

Astronomical League

Observing Program Division

Annual Report 2019

Submitted by the Astronomical League Observing Program Division Board:

Aaron Clevenson

Cliff Mygatt

Al Lamperti

Maynard Pittendreigh

Highlights for the year:

2018-2019 has been a good year for the Astronomical League Observing Programs. A total of 676 certificates and/or pins were issued during the previous year (2018) and as of this time, a grand total of 15,779 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 2018 there were a total of 2 proposals. All were adopted:

- **Nova**
- **Binocular Master Observer Award**

Additionally, these certifications were adopted:

- Astronomy Before the Telescope Observing Certificate
- TESS NASA Observing Challenge Certificate
- InSight NASA Observing Challenge Certificate
- Observing Program Mentor Certificate
- The Citizen Science Program, including:
 - Certificates for those projects requiring active participation but no direct observing.
 - Certificates for those projects requiring observing beyond existing AL Observing Programs.

These proposed Observing Programs for consideration by Council at the AL-Con in 2019 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 2019 AL-Con are:

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

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

- Double Star Observing Program – John Schuchardt
- Galileo Observing Program – Rodney Rynearson
- Mars Observing Program – Mark Simonson
- Radio Astronomy Observing Program – Steve Boerner
- Solar System Observing Program – Aaron Clevenson (temporary)
- Galaxy Groups and Clusters Observing Program – Aaron Clevenson (temporary)
- Local Galaxy Groups and Clusters Observing Program – Aaron Clevenson (temporary)

Observing Programs by activity level:

- Those programs with an average of over 50 certificates in the past year:
 - Outreach (273 awards in 2018)
- Those programs with an average between 25 and 49 in the past year:
 - Binocular Messier (29 awards in 2018)
 - Messier (25 awards in 2018)
- Those programs with an average between 10 and 24 in the past year:
 - Caldwell
 - Comet Hunter
 - Constellation Hunter – Northern Skies
 - Double Star
 - Herschel 400
 - Lunar
 - Lunar II
 - Master Observer
 - Solar System
 - Stellar Evolution
- Those programs with an average between 5 and 9 in the past year:
 - Advanced Binocular Double Star
 - Advanced Observer
 - Beyond Polaris
 - Binocular Double Star
 - Carbon Star

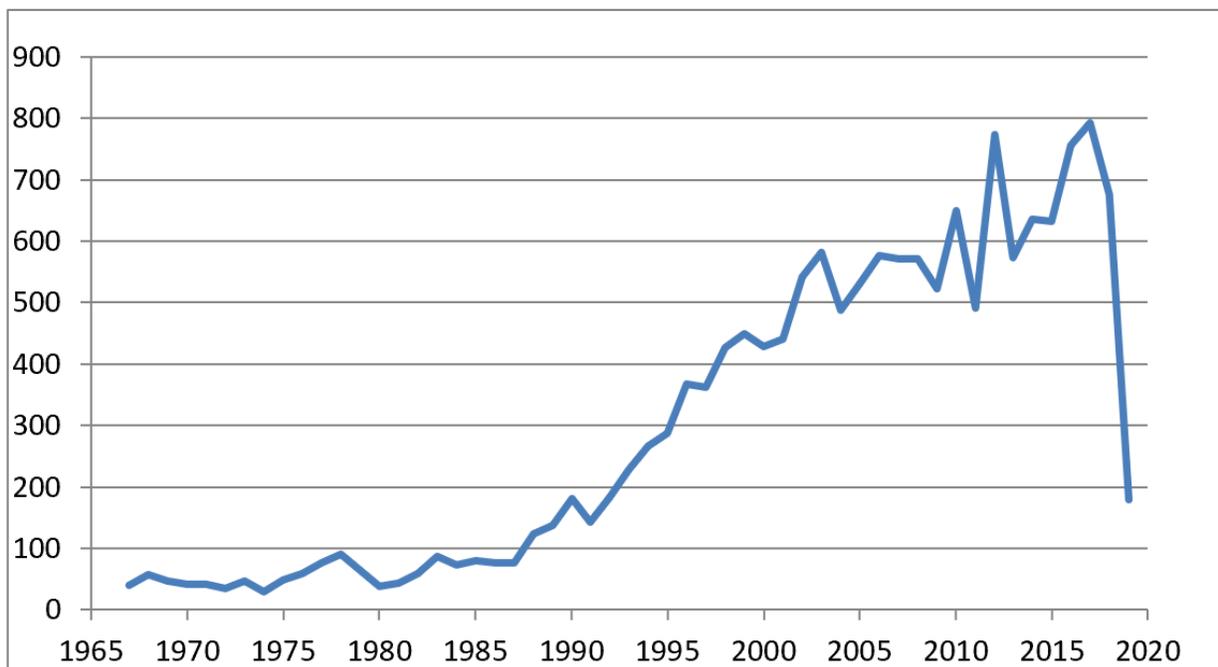
- Deep Sky Binocular
- Flat Galaxies
- Galileo
- Globular Clusters
- Observer
- NASA TESS Observing Challenge
- NASA InSight Observing Challenge
- NOVA
- Planetary Nebula
- Radio Astronomy
- Sketching
- Sky Puppy
- Two in the View
- Urban
- Those programs with an average of 4 or less in the past year:
 - Active Galactic Nuclei
 - Analemma
 - Arp Northern
 - Arp Southern
 - Asterism
 - Asteroid
 - Astronomy Before the Telescope
 - Binocular Master Observer
 - Bright Nebula
 - Constellation Hunter Southern Skies
 - Dark Nebulae
 - Dark Sky Advocate
 - Earth Orbiting Satellites
 - Galaxy Groups and Clusters
 - Galileo's TOES
 - Hydrogen-Alpha
 - Local Galaxy Group
 - Mars
 - Master Observer - Silver
 - Master Observer - Gold
 - Master Observer – Platinum
 - NEO
 - Occultation
 - Open Clusters
 - Southern Skies Binocular

- Southern Skies Telescope
- Sunspotter
- Universe Sampler
- Variable Stars

Accomplishments for the Overall AL Observing Program:

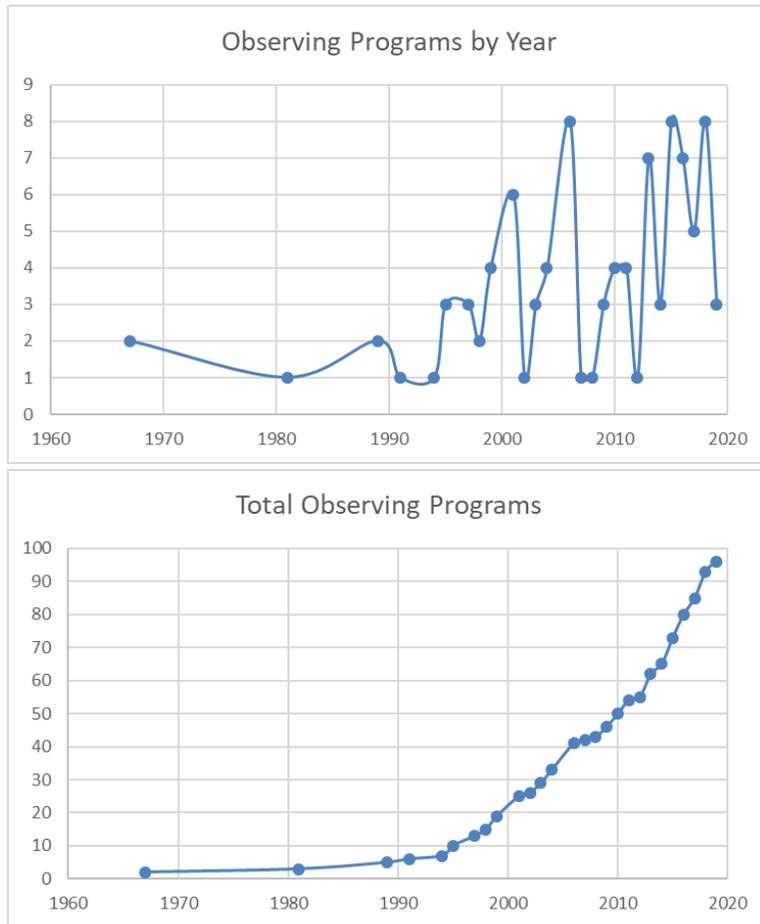
- Seven new Observing Program Coordinators were appointed to existing Programs.
- One additional NASA Observing Challenge was identified and introduced to the membership (Apollo - 50 years).
- These Observing Program Manuals have been reproduced:
 - Carbon Star
 - Math for Amateur Astronomers
 - Planetary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

Overall Observing Program Growth:



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; Messier, the Observing Program Division has grown significantly. It currently offers 96 different certificates to our members.



At this time four coordinators have more than three Observing Programs;

- Aaron Clevenson has the Master Observer Progression, NASA Observing Challenges, and five Observing Programs;
- Al Lamperti, Cliff Mygatt, and Scott Kranz have 4 each.
- Three is the best practice maximum that we follow. We have a total of 31 different coordinators at this time coordinating 67 Observing Programs and Awards. There are a total of 92 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

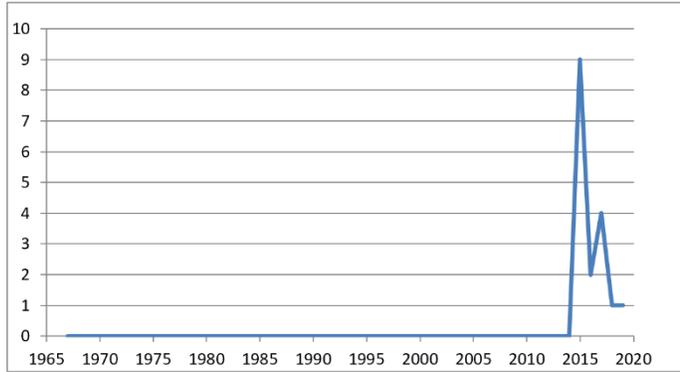
June 2, 2019

Observing Program Name:
Coordinator Name:

Active Galactic Nuclei
Al Lamperti

Pins on hand: 83
Certificates issued this year: 1
Certificates issued ever: 17

Certificates Awarded:

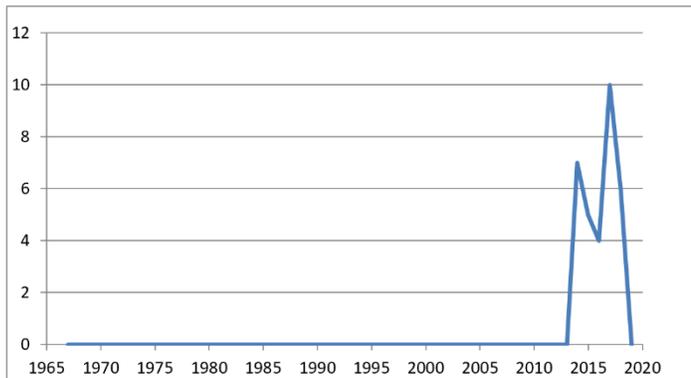


Observing Program Name:
Coordinator Name:

Advanced Binocular Double Star
Bob Kerr

Pins on hand: 72
Certificates issued this year: 8
Certificates issued ever: 26

Certificates Awarded:

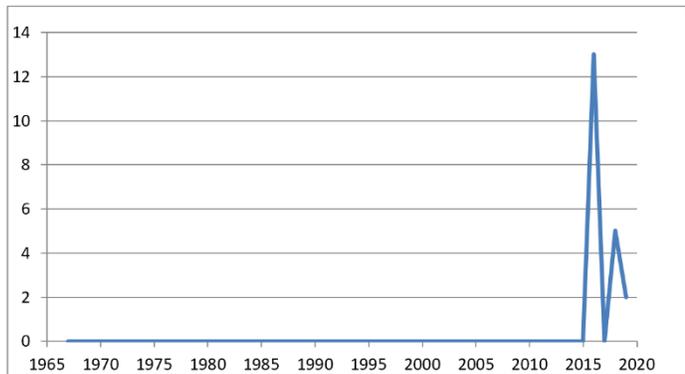


Observing Program Name:
Coordinator Name:

Advanced Observer
Aaron Clevenson

Pins on hand: 53
Certificates issued this year: 5
Certificates issued ever: 20

Certificates Award:

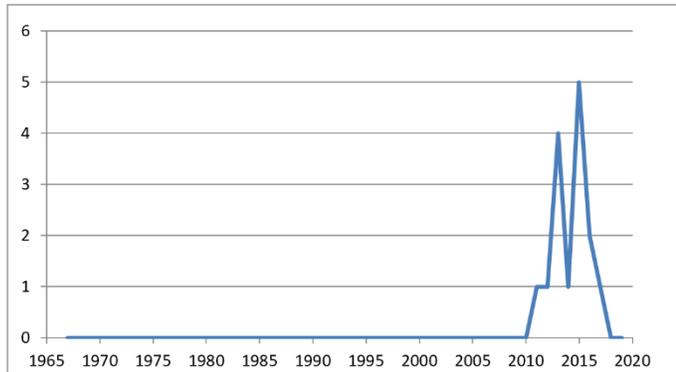


Observing Program Name:
Coordinator Name:

Analemma
Douglas Smith

Pins on hand: 79
Certificates issued this year: 0
Certificates issued ever: 15

Certificates Awarded:

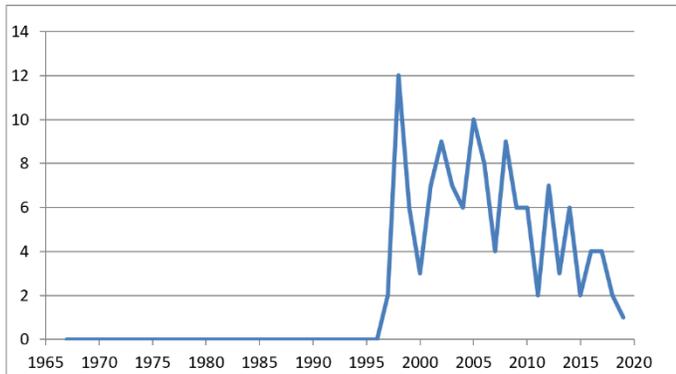


Observing Program Name:
Coordinator Name:

Arp – Northern Skies
Al Lamperti

Pins on hand: 68
Certificates issued this year: 2
Certificates issued ever: 126

Certificates Awarded:

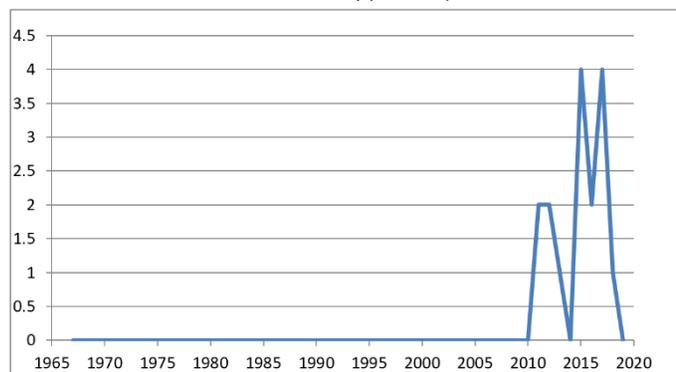


Observing Program Name:
Coordinator Name:

Arp – Southern Skies
Al Lamperti

Pins on hand: 73
Certificates issued this year: 1
Certificates issued ever: 16

Certificates Awarded:

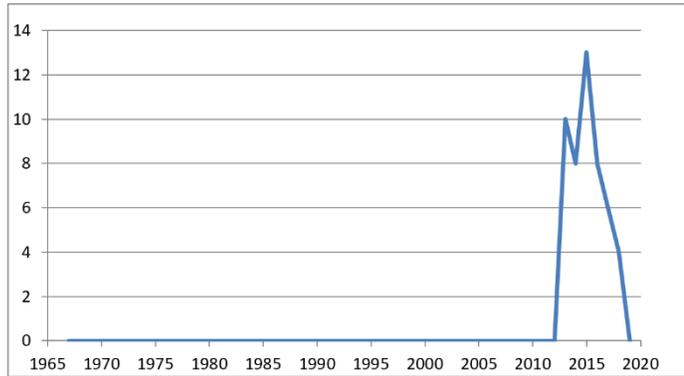


Observing Program Name:
Coordinator Name:

Asterism
Troy Stratton

Pins on hand: 41
Certificates issued this year: 4
Certificates issued ever: 49

Certificates Awarded:

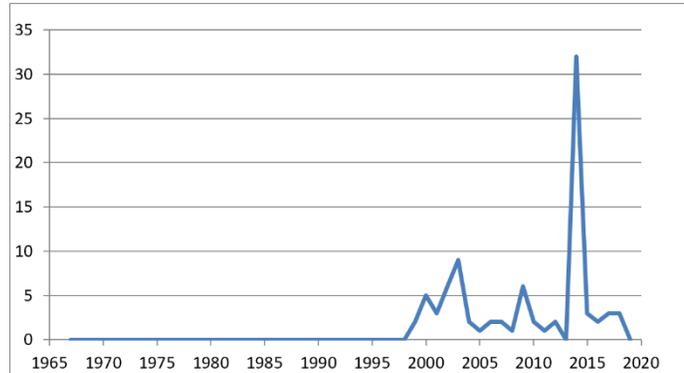


Observing Program Name:
Coordinator Name:

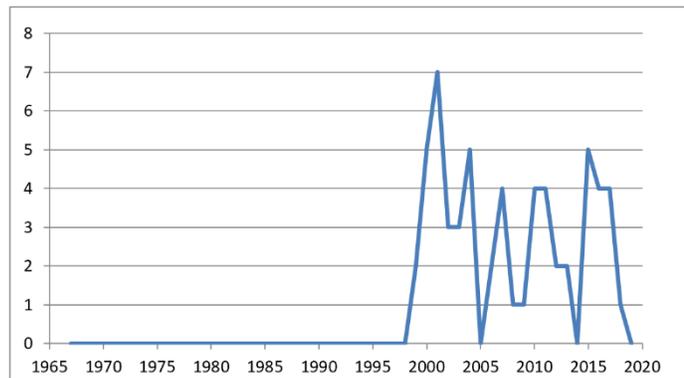
Asteroid
John Goar

| | Regular | Gold |
|--------------------------------|---------|------|
| Pins on hand: | | 30 |
| Certificates issued this year: | 3 | 87 |
| Certificates issued ever: | 1 | 59 |

Asteroid Regular Certificates Awarded:



Asteroid Gold Certificates Awarded:

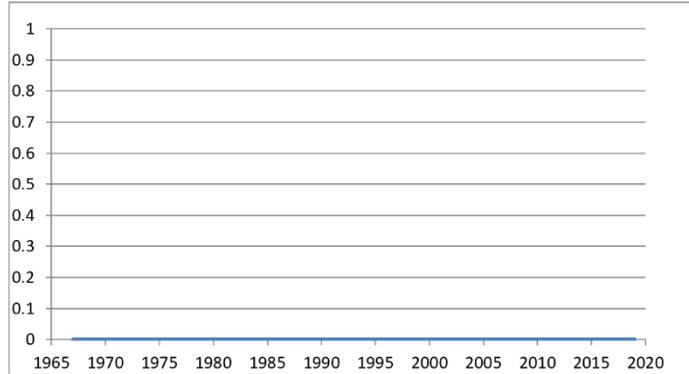


Observing Program Name:
Coordinator Name:

Astronomy Before the Telescope
W. Maynard Pittendreigh

Certificates issued this year: 0
Certificates issued ever: 0

Certificates Awarded:



Observing Program Name:
Coordinator Name:

Beyond Polaris
W. Maynard Pittendreigh

Pins on hand: 64
Certificates issued this year: 30
Certificates issued ever: 9

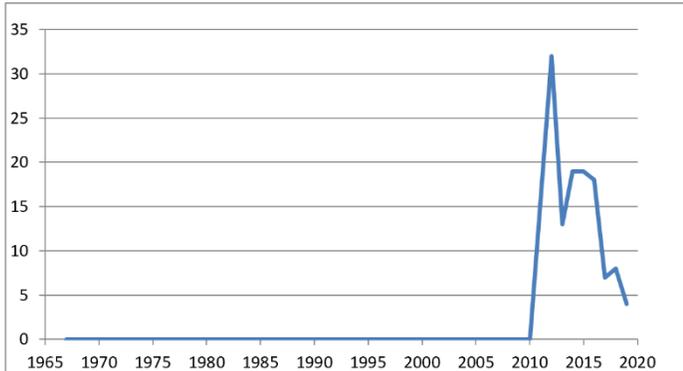
Certificates Awarded:

Observing Program Name:
Coordinator Name:

Binocular Double Star
Bob Kerr

pins on hand: 43
Certificates issued this year: 8
Certificates issued ever: 136

Certificates Awarded:

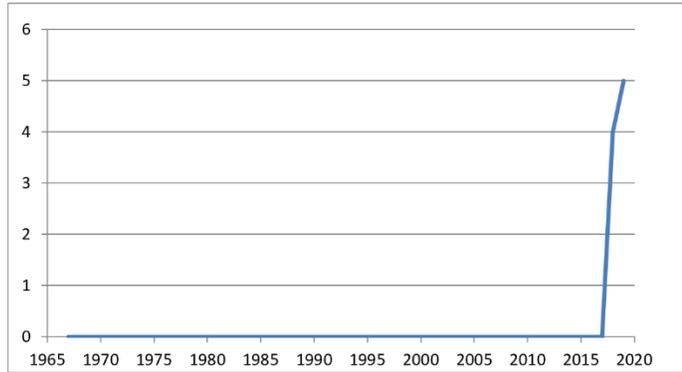


Observing Program Name:
Coordinator Name:

Binocular Master Observer
Aaron Clevenson

pins on hand: 84
Certificates issued this year: 4
Certificates issued ever: 9

Certificates Awarded:

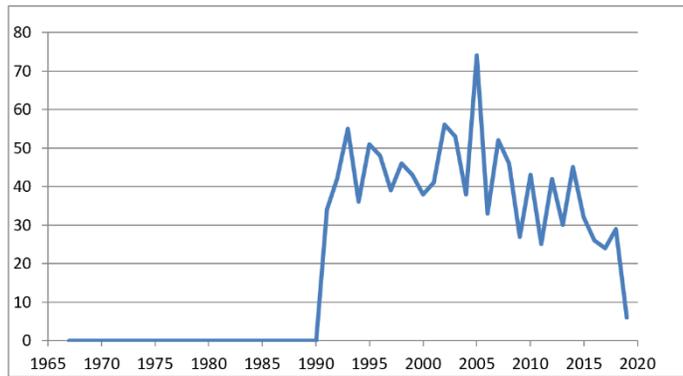


Observing Program Name:
Coordinator Name:

Binocular Messier
John Goar

Pins on hand: 41
Certificates issued this year: 29
Certificates issued ever: 1154

Certificates Awarded:

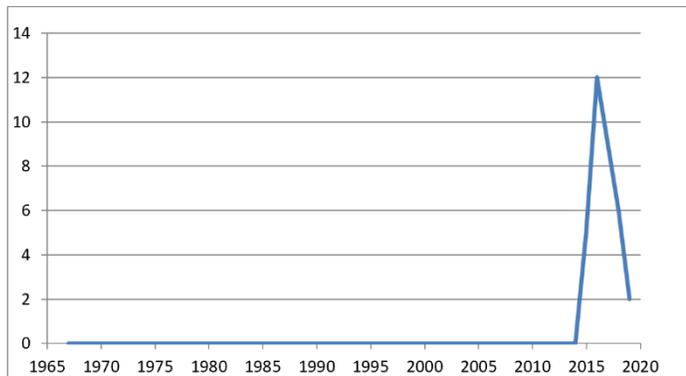


Observing Program Name:
Coordinator Name:

Binocular Variable Star
Robert Togni

Number of pins on hand: 55
Certificates issued this year: 6
Certificates issued ever: 36

Certificates Awarded:

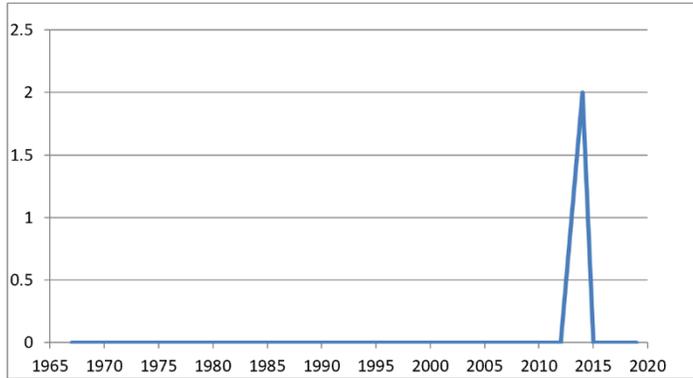


Observing Program Name:
Coordinator Name:

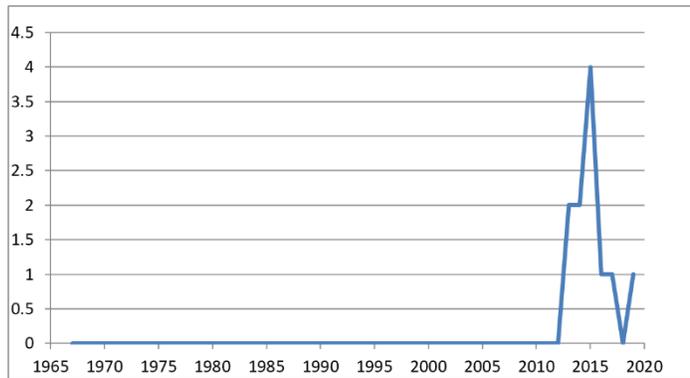
Bright Nebulae
Bob Scott

| | Regular | Advanced |
|--------------------------------|---------|----------|
| Pins on hand: | | 79 |
| Certificates issued this year: | 0 | 0 |
| Certificates issued ever: | 11 | 0 |

Bright Nebula Regular Certificates Awarded:



Bright Nebula Advanced Certificates Awarded:

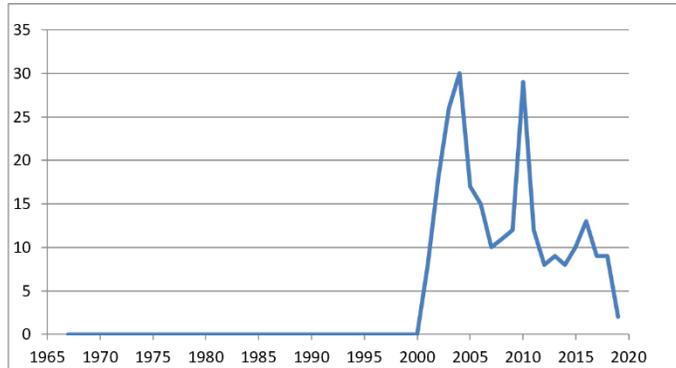


Observing Program Name:
Coordinator Name:

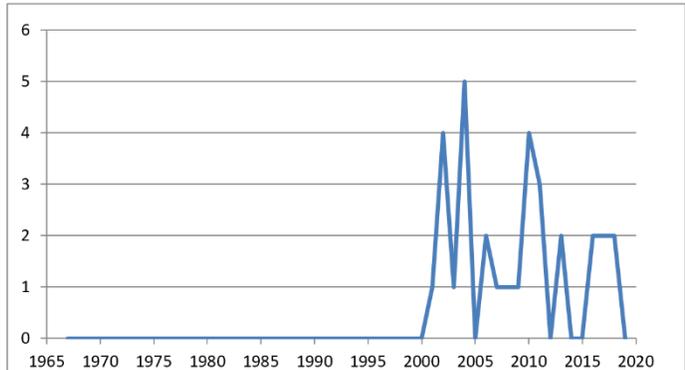
Caldwell
Sue Rose

| | Silver | Gold |
|--------------------------------|--------|------|
| Pins on hand: | 25 | 62 |
| Certificates issued this year: | 9 | 2 |
| Certificates issued ever: | 256 | 31 |

Caldwell Silver Certificates Awarded:



Caldwell Gold Certificates Awarded:

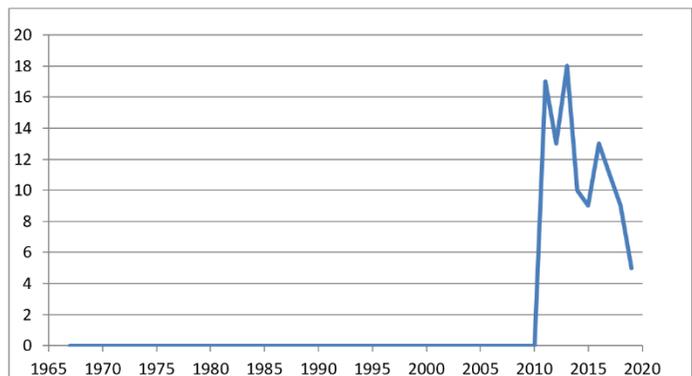


Observing Program Name:
Coordinator Name:

Carbon Star
Robert Togni

Pins on hand: 7
Certificates issued this year: 6
Certificates issued ever: 34
(2 duplicate #'s 46 & 47)

Certificates Awarded:



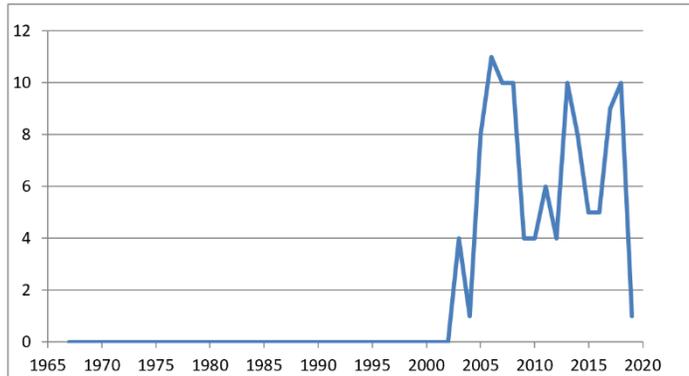
Observing Program Name:
Coordinator Name:

Comet
Scott Kranz

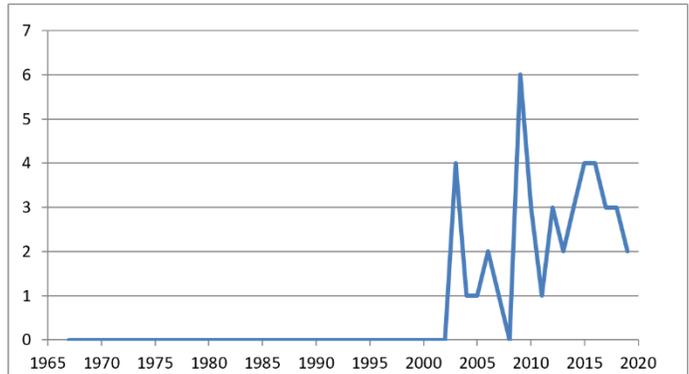
Pins on hand:
Certificates issued this year:
Certificates issued ever:

| Silver | Gold |
|--------|------|
| | 72 |
| 10 | 3 |
| 110 | 43 |

Comet Silver Certificates Awarded:



Comet Gold Certificates Awarded:

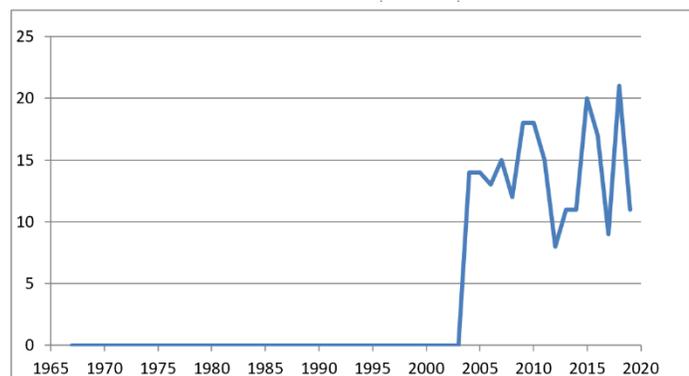


Observing Program Name:
Coordinator Name:

Constellation Hunter – Northern Skies
Cliff Mygatt

Pins on hand: 89
Certificates issued this year: 21
Certificates issued ever: 227

Certificates Awarded:

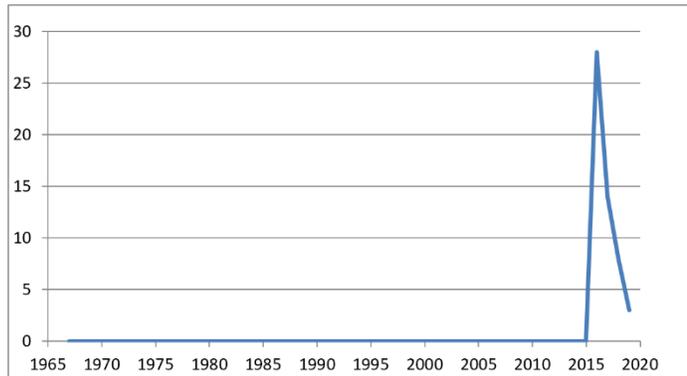


Observing Program Name:
Coordinator Name:

Constellation Hunter – Southern Skies
Cliff Mygatt

Pins on hand: 76
Certificates issued this year: 0
Certificates issued ever: 11

Certificates Awarded:

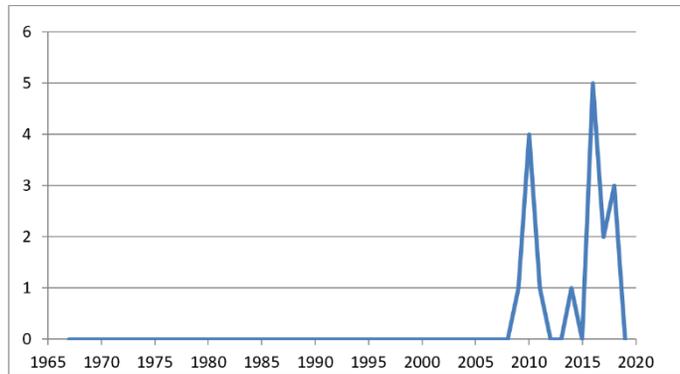


Observing Program Name:
Coordinator Name:

Dark Sky Advocate
John Goss

Pins on hand: 81
Certificates issued this year: 3
Certificates issued ever: 17

Certificates Awarded:

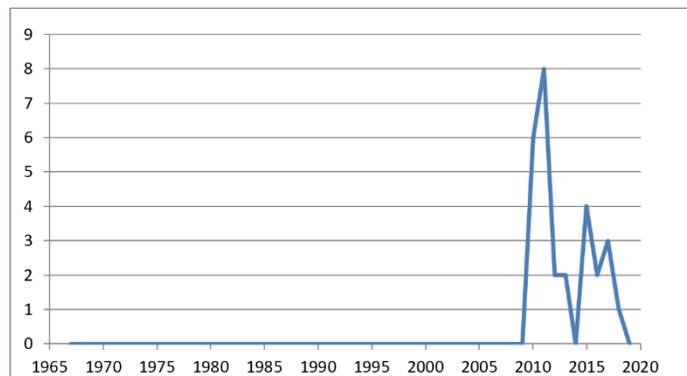


Observing Program Name:
Coordinator Name:

Dark Nebulae
Kathy Machin

Pins on hand: 64
Certificates issued this year: 1
Certificates issued ever: 28

Certificates Awarded:

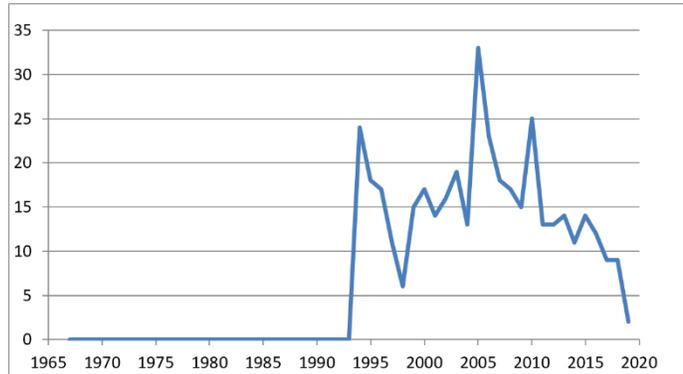


Observing Program Name:
Coordinator Name:

Deep Sky Binocular
Cindy La Russa

Pins on hand: 64
Certificates issued this year: 9
Certificates issued ever: 398

Certificates Awarded:

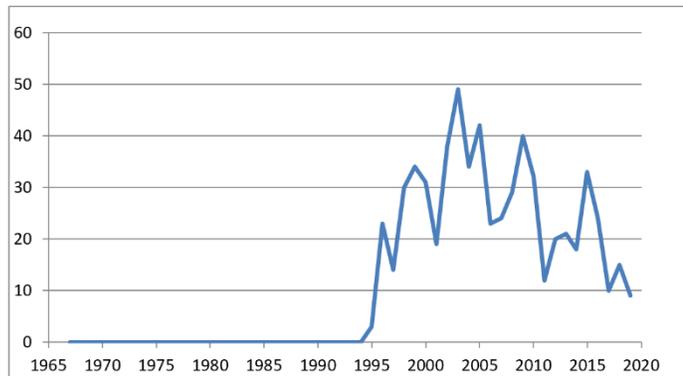


Observing Program Name:
Coordinator Name:

Double Star
Jon Schuchardt

Pins on hand: 47
Certificates issued this year: 15
Certificates issued ever: 627

Certificates Awarded:

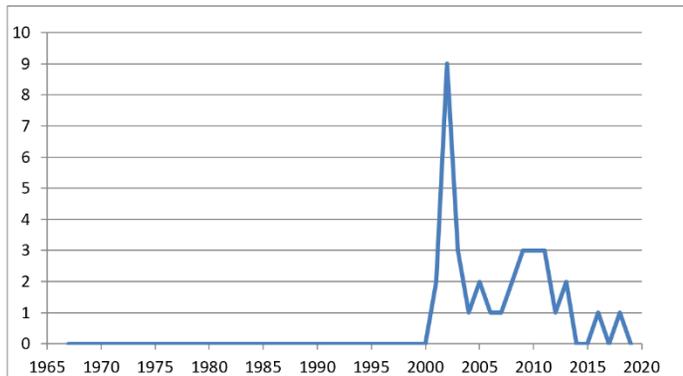


Observing Program Name:
Coordinator Name:

Earth Orbiting Satellite
Tom DeClue

Pins on hand: >100
Certificates issued this year: 1
Certificates issued ever: 35

Certificates Awarded:

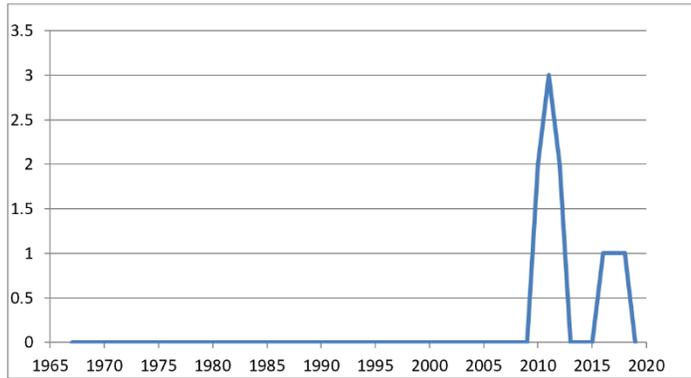


Observing Program Name:
Coordinator Name:

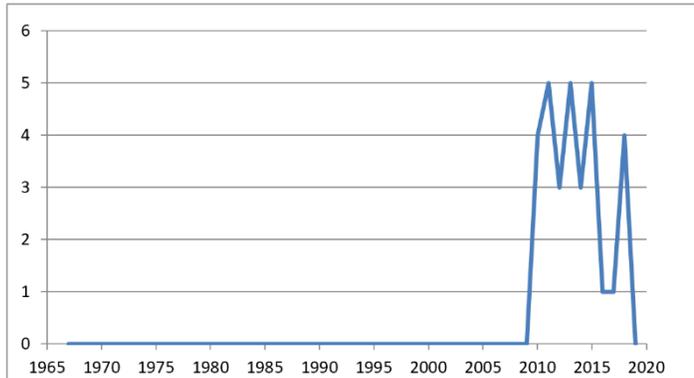
Flat Galaxy
Al Lamperti

| | Regular | Honorary |
|--------------------------------|---------|----------|
| Pins on hand: | | 58 |
| Certificates issued this year: | 1 | 4 |
| Certificates issued ever: | 10 | 31 |

Regular Certificates Awarded:



Honorary Certificates Awarded:

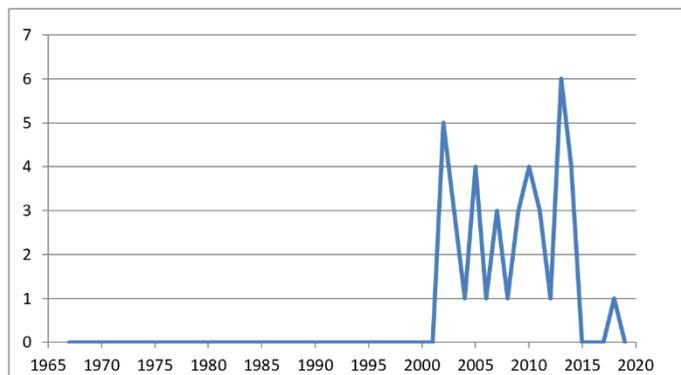


Observing Program Name:
Coordinator Name:

Galaxy Groups and Clusters
Aaron Clevenson

| | |
|--------------------------------|------------|
| Number of pins on hand: | 50 (Guess) |
| Certificates issued this year: | 1 |
| Certificates issued ever: | 40 |

Certificates Awarded:

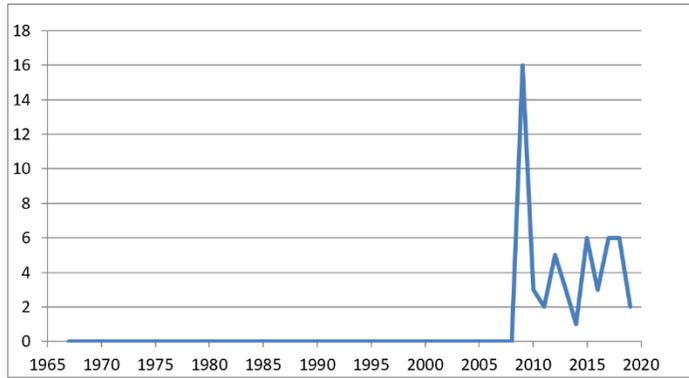


Observing Program Name:
Coordinator Name:

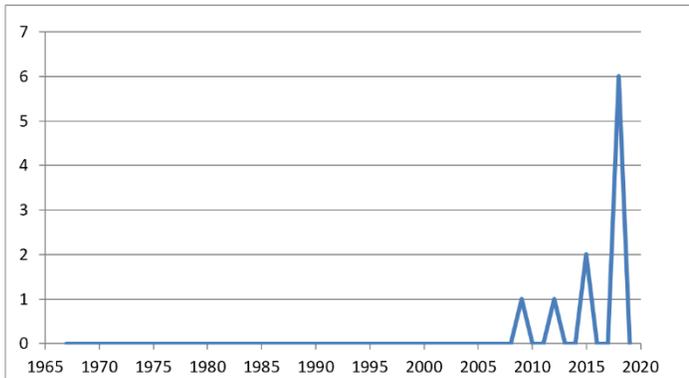
Galileo
Rodney Rynearson

| | Binocular | Regular |
|--------------------------------|-----------|---------|
| Pins on hand: | | 46 |
| Certificates issued this year: | | 4 |
| Certificates issued ever: | | 33 |

Binocular Certificates Awarded:



Regular Certificates Awarded:

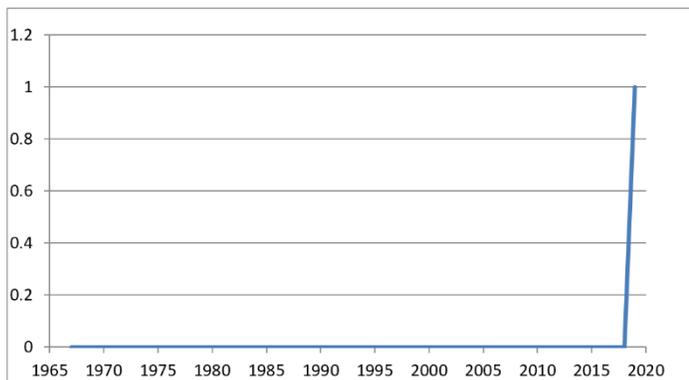


Observing Program Name:
Coordinator Name:

Galileo's T.O.E.S.
Aaron Clevenson

Certificates issued this year: 0
Certificates issued ever: 1

Certificates Awarded:

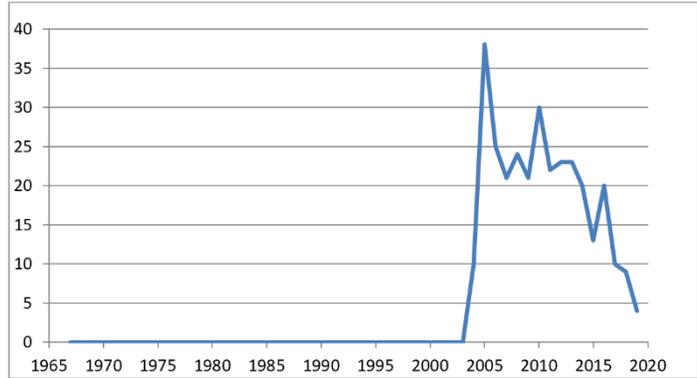


Observing Program Name:
Coordinator Name:

Globular Cluster
Bob Kerr

Pins on hand: 203
Certificates issued this year: 9
Certificates issued ever: 333

Certificates Awarded:

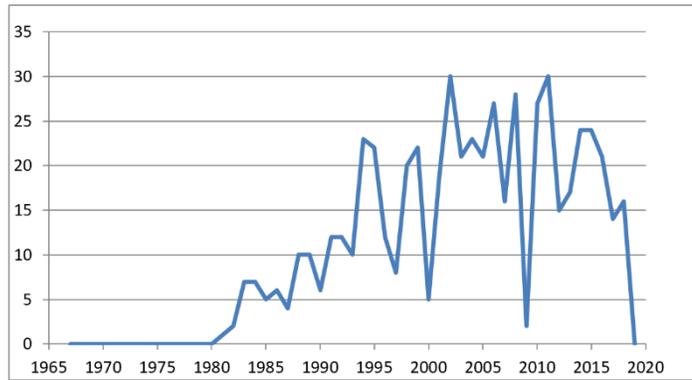


Observing Program Name:
Coordinator Name:

Herschel 400
Jack Estes

Pins on hand: 12
Certificates issued this year: 16
Certificates issued ever: 579

Certificates Awarded:

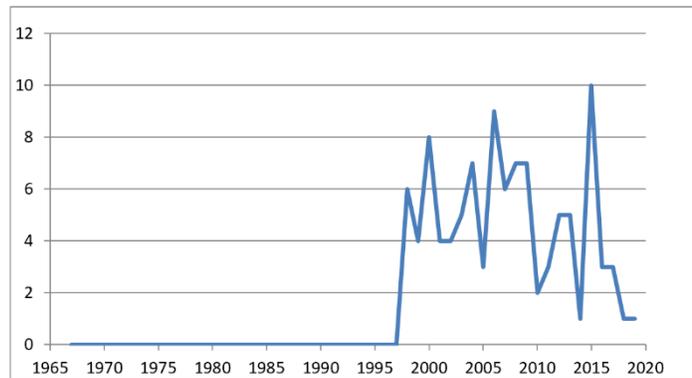


Observing Program Name:
Coordinator Name:

Herschel II
Candace Pratt

Pins on hand: 102
Certificates issued this year: 1
Certificates issued ever: 104

Certificates Awarded:

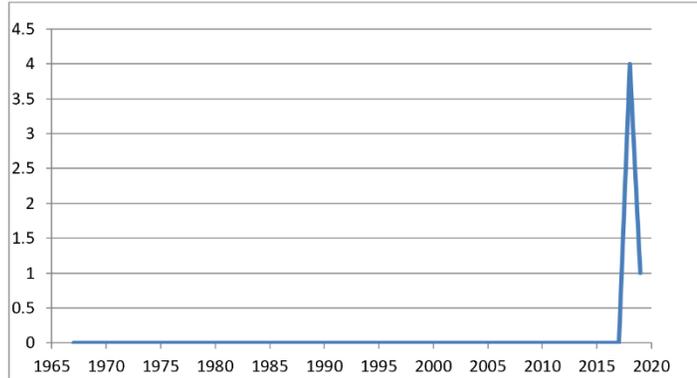


Observing Program Name:
Coordinator Name:

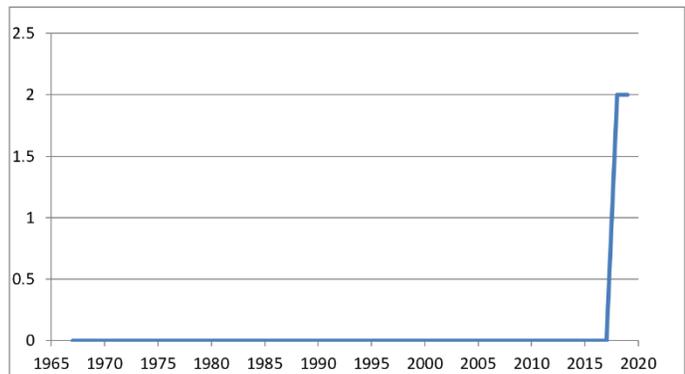
Herschel Society
Cliff Mygatt

| | Silver | Gold |
|--------------------------------|--------|------|
| Certificates issued this year: | 4 | 2 |
| Certificates issued ever: | 5 | 4 |

Silver Certificates Awarded:



Gold Certificates Awarded:

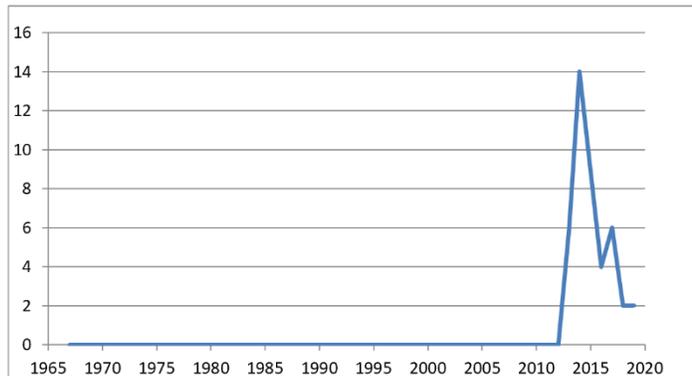


Observing Program Name:
Coordinator Name:

Hydrogen-Alpha Solar
Mark Simonson

| | |
|--------------------------------|----|
| Pins on hand: | 51 |
| Certificates issued this year: | 2 |
| Certificates issued ever: | 43 |

Certificates Awarded:

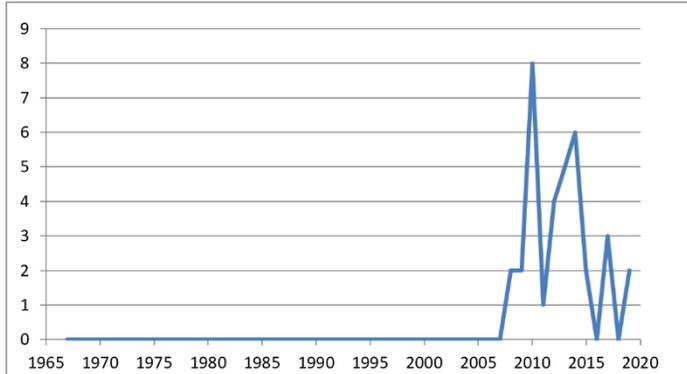


Observing Program Name:
Coordinator Name:

Local Galaxy Groups
Aaron Clevenson

Pins on hand: 55 (guess)
Certificates issued this year: 0
Certificates issued ever: 35

Certificates Awarded:

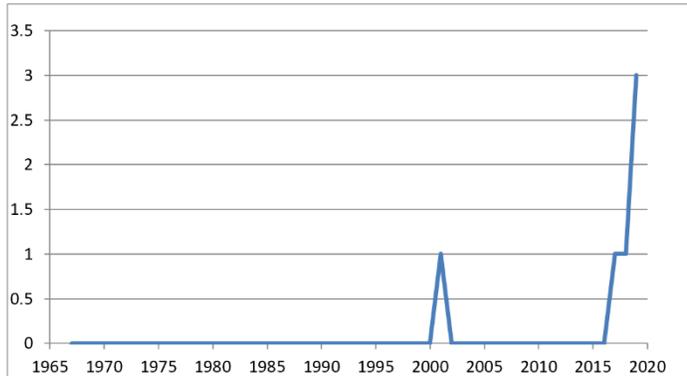


Observing Program Name:
Coordinator Name:

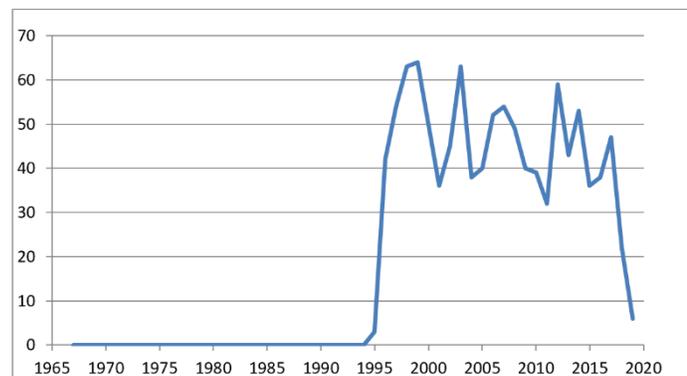
Lunar
Nina Chevalier

| | Binocular | Regular |
|--------------------------------|-----------|---------|
| Pins on hand: | | 26 |
| Certificates issued this year: | 1 | 22 |
| Certificates issued ever: | 6 | 1068 |

Binocular Certificates Awarded:



Regular Certificates Awarded:

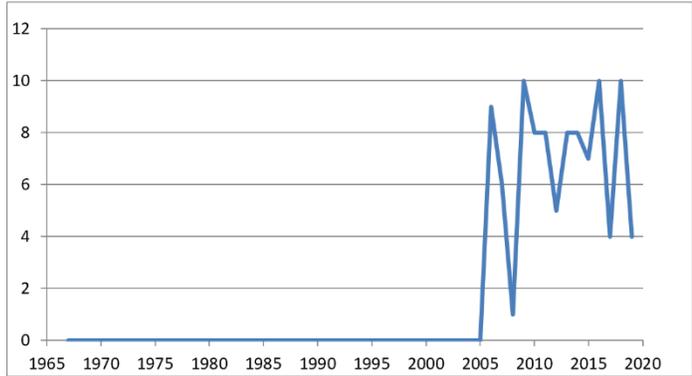


Observing Program Name:
Coordinator Name:

Lunar II
Cliff Mygatt

Pins on hand: 99
Certificates issued this year: 10
Certificates issued ever: 98

Certificates Awarded:

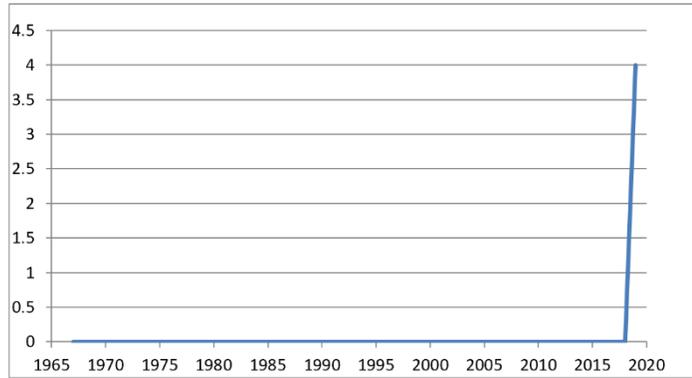


Observing Program Name:
Coordinator Name:

Mars
Mark Simonson

Pins on hand: 90
Certificates issued this year: 4
Certificates issued ever: 4

Certificates Awarded:



Observing Program Name:

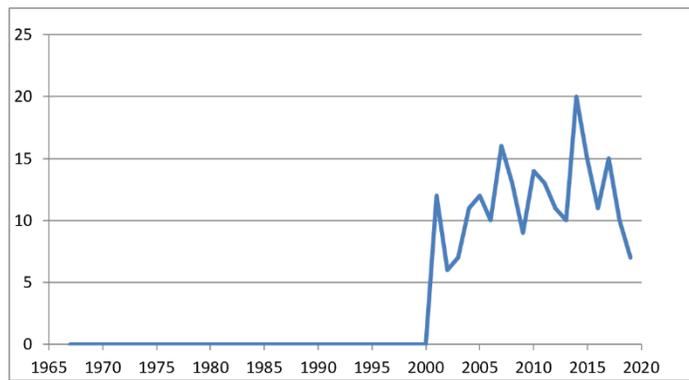
Master Observer
Master Observer – Silver
Master Observer – Gold
Master Observer – Platinum

Coordinator Name:

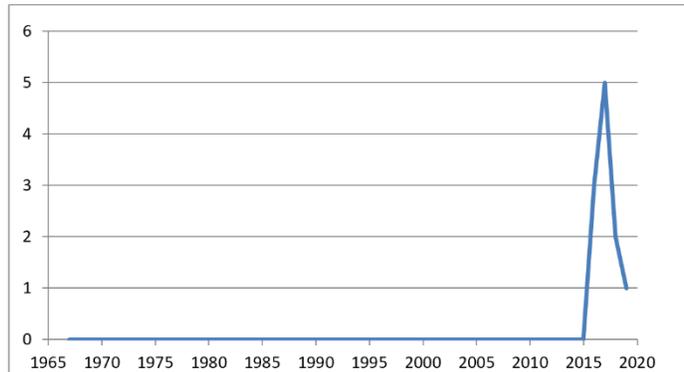
Aaron Clevenson

| | Master | Silver | Gold | Platinum |
|--------------------------------|--------|--------|------|----------|
| Pins on hand: | 66 | 80 | 86 | 89 |
| Certificates issued this year: | 10 | 2 | 0 | 1 |
| Certificates issued ever: | 222 | 11 | 6 | 3 |

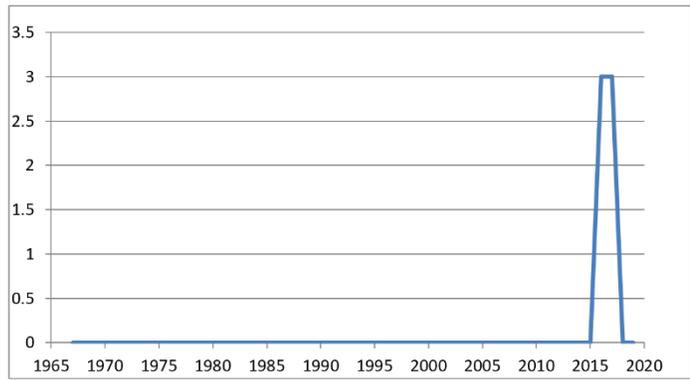
Master Observer Certificates Awarded:



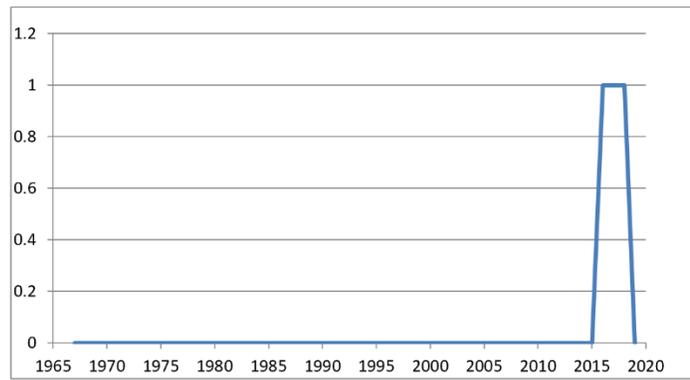
Master Observer – Silver Certificates Awarded:



Gold Master Observer Certificates Awarded:



Platinum Master Observer Certificates Awarded:



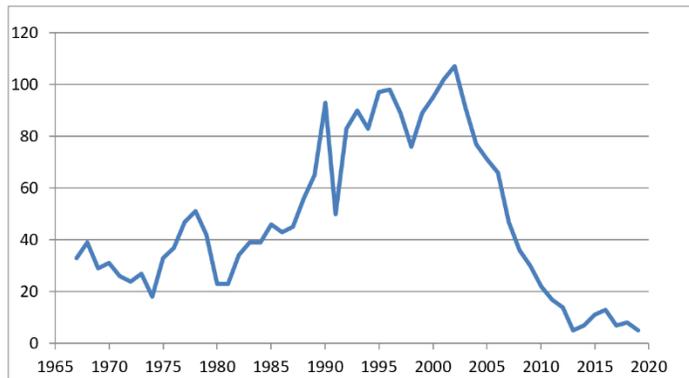
Observing Program Name:
Coordinator Name:

Messier
Scott Kranz

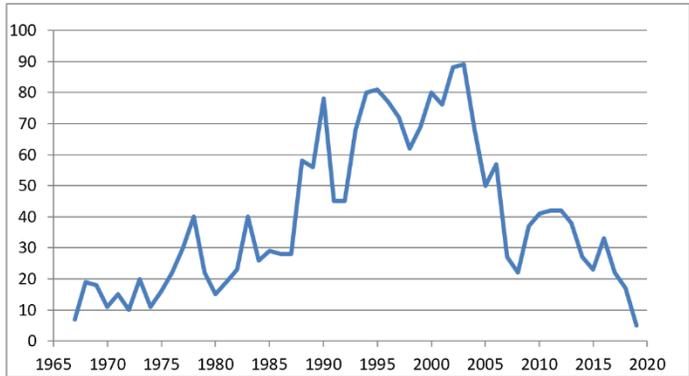
Number of pins on hand:
Number of certificates issued this year:
Total number of certificates issued ever:

| Regular | Honorary |
|---------|----------|
| | 20 |
| 8 | 17 |
| 2529 | 2124 |

Regular Certificates Awarded:



Honorary Certificates Awarded:



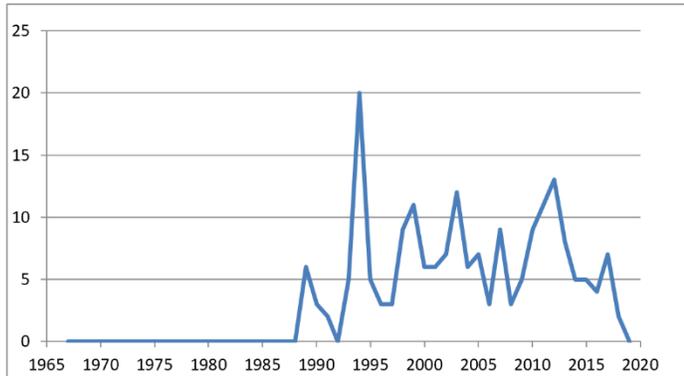
Observing Program Name:
Coordinator Name:

Meteor
Scott Kranz

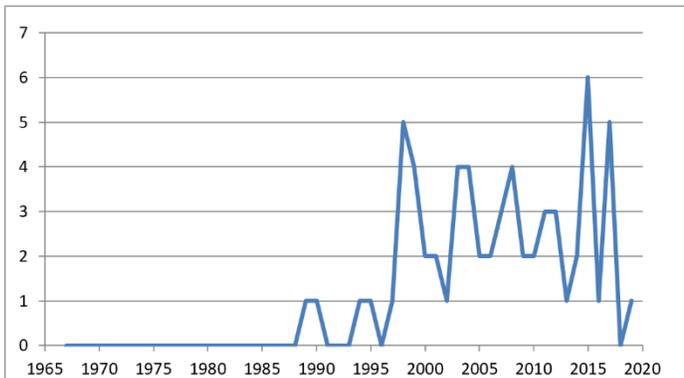
Number of pins on hand:
Number of certificates issued this year:
Total number of certificates issued ever:

| Regular | Honorary |
|---------|----------|
| | 26 |
| 2 | 0 |
| 195 | 64 |

Regular Certificates Awarded:



Honorary Certificates Awarded:

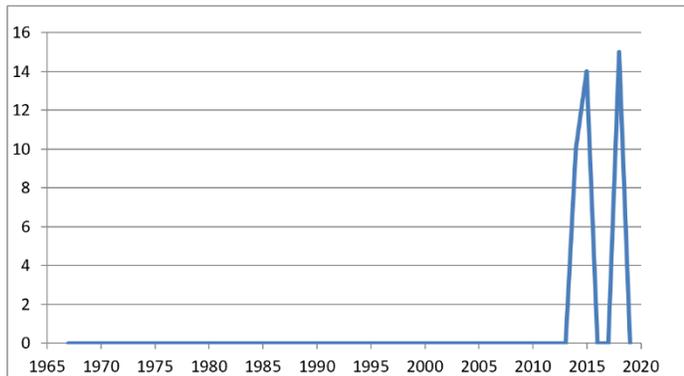


Observing Program Name:
Coordinator Name:

NASA Observing Challenges
Aaron Clevenson

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

Certificates Awarded:

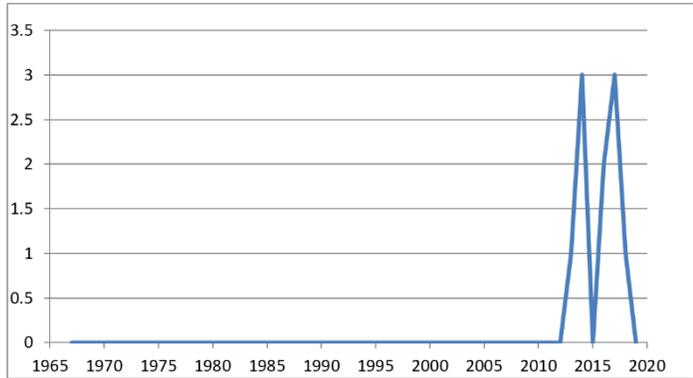


Observing Program Name:
Coordinator Name:

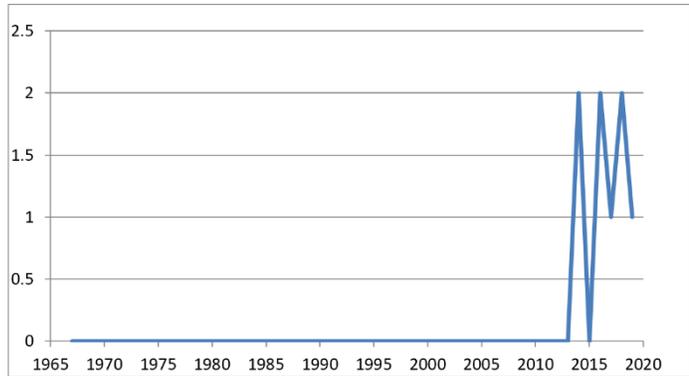
NEO
Dolores Hill and Carl Hergenrother

| | Intermediate | Advanced |
|--------------------------------|--------------|----------|
| Number of pins on hand: | | 177 |
| Certificates issued this year: | 1 | 2 |
| Certificates issued ever: | 10 | 8 |

Intermediate Certificates Awarded:



Advanced Certificates Awarded:

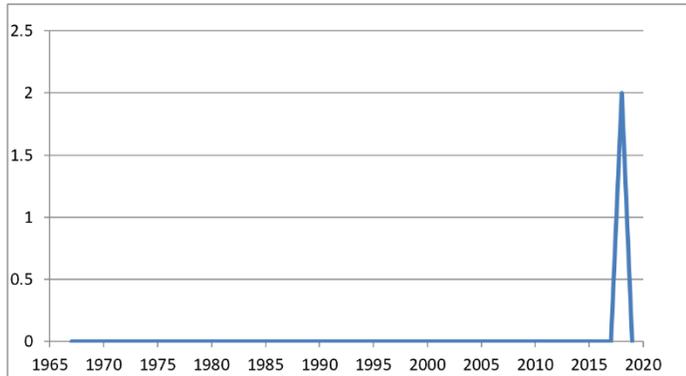


Observing Program Name:
Coordinator Name:

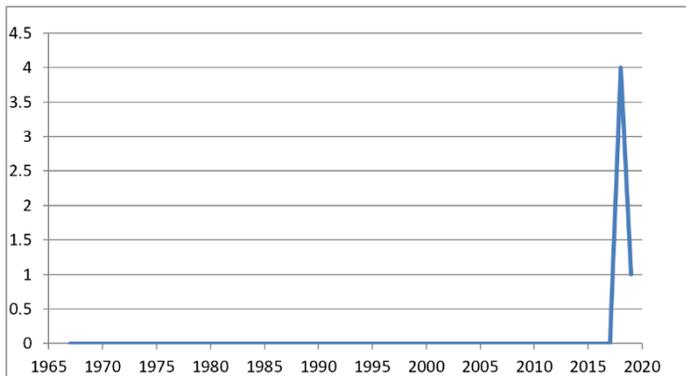
Nova
Raymond Hill

| | Silver | Gold |
|--------------------------------|--------|------|
| Number of pins on hand: | | 177 |
| Certificates issued this year: | 2 | 4 |
| Certificates issued ever: | 2 | 5 |

Silver Certificates Awarded:



Gold Certificates Awarded:

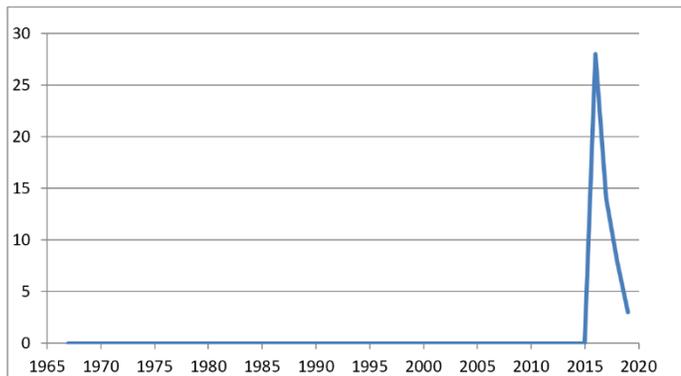


Observing Program Name:
Coordinator Name:

Observer
Aaron Clevenson

| | |
|--------------------------------|----|
| pins on hand: | 35 |
| Certificates issued this year: | 8 |
| Certificates issued ever: | 53 |

Certificates Awarded:

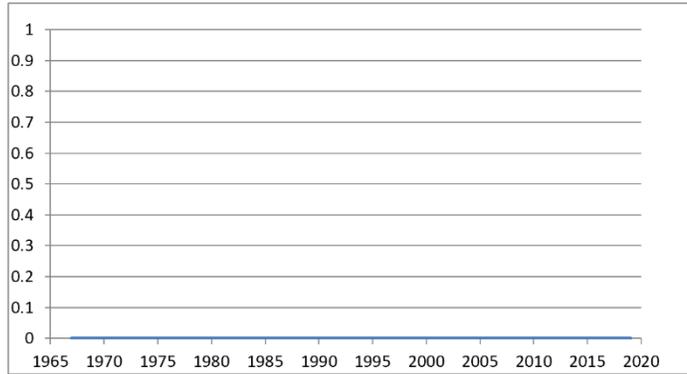


Observing Program Name:
Coordinator Name:

Occultation
Steve Conard

Pins on hand: 0
Certificates issued this year: 0
Certificates issued ever: 0

Certificates Awarded:

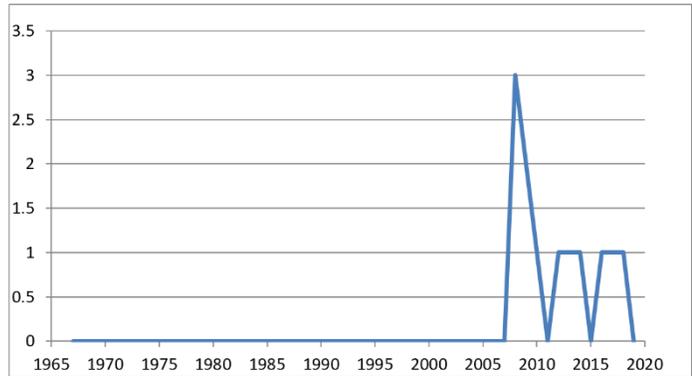


Observing Program Name:
Coordinator Name:

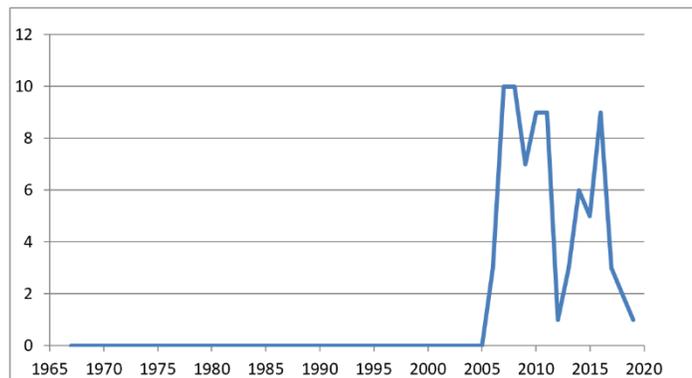
Open Cluster
Cliff Mygatt

| | Basic | Advanced |
|--------------------------------|-------|----------|
| Pins on hand: | | 97 |
| Certificates issued this year: | 1 | 2 |
| Certificates issued ever: | 12 | 78 |

Basic Certificates Awarded:



Advanced Certificates Awarded:

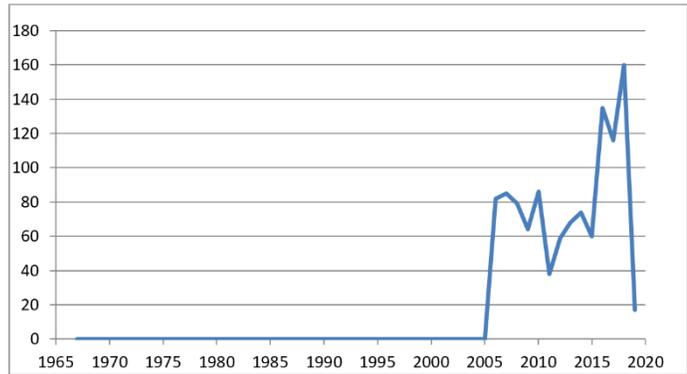


Observing Program Name:
Coordinator Name:

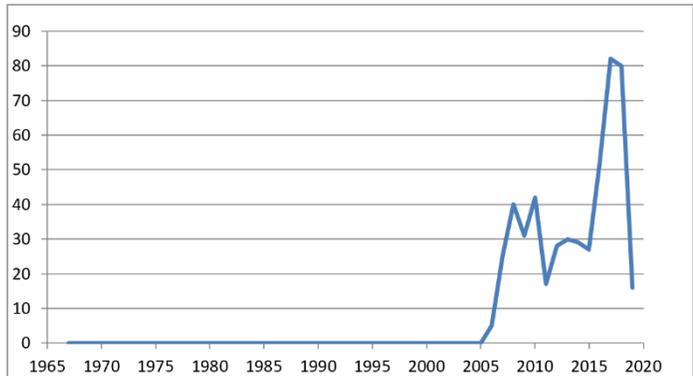
Outreach
W. Maynard Pittendreigh

| | Honorary | Outreach | Stellar | Master |
|--------------------------------|----------|----------|---------|--------|
| Pins on hand: | | | 116 | 54 |
| Certificates issued this year: | 0 | 160 | 80 | 33 |
| Certificates issued ever: | 4 | 1123 | 504 | 259 |

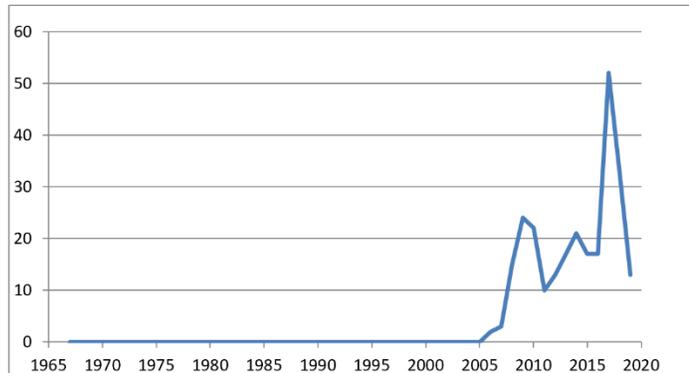
Outreach Certificates Awarded:



Stellar Certificates Awarded:



Master Certificates Awarded:

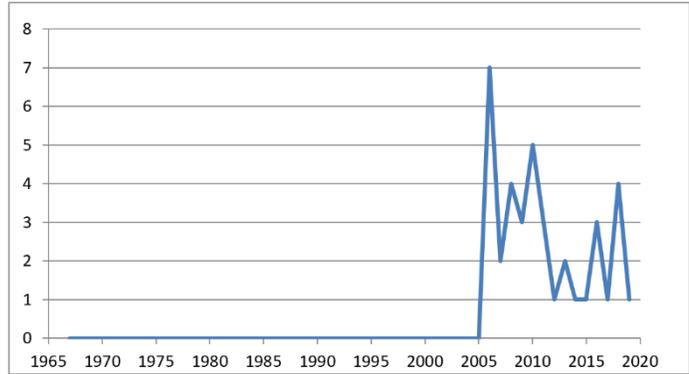


Observing Program Name:
Coordinator Name:

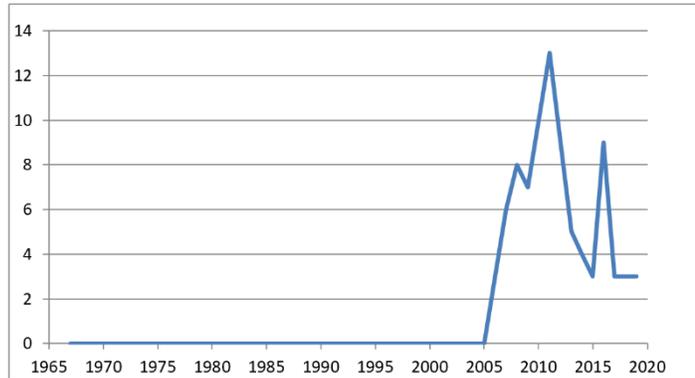
Planetary Nebulae (Northern and Southern)
Ted Forte

| | Basic | Advanced |
|--------------------------------|-------|----------|
| Pins on hand: | | 209 |
| Certificates issued this year: | 4 | 3 |
| Certificates issued ever: | 38 | 86 |

Basic Certificates Awarded:



Advanced Certificates Awarded:

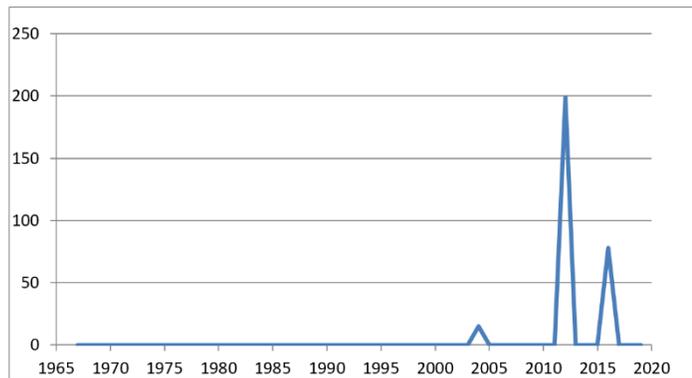


Observing Program Name:
Coordinator Name:

Planetary Transit
Steve Conard

| | |
|--------------------------------|-----|
| Pins on hand: | 0 |
| Certificates issued this year: | 0 |
| Certificates issued ever: | 292 |

Certificates Awarded:

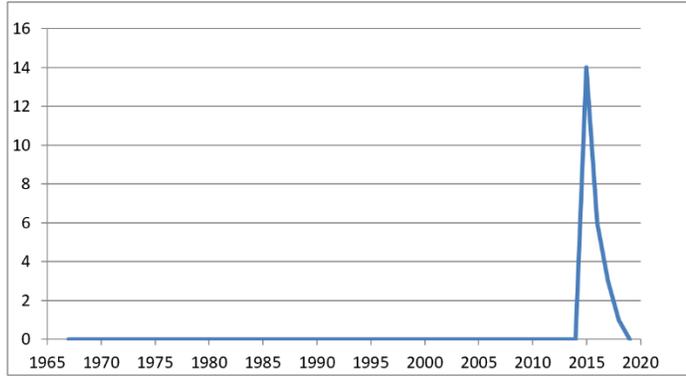


Observing Program Name:
Coordinator Name:

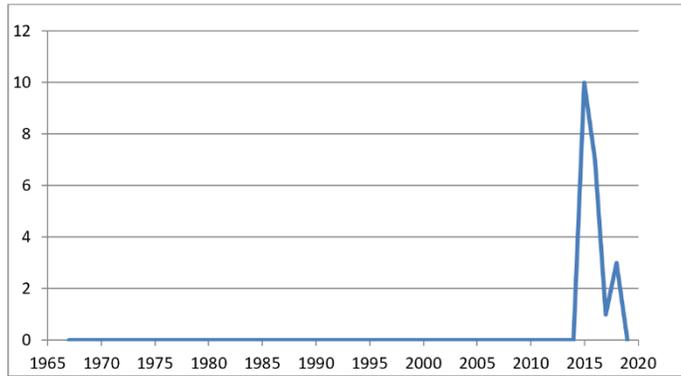
Radio Astronomy
Steve Boerner

| | Bronze | Silver | Gold |
|--------------------------------|--------|--------|------|
| Pins on hand: | | 73 | 65 |
| Certificates issued this year: | 1 | 3 | 1 |
| Certificates issued ever: | 24 | 21 | 10 |

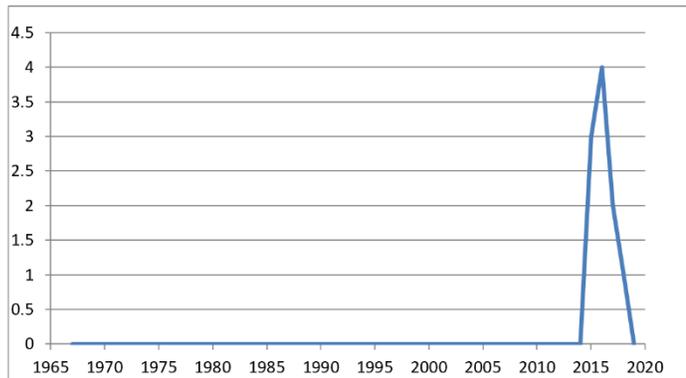
Bronze Certificates Awarded:



Silver Certificates Awarded:



Gold Certificates Awarded:

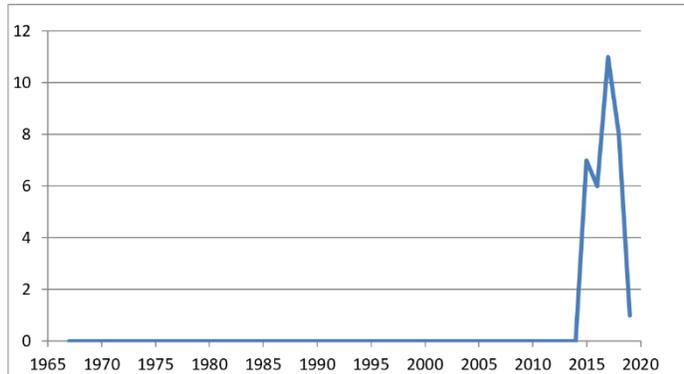


Observing Program Name:
Coordinator Name:

Sketching
Cindy L. Krach

Pins on hand: 55
Certificates issued this year: 8
Certificates issued ever: 33

Certificates Awarded:



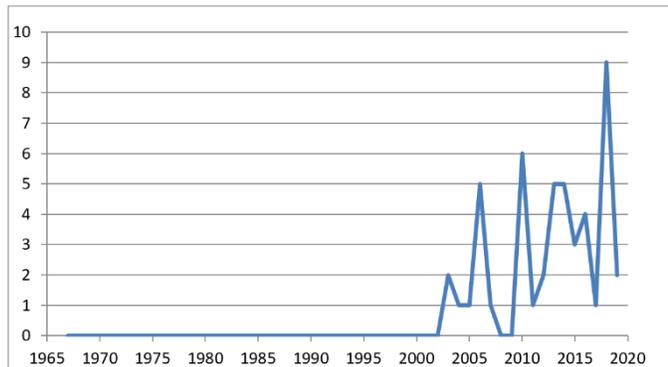
Observing Program Name:
Coordinator Name:

Sky Puppies
Aaron Clevenson

Pins on hand: 35
Certificates issued this year: 9
Certificates issued ever: 48
Highlights:

We have entered into a relationship with NASA through the NSSEC. We are making the manuals, workbooks, and pins Available to anyone and the costs are covered by NSSEC.

Certificates Awarded:

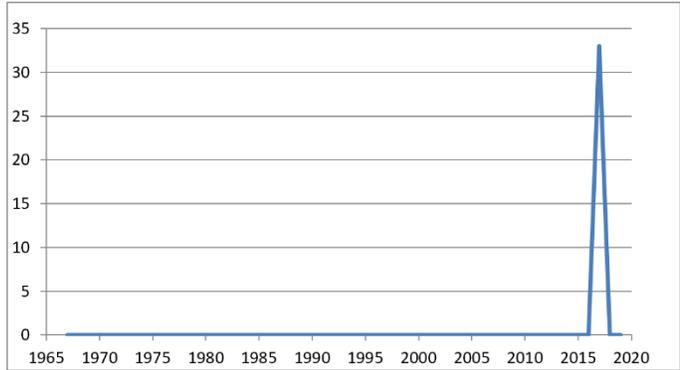


Observing Program Name:
Coordinator Name:

Solar Eclipse 2018
Aaron Clevenson

Pins on hand: 0
Certificates issued this year: 0
Certificates issued ever: 33

Certificates Awarded:

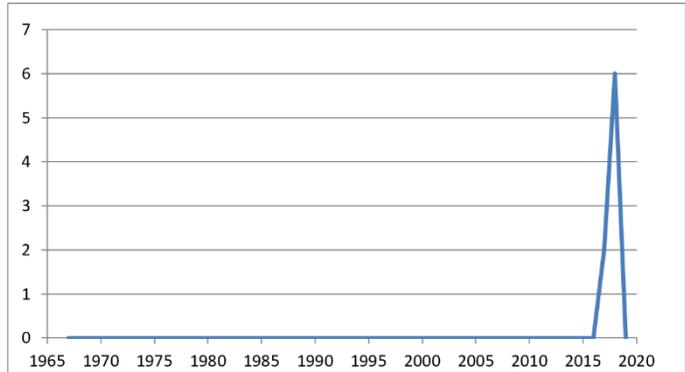


Observing Program Name:
Coordinator Name:

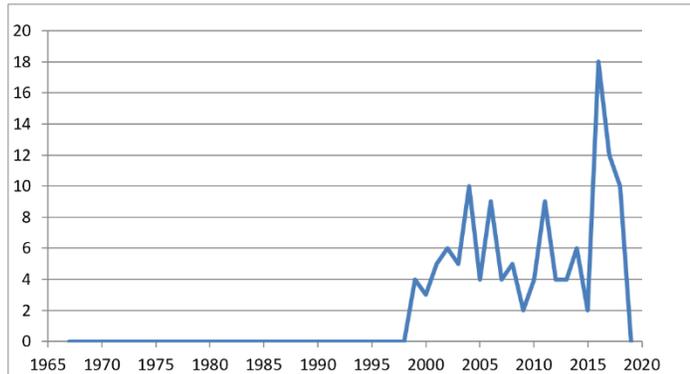
Solar System
Aaron Clevenson

| | Binocular | Regular |
|--------------------------------|-----------|---------|
| Pins on hand: | | 0 |
| Certificates issued this year: | 6 | 10 |
| Certificates issued ever: | 8 | 22 |

Binocular Certificates Awarded:



Regular Certificates Awarded:

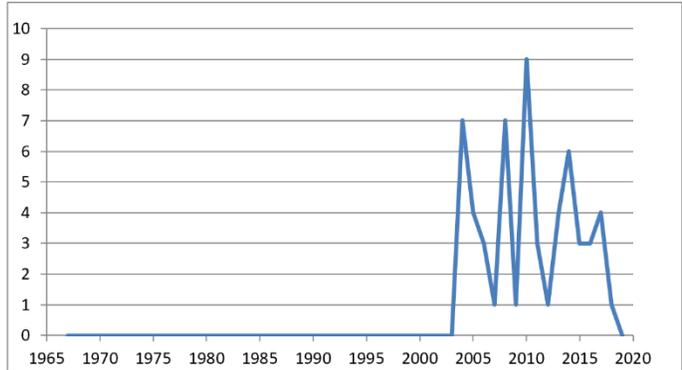


Observing Program Name:
Coordinator Name:

Southern Skies Telescopic
Kathy Machin

Pins on hand: 34
Certificates issued this year: 1
Certificates issued ever: 57

Certificates Awarded:

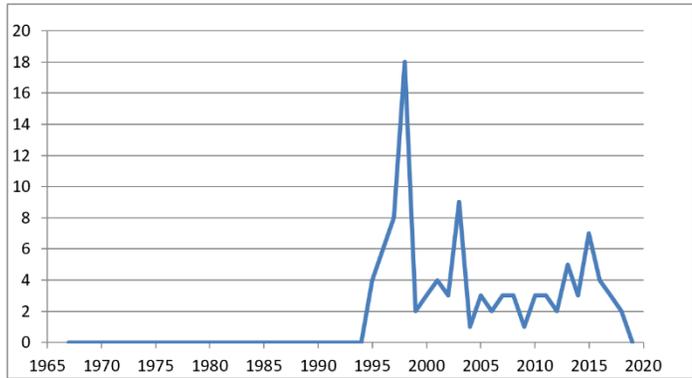


Observing Program Name:
Coordinator Name:

Southern Skies Binocular
Cindy La Russa

Pins on hand: 90
Certificates issued this year: 2
Certificates issued ever: 102

Certificates Awarded:

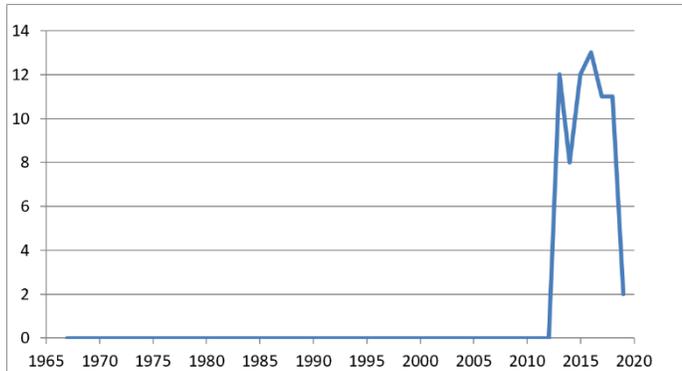


Observing Program Name:
Coordinator Name:

Stellar Evolution
Bill Pellerin

Pins on hand: 33
Certificates issued this year: 11
Certificates issued ever: 69

Certificates Awarded:

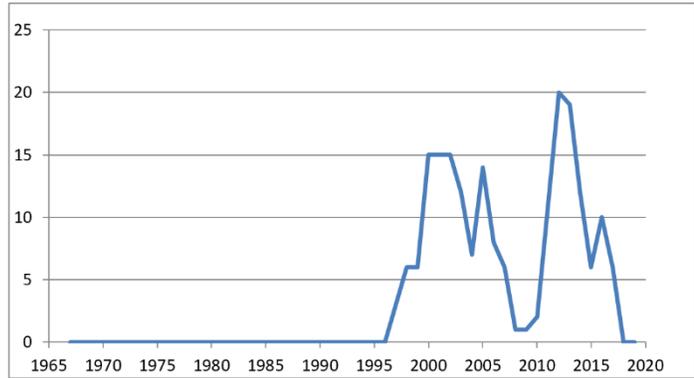


Observing Program Name:
Coordinator Name:

Sunspotter
Scott Kranz

Pins on hand: 96
Certificates issued this year: 0
Certificates issued ever: 195

Certificates Awarded:

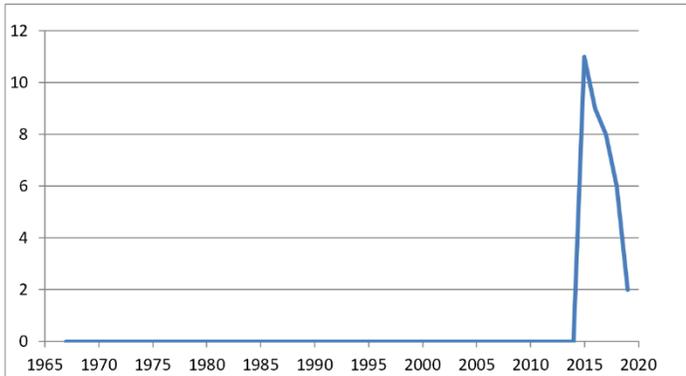


Observing Program Name:
Coordinator Name:

Two in the View
Bob Scott

Pins on hand: 54
Certificates issued this year: 6
Certificates issued ever: 36

Certificates Awarded:

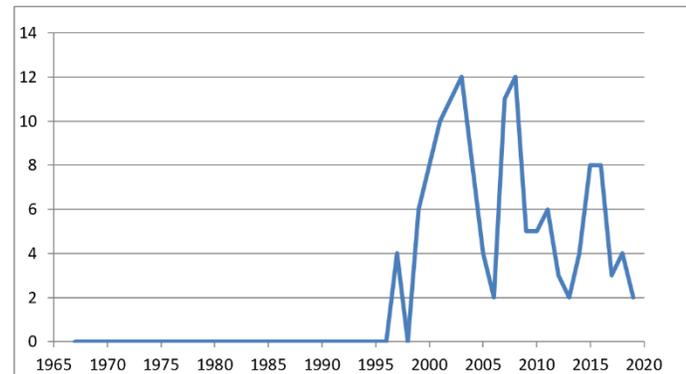


Observing Program Name:
Coordinator Name:

Universe Sampler
Amelia Goldberg

Pins on hand: 53
Certificates issued this year: 4
Certificates issued ever: 138

Certificates Awarded:

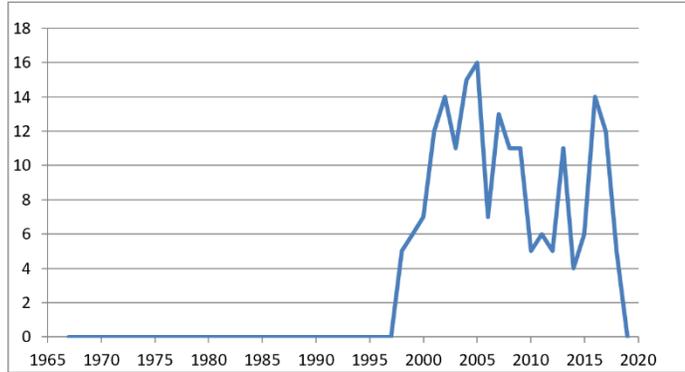


Observing Program Name:
Coordinator Name:

Urban
Terry N. Trees

Pins on hand: 87
Certificates issued this year: 5
Certificates issued ever: 196

Certificates Awarded:



Observing Program Name:
Coordinator Name:

Variable Star
Robert Togni

Pins on hand: 60
Certificates issued this year: 4
Certificates issued ever: 33

Certificates Awarded:

