

# DOUBLE STARS FOR SEEING TEST SPRING 2004

By STEVE COE AND A.J. CRAYON

ENCLOSED ARE STAR CHARTS AND INFORMATION ON SEVERAL DOUBLE STARS IN THE SPRING SKY. WE WOULD LIKE TO CONDUCT A SEEING TEST TO SEE HOW THESE STARS CAN BE SPLIT WITH THE TELESCOPES AVAILABLE TO SAC OBSERVERS OVER THE NEXT SEVERAL MONTHS.

THERE ARE SEVERAL QUESTIONS TO BE ANSWERED:

- 1) IS THE SEEING BETTER IN EVENING OR MORNING TWILIGHT? AFTER MIDNIGHT?
- 2) DO VERY HIGH POWERS, SUCH AS 400X, PROVIDE A BETTER CHANCE AT SPLITTING THESE DOUBLES?
- 3) DOES ONE TYPE OF TELESCOPE DO A BETTER JOB OF SEPARATING THESE STARS?

GOOD NOTES ARE ESSENTIAL. MAKE CERTAIN THAT YOU WRITE DOWN AT LEAST THESE FACTS:

OBSERVER AND LOCATION

TELESCOPE

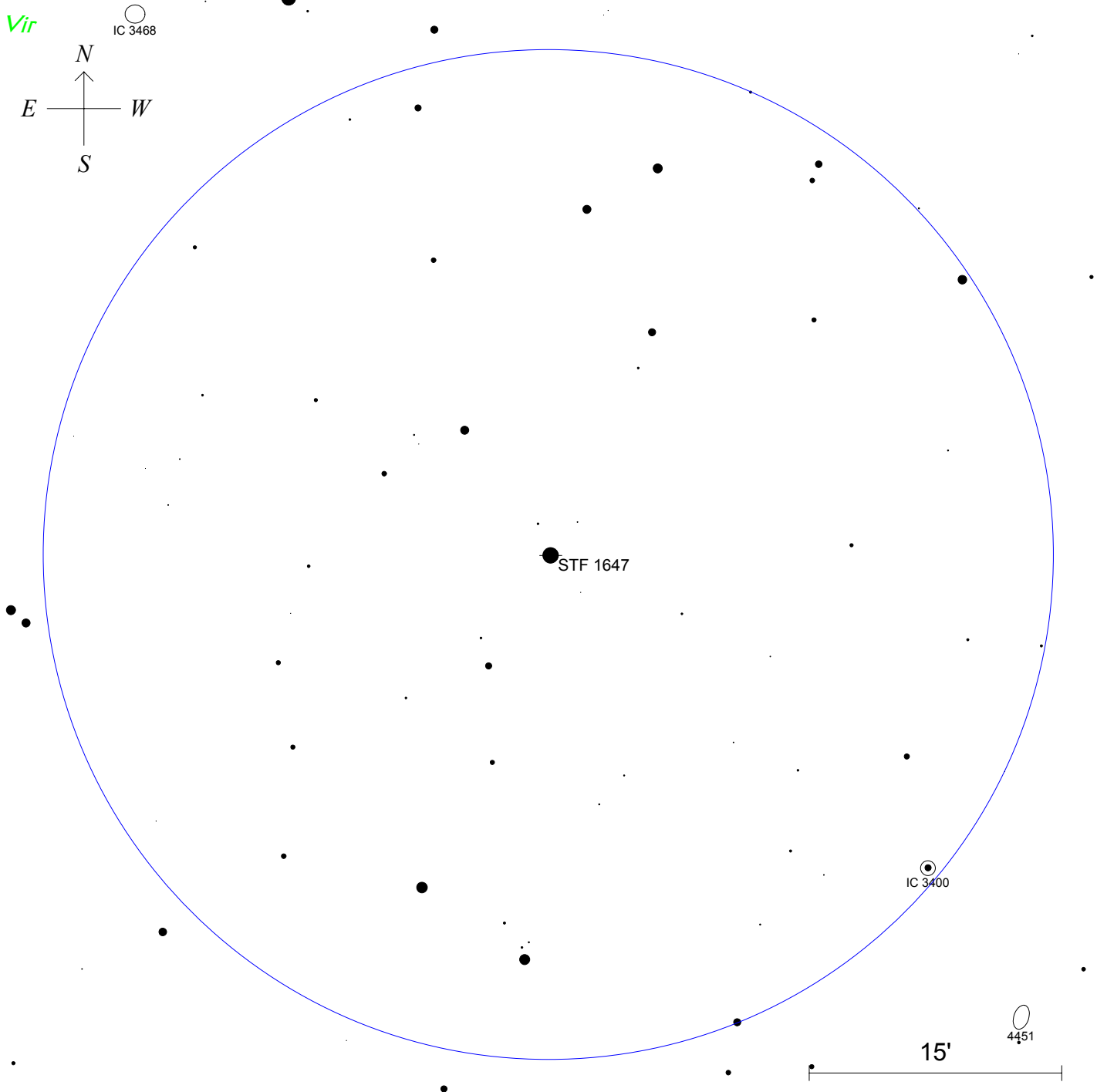
MAGNIFICATION

HOW WELL IS STAR SPLIT? (CLEAN SEPARATION, JUST TOUCHING, NOTCHED PAIR, ELONGATED, NOT SPLIT) AND ANY OTHER NOTES THAT YOU THINK ARE WORTHWHILE PROVIDING

AJ AND I ARE DOING THIS IN AN EFFORT TO SEE IF WE CAN CONFIRM OUR NAKED EYE AND TELESCOPIC SCALE OF SEEING, SO IF YOU HAVE A SEEING ESTIMATE THAT IS DETERMINED BY A METHOD THAT DOES NOT INVOLVE THESE DOUBLE STARS THEN NOTE THAT, PLEASE.

# STF 1647 in Virgo for Seeing Test

## 8.5 m and 8.8 m; Sep 1.3 Arcsec in PA 240



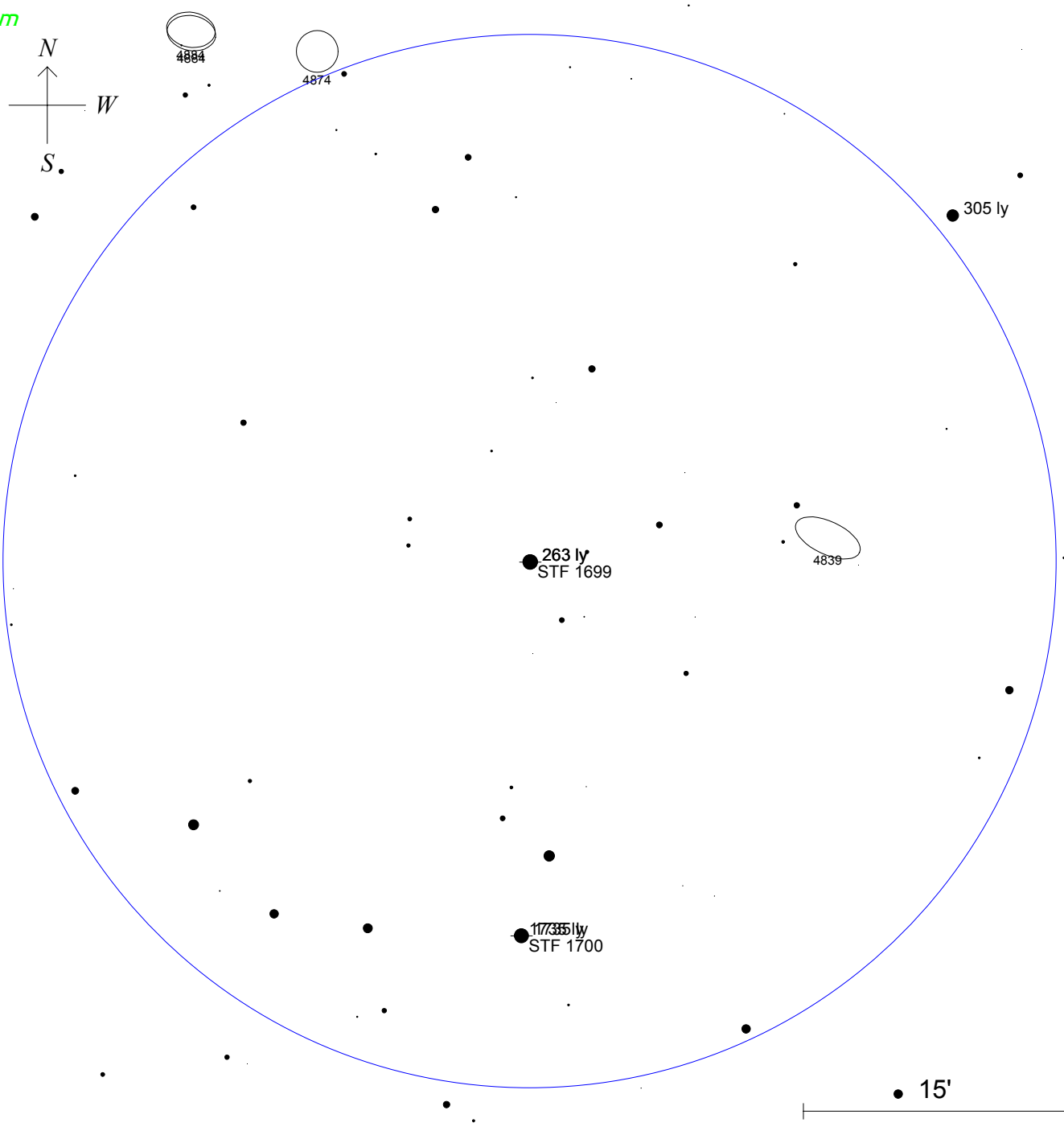
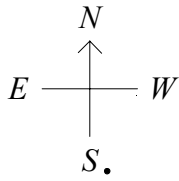
<p><b>STARS</b></p> <ul style="list-style-type: none"> <li>● &lt;7    ● 12</li> <li>● 8     ● 13</li> <li>● 9     ● &gt;14</li> <li>● 10</li> <li>● 11</li> </ul>	<p><b>SYMBOLS</b></p> <ul style="list-style-type: none"> <li>● Multiple star</li> <li>○ Variable star</li> <li>☄ Comet</li> <li>☾ Galaxy</li> <li>□ Bright nebula</li> <li>◻ Dark nebula</li> <li>⊕ Globular cluster</li> <li>○ Open cluster</li> <li>⊕ Planetary nebula</li> <li>⊗ Quasar</li> <li>△ Radio source</li> <li>× X-ray source</li> <li>○ Other object</li> </ul>	<p><i>Circle represents one degree FOV</i></p>
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Local Time: 08:16:49 5-Jun-2004	UTC: 15:16:49 5-Jun-2004	Sidereal Time: 00:46:00
Location: 34° 31' 7" N 112° 5' 7" W	RA: 12h30m49s Dec: +9° 41' Field: 1.1°	Julian Day: 2453162.1367

# STF 1699 in Coma Berenices for Seeing Test

## 8.6 m and 8.6 m; Sep 1.6 Arcsec in PA 7 Deg

Com



STARS		SYMBOLS		
● <7	● 12	● Multiple star	◻ Dark nebula	△ Radio source
● 8	● 13	○ Variable star	⊕ Globular cluster	× X-ray source
● 9	● >14	☄ Comet	○ Open cluster	○ Other object
● 10		○ Galaxy	⊙ Planetary nebula	
● 11		◻ Bright nebula	⊗ Quasar	

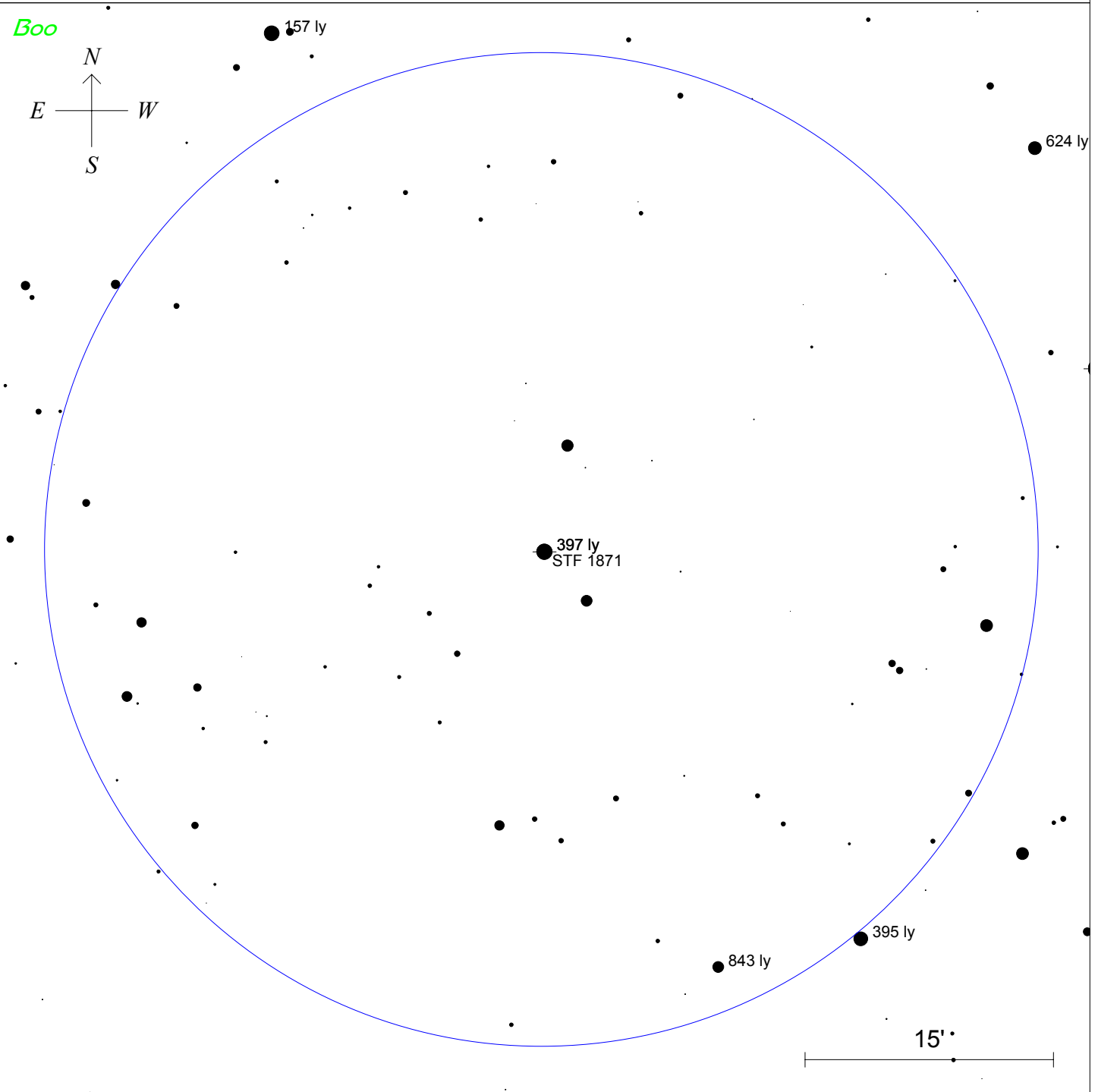
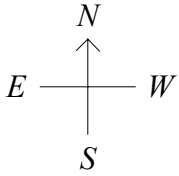
Circle represents one degree FOV

Local Time: 08:16:49 5-Jun-2004      UTC: 15:16:49 5-Jun-2004      Sidereal Time: 00:46:00  
 Location: 34° 31' 7" N 112° 5' 7" W      RA: 12h58m55s Dec: +27° 26' Field: 1.1°      Julian Day: 2453162.1367

# STF 1871 in Bootes for Seeing Test

## 7.3 m and 7.5 m; Sep 1.4 Arcsec in PA 185 Deg

*Boo*



### STARS

- <7    ● 12
- 8     ● 13
- 9     ● >14
- 10
- 11

### SYMBOLS

- |                 |                    |                |
|-----------------|--------------------|----------------|
| ● Multiple star | ◻ Dark nebula      | △ Radio source |
| ○ Variable star | ⊕ Globular cluster | × X-ray source |
| ☄ Comet         | ○ Open cluster     | ○ Other object |
| ○ Galaxy        | ⊙ Planetary nebula |                |
| ◻ Bright nebula | ⊗ Quasar           |                |

*Circle represents one degree FOV*

Local Time: 08:16:49 5-Jun-2004  
 Location: 34° 31' 7" N 112° 5' 7" W

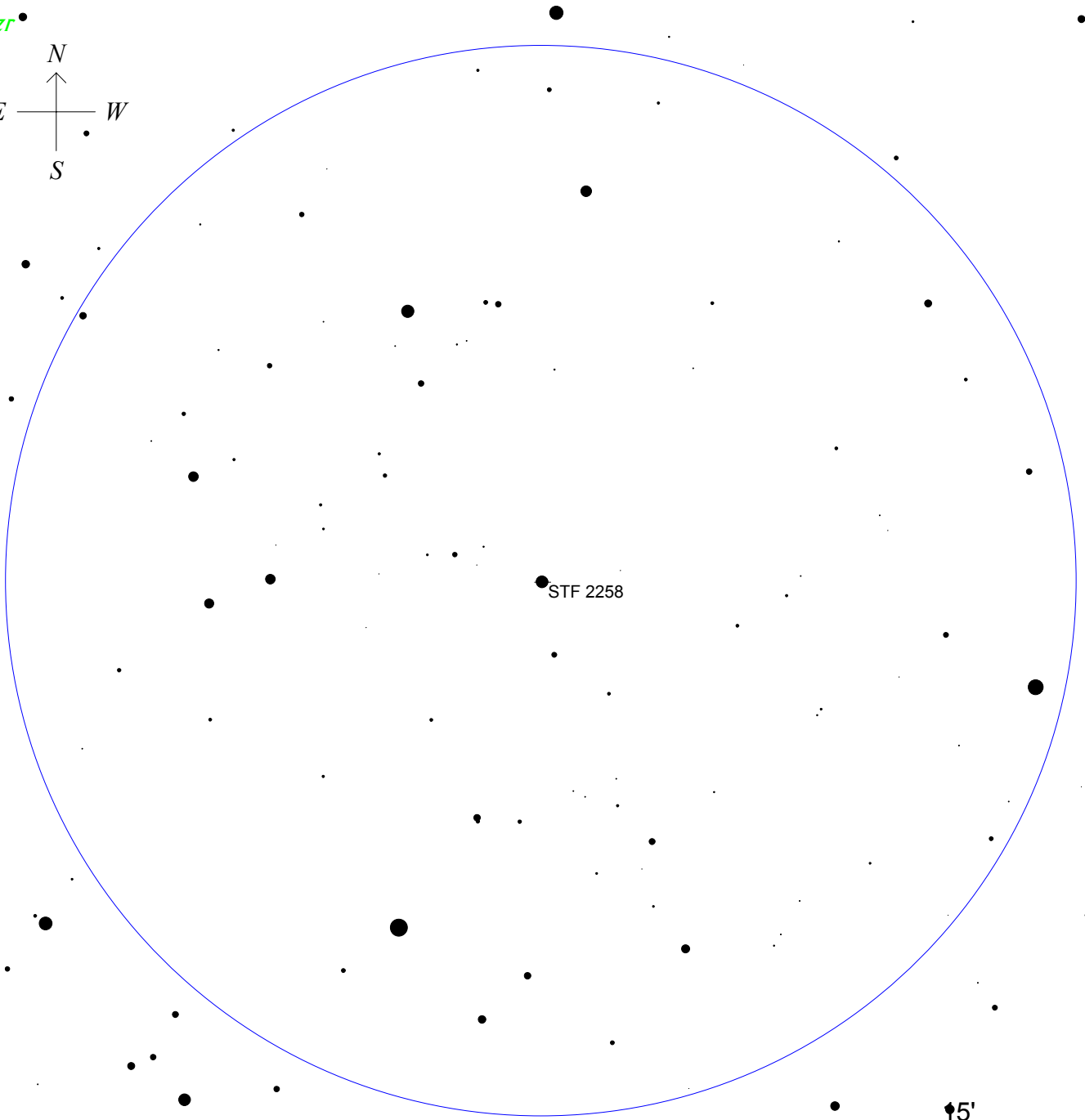
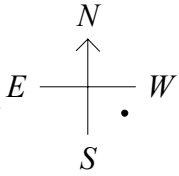
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Sidereal Time: 00:46:00  
 Julian Day: 2453162.1367

# STF 2258 in Hercules for Seeing Test

## 8.7 m and 8.9 m; Sep 2.2 Arcsec in PA 221 Deg

Her



15'

<p><b>STARS</b></p> <ul style="list-style-type: none"> <li>● &lt;7    · 12</li> <li>● 8      · &gt;13</li> <li>● 9</li> <li>● 10</li> <li>● 11</li> </ul>	<p><b>SYMBOLS</b></p> <ul style="list-style-type: none"> <li>● Multiple star</li> <li>○ Variable star</li> <li>☄ Comet</li> <li>○ Galaxy</li> <li>□ Bright nebula</li> <li>□ Dark nebula</li> <li>⊕ Globular cluster</li> <li>○ Open cluster</li> <li>⊕ Planetary nebula</li> <li>⊗ Quasar</li> <li>△ Radio source</li> <li>× X-ray source</li> <li>○ Other object</li> </ul>	<p><i>Circle represents one degree FOV</i></p>
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Local Time: 08:16:49 5-Jun-2004  
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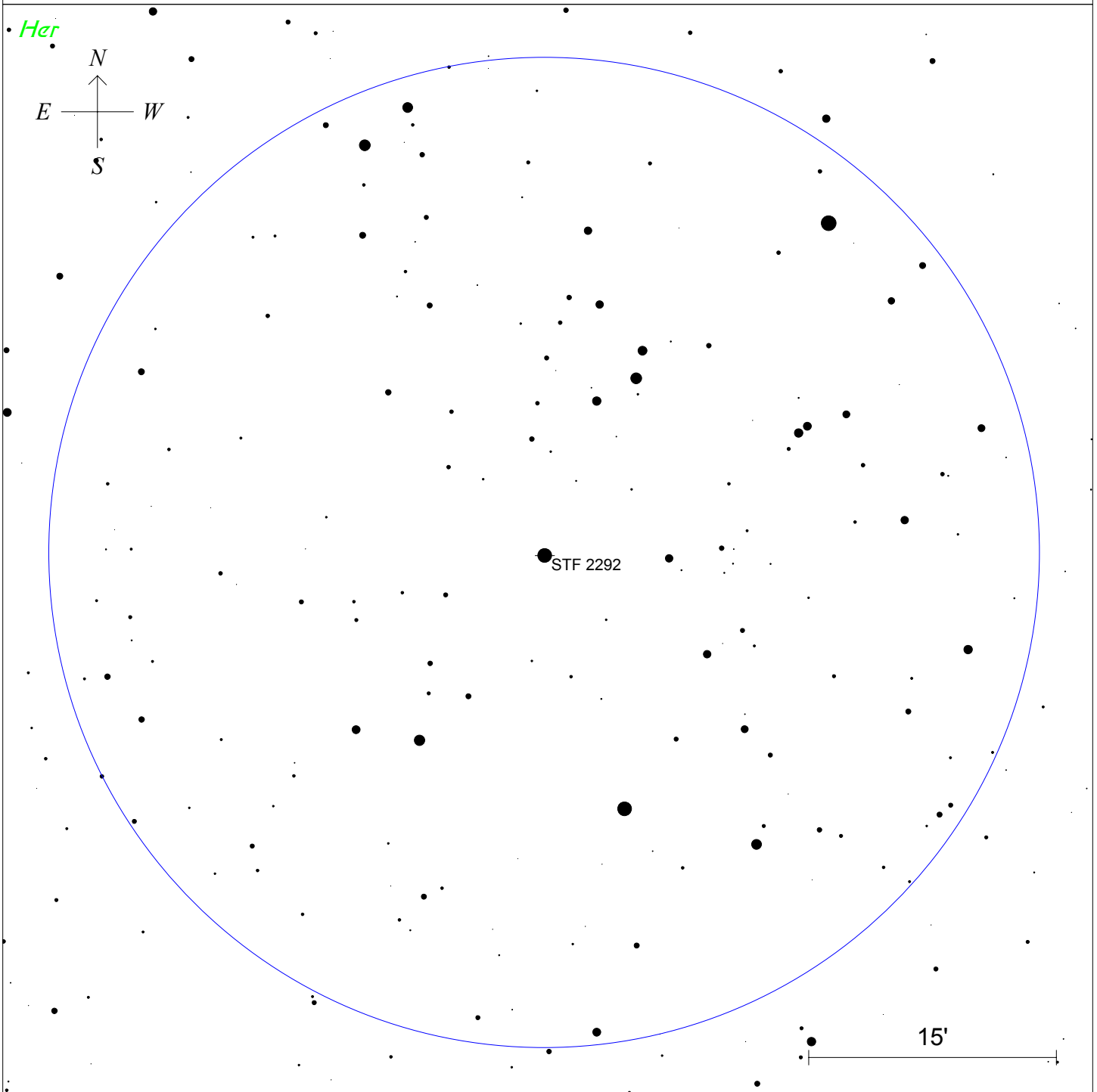
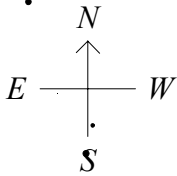
UTC: 15:16:49 5-Jun-2004  
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Sidereal Time: 00:46:00  
 Julian Day: 2453162.1367

# STF 2292 in Hercules for Seeing Test

## 8.9 m and 9.0 m; Sep 1.0 Arcsec in PA 271 Deg

Her



### STARS

- <7    · 12
- 8      · >13
- 9
- 10
- 11

### SYMBOLS

- |                 |                    |                |
|-----------------|--------------------|----------------|
| ● Multiple star | ◻ Dark nebula      | △ Radio source |
| ○ Variable star | ⊕ Globular cluster | × X-ray source |
| ☄ Comet         | ○ Open cluster     | ○ Other object |
| ○ Galaxy        | ⊙ Planetary nebula |                |
| ◻ Bright nebula | ⊗ Quasar           |                |

Circle represents one degree FOV

Local Time: 08:16:49 5-Jun-2004  
 Location: 34° 31' 7" N 112° 5' 7" W

UTC: 15:16:49 5-Jun-2004  
 RA: 18h12m17s Dec: +27° 38' Field: 1.1°

Sidereal Time: 00:46:00  
 Julian Day: 2453162.1367