

Summer 2025 Targets

| Object / Name | Type | Constellation | Notes | Scope | Filter | Exposure |
|--------------------------------------|--------------|--------------------|---|------------------|-----------|--|
| Starclouds: (Widefield) | | | | | | |
| Summer Triangle / Sagittarius | S. Clouds | | | Pixel 8 Phone | | ? |
| SeeStar S30 Widefield: | | | | | | |
| T Coronae Borealis | Star | Corona Borealis | recurring nova | S30 | IR | 10 second subs for 1 minute |
| False Comet | Stars/O.C. | Scorpius | EQ Mode and frame/mosaic | S30 | IR | 20 second subs for 15 minutes |
| M7 | Open Cluster | Scorpius | EQ Mode and frame/mosaic | S30 | IR | 60 second subs for 1 hour |
| Rho Ophichui & Antares | DNeb/RN | Ophiuchus | EQ Mode and frame/mosaic | S30 | IR | 60 second subs for 1 hour |
| B66 (Pipe Nebula) | D. Nebula | Ophiuchus | EQ Mode and frame/mosaic | S30 | IR | 60 second subs for 1 hour |
| B72 (Snake Nebula) | D. Nebula | Ophiuchus | EQ Mode and frame/mosaic | S30 | IR | 60 second subs for 1 hour |
| M8 | D. Nebula | Ophiuchus | EQ Mode and frame/mosaic | S30 | NB | 60 second subs for 1 hour |
| M16 | Nebula | Serpens | EQ Mode and frame/mosaic | S30 | NB | 60 second subs for 1 hour |
| M17 | Nebula | Sagittarius | EQ Mode and frame/mosaic | S30 | NB | 60 second subs for 1 hour |
| M22 | Glob Cluster | Sagittarius | EQ Mode and frame/mosaic | S30 | IR | 20 second subs for 15 minutes |
| M23 | Open Cluster | Sagittarius | EQ Mode and frame/mosaic | S30 | IR | 20 second subs for 15 minutes |
| Baades Window (NGC6522) | Nebula | Sagittarius | EQ Mode and frame/mosaic | S30 | IR | 60 second subs for 1 hour |
| M24 (Small Sag Starcloud) | S. Clouds | Sagittarius | EQ Mode and frame/mosaic | S30 | IR | 60 second subs for 1 hour |
| NGC7000 (N American neb) | Nebula | Cygnus | EQ Mode and frame/mosaic | S30 | NB | 60 second subs for 1 hour |
| Sadr & Butterfly Nebula | Nebula | Cygnus | EQ Mode and frame/mosaic | S30 | NB | 60 second subs for 1 hour |
| Coat Hanger (CR399) | Asterism | Vulpecula | EQ Mode and frame/mosaic | S30 | IR | 20 second subs for 15 minutes |
| Veil Nebula - NGC6960 / NGC6992 | SNR | Cygnus | EQ Mode and frame/mosaic | S30 | NB | 60 second subs for 1 hour |
| Specific Objects: | | | | | | |
| T Coronae Borealis | Star | C. Borealis | recurring nova | EVO50mm & 8" SCT | L-Pro | 15 sec subs for 5 minutes |
| V404 Cygni RA: 20h 24m Dec: +33° 52' | Star | Cygnus | Black Hole - see Mar S&T p9 | 8" SCT | L-Pro | 30 second subs for 5 or 15 minutes |
| Arp188 UGC10214 | Galaxy | Draco | "Tadpole Galaxy" | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5963 & 5965 | Galaxy | Draco | near M102 (June Reflect, P.6) | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| QSO 0957+561 | Quasar | Ursa Major | "Twin Lensed" near NGC3079 | 8" SCT | L-Pro | 3 min subs for 15 minutes |
| HE 1216+5032A/B | Quasar | Canes Venatici | "Twin Quasar" near NGC4157 | 8" SCT | L-Pro | 3 min subs for 15 minutes |
| H 1413+117A/B/C/D | Quasar | Bootes | "Cloverleaf" near NGC5532 | 8" SCT | L-Pro | 3 min subs for 15 minutes |
| Wolf-Rayet Shells | | | https://www.reinervogel.net/index_e.html | | | also see PDF |
| WR102 | Nebula | Sagittarius | Wolf-Rayet Shell | 8" SCT | L-eNhance | 3 or 5 min subs for 30 or 60 min |
| WR128 | Nebula | Sagitta | Wolf-Rayet Shell | 8" SCT | L-eNhance | 3 or 5 min subs for 30 or 60 min |
| WR134 | Nebula | Cygnus | Wolf-Rayet Shell | 8" SCT | L-eNhance | 3 or 5 min subs for 30 or 60 min |
| Kepler's SuperN Remnant (SN1604) | SNR | Ophiuchus | Supernova Remnant | 8" SCT | L-eNhance | 5 min subs for 60 min ROI=2072x1410 |
| Cassiopeia-A | SNR | Cassiopeia | Supernova Remnant | 8" SCT | L-eNhance | 5 min subs for 60 min ROI=2072x1410 |
| M1-92 "MinkowSki's Footprint" | P. Nebula | Cygnus | Jun '21 S&T p.57 / Jul '18 p59 | 8" SCT | L-eNhance | 3/5 min subs for 30/60 m ROI=2072x1410 |
| M2-9 "Butterfly" | P. Nebula | Ophiuchus | see Jun '21 S&T p.59 | 8" SCT | L-eNhance | 3/5 min subs for 30/60 m ROI=2072x1410 |
| CRL2688 "Egg Nebula" | P. Nebula | Cygnus | see Jun '21 S&T p.59 | 8" SCT | L-eNhance | 3/5 min subs for 30/60 m ROI=2072x1410 |
| NGC6302 "Southern Butterfly Neb" | P. Nebula | Sorpius | see Jun '21 S&T p.32 | 8" SCT | L-eNhance | 3/5 min subs for 30/60 m ROI=2072x1410 |
| NGC6337 "Cheerio Nebula" | P. Nebula | Sorpius | see Jun '21 S&T p.32 | 8" SCT | L-eNhance | 3/5 min subs for 30/60 m ROI=2072x1410 |
| IC4954 & IC4955 / Roslund-5 cluster | R. Nebula | Vulpecula | see Jul '18 S&T p.58 | 8" SCT | L-eNhance | 3/5 min subs for 30/60 m ROI=2072x1410 |
| HH32 (Herbig-Haro proto-planetary | P. Nebula | Aquila | see Jul '16 S&T p.35 | 8" SCT | L-eNhance | 3/5 min subs for 30/60 m ROI=2072x1410 |
| NGC6540 | Glob Cluster | Sagittarius | Observers Challenge for Sept | EVO50mm & 8" SCT | L-Pro | 30 second subs for 5 or 15 minutes |
| NGC6544 | Glob Cluster | Sagittarius | Observers Challenge for Sept | EVO50mm & 8" SCT | L-Pro | 30 second subs for 5 or 15 minutes |
| NGC188 | Open Cluster | Cepheus | Observers Challenge for Sept | EVO50mm & 8" SCT | L-Pro | 30 second subs for 5 or 15 minutes |
| Rho Ophichui | D. Nebula | Ophiuchus | | EVO50mm & 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| IC4592 (also B40 - plate12) | R. Nebula | Scorpius (near Nu) | "Blue Horsehead" | EVO50mm | L-Pro | 3 or 5 min subs for 30 or 60 min |
| Re-Observe Objects: | | | | | | |
| NGC5350, 5353, 5354, 5355, 5358 | Galaxy | Canes Venatici | group | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5371 | Galaxy | Canes Venatici | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5239 | Galaxy | Bootes | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5248 | Galaxy | Bootes | see Jun '25 S&T p.58 | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5579 | Galaxy | Bootes | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5829 & IC4526 | Galaxy | Bootes | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5840 & NGC5841 | Galaxy | Bootes | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC5874 | Galaxy | Bootes | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC6106 | Galaxy | Hercules | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC6155 | Galaxy | Hercules | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| NGC6555 | Galaxy | Hercules | | 8" SCT | L-Pro | 3 or 5 min subs for 30 or 60 min |
| Abell2 | P. Nebula | Cassiopeia | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell39 | P. Nebula | Hercules | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell43 | P. Nebula | Ophiuchus | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell50 | P. Nebula | Draco | NGC6742 | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell55 | P. Nebula | Aquila | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell70 | P. Nebula | Aquila | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell72 | P. Nebula | Delphinus | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell75 | P. Nebula | Cepheus | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell78 | P. Nebula | Cygnus | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell79 | P. Nebula | Lacerta | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell81 | P. Nebula | Cepheus | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell82 | P. Nebula | Cassiopeia | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |
| Abell84 | P. Nebula | Cassiopeia | | 8" SCT | L-eNhance | 3 or 5 min subs for 15 or 30 min |

