

Caldwells All Over

This year we focus in on the Caldwell objects for the intermediate list.
You must observe 20 of the 27 objects and the planets count as one object. Please sketch the objects.

Goto scopes and Image enhancers(photography) are permitted at OSP for the OSP award.

A "LA" or "IE" will be placed on your certificate and on the awards page on the OSP website

If you are interested in using these observations to also qualify for the Astronomical League Calwell Observing Club award, see the note at the bottom

	NGC	Cald #	R.A		DEC		Const	Type	Mag	Common Name / Notes
1	147	17	0	33.2	48	30	Cass	Gal	9.5	
2	185	18	0	39	48	20	Cass	Gal	9.2	891
3	457	13	1	19.1	58	20	Cass	OC	6.4	ET Cluster
4	559	8	1	29.5	63	18	Cass	OC	9.5	Ghost's Goblet
5	663	10	1	46	61	15	Cass	OC	7.1	Horseshoe Cluster
6	752	28	1	57.8	37	41	And	OC	5.7	
7	891	23	2	22.6	42	21	And	Gal	9.9	Outer Limits Galaxy
8	1275	24	3	19.8	41	31	Per	Gal	11.9	Perseus A
9	4244	26	12	17.5	37	49	CVN	Gal	10.4	Silver Needle
10	6541	78	18	8	-43	42	C aust	GC		
11	6729	68	19	1.9	-36	57	C aust	EN	9.5	w/ 6726-7/IC 4812 in area
12	6822	57	19	44.9	-14	48	Sag	Gal	8.8	Barnard's Galaxy
13	6888	27	20	12	38	21	Cyg	Neb	7.7	Crescent Nebula. Use Filters
14	6946	12	20	34.8	60	9	Ceph	Gal	8.8	
15	7006	42	21	1.5	16	11	Del	GC	10.6	
16	7023	4	21	1.8	68	12	Ceph	RN	6.8	O'Meara's favorite emission Nebula
17	7243	16	22	15.3	49	53	Lacr	OC	6.4	
18	7479	44	23	4.9	12	19	Peg	Gal	10.8	
19	7635	11	23	20.7	61	12	Cass	Neb	10	Bubble NebulaOff M52
20	7814	43	0	3.3	16	9	Peg	Gal	10.6	
21	IC 405	31	5	16.2	34	16	Aur	RN	9.2	Flaming Star Nebula. Very large
22	MEL 25	41	4	27	16	0	Tau	OC	0.5	Hyades. Must Sketch
23	Sharp 2-155	9	22	56.8	62	37	Ceph	EN	10	Cave Nebula

Planets	Must observe both to count as 1 object	Const	Notes
24a	Jupiter	Sag	Sketch with Moons
24b	Neptune	Cap	

Double Stars								
	Greek letter	Const	M	M1	M2	Sep	Common Name	Notes
25	Epsilon	Boo	2.4	2.4	4.9	2.8	Izar	Good contrasting colors
26	Eta	Cass	3.4	3.4	7.5	12.8		Good contrasting colors
27	Delta	Cyg	2.9	2.9	6.3	2.5		Tight Split

Note: If you are interested in qualifying for the Astronomical League's Caldwell Observing Club Award, completing this OSP list will take you 1/3 of the way to completing the Astronomical League Award list that requires 70 objects.

Please be aware that the Astronomical League does not allow GOTO or Computer Assisted telescopes and they do not allow photographs or CCD images to qualify for the AL Caldwell Club Observing award!

<http://www.astroleague.org/al/obsclubs/caldwell/cldwl.html>