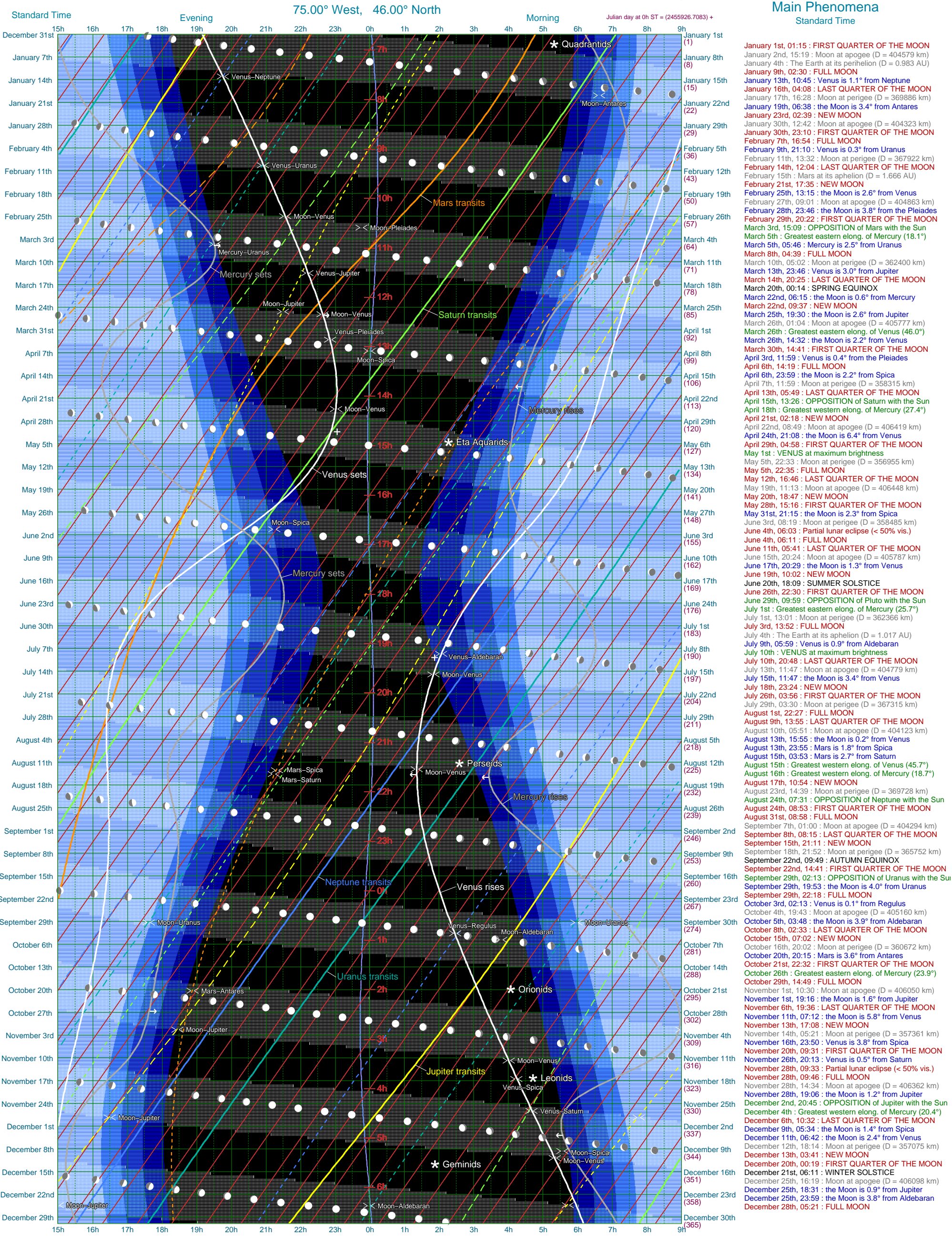


Graphic Almanac 2012



Main Phenomena

Standard Time

January 1st, 01:15 : FIRST QUARTER OF THE MOON
January 2nd, 15:19 : Moon at apogee (D = 404579 km)
January 4th : The Earth at its perihelion (D = 0.983 AU)
January 9th, 02:30 : FULL MOON
January 13th, 10:45 : Venus is 1.1° from Neptune
January 16th, 04:08 : LAST QUARTER OF THE MOON
January 17th, 16:28 : Moon at perigee (D = 369886 km)
January 19th, 06:38 : the Moon is 3.4° from Antares
January 23rd, 02:39 : NEW MOON
January 30th, 12:42 : Moon at apogee (D = 404323 km)
January 30th, 23:10 : FIRST QUARTER OF THE MOON
February 7th, 16:54 : FULL MOON
February 9th, 21:10 : Venus is 0.3° from Uranus
February 11th, 13:32 : Moon at perigee (D = 367922 km)
February 14th, 12:04 : LAST QUARTER OF THE MOON
February 15th : Mars at its aphelion (D = 1.666 AU)
February 21st, 17:35 : NEW MOON
February 25th, 13:15 : the Moon is 2.6° from Venus
February 27th, 09:01 : Moon at apogee (D = 404863 km)
February 28th, 23:46 : the Moon is 3.8° from the Pleiades
February 29th, 20:22 : FIRST QUARTER OF THE MOON
March 3rd, 15:09 : OPPOSITION of Mars with the Sun
March 5th : Greatest eastern elong. of Mercury (18.1°)
March 5th, 05:46 : Mercury is 2.5° from Uranus
March 8th, 04:39 : FULL MOON
March 10th, 05:02 : Moon at perigee (D = 362400 km)
March 13th, 23:46 : Venus is 3.0° from Jupiter
March 14th, 20:25 : LAST QUARTER OF THE MOON
March 20th, 00:14 : SPRING EQUINOX
March 22nd, 06:15 : the Moon is 0.6° from Mercury
March 22nd, 09:37 : NEW MOON
March 25th, 19:30 : the Moon is 2.6° from Jupiter
March 26th, 01:04 : Moon at apogee (D = 405777 km)
March 26th : Greatest eastern elong. of Venus (46.0°)
March 26th, 14:32 : the Moon is 2.2° from Venus
March 30th, 14:41 : FIRST QUARTER OF THE MOON
April 3rd, 11:59 : Venus is 0.4° from the Pleiades
April 6th, 14:19 : FULL MOON
April 6th, 23:59 : the Moon is 2.2° from Spica
April 7th, 11:59 : Moon at perigee (D = 358315 km)
April 13th, 05:49 : LAST QUARTER OF THE MOON
April 15th, 13:26 : OPPOSITION of Saturn with the Sun
April 18th : Greatest western elong. of Mercury (27.4°)
April 21st, 02:18 : NEW MOON
April 22nd, 08:49 : Moon at apogee (D = 406419 km)
April 24th, 21:08 : the Moon is 6.4° from Venus
April 29th, 04:58 : FIRST QUARTER OF THE MOON
May 1st : VENUS at maximum brightness
May 5th, 22:33 : Moon at perigee (D = 356955 km)
May 5th, 22:35 : FULL MOON
May 12th, 16:46 : LAST QUARTER OF THE MOON
May 19th, 11:13 : Moon at apogee (D = 406448 km)
May 20th, 18:47 : NEW MOON
May 28th, 15:16 : FIRST QUARTER OF THE MOON
May 31st, 21:15 : the Moon is 2.3° from Spica
June 3rd, 08:19 : Moon at perigee (D = 358485 km)
June 4th, 06:03 : Partial lunar eclipse (< 50% vis.)
June 4th, 06:11 : FULL MOON
June 11th, 05:41 : LAST QUARTER OF THE MOON
June 15th, 20:24 : Moon at apogee (D = 405787 km)
June 17th, 20:29 : the Moon is 1.3° from Venus
June 19th, 10:02 : NEW MOON
June 20th, 18:09 : SUMMER SOLSTICE
June 26th, 22:30 : FIRST QUARTER OF THE MOON
June 29th, 09:59 : OPPOSITION of Pluto with the Sun
July 1st : Greatest eastern elong. of Mercury (25.7°)
July 1st, 13:01 : Moon at perigee (D = 362366 km)
July 3rd, 13:52 : FULL MOON
July 4th : The Earth at its aphelion (D = 1.017 AU)
July 9th, 05:59 : Venus is 0.9° from Aldebaran
July 10th : VENUS at maximum brightness
July 10th, 20:48 : LAST QUARTER OF THE MOON
July 13th, 11:47 : Moon at apogee (D = 404779 km)
July 15th, 11:47 : the Moon is 3.4° from Venus
July 18th, 23:24 : NEW MOON
July 26th, 03:56 : FIRST QUARTER OF THE MOON
July 29th, 03:30 : Moon at perigee (D = 367315 km)
August 1st, 22:27 : FULL MOON
August 9th, 13:55 : LAST QUARTER OF THE MOON
August 10th, 05:51 : Moon at apogee (D = 404123 km)
August 13th, 15:55 : the Moon is 0.2° from Venus
August 13th, 23:55 : Mars is 1.8° from Spica
August 15th, 03:53 : Mars is 2.7° from Saturn
August 15th : Greatest western elong. of Venus (45.7°)
August 16th : Greatest western elong. of Mercury (18.7°)
August 17th, 10:54 : NEW MOON
August 23rd, 14:39 : Moon at perigee (D = 369728 km)
August 24th, 07:31 : OPPOSITION of Neptune with the Sun
August 24th, 08:53 : FIRST QUARTER OF THE MOON
August 31st, 08:58 : FULL MOON
September 7th, 01:00 : Moon at apogee (D = 404294 km)
September 8th, 08:15 : LAST QUARTER OF THE MOON
September 15th, 21:11 : NEW MOON
September 18th, 21:52 : Moon at perigee (D = 365752 km)
September 22nd, 09:49 : AUTUMN EQUINOX
September 22nd, 14:41 : FIRST QUARTER OF THE MOON
September 29th, 02:13 : OPPOSITION of Uranus with the Sun
September 29th, 19:53 : the Moon is 4.0° from Uranus
September 29th, 22:18 : FULL MOON
October 3rd, 02:13 : Venus is 0.1° from Regulus
October 4th, 19:43 : Moon at apogee (D = 405160 km)
October 5th, 03:48 : the Moon is 3.9° from Aldebaran
October 8th, 02:33 : LAST QUARTER OF THE MOON
October 15th, 07:02 : NEW MOON
October 16th, 20:02 : Moon at perigee (D = 360672 km)
October 20th, 20:15 : Mars is 3.6° from Antares
October 21st, 22:32 : FIRST QUARTER OF THE MOON
October 26th : Greatest eastern elong. of Mercury (23.9°)
October 29th, 14:49 : FULL MOON
November 1st, 10:30 : Moon at apogee (D = 406050 km)
November 1st, 19:16 : the Moon is 1.2° from Jupiter
November 6th, 19:36 : LAST QUARTER OF THE MOON
November 11th, 07:12 : the Moon is 5.8° from Venus
November 13th, 17:08 : NEW MOON
November 14th, 05:21 : Moon at perigee (D = 357361 km)
November 16th, 23:50 : Venus is 3.8° from Spica
November 20th, 09:31 : FIRST QUARTER OF THE MOON
November 26th, 20:13 : Venus is 0.5° from Saturn
November 28th, 09:33 : Partial lunar eclipse (< 50% vis.)
November 28th, 09:46 : FULL MOON
November 28th, 14:34 : Moon at apogee (D = 406362 km)
November 28th, 19:06 : the Moon is 1.2° from Jupiter
December 2nd, 20:45 : OPPOSITION of Jupiter with the Sun
December 4th : Greatest western elong. of Mercury (20.4°)
December 6th, 10:32 : LAST QUARTER OF THE MOON
December 9th, 05:34 : the Moon is 1.4° from Spica
December 11th, 06:42 : the Moon is 2.4° from Venus
December 12th, 18:14 : Moon at perigee (D = 357075 km)
December 13th, 03:41 : NEW MOON
December 20th, 00:19 : FIRST QUARTER OF THE MOON
December 21st, 06:11 : WINTER SOLSTICE
December 25th, 16:19 : Moon at apogee (D = 406098 km)
December 25th, 18:31 : the Moon is 0.9° from Jupiter
December 25th, 23:59 : the Moon is 3.8° from Aldebaran
December 28th, 05:21 : FULL MOON

Legend

Setting or rising of the Sun
End of civil twilight (Sun 6° below the horizon)
End of nautical twilight (Sun 12° below the horizon)
End of astronomical twilight (Sun 18° below the horizon)

The inclined red lines give the local sidereal time.
This corresponds to the right ascension of the celestial bodies that transit the celestial meridian at that time.
For example, the 6h line indicates when Betelgeuse transits the meridian, since its right ascension is about 6h.

The vertical blue line indicates the true middle of the night.
This is the sum of the equation of time and the correction in longitude if the site is not at the center of the time zone.
Add 12 hours to get the time when the Sun transits the meridian.

Setting or rising of Mercury
Setting or rising of Venus
Meridian transit of Saturn *
Rising of Saturn *
Setting of Saturn *
* (or another planet depending on the color of the line)

Moonset
Phase and meridian transit of the Moon
Moonrise

> < Conjunction or close grouping of celestial bodies
→ Greatest elongation of Venus or Mercury
+ Maximum brightness of Venus
* Meteor shower

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