

Thirty Hickson Compact Galaxy Groups

observed by Marie Lott

<u>HCG 02 UGC 312 et al in Pisces</u>	<u>HCG 16 NGC 835 et al in Cetus</u>	<u>HCG 44 NGC 3190 et al in Leo</u>
<u>HCG 03 PGC 2045 et al in Cetus</u>	<u>HCG 18 UGC 2140A et al in Aries</u>	<u>HCG 57 NGC 3753 et al in Leo</u>
<u>HCG 04 PGC 2047 et al in Cetus</u>	<u>HCG 19 PGC 10262 et al in Cetus</u>	<u>HCG 63 PGC 44984 et al in Centaurus</u>
<u>HCG 06 PGC 2353 et al in Cetus</u>	<u>HCG 21 NGC 1098 et al in Eridanus</u>	<u>HCG 67 NGC 5306 et al in Virgo</u>
<u>HCG 07 NGC 192 et al in Cetus</u>	<u>HCG 22 NGC 1199 et al in Eridanus</u>	<u>HCG 90 NGC 7172 et al in PsA</u>
<u>HCG 09 IC 1599 et al in Cetus</u>	<u>HCG 23 NGC 1215 et al in Eridanus</u>	<u>HCG 91 NGC 7214 et al in PsA</u>
<u>HCG 10 NGC 536 et al in Andromeda</u>	<u>HCG 25 UGC 2690 et al in Cetus</u>	<u>HCG 92 NGC 7320 et al in Pegasus</u>
<u>HCG 11 PGC 5362 et al in Cetus</u>	<u>HCG 29 PGC 15559 et al in Eridanus</u>	<u>HCG 93 NGC 7550 et al in Pegasus</u>
<u>HCG 14 PGC 7557 et al in Cetus</u>	<u>HCG 31 NGC 1741 et al in Eridanus</u>	<u>HCG 95 NGC 7609 et al in Pegasus</u>
<u>HCG 15 UGC 1620 et al in Cetus</u>	<u>HCG 37 NGC 2783 et al in Cancer</u>	<u>HCG 97 IC 5357 et al in Pisces</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.

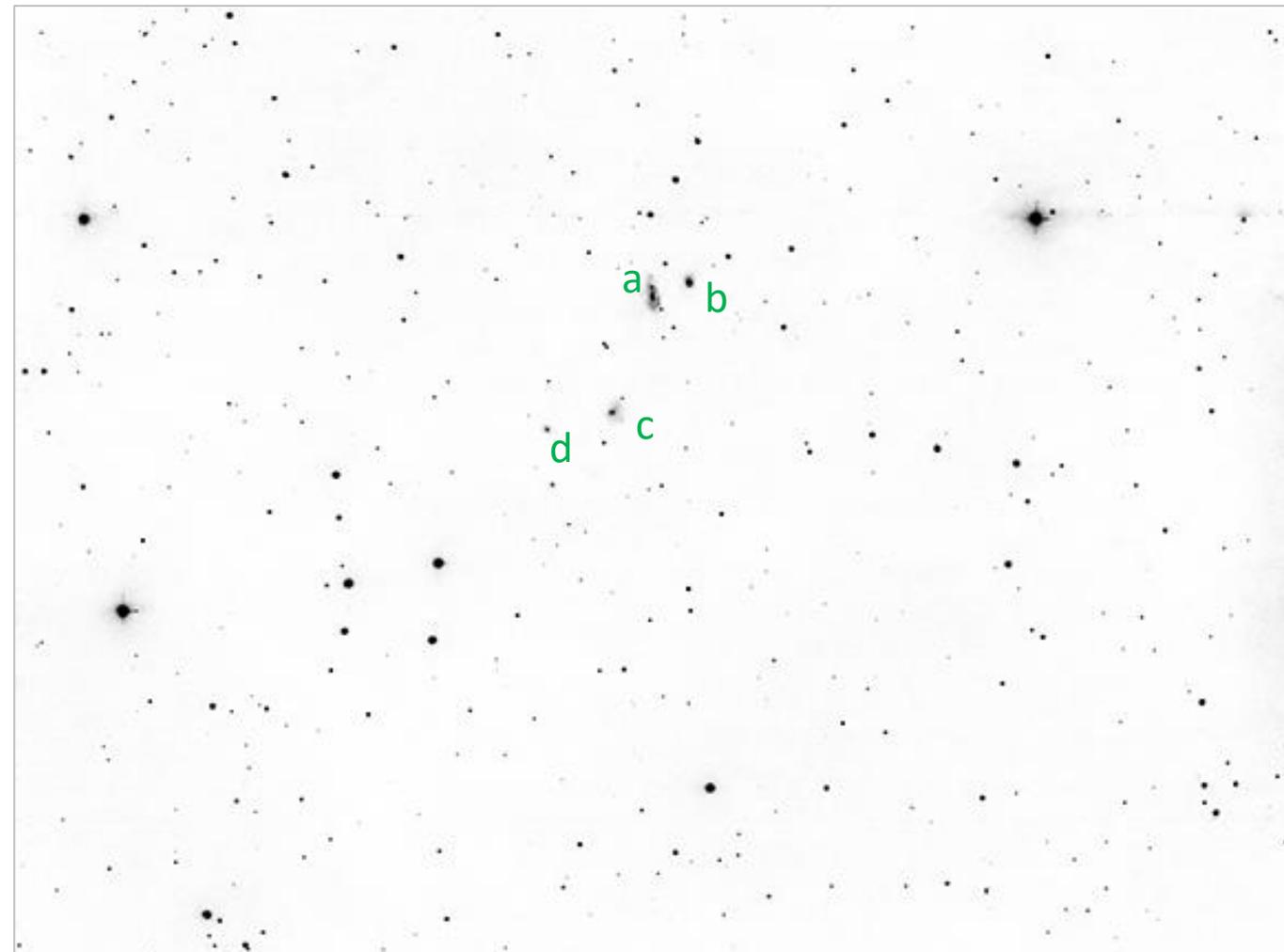
- Canary One: 20" CDK, FLI PL09000 camera
- Canary Two: 17" CDK, FLI PL16803 camera
- Chile Two: 17" CDK, FLI PL16803 camera
- Deerlick Astronomy Village ("DAV") in Sharon GA: 8" SCT with Mallincam DS10c camera
- Remote telescopes other than SLOOH are indicated on the image.

HCG 02

UGC 312 et al in Pisces

2023-11-09 01:30Z SLOOH Chile Two

(plate solve screenshot and inverted image are both slightly cropped)



Job Status	
Job 9681631:	Success
Calibration	
Center (RA, Dec):	(7.848, 8.386)
Center (RA, hms):	00 ^h 31 ^m 23.566 ^s
Center (Dec, dms):	+08° 23' 10.381"
Size:	43.5 x 43.5 arcmin
Radius:	0.513 deg
Pixel scale:	1.28 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):	rdls.fits
Stars detected in your images (x,y table):	axy.fits
Correspondences between image and reference stars (table):	corr.fits

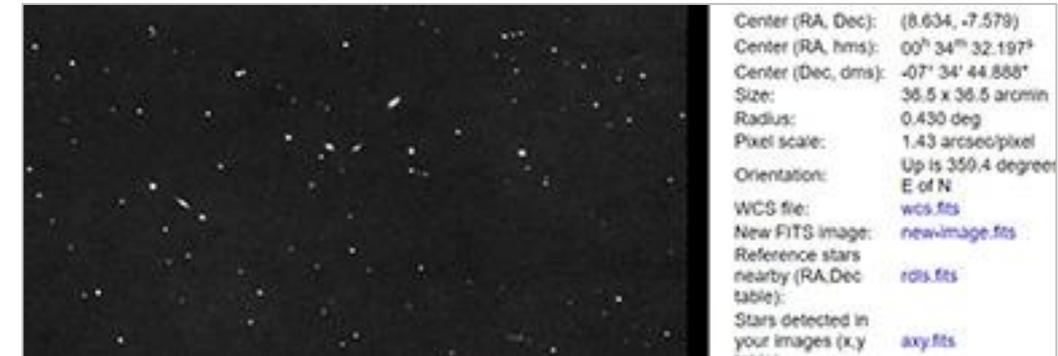
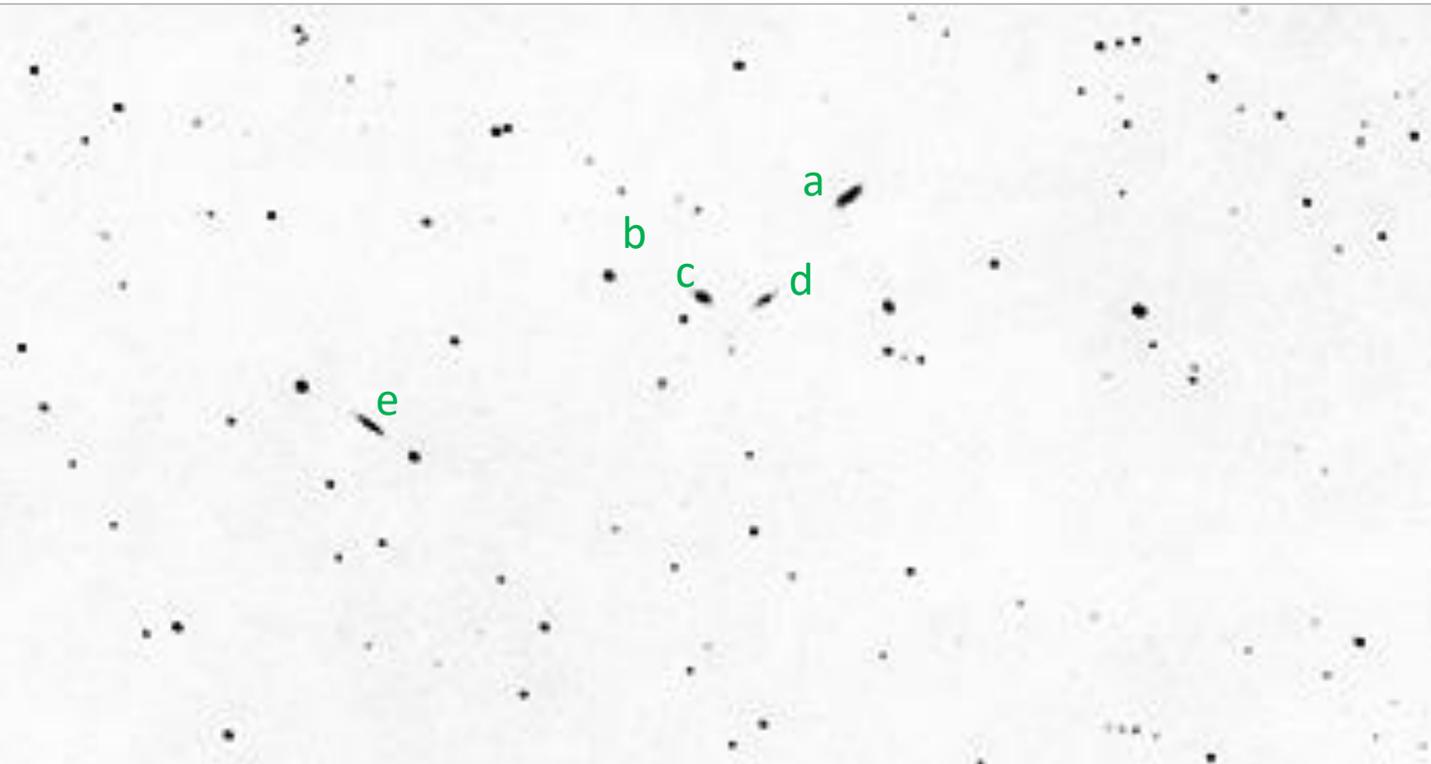
- a) **UGC 312**, mag 13.9
- b) PGC 1914, mag 14.5
- c) UGC 314, mag 15.0
- d) UGC 315, mag 16.20

The largest galaxy (a) of this group, UGC 312, is a small spiral, only 1.3' x 0.7'. Three other even smaller galaxies join it to make Hickson Group 2 (b-d). Little UGC 315 (d) is only 0.6 x 0.5 arcmin!

HCG 03

PGC 2045 et al in Cetus

2023-11-30 02:00Z SLOOH Chile Two
(plate solve screenshot and inverted image are both cropped)



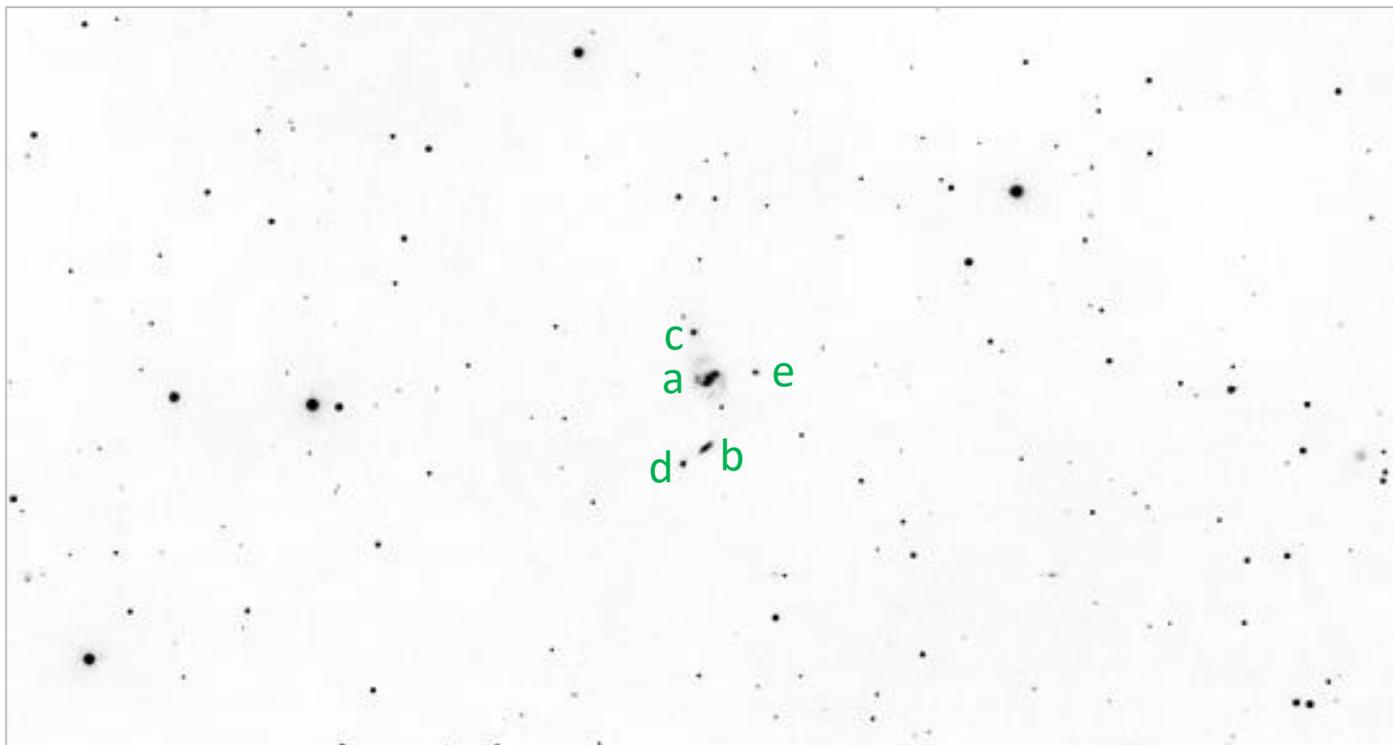
- a) **PGC 2045**, mag 15.5
- b) PGC 2064, mag 15.6
- c) PGC 2059, mag 16.7
- d) PGC 2043, mag 15.8
- e) PGC 2087, mag 15.9

The largest galaxy (a) of this group, PGC 2045, is a small spiral, only 1.0' x 0.3'. Other smaller galaxies form a line just below it to make Hickson Group 3 (b-d). The spiral PGC 2087 (e) sits like a hyphen between two field stars and lies a little further east (left).

HCG 04

PGC 2047 et al in Cetus

2023-11-06 03:10Z SLOOH Chile Two
(plate solve screenshot and inverted image are both cropped)



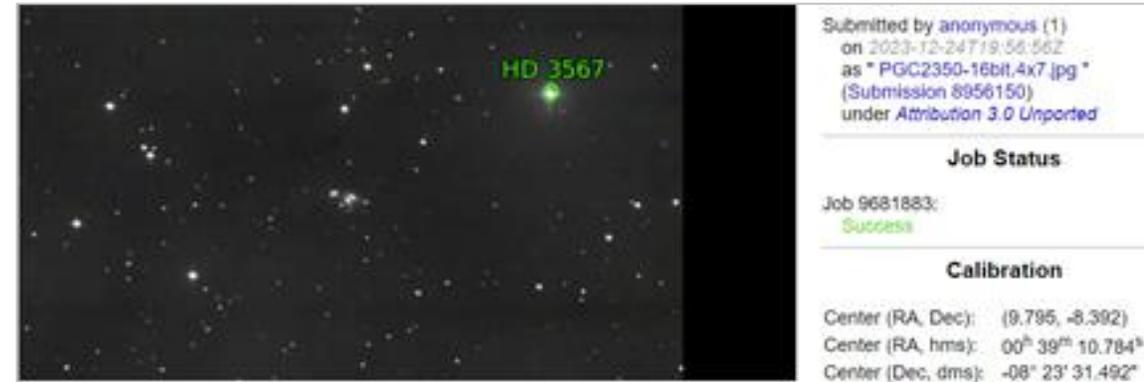
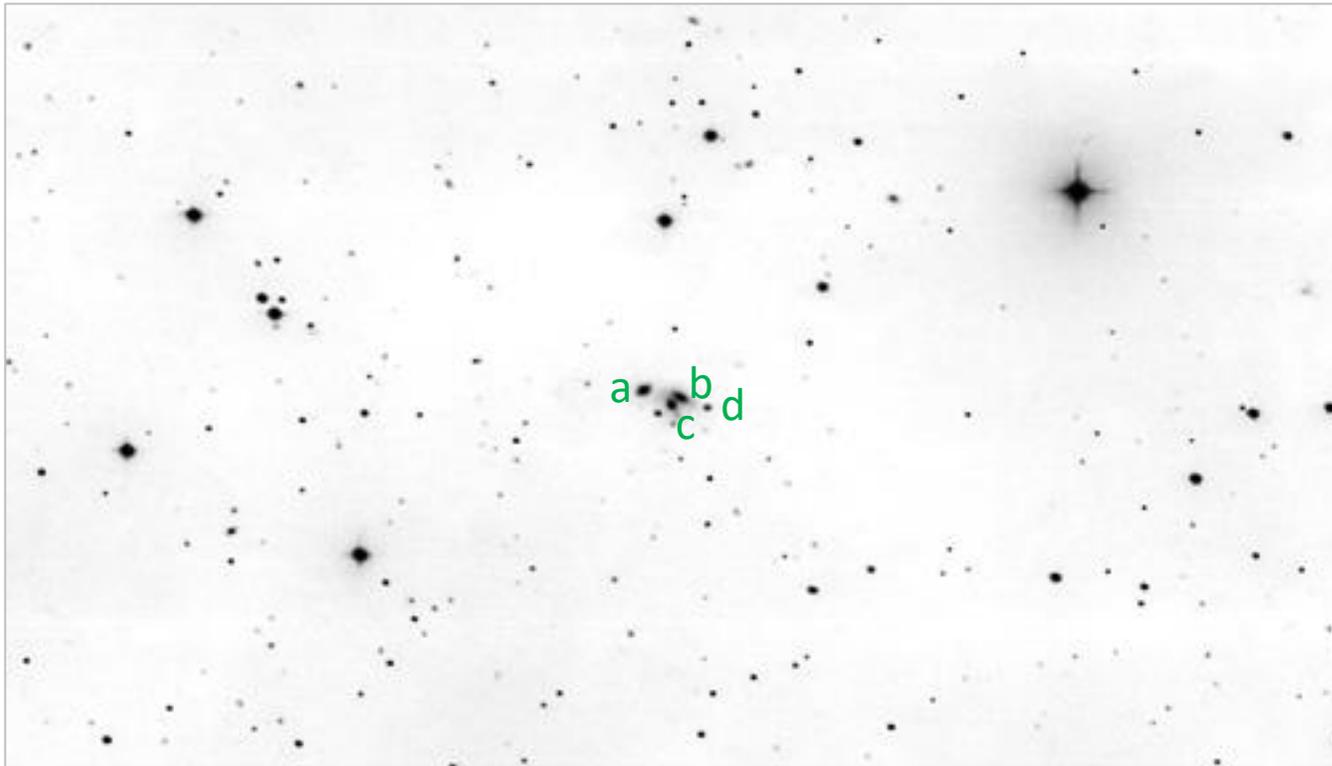
- a) **PGC 2047**, mag 13.7
- b) PGC 2046, mag 15.6
- c) PGC 2051, mag 15.8
- d) PGC 2057, mag 15.8
- e) PGC 2040, mag 16.5

The largest galaxy (a) of this group, PGC 2047, is a beautiful face-on barred spiral, 1.3' x 1.1' in apparent size. Other smaller and dimmer galaxies circle it to form Hickson Group 4 (b-d).

HCG 06

PGC 2353 et al in Cetus

2023-12-03 20:15Z SLOOH Canary One
(inverted image and plate solve are both cropped from original)
Up is 359.4 degrees E of N



- a) **PGC 2353**, mag 15.7
- b) PGC 2350, mag 16.0
- c) PGC 2351, mag 15.6
- d) PGC 2347, mag 17.8

The central galaxy (a) of this group, PGC 2343, is a small spiral, 0.6' x 0.4' in apparent size. Three other small galaxies form a tight row above it to make Hickson Group 6 (b-d).

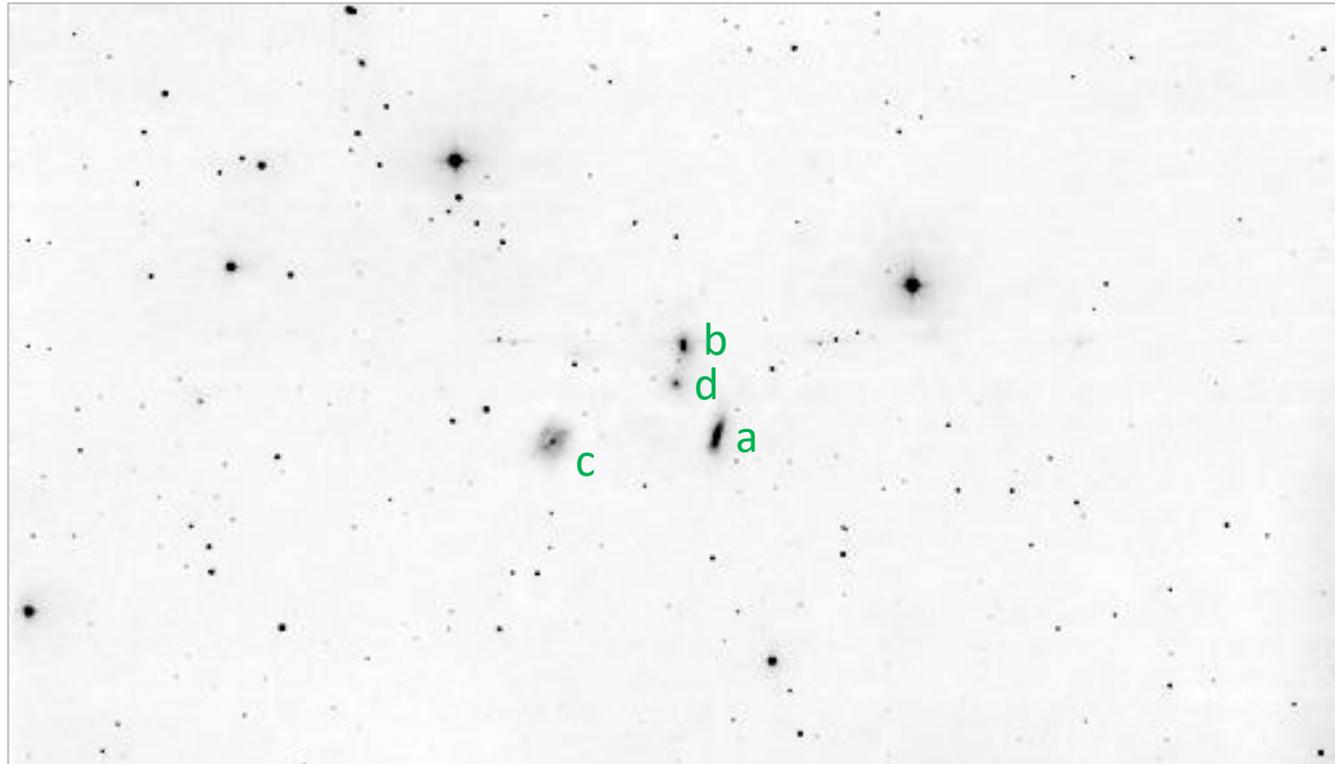
HCG 07

NGC 192 et al in Cetus

2023-11-09 01:35Z SLOOH Chile Two

(inverted image and plate solve are both cropped from original)

Up is 359.5 degrees E of N



- a) **NGC 192**, mag 12.6
- b) NGC 196, mag 13.5
- c) NGC 201, mag 13.0
- d) NGC 197, mag 14.2

NGC 192 is a narrow (almost edge-on) spiral galaxy, 2.1' x 0.8' in apparent size. Three other galaxies are above (north) and left (east) of it, joining NGC 192 (a) to form Hickson Group 7 (b-d). Face-on galaxy NGC 201 (c) shows us a hint of its pretty spiral arms.

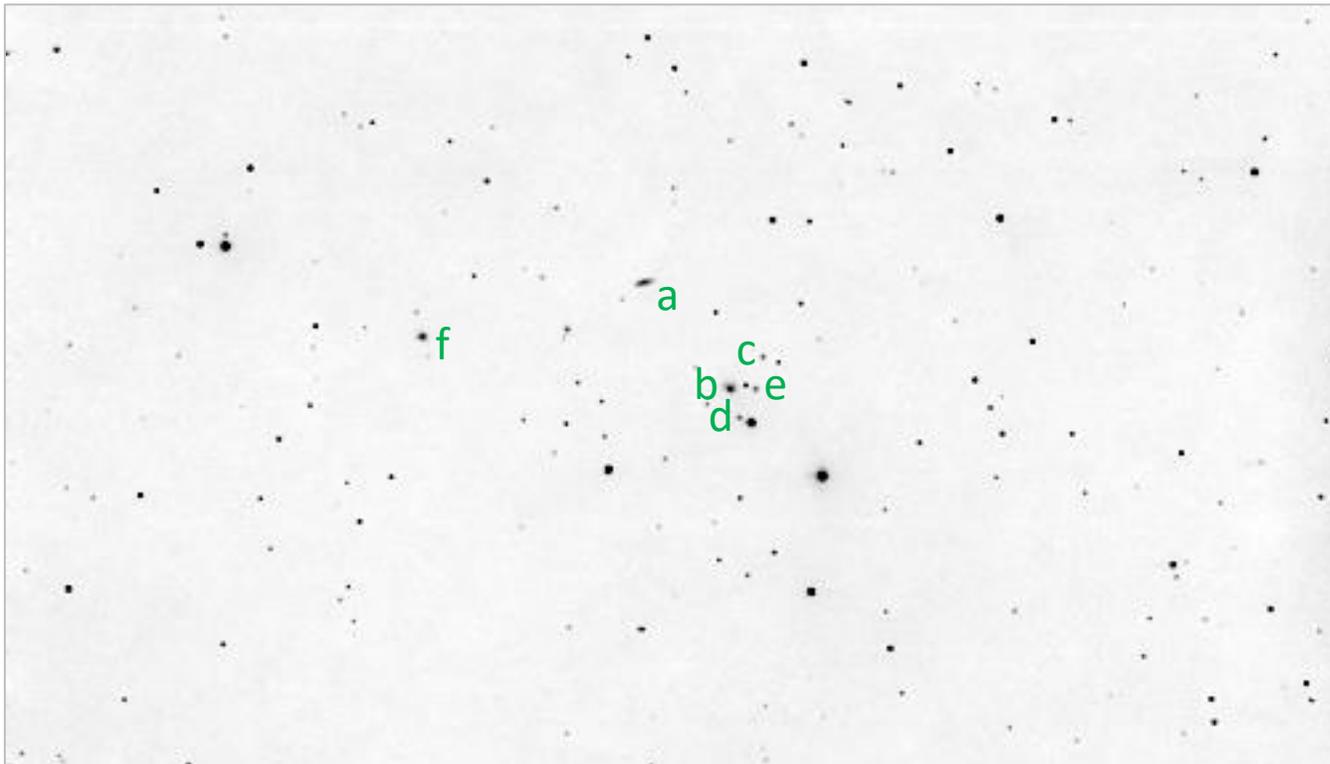
HCG 09

IC 1599 et al in Cetus

2023-10-12 03:45Z SLOOH Chile Two

(inverted image and plate solve are both cropped from original)

Up is 359.7 degrees E of N



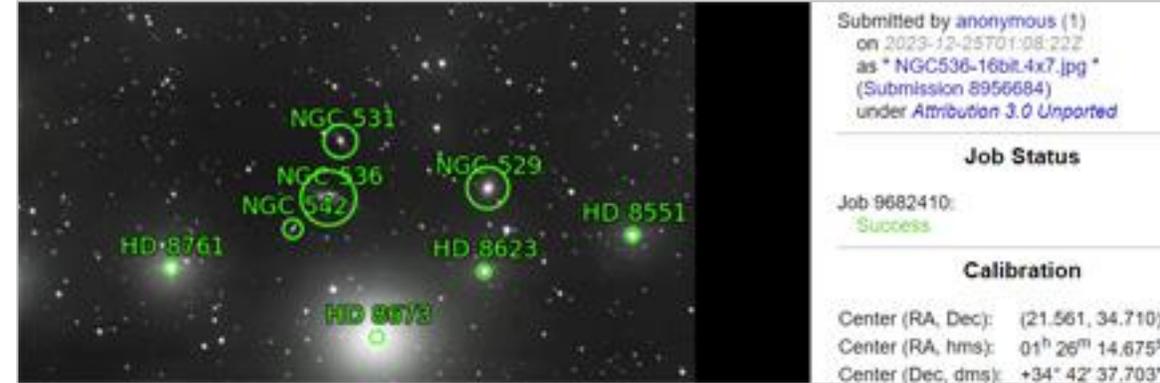
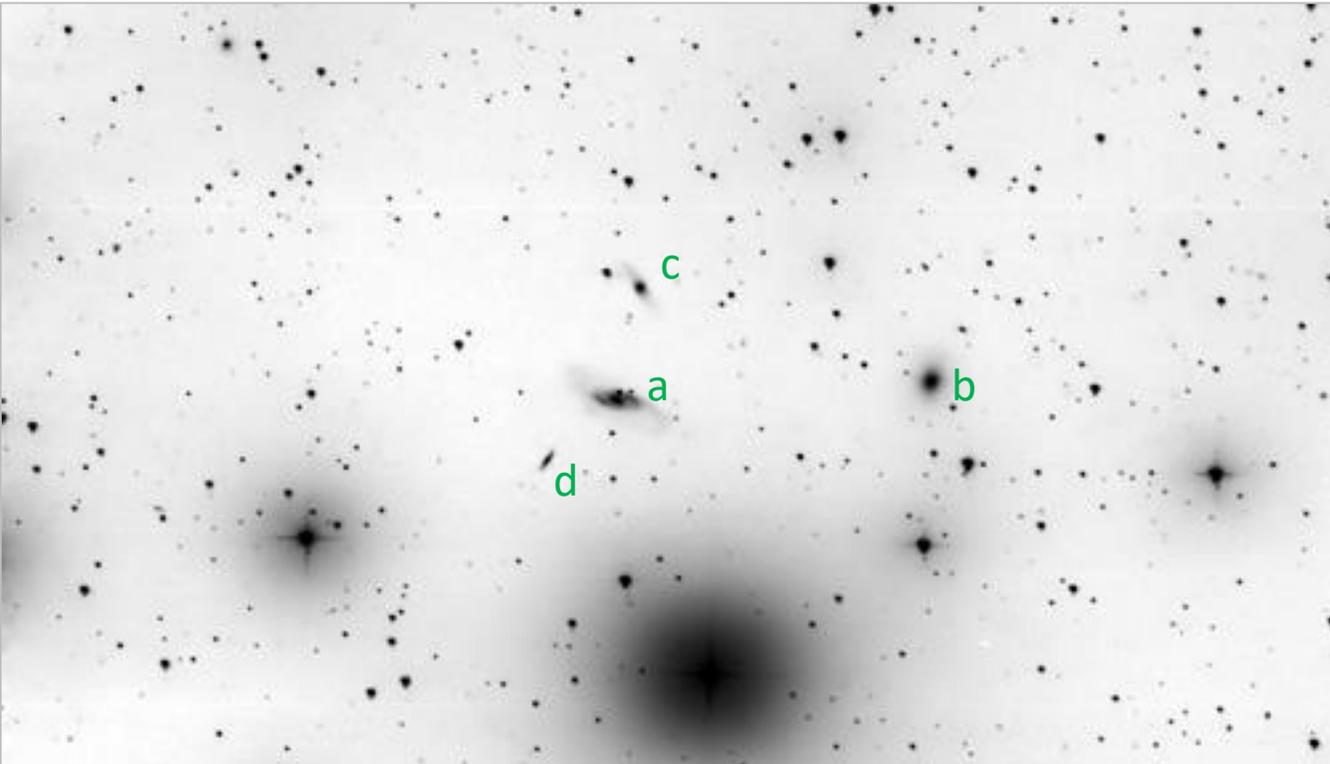
- a) **IC 1599**, mag 15.5
- b) PGC 3201, mag 15.2
- c) PGC 3196, mag 15.8
- d) PGC 3200, mag 17.0
- e) PGC 3198, mag 16.8
- f) **IC 1600**, mag 15.5

The “core 4” of Hickson 9 consists of dim galaxies PGC 3201 (b), 3196 (c), 3200 (d), and 3198 (e). The three latter ones are so very dim and tiny! The two brightest galaxies in this field are IC 1599 (a), at 15.2, and IC 1600 (f) at 15.5.

HCG 10

NGC 536 et al in Andromeda

2023-11-20 01:40Z SLOOH Canary One
(inverted image and plate solve are both cropped from original)
Up is 359.4 degrees E of N



Submitted by anonymous (1) on 2023-12-25T01:08:22Z as * NGC536-16bit.4x7.jpg * (Submission 8956684) under Attribution 3.0 Unported
Job Status
Job 9682410: Success
Calibration
Center (RA, Dec): (21.561, 34.710)
Center (RA, hms): 01 ^h 26 ^m 14.675 ^s
Center (Dec, dms): +34° 42' 37.703"

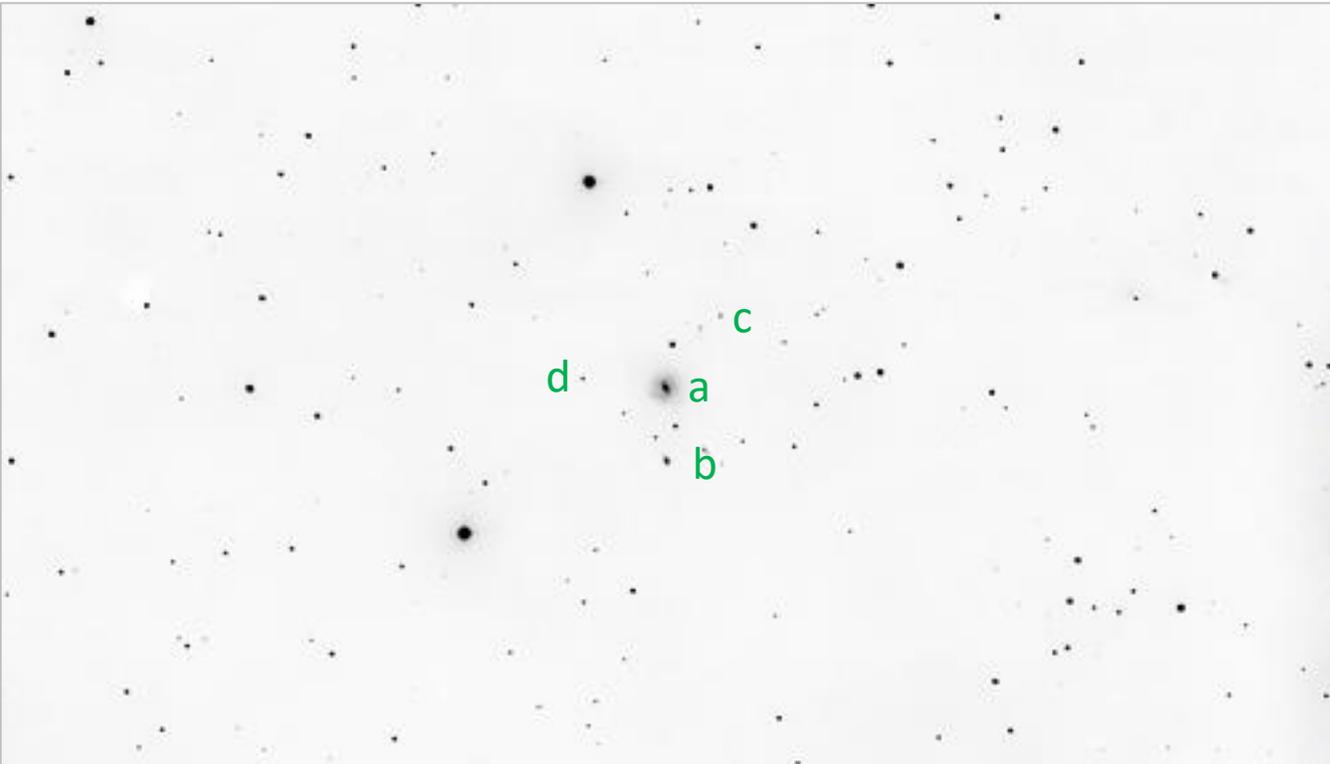
- a) **NGC 536**, mag 12.3
- b) NGC 529, mag 12.1
- c) NGC 531, mag 14.9
- d) NGC 542, mag 15.7

This quadrilateral of four galaxies consists of three spirals, NGC 536 (a), 531 (c), and 532 (d), plus one elliptical, NGC 529 (b). They sit in the bright glow of mag 6.3 HD 8673, sitting just to the south.

HCG 11

PGC 5362 et al in Cetus

2023-11-06 02:35 Z SLOOH Chile Two
(inverted image and plate solve are both cropped from original)
Up is 359.8 degrees E of N



file: 2023-11-06_02:35_0001.jpg as: "PGC5362.1x7.jpg" (Submission 8867-6) under Attribution 3.0 Unported
Job Status
Job: 8032440. Success
Calibration
Center (RA, Dec): (21.638, -23.225)
Center (RA, rms): 00h 28m 33.204s
Center (Dec, rms): -23° 13' 28.110"

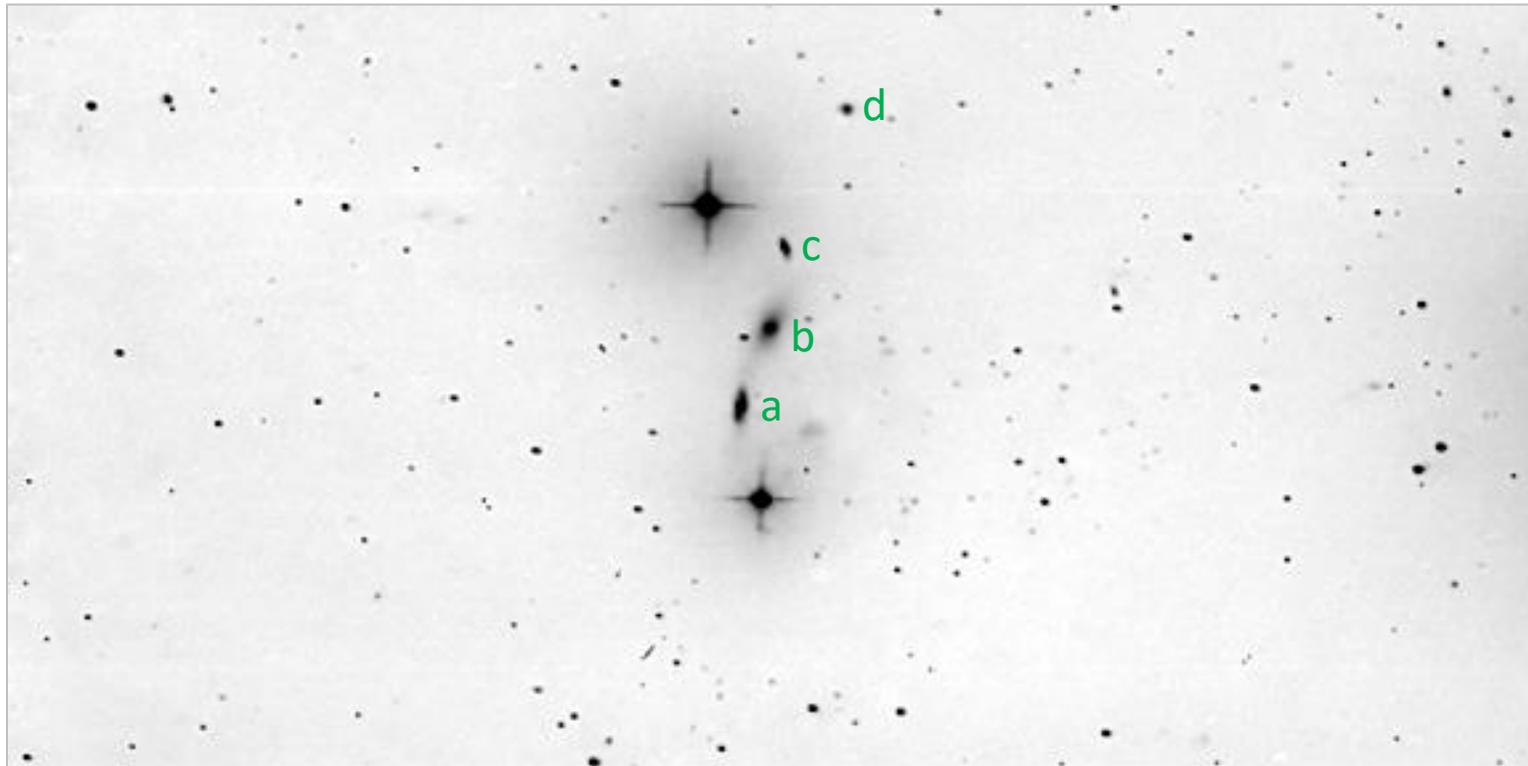
- a) **PGC 5362**, mag 12.7
- b) PGC 5365, mag 15.8
- c) PGC 5357, mag 17.2
- d) PGC 5381, mag 16.8

This Hickson group is composed of one fairly bright face-on spiral galaxy, PGC 5362 (a) and three pretty dim ones, PGC 5365 (b), 5357 (c), and 5381 (d). The last two are so faint that are easy to miss.

HCG 14

PGC 7557 et al in Cetus

2023-11-18 23:20 Z SLOOH Canary One
(inverted image and plate solve are both cropped from original)
Up is 359.3 degrees E of N



Submitted by anonymous (1) on 2023-12-25T02:13:18Z as "PGC7557-16bit.jpg" (Submission 8956772) under Attribution 3.0 Unported
Job Status
Job 9682496: Success
Calibration
Center (RA, Dec): (29.957, -7.080)
Center (RA, hms): 01 ^h 59 ^m 49.606 ^s
Center (Dec, dms): -07° 04' 47.384"

- a) **PGC 7557**, mag 14.8
- b) PGC 7553, mag 15.4
- c) PGC 7550, mag 17.1
- d) PGC 7546, mag 16.6

This Hickson group is much brighter than the last, with four easily detectable spiral galaxies (a-d) dangling north-south between two mag 8/9 HD stars.

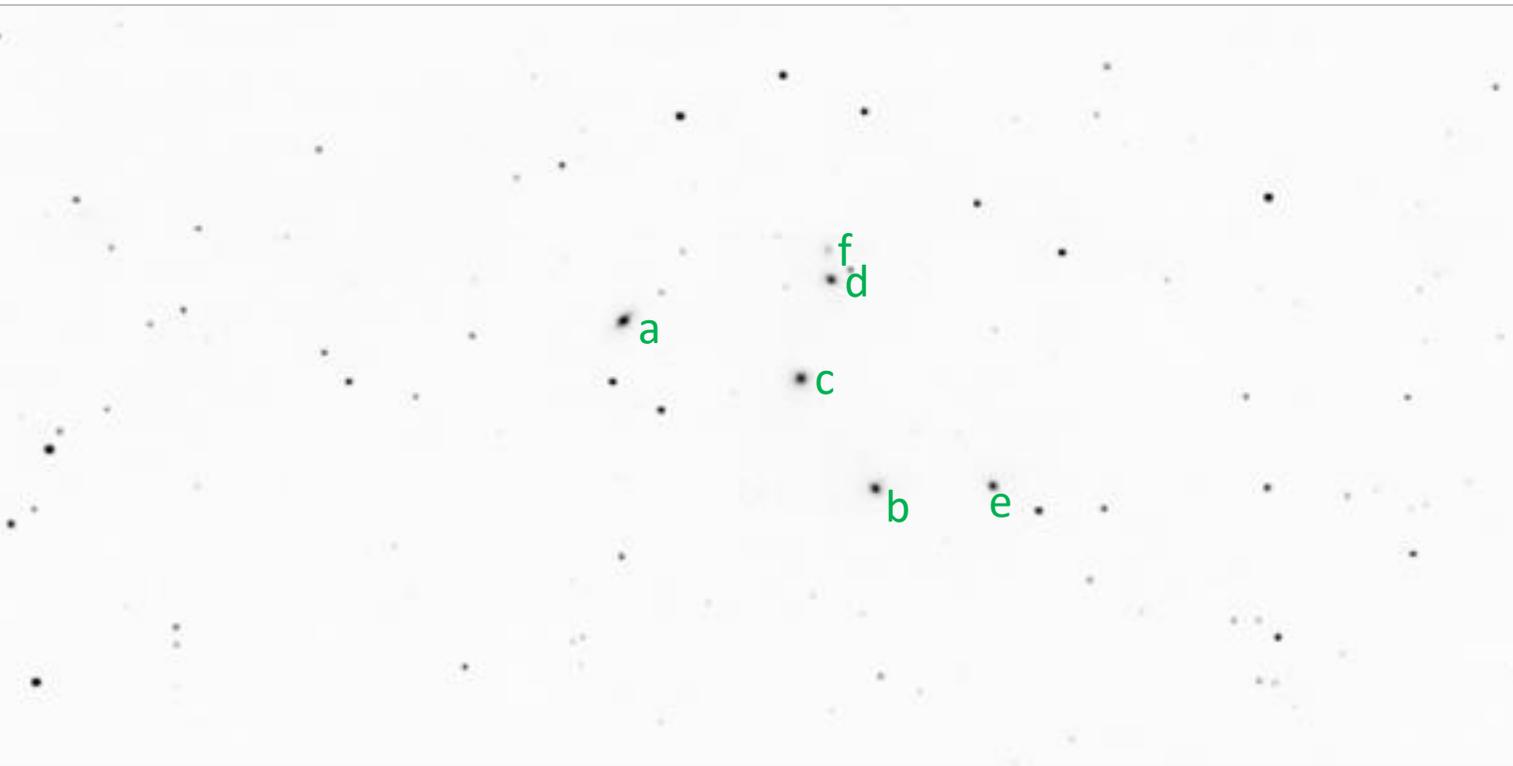
HCG 15

UGC 1620 et al in Cetus

2023-11-18 23:20 Z SLOOH Canary One

(inverted image and plate solve are both cropped from original)

Up is 359.8 degrees E of N



Submitted by anonymous (1)
on 2023-12-25T02:39:54Z
as "UGC1620.4x8.jpg" (Submission
8956805)
under Attribution 3.0 Unported

Job Status

Job 9682528:
Success

Calibration

Center (RA, Dec): (31.928, 2.147)
Center (RA, hms): 02^h 07^m 42.744^s
Center (Dec, dms): +02[°] 08['] 48.638["]

- a) UGC 1624, mag 14.7
- b) UGC 1617, mag 15.0
- c) **UGC 1620**, mag 14.6
- d) UGC 1618, mag 15.2
- e) PGC 8096, mag 15.8
- f) PGC 8116, mag 16.1

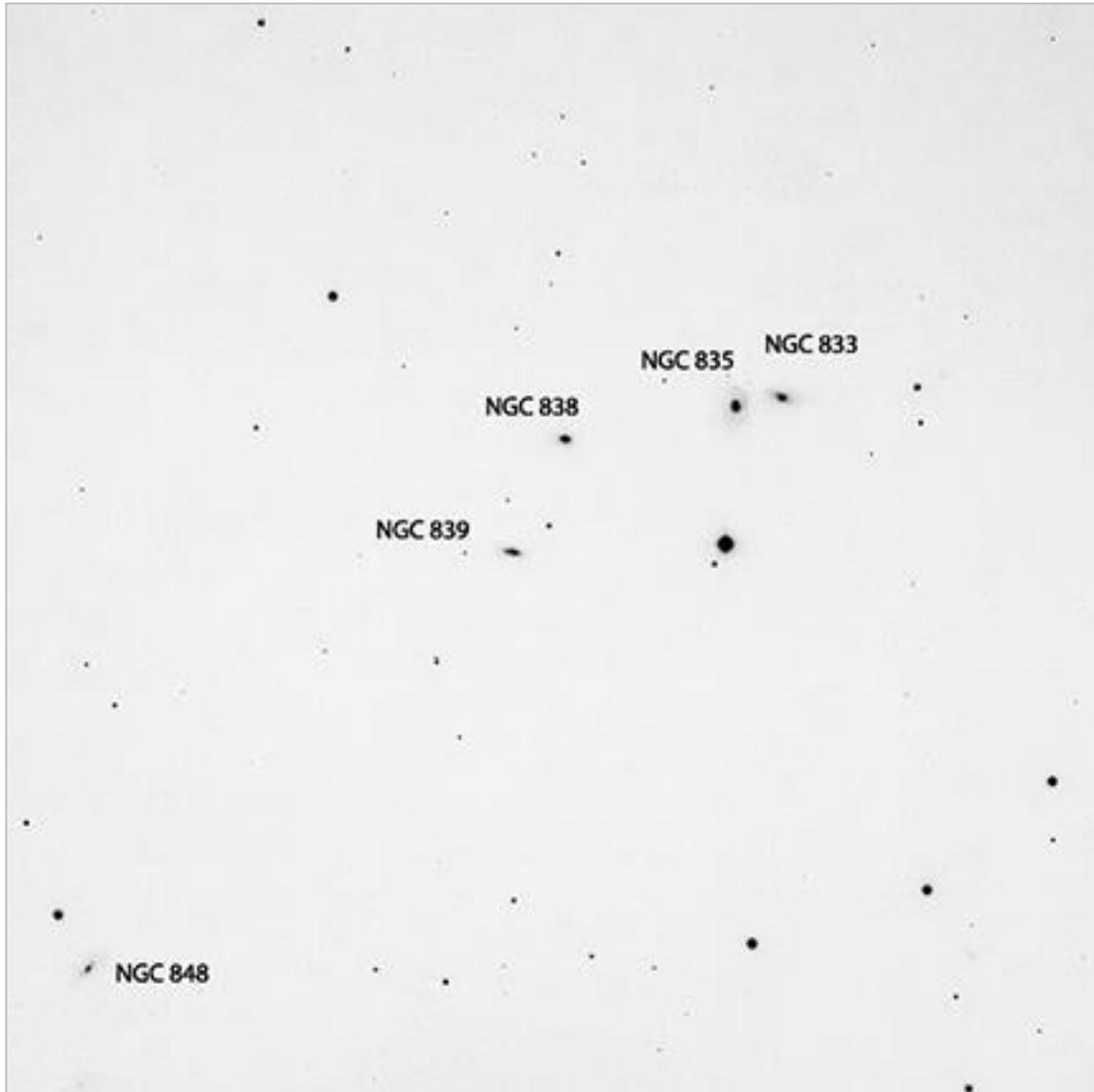
Six galaxies make up Hickson 15, three of the six are ellipticals in an obtusely angled bent line: UGC 1617 (b), 1620 (c), 1618 (d); the other three scattered around them are spirals: UGC 1624 (a), PGC 8096 (e) and 8116 (f).

HCG 16

NGC 835 et al in Cetus

2020-06-27 08:31Z

Up is 0.6 degrees E of N



Job 9685001:	Success
Calibration	
Center (RA, Dec):	(32.414, -10.183)
Center (RA, hms):	02 ^h 09 ^m 39.361 ^s
Center (Dec, dms):	-10° 10' 59.739"
Size:	21.9 x 21.9 arcmin
Radius:	0.258 deg
Pixel scale:	1.28 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):	rdls.fits
Stars detected in your images (x,y table):	axy.fits
Correspondences between image and reference stars (table):	corr.fits
Lenny Szustek, sky	

HCG 16 (aka Arp 318) contains four galaxies arranged in an arc. Three are starburst galaxies (NGC 833, 835, 839), two are LINER galaxies (NGC 838, 839), and two are Seyfert 2 galaxies with active supermassive black holes (NGC 833, 835). Also shown in this image is an adjunct member of the group, emission-line galaxy NGC 848.

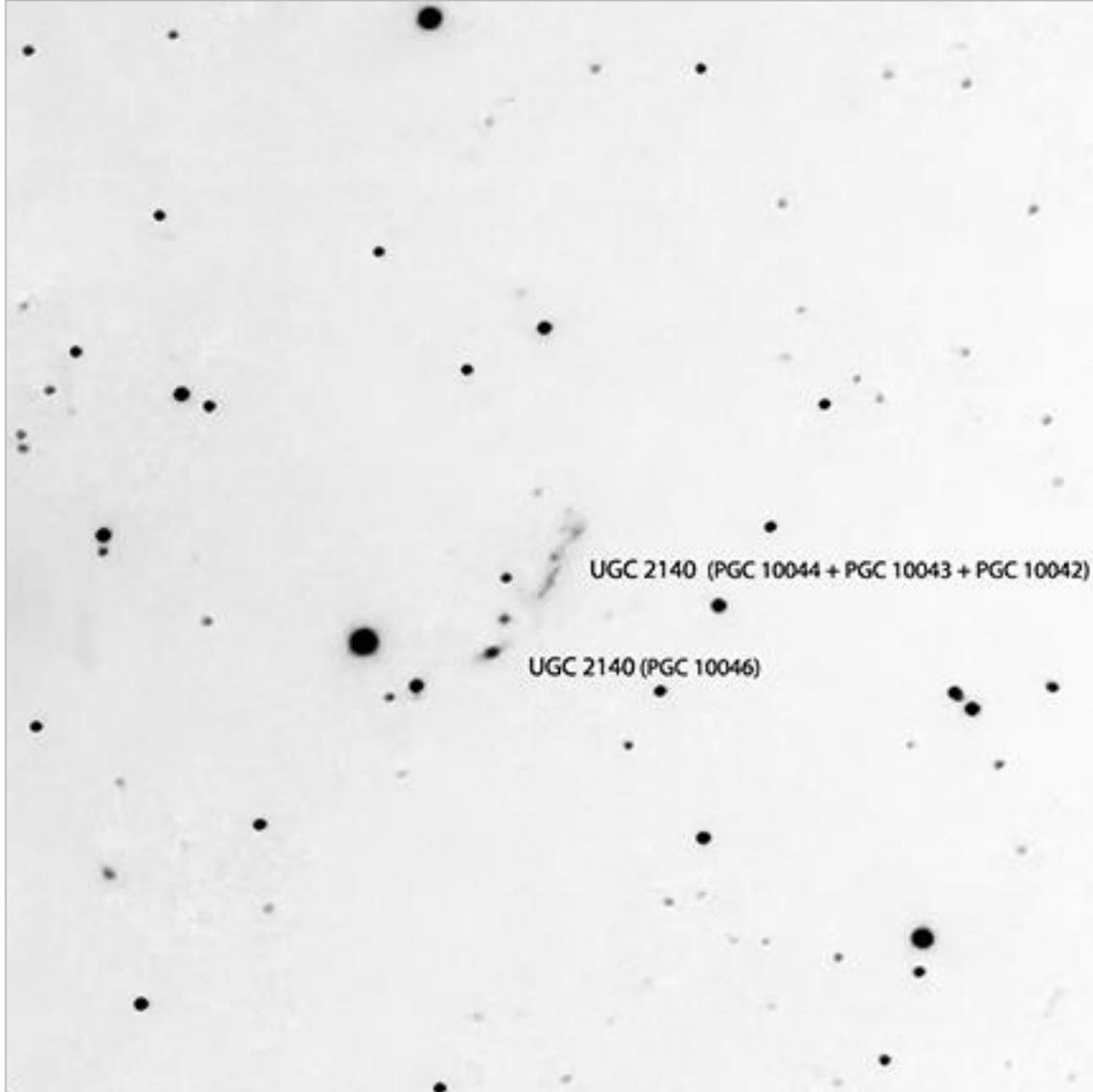
El Sauce Observatory, Rio Hurtado Valley, Chile -70.8189° E -30.4922° N
CHI-1: CDK24 @ f/6.5 FLI PL9000, 1x60s exposure

HCG 18

UGC 2140A et al in Aries

2020-08-16 00:57Z

Up is 0.4 degrees E of N



Submitted by anonymous (1) on 2023-12-26T00:40:48Z as "Arp258.UGC2140.jpg" (Submission 8959650) under Attribution 3.0 Unported	
Job Status	
Job 9685296:	Success
Calibration	
Center (RA, Dec):	(39.774, 18.391)
Center (RA, hms):	02 ^h 39 ^m 05.812 ^s
Center (Dec, dms):	+18° 23' 26.730"
Size:	14.6 x 14.6 arcmin
Radius:	0.172 deg
Pixel scale:	0.855 arcsec/pixel
Orientation:	Up is 0.4 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

UGC 2140 is a non-stop train wreck that stretches NW-SE. The elongated northern portion is full of knots and hazy remnants of the three original galaxies (PGC 10044, 43, 42 / Arp 238 / Hickson 18 B,C,D). The large bright spiral galaxy on the SE end (PGC 10046/Hickson 18A) looks like it is a sweeping extension of this group, but it is actually much more distant at 480 Mly with more than twice the redshift than the northern galaxies and may not be physically associated with them.

*TelescopeLive: Almeria, Spain SPA-2: 700mm reflector @ f/8
FLI PL16803, 1x60s exposure, bin2*

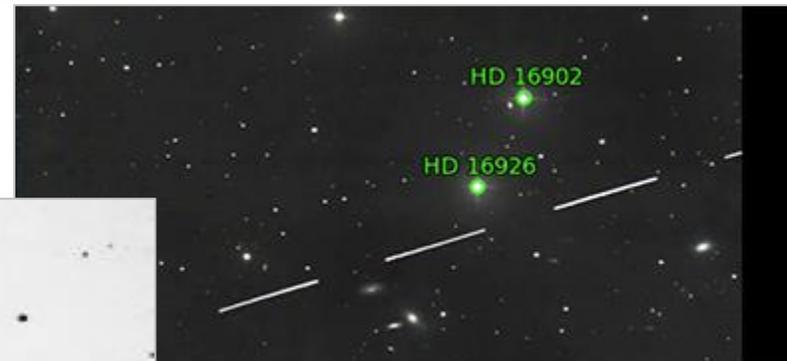
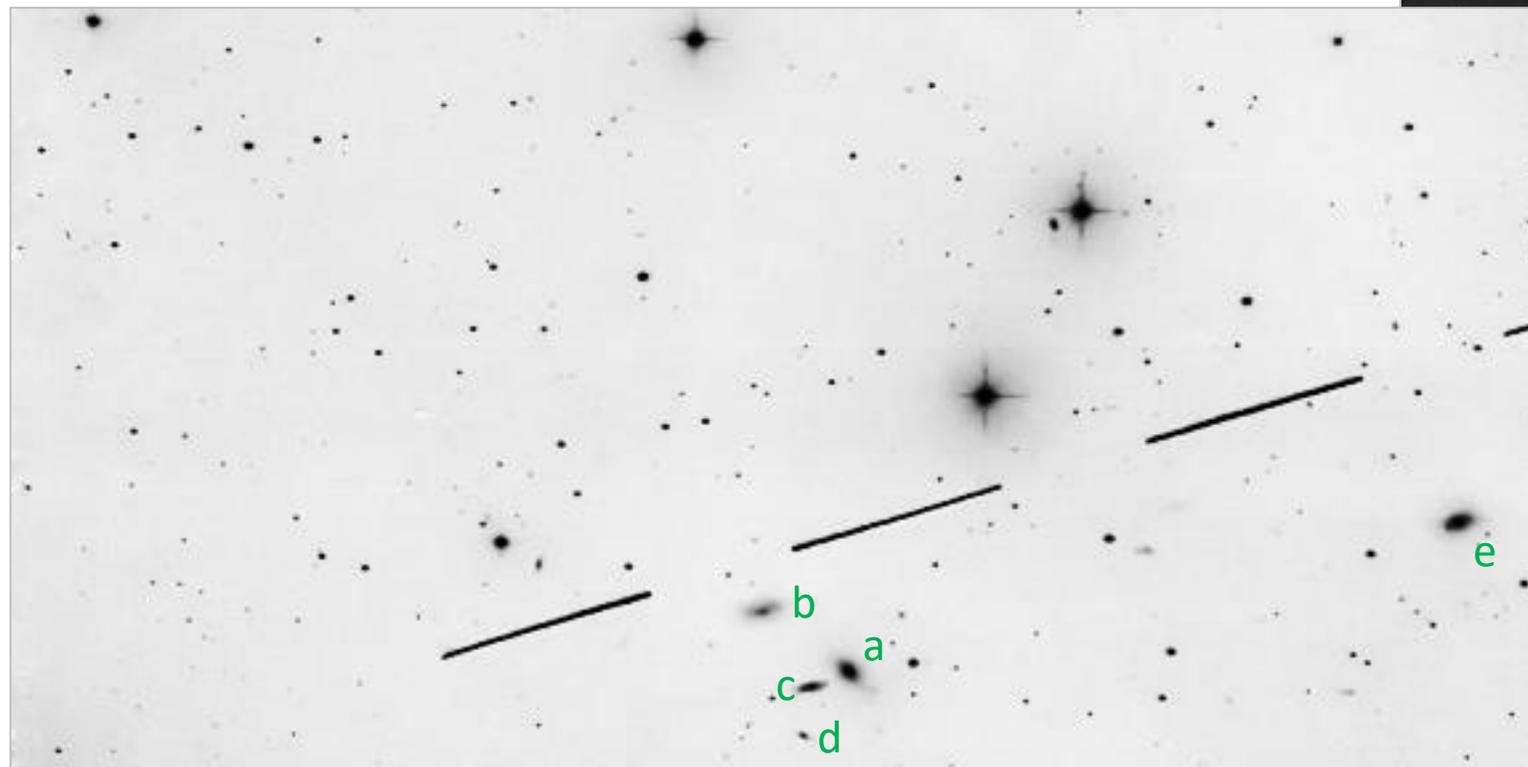
HCG 19

PGC 10262 et al in Cetus

2023-11-12 00:10Z SLOOH Canary One

(inverted image and plate solve are both cropped from original)

Up is 359.5 degrees E of N



Submitted by anonymous (1)
on 2023-12-26T01:03:10Z
as "PGC-10262-16bit_4x8.jpg"
(Submission 8959679)
under Attribution 3.0 Unported

Job Status

Job 9685324:
Success

Calibration

Center (RA, Dec): (40.690, -12.309)
Center (RA, hms): 02^h 42^m 45.690^s
Center (Dec, dms): -12° 18' 32.584"
Size: 36.5 x 18.3 arcmin

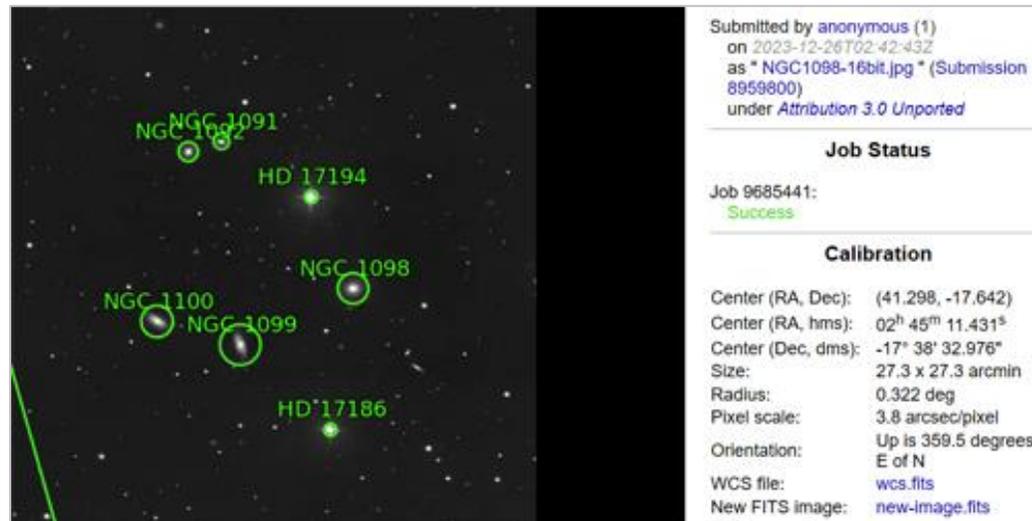
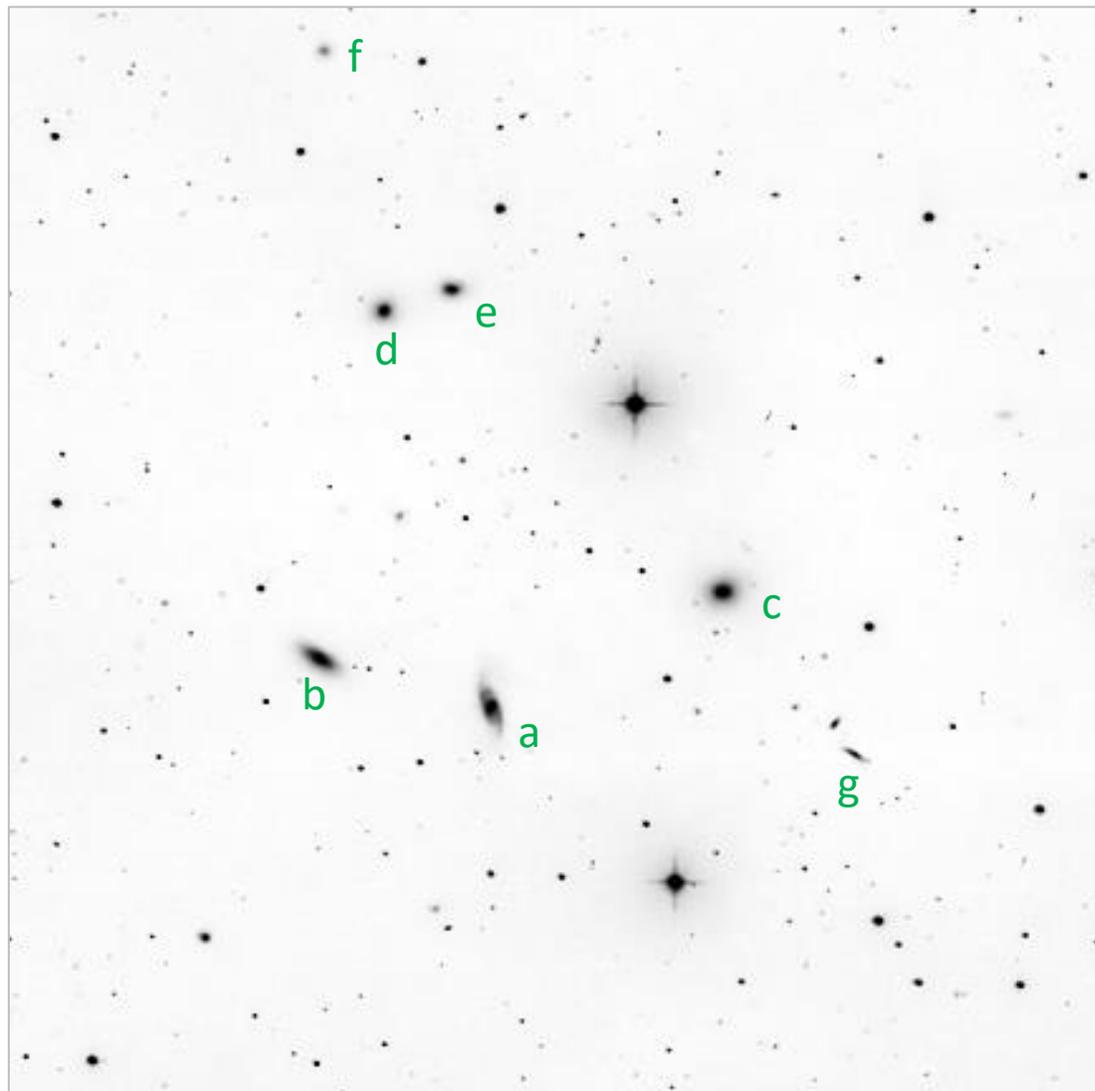
- a) PGC 10262, mag 14.2
- b) PGC 10270, mag 15.4
- c) PGC 10268, mag 15.7
- d) PGC 10269, mag 17.2
- e) PGC 10203, mag 14.6

Four galaxies make up Hickson 19. The brightest (a) is an elliptical galaxy but the others are tiny spirals (b-d). Above (north) of the group are two sparkling mag 9 field stars. Another fairly bright spiral galaxy (e) lies to the far right (west) edge of the field. A few other tiny ones can be seen scattered about. Meanwhile, a plane photobombs our group.

HCG 21

NGC 1098 et al in Eridanus

2023-11-12 00:00Z SLOOH Canary One



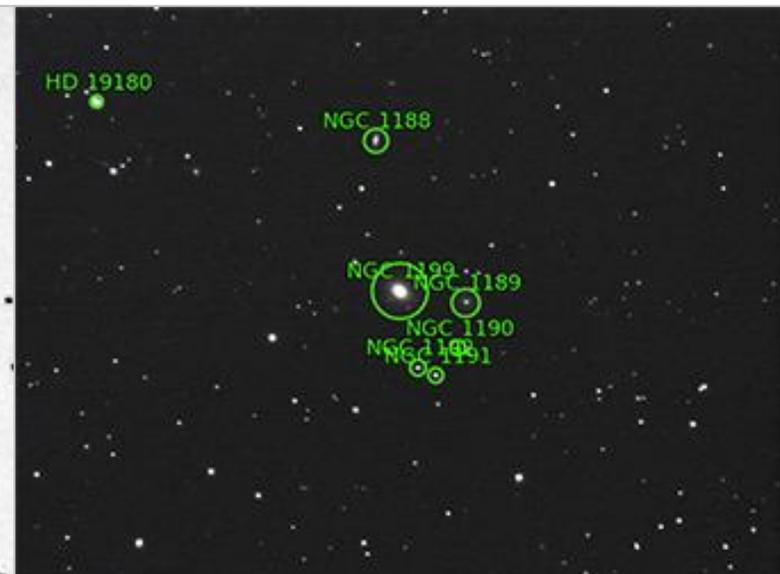
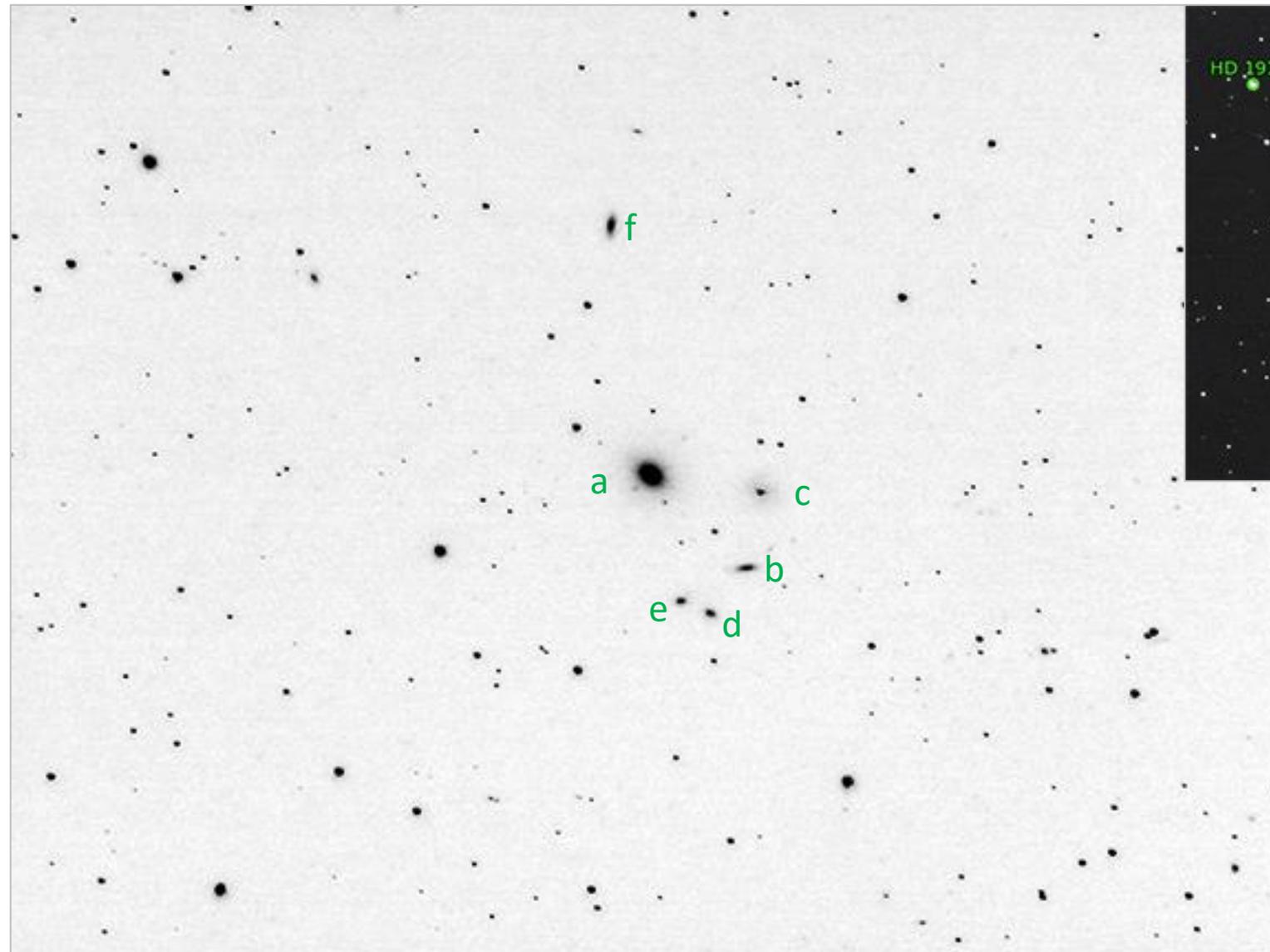
- a) NGC 1099, mag 13.2
- b) NGC 1100, mag 13.1
- c) NGC 1098, mag 12.7
- d) NGC 1092, mag 14.5
- e) NGC 1091, mag 15.2
- f) PGC 134948, mag 16.2
- g) PGC 10390, mag 16.1

Five NGC galaxies (a-e) form the Hickson 21 group. Combined with two bright stars, they make a prominent grouping. Two of the galaxies (a, b) are obvious spirals. I count at least 7 other teeny tiny galaxies (unlabeled) in this field.

HCG 22

NGC 1199 et al in Eridanus

2022-01-31 21:04 EDT Sharon, GA
C8 @ f/7 + Mallincam DS10cTEC



Submitted by anonymous (1)
on 2023-12-26T16:05:17Z
as *ngc1199.DAV.jpg* (Submission
8960939)
under Attribution 3.0 Unported

Job Status

Job 9686548:
Success

Calibration

Center (RA, Dec): (45.912, -15.616)
Center (RA, hms): 03^h 03^m 38.978^s
Center (Dec, dms): -15° 36' 58.099"
Size: 39.3 x 29.5 arcmin
Radius: 0.409 deg
Pixel scale: 1.27 arcsec/pixel
Orientation: Up is 0.3 degrees E
of N
WCS file: wcs.fits
New FITS image: new-image.fits
Reference stars
nearby (RA,Dec
table): rdis.fits

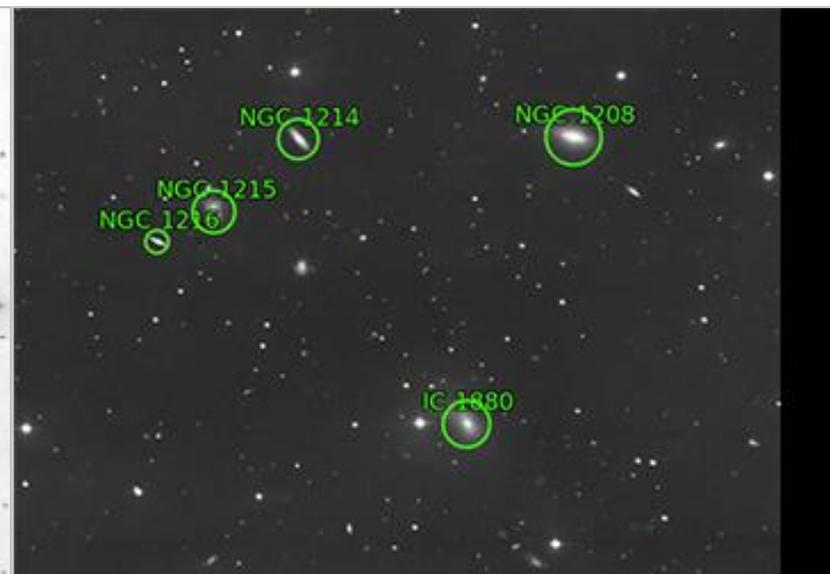
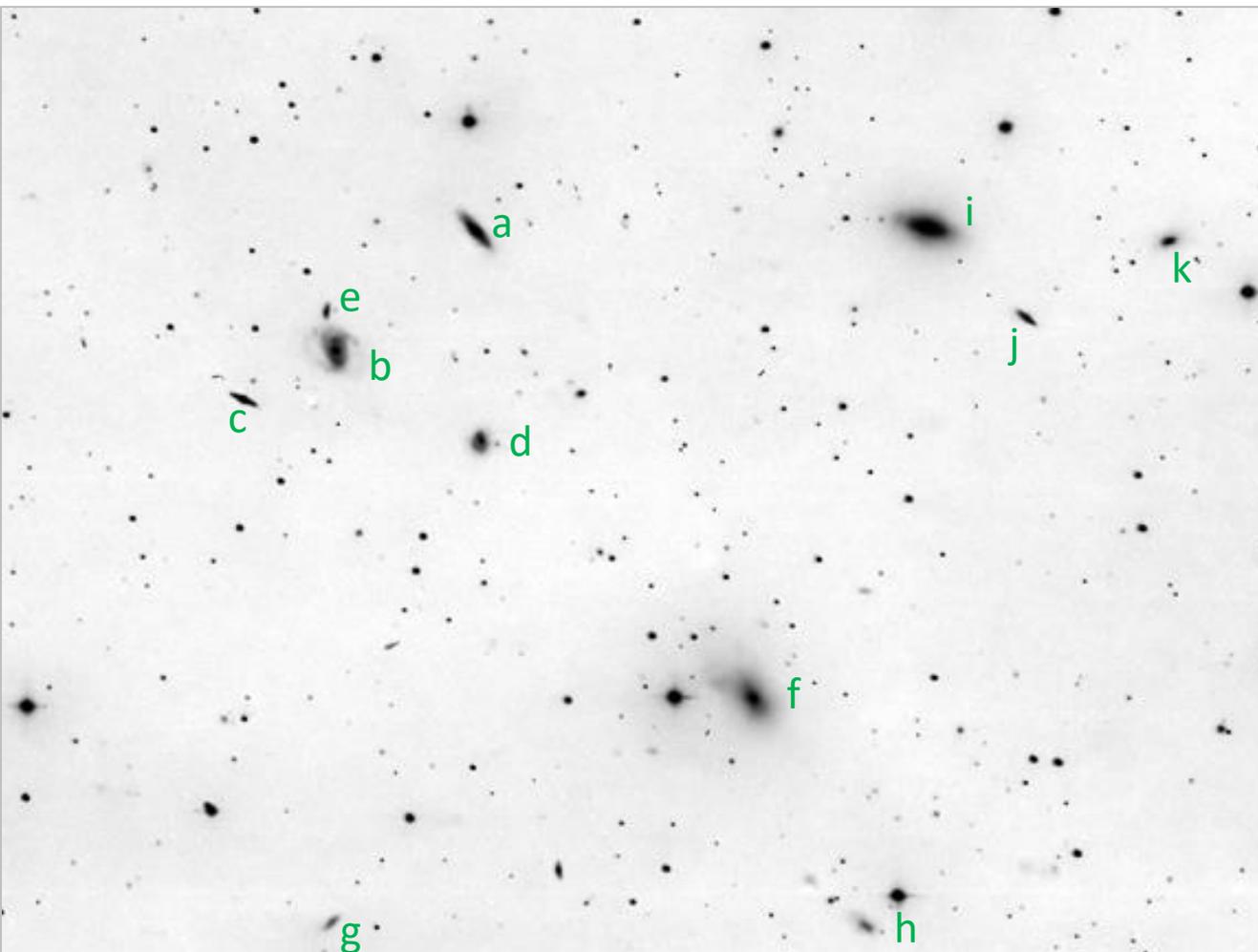
- a) NGC 1199, mag 11.4
- b) NGC 1190, mag 15.2
- c) NGC 1189, mag 14.4
- d) NGC 1191, mag 15.3
- e) NGC 1192, mag 15.4
- f) NGC 1188, mag 14.6

Hickson 22 is anchored by bright elliptical NGC 1199 (a), mag 11.4. It is joined by four other smaller galaxies (b-e), with a fifth one, NGC 1188 (f), a bit further away to the north.

HCG 23

NGC 1215 et al in Eridanus

2023-11-18 23:30Z SLOOH Canary One
(inverted image and plate solve are both cropped from original)
Up is 359.5 degrees E of N



Submitted by anonymous (1)
on 2023-12-26T16:41:55Z
as "IC1880.4x8.jpg" (Submission
8961020)
under Attribution 3.0 Unported

Job Status

Job 9686627:
Success

Calibration

Center (RA, Dec): (46.667, -9.644)
Center (RA, hms): 03^h 06^m 40.196^s
Center (Dec, dms): -09° 38' 38.747"
Size: 30.5 x 22.9 arcmin
Radius: 0.317 deg
Pixel scale: 3.17 arcsec/pixel
Orientation: Up is 359.5 degrees
E of N
WCS file: [wcs.fits](#)
New FITS image: [new-image.fits](#)
Reference stars

- | | |
|------------------------|-------------------------|
| a) NGC 1214, mag 15.0 | g) PGC 985982, mag 16.2 |
| b) NGC 1215, mag 15.0 | h) PGC 11654, mag 16.4 |
| c) NGC 1216, mag 15.9 | i) NGC 1208, mag 13.4 |
| d) PGC 11673, mag 16.3 | j) PGC 989243, mag 15.7 |
| e) PGC 11690, mag 17.7 | k) PGC 989667, mag 15.9 |
| f) IC 1880, mag 14.9 | |

A lot of galaxies here! Hickson 23 is indexed using spiral galaxy NGC 1214 (a). Included are four other smaller galaxies nearby (b-e); the most visually interesting of these is NGC 1215 (b), which has a single thin arm that can be seen encircling its elongated core. Several other galaxies are in the field, most are labeled but some tiny ones are not!

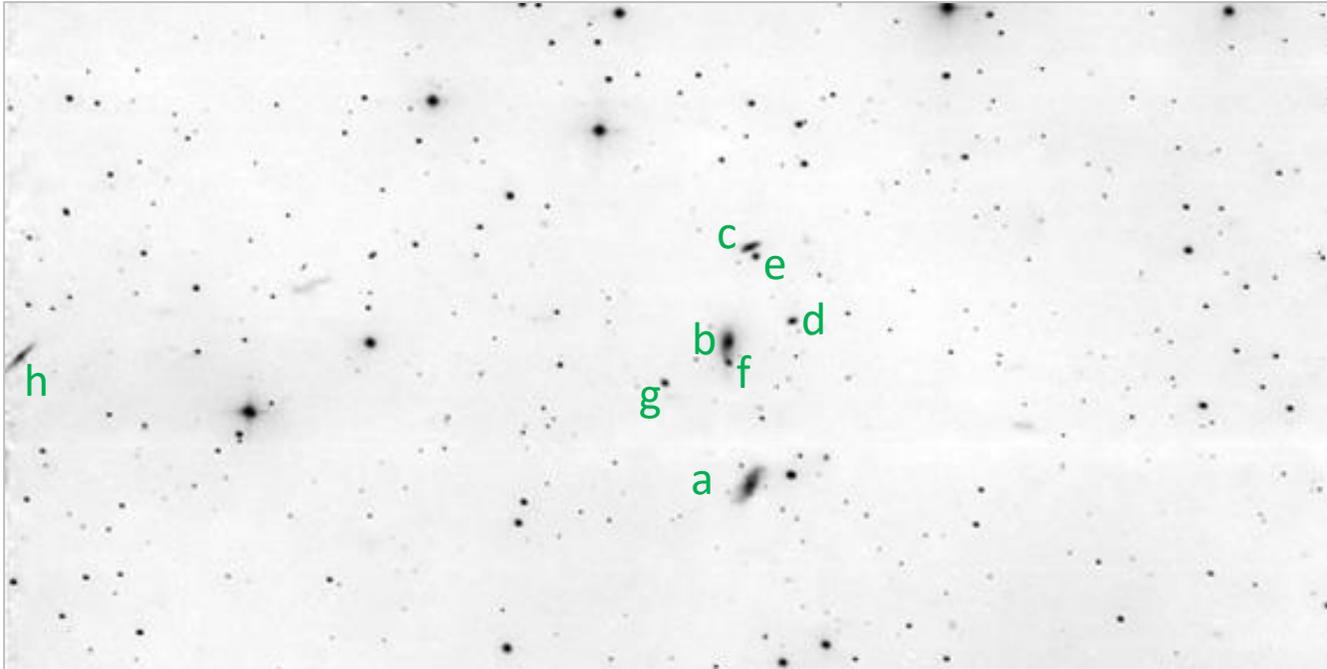
HCG 25

UGC 2690 et al in Cetus

2023-11-17 23:10Z SLOOH Canary One

(inverted image and plate solve are both cropped from original)

Up is 359.5 degrees E of N



Submitted by anonymous (1)
on 2023-12-26T22:24:26Z
as "PGC-12533.jpg" (Submission
8962001)
under Attribution 3.0 Unported

Job Status

Job 9687590:
Success

Calibration

Center (RA, Dec): (50.213, -1.043)
Center (RA, hms): 03^h 20^m 51.038^s
Center (Dec, dms): -01° 02' 36.478"

Hickson 25 has a nice cluster of six galaxies (a-g). Most are rather faint (≥ 16) but two (a,b) are slightly brighter than the others in the group. A skinny spiral outlier can be seen to the east, PGC 12550 (h), a faint one at mag 17.2.

- a) UGC 2690, mag 14.6
- b) UGC 2691, mag 15.0
- c) PGC 12533, mag 15.9
- d) PGC 12524, mag 16.2
- e) PGC 12530, mag 16.5
- f) PGC 12538, mag 16.6
- g) PGC 12550, mag 17.2
- h) UGC 2699, mag 16.4

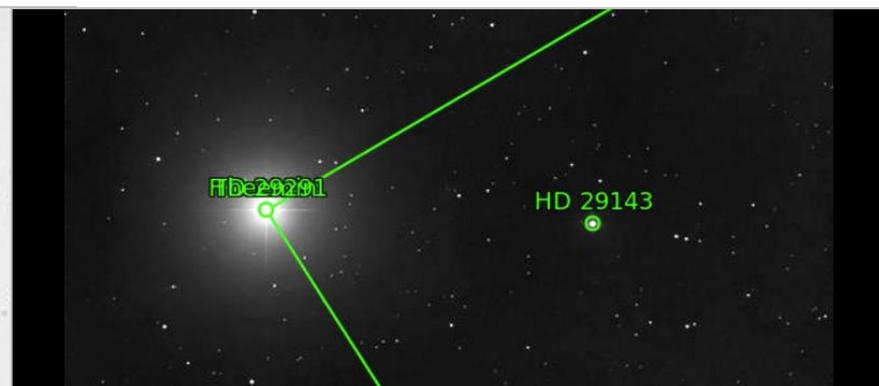
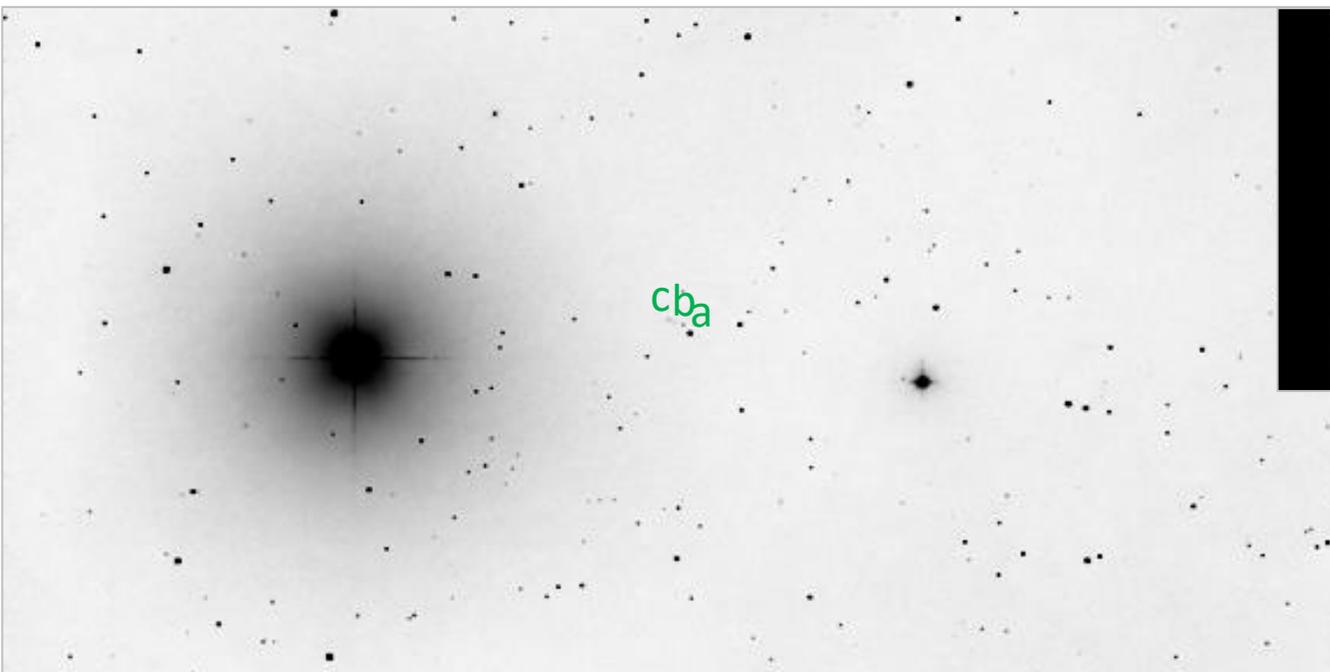
HCG 29

PGC 15559 et al in Eridanus

2023-02-25 03:00Z SLOOH Chile Two

(inverted image and plate solve are both cropped from original)

Up is 359.9 degrees E of N



Submitted by anonymous (1)
on 2023-12-28T18:41:19Z
as " PGC15559-16bit.jpg " (Submit
8968943)
under Attribution 3.0 Unported

Job Status

Job 9694436:
Success

Calibration

Center (RA, Dec): (68.688, -30.553)
Center (RA, hms): 04^h 34^m 45.029^s
Center (Dec. dms): -30° 33' 10.468"

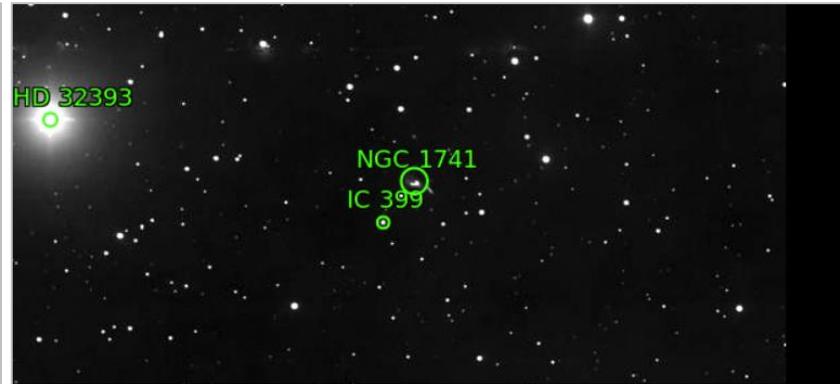
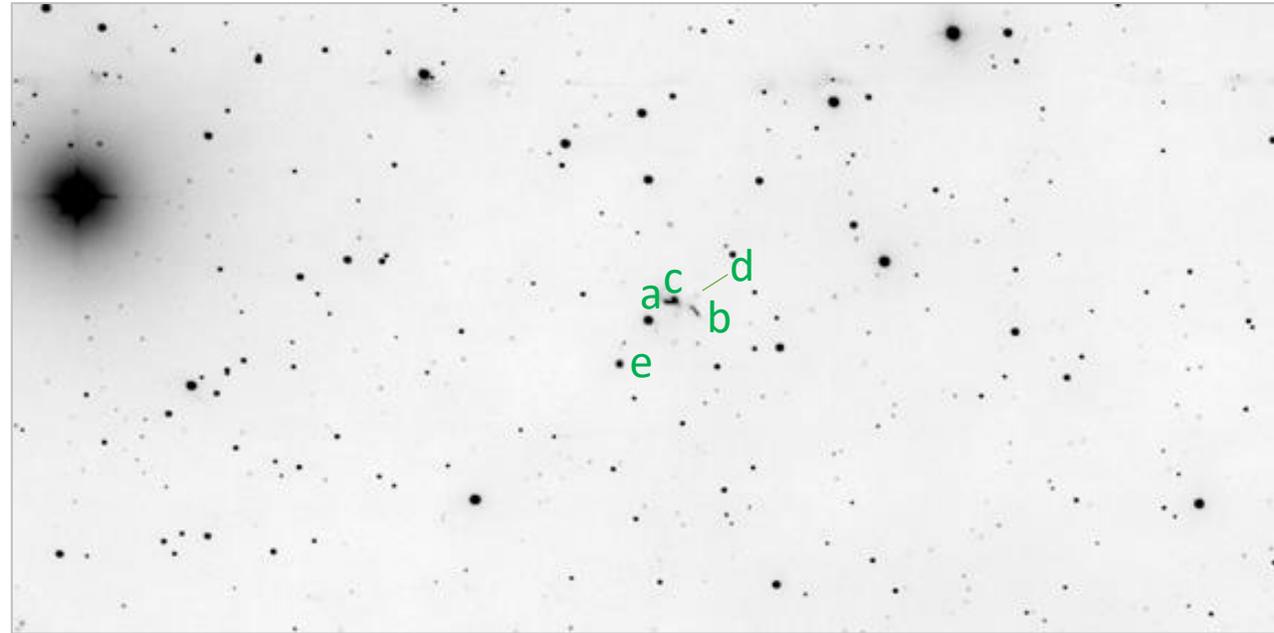
- a) PGC 15559, mag 15.1
- b) PGC 15560, mag 17.5
- c) PGC 15561, mag 17.8

The galaxies of Hickson 29 are tiny!! Even cropped down like this, these galaxies are almost invisible! The two dimmest, PGC 15560 (b) & PGC 15561 (c) are much more distant at 1500/1600MLy than is the brightest, PGC 15559 (a), which is “only” 630MLy away.

HCG 31

NGC 1741 et al in Eridanus

2023-11-06 03:00Z SLOOH Chile Two
(inverted image and plate solve are both cropped from original)
Up is 359.9 degrees E of N



Submitted by anonymous (1)
on 2023-12-28T19:06:29Z
as "new.PGC16571.2023.11....op.jp"
(Submission 8968977)
under Attribution 3.0 Unported

Job Status

Job 9694469:
Success

Calibration

Center (RA, Dec): (75.422, -4.267)
Center (RA, hms): 05^h 01^m 41.332^s
Center (Dec. dms): -04° 16' 01.825"

- a) NGC 1741 (Arp 259), mag 15.5
- b) PGC 16570, mag 15.2
- c) PGC 16573, mag 13.4
- d) PGC 16571, mag 18.0
- e) IC 399, mag 15.5

More tiny galaxies! Hickson 31 is slightly easier to pick out than the previous group. Two of the galaxies (a,c) are clumped up together. The dimmest galaxy, PGC 16571 (d), at mag 18 can just barely be detected - I've drawn a thin line to point it out.

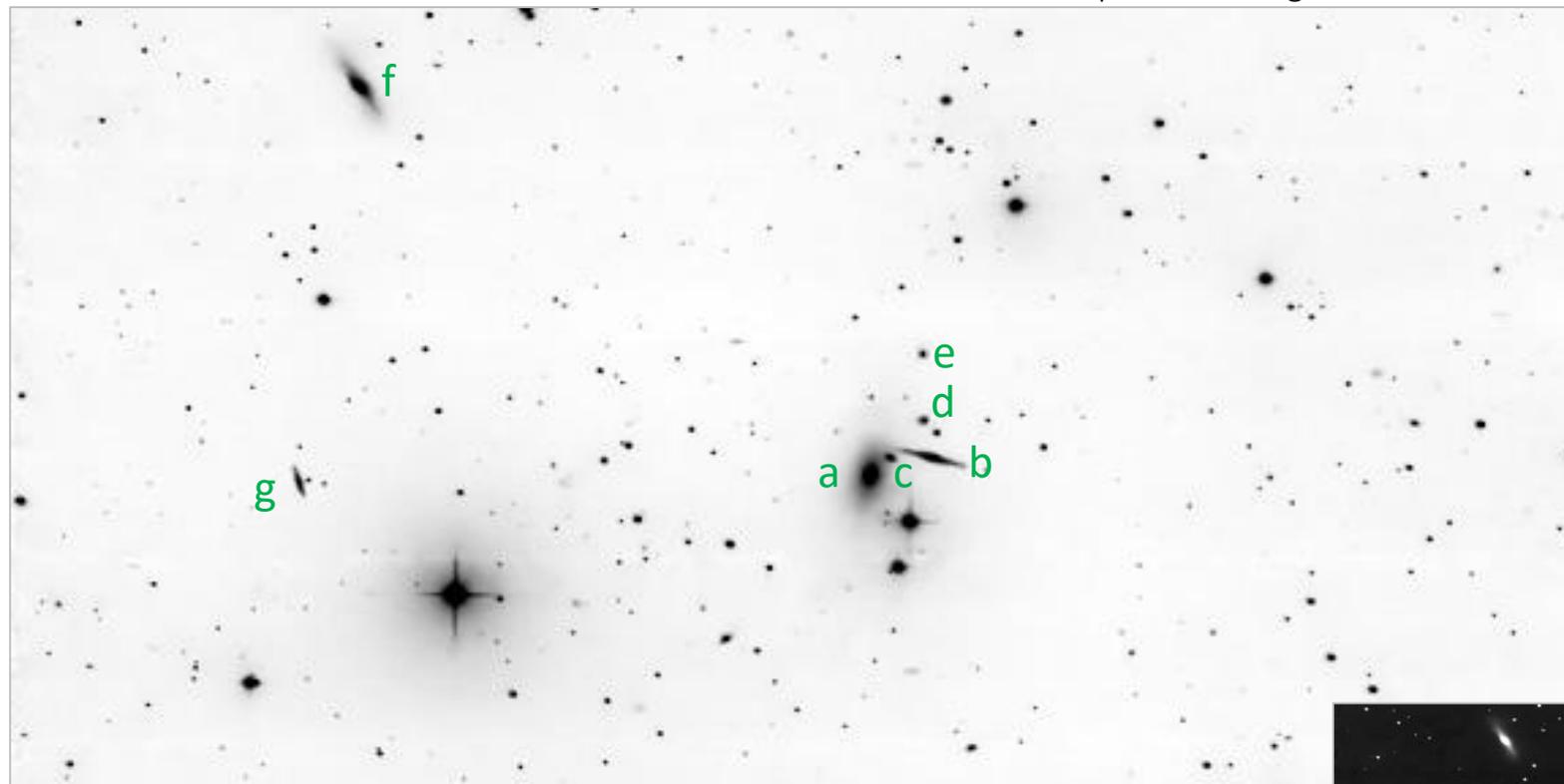
HCG 37

NGC 2783 et al in Cancer

2023-12-10 02:20Z SLOOH Canary One

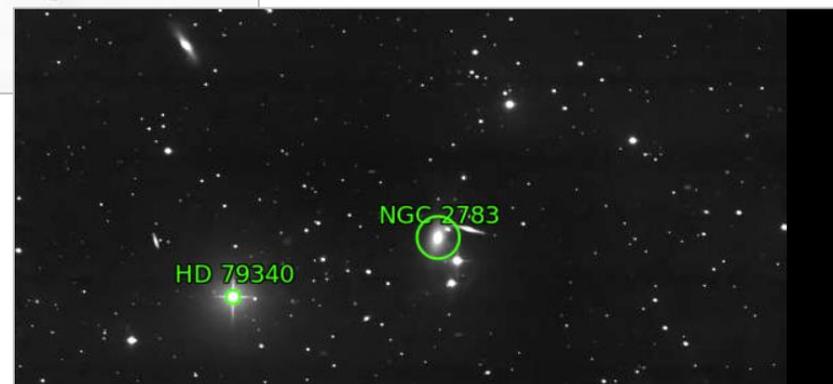
(inverted image and plate solve are both cropped from original)

Up is 359.3 degrees E of N



- a) NGC 2783, mag 12.6
- b) UGC 4856, mag 15.1
- c) PGC 26004, mag 15.8
- d) PGC 26005, mag 16.1
- e) PGC 26006, mag 16.3
- f) UGC 4869, mag 14.3
- g) PGC 26064, mag 15.7

Hickson 37 is a diverse group of galaxies, with a long needle-like spiral (b), a plump elliptical (a), some small punctate ones (c,d,e), and a couple of outlying thin edge-ons (f,g). Other dim and unlabeled galaxies can be seen in the field.



Submitted by anonymous (1)
on 2023-12-28T19:18:26Z
as "NGC2783-16bit.jpg" (Submission
8969001)
under Attribution 3.0 Unported

Job Status

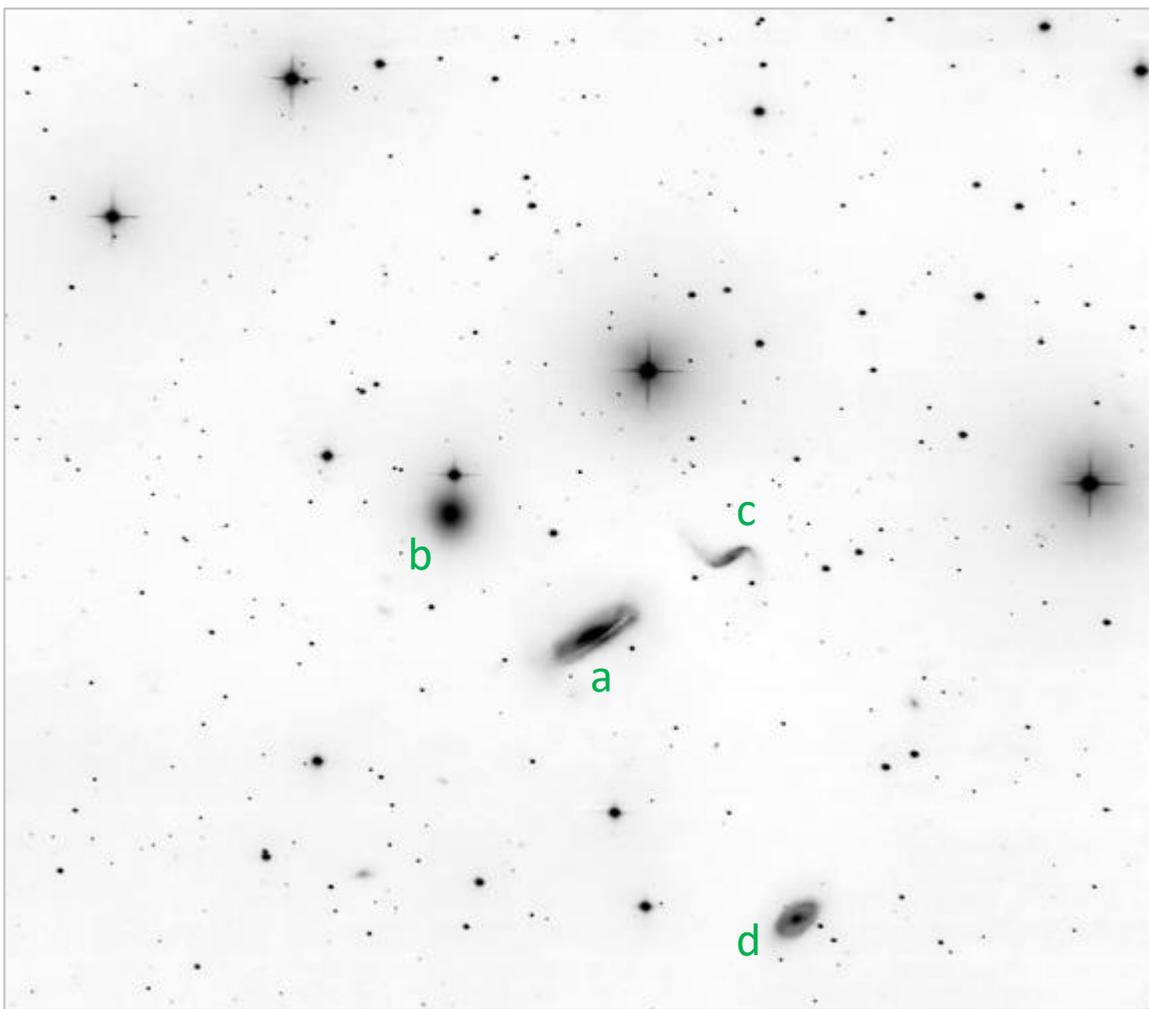
Job 9694493:
Success

Calibration

Center (RA, Dec): (138.449, 30.022)
Center (RA, hms): 09^h 13^m 47.681^s
Center (Dec. dms): +30° 01' 20.998"

HCG 44 NGC 3190 et al in Leo

2023-12-09 03:20Z SLOOH Canary One



- a) **NGC 3190, mag 10.9**
- b) NGC 3193, mag 11.0
- c) NGC 3187, mag 13.3
- d) NGC 3185, mag 12.1

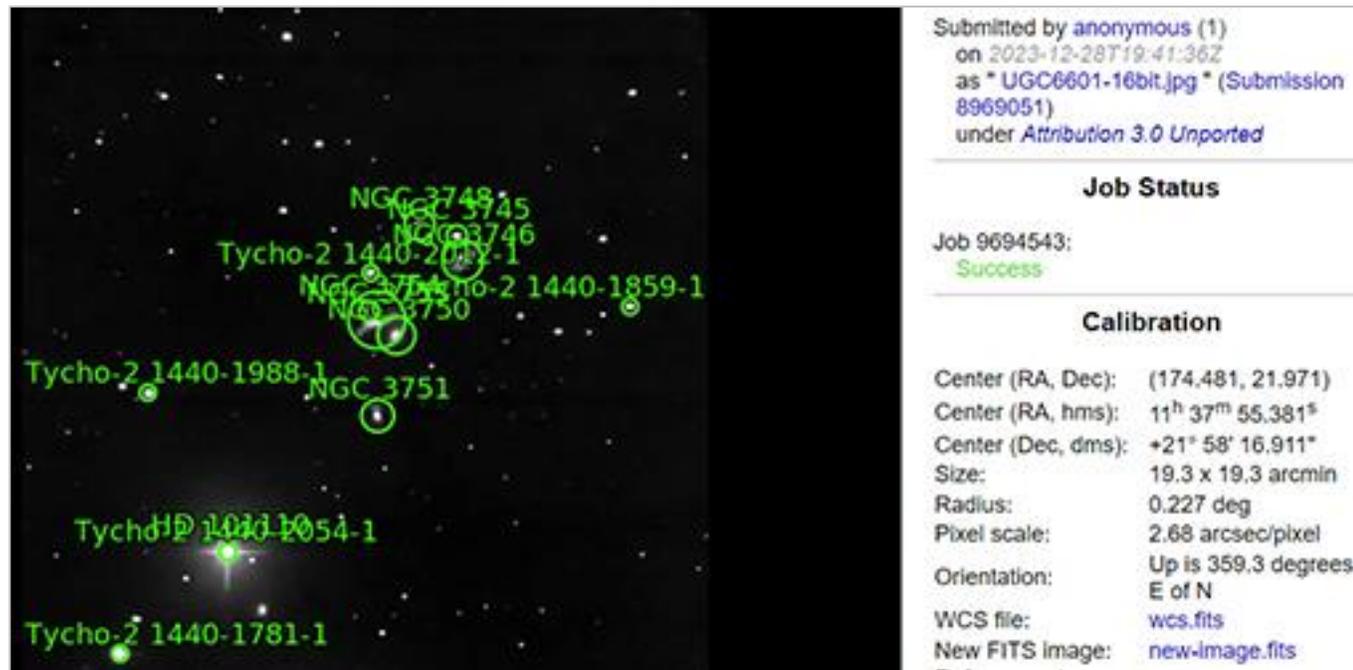
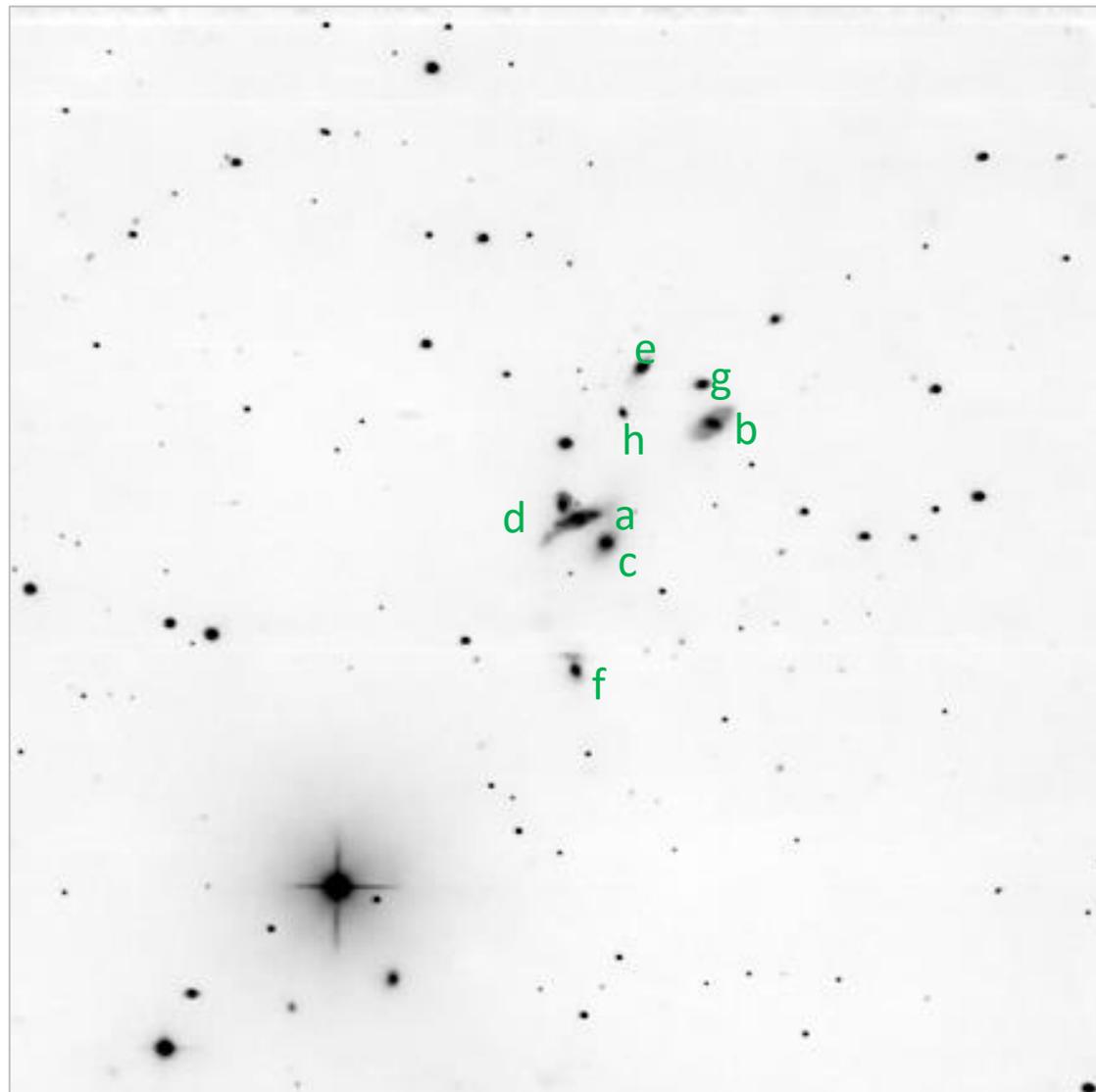
Hickson 44 is a really lovely, with a close group of four galaxies, each with a unique look. I particularly like wispy spiral NGC 3187 (c) with its dainty tips spinning out in opposite directions. Spiral NGC 3185 (d) is a nice little eyeball with hints of structure in its haze. The largest, NGC 3190 (a), sports a distinct dust belt across the middle of its slightly contorted cloudy arms. The one elliptical (b) appears to us as a perfectly round and featureless hazy ball.

HCG 57

NGC 3753 et al in Leo (Copeland's Septet)

2023-12-10 03:10Z SLOOH Canary One

(inverted image and plate solve are both cropped from original)



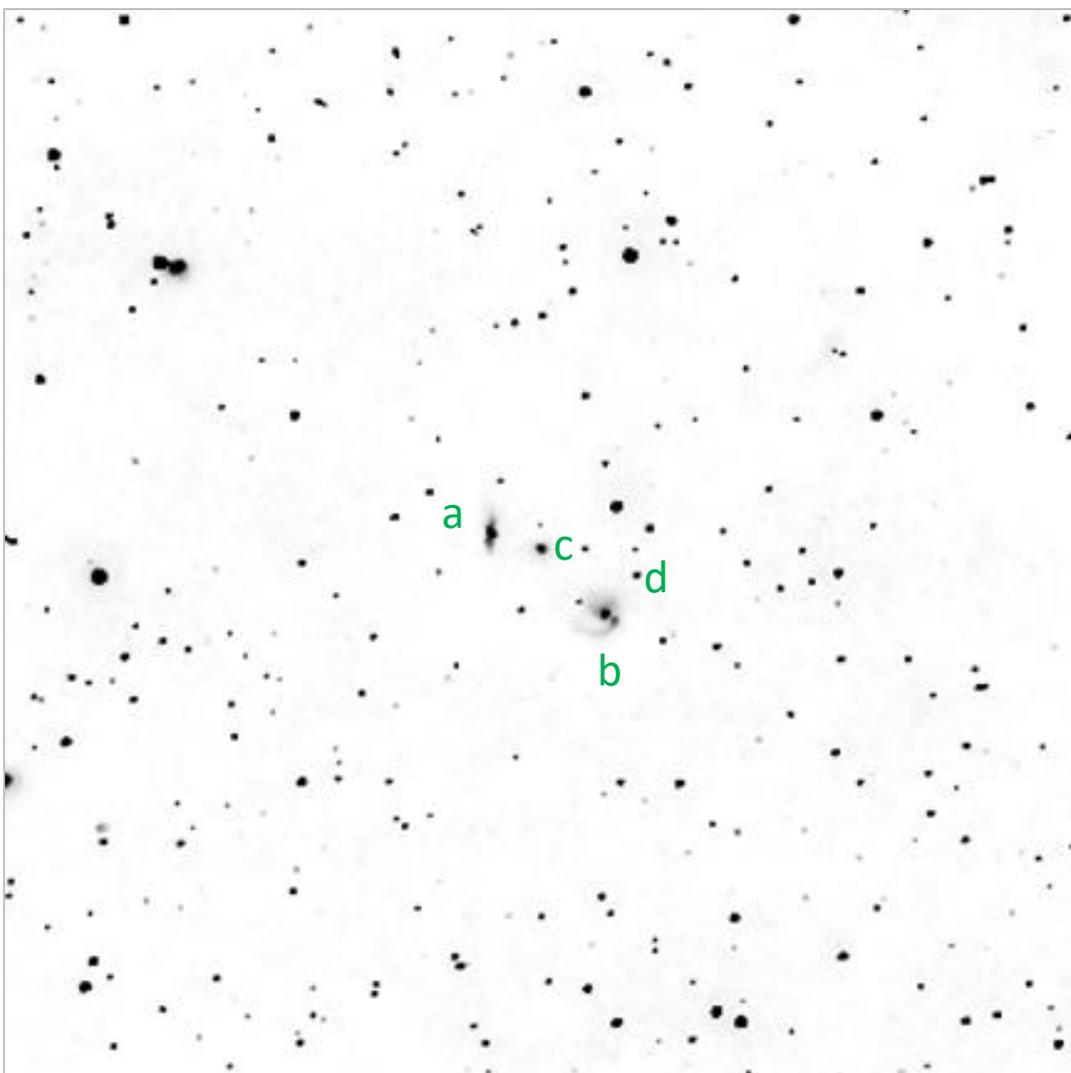
- a) NGC 3753, mag 14.0
- b) NGC 3746, mag 14.3
- c) NGC 3750, mag 14.6
- d) NGC 3754, mag 14.5
- e) NGC 3748, mag 15.4
- f) NGC 3751, mag 15.2
- g) NGC 3745, mag 15.8
- h) PGC 36010, mag 16.8

Hickson 57 is also known as Copeland's Septet (although eight are labeled here). NGC 3753 (a) is the largest, with curved wispy arms bending outwards, as if they might be interacting with another neighboring galaxy. Galaxies b & c display nice encircling cloudy shells, and, with some imagination, so do galaxies e-g.

HCG 63

PGC 44984 et al in Centaurus

2023-2-25 03:05Z SLOOH Canary One
(inverted image and plate solve are both cropped from original)



Submitted by anonymous (1)
on 2023-12-28T19:49:09Z
as "PGC44965-16bit.jpg" (Submission
8969065)
under Attribution 3.0 Unported

Job Status

Job 9694556:
Success

Calibration

Center (RA, Dec): (195.554, -32.765)
Center (RA, hms): 13^h 02^m 12.905^s
Center (Dec, dms): -32° 45' 54.678"
Size: 20.3 x 20.3 arcmin
Radius: 0.239 deg
Pixel scale: 2.81 arcsec/pixel
Orientation: Up is 359.7 degrees
E of N
WCS file: wcs.fits
New FITS image: new-image.fits

- a) PGC 44984, mag 14.9
- b) PGC 44965, mag 14.3
- c) PGC 44979, mag 15.5
- d) PGC 44959, mag 17.4

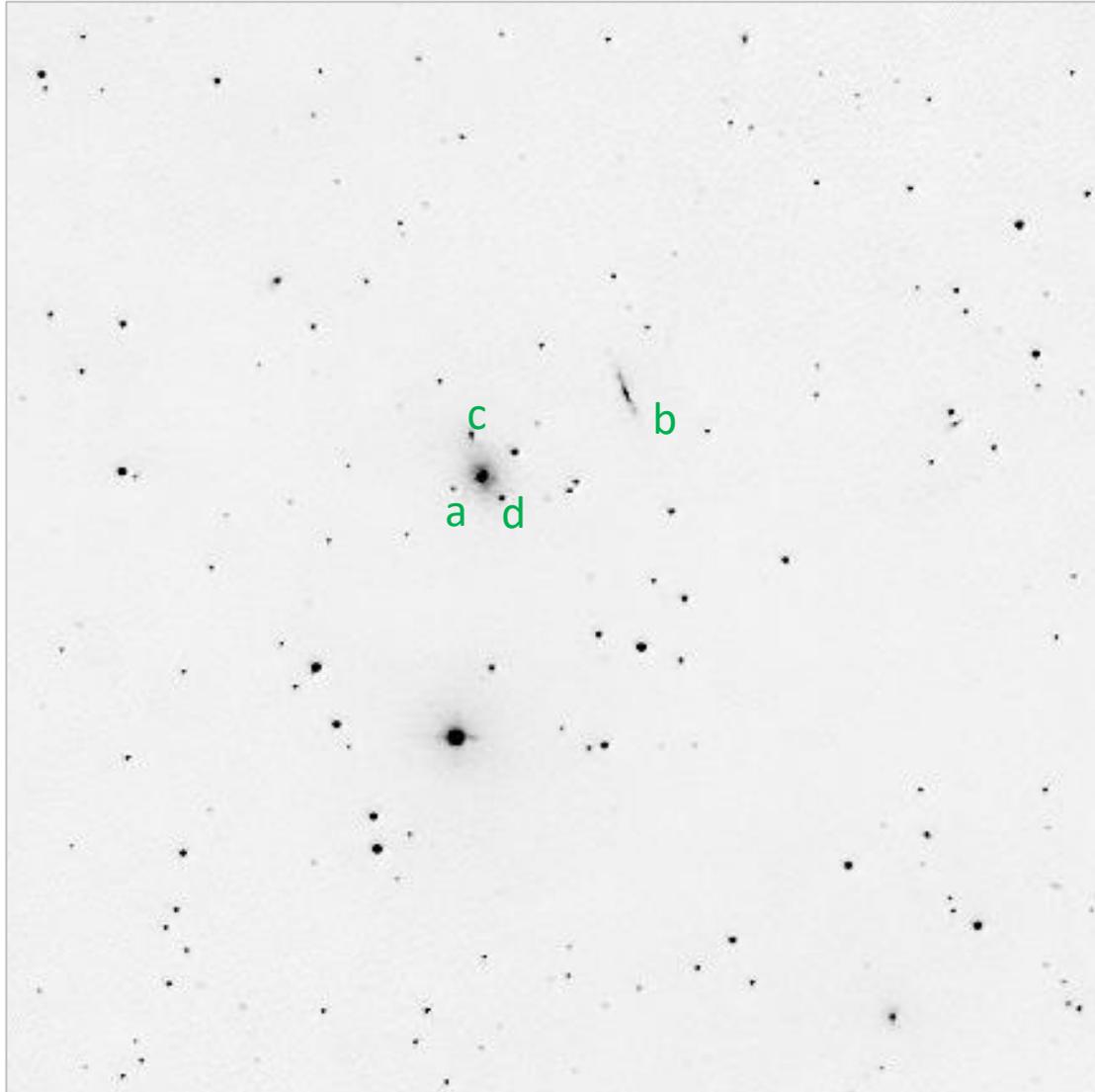
This set of tiny galaxies is Hickson 63. The most striking is PGC 44965 (b), a wildly distorted galaxy with a prominent lower arm separating from the core and swinging out by itself towards the west (left).

HCG 67

NGC 5306 et al in Virgo

2023-2-23 04:40Z SLOOH Chile Two

(inverted image and plate solve are both cropped from original)



Submitted by [anonymous \(1\)](#)
on 2023-12-28T20:21:21Z
as "NGC5306-16bit.jpg" (Submission
8969105)
under [Attribution 3.0 Unported](#)

Job Status

Job 9694595:
Success

Calibration

Center (RA, Dec): (207.272, -7.248)
Center (RA, hms): 13^h 49^m 05.278^s
Center (Dec, dms): -07° 14' 54.578"
Size: 22.4 x 22.4 arcmin
Radius: 0.264 deg
Pixel scale: 3.11 arcsec/pixel
Orientation: Up is 359.7 degrees
E of N
WCS file: [wcs.fits](#)
New FITS image: [new-image.fits](#)
Reference stars

- a) NGC 5306, mag 13.1
- b) PGC 49017, mag 15.1
- c) PGC 49040, mag 15.7
- d) PGC 49036, mag 15.7

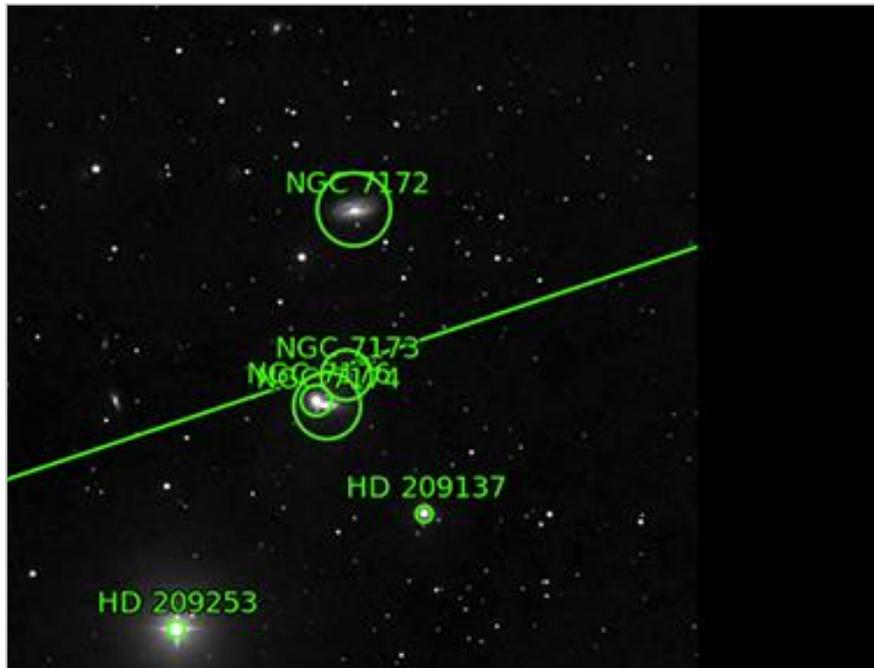
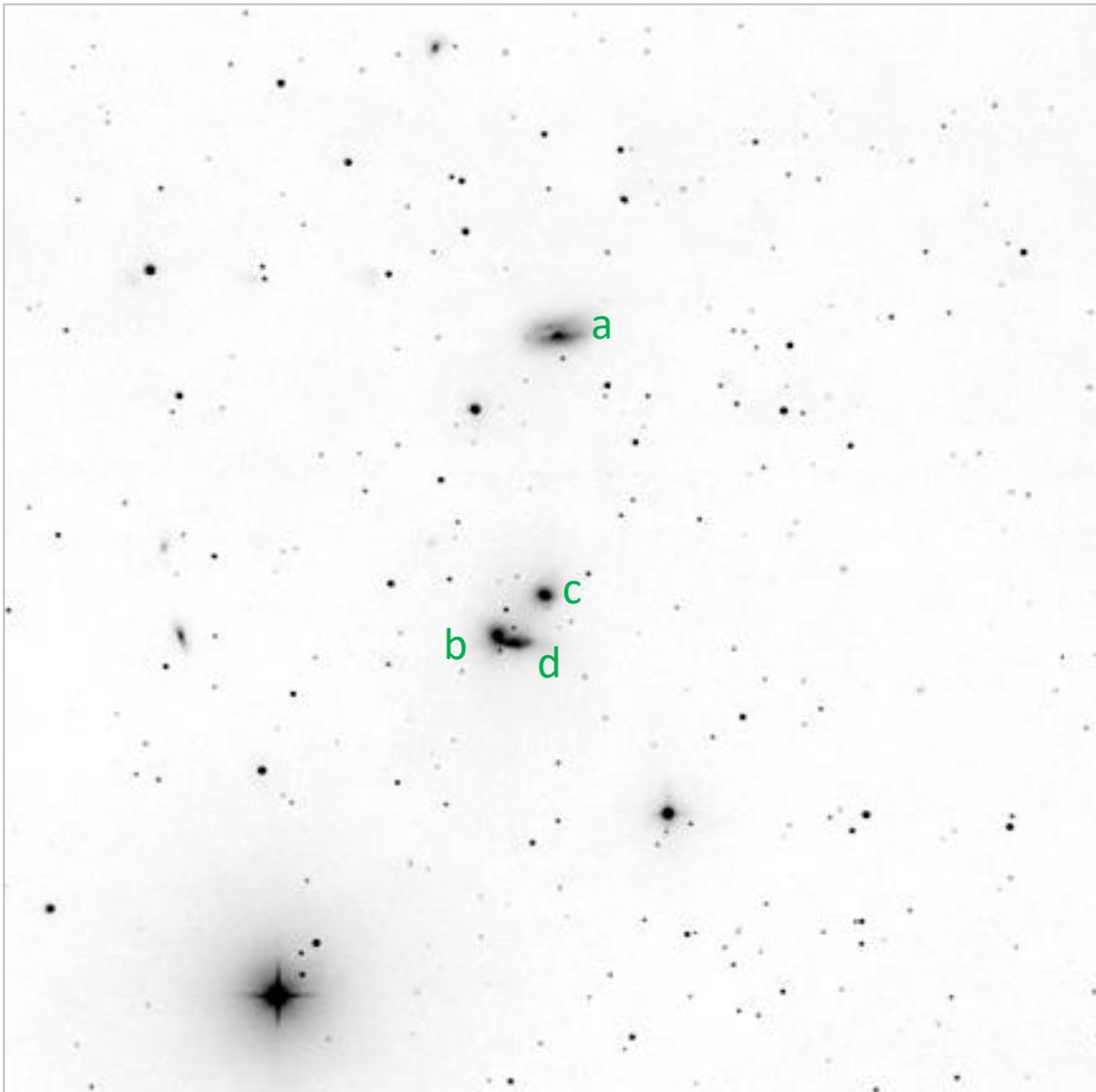
Hickson 67 is a group of small spirals. The largest/brightest is NGC 5306 (a) at mag 13.1. All are roughly at the same distance 110 Mpc. One of the smaller ones, PGC 49036 (d) is actually a little bit closer to us at 100Mpc (=20Mly closer).

HCG 90

NGC 7172 et al in PsA

2023-9-15 02:00Z SLOOH Chile Two

(inverted image and plate solve are both cropped from original)



Submitted by anonymous (1)
on 2023-12-28T20:51:15Z
as "NGC7173-16bit.jpg" (Submission
8969150)
under Attribution 3.0 Unported

Job Status

Job 9694640:
Success

Calibration

Center (RA, Dec): (330.510, -31.956)
Center (RA, hms): 22^h 02^m 02.386^s
Center (Dec, dms): -31° 57' 20.787"
Size: 26.1 x 26.1 arcmin
Radius: 0.307 deg
Pixel scale: 3.62 arcsec/pixel
Orientation: Up is 359.6 degrees
E of N
WCS file: wcs.fits
New FITS image: new-image.fits

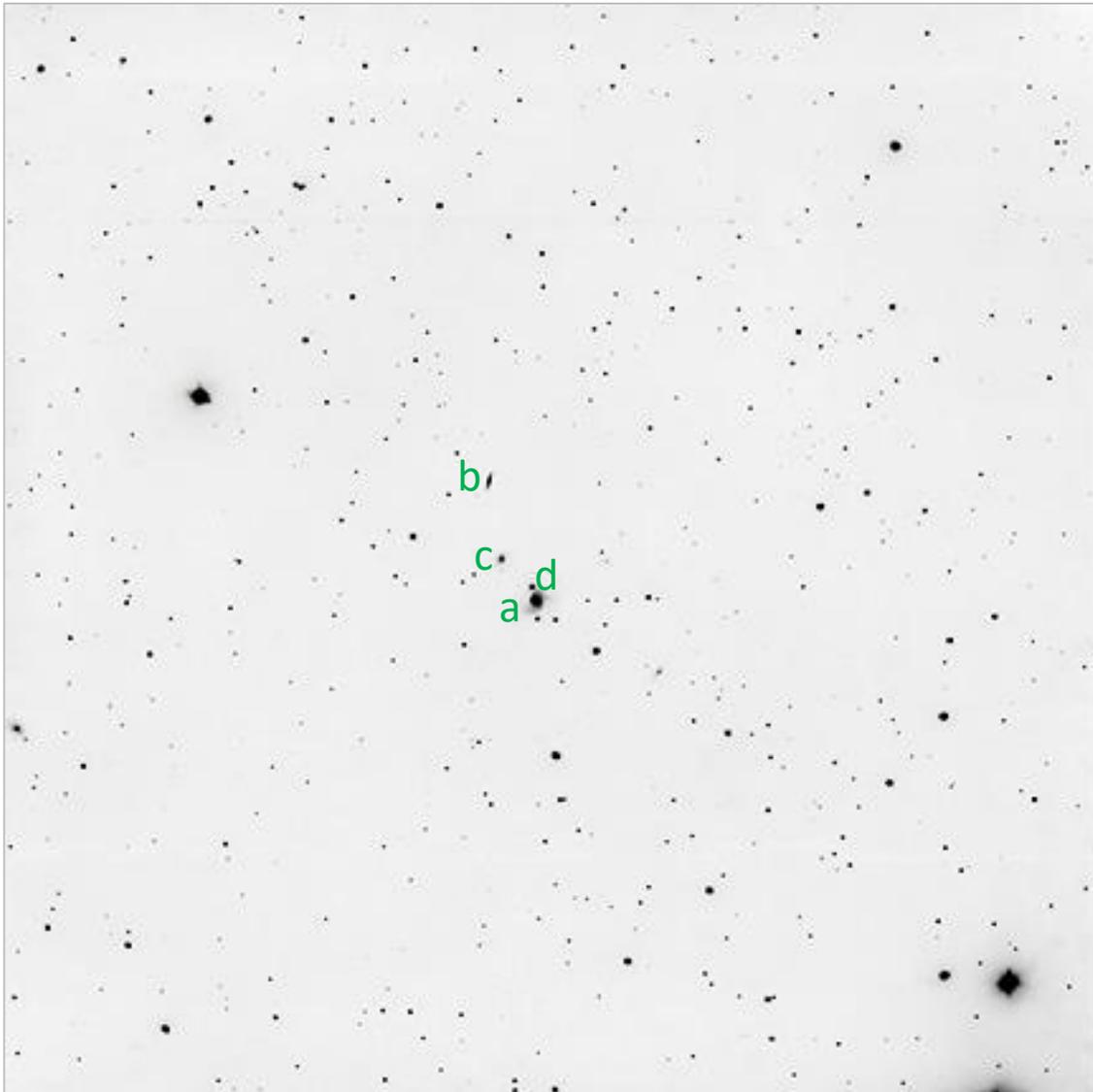
- a) NGC 7172, mag 11.8
- b) NGC 7176, mag 12.9
- c) NGC 7173, mag 11.9
- d) NGC 7174, mag 12.9
- e) PGC 67910, mag 13.8
- f) PGC 67888, mag 15.1

Hickson 90 features four main galaxies, two elliptical (b,c) and two spiral (a, d) . Their types can readily deduced by the shapes seen in the image. I have labeled two other small spirals (e,f); other dim galaxies can be detected.

HCG 91 NGC 7214 et al in PsA

2023-11-06 02:50Z SLOOH Chile Two

(inverted image and plate solve are both cropped from original)



Submitted by anonymous (1) on 2023-12-28T21:06:06Z as "NGC7214.jpg" (Submission 8969166) under Attribution 3.0 Unported	
Job Status	
Job 9694656: Success	
Calibration	
Center (RA, Dec):	(332.311, -27.785)
Center (RA, hms):	22 ^h 09 ^m 14.605 ^s
Center (Dec, dms):	-27° 47' 07.418"
Size:	27.6 x 27.6 arcmin
Radius:	0.325 deg
Pixel scale:	3.83 arcsec/pixel
Orientation:	Up is 359.6 degrees E of N
WCS file:	wcs.fits
New FITS image:	new-image.fits
Reference stars:	

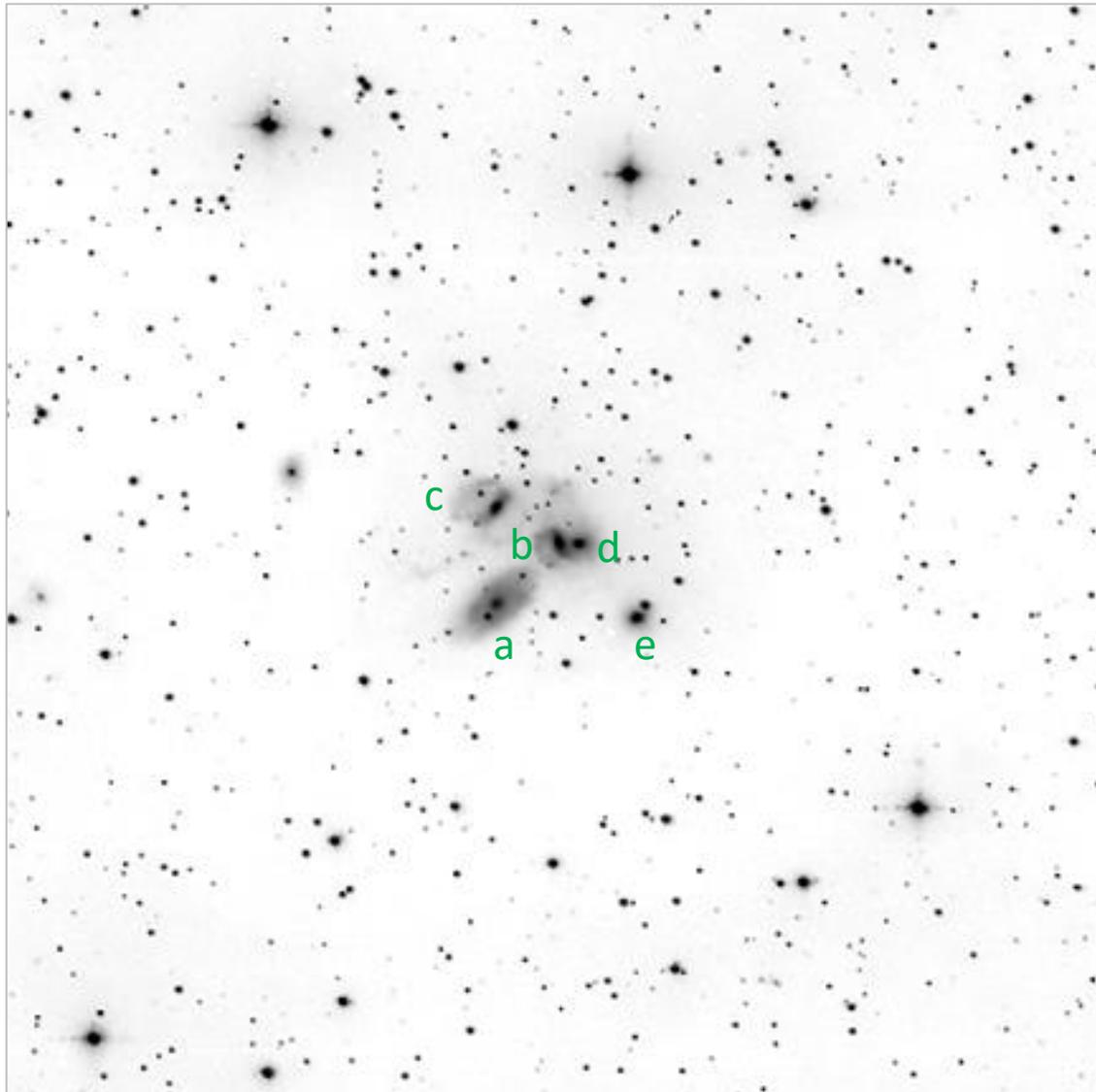
- a) NGC 7214, mag 12.6
- b) PGC 68164, mag 15.6
- c) PGC 68160, mag 15.2
- d) PGC 68155, mag 15.3

Hickson 91 has four tiny spirals (a-d). The largest/brightest of these (a) is face-on to us and has two outer arms that can be detected, reaching out from the core.

HCG 92 (Stephan's Quintet) NGC 7320 et al in Pegasus

2023-11-12 23:20Z SLOOH Canary One

(inverted image and plate solve are both cropped from original)



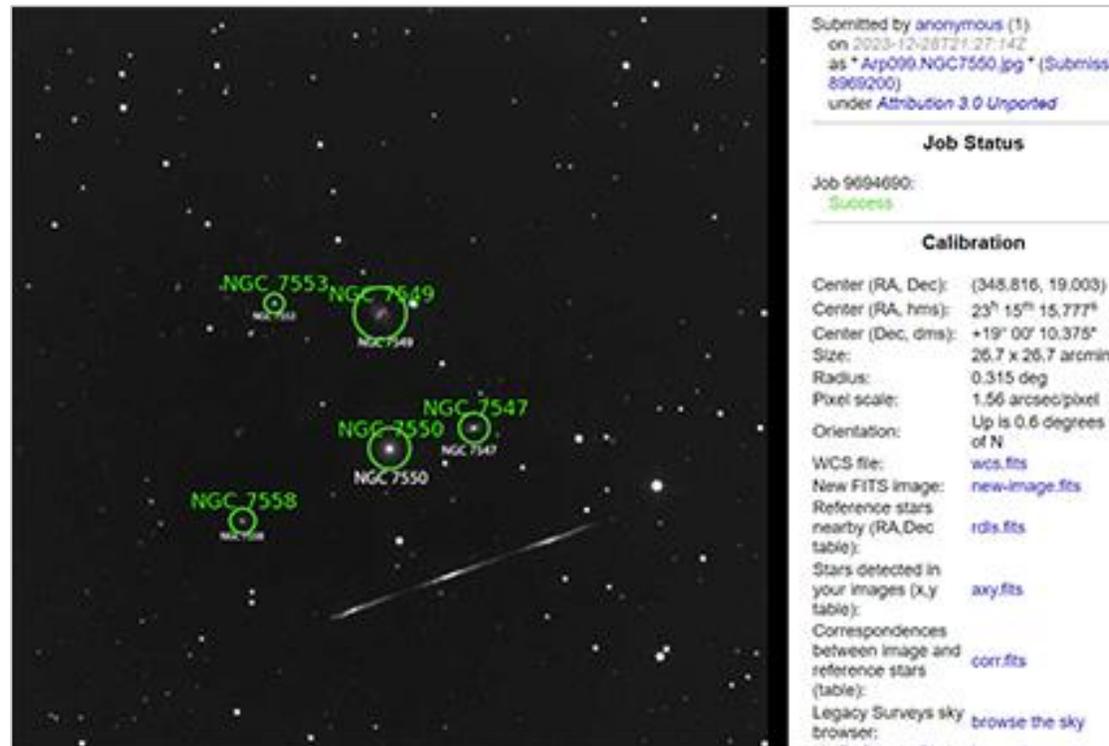
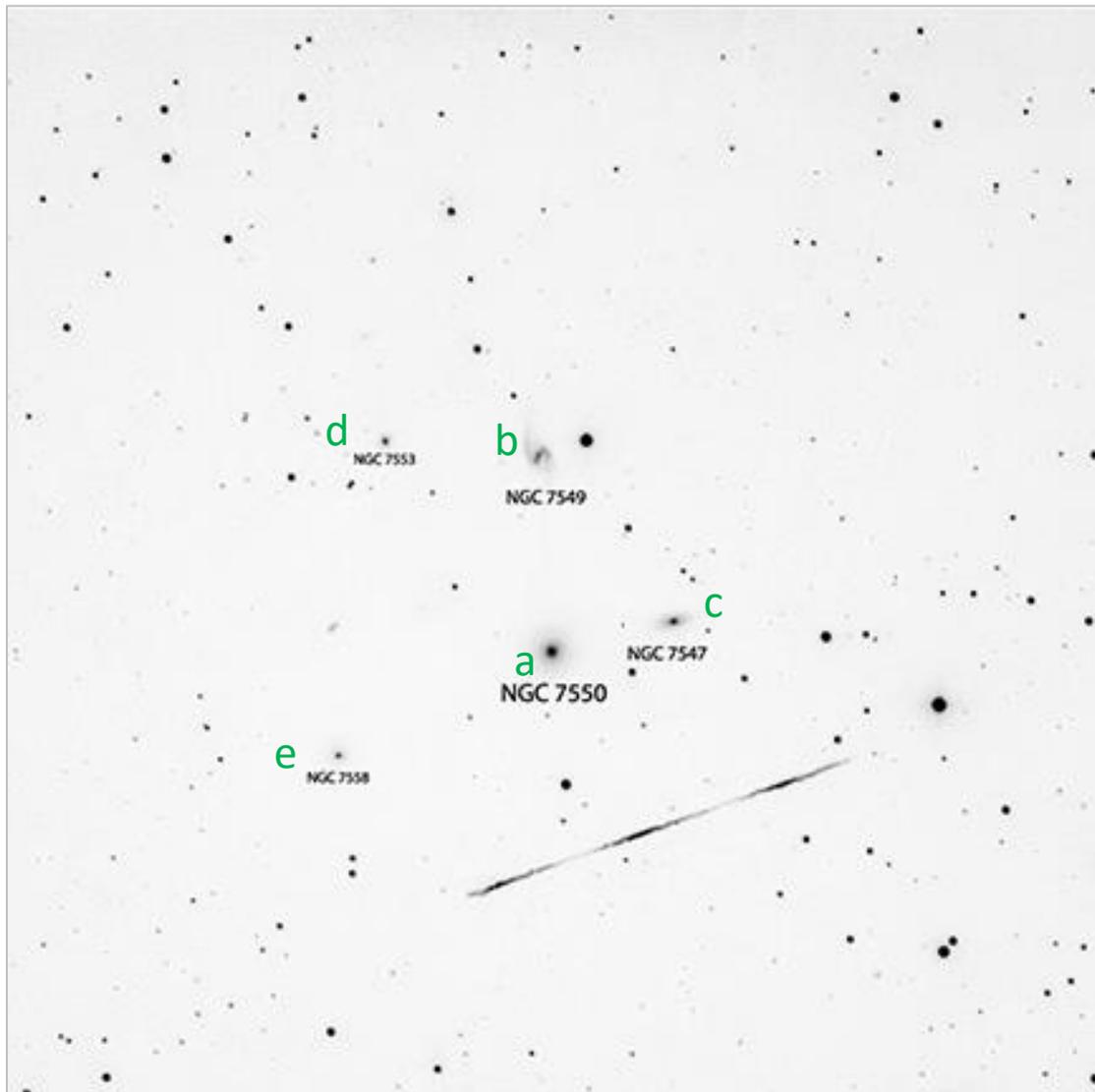
Submitted by anonymous (1) on 2023-12-28T21:21:34Z as "NGC7318.2023.11.jpg" (Submission 8969186) under Attribution 3.0 Unported	
Job Status	
Job 9694676:	Success
Calibration	
Center (RA, Dec):	(338.995, 33.964)
Center (RA, hms):	22 ^h 35 ^m 58.777 ^s
Center (Dec, dms):	+33° 57' 49.639"
Size:	18.6 x 18.6 arcmin
Radius:	0.220 deg
Pixel scale:	2.59 arcsec/pixel
Orientation:	Up is 359.3 degrees E of N
WCS file:	wcs.fits
New FITS image:	new-image.fits
Reference stars:	

- a) NGC 7320, mag 12.8
- b) NGC 7318B, mag 12.9
- c) NGC 7319, mag 14.0
- d) NGC 7318A, mag 13.3
- e) NGC 7317, mag 13.6

Say hello to Stephan's Quintet! (aka Hickson 92)
This is an impressive line-of-sight clustering of 5 bright galaxies: 3 spirals (a,b,c) and 2 ellipticals (d,e). Their characteristic shapes can be easily seen in this image. Only three of them are actually at the same distance (99Mpc, c-e). Another is almost that far away (87 Mpc, b). However, the fifth is much closer (14 Mpc, a).

HCG 93 (Arp 99) NGC 7550 et al in Pegasus

2020-6-25 07:36Z El Sauce Observatory, Rio Hurtado Valley, Chile
CHI-1: CDK24 @ f/6.5 FLI PL9000



- a) NGC 7550, mag 12.0
- b) NGC 7549, mag 14.1
- c) NGC 7547, mag 14.7
- d) NGC 7553, mag 15.7
- e) NGC 7558, mag 15.9

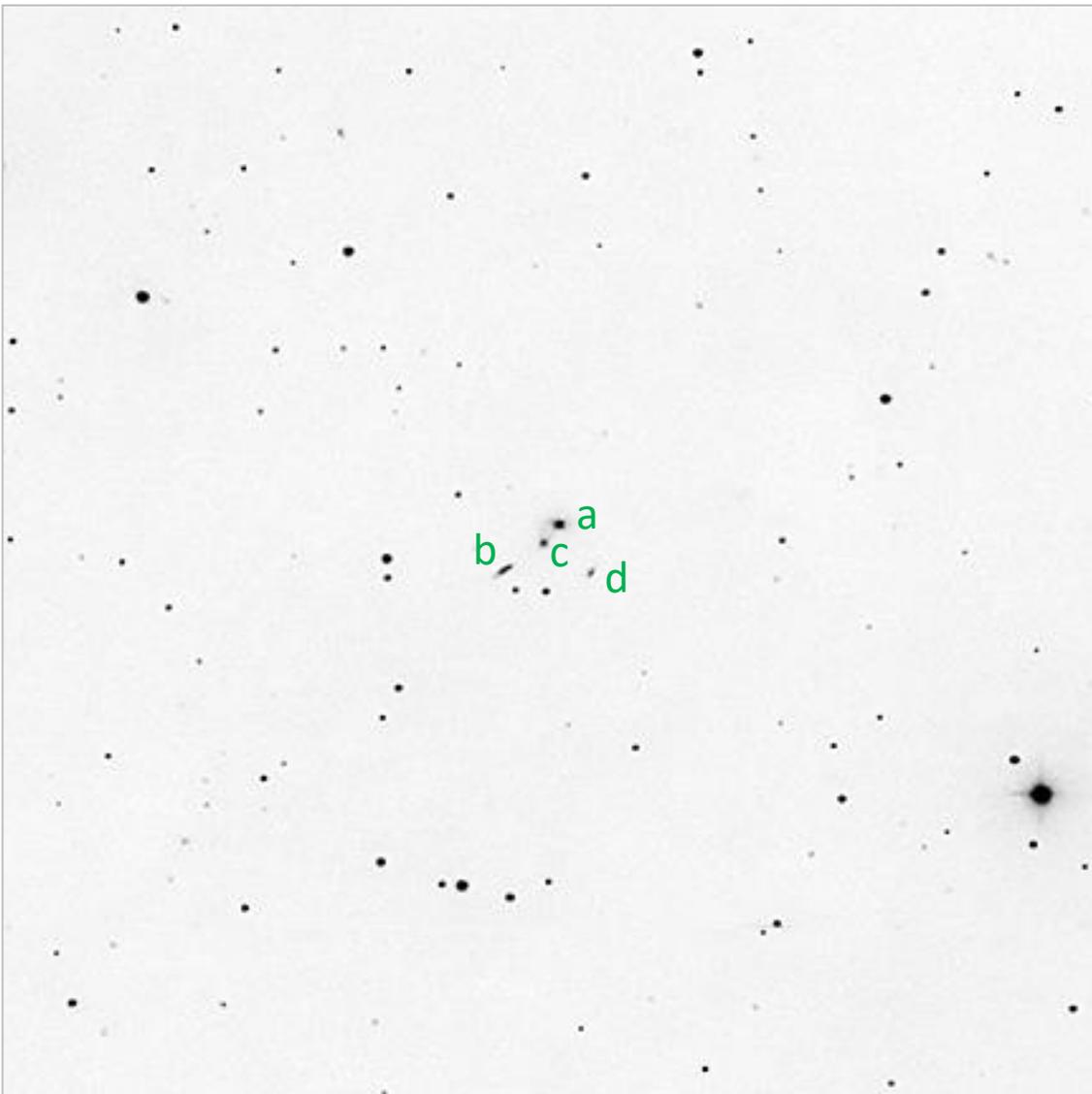
The three brightest members of Hickson 93 are catalogued in the Arp Catalog of Peculiar Galaxies as Arp 99 (a-c). The most distorted of these is NGC 7549 (b), with widespread spiral arms. The two dimmer galaxies, NGC 7553 & 7558 (d,e), are not part of Arp 99; the dimmest, NGC 7558 (e), is much more distant than the rest at 130 Mpc (vs 69-77).

HCG 95

NGC 7609 et al in Pegasus

2023-11-09 01:45Z SLOOH Chile Two

(inverted image and plate solve are both cropped from original)



Submitted by [anonymous \(1\)](#)
on 2023-12-29T01:34:56Z
as "NGC7609-16bit.jpg" (Submission
8969675)
under [Attribution 3.0 Unported](#)

Job Status

Job 9695148:
Success

Calibration

Center (RA, Dec): (349.878, 9.501)
Center (RA, hms): 23^h 19^m 30.627^s
Center (Dec, dms): +09° 30' 02.509"
Size: 18.6 x 18.6 arcmin
Radius: 0.220 deg
Pixel scale: 2.59 arcsec/pixel
Orientation: Up is 359.7 degrees
E of N
WCS file: [wcs.fits](#)

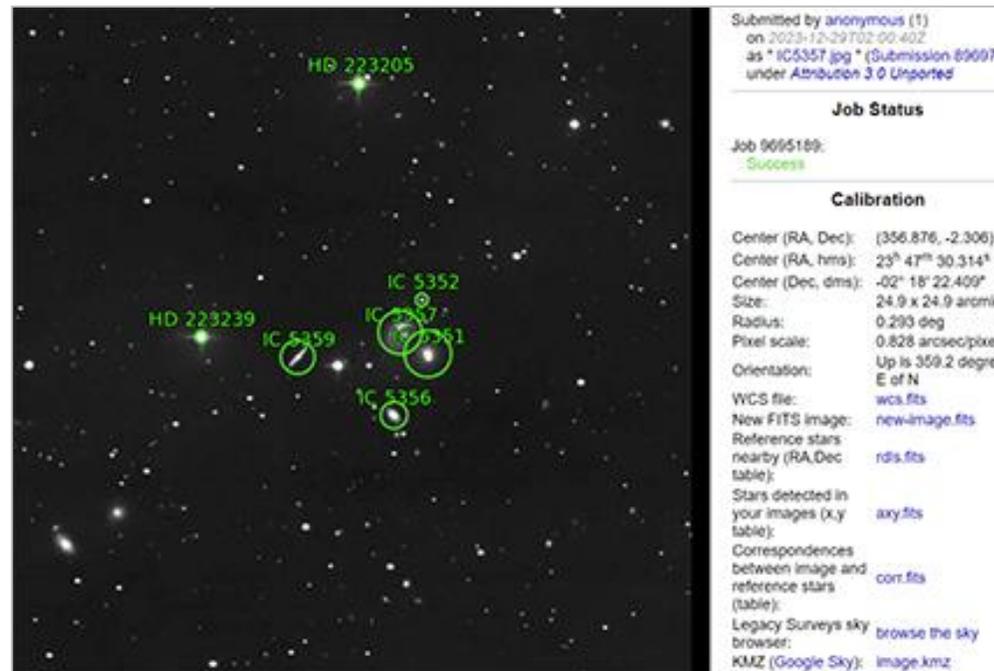
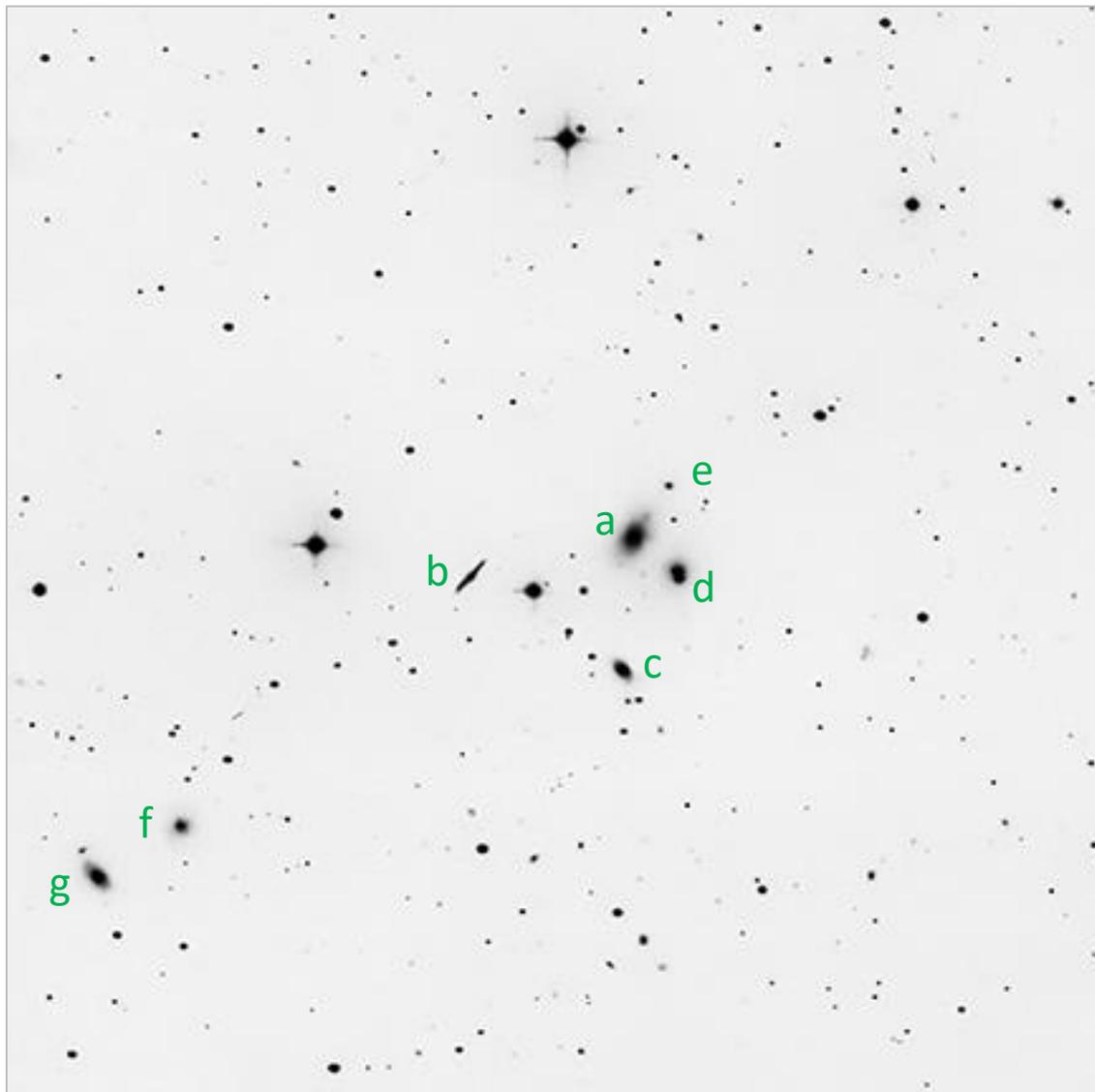
- a) NGC 7609, mag 14.9
- b) PGC 71080, mag 16.0
- c) PGC 71077, mag 16.2
- d) PGC 71074, mag 17.1

These are some tiny galaxies!
Hickson 95 is a tight grouping of four mag 15-17 galaxies. Three are spirals (b-d), but the brightest, NGC 7609 (a), is an elliptical. It's hard to identify their shapes in this image because they are so small.

HCG 97 IC 5357 et al in Pisces

2023-12-03 20:25Z SLOOH Canary One

(inverted image and plate solve are both cropped from original)



- a) IC 5357, mag 14.0
- b) IC 5359, mag 15.7
- c) IC 5356, mag 15.0
- d) IC 5351, mag 14.6
- e) PGC 72405, mag 16.6
- f) PGC 72457, mag 15.0
- g) PGC 72461, mag 14.5

All of the galaxies labeled in this field (a-e) are members of Hickson 97 and are roughly similar in distance from us (87-100 Mpc). All are spirals except for elliptical IC 5351 (d). Three of them (a,c,d) plus a field star form an eye-catching tumbler-shaped trapezoid (albeit upside down in this view).