

## Tuesday April 30, 2019

Arrived at the TSP 2019 at 1:45 PM.

All setup. Clear near sunset. 83 degrees.

68 degrees at sunset. The strong wind that blew all afternoon has stopped. Clear.

My ServoCat beeped after initialing the AN and turning it on. Will leave it off tonight. Could not initialize the AN. Switched to the Sky Commander and noticed the Az encoder was slipping. Turned it off and star hopped all night.

Looking at it on Wednesday afternoon, the encoder was secure to the base. Must be a cable issue. I've seen this behavior before be the cable. Will get it fixed when I go see Randy Cunningham next week.

Used my 12.5" f/8 scope with my 13mm (195x) eyepiece all night.

Seeing and Transparency Good.

NGC 4035    10:37 PM    A very faint, fat, longer oval. Doesn't seem uniformly lit but maybe a hare brighter core area.

Several cars (20 or more) are coming down from McDonald observatory about every other minute. Very annoying to have to hide my eyes until they pass because their headlights can be seen from the lower field.

NGC 4177    11:20 PM    A fat, larger tilted oval. Very faint. Hard to see it's shape. Uniformly lit.

Tried to find N4114 and N4265 for quite some time. I was on the star field but they would not reveal themselves. (On the following night, while observing with Bernie Poskus, we realized these were non-existent objects. I need to mark these on my star charts so I will know.)

NGC 4714    12:06 AM    A small, dim oval with larger, brighter center.

NGC 4748    12:10 AM    A small, thin, 2:1 oval. Has 2 brighter areas on glow. Very hard to see. One area centered and one below center. Galaxy is vertical in FOV.

NGC 4825    12:16 AM    A dim, tilted oval. Small. Has larger, brighter core that is mottled.

NGC 4899    12:19 AM    A small, very faint, uniformly lit oval. Looks lens shaped.

NGC 4724 12:32 AM 2 galaxies side by side. Right one (N4727) is a dim, small, round glow with a hare brighter core. To left and near is a tiny (N4724), ¼ size of right one, a round, dim glow with a brighter stellar core.



NGC 4763 12:40 AM A small, very faint fat oval to round shape. Has a larger, brighter core that brightens to a brighter central area.

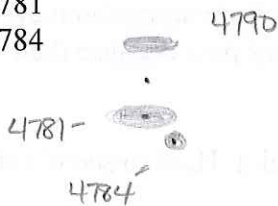
NGC 4783 12:47 AM 2 galaxies touching at top. Upper one, N4783, is a bit bigger than lower one. Has a brighter, stellar core. Then below and bit to left is N4782, a bit smaller round, dim glow with a faint stellar core. Then below and near is N4794, another small, dim, round glow with a dim stellar core.



NGC 4700 1:02 AM A long, 5:1, thin edge on. Has a brighter center down the arms and this brightens into a small central bulge. Nice.

Seeing and Transparency good. 48 degrees. Light breeze from west now and then.

NGC 4790 1:15 AM N4790 is a small, dim, fat tilted oval that has a hare brighter, huge, mottled core area. Then below and beyond a dim field star is N4781, a larger, dim, thin lens shaped galaxy that has a hare brighter larger core. Then above and to the left is N4784, a tiny, round, very faint glow with a brighter stellar. All 3 are in the FOV with 4790 at the top edge and 4784 at the bottom edge.



NGC 4770 1:33 AM A small, dim, tilted oval. Down center of galaxy is a hare brighter central area and in center is a larger, brighter core.



NGC 4759 1:40 AM A tiny, very faint oval with maybe a stellar core. Otherwise it is uniformly lit.

NGC 4970 2:05 AM A tiny, thin oval with maybe a hare brighter core.

NGC 5328 2:14 AM A tiny oval, extremely faint, uniformly lit. Seeing is OK to poor this low in the south.

Omega Centauri is awesome as was Centaurus A.

NGC 5716    2:21 AM    A long, thin tilted oval. Dim. Has a larger, round, brighter core. Has a faint field star on upper part of halo glow.

2:36 AM. 46 degrees. My back is hurting. Time to go to bed.

Had a great night even though the DSCs didn't work. I reverted to my star hopping skills. I was rusty in the beginning but once I was oriented, I was finding objects.

I met Bernie Poskus and Mike Prochoda that were setup to the east and near me. You cannot mistake Bernie's voice in the dark and he kept saying Mike...Mike...Mike. So I went over and acted like someone who was annoyed with their loud voices. Bernie was very apologetic until I introduced myself. I used the cloak of darkness to hide me. The next day at lunch, Mike said it is hard to pull one over on Bernie but I did just that last night when I razzed him. I saw Omega Centauri and Centaurus A one thru each of their scopes.

## Wednesday May 1, 2019

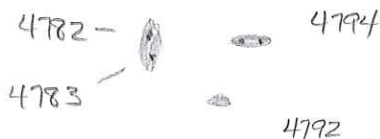
After lunch, I went over and checked the tightness of the azimuth encoder. I found everything was tight and now suspect the cable. I will have Randy Cunningham put a new connector on the end of the azimuth end of the DSC cable.

When I approached my telescope on the lower field about 7 PM on Wednesday evening, it was laying on its side. I was told by people who saw what had happened that a dust devil developed just to the west and had gone thru this part of the lower field, knocking over my scope and about 6 others in its path. They said the vortex spun my scope around 3 times, raised the tube vertically and then it went over. I asked for their help to raise it up and upon inspection, noticed the secondary spider was bent and my secondary mirror has almost popped out. I had the windows of my car cracked an inch and there was no dust inside my car. The dust devil has missed going over my car. Thank goodness.

With the optical alignment of my scope gone, I decided to hang out with Bernie and Mike tonight. I packed my scope up in my car as evening twilight was darkening. I took my charts and notebook over to their site and enjoyed the evening with them. Bernie's scope is a 16" f/4 and we used his 13mm Ethos with was 125x.

Clear and calm at sunset. Temperature was like it was at this time last night.

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| NGC 4114                                     | 10:14 PM | A small, dim, tilted oval that is long and thin. Has a brighter stellar core.  |
| NGC 4265                                     | 10:45 PM | A very close, very faint double star that resembled a glow. This is a non-existent one I tried to find the night before for an hour.   |
| NGC 4804                                     | 10:47 PM | A very close, very faint double star. This is another non-existent one I tried to find the night before during that same hour.   |
| NGC 4794<br>NGC 4792<br>NGC 4782<br>NGC 4783 | 10:54 PM | N4794 is a nice long, dim, uniformly lit tilted oval. N4792 is a small, thin, faint oval with 2 field stars on each side of the glow with core in between. Has a linear, hare brighter subtle core. N4792 is a tiny oval, very faint with a field star on the glow. N4782 is actually 2 galaxies, very close together. Upper one (N4782) is a bit larger than lower one (N4783). Both are roundish. Both have faint stellar cores. |



NGC 4129 11:15 PM A longer, thin, 3:1 oval. Dim. Has hint of a hare brighter core.

NGC 4403 11:22 PM 2 tiny, very faint ovals very close together, towed in to each other at the bottom. Both have bright stellar cores in center.

4404  4403

Seeing and transparency very good.

NGC 4422 11:29 PM A very faint, thin oval with bit brighter stellar core. Very small. Core might be a faint field star because it is below center of glow.

NGC 4348 11:36 PM A very faint edge on, 4:1, uniformly lit. Can see arm tapers on top and bottom. Maybe down center see a hint of a hare brighter something.

NGC 4628 11:42 PM A thin tilted oval, very faint. Has larger, hare brighter core.  
NGC 4626 Then above and bit to right and near is N4626, a dimmer,  
PGC 42600 long, thin tilted oval that is uniformly lit. Then above and to the left of these 2 is this extremely faint, elusive tiny oval seen with AV. It is P42600 and is magnitude 15.9.

Seeing and Transparency very good.

NGC 4520 11:54 PM A very small, very faint thin oval. With AV can see an extremely faint linear mottling down center of glow. 15.0 magnitude.

Bernie's scope is working beautifully. The galaxies are easily seen fuzz balls. It is like shooting fish in a barrel.

NGC 4504 11:58 PM A larger, fat oval. Not circular. A dim, uniformly lit glow.

NGC 4708 12:04 AM A very small, fat oval that is very faint and uniformly lit.  
NGC 4700 Then above and at edge of FOV is N4700, a long, thin, 4:1  
MGC-2-33-20 tilted oval. It is brighter, yet small. Then to the left is the MGC, a larger, elongated oval that is extremely faint and uniformly lit.

Took a break and had a \$2 large coffee.

NGC 4658 1:05 AM A small oval. Dim. To right of a bright field star. Has faint field star on bottom of halo glow. Once in a while there appears to be a brightness in center using AV.

NGC 4682 1:10 AM A larger, very faint tilted oval. Looks pretty uniformly lit except maybe a hint of a larger, brighter central area.

MGC-2-33-10 1:10 AM An extremely faint, circular, larger glow.

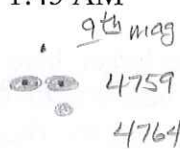
PGC 43237 1:10 AM An extremely faint stellar glow.

NGC 4777 1:32 AM A small, fat oval. Pretty uniformly lit. Very faint.

NGC 4783 1:32 AM A small, very faint oval with have brighter stellar core.

NGC 4773 1:32 AM A small, dim oval with fatter bottom than top of halo glow.  
MGC-2-33-42 This is the MGC galaxy. See 2 extremely faint cores on glow.

NGC 4761 1:45 AM 3 galaxies together. 2 above are on a horizontal line and are  
NGC 4759 very small, round glows with larger core areas. Below and  
NGC 4764 near is N4764, a fainter, uniformly lit round glow. All  
below a 9<sup>th</sup> magnitude star.



PGC 43760 1:45 AM A hint of a small, circular uniformly lit glow. Seen with AV and giggling scope. This is a 16.0 magnitude galaxy. The more you look at it, the easier it is to see. Also saw it in Mike's 18" scope.

Seeing and Transparency good.

NGC 4739 2:13 AM A tiny, very faint oval with 2 faint field stars on glow, left and right of center.

NGC 4818 2:15 AM A longer, 3:1 tilted oval. Dim. Has larger, hare brighter core area.

NGC 4925 2:17 AM A very small, very faint round, uniformly lit glow.

NGC 4786 2:24 AM A very small, very faint oval glow with brighter stellar core.

Contrast in FOV is gone yet we are able to see these faint galaxies. 41 degrees. 39% relative humidity someone on the field said. There is a light breeze from west.

NGC 4813 2:28 AM A tiny, very faint oval glow with brighter, stellar core.

NGC 4671 2:35 AM A tiny, round, very faint glow with a bit brighter core.

NGC 4731	2:39 AM	A <u>very faint</u> , long, thin cigar shaped, 5:1, uniformly lit. A <u>very faint</u> field star is above and centered and very close to halo glow.
MGC 1-33-27	2:39 AM	A small, roundish, ghostly, uniformly lit smudge of light.
NGC 4942	3:19 AM	An <u>extremely faint</u> , fat oval that is a uniformly lit, ghostly glow. Almost round.
NGC 4879	3:27 AM	A larger tilted oval. <u>Very faint</u> halo with larger, brighter core that brightens slowly to central core.
NGC 4989	3:32 AM	A tiny, faint oval that has a brighter stellar core.
NGC 4775	3:35 AM	A larger, dim, uniformly lit fat oval that is almost circular in shape.
NGC 4878	3:43 AM	A small, <u>extremely faint</u> roundish halo glow with bit brighter stellar core.

Seeing and transparency still good. Stars starting to bloat in FOV though.

NGC 4888	3:43 AM	Then below N4878 and to right and near is this <u>extremely faint</u> , tiny, uniformly lit roundish glow.
NGC 4705	3:50 AM	A long, thin, 4:1, uniformly lit, very faint glow.
NGC 4720	3:57 AM	A tiny, <u>very faint</u> oval. Has tiny, hare brighter core area.
NGC 4843	4:11 AM	A long, thin, 3:1 cigar shaped galaxy. Has a brighter field star on right hand side of glow. Maybe a linear glow to left of field star in center of halo glow.

Heading to bed. What a wonderful night. Bernie's SkyTools program really identified where the galaxies were in the FOV. You could match the star patterns from the screen to what you saw in the eyepiece and nail the position of the elusive galaxy. I need to get this out in the field with me.

Saturn was awesome and crisp. I'd say the seeing and transparency was still good.

I went to Bernie's scope thinking I might get to see a few of my fainter targets and was surprised that he wanted to look at the objects on my list, so we did. He had not seen most of my objects so he was ready to log them into his SkyTools database.

Saw some nice meteors tonight. One was a long, slow, bright one and a few short, fast ones.