



# 2026 OzSky "CLASSIC" STAR SAFARI

## HORROR OBJECTS

**AND HOW TO OBSERVE THEM**

*OBSERVING THE FAINT STUFF OF THE SOUTHERN HEMISPHERE*

**ANDREW MURRELL**

**www.OzSky.org**



# WHY SHOULD YOU BOTHER?

Observing the difficult objects in the sky has always been a rewarding experience

You can honestly say you're one of only a handful to "see" the photons from the distant object

It helps develop your observing skills

It can create good friendships with people in other states and countries





## WHAT DO YOU NEED?

The first thing you need is a good dark sky. It also helps with some objects to have good seeing

There are challenges with all sizes of scopes - always try and push your scope beyond its theoretical limits

Good charts and atlases

**DIM RED** light - and I do mean DIM...





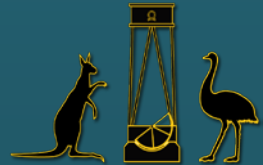
# HOW TO START

Depending on the size of the scope try and select objects that will challenge it

Start with NGC & IC, then move onto more obscure objects

You may find you like a particular style of object (Globulars, Planetaries). If this happens, stay with it

Plan, plan, plan... Don't go to the scope without a list of objects in R.A. order – it helps keep you on track





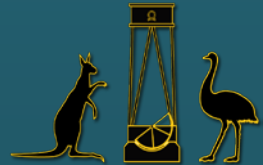
## SOME GOOD TIPS FOR OBSERVING 1

Dark adaption takes time and can be spoilt easily – even with red light!

It takes about 30 minutes to be fully adapted

The dimmer the light, the better. A bright red light will still ruin your adaption

Once at the eyepiece you can use a hood to remove the background light – this will help with contrast





## SOME GOOD TIPS FOR OBSERVING 2

Really look! It sounds strange to say but too many people spend only a few seconds before they say they can't see an object

Be patient – it may take a while to really locate the object's exact location using the field stars on your chart

Don't try only once – if at first you don't succeed, try and try again



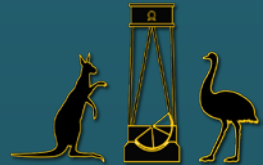


## SOME GOOD TIPS FOR OBSERVING 3

Once you know you have the field where the object should be and you are still having difficulty, try rocking the scope. A small amount of movement is all you need

Try a higher magnification as this may increase the contrast and assist you in seeing the object

Don't try only once – if at first you don't succeed, try and try again

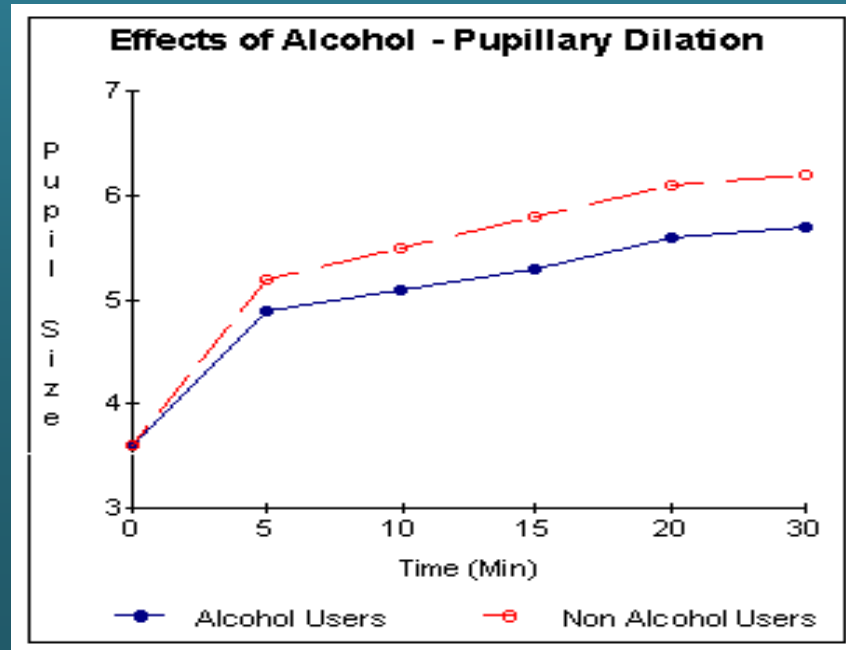




# SOME GOOD TIPS FOR OBSERVING 4

Some things to avoid before wanting to observe some challenging objects

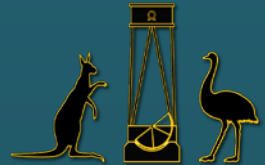
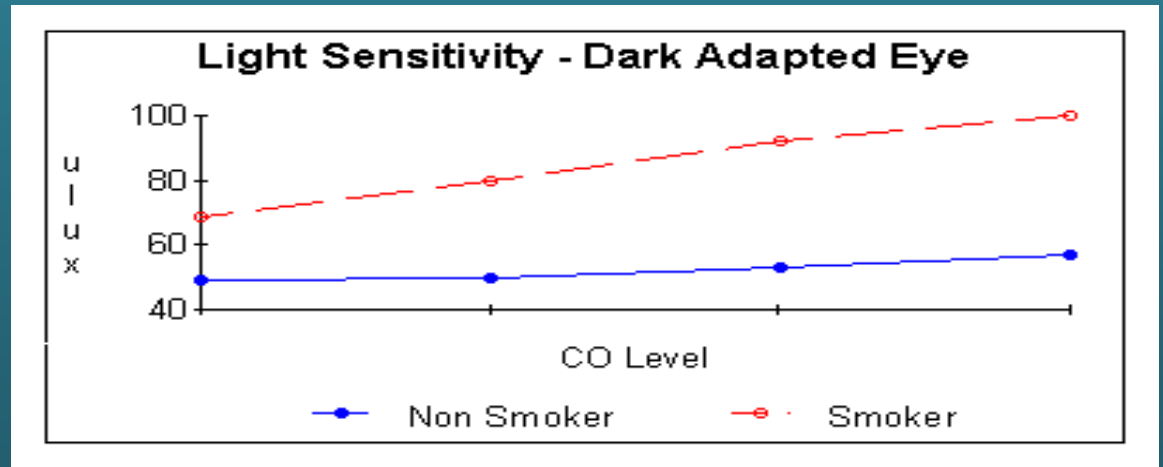
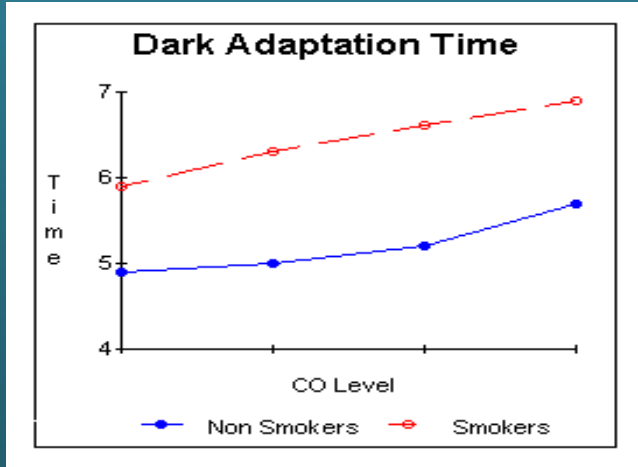
Alcohol: it restricts the eye's ability to open the iris fully





# SOME GOOD TIPS FOR OBSERVING 5

Smoking: It restricts the oxygen flow in the blood and reduces the retina's ability to "see"



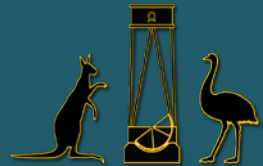


# THE HORRORS

I have chosen only a few objects for this talk

If I included too many objects you would run away screaming!!

These objects are all designed to see at OzSky in the 25" scopes out on the field





# AM1

## One of the Ultimate Globular Challenges

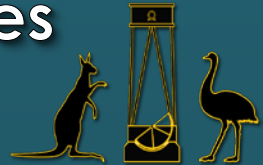
AM1 is in Horologium and is one of the most distant Globular Clusters in the Milky Way system.

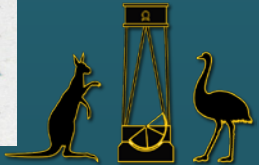
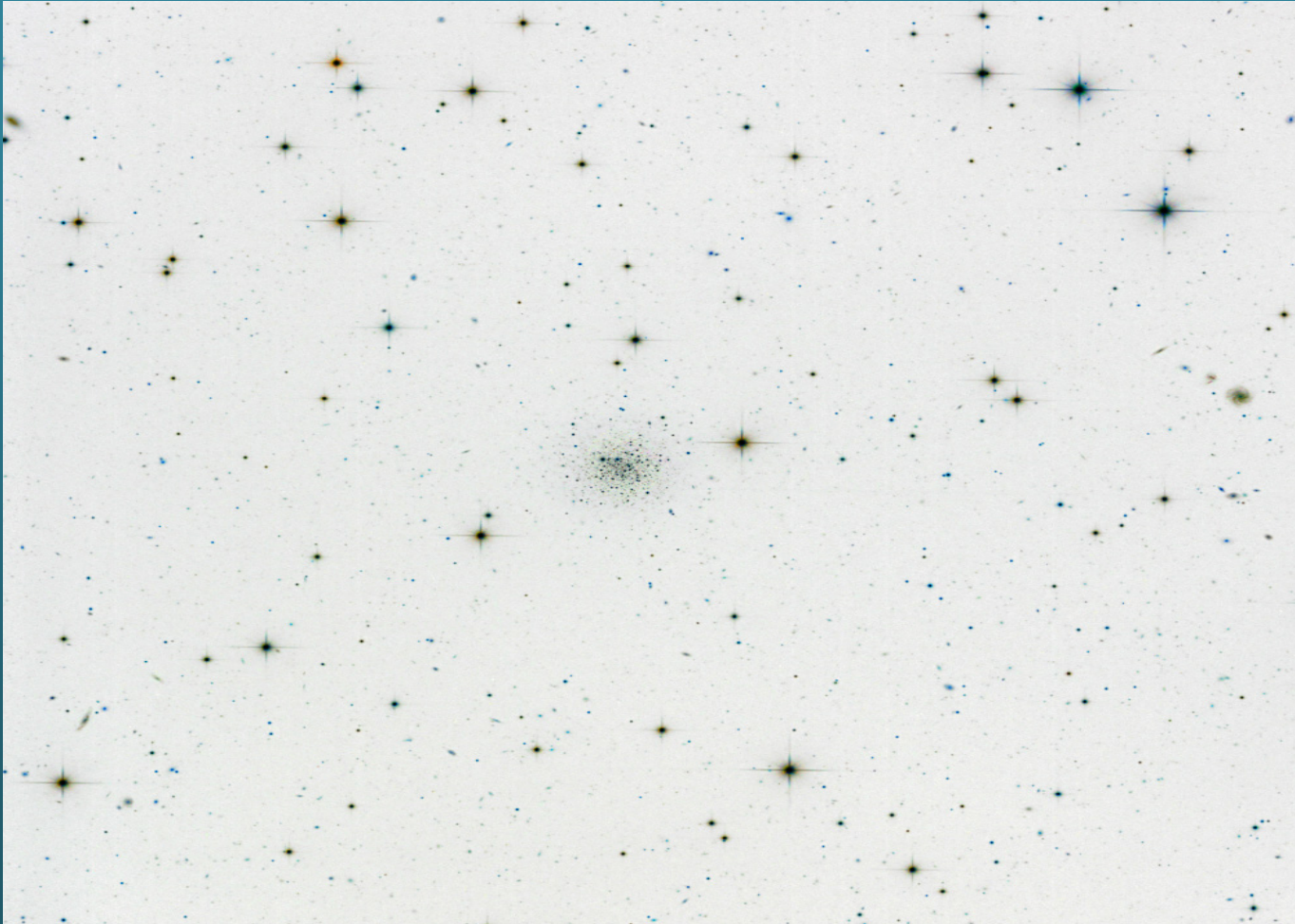
RA: 03<sup>h</sup> 55<sup>m</sup> 02.7<sup>s</sup>

Dec: -49<sup>o</sup> 36' 52.0"

I have seen this in Hector (my 20" *f*/5 scope)

Very faint and a challenge due to the field stars - they show you where to look but the brightness interferes







# ESO 34-IG 11

ESO34-IG11 is an Interacting Ring Galaxy

The galaxy is quite bright and can be seen in a 12" scope

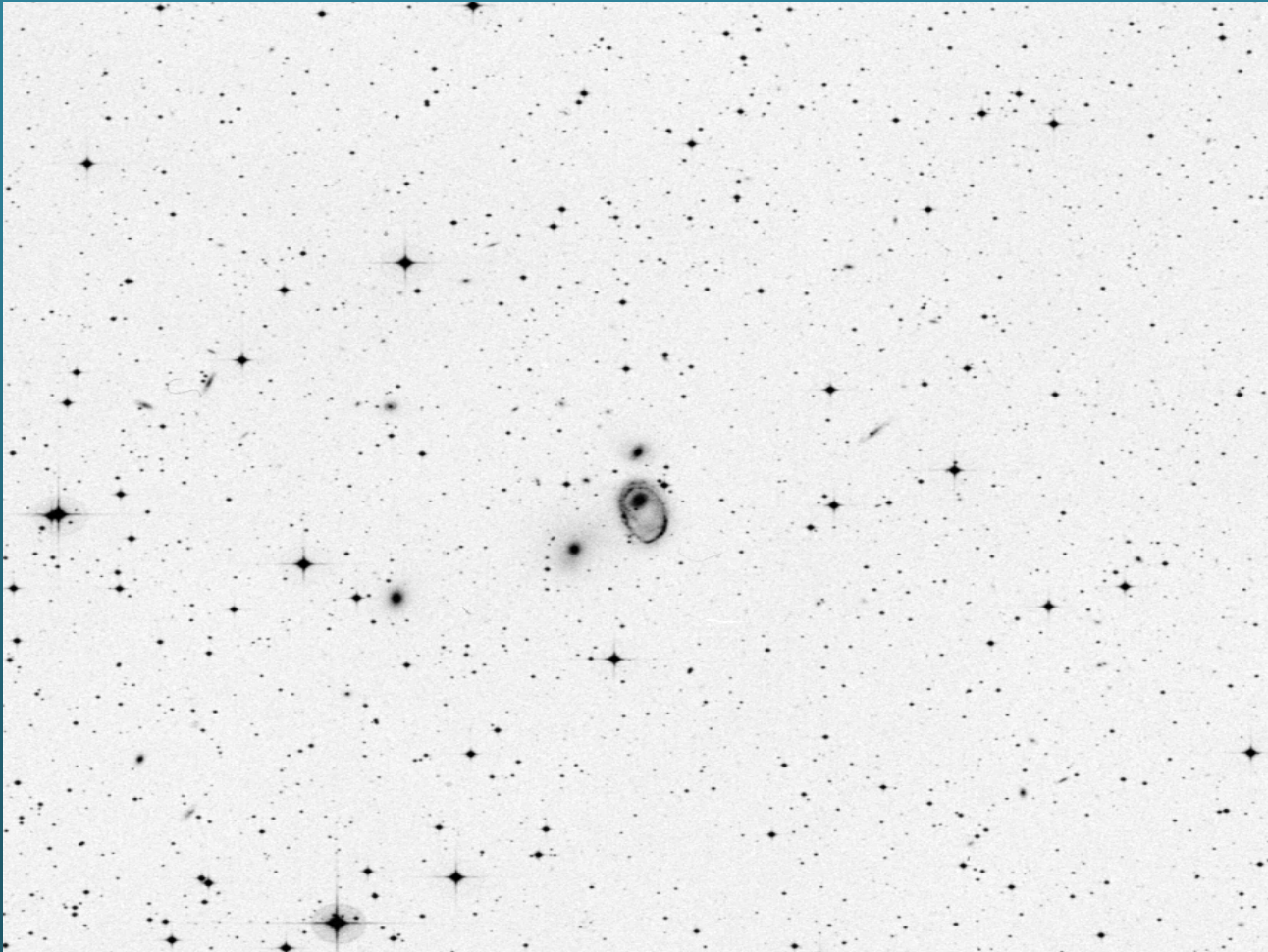
RA: 06<sup>h</sup> 43<sup>m</sup> 06.10<sup>s</sup>

Dec: -74° 13' 35.0"

The challenge is seeing The Ring and the companion galaxies

Seen in Hector (my 20"  $f/5$ ), I noted 3 galaxies with a hint of the ring when using averted vision







## ESO 270-IG17

The Fourcade-Figueroa Shred - This is the remnant of the galaxy colliding with NGC 5128 (Centaurus A)

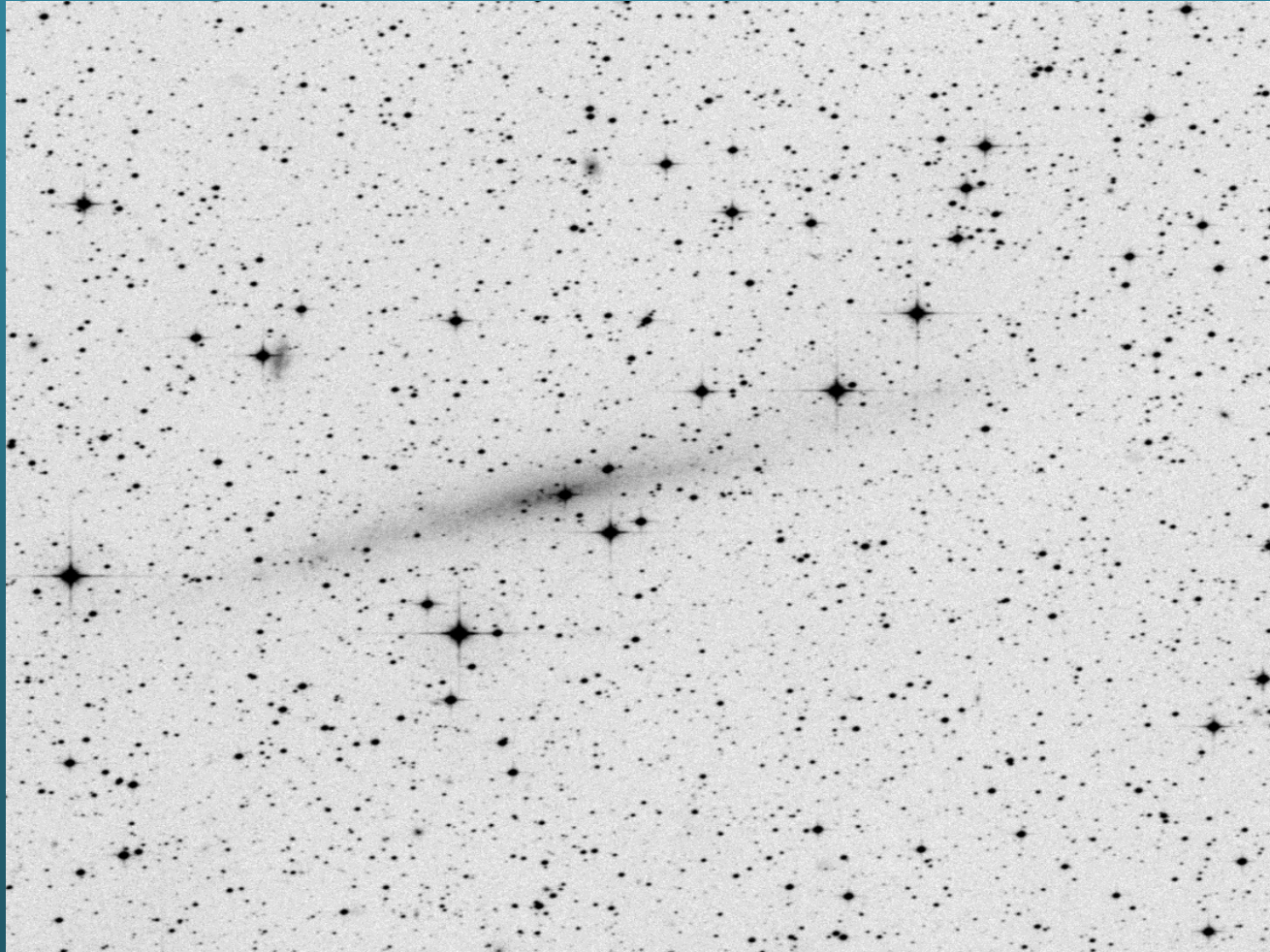
Technically it's not a galaxy as it is just the remaining shred of material left over from the collision

Very faint and a good challenge due to the Bright field star that lies within the shred

RA: 13<sup>h</sup> 34<sup>m</sup> 47.30<sup>s</sup>

Dec: -45° 32' 51.0"







## GLOBULARS IN CENTAURUS A

This is a double challenge due to the faintness of the cluster and the extreme difficulty in star-hopping

Once found you will be looking at a Globular Cluster about 12 MLY distant

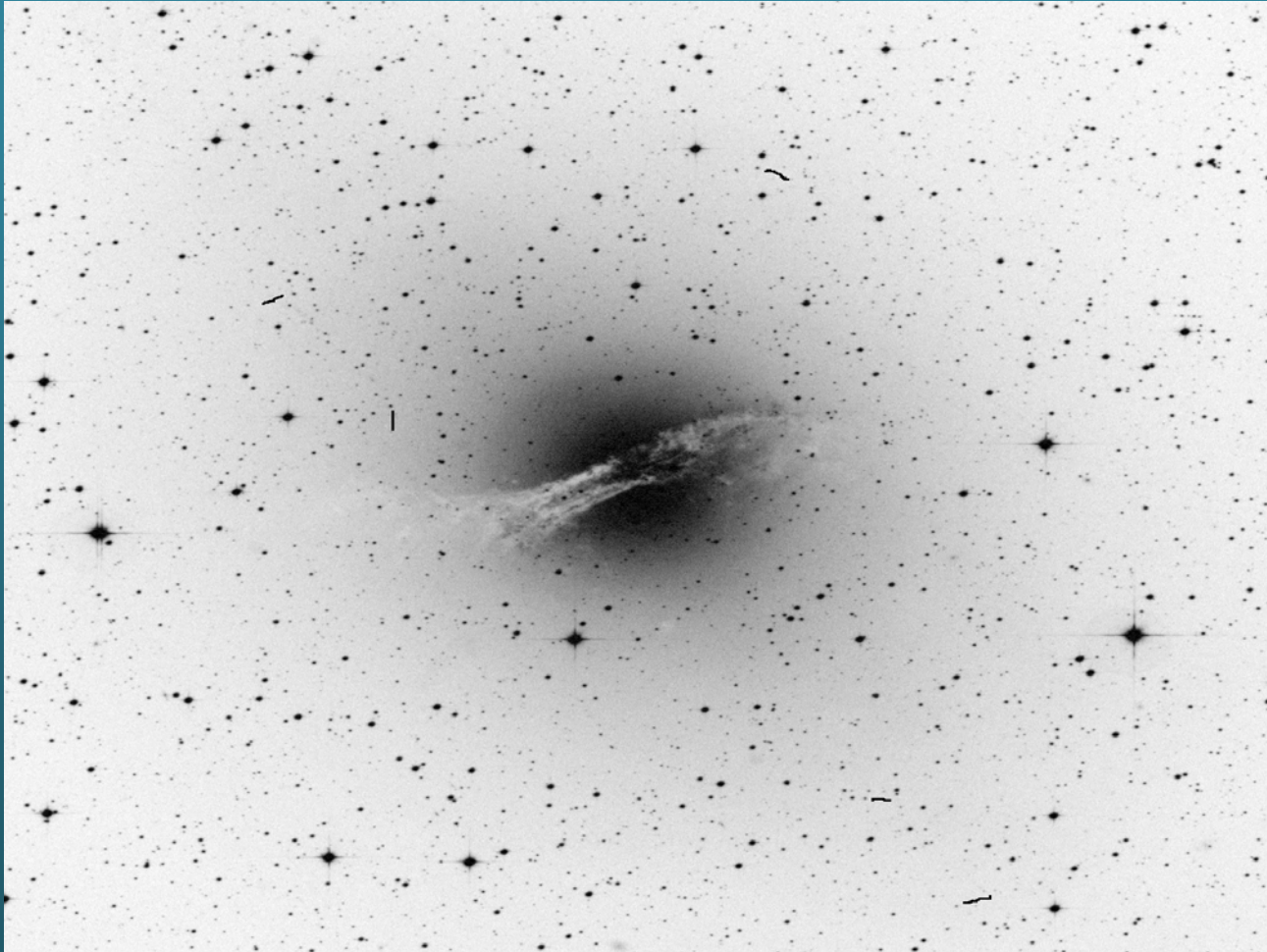
The clusters will appear stellar

I have seen 3 of the clusters in the Galaxy so far.

The easiest is marked in the chart which I have available



# GLOBULARS IN CENTAURUS A





# MURRELL 1

Discovered in 2004, this is one of only a few deep sky objects discovered by Amateur Astronomers

This faint ring planetary has a low surface brightness and is quite large

It was discovered on the DSS plates

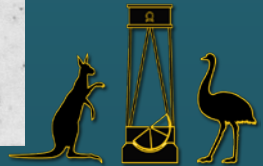
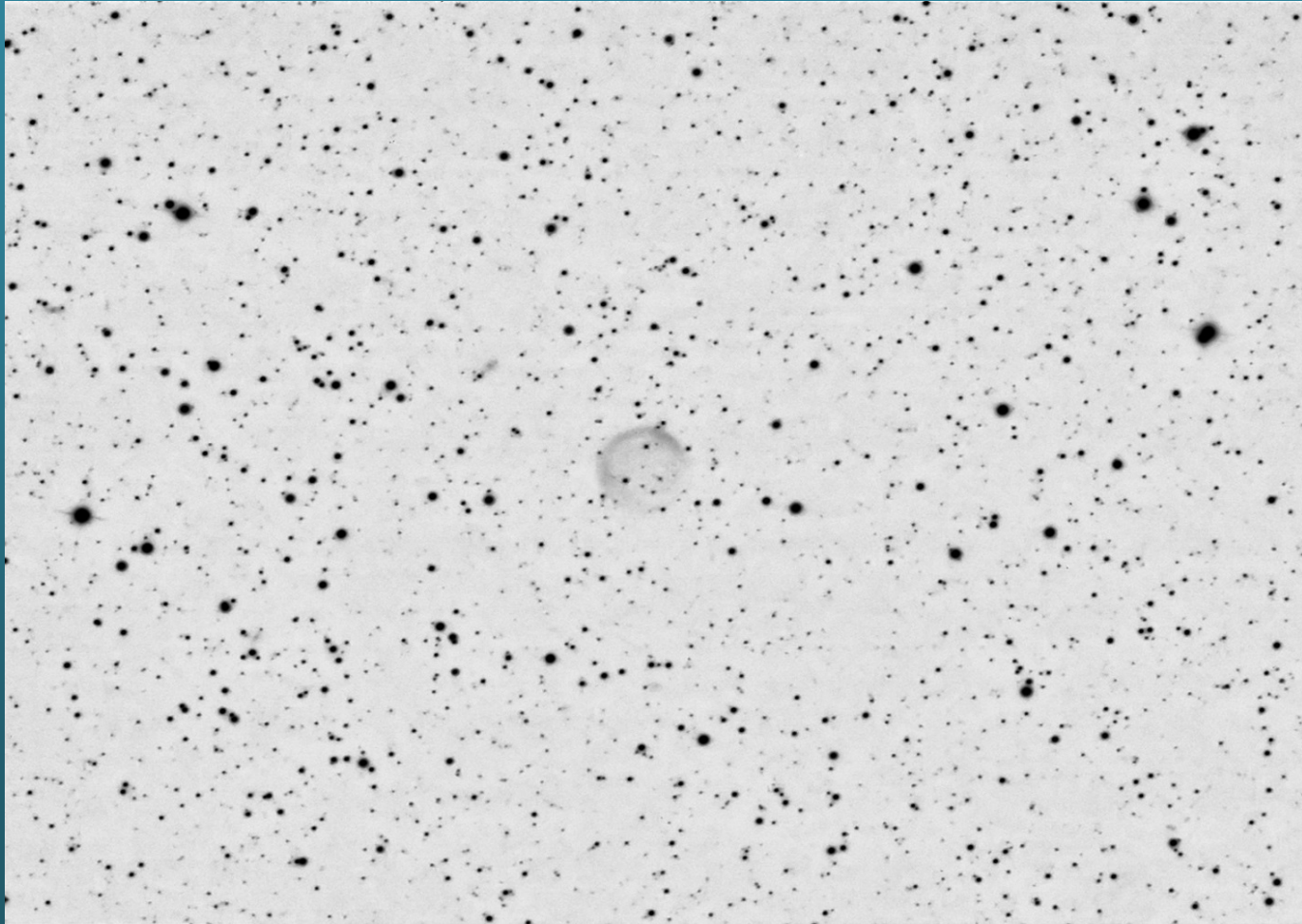
RA: 15<sup>h</sup> 06<sup>m</sup> 17.13<sup>s</sup>

Dec: 41° 45' 18.4"

I have seen this in my 20" *f*/5 scope and I has been reported in smaller apertures



# MURRELL 1





## NGC 6164-6165

This is an interesting object to observe normally. It's an ejection shell around a star

Often mistaken as a WR bubble. It is actually an ejection shell around a pre main sequence star

The twin lobe nebula is quite easy to catch in a 10" scope. The challenge here is to see the previous ejection shell

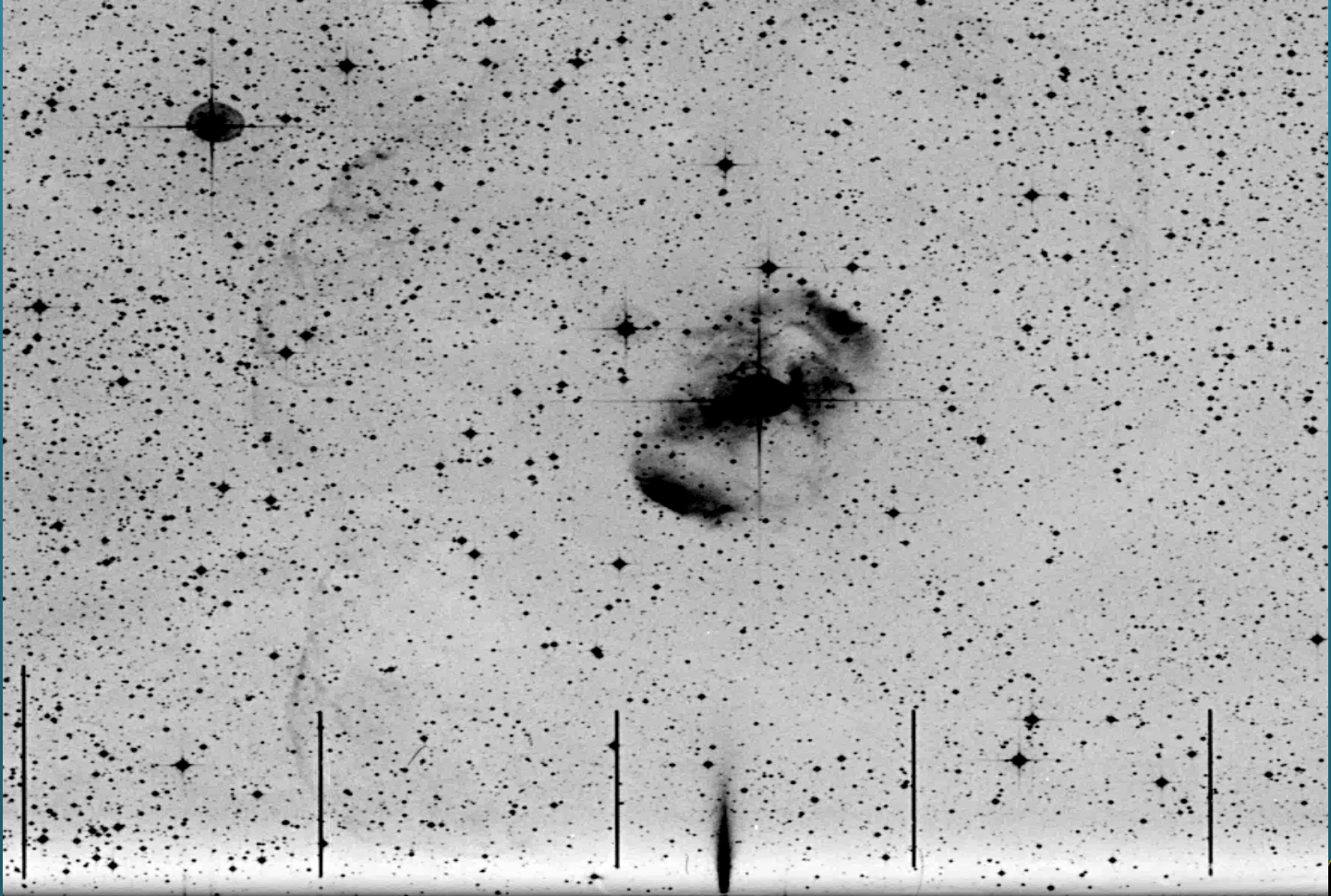
You can see several sections of faint nebula surrounding the star

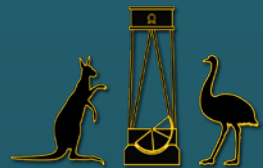
The interesting one is the spiral section which I have seen in a 20"

Best viewed with the assistance of a UHC filter



# NGC 6164-6165







## ESO 138-IG29

This is a faint interacting pair of Galaxies, one of which is a ring

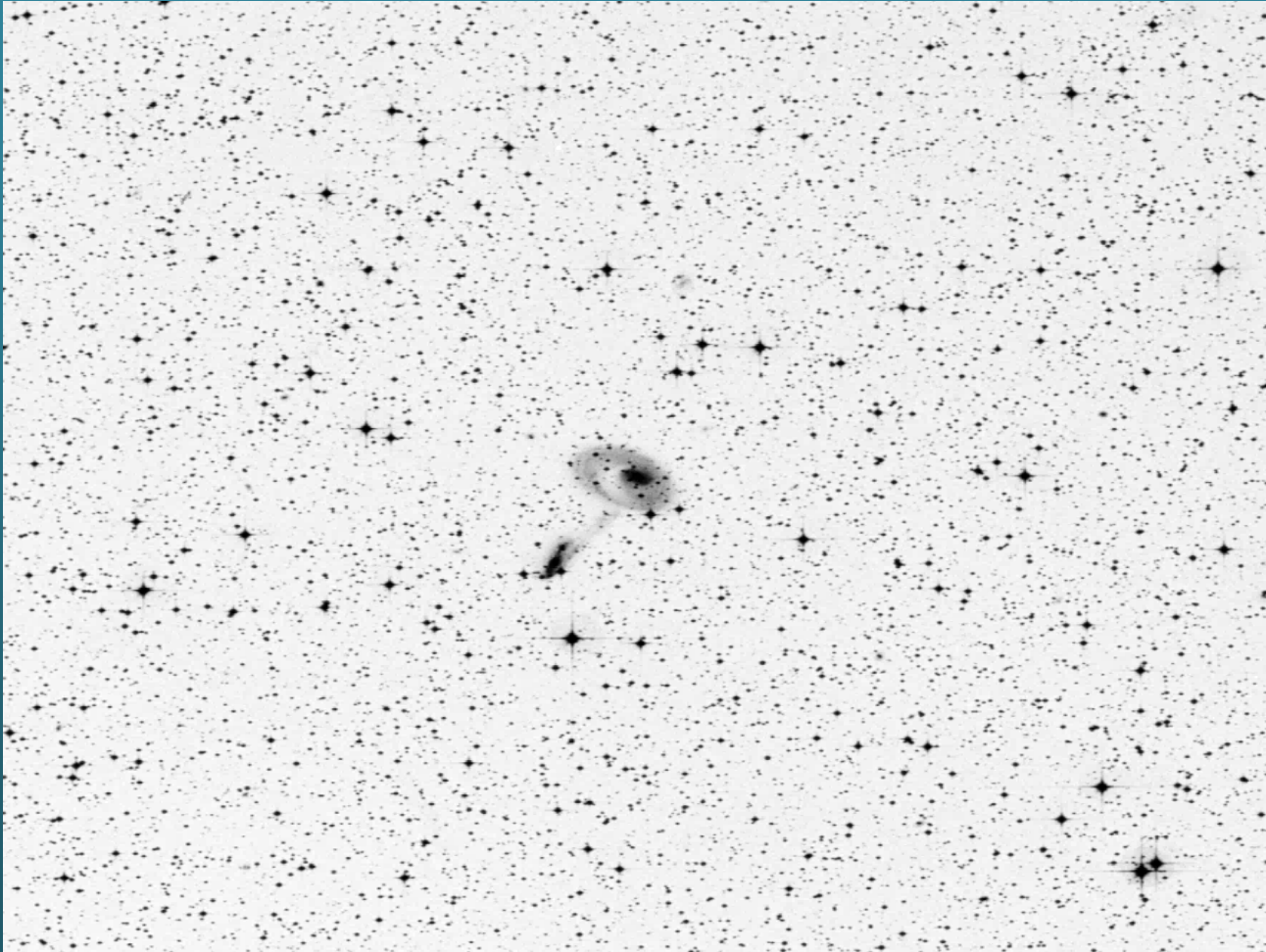
The main component is quite easy in a large scope

The interactor is more of a challenge

The real trouble comes when you try to observe the bridge running between the galaxies

I have seen the galaxies (but not the bridge) in a 20"







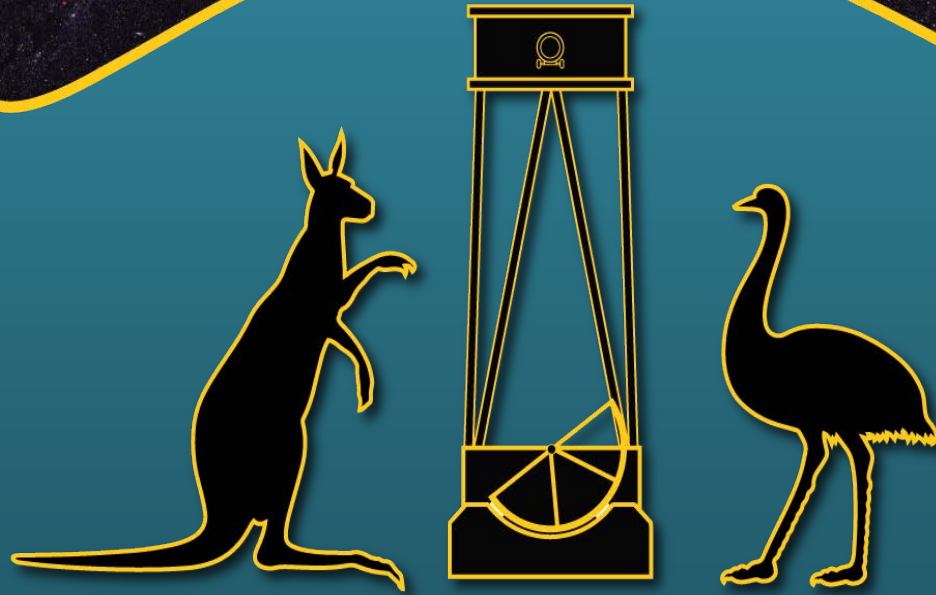
# THAT'S NOT ALL

The fun is in the discovery with challenge objects

Look thru the scientific journals for interesting targets

Above all else, have fun





[www.OZSKY.ORG](http://www.OZSKY.ORG)