

Oregon Star Party Observing Award 2018 Level 2 - Intermediate List

This year we have a larger number of objects on the list to try. Some are relatively easy, some are more of a challenge. The goal is to provide a wide variety of interesting objects to observe. Though you are encouraged to try them all, to receive the OSP Level 2 observer pin you must observe and record at least 16 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 W (drift direction) or N. Goto and image enhancers (photography) are permitted at OSP for the OSP L2 award. Each object's page number in the popular Sky and Telescope Pocket Sky Atlas (PSA) is listed as well (or the page it would be on to help with location). The objects marked **challenge** add 1 additional item count to encourage you to try them.

When finished bring your record of observations to the Observing Program table next to the Information Tent to receive your pin. *The Observing Program table will be staffed by volunteers 2-4 PM Thursday, 1-3 Friday & Saturday, 10-12 Sunday.*

#	Type	Object	Con	RA	Dec	Mag	PSA	Alternate Name/Comments
1	Ast	Kemble's Cascade	Cam	3h 59' 5"	62° 52' 10"		11	Very large field, chain, varying colors
2	CS	Mu (μ) Cephei	Cep	21h 43' 30"	58° 46' 48"	4.2	71	Herschels Garnet Star, deep red, variable brightness
3	CS	WZ Cassiopeiae/HIP 99	Cas	0h 1' 16"	60° 21' 18"		7	1 Carbon/binary star "Stop Light" - what colors do you see?
4	DN	Bernard's E B142 & B143	Aql	19h 40' 2" 19h 41' 6"	10° 28' 36" 11° 0' 4"		64	Resembles dark "E"
5	TS	16/17 Draco	Dra	16h 36' 11" 16h 36' 14"	52° 54' 0" 52° 55' 28"	5.5 5.1	52	Triple star, one split wide, one tight
6	GX	NGC 5902	Boo	15h 14' 22"	50° 19' 47"	14	53	challenge small, faint galaxy
7	GX	NGC 404	And	1h 9' 27"	35° 43' 4"	10.4	3	Mirach's Ghost
8	GX	NGC 5907	Dra	15h 15' 54"	56° 19' 47"	11.1	42	edge-on galaxy
9	GX grp	Stephan's Quintet	Peg	22h 36' 20"	33° 59' 6"	13.9-16.7	72	Stephan's Quintet/Hickson 92 (2 or more) see all 5 challenge
10	GC	NGC 5466	Boo	14h 5' 27"	28° 32' 3"	9.03	44	Large, dim, sparse globular cluster
11	GC	NGC 6934	Del	20h 34' 12"	7° 24' 14"	8.8	64	Globular cluster in rich star field
12	GC	NGC 6229	Her	16h 46' 59"	47° 31' 39"	9.4	52	Medium size globular cluster near 3 stars
13	GC	NGC 6760	Aql	19h 11' 12"	1° 1' 49"	8.9	65	Big faint globular cluster
14	A	Vesta	Oph	17h 25' 25" 17h 25' 39" 17h 25' 55" 17h 26' 13" 17h 26' 33"	-23° 14' 45" -23° 18' 34" -23° 22' 21" -23° 26' 7" -23° 29' 52"	5.7	56	bright asteroid Aug 7 11:00 PM bright asteroid Aug 8 11:00 PM bright asteroid Aug 9 11:00 PM bright asteroid Aug 10 11:00 PM bright asteroid Aug 11 11:00 PM
15	OC	NGC 6866	Cyg	20h 3' 55"	44° 10' 19"	7.6	62	Open cluster with chains
16	OC	NGC 6939	Cep	20h 31' 30"	60° 40' 0"	7.8	61	Open cluster in kite asterism
17	OC	NGC 7789	Cas	23h 57' 8"	56° 44' 24"	6.7	72	Very dense open cluster "Caroline's Rose"
18	OC	NGC 1502	Cam	4h 7' 50"	62° 20' 0"	5.7	11	Open cluster, near end of Kemble's Cascade
19	OC DN	NGC 6520 & B86	Sgr Sgr	18h 3' 25" 18h 2' 58"	-27° 53' 30" -27° 51' 34"	7.6	67	Open cluster and Ink Spot Nebula (great pairing)
20	P	Mars	Cap	20h 15' 48"	-26° 28' 29"	-2.6	66	Sketch surface detail - challenge if global dust storm still going
21	P	Uranus	Ari	2h 1' 14"	11° 45' 24"	5.8	4	Uranus
22	P	Neptune and Triton	Aqr	23h 8' 23"	-6° 36' 19"	7.9/13.5	76	Neptune and Triton - Triton is challenge
23	PN	NGC 7027	Cyg	21h 7' 2"	42° 14' 9"	10.4	73	Oval planetary nebula
24	PN	NGC 6781	Aql	19h 18' 28"	6° 32' 23"	11.8	65	Annular planetary nebula, fairly large, dim
25	PN	NGC 7293	Aqr	22h 29' 40"	-20° 49' 24"	6.5	76	Helix nebula - very large (moon size)
26	PN	NGC 7293	Aqr	22h 29' 40"	-20° 49' 24"	6.5	76	Helix - naked eye (or with naked eye & filter) challenge
27	PN	NGC 6826	Cyg	19h 44' 48"	50° 31' 30"	9.8	62	Blinking Planetary - nebula disappears if you stare right at it (except largest scopes)
28	SN	NGC 6992	Cyg	20h 56' 7"	31° 27' 49"	7	73	Bridal Veil - filters can really bring it out
29	QS	Nu (ν) Sco	Sco	16h 11' 59"	-19° 27' 1"	4	56	Quad star, southerly "double double"
30	DS	Xi (ξ) Cep	Cep	22h 3' 48"	64° 37' 42"	4.2	71	8" separation
31	TS	Gamma (γ) And	And	2h 3' 54"	42° 19' 46"	2.2/4.8	2	Triple star, splits are 7" and 0.4" (2nd split challenge)

P: planet GX: galaxy GC: globular cluster OC: open cluster PN: planetary nebula EN: emission nebula SN: supernova remnant
DN: dark nebula A: Asteroid SC: star cloud DS/TS/QS: double/triple/quad star CS: carbon star C: constellation Ast: asterism