

Celestial Events for 2020

Hōkūlani Imaginarium
Windward Community College
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all times HST

Month	Day	Time	Celestial Event 2020
Jan	1	3:30 pm	Moon at apogee (farthest from earth)
	2	6:45 pm	First Quarter (Waxing Half) Moon
	4	9:48 pm	Perihelion (earth closest to sun)
	3	after sunset	Quadrantid Meteor Shower
	10	7:07 am – 7:11 am	Penumbral Lunar Eclipse (max: 7:09 am; duration: 4 min)
	10	9:21 am	Full Moon
	11	4:48 am	Perigean Spring (King) Tides (2.5 ft) — Honolulu Harbor
	13	10:20 am	Moon at perigee (closest to earth)
	17	2:58 am	Last Quarter (Waning Half) Moon
	24	11:42 am	New Moon
	29	11:28 am	Moon at apogee (farthest from earth)
Feb	1	3:41 pm	First Quarter (Waxing Half) Moon
	8	9:33 pm	Full Moon
	10	10:31 am	Moon at perigee (closest to earth)
	15	12:17 pm	Last Quarter (Waning Half) Moon
	19	5:00 am	Jupiter & Waning Crescent Moon conjunction: 2° apart
	23	5:32 am	New Moon
	26	1:35 am	Moon at apogee (farthest from earth)
Mar	2	9:57 am	First Quarter (Waxing Half) Moon
	9	7:47 am	Full Moon Super Full Moon: largest/brightest full moon that occurs nearest perigee
	9	8:33 pm	Moon at perigee (closest to earth)
	12	sunrise 6:40 am sunset 6:40 pm	Spring Equilux (equilux: equal day & night—12 hrs of daylight & 12 hrs of nighttime)
	15	11:34 pm	Last Quarter (Waning Half) Moon
	20	4:00 am	Conjunction of Jupiter & Mars (0.7° apart)
	19	5:50 pm	Vernal Equinox (first day of spring)
	23	11:28 pm	New Moon Micro New Moon: smallest new moon that occurs nearest apogee
	24	5:23 am	Moon at apogee (farthest from earth)
	26	4:00 am	Greatest conjunction of Jupiter, Mars & Saturn (3.5° apart)
	31	4:00 am	Conjunction of Mars & Saturn (1.5° apart)

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Apr	1	12:21 am	First Quarter (Waxing Half) Moon
	7	8:08 am	Moon at perigee (closest to earth)
	7	4:35 pm	Full Moon Super Full Moon: largest/brightest full moon that occurs nearest perigee
	14	12:56 pm	Last Quarter (Waning Half) Moon
	20	9:01 am	Moon at apogee (farthest from earth)
	22	after sunset	Lyrid Meteor Shower
	22	4:25 pm	New Moon
	30	10:38 am	First Quarter (Waxing Half) Moon
May	5	5:03 pm	Moon at perigee (closest to earth)
	6	after sunset	Eta Aquarid Meteor Shower
	7	12:45 am	Full Moon Super Full Moon: largest/brightest full moon that occurs nearest perigee
	14	4:02 am	Last Quarter (Waning Half) Moon
	17	9:45 pm	Moon at apogee (farthest from 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")
	21	8:00 pm	Conjunction of Venus & Mercury (0.9° apart)
	22	7:38 am	New 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	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	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")
	29	5:29 pm	First Quarter (Waxing Half) Moon
	30	12:35 pm	Līhue (kau ka lā i ka lolo = "Lāhaina Noon")
Jun	2	5:36 pm	Moon at perigee (closest to earth)
	5	9:12 am	Full Moon
	12	8:23 pm	Last Quarter (Waning Half) Moon
	14	2:56 pm	Moon at apogee (farthest from earth)
	19	5:00 am	Venus & Waning Crescent Moon conjunction: 4° apart
	20	11:44 am	Summer Solstice (first day of summer)
	20	8:41 pm	New Moon
	27	10:15 pm	First Quarter (Waxing Half) Moon
	29	4:09 pm	Moon at perigee (closest to earth)
Jul	4	1:35 am	Aphelion (earth farthest from sun)
	4	6:44 pm	Full Moon
	4	7:18 pm – 7:52 pm	Penumbral Lunar Eclipse (max: 7:21 pm; duration: 34 min)
	11	12:43 pm	Līhue (kau ka lā i ka lolo = "Lāhaina Noon")

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	12	9:27 am	Moon at apogee (farthest from earth)
	12	1:28 pm	Last Quarter (Waning Half) Moon
	14	12:37 pm	Kāne‘ohe (kau ka lā i ka lolo = “Lāhaina Noon”)
	15	12:38 pm	Honolulu (kau ka lā i ka lolo = “Lāhaina Noon”)
	16	12:35 pm	Kaunakakai (kau ka lā i ka lolo = “Lāhaina Noon”)
	17	12:32 pm	Kahului (kau ka lā i ka lolo = “Lāhaina Noon”)
	17	12:33 pm	Lāhaina (kau ka lā i ka lolo = “Lāhaina Noon”)
	18	12:30 pm	Hāna (kau ka lā i ka lolo = “Lāhaina Noon”)
	18	12:34 pm	Lāna‘i City (kau kā la i ka lolo = “Lāhaina Noon”)
	20	7:32 am	New Moon
	23	12:27 pm	Hilo (kau ka lā i ka lolo = “Lāhaina Noon”)
	23	12:31 pm	Kailua-Kona (kau ka lā i ka lolo = “Lāhaina Noon”)
	24	6:54 pm	Moon at perigee (closest to earth)
	27	2:32 am	First Quarter (Waxing Half) Moon
	28	after sunset	Delta Aquarid Meteor Shower
Aug	3	5:58 am	Full Moon
	8	11:00 pm	Mars & Waning Gibbous Moon conjunction: 1.5° apart
	9	3:51 am	Moon at apogee (farthest from earth)
	11	6:44 am	Last Quarter (Waning Half) Moon
	12	after sunset	Perseid Meteor Shower
	18	4:41 pm	New Moon Black Moon: third New Moon in a season with four New Moons
	21	12:59 am	Moon at perigee (closest to earth)
	25	7:57 am	First Quarter (Waxing Half) Moon
Sep	1	4:49 am	Apollo asteroid 2011 ES4 passes 48,500 miles from earth
	1	7:22 pm	Full Moon
	5	9:30 pm	Mars & Waning Gibbous Moon conjunction: 2° apart
	9	11:25 pm	Last Quarter (Waning Half) Moon
	17	1:00 am	New Moon Super New Moon: largest New Moon that occurs nearest perigee
	18	3:44 am	Moon at perigee (closest to earth)
	22	3:31 am	Autumnal Equinox (first day of fall)
	23	3:54 pm	First Quarter (Waxing Half) Moon
	27	sunrise 6:22 am sunset 6:22 pm	Fall Equilux (equilux: equal day & night—12 hrs of daylight & 12 hrs of nighttime)
Oct	1	11:05 am	Full Moon Micro Full Moon: smallest/dimmest full moon that occurs nearest apogee
	2	7:30 pm	Mars & Waning Gibbous Moon conjunction: 1.9° apart
	3	7:22 am	Moon at apogee (farthest from earth)
	7	after sunset	Draconid Meteor Shower
	9	2:39 pm	Last Quarter (Waning Half) Moon

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	16	9:31 am	New Moon
	16	1:46 pm	Moon at perigee (closest to earth)
	21	after sunset	Orionid Meteor Shower
	23	3:22 am	First Quarter (Waxing Half) Moon
	30	8:46 am	Moon at apogee (farthest from earth)
	31	4:49 am	Full Moon Blue Moon: second Full Moon in a single calendar month Micro Full Moon: smallest/dimmest full moon that occurs nearest apogee
Nov	4	after sunset	South Taurid Meteor Shower
	8	3:46 am	Last Quarter (Waning Half) Moon
	11	after sunset	North Taurid Meteor Shower
	14	1:48 am	Moon at perigee (closest to earth)
	14	7:07 pm	New Moon Super New Moon: largest New Moon that occurs nearest perigee
	15	4:13 am	Perigean Spring (King) Tides (2.6 ft) Honolulu Harbor
	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)
	17	after sunset	Leonid Meteor Shower
	21	6:45 pm	First Quarter (Waxing Half) Moon
	26	2:29 pm	Moon at apogee (farthest from earth)
	29	9:32 pm – 1:53 am	Penumbral Lunar Eclipse (max: 11:42 pm; duration: 4hr 21min)
	29	11:29 pm	Full Moon
Dec	7	2:36 pm	Last Quarter (Waning Half) Moon
	12	5:30 am	Venus & Waning Crescentn conjunction: 2.3° apart
	12	10:42 am	Moon at perigee (closest to earth)
	13	after sunset	Geminid Meteor Shower
	14	6:16 am	New Moon
	15	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)
	21	12:02 am	Winter Solstice (first day of winter)
	21	1:41 pm	First Quarter (Waxing Half) Moon
	21	6:30 pm	Greater conjunction of Jupiter & Saturn: 0.1° apart
	21	after sunset	Ursid Meteor Shower
	24	6:32 am	Moon at apogee (farthest from earth)
	29	5:28 pm	Full Moon