

Astronomical League

Observing Program Division

Annual Report 2020

Submitted by the Astronomical League Observing Program Division Directors:

Aaron Clevenson
Cliff Mygatt
Al Lamperti
Maynard Pittendreigh

Highlights for the year:

2019-2020 has been a good year for the Astronomical League Observing Programs. A total of 857 certificates and/or pins were issued during the previous year (2019) and as of this time, a grand total of 15,763 certificates have been issued by the Observing Program Division. At the end of this report, there is a detailed analysis of all of the 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.

At the AL-Con in 2019 there were a total of 3 proposals. All were adopted:

- **Spectroscopy Observing Program**
- **Multiple Star Observing Program**
- **Mercury Transit 2019 Special Observing Award**

Additionally, these certifications were adopted:

- Apollo 50th NASA Observing Challenge
- AL-Con 2019 Observing Award
- Lunar Evolution Award
- Additional certificates for Citizen Science are being added on an on-going basis
- Many new binocular awards associated with existing Observing Programs.
- Many new imaging awards associated with existing Observing Programs.

These proposed Observing Programs for consideration by Council at the AL-Con in 2020 were reviewed by Observing Program Directors. A summary of those reviews and recommendations was submitted to the President, John Goss and to the Council via email.

The list of known Observing Program Proposals for review at the 2020 AL-Con are:

- Alternate Constellations
- Foundations of Imaging Observing Program
- Library Telescope Observing Award
- Master Imager Award

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

- Galileo Observing Program - Rodney Rynearson
- Double Star Observing Program - Jon Schuchardt
- Radio Astronomy Observing Program - Steve Boerner
- Mars Observing Program - Mark Simonson
- Lunar Observing Program – Chuck Allen

The Observing Program Directors have identified four areas of major emphasis and consider these Special Programs. Each is headed by one of the Observing Program Directors.

- Outreach Special Program (Maynard Pittendreigh)
 - Outreach Observing Program
 - Library Telescope Award (if adopted)
- Citizen Science Special Program (Al Lamperti)
 - All Citizen Science Observing Awards
- The AL's Herschel Society (Cliff Mygatt)
 - Herschel 400 Observing Program
 - Herschel-II Observing Program
 - The Herschel Society – Silver Certificate
 - The Herschel Society – Gold Certificate
 - The Herschel Hustle Certificate
- The Master Observer Progression (Aaron Clevenson)
 - Observer Award
 - Master Observer Award
 - Advanced Observer Award
 - Master Observer – Silver Level Award
 - Master Observer – Gold Level Award
 - Master Observer – Platinum Level Award
 - Binocular Master Observer
 - Master Imager Award (if adopted)

Observing Programs by activity level:

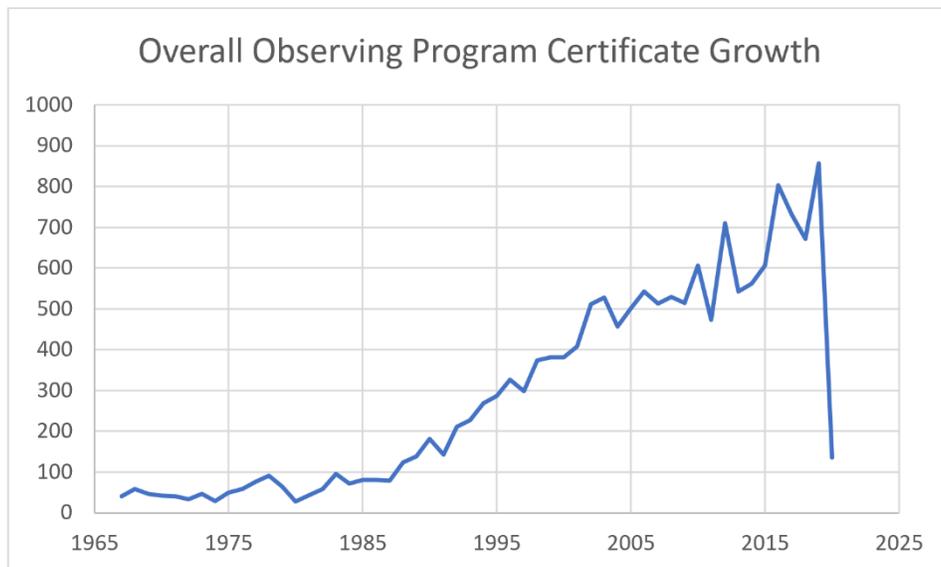
- Those programs with an average of over 50 certificates in the past year:
 - Outreach Award (171 in 2019)
 - AL-Con 2019 Observing Award (66 in 2019)
 - Lunar Observing Program (64 in 2019)
 - Apollo 50th NASA Observing Challenge Certificate (52 in 2019)
- Those programs with an average between 25 and 49 in the past year:
 - Citizen Science Certificates (48 awards in 2019)
 - Messier Observing Program (34 awards in 2019)
 - Binocular Messier Observing Program (26 awards in 2019)
 - Constellation Hunter – Northern Skies Observing Program (25 in 2019)

- Those programs with an average between 10 and 24 in the past year:
 - Beyond Polaris Observing Program
 - Binocular Double Star Observing Program
 - Caldwell Observing Program
 - Double Star Observing Program
 - Globular Cluster Observing Program
 - Herschel 400 Observing Program
 - Observer Award
 - Master Observer Award
 - Solar System Observing Program
- Those programs with an average between 5 and 9 in the past year:
 - Asterism Observing Program
 - Asteroid Observing Program
 - Binocular Variable Star Observing Program
 - Carbon Star Observing Program
 - Comet Observing Program
 - Deep Sky Binocular Observing Program
 - Herschel Society Certificates
 - Local Galaxy Groups and Galactic Neighborhood Observing Program
 - Lunar II Observing Program
 - Advanced Observer Award
 - Binocular Master Observer Award
 - Galileo Observing Program
 - Meteor Observing Program
 - Mercury Transit 2019 Special Observing Award
 - Planetary Nebula Observing Program
 - Sketching Observing Award
 - Stellar Evolution Observing Program
 - Universe Sampler Observing Program
 - Urban Observing Program
- Those programs with an average of 4 or less in the past year:
 - Active Galactic Nuclei Observing Program
 - Advanced Binocular Double Star Observing Program
 - Analemma Observing Program
 - Arp Peculiar Galaxy – Northern Observing Program
 - Arp Peculiar Galaxy – Southern Observing Program
 - Astronomy Before the Telescope Observing Certificate
 - Bright Nebula Observing Program
 - Constellation Hunter – Southern Skies Observing Program
 - Dark Nebula Observing Program
 - Dark Sky Advocate Observing Award
 - Earth Orbiting Satellite Observing Program
 - Flat Galaxies Observing Program

- Galaxy Groups and Clusters Observing Program
- Hydrogen-Alpha Solar Observing Program
- Mars Observing Program
- Master Observer – Silver Observing Award
- Master Observer – Gold Observing Award
- Master Observer – Platinum Observing Award
- Multiple Star Observing Program
- NEO Observing Program
- Open Cluster Observing Program
- Radio Astronomy Observing Program
- Sky Puppy Observing Program
- Southern Skies Binocular Observing Program
- Southern Skies Telescope Observing Program
- Spectroscopy Observing Program
- Sunspotter Observing Program
- Two in the View Observing Program
- Variable Star Observing Program

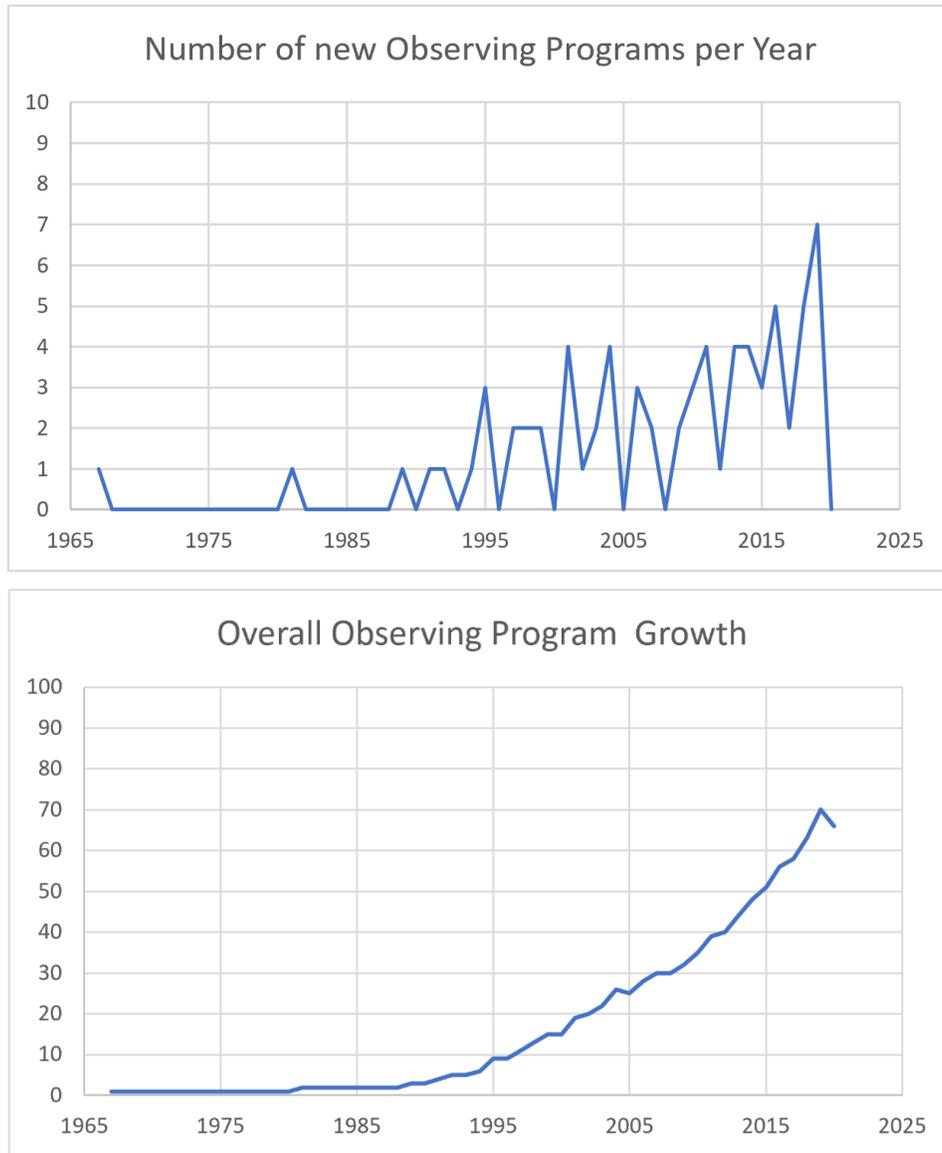
Accomplishments for the Overall AL Observing Program:

- Seven new Observing Program Coordinators were appointed to existing Programs.
- One additional NASA Observing Challenge was identified and introduced to the membership (Apollo - 50 years).
- These Observing Program Manuals have been reproduced:
 - Carbon Star
 - Math for Amateur Astronomers
 - Planetary Nebula
 - Sky Puppies
 - Visual Observing Journals



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.

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.



At this time 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 have 4 each
- Three is the best practice maximum that we follow. We have a total of 35 different coordinators at this time coordinating 63 Observing Programs and Awards. There are a total of 106 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

National Observing Program Directors

June 9, 2020

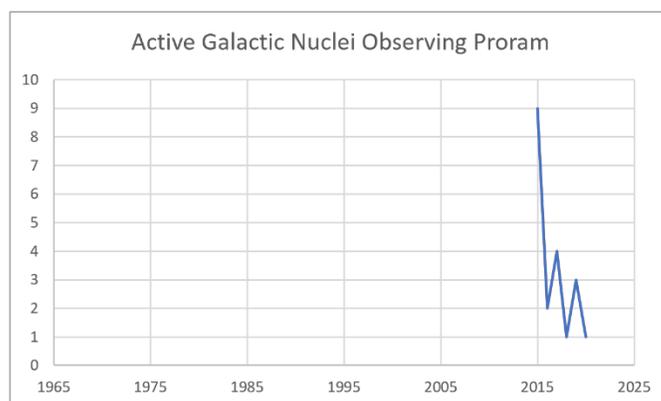
Individual Observing Program Statuses

Active Galactic Nuclei Observing Program

Coordinator Name: Al Lamperti

Certificates issued this year: 3

Certificates issued ever: 20

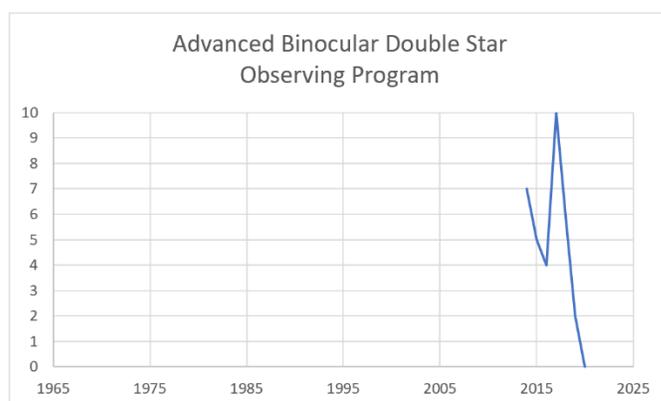


Advanced Binocular Double Star Observing Program

Coordinator Name: Bob Kerr

Certificates issued this year: 2

Certificates issued ever: 34

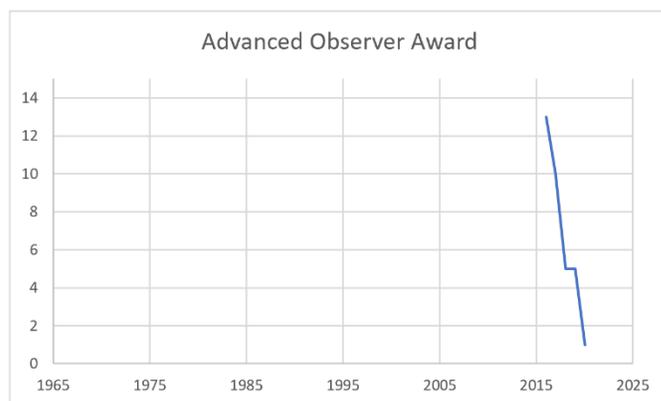


Advanced Observer

Coordinator Name: Aaron Clevenson

Certificates issued this year: 5

Certificates issued ever: 34

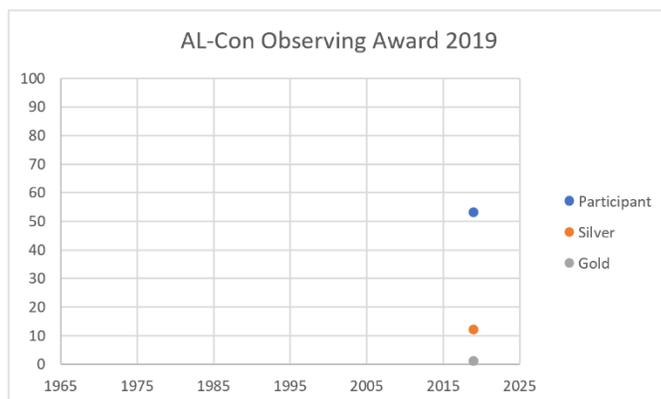


AL-Con 2019 Observing Challenge Certificate

Coordinator Name: Aaron Clevenson

Certificates issued:

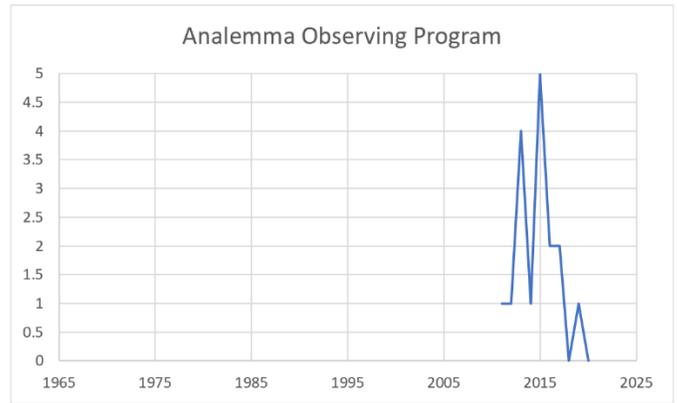
Gold	Silver	Participant
1	12	53



Analemma Observing Program

Coordinator Name: Douglas Smith

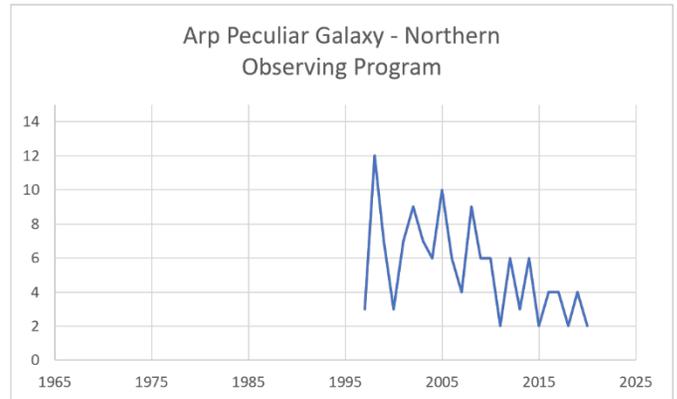
Certificates issued this year: 1
Certificates issued ever: 17



Arp Peculiar Galaxies – Northern Skies Observing Program

Coordinator Name: Marie Lott

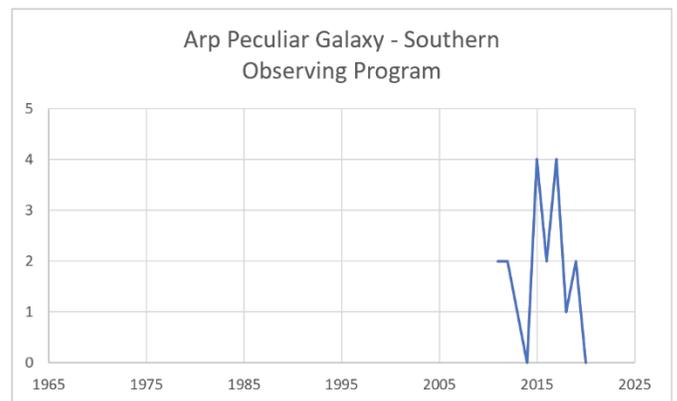
Certificates issued this year: 4
Certificates issued ever: 130



Arp Peculiar Galaxies – Southern Skies Observing Program

Coordinator Name: Marie Lott

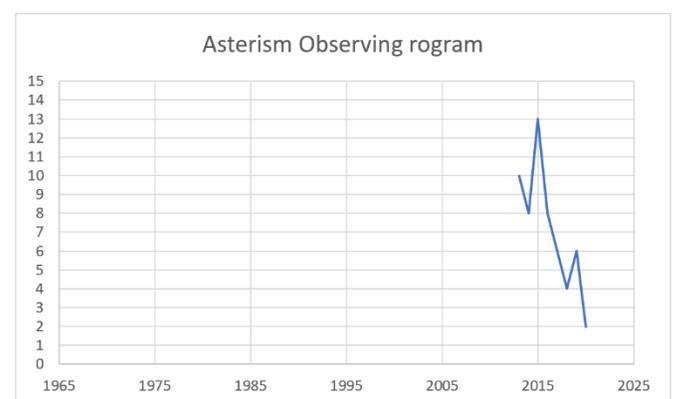
Certificates issued this year: 2
Certificates issued ever: 18



Asterism Observing Program

Coordinator Name: Troy Stratton

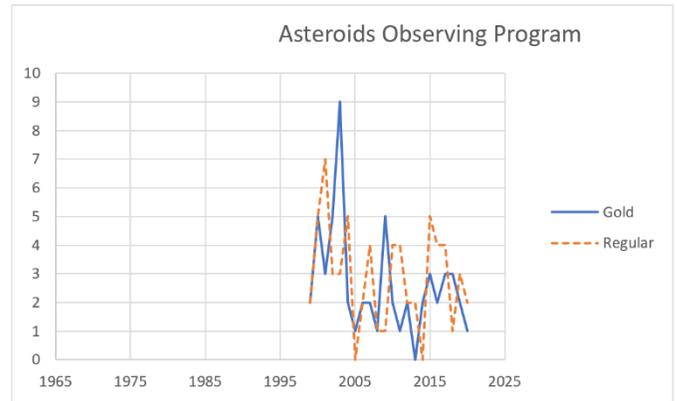
Certificates issued this year: 6
Certificates issued ever: 57



Asteroid Observing Program

Coordinator Name: John Goar

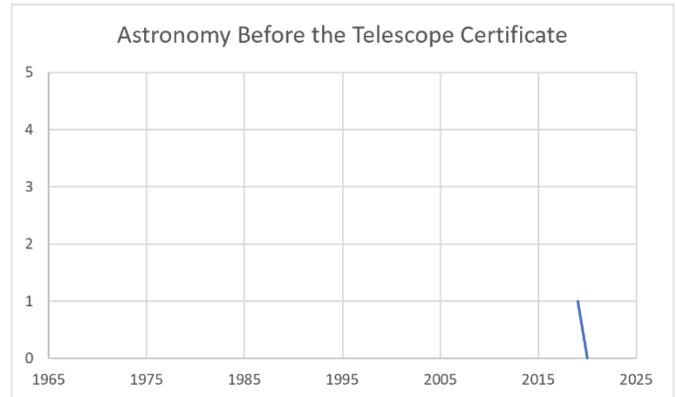
	Regular	Gold
Certificates issued this year:	1	2
Certificates issued ever:	58	64



Astronomy Before the Telescope Certificate

Coordinator Name: Steve Boerner

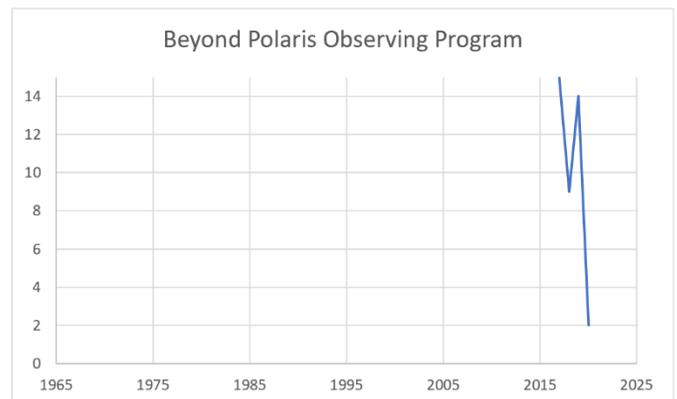
Certificates issued this year:	1
Certificates issued ever:	1



Beyond Polaris Observing Program

Coordinator Name: W. Maynard Pittendreigh

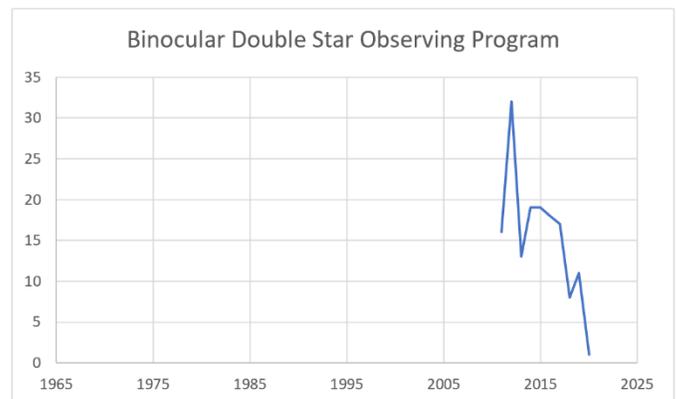
Certificates issued this year:	14
Certificates issued ever:	40



Binocular Double Star Observing Program

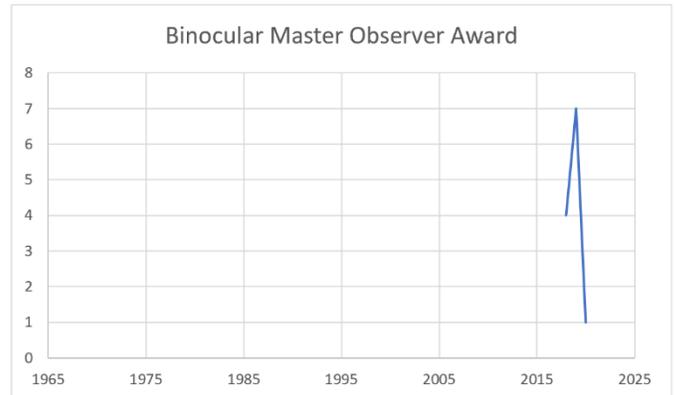
Coordinator Name: Bob Kerr

Certificates issued this year:	11
Certificates issued ever:	154



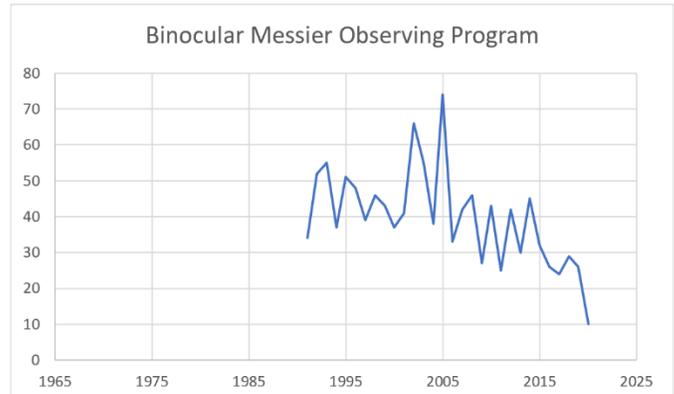
Binocular Master Observer Award
 Coordinator Name: Aaron Clevenson

Certificates issued this year: 7
 Certificates issued ever: 12



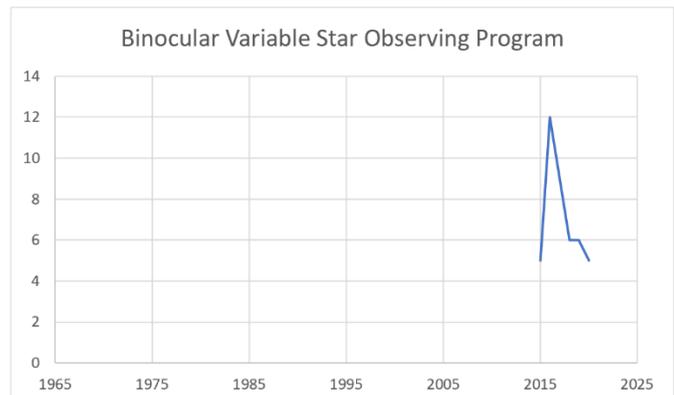
Binocular Messier Observing Program
 Coordinator Name: John Goar

Certificates issued this year: 26
 Certificates issued ever: 1196



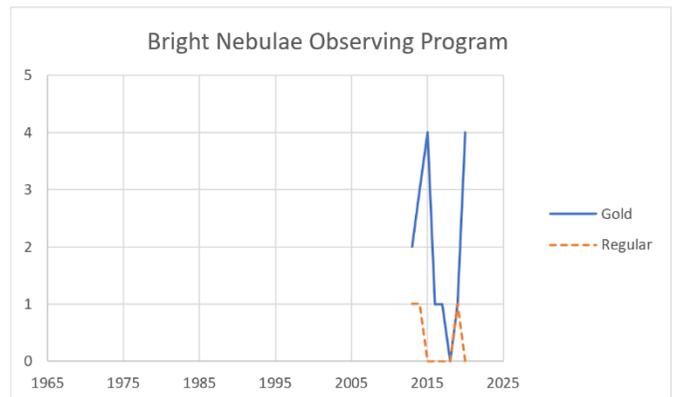
Binocular Variable Star Observing Program
 Coordinator Name: Robert Togni

Certificates issued this year: 6
 Certificates issued ever: 43



Bright Nebulae Observing Program
 Coordinator Name: Bob Scott

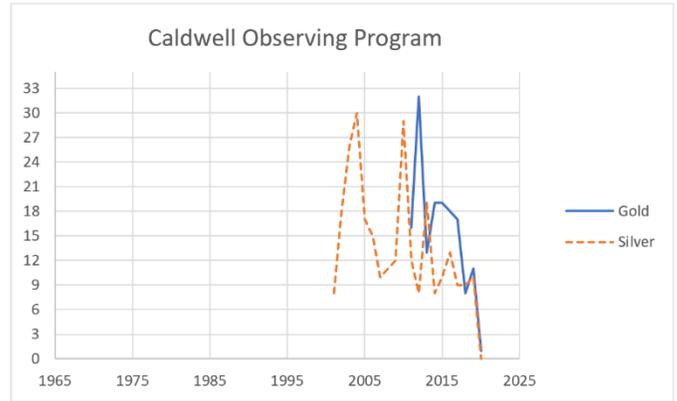
	Regular	Advanced
Certificates issued this year:	1	1
Certificates issued ever:	3	16



Caldwell Observing Program

Coordinator Name: Sue Rose

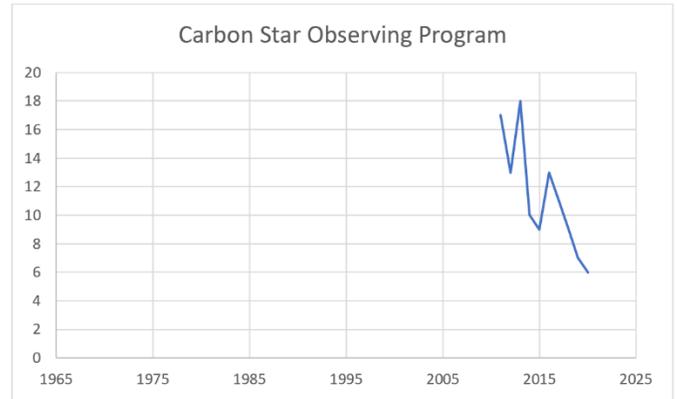
	Silver	Gold
Certificates issued this year:	10	5
Certificates issued ever:	274	46



Carbon Star Observing Program

Coordinator Name: Robert Togni

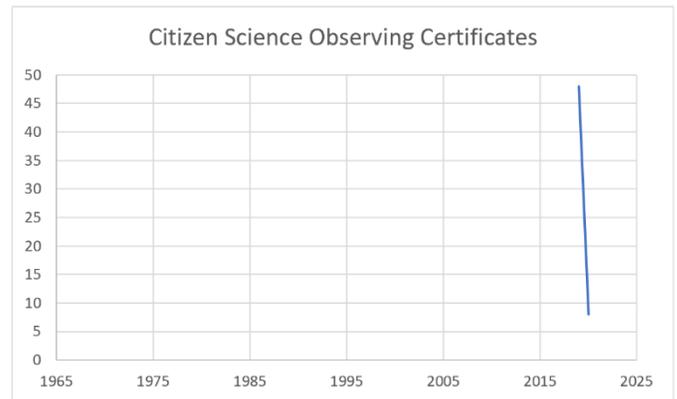
Certificates issued this year:	7
Certificates issued ever:	113



Citizen Science Observing Certificates

Coordinator Name: Al Lamperti

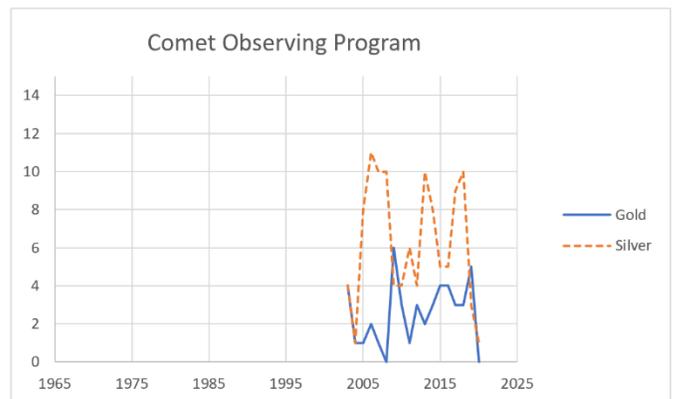
Certificates issued this year:	48
Certificates issued ever:	56



Comet Observing Program

Coordinator Name: Scott Kranz

	Silver	Gold
Certificates issued this year:	3	5
Certificates issued ever:	113	46

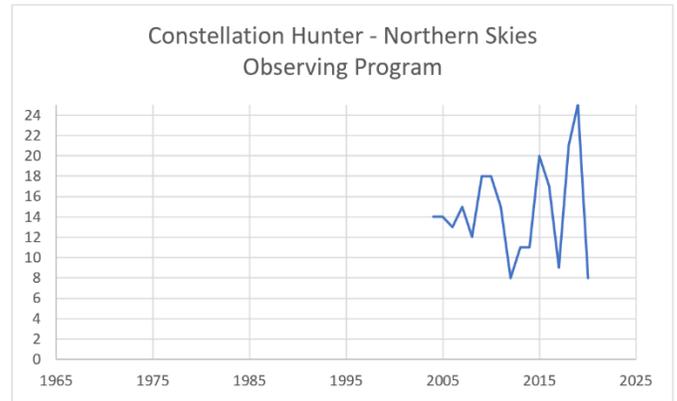


**Constellation Hunter – Northern Skies
Observing Program**

Coordinator Name: Cliff Mygatt

Certificates issued this year: 25

Certificates issued ever: 249

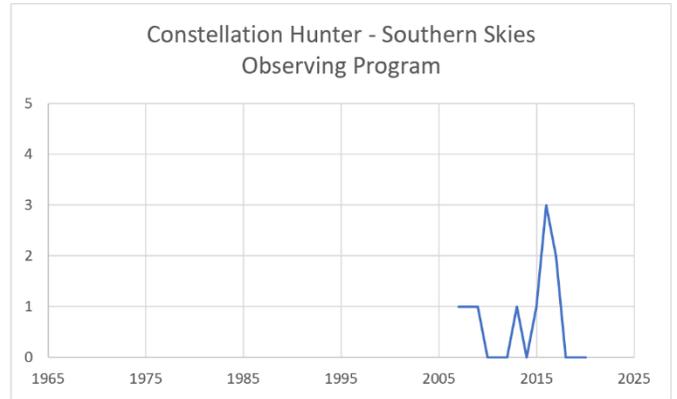


**Constellation Hunter – Southern Skies
Observing Program**

Coordinator Name: Cliff Mygatt

Certificates issued this year: 0

Certificates issued ever: 10

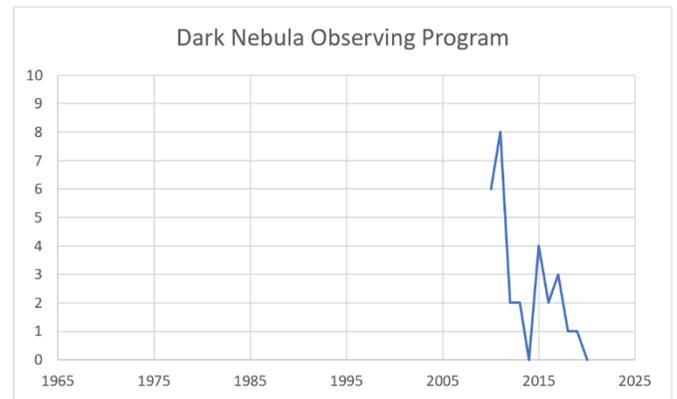


Dark Nebulae Observing Program

Coordinator Name: Kathy Machin

Certificates issued this year: 1

Certificates issued ever: 29

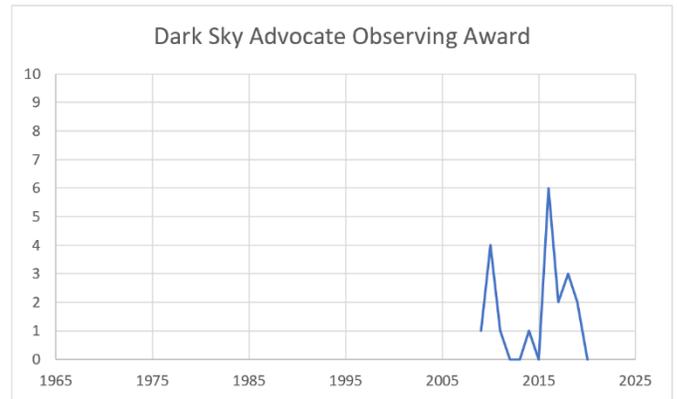


Dark Sky Advocate Observing Award

Coordinator Name: John Goss

Certificates issued this year: 2

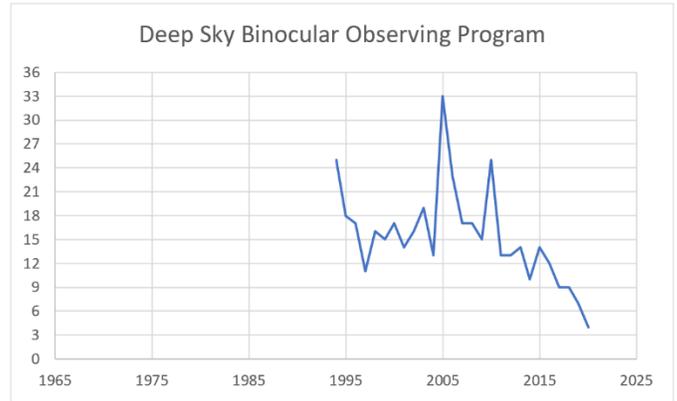
Certificates issued ever: 20



Deep Sky Binocular Observing Program

Coordinator Name: Cindy La Russa

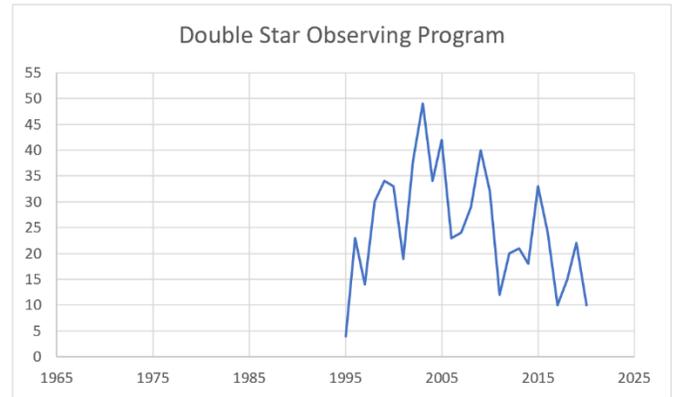
Certificates issued this year: 7
 Certificates issued ever: 416



Double Star Observing Program

Coordinator Name: Jon Schuchardt

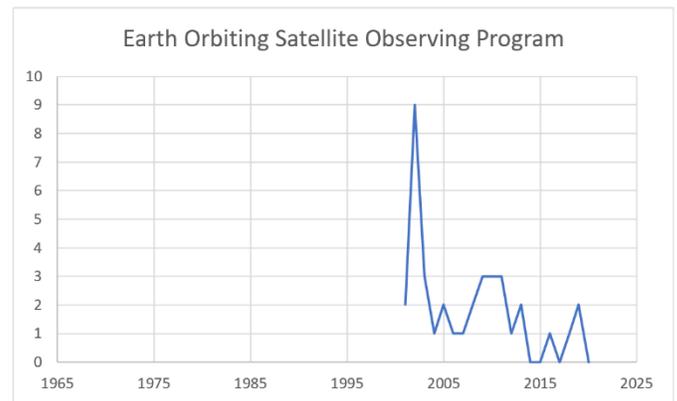
Certificates issued this year: 22
 Certificates issued ever: 653



Earth Orbiting Satellite Observing Program

Coordinator Name: Tom DeClue

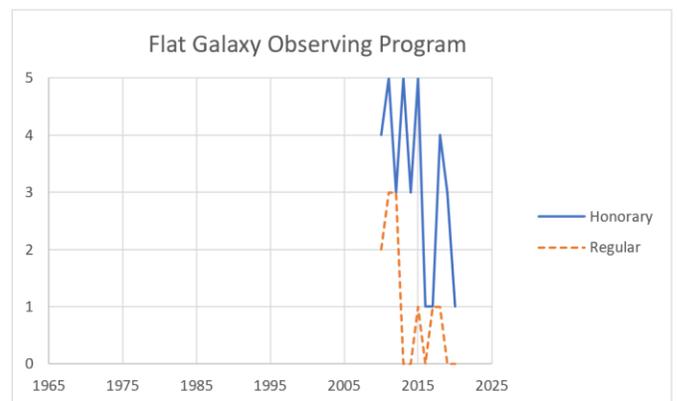
Certificates issued this year: 2
 Certificates issued ever: 37



Flat Galaxy Observing Program

Coordinator Name: Al Lamperti

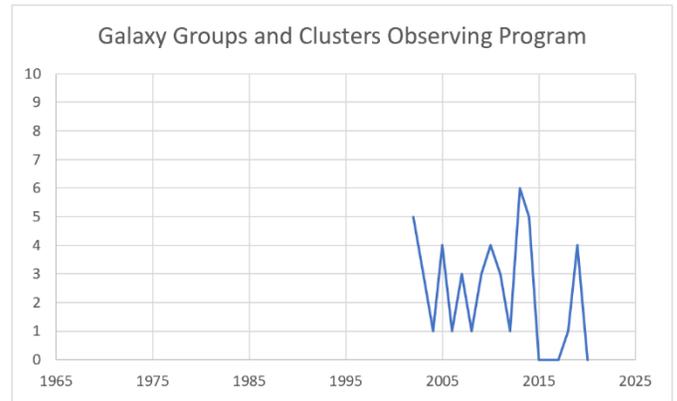
	Regular	Honorary
Certificates issued this year:	0	3
Certificates issued ever:	11	35



Galaxy Groups and Clusters Observing Program

Coordinator Name: Russell Pinizotto

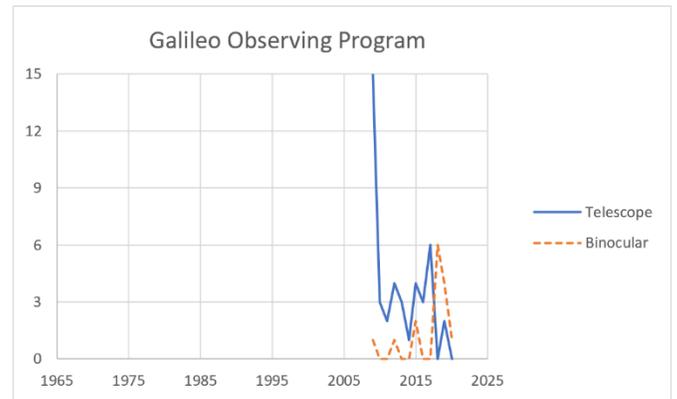
Certificates issued this year: 4
 Certificates issued ever: 45



Galileo Observing Program

Coordinator Name: Rodney Rynearson

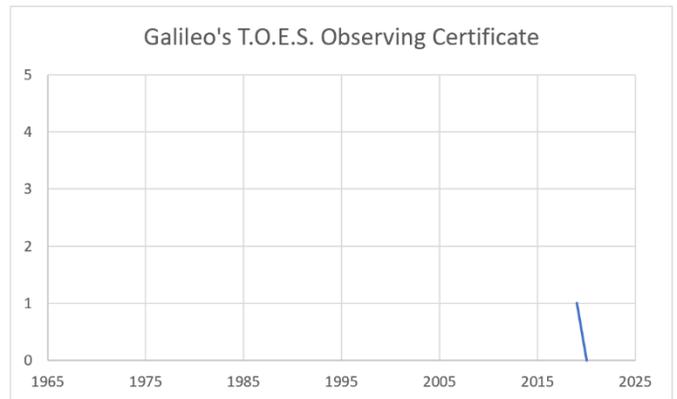
	Binocular	Regular
Certificates issued this year:	4	2
Certificates issued ever:	15	43



Galileo's T.O.E.S. Certificate

Coordinator Name: Aaron Clevenson

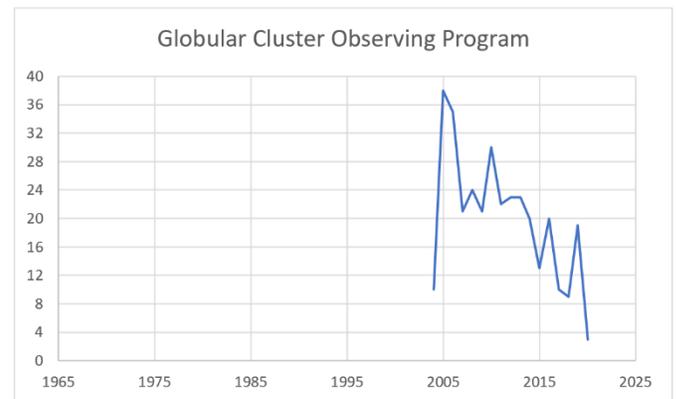
Certificates issued this year: 1
 Certificates issued ever: 1



Globular Cluster Observing Program

Coordinator Name: Bob Kerr

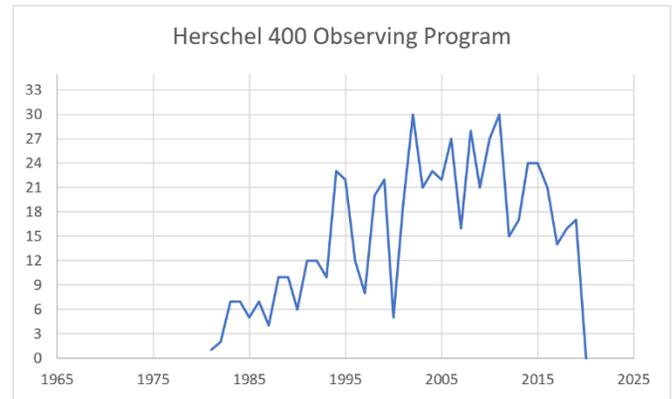
Certificates issued this year: 19
 Certificates issued ever: 341



Herschel 400 Observing Program

Coordinator Name: Jack Estes

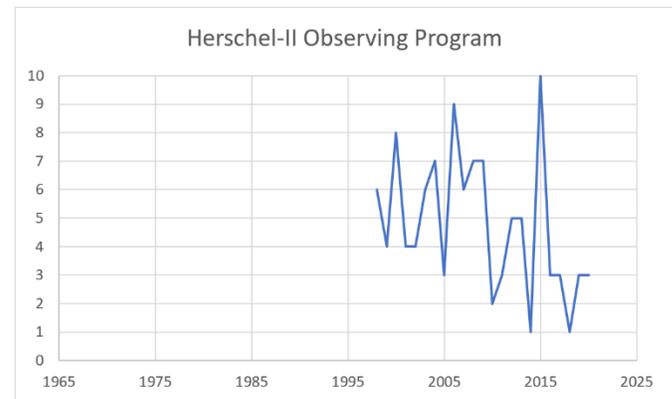
Certificates issued this year: 17
 Certificates issued ever: 617



Herschel II Observing Program

Coordinator Name: Candace Pratt

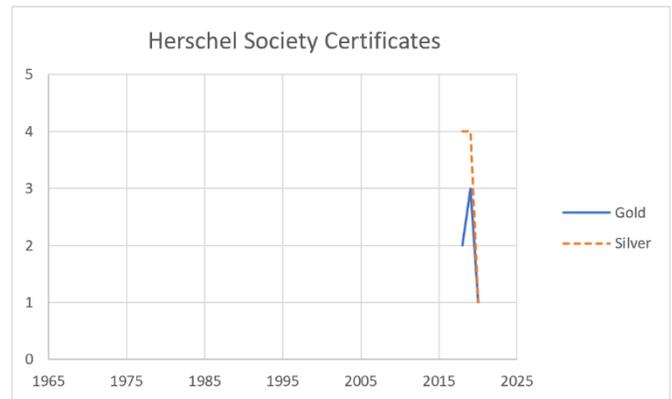
Certificates issued this year: 3
 Certificates issued ever: 110



Herschel Society Certificates

Coordinator Name: Cliff Mygatt

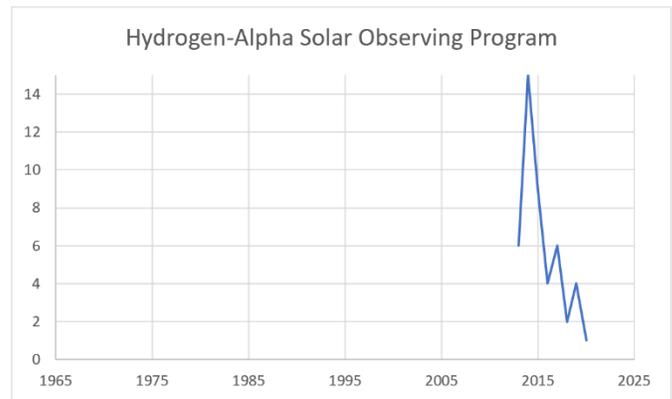
	Silver	Gold
Certificates issued this year:	4	3
Certificates issued ever:	9	6



Hydrogen-Alpha Solar Observing Program

Coordinator Name: Mark Simonson

Certificates issued this year: 4
 Certificates issued ever: 47

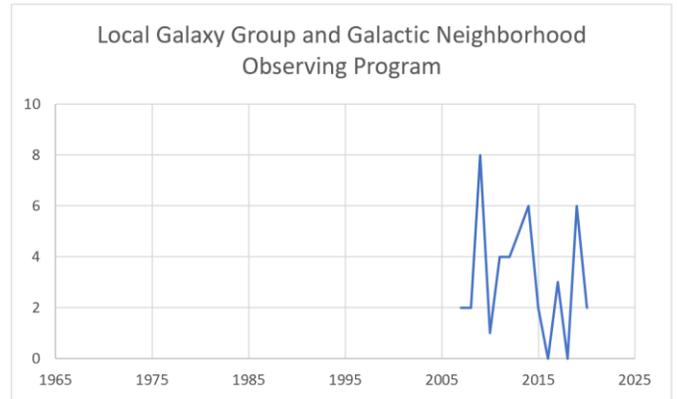


Local Galaxy Groups and Galactic Neighborhood

Coordinator Name: Mark Simonson

Certificates issued this year: 6

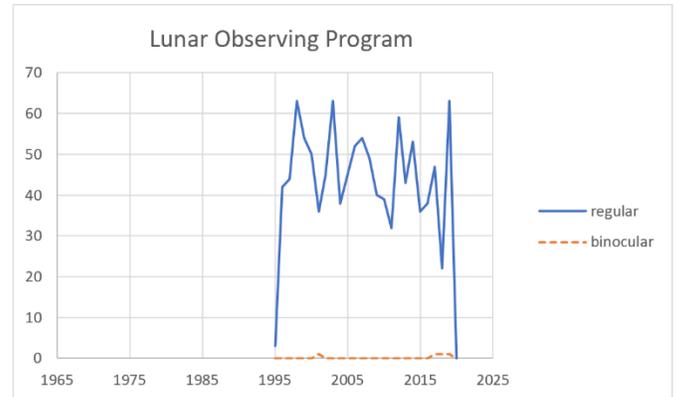
Certificates issued ever: 45



Lunar Observing Program

Coordinator Name: Chuck Allen

	Binocular	Regular
Certificates issued this year:	1	22
Certificates issued ever:	6	1068

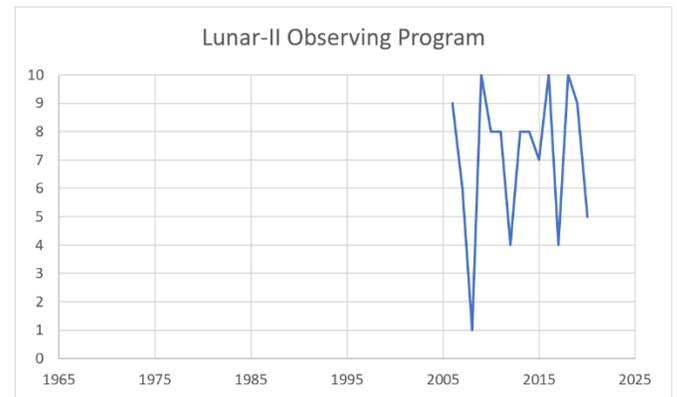


Lunar II Observing Program

Coordinator Name: Cliff Mygatt

Certificates issued this year: 9

Certificates issued ever: 107

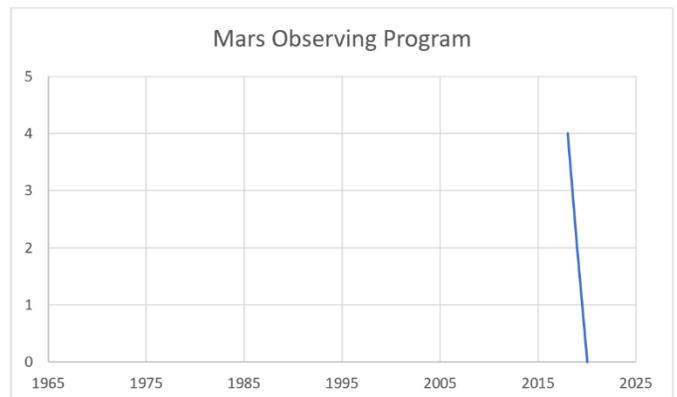


Mars Observing Program

Coordinator Name: Mark Simonson

Certificates issued this year: 2

Certificates issued ever: 6



Master Observer Award

Master Observer – Silver Award

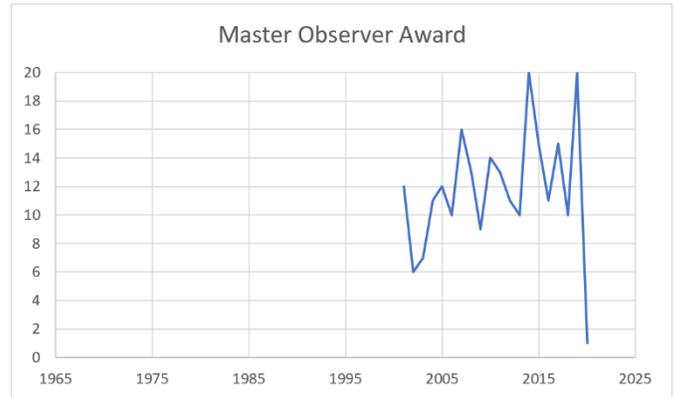
Master Observer – Gold Award

Master Observer – Platinum Award

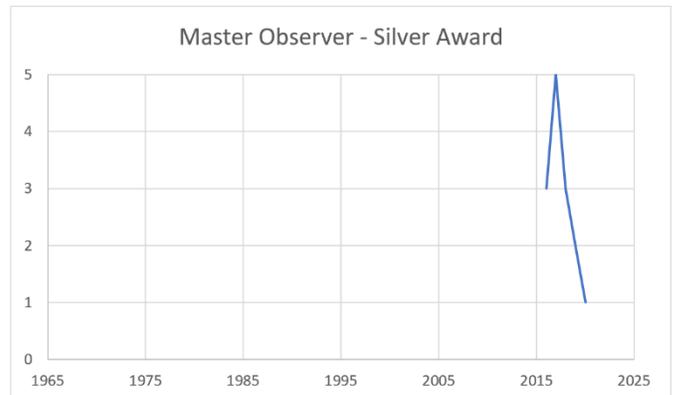
Coordinator Name: Aaron Clevenson

	Master	Silver	Gold	Platinum
Certificates issued this year:	20	2	4	0
Certificates issued ever:	236	14	10	3

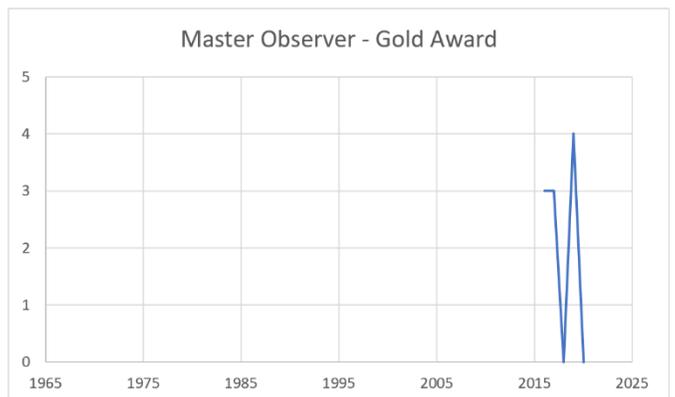
Master Observer Certificates Awarded:



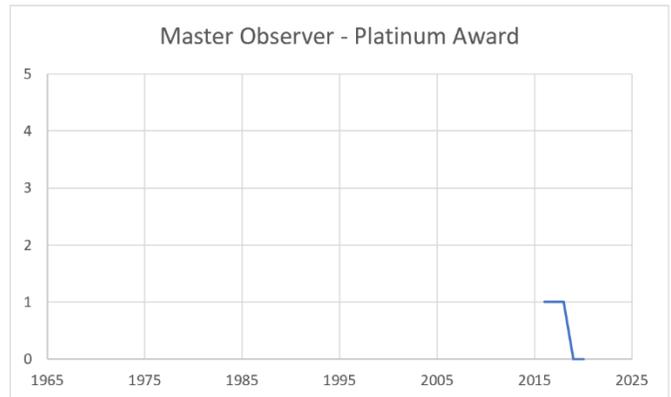
Master Observer – Silver Certificates Awarded:



Master Observer – Gold Certificates Awarded:



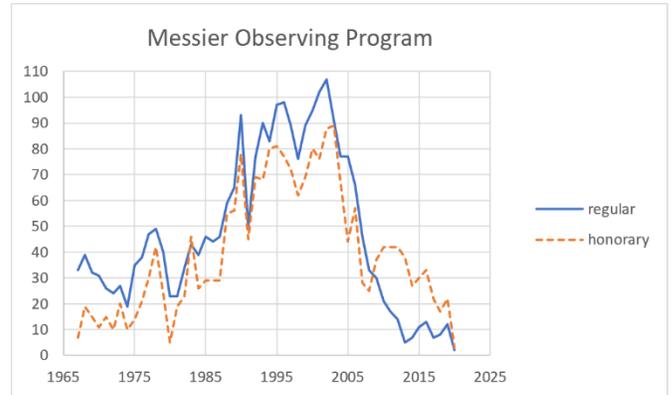
Master Observer – Platinum Certificates Awarded:



Messier Observing Program

Coordinator Name: Scott Kranz

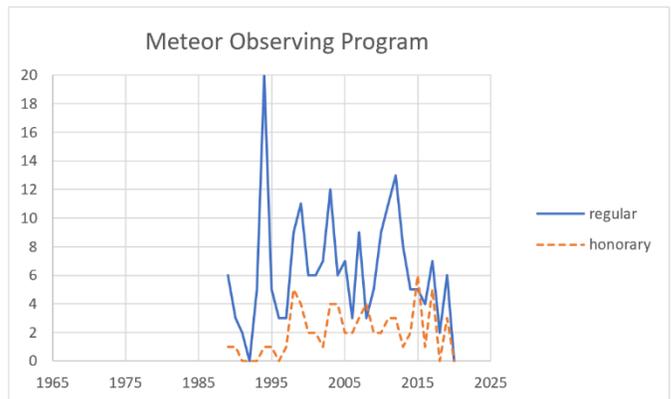
	Regular	Honorary
Certificates issued this year:	12	22
Certificates issued ever:	2545	2165



Meteor Observing Program

Coordinator Name: Scott Kranz

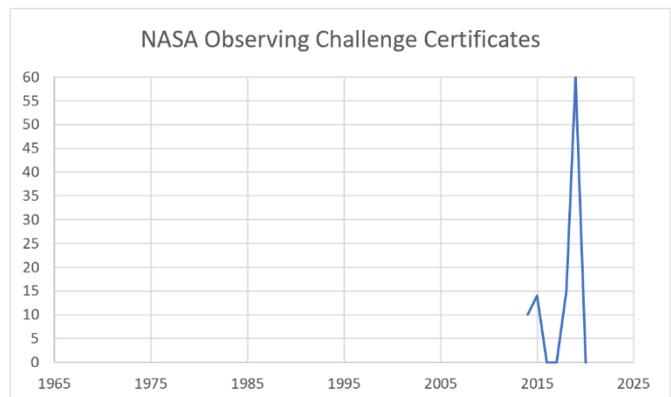
	Regular	Honorary
Certificates issued this year:	6	3
Certificates issued ever:	201	66



NASA Observing Challenge Certificates

Coordinator Name: Aaron Clevenson

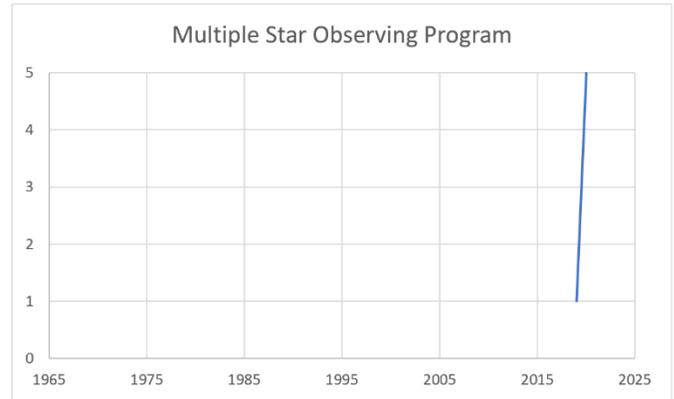
Siding Spring (2013)	9
Rosetta (2013)	1
New Horizons (2014)	14
TESS (2018)	8
InSight (2018)	7
Apollo 50 th (2019)	0



Multiple Star Observing Program

Coordinator Name: Steve McGaughey

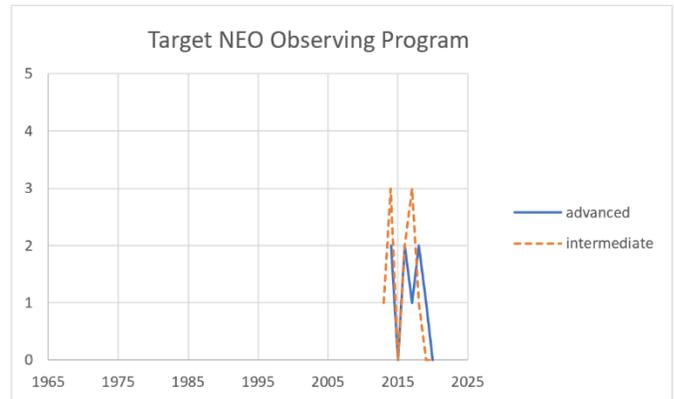
Certificates issued this year: 1
 Certificates issued ever: 6



Target NEO Observing Program

Coordinator Names: Dolores Hill and Carl Hergenrother

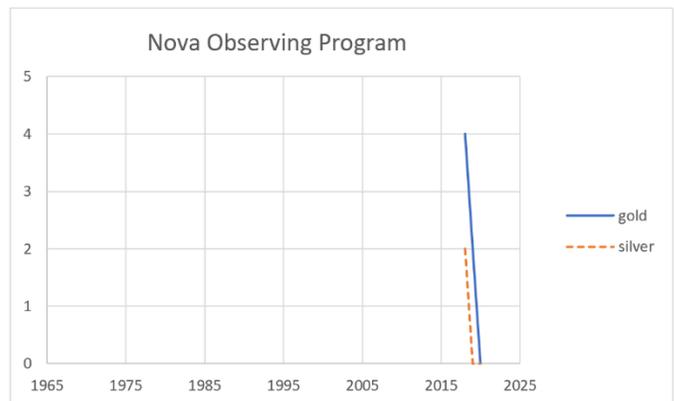
	Intermediate	Advanced
Certificates issued this year:	0	1
Certificates issued ever:	10	8



Nova Observing Program

Coordinator Name: Raymond Howard

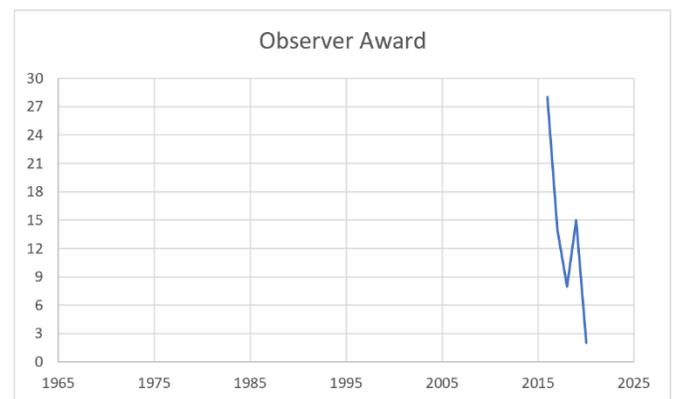
	Silver	Gold
Certificates issued this year:	0	2
Certificates issued ever:	2	6



Observer Award

Coordinator Name: Aaron Clevenson

Certificates issued this year: 15
 Certificates issued ever: 67

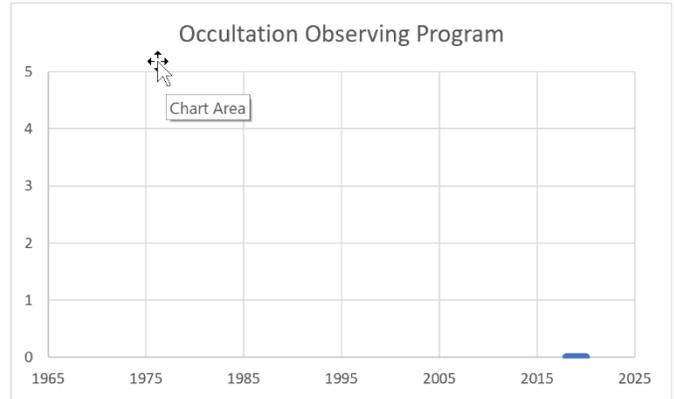


Occultation Observing Program

Coordinator Name: Steve Conard

Certificates issued this year: 0

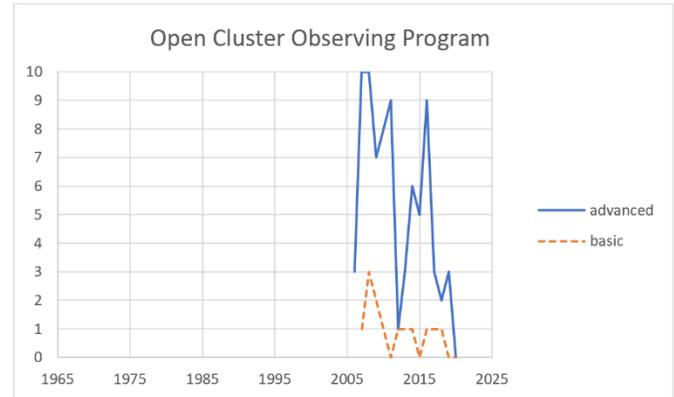
Certificates issued ever: 0



Open Cluster Observing Program

Coordinator Name: Cliff Mygatt

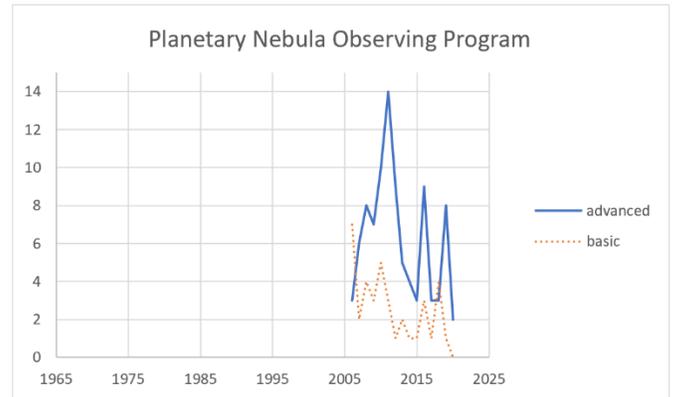
	Basic	Advanced
Certificates issued this year:	0	3
Certificates issued ever:	13	79



Planetary Nebulae (Northern and Southern) Observing Program

Coordinator Name: Ted Forte

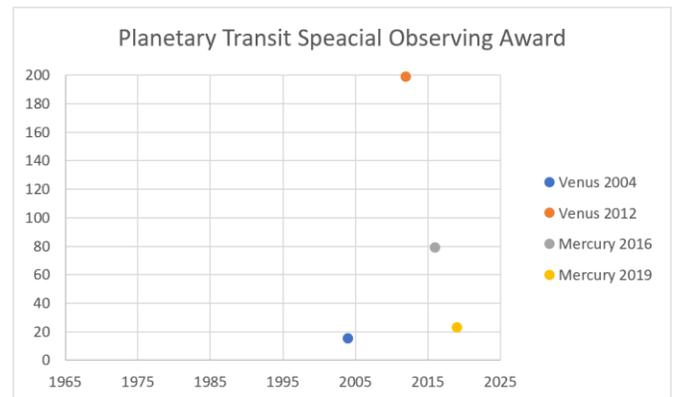
	Basic	Advanced
Certificates issued this year:	1	8
Certificates issued ever:	38	94



Planetary Transit Special Observing Award

Coordinator Name: Aaron Clevenson

Venus 2004	15
Venus 2012	199
Mercury 2016	79
Mercury 2019	23

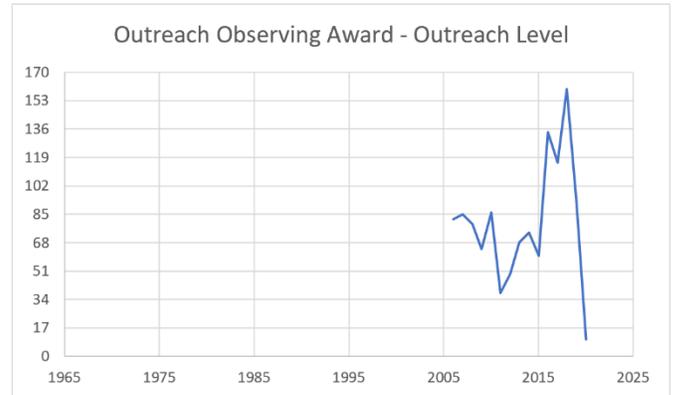


Outreach Observing Award

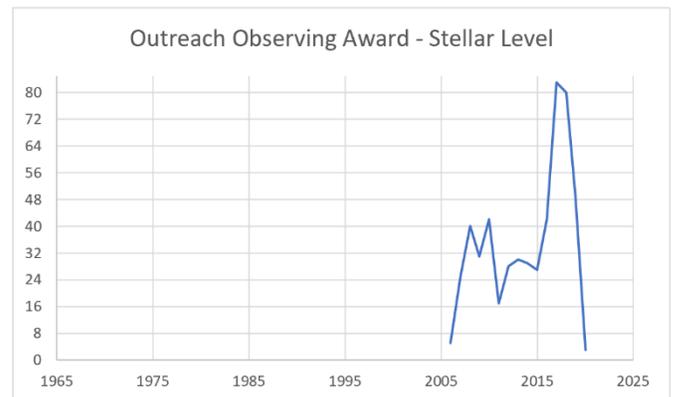
Coordinator Name: W. Maynard Pittendreigh

	Honorary	Outreach	Stellar	Master
Certificates issued this year:	0	92	49	30
Certificates issued ever:	4	1197	531	281

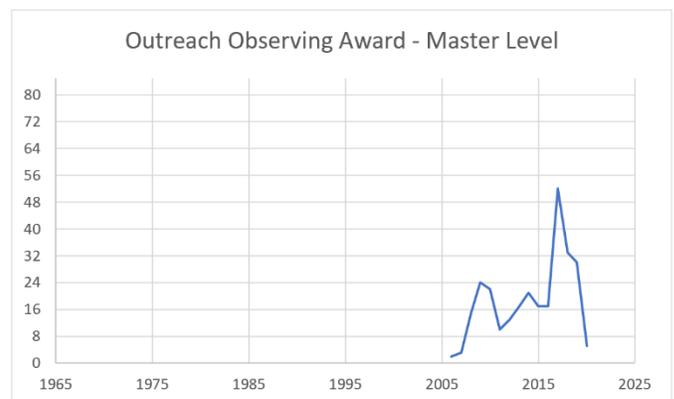
Outreach Certificates Awarded:



Stellar Certificates Awarded:



Master Certificates Awarded:

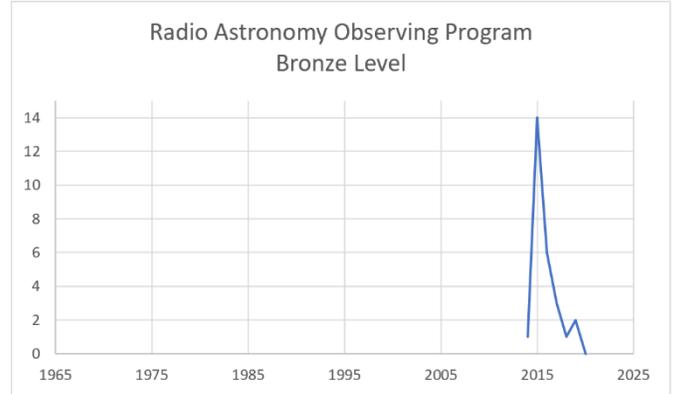


Radio Astronomy Observing Program

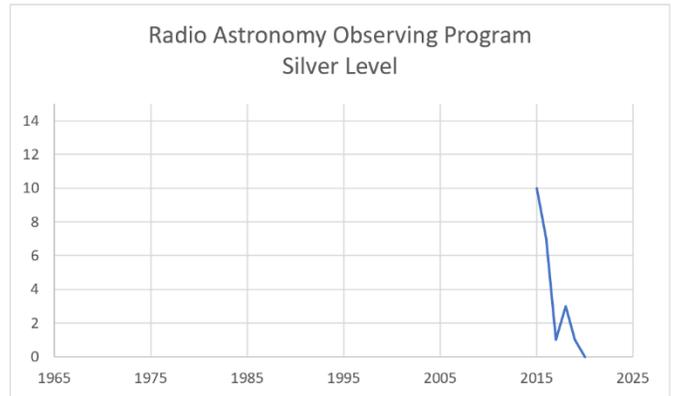
Coordinator Name: Steve Boerner

	Bronze	Silver	Gold
Certificates issued this year:	2	1	1
Certificates issued ever:	27	22	11

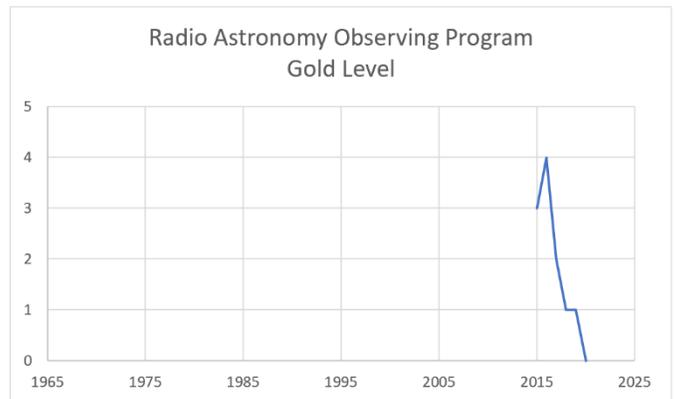
Bronze Certificates Awarded:



Silver Certificates Awarded:



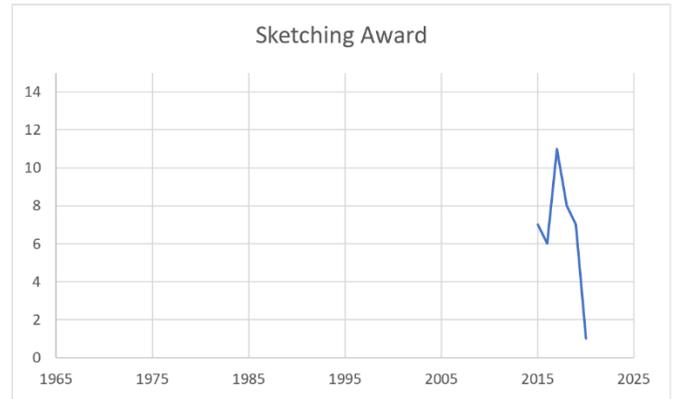
Gold Certificates Awarded:



Sketching Observing Award

Coordinator Name: Cindy L. Krach

Certificates issued this year: 7
 Certificates issued ever: 40

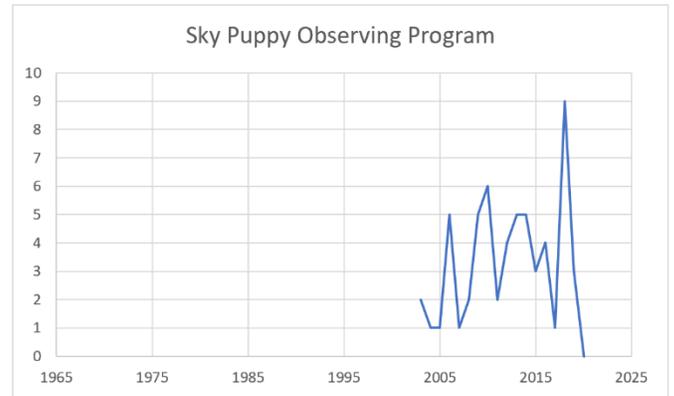


Sky Puppies Observing Program

Coordinator Name: Aaron Clevenson

Certificates issued this year: 3
 Certificates issued ever: 59

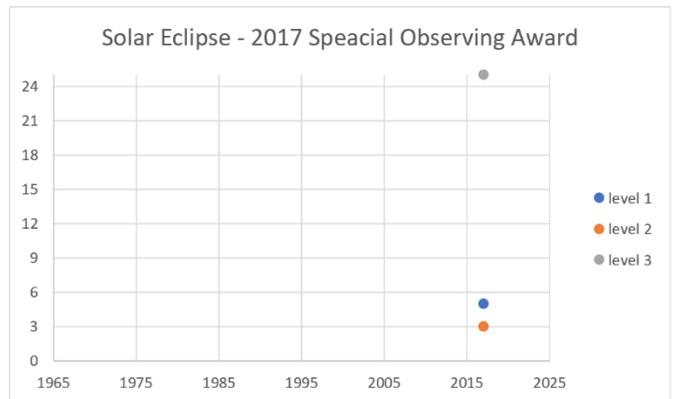
Highlights: We are in a relationship with NASA through the NSSEC. We are making the manuals, workbooks, and pins Available to anyone and the costs are covered by NASA.



Solar Eclipse – 2017 Special Observing Award

Coordinator Name: Aaron Clevenson

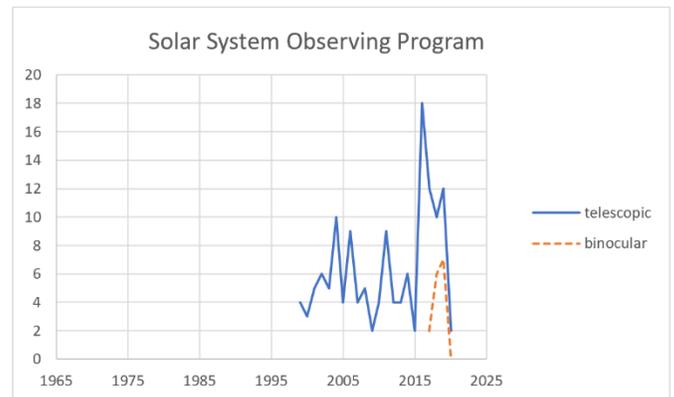
Certificates issued: 33



Solar System Observing Program

Coordinator Name: Chuck Allen

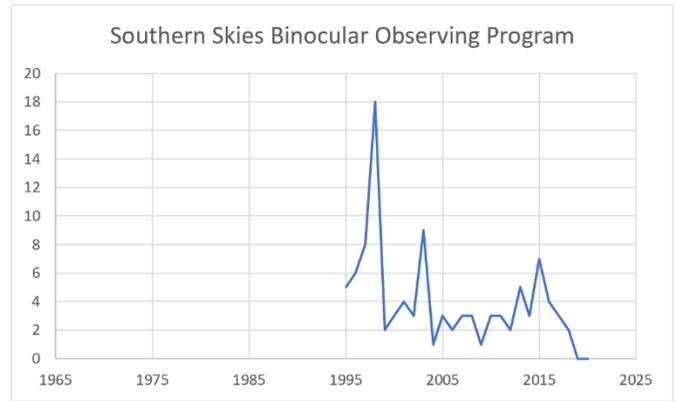
	Binocular	Regular
Certificates issued this year:	7	12
Certificates issued ever:	15	140



Southern Skies Binocular Observing Program

Coordinator Name: Cindy La Russa

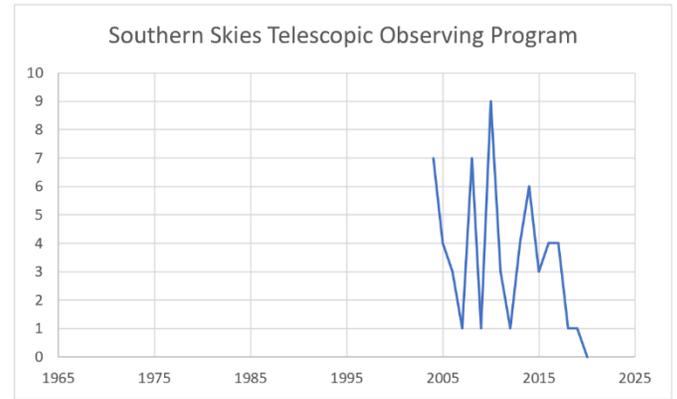
Certificates issued this year: 0
Certificates issued ever: 103



Southern Skies Telescopic Observing Programs

Coordinator Name: Kathy Machin

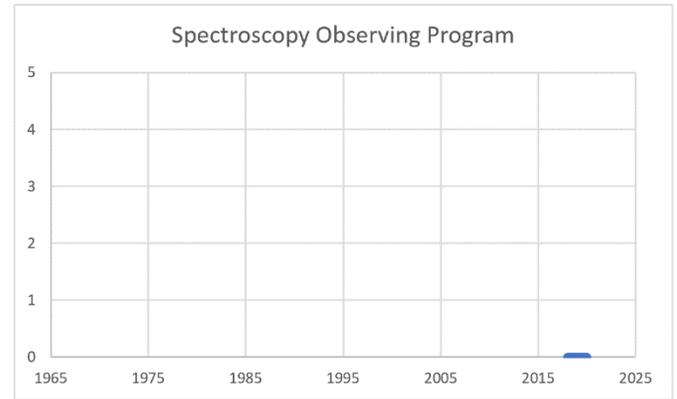
Certificates issued this year: 1
Certificates issued ever: 59



Spectroscopy Observing Program

Coordinator Name: Steve Boerner

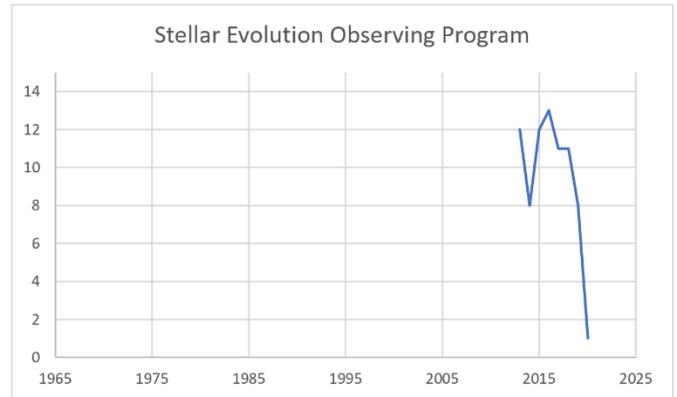
Certificates issued this year: 0
Certificates issued ever: 0



Stellar Evolution Observing Program

Coordinator Name: Bill Pellerin

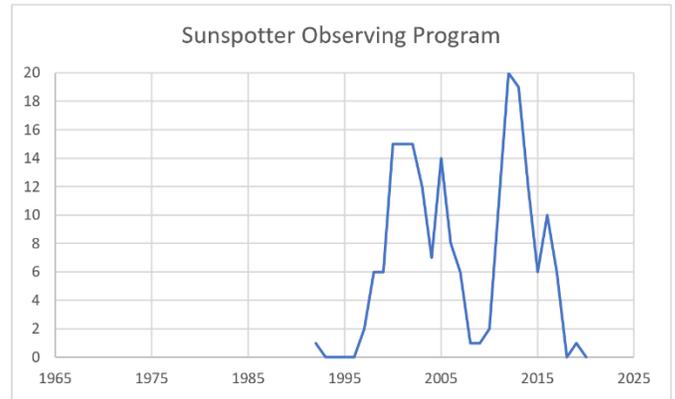
Certificates issued this year: 8
Certificates issued ever: 76



Sunspotter Observing Program

Coordinator Name: Scott Kranz

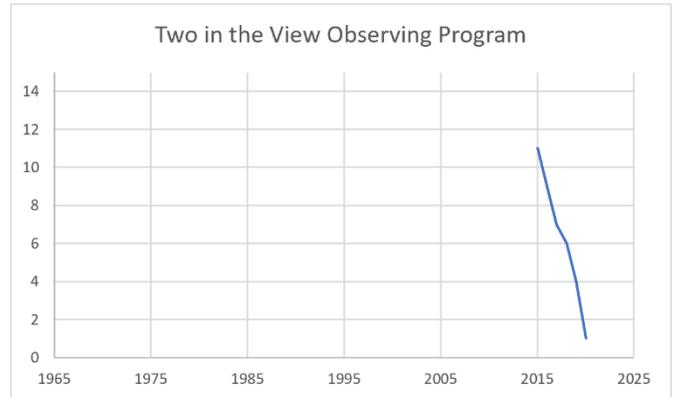
Certificates issued this year: 1
Certificates issued ever: 196



Two in the View Observing Program

Coordinator Name: Bob Scott

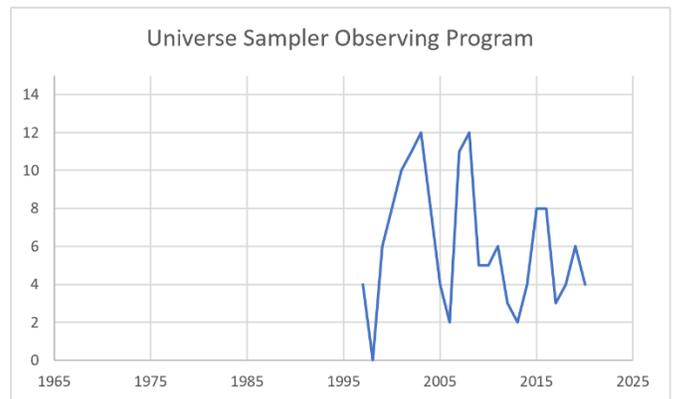
Certificates issued this year: 4
Certificates issued ever: 38



Universe Sampler Observing Program

Coordinator Name: Amelia Goldberg

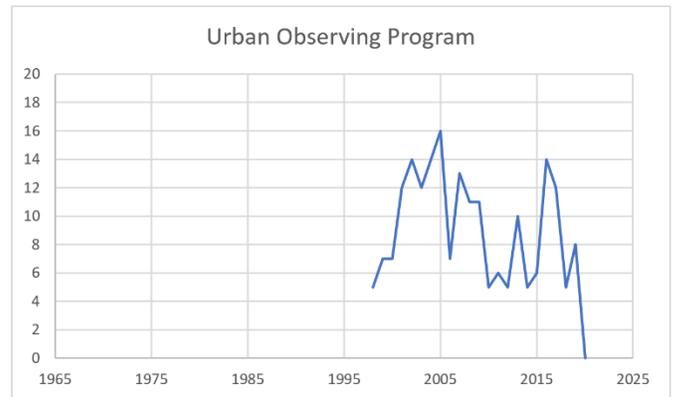
Certificates issued this year: 4
Certificates issued ever: 138



Urban Observing Program

Coordinator Name: Terry N. Trees

Certificates issued this year: 8
Certificates issued ever: 205

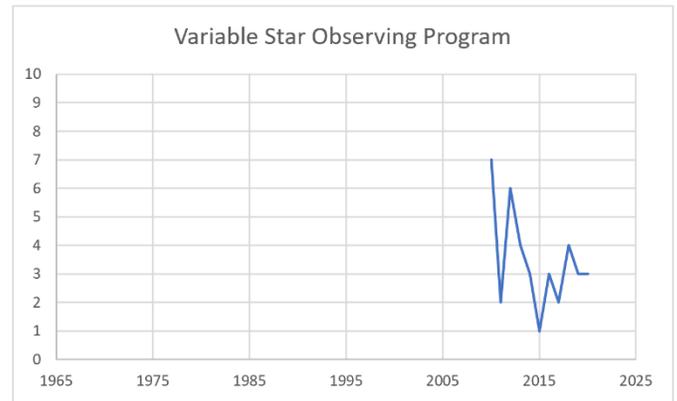


Variable Star Observing Program

Coordinator Name: Robert Togni

Certificates issued this year: 3

Certificates issued ever: 38



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.
- 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 Observing 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.