Not all of the best sites to observe are barren desert or tree-covered mountaintops. Dave Pinsky took this image from Death Valley, looking west to the Panamint Range from Bad Water. It was taken this March after the deluge we experienced, hence the relatively large amount of water here. Dave reports the seeing was pretty good. The advantage of a place like this is, and Astronomy in general, is that because we often have to go out of our way to get to pristine skies, if the clouds don’t cooperate, we still have a great view!

December Election Results

Well, the results from the December 12th election are as follows.

President . . . . . David Sovereign
Vice-President . Mary Brown
Secretary . . . . . Wendy Brown
Treasurer . . . . Darrell Dooley

Board Members: Peter DeHoff, PJ Goldfinger, Herman Meyerdierks, Norm Vargas, Don DeGregori, Bob Deubler, Larry Guerra, Kim Stober, Virginia Ward

Let’s give our best wishes to the officers and board members in this, the beginning of the LAAS’ 80th year, a year we will hopefully see the reopening of Griffith Observatory.

David Nakamoto


**Editor's Message**

The start of our 80th year, the anticipated reopening of Griffith Observatory . . . the beginning of 2006 speaks for itself. For those wishing to submit material for the bulletin, the deadline is the 10th of each month. I need the time to prepare all material into the bulletin and get it to Peter and Minghua in time for printing and mailing.

Here is a website hosted by KABC Ch 7. These webcams are good for checking local weather conditions and cloud cover:

http://abclocal.go.com/kabc/story?section=cams&id=3319445 

— David Nakamoto

**The Outreach Program**

The Outreach program, where LAAS members visit elementary schools and put on Star Parties for the students and parents has been successful. So far this year, we have organized twelve programs for the kids. Paul Wicker, better known as Galileo Guy, really brings Astronomy to life with his skit about Galileo and his contributions to the science. He shows a slide show about the planets, sun and moon. And including a question and answer session, helps to show Astronomy can be fun.

During this time, the other LAAS members set up their telescopes on the playground, for evening viewing of the stars. After Galileo has concluded his program, the kids proceed to where the scopes are setup. This can be quite

**EVENTS CALENDAR**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>Jan 7th  (Sat)</td>
<td>Public Star Party</td>
<td>Griffith Observatory Satellite Moon, Mars, and Saturn</td>
</tr>
<tr>
<td>Jan 22nd (Sun)</td>
<td>Annual Banquet</td>
<td>(See pg 10 for details)</td>
</tr>
<tr>
<td>Jan 28th (Sat)</td>
<td>Dark Sky Night</td>
<td>Lockwood Valley</td>
</tr>
<tr>
<td>Feb 4th (Sat)</td>
<td>Public Star Party</td>
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</tr>
<tr>
<td>Feb 13th (Mon)</td>
<td>General Meeting</td>
<td>The Speaker is Amanda Mainzer of JPL. Topic is Brown Dwarfs.</td>
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</tbody>
</table>

**Membership Annual Dues:**

- Youth: $20.00
- Regular (18-65): $35.00
- Senior Citizen (65 and up): $20.00
- Senior Family: $30.00
- Family: $50.00
- Group or Club: $50.00
- Life: $500.00

**Additional fees:**

- Charter Star member: $30.00
- Star member, with pad: $70.00
- Star member, no pad: $60.00

(Membership due date is indicated on the mailing label)

**HANDY PHONE LIST**

LAAS Answering Machine: (213) 673-7355
Griffith Observatory
Program: (323) 664-1191
Office: (323) 664-1181
Sky Report: (323) 663-8171
Lockwood Site: (661) 245-2106
(Mt. Wilson Institute: (626) 793-3100)

Vol 80, issue 1
Mars is past opposition, but it’s still in good position for observing and Saturn is coming into view late at night. Orion is beginning to regain control of the winter nights. Although originally intended for our new members, any LAAS member can check out one of these fine instruments.

LAAS-1 - 4.5” f/8 Celestron reflector on a solid Polaris equatorial mount, with Kellner eyepiece, two Orthoscopics, and collimation tool. These two 4.5” reflectors are good telescopes for beginners to learn from since they are both small enough to be easily carried and set up, but with enough aperture to provide good views.

LAAS-2 - 4.5” f/8 Tasco reflector on a motorized Edmund equatorial mount. This telescope has been upgraded with 1.25” accessories, a 6x30 finder, and very solid wooden legs. It comes fully equipped with a set of three Kellner eyepieces and a collimation tool.

LAAS-4 – 6” f/5 reflector by Telescopics on a low Dobsonian mount. It is equipped with a set of three Orthoscopic eyepieces.

LAAS-7 – 80mm f/15 Meade refractor on an Orion Sky View Deluxe equatorial mount. It is equipped with two Plossl eyepieces and an Orthoscopic. These two refractors are ideal to observe Mars during this opposition.

LAAS-8 – 80mm f/11.4 Selsi refractor on an equatorial mount. It is equipped with two Plossl eyepieces and an Orthoscopic.

For further information concerning these loaner telescopes call: David Sovereign at (626) 794-0646.

LAAS Bulletin

LOANER CORNER

hectic, because of the enthusiasm of the kids. Most soon learn to be patient, get in line, and not bump the telescopes. Soon we hear lots of wow’s upon seeing the moon or the planets up close. We get lots of questions and try to simply explain what they are seeing. Many parents and teachers are there too, and I know they appreciate our effort. And of course we adults all hope that this time viewing the heavens will instill in the students an interest in science that will benefit through life.

These are the schools we have visited so far this year, 2005.

March 11, Ivanhoe Elementary School
March 15, Washington Elementary School
March 15, Barnhart School
April 15, Irwin Elementary
April 20, Monterey Park (Girl Scouts)
April 20, Mayfair High School
May 13, St. Catherine of Siena School
June 14, Hollencrest Middle school, W. Covina
Aug12, Temescal Gateway Park
Nov 1, East Valley Middle School
Dec 7, San Gabriel Elementary School
Dec 8, Serrania Elementary School

And the LAAS members that contributed their time, expertise and effort: Bob Alborsian, Ken Allen, Dave Bereau, Mary Brown, Dan Dickerson, Don DeGregori, Tom Drouet, Reginaldo Flores, Jim Hunter, Penny Hunter, Jamie Johnson, Herbert Kraus, Tom Meneghini, Herman Meyerdirks, Grant Mills, Tim Thompson, Norm Vargas, and Paul Wicker. If I left anybody out, please forgive me. I hope we can have a successful Outreach program again next year.

Along with Paul Wicker and myself, thanks very much.

Don DeGregori

LAAS Bulletin

Here’s a sneak peek at the new Zeiss Projector. The planets, Sun, and Moon are projected from the monolithic blocks in the foreground, while the star projector sites in the background. And for those that pine for the old projector, all I can say is . . . you’ll be holding your breath when you see the stars from this projector. —— David Nakamoto

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These days, it’s amazing what can be done with a desktop or laptop computer. The improvements in computer speed, memory, monitors and video cards have led to vast improvements, not the least of which is the transformation of computers within just the last two generations or forty years, from mainframes the size of a desk to laptops that fit, well, on your lap! And what was capable only with mainframes a few decades ago can be done faster, cheaper, and with less effort on a computer you can carry easily around with you. But even within the PC realm, vast changes have occurred. This is especially true for computer graphics and simulations. Compared with the early 286 and 6510 machines, gone are the flatly rendered planet surfaces, dots for the moons, and bloated stars. The very realistic scenes modern computers and their software can produce are reminiscent of the work of Dr. James Blinn, who in the 1970s and 1980s used a PDP or VAX mainframe and hours of rendering time to produce the Voyager animations that were state of the art back then, and certainly at the cutting edge of things. Now, things have progressed to where anyone with a decent machine can produce replicas of those animations as you sit and watch the monitor, and even amateurs can write their own software to compete with the software development houses. One such program is Celestia. And not only does Celestia produce high quality visions of spaceflight, but it’s free!

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Los Angeles Astronomical Society
1815 Avalon Street
Los Angeles, CA 90026

The Monterey Room at Monterey Hills Restaurant is where we’ll meet. The date is Sunday, January 22nd. We can start at 5PM. Speaker will be Tim Hogle from the Voyager project.

Address is:

3700 W. Ramona Blvd.
Monterey Park, CA 91754
(323) 264-8400
(323) 264-8426

Directions to get there: traveling north on the I-710 (Long Beach) freeway, exit on Ramona, just before the I-10 (San Bernardino) freeway. At the end of the offramp, continue straight ahead, uphill, and into the restaurant parking lot.

Traveling east or west on the I-10 freeway, exit on Atlantic, go south to Garvey Ave. and turn right. Bear left and go uphill on W. Garvey Ave., which becomes Ramona. Turn right into the driveway for Luminaria’s, but go around Luminaria’s and go downhill to the Monterey Hills, which is just below Luminaria’s. OR, continue on Ramona to a left run onto Corporate Center Dr., and then turn left where the offramp from the 710 is, and go uphill into the parking lot for Monterey Hills.

Hope to see you there! ♡

(Continued on page 11)

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As a final showcase, below is a simulation of the spectacular view Voyager 2 had as it left the Saturn system on route to Uranus, another 5 years and over a billion miles from when and where it saw this view, looking back on the ringed planet.

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Mars is past opposition, but it’s still in good position for observing and Saturn is coming into view late at night. Orion is beginning to regain control of the winter nights. Although originally intended for our new members, any LAAS member can check out one of these fine instruments.

LAAS-1 - 4.5" f/8 Celestron reflector on a solid Polaris equatorial mount, with Kellner eyepiece, two Orthoscopics, and collimation tool. These two 4.5" reflectors are good telescopes for beginners to learn from since they are both small enough to be easily carried and set up, but with enough aperture to provide good views.

LAAS-2 - 4.5" f/8 Tasco reflector on a motorized Edmund equatorial mount. This telescope has been upgraded with 1.25” accessories, a 6x30 finder, and very solid wooden legs. It comes fully equipped with a set of three Kellner eyepieces and a collimation tool.

LAAS-4 – 6" f/5 reflector by Telescopics on a low Dobsonian mount. It is equipped with a set of three Orthoscopic eyepieces.

LAAS-7 – 80mm f/15 Meade refractor on an Orion Sky View Deluxe equatorial mount. It is equipped with two Plossl eyepieces and an Orthoscopic. These two refractors are ideal to observe Mars during this opposition.

LAAS-8 – 80mm f/11.4 Selsi refractor on an equatorial mount. It is equipped with two Plossl eyepieces and an Orthoscopic.

For further information concerning these loaner telescopes call: David Sovereign at (626) 794-0646.

hectic, because of the enthusiasm of the kids. Most soon learn to be patient, get in line, and not bump the telescopes. Soon we hear lots of wow's upon seeing the moon or the planets up close. We get lots of questions and try to simply explain what they are seeing. Many parents and teachers are there too, and I know they appreciate our effort. And of course we adults all hope that this time viewing the heavens will instill in the students an interest in science that will benefit through life.

These are the schools we have visited so far this year, 2005.

March 11, Ivanhoe Elementary School
March 15, Washington Elementary School
March 15, Barnhart School
April 15, Irwin Elementary
April 20, Monterey Park (Girl Scouts)
April 20, Mayfair High School
May 13, St. Catherine of Siena School
June 14, Hollencrest Middle school, W. Covina
Aug 12, Temescal Gateway Park
Nov 1, East Valley Middle School
Dec 7, San Gabriel Elementary School
Dec 8, Serrania Elementary School

And the LAAS members that contributed their time, expertise and effort: Bob Alborsian, Ken Allen, Dave Bereau, Mary Brown, Dan Dickerson, Don DeGregori, Tom Drouet, Reginaldo Flores, Jim Hunter, Penny Hunter, Jamie Johnson, Herbert Kraus, Tom Meneghini, Herman Meyerdirks, Grant Mills, Tim Thompson, Norm Vargas, and Paul Wicker. If I left anybody out, please forgive me. I hope we can have a successful Outreach program again next year.

Along with Paul Wicker and myself, thanks very much.

Don DeGregori

Here’s a sneak peek at the new Zeiss Projector. The planets, Sun, and Moon are projected from the monolithic blocks in the foreground, while the star projector sites in the background. And for those that pine for the old projector, all I can say is . . . you’ll be holding your breath when you see the stars from this projector. — David Nakamoto
Editor's Message

The start of our 80th year, the anticipated reopening of Griffith Observatory... the beginning of 2006 speaks for itself.

For those wishing to submit material for the bulletin, the deadline is the 10th of each month. I need the time to prepare all material into the bulletin and get it to Peter and Minghua in time for printing and mailing.

Here is a website hosted by KABC Ch 7. These webcams are good for checking local weather conditions and cloud cover:

http://abclocal.go.com/kabc/story?section=cams&id=3319445

— David Nakamoto

The Outreach Program

The Outreach program, where LAAS members visit elementary schools and put on Star Parties for the students and parents has been successful. So far this year, we have organized twelve programs for the kids. Paul Wicker, better known as Galileo Guy, really brings Astronomy to life with his skit about Galileo and his contributions to the science. He shows a slide show about the planets, sun and moon. And including a question and answer session, helps to show Astronomy can be fun.

During this time, the other LAAS members set up their telescopes on the playground, for evening viewing of the stars. After Galileo has concluded his program, the kids proceed to where the scopes are setup. This can be quite

EVENTS CALENDAR

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 7th (Sat)</td>
<td>Public Star Party</td>
<td>Griffith Observatory Satellite Moon, Mars, and Saturn</td>
</tr>
<tr>
<td>Jan 22nd (Sun)</td>
<td>Annual Banquet</td>
<td>(See pg 10 for details)</td>
</tr>
<tr>
<td>Jan 28th (Sat)</td>
<td>Dark Sky Night</td>
<td>Lockwood Valley</td>
</tr>
<tr>
<td>Feb 4th (Sat)</td>
<td>Public Star Party</td>
<td>Griffith Observatory Satellite Moon, Mars, and Saturn</td>
</tr>
<tr>
<td>Feb 13th (Mon)</td>
<td>General Meeting</td>
<td>The Speaker is Amanda Mainzer of JPL. Topic is Brown Dwarfs.</td>
</tr>
<tr>
<td>Feb 25th (Sat)</td>
<td>Dark Sky Night</td>
<td>Lockwood Valley</td>
</tr>
</tbody>
</table>

Membership Annual Dues:

- Youth                          $ 20.00
- Regular (18-65)                $ 35.00
- Senior Citizen (65 and up)     $ 20.00
- Senior Family                  $ 30.00
- Family                        $ 50.00
- Group or Club                  $ 50.00
- Life                           $ 500.00

Additional fees:
- Charter Star member            $ 30.00
- Star member, with pad          $ 70.00
- Star member, no pad            $ 60.00

(Membership due date is indicated on the mailing label)

LAAS Home Page: [http://www.laas.org](http://www.laas.org)
LAAS Bulletin Online: [http://www.laas.org/bulletin.html](http://www.laas.org/bulletin.html)
Not all of the best sites to observe are barren desert or tree-covered mountaintops. Dave Pinsky took this image from Death Valley, looking west to the Panamint Range from Bad Water. It was taken in March after the deluge we experienced. Hence the relatively large amount of water here. Dave reports the seeing was pretty good. The advantage of a place like this is and Astronomy in general, is that because we often have to go out of our way to get to pristine skies, if the clouds don’t cooperate, we still have a great view. !

December Election Results

Well, the results from the December 12th election are as follows.

President . . . . . . David Sovereign
Vice-President . Mary Brown
Secretary . . . . . . Wendy Brown
Treasurer . . . . . . Darrell Dooley

Board Members: Peter DeHoff, PJ Goldfinger, Herman Meyerdierks, Norm Vargas, Don DeGregori, Bob Deubler, Larry Guerra, Kim Stober, Virginia Ward

Let’s give our best wishes to the officers and board members in this, the beginning of the LAAS’ 80th year, a year we will hopefully see the reopening of Griffith Observatory.

David Nakamoto

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Notes, corrections, questions, ideas, articles? All are welcome at: BulletinEditor@laas.org.