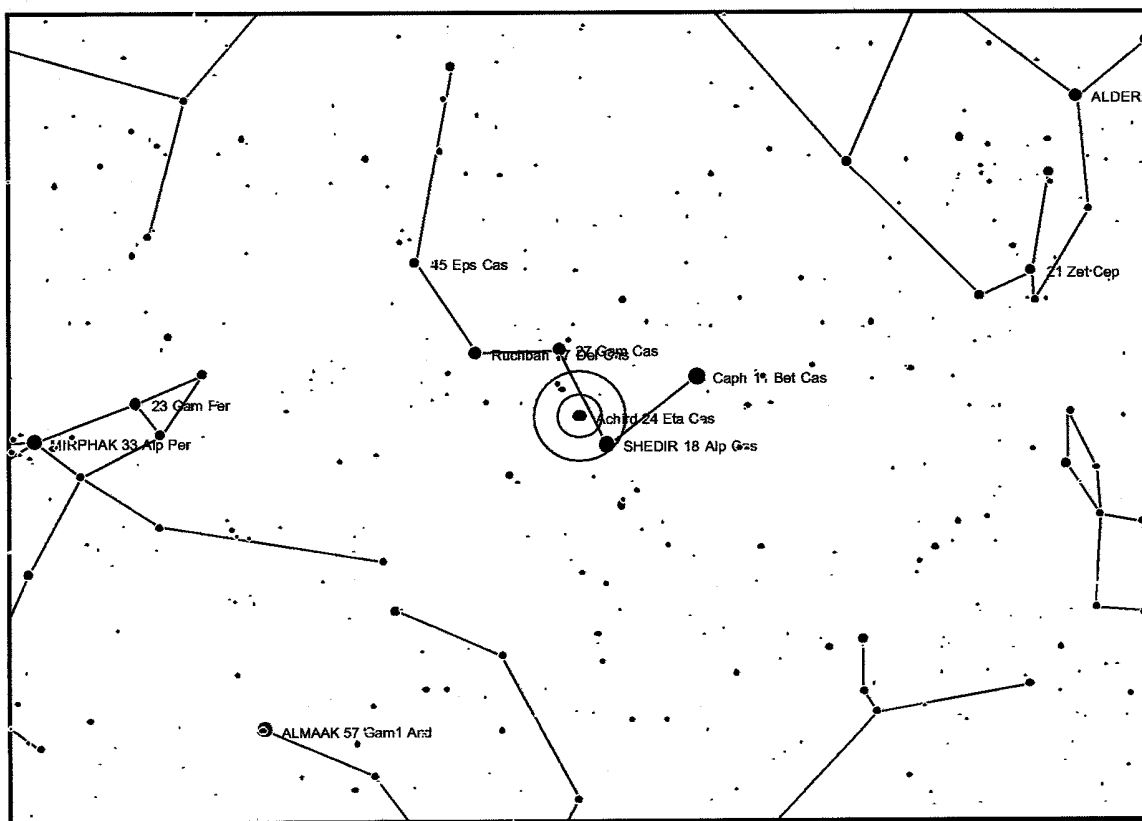


[illegible]

@ HOME

65 Psc	Date: 10/13/02	Time: 11:55 pm	Seeing: II	Trans: I
	RA: 00 49.9	DE: +27 43	Class: DBL	Inst: 125mm
	Mag: 6.3, 6.3	Sep: 4.4"	PA: 297°	EP: 73X

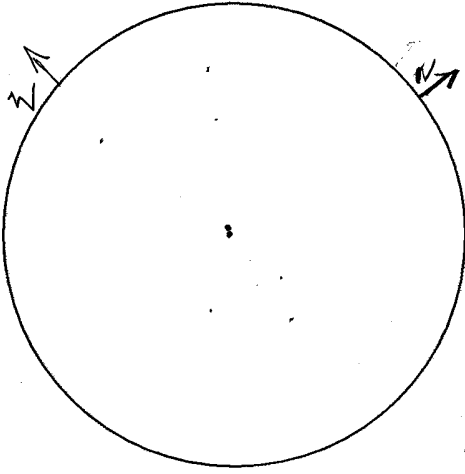
Description:

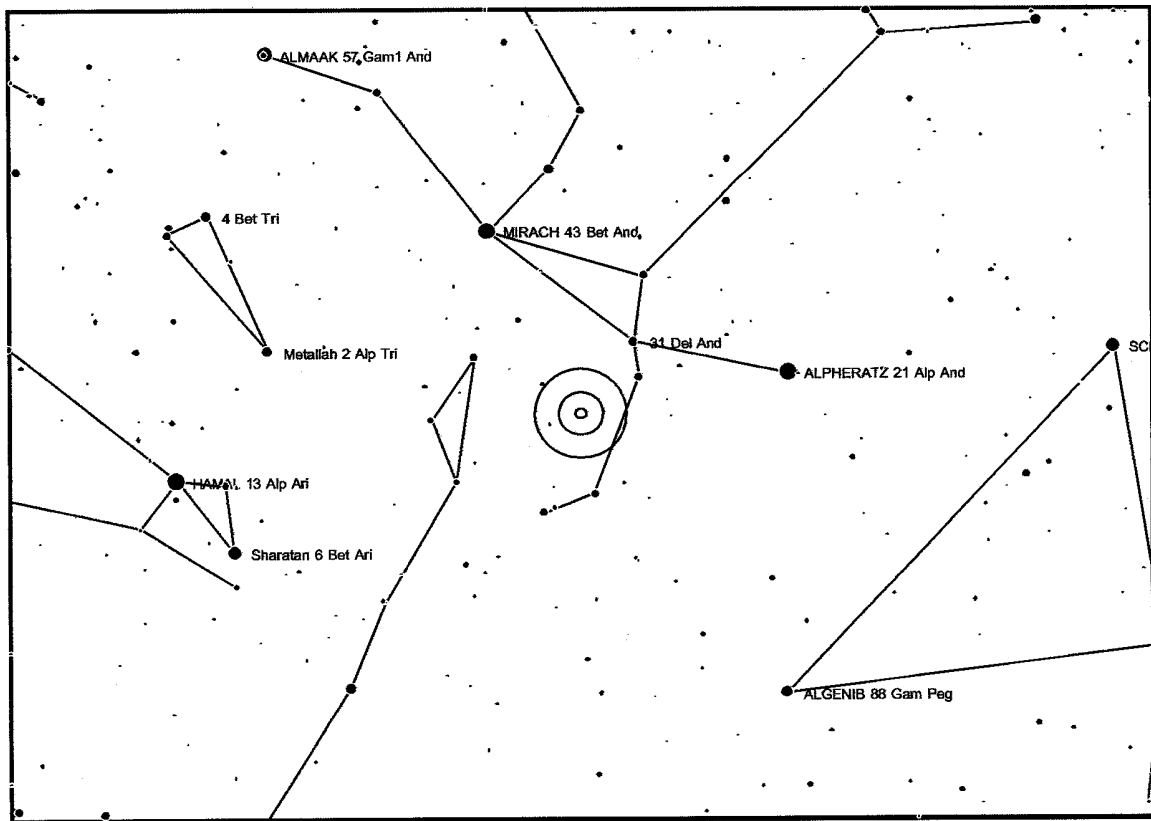
PERFECT LITTLE PAIR OF WHITES - JUST
SPLIT AT 73X - SMALL GAP BETWEEN THEM

BECAUSE SO TIGHT - TRIED 153X TO BE SURE
EXACTLY SAME PAIR / NOW 1.5 IMAGE WIDTH
GAP. REALLY STRAINED TO SEE MGR D,
MAYBE THE LOWER ONE JUST SLIGHTLY

DIMMER - CANT CONFIRM, APPARENTLY
NOT OFF BY 180° (AS I OFTEN AM ON
PERFECT PAIRS)

SEEN BEFORE





© Home

Psi1 Psc	Date: 10/14/02	Time: 12:00 am	Seeing: II	Trans: I
	RA: 01 05.6	DE: +21 28	Class: DBL	Inst: 125mm
	Mag: 5.6, 5.8	Sep: 30"	PA: 159°	EP: 73X

Description:

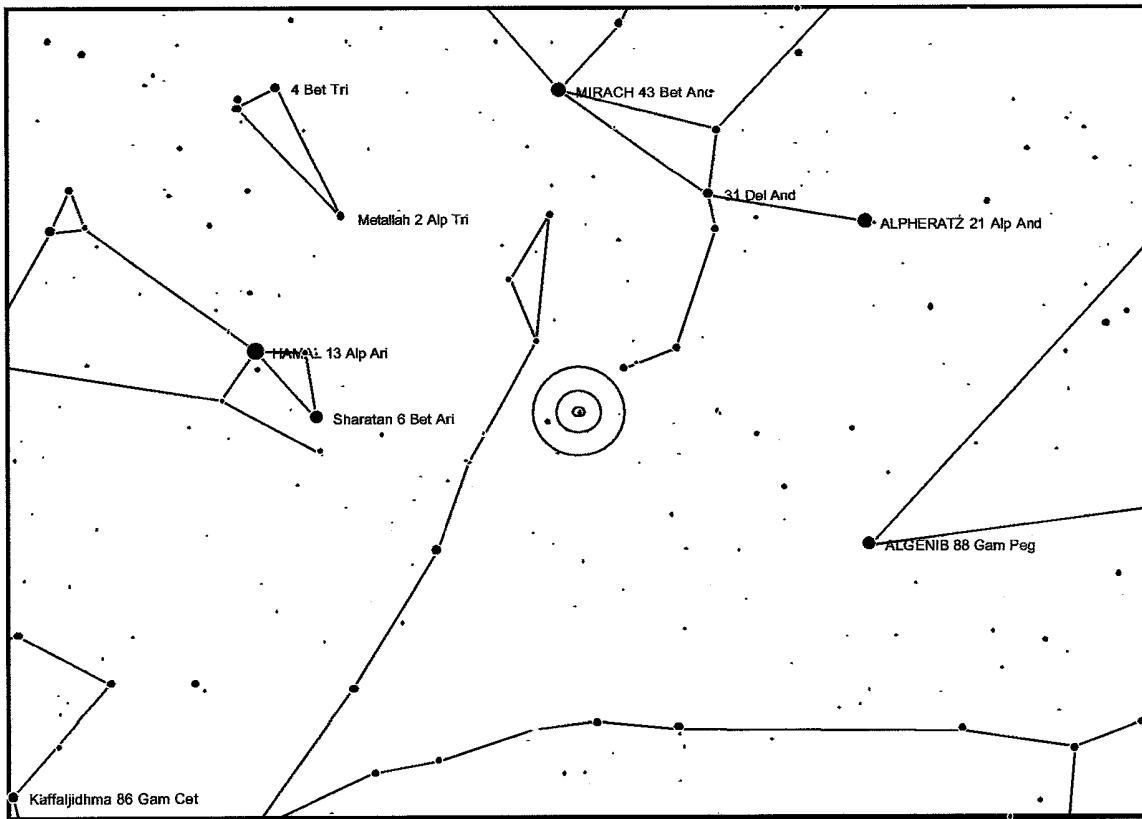
NICE WIDE PAIR OF WHITES, I SEE A ~10m COMES ALSO. WHITE (ALL 3). LOVELY FIELD

WEBB CITES 11m following

BURNHAM SAYS 11m @ 93", 123° (1959)

I AGREE

SEEN BEFORE



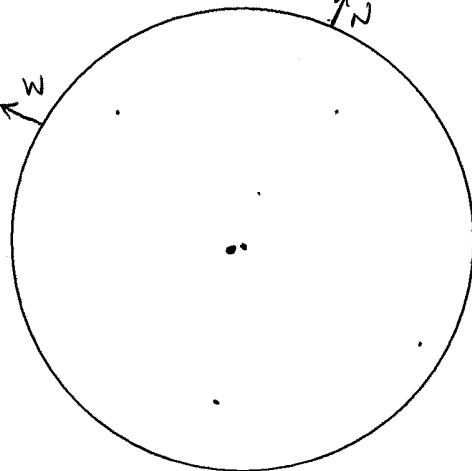
@Home

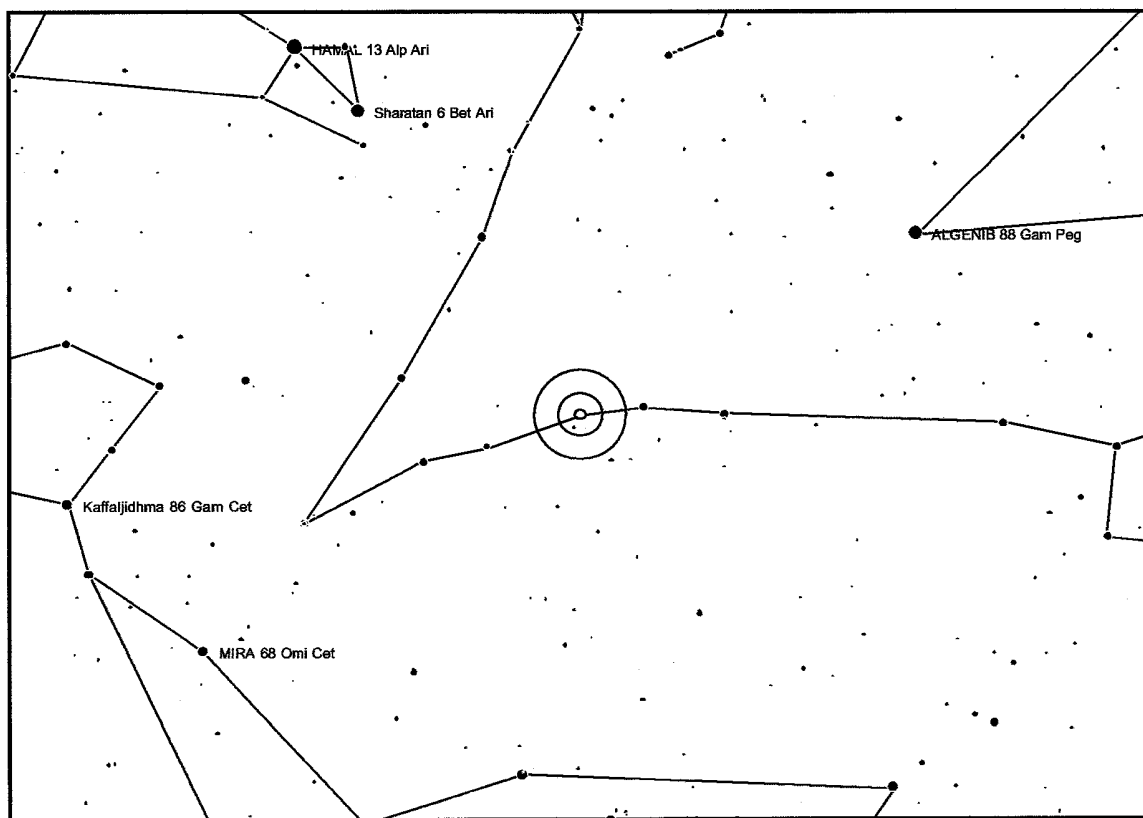
Zet Psc	Date: 10/14/02	Time: 12:10 am	Seeing: II	Trans: I
	RA: 01 13.7	DE: +07 35	Class: DBL	Inst: 125mm
	Mag: 5.6, 6.5	Sep: 23"	PA: 63°	EP: 73x

Description:

BEAMY - BOTH WHITE. NOT BAD FOR 73X

SEEN BEFORE



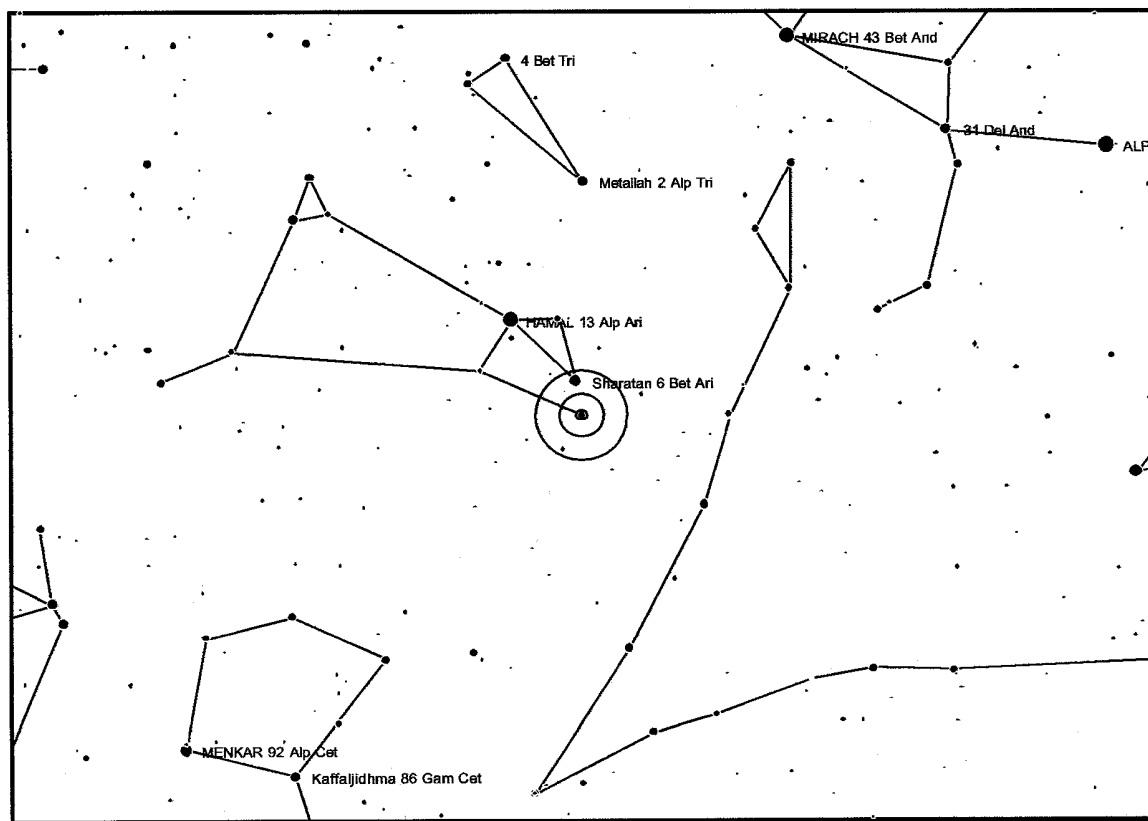


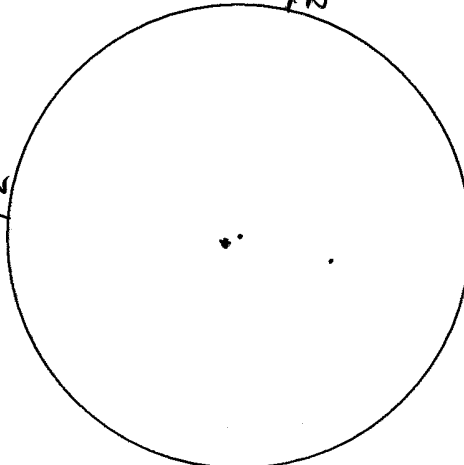
Gam Ari	Date: 10/12/02	Time: 1:55am	Seeing: II	Trans: II-
	RA: 01 53.5	DE: +19 18	Class: DBL	Inst: 125mm
	Mag: 4.8, 4.8	Sep: 7.8"	PA: 0°	EP: 73X

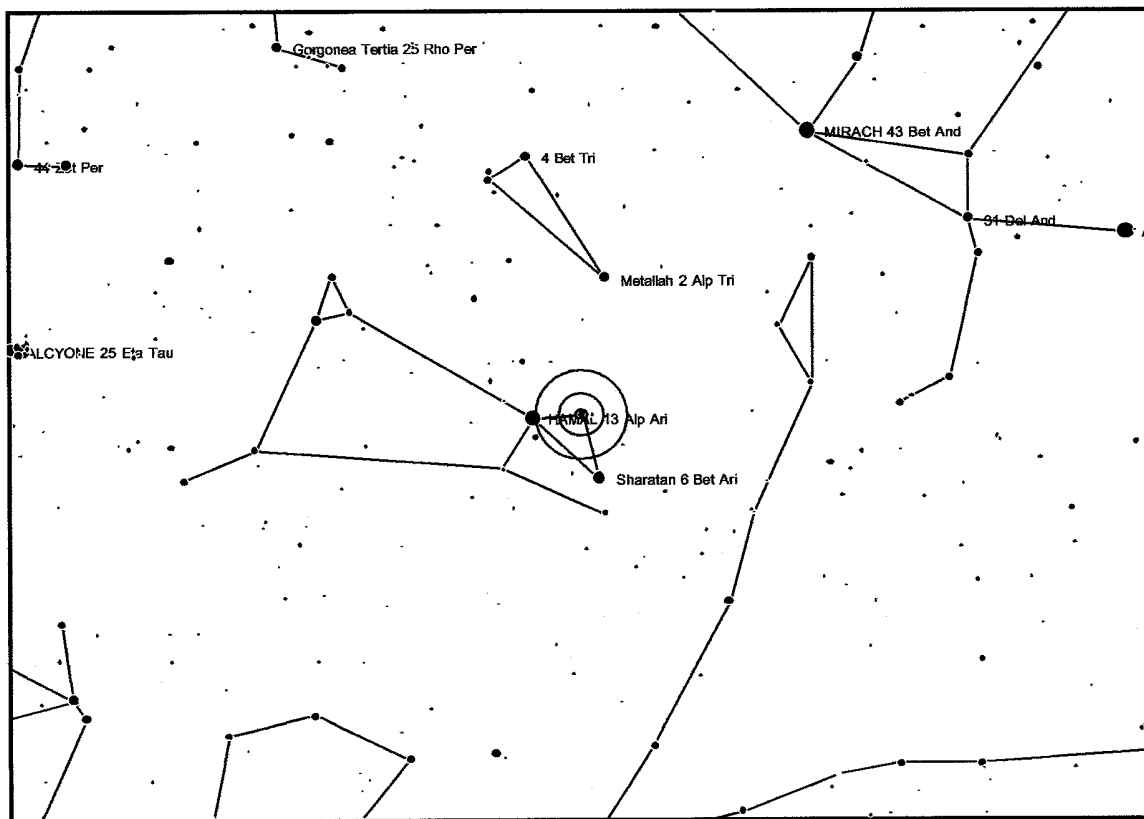
Description:

PERFECT PAIR - 1/2 DISK WIDTH GAP
OF DARK BETWEEN 2 BLuish-WHITES

SEEN IN '82



Lam Ari	Date: 10/12/02	Time: 1158am	Seeing: II	Trans: II-
	RA: 01 57.9	DE: +23 36	Class: DBL	Inst: 125mm
	Mag: 4.9, 7.7	Sep: 37"	PA: 46°	EP: 73x
Description: Nice blue-white & white. Easy split				
SEEN BEFORE				

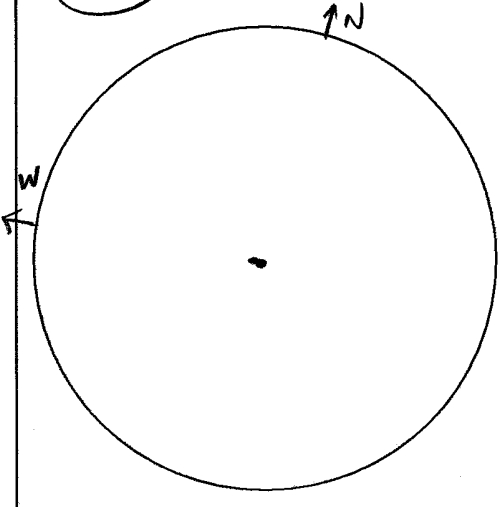


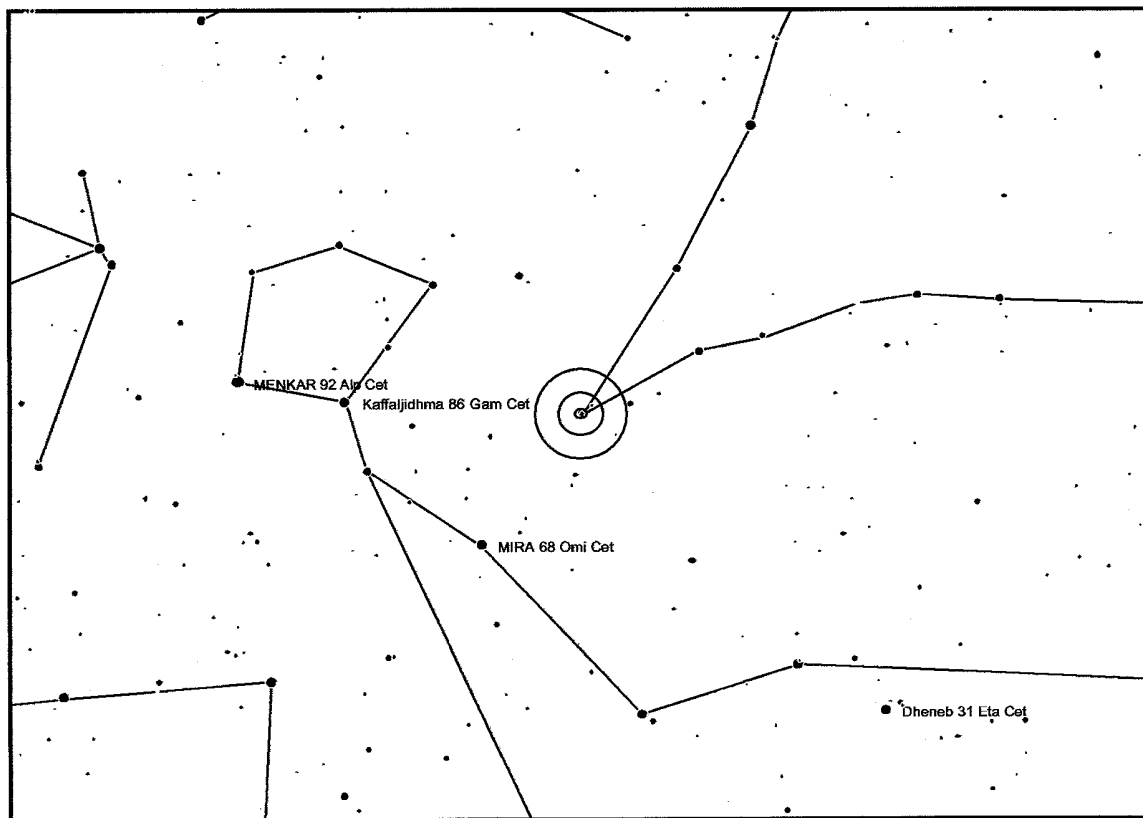
@HOME

REVISIT ✓
CONFIRMED

Alp Psc	Date: 10/12/02	Time: 21:01 am	Seeing: II	Trans: II-
	RA: 02 02.0	DE: +02 46	Class: DBL	Inst: 125mm
	Mag: 4.2, 5.1	Sep: 1.7"	PA: 50°	EP: 475X

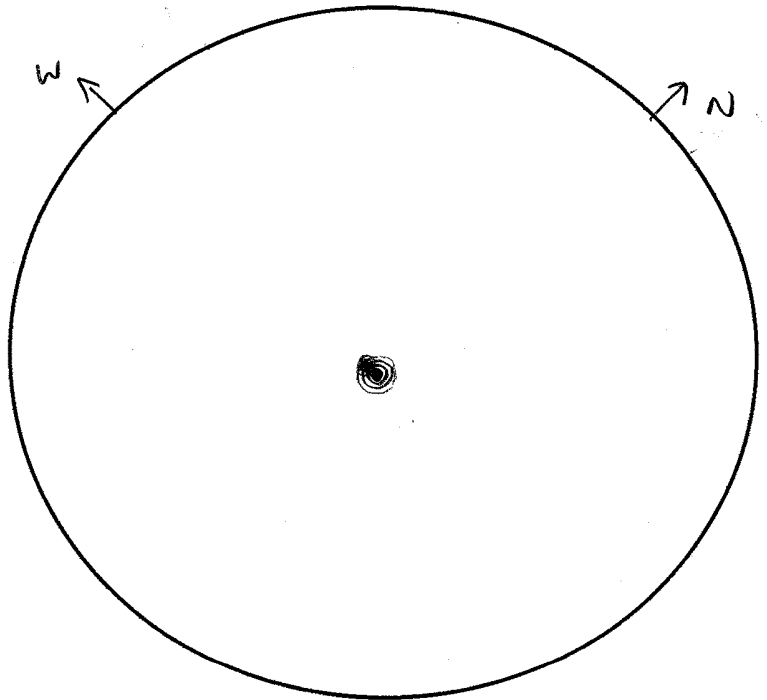
Description:
CHECK PA°! I KNOW I GOT IT - WHAT IS
THE DEAL? BOTH WHITES
BURNHAM CITES 292° IN 1966
AND ORBITAL DIAGRAM (P. 1470) SAYS
~290° IN 2002, WHICH MATCHES MY
OBSERVATION! WHAT IS ERROR
WITH THIS ALDS SHEET?
SEE NEXT PAGE
SEEN IN '82





REVISITED

DATE 10/17/02 TIME 12:20 ^{am} CST CDT CLARITY I II III IV V SEEING II III IV V
INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X
OBJECT α psc LOCATION RMCC HOME



ACTUALLY, PA $\sim$ 265° FROM BETTER ANGLE.

I SPENT SEVERAL MINUTES WATCHING IT DRIFT -

IT IS A BIT SOUTH OF WEST NOW! HEAVY DIFF. RINGS

BUT A BIT OF BLACK BETWEEN THEM.

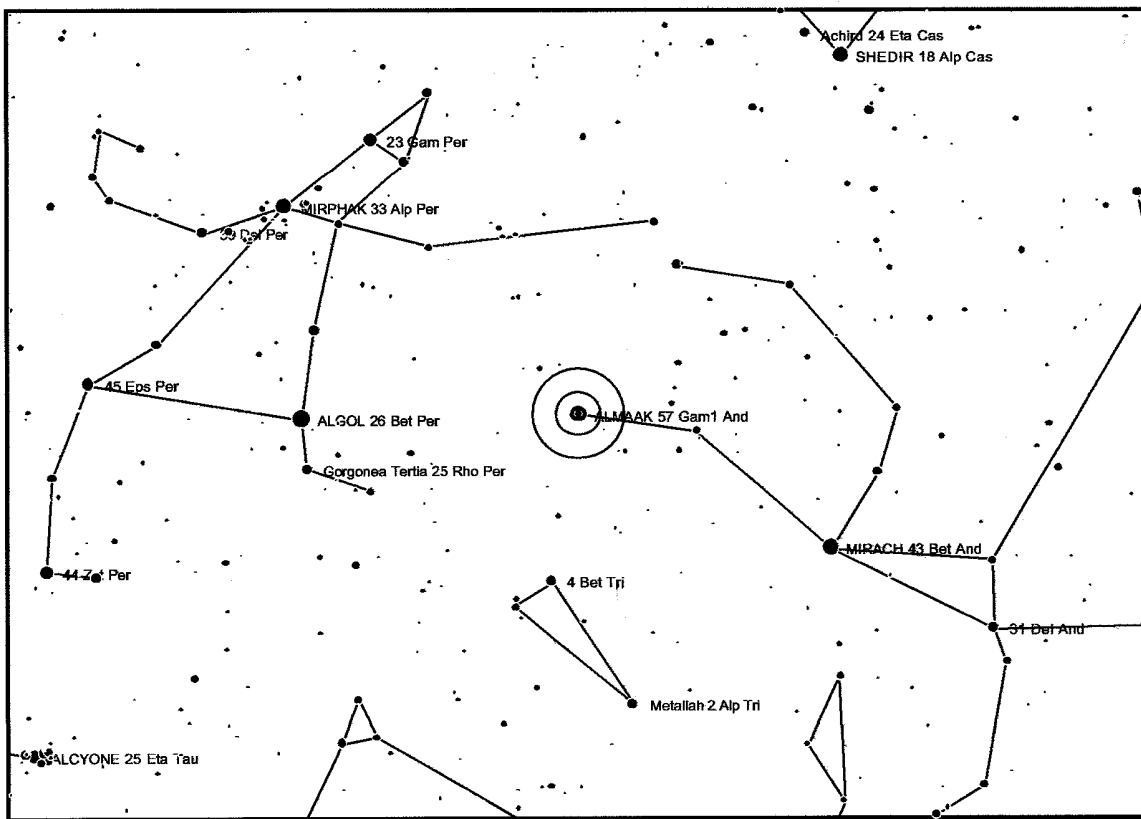
@Home

Gam And	Date: 10/14/02	Time: 12:35am	Seeing: II	Trans: I
	RA: 02 03.9	DE: +42 20	Class: DBL	Inst: 125mm
	Mag: 2.3, 5.5	Sep: 9.8"	PA: 63°	EP: 73x

Description:

ABSOLUTELY LOVELY - DEEP YELLOW AND GREENISH BLUE - FALL COLORS SIMILAR TO BCyg BUT MORE SUBTLY DEEP.

SEEN IN '82



@Home

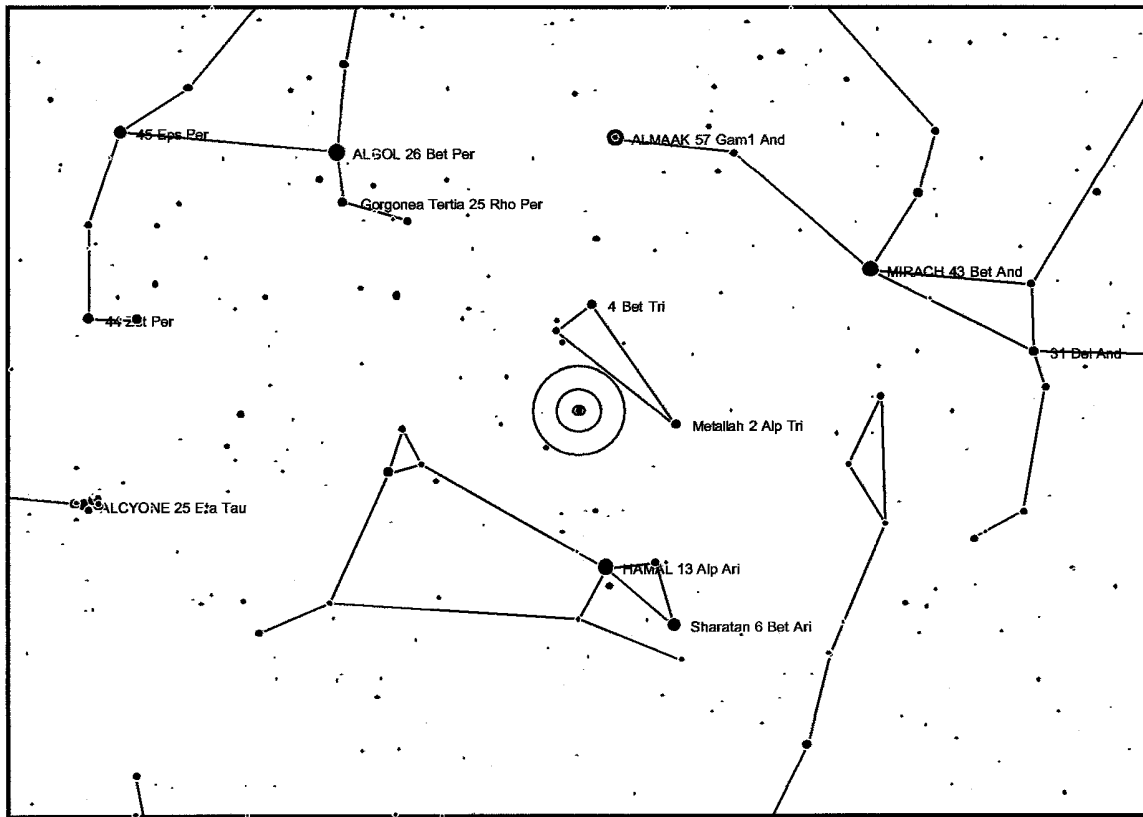
lot Tri	Date: 10/14/02	Time: 12:50 ^{am}	Seeing: II	Trans: I
	RA: 02 12.4	DE: +30 18	Class: DBL	Inst: 125mm
	Mag: 5.3, 6.9	Sep: 3.9"	PA: 71°	EP: 153X

Description:
CHECK OUT <232 IN SAME FIELD

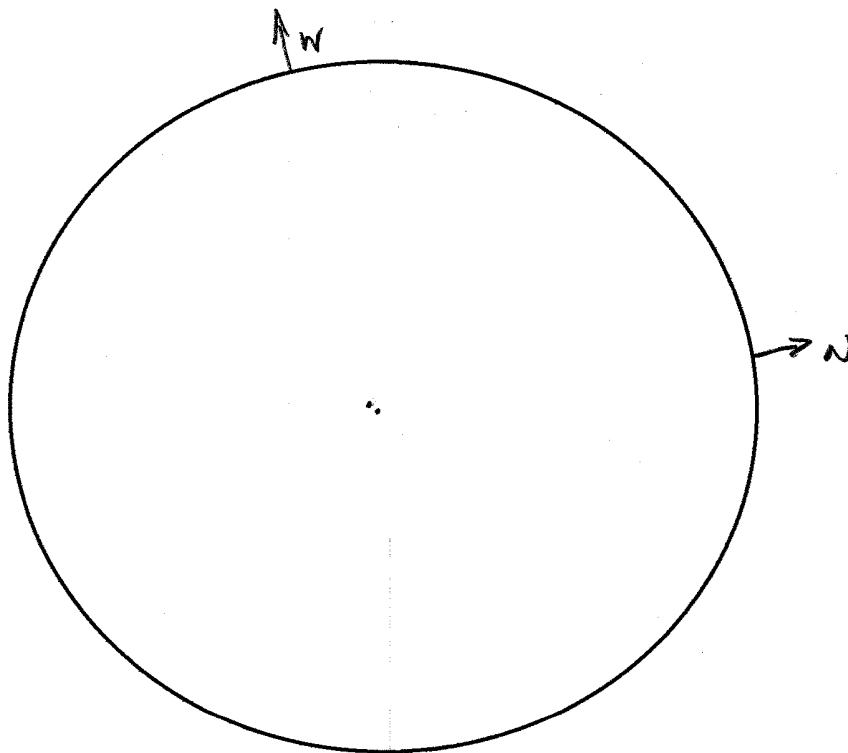
< SEEN @ 153X VERY NICE SPLIT,
SOFT YELLOW (CHEDDAR) + SKY BLUE
POINT NEXT TO IT WITH 2 IMAGE-WIDE GAP
OF BLACK. WONDERFUL!
SEE NEXT PAGE FOR <232

NOTE: 73X COULD NOT VERIFY SPLIT
(NOT SHOWN)

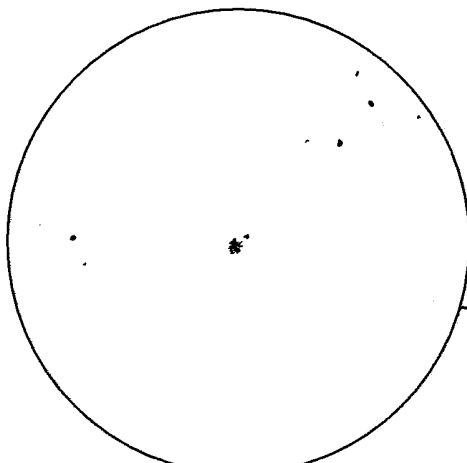
SEEN BEFORE

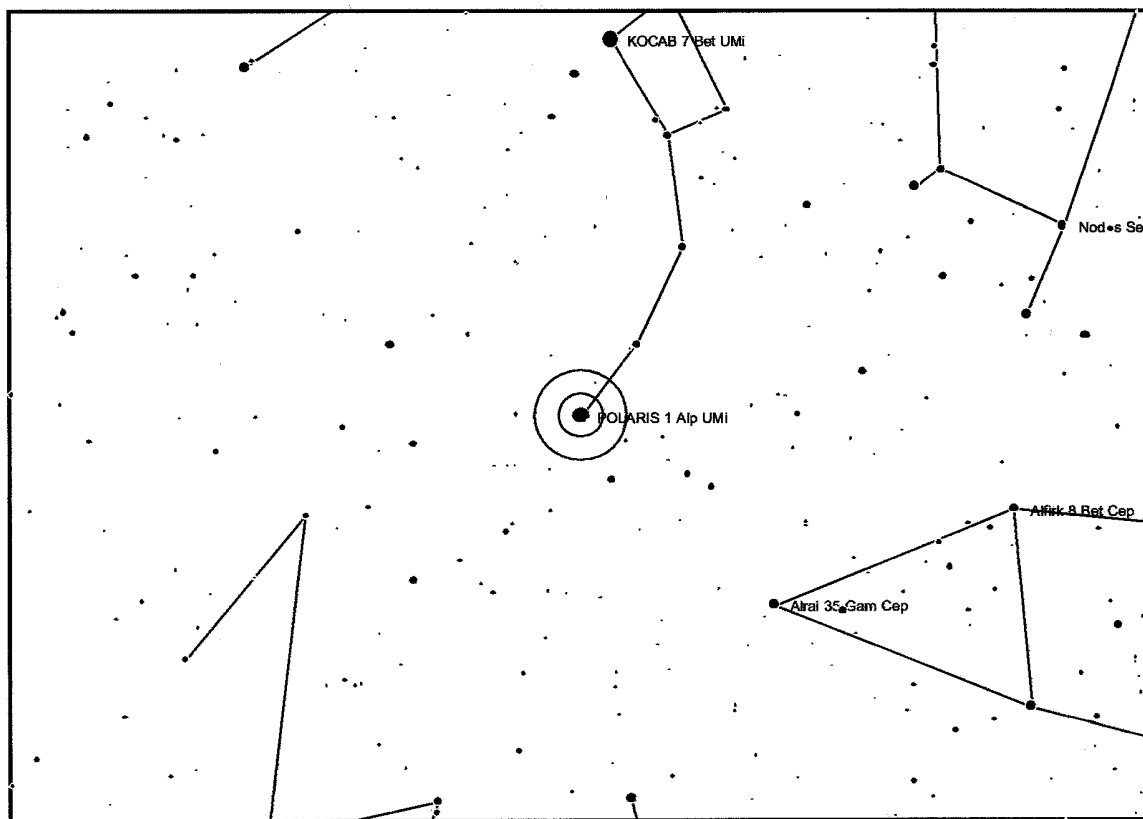


DATE 10/4/02 TIME 1:05 ^{am} CST CDT CLARITY (1) II III IV V SEEING I II III IV V
INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X
OBJECT $\Sigma 232$ (Tri) LOCATION RMCC HOME



WHILE LOOKING AT vTri. IN SAME LOW POWER
FIELD. IT (UNLIKE v) IS SPLIT @ 73X, BUT SO CLOSE
I WANTED 153X TO CONFIRM PA°. BOTH SLIGHTLY
BLUE-WHITE, VERY NICE. I SEE PA ABOUT 60°, BUT
MAG A IS VERY SMALL. W/BBS CUBS 7.5+7.5, 246°, 6".6
SO I WAS OFF BY 180° - OH WELL!

Alp UMi	Date: 10/14/82	Time: 1:40 am	Seeing: II	Trans: I
	RA: 02 31.8	DE: +89 16	Class: DBL	Inst: 125 mm
	Mag: 2.0, 9.0	Sep: 18.4"	PA: 218°	EP: 73x
Description: I LOVE IT - EVEN COLONY PRIESTS. <u>EASY, WHITE & BLUE, 6 MAX DIFF. (THOUGHT)</u>				
SEEN IN '82				



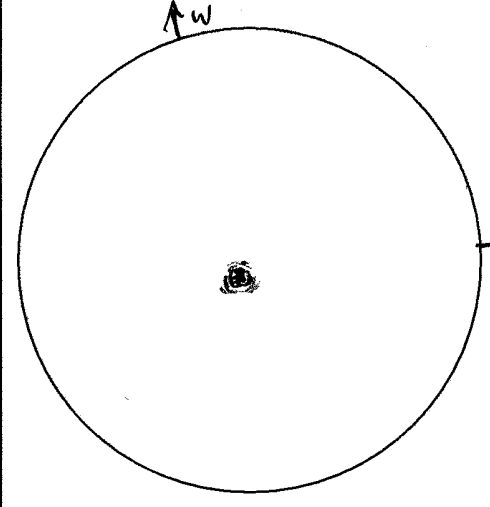
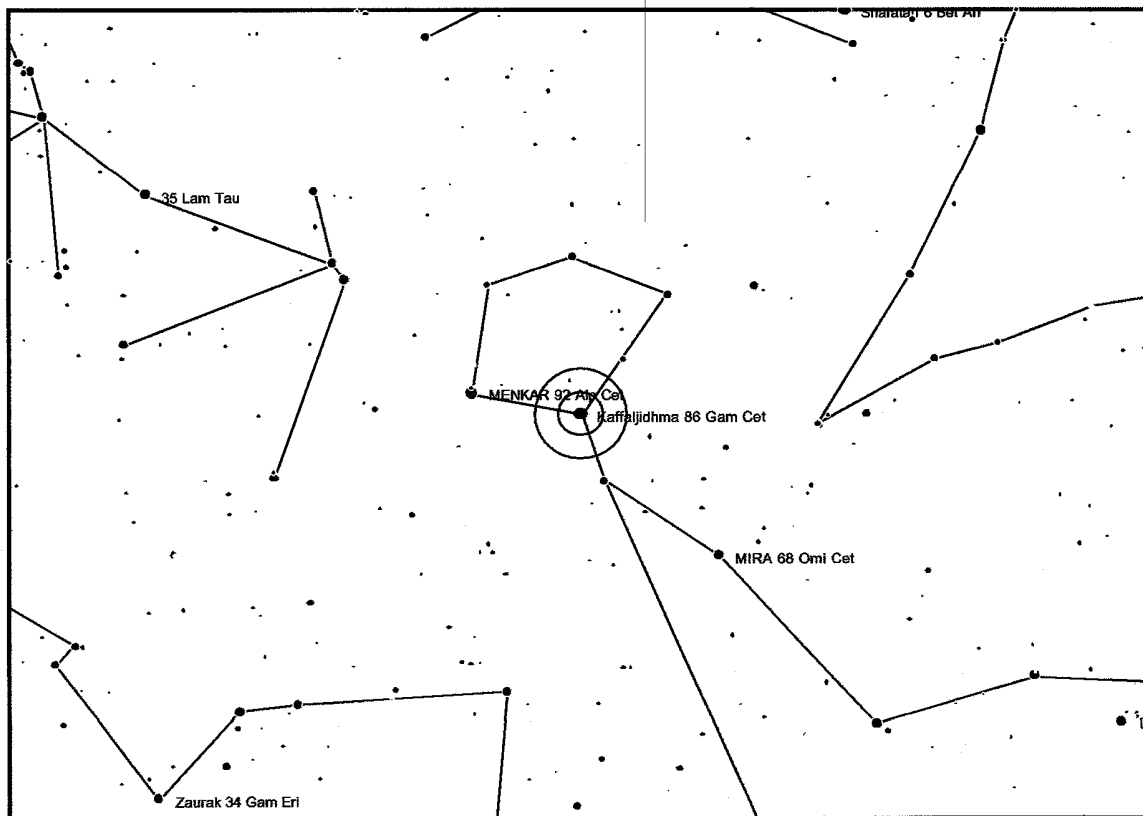
✓ REVISIT (OPTIONAL)
 & LOOK FOR "C" =
 LTT 10888, red
 DWAMP 2 14' 50" NW

@ HOME

Gam Cet	Date: 10/14/02	Time: 1:15am	Seeing: II	Trans: I
	RA: 02 43.3	DE: +03 14	Class: DBL	Inst: 125mm
	Mag: 3.5, 7.3	Sep: 2.8"	PA: 294°	EP: 475X

Description:
 EXTRAORDINARILY DIFFICULT. SAW
 SAME PA W/ 153x WHERE DIFF.
 RINGS & 3.5m IMAGE SMALLER BUT
 TRY CONFIRMING ON STEADIER
 NIGHT (ALTHOUGH IT'S A SOLID # TON-
 LIGHT!) PRIM. BLUE-WHITE

SEEN BEFORE

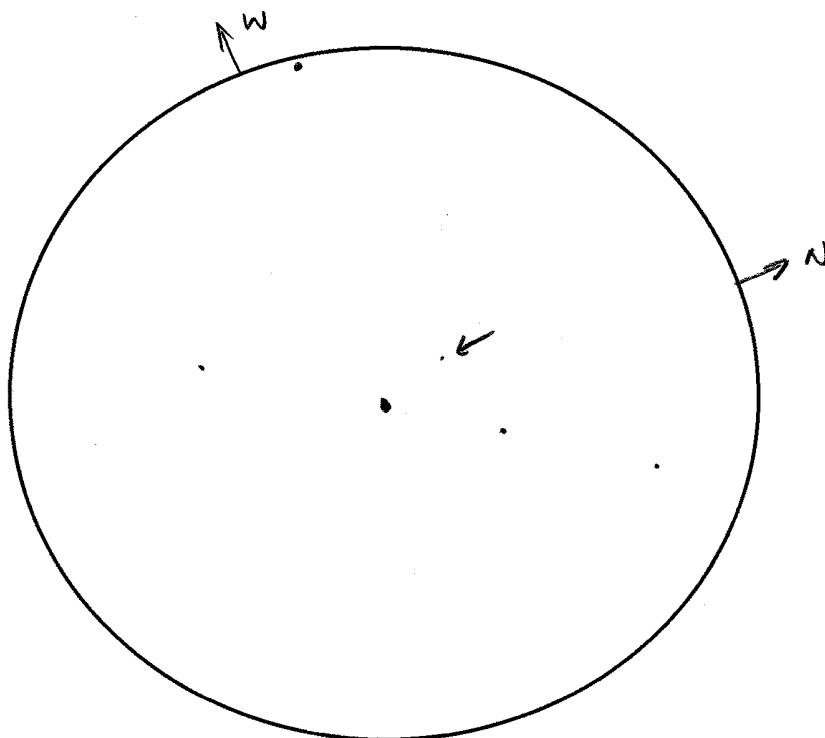



REVISED

DATE 10/16/02 TIME 12:45 CST CDP CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X

OBJECT γ Cet LOCATION RMCC HOME



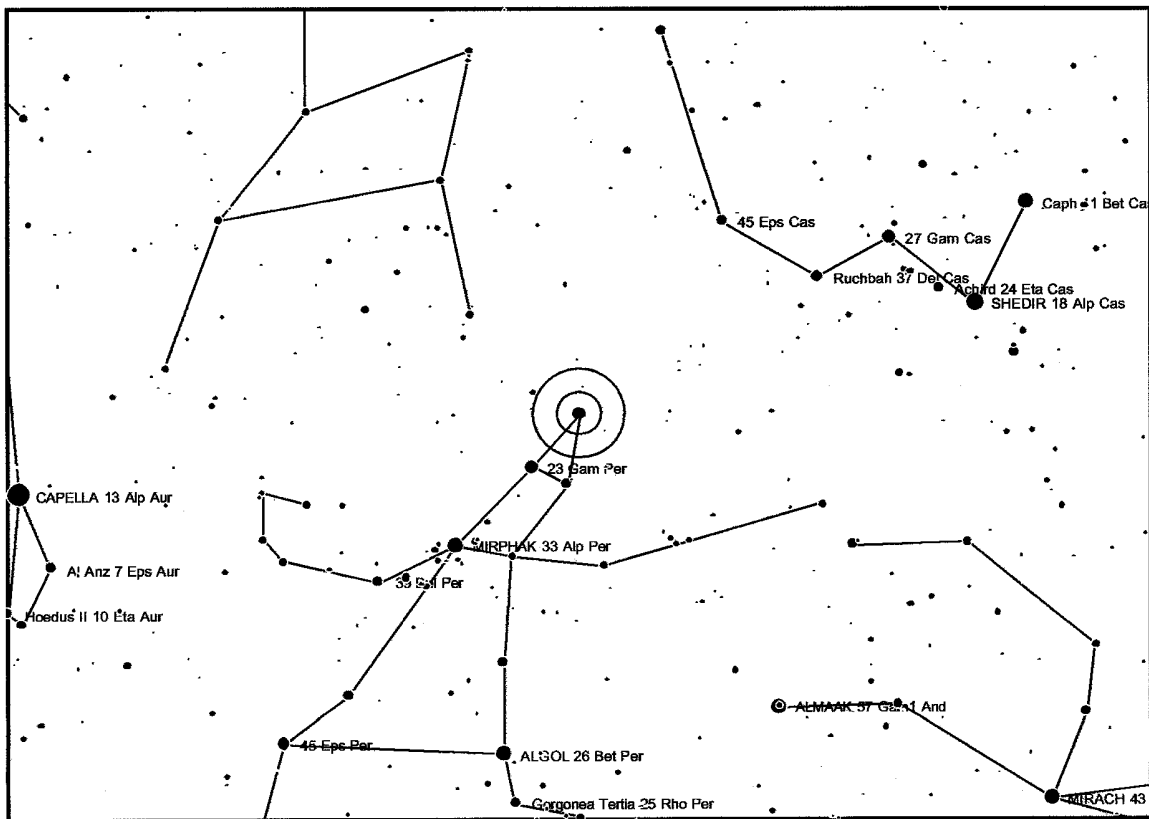
Red dwarf companion? Also, 475x shows same on AB
as before. As drawn here, there is a hint of B @ 153x
but no way it is resolved.

✓ REVISIT (OPTIONAL)
 10m is @ 269° 211 A
 10-10.5 mag per, 5"
 2114°
 (1925)
 per
 BURRHAM

@ HOME

Eta Per	Date: 10/14/02	Time: 1:25	Seeing: II	Trans: I
	RA: 02 50.7	DE: +55 54	Class: DBL	Inst: 125mm
	Mag: 3.8, 8.5	Sep: 28.3"	PA: 300°	EP: 73X

Description:
CHARTED OUT 10m @ 66"
LOVELY OR-YELLOW AND GREENISH
10m SEEN AS SHOWN - ALMOST 3X AB DISTANCE
NO ON 10mag - REVISIT (OPTIONAL)
SEEN BEFORE

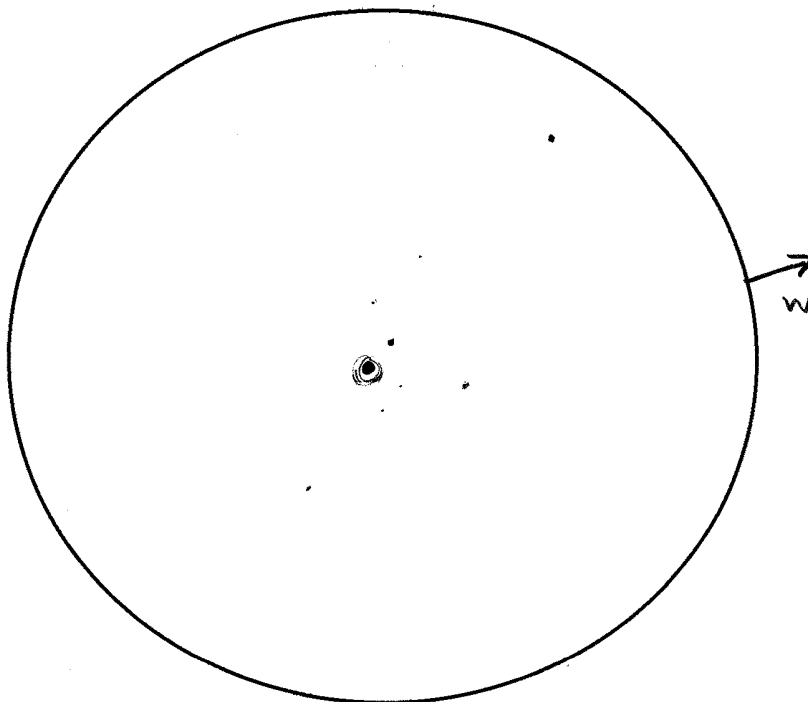


REVISED

DATE 10/15/02 TIME 10:40 CST (CDT) CLARITY (I) II III IV V SEEING (I) II III IV V

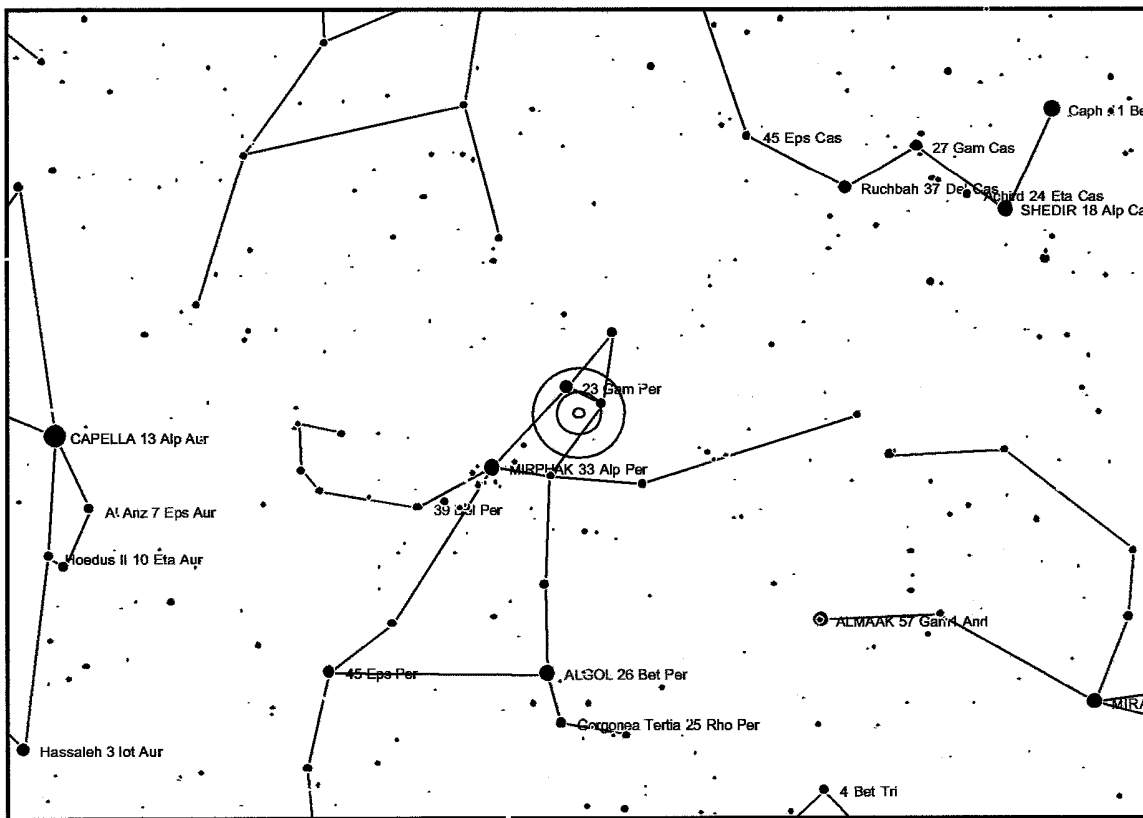
INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X (475X)

OBJECT η Per LOCATION RMCC HOME



W HDA, I SPENT 20 MINUTES ON THIS AND ONLY COULD
GET PLANT. IN 10 m, IN RIGHT DIRECTION (~110°), 1 + 13
NOW @ 250° relative to η

@ Home

[illegible]

@HOME

32 Eri	Date: 10/16/02	Time: 1:10 am	Seeing: II	Trans: I
	RA: 03 54.3	DE: -02 57	Class: DBL	Inst: 125mm
	Mag: 4.8, 6.1	Sep: 6.8"	PA: 347°	EP: 73X

Description:

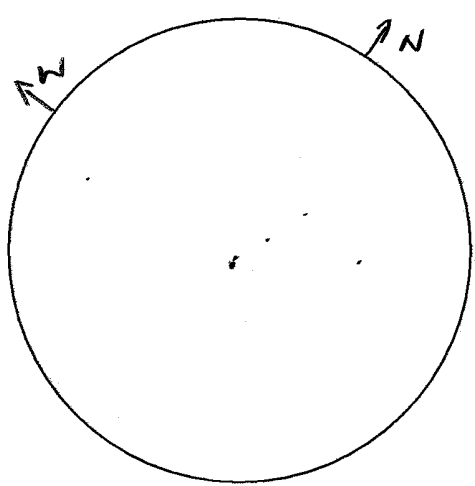
CITEAK out ± 466 & ± 468 NP

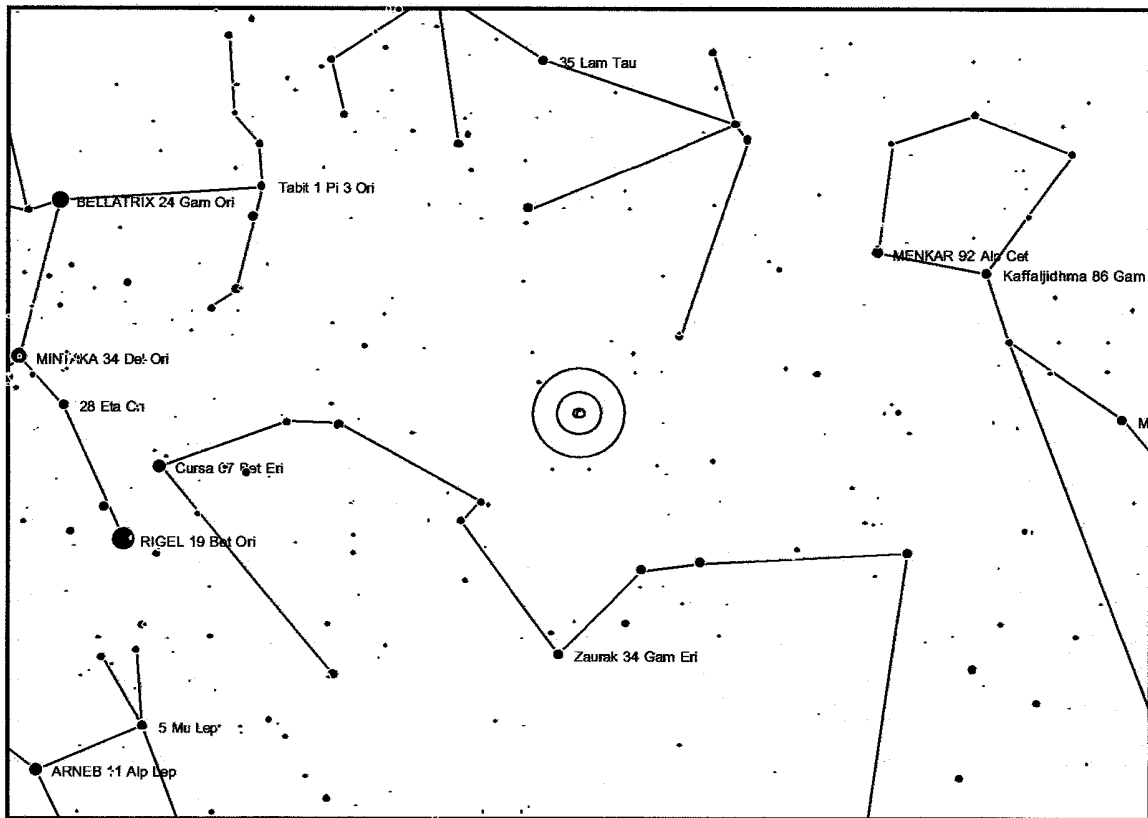
Lovely, just split @ 73x, not quite image width gap of space.

Yellow and blue but not well shown at 73x

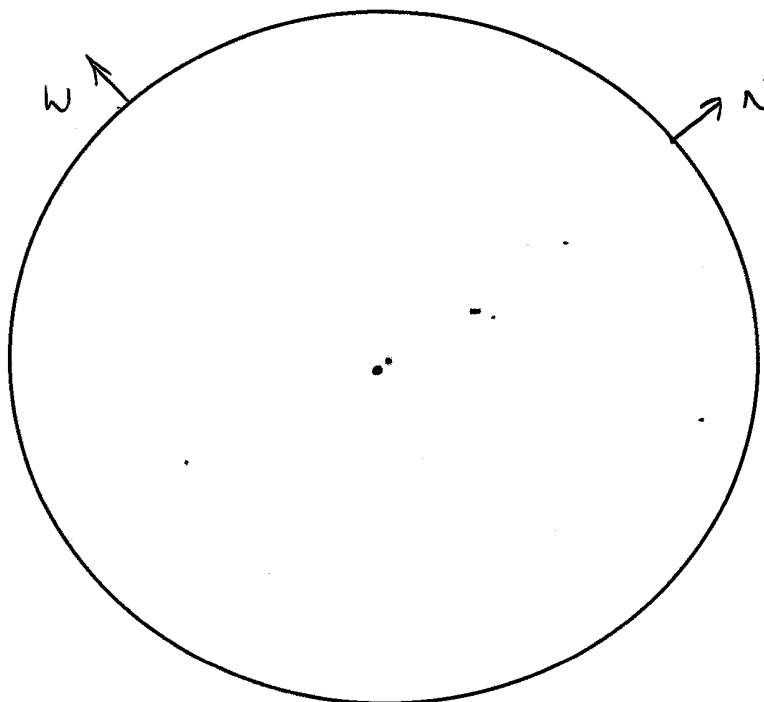
See next page for 153x view

SEEN DISTANCE





DATE 10/16/02 TIME 1116 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X
OBJECT 32 en LOCATION RMCC HOME



Stronger teal yellow & navy blue with 153x

@Home

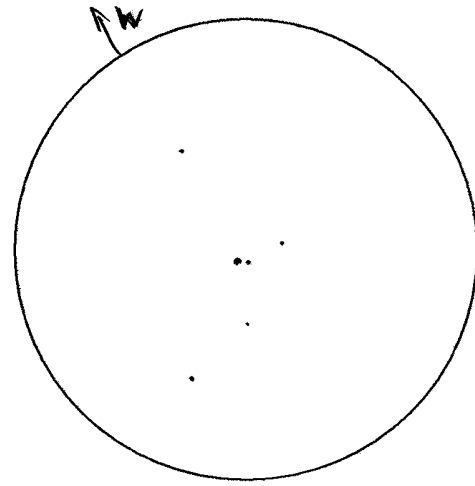
Chi Tau	Date: 10/16/02	Time: 1:30	Seeing: II	Trans: I
	RA: 04 22.6	DE: +25 38	Class: DBL	Inst: 125mm
	Mag: 5.5, 7.6	Sep: 19.4"	PA: 24°	EP: 73X

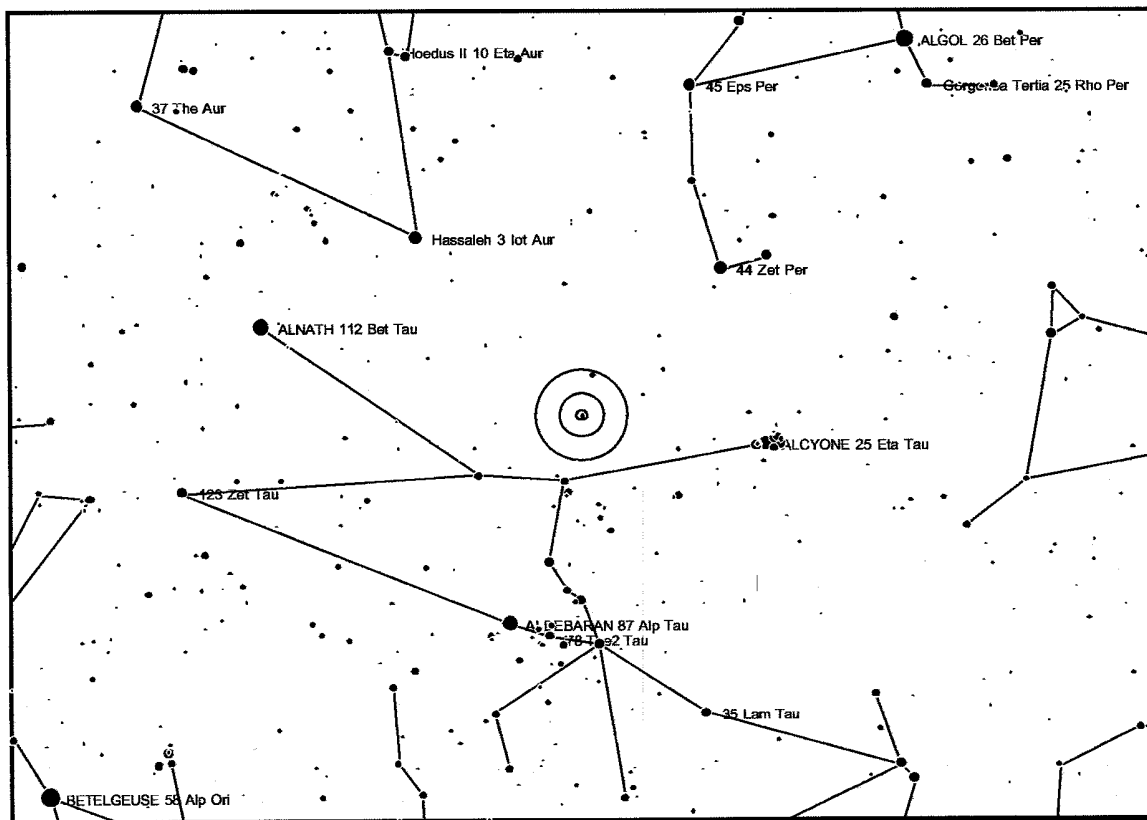
Description:

Dimmy white & slightly light blue

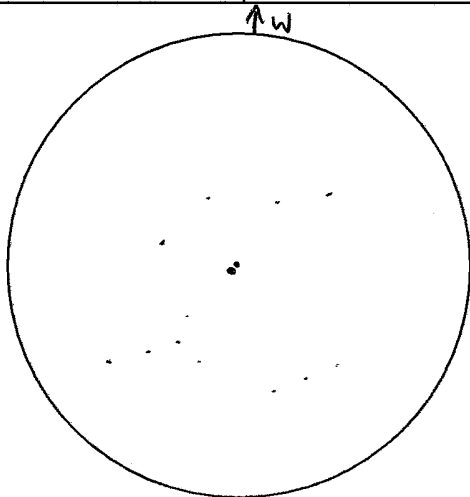
Easily split in 73x

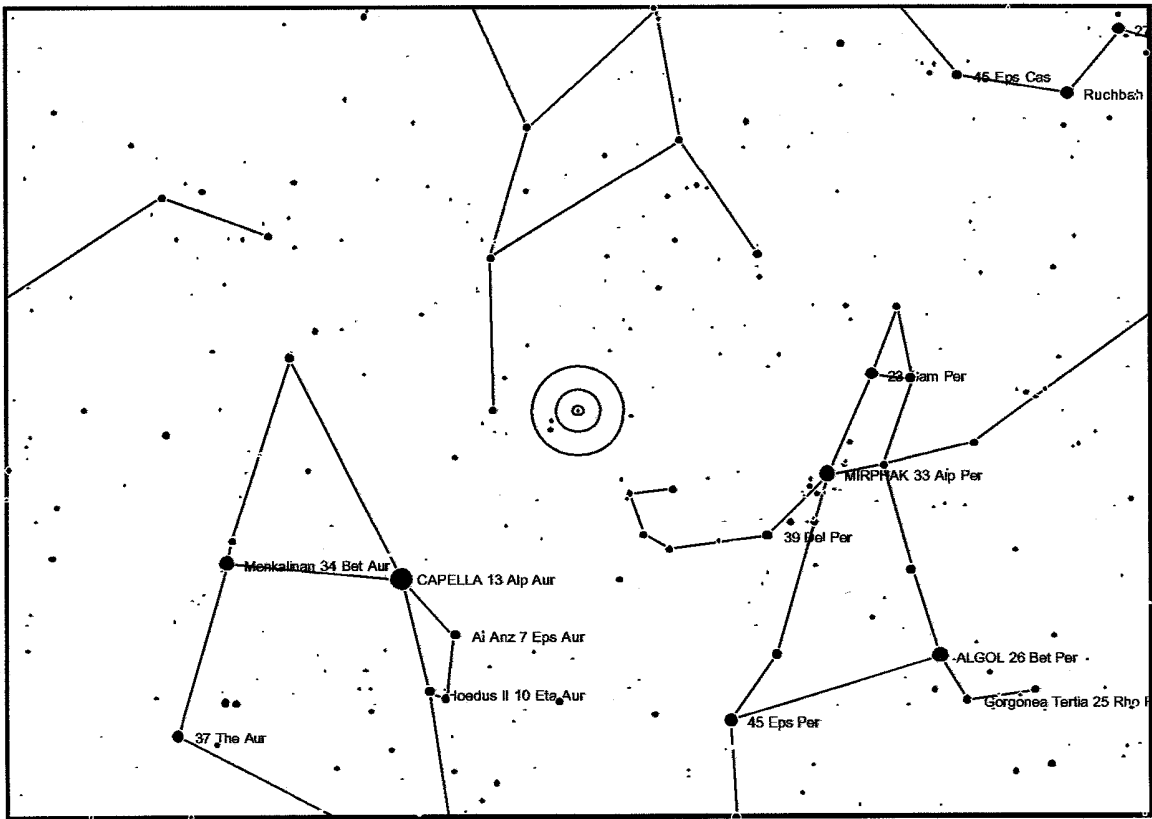
SEEN BEFORE





@Home

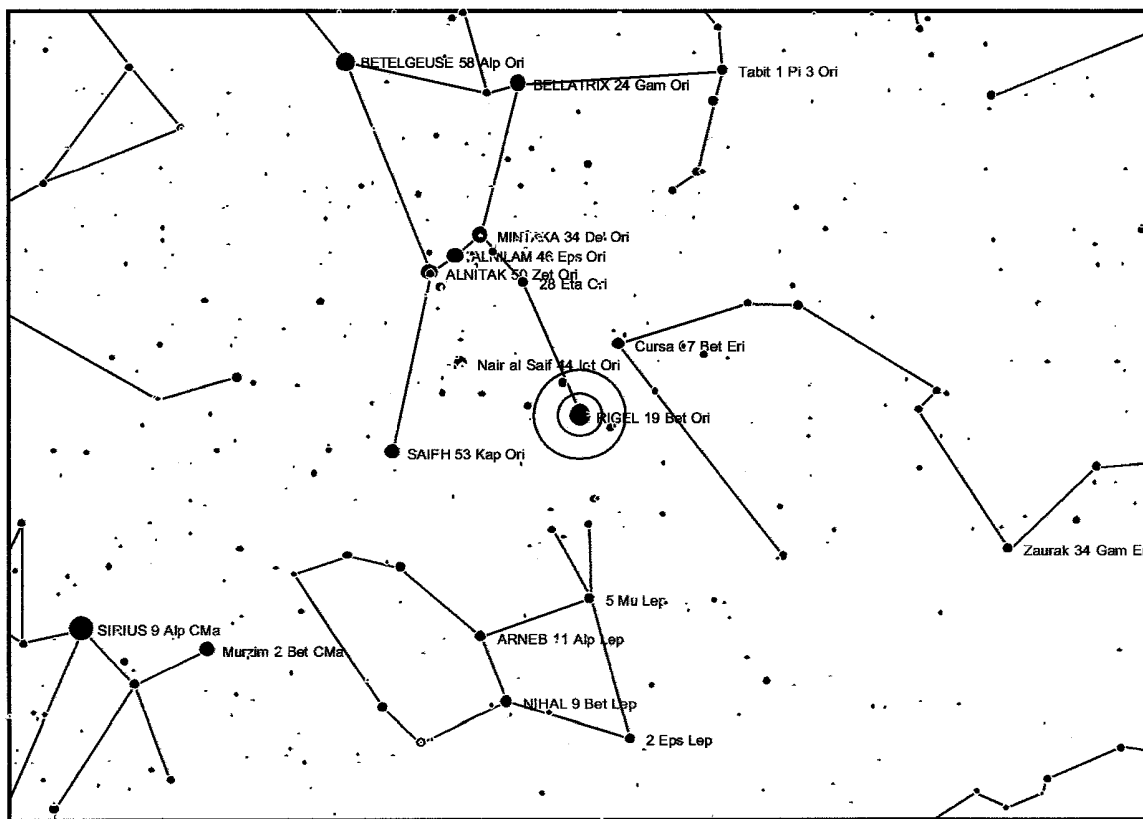
1 Cam	Date: 10/16/02	Time: 12:35am	Seeing: II	Trans: I
	RA: 04 32.0	DE: +53 55	Class: DBL	Inst: 125mm
	Mag: 5.7, 6.8	Sep: 10.3"	PA: 308°	EP: 73X
Description: white "tawny" - nice split. Seen originally in 153x (not shown) but its easy @ 73x too.				
SEEN BEFORE				



@ Home

Bet Ori	Date: 10/14/02	Time: 2:05	Seeing: II	Trans: I
	RA: 05 14.5	DE: -08 12	Class: DBL	Inst: 125mm
	Mag: 0.1, 6.8	Sep: 9.5"	PA: 202°	EP: 475x

Description: Ice blue-white & blue. Vind, striking color. No problem - strikes out, Vist on 4th diff ring - clearly seen, no waiting. SEEN IN '82	
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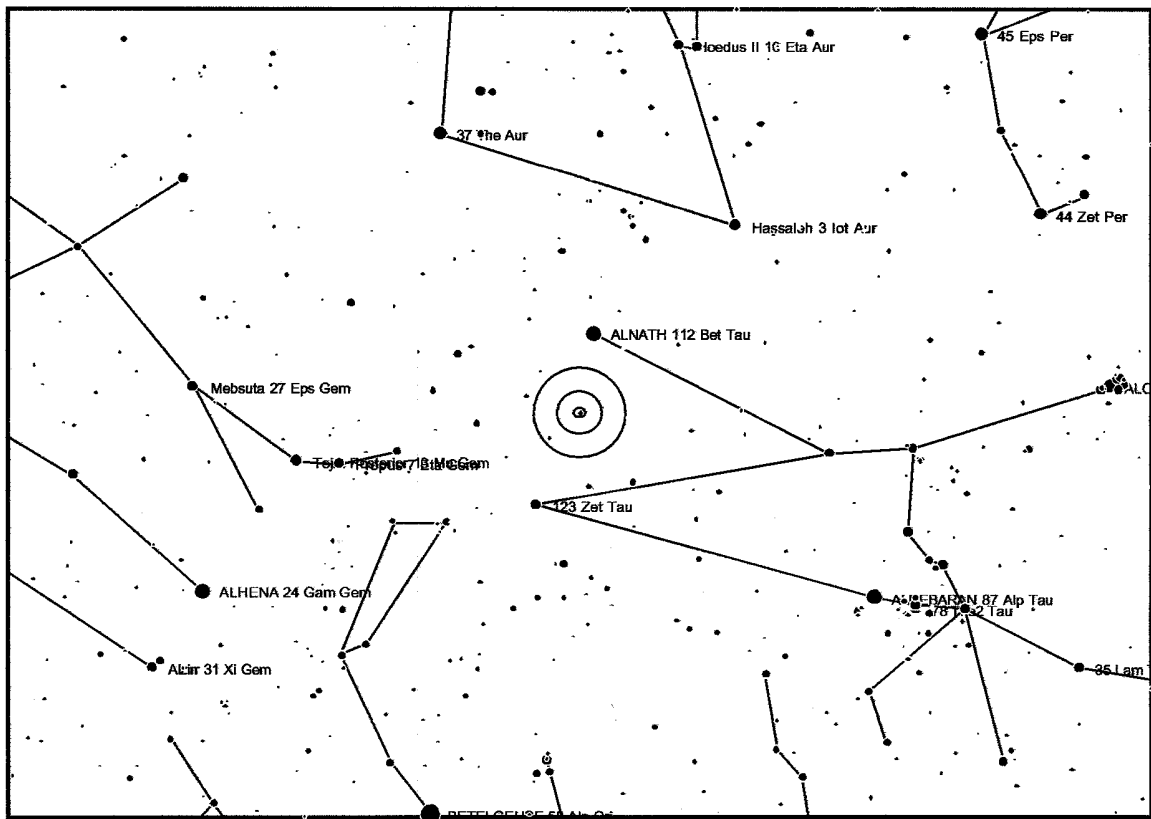
@ Home

118 Tau	Date: 10/16/02	Time: 2:10	Seeing: II	Trans: I
	RA: 05 29.3	DE: +25 09	Class: DBL	Inst: 125mm
	Mag: 5.8, 6.6	Sep: 4.8"	PA: 204°	EP: 153X

Description:

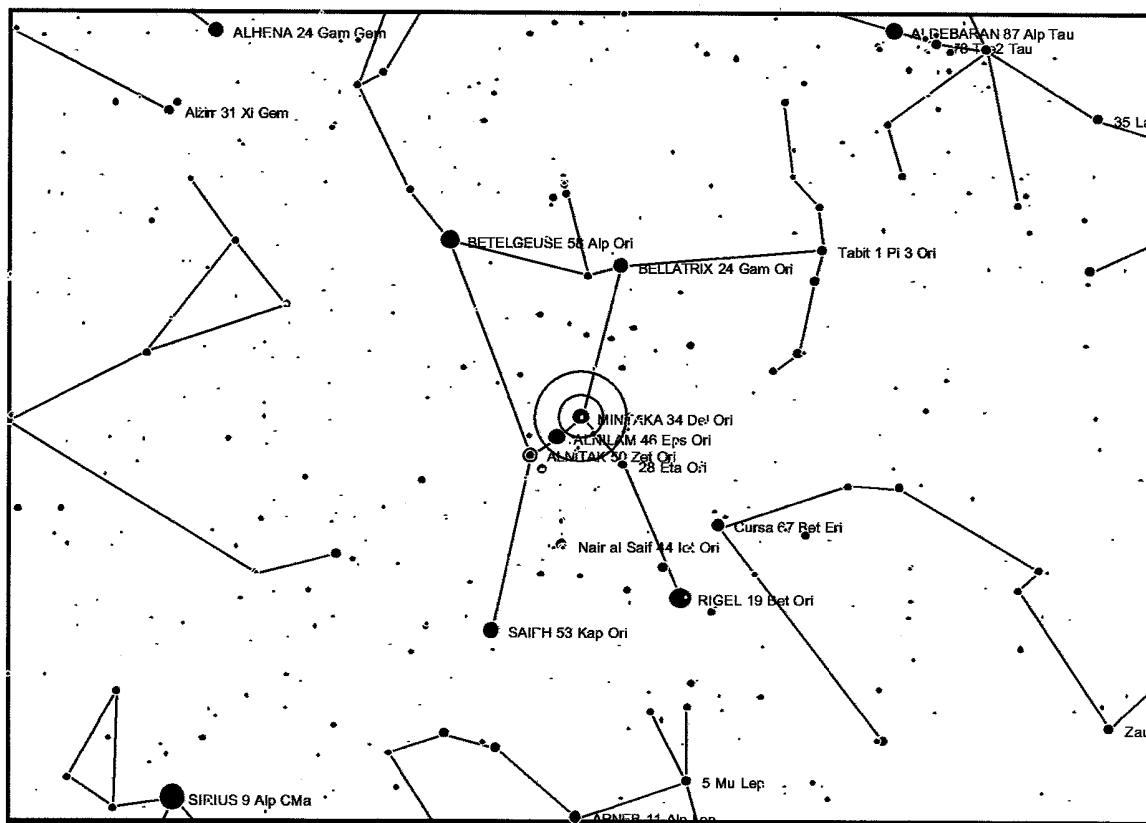
Obviously split @ 73X, but to verify
and check for colors - used 153X
No colors seen

Seen in '82



@ Home

Del Ori	Date: 10/16/02	Time: 2:15	Seeing: II	Trans: I
	RA: 05 32.0	DE: -00 18	Class: DBL	Inst: 125mm
	Mag: 2.2, 6.3	Sep: 52.6"	PA: 359°	EP: 73x
Description: Nice but very wide, whites				
SEEN IN '02				



e Home

STF 747	Date: 10/16/02	Time: 2:30	Seeing: II	Trans: I
	RA: 05 35.0	DE: -06 00	Class: DBL	Inst: 125 mm
	Mag: 4.8, 5.7	Sep: 8.8"	PA: 31°	EP: 73X

Description:

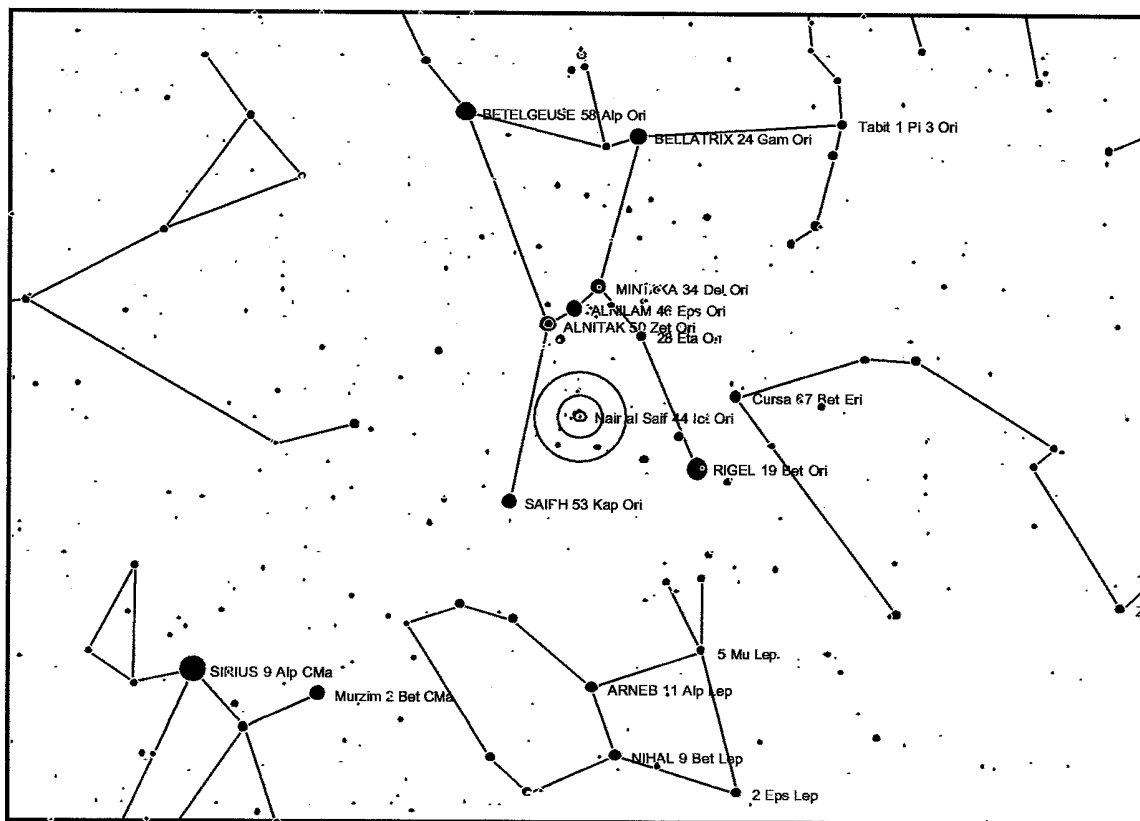
NOTICE 2 ORI (ANOTHER ALOS DOUBLE) + STF 745 (NOT INCLUDED)

STF 747 EASY, NO COLOR

STF 745 (JUST W OF STF 747): NO COLOR

EASY & WHAT A FIELD THIS ALL MAKES!

SEEN BEFORE



@ Home

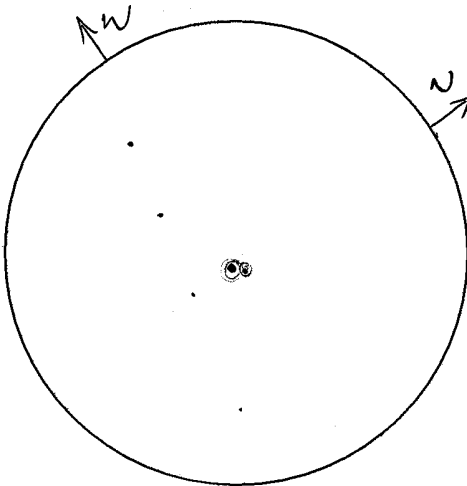
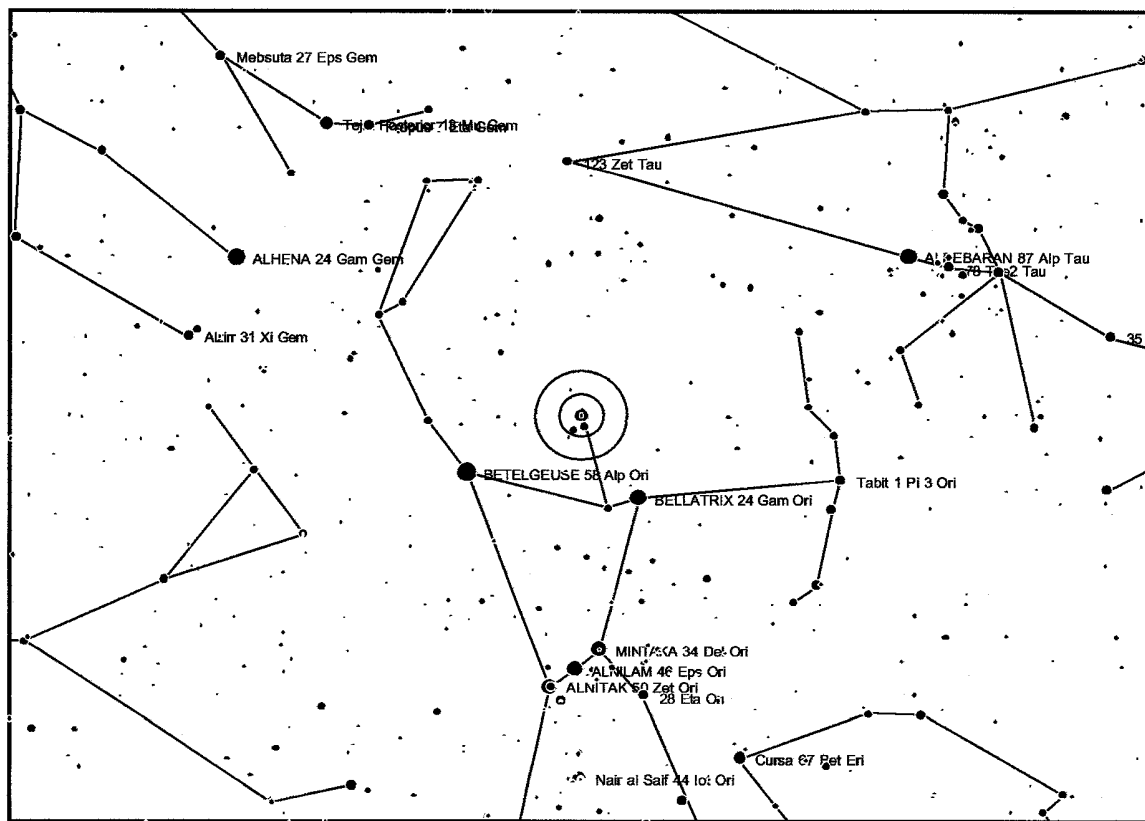
Lam Ori	Date: 10/16/02	Time: 2:40	Seeing: II	Trans: I
	RA: 05 35.1	DE: +09 56	Class: DBL	Inst: 125mm
	Mag: 3.6, 5.5	Sep: 4.4"	PA: 43°	EP: 475X

Description:

Very good split @ 475X, easy w/ perfect little Argy disks that are white & blue-gray, good 2 disk-width band of black between them.

What a curious line of 4 from W to SE, mag = 9, 10, 11, 12 I think

SEEN BEFORE

(optional) REVISIT w/ ✓
153x, 475x &
with FILTER for
nebula

@ HOME

The1 Ori	Date: 10/16/02	Time: 2145	Seeing: II	Trans: I
	RA: 05 35.3	DE: -05 23	Class: MULT	Inst: 125mm
	Mag: 6.7, 7.9, 5.1, 6.7	Sep: 8.8", 13", 21.5"	PA: 31°, 132°, 96°	EP: 73x

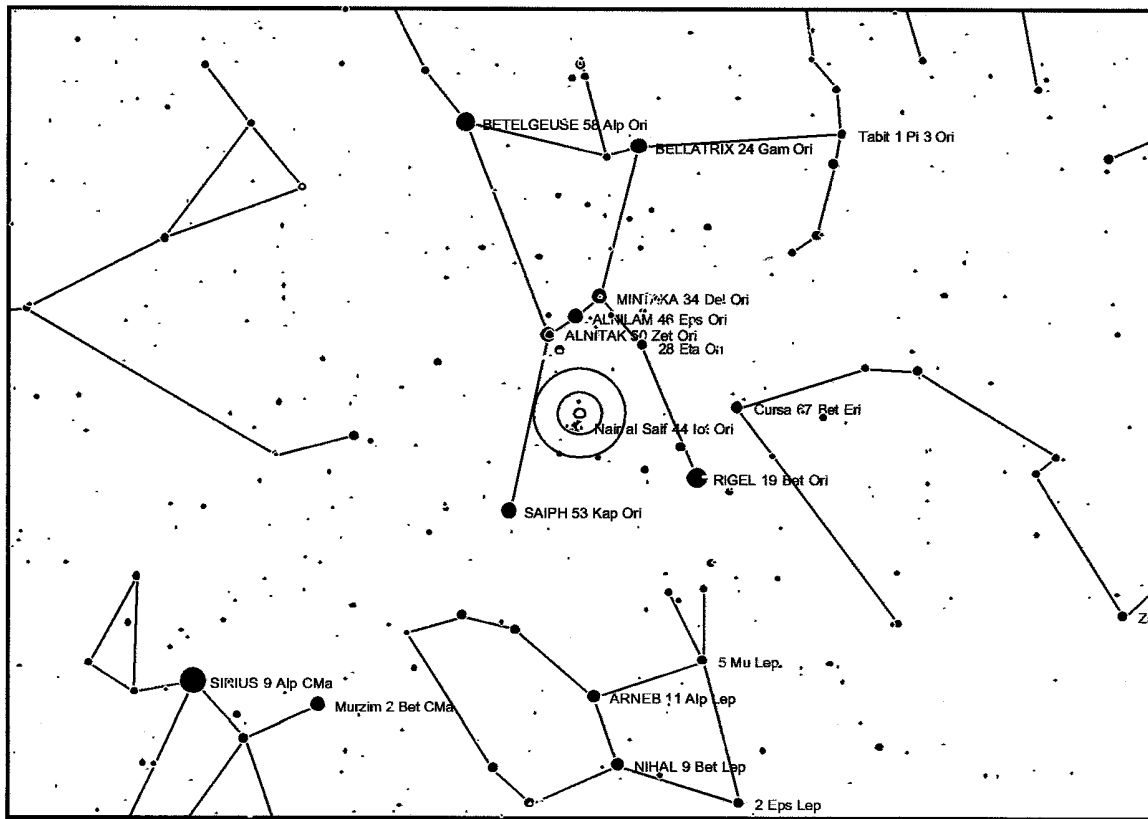
Description:

OH LORD! EVEN @ 73x THEY ARE
SPLIT, STEADY & WONDERFUL!

NEBULA WELL SEEN TOO

SEE 11/7/02 REVISIT FOLLOWING

SEEN BEFORE



✓ REVISIT

The2 Ori	Date: 10/16/02	Time: 2:50	Seeing: II	Trans: I
	RA: 05 35.4	DE: -05 25	Class: DBL	Inst: 125mm
	Mag: 5.2, 6.5	Sep: 52"	PA: 92°	EP: 73X

Description:
CRUCIATE 8.5m @ 129" & 97°

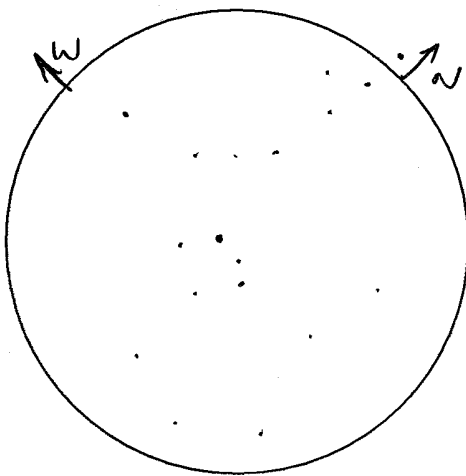
Yes 8.5m there too. BUT WHAT
IS WITH THE ORION, PA'S AND
DISTANCES ???

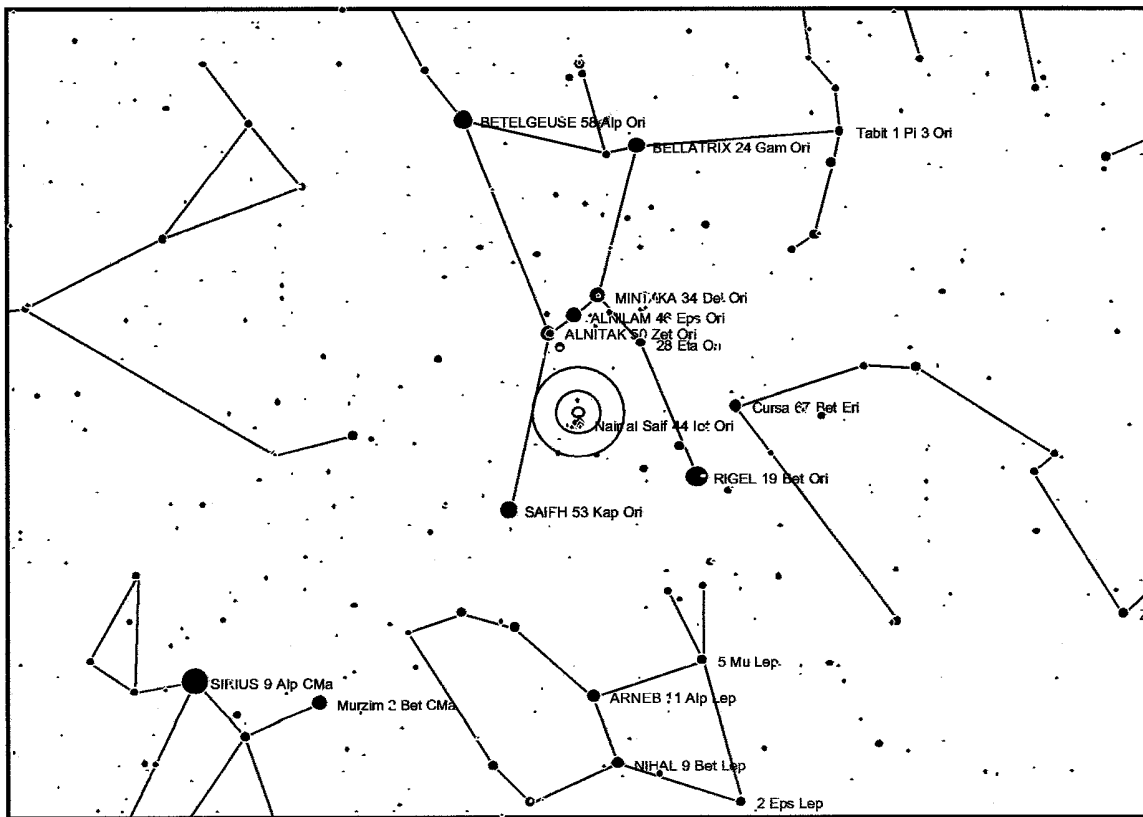
THIS AIN'T IT - SEE REVISIT

OF ALL THE EASY DOUBLES - HOW DID

I BLOW THIS ONE ???

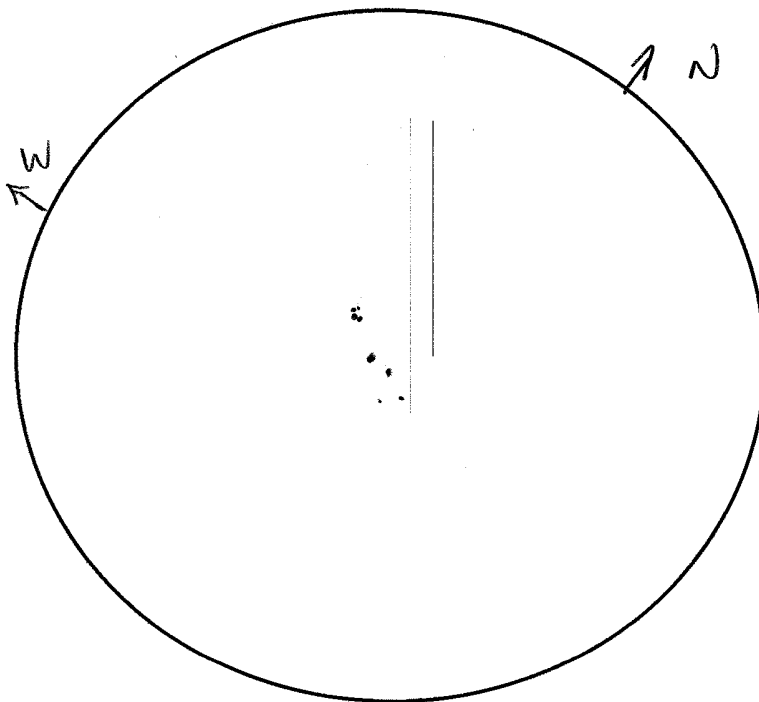
SEEN BEFORE





REVISITED

DATE 11/7/2 TIME 1219 CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X
OBJECT A₂ Ori LOCATION RMCC HOME



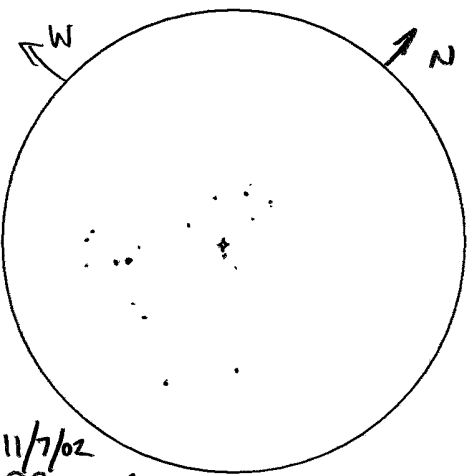
TO CLARIFY - NOT WIDE DBL WITH 8m & 10m COMES

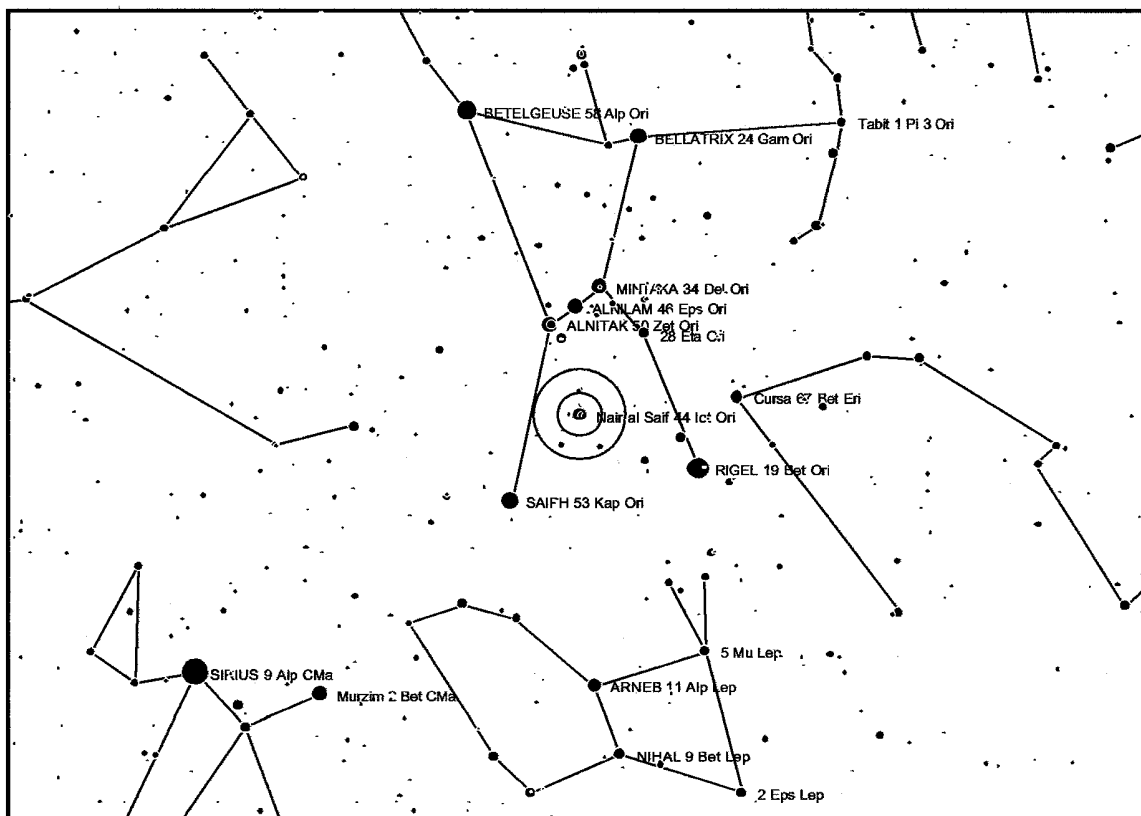
OH YEAH, FAIRLY COOL QUAD TO NW.

I STILL DON'T KNOW HOW I GOT SO CONFUSED

ON 10/16/02 - BUT HERE IT IS.

lot Ori	Date: 11/7/02	Time: 12:10	Seeing: II	Trans: I
	RA: 05 35.4	DE: -05 55	Class: DBL	Inst: 125mm
	Mag: 2.8, 6.9	Sep: 11.3"	PA: 141°	EP: 73X

Description: CHECK OUT $\Sigma 745$ & $\Sigma 747$ SEE RECORD OF $\Sigma 747$ PREVIOUS L IS WHITE & GREENISH-WHITE PAIR, NOT HARD @ 73X BUT NOT TOO SPLIT. DUE TO MAG DIFF. ($\Delta \approx 4$) 11/7/02 - SHOWN TO GIVE IT AN "INDIVIDUAL" RECORD SEEN BEFORE	
--	--



Sig Ori	Date: 11/7/02	Time: 12:45	Seeing: II	Trans: I
	RA: 05 38.7	DE: -02 36	Class: MULT	Inst: 125mm
	Mag: 4.0,7.5,6.5	Sep: 12.9",43"	PA: 84°, 61°	EP: 73X

Description:

SO BEAUTIFUL! LOVELY BLUES, EASY SPLIT, W/ 5761 TO N.W.

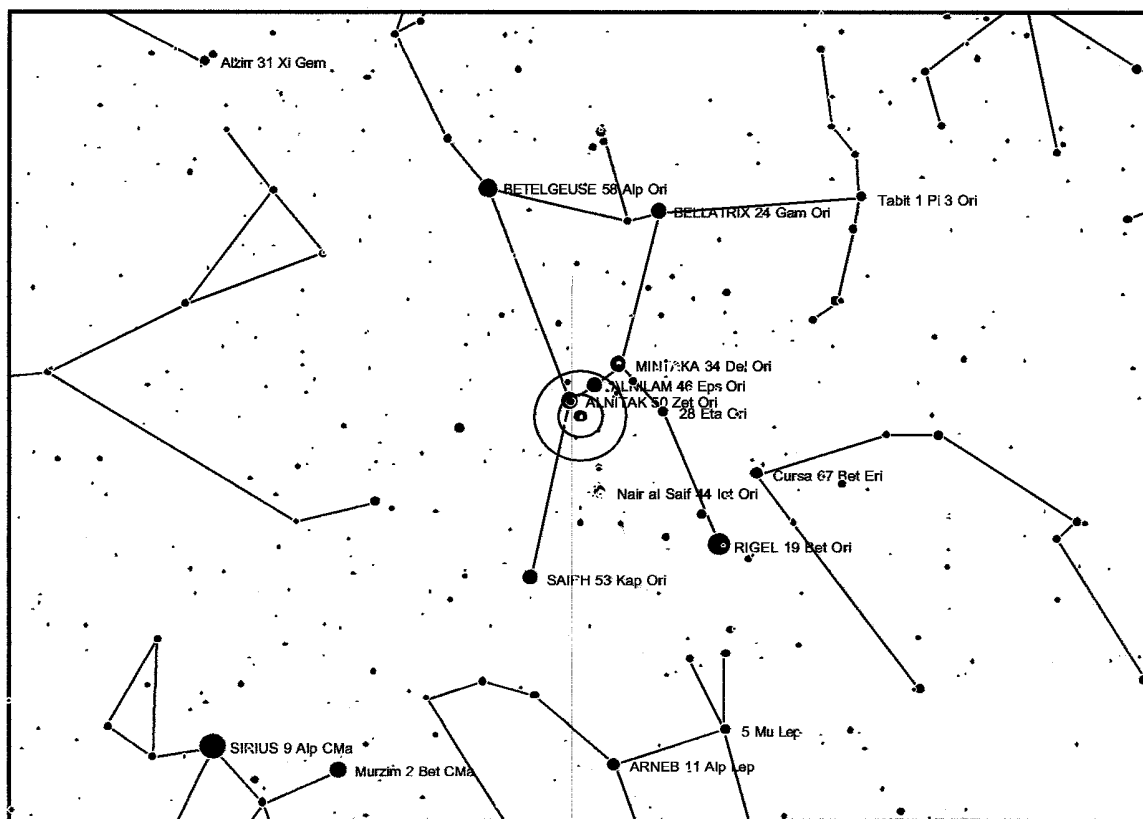
ALL EASY, 5761 1/2 IMAGE WIDTH

GAP VIEW AT 73X

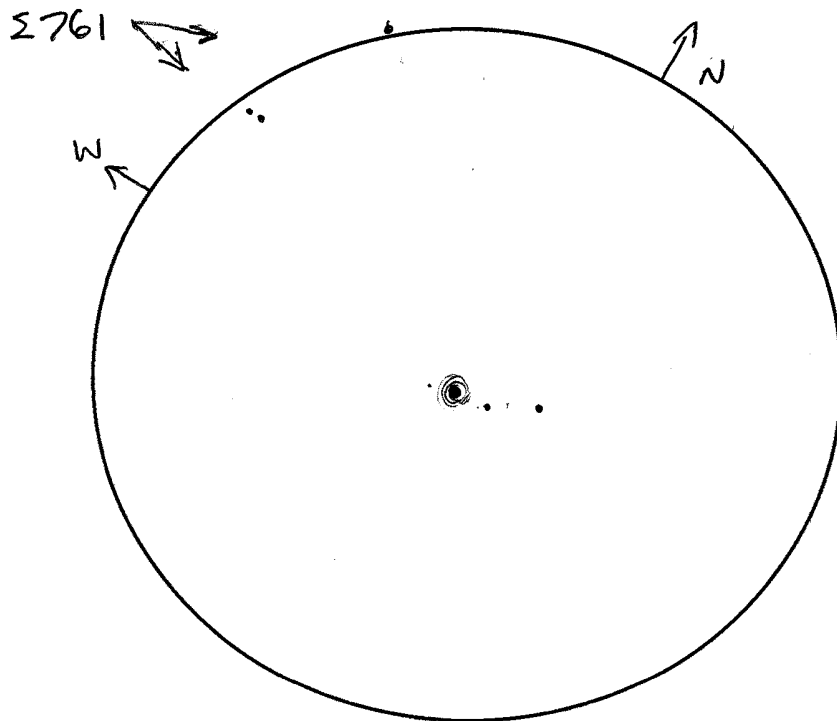
ALSO SEE 475X VIEW ATTACHED

WHERE I CATCH 10m COMES OF O

SEEN BEFORE



DATE 11/7/2 TIME 12:50 CST CDT CLARITY (I) II III IV V SEEING I II III IV V
 INSTRUMENT (ETX-125) 10x50 EYE POWER 10X 73X 153X (475X)
 OBJECT σ Ori + ζ 761 LOCATION RMCC (HOME)



DID NOT NOTICE
 ON RECORD "2 FRAMES
 BETWEEN GROUPS" OR
 "MINUTE PAIR N.O.F 4.1m"

BURNHAM LISTS "C" @ 10m, 11.2", 236° ✓ (WEBB)

"D" @ 7.5m, 12.9", 84° ✓

"E" @ 6m, 42", 61° ✓

I SEE ALL AS BLuish-WHITE

WHY DOES BURNHAM LIST AN 8m @ 231° & 30" WHEN

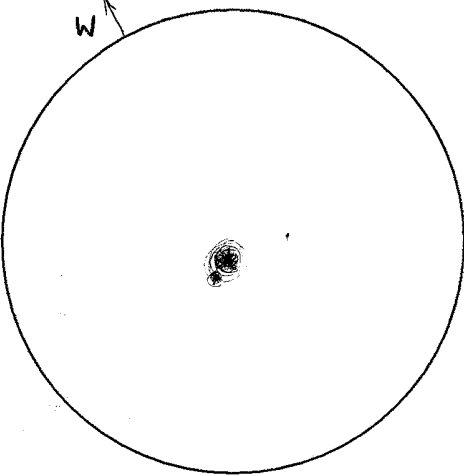
THIS IS "D"?? WEBB CLEARED IT UP FOR ME

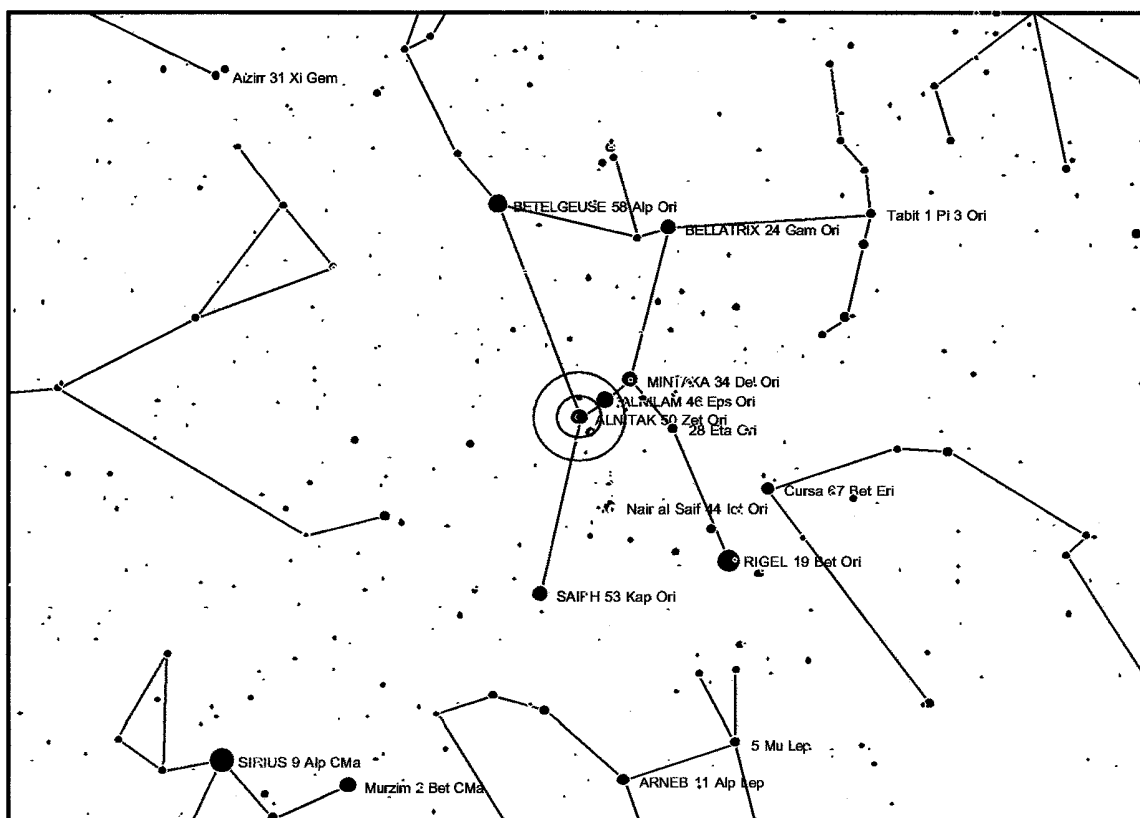
ζ 761 IS WONDERFUL, 8-8.5 68", 202° ✓
 split 8.5 to 8.5-9 8.5", 268° ✓
 (BURNHAM)

Zet Ori	Date: 11/11/02	Time: 12:15	Seeing: II	Trans: II-
	RA: 05 40.8	DE: -01 57	Class: MULT	Inst: 125mm
	Mag: 1.9, 4.0, 9.9	Sep: 2.4", 58"	PA: 162°, 10°	EP: 475X

Description:
11/7/02 - TRIED - NO WORK ON 4.0m
NOISE - 9.9 MAG IS EASY - WILL RECORD ONLY WHEN
1.9 & 4.0 MAG RESOLVED 11/7/02 WAS A II NIGHT
11/10/02 12:30 - maybe but more S=II FRT

11/11/02 FINALLY! GOOD STEADY, SLIGHTLY
CLOUDY OVER NIGHT. NOT THAT HARD TO
SELT ONE AIRY DISK, DIFF. RINGS AND
SPICES CAME DOWN. NICE BLUE PRIMARY
11/13/01 12:35am similar sight - confirmed
was for moments of steadiness but's plain -
hard because on 2nd diff. mag
SEEN (9.9m) - BUT HAVE I SEEN 4.0m?

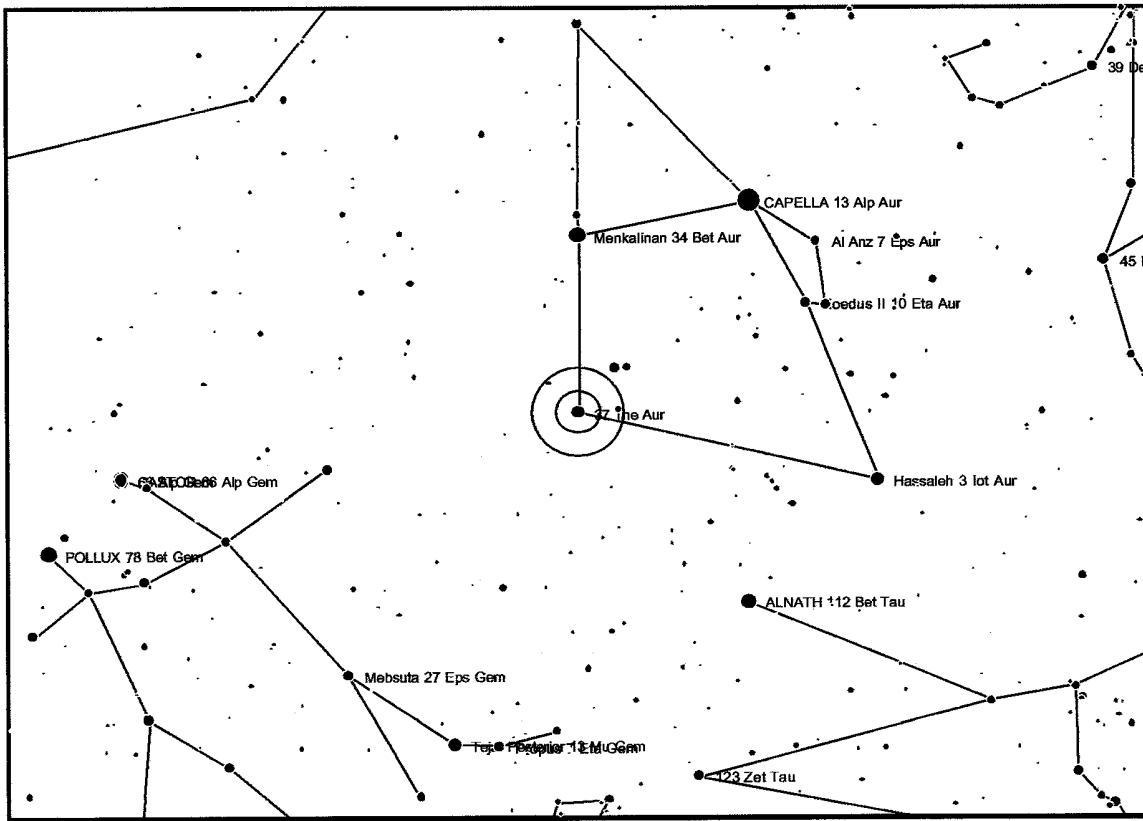




REVISIT & CONFIRM

The Aur	Date: 10/16/02	Time: 2:58	Seeing: II	Trans: I
	RA: 05 59.7	DE: +37 13	Class: DBL	Inst: 125mm
	Mag: 2.6, 7.1	Sep: 3.6"	PA: 313°	EP: 475X

Description:
 WOW! JUST GOT BETWEEN DIFF. RINGS
 (NOT COMPLETE IN RING; FOR CLARITY)
 White & slightly green tinged white
 NO RECORD OF IT!!



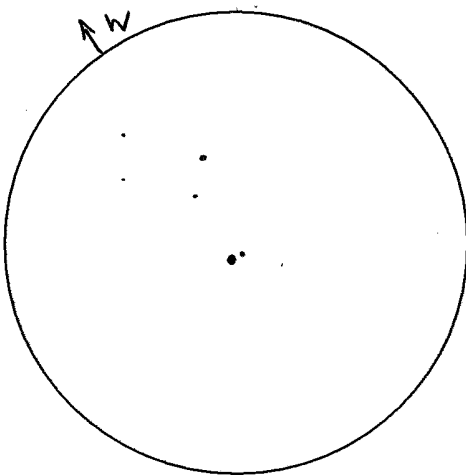
Eps Mon	Date: 11/13/02	Time: 12:50	Seeing: II-	Trans: II
	RA: 06 23.8	DE: +04 36	Class: DBL	Inst: 125mm
	Mag: 4.5, 6.5	Sep: 13.4"	PA: 27°	EP: 153x

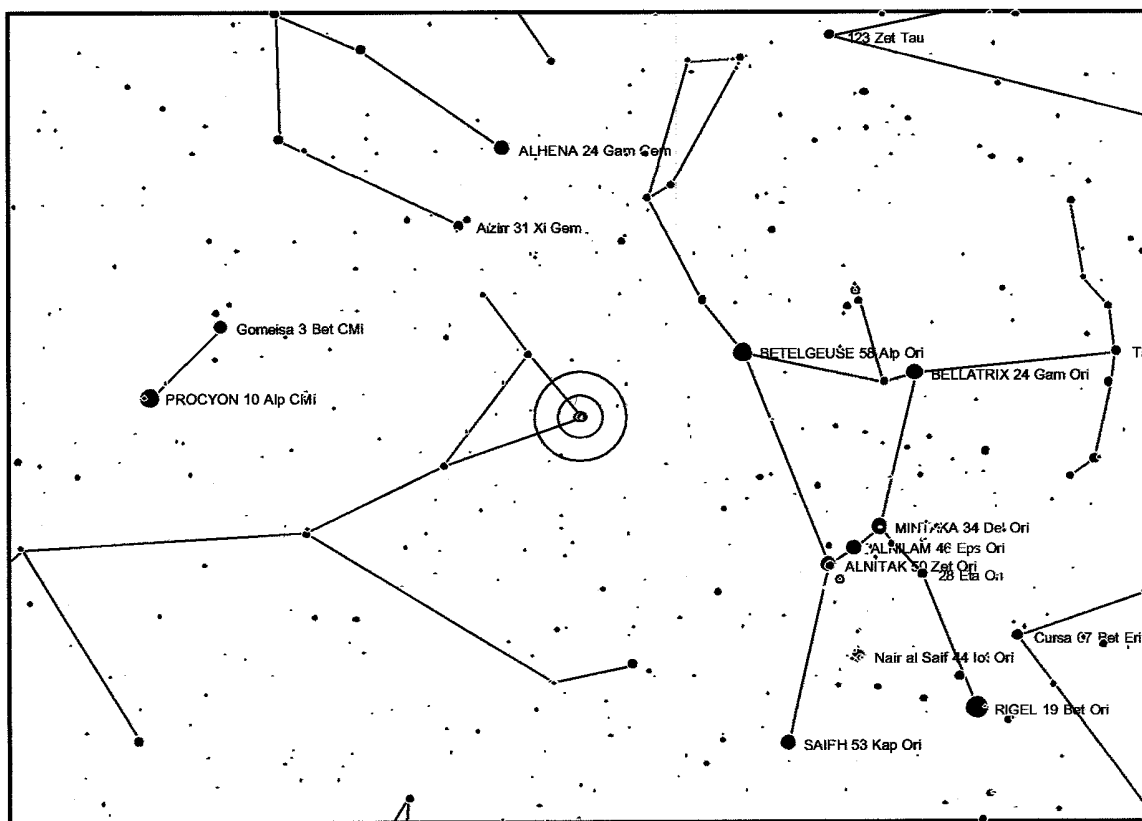
Description:

white & slightly bluish-white

Easy @ medium power

SEEN BEFORE

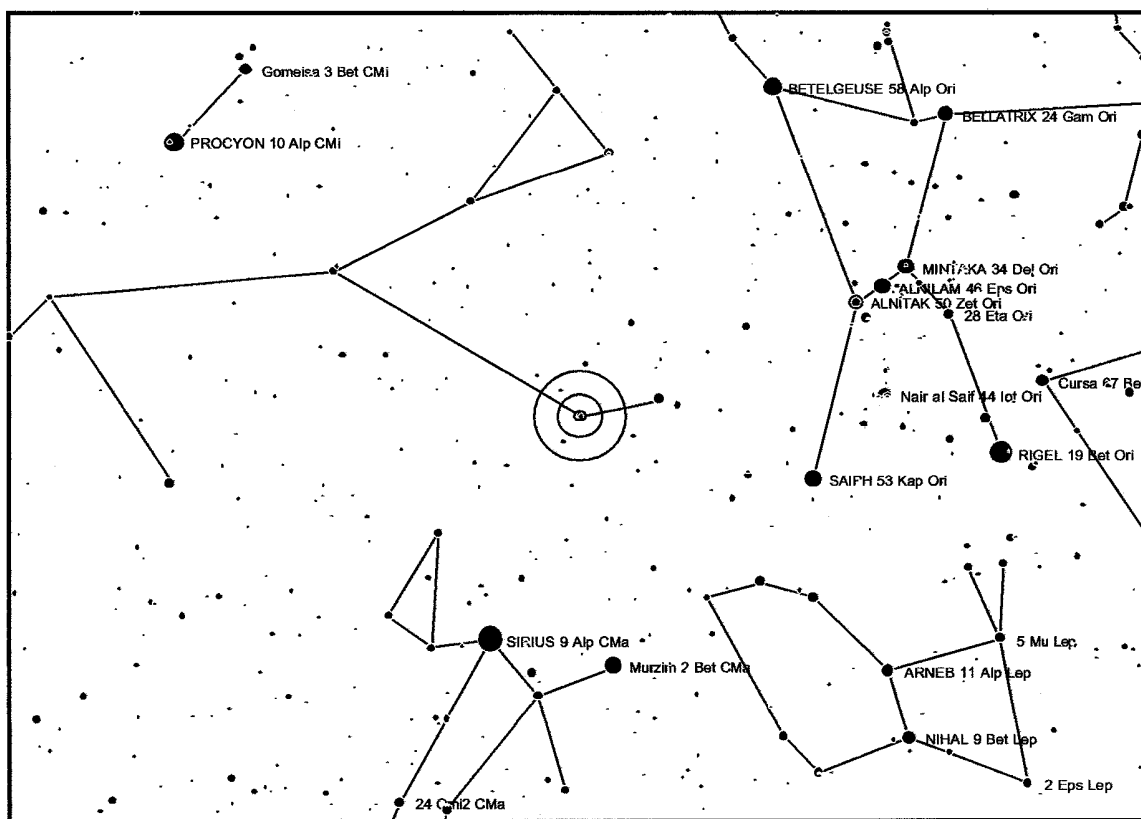
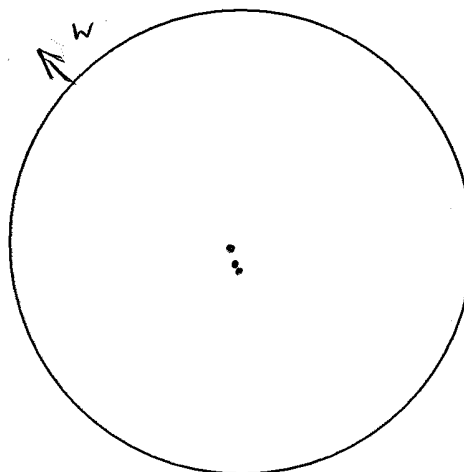




Bet Mon	Date: 11/13/02	Time: 1:00	Seeing: II-	Trans: II
	RA: 06 28.8	DE: -07 02	Class: DBL	Inst: 125mm
	Mag: 4.7, 5.2	Sep: 7.3"	PA: 132°	EP: 475X

Description:
 Wonderful triple, all blue-white & crystal clear. Triple easily noticed @ 153x, push power to confirm w/ range wide gap between 2 closest. Even @ 73x, once you know it's actually a triple the lovely pair of blues elongates and nearly splits out.

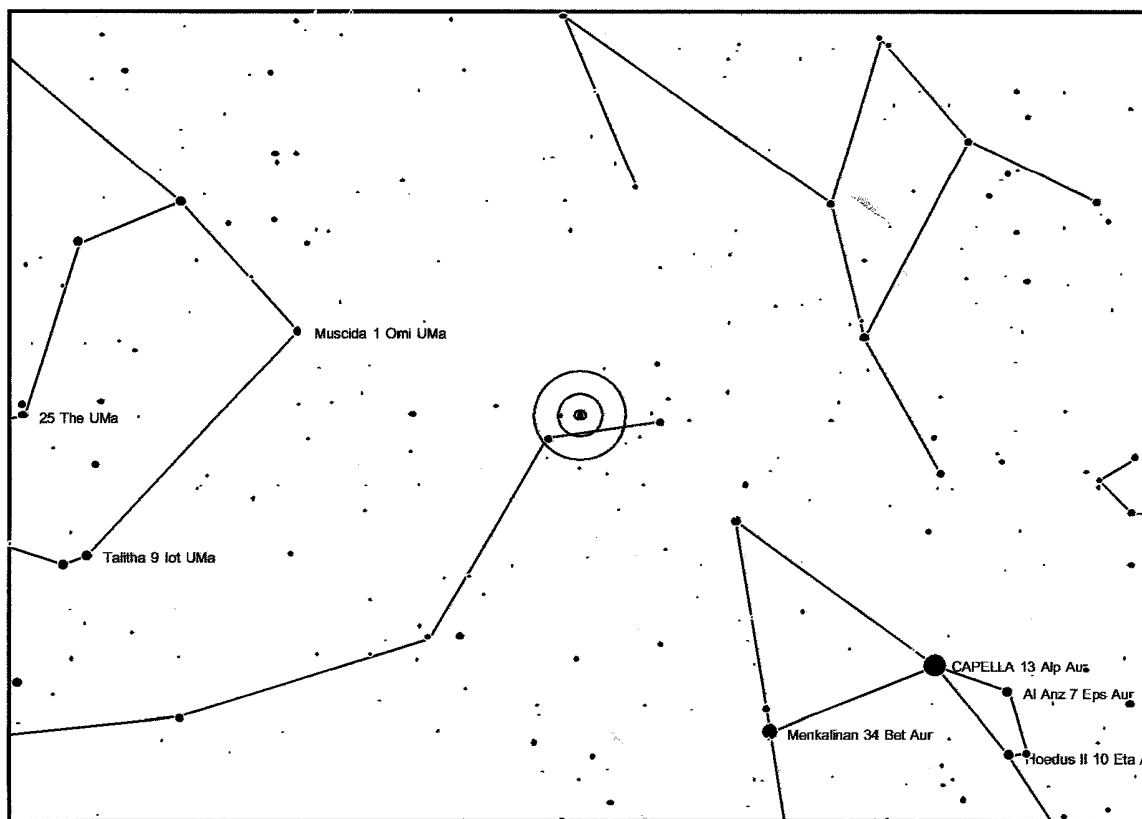
SEEN '82



12 Lyn	Date: 11/13/02	Time: 1:15	Seeing: II	Trans: II
	RA: 06 46.2	DE: +59 27	Class: DBL	Inst: 125mm
	Mag: 5.4, 7.3	Sep: 8.7"	PA: 308°	EP: 475X

Description:
SPLIT PRIMARY INTO 5 1/2 - 6 1.8 101°
Sure did! 5+7m split very easy
in 153x, not bad in 73x. @ 153x, you
at least along main pair, with hint of
a gap. 475x splits it wonderfully
What a triple! (especially after
just seeing β Mon!) No colors but
white noted.

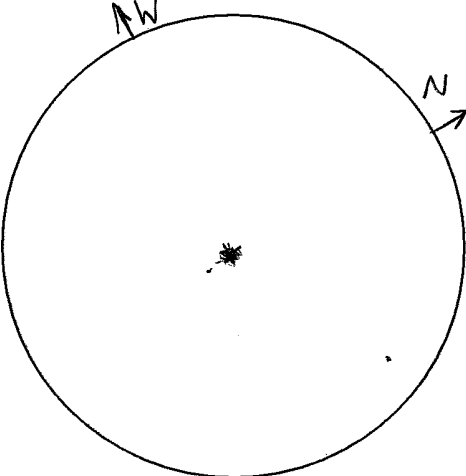
SEEN BEFORE

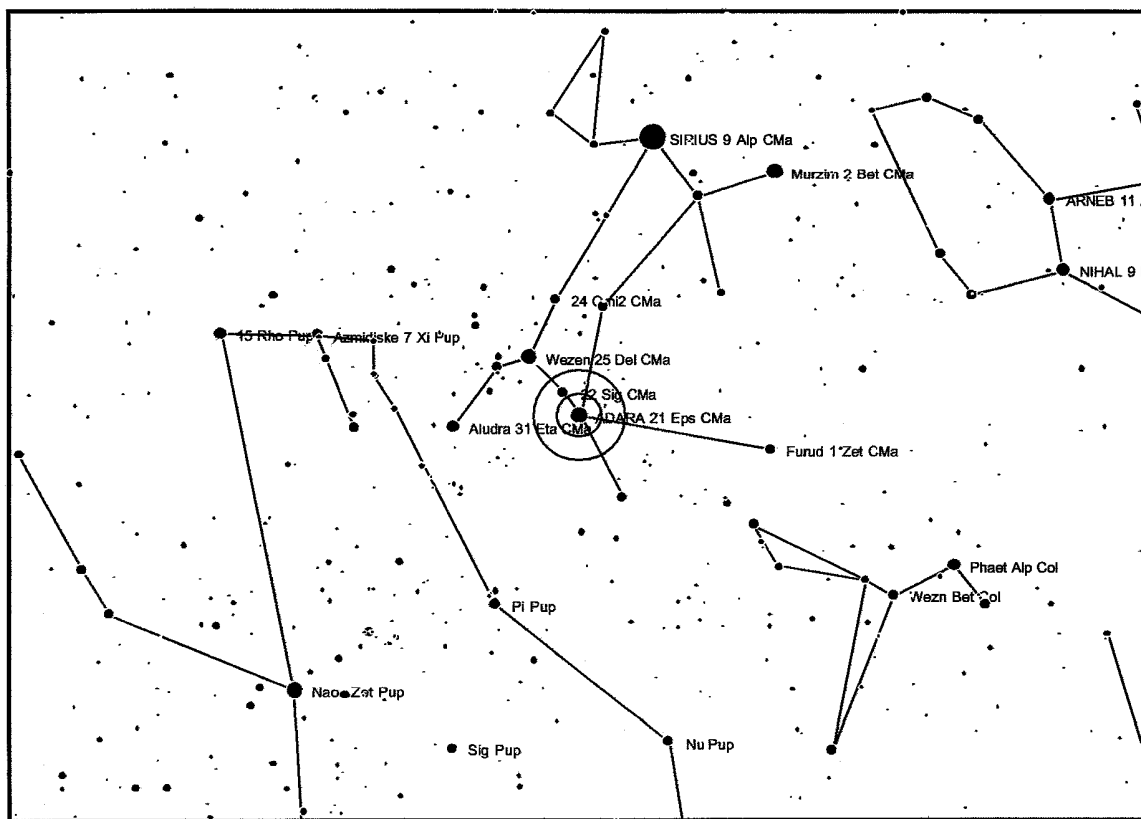


Eps CMa	Date: 11/13/02	Time: 2:15	Seeing: II-	Trans: II
	RA: 06 58.6	DE: -28 58	Class: DBL	Inst: 125mm
	Mag: 1.5, 7.4	Sep: 7.5"	PA: 161°	EP: 475X

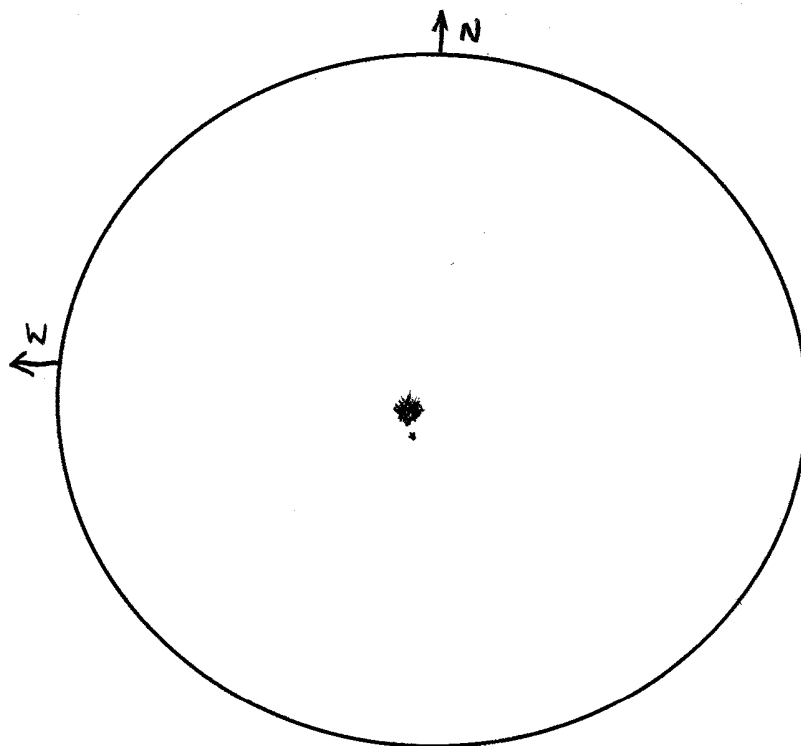
Description:
 Confirmed at 153x - I know that sounds strange but with high Δmag pairs often helps to back down & check the faint one. 475x view shown - white primary with bluish flare next to it outside of of dancing sparkle of primary. About as far from center of 1.5mag as widest point of the wings I'd say.

NO RECORD OF IT!!

NW
N




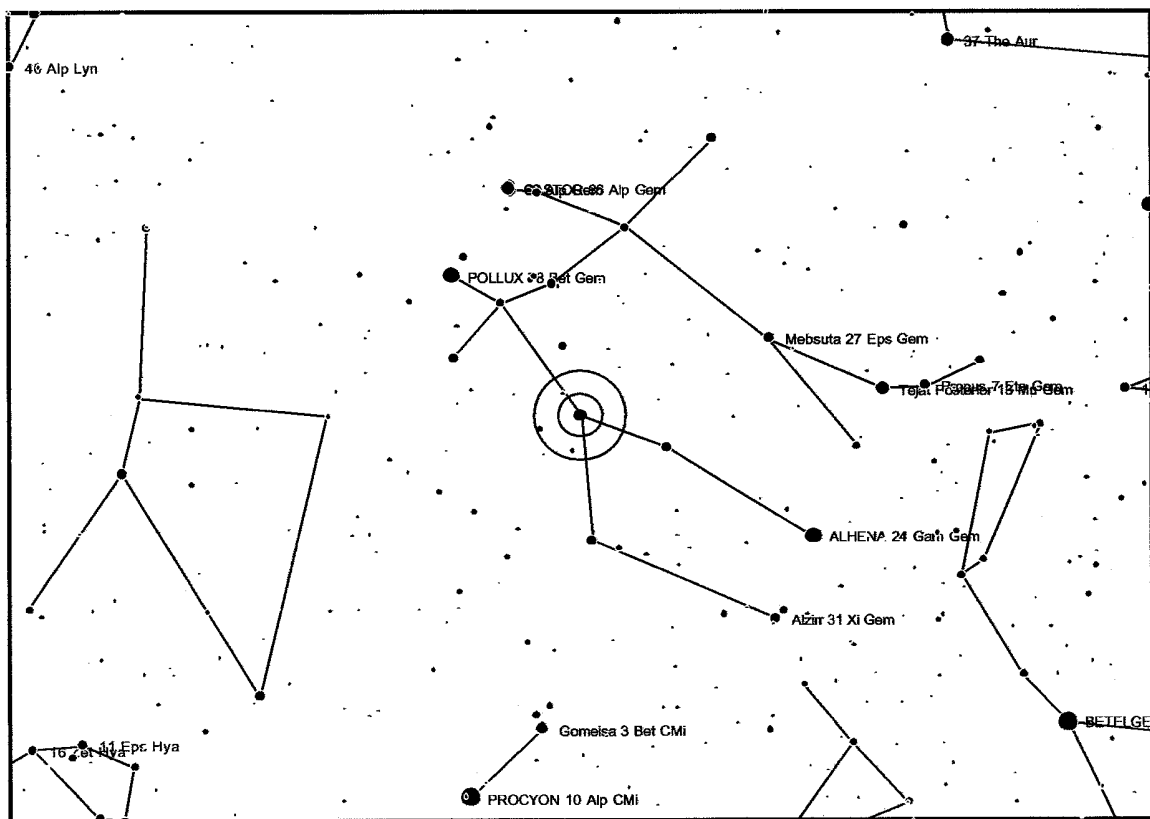
DATE 12/28/2 TIME 11:00 CST CDT CLARITY I II III IV V SEEING I II III IV V
INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X
OBJECT ECMa LOCATION RMCC HOME



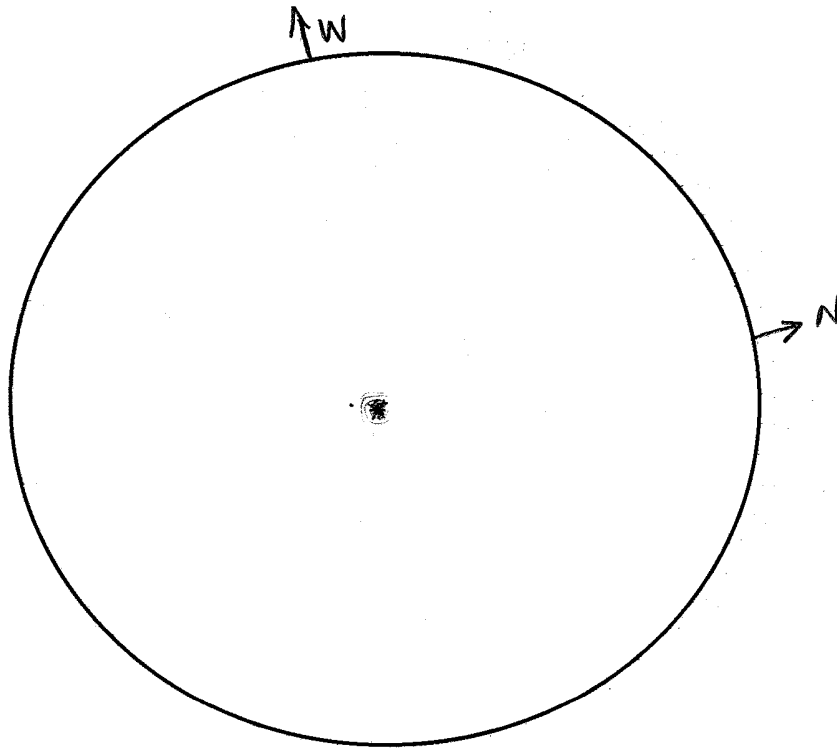
Reconfirmed - definitely see 7m @ 170° mag $\Delta \sim 6-7$
Sep $\sim 1/4$ to disk - very nice double

Del Gem	Date: 11/13/02	Time: 1:35	Seeing: II-	Trans: II
	RA: 07 20.1	DE: +21 59	Class: DBL	Inst: 125mm
	Mag: 3.5, 8.2	Sep: 6.8"	PA: 211°	EP: 153x

Description: Yellowish primary - hard @ 153x Confirmed @ 475x - next page for view @ high power. Not easy! See 4/12/3 observation SEEN BEFORE	
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DATE 11/3/01 TIME 1:40 CST CDT CLARITY I (II) III IV V SEEING I (II) III IV V
INSTRUMENT ETX-123 10x50 EYE POWER 10X 73X 153X 475X
OBJECT 2 Gem LOCATION RMCC HOME



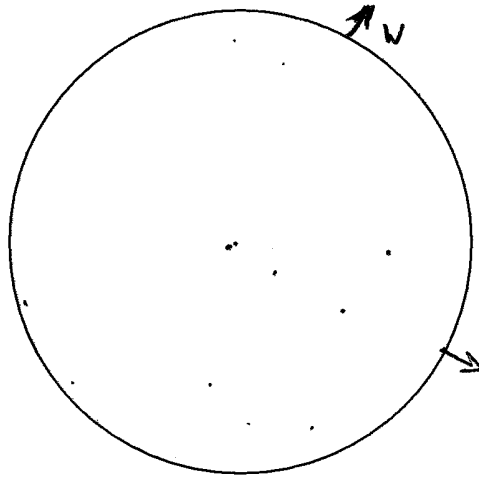
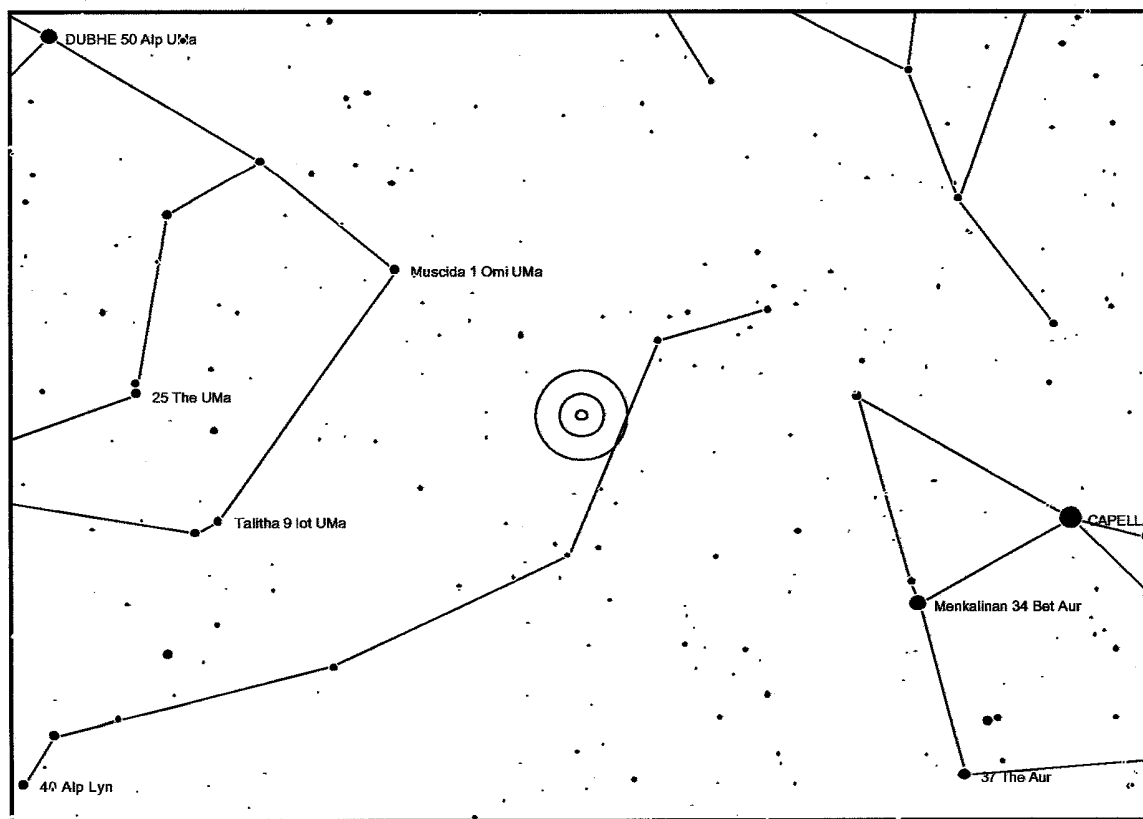
475x view - 8m more like a "shadow" in this view.

153x harder to split but more pleasing to the eye.

19 Lyn	Date: 11/13/02	Time: 1150	Seeing: II-	Trans: II
	RA: 07 22.9	DE: +55 17	Class: DBL	Inst: 125 mm
	Mag: 5.6, 6.5	Sep: 14.8"	PA: 315°	EP: 73x

Description:
 Slightly blue-white and bluer, wonderful double. Not hard to see.

SEEN IN '82

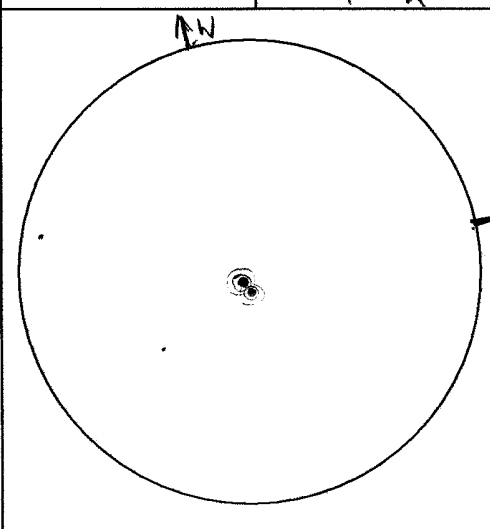



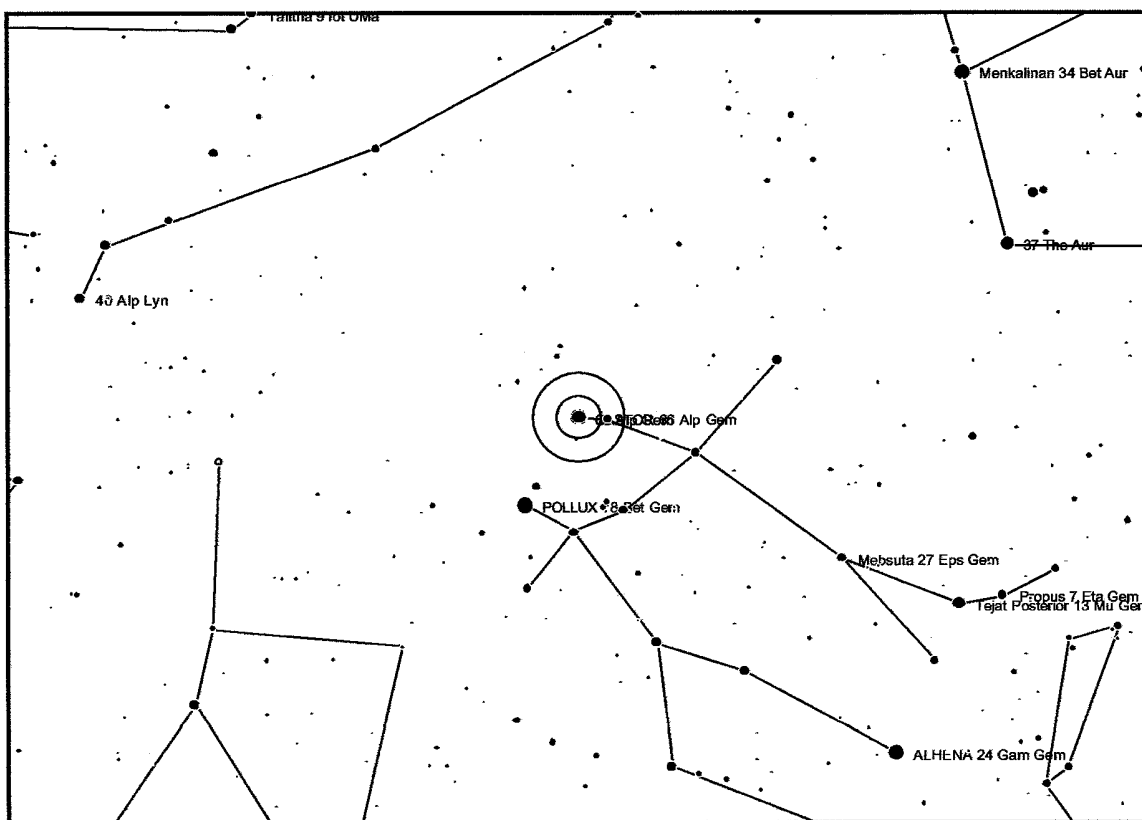
Alp Gem	Date: 11/13/02	Time: 1:05	Seeing: II	Trans: II
	RA: 07 34.6	DE: +31 53	Class: DBL	Inst: 125mm
	Mag: 1.9, 2.9	Sep: 2.2"	PA: 171° No	EP: 475x

Description:
 Phenomenal as always!
 Check PA - orbit may be fast
 Definite nmtsa 73x of duplicity
 475x sets image with gap with
 wonderful clear ice-blue Army disk
 I see PA now as about 75°

Burnham's p. 917 has diagram
 that shows it should be north of
 east by a good bit in 2002.
 PA was 171° in maybe 1955!

BBEN '82



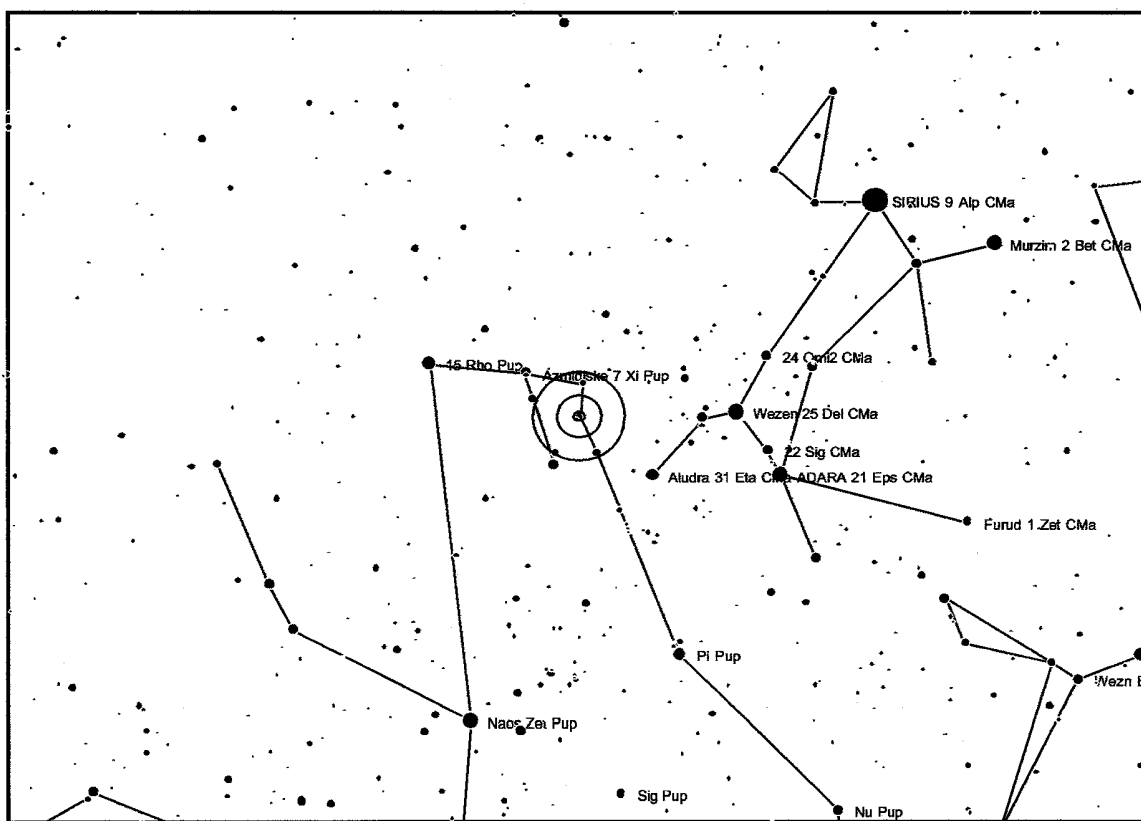


Kap Pup	Date: 12/28/2	Time: 11:55 pm	Seeing: II-	Trans: II
	RA: 07 38.8	DE: -26 48	Class: DBL	Inst: 125mm
	Mag: 4.5, 4.7	Sep: 9.9"	PA: 318°	EP: 73X

Description:

Most lovely pair - easy. Slightly yellow cast on white - esp. with 4.7m but just barely - like dirty snow.

SEEN BEFORE



TRY AGAIN
FOR TRIPLES (NOT RESOLVED)

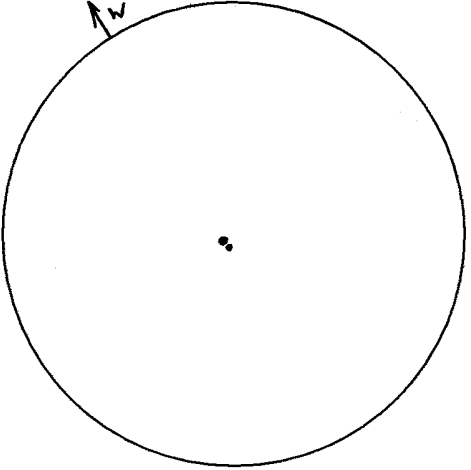
Zet Cnc	Date: 12/28/2	Time: 11:10pm	Seeing: II-	Trans: II
	RA: 08 12.2	DE: +17 39	Class: DBL	Inst: ETR-125
	Mag: 5.6, 6.0	Sep: 5.9"	PA: 89°	EP: 153x

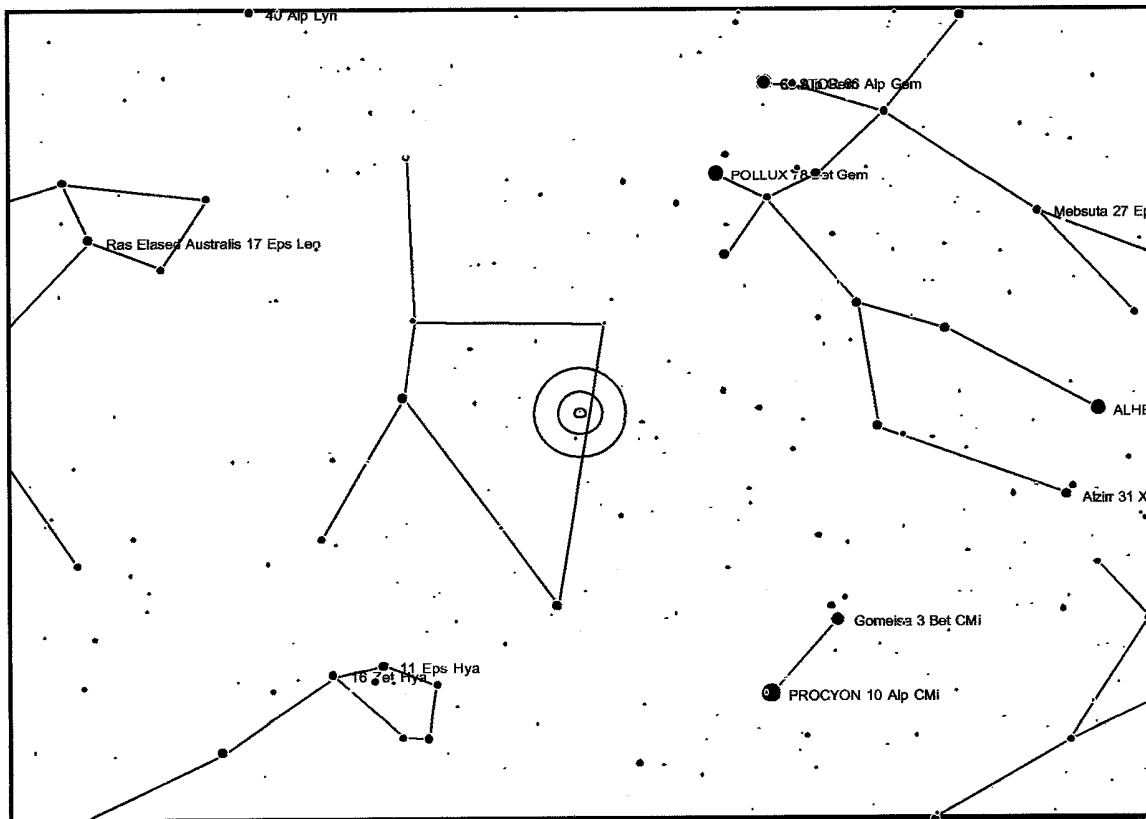
Description:
 TRY TO SPLIT PAIR. 5.6 + 5.9 @ 1".2
 Nice yellows - split @ 73x - 153x
 makes it sure & easy.

 Tried for triple in 475x - not tonight
 my eye more steady right - hint of
 elong. but no confirmation triple.

 See 4/12 observation for triple

 SEEN BEFORE





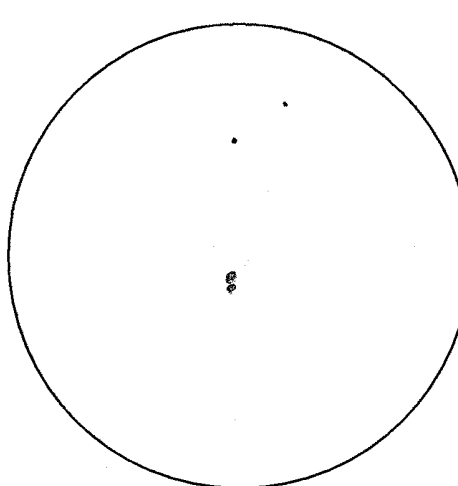
Gam Leo	Date: 12/28/2	Time: 11:25pm	Seeing: III -	Trans: II -
	RA: 10 20.0	DE: +19 51	Class: DBL	Inst: 125mm
	Mag: 2.2, 3.5	Sep: 4.4"	PA: 122°	EP: 153x

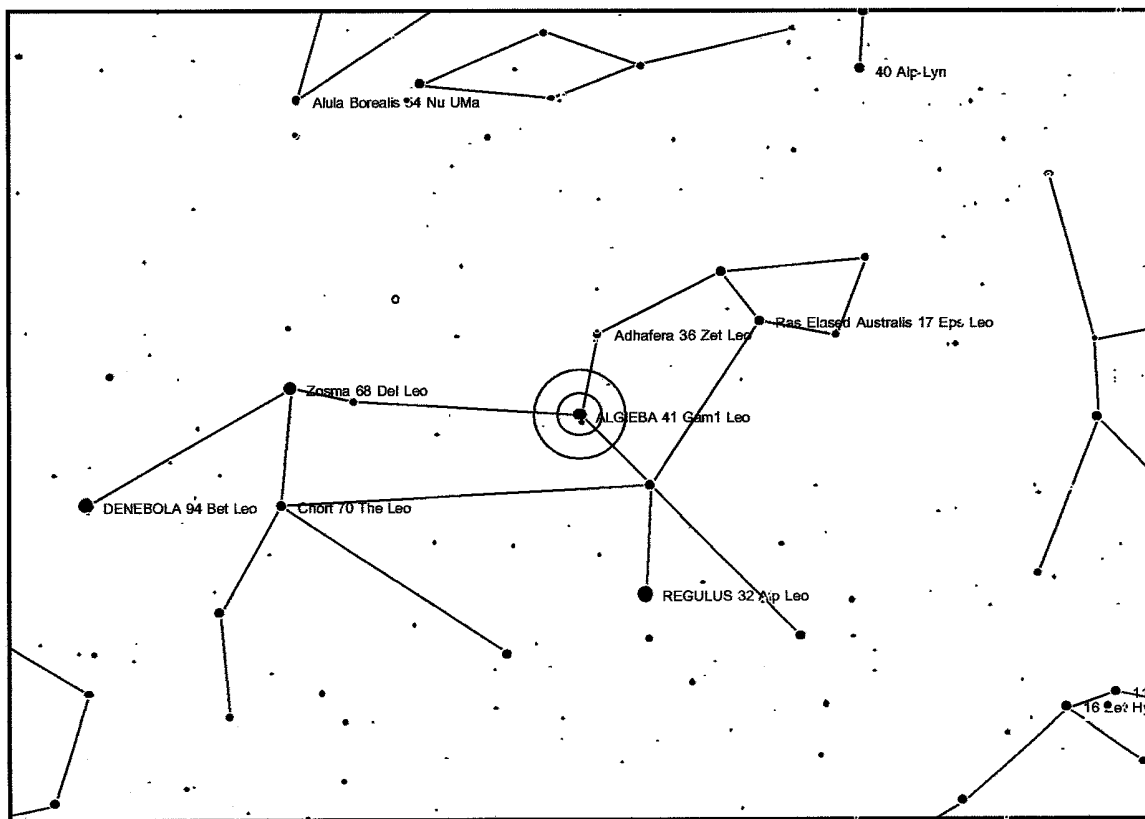
Description:

Wow, nice split though low

Very deep yellows, 0m ~1

SEEN '82





@ HOME

38 Lyn	Date: 5/24/3	Time: 11:15	Seeing: II	Trans: II -
	RA: 09 18.8	DE: +36 48	Class: DBL	Inst: ETR-125
	Mag: 3.9, 6.6	Sep: 2.7"	PA: 229°	EP: 475X

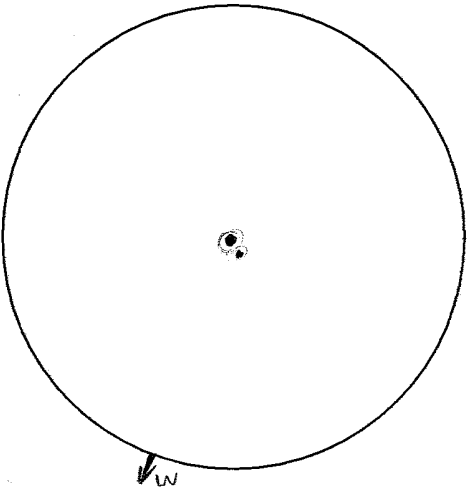
Description:

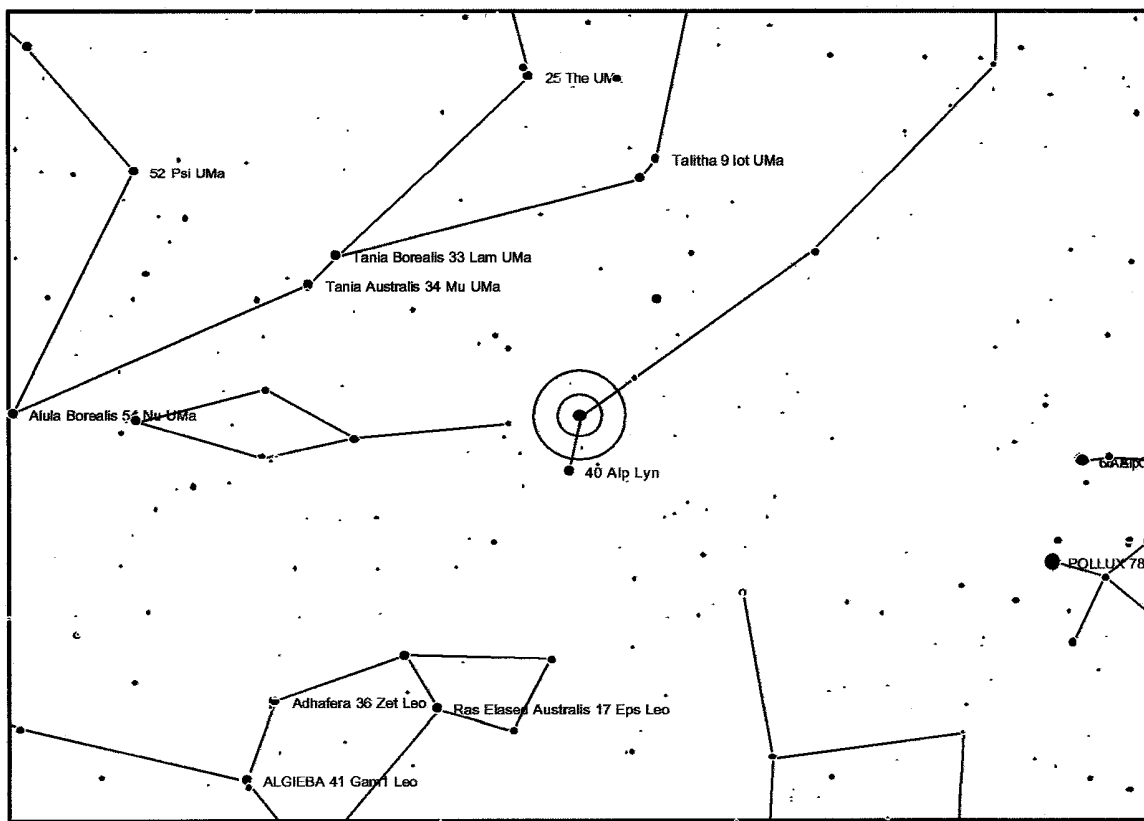
NOT HARD TO SPOT WITH RATHER STEADY SKIES - NEAR - 2.5 MAG Δ

NO COLORS NOTICED

CONFIRMED NEXT NIGHT @ RMCC - SEE THAT OBSERVATION (5/25/03)

SEEN BEFORE

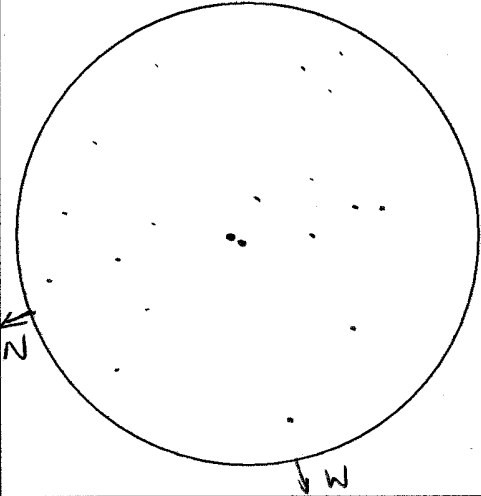
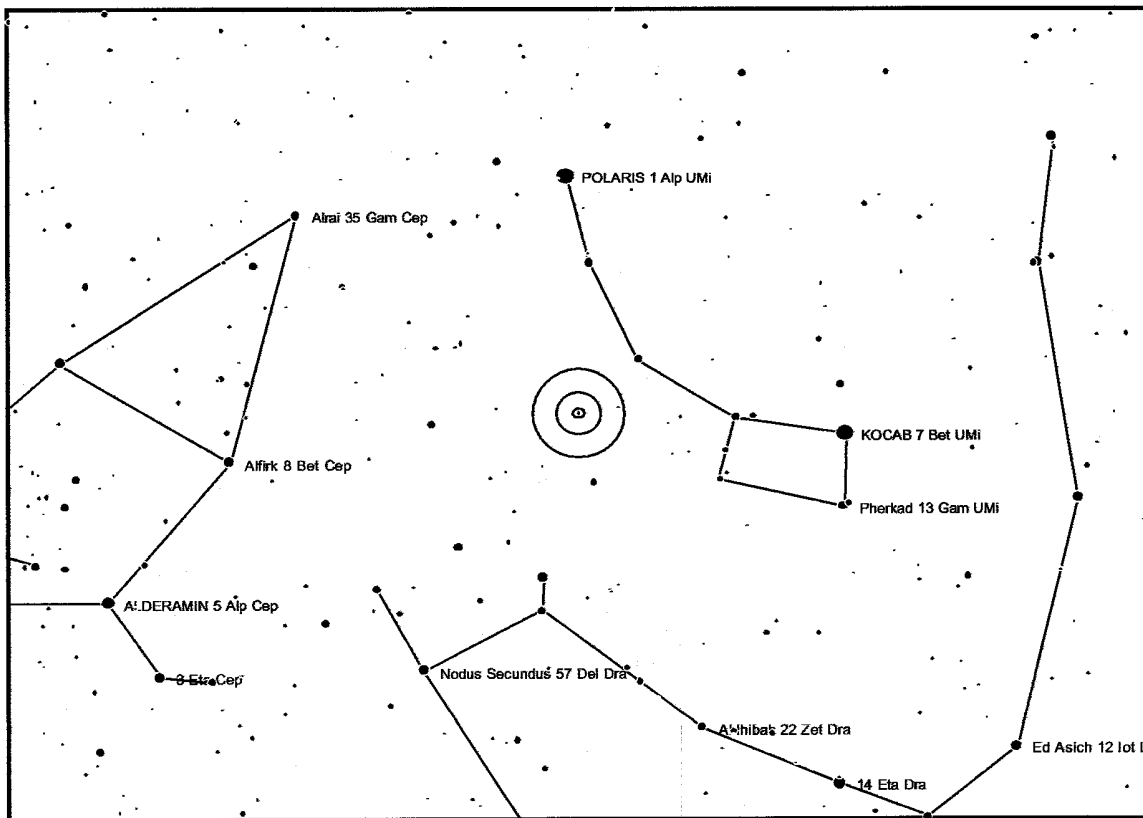




@RMCC

40/41 Dra	Date: 10/14/02	Time: 9:40pm	Seeing: II	Trans: II
	RA: 18 00.2	DE: +80 00	Class: DBL	Inst: 125mm
	Mag: 5.7, 6.1	Sep: 19.3"	PA: 232°	EP: 73x

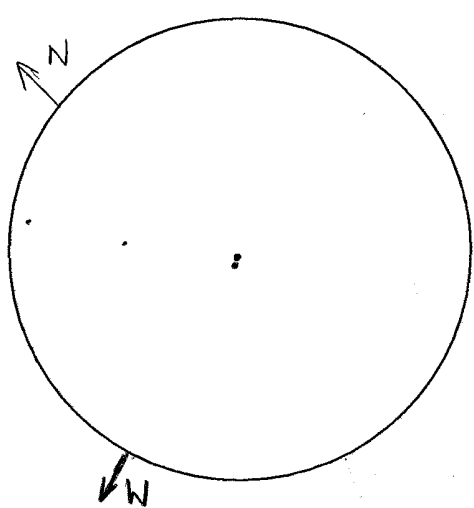
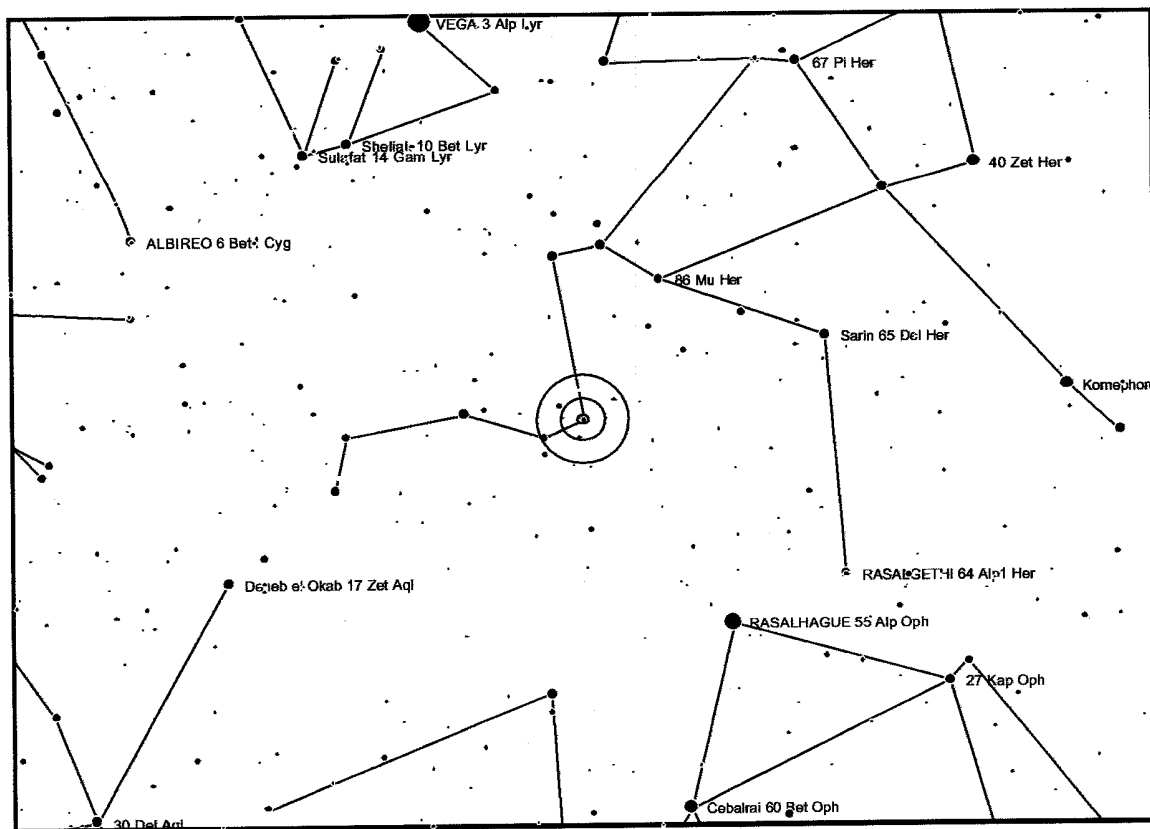
Description:
 Beautiful wide pair. Both same white w/just a hint of yellow. Nice field too.
 HA wide doubles on way - see regular record book. That was 135 Dra & not "real" doubles - still a nice field!
 DEEN BEFORE

@ Home

95 Her	Date: 10/11/02	Time: 10:45 pm	Seeing: II	Trans: II
	RA: 18 01.5	DE: +21 36	Class: DBL	Inst: 125mm
	Mag: 5.0, 5.1	Sep: 6.3"	PA: 258°	EP: 153x

Description:
 WONDERFUL SPLIT, ALMOST EVEN
 PRIMARY WHITE, SEC. HAS STRANGE
 ROSY-PINKISH-ORANGE TINT - IS THIS
 TRUE OR ARTIFACT?
 WEBB, FICHER, BURNHAM ALL DESCRIBE
 VARIOUS COLOR COMBOS - NONE MENTION
 ROSY-PINK.
 SEEN BEFORE

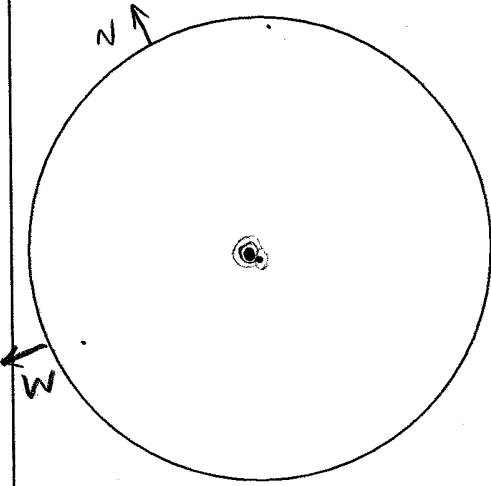
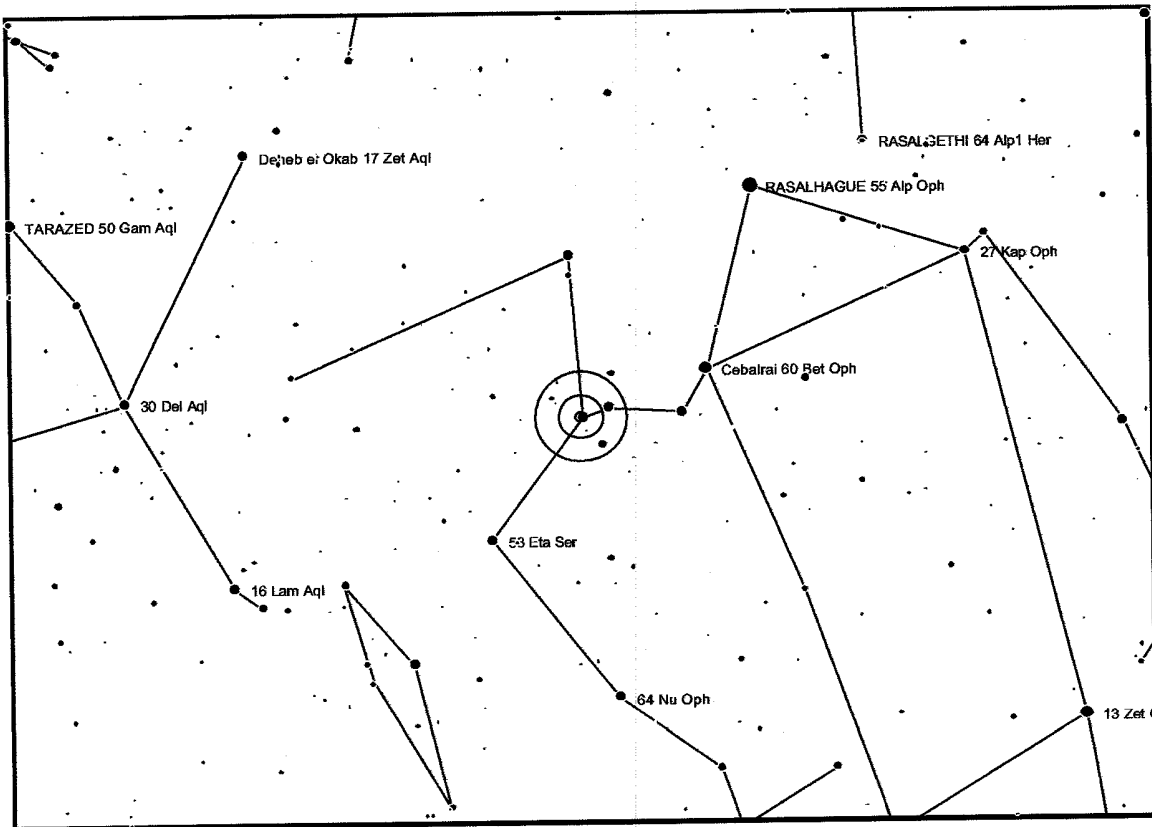
@RMCC

70 Oph	Date: 10/14/02	Time: 9:50pm	Seeing: II	Trans: II-
	RA: 18 05.5	DE: +02 30	Class: DBL	Inst: 125mm
	Mag: 4.2, 6.0	Sep: 2.8"	PA: 72°	EP: 475X

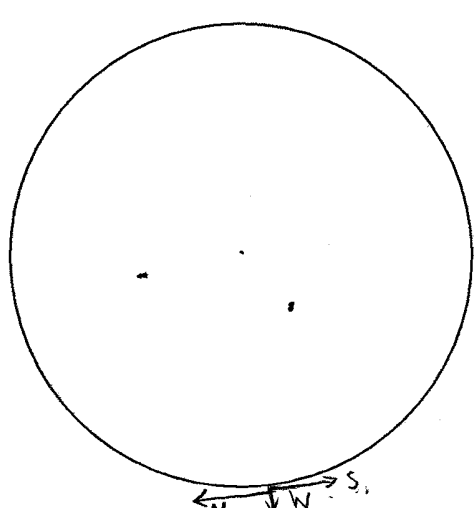
Description:
BURNHAM'S DIAGRAM → 2002 = 4" 58 145°
Wow! Nice orange & dark blue-white
(obviously just from contrast) sec.
well split, good space between them
Nice double!

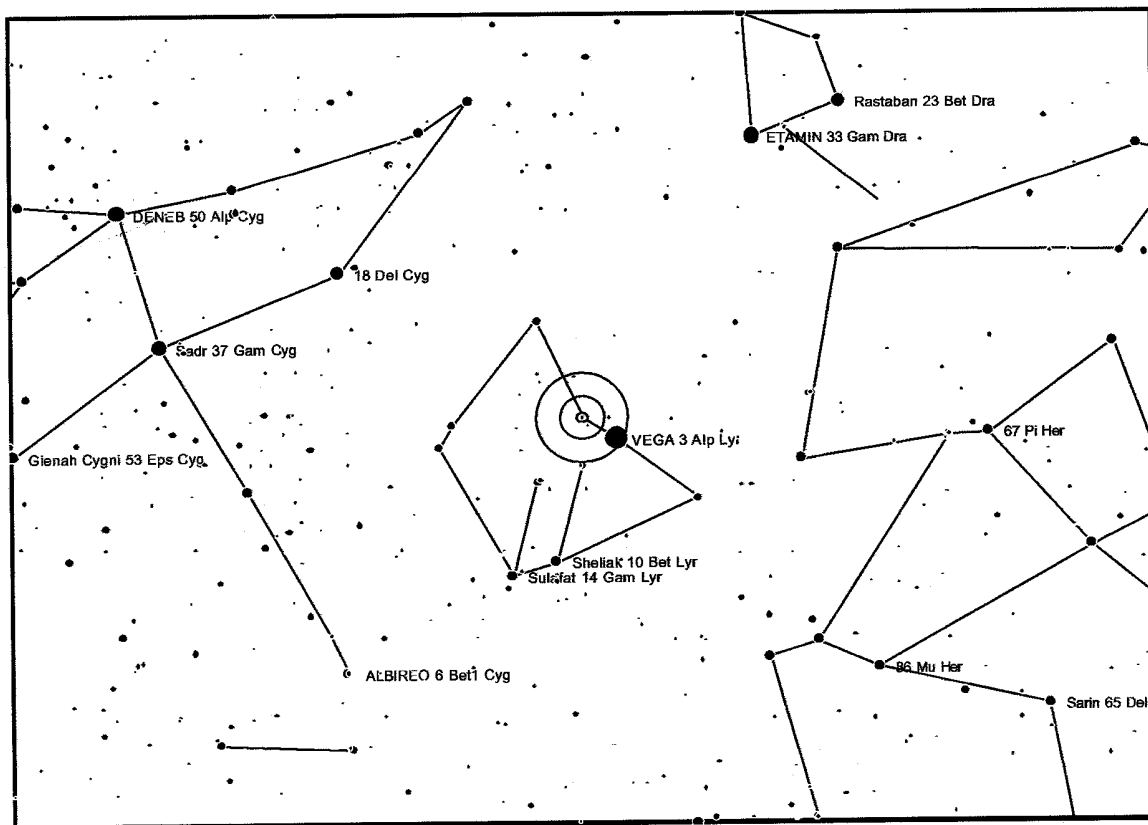
I agree with Burnham - 140-150° PA

SEEN BEFORE - COMPARE RAPID MOTION

@HOME

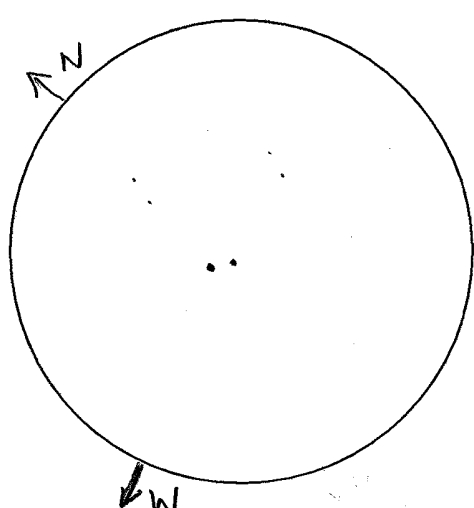
Eps Lyr	Date: 10/11/02	Time: 11:00 pm	Seeing: II	Trans: II
	RA: 18 44.3	DE: +39 40	Class: MULT	Inst: 125mm
	Mag: 5.0, 5.2, 6.1, 5.4	Sep: 208", 2.6", 2.3"	PA: 357°, 173°, 94°	EP: 153x
Description: ITS ALWAYS AMAZING! DIFFICULT TO SPLIT N. PAIR IN 153X BUT HINT OF SPACE MORE LIKE 1/2 DISK DIAMETER ON S. PAIR. DEFINITELY MORE EASILY SPLIT W/475X (NOT SHOWN) BUT DETRACTS FROM BEAUTY BECAUSE TWO PAIRS NOT CONTAINED IN ONE FIELD. ALL WHITE. RETURN LATER FOR FAINT STARS BETWEEN THE 2 PAIRS (ONE SHOWN) SEEN '82				

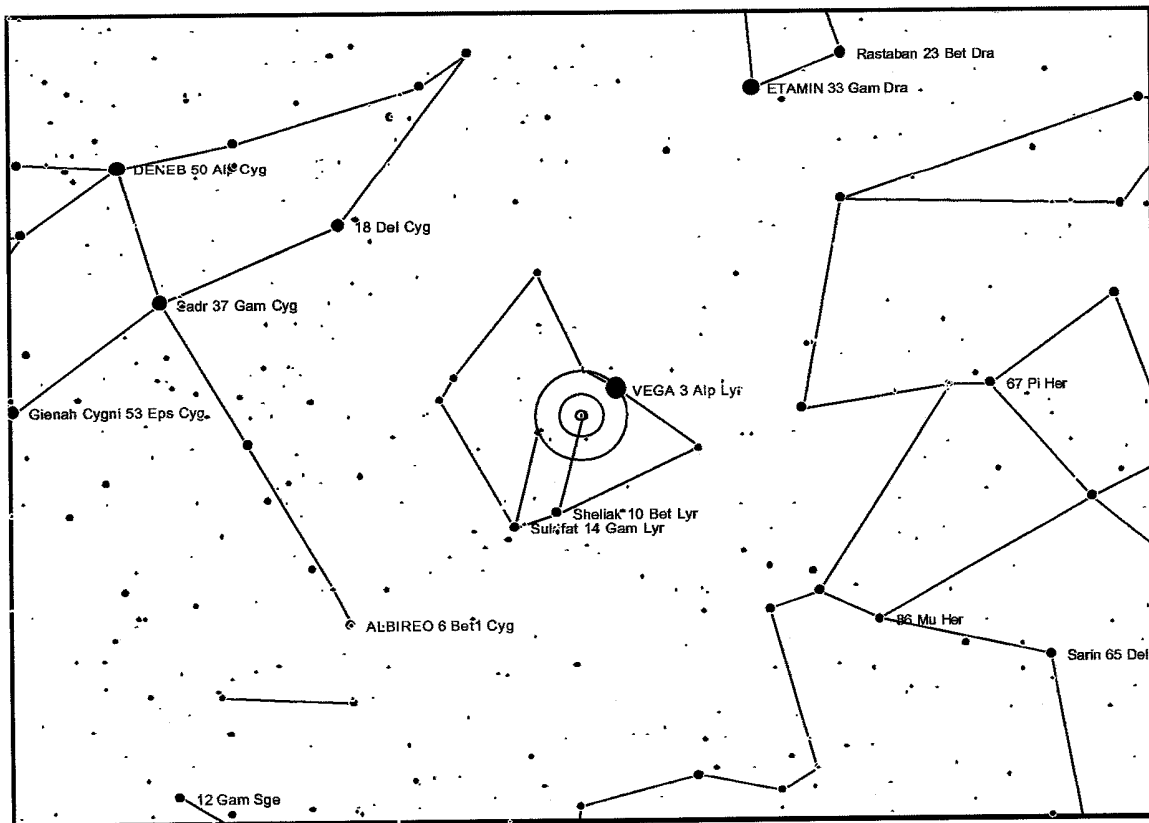


@HOME

Zet Lyr	Date: 10/11/02	Time: 11:10pm	Seeing: II	Trans: II
	RA: 18 44.8	DE: +37 36	Class: DBL	Inst: 125mm
	Mag: 4.3, 5.9	Sep: 44"	PA: 150°	EP: 73x

Description:
 lovely wide pair, reminds me very much of 'cats eyes' in Sco in appearance to eye.
 White & sl. yellow - colors are not vivid.
 SEEN BEFORE





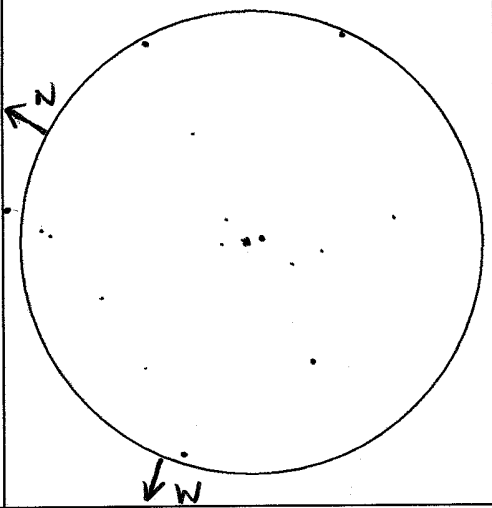
@HOME

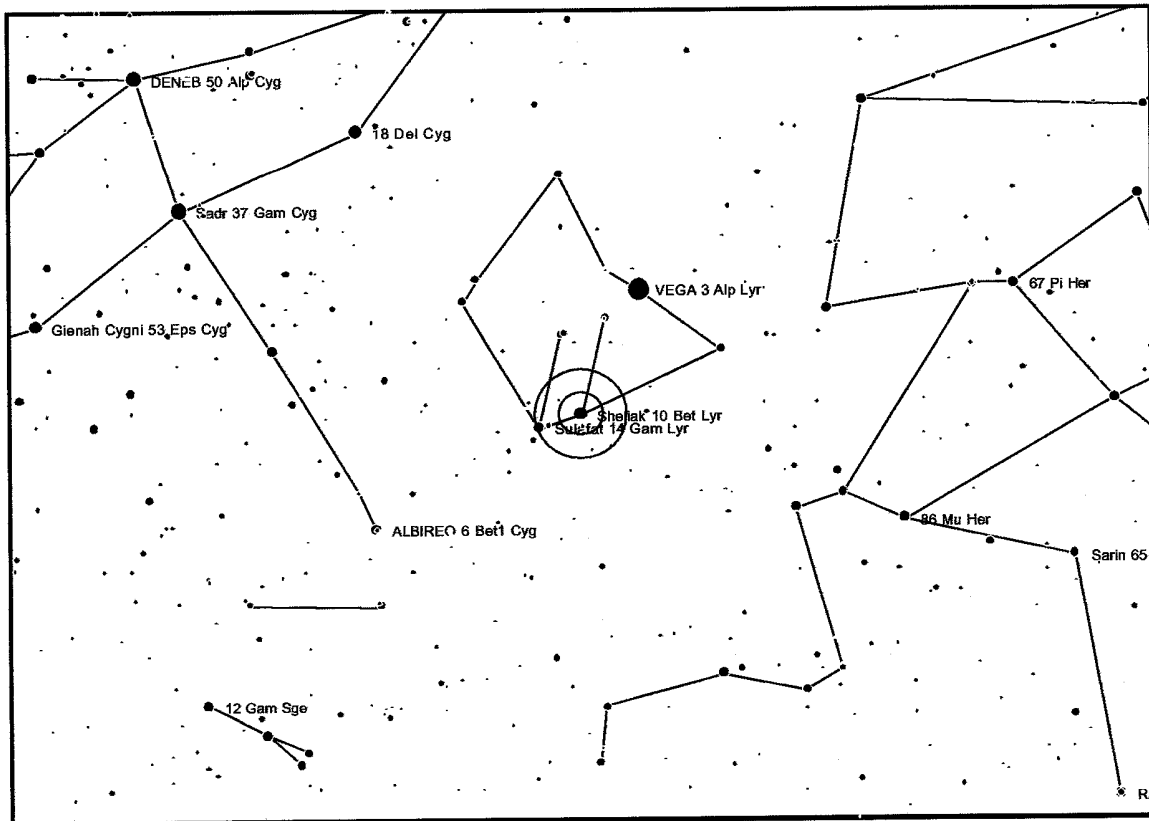
Bet Lyr	Date: 10/11/02	Time: 11:15 pm	Seeing: II	Trans: II
	RA: 18 50.1	DE: +33 22	Class: DBL	Inst: 125mm
	Mag: 3.4, 8.6	Sep: 46"	PA: 149°	EP: 13X

Description:
 Also 2 am, @ 69" 318° & 86" 19°
 All SEEN & ASILY!!
 White prim, sh blue tinge to 8.6m,
 9m's are white. Lovely, easy

 Nice 9-10 mag to north

 SEEN BEFORE





@NMCC

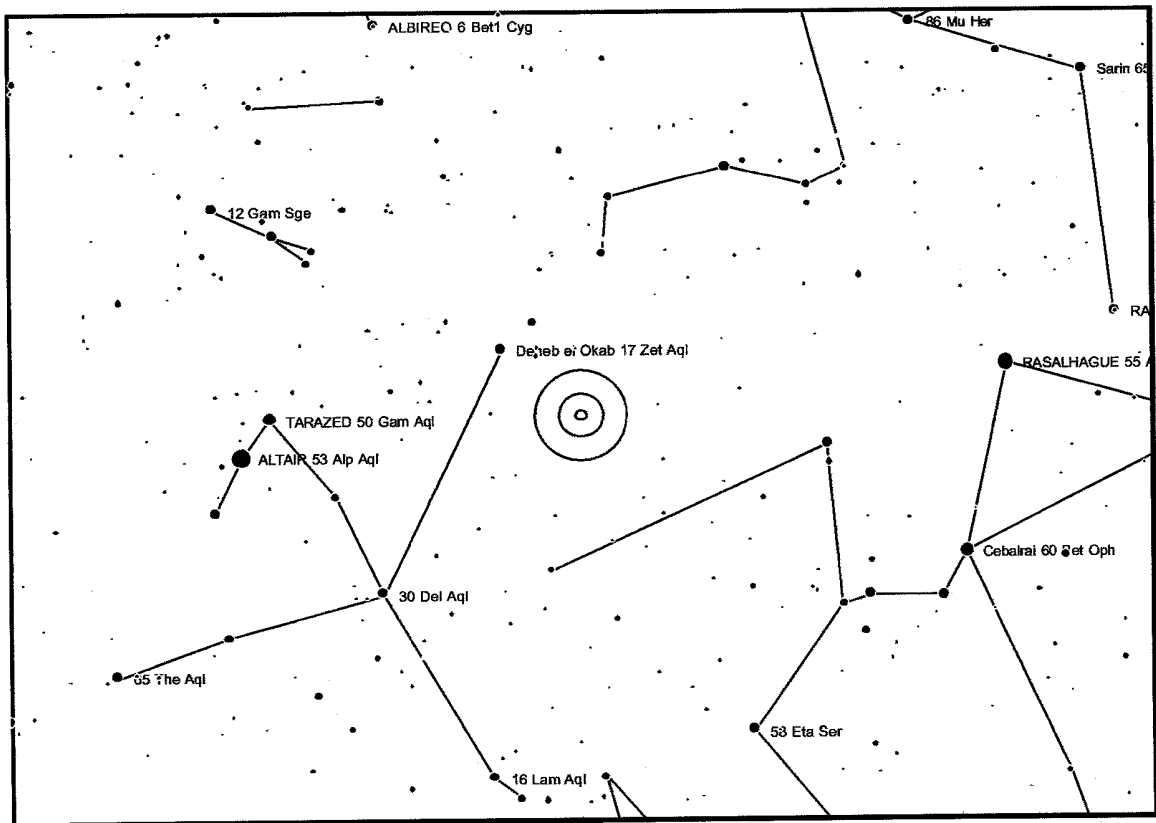
STF 2404	Date: 10/14/02	Time: 10:00pm	Seeing: II	Trans: I
	RA: 18 50.8	DE: +10 59	Class: DBL	Inst: 125mm
	Mag: 6.9, 8.1	Sep: 3.6"	PA: 183°	EP: 153X

Description:

Lovely or-yellow + white, just split in 153x w/ nice gap between

Several good fields in area - see other record book - took ~ 30 minutes and wandered.

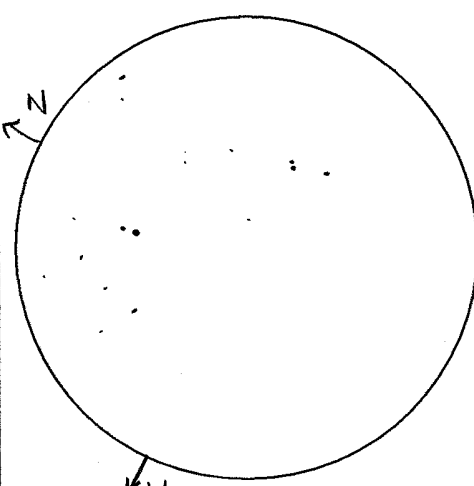
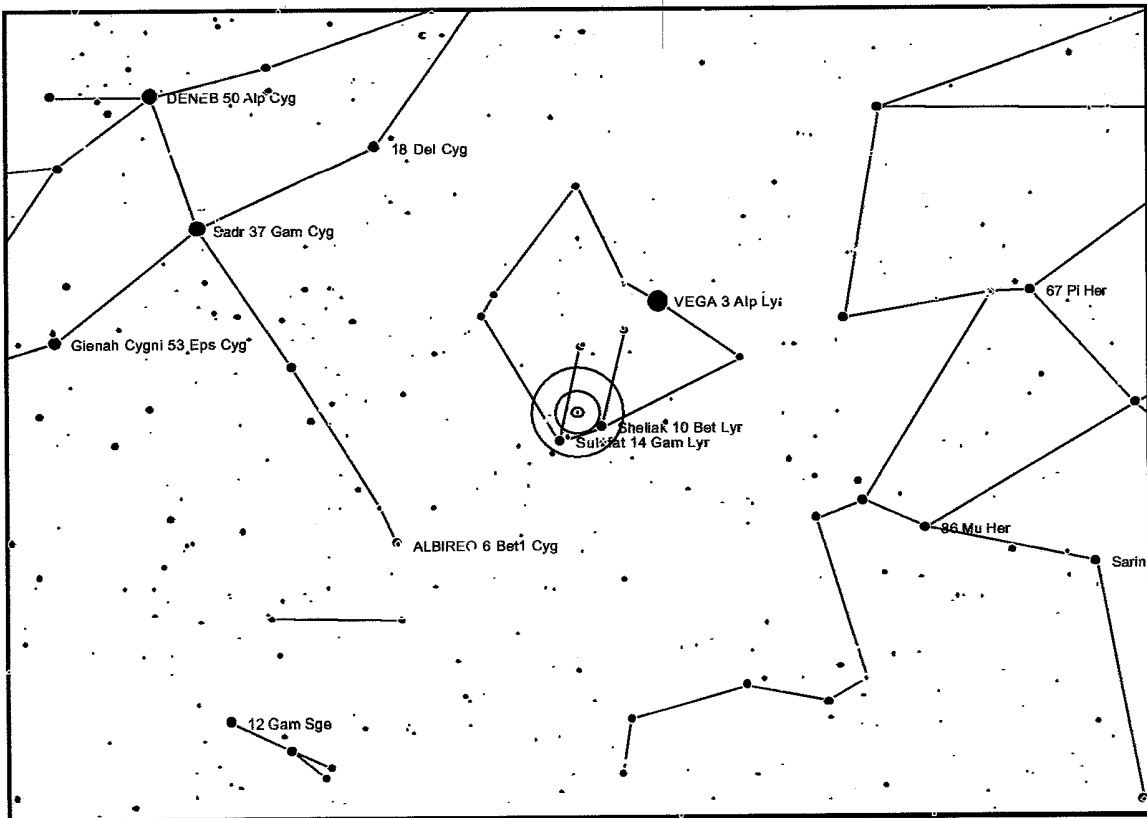
Seen before



@HOME

OS 525	Date: 10/11/02	Time: 11:25pm	Seeing: II	Trans: II
	RA: 18 54.9	DE: +33 58	Class: DBL	Inst: 125mm
	Mag: 6.0, 7.7	Sep: 45"	PA: 350°	EP: 73x

Description:
 AKA 02525, ϵ 2421 TO SE
 Beautiful little pair, with another in field.
 02525 is sl. yellow, sl. blue (looks almost artificial in contrast) other double both whites.
 WEBB NOTES: "A little S.F. is ϵ 2421"
 8, 8.7 (64° 23" (1903) PA DEC, SEP INC
 EPOCH GIVES SAME
 SEEN BEFORE

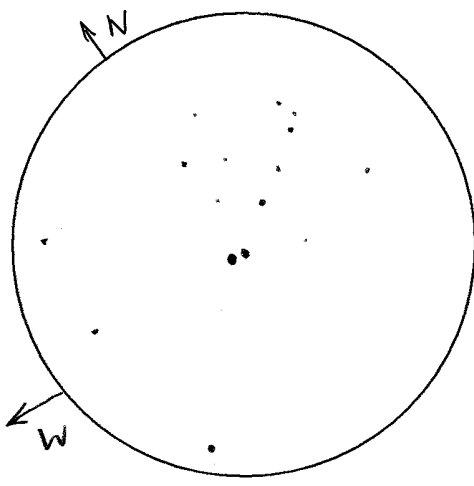
ERNCC

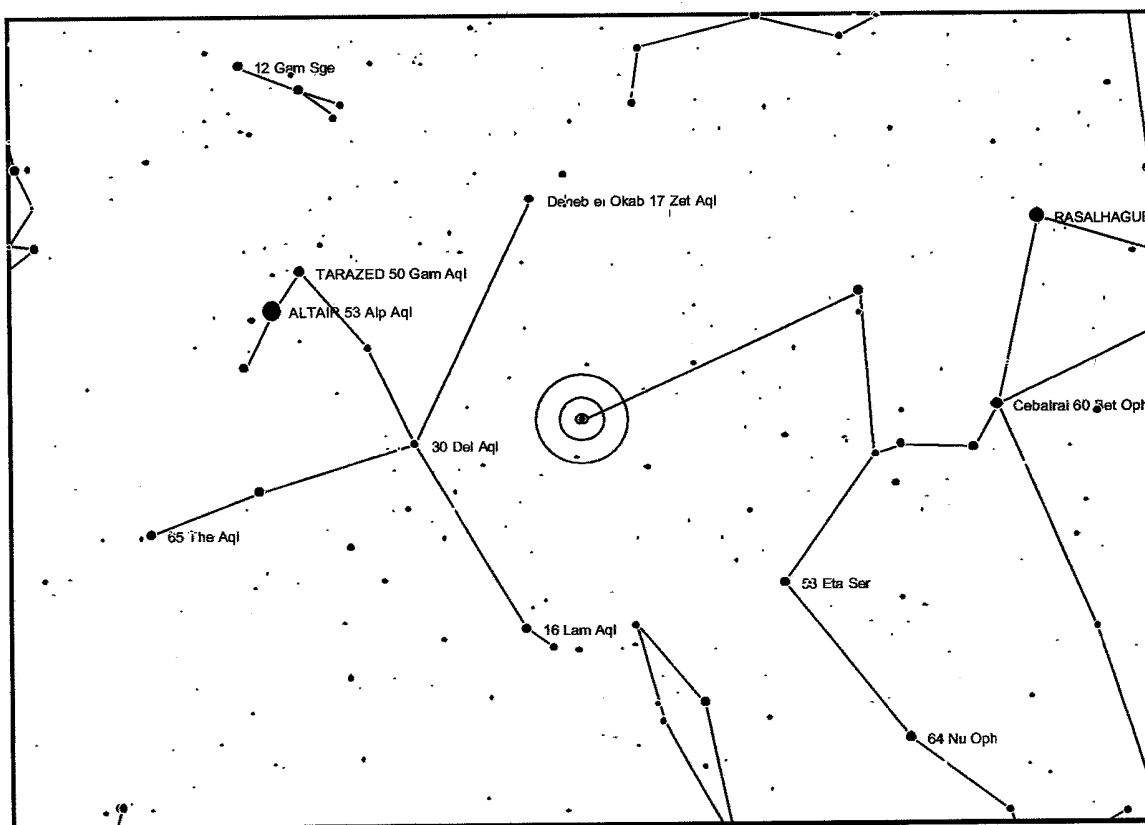
The Ser	Date: 10/14/02	Time: 10:30pm	Seeing: II	Trans: II
	RA: 18 56.2	DE: +04 12	Class: DBL	Inst: 125mm
	Mag: 4.5, 5.4	Sep: 22.3"	PA: 104°	EP: 73X

Description:

So nice, both whites Am seems less tone, I think I had before.

SEEN BEFORE





@HOME

Bet Cyg	Date: 10/11/02	Time: 11:45pm	Seeing: II	Trans: II
	RA: 19 30.7	DE: +27 58	Class: DBL	Inst: 125mm
	Mag: 3.1, 5.1	Sep: 34.4"	PA: 54°	EP: 73x

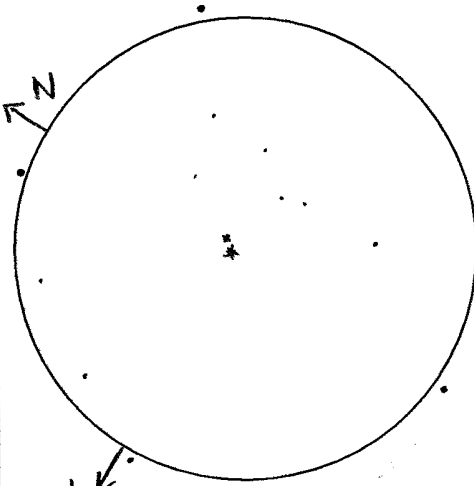
Description:

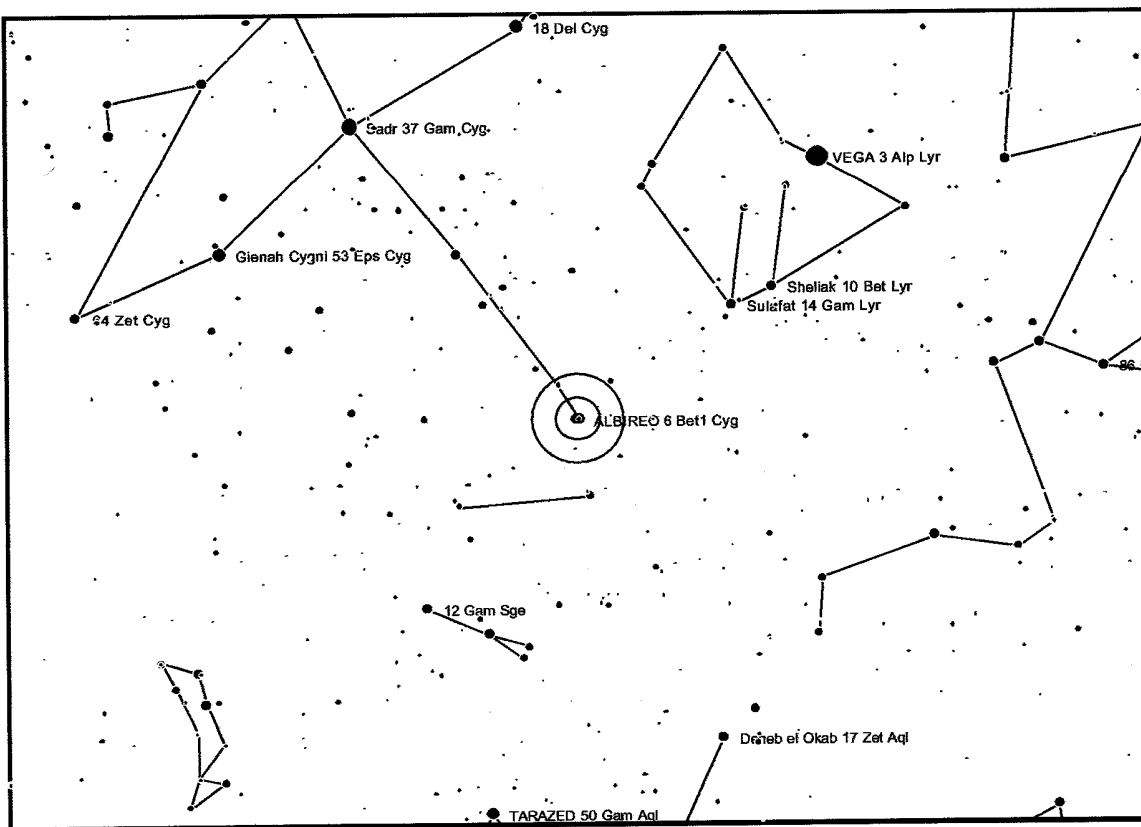
Still the best! Golden & deep sea blue

Like leaves on sky, they contrast

fall

SEEN BEFORE





~~REVISIT~~
NO NEED TO

@Home

57 Aql	Date: 10/13/02	Time: 11:20pm	Seeing: II	Trans: I
	RA: 19 54.6	DE: -08 14	Class: DBL	Inst: 125mm
	Mag: 5.8, 6.5	Sep: 36"	PA: 170°	EP: 73x

Description:

White + hint of yellow

PA different - check out

WEBB BY WHAM LIST 171°

REVISIT - WHAT HAPPENED?

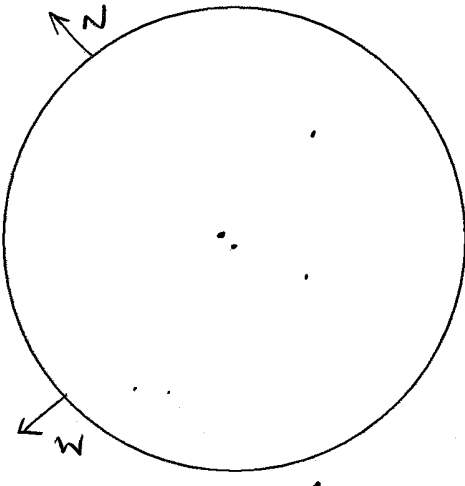
WHAT HAPPENED WAS YOU LISTED

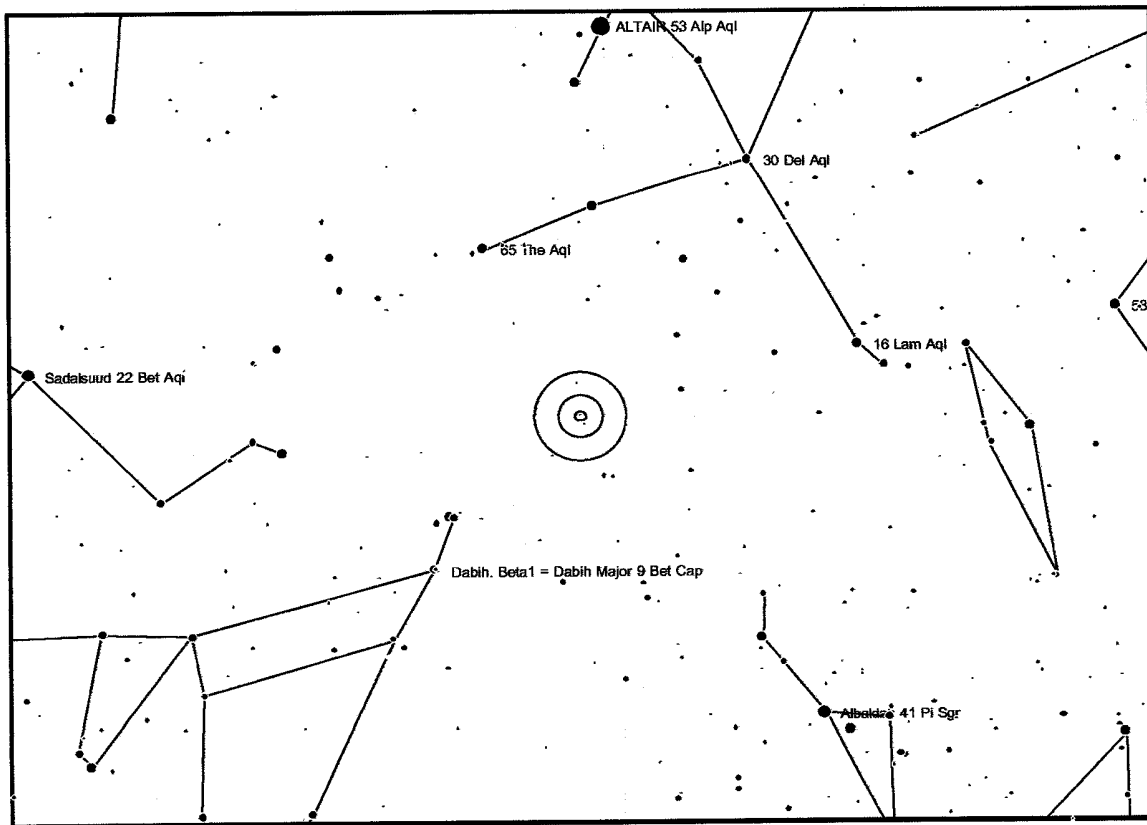
ELIOT ARROW WRONG! ANNOTATED

10/14/02 - THINK ABOUT DIRECTION

IN THE SKY

SEEN BEFORE





RENSITV
CONFIRMED

@Home

31 Cyg	Date: 10/11/02	Time: 11:55pm	Seeing: II	Trans: II-
	RA: 20 13.6	DE: +46 44	Class: MULT	Inst: 125mm
	Mag: 3.8, 6.7, 4.8	Sep: 107", 337"	PA: 173°, 323°	EP: 73X

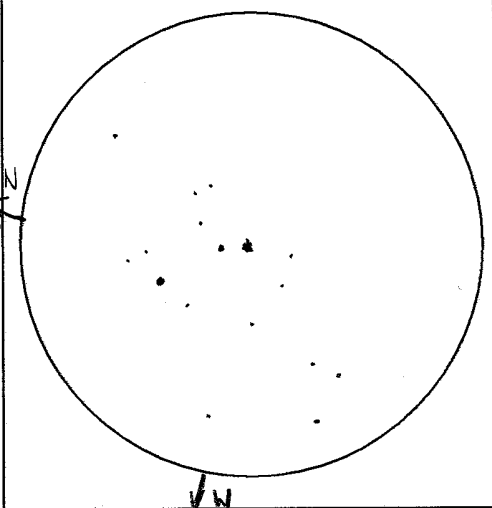
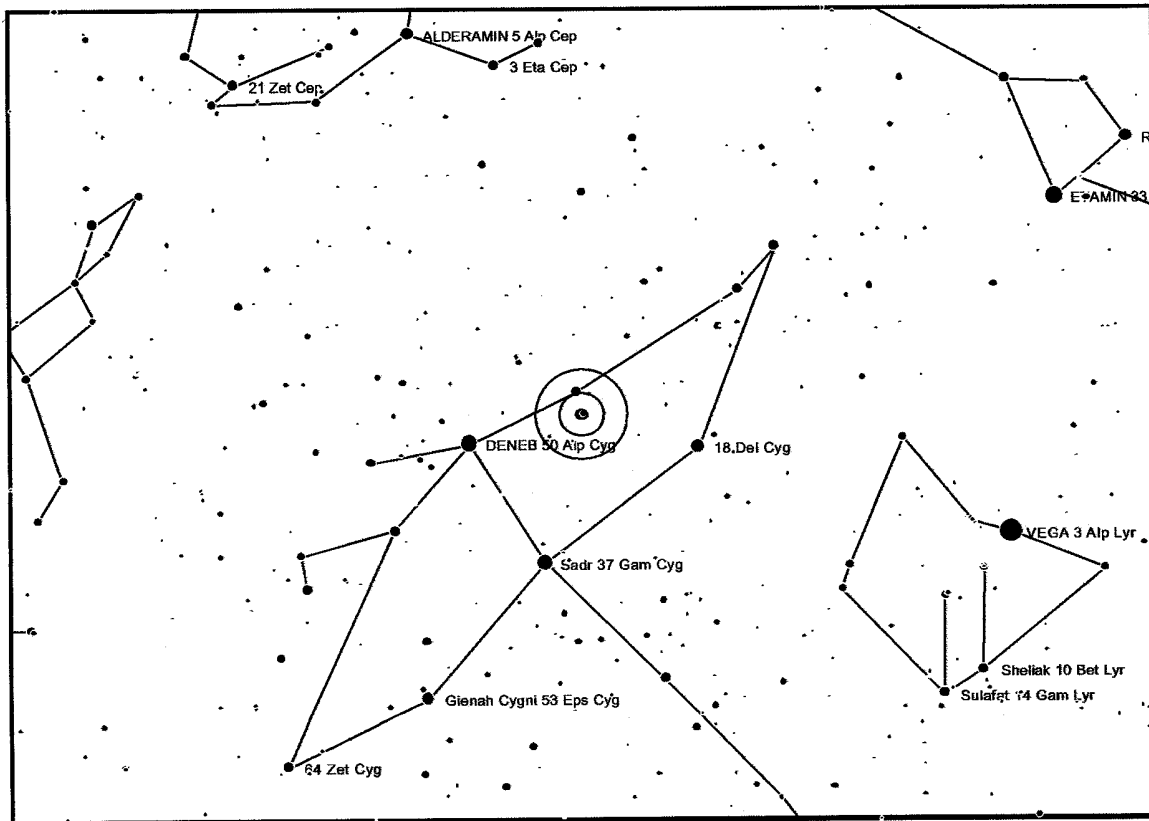
Description:

~~AAA 30/31 Cyg~~ 30 Cyg

Shinning colors much like β Cyg

but sec. (blue) not as vivid. Third star is white, 123 seen easily w/ binocs but can't get 6.7 mag. Very easy & beautiful @ 73X

HAD ALL KINDS OF MOVING WITH THIS ONE! 10/4/02 OBS. (SEE BELOW WAS RIGHT IN PA. WRONG IN MAGS. THIS ONE ALL SWITCHED AROUND! RENSIT & DRAW WHAT'S THERE!! SEEN 10/4/02 - USE OR REVISIT)

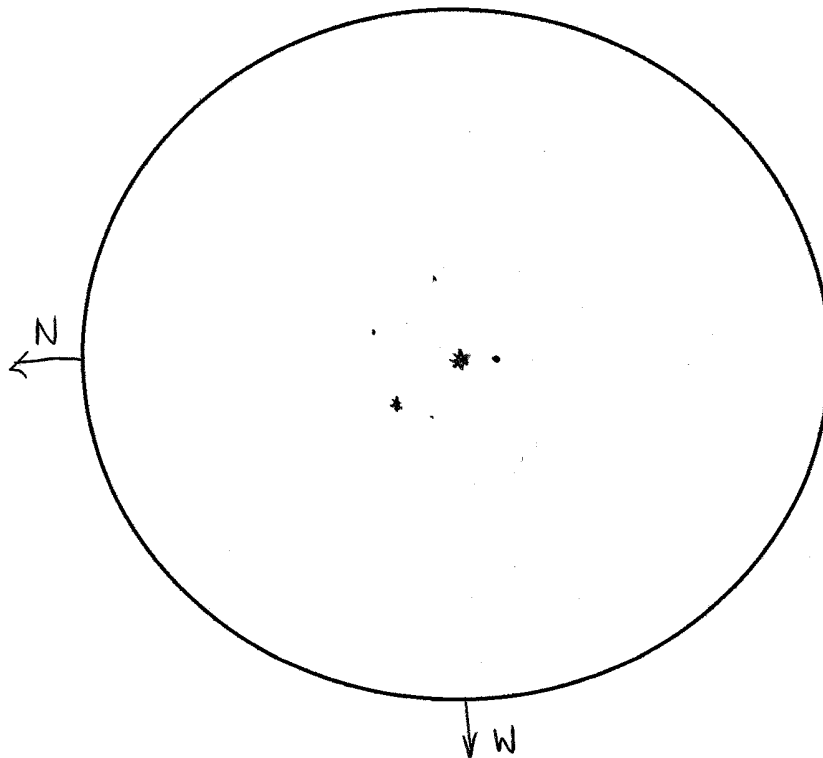



REVISITED

DATE 10/12/02 TIME 1100 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X

OBJECT 31 Cyg LOCATION RMCC HOME



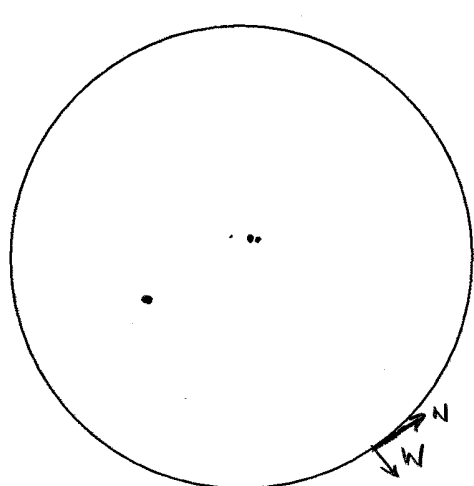
AS IT REALLY IS. FINE GOLD-YELLOW, LIGHT BLUE, BLUE-TINTED

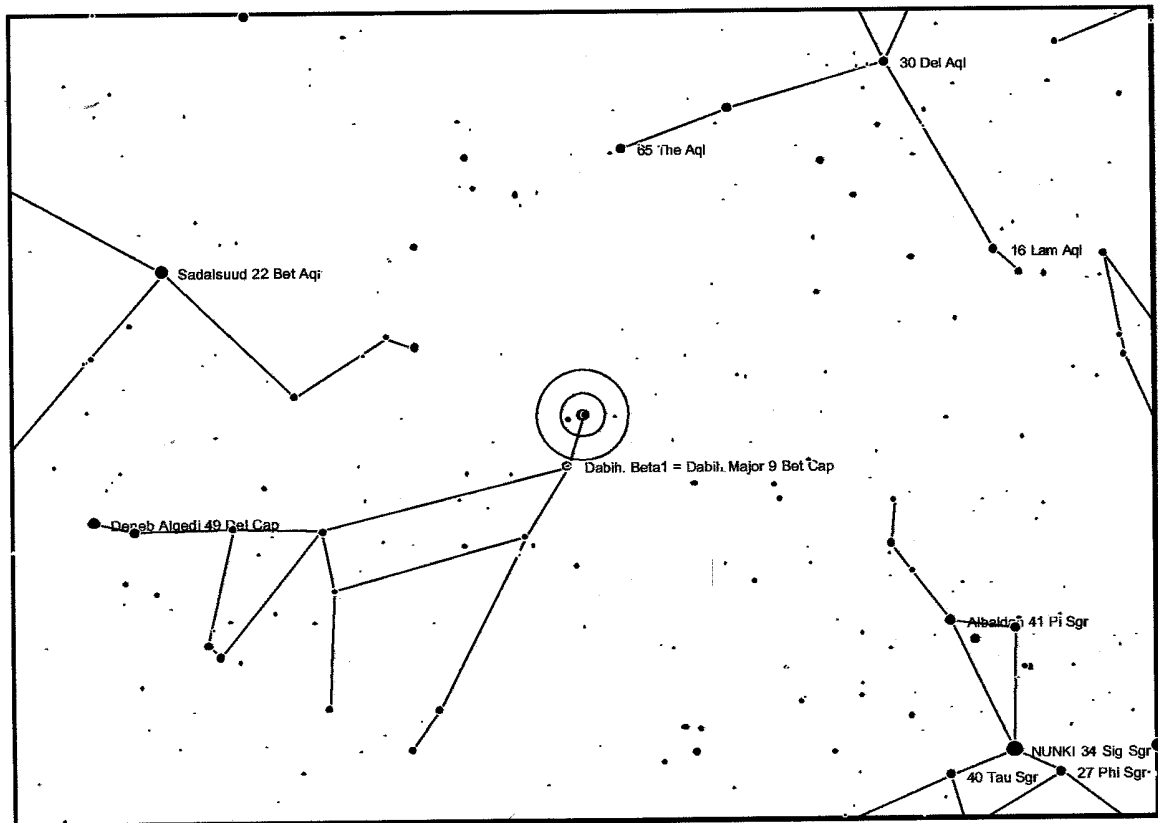
WHITE.

@ HOME

Alp Cap	Date: 10/12/02	Time: 12:00 am	Seeing: II	Trans: II-
	RA: 20 18.1	DE: -12 33	Class: DBL	Inst: EYE
	Mag: 3.6, 4.2	Sep: 378"	PA: 291°	EP: 1X

Description:
TRY W/EYE
JUST SPLIT W/EYE DOWNDOWN TUSA!
SEEN EASILY BEFORE IN COUNTRY.
ALL 4 (α, ε, β & γ) SEEN, γ VERY DIFFICULT
ALL CONFIRMED WITH 0.5
SEEN BEFORE





@ HOME

Bet Cap	Date: 10/12/02	Time: 12:10 ^{am}	Seeing: II	Trans: II -
	RA: 20 21.0	DE: -14 47	Class: DBL	Inst: 125 mm
	Mag: 3.4, 6.2	Sep: 206"	PA: 267°	EP: 73x

Description:

13m PAIR BETWEEN THEM (NOT SEEN!)

EASILY SEEN WITH BINOCs WHILE

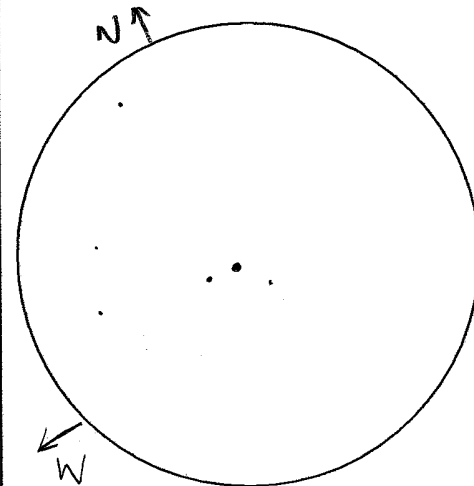
VIEWING α (SEE PREVIOUS)

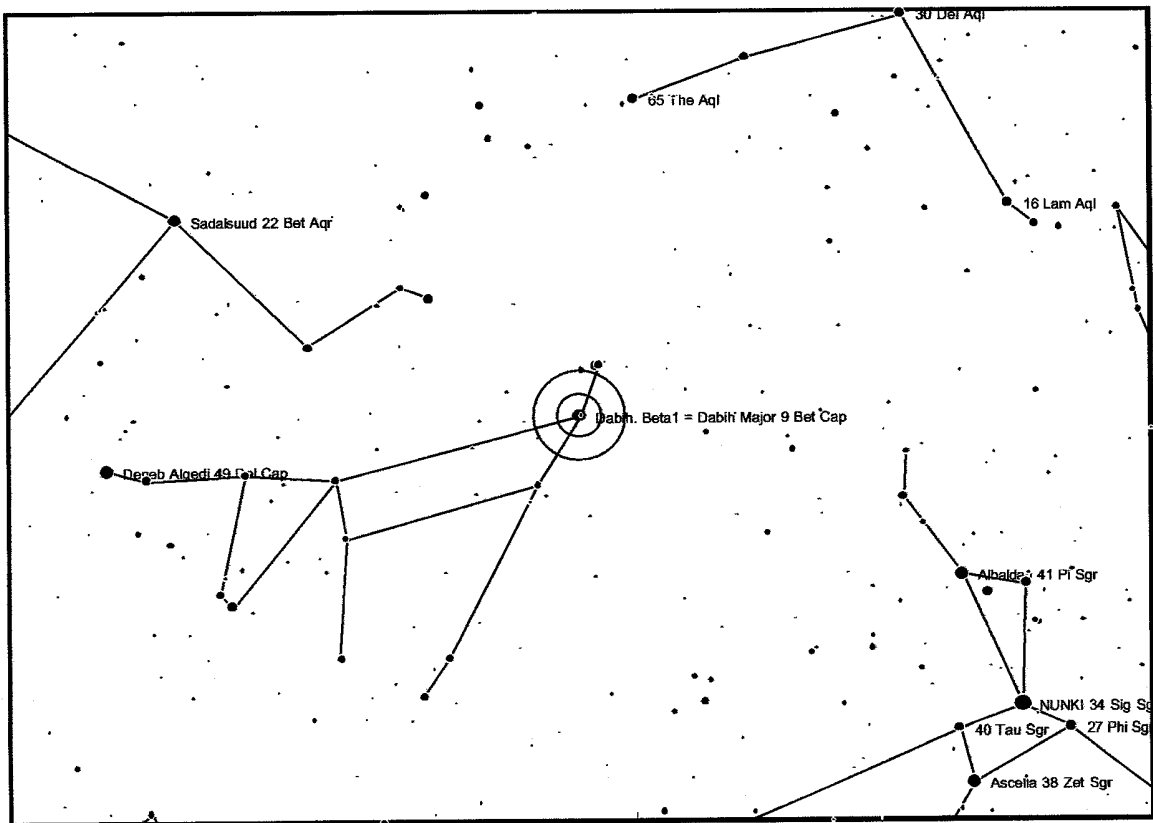
IN SCOPE, sl. yellow target to primary

but altitude ~15-20°, sec. white

unimpressive in 73x, nice in b's

SEEN BEFORE





@ HOME

Gam Del	Date: 10/12/02	Time: 12:15am	Seeing: II	Trans: II-
	RA: 20 46.7	DE: +16 07	Class: DBL	Inst: 125mm
	Mag: 4.5, 5.5	Sep: 9.6"	PA: 268°	EP: 153x

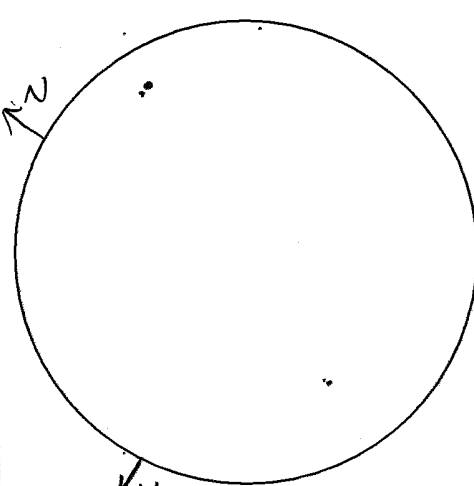
Description:

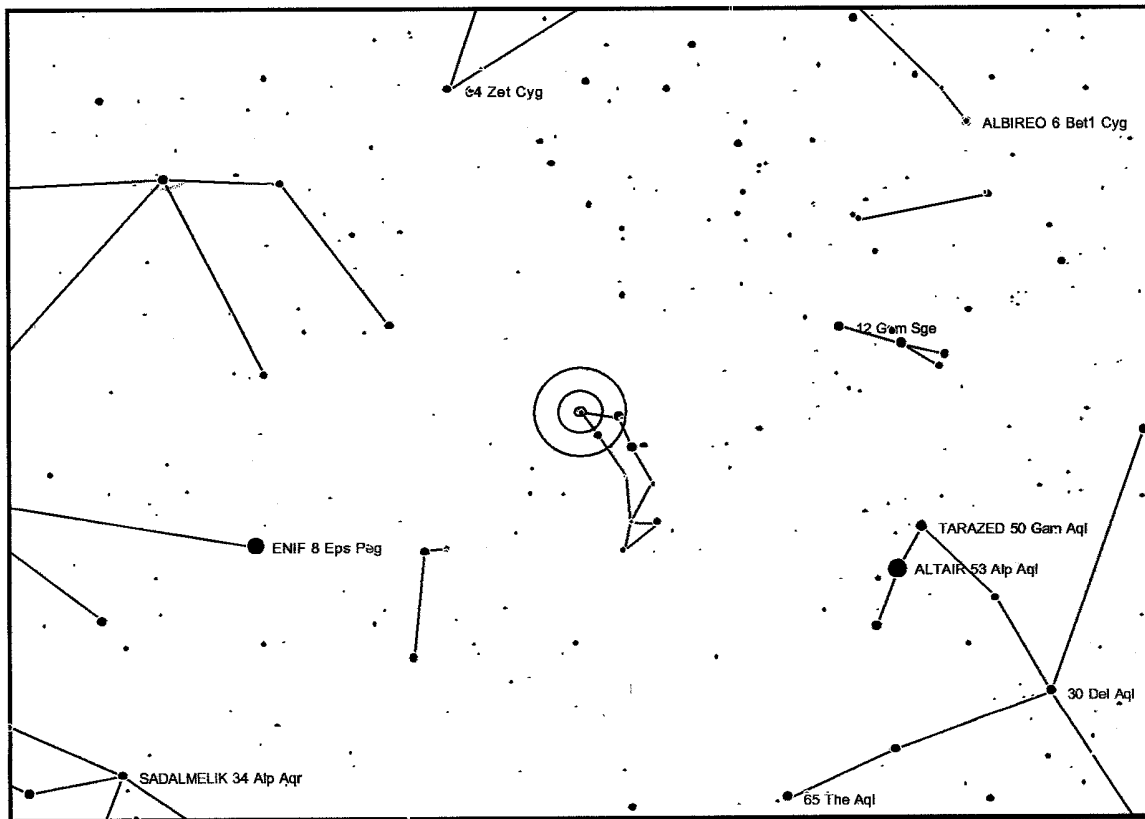
Σ2725 IN FIELD

Y BEAUTIFUL YELLOW PAIR, EASILY SPLIT, EVEN @ 73x IT IS HAS DARK WIDTH BLACK SPACE. Σ2725 IS HANDIER, VERY DELICATE, 153x TO CONFIRM WONDERFUL DBL-DBL!

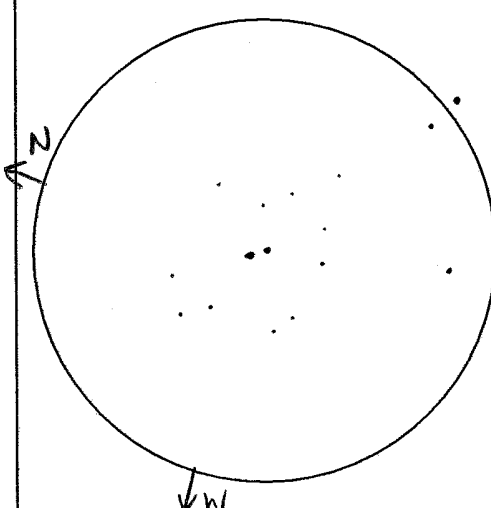
BURNHAM LISTS Σ2725 AS 7.888m, 5.7, 9° (1961), PA & DIST SLOW ME.

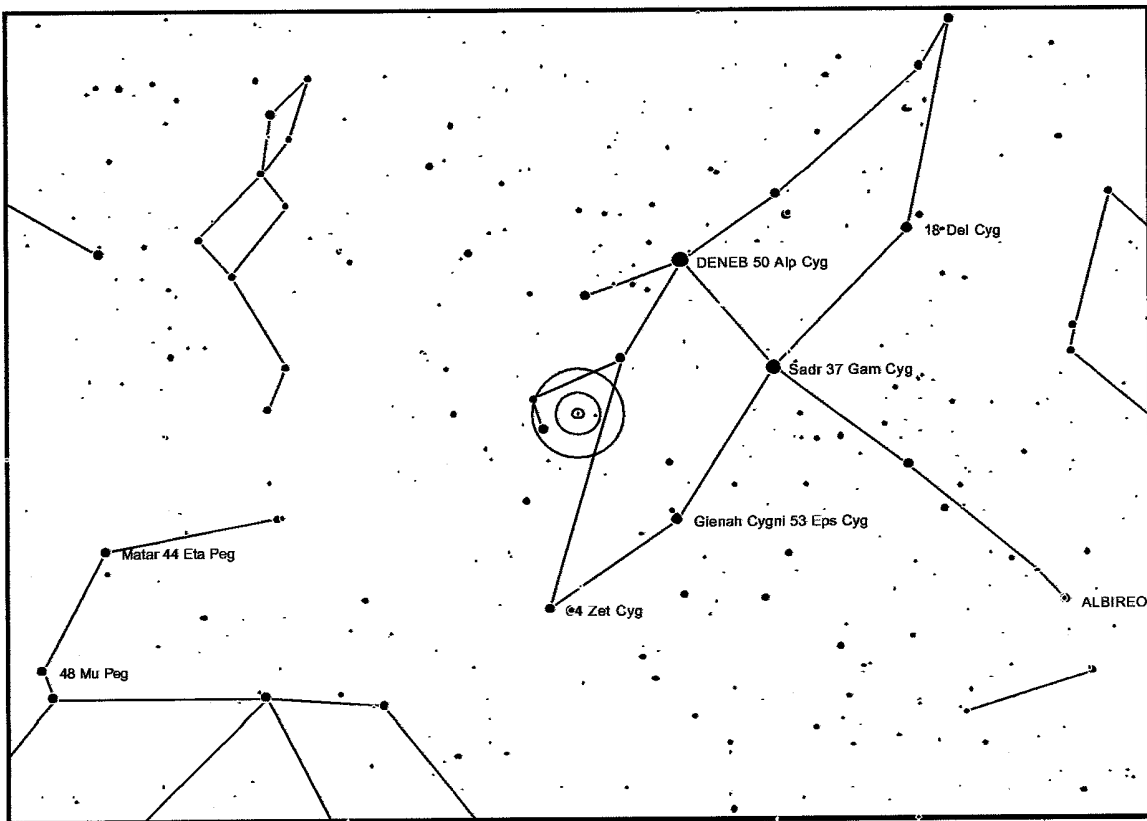
SEEN BEFORE





@ Home

61 Cyg	Date: 10/12/02	Time: 12:20am	Seeing: II	Trans: II-
	RA: 21 06.9	DE: +38 45	Class: DBL	Inst: 125mm
	Mag: 5.2, 6.0	Sep: 28"	PA: 146°	EP: 73x
Description: <i>Nice easy wide pair of sl. orangish-yellow.</i>				
<i>SEEN BEFORE</i>				



@HOME

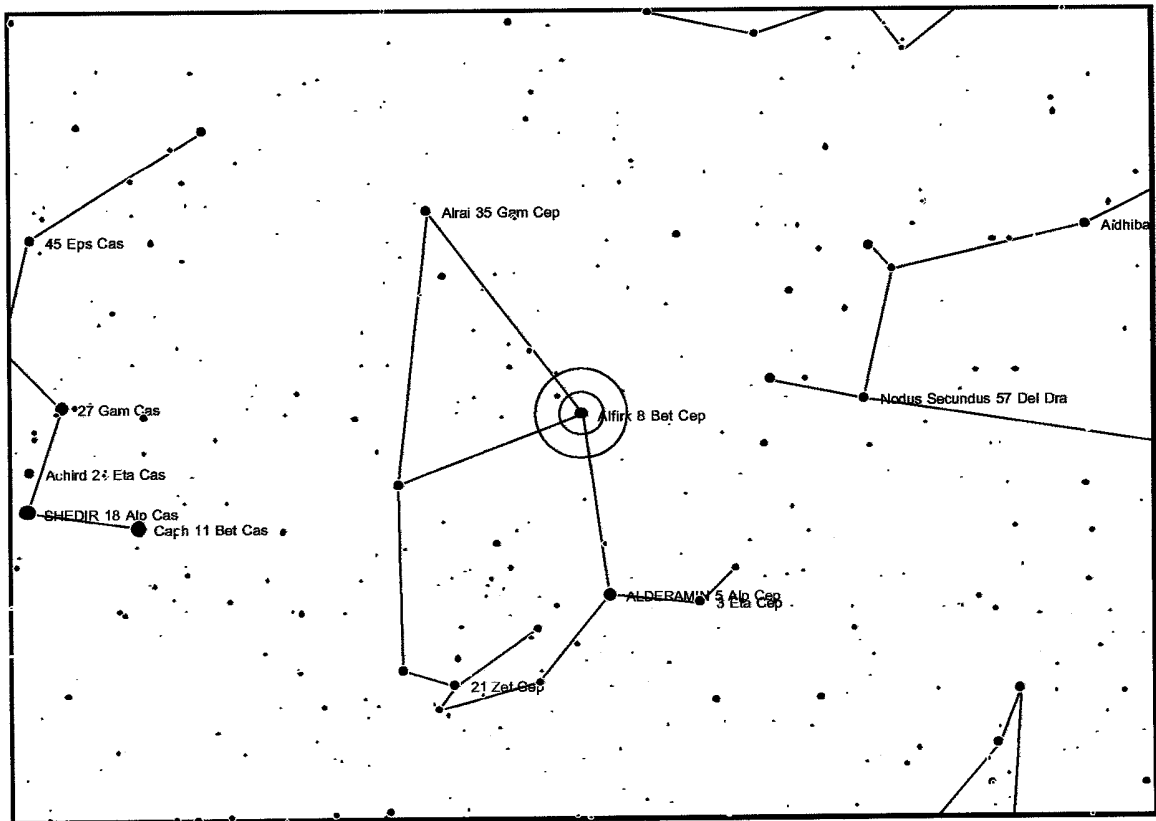
Bet Cep	Date: 10/12/02	Time: 12:25am	Seeing: II	Trans: II -
	RA: 21 28.7	DE: +70 34	Class: DBL	Inst: 125mm
	Mag: 3.2, 7.9	Sep: 13.3"	PA: 249°	EP: 73x

Description:

Absolutely lovely - both white & perfect power to split comfortably but still close.

Really "shines" - don't know why

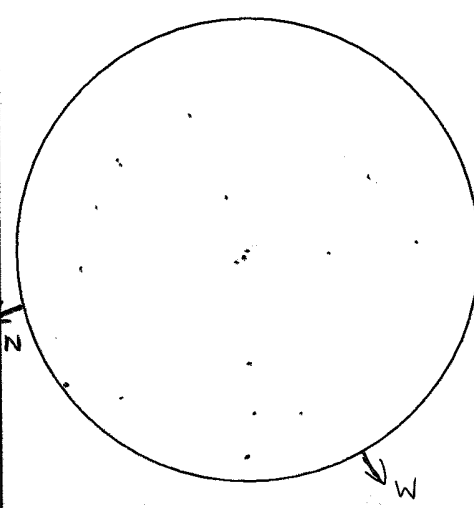
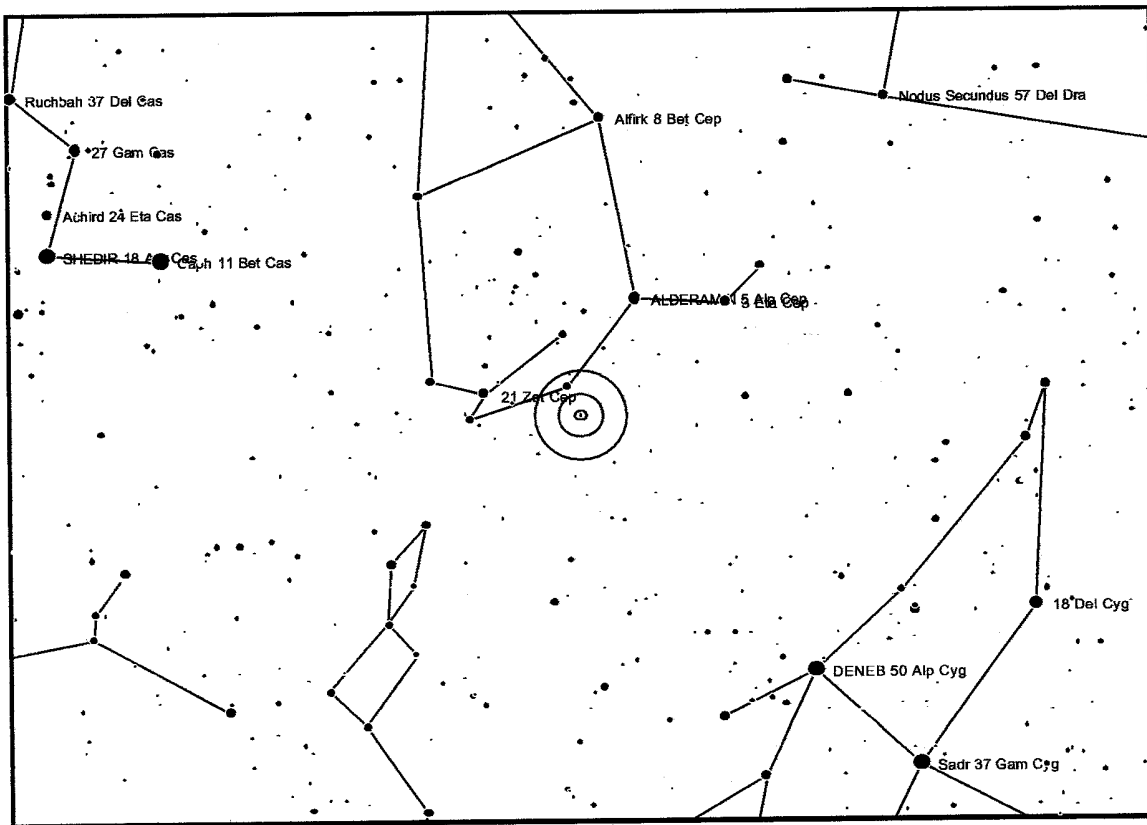
SEEN BEFORE



@HOME

STF 2816 + ε2819	Date: 10/12/02	Time: 12:35am	Seeing: II	Trans: II-
	RA: 21 39.0	DE: +57 29	Class: MULT	Inst: 125mm
	Mag: 5.6,7.7,7.8	Sep: 11.7",20"	PA: 121°, 339°	EP: 73X

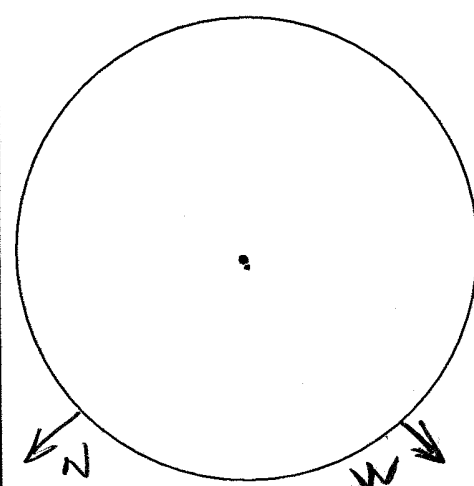
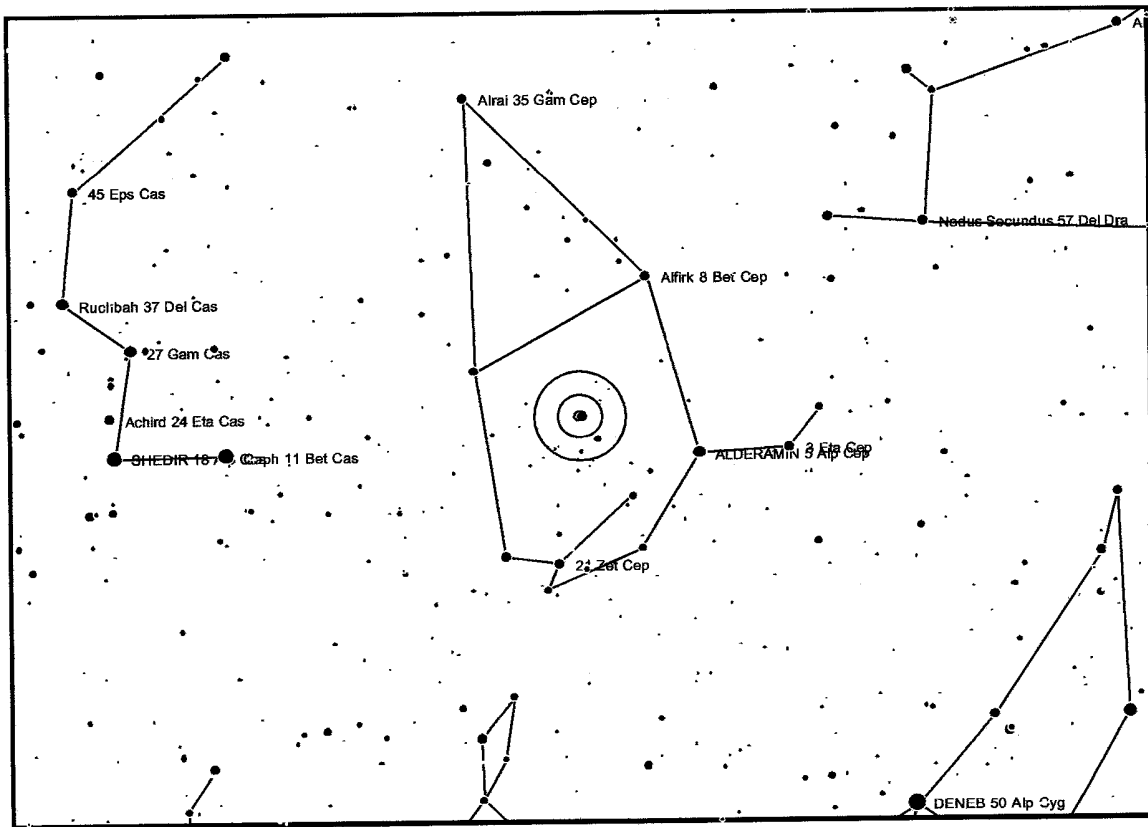
Description:
 PERFECT LITTLE TRIPLE, SO DELICATE
 BUT EASY & GREAT POWER FOR IT.
 ALL WHITES, CLOSER 8m LOOKS MORE
 THAN 2.1m DIMMER BECAUSE CLOSER
 IN 153X VIEW (NOT SHOWN) THEY LOOK
 MUCH CLOSER IN MAG. 153X FIELD
 BARELY INCLUDES OTHER DOUBLE SHOWN,
 WHICH IS ALSO LOVELY & MAKES THIS
 FIELD A REAL JEWEL. OTHER DOUBLE
 IS EVE OF ε2816, MUST BE ε2819
 WFO CIRS 7.588.5, 57°, 12". EXCELLENT!
 SEEN BEFORE

@HOME

Xi Cep	Date: 10/12/02	Time: 12:30am	Seeing: II	Trans: II -
	RA: 22 03.8	DE: +64 38	Class: DBL	Inst: 125mm
	Mag: 4.4, 6.5	Sep: 7.7"	PA: 277°	EP: 73x

Description:
 ACTUALLY HIT LOOKING FOR β !
 OH WELL, VERY GOOD DBL, WHITE &
 slightly blue, good power to
 split it, 2 disks of black between them
 Nice neat sight.
 SEEN BEFORE

REVISIT ✓

CONFIRMED

@ HOME

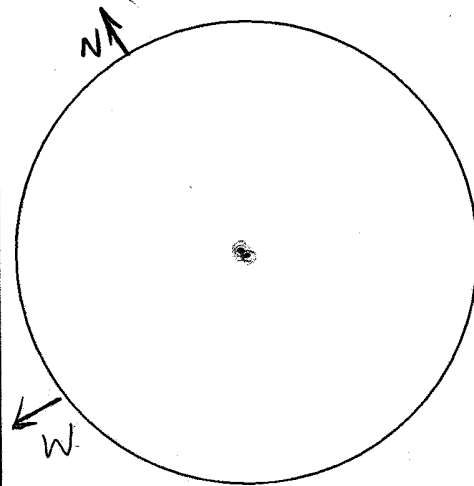
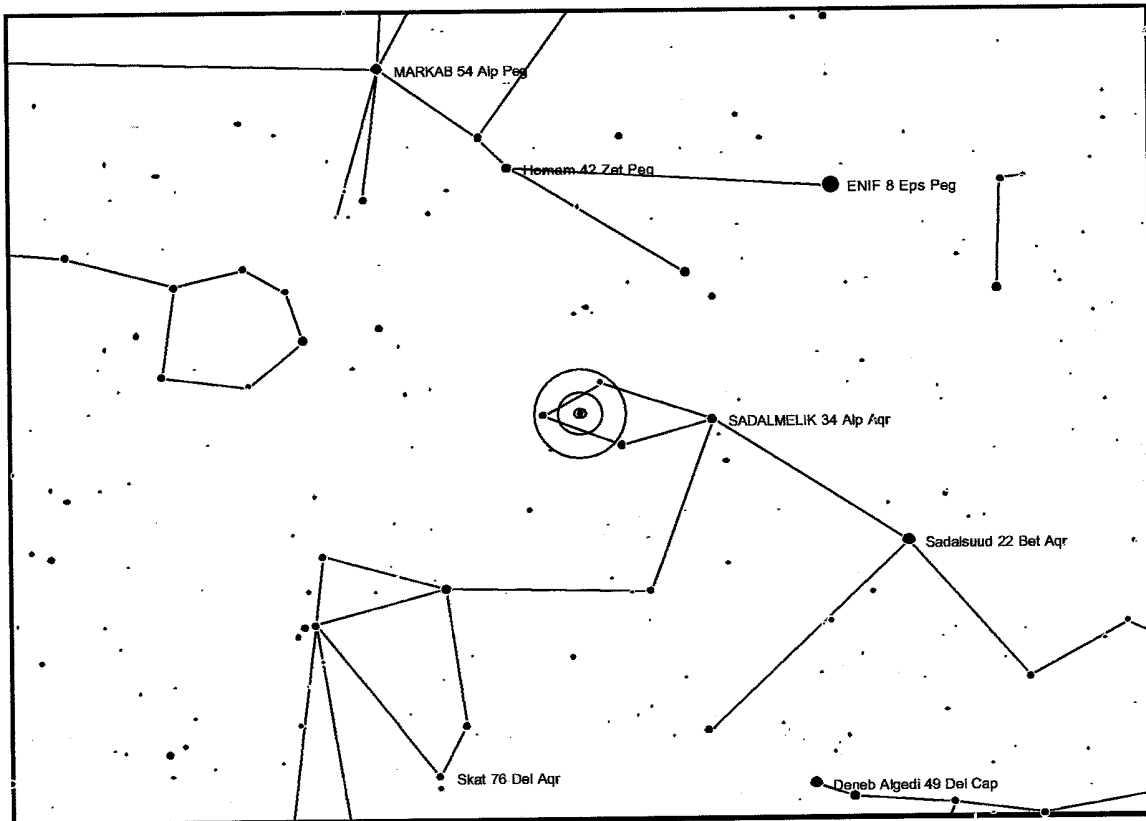
Zet Aqr	Date: 10/12/02	Time: 1:05am	Seeing: II	Trans: II-
	RA: 22 28.8	DE: -00 01	Class: DBL	Inst: 125mm
	Mag: 4.3, 4.5	Sep: 1.8"	PA: 266°	EP: 475X

Description:

CHECK PA FOR 2002 - THIS IS WELL SPLIT @ 475X AND WAS SEEN AS TWO TOUCHING SPHERES @ 153X. 475X HAS DISK - WIDTH 6M - WHAT'S THE DEAL?

MY PA ~ 170° - 175°. BURNHAM CHART PG. 173 SHOWS POSITIONS I EXTRAPOLATED TO 1998 @ PA ~ 190°, SEP = 1".3 BUT ORBIT IS UNCERTAIN. REVISIT AND/OR LOOK AT CURRENT "OFFICIAL" POSITION.

SEEN BEFORE

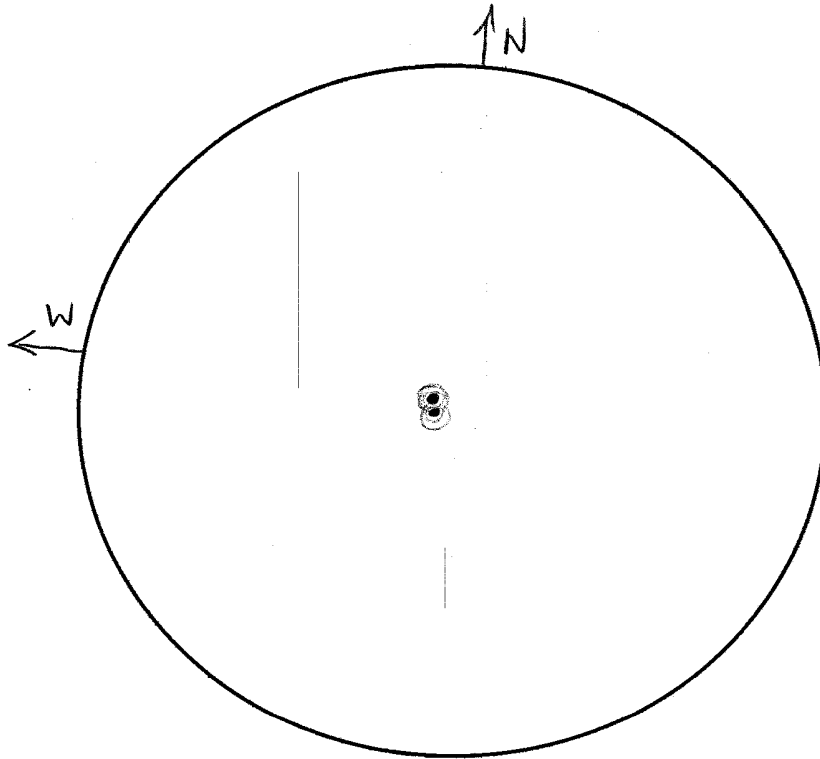



REVISITED

DATE 10/13/02 TIME 11:10 CST CDT CLARITY I II III IV V SEEING I II III IV V

INSTRUMENT ETX-125 10x50 EYE POWER 10X 73X 153X 475X

OBJECT 5 Ar LOCATION RMCC HOME



ABSOLUTELY SURE, GOOD GAP BETWEEN THEM, PA = 170-

175 at most!

@ HOME

Del Cep	Date: 10/12/02	Time: 1:15am	Seeing: II	Trans: II-
	RA: 22 29.2	DE: +58 25	Class: DBL	Inst: 125mm
	Mag: 3.9, 6.3	Sep: 41"	PA: 192°	EP: 73X

Description:

LOVELY LIGHT YELLOW & ICY BLUE

A BIT WIDE

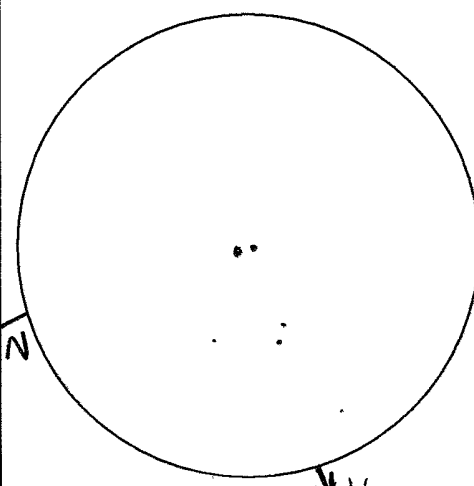
NOTICED DEW AT THIS POINT - WIPOD OFF

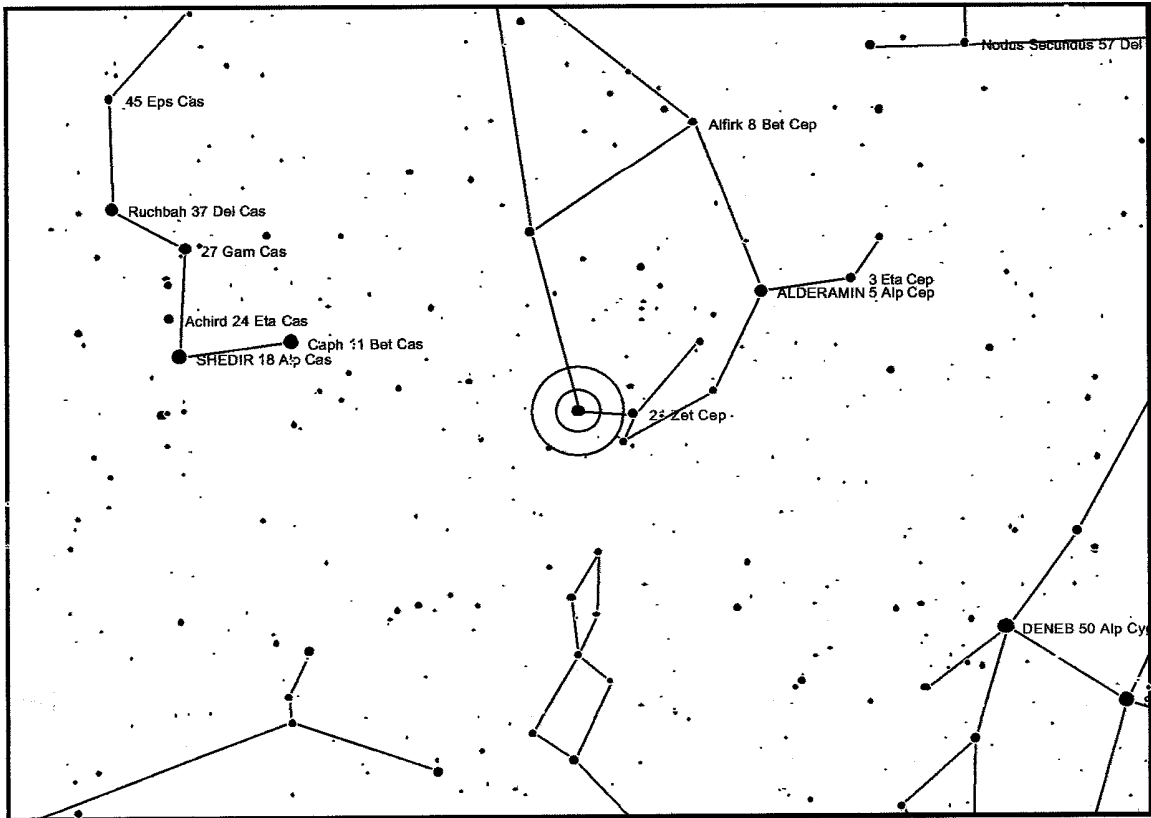
MAIN LENS. WHAT A DIFFERENCE IN MAG.

GATHERED THAT MADE, FIRST DEW OF

THE YEAR.

SEEN IN '82



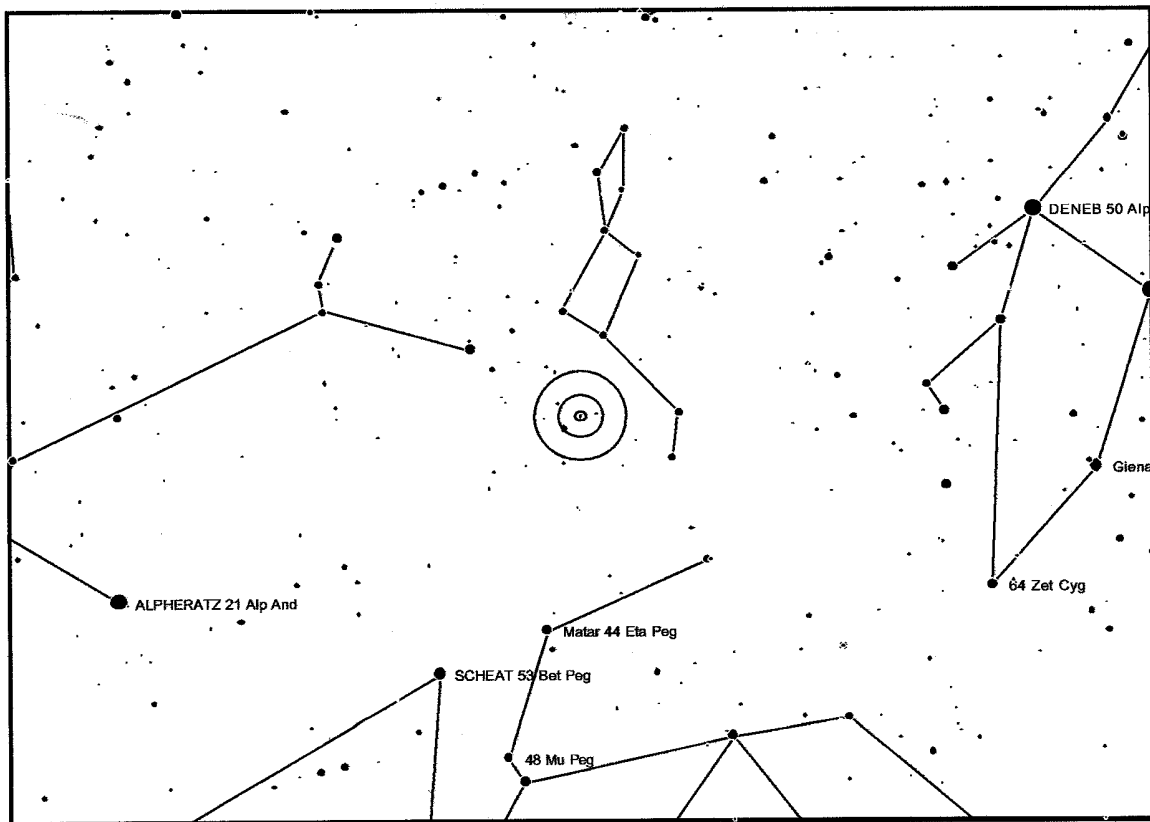
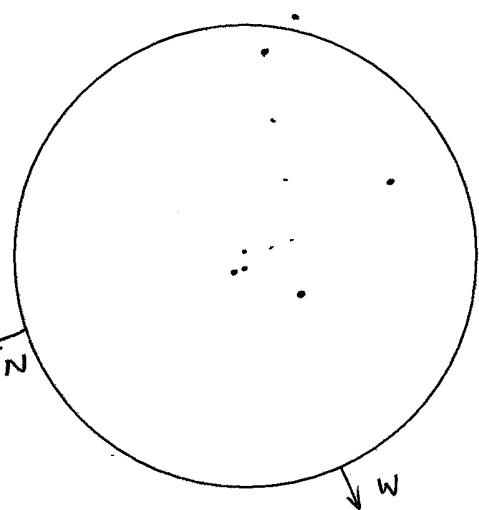


8 Lac

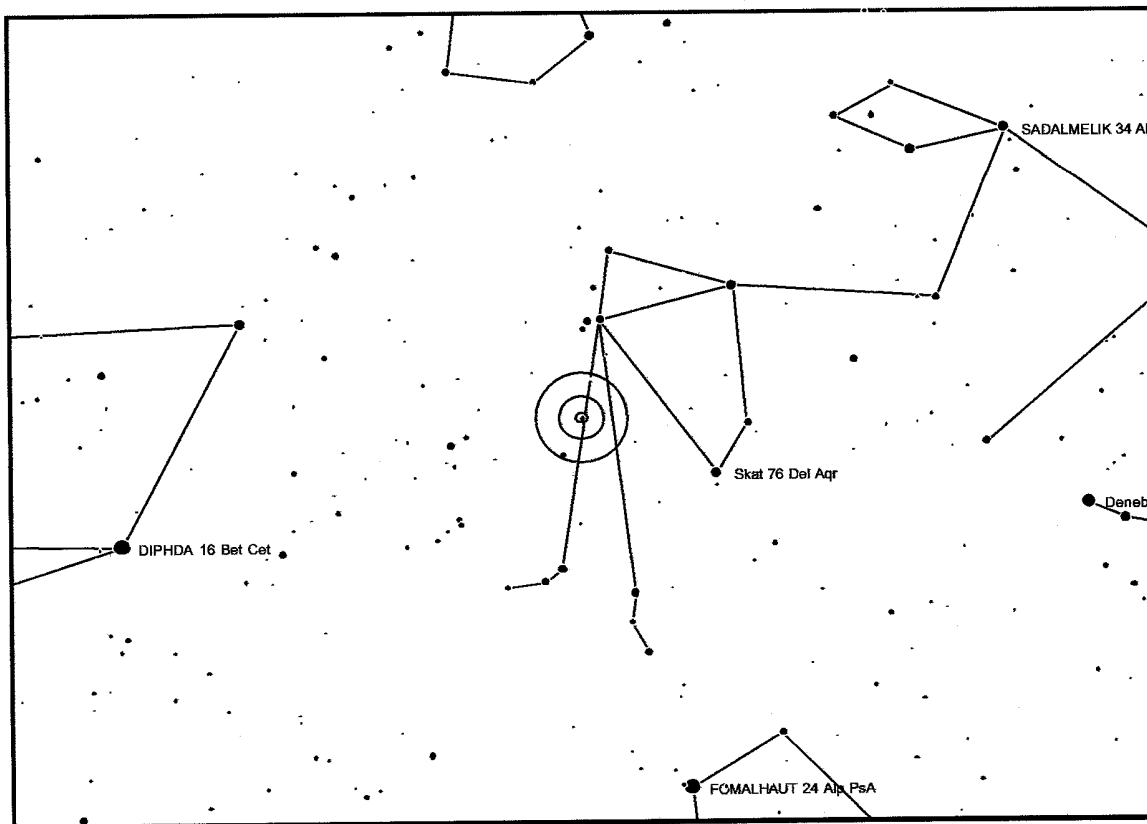
Date: 10/14/02	Time: 10:56pm	Seeing: II	Trans: II
RA: 22 35.9	DE: +39 38	Class: DBL	Inst: 125mm
Mag: 5.7, 6.5	Sep: 22.4"	PA: 186°	EP: 73x

Description:

CHECK FOR FAINT COMES
 Whites - didn't push for faints
 80-9m at 140° & ~50-60" seen
 Webb 13+5 8.5 @ 132° & 66" - that's it
 Also 13+5 10.2m @ 156° 28" - didn't
 see that - and pair of 13m & 14m
 that are probably out of reach.
 SEEN BEFORE



@HOME

[illegible]

Sig Cas	Date: 10/12/02	Time: 1140am	Seeing: II	Trans: II -
	RA: 23 59.0	DE: +55 45	Class: DBL	Inst: 125mm
	Mag: 5.0, 7.1	Sep: 3"	PA: 326°	EP: 475X

Description:

Wow - very hard - finally got it
 Double-checked after wiping down -
 same view. Doesn't help that 7.1 mag
 Bright on a diffraction ring!
 No colors noted.

SEEN BEFORE

