

# SDAA

## San Diego Astronomy Association

*Promising the Sun, the Moon, and the Stars...and Delivering!*



Office (619) 645-8940  
Observatory (619) 766-9118  
http://www.sdaa.org  
A Non-Profit Educational Association  
P.O. Box 23215, San Diego, CA 92193-3215

### SDAA Business Meeting

Will be held at:

**SKF Condition Monitoring**  
4141 Ruffin Road  
San Diego, CA 92123-1841  
February 11th at 7:00 pm

## The Ultimate Star Party

Please join us January 18th for the annual SDAA banquet.

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### News and Notes

January 2003

### Eye-piece Shootout 8, The Panoptic 24mm by Bret Akers

#### The competitors:

In the April 2002 SDAA Newsletter, we compared the Meade 24.5mm Super Wide Angle and the University Optics 25mm Konig MK-70. Recently, Tele Vue released the 24mm Panoptic. So we started to wonder how this eyepiece would compete in this focal range. Since the Meade 24.5 Super Wide Angle won the previous comparison, this shootout will feature the reigning champ, the Meade, against the new eyepiece on the block, the Tele Vue.

The Meade 24.5mm Super Wide Angle sits right in the middle of Meade SWA line of eyepieces. It is a 6-element, 7-layer multicoated eyepiece with a 1.25" barrel.

It also has a soft roll-down rubber eyecup, a rubber grip ring, is threaded for 1.25" filters and comes with a Polypropylene "bolt" case. The apparent field of view is advertised at 67 degrees and the street price for this eyepiece hovers around \$179.95.

The 24mm Panoptic is also a 1.25" eyepiece that has all of the typical Tele Vue features: full multicoatings, filter threads, a grip ring, a fold down eyeguard, and safety undercuts on the

barrel. The eye relief is rated at 16mm with a 68 degree field of view. This eyepiece currently sells for about \$295.

In the April test, the Meade and the University Optics eyepiece effectively cost the same, about \$180. This time, there's a \$115 difference between the two competitors.

#### Testers and observing conditions:

The same 12.5" f/5 Dobsonian was used as the test scope in this review. However, we never made it out to TDS, so this test was performed under mag 4.5 skies in the East County. As the night progressed the skies settled down quite a bit and it turned out to be a good night for testing.



So how did the Meade 24.5 SWA fair the first time...

As a reference, here are the results from the original comparison between the Meade 24.5 SWA and the University Optics 25mm MK-70:

(continued on page 6)



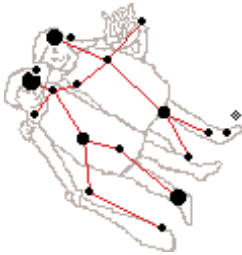
# San Diego Astronomy Association

## Astronomy 101

### Gemini—The Twins by Scott Baker

It's the Greeks who bring us the story of Castor and Pollux, the twins of the constellation Gemini. They're proclaimed to be heroes, but the tale of their lives consists of kidnapping, cattle stealing and murder. Here's the tale...

Castor and Pollux were born from the egg of Leda after she was seduced by Zeus in the disguise of a swan (that Zeus sure got around).

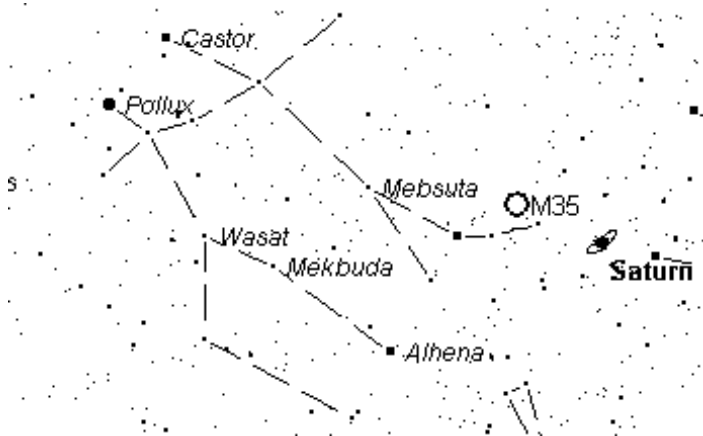


Castor and Pollux were raised by the centaur "Chiron" (remember his tale in my article on Sagittarius?) and became great sailors and fighters. They later became part of the crew of the Argonaut and sailed with Jason in search of the "Golden Fleece".

Later, Castor and Pollux decided to take wives, and chose the daughters of Tyndareus, the king of Sparta. The fact that they were already married, made no difference to them. The daughters, who were married to Idas and Lynceus, cousins of the twins, lived with the twins, with the approval of Idas and Lynceus (you have to wonder?). A few years later, the four cousins, Castor, Pollux, Idas and Lynceus, decided to steal some cattle. When it came time to divide up the stolen cattle, a fight

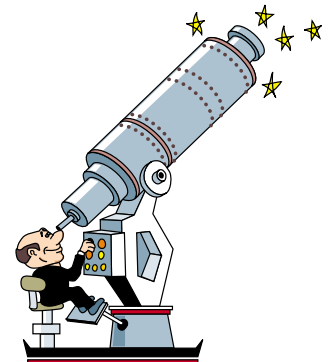
broke out between the four. Idas killed Castor with a spear and just as Lynceus was about to hurl a boulder at Pollux, Zeus intervened, and killed Lynceus with a thunderbolt. Pollux, the immortal son of Zeus, begged to die so that he would not be separated from his brother. Not even the mighty Zeus could do such a thing so he placed them together in the sky as the constellation Gemini, the twins.

The constellation of Gemini is in our winter sky, high over-head to the south, around 10:00 at night, in the months of January and February. Look for the "Winter Hexagon" that I covered in the last article, to help locate the twins. The two brightest stars, Castor and Pollux, named for the twins, are easy to spot, they are the 16th (Pollux) and 23rd brightest stars in the sky. Although a fairly large constellation, it is rather devoid of celestial objects for the amateur astronomer. The most notable object is M35, an open cluster (or galactic cluster) of some 100 to 200 stars, in an area about the diameter of a full moon. Nearby, a smaller and fainter and more distant cluster, NGC 2158 makes a nice companion for larger telescopes. M35 is located at the feet of the twins, which point down towards the constellation of Orion, and is very close to the planet Saturn, at this time. M35 is a beautiful object for binoculars or a small telescope. To the naked eye, it will appear as a fuzzy, cloud like, patch in the sky. Make sure to look at Saturn, which is presently nearing opposition (closest to us) and it's reached it's greatest tilt, so it's rings are very evident. Clear Skies!



### Tierra Del Sol Star Party Schedule for 2003

DATE	MOON DATA
Jan. 4	Sets at 7:01 pm
Jan. 25	Rises at 1:27 am
Feb. 1	Sets at 5:48 pm
Feb-22	Rises at 12:29 am
Mar-1	Rises at 6:30 am
Mar-22	Rises at 11:28 pm
Mar-29	Rises at 5:02 am
Apr-19	Rises at 11:21 pm
Apr-26	Rises at 4:34 am
May-24	Rises at 3:04 am
May-31	Sets at 8:49 pm
Jun-21	Rises at 1:32 am
Jun-28	Rises at 6:27 am
Jul-19	Rises at 11:59 pm
Jul-26	Rises at 4:12 am
Aug-23	Rises at 2:57 am
Aug-30	Sets at 9:28 pm
Sept-20	Rises at 1:41 am
Sept-27	Sets at 7:59 pm
Oct-18	Rises at 11:26 pm
Oct-25	Sets at 5:25 pm
Nov-22	Rises at 6:06 am
Nov-29	Sets at 10:58 pm
Dec-20	Rises at 4:53 am
Dec-27	Sets at 9:46 pm





# San Diego Astronomy Association

## Treasurer's Report by Jennifer Pesqueira

With the addition of the following members we now have a total of 537 SDAA members. Please welcome: Alvis Anderson, Ivy Beck, Denis Cheng, Ed Reap, Alan Robbins, Alfonso Sarabia, Thomas Shotwell, Michelle Thompson. Welcome to SDAA and may you enjoy clear dark skies.

## Acknowledgments by Michael Dietz

The club would like to thank Dean Belcher, Rich Bentley, Carolyn Corless, Peter DeBaan, Mike Dietz, Ted Jucudo, Shawn Kelley, Jose Magsaysay, Nick Marilao, Ken Olson, Jennifer Pesqueira, Rich Strobel, George Varga, Bob Wetzel, Bill Whalen, Marjorie White, for helping with the school star parties, Camp With The Stars, and Stars In The Park programs. Your efforts are greatly appreciated by the students, parents and teachers.

### SDAA Editorial Staff



#### Editors

Bret Akers  
Julie Quinn  
Newsletter@sdaa.org

#### Contributing Writers

Scott Baker  
Michael Dietz  
John Kuhl  
John Mood  
Jennifer Pesqueira  
John Restivo

## SkyWatch for January, 2003

John Mood



[ Times PST ] [ \* = Easy ] [ \*\* = Moderate ] [ \*\*\* = Difficult ]

Wed., 1 Jan. ---- HAPPY NEW YEAR!!  
Thurs., 2 Jan. ---- NEW MOON, 12:23 p.m.  
Sat., 4 Jan. ---- STAR PARTY @ Tierra del Sol.  
Fri., 18 Jan. ---- FULL MOON, 2:48 a.m.  
Sat., 25 Jan. ---- STAR PARTY @ Tierra del Sol.  
Sat., 1 Feb. ---- NEW MOON, 2:48 a.m.  
---- STAR PARTY @ Tierra del Sol.

### EVENING PLANETS:

SATURN ( \* ) is still stuck on one of the horns of Taurus the Bull & is at its best in the lifetime of many of you, since its rings are tilted the most in 15 years & the planet is nearest to the Sun (perihelion) in its 29-year orbit, & closest to Earth as well (opposition). JUPITER ( \* ) is moving into Cancer the Crab & is well-placed for telescopes long before midnight; note its 4 Galilean moons & its bands, especially the Great Red Spot (GRS).

### MORNING PLANETS:

Dim MARS ( \*½ ) moves from Libra the Scales all the way across the Scorpius-Ophiuchus border into Sagittarius the Archer; it's at about "half0moon" phase now.

### BEGINNING OBSERVERS:

Last month, I discussed variable stars & the charm they hold for many amateur astronomers because one can observe changes taking place in their brightness.

There's another object which also offers the opportunity of seeing changes occurring quickly.....the Moon! Oh, yes, I know we all like to observe when the Moon isn't visible, but doing so deprives one of some really spectacular sights. The place to look, of course, is at the "terminator," the place on the Moon's face where darkness is changing to bright light, since the Sun is appearing to rise there. One can note changes in as little as a few minutes; mountain peaks grow in light, craters are gradually revealed; sometime one can even see light race across the floors of craters!

The beauty of this is that you can do this observing from in town. Lights don't dim the view of the Moon. Even the lowest powered telescope will make visible exciting & changing vistas.

Something else to watch for is a glow in the floor of the crater Aristarchus near the dark edge of the new crescent Moon. It happens about once a year according to my observations. The theory is that after having been in the heat of sunlight for 2 weeks & now in the dark, gases are emitted which either fluoresce or reflect sunlight. If it does glow, one can easily spot it in binocs or even naked eye.

### EXPERIENCED OBSERVERS:

The same is true for yr viewing. There are on the Moon subtle details, rills, valleys, clefts, craters, etc., that are visible only in larger scopes. You can either eyeball 'em or photograph 'em, & again, even in San Diego.

### TIERRA DEL SOL

LAT = 32° 36' 46" N ( ± 0.1" ), LONG = 116° 19' 55" W ( ± 0.1" ), ELEV = 3710' ( ± 5' ), at the bathroom, as determined from USGS 7.5 min 1/24000 map.

Send comments & questions to me by phone (619/225-9639), USPS (4538 Long Branch Av., San Diego, CA 92107) or my e-mail address lhappyalien@cox.net.

¡HAPPY VIEWING!



# San Diego Astronomy Association

## Observing Etiquette

By John Kuhl

With most of us living in the heavily light-polluted San Diego area, we are very lucky to have available to us such a great facility as the one at Tierra del Sol. Like many others, I live for the time I can spend at the site doing deep sky observing. Since this time always seems too short, there are a few things we can all do to make this time more enjoyable for everyone. Following some simple rules will make observing better for all.

### Lights...

No white lights after sundown, no excuses. After sundown use only red light, but be careful where you point it (i.e. don't wave it in peoples faces). When arriving at the site, try to get there before dark. Park your vehicle in a way so you won't need to use your backup lights when you leave. Disable, cover, or take out the fuses or bulbs for your door and trunk lights so you don't spill out white light when opened. If you have one of the new cars with "daytime running lights" that come on when you turn on the key, there is an easy way to turn them off temporarily. Simply lift the emergency brake one click, and now you can turn the key without the light coming on. After you have left the site, you can then turn the emergency brake off. If you have trouble driving your vehicle with the lights off when leaving, have someone walk ahead of you with a red flashlight guiding you until you are out of the site. Then you can turn your headlights on without disturbing the other observers. If it is not possible to avoid a bright light, yell a warning. At least this will give everyone a chance to turn the other way. Your thoughtfulness will be appreciated. White light after dark is one of the biggest problems at Tierra del Sol, so please be considerate of others in this regard.

### Dust...

Our site is dusty. When driving around the site, go slowly. I have seen vehicles coming in too fast throwing up huge clouds of dust. Dust and telescopes don't mix. Also, playing catch with footballs, baseballs, and

Frisbees not only stirs up a lot of dust, but could also damage a telescope if a bad throw was made.

### Trash...

If you bring it in, take it out. Everyone is responsible for his or her own trash. Don't litter the site; please pick up after yourself when you leave.

### Music...

A lot of people love to listen to music while observing. Some like to have classical music playing softly in the background, while some might prefer heavy metal blasting away at full volume. To each their own so long as you are not disturbing others. If you like your music at 100+ decibels, go ahead, but use a headset. The battle of the bands shouldn't be at the site.

### Dobsonians...

Learn how to use a Dob or you may end up embarrassing yourself. You don't want to be at the top of a ladder with a line of people waiting, only to yell, "It's moving out of the field." It's not polite to lose an object being viewed while others wait. Take time before it gets dark to learn how to operate a Dob. It is not difficult and only takes a short amount of time to learn.

### Big Scopes...

The biggest scopes are almost always the most popular. They usually gather a large crowd. Be considerate and ask if it is OK to view through it first. Most people want to look through the "big ones". Just remember that the owners want to look through the scope too. Most big scope owners are very dedicated and serious astronomers. They may have their own observing programs to carry out, so keep this in mind.

### Scope Hogs...

Don't become an eyepiece hog on someone else's telescope. Of course you should never simply take a two second look at an interesting object, take enough time to really see what you are looking at. However, when you are at someone else's telescope, don't get carried away and spend hours hogging their observing time. Keep your look short and then let the next person in.

### Be Helpful...

Share your knowledge. Our hobby emphasizes learning and teaching. If you see a novice struggling to locate an object in his or her telescope ask if you can be of assistance. Chances are the person will appreciate it. Every once in awhile take a break and walk around the site. You will see some amazing (and possibly comical) sites. Enjoy yourself, and help others to enjoy themselves.

### Quiet Time...

Loud talking or other noise late at night or early in the morning should be avoided. People may be trying to sleep...

### Other Considerations...

Although not observing etiquette, there are some other things to consider when going to TDS. Bring warm clothing. It may be nice during the day, but it can get very cold at night. Bring food and drinks; you may want a snack later in the evening. Even better, bring some goodies to share. It is helpful to make a checklist to avoid forgetting something. Make up a tool kit with extra batteries, flashlights, tools, and other essential items. Try to avoid always having to borrow something. Arrive early so you won't have to set up your equipment in the dark. When leaving, double-check your area so you don't leave something behind.

### Conclusions...

Astronomy is a wonderful hobby. It is a lifetime learning experience. Hopefully, simple etiquette can make for more harmonious observing for everyone.

This article was based in part on an article written by Tom Clark as published in Amateur Astronomy.

## Star Party Report by Michael Dietz

Happy New Year to everyone. Last year was another banner year for the star party program. We held 120 star parties last year thanks to the help of numerous individuals who are mentioned each month in the



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acknowledgments section. Many thanks to those of you who participated, last year, in the program. We are going to need your help again this year as there is no let up in the demand for star parties. There are already over 20 star parties scheduled for the first 2 months of this year.

This year we have a new monthly star party program at Mission Trails regional Park. We will hold a star party every 2nd Friday of the month starting at 7 p.m. or darkness whichever is later. We will be holding it by the campground on the Santee side of the park.

Stars In The Park will be held on Wednesday, January 8th and February 5th. We will be at Vallecito Stage Station on January 25th for our first Camp With The Stars program for the year.

On Monday, January 6th, we have a star party at Woodland Elementary School. Contact Bob Nanz for details.

We have a 6:30 p.m. star party Tuesday the 7th at Doyle Elementary located at 3950 Berino Ct. in San Diego.

We will be in Coronado on Thursday the 9th for a star party for Village Elementary at 201 6th Street. They are expecting about 400 to 500 people so we could use as much help as possible for this one. To reach the school take the Coronado Bridge into Coronado and turn left on Orange Avenue and then right on 6th Street. The school is on the right.

We will be back in Balboa Park at the Girl Scout Camp Headquarters on Friday the 17th to host a 7 p.m. star party for a group of 100 to 150 girls.

As always, please contact one of the star party coordinators (Rich Bentley, Mike Dietz, or Bob Nanz) to let them know that you will be attending. That way they can let you know of any changes or cancellations.

## Camp With The Stars by Michael Dietz

This month's Camp With The Stars program will be our last one of the year. We will be out in the dessert on January 25th at Vallecito Stage Station Campground. If you have a telescope that you can share with the campers you are welcome to join us and camp for free. If you like, you can come up on Friday and enjoy the campground an extra day/night. Don't forget to bring a towel and swimsuit so you can take a dip in the pool at Agua Caliente Hot Springs for free.

To reach Vallecito Stage Station take I -8 East to Ocotillo, and then take Hwy. S-2 North about 30 miles to the campground which is about 4 1/2 miles north of Agua Caliente Hot Springs. Those of you that are coming from the North County area can take Hwy. 78 through Julian to Scissors crossing. Turn right and head South on Hwy S-2 to the campground. If you plan on attending please let me know at (619)334-9930 so I can make arrangements to accommodate everyone.

## Parking—Stars in the Park by John Restivo

The Balboa Park administration has a new director along with a new Senior Park Ranger. Having conferred with the Ruben H. Fleet, they have established new guidelines for parking for our Stars in the Park event. Effective January 2003, the SDAA will be permitted to have only FOUR vehicles parked at our meeting point. All other members will have to unload their telescopes and equipment and find a parking spot elsewhere.

I have explained this obvious problem to the Fleet center and they said that the Park Ranger will not make any exceptions. I wish I could make this a more pleasant bit of news for the New Year, however, as you know, with new administration will come new changes.





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(continued from page 1)

<b>Test</b>	<b>Original Winner</b>
On-axis sharpness:	25 mm MK-70
Off-axis sharpness:	24.5 mm SWA
Contrast: Edge:	24.5 mm SWA
Light transmission:	25 mm MK-70
Field flatness:	24.5 mm SWA
Eye relief and comfort:	24.5 mm SWA
Chromatic Aberration:	25 mm MK-70
Coatings:	Draw

Keep this in mind when looking at the results of these tests. On to the new results...

**On-Axis Sharpness:** The Panoptic is slightly sharper on axis and has a better snap to focus. Stars were a tad tighter and Jupiter's moons looked a little better. **Edge: Panoptic**

**Off-Axis Sharpness:** At this focal ratio, one word describes the Meade's off-axis performance: seagulls. Stars were bloated and refused to come into focus. The Panoptic wasn't sharp either, but it did look better. **Edge: Panoptic**

**Contrast:** I looked at several different types of objects for this test, nebulas, planets, and clusters and the differences were too minor to note. **Edge: Draw**

**Chromatic Aberration:** Once again, the Panoptic came out ahead. As you move to

the edge of the field, the distortion and color separation is a little bit worse on the Meade SWA than on the Panoptic. **Edge: Panoptic**

**Field Flatness:** Another draw here, both of the fields tested out to be pretty flat. There just wasn't much focal shift from the center to the edge of the field. **Edge: Draw**

**Eye Relief and Comfort:** The Meade 24.5mm SWA is comfortable to use. The eye relief and head placement are good and it is easy to take in the full field of view. The rubber grip is also well placed and helps when holding it in cold weather. The Panoptic, however, is a bit better. The eye relief and head placement are a tad better and it's a little easier to take in the full field of view. **Edge: Panoptic**

**Light Transmission:** Yet another draw. There's not a noticeable difference here. This was a bit of a surprise considering the result of the coatings test. **Edge: Draw**

**Coatings:** This was a big win for the Panoptic. The coatings on this Panoptic looked much darker than the Meade SWA coatings (although they weren't quite up to the Pentax standard). **Edge: Panoptic**

**Conclusions:** It sure looks like a landslide win for the Panoptic, doesn't it? Well, the **Tele Vue 24mm Panoptic** is a better

eyepiece. But, it's only better by a very narrow margin. Aside from the ease of focusing and on-axis sharpness, it took a lot of work to find the differences between the eyepieces. Look at the Orion Nebula with both of these eyepieces and it would be difficult to tell which view came from which eyepiece. So, give the **Meade 24.5mm SWA** the value award.

Note: The opinions expressed in this review are solely those of the author(s) and do not constitute an endorsement by the San Diego Astronomy Association.



*Clip and Save*

## 2002 Board of Directors and Chairpersons

**President**, Observatory Director, Brian Staples  
email: President@sdaa.org .....858-560-9064

**Vice President**, New Member Mentor, Scott Baker  
email: VicePresident@sdaa.org .....858-792-5581

**Treasurer** (Membership), Jennifer Pesqueira  
email: Treasurer@sdaa.org .....619-276-9568

**Recording Secretary**, Melinda Baker  
email: Recorder@sdaa.org .....858-792-5581

**Corresponding Secretary**, Christopher Watson  
email: Corresponding@sdaa.org .....858-454-8695

**Star Party Director**, Michael Dietz  
email: StarParties@sdaa.org .....619-334-9930

**SDAA Yahoo Group Moderator**, Scott Baker  
http://groups.yahoo.com/group/sdaa

**North County Star Party Coordinator**, Bob Nanz  
email: NorthStarParty@sdaa.org .....760-751-3992

**East County Star Party Coordinator**  
email: EastStarParty@sdaa.org

**So. County Star Party Coordinators**, Rich Bentley & Stewart Hall  
email: SouthStarParty@sdaa.org .....619-231-8791

**Director, Education**  
email: Education@sdaa.org

**Director, Private Pads**, Brian McFarland  
email: Pads@sdaa.org .....619-462-4483

**Newsletter Editors**, Bret Akers and Julie Quinn  
email: Newsletter@sdaa.org .....619-596-4697

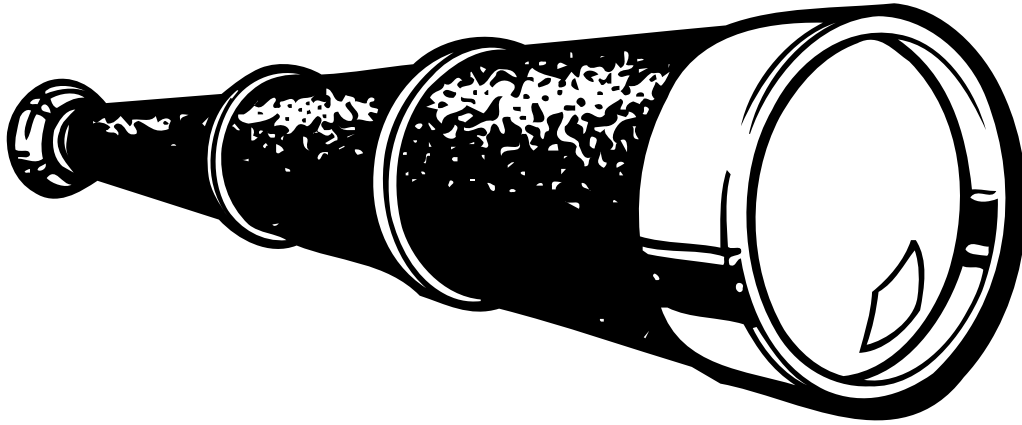
**TDS Site Director**, Shawn Kelly  
email: TDS@sdaa.org .....858-344-8737



## SDAA Calendar of Events January 2003

S	M	T	W	T	F	S
			1	2	● 3	4 Star Party at Tierra Del Sol
5	6 Star Party at Woodland Elementary	7 Star Party at Doyle Elementary	8 Stars in the Park	9 Star Party at Village Elementary	10 Star Party at Mission Trails	● 11
12	13	14	15	16	17 Star Party at Girl Scout Camp Headquarters	18 ○ SDAA Banquet
19	20	21	22	23	24	● 25 Star Party at Tierra Del Sol  Camp with the Stars @ Vallecito Stage Station
26	27	28	29	30	31	

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## MEMBERSHIP INFORMATION

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**SAN DIEGO ASTRONOMY ASSOCIATION**  
**P.O. BOX 23215**  
**SAN DIEGO, CA 92193-3215**  
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