## TABLE MOUNTAIN STAR PARTY OBSERVER'S CHALLENGE \#2

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Modified for 2010 by John Goar
All observations must be made at the Table Mountain Star Party
Observe and record 25 of the 30 items to earn a untique Table Mountain Star Party Observer's Challenge \#2 Award lapel pin.

| \# | ID | MAG | SIZE | TYPE OBJECT | CONSTELLATION | R.A. | DEC. | DESCRIPTION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | NGC404 | 10.1 | 4.4'x4.2' | Galaxy | Andromeda | 0109.4 | 35.43 | Appears as a faint smudge. Take Beta Andromeda out of the field of view. |
| 2 | Almach | 2.3/4.8 | 10" | Double Star | Andromeda | 023.9 | 42.2 | Beautiful Gold and Blue double star. |
| 3 | NGC891 | 10 | $13.5{ }^{\prime} \times 2.8{ }^{\prime}$ | Galaxy Sb | Andromeda | 0222.6 | 42.21 | A faint edge on galaxy. It shows a dark dust lane on good night. |
| 4 | NGC7662 | 9.2 | 20.0"/130.0" | P. Nebula | Andromeda | 2325.9 | 42.33 | Blue Snowball is pale blue/white in color with central star visible. |
| 5 | NGC7009 | 8.3 | 25.0"/100.00" | P. Nebula | Aquarius | 2104.2 | -11.22 | The Saturn Nebula looks like minature Saturn complete rings and green color. |
| 6 | M36 | 6 | $12.0{ }^{\prime}$ | O. Cluster | Auriga | 0536.5 | 34.08 | M36 is bright tight open cluster. |
| 7 | M37 | 5.6 | $24.0{ }^{\prime}$ | O. Cluster | Auriga | 0552.4 | 32.33 | Bright open cluster with orange star in center. |
| 8 | M30 | 7.5 | 9.0' | G. Cluster | Capricornus | 2140.4 | -23.11 | The Lunar Lander. At Medium power looks like Lunar Lander with three feet. |
| 9 | Neptune | 7.9 | 2.3" | Planet | Aquarius | 2159.4 | -12.8 |  |
| 10 | NGC7789 | 10.9 | 2.2'x2.1' | O. Cluster | Cassiopeia | 0052.1 | 47.33 | A large round open cluster with hundreds of stars visible. |
| 11 | NGC7510 | 7.9 | 4.0' | O. Cluster | Cepheus | 2311.5 | 60.34 | A bright open cluster in a wedge shape. |
| 12 | NGC6960/52 Cygni | N/A/4.2 | 70.0'x6.0'/6.0" | E. Nebula/Dbl Star | Cygnus | 2045.7 | 30.43 | The ski jump part of Veil nebula. 52 Cygni is tight double star. Nebula filters help. |
| 13 | NGC6992 | N/A | $70.0{ }^{\prime} \times 8.0{ }^{\prime}$ | E. Nebula | Cygnus | 2056.4 | 31.43 | This is part of bridal Veil nebula. Shaped like backward C. Nebula filters help. |
| 14 | NGC6905 | 12 | 46.0"/100.00" | P. Nebula | Delphinus | 2022.4 | 20.07 | The Blue Flash Nebula a donut of nebula in a triangle of stars. High power helps. |
| 15 | Gamma Delphini | 4.1/4.5 | 9.6" | Double Star | Delphinus | 2046.7 | 16.7 | These two stars are similar color (orange/yellow) and brightness. |
| 16 | NGC5907 | 10.4 | 12.3 'x1.8' | Galaxy Sb+ | Draco | 1515.9 | 56.19 | A huge edge on galaxy that fills the entire eyepiece. |
| 17 | Rasalgethi | 3.3/3.5 | 4.6" | Double Star | Hercules | 1714.6 | 14.23 | Alpha Herculis is nice pair of red/golden primary star and blue secondary star. |
| 18 | NGC6229 | 8.7 | $1.2^{\prime}$ | G. Cluster | Hercules | 1647.0 | 47.32 | The third globular cluster in Hercules. A challenge in small telescopes. |
| 19 | M10 | 6.6 | 15.1' | G. Cluster | Ophiuchus | 1657.1 | -04.06 | One of the closest Globulars in Ophichus. It resolves to core in 8" or larger scopes. |
| 20 | M14 | 7.6 | 11.7' | G. Cluster | Ophiuchus | 1737.6 | -03.15 | A large and bright globular cluster discovered by Messier June 1st, 1764. |
| 21 | NGC6572 | 8.1 | 18.0" | P. Nebula | Ophiuchus | 1812.1 | 6.51 | A green planetary that forms a triangle with two stars. |
| 22 | NGC7331 | 9.5 | 10.7'x4.0' | Galaxy Sb | Pegasus | 2237.1 | 34.25 | NGC7331 is mini Andromeda Galaxy with nice detail. Look for 5 others in same field. |
| 23 | NGC7332/7339 | 10.9/12.1 | 4.2'x1.3'/3.2'x0.9' | Galaxies E7/S(B)b+ | Pegasus | 2337.4 | 23.48 | A nice pair of edge on galaixes. Medium power helps. |
| 24 | NGC1545 | 6.2 | 18.0' | O. Cluster | Perseus | 0420.9 | 50.15 | A faint cluster of stars with a triangle of bright stars toward the center. |
| 25 | Uranus | 5.8 | 3.6" | Planet | Pisces | 001.31 | -00.71 | Uranus can be seen Naked-eye or in binoculars. |
| 26 | NGC6522/NGC6528 | 8.6/9.5 | 5.6'/3.7' | G. Clusters | Sagittarius | 1803.6 | -30.02 | A pair of globular clusters of equal brightness. |
| 27 | NGC5897 | 8.6 | 12.6' | G. Cluster | Scorpius | 1517.4 | -21.01 | A nice globular cluster that starts to resolve in larger telescopes. |
| 28 | NGC6712 | 8.2 | 7.2' | G. Cluster | Scutum | 1853.1 | -08.42 | A globular cluster that resolves into some stars. Challenge is to see IC1295 planetary nebula in same field. |
| 29 | IC4756 | 4.6 | 52.0' | O. Cluster | Serpens Cauda | 1839.0 | 5.27 | A large open cluster best viewed at low power. |
| 30 | M81/M82 | 6.8/8.4 | 26.0'x14.0'/11.0'x5.0' | Galaxies Sp/Ir | Ursa Major | 0955.6 | 69.04 | M81 and M82. How often can you see a Spiral galaxy and Irregular galaxy in same field? |

