8.8	6	98.60%	SELDOM
NAT ♁ * NAT As MAXORB 08°	4	10.2	5.9	98.50%	SELDOM
NAT ♁ Δ NAT ○ MAXORB 08°	3	8.7	5.9	98.50%	SELDOM
NAT (♁) ∈ (♁)	2	7	5.7	98.30%	SELDOM
NAT (♁) ∈ (XII NAT)	3	8.6	5.7	98.30%	SELDOM
NAT (♁) ∈ (WATER SIGNS)	16	25.5	5.4	98.00%	SELDOM
NAT (♁) ∈ (III NAT)	3	8.4	5.4	98.00%	SELDOM
NAT 7 ♂ PHASE	7	14.1	5.3	97.90%	SELDOM
NAT (♁) ∈ (III VI XII NAT)	24	34.6	5.3	97.90%	SELDOM
NAT ♁ * NAT ♂ MAXORB 08°	4	9.7	5.1	97.60%	SELDOM
NAT lc □ NAT Ω MAXORB 08°	4	9.6	5	97.50%	SELDOM
NAT (♁) ∈ (♁)	3	8.1	5	97.50%	SELDOM
NAT RULE OF As IN ♂	3	8.1	4.9	97.40%	SELDOM
NAT (♁) ∈ (♁)	2	6.4	4.9	97.30%	SELDOM
NAT ♁ □ NAT ♂ MAXORB 08°	4	9.5	4.8	97.10%	SELDOM
NAT (♁) ∈ (IX NAT)	4	9.3	4.5	96.70%	SELDOM
♁ FIRST RISING BEFORE ♁	4	9.3	4.5	96.70%	SELDOM
NAT (♁) ∈ (XI NAT)	4	9.2	4.4	96.50%	SELDOM
NAT ♁ Δ NAT ♂ MAXORB 08°	4	9.2	4.3	96.20%	SELDOM
NAT ♂ Δ NAT ♁ MAXORB 08°	2	6	4.2	95.90%	SELDOM
NAT ♂ □ NAT ♂ MAXORB 08°	4	8.9	4	95.50%	SELDOM
NAT ♁ * NAT ♂ MAXORB 08°	4	8.9	3.9	95.30%	SELDOM
NAT (♁) ∈ (III NAT)	4	8.9	3.9	95.30%	SELDOM
NAT ● * NAT As MAXORB 08°	4	8.8	3.9	95.10%	SELDOM
NAT ♂ Δ NAT ♁ MAXORB 08°	3	7.4	3.9	95.10%	SELDOM
NAT (♁) (SLOW)	31	40.5	3.8	95.00%	SELDOM
NAT (♁) (↓)	42	51.9	3.8	94.90%	SELDOM
NAT (♁) ∈ (AIR SIGNS)	18	26.1	3.8	94.80%	SELDOM

Looking at the chart of the Gaziantep earthquake and comparing it to the criteria found in Turkish earthquakes, you can see that there are almost equal amounts of signatures that occur seldom as do often if we use the cut-off of 2.5 chi-square. However, significant values are 3.84 or a probability of 95%. Of those then there are 7 events that occur often and 5 that occur seldom.

	EVENT	OCCURRENCE	AVERAGE CONTROL	CHI SQ.	PROB	STAT
1*	NAT ♂ * NAT lc MAXORB 08°	20	7.7	12.7	100.00%	OFTEN
1*	NAT (♀) ∈ (AslcDsMc NAT)	21	36.6	11.7	99.90%	SELDOM
2*	NAT RULE OF As IN γ	18	8.1	8.5	99.70%	OFTEN
2*	NAT (●) ∈ (M _L)	2	7.6	6.8	99.10%	SELDOM
3*	NAT RULE OF As IN FIRE SIGNS	38	26.3	6.2	98.70%	OFTEN
3*	NAT (♀) ∈ (WATER SIGNS)	16	25.5	5.4	98.00%	SELDOM
4*	NAT (♀) ∈ (CARDINAL SIGNS)	45	33.5	5.4	98.00%	OFTEN
4*	NAT (♃) ∈ (III V IX XII NAT)	24	34.6	5.3	97.90%	SELDOM
5*	NAT (♄) ∈ (23°40'..31°) DECLIN	16	8.8	4.8	97.20%	OFTEN
5*	NAT (♁) ∈ (IX NAT)	4	9.3	4.5	96.70%	SELDOM
6*	NAT (♂) ∈ (II V V III XI NAT)	46	35.2	4.7	97.10%	OFTEN
6	NAT (♃) (D)	62	71.2	3.6	94.10%	SELDOM
7*	NAT ♃ ♂ NAT ♀ DECLIN MAXORB 02°	15	8.4	4.2	95.90%	OFTEN
7	NAT (♃) ∈ (II V V III XI NAT)	26	34.3	3.2	92.70%	SELDOM
8	NAT ♃ ♂ NAT ♁ MAXORB 08°	9	4.4	3.4	93.70%	OFTEN
8	NAT (♁) ∈ (CARDINAL SIGNS)	29	37.3	3	91.90%	SELDOM
9	NAT (●) ∈ (Mc NAT)	13	7.8	2.8	90.80%	OFTEN
9	NAT (♁) ∈ (EARTH SIGNS)	17	23.7	2.8	90.30%	SELDOM
10	NAT ♁ □ NAT lc MAXORB 08°	14	8.7	2.8	90.60%	OFTEN
10	NAT ♃ Δ NAT ♁ MAXORB 08°	5	9.2	2.7	90.00%	SELDOM
11	NAT (♁) ∈ (lc NAT)	13	7.9	2.8	90.50%	OFTEN
11	NAT ♃ * NAT ♁ MAXORB 08°	5	9.2	2.7	89.70%	SELDOM
12	NAT (●) ∈ (II V V III XI NAT)	43	34.9	2.7	89.80%	OFTEN
12	NAT (♁) ∈ (V NAT)	4	7.8	2.5	88.90%	SELDOM
13	♀ FIRST RISING BEFORE ♃	14	8.9	2.5	88.80%	OFTEN

Study of Earthquakes to the Turkish Natal Chart

The nation of Türkiye came into being on 29 October 1923 at 20:30 in Ankara.

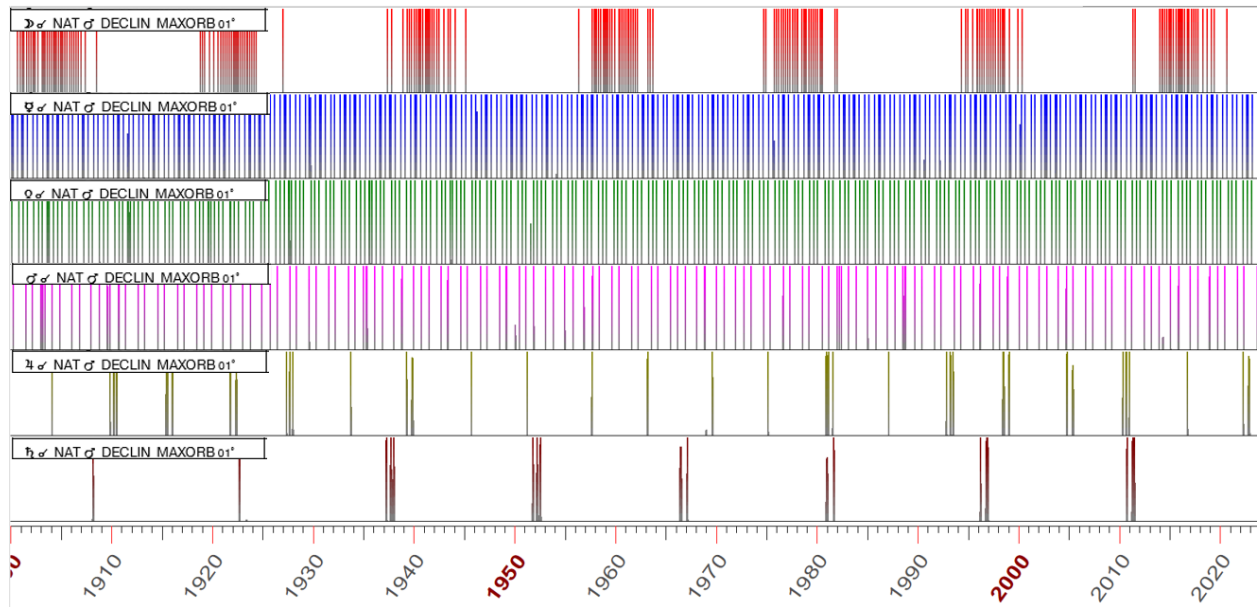


If we examine the transits of the 104 earthquakes to the nation chart of Türkiye, the results are below.

EVENT	OCCURRENCE	AVERAGE CONTROL	CHI SQ.	PROB	STAT
♄♂ NAT ♂ DECLIN MAXORB 01°	53	1.8	129.9	100.00%	OFTEN
♀♂ NAT ♂ DECLIN MAXORB 01°	32	2	63.5	100.00%	OFTEN
♀♂ NAT ♂ DECLIN MAXORB 01°	30	1.6	60	100.00%	OFTEN
♄♂ NAT ♂ DECLIN MAXORB 01°	23	1.6	42	100.00%	OFTEN
♂♂ NAT ♂ DECLIN MAXORB 01°	21	1.7	36.9	100.00%	OFTEN
♃♂ NAT ♂ DECLIN MAXORB 01°	17	2	26.1	100.00%	OFTEN
(♄)∈(Mc NAT)	26	8.9	20.1	100.00%	OFTEN
(♁)∈(XI NAT)	20	8.3	11.2	99.90%	OFTEN
(♃)∈(XI NAT)	21	9.3	10.6	99.90%	OFTEN
(♄)∈(XI NAT)	19	8.9	8.5	99.60%	OFTEN
(♀)∈(XI NAT)	18	8.8	7.3	99.30%	OFTEN
♀(*Δ) NAT ♃ MAXORB 02°	13	5.5	6.6	99.10%	OFTEN
♀(*Δ) NAT ♂ MAXORB 02°	11	4.3	6.4	98.90%	OFTEN
(♄)∈(XII NAT)	16	8	6.1	98.70%	OFTEN
(♁)∈(VI NAT)	15	7.4	5.7	98.30%	OFTEN
(♀)∈(Mc NAT)	17	9	5.7	98.30%	OFTEN
(♁)∈(XI NAT)	16	8.2	5.7	98.30%	OFTEN
♃(♂♁♂♂♂) NAT lc MAXORB 02°	17	9.1	5.4	98.00%	OFTEN
(♁)∈(XII NAT)	14	7	5.2	97.70%	OFTEN
♃(*Δ) NAT ♃ MAXORB 02°	11	4.8	5.2	97.70%	OFTEN
(♀)∈(XII NAT)	16	8.5	5.2	97.70%	OFTEN
(♂)∈(XII NAT)	16	8.6	5.1	97.60%	OFTEN
(♄)∈(lc NAT)	15	8.4	4.1	95.80%	OFTEN

What is interesting is the declination of the transiting planets to the declination of the Turkish natal Mars. The hits to Mars make up the top six criteria. The declination of Saturn to natal Mars is over half of the earthquakes.

If we look at how often these declinations occur shown in the chart below, one can see half the earthquakes occurred during the rare occurrence of Saturn parallel the natal Mars. That event happens every 14 years or so and only lasts periods of a few months.



Conclusions

This study shows some contributors that occur in earthquakes in Turkey, but there is additional work which needs to be done. Looking at additional criteria and developing a Neural Network model will help develop tools to be able to predict earthquakes in the future.