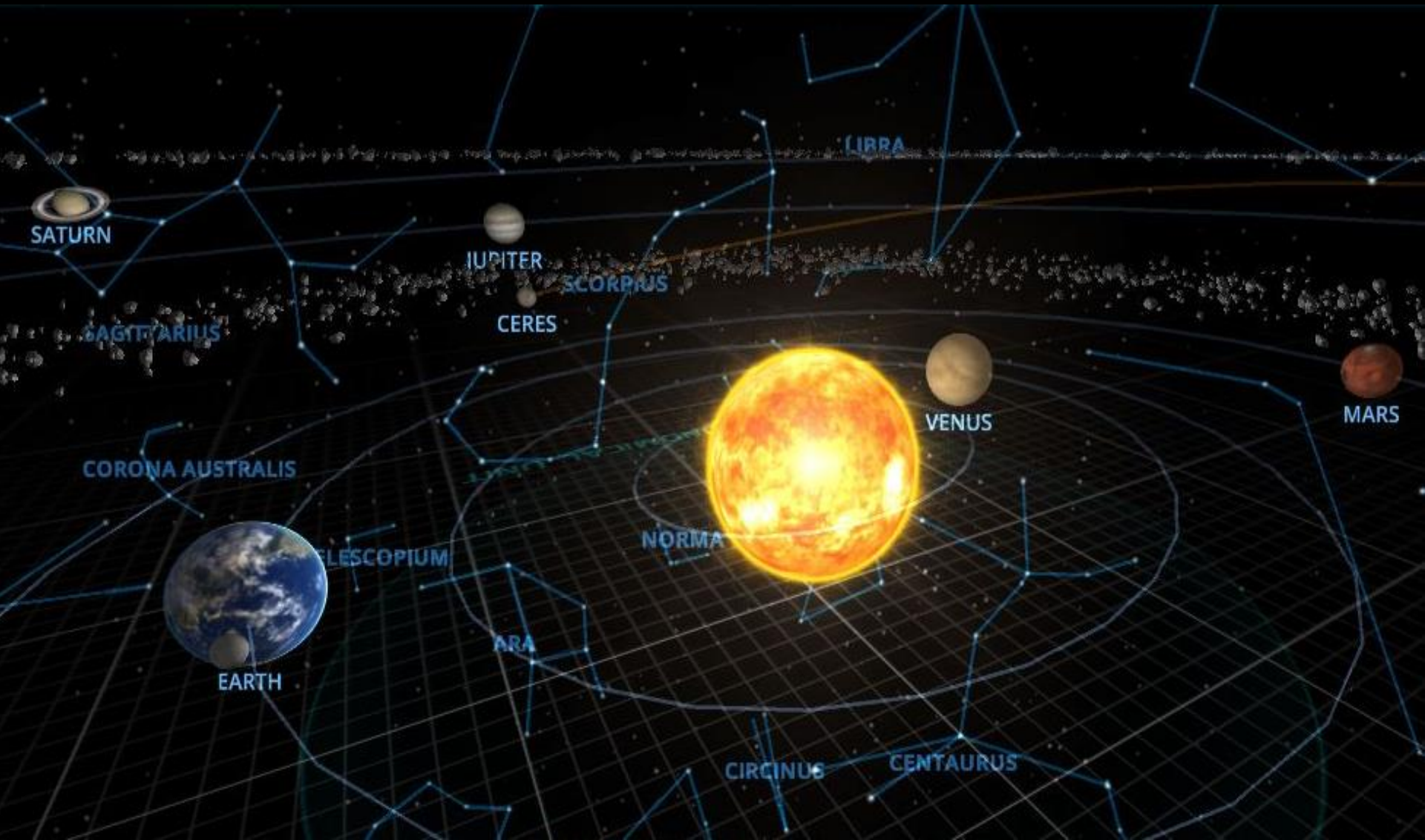
What's Up

Jan - Feb 2021

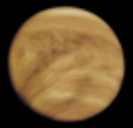


Inner Planets

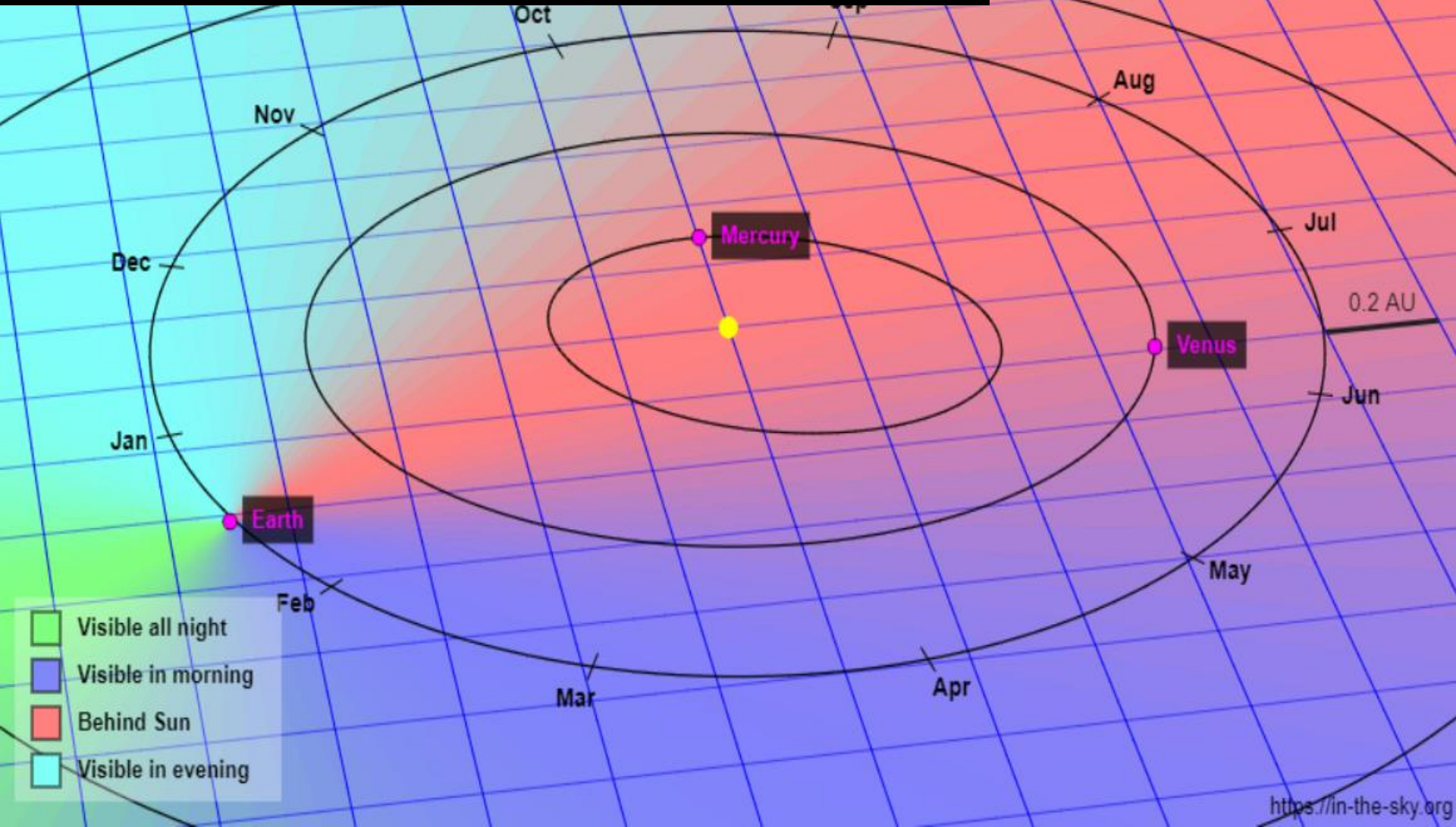
Mercury

Mercury just pass superior solar conjuntion (19 Dec 2020) it will reach its highest point in the sky during daytime and is no higher than 8° in January ~ 10° in February above the horizon.

Venus



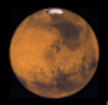
Venus will soon pass behind to the Sun. It will be not observable and reaching no more to an altitude of 5° above horizon.



Outer Planets

Mars it's visible in the evening sky as the dusk sky fades. It will reach highest point in the sky around 06.40 p.m. 60° above southern horison.

Mars



Jupiter is getting closer to pass behind to the Sun @ solar conjunction (28 Jan 2021). Not observable.

Jupiter

Saturn is getting closer to pass behind to the Sun @ solar conjunction (23 Jan 2021). Not observable

Saturn

Uranus is currently an early evening object. It will becoming accessible as the dusk sky fades, 58° above your south-eastern horizon. Observable till around 23:45 In January

Uranus

Neptune is currently an early evening object. It will becoming accessible ss the dusk sky fades, 31° above your south-western horizon. Observable till around 21:30 in Jnauary . In Febryary is getting close to pass behind to Sun, so not observable by end of February.

Neptune

Month	Day	Year
Jan	15	2021

	Right Ascension	Declination	Rise	Culm	Set	Approx Mag.	Observable	Constellation
Sun	19h46m46s	-21°10'17"	7:54	12:32	17:10	-26.70		Sagittarius
Moon	21h25m09s	-19°48'27"	9:26	14:10	18:54	-9.2	17:31 until 17:58	Capricornus
Mercury	20h52m33s	-19°15'00"	8:51	13:38	18:24	-0.9	Not observable	Capricornus
Venus	18h33m25s	-23°09'03"	6:51	11:19	15:47	-3.9	Not observable	Sagittarius
Mars	02h03m40s	+13°43'41"	11:51	18:48	1:49	0.1	17:44 until 00:47	Aries
Jupiter	20h33m00s	-19°19'17"	8:32	13:18	18:04	-1.9	Not observable	Capricornus
Saturn	20h21m26s	-19°53'01"	8:23	13:06	17:50	0.6	Not observable	Capricornus
Uranus	02h17m01s	+13°14'36"	12:06	19:01	2:00	5.8	18:24 until 23:52	Aries
Neptune	23h19m22s	-05°32'22"	10:22	16:04	21:46	7.9	18:24 until 19:34	Aquarius

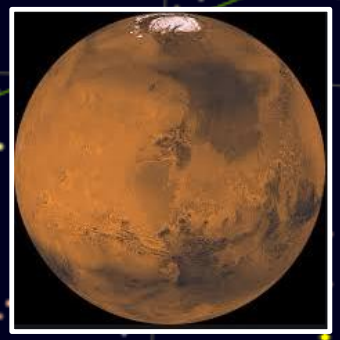
Month	Day	Year
Feb	15	2021

	Right Ascension	Declination	Rise	Culm	Set	Approx Mag.	Observable	Constellation
Sun	21h53m53s	-12°46'18"	7:19	12:32	17:46	-26.70		Capricornus
Moon	00h21m53s	-02°52'54"	9:08	15:00	20:52	-10.2	18:05 until 20:04	Pisces
Mercury	20h57m53s	-13°43'13"	6:27	11:37	16:46	2.2	Not observable	Aquarius
Venus	21h17m15s	-16°54'12"	7:00	11:56	16:52	-3.9	Not observable	Capricornus
Mars	03h08m21s	+19°03'00"	10:25	17:46	1:11	0.7	18:25 until 23:55	Aries
Jupiter	21h02m51s	-17°24'51"	6:48	11:42	16:35	-1.9	Not observable	Capricornus
Saturn	20h36m32s	-19°02'28"	6:29	11:15	16:02	0.7	Not observable	Capricornus
Uranus	02h18m41s	+13°24'00"	10:01	16:57	23:52	5.8	18:56 until 21:47	Aries
Neptune	23h22m55s	-05°09'23"	8:18	14:01	19:45	8	Not observable	Aquarius

Conjunction Neptune – Ceres @ 6:00 p.m. EST

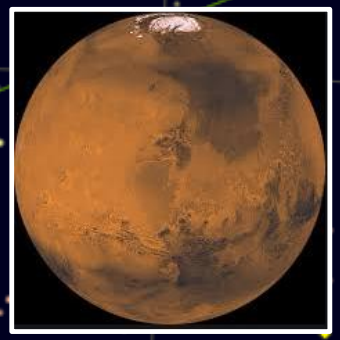
Date	Event	Sun		Moon 8%	
Sunday Jan 10 2021	Conjunction Neptune (mag 7.9) and Ceres (mag 9.4) @ 11:37 a.m. EST in constellation Aquarius. Neptune passing 8°37' to the north of Ceres. Both are at the same right ascension.	Rise 07:50 am	Set 05:00 pm	Rise 05:25 am	Set 02:30 pm
				Waning Crescent	

Conjunction Moon – Mars @ 00:30 a.m. EST



Date	Event	Sun		Moon 53%	
Thursday Jan 21 2021	Conjunction Moon (mag -11.8) in constellation Cetus and Mars (mag 0.2) @ 00:36 a.m. EST in constellation Aries. Moon passing 5°04' to the south of Mars.	Rise 07:44 am	Set 05:14 pm	Rise 12:07 pm	Set 00:55 am
				Waxing Gibbous	

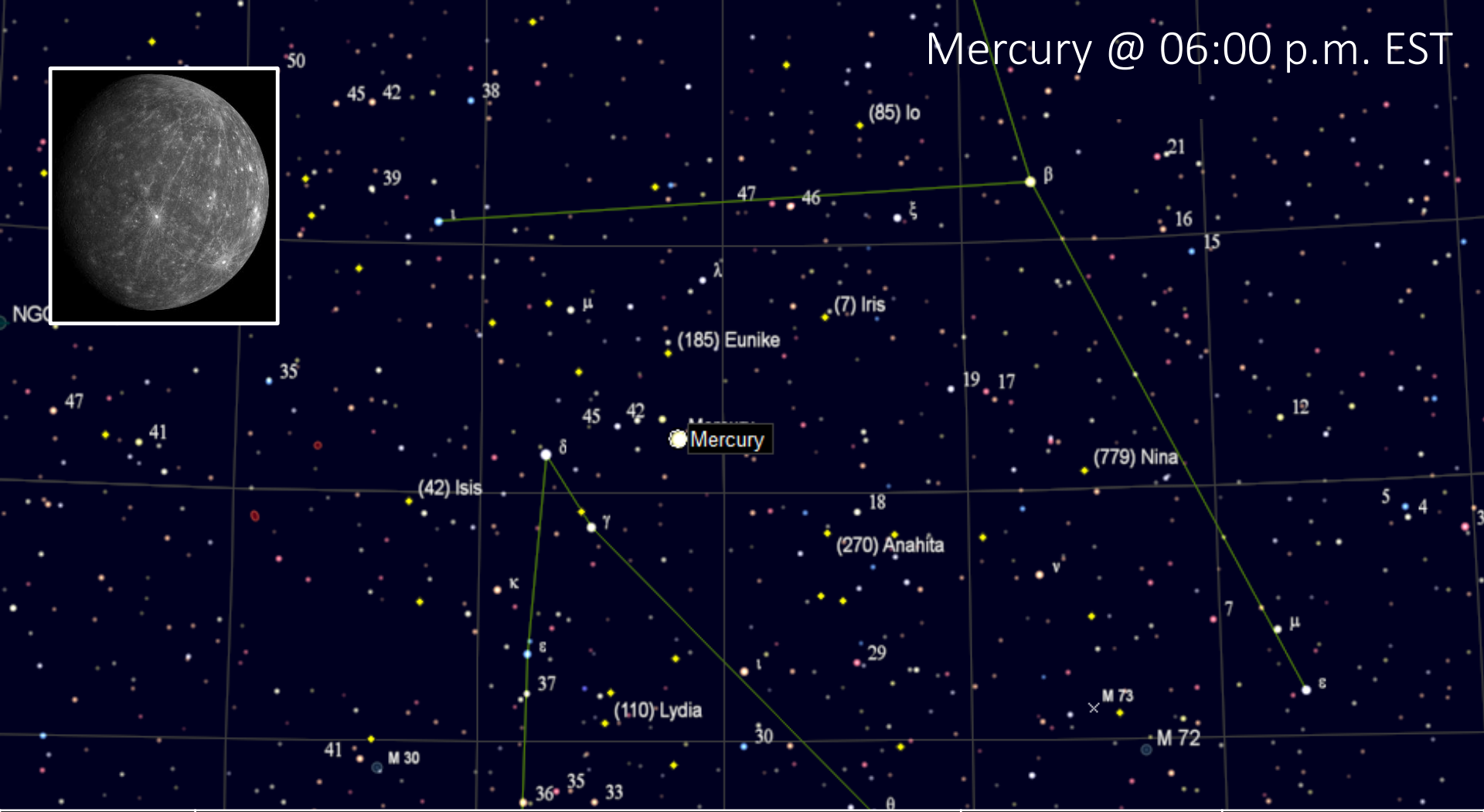
Conjunction Mars – Uranus @ 10:00 p.m. EDT



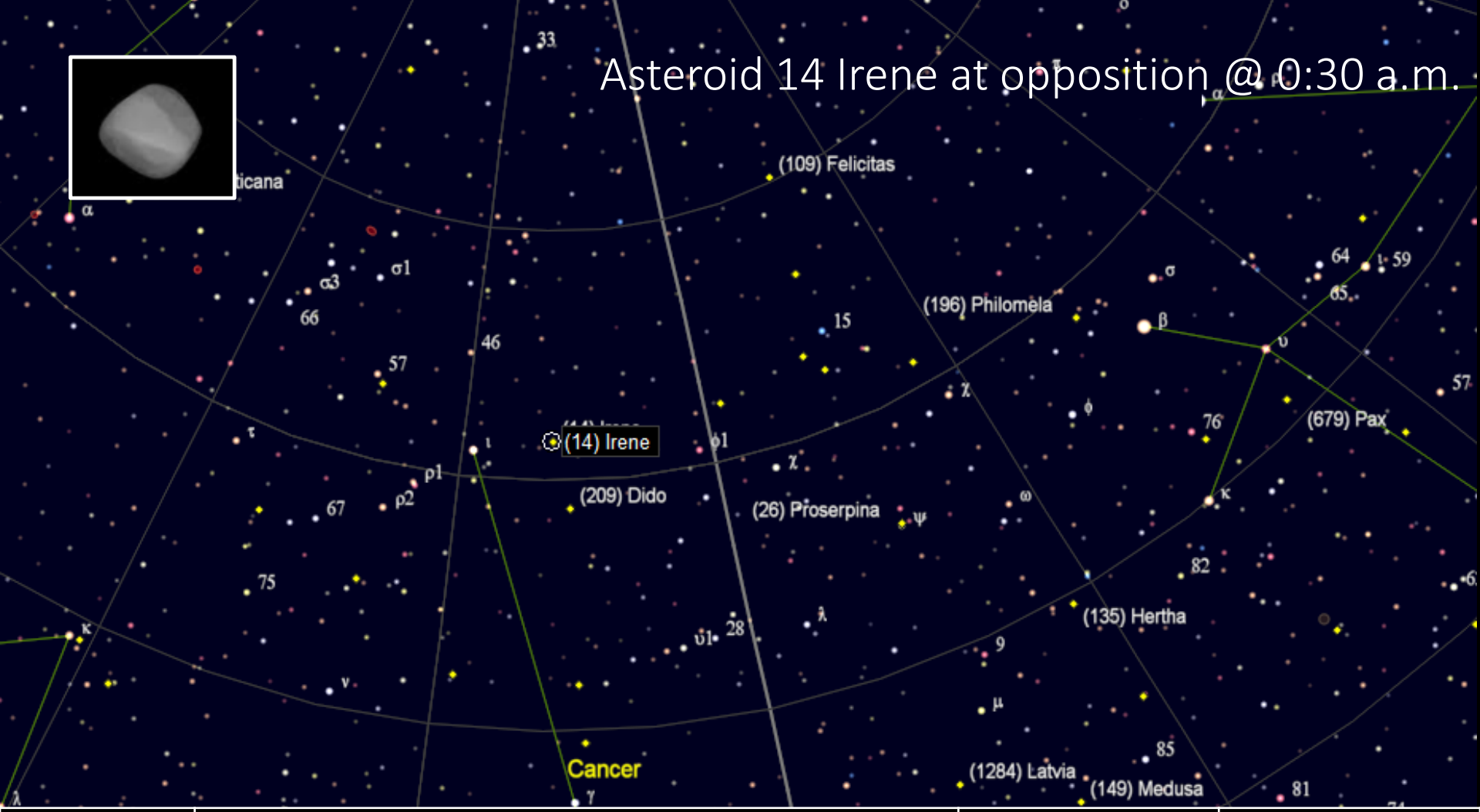
Date	Event	Sun		Moon 53%	
Thursday Jan 21 2021	Conjunction Mars (mag 0.2) and Uranus (mag 5.8) @ 06:34 p.m. EST in constellation Aries. Mars passing 1°44' to the north of Uranus.	Rise 07:44 am	Set 05:14 pm	Rise 12:07 pm	Set 00:55 am
				Waxing Gibbous	

Asteroid 15 Eunomia at opposition @ 0:44 a.m.

Date	Event	Sun		Moon 53%	
Thursday Jan 21 2021	Asteroid 15 Eunomia (mag 8.4) will be well placed in constellation Cancer. Highest point @ 00:44 a.m. EST, 63° above southern horizon.	Rise 07:44 am	Set 05:14 pm	Rise 12:07 pm	Set 00:55 am
				Waxing Gibbous	



Date	Event	Sun		Moon 78%	
Saturday Jan 23 2021	Mercury (mag -0.7) greatest elongation east @ 08:59 a.m. EST in constellation Capricornus. (15° above horizon).	Rise 07:45 am	Set 05:17 pm	Rise 01:04 pm	Set 02:58 am
				Waxing Gibbous	

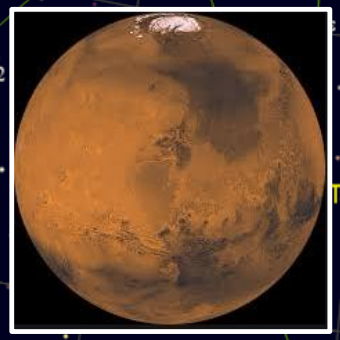


Date	Event	Sun		Moon 82%	
Sunday Jan 24 2021	Asteroid 14 Irene (mag 9.3) will be well placed in constellation Cancer. Highest point @ 00:44 a.m. EST, 73° above southern horizon.	Rise 07:42 am	Set 05:16 pm	Rise 01:41 pm	Set 03:59 am
				Waxing Gibbous	

DAY TIME- Conjunction Moon – Saturn @ 12:30 p.m. EST

Date	Event	Sun		Moon 2%	
Wednesday Feb 10 2021	Conjunction Moon (mag -8.4) and Saturn (mag 0.6) @ 06:11 a.m. EST in constellation Capricornus. Moon passing 3°24' to the south of Saturn. (Do not try to observe, it's not save, too close to the sun 16°)	Rise 07:21 am	Set 05:41 pm	Rise 07:10 am	Set 04:19 pm
				Waxing Crescent	

Conjunction Moon – Mars @ 10:00 p.m. Feb 17 EST

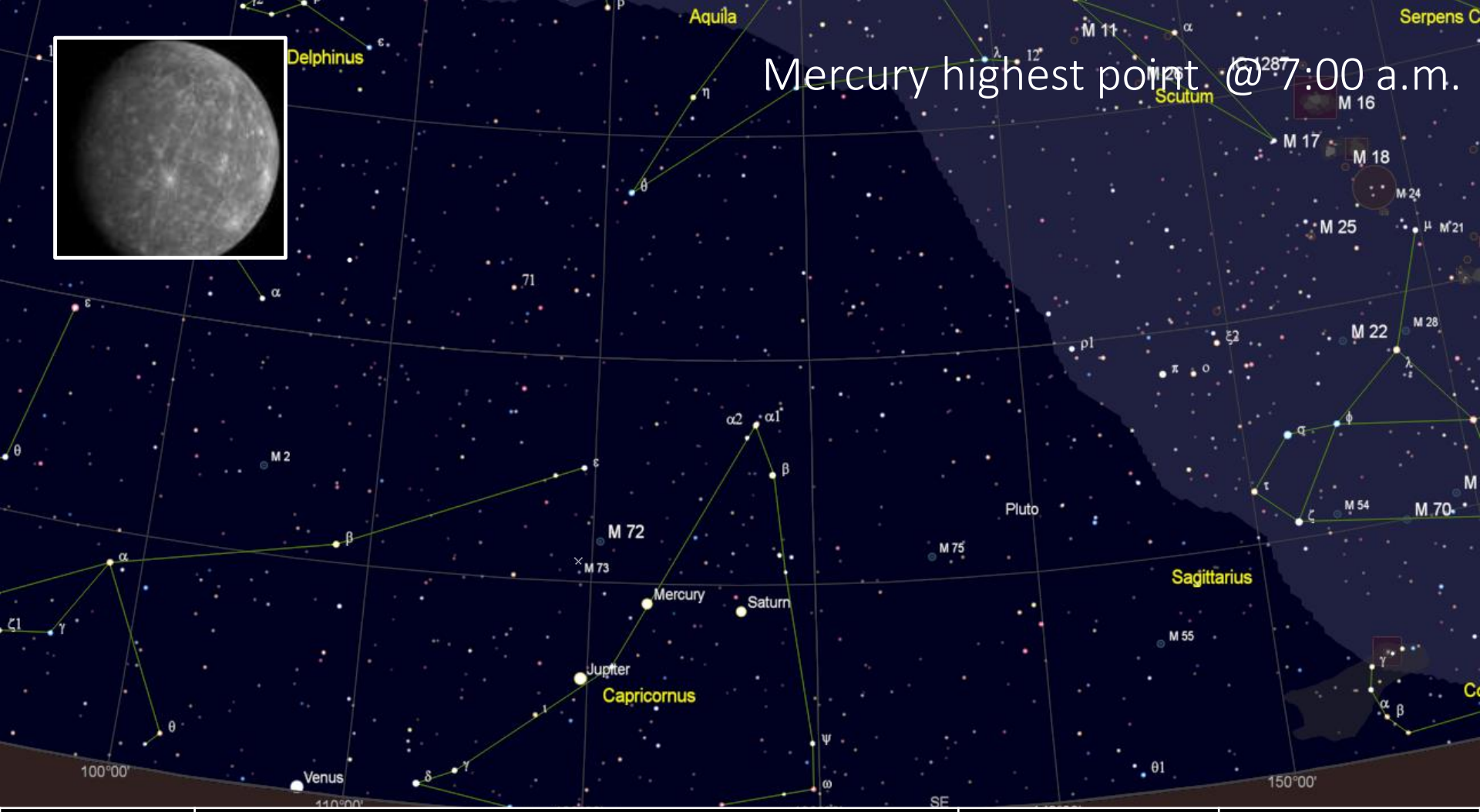


Date	Event	Sun		Moon 42%	
Wed – Thu Feb 17/18 2021	Conjunction Moon (mag -11.1) and Mars (mag 0.8) @ 05:45 p.m. EST in constellation Aries. Moon passing 3°41' to the south of Mars.	Rise 07:11 am	Set 05:51 pm	Rise 10:20 am	Set 00:49 am
				Waxing Crescent	

M81 highest point @ 00:30 a.m.

Geremy Perez

Date	Event	Sun		Moon 50%	
Friday Feb 19 2021	M81 (mag 7.8) Bode's galaxy reaches the heights point in the sky in constellation Ursa Major. @ 00.26, 64° above northern horizon.	Rise 07:12 am	Set 05:52 pm	Rise 11:51 am	Set 00:46 am
				First Quarter	



Date	Event	Sun		Moon 90%	
Wednesday Feb 24 2021	Mercury (mag 0.1) reaches the heights point in the sky for February in constellation Capricornus. Highest point 10° above southern east horizon.	Rise 07:02 am	Set 05:56 pm	Rise 03:01 pm	Set 05:36 am
				Waxing Gibbous	

Messier List

OBJ	TYPE	CON	Constalation	RA	DEC	MAG		Best to see as 9PM
M42	C/N	Ori	Orion	05:35.4	-5:27	4	very easy	January
M43	C/N	Ori	Orion	05:35.6	-5:16	9	easy	January
M78	NEB	Ori	Orion	05:46.7	+00:03	8	moderate	January
M1	SNR	Tau	Taurus	05:34.5	+22:01	8.4	moderate	January
M45	OCL	Tau	Taurus	03:47.0	+24:07	1.2	very easy	January
M36	OCL	Aur	Auriga	05:36.1	+34:08	6	easy	February
M37	OCL	Aur	Auriga	05:52.4	+32:33	5.6	easy	February
M38	OCL	Aur	Auriga	05:28.4	+35:50	6.4	easy	February
M41	OCL	CMa	Canis Major	06:46.0	-20:46	4.5	easy	February
M35	OCL	Gem	Gemini	06:08.9	+24:20	5.1	very easy	February
M79	GCL	Lep	Lepus	05:24.5	-24:33	7.7	moderate	February
M50	OCL	Mon	Monoceros	07:02.8	-8:21	5.9	easy	February
M52	OCL	Cas	Cassiopeia	23:24.2	+61:35	6.9	easy	Circumpolar
M103	OCL	Cas	Cassiopeia	01:33.2	+60:42	7.4		Circumpolar
M102	GAL	Dra	Draco	15:06.5	+55:46	9.9		Circumpolar
M40	OTH	UMa	Ursa Major	12:22.3	+58:05	9.1	easy	Circumpolar
M81	GAL	UMa	Ursa Major	09:55.6	+69:04	6.9	easy	Circumpolar
M82	GAL	UMa	Ursa Major	09:55.8	+69:41	8.4	easy	Circumpolar
M97	PLN	UMa	Ursa Major	11:14.8	+55:01	9.9	very hard	Circumpolar
M101	GAL	UMa	Ursa Major	14:03.2	+54:21	7.9	very hard	Circumpolar
M108	GAL	UMa	Ursa Major	11:11.5	+55:40	10	hard	Circumpolar
M109	GAL	UMa	Ursa Major	11:57.6	+53:23	9.8	hard	Circumpolar

What's Up 2021

Objects under City view

OBJ	TYPE	CON	RA	DEC	MAG	Best to see as 10PM
Betelgeuse	Star	Ori	5h 55.3m	+7° 24'	0.5	January
M42	NB	Ori	5h 35.4m	−5° 27'	3.7	January
Rigel	DS	Ori	5h 14.7m	−8° 12'	0.1, 6.8	January
σ	MS	Ori	5h 38.7m	−2° 36'	3.7, 6.3, 6.7, 8.8	January
Aldebaran	Star	Tau	4h 36.1m	+16° 31'	0.9	January
Hyades	OC	Tau	4h 20m	16° &nbs	—	January
M1	NB	Tau	5h 34.5m	+22° 01'	8.4	January
M45	OC	Tau	3h 47.0m	+24° 07'	1.5	January
Capella	Star	Aur	5h 16.9m	+46° 00'	0.1	February
M37	OC	Aur	5h 52.3m	+32° 33'	5.6	February
145 Mon	DS	CMa	7h 16.6m	−23° 19'	4.8, 6.0	February
M41	OC	CMa	6h 46.0m	−20° 45'	4.5	February
Sirius	Star	CMa	6h 45.3m	−16° 43'	−1.4	February
Castor	DS	Gem	7h 34.6m	+31° 53'	2.0, 2.9	February
M35	OC	Gem	6h 08.9m	+24° 21'	5.1	February
NGC 2392	PN	Gem	7h 29.2m	+20° 55'	9.2	February
γ	DS	Lep	5h 44.5m	−22° 27'	3.6, 6.3	February
η 3780	MS	Lep	5h 39.3m	−17° 51'	—	February
R Lep	Star	Lep	4h 59.6m	−14° 48'	8.1	February
β	MS	Mon	6h 28.8m	−7° 02'	4.7, 5.2, 6.2	February
η	DS	Cas	0h 49.1m	+57° 49'	3.5, 7.2	Circumpolar
ι	MS	Cas	2h 29.1m	+67° 24'	4.5, 6.9	Circumpolar
σ	DS	Cas	23h 59.0m	+55° 45'	5.0, 7.1	Circumpolar
ν	DS	Dra	17h 32.2m	+55° 11'	4.9, 4.9	Circumpolar
NGC 6543	PN	Dra	17h 58.6m	+66° 38'	8.1	Circumpolar
M81	GX	UMa	9h 55.6m	+69° 04'	6.9	Circumpolar
M82	GX	UMa	9h 55.8m	+69° 41'	8.4	Circumpolar
Mizar	DS	UMa	13h 23.9m	+54° 56'	2.2, 3.9	Circumpolar
ξ	DS	UMa	11h 18.2m	+31° 32'	4.3, 4.8	Circumpolar

X = Galaxy; GC = Globular cluster; OC = Open cluster; NB = Nebula; PN = Planetary nebula; DS = Double star; MS = Multiple star; SC = Starcloud; QSO = Quasar; RA and Dec. are equinox 2000.0; *SA 2000.0* = *Sky Atlas 2000* chart number

"The events decribed in this presentation are just a fiction. Any similarity to any real celestial events is pure coincidence”

Just joking

Clear Sky!

Observers HandBook 2020 Editor: James S.Edgar

Software :

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