Hurrah! First day in Florida ahead of the Winter Star Party. I left England's grey, storm ridden skies and unprecedented floods to arrive in Miami under warm, clear skies,

Unwilling to drive from Miami to the keys having only just landed, I crashed out at the airport hotel with jet lag. After sleeping like the dead, I woke at 0400 (local) thoroughly refreshed and was outside at 0500 with my binos and the 4" f5. A beautiful crescent moon, Saturn, Venus and Mars were the targets – it was far too light polluted to see anything else. It was simply lovely to be outside observing in t-shirt and shorts. I was also joined by some of the hotel staff on their way into work.

- Venus clear crescent phase
- Saturn and Titan
- Mars dark bands, Syrtis Major and Hellas
- Moon Copernicus, Mare Imbrium, Moretus, Kies & Bulliadus, Gassendi



Early Morning Observations Miami Airport Hotel

After a quick breakfast, I was in the hire car and driving south with a huge grin on my face. The sun was warm on my pale European skin and ahead of me was a whole week of holiday in the tropics. A quick stop for groceries and I arrived at Scout Key. After registering and sorting myself out, I got ready for my first night at the star party.



Driving South under Blue Skies



Home for the week. Shaded but not under a coconut tree



Vendor Area – a proper shopping mall

As the stars came out, I realised everything's in the wrong place! Orion is high in the sky while the Plough is only just above the tree line. Polaris is hard to find at it skirts the tree tops!

- M42 always a pleasure
- M41 OC CMa
- M46 and M47 no planetary nebula seen in the 4"
- NGC 2451 OC Puppis
- Shadow transit of Europa on Jupiter
- NGC 2477 OC Puppis 100mm f5 19P x26 Quite rich and dense, adjacent to a bright star.



Sagittarius and the moon rise over the sea



Orion through the palm trees – sent to friends back in the UK

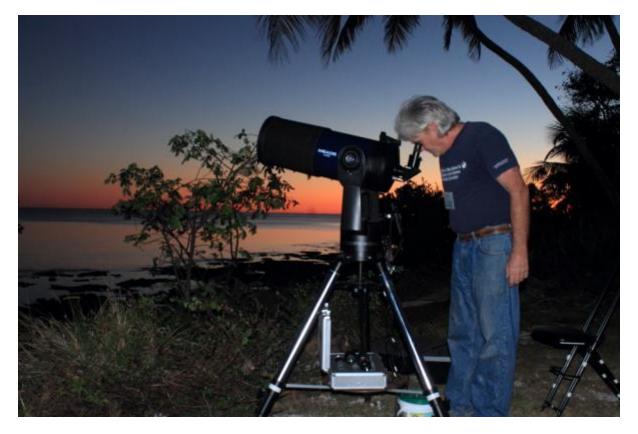
- M42 through an 18" dob with UHC 6 stars in Trapezium, nebula appeared like cotton wool, almost three dimensional
- M82 through 10" ATM Newtonian, supernova still visible
- M46 OC Puppis and NGC 2438, superimposed planetary nebula through 8" LX200

On into Vela:

- NGC 2547 Coarse group of 25 or so stars
- IC2391 and NGC 2669 IC is a bright group of 10 scattered stars. The NGC cluster is 10 fainter stars over a smaller area. Hard to see where one cluster begins and ends.
- NGC 3201 GC Easy star hop to small round but faint globular cluster. Not much granularity or resolution, uniform in brightness.
- NGC 6231 and Collinder 316 OC Sco 100mm f5 24 hyperion x20 simply stunning. Zeta Sco forms bright, tight group of stars with NGC cluster and then coarser scatting of Cr cluster. Quite clear where it gets its nickname of the False Comet. A real highlight!

Then through neighbouring Jim Bennett's LX90

- Saturn and satellites
- Aristarchus and Schroter's Valley on the Moon

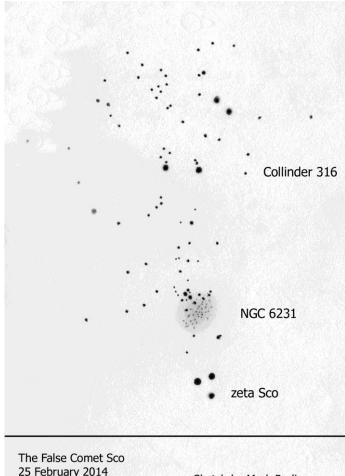


Jim Bennett – my neighbour for the week with his LX90

Caught Andromeda Galaxy in binos before it set, then with 100mm f5 19 panoptic x26

- NGC 1528 Per OC nice dense cluster, quite pretty •
- NGC 1545 Per OC not sure where cluster and field stars separate. Non-descript really. •
- NGC 1513 Per OC another pretty and dense OC this time against rich star field. •
- M65, M66 G Leo •
- NGC 2903 G Leo •
- U Cam, carbon star Rather disappointing pale orange star •
- Kemble's cascade and NGC 1502 Cameleopardalis •
- M42 and M43 N Orion •
- M79 GC Lepus •
- Jupiter •

Sketched NGC 2477 OC Puppis with 100mm f5 X20



25 February 2014 100mm f5 refractor x21 Winter Star Party

Sketch by Mark Radice

The False Comet, A Wonderful Sight

Sat on a deck chair with the 15x50 binos scanning from Canis Minor to horizon via Puppis, Carina, Vela. Soooo many stars and clusters of note:

- M93
- M46 & M47
- NGC 2477 and 2451
- NGC 2546
- NGC 2547
- IC 2391

After the bino break I walked the field and the berm to:

- 16": Jupiter, M46 and NGC 2438 always a classic,
- 22": eta carina with outer nebulosity and homunculus. Wow, puts the Orion nebula to shame. Hurried back to my own scope to make sketch which didn't quite have the same wow factor as the 22"!
- While star hopping to Eta Car, stumbled across stunning open cluster NGC 3532, fantastic rich open cluster, another real highlight. Fantastic to get Eta Car and NGC 3532 in same field of view in binos.
- NGC 3247 OC Smaller and dense open cluster but not a patch on nearby NGC 3532
- Caught Ceres and Vesta although I never compared it on following nights to see if they had moved

Caught Moon and Venus at dawn.





• Jupiter and 3 moons, rift in SEB very noticeable in nearby 5"

#### Using 100mm f5

- M46 and M47 19P simply fantastic view of two very different open clusters. M47 coarser and brighter, whereas M46 is much fainter but denser
- NGC 2301 OC Mon Somewhat unusual to find that this cluster takes on the appearance of a straight line of ~ 30 stars although this could be chance alignment with background stars with haze orientated north south
- NGC 2244 OC Mon Rosette Nebula's 3x2 open cluster, somewhat hazy so no sign of the Rosette itself
- NGC 2264 OC Mon Christmas Tree cluster, always a classic
- NGC 2362 OC CMa
  Stunning open cluster, dominated by bright orange Tau CMa
- NGC 3242 PN Hyd Easy star hop through Crater to Hydra. PN is a small disc that takes magnification well.

Walked up to berm as now quite windy and I needed a leg stretch

Jupiter through 12" f8 with binoviewer and 3 moons. Simply stunning in this optimised, high contrast telescope. Jupiter appeared like a globe rather than a disc. Features of note (from daytime visit to this wonderful instrument):

- Well baffled down tube
- Flocked with velvet
- Minimal spider and secondary
- Baffled across rear end
- Primary fan to keep mirror at ambient T



Planetary Newtonian – stunning views

Through monster 30" – quite a challenge going up and down the huge ladder in the dark

- M82 and supernova
- M51 not as good as I hoped as haze was not helping

Finished with a brownie, called Lucy to wish her a happy birthday and bed

## 27 February

Cloudy so a welcome chance to catch up with some sleep. Did photograph a vulture that flew overhead during the day.

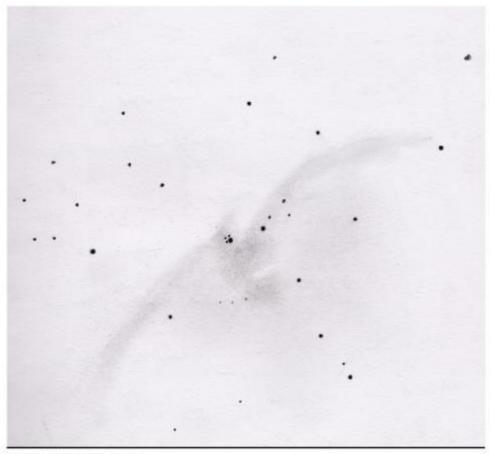


### 28 February

Jupiter, 4 moons visible, 1 immediately adjacent to the limb and dark shadow on belt, GRS approaching meridian through 5" refractor

100mm f5:

- NGC 2477 OC Puppis Becoming a firm favourite. Rich OC with a bright orange carbon star. Skies clouded over so burger, brownie and walk to berm. As skies cleared I walked back to the scope.
- M68 GC Cor Easy find
- No sign of Antenna Galaxies clearly not in 4" category
- IC 2488 OC Cor Indistinct cluster hard to make out from background milky way. Takes on a V-shape like Hyades.
- Saturn LX90 Glorious sight with many moons
- Mars LX90 Hard to make out surface details



M42 The Orion Nebula 28 February 2014 100mm f5 refractor x63 Winter Star Party

Sketch by Mark Radice

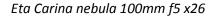
Sketch of Orion nebula

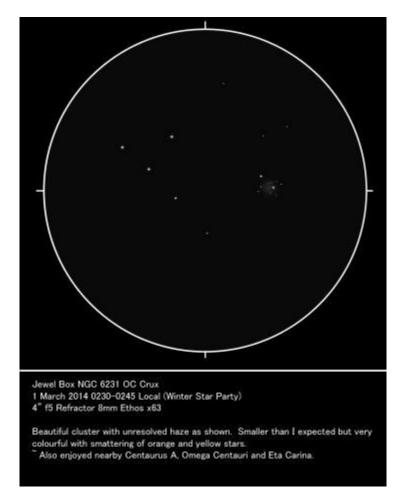
- NGC 4038/9 G Cor Stepping up to the LX90 and 8mm Ethos makes the Antenna Galaxies an easy find. L shaped pair, touching at the joint.
- Eta Carina Neb Car Simply stunning, what must it be like near the zenith?
- NGC 4755 OC Crux Jewel Box! Beautiful, dense and colourful cluster with several orange and yellow stars. Smaller than I expected but a classic see sketch.
- NGC 5128 G Cent Centaurus A! Very pacman like but fainter than I expected.
- NGC 5139 GC Cent Omega Centauri! Wow, a monster. Massive globular and, using the LX90 and 8mm Ethos, the footprint is clearly visible.



Eta Carina Nebula 28 February 1920 - 2015 4" f5 refractor x26 with UHC Winter Star Party

Sketch by Mark Radice





Jewel Box – a colourful open cluster

Joined some other observers and was allowed to use a 22" driven dob:

- M83, M101, M51, M101, M99 All gloriously detailed galaxies showing spiral arms and star clouds
- M3, M10, M12, M13, M4 Globulars of all shapes and sizes
- M57 PN Lyra Annulus was very bright, yellow tint and outer tendrils.

Went up to berm to photograph Venus and the Milky Way. Met with Kim Coulter and enjoyed his 30x80 Kowa binos in SgR and Sco. Wonderful to scan up the centre of the galaxy, real highlights were M8 and NGC 6231.

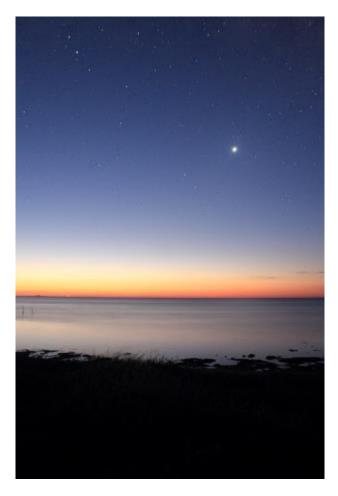
Finally caught Mercury at dawn. No details visible in 100mm f5 x 125 but small disc.



Venus and Milky Way Rising



Observing Milky Way at Dawn through 30x80 Kowa Binoculars



Mercury at dawn, small disc but no surface details in my scope

## 1 March 2014

#### M42 through LX90

Noticed the Zodiacal Light as I walked to see another group of nearby observers. Vertical glow, similar to milky way, from Hyades through Aries to horizon. I can't remember why I didn't photograph it, maybe because the camera screen would have affected nearby observers.



#### Quick Sketch of Zodiacal Light

Then with 100mm f5 13 Hyperion x38

- NGC 2362 OC CMa Tau CMa cluster •
- M41 OC CMa •
- M93 OC Pup Lovely cluster set against rich portion of the Milky Way •
  - NGC2467 N Pup •
  - NGC 2482 OC Pup • way
  - NGC 2483 OC Pup • brighter stars.
- Fairly loose cluster of ~40 stars hard to make out from milky

Small puff of cloud with bright star superimposed

- Same as above really! Appears to be cupped by arc of 3
  - OC Pup Hard to differentiate from background milky way
  - NGC 2489 OC Pup Faint but dense cluster adjacent to arc of 3 brighter stars. Quite pretty as its well separated from the milky way. Needs time on target to make out in
  - all its glory.

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- NGC 2533 OC Pup Believe it to be tiny OC in 13H. With 8 Ethos appears as small dense grouping of stars.
- NGC 2527 OC Pup Loose group of 20 stars hard to distinguish from milky way.
- M46 and M47 OC Pup Always a classic observation

Cloud came in at 0100 so after walk and talk on the berm I called it a night. I woke again at 0500 to find it was clear so was outside at 0515.

100mm f5 19 panoptic x26

- M6 and M7 OC Sag
- Omega Centauri with 8mm ethos x63
- NGC 6231 and Cr 316 my new favourite object, find of the star party
- Also noticed nearby NGC 6268, OC Sag