

Celestial Events for 2022

Hökūlani Imaginarium
 Windward Community College
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all times HST

Month	Day	Time	Celestial Event 2022
Jan	1	1:00 pm	Moon at perigee (closest to earth)
	2	4:04 am	Perigean Spring (King) Tides (2.63 ft) — Honolulu Harbor
	2	8:33 am	New Moon Super New Moon: largest new moon that occurs nearest perigee
	3	1 am – 6 am	Quadrantid Meteor Shower peak
	3	6:30 - 7 pm	Conjunction of Moon-Mercury (3.3° apart)
	3	8:55 pm	Perihelion (earth closest to sun)
	5	6:00 – 9:15 pm	Conjunction of Moon-Jupiter (4.3° apart)
	9	8:11 am	First Quarter (Waxing Half) Moon
	12	6:00 – 7 pm	Conjunction of Mercury-Saturn (3.3° apart)
	13	11:27 pm	Moon at apogee (farthest from earth)
	16	7:10:16 am	latest time that sunrise ever occurs in Honolulu
	17	1:48 pm	Full Moon
	25	3:40 am	Last Quarter (Waning Half) Moon
	29	9:09 pm	Moon at perigee (closest to earth)
	29	5:15 – 6:45 am	Conjunction of Moon-Mars (2.9° apart)
	31	7:46 pm	New Moon Black Moon: second new moon in the same month
Feb			Note: February is a Black Moon month since there is no New Moon throughout this month
	2	6:30 – 7:45 pm	Conjunction of Moon-Jupiter (4.3° apart)
	8	3:50 am	First Quarter (Waxing Half) Moon
	9	5 am	Venus at its brightest (mag -4.6)
	10	4:39 pm	Moon at apogee (farthest from earth)
	11	12:45:37 pm	latest “noon”—latest time sun crosses the meridian in Honolulu (latest apparent noon)
	12	5:00 – 6:45 am	Conjunction of Venus-Mars (6.5° apart)
	15	7 am	Mercury at highest point in morning sky (19° altitude)
	16	6:56 am	Full Moon
	23	12:32 pm	Last Quarter (Waning Half) Moon
	26	4:45 – 6:30 am	Conjunction of Venus-Mars (5.2° apart) with Moon nearby
	26	12:18 pm	Moon at perigee (closest to earth)
Mar	2	7:34 am	New Moon
	3	7 am	Venus at highest point in morning sky (34° altitude)
	10	12:45 am	First Quarter (Waxing Half) Moon

	10	1:05 pm	Moon at apogee (farthest from earth)
	12	sunrise 6:41:03 am sunset 6:41:01 pm	Spring Equilux (equilux: equal day & night—12 hrs of daylight & 12 hrs of nighttime)
	13	2:00 am	Daylight Saving Times begins on mainland [Note: Hawaii does not observe DST]
	15	4:15 – 6:30 am	Conjunction of Venus & Mars (4° apart)
	17	9:17 pm	Full Moon
	20	5:33 am	Vernal Equinox (first day of spring)
	23	1:28 pm	Moon at perigee (closest to earth)
	24	7:37 pm	Last Quarter (Waning Half) Moon
	27	4:00 – 6:00 am	Conjunction of Venus-Mars-Saturn (4° apart) with Moon nearby
	31	8:24 pm	New Moon Black Moon: second new moon in the same month [Note: This is the third Black Moon in a row this year—rare event.]
Apr	4	4:00 – 6:15 am	Conjunction of Saturn-Mars (0.3° apart)
	7	9:11 am	Moon at apogee (farthest from earth)
	8	8:47 pm	First Quarter (Waxing Half) Moon
	16	8:55 am	Full Moon
	19	5:16 am	Moon at perigee (closest to earth)
	21-22	10 pm – 5 am	Lyrid Meteor Shower peak
	23	1:56 am	Last Quarter (Waning Half) Moon
	24	2:45 – 5:45am	Conjunction of Moon-Saturn (7° apart)
	25	3:30 – 5:45am	Conjunction of Moon-Mars (6.8° apart)
	27	4:30 – 5:45 am	Conjunction of Moon-Jupiter-Venus (3° apart)
	30	4:00 – 5:45 am	Conjunction of Jupiter-Venus (0.25° apart)
	30	10:28 am	New Moon
May	4	7 pm	Mercury at highest point in evening sky (19° altitude)
	5	2:46 am	Moon at apogee (farthest from earth)
	5	2:00 am – 5:00 am	Eta Aquarid Meteor Shower peak
	8	2:21 pm	First Quarter (Waxing Half) Moon
	15	6:14 pm	Full Moon
	15	partial phase in progress at moonrise 7:02 pm	PARTIAL LUNAR ECLIPSE partial begins: 7:02 pm May 15 at moonrise local max: 7:04 pm May 15 partial ends: 7:55 pm May 15 [Note: this is a Total Lunar Eclipse from mainland USA]

	17	5:23 am	Moon at perigee (closest to earth)
	18	12:17 pm	Hilo (kau ka lā i ka lolo = “Lāhaina Noon”)
	18	12:21 pm	Kailua-Kona (kau ka lā i ka lolo = “Lāhaina Noon”)
	22	2:45 – 5:30 am	Conjunction of Moon-Saturn (4.5° apart)
	22	8:43 am	Last Quarter (Waning Half) Moon
	23	12:21 pm	Hāna (kau ka lā i ka lolo = “Lāhaina Noon”)
	23	12:25 pm	Lāna‘i City (kau ka lā i ka lolo = “Lāhaina Noon”)
	24	3:00 – 5:30 am	Conjunction of Moon-Mars-Jupiter (3.5° apart)
	24	12:23 pm	Kahului (kau ka lā i ka lolo = “Lāhaina Noon”)
	24	12:24 pm	Lāhaina (kau ka lā i ka lolo = “Lāhaina Noon”)
	25	12:25 pm	Kaunakakai (kau ka lā i ka lolo = “Lāhaina Noon”)
	26	4:00 – 5:30 am	Conjunction of Moon-Venus (5° apart)
	26	12:29 pm	Honolulu (kau ka lā i ka lolo = “Lāhaina Noon”)
	27	12:29 pm	Kāne‘ohe (kau ka lā i ka lolo = “Lāhaina Noon”)
	28	2:30 – 5:30 am	Conjunction of Jupiter-Mars (0.6° apart)
	30	1:30 am	New Moon
	31	12:35 pm	Līhue (kau ka lā i ka lolo = “Lāhaina Noon”)
Jun	1	3:14 am	Moon at apogee (farthest from earth)
	6	5:47:25 am	earliest time sunrise ever occurs in Honolulu
	7	4:48 am	First Quarter (Waxing Half) Moon
	14	1:51 am	Full Moon Super Full Moon: largest/brightest full moon that occurs nearest perigee
	14	1:21 pm	Moon at perigee (closest to earth)
	14	4:42 pm	Perigean Spring (King) Tides (2.63 ft) — Honolulu Harbor
	17	11:15 pm – 5:30 am	Conjunction of Moon-Saturn (9.5° apart)
	19	5:45 am	Mercury at highest altitude in morning sky (18°)
	20	4:30 am – 5:30 am	Conjunction of Mercury-Venus (9.5° apart)
	20	5:10 pm	Last Quarter (Waning Half) Moon
	20	11:13 pm	Summer Solstice (first day of summer) Honolulu sunrise 5:48:58 am; sunset 7:17:15 pm Longest Day: 13h 28m 17s
	21	1:15 – 5:30 am	Conjunction of Moon-Jupiter (3.7° apart)
	22	1:45 – 5:30 am	Conjunction of Moon-Mars (2° apart)
	26	4:15 – 5:30 am	Conjunction of Moon-Venus (5.1° apart)
	27	5:00 – 5:30 am	Conjunction of Moon-Mercury (5.8° apart)
	28	4:52 pm	New Moon Micro New Moon: smallest new moon that occurs nearest apogee
	28	8:08 pm	Moon at apogee (farthest from earth)
Jul	3	9:11 pm	Aphelion (earth farthest from sun)
	4	7:18:53 pm	latest time sunset ever occurs in Honolulu

	6	4:14 pm	First Quarter (Waxing Half) Moon
	11	12:43 pm	Lihue (kau ka lā i ka lolo = “Lāhaina Noon”)
	12	11:08 pm	Moon at perigee (closest to earth)
	13	8:37 am	Full Moon Super Full Moon: largest/brightest full moon that occurs nearest perigee
	13	7:28 pm	Perigean Spring (King) Tides (2.72 ft) — Honolulu Harbor
	15	12:37 pm	Kāne‘ohe (kau ka lā i ka lolo = “Lāhaina Noon”)
	15	10:00 pm – 5:30 am	Conjunction of Moon-Saturn (6° apart)
	16	12:38 pm	Honolulu (kau ka lā i ka lolo = “Lāhaina Noon”)
	17	12:35 pm	Kaunakakai (kau ka lā i ka lolo = “Lāhaina Noon”)
	18	11:45 pm – 5:30 am	Conjunction of Moon-Jupiter (5° apart)
	18	12:32 pm	Kahului (kau ka lā i ka lolo = “Lāhaina Noon”)
	18	12:33 pm	Lāhaina (kau ka lā i ka lolo = “Lāhaina Noon”)
	19	12:34 pm	Lāna‘i City (kau kā la i ka lolo = “Lāhaina Noon”)
	19	12:30 pm	Hāna (kau ka lā i ka lolo = “Lāhaina Noon”)
	20	4:18 am	Last Quarter (Waning Half) Moon
	21	1:00 am – 5:30 am	Conjunction of Moon-Mars (0.5° apart)
	24	12:27 pm	Hilo (kau ka lā i ka lolo = “Lāhaina Noon”)
	24	12:31 pm	Kailua-Kona (kau ka lā i ka lolo = “Lāhaina Noon”)
	26	12:22 am	Moon at apogee (farthest from earth)
	28	7:54 am	New Moon
	29-30	9 pm – 5 am	Delta Aquariid Meteor Shower peak
Aug	3	7:45 pm – 8 pm	Mercury near Regulus (0.6° apart)
	5	1:06 am	First Quarter (Waxing Half) Moon
	10	7:14 am	Moon at perigee (closest to earth)
	10	3:25 pm	Perigean Spring (King) Tides (2.65 ft) — Honolulu Harbor
	11	3:35 pm	Full Moon
	11	7:45 pm – 5:30 am	Conjunction of Moon-Saturn (4.3° apart)
	12-13	10 pm – 5 pm	Perseid Meteor Shower peak
	14	9:45 pm – 5:30 am	Conjunction of Moon-Jupiter (2.7° apart)
	18	6:36 pm	Last Quarter (Waning Half) Moon
	19	12:15 am – 5:30 am	Conjunction of Moon-Mars (2° apart)
	21	7 pm	Mercury at highest altitude in evening sky (17°)
	22	11:53 am	Moon at apogee (farthest from earth)
	25	5:15 pm – 5:45 am	Conjunction of Moon-Venus (4.7° apart)
	26	10:17 pm	New Moon
Sep	3	8:07 am	First Quarter (Waxing Half) Moon
	6	12:15 am – 5:45 am	Mars near Aldebaran (4.2° apart)
	7	8:17 am	Moon at perigee (closest to earth)
	7	6:30 pm – 4 am	Conjunction of Moon-Saturn (5° apart)
	9	11:59 pm	Full Moon
	10	7:45 pm – 6 am	Conjunction of Moon-Jupiter (2.1° apart)
	15	11:15 pm – 6 am	Conjunction of Moon-Mars (5.3° apart)

	17	11:52 am	Last Quarter (Waning Half) Moon
	19	4:44 am	Moon at apogee (farthest from earth)
	22	3:03 pm	Autumnal Equinox (first day of fall)
	25	11:54 am	New Moon
	30	sunrise 6:21:20 am sunset 6:21:11 pm	Fall Equilux (equilux: equal day & night—12 hrs of daylight & 12 hrs of nighttime)
Oct	2	2:14 pm	First Quarter (Waxing Half) Moon
	4	7:01 am	Moon at perigee (closest to earth)
	4	6:15 pm – 1:30 am	Conjunction of Moon-Saturn (8.3° apart)
	7	6:15 pm – 4:30 am	Conjunction of Moon-Jupiter (5° apart)
	8-9	7 pm – 1 am	Draconid Meteor Shower peak
	9	10:54 am	Full Moon
	9-10	8 pm – 6 am	South Taurid Meteor Shower peak
	10	6 am	Mercury at highest altitude in morning sky (17°)
	14	10:15 pm – 6 am	Conjunction of Moon-Mars (4.4° apart)
	17	12:21 am	Moon at apogee (farthest from earth)
	17	7:15 am	Last Quarter (Waning Half) Moon
	20-21	11 pm – 6 am	Orionid Meteor Shower peak
	25	12:48 am	New Moon
	29	4:48 am	Moon at perigee (closest to earth)
	31	8:37 pm	First Quarter (Waxing Half) Moon
Nov	1	6:15 pm – 12:30 am	Conjunction of Moon-Saturn (5.3° apart)
	2	12:14:59 pm	earliest “noon”—earliest time sun crosses the meridian in Honolulu (earliest apparent noon)
	4	8:15 pm – 3 am	Conjunction of Moon-Jupiter (4.5° apart)
	6	2:00 am	Daylight Saving Times ends on mainland [Hawaii does not observe DST]
	7	starts 11:09 pm on Nov 7 max at 12:59 am on Nov 8 duration of totality: 1 hr 25 min	TOTAL LUNAR ECLIPSE partial begins: 11:09 pm Nov 7 totality starts: 12:16 am Nov 8 max: 12:59 am Nov 8 totality ends: 1:42 am Nov 8 partial ends: 2:49 am Nov 8
	8	1:02 am	Full Moon
	10	9 pm – 6:15 am	Conjunction of Moon-Mars (2.3° apart)
	12	6 pm – 6 am	North Taurid Meteor Shower peak

	13	8:41 pm	Moon at apogee (farthest from earth)
	16	3:27 am	Last Quarter (Waning Half) Moon
	17	5:49 pm	Pleiades rise at sunset (first condition needed for declaring start of Makahiki; must wait until the sighting of first visible crescent moon after this date)
	18	12 mid – 6:00 am	Leonid Meteor Shower peak
	23	12:57 pm	New Moon
	24	5:45 pm – 6:00 pm	Conjunction of Mercury-Venus (1.5° apart)
	24	sunset	Beginning of Makahiki with sighting of first visible crescent moon (Hilo moon) after rise of Pleiades (this unofficially could be consider beginning of Makahiki; technically someone must visually sight the first crescent moon that occurs after the Mahakihi rise at sunset)
	25	3:30 pm	Moon at perigee (closest to earth)
	26	5:49:24 pm	earliest time that sunset ever occurs in Honolulu
	28	6:00 pm – 10:30 pm	Conjunction of Moon-Saturn (4.8° apart)
	30	4:36 am	First Quarter (Waxing Half) Moon
Dec	1	5:45 pm – 6:00 am	Conjunction of Moon-Jupiter (2.7° apart)
	7	6:08 pm	Full Moon
	7	6:15 pm – 6:15 am	Conjunction of Moon-Mars (0.5° apart); Moon occults Mars from mainland USA; Mars at opposition
	11	2:30 pm	Moon at apogee (farthest from earth)
	13-14	8 pm – 6 am	Geminid Meteor Shower peak
	15	10:56 pm	Last Quarter (Waning Half) Moon
	17	3:39 am – 4:52 am	Lunar Occultation of Gamma Virginis (Porrima)
	21	11:48 am	Winter Solstice (first day of winter) Honolulu sunrise 7:03:23 am; sunset 5:56:00 pm Shortest Day: 10h 52m 37s
	21-22	7 pm – 6 am	Ursid Meteor Shower peak
	23	12:16 am	New Moon Super New Moon: largest new moon that occurs nearest perigee
	23	10:32 pm	Moon at perigee (closest to earth)
	24	5:04 am	Perigean Spring (King) Tides (2.62 ft) — Honolulu Harbor
	24	6 pm – 6:45 pm	Conjunction Moon-Mercury-Venus (5° apart)
	26	6:30 pm – 9 pm	Conjunction of Moon-Saturn (7.5° apart)
	28	6 pm – 6:45 pm	Conjunction of Mercury-Venus (1.3° apart)
	28	6 pm – 11:30 pm	Conjunction of Moon-Jupiter (5.3° apart)
	29	3:20 pm	First Quarter (Waxing Half) Moon