

February 24, <sup>2001</sup>2000.

Little Thompson Observatory, Berthoud, CO.

Scope is an 18" f/14.2 classical cassegrain. The sky was clear but Jupiter and Saturn showed affects of an unstable sky. By 10:45 PM, Jupiter's image was covered with atmospheric turbulence and rising heat from the ground. The LTO scope cannot see detail in faint galaxies, so I will concentrate on open clusters tonight. The eyepiece is a 40mm eyepiece (the only eyepiece LTO owns).

- NGC 1513      10:01 P Very loose association of stars. There are two groupings of stars. 1 group in with about 12 stars that are the same brightness. Seems to go off to the left of FOV and curls around, giving the whole cluster a comma shape. Stars are very blue, yet faint.
- NGC 1027      10:05 P It has 1 bright field star that is much brighter than the rest. Very small number of member stars that are all over the place. No real pattern to the cluster. 10-12 stars about the same brightness and other fainter stars that could be part of the cluster. Fills 1/2 FOV
- NGC 1245      10:14 P Very faint cluster. Very faint glow. About 5 stars much brighter than the rest, with the remainder giving a ghostly glow to the cluster. Let eye adjust to image, can see the fainter members of this cluster.
- NGC 1342      10:16P Very open cluster of stars. Dominates center of FOV. Couple of brighter stars, 15-16 stars all about the same brightness and a bit dimmer. Then there are about another 12 stars that are even dimmer than the previous set. Very loose association..
- NGC 1444      10:18P Very faint, small cluster. Has 1 very bright field star in it. Compact. w/AV, 15-20 very faint stars can be seen. Couple that are a bit brighter to the east in FOV. Very faint and dim blue stars in this cluster.
- NGC 1502      10:21P Little, tight cluster. 2 bright stars (like eyes) in the middle of the cluster. About 18-20 stars that are about the same brightness, but a bit dimmer than the 2 eye stars. There is a bright field star to the east in FOV at the edge of the cluster. There seems to be another level of star intensity that is 1/2 as bright as the middle level stars, which are 1/2 as bright as the 2 eyes. The cluster is a bit circular in shape.
- NGC 1528      10:23P Cluster dominates the FOV. Its all over the place. There is 1 relatively bright member, with many stars of similar magnitude and then there is another set that is dimmer and are all over the cluster. No particular shape.
- NGC 1545      10:25P Very loose association. Its hard to tell which stars in the FOV belongs to cluster for it is in a star rich region of the sky. 2-3 stars in area that are very bright. Members are much dimmer than these 3, which are about 12-16 stars.
- NGC 1664      10:27P Very faint grouping of stars. Resembles the constellation Aquila in its shape of stars. Has a boxy look to it. All fairly faint, with all about the same magnitude. In a star rich part of the sky. There is 1 bright field star to the west of the cluster. There are lines of stars in the cluster. 1 line goes off to the north from box. 1 goes off to the west and a couple of stars making a line to the south of box. Appears to be about 25-30 stars of the same brightness that compose this cluster. These are very blue stars.
- NGC 1857      10:29P A very tight, compact open cluster. Very faint. There is 1 bright field is near center of cluster. There are 4 stars that are relatively brighter than the remaining dim stars. It has a circular shape. About 25 stars are fainter. Fills 1/2 FOV.
- NGC 1907      10:32P Very faint, tight cluster. Relatively small. To the bottom of FOV, there are 2 bright field stars that bound cluster on this side. Very small, compact blue stars. Not many stars. Maybe about 10-12 stars. Hard to count bcs they are so faint, Need AV to see them at all. Circular in shape.

NGC 2266 11:20P Has 1 bright field star at the bottom of FOV. There are 2 dimmer stars in the cluster. The cluster is very small and compact. Has 10-20 dim stars and a lot more that are very faint that gives it a glow.

There is a high haze now and appears to be a lot of moisture in the atmosphere.

NGC 2281 11:23P Fills FOV. Very bright, blue stars. Much brighter than most of the other clusters seen tonight. Very loose and open. Yet has a pattern that are in a chevron shape. Stars on the south side are the same brightness to those that are in the chevron. Left part of the chevron is more defined and filled in with stars than the right side, which is more of an outline. Whole FOV contains stars that are of the same brightness. About 30-40 stars in this cluster. To the north is a very bright field star, which bounds the cluster on this side.

NGC 2304 11:26P Very faint cluster. The stars are very dim. Almost just a glow. It is a small cluster. w/AV, can see member stars pop out. Says this is mag 11.0, which attests to the dimness of cluster.

NGC 2395 11:31P Not many stars and is extremely open. Linear in shape. Goes from south to north and members are scattered. 3-4 stars that are brighter than about another 20-30 stars.

NGC 2419 11:34P Globular cluster. It is a faint smudge here. Want to look at this in darker skies. Bounded by 4 stars that form a trapezium.

NGC 2420 11:36P Very dim. Linear, boxy shape. On the north side bounded by bright field star. About 20, blue, dim stars. There are other dimmer stars in the center that gives the center a flow. w/AV, can see lots of pin points. Hard to count these points of light.

NGC 2421 11:38P Its in the clouds now. Circular in shape. Fills 1/2 FOV. About 15-20 stars, but hard to tell how bright the stars are.

Clouds approaching from SW. Moved to Eastern part of sky.

NGC 4147 11:41P Globular cluster. 11<sup>th</sup> mag. Very small. w/AV can see member stars pop in and out. Bright little nucleus and halo dims out a bit. It's a fuzzy snowball.

With all the open clusters over in the western soup and all but galaxies in this part of the sky, I gave up for the evening. Left LTO at about 11:58P.