

## My Thoughts About My Australian Astronomy Adventure

What an incredible adventure. I am on the train now, from Dubbo to Sydney Central Station.

I observed all cloudless, moonless darkness. Both Friday nights and Thursday night were stopped early by clouds. Rest of nights were clear, with occasional clouds that went away. Wednesday night was exceptional and I observed till morning twilight was well started, Thursday morning. Other nights, quit as soon as moon cleared the trees, some 10-15 minutes after predicted moonrise.

Saw lots of incredible objects. M83 with spiral arms, Scorpio directly overhead. All my northern constellations upside down. Comet 252P was a treat I learned of from FRAC emails.

I observed and never felt tired. I got some sleep and took naps. Seemed I couldn't sleep past 10:30 AM, no matter when I went to bed.

Meals were good, but portions were smaller than I would have liked.

Talked to Barbara daily thru the WhatsApp, recommended by Melanie. It worked OK and at the Dubbo public library, it was very clear.

Made a couple of new friends. Steve Gotleib and Faith from the UK. Roger from east Texas. Vance Bagwell from Dallas. Nice to see Gary Kopff from Australia again. After learning of the extensive database the Argo Navis had, I purchased one. This will enhance my viewing enjoyment.

Lachlan was a great friend and made this trip enjoyable. He showed us that if you used a white flashlight, held it on your chin and looked down the beam at the ground, Hunter spider eyes are tiny, green, doubles in the grass at night. Friday when it clouded up, we found several. A moth's eyes lit up red.

The 18" f/4.5 I used performed marvelously. I was generally one of the first on the observing field and one of the last to leave every morning. Tuesday night thru Wednesday morning, I was all alone for the last 30 minutes before moonrise. Something big fell in the bush near me and scared me. Shivers up my spine. Talked to it to keep it away. Maybe a possum or large nocturnal rodent I saw at the zoo. Fresh kangaroo poop was on the field every morning, so it could have been a kangaroo. Someone was observing moonrise from the cabin's veranda and heard the crash and then heard me talking to the varmint to keep away. He thought it was cute.

Mike's 13m Ethos eyepiece performed nicely in the scope. We used it for almost every observation.

Eta Carina, the Homoculus were incredible. You could see both lobes easily and holes thru the closer, larger lobe. Taratula Nebula was awesome as well as the LMC and SMC, 47 Tuc. They had a motorized Bino chair with 25x150 bins. It was neat to slew it around but without a Telrad or other pointing device, I couldn't find M42. Took a quick look thru their 12" bino telescope, but the collimation was off and the

views were not as good as they could have been. Looked at faint objects in the 30" that our roommate, Alan Whitman from British Columbia, Canada, was finding. They had coffee and cookies nightly.

The other volunteers were great. Andrew Murrill sang in the dark Friday night. He had a nice, baritone voice. His video he made of the week is incredible. His talk about observing faint stuff reminded me to use dimmer red light as to not to affect my night vision. James and Alex were good to hang out with. The first Friday night, used James's 16" scope with his ServoCat engaged. The other scopes had ServoCats, but due to their ability to be easily damaged, they were not used (push scope with clutches engaged is not good).

I shared my 18" with Roger, Mike, Faith, people from the observatory. For observations, I convinced Roger and Mike to alternate observations, one of theirs then one of mine. That worked well and I saw more things than were on my lists along.

By Monday night, I had finished my southern sky Astronomical League SST, Caldwell, SPN and SSBino lists. My additional list with the NGC/IC objects, the SA list of NGC/IC objects and the LMC and SMC objects were finished Wednesday night. I decided to just look at the NGC/IC objects for speed for it was easier to dial in a NGC # than enter coordinates (like PGC galaxies) for an object thru the Scratch interface. Thursday, we plowed thru Mike's objects.

The bed was comfortable. I used a bunk and kept my clothes on top bunk like at 3RF in Texas. The ear plugs and eye shade worked great to let me sleep thru 3 guys' snoring and loud talk outside our room starting about 9 AM each morning.

Every night I'd see the LMC, SMC and 47 Tuc and realized how fortunate it is that I was in Australia, seeing these objects myself. They want me to come back in the Fall of 2017. Greg is returning then. I'll see.

Traveling with Greg is nice. His United Premier status that is extended to once guest (me) is awesome. Pre-board plane, United lounge access, extra leg room, free bags is nice. All for free for me. No fighting for overhead space for my carryon bag.

I was so worried about not being able to use a scope all night before we arrived. That never happened. Wednesday night thru Thursday morning sunrise, Mike and I had the 18" uncontested.

The train ride is nice. I was able to identify the objects in my sketches using my SkySafari app during ride back to Sydney. I took 66 pages of notes, recording 44 object 4/1, 74 4/2, 86 4/3, 157 4/4, 170 4/5, 181 4/6, 53 4/7 and 15 4/8 each night for a total of 780 objects observed. Lots of duplicate observations but this was INCREDIBLE!!! What a lot of fun. I observed a total of 53 ¼ hours of total observing. This is the time when I recorded my first observation of the night and the last observation time. It includes the time I waited for clouds to pass or the sky to stabilize. Way cool. Thanks to Roger, Faith and Mike additional lists of objects.

Just saw several wild kangaroos jumping away from the tracks when the train stirred them up. They were neat. One jumped a fence along the tracks and tripped on the top wire. Didn't slow it down much though.

I did take a good look at every object, cupping my hands around my eye to block stray light. I feel I teased every bit of detail out of the object and felt good about every object I saw. Faith showed me what a bar in the core of a galaxy looks like and now I can record these. She appears to be a good observer, often finding the galaxy I could not. Her preparation and typing of notes afterwards is just like what I do, so I am not that weird.

6:05 PM. Looking out the train window to the west, a very thin crescent Moon about 10 degrees above the trees is shining down on the end of my Australian observing adventure.

The first Friday night, it was getting dark. We were finishing dinner. I left the group from under the lighted shelter, grabbed my binoculars and proceeded to sit in a chair and look thru the LMC, SMC and all the knots in the southern Milky Way. My first views of the LMC and SMC with just my eyes were breathtaking. The LMC was bright and the SMC was much dimmer, yet easy to see and obvious.

All week, I think the adrenaline of being at OzSky kept me from being tired. Never felt I wanted to pack it in early. Maybe the day time at home and it being 16 hrs. later in Australia and being their night at the same time helped a bit. I slept Denver normal night time on the flight over and tried not to adjust to Sydney days while there for 2 days prior to heading to Coonabarabran. Going west, jet lag didn't bother me. Faith went east thru Singapore from the UK and jet lag affected her a lot.

I put on the long sleeve black shirt, OzSky tee shirt nightly. Often it was too much in the early evening. When it cooled off, I would add my Yellowstone jacket, stocking cap and a couple of nights, my fingerless gloves to keep warm. That was enough. It never got colder than that. The locals were all bundled up in meat worker freezer suits, which is a puffy coverall type of item. The nights at the end of the week were warmer than the nights early on and I needed to take off the tee shirt in the early evening. Early in the morning, only twice did I need the gloves when my hands were cold. Stocking cap was also not needed until well into each evening.

In the afternoons, bottles of good wine were brought out for people to share. I didn't have any for I felt if I had, it might bring on fatigue. Although I wanted to, I didn't go to the Australian telescope tour Wednesday afternoon and choose to nap instead. Wednesday night into Thursday morning I was rewarded with an incredible night of seeing so I am glad I didn't do that. Mike Roos was wanting to turn in early, but I convinced him to stay up with me and by the time his head hit his pillow, he fell asleep in just a few seconds (I could tell by his breathing he were asleep).

The volunteers stayed up with us. I know they were hoping for an early to bed time, but Alan Whitman and a couple of others over by the 30" and 25" scopes stayed observing till I decided to quit. Alan napped early evenings and came out about midnight. He liked to talk. He and Mike talked together often. Most of the time you couldn't get a word in edgewise.

Wildlife rescue park tour on Friday was nice. A 70 minute drive 1 way. Petting Koala bears was awesome. Their fur is short and thick.

Made 3 trips into Coona during the week. Sandwiches I had for lunch there had beets on them. I liked that. Bought groceries at a local Woolworth's that gave me fruit, yogurts, lunch meat and cheese for snacks, breakfast and lunch. Got Adkins chocolate protein shakes I had each early morning while observing. This food lasted me all week, for there was a small fridge in the room that we all shared that kept it all cold.

Dinner deserts were good, but full of calories. So by Monday night, I was passing on deserts to help maintain my diet. When I got home, I had lost 5 lbs. on the trip to maintain my diet. I was never hungry.

Mike and Greg brought camera gear and took lots of pictures. I would like one that shows the LMC and SMC. Greg said he has one from a previous trip. Sydney zoo was awesome. Lost Mike for he was taking pictures of every critter. I made it thru all exhibits and when I was on the ferry to head back, Mike showed up just before they closed the gates.

Manly Bay was cloudy the first Wednesday night we were in Australia. It was easy to find the necessary ferry and there is a total of \$15 AUD for mass transit fees each day, no matter how much you rode public transportation. It was neat to sit and watch the Pacific Ocean roll in from the east. We had very delicious fish and chips at a local restaurant. On the ferry ride back, the sky was breaking up and I could see Canopus and the Southern Cross for my first time.

Tried to sketch constellations. Did some. But others were in the trees so if I don't return in a fall trip, I won't get this AL certificate. I then decided to concentrate on my telescopic observations.

The first night, with James's 16" scope and then the 18", I completed many objects of my 91 to get AL certificates. I finished these observations Saturday night and checked twice Sunday morning to ensure I have everything observed I needed to complete all the certificates. I completed the Southern Sky Telescopic, Caldwell Gold and Southern Sky Binocular programs/certifications. I observed all Southern Sky Planetary Nebula objects I cannot see from home. Once I complete about 12 more PNs, I will have this certification also.

My gooseneck red light is too bright, so I didn't use it after the first couple of nights. Never used my observing hood. Just cupped my hands around my eye at the eyepiece.

The observing field never got really dark. I could walk around and not trip over chairs and telescopes. But I did need a red light to fill the coffee cup with hot water and mix instant coffee in. It was OK coffee. Had a couple of cookies (they called them biscuits) from the large assortment container on a couple of nights. One reminded me of the windmill shortbread cookies I liked when I was a kid.

Took lots of pictures with my camera, but mostly with my cell phone camera. Can't wait to see how they turned out (which I now know are some incredible shots).

Sunday morning, about 5:30 AM in my hotel room in Sydney. The van is going to pick us up in a bit over an hour from now to take us to the airport. Need to get my VAT tax back on the Argo Navis and turn in my Duty Free paperwork for the opal purchase. Then plan to have breakfast in the United lounge (which was nice) and call Barbara on their WiFi.

She treats me so well and I love her to death. Even though she said go on this trip this year, I feel so fortunate to have the ability to do this trip, a once in a lifetime opportunity. That's why I observed as many objects as I could, for in reality, there are other places to visit and returning to Australia to observe thru a telescope will probably never happen again. I am less stressed now and need to carry this feeling forward in my life. I am a lucky man.

Did a quick calculation and the total trip cost was \$3182 USD. Not bad for my OzSky adventure.