Notes on Double and Multiple Systems

MSA	Note	es DN1 252–513
252		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.96$ , $\theta = 176^{\circ}$ , $\varrho = 0.69$ arcsec.
267		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.28$ , $\theta = 267^{\circ}$ , $\varrho = 1.26$ arcsec.
365		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.68$ , $\theta = 169^{\circ}$ , $\varrho = 0.51$ arcsec.
455		Ambiguous double-star solution of HIP 455 + 465. An alternative solution for HIP 455 gives: $\Delta Hp = 0.3$ $\theta = 227^{\circ}$ , $\rho = 0.30$ arcsec.
465		See HIP 455.
487		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.24$ , $\theta = 3^{\circ}$ , $\varrho = 0.64$ arcsec.
570		Ambiguous double-star solution of HIP 570 + 571. An alternative solution for HIP 570 relative to HIP 571 give $\Delta Hp = 1.43$ , $\theta = 204^{\circ}$ , $\varrho = 20.34$ arcsec.
571		See HIP 570.
673		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.02$ , $\theta = 323^{\circ}$ , $\varrho = 0.64$ arcsec.
683		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.20$ , $\theta = 344^{\circ}$ , $\varrho = 0.79$ arcsec.
779		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.74$ , $\theta = 269^{\circ}$ , $\varrho = 1.53$ arcse An alternative VIM solution for this system gives $\theta = 200^{\circ}$ for the constant star relative to the variable.
871		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.21$ , $\theta = 250^{\circ}$ , $\varrho = 21.19$ arcse An alternative VIM solution for this system gives $\theta = 54^{\circ}$ for the constant star relative to the variable.
965		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.50$ , $\theta = 282^{\circ}$ , $\varrho = 5.06$ arcsec.
1068		Ambiguous double-star solution. An alternative solution for AS gives: $\Delta Hp = 0.40$ , $\theta = 172^{\circ}$ , $\varrho = 0.38$ arcsec.
1082		Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = 0.22$ , $\theta = 307^{\circ}$ , $\varrho = 5.10$ arcsec.
1098		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.81$ , $\theta = 194^{\circ}$ , $\varrho = 0.83$ arcsec.
1244		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.18$ , $\theta = 282^{\circ}$ , $\varrho = 1.66$ arcsec.
1393		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.68$ , $\theta = 140^{\circ}$ , $\varrho = 0.18$ arcsec.
1723		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.77$ , $\theta = 4^{\circ}$ , $\varrho = 0.25$ arcsec.
1732		Component B is really the photocentre of BC.
2033		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.89$ , $\theta = 325^{\circ}$ , $\varrho = 7.13$ arcsec.
2271	Р	The double-star analysis indicates that it may be the fainter (B) component which is variable.
2411		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.58$ , $\theta = 198^{\circ}$ , $\varrho = 1.53$ arcsec.
2438		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.47$ , $\theta = 1^{\circ}$ , $\varrho = 11.90$ arcsec.
2533		Ambiguous double-star solution. An alternative solution gives: $\Delta Hp = 2.29$ , $\theta = 332^{\circ}$ , $\varrho = 0.22$ arcse Component A is really the photocentre of AB, so the alternative solution may refer to AB.
2548		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 3.55$ , $\theta = 2^{\circ}$ , $\varrho = 0.65$ arcsec.
2631		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.93$ , $\theta = 88^{\circ}$ , $\rho = 0.35$ arcsec.
2646 2656		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.22$ , $\theta = 358^\circ$ , $\varrho = 8.82$ arcsec. Ambiguous double-star solution of HIP 2656 + 2657. An alternative solution for HIP 2657 relative to HIP 26 gives: $\Delta Hp = 2.73$ , $\theta = 7^\circ$ , $\varrho = 11.79$ arcsec.
2657		See HIP 2656.
2780		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.13$ , $\theta = 141^{\circ}$ , $\rho = 1.94$ arcsec.
2808		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.50$ , $\theta = 324^{\circ}$ , $\varrho = 0.24$ arcsec.
3061		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.23$ , $\theta = 161^\circ$ , $\varrho = 0.42$ arcsec.
3379		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.95$ , $\theta = 1^{\circ}$ , $\varrho = 2.05$ arcsec.
3394	Р	Ambiguous double-star solution of HIP 3394 + 3397. An alternative solution for HIP 3394 relative to HIP 339 gives: $\Delta H \rho = 2.46$ , $\theta = 311^{\circ}$ , $\varrho = 14.36$ arcsec.
3397		See HIP 3394.
3653		Ambiguous double-star solution of HIP 3653 + 3656. An alternative solution for HIP 3656 relative to HIP 36 gives: $\Delta Hp = 0.81$ , $\theta = 146^{\circ}$ , $\varrho = 32.58$ arcsec.
3656		See HIP 3653.
3689		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.09$ , $\theta = 275^{\circ}$ , $\varrho = 0.24$ arcsec.
4044		Component A is really the photocentre of AB.
4082		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.16$ , $\theta = 74^{\circ}$ , $\varrho = 8.88$ arcsec.
4277		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.58$ , $\theta = 111^{\circ}$ , $\varrho = 6.39$ arcsec.
4768		Ambiguous double-star solution of HIP 4768 + 4773. An alternative solution for HIP 4773 relative to HIP 47 gives: $\Delta Hp = 0.32$ , $\theta = 45^{\circ}$ , $\varrho = 17.53$ arcsec.
4773	-	See HIP 4768.
4862	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.12$ , $\theta = 261^\circ$ , $\varrho = 2.07$ arcsec.
4886 5131		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.84$ , $\theta = 24^{\circ}$ , $\varrho = 1.10$ arcsec. Ambiguous double-star solution of HIP 5131 + 5132. An alternative solution for HIP 5132 relative to HIP 513

5132	See HIP 5131.
5210	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.55$ , $\theta = 188^{\circ}$ , $\varrho = 2.17$ arcsec.
5244	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.38$ , $\theta = 192^{\circ}$ , $\varrho = 8.59$ arcsec.
5336	$\mu$ Cas. The long period of the astrometric orbit (21 years) prevented adjustment of the orbital parameters, which were thus all adopted from the literature (see Part O of the Double and Multiple Systems Annex). The given astrometric standard errors consequently do not include the uncertainties of the adopted orbit used to reduce the observations to the centre of mass of the system.
5443	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.95$ , $\theta = 301^{\circ}$ , $\varrho = 1.50$ arcsec.
5450	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.56$ , $\theta = 240^{\circ}$ , $\varrho = 4.18$ arcsec.
5468	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.99$ , $\theta = 31^{\circ}$ , $\varrho = 1.29$ arcsec. Component A is really the photocentre of AP.
5562	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.20$ , $\theta = 38^{\circ}$ , $\varrho = 0.67$ arcsec.
5616	Uncertain double-star solution. Tycho data suggest that component B is located at $\theta = 245^{\circ}$ , $\varrho = 7.17$ arcsec relative to component A.
5737	Ambiguous double-star solution of HIP 5737 + 5743. An alternative solution for HIP 5743 relative to HIP 5737 gives: $\Delta H p = 1.22$ , $\theta = 62^{\circ}$ , $\varrho = 22.44$ arcsec.
5743	See HIP 5737.
5759	Ambiguous double-star solution of HIP 5759 + 5760. An alternative solution for HIP 5759 relative to HIP 5760 gives: $\Delta Hp = 3.32$ , $\theta = 341^{\circ}$ , $\varrho = 20.70$ arcsec.
5760	See HIP 5759.
5773	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.98$ , $\theta = 221^{\circ}$ , $\varrho = 16.39$ arcsec.
5779	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.52$ , $\theta = 10^{\circ}$ , $\varrho = 1.43$ arcsec.
5904	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.39$ , $\theta = 251^{\circ}$ , $\varrho = 0.33$ arcsec.
6140	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.48$ , $\theta = 235^{\circ}$ , $\varrho = 6.60$ arcsec.
6375	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.48$ , $\theta = 258^{\circ}$ , $\varrho = 0.58$ arcsec.
6684	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.89$ , $\theta = 3^{\circ}$ , $\varrho = 1.88$ arcsec.
6730	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.21$ , $\theta = 354^{\circ}$ , $\varrho = 0.44$ arcsec.
6992	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.98$ , $\theta = 273^{\circ}$ , $\varrho = 0.30$ arcsec.
7019	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.66$ , $\theta = 80^\circ$ , $\varrho = 7.27$ arcsec.
7260	An alternative VIM solution for this system gives $\theta = 131^{\circ}$ for the constant star relative to the variable.
7495	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.34$ , $\theta = 309^{\circ}$ , $\varrho = 1.86$ arcsec.
7559	Ambiguous double-star solution of HIP 7559 + 7566. An alternative solution for HIP 7566 relative to HIP 7559 gives: $\Delta H p = 1.31$ , $\theta = 76^{\circ}$ , $\varrho = 22.76$ arcsec.
7566	See HIP 7559. Ambiguous double star solution An elementic solution for PA since $A H n = -0.01$ (component reverse)
7751	Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = -0.01$ (component reversal).
8036 8067	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.66$ , $\theta = 24^{\circ}$ , $\varrho = 1.56$ arcsec. Ambiguous double-star solution of HIP 8067 + 8069. An alternative solution for HIP 8069 relative to HIP 8067 gives: $\Delta Hp = 4.34$ , $\theta = 137^{\circ}$ , $\varrho = 20.10$ arcsec.
8069	See HIP 8067.
8270	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.17$ , $\theta = 153^{\circ}$ , $\varrho = 0.25$ arcsec.
8495	Ambiguous double-star solution of HIP 8495 + 8496. An alternative solution for HIP 8495 relative to HIP 8496 gives: $\Delta H p = 1.38$ , $\theta = 327^{\circ}$ , $\varrho = 22.84$ arcsec.
8496	See HIP 8495.
8607	Ambiguous double-star solution of HIP 8607 + 8608. An alternative solution for HIP 8607 relative to HIP 8608 gives: $\Delta Hp = 0.47$ , $\theta = 252^{\circ}$ , $\varrho = 26.05$ arcsec.
8608	See HIP 8607.
8698	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.48$ , $\theta = 98^{\circ}$ , $\varrho = 2.60$ arcsec.
8708	Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = -0.02$ (component reversal).
8895	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.55$ , $\theta = 219^{\circ}$ , $\varrho = 0.72$ arcsec.
8922	An orbital solution based on elements by R.F. Griffin, Observatory, 101, 175, 1981, gives a semi-major axis of 8 mas for the photocentre.
9172	Ambiguous double-star solution of HIP 9172 + 9176. An alternative solution for HIP 9176 relative to HIP 9172 gives: $\Delta H p = 1.08$ , $\theta = 78^{\circ}$ , $\varrho = 24.72$ arcsec.
9176	See HIP 9172.
9224	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.16$ , $\theta = 291^{\circ}$ , $\varrho = 0.89$ arcsec.
9378	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.48$ , $\theta = 320^{\circ}$ , $\varrho = 0.39$ arcsec.
9445	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.38$ , $\theta = 314^{\circ}$ , $\varrho = 1.24$ arcsec.

DMSA	Note	DN3	9500–14542
9500		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 2.53$ , $\theta =$	$= 206^{\circ}, \rho = 1.09$ arcsec.
9613		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.96$ , $\theta =$	-
9640	Р	Component B is really the photocentre of BC.	
9642		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.47$ , $\theta =$	$= 252^{\circ}, \rho = 2.13$ arcsec.
9728		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.47$ , $\theta =$	-
9729		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.53$ , $\theta =$	
9748	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.44$ , $\theta =$	
9854	P	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.49$ , $\theta =$	
10139	•	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.33$ , $\theta =$	
10178		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.66$ , $\theta =$	
10529		Ambiguous double-star solution of HIP 10529 + 10531. This system was solved as a it is known to be an optical pair. The tabulated parallax and proper motion effectivel HIP 10531. An alternative solution treating the system as an optical pair gives neg motion for HIP 10529, and the following parameters relative to HIP 10531: $\Delta Hp =$ arcsec. This solution also gives a slightly larger parallax for HIP 10531, 55.1 mas (star	fixed double star although ly refer to the brighter star, gligible parallax and proper $3.47, \theta = 351^{\circ}, \varrho = 14.34$
10531		See HIP 10529.	
10775		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.28$ , $\theta =$	= $251^{\circ}$ , $\rho = 8.01$ arcsec.
10829		An alternative VIM solution for this system gives $\theta = 41^{\circ}$ for the constant star relative to	
11055		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.72$ , $\theta =$	
11167		Ambiguous double-star solution of HIP 11167 + 11168. An alternative solution for H 11168 gives: $\Delta Hp = 1.45$ , $\theta = 194^{\circ}$ , $\varrho = 21.48$ arcsec.	HIP 11167 relative to HIP
11168		See HIP 11167.	
11206	_	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.52$ , $\theta =$	
11318	Р	The double-star analysis indicates that it is probably the fainter (B) component which is	
11400		An alternative VIM solution for this system gives $\theta = 147^{\circ}$ for the constant star relative	
11565		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ , $\theta =$	
11624		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.14$ , $\theta =$	
11656		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 1.59$ , $\theta =$	-
11903		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.94$ , $\theta =$	
12224		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.26$ , $\theta =$	
12257		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.37$ , $\theta =$	$= 35^{\circ}, \ \varrho = 1.42 \text{ arcsec.}$
12512		Component A is really the photocentre of AP.	000 5.00
12631		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.99$ , $\theta =$	
12702 12703		Ambiguous double-star solution of HIP 12702 + 12703. An alternative solution for H 12702 gives: $\Delta H \rho = 2.41$ , $\theta = 21^{\circ}$ , $\varrho = 0.33$ arcsec. See HIP 12702.	HIP 12703 relative to HIP
12703		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.61$ , $\theta =$	$-331^{\circ}$ $a - 3.15$ presec
13042		Ambiguous double-star solution. An alternative solution for Ab gives: $\Delta Hp = 2.01$ , 0 - Ambiguous double-star solution of HIP 13042 + 13043. An alternative solution for H 13043 gives: $\Delta Hp = 3.33$ , $\theta = 305^{\circ}$ , $\varrho = 25.68$ arcsec.	-
13043		See HIP 13042.	
13117		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.53$ , $\theta =$	= 69°, $\varrho$ = 0.52 arcsec.
13173		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.61$ , $\theta =$	
13187		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.07$ , $\theta =$	
13199	Р	The double-star analysis indicates that it is probably the fainter (B) component which is	
13340		Ambiguous double-star solution of HIP 13340 + 13344. An alternative solution for H 13340 gives: $\Delta Hp = 2.66$ , $\theta = 136^{\circ}$ , $\varrho = 21.32$ arcsec.	HIP 13344 relative to HIP
13344		See HIP 13340.	
13652		Ambiguous double-star solution of HIP 13652 + 13653. An alternative solution for I 13652 gives: $\Delta Hp = 0.92$ , $\theta = 153^{\circ}$ , $\varrho = 18.66$ arcsec.	HIP 13653 relative to HIP
13653		See HIP 13652.	
13769		Ambiguous double-star solution. An alternative solution for CD gives: $\Delta Hp = 1.54$ , $\theta$	-
13979		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.25$ , $\theta =$	
13983	Р	An alternative VIM solution for this system gives $\theta = 52^{\circ}$ for the constant star relative to	to the variable.
14127		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.24$ , $\theta =$	
14218		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.48$ , $\theta =$	
14542		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.36$ , $\theta$ An alternative VIM solution for this system gives $\theta = 223^{\circ}$ for the constant star relation	

14555-	-1820	60 DN4 DMSA N	otes
14555		Ambiguous double-star solution of HIP 14555 + 14559. An alternative solution for HIP 14559 relative to 14555 gives: $\Delta Hp = 0.91$ , $\theta = 114^\circ$ , $\varrho = 14.46$ arcsec.	) HIP
14559		See HIP 14555.	
14576	Р	Algol. For the quadrants of $\omega$ and $\Omega$ see G. Gatewood, J.K. de Jonge, W.D. Heintz, Astron. J. 109, 434, 199	95.
14589	Р	Ambiguous double-star solution of HIP 14589 + 14593. An alternative solution for HIP 14589 gives: $\Delta Hp = \theta = 328^{\circ}$ , $\varrho = 0.29$ arcsec.	0.35,
14593		See HIP 14589.	
14918		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.99$ , $\theta = 218^{\circ}$ , $\varrho = 1.45$ arcs	sec.
15053		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.27$ , $\theta = 210^{\circ}$ , $\varrho = 3.26$ arcs	
15140		Ambiguous double-star solution of HIP 15140 + 15144. An alternative solution for HIP 15144 relative to 15140 gives: $\Delta Hp = 2.32$ , $\theta = 102^{\circ}$ , $\varrho = 20.45$ arcsec. Component B (in HIP 15144) is really the photoe of BC.	
15144		See HIP 15140.	
15455		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.30$ , $\theta = 228^{\circ}$ , $\varrho = 1.04$ arcs	sec.
15689		Ambiguous double-star solution of HIP 15689 + 15690. An alternative solution for HIP 15689 relative to 15690 gives: $\Delta Hp = 2.15$ , $\theta = 213^{\circ}$ , $\varrho = 18.77$ arcsec.	) HIP
15690		See HIP 15689.	
15833		Ambiguous double-star solution of HIP 15833 + 15834. An alternative solution for HIP 15834 relative to 15833 gives: $\Delta Hp = 0.28$ , $\theta = 93^{\circ}$ , $\varrho = 19.62$ arcsec.	) HIP
15834		See HIP 15833.	
16039 16068		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.64$ , $\theta = 111^{\circ}$ , $\varrho = 1.18$ arcs Ambiguous double-star solution of HIP 16068 + 16069. An alternative solution for HIP 16068 relative to	
10000		16069 gives: Δ <i>Hp</i> = 1.01, $\theta$ = 201°, $\varrho$ = 25.41 arcsec.	
16069		See HIP 16068.	_
16181		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.12$ , $\theta = 97^{\circ}$ , $\varrho = 1.82$ arcse	
16228 16267	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.86$ , $\theta = 148^{\circ}$ , $\varrho = 3.31$ arcs Ambiguous double-star solution. An alternative solution for AD gives: $\Delta Hp = 3.02$ , $\theta = 222^{\circ}$ , $\varrho = 4.77$ arc	
16207	г	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.02$ , $\theta = 2.22$ , $\varrho = 4.77$ are Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.65$ , $\theta = 283^{\circ}$ , $\varrho = 6.94$ area	
16296		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.63$ , $\theta = 2.43^{\circ}$ , $\rho = 2.32$ area	
16525		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.00$ , $\theta = 0.01^\circ$ , $\varrho = 2.00^\circ$ are solution for AB gives: $\Delta Hp = 2.41$ , $\theta = 93^\circ$ , $\varrho = 1.53$ arcsec	
16550		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.17$ , $\theta = 277^{\circ}$ , $\varrho = 1.58$ area	
16626		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.35$ , $\theta = 140^\circ$ , $\varrho = 14.54$ ar	
16920		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.56$ , $\theta = 338^{\circ}$ , $\varrho = 0.22$ a An alternative VIM solution for this system gives $\theta = 275^{\circ}$ for the constant star relative to the variable.	
17102		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.19$ , $\theta = 294^{\circ}$ , $\varrho = 13.60$ ar	csec.
17155		Ambiguous double-star solution of HIP 17155 + 17158. An alternative solution for HIP 17158 relative to 17155 gives: $\Delta Hp = 1.02$ , $\theta = 58^{\circ}$ , $\varrho = 0.10$ arcsec.	) HIP
17158		See HIP 17155.	
17257		An alternative VIM solution for this system gives $\theta = 33^{\circ}$ for the constant star relative to the variable.	
17303		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.36$ , $\theta = 55^{\circ}$ , $\varrho = 1.64$ arcsec	c.
17319		Ambiguous double-star solution of HIP 17319 + 17321. An alternative solution for HIP 17321 relative to 17319 gives: $\Delta Hp = 0.68$ , $\theta = 172^{\circ}$ , $\varrho = 21.67$ arcsec.	) HIP
17321		See HIP 17319.	
17448	Р	The double-star analysis indicates that it is the fainter (B) component which is variable.	
17561		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.96$ , $\theta = 263^{\circ}$ , $\varrho = 4.98$ arcs	
17606	-	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.94$ , $\theta = 38^{\circ}$ , $\varrho = 10.34$ arcs	sec.
17666	P	The double-star analysis indicates that it is probably the fainter (B) component which is variable.	
17749	G	Uncertain triple-star solution of system HIP 17749 (A) + 17750 (BC). TYC 4327-1502-1 (at $\alpha$ = 57°.006 $\delta$ = +68°.676 895) may be identified with component B (in HIP 17750), or possibly with the centre of li components B and C; this position is at $\theta$ = 14°, $\rho$ = 17.11 arcsec relative to component A.	
17750	G	See HIP 17749.	
18084		Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = 3.32$ , $\theta = 198^{\circ}$ , $\varrho = 0.76$ arcs	
18115		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.18$ , $\theta = 334^{\circ}$ , $\varrho = 0.44$ arcs	
18131		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.72$ , $\theta = 246^{\circ}$ , $\varrho = 1.11$ arcs	ec.
18158		Tycho data suggest that component B is located at $\theta = 110^\circ$ , $\varrho = 9.62$ arcsec.	
18166 18260		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.15$ , $\theta = 63^\circ$ , $\varrho = 0.90$ arcse An alternative VIM solution for this system gives $\theta = 121^\circ$ for the constant star relative to the variable.	с.

omsa	Note	es DN5	18349–2332
18349		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.24$	$\theta = 51^{\circ}, \ \varrho = 0.75 \text{ arcsec.}$
18364		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.10$	), $\theta = 40^{\circ}$ , $\varrho = 1.50$ arcsec.
18603		Ambiguous double-star solution of HIP 18603 + 18604. An alternative solution i 18604 gives: $\Delta Hp = 2.52$ , $\theta = 220^{\circ}$ , $\varrho = 12.20$ arcsec. HIP 18604 itself is pr	
18604		$\rho = 0.5$ arcsec.	
		See HIP 18603.	0 0 00 - 0 04
18668		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.03$	
18669		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.96$	
18790		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.80$	
19060		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.11$	
19198 19338		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.46$ Ambiguous double-star solution of HIP 19338 + 19342. An alternative solution is 19342 gives: $\Delta Hp = 2.39$ , $\theta = 298^{\circ}$ , $\varrho = 29.29$ arcsec.	
19342		See HIP 19338.	
19442		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.85$	5, $\theta = 245^{\circ}$ , $\varrho = 1.65$ arcsec.
19710		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.28$	B, $\theta = 298^{\circ}$ , $\varrho = 0.35$ arcsec.
19853		An alternative VIM solution for this system gives $\theta = 322^{\circ}$ for the constant star relations	ative to the variable.
19885		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.48$	3, $\theta = 349^{\circ}$ , $\varrho = 1.26$ arcsec.
19916		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.76$	5, $\theta = 306^{\circ}$ , $\varrho = 1.56$ arcsec.
20227		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.15$	5, $\theta = 214^{\circ}$ , $\varrho = 0.83$ arcsec.
20236		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.20$	), $\theta = 277^{\circ}$ , $\varrho = 0.99$ arcsec.
20469		Ambiguous double-star solution of HIP 20469 + 20471. An alternative solution = 20471 gives: $\Delta Hp = 1.51$ , $\theta = 243^{\circ}$ , $\varrho = 17.60$ arcsec.	for HIP 20469 relative to H
20471		See HIP 20469.	
20531		Ambiguous double-star solution of HIP 20531 + 20533. An alternative solution 20533 gives: $\Delta Hp = 2.20$ , $\theta = 289^{\circ}$ , $\varrho = 30.91$ arcsec.	for HIP 20531 relative to H
20533		See HIP 20531.	
20681 20830		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.04$ Ambiguous double-star solution of HIP 20830 + 20831. An alternative solution = 20830 gives: $\Delta Hp = 3.86$ , $\theta = 157^{\circ}$ , $\varrho = 26.80$ arcsec.	-
20831		See HIP 20830.	
20918		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.84$	
21059		An alternative VIM solution for this system gives $\theta = 83^{\circ}$ for the constant star relation of the system gives $\theta = 83^{\circ}$ for the constant star relation.	
21088 21132		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.25$ Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0$ . Tycho data suggest that component B is located at $\theta = 221^\circ$ , $\varrho = 2.26$ arcsec.	-
21176		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.14$	$\theta = 313^{\circ}, \ \varrho = 1.67 \text{ arcsec.}$
21233		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 1.65$	5, $\theta = 248^{\circ}$ , $\varrho = 0.18$ arcsec.
21240		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.85$	5, $\theta = 101^{\circ}$ , $\varrho = 1.16$ arcsec.
21273	Р	The low significance of the semi-major axis in spite of the short period casts doubts	s on the reliability of the orbi
21354		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.68$	8, $θ = 188^\circ$ , $ρ = 23.60$ arcse
21465		Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = -0.0$	02 (component reversal).
21542		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.16$	$\theta$ , $\theta = 79^{\circ}$ , $\varrho = 1.23$ arcsec.
21800		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.90$	), $\theta = 295^{\circ}$ , $\varrho = 7.55$ arcsec.
21930		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.70$	), $\theta = 16^{\circ}$ , $\varrho = 1.65$ arcsec.
22000		An alternative VIM solution for this system gives $\theta = 41^{\circ}$ for the constant star relat	tive to the variable.
22079		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.78$	B, $θ = 329^\circ$ , $ρ = 1.57$ arcsec.
22140	G	Uncertain solution of triple system. Tycho data suggest that component C is located relative to component A.	d at $θ = 300^\circ$ , $ρ = 10.10$ arcs
22174		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.24$	$θ = 326^\circ$ , $ρ = 1.71$ arcsec.
22266		Ambiguous double-star solution of HIP 22266 + 22267. An alternative solution a 22267 gives: $\Delta Hp = 4.79$ , $\theta = 289^{\circ}$ , $\varrho = 28.55$ arcsec.	for HIP 22266 relative to H
22267		See HIP 22266.	
22489		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.41$	
23196	Р	The double-star analysis indicates that it may be the fainter (B) component which i	
23261		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.71$	-
23324		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.20$	$\theta = 82^{\circ}, \ \varrho = 2.66 \text{ arcsec.}$

23416-	-273	50 DN6	DMSA Notes
23416		$\epsilon$ Aur. The long period of the astrometric orbit (27 years) prevented adjustment of the were thus all adopted from the literature (see Part O of the Double and Multiple astrometric standard errors consequently do not include the uncertainties of the atthe observations to the centre of mass of the system.	Systems Annex). The given
23418		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.75$ , 6	$\theta = 304^{\circ}, \ \varrho = 0.85 \text{ arcsec.}$
23686		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.92$ , 6	$\theta = 245^{\circ}, \ \varrho = 0.93 \text{ arcsec.}$
23804		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.38$ , 6	$\theta = 185^{\circ}, \ \varrho = 1.90 \text{ arcsec.}$
23807		Ambiguous double-star solution of HIP 23807 + 23810. An alternative solution for HI $\theta = 10^{\circ}$ , $\varrho = 0.24$ arcsec.	IP 23810 gives: $\Delta Hp = 1.63$ ,
23810		See HIP 23807.	
23880		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.03$ , 6	$\theta = 135^{\circ}, \ \varrho = 1.75$ arcsec.
23886		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.02$ , 6	$\theta = 68^{\circ}$ , $\varrho = 0.61$ arcsec.
24001		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.09$ , 6	
24019	G	Uncertain triple-star solution of system HIP 24019 (A) + 24020 (BC). TYC 1853-1 $\delta = +28^{\circ}.033412$ ) may be identified with the centre of light of components B and C located at $\theta = 28^{\circ}$ , $\varrho = 11.48$ arcsec relative to component A.	
24020	G	See HIP 24019.	
24470		Ambiguous double-star solution of HIP 24470 + 24474. An alternative solution for 24474 gives: $\Delta Hp = 2.13$ , $\theta = 281^{\circ}$ , $\varrho = 20.36$ arcsec.	r HIP 24470 relative to HIP
24474		See HIP 24470.	
24502	P	Ambiguous double-star solution of HIP 24502 + 24504. An alternative solution for 24504 gives: $\Delta Hp = 1.64$ , $\theta = 221^{\circ}$ , $\varrho = 17.84$ arcsec.	r HIP 24502 relative to HIP
24504	Р	See HIP 24502. Ambiguous double stor solution. An alternative solution for AB gives $AUn = 2.00$ .	0 - 1979 = -6.01 among $0$
24594 24710	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.99$ , 6 Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = -0.12$ double-star analysis indicates that it may be the fainter (B) component which is var	component reversal). The
24852		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.22$ , 6	
25102		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.20$ , e	
25275		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.33$ , $\theta$	
25354		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.55$ , $C$ Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.65$ , $C$	-
25403		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.00$ , e	-
25556		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.44$ , 6	
25733		An alternative VIM solution for this system gives $\theta = 46^{\circ}$ for the constant star relative	
25788		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.32$ , 6	
25930		An alternative VIM solution for this system gives $\theta = 199^{\circ}$ for the constant star relati	-
25996		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 2.29$ , 6	
26009		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.71$ , 6	
26085		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.13$ , $\theta$	
26298		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.49$ , 6	-
26462		Ambiguous double-star solution of HIP 26462 + 26468. An alternative solution for 26468 gives: $\Delta Hp = 2.91$ , $\theta = 283^{\circ}$ , $\varrho = 0.54$ arcsec.	r HIP 26462 relative to HIP
26468		See HIP 26462.	
26563		Spectroscopic orbit unreliable. Probably single.	
26781		Ambiguous double-star solution of HIP 26781 + 26783. An alternative solution for 26781 gives: $\Delta Hp = 0.01$ , $\theta = 12^{\circ}$ , $\varrho = 26.58$ arcsec.	r HIP 26783 relative to HIP
26783		See HIP 26781.	
26948		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.53$ , 6	$\theta = 38^{\circ}$ , $\varrho = 2.19$ arcsec.
26960		Ambiguous double-star solution of HIP 26960 + 26961. An alternative solution for 26961 gives: $\Delta Hp = 4.06$ , $\theta = 221^{\circ}$ , $\varrho = 17.54$ arcsec.	r HIP 26960 relative to HIP
26961	~	See HIP 26960.	0400 0.55
27008	G	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.08$ , 6	
27067		Ambiguous double-star solution of HIP 27067 (A) + 27070 (B). An alternative solution to HIP 27067 gives: $\Delta Hp = 1.76$ , $\theta = 67^{\circ}$ , $\varrho = 22.50$ arcsec. TYC 2915-12 $\delta = +40^{\circ}.407256$ ) may be identified with component B (HIP 27070), which is $\varrho = 22.50$ arcsec relative to component A.	230-1 (at $\alpha = 86^{\circ}.110410$ ,
27070		See HIP 27067.	
27341		An alternative VIM solution for this system gives $\theta = 283^{\circ}$ for the constant star relati	
27350		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.44$ , 6	$\theta = 183^{\circ}, \ \varrho = 4.55 \text{ arcsec.}$

DMSA N			27466-3129
27466		Ambiguous double-star solution of HIP 27466 + 27467. An alternative solution for HI 27466 gives: $\Delta Hp = 1.08$ , $\theta = 28^{\circ}$ , $\varrho = 20.87$ arcsec.	P 27467 relative to H
27467		See HIP 27466.	
27600	G	Uncertain triple-star solution of system HIP 27600 (AB) + 27604 (C). TYC 4768-727 $\delta = -1^{\circ}$ . 429 763) may be identified with component C (HIP 27604), which is then locat arcsec relative to component A.	
27604	G	See HIP 27600.	
27617		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.92$ , $\theta = 2.92$	$277^{\circ}$ , $\rho = 4.85$ arcsec.
27633		Ambiguous double-star solution of HIP 27633 + 27643. An alternative solution for HIP 27633 + 27643. An alternative solution for HIP 27633 + 27643.	7643 gives: $\Delta Hp = 2.9$
27643		See HIP 27633.	
27722		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.70$ , $\theta = 2$	_
27805		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.82$ , $\theta = 1$	-
27861		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.76$ , $\theta = 1$	-
27874	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.30$ , $\theta = 1$	-
28077		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.56$ , $\theta = 2$	
28153		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.38$ , $\theta = 4$	-
28319		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.56$ , $\theta = 1$	
28415		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.27$ , $\theta = 1$	-
28535		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.84$ , $\theta = 3$	-
28684		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.41$ , $\theta = 2$	277°, $\rho = 15.71$ arcse
28774		Ambiguous double-star solution of HIP 28774 + 28777. An alternative solution for HI 28777 gives: $\Delta Hp = 0.87$ , $\theta = 308^\circ$ , $\varrho = 17.59$ arcsec.	P 28774 relative to H
28777		See HIP 28774.	
28936		Ambiguous double-star solution of HIP 28936 (B) + 28937 (A). An alternative solution is into B+C?) gives: $\Delta Hp = 0.70$ , $\theta = 7^{\circ}$ , $\varrho = 0.97$ arcsec. TYC 721-939-1 (at +10°.748104) may be identified with component B (HIP 28936), which is then located arcsec relative to component A.	$\alpha = 91^{\circ}.611211, \delta$
28937		See HIP 28936.	
29087		Component A is really the photocentre of AB.	
29151		Ambiguous double-star solution of HIP 29151 + 29154. An alternative solution for HI 29151 gives: $\Delta Hp = 8.70$ , $\theta = 158^{\circ}$ , $\varrho = 29.60$ arcsec.	P 29154 relative to H
29154		See HIP 29151.	
29655	Р	An alternative VIM solution for this system gives $\theta = 357^{\circ}$ for the constant star relative to	
29853		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.83$ , $\theta = 2$	
30061		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.21$ , $\theta = 4$	
30300		Ambiguous double-star solution. An alternative solution for BC gives: $\Delta Hp = 3.07$ , $\theta = 4$	$40^{\circ}$ , $\varrho = 0.53$ arcsec.
30313		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.10$ , $\theta = 5$	$09^{\circ}$ , $\varrho = 1.54$ arcsec.
30319		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.63$ , $\theta = 9$	$03^{\circ}$ , $\varrho = 1.06$ arcsec.
30362		Uncertain double-star solution of system HIP 30362 (A) + 30365 (C). TYC 732-1935 $\delta = +8^{\circ}.906976$ ) may be identified with component A (HIP 30362). The position of consistent probably correct, giving $\theta = 88^{\circ}$ , $\varrho = 22.61$ arcsec relative to component A.	
30365		See HIP 30362.	
30482		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.74$ , $\theta = 3$	$840^{\circ}, \ \varrho = 0.38 \text{ arcsec.}$
30488		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.53$ , $\theta = 8$	$89^{\circ}$ , $\varrho = 2.01$ arcsec.
30550		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.60$ , $\theta = 2$	$235^{\circ}$ , $\varrho = 4.91$ arcsec.
30674		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.65$ , $\theta = 9$	$\theta^{\circ}$ , $\varrho = 0.25$ arcsec.
30709		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.32$ , $\theta = 3$	-
30756		Uncertain double-star solution of system HIP 30757 (A) + 30756 (B). TYC 1340-2545 $\delta$ = +20°.783 033) may be identified with component B (HIP 30756), which is the $\rho$ = 25.74 arcsec relative to component A.	
30757		See HIP 30756.	
30923		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.93$ , $\theta = 1$	91°, $\rho = 1.67$ arcsec.
30941		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.87$ , $\theta = 2.87$	$258^{\circ}$ , $\varrho = 2.67$ arcsec.
31081		Tycho photometry for component A has been suppressed.	
		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.35$ , $\theta = 9$	$06^{\circ}$ , $\varrho = 0.67$ arcsec.
31087			

31293		See HIP 31292.
31324		Ambiguous double-star solution of HIP 31324 + 31328. An alternative solution for HIP 31324 relative to HIP 31328 gives: $\Delta Hp = 2.57$ , $\theta = 276^{\circ}$ , $\varrho = 26.76$ arcsec.
31328		See HIP 31324.
31408		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.83$ , $\theta = 198^{\circ}$ , $\varrho = 2.15$ arcsec.
31422		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.96$ , $\theta = 230^{\circ}$ , $\varrho = 1.09$ arcsec.
31491		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.96$ , $\theta = 27^{\circ}$ , $\varrho = 0.37$ arcsec.
31513		Ambiguous double-star solution of HIP 31513 + 31515. An alternative solution for HIP 31515 relative to HIP 31513 gives: $\Delta Hp = 3.09$ , $\theta = 71^{\circ}$ , $\varrho = 1.46$ arcsec.
31515		See HIP 31513.
31621		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.36$ , $\theta = 116^{\circ}$ , $\varrho = 0.58$ arcsec.
31644 31681		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.23$ , $\theta = 37^{\circ}$ , $\varrho = 3.89$ arcsec. An orbital solution based on elements by F.C. Fekel, J. Tomkin, Astron. J., 106, 1156, 1993, does not give a significantly different parallax.
31722		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 2.14$ , $\theta = 218^{\circ}$ , $\varrho = 4.71$ arcsec.
31794		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.27$ , $\theta = 189^{\circ}$ , $\varrho = 1.40$ arcsec.
31971		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.40$ , $\theta = 121^{\circ}$ , $\varrho = 1.74$ arcsec.
31973		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.24$ , $\theta = 46^{\circ}$ , $\varrho = 0.98$ arcsec.
31978	Р	An alternative VIM solution for this system gives $\theta = 16^{\circ}$ for the constant star relative to the variable.
31994		Ambiguous double-star solution of HIP 31994 + 31998. An alternative solution for HIP 31998 relative to HIP 31994 gives: $\Delta Hp = 2.26$ , $\theta = 100^{\circ}$ , $\varrho = 17.97$ arcsec.
31998		See HIP 31994.
32085	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 3.74$ , $\theta = 306^{\circ}$ , $\varrho = 1.55$ arcsec.
32289		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.25$ , $\theta = 185^{\circ}$ , $\varrho = 3.99$ arcsec.
32312 32349	G	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.33$ , $\theta = 195^{\circ}$ , $\varrho = 3.52$ arcsec. Sirius. Due to the extreme brightness of the object, the formal standard errors of great-circle abscissae were severely
0.0010	ų	underestimated. The astrometric standard errors were instead derived from the statistics of the post-fit residuals, resulting in a unit weight error of exactly 1. For this reason, no goodness-of-fit statistic is given in Field H30. Note that the long period of the astrometric orbit (50 years) prevented adjustment of the orbital parameters, which were thus all adopted from the literature (see Part O of the Double and Multiple Systems Annex). The given astrometric standard errors consequently do not include the uncertainties of the adopted orbit used to reduce the observations to the centre of mass of the system.
32388		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.16$ , $\theta = 163^{\circ}$ , $\varrho = 17.80$ arcsec.
32475		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.64$ , $\theta = 26^{\circ}$ , $\varrho = 0.81$ arcsec.
32483		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.71$ , $\theta = 180^{\circ}$ , $\varrho = 13.81$ arcsec.
32548		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 3.40$ , $\theta = 142^{\circ}$ , $\varrho = 0.45$ arcsec.
33071		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.03$ , $\theta = 117^{\circ}$ , $\varrho = 4.24$ arcsec.
33291		Ambiguous double-star solution of HIP 33291 (A) + 33296 (B). An alternative solution for HIP 33296 relative to HIP 33291 gives: $\Delta Hp = 3.96$ , $\theta = 87^{\circ}$ , $\varrho = 19.33$ arcsec. TYC 2942-2010-1 (at $\alpha = 103^{\circ}.889.821$ , $\delta = +37^{\circ}.916.060$ ) may be identified with component B (HIP 33296), which is then located at $\theta = 83^{\circ}$ , $\varrho = 19.20$ arcsec relative to component A.
33296		See HIP 33291.
33403		Ambiguous double-star solution of HIP 33403 + 33404. An alternative solution for HIP 33404 relative to HIP 33403 gives: $\Delta Hp = 0.81$ , $\theta = 356^{\circ}$ , $\varrho = 22.58$ arcsec.
33404		See HIP 33403.
33450		An alternative VIM solution for this system gives $\theta = 45^{\circ}$ for the constant star relative to the variable.
33455		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.85$ , $\theta = 70^{\circ}$ , $\varrho = 0.39$ arcsec.
33499		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.04$ , $\theta = 259^{\circ}$ , $\rho = 0.94$ arcsec.
33934 33985		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.22$ , $\theta = 322^{\circ}$ , $\varrho = 4.34$ arcsec. Uncertain double-star solution. Tycho data suggest that component B is located at $\theta = 58^{\circ}$ , $\varrho = 9.72$ arcsec
34184		relative to component A. Ambiguous double-star solution of HIP 34184 + 34191. An alternative solution for HIP 34191 relative to HIP
34191		Annuguous double-star solution of FIF 54154 + 54151. An alternative solution for FIF 54151 relative to FIF 34184 gives: $\Delta Hp = 3.22$ , $\theta = 89^\circ$ , $\varrho = 21.79$ arcsec. See HIP 34184.
34384		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.67$ , $\theta = 350^{\circ}$ , $\varrho = 0.34$ arcsec.
34479		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.31$ , $\theta = 157^{\circ}$ , $\varrho = 14.98$ arcsec.
34617		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.34$ , $\theta = 181^{\circ}$ , $\varrho = 1.43$ arcsec.
34655		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.27$ , $\theta = 172^{\circ}$ , $\varrho = 16.40$ arcsec.

omsa	note	S DN9	34975–392
34975		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.70$ ,	$\theta = 163^{\circ}, \ \varrho = 1.11 \text{ arcsec}$
35062		Ambiguous double-star solution of HIP 35062 + 35063. An alternative solution for 35062 gives: $\Delta Hp = 1.40$ , $\theta = 4^{\circ}$ , $\varrho = 22.44$ arcsec.	or HIP 35063 relative to I
35063		See HIP 35062.	
35065		Ambiguous double-star solution of HIP 35065 + 35066. An alternative solution fr 35066 gives: $\Delta Hp = 1.66$ , $\theta = 354^{\circ}$ , $\varrho = 30.20$ arcsec.	or HIP 35065 relative to I
35066		See HIP 35065.	
35327		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.07$ ,	$\theta = 0^{\circ}$ , $\varrho = 0.57$ arcsec.
35433		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.77$ ,	$\theta = 72^{\circ}$ , $\varrho = 0.68$ arcsec.
35449		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.00$ ,	$\theta = 47^{\circ}$ , $\varrho = 1.64$ arcsec.
35473		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.91$ ,	$\theta = 339^{\circ}, \ \varrho = 0.26 \ \mathrm{arcsec}$
35488	Р	The double-star analysis indicates that it may be the fainter (B) component which is	variable.
35493	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.90$ The double-star analysis indicates that it may be the fainter (B) component which	
35550		Spectroscopic orbit unreliable. Probably single.	
35585		Ambiguous double-star solution of HIP 35585 + 35588. An alternative solution for H $\theta = 184^{\circ}$ , $\varrho = 0.23$ arcsec.	HIP 35585 gives: $\Delta Hp = 0$ .
35588		See HIP 35585.	
36036		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ ,	$\theta = 66^{\circ}, \ \varrho = 1.33$ arcsec.
36251	Р	The double-star analysis indicates that it may be the fainter (B) component which is	variable.
36349		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 1.23$ ,	$\theta = 313^{\circ}, \ \varrho = 6.38 \text{ arcsec}$
36384		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.51$ ,	$\theta = 25^{\circ}, \ \varrho = 3.96$ arcsec.
36621		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.72$ ,	$\theta = 310^{\circ}, \ \varrho = 1.70 \ \mathrm{arcsec}$
36706		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.85$ ,	$\theta = 184^{\circ}$ , $\varrho = 10.01 \text{ arcs}$
36935		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.37$ ,	$\theta = 11^\circ,  \varrho = 0.72$ arcsec.
37096		Component A is really the photocentre of AB.	
37100		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.32$ ,	$\theta = 19^\circ,  \varrho = 5.27$ arcsec.
37110		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.58$ ,	$\theta = 56^{\circ}, \ \varrho = 0.53$ arcsec.
37134		Component A is really the photocentre of AB.	
37197	Р	The double-star analysis indicates that it may be the fainter (B) component which is	variable.
37272		Periodogram analysis indicates that this is an astrometric binary with period 826 day for the photocentre. A full orbital solution gives a parallax of 18.71 mas (standard	ů
37279		Procyon. The long period of the astrometric orbit (40 years) prevented adjustment of were thus all adopted from the literature (see Part O of the Double and Multiple astrometric standard errors consequently do not include the uncertainties of the the observations to the centre of mass of the system.	e Systems Annex). The gi
37614		Component A is really the photocentre of AB.	
37780		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.36$ ,	$\theta = 124^{\circ}$ , $\varrho = 1.36$ arcsec
37788 37824		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.12$ , Ambiguous double-star solution of HIP 37824 + 37825. An alternative solution for	-
		37824 gives: $\Delta Hp = 3.28$ , $\theta = 153^{\circ}$ , $\varrho = 20.38$ arcsec.	
37825		See HIP 37824.	
37848		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.50$ ,	$\theta = 266^{\circ}, \ \varrho = 4.31 \text{ arcsec}$
37954		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.69$ ,	
38174		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.40$ ,	
38242		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.31$ ,	-
38298		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.16$ ,	
38414		An orbital solution based on elements by S.B. Parsons, Astrophys. J. Supp. Ser., 53, axis of 33 mas for the photocentre.	U U
38479		Uncertain double-star solution. Tycho data suggest that component B is located a relative to component A.	_
38687		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.12$ ,	
38752		Ambiguous double-star solution of HIP 38752 + 38753. An alternative solution for 38752 gives: $\Delta Hp = 2.16$ , $\theta = 164^{\circ}$ , $\varrho = 15.48$ arcsec.	or HIP 38753 relative to I
38753		See HIP 38752.	
38976		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.61$ ,	
39264		An alternative VIM solution for this system gives $\theta = 78^{\circ}$ for the constant star relati	ve to the variable.

39424-	-4322	25 DN10	DMSA Notes
39424		An orbital solution based on elements by R.F. Griffin, Mon. Not. R. Astron. Soc., 200, semi-major axis of 19 mas for the photocentre.	1161, 1982, gives a
39508		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.46$ , $\theta = 286^{\circ}$	$\rho$ , $\rho = 3.76$ arcsec.
39533		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 0.35$ , $\theta = 1$ . This might correspond to components A and B.	$4^{\circ}$ , $\varrho = 0.51$ arcsec.
39571		Ambiguous double-star solution of HIP 39571 + 39573. An alternative solution for HIP 39575 $\theta = 133^{\circ}$ , $\varrho = 2.57$ arcsec.	B gives: $\Delta Hp = 0.01$
39573		See HIP 39571.	
39592		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.70$ , $\theta = 247^{\circ}$	$\rho$ , $\rho = 1.47$ arcsec.
39653		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.46$ , $\theta = 297^{\circ}$	$\rho$ , $\rho = 0.43$ arcsec.
39668		Ambiguous double-star solution of HIP 39668 + 39670. An alternative solution for HIP 39 39668 gives: $\Delta Hp = 0.39$ , $\theta = 23^{\circ}$ , $\varrho = 24.88$ arcsec.	9670 relative to HII
39670		See HIP 39668.	
39692		Ambiguous double-star solution of HIP 39692 + 39693. An alternative solution for HIP 39 39693 gives: $\Delta Hp = 3.20$ , $\theta = 242^{\circ}$ , $\varrho = 20.65$ arcsec.	9692 relative to HII
39693		See HIP 39692.	
39825	G	Uncertain triple-star solution of system HIP 39825 (AC) + 39827 (B). TYC 8924-2784-1 (a $\delta = -61^{\circ}.077698$ ) may be identified with component B (HIP 39827), which is then I $\rho = 11.58$ arcsec relative to component A. Tycho data also suggest that component C is I $\rho = 20.27$ arcsec relative to component A.	ocated at $\theta = 98^{\circ}$
39827	G	See HIP 39825.	
39865		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.62$ , $\theta = 17^{\circ}$ ,	$\rho = 0.63$ arcsec.
40089		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.44$ , $\theta = 167^{\circ}$	$\rho$ , $\rho = 0.25$ arcsec.
40239	Р	The double-star analysis indicates that it may be the fainter (B) component which is variable.	
40527		Ambiguous double-star solution of HIP 40527 + 40532. An alternative solution for HIP 4040527 gives: $\Delta Hp = 1.28$ , $\theta = 8^{\circ}$ , $\varrho = 18.73$ arcsec.	0532 relative to HII
40532		See HIP 40527.	
40638		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.30$ , $\theta = 347^{\circ}$	$\rho$ , $\rho = 0.92$ arcsec.
40708		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.33$ , $\theta = 273^{\circ}$	$\rho$ , $\rho = 1.95$ arcsec.
41181		Ambiguous double-star solution of HIP 41181 + 41184. An alternative solution for HIP 42	1181 relative to HIF

- 41184 gives:  $\Delta Hp = 3.47$ ,  $\theta = 237^{\circ}$ ,  $\rho = 29.38$  arcsec. See HIP 41181. 41184
- Ambiguous double-star solution of HIP 41276 + 41279. An alternative solution for HIP 41276 relative to HIP 41276 41279 gives:  $\Delta Hp = 1.69$ ,  $\theta = 212^{\circ}$ ,  $\varrho = 27.80$  arcsec.
- 41279 See HIP 41276.
- Component B is really the photocentre of BC. 41361
- 41616 Component A is really the photocentre of AP.
- 41796 Ambiguous double-star solution. An alternative solution for AB gives:  $\Delta Hp = 0.24$ ,  $\theta = 64^{\circ}$ ,  $\rho = 20.27$  arcsec.
- 41880 Ambiguous double-star solution. An alternative solution for AP gives:  $\Delta Hp = 0.60$ ,  $\theta = 315^{\circ}$ ,  $\varrho = 0.75$  arcsec. Ambiguous double-star solution. An alternative solution for AB gives:  $\Delta Hp = 3.12$ ,  $\theta = 81^{\circ}$ ,  $\varrho = 13.75$  arcsec. 42018
- Ambiguous double-star solution. An alternative solution for AB gives:  $\Delta Hp = 3.48$ ,  $\theta = 234^{\circ}$ ,  $\varrho = 1.52$  arcsec. 42099
- 42488 Ambiguous double-star solution of HIP 42488 + 42491. An alternative solution for HIP 42491 gives:  $\Delta Hp = 3.15$ ,  $\theta = 348^{\circ}$ ,  $\varrho = 5.43$  arcsec.
- 42491 See HIP 42488.
- 42910 Ambiguous double-star solution. An alternative solution for AB gives:  $\Delta Hp = 2.61$ ,  $\theta = 182^{\circ}$ ,  $\varrho = 1.25$  arcsec.
- 42916 Periodogram analysis indicates that this is an astrometric binary with period 837 days and semi-major axis 22 mas for the photocentre. A full orbital solution does not give a significantly different parallax.
- Ambiguous double-star solution. An alternative solution for AB gives:  $\Delta Hp = 2.79$ ,  $\theta = 145^{\circ}$ ,  $\varrho = 12.46$  arcsec. 43003
- 43109 Р Component A is really the photocentre of AB. The double-star analysis indicates that it is the fainter (C) component which is variable.
- 43219 Ambiguous double-star solution of HIP 43219 (B) + 43220 (A). An alternative solution for HIP 43219 relative to HIP 43220 gives:  $\Delta Hp = 2.41$ ,  $\theta = 342^{\circ}$ ,  $\varrho = 20.39$  arcsec. TYC 2488-644-1 (at  $\alpha = 132^{\circ}.066498$ ,  $\delta = +34^{\circ}.604422$ ) may be identified with component B (HIP 43219), which is then located at  $\theta = 343^{\circ}$ ,  $\rho = 20.26$  arcsec relative to component A. 43220 See HIP 43219.
- 43224 Ambiguous double-star solution of HIP 43224 + 43225. An alternative solution for HIP 43225 relative to HIP 43224 gives:  $\Delta Hp = 3.30$ ,  $\theta = 51^{\circ}$ ,  $\varrho = 11.62$  arcsec.
- 43225 See HIP 43224.

	Not	DN11 43722-4763
43722		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.00$ , $\theta = 91^{\circ}$ , $\varrho = 0.66$ arcsec.
43748		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.95$ , $\theta = 215^{\circ}$ , $\varrho = 0.43$ arcsec.
13827		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.34$ , $\theta = 310^{\circ}$ , $\varrho = 4.28$ arcsec.
44135		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.88$ , $\theta = 62^{\circ}$ , $\varrho = 0.77$ arcsec.
44260		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.38$ , $\theta = 239^\circ$ , $\varrho = 0.47$ arcsec.
14435		Ambiguous double-star solution of HIP 44435 + 44436. An alternative solution for HIP 44436 relative to H 44435 gives: $\Delta Hp = 2.93$ , $\theta = 124^{\circ}$ , $\varrho = 21.70$ arcsec.
44436		See HIP 44435.
44479		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.23$ , $\theta = 213^{\circ}$ , $\varrho = 0.38$ arcsec.
44541		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.65$ , $\theta = 99^{\circ}$ , $\rho = 0.74$ arcsec.
44664		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.29$ , $\theta = 273^{\circ}$ , $\varrho = 4.04$ arcsec
44796		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.43$ , $\theta = 322^\circ$ , $\varrho = 11.82$ arcse
14894		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.48$ , $\theta = 120^\circ$ , $\varrho = 1.19$ arcsec
44902		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.41$ , $\theta = 176^{\circ}$ , $\varrho = 11.02$ arcsec
44965		Ambiguous double-star solution of HIP 44965 + 44968. An alternative solution for HIP 44965 relative to F 44968 gives: $\Delta Hp = 0.48$ , $\theta = 289^{\circ}$ , $\varrho = 19.59$ arcsec.
44968		See HIP 44965.
45180		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.51$ , $\theta = 347^{\circ}$ , $\varrho = 2.61$ arcsec
45206		Ambiguous double-star solution of HIP 45206 + 45208. An alternative solution for HIP 45208 relative to H 45206 gives: $\Delta Hp = 0.68$ , $\theta = 32^{\circ}$ , $\varrho = 23.79$ arcsec.
45208		See HIP 45206.
45269		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.35$ , $\theta = 44^{\circ}$ , $\varrho = 16.94$ arcsec
45380		Ambiguous double-star solution of HIP 45380 + 45381. An alternative solution for HIP 45381 relative to H 45380 gives: $\Delta Hp = 2.96$ , $\theta = 10^{\circ}$ , $\varrho = 26.92$ arcsec.
45381		See HIP 45380.
45567		Ambiguous double-star solution of HIP 45567 + 45570. An alternative solution for HIP 45567 relative to H 45570 gives: $\Delta Hp = 0.51$ , $\theta = 181^{\circ}$ , $\varrho = 0.25$ arcsec.
45570	Р	See HIP 45567.
45593		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = -0.10$ (component reversal).
45802		Ambiguous double-star solution. An alternative solution for BC gives: $\Delta Hp = 3.59$ , $\theta = 200^{\circ}$ , $\rho = 9.44$ arcsec
45946		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.87$ , $\theta = 262^\circ$ , $\varrho = 0.99$ arcsec
45968		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.29$ , $\theta = 349^\circ$ , $\varrho = 6.99$ arcsec
46151		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.54$ , $\theta = 159^{\circ}$ , $\varrho = 2.80$ arcsec
46213		Ambiguous double-star solution of HIP 46213 + 46216. An alternative solution for HIP 46213 relative to H 46216 gives: $\Delta Hp = 2.49$ , $\theta = 27^{\circ}$ , $\varrho = 13.78$ arcsec.
46216		See HIP 46213.
46651	Р	The double-star analysis indicates that it is probably the fainter (B) component which is variable.
46710		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.61$ , $\theta = 42^{\circ}$ , $\varrho = 0.31$ arcsec.
46779		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.51$ , $\theta = 47^{\circ}$ , $\varrho = 1.39$ arcsec.
46860		Ambiguous double-star solution of HIP 46860 + 46863. An alternative solution for HIP 46860 relative to H 46863 gives: $\Delta Hp = 3.85$ , $\theta = 324^{\circ}$ , $\varrho = 25.41$ arcsec.
6863		See HIP 46860.
46989		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.04$ , $\theta = 75^{\circ}$ , $\varrho = 1.07$ arcsec.
47106		Tycho data suggest that component B is located at $\theta = 185^{\circ}$ , $\varrho = 3.57$ arcsec.
47107		Uncertain double-star solution of system HIP 47113 (A) + 47107 (B). TYC 3807-882-1 (at $\alpha = 144^{\circ}0141$ $\delta = +53^{\circ}293708$ ) may be identified with component B (HIP 47107), which is then located at $\theta = 22$
477440		$\rho = 21.64$ arcsec relative to component A.
47113		See HIP 47107.
47205		An orbital solution based on elements by R.F. Griffin, Observatory, 105, 7, 1985, gives a semi-major axis of mas for the photocentre.
47228		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 1.14$ , $\theta = 181^{\circ}$ , $\varrho = 0.38$ arcsec
47252		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.41$ , $\theta = 344^{\circ}$ , $\varrho = 2.96$ arcsec
47371		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.94$ , $\theta = 131^{\circ}$ , $\varrho = 0.72$ arcsec
47470		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.28$ , $\theta = 93^{\circ}$ , $\varrho = 0.63$ arcsec.
47638		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.02$ , $\theta = 112^{\circ}$ , $\varrho = 0.91$ arcsec
47639		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.16$ , $\theta = 31^{\circ}$ , $\varrho = 0.99$ arcsec.

47645		Ambiguous double-star solution of HIP 47645 (B) + 47646 (A). An alternative solution for HIP 47645 relative to HIP 47646 gives: $\Delta Hp = 2.22$ , $\theta = 282^{\circ}$ , $\varrho = 15.92$ arcsec. TYC 6602-2082-1 (at $\alpha = 145^{\circ}.707397$ , $\delta = -22^{\circ}.964637$ ) may be identified with component B (HIP 47645), which is then located at $\theta = 282^{\circ}$ , $\varrho = 15.72$ arcsec relative to component A.
47646		See HIP 47645.
47679		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.72$ , $\theta = 350^{\circ}$ , $\varrho = 13.61$ arcsec.
47691		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.23$ , $\theta = 349^{\circ}$ , $\varrho = 3.27$ arcsec.
47708		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 1.50$ , $\theta = 50^{\circ}$ , $\varrho = 19.29$ arcsec.
47775		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.73$ , $\theta = 165^{\circ}$ , $\varrho = 1.09$ arcsec.
47862		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.58$ , $\theta = 177^{\circ}$ , $\varrho = 9.54$ arcsec.
47890		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.95$ , $\theta = 133^{\circ}$ , $\varrho = 1.29$ arcsec.
47945		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.28$ , $\theta = 234^{\circ}$ , $\varrho = 0.63$ arcsec.
48012		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.65$ , $\theta = 93^{\circ}$ , $\varrho = 0.23$ arcsec.
48086		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.31$ , $\theta = 233^{\circ}$ , $\varrho = 0.77$ arcsec.
48175		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.04$ , $\theta = 214^{\circ}$ , $\varrho = 2.09$ arcsec.
48445		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.84$ , $\theta = 323^{\circ}$ , $\varrho = 0.29$ arcsec.
48500		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.27$ , $\theta = 313^{\circ}$ , $\varrho = 1.63$ arcsec.
48656		Ambiguous double-star solution of HIP 48656 (B) + 48657 (A). An alternative solution for HIP 48656 relative to HIP 48657 gives: $\Delta Hp = 2.72$ , $\theta = 228^{\circ}$ , $\varrho = 18.86$ arcsec. TYC 832-1463-1 (at $\alpha = 148^{\circ}.842465$ , $\delta = +10^{\circ}.108385$ ) may be identified with component B (HIP 48656), which is then located at $\theta = 229^{\circ}$ , $\varrho = 18.83$ arcsec relative to component A.
48657		See HIP 48656.
48995		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.24$ , $\theta = 90^{\circ}$ , $\varrho = 1.12$ arcsec.
49224		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 3.09$ , $\theta = 213^{\circ}$ , $\varrho = 0.73$ arcsec.
49314		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.51$ , $\theta = 317^{\circ}$ , $\varrho = 0.29$ arcsec.
49450		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.98$ , $\theta = 148^{\circ}$ , $\varrho = 1.99$ arcsec.
49525		Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = -1.28$ (component reversal).
49624		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.94$ , $\theta = 261^{\circ}$ , $\varrho = 13.49$ arcsec.
50193		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.86$ , $\theta = 167^{\circ}$ , $\varrho = 1.38$ arcsec.
50583	Р	The double-star analysis indicates that it is the fainter (B) component which is variable.
50636		Ambiguous double-star solution of HIP 50636 (B) + 50638 (A). An alternative solution for HIP 50636 relative to HIP 50638 gives: $\Delta Hp = 1.58$ , $\theta = 215^{\circ}$ , $\varrho = 17.14$ arcsec. TYC 6619-1594-2 (at $\alpha = 155^{\circ}.135721$ , $\delta = -23^{\circ}.644203$ ) may be identified with component B (HIP 50636), which is then located at $\theta = 216^{\circ}$ , $\varrho = 17.06$ arcsec relative to component A.
50638		See HIP 50636.
50648		Ambiguous double-star solution of HIP 50648 + 50651. An alternative solution for HIP 50648 relative to HIP 50651 gives: $\Delta Hp = 3.67$ , $\theta = 188^{\circ}$ , $\varrho = 1.15$ arcsec.
50651		See HIP 50648.
50798		Ambiguous double-star solution of HIP 50798 + 50804. An alternative solution for HIP 50798 relative to HIP 50804 gives: $\Delta Hp = 0.66$ , $\theta = 251^{\circ}$ , $\varrho = 0.16$ arcsec.
50804		See HIP 50798.
50830		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.88$ , $\theta = 266^{\circ}$ , $\varrho = 0.64$ arcsec.
50909		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.05$ , $\theta = 359^{\circ}$ , $\varrho = 2.23$ arcsec.
51031		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.84$ , $\theta = 177^{\circ}$ , $\varrho = 0.49$ arcsec.
51288		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.56$ , $\theta = 218^{\circ}$ , $\varrho = 0.42$ arcsec.
51727		Ambiguous double-star solution of HIP 51727 + 51734. An alternative solution for HIP 51727 relative to HIP 51734 gives: $\Delta Hp = 2.59$ , $\theta = 292^{\circ}$ , $\varrho = 26.24$ arcsec.
51734		See HIP 51727.
51740		An alternative VIM solution for this system gives $\theta = 162^{\circ}$ for the constant star relative to the variable.
51824		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.05$ , $\theta = 16^{\circ}$ , $\varrho = 1.09$ arcsec.
51847	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.90$ , $\theta = 344^{\circ}$ , $\varrho = 1.15$ arcsec.
51876		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.30$ , $\theta = 278^{\circ}$ , $\varrho = 16.31$ arcsec.
52038		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.92$ , $\theta = 147^{\circ}$ , $\varrho = 16.36$ arcsec.
52202		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.05$ , $\theta = 5^{\circ}$ , $\rho = 1.23$ arcsec.
52499		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.88$ , $\theta = 359^{\circ}$ , $\varrho = 1.04$ arcsec.
52634		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.99$ , $\theta = 18^{\circ}$ , $\varrho = 0.67$ arcsec.

DMSA Note	s DN13		52940–57880
52940	Ambiguous double-star solution of HIP 52940 + 529 52942 gives: $\Delta Hp = 0.42$ , $\theta = 275^{\circ}$ , $\varrho = 17.53$ arc		P 52940 relative to HIP
52942	See HIP 52940.		
53152	Ambiguous double-star solution. An alternative solut		
53326	Ambiguous double-star solution. An alternative solution	on for AB gives: $\Delta Hp = 0.25$ , $\theta = 3$	59°, $\rho = 0.97$ arcsec.
53421 53494	Ambiguous double-star solution. An alternative solution Ambiguous double-star solution of HIP 53494 + 53 53404 given $AH_{P} = 2.06$ , $a = 100^{\circ}$ , $a = 16.21$ grows	196. An alternative solution for HIP	
53496	53494 gives: $\Delta Hp = 2.06$ , $\theta = 109^{\circ}$ , $\varrho = 16.21$ arc See HIP 53494.	sec.	
53632	Ambiguous double-star solution of HIP 53632 + 536 53633 gives: $\Delta Hp = 2.41$ , $\theta = 351^{\circ}$ , $\varrho = 19.16$ arc		9 53632 relative to HIP
53633	See HIP 53632.		
53782	Ambiguous double-star solution. An alternative solut	on for AB gives: $\Delta Hp = 1.52$ , $\theta = 12$	21°, $\rho = 0.19$ arcsec.
53947	Ambiguous double-star solution of HIP 53947 + 538 53953 gives: $\Delta Hp = 0.61$ , $\theta = 286^{\circ}$ , $\rho = 18.87$ are		P 53947 relative to HIP
53953	See HIP 53947.		
54066 P 54293	Ambiguous double-star solution. An alternative solution Ambiguous double-star solution of HIP 54293 + 542 54293 gives: $\Delta Hp = 0.53$ , $\theta = 42^\circ$ , $\varrho = 22.67$ arcsec	298. An alternative solution for HIP	-
54298	See HIP 54293.		
54375	Ambiguous double-star solution. An alternative solut	on for AB gives: $\Delta Hp = 3.86$ , $\theta = 68$	5°, $\rho = 3.06$ arcsec.
54700	Ambiguous double-star solution of HIP 54700 + 54' 54701 gives: $\Delta Hp = 1.24$ , $\theta = 348^{\circ}$ , $\varrho = 22.08$ arc		9 54700 relative to HIP
54701	See HIP 54700.		
54980	Ambiguous double-star solution. An alternative solut		
55055	Ambiguous double-star solution. An alternative solut	0 1	-
55067	Ambiguous double-star solution. An alternative solut		
55115 55402	Ambiguous double-star solution. An alternative solution Ambiguous double-star solution of HIP 55402 + 55402 gives: $\Delta Hp = 1.82$ , $\theta = 173^\circ$ , $\varrho = 22.83$ arc	104. An alternative solution for HIP	-
55404	See HIP 55402.		
55663	Ambiguous double-star solution. An alternative solution	on for AB gives: $\Delta Hp = 2.96$ , $\theta = 12$	$3^{\circ}$ , $\rho = 0.39$ arcsec.
55793	Ambiguous double-star solution. An alternative solution	on for AB gives: $\Delta Hp = 2.14$ , $\theta = 3$	18°, $\varrho = 1.54$ arcsec.
55846	Ambiguous double-star solution of HIP 55846 + 558 55846 gives: $\Delta Hp = 1.89$ , $\theta = 150^{\circ}$ , $\varrho = 27.96$ arc		9 55848 relative to HIP
55848	See HIP 55846.		
55986	The solution for the B component (HIP 55987) may	be spurious.	
55987	See HIP 55986.		
56110	Ambiguous double-star solution. An alternative solut	<b>o</b> 1	-
56267 P	Ambiguous double-star solution. An alternative solution		
56401 56469	Ambiguous double-star solution. An alternative solution Ambiguous double-star solution of HIP 56469 + 56469 gives: $\Delta Hp = 0.47$ , $\theta = 56^{\circ}$ , $\varrho = 23.54$ arcs	72. An alternative solution for HIP	
56472	See HIP 56469.		
56788	Ambiguous double-star solution. An alternative solution		
57146 G	Uncertain triple-star solution of system HIP 57148 ( $\delta = -39$ °.432 643) may be identified with component $\rho = 24.86$ arcsec relative to component A. Tycho d B.	ent B (in HIP 57146), which is the	In located at $\theta = 336^{\circ}$ ,
57148 G	See HIP 57146.		
57272	Ambiguous double-star solution. An alternative solut	0 1	-
57283	Ambiguous double-star solution. An alternative solut	0 1	-
57557	Ambiguous double-star solution. An alternative solut	0 1	-
57595	Ambiguous double-star solution. An alternative solut	0 1	-
57647	Ambiguous double-star solution. An alternative solut	0 1	-
57844 57880	Ambiguous double-star solution. An alternative solut Ambiguous double-star solution. An alternative solut	<b>o</b> 1	-

E 7007		Ambiguous double star solution An alternative solution for AD store AU = 0.01 a 540 = 0.70
57937 58347		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.21$ , $\theta = 54^{\circ}$ , $\varrho = 2.70$ arcsec.
58347		Ambiguous double-star solution of HIP 58347 + 58352. An alternative solution for HIP 58352 relative to HIP 58347 gives: $\Delta Hp = 1.67$ , $\theta = 159^{\circ}$ , $\varrho = 0.23$ arcsec.
58352		See HIP 58347.
58697		Ambiguous double-star solution of HIP 58697 + 58713. An alternative solution for HIP 58713 relative to HIP 58697 gives: $\Delta Hp = 4.08$ , $\theta = 151^{\circ}$ , $\varrho = 23.70$ arcsec.
58713		See HIP 58697.
58760		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.21$ , $\theta = 93^{\circ}$ , $\varrho = 3.76$ arcsec.
58846		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.13$ , $\theta = 41^{\circ}$ , $\varrho = 0.21$ arcsec.
58906	G	Uncertain triple-star solution of system HIP 58906 (A) + 58910 (B) + 58909 (C). TYC 8978-5554-1 (at $\alpha$ = 181°.202 658, $\delta$ = -62°.002 276) may be identified with component B (HIP 58910), which is then located at $\theta$ = 149°, $\varrho$ = 22.79 arcsec relative to component A.
58909	G	See HIP 58906.
58910	G	See HIP 58906.
58920		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.94$ , $\theta = 127^{\circ}$ , $\varrho = 1.58$ arcsec.
59004		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.04$ , $\theta = 87^{\circ}$ , $\varrho = 1.09$ arcsec.
59007		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.25$ , $\theta = 130^{\circ}$ , $\varrho = 1.74$ arcsec.
59078		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.82$ , $\theta = 107^{\circ}$ , $\varrho = 2.02$ arcsec.
59101		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.05$ , $\theta = 12^{\circ}$ , $\varrho = 0.26$ arcsec.
59190		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.80$ , $\theta = 28^{\circ}$ , $\varrho = 1.53$ arcsec.
59233		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 1.92$ , $\theta = 54^{\circ}$ , $\varrho = 1.49$ arcsec.
59368		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.27$ , $\theta = 199^{\circ}$ , $\varrho = 1.69$ arcsec.
59568		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.58$ , $\theta = 108^{\circ}$ , $\varrho = 9.89$ arcsec.
59660		Ambiguous double-star solution of HIP 59660 + 59667. An alternative solution for HIP 59667 relative to HIP 59660 gives: $\Delta Hp = 1.39$ , $\theta = 80^{\circ}$ , $\varrho = 26.86$ arcsec.
59667		See HIP 59660.
59966		Component B is really the photocentre of BC.
59996		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = -0.32$ (component reversal).
60155		Uncertain double-star solution. Tycho data suggest that component B is located at $\theta = 298^{\circ}$ , $\varrho = 14.70$ arcsec relative to component A.
60352		Ambiguous double-star solution of HIP 60352 + 60353. An alternative solution for HIP 60352 relative to HIP 60353 gives: $\Delta Hp = 2.85$ , $\theta = 345^{\circ}$ , $\varrho = 20.35$ arcsec.
60353		See HIP 60352.
60432		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.62$ , $\theta = 272^{\circ}$ , $\varrho = 2.22$ arcsec.
60469		Ambiguous double-star solution of HIP 60469 + 60472. An alternative solution for HIP 60472 relative to HIP 60469 gives: $\Delta Hp = 2.36$ , $\theta = 92^{\circ}$ , $\varrho = 21.84$ arcsec.
60472		See HIP 60469.
60727		Ambiguous double-star solution. An alternative solution for AS gives: $\Delta Hp = 3.00$ , $\theta = 82^{\circ}$ , $\varrho = 0.57$ arcsec.
60772	Р	The double-star analysis indicates that it is the fainter (B) component which is variable.
60959		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 0.37$ , $\theta = 262^{\circ}$ , $\varrho = 22.17$ arcsec.
61247		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.44$ , $\theta = 281^{\circ}$ , $\varrho = 0.25$ arcsec.
61303		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.14$ , $\theta = 5^{\circ}$ , $\varrho = 3.33$ arcsec.
61484		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.31$ , $\theta = 108^{\circ}$ , $\varrho = 9.30$ arcsec.
61524		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.34$ , $\theta = 309^{\circ}$ , $\varrho = 8.32$ arcsec.
61896		Ambiguous double-star solution of HIP 61896 + 61900. An alternative solution for HIP 61896 relative to HIP 61900 gives: $\Delta Hp = 2.84$ , $\theta = 203^{\circ}$ , $\varrho = 25.31$ arcsec.
61900	Р	See HIP 61896.
61906		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ , $\theta = 271^{\circ}$ , $\varrho = 1.38$ arcsec.
62132		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.03$ , $\theta = 249^{\circ}$ , $\varrho = 12.72$ arcsec.
62162		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.50$ , $\theta = 83^{\circ}$ , $\varrho = 0.99$ arcsec.
62183		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.30$ , $\theta = 278^{\circ}$ , $\varrho = 0.88$ arcsec.
62263		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.90$ , $\theta = 86^{\circ}$ , $\varrho = 1.41$ arcsec.
62336		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.02$ , $\theta = 0^{\circ}$ , $\varrho = 2.64$ arcsec.
62387		Ambiguous double-star solution of HIP 62387 + 62390. An alternative solution for HIP 62387 relative to HIP 62390 gives: $\Delta Hp = 3.34$ , $\theta = 296^{\circ}$ , $\varrho = 18.12$ arcsec.
62390		See HIP 62387.
62505		The B component may be spurious.

JIVISA	Not	es DN15 62571–6	516
62571		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.55$ , $\theta = 52^{\circ}$ , $\varrho = 15.14$ are	sec.
62643		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.30$ , $\theta = 333^{\circ}$ , $\varrho = 17.35$ and	rcsec
62672		Ambiguous double-star solution of HIP 62672 + 62675. An alternative solution for HIP 62672 relative t 62675 gives: $\Delta Hp = 2.35$ , $\theta = 233^{\circ}$ , $\varrho = 11.95$ arcsec.	o HI
62675		See HIP 62672.	
62677		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.20$ , $\theta = 211^{\circ}$ , $\varrho = 17.28$ at	csec.
62723		Ambiguous double-star solution of HIP 62723 + 62726. An alternative solution for HIP 62723 gives: $\Delta Hp = \theta = 176^{\circ}$ , $\rho = 9.77$ arcsec.	= 2.0
62725		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.91$ , $\theta = 193^{\circ}$ , $\varrho = 5.90$ arc	sec.
62726		Ambiguous double-star solution of HIP 62723 + 62726. An alternative solution for HIP 62723 gives: $\Delta Hp = \theta = 176^{\circ}$ , $\rho = 9.77$ arcsec.	- 2.0
62915		An orbital solution based on elements by R.F. Griffin, Observatory, 103, 17, 1983, gives a semi-major ax mas for the photocentre.	is of
62951		Ambiguous double-star solution of HIP 62951 (B) + 62954 (A). An alternative solution for HIP 62951 r to HIP 62954 gives: $\Delta Hp = 1.69$ , $\theta = 291^{\circ}$ , $\varrho = 23.59$ arcsec. TYC 6114-1761-1 (at $\alpha = 193^{\circ}.49$ $\delta = -18^{\circ}.034908$ ) may be identified with component B (HIP 62951), which is then located at $\theta = \varrho = 23.31$ arcsec relative to component A.	5 099
62954		See HIP 62951.	
63078		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.04$ , $\theta = 28^{\circ}$ , $\rho = 0.84$ arcs	
63079		Uncertain double-star solution of system HIP 63081 (A) + 63079 (B). TYC 885-1206-1 (at $\alpha = 193^{\circ}87$ $\delta = +11^{\circ}496233$ ) may be identified with component A (HIP 63081). The position of component E 63079) is probably correct, giving $\theta = 220^{\circ}$ , $\varrho = 29.63$ arcsec relative to component A.	
33081	G	See HIP 63079.	
63240		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.40$ , $\theta = 321^{\circ}$ , $\varrho = 2.21$ are	sec.
3253		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.96$ , $\theta = 225^{\circ}$ , $\varrho = 14.51$ at	rcsec
3383		Ambiguous double-star solution of HIP 63383 + 63386. An alternative solution for HIP 63383 relative t 63386 gives: $\Delta Hp = 1.22$ , $\theta = 311^{\circ}$ , $\varrho = 22.98$ arcsec.	o H
3386		See HIP 63383.	
33507		Ambiguous double-star solution of HIP 63507 (B) + 63509 (A). An alternative solution for HIP 63507 r to HIP 63509 gives: $\Delta Hp = 2.35$ , $\theta = 189^{\circ}$ , $\varrho = 26.74$ arcsec. TYC 889-263-1 (at $\alpha = 195^{\circ}.19$ $\delta = +14^{\circ}.370086$ ) may be identified with component B (HIP 63507), which is then located at $\theta = \varrho = 26.74$ arcsec relative to component A.	2 55
63509		See HIP 63507.	
3914		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.59$ , $\theta = 110^{\circ}$ , $\varrho = 0.22$ are	sec.
4060		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.71$ , $\theta = 278^{\circ}$ , $\varrho = 0.75$ are	sec.
4153		Ambiguous double-star solution of HIP 64153 + 64154. An alternative solution for HIP 64154 relative t 64153 gives: $\Delta Hp = 1.76$ , $\theta = 57^{\circ}$ , $\varrho = 17.28$ arcsec.	o H
4154		See HIP 64153.	
4251		Ambiguous double-star solution of HIP 64251 + 64252. An alternative solution for HIP 64251 relative t 64252 gives: $\Delta Hp = 1.65$ , $\theta = 183^{\circ}$ , $\varrho = 27.07$ arcsec.	o H
4252		See HIP 64251.	
4286		Ambiguous double-star solution of HIP 64286 + 64289. An alternative solution for HIP 64289 relative t 64286 gives: $\Delta Hp = 2.93$ , $\theta = 134^{\circ}$ , $\varrho = 24.02$ arcsec.	o H
4289		See HIP 64286.	
4372		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.97$ , $\theta = 80^{\circ}$ , $\varrho = 1.75$ arcs	
4451		Ambiguous double-star solution of HIP 64451 + 64454. An alternative solution for HIP 64454 relative t 64451 gives: $\Delta Hp = 2.51$ , $\theta = 120^{\circ}$ , $\varrho = 26.22$ arcsec.	οH
4454		See HIP 64451.	
4455		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.00$ , $\theta = 302^{\circ}$ , $\varrho = 10.68$ and	
4558		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.89$ , $\theta = 295^{\circ}$ , $\varrho = 0.17$ are	
4616		Ambiguous double-star solution of HIP 64616 + 64620. An alternative solution for HIP 64620 relative t 64616 gives: $\Delta Hp = 0.42$ , $\theta = 150^{\circ}$ , $\varrho = 22.71$ arcsec.	οH
4620		See HIP 64616.	
64821		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.66$ , $\theta = 196^{\circ}$ , $\varrho = 0.25$ are	
64863		Ambiguous double-star solution of HIP 64863 + 64868. An alternative solution for HIP 64868 relative t 64863 gives: $\Delta Hp = 2.57$ , $\theta = 121^{\circ}$ , $\varrho = 0.25$ arcsec.	o H
64868		See HIP 64863.	
35166	Р	An alternative VIM solution for this system gives $\theta = 175^{\circ}$ for the constant star relative to the variable.	

66086		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.75$ , $\theta = 197^{\circ}$ , $\varrho = 0.52$ arcsec.
66089		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.42$ , $\theta = 137^{\circ}$ , $\varrho = 4.98$ arcsec.
66093		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.33$ , $\theta = 51^{\circ}$ , $\varrho = 0.76$ arcsec.
66121		Ambiguous double-star solution of HIP 66121 + 66125. An alternative solution for HIP 66125 relative to HIP 66121 gives: $\Delta Hp = 3.98$ , $\theta = 149^{\circ}$ , $\varrho = 22.13$ arcsec.
66125		See HIP 66121.
66134		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.65$ , $\theta = 360^{\circ}$ , $\varrho = 1.60$ arcsec.
66182		Ambiguous double-star solution of HIP 66182 + 66183. An alternative solution for HIP 66182 relative to HIP 66183 gives: $\Delta Hp = 1.78$ , $\theta = 228^{\circ}$ , $\varrho = 13.11$ arcsec.
66183		See HIP 66182.
66408		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.40$ , $\theta = 224^{\circ}$ , $\varrho = 11.28$ arcsec.
66531		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.96$ , $\theta = 140^\circ$ , $\varrho = 1.05$ arcsec.
66668		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.61$ , $\theta = 359^\circ$ , $\varrho = 0.90$ arcsec.
66784		Ambiguous double-star solution of HIP 66784 + 66785. An alternative solution for HIP 66784 relative to HIP 66785 gives: $\Delta Hp = 3.94$ , $\theta = 283^{\circ}$ , $\varrho = 17.26$ arcsec.
66785		See HIP 66784.
66851		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.35$ , $\theta = 94^{\circ}$ , $\varrho = 0.40$ arcsec.
66928		Ambiguous double-star solution of HIP 66928 + 66933. An alternative solution for HIP 66933 gives: $\Delta Hp = 0.53$ , $\theta = 131^{\circ}$ , $\varrho = 0.24$ arcsec.
66933		See HIP 66928.
66985		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.78$ , $\theta = 165^{\circ}$ , $\varrho = 1.91$ arcsec.
67067	P	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 2.76$ , $\theta = 113^{\circ}$ , $\rho = 0.55$ arcsec.
67308	Р	The double-star analysis indicates that it may be the fainter (B) component which is variable.
67479 67480		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.75$ , $\theta = 45^{\circ}$ , $\varrho = 0.82$ arcsec. An orbital solution based on elements by R. F. Griffin, J. Astrophys. Astr., 6, 77, 1985, gives a semi-major axis of 7
		mas for the photocentre.
67506 67593		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 1.68$ , $\theta = 325^{\circ}$ , $\varrho = 10.30$ arcsec. Ambiguous double-star solution of HIP 67593 + 67594. An alternative solution for HIP 67593 relative to HIP 67594 gives: $\Delta H p = 2.05$ , $\theta = 278^{\circ}$ , $\varrho = 22.56$ arcsec.
67594		See HIP 67593. See HIP 67593.
67633		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.13$ , $\theta = 357^{\circ}$ , $\rho = 0.30$ arcsec.
67683		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.10$ , $\theta = 258^{\circ}$ , $\rho = 10.23$ arcsec.
67688		The positions given for HIP 67688 and 67694 are about 17 arcsec off from the positions in the Hipparcos Input Catalogue. The given position for HIP 67688 approximately agrees with the Hipparcos Input Catalogue position for 67694, suggesting a confusion of the two entries in either catalogue. The positions given in the Hipparcos Catalogue are probably correct, in which case the photometry may be badly affected by the pointing error.
67694		See HIP 67688.
68117		Ambiguous double-star solution of HIP 68117 + 68125. An alternative solution for HIP 68125 relative to HIP 68117 gives: $\Delta Hp = 0.92$ , $\theta = 108^{\circ}$ , $\varrho = 31.29$ arcsec.
68125		See HIP 68117.
68374		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.13$ , $\theta = 244^{\circ}$ , $\varrho = 0.88$ arcsec.
68384		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.07$ , $\theta = 127^{\circ}$ , $\varrho = 1.60$ arcsec.
68399		Ambiguous double-star solution of HIP 68399 + 68402. An alternative solution for HIP 68402 relative to HIP 68399 gives: $\Delta Hp = 1.84$ , $\theta = 102^{\circ}$ , $\varrho = 30.41$ arcsec.
68402		See HIP 68399.
68548		Ambiguous double-star solution of HIP 68548 + 68549. An alternative solution for HIP 68549 relative to HIP 68548 gives: $\Delta Hp = 0.75$ , $\theta = 155^{\circ}$ , $\varrho = 20.78$ arcsec.
68549		See HIP 68548.
68836		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.29$ , $\theta = 78^{\circ}$ , $\varrho = 1.35$ arcsec.
68887		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.28$ , $\theta = 224^{\circ}$ , $\varrho = 0.72$ arcsec.
68976		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.22$ , $\theta = 358^{\circ}$ , $\varrho = 1.98$ arcsec.
69050	Р	The double-star analysis indicates that it is the fainter (B) component which is variable.
69270		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.29$ , $\theta = 11^{\circ}$ , $\varrho = 0.24$ arcsec.
69499		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.50$ , $\theta = 204^{\circ}$ , $\varrho = 0.92$ arcsec.
69524		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.51$ , $\theta = 196^{\circ}$ , $\varrho = 17.91$ arcsec.
69583		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.08$ , $\theta = 22^\circ$ , $\varrho = 4.04$ arcsec.
69606		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.58$ , $\theta = 352^{\circ}$ , $\varrho = 13.62$ arcsec.

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69736	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H$	$p = 3.31, \theta = 342^{\circ}, \rho = 4.17$ arcsec.
69750	Ambiguous double-star so	lution of HIP 69750 + 69755. An alternative s 4, $\theta = 125^{\circ}$ , $\varrho = 22.37$ arcsec.	-
69755	See HIP 69750.		
69797	0	lution of HIP 69797 + 69799. An alternative s 2, $\theta = 26^{\circ}$ , $\varrho = 11.47$ arcsec.	solution for HIP 69799 relative to HIP
69799	See HIP 69797.		
69819	Ambiguous double-star sol	ution. An alternative solution for AS gives: $\Delta H_{I}$	$p = 0.56, \ \theta = 7^{\circ}, \ \varrho = 1.50$ arcsec.
69893	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{z}$	$p = 2.22, \ \theta = 56^{\circ}, \ \varrho = 0.94 \text{ arcsec.}$
70120	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{z}$	$p = 2.22, \ \theta = 28^{\circ}, \ \varrho = 0.27$ arcsec.
70179	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{z}$	$p = 2.95, \ \theta = 92^{\circ}, \ \varrho = 0.41$ arcsec.
70185	-	lution of HIP 70185 + 70186. An alternative s 6, $\theta = 182^{\circ}$ , $\varrho = 20.52$ arcsec.	solution for HIP 70185 relative to HIP
70186	See HIP 70185.		
70209	Ambiguous double-star sol	ution. An alternative solution for BA gives: $\Delta H_{j}$	p = -0.62 (component reversal).
70302	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{j}$	$p = 2.65, \ \theta = 254^{\circ}, \ \varrho = 3.53 \text{ arcsec.}$
70396	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{j}$	$p = 2.99, \ \theta = 256^{\circ}, \ \varrho = 2.16 \text{ arcsec.}$
70707	-	ution. An alternative solution for AC gives: $\Delta H$	-
70781		lution of HIP 70781 + 70786. An alternative s 6, $\theta = 260^{\circ}$ , $\rho = 26.85$ arcsec.	solution for HIP 70781 relative to HIP
70786	See HIP 70781.		
70808	0	ution. An alternative solution for AB gives: $\Delta H_{\mu}$	-
70926	0	ution. An alternative solution for AB gives: $\Delta H_{\mu}$	-
70939		ution of HIP 70939 + 70940. An alternative s 1, $\theta = 178^{\circ}$ , $\varrho = 20.63$ arcsec.	solution for HIP 70940 relative to HIP
70940	See HIP 70939.		
71164	0	ution. An alternative solution for AB gives: $\Delta H_{\mu}$	-
71278	0	lution of HIP 71278 + 71281. An alternative s 1, $\theta = 342^{\circ}$ , $\varrho = 31.32$ arcsec.	solution for HIP 71278 relative to HIP
71281	See HIP 71278.		
71620 71681	Ambiguous double-star so	ution. An alternative solution for AB gives: $\Delta H_{j}$ lution of HIP 71681 + 71683. An alternative s	-
	0 1	5, $\theta = 221^{\circ}$ , $\varrho = 22.13$ arcsec.	
71683	See HIP 71681.		
71686		ution. An alternative solution for CD gives: $\Delta H$	
71811		ution. An alternative solution for AB gives: $\Delta H_{\mu}$	
71867 71878	0	ution. An alternative solution for AB gives: $\Delta H_{\mu}$ lution of HIP 71878 + 71882. An alternative s	-
71882	0	$ 8, θ = 287^\circ, ρ = 27.67 \text{ arcsec.} $	
71926	Ambiguous double-star so	lution of HIP 71926 + 71928. An alternative s 9, $\theta = 134^{\circ}$ , $\varrho = 26.48$ arcsec.	solution for HIP 71928 relative to HIP
71928	See HIP 71926.		
71990	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H$	$p = 2.30, \ \theta = 57^{\circ}, \ \varrho = 10.57 \text{ arcsec.}$
72235		ution. An alternative solution for AB gives: $\Delta H$	
72476	U	lution of HIP 72476 + 72477. An alternative s 1, $\theta = 177^{\circ}$ , $\varrho = 20.63$ arcsec.	solution for HIP 72476 relative to HIP
72477	See HIP 72476.		
72504	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{\mu}$	$p = 2.31, \ \theta = 216^{\circ}, \ \varrho = 3.42 \text{ arcsec.}$
72733	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{\mu}$	$p = 3.22, \ \theta = 338^{\circ}, \ \varrho = 1.72 \text{ arcsec.}$
72745	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H$	$p = 2.35, \ \theta = 170^{\circ}, \ \varrho = 1.04 \text{ arcsec.}$
73144	Ambiguous double-star sol	ution. An alternative solution for AB gives: $\Delta H_{\mu}$	$p = 2.85, \ \theta = 277^{\circ}, \ \varrho = 0.31$ arcsec.
73182	U	ution of HIP 73182 + 73184. An alternative s 0, $\theta = 299^{\circ}$ , $\varrho = 24.25$ arcsec.	solution for HIP 73182 relative to HIP
73184	See HIP 73182.		
73192 P	0	ution. An alternative solution for AB gives: $\Delta H$ indicates that it is the fainter (B) component wh	-

73478		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.87$ , $\theta = 101^{\circ}$ , $\varrho = 17.78$ arcsec.
73529		Ambiguous double-star solution of HIP 73529 + 73531. An alternative solution for HIP 73531 relative to HIP 73529 gives: $\Delta Hp = 1.74$ , $\theta = 29^{\circ}$ , $\varrho = 19.35$ arcsec.
73531		See HIP 73529.
73603		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.03$ , $\theta = 73^{\circ}$ , $\varrho = 2.56$ arcsec.
73630		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.24$ , $\theta = 245^{\circ}$ , $\varrho = 4.64$ arcsec.
73633		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.75$ , $\theta = 33^{\circ}$ , $\varrho = 4.66$ arcsec.
73695		The double-star analysis indicates that it may be the fainter (B) component which is variable.
73723		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.85$ , $\theta = 314^{\circ}$ , $\varrho = 0.26$ arcsec.
73803		Ambiguous double-star solution of HIP 73803 + 73816. An alternative solution for HIP 73803 relative to HIP 73816 gives: $\Delta Hp = 1.99$ , $\theta = 276^{\circ}$ , $\varrho = 24.00$ arcsec.
73816		See HIP 73803.
74142		Ambiguous double-star solution of HIP 74142 + 74143. An alternative solution for HIP 74143 relative to HIP 74142 gives: $\Delta Hp = 1.76$ , $\theta = 155^{\circ}$ , $\varrho = 18.60$ arcsec.
74143		See HIP 74142.
74291 74386		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.28$ , $\theta = 50^{\circ}$ , $\varrho = 2.30$ arcsec. An alternative VIM solution for this system gives $\theta = 78^{\circ}$ for the constant star relative to the variable.
74380		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.98$ , $\theta = 78^{\circ}$ , $\rho = 1.65$ arcsec.
74937		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.48$ , $\theta = 296^{\circ}$ , $\varrho = 1.02$ arcsec. Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.48$ , $\theta = 296^{\circ}$ , $\varrho = 1.02$ arcsec.
75130		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.230$ , $\theta = 1.02$ arcsec. Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.23$ , $\theta = 170^{\circ}$ , $\rho = 1.81$ arcsec.
75416		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.14$ , $\theta = 219^{\circ}$ , $\rho = 2.33$ arcsec.
75728		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.14$ , $\theta = 2.19$ , $\varrho = 2.25$ arcsec. Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.00$ , $\theta = 330^\circ$ , $\varrho = 0.25$ arcsec.
75741		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.00, \theta = 350^\circ, \rho = 0.23$ arcsec. Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.30, \theta = 257^\circ, \rho = 0.72$ arcsec.
75840		Ambiguous double-star solution. An anternative solution for Ab gives. $\Delta T p = 0.00$ , $v = 2.07$ , $g = 0.72$ acsec. Ambiguous double-star solution of HIP 75840 + 75845. An alternative solution for HIP 75845 relative to HIP
75845		The final statistic of the formation of
76001		Component A is really the photocentre of AB.
76029		Tycho data suggest that component B is located at $\theta = 334^\circ$ , $\rho = 5.55$ arcsec.
76025		Component A (in HIP 76052) is really the photocentre of AB.
76051		See HIP 76051.
76227		Ambiguous double-star solution of HIP 76227 + 76229. An alternative solution for HIP 76227 relative to HIP 76229 gives: $\Delta Hp = 2.34$ , $\theta = 242^{\circ}$ , $\varrho = 11.77$ arcsec.
76229		See HIP 76227.
76351		Ambiguous double-star solution of HIP 76351 + 76362. An alternative solution for HIP 76362 relative to HIP 76351 gives: $\Delta Hp = 1.09$ , $\theta = 64^{\circ}$ , $\varrho = 20.93$ arcsec.
76362		See HIP 76351.
76414		Ambiguous double-star solution. An alternative solution for AD gives: $\Delta Hp = 2.14$ , $\theta = 327^{\circ}$ , $\varrho = 3.68$ arcsec.
76507		Ambiguous double-star solution of HIP 76507 + 76510. An alternative solution for HIP 76510 relative to HIP 76507 gives: $\Delta Hp = 0.86$ , $\theta = 47^{\circ}$ , $\varrho = 31.75$ arcsec.
76510		See HIP 76507.
76570		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.13$ , $\theta = 315^{\circ}$ , $\varrho = 1.12$ arcsec.
76572		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.48$ , $\theta = 227^{\circ}$ , $\varrho = 3.12$ arcsec.
76575	_	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.21$ , $\theta = 32^{\circ}$ , $\varrho = 0.96$ arcsec.
76646	Р	The double-star analysis indicates that it may be the fainter (B) component which is variable.
77202		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.67$ , $\theta = 34^{\circ}$ , $\varrho = 0.68$ arcsec.
77229		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.92$ , $\theta = 224^{\circ}$ , $\varrho = 0.32$ arcsec.
77555		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.80$ , $\theta = 334^\circ$ , $\varrho = 0.30$ arcsec.
77725		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.97$ , $\theta = 282^{\circ}$ , $\varrho = 7.08$ arcsec.
77760		The small value of the semi-major axis and its low significance in spite of the short period casts doubts on the reliability of the orbit.
78301		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.80$ , $\theta = 172^{\circ}$ , $\varrho = 0.96$ arcsec.
78331		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.11$ , $\theta = 190^{\circ}$ , $\varrho = 0.26$ arcsec.
78351		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.73$ , $\theta = 92^{\circ}$ , $\varrho = 1.52$ arcsec.
78385		Ambiguous double-star solution of HIP 78385 + 78386. An alternative solution for HIP 78385 relative to HIP 78386 gives: $\Delta Hp = 3.37$ , $\theta = 336^{\circ}$ , $\varrho = 16.81$ arcsec.
78386		See HIP 78385.
78712		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.08$ , $\theta = 111^{\circ}$ , $\varrho = 0.62$ arcsec.

DMSA No	otes DN19 78749-8
78749	Component B is really the photocentre of BC.
78759	Ambiguous double-star solution of HIP 78759 + 78760. An alternative solution for HIP 78760 gives: $\Delta Hp = 95^{\circ}$ , $\rho = 0.38$ arcsec.
78760	See HIP 78759.
79033	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.65$ , $\theta = 297^{\circ}$ , $\varrho = 5.11$ ar
79043	Ambiguous double-star solution of HIP 79043 + 79045. An alternative solution for HIP 79045 gives: $\Delta Hp = 6600$ $\theta = 167^{\circ}$ , $\rho = 1.09$ arcsec.
79045	See HIP 79043.
79384	Ambiguous double-star solution of HIP 79384 + 79388. An alternative solution for HIP 79384 gives: $\Delta Hp \theta = 276^{\circ}$ , $\rho = 0.24$ arcsec.
79388	See HIP 79384.
79925	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.04$ , $\theta = 237^{\circ}$ , $\varrho = 19.75$ a
79979	Ambiguous double-star solution of HIP 79979 + 79980. An alternative solution for HIP 79979 relative 79980 gives: $\Delta Hp = 1.53$ , $\theta = 313^{\circ}$ , $\varrho = 22.94$ arcsec.
79980	See HIP 79979.
80074	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.52$ , $\theta = 89^{\circ}$ , $\varrho = 1.09$ arcs
80140 80190	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.63$ , $\theta = 273^{\circ}$ , $\varrho = 11.77$ a Ambiguous double-star solution of HIP 80190 + 80194. An alternative solution for HIP 80190 relative 80194 gives: $\Delta Hp = 0.36$ , $\theta = 309^{\circ}$ , $\varrho = 17.06$ arcsec. The positions given for HIP 80190 and 80 about 17 arcsec off from the positions in the Hipparcos Input Catalogue. The given position for HIP approximately agrees with the Hipparcos Input Catalogue position for 80190, suggesting a confusion of entries in either catalogue. The positions given in the Hipparcos Catalogue are probably correct for both but the photometry may be badly affected by the pointing error.
80194	See HIP 80190.
80449	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.06$ , $\theta = 153^{\circ}$ , $\varrho = 3.91$ ar
80635	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.37$ , $\theta = 125^{\circ}$ , $\varrho = 12.34$ a
80776	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.45$ , $\theta = 6^{\circ}$ , $\varrho = 9.46$ arcse
80810	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.57$ , $\theta = 288^{\circ}$ , $\varrho = 3.09$ ar
80816	The results announced by X.P. Pan, M. Shao, M.M. Colavita, B.E. Hines, J.T. Armstrong, C.S. Deniss Vivekanand, D. Mozurkewich, R.S. Simon, K.J. Johnston, BAAS, 22, 1335, 1990, do not agree with the presented here.
80979	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.58$ , $\theta = 308^{\circ}$ , $\varrho = 2.19$ ar
81134	Ambiguous double-star solution of HIP 81134 + 81137. An alternative solution for HIP 81134 gives: $\Delta Hp = 15^{\circ}$ , $\rho = 0.23$ arcsec.
81137	See HIP 81134.
81194	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.45$ , $\theta = 325^{\circ}$ , $\varrho = 4.08$ ar
81225	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.51$ , $\theta = 251^{\circ}$ , $\varrho = 4.53$ ar
81320	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.65$ , $\theta = 319^{\circ}$ , $\varrho = 0.42$ ar
81492	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.80$ , $\theta = 122^{\circ}$ , $\varrho = 3.15$ ar
81494	Ambiguous double-star solution of HIP 81494 + 81496. An alternative solution for HIP 81496 relative 81494 gives: $\Delta Hp = 1.94$ , $\theta = 356^{\circ}$ , $\varrho = 0.30$ arcsec.
81496	See HIP 81494.
81562	Ambiguous double-star solution of HIP 81562 + 81565. An alternative solution for HIP 81562 relative 81565 gives: $\Delta Hp = 2.61$ , $\theta = 324^{\circ}$ , $\varrho = 20.82$ arcsec.
81565	See HIP 81562.
81569	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.68$ , $\theta = 265^{\circ}$ , $\varrho = 1.79$ ar
81589 P	
81624	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.10$ , $\theta = 243^{\circ}$ , $\varrho = 1.54$ ar
81854	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.85$ , $\theta = 205^{\circ}$ , $\varrho = 2.81$ ar
82327	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.60$ , $\theta = 222^{\circ}$ , $\varrho = 9.01$ ar
82623	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.12$ , $\theta = 282^{\circ}$ , $\varrho = 4.53$ ar
82627	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.20$ , $\theta = 198^{\circ}$ , $\varrho = 1.71$ ar
82691	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.15$ , $\theta = 15^{\circ}$ , $\varrho = 0.69$ arcs
82724	Ambiguous double-star solution of HIP 82724 + 82725. An alternative solution for HIP 82724 relative 82725 gives: $\Delta Hp = 0.40$ , $\theta = 347^{\circ}$ , $\varrho = 12.97$ arcsec.
82725	See HIP 82724.
82869 82926	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.95$ , $\theta = 321^{\circ}$ , $\varrho = 15.56$ a
	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.27$ , $\theta = 216^{\circ}$ , $\varrho = 0.72$ ar

829	36-	-85	642

DN20

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82936	GP	The double-star analysis indicates that it is the fainter (C) component which is variable.
83015		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.26$ , $\theta = 288^\circ$ , $\varrho = 3.36$ arcsec.
83024	C	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.79$ , $\theta = 88^{\circ}$ , $\varrho = 1.23$ arcsec.
83042	G	Tycho data suggest that component C is located at $\theta = 89^\circ$ , $\varrho = 19.80$ arcsec.
83369	G	Tycho data suggest that component C is located at $\theta = 235^\circ$ , $\varrho = 15.41$ arcsec.
83568		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 2.37$ , $\theta = 219^{\circ}$ , $\varrho = 16.56$ arcsec.
83609		Uncertain double-star solution of system HIP 83612 (A) + 83609 (B). TYC 7368-903-1 (at $\alpha$ = 256°.336 375, $\delta$ = -33°.766 667) may be identified with component B (HIP 83609), which is then located at $\theta$ = 301°, $\rho$ = 23.69 arcsec relative to component A.
83612		See HIP 83609.
83754		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.18$ , $\theta = 273^{\circ}$ , $\varrho = 17.29$ arcsec.
83811		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.99$ , $\theta = 206^{\circ}$ , $\varrho = 14.31$ arcsec.
83851		Ambiguous double-star solution of HIP 83851 + 83852. An alternative solution for HIP 83851 relative to HIP 83852 gives: $\Delta Hp = 1.24$ , $\theta = 280^{\circ}$ , $\varrho = 13.64$ arcsec. HIP 83851 is probably affected by a grid-step error.
83852		See HIP 83851.
83883		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.30$ , $\theta = 188^{\circ}$ , $\varrho = 0.38$ arcsec.
83935		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.78$ , $\theta = 1^{\circ}$ , $\varrho = 1.42$ arcsec.
83960		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp$ = 3.26, $\theta$ = 17°, $\varrho$ = 13.52 arcsec.
84003		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ , $\theta = 268^{\circ}$ , $\varrho = 0.51$ arcsec.
84174		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.39$ , $\theta = 21^{\circ}$ , $\varrho = 16.47$ arcsec.
84301	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.55$ , $\theta = 325^{\circ}$ , $\varrho = 1.39$ arcsec. The double-star analysis indicates that it may be the fainter (B) component which is variable.
84345		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.73$ , $\theta = 126^{\circ}$ , $\varrho = 5.11$ arcsec.
84360		Ambiguous double-star solution of HIP 84360 + 84363. An alternative solution for HIP 84363 relative to HIP 84360 gives: $\Delta Hp = 3.00$ , $\theta = 119^{\circ}$ , $\varrho = 27.37$ arcsec.
84363		See HIP 84360.
84405		Tycho data suggest that component A is located at $\theta = 340^{\circ}$ , $\varrho = 5.33$ arcsec relative to component B.
84451		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.77$ , $\theta = 297^{\circ}$ , $\varrho = 4.87$ arcsec.
84512		Component A (in HIP 84513) is really the photocentre of AB.
84513		See HIP 84512.
84581		Ambiguous double-star solution of HIP 84581 + 84582. An alternative solution for HIP 84581 relative to HIP 84582 gives: $\Delta Hp = 1.90$ , $\theta = 182^{\circ}$ , $\varrho = 22.28$ arcsec.
84582		See HIP 84581.
84584		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.15$ , $\theta = 139^{\circ}$ , $\varrho = 0.45$ arcsec.
84842		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.87$ , $\theta = 217^{\circ}$ , $\varrho = 0.14$ arcsec.
84999		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.34$ , $\theta = 297^{\circ}$ , $\varrho = 12.51$ arcsec. Tycho data suggest that component B is located at $\theta = 304^{\circ}$ , $\varrho = 17.10$ arcsec.
85036		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.26$ , $\theta = 259^{\circ}$ , $\varrho = 2.73$ arcsec.
85045		Component A is really the photocentre of AB.
85153		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.98$ , $\theta = 354^{\circ}$ , $\varrho = 0.48$ arcsec. Tycho data suggest that component B is located at $\theta = 76^{\circ}$ , $\varrho = 23.45$ arcsec.
85209		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.29$ , $\theta = 23^{\circ}$ , $\varrho = 1.46$ arcsec.
85227		Ambiguous double-star solution of HIP 85227 (B) + 85229 (A). An alternative solution for HIP 85227 relative to HIP 85229 gives: $\Delta Hp = 0.78$ , $\theta = 327^{\circ}$ , $\varrho = 24.51$ arcsec. TYC 1003-1434-1 (at $\alpha = 261^{\circ}.228159$ , $\delta = +13^{\circ}.328395$ ) may be identified with component A (HIP 85229). Component B is then located at $\theta = 325^{\circ}$ , $\varrho = 26.49$ arcsec relative to component A.
85229		See HIP 85227.
85440		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.55$ , $\theta = 21^{\circ}$ , $\varrho = 0.78$ arcsec.
85460		Ambiguous double-star solution of HIP 85460 + 85463. An alternative solution for HIP 85460 relative to HIP 85463 gives: $\Delta Hp = 2.15$ , $\theta = 278^{\circ}$ , $\varrho = 27.83$ arcsec.
85463		See HIP 85460.
85605		Ambiguous double-star solution of HIP 85605 (B) + 85607 (A). An alternative solution for HIP 85605 relative to HIP 85607 gives: $\Delta Hp = 0.76$ , $\theta = 228^{\circ}$ , $\varrho = 21.58$ arcsec. TYC 2079-1800-1 (at $\alpha = 262^{\circ}.401097$ , $\delta = +24^{\circ}.653099$ ) may be identified with component B (HIP 85605), which is then located at $\theta = 231^{\circ}$ , $\varrho = 21.34$ arcsec relative to component A.
85607		See HIP 85605.
85642		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.14$ , $\theta = 207^{\circ}$ , $\varrho = 2.65$ arcsec.

MSA No	tes DN21	85868-8860
85868	Ambiguous double-star solution of HIP 85868 + 85872. An alternative solution for 85868 gives: $\Delta Hp = 1.04$ , $\theta = 97^{\circ}$ , $\varrho = 17.35$ arcsec.	or HIP 85872 relative to HI
85872	See HIP 85868.	
85931	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.39$ ,	
86011	Ambiguous double-star solution. An alternative solution for AD gives: $\Delta Hp = 3.90$ ,	-
86032	An orbital solution based on elements by H.J. Augensen, W.D. Heintz, Publ. Astro- gives a semi-major axis of 71 mas for the photocentre.	
86230	Ambiguous double-star solution of HIP 86230 + 86231. An alternative solution for 86231 gives: $\Delta Hp = 3.03$ , $\theta = 341^{\circ}$ , $\varrho = 12.94$ arcsec.	or HIP 86230 relative to HII
86231	See HIP 86230.	
86441	Ambiguous double-star solution of HIP 86441 + 86444. An alternative solution for 86444 gives: $\Delta Hp = 1.43$ , $\theta = 267^{\circ}$ , $\varrho = 27.31$ arcsec.	or HIP 86441 relative to HII
86444	See HIP 86441.	
86614	Ambiguous double-star solution of HIP 86614 + 86620. An alternative solution for 86614 gives: $\Delta Hp = 4.33$ , $\theta = 181^{\circ}$ , $\varrho = 0.83$ arcsec.	or HIP 86620 relative to HII
86620	See HIP 86614.	
86692	Ambiguous double-star solution of HIP 86692 + 86697. An alternative solution for H $\theta$ = 266°, $\varrho$ = 0.34 arcsec.	HIP 86697 gives: $\Delta Hp = 0.75$
86697	See HIP 86692.	
86873	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.90$ ,	-
86895	Ambiguous double-star solution of HIP 86895 + 86896. An alternative solution for 86895 gives: $\Delta Hp = 1.28$ , $\theta = 162^{\circ}$ , $\varrho = 18.01$ arcsec.	or HIP 86896 relative to HII
86896	See HIP 86895.	
86961	Ambiguous double-star solution of HIP 86961 + 86963. An alternative solution for 86963 gives: $\Delta Hp = 1.26$ , $\theta = 86^{\circ}$ , $\varrho = 22.52$ arcsec.	or HIP 86961 relative to HII
86963	See HIP 86961.	
86998	Ambiguous double-star solution of HIP 86998 + 87000. An alternative solution for 86998 gives: $\Delta Hp = 3.18$ , $\theta = 0^{\circ}$ , $\varrho = 0.77$ arcsec.	or HIP 87000 relative to HI
87000	See HIP 86998.	
87029	Uncertain double-star solution of system HIP 87033 (A) + 87029 (B). TYC 7897- $\delta = -43^{\circ}$ .490 244) may be identified with component B (HIP 87029), which $\rho = 13.10$ arcsec relative to component A.	
87033	See HIP 87029.	
87186	Ambiguous double-star solution of HIP 87186 (A) + 87187 (B). An alternative so to HIP 87186 gives: $\Delta Hp = 2.04$ , $\theta = 76^{\circ}$ , $\varrho = 19.26$ arcsec. TYC 416-18 $\delta = +1^{\circ}.165491$ ) may be identified with component B (HIP 87187), which is then arcsec relative to component A.	359-1 (at $\alpha = 267^{\circ}.187825$
87187	See HIP 87186.	
87314 P	An alternative VIM solution for this system gives $\theta = 90^{\circ}$ for the constant star relati	ve to the variable.
87437	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.74$ ,	$\theta = 358^{\circ}$ , $\varrho = 0.38$ arcsec.
87768	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.07$ ,	$\theta = 147^{\circ}$ , $\varrho = 1.06$ arcsec.
87778	Ambiguous double-star solution of HIP 87778 + 87784. An alternative solution for H $\theta = 247^{\circ}$ , $\rho = 0.26$ arcsec.	IIP 87784 gives: $\Delta Hp = 0.58$
87784	See HIP 87778.	
87838	Ambiguous double-star solution of HIP 87838 + 87842. An alternative solution for 87838 gives: $\Delta Hp = 2.25$ , $\theta = 129^{\circ}$ , $\varrho = 26.71$ arcsec.	or HIP 87842 relative to HI
87842	See HIP 87838.	
87889	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.26$ ,	-
87920	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.91$ ,	-
88355	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.60$ ,	-
88363	Ambiguous double-star solution of HIP 88363 + 88364. An alternative solution for 88363 gives: $\Delta Hp = 2.28$ , $\theta = 14^{\circ}$ , $\varrho = 16.59$ arcsec.	or HIP 88364 relative to HI
	See HIP 88363.	
88364		
88394	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp$ = 3.61,	-
88394 88514	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.61$ , Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.40$ ,	$\theta = 315^{\circ}, \ \varrho = 0.67$ arcsec.
88394	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp$ = 3.61,	$\theta = 315^{\circ}, \ \varrho = 0.67$ arcsec. $\theta = 226^{\circ}, \ \varrho = 4.50$ arcsec.

88623		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.72$ , $\theta = 106^{\circ}$ , $\varrho = 13.49$ arcsec.
88762	G	Ambiguous double-star solution. An alternative solution for AD gives: $\Delta Hp = 0.61$ , $\theta = 175^{\circ}$ , $\varrho = 2.16$ arcsec.
		The given position for HIP 88762 is closer to the Hipparcos Input Catalogue position of HIC 88759 than to HIC 88762, suggesting that the binary solved as HIP 88762 is really components BC in HIC 88759.
88895		
		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.86$ , $\theta = 52^\circ$ , $\varrho = 0.92$ arcsec.
89351		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.39$ , $\theta = 246^{\circ}$ , $\varrho = 1.56$ arcsec.
89383		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.24$ , $\theta = 47^{\circ}$ , $\varrho = 2.24$ arcsec.
89524		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.74$ , $\theta = 139^{\circ}$ , $\varrho = 0.73$ arcsec.
89526		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.83$ , $\theta = 165^{\circ}$ , $\varrho = 0.30$ arcsec.
89750		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.08$ , $\theta = 111^{\circ}$ , $\varrho = 0.80$ arcsec.
89976		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.23$ , $\theta = 354^{\circ}$ , $\varrho = 2.34$ arcsec.
90100	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.73$ , $\theta = 144^{\circ}$ , $\varrho = 3.75$ arcsec.
90171		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.42$ , $\theta = 13^{\circ}$ , $\varrho = 0.92$ arcsec.
90222		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.74$ , $\theta = 353^{\circ}$ , $\varrho = 4.73$ arcsec.
90287		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 2.47$ , $\theta = 208^{\circ}$ , $\varrho = 5.53$ arcsec.
90288		Ambiguous double-star solution. An alternative solution for AE gives: $\Delta Hp = 3.14$ , $\theta = 20^{\circ}$ , $\varrho = 0.95$ arcsec.
90300		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.04$ , $\theta = 341^{\circ}$ , $\varrho = 1.14$ arcsec.
90372		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.92$ , $\theta = 305^{\circ}$ , $\varrho = 0.54$ arcsec.
90441		Component A is really the photocentre of AP.
90465		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.38$ , $\theta = 248^{\circ}$ , $\varrho = 17.85$ arcsec.
90480		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.97$ , $\theta = 263^{\circ}$ , $\varrho = 4.28$ arcsec.
90744		Ambiguous double-star solution of HIP 90744 + 90750. An alternative solution for HIP 90750 relative to HIP
		90744 gives: $\Delta Hp = 3.56$ , $\theta = 114^{\circ}$ , $\varrho = 20.01$ arcsec.
90750		See HIP 90744.
90825		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.62$ , $\theta = 67^{\circ}$ , $\varrho = 1.21$ arcsec.
90893		Ambiguous double-star solution of HIP 90893 + 90898. An alternative solution for HIP 90893 relative to HIP 90898 gives: $\Delta H \rho = 5.13$ , $\theta = 340^{\circ}$ , $\varrho = 29.32$ arcsec.
90898		See HIP 90893.
90937		Ambiguous double-star solution of HIP 90937 + 90942. An alternative solution for HIP 90942 relative to HIP
		90937 gives: $\Delta Hp = 0.63$ , $\theta = 105^{\circ}$ , $\varrho = 26.50$ arcsec.
90942		See HIP 90937.
90943		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.72$ , $\theta = 38^{\circ}$ , $\varrho = 1.85$ arcsec.
90951		Ambiguous double-star solution of HIP 90951 + 90954. An alternative solution for HIP 90951 relative to HIP
		90954 gives: $\Delta Hp = 2.60$ , $\theta = 301^{\circ}$ , $\varrho = 28.79$ arcsec.
90954		See HIP 90951.
91115		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.52$ , $\theta = 28^{\circ}$ , $\varrho = 20.25$ arcsec.
91186		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.82$ , $\theta = 297^{\circ}$ , $\varrho = 1.38$ arcsec.
91288		Ambiguous double-star solution of HIP 91288 + 91291. An alternative solution for HIP 91288 gives: $\Delta Hp = 1.11$ , $\theta = 357^{\circ}$ , $\varrho = 0.28$ arcsec.
91291		See HIP 91288.
91416		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.51$ , $\theta = 344^{\circ}$ , $\varrho = 0.41$ arcsec.
91430		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.34$ , $\theta = 90^{\circ}$ , $\varrho = 0.64$ arcsec.
91529		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.32$ , $\theta = 219^{\circ}$ , $\varrho = 8.47$ arcsec.
91703	Р	An alternative VIM solution for this system gives $\theta = 329^{\circ}$ for the constant star relative to the variable.
91728		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.61$ , $\theta = 304^{\circ}$ , $\varrho = 3.40$ arcsec.
91832	Р	The double-star analysis indicates that it is probably the fainter (B) component which is variable.
91900		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ , $\theta = 81^{\circ}$ , $\varrho = 1.37$ arcsec.
92007		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.58$ , $\theta = 22^{\circ}$ , $\varrho = 15.23$ arcsec. Tycho data suggest that component B is located at $\theta = 24^{\circ}$ , $\varrho = 17.14$ arcsec.
92238		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.55$ , $\theta = 10^{\circ}$ , $\varrho = 17.96$ arcsec.
92284		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.53$ , $\theta = 168^{\circ}$ , $\rho = 3.87$ arcsec.
92304		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.30$ , $\theta = 130^\circ$ , $\varrho = 5.85$ arcsec. Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.73$ , $\theta = 134^\circ$ , $\varrho = 5.85$ arcsec.
92304 92423		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.48$ , $\theta = 104^{\circ}$ , $\varrho = 2.87$ arcsec.
92423 92492		Ambiguous double-star solution. An alternative solution for AB gives. $\Delta TP = 3.48$ , $\theta = 104^\circ$ , $\theta = 2.67$ arcsec. Ambiguous double-star solution of HIP 92492 + 92493. An alternative solution for HIP 92492 relative to HIP
		92493 gives: $\Delta Hp = 3.92$ , $\theta = 336^{\circ}$ , $\varrho = 28.92$ arcsec.
92493		See HIP 92492.
92789		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.40$ , $\theta = 135^{\circ}$ , $\varrho = 2.07$ arcsec.

dmsa n	lotes	DN23	92809–9557
92809	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	.94, $\theta = 221^{\circ}$ , $\varrho = 1.67$ arcsec.
92863	-	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	
92872		ion based on elements by R.F. Griffin, Observatory, 101, 208, 1	
92926	Component A	s really the photocentre of AB.	
92932	0	ble-star solution of HIP 92932 + 92933. An alternative solution $\Delta Hp = 3.23$ , $\theta = 61^{\circ}$ , $\varrho = 23.50$ arcsec.	on for HIP 92933 relative to H
92933	See HIP 92932		
92955	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 3$	.04, $\theta = 171^{\circ}$ , $\varrho = 0.82$ arcsec.
93072	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 1$	.38, $\theta = 225^{\circ}$ , $\varrho = 3.46$ arcsec.
93409	-	ble-star solution of HIP 93409 + 93410. An alternative solution $\Delta Hp$ = 1.97, $\theta$ = 168°, $\varrho$ = 20.50 arcsec.	on for HIP 93410 relative to H
93410	See HIP 93409		
93424	Ambiguous do	ble-star solution. An alternative solution for BA gives: $\Delta Hp = -$	0.06 (component reversal).
93438	Uncertain dou relative to co	le-star solution. Tycho data suggest that component B is locat nponent A.	ted at $\theta = 87^\circ$ , $\varrho = 14.74$ arcs
93466	=	s really the photocentre of BC.	
93492	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	.96, $\theta = 294^{\circ}$ , $\varrho = 1.06$ arcsec.
93506	P The double-sta	analysis indicates that it is probably the fainter (B) component	which is variable.
93539	Probably doub	e at 1.5 arcsec separation.	
93666	An alternative	'IM solution for this system gives $\theta = 317^{\circ}$ for the constant star	relative to the variable.
93835	$\delta = -1^{\circ}.342$	le-star solution of system HIP 93836 (A) + 93835 (B). TYC 51 380) may be identified with component B (HIP 93835), whi sec relative to component A.	
93836	See HIP 93835		
93870	Tycho data sug	gest that component B is located at $\theta = 85^{\circ}$ , $\varrho = 16.06$ arcsec.	
94022	U	ble-star solution of HIP 94022 + 94024. An alternative solution $\Delta Hp = 0.75$ , $\theta = 343^{\circ}$ , $\varrho = 22.87$ arcsec.	on for HIP 94022 relative to H
94024	See HIP 94022		
94049	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 3$	.08, $\theta = 276^{\circ}$ , $\varrho = 3.93$ arcsec.
94098	8	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	.09, $\theta = 323^{\circ}$ , $\varrho = 0.79$ arcsec.
94223	ş e	gest that component B is located at $\theta = 291^{\circ}$ , $\rho = 20.85$ arcsec.	
94307	0	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	· · · ·
94317	-	ble-star solution of HIP 94317 + 94319. An alternative solution $\Delta Hp = 1.20$ , $\theta = 352^{\circ}$ , $\varrho = 18.39$ arcsec.	on for HIP 94317 relative to H
94319	See HIP 94317		
94349		nents derived by R.S. Harrington, Publ. Astr. Soc. Pac., 89, 214,	
94371	mas for the p		
94409	0	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	-
94462		ble-star solution. An alternative solution for AB gives: $\Delta H p = 2$	
94683	0	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 4$	-
94720 94959	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ ble-star solution of HIP 94959 + 94961. An alternative solution $\Delta Hp = 2.09, \ \theta = 19^{\circ}, \ \varrho = 20.46$ arcsec. Component B (in HII)	on for HIP 94961 relative to H
94961	See HIP 94959		
95299	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	.63, $\theta = 122^{\circ}$ , $\varrho = 1.01$ arcsec.
95313	P The double-sta	analysis indicates that it may be the fainter (B) component which	ch is variable.
95324	U	ble-star solution of HIP 95324 + 95326. An alternative solution $\Delta Hp = 1.22$ , $\theta = 159^{\circ}$ , $\varrho = 16.18$ arcsec.	on for HIP 95326 relative to H
95326	See HIP 95324		
95328	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	.71, $\theta = 31^{\circ}$ , $\varrho = 1.05$ arcsec.
95338	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 2$	.40, $\theta = 66^{\circ}$ , $\varrho = 0.28$ arcsec.
95348	Ambiguous do	ble-star solution. An alternative solution for AB gives: $\Delta Hp = 0$	.93, $\theta = 79^{\circ}$ , $\varrho = 0.30$ arcsec.
95579		ble-star solution. An alternative solution for AB gives: $\Delta Hp = 0$	40 0 1010 1100

95704		Ambiguous double-star solution of HIP 95704 + 95712. An alternative solution for HIP 95704 relative to HIP 95712 gives: $\Delta H p = 1.68$ , $\theta = 278^{\circ}$ , $\varrho = 13.76$ arcsec.
95712		See HIP 95704.
95777		An alternative VIM solution for this system gives $\theta = 138^{\circ}$ for the constant star relative to the variable.
95859		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.43$ , $\theta = 87^{\circ}$ , $\varrho = 14.77$ arcsec.
95862		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.31$ , $\theta = 247^{\circ}$ , $\varrho = 0.42$ arcsec.
96002		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.41$ , $\theta = 229^{\circ}$ , $\varrho = 11.07$ arcsec.
96241		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.99$ , $\theta = 6^{\circ}$ , $\varrho = 0.13$ arcsec.
96423		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.13$ , $\theta = 149^{\circ}$ , $\varrho = 16.15$ arcsec. Tycho data suggest that component B is located at $\theta = 151^{\circ}$ , $\varrho = 11.74$ arcsec.
96446		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.25$ , $\theta = 125^{\circ}$ , $\varrho = 5.45$ arcsec.
96493		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.48$ , $\theta = 327^{\circ}$ , $\varrho = 0.52$ arcsec.
96643		Ambiguous double-star solution of HIP 96643 + 96646. An alternative solution for HIP 96643 relative to HIP 96646 gives: $\Delta Hp = 1.21$ , $\theta = 332^{\circ}$ , $\varrho = 23.24$ arcsec.
96646		See HIP 96643.
96660		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.28$ , $\theta = 231^{\circ}$ , $\varrho = 1.41$ arcsec.
96840		An alternative VIM solution for this system gives $\theta = 297^{\circ}$ for the constant star relative to the variable.
96913		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.08$ , $\theta = 259^{\circ}$ , $\varrho = 2.32$ arcsec.
96929		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ , $\theta = 213^{\circ}$ , $\rho = 0.40$ arcsec.
96980		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.62$ , $\theta = 157^{\circ}$ , $\varrho = 1.46$ arcsec.
96999		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.71$ , $\theta = 256^{\circ}$ , $\varrho = 1.24$ arcsec.
97096		Ambiguous double-star solution of HIP 97096 (B) + 97099 (A). An alternative solution for HIP 97096 relative to HIP 97099 gives: $\Delta Hp = 3.52$ , $\theta = 307^{\circ}$ , $\varrho = 20.11$ arcsec. TYC 9097-1689-1 (at $\alpha = 295^{\circ}988362$ , $\delta = -66^{\circ}293304$ ) may be identified with component B (HIP 97096), which is then located at $\theta = 308^{\circ}$ , $\varrho = 21.49$ arcsec relative to component A.
97099		See HIP 97096.
97172		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.24$ , $\theta = 287^{\circ}$ , $\varrho = 0.53$ arcsec.
97241		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.50$ , $\theta = 340^{\circ}$ , $\varrho = 13.68$ arcsec.
97322	Р	The double-star analysis indicates that it is the fainter (B) component which is variable.
97446		An orbital solution based on elements by R.F. Griffin, G.A. Radford, Observatory, 97, 169, 1977, gives a semi- major axis of 5 mas for the photocentre.
97447		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.93$ , $\theta = 277^{\circ}$ , $\varrho = 10.85$ arcsec.
97481		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.52$ , $\theta = 205^{\circ}$ , $\varrho = 3.95$ arcsec.
97513		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.42$ , $\theta = 33^{\circ}$ , $\varrho = 0.45$ arcsec.
97578		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.51$ , $\theta = 132^{\circ}$ , $\varrho = 8.39$ arcsec.
97631		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.21$ , $\theta = 173^{\circ}$ , $\varrho = 18.61$ arcsec.
97697		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.24$ , $\theta = 31^{\circ}$ , $\varrho = 1.67$ arcsec.
97700		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.93$ , $\theta = 313^{\circ}$ , $\varrho = 3.95$ arcsec.
97807		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.93$ , $\theta = 110^{\circ}$ , $\varrho = 1.45$ arcsec.
97830		Ambiguous double-star solution of HIP 97830 + 97831. An alternative solution for HIP 97830 relative to HIP 97831 gives: $\Delta Hp = 3.84$ , $\theta = 188^{\circ}$ , $\varrho = 26.67$ arcsec.
97831		See HIP 97830.
97849		An alternative VIM solution for this system gives $\theta = 24^{\circ}$ for the constant star relative to the variable.
97933		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.15$ , $\theta = 204^{\circ}$ , $\varrho = 7.12$ arcsec.
98123		Periodogram analysis indicates that this is an astrometric binary with period 90 days and semi-major axis 27 mas for the photocentre. A full orbital solution does not give a significantly different parallax.
98253		Component A is really the photocentre of AB.
98356		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ , $\theta = 162^{\circ}$ , $\varrho = 5.02$ arcsec.
98528		Bad fit of system HIP 98528 + 98534 is probably due to unsolved duplicity of HIP 98528 (with 0.6 arcsec separation).
98534		See HIP 98528. An alternative VIM solution for this system gives $0 = 211^\circ$ for the constant star relative to the variable
98662 08670		An alternative VIM solution for this system gives $\theta = 211^{\circ}$ for the constant star relative to the variable.
98679		Ambiguous double-star solution of HIP 98679 + 98681. An alternative solution for HIP 98681 relative to HIP 98679 gives: $\Delta H p = 1.82$ , $\theta = 36^{\circ}$ , $\varrho = 15.15$ arcsec.
98681 08770		See HIP 98679. Ambiguous double star solution of HIP 09770 + 09772. An alternative solution for HIP 09770 gives: A $H_{P} = 1.42$
98770		Ambiguous double-star solution of HIP 98770 + 98773. An alternative solution for HIP 98770 gives: $\Delta Hp = 1.43$ , $\theta = 283^{\circ}$ , $\varrho = 0.26$ arcsec.

DMSA	Note	es DN25	98773–101441
98773		See HIP 98770.	
98826	Р	The double-star analysis indicates that it may be the fainter (B) component whic	h is variable.
98874		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	
98927		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0$ .	-
99045		Ambiguous double-star solution of HIP 99045 + 99048. An alternative solution 99048 gives: $\Delta Hp = 3.16$ , $\theta = 274^{\circ}$ , $\varrho = 22.64$ arcsec.	-
99048		See HIP 99045.	
99204		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2$ .	<b>.09</b> , $\theta = 90^{\circ}$ , $\varrho = 6.15$ arcsec.
99336		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ An alternative VIM solution for this system gives $\theta = 269^{\circ}$ for the constant star	ar relative to the variable.
99350		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2$ .	
99579		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	-
99605		Ambiguous double-star solution of HIP 99605 + 99606. An alternative solution for $\theta = 248^{\circ}$ , $\varrho = 0.51$ arcsec.	or HIP 99606 gives: $\Delta Hp = 0.34$ ,
99606		See HIP 99605.	
99740		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	
99753		Ambiguous double-star solution of HIP 99753 + 99756. An alternative solution 99753 gives: $\Delta Hp = 2.55$ , $\theta = 40^{\circ}$ , $\varrho = 19.00$ arcsec.	on for HIP 99756 relative to HIP
99756		See HIP 99753.	70 4 440 40.07
99767		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2$ .	-
99813		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	-
99857		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	
99875		Ambiguous double-star solution of HIP 99875 + 99879. An alternative solution 99875 gives: $\Delta Hp = 1.57$ , $\theta = 115^{\circ}$ , $\varrho = 31.62$ arcsec.	on for HIP 99879 relative to HIP
99879		See HIP 99875.	00 0 750 10 71
100023		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2$ .	-
100036		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	-
100130 100141		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1$ . Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1$ .	-
100141		Component B is really the photocentre of BC.	22, 0 = 500, p = 0.54 at csec.
100192		Ambiguous double-star solution of HIP 100222 + 100226. An alternative solution 100226 gives: $\Delta Hp = 2.20, \ \theta = 319^{\circ}, \ \varrho = 27.68$ arcsec.	on for HIP 100222 relative to HIP
100226		See HIP 100222.	
100286	G	Uncertain triple-star solution of system HIP 100288 (AB) + 100286 (C). TYC 69 $\delta = -29$ °. 191 337) may be identified with component C (HIP 100286), wh $\rho = 27.21$ arcsec relative to component A.	
100288	G	See HIP 100286.	
100525		Ambiguous double-star solution of HIP 100525 + 100531. An alternative solution 100525 gives: $\Delta Hp = 1.81$ , $\theta = 149^{\circ}$ , $\varrho = 21.91$ arcsec.	on for HIP 100531 relative to HIP
100531		See HIP 100525.	
100552		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	
100607		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2$ .	
100638		Ambiguous double-star solution of HIP 100638 + 100640. An alternative solution 100638 gives: $\Delta Hp = 2.24$ , $\theta = 76^{\circ}$ , $\varrho = 26.15$ arcsec.	on for HIP 100640 relative to HIP
100640		See HIP 100638.	
100695		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta H p = 0$ .	-
100864		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 3$ .	
100914		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	
101092		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	11, $\theta = 108^{\circ}$ , $\rho = 9.39$ arcsec.
101233		Component B (in HIP 101233) is really the photocentre of BC.	
101235 101288		See HIP 101233. Ambiguous double-star solution An alternative solution for AS gives: $\Delta Hn = 0.1$	$81.4 - 158^{\circ} = 0.22$ areas
101288		Ambiguous double-star solution. An alternative solution for AS gives: $\Delta Hp = 0.4$ Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = -0.4$	
101317		Ambiguous double-star solution. An alternative solution for BA gives: $\Delta H p = -4$ Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H p = 3$ .	-
101353		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ . Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3$ .	
101333		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2$ .	
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101539-109339

DN26

101539		Ambiguous double-star solution of HIP 101539 + 101544. An alternative solution for HIP 101539 relative to HIP 101544 gives: $\Delta Hp = 1.80$ , $\theta = 299^{\circ}$ , $\varrho = 21.59$ arcsec.
101544		See HIP 101539.
101574		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = -0.24$ (component reversal).
101722		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp$ = 2.11, $\theta$ = 87°, $\varrho$ = 0.42 arcsec.
102061		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.11$ , $\theta = 88^{\circ}$ , $\varrho = 5.36$ arcsec.
102141		Ambiguous double-star solution. An alternative solution for BC gives: $\Delta Hp = 0.08$ , $\theta = 22^{\circ}$ , $\varrho = 3.99$ arcsec.
102320		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.88$ , $\theta = 21^{\circ}$ , $\varrho = 0.28$ arcsec.
102796		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.22$ , $\theta = 138^{\circ}$ , $\varrho = 0.72$ arcsec.
103390		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.59$ , $\theta = 327^{\circ}$ , $\varrho = 1.05$ arcsec.
103767		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.35$ , $\theta = 233^{\circ}$ , $\varrho = 1.78$ arcsec.
103855		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.42$ , $\theta = 357^{\circ}$ , $\varrho = 5.88$ arcsec.
104093	G	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.35$ , $\theta = 177^{\circ}$ , $\varrho = 4.10$ arcsec.
104416		Ambiguous double-star solution. An alternative solution for BA gives: $\Delta Hp = 0.04$ , $\theta = 97^{\circ}$ , $\varrho = 0.59$ arcsec.
104997		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.47$ , $\theta = 219^{\circ}$ , $\varrho = 1.04$ arcsec.
105259		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.13$ , $\theta = 309^{\circ}$ , $\varrho = 0.15$ arcsec.
105324	Р	The double-star analysis indicates that it may be the fainter (B) component which is variable.
105445		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.99$ , $\theta = 48^{\circ}$ , $\varrho = 0.58$ arcsec.
105587		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.56$ , $\theta = 195^{\circ}$ , $\varrho = 1.53$ arcsec.
105655		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.61$ , $\theta = 230^{\circ}$ , $\varrho = 0.20$ arcsec.
106059		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 1.94$ , $\theta = 282^{\circ}$ , $\varrho = 0.30$ arcsec.
106255	G	Periodogram analysis indicates that this is an astrometric binary with period 684 days and semi-major axis 31 mas for the photocentre. An orbital solution assuming zero eccentricity gives a parallax of 123.21 mas (standard error 3.97 mas).
106264		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.96$ , $\theta = 9^{\circ}$ , $\varrho = 0.48$ arcsec.
106923		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.25$ , $\theta = 277^{\circ}$ , $\rho = 8.19$ arcsec.
106983		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.85$ , $\theta = 171^{\circ}$ , $\varrho = 1.07$ arcsec.
107089		An orbital solution based on elements by W.H. Christie, Astrophys. J., 83, 433, 1936, gives a semi-major axis of 30 mas and a slightly smaller parallax, 44.40 mas (standard error 0.60 mas).
107240		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.06$ , $\theta = 229^{\circ}$ , $\varrho = 0.69$ arcsec.
107242		An alternative VIM solution for this system gives $\theta = 162^{\circ}$ for the constant star relative to the variable.
107396		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.89$ , $\theta = 83^{\circ}$ , $\varrho = 0.58$ arcsec.
107404		Tycho data suggest that component B is located at $\theta = 224^{\circ}$ , $\varrho = 27.66$ arcsec.
107438		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.77$ , $\theta = 341^{\circ}$ , $\varrho = 0.28$ arcsec.
108048		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.85$ , $\theta = 192^{\circ}$ , $\varrho = 20.61$ arcsec.
108111		Ambiguous double-star solution of HIP 108111 + 108115. An alternative solution for HIP 108115 relative to HIP 108111 gives: $\Delta H p = 2.56$ , $\theta = 93^{\circ}$ , $\varrho = 12.64$ arcsec.
108115		See HIP 108111.
108119		Component B (in HIP 108121) is really the photocentre of BC.
108121		See HIP 108119.
108162		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.43$ , $\theta = 72^{\circ}$ , $\varrho = 1.77$ arcsec.
108431		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.08$ , $\theta = 172^{\circ}$ , $\varrho = 1.23$ arcsec.
108776		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.95$ , $\theta = 198^{\circ}$ , $\varrho = 2.88$ arcsec.
108893		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.09$ , $\theta = 181^{\circ}$ , $\varrho = 3.73$ arcsec.
109035		Ambiguous double-star solution of HIP 109035 (B) + 109038 (A). An alternative solution for HIP 109035 relative to HIP 109038 gives: $\Delta Hp = 2.45$ , $\theta = 299^{\circ}$ , $\varrho = 25.03$ arcsec. TYC 5224-1809-1 (at $\alpha = 331^{\circ}325860$ , $\delta = -1^{\circ}420236$ ) may be identified with component B (HIP 109035), which is then located at $\theta = 304^{\circ}$ , $\varrho = 25.50$ arcsec relative to component A.
109038		See HIP 109035.
109115		Ambiguous double-star solution of HIP 109115 + 109118. An alternative solution for HIP 109115 relative to HIP 109118 gives: $\Delta Hp = 1.82$ , $\theta = 311^{\circ}$ , $\varrho = 16.49$ arcsec.
109118		See HIP 109115.
109237		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.31$ , $\theta = 50^{\circ}$ , $\varrho = 1.45$ arcsec.
109335		Ambiguous double-star solution of HIP 109335 + 109339. An alternative solution for HIP 109335 relative to HIP 109339 gives: $\Delta Hp = 2.46$ , $\theta = 336^{\circ}$ , $\varrho = 26.56$ arcsec.
109339		See HIP 109335.

DMSA	Notes	S DN27	109464–114396
109464		Ambiguous double-star solution of HIP 109464 + 109467. An alternative 109467 gives: $\Delta Hp = 3.58$ , $\theta = 305^{\circ}$ , $\varrho = 22.80$ arcsec.	solution for HIP 109464 relative to HIP
109467		See HIP 109464.	
109505 109657		The double-star analysis indicates that it may be the fainter (B) componer Ambiguous double-star solution of HIP 109657 + 109659. An alternative 2.33, $\theta = 151^{\circ}$ , $\varrho = 11.06$ arcsec.	
109659		See HIP 109657.	
109695		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	Ap = -0.10 (component reversal).
109788		Ambiguous double-star solution of HIP 109788 + 109790. An alternative 109788 gives: $\Delta Hp = 2.32$ , $\theta = 25^{\circ}$ , $\varrho = 20.86$ arcsec.	solution for HIP 109790 relative to HIP
109790		See HIP 109788.	
109908		Ambiguous double-star solution. An alternative solution for BA gives: $\Delta H$	
109986		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H$	
110113		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H$	
110237		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H$	
110583		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta F$	•
110629		Ambiguous double-star solution of HIP 110629 + 110632. An alternative 110629 gives: $\Delta Hp = 2.64$ , $\theta = 83^{\circ}$ , $\varrho = 14.99$ arcsec.	solution for HIP 110632 relative to HIP
110632		See HIP 110629.	
110856		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H$	
110922		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	
111123		The B component may be spurious. Periodogram analysis indicates that th with period 654 days and semi-major axis 9 mas for the photocentre. <i>A</i> 14.13 mas (standard error 1.12 mas).	
111469		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 3.69, \ \theta = 248^{\circ}, \ \varrho = 0.54 \text{ arcsec.}$
111708		Ambiguous double-star solution of HIP 111708 + 111715. An alternative 111708 gives: $\Delta Hp = 0.44$ , $\theta = 322^{\circ}$ , $\varrho = 0.19$ arcsec.	solution for HIP 111715 relative to HIP
111715		See HIP 111708.	
112170		Component B is really the photocentre of BC.	
112323		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 3.43, \ \theta = 106^{\circ}, \ \varrho = 0.74 \text{ arcsec.}$
112422		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 1.00, \ \theta = 151^{\circ}, \ \varrho = 0.25 \text{ arcsec.}$
112621		Ambiguous double-star solution. An alternative solution for AC gives: $\Delta F$	$Hp = 3.46, \ \theta = 6^{\circ}, \ \varrho = 9.17$ arcsec.
112676		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 0.90, \ \theta = 308^{\circ}, \ \varrho = 0.33 \text{ arcsec.}$
112777		Ambiguous double-star solution of HIP 112777 + 112783. An alternative 112783 gives: $\Delta H p = 0.55$ , $\theta = 203^{\circ}$ , $\varrho = 16.02$ arcsec.	solution for HIP 112777 relative to HIP
112783 113017		See HIP 112777. An elementic VIM solution for this system gives $0 = 222^{\circ}$ for the constant	at stan valative to the vanishle
113017		An alternative VIM solution for this system gives $\theta = 333^{\circ}$ for the constar Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	
113081		Ambiguous double-star solution of HIP 113226 + 113228. An alternative 0.56, $\theta = 250^\circ$ , $\varrho = 0.24$ arcsec.	
113228		See HIP 113226.	
113323		Ambiguous double-star solution. An alternative solution for AP gives: $\Delta H$	$Ap = 1.28, \ \theta = 338^{\circ}, \ \varrho = 0.23 \text{ arcsec.}$
113352		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 3.13, \ \theta = 165^{\circ}, \ \varrho = 0.82 \text{ arcsec.}$
113397		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 2.48, \ \theta = 274^{\circ}, \ \varrho = 0.81 \ \text{arcsec.}$
113598		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 3.22, \ \theta = 216^{\circ}, \ \varrho = 3.46 \text{ arcsec.}$
113715	Р	An alternative VIM solution for this system gives $\theta = 31^{\circ}$ for the constant	star relative to the variable.
113751		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 3.26, \ \theta = 296^{\circ}, \ \varrho = 1.36 \text{ arcsec.}$
113797	Р	An alternative VIM solution for this system gives $\theta = 95^{\circ}$ for the constant	star relative to the variable.
113809		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$Ap = 2.75, \ \theta = 194^{\circ}, \ \varrho = 1.61$ arcsec.
114207		Ambiguous double-star solution of HIP 114207 + 114209. An alternative 114209 gives: $\Delta Hp = 1.66$ , $\theta = 262^{\circ}$ , $\varrho = 7.78$ arcsec.	solution for HIP 114207 relative to HIP
114209		See HIP 114207.	
114240		Ambiguous double-star solution of HIP 114240 + 114243. An alternative 114243 gives: $\Delta Hp = 2.21$ , $\theta = 215^{\circ}$ , $\varrho = 20.70$ arcsec.	solution for HIP 114240 relative to HIP
114243		See HIP 114240.	
114254		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta H$	
114396		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta F$	$dp = 2.99, \ \theta = 146^{\circ}, \ \varrho = 1.61 \text{ arcsec.}$

114440		
114440		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.58$ , $\theta = 146^{\circ}$ , $\varrho = 0.31$ arcsec.
114543		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.18$ , $\theta = 134^{\circ}$ , $\varrho = 3.09$ arcsec.
114702		Ambiguous double-star solution of HIP 114702 + 114703. An alternative solution for HIP 114703 relative to HIP
		114702 gives: $\Delta H p = 1.09$ , $\theta = 173^{\circ}$ , $\varrho = 25.66$ arcsec.
114703	~	See HIP 114702.
114791	G	Uncertain triple-star solution. Tycho data suggest that component E is located at $\theta = 193^{\circ}$ , $\rho = 15.69$ arcsec relative to component A.
114830		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.00$ , $\theta = 182^{\circ}$ , $\varrho = 1.10$ arcsec.
114923		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.74$ , $\theta = 219^{\circ}$ , $\varrho = 1.13$ arcsec.
114994	G	Ambiguous double-star solution. An alternative solution for AC gives: $\Delta Hp = 0.49$ , $\theta = 330^{\circ}$ , $\varrho = 17.36$ arcsec.
115028		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.81$ , $\theta = 310^{\circ}$ , $\varrho = 13.95$ arcsec.
115031		Using only FAST data gives a semi-major axis of 24 mas with a standard error of 9 mas. The strong discrepancy with the merged (FAST+NDAC) solution in spite of the short period casts doubts on the reliability of the orbit.
115064		Ambiguous double-star solution of HIP 115064 + 115068. An alternative solution for HIP 115064 relative to HIP 115068 gives: $\Delta Hp = 2.72$ , $\theta = 301^{\circ}$ , $\varrho = 19.69$ arcsec.
115068		See HIP 115064.
115272		Probably double at 1.1 arcsec separation.
115650		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.41$ , $\theta = 216^{\circ}$ , $\varrho = 0.29$ arcsec.
115698		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.29$ , $\theta = 63^{\circ}$ , $\varrho = 2.36$ arcsec.
115700		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 2.61$ , $\theta = 174^{\circ}$ , $\varrho = 0.62$ arcsec.
115762		Ambiguous double-star solution of HIP 115762 + 115765. An alternative solution for HIP 115765 relative to HIP 115762 gives: $\Delta Hp = 1.87$ , $\theta = 78^{\circ}$ , $\varrho = 29.20$ arcsec.
115765		See HIP 115762.
115800		Ambiguous double-star solution. An alternative solution for CD gives: $\Delta Hp = 1.73$ , $\theta = 206^{\circ}$ , $\varrho = 3.15$ arcsec.
116046		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.56$ , $\theta = 65^{\circ}$ , $\varrho = 1.77$ arcsec.
116081		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.76$ , $\theta = 269^{\circ}$ , $\varrho = 1.43$ arcsec.
116135		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.05$ , $\theta = 68^{\circ}$ , $\varrho = 0.26$ arcsec.
116167		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.05$ , $\theta = 129^{\circ}$ , $\varrho = 2.81$ arcsec.
116191		Ambiguous double-star solution. An alternative solution for BC gives: $\Delta Hp = -0.12$ (component reversal).
116193		Ambiguous double-star solution. An alternative solution for AS gives: $\Delta Hp = 1.58$ , $\theta = 159^{\circ}$ , $\varrho = 0.25$ arcsec.
116920		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 4.19$ , $\theta = 24^{\circ}$ , $\varrho = 0.77$ arcsec.
117163		Ambiguous double-star solution of HIP 117163 + 117164. An alternative solution for HIP 117163 relative to HIP 117164 gives: $\Delta Hp = 2.28$ , $\theta = 109^{\circ}$ , $\varrho = 0.34$ arcsec.
117164		See HIP 117163.
117187		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 0.88$ , $\theta = 170^{\circ}$ , $\varrho = 0.23$ arcsec.
117226	G	Uncertain triple-star solution of system HIP 117227 (AB) + 117226 (C). TYC 4281-1585-1 (at $\alpha$ = 356°530 971, $\delta$ = +60°.465 083) may be identified with component C (HIP 117226), which is then located at $\theta$ = 189°, $\varrho$ = 29.47 arcsec relative to component A.
117227	G	See HIP 117226.
117388		Ambiguous double-star solution of HIP 117388 + 117390. An alternative solution for HIP 117388 relative to HIP 117390 gives: $\Delta Hp = 2.42$ , $\theta = 216^{\circ}$ , $\varrho = 26.85$ arcsec.
117390		See HIP 117388.
117561		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.77$ , $\theta = 215^{\circ}$ , $\varrho = 1.75$ arcsec.
117581		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.02$ , $\theta = 151^{\circ}$ , $\varrho = 0.81$ arcsec.
117642		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.08$ , $\theta = 314^{\circ}$ , $\varrho = 1.11$ arcsec.
117837		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 1.71$ , $\theta = 323^{\circ}$ , $\varrho = 0.64$ arcsec.
118060		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.99$ , $\theta = 77^{\circ}$ , $\varrho = 4.70$ arcsec.
118218		Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.18$ , $\theta = 307^{\circ}$ , $\varrho = 2.93$ arcsec.
118222	Р	Ambiguous double-star solution. An alternative solution for AB gives: $\Delta Hp = 3.84$ , $\theta = 2^{\circ}$ , $\varrho = 2.78$ arcsec.