Table 9.1 Astrometric precision measurements versus separation

Telescope	Type	Sep (″)	⟨σ⟩ (mas)	Exp (s)	FWHM (″)	Diam (m)	Q	Ref.
UCAC	Ref	2460	30.0	125	2.0	0.21	118	1
YSO	Ref	2160	25.0	120	1.8	0.51	174	2
MAP	Sep	1200	5.2	600	2.0	0.76	107	3
KPNO	Ref	928	10.1	100	1.8	0.9	94	4
UCAC	Ref	840	15.0	180	2.0	0.2	69	5
Subaru	Sep	800	15.6	10	0.5	8.2	201	6
Subaru	Sep	800	7.8	30	0.5	8.2	174	6
KPNO/4m	Ref	720	26.0	10	1.1	4.0	207	7
KPNO/4m	Ref	720	10.0	30	1.1	4.0	138	7
CTIO	Ref	544	8.2	100	1.4	0.9	76	4
Subaru	Sep	400	7.8	10	0.5	8.2	100	6
Subaru	Sep	400	5.7	30	0.5	8.2	127	6
MAP	Sep	330	3.4	600	2.0	0.76	69	3
USNO	Ref	256	2.7	600	1.5	1.5	87	8
Subaru	Sep	200	6.4	10	0.5	8.2	82	6
Subaru	Sep	200	5.0	30	0.5	8.2	111	6
WIYN/OPTIC	Ref	186	2.0	300	0.6	3.5	80	9
Subaru	Sep	100	4.8	10	0.5	8.2	62	6
Subaru	Sep	100	3.5	30	0.5	8.2	78	6
Hale P&S Dec	Ref	38	1.4	60	1.0	5.0	32	10
Hale C	Sep	24	7.2	1.4	0.2	5.0	25	11
Subaru	Sep	20	1.4	10	0.5	8.2	18	6
Subaru	Sep	20	1.4	30	0.5	8.2	31	6
Hale P&S RA	Ref	18	0.8	60	1.0	5.0	18	10
Hale C	Sep	12	4.9	1.4	0.2	5.0	17	11
VLT/NACO	Sep	8	0.42	34.4	0.078	8.2	10	12
Hale C	Sep	4	3.5	1.4	0.2	5.0	12	11
VLT/NACO	Sep	4	0.26	34.4	0.078	8.2	6	12
VLT/NACO	Sep	2	0.20	34.4	0.078	8.2	5	12
VLT/NACO	Sep	1	0.19	34.4	0.078	8.2	5	12
VLT/NACO	Sep	0.5	0.18	34.4	0.078	8.2	4	12
WIYN Speckle	Sep	0.5	1.1	1.6	0.84	3.5	3	13
CTIO Speckle	Sep	0.5	1.75	0.4	0.84	4.0	3	14

References: 1 = US Naval Observatory astrograph at CTIO, Chile, Zacharias *et al.*, 2004, Fig. 8 mean rms; 2 = Yale Southern Observatory double astrograph at El Leoncito, Argentina, Vieira *et al.* 2010 mean rms; 3 = Allegheny Observatory Multichannel Astrometric Photometer at Pittsburg, PA, Han 1989, Fig. 3; 4 = KPNO Mayall telescope, in Arizona, Zacharais 1996, average used; 5 = See 1, Zacharias 1997, average of test data used; 6 = Subaru telescope at Hawaii, Monet (2010, private communication), linear model; 7 = KPNO Blanco telescope in Arizona, Platais *et al.* 2002, data from his Fig. 6; 8 = USNO astrometric reflector at Flagstaff, AZ, Harris, H. (2010, private communication), mean rms; 9 = WIYN reflector at KPNO in Arizona, Vieira *et al*. 2005, OPTIC camera, FWHM = 0.6″; 10 = Hale reflector in CA, Pravdo and Shaklan 1996, all exp.; 11 = See 10, Cameron *et al.* 2009, data from his Fig. 3 average used; 12 = VLT reflectors at Paranol, Chile, Fritz *et al.* 2010, data from his Fig. 3 NACO average used; 13 = See 9, Horch *et al.* 2011, data from his Figs. 1 and 4 external error; 14 = Blanco telescope at CTIO, Chile, Tokovinin *et al.* 2010, Blanco and SOAR external error.