

RASC Double Star Observing Supplemental Information

Use this supplemental list to learn detailed information for each target including the magnitude of each star, the position angle of each pair, and the separation in arc-seconds.

Many "double stars" are in fact multi-star systems. Many of the targets in this programme are triples or have additional stars. While there are many beautiful pairs, there are an equal number of stunning, breath-taking triples and quadruples. This is part of what makes double star observing fun!

List Notes

Data from the Washington Double Star database and Stelle Doppie.

Pairs with separations less than 1.0 arc-second omitted.

Stars dimmer than magnitude 13.0 omitted.

The "PA" column shows the most recent position angle.

"Sep" column shows the most recent separation.

"M1" and "M2" columns show magnitudes of each star in the pair.

The other stars you may log, note, describe, and sketch, if inclined.

If "Pair" column is blank, there are only 2 stars in the system.

Bolded text indicates pair you must observe.

Position Angle or PA is taken from north, revolving through the east direction, which is 90 degrees, and continuing through south (180), west (270), and returning to north for a full 360.

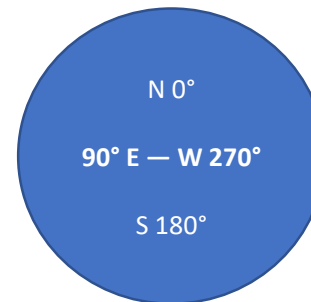
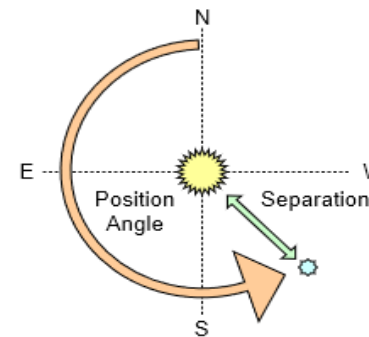
A telescope with an even number of reflections rotates the field. An odd number, flips east and west like looking in a mirror.

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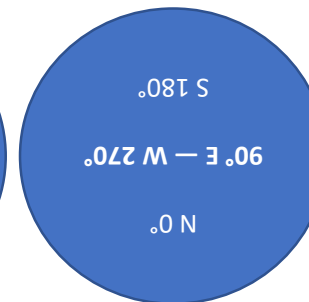
To complete the program, you need to observe ALL 110 "target" pairs. You do NOT need to observe every pair on this list. Only the brightest or most obvious pair is required. **The target pair is noted on this list in bold.**

Example: Phi Tauri is a triple. Observe and log the A and B pair of stars. They are wide, about 49 arc-seconds apart, and at a position angle of 259° (that's nearly due west). A is bright at magnitude 5.1 and B is dimmer at mag 7.5.

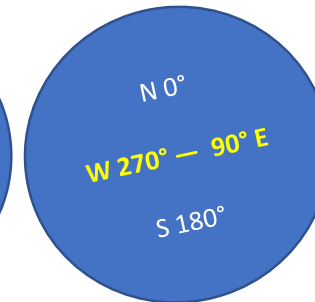
The C star, on the other hand is mag 12.3, at PA 25°, and separated by 118". It's north-north-east and 2½ times the distance. You might need a 4 or 5-inch telescope or larger to spot the C star, assuming good sky conditions. It is an optional target.



eyes or
binoculars



even number
reflections



odd number
reflections

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Con | Notes | Type |
|------------------------|---------|---------|-----------|------------|--------------|------------|------------|-----|---|-----------|
| WINTER (part 1) | | | | | | | | | | |
| HD 21700 | STFA 7 | STFA 7 | AB | 234 | 44.1 | 7.4 | 7.8 | Tau | Wide pair. Nearly equal. Oriented NE to SW. Yellow or orange and blue. Beside double HR 1065. | Physical |
| Phi Tau | SHJ 40 | SHJ 40 | AB | 259 | 48.7 | 5.1 | 7.5 | Tau | Widely separated. Intense colours, gold and blue. There's a bright orange-red star opposite B. | Optical |
| | | WAL 29 | AC | 25 | 118.1 | 5.1 | 12.3 | | Very dim partner, NNE. | Uncertain |
| 32 Eri | STF 470 | STF 470 | AB | 349 | 6.9 | 4.8 | 5.9 | Eri | Colourful pair, yellow and pale blue. Tight. May be called HR 1211 as opposed to HR 1212. | Uncertain |
| | | STF 470 | AC | 5 | 164.7 | 4.8 | 10.5 | | Dim star beyond secondary, further north. Colourless. | Optical |
| Keid | STF 518 | STF 518 | AB | 102 | 83.7 | 4.4 | 9.3 | Eri | Very wide. Primary is orange or yellow. B is blue or red? B nearly due east. | Physical |
| | | STF 518 | AC | 98 | 78.1 | 4.4 | 11.2 | | Another dim companion. C is very close to B, 9" apart! C north of B. | Physical |
| | | STF 518 | AD | 38 | 481.4 | 4.4 | 12.6 | | Very faint and a long ways away. Looks like a field star. To the NE. | Optical |
| 1 Cam | STF 550 | STF 550 | AB | 309 | 10.4 | 5.8 | 6.8 | Cam | A and B bright. B NW of A. Very tight. Both look blue-white. A showcase pair for many. | Uncertain |
| | | STF 550 | BC | 217 | 150.9 | 6.8 | 11.4 | | C much dimmer and well away to the SW. Looks pale blue? | Optical |
| Beta Cam | S 459 | S 459 | AB | 209 | 84.2 | 4.1 | 7.4 | Cam | Wide pair. Yellow and deep blue. B to the SW. Lots of field stars. | Uncertain |
| | | ES 58 | BC | 170 | 14.8 | 7.4 | 12.4 | | Interesting triple. Very dim. Close to B. In a hockey stick shape. C south of B. | Physical |
| Rho Ori | STF 654 | STF 654 | AB | 65 | 6.4 | 4.6 | 8.5 | Ori | Fantastic colours. Gold and deep blue. Quite tight. To the NE. | Uncertain |
| | | STF 654 | AC | 157 | 183.4 | 4.6 | 11.4 | | 90° to A and B. Very far away, 20 to 25 times! | Optical |
| Mintaka | BU 558 | STFA 14 | AC | 4 | 56.2 | 2.4 | 6.8 | Ori | Widely separated, very attractive. Primary is white, a little yellow. Next star medium blue. | Optical |
| HR 1887 | STF 747 | STF 747 | AB | 225 | 36.0 | 4.7 | 5.5 | Ori | Very similar, pale yellow. Easily separated at 145x. Near Iota Orionis and Messier 42. | Physical |
| | | CLL 22 | AC | 12 | 68.2 | 4.7 | 9.0 | | Faint companion to the N. | Physical |
| Trapezium | STF 748 | STF 748 | AB | 32 | 8.8 | 6.6 | 7.5 | Ori | The Trapezium in the middle of M42. Stunning. B is NNE of A. | Uncertain |
| | | STF 748 | AC | 132 | 12.8 | 6.6 | 5.1 | | A, B, C, and D are all fairly easy. C is SE of A. | Optical |
| | | STF 748 | AD | 97 | 21.5 | 6.6 | 6.4 | | A, B, C, and D are all fairly easy. D is kitty-corner from and east of A. | Uncertain |
| | | STF 748 | AE | 352 | 4.6 | 6.6 | 11.1 | | E and F get harder. Need good seeing. E is between A and B (but not in-line). | Uncertain |
| | | STF 748 | BF | 154 | 20.5 | 7.5 | 11.5 | | And higher magnification. F is SE of C. | Uncertain |
| | | MZA 16 | CZ | 338 | 6.5 | 5.1 | 12.7 | | Bonus points! | Uncertain |
| Beta Mon | STF 919 | STF 919 | AB | 133 | 7.1 | 4.6 | 5.0 | Mon | Same colour, white. Extremely tight. Bright. B a tiny bit dimmer than A. SE of A. | Uncertain |
| | | STF 919 | AC | 125 | 9.8 | 4.6 | 5.4 | | At low power B is not round. B very tight to C. C slightly dimmer than B. SE of B. | Uncertain |
| | | BU 570 | AD | 55 | 26.6 | 4.6 | 12.1 | | Four or five times the AB sep., to the NE, a right angle to A-B-C. Very faint, needs averted. | Uncertain |
| HD 34071 | GAL 378 | GAL 378 | | 318 | 39.1 | 7.8 | 9.2 | Lep | Yellow and orange. Nice. Primary is a K2 star. Near Mu Lep. Shown as single star in PSA. | Optical |
| Gamma Lep | H 6 40 | H 6 40 | AB | 350 | 97.4 | 3.6 | 6.3 | Lep | Colourful, unequal stars. Bright primary, yellow. Faint secondary, orange. | Physical |
| | | H 5 50 | BC | 8 | 112.1 | 6.3 | 11.4 | | Faint distant companion to the N. | Optical |
| HD 51502 | STTA 80 | STTA 80 | AB | 53 | 124.1 | 7.3 | 7.4 | Gem | Appears as a little triangle of stars in finder. Yellow primary, yellow secondary. To the NE. | Optical |
| | | STTA 80 | AC | 112 | 81.2 | 7.3 | 8.4 | | The tertiary star was orange. To the SE. Neat! In a rich field. | Uncertain |
| | | ARN 1 | AD | 286 | 86.3 | 7.3 | 10.3 | | Dim. Orange-red. To the W. | Optical |
| Mekbuda | SHJ 77 | SHJ 77 | AB | 85 | 87.4 | 4.1 | 11.5 | Gem | In an obvious triangle. Awesome. Light yellow primary. B dim to the E. In a neat field. | Uncertain |
| | | SHJ 77 | AC | 347 | 100.2 | 4.1 | 7.7 | | Fairly bright star to the N is C. At a 90° angle to A and B. Much brighter than B. Looked blue. | Optical |
| | | SHJ 77 | AD | 354 | 67.8 | 4.1 | 12.5 | | Use averted vision. Between C and A stars. | Uncertain |
| HR 2764 | HJ 3945 | HJ 3945 | AB | 50 | 26.8 | 5.0 | 5.8 | CMa | The Winter Albireo. Main star orangey. Companion is pale, sky blue. Wonderful sight. | Optical |

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
|------------------------|---------|---------|-----------|------------|--------------|------------|------------|---|-----------|
| WINTER (part 2) | | | | | | | | | |
| 19 Lyn | STF1062 | STF1062 | AB | 316 | 14.8 | 5.8 | 6.7 | Lyn A, B, and D obvious in a flattened triangle. Primary is white; secondary blue? Oriented SE to NW. | Physical |
| | | STF1062 | AD | 6 | 215.3 | 5.8 | 7.6 | Bright. Well to the N. | Physical |
| | | STF1062 | BC | 288 | 74.1 | 6.7 | 12.8 | To the west. Dim! | Physical |
| HD 75353 | STF1282 | STF1282 | AB | 279 | 3.5 | 7.6 | 7.8 | Lyn Equal, similar colours. Pleasing separation at 71x; tight at 54x. Many field stars. | Physical |
| | | SLE1025 | AC | 10 | 49.4 | 7.5 | 12.4 | Dim and distant. Nearly due N. | Physical |
| Alpha Lyn | STT 571 | STT 571 | AB | 43 | 223.3 | 3.3 | 8.8 | Lyn Great system. The BC pair was far away NE. Incredible orange and blue at low power. | Optical |
| | | STF1342 | BC | 313 | 16.7 | 8.8 | 11.1 | Faint. Use high power. Visible at low power in good seeing. Colourless. 90° to AB line. | Uncertain |
| HR 2910 | H N 19 | H N 19 | | 117 | 9.6 | 5.8 | 5.9 | Pup aka HR 2909. Cool! Car headlights. Nearly same brightness. Same light yellow colour. | Physical |
| 2 Pup | STF1138 | STF1138 | AB | 341 | 16.8 | 6.0 | 6.7 | Pup To the N. Nearly equal colour. Nearly equal brightness. Not far from Messier 46. | Physical |
| | | STF1138 | AC | 229 | 100.0 | 6.0 | 10.6 | Dim and distant. To the SW. | Uncertain |

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
|------------------------|---------|---------|-----------|------------|-------------|------------|------------|---|-----------|
| SPRING (part 1) | | | | | | | | | |
| Tegmen | STF1196 | STF1196 | AB | 8 | 1.1 | 5.3 | 6.3 | Cnc or Tegmine. At high power, not round, a figure-8. Almost in-line with C. Split at 391x in 2012. | binary |
| | | STF1196 | AC | 51 | 6.3 | 5.3 | 5.9 | Pleasing at 52x. Main pale yellow colour, companion hint of orange? To the NE. | Physical |
| | | STF1196 | AD | 107 | 275.6 | 4.9 | 8.9 | Faint, well away to the E. | Optical |
| | | ENH 1 | AE | 26 | 562.2 | 4.9 | 10.1 | NNE, further away than D. | Optical |
| | | ENH 1 | AF | 46 | 638.1 | 4.9 | 10.3 | The faintest of all. East of the E star. aka TYC 01381-0323 1. | Optical |
| | | ENH 1 | AG | 332 | 672.3 | 4.9 | 10.2 | G is to the NW, at a right angle to E star, about the same distance that E was from A. | Optical |
| HR 3395 | STF1245 | STF1245 | AB | 25 | 10.1 | 6.0 | 7.2 | Cnc Yellow and white. In middle of a triangle. B was roughly north. | Physical |
| | | STF1245 | AC | 109 | 100.4 | 6.0 | 10.7 | C was to the east, was dimmer than E. C looked red. Opposite D. | Optical |
| | | STF1245 | AD | 292 | 110.3 | 6.0 | 11.9 | Dim. Opposite C. | Optical |
| | | STF1245 | AE | 207 | 114.8 | 6.0 | 9.6 | Brighter than C. Blue. To the south. | Optical |
| | | ANT 4 | AG | 211 | 120.5 | 6.0 | 12.3 | The dimmest of all. Furthest out. | Uncertain |
| HD 75646 | STTA 96 | STTA 96 | AB | 312 | 50.0 | 7.7 | 8.5 | Cnc Sparse field. Colourful. Bright primary SE, secondary NW. Lovely. A great system. | Optical |
| | | STTA 96 | AC | 267 | 35.6 | 7.7 | 10.7 | C is red. Very dim. W of A. At apex of right-angle bend, so B due north of C and A due east. | Uncertain |
| HD 73668 | STF1255 | STF1255 | AB | 30 | 26.0 | 7.3 | 8.6 | Hya Near ε and ζ. Faint pair. Easy split at 62x. Yellow and orange. Yellow and orange. NE. | Physical |
| | | STF1255 | BD | 22 | 71.5 | 8.6 | 12.6 | Additional companion needs a bigger aperture. Beyond D. | optical |
| Tau 1 Hya | HJ 1167 | HJ 1167 | | 4 | 67.5 | 4.6 | 7.3 | Hya Pleasing warm yellow main star and pale orange companion. Widely separated at 110x. | Physical |
| HR 3963 | BU 1072 | BU 1072 | AB | 53 | 12.7 | 6.2 | 12.1 | Hya Will need large aperture. Near Alphard. To the E. | Optical |
| | | SHJ 110 | AC | 273 | 21.2 | 6.2 | 7.0 | Wide pair at 48x. Blue or blue-white and orange. Faint. Oriented to the W. | Optical |
| HR 4363 | STF1520 | STF1520 | | 344 | 12.4 | 6.5 | 7.8 | UMa Slightly unequal intensities. Nice. Medium tight. Secondary orange and main yellow. | Physical |
| HD 100054 | STF1544 | STF1544 | | 91 | 12.2 | 7.3 | 8.0 | UMa Wide pair. Easy in big 'scope. Yellow and pale blue. Very similar brightness, B very slightly dimmer. | Uncertain |
| 83 Leo | STF1540 | STF1540 | AB | 150 | 28.4 | 6.6 | 7.5 | Leo Bright stars. B SE. Easy split, while tighter than Tau AB. West of Tau Leonis. Two in the view. | Binary |
| | | STF1540 | AC | 191 | 205.2 | 6.6 | 11.1 | Faint and well away, 10x. To the S. | Optical |
| Tau Leo | STFA 19 | STFA 19 | AB | 182 | 88.5 | 5.1 | 7.5 | Leo Neat system. A yellow-white, B blue, much dimmer. South. Wide. Beside 83 Leo. Two in the view. | Optical |
| | | STFA 19 | AD | 92 | 761.2 | 5.1 | 9.5 | D, far afield east, very wide. Brighter than B! About 90° from AB angle. White, maybe blue white. | Optical |

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
|------------------------|---------|---------|-----------|------------|--------------|------------|-------------|---|-----------|
| SPRING (part 2) | | | | | | | | | |
| HD 105590 | STF1604 | STF1604 | AB | 88 | 9.0 | 6.9 | 10.0 | Crv Very cool. Tight. Equilateral triangle. B faint. Fantastic colours at 217x! Yellow and red. Sparse field. | Physical |
| | | STF1604 | AC | 3 | 10.5 | 6.9 | 8.1 | C, aka SAO 157112, is brighter than B. To the N. Fantastic colours again, A yellow; C blue. | Optical |
| Algorab | SHJ 145 | SHJ 145 | AB | 215 | 24.0 | 3.0 | 8.5 | Crv Contrasting brightness. Wide. Pretty at low power. Main is white or pale yellow. Companion: white. | Uncertain |
| HD 109556 | STF1659 | STF1659 | AB | 351 | 28.1 | 7.9 | 8.3 | Crv Lots going on! A triad shape, close faint pair in the middle. A is to the south. Slightly warmer colour. | Physical |
| | | STF1659 | AC | 69 | 43.8 | 7.9 | 10.9 | Extremely faint, spotted at 139x. Right angle to A and B. Blue-white. Near HD 109875. | Uncertain |
| | | STF1659 | AD | 32 | 189.8 | 7.9 | 9.9 | D was very faint to the NE. Further out from A than E. Blue-white. | Optical |
| | | STF1659 | AE | 275 | 151.2 | 7.9 | 6.8 | West (opposite C, a right-angle again). Fairly bright. Tiny bit closer to A than the D star. Blue-white. | Optical |
| | | STF1659 | AF | 139 | 209.4 | 7.9 | 6.6 | F brightest of all the members, to the SE. Slightly further from A than D. Blue-white. | Optical |
| 2 CVn | STF1622 | STF1622 | | 260 | 12.1 | 5.9 | 8.7 | CVn Colourful pair. Orange and blue. Pleasingly close at 78x. Lovely. | Optical |
| Cor Caroli | STF1692 | STF1692 | AB | 230 | 19.5 | 2.9 | 5.5 | CVn Main very white blue, partner pale yellow green? Fairly close. Easy to separate at 40x Nice at 48x! | Physical |
| HR 4698 | STF1633 | STF1633 | | 245 | 8.9 | 7.0 | 7.1 | Not far from open cluster Collinder 256. WSW. | Uncertain |
| 12 Com | SHJ 143 | SHJ 143 | AB | 57 | 36.7 | 4.9 | 11.8 | Com Fainter than the eastern triangle stars including TYC 1989-0807 1. Shown as single star in PSA. | Optical |
| | | SHJ 143 | AC | 168 | 59.0 | 4.9 | 8.9 | To the S. Wide pair, about double AB. Yellow and orange. Within open cluster Collinder 256. | Physical |
| | | ARN 6 | AD | 132 | 213.1 | 4.9 | 10.1 | A star further along, more to the east, making a hockey stick with A and C, same brightness as C. | Optical |
| 24 Com | STF1657 | STF1657 | | 272 | 20.2 | 5.1 | 6.3 | Com A nice wide colourful double. Yellow is the primary and white-blue is the secondary. | Physical |
| HD 110932 | STF1678 | STF1678 | | 170 | 37.5 | 7.2 | 7.7 | Com Nearly equal stars. Maybe orange. And white or yellow. Nice. Quite wide at 48x but attractive. | Optical |
| 32 Com | STFA 23 | STFA 23 | AB | 51 | 196.3 | 6.5 | 7.0 | Com Extremely wide at medium power. 32-33 Com. Orange and blue. To the NE. | Optical |
| | | STFA 23 | AC | 262 | 905.1 | 6.5 | 9.0 | C star is dim grey or yellow. A and C might be opposite edges of field of view at high power! | Optical |
| HD 112278 | STF1689 | STF1689 | | 223 | 30.2 | 7.1 | 9.1 | Vir In a hook shape of stars. Tight pair. Yellow-white and orange-red. Challenging. Near NGC 4762. | Optical |
| Asellus Tertius | STF1821 | STF1821 | AB | 236 | 13.7 | 4.5 | 6.6 | Boo Beside iota Boo. Two in the view. Nice double. Pale yellow and very pale blue? | Physical |
| Iota Boo | STFA 26 | STFA 26 | AB | 33 | 38.9 | 4.8 | 7.4 | Boo Beside kappa Boo. Two in the view. Main pale yellow; companion medium pale orange. | Physical |
| Delta Boo | STFA 27 | STFA 27 | AB | 78 | 105.0 | 3.6 | 7.9 | Boo Yellow and pale blue-green. Wide. Easy at 48x. ENE. | Physical |
| Alkalurops | STFA 28 | STFA 28 | AB | 172 | 109.0 | 4.3 | 7.1 | Boo At 54x, a wide pair. Primary pale yellow or white. Companion quite dim. White? South. | Physical |
| | | STF1938 | Ba,Bb | 4 | 2.3 | 7.1 | 7.6 | Split at 145x. Both white. Angle of tight pair almost same A and the pair. | Binary |
| HR 5397 | SHJ 179 | SHJ 179 | AB | 296 | 35.0 | 6.6 | 7.2 | Lib NW. Nice. Nearly equal brightness. White or yellow and orange. Surrounded by doubles. | Physical |
| | | BU 225 | BC | 91 | 1.2 | 7.2 | 8.4 | Very tight. Large aperture and good seeing needed. C east of B. | Physical |
| Zuben Elgenubi | SHJ 186 | SHJ 186 | AB | 314 | 231.1 | 2.7 | 5.2 | Lib Use binoculars! Extremely wide. White, bright; pale orange. NW. | Physical |
| | | AOT 53 | AC | 291 | 275.6 | 2.7 | 12.5 | Even further away but so dim a telescope is needed. WNW. | Uncertain |
| HR 5816 | STF1962 | STF1962 | | 190 | 11.7 | 6.4 | 6.5 | Lib A nice pair in a 100mm at 55x. Pleasing, tight. Equally bright. Identical in colour: pale yellow. | Physical |
| HD 139691 | HU 1167 | HU 1167 | AB | 81 | 1.2 | 8.1 | 9.9 | CrB Requires aperture greater than 90mm. Near Zeta 1 and 2 Coronae Borealis. E of A. | Binary |
| | | STF1964 | AC | 90 | 14.5 | 8.1 | 8.1 | Faint pair, wide, equal brightness. Orange and blue. C is due E of A. | Physical |
| | | STF1964 | AD | 84 | 15.1 | 8.1 | 9.0 | Dim. C and D are inline and are very close to each other. Likely merged together. | Physical |
| HR 6043 | STT 305 | STT 305 | AB | 263 | 5.7 | 6.4 | 10.2 | CrB B medium-bright star immediately west, very close, almost touching primary! Beige and pale blue. | Physical |
| Sigma CrB | STF2032 | STF2032 | AB | 239 | 7.3 | 5.6 | 6.5 | CrB Nice double star. Similar magnitudes. Pretty tight. White; pale orange. Oriented NE to SW. | Binary |
| | | STF2032 | AD | 82 | 93.5 | 5.6 | 10.8 | Faint. Very wide. Nearly due E of A. | Optical |
| | | STF2032 | AE | 241 | 634.8 | 5.6 | 12.3 | Dimmer. Extraordinarily wide. To the SW, beyond B. | Physical |

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
|------------------------|---------|---------|--------------|------------|--------------|------------|------------|--|-----------|
| SPRING (part 3) | | | | | | | | | |
| HD 144564 | STF2007 | STF2007 | AB | 322 | 37.5 | 6.9 | 8.0 | Ser Colourful stars. A is yellow with a hint orange while B is white. B is NW. Nice triple. Interesting field. | Optical |
| | | STF2007 | AC | 137 | 162.7 | 6.9 | 10.8 | (Cap) Wide pair, easily separated. Opposite B. The C attendant is in an arc of stars. Serpens Caput. | Optical |
| Theta 1 Ser | STF2417 | STF2417 | AB | 104 | 22.5 | 4.6 | 4.9 | Ser aka Alya. Identical stars, like eyes. Tight. A nice double, white stars. Serpens Cauda. ESE. | Physical |
| | | STF2417 | AC | 58 | 421.0 | 4.6 | 6.8 | (Cau) Slightly fainter but much further out. NE. | Optical |
| SUMMER (part 1) | | | | | | | | | |
| Xi Sco | STF1998 | STF1998 | AB | 9 | 1.1 | 5.2 | 4.9 | Sco Grafias. Very low through high power. AB is super-tight. Pale gold. Big 'scope and 200x? | Binary |
| | | STF1998 | AC | 43 | 7.5 | 5.2 | 7.3 | Colourful stars. NE of A. Bright stars. C is easy split, at low power. C is orange. | Binary |
| Rasalgethi | STF2140 | STF2140 | AB | 103 | 4.6 | 3.5 | 5.4 | Her Lovely. A brilliant shimmering orange star with pale blue companion. Relatively tight at 217x. | Binary |
| | | STF2140 | AD | 39 | 79.2 | 3.5 | 11.1 | D obvious in good conditions. To the NE. White. Well away. | Optical |
| 100 Her | STF2280 | STF2280 | AB | 183 | 14.3 | 5.8 | 5.8 | Her A and B are Identical. Exact same brightness and colour. Both white. South. | Optical |
| | | STF2280 | AC | 127 | 79.9 | 5.9 | 11.8 | Dim and well away to the SE. | Uncertain |
| 17 Dra | STF2078 | STF2078 | AB | 104 | 3.3 | 5.4 | 6.4 | Dra Very tight. Switch from low power to high power. ESE. | Physical |
| | | STFA 30 | AC | 193 | 90.0 | 5.4 | 5.5 | 16 and 17 Draconis might well be a binocular target. Similar colours and brightness. Nice. South. | Physical |
| | | STFA 30 | CD | 123 | 123.9 | 5.5 | 11.2 | Possible beyond the light grasp of binoculars or a small telescope. To the SE. | Optical |
| Kuma | STFA 35 | STFA 35 | | 311 | 62.1 | 4.9 | 4.9 | Dra aka Dragon's Eyes. Wide. Same brightness. One is white; the other a hint of yellow. Very good. | Physical |
| Dsiban | STF2241 | STF2241 | AB | 17 | 30.1 | 4.6 | 5.6 | Dra Wide pair. Surprisingly. Main bright yellow; companion dark yellow or yellow with a hint of orange. | Binary |
| | | STF2241 | AC | 107 | 78.1 | 4.6 | 11.1 | Dim and twice the separation. Right angle. C is nearly due E of A. | Optical |
| 41 Dra | STF2308 | STF2308 | AB | 232 | 18.8 | 5.7 | 6.0 | Dra Nice. Wide. Nearly equal colour and brightness. Not very colourful... SW. | Binary |
| | | STF2308 | AC | 129 | 224.8 | 5.7 | 8.3 | Wide pair, C is to the SE. Surprisingly close to Ursa Minor. | Optical |
| HR 7083 | H 6 50 | H 6 50 | AB | 358 | 24.8 | 6.2 | 12.5 | Sct Dim close-in companion. Due N. Beside Wild Duck Cluster. | Uncertain |
| | | H 6 50 | AC | 171 | 111.8 | 6.2 | 8.2 | The stars looked yellow and blue. Wide. S. | Optical |
| Epsilon 1 Lyr | STF2382 | STF2382 | AB | 345 | 2.3 | 5.2 | 6.1 | Lyr Tight pair to the north. This pair is the same colour, white. | Binary |
| | | STFA 37 | AB,CD | 172 | 209.5 | 4.7 | 4.6 | The Double Double. Tim Horton Star! :-). Easy in binoculars. Can you see naked eye?! | Physical |
| | | STF2383 | CD | 74 | 2.4 | 5.3 | 5.4 | Tight pair to the south. Slightly different colours. Subtle. 90° angle to AB alignment. | binary |
| | | STFA 37 | AI | 137 | 149.5 | 5.2 | 10.1 | Faint. Bright, east of F. Easily seen at 226x. Pale yellow. | Optical |
| | | SHJ 277 | CF | 0 | 93.3 | 4.6 | 12.7 | Very faint. Between AB and CD. Closer to AB and eastward. Use averted. Pale yellow. | Uncertain |
| | | STF2383 | CE | 334 | 63.2 | 5.3 | 12.3 | Very faint. Between AB and CD. Westward. Brighter than F. Pale yellow. | Optical |
| Sheliak | STFA 39 | STFA 39 | AB | 149 | 45.7 | 3.6 | 6.7 | Lyr Close at 17x but wide at 71x. Primary brilliant white with hint of yellow. Secondary looks green. | Uncertain |
| | | BU 293 | AE | 317 | 67.2 | 3.6 | 10.1 | No trouble at 78x. Blue-white? To the NW. | Optical |
| | | BU 293 | AF | 18 | 86.0 | 3.6 | 10.6 | Blue-white? Not far from Ring Nebula. To the NE. | Uncertain |
| HR 7140 | STT 525 | STT 525 | AB | 130 | 1.8 | 6.1 | 9.1 | Lyr Very faint companion very close to the primary. Visible in large 'scope. Orange or yellow. | Uncertain |
| | | SHJ 282 | AC | 350 | 45.4 | 6.1 | 7.6 | Nice wide double. Classic colours: pale yellow and pale blue. Near the Ring Nebula. To the N. | Physical |
| | | SHJ 282 | AD | 295 | 214.8 | 6.1 | 11.0 | Very faint and far from primary. To the NW. | Optical |
| HR 7099 | STF2404 | STF2404 | | 182 | 3.5 | 6.9 | 7.8 | Aql Pretty. South. Yellow and orange at lower power. Interesting. Near open cluster NGC 6709. | Uncertain |
| 15 Aql | SHJ 286 | SHJ 286 | | 211 | 39.6 | 5.5 | 7.0 | Aql Very interesting pair. Hard to get colours. Bright one seemed a dark yellow; companion looks red. | Optical |
| 57 Aql | STF2594 | STF2594 | | 171 | 35.7 | 5.7 | 6.4 | Aql Nice pair. Almost equal in magnitude. The brighter one is a pale blue; fainter star is pale yellow. | Physical |

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
|------------------------|---------|---------|-----------|------------|--------------|------------|------------|---|-----------|
| SUMMER (part 2) | | | | | | | | | |
| HR 7294 | STF2486 | STF2486 | AB | 204 | 7.1 | 6.5 | 6.7 | Cyg Two gold stars, equally coloured, equally bright. Easily split at 145x. Beside triple HR 7311. | Binary |
| | | STF2486 | AD | 104 | 196.0 | 6.5 | 11.1 | Very faint. Far away to the SE. May be referred to as HD 179957 and HR 7293. | Optical |
| HR 7529 | STF2578 | STF2578 | AB | 125 | 14.9 | 6.4 | 7.0 | Cyg Nearly equal. White and orange. Almost east-west. Lots of faint stars. Attractive at 48x. | Optical |
| | | STF2578 | AC | 356 | 44.3 | 6.4 | 12.5 | The C and D stars popped at 226x. C to the north. | Uncertain |
| | | STF2578 | AD | 70 | 95.0 | 6.4 | 12.4 | The C and D stars popped at 226x. D to the NE. | Uncertain |
| | | STF2578 | AF | 251 | 144.5 | 6.4 | 9.2 | The curious star to the far west. | Optical |
| U Cyg | BLL 49 | BLL 49 | | 231 | 65.4 | 8.0 | 9.0 | Cyg The A star is highly variable, may be dimmer than B. Pale orange and red. SW. | Optical |
| 61 Cyg | STF2758 | STF2758 | AB | 153 | 31.8 | 5.2 | 6.1 | Cyg Close. SE. Both light gold. Almost equal brightness. B is slightly fainter than A. Pretty system. | Binary |
| | | STF2758 | AC | 219 | 839.8 | 5.4 | 10.2 | Ay carumba! Very wide. To the SW. Rich field. Surrounded by many faint stars. | Optical |
| | | STF2758 | AD | 250 | 748.0 | 5.4 | 10.5 | Use a detailed atlas or powerful software to identify field stars from official companions. Very wide. | Optical |
| | | STF2758 | AE | 267 | 340.8 | 5.4 | 9.6 | Use atlas or software to identify field stars from official companions. Very wide. Due W. | Optical |
| | | STF2758 | AF | 240 | 371.2 | 5.4 | 11.3 | Use atlas or software to identify field stars from official companions. Very wide. SW. | Optical |
| | | STF2758 | AG | 236 | 260.4 | 5.4 | 11.3 | Use atlas or software to identify field stars from official companions. Very wide. SW. | Optical |
| | | STF2758 | AH | 268 | 117.5 | 5.4 | 10.0 | Use atlas or software to identify field stars from official companions. Wide. W. | Optical |
| | | SMR 1 | AI | 239 | 28.3 | 5.4 | 10.7 | Use atlas or software to identify field stars from official companions. Close. SW. | Optical |
| | | HZE 4 | AJ | 241 | 17.5 | 2.3 | 12.4 | Use atlas or software to identify field stars from official companions. Tight. Faint. SW. | Uncertain |
| | | SMR 40 | AO | 281 | 163.4 | 5.4 | 12.7 | Use atlas or software to identify field stars from official companions. Wide. Faint. W. | Optical |
| | | SMR 40 | AP | 285 | 159.6 | 5.4 | 12.8 | Use atlas or software to identify field stars from official companions. Wide. Faint. W. | Optical |
| HD 200392 | BU 69 | BU 69 | AC | 241 | 74.6 | 8.4 | 8.0 | Vul In a big hockey stick. Stars in the blade. Main was a touch brighter than companion. Wide. WSW. | Uncertain |
| HR 8101 | STF2769 | STF2769 | AB | 300 | 18.2 | 6.7 | 7.4 | Vul Obvious. Bright star yellow. B blue? Nearly equal brightness. Oriented nearly perfectly east-west. | Physical |
| HD 183014 | STF2523 | STF2523 | AB | 148 | 6.4 | 8.0 | 8.1 | Vul Nearly equal. Part of a triangle, at north apex. Very tight, blue-white stars. Near Coathanger. | Physical |
| | | STF2523 | AC | 147 | 250.8 | 8.0 | 7.2 | Very wide. SE. Similar brightness to AB. | Uncertain |
| | | KRU 8 | CD | 139 | 10.5 | 7.2 | 12.8 | Fantastic. Unequal stars in brightness and colour. White and orange. Classic! Near HLM 23. | Uncertain |
| V340 Sge | H N 84 | H N 84 | | 301 | 28.4 | 6.4 | 9.5 | Sge WNW. Wide at 55x. Orange and blue. Or green? Unequal. Interesting. Near epsilon Sge. | Uncertain |
| Theta Sge | STF2637 | STF2637 | AB | 332 | 11.6 | 6.6 | 8.9 | Sge NNW. Tight. Primary yellow-white, partner orange-yellow. Interesting. Low and high power. | Physical |
| | | STF2637 | AC | 222 | 91.3 | 6.6 | 7.5 | C is yellow with a touch of orange. To the SW! | Optical |
| | | STF2637 | AD | 226 | 172.8 | 6.6 | 11.9 | Harder. Grey? D is beyond C. Surrounded by other doubles. | Optical |
| HR 8281 | BU 1143 | STF2816 | AC | 121 | 11.8 | 5.7 | 7.5 | Cep Within open cluster IC 1396. In Elephant Trunk. Wow! White-yellow; companion SW yellow-orange. | Physical |
| | | STF2816 | AD | 339 | 20.6 | 5.7 | 7.5 | The companion to the north, D, the bright one, slightly further, is dull yellow. | Physical |
| HR 8357 | STF2840 | STF2840 | AB | 197 | 18.1 | 5.6 | 6.4 | Cep SSW. Nearly equal brightness stars, whitish in colour. Near some close colourful stars. | Optical |
| Alkurhah | STF2863 | STF2863 | AB | 274 | 8.4 | 4.5 | 6.4 | Cep Tight. Main is light yellow. At low power partner looks blue. Pretty, near a loose gaggle of stars. | Binary |
| | | STF2863 | AC | 206 | 109.5 | 4.5 | 12.6 | Very faint start to the south-west, well away. | Optical |
| Delta Cep | STFA 58 | STFA 58 | AC | 191 | 41.0 | 4.2 | 6.1 | Cep S. Very wide pair, wide even at 36x. Yellow and blue. Assess variable brightness while here. | Physical |
| Kappa Cep | STF2675 | STF2675 | AB | 120 | 7.3 | 4.4 | 8.3 | Cep ESE. White and orange. Many magnitudes different. Very close together. A neat system! | Physical |
| | | STF2675 | AC | 334 | 170.2 | 4.4 | 10.3 | The C star is dimmer and to the north-west. Bluish. | Optical |
| Alpha 1 Cap | BU 295 | HJ 607 | AC | 222 | 46.9 | 4.2 | 9.6 | Cap C is south-west. Yellow-blue. Do not get distracted by binocular double with alpha 2. | Optical |
| Dabih | STFA 52 | STFA 52 | AB | 267 | 205.4 | 3.2 | 6.1 | Cap Use binoculars! Very wide. Bright yellow and bright blue stars. To the W. | Physical |
| | | STFA 52 | AC | 133 | 226.1 | 3.2 | 8.8 | Flanking. SE. Dark blue. They form an isosceles triangle. | Physical |
| Omicron Cap | SHJ 324 | SHJ 324 | | 239 | 21.9 | 5.9 | 6.7 | Cap Two equal pale blue white stars. WSW. | Physical |

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
|------------------------|---------|---------|-----------|------------|--------------|------------|-------------|--|-----------|
| SUMMER (part 3) | | | | | | | | | |
| HD 196411 | STF2703 | STF2703 | AB | 289 | 25.0 | 8.4 | 8.4 | Del NW. A and B are blue-ish. Equal brightness. Faint. Near multi-star system Rotanev. | Uncertain |
| | | STF2703 | AC | 234 | 77.8 | 8.4 | 8.8 | Blue-ish. C slightly fainter than A and B. South-west of B. | Optical |
| | | STF2703 | AD | 347 | 84.7 | 8.4 | 12.8 | Very faint. Flanking, to the north. | Uncertain |
| Gamma 2 Del | STF2727 | STF2727 | AB | 266 | 8.9 | 4.4 | 5.0 | Del Bright yellow gold pair of stars, fairly tight at 77x. West. | binary |
| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
| AUTUMN (part 1) | | | | | | | | | |
| 3 Peg | STFA 56 | STFA 56 | AB | 348 | 38.8 | 6.2 | 7.5 | Peg NNW. White and orange. Equal. Stunning. Near a faint double. Two in the view. | Physical |
| Epsilon Equ | STF2737 | STF2737 | AC | 67 | 10.6 | 5.3 | 7.1 | Equ Easy in a large 'scope. C to the north-east. Bright yellow and light yellow. Hints of green? | Optical |
| 8 Lac | STF2922 | STF2922 | AB | 186 | 22.3 | 5.7 | 6.3 | Lac Both white? Or pale yellow? B to the south. Slightly dimmer than A. Near double HR 8588. | Optical |
| | | A 1469 | AC | 168 | 48.8 | 5.7 | 10.4 | C was further south of B, slightly east, much dimmer. Orange! | Uncertain |
| | | A 1469 | AD | 145 | 81.6 | 5.7 | 9.1 | D was brighter than C, south-east of B, and blue. | Uncertain |
| | | A 1469 | AE | 239 | 335.2 | 5.7 | 7.3 | E, well away to the SW, pale orange, dimmer than B. | Optical |
| | COM 8 | BF | | 175 | 127.6 | 6.3 | 11.0 | Dimmer still. And well away from B, same direction, but not as far as E. | Uncertain |
| 10 Lac | S 813 | S 813 | AB | 47 | 62.6 | 4.8 | 10.3 | Lac Bright star, blue-white. B might look purple!? B much fainter. Cool! Shown as single star in PSA. | Optical |
| WZ Cas | STTA254 | STTA254 | AB | 89 | 57.8 | 7.4 | 8.3 | Cas Incredible. Wide. A, orange, B, blue. In a rich field. May not be obvious. Due E. | Uncertain |
| | | STTA254 | AC | 324 | 155.4 | 7.4 | 9.6 | Forms a spire. Well away to the north-west. Fainter. | Uncertain |
| | | STTA254 | AD | 118 | 181.4 | 7.4 | 10.4 | Opposite C from the B star. Fainter still. | Optical |
| HR 9094 | STF3053 | STF3053 | AB | 70 | 15.0 | 6.0 | 7.2 | Cas A little Albireo. Lovely light gold primary and a wide blue companion. Almost equal brightness. E. | Optical |
| | | STF3053 | AC | 291 | 98.5 | 6.0 | 11.0 | Much fainter and much further away. To the NW. | Uncertain |
| Achird | STF 60 | STF 60 | AB | 326 | 13.4 | 3.5 | 7.4 | Cas Wow! Burnt yellow and dull orange. Close, to the NW. | binary |
| | | STF 60 | AC | 260 | 225.0 | 3.5 | 11.4 | Faint and wide. Between B and G. Due W of A. | Optical |
| | | STF 60 | AD | 354 | 189.4 | 3.5 | 12.8 | D star to the N. Faint. | Optical |
| | | STF 60 | AE | 126 | 75.6 | 3.5 | 10.2 | E star to the south-east. Blue. In-line with A and B. | Optical |
| | | STF 60 | AF | 276 | 378.3 | 3.5 | 11.5 | To the west. Faint. Orange. | Optical |
| | | STF 60 | AG | 259 | 419.7 | 3.5 | 9.5 | G star to the west of A and south of F. White. | Optical |
| | | STF 60 | AH | 355 | 701.1 | 3.5 | 8.4 | H star far to the north. | Optical |
| | | SMR 2 | AI | 73 | 90.3 | 3.5 | 11.6 | Faint and wide. NE. | Optical |
| | | SMR 2 | AJ | 262 | 237.1 | 3.5 | 12.3 | Faint and wide. | Uncertain |
| Pi And | H 5 17 | H 5 17 | AB | 174 | 35.8 | 4.4 | 7.1 | And Wide, easy, low power. Nice yellow and blue. B south. Faint 3rd star. Shown as single star in PSA. | Physical |
| 56 And | STFA 4 | STFA 4 | AB | 298 | 202.5 | 5.8 | 6.1 | And Equal in brightness. Citrus-orange and pale or straw-yellow. Binoculars? Near NGC 752. | Optical |
| | | BU 1368 | AC | 79 | 18.4 | 5.8 | 11.9 | Faint. Much closer. East. | Physical |
| | | BU 1368 | BD | 258 | 204.4 | 6.1 | 9.8 | Further out from B star. Nearly due W of B. | Optical |
| Almaak | STF 205 | STF 205 | AB | 63 | 9.4 | 2.3 | 5.0 | And A close pair of yellow (A) and blue (BC) stars, like a miniature Albireo. Beautiful. | Physical |
| 59 And | STF 222 | STF 222 | | 36 | 16.5 | 6.1 | 6.7 | And Wide pair. Yellow and blue. Wow. NE. | Physical |
| 77 Psc | STF 90 | STF 90 | AB | 84 | 32.7 | 6.4 | 7.3 | Psc B is bright star to the east of A. Nearly the same magnitude. Wide. | Physical |

| Target | Parent | WDS | Pair | PA | Sep | M1 | M2 | Notes | Type |
|------------------------|---------|---------|-----------|------------|--------------|------------|------------|---|-----------|
| AUTUMN (part 2) | | | | | | | | | |
| Zeta Psc | STF 100 | STF 100 | AB | 63 | 23.2 | 5.2 | 6.3 | Psc ENE. Bright stars. The main is yellow. The companion is slightly redder. | Physical |
| | | BU 1029 | BC | 75 | 2.0 | 6.3 | 12.2 | Very faint and very tight. E of B. | Uncertain |
| HD 3125 | STF 39 | STF 39 | AC | 45 | 20.1 | 7.1 | 8.7 | Cet Decent star hop from iota. White and orange. Very close! SW-NE. AB (WDS D 2) are <0.5". | Physical |
| | | ALL 1 | AD | 159 | 200.8 | 7.1 | 10.0 | Outlier. The D star was to the south-south-east. 10 times the AC sep. Slightly dimmer than C. Nice! | Optical |
| HD 9336 | HJ 2052 | HJ 2052 | | 114 | 80.8 | 6.9 | 7.5 | Cet Equal. Wide. ESE. | Optical |
| Nu Cet | STF 281 | STF 281 | | 80 | 8.4 | 5.0 | 9.1 | Cet Bright primary and delicate dim star. B is east. | Physical |
| 66 Cet | STF 231 | STF 231 | AB | 235 | 16.8 | 5.7 | 7.7 | Cet Interesting. Yellow and orange? Blue? delicate. Not far from Mira. SW. | Optical |
| | | STF 231 | AC | 53 | 147.0 | 5.7 | 11.5 | Faint star to the north-east. | Optical |
| Mesarthim | STF 180 | STF 180 | AB | 2 | 7.4 | 4.5 | 4.6 | Ari Same magnitude and colour. Yellow-white. Easy to split at 52x. They look like moth eyes! | Physical |
| | | STF 180 | AC | 81 | 216.8 | 4.5 | 8.6 | Dim and very far away, to the east. | Optical |
| HD 13247 | STF 219 | STF 219 | | 186 | 11.7 | 8.0 | 8.9 | Tri Faint. Interesting field stars. B is slightly dimmer and nearly due south. | Physical |
| 15 Tri | AG 304 | AG 304 | | 16 | 142.4 | 5.6 | 6.8 | Tri Amazing colours. Wide pair. NNE. Easy target in binoculars. Pale orange. B is aquamarine. | Uncertain |
| Polaris | STF 93 | STF 93 | AB | 236 | 18.4 | 2.0 | 9.1 | UMi Yellow and blue and beautiful! SW. | Physical |
| Zeta Per | STF 464 | STF 464 | AB | 209 | 12.9 | 2.9 | 9.2 | Per aka Atik. Tight. A is pale yellow. Near triple HD 24601. | Physical |
| | | STF 464 | AC | 286 | 33.3 | 2.9 | 11.2 | Faintest of all. NW. | Uncertain |
| | | STF 464 | AD | 195 | 98.6 | 2.9 | 10.4 | A pair, dim, to the south. D and E stars. D is closer. Hard to get colours, orange? | Optical |
| | | STF 464 | AE | 186 | 120.0 | 2.9 | 10.0 | A pair, dim, to the south. D and E stars. Hard to get colours, blue? | Physical |
| Miram | STF 307 | STF 307 | AB | 301 | 28.7 | 3.8 | 8.5 | Per Miram. Light orange with blue-green. NW. | Uncertain |
| | | STF 307 | AC | 269 | 64.0 | 3.8 | 11.6 | Grey. To the W. Same distance as F. | Optical |
| | | SHJ 34 | AE | 297 | 242.9 | 3.8 | 9.2 | Blue-white. Beyond B. Well away | Optical |
| | | WAL 19 | AF | 25 | 57.7 | 3.8 | 11.4 | Dull yellow. Same distance as CD. Nearly due N. | Optical |
| | | WRD 1 | CD | 116 | 5.2 | 11.6 | 12.7 | Grey. Same distance as F. D is the "inner" star while C is the "outer." | Uncertain |