



Desert Sky Observer

Volume 33

Antelope Valley Astronomy Club Newsletter

November 2013

Up-Coming Events

- November 6:** [Executive Board Meeting](#)
November 8: [Youth Astronomy Club Meeting](#) @ Sage Planetarium
November 8: Club Meeting*
November 15: [Public Night](#) at the SAGE Planetarium
November 23: [Prime Desert Woodlands Moon Walk](#)

* Monthly meetings are held at the S.A.G.E. Planetarium on the Cactus School campus in Palmdale, the second Friday of each month. The meeting location is at the northeast corner of Avenue R and 20th Street East. Meetings start at 7 p.m. and are open to the public. *Please note that food and drink are not allowed in the planetarium*



President

Don Bryden

In the words of Jerry Garcia, “What a long, strange trip it’s been”. Well, not too strange I hope. I’ve been your president for five years! It seems like just yesterday I walked into the gym at the old Cactus Elementary School and said, “Hey Terry what’s the deal? Last one to find the place has to be president?”

Actually I had gone to that meeting back in October 2008 and hoped to volunteer for a committee or something. Most of the existing board had been serving for years. Some were moving away, others just hadn’t the time to continue but most were still there to carry on the charter of the club. They just needed a few of us to sign on and help out.

It was a similar situation just last month when we met for our annual business meeting. It was so nice to see interest from several newer members such as Kathy, Ann and Bob. I hope to see them and many others at some of the executive board meetings this coming year. And speaking of this coming year, I would like to express my thanks and congratulate our new e-board: Frank Moore, President and Rose Moore, Vice-President. Also Pam Grove who will continue as Secretary and Gin Reed who we are rapidly growing dependent on as our Treasurer! I’ll still be around as Director of Community Development. We also have new opportunities as the new president, Frank, will be selecting new committee chairmen as well as possibly creating new standing committees.

I suspect you’ll still see Bill Grove running the library and Steve Trotta doing his usual fantastic job as webmaster and newsletter editor. But whether you are interested in running or joining a committee or if you just want to get more involved, let us know! Come out to the board meetings and add your two cents. Our membership is our lifeblood and your participation is required!

Be sure to check the calendar of Facebook page as we will be adding a few events over the next few weeks and I hope to see you out there under the stars – and maybe at a meeting or two!



Vice President

Frank Moore

As the shorter days, and longer nights, of fall and winter are upon us you would think that things would slow down for the AVAC board. Nope. We still have lots of activities to attend to including winding down the term of the current board and getting ready for next year. Passing the baton shouldn't be too hard since the results of the Board Election, at the Annual Business Meeting, basically resulted in a case of musical chairs with the board remaining largely intact only with several of us in different positions. I'll try to fill Don's shoes as President but he has done such a fantastic job they will be enormous shoes to fill.

We have several big events approaching. First, the speaker at our November 8 meeting will be Joe Beck from [Lumicon International](#). If you aren't aware, Lumicon International offers the most extensive line of telescope filters and astronomical accessories in the world. Astronomy Filters for every imagined visual and astrophotography application are available in many configurations and sizes. Joe will be talking about how Lumicon filters are made the characteristics and bandwidths filtered and passed by various filters, their application and how to select the right filter(s) for your needs. I'm looking forward to having a presentation that deals with the practical use of an important accessory for visual observing and photography. A big thank you to AVAC member Bob Kemp and Lumicon President Sam Sweiss who made this possible. We made this contact at the Science Imaging, and Astronomy Expo at Pierce College in Woodland Hills on October 19. I want to thank Bob Kemp Lee and Millie Bush and Bill and Pam Grove for helping me in the booth.

Next remember that the club will be having a booth at the [Arizona Science and Astronomy Expo](#) (ASAE) in Tucson, AZ on November 16 and 17. I know it's long way to go but in two years this has become the biggest astronomy exposition and gathering of astronomy related businesses and organizations in the country. Why is the club going? (At individual member's expense I might add. Other than the booth rental, no club funds are involved). Obviously we really don't expect to recruit members there though it's not out of the question but we go to meet and network with manufacturers, vendors, and other clubs and organizations. Plus we want to showcase what we do and show off our extensive education and outreach programs. As an aside the contacts and friendships we make at these events is EXACTLY how we got Lumicon to speak at our November 8 meeting. Remember also that Tucson is the Epicenter of Astronomy in the continental United States with attractions that include the [Steward Mirror Lab at the University of Arizona](#) the [Mount Lemmon Sky Center](#) the [Kitt Peak National Observatory](#) the [Mount Graham International Observatory](#) and the [Fred Lawrence Whipple Observatory](#) as well as the home to numerous astronomy related manufacturers. There are special tours of some of these facilities for ASAE attendees only. At this point only a few of the board members are committed to going and we sure could use some help in covering the booth over two days. Please let the board know if you might be attending so we will know who to expect.

Finally the Christmas Party is rapidly approaching on December 14. This year it will be held at [Giannini Bistro and Grill](#) on Lancaster Blvd. Once again the party is for members and their guests only and the cost will be \$25 per person inclusive (nonalcoholic beverage, entrée, tax and gratuity). Our minimum guest count is 30 for the full banquet room. The room is smaller than what we formerly had at the Embassy Suites and maximum occupancy is around 45 so PLEASE notify myself or Rose of your intention to attend

as soon as possible. As in year's past we will be sending out an email with a PayPal link via which you can pay for your reservation. The link will also be on the club's website. Be sure to use the link specifically supplied for the Christmas Party and not the membership renewal PayPal link. You can also pay by sending a check to the AVAC P.O. Box or pay in person at the November meeting. This will not be a buffet as has been the case for the last few years and we will be ordering individually from a special limited Christmas Menu as noted below.



Director of Community Development

Rose Moore

Congratulations are in order for Don Bryden, who will be your Director of Community Development for 2014! The DoCD has a tough job of arranging and supporting our outreach events. We encourage our members to please come to our Executive Board meetings to observe how they work, maybe participate, and to help out at any of our events through the year! Also, thanks to the members who came out to vote at our club business meeting, and electing me as the VP for next year! If anyone has suggestions for speakers, please contact me!!

The first event is at the SAGE Planetarium on Friday, Nov. 1st at 7:30pm. Jeremy has an informal star party outside the SAGE after his Planetarium shows inside. You can bring your own scope, or speak to Jeremy about using one of the club's scopes from inside the SAGE.

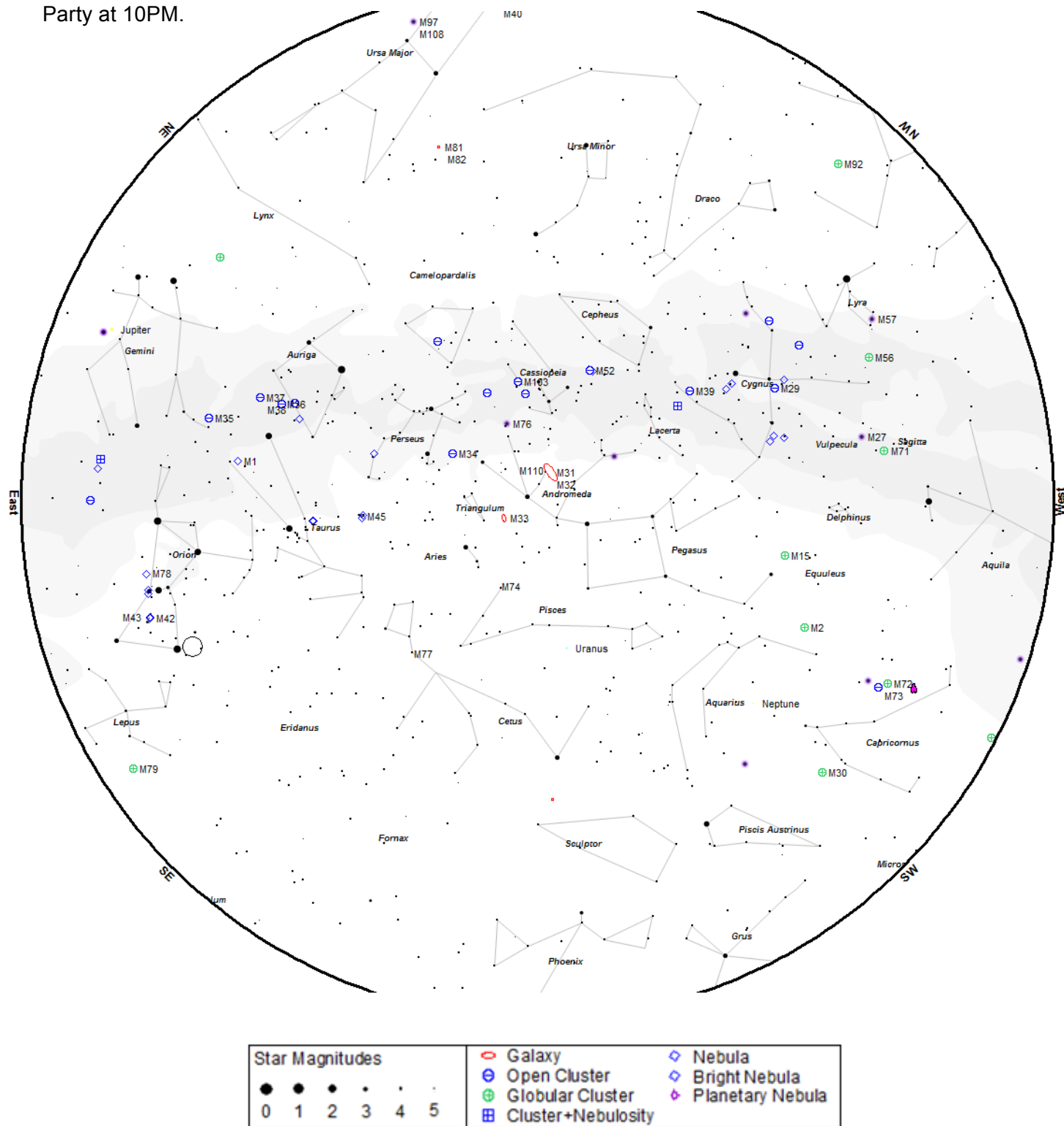
Saturday, Nov. 23rd at 6:30pm is a Prime Desert Moonwalk with Jeremy. We always need members with telescopes to show the public what's up in the night sky, give out handouts, or just to talk and provide helpful club information.

If any new events come up we will be posting them on the website, and sending out emails!

Please see Frank's message above regarding the Science Expo in Tucson, or the Christmas Party. If any questions, please give one of the Board members a call, or email! We'll be sending out information regarding the Christmas Party, and payment options, shortly. Seating is limited.

Rose

Chart is plotted for the sky
on the date and location
of the AVAC Star
Party at 10PM.



To use the chart, go outside within an hour or so of the time listed and hold it up to the sky. Turn the chart so the direction you are looking is at the bottom of the chart. If you are looking to the south then have 'South horizon' at the lower edge.

Suggested Observing List

The list below contains objects that will be visible on the night of the AVAC Star Party. The list is sorted by the best time to observe the object. The difficulty column describes how difficult it is to observe the object from the current location on a perfect night in a 6 inch Newtonian telescope.

ID	Cls	Mag	Con	RA 2000	Dec 2000	Begin	Best	End	Difficulty
M 54	Glob	7.7	Sgr	18h55m03.0s	-30°28'42"	19:09	19:21	19:45	detectable
M 13	Glob	5.8	Her	16h41m41.0s	+36°27'36"	19:06	19:24	19:53	easy
NGC 6716	Open	7.5	Sgr	18h54m34.0s	-19°54'06"	19:07	19:23	20:24	detectable
NGC 6572	PNe	8.0	Oph	18h12m06.4s	+06°51'12"	18:57	19:24	20:12	obvious
IC 4665	Open	5.3	Oph	17h46m18.0s	+05°43'00"	19:10	19:24	19:42	detectable
M 55	Glob	6.3	Sgr	19h40m00.0s	-30°57'42"	19:08	19:24	20:17	detectable
NGC 6633	Open	5.6	Oph	18h27m15.0s	+06°30'30"	19:04	19:25	20:25	easy
M 11	Open	6.1	Sct	18h51m05.0s	-06°16'12"	19:07	19:25	20:03	detectable
M 92	Glob	6.5	Her	17h17m07.0s	+43°08'12"	19:05	19:27	20:43	easy
IC 4756	Open	5.4	Ser	18h39m00.0s	+05°27'00"	19:08	19:26	20:34	easy
NGC 6818	PNe	10.0	Sgr	19h43m57.8s	-14°09'12"	19:01	19:26	20:18	easy
NGC 6543	PNe	8.3	Dra	17h58m33.4s	+66°37'59"	18:57	19:28	22:21	obvious
M 57	PNe	9.4	Lyr	18h53m35.1s	+33°01'45"	19:02	19:28	21:57	easy
M 56	Glob	8.4	Lyr	19h16m36.0s	+30°11'06"	19:07	19:29	21:30	detectable
NGC 6871	Open	5.8	Cyg	20h05m59.0s	+35°46'36"	19:03	19:31	23:00	easy
M 27	PNe	7.3	Vul	19h59m36.3s	+22°43'16"	19:03	19:30	22:35	easy
M 71	Glob	8.4	Sge	19h53m46.0s	+18°46'42"	19:03	19:30	22:25	easy
NGC 6910	Open	7.3	Cyg	20h23m12.0s	+40°46'42"	19:01	19:32	23:35	easy
M 29	Open	7.5	Cyg	20h23m57.0s	+38°30'30"	19:03	19:32	23:24	easy
NGC 7009	PNe	8.3	Aqr	21h04m10.9s	-11°21'48"	18:57	19:34	21:54	obvious
M 15	Glob	6.3	Peg	21h29m58.0s	+12°10'00"	19:05	19:43	23:29	easy
M 39	Open	5.3	Cyg	21h31m48.0s	+48°26'00"	19:03	19:45	01:06	easy
M 2	Glob	6.6	Aqr	21h33m27.0s	-00°49'24"	19:06	19:44	23:04	detectable
IC 1396	Neb		Cep	21h39m06.0s	+57°30'00"	19:03	19:47	01:36	challenging
M 30	Glob	6.9	Cap	21h40m22.0s	-23°10'42"	19:07	19:49	20:54	detectable
NGC 7160	Open	6.4	Cep	21h53m40.0s	+62°36'12"	18:58	19:57	02:04	obvious
Cocoon	Neb	10.0	Cyg	21h53m24.0s	+47°16'00"	19:02	20:01	01:20	challenging
NGC 7243	Open	6.7	Lac	22h15m08.0s	+49°53'54"	19:06	20:22	00:49	detectable
NGC 7293	PNe	6.3	Aqr	22h29m38.5s	-20°50'14"	19:06	20:37	22:11	detectable
M 52	Open	8.2	Cas	23h24m48.0s	+61°35'36"	19:10	21:28	01:59	detectable
NGC 7789	Open	7.5	Cas	23h57m24.0s	+56°42'30"	19:10	22:00	02:10	detectable
NGC 7790	Open	7.2	Cas	23h58m24.0s	+61°12'30"	19:00	22:01	04:04	obvious
NGC 55	Gal	8.5	Scl	00h15m08.4s	-39°13'13"	21:00	22:22	23:43	difficult
M 110	Gal	8.9	And	00h40m22.3s	+41°41'09"	19:13	22:48	02:51	detectable
M 32	Gal	8.9	And	00h42m41.8s	+40°51'58"	19:07	22:49	03:43	easy
M 31	Gal	4.3	And	00h42m44.3s	+41°16'07"	19:08	22:50	03:43	easy
NGC 253	Gal	7.9	Scl	00h47m33.1s	-25°17'20"	20:25	22:54	01:23	detectable
NGC 288	Glob	8.1	Scl	00h52m45.0s	-26°35'00"	21:19	23:00	00:40	difficult

ID	Cls	Mag	Con	RA 2000	Dec 2000	Begin	Best	End	Difficulty
NGC 457	Open	5.1	Cas	01h19m35.0s	+58°17'12"	19:04	23:22	05:18	obvious
NGC 559	Open	7.4	Cas	01h29m31.0s	+63°18'24"	19:05	23:32	05:43	easy
M 103	Open	6.9	Cas	01h33m23.0s	+60°39'00"	19:02	23:37	05:38	obvious
M 33	Gal	6.4	Tri	01h33m50.9s	+30°39'36"	19:41	23:40	03:40	detectable
NGC 637	Open	7.3	Cas	01h43m04.0s	+64°02'24"	19:01	23:46	05:58	obvious
NGC 663	Open	6.4	Cas	01h46m09.0s	+61°14'06"	19:07	23:49	05:54	easy
M 76	PNe	10.1	Per	01h42m19.9s	+51°34'31"	19:23	23:49	04:21	detectable
NGC 752	Open	6.6	And	01h57m41.0s	+37°47'06"	21:37	00:04	02:33	challenging
NGC 869	Open	4.3	Per	02h19m00.0s	+57°07'42"	19:04	00:22	06:14	obvious
NGC 884	Open	4.4	Per	02h22m18.0s	+57°08'12"	19:04	00:26	06:15	obvious
Heart Nebula	Neb	6.5	Cas	02h33m52.0s	+61°26'50"	22:00	00:37	03:23	challenging
NGC 957	Open	7.2	Per	02h33m21.0s	+57°33'36"	19:13	00:37	06:08	easy
NGC 1027	Open	7.4	Cas	02h42m40.0s	+61°35'42"	19:58	00:46	05:41	detectable
M 34	Open	5.8	Per	02h42m05.0s	+42°45'42"	20:07	00:49	05:31	easy
M 77	Gal	9.7	Cet	02h42m40.8s	-00°00'48"	21:29	00:49	04:09	detectable
NGC 1245	Open	7.7	Per	03h14m42.0s	+47°14'12"	22:54	01:21	03:49	challenging
NGC 1342	Open	7.2	Per	03h31m38.0s	+37°22'36"	21:07	01:38	06:02	easy
M 45	Open	1.5	Tau	03h47m00.0s	+24°07'00"	21:17	01:54	06:15	obvious
NGC 1444	Open	6.4	Per	03h49m25.0s	+52°39'30"	20:18	01:56	06:20	obvious
NGC 1502	Open	4.1	Cam	04h07m50.0s	+62°19'54"	20:12	02:11	06:23	obvious
NGC 1528	Open	6.4	Per	04h15m23.0s	+51°12'54"	20:51	02:22	06:15	easy
Hyades	Open	0.8	Tau	04h26m54.0s	+15°52'00"	22:17	02:33	06:13	easy
NGC 1647	Open	6.2	Tau	04h45m55.0s	+19°06'54"	23:23	02:52	06:06	detectable
NGC 1664	Open	7.2	Aur	04h51m06.0s	+43°40'30"	21:42	02:58	06:17	easy
NGC 1746	Open	6.1	Tau	05h03m50.0s	+23°46'12"	23:31	03:10	06:09	detectable
NGC 1851	Glob	7.1	Col	05h14m06.0s	-40°02'48"	01:51	03:20	04:49	detectable
M 38	Open	6.8	Aur	05h28m40.0s	+35°50'54"	23:10	03:35	06:16	detectable
M 1	Neb	8.4	Tau	05h34m30.0s	+22°01'00"	01:32	03:41	05:47	challenging
M 43	Neb	9.0	Ori	05h35m30.0s	-05°16'00"	00:33	03:41	06:16	challenging
M 42	Neb	4.0	Ori	05h35m18.0s	-05°23'00"	00:33	03:41	06:16	easy
M 36	Open	6.5	Aur	05h36m18.0s	+34°08'24"	22:45	03:42	06:19	easy
M 78	Neb	8.0	Ori	05h46m48.0s	+00°05'00"	00:24	03:53	06:16	challenging
M 37	Open	6.2	Aur	05h52m18.0s	+32°33'12"	23:03	03:59	06:18	easy
NGC 2129	Open	7.0	Gem	06h01m07.0s	+23°19'20"	23:33	04:07	06:21	obvious
M 35	Open	5.6	Gem	06h09m00.0s	+24°21'00"	23:42	04:15	06:18	easy
NGC 2169	Open	7.0	Ori	06h08m24.0s	+13°57'54"	00:02	04:14	06:21	obvious
NGC 2175	Open	6.8	Ori	06h09m39.0s	+20°29'12"	00:22	04:16	06:15	detectable
NGC 2237	Neb	5.5	Mon	06h32m02.0s	+04°59'10"	02:52	04:38	06:01	challenging
NGC 2264	Open	4.1	Mon	06h40m58.0s	+09°53'42"	00:46	04:47	06:18	obvious
M 41	Open	5.0	CMa	06h46m01.0s	-20°45'24"	03:17	04:52	06:15	easy
NGC 2301	Open	6.3	Mon	06h51m45.0s	+00°27'36"	01:27	04:58	06:18	easy
M 50	Open	7.2	Mon	07h02m42.0s	-08°23'00"	02:13	05:08	06:14	detectable
NGC 2353	Open	5.2	Mon	07h14m30.0s	-10°16'00"	02:33	05:21	06:20	easy
NGC 2355	Open	9.7	Gem	07h16m59.0s	+13°45'00"	02:29	05:23	06:12	difficult
NGC 2360	Open	9.1	CMa	07h17m43.0s	-15°38'30"	03:46	05:23	06:07	challenging

ID	Cls	Mag	Con	RA 2000	Dec 2000	Begin	Best	End	Difficulty
NGC 2392	PNe	8.6	Gem	07h29m10.8s	+20°54'42"	01:06	05:33	06:25	obvious
NGC 2423	Open	7.0	Pup	07h37m06.0s	-13°52'18"	03:16	05:38	06:16	easy
M 47	Open	4.3	Pup	07h36m35.0s	-14°29'00"	03:18	05:38	06:18	obvious
M 46	Open	6.6	Pup	07h41m46.0s	-14°48'36"	03:27	05:41	06:16	detectable
NGC 2440	PNe	11.5	Pup	07h41m55.4s	-18°12'31"	03:50	05:41	06:14	detectable
NGC 2439	Open	7.1	Pup	07h40m45.0s	-31°41'36"	03:20	05:41	06:16	easy
M 93	Open	6.5	Pup	07h44m30.0s	-23°51'24"	04:59	05:43	06:17	easy
NGC 2506	Open	8.9	Mon	08h00m01.0s	-10°46'12"	03:55	05:45	06:10	difficult
NGC 2451	Open	3.7	Pup	07h45m23.0s	-37°57'21"	03:40	05:45	06:18	easy
NGC 2477	Open	5.7	Pup	07h52m10.0s	-38°31'48"	03:51	05:48	06:17	easy
M 82	Gal	9.0	UMa	09h55m52.4s	+69°40'47"	01:34	05:50	06:17	easy
M 81	Gal	7.8	UMa	09h55m33.1s	+69°03'56"	01:36	05:50	06:15	detectable
M 44	Open	3.9	Cnc	08h40m24.0s	+19°40'00"	02:28	05:49	06:18	easy
M 67	Open	7.4	Cnc	08h51m18.0s	+11°48'00"	03:44	05:50	06:12	detectable
NGC 2571	Open	7.4	Pup	08h18m56.0s	-29°45'00"	03:50	05:51	06:17	easy
NGC 2546	Open	5.2	Pup	08h12m15.0s	-37°35'42"	04:53	05:52	06:10	difficult
M 97	PNe	11.0	UMa	11h14m47.7s	+55°01'09"	03:37	05:53	06:19	challenging
M 106	Gal	9.1	CVn	12h18m57.6s	+47°18'13"	04:57	05:55	06:12	detectable
NGC 3227	Gal	11.5	Leo	10h23m30.6s	+19°51'54"	04:38	05:54	06:12	difficult
NGC 2547	Open	5.0	Vel	08h10m09.0s	-49°12'54"	04:52	05:55	06:16	detectable
M 65	Gal	10.1	Leo	11h18m55.7s	+13°05'32"	05:16	05:56	06:12	detectable
M 66	Gal	9.7	Leo	11h20m14.9s	+12°59'30"	05:17	05:56	06:12	detectable
M 94	Gal	8.7	CVn	12h50m53.1s	+41°07'12"	05:43	05:57	06:15	easy
Col. 256	Open	2.9	Com	12h25m06.0s	+26°06'00"	05:50	05:57	06:15	easy
NGC 3242	PNe	8.6	Hya	10h24m46.1s	-18°38'32"	04:28	05:58	06:21	obvious
IC 2395	Open	4.6	Vel	08h42m30.0s	-48°06'48"	04:58	05:59	06:18	easy
IC 2391	Open	2.6	Vel	08h40m32.0s	-53°02'00"	05:38	06:04	06:18	easy

A.V.A.C. Information

Membership in the Antelope Valley Astronomy Club is open to any individual or family.

The Club has three categories of membership.

- Family membership at \$30.00 per year.
- Individual membership at \$25.00 per year.
- Junior membership at \$15.00 per year.

Membership entitles you to...

- Desert Sky Observer—monthly newsletter.
- The Reflector – the publication of the Astronomical League.
- The A.V.A.C. Membership Manual.
- To borrow club equipment, books, videos and other items.

AVAC

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Visit the Antelope Valley Astronomy Club website at www.avastronomyclub.org/

The Antelope Valley Astronomy Club, Inc. is a 501(c)(3) Non-Profit Corporation.

The A.V.A.C. is a Sustaining Member of The Astronomical League and the International Dark-Sky Association.

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