

Almanac of Astronomical Events for 2021

Date	GMT (h:m)	Event	Date	GMT (h:m)	Event
Jan 02	14	Earth at Perihelion: 0.98325 AU	Apr 04	10:02	LAST QUARTER MOON
	03	Quadrantid Meteor Shower		06	08:34 Saturn 4.0°N of Moon
	06	09:37 LAST QUARTER MOON		07	07:15 Jupiter 4.4°N of Moon
	09	15:39 Moon at Perigee: 367390 km		12	02:31 NEW MOON
	11	20:12 Venus 1.5°N of Moon		14	17:47 Moon at Apogee: 406120 km
	13	05:00 NEW MOON		17	12:09 Mars 0.1°N of Moon: Occn.
	14	08:15 Mercury 2.3°N of Moon		19	02 Mercury at Superior Conjunction
	20	21:02 FIRST QUARTER MOON		19	18:18 Pollux 3.2°N of Moon
	21	13:11 Moon at Apogee: 404361 km		20	06:59 FIRST QUARTER MOON
	24	02 Mercury at Greatest Elong: 18.6°E		22	12 Lyrid Meteor Shower
	24	02 Saturn in Conjunction with Sun		27	03:31 FULL MOON
	27	15:46 Pollux 3.8°N of Moon		27	15:24 Moon at Perigee: 357379 km
	28	19:16 FULL MOON		30	21 Uranus in Conjunction with Sun
	29	01 Jupiter in Conjunction with Sun			
Feb 03	19:33	Moon at Perigee: 370127 km	May 03	17:02	Saturn 4.2°N of Moon
	04	17:37 LAST QUARTER MOON		03	19:50 LAST QUARTER MOON
	08	14 Mercury at Inferior Conjunction		04	03:03 Mercury 2.1°S of Pleiades
	10	11:16 Saturn 3.4°N of Moon		04	21:00 Jupiter 4.6°N of Moon
	11	19:06 NEW MOON		05	01 Eta-Aquarid Meteor Shower
	18	10:22 Moon at Apogee: 404467 km		11	19:00 NEW MOON
	18	22:47 Mars 3.7°N of Moon		11	21:54 Moon at Apogee: 406512 km
	19	18:47 FIRST QUARTER MOON		13	17:59 Mercury 2.1°N of Moon
	23	08 Mercury 4.0°N of Saturn		16	04:47 Mars 1.5°S of Moon
	24	01:10 Pollux 3.7°N of Moon		17	00:39 Pollux 3.1°N of Moon
	27	08:17 FULL MOON		17	06 Mercury at Greatest Elong: 22.0°E
				19	19:13 FIRST QUARTER MOON
Mar 02	05:19	Moon at Perigee: 365422 km		26	01:52 Moon at Perigee: 357310 km
	03	23:36 Mars 2.6°S of Pleiades		26	11:14 FULL MOON
	05	05 Mercury 0.3°N of Jupiter		26	11:19 Total Lunar Eclipse; mag=1.009
	06	01:30 LAST QUARTER MOON		29	03 Mercury 0.4°S of Venus
	06	11 Mercury at Greatest Elong: 27.3°W		31	01:22 Saturn 4.2°N of Moon
	09	23:02 Saturn 3.7°N of Moon			
	10	15:35 Jupiter 4.0°N of Moon	Jun 01	08:57	Jupiter 4.6°N of Moon
	11	00 Neptune in Conjunction with Sun		02	07:24 LAST QUARTER MOON
	11	01:02 Mercury 3.7°N of Moon		08	02:27 Moon at Apogee: 406230 km
	13	10:21 NEW MOON		10	10:42 Annular Solar Eclipse; mag=0.943
	18	05:04 Moon at Apogee: 405253 km		10	10:53 NEW MOON
	19	17:48 Mars 1.9°N of Moon		11	01 Mercury at Inferior Conjunction
	20	09:37 Vernal Equinox		12	06:44 Venus 1.5°S of Moon
	21	14:40 FIRST QUARTER MOON		13	06:19 Pollux 3.1°N of Moon
	23	10:26 Pollux 3.5°N of Moon		13	19:52 Mars 2.8°S of Moon
	26	06 Venus at Superior Conjunction		18	03:54 FIRST QUARTER MOON
	28	18:48 FULL MOON		21	03:32 Summer Solstice
	30	06:12 Moon at Perigee: 360311 km		23	09:58 Moon at Perigee: 359960 km
				24	18:40 FULL MOON
				27	09:30 Saturn 4.0°N of Moon
				28	18:38 Jupiter 4.5°N of Moon

FIFTY YEAR ALMANAC OF ASTRONOMICAL EVENTS – 2021 TO 2070

Date	GMT (h:m)	Event	Date	GMT (h:m)	Event
Jul 01	21:11	LAST QUARTER MOON	Oct 06	11:05	NEW MOON
04	20	Mercury at Greatest Elong: 21.6°W	08	04	Mars in Conjunction with Sun
05	14:48	Moon at Apogee: 405342 km	08	17:28	Moon at Perigee: 363388 km
05	23	Earth at Aphelion: 1.01673 AU	09	16	Mercury at Inferior Conjunction
08	04:38	Mercury 3.7°S of Moon	09	18:36	Venus 2.9°S of Moon
10	01:17	NEW MOON	10	06:27	Antares 4.0°S of Moon
12	09:10	Venus 3.3°S of Moon	13	03:25	FIRST QUARTER MOON
12	10:10	Mars 3.8°S of Moon	14	07:12	Saturn 3.9°N of Moon
13	00	Mars at Aphelion: 1.66596 AU	15	09:58	Jupiter 4.1°N of Moon
13	13	Venus 0.5°N of Mars	16	13:24	Venus 1.4°N of Antares
17	10:11	FIRST QUARTER MOON	20	14:57	FULL MOON
21	10:30	Moon at Perigee: 364520 km	21	11	Orionid Meteor Shower
21	21:21	Venus 1.0°N of Regulus	24	15:30	Moon at Apogee: 405616 km
24	02:37	FULL MOON	25	05	Mercury at Greatest Elong: 18.4°W
24	16:42	Saturn 3.8°N of Moon	27	20:40	Pollux 2.6°N of Moon
26	01:17	Jupiter 4.2°N of Moon	28	20:05	LAST QUARTER MOON
28	03	Delta-Aquarid Meteor Shower	29	22	Venus at Greatest Elong: 47.0°E
29	14:09	Mars 0.6°N of Regulus			
31	13:16	LAST QUARTER MOON	Nov 03	18:40	Mercury 1.2°S of Moon: Occn.
Aug 01	14	Mercury at Superior Conjunction	04	21:15	NEW MOON
02	05	Saturn at Opposition	05	00	Uranus at Opposition
02	07:35	Moon at Apogee: 404412 km	05	12	S Taurid Meteor Shower
06	19:42	Pollux 3.1°N of Moon	05	22:23	Moon at Perigee: 358845 km
08	13:50	NEW MOON	06	15:29	Antares 3.9°S of Moon
10	00:42	Mars 4.3°S of Moon	08	05:21	Venus 1.1°S of Moon: Occn.
11	07:00	Venus 4.3°S of Moon	10	14:27	Saturn 4.1°N of Moon
12	19	Perseid Meteor Shower	11	12:46	FIRST QUARTER MOON
15	15:20	FIRST QUARTER MOON	11	17:13	Jupiter 4.4°N of Moon
17	09:23	Moon at Perigee: 369127 km	12	11	N Taurid Meteor Shower
19	03	Mercury 0.1°S of Mars	17	18	Leonid Meteor Shower
19	23	Jupiter at Opposition	19	08:58	FULL MOON
20	22:19	Saturn 3.7°N of Moon	19	09:03	Partial Lunar Eclipse; mag=0.974
22	04:52	Jupiter 4.0°N of Moon	21	02:14	Moon at Apogee: 406276 km
22	12:02	FULL MOON	24	03:22	Pollux 2.5°N of Moon
30	02:22	Moon at Apogee: 404100 km	27	12:28	LAST QUARTER MOON
30	07:13	LAST QUARTER MOON	29	05	Mercury at Superior Conjunction
Sep 03	04:04	Pollux 3.0°N of Moon	Dec 03	00:28	Mars 0.7°S of Moon: Occn.
05	14:32	Venus 1.4°N of Spica	04	07:33	Total Solar Eclipse; mag=1.037
07	00:52	NEW MOON	04	07:43	NEW MOON
10	02:09	Venus 4.1°S of Moon	04	10:01	Moon at Perigee: 356794 km
11	10:05	Moon at Perigee: 368464 km	07	00:48	Venus 1.9°N of Moon
12	23:59	Antares 4.2°S of Moon	08	01:52	Saturn 4.2°N of Moon
13	20:39	FIRST QUARTER MOON	09	06:07	Jupiter 4.5°N of Moon
14	04	Mercury at Greatest Elong: 26.8°E	11	01:36	FIRST QUARTER MOON
14	08	Neptune at Opposition	14	07	Geminid Meteor Shower
17	02:37	Saturn 3.8°N of Moon	18	02:16	Moon at Apogee: 406322 km
18	06:50	Jupiter 4.0°N of Moon	19	04:36	FULL MOON
20	23:55	FULL MOON	21	09:20	Pollux 2.6°N of Moon
21	02:00	Mercury 1.2°S of Spica	21	15:59	Winter Solstice
22	19:21	Autumnal Equinox	22	15	Ursid Meteor Shower
26	21:44	Moon at Apogee: 404641 km	27	02:24	LAST QUARTER MOON
29	01:57	LAST QUARTER MOON	29	05	Mercury 4.2°S of Venus
30	12:44	Pollux 2.8°N of Moon	31	13:54	Antares 3.9°S of Moon
			31	20:13	Mars 1.0°N of Moon: Occn.