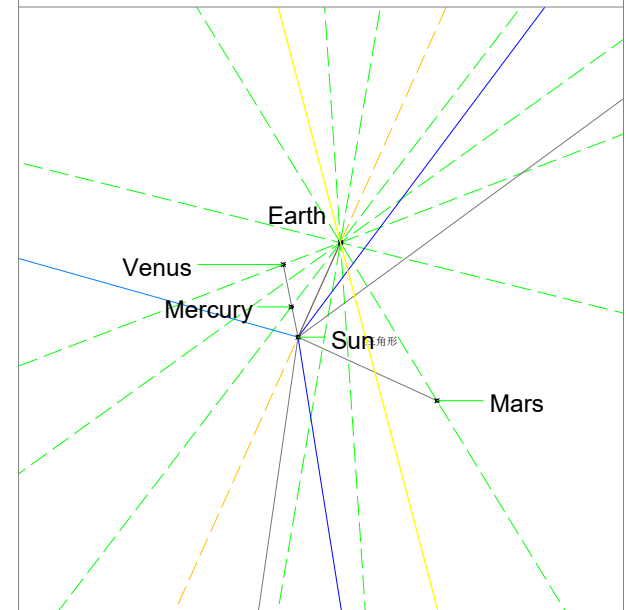


1575 Valdivia earthquake

Local date December 16, 1575
 Local time 14:30
 Magnitude 8.5
 Epicenter 39.8°S 73.2°W
 Areas affected Valdivia, Chile



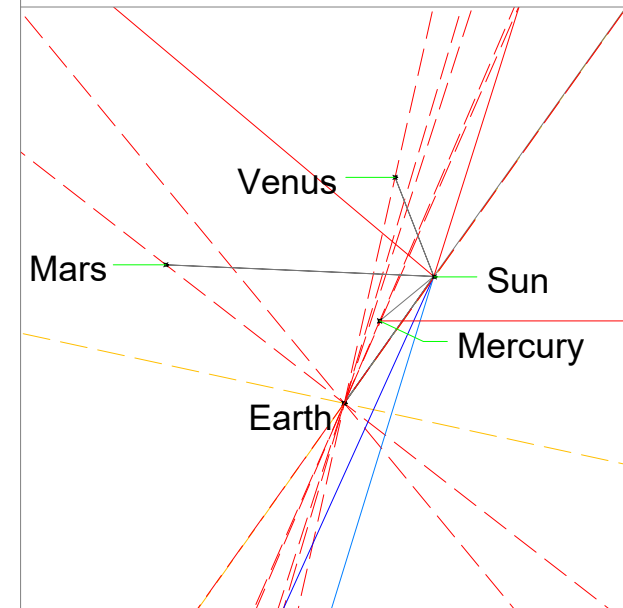
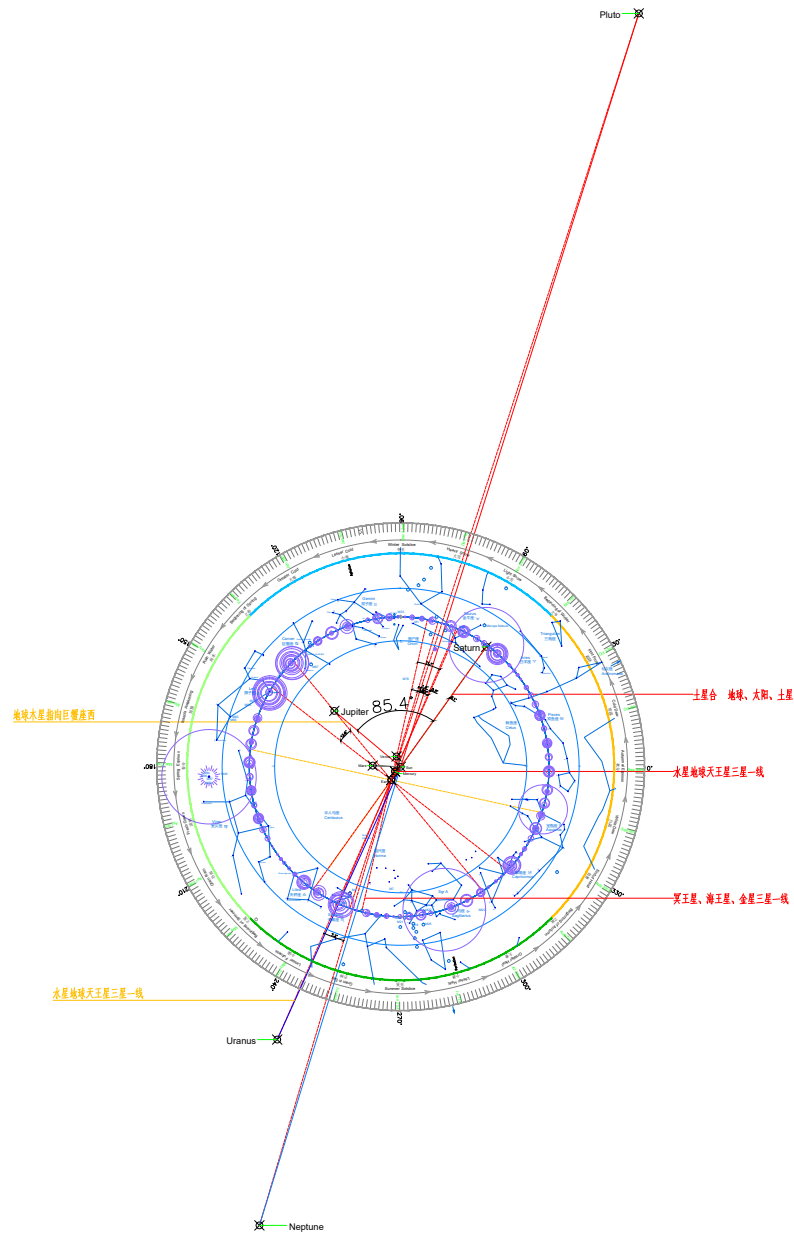
1604 Arica earthquake

Local date November 24, 1647

Magnitude 8.5 (est.)

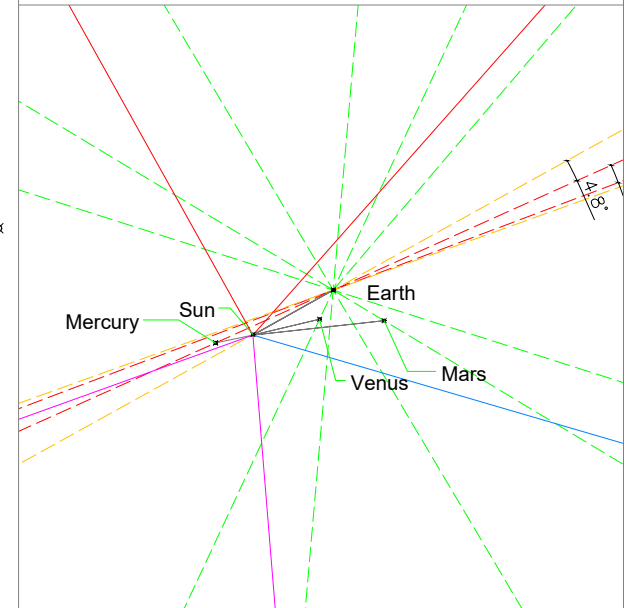
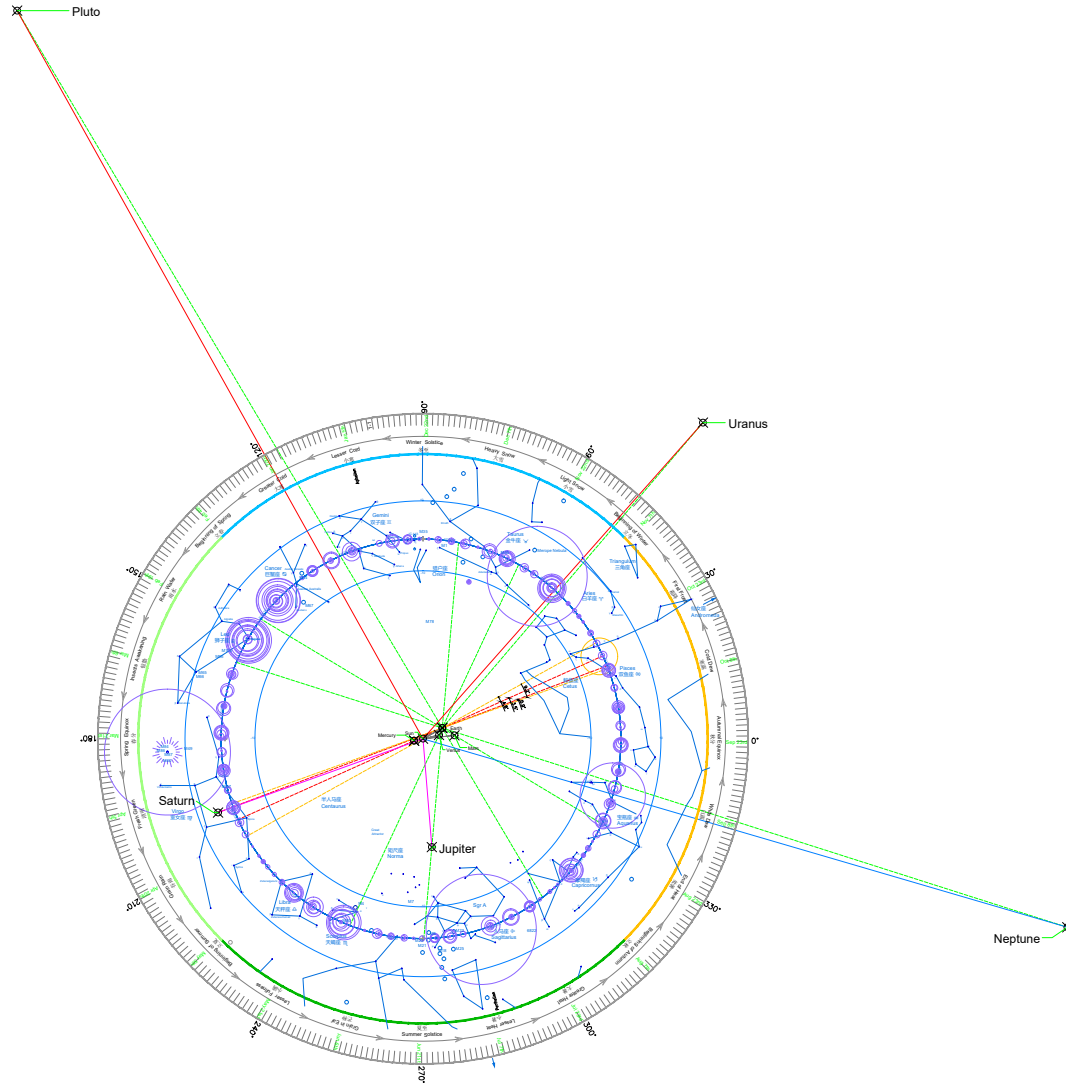
Epicenter

Areas affected Arica, Chile (then part of the Spanish Empire)



1647 Valparaiso earthquake

Local date May 14, 1647
Magnitude 8.5 Ms
Epicenter 33.4°S 70.6°W
Areas affected Chile
Casualties 1,000

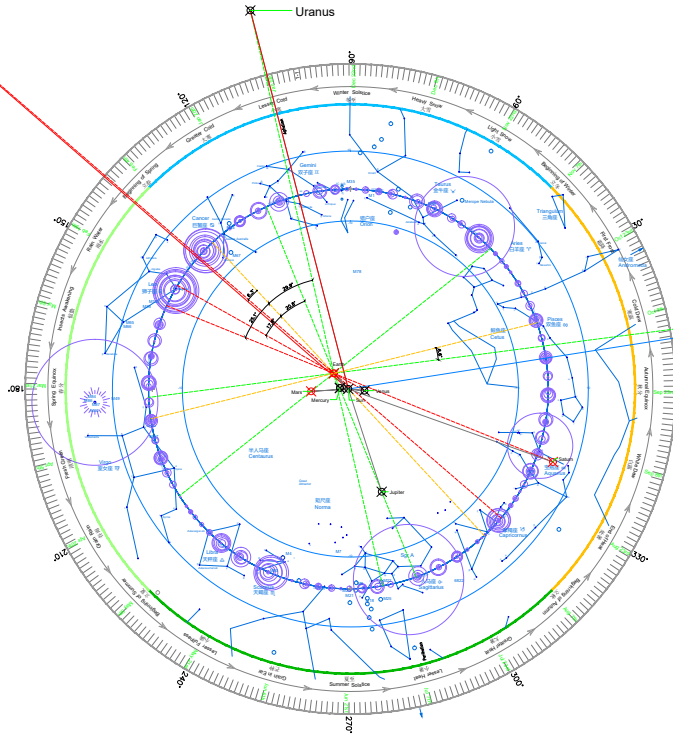


1687 Peru earthquake

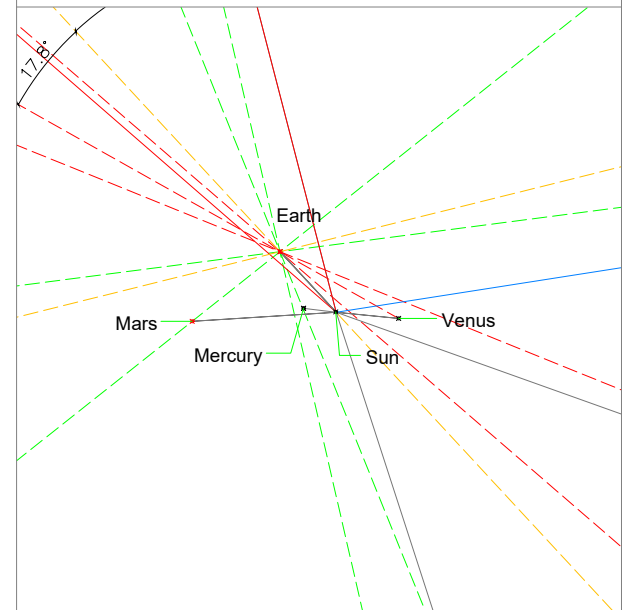
Local date 20 October 1687
Magnitude 8.7 Mw
Epicenter 15.2°S 75.9°W
Areas affected Peru
Tsunami Yes
Casualties 5,000

Pluto

Uranus

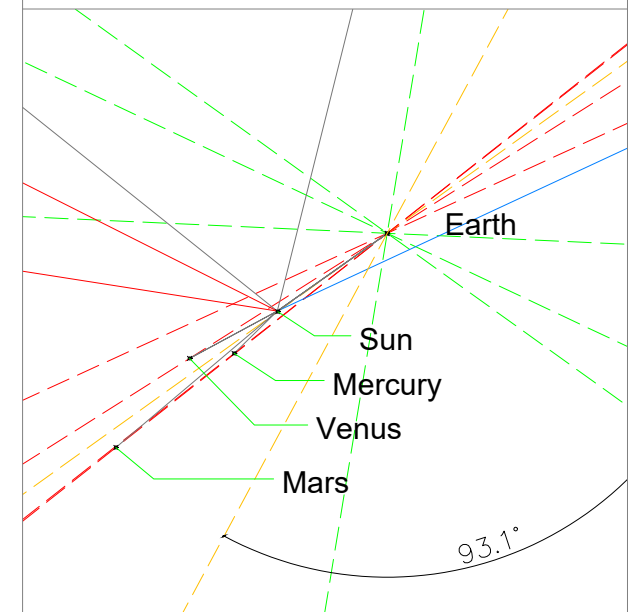
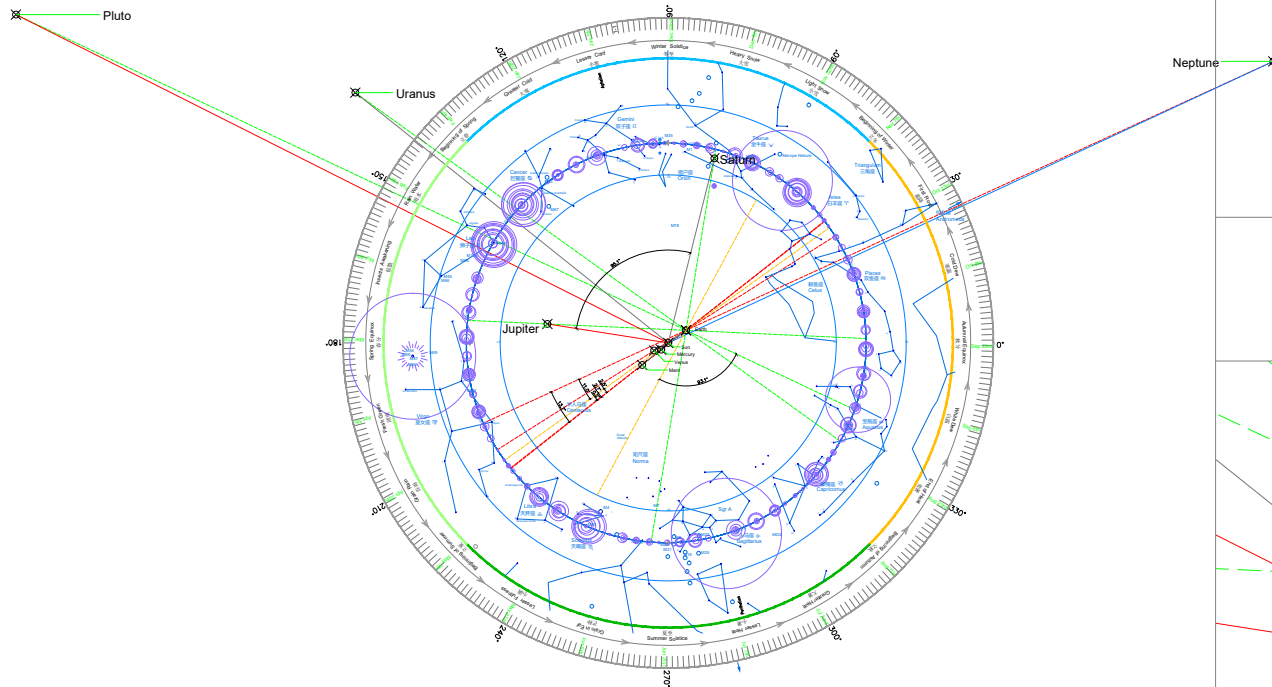


Neptune



1700 Cascadia earthquake

Local date January 26, 1700
Local time 21:00 local time
Magnitude 8.7–9.2 Mw
Epicenter 45°N 125°W
Fault Cascadia subduction zone
Type Megathrust
Tsunami Yes



1707 Hōei earthquake

Local date 28 October 1707

Local time 14:00

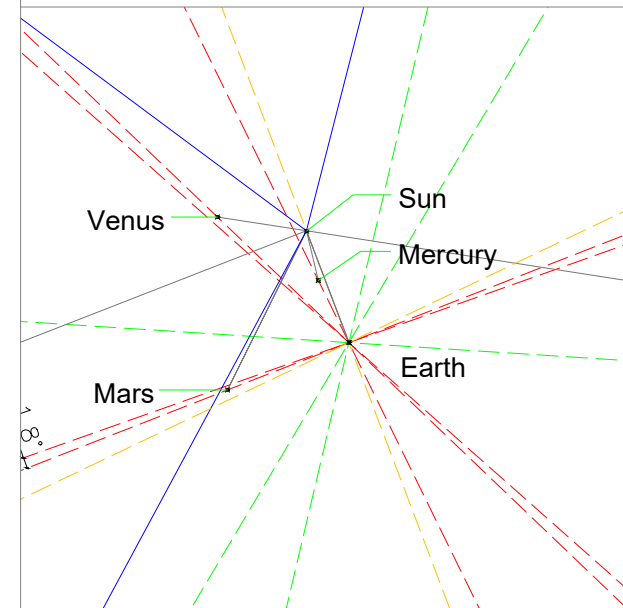
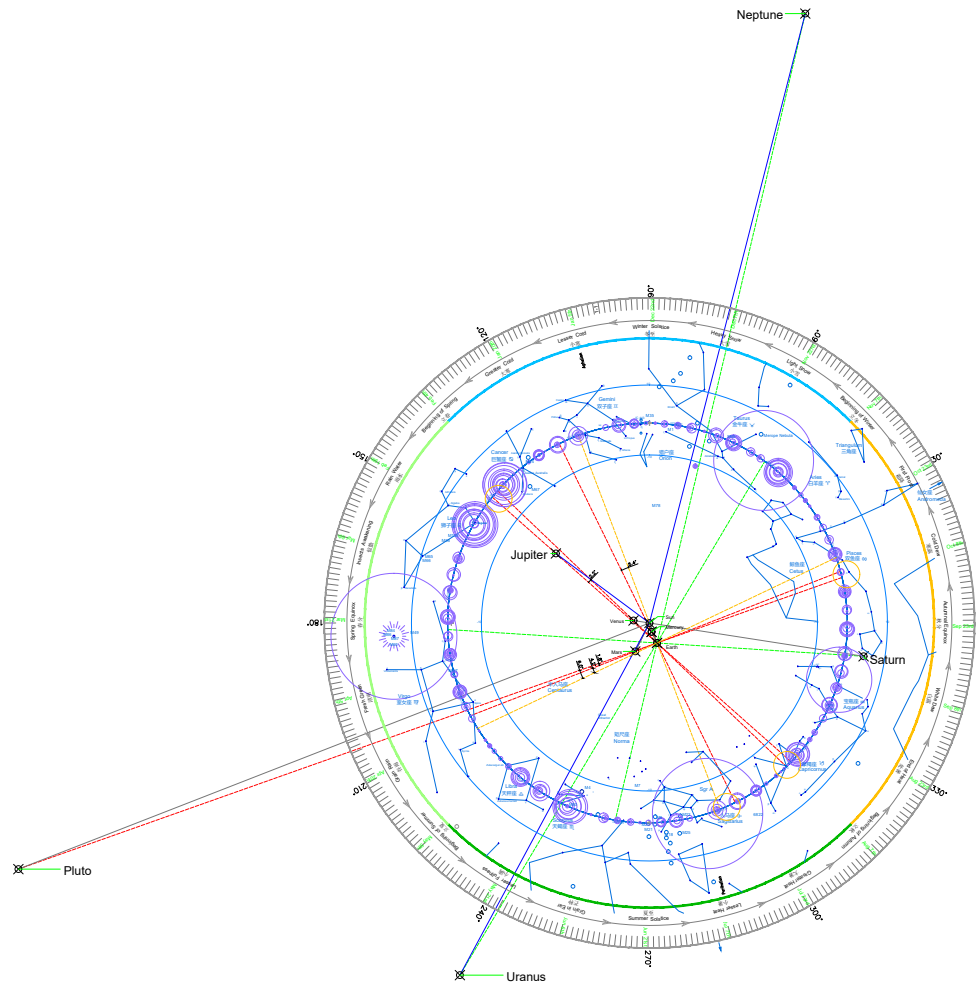
Magnitude 8.6 ML, Mw8.7 – 9.3 (est.)

Epicenter 33.0°N 136.0°E

Areas affected Japan: Chūbu region,
Kansai region, Shikoku, Kyūshū

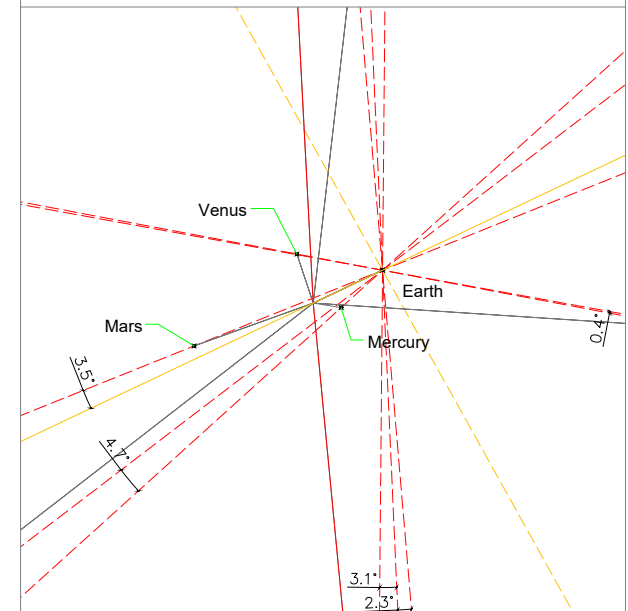
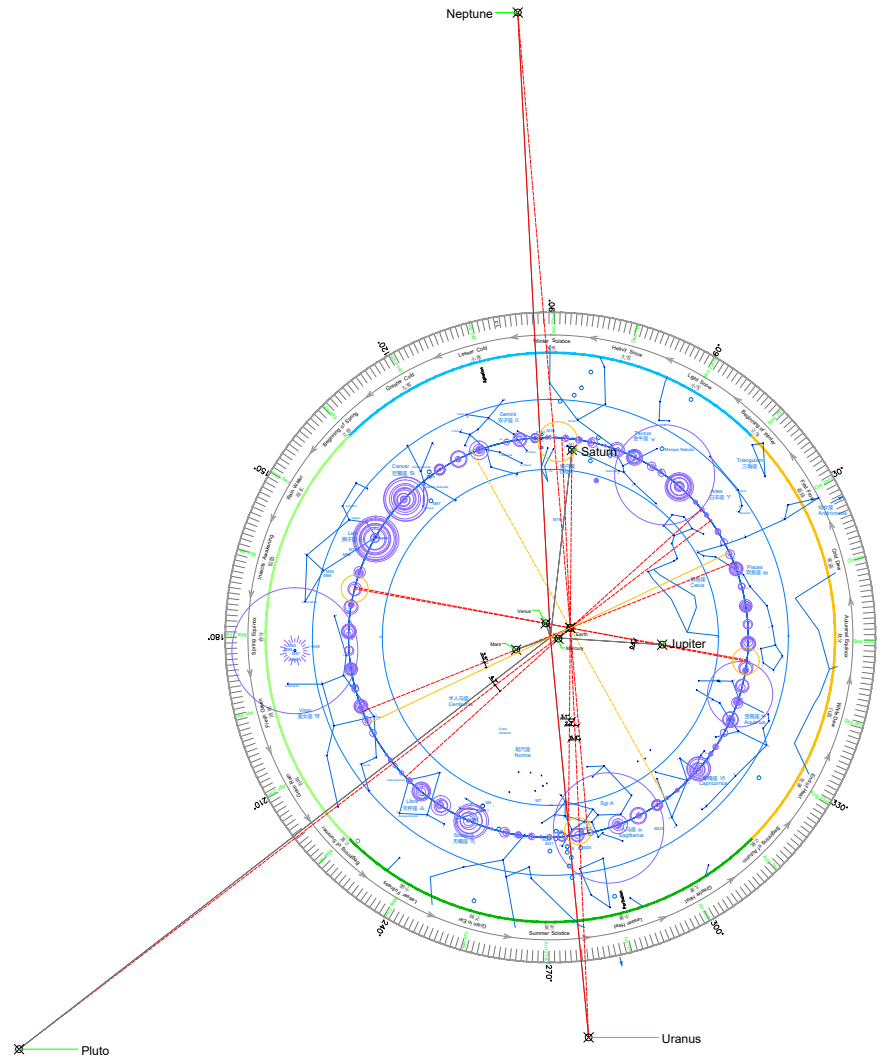
Tsunami yes

Casualties >5,000



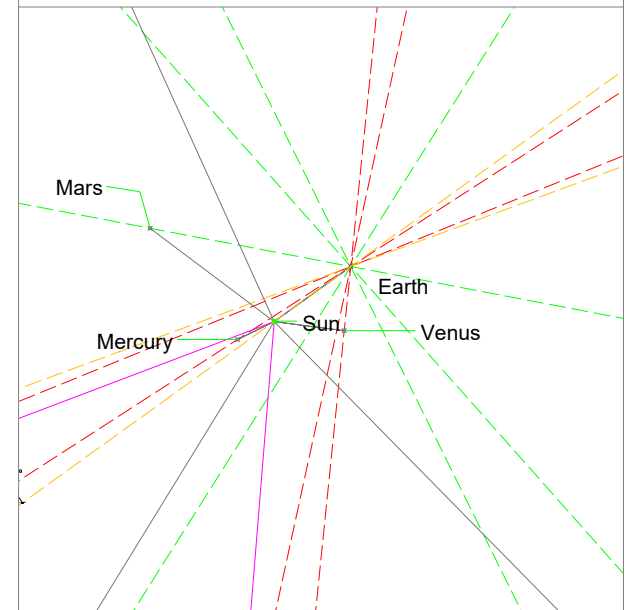
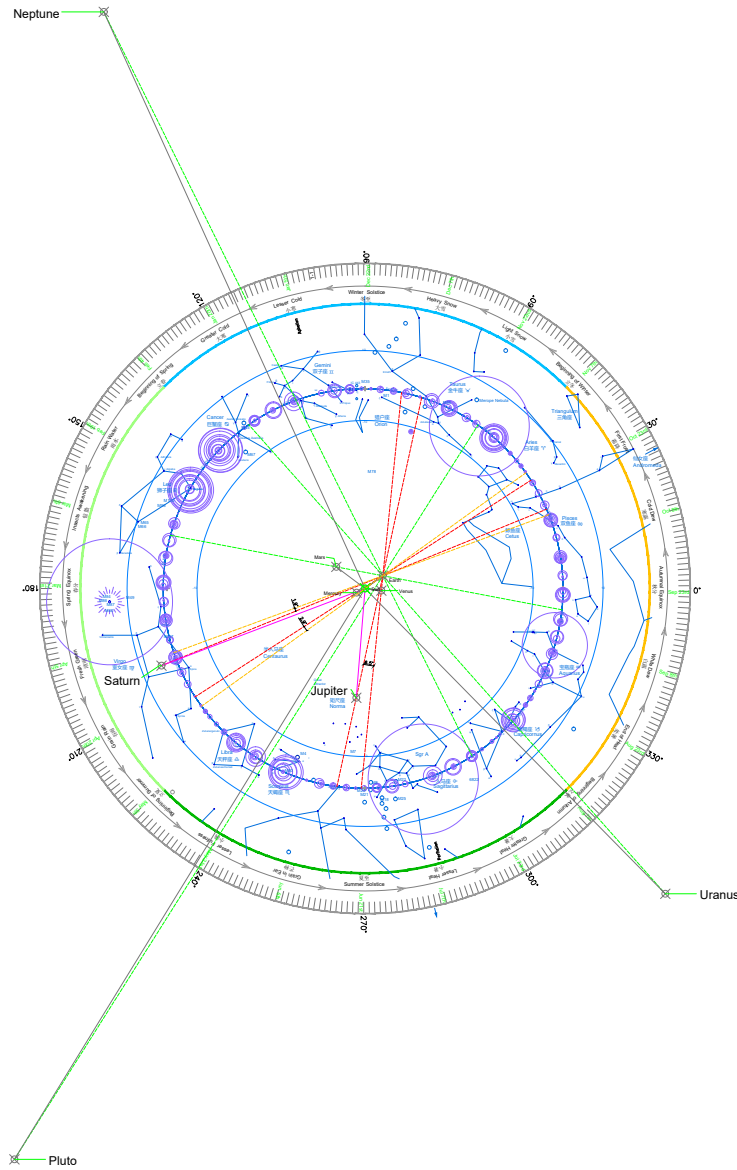
1730 Valparaíso earthquake

Local date July 8, 1730
Local time 04:45
Magnitude 8.7 Ms
Epicenter 32.5°S 71.5°W
Areas affected Chile
Tsunami Yes
Casualties Unknown



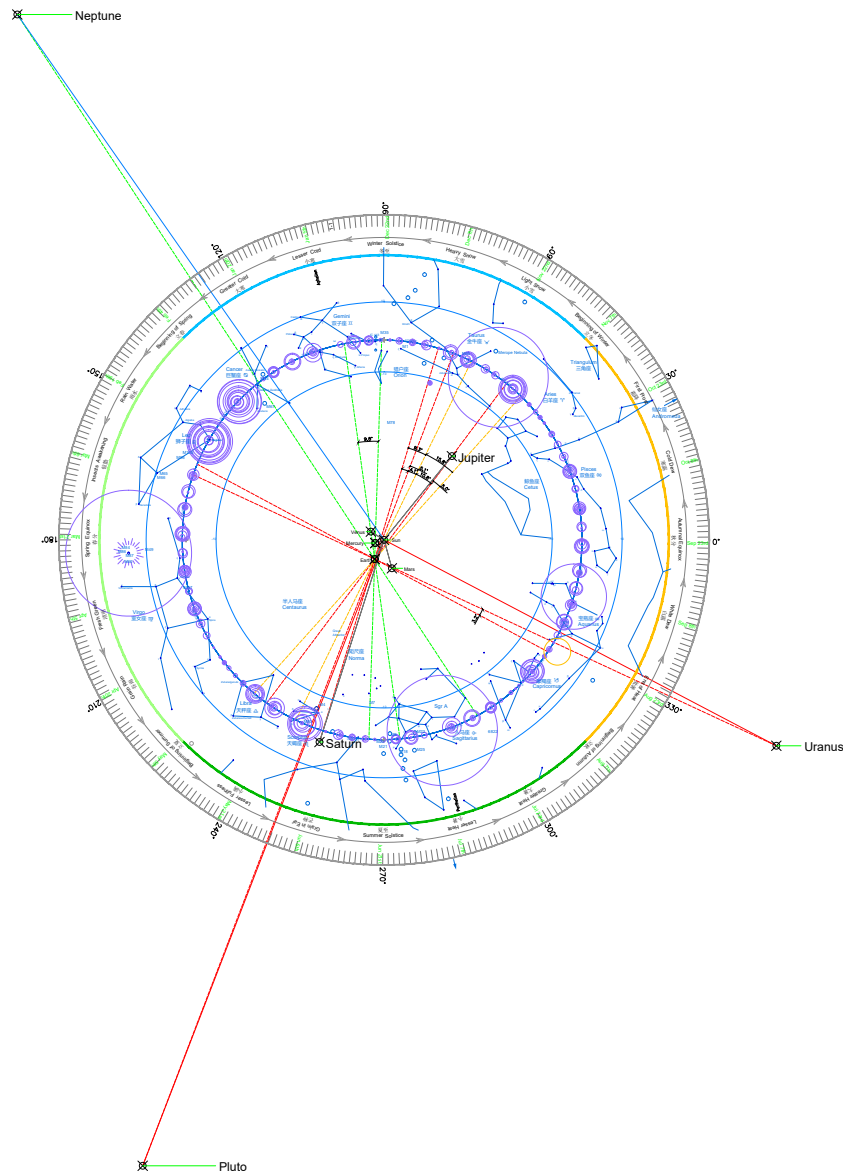
1737 Kamchatka earthquakes

Local date October 17, 1730
Local time
Magnitude 8.3 Ms (9.0Mw)
Epicenter 52.5°N 159.5°E
Areas affected Russia
Depth 40 km



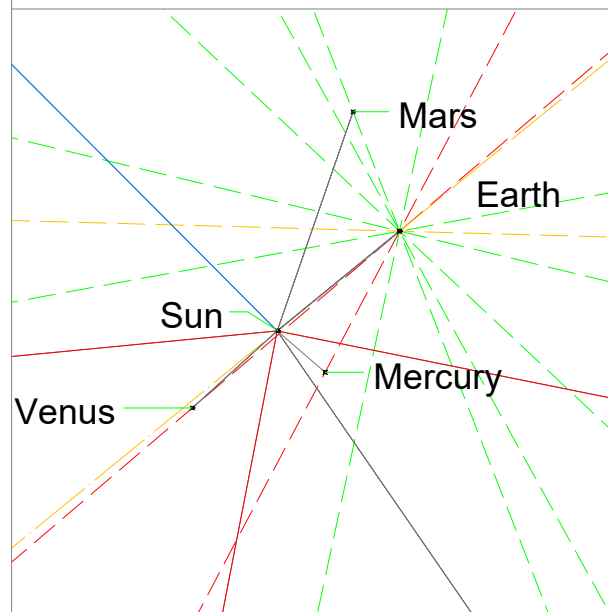
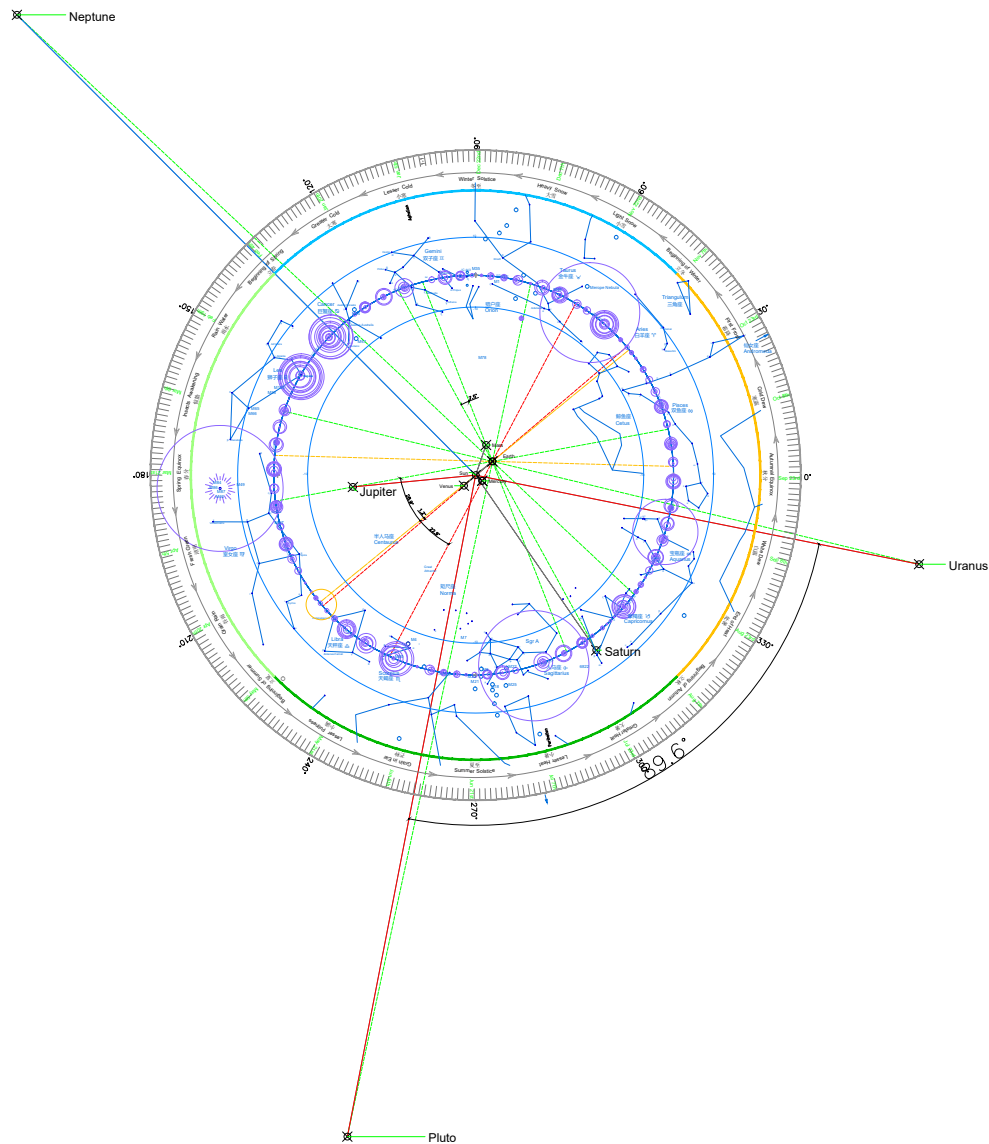
1746 Lima–Callao earthquake

Local date 28 October 1746
 Local time 22:30
 Magnitude 8.6–8.8 Mw
 Epicenter 11.35°S 77.28°W
 Areas affected Peru
 Max. intensity XI (Extreme)
 Tsunami Yes
 Casualties 5,941



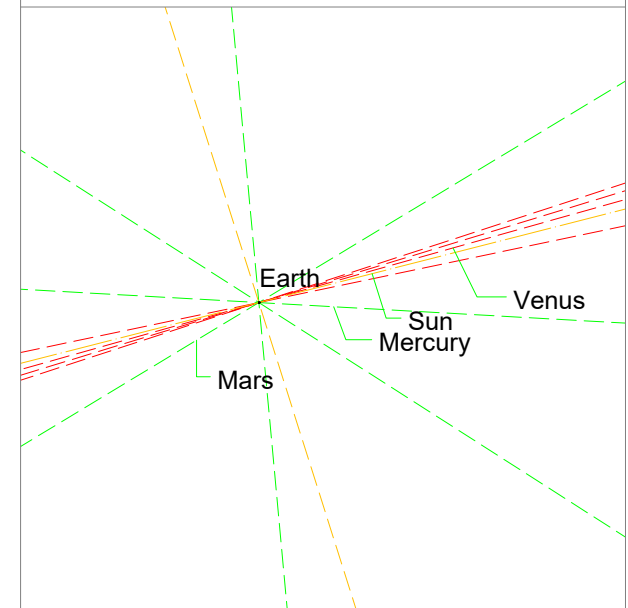
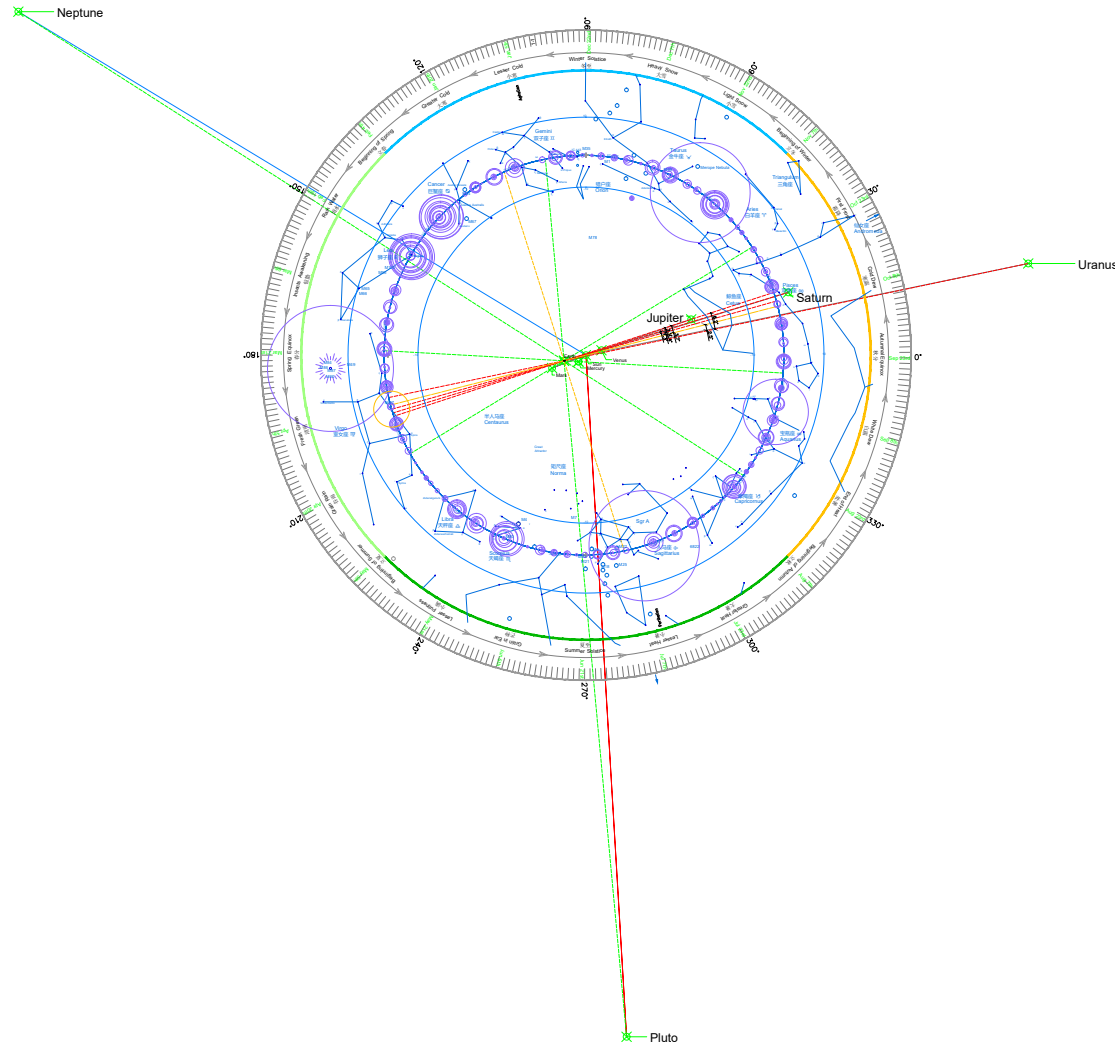
1751 Concepción earthquake

Local date 25 May 1751
Local time 01:00
Magnitude 8.5
Epicenter 36.8°S 73°W
Areas affected Kingdom of Chile
Casualties ~65 killed



1755 Lisbon earthquake

Local date 1 November 1755
 Local time 09:40
 Magnitude 8.5–9.0 Mw (est.)
 Epicenter 36°N 11°W
 About 200 km (120 mi) west-southwest of Cape St. Vincent
 Areas affected Kingdom of Portugal, Kingdom of Spain, Kingdom of Morocco. The tsunami affected Southern Great Britain and Ireland
 Max. intensity XI (Extreme)
 Casualties 10,000–100,000 deaths



1762 Arakan earthquake

Local date 2 April 1762

Local time 17:00

Magnitude ≤ 8.8 Mw

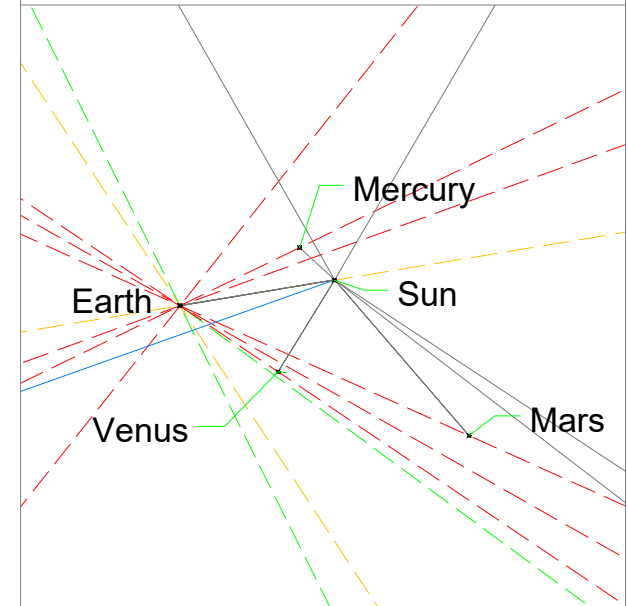
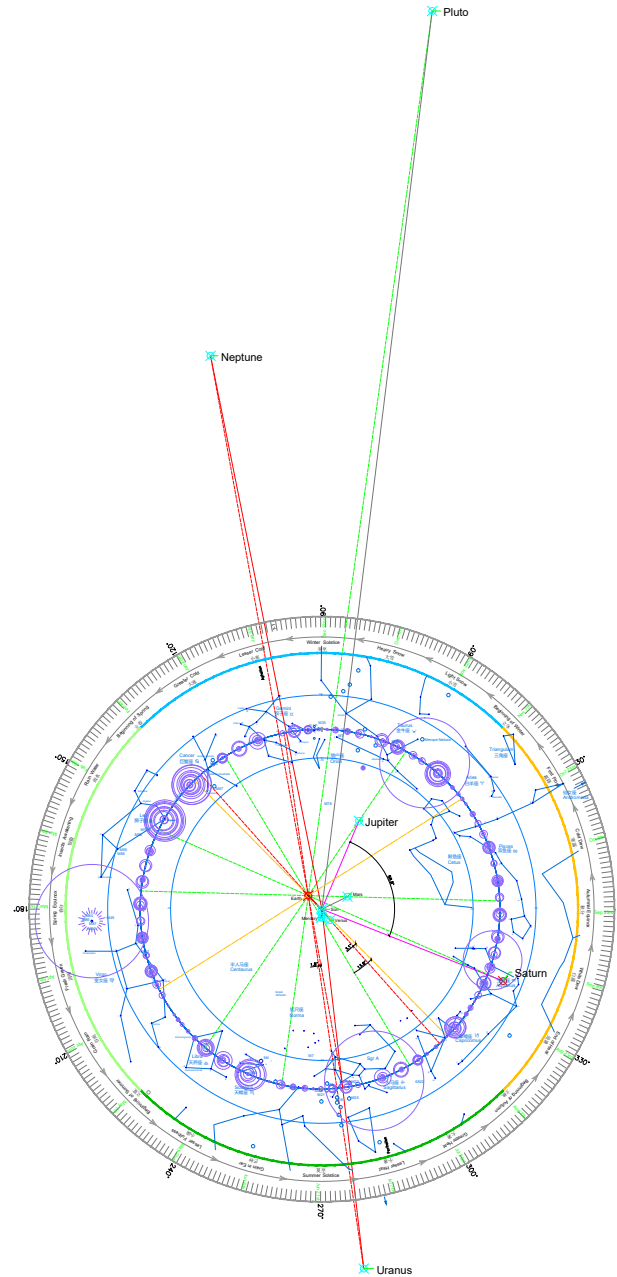
Epicenter 22.0°N 92.0°E
Coordinates: 22.0°N
92.0°E

Areas affected Bangladesh

Max. intensity XI (Extreme)

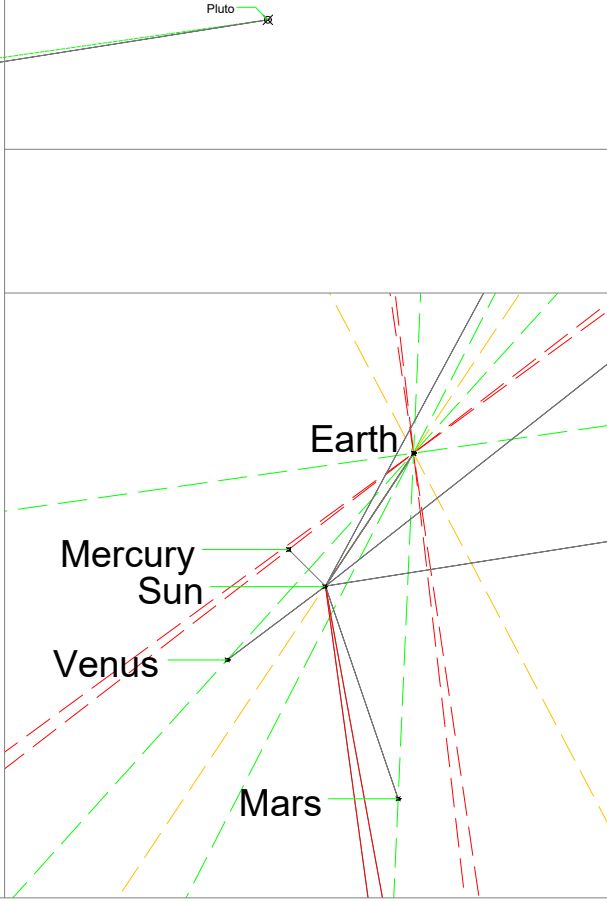
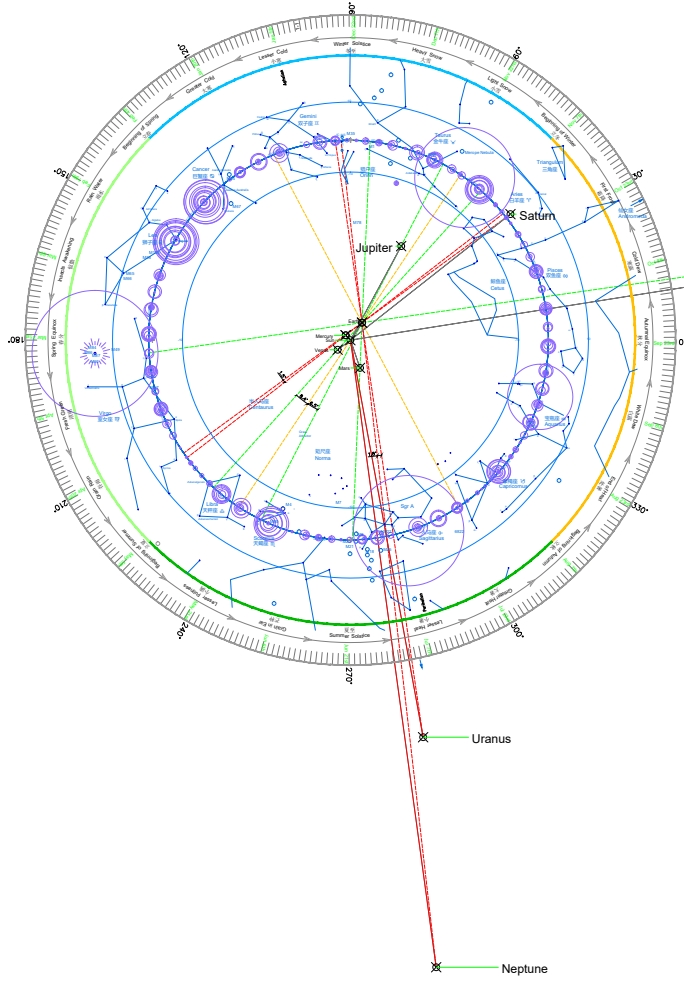
Tsunami Yes

Casualties 200+



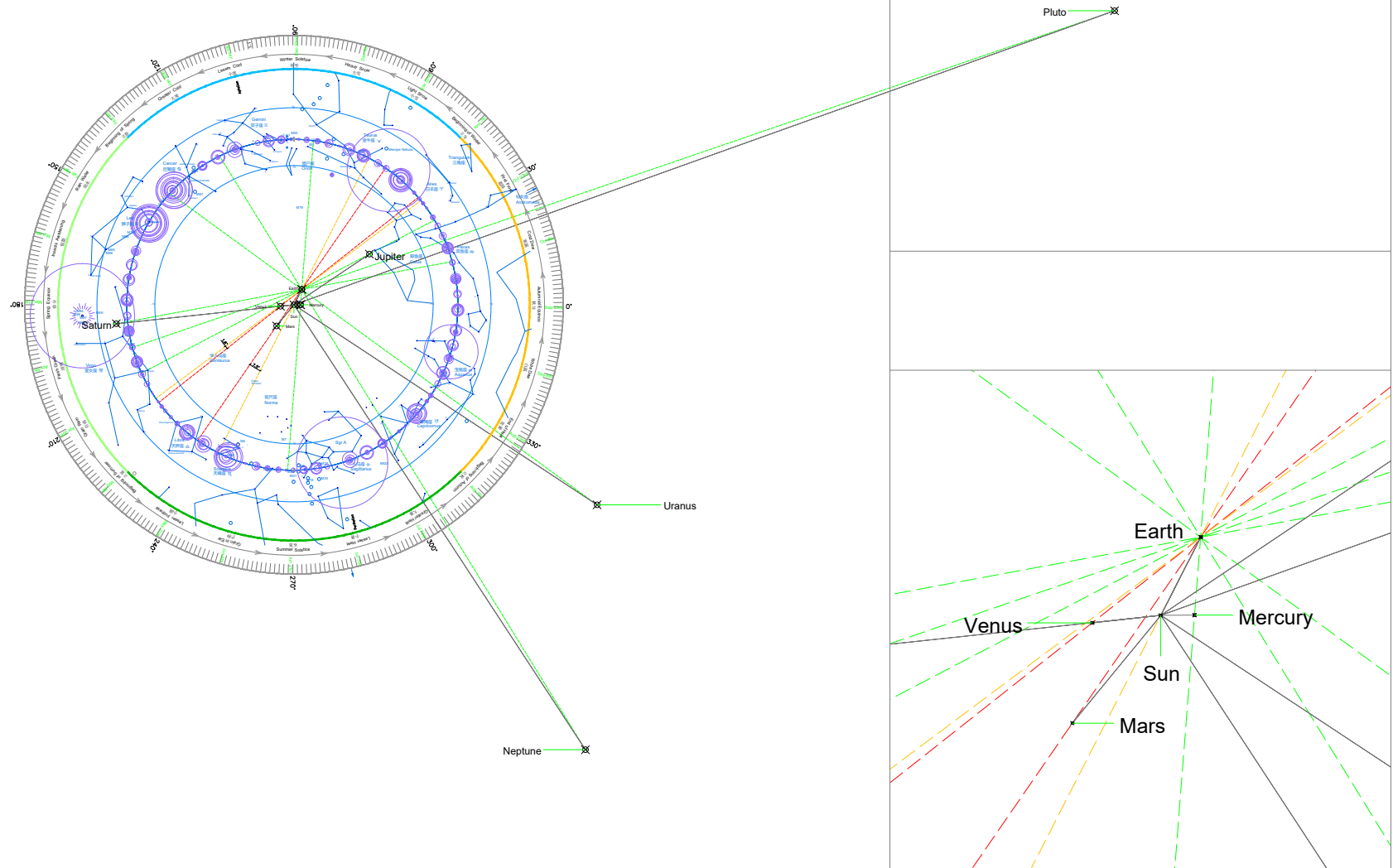
1787 New Spain earthquake

Local date 28 March 1787
 Local time 11:30
 Magnitude 8.6 Mw
 Epicenter 16.5°N 98.5°W
 Type Megathrust
 Areas affected New Spain
 Total damage Severe
 Tsunami Yes
 Casualties 11 killed in the tsunami, total unknown



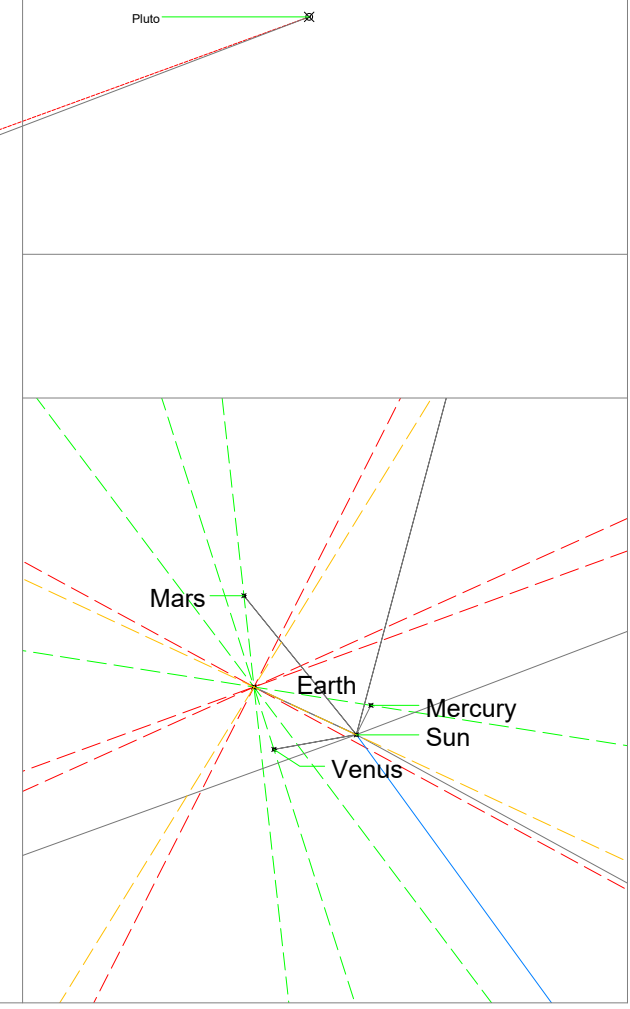
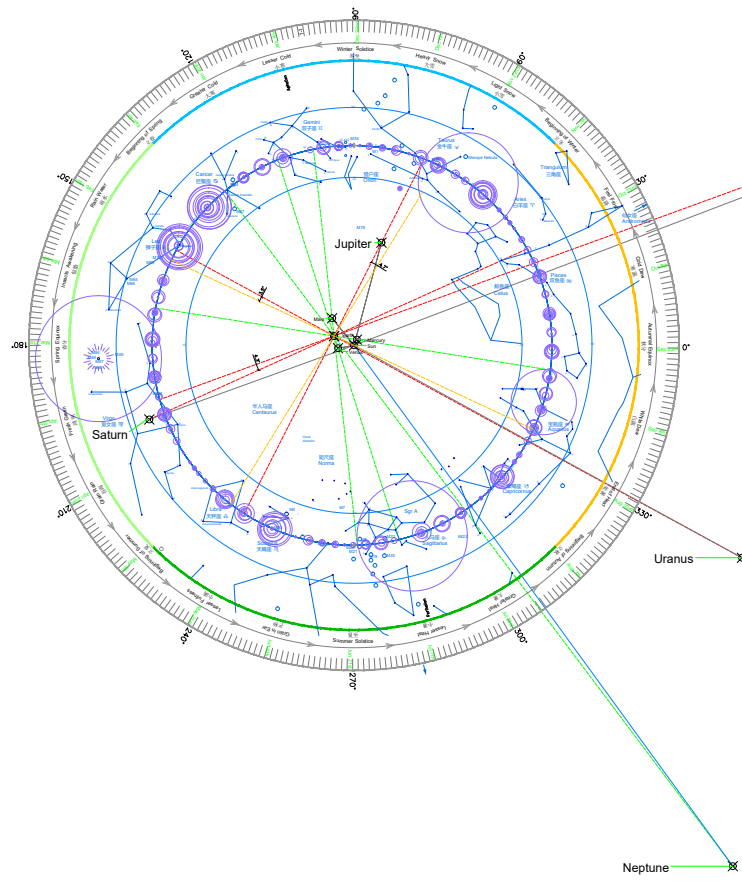
1822 Valparaíso earthquake

Local date **November 19, 1822**
Local time
Magnitude **8.5 MS**
Epicenter **33.050°S 71.630°W**



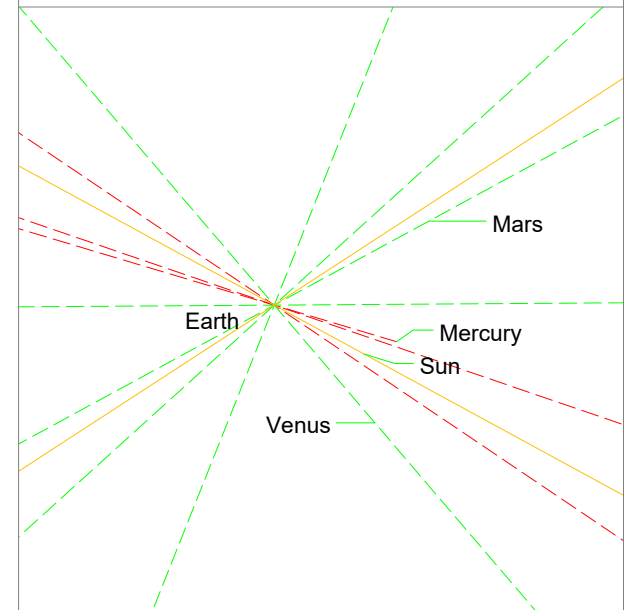
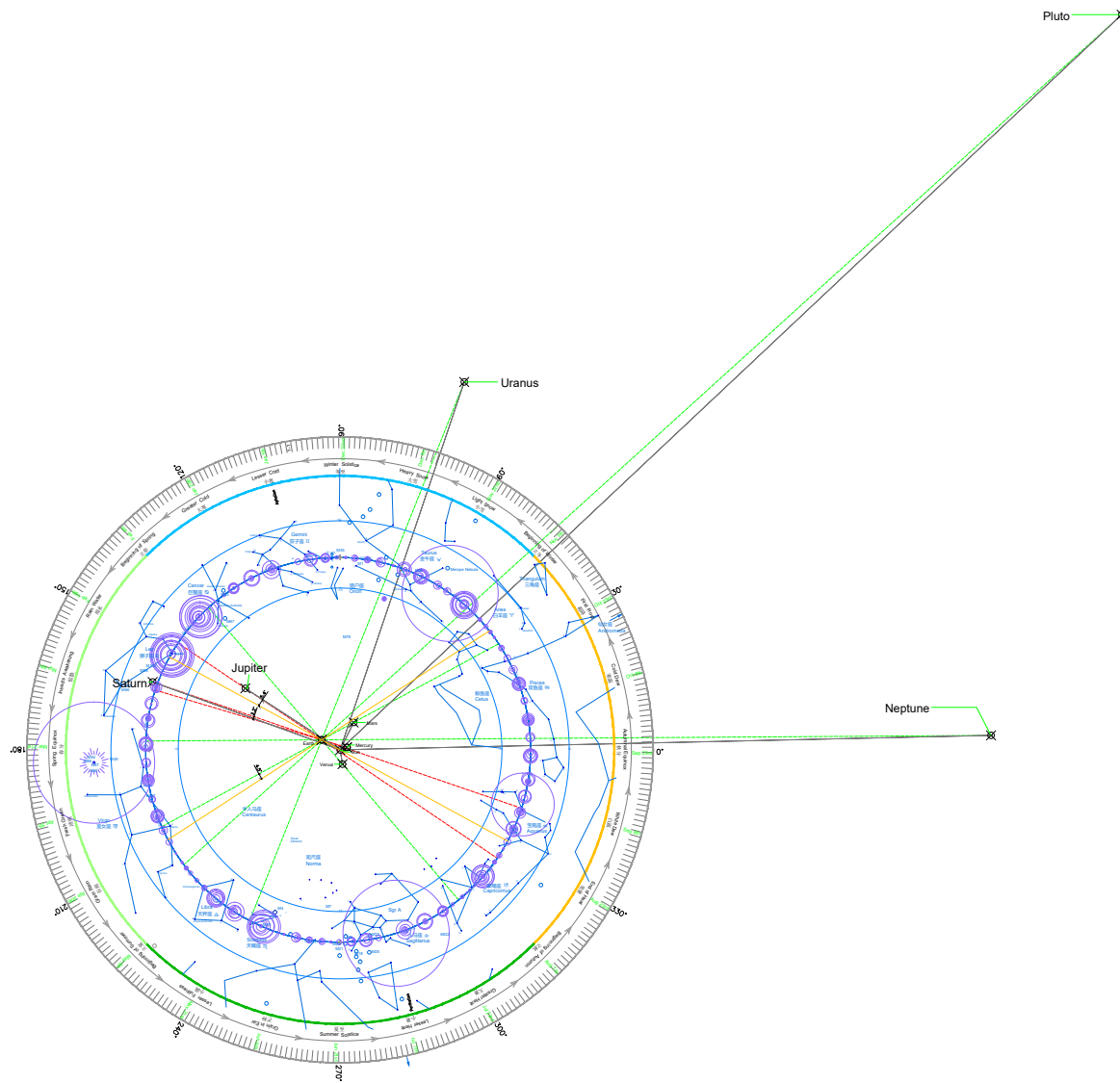
1833 Sumatra earthquake

Local date November 25, 1833
Local time 22:00
Magnitude 8.8–9.2 Mw
Epicenter 2.5°S 100.5°E
Areas affected Sumatra, Dutch East Indies
Casualties unknown



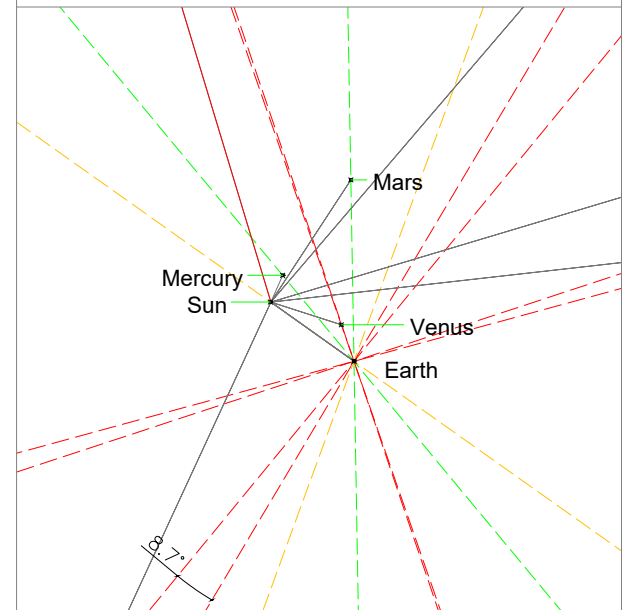
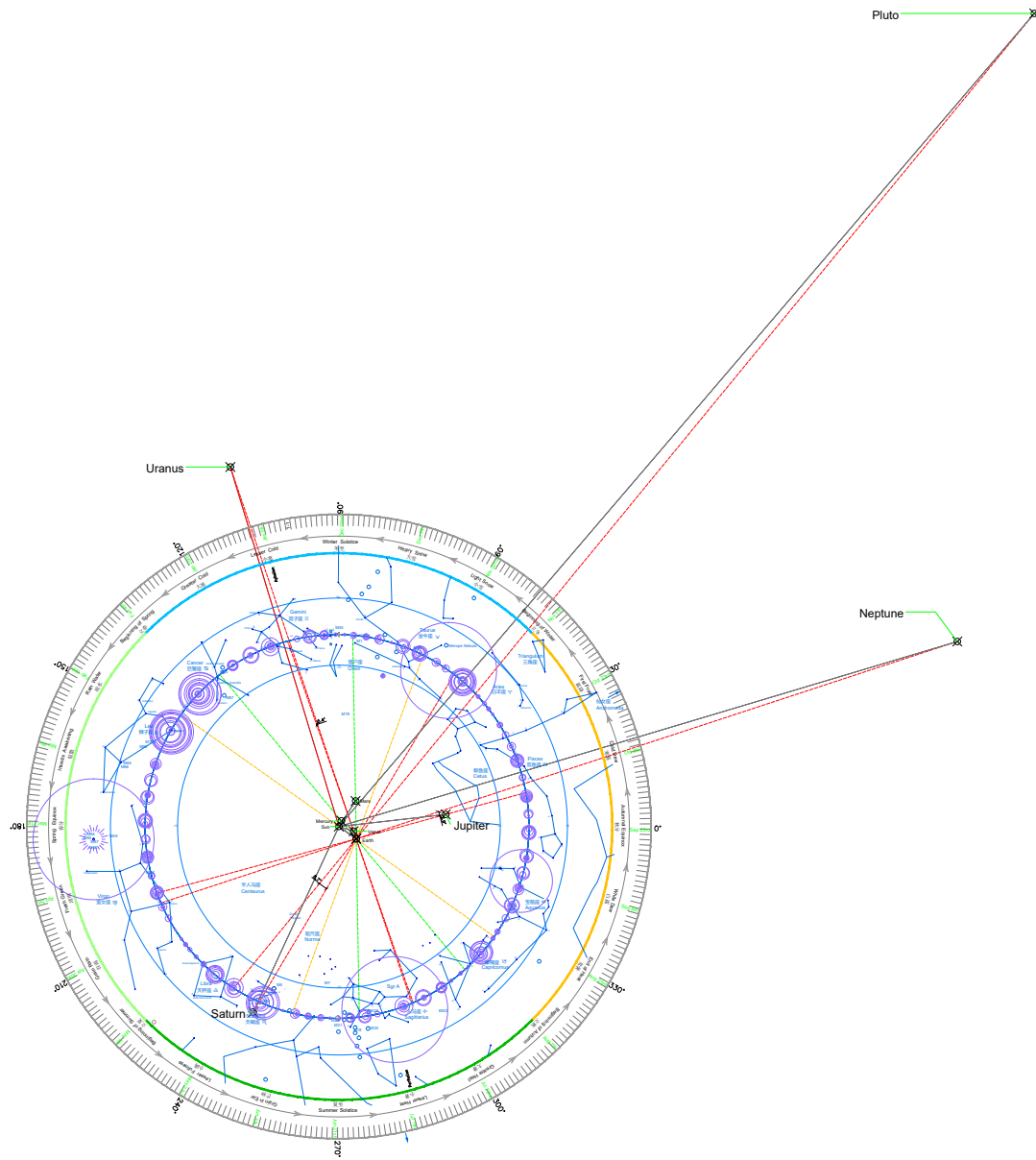
1835 Concepción earthquake

Local date 20 February 1835
Magnitude 8.2 Ms
Epicenter 36.8°S 73.0°W
Areas affected Chile
Tsunami yes
Casualties >50



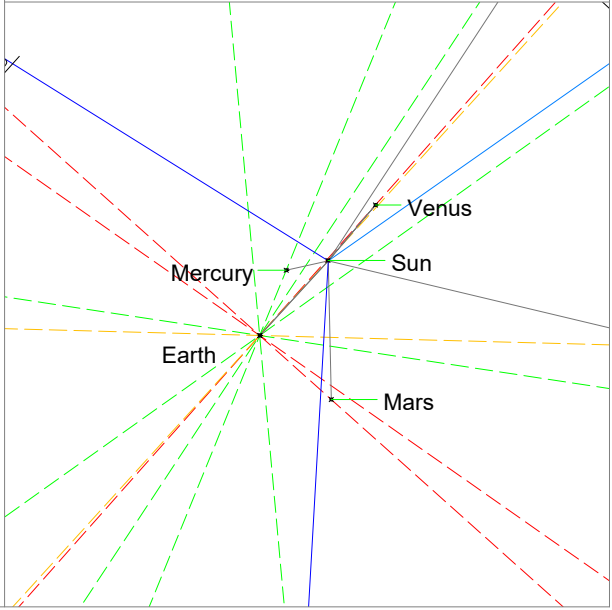
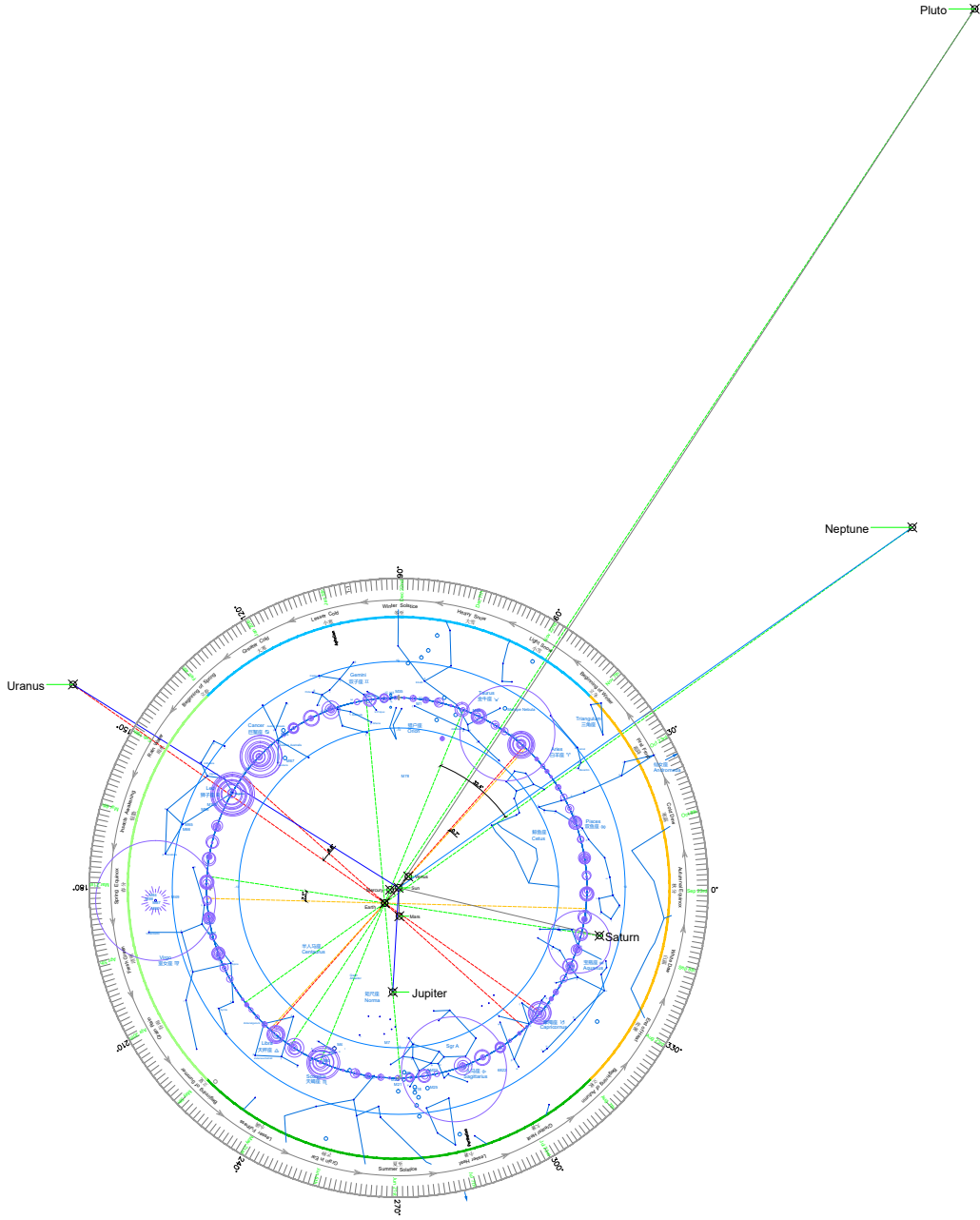
1861 Sumatra earthquake

Local date February 16, 1861
Magnitude 8.5 Mw
Epicenter 1.0°N 97.5°E
Areas affected Sumatra, Dutch East Indies
Tsunami yes
Casualties several thousand



1868 Arica earthquake

Local date 13 August 1868
 Local time 16:45
 Magnitude 8.5–9.0 Mw (est.)
 Epicenter 18.5°S 71.0°W
 Areas affected Peru and northern Chile
 Max. intensity XI (Extreme)
 Casualties 25,000+



1877 Iquique earthquake

Local date May 9, 1877

Local time 21:16

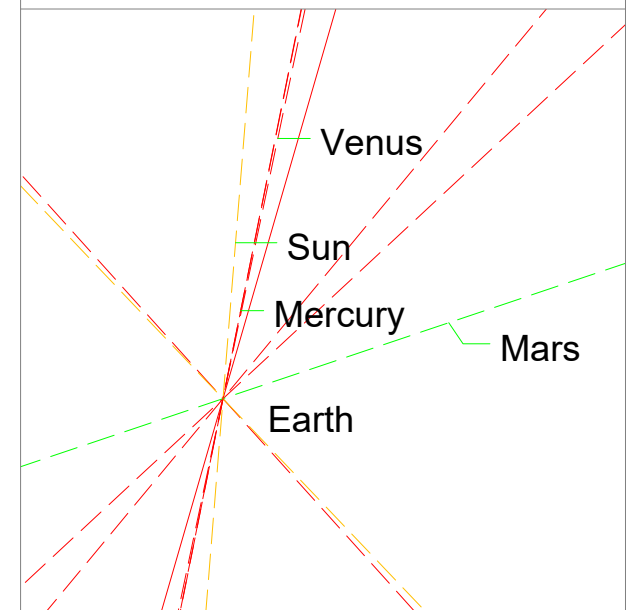
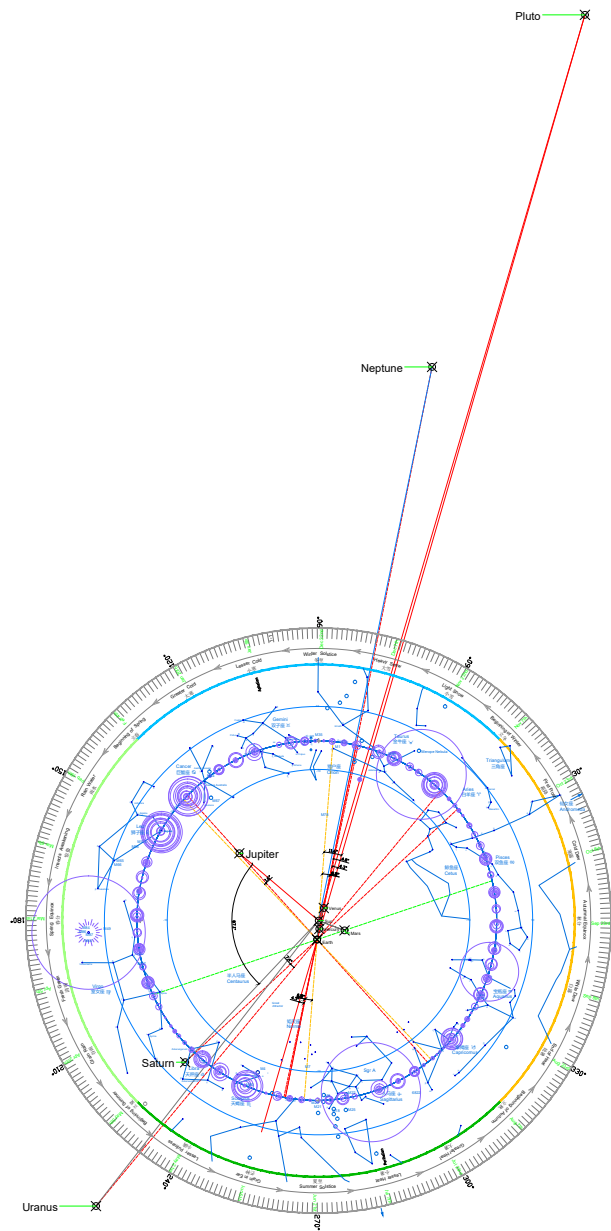
Magnitude 8.5 Ms, 9 M

Epicenter 19.6°S 70.2°W

Areas affected Peru, Tarapacá Region and Bolivia,
Antofagasta Region (both now part of Chile)

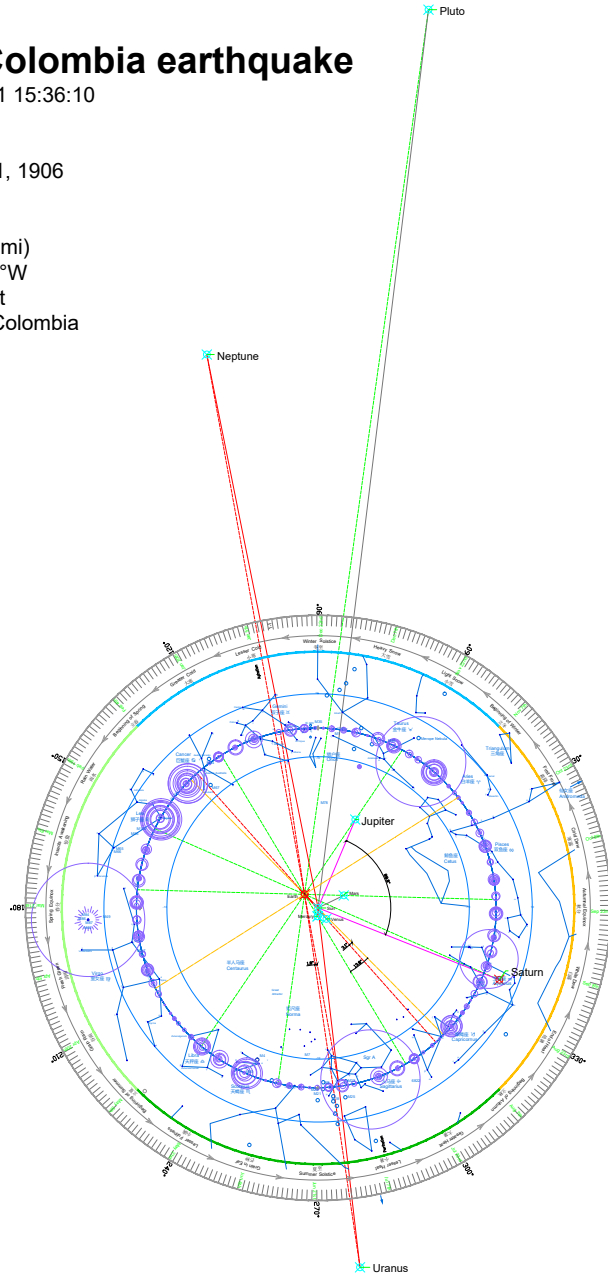
Tsunami Yes

Casualties 2,385

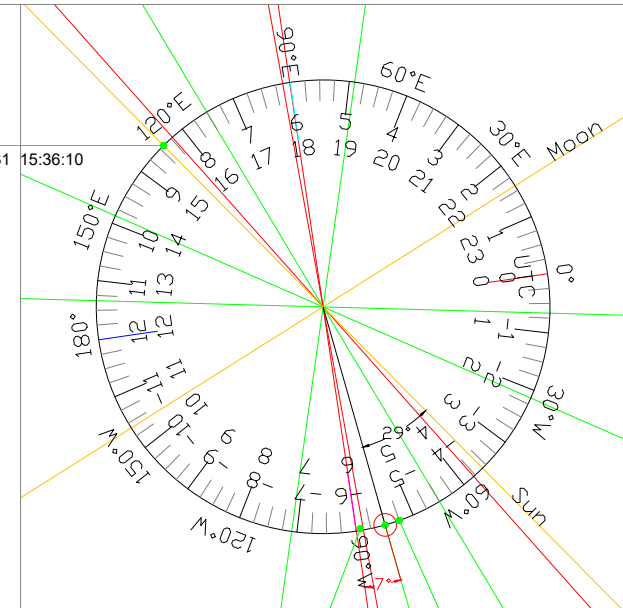


1906 Ecuador-Colombia earthquake

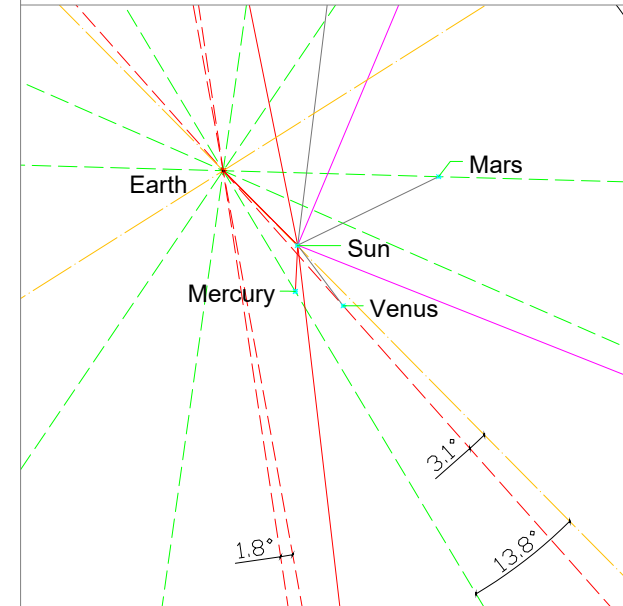
UTC time 1906-01-31 15:36:10
 ISC event 16957884
 USGS-ANSS ComCat
 Local date January 31, 1906
 Local time 10:00
 Magnitude 8.8 Mw
 Depth 20 km (12 mi)
 Epicenter 1.0°N 81.5°W
 Type Megathrust
 Areas affected Ecuador, Colombia
 Tsunami 5 m (16 ft)
 Casualties ~1,000



UTC time
 1906-01-31 15:36:10

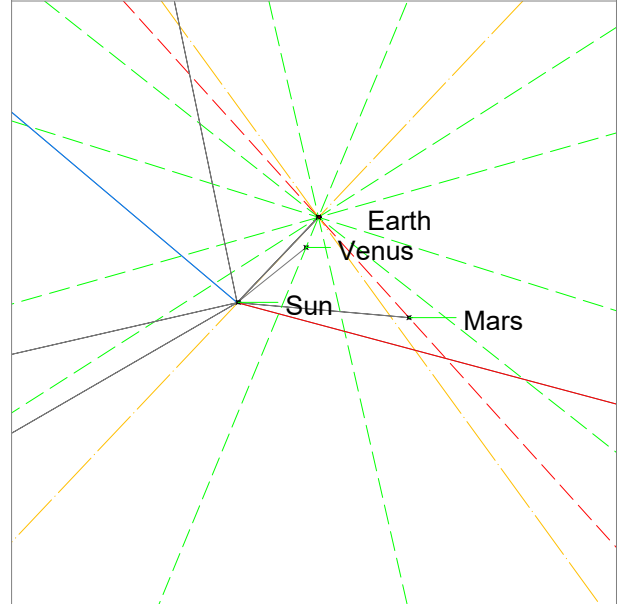
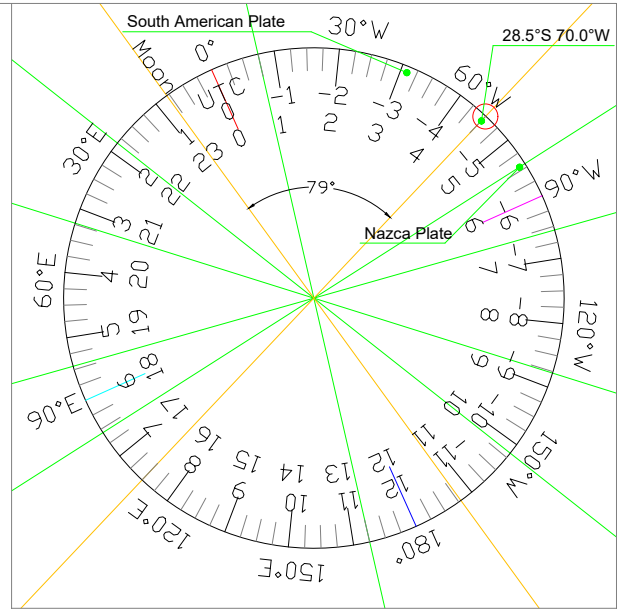
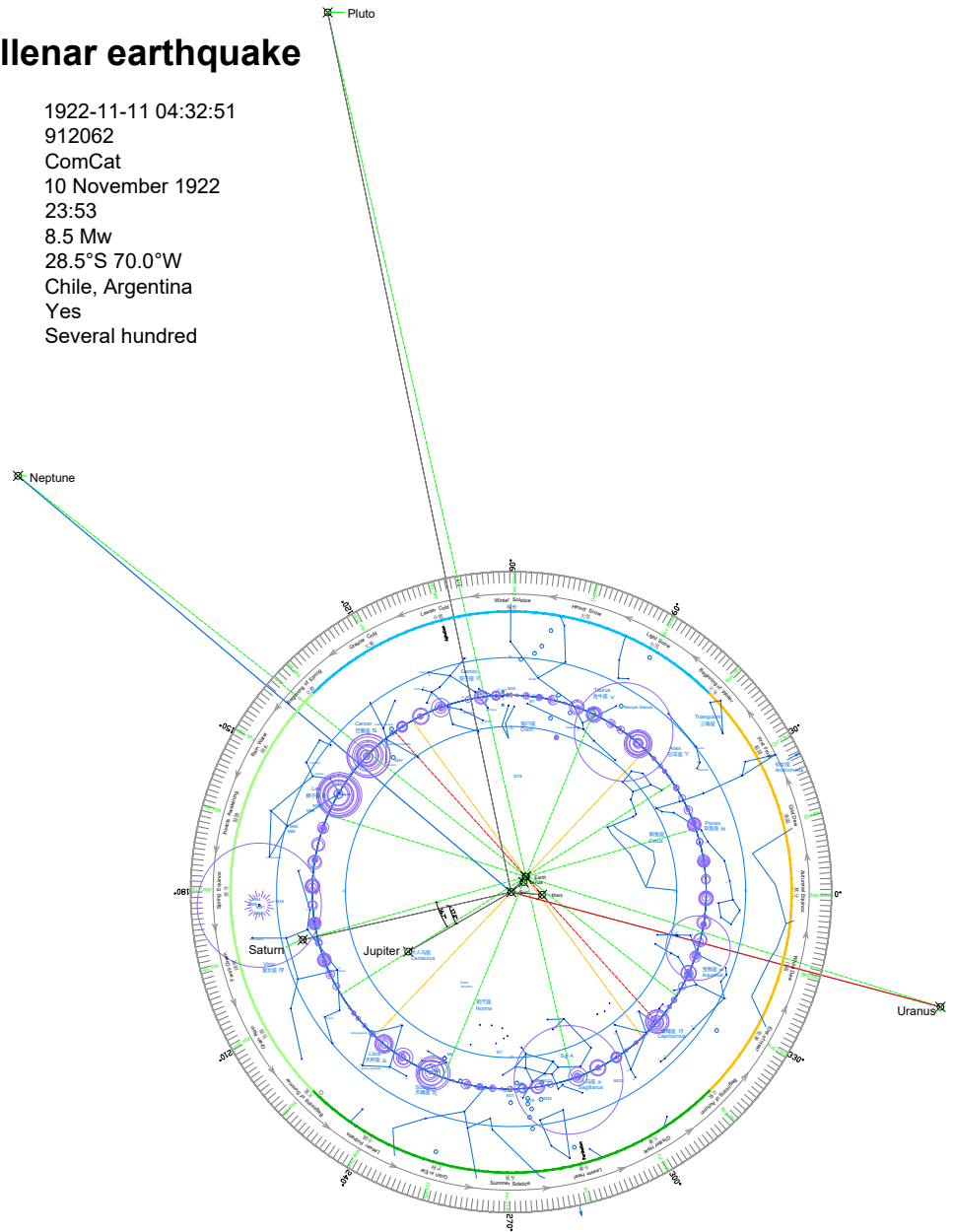


Cocos Plate Nazca Plate South American Plate
 The operation time is about 30 minutes
 1.0°N 81.5°W



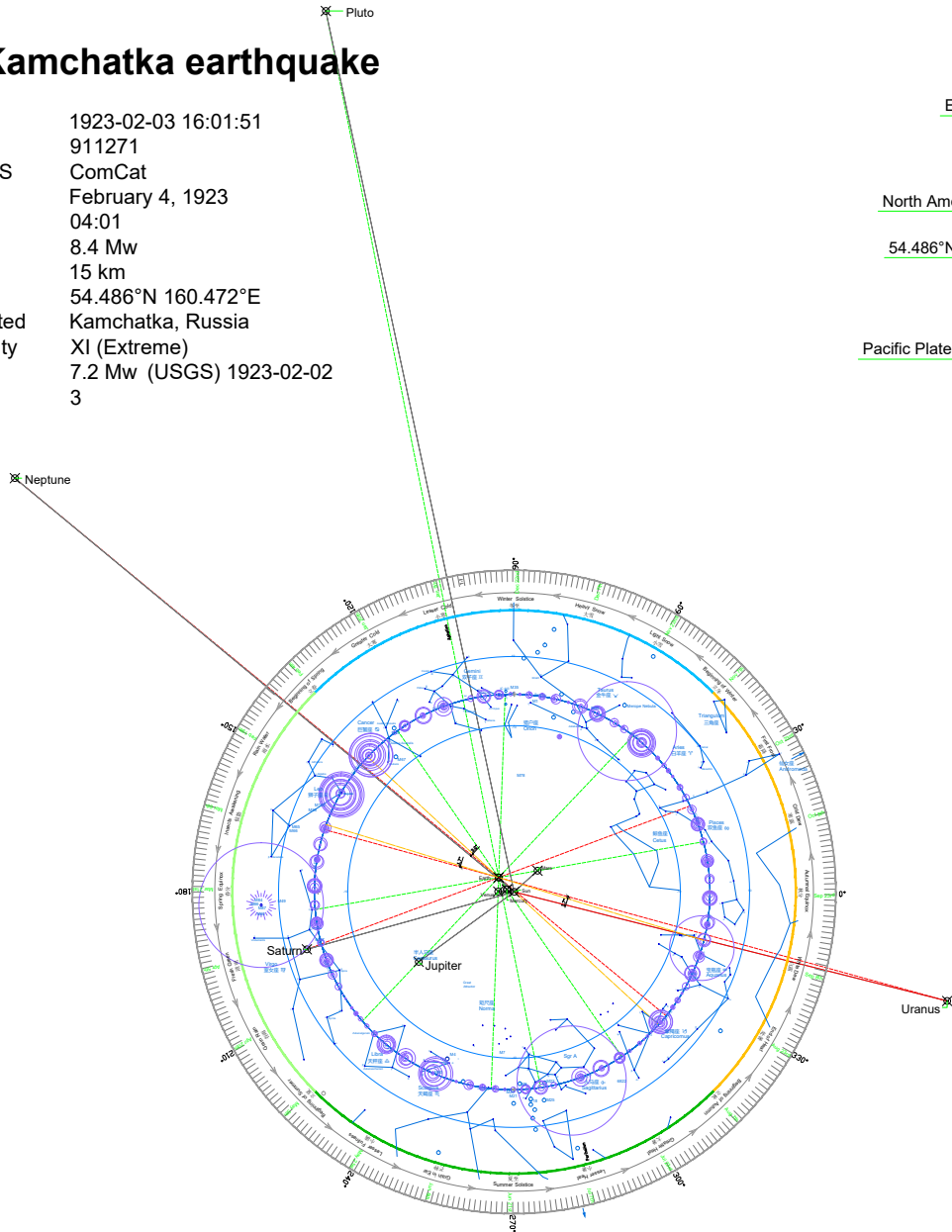
1922 Vallenar earthquake

UTC time 1922-11-11 04:32:51
 ISC event 912062
 USGS-ANSS ComCat
 Local date 10 November 1922
 Local time 23:53
 Magnitude 8.5 Mw
 Epicenter 28.5°S 70.0°W
 Areas affected Chile, Argentina
 Tsunami Yes
 Casualties Several hundred



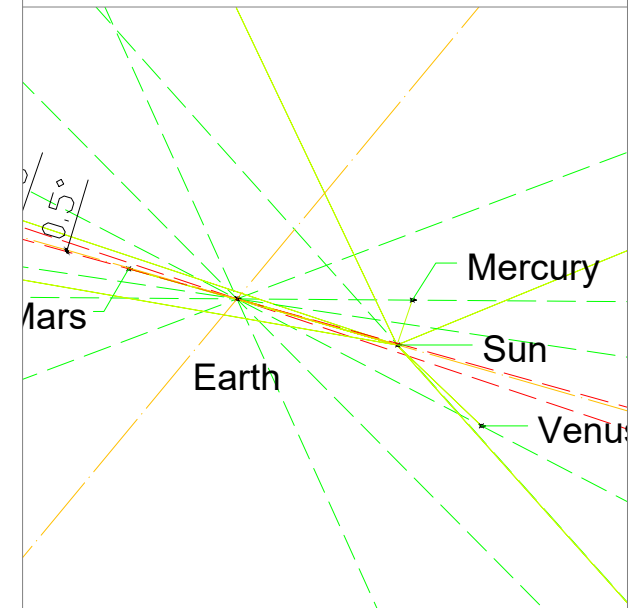
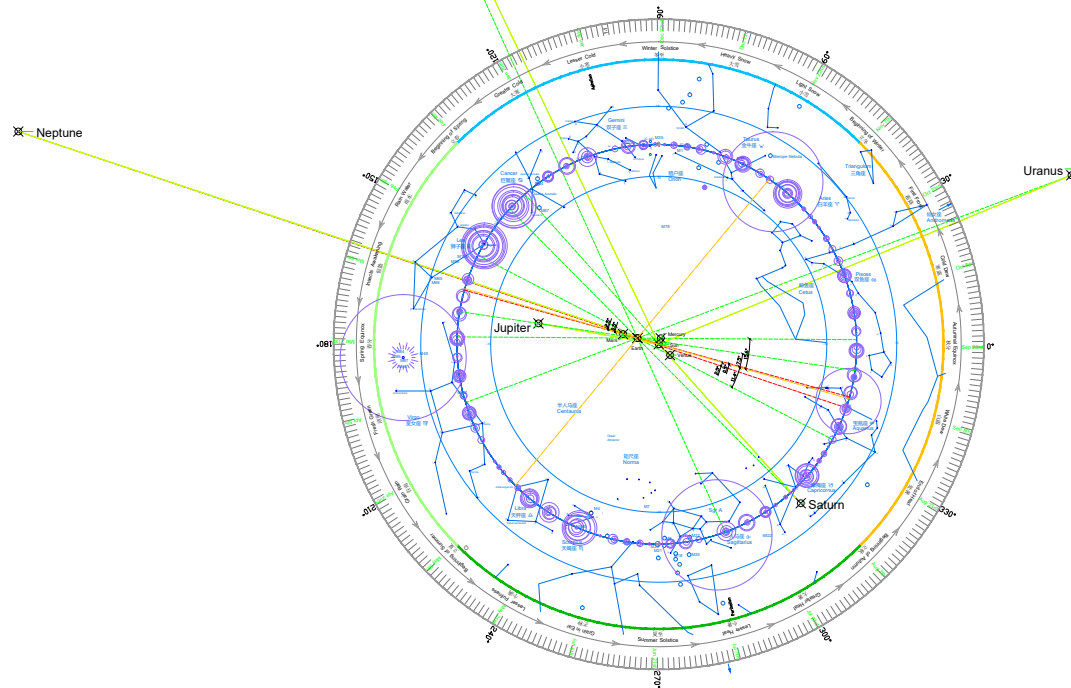
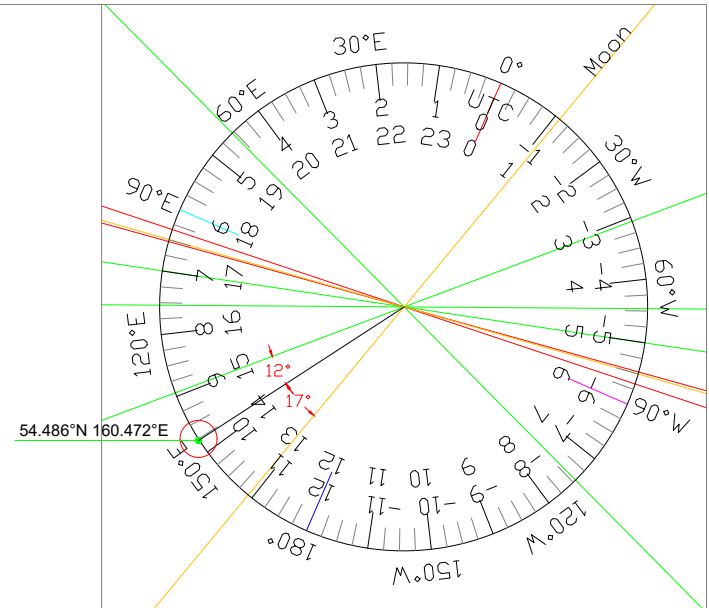
1923 Kamchatka earthquake

UTC time 1923-02-03 16:01:51
 ISC event 911271
 USGS-ANSS ComCat
 Local date February 4, 1923
 Local time 04:01
 Magnitude 8.4 Mw
 Depth 15 km
 Epicenter 54.486°N 160.472°E
 Areas affected Kamchatka, Russia
 Max. intensity XI (Extreme)
 Foreshocks 7.2 Mw (USGS) 1923-02-02
 Casualties 3



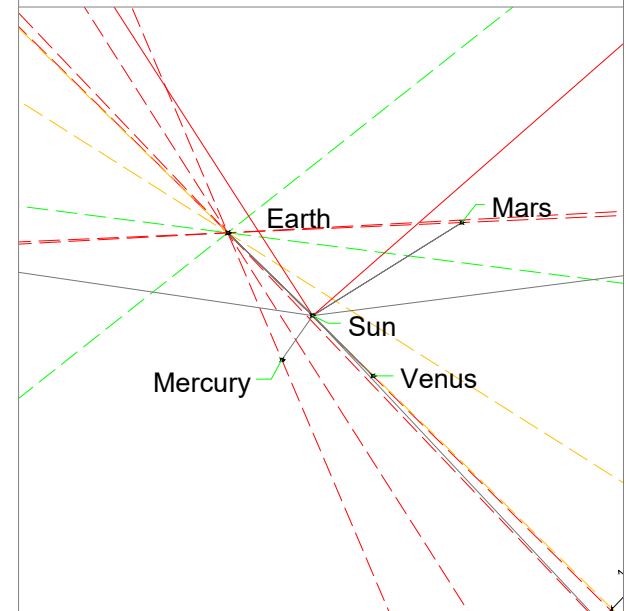
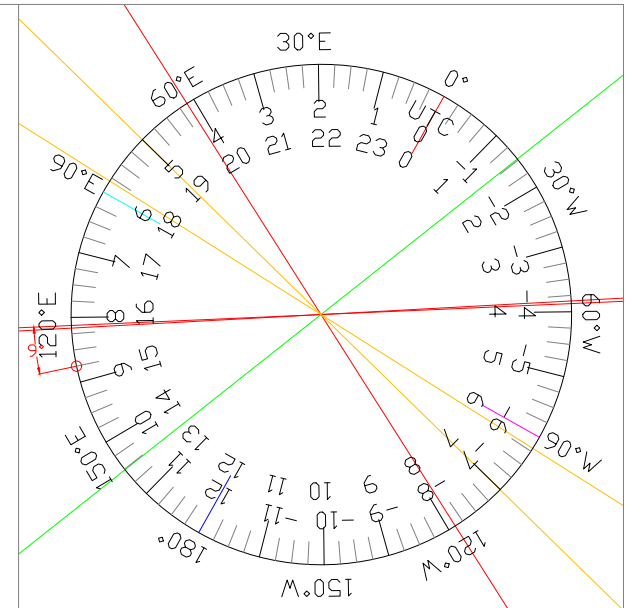
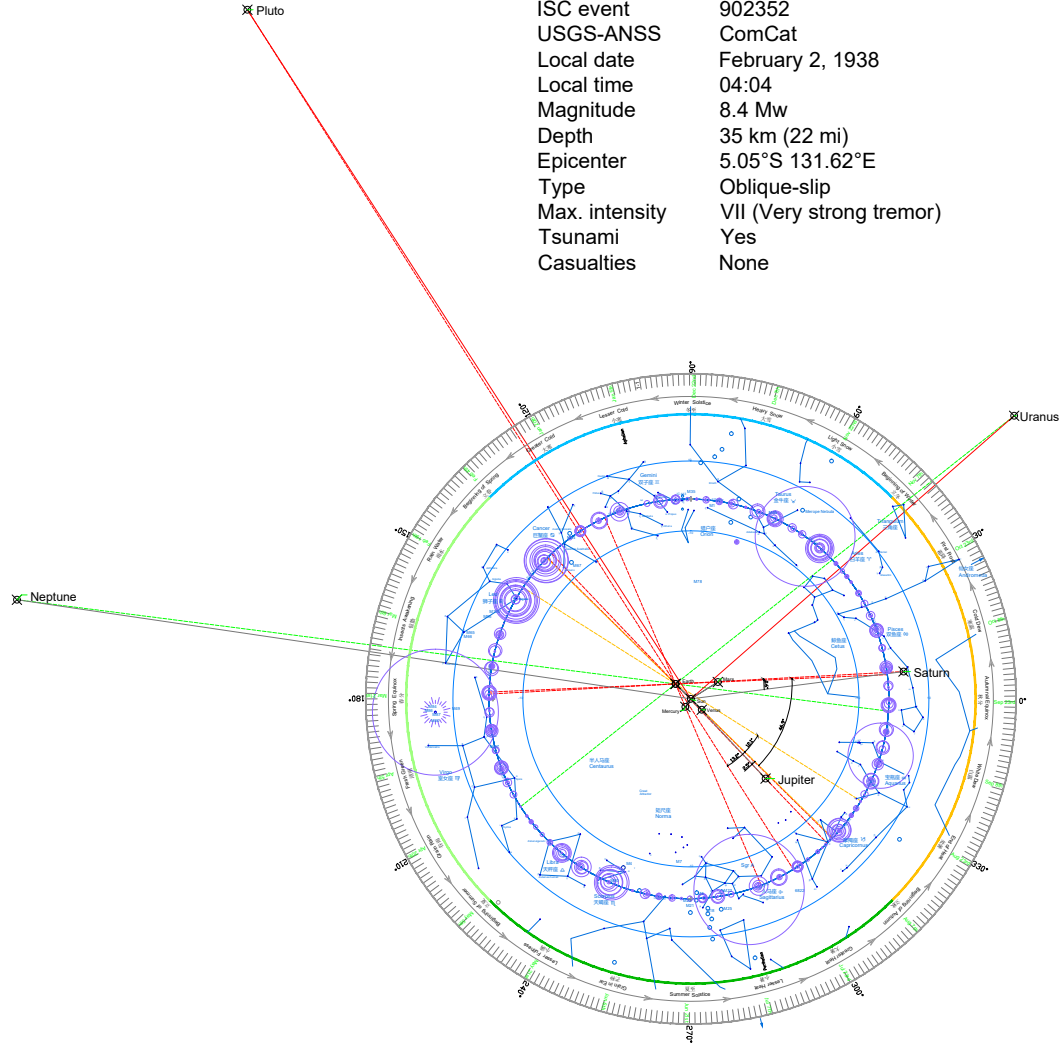
1933 Sanriku earthquake

UTC time	1933-03-02 17:30:59
ISC event	905420
USGS-ANSS	ComCat
Local date	March 3, 1933
Local time	02:30:48 JST
Magnitude	8.4 Mw
Depth	20 km (12 mi)
Epicenter	39°7.7'N 144°7'E
Type	Dip-slip – Intraplate
Areas affected	Japan
Tsunami	Up to 28.7 m (94 ft)
Casualties	1,522 deaths, 1,542 missing,



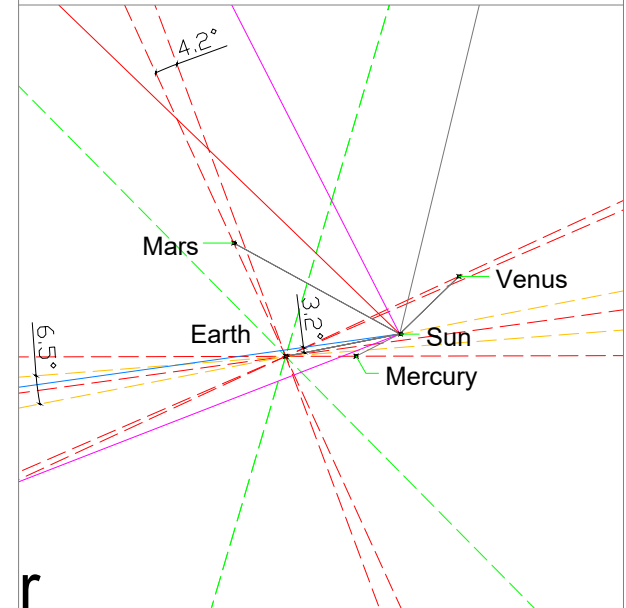
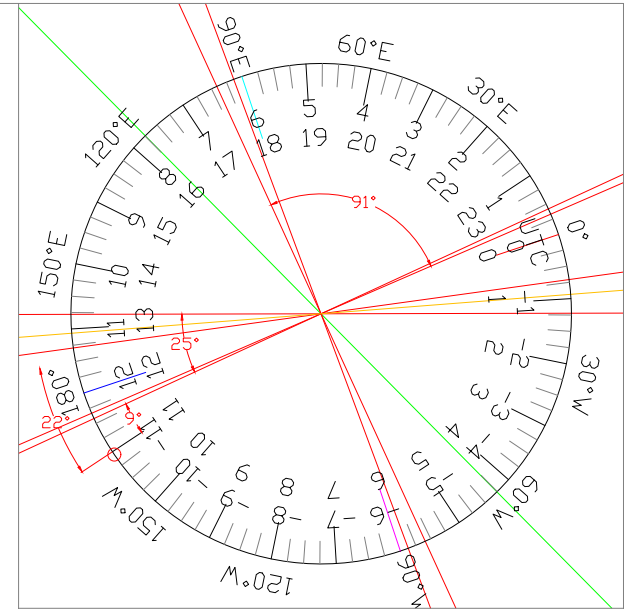
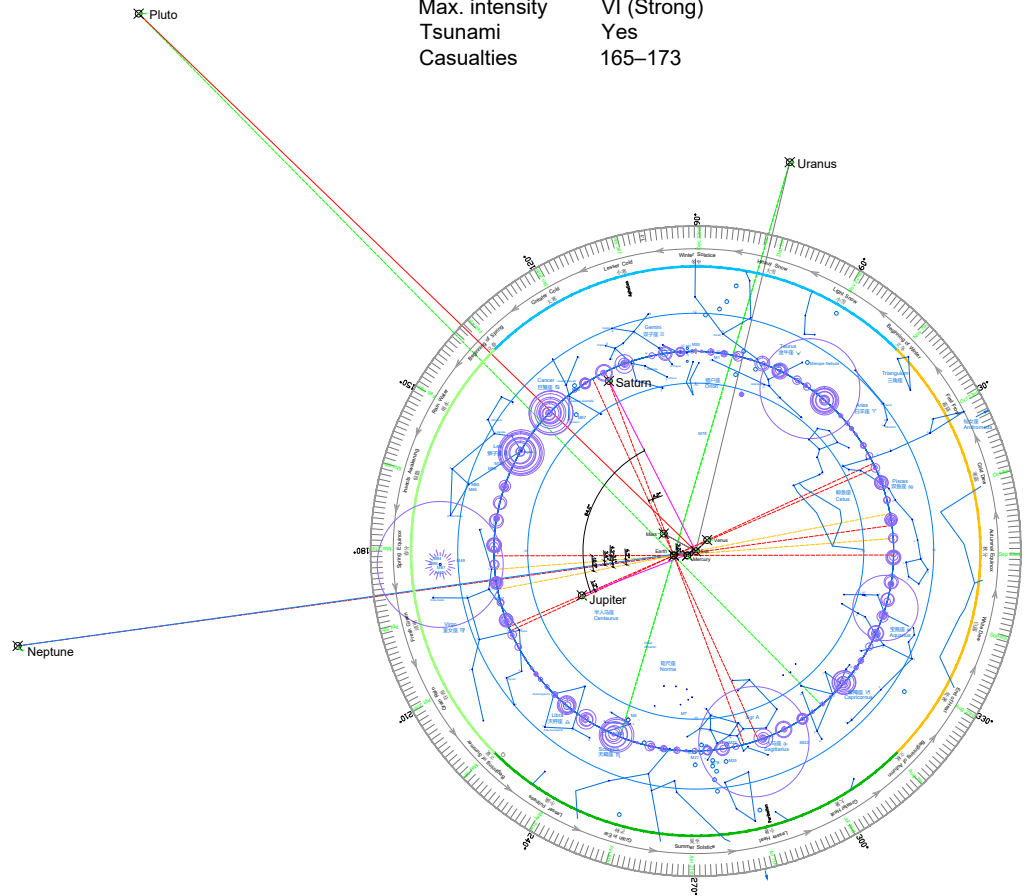
1938 Banda Sea earthquake

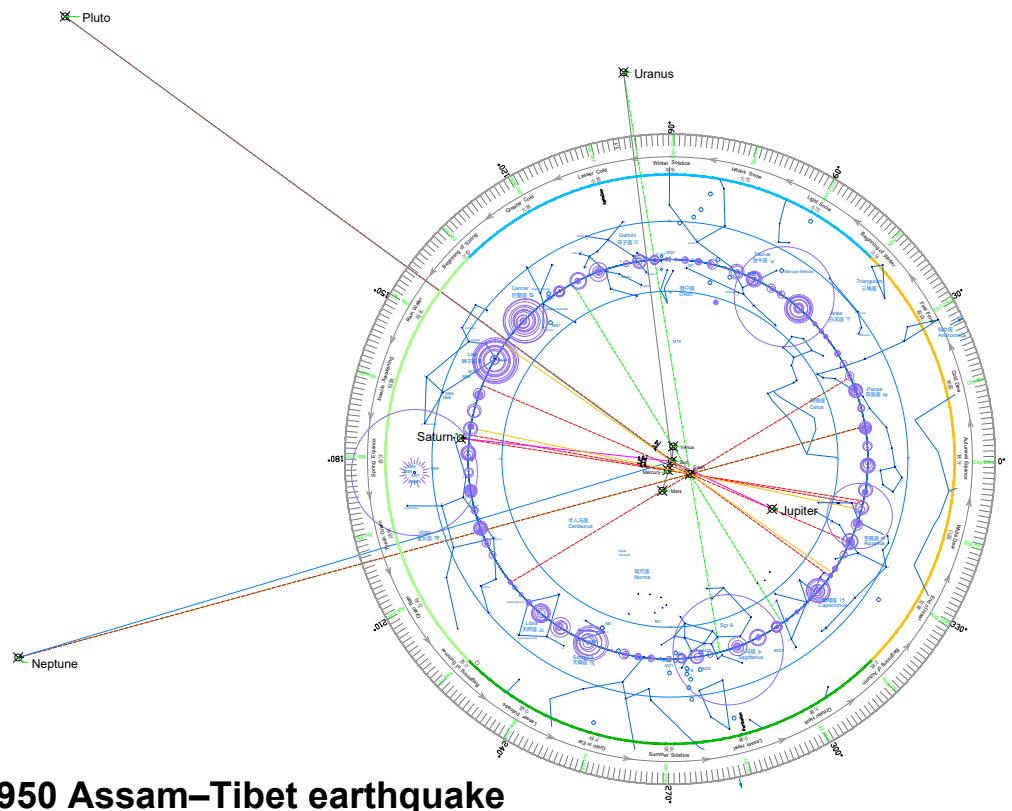
UTC time	1938-02-01 19:04:23
ISC event	902352
USGS-ANSS	ComCat
Local date	February 2, 1938
Local time	04:04
Magnitude	8.4 Mw
Depth	35 km (22 mi)
Epicenter	5.05°S 131.62°E
Type	Oblique-slip
Max. intensity	VII (Very strong tremor)
Tsunami	Yes
Casualties	None



1946 Aleutian Islands earthquake

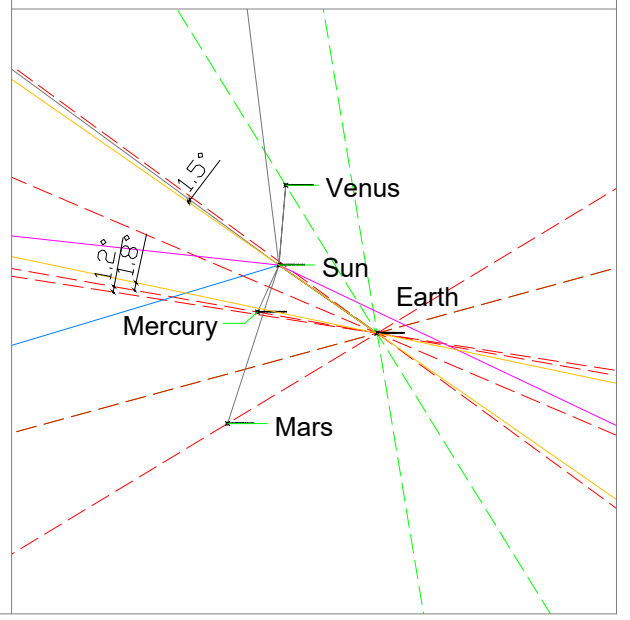
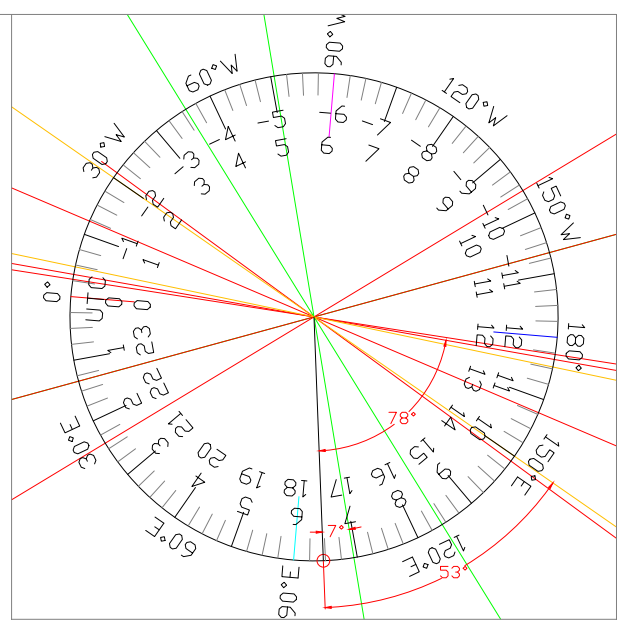
UTC time	1946-04-01 12:29:01
ISC event	898313
USGS-ANSS	ComCat
Local date	1 April 1946
Local time	03:29
Magnitude	8.6 Mw
Depth	15 km (9.3 mi)
Epicenter	53.49°N 162.83°W
Areas affected	Hawaii, Alaska United States
Max. intensity	VI (Strong)
Tsunami	Yes
Casualties	165–173

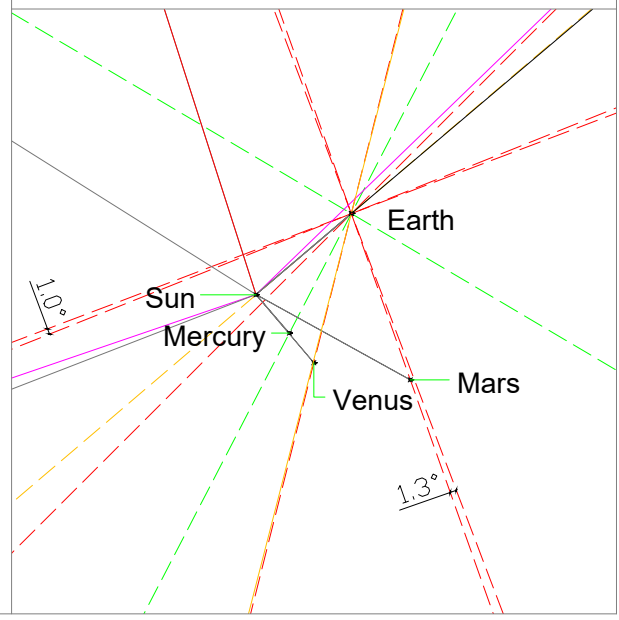
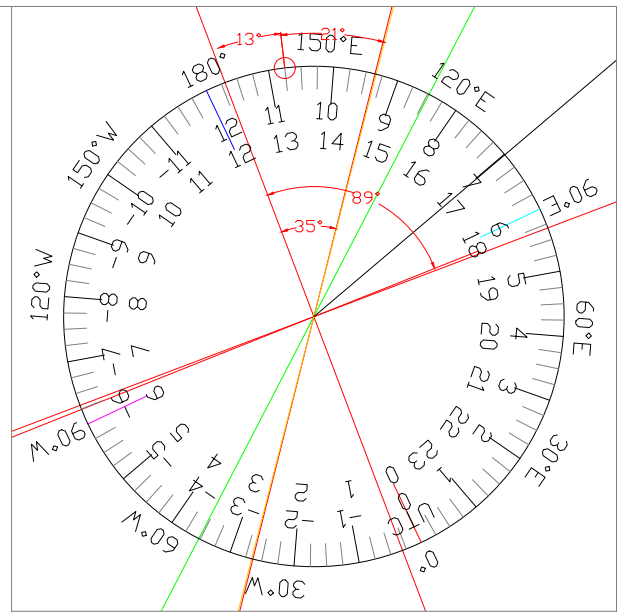
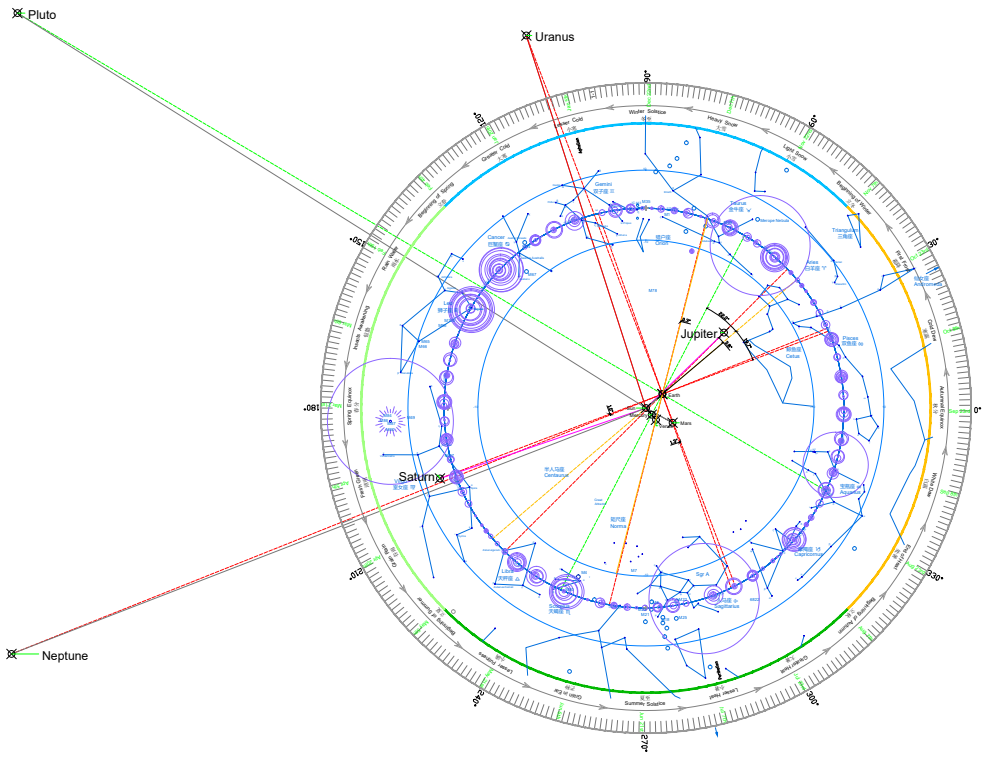




1950 Assam–Tibet earthquake

UTC time	1950-08-15 14:09:34
ISC event	895681
USGS-ANSS	ComCat
Local date	August 15, 1950
Local time	7:39 pm IST
Magnitude	8.6 Mw
Depth	15 km (9.3 mi)
Epicenter	28.36°N 96.45°E
Type	Strike-slip
Areas affected	Tibet, Assam
Max. intensity	XI (Extreme)
Casualties	4,800



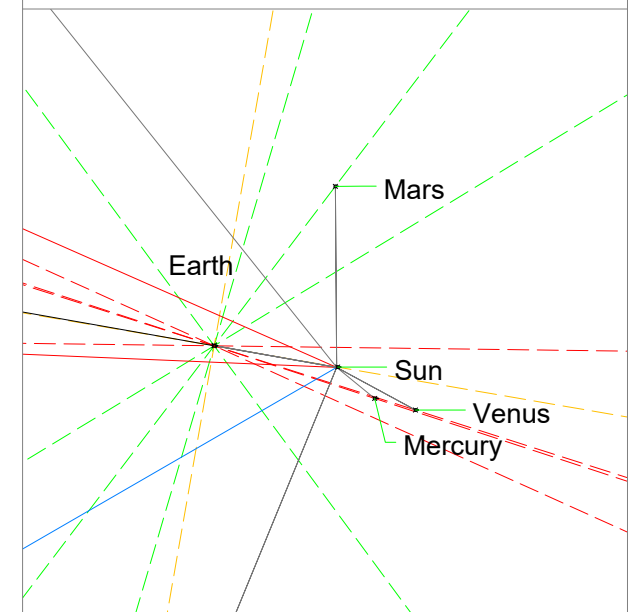
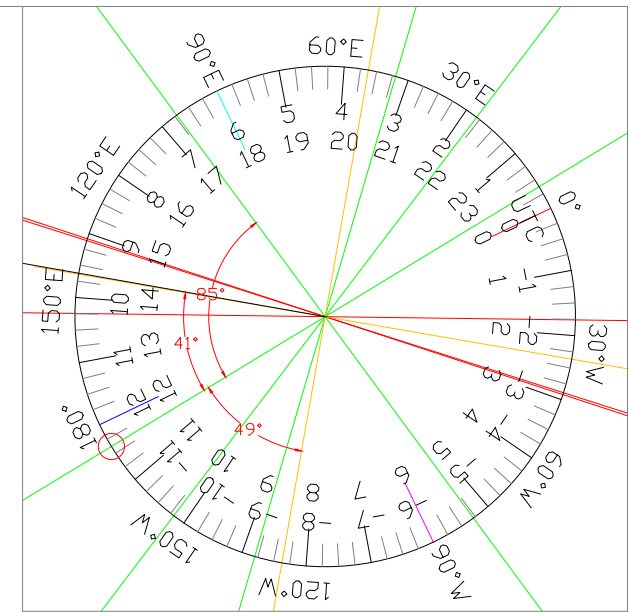
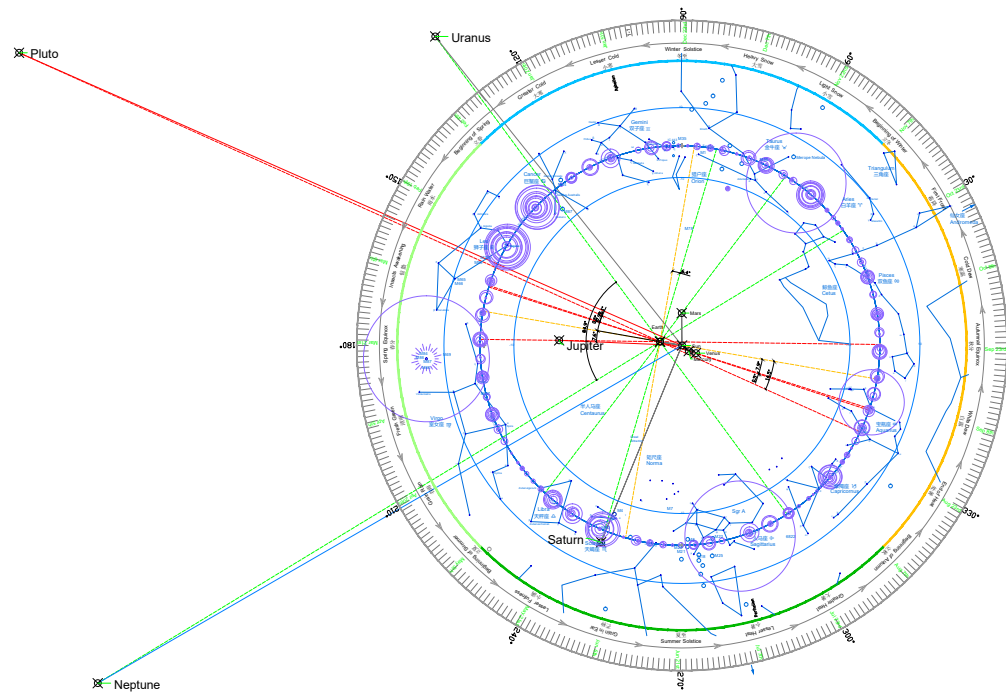


1952 Severo-Kurilsk earthquake

UTC time	1952-11-04 16:58:30
ISC event	893648
USGS-ANSS	ComCat
Local date	November 5, 1952
Local time	04:58:30
Magnitude	9.0 Mw
Epicenter	52.3°N 161.0°E
Max. intensity	XI (Extreme)
Tsunami	18 m (59 ft)
Casualties	2,336 dead

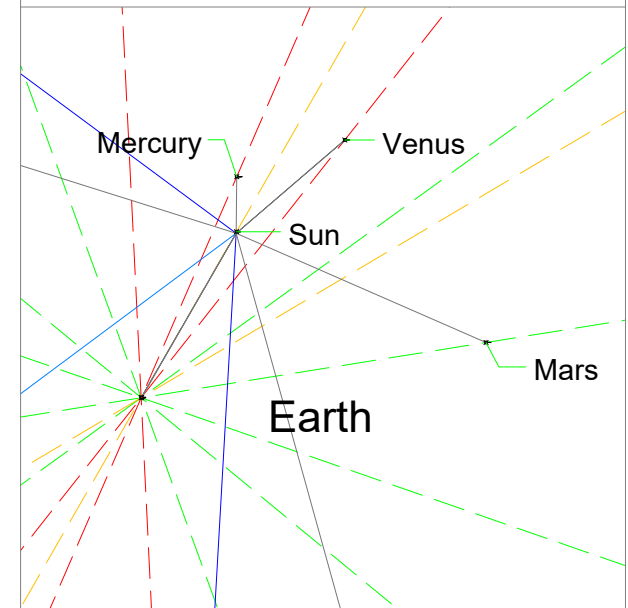
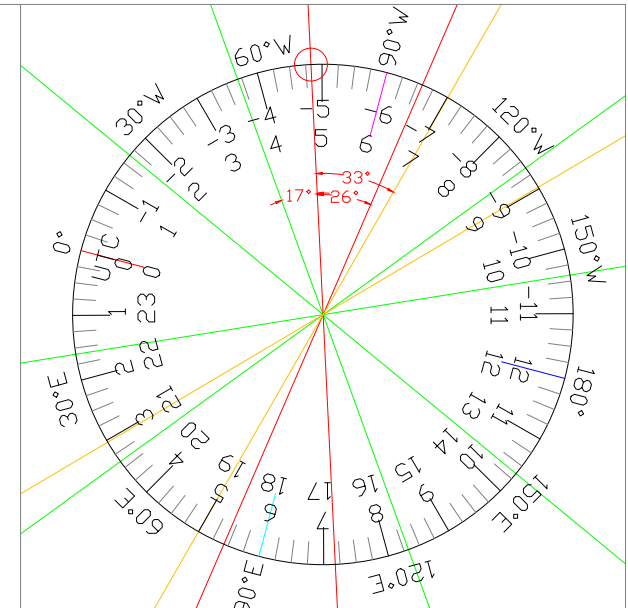
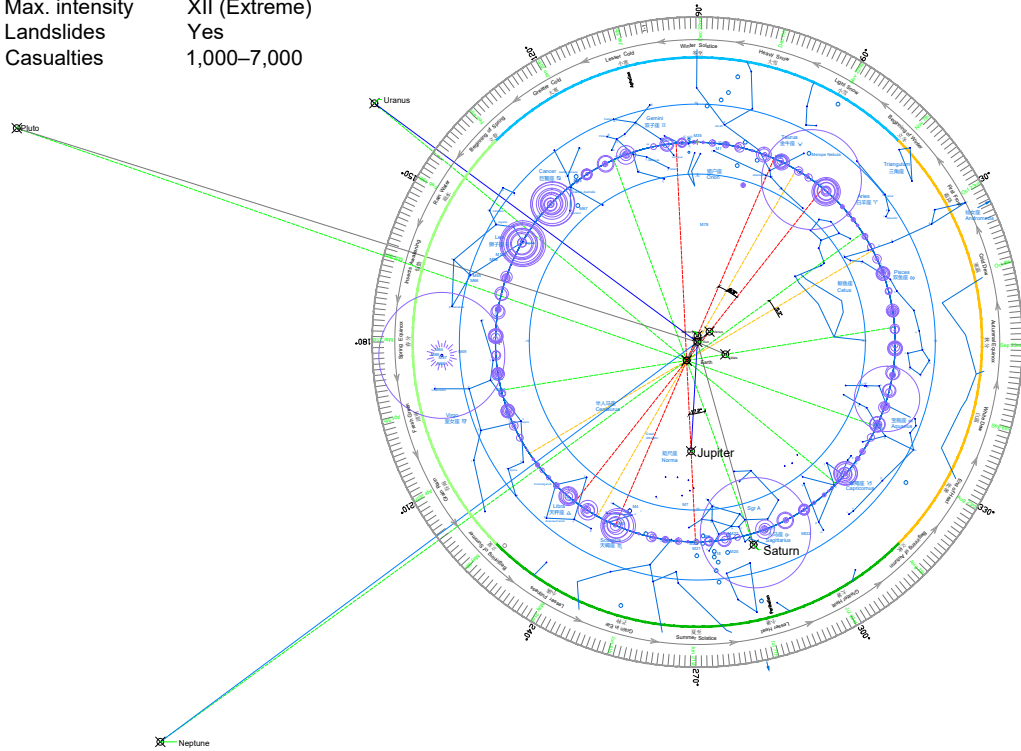
1957 Andean Islands earthquake

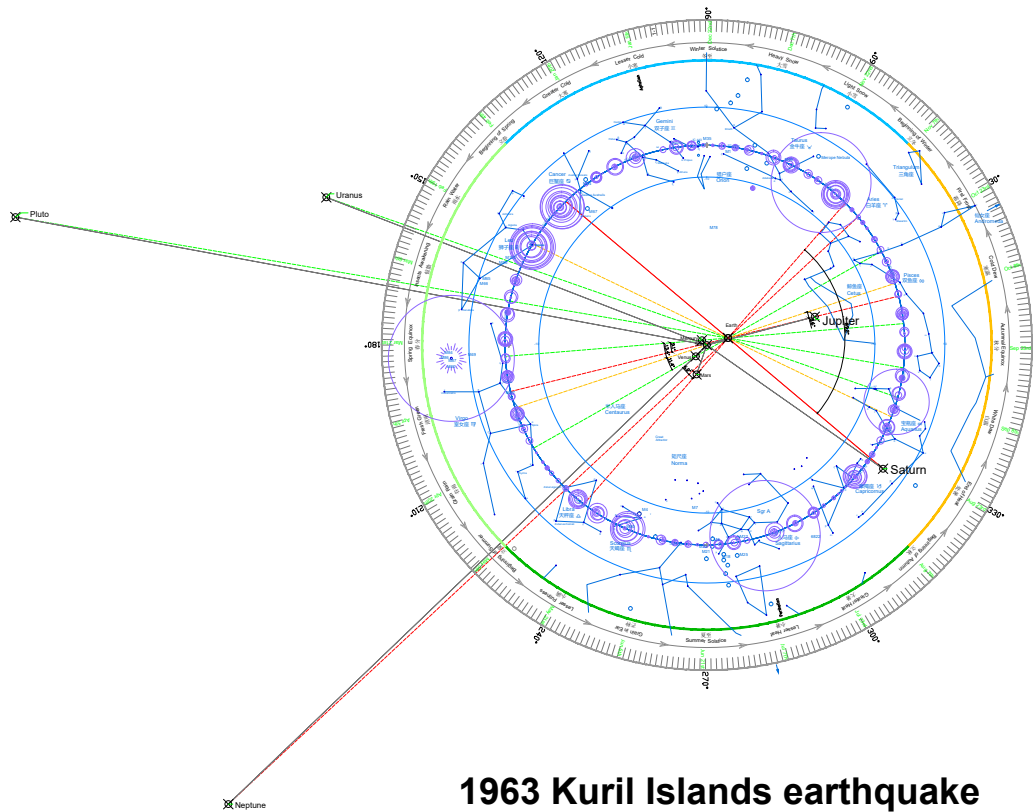
UTC time 1957-03-09 14:22:33
 ISC event 886030
 USGS-ANSS ComCat
 Local date March 9, 1957
 Local time 04:22:33
 Magnitude 8.6 Mw
 Depth 16 mi (25 km)
 Epicenter 51.5°N 175.63°W
 Areas affected Aleutian Islands & Hawaii
 Total damage \$5 million
 Max. intensity VIII (Severe)
 Casualties None



1960 Valdivia earthquake

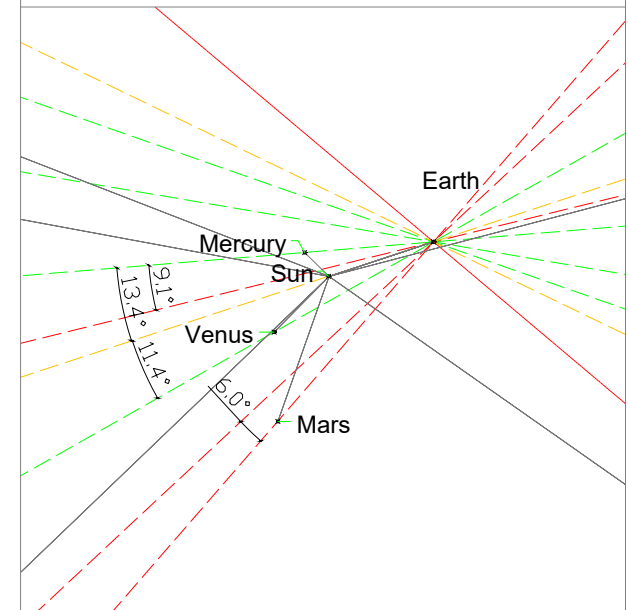
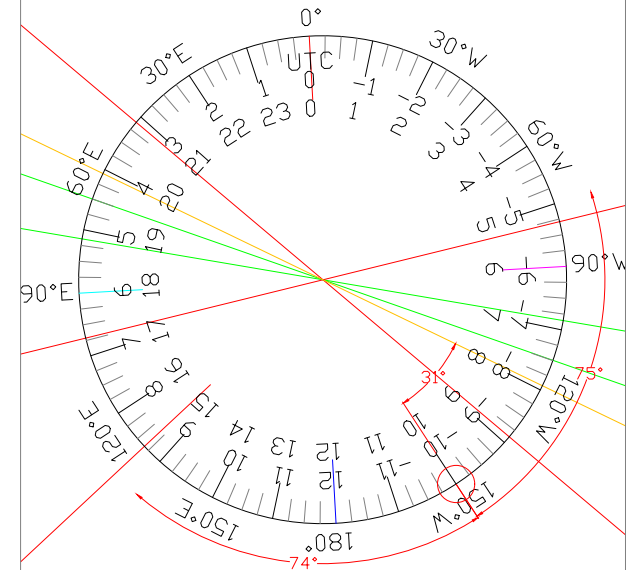
UTC time 1960-05-22 19:11:14
 ISC event 879136
 USGS-ANSS ComCat
 Local date May 22, 1960
 Local time 15:11:14
 Magnitude 9.5 Mw
 Depth 33 km (21 mi)
 Epicenter 38.24°S 73.05°W
 Type Megathrust
 Areas affected Chile, Pacific Rim
 Max. intensity XII (Extreme)
 Landslides Yes
 Casualties 1,000–7,000

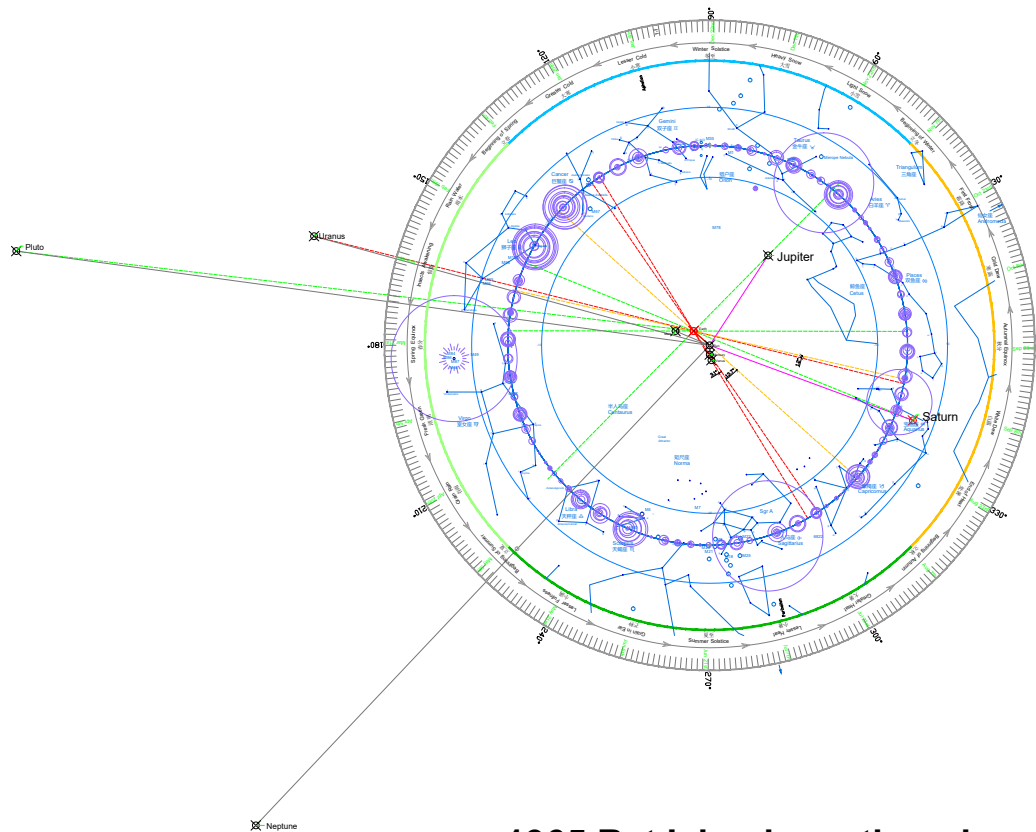




1963 Kuril Islands earthquake

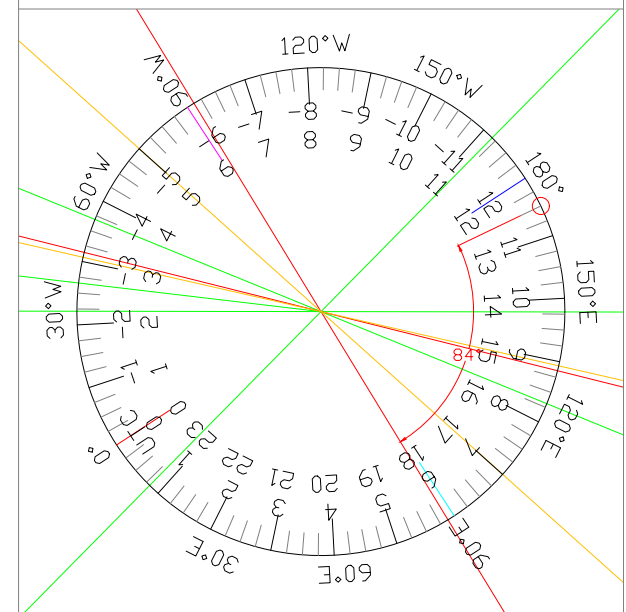
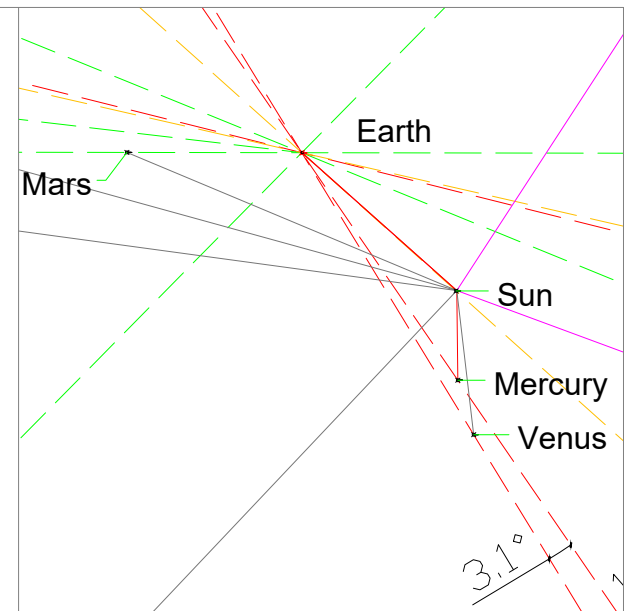
UTC time	1963-10-13 05:17:59
ISC event	873239
USGS-ANSS	ComCat
Local date	October 13, 1963
Local time	15:17:59
Magnitude	8.5 Mw
Depth	47 km
Epicenter	44.81°N 149.54°E
Areas affected	Soviet Union
Max. intensity	IX (Violent)
Tsunami	yes

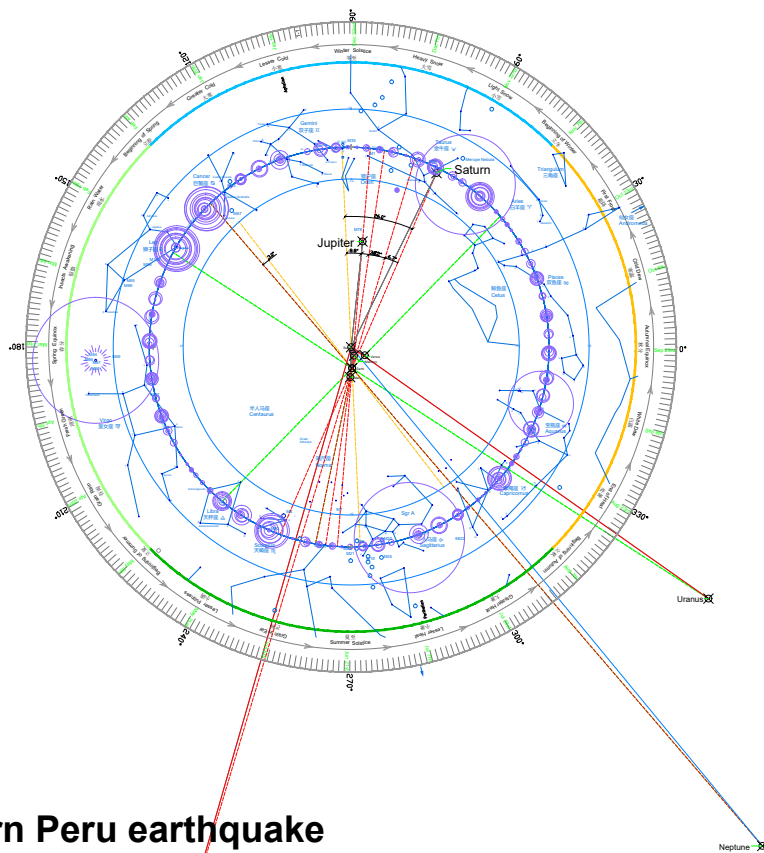




1965 Rat Islands earthquake

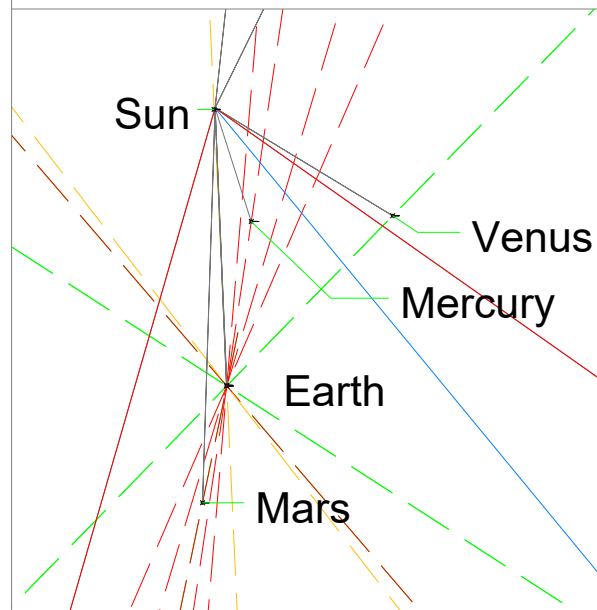
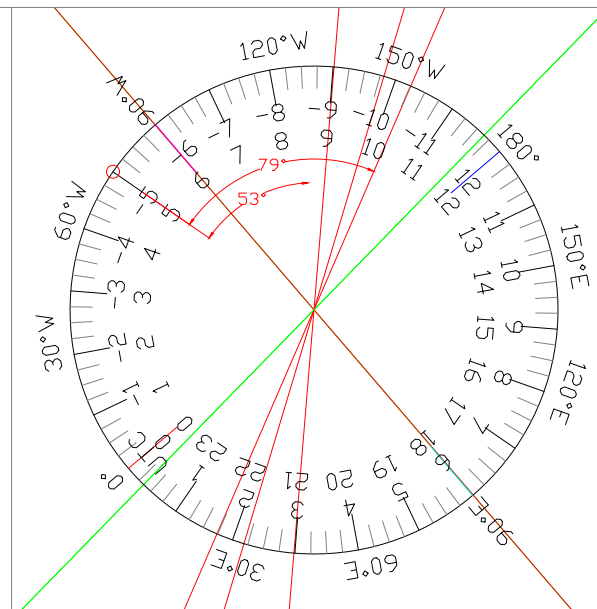
UTC time	1965-02-04 05:01:22
ISC event	859206
USGS-ANSS	ComCat
Local date	February 3, 1965
Local time	19:01:22
Magnitude	8.7 Mw
Epicenter	51.29°N 178.55°E
Areas affected	United States (Alaska)
Max. intensity	VI (Strong)
Tsunami	10.7 m (35 ft)

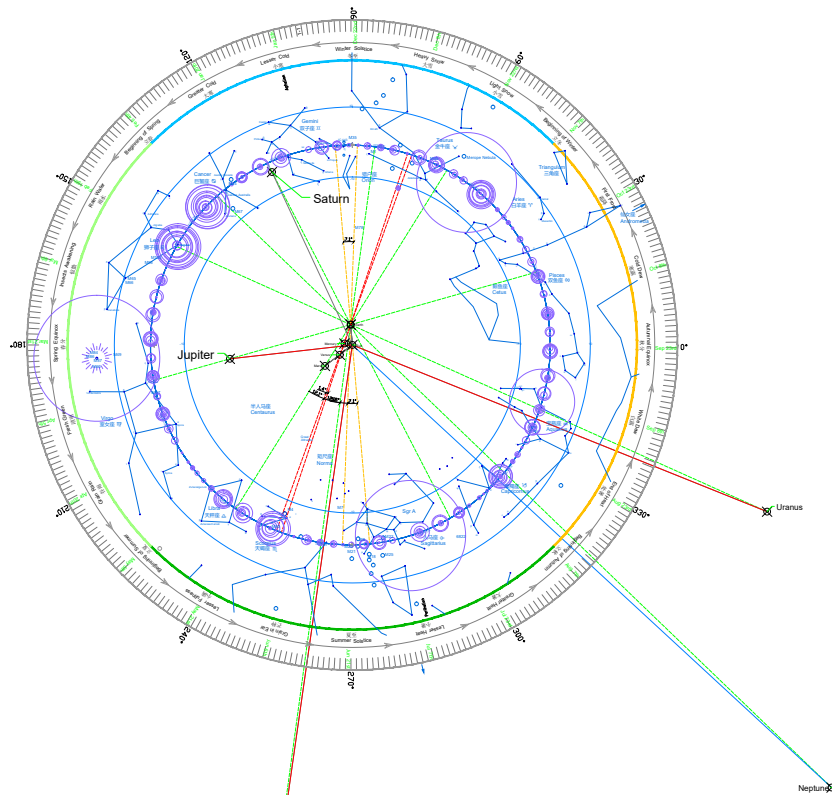




2001 southern Peru earthquake

UTC time	2001-06-23 20:33:14
ISC event	1893467
USGS-ANSS	ComCat
Local date	June 23, 2001
Local time	15:33
Magnitude	8.4 Mw
Depth	32 km (20 mi)
Epicenter	16.36°S 73.48°W
Areas affected	Peru
Max. intensity	VIII (Severe)
Tsunami	7 m (23 ft)
Casualties	74–145 dead 2,687–2,713 injured

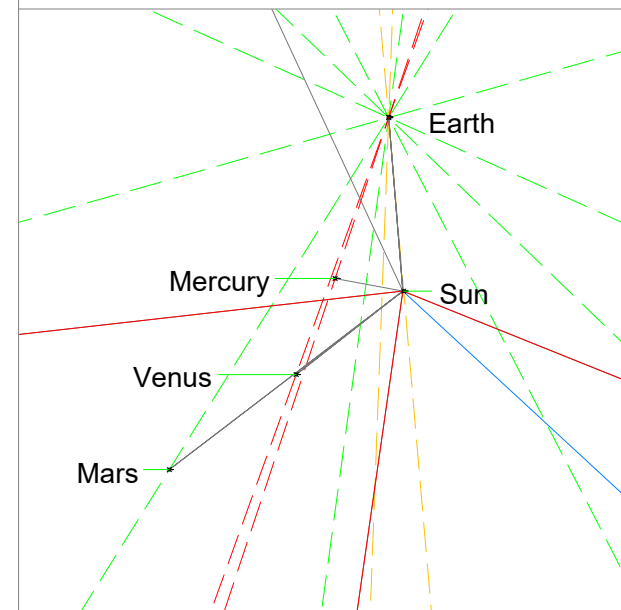
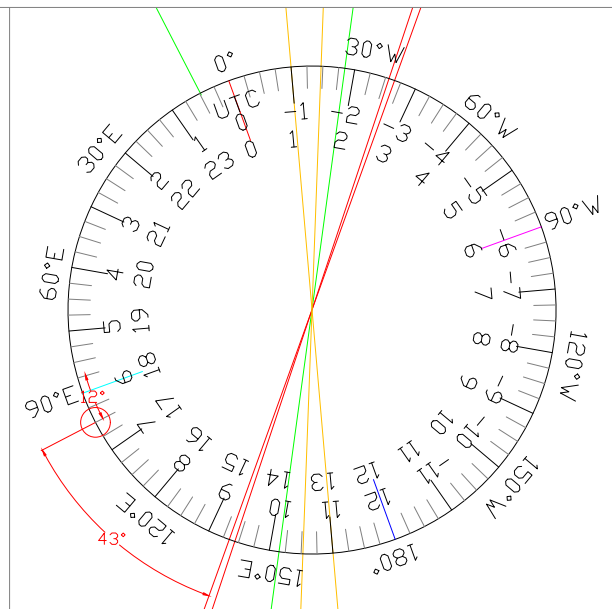


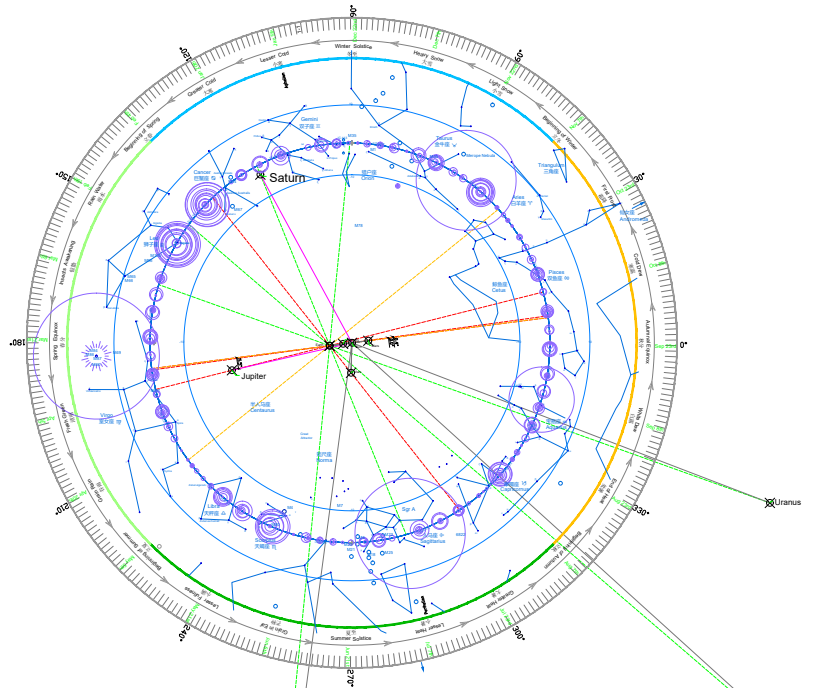


2004 Indian Ocean earthquake and tsunami

UTC time 2004-12-26 00:58:53
 ISC event 7453151
 USGS-ANSS ComCat
 Local date 26 December 2004
 Local time 07:28:53 UTC+6/2
 07:58:53 UTC+7
 08:58:53 UTC+8
 Magnitude 9.1–9.3 Mw
 Depth 30 km (19 mi)
 Epicenter 3.316°N 95.854°E

Type Megathrust
 Areas affected Indonesia, Sri Lanka, India, Thailand, Bangladesh, Maldives, Malaysia, Myanmar, Madagascar, Somalia, Kenya, Tanzania, Seychelles, South Africa, Yemen
 Max. intensity IX (Violent)
 Tsunami 15 to 30 metres (50 to 100 ft), with a maximum run-up of 51 metres (167.3 ft) at Lhoknga
 Casualties 227,898 dead

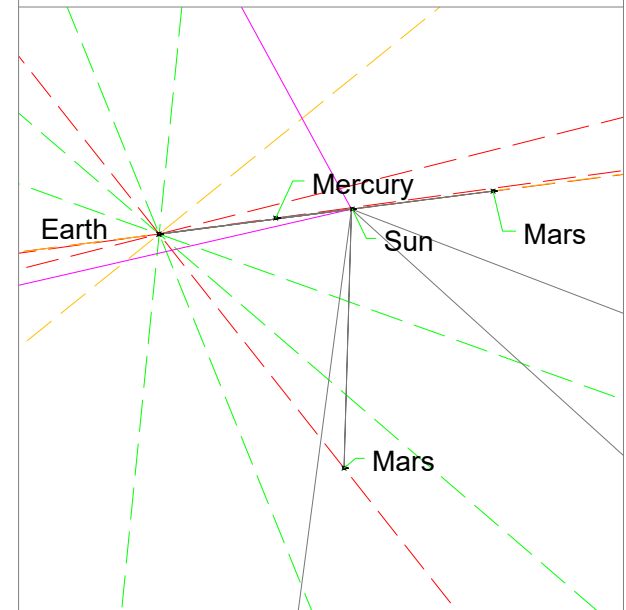
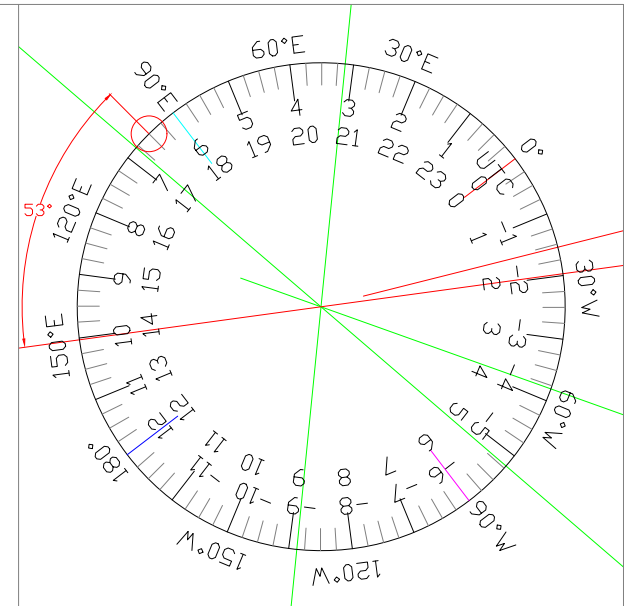


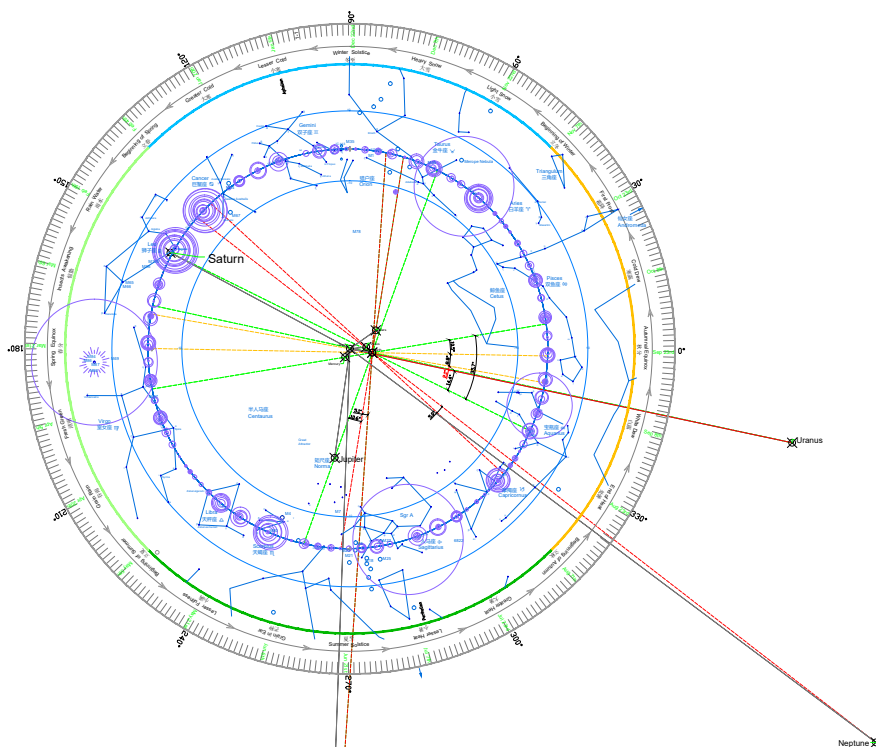


2005 Nias-Simeulue earthquake

UTC time 2005-03-28 16:09:36
 ISC event 7486110
 USGS-ANSS ComCat
 Local date 28 March 2005
 Local time 23:09
 Magnitude 8.6 Mw [1]
 Depth 30 km (19 mi)
 Epicenter 2.09°N 97.15°E

Areas affected Indonesia
 Max. intensity VIII (Severe)
 Casualties 915-1,314 deaths
 340-1,146 injured

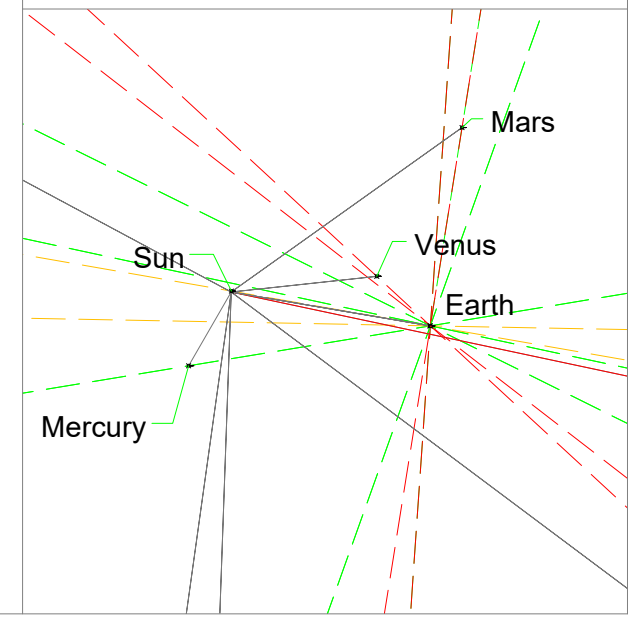
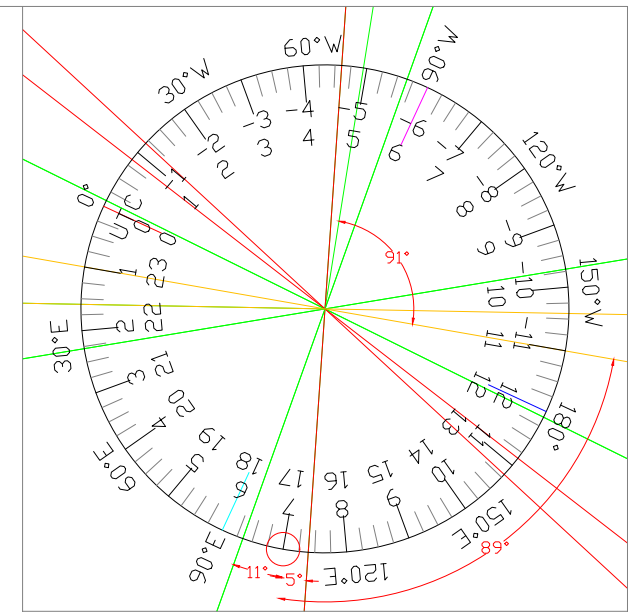


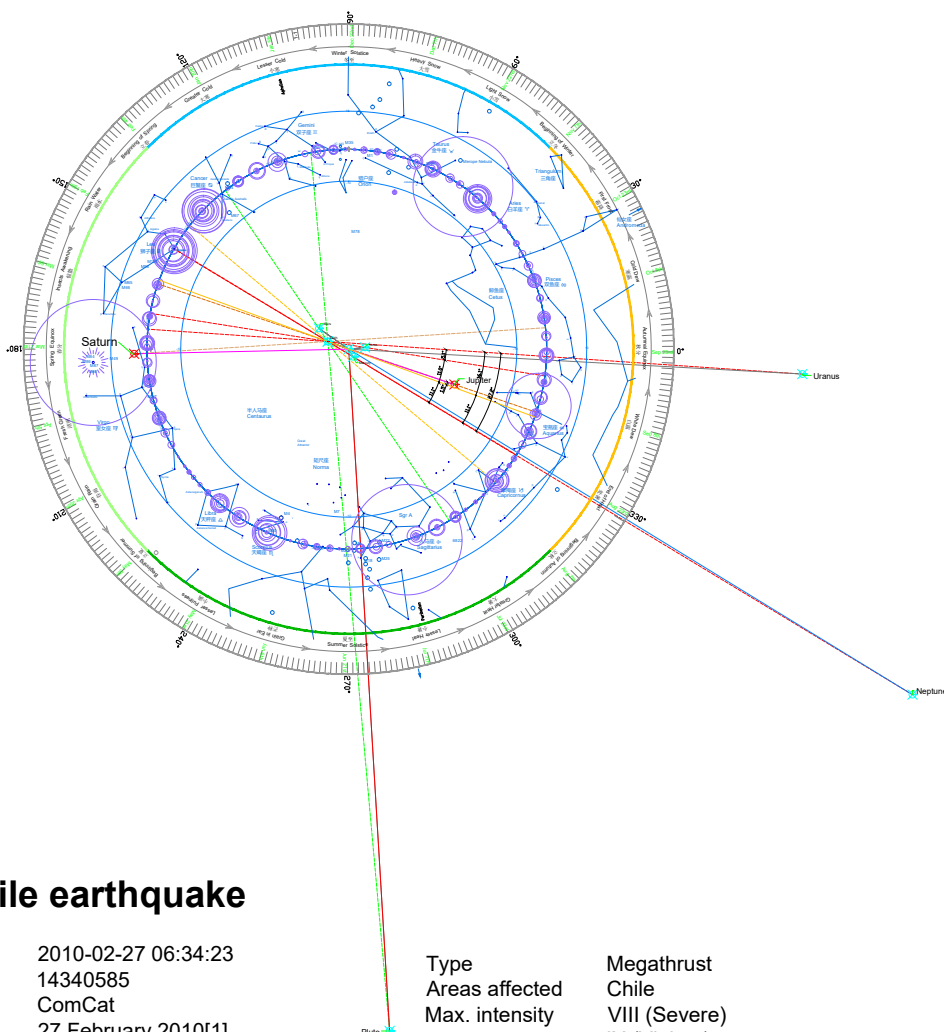


September 2007 Sumatra earthquakes

UTC time
 2007-09-12 11:10:26
 2007-09-12 23:49:03
 ISC event
 13203322
 13203366
 USGS-ANSS
 ComCat
 ComCat
 Local date 12 September 2007

13 September 2007
 Local time
 18:10
 06:49
 Magnitude
 8.4 Mw[1][2]
 7.9 Mw
 Depth 30 kilometres (19 mi)
 Epicenter 4.438°S 101.367°E
 2.625°S 100.841°E
 Areas affected Indonesia
 Singapore
 Malaysia
 Thailand
 Casualties 23 killed[3]

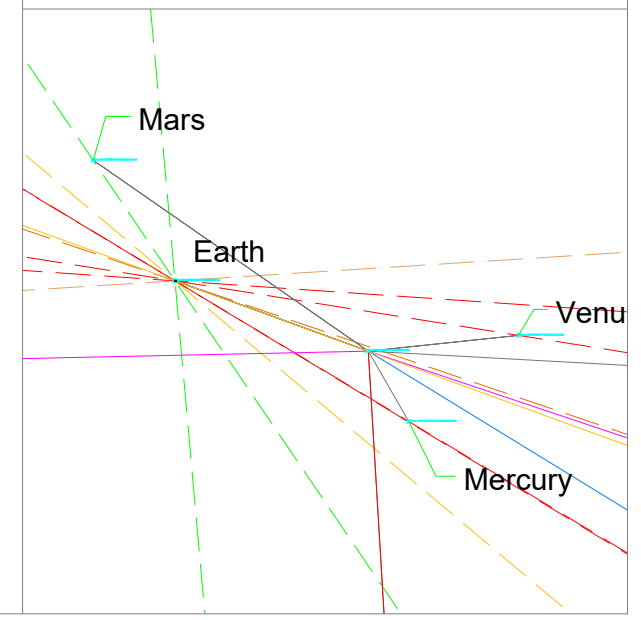
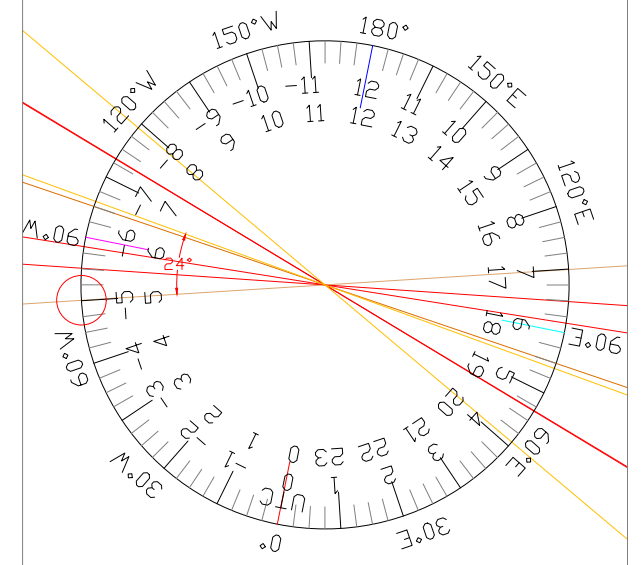


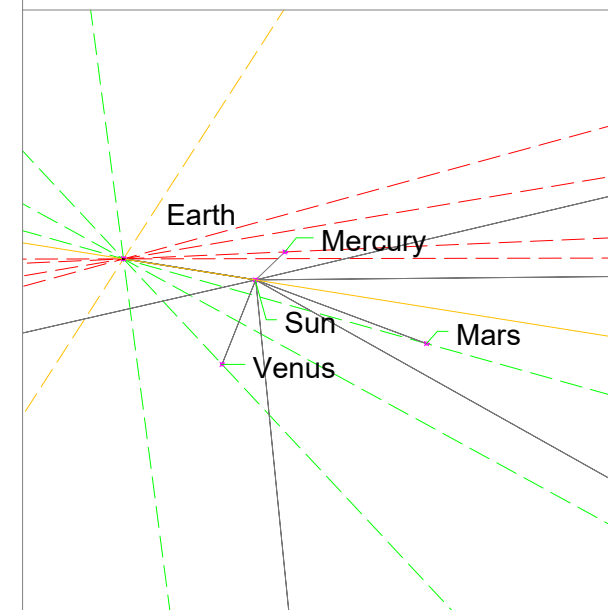
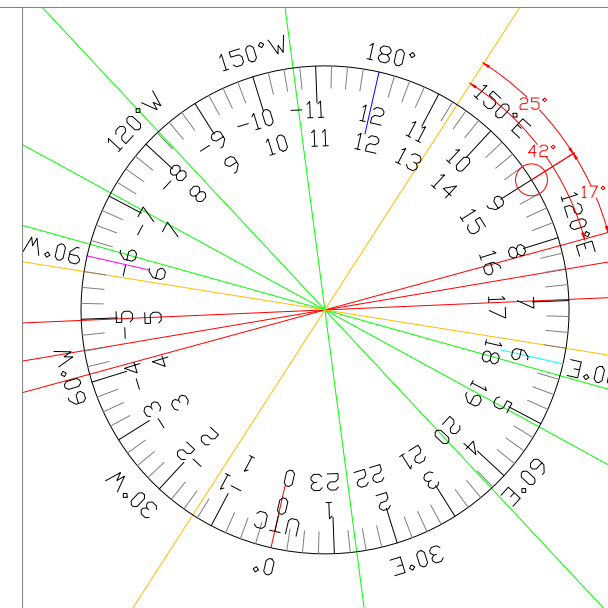
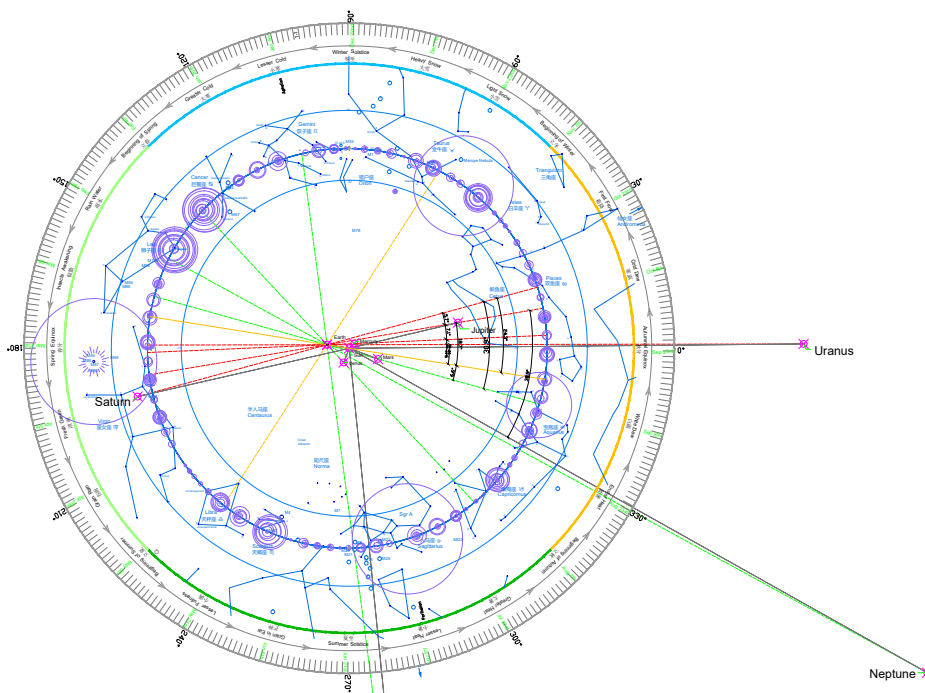


2010 Chile earthquake

UTC time 2010-02-27 06:34:23
 ISC event 14340585
 USGS-ANSS ComCat
 Local date 27 February 2010[1]
 Local time 03:34 CST (UTC-03:00)
 Magnitude 8.8 Mww
 Depth 35 km (22 mi)
 30.1 km (19 mi)
 Epicenter 35.909°S 72.733°W

Type	Megathrust
Areas affected	Chile
Max. intensity	VIII (Severe) IX (Violent)
Peak acceleration	0.65 g
Tsunami	Yes
Casualties	525 dead, 25 missing.

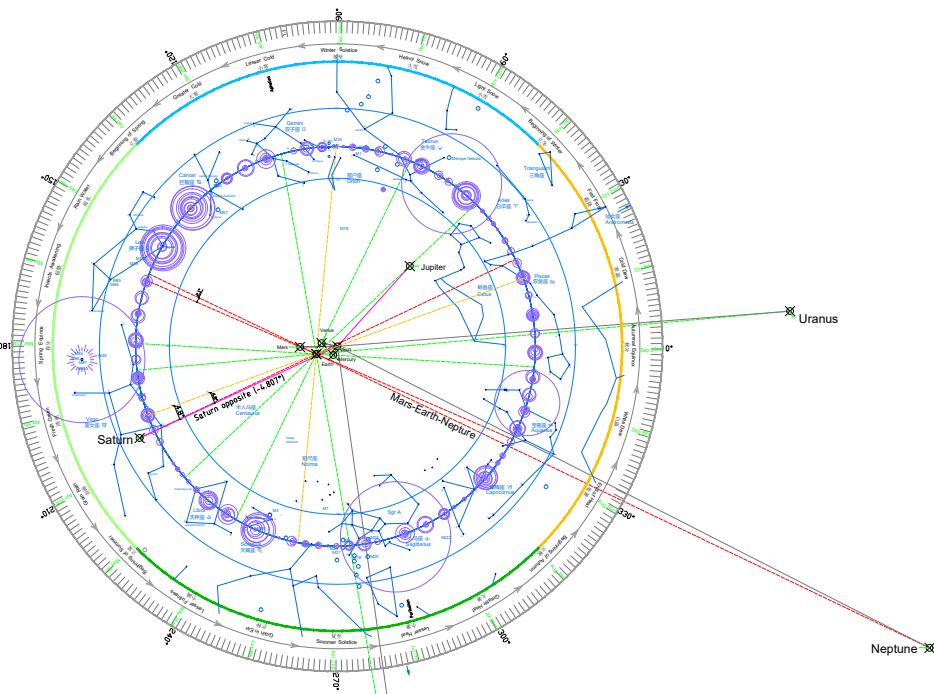




2011 Tōhoku earthquake and tsunami

UTC time 2011-03-11 05:46:24
 ISC event
 USGS-ANSS ComCat
 Local date 11 March 2011; 7 years ago
 Local time 14:46 JST
 Duration 6 minutes
 Magnitude 9.0–9.1 (M_w)
 Depth 29 km (18 mi)
 Epicenter 38.322°N 142.369°E
 Type Megathrust
 Areas affected Japan (shaking, tsunami)
 Pacific Rim (tsunami)
 Max. intensity IX (Violent)

Peak acceleration 2.99 g
 Peak velocity 117.41 cm/s
 Tsunami Up to 40.5 m (133 ft)
 in Miyako, Iwate, Tōhoku
 Landslides Yes
 Foreshocks List of foreshocks and aftershocks of the 2011 Tōhoku earthquake
 Aftershocks 13,386 (as of 6 March 2018)
 Casualties 15,896 deaths, 6,157 injured, 2,537 people missing
 Citations



2012 Indian Ocean earthquakes

UTC time 2012-04-11 08:38:36
 ISC event 600860404
 USGS-ANSS ComCat
 Local date 11 April 2012
 Local time 15:38
 Magnitude 8.6 Mw
 Epicenter 2.311°N 93.063°E

Pluto	Type	Strike-slip – Intraplate
	Areas affected	Indonesia
	Max. intensity	VII (Very strong)
	Tsunami	Yes
	Foreshocks	7.2 Mw Jan 10 at 18:36
	Aftershocks	8.2 Mw April 11 at 10:43
	Casualties	10 dead
	Injured	12 injured

