NGC							
Object	Date	Time	Seeing	Trans.	Location	Equipment	Description
					Deer Trail, CO. Moderately		205x – Nice. Bright. Small oval glow. Larger, brighter core
16	8/19/2012	1:12	OK	OK	Dark Skies.	C14	seen on bright halo glow.
							205x – A small tilted oval with hare brighter central region
					Deer Trail, CO. Moderately		and much brighter, small core on this. Bit of halo
95	8/19/2012	2:58	OK	OK	Dark Skies.	C14	surrounding core.
					Deer Trail, CO. Moderately		134x - Very small round dim halo glow with tiny star like
128	12/28/2008	18:41	OK	OK	Dark Skies.	12.5" f/8 Newtonian	nucleus seen in center.
					Deer Trail, CO. Moderately		205x – A small oval dim glow with brighter stellar core.
210	8/19/2012	3:37	OK	Good	Dark Skies.	C14	Dim overall though.
					Deer Trail, CO. Moderately		205x - A larger, extremely faint oval ghostly, uniformly lit
245	8/19/2012	3:39	OK	Good	Dark Skies.	C14	glow.
					Deer Trail, CO. Moderately		205x – A larger, roundish, extremely faint smudge of light.
255	8/19/2012	3:47	OK	OK	Dark Skies.	C14	Uniformly lit.
					Deer Trail, CO. Moderately		205x – A small tilted oval with larger, textured core and
266	8/19/2012	1:37	OK	OK	Dark Skies.	C14	easy to see halo around it.
					Deer Trail, CO. Moderately		205x – An extremely faint, larger oval, uniformly lit
268	8/19/2012	3:55	OK	OK	Dark Skies.	C14	smudge of light.
					Deer Trail, CO. Moderately		205x – A very faint, longer, thin oval. Uniformly lit. Has
274	8/19/2012	3:57	OK	OK	Dark Skies.	C14	bright field star on upper end of glow.
					Deer Trail, CO. Moderately		205x - A larger oval, extremely faint, uniformly lit ghostly
450	8/19/2012	3:51	OK	OK	Dark Skies.	C14	smudge of light.
					Deer Trail, CO. Moderately		205x – A large, round to oval shaped, uniformly lit dim
470	8/19/2012	3:13	OK	Good	Dark Skies.	C14	glow.
					Deer Trail, CO. Moderately		205x – A small oval. Very dim. Has a hare brighter core
474	8/19/2012	3:13	OK	Good	Dark Skies.	C14	area.
					Deer Trail, CO. Moderately		205x – A larger, fat thin cigar shaped oval. Uniformly lit.
520	8/19/2012	3:15	OK	Good	Dark Skies.	C14	Dim. Goes from 6:30 – 00:30 o'clock in FOV.
					Deer Trail, CO. Moderately		205x – A small oval, very faint glow with hare brighter,
533	8/19/2012	3:49	OK	OK	Dark Skies.	C14	small core.
					Commanche Springs		263x - Brightest of Hickson Group 10 is a small, linear,
					Astronomy Center,		uniformly lit glow. 2 bright field stars below glow and near
536	1/22/2012	21:50	OK	OK	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	it.
					Deer Trail, CO. Moderately		
600	8/19/2012	3:36	OK	Good	Dark Skies.	C14	205x – A small round glow with larger brighter core.

					Deer Trail, CO. Moderately		205x – A small, thin edge on. Dim. Central core area
670	8/19/2012	3:22	OK	OK	Dark Skies.	C14	brighter than thin, very faint tapered arms.
					Deer Trail, CO. Moderately		
673	8/19/2012	2:39	OK	OK	Dark Skies.	C14	205x – An <u>extremely</u> faint larger oval ghostly glow.
							205x – A bright large core that has a tiny bit of very dim
							halo around it and extending 8 – 2 o'clock. Looked like a
					Deer Trail, CO. Moderately		star except for the arms. A thin tilted oval and this bright
676	8/19/2012	3:10	OK	OK	Dark Skies.	C14	core maybe.
					Deer Trail, CO. Moderately		205x – Is oval, pretty uniformly lit with hare brighter, small
678	8/19/2012	2:31	OK	OK	Dark Skies.	C14	core.
					Deer Trail, CO. Moderately		
680	8/19/2012	2:31	OK	OK	Dark Skies.	C14	205x – A round, dim glow with tiny stellar core in center.
					Deer Trail, CO. Moderately		
681	8/19/2012	3:45	OK	OK	Dark Skies.	C14	205x – A tiny, oval, extremely dim, uniformly lit glow.
					Deer Trail, CO. Moderately		205x - Nice! Larger, longer fat edge on. Uniformly lit with
697	8/19/2012	2:35	OK	OK	Dark Skies.	C14	hint of hare brighter core. Extremely dim overall.
							234x - A longer, larger fat oval. Very faint. Uniformly lit
701	12/27/2013	19:18	Good	Good	Berthoud, CO	24" f/4 Newtonian	glow.
					Keota, CO. Moderately		134x - A faint small round glow seen. No details. Just a
705	8/10/2010	1:09	Great	Great	dark skies.	12.5" f/8 Newtonian	glow.
							234x - A small, oval, extremely faint, uniformly lit smudge
748	12/27/2013	18:56	Good	Good	Berthoud, CO	24" f/4 Newtonian	of light.
					Deer Trail, CO. Moderately		205x – A small, thin oval glow. w/AV see a texture on
750	8/19/2012	2:08	OK	OK	Dark Skies.	C14	uniformly lit glow.
					Deer Trail, CO. Moderately		205x – A small faint roundish glow with brighter tiny core
777		2:07	OK	OK	Dark Skies.	C14	seen in center.
788	1/5/2013	19:30	Good	OK	Berthoud, CO	24" f/4 Newtonian	187x – A small, oval, uniformly lit, very faint glow.
864	1/5/2013	19:43	Good	OK	Berthoud, CO	24" f/4 Newtonian	187x – A very faint, fat oval, uniformly lit glow.
							205x – A larger, <u>very</u> faint fat oval. Uniformly lit. Has faint
					Deer Trail, CO. Moderately		field star just outside glow on lower left side. Had to put a
877	8/19/2012	2:20	OK	OK	Dark Skies.	C14	bright field star out of FOV to see this.
					Deer Trail, CO. Moderately		205x – A larger, uniformly lit, oval to circular shaped,
895	8/19/2012	3:41	OK	Good	Dark Skies.	C14	extremely faint smudge of light.
					Okie-Tex Star Party-		
					Kenton, OK-Moderately		15mm – A <u>very</u> faint tilted oval glow with hare brighter
922	9/30/2011	1:18	Good	Good	Dark Sky.	12.5" f/8 Newtonian	larger core seen on halo glow.

					Deer Trail, CO. Moderately		205x – A larger, uniformly lit, oval to circular shaped,
941	8/19/2012	3:44	OK	OK	Dark Skies.	C14	extremely faint smudge of light.
	0. 10. 20. 12	9 111	<u> </u>		Deer Trail, CO. Moderately		in the state of th
945	8/19/2012	2:05	OK	OK	Dark Skies.	C14	205x – An extremely faint larger oval, uniformly lit glow.
					Deer Trail, CO. Moderately		205x – A small tilted oval, pretty uniformly lit. w/AV see a
949	8/19/2012	3:53	OK	OK	Dark Skies.	C14	texture on glow. Very dim overall.
							187x – A long, slender glow. Faint. Has hare brighter,
955	1/5/2013	19:19	Good	OK	Berthoud, CO	24" f/4 Newtonian	larger core in center.
					Deer Trail, CO. Moderately		
958	8/19/2012	3:34	OK	Good	Dark Skies.	C14	205x – A larger, thin oval. Long. Uniformly lit.
					WUTS 2008, Fox Park,		134x – Small, oval glow with larger, hare brighter core
972	08/02/08	1:46	Good	Good	WY	12.5" f/8 Newtonian	seen.
					Okie-Tex Star Party-		80x-Small-bright nucleus. Edge on. Nucleus blends into
					Kenton, OK-Moderately		slender halo. 134x-Relatively brighter circular nucleus
1097		1:07	Good	Good	Dark Sky.	12.5" f/8 Newtonian	blends into long, slender arms.
1140	1/5/2013	19:53	Good	OK	Berthoud, CO	24" f/4 Newtonian	187x – A nice tilted oval. Has brighter larger core.
	_ , ,				Deer Trail, CO. Moderately		205x – An extremely faint found, uniformly lit glow. Has
1186	8/19/2012	2:44	OK	OK	Dark Skies.	C14	bright field star offset to left of center on halo glow.
4004	4/04/0044	40.00	014	014	Deer Trail, CO. Moderately		122x – A small, round, dim glow with tiny, much brighter
1201	1/21/2014	18:20	OK	OK	Dark Skies.	8" f/6 Newtonian	core.
					Daar Trail CO Madaratak		424. Lanca record alexandrial length his his his and a second
4000	4/40/2000	40.40	OK	OK	Deer Trail, CO. Moderately Dark Skies.		134x – Larger round glow with large, bit brighter nucleus
1232	1/16/2009	18:43	UK	UK	Deer Trail, CO. Moderately	12.5" f/8 Newtonian	area. Pretty dim overall yet easy to spot in FOV. 134x – Very faint circular uniformly lit glow. Hint of
12/1	12/28/2008	19:49	OK	OK	Dark Skies.	12.5" f/8 Newtonian	brighter core area seen.
1241	12/20/2000	19.49	OK	OK	Commanche Springs	12.5 1/6 Newtonian	brighter core area seen.
					Astronomy Center,		134x – A very large, dim, uniformly lit, fat oval glow. No
12/17	1/20/2012	21:46	Great	Great	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	core seen. PA 0 degrees.
1241	1/20/2012	21.40	Oreat	Oleat	Crowell, TX - Dark Okles	20 1/4.5 Newtonian	234x - A medium sized round, dim glow. Uniformly lit.
							Has extremely faint tiny star like core in center of round
1309	12/27/2013	14\9:44	Good	Good	Berthoud, CO	24" f/4 Newtonian	halo glow.
1000	.2,21,2010	11,0.77	<u> </u>			1/ 1 140 Wto mail	134x – Larger, slender oval. W/AV, see tiny relatively
					Deer Trail, CO. Moderately		brighter star like core. Then just below this, on halo glow
1344	1/9/2010	20:04	Great	Great	Dark Skies.	12.5" f/8 Newtonian	is a very faint point of light.
	12/27/2013	20:06	Great	Great	Berthoud, CO	24" f/4 Newtonian	234x - An extremely faint, round, small, ghostly glow.

							234x - A tiny, round, extremely faint glow with larger, hare
1358	12/27/2013	20:08	Great	Great	Berthoud, CO	24" f/4 Newtonian	brighter core area.
					Commanche Springs		
					Astronomy Center,		134x - A cigar shaped glow with large brighter core in
1371	1/21/2012	20:58	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	center of halo glow. Small.
					Deer Trail, CO. Moderately		134x – Is right next to NGC 1374 and is circular and very
1376	1/16/2009	19:11	OK	OK	Dark Skies.	12.5" f/8 Newtonian	faint. Uniformly lit.
					Commanche Springs		134x - A "lopsided" circular glow. Small. Uniformly lit
					Astronomy Center,		circular glow. It seems to have a bit of extremely faint
1385	1/21/2012	20:56	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	halo glow trailing off the lower right of circular glow.
					Commanche Springs		134x - A small, slender linear glow. Goes from 2 – 8
					Astronomy Center,		o'clock in FOV. Small. Has brighter core with slight bulge
1395	1/21/2012	20:46	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	in this area of glow
					Commanche Springs		
					Astronomy Center,		134x - A nice, dim, oval galaxy with larger, brighter core
1415	1/21/2012	20:41	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	and bit of dim halo around it.
1417	12/27/2013	20:11	Great	Great	Berthoud, CO	24" f/4 Newtonian	234x - An extremely faint, small, thin oval ghostly glow.
							134x – A faint, fat oval glow with central core a linear
					Deer Trail, CO. Moderately		glow and easy to see on halo glow. Central bar goes from
1425	1/16/2009	19:01	OK	OK	Dark Skies.	12.5" f/8 Newtonian	8 – 2 o'clock.
							l
							134x - A circular glow with arms. Has large bright core
					Commanche Springs		with lots of detail in core. Seems to have a brighter stellar
					Astronomy Center,		part then some less bright knots around this one. Core
	1/21/2012	20:49	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	looks different from any others I've ever looked at.
1439	12/27/2013	19:53	Good	Good	Berthoud, CO	24" f/4 Newtonian	234x - A small, dim oval with small, brighter core.
	40/07/00:5	00.00				0.48.474.81	234x - A thin, small oval dim glow with larger, brighter
1440	12/27/2013	20:00	Great	Great	Berthoud, CO	24" f/4 Newtonian	core.
							234x - A tiny, oval glow. <u>Very</u> faint with larger, hare
1452	12/27/2013	19:59	Great	Great	Berthoud, CO	24" f/4 Newtonian	brighter core.
4.450	40/07/00/0	00.44			D # 1 00	0.411.674.84	
1453	12/27/2013	20:14	Great	Great	Berthoud, CO	24" f/4 Newtonian	234x - A small, dim oval with larger, much brighter core.
4.46.4	40/07/00/0	00.04			Death and OO	0.411.474.81	234x - A small, thin oval to edge on shaped galaxy. Very
1461	12/27/2013	20:04	Great	Great	Berthoud, CO	24" f/4 Newtonian	dim. Has hare brighter core.
4 = 6 5	00/05/05				Pawnee Grasslands, CO-	10 = 11 (/0)	134x-A long, linear cigar with lhs fatter and brighter. The
1569	03/05/05	7:20	Fair	Fair	Moderately Dark Sky.	12.5" f/8 Newtonian	brightest part of the nucleus glow is in this part.

							134x - A small round, faint halo glow. Has 2 star like
					Commanche Springs		points of light on halo glow. One very dim point of light at
					Astronomy Center,		center of round glow. Above at 2 o'clock is a brighter field
1589	1/20/2012	22:07	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	star, well outside of halo glow.
					Commanche Springs		134x - A small, round brighter glow. Large bright core with
					Astronomy Center,		bit of dim halo around it. Just below and very near a dim
1620	1/20/2012	21:54	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	field star.
							187x – A larger, very dim tilted oval. Appears to have an
							extended halo a bit away from a small, hare brighter core
							region in center of glow. Yet dim, easy to see the extent
1638	3/5/2013	19:43	OK	OK	Berthoud, CO	24" f/4 Newtonian	of this halo glow. Nice.
							187x – A ghostly glow, extremely faint, almost not there
1659	3/5/2013	19:40	OK	OK	Berthoud, CO	24" f/4 Newtonian	with AV, uniformly lit glow. Small.
							134x - Small, dim tilted oval from 1-7 o'clock. Pretty
					Deer Trail, CO. Moderately		uniformly lit. Most of what can be seen might be the core
1888	12/28/2008	19:22	OK	OK	Dark Skies.	12.5" f/8 Newtonian	with maybe a hint of tiny bit of halo glow around it.
					Commanche Springs		263x - A larger, very dim tilted oval. w/AV can see it has
					Astronomy Center,		a tiny star like core. Core area seems to have a texture.
2507	1/22/2012	22:22	Great	Good	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	Most of what is seen is halo glow.
					Deer Trail, CO. Moderately		134x – Small, round dim glow. Pretty uniformly lit. Easy to
	12/28/2008	22:42	OK	OK	Dark Skies.	12.5" f/8 Newtonian	see.
2543	12/27/2013	22:34	Good	Good	Berthoud, CO	24" f/4 Newtonian	234x - A larger, extremely faint oval, uniformly lit glow.
							187x – A nice, brighter, larger, long thin edge on. Has
							larger, brighter core and longer tapered arms that dim
2545	3/5/2013	20:05	OK	OK	Berthoud, CO	24" f/4 Newtonian	slowly. Goes from 1 – 7 o'clock in FOV. Nice.
					Commanche Springs		
					Astronomy Center,		134x - A small, faint oval glow in star rich FOV. 2 faint
2566	1/22/2012	0:50	OK	OK	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	field stars on glow, one of which may be a core.
			_	_	Deer Trail, CO. Moderately		134x – Very faint, elongated fat oval. Uniformly lit. No
2608	03/01/08	0:26	Good	Good	Dark Skies.	12.5" f/8 Newtonian	nucleus seen.
							134x – Nice. Easy to see. A fat oval halo glow that is
							almost vertical in FOV. Upper nucleus (2672) is much
					Deer Trail, CO. Moderately		brighter and round than 2nd nucleus (2673), very near it.
2672		0:32	Good	Good	Dark Skies.	12.5" f/8 Newtonian	See 2nd nucleus w/AV.
2693	12/27/2013	22:37	Good	Good	Berthoud, CO	24" f/4 Newtonian	234x - A brighter, small oval with large, bright core.

							281x - A small, round, very faint, uniformly lit glow. Has
							brighter field star at edge of glow at 2 o'clock wrt to center
2701	5/28/2014	22:13	Good	Good	Berthoud, CO	24" f/4 Newtonian	of glow.
					Pawnee Grasslands, CO-		187x – A small, thin, linear glow. Has stellar core and
2718	04/06/13	23:15	Good	Good	Moderately Dark Sky.	20" f/4.5 Newtonian	another field star to left of core on glow.
					Pawnee Grasslands, CO-		187x – A larger, longer, fat cigar. Very dim and uniformly
2763	04/07/13	0:04	Good	Good	Moderately Dark Sky.	20" f/4.5 Newtonian	lit.
							281x - An extremely faint ghostly hint of a uniformly lit,
							small oval glow. Thought I saw it a couple of times as it
2770	5/28/2014	21:52	Good	Good	Berthoud, CO	24" f/4 Newtonian	popped in and out. Looked again and saw it.
					Deer Trail, CO. Moderately		134x – Small, very dim, oval shaped with bit brighter
2798	2/24/2009	19:22	Good	Good	Dark Skies.	12.5" f/8 Newtonian	central area.
					Pawnee Grasslands, CO-		134x – A larger, longer, very dim tilted oval with dim,
2815	04/06/13	23:50	Good	Good	Moderately Dark Sky.	20" f/4.5 Newtonian	brighter core seen in center of glow.
					Pawnee Grasslands, CO-		In Bill Possel's 20 inch scope, 250x. Large but very dim
2820	04/01/05	21:33	Good	Good	Moderately Dark Sky.	20" f/4.5 Newtonian	glow. Circular in shape and uniformly lit.
					Commanche Springs		
					Astronomy Center,		
2848	04/07/13	0:01	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A larger, round, <u>very</u> faint, uniformly lit glow
					Deer Trail, CO. Moderately		134x – This is a round, dim glow with a tiny, relatively
2872	3/12/2010	22:36	Fair	OK	Dark Skies.	12.5" f/8 Newtonian	brighter core seen.
					Commanche Springs		
					Astronomy Center,		
2874	1/23/2012	1:28	OK	OK	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	180x - An edge on, dim, with hare brighter core.
					Commanche Springs		187x – A small, dim, oval glow with bright core. Has a
					Astronomy Center,		field star above core and same brightness as core and on
2907	04/06/13	23:56	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	glow.
					Commanche Springs		134x – A small, oval glow. Has 2 fainter cores on halo
					Astronomy Center,		glow equidistant on each side of center of glow. Both
2935	04/06/13	23:45	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	cores look the same.
							281x - A small, lenticular shaped, uniformly lit, extremely
2955	5/28/2014	22:02	Good	Good	Berthoud, CO	24" f/4 Newtonian	<u>faint</u> glow.
					Commanche Springs		
					Astronomy Center,		149x - A medium sized, round, uniformly lit glow. Dim yet
2967	3/25/2014	21:33	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	easy to see.

					Commanche Springs Astronomy Center,]	
2968	3/27/2014	21:53	Good	OK	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	149x - A bit smaller, round, dim glow with tiny core.
2300	3/21/2014	21.00		OK	Pawnee Grasslands, CO-	20 1/4.5 Newtonian	134x – A small tilted oval. Dim. Has larger brighter core
2983	04/06/13	23:35	Good	Good	Moderately Dark Sky.	20" f/4.5 Newtonian	with even brighter area in center of this core.
2000	3 17 3 37 1 3	20.00		3004	measurery Dam Cry:	20 II HO HOWENIAN	I I I I I I I I I I I I I I I I I I I
							134x – Nice. Round, large circular face on galaxy. Very
							dim with bit brighter, larger core seen in center. Dim halo
					Deer Trail, CO. Moderately		glow not uniformly lit but a bit mottled in appearance.
2997	4/21/2009	21:07	Good	Good	Dark Skies.	12.5" f/8 Newtonian	Pretty dim overall. Mottling may be a hint of spiral arms.
							281x - An extremely faint, oval, small, uniformly lit
2998	5/28/2014	22:08	Good	Good	Berthoud, CO	24" f/4 Newtonian	smudge of light.
					Deer Trail, CO. Moderately		
3003	4/21/2009	21:54	Great	Great	Dark Skies.	12.5" f/8 Newtonian	134x – Long. Slender, dim, uniformly lit glow.
					Commanche Springs		
					Astronomy Center,		180x - A large, faint oval halo glow. Has a tiny, hare
3020	1/23/2012	1:38	Fair	Fair	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	brighter core seen with AV.
					Commanche Springs		
					Astronomy Center,		180x - A large, faint oval halo glow. Has a tiny, hare
3024	1/23/2012	1:38	Fair	Fair	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	brighter core seen with AV.
					Commanche Springs		
					Astronomy Center,		
3027	1/25/2017	22:10	OK	OK	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	195x - A small fat oval. Dim. Has small, brighter core.
					Commanche Springs		149x – A larger, face on. Very dim. See splotchy nature to
00.44	0/00/0044	00.44	0 1	0 1	Astronomy Center,	00111/4 5 N	glow which looks like 2 CCW arms. Has tiny, extremely
3041	3/28/2014	22:14	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	faint core and 3-4 faint field stars on glow.
					Commanche Springs		134x - A nice edge on. Easy to see. Long and slender.
2044	4/00/0040	0.00	Cood	Cood	Astronomy Center,	20" f/4 E Novetonion	Slight bulge seen at center. Hint of dust lane bisecting it.
3044	1/22/2012	2:33	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	Uniformly lit.
					Commanche Springs Astronomy Center,		
3052	04/06/13	23:25	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A dim, larger, uniformly lit oval glow.
3032	04/00/13	23.23	Guu	3000	Commanche Springs	ZU 1/4.0 INEWIUIIIAII	1077 - A diffi, larger, difficility in ovar glow.
					Astronomy Center,		134x – A small, circular, dim glow with larger, brighter
3081	04/06/13	23:30	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	core in center.
5001	07/00/10	20.00	0000	0000	Cionon, IA Daik Okico	20 1/T.O NOWIGINALI	coro in conton.

					Texas Star Party- Ft		
					Davis, TX. Very Dark		134x – A dim oval glow with hint of halo around a larger
3091	5/11/2010	23:24	OK	OK	Skies.	12.5" f/8 Newtonian	core.
							281x - A small, <u>very</u> faint glow. Can't tell if a long, thin
							edge on with larger central bulge or a tilted oval. Seen
							with AV. Has dim field star on right hand side edge of
3320	5/28/2014	22:53	Good	Good	Berthoud, CO	24" f/4 Newtonian	glow. Uniformly lit.
					Commanche Springs		
					Astronomy Center,		
3346	3/28/2014	22:29	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	149x – A larger, round, dim, uniformly lit glow.
					Commanche Springs		
					Astronomy Center,		
3348	1/25/2017	23:10	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	195x - A small fat oval, uniformly lit, very faint.
					Commanche Springs		
	0/00/0044	00.00			Astronomy Center,		149x – A small, round, dim glow with tiny, star like core in
3367	3/28/2014	22:28	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	center of glow.
					Commanche Springs		149x – A small dim oval with hare brighter, linear core
0070	0/00/0044	00.04	0 1	0 1	Astronomy Center,	0011 (/4 5 November)	centered on oval halo glow that has an even hare brighter
3370	3/28/2014	22:31	Good	Good	Crowell, TX - Dark Skies Commanche Springs	20" f/4.5 Newtonian	central core.
					Astronomy Center,		
3381	1/26/2017	22:03	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	195x - A small, <u>very faint</u> uniformly lit fat oval.
3301	1/20/2017	22.03	Good	Good	Crowell, TX - Bark Skies	20 1/4.3 Newtonian	134x – In same FOV as M105 and NGC 3384 is this
					Keota, CO. Moderately		small, very dim, uniformly lit oval below 3384 and to the
3389	4/9/2010	0:52	Great	Great	Dark Skies.	12.5" f/8 Newtonian	right of it.
0000	4/3/2010	0.02	Orcat	Great	Ban Galos.	12.0 1/014cWtoman	134x – Above NGC 3395 are 3 other dim, uniformly lit
					Pawnee Grasslands, CO-		smudges of light. NGC 3413 is linear, NGC 3395 is oval
3396	03/05/05	22:56	Good	Good	Moderately Dark Sky.	16" f/5 Newtonian	and the largest, NGC 3396, is circular in shape.
	00,00,00				Commanche Springs		
					Astronomy Center,		195x - A small, very faint, thin tilted oval, 4:1. Has tiny
3403	1/25/2017	23:08	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	stellar core popping in once in a while.
					Commanche Springs		5
					Astronomy Center,		149x – A larger, <u>very</u> faint fat oval, uniformly lit glow. On
3423	3/28/2014	22:45	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	upper part of glow are 2 evenly bright, dim field stars.
					Commanche Springs		
					Astronomy Center,		149x – A larger, extremely faint uniformly lit, ghostly
3433	3/28/2014	22:38	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	glow.

3437	5/27/2014	23:02	Good	Good	Berthoud, CO	24" f/4 Newtonian	281x - A small, dim, fat thin oval, uniformly lit.
							134x – A tilted oval going from 2-8 o'clock. Small.
					Deer Trail, CO. Moderately		Uniformly lit. Maybe hint of hare brighter core area. Its
3448	2/24/2009	22:11	OK	OK	Dark Skies.	12.5" f/8 Newtonian	pretty dim yet easy to see.
					Commanche Springs		
					Astronomy Center,		180x - Near a brighter field star is this very faint, round-
3455	1/23/2012	21:45	Good	Good	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	oval uniformly lit glow.
							281x - A medium sized, long, thin cigar shape. Extremely
3478	5/28/2014	22:57	Good	Good	Berthoud, CO	24" f/4 Newtonian	faint, uniformly lit, smudge of light.
					Commanche Springs		149x – Nice. Brighter tilted oval with larger, bright core
					Astronomy Center,		and lots of extended, dimmer halo.
3485	3/24/2014	21:44	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	
							149x – A larger, long, evenly thin dim uniformly lit glow.
					Commanche Springs		Just above a bright field star. Have to put star out of field
					Astronomy Center,		to see this. It is square on right hand side and tapers to a
3495	3/28/2014	22:48	Good	Good		20" f/4.5 Newtonian	point on left hand side.
					Commanche Springs		149x – To upper left of a bright field star and near is this
					Astronomy Center,		very thin, long, very faint small glow that seems to be a
3510	3/27/2014	21:42	Good	OK	,	20" f/4.5 Newtonian	hare brighter in middle.
					Commanche Springs		
					Astronomy Center,		149x – A small, brighter, tilted oval with small, bright core.
3512	3/27/2014	21:44	Good	OK	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	Has field star to upper left of core and on halo glow.
							281x - A <u>very</u> faint, long, medium sized tilted oval.
3549	5/28/2014	23:09	Good	Good	Berthoud, CO	24" f/4 Newtonian	Uniformly lit. Nice.
					Commanche Springs		
					Astronomy Center,		149x – A small, very dim, tilted oval with small, hare
3571	3/28/2014	22:59	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	brighter core.
							281x - A small, round, fat oval, extremely faint, uniformly
3614	5/28/2014	23:00	Good	Good	Berthoud, CO	24" f/4 Newtonian	lit, smudge of light.
					Commanche Springs		
					Astronomy Center,		
3660	04/07/13	23:35	OK	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A larger, <u>very</u> faint, oval, uniformly lit glow.
							134x – An oval glow, easy to see with tiny star-like
					Deer Trail, CO. Moderately		nucleus off center and on lower part of halo glow. Goes
3690	2/24/2009	22:33	OK	OK	Dark Skies.	12.5" f/8 Newtonian	from 2 – 8 o'clock. This one was neat.

				1	
			North Sterling State Park,		134x - 2 galaxies in FOV. NGC 3729-This is the smaller one to the left. Small, circular and uniformly lit. There is a field star at the bottom edge. NGC 3718-Is much larger and just as dim. Oval in shape. Has 2 field start on
3718 04/27/03 (0:40 Fa	ir Fair	<u>, </u>	12.5" f/8 Newtonian	the rhs and 1 on the lhs bounding this galaxy.
			Okie-Tex Star Party-		187x – A long thin 5:1, medium sized edge on. See
			Kenton, OK-Moderately		central glow broken into 2-3 pieces. Not uniformly lit thru
3735 9/28/2016 2	21:08 Go	od Good	Dark Sky.	12.5" f/8 Newtonian	core. Very dim.
			Texas Star Party- Ft		134x – Around a bright field star I see 5 glows of light. All
			Davis, TX. Very Dark		real dim. Below field star is small round dim uniformly lit
3738 5/12/2010 2	23:25 Go	od Good	Skies.	12.5" f/8 Newtonian	glow of 3738.
					134x – A linear shaped uniformly lit glow going from
			Deer Trail, CO. Moderately		11:30 – 5:30 o'clock in FOV. Easy to see. No central
3769 2/24/2009 2	22:45 O	K OK	Dark Skies.	12.5" f/8 Newtonian	brightening of core seen.
					281x - A larger, long, very faint, tilted oval. Can see large
					part of center uniformly lit and hare brighter than
3780 5/28/2014 2	23:00 Go	od Good	Berthoud, CO	24" f/4 Newtonian	surrounding uniformly lit halo glow. Nice.
			Deer Trail, CO. Moderately		
3801 3/13/2010 (0:00 Fa	ir OK	Dark Skies.	12.5" f/8 Newtonian	134x – 3801 is a slender, dim, uniformly lit glow.
			Commanche Springs		
			Astronomy Center,		
3802 1/23/2012 2	2:01 Fa	ir Fair	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	180x - A small, fat oval uniformly lit glow.
			Commanche Springs		
			Astronomy Center,		
3885 04/07/13 2	23:55 O	K Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A small, dim, oval glow with hare brighter core.
			Commanche Springs		
			Astronomy Center,		
3894 1/23/2012 2	21:45 Go	od Good		30" f/4.5 Newtonian	202x - A tiny oval glow with hint of have brighter core.
			Commanche Springs		
			Astronomy Center,		202x - A very faint oval smudge of light. Has hare
3895 1/23/2012 2	21:45 Go	od Good	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	brighter, larger core area.
			Texas Star Party- Ft		
			Davis, TX. Very Dark		134x - Small, round dim glow with larger, little brighter
3904 5/10/2010 2	23:01 Go	od Good	Skies.	12.5" f/8 Newtonian	core.

					Commanche Springs Astronomy Center,		149x - A large, lens shape galaxy, very dim, uniformly lit
3917	1/17/2015	1:22	Great	Great	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	glow.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		134x - Oval shaped, bright, pretty uniformly lit with maybe
3923	5/10/2010	23:03	Good	Good	Skies.	12.5" f/8 Newtonian	a hint of a halo around it.
					Pawnee Grasslands, CO-		134x - Small, edge on oval with hare brighter nucleus.
3955	04/01/05	22:39	Good	Good	Moderately Dark Sky.	12.5" f/8 Newtonian	Overall its dim.
					Pawnee Grasslands, CO-		In Bill Possel's 20 inch scope, 250x . Very dim cigar
3956	04/01/05	22:46	Good	Good	Moderately Dark Sky.	20" f/4.5 Newtonian	shaped, uniformly lit glow.
					Pawnee Grasslands, CO-		
3957	04/01/05	22:47	Good	Good	Moderately Dark Sky.	12.5" f/8 Newtonian	134x - Tiny, yet easy to see uniformly lit edge on galaxy.
							281x - A <u>very</u> faint, larger, roundish glow. Can see
							mottling on glow and hint of 1 CCW arm off bottom.
2000	E/00/004 4	00.00	0	0	Darth and CO	0.411 f/4 Novetonion	Maybe a couple of extremely faint field stars on lower part
3963	5/28/2014	23:32	Good	Good	Berthoud, CO	24" f/4 Newtonian	of glow.
							281x - An <u>extremely faint</u> ghostly glow. Hard to see. A small, fat oval shape maybe. Can't tell for sure. Seen
2060	5/27/2014	23:24	Good	Good	Berthoud, CO	24" f/4 Newtonian	once in a while with AV.
3972	5/28/2014	23:52	Good	Good	Berthoud, CO	24" f/4 Newtonian	281x - A very small, thin oval with small, brighter core.
3912	3/20/2014	23.32	Good	Good	Commanche Springs	24 1/4 Newtonian	201X - A very small, thin oval with small, brighter core.
					Astronomy Center,		149x – A medium sized, long tilted oval. Very dim halo.
3976	3/28/2014	0:34	Fair	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	Core larger and brightens to a small, brighter core.
	0/20/20 : :	0.0.			Commanche Springs		Solo iai got and originate a difficulty anglitar color
					Astronomy Center,		187x – A longer, thin, uniformly lit, very faint sliver of
3981	04/07/13	23:46	OK	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	light.
					Commanche Springs		
					Astronomy Center,		
4017	3/27/2014	22:40	Good	OK	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	149x - A tiny oval, very faint, uniformly lit glow.
					Commanche Springs		187x – A small, tilted oval. <u>Very</u> faint. Has larger, brighter
					Astronomy Center,		core that is not uniformly lit. See extremely faint halo
4033	04/07/13	23:42	OK	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	taper off 11-5 o'clock from this core.
					Commanche Springs		
					Astronomy Center,		
4050		23:44	OK	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A larger, fat oval. Uniformly lit. <u>Very</u> faint.
4123	2/1/2019	23:56	Good	Good	Berthoud, CO	24" f/4 Newtonian	281x - A small, very faint, uniformly lit oval glow.

					Commanche Springs]	
					Astronomy Center,		195x - A very small tilted oval with larger, linear, brighter
	3 1/27/2017	20:12			Crowell, TX - Dark Skies	20" f/4.5 Newtonian	core. Center of bar has much brighter small, round core.
414	2/1/2019	23:56	Good	Good	Berthoud, CO	24" f/4 Newtonian	188x - A small, very faint, uniformly lit oval glow.
					Commanche Springs		
					Astronomy Center,		202x - An extremely dim, uniformly lit glow. Fatter in
419	7 1/24/2012	0:59	OK	OK	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	middle.
					Commanche Springs		
					Astronomy Center,		202x - This is a thin, short, uniformly lit, very faint sliver
420	5 1/24/2012	0:22	OK	OK	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	of light.
					Commanche Springs		
					Astronomy Center,		149x – A small, long, very tilted oval. Dim halo. Small,
421	5 3/28/2014	0:37	Fair	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	bright core seen in center.
							134x - Just below and to the left a bit from NGC 4274 is
					Crow Valley campground.		this small, round glow of halo with a little brighter central
428	3/18/2008	3:30	Good	Fair	Moderately Dark Sky.	12.5" f/8 Newtonian	core seen.
					Texas Star Party- Ft		125x - A very faint edge on, 4:1, uniformly lit. Can see
					Davis, TX. Very Dark		arm tapers on top and bottom. Maybe down center see a
434	3 5/1/2019	23:36	Very Good	Very Good	Skies.	16" f/4 Newtonian	hint of a hare brighter something.
							188x - A small, dim tilted oval, 2:1 with larger, brighter
437	3 5/3/2016	22:56	OK	Good	Berthoud, CO	24" f/4 Newtonian	core.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		134x – 4388 is a long slender uniformly lit edge on. Goes
438	5/12/2010	2:25	Good	Good	Skies.	12.5" f/8 Newtonian	from 11:30 – 5:30 o'clock in FOV.
					Commanche Springs		
					Astronomy Center,		187x – A medium sized, dim oval with linear glow down
438	9 4/24/2022	21:47	Very Good	Very Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	Center that is easy to see.
				-			187x - A small, extremely faint oval with brighter, stellar
441	2 3/25/2019	22:52	OK	OK	Berthoud, CO	24" f/4 Newtonian	core.
							281x - A small, thin, 2:1 dim oval. Has linear, brighter
							core down center and small bit brighter core in center of
441	7 5/8/2018	23:18	OK	OK	Berthoud, CO	24" f/4 Newtonian	this.
							281x - A very small, thin oval, very faint. Has brighter
							complex core. Saw multiple brighter areas in center of
442	1 5/8/2018	22:21	Good	Good	Berthoud, CO	24" f/4 Newtonian	glow. Maybe linear core or bar.

							281x - A small, very faint, thin, 3:1 oval. Has brighter
4425	5/8/2018	21:59	Good	Good	Berthoud, CO	24" f/4 Newtonian	core that dims slowly to edge.
4452	5/8/2018	21:38	Good	Good	Berthoud, CO	24" f/4 Newtonian	281x - A long, thin, 4:1, uniformly lit faint glow.
							281x - A very small, extremely faint, linear oval.
4454	5/27/2014	23:31	OK	OK	Berthoud, CO	24" f/4 Newtonian	Uniformly lit.
							188x - A long, 4:1, cigar shaped, very faint oval,
4455	2/2/2019	0:26	Good	Good	Berthoud, CO	24" f/4 Newtonian	uniformly lit glow.
							187x - A small dim oval glow with brighter stellar core.
4457	3/25/2019	22:55	OK	OK	Berthoud, CO	24" f/4 Newtonian	Nicest one I've seen tonight.
							187x – A long thin 4:1 edge on. A bright field star to
					Commanche Springs		right. See a larger, bit brighter core and then a bit brighter
					Astronomy Center,		down the center of arms.
4460	4/24/2022	22:14	Very Good	Very Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	
					Texas Star Party- Ft		
					Davis, TX. Very Dark		
4461	5/12/2010	2:25	Good	Good	Skies.	12.5" f/8 Newtonian	134x - A tiny round smudge of light.
					Commanche Springs		187x – A small tilted oval with brighter core. Halo tapers
					Astronomy Center,		off quickly from central area of glow on both sides. Halo
4462	04/07/13	0:56	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	very dim.
							281x - A medium sized cigar shaped fat oval. 4:1.
4469	5/8/2018	23:21	OK	OK	Berthoud, CO	24" f/4 Newtonian	Uniformly lit dim glow.
							281x - A very small, thin, 2:1 oval. Very faint. Has
							hare brighter larger central area with brighter small core in
4474	5/8/2018	22:13	Good	Good	Berthoud, CO	24" f/4 Newtonian	center of this. Very faint halo off each end.
							281x - A very small, thin, 2:1 oval. Extremely faint,
4479	5/8/2018	22:55	OK	OK	Berthoud, CO	24" f/4 Newtonian	uniformly lit ghostly glow.
							187x - A medium sized, extremely faint ghostly glow with
4496	3/25/2019	23:03	OK	OK	Berthoud, CO	24" f/4 Newtonian	hare brighter stellar core.
							281x - A small, fat oval. 2:1. Has larger brighter core that
4503	5/8/2018	23:10	OK	OK	Berthoud, CO	24" f/4 Newtonian	dims slowly to edge of very faint halo glow.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		125x - A larger, fat oval. Not circular. A dim, uniformly lit
4504	5/1/2019	23:58	Good	Good	Skies.	16" f/4 Newtonian	glow.

					Texas Star Party- Ft]	134x – A very long, slender oval, uniformly lit and dim. Has bright field star ½ across it and on bottom left edge.
					Davis, TX. Very Dark		Goes from 11:30 – 5:30 o'clock in FOV and is approx 1/3
4517	5/10/2010	23:48	Good	Good	Skies.	12.5" f/8 Newtonian	FOV long.
	0,10,2010				Commanche Springs		
					Astronomy Center,		195x - A small, thin tilted oval. 3:1. Has small, bit brighter
4521	1/27/2017	22:21	Very Good	Very Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	core and very faint tapered arms off each side.
4532	3/25/2019	22:37	OK	OK	Berthoud, CO	24" f/4 Newtonian	187x - A small, fat oval, extremely faint, uniformly lit.
							188x - A small, round, very faint glow with hare brighter,
4561	2/2/2019	0:33	Good	Good	Berthoud, CO	24" f/4 Newtonian	larger core with maybe a stellar core at the center of that.
							188x - A dim, long, thin edge on. 3:1. Has larger, brighter
							core and tiny tapered arms. Goes 11:30 – 5:30 o'clock in
4564	2/2/2019	1:45	Good	Good	Berthoud, CO	24" f/4 Newtonian	FOV. Nicest one seen tonight.
							188x - A larger, very faint, fat oval. Vertical in FOV.
4567	2/2/2019	1:48	Good	Good	Berthoud, CO	24" f/4 Newtonian	Approx. ½ FOV long. Has tiny bright core.
							188x - To lower left and touching N4567's halo glow is
							this medium sized, 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. Another
							look, N4767 is tilted a bit with respect to N4568. A nice
4568	2/2/2019	1:48	Good	Good	Berthoud, CO	24" f/4 Newtonian	surprise.
							187x - A bit larger than small sized fat oval, very faint,
	3/25/2019	22:46	OK		Berthoud, CO	24" f/4 Newtonian	uniformly lit.
4592	5/27/2014	22:27	Fair	Fair	Berthoud, CO	24" f/4 Newtonian	281x - A long thin dim uniformly lit glow.
							281x - A small, <u>very</u> faint, thin oval with hare brighter
4593	5/27/2014	23:35	OK		Berthoud, CO	24" f/4 Newtonian	small core in center, seen with AV.
					OzSky, Coonabarabran,		158x - A very small, very faint, thin oval with hare brighter
4597	4/7/2016	20:44	Very Good	Very Good	NSW AUS	18" f/4.5 Newtonian	stellar core.
	- / /				D 11 1 00		281x - A medium sized, long, thin oval, very faint,
4602	5/27/2014	23:33	OK	OK	Berthoud, CO	24" f/4 Newtonian	uniformly lit.
			211		D 11 1 00		281x - A very small, <u>extremely faint</u> , 2:1 thin oval,
4623	5/8/2018	23:45	OK	OK	Berthoud, CO	24" f/4 Newtonian	uniformly lit ghostly glow.
					Commanche Springs		1.07
4000	1/0=/005	4.0=			Astronomy Center,		187x – A medium sized dim tilted oval. Has a larger, hair
4632	4/25/2022	1:05	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	brighter core area.

							281x - A small, thin, 3:1, uniformly lit, extremely faint
4634	5/8/2018	22:49	OK	OK	Berthoud, CO	24" f/4 Newtonian	ghostly glow.
					Commanche Springs		
					Astronomy Center,		187x - A nice, long thin tilted oval. This is a
4653	4/24/2022	23:35	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	brighter one. Has large core that dims into halo glow.
					Tarras Otan Banto Et		AOS - A Bio To viola of a bright Sald star
					Texas Star Party- Ft		125x - A small oval. Dim. To right of a bright field star.
4050	5 /0 /00 A O	4.05	0 1		Davis, TX. Very Dark	40" (/4 N	Has faint field star on bottom of halo glow. Once in a
4658	5/2/2019	1:05	Good	Good	Skies.	16" f/4 Newtonian	while there appears to be a brightness in center using AV.
	_,,						281x - A small, thin edge on. Bright. Most of what is seen
4684	5/27/2014	23:28	OK	OK	Berthoud, CO	24" f/4 Newtonian	is a long, linear core of uniform brightness.
	,,						281x - A small, thin, 2:1 linear, very faint glow. Has
4694	5/8/2018	23:06	OK	OK	Berthoud, CO	24" f/4 Newtonian	larger, hare brighter central core area.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		
4700	5/2/2019	0:04	Good	Good	Skies.	16" f/4 Newtonian	125x - A long, thin, 4:1 tilted oval. It is brighter, yet small.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		134x – A dim, uniformly lit, larger edge on with central
4710	5/12/2010	2:52	Good	Good	Skies.	12.5" f/8 Newtonian	bulge, which is mostly above the center line of edge on.
					Texas Star Party- Ft		125x - A very faint, long, thin cigar shaped, 5:1, uniformly
					Davis, TX. Very Dark		lit. A very faint field star is above and centered and very
4731	5/2/2019	2:39	Good	Good	Skies.	16" f/4 Newtonian	close to halo glow.
					Commanche Springs		
					Astronomy Center,		187x - A long, thin tilted oval. Extremely faint.
4747	4/26/2022	1:11	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	Uniformly lit.
					Commanche Springs		
					Astronomy Center,		
4750	1/26/2017	21:04	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	195x - A dim, medium sized fat oval, uniformly lit.
					Commanche Springs		
					Astronomy Center,		187x - A long, slender, fat vertical, very dim glow. 5:1.
4771	4/26/2022	0:44	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	It's long. Uniformly lit.
					Commanche Springs		187x - A small, dim, lens shape. Has large, bright core
					Astronomy Center,		that has many brighter areas. Core surrounded by tiny bit
4772	4/26/2022	0:41	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	of halo. Core is most of what is seen.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		125x - A larger, dim, uniformly lit fat oval that is almost
4775	5/2/2019	3:35	Good	Good	Skies.	16" f/4 Newtonian	circular in shape.

							281x - A small, extremely faint, uniformly lit roundish
4779	5/8/2018	23:25	OK	OK	Berthoud, CO	24" f/4 Newtonian	ghostly glow. Almost not there.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		195x - A bit smaller round, dim glow with a faint stellar
4782	5/1/2019	0:47	Good	Good	Skies.	12.5" f/8 Newtonian	core.
					Texas Star Party- Ft		195x - A bit bigger than lower galaxy NGC 4782. Has a
4700	5/4/0040	0.47		0 1	Davis, TX. Very Dark	40 5" (/0 1)	brighter, stellar core.
4783	5/1/2019	0:47	Good	Good	Skies.	12.5" f/8 Newtonian	
					Texas Star Party- Ft		10Ev. A small dim fot tilted eval that has a hare
4790	5/1/2019	1:15	Good	Good	Davis, TX. Very Dark Skies.	12.5" f/8 Newtonian	195x - A small, dim, fat tilted oval that has a hare brighter, huge, mottled core area.
4790	5/1/2019	1.10	Good	Good	Commanche Springs	12.5 1/6 Newtonian	brighter, huge, mothed core area.
					Astronomy Center,		187x - A long, thin oval. Extremely faint. Uniformly lit.
4793	4/26/2022	0:44	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	Small.
	.,_0,_0	0					281x - A very small, very faint oval. Has bit brighter small
4795	5/8/2018	23:28	OK	OK	Berthoud, CO	24" f/4 Newtonian	core.
					Commanche Springs		
					Astronomy Center,		187x - A very small, dim fat oval to round glow. Has a
4808	4/26/2022	0:48	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	hair brighter bar down center of halo glow.
					Commanche Springs		195x - A medium sized fat oval. Has hare brighter bar
					Astronomy Center,		down center of glow and is more than just a little bit of a
4814	1/27/2017	22:38	Very Good	Very Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	glow
					Texas Star Party- Ft		105 Al 04 (11 15 11
4040	F/0/0040	0.45	0	0	Davis, TX. Very Dark	401 f/4 Navitanian	125x - A longer, 3:1 tilted oval. Dim. Has larger, hare
4818	5/2/2019	2:15	Good	Good	Skies. Texas Star Party- Ft	16" f/4 Newtonian	brighter core area.
					Davis, TX. Very Dark		195x - A dim, tilted oval. Small. Has larger, brighter core
4825	4/30/2019	0:16	Good	Good	Skies.	12.5" f/8 Newtonian	that is mottled.
4020	7/30/2019	0.10	Good	Good	Deer Trail, CO. Moderately	12.0 I/O INGWIOIIIAII	134x - A very faint sliver of uniformly lit light going from 2
4861	6/23/2009	0:12	ОК	Good	Dark Skies.	12.5" f/8 Newtonian	- 8 o'clock in FOV. Fairly long.
7001	3, 23, 2000	J. 12	J.,	2300		i i i i i i i i i i i i i i i i i i i	281x - A small, round, very dim glow. w/AV, can see it
							has a brighter core in center and once saw 2 CCW arms
4868	5/27/2014	22:33	Fair	Fair	Berthoud, CO	24" f/4 Newtonian	spiraling out from core at 8 and 2 o'clock.
							281x - A small, extremely faint linear smudge of light.
4877	5/27/2014	23:46	OK	OK	Berthoud, CO	24" f/4 Newtonian	Barely there with AV.

					Texas Star Party- Ft	7	424. A faint place again FOV Dalace a bright field stage
4000	E/12/2010	2:13	Fair	Fair	Davis, TX. Very Dark	10 F" f/9 Novetonian	134x – 4 faint glows seen in FOV. Below a bright field star
4889	5/13/2010	2:13	rair	Fair	Skies. Texas Star Party- Ft	12.5" f/8 Newtonian	is a bit larger faint round glow of 4889.
					Davis, TX. Very Dark		195x - A small, very faint, uniformly lit oval. Looks lens
4000	4/20/2040	0.40	Cood	Cood	•	40 F# f/O Novetonian	
4899	4/30/2019	0:19	Good	Good	Skies.	12.5" f/8 Newtonian	shaped.
					Tayon Char Darty Ct		134x – A longer, small, cigar shaped uniformly lit dim
					Texas Star Party- Ft		glow. Just below and to right of a bright field star. Has a
4000	E/40/0040	00.40	0 1	014	Davis, TX. Very Dark	40 F# (/O NI /	hare brighter core and maybe a dim field star on upper
4933	5/13/2010	22:19	Good	OK	Skies.	12.5" f/8 Newtonian	halo glow. Goes from 11 – 5 o'clock in FOV.
					Commanche Springs		407 A
1054	0.4/0.0/4.0	0.00	014		Astronomy Center,	00" (/4 5 N)	187x – A larger, <u>very</u> faint, lenticular shaped, uniformly
4951	04/08/13	0:09	OK	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	lit glow.
					Commanche Springs		
	0.4/0.0/4.0	2.40			Astronomy Center,	0011444 5 3 1	407 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
5015	04/08/13	0:12	Fair	Fair	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – An <u>extremely</u> faint, small, oval smudge of light.
					Commanche Springs		
					Astronomy Center,		
5016	1/24/2012	2:15	OK	OK	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	263x - A fatter small uniformly lit oval.
	,,,,,,,				Keota, CO. Moderately		15mm – A small, thin, uniformly lit linear glow. PA 1
5073	5/14/2012	23:17	Good	Good	Dark Skies.	12.5" f/8 Newtonian	o'clock.
					Commanche Springs		187x – A larger, roundish dim glow. Has hint of hare
					Astronomy Center,		brighter core. Thought I saw CCW spiral arms off top and
5085	04/07/13	1:39	Good	Good	Crowell, TX - Dark Skies	20" f/4.5 Newtonian	bottom of core.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		134x – A brighter oval with larger, bright core and dim
5101	5/11/2010	0:02	Good	Good	Skies.	12.5" f/8 Newtonian	halo around it. Pretty dim overall.
							281x - A larger, extremely faint, round, uniformly lit glow.
5112	5/27/2014	22:44	Fair	Fair	Berthoud, CO	24" f/4 Newtonian	Seen with AV only.
							281x - A small, very dim tilted oval with brighter, small
5147	5/28/2014	0:03	Fair	Fair	Berthoud, CO	24" f/4 Newtonian	core in center of halo glow.
		-					169x – Nice edge on. Needle thin. Has longer faint arms
					Keota, CO. Moderately		that extend from hare brighter central bulge. PA 2 o'clock.
5170	5/14/2012	23:15	Good	Good	Dark Skies.	12.5" f/8 Newtonian	Very nice.
							281x - A medium sized, round, very faint, uniformly lit
5230	5/27/2014	23:51	OK	OK	Berthoud, CO	24" f/4 Newtonian	glow.

				<u> </u>	Texas Star Party- Ft	1	
					Davis, TX. Very Dark		134x – Larger, roundish, very dim glow with bit brighter
E047	5/11/2010	2:34	Cood	Cood	Skies.	12.5" f/8 Newtonian	
5247	5/11/2010	2.34	Good	Good		12.5 1/6 Newtonian	central region in center of glow. 134x – Nice long oval with larger, longer bright core that
					Texas Star Party- Ft		
5050	E/44/0040	0.50	0 1		Davis, TX. Very Dark	40 511 (/0 1)	appears mottled. Dim bit of halo that on each end, goes
5253	5/11/2010	0:53	Good	Good	Skies.	12.5" f/8 Newtonian	from 11:30 – 5:30 o'clock in FOV.
							281x - A small, thin edge on. Longer, dim tapered arms
5290	5/27/2014	22:57	Fair	Fair	Berthoud, CO	24" f/4 Newtonian	off brighter small core.
							134x - A very dim, linear smudge of uniformly lit light.
					Deer Trail, CO. Moderately		Nestled with 2 field stars, with the lower star much
5297	6/23/2009	0:28	OK	Good	Dark Skies.	12.5" f/8 Newtonian	brighter than upper star.
					Deer Trail, CO. Moderately		205x – A larger, round, extremely faint glow. Can see its
5300	7/20/2012	22:02	OK	OK	Dark Skies.	C14	mottled with possible CCW spiral structure.
							281x - A medium sized, long, thin, slender, very faint,
5301	5/28/2014	0:31	Fair	Fair	Berthoud, CO	24" f/4 Newtonian	uniformly lit glow.
					Deer Trail, CO. Moderately		
5324	7/20/2012	21:56	OK	OK	Dark Skies.	C14	205x – An extremely faint oval. Small. Uniformly lit.
					Deer Trail, CO. Moderately		
5326	6/23/2009	0:49	OK	Good	Dark Skies.	12.5" f/8 Newtonian	134x - A small dim circular glow with tiny brighter core.
					Texas Star Party- Ft		
					Davis, TX. Very Dark		195x - A tiny oval, extremely faint, uniformly lit. Seeing is
5328	5/1/2019	2:14	OK	OK	Skies.	12.5" f/8 Newtonian	OK to poor this low in the south.
							205x – A larger, extremely faint elongated glow between
					Deer Trail, CO. Moderately		2 fields stars at each end. Has a hare brighter, larger core
5334	7/20/2012	21:58	OK	OK	Dark Skies.	C14	area.
					Deer Trail, CO. Moderately	,	
5347	7/20/2012	22:23	OK	ок	Dark Skies.	C14	205x – A small extremely dim linear smudge of light.
		_	_	_	Deer Trail, CO. Moderately		, , ,
5350	6/23/2009	0:49	OK	Good	Dark Skies.	12.5" f/8 Newtonian	134x - A bit larger, circular uniformly lit glow.
					Deer Trail, CO. Moderately		
5351	6/23/2009	0:49	OK	Good	Dark Skies.	12.5" f/8 Newtonian	134x - A very faint uniformly lit oval glow.
	5. 20, 200	0			Deer Trail, CO. Moderately		134x - Brightest of all members of this group. Elongated
5353	6/23/2009	0:49	OK	Good	Dark Skies.	12.5" f/8 Newtonian	oval with brighter center.
2230	5. 20, 200	00					134x - An oval, dim galaxy with little brighter nucleus that
					Pawnee Grasslands, CO-		is easy to see. Halo may extend a bit on each side of
5376	03/21/04	1:28	Good	Good	Moderately Dark Sky.	12.5" f/8 Newtonian	nucleus.
3370	00/21/07	1.20			ividuolatory Dark Oky.	1.2.0 1/0 NOWIGINAL	11401040.

							281x - A very dim, long, medium sized, tilted oval with
5377	5/28/2014	0:32	Fair	Fair	Berthoud, CO	24" f/4 Newtonian	larger, brighter core. Nice.
					Commanche Springs		
					Astronomy Center,		202x - A small, dim oval with brighter, larger core
5379	1/24/2012	2:15	Fair	Fair	Crowell, TX - Dark Skies	30" f/4.5 Newtonian	surrounded by a bit of halo glow.
5389	6/30/2014	0:57	Good	Good	Berthoud, CO	24" f/4 Newtonian	281x - A small, dim, tilted oval with large brighter core.
							134x – Bottom galaxy in FOV is a larger oval and has
							hare brighter center. Above it and at 11 o'clock is a hare
					Raymer, CO. Moderately		brighter (overall) circular galaxy with bright core and bit of
5395	6/29/2008	22:21	Good	Good	Dark Sky.	12.5" f/8 Newtonian	halo around it.
					Deer Trail, CO. Moderately		205x – A larger, <u>very</u> faint face on with brighter, star like
5406	7/20/2012	22:32	OK	OK	Dark Skies.	C14	core in center. Hint of CCW spiral arms seen.
					Deer Trail, CO. Moderately		
5422	7/3/2013	22:10	OK	OK	Dark Skies.	8" f/6 Newtonian	121x - Nice small edge on with brighter core.
							134x (19mm)- 5426 is a dim, long oval, pretty uniformly lit
							with hint of hare brighter core area. Right next to it on
							right is a smaller, bit dimmer galaxy (5427). Its more
							elongated and is perpendicular to 5426. In between them
					Pawnee Grasslands, CO-		is a very faint field star.
5427	05/25/06	0:18	Fair	Good	Moderately Dark Sky.	12.5" f/8 Newtonian	
							205x – A large, round, very dim glow. Has star like core
					Deer Trail, CO. Moderately		seen in center of glow once in a while. It is to the right of
5468	7/20/2012	21:48	OK	OK	Dark Skies.	C14	a bright field star.
					Pawnee Grasslands, CO-		134x - Just above NGC 5366 it is a small, faint smudge of
5574	03/21/04	1:28	Good	Good	Moderately Dark Sky.	12.5" f/8 Newtonian	light with a tiny, dim nucleus.
							205x – Looks like a propeller. Elongated glow. Maybe 2
					Deer Trail, CO. Moderately		spiral arms off top and bottom to give propeller look. Disk
5645	7/20/2012	22:16	OK	OK	Dark Skies.	C14	mottled. Hare brighter core. Lots of detail seen in core.
					Keota, CO. Moderately		
5665	8/9/2010	21:21	OK	OK	Dark Skies.	12.5" f/8 Newtonian	134x – A small, dim, round, uniformly lit glow.
							205x – An extremely faint linear smudge of light. Small.
							This could be the core for once in a while see a large,
							extended halo around this core. Makes this a pretty large
					Deer Trail, CO. Moderately		object in FOV with this halo. Goes from 10-4 o'clock in
5669	7/20/2012	22:19	OK	OK	Dark Skies.	C14	FOV.

5678	4/21/2009	23:47	Great	Good	Deer Trail, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	134x - Small, dim, oval glow with hare brighter small central area. Situated between 2 field stars and closer to upper left star.
5690	7/20/2012	22:08	OK	OK	Deer Trail, CO. Moderately Dark Skies.	C14	205x – Long, slender thin galaxy. Bright field star to lower left of glow. Below and to right of a very bright field star.
5701	7/20/2012	22:11	OK	OK	Deer Trail, CO. Moderately Dark Skies.	C14	205x – Small, round, dim glow with bright stellar core that is seen once in a while.
5713	5/15/2012	0:50	Good	Good	Keota, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	169x – A small linear glow with hint of hare brighter core.
5719	5/15/2012	0:50	Good	Good	Keota, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	15mm – A larger, round, uniformly lit glow.
5729	04/07/13	2:57	Good	Good	Commanche Springs Astronomy Center, Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A larger, thin, tilted oval. Uniformly lit. <u>Very</u> dim.
5740	5/15/2012	0:40	Good	Good	Keota, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	15mm – A dim oval with hare brighter core. Medium sized.
5757	04/07/13	2:53	Good	Good	Commanche Springs Astronomy Center, Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A small tilted oval. Dim. Has tiny brighter core.
5792	5/15/2012	0:42	Good	Good	Keota, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	169x – A dim, round glow with something a have brighter near core area. Might be a faint field stars on halo glow. Galaxy is to right and very near a brighter field star.
5875	6/30/2014	0:41	Good	Good	Berthoud, CO	24" f/4 Newtonian	281x - A medium sized, long, thin, tilted oval. Very dim. Uniformly lit.
5885		2:49	Good	Good	Commanche Springs Astronomy Center, Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A <u>very</u> faint, round, larger, uniformly lit glow. Just above and very near a dim field star.
5898	04/07/13	2:26	Good	Good	Commanche Springs Astronomy Center, Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x - A small, oval glow. It has a larger, brighter core.
5903	04/07/13	2:26	Good	Good	Commanche Springs Astronomy Center, Crowell, TX - Dark Skies	20" f/4.5 Newtonian	187x – A dim, round glow. Small. Has larger, brighter core.

							281x - A small, very faint oval with larger, brighter core
5905	6/30/2014	0:46	Good	Good	Berthoud, CO	24" f/4 Newtonian	that is easy to see beings is it so faint.
							281x - A medium sized, dim, long thin tilted oval with
5908	6/30/2014	0:44	Good	Good	Berthoud, CO	24" f/4 Newtonian	larger, linear, brighter core seen once in a while.
					WUTS 2008, Fox Park,		134x - Small, dim oval galaxy with hare brighter and
5921	07/31/08	21:52	Good	Good	WY	12.5" f/8 Newtonian	bigger nucleus.
							281x - A medium sized, long, thin cigar shaped glow. Has
5949	6/30/2014	1:03	Good	Good	Berthoud, CO	24" f/4 Newtonian	a long, linear, brighter, mottled core seen once in a while.
							281x - A small, dim, fat oval that brightens slowly to a
5962	6/29/2014	23:59	Good	Good	Berthoud, CO	24" f/4 Newtonian	small, brighter core area.
					Okie-Tex Star Party-		
					Kenton, OK-Moderately		15mm – N5965 is a linear edge on, longer, dim with hare
5965	9/27/2011	21:46	Good	Good	Dark Sky.	12.5" f/8 Newtonian	brighter core.
			_				
5984	6/30/2014	1:13	Good	Good	Berthoud, CO	24" f/4 Newtonian	182x - A small, extremely faint fat oval, uniformly lit glow.
	//				WUTS 2008, Fox Park,		134x - Very dim, uniformly lit fat oval smudge of light.
6412	08/02/08	0:23	Good	Good	WY	12.5" f/8 Newtonian	Very bright field star to lower right and near it at 4 o'clock.
2000	0/40/0040	00.07		014	Deer Trail, CO. Moderately		OOF. A compatible because and bliefs make life
6926	8/18/2012	23:27	Fair	OK	Dark Skies.	C14	205x – A very dim, large oval. Uniformly lit.
							205x – A nice, brighter galaxy with larger, bright core and
					Dan Trail CO Madanataly		a star like core in center of this seen once in a while. Lots
7040	0/40/0040	00.00	-	OK	Deer Trail, CO. Moderately		of dim halo around this larger core that tapers off each
7013	8/18/2012	23:30	Fair	OK	Dark Skies.	C14	end and dims quickly.
7407	0/40/0040	00.40	- -:-	OK	Deer Trail, CO. Moderately		205x – A larger circular uniformly lit, easy to see glow.
/13/	8/18/2012	23:42	Fair	OK	Dark Skies. Deer Trail, CO. Moderately	C14	Has 4-5 faint field stars on lower left part of glow. 134x – Small, circular halo glow with larger hare brighter
7050	10/27/2008	20.44	Cood	Cood		12.5" f/8 Newtonian	
1252	10/21/2006	20:44	Good	Good	Dark Skies. Deer Trail, CO. Moderately		core area seen. Easy to see in FOV. 205x – A small elongated oval with brighter, large,
7202	8/19/2012	0:00	OK	OK	Dark Skies.	C14	textured core area surrounded by <u>very</u> faint halo glow.
7302	0/19/2012	0.00	OK	OK	Deer Trail, CO. Moderately		205x – A medium circular glow. <u>Very</u> faint fail glow.
7309	8/18/2012	23:54	Fair	OK	Dark Skies.	C14	predicted magnitude.
7309	0/10/2012	20.04	ı alı	ON	Deer Trail, CO. Moderately		205x – A larger elongated oval. Large, textured core area.
7371	8/18/2012	23:57	OK	OK	Dark Skies.	C14	Very dim overall. Bit of faint halo around core.
1311	0/10/2012	20.01	OIN	ON	Keota, CO. Moderately		134x – Larger oval. To left of dim field star. Hint of a hare
7385	10/18/2009	0:20	OK	OK	Dark Skies.	12.5" f/8 Newtonian	brighter core.
1 303	10/10/2009	0.20	OIN	ON	Dair Ories.	12.5 1/0 Newtornall	brighter core.

					Deer Trail, CO. Moderately		205x – A long, approx ½ FOV long, flat, fat uniformly lit
7497	8/19/2012	1:07	OK	OK	Dark Skies.	C14	glow. Hint of larger core area near center of glow.
7585	10/27/2008	20:14	Good	Good	Deer Trail, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	134x – Small, brighter circular halo glow with larger, hare brighter core area seen on halo glow. Easy to see. w/AV, central part of core is a bright, tiny stellar nucleus. Nice.
7625	10/27/2008	19:31	Good	Good	Deer Trail, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	134x - Very near a very bright field star. Small, dim circular halo glow with brighter core that every once in a while looks stellar. Most of the time it's a larger glow. Easy to see in FOV. Need to put bright field star out of FOV to see it which puts galaxy very near edge of FOV, making it harder to study.
					Deer Trail, CO. Moderately		134x – Nice. Easy to see. Very dim elongated oval. Goes from 11 to 5 o'clock. On lower right, glow is bounded by 3 stars and upper left its bounded by 1. Glow fits nicely in between these stars. Dim, hare brighter core seen in very
7678	10/27/2008	19:39	Good	Good	Dark Skies.	12.5" f/8 Newtonian	middle of glow.
					Deer Trail, CO. Moderately		205x – A large fat cigar shaped, uniformly lit glow. 2/3
7721	8/19/2012	0:03	OK	OK	Dark Skies.	C14	FOV long.
					Deer Trail, CO. Moderately		205x – A small linear oval with hint of large, hare brighter
7741	8/19/2012	1:10	OK	OK	Dark Skies.	C14	core area. Pretty uniformly lit though.
7743	8/19/2012	0:51	ОК	OK	Deer Trail, CO. Moderately Dark Skies.	C14	205x – Nice. Small brighter elongated oval. Maybe what is seen is brighter core with dim bit of halo extending off both ends.
7753	12/28/2008	17:52	OK	OK	Deer Trail, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	134x – Very dim, round, uniformly lit smudge of light. Very small in size yet easy to see in FOV w/AV. Maybe a hint of something in center of glow.
7769	8/10/2010	0:26	Great	Great	Keota, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	134x - Below NGC 7771 and 7770 is a larger, circular glow of 7769. Uniformly lit but very dim with star like core in center of glow.
7771	8/10/2010	0:26	Great	Great	Keota, CO. Moderately Dark Skies.	12.5" f/8 Newtonian	134x - 7771 is a small, linear galaxy, goes from 2 – 8 o'clock with hint of a brighter core area.
7782	8/19/2012	0:39	OK	OK	Deer Trail, CO. Moderately Dark Skies.	C14	205x – A larger, roundish uniformly lit glow. Maybe a hint of texture on glow.

Observational Statistics:

Number

Observed 300 of 300

Magnifications Used:

9mm 282x

10mm 254x

19mm 134x

32mm 80x

Abbreviations:

AV - Adverted Vision

FOV - Field of View of Eyepiece

DV - Direct Vision