												Observed		Right Ascension (J2000)		clination J2000)	Best Mont h
Target Name	Names	Common Name	Туре	CON N	lag PA	Class	Date Time	Location	Instrument	Seeing	Transparency	134x - Nice edge on. Nice central bulge that tapers into thin arms. Small.	Link to Image	hr min sec	+/- d	l m	s
NGC 134			Gal	HYA 1	0.3	SAB(s)bc	####### 22:29	DAS Site	12.5" f/8 Newtonian	Good	Good	Looks like a dust lane bisects it just below center. Faint field star below it.  Goes from 10 to 4 o'clock in FOV.  134x – Very dim, uniformly lit oval bounded by 4 dim field stars on each		0 30 21.0	) - 30	3 14	50 Oct
NGC 300 NGC 681	D 530			SCL S		Scd SAB(s)absp	####### 22:44 8/19/2012 3:45	DAS Site	12.5" f/8 Newtonian 14" Cassegrain	Good OK	Good OK	side. No central brightening. Just a glow. Very low in south.    205x - A tiny, oval, extremely dim, uniformly lit glow.		0 54 53.3 1 35 5.7	3 - 37	7 41	3 Oct 28 Nov
NGC 2573 NGC 1049			Gal GC	OCT 1 FOR 1	3.6 2.6	SABscd	4/3/2016 22:46 1/15/2015 20:04	OzSky CSAC	18" f/4.5 Newtonian 20" f/5 Newtonian	Good OK	Good OK	187x – A small, faint oval with a brighter stellar core.  149x – A small, very dim oval glow. Has a larger, hare brighter core.		1 41 42.8 2 39 48.0	3 - 89 ) - 34	9 20 4 15	4 Nov 30 Nov
NGC 1073				CET 1			####### 21:46	Í	12.5" f/8 Newtonian	Great	Great	134x – Small, faint, long oval smudge of uniformly lit light.  134x – Larger round glow with large, bit brighter nucleus area. Pretty dim		2 43 40.6			31 Nov
NGC 1232 NGC 1300			Gal Gal	ERI 1			1/16/2009 18:43		12.5" f/8 Newtonian 30" f/4.5 Newtonian	OK OK		overall yet easy to spot in FOV.  263x – A large oval glow with brighter core and a linear box shape. Pretty faint halo glow.		3 9 45.3			45 Dec 40 Dec
NGC 1300					0.5 106 0.7 0	SBb I Sba-b	1/21/2012 21:18	CSAC DAS Site	12.5" f/8 Newtonian	OK OK		134x – Nice, tilted oval with larger, brighter core surrounded by dim, yet easy to see halo glow. Tilt is 10 - 4 o'clock. Easy to see in FOV.		3 31 6.0			0 Dec
1440 1000			Gui	1011	0.7 0	GSG 5	1710/2003 10:11	BAC OILC	12.0 1/0 Newtornari	<u> </u>	<u> </u>	134x – Nice. Longer, brighter, elongated slender oval. Fairly bright. But very low in south. Brighter, large core seen with bit of dim halo around it.		0 01 0.0		3   00	0 200
NGC 1380 NGC 1387	D 574			FOR 1		SB0 SB0	####### 1:43 1/16/2009 19:11		12.5" f/8 Newtonian 12.5" f/8 Newtonian	OK OK	OK OK	Center part of core pretty bright. Didn't see any other galaxies around it.  134x – Is a bit of an oval. Dim. Uniformly lit.		3 36 27.5 3 36 57.1			31 Dec 23 Dec
NGC 1395			Gal	ERI	9.8 120	) E2	1/21/2012 20:46	CSAC	20" f/5 Newtonian	Fair	Poor	149x – A small, slender linear glow. Goes from 2 – 8 o'clock in FOV. Small. Has brighter core with slight bulge in this area of glow.		3 38 29.6	6 - 20	3 1	38 Dec
NGC 1404			Gal	ERI 1	0.2	E1	1/9/2010 18:53	DAC Cita	12.5" f/8 Newtonian	Good	Good	134x – Revisited Fornax Galaxy Cluster to pickup members I missed when viewing this last time I was out. Just below a field star, a small oval with a brighter core.		3 38 51.9			35 Dec
NGC 1404			Gai	ERIII	0.2		1/9/2010 18.53	DAS SILE	12.5 1/8 Newtonian	G000	Good	134x – Small, round bright galaxy with bit brighter, large core area. Very easy to see. Maybe an extended halo surrounds this bright galaxy. Looking		3 36 51.8	9 - 30	35	35 Dec
												again, see it's a tilted oval from 11 – 5 o'clock in FOV. What was described above is brighter central part and can see faint halo arms above and below					
NGC 1398				FOR			1/16/2009 18:55	DAS Site	12.5" f/8 Newtonian	ОК	OK	central glow as it tapers off.  187x – A small, long tilted oval. Very dim halo. Large, brighter oval core		3 38 52.0			14 Dec
NGC 1433 NGC 1435	D 426	Merope Nebula		HOR :		SBa RN	4/7/2016 19:10:00 1/11/2021 20:28	,	18" f/4.5 Newtonian 24" f/5 Newtonian	OK Good	Good Good	with even brighter center.  188x – Around a bright field star of M45 is this large, circular halo glow.		3 42 1.2 3 46 10.0			<ul><li>19 Dec</li><li>54 Dec</li></ul>
												47x - This thing is faint. With 24mm, its about 2 FOVs long and thin. See it contrast with background and only see it with H-Beta filter. Nice. Seen with					
NGC 1499		California Nebula		PER		EN	####### 22:01		8" f/6 Newtonian	OK		adverted vision. Many stars over glow. It is long and slender. Lynd brightness 6.  187x – A large, tilted oval. Large, brighter core surrounded by dim halo.		4 3 14.4	+ 36	6 21	33 Dec
NGC 1512 NGC 1515				HOR 1		` '	4/6/2016 20:28 4/6/2016 20:30	OzSky OzSky	18" f/4.5 Newtonian	Good Good	Good	187x – A large, filled oval. Large, brighter core surrounded by diff halo.  187x – A nice small tilted oval. Core larger and linear on center of glow.  Then in very center is a stellar, brighter core.		4 4 2.1			57 Dec 2 Dec
1910 1919			Gal	POU 1	1.7 18	30	7/0/2010   20:30	OZSKY	10 1/4.0 Newtonian	G000	Guud	134x - Best with OIII. Soft round maybe slightly oval glow with brighter central star in middle of glow. w/o OIII, see central star and a hint of a glow		+ 4 2.1	- 52	7 0	_ Dec
NGC 1514			PN	TAU 1	0.9	PN	2/25/2006 21:27	Crow Valley	12.5" f/8 Newtonian	Good	Good	around it. Nice.  134x - This galaxy is the biggest and brightest of the 3 galaxies in FOV.		4 9 17.0	) + 30	0 46	35 Dec
NGC 1532			Gal	ERI 1	0.6 33	Sc II-III	2/3/2005 21:16	John Martin	12.5" f/8 Newtonian	Good	Good	Has a hint of a nucleus.  187x – A medium size tilted, long oval. Uniformly lit. Dim. Has very faint		4 12 4.2	- 32	2 52	30 Dec
NGC 1559			Gal	RET 1	0.7 64	SBc	4/6/2016 20:45	OzSky	18" f/4.5 Newtonian	Good	Good	field star on lower upper edge of halo (galaxy is vertical in FOV) glow and another field stars just off right hand side edge and close.		4 17 36.7	7 - 62	2 47	4 Dec
NGC 1579			BN		9.9	EN+RN	1/21/2014 20:52	DAS Site	8" f/6 Newtonian	Good		81x – With UHC. Around a brighter field star is this larger, round, dim halo glow. Centered on star. Lynd brightness 4.		4 30 14.2	2 + 35	5 16	47 Dec
NGC 1617 NGC 1672			Gal	DOR 1	0.7   107 0.2   170	Sba SBc I-II	4/6/2016 21:10 4/6/2016 19:35	OzSky OzSky	18" f/4.5 Newtonian 18" f/4.5 Newtonian			187x – A medium size, dim, tilted oval with larger, brighter oval core.  187x – A large, dim tilted oval with large, bright core and tapered ends.		4 31 39.3 4 45 42.9			6 Dec 52 Dec
NGC 1783			GC	DOR 1	0.9		4/4/2016 20:11	OzSky	18" f/4.5 Newtonian	Very Good	Very Good	187x – A medium sized, dim, round, uniformly lit glow. See speckling on glow.  187x – A nice bright oval. Has tons of stars in center and then dims slowly.		4 59 8.8	- 65	5 59	7 Dec
NGC 1818			ОС	DOR	9.7		4/5/2016 19:15	OzSky	18" f/4.5 Newtonian	Very Good	Very Good	Tons of stars seen. Looks like a globular.  187x – A medium size, dim, long, fat, uniformly lit oval. Has a few		5 4 14.8	3 - 66	6 26	4 Jan
NGC 1792 NGC 1808	D 532			COL 1			4/6/2016 21:18 4/6/2016 21:23	,	18" f/4.5 Newtonian 18" f/4.5 Newtonian	Good Good		extremely faint field stars on glow.  187x – A long, thin tilted oval. Dim. Has brighter, linear core. A bar.		5 5 14.1 5 7 42.5	- 37 5 - 37	7 58 · 7 30 · 7	48 Jan 48 Jan
NGC 1866			ОС		9.7		4/5/2016 19:26	OzSky	18" f/4.5 Newtonian	Very Good		187x- A medium sized oval. Bright. Brighter in center and dims slowly to edge. See tiny stars speckled on OC.		5 13 39.1			56 Jan
NGC 1968			BN + OC	DOR	9.0	OCL+EN	4/5/2016 20:14	OzSky	18" f/4.5 Newtonian	Very Good		187x – A small knot of 5-10 dim, easily seen stars. This is to left of a chain of 4 OCs drawn on previous page.		5 27 22.2	2 - 67	7 27	50 Jan
NGC 1981			ос	ORI -	1.2	III3pn	1/1/2006 21:36	Kim's Place	12.5" f/8 Newtonian	Good	Good	64x - 14 bright, blue-white stars. Very open. Approx 3 magnitudes makeup this OC. Classification III 1 p.  81x - Around 3 brighter stars is this nice, bright glow. Same with and		5 35 9.6	- 4	25	30 Jan
NGC 1977		The Running Man	BN	ORI	7.0		####### 23:30	DAS Site	8" f/6 Newtonian	OK	OK	without UHC. Brightest near stars. Seen with direct vision. Lynd brightness		5 35 15.8	3 - 4	50	40 Jan
NGC 2214		The Hamming Warr			0.9		4/6/2016 19:34	OzSky	18" f/4.5 Newtonian	-		187x – A small, round, dim glow. Brighter core. See speckling of very faint stars on glow.		6 12 57.5			33 Jan
NGC 2243			ОС		9.4	l2r	3/5/2024 19:59	CSAC	20" f/5 Newtonian	Good	j	195x – A small, round glow. With AV, see 4-5 extremely faint stars and rest are unseen.		6 29 34.5			53 Jan
							1/21/2014 20:14	DAS Site				51x – With UHC. Nice. Faint thick oval. Brightest on lower left (Lynd Brightness 4) and faintest on upper right (Lynd Brightness 6). Can only see					
NGC 2237	<b>-</b>	Rosette Nebula		MON		EN			8" f/6 Newtonian	Good	Good	it with UHC filter.  187x – A small, somewhat compact, dim, uniformly lit glow. Tons of		6 30 54.6			57 Jan
NGC 2298 NGC 2346	D 5/8			PUP 9	9.3	3b(4)	4/6/2016 20:16 1/25/2017 20:54	OzSky CSAC	18" f/4.5 Newtonian 20" f/5 Newtonian	Good Very Good	Good Very Good	member stars easily seen.  195x – A PN. Small. Pale white circular glow with larger central star in		6 48 59.1 7 9 22.5			19 Jan 24 Feb
NGC 2442		The Meathook			0.5	Sc I-II	4/6/2016 20:19	OzSky	18" f/4.5 Newtonian	Good		187x – A medium size, very dim halo with larger, brighter core. Bottom of halo glow wraps to left and maybe dust lane above core on glow.		7 36 19.7			31 Feb
NGC 2451		The Meanlook			2.8	II2m	4/7/2016 0:36	OzSky	18" f/4.5 Newtonian			79x – 10-15 brighter blue white stars of 2 magnitudes in a very loose wedge shaped OC. Fills 34 of FOV in size.		7 45 15.0			3 Feb
	D 535		ОС		5.8	l2r	4/7/2016 0:45	OzSky	18" f/4.5 Newtonian	Good	Good	79x – A tight group of 50+ fainter, blue white stars. Compact. Shape of a 5 point star.		7 52 9.8			0 Feb
												134x - A dim, yet easy to see glow. Quite large in 19 mm. Has bright star in bottom 1/3 of glow. Most of glow above (N) of star, which also is the					
NGC 2467 NGC 2546			BN OC	PUP PUP	7.1 3.3	OCL+EN III2m	2/3/2005     23:01       3/12/2010     19:39		12.5" f/8 Newtonian 20x80 Binoculars	Good Good	Good Good	brighter part of this nebula.  About 20 faint stars. Fairly compact and circular in shape.		7 52 29.5 8 12 15.6			48 Feb 39 Feb
NGC 2659			ОС	VEL	3.6	III2r	4/1/2016 22:21	OzSky	16" f/4 Newtonian	Good	Good	125x – 30+ dimmer starts of 3-4 magnitudes form this compact, roughly circular shape.  195x – 13 faint and 5 even fainter stars forms a plus sign with 2 lines of		8 42 33.0	) - 45	5 0	2 Feb
NGC 2670			ОС	VEL	7.8	III2m	3/5/2024 21:13	CSAC	20" f/5 Newtonian	Very Good	Very Good	stars. A few more stars are sprinkled about. Small in size.  195x – 7-8 brighter and 10-15 dimmer stars and a nice glow underneath		8 45 29.5	5 - 48	8 47	30 Feb
NGC 2671		The Pencil. Part of Vela	OC SR	VEL 1		I2m	3/5/2024 22:48	CSAC	20" f/5 Newtonian	Good		these dimmer stars. Roundish in shape. Fills center of FOV.  66x – With O3. Brightest part of nebula is the long, thin line with nebula		8 46 11.9 9 0 16.9			<ul><li>38 Feb</li><li>53 Mar</li></ul>
NGC 2736 NGC 2818	D 564	Supernova Remnant		PYX 1		OC+PN	4/5/2016     20:52       4/4/2016     22:54	OzSky OzSky	18" f/4.5 Newtonian 18" f/4.5 Newtonian	Very Good Good		above it. Chase arc several FOVs around to see it all.  187x – A small, planetary nebula inside an OC (N2181).		9 0 16.9			
NGC 2867			PN	CAR	9.7	4	4/1/2016 22:56	OzSky	18" f/4.5 Newtonian	Good	Good	187x – A very small, round, bluish, uniformly lit glow. No central star seen.  O3 shows it the same. 80 degrees high.		9 21 25.3	3 - 58	8 18	42 Mar
												187x – Without O3, a very dim, roundish glow. Maybe dumbbell shape inside round glow. With O3 and AV, see circular shape and a bow tie on glow that extends above and below each side of bowtie of circle. Circle					
NGC 2899			PN	VEL 1	1.8		4/5/2016 0:03	OzSky	18" f/4.5 Newtonian	Good	Good	glow that extends above and below each side of bowtie of circle. Circle seems to have a hint of a thick ring around it's edge.  187x – A nice roundish OC that has 50 or so stars of 3-4 magnitudes that		9 27 3.0	- 56	6 6	22 Mar
NGC 2910			ОС	VEL	7.2	III3m	4/2/2016 22:43	OzSky	18" f/4.5 Newtonian	Very Good	Very Good	fills FOV nicely.  187x – 50+ stars. Brighter blue white color of 2 magnitudes in a loose,		9 30 29.0	) - 52	2 54	50 Mar
NGC 2925			ОС	VEL	3.3	II3m	4/4/2016 21:50	OzSky	18" f/4.5 Newtonian		Good	roughly circular area.  187x – A larger, very dim tilted oval. Has larger, brighter oval core.		9 33 10.9			45 Mar
NGC 2997 NGC 3109	D 622	The Wisp	Gal Gal	ANT :		SB(s)msp IV-\	4/7/2016     0:58       J 5/10/2010     22:48	OzSky TSP	18" f/4.5 Newtonian 12.5" f/8 Newtonian	Good Good	Good Good	Extremely faint dust lanes on halo glow reveals 2 CCW spiral arms.  134x – Large, diffused oval, uniformly lit, dim glow.		9 45 38.5 10 3 6.7			<ul><li>25 Mar</li><li>31 Mar</li></ul>
								-		_		187x – A brighter, thick arc glow. The brightest part is mottled. See very faint end of it on each side where arc dims to it at end of each side of arc.					
NGC 3199 NGC 3187	D 332	Southern Crescent		CAR 1		EN S	4/4/2016     22:46       4/21/2009     22:12		18" f/4.5 Newtonian 12.5" f/8 Newtonian			In a star rich field.  134x – Very dim, tiny, round smudge of light.		10     17     24.4       10     17     48.1			
NGC 3228			ОС	VEL	6.0	II3p	4/5/2016 0:24	OzSky	18" f/4.5 Newtonian	Good	Good	187x – 10 brighter blue white stars form a loose association with 8 in a roughly circular shape and 2 outliers.  187x – A brighter star is with a few tightly packed stars. Small in size. Has		10 21 22.2	2 - 5	1 43	57 Mar
NGC 3603			ОС	CAR	9.1	II3mn	4/4/3026 23:59	OzSky	18" f/4.5 Newtonian	Good	Good	a nebulous glow around these stars.  187x – A brighter star is with a few tightly packed stars. Small in size. Has a nebulous glow around these stars.  187x – A small, almost circular, very dim, uniformly lit glow with thick dust		11 15 6.6	- 6 <sup>-</sup>	1 15	40 Apr
NGC 3699	h 3345		PN	CEN 1	1.3	PN	4/2/2016 23:05	OzSky	18" f/4.5 Newtonian	Verv Good	Verv Good	lane bisecting right hand side of it. 3/4 to left of lane and 1/4 of it to right. O3 shows it nicely and the same. 70 degrees high.		11 27 58.1	- 59	9   57	37 Apr
NGC 3960	•			CEN		I2m	4/3/2016 19:47		18" f/4.5 Newtonian			187x – Awesome.  134x - Oval shaped, bright, pretty uniformly lit with maybe a hint of a halo		11 50 33.2			35 Apr
NGC 3923		The Antennae		HYA 1			5/10/2010 23:03 4/4/2016 0:07	TSP OzSky	12.5" f/8 Newtonian 18" f/4.5 Newtonian		Good Good	around it.  187x – Shape is like a 6. Fairly dim yet lots of details seen on glows.		11 51 1.8	- 28	8 48	21 Apr 10 Apr

													79x – A smaller, boxy, rectangular shape. 40-50 brighter blue white starts					$\overline{}$
NGC 4052		OC	CRU	8.8		III2r	4/4/2016	3 22:58	OzSky	18" f/4.5 Newtonian	Good	Good	of 2-3 magnitudes.  187x – 50-60 dimmer blue white stars of 3 magnitudes form a roughly	12	2 5.2	- 6	3 13 24	4 Apr
NGC 4103	D 291	OC	CRU	7.4		I2m	4/5/2016	1:10	OzSky	18" f/4.5 Newtonian	Good	Good	circular compact OC.  169x – A medium sized brighter tilted oval with larger core area and dim	12	6 39.5	- (	1 15 0	Apr
NGC 4244	Silver Needle Galaxy	Gal	CVN	10.0	48	SA(s)cd:sp IV	V 5/15/2012	2 1:06	Keota, CO	12.5" f/8 Newtonian 16" f/9 Ritchie-	Good	Good	halo extending out a bit from 10-4 o'clock.  203x - To lower right of a dim field star is this small, fat oval to round,	12	17 29.7	+ (	7 48 24	4 Apr
NGC 4275		Gal	СОМ	12.8		Sc	3/15/2018	8 22:57	MDO	Creighton	Good	Good	uniformly lit glow.  187x – 18 dim stars in 1, ½ circle arc and 10 in a leading second arc with	12	19 52.6	+ 2	7 37 16	3 Apr
NGC 4337		OC	CRU	8.9		II3p	4/5/2016	3 1:14	OzSky	18" f/4.5 Newtonian	Good	Good	lots of very faint stars underneath. Nice lines.  187x – 50+ dimmer stars of 4 magnitudes make up this large oval shaped	12	24 3.3	- {	8 7 25	5 Apr
NGC 4349		OC	CRU	7.4		II2m	4/5/2016	1:23	OzSky	18" f/4.5 Newtonian	Good	Good	OC. Has 1 bright field star at bottom. Fills center of FOV nicely.  187x – 2 brighter and 15-20 much dimmer stars basically outline a small	12	24 6.0	- (	1 52 13	3 Apr
NGC 4463		OC	MUS	7.2		l3m	4/5/2016	1:29	OzSky	18" f/4.5 Newtonian	Good	Good	football shape.  188x - A larger, very faint, fat oval. Vertical in FOV. Approx. ½ FOV long.	12	29 55.2	- (	4 47 23	3 Apr
NGC 4567	Siamese Twins	Gal	VIR	11.5	85	Sc	2/2/2019	1:48	LTO	24" f/5 Newtonian	Good	Good	Has tiny bright core.  188x - To lower left and touching N4567's halo glow is this medium sized,	12	36 32.8	+ -	1 15 28	3 Apr
													fat oval. Dim. Has brighter stellar core. Would have missed these and thought them to be one but now can see two distinct ovals touching.					
NGC 4568 NGC 4696	Siamese Twins Part of Custer Abell 3526	Gal Gal	VIR CEN	11.2 10.5		Sc S0	2/2/2019 4/3/2016		LTO OzSky	24" f/5 Newtonian 18" f/4.5 Newtonian	Good OK	Good OK	Another look, N4767 is tilted a bit with respect to N4568. A nice surprise.  187x – A small tilted oval. Pretty uniformly lit.	12	36 34.3 48 49.1		1 14 17 1 18 4	
NGC 4710		Gal	СОМ				5/12/2010		TSP	12.5" f/8 Newtonian	Good	Good	134x – A dim, uniformly lit, larger edge on with central bulge, which is mostly above the center line of edge on.		49 38.7		5 9 54	
NGC 4815		OC	MUS	8.6		I2r	4/5/2016		OzSky	18" f/4.5 Newtonian	Good	Good	187x – Under 2 brighter field stars are 15 very faint stars and a glow of many unseen stars in a roughly fat oval shape. Small and compact.		57 58.3		4 57 42	
NGC 4889		Gal	COM		80		4/26/202		CSAC	20" f/5 Newtonian	OK	OK	195x - A very small, very faint oval glow with hair brighter core.  187x – 50-60 very dim stars of 3 magnitudes form a long rectangle shape.		0 8.1	+ 2	7 58 37	7 May
NGC 4852		OC	CEN	8.9		l3r	4/5/2016	1:36	OzSky	18" f/4.5 Newtonian	OK	OK	Compact. Fills center of FOV nicely.  187x – A small, thin tilted oval. Has brighter, thin oval core. Has very faint	13	0 14.5	- 5	9 36 58	3 May
NGC 4976 NGC 5061		Gal Gal	CEN HYA	10.2		S0	4/7/2016 5/11/2010		OzSky TSP	18" f/4.5 Newtonian 12.5" f/8 Newtonian	Good Good	Good Good	field star to upper left of halo and near.  134x – Round glow with larger bright core and bit of dim halo around it.	13	8 37.4 18 5.2	4	9 30 2 <sup>-</sup> 6 50 16	1 May
NGC 5068 NGC 5078		Gal	VIR	9.8	110	Sd SO	5/24/2000	6 22:49	Keota, CO	12.5" f/8 Newtonian 18" f/4.5 Newtonian	OK	OK Good	134x - Large, very dim round uniformly lit glow.  187x - A very small, very faint, roundish, uniformly lit glow.	13	18 54.6 19 49.8	- 2	1 2 19 7 24 36	9 May
NGC 5102	h 3402		CEN				4/7/2016			18" f/4.5 Newtonian		Good	187x – A small tilted oval. Dim. Halo extends left and right beyond brighter halo. Has small, bright core.				6 37 49	
NGC 5253	11 3492	Gal	CEN			ImP	5/11/2010		TSP	12.5" f/8 Newtonian	Good	Good	134x – Nice long oval with larger, longer bright core that appears mottled.  Dim bit of halo that on each end, goes from 11:30 – 5:30 o'clock in FOV.		39 55.9			
NGC 5255 NGC 5460		OC	CEN	5.6	40	I3m	4/4/2016		OzSky	18" f/4.5 Newtonian		Good	187x – 20-25 bright blue white stars form a chain and hook.		7 27.7	- 4	1 38 3 <sup>-</sup> 8 20 33	3 May
NGC 5617	D 302	ОС	CEN	6.3		l3r	4/4/2016	0:40	OzSky	18" f/4.5 Newtonian	Good	Good	187x – A larger, ½ FOV long and narrow bullet shaped OC. 50+ dim blue white stars of 3-4 magnitudes. Stars fill in and outline the bullet.	14	29 44.0	- 6	0 42 39	9 May
NGC 5643		Gal	LEP	10.5		Sc III	4/7/2016	3:44	OzSky	18" f/4.5 Newtonian	Good	Good	187x – A small, very faint round glow. Has hare brighter small core. Has 3  very faint field stars on glow at 2, 10 and 12 o'clock.	14	32 41.3	- 4	4 10 24	4 May
NGC 5662		ОС	CEN	5.5		II3r	4/4/2016	0:44	OzSky	18" f/4.5 Newtonian	Good	Good	187x – 30 blue white dim stars of 3-4 magnitudes make up this large, boxy cluster. Fills center of FOV nicely.	14	35 37.5	- 5	6 37 5	May
NGC 5824		GC	LUP	9.1		I	4/7/2016	3:57	OzSky	18" f/4.5 Newtonian	Good	Good	187x – Globular. A small, round. Has bright compact core that dims quickly to dim halo. Speckling of member stars seen.	15	3 58.5	- (	3 4 4	1 Jun
NGC 5823		ОС	CIR	7.9		II2r	4/3/2016	6 0:41	OzSky	18" f/4.5 Newtonian	Good	Good	187x – A nice, tight, 50+ star OC with dimmer stars of 4 magnitudes with 4th very faint. Fills center of FOV.	15	5 30.6	- !	5 36 13	3 Jun
													122x – A small oval, brighter, pale white glow. With O3, stands out nicely and maybe see central star in center. Just 5 degrees above southern					
NGC 5882 [	D h 3594	PN	LUP	9.4		PN	7/6/2016	21:53	DAS Site	8" f/6 Newtonian	Good	Good	horizon and that area is a bit soft with haze. Stars are pinpoints in FOV.  187x – 1 ½ FOVs long and ½ FOV wide. A thick arc of dim, blue white	15	16 50.0	- 4	5 38 58	3 Jun
NGC 5925		OC	NOR	8.4		III2r	4/4/2016	0:58	OzSky	18" f/4.5 Newtonian	Good	Good	stars of many magnitudes with brighter ones of same magnitude.  187x – With O3, see a small, round, uniformly lit glow. No central star	15	27 26.7	- !	4 31 43	3 Jun
NGC 6072	h 3620	PN	sco	11.7		PN	4/4/2016	23:50	OzSky	18" f/4.5 Newtonian	Good	Good	seen.  134x – 30+ stars of approx 4 magnitudes makeup this open cluster. Fairly	16	12 58.2	: - (	6 13 47	7 Jun
NGC 6124	D 514	OC	sco	5.8		l3r	5/12/2010	0 1:33	TSP	12.5" f/8 Newtonian	Good	Good	loose and circular in shape. Completely fills FOV.  187x – Globular. A small, dim, round. Hare brighter core that dims slowly to	16	25 20.0	- 4	0 39 13	3 Jun
NGC 6139 NGC 6134	D 412	GC OC	SCO NOR			II II3m	4/7/2016 5/12/2010		OzSky TSP	18" f/4.5 Newtonian 20x80 Binoculars	Good Good	Good Good	edge. Speckling of stars on glow.  Larger, almost round glow.		27 40.4 27 46.5	- (	8 50 56 9 9 4	3 Jun I Jun
NGC 6153		PN		10.9		IV	5/11/2010		TSP	12.5" f/8 Newtonian	Good	Good	134x – Small, round dim planetary nebula. Central star easily seen in center of glow. Responds well to O3.		31 30.6			
NGC 6152 NGC 6167	·	OC	NOR NOR	8.1		III3r II3m	5/12/2010	0 3:14	TSP TSP	20x80 Binoculars 20x80 Binoculars	Good	Good	Medium sized round glow.  Small, very dim glow.	16	32 45.5 34 34.9	- 4	0 15 13 2 38 38 9 46 19	3 Jun
	2 .00		11011	0			0,12,201	3 3111	10.	Zoxoo Ziiroodia.o		0.000	137x – 50+ stars of a dimmer magnitude form an arc above 2 brighter		0.0.0			7 00.1
NGC 6193		ОС	ARA	5.2		II3p	4/3/2016	3 1:26	OzSky	18" f/4.5 Newtonian	Good	Good	double field stars. Arc fatter in middle and tapers off at each end. 60 degrees high.	16	41 20.2	4	8 45 45	5 Jun
NGC 6210		PN	HER	8.8		2(3b)	6/24/2013	3 22:55	LTO	24" f/5 Newtonian	OK	OK	110x. A small, round glow with brighter central star easily seen. Has greenish tint to it. At 187x, you can see the green hue easier. Uniformly lit.	16	44 29.4	+ 2	3 48 0	) Jun
													187x – Fills FOV. A loose OC with lots of dimmer blue white stars of 2-3 magnitudes. Has streamers of stars coming off center. Looks cool. Has					
NGC 6208		OC	ARA	7.2		III2r	4/4/2016			18" f/4.5 Newtonian		Good	bright field star in center that probably is not part of it.  134x - 1 bright star, 8 of 2nd magnitude and may more fainter stars	16	49 28.1		3 43 42	
NGC 6242 NGC 6302	Bug Nebula	OC PN	SCO	6.4 9.6		I3m VI	5/6/2005 4/4/2016		TSP OzSky	12.5" f/8 Newtonian 18" f/4.5 Newtonian	Good Good	Good Good	makeup this small, compact vertical linear OC.  187x – Bug Nebula. A small, 2:1 glow with brighter, elongated core.	16 17	55 33.4 13 44.6		9 27 39 7 6 12	<ul><li>Jun</li><li>Jul</li></ul>
													134x – Small, dim, round glow with tiny, dim field star right next to it. w/OIII, thought I saw a central star. OIII nicely makes it stand out. Not so good of a					
NGC 6309		PN	OPH	11.5		3b(6)	6/30/2008	8 0:19	Raymer, CO	12.5" f/8 Newtonian	Good	Good	view with UHC.  134x – Nice dim oval glow. 2 field stars seen on glow but none are at the	17	14 4.3		2 54 39	) Jul
NGC 6337	Diamond Ring	PN	sco	12.3		IV	7/22/2000	6 22:46	John Martin	12.5" f/8 Newtonian	ОК	OK	center of the glow. O3 gives a better view of oval glow, but can only see the 3 faint field stars on the glow w/o filter.	17	22 15.7	- (	8 29 1.	4 Jul
NGC 6416		OC	sco	5.7		III2m	8/8/2007	21:22	DAS Site	12.5" f/8 Newtonian	Good	Good	79x - Fills center of FOV nicely. Fainter stars with 3-4 brighter ones with rest dimmer but of same magnitude. Stars form lines. Class II.1.p.	17	44 19.9	- 3	2 21 40	0 Jul
	D 557	GC	sco	7.2		III	4/7/2016		OzSky	18" f/4.5 Newtonian	Good	Good	187x – A small, brighter globular. Small, dense core dims quickly to dim halo. Speckling. It is to left of bright field star.	17	50 12.9		7 3 4	
NGC 6453		GC	SCO			IV	4/7/2016		OzSky	18" f/4.5 Newtonian	Good	Good	187x – A small, dim globular. Has hare brighter core. Speckling.  187x – 8 bright field stars on a medium sized, uniformly lit glow. No	17	50 51.6		4 35 55	
NGC 6496		GC	CRA	8.6		XII	4/4/2016		OzSky	18" f/4.5 Newtonian	Good	Good	member stars seen.  254x - A dim glow with Lynd Brightness 4 with 6-8 field stars on glow of		59 3.7		4 15 59	
NGC 6530 NGC 6537	Red Spider Nebula	OC PN	SAG SAG	4.6 11.6		II2mn 2a(6)	8/17/2014 6/30/2008			12.5" f/8 Newtonian 12.5" f/8 Newtonian	Good Good	Good Good	NGC 6530.  282x – Stellar in appearance. Responds well to OIII and UHC filters.		4 31.0 5 13.0	- 2	4 21 29 9 50 34	<ul><li>Jul</li><li>Jul</li></ul>
NGC 6541 [	D 473	GC	CRA	6.3		III	4/4/2016		OzSky	18" f/4.5 Newtonian	Good	Good	187x – Nice. Larger oval shape, loose. Member stars seen. Bright core and dims quickly to large, extended halo of stars.		8 2.0		3 42 57	
	D 606	PN	SGR	11.0	60	3a	6/30/2008			12.5" f/8 Newtonian		Good	134x – Larger, round, dim, uniformly lit glow. Responds well to OIII but not so much to UHC. No central star seen.	18	12 2.6		3 52 7	
													134x – Nice. Larger than out-of-focus star. Easy to see. O3 and UHC show it about the same. Bluish-green colored circular patch of light. Central star					
													often seen with AV in center of a small, circular glow. 9mm - Larger and easier to see. w/o filters is the best view at this power. Larger, circular					
NGC 6572 NGC 6567		PN PN	OPH SGR			2a 2a(3)	9/12/200			12.5" f/8 Newtonian 12.5" f/8 Newtonian	Great Good	Great Good	greenish glow with central star often seen in center of glow with AV.  282x – Shows a stellar, out of focus like PN. Responds well to OIII.		12 6.4 13 45.1		5 51 13 9 4 34	
NGC 6604		ОС	SER	6.5		l3mn	8/8/2007		DAS Site	12.5" f/8 Newtonian	Great	Great	134x - A brighter star and 4 little dimmer stars makes a nice arc. 3-4 other stars on rhs of arc might also be part of it. Class III.3.p.	18			2 14 35	
NGC 6603		ОС	SGR	11.1		l2rn	8/1/2008		WUTS	12.5" f/8 Newtonian	Good	Good	134x - Inside M24 is this tight, circular grouping of many faint stars that are easily seen.	18			8 24 22	
NGC 6584		GC	TEL	7.9		VIII	4/4/2016	3 2:02	OzSky	18" f/4.5 Newtonian	Good	Good	187x – A small, very dim circular glow. Uniformly lit. Speckling on glow of member stars.	18	18 38.0		2 12 54	
NGC 6652		GC	SGR	8.5		VI	9/2/2005		Keota, CO	12.5" f/8 Newtonian	Good	Good	134x - Small, dim circular globular w/hare brighter center. Mottling of stars seen. Low in south so harder to see details but easy to see this. Class 3.	18	35 46.0		2 59 25	
NGC 6723	D 573	GC	SGR	6.8		VII	4/4/2016		·	18" f/4.5 Newtonian	Good	Good	187x – A medium sized circular globular. Has large, brighter, uniformly lit core and tiny bit of dim halo around it. Lots of member stars seen.	18	59 33.0		6 37 54	
NGC 6729	R Coronae Australis Nebula	BN	CRA	9.7		complex	4/5/2016			18" f/4.5 Newtonian		OK	187x – Under 3 sets of 2 stars around FOV is a nice nebula glow that extends a bit away from the stars.	19			6 57 12	
		-				12.00	010		<b>,</b>	2	-		134x - Small dim oval. Just a ghostly glow without filters. w/O3, stands out.					
													See central star. UHC shows it nicely also. 9mmShows it nicely. Almost circular but a bit oval on a 1 - 7 o'clock line. Uniformly lit. Maybe see central					
NGC 6751		PN	AQL	11.9		III	7/30/2008	8 21:42	WUTS	12.5" f/8 Newtonian	Great	Great	star once in a while. 2 very faint field stars near it to 3 and 8 o'clock side.  187x – N6769 is a small, round, dim glow with larger, bright core that dims	19	5 55.5	-	5 59 32	2 Aug
NGC 6769		Gal	PAV	11.9	123	SBb/P	4/6/2016	1:54	OzSky	18" f/4.5 Newtonian	Poor	Poor	quickly.  134x – Shows large circular glow. Like a nebula. W/AV, can see tiny stars	19	18 23.1	- 6	0 30 5	Aug
													on glow. 9mm shows more stars on glow and more circular glow. Glow easy to see in FOV.					
NGC 6791	Levy's False Comet	OC	LYR	9.5		l2r	#######	# 23:14	WUTS	12.5" f/8 Newtonian	Great	Great	Class I 1 r.  94x – A large, very faint, tall fat oval. Uniformly lit. Moves with FOV and eye	19	20 53.0	+ 3	7 46 19	3 Aug
	<b> </b>		ı		1 1	l	1	1	1				To in things, vory raint, tain at oval. Ormothing it. Moves with LOV and eye		I I		,   ,     -	7   1
NGC 6822	Barnard's Galaxy	Gal	SGR	9.9	5	IB(s)m IV-V	9/26/2019	9 22:23	Okie-Tex SF	8" f/6 Newtonian	Good	Good	follows it.  134x – In John's scope are 5 dim stars forming a pentagon and with OIII,	19	44 56.3		4 48 37	/ Aug

												134x - Tiny round to oval uniformly lit PN. Blue-green in color. Responds				
NGC 6891		PN	DEL	10.5	2a(2b)	7/31/20	2:39	WUTS	12.5" f/8 Newtonian	Great	Great	well to O3 and UHC. 9mm didn't show it any better.	20 15	8.9 +	12 42	2 15 Aug
												134x - Dimmer than M56. Uniformly lit. w/AV see speckling on the glow.				
IGC 6981	M 72	GC	AQR	9.2	IX	9/25/20	03 20:02	Okie-Tex SF	12.5" f/8 Newtonian	OK	OK	Class 7.	20 53	28.0 -	12 32	2 13 Aug
												134x - Nice. 6992 is an uneven glow, twisting and wide. 6995 has				
												streamers coming off it. Best seen with OIII and UHC shows it a bit as well				
												as naked eye. There are a few stars mixed in amongst the nebulosity. Easy				
GC 6992	Veil Nebula	SR	CYG	7.0	3:3:3	9/7/201	3 0:56	John Martin	12.5" f/8 Newtonian	OK	ОК	to see with direct vision. 15mm eyepiece the best. Lynd brightness 2.	20   56	19.0 +	31 44	1 34 Aug
												134x - Nice. A tiny dim uniformly lit glow to right of a brighter field star				+
												which makes it look like a double star. Responds well to O3 and UHC				
GC 7026		PN	CYG	10.9	3a	8/1/200	8 3:37	WUTS	12.5" f/8 Newtonian	OK	ОК	filters. No central star seen.	21 6	18.6 +	47 51	l 8 Sep
												134x - Nice. Thin flat oval. Blue-green in color. Pretty bright. Central star				1 1 1 1 1
GC 7027		PN	CYG	8.5	3a	8/1/200	8 3:21	WUTS	12.5" f/8 Newtonian	OK	OK	easily seen in center of glow. O3 and UHC shows it real well also.	21 7	1.7 +	42 14	1 10 Sep
GC 7320	Stephan's Quintet of Galaxies			13.1 132	2 Sc	11/2/20			12.5" f/8 Newtonian	OK	OK	134x - An oval glow with nucleus glow seen.	22 36	3.4 +	33 56	5 54 Sep
GC 7456	·	Gal		11.7 23		9/27/20			8" f/6 Newtonian	Good	Good	94x – A very long, fat cigar shape, extremely faint, uniformly lit glow.	23 2			1 11 Oct
GC 7552		Gal	GRU		Sbab			Okie-Tex SF	8" f/6 Newtonian	Good	Good	94x – A small, faint, with a brighter, linear core.	23 16		42 35	5 5 Oct
												94x – A medium sized, a long, fat cigar shape that is very faint and				1 1
GC 7582	Grus Quartet of galaxies	Gal	GRU	10.6 157	7 Sbab	9/26/20	19 23:20	Okie-Tex SF	8" f/6 Newtonian	Good	Good	uniformly lit.		23.7 -		2 15 Oct
GC 7590	•	Gal	GRU	11.6 36	Sc	9/26/20	19 23:20	Okie-Tex SF	8" f/6 Newtonian	Good	Good	94x – A small, <u>very faint,</u> uniformly lit oval glow.	23 18	54.7 -	42 14	1 21 Oct
												94x – A small, very faint galaxy with a very faint core in center and a field				
GC 7599		Gal		11.4 57		9/26/20	19 23:20	Okie-Tex SF	8" f/6 Newtonian	Good	Good	star below that and on glow of galaxy.	23 19			5 26 Oct
GC 1543		Gal		10.3 93	SB0		24 18:38 U		20" f/6.8 Cassegrain			120 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/NGC1543.html">https://mikehotka.com/CertLogs/Bambury600/NGC1543.html</a>				1 17 Dec
GC 2972		OC	VEL		II1p		24 10:06 U		20" f/6.8 Cassegrain			60 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/NGC2972.html">https://mikehotka.com/CertLogs/Bambury600/NGC2972.html</a>		11.5 -	50 19	9 15 Mar
GC 5999		OC	NOR		l2m		24 11:02 U		20" f/6.8 Cassegrain			60 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/NGC5999.html">https://mikehotka.com/CertLogs/Bambury600/NGC5999.html</a>	15 52			3 22 Jun
GC 6005		OC	NOR		l2m		24   11:00 U		20" f/6.8 Cassegrain			60 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/NGC6005.html">https://mikehotka.com/CertLogs/Bambury600/NGC6005.html</a>	15 55			3 14 Jun
GC 6188 h 3642		BN	ARA	5.2	EN+RN	6/17/20	24 13:41 U	T SSO	20" f/6.8 Cassegrain			30 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/RimNebula.html">https://mikehotka.com/CertLogs/Bambury600/RimNebula.html</a>	16 40	5.8 -	48 39	9 44 Jun
												122x – Very low in south. A roundish open cluster. Fills center of FOV. 10-				
												15 very faint stars, but it is easy to see these stars.				
GC 6192		OC	SCO	8.5	I2r	7/8/202	21:49	DAS Site	8" f/6 Newtonian	Good	Good	47x – Small, roundish glow speckled with stars.	16 40	23.8 -	43 22	2 1 Jun
												203x - Very loose open cluster. 4 brighter and 3 very faint stars form a				
												pentagon shape. 3 stars, 2 part of the open cluster form a line on the right				
GC 6216		OC	SCO		I2m	7/8/202				Good	Good	hand side of open cluster. Very faint. Very low above horizon.				3 53 Jun
GC 6253		OC	ARA	10.2	ll1m	6/22/20	24 13:16 U	T SSO	20" f/6.8 Cassegrain			90 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/NGC6253.html">https://mikehotka.com/CertLogs/Bambury600/NGC6253.html</a>	16 59	5.1 -	52 42	2 32 Jun
												203x – 6 stars, very faint, form a vertical line in FOV. Very small. To left is				
GC 6318		OC	SCO	11.8	III2p	7/8/202	4 22:08	DAS Site	8" f/6 Newtonian	Good	Good	a single star not part of the open cluster. Easy to see.	17 16	11.5 -	39 25	5 30 Jul
												203x – Inside a triangle of 3 brighter stars that fills the center of FOV is this				
												open cluster. 3 brighter above for a hat and 3 dimmer below in a line, 2				
GC 6322		OC	SCO	6.0	I3m	7/8/202			8" f/6 Newtonian	Good	Good	stars close and third a bit away and below. Very cool.				3 2 Jul
C 6590		BN			III3mn		24 22:02			Good	Good	203x – A dim star has a hint of a very faint, small round glow around it.	18 17			l 58 Jul
GC 6857		BN	CYG		3:2:3	9/27/20			8" f/6 Newtonian	OK	OK	see.	20 1	48.0 +	33 31	I 33 Aug
GC 7410		Gal		10.6 45			24 16:06 U		20" f/6.8 Cassegrain			120 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/NGC7410.html">https://mikehotka.com/CertLogs/Bambury600/NGC7410.html</a>	22   54	59.3 -	39 39	9 45 Sep
IGC 7424		Gal	GRU	10.4	S(B)c II	7/31/20	24 16:16 U	T SSO	20" f/6.8 Cassegrain			120 sec exposure. Luminance. FOV is 37.2 x 37.2 arcmin <a href="https://mikehotka.com/CertLogs/Bambury600/NGC7424.html">https://mikehotka.com/CertLogs/Bambury600/NGC7424.html</a>	22   57	18.4 -	41 4	15 Sep

Observed: 150 of 150

	Observing Locations
Location	Description
DAS Site	Near Deer Trail, CO
OzSky	Near Coonabarabran, NSW, AUS
LTO	Little Thompson Observatory, Berthoud, CO
Okie-Tex SP	Okie-Tex Star Party, Kenton, OK
CSAC	Comanche Springs Astronomy Campus, 3RF, Crowell, TX
WUTS	Weekend Under The Stars, Fox Park, WY
John Martin	John Martin Reservoir State Park, Lamar, CO
Kim's Place	Irrigation ditch access road east of Longmont, CO
TSP	Texas Star Party, Prude Ranch, TX
MDO	McDonald Observatory, Ft. Davis, TX
Red Feathers	Red Feathers Lake, CO