

FRAC 50 Observing Program

| Object | Type | Con | VMag | Size | RA | Dec | Pop. Name | Notes |
|---------------------------|----------|-----|------|-------------|-------------|--------------|-------------------------------------|--|
| NGC 7662 | PN | And | 8.6 | 17.0"x14.0" | 23h 25m 57s | +42° 32' 44" | Blue Snowball Nebula | |
| NGC 7009 | PN | Aqr | 8.3 | 28.0"x23.0" | 21h 04m 15s | -11° 21' 49" | Saturn Nebula | |
| NGC 7293 | PN | Aqr | 6.3 | 16.0"x12.0' | 22h 29m 40s | -20° 47' 23" | Helical Nebula | Filter Helps |
| NGC 1907 | OC | Aur | 8.2 | 7.0' | 05h 28m 00s | +35° 18' 53" | | |
| NGC 1502 | OC | Cam | 6.9 | 8.0' | 04h 07m 45s | +62° 19' 49" | | near SE end of Kemble's Cascade |
| NGC 2403 | Gal | Cam | 8.5 | 17.8' | 07h 36m 55s | +65° 35' 42" | | |
| NGC 225 | OC | Cas | 7.0 | 12.0' | 00h 43m 28s | +61° 47' 06" | | |
| NGC 457 | OC | Cas | 6.4 | 13.0' | 01h 19m 10s | +58° 20' 02" | Owl Cluster | |
| NGC 654 | OC | Cas | 6.5 | 5.0' | 01h 44m 10s | +61° 53' 00" | | |
| NGC 659 | OC | Cas | 7.9 | 5.0' | 01h 44m 16s | +60° 42' 00" | | |
| NGC 663 | OC | Cas | 7.1 | 16.0' | 01h 46m 04s | +61° 15' 00" | | |
| NGC 7789 | OC | Cas | 6.7 | 16.0' | 23h 57m 04s | +56° 44' 09" | | |
| NGC 247 | Gal | Cet | 9.1 | 20.0"x7.0' | 00h 47m 11s | -20° 45' 21" | | Under 8" Difficult |
| NGC 2360 | OC | CMA | 7.2 | 13.0' | 07h 17m 48s | -15° 36' 53" | | |
| NGC 2362 | OC | CMA | 4.1 | 8.0' | 07h 18m 48s | -24° 56' 51" | | |
| Mel 111 | OC | Com | 1.8 | 275.0' | 12h 25m 00s | +26° 00' 07" | Coma Star Cluster | Binocular Target |
| NGC 4565 | Gal | Com | 9.6 | 15.5"x1.9' | 12h 36m 20s | +25° 59' 23" | Bernice's Hair Clip | classic edge-on spiral with dust lane |
| NGC 4361 | PN | Crv | 11.0 | 81.0" | 12h 24m 05s | -18° 48' 00" | | |
| NGC 4631 | Gal | CVn | 9.2 | 17.0"x3.5' | 12h 42m 11s | +32° 32' 42" | | same LP field as companion galaxy NGC 4627 & NGC 4656 |
| Beta Cygnus | Star | Cyg | 3.1 | | 19h 30m 45s | +27° 57' 55" | Albireo | superb double star; blue-white/yellow |
| NGC 6819 | OC | Cyg | 7.3 | 5.0' | 19h 41m 20s | +40° 11' 22" | | |
| NGC 6826 | PN | Cyg | 8.8 | 27.0"x24.0" | 19h 44m 53s | +50° 31' 42" | Blinking Planetary | |
| 31 Cygnus | Star | Cyg | 3.8 | | 20h 13m 06s | +46° 44' 00" | | |
| NGC 6543 | PN | Dra | 8.3 | 22.0"x16.0" | 17h 58m 36s | +66° 38' 17" | Cat's Eye Nebula | |
| NGC 2158 | OC | Gem | 8.6 | 5.0' | 06h 07m 33s | +24° 05' 56" | | |
| NGC 2392 | PN | Gem | 8.6 | 47.0"x43.0" | 07h 29m 10s | +20° 54' 42" | Eskimo Nebula; Clown | |
| NGC 6210 | PN | Her | 9.7 | 20.0"x13.0" | 16h 44m 30s | +23° 48' 46" | | |
| NGC 3242 | PN | Hya | 8.6 | 40.0"x35.0" | 10h 24m 48s | -18° 38' 14" | Ghost of Jupiter | |
| NGC 2903 | Gal | Leo | 9.0 | 13.3"x6.0' | 09h 32m 10s | +21° 29' 58" | | |
| Epsilon Lyra | Star | Lyr | 5.0 | | 18h 44m 03s | +39° 40' 00" | | First Split Req'd second split bonus. |
| NGC 2237 | BN | Mon | 5.5 | 70.0"x80.0' | 06h 32m 19s | +04° 59' 03" | Rosette Nebula | OC NGC 2244 embedded in nebula |
| NGC 2244 | OC | Mon | 4.8 | 24.0' | 06h 32m 25s | +04° 52' 03" | | involved with Rosette Neb. (NGC 2237) |
| NGC 2264 | OC | Mon | 3.9 | 30.0"x60.0' | 06h 40m 58s | +09° 53' 42" | Christmas Tree Cluster; Cone Nebula | includes naked-eye S Mon (15 Mon) Good Bino Target |
| NGC 2301 | OC | Mon | 6.0 | 12.0' | 06h 51m 49s | +00° 28' 04" | | |
| NGC 6572 | PN | Oph | 9.0 | 15.0"x12.0" | 18h 12m 09s | +06° 51' 01" | | |
| NGC 6633 | OC | Oph | 4.6 | 27.0' | 18h 27m 43s | +06° 34' 14" | | |
| Zeta Orion | Star | Ori | 1.9 | | 05h 40m 08s | -01° 57' 00" | | |
| NGC 2169 | OC | Ori | 5.9 | 7.0' | 06h 08m 27s | +13° 56' 59" | "37" Cluster | |
| NGC 7331 | Gal | Peg | 9.5 | 11.4"x4.0' | 22h 37m 08s | +34° 25' 27" | Little Andromeda Gal | |
| NGC 869 | OC | Per | 5.3 | 30.0' | 02h 19m 03s | +57° 08' 58" | Double Cluster | w/NGC 884 Good Bino Target |
| NGC 884 | OC | Per | 6.1 | 30.0' | 02h 22m 27s | +57° 06' 57" | Double Cluster | w/NGC 869 Good Bino Target |
| NGC 1023 | Gal | Per | 9.4 | 9.0"x4.0' | 02h 40m 27s | +39° 03' 47" | | |
| NGC 1528 | OC | Per | 6.4 | 24.0' | 04h 15m 24s | +51° 13' 49" | | |
| NGC 253 | Gal | ScI | 7.2 | 25.0"x7.0' | 00h 47m 35s | -25° 17' 01" | | edge-on spiral |
| NGC 3115 | Gal | Sex | 8.9 | 8.3"x3.2' | 10h 05m 14s | -07° 43' 06" | Spindle Gal | |
| NGC 2841 | Gal | Uma | 9.2 | 7.4"x3.5' | 09h 22m 01s | +50° 58' 21" | | |
| WA 1 (Whiting's Asterism) | Asterism | Umi | 9.0 | 18"x9' | 16h 31m 00s | +80 13' 00" | Mini Coathanger | telescopic cousin to Cr 399 |
| NGC 4526 | Gal | Vir | 9.7 | 7.0"x2.7' | 12h 34m 03s | +07° 42' 03" | Lost Gal | |
| Cr 399 | Asterism | Vul | 3.6 | 60.0' | 19h 25m 26s | +20° 11' 18" | Brocchi's Cluster; The Coathanger | once assumed to be a OC; data from Hipparcos spacecraft shows it to be a chance alignment of stars |
| NGC 6885 | OC | Vul | 8.1 | 7.0' | 20h 12m 02s | +26° 29' 20" | | w/ NGC 6882 |