## Astronomical League Observing Programs <u>Annual Report 2015</u>

Submitted by the Astronomical League Observing Program Directors: Mike Benson Aaron Clevenson Cliff Mygatt

## **Highlights for the year:**

2014-2015 has been a successful year for the Observing Programs. A total of 594 certificates and/or pins were issued during the past year. At the end of this report, there is a detailed analysis of all of the observing programs and awards. In that report, expenses represent actual costs of doing business, but may not be submitted for reimbursement. The Treasurer is the best source for actual costs to the Astronomical League. Total expenses reflect those reported by the coordinators or those by the Treasurer, whichever were higher. Pin purchases through the national office are included. Requested budget for next year reflects the best estimate by the coordinator and includes expected pin purchases.

This year saw the changing of the name of the National Observing Program Coordinators to National Observing Program Directors. This was done to clarify and differentiate the role of these Directors compared to the individual Observing Program Coordinators.

We also added a third Observing Program Director to the role: Cliff Mygatt.

At the AL-Con in 2014 there were a total of 10 proposals. The four adopted are **large and in bold**:

- Active Galactic Nuclei
- Advanced Binocular Double Star Bob Kerr, coordinator
- Advanced Observer
- Binocular Asteroids Log Book
- Radio Astronomy Bill Bogardus, coordinator
- Sketching Cindy Krach, coordinator
- Solar Eclipses
- Supernova
- Two in the View Bob Scott, coordinator

The proposed Observing Programs for consideration by Council at the AL-Con in 2015 were reviewed by Aaron Clevenson and Cliff Mygatt. A summary of those reviews and recommendations was submitted to the President, John Goss, for distribution to the Council prior to the meeting at AL-Con. The list of known Observing Program Proposals for review at the 2015 AL-Con are:

- Advanced Observer
- Active Galactic Nuclei
- Binocular Variable Stars
- Electronically Enhanced Observing
- Logbook
- Planetary Transit Mercury 2016
- Sharpless

New Coordinators were appointed for these observing programs in the past year:

Herschel 400 Observing Program – Jack Estes

Outreach Observing Award – Maynard Pittendreigh

The Astronomical League entered into an agreement with NASA to host the awards for NASA Observation Challenges. There have been two completed at this time with the third in July.

Comet Siding Spring at Mars – 9 awardees

Rosetta Spacecraft and Comet 67P - 1 awardee

New Horizons Spacecraft rendezvous with Pluto - 0 awardees

These awards have certificates that are signed by the AL President and the Director of Planetary Science at NASA, were designed by NASA, and are sent to those completing the requirements by the Astronomical League. Certificates are sent as PDF files through email and the awardees are logged in the AL's on-line database. The requirements are to image an object related to the observation, posting that image on the NASA website, and performing an outreach activity related to the event.

In 2014-2015 the AL entered into an agreement with NASA to provide support and development assistance for certifications and other activities related to a series of grant proposals. One of these is related to heliophysics and another is stellar spectroscopy.

These Observing Programs have known issues and are being revised:

- Analemma website revisions and clarification
- Bright Nebulae concerns with the list of objects
- Herschel 400 very minor, a discrepancy of one object on the list

These observing programs have coordinator issues:

- Analemma coordinator undergoing surgery and is recovering. Awards are on-hold.
- Sky Puppies new coordinator needed. Materials being sent to Aaron Clevenson.

A critical analysis of the popularity of the observing programs currently offered yields these results. Programs adopted in the last two years are not included in the analysis.

- Those programs with an average of over 50 certificates per year:
  - o Messier
  - Outreach
  - Planetary Transit of Venus 2012 (1 time event)
- Those programs with an average between 25 and 49 per year:
  - Binocular Messier
  - Double Star
  - o Lunar
- Those programs with an average between 10 and 24 per year:
  - Binocular Double Star
  - Caldwell
  - Carbon Stars
  - Constellation Hunter Northern Skies
  - Deep Sky Binocular
  - o Globular Clusters
  - o Herschel 400
  - Master Observer
  - Planetary Nebulae
- Those programs with an average between 5 and 9 per year:
  - \* Arp Peculiar Galaxies Northern
  - Asterisms
  - Asteroid Observing
  - Comets
  - \* Flat Galaxies
  - o Herschel II
  - o Hydrogen-Alpha Solar
  - o Lunar II
  - Meteor Observing
  - Open Clusters
  - Solar System
  - Stellar Evolution
  - Sunspotters
  - Universe Sampler
  - Urban Observing
- Those programs with an average of 4 or less per year:
  - o Bright Nebulae
  - Constellation Hunter Southern Skies
  - o Dark Nebulae

- Dark Sky Advocate
- Earth Orbiting Satellites
- \* Galaxy Groups and Clusters
- o Galileo
- \* Local Galaxy Group and Galactic Neighborhood
- o NEO
- o Sky Puppy
- \* Southern Arp Peculiar Galaxies
- Southern Planetary Nebulae
- Southern Skies Telescope
- Southern Skies Binocular
- Variable Stars

Note: Those Observing Programs that deal solely with galaxies are preceded by an asterisk (\*).

There were some issues brought to the attention of the Observing Program Directors. These were largely informational and were handled by the individual program coordinators. A few required intervention and interaction by the Observing Program Directors. None were escalated to the AL President. All have been resolved.

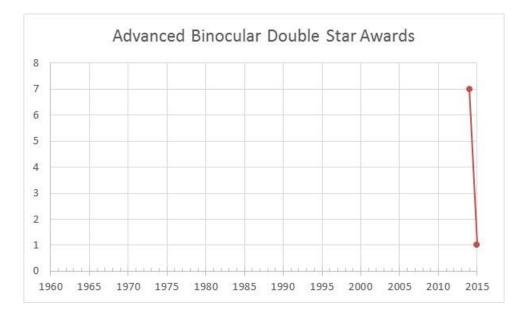
At this time, only one coordinator has more than three Observing Programs; Scott Kranz has four. Three is the best practice maximum that we follow. We have a total of 33 different coordinators at this time coordinating 50 Observing Programs and Awards. There are a total of 76 different certificates (by level and program) issued through the Astronomical League.

Respectfully submitted,

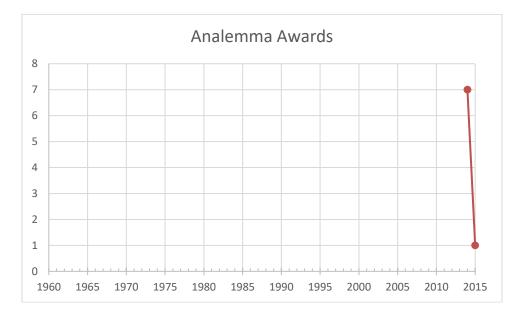
levensor Aaron B. Clevenson

National Observing Program Director June 4, 2015

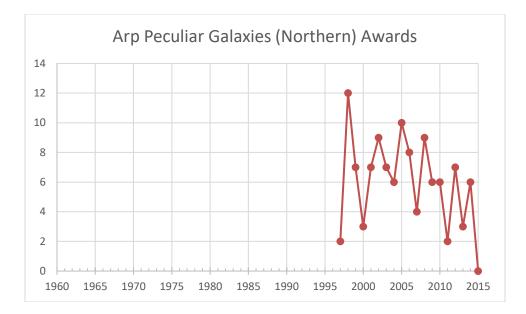
The following are additional pages of detailed reports by the coordinators of the individual Observing Programs and Awards.



Advanced Binocular Double Star Observing Program Bob Kerr

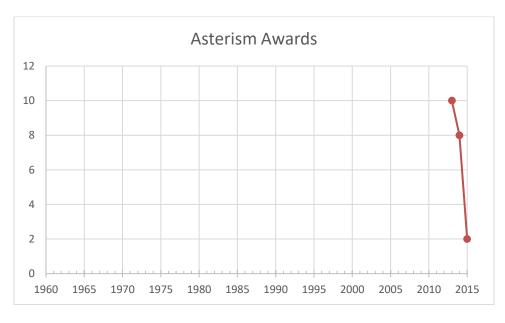


Observing Program Name: Coordinator Name: Analemma Observing Program Lowell Martin

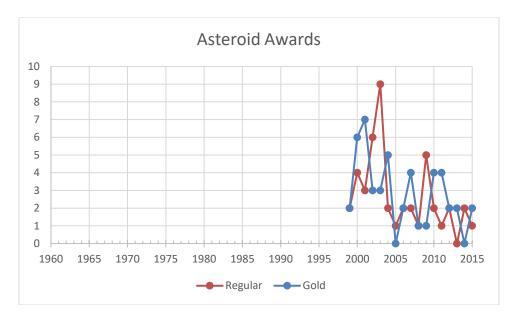


ARP Northern Peculiar Galaxies Observing Program Mike Benson

Observing Program Name: Coordinator Name: ARP Southern Peculiar Galaxies Observing Program Al Lamperti

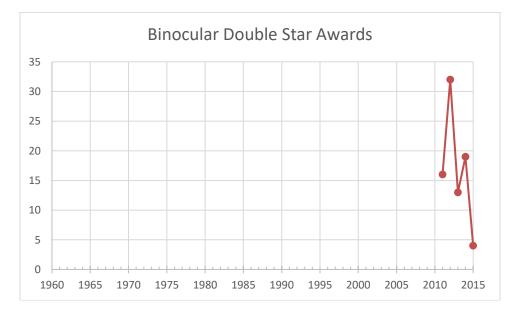


Asterism Observing Program Troy Stratton

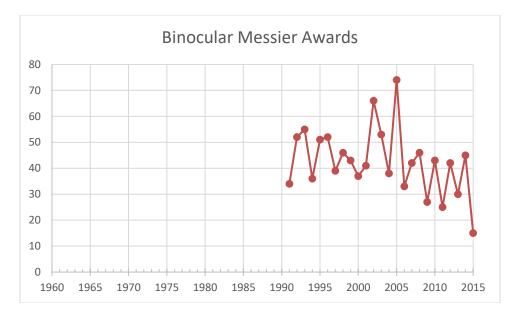


Observing Program Name: Coordinator Name:

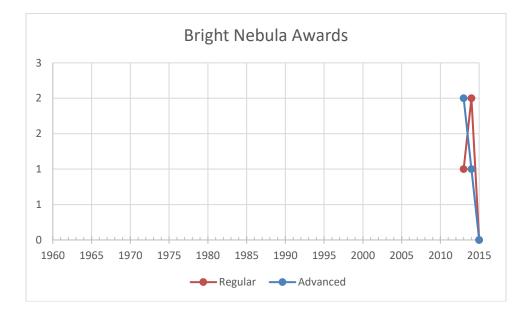
Asteroid Observing Program John Goar



Binocular Double Star Observing Program Bob Kerr

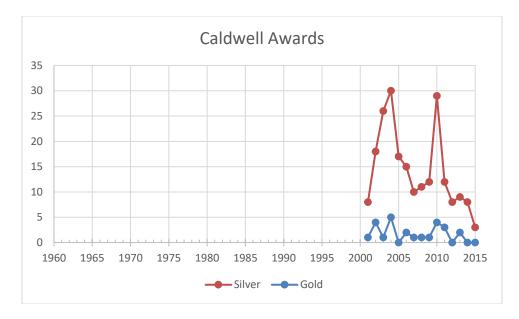


Binocular Messier Observing Program John Goar

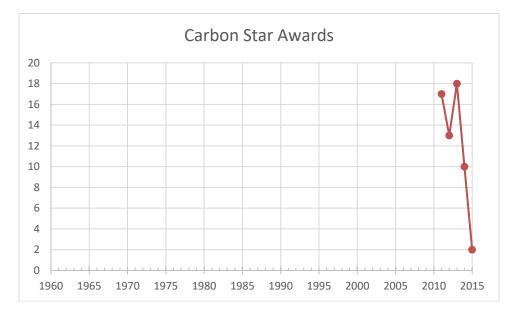


Observing Program Name: Coordinator Name:

Bright Nebula Observing Program Vince Foster

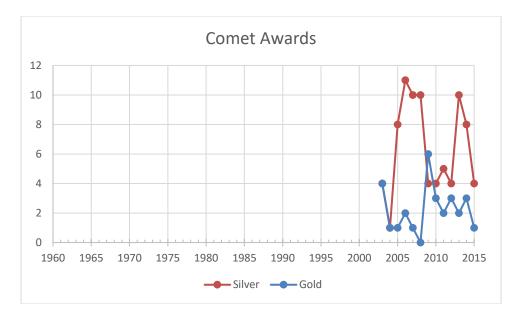


Caldwell Observing Program Susan Rose

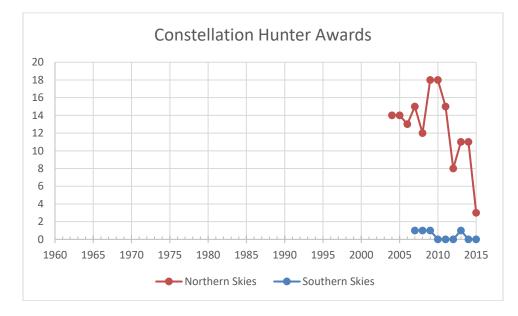


Observing Program Name: Coordinator Name:

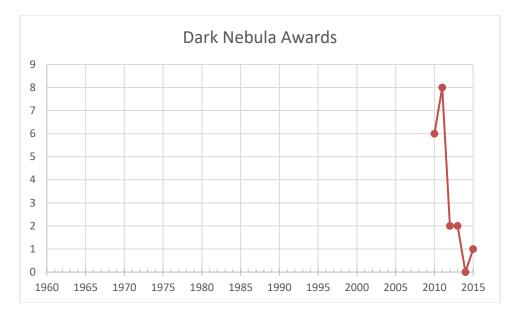
Carbon Star Observing Program Robert Togni



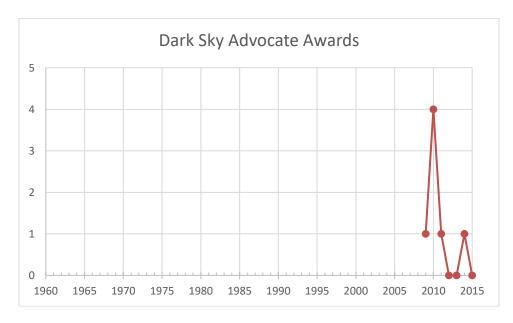
Comet Observing Program Scott Kranz



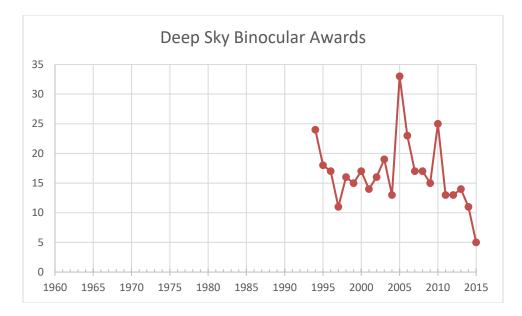
Observing Program Name: Coordinator Name: Constellation Hunter Observing Programs Cliff Mygatt



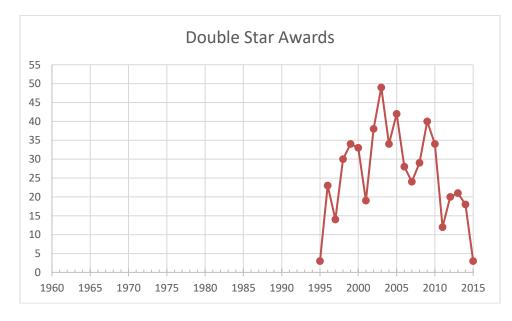
Dark Nebulae Observing Program Kathy Machin



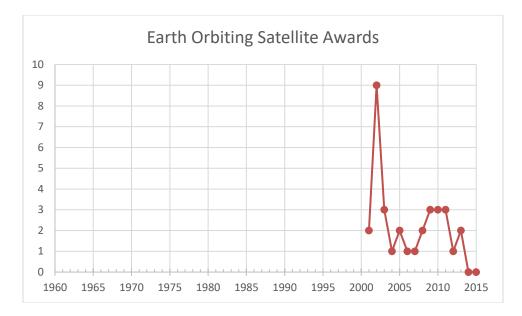
Dark Sky Advocate Observing Program John Goss



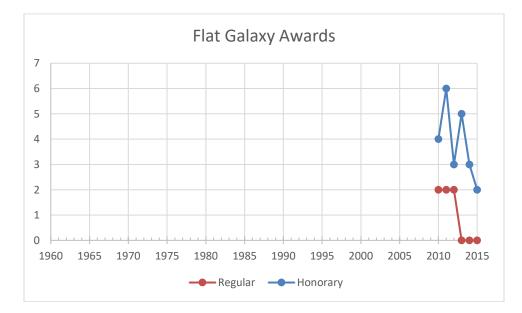
Deep Sky Binocular Observing Program Cindy La Russa



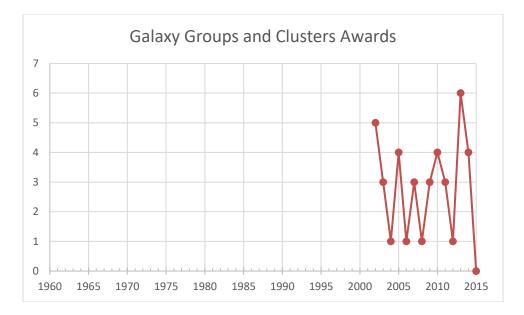
Observing Program Name: Coordinator Name: Double Star Observing Program Mike Benson



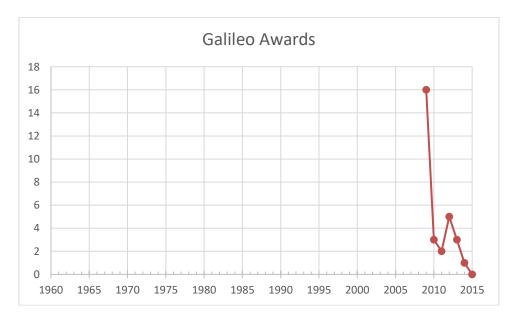
Earth Orbiting Satellite Observing Program Tom DeClue



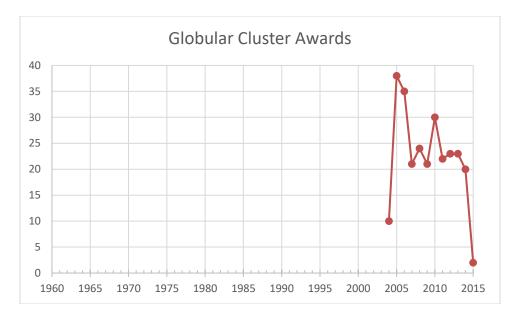
Observing Program Name: Coordinator Name: Flat Galaxy Observing Program Al Lamperti



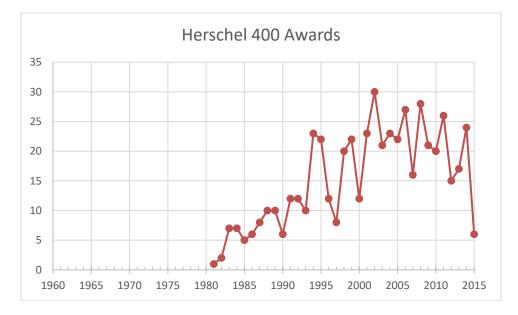
Galaxy Groups and Clusters Observing Program Dareth Murray



Observing Program Name: Coordinator Name: Galileo Observing Program Aaron Clevenson

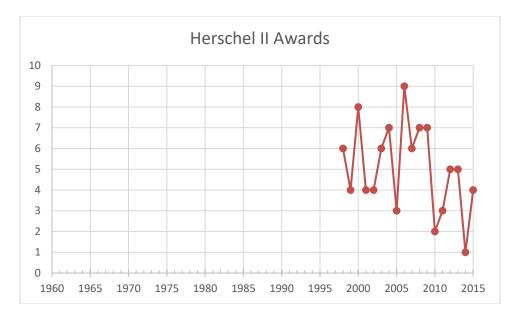


Globular Cluster Observing Program Bob Kerr

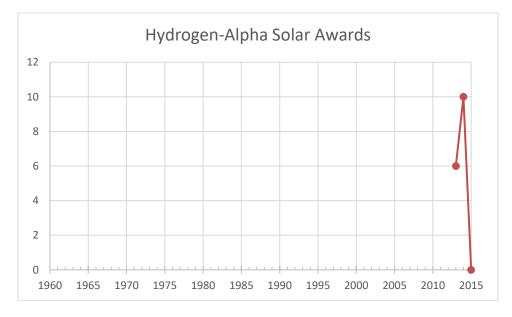


Observing Program Name: Coordinator Name:

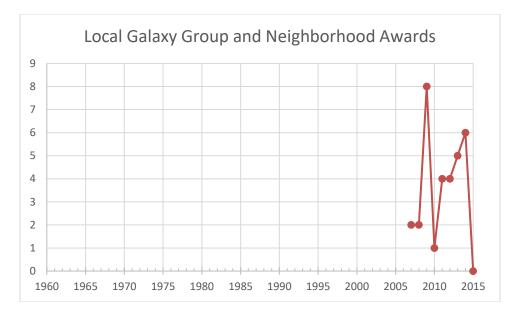
Herschel 400 Observing Program Jack Estes



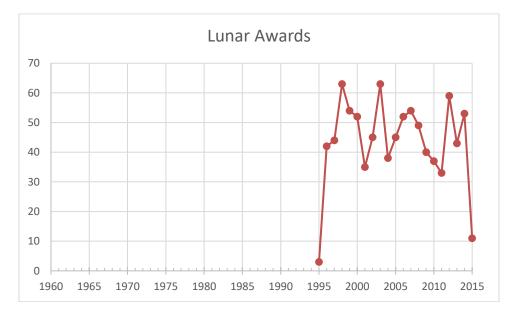
Herschel II Observing Program Candace Pratt



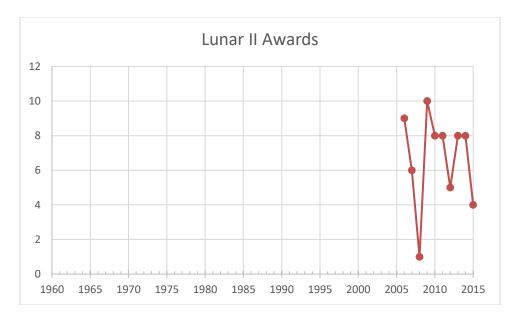
Hydrogen Alpha Observing Program Vince Foster



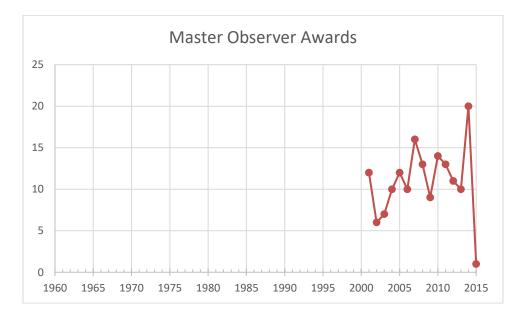
Local Galaxy Group and Neighborhood Observing Prog Dareth Murray



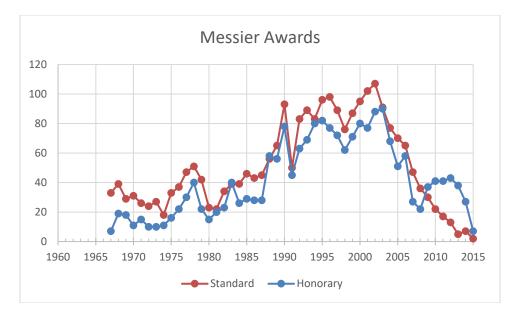
Lunar Observing Program Steve Nathan



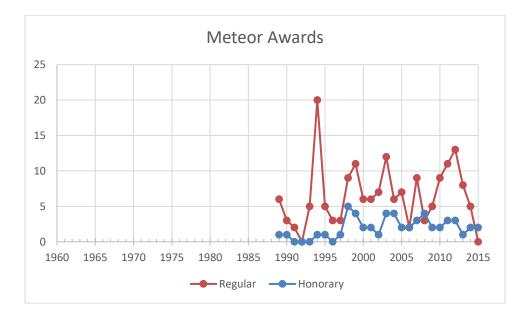
Lunar II Observing Program Cliff Mygatt



Master Observer Observing Award Mike Benson

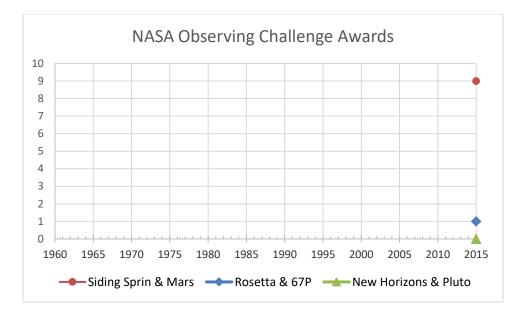


Messier Observing Program Scott Kranz

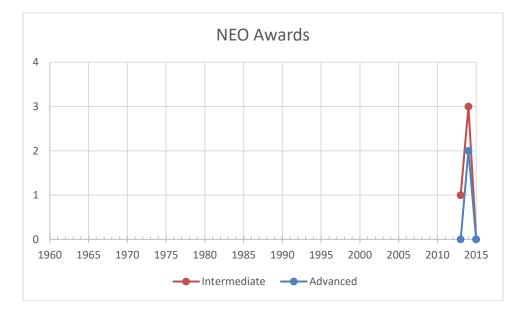


Observing Program Name: Coordinator Name: Meteor Observing Program Scott Kranz

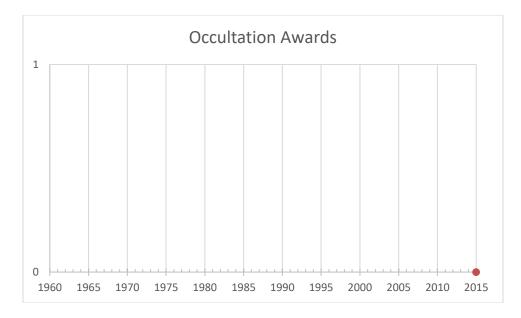
Historical Certificates Issued:



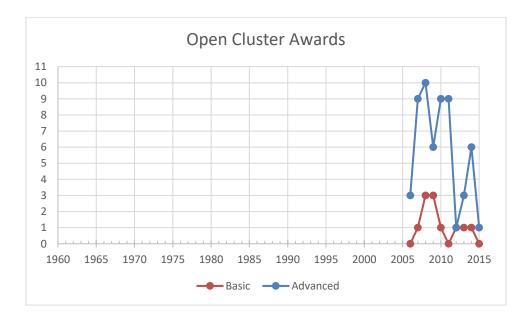
NASA Observing Challenge Special Observing Awards Aaron Clevenson



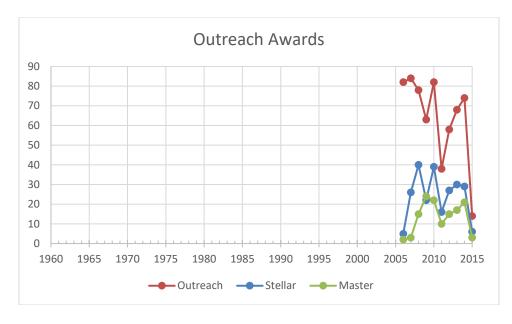
Observing Program Name: Coordinator Name: NEO Observing Program Dolores Hill and Carl Hergenrother



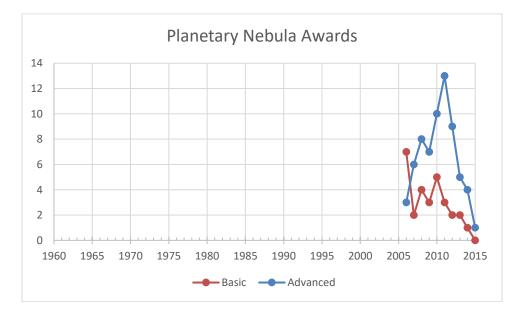
Occultation Observing Program Steven Conard



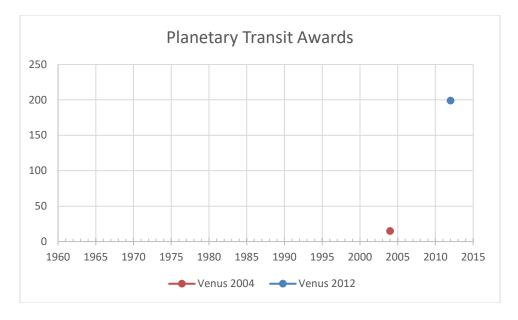
Observing Program Name: Coordinator Name: Open Cluster Observing Program Benjamin Jones



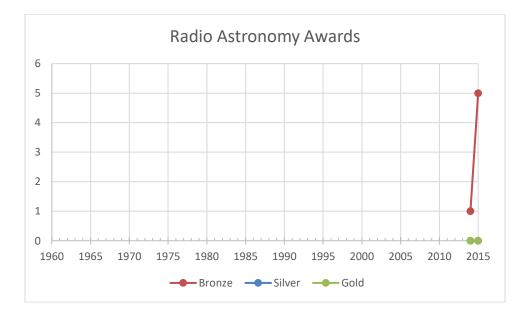
Outreach Observing Award Maynard Pittendreigh



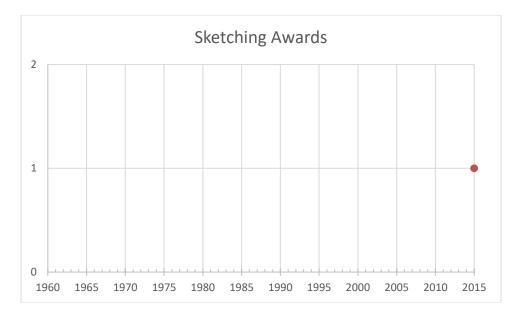
Planetary Nebulae Observing Program Ted Forte



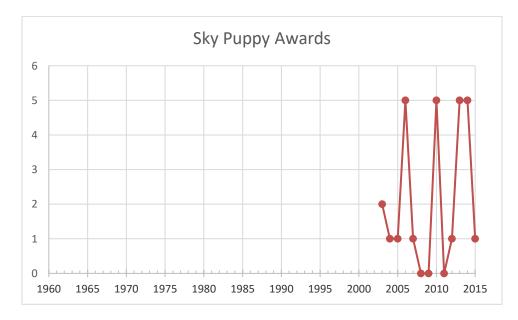
Planetary Transit Special Observing Award (if approved) Aaron Clevenson



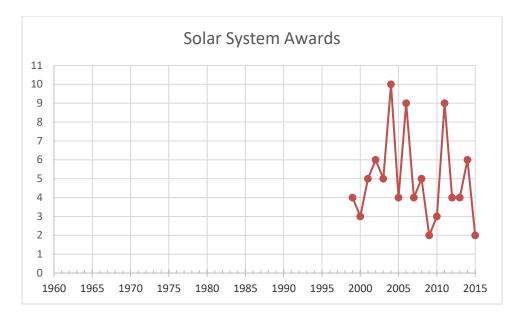
Observing Program Name: Coordinator Name: Radio Astronomy Observing Program Bill Bogardus



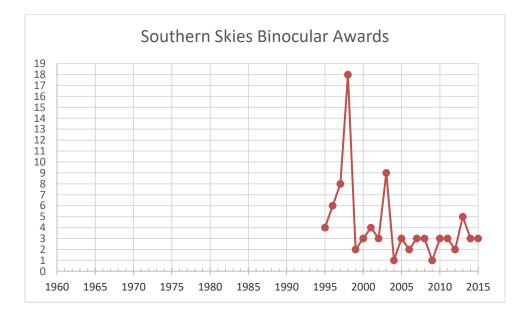
Sketching Observing Award Cindy Krach



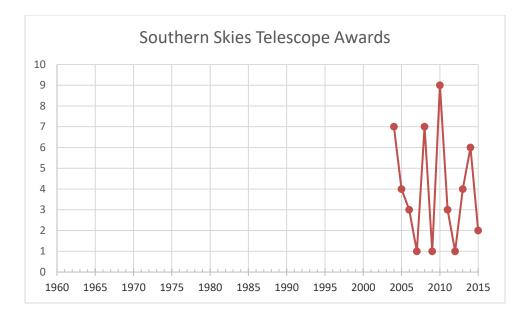
Observing Program Name: Coordinator Name: Sky Puppy Observing Program Grace Aikman



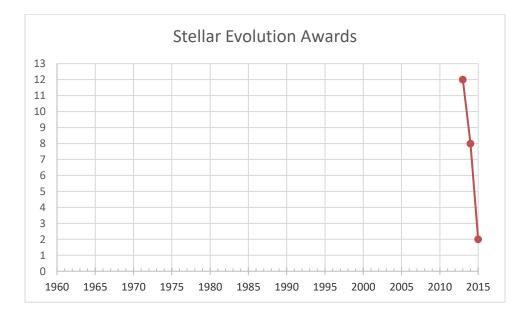
Solar System Observing Program Bryan Tobias



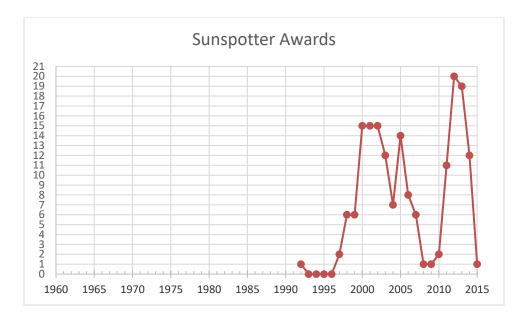
Southern Skies Binocular Observing Program Cindy La Russa



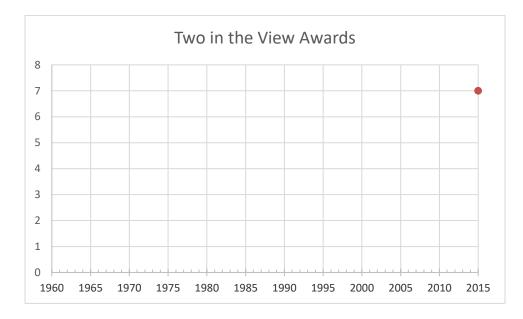
Southern Skies Telescopic Observing Program Kathy Machin



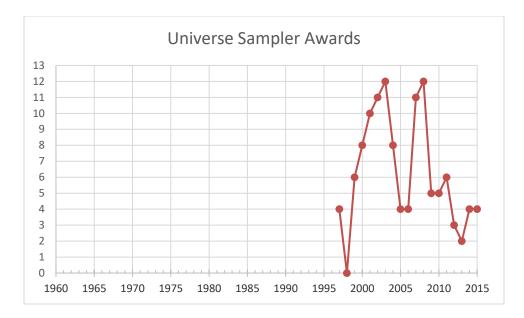
Observing Program Name: Coordinator Name: Stellar Evolution Observing Program Bill Pellerin



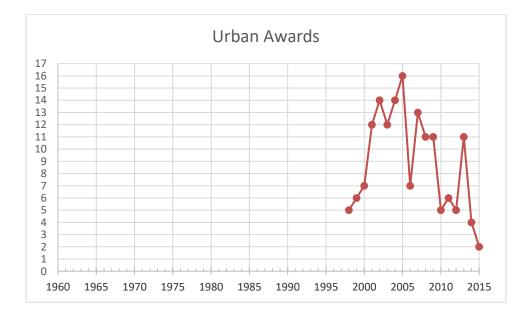
Sunspotters Observing Program Scott Kranz



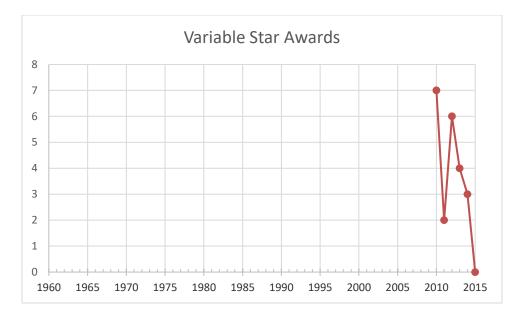
Two in the View Observing Program Bob Scott



Universe Sampler Observing Program Amelia Goldberg



Observing Program Name: Coordinator Name: Urban Observing Program Terry N. Trees



Variable Star Observing Program Robert Togni