

Intermediate List

Again this year we have a large number of objects on the list to try, including many Caldwell items. Objects for this year are intended to be interesting, but for the most part not repeat items in recent prior lists (with the exception of the ice giant planets). There is a wide variety of objects to choose from, including double and multiple stars, a carbon star, and a possible nova! There's also a wide assortment of open and globular clusters, nebulae and galaxies. Some are fairly challenging, others somewhat easier to find but hopefully just as interesting and rewarding to see.

Though you are encouraged to try them all, to receive the OSP Intermediate list observer pin you must observe and record at least 20 of the listed objects while you are here at OSP. A short description of each object is required and object sketches are strongly encouraged. Sketch double stars noting West (drift direction) or North. (Recommended for all sketches). Visual observations are encouraged but goto and image enhancers (photography) are permitted at OSP for the Intermediate List award. Each objects page number in the popular Sky and Telescope Pocket Sky Atlas (PSA) is listed as well (or where it would be, if not actually included).

When finished, bring your record of observations to the Observing Program table next to the Information Tent to receive your pin. *Please check the information tent for updates on when the Observing Program table will be staffed, and where it is going to be for the next session. Typically it will be manned later in the afternoon.*

6/23/2024 v1.0

2024 Oregon Star Party Intermediate Observing List

#	Type	Object	Con	RA	Dec	Mag	Size/ Split	PSA	Alternate Name/Comments
1	C	13P/Olbers 7/30 10:30:00 PM 8/1 10:30:00 PM 8/3 10:30:00 PM	UMa	11h 13' 44.3" 11h 23' 09.1" 11h 32' 20.7"	35° 09' 57.0" 34° 16' 08.0" 33° 20' 15.0"	8 8 8.1			Fairly dim comet. Low, sets around midnight. Coma diameter 2" early June (same time before peak that OSP is after)
2	DP	Ceres 7/31 12:00:00 AM 8/2 12:00:00 AM 8/4 12:00:00 AM	Sgr	18h 42' 11.1" 18h 40' 51.9" 18h 39' 38.2"	-30° 37' 21.0" -30° 40' 48.0" -30° 43' 52.0"	7.2 7.2 7.2	0.66" 0.65" 0.65"		Nearly stellar. Will need to observe several nights to confirm motion.
3	A	Iris 7/31 12:00:00 AM 8/2 12:00:00 AM 8/4 12:00:00 AM	Aqr	21h 04' 45.5" 21h 02' 46.4" 21h 00' 45.3"	-08° 26' 48.0" -08° 30' 06.0" -08° 33' 53.0"	8.0 7.9 7.9	0.22" 0.22" 0.22"		Nearly stellar. Will need to observe several nights to confirm motion.
4	P	Neptune	Psc	23h 59' 38.6"	-01° 27' 38.0"	7.8	2.3"	74	Moon Triton may be visible in medium+ scopes.
5	P	Uranus	Tau	03h 37' 10.4"	19° 07' 19.0"	5.8	3.6"	15	Challenge - moons - brightest is mag 14. Approx. face-on orbit
6	MS	Nu Scorpii	Sco	16h 11' 59.7"	-19° 27' 37.0"	4.2/6.6 4.4/5.3 6.6/7.2	40.8" 1.3" 2.4"	56	Southerly Dbl-Dbl, AB-CD pair AB Pair CD Pair
7	DS	Delta Cygni	Cyg	19h 45' 44.2"	45° 11' 22.0"	2.9, 6.3	2.5"	62	Al Fawaris
8	MS	Epsilon/1 Equulei	Equ	20h 59' 04.3"	04° 17' 34.0"	5.3, 7.1 6, 6.3	10.5" 0.7"	75	AB-C main pair AB pair (very tight) - challenge Welcome to Equuleus! (First appearance on an OSP list.)
9	S/ Nova?	T Coronae Borealis	CrB	15h 59' 30.0"	25° 55' 19.0"	10-2		53	"Blaze Star" - Dim star expected to nova this year - if this occurs it will go from telescope-only to easy naked eye brightness - for about a week. Would be obvious "new star" near CrB. Will it happen during OSP?
10	CS	T Lyrae	Lyr	18h 32' 20.0"	36° 59' 55.0"	7.6		63	Carbon (and variable) star - very red
11	OC	NGC 7063	Cyg	21h 24' 21.0"	36° 29' 00.0"	7.3	9'	62	
12	OC	NGC 7235	Cep	22h 12' 25.0"	57° 16' 00.0"	8.6	5'	71	
13	OC	Tr 2	Per	02h 36' 53.0"	55° 54' 00.0"	6.5	17'	13	Trumpler 2
14	OC	Tr 3	Cas	03h 11' 48.0"	63° 15' 00.0"	7.0	12'	11	Trumpler 3
15	EN	NGC 7000	Cyg	20h 58' 48.0"	44° 20' 00.0"	4.0	2"	62	North America Nebula, Caldwell 20, very large
16	PN	NGC 6826	Cyg	19h 44' 48.5"	50° 31' 37.0"	8.9	2.1'	62	Blinking Planetary, Caldwell 15
17	PN	NGC 7009	Aqr	21h 04' 10.7"	-11° 21' 50.0"	7.8	30"	77	Saturn Nebula, Caldwell 55
18	PN	NGC 246	Cet	00h 47' 03.7"	-11° 52' 23.0"	10.4	4'	7	Caldwell 56, Skull Nebula
19	RN	NGC 7023	Cep	21h 01' 35.0"	68° 10' 00.0"	7.1	5'	61	Caldwell 4, Iris Nebula
20	GC	NGC 6144	Sco	16h 27' 13.8"	-26° 01' 24.0"	10.0	7.4'	56	Low density/small - not M4 (but in vicinity)
21	GC	NGC 6522 NGC 6528	Sgr	18h 03' 34.0" 18h 04' 49.6"	-30° 02' 02.0" -30° 03' 02.0"	9.5 11.1	9.4' 5'	67	GC pair 16' apart
22	GC	NGC 6440	Sgr	17h 48' 52.7"	-20° 21' 36.0"	11.2	4.4'	67	Small/dim
23	GC	NGC 6553	Sgr	18h 09' 17.6"	-25° 54' 31.0"	9.8	9.2'	67	
24	GC	NGC 6934	Del	20h 34' 11.3"	07° 24' 16.0"	9.6	7.1'	64	Caldwell 47
25	GX	NGC 4631	CVn	12h 42' 07.9"	32° 32' 31.0"	9.5	14'	43	Caldwell 32
26	GX	NGC 5005	CVn	13h 10' 56.3"	37° 03' 33.0"	10.5	4.8'	43	Caldwell 29
27	GX	NGC 3077	UMa	10h 03' 18.9"	68° 44' 03.0"	10.6	5.2'	31	Part of M 81 GX group
28	GX	M 108	UMa	11h 11' 30.9"	55° 40' 27.0"	10.7	4'	43	NGC 3556
29	GX	M 109	UMa	11h 57' 36.0"	53° 22' 27.0"	10.5	8.1'	43	NGC 3992
30	GX	M 74	Psc	01h 36' 41.8"	15° 47' 00.0"	9.7	9.9'	5	NGC 628

Key:			
P	Planet	DP	Dwarf Planet
GX	Galaxy	SC	Star Cloud
GC	Globular Cluster	S	Star
OC	Open Cluster	DS	Double Star
PN	Planetary Nebula	MS	Multiple Star
EN	Emission Nebula	CS	Carbon Star
SN	Supernova Remnant	VS	Variable Star
DN	Dark Nebula	A	Asteroid
C	Comet	Ast	Asterism

06232024 v1.0

Locations J2000.0 + mag & size
From Starry Night 8.1.0.2050
8/2/2024 12:00:00 AM
(except as noted)