

CCD Measurements of Multiple Component Stars

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Abstract: As part of the preparatory work for the Remote Astronomical Society's double star survey, 15 second, unfiltered images have been taken of a number of multiple component double stars. The results of the trial are presented in this paper.

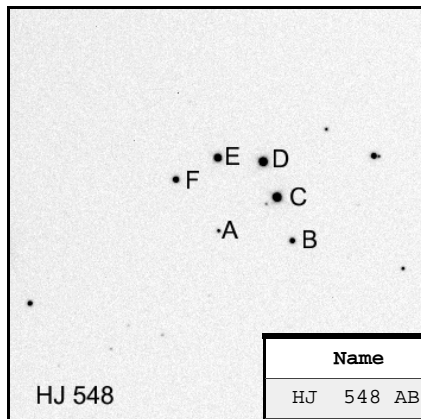
As part of the preparatory work for the Remote Astronomical Society's double star survey, 15 second unfiltered images have been taken of a number of multiple component double stars. The telescope used was a Takahashi Epsilon 250mm F/3.8 astrograph with an ST-8XE CCD camera on a Paramount

GT1100ME mount. The results of the trial are presented below with the average of three results being used for the position angle and separation. Magnitudes are taken from the WDS catalog but in some cases these are missing and in other cases appear inaccurate.

Figures below are the 15-second unfiltered images taken by the author using the Remote Astronomical Society's facilities near Mahill, New Mexico.

HJ 548 in Bootes

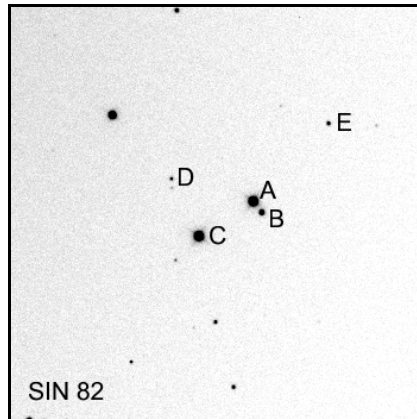
This is an unusual double star system in that the published position angles and separations are all measured from the faintest of the six stars rather than from the brightest of the stars as would be standard practice.



Name	RA + DEC	Mags	PA	Sep	Date	N
HJ 548 AB	14230+3616	13.00, 9.70	259.4	136.74	2006.124	3
HJ 548 AC	14230+3616	13.00, 9.20	286.9	124.08	2006.124	3
HJ 548 AD	14230+3616	13.00, 9.40	314.1	151.46	2006.124	3
HJ 548 AE	14230+3616	13.00, 9.70	347.6	134.72	2006.124	3
HJ 548 AF	14230+3616	13.00, 9.70	26.6	123.04	2006.124	3
HJ 548 BC	14230+3616	9.70, 9.20	32.6	84.70	2006.124	3
HJ 548 BD	14230+3616	9.70, 9.40	33.4	154.86	2006.124	3
HJ 548 BE	14230+3616	9.70, 9.70	55.2	205.27	2006.124	3
HJ 548 BF	14230+3616	9.70, 9.70	75.5	241.96	2006.124	3
HJ 548 CD	14230+3616	9.20, 9.40	34.5	70.19	2006.124	3
HJ 548 CE	14230+3616	9.20, 9.70	69.5	131.19	2006.124	3
HJ 548 CF	14230+3616	9.20, 9.70	92.2	188.95	2006.124	3
HJ 548 DE	14230+3616	9.40, 9.70	98.2	83.98	2006.124	3
HJ 548 DF	14230+3616	9.40, 9.70	114.7	163.88	2006.124	3
HJ 548 EF	14230+3616	9.70, 9.70	130.7	86.73	2006.124	3

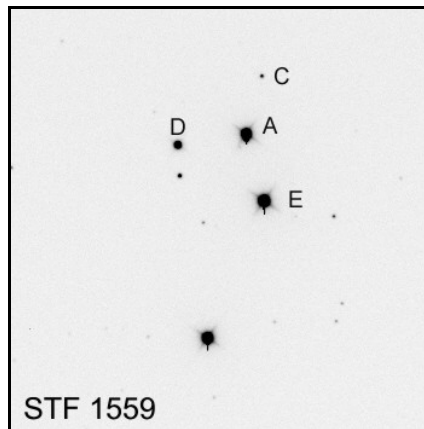
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KU 47 in Canes Venatici



Name	RA + DEC	Mags	PA	Sep	Date	N
STF1778 AB	13431+3201	9.30, 11.40	203.9	25.66	2006.124	3
SIN 82 AC	13431+3201	9.30, 9.30	109.4	118.91	2006.124	3
SIN 82 AD	13431+3201	9.30, 14.70	61.5	156.11	2006.124	3
SIN 82 AE	13431+3201	9.30, 14.60	302.7	198.69	2006.124	3

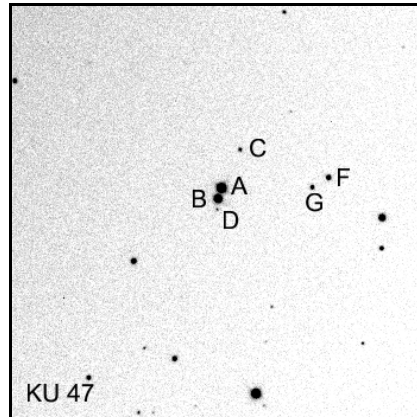
STF 1599 in Draco



Name	RA + DEC	Mags	PA	Sep	Date	N
STF 1599AC	12056+6848	7.35, 12.60	331.9	109.25	2006.124	3
STF 1599AD	12056+6848	7.35, 9.19	85.3	125.30	2006.124	3
STF 1599AE	12056+6848	7.35, 7.70	178.1	124.18	2006.124	3

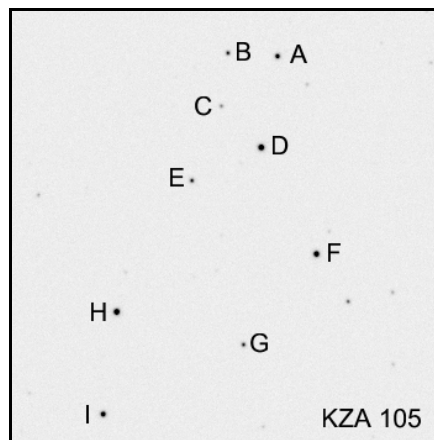
CCD Measurements of Multiple Component Stars

SIN 82 in Canes Venatici



Name	RA + DEC	Mags	PA	Sep	Date	N
KU 47 AB	13540+3209	10.70, 11.20	149.0	20.99	2006.124	3
KU 47 AC	13540+3209	10.70, ?	320.9	78.70	2006.124	3
KU 47 AF	13540+3209	10.70, 12.00	262.4	197.88	2006.124	3
KU 47 AG	13540+3209	10.70, 13.00	257.2	167.13	2006.124	3

KZA 105 in Bootes



Name	RA + DEC	Mags	PA	Sep	Date	N
KZA 105 AB	15367+3954	9.50, 11.0	73.2	87.91	2006.124	3
KZA 105 AC	15367+3954	9.50, 11.0	118.5	133.07	2006.124	3
KZA 105 AD	15367+3954	9.50, 10.0	156.7	164.11	2006.124	3
KZA 105 AE	15367+3954	9.50, 10.5	132.3	267.32	2006.124	3
KZA 105 AF	15367+3954	9.50, 10.0	178.0	356.83	2006.124	3
KZA 105 AG	15367+3954	9.50, 10.0	160.1	514.53	2006.124	3
KZA 105 AH	15367+3954	9.50, 10.5	134.7	534.92	2006.124	3
KZA 105 AI	15367+3954	9.50, 10.5	140.8	705.05	2006.124	3