

Thirty Abell Galaxy Groups

observed by Marie Lott

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|--|--|--|
| <u>#1 Abell 14 ESO 473-5 et al in Cetus</u> | <u>#11 Abell 426 NGC 1275 et al in Perseus</u> | <u>#30 Abell 1656/1367 the Coma Cluster</u> |
| <u>#2 Abell 76 IC 1565 et al in Pisces</u> | <u>#12 Abell 539 UGC 3274 et al in Orion</u> | <u>#31 Abell 3537 IC 3986 et al in Centaurus</u> |
| <u>#3 Abell 119 UGC 579 et al in Cetus</u> | <u>#14 Abell 569 NGC 2329 et al in Lynx</u> | <u>#33 Abell 3565 IC 4296 et al in Centaurus</u> |
| <u>#4 Abell 147 PGC 4060 et al in Cetus</u> | <u>#15 Abell 576 CGCG 261-56 et al in Lynx</u> | <u>#34 Abell 3574 IC 4329 et al in Centaurus</u> |
| <u>#5 Abell 151 IC 80A et al in Cetus</u> | <u>#16 Abell 634 UGC 4289 et al in Lynx</u> | <u>#42 Abell 2199 NGC 6166 et al in Hercules</u> |
| <u>#6 Abell 194 NGC 541 et al in Cetus</u> | <u>#17 Abell 671 IC 2378 et al in Cancer</u> | <u>#46 Abell 2589 NGC 7647 et al in Pegasus</u> |
| <u>#7 Abell 262 NGC 708 et al in Andromeda</u> | <u>#18 Abell 754 PGC 25714 et al in Hydra</u> | <u>#47 Abell 2593 NGC 7649 et al in Pegasus</u> |
| <u>#8 Abell 347 NGC 910 et al in Andromeda</u> | <u>#19 Abell 779 NGC 2832 et al in Lynx</u> | <u>#48 Abell 2634 NGC 7720 et al in Pegasus</u> |
| <u>#9 Abell 397 UGC 2413 et al in Aries</u> | <u>#20 Abell 1060 NGC 3311 et al in Hydra</u> | <u>#49 Abell 4038 IC 5358 et al in Sculptor</u> |
| <u>#10 Abell 400 CGC 415-46 et al in Cetus</u> | <u>#21 Abell 1139 NGC 6057 et al in Leo</u> | <u>#50 Abell 2666 NGC 7768 et al in Pegasus</u> |

Telescopes, Exposures, and Locations

Remote telescopes were used through SLOOH unless indicated otherwise. The SLOOH telescopes were either in the Canary Islands at the Observatorio del Teide, Izaña, Tenerife or in Chile at the Santa Martina Observatory, La Dehesa, Santiago, Chile. Full specs on the SLOOH scopes are available [here](#). SLOOH images were captured as multiple (2-6) 50-second luminance exposures, stacked in DeepSkyStacker, run through [FitsScrubber](#), and then had curves or levels tweaked in Photoshop. The resulting images from SLOOH were inverted for display here. All SLOOH images are oriented with North up and East left.

Astrometry was performed at nova.astronomy.net

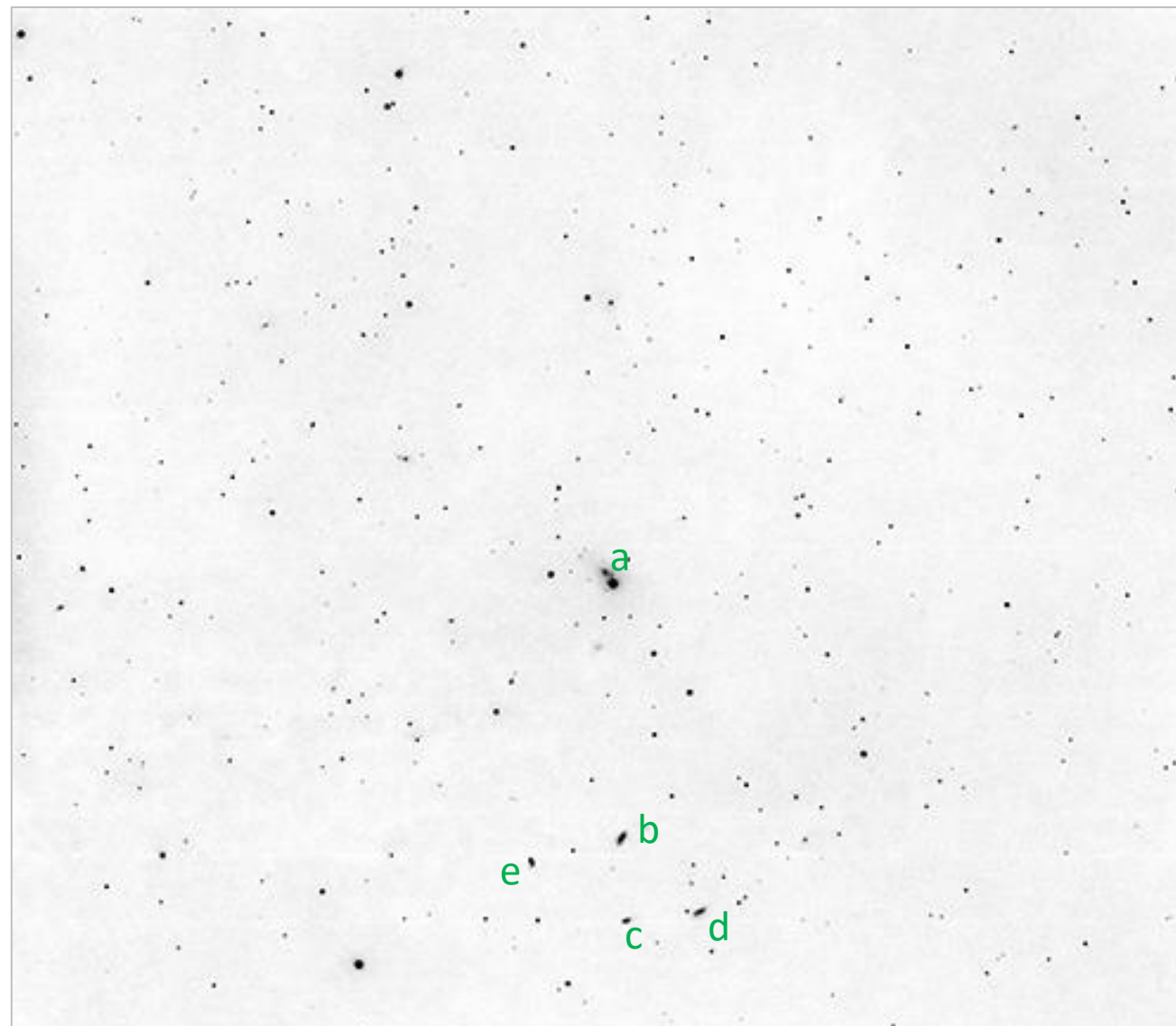
Magnitudes are taken from Sky Safari; in many cases these are dimmer than those listed in the program booklet.

- Canary One: 20" CDK, FLI PL09000 camera
- Canary Two: 17" CDK, FLI PL16803 camera
- Chile Two: 17" CDK, FLI PL16803 camera
- Deerlick Astronomy Village ("DAV") in Sharon GA: 8" SCT with Mallincam DS10c camera
- Remote telescopes other than SLOOH are indicated on the image.

#1 Abell 14

ESO 473-5 et al in Cetus

2023-11-14 02:20Z SLOOH Chile Two



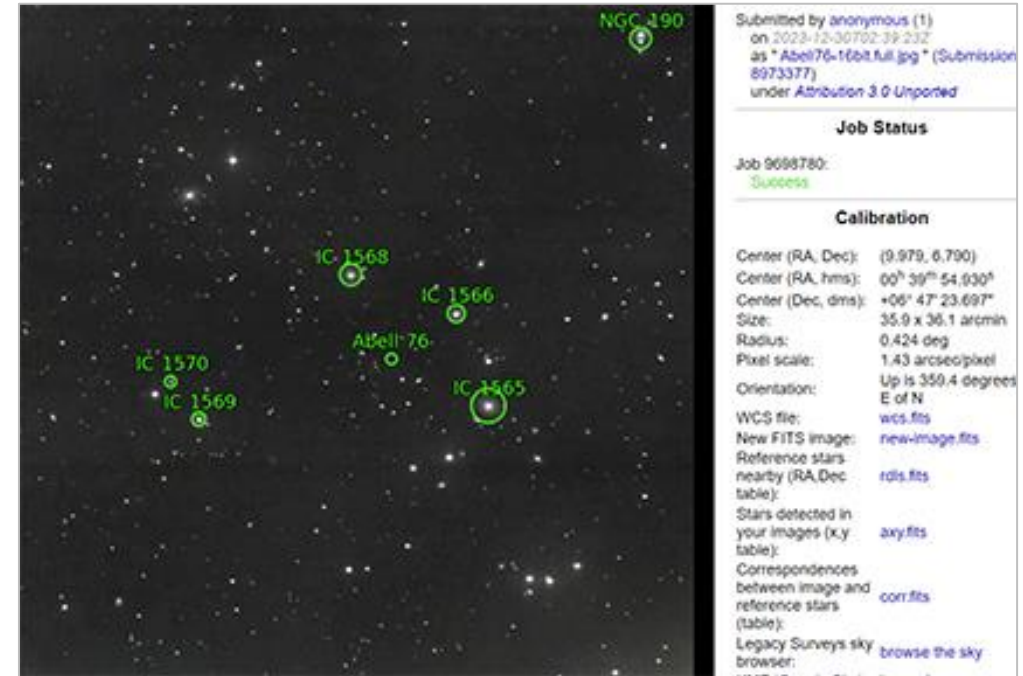
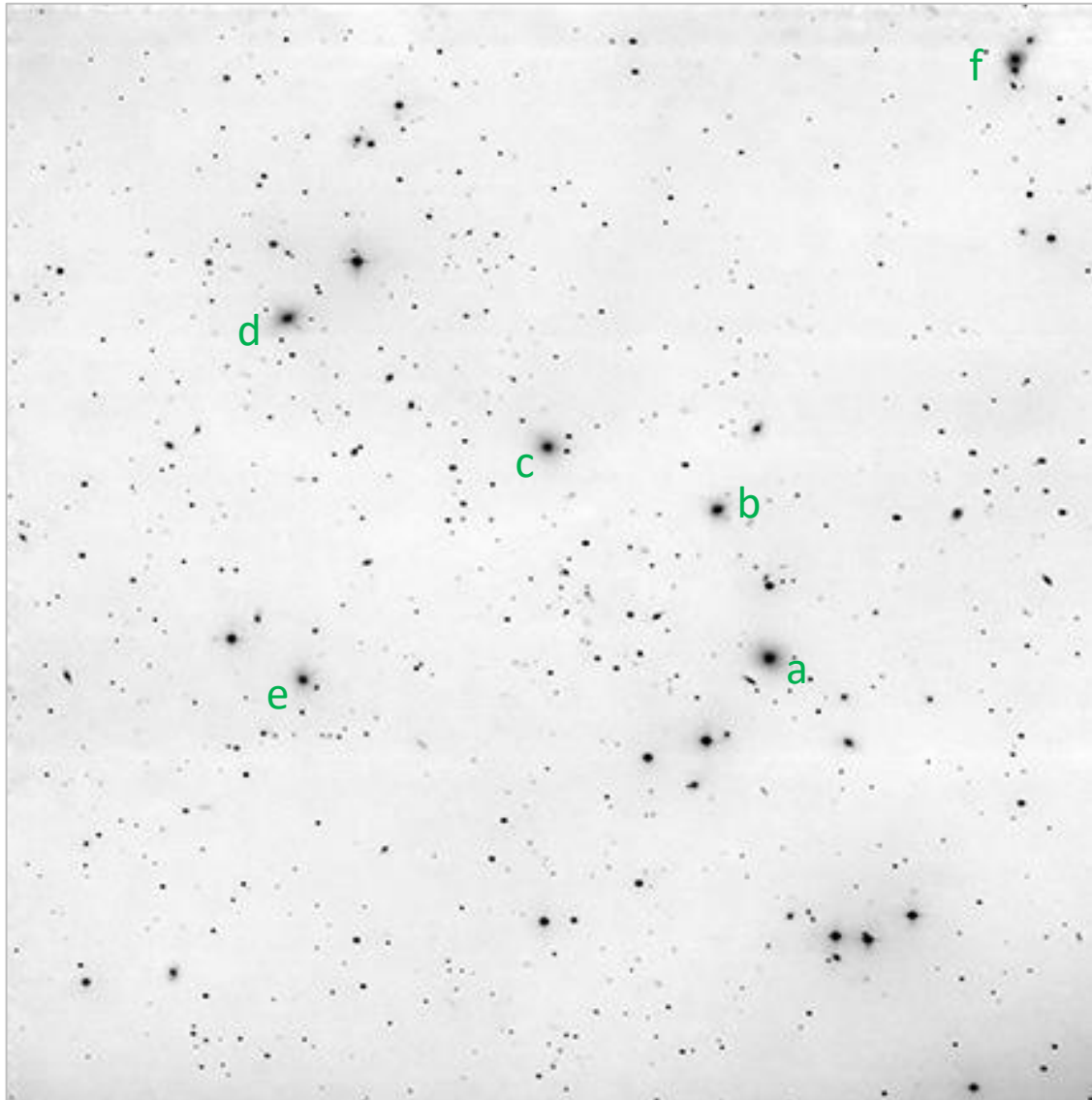
- a) **ESO 473-5**, mag 14.6
- b) PGC 1013, mag 14.9
- c) PGC1012, mag 15.4
- d) PGC 991, mag 15.0
- e) PGC 1029, mag 15.1

Abell 14 contains 35+ galaxies, the brightest of which is ESO 473-5 (a) at mag 15.2. It is sitting right on top of mag 10 star HD 1096, so at 1st glance it appears bigger than it truly is. I've labeled 4 other brighter members of ACO 14 (b-e) but the rest of the group are teeny tiny.

#2 Abell 76

IC 1565 et al in Pisces

2023-11-15 21:20Z SLOOH Canary One

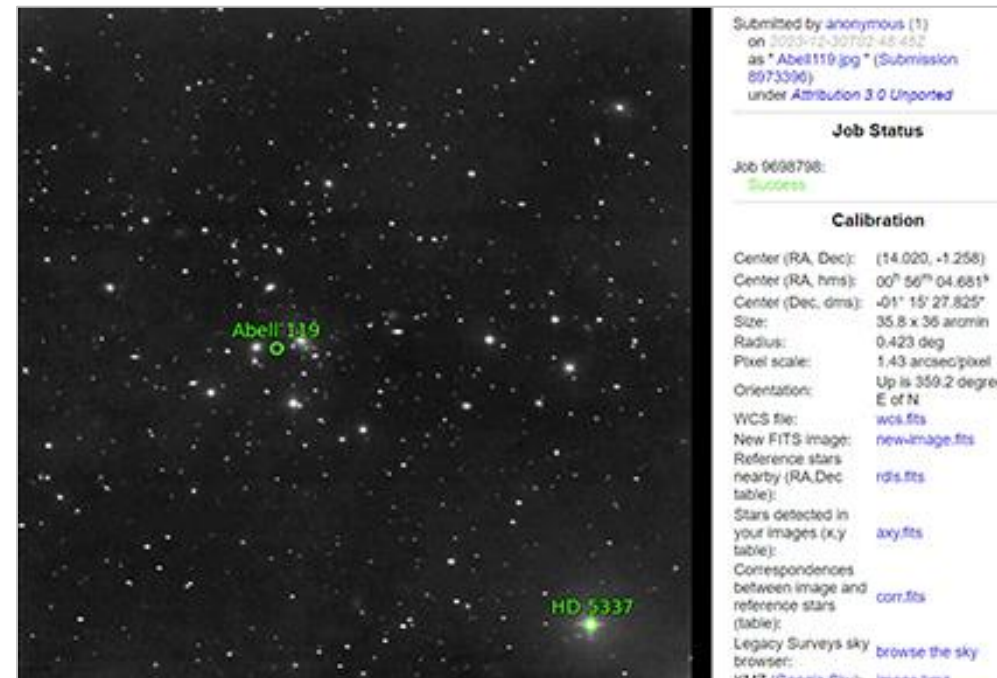
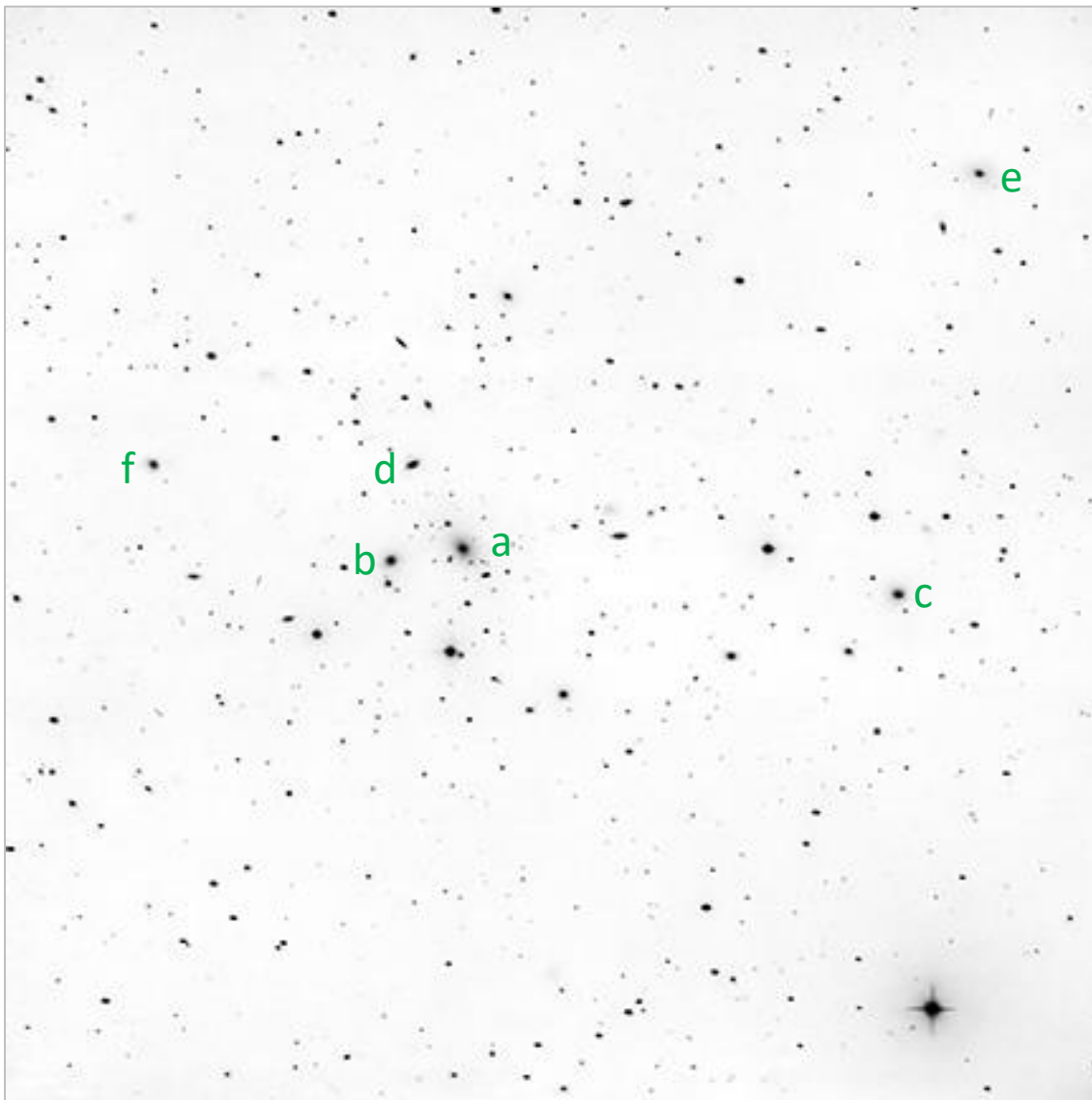


- a) **IC 1565**, mag 14.5
 - b) IC 1566, mag 15.4
 - c) IC 1568, mag 15.7
 - d) UGC 429, mag 15.4
 - e) IC 1569, mag 15.7
 - f) NGC 190, mag 14.9
- = Hickson

Abell 76 contains 42+ galaxies, the brightest of which is IC 1565 (a) at mag 15.2. I've labeled six other brighter members of ACO 76 (b-f). Still, over a dozen more easily seen galaxies are present in this field, plus lots of tiny ones as well.

#3 Abell 119 UGC 579 et al in Cetus

2023-11-15 22:50Z SLOOH Canary One



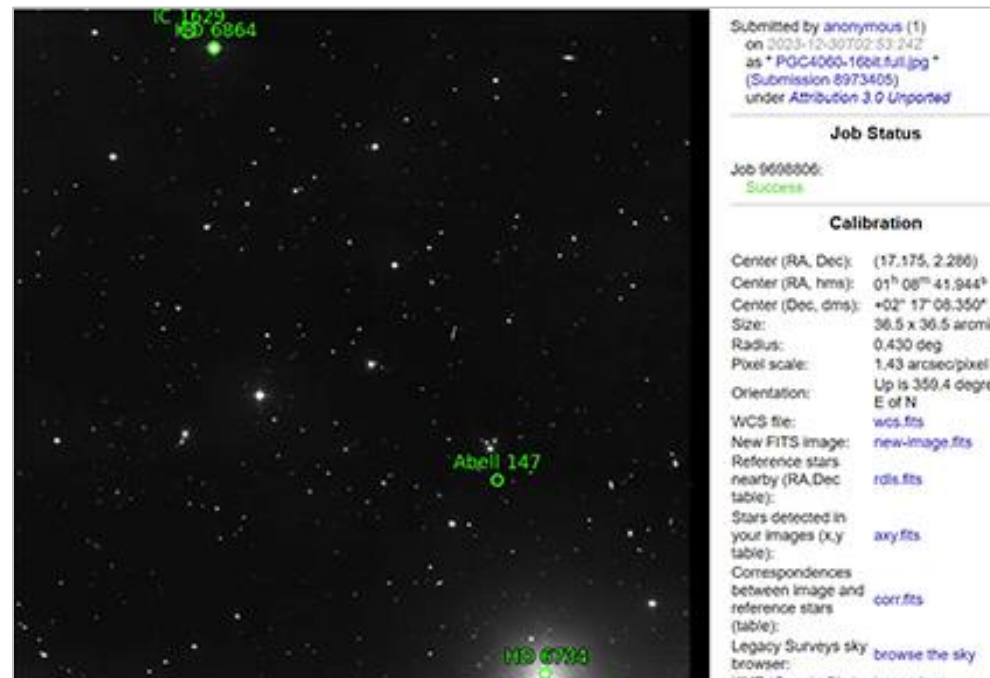
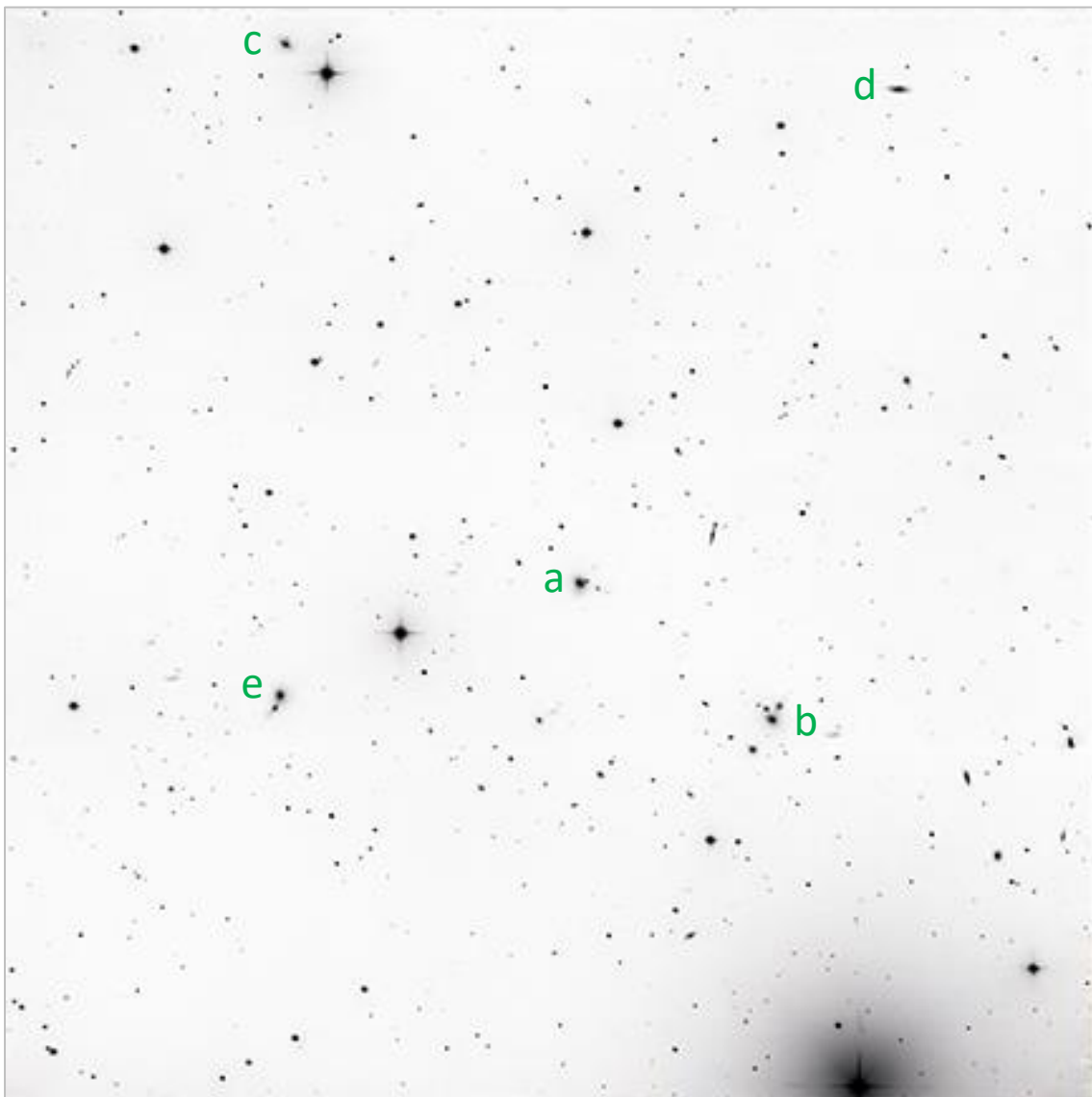
- a) **UGC 579**, mag 13.3
- b) UGC 583, mag 13.5
- c) PGC 3272, mag 15.0
- d) PGC 3357, mag 15.3
- e) UGC 568, mag 15.4
- f) UGC 587, mag 15.5

Abell 119 contains well over 69 galaxies, the brightest of which is UGC 579 (a) at mag 13.3. I've labeled five other brighter members of ACO 119 (b-f). Many other galaxies are detectable in this field.

#4 Abell 147

PGC 4060 et al in Cetus

2023-11-13 21:40Z SLOOH Canary One

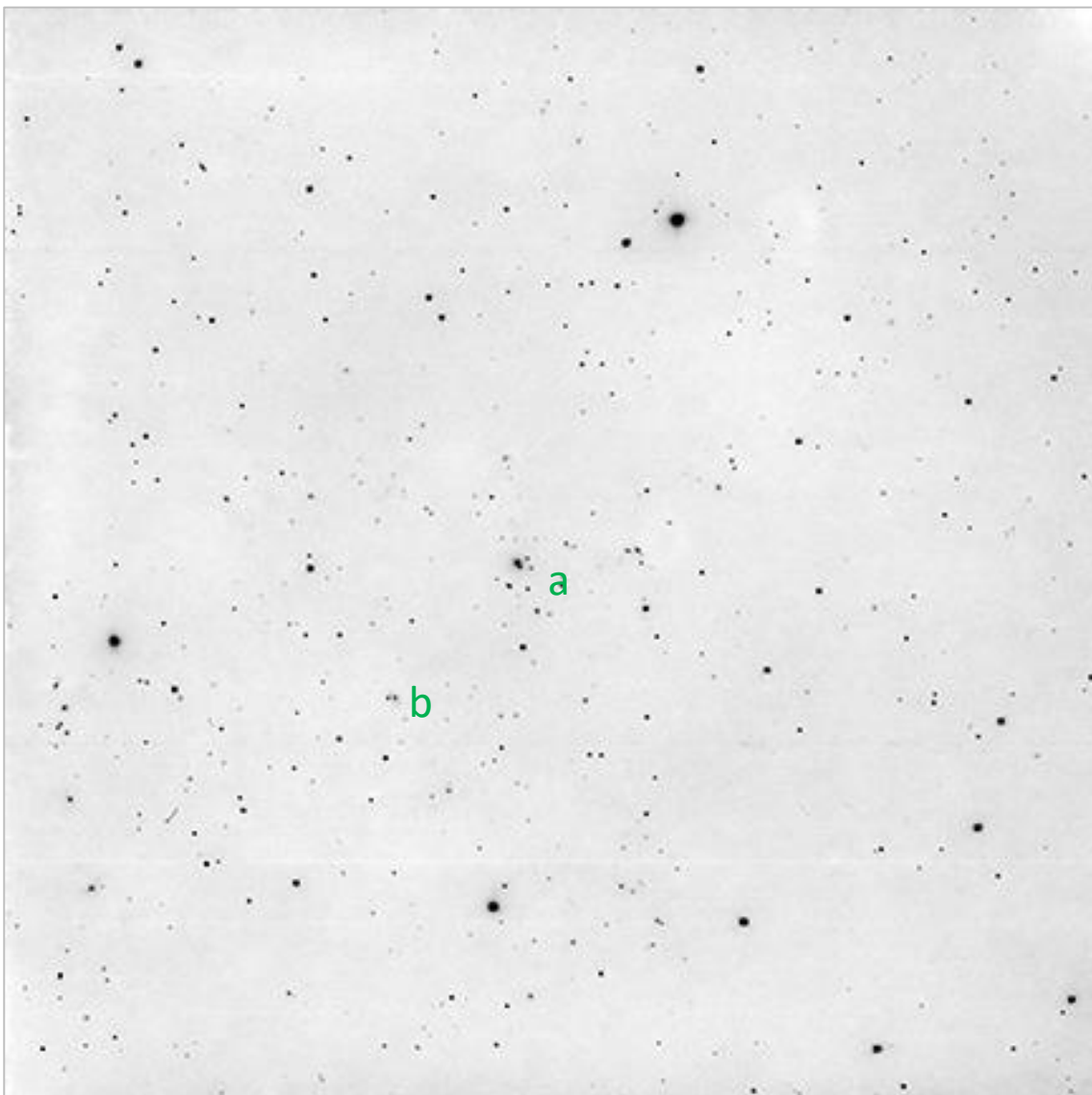


- a) **PGC 4060, mag 15.0**
- b) UGC 701, mag 15.1
- c) IC 1629, mag 16.0
- d) UGC 698, mag 15.4
- e) UGC 720, mag 15.7

Abell 147 contains over 32 galaxies, the brightest of which is PGC 4060 (a) at mag 15.0. I've labeled four other brighter members of ACO 147 (b-e). A few other tiny galaxies can be detected. Bright star 29 Ceti illuminates the field, bottom right.

#5 Abell 151 IC 80A et al in Cetus

2023-11-13 21:40Z SLOOH Canary One



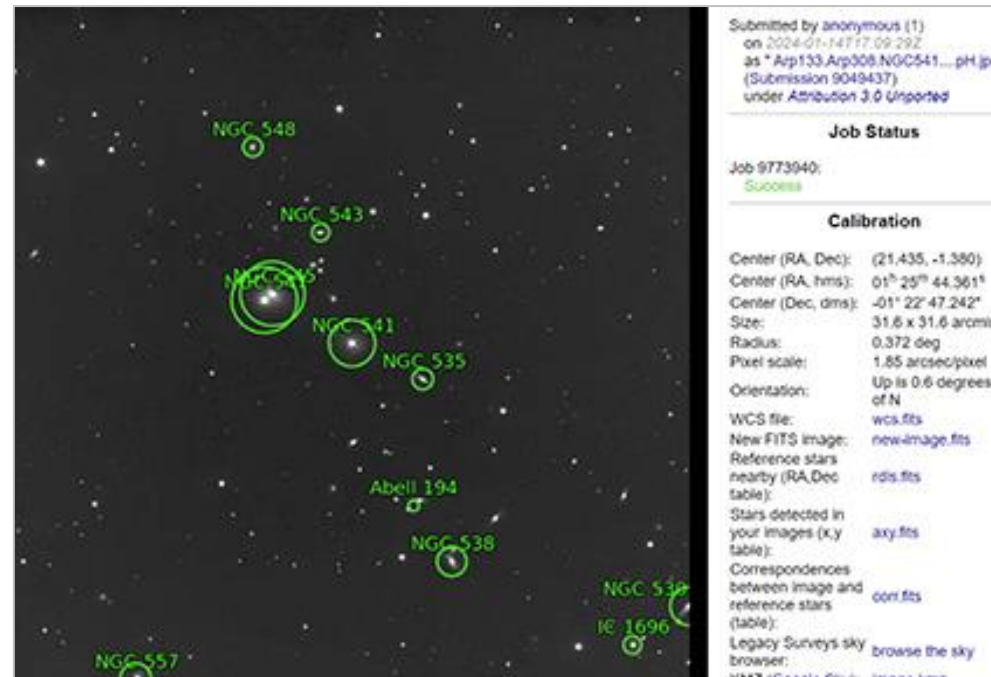
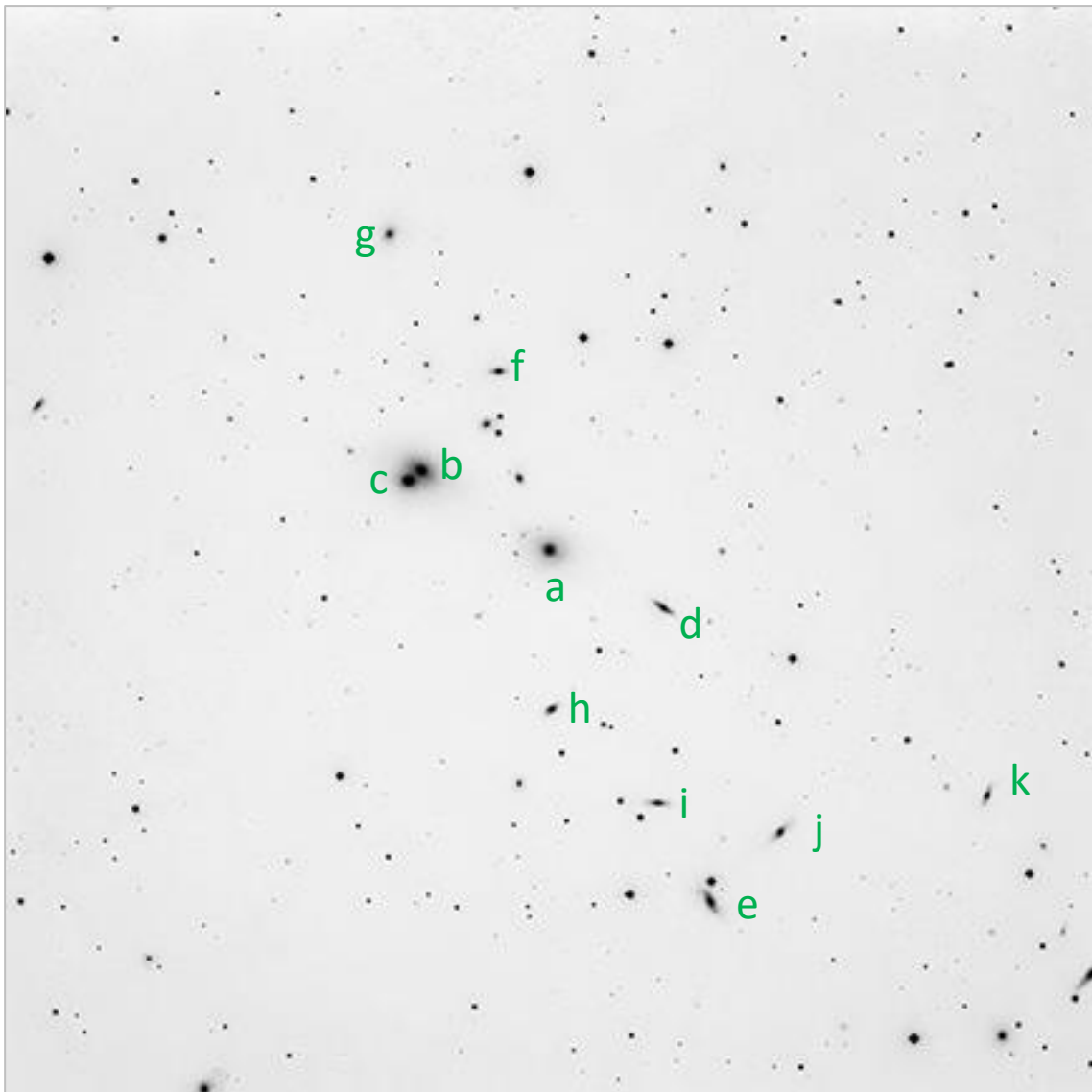
| |
|---|
| Submitted by anonymous (1) on 2023-10-30 08:02Z as "PGC4071-1661.jpg" (Submission 8073448) under Attribution 3.0 Unported |
| Job Status |
| Job 0098848: Success |
| Calibration |
| Center (RA, Dec): (17.190, -15.400) |
| Center (RA, hms): 01 ^h 08 ^m 45.577 ^s |
| Center (Dec, dms): -15° 24' 00.763" |
| Size: 43.5 x 43.5 arcmin |
| Radius: 0.513 deg |
| Pixel scale: 1.27 arcsec/pixel |
| Orientation: Up is 359.8 degrees E of N |
| WCS file: wcs.fits |
| New FITS image: new-image.fits |
| Reference stars nearby (RA,Dec table): rds.fits |
| Stars detected in your images (x,y table): axy.fits |
| Correspondences between image and reference stars (table): con.fits |
| Legacy Surveys sky browser: browse the sky |

- a) IC80A, mag 12.9
- b) PGC 4109, mag 16.0

Abell 147 contains over 72 galaxies, the brightest of which is IC 80A (a) at mag 12.9. I've only labeled one other member of ACO 147 (b) in this image because the rest are simply too dim and tiny.

#6 Abell 194 NGC 541 et al in Cetus

2020-06-06 09:53Z El Sauce Observatory, Rio Hurtado Valley, Chile
CHI-1: CDK24 @ f/6.5 FLI PL9000



Submitted by anonymous (1)
on 2024-01-14T17:09:29Z
as *Ap133.Arp308.NGC541..._pH.jpg
(Submission 9049437)
under Attribution 3.0 Unported

Job Status

Job 9773940:
Success

Calibration

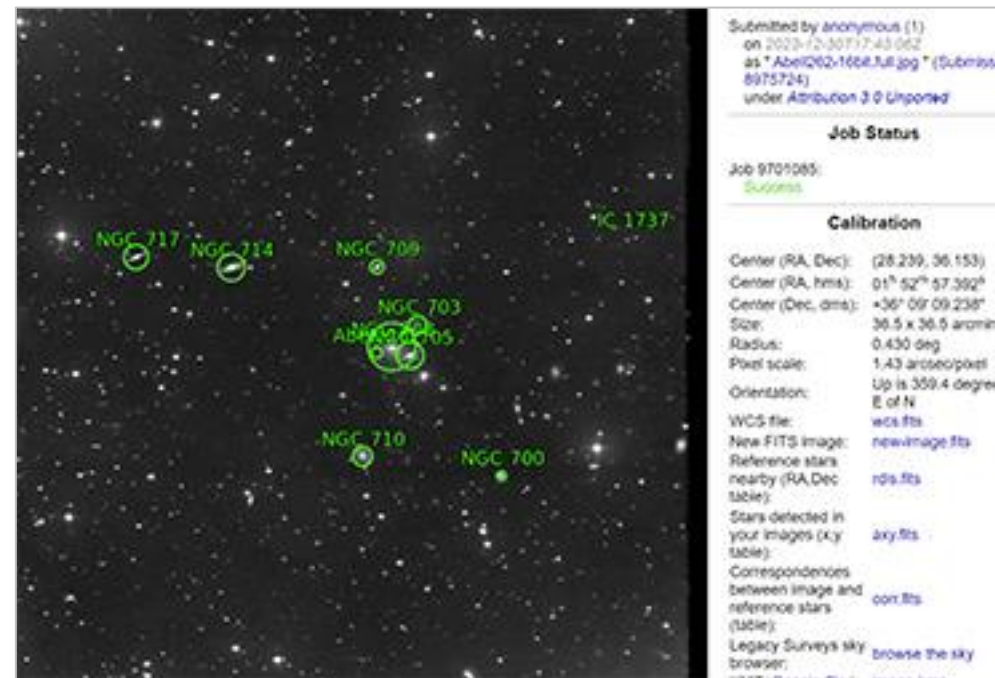
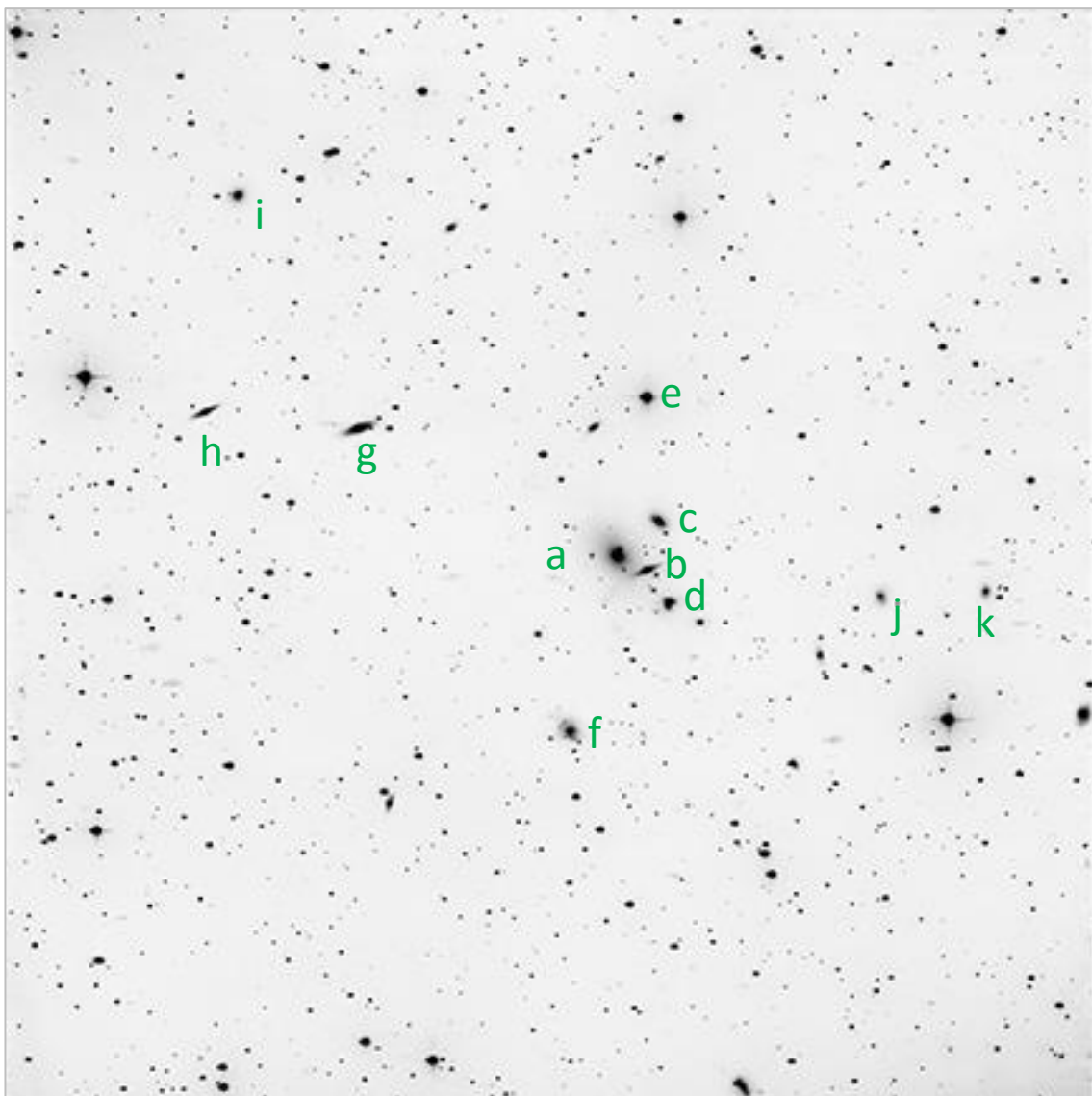
Center (RA, Dec): (21.435, -1.380)
Center (RA, hms): 01^h 25^m 44.361^s
Center (Dec, dms): -01[°] 22' 47.242"
Size: 31.6 x 31.6 arcmin
Radius: 0.372 deg
Pixel scale: 1.85 arcsec/pixel
Orientation: Up is 0.6 degrees E
of N
WCS file: wcs.fits
New FITS image: new-image.fits
Reference stars
nearby (RA, Dec
table): rds.fits
Stars detected in
your images (x,y
table): axy.fits
Correspondences
between image and
reference stars
(table): conr.fits
Legacy Surveys sky
browser: browse the sky
MNRAS 000, 000 (2024)

- a) **NGC 541, mag 12.1**
- b) NGC 545, mag 12.3
- c) NGC 547, mag 12.1
- d) NGC 535, mag 14.9
- e) NGC 538, mag 14.6
- f) NGC 543, mag 13.1
- g) NGC 548, mag 13.7
- h) UGC 1003, mag 15.0
- i) UGC 996, mag 14.7
- j) UGC 984, mag 15.1
- k) UGC 974, mag 14.9

Abell 194 contains over 37 galaxies, the brightest of which are NGC 541 (a) and NGC 547 (c), both at mag 12.1. I've labeled 9 other brighter members of ACO 194 (b, d-k). I could have labeled more but ran out of room! An additional three galaxies are labeled in the plate solve above. NGC 545 & 547 (b,c) are interacting galaxies catalogued as Arp 308.

#7 Abell 262 NGC 708 et al in Andromeda

2023-11-16 21:50Z SLOOH Canary One

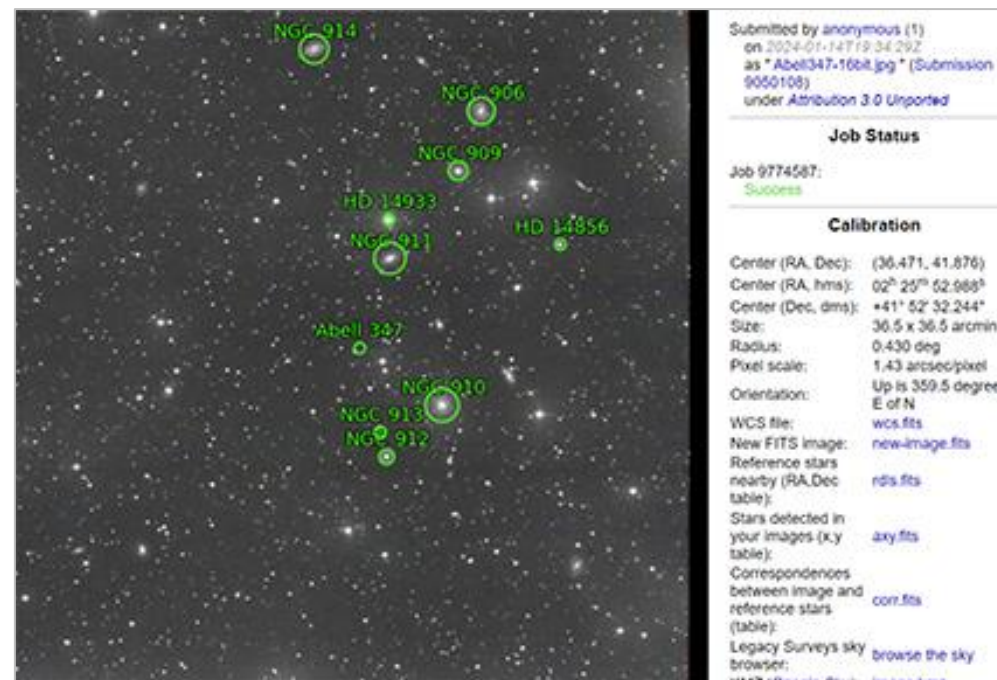
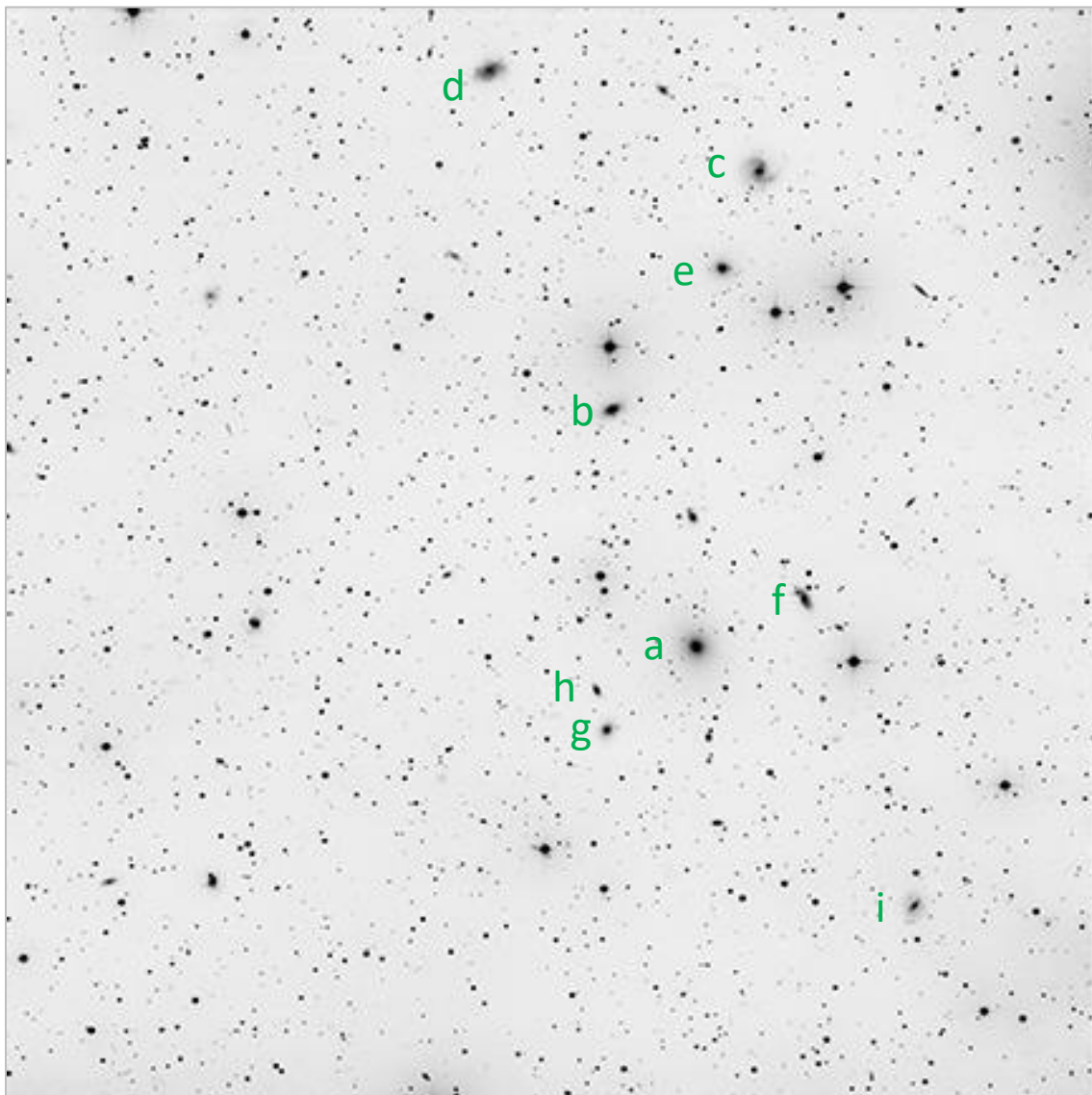


- a) **NGC 708, mag 12.7**
- b) NGC 705, mag 13.5
- c) NGC 703, mag 13.2
- d) NGC 704, mag 14.0
- e) NGC 709, mag 14.2
- f) NGC 710, mag 13.6
- g) NGC 714, mag 13.0
- h) NGC 717, mag 13.8
- i) PGC 7029, mag 15.2
- j) PGC 6911, mag 15.6
- k) PGC 6886, mag 15.9

Abell 262 contains over 40 galaxies, the brightest of which is NGC 708 (a) at mag 12.7. I've labeled 10 other brighter members of ACO 262 (b-k). Other dimmer galaxies can be seen in the field.

#8 Abell 347 NGC 910 et al in Andromeda

2023-11-15 21:40Z SLOOH Canary One



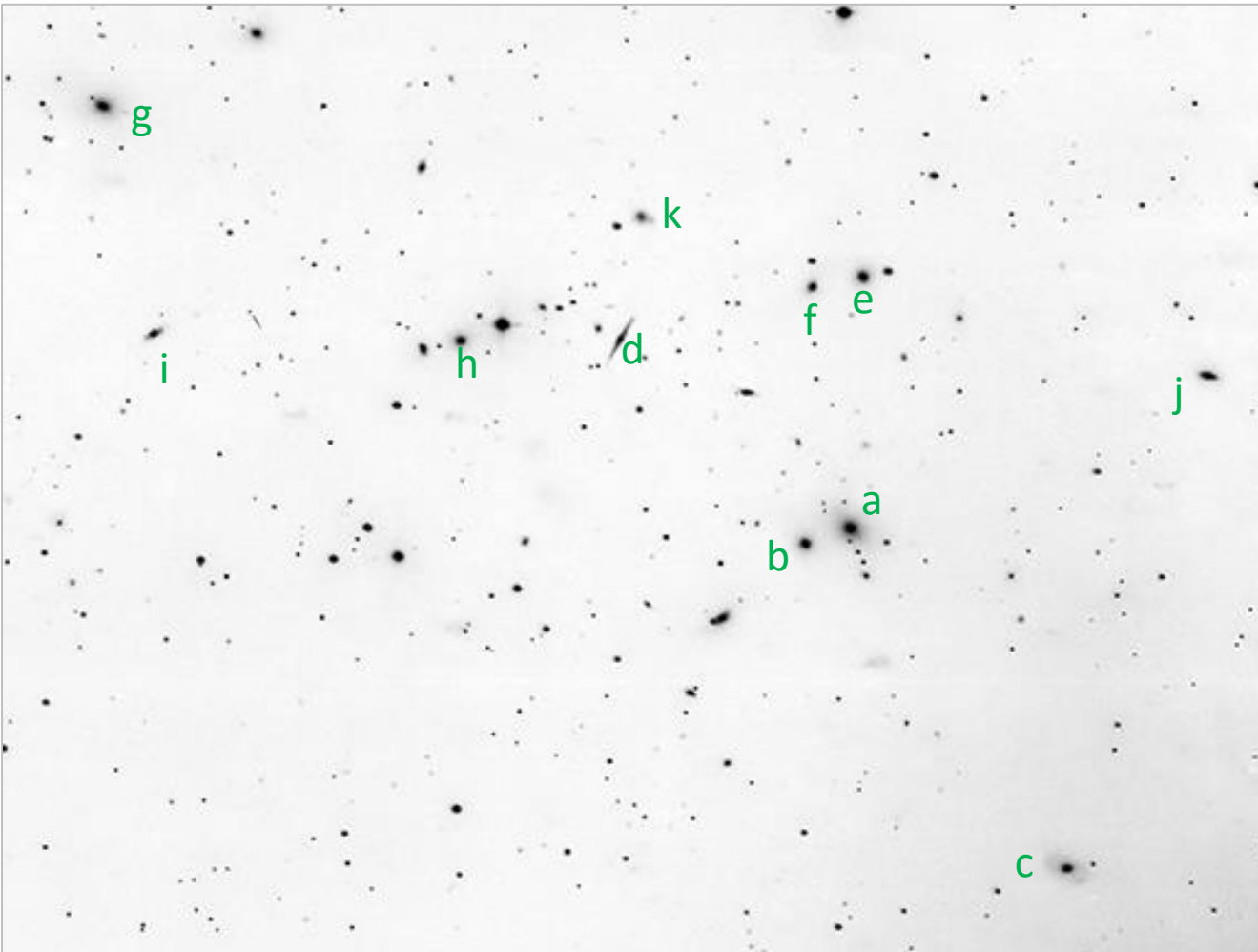
- a) **NGC 910, mag 12.2**
- b) NGC 911, mag 13.9
- c) NGC 906 mag 12.8
- d) NGC 914, mag 13.8
- e) NGC 909, mag 14.5
- f) UGC 1866, mag 14.9
- g) NGC 912, mag 14.9
- h) NGC 913, mag 15.0
- i) UGC 1858, mag 15.6

Abell 347 contains over 32 galaxies, the brightest of which is NGC 910 (a) at mag 12.2. I've labeled 8 other brighter members of ACO 347 (b-i). I especially like face-on galaxy NGC 906 (c) with its spiraling arms. Other smaller/dimmer galaxies can be seen in the field.

#9 Abell 397

UGC 2413 et al in Aries

2023-11-15 21:50Z SLOOH Canary One
(plate solve screenshot and inverted image are both slightly cropped)



Submitted by anonymous (1)
on 2023-12-30T18:12:45Z
as "Abell397_cropped.jpg" (Submission
8975780)
under Attribution 3.0 Unported

Job Status

Job 9701139:
Success

Calibration

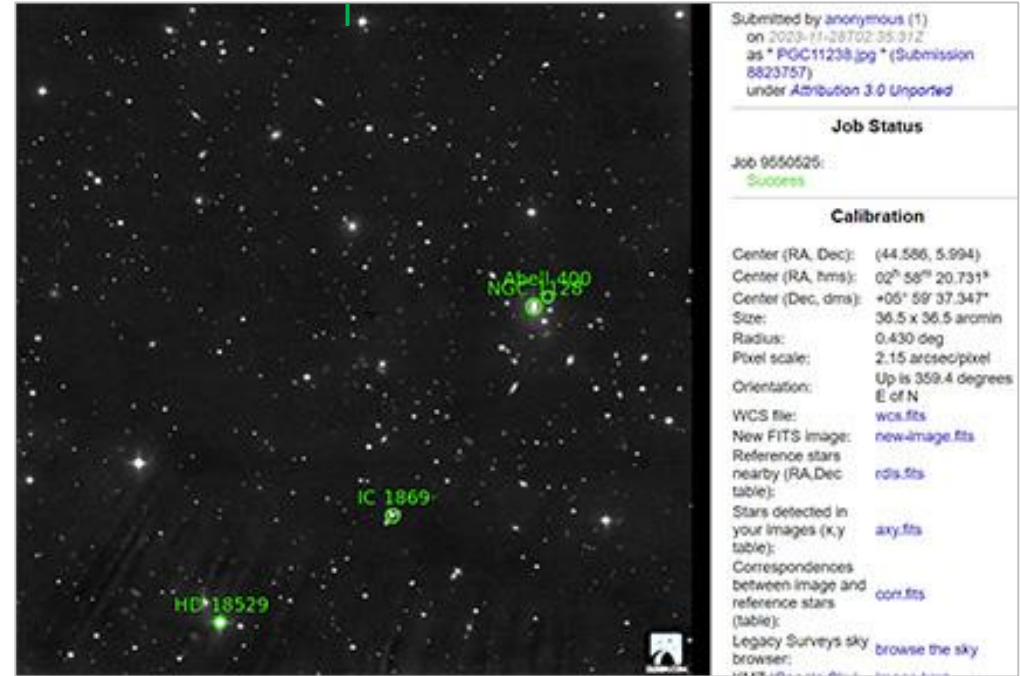
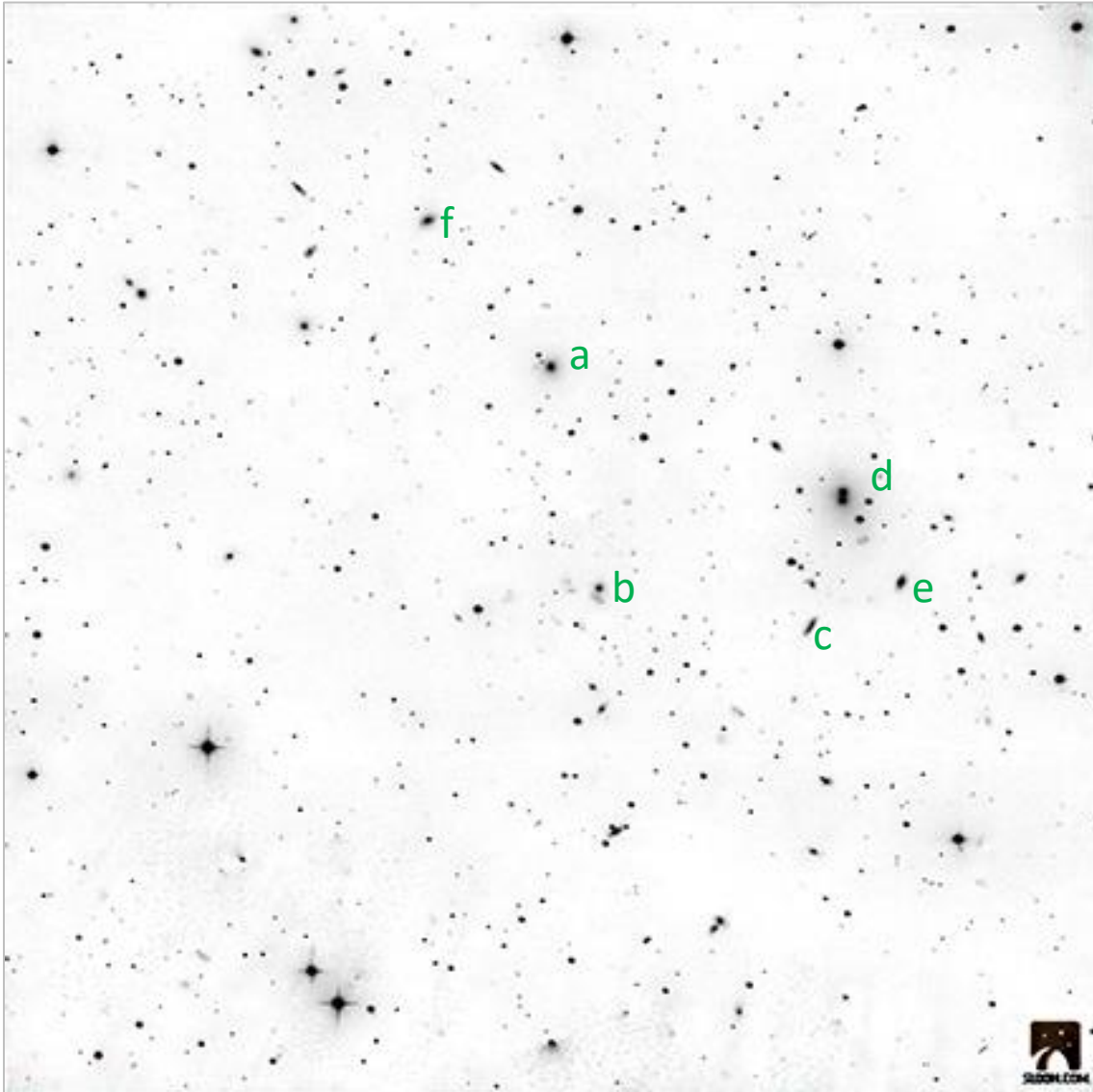
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Center (RA, hms): 02^h 56^m 48.551^s
Center (Dec, dms): +15° 55' 59.057"
Size: 27.8 x 20.9 arcmin
Radius: 0.290 deg
Pixel scale: 1.44 arcsec/pixel
Orientation: Up is 359.4 degrees
E of N
WCS file: wcs.fits
New FITS image: new-image.fits
Reference stars
nearby (RA,Dec
table): rdis.fits

- a) **UGC 2413, mag 15.1**
- b) PGC 11117, mag 15.7
- c) UGC 2406 mag 15.9
- d) UGC 2420, mag 16.0
- e) PGC 11106, mag 15.9
- f) PGC 95520, mag 16.5
- g) PGC 11185, mag 15.2
- h) PGC 95519, mag 15.2
- i) PGC 1497948, mag 16.4
- j) PGC 11069, mag 15.4
- k) 2MASX J02564815+1601446,
mag ~15.8

Abell 397 contains over 32 galaxies, and a wide assortment is seen here! The brightest is UGC 2413 (a) at mag 15.1. I particularly like the pretty little string of 4 stars dangling from it - so dainty! I've labeled 10 other galaxies in this field (b-k). Other smaller/dimmer galaxies can be detected if you look carefully.

#10 Abell 400 CGC 415-46 et al in Cetus

2023-10-13 01:40Z SLOOH Canary One

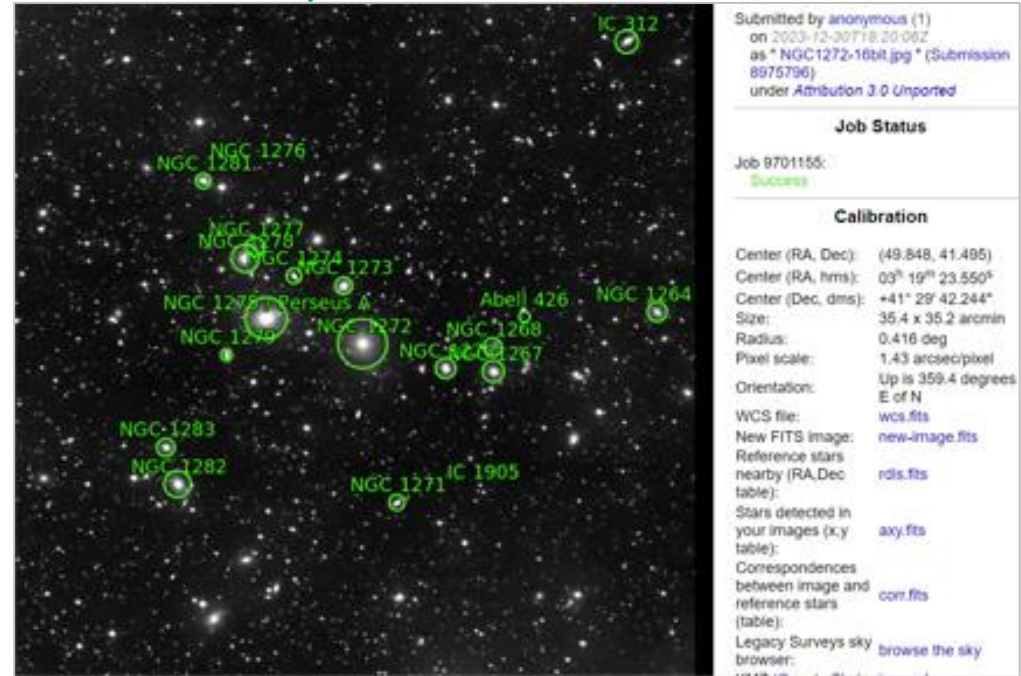
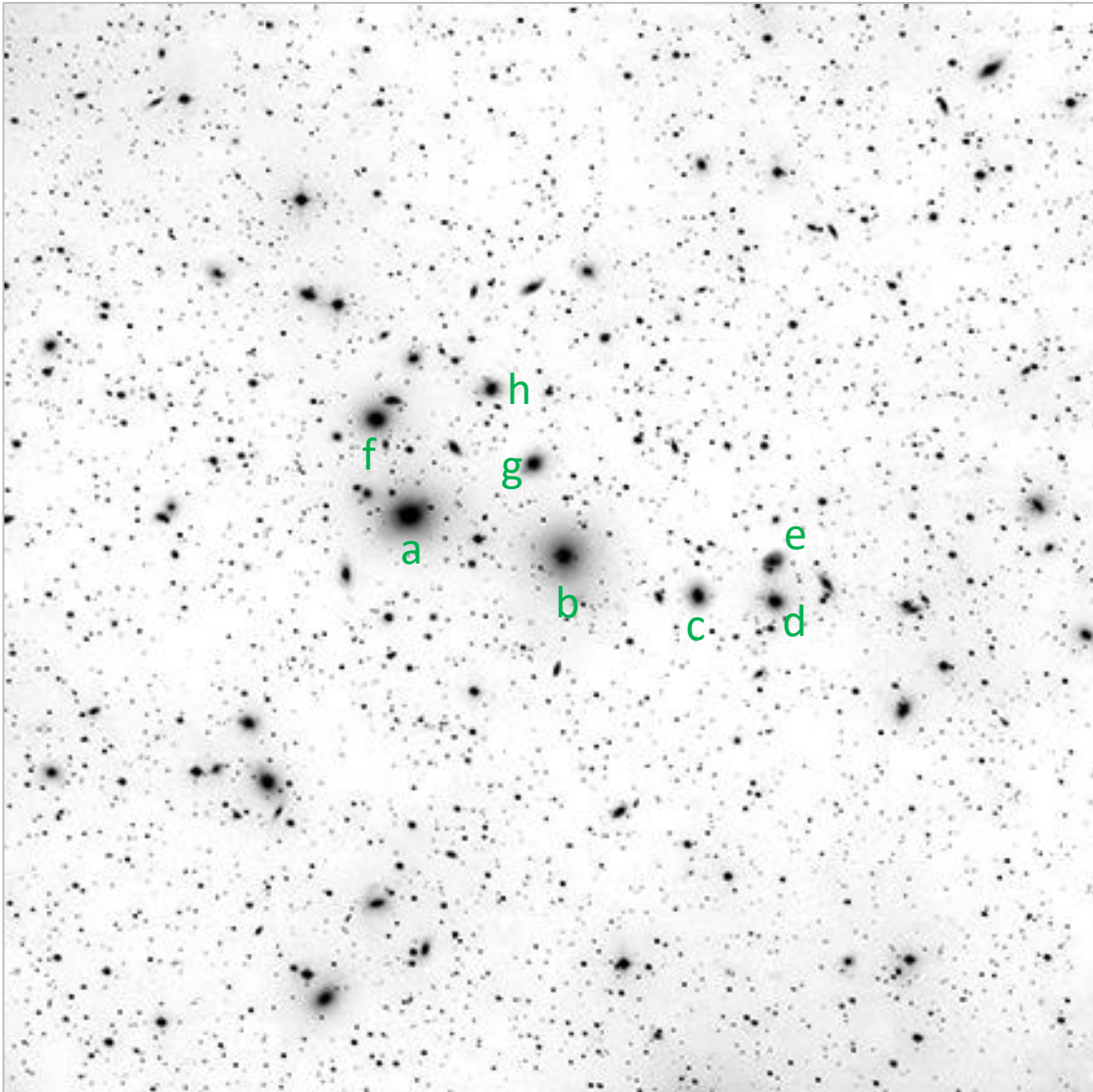


- a) CGC 415-56, mag 15.1
- b) PGC 11238, mag 15.1
- c) PGC 11199 mag 15.6
- d) **NGC 1128, mag 14.5 (double galaxy 3C-75)**
- e) PGC 11179, mag 15.4
- f) PGC 74276, mag 15.8

Abell 400 contains over 58 galaxies. The brightest and most unusual is double galaxy 3C 75A/B (NGC 1128) (a) at mag 15.1. I've labeled 5 other galaxies in this field (b-f). Other smaller/ dimmer galaxies can be easily seen in the field.

#11 Abell 426 NGC 1275 et al in Perseus

2023-11-12 23:40Z SLOOH Canary One

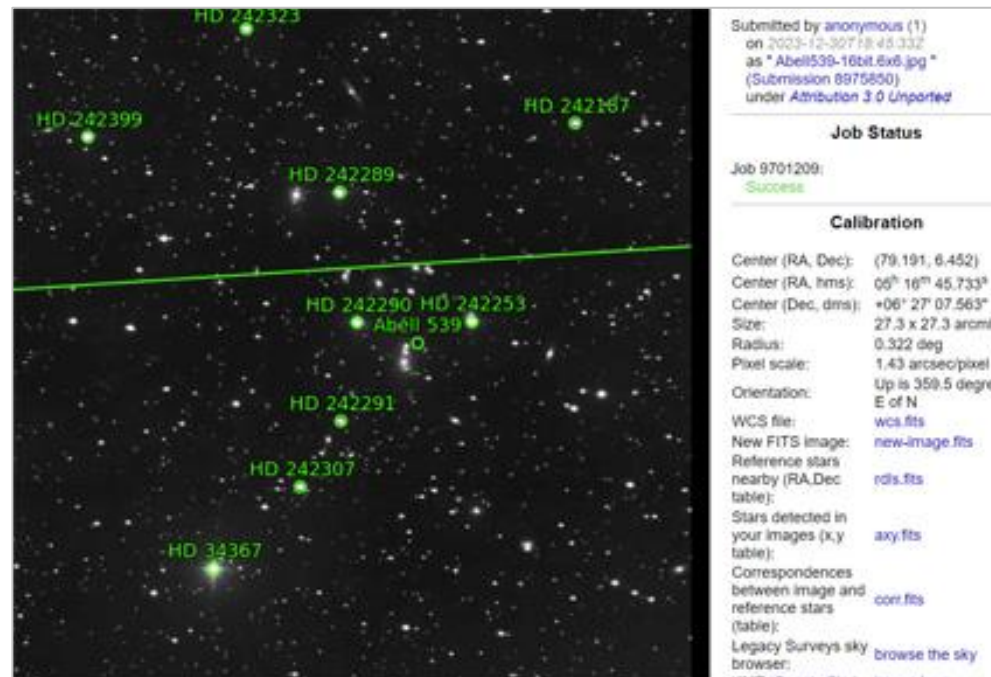
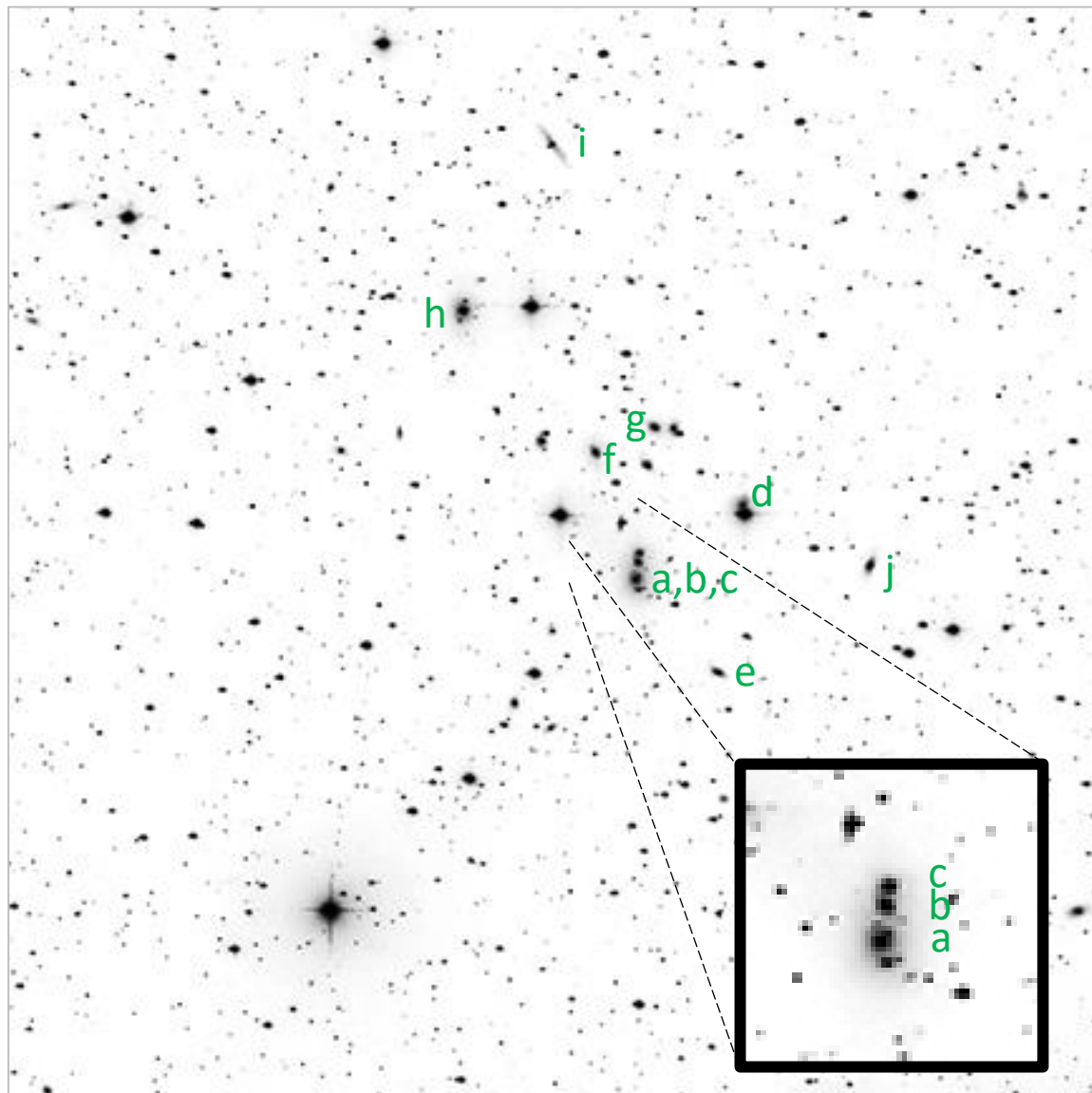


- a) **NGC 1275, mag 11.9**
- b) NGC 1272, mag 11.8
- c) NGC 1270 mag 13.0
- d) NGC 1267, mag 14.1
- e) NGC 1268, mag 13.9
- f) NGC 1278, mag 12.4
- g) NGC 1273, mag 13.1
- h) PGC 12405, mag 14.2

Abell 426 contains over 88 galaxies. The most well known is NGC 1275 (a) due to its strong radio and X-ray source Perseus A (a). This galaxy contains an active nucleus with a supermassive black hole. I have labeled the galaxies along the center swath (b-h) & more are labeled above, but an amazing number of other galaxies are in this field!

#12 Abell 539 UGC 3274 et al in Orion

2023-11-18 00:30Z SLOOH Canary One

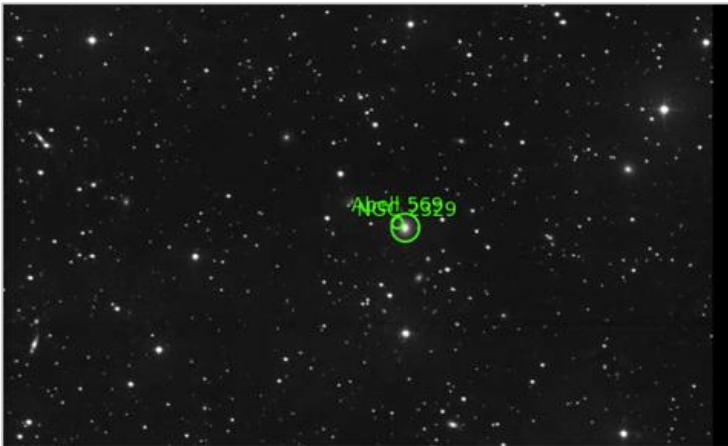
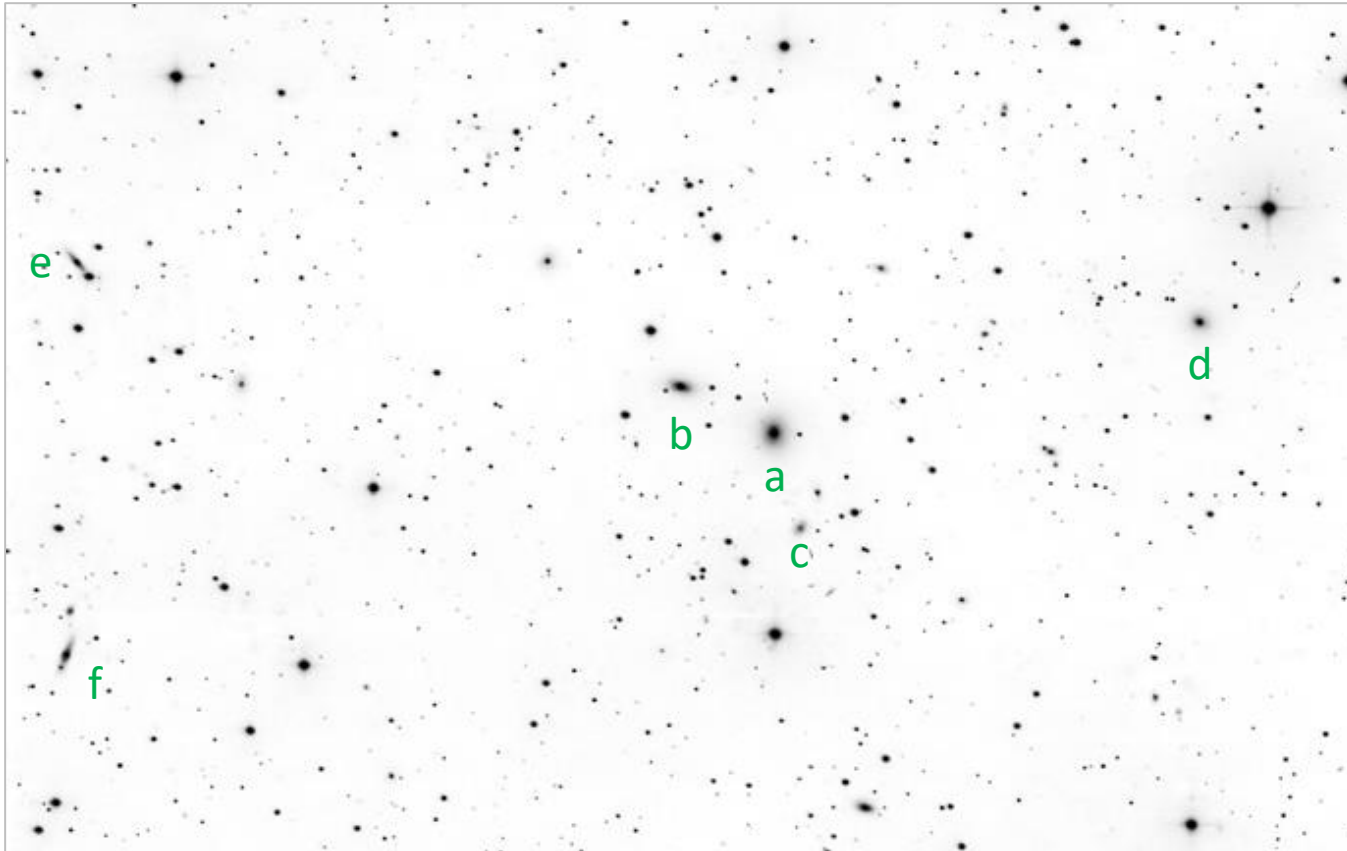


- a) **UGC 3274, mag 14.9**
- b) UGC 3274b, mag ?
- c) UGC 3274c, mag ?
- d) PGC 17020, mag 15.6
- e) PGC 17022, mag 15.6
- f) PGC 17024, mag 15.9
- g) PGC 17018, mag 15.6
- h) PGC 17033, mag 15.5
- i) UGC 3275, mag 16.0
- j) PGC 75301, mag 15.8

Abell 539 contains over 50 galaxies. The brightest, UGC 3274, is actually a triple system (a-c)! These line up in a tight light dangle, and the zoomed-in image suggests other smaller galaxies might be crowded in there as well. A diagonal line of HD stars (labeled in the plate solve above) seem to point to the heart of this cluster of galaxies.

#14 Abell 569 NGC 2329 et al in Lynx

2023-12-08 00:00Z SLOOH Canary One
(plate solve screenshot and inverted image are both cropped)



| | |
|--|---|
| Submitted by anonymous (1) on 2023-12-30T19:22:01Z as "A14_Abell569-16bit.cropped.jpg" (Submission 8975950) under Attribution 3.0 Unported | |
| Job Status | |
| Job 9701307: | Success |
| Calibration | |
| Center (RA, Dec): | (107.344, 48.617) |
| Center (RA, hms): | 07 ^h 09 ^m 22.535 ^s |
| Center (Dec, dms): | +48° 37' 01.037" |
| Size: | 36 x 22.6 arcmin |
| Radius: | 0.354 deg |
| Pixel scale: | 0.717 arcsec/pixel |
| Orientation: | Up is 359.4 degrees E of N |
| WCS file: | wcs.fits |

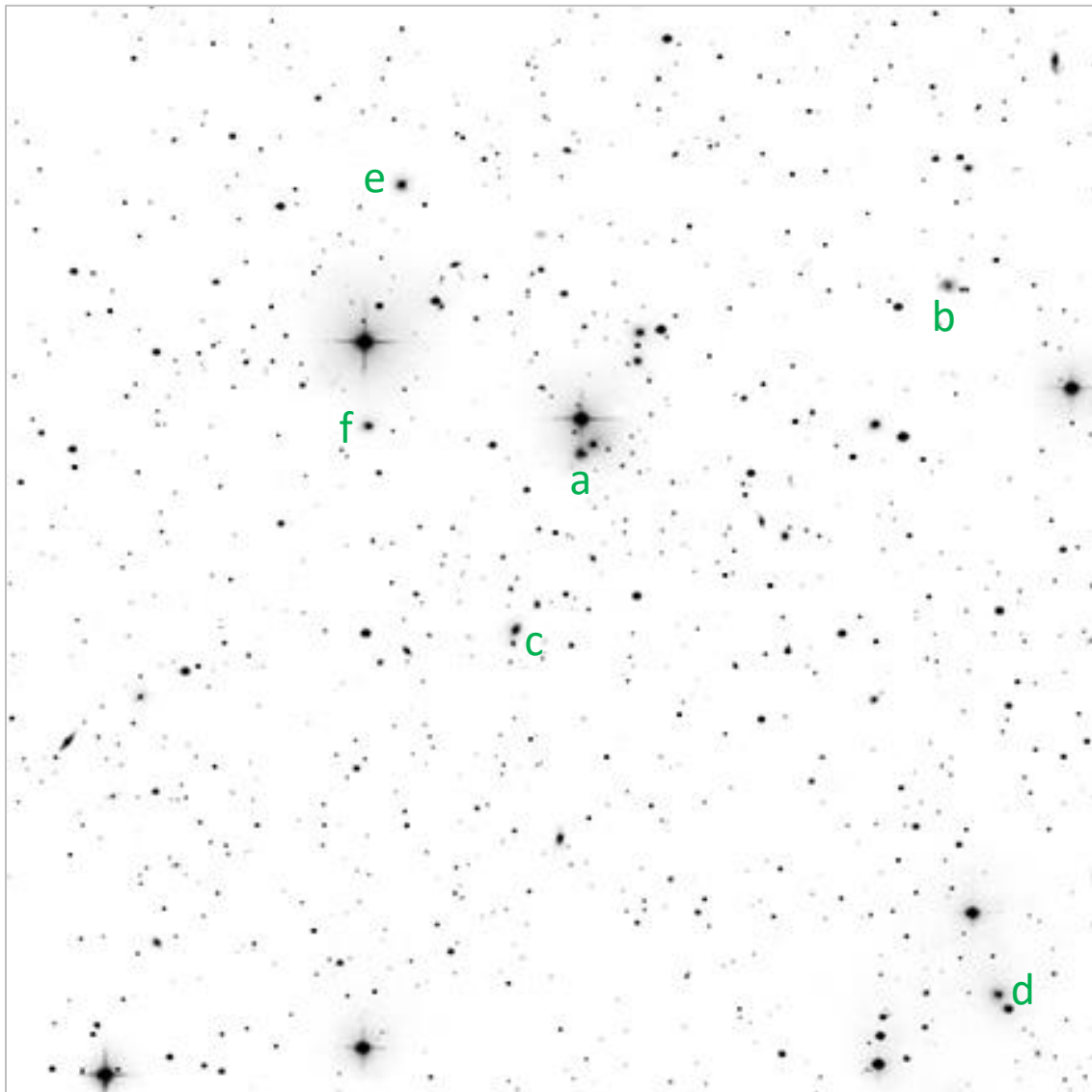
Abell 569 contains over 36 galaxies. The brightest is elliptical galaxy NGC 2329 (a). I have labeled 5 other galaxies in this field (b-f). Other smaller/ dimmer galaxies are easily visible in the field.

- | | |
|------------------------------|--------------------------|
| a) NGC 2329, mag 12.5 | d) CGCG 234-59, mag 13.4 |
| b) UGC 3696, mag 12.7 | e) CGCG 234-89, mag 15.0 |
| c) CGCG 234-69, mag 15.6 | f) UGC 3719, mag 15.1 |

#15 Abell 576

CGCG 261-56 et al in Lynx

2023-11-20 02:20Z SLOOH Canary One
(plate solve screenshot and inverted image are both cropped)



| | |
|--|---|
| Submitted by anonymous (1) on 2023-12-30T19:35:57Z as "Abell576-10bit.6x6.jpg" (Submission 8975999) under Attribution 3.0 Unported | |
| Job Status | |
| Job 9701356: | Success |
| Calibration | |
| Center (RA, Dec): | (110.408, 55.715) |
| Center (RA, hms): | 07 ^h 21 ^m 37.976 ^s |
| Center (Dec, dms): | +55° 42' 52.377" |
| Size: | 28.8 x 28.8 arcmin |
| Radius: | 0.340 deg |
| Pixel scale: | 1.43 arcsec/pixel |
| Orientation: | Up is 359.3 degrees E of N |
| WCS file: | wcs.fits |
| New FITS image: | new-image.fits |
| Reference stars nearby (RA, Dec table): | rdts.fits |
| Stars detected in your images (x,y table): | axy.fits |
| Correspondences between image and reference stars (table): | corr.fits |
| Legacy Surveys sky browser: | browse the sky |

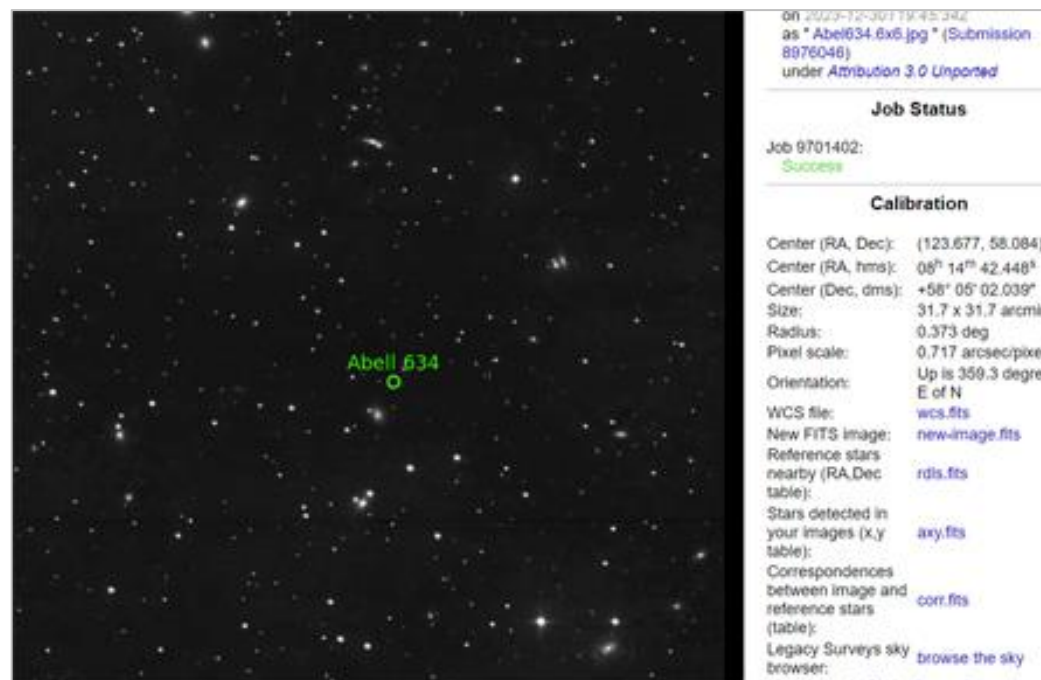
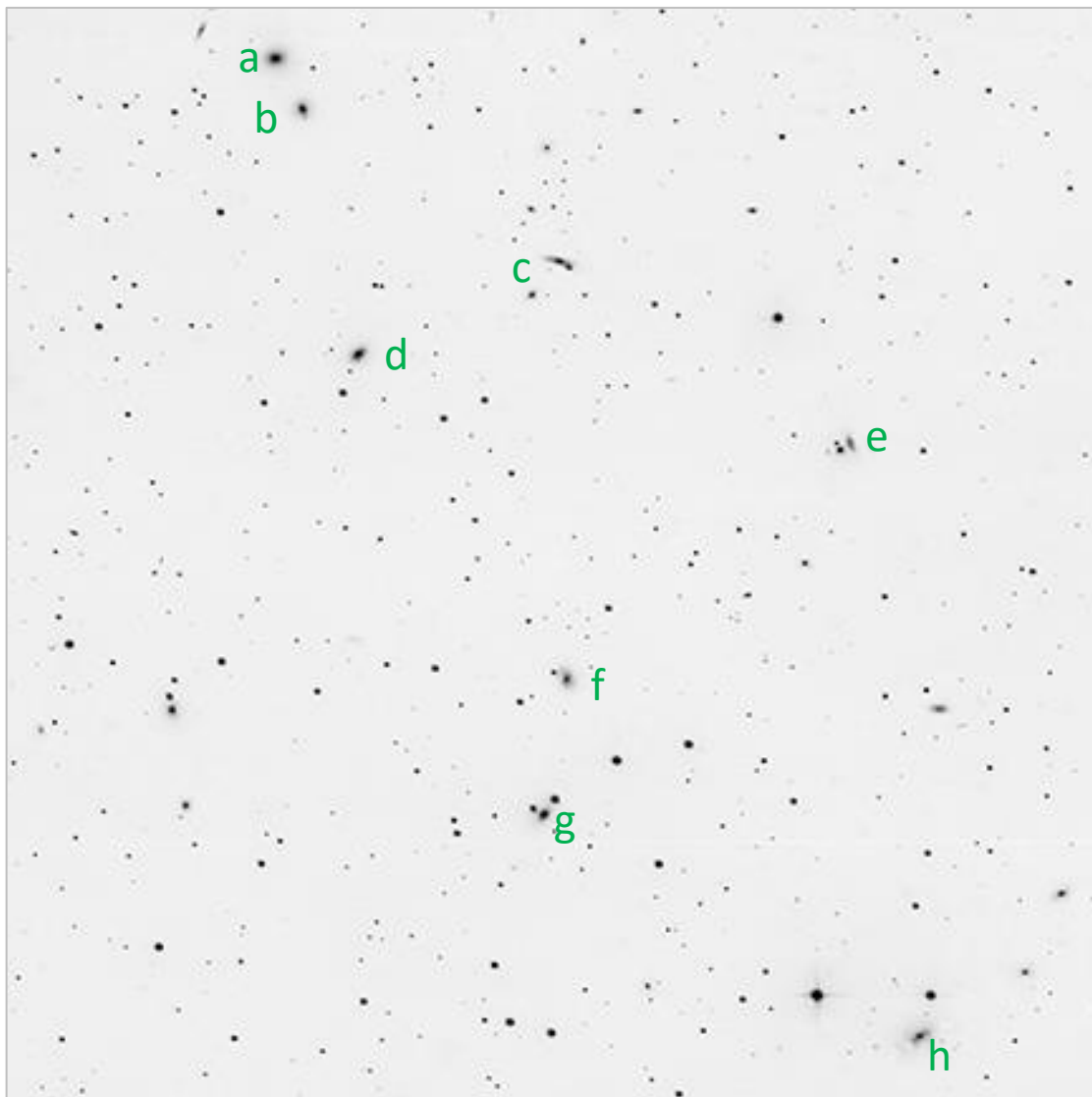
- a) **CGCG 261-56, mag 14.1**
- b) UGC 3696, mag 12.7
- c) CGCG 261-57, mag 15.2
- d) PGC 20709, mag 15.5
- e) PGC 20823, mag 15.2
- f) PGC 20829, mag 15.7

Abell 576 contains over 61 galaxies, but you wouldn't know it by looking at this field. The brightest here is elliptical galaxy CGCG 2261-56 (PGC 20778) (a). I have labeled 5 other galaxies in the field (b-f), but none are particularly noteworthy.

#16 Abell 634

UGC 4289 et al in Lynx

2023-12-06 00:45Z SLOOH Canary One
(plate solve screenshot and inverted image are both cropped)

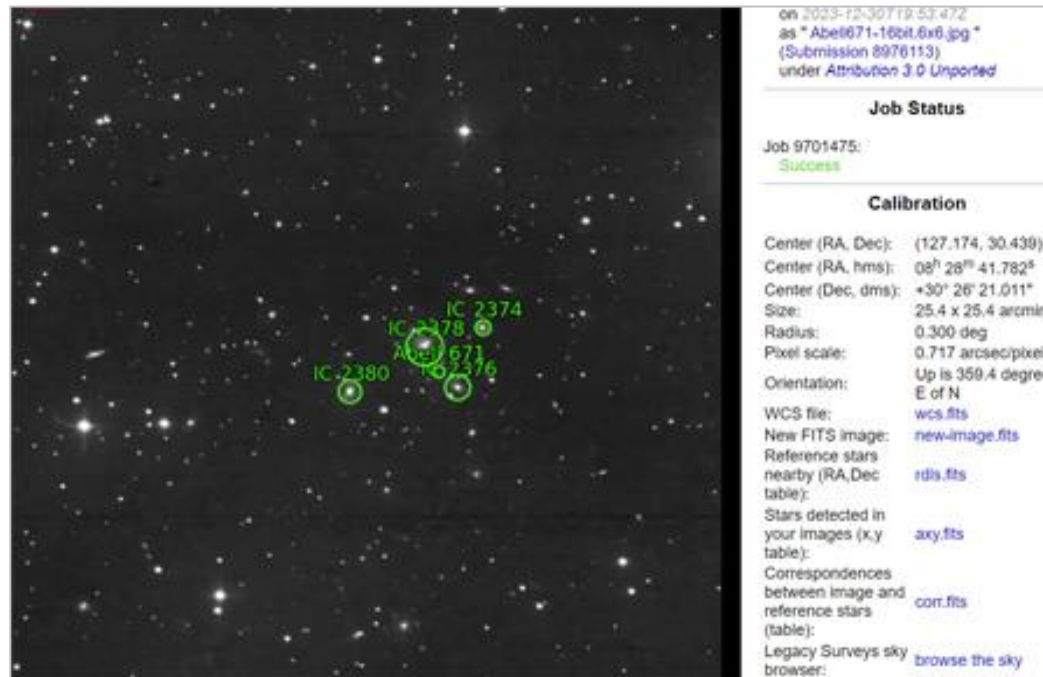
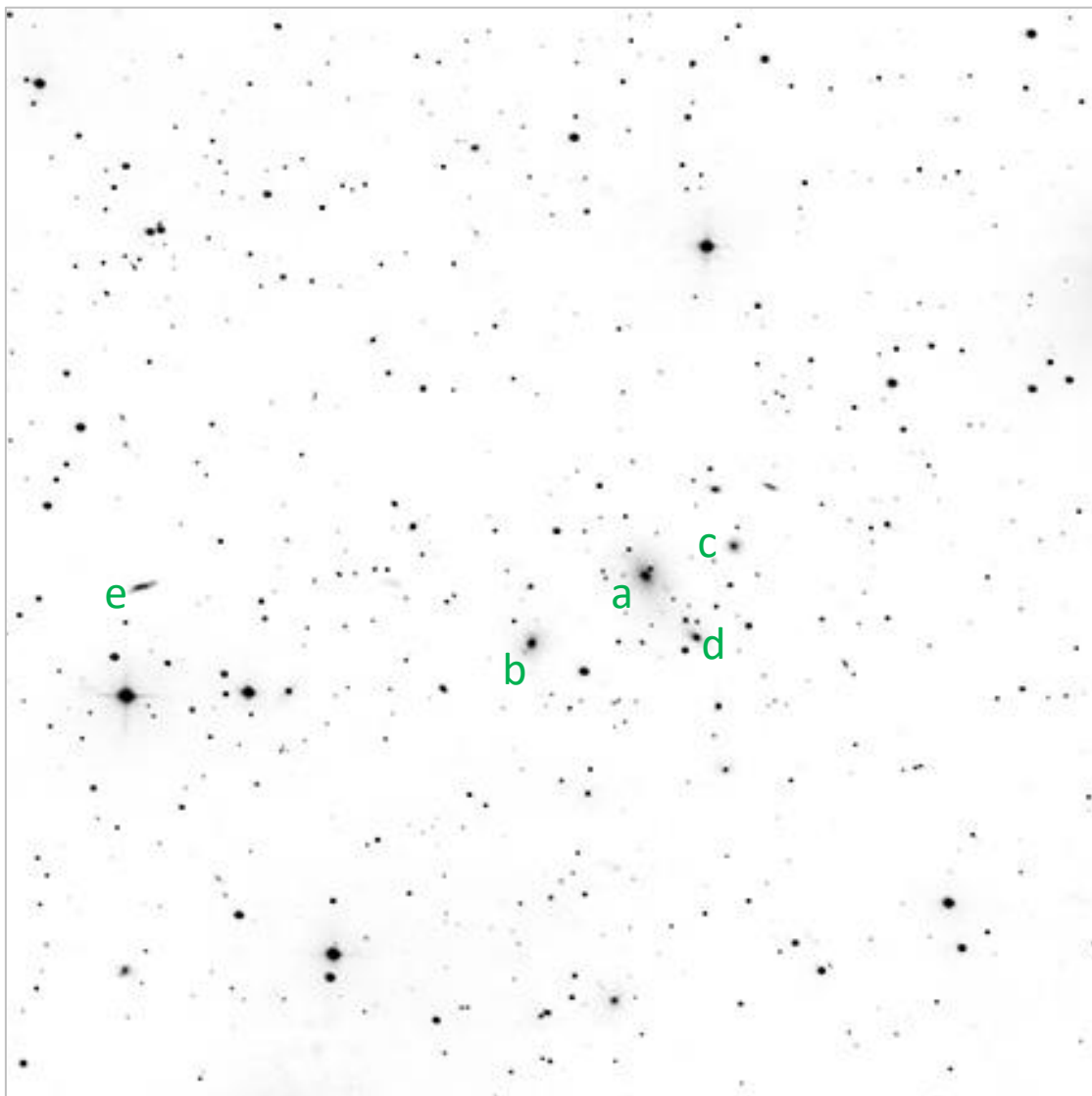


- a) **UGC 4289, mag 14.3**
- b) CGCG 267-61, mag 15.0
- c) UGC 4281, mag 15.1
- d) CGCG 287-60, mag 14.5
- e) CGCG 287-55, mag 15.5
- f) CGCG 287-56, mag 15.2
- g) UGC 4280, mag 14.4
- h) UGC 4270, mag 14.7

Abell 634 contains over 40 galaxies, but this is relatively sparse field. The brightest here is elliptical galaxy UGC 4289 (a), sitting at the top left. I have labeled 7 other modest galaxies (b-h), and other galaxies (not labeled) are detectable in the field. None are particularly remarkable at this resolution.

#17 Abell 671 IC 2378 et al in Cancer

2023-12-06 00:35Z SLOOH Canary One
(plate solve screenshot and inverted image are both cropped)



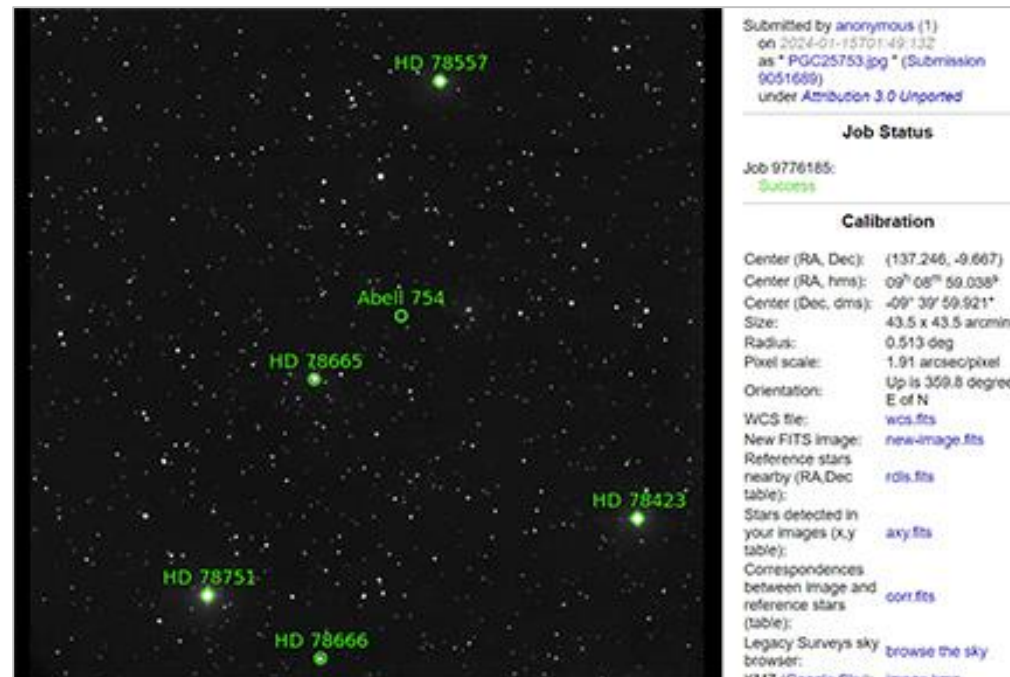
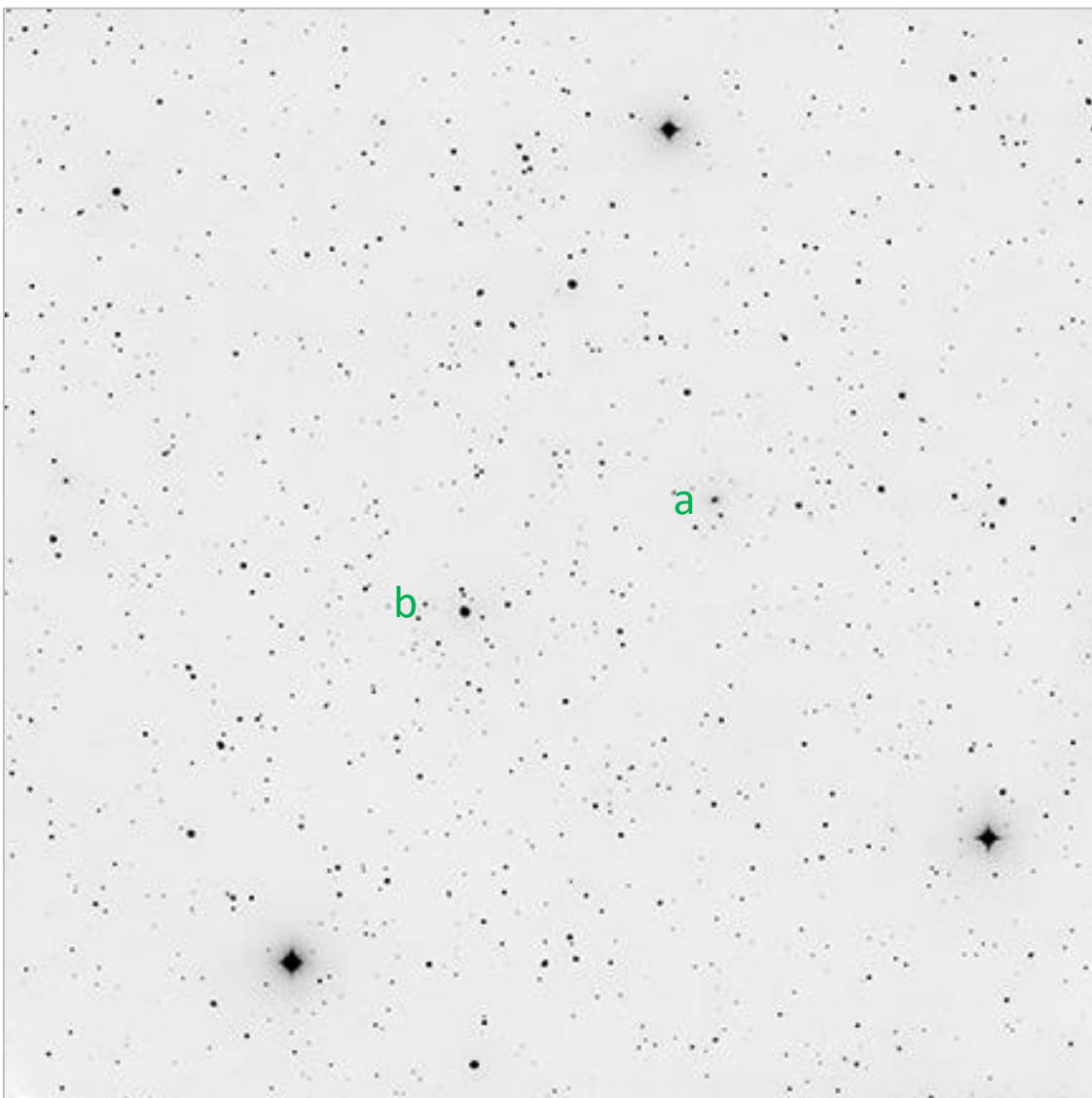
- a) IC 2378, mag 14.3
- b) IC 2380, mag 15.3
- c) IC 2374, mag 16.1
- d) IC 2376, mag 14.5
- e) CGCG 149-36, mag 16.0

Abell 671 contains over 40 galaxies, but this is relatively sparse field. The brightest here is elliptical galaxy UGC 4289 (a), sitting at the top left. I have labeled 7 other modest galaxies (b-h), and other galaxies (not labeled) are detectable in the field. None are particularly remarkable at this resolution.

#18 Abell 754

PGC 25714 et al in Hydra

2023-12-24 02:45Z SLOOH Chile Two



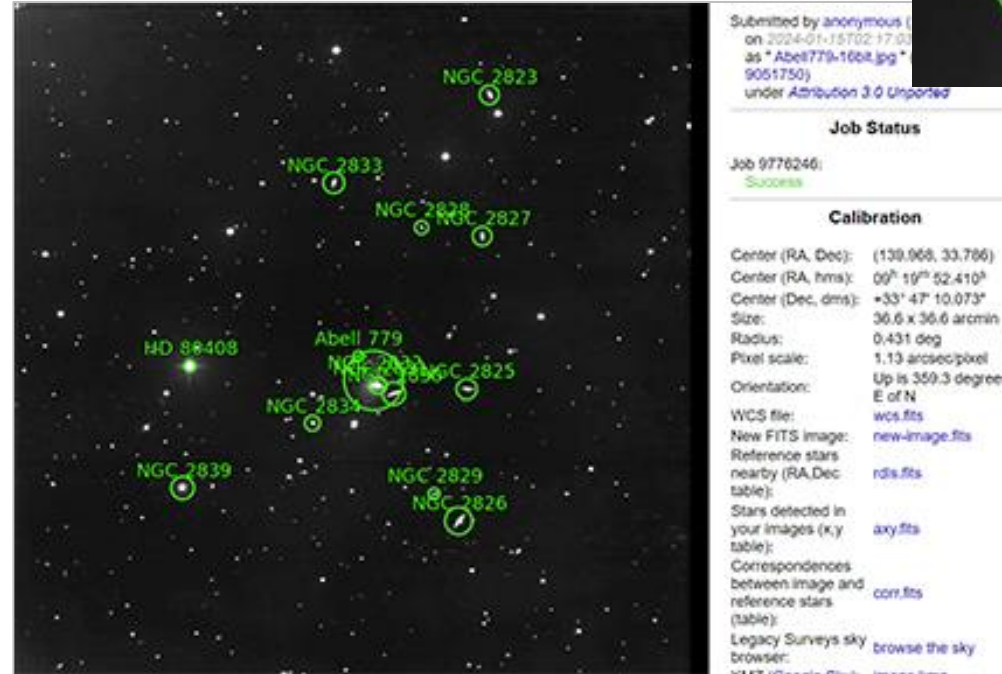
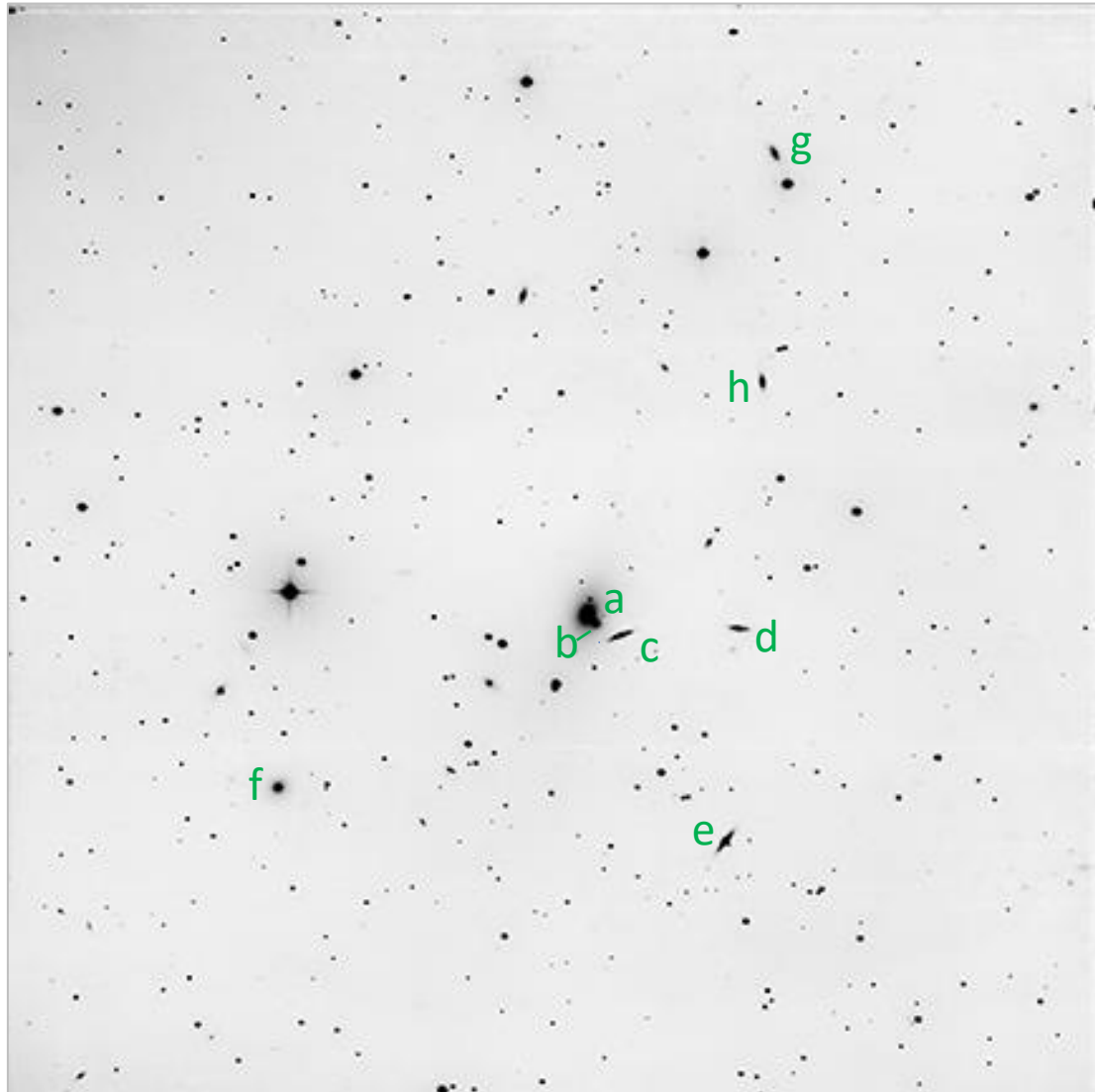
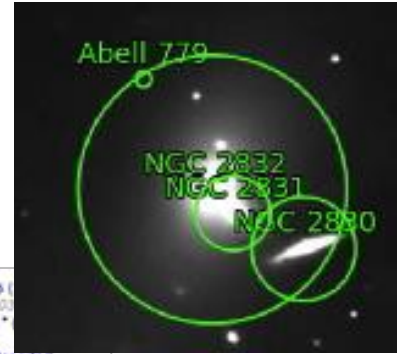
| | |
|--|---|
| Submitted by anonymous (1) on 2024-01-15 01:49:13Z as "PGC25753.jpg" (Submission 9051689) under Attribution 3.0 Unported | |
| Job Status | |
| Job 9776185: | Success |
| Calibration | |
| Center (RA, Dec): | (137.246, -9.667) |
| Center (RA, hms): | 09 ^h 08 ^m 59.038 ^s |
| Center (Dec, dms): | -09° 39' 59.921" |
| Size: | 43.5 x 43.5 arcmin |
| Radius: | 0.513 deg |
| Pixel scale: | 1.91 arcsec/pixel |
| Orientation: | Up is 359.8 degrees E of N |
| WCS file: | wcs.fits |
| New FITS image: | new-image.fits |
| Reference stars nearby (RA, Dec table): | rds.fits |
| Stars detected in your images (x,y table): | axy.fits |
| Correspondences between image and reference stars (table): | corr.fits |
| Legacy Surveys sky browser: | browse the sky 1317 / Google Sky / images.html |

- a) **PGC 25714, mag 13.2**
- b) **PGC 25777, mag 15.3**

Abell 754 theoretically contains over 92 galaxies, but this field is curiously devoid of obvious galaxies. The brightest here is PGC25714 (a) but its small size belies its magnitude of 13.2. I could find one other galaxy, PGC 25774 (b), next to star HD 78665, but that's it. Perhaps all of the galaxies in this cluster are just too small and dim.

#19 Abell 779 NGC 2832 et al in Lynx

2023-12-08 01:50Z SLOOH Chile Two



- a) **NGC 2832, mag 11.8**
- b) NGC 2831, mag 13.1
- c) NGC 2830, mag 14.1
- d) NGC 2825, mag 15.0
- e) NGC 2826, mag 14.4
- f) NGC 2839, mag 14.7
- g) NGC 2823, mag 14.6
- h) NGC 2827, mag 15.4

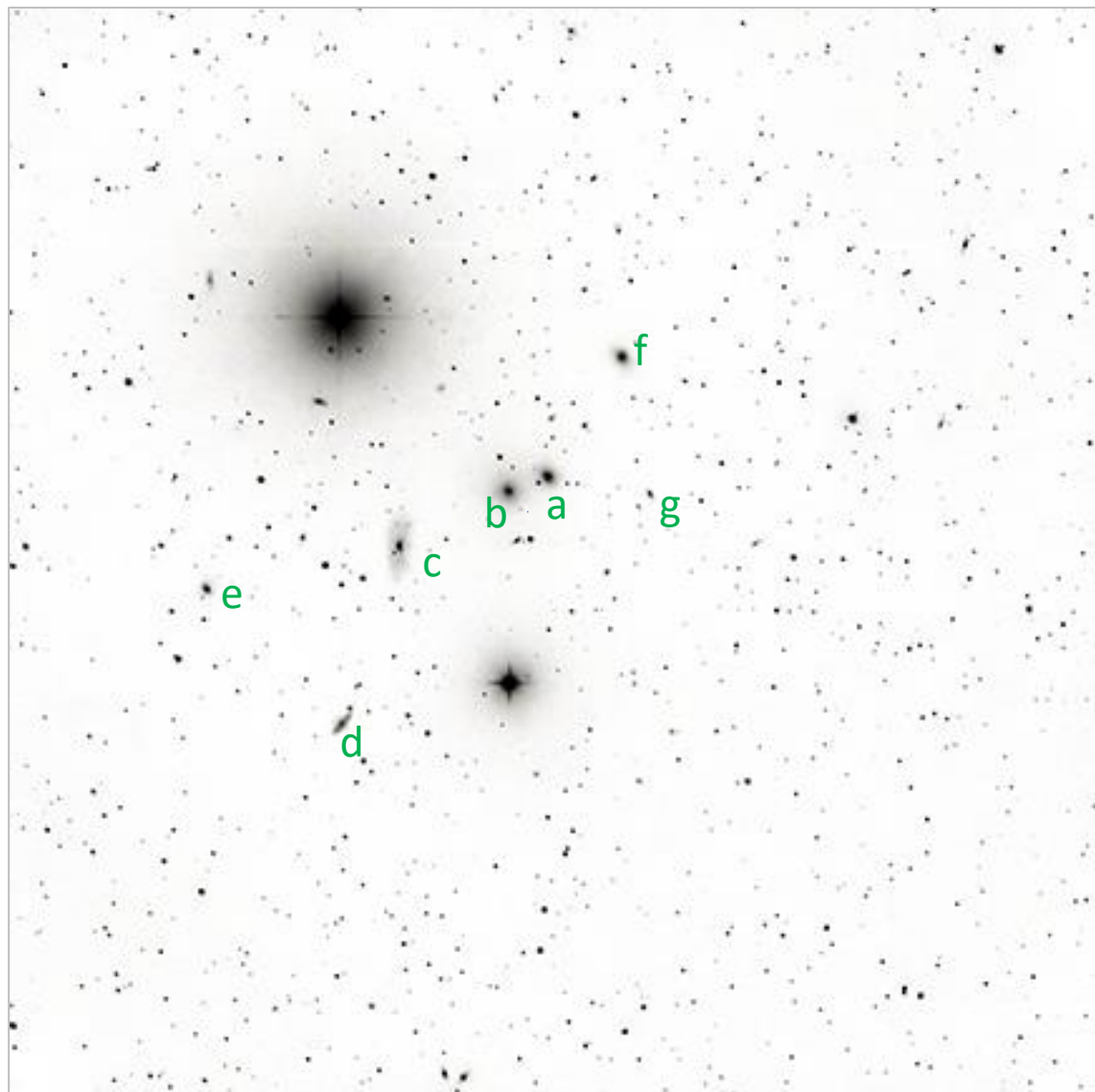
Abell 779 contains over 32 galaxies. The brightest in this cluster is NGC 2832 (a), a large elliptical at mag 11.8. It is interacting with adjacent NGC 2831 and the pair is catalogued as Arp 315. I've labelled six other galaxies(c-h) in my image. Others are labeled in the plate solve above. Other tiny galaxies can be seen scattered in the field.

#20 Abell 1060 NGC 3311 et al in Hydra

2023-02-23 01:40Z SLOOH Chile Two



| Job Status | |
|--|---|
| Job 9776382: | Success |
| Calibration | |
| Center (RA, Dec): | (159.145, -27.568) |
| Center (RA, hms): | 10 ^h 36 ^m 34.768 ^s |
| Center (Dec, dms): | -27° 34' 06.369" |
| Size: | 43.5 x 43.5 arcmin |
| Radius: | 0.513 deg |
| Pixel scale: | 1.91 arcsec/pixel |
| Orientation: | Up is 359.8 degrees E of N |
| WCS file: | wcs.fits |
| New FITS image: | new-image.fits |
| Reference stars nearby (RA, Dec table): | nds.fits |
| Stars detected in your images (x,y table): | axy.fits |
| Correspondences between image and reference stars (table): | corr.fits |
| Legacy Surveys sky browser: | browse the sky |
| W337 (Google Sky): | image.km2 |

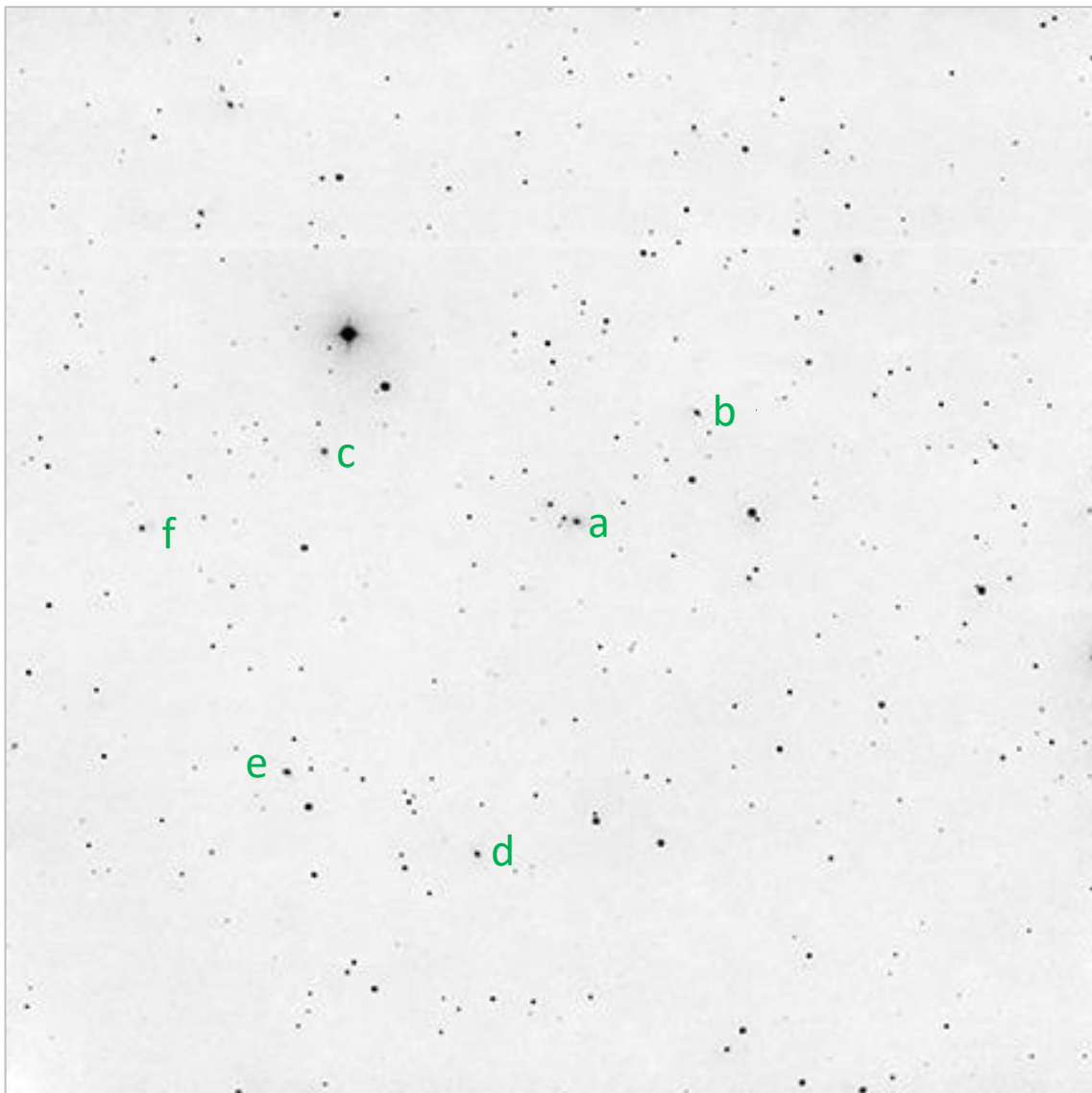


- a) NGC 3309, mag 11.5
- b) NGC 3311, mag 11.8
- c) NGC 3312, mag 11.7
- d) NGC 3314, mag 13.4
- e) NGC 3316, mag 13.8
- f) NGC 3308, mag 12.3
- g) NGC 3307, mag 14.3

Abell 1060 contains over 50 galaxies in this pretty field in Hydra. The brightest in appearance is the galaxy pair NGC 3309 (a) and 3311 (b). I've labelled 5 other galaxies(d-g). Other tiny galaxies can be easily detected in the field.

#21 Abell 1139 NGC 6057 et al in Leo

2023-02-23 02:40Z SLOOH Chile Two
(plate solve screenshot and inverted image are both cropped)



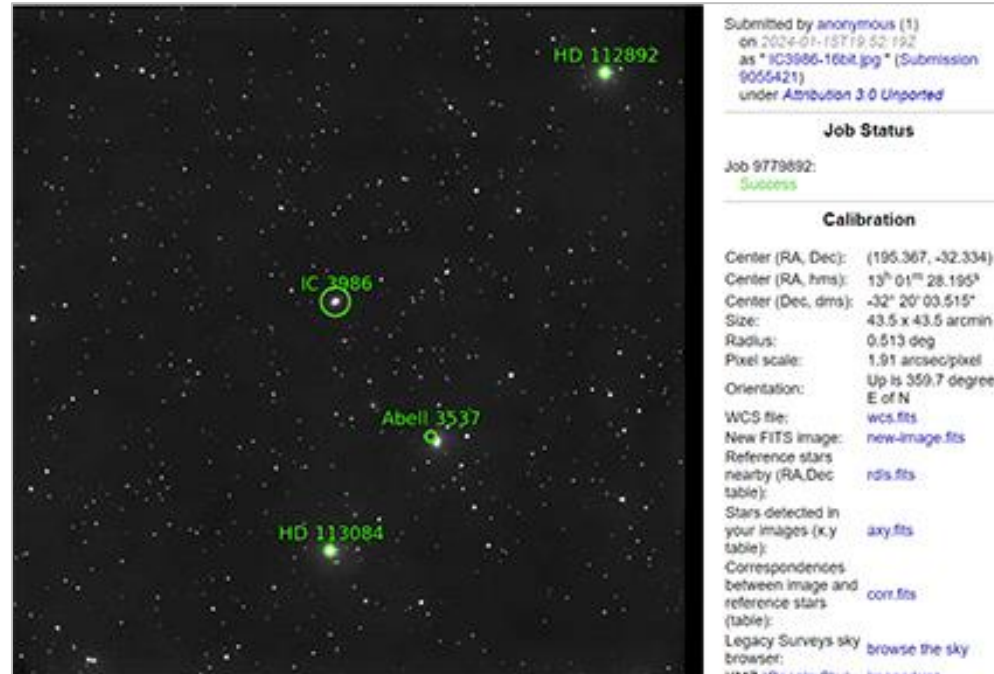
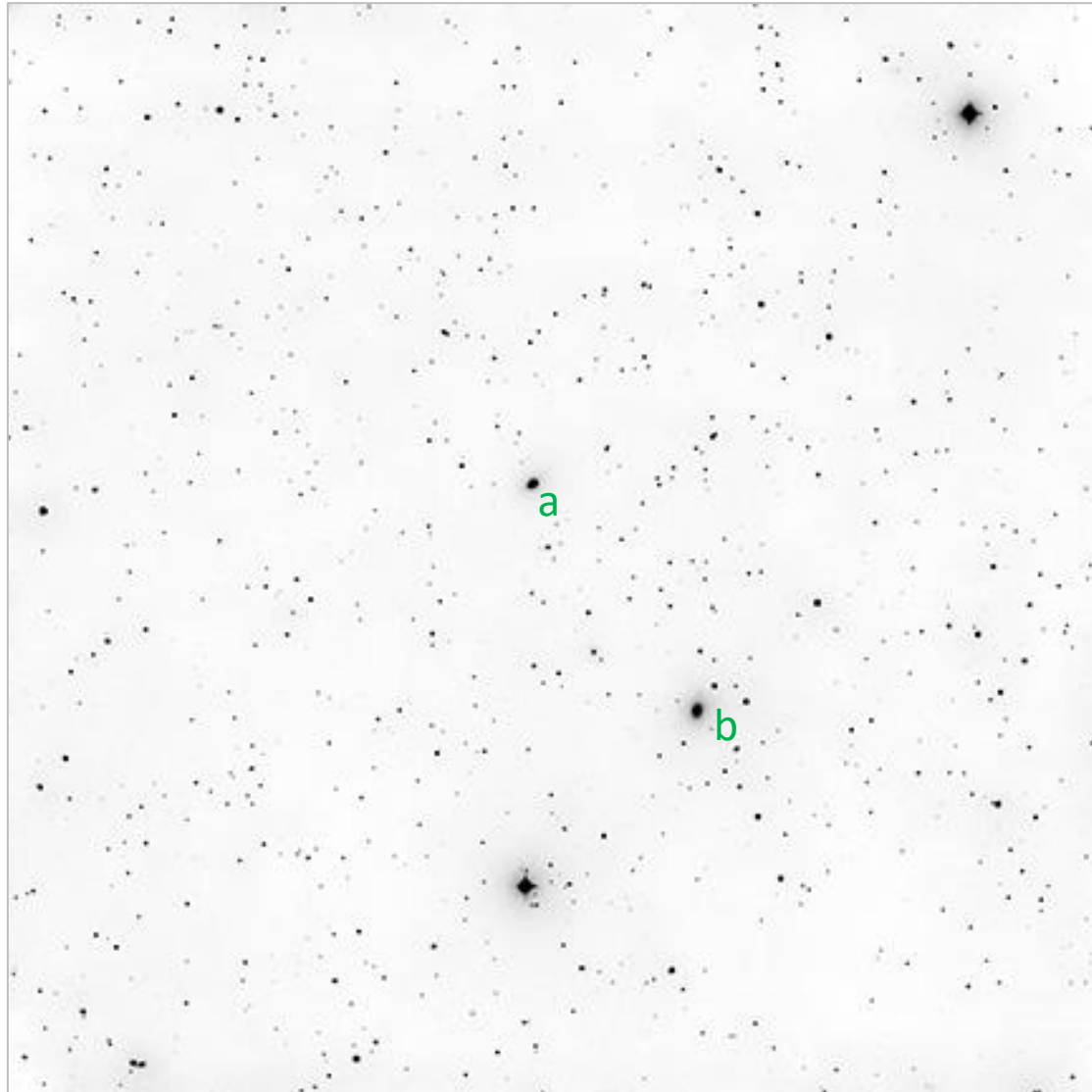
| | |
|---|---|
| 06/2024-01-15 16:59:18Z as "UGC6057-16bit.jpg" (Submission 9054699) Under Attribution 3.0 Unported | |
| Job Status | |
| Job 9770002: | Success |
| Calibration | |
| Center (RA, Dec): | (164.564, 1.584) |
| Center (RA, hms): | 10 ^h 58 ^m 15.297 ^s |
| Center (Dec, dms): | +01° 35' 03.256" |
| Size: | 43.5 x 43.5 arcmin |
| Radius: | 0.513 deg |
| Pixel scale: | 1.01 arcsec/pixel |
| Orientation: | Up is 359.7 degrees E of N |
| WCS file: | wcs.fits |
| New FITS image: | new-image.fits |
| Reference stars nearby (RA, Dec table): | rdis.fits |
| Stars detected in your images (x,y table): | axy.fits |
| Correspondences between image and reference stars (table): | corr.fits |
| Legacy Surveys sky browser: | browse the sky |

- a) **UGC 6057, mag 14.9**
- b) PGC 32963, mag 15.6
- c) IC 661, mag 15.3
- d) IC 660, mag 15.5
- e) PGC 33065, mag 15.1
- f) IC 662, mag 15.6

Abell 1139 contains over 36 galaxies. The brightest in appearance is galaxy UGC 6057 (a). I've labelled 4 other galaxies(b-e). This field is rather sparse; only a couple of other dim galaxies can be suspected in the field.

#31 Abell 3537 IC 3986 et al in Centaurus

2023-02-24 02:50Z SLOOH Chile Two

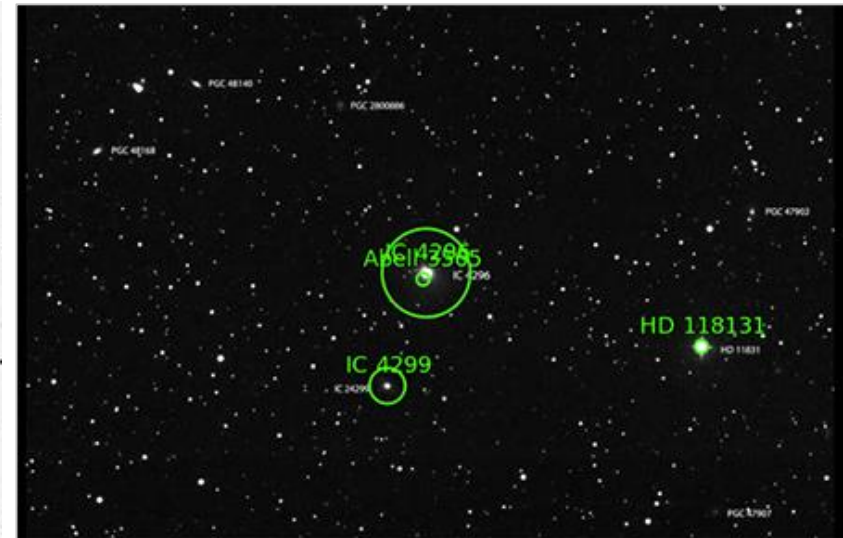
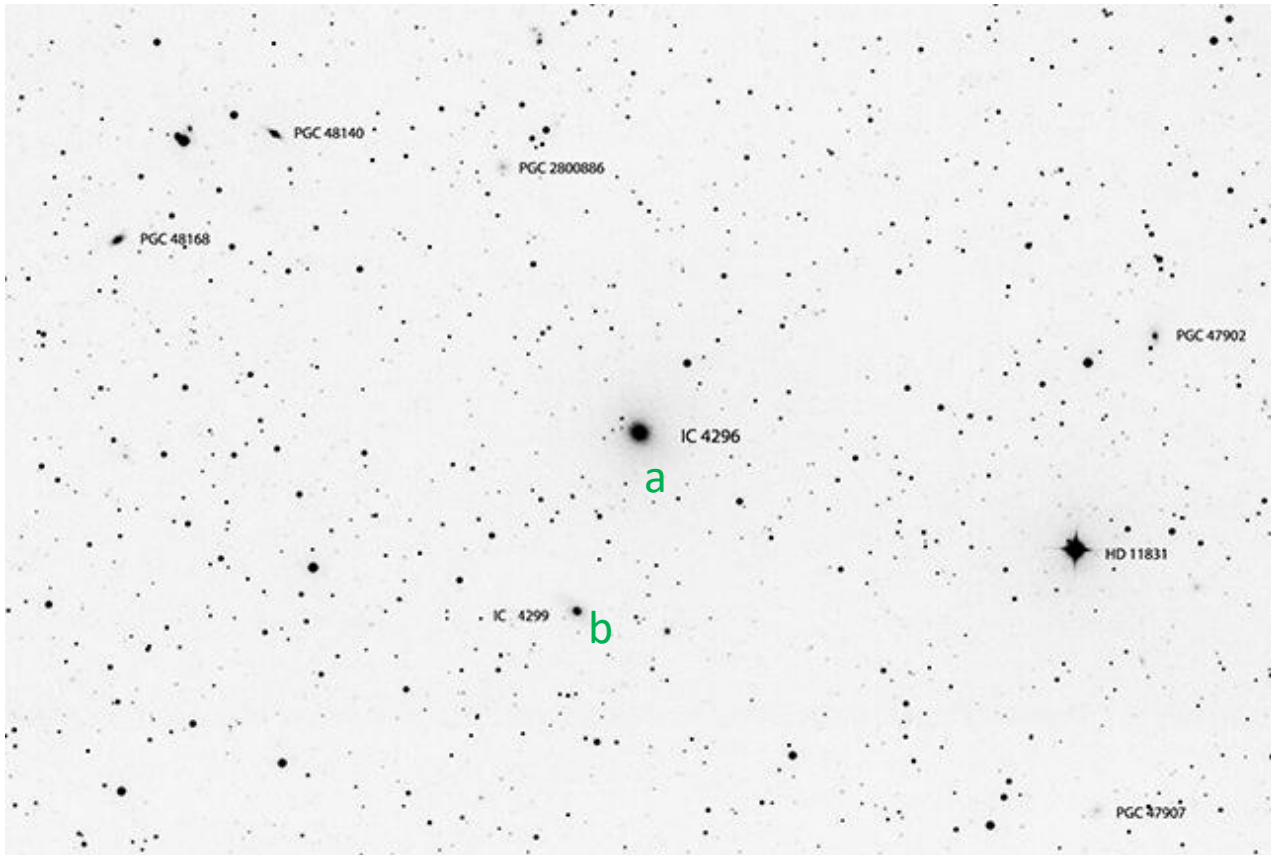


- a) IC 3986, mag 11.8
- b) ESO 443-24, mag 12.2

Abell 3537 theoretically contains over 35 galaxies, but in this field (& in the book) I only see two (a, b). I cannot detect other galaxies in the field, so they must be pretty dim.

#33 Abell 3565 IC 4296 et al in Centaurus

2019-05-09 15:00Z 0.43m CDK17 with SBIG 11000, Dubbo Observatory, New South Wales, Australia



Submitted by anonymous (1)
on 2024-01-15T20:03:04Z
as "IC4296.jpg" (Submission 9055454)
under Attribution 3.0 Unported

| Job Status | |
|--------------|---------|
| Job 9779925: | Success |

| Calibration | |
|--------------------|---|
| Center (RA, Dec): | (204.159, -33.965) |
| Center (RA, hms): | 13 ^h 36 ^m 38.164 ^s |
| Center (Dec, dms): | -33° 57' 52.865" |
| Size: | 42.3 x 28.2 arcmin |
| Radius: | 0.424 deg |
| Pixel scale: | 1.27 arcsec/pixel |
| Orientation: | Up is 357.1 degrees E of N |
| WCS file: | wcs.fits |
| New FITS image: | new-image.fits |
| Reference stars | |

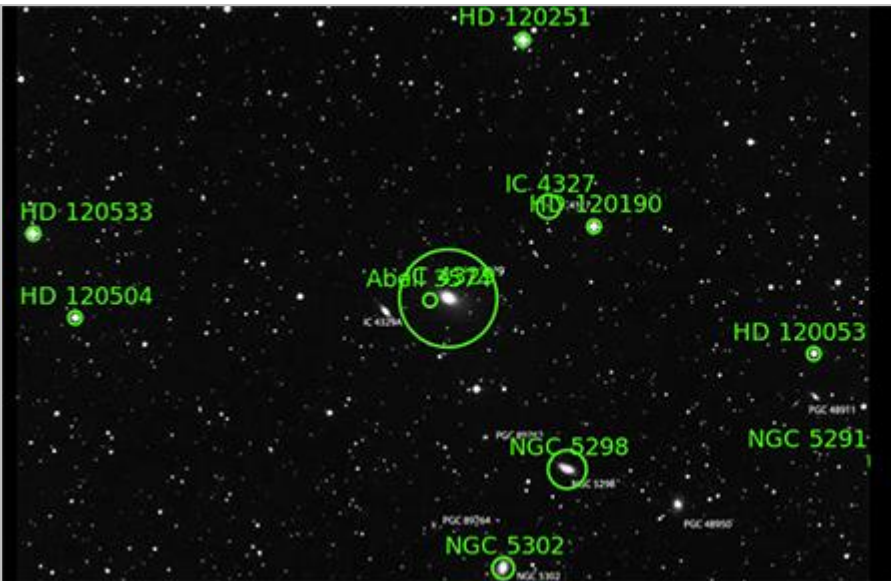
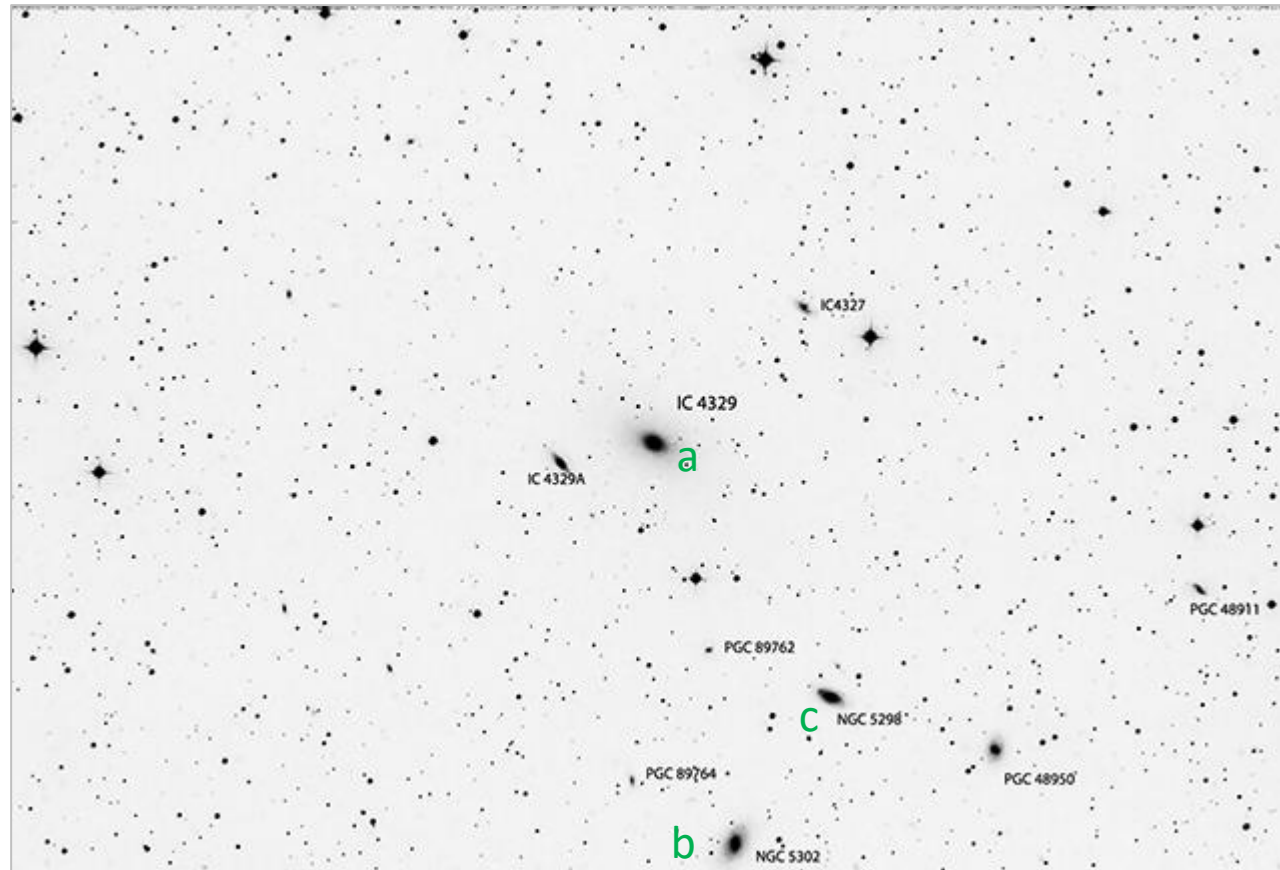
Abell 3565 contains over 64 galaxies. Visible galaxies are labeled directly in the image itself. I have added additional annotation to the two brightest galaxies (a, b).

a) IC 4296, mag 10.6

b) IC 4299, mag 12,6

#34 Abell 3574 IC 4329 et al in Centaurus

2019-05-06 15:20Z 0.43m CDK17 with SBIG 11000, Dubbo Observatory, New South Wales, Australia



Submitted by anonymous (1)
on 2024-01-15T22:59:48Z
as "IC4329.jpg" (Submission 9057056
under Attribution 3.0 Unported

Job Status

Job 9781523:
Success

Calibration

Center (RA, Dec): (207.277, -30.293)
Center (RA, hms): 13^h 49^m 06.402^s
Center (Dec, dms): -30° 17' 36.505"
Size: 41.4 x 28.2 arcmin
Radius: 0.417 deg
Pixel scale: 1.27 arcsec/pixel
Orientation: Up is 357.0 degrees
WCS file: [wcs.fits](#)
New FITS image: [new-image.fits](#)
Reference stars nearby (RA,Dec): [rdls.fits](#)

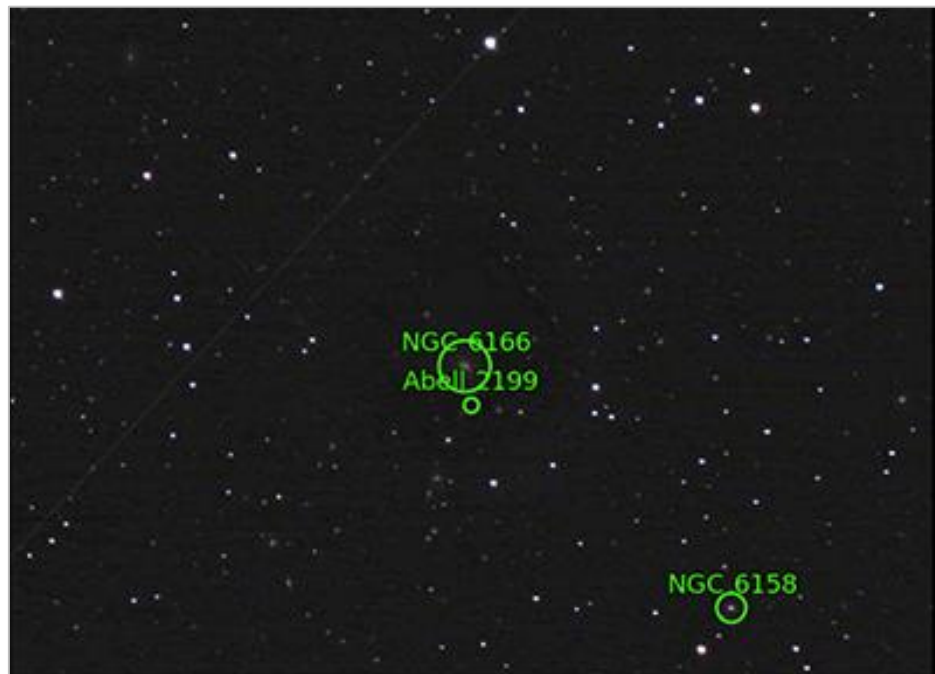
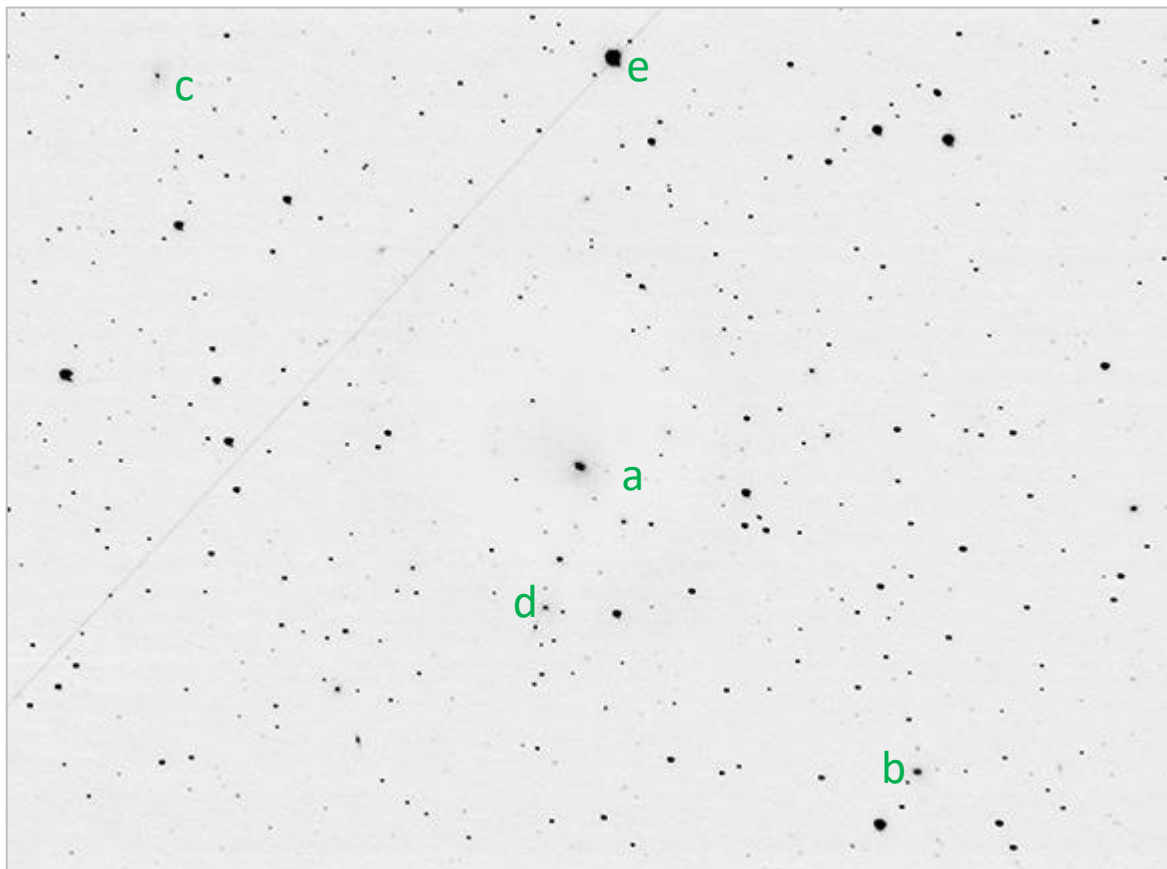
Abell 3574 contains over 31 galaxies. Visible galaxies are labeled directly in the image itself. I have added additional annotation to the three brightest galaxies (a-c).

- a) IC 4329, mag 11.3
- b) NGC 5302, mag 12.4
- c) NGC 5298, mag 13.0

#42 Abell 2199

NGC 6166 et al in Hercules

2022-07-24 01:57 EDT 8" SCT with Mallincam DS10cTEC, Sharon GA



Submitted by anonymous (1)
on 2024-01-15T20:09:00Z
as "ngc6166.DAV.jpg" (Submission
9055476)
under Attribution 3.0 Unported

Job Status

Job 9779947:
Success

Calibration

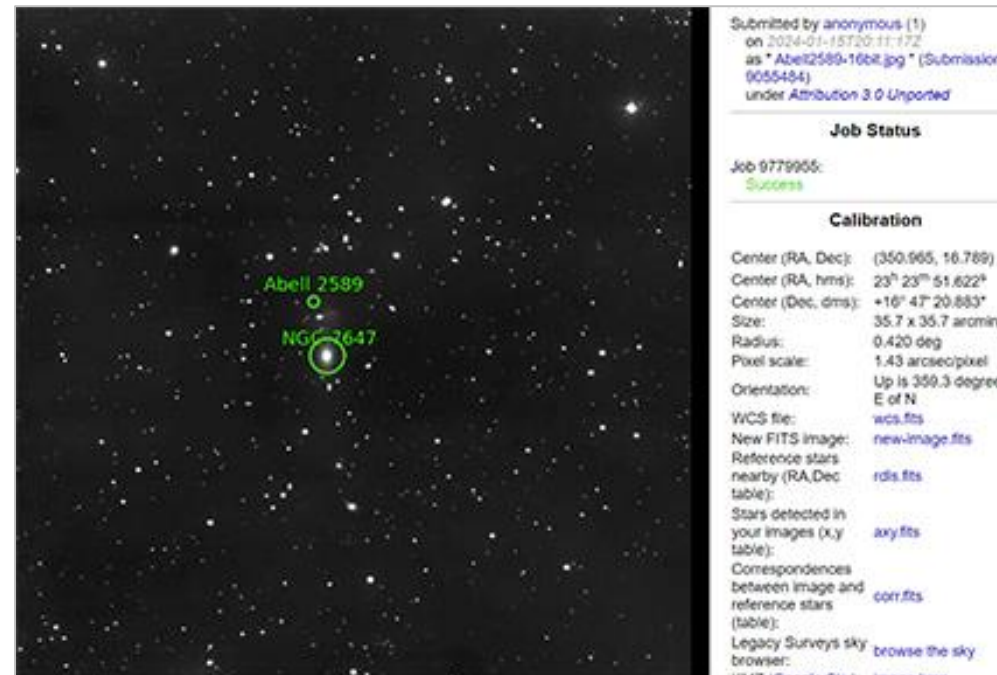
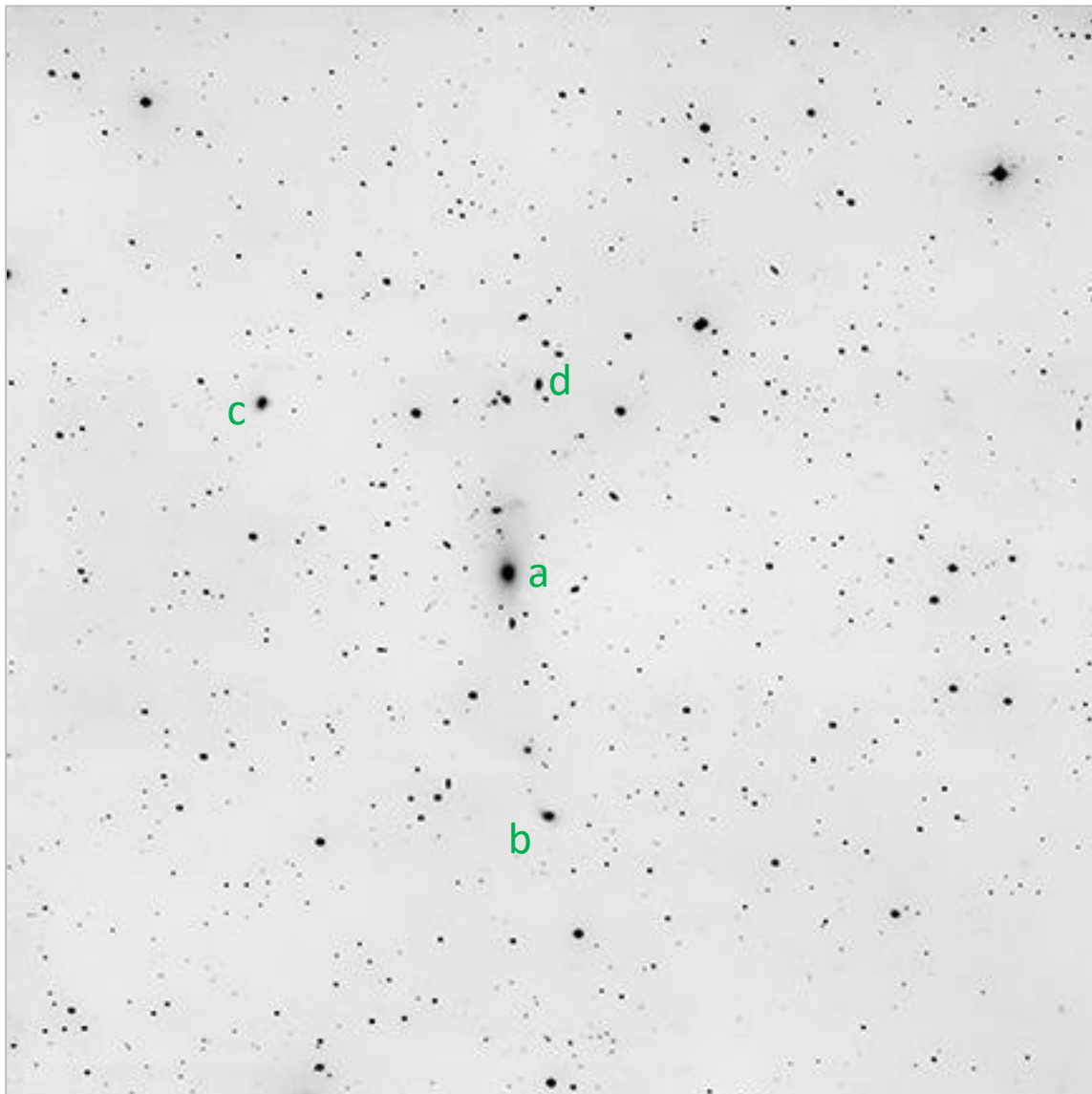
| | |
|--|---|
| Center (RA, Dec): | (247.154, 39.566) |
| Center (RA, hms): | 16 ^h 28 ^m 36.853 ^s |
| Center (Dec, dms): | +39° 33' 56.926" |
| Size: | 38.5 x 28.6 arcmin |
| Radius: | 0.399 deg |
| Pixel scale: | 1.27 arcsec/pixel |
| Orientation: | Up is 359.9 degrees E of N |
| WCS file: | wcs.fits |
| New FITS image: | new-image.fits |
| Reference stars nearby (RA,Dec table): | rdls.fits |

- a) **NGC 6166, mag 11.9**
- b) NGC 6158, mag 13.7
- c) UGC 10420, mag 13.7
- d) PGC 58277, mag 14.8
- e) SAO 65324 (star), mag 8.8

Abell 2199 contains over 88 galaxies. I have labeled the four(a-d) that I see in this field. A satellite can be seen slicing through the frame, passing right over a mag 9 star, SAO 65324.

#46 Abell 2589 NGC 7647 et al in Pegasus

2023-11-18 23:40Z SLOOH Canary One

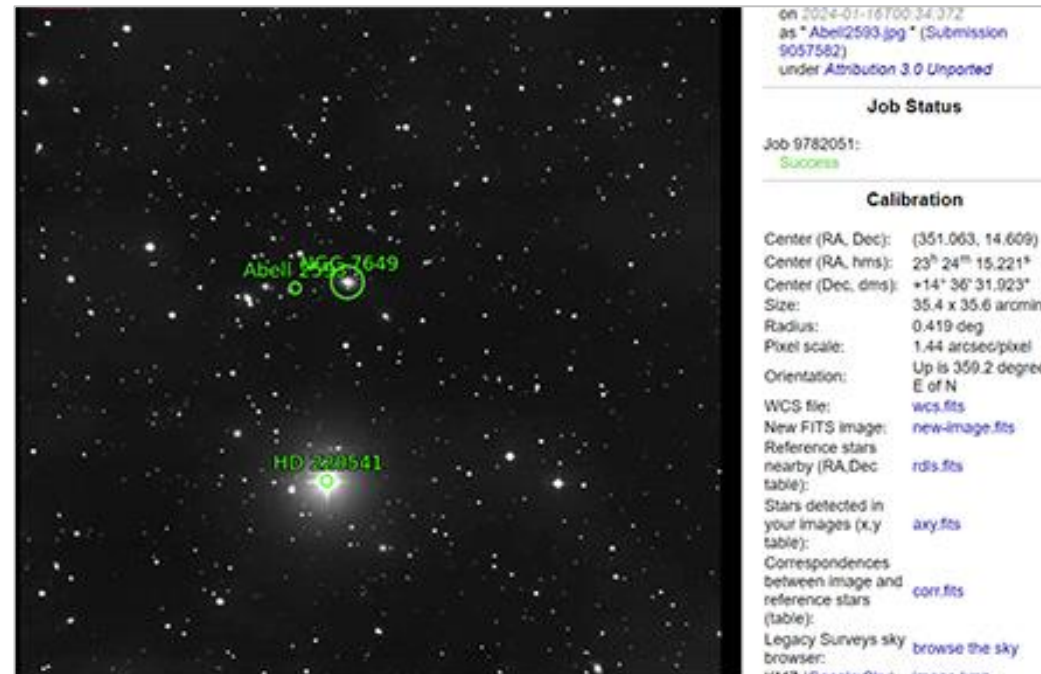
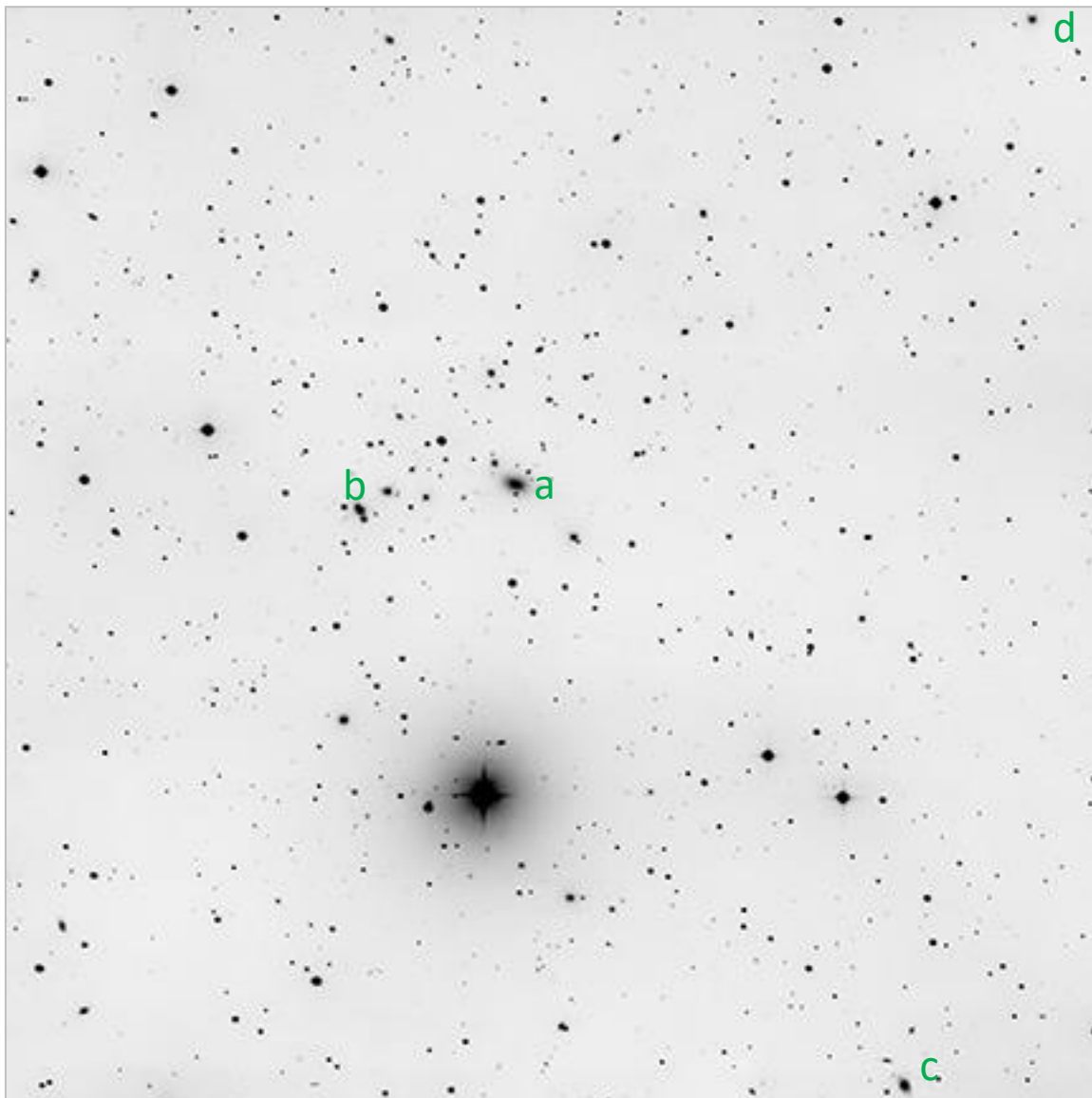


- a) **NGC 7647, mag 12.8**
- b) PGC 71323, mag 15.5
- c) UGC 12582, mag 15.5
- d) 2MASX J23235357+1652479, mag 15.8

Abell 2589 contains over 40 galaxies. The brightest by far in this field is elliptical galaxy NGC 7647 (a). I have labeled the 3 other smaller galaxies (b-d) that I was able to detect easily. A few other tiny galaxies can be picked out if you look carefully.

#47 Abell 2593 NGC 7649 et al in Pegasus

2023-12-03 19:55Z SLOOH Canary One

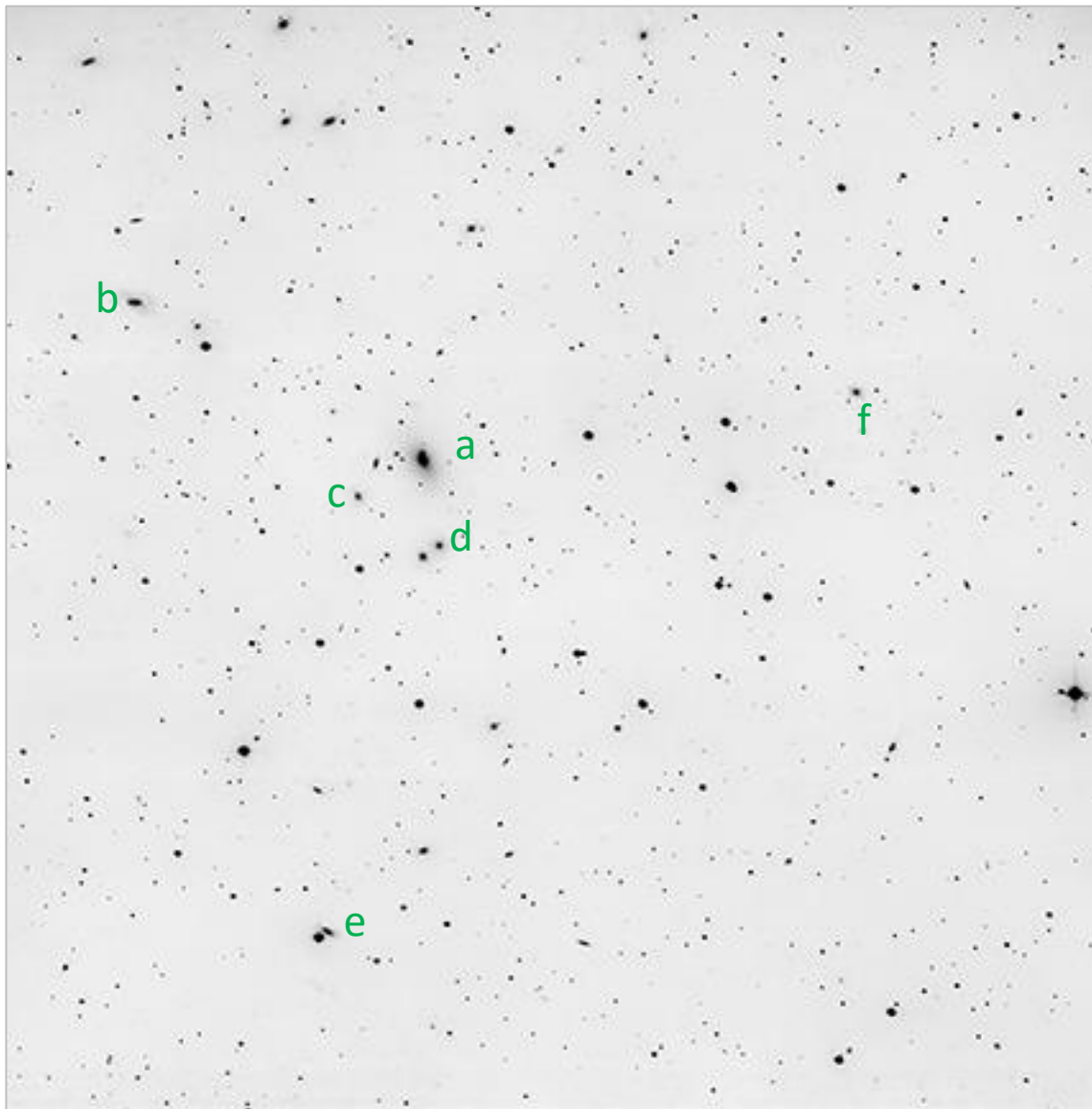


- a) **NGC 7649, mag 14.2**
- b) PGC 95574, mag 15.1
- c) PGC 71302, mag 15.4
- d) UGC 12569, mag 15.8

Abell 2589 contains over 42 galaxies. The brightest one in this field is elliptical galaxy NGC 7649 (a). I have labeled the 3 other smaller galaxies (b-d) that I was able to detect easily. A few other tiny galaxies can be detected in the field.

#48 Abell 2634 NGC 7720 et al in Pegasus

2023-12-05 20:15Z SLOOH Canary One



Submitted by anonymous (1)
on 2024-01-16T01:12:26Z
as "Abell2634-160x.jpg" (Submission
9057693)
under Attribution 3.0 Unported

Job Status

Job 9782163:
Success

Calibration

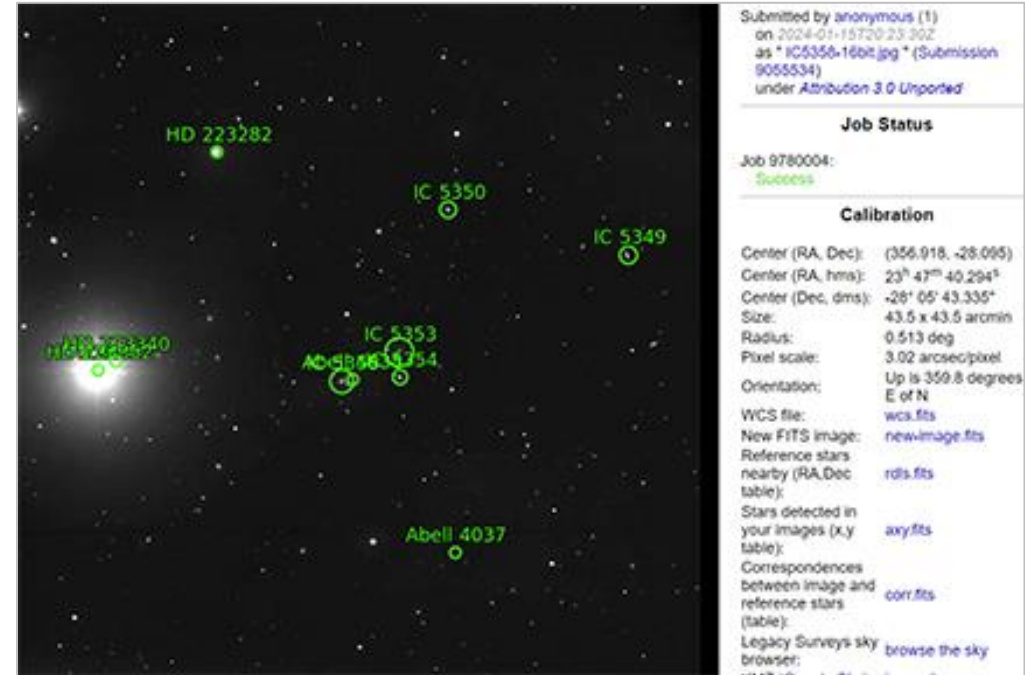
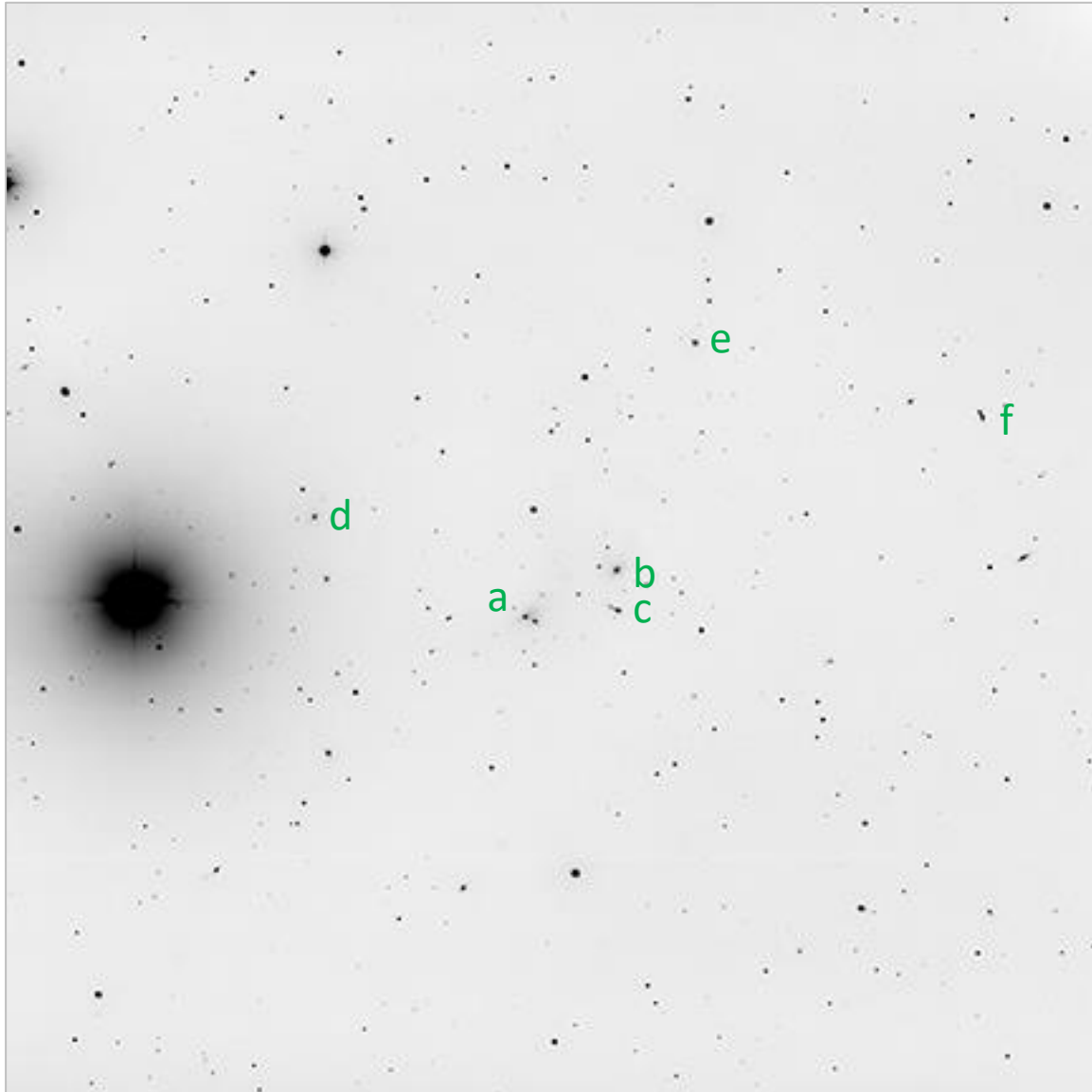
Center (RA, Dec): (354.543, 26.978)
Center (RA, hms): 23^h 38^m 10.223^s
Center (Dec, dms): +26° 58' 44.276"
Size: 35.6 x 36.1 arcmin
Radius: 0.423 deg
Pixel scale: 2.51 arcsec/pixel
Orientation: Up is 359.3 degrees
E of N
WCS file: wcs.fits
New FITS image: new-image.fits
Reference stars nearby (RA,Dec table): rds.fits
Stars detected in your images (x,y table): axy.fits
Correspondences between image and reference stars (table): corr.fits
Legacy Surveys sky browser: browse the sky

- a) **NGC 7720, mag 12.3**
- b) NGC 7726, mag 15.0
- c) IC 5342, mag 14.3
- d) IC 5341, mag 15.7
- e) UGC 12719, mag 15.6
- f) PGC 71927, mag 15.5

Abell 2634 contains over 52 galaxies. The brightest one in this field is clearly elliptical galaxy NGC 7720 (a). I have labeled five other smaller galaxies (b-f). Other small galaxies can be detected in the field.

#49 Abell 4038 IC 5358 et al in Sculptor

2023-10-19 04:32Z SLOOH Chile Two

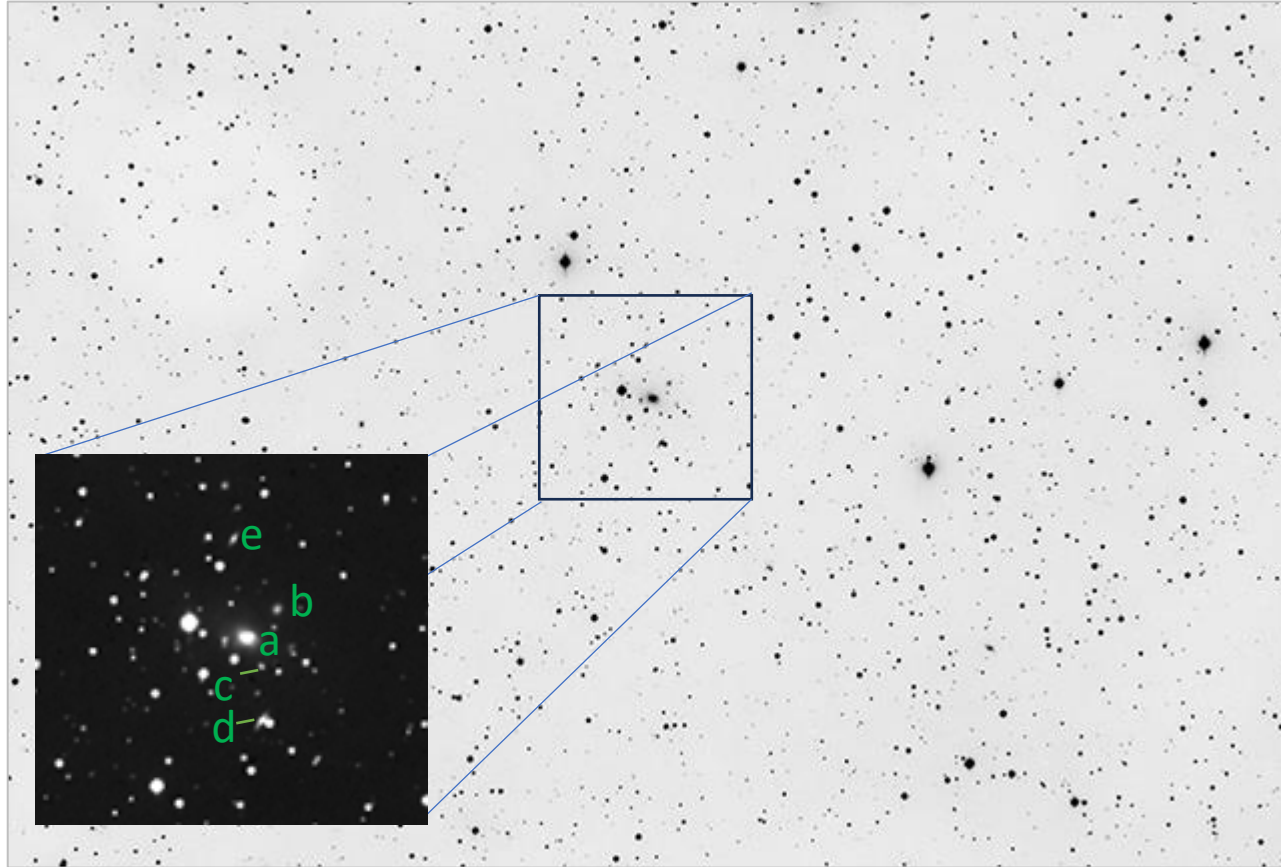


- a) IC 5358, mag 12.3
- b) IC 5353, mag 13.6
- c) IC 5354, mag 15.0
- d) PGC 72471, mag 13.7
- e) IC 5350, mag 13.6
- f) IC 5349, mag 15.3

Abell 4038 contains over 117 galaxies! Blazingly luminous delta Sculptoris at mag 4.6 washes out the field, making it hard to see the galaxies here. Again our brightest galaxy is an elliptical one, IC 5358 (a). I have labeled five other galaxies that can be clearly identified (b-f). I think I can see a couple more faint/small galaxies in the field, but not many.

#50 Abell 2666 NGC 7768 et al in Pegasus

2023-9-1 05:40Z SLOOH Canary Two UW



Submitted by anonymous (1)
on 2024-01-15T20:25:52Z
as "NGC7768.jpg" (Submission
9055541)
under Attribution 3.0 Unported

Job Status

Job 9780011:
Success

Calibration

Center (RA, Dec): (357.750, 27.099)
Center (RA, hms): 23^h 50^m 59.982^s
Center (Dec, dms): +27° 05' 58.138"
Size: 1.73 x 1.16 deg
Radius: 1.039 deg
Pixel scale: 7.19 arcsec/pixel
Orientation: Up is 3.3 degree
of N
WCS file: [wcs.fits](#)
New FITS image: [new-image.fits](#)
Reference stars:

- a) **NGC 7768**, mag 12.3
- b) NGC 7765, mag 15.7
- c) NGC 7766, mag 16.2
- d) NGC 7767, mag 14.1
- e) PGC 72607, mag 15.4

Abell 2666 contains over 34 galaxies, but the brightest are all concentrated in a tight clump in this wide-field image. The brightest galaxy is NGC 7768 (a). I have labeled four other galaxies that can be clearly identified (b-e) using the [Aladin Sky Atlas](#) which enables identification using the Simbad database. Give the given link some time to load; you can then see this same field where you can enable the Simbad ID popup.