

Arkaroola Mon 15Mar10 Observations from 9:30pm till 12:00am. 21.7+
Mag/ArcSec2

Observers: Mark Johnston, solo trip.

Arkaroola Location: 139 20 East, 30 18 South

The 14th was all clouds. Clear all this night but observatory in use till 9:30

Southern sky never seen objects with this night the my first real good but
general LMC run.

For the LMC objects I did not take super detailed descriptions on the most
part but kept to general brief observations because LMC is just frankly a
lifetime project so I wanted a broad overview more than clinical detail. On 3-
17-2010 a few nights later I went back to focus on a few areas I had felt were
nice and had detailed DSS printouts of for a closer look.

Date: 3/15/2010 Site: Arkaroola Scope: 12DobF5 Obs: 84
NELM: 6.8 see: 5 trans: 5 sqm: 21.74

Scope: 14SctF7

NGC 1261 con: Hor lst: SAL,C87 alt: 30

Glob 8.3 6.8' 13.5 16.8 --- --- BAA 03 12 15.3 -55 13 01

8:53pm 7mmNag 360x 3' apparent dia Low concentration. Slightly NS look
to it. Averted shows shugary look, low concentration to edges. FStar ENE by
5 min. Some jutting out to Northern side with almost-resolving star spikes.

PostNote: It is larger but as usual if you cannot pick out the outter stars I tend
to get much smaller 'apparent size' than per the book.

Scope: 12DobF5

Moved to 12" BinTel Dob after collimating it. Time for LMC

NGC 2069 con: Dor cmt1: LMC_TarantulaNebula: fav: F5 alt: 39

Brtn 18.0x11.0' E UNK 05 38 30.0 -69 07 00

9:40pm 9mmNag Lumicon O3 filter. Wide-mouthed deamon head with ear
to the left goes up and is defined. Nostrel to the right is the bright center of a
large clump of field stars [PostNote: must be 2070], perhaps core stars of 2070.
Bridging to right then small dark area, nebulous vertical land then broad dark
area as big as head, then wispy.

Below the chin there are dark round areas below and to right of chin and two
dark areas below and to left of the chin. so 3 across. Now to below chin is
dark area then to right is another dark circle to the right. Nebulous area
below the dark circle below right of chin has bright nebulous lower (E)

boundry with dark area farther E and faint nebulous far E boundry to this dark area.

The goblin's big ear goes out to the left then turns up, W, before it splits to 2 prongs and the whole ear as tall as the head. Moving north of the ear is a dark channel parallel to the ear then light again. Then above the head is a bit of a hump in nebulosity with another dark area above the eye to the right and nebulosity extending up twice the height of the head.

There is a separate area of nebulosity around a fair sized grouping of stars that is distinct and round and as big as the large mouth of the goblin. The round nebulous to the south-west is distinct enough to be an object [PostNote: must be Ngc2060].

NGC 2081 con: Dor cmt: LMC_2074area:

C+N 5.0' E NGC 05 40 05.3 -69 24 06

10:15pm 9mmNag 170x 5-6 resolvable stars. Averted vision required to see the loop around the cluster area. There is a noticable knot in nebulosity on the south side of the ring of nebulous area.

NGC 2074 1st: SAL alt: 39

Open 1.0' --- --- BAA 05 39 02.7 -69 29 41

10:17pm 9mmNag 170x Much brighter than 2081 nebula region. Bright half circle starts on NW, loops around the north still bright then continues looping around East, still bright, then dims as it thins out in the loop back CCW down to the south side.

NGC 2080 cmt: LMC_2080area:

Open 0.7' --- --- BAA 05 39 44.6 -69 38 42

10:17pm 9mmNag 170x Very bright and concentrated nebula. Thins and 2077 is dimmer to SSW

NGC 2077

Open 0.6' --- --- BAA 05 39 34.9 -69 39 19

10:20pm 9mmNag 170x Dimmer than its neighbor of 2080 but seems separate with darkness between the 2. Just below 2077 there seem to be 2 even dimmer and smaller nebulous areas before the dark gap that will separate this from 2079/2083 area. To the west is FS with nebulosity to its west then

NGC 2085

Open 0.4' --- --- BAA 05 40 09.2 -69 40 21

10:22pm 9mmNag 170x Noticed as dimmer than 2080 as a field star with nebulosity to WSW

NGC 2086

C+N 0.3' NGC 05 40 12.3 -69 40 04
10:25pm 9mmNag 170x Noted just to east as fuzzy area just to east of 2085

NGC 2083 NGC 2084 cmt: LMC_2083area:
C+N 3.5x 2.5' NGC 05 39 58.8 -69 44 56
10:25pm 9mmNag 170x This area appears as 3 nebulous areas. 2083 is second brightest and to the East. I describe a third object as between brighter 2079 and 2nd tier 2083 but I think it is part of 2083. [PostNote: Bright part of 2083 is denser star area to NE of this group]

NGC 2079
C+N 0.8' E NGC 05 39 40.2 -69 46 25
10:30pm 9mmNag 170x Brightest of 3 nebulous areas in 2083 group. Smaller than area to East but brightest surface brightness.

NGC 2078
C+N 0.4' E NGC 05 39 40.1 -69 44 36
10:30pm 9mmNag 170x I noticed this as a tiny, dim NW corner of a 'box' but dim compared to other corners.

NGC 2052 cmt1: .
C+N 1.1x 0.9' RID 05 37 12.0 -69 46 27
10:34pm 9mmNag 170x 16' E of 2083 [was mystery object] A definite nebulous round area which is half way to 2013 which I did not note in my tape but does show up on DSS so I circle it on my chart.

Tape: 14min

NGC 2058 con: Dor cmt: LMC_TheGrapes:
Open 12.0 1.0x 1.0' --- 16.0 I r NGC 05 36 54.3 -70 09 48
10:35pm 9mmNag 170x One of two dominant clusters of this group. Larger and very obvious but no resolved stars.

NGC 2059
Open 12.9 0.4x 0.4' --- --- NGC 05 37 00.9 -70 07 40
10:35pm 9mmNag 170x A medium dim and tiny cluster just N of 2058.

NGC 2066
Open 13.1 0.5x 0.5' --- --- NGC 05 37 42.4 -70 09 58
10:36pm 9mmNag 170x Very very tiny, dim and East of 2058.

NGC 2065
Open 11.0 1.5x 1.5' --- 16.0 I r NGC 05 37 36.5 -70 14 09

10:36pm 9mmNag 170x One of two dominant clusters of this group. Larger and very obvious but no resolved stars. This pattern above is like a staircase with this is bottom floor.

NGC 2072

Open 13.2 0.4x 0.4' --- --- NGC 05 38 23.9 -70 13 59

10:37pm 9mmNag 170x Very tiny, dim grape directly East of 2065 dominant member.

NGC 2057

Open 12.2 0.5x 0.5' --- --- NGC 05 36 56.2 -70 16 12

10:37pm 9mmNag 170x Tiny cluster directly south from 2058 2.5 'step' units.

Mystery_Object Possible object on East point of an EQ triangle formed with 2047 and 2046 as other vertices. This seems like it may be an object but may be asterism?

NGC 2046

Open 12.6 0.7x 0.7' --- --- NGC 05 35 38.4 -70 14 26

10:37pm 9mmNag 170x tiny tier2 grape SSW of 2047 on the SW side of the group of 'grapes'

NGC 2047

Open 13.2 0.5x 0.5' --- --- NGC 05 35 54.6 -70 11 32

10:37pm 9mmNag 170x tiny tier2 grape NNE of 2046 on the SW side of the group of 'grapes'

con: Dor cmt: LMC_SE:

NGC 2019 SL 554

Glob 10.9 1.0' --- --- --- BAA 05 31 56.7 -70 09 35

10:38pm 9mmNag 170x Easily noticed, no resolved stars noted.

Mystery_Object

10:38pm 7mmNag 220x Possible tiny object 5' SW of 2019 [PostNote: MegaStar mag 12.5 star & LMC picture 1 shows this as possible star with nebulosity.]

Mystery_Object

10:38pm 7mmNag 220x Possible tiny object 5' NNW of 2019 [PostNote: MegaStar mag 13.5 star & LMC picture 1 shows this as possible star with nebulosity.]

NGC 2018

Brtn 2.0x 1.5' E SKY 05 31 18.5 -71 04 06

10:42pm 9mmNag 170x NPB filter. Bright distinct stars in most nebulous region. Nebulosity off to the west is very faint. 2'W/1'N a much smaller faint but appearing a bit separate from main nebulous region. 9' East and a bit N is distinct separate sort of smaller nebulous area that does not appear stellar. Also 4' WSW of main area is knot in nebulosity.

HenizeN 206B

Brtn 1.2x 0.3' MAC 05 30 48.1 -71 08 03

10:44pm 9mmNag 170x NPB filter. Distinct 1' len mostly EW elongated 1x bright nebulous bar.

Mystery_Object

10:44pm 9mmNag 170x Obvious possible cluster object 15' S and about 5' E of 2018. [PostNote: DSS shows it very well]

con: Dor cmt: LMC_NearTarNeb: Tape: 21min

NGC 2100

Open 9.6 2.0' --- 11.8 II r NGC 05 42 08.2 -69 12 42

10:45pm 16mmNag 95x Fairly large and bright cluster due East of Tarantula Nebula.

NGC 2055

Open 0.6' --- --- BAA 05 36 41.8 -69 29 49

10:46pm 16mmNag 95x In among a gorgeous 16' length star cloud just SSW of Tarantula Nebula. Cloud is Very apparent from background and a fairly even blanket of stars.

NGC 2050

Open 1.0' --- --- BAA 05 36 40.0 -69 22 49

10:46pm 16mmNag 95x Within a gorgeous 16' length star cloud just SSW of Tarantula Nebula.

NGC 2048

Brtn 18.0' SKY 05 35 04.1 -69 42 37

10:47pm 16mmNag 95x Noted as nebulous area farther south from large star cloud that is just below Tarantula nebula.

Funny: Got a bit lost looking for Globular Ngc2005 and said 'Cripes theres objects like everywhere' LOL

Tape: 21min

con: Dor cmt: LMC:

NGC 2036

Open 12.8 0.7x 0.7' --- --- NGC 05 34 31.9 -70 03 59

10:50pm 16mmNag 95x Noted as small cluster in failed search for 2005.

NGC 2028

Open 12.9 0.4x 0.4' --- --- NGC 05 33 48.2 -69 57 03

10:52pm 16mmNag 95x Noted as small cluster in failed search for on hop route to 2005.

NGC 2016

Open 0.1x 0.1' --- --- m NGC 05 31 31.1 -69 55 59

10:53pm 16mmNag 95x Noted as small cluster in failed search for on hop route to 2005.

con: Dor cmt: LMC_By1962: Tape: 21min

SL 476 HenizeN 144 LH 58

C+N 4.0' MAC 05 26 35.6 -68 49 05

11:15pm 9mmNag 170x 5' size. Contains CCW on half circle 1962 on W, 1965, 1966, 1970 on East. Note that MegaStar only had 1962 so I used GSC stars for other objects which I observed on 3-18-2010 separately.

GSC 9162:500 NGC 1953

Star 13.6 0.4 6 GSC 05 25 29.4 -68 50 28

10:55pm 9mmNag 170x Noted as distinct object on this nite, more on 3-18-2010

NGC 1962

Open 0.5' --- --- BAA 05 26 19.4 -68 50 15

10:55pm 9mmNag 170x

GSC 9162:484 NGC 1965

Star 10.4 0.3 6 GSC 05 26 29.6 -68 48 20
10:55pm 9mmNag 170x

GSC 9162:987 NGC 1966
Star 12.3 0.4 6 GSC 05 26 46.2 -68 48 47
10:55pm 9mmNag 170x

GSC 9162:971 NGC 1970
Star 10.96 0.0461 --- TYC 05 26 53.1 -68 50 00
10:55pm 9mmNag 170x

NGC 1949
Brtn 0.4' E SKY 05 25 05.8 -68 28 15
11:00pm 9mmNag 170x Less distinct than SL 476 area and small bright
center then very faint outter glow.

NGC 1901
Open 20.0' 40 --- III 3 m LYN 05 18 34.6 -68 30 09
11:01pm 9mmNag 170x 20' size < 40 stars. Very sparse, elongated 5x NS
sort of look due to 5 Tier1 stars, another 15 lower mag. Good for a marker and
jump-off point.

con: Dor cmt: LMC_by1910: fav: F3
TAPE: 29:30

NGC 1910
Open 11.2 9.0x9.0' --- --- association NGC 05 18 27.5 -69 13 06
11:05pm 9mmNag 170x 8' size 50 stars with 5 bright members. Nebulosity
looping around to east from most of nebulosity over the south side of the
cluster.

NGC 1916
Glob 10.4 0.5' --- --- --- --- BAA 05 17 26.7 -69 22 34
11:05pm 9mmNag 170x < 1' dia Tight, concentrated. Dimmer than 1903 by
a bit. Object is 6' ESE of these coordinates that are wrong per dss and
observation. I felt there was a very faint object halfway between 1916 and
1903.

NGC 1903
Open 12.0 0.6x0.6' --- --- Ir NGC 05 17 22.7 -69 20 13
11:06pm 9mmNag 170x 1' dia Broader than 1916 and partly resolved.

con: Dor cmt: LMC_by1876:

NGC 1876
C+N 1.0' MAC 05 13 19.8 -69 21 44
11:10pm 9mmNag 170x 3' size cluster with nebulosity. Described as one
with 1874,1877,1880

NGC 1874
C+N 0.7' E NGC 05 13 12.9 -69 22 32
11:10pm 9mmNag 170x 3' size cluster with nebulosity. Described as one
with 1876,1877,1880

NGC 1877
C+N 0.5' MAC 05 13 23.9 -69 22 44
11:11pm 9mmNag 170x 3' size cluster with nebulosity. Described as one
with 1874,1876,1880

NGC 1880
C+N 0.7' E NGC 05 13 38.9 -69 23 00
11:11pm 9mmNag 170x 3' size cluster with nebulosity. Described as one
with 1874,1876,1877

NGC 1872
Open 11.0 1.0' --- --- IV r BAA 05 13 11.5 -69 18 45
11:12pm 9mmNag 170x Described as concentrated cluster 1 unit (3') N of
1876 'large cluster with neb'.

NGC 1894
Open 12.2 0.8' --- --- II m NGC 05 15 51.8 -69 28 13
11:13pm 9mmNag 170x Cluster < 1' size. Not too diffuse. Mistook for 1898
then corrected on tape.

con: Dor cmt: LMC_by1918:

LH 42 NGC 1918
C+N 2.0x 1.5' OB Assoc RID 05 19 18.3 -69 39 11
11:15pm 9mmNag 170x 3' size cluster with nebulosity

NGC 1898 SL 350
Glob 11.9 --- --- --- --- BAA 05 16 42.0 -69 39 24

11:15pm 9mmNag 170x < 1' dia Very diffuse like a cluster Not spectacular.

NGC 1770

Open 1.6' --- --- BAA 04 57 16.8 -68 24 41

11:16pm 9mmNag 170x Described along with IC 2117 as very large open cluster

IC 2117

Open 1.8' --- --- BAA 04 57 14.5 -68 26 30

11:16pm 9mmNag 170x Described along with 1770 as very large open cluster

NGC 1835

Glob --- --- --- --- BAA 05 05 06.6 -69 24 14

11:17pm 9mmNag 170x Tiny but almost stellar with averted showing it broader

NGC 1828

Open 12.5 0.7x 0.7' --- --- II NGC 05 04 21.2 -69 23 16

11:17pm 9mmNag 170x Noticed as dim cluster sort of object while looking at 1835

NGC 1830

Open 12.6 0.7' --- --- II NGC 05 04 39.5 -69 20 29

11:18pm 9mmNag 170x Noticed as dim cluster sort of object while looking at 1835

NGC 1856

Open 10.0 1.5x 1.5' --- 15.0 IV r NGC 05 09 31.0 -69 07 44

11:18pm 9mmNag 170x Broader than 1835 to it's SW. Medium concentration.

con: Dor cmt: LMC_by1858: fav: F3

TAPE: 39:00

NGC 1858

C+N 3.0x 2.0' NGC 05 09 56.1 -68 53 48

11:20pm 9mmNag 170x 3' len 1.5EL 135dPA Broad star cluster with 10 resolved averted and dark spot in middle.

NGC 1855

Open 10.4 3.0' --- 14.2 II 0 BAA 05 09 20.6 -68 50 51

11:21pm 9mmNag 170x Smaller than 1858

NGC 1850

Open 9.3 3.0' --- 14.3 r n NGC 05 08 46.0 -68 45 42

11:22pm 9mmNag 170x Almost 3' size and concentrated compared to 1858

con: Dor cmt: LMC_by1934:

NGC 1936

C+N 0.8' E NGC 05 22 14.1 -67 58 36

11:25pm 9mmNag 170x Described this as a larger and obvious area to the far SSE of the area of main 1934 nebulous region but with a darker gap in it then on it's northern edge brighter again.

NGC 1937

C+N 3.0' NGC 05 22 24.5 -67 53 43

11:26pm 9mmNag 170x Described as 2 units (6') N of 1936 on other side of a star field that is apparent between these areas.

NGC 1934

C+N 6.0' E NGC 05 22 01.4 -67 55 59

11:26pm 9mmNag 170x 7' size described for this whole complex with 1934 being the main nebulous region.

NGC 1929

C+N 0.6' E NGC 05 21 37.8 -67 54 48

11:27pm 9mmNag 170x Described as nebulous area on western edge that may be nebulous field star.

HenizeN 44H

Brtn 0.2' MAC 05 22 49.4 -68 01 21

11:28pm 9mmNag 170x Described as 6'E and 3'S of main area and around 1' in size.

IC 2128

Brtn 0.4' SKY 05 22 52.1 -68 04 23

11:28pm 9mmNag 170x Described as VERY dim nebulous area 6' S of HenizeN 44H and just noticable averted.

con: Dor cmt: LMC_by1955:

TAPE: 42:30

NGC 1955

Open 9.0 1.8' --- 11.3 III 3 p n BAA 05 26 04.2 -67 29 52

11:30pm 9mmNag 170x Arc of stars in center EW orientation and nebulous region is bowing around on this line's E side being the center of a wide arc open to the W. Averted vision required to see this 7' long 1/3 circle arc with outside edge to E. I did NOT report the western nebulous region that shows up as other side of a big circle if the big arc continued.

Mystery_Object 6' SSE of bottom of big 1955 arc

11:30pm 9mmNag 170x Very dim nebulous region a lot smaller than 1955

NGC 1968

Open 9.0 1.1' --- 12.6 III 3 p n BAA 05 27 39.7 -67 27 20

11:32pm 9mmNag 170x Leading big Arc of 1955 this object is elongated EW with a very faint nebulous wide bar extending S from its Western end. A dark lane separates 1968 and the very faint lower nebulous S bar from the center through south side arc of 1955. I describe this 1966 area almost as 3 areas of brightness just next to each other.

NGC 1974

Open 9.0 1.7' --- 12.7 III 2 p n BAA 05 28 00.6 -67 25 22

11:32pm 9mmNag 170x A more broad continuous segment described as 8'E and 8'N of center of 1955.

con: Dor cmt: LMC_by2014:

NGC 2014

Open 1.8' --- --- BAA 05 32 21.7 -67 41 58

11:35pm 9mmNag 170x 3' size and very obvious with nebulosity all about the stars within it.

NGC 2020

Brtn 1.5' SNR? SKY 05 33 08.6 -67 42 47

11:35pm 9mmNag 170x Very dim and diffuse nebulous region with averted with 1 central star visible.

con: Dor cmt: LMC_by2014_TheTeeth_DragonsHead:

LH 82 NGC 2032 Most W of the 2 main 'Incisors'

C+N 6.0' RID 05 35 16.0 -67 34 13

11:40pm 9mmNag 170x Most East of the 2 main incisors and bright like 2035.
Close to NS and elongated.

LH 82 NGC 2035 Most E of the 2 main 'Incisors'
C+N 6.0' RID 05 35 32.0 -67 34 50
11:41pm 9mmNag 170x Most East of the 2 main incisors and bright like 2032.
Close to NS and elongated.

LH 82 NGC 2029 NW of 2032
C+N 6.0' RID 05 35 05.0 -67 33 12
11:41pm 9mmNag 170x Not as bright as main 2 incisors and closer to EW. It
is to W of 2 stars that are spacing of the length of main incisors.

Mystery_Object Farthest NW of the teeth
C+N 6.0' RID 05 34 59.0 -67 31 50
11:42pm 9mmNag 170x Averted shows this elongated region half the len of
main incisors with dark between it and 2029

NGC 2040 LH 88
C+N 2.1x 1.7' RID 05 36 07.0 -67 34 00
11:42pm 9mmNag 170x

LEFT OFF
TAPE: 47:40 and was 11:44pm Next is 1873 area then 1773 bean area

con: Dor cmt: LMC_Within_1869:

NGC 1869
Open 14.0' --- --- association BAA 05 13 53.9 -67 23 00
11:45pm 9mmNag 170x This is an area that has 1873 AND 1871 all within it.
So I KNOW I saw this area. Did not make any specific observations as I must
have felt it was just general field stars.

NGC 1871
Open 2.0' --- --- BAA 05 13 52.4 -67 27 09
11:45pm 9mmNag 170x 2' cluster EW mostly. About 5-6 tier1 stars. Small
amount of nebulosity.

NGC 1873
Open 3.5' --- --- BAA 05 14 01.7 -67 19 54

11:45pm 9mmNag 170x 1.5' length cluster EW mostly. Small amount of nebulosity.

con: Dor cmt: LMC_1763area_BeanNebula:

SL 125 LH 10 NGC 1763

C+N 5.2x 3.6'

RID 04 56 49.0 -66 24 23

11:45pm 9mmNag 170x 5' len 2.5EL 45dPA. Few bright FStars along it's major axis

NGC 1769

C+N 2.0'

E

NGC 04 57 44.1 -66 27 44

11:45pm 9mmNag 170x Bright nebulous area, less obvious than 1763. with a couple stars resolvable within it. just to East of main 'bean' of 1763.

NGC 1776

Open 1.1'

--- --- II

NGC 04 58 39.2 -66 25 46

11:48pm 9mmNag 170x Described as a little cluster NE of 1769 and past a field star.

NGC 1773

Star 11.8 0.3 6

GSC 04 58 08.8 -66 21 53

11:48pm 9mmNag 170x Ngc1773 is just SW of this star and was described as nebulous area smaller than 1769 with couple stars.

NGC 1761

Open 1.2' --- ---

BAA 04 56 34.4 -66 28 24

11:48pm 9mmNag 170x Cluster region almost as big as the bean and less nebulosity.

NGC 1760

C+N 2.0'

E

NGC 04 56 35.9 -66 31 17

<< best

guess at coordinates

11:48pm 9mmNag 170x Just South of 1761 this object appears as a small and elongated nebulous region. [PostNote: This I think has a core of a thin EW line of stars 2' S of the 1761 cluster/nebula. Was a mysteryObject but later identified by SteveG.]

I was very very tired and started feeling dizzy so decided to pack it up about 12 after a bit of wide-field looking at Milky way and so on. I had done a long hike this day and think I may have been a bit dehydrated at this time as well.