



Pretoria Centre

Astronomical Society of Southern Africa

Members Observing Activities

Observing List

Observing Log Sheet

Submitting Observations

Verifying Submitted Observations

Logging Observations

Rewards / Recognition

Jack Bennett at the eyepiece of the 12-inch Pretoria Centre telescope. It is housed in the Jack Bennett Observatory which is on the grounds of the Christian Brothers College.

Bennett was born on April 6th, 1914 and passed away on May 30th, 1990. A long-standing member of the Astronomical Society of Southern Africa (ASSA), he was elected President in 1969.



“Top-100 Deepsky Objects”

Summary

| Catalogue source | numObj |
|------------------|--------|
| NGC | 86 |
| IC | 6 |
| Other | 8 |
| Bennett | 44 |
| Messier | 29 |

| Type | numObj |
|-------------------|--------|
| Open clusters | 40 |
| Globular clusters | 24 |
| Galaxies | 15 |
| Planetary nebulae | 8 |
| Bright nebulae | 7 |
| Dark nebulae | 5 |
| Star cloud | 1 |

Number of objects visible per month

| Jn | Fb | Mr | Ap | My | Jn | Jl | Ag | Sp | Oc | Nv | Dc |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 46 | 62 | 58 | 58 | 73 | 49 | 53 | 52 | 59 | 45 | 46 | 45 |

1 per week ~2 years
 2 per week ~1 year
 4 per week ~6 months

ASSA Deepsky Observing Section "Top-100 Deepsky Objects"

| ASS A nu m | Object (1) | Other designations (2) | Bennet (3) | Type (4) | Mag (5) | Size (6) | Con (7) | RA (8) | Dec (9) | Ura n (10) | MSA (11) | S A (1 2) | D (13) |
|-------------------------|-------------------|--|-------------------|-----------------|----------------|-------------------|----------------|---------------|----------------|----------------------|-----------------|------------------------|-----------------------|
| 001 | NGC 55 | ESO 293-50, LEDA 1014, SGC 001238-3929.9 | Ben 1 | Glxy | 7.9 | 32' x 5.6' | Scl | 00 15 | - 39 11 | 386 | 1:430 | 18 | 06, 25 |
| 002 | NGC 104 | 47 Tucanae, Melotte 1 | Ben 2 | Glcl | 4.5 | 31' | Tuc | 00 24 | - 72 05 | 440 | 1:502 | 24 | 05, 06 |
| 003 | NGC 247 | ESO 540-22, LEDA 2758 | Ben 3 | Glxy | 8.9 | 18' x 5' | Cet | 00 47 | - 20 46 | 306 | 1:340 | 18 | 06, 25 |
| 004 | NGC 246 | BD-12 134, HIP 3678, PN G118.8-74.7 | | Plnb | 8.5 | 4' x 3.5' | Cet | 00 47 | - 11 53 | 261 | 1:316 | 10 | 25 |
| 005 | NGC 253 | Silver Coin, Sculptor Filament, ESO 474-29, LEDA 2789, SGC 004507-2533.9 | Ben 4 | Glxy | 7.1 | 22' x 6' | Scl | 00 48 | - 25 17 | 306 | 1:364 | 18 | 06, 25 |
| 006 | NGC 288 | C 0050-268, Melotte 3, GCl 2 | Ben 5 | Glcl | 8.1 | 14' | Scl | 00 53 | - 26 35 | 307 | 1:364 | 18 | 06, 25 |
| 007 | SMC | | | Glxy | 2.3 | 5° x 3° | Tuc | 00 53 | - 72 50 | 460 | 1:501 | 24 | 05, 06 |
| 008 | NGC 362 | Melotte 4, C 0100-711, GCl 3 | Ben 7 | Glcl | 6.6 | 13' | Tuc | 01 03 | - 70 51 | 441 | 1:501 | 24 | 05, 06 |
| 009 | NGC 1068 | Messier 77, LEDA 10266 | Ben 9 | Glxy | 8.9 | 7.1' x 6.0' | Cet | 02 43 | - 00 01 | 220 | 1:262 | 10 | 25 |
| 010 | NGC 1261 | C 0310-554, GCl 5 | Ben 11 | Glcl | 8.4 | 7' | Hor | 03 12 | - 55 13 | 419 | 1:460 | 24 | 05 |
| 011 | NGC 1291 | ESO 301-2, LEDA 12209, NGC 1269 | Ben 12 | Glxy | 9.0 | 11' | Eri | 03 17 | - 41 08 | 390 | 1:422 | 18 | 05, 12, 15 |

Open Clusters

- (a) relation to the surrounding field stars
- (b) how many stars are there?
- (c) range of brightness / magnitudes
- (d) how are the stars concentrated?
- (e) look for prominent empty spaces
- (f) are there clumps/chains of stars?
- (g) glow of unresolved stars/nebulosity?
- (h) central / prominent individual stars?
- (i) any striking double stars resolved?
- (j) Stars with a particular colour?

Globular Clusters

- (a) are individual stars seen? (unresolved – granular – partially resolved – well resolved)
- (b) how are the stars concentrated towards the nucleus?
- (c) estimate the size of the nucleus (compare with the size of the halo)
- (d) look for prominent empty spaces / starless patches
- (e) any clumps/chains of stars?

Galaxies

- (a) galactic nucleus shape/brightness?
- (b) are there stars very near by, or within the galaxy?
- (c) are there darker areas within galaxy?
- (d) any areas of uneven brightness?

Planetary Nebulae

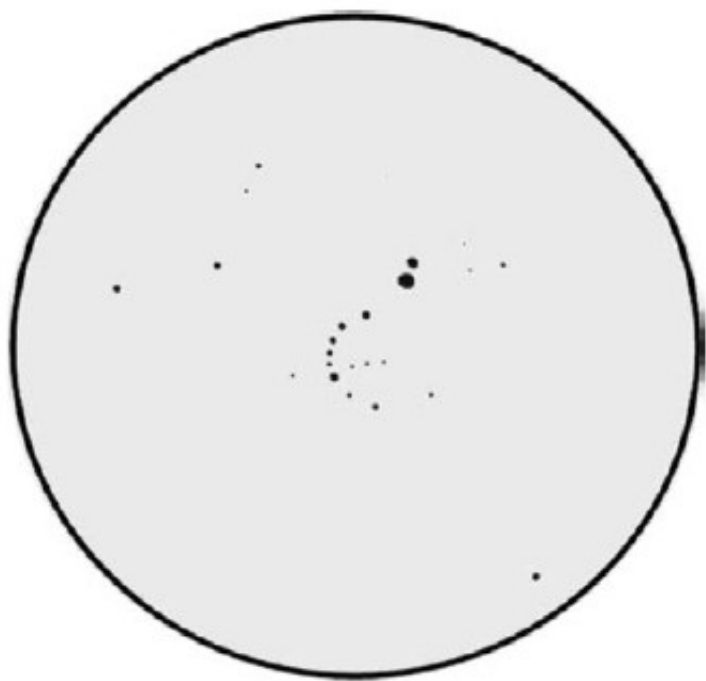
- (a) is a disk seen?
- (b) edge sharply defined?
- (c) colour of the nebula?
- (d) central star visible?

Bright Nebulae

- (a) are there areas of uneven brightness?
- (b) dark lanes/patches?
- (c) any other structure

Dark Nebulae

- (a) how well does the nebula stand out
- (b) is it isolated, or part of larger complex?
- (c) how dark is it?
- (d) are the edges sharp or diffuse?
- (e) stars superimposed on the nebula?



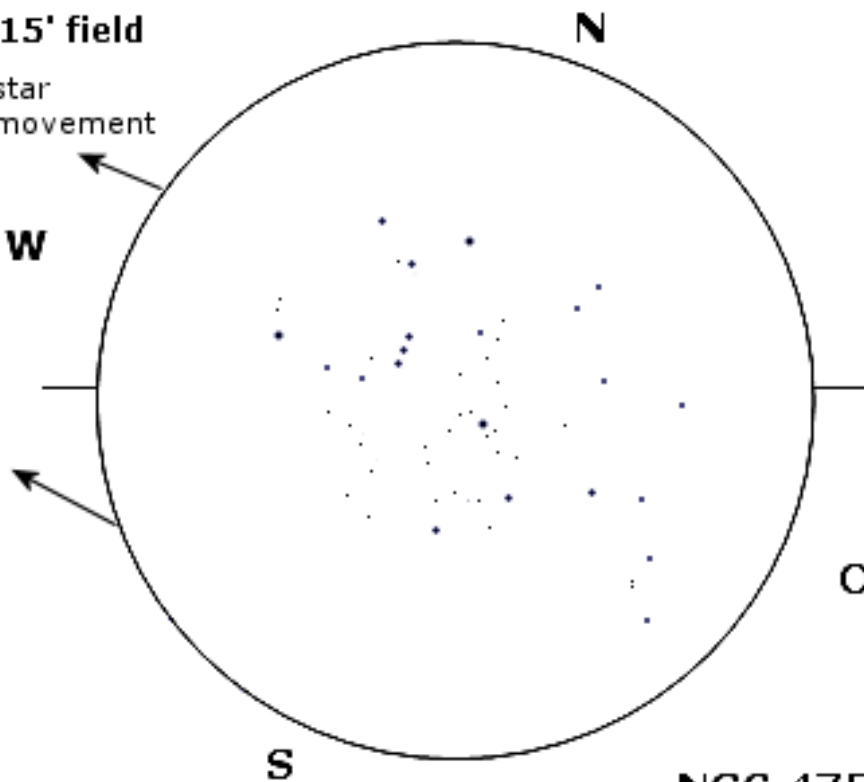
The Open Cluster NGC 4349 sketched by Magda using her 12-inch telescope at 95 power. North is up and west to the right.

15' field

star
movement

W

N



O

S

NGC 4755



Pretoria Centre of the Astronomical Society of Southern Africa

Observer: _____ Date: _____

Site: _____ Time: _____

Map / Book / Software used: _____

Approx. Deg's above horizon example - 25°
Direction example - W

OR

RA example - 17h 52m
DEC example, -2° 56.64

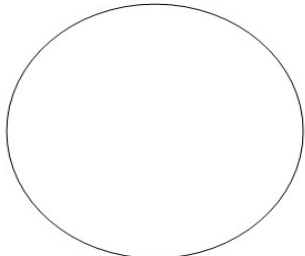
Telescope Size: _____
Eyepiece: _____
Mag: _____
FOV: _____

Sky Conditions: _____

OBJECT: _____

Notes: - magnitude, shape, size, colour, etc

Drawing (optional)



Verified by: _____

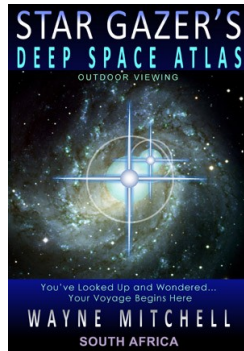
CD for freeware and demos in Library – or download directly off internet

Cartes du Ciel
Stellarium
Starry Night

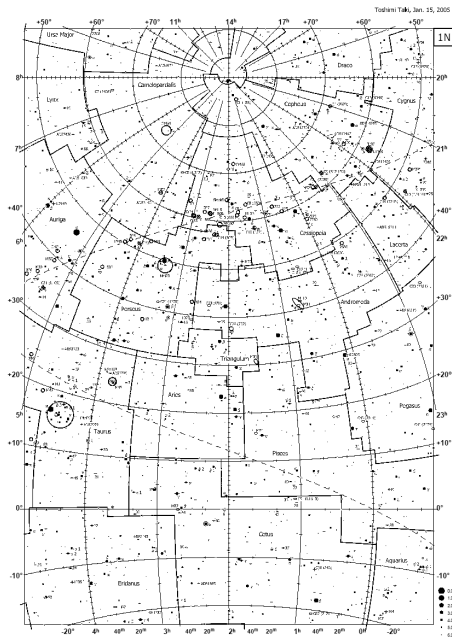
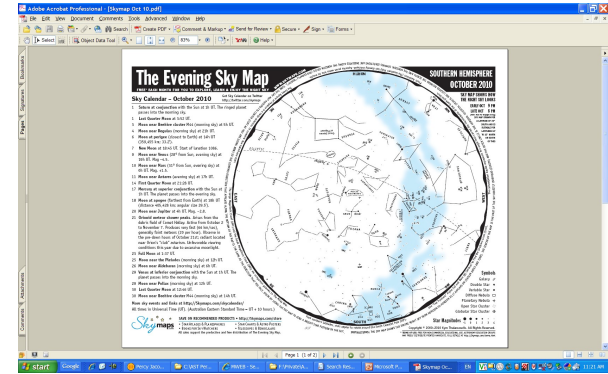
Monthly Star Maps for Southern Hemisphere

skymaps.com – download latest map

Star Gazer's Deep Space Atlas by Wayne Mitchell



Toshimi Taki – Star Maps – free downloads available



Submitting Observations, Verifying Submitted Observations, Logging Observations

Submit observations to

- Percy Jacobs

Verifying Submitted Observations

- by Percy Jacobs

Logging Observations

- by Percy Jacobs

(scanned electronic filing system per person + hard copy)

Rewards / Recognition

Pretoria ASSA Certificate

+

**a mystery prize for top
observer**