

Astronomical League

Observing Program Division

Annual Report 2022

Submitted by the Astronomical League Observing Program Division Directors:

Aaron Clevenson
Cliff Mygatt
Al Lamperti
Maynard Pittendreigh
Marie Lott

Highlights for the year:

2021-2022 was a good year for the Astronomical League Observing Programs. A total of 706 certificates and/or pins were issued during the previous year (2021) and as of this time, a grand total of 17,391 certificates have been issued by the Observing Program Division. At the end of this report, there is a detailed analysis of the individual observing programs and awards. Budget information for the next year for the Observing Program Division as well as the total expenses for the previous year were sent separately to the AL Treasurer.

The Division continues to pursue Observing Program opportunities to increase the breadth and depth of our offerings:

- New object types.
- New educational opportunities.
- New observational skill development.
- Opportunities for Binocular Observers.
- Opportunities for Imagers.
- Opportunities for observers to utilize remote telescopes.
- Opportunities for southern hemisphere observers.
- Opportunities for use of vision enhancing tools.

We also continue to work on increased AL Branding across our offerings:

- Use of the Observing Program Division logo.
- Pins to recognize Observing Program Coordinators and Observing Program Directors.
- Observing Program web page standard look and feel.
- Observing Program requirements standardization:
 - Latitude and Longitude of observer.
 - Seeing and Transparency of the sky.
- Observing Program pin standards:
 - To include Astronomical League.
 - To include the name of the Observing Program.

At the AL-Con in 2021 there was a total of one proposal. It was adopted:

- **Jupiter Observing Program**

These proposed Observing Programs for consideration by Council at the AL-Con in 2022 were reviewed by Observing Program Directors. A summary of those reviews and recommendations was submitted to the President, Carroll Iorg and to the Council via email.

The list of known Observing Program Proposals for review at the 2022 AL-Con are:

- **Bennett Observing Program**
- **Solar Neighborhood Observing Program**

No new Coordinators were appointed for observing programs in the past year.

Records for the Observing Program Division are reported by calendar year. Official reporting is through May 1 of the current year.

Observing Programs by activity level:

- Those programs with over 50 certificates in the past year:
 - Outreach Award
- Those programs with between 25 and 49 in the past year:
 - AL Observing Challenge – Observe the Moon Night 2021
 - Citizen Science Observing Award
 - Lunar Observing Program
 - Messier Observing Program
 - Solar System Observing Program
- Those programs with between 10 and 24 in the past year:
 - Alternate Constellations Obs. Prog.
 - Arp Peculiar Galaxies – Northern Observing Program
 - Beyond Polaris Observing Program
 - Binocular Double Star Obs. Prog.
 - Binocular Variable Star Obs. Prog.
 - Carbon Star Observing Program
 - Comet Observing Program
 - Constellation Hunters – Northern Skies Observing Program
 - Deep Sky Binocular Obs. Prog.
 - Double Star Observing Program
 - Globular cluster Observing Program
 - Herschel 400 Observing Program
 - Library Telescope Award
 - Lunar II Observing Program
 - Planetary Nebula Observing Program
 - Radio Astronomy Observing Program
 - Sketching Observing Program
 - Sky Puppy Observing Program
 - Sunspotter Observing Program
- Those programs with between 5 and 9 in the past year:
 - Asteroid Observing Program
 - Binocular Variable Star Obs. Prog.
 - Caldwell Observing Program
 - Flat Galaxy Observing Program
 - Galileo Observing Program
 - Galileo's TOES Obs. Certificate
 - Hydrogen Alpha - Solar Obs. Prog.
 - Lunar Evolution Observing Program
 - Master Observer Award
 - Observer Award
 - Multiple Star Observing Program
 - Nova Observing Program
 - Open Cluster Observing Program
 - Two in the View Observing Program

- Those programs with 4 or less in the past year:
 - Active Galactic Nuclei Obs. Prog.
 - Advanced Binocular Double Star Observing Program
 - 75th AL Anniversary Obs. Challenge
 - Analemma Observing Program
 - Arp Peculiar Galaxies – Southern Observing Program
 - Asterism Observing Program
 - Astronomy Before the Telescope Observing Program
 - Bright Nebula Observing Program
 - Constellation Hunters - Southern Observing Program
 - Dark Nebula Observing Program
 - Dark Sky Advocate Obs. Award
 - Earth Orbiting Satellite Obs. Prog.
 - Foundations of Imaging Obs. Prog.
 - Galaxy Groups and Clusters Observing Program
 - Galileo's TOES II Certificate
 - Herschel II Observing Program
 - Herschel Hustle Certificate
 - Herschel Society Certificate
 - Jupiter Observing Program
 - Local Galaxy Group and Neighborhood Observing Program
 - Mars Observing Program
 - Advanced Observer Award
 - Binocular Master Observer Award
 - Master Imager Award
 - Master Observer – Silver Award
 - Master Observer – Gold Award
 - Master Observer – Platinum Award
 - Mentor Award
 - Meteor Observing Program
 - Target NEO Observing Program
 - Occultation Observing Program
 - Southern Planetary Nebula Obs. Prog.
 - Southern Skies Binocular Obs. Program
 - Southern Skies Telescope Obs. Prog.
 - Spectroscopy Observing Program
 - Stellar Evolution Observing Program
 - Universe Sampler Observing Program
 - Urban Observing Program
 - Variable Star Observing Program
 - Youth Astronomer Observing Program

Accomplishments for the Overall AL Observing Program:

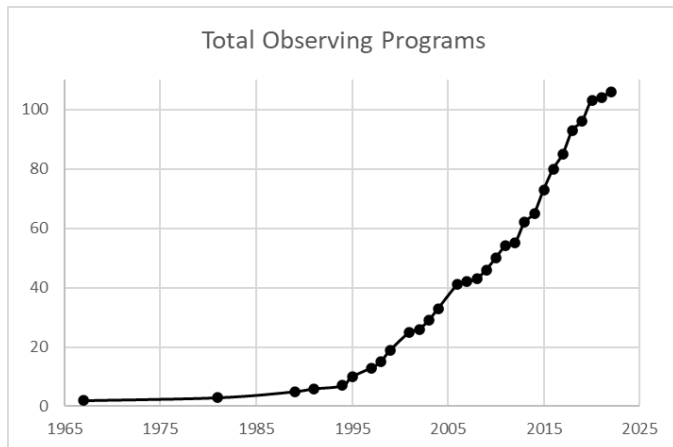
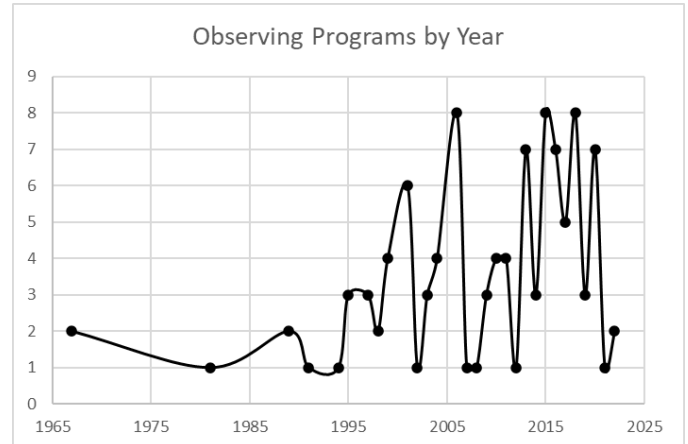
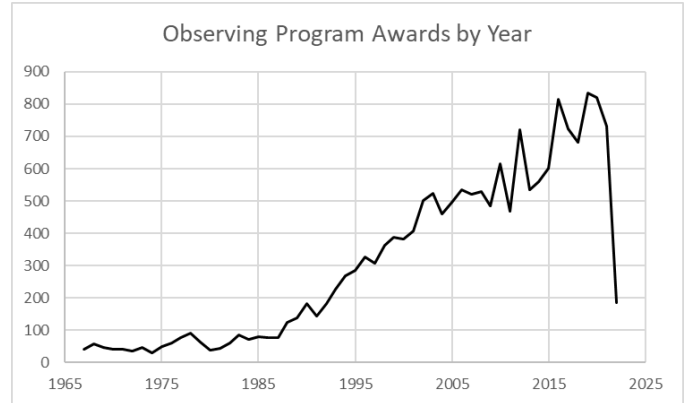
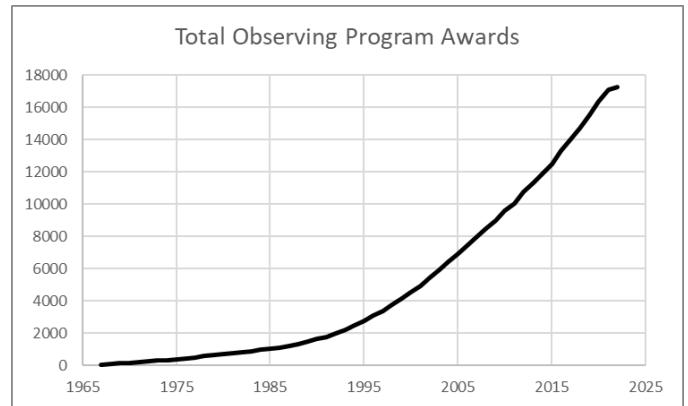
- These Observing Program Manuals are maintained and reproduced for the AL Store by the Observing Program Division:
 - A Pathway to the Stars
 - Carbon Stars
 - Carpe Lunam (new)
 - Exploring the Starry Realm
 - Galaxy Groups and Clusters
 - Globular Clusters
 - Herschel 400
 - Herschel II
 - Journal – Imaging
 - Journal – Visual Observing
 - Jupiter
 - Local Galaxy Groups
 - Mars
 - Math for Amateur Astronomers
 - Meteors
 - Planetary Nebula
 - Sky Puppy
 - Universe Sampler
- The Observing Program Division also maintains and updates the AstroNotes for the Astronomical League.
- There were no issues requiring the attention of the Observing Program Directors. Issues were minor and handled well by the Observing Program Coordinators. None were escalated to the AL President. All have been resolved.

We note a significant drop in certifications in 2020 through 2022. We attribute this largely due to the COVID pandemic.

Since the introduction of our first Observing Program in 1967, Messier, the Observing Program Division has grown significantly. It currently offers over 110 different certificates to our members.

These coordinators have more than three Observing Programs:

- Aaron Clevenson has the Master Observer Progression, coordinates the Special Observing Awards (none currently active), the Galileo's T.O.E.S. certificate, and Sky Puppy.
- Cliff Mygatt and Scott Kranz each have 4 coordination roles.
- Three coordination roles per Coordinator is the best practice that we follow.
- We have a total of 35 different Coordinators coordinating 81 Observing Programs and Awards. There are a total of 123 different certificates (by level and program) issued through the Astronomical League.



Respectfully submitted,
 Aaron B. Clevenson
 Clifton B. Mygatt, Jr.
 Al Lamperti
 W. Maynard Pittendreigh
 Marie Lott
 National Observing Program Directors

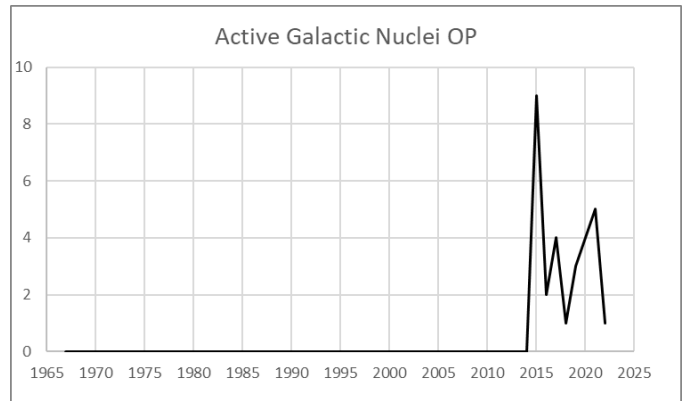
June 1, 2022

Individual Observing Program Data

Active Galactic Nuclei Observing Program

Coordinator Name: Al Lamperti

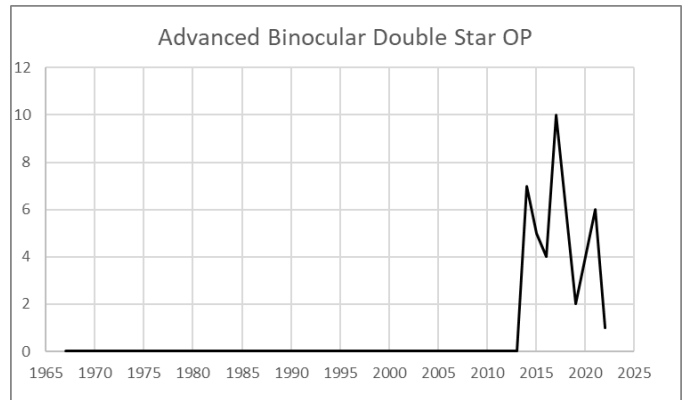
Certificates issued this year: 4
 Certificates issued ever: 29



Advanced Binocular Double Star Observing Program

Coordinator Name: Bob Kerr

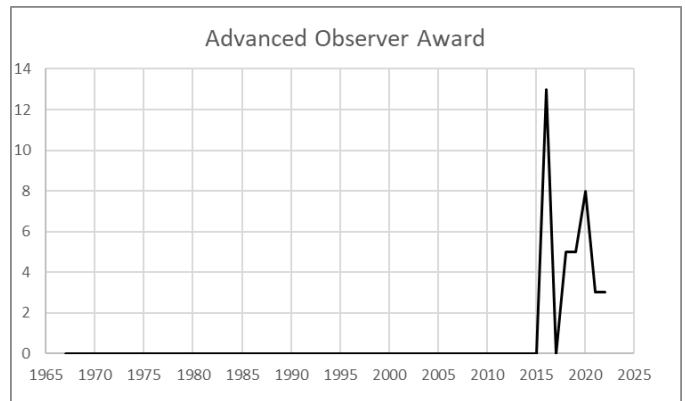
Certificates issued this year: 3
 Certificates issued ever: 45



Advanced Observer

Coordinator Name: Aaron Clevenson

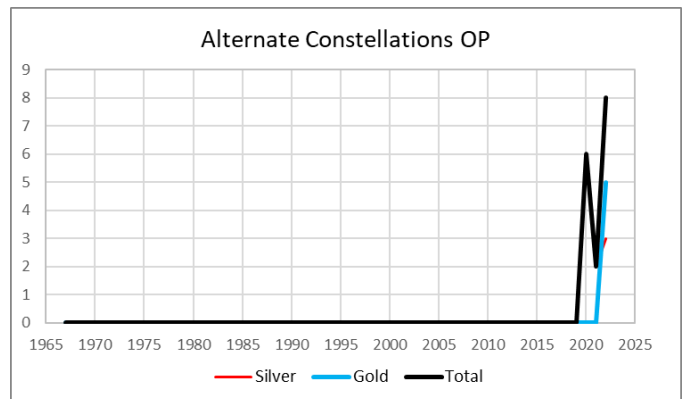
Certificates issued this year: 4
 Certificates issued ever: 47



Alternate Constellations

Coordinator Name: Brad Young

	Silver	Gold
Certificates issued this year:	5	5
Certificates issued ever:	5	12

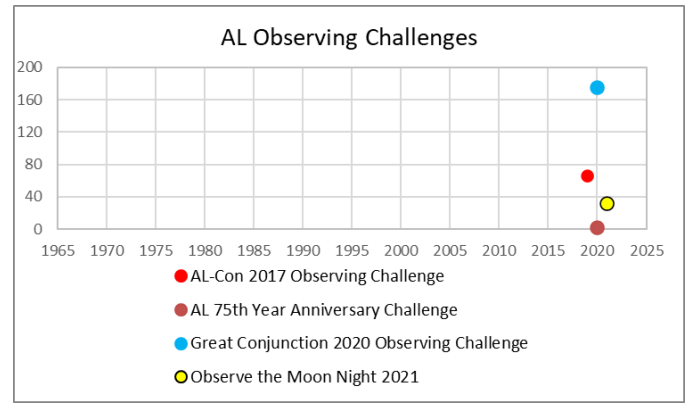


AL Observing Challenge Certificates

Coordinator Name: Cliff Mygatt

Certificates issued:

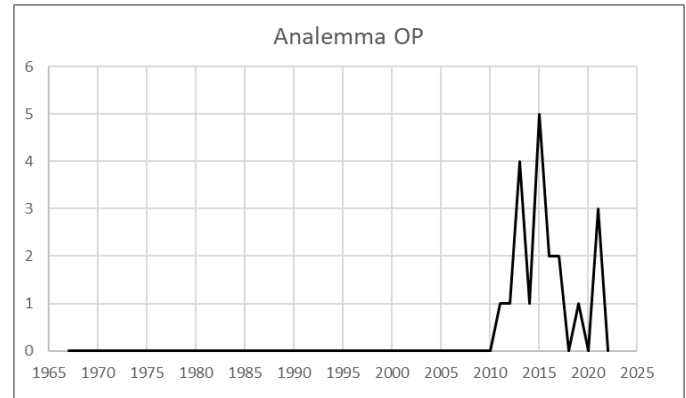
AL-Con 2017	66
AL 75 th Year Anniversary	2
Great Conjunction 2020	176
Observe the Moon 2021	32



Analemma Observing Program

Coordinator Name: Douglas Smith

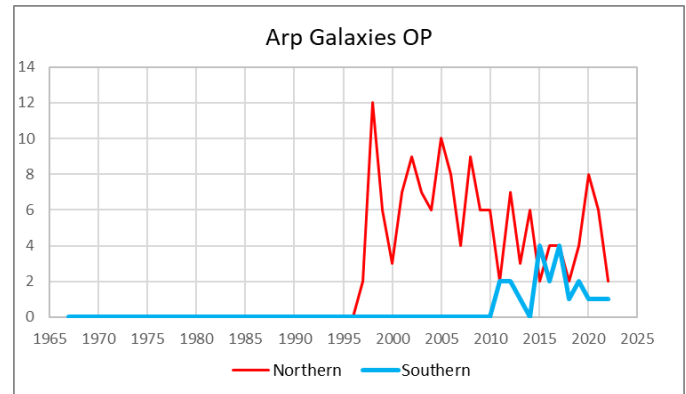
Certificates issued this year: 2
 Certificates issued ever: 20



Arp Peculiar Galaxies Observing Program

Coordinator Name: Marie Lott

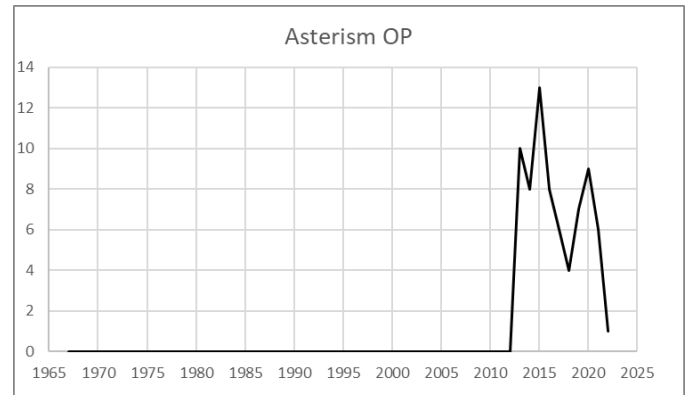
	North	South
Certificates issued this year:	8	2
Certificates issued ever:	149	21



Asterism Observing Program

Coordinator Name: Troy Stratton

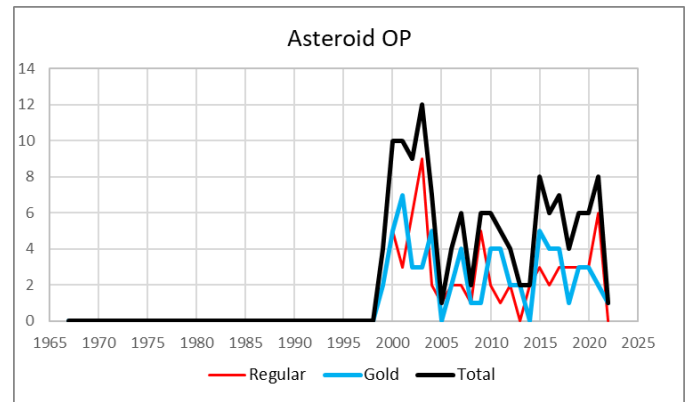
Certificates issued this year: 1
 Certificates issued ever: 72



Asteroid Observing Program

Coordinator Name: John Goar

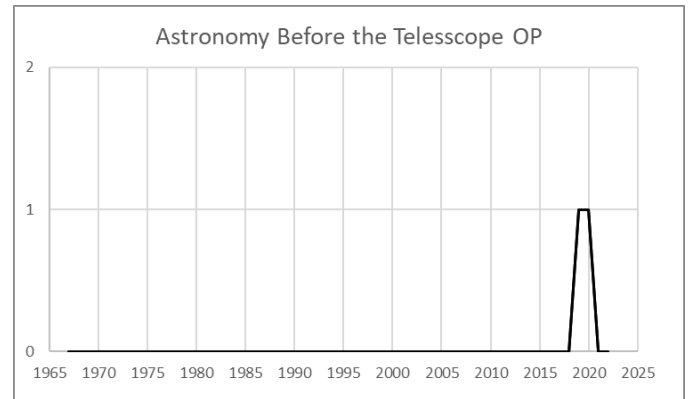
	Regular	Gold
Certificates issued this year:	2	3
Certificates issued ever:	65	69



Astronomy Before the Telescope Certificate

Coordinator Name: Steve Boerner

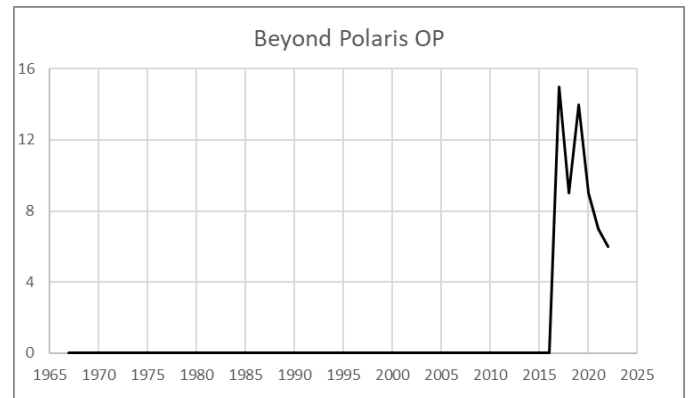
Certificates issued this year:	0
Certificates issued ever:	2



Beyond Polaris Observing Program

Coordinator Name: W. Maynard Pittendreigh

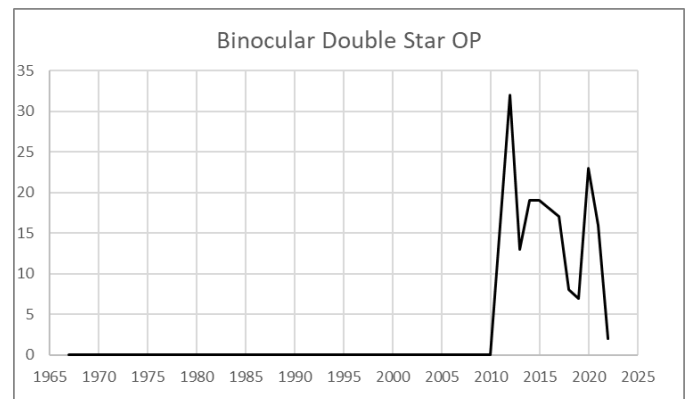
Certificates issued this year:	12
Certificates issued ever:	60



Binocular Double Star Observing Program

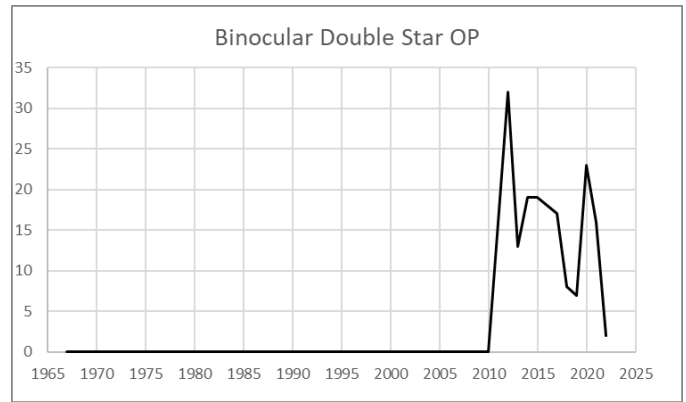
Coordinator Name: Bob Kerr

Certificates issued this year:	14
Certificates issued ever:	194



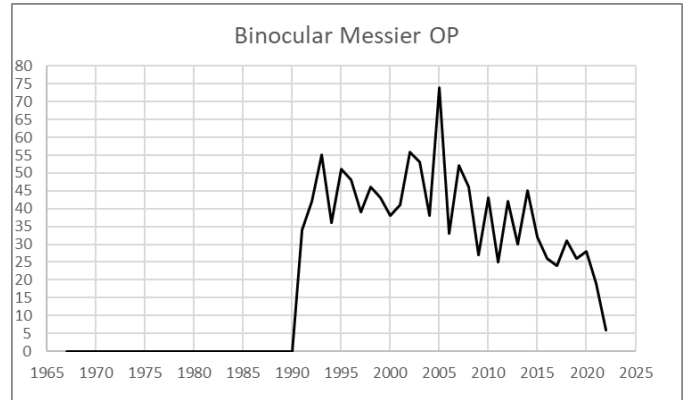
Binocular Master Observer Award
 Coordinator Name: Aaron Clevenson

Certificates issued this year: 3
 Certificates issued ever: 22



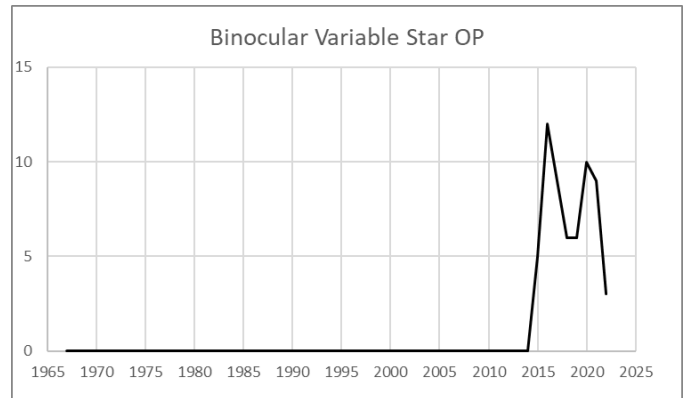
Binocular Messier Observing Program
 Coordinator Name: John Goar

Certificates issued this year: 15
 Certificates issued ever: 1236



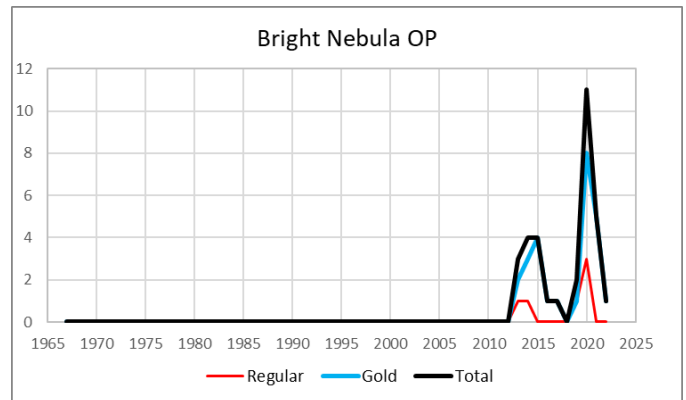
Binocular Variable Star Observing Program
 Coordinator Name: Robert Togni

Certificates issued this year: 8
 Certificates issued ever: 60



Bright Nebula Observing Program
 Coordinator Name: Bob Scott

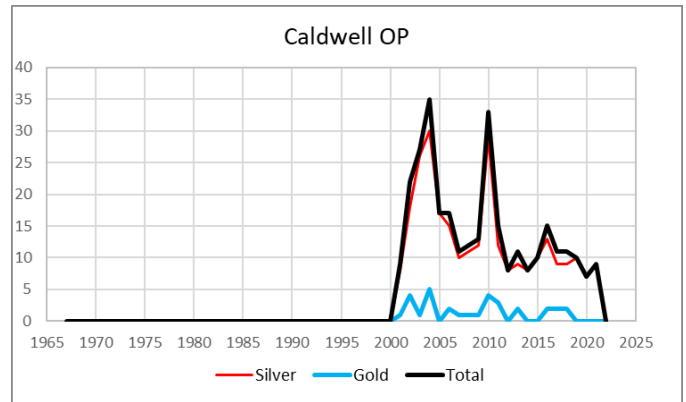
	Regular	Advanced
Certificates issued this year:	0	3
Certificates issued ever:	6	26



Caldwell Observing Program

Coordinator Name: Sue Rose

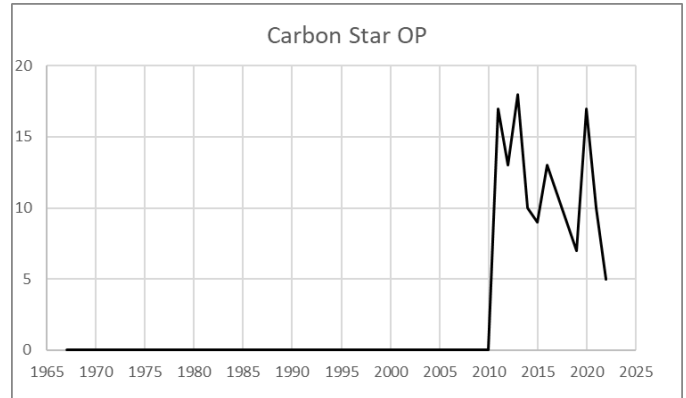
	Silver	Gold
Certificates issued this year:	9	0
Certificates issued ever:	284	31



Carbon Star Observing Program

Coordinator Name: Robert Togni

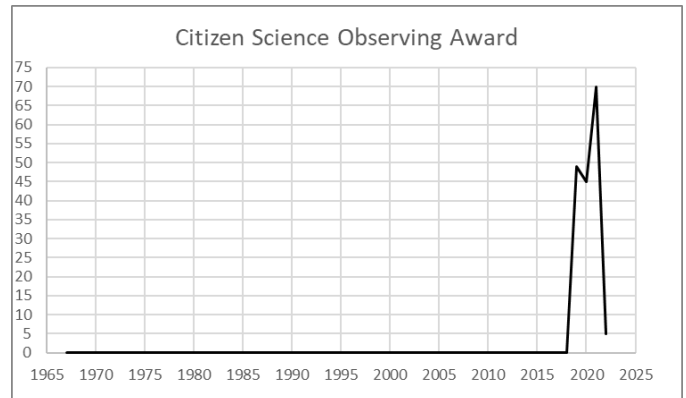
Certificates issued this year:	10
Certificates issued ever:	139



Citizen Science Observing Certificates

Coordinator Name: Al Lamperti

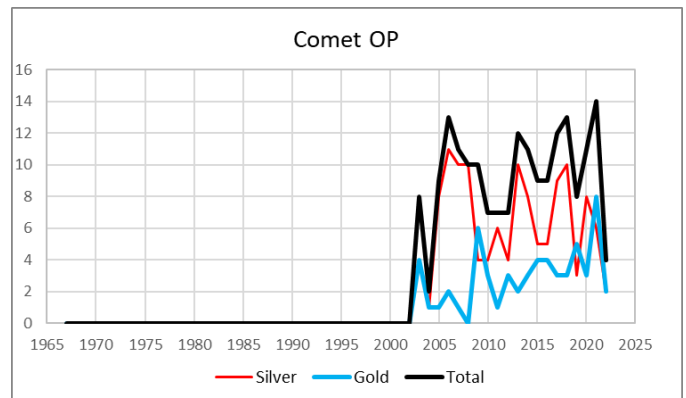
Certificates issued this year:	46
Certificates issued ever:	171



Comet Observing Program

Coordinator Name: Scott Kranz

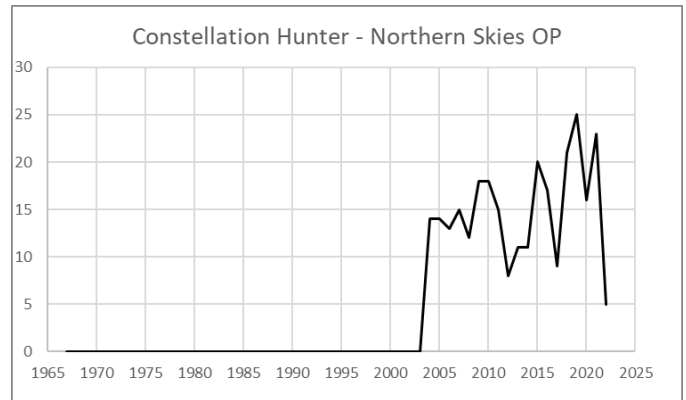
	Silver	Gold
Certificates issued this year:	7	8
Certificates issued ever:	128	59



**Constellation Hunter – Northern Skies
Observing Program**

Coordinator Name: Cliff Mygatt

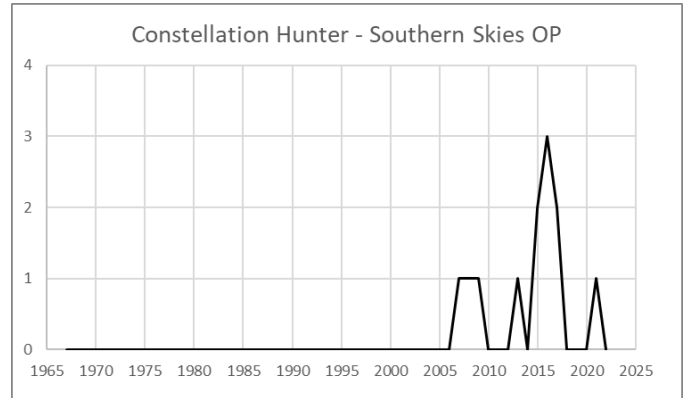
Certificates issued this year: 16
Certificates issued ever: 285



**Constellation Hunter – Southern Skies
Observing Program**

Coordinator Name: Cliff Mygatt

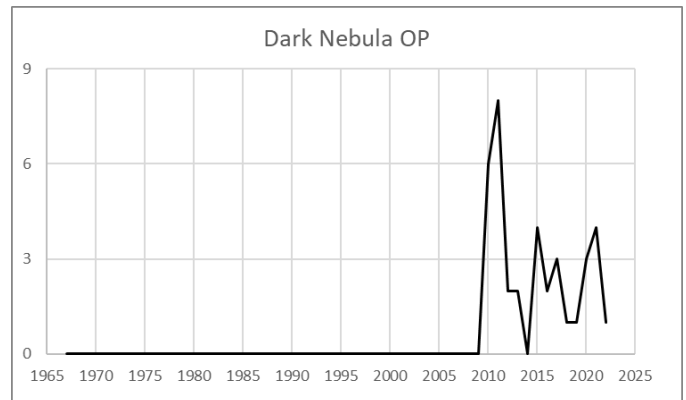
Certificates issued this year: 0
Certificates issued ever: 12



Dark Nebulae Observing Program

Coordinator Name: Kathy Machin

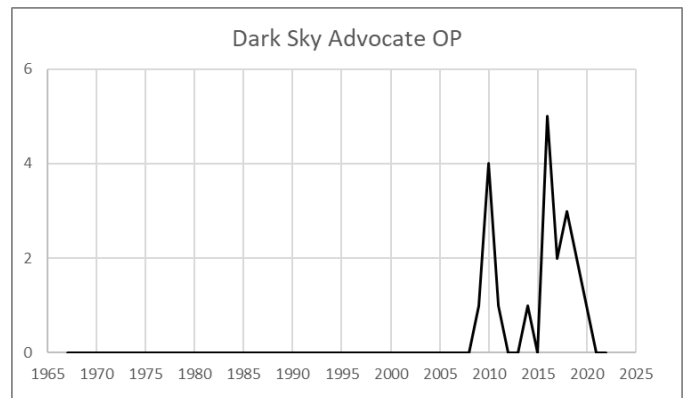
Certificates issued this year: 3
Certificates issued ever: 37



Dark Sky Advocate Observing Award

Coordinator Name: John Goss

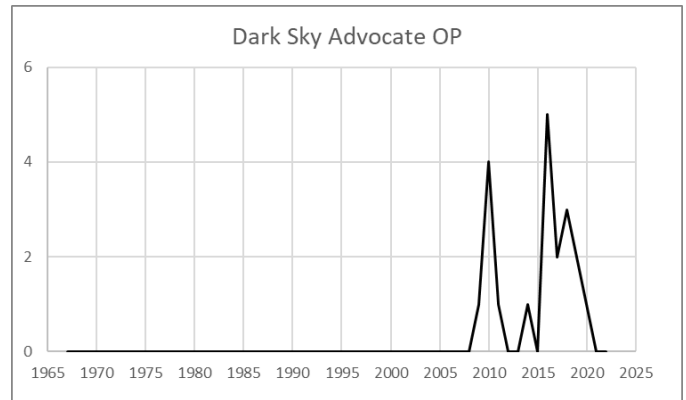
Certificates issued this year: 0
Certificates issued ever: 20



Deep Sky Binocular Observing Program

Coordinator Name: Cindy La Russa

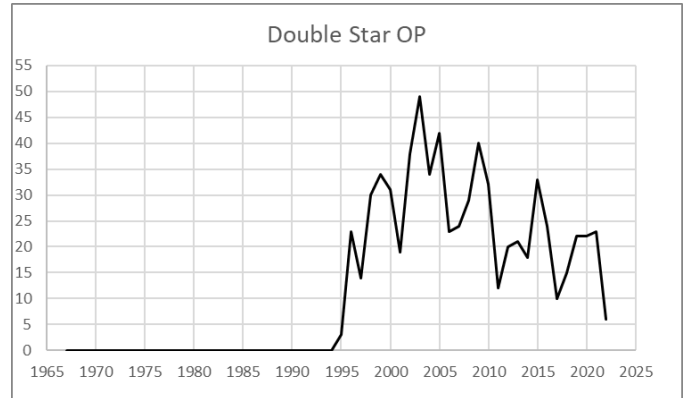
Certificates issued this year: 14
 Certificates issued ever: 440



Double Star Observing Program

Coordinator Name: Jon Schuchardt

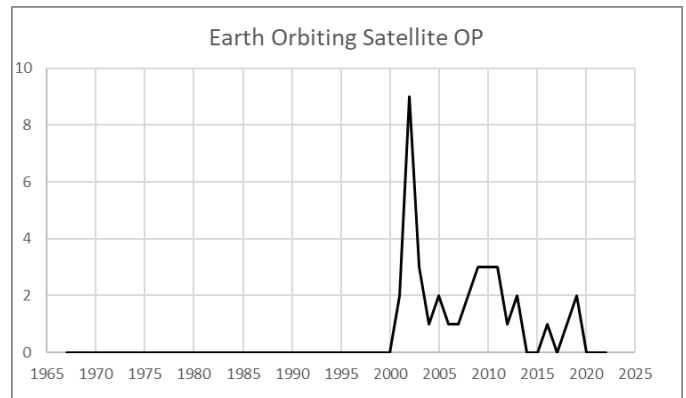
Certificates issued this year: 17
 Certificates issued ever: 694



Earth Orbiting Satellite Observing Program

Coordinator Name: Brad Young

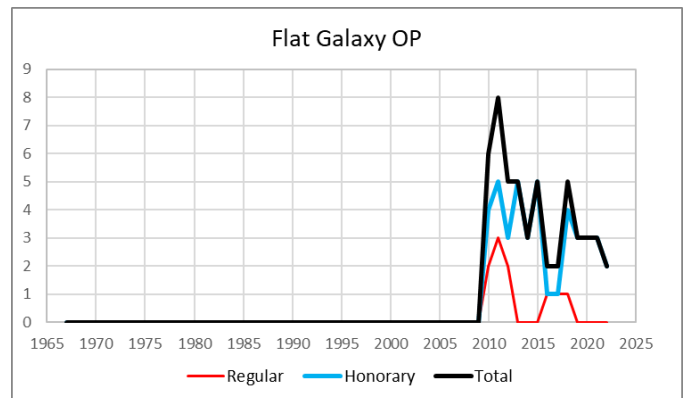
Certificates issued this year: 0
 Certificates issued ever: 37



Flat Galaxy Observing Program

Coordinator Name: Al Lamperti

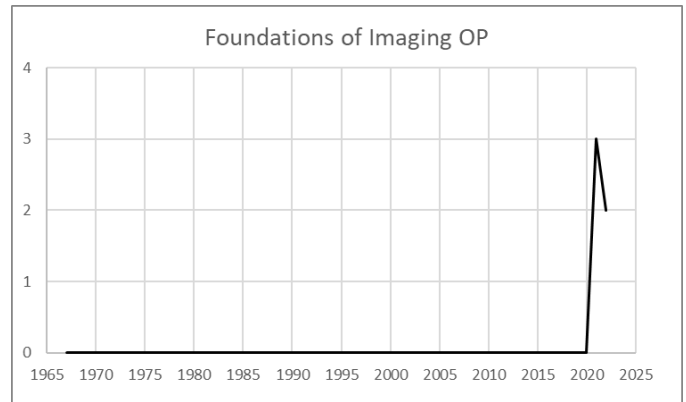
	Regular	Honorary
Certificates issued this year:	0	5
Certificates issued ever:	11	42



Foundations of Imaging Observing Program

Coordinator Name: Dan Crowson

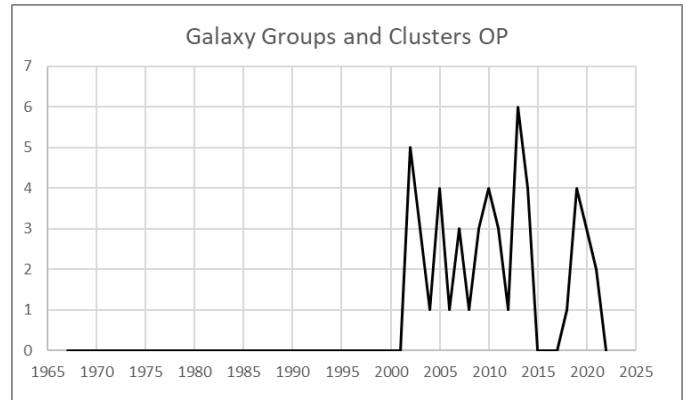
Certificates issued this year: 3
 Certificates issued ever: 5



Galaxy Groups and Clusters Observing Program

Coordinator Name: Russell Pinizotto

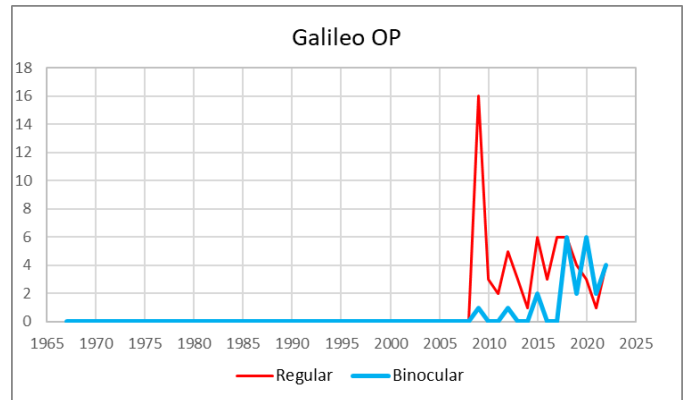
Certificates issued this year: 1
 Certificates issued ever: 50



Galileo Observing Program

Coordinator Name: Rodney Rynearson

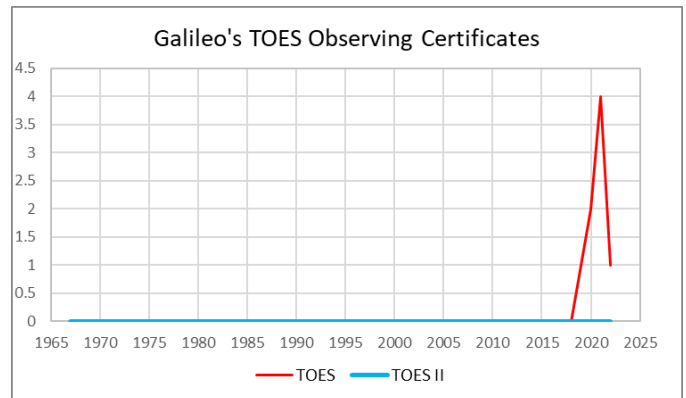
	Regular	Binocular
Certificates issued this year:	4	5
Certificates issued ever:	51	26



Galileo's T.O.E.S. Certificate3.5

Coordinator Name: Aaron Clevenson

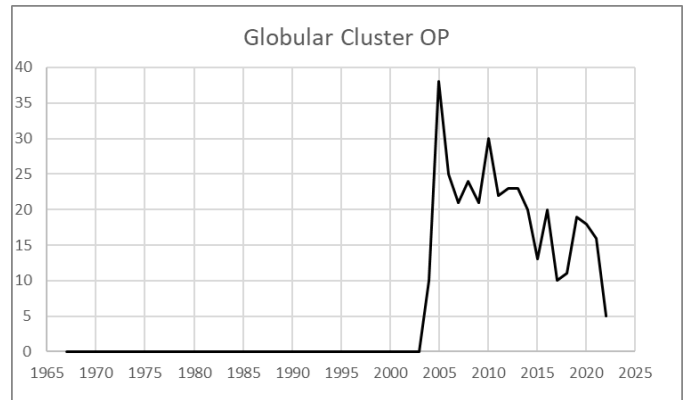
	TOES	TOES II
Certificates issued this year:	5	0
Certificates issued ever:	9	0



Globular Cluster Observing Program

Coordinator Name: Bob Kerr

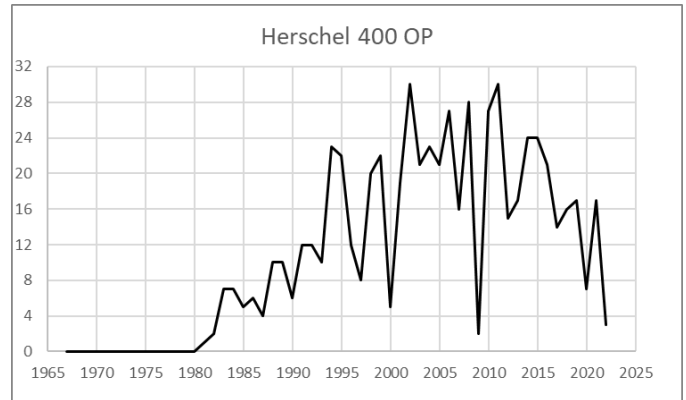
Certificates issued this year: 14
 Certificates issued ever: 377



Herschel 400 Observing Program

Coordinator Name: Jack Estes

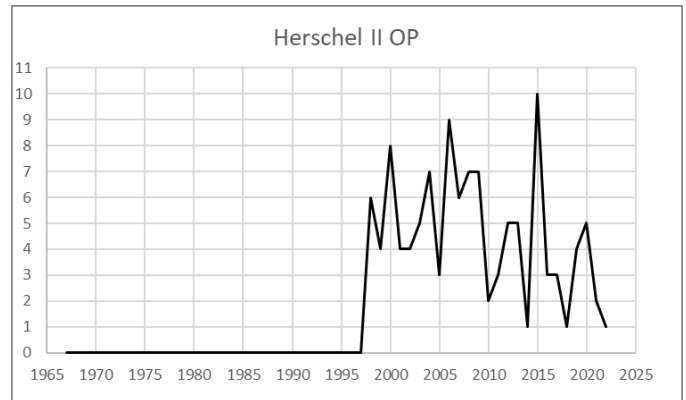
Certificates issued this year: 16
 Certificates issued ever: 647



Herschel II Observing Program

Coordinator Name: Candace Pratt

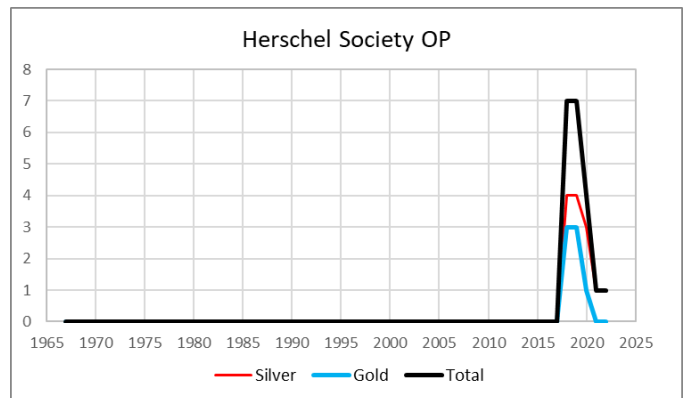
Certificates issued this year: 3
 Certificates issued ever: 115



Herschel Society Certificates

Coordinator Name: Cliff Mygatt

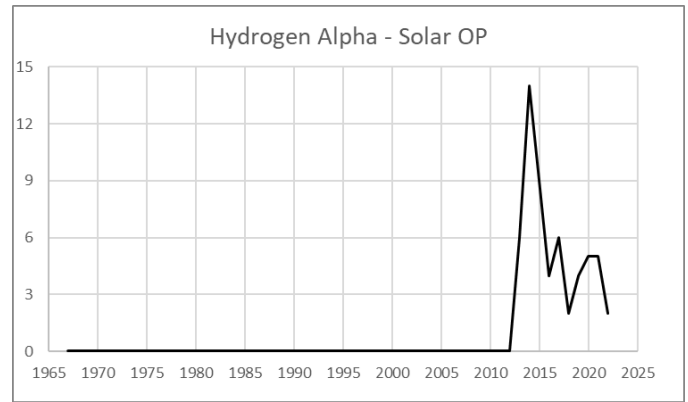
	Silver	Gold
Certificates issued this year:	1	2
Certificates issued ever:	14	10



Hydrogen-Alpha Solar Observing Program

Coordinator Name: Mark Simonson

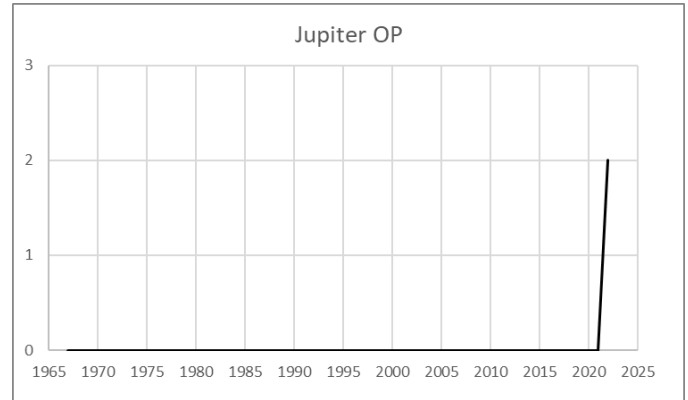
Certificates issued this year: 5
 Certificates issued ever: 58



Jupiter Observing Program

Coordinator Name: Aaron Clevenson

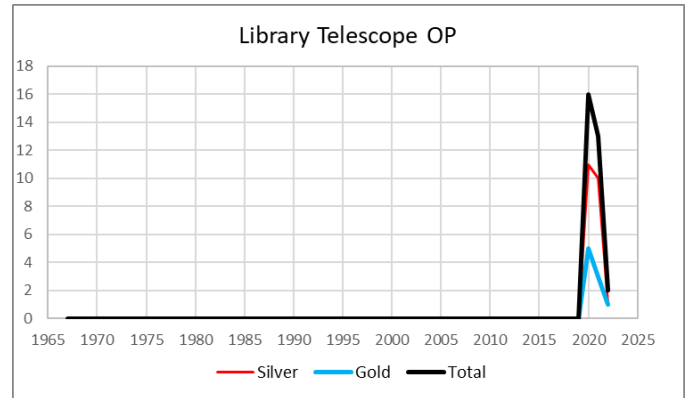
Certificates issued this year: 2
 Certificates issued ever: 2



Library Telescope Observing Award

Coordinator Name: Tom Lynch

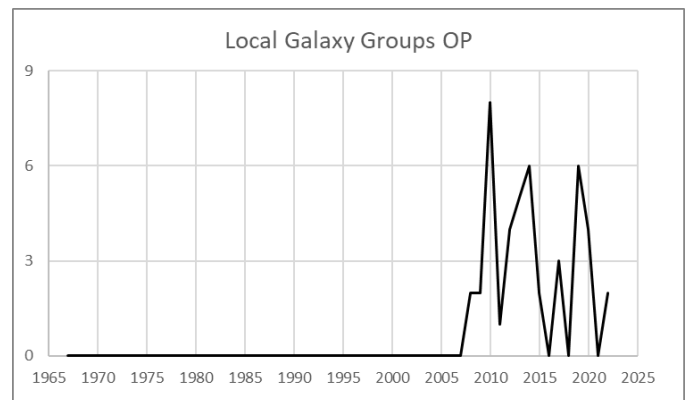
	Silver	Gold
Certificates issued this year:	9	2
Certificates issued ever:	22	9



Local Galaxy Groups and Galactic Neighborhood Observing Program

Coordinator Name: Mark Simonson

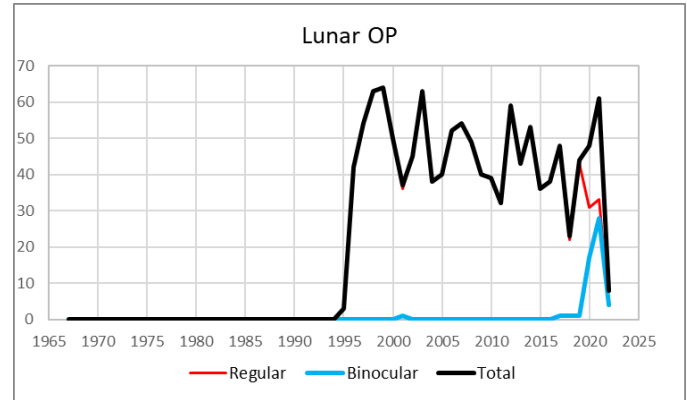
Certificates issued this year: 2
 Certificates issued ever: 49



Lunar Observing Program

Coordinator Name: Chuck Allen

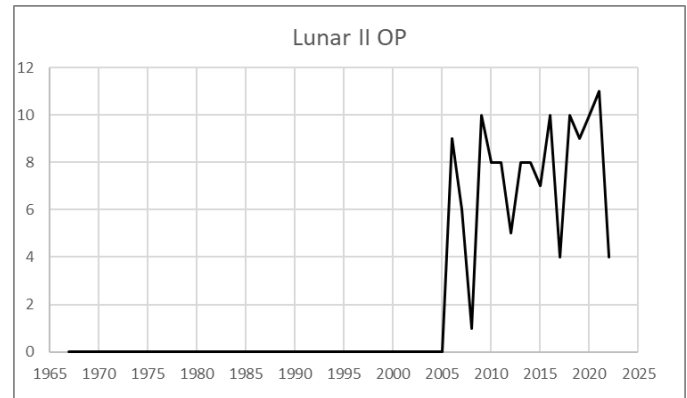
	Binocular	Regular
Certificates issued this year:	21	24
Certificates issued ever:	53	1158



Lunar II Observing Program

Coordinator Name: Cliff Mygatt

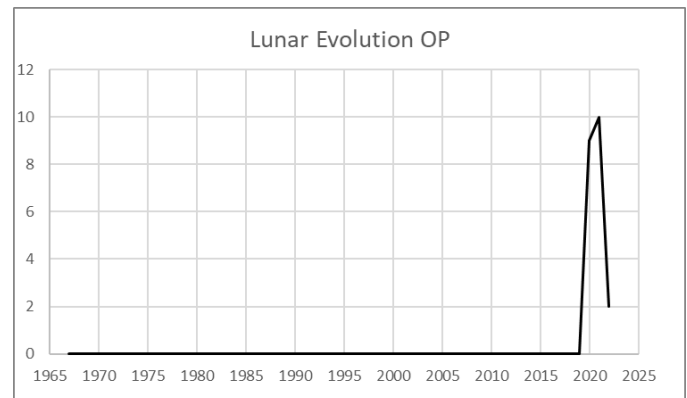
Certificates issued this year:	10
Certificates issued ever:	128



Lunar Evolution Observing Program

Coordinator Name: Chuck Allen

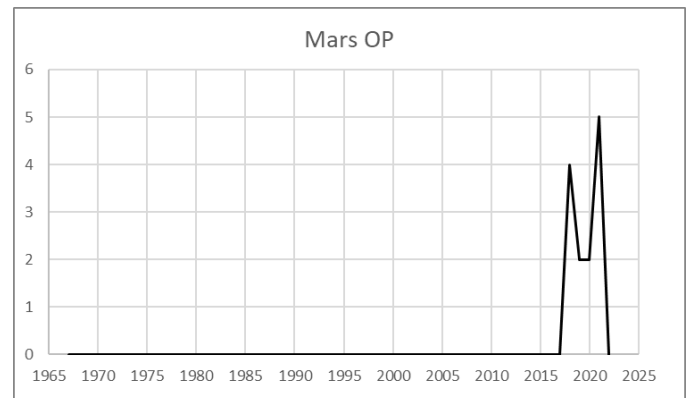
Certificates issued this year:	6
Certificates issued ever:	21



Mars Observing Program

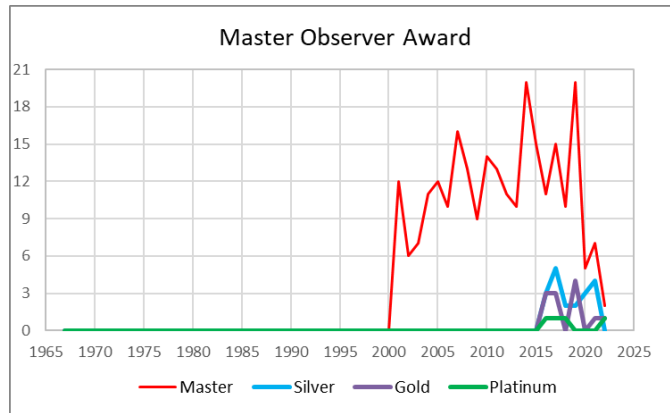
Coordinator Name: Mark Simonson

Certificates issued this year:	1
Certificates issued ever:	13



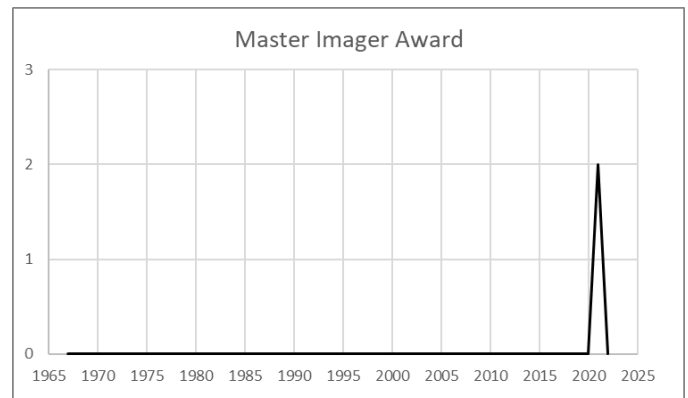
Master Observer Award
Master Observer – Silver Award
Master Observer – Gold Award
Master Observer – Platinum Award
 Coordinator Name: Aaron Clevenson

	Master	Silver	Gold	Platinum
Certificates issued this year:	9	2	2	1
Certificates issued ever:	249	20	11	4



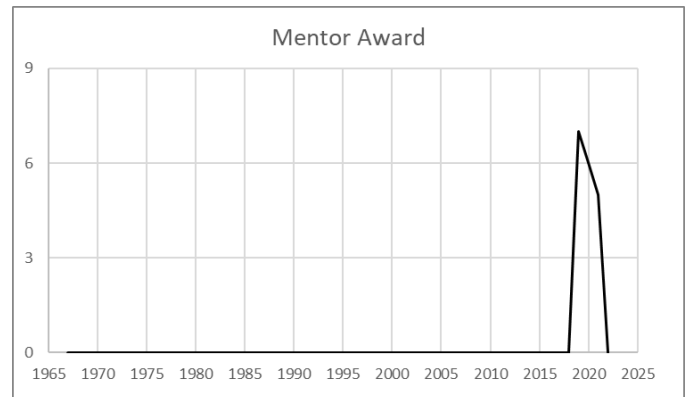
Master Imager Award
 Coordinator Name: Aaron Clevenson

Certificates issued this year:	1
Certificates issued ever:	2



Mentor Award
 Coordinator Name: Aaron Clevenson

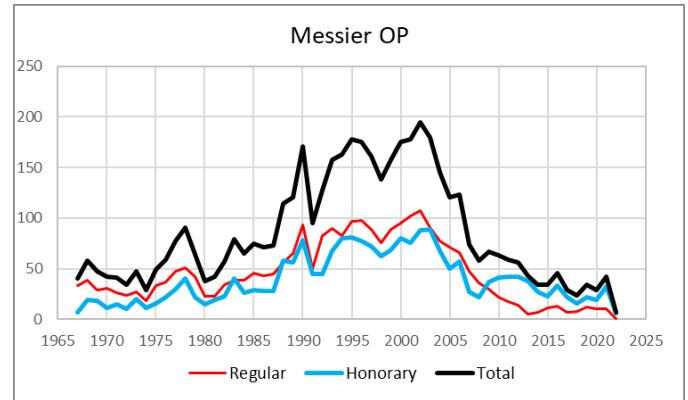
Certificates issued this year:	2
Certificates issued ever:	18



Messier Observing Program

Coordinator Name: Scott Kranz

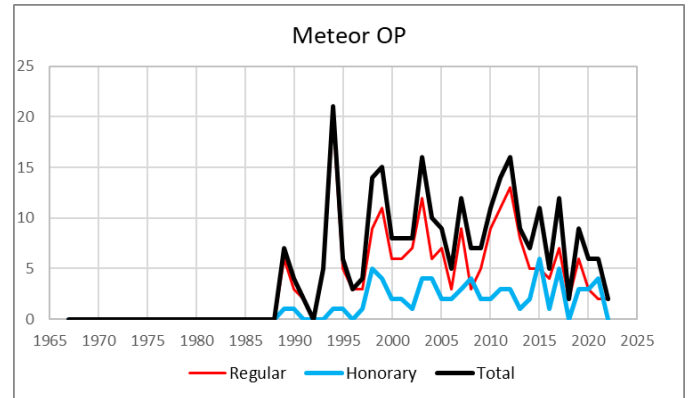
	Regular	Honorary
Certificates issued this year:	9	23
Certificates issued ever:	2554	2229



Meteor Observing Program

Coordinator Name: Scott Kranz

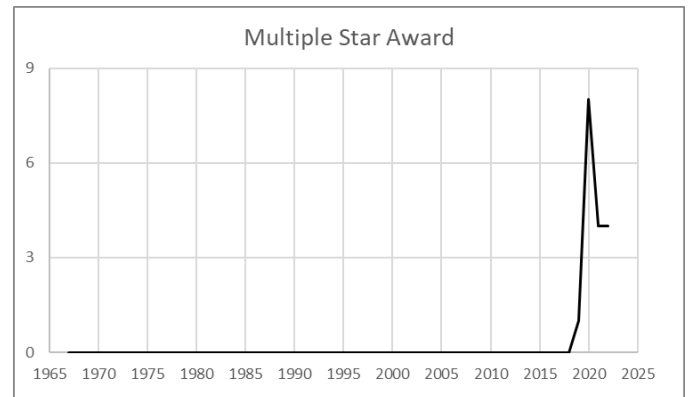
	Regular	Honorary
Certificates issued this year:	0	2
Certificates issued ever:	208	75



Multiple Star Observing Program

Coordinator Name: Steve McGaughey

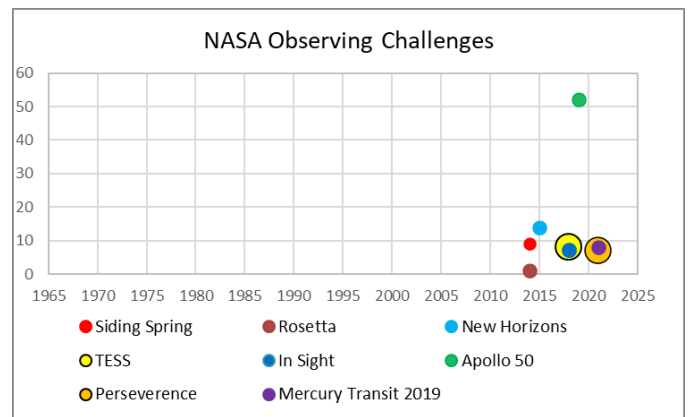
Certificates issued this year:	8
Certificates issued ever:	17



NASA Observing Challenge Certificates

Coordinator Name: Aaron Clevenson

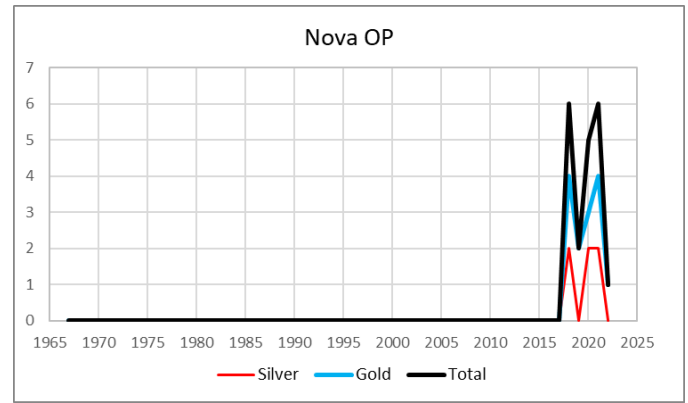
1. Siding Spring	(2013)	9
2. Rosetta	(2013)	1
3. New Horizons	(2014)	14
4. TESS	(2018)	8
5. InSight	(2018)	7
6. Apollo 50 th	(2019)	52
7. Mercury Transit	(2019)	8
8. Perseverance	(2021)	7



Nova Observing Program

Coordinator Name: Raymond Howard

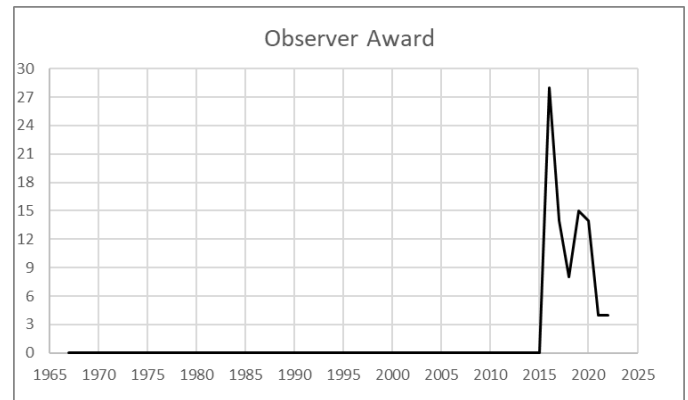
	Silver	Gold
Certificates issued this year:	2	5
Certificates issued ever:	6	14



Observer Award

Coordinator Name: Aaron Clevenson

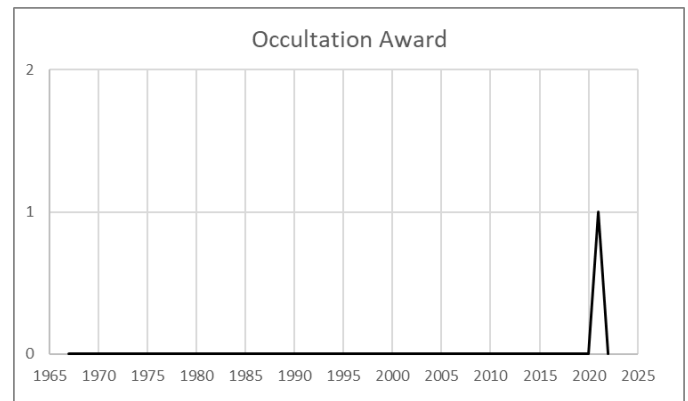
Certificates issued this year:	9
Certificates issued ever:	92



Occultation Observing Program

Coordinator Name: Steve Conard

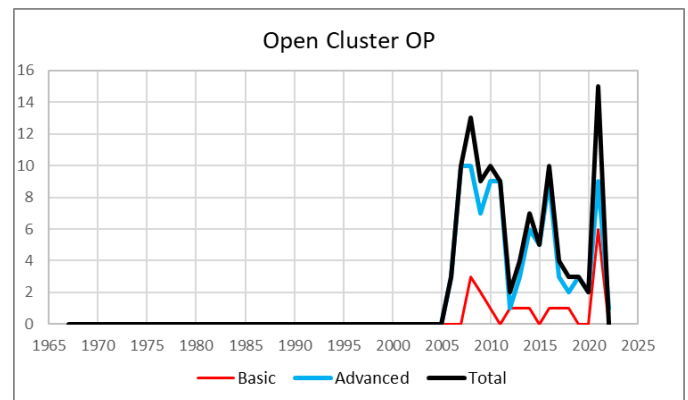
Certificates issued this year:	1
Certificates issued ever:	1



Open Cluster Observing Program

Coordinator Name: Cliff Mygatt

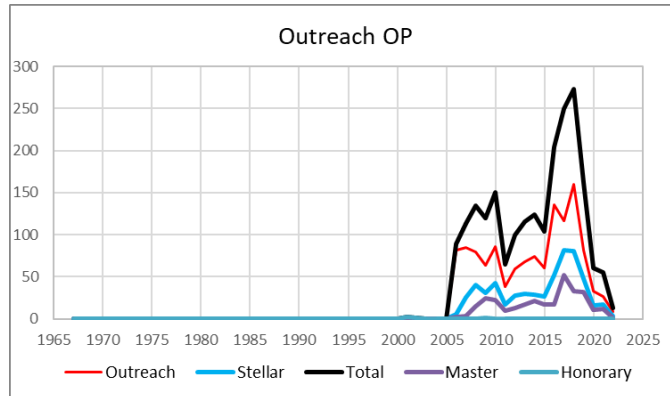
	Basic	Advanced
Certificates issued this year:	3	6
Certificates issued ever:	19	92



Outreach Observing Award

Coordinator Name: W. Maynard Pittendreigh

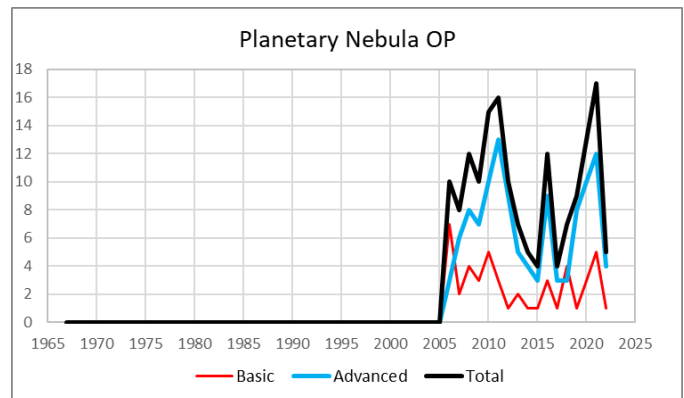
	Honorary	Outreach	Stellar	Master
Certificates issued this year:	0	31	12	8
Certificates issued ever:	4	1257	564	300



Planetary Nebulae (Northern and Southern) Observing Program

Coordinator Name: Ted Forte

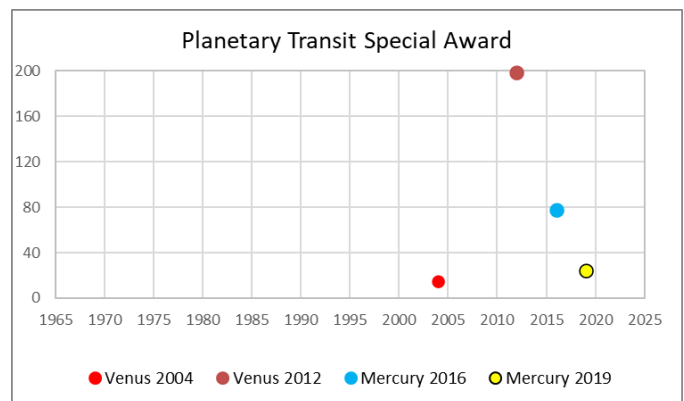
	Basic	Advanced
Certificates issued this year:	5	15
Certificates issued ever:	50	123



Planetary Transit Special Observing Award

Coordinator Name: Aaron Clevenson

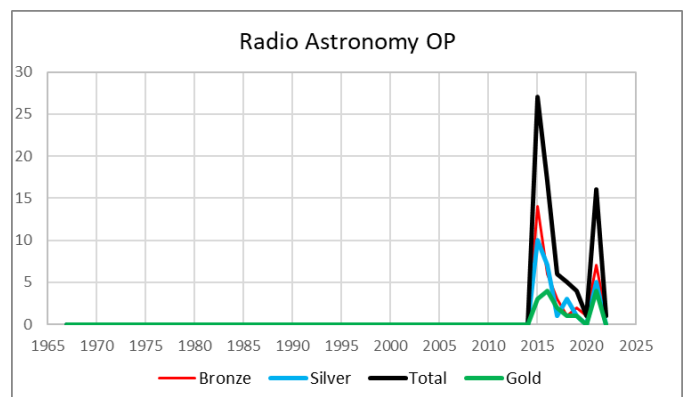
Venus 2004	20
Venus 2012	195
Mercury 2016	78
Mercury 2019	24



Radio Astronomy Observing Program

Coordinator Name: Steve Boerner

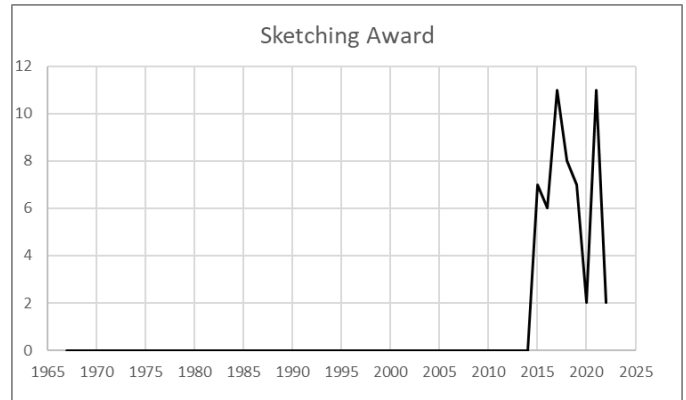
	Bronze	Silver	Gold
Certificates issued this year:	6	4	4
Certificates issued ever:	36	27	15



Sketching Observing Award

Coordinator Name: Cindy L. Krach

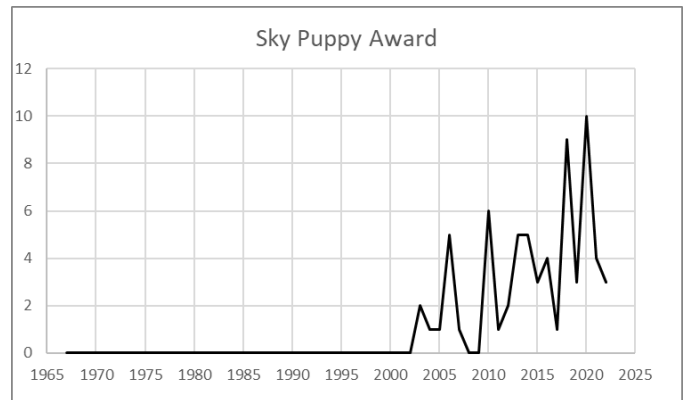
Certificates issued this year: 11
 Certificates issued ever: 54



Sky Puppy Observing Program

Coordinator Name: Aaron Clevenson

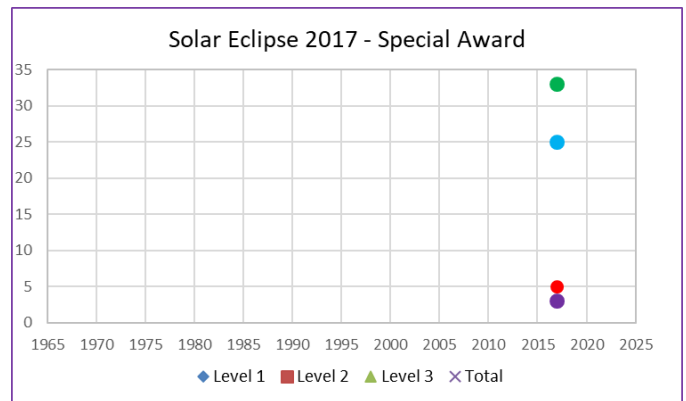
Certificates issued this year: 6
 Certificates issued ever: 76



Solar Eclipse – 2017 Special Observing Award

Coordinator Name: Aaron Clevenson

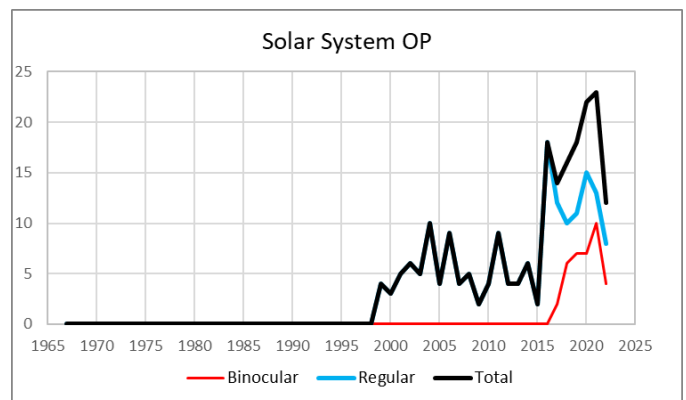
Certificates issued:
 Level 1: 5
 Level 2: 3
 Level 3: 25



Solar System Observing Program

Coordinator Name: Chuck Allen

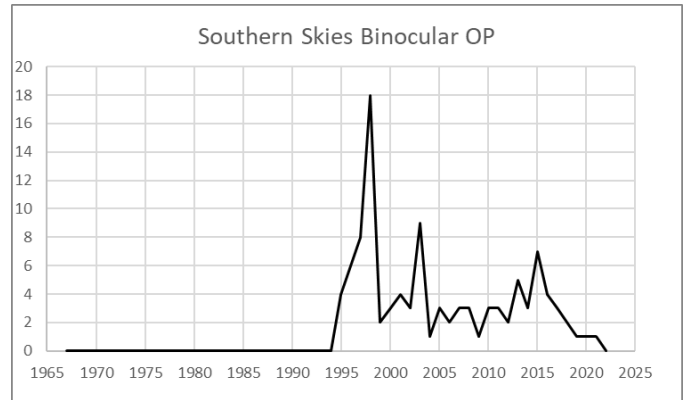
	Binocular	Regular
Certificates issued this year:	13	17
Certificates issued ever:	36	173



Southern Skies Binocular Observing Program

Coordinator Name: Cindy La Russa

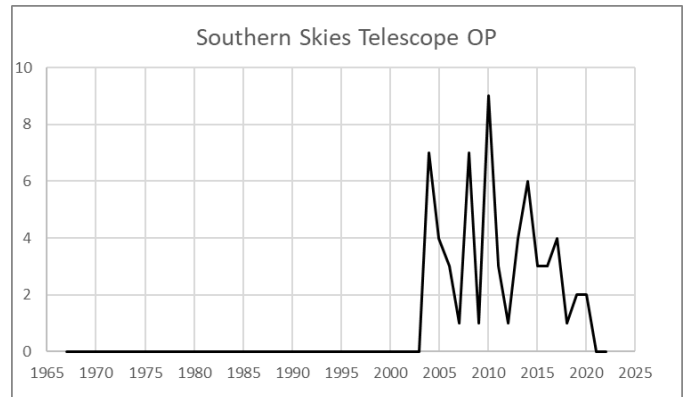
Certificates issued this year: 0
Certificates issued ever: 105



Southern Skies Telescopic Observing Programs

Coordinator Name: Kathy Machin

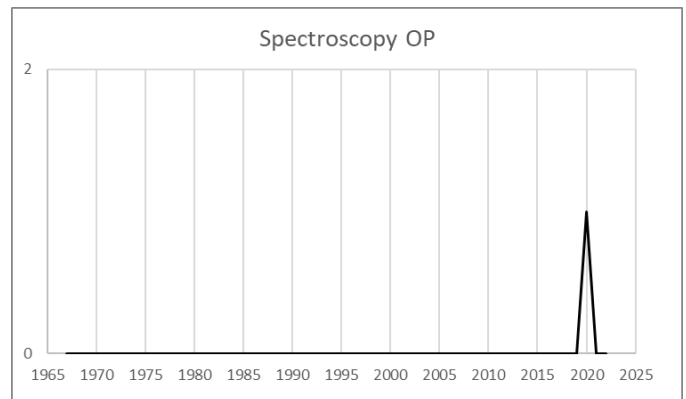
Certificates issued this year: 1
Certificates issued ever: 62



Spectroscopy Observing Program

Coordinator Name: Steve Boerner

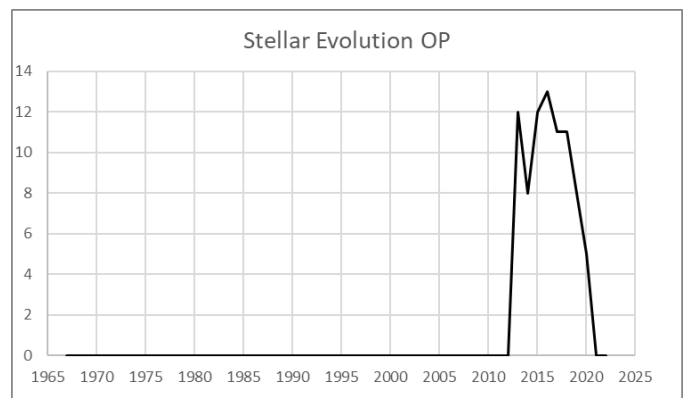
Certificates issued this year: 0
Certificates issued ever: 1



Stellar Evolution Observing Program

Coordinator Name: Bill Pellerin

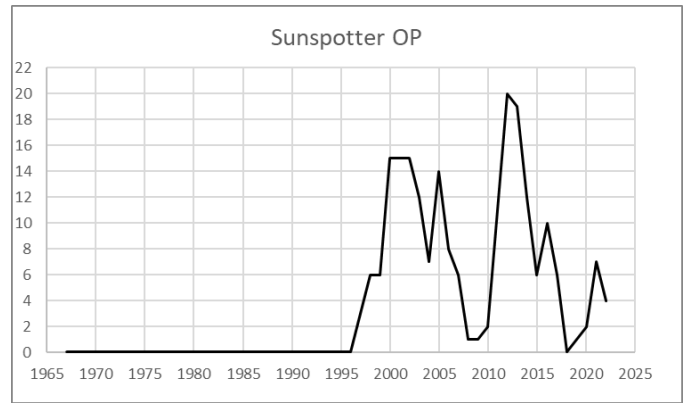
Certificates issued this year: 0
Certificates issued ever: 80



Sunspotter Observing Program

Coordinator Name: Scott Kranz

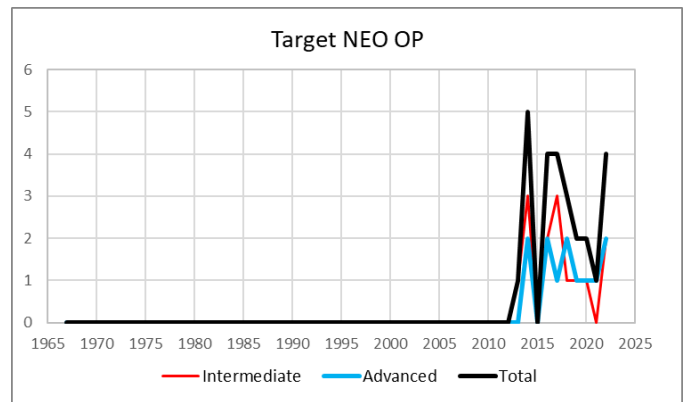
Certificates issued this year: 10
 Certificates issued ever: 209



Target NEO Observing Program

Coordinator Names: Dolores Hill and Carl Hergenrother

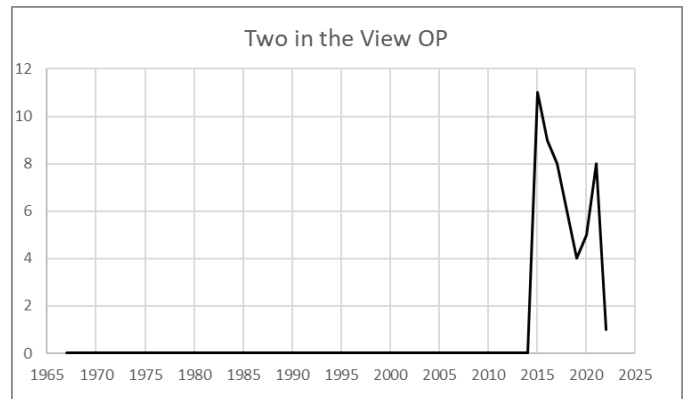
	Intermediate	Advanced
Certificates issued this year:	2	2
Certificates issued ever:	14	12



Two in the View Observing Program

Coordinator Name: Bob Scott

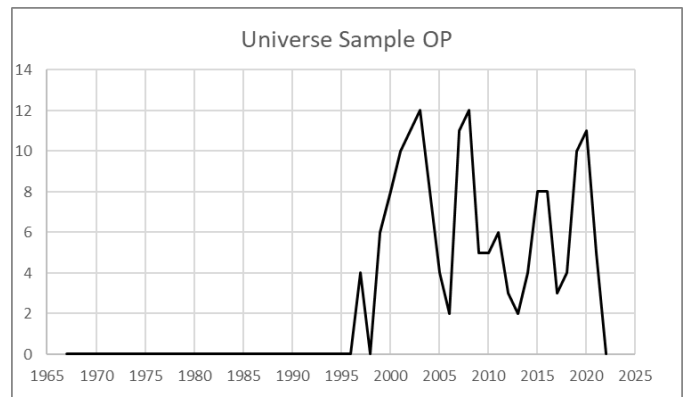
Certificates issued this year: 7
 Certificates issued ever: 52



Universe Sampler Observing Program

Coordinator Name: Amelia Goldberg

Certificates issued this year: 0
 Certificates issued ever: 163

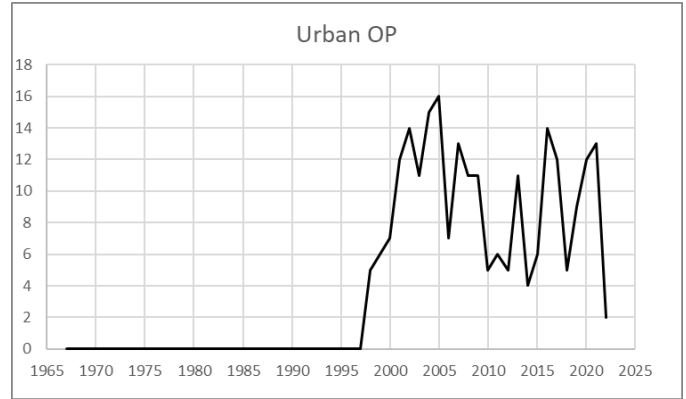


Urban Observing Program

Coordinator Name: Terry N. Trees

Certificates issued this year: 2

Certificates issued ever: 232

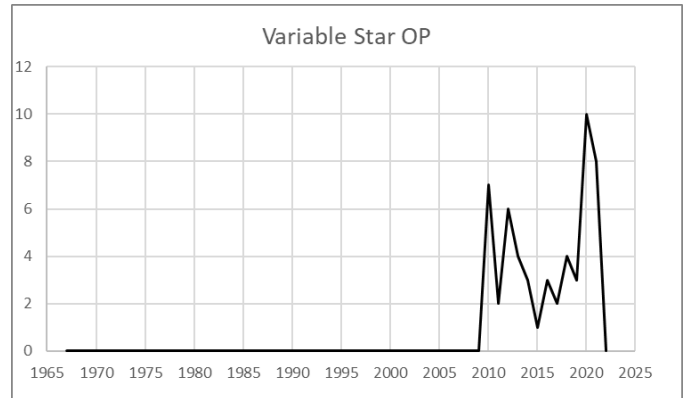


Variable Star Observing Program

Coordinator Name: Robert Togni

Certificates issued this year: 3

Certificates issued ever: 53

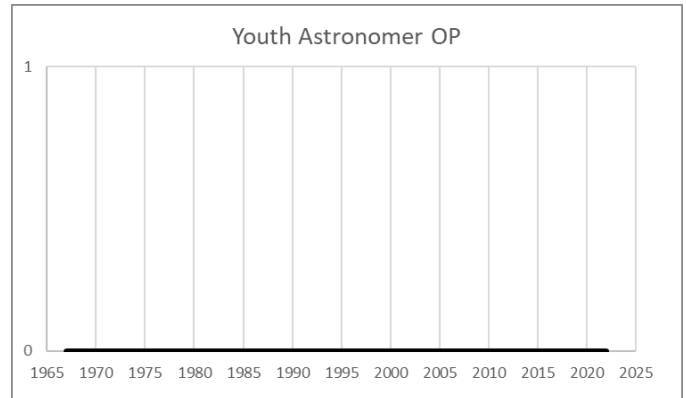


Youth Astronomer Observing Program

Coordinator Name: Maynard Pittendreigh

Certificates issued this year: 0

Certificates issued ever: 0



Astronomical League certifications fall into these classifications:

- Observing Programs – Require observation, count towards the Master Observer Progression, announced in the Reflector Magazine, and recorded in the database.
- Observing Awards – Do not require observation, sometimes count towards the Master Observer Progression, announced in the Reflector Magazine, and recorded in the database.
- Special Observing Awards – Require observation, designed to commemorate a specific one-time astronomical event, does not count towards the Master Observer Progression, announced in the Reflector Magazine, and recorded in the database.
- Observation Challenges – Usually only include a certificate, no pin. Always include an outreach component. These two groups of Observing Challenges have been done:
 - AL Observation Challenges – usually of significant astronomical events.
 - NASA Observing Challenges – usually associated with significant NASA events.
- Observing Certificates – Often require observation, done in support and as extensions of the Observing Programs, does not count towards the Master Observer Progression, announced in the Reflector magazine, and recorded in the database.
- 4 downloadable certificates – available to anyone and not recorded in the database or announced in the Reflector magazine.

Many Observing Programs and Observing Awards contain multiple levels and options for completion.

- Those with three levels:
 - Outreach Award
 - Radio Astronomy Observing Program
 - Solar Eclipse – 2017 Special Observing Award
- These include a partial level of completion as well as a complete certification:
 - Asteroid Observing Program: silver and gold
 - Bright Nebula Observing Program: regular and gold
 - Caldwell Observing Program: silver and gold. This is the only example where the two levels count as independent certifications.
 - Comet Observing Program: silver and gold
 - Flat Galaxies Observing Program: regular and honorary
 - Herschel Society: silver and gold
 - Lunar Observing Program: regular and binocular
 - Messier Observing Program: regular and honorary
 - Meteor Observing Program: 6, 12, 18, 24, 30, and 36 hours
 - Target NEO Observing Program: intermediate and advanced
 - Nova Observing Program: silver and gold
 - Open Cluster Observing Program: basic and advanced
 - Planetary Nebula Observing Program: basic and advanced
 - Solar System Observing Program: telescopic and binocular
- Many Observing Programs include options for manual target acquisition as well as device-aided target acquisition.
- Many Observing Programs include options for visual observing as well as imaging.
- Many Observing Programs include options for binocular as well as telescopic observations.