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A. α or δ, K or L (or both) doubtful; difference rejected.
B. " " " " " " " " " " Corrected.
C. " " " " " " " " " " Completed.

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zon
7509 8.0	L_1 97.7	L_1 97.7	2	21 5 21.64	L_1 97.7	2	12 7 58.3	3,
21 5 21.46	K 22.8	K 22.8	1	5 21.76	K 22.8	1	8 9.0	11
12 8 10.2	R_1 50.0	M_1 46.0	5	5 21.52	M_1 46.0	5	8 7.9	
	M_1 46.0	R_1 50.0	1	5 21.40	R_1 50.0	1	8 6.2	
	L_4 60.5, 60.1	St_1 60.0	2	5 21.51	St_1 60.0	2	8 8.6	
	St_1 [60.0]	L_4 60.5	4	5 21.57	L_4 60.1	5	8 9.1	
	Wc 76.7, 77.8	Wc 76.7	2	5 21.59	Wc 77.8	2	8 8.6	
	L_5 78.7	L_5 78.7	2	5 21.64	L_5 78.7	1	8 9.7	
	D_1 84.8	D_1 84.8	1	5 21.57	D_1 84.8	1	8 7.6	
	D_2 96.8	H 90.2	2	5 21.46	H 90.2	2	8 10.2	
	H 90.2	D_2 96.8	4	5 21.64	D_2 96.8	4	8 10.3	
7510 6.8	L_1 94.6	L_1 94.6	1	21 5 22.48	L_1 94.6	1	9 45 23.2	
21 5 23.32	P 493 00.0	P 00.0	8	5 22.73	P 00.0	9	45 26.5	
9 45 35.0	K 22.6	K 22.6	1	5 23.01	K 22.6	1	45 29.9	1
	L_3 40.7, ..	L_3 40.7	1	5 22.92	L_3 ..	..	..	
	M_1 50.7	M_1 50.7	3	5 22.98	M_1 50.7	2	45 33.0	
	L_4 63.4, 61.2	St_1 60.0	2	5 23.06	St_1 60.0	2	45 33.7	
	St_1 [60.0]	Sj 62.7	2	5 23.14	L_4 61.2	4	45 33.1	
	Sj 62.7	L_4 63.4	3	5 23.18	Sj 62.7	2	45 33.8	
	Q 65.0, 65.2	Q 65.0	3	5 23.14	Q 65.2	2	45 34.0	
	G 77.7	L_5 74.7	1	5 23.23	L_5 74.7	1	45 33.9	
	A 76.8	A 76.8	2	5 23.20	A 76.8	2	45 34.6	
	L_5 74.7	G 77.7	4	5 23.26	G 77.7	4	45 33.3	
	V 86.5	V 86.5	4	5 23.09	V 86.5	4	45 31.7	
	E 06.4, 06.0	H 93.2	4	5 23.32	H 93.2	4	45 35.0	
	H 93.2	Db 94.2	2	5 23.41	Db 94.2	2	45 35.6	
	Db 94.2	E 06.4	3	5 23.42	E 06.0	3	45 35.1	

For 7511 see X

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Zones.	α Ep-H.	δ	α Obs-H.	δ	α C-H.	δ	α Adj.	δ	Δα	Δδ	
3, 39	-92.5	-92.5	+.18	-11.9	+.24	-7.5	21.70	2.7	+.15	+5.6	✓
114	-67.4	-67.4	+.30	-1.2	+.10	-3.4	21.56	6.8	+.01	+1.5	✓
	-44.2	-44.2	+.06	-2.3	+.09	-3.0	21.48	8.8	-.07	-0.5	✓
	-40.2	-40.2	-.06	-4.0	+.08	-2.7	21.48	5.5	-.07	+2.8	✓
	-30.2	-30.2	+.05	-1.6	+.06	-2.1	21.55	9.3	-.04	-1.0	✓
	-29.7	-30.1	+.11	-1.1	+.06	-2.0	21.60	9.9	+.05	-1.6	✓
	-13.5	-12.4	+.13	-1.6	+.03	-0.8	21.59	9.4	+.04	-1.1	✓
	-11.5	-11.5	+.18	-0.5	+.02	-0.8	21.64	10.5	+.09	-2.2	✓
	-5.4	-5.4	+.11	-2.6	+.01	-0.4	21.50	8.0	-.05	+0.3	✓
	-80.0	-21		+6.8			21.46	10.2	-.09	-1.9	✓
	+6.6	+6.6	+.18	+0.1	-.01	+0.4	21.55 / 21.55	10.2 / 8.3	.00	-1.9	✓
1	-98.6	-98.6	-.84	-11.8	-.77	-7.1	22.55	27.9	-.55	+5.4	✓
	-93.2	-93.2	-.59	-8.5	-.70	-7.5	22.84	30.6	-.26	+2.7	✓
102	-70.6	-70.6	-.31	-5.1	-.50	-6.6	22.82	28.4	-.28	+4.9	✓
	-52.5	..	-.40	..	-.39	..	22.90	...	-.20	..	✓
	-42.5	-42.5	-.34	-2.0	-.32	-3.4	22.94	33.9	-.16	-0.6	✓
	-33.2	-33.2	-.26	-1.3	-.25	-2.7	23.10	34.6	.00	-1.3	✓
	-30.5	-32.0	-.18	-1.9	-.23	-2.6	23.19	33.9	+.09	-0.6	✓
	-29.8	-30.5	-.14	-1.2	-.22	-2.5	23.21	34.9	+.11	-1.6	✓
	-28.2	-28.0	-.18	-1.0	-.21	-2.3	23.23	34.5	+.13	-1.2	✓
	-18.5	-18.5	-.09	-1.1	-.14	-1.5	23.23	34.7	+.13	-1.4	✓
	-16.4	-16.4	-.12	-0.4	-.12	-1.3	23.20	34.6	+.10	-1.3	✓
	-15.5	-15.5	-.06	-1.7	-.12	-1.3	23.26	33.9	+.16	-0.6	✓
	-6.7	-6.7	-.23	-3.3	-.05	-0.5	23.07	31.8	-.03	+1.5	✓
	-84.6	+.75		+8.1			23.32	35.0	+.22	-1.7	✓
	+1.0	+1.0	+.09	+0.6	+.08	0.0	23.41	35.3	+.31	-2.0	✓
	+13.2	+12.8	+.10	+0.1	+.99	+0.1	23.40 / 23.10	35.0 / 33.3	+.30	-1.7	✓

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zo
7512 8.7	L_1 97.7	97.7	2	21 6 5.86		2	11 56 30.9	3
21 6 5.67	K 22.8		1	6 6.46		1	56 38.5	1
11 56 41.0	M_1 45.7		2	6 5.83		2	56 37.7	
	L_4 59.8, 55.6		1	6 5.76		1	56 36.4	
	St_1 [60.0]		2	6 5.59		2	56 38.3	
	L_5 78.7		2	6 5.61		2	56 39.3	
	H 90.0		3	6 5.67		3	56 41.0	
7513 8.8	M_1 46.2		2	21 6 21.43		2	13 22 17.6	
21 6 21.40	D_1 84.7		2	6 21.64		2	22 19.9	
13 22 18.6	H 90.7		2	6 21.40		2	22 18.6	
7514 8.5	L_1 97.7		2	21 6 31.11		2	11 55 8.5	3
21 6 31.19	K 22.8		1	6 31.47		1	55 19.1	1
11 55 18.2	M_1 46.0		3	6 31.17		3	55 16.8	
	L_4 54.7, 58.7		1	6 31.37		1	55 16.1	
	St_1 [60.0]		3	6 31.28		3	55 15.5	
	L_5 78.8		1	6 31.21		1	55 15.3	
	H 90.2		2	6 31.19		2	55 18.2	
7515 8.5	M_1 45.8		1	21 6 53.89		1	12 19 25.3	
21 6 53.69	Wc 69.7, 69.4		4	6 53.76		5	19 30.1	
12 19 30.9	M_2 85.7		1	6 53.84		1	19 26.1	
	H 91.0		4	6 53.69		4	19 30.9	
7516 8.5	Wc 72.8, 65.0		4	21 6 59.28		3	12 13 40.2	
21 6 59.22								
12 13 41.2	H 90.7		3	6 59.22		3	13 41.2	

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Zones	α Eph-H	δ	α Pos-H.	δ	α C-H	δ	α adj.	δ	Δα	Δδ	
3,39	-92.3	-92.3	+.19	-10.1	+.25	-5.7	5.92	35.3	+.11	+2.9	✓
114	-67.2	-67.2	+.79	-2.5	+.59	-4.7	6.26	36.3	+.45	+1.9	✓
	-44.3	-44.3	+.16	-3.3	+.23	-2.9	5.79	38.6	-.02	-0.6	✓
	-30.2	-34.4	+.09	-4.6	+.16	-2.2	5.79	37.2	-.02	+1.0	✓
	-30.0	-30.0	-.08	-2.7	+.16	-2.0	5.63	38.9	-.18	-0.7	✓
	-11.3	-11.3	-.06	-1.7	+.06	-0.7	5.61	40.1	-.20	-1.9	✓
		-79.8	-.53	+6.5			5.67	41.0	-.14	-2.8	✓
							5.81	38.2			
	-44.5	-44.5	+.03	-1.0			21.39	18.5	-.06	+0.6	✓
	-6.0	-6.0	+.24	+1.8			21.57	20.3	+.12	-1.2	✓
							21.40	18.6	-.05	+0.5	✓
							21.48	19.1			
3,39	-92.5	-92.5	-.08	-9.7	-.02	-5.3	31.17	12.9	-.07	+3.5	✓
114	-67.4	-67.4	+.28	+0.9	+.08	-1.3	31.27	16.9	+.03	-0.5	✓
	-44.2	-44.2	-.02	-1.4	+.02	-1.8	31.13	17.7	-.11	-1.3	✓
	-35.5	-31.5	+.18	-2.1	+.01	-1.3	31.40	16.9	+.16	-0.5	✓
	-30.2	-30.2	+.09	-2.7	+.01	-1.2	31.32	16.1	+.08	+0.3	✓
	-11.4	-11.4	+.02	-2.9	.00	-0.5	31.21	16.1	-.03	+0.3	✓
		-80.0	-.04	+4.1			31.19	18.2	-.05	-1.8	✓
							31.24	16.4			
	-45.2	-45.2	+.20	-5.6			53.85	26.2	+.08	+2.4	✓
	-21.3	-21.6	+.07	-0.8			53.76	30.9	-.01	-2.3	✓
	-5.3	-5.3	+.15	-4.8			53.78	26.2	+.01	+2.4	✓
							53.69	30.9	-.08	-2.3	✓
							53.77	28.6			
	-17.9	-25.7	+.06	-1.0			59.28	41.0	+.03	+0.1	✓
							59.22	41.2	-.03	-0.1	✓
							59.25	41.1			

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zo
7517 8.6	L_1 94.6		1	21 6 59.62		1	12 9 59.4	
21 6 59.80	M_1 45.8		1	7 0.31		1	10 1.8	
12 10 6.9	L_4 54.7, 58.7		1	6 59.78		1	10 6.3	
	We 76.7, 73.7		4	6 59.94		2	10 6.0	
	L_5 79.7		1	7 0.00		1	10 6.0	
	D_1 84.2		2	6 59.83		2	10 4.6	
	H 95.3		4	6 59.80		4	10 6.9	
7518 8.9	M_1 46.6		1	21 7 20.59		1	12 58 5.4	
21 7 20.46	Sj 62.7		1	7 20.58		1	58 13.0	
12 58 12.2	H 90.7		2	7 20.46		2	58 12.2	
7519 9.2	K 22.8		1	21 7 21.33		1	11 3 20.3	11
21 7 21.12	M_1 45.1		2	7 20.77		2	3 26.1	
11 3 17.4	St_1 [60.0]		2	7 21.01		2	3 17.0	
	Sj 62.6		2	7 21.21		2	3 17.6	
	H 92.3		4	7 21.12		4	3 17.4	
7520 8.7	L_1 97.7	L_1 97.7	2	21 7 35.35	L_1 97.7	2	11 57 50.2	39
21 7 35.86	M_1 45.8	M_1 45.8	1	7 35.78	M_1 45.8	1	57 50.7	
11 57 48.7	L_4 54.7, 61.2	L_4 54.7	1	7 35.64	L_4 61.2	2	57 48.5	
	L_5 78.7	A 67.7	2	7 35.81	A 67.7	2	57 52.6	
	A 67.7	L_5 78.7	1	7 35.96	L_5 78.7	1	57 50.8	
	H 89.6	H 89.6	2	7 35.86	H 89.6	2	57 48.7	
7521 8.8	K 22.9		1	21 8 10.74		1	13 14 11.9	11
21 8 10.62	St_2 59.6		2	8 10.51		2	14 10.3	
13 14 10.9	Sj 62.7		1	8 10.63		1	14 7.6	
	H 93.5		4	8 10.62		4	14 10.9	

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Zones	α Eph.-H.	δ	α Pos.-H.	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ
3	-100.7	-100.7	-.18	-7.5	-.09	-2.5	59.71	4.4	-.19	+1.3
	-49.5	-49.5	+.51	-5.1	-.04	-1.2	0.27	2.7	+.37	+3.0
	-40.6	-36.6	-.02	-0.6	-.04	-0.9	59.81	7.1	-.09	-1.4
	-18.6	-21.6	+.14	-0.9	-.02	-0.5	59.94	6.8	+.04	-1.1
	-15.6	-15.6	+.20	-0.9	-.01	-0.4	0.00	6.8	+.10	-1.1
	-11.1	-11.1	+.03	-2.3	-.01	-0.3	59.76	5.0	-.14	+0.7
			+.09	+2.5			59.80	6.9	-.10	-1.2
							59.90	5.7		
	-44.1	-44.1	+.13	-6.8			20.55	6.3	.00	+4.6
	-28.0	-28.0	+.12	+0.8			20.63	14.1	+.08	-3.2
							20.46	12.2	-.09	-1.3
							20.55	10.9		
114	-69.5	-69.5	+.21	+2.9	+.01	+0.7	21.13	18.1	+.07	~~+1.6~~ -0.2
	-47.2	-47.2	-.35	+8.7	.00	+0.5	20.73	[27.0]	-.83	[~~-7.3~~ ab]
	-32.3	-32.3	-.11	-0.4	.00	+0.3	21.05	17.5	-.01	~~+2.2~~ +0.4
	-29.7	-29.7	+.09	+0.2	.00	+0.3	21.26	18.7	+.20	~~+1.0~~ -0.8
			-.01	-1.0			21.12	17.4	+.06	~~+2.3~~ +0.5
							21.06	19.7		
								17.9		
39, 3	-91.9	-91.9	-.51	+1.5	-.45	+5.9	35.41	54.6	-.33	-3.2
	-43.8	-43.8	-.08	+2.0	-.21	+2.8	35.74	51.6	.00	-0.2
	-34.9	-28.4	-.22	-0.2	-.17	+1.8	35.67	49.3	-.07	+2.1
	-21.9	-21.9	-.05	+3.9	-.11	+1.4	35.81	52.6	+.07	-1.2
	-10.9	-10.9	+.10	+2.1	-.05	+0.7	35.96	51.6	+.22	-0.2
			+.49	-6.4			35.86	48.7	+.12	+2.7
							35.74	51.4		
119	-70.6	-70.6	+.12	+1.0	-.16	+0.5	10.46	11.4	-.13	-0.7
	-33.9	-33.9	-.11	-0.6	-.08	+0.7	10.60	11.7	+.01	-1.0
	-30.8	-30.8	+.01	-3.3	-.07	+0.2	10.68	8.7	+.09	+2.0
			+.23	-0.7			10.62	10.9	+.03	-0.2
							10.59	10.7		

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Star	Epoch		Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zo
7522 8.9.	K	22.6		1	21 8 17.15		1	10 2 30.8	10
21 8 16.74.	M_1	45.8		1	8 17.12		1	2 26.1	
10 2 27.1.	St_1	[60.0]		2	8 16.86		2	2 26.1	
μ^2.	Sj	62.7		1	8 16.57		1	2 25.3	
	A	76.8		2	8 16.87		2	2 28.0	
	H	89.7		2	8 16.74		2	2 27.1	
7523 8.5.	L_1	94.6		1	21 8 22.52		1	12 21 28.3	
21 8 22.78.	M_1	45.5		3	8 22.82		3	21 32.5	
12 21 36.8.	L_4	54.7		1	8 22.67		1	21 35.5	
μ^{12}.	L_5	78.7		3	8 22.71		3	21 35.3	
	H	90.2		2	8 22.78		2	21 36.8	
7524 8.9.	K	22.8		1	21 8 24.84		1	11 11 12.8	11
21 8 24.69.	M_1	43.7		1	8 24.55		1	11 10.1	
11 11 8.5.	St_1	[60.0]		2	8 24.51		2	11 8.0	
	M_2	85.7		1	8 24.60		1	11 10.3	
	H	92.4		3	8 24.69		3	11 8.5	
7525 8.9.	K	22.9		1	21 8 27.77		1	12 56 58.6	12
21 8 27.29.	M_1	44.7		1	8 27.48		1	56 50.2	
12 56 54.7.	St_2	59.6		2	8 27.40		2	56 53.8	
μ^2.	H	92.8		3	8 27.29		3	56 54.7	
7526 8.7.	K	22.8		1	21 8 36.32		1	11 35 42.4	11
21 8 36.06.	M_1	45.7		1	8 36.12		1	35 38.8	
11 35 41.4.	St_1	[60.0]		2	8 36.01		2	35 37.6	
	A	80.7		1	8 35.90		1	35 36.4	
	H	91.7		3	8 36.06		3	35 41.4	

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Zones	α Ep.-H.δ	α Pos-H.δ	αC-H.δ	α adj.	δ	Δα	Δδ
102	-67.1 -67.1	+41 +3.7	+.22 +2.2	16.96	29.3	+.10	-1.9
	-43.9 -43.9	+.38 -1.6	+.14 +1.4	17.08	27.0	+.22	+0.4
	-29.7 -29.7	+.12 -1.6	+.10 +1.0	16.90	26.6	+.04	+0.8
	-27.0 -27.0	-.17 -1.8	+.09 +0.9	16.62	26.4	-.24	+1.0
	-12.9 -12.9	+.13 +0.9	+.04 +0.4	16.87	28.0	+.01	-0.6
		-.33 -3.3		16.74	27.1	-.12	+0.3
				16.86	27.4		
3	-95.6 -95.6	-.26 -8.5	-.17 -3.5	22.61	32.7	-.11	+2.4
	-44.7 -44.7	+.04 -4.3	-.08 -1.7	22.78	33.4	+.06	+1.7
	-35.5 -35.5	-.11 -1.3	-.06 -1.3	22.70	36.3	-.02	-1.2
	-11.5 -11.5	-.07 -1.5	-.02 -0.4	22.71	36.1	-.01	-1.0
		+.18 +3.7		22.78	36.8	+.06	-1.7
				22.72	35.1		
114	-69.6 -69.6	+.15 +4.3	-.05 +2.1	24.64	10.6	+.05	-0.8
	-48.7 -48.7	-.14 +1.6	-.03 +1.5	24.51	10.9 (11.0)	-.08	-1.1 (-1.2)
	-32.4 -32.4	-.18 -0.5	-.02 +1.0	24.55	8.5	-.04	+1.3
	-6.7 -6.7	-.09 +1.8	.00 +0.2	24.54	10.4	-.05	-0.6
		+.07 -3.0		24.69	8.5	+.10	+1.3
				24.59	9.8		
119	-69.9 -69.9	+.48 +3.9	+.20 +3.4	27.49	58.1	+.06	-3.3
	-48.1 -48.1	+.19 -4.5	+.14 +2.4	27.44	51.1	+.01	+3.7
	-33.2 -33.2	+.11 -0.9	+.10 +1.6	27.49	55.2	+.06	-0.4
		-.29 -4.9		27.29	54.7	-.14	+0.1
				27.43	54.8		
114	-68.9 -68.9	+.26 +1.0	+.06 -1.2	36.12	40.2	+.08	-1.0
	-46.0 -46.0	+.06 -2.6	+.04 -0.8	36.08	39.7	+.04	-0.5
	-31.7 -31.7	-.05 -3.8	+.03 -0.5	36.05	38.2	+.01	+1.0
	-11.0 -11.0	-.16 -5.0	+.01 -0.2	35.90	36.4	-.14	+2.8
		-.09 +1.7		36.06	41.4	+.02	-2.2
				36.04	39.2		

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Star	Epoch		Eph. α		Obs.	α 1900.0		Eph. δ		Obs.	δ 1900.0			Zon
7527 8.0	L_1	98.2	L_1	98.2	2	21	8 39.81	L_1	98.2	2	12	52	41.3	39
21 8 39.78	K	22.9	K	22.9	1		8 39.77	K	22.9	1		52	43.6	11
12 52 46.6	R_1	48.0	M_1	46.0	4		8 39.82	M_1	46.0	3		52	45.5	
	M_1	46.0	R_1	48.0	1		8 38.34	R_1	48.0	1		(50)	40.5	
	L_4	61.2 60.4	St_2	59.7	2		8 39.76	St_2	59.7	2		52	44.3	
	St_2	59.7	L_4	61.2	2		8 39.91	L_4	60.4	3		52	45.3	
	E	06.0	H	90.8	2		8 39.78	H	90.8	2		52	46.6	
	H	90.8	E	06.0	4		8 39.83	E	06.0	4		52	44.4	
7528 8.9	K	228			1	21	8 44.87			1	12	30	19.8	11
21 8 44.99	M_1	45.8			1		8 44.88			1		30	12.6	
12 30 15.0	St_1	[60.0]			2		8 44.94			2		30	16.3	
	A	80.7			1		8 44.99			1		30	18.5	
	H	90.7			2		8 44.99			2		30	15.0	
7529 6.7	L_1	97.7	L_1	97.7	2	21	8 51.75	L_1	97.7	2	11	1	4.5	39
21 8 52.10	R_1	48.0	M_1	46.0	3		8 52.08	M_1	46.0	3		1	4.9	
11 1 6.5	L_3	47.9	L_3	47.9	2		8 52.03	L_3	47.9	2		1	6.9	
	M_1	46.0	R_1	48.0	3		8 52.03	R_1	48.0	3		1	6.1	
	L_4	54.7	L_4	54.7	1		8 52.00	L_4	54.7	1		1	8.4	
	G	77.7	G	77.7	4		8 52.12	G	77.7	4		1	5.7	
	L_5	78.6	L_5	78.6	1		8 52.01	L_5	78.6	1		1	7.3	
	H	89.6	H	89.6	2		8 52.10	H	89.6	2		1	6.5	
	E	98.7	E	98.7	3		8 52.11	E	98.7	3		1	7.0	
7530 8.6	K	22.9			1	21	9 46.16			1	13	29	22.4	11
21 9 46.20	M_1	45.6			2		9 46.06			2		29	23.5	
13 29 24.6	St_2	59.7			3		9 46.22			3		29	23.0	
	Sj	62.7			1		9 46.18			1		29	25.3	
	A	80.8			4		9 46.22			4		29	24.7	
	H	91.7			2		9 46.20			2		29	24.6	

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zones	α Sp-H δ	α Pos-H. δ	α C.-H. δ	α adj. δ	Δα	Δδ
39,9	-92.6 -92.6	+.03 -5.3	+.05 -1.4	39.83	45.2	+.05 +0.1 -0.6
119	-67.9 -67.9	-.01 -3.0	-.29 -3.5	39.49	43.1	-.29 +2.2 +1.5
	-44.8 -44.8	+.04 -1.1	-.09 -1.4	39.78	46.4	.00 -1.1 -1.8
	-42.8 -42.8	-1.44 -6.1	-.06 -1.3	[38.42]	[39.8]	[-1.36] ab [ac +4.8] Error of 2'?
	-31.1 -31.1	-.02 -2.3	-.05 -1.0	39.85	45.7	+.07 -0.4 -1.1
	-29.6 -30.4	+.13 -1.3	-.04 -0.9	39.94	46.1	+.16 -0.8 -1.5
	-80.2	+.15 +3.1		39.78	46.6	.00 -1.3 -2.0
	+15.2 +15.2	+.05 -2.2	+.23	0.0 39.81 / 39.78	44.3 / 44.6 / 45.3	+.03 +1.0 +0.3
114	-67.9 -67.9	-.12 +4.8	-.32 +2.6	44.67	17.6	-.22 -1.3
	-44.9 -44.9	-.11 -2.4	-.21 +1.7	44.84	13.5	-.05 +2.8
	-30.7 -30.7	-.05 +1.3	-.14 +1.2	44.98	16.8	+.09 -0.5
	-10.0 -10.0	.00 +3.5	-.05 +0.4	44.99	18.5	+.10 -2.2
		+.47 -3.8		44.99 / 44.89	15.0 / 16.3	+.10 +1.3
39,1	-91.9 -91.9	-.35 -2.0	-.29 +2.2	51.81	8.7	-.23 -1.6
	-43.6 -43.6	-.02 -1.6	-.14 +1.0	52.04	5.8	.00 +1.3
	-41.7 -41.7	-.07 +0.4	-.13 +1.0	52.01	7.2	-.03 -0.1
	-41.6 -41.6	-.07 -0.4	-.13 +1.0	52.11	5.4	+.07 +1.7
	-34.9 -34.9	-.10 +1.9	-.11 +0.8	52.03	9.2	-.01 -2.1
	-11.9 -11.9	+.02 -0.8	-.04 +0.3	52.12	6.3	+.08 +0.8
	-11.0 -11.0	-.09 +0.8	-.04 +0.3	52.01	8.1	-.03 -1.0
		+.82 -2.4		52.10	6.5	+.06 +0.6
	+9.1 +9.1	+.01 +0.5	+.29 -0.2	52.09 / 52.04	6.9 / 7.1	+.05 +0.2
119	-68.8 -68.8	-.04 -2.2	-.32 -2.7	45.88	21.9	-.26 +2.5
	-46.1 -46.1	-.14 -1.1	-.22 -1.8	46.02	24.4	-.12 0.0
	-32.0 -32.0	+.02 -1.6	-.15 -1.2	46.31	24.4	+.17 0.0
	-29.0 -29.0	-.02 +0.7	-.14 -1.1	46.23	26.4	+.09 -2.0
	-10.9 -10.9	+.02 +0.1	-.05 -0.4	46.22	24.7	+.08 -0.3
		+.47 +3.9		46.20	24.6	+.06 -0.2 → 46.14 24.4 mean

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Star		Epoch		Eph. α		Obs.	α 1900.0		Eph δ		Obs.	δ 1900.0			Zo
7531	8.4	L,	96.7	L,	96.7	3	21	9 59.68	L,	96.7	3	10	45 49.6		3, 1,
21 9	59.66	R,	.., 48.0	M,	45.5	5		9 59.65	M,	45.5	5		45 49.1		
10 45	49.1	M,	45.5	R,	..	..		10 0 ..	R,	48.0	1		45 49.6		
		Sj	62.8	Sj	62.8	1		9 59.63	Sj	62.8	1		45 48.8		
	29.66	G	78.6	G	78.6	4		9 59.70	G	78.6	4		45 49.8		
		H	91.7	H	91.7	4		9 59.66	H	91.7	4		45 49.1		
7532	8.9	K	22.8			1	21	10 0.99			1	12	30 6.2		11
21 10	0.70	St,	[60.0]			3 &		10 0.68			3 &		30 7.4		
12 30	6.4	H	90.1			5		10 0.70			5		30 6.4		
7533	9.1	M,	45.8			1	21	10 1.61			1	10	51 54.4		
21 10	1.66	M$_2$	85.7			1		10 1.75			1		51 58.4		
10 51	56.2	H	90.7			2		10 1.66			2		51 56.2		
7534	9.2	M,	45.0			3	21	10 4.35			3	10	44 56.8		
21 10	4.09														
10 44	55.0	H	92.5			4		10 4.09			4		44 55.0		
7535	8.9	R,	50.0	R,	50.0	1	21	10 9.24	R,	50.0	1	9	42 8.6		
21 10	9.05	Db	94.1	H	93.8	4		10 9.05	H	93.8	4		42 8.4		
9 42	8.4	H	93.8	Db	94.1	3		10 9.11	Db	94.1	3		42 8.7		
7536	9.5	R,	48.0			1	21	10 27.12			1	11	11 33.3		
21 10	26.94														
11 11	29.2	H	92.2			4		10 26.94			4		11 29.2		

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zones	α Ep.−H.	δ	α Obs.−H.	δ	α C.−H.	δ	α Adj.	δ	Δα	Δδ
3, 1, 39	-95.0	-95.0	+.02	+0.5	+.09	+5.0	59.75	54.1	+.07	−3.7
	-46.2	-46.2	−.01	0.0	+.04	+2.4	59.61	50.0	−.07	+0.4
	..	-43.7	..	+0.5	..		~~0.08~~	48.9	..	+1.5
	-28.9	-28.9	−.03	−0.3	+.03	+1.5	59.68	49.9	.00	+0.5
	-13.1	-13.1	+.04	+0.7	+.01	+0.7	59.70	50.4	+.02	0.0
			−.09	−5.3			59.66	49.1	−.02	+1.3
							59.68	50.4		
11H	-67.3	-67.3	+.29	−0.2	+.09	−2.4	0.79	4.0	+.05	+2.1
	-30.1	-30.1	−.02	+1.0	+.04	−1.1	0.72	7.9	−.02	−1.8
			−.13	+3.6			0.70	6.4	−.04	−0.3
							0.74	6.1		
	-44.9	-44.9	−.05	−1.8			1.57	55.3	−.07	+1.4
	-5.0	-5.0	+.09	+2.2			1.69	58.5	+.05	−1.8
							1.66	56.2	+.02	+0.5
							1.64	56.7		
	-47.5	-47.5	+.26	+1.8			4.31	57.7	+.11	−1.3
							4.09	55.0	−.11	+1.4
							4.20	56.4		
	-43.8	-43.8	+.19	+0.2			9.32	7.9	+.16	+0.3
							9.~~38~~ 05	8.4	−.11	−0.2
	+0.3	+0.3	+.06	+0.3			9.11	8.4	−.05	−0.2
							9.16	8.2		
	-44.2	-44.2	+.18	+4.1			27.20	32.6	+.13	−1.7
							26.94	29.2	−.13	+1.7
							27.07	30.9		

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zon
7537 6.8	L_1 95.6	L_1 95.6	1	21 10 30.96	L_1 95.6	1	13 36 50.2	9
21 10 30.99	K 22.9	K 22.9	1	10 31.14	K 22.9	1	36 57.9	11
13 37 0.9	R_1 50.0	M_1 45.9	5	10 30.90	M_1 45.9	4	36 54.9	
	M_1 45.9	R_1 50.0	1	10 30.96	R_1 50.0	1	36 56.3	
	L_4 59.8, 58.7	St_2 59.6	2	10 31.02	L_4 58.7	1	36 57.1	
	St_2 59.6	L_4 59.8	1	10 30.83	St_2 59.6	2	36 57.9	
	L_5 79.6	A 71.7	2	10 30.95	A 71.7	2	36 59.4	
	A 71.7	G 77.8	4	10 30.97	G 77.8	4	36 59.2	
	D_1 85.6	L_5 79.6	1	10 30.93	L_5 79.6	1	36 58.9	
	D_2 96.7	D_1 85.6	1	10 30.92	D_1 85.6	1	37 1.1	
	H 90.8	H 90.8	3	10 30.99	H 90.8	3	37 0.9	
	E 04.4	D_2 96.7	4	10 30.96	D_2 96.7	4	37 1.0	
29176	G 77.8	E 04.4	5	10 30.99	E 04.4	5	37 1.5	
7538 7.9	L_1 94.6	L_1 94.6	1	21 10 33.05	L_1 94.6	1	9 48 27.4	1
21 10 32.51	P 40 00.0	P 00.0	10	10 32.75	P 00.0	11	48 25.0	
9 48 26.1	R_1 44.0	R_1 44.0	1	10 32.43	R_1 44.0	1	48 27.8	
	M_1 45.1	M_1 45.1	3	10 32.55	M_1 45.1	3	48 27.0	
	L_4 60.6, 55.7	L_4 60.6	1	10 32.58	L_4 55.7	1	48 26.6	
29177	G 79.8	L_5 79.7	1	10 32.53	L_5 79.7	1	48 26.0	
	L_5 79.7	G 79.8	3	10 32.50	G 79.8	3	48 25.6	
	H 90.7	H 90.7	2	10 32.51	H 90.7	2	48 26.1	
	Db 93.7	Db 93.7	2	10 32.58	Db 93.7	2	48 26.7	
7539 9.0	K 22.9		1	21 10 33.48		1	13 52 37.5	11
21 10 33.31	St_2 59.7		2	10 33.21		2	52 39.7	
13 52 40.9	A 71.8		2	10 33.41		2	52 42.7	
	H 91.0		3	10 33.31		3	52 40.9	
	St 95.2		2	10 33.36		2	52 42.5	

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Zones	α Ep-H	δ	α Bs-H	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ
9	-95.2	-95.2	-.03	-10.7	-.03	-6.6	30.96	54.3	+.02	+4.5
119	-67.9	-67.9	+.15	-3.0	-.13	-3.5	30.86	57.4	-.08	+1.4
	-44.9	-44.9	-.09	-6.0	-.04	-2.8	30.86	55.8	-.08	+3.0
	-40.8	-40.8	-.03	-4.6	-.04	-2.5	31.04	55.6	+.10	+3.2
	-31.2	-32.1	+.03	-3.8	-.03	-2.0	31.11	57.9	+.17	+0.9
	-31.0	-31.2	-.16	-3.0	-.03	-1.9	30.86	59.3	-.08	-0.5
	-19.1	-19.1	-.04	-1.5	-.02	-1.2	30.95	59.4	+.01	-0.6
	-13.0	-13.0	-.02	-1.7	-.01	-0.8	30.97	59.8	+.03	-1.6
	-11.2	-11.2	-.06	-2.0	-.01	-0.7	30.93	59.7	-.01	-0.9
	-5.2	-5.2	-.07	+0.2	-.01	-0.3	30.85	1.5	-.09	-2.7
		-81.6	+.10	+6.2			30.99	0.9	+.05	-2.1
	+5.9	+5.9	-.03	+0.1	+.01	+0.4	30.87	0.9	-.07	-2.1
	+13.6	+13.6	.00	+0.6	+.01	+0.8	30.97 / 30.94	1.4 / 58.8	+.03	-2.6
1	-96.1	-96.1	+.54	+1.3	+.61	+6.0	33.12	32.1	+.48	-4.4
	-90.7	-90.7	+.24	-1.1	+.57	+5.6	32.86	29.1	+.22	-1.4
	-46.7	-46.7	-.08	+1.7	+.29	+2.9	32.51	27.1	-.13	+0.6
	-45.6	-45.6	+.04	+0.9	+.29	+2.8	32.51	27.9	-.13	-0.2
	-30.1	-35.0	+.07	+0.5	+.19	+2.2	32.61	27.4	-.03	+0.3
	-11.0	-11.0	+.02	-0.1	+.07	+0.7	32.53	26.8	-.11	+0.9
	-10.9	-10.9	-.01	-0.5	+.07	+0.7	32.50	26.2	-.14	+1.5
			-.63	-6.2			32.51	26.1	-.13	+1.6
	+3.0	+3.0	+.07	+0.6	+.02	-0.2	32.58 / 32.64	26.4 / 27.7	-.06	+1.3
119	-68.1	-68.1	+.17	-3.4	-.11	-3.9	33.20	37.0	-.11	+3.9
	-31.3	-31.3	-.10	-1.2	-.05	-1.8	33.30	41.1	-.01	-0.2
	-19.2	-19.2	+.10	+1.8	-.03	-1.1	33.41	42.7	+.10	-1.8
							33.31	40.9	.00	0.0
	+4.2	+4.2	+.05	+1.6	+.01	+0.2	33.33 / 33.31	42.9 / 40.9	+.02	-2.0
			+.16	+5.7						

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Star		Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0		Cor.
7540	8.8	K	22.9			1	21 10 47.73				1	13 58 50.9		11
21 10	47.64	St_2	59.7			2	10 47.39				2	58 47.1		
13 58	49.4	Sj	62.7			1	10 47.69				1	58 48.7		
		H	90.8			2	10 47.64				2	58 49.4		
		St	95.2			2	10 47.54				2	58 48.8		
7541	9.1	K	22.8			1	21 11 21.37				1	10 33 36.9		11
21 11	21.67	St_1	[60.0]			2	11 21.14				2	33 32.0		
10 33	32.7	H	92.7			3	11 21.67				3	33 32.7		
7542	8.9	K	22.6			1	21 11 24.06				1	9 45 16.5		10
21 11	23.60	M_1	45.2			4	11 23.61				4	45 12.8		
9 45	12.0	H	90.1			3	11 23.60				3	45 12.0		
		Db	93.7			2	11 23.65				2	45 14.2		
7543	7.3	L_1	97.7	L_1	97.7	2	21 11 34.46		L_1	97.7	2	10 33 4.1		3,
21 11	34.61	K	22.8	K	22.8	1	11 35.20		K	22.8	1	33 10.0		11
10 33	7.6	R_1	50.0	M_1	46.0	3	11 34.80		M_1	46.0	3	33 8.1		
		M_1	46.0	R_1	50.0	1	11 34.70		R_1	50.0	1	33 9.0		
		L_4	54.7	L_4	54.7	1	11 34.76		L_4	54.7	1	33 6.8		
		St_1	[60.0]	St_1	60.0	2	11 34.47		St_1	60.0	2	33 5.5		
		Sj	62.7	Sj	62.7	1	11 34.53		Sj	62.7	1	38 4.8		
		A	70.7	A	70.7	4	11 34.65			..	..		..	
29196		G	78.7	G	78.7	3	11 34.68		G	78.7	3	33 5.7		
		L_5	80.6	L_5	80.6	1	11 34.68		L_5	80.6	1	33 4.8		
		H	89.7	H	89.7	3	11 34.61		H	89.7	3	33 7.6		

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	zones.	α Sp-H	δ	α Pos-H	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
9	119	-67.9	-67.9	+.09	+1.5	-.19	+1.0	47.45	50.4	-.11	-0.9	✓
1		-31.1	-31.1	-.25	-2.3	-.09	+0.5	47.48	48.5	-.08	+1.0	✓
7		-28.1	-28.1	+.05	-0.7	-.08	+0.4	47.74	49.8	+.18	-0.3	✓
4				+.28	-1.5			47.64	49.4	+.08	+0.1	✓
3		+4.4	+4.4	-.10	-0.6	+.01	-0.1	47.51 / 47.56	49.2 / 49.5	-.05	+0.3	✓
9	114	-69.9	-69.9	-.30	+4.2	-.50	+2.0	21.17	34.7	-.17	-1.4	✓
0		-32.7	-32.7	-.53	-0.7	-.24	+0.9	21.18	32.4	-.16	+0.9	✓
7				+.72	-2.9			21.67 / 21.34	32.7 / 33.3	+.33	+0.6	✓
5	102	-67.5	-67.5	+.46	+4.5	+.27	+3.0	23.87	15.0	+.20	-1.4	✓
3		-44.9	-44.9	+.01	+0.8	+.18	+2.0	23.57	13.7	-.10	-0.1	✓
0				-.40	-4.4			23.60	12.0	-.07	+1.6	✓
-		+3.6	+3.6	+.05	+2.2	-.01	-0.2	23.65 / 23.67	13.9 / 13.6	-.02	-0.3	✓
1	3, 39	-92.0	-92.0	-.15	-3.5	-.09	+0.9	34.52	8.5	-.17	-1.2	✓
0	114	-66.9	-66.9	+.59	+2.4	+.39	+0.2	35.00	7.8	+.31	-0.5	✓
1		-43.7	-43.7	+.19	+0.5	+.08	+0.3	34.76	9.0	+.07	-1.7	✓
0		-39.7	-39.7	+.09	+1.4	+.08	+0.3	34.78	8.3	+.09	-1.0	✓
3		-35.0	-35.0	+.15	-0.8	+.07	+0.2	34.79	7.6	+.16	-0.3	✓
5		-29.7	-29.7	-.14	-2.1	+.06	+0.2	34.51	6.3	-.18	+1.0	✓
8		-27.0	-27.0	-.08	-2.8	+.05	+0.2	34.58	5.9	-.11	+1.4	✓
		-19.0	..	+.04	..	+.04	..	34.65	...	-.04	..	✓
7		-11.0	-11.0	+.07	-1.9	+.02	+0.1	34.68	6.3	-.01	+1.0	✓
8		-9.1	-9.1	+.07	-2.8	+.02	+0.1	34.68	5.6	-.01	+1.7	✓
6		-79.4	-.19	-0.7				34.61 / 34.69	7.6 / 7.3	-.08	-0.3	✓

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zon
7544 6.7	L_1 95.6	L_1 95.6	1	21 11 45.14	L_1 95.6	1	13 41 43.8	9
21 11 45.05	K 22.9	K 22.9	1	11 45.25	K 22.9	1	41 50.1	11
13 41 48.3	R_1 49.0	M_1 46.3	5	11 45.02	M_1 46.3	4	41 49.2	
	M_1 46.3	R_1 49.0	1	11 45.05	R_1 49.0	1	41 53.1	
	L_4 64.2, 62.5	St_2 59.7	2	11 44.83	St_2 59.7	2	41 49.3	
	St_2 59.7	L_4 64.2	2	11 45.17	L_4 62.5	4	41 47.9	
	A 71.7	A 71.7	2	11 44.95	A 71.7	2	41 49.6	
29201	G 78.7	G 78.7	4	11 45.06	G 78.7	4	41 48.6	
	H 91.0	H 91.0	4	11 45.05	H 91.0	4	41 48.3	
	Sk 95.3	Sk 95.3	2	11 45.06	Sk 95.3	2	41 48.2	
7545 8.4	L_1 94.6		1	21 11 56.93		1	10 29 29.3	3
21 11 56.64	K 22.8		1	11 57.00		1	29 43.1	11
10 29 38.7	M_1 45.4		5	11 56.81		5	29 40.2	
	L_4 54.7		1	11 56.59		1	29 37.3	
	A 70.7		4	11 56.65		1	29 43.2	
	L_5 78.7		1	11 56.67		1	29 37.4	
	H 91.3		2	11 56.64		2	29 38.7	
7546 9.0	K 22.9		1	21 12 4.40		1	13 50 6.1	11
21 12 4.10	M_1 45.7		1	12 4.26		1	50 11.4	
13 50 10.3	St_2 59.6		2	12 4.01		2	50 8.5	
	D_1^2 86.6		1	12 4.25		1	50 9.0	
	H 91.1		3	12 4.10		3	50 10.3	
	Sk 97.0		3	12 4.08		3	50 11.0	
7547 8.9	K 22.8	K 22.8	1	21 12 32.12	K 22.8	1	11 13 59.4	11
21 12 31.58	R_1 50.0	M_1 43.7	1	12 31.62	M_1 43.7	1	13 59.1	
11 13 58.8	M_1 43.7	R_1 50.0	1	12 31.72	R_1 50.0	1	13 57.7	
	St_1 [60.0]	St_1 60.0	3	12 31.66	St_1 60.0	3	13 58.4	
	H 92.0	H 92.0	4	12 31.58	H 92.0	4	13 58.8	

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zones	α Ep-H d	α Ps.-H d.	α C.-H.d	α adj.	δ	Δα	Δδ.
9	-95.4 -95.4 +.09	-4.5	+.09 -0.4	45.14	47.9	+.10	+1.6
119	-68.1 -68.1 +.20	+1.8	-.08 +1.3	44.97	49.6	-.07	-0.1
	-44.7 -44.7 -.03	+0.9	.00 +0.3	44.98	50.1	-.06	-0.6
	-42.0 -42.0 .00	+4.8	.00 +0.3	45.13	52.4	+.09	-2.9
	-31.3 -31.3 -.22	+1.0	.00 +0.2	44.92	50.8	-.12	-1.3
	-26.8 -28.5 +.12	-0.4	.00 +0.2	45.20	48.7	+.16	+0.8
	-19.3 -19.3 -.10	+1.3	.00 +0.1	44.95	49.6	-.09	-0.1
	-12.3 -12.3 +.01	+0.3	.00 +0.1	45.06	49.2	+.02	+0.3
	-81.8 -.01	-0.6		45.05	48.3	+.01	+1.2
	+4.3 +4.3 +.01	-0.1	.00 0.0	45.03 45.04	48.6 49.5	+.01	+0.9
3	-96.7 -96.7 +.29	-9.4	+.38 -4.4	57.02	34.3	+.28	+4.9
114	-68.5 -68.5 +.36	+4.4	+.16 +2.2	56.80	40.9	+.06	-1.7
	-45.9 -45.9 +.17	+1.5	+.15 -0.6	56.77	41.1	+.03	-1.9
	-36.6 -36.6 -.05	-1.4	+.12 -0.5	56.62	38.1	-.12	+1.1
	-20.6 -20.6 +.01	+4.5	+.07 -0.3	56.65	43.2	-.09	-4.6
	-12.6 -12.6 +.03	-1.3	+.04 -0.2	56.67	38.2	-.07	+1.0
	-82.6 -33	+1.3		56.64 56.74	38.7 39.2	-.10	+0.5
119	-68.2 -68.2 +.30	-4.2	+.02 -4.7	4.12	5.6	-.01	+4.2
	-45.4 -45.4 +.16	+1.1	+.01 -3.1	4.22	12.3	+.09	-2.5
	-31.5 -31.5 -.09	-1.8	+.01 -2.2	4.10	10.0	-.03	-0.2
	-4.5 -4.5 +.15	-1.3	.00 -0.3	4.18	9.4	+.05	+0.4
	-.03	+6.9		4.10	10.3	-.03	-0.5
	+5.9 +5.9 -.02	+0.7	.00 +0.4	4.05 4.13	11.4 9.8	-.08	-1.6
114	-69.2 -69.2 +.54	+0.6	+.34 -1.6	31.92	57.2	+.20	+1.2
	-48.3 -48.3 +.04	+0.3	+.24 -1.1	31.58	0.0	-.14	-1.6
	-42.0 -42.0 +.14	-1.1	+.21 -1.0	31.80	57.0	+.08	+1.4
	-32.0 -32.0 +.08	-0.4	+.16 -0.7	31.70	58.8	-.02	-0.4
	-49	+2.3		31.58	58.8	-.14	-0.4

31.72 / 58.4

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Star		Epoch		Eph. α	Obs.	α 1900.0			Eph. δ	Obs.	δ 1900.0		
7548	8.6	L_1	95.6	L_1 95.6	1	21	12	50.17	L_1 95.6	1	13	44	15.2
21	12	51.18	K	22.9	K 22.9	1		12	50.70	K 22.9	1		44	28.5
13	44	32.6	M_1	46.1	M_1 46.1	3		12	51.07	M_1 46.1	3		44	27.8
			L_4	57.7, 59.2	L_4 57.7	2		12	50.94	L_4 59.2	2		44	30.0
			St_2	59.6	St_2 59.6	2		12	50.98	St_2 59.6	2		44	29.0
			Sj	62.7	Sj 62.7	1		12	50.93	Sj 62.7	1		44	32.6
			L_5	78.7	L_5 78.7	2		12	51.07	L_5 78.7	2		44	33.0
			H	90.1	H 90.1	3		12	51.18	H 90.1	3		44	32.6
			Sk	95.2	Sk 95.2	2		12	51.28	Sk 95.2	2		44	35.1
7549	8.2	L_1	00.8	P 00.0	4	21	13	2.65	P 00.0	4	12	41	1.2
21	13	2.97	P 59	00.0	L_1 00.8	1		13	2.63	L_1 00.8	1		41	3.4
12	41	4.0	K	22.8	K 22.8	1		13	3.07	K 22.8	1		41	3.0
			M_1	45.5	M_1 45.5	3		13	2.97	M_1 45.5	3		41	0.7
			L_4	54.7 ..	L_4 54.7	2		13	2.83	L_4 ..	..			..
			St_2	59.7	St_2 59.7	2		13	2.80	St_2 59.7	2		41	2.9
		29230	G	80.3	L_5 78.6	1		13	2.98	L_5 78.6	1		41	4.3
			L_5	78.6	G 80.3	4		13	2.99	G 80.3	4		41	4.5
			H	90.4	H 90.4	3		13	2.97	H 90.4	3		41	4.0
7550	8.1	M_1	45.8		1	21	13	5.84		1	13	0	49.4
21	13	5.78	M_2	85.7		1		13	6.01		1		0	55.1
13	0	55.2	H	93.0		3		13	5.78		3		0	55.2
			E	07.4		3		13	5.81		3		0	54.9
7551	8.7	K	22.9			1	21	13	6.96		1	13	52	39.3
21	13	6.54	M_1	45.7		1		13	6.74		1		52	41.3
13	52	41.4	St_2	59.7		2		13	6.50		2		52	39.8
			Sj	62.6		1		13	6.65		1		52	42.5
			H	90.7		3		13	6.54		3		52	41.4
			Sk	95.2		2		13	6.61		2		52	41.7

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zones	α Ep-H	δ	α Pos-H	δ	α C.-H.	δ	α Adj.	δ	Δα	Δδ apr.	
9	-94.5	-94.5	-1.01	-17.4	-1.01	-13.3	50.17	19.3	-.73	[+1.0]	C
119	-67.2	-67.2	-.48	-4.1	-.76	-4.6	50.42	28.0	-.48	+2.3	
	-44.0	-44.0	-.11	-4.8	-.48	-4.9	51.03	28.7	+.13	+1.6	
	-32.4	-30.9	-.24	-2.6	-.36	-3.4	50.97	30.8	+.07	-0.5	
	-30.5	-30.5	-.20	-3.6	-.34	-3.4	51.07	30.5	+.17	-0.2	
	-27.4	-27.4	-.25	0.0	-.30	-3.0	50.98	33.7	+.08	-3.4	
	-11.4	-11.4	-.11	+0.4	-.13	-1.3	51.07	33.8	+.17	-3.5	
		-80.8	+1.10	+11.1			51.18	32.6	+.28	-2.3	
	+5.1	+5.1	+.10	+2.5	+.06	+0.6	51.25 / 50.90	35.5 / 30.3	+.35	-5.2	
	-90.4	-90.4	-.32	-2.8	-.23	-0.1	2.76	5.2	-.12	-1.0	
39	-89.6	-89.6	-.34	-0.6	-.30	+3.1	2.67	7.1	-.21	-2.9	
114	-67.6	-67.6	+.10	-1.0	-.10	-3.2	2.87	0.8	-.01	+3.4	
	-44.9	-44.9	.00	-3.3	-.11	0.0	2.93	1.6	+.05	+2.6	
	-35.7	..	-.14	..	-.09	..	2.86	....	-.02	..	
	-30.7	-30.7	-.17	-1.1	-.08	0.0	2.89	4.4	+.01	-0.2	
	-11.8	-11.8	+.01	+0.3	-.03	0.0	2.98	5.1	+.10	-0.9	
	-10.1	-10.1	+.02	+0.5	-.03	0.0	2.99	5.1	+.11	-0.9	
		-78.6	+.25	+0.1			2.97 / 2.88	4.0 / 4.2	+.09	+0.2	
	-47.2	-47.2	+.06	-5.8			5.80	50.3	-.03	+3.6	
	-7.3	-7.3	+.23	-0.1			5.95	55.2	+.12	-1.3	
							5.78	55.2	-.05	-1.3	
	+14.4	+14.4	+.03	-0.3			5.79 / 5.83	54.8 / 53.9	-.04	-0.9	
119	-67.8	-67.8	+.42	-2.1	+.14	-2.6	6.68	38.8	+.05	+2.8	
	-45.0	-45.0	+.20	-0.1	+.09	-1.7	6.70	42.2	+.07	-0.6	
	-31.0	-31.0	-.04	-1.6	+.07	-1.2	6.59	41.3	-.04	+0.3	
	-28.1	-28.1	+.11	+1.1	+.06	-1.1	6.70	43.6	+.07	-2.0	
		-.21	+3.8				6.54	41.4	-.09	+0.2	
	+4.5	+4.5	+.07	+0.3	-.01	+0.2	6.58	42.1	-.05	-0.5	> 6.63 41.6 mean

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zon.
7552 9.1	M_1 45.1		3	21 13 21.09		3	11 2 35.8	
21 13 21.01								
11 2 37.4	H 90.5		3	13 21.01		3	2 37.4	
7553 9.3	M_1 45.8		2	21 13 46.98		1	10 27 57.2	
21 13 46.58								
10 28 3.7	H 93.1		3	13 46.58		3	28 3.7	
7554 6.9	L_1 95.6	L_1 95.6	1	21 13 51.88	L_1 95.6	1	13 28 3.7	
21 13 52.23	K 22.9	K 22.9	1	13 52.44	K 22.9	1	28 8.8	
13 28 9.3	L_3 40.8 ..	L_3 40.8	1	13 52.15	L_3 ..	..	..	
	M_1 46.0	M_1 46.0	3	13 51.78	M_1 46.0	3	28 8.3	
	L_4 55.5, 56.7	L_4 55.5	1	13 52.28	L_4 56.7	2	28 8.6	
	St_2 59.6	St_2 59.6	2	13 52.23	St_2 59.6	2	28 7.4	
	Wc 72.6, 67.7	Sj 62.7	1	13 52.31	Sj 62.7	1	28 9.0	
	Sj 62.7	Wc 72.6	4	13 52.31	Wc 67.7	2	28 8.9	
	L_5 78.7	L_5 78.7	3	13 52.19	L_5 78.7	3	28 8.6	
	H 94.8	H 94.8	4	13 52.23	H 94.8	4	28 9.3	
7555 8.6	L_1 94.6		1	21 13 52.64		1	9 59 54.4	
21 13 52.76	M_1 46.0		3	13 52.93		3	10 0 0.0	
9 59 59.7	L_4 54.7, 56.7		1	13 52.83		2	10 0 1.7	
	Sj 62.8		1	13 52.93		1	9 59 59.1	
	L_5 79.8		2	13 52.73		2	10 0 0.3	
	H 90.7		4	13 52.76		4	9 59 59.7	
7556 9.1	M_1 43.7	M_1 43.7	1	21 13 54.63	M_1 43.7	1	11 6 55.2	
21 13 54.34	M_2 88.7	D_1 84.8	1	13 54.48	D_1 84.8	1	6 46.1	
11 6 48.9	D_1 84.8	M_2 88.7	1	13 54.34	M_2 88.7	1	6 46.2	
	H 91.7	H 91.7	4	13 54.34	H 91.7	4	6 48.9	

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	Zones	α Eph.-H.δ	α Bes.-H.δ	α C.-H.δ		α adj. δ		Δα	Δδ
8		-45.4	-45.4	+.08	-1.6		21.05	36.7	+.02	+0.3
4							21.01 / 21.03	37.4 / 37.0	-.02	-0.4
2		-47.3	-47.3	+.40	-6.5		46.94	58.1	+.18	+2.8
7							46.58 / 46.76	3.7 / 0.9	-.18	-2.8
7	9	-99.2	-99.2	-.35	-5.6	-.35	-1.5	51.88	7.8	-.28	+1.3
8	119	-71.9	-71.9	+.21	-0.5	-.07	-1.0	52.16	8.3	.00	+0.8
		-54.0	..	-.08	..	-.14	..	52.13	...	-.03	..
3		-48.8	-48.8	-.45	-1.0	-.12	-0.7	51.74	9.2	-.42	-0.1
		-39.3	-38.1	+.05	-0.7	-.10	-0.6	52.31	9.4	+.15	-0.3
1		-35.2	-35.2	.00	-1.9	-.09	-0.5	52.32	8.9	+.16	+0.2
0		-32.1	-32.1	+.08	-0.3	-.08	-0.5	52.36	10.1	+.20	-1.0
9		-22.2	-27.1	+.08	-0.4	-.06	-0.4	52.31	9.7	+.15	-0.6
6		-16.1	-16.1	-.04	-0.7	-.04	-0.2	52.19	9.4	+.03	-0.3
3				-85.6		+.25	+1.5	52.23 / 52.16	9.3 / 9.1	+.07	-0.2
14	1	-96.1	-96.1	-.12	-5.3	-.05	-0.6	52.71	59.1	-.11	+1.5
0		-44.7	-44.7	+.17	+0.3	-.02	-0.3	52.89	0.9	+.07	-0.3
7		-36.0	-34.0	+.07	+2.0	-.02	-0.2	52.86	2.5	+.04	-1.9
1		-27.9	-27.9	+.17	-0.6	-.01	-0.2	52.98	0.2	+.16	+0.4
3		-10.9	-10.9	-.03	+0.6	-.01	-0.1	52.73	1.1	-.09	-0.5
7				+.05	+0.6			52.76 / 52.82	59.7 / 0.6	-.06	+0.9
2		-48.0	-48.0	+.29	+6.3			54.59	[56.1]	+.19	[-6.7] ab
1		-6.9	-6.9	+.14	-2.8			54.41	46.5	+.01	+0.7 +2.9
2		-3.0	-3.0	.00	-2.7			54.28	46.3	-.12	+0.9 +3.1
9								54.34 / 54.40	48.9 / 49.4 / 47.2	-.06	-1.7 +0.6

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zon
7557 8.5	K 22.8		1	21 14 3.93		1	12 46 7.7	11
21 14 4.02	M_1 45.3		2	14 4.08		2	46 3.8	
12 46 15.0	St_2 59.7		2	14 4.12		2	46 14.0	
	H 94.1		4	14 4.02		4	46 15.0	
7559 8.5	L_1 95.6	L_1 95.6	1	21 14 33.88	L_1 95.6	1	13 24 29.1	
21 14 34.07	K 22.9	K 22.9	1	14 34.07	K 22.9	1	24 35.7	11
13 24 32.1	M_1 46.6	M_1 46.6	1	14 33.75	M_1 46.6	1	24 37.5	
	L_4 61.2	L_4 61.2	2	14 34.05	L_4 61.2	2	24 27.7	
	Wc 72.4, 67.7	Wc 72.4	3	14 34.10	Wc 67.7	2	24 31.4	
29256	G 80.7	G 80.7	3	14 34.10	G 80.7	3	24 33.8	
	D_1 85.7	D_1 85.7	1	14 34.08	D_1 85.7	1	24 33.4	
	D_2 96.7	H 90.0	4	14 34.07	H 90.0	4	24 32.1	
	H 90.0	D_2 96.7	4	14 34.18	D_2 96.7	4	24 31.9	
7560 8.1	L_1 97.7	L_1 97.7	2	21 14 34.98	L_1 97.7	2	12 14 25.1	3
21 14 35.12	K 22.8	K 22.8	1	14 35.39	K 22.8	1	14 28.9	11
12 14 26.0	M_1 45.8	M_1 45.8	3	14 34.98	M_1 45.8	3	14 25.4	
	L_4 .. 54.8	L_4 ..	..	14 ..	L_4 54.8	1	14 23.2	
	St_1 [60.0]	St_1 60.0	2	14 34.80	St_1 60.0	2	14 25.0	
	L_5 78.7	L_5 78.7	2	14 35.05	L_5 78.7	2	14 26.1	
	H 92.4	H 92.4	3	14 35.12	H 92.4	3	14 26.0	
7561 7.1	L_1 95.6		1	21 14 39.80		1	13 55 21.8	
21 14 40.45	L_3 40.7, 40.8		1	14 40.49		1	55 28.8	
13 55 29.8	M_1 46.2		2	14 40.57		2	55 31.5	
	L_4 57.3, 54.7		2	14 40.39		1	55 29.0	
29258	G 78.7		4	14 40.43		4	55 29.6	
	L_5 79.7		1	14 40.23		1	55 28.9	
	H 91.1		3	14 40.45		3	55 29.8	
	SK 95.2		2	14 40.40		2	55 29.3	

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zones	α Sh.−H	δ	α Bs.−H	δ	α C−H.	δ	α adj.	δ	Δα	Δδ	
114	-71.3	-71.3	−.09	−7.3	−.29	−9.5	3.73	5.5	−.27	+4.7	✓
	-48.8	-48.8	+.06	−11.2	−.20	−6.5	4.04	4.7	+.04	+5.5	✓
	-34.4	-34.4	+.10	−1.0	−.14	−4.6	4.21	15.5	+.21	−5.3	✓
			+.41	+13.3			4.02	15.0	+.02	−4.8	✓
							4.00	10.2			
9	-94.4	-94.4	−.19	−3.0	−.19	+1.1	33.88	33.2	−.10	+0.1	✓
119	-67.1	-67.1	.00	+3.6	−.28	+3.1	33.79	35.2	−.19	−1.9	✓
	-43.4	-43.4	−.32	+5.4	−.13	+1.1	33.71	38.4	−.27	−5.1	✓
	-28.8	-28.8	−.02	−4.4	−.08	+0.7	34.08	28.5	+.10	+4.8	✓
	-17.6	-22.3	+.03	−0.7	−.05	+0.6	34.10	32.2	+.12	+1.1	✓
	-9.3	-9.3	+.03	+1.7	−.03	+0.2	34.10	34.4	+.12	−1.1	✓
	-4.3	-4.3	+.01	+1.3	−.01	+0.1	34.01	33.8	+.03	−0.5	✓
		-80.8	+.29	−2.6			34.07	32.1	+.09	+1.2	✓
	+6.7	+6.7	+.11	−0.2	+.02	−0.2	34.09	31.8	+.11	+1.5	✓
							33.98	33.3			
39,3	-94.7	-94.7	−.14	−0.9	−.08	+3.5	35.04	29.5	+.01	−3.1	✓
114	-69.6	-69.6	+.27	+2.9	+.07	+0.7	35.19	26.7	+.16	−0.3	✓
	-46.6	-46.6	−.14	−0.6	.00	+1.2	34.94	26.3	−.09	+0.1	✓
	..	-37.6	..	−2.8	..	+1.0	....	24.0	..	+2.4	✓
	-32.4	-32.4	−.32	−1.0	.00	+0.8	34.84	25.6	−.19	+0.8	✓
	-13.7	-13.7	−.07	+0.1	.00	+0.4	35.05	26.9	+.02	−0.5	✓
		-82.2	+.01	−2.6			35.12	26.0	+.09	+0.4	✓
							35.03	26.4			
9	-95.5	-95.5	−.65	−8.0	−.65	−3.9	39.80	25.9	−.54	+3.7	✓
	-50.4	-50.3	+.04	−1.0	−.34	−2.1	40.47	29.1	+.13	+0.5	✓
	-44.9	-44.9	+.12	+1.7	−.31	−1.8	40.53	32.4	+.19	−2.8	✓
	-33.8	-36.4	−.06	−0.8	−.23	−1.5	40.42	29.8	+.08	−0.2	✓
	-12.4	-12.4	−.02	−0.2	−.08	−0.5	40.43	30.2	+.09	−0.6	✓
	-11.4	-11.4	−.22	−0.9	−.08	−0.5	40.23	29.7	−.11	−0.1	✓
			+.68	+4.1			40.45	29.8	+.11	−0.2	✓
	+4.1	+4.1	−.05	−0.5	+.03	+0.2	40.34	29.7	+.03	−0.1	✓

40.34 29.6

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0
7562 8.6.	K 22.6		1	21 14 42.17		1	10 53 43.9
21 14 41.86.	R_1 48.0		1	14 41.5		1	53 43.1
10 53 44.3.	St_1 [60.0]		2	14 41.87		2	53 44.4
	V 86.7		2	14 42.23		2	52 44.8
	H 89.7		2	14 41.86		2	53 44.3
7563 8.8.	K 22.6		1	21 14 44.30		1	10 38 23.5
21 14 44.18.	M_1 45.8		2	14 43.60		2	38 22.6
10 38 24.8.	St_1 [60.0]		2	14 44.08		2	38 23.9
	S_1 62.7		1	14 43.87		1	38 21.8
	A 70.7		4	14 44.04		..	..
	H 92.7		3	14 44.18		3	38 24.8
7564 8.8.	K 22.8		1	21 14 51.29		1	11 13 38.4
21 14 51.25.	M_1 45.7		1	14 51.65		1	13 34.5
11 13 33.9.	St_1 [60.0]		3	14 51.23		3	13 34.0
	H 92.4		3	14 51.25		3	13 33.9
7565 8.0.	L_1 95.6	L_1 95.6	1	21 15 19.12	L_1 95.6	1	13 18 29.0
21 15 19.20.	K 22.9	K 22.9	1	15 19.42	K 22.9	1	18 33.3
13 18 32.8.	R_1 50.0	L_3 40.7	2	15 19.17	L_3 ..	..	..
	L_3 40.7, ..	M_1 45.8	3	15 19.11	M_1 45.8	3	18 29.7
	M_1 45.8	R_1 50.0	1	15 19.30	R_1 50.0	1	18 34.8
	St_2 59.6	St_2 59.6	2	15 19.22	St_2 59.6	2	18 30.6
	A 71.7	A 71.7	2	15 19.27	A 71.7	2	18 33.7
	H 93.0	H 93.0	4	15 19.20	H 93.0	4	18 32.8
7566 9.3.	M_1 46.6		1	21 15 20.97		1	11 30 44.7
21 15 20.65.	M_2 85.7		1	15 20.78		1	30 38.8
11 30 36.4.	H 92.8		3	15 20.65		3	30 36.4

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zones.	α Ep.−Hd	δ	α Bs.−H	δ	α C−H.	δ	α adj.	δ	Δα	Δδ	
102	−67.1	−67.1	+.31	−0.4	+.12	−1.9	41.98	42.4	+.08 −.01	+1.1	
	−41.7	−41.7	−.4	−1.2	+.08	−1.2	41.58	42.4	−.32 −.41	+1.1	{let it stand: Rümker counts it an observation.
	−29.7	−29.7	+.01	+0.1	+.05	−0.8	41.91	44.9	+.01 −.08	−1.4	
	−3.0	−3.0	+.37	+0.5	+.01	−0.1	42.21	[44.9]	+.31 +.22	[ac −1.1]	1' Error in Bidsch.
			−.18	+2.8			41.86	44.3	−.04 −.10	−0.8	
							41.99	43.8			
102	−70.1	−70.1	+.12	−1.3	−.07	−2.8	44.11	22.0	+.12	+1.5	
	−46.9	−46.9	−.58	−2.2	−.05	−1.9	43.56	23.5	−.43	0.0	
	−32.7	−32.7	−.10	−0.9	−.03	−1.3	44.12	24.4	+.13	−0.9	
	−30.0	−30.0	−.31	−3.0	−.03	−1.2	43.92	22.9	−.07	+0.6	
	−22.0	..	−.14	..	−.02	..	44.04	...	+.05	..	A. St. gum Tabellen mg.
			+.10	+4.0			44.18	24.8	+.19	−1.3	
							43.99	23.5			
114	−69.6	−69.6	+.04	+4.5	−.16	+2.3	51.09	36.2	−.21	−1.2	
	−46.7	−46.7	+.40	+0.6	−.11	+1.5	51.61	35.4	+.31	−0.4	
	−32.4	−32.4	−.02	+0.1	−.07	+1.1	51.27	34.5	−.03	+0.5	
			+.23	−3.3			51.25	33.9	−.05	+1.1	
							51.30	35.6			
9	−97.4	−97.4	−.08	−3.8	−.08	+0.3	19.12	33.1	−.08	−0.4	
119	−70.1	−70.1	+.22	+0.5	−.06	0.0	19.14	32.8	−.06	−0.1	
	−52.3	..	−.03	..	−.04	..	19.15	...	−.05	..	
	−47.2	−47.2	−.09	−3.1	−.04	+0.1	19.07	30.6	−.13	+2.1	
	−43.0	−43.0	+.10	+2.0	−.03	+0.1	19.38	34.1	+.18	−1.4	
	−33.4	−33.4	+.02	−2.2	−.03	+0.1	19.31	32.1	+.11	+0.6	
	−21.3	−21.3	+.07	+0.9	−.02	0.0	19.27	33.7	+.07	−1.0	
			−.83	+.08	−.02		19.20	32.8	.00	−0.1	
							19.20	32.7			
	−46.2	−46.2	+.32	+8.3			20.93	45.6	+.16	−5.3	
	−7.1	−7.1	+.13	+2.4			20.72	38.9	−.05	+1.4	
							20.65	36.4	−.12	+3.9	
							20.77	40.3			

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0
7567 8.2	L, 97.7	L, 97.7	2	21 15 23.79	L, 97.7	2	11 46 24.4
21 15 23.79	K 22.8	K 22.8	1	15 23.95	K 22.8	1	46 25.4
11 46 23.1	M, 45.7	M, 45.7	2	15 23.87	M, 45.7	2	46 24.1
	St, [60.0]	St, 60.0	5	15 23.60	St, 60.0	5	46 23.7
	A 65.7	A 65.7	2	15 23.82	Q 64.9	2	46 25.2
9396	Q 68.1, 64.9	Q 68.1	3	15 23.65	A 65.7	2	46 21.6
	H 92.1	H 92.1	3	15 23.79	H 92.1	3	46 23.1
	E 05.0	E 05.0	5	15 23.81	E 05.0	5	46 23.2
7568 8.7	St, [60.0]		1	21 15 27.13		1	12 5 33.0
21 15 27.40							
12 5 35.0	H 92.8		3	15 27.40		3	5 35.0
7570 9.2	K 22.9		1	21 15 57.11		1	12 45 13.8
21 15 56.87	St_2 59.6		1	15 56.65		1	45 10.6
12 45 12.8	H 94.8		3	15 56.87		3	45 12.8
7571 8.5	K 22.9		1	21 15 56.98		1	12 44 27.3
21 15 57.32	St_2 59.6		4	15 57.00		4	44 26.5
12 44 29.9	Sj 62.6		1	15 57.07		1	44 31.2
	H 90.1		3	15 57.32		3	44 29.9
7572 7.8	P 82, 00.0	L, 97.7	2	21 16 3.73	L, 97.7	2	11 52 46.8
21 16 4.58	L, 97.7	P 00.0	4	16 4.14	P 00.0	4	52 45.7
11 52 53.5	K 22.8	K 22.8	1	16 4.70	K 22.8	1	52 53.0
	M, 45.7	M, 45.7	2	16 4.32	M, 45.7	2	52 50.5
	L_4 54.7, 56.7	L_4 54.7	1	16 4.33	L_4 56.7	2	52 48.8
9399	Q 72.0, 66.8	Q 72.0	5	16 4.33	Q 66.8	2	52 51.7
29286	G 79.8	L_5 78.6	1	16 4.38	L_5 78.6	1	52 51.5
	L_5 78.6	G 79.8	3	16 4.47	G 79.8	3	52 51.4
	H 92.8	H 92.8	3	16 4.58	H 92.8	3	52 53.5

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zones	α Ep.−Hd	α Ps.−H.	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ	
39,3	−94.4	−94.4	.00	+1.3	+06	+5.7	23.85	28.8	+.07	−4.4	✓
114	−69.3	−69.3	+.16	+2.3	−.04	+0.1	23.75	23.2	−.03	+1.2	✓
	−46.4	−46.4	+.08	+1.0	.00	+1.6	23.83	25.0	+.05	−0.6	✓
	−32.1	−32.1	−.19	+0.6	.00	+1.1	23.64	24.3	−.14	+0.1	✓
	−26.4	−27.2	+.03	+2.1	.00	+1.0	23.82	25.7	+.04	−1.3	✓
	−24.0	−26.4	−.14	−1.5	.00	+0.9	23.74	21.6	−.04	+2.8	✓
	−81.8		−.01	−3.5			23.79	23.1	+.01	+1.3	✓
	+12.9	+12.9	+.02	+0.1	.00	−0.5	23.79 / 23.78	23.1 / 24.4	+.01	+1.3	✓
	−32.8	−32.8	−.27	−2.0			27.17	33.6	−.11	+0.7	✓
							27.40 / 27.28	35.0 / 34.2	+12	−0.8	✓
119	−71.9	−71.9	+.24	+1.0	−.04	+0.5	56.83	13.3	+.01	−0.6	✓
	−35.2	−35.2	−.21	−2.2	−.02	+0.2	56.75	12.1	−.07	+0.6	✓
			+.06	−0.7			56.87 / 56.82	12.8 / 12.7	+.05	−0.1	✓
119	−67.2	−67.2	−.34	−2.6	−.62	−3.1	56.70	26.8	−.36	+2.4	✓
	−30.5	−30.5	−.32	−3.4	−.28	−1.4	57.09	28.0	+.03	+1.2	✓
	−27.5	−27.5	−.25	+1.3	−.25	−1.3	57.12	32.3	+.06	−3.1	✓
			+.92	+4.6			57.32 / 57.06	29.9 / 29.2	+.26	−0.7	✓
3,39	−95.1	−95.1	−.85	−6.7	−.79	−2.3	3.79	51.2	−.55	+0.2	✓
	−92.8	−92.8	−.44	−7.8	−.49	−2.8	4.25	49.7	−.09	+1.7	✓
114	−70.0	−70.0	+.12	−0.5	−.08	−2.7	4.50	50.8	+.16	+0.6	✓
	−47.1	−47.1	−.26	−3.0	−.25	−1.4	4.28	51.4	−.06	0.0	✓
	−38.1	−36.1	−.25	−4.7	−.20	−1.1	4.36	49.6	+.02	+1.8	✓
	−20.8	−26.0	−.25	−1.8	−.11	−0.8	4.42	52.2	+.08	−0.8	✓
	−14.2	−14.2	−.28	−2.0	−.08	−0.4	4.38	52.3	+.04	−0.9	✓
	−13.0	−18.0	−.11	−2.1	−.07	−0.4	4.47	52.0	+.13	−0.6	✓
	−82.6		+.53	+3.0			4.58	53.5	+.24	−2.1	✓

→ 4.34 ✓ 51.4

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Star	Epoch		Eph α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0
7573 8.7.	L_1	00.8		1	21 16 10.57		1	12 3 25.6
21 16 10.64	K	22.8		1	16 11.03		1	3 28.6
12 3 31.9	L_4	54.7		1	16 10.56		1	3 31.0
	L_5	78.7		3	16 10.59		3	3 30.5
	H	90.8		2	16 10.64		2	3 31.9
7575 8.9.	K	22.8		2	21 16 23.03		2	12 47 34.1
21 16 23.00	St_2	59.7		2	16 22.90		2	47 32.9
12 47 33.6	A	71.7		2	16 23.12		2	47 34.0
	H	92.8		3	16 23.00		3	47 33.6
7576 8.6	M,	46.1		2	21 16 35.48		2	10 44 20.9
21 16 35.16								
10 44 25.9	H	93.2		3	16 35.16		3	44 25.9
7577 7.3	L_1	94.6	L_1	94.6	1	21 16 36.26	L_1 94.6	1 9 44 56.5
21 16 36.70	R_1	43.0	R_1	43.0	2	16 36.46	R_1 43.0	2 45 12.1
9 45 8.0	M,	45.8	M,	45.8	3	16 36.81	M, 45.8	3 45 6.2
	Nc	48.7, 68.3	Nc	48.7	1	16 36.57	A 66.7	2 45 6.2
	A	66.7	Q	64.8	3	16 36.55	Q 68.1	5 45 6.5
	Q	64.8, 68.1	A	66.7	2	16 36.66	Nc 68.3	2 45 5.4
	G	77.8	G	77.8	H	16 36.62	G 77.8	4 45 6.3
	V	87.8, 87.7	D_1	83.2	2	16 36.72	D_1 83.2	2 45 5.4
	D_1	83.2	V	87.8	3	16 36.74	V 87.7	3 45 7.1
	C_2	95.0	Db	93.7	2	16 36.69	Db 93.7	2 45 7.7
	H	93.8	H	93.8	H	16 36.70	H 93.8	H 45 8.0
	Db	93.7	C_2	95.0	2	16 36.72	C_2 95.0	2 45 7.7

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zones	α Ep-H	δ	α Ps-H	δ	α C-H	δ	α adj.	δ	Δα	Δδ	
39	-90.0	-90.0	-.07	-6.3	-.03	-2.6	10.61	29.3	-.04	+0.8	✓
114	-68.0	-68.0	+.39	-3.3	+.19	-5.5	10.83	26.4	+.18	+3.7	✓
	-36.1	-36.1	-.08	-0.9	+.04	-1.8	10.59	31.8	-.06	-1.7	✓
	-12.1	-12.1	-.05	-1.4	+.01	-0.6	10.59	31.3	-.06	-1.2	✓
	-79.0		-.10	+5.1			10.64	31.9	-.01	+1.8	✓
							10.65	30.1			
114,119	-70.0	-70.0	+.03	+0.5	-.21	-0.9	22.79	32.7	-.19	+1.0	✓
	-33.1	-33.1	-.10	-0.7	-.10	-0.4	22.99	34.4	+.01	-0.7	✓
	-21.1	-21.1	+.12	+0.4	-.06	-0.3	23.12	34.0	+.14	-0.3	✓
			+.30	+1.3			23.00	33.6	+.02	+0.1	✓
							22.98	33.7			
	-47.1	-47.1	+.32	-5.0			35.44	21.8	+.14	+2.0	✓
							35.16	25.9	-.14	-2.1	✓
							35.30	23.8			
1	-99.2	-99.2	-.44	-11.5	-.37	-6.8	36.33	11.2	-.30	+5.7	✓
	-50.8	-50.8	-.24	+4.1	-.19	-3.5	36.54	11.4	-.09	-4.5	✓
	-48.0	-48.0	+.11	-1.8	-.18	-3.3	36.77	7.1	+.14	-0.2	✓
	-45.1	-27.1	-.13	-1.8	-.17	-1.9	36.57	6.2	-.06	+0.7	✓
	-29.0	-25.7	-.15	-1.5	-.11	-1.8	36.64	7.0	+.01	-0.1	✓
	-27.1	-25.5	-.04	-2.6	-.10	-1.8	36.66	6.2	+.03	+0.7	✓
	-16.0	-16.0	-.08	-1.7	-.06	-1.1	36.62	6.9	-.01	0.0	✓
	-10.6	-10.6	+.02	-2.6	-.04	-0.7	36.65	5.8	+.02	+1.1	✓
	-6.0	-6.1	+.04	-0.9	-.02	-0.4	36.72	7.2	+.09	-0.3	✓
	-0.1	-0.1	-.01	-0.3	.00	0.0	36.69	7.4	+.06	-0.5	✓
			+.37	+6.9			36.70	8.0	+.07	-1.1	✓
	+1.2	+1.2	+.02	-0.3	.00	+0.1	36.68	8.2	+.05	-1.3	✓
							36.63	6.9			

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Star	Epoch		Ep. α		Obs. α 1900.0		Ep. δ		Obs. δ 1900.0	
7578 8.8	K	22.8			1	21 16 47.10			1	13 51 15.2
21 16 46.74	St_2	59.7			2	16 46.53			2	51 13.0
13 51 16.0	Sj	62.7			1	16 46.71			1	51 14.5
	H	93.5			4	16 46.74			4	51 16.0
	Sk	95.1			2	16 46.85			2	51 15.2
7579 9.1	Sj	62.8			1	21 16 48.25			1	9 56 37.6
21 16 48.22	D_1	83.6			1	16 48.55			1	56 40.8
9 56 35.9	H	92.6			3	16 48.22			3	56 35.9
	Db	93.7			2	16 48.39			2	56 38.0
7580 8.8	M_1	46.2			4	21 17 29.76			4	13 11 28.2
21 17 29.69	Sj	62.7			1	17 29.70			1	11 32.0
13 11 32.8	H	88.7			3	17 29.69			3	11 32.8
7581 6.8	L_1	94.6	L_1	94.6	1	21 17 34.76	L_1	94.6	1	9 44 35.7
21 17 34.66	P 92	00.0	P	00.0	7	17 35.13	P	000	7	44 38.1
9 44 43.9	K	22.6	K	22.6	1	17 35.10	K	22.6	1	44 43.0
17 Aquarii	R_1	50.0	M_1	45.5	5	17 34.86	M_1	45.5	5	44 43.1
	M_1	45.5	R_1	50.0	1	17 34.55	R_1	50.0	1	44 46.5
	St_1	[60.0]	St_1	60.0 / 61.8 Lr	3 / 1	17 34.62 / 17 34.67 Lr	St_1	60.0 / 61.8 Lr	3 / 1	44 44.3 / 44 45.6
	Wc	69.7, 68.3	Sj	62.7	1	17 34.41	Sj	62.7	1	44 40.3
	Sj	62.7	A	66.7	2	17 34.78	A	66.7	2	44 42.6
	A	66.7	Wc	69.7	2	17 34.62	Wc	68.3	2	44 43.1
	Q	71.8, 70.7	Q	71.8	2	17 34.51	Q	70.7	5	44 43.2
	G	79.8	G	79.8	4	17 34.67	G	79.8	3	44 43.9
	V	86.7	V	86.7	2	17 34.67	V	86.7	2	44 41.2
	H	90.7	H	90.7	3	17 34.66	H	90.7	3	44 43.9
	E	98.7	Db	93.7	2	17 34.66	Db	93.7	2	44 44.6
	Db	93.7	E	98.7	3	17 34.66	E	98.7	3	44 44.3

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Zones.	α Eph-H	δ	α Bes-H	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
117	-70.7	-70.7	+.36	-0.8	+.05	-1.9	46.79	14.1	+.04	+1.1	✓
	-33.8	-33.8	-.21	-3.0	+.02	-0.9	46.62	14.5	-.13	+0.7	✓
	-30.8	-30.8	-.03	-1.5	+.02	-0.8	46.76	15.6	+.01	-0.4	✓
			-.07	+2.7			46.74	16.0	-.01	-0.8	✓
	+1.6	+1.6	+.11	-0.8	-.01	0.0	46.82 / 46.75	15.6 / 15.2	+.07	-0.4	✓
	-29.8	-29.8	+.03	+1.7			48.30	38.7	-.05	-0.6	✓
	-9.0	-9.0	+.33	+4.9			48.48	41.2 / 40.1	+.13	-2.0	✓
							48.22	35.9	-.13	+2.2	✓
	+1.1	+1.1	+.17	+2.1			48.39 / 48.35	37.7 / 38.1	+.04	+0.4	✓
	-42.5	-42.5	+.07	-4.6			29.72	29.1	.00	+2.6	✓
	-26.0	-26.0	+.01	-0.8			29.75	33.1	+.03	-1.4	✓
							29.69 / 29.72	32.8 / 31.7	-.03	-1.1	✓
1	-96.1	-96.1	+.10	-8.2	+.17	-3.5	34.83	40.4	+.12	+3.0	✓
	-90.7	-90.7	+.47	-5.8	+.24	-3.3	35.24	42.1	+.58	+1.3	✓
102	-68.1	-68.1	+.44	-0.9	+.25	-2.4	34.91	41.5	+.20	+1.9	✓
	-45.2	-45.2	+.20	-0.8	+.12	-1.6	34.82	44.0	+.11	-0.6	✓
	-40.7	-40.7	-.11	+2.6	+.11	-1.5	34.63	45.8	-.08	-2.4	✓
	-30.7	-30.7	-.04	+0.4	+.08	-1.1	34.67 / 34.58	45.1 / 44.9	-.04 / -.13	-1.7 / -1.5	✓ ✓
	-28.0	-28.0	-.25	-3.6	+.07	-1.0	34.46	41.4	-.24	+2.0	✓
	-24.0	-24.0	+.12	-1.3	+.06	-0.9	34.78	42.6	+.07	+0.8	✓
	-21.0	-22.4	-.04	-0.8	+.05	-0.8	34.62	43.9	-.09	-0.5	✓
	-18.9	-20.0	-.15	-0.7	+.05	-0.7	34.60	43.7	-.11	-0.3	✓
	-10.9	-10.9	+.01	0.0	+.03	-0.4	34.67	44.5	-.04	-1.1	✓
	-4.0	-4.0	+.01	-2.7	+.01	-0.1	34.65	41.3	-.06	+2.1	✓
		-82.1	-.26	+3.6			34.66	43.9	-.05	-0.5	✓
	+3.0	+3.0	.00	+0.7	-.01	+0.1	34.66	44.3	-.05	-0.9	✓
	+8.0	+8.0	.00	+0.4	-.02	+0.3	34.64 / 34.71	44.2 / 43.4	-.07	-0.8	✓

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Star	Epoch		Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zon.
7582 8.6	K	22.8		1	21 17 45.10		1	11 39 2.1	11.
21 17 44.61	M_1	45.8		1	17 44.75		1	39 1.2	
11 39 3.2	H	92.1		3	17 44.61		3	39 3.2	
7583 8.6	L_1	97.7	L_1	97.7	2 21 17 46.33	L_1	97.7	2 11 0 53.7	3,
21 17 47.09	K	22.8	K	22.8	1 17 47.27	K	22.8	1 0 59.6	11.
11 0 57.6	M_1	45.1	M_1	45.1	3 17 46.98	M_1	45.1	3 0 58.6	
	L_4	54.7, 54.8	L_4	54.7	1 17 46.73	L_4	54.8	1 0 54.6	
	B	65.8	St_1	60.0	2 17 46.82	Wc	58.6	6 0 55.8	
	St_1	[60.0]	B	65.8	1 17 47.14	St_1	60.0	2 0 55.3	
	Wc	76.8, 58.6	Wc	76.8	5 17 47.11	B	65.8	1 0 54.6	
	L_5	78.7	L_5	78.7	1 17 46.81	L_5	78.7	1 0 54.5	
	H	91.7	H	91.7	3 17 47.09	H	91.7	3 0 57.6	
7584 7.4	L_1	95.6	L_1	95.6	1 21 17 52.57	L_1	95.6	1 13 56 20.5	9
21 17 52.63	K	22.8	K	22.8	2 17 52.92	K	22.8	2 56 31.1	11
13 56 29.1	R	50.0	M_1	45.8	2 17 52.69	M_1	45.8	2 56 29.1	
	M_1	45.8	R	50.0	1 17 52.54	R	50.0	1 56 27.9	
	L_4	61.8, 60.3	St_2	59.6	2 17 52.48	St_2	59.6	2 56 28.5	
	St_2	59.6	L_4	61.8	1 17 52.70	L_4	60.3	2 56 28.9	
	L_5	78.6	Q	70.0	3 17 52.41	Q	74.8	2 56 29.8	
9420	Q	70.0, 74.8	L_5	78.6	1 17 52.43	L_5	78.6	1 56 28.9	
	H	92.7	H	92.7	3 17 52.63	H	92.7	3 56 29.1	
	Sk	95.1	Sk	95.1	2 17 52.54	Sk	95.1	2 56 29.0	
For 7585–89 next page									
7590 9.0	L_1	95.6			1 21 18 55.58		1	13 13 34.8	
21 18 55.64	K	22.9			1 18 55.74		1	13 35.4	11
13 13 34.7	M_1	44.7			1 18 55.50		1	13 34.8	
	H	89.4			3 18 55.64		3	13 34.7	

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zones	α Ep-H	δ	α Pos.-H	δ	α C.-H.	δ	α adj.	δ	Δx	$\Delta\delta$	
114	-69.3	-69.3	+.49	-1.1	+.29	-3.3	44.90	59.9	+.16	+1.8	✓
	-46.3	-46.3	+.14	-2.0	+.19	-2.2	44.71	2.1	-.03	-0.4	✓
			-.42	+4.8			44.61	3.2	-.13	-1.5	✓
							44.74	1.7			
3,39	-94.0	-94.0	-.76	-3.9	-.70	+0.5	46.39	58.1	-.51	-1.1	✓
114	-68.9	-68.9	+.18	+2.0	-.02	-0.2	47.07	57.4	+.17	-0.4	✓
	-46.6	-46.6	-.11	+1.0	-.21	+0.1	46.94	59.5	+.04	-2.5	✓
	-37.0	-36.9	-.36	-3.0	-.16	+0.1	46.76	55.4	-.14	+1.6	✓
	-31.7	-33.1	-.27	-1.8	-.14	+0.1	46.87	56.6	-.03	+0.4	✓
	-25.9	-31.7	+.05	-2.3	-.11	+0.1	47.06	55.8	+.16	+1.2	✓
	-14.9	-25.9	+.02	-3.0	-.07	+0.1	47.11	56.9	+.21	+0.1	✓
	-13.0	-13.0	-.28	-3.1	-.06	0.0	46.81	55.3	-.09	+1.7	✓
			-81.4	+44	-0.2		47.09	57.6	+.19	-0.6	✓
							46.90	57.0			
9	-97.1	-97.1	-.06	-8.6	-.06	-4.5	52.57	24.6	-.01	+4.4	✓
117,119	-69.9	-69.9	+.29	+2.0	-.01	+1.2	52.62	30.3	+.04	-1.3	✓
	-46.9	-46.9	+.06	0.0	-.02	-0.9	52.65	30.0	+.07	-1.0	✓
	-42.7	-42.7	-.09	-1.2	-.02	-0.9	52.62	27.2	+.04	+1.8	✓
	-33.1	-33.1	-.15	-0.6	-.01	-0.7	52.57	30.0	-.01	-1.0	✓
	-30.9	-32.4	+.07	-0.2	-.01	-0.6	52.73	29.7	+.15	-0.7	✓
	-22.7	-17.9	-.22	+0.7	-.01	-0.4	52.50	30.3	-.08	-1.3	✓
	-14.1	-14.1	-.20	-0.2	-.07	-0.3	52.43	29.7	-.15	-0.7	✓
			-83.5	+0.4	+2.0		52.63	29.1	+.05	-0.1	✓
	+2.4	+2.4	-.09	-0.1	.00	0.0	52.51	29.4	-.07	-0.4	✓
							52.58	29.0			
9	-93.8	-93.8	-.06	+0.1	-.06	+4.2	55.58	38.9	+.04	-2.9	✓
119	-66.5	-66.5	+.10	+0.7	-.18	+0.2	55.46	34.9	-.08	+1.1	✓
	-44.7	-44.7	-.14	+0.1	-.07	+1.2	55.46	35.7	-.08	+0.3	✓
			-80.2	+1.5	-2.7		55.64	34.7	+.10	+1.3	✓
							55.54	36.0			

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Star		Epoch		Ep. α		Obs.	α 1900.0			Ep. δ		Obs.	δ 1900.0			zon.
7585	8.3	L_1	94.6	L_1	94.6	1	21	18	15.71	L_1	94.6	1	12	29	17.4	3
21	18	15.72	M_1	45.6	M_1	45.6	2		18	15.45	M_1	45.6	2		29	16.1	
12	29	17.1	L_4	63.8, 62.2	L_4	63.8	2		18	15.75	L_4	62.2	2		29	16.3	
			Wc	67.2, 69.7	Wc	67.2	2		18	15.76	Wc	69.7	2		29	16.5	
		9426	Q	75.3, 69.7	Q	75.3	2		18	15.67	Q	69.7	3		29	16.9	
			L_5	78.7	L_5	78.7	2		18	15.75	L_5	78.7	2		29	16.5	
			H	90.0	H	90.0	3		18	15.72	H	90.0	3		29	17.1	
7586	9.1	K	22.8	K	22.8	1	21	18	21.04	K	22.8	1	11	7	36.0	114
21	18	20.63	M_1	45.8	M_1	45.8	2		18	20.79	M_1	45.8	2		7	31.8	
11	7	33.1	B	65.8	St_1	60.0	2		18	20.33	St_1	60.0	2		7	32.3	
			St_1	[60.0]	A	65.7	2		18	20.67	A	65.7	2		7	31.3	
			Wc	77.4, 75.4	B	65.8	1		18	20.62	B	65.8	1		7	32.4	
			A	65.7	Wc	77.4	5		18	20.71	Wc	75.4	5		7	33.2	
			H	90.4	H	90.4	3		18	20.63	H	90.4	3		7	33.1	
7587	6.5	L_1	95.6	L_1	95.6	1	21	18	43.08	L_1	95.6	1	13	18	24.4	9
21	18	43.56	P 104	00.0	P	00.0	11		18	43.13	P	00.0	11		18	23.2	
13	18	26.5	K	22.9	K	22.9	1		18	43.35	K	22.9	1		18	29.5	11
			L_3	48.5, 48.0	M_1	46.0	4		18	43.22	M_1	46.0	4		18	25.3	
			M_1	46.0	L_3	48.5	5		18	43.33	L_3	48.0	3		18	26.3	
			L_4	54.7, 58.7	L_4	54.7	1		18	43.17	L_4	58.7	1		18	26.7	
			St_2	59.7	St_2	59.7	2		18	43.47	St_2	59.7	2		18	24.5	
			Wc	66.4, 69.2	Wc	66.4	3		18	43.51	Q	61.2	2		18	26.2	
		9433	Q	67.4, 61.2	Q	67.4	3		18	43.30	Wc	69.2	2		18	26.4	
		29332	G	77.8	G	77.8	4		18	43.53	G	77.8	4		18	26.2	
			L_5	79.7	L_5	79.7	1		18	43.52	L_5	79.7	1		18	26.5	
			H	90.0	H	90.0	3		18	43.56	H	90.0	3		18	26.5	
			E	01.8	E	01.8	3		18	43.68	E	01.8	3		18	25.7	

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zones	α Ep-H	δ Ep-H	α Bs-H	δ Bs-H	α C-H	δ C-H	α adj.	δ	Δα	Δδ
3	-95.4	-95.4	-.01	+0.3	+.08	+5.3	15.80	22.4	+.09	-4.5
	-44.4	-44.4	-.27	-1.0	+.04	+2.5	15.41	17.0	-.30	+0.9
	-26.2	-27.8	+.03	-0.8	+.02	+1.6	15.78	17.1	+.07	+0.8
	-22.8	-20.3	+.04	-0.6	+.02	+1.1	15.76	17.3	+.05	+0.6
	-14.7	-20.3	-.05	-0.2	+.01	+1.1	15.76	17.4	+.05	+0.5
	-11.3	-11.3	+.03	-0.6	+.01	+0.6	15.75	17.3	+.04	+0.6
			-.08	-5.6			15.72 / 15.71	17.1 / 17.9	+.01	+0.8
114	-67.6	-67.6	+.41	+2.9	+.21	+0.7	20.84	33.8	+.20	-0.6
	-44.6	-44.6	+.16	-1.3	+.14	+0.4	20.75	32.7	+.11	+0.5
	-30.4	-30.4	-.30	-0.8	+.09	+0.3	20.38	32.7	-.26	+0.5
	-24.7	-24.7	+.04	-1.8	+.08	+0.2	20.67	31.3	+.03	+1.9
	-24.6	-24.6	-.01	-0.7	+.08	+0.2	20.54	34.7	-.10	-1.5
	-13.0	-150	+.08	+0.1	+.04	+0.2	20.71	34.0	+.07	-0.8
			-.31	-1.0			20.63 / 20.64	33.1 / 33.2	-.01	+0.1
9	-94.4	-94.4	-.48	-2.1	-.48	+2.0	43.08	28.5	-.29	-1.5
	-90.0	-90.0	-.43	-3.3	-.54	+2.5	43.24	27.2	-.13	-0.2
119	-67.1	-67.1	-.21	+3.0	-.49	+2.5	43.07	29.0	-.30	-2.0
	-44.0	-44.0	-.34	-1.2	-.26	+1.2	43.18	26.2	-.19	+0.8
	-41.5	-42.0	-.23	-0.2	-.25	+1.2	43.31	26.6	-.06	+0.4
	-35.3	-31.3	-.39	+0.2	-.21	+0.9	43.20	27.5	-.17	-0.5
	-30.3	-30.3	-.09	-2.0	-.18	+0.8	43.56	26.0	+.19	+1.0
	-38.6	-28.8	-.05	-0.3	-.20	+0.8	43.51	26.7	+.14	+0.3
	-22.6	-20.8	-.26	-0.1	-.14	+0.6	43.39	27.2	+.02	-0.2
	-12.2	-12.2	-.03	-0.3	-.07	+0.3	43.53	26.8	+.16	+0.2
	-10.3	-10.3	-.04	0.0	-.06	+0.3	43.52	27.3	+.15	-0.3
			-80.8	+6.0			43.56	26.5	+.19	+0.5
	+11.8	+11.8	+.12	-0.8	+.07	-0.3	43.66 / 43.37	25.6 / 27.0	+29	+1.4

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zon
7588 9.1	K 22.8	K 22.8	1	21 18 50.58	K 22.8	1	11 2 29.7	11
21 18 50.15	M, 45.1	M, 45.1	3	18 50.35	M, 45.1	3	2 25.4	
11 2 26.6	St, [60.0]	St, 60.0	2	18 50.23	St, 60.0	2	2 27.3	
	Wc 77.2, 73.7	A 65.9	2	18 50.51	A 65.9	2	2 26.2	
	A [65.9]	Wc 77.2	3	18 50.29	Wc 73.7	1	2 24.5	
	H 90.4	H 90.4	3	18 50.15	H 90.4	3	2 26.6	
7589 8.9	K 22.6	K 22.6	1	21 18 51.07	K 22.6	1	10 6 36.9	10
21 18 51.10	R, 50.0	M, 46.6	1	18 51.51	M, 46.6	1	6 35.7	
10 6 36.3	M, 46.6	R, 50.0	1	18 51.18	R, 50.0	1	6 34.6	
	St, [60.0]	St, 60.0	1	18 50.95	St, 60.0	1	6 24.6	
	A 66.8	A 66.8	1	18 51.33	A 66.8	1	6 35.3	
9437	Q 69.8, 67.8	Q 69.8	2	18 51.05	Q 67.8	2	6 34.6	
	H 88.7	H 88.7	3	18 51.10	H 88.7	3	6 36.3	
7590 See p. 34								
7591 9.1	R, 48.0		2	21 18 55.71		3	10 47 39.5	
21 18 55.80	B 65.9		1	18 55.97		1	47 39.0	
10 47 39.0	A 66.0		5	18 55.91		5	47 40.2	
	H 90.0		3	18 55.80		3	47 39.0	
7592 8.9	K 22.8		1	21 19 12.06		1	11 22 57.5	11
21 19 11.72	M, 45.8		1	19 11.97		1	22 57.9	
11 22 57.2	B 65.9		1	19 12.03		1	22 55.8	
	H 89.4		3	19 11.72		3	22 57.2	
7593 8.2	L, 97.7	L, 97.7	2	21 19 15.08	L, 97.7	2	12 12 19.2	3,
21 19 15.26	P 106 00.0	P 00.0	8	19 15.36	P 00.0	8	12 29.7	
12 12 33.3	M, 46.6	M, 46.6	2	19 15.43	M, 46.6	2	12 32.8	
	G 79.7	L$_5$ 78.7	2	19 15.21	L$_5$ 78.7	2	12 31.3	
	L$_5$ 78.7	G 79.7	3	19 15.23	G 79.7	3	12 31.0	
	H 93.0	H 93.0	4	19 15.26	H 93.0	4	12 12 33.3	

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Zones	α Ep.−H.	δ	α Bs.−H.	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ
114	−67.6	−67.6	+.43	+3.1	+.23	+0.9	50.38	27.5	+.06	−0.9
	−45.3	−45.3	+.20	−1.2	+.15	+0.6	50.31	26.3	−.01	+0.3
	−30.4	−30.4	+.08	+0.7	+.10	+0.4	50.28	27.7	−.04	−1.1
	−24.5	−24.5	+.36	−0.4	+.08	+0.3	50.51	26.2	+.19	+0.4
	−13.2	−16.7	+.14	−2.1	+.04	+0.2	50.29	25.3	−.03	+1.3
			+.34	−1.3			50.15	26.6	−.17	0.0
							50.32	26.6		
102	−66.1	−66.1	−.03	+0.6	−.22	−0.9	50.88	35.4	−.29	0.0
	−42.1	−42.1	+.41	−0.6	−.14	−0.6	51.47	36.6	+.30	−1.2
	−38.7	−38.7	+.08	−1.7	−.13	−0.5	51.26	33.9	+.09	+1.5
	−28.7	−28.7	−.15	−11.7	−.09	−0.4	51.00	[25.0]	−.17	[+10.4] ab
	−21.9	−21.9	+.23	−1.0	−.07	−0.3	51.33	35.3	+.16	+0.1
	−18.9	−20.9	+.05	−1.7	−.06	−0.3	51.14	35.1	−.03	+0.3
			+.33	+1.4			51.10	36.3	−.07	−0.9
							51.17	35.4		
	−42.0	−42.0	−.09	+0.5			55.79	38.8	−.06	+1.0
	−24.1	−24.1	+.17	0.0			55.89	41.3	+.04	−1.5
	−24.0	−24.0	+.11	+1.2			55.91	40.2	+.06	−0.4
							55.80	39.0	−.05	+0.8
							55.85	39.8		
114	−66.6	−66.6	+.34	+0.3	+.14	−1.9	11.86	55.3	.00	+2.1
	−43.6	−43.6	+.25	+0.7	+.09	−1.3	11.93	58.8	+.07	−1.4
	−23.5	−23.5	+.31	−1.4	+.05	−0.7	11.95	58.1	+.09	−0.7
			+.21	+2.9			11.92	57.2	−.14	+0.2
							11.86	57.4		
3,39	−95.3	−95.3	−.18	−14.1	−.12	−9.7	15.14	23.6	−.14	+7.7
	−93.0	−93.0	+.10	−3.6	−.12	−9.5	15.47	33.7	+.19	−2.4
	−46.4	−46.4	+.17	−0.5	−.06	−4.7	15.39	33.7	+.11	−2.4
	−14.8	−14.8	−.05	−2.0	−.02	−1.5	15.21	32.1	−.07	−0.8
	−13.3	−13.8	−.03	−2.3	−.02	−1.4	15.23	31.6	−.05	−0.3
			+.13	+10.2			15.26	33.3	−.02	−2.0
									→ 15.28	31.3 mean

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Star		Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0	
7594	7.7	L_1	95.6	L_1	95.6	1	21 19 44.41		L_1	95.6	1	13 55 28.2	
21 19	44.60	K	22.9	K	22.9	1	19 44.92		K	22.9	1	55 29.1	
13 55	27.2	L_4	.. 57.7	L_4	..	..	..		L_4	57.7	1	55 27.1	
		St_2	59.6	St_2	59.6	2	19 44.38		St_2	59.6	2	55 26.6	
		L_3	62.6	L_3	62.6	2	19 44.68		L_3	62.6	2	55 27.0	
		A	73.7	A	73.7	2	19 44.60		A	73.7	2	55 27.4	
		L_5	80.2	L_5	80.2	2	19 44.72		L_5	80.2	2	55 25.2	
		H	90.0	H	90.0	3	19 44.60		H	90.0	3	55 27.2	
		St	95.3	St	95.3	2	19 44.66		St	95.3	2	55 27.0	
7595	6.5	L_1	94.6	L_1	94.6	1	21 19 50.44		L_1	94.6	1	10 10 9.4	
21 19	50.66	P 110	00.0	P	00.0	9	19 50.48		P	00.0	10	10 [7.4]	
10 10	27.2	K	22.6	K	22.6	1	19 50.79		K	22.6	1	10 18.6	
		L_3	50.2, 48.7	M_1	46.0	3	19 50.68		M_1	46.0	2	10 17.4	
		M_1	46.0	L_3	50.2	2	19 50.67		L_3	48.7	2	10 19.2	
		L_4	58.9, 60.3	L_4	58.9	4	19 50.60		St_1	60.0	4	10 21.0	
		St_1	[60.0]	St_1	60.0	4	19 50.54		L_4	60.3	3	10 20.6	
				Lr	62.9	1	19 50.67		Lr	62.9	1	10 23.6	
		Nc	63.8, 73.0	Nc	63.8	2	19 50.64		Q	63.9	6	10 21.6	
		A	66.0	A	66.0	4	19 50.56		A	66.0	4	10 22.0	
		L_5	80.7, 81.0	Q	66.7	4	19 50.52		Nc	73.0	4	10 22.0	
		V	86.7	G	78.4	5	19 50.61		G	78.4	5	10 24.1	
		H	92.0	L_5	80.7	2	19 50.68		L_5	81.0	3	10 24.1	
		E	02.7	V	86.7	2	19 50.71		V	86.7	2	10 25.1	
		C_1	90.0	C_1	90.0	5	19 50.70		C_1	90.0	5	10 27.2	
		Q	66.7, 63.9	H	92.0	4	19 50.66		H	92.0	4	10 27.2	
		G	78.4	E	02.7	3	19 50.64		E	02.7	3	10 28.2	
7596	8.5	K	22.6			1	21 19 55.79				1	10 19 30.0	
21 19	55.44	M_1	45.7			1	19 55.83				1	19 30.3	
10 19	32.1	H	90.4			3	19 55.44				3	19 32.1	

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Zones	Ep-H δ.	α Bs-H δ	α C.-H. δ	α adj. δ	Δα	Δδ.	
9	-94.4 -94.4	-.19 +1.0	-.19 +5.1	44.41	32.3	-.19	-4.2
119	-67.1 -67.1	+.32 +1.9	+.04 +1.4	44.64	28.6	+.04	-0.5
	" -32.3	" -0.1	" +1.3	...	27.9	"	+0.2
	-30.4 -30.4	-.22 -0.6	-.03 +1.2	44.47	28.1	-.13	0.0
	-27.4 -27.4	+.08 -0.2	-.02 +1.1	44.73	28.1	+.13	0.0
	-16.3 -16.3	.00 +0.2	-.01 +0.7	44.60	27.4	.00	+0.7
	-9.8 -9.8	+.12 -2.0	-.01 +0.4	44.72	26.0	+.12	+2.1
	-80.8	+.09 -4.0		44.60	27.2	.00	+0.9
	+5.3 +5.3	+.06 -0.2	.00 -0.2	44.63 / 44.60	27.4 / 28.1	+.03	+0.7
1	-97.4 -97.4	-.22 -17.8	-.15 -13.1	50.51	14.1	-.11	+7.7 +7.7
	-92.0 -92.0	-.18 -19.8	-.12 -12.8	50.59	11.4	-.03	[+10.4] [+10.4]
102	-69.4 -69.4	+.13 -8.6	-.06 -10.1	50.60	17.1	-.02	+4.7 +4.7
	-46.0 -46.0	+.02 -9.8	-.06 -6.4	50.64	18.3	+.02	+3.5 +3.5
	-41.8 -43.3	+.01 -8.0	-.05 -6.0	50.65	19.5	+.03	+2.3 +2.3
	-33.1 -32.0	-.06 -6.2	-.04 -4.4	50.63	21.8	+.01	+0.0 +0.0
	-32.0 -31.7	-.12 -6.6	-.04 -4.4	50.59 / 50.58	21.4 / 22.9	-.03 -.04	+0.4 +0.4 -1.1
	-28.2 -28.1	-.02 -5.6	-.04 -3.9	50.64	22.1	+.02	+0.3 +0.3
	-26.0 -26.0	-.10 -5.2	-.03 -3.6	50.56	22.0	-.06	-0.2 -0.2
	-25.3 -19.0	-.14 -5.2	-.03 -2.6	50.61	22.8	-.01	-1.0 -1.0
	-13.6 -13.6	-.05 -3.1	-.02 -1.9	50.61	24.7	-.01	-2.9 -2.9
	-11.3 -11.0	+.02 -3.1	-.01 -1.5	50.68	24.9	+.06	-3.1 -3.1
	-5.3 -5.3	+.05 -2.1	-.01 -0.7	50.69	25.2	+.07	-3.4 -3.4
	-2.0 -2.0	+.04 0.0	.00 -0.3	50.62	26.9	.00	-5.1 -5.1
	-83.4	+.13 +13.9		50.66	27.2	+.04	-5.4 -5.4
	+10.7 +10.7	-.02 +1.0	+.01 +1.5	50.62 / 50.62	28.1 / 21.8 / 22.4	.00	-6.3 -6.3
102	-67.8 -67.8	+.35 -2.1	+.16 -3.6	55.60	28.5	-.01	+2.1
	-44.7 -44.7	+.39 -1.8	+.11 -2.4	55.79	31.2	+.18	-0.6
		-.24 +5.3		55.44 / 55.61	32.1 / 30.6	-.17	-1.5

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0
7597	8.6	M_1 44.7	M_1	44.7	2	21 20 15.93	M_1	44.7	2	10 57 5.0
21 20	16.29	M_2 88.7	A	66.8	1	20 16.74	A	66.8	1	57 6.1
10 57	5.6	A 66.8	M_2	88.7	1	20 15.86	M_2	88.7	1	57 4.9
		H 90.3	H	90.3	3	20 16.29	H	90.3	3	57 5.6
7598	9.3	Sj 62.7			1	21 20 18.84			1	9 41 7.8
21 20	18.88	H 90.6			3	20 18.88			3	41 10.2
9 41	10.2	Db 93.7			2	20 18.95			2	41 9.8
7599	9.1	M_1 46.6			1	21 20 27.71			1	13 29 40.9
21 20	28.16	M_2 87.8			1	20 28.27			1	29 42.2
13 29	41.3	H 90.4			4	20 28.16			4	29 41.3
7600	7.0	L_1 00.8	P	00.0	11	21 20 58.78	P	00.0	12	12 30 55.7
21 20	59.12	P 119 00.0	L_1	00.8	1	20 58.80	L_1	00.8	1	30 56.4
12 31	18.2	K 22.8	K	22.8	1	20 59.23	K	22.8	1	31 5.8
		L_3 41.7, ..	L_3	41.7	1	20 58.98	L_3	..	"	..
		M_1 45.8	M_1	45.8	2	20 59.18	M_1	45.8	2	31 11.4
		L_4 54.7	L_4	54.7	1	20 58.98	L_4	54.7	1	31 11.1
		St, [60.0]	St_2	59.7	2	20 59.11	St_2	59.7	2	31 8.9
		St_2 59.7	St,	60.0	3	20 59.09	St,	60.0	3	31 12.2
9461		Q 70.1, 69.7	A	65.7	2	20 59.17	A	65.7	2	31 10.0
		A 65.7	Q	70.1	3	20 58.98	Q	69.7	3	31 13.4
29384		G 77.8	G	77.8	4	20 59.08	G	77.8	4	31 15.3
		L_5 79.8	L_5	79.8	2	20 59.14	L_5	79.8	2	31 15.6
		H 92.7	C_1	90.0	3	20 59.08	C_1	90.0	3	31 19.1
		C_1 90.0	H	92.7	4	20 59.12	H	92.7	4	31 18.2

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Zones	α Ep-H	δ	α Pos-H	δ	α C-H.	δ	α Adj.	δ	Δα	Δδ	
	-45.6	-45.6	-.36	-0.6			15.89	5.9	-.29	-0.3	✓
	-23.5	-23.5	+.45	+0.5			16.74	6.1	+.56	-0.5	✓
	-1.6	-1.6	-.43	-0.7			15.80	5.0	-.38	+0.6	✓
							16.29 / 16.18	5.6 / 5.6	+.11	0.0	✓
	-27.9	-27.9	-.04	-2.4			18.89	8.9	-.02	+0.6	✓
							18.88	10.2	-.03	-0.7	✓
	+3.1	+3.1	+.07	-0.4			18.95 / 18.91	9.5 / 9.5	+.04	0.0	✓
	-43.8	-43.8	-.45	-0.4			27.67	41.8	-.34	0.0	✓
	-2.6	-2.6	+.11	+0.9			28.21	42.3	+.20	-0.5	✓
							28.16 / 28.01	41.3 / 41.8	+.15	+0.5	✓
	-92.7	-92.7	-.34	-22.5	-.21	-18.7	58.89	59.7	-.17	[±11.4]	✓
39	-91.9	-91.9	-.32	-21.8	-.28	-18.1	58.84	0.1	-.22	[±11.0]	✓
114	-69.9	-69.9	+.11	-12.4	-.09	-14.6	59.03	3.6	-.03	+7.5	R
	-51.0	..	-.14	..	-.12	..	58.96	..	-.10	..	✓
	-46.9	-46.9	+.06	-6.8	-.11	- 9.5	59.14	12.3	+.08	-1.2	✓
	-38.0	-38.0	-.14	-7.1	-.09	- 7.7	59.01	11.9	-.05	-0.8	✓
	-33.0	-33.0	-.01	-9.3	-.08	- 6.7	59.20	10.4	+.14	+0.7	✓
	-32.7	-32.7	-.03	-6.0	-.08	- 6.6	59.14	13.0	+.08	+1.9	✓
	-27.0	-27.0	+.05	-8.2	-.06	- 5.5	59.17	10.0	+.11	+1.1	✓
	-22.6	-23.0	-.14	-4.8	-.05	- 4.6	59.07	13.9	+.01	-2.8	✓
	-14.9	-14.9	-.04	-2.9	-.03	- 3.0	59.08	15.9	+.02	-4.8	✓
	-12.9	-12.9	+.02	-2.6	-.03	- 2.6	59.14	16.4	+.08	-5.3	✓
	-2.7	-2.7	-.04	+0.9	-.01	- 0.5	59.00	18.4	-.06	-7.6	✓
	-809		+.23	+20.2			59.12 / 59.06	18.2 / 11.1	+.06	-7.1	✓

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Jon
7601 8.0	L_1 97.7	L_1 97.7	2	21 21 2.61	L_1 97.7	2	11 20 52.5	3,
21 21 2.55	K 22.8	K 22.8	1	21 2.74	K 22.8	1	20 59.2	11
11 20 57.2	R_1 50.0	M_1 45.3	3	21 2.70	M_1 45.3	3	20 55.5	
	M_1 45.3	R_1 50.0	1	21 2.69	R_1 50.0	1	20 57.7	
	L_4 54.7	L_4 54.7	1	21 2.44	L_4 54.7	1	20 57.1	
	B 65.8	St_1 60.0	2	21 2.32	St_1 60.0	2	20 56.7	
	St_1 [60.0]	B 65.8	1	21 2.65	B 65.8	1	20 56.2	
	L_5 78.7	L_5 78.7	2	21 2.58	L_5 78.7	2	20 57.5	
	H 89.7	H 89.7	3	21 2.55	H 89.7	3	20 57.2	
	E 07.4, 07.5	E 07.4	3	21 2.54	E 07.5	4	20 58.0	
7602 8.9	K 22.8	K 22.8	1	21 21 4.46	K 22.8	1	12 27 35.0	11
21 21 3.98	B 65.9	St_1 60.0	2	21 3.96	St_1 60.0	2	27 34.2	
12 27 35.7	St_1 [60.0]	B 65.9	1	21 4.09	B 65.9	1	27 36.6	
	H 90.8	H 90.8	4	21 3.98	H 90.8	4	27 35.7	
7603 8.7	M_1 45.4		4	21 21 36.29		4	10 25 33.7	
21 21 36.12								
10 25 34.0	H 91.5		4	21 36.12		4	25 34.0	
7604 9.2	M_1 45.1		3	21 21 44.46		3	10 29 26.1	
21 21 44.07								
10 29 27.7	H 91.9		4	21 44.07		4	29 27.7	
7605 9.0	M_1 46.6		1	21 21 56.05		1	12 57 55.1	
21 21 56.23	M_2 85.7		1	21 56.30		1	57 52.2	
12 57 50.4	H 89.4		3	21 56.23		3	57 50.4	

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Zones	α Ep-H	δ	α Rs-H	δ	α C-H.	δ	α adj.	δ	Δα	Δδ	
3,39	-92.0	-92.0	+.06	-4.7	+.12	-0.3	2.67	56.9	+.10	+0.5	✓
114	-66.9	-66.9	+.19	+2.0	-.01	-0.2	2.54	57.0	-.03	+0.4	✓
	-44.4	-44.4	+.15	-1.7	+.03	-0.1	2.66	56.4	+.09	+1.0	✓
	-39.7	-39.7	+.14	+0.5	+.03	-0.1	2.77	57.0	+.20	+0.4	✓
	-35.0	-35.0	-.11	-0.1	+.02	-0.1	2.47	57.9	-.10	-0.5	✓
	-29.7	-29.7	-.23	-0.5	+.02	-0.1	2.37	57.3	-.20	+0.1	✓
	-23.9	-23.9	+.10	-1.0	+.02	-0.1	2.57	58.5	.00	-1.1	✓
	-11.0	-11.0	+.03	+0.3	+.01	0.0	2.58	58.3	+.01	-0.9	✓
	-794		-.07	+0.8			2.55	57.2	-.02	+0.2	✓
	+17.7	+17.8	-.01	+0.8	-.01	+0.1	2.52 / 2.57	57.9 / 57.4	-.05	-0.5	✓
114	-68.0	-68.0	+.48	-0.7	+.28	-2.9	4.26	32.8	+.20	+2.7	✓
	-30.8	-30.8	-.02	-1.5	+.13	-1.3	4.01	34.6	-.05	+0.9	✓
	-24.9	-24.9	+.11	+0.9	+.10	-1.1	4.01	38.9	-.05	-3.4	✓
			-.41	+4.3			3.98 / 4.06	35.7 / 35.5	-.08	-0.2	✓
	-46.1	-46.1	+.17	-0.3			36.25	34.6	+.07	-0.3	✓
							36.12 / 36.18	34.0 / 34.3	-.06	+0.3	✓
	-46.8	-46.8	+.39	-1.6			44.42	27.0	+.18	+0.4	✓
							44.04 / 44.24	27.7 / 27.4	-.17	-0.3	✓
	-42.8	-42.8	-.18	+4.7			56.01	56.0	-.15	-3.1	✓
	-3.7	-3.7	+.07	+1.8			56.24	52.3	+.08	+0.6	✓
							56.23 / 56.16	50.4 / 52.9	+.07	+2.5	✓

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Log
7607 7.9	L_1 00.8	L_1 00.8	1	21 22 5.22	L_1 00.8	1	11 35 51.5	3
21 22 5.15	L_3 40.7, ..	L_3 40.7	1	22 5.02	L_3 ..	..	..	
11 35 51.8	M_1 45.7	M_1 45.7	1	22 5.44	M_1 45.7	1	35 49.4	
	L_4 .. 54.7	L_4 ..	..	..	L_4 54.7	1	35 49.5	
	B 65.9	B 65.9	1	22 5.20	B 65.9	1	35 51.3	
	A 66.6	A 66.6	1	22 5.31	A 66.6	1	35 50.9	
	L_5 79.7	L_5 79.7	2	22 5.14	L_5 79.7	2	35 51.0	
	H 89.4	H 89.4	3	22 5.15	H 89.4	3	35 51.8	
7608 7.4	L_1 97.7	L_1 97.7	2	21 22 13.10	L_1 97.7	2	12 5 43.7	39
21 22 13.27	P 126, 00.0	P 00.0	20	22 13.34	P 00.0	16	5 48.2	
12 5 58.4	K 22.8	K 22.8	1	22 13.60	K 22.8	1	5 65.0	11
P XXI. 126 =	R_1 48.0	M_1 45.8	3	22 13.32	M_1 45.8	2	5 51.9	
	M_1 45.8	R_1 48.0	1	22 13.41	R_1 48.0	1	5 55.8	
	L_4 54.7, 56.8	L_4 54.7	1	22 13.15	L_4 56.8	2	5 55.4	
	B 65.8	St_1 60.0	2	22 12.97	St_1 60.0	2	5 51.8	
	St_1 [60.0]	B 65.8	1	22 13.35	B 65.8	1	5 52.9	
	W_c 67.3, 67.8	A 66.2	2	22 13.33	A 66.2	2	5 56.1	
	A 66.2	W_c 67.3	2	22 13.25	Q 67.5	4	5 57.2	
94.73	Q 69.4, 67.5	Q 69.4	5	22 13.29	W_c 67.8	2	5 55.4	
29 H05	G 77.8	G 77.8	4	22 13.32	G 77.8	4	5 54.3	
	L_5 79.7	L_5 79.7	2	22 13.26	L_5 79.7	2	5 55.9	
	H 89.8	H 89.8	3	22 13.27	H 89.8	3	5 58.4	
	E 07.7	E 07.7	3	22 13.36	E 07.7	3	5 58.4	
7610 9.2	M_1 43.7		1	21 22 32.72		1	10 4 12.1	
21 22 32.92	M_2 87.8		1	22 32.74		1	4 11.9	
10 4 11.9	H_2 90.1		3	22 32.92		3	4 11.9	

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Zones	α Ep.−H	δ α Bs.−H.	δ.	α C−H.	δ	α adj.	δ	Δα	Δδ.	
39	−88.6 −88.6	+.07	+4.7	+.11	+8.4	5.26	54.2 ~~50.2~~	+.06	−2.4	✓
	−48.7 ..	−.13	..	+.06	..	5.00	...	−.20	..	✓
	−43.7 −43.7	+.29	−2.4	+.05	+4.2	5.40	50.3	+.20	+1.5	✓
	.. −34.7	..	−2.3	..	+3.3	...	50.3	..	+1.5	✓
	−23.5 −23.5	+.05	−0.5	+.03	+2.2	5.12	53.6	−.08	−1.8	✓
	−22.8 −22.8	+.16	−0.9	+.03	+2.2	5.31	50.9	+.11	+0.9	✓
	−9.7 −9.7	−.01	−0.8	+.01	+0.9	5.14	51.8	−.06	0.0	✓
		−.12	−9.5			5.15 / 5.20	51.8 / 51.8	−.05	0.0	✓
39,3	−92.1 −92.1	−.17	−14.7	−.11	−10.3	13.16	48.1	−.13	+6.8	✓
	−89.8 −89.8	+.07	−19.2	+.01	−9.0	13.45	52.1	+.16	+2.8	✓
114	−67.0 −67.0	+.33	−3.4	+.13	−5.6	13.40	52.8	+.11	+2.1	✓
	−44.0 −44.0	+.05	−6.5	.00	−4.4	13.28	52.8	−.01	+2.1	✓
	−41.8 −41.8	+.14	−2.6	.00	−4.2	13.49	55.1	+.20	−0.2	✓
	−35.1 −33.0	−.12	−3.0	.00	−3.3	13.18	56.2	−.11	−1.3	✓
	−29.8 −29.8	−.30	−6.6	.00	−3.0	13.02	52.6	−.27	+2.3	✓
	−24.0 −24.0	+.08	−5.5	.00	−2.4	13.27	55.2	−.02	−0.3	✓
	−23.6 −23.6	+.06	−2.3	.00	−2.4	13.33	56.1	+.04	−1.2	✓
	−22.5 −22.3	−.02	−1.2	.00	−2.2	13.25	57.7	−.04	−2.8	✓
	−20.4 −22.0	+.02	−3.0	.00	−2.2	13.38	56.2	+.09	−1.3	✓
	−12.0 −12.0	+.05	−4.1	.00	−1.2	13.31	54.9	+.02	0.0	✓
	−10.1 −10.1	−.01	−2.5	.00	−1.0	13.26	56.7	−.03	−1.8	✓
	−79.6	−.01	+10.0			13.27	58.4	−.02	−3.5	✓
	+17.9 +17.9	+.09	00	.00	+1.8	13.34 / 13.29	58.3 / 54.9	+.05	−3.4	✓
	−46.4 −46.4	−.20	+0.2			32.68	13.0	−.08	−0.7	✓
	−2.3 −2.3	−.18	0.0			32.68	12.0	−.08	+0.3	✓
						32.92 / 32.76	11.9 / 12.3	+.16	+0.4	✓

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zone
7609 8.3.	L_1 95.6	L_1 95.6	1	21 22 27.30	L_1 95.6	1	13 51 49.9	9
21 22 27.10	K 22.8	K 22.8	2	22 27.09	K 22.8	2	52 3.2	117,11
13 52 2.5	L_4 .. 57.7	L_4 ..	..	..	L_4 57.7	1	52 1.0	
	St_2 59.7	St_2 59.7	2	22 26.93	St_2 59.7	2	51 58.0	
	Sj 62.6	Sj 62.6	1	22 27.04	Sj 62.6	1	51 59.8	
9476	Q 68.3, 66.7	Q 68.3	2	22 26.90	Q 66.7	2	52 0.5	
	L_5 78.7	L_5 78.7	2	22 27.09	L_5 78.7	2	52 0.7	
	H 92.0	H 92.0	4	22 27.10	H 92.0	4	52 2.5	
	Sk 95.3	Sk 95.3	2	22 27.14	Sk 95.3	2	52 1.7	
7611 8.3.	L_1 97.7	L_1 97.7	2	21 22 39.21	L_1 97.7	2	12 21 39.7	3,3
21 22 39.49	P 130 00.0	P 00.0	2	22 40.07	P 00.0	2	21 40.6	
12 21 46.2	K 22.8	K 22.8	1	22 39.79	K 22.8	1	21 46.6	114
	M_1 45.8	M_1 45.8	2	22 39.67	M_1 45.8	2	21 48.4	
	St_1 [60.0]	St_1 60.0	4	22 39.25	St_1 60.0	4	21 44.8	
	A [67.8]	A 67.8	5	22 39.58	Q 63.2	2	21 46.2	
9479	Q 73.3, 63.2	Q 73.3	7	22 39.62	A 67.8	5	21 46.3	
29416	G 77.7	G 77.7	4	22 39.53	G 77.7	4	21 46.5	
	H 90.4	H 90.4	3	22 39.49	H 90.4	3	21 46.2	
7612 8.6.	L_1 00.8	P 00.0	5	21 22 42.70	P 00.0	7	12 31 21.8	
21 22 42.61	P 131 00.0	L_1 00.8	1	22 44.58	L_1 00.8	1	31 24.7	39
12 31 25.3	B 66.6	B 66.6	1	22 42.68	B 66.6	1	31 26.1	
101 9480	Q 74.4, 69.7	Q 74.4	3	22 42.50	Q 69.7	3	31 24.3	
29417	G 80.4	G 80.4	4	22 42.68	G 80.4	4	31 24.6	
	H 90.4	H 90.4	3	22 42.61	H 90.4	3	31 25.3	
7614 9.3.	M_1 43.7		1	21 22 46.81		1	10 22 53.4	
21 22 46.77	M_2 85.7		1	22 46.82		1	22 57.4	
10 22 58.5	H 91.0		3	22 46.77		3	22 58.5	

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Zones	α Eph.−H d	α Pos.−H d	α C−H d	α Adj.	δ	Δα	Δδ	
9	−96.4 −96.4	+.20 −12.6	+20 −8.5	27.30	54.0	+.24	+6.6	✓
117,119	−69.2 −69.2	−.01 +0.7	−.31 −0.1	26.79	2.4	−.27	−1.8	✓
	.. −34.3	.. −1.5	.. −1.8	...	1.8	..	−1.2	✓
	−32.3 −32.3	−.17 −4.5	−.02 −1.7	27.02	59.5	−.04	+1.1	✓
	−29.4 −29.4	−.06 −2.7	−.02 −1.5	27.08	0.9	+.02	−0.3	✓
	−23.7 −25.3	−.20 −2.0	−.02 −1.3	26.99	1.0	−.07	−0.4	✓
	−13.3 −13.3	−.01 −1.8	−.01 −0.7	27.09	1.5	+.03	−0.9	✓
	−82.8	+.07 +5.2		27.10	2.5	+.04	−1.9	✓
	+3.3 +3.3	+.04 −0.8	.00 +0.2	27.11 / 27.06	2.1 / 0.6	+.05	−1.5	✓
3,39	−92.7 −92.7	−.28 −6.5	−.22 −2.1	39.27	44.1	−.32	+1.9	✓
	−90.4 −90.4	+.58 −5.6	−.06 −2.2	40.18	44.5	+.59	+1.5	✓
114	−67.6 −67.6	+.30 +0.4	+.10 −1.8	39.59	44.4	.00	+1.6	✓
	−44.6 −44.6	+.18 +2.2	−.03 −1.1	39.63	49.3	+.04	−3.3	✓
	−30.4 −30.4	−.24 −1.4	−.02 −0.7	39.30	45.4	−.29	+0.6	✓
	−22.6 −27.2	+.09 00	−.02 −0.7	39.58	46.7	−.01	−0.7	✓
	−17.1 −22.6	+.13 +0.1	−.01 −0.5	39.71	46.3	+.12	−0.3	✓
	−12.7 −12.7	+.04 +0.3	−.01 −0.3	39.52	47.1	−.07	−1.1	✓
	−80.2	+.07 +2.4		39.49 / 39.59	46.2 / 46.0	−.10	−0.2	✓
	−90.4 −90.4	+.09 −3.5	+2.02 +3.2	42.81	25.7	+.15	+0.6	✓ A
39	−89.6 −89.6	+1.97 −0.6	+2.01 +3.1	[44.62]	28.4	[+1.96] ave	−2.1	✓
	−23.8 −23.8	+.07 +0.8	+.53 +3.1	42.60	28.4	−.06	−2.1	✓ Begin here A
	−16.0 −20.7	−.11 −1.0	+.36 +0.7	42.59	24.8	−.07	+1.5	✓ A
	−10.0 −10.0	+.07 −0.7	+.22 +0.4	42.67	25.2	+.01	+1.1	✓ A
		−2.24 −3.5		42.61 / 42.66	25.3 / 26.3	−.05	+1.0	✓
	−47.3 −47.3	+.04 −5.1		46.77	54.3	.00	+2.5	✓
	−5.3 −5.3	+.05 −1.1		46.76	57.5	−.01	−0.7	✓
				46.77 / 46.77	58.5 / 56.8	.00	−1.7	✓

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7613 8.8.	L_1 94.6	L_1 94.6	1	21 22 43.29	L_1 94.6	1	12 12 3.1
21 22 44.68.	K 22.8	K 22.8	1	22 41.41	K 22.8	1	12 4.3
12 11 57.7.	L_4 59.7, 62.1	L_4 59.7	3	22 44.56	St, 60.0	1	12 1.0
	B 65.8	St, 60.0	1	22 44.15	L_4 62.1	3	11 59.7
	St, [60.0]	B 65.8	1	22 44.72	B 65.8	1	11 57.3
	H 91.0	H 91.0	3	22 44.68	H 91.0	3	11 57.7
7615 6.4.	L_1 97.7	L_1 97.7	2	21 22 49.11	L_1 97.7	2	11 59 58.3
21 22 49.10.	P 134 00.0	P 00.0	9	22 49.19	P 00.0	9	12 0 0.7
12 0 7.9.	K 22.8	K 22.8	1	22 49.19	K 22.8	1	0 7.9
	L_3 41.7, ..	L_3 41.7	1	22. 49.01	L_3 ..	..	..
	M_1 46.3	M_1 46.3	2	22 48.99	M_1 46.3	2	0 5.2
	B 65.9	St, 60.0	2	22 48.78	St 60.0	2	0 4.2
	St, [60.0]	B 65.9	2	22 49.15	Q 65.4	3	0 6.3
	Wc 67.2, 67.8	Q 66.7	3	22 48.80	B 65.9	2	0 5.6
	A 71.7	Wc 67.2	2	22 49.02	Wc 67.8	2	0 5.0
9481	Q 66.7, 65.4	A 71.7	2	22 48.96	A 71.7	2	0 5.7
29421	G 79.8	G 79.8	3	22 48.96	G 79.8	3	0 6.4
	H 90.8	H 90.8	3	22 49.10	H 90.8	3	0 7.9
7616 9.1.	R, 50.0		1	21 23 14.34		1	13 19 3.0
21 23 14.38.							
13 19 4.1.	H 90.1		3	23 14.38		3	19 4.1
7617 8.8.	K 22.9	K 22.9	1	21 23 16.52	K 22.9	1	13 1 28.7
21 23 16.42.	M_1 46.6	M_1 46.6	1	23 16.13	M_1 46.6	1	1 29.6
13 1 28.7.	St_2 59.7	St 59.7	2	23 16.43	St_2 59.7	2	1 26.0
	D_1 84.7	D_1^2 84.7	1	23 16.42	D_1 84.7	1	1 27.4
	D_2 96.7	H 91.0	3	23 16.42	H 91.0	3	1 28.7
	H 91.0	D_2 96.7	4	23 16.55	D_2 96.7	4	1 29.8

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zones	α Ep−H	δ	α Pos−H	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ	
3	−96.4	−96.4	−.39	+5.4	−.30	+10.4	[43.38]	8.1	[−1.08] abi	−6.5	✓
114	−68.2	−68.2	−.27	+6.6	−.47	+4.4	44.21	2.1	−.25	−0.5	✓
	−31.3	−31.0	−.12	+3.3	−.22 .15	+2.8	44.59	1.8 5	+.13	+0.8 1	✓
	−31.0	−28.9	−.53	+2.0	−.21 .15	+2.6	44.20	0.2 5	−.26	+1.4 1	✓
	−25.2	−25.2	+.04	−0.4	−.12 7	+2.3	44.64	59.6	+.18	+2.0	✓
		−82.3	+.17 .69	−9.0			44.68	57.7	+.22	+3.9	✓
							44.46	1.6			
39, 3	−93.1	−93.1	+.01	−9.6	+.07	−5.2	49.17	2.7	+.15	+3.3	✓
	−90.8	−90.8	+.09	−7.2	−.02	−4.2	49.30	4.6	+.28	+1.4	✓
114	−68.0	−68.0	+.09	0.0	−.11	−2.2	48.99	5.7	−.03	+0.3	✓
	−49.1	..	−.09	"	−.01	..	48.99	...	−.03	..	✓
	−44.5	−44.5	−.11	−2.7	−.01	−2.0	48.95	6.1	−.07	−0.1	✓
	−30.8	−30.8	−.32	−3.7	−.01	−1.4	48.83	5.0	−.19	+1.0	✓
							49.03	6.2	+.01	−0.2	✓
	−24.9	−25.4	+.05	−1.6	.00	−1.2	49.07	6.8	+.05	−0.8	✓
	−24.1	−24.9	−.30	−2.3	.00	−1.1	48.89	7.9	−.13	−1.9	✓
	−23.6	−23.0	−.08	−2.9	.00	−1.1	49.02	5.8	.00	+0.2	✓
	−19.1	−19.1	−.14	−2.2	.00	−0.9	48.96	5.7	−.06	+0.3	✓
	−11.0	−11.0	−.14	−1.5	.00	−0.5	48.95	7.0	−.07	−1.0	✓
		−80.6	+.02	+4.6			49.10	7.9	+.08	−1.9	✓
							49.02	6.0			
	−40.1	−40.1	−.04	−1.1			14.42	2.3	+.02	+0.9	✓
							14.38	4.1	−.02	−0.9	✓
							14.40	3.2			
119	−68.1	−68.1	+.10	0.0	−.18	−0.5	16.24	28.2	−.11	+0.5	✓
	−44.4	−44.4	−.29	+0.9	−.12	−0.3	16.09	30.5	−.26	−1.8	✓
	−31.3	−31.3	+.01	−2.7	−.08	−0.2	16.52	27.5	+.17	+1.2	✓
	−6.3	−6.3	.00	−1.3	−.02	0.0	16.35	27.8	.00	+0.9	✓
			+.26	+0.7			16.42	28.7	+.07	−0.0	✓
	+5.7	+5.7	+.13	+1.1	+.01	0.0	16.46	29.6	+.11	−0.9	✓
							16.35	28.7			

B

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	zon
7618 9.1	K	22.8	K	22.8	1	21 23 37.08	K	22.8	1	10 34 22.2	11
21 23 36.60	M_1	43.7	M_1	43.7	1	23 36.61	M_1	43.7	1	34 17.5	
10 34 19.7	L_4	65.7	St_1	60.0	3	23 36.65	St_1	60.0	3	34 18.3	
	St_1	[60.0]	Sj	62.7	1	23 36.37	Sj	62.7	1	34 17.3	
	Sj	62.7	L_4	65.7	1	23 36.70	L_4	65.7	1	34 17.3	
	A	66.8	A	66.8	2	23 36.87	A	66.8	2	34 17.0	
	H	91.8	H	91.8	4	23 36.60	H	91.8	4	34 19.7	
7619 9.0	K	22.8	K	22.8	1	21 23 54.63	K	22.8	1	10 42 8.7	11
21 23 54.72	R_1	48.0	M_1	45.1	2	23 54.53	M_1	45.1	2	42 9.6	
10 42 4.8	M_1	45.1	R_1	48.0	3	23 54.46	R_1	48.0	3	42 12.3	
	St_1	[60.0]	St_1	60.0	1	23 54.13	St_1	60.0	1	42 5.8	
	A	66.8	A	66.8	2	23 54.77	A	66.8	2	42 6.0	
	H	89.7	H	89.7	4	23 54.72	H	89.7	4	42 4.8	
7620 8.6	D_1	85.6			1	21 23 56.59			1	13 12 28.8	
21 23 56.56	H	90.1			3	23 56.56			3	12 30.1	
13 12 30.1	E	03.4			3	23 56.75			3	12 30.5	
7621 next page											
7622 8.6	L_1	94.6	L_1	94.6	1	21 24 2.93	L_1	94.6	1	12 30 49.7	
21 24 3.24	P 143	00.0	P	00.0	6	24 3.16	P	00.0	6	30 49.2	
12 30 56.3	K	22.9	K	22.9	1	24 3.54	K	22.9	1	30 55.0	11
	M_1	45.8	M_1	45.8	3	24 3.31	M_1	45.8	3	30 54.7	
	L_4	54.6, 58.7	L_4	54.6	2	24 3.07	L_4	58.7	1	30 54.3	
	St_1	[60.0]	St_2	59.6	2	24 3.05	St_2	59.6	2	30 52.4	
	St_2	59.6	St_1	60.0	2	24 3.03	St_1	60.0	2	30 54.2	
	Q	64.2, 69.7	Q	64.2	2	24 3.16	Q	69.7	3	30 55.5	
	G	79.7	L_5	78.6	2	24 3.28	L_5	78.6	2	30 55.5	
	L_5	78.6	G	79.7	3	24 3.24	G	79.7	3	30 55.7	
	H	89.7	H	89.7	3	24 3.24	H	89.7	3	30 56.3	

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zones	α Ep-H	δ	α Ps.-H.	δ	α C-H.	δ	α adj.	δ	$\Delta\alpha$	$\Delta\delta$	
114	-69.0	-69.0	+.48	+2.5	+.28	+0.3	36.88	20.2	+.20	-1.6	✓
	-48.1	-48.1	+.01	-2.2	+.20	+0.2	36.57	18.4	-.11	+0.2	✓
	-31.8	-31.8	+.05	-1.4	+.13	+0.1	36.70	18.7	+02	-0.1	✓
	-29.1	-29.1	-.23	-2.4	+.12	+0.1	36.41	18.4	-.27	+0.2	✓
	-26.1	-26.1	+.10	-2.4	+.11	+0.1	36.73	18.1	+.05	+0.5	✓
	-25.0	-25.0	+.27	-2.7	+.10	+0.1	36.87	17.0	+.19	+1.6	✓
			-.41	-0.4			36.60	19.7	-.08	-1.1	✓
							36.68	18.6			
114	-66.9	-66.9	-.09	+3.9	-.29	+1.7	54.43	6.5	-.09	+1.1	✓
	-44.6	-44.6	-.19	+4.8	-.19	+1.1	54.49	10.5	-.03	-2.9	✓
	-41.7	-41.7	-.26	+7.5	-.18	+1.0	54.54	11.6	+02	-4.0	✓
	-29.7	-29.7	-.59	+1.0	-.13	+0.7	54.18	6.2	-.34	+1.4	✓
	-22.9	-22.9	+.05	+1.2	-.10	+0.6	54.77	6.0	+.25	+1.6	✓
			+.43	-2.5			54.72	4.8	+.20	+2.8	✓
							54.52	7.6			
	-4.5	-4.5	+.03	-1.3			56.52	29.2	-.08	+0.7	✓
							56.56	30.1	-.04	-0.2	✓
	+13.3	+13.3	+.19	+0.4			56.73	30.4	+.13	-0.5	✓
							56.60	29.9			
3	-95.1	-95.1	-.31	-6.6	-.22	-1.6	3.02	54.7	-.17	+0.5	✓
	-89.7	-89.7	-.08	-7.1	-.11	-1.9	3.27	53.1	+.08	+2.1	✓
119	-66.8	-66.8	+.30	-1.3	+02	-1.8	3.26	54.5	+.07	+0.7	✓
	-43.9	-43.9	+.07	-1.6	-.05	-0.9	3.27	55.6	+.08	-0.4	✓
	-35.1	-31.0	-.17	-2.0	-.04	-0.7	3.10	55.1	-.09	+0.1 0.0	✓
	-30.1	-30.1	-.19	-3.9	-.04	-0.6	3.14	53.9	-.05	+1.3	✓
	-29.7	-29.7	-.21	-2.1	-.04	-0.6	3.08	[54.7]	-.11	[ad +0.4]	✓ 3' subtracted from St,
	-25.5	-20.0	-.08	-0.8	-.03	-0.4	3.25	56.0	+.06	-0.8	✓
	-11.1	-11.1	+.04	-0.8	-.01	-0.2	3.28	56.3	+.09	-1.2	✓
	-10.0	-10.0	.00	-0.6	-.01	-0.2	3.23	56.3	+.04	-1.2	✓
			-81.0	+12	+2.1		3.24	56.3	+.05	-1.2	✓
							3.19	55.2			

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs	δ 1900.0	
7621 9.4	R_1 48.0		2	21 23 59.23		1	10 45 29.3	
21 23 59.65								
10 45 39.5	H 90.1		3	23 59.65		3	45 39.5	
7623 8.9	K 22.9	K 22.9	1	21 24 24.85	K 22.9	1	12 56 4.5	11
21 24 29.06	M_1 46.6	M_1 46.6	1	24 26.03	M_1 46.6	1	56 12.7	
12 56 22.9	St_2 59.7	St_2 59.7	2	24 26.82	St_2 59.7	2	56 13.5	
	Si_2 62.7	Si_2 62.7	1	24 27.16	Si_2 62.7	1	56 15.2	
	A 65.8	A 65.8	2	24 27.53	C_2 64.7	3	56 15.9	
9503	R 66.7, 64.7	R 66.7	5	24 27.37	A 65.8	2	56 16.1	
	M_2 86.8	M_2 86.8	2	24 28.89	M_2 86.8	2	56 24.5	
	C_1 90.0	C_1 90.0	4	24 29.16	C_1 90.0	4	56 23.7	
	H 91.5	H 91.5	4	24 29.06	H 91.5	4	56 22.9	
7624 9.2	M_1 43.7		1	21 24 46.91		1	10 45 24.6	
21 24 47.14	M_2 87.8		1	24 47.41		1	45 23.7	
10 45 22.3	H 93.1		3	24 47.14		3	45 22.3	
7625 8.8	K 22.8		1	21 25 4.68		1	12 51 19.6	11
21 25 4.62	St_2 59.7		2	25 4.68		2	51 21.7	
12 51 20.1	A 66.1		3	25 4.79		3	51 20.7	
	H 90.4		3	25 4.62		3	51 20.1	
7626 8.9	K 22.8	K 22.8	1	21 26 4.21	K 22.8	1	10 43 31.5	11
21 26 4.48	M_1 43.7	M_1 43.7	1	26 3.92	M_1 43.7	1	43 33.5	
10 43 32.9	St_1 [60.0]	St_1 60.0	2	26 4.01	St_1 60.0	2	43 31.6	
	D_1 84.8	D_1 84.8	1	26 4.67	D_1 84.8	1	43 31.8	
	D_2 96.8	H 90.7	4	26 4.48	H 90.7	H	43 32.9	
	H 90.7	D_2 96.8	4	26 4.67	D_2 96.8	4	43 31.1	

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zones	α Ep.−H	δ	α Bos.−H.	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ
	−42.1	−42.1	−.42	−10.2			59.31	28.6	−.17	+5.4
							59.65	39.5	+1.7	−5.5
							59.48	34.0		
119	−68.6	−68.6	−4.21	−18.4	−4.49	−18.9	24.57	4.0	[−2.83]	[+12.9]
	+44.9	−44.9	−3.03	−10.2	−2.94	−12.4	25.99	13.6	[−1.41]	+3.3
	−31.8	−31.8	−2.24	−9.4	−2.08	−8.8	26.91	15.0	−0.49	+1.9
	−28.8	−28.8	−1.90	−7.7	−1.89	−7.9	27.20	16.3	−0.20	+0.6
	−25.7	−26.8	−1.53	−7.0	−1.68	−7.4	27.53	16.4	+0.13	+0.5
	−24.8	−25.7	−1.69	−6.8	−1.62	−7.1	27.46	16.1	+0.06	+0.8
	−4.7	−4.7	−0.17	+1.6	−.31	−1.3	28.83	24.6	[+1.43]	−7.7
	−1.5	−1.5	+0.10	+0.8	−.10	−0.4	29.08	23.4	[+1.68]	−6.5
			+6.55	+27.6			29.06	22.9	[+1.66]	−6.0
							27.40	16.9		
							75			
	−49.4	−49.4	−.23	+2.3			46.87	25.5	−.25	−1.6
	−5.3	−5.3	+.27	+1.4			47.35	23.8	+.23	+0.1
							47.14	22.3	+.02	+1.6
							47.12	23.9		
114	−67.6	−67.6	+.06	−0.5	−.14	−2.7	4.48	17.4	−.18	+3.6
	−30.7	−30.7	+.06	+1.6	−.06	−1.2	4.77	23.2	+.11	−2.8
	−24.3	−24.3	+.17	+0.6	−.05	−1.0	4.79	20.7	+.13	−0.3
			+.21	+4.0			4.62	20.1	−.04	+0.3
							4.66	20.4		
114	−67.9	−67.9	−.27	−1.4	−.47	−3.6	4.01	29.3	−.26	+2.7
	−47.0	−47.0	−.56	+0.6	−.32	−2.5	3.88	34.4	−.39	−2.4
	−30.7	−30.7	−.47	−1.3	−.21	−1.6	4.06	32.0	−.21	0.0
	−5.9	−5.9	+.19	−1.1	−.04	−0.3	4.60	32.2	+.33	−0.2
			+.69	+5.3			4.48	32.9	+.21	−0.9
	+6.1	+6.1	+.19	−1.8	+.04	+0.3	4.58	30.9	+.31	+1.1
							4.27	32.0		

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7627 8.2	L_1 98.2	L_1 98.2	2	21 26 8.33	L_1 98.2	2	12 57 6.8
21 26 8.69	K 22.9	K 22.9	1	26 8.56	K 22.9	1	57 10.6
12 57 13.2	M_1 45.1	M_1 45.1	3	26 8.53	M_1 45.1	2	57 13.2
	L_4 57.8, 60.8	L_4 57.8	2	26 8.59	St_2 59.6	2	57 13.1
	St_2 59.6	St_2 59.6	2	26 8.61	L_4 60.8	1	57 12.9
	A 65.7	A 65.7	2	26 8.72	A 65.7	2	57 13.3
	Q 67.8, 66.2	Q 67.8	4	26 8.58	Q 66.2	4	57 12.7
	L_5 78.7	L_5 78.7	2	26 8.66	L_5 78.7	2	57 13.7
	H 90.4	H 90.4	3	26 8.69	H 90.4	3	57 13.2
7628 8.5	L_1 94.6		1	21 26 9.74		1	12 22 32.7
21 26 9.79	M_1 45.4		3	26 9.69		3	22 38.5
12 22 38.6	H 90.1		3	26 9.79		3	22 38.6
7629 8.8	L_1 94.6		1	21 26 11.98		1	10 32 58.1
21 26 11.79	K 22.8		1	26 11.77		1	33 9.3
10 33 6.3	M_1 44.7		2	26 11.77		2	33 7.4
	St_1 [60.0]		2	26 11.48		2	33 3.9
	Sj 62.7		1	26 11.61		1	33 3.7
	H 93.8, 94.8		4	26 11.79		3	33 6.3
7630 8.0	L_1 94.6	L_1 94.6	1	21 26 14.32	L_1 94.6	1	10 10 32.5
21 26 13.46	K 22.6	K 22.6	1	26 14.40	K 22.6	1	10 45.3
10 10 52.2	M_1 45.7	M_1 45.7	2	26 13.95	M_1 45.7	2	10 48.2
	L_4 62.7, 58.7	St_1 60.0	3	26 13.77	L_4 58.7	2	10 47.7
	St_1 [60.0]	L_4 62.7	1	26 13.81	St_1 60.0	3	10 50.4
	U 87.3	U 87.3	4	26 13.58	U 87.3	4	10 51.4
	H 93.1	H 93.1	3	26 13.46	H 93.1	3	10 52.2
	C_2 95.0	C_2 95.0	2	26 13.54	C_2 95.0	2	10 53.7
	E 02.7	Σ 02.7	3	26 13.38	E 02.7	3	10 53.7

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zones	α Ep.−H	δ	α Pos.−H	δ	α C−H.	δ	α adj.	δ	Δα	Δδ	
39,9	−92.2	−92.2	−.36	−6.4	−.34	−2.5	8.35	10.7	−.23	+2.4	✓
127	−67.5	−67.5	−.13	−2.6	−.37	−2.5	8.32	10.7	−.26	+2.4	✓
	−45.3	−45.3	−.16	0.0	−.20	−1.4	8.49	14.1	−.09	−1.0	✓
	−32.6	−30.8	−.10	−0.1	−.14	−1.0	8.62	14.6	+.04	−1.5	✓
	−30.8	−29.6	−.08	−0.3	−.14	−0.9	8.70	13.7	+.12	−0.6	✓
	−24.7	−24.7	+.03	+0.1	−.11	−0.8	8.72	13.3	+.14	−0.2	✓
	−22.6	−24.2	−.11	−0.5	−.10	−0.8	8.67	13.2	+.09	−0.1	✓
	−11.7	−11.7	−.03	+0.5	−.05	−0.4	8.66	14.5	+.08	−1.4	✓
	−79.8		+.44	+3.1			8.69	13.2	+.11	−0.1	✓
							8.58	13.1			
3	−95.5	−95.5	−.05	−5.9	+.04	−0.9	9.83	37.7	+.07	+0.9	✓
	−44.7	−44.7	−.10	−0.1	+.02	−0.4	9.65	39.4	−.11	−0.8	✓
			−.04	+0.9			9.79	38.6	+.03	0.0	✓
							9.76	38.6			
3	−99.2	−100.2	+.19	−8.2	+.28	−3.2	12.07	3.1	+.35	+2.6	✓
114	−71.0	−72.0	−.02	+3.0	−.22	+0.8	11.57	7.1	−.15	−1.4	✓
	−49.1	−50.1	−.02	+1.1	+.02	−0.7	11.73	8.3	+.01	−2.6	✓
	−33.8	−34.8	−.31	−2.4	+.01	−0.5	11.53	4.4	−.19	+1.3	✓
	−31.1	−32.1	−.18	−2.6	+.01	−0.4	11.65	4.8	−.07	+0.9	✓
	−85.1	−86.1	−.04	+1.4			11.79	6.3	+.07	−0.6	✓
							11.72	5.7			
1	−98.5	−98.5	+.86	−19.7	+.93	−15.0	14.39	37.2	+.61	[+11.8]	✓
102	−70.5	−70.5	+.94	−6.9	+.75	−8.4	14.21	43.8	+.43	+5.2	✓
	−47.4	−47.4	+.49	−4.0	+.47	−6.5	13.91	49.1	+.13	−0.1	✓
	−33.1	−34.4	+.31	−4.5	+.33	−4.7	13.82	48.5	+.04	+0.5	✓
	−30.4	−33.1	+.35	−1.8	+.30	−4.6	13.84	51.0	+.06	−2.0	✓
	−5.8	−5.8	+.12	−0.8	+.06	−0.8	13.56	51.5	−.22	−2.5	✓
	−84.5	−.99	+13.8				13.46	52.2	−.32	−3.2	✓
	+1.9	+1.9	+.08	+1.5	−.02	+0.3	13.50	54.2	−.28	−5.2	✓
	+9.6	+9.6	−.08	+1.5	−.10	+1.3	13.36	53.6	−.42	−4.6	✓
							13.78	49.0			

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	
7631 8.9	K 22.8		2	21 26 16.84		2	13 56 29.3	207
21 26 16.31	R_1 49.0		1	26 16.37		1	56 31.8	117,
13 56 25.2	St_2 59.7		2	26 16.32		2	56 26.5	
	Sj 62.6		1	26 16.34		1	56 23.6	
	H 94.5		4	26 16.31		4	56 25.2	
	St 95.3		2	26 16.40		2	56 25.5	
7632 8.7	M_1 44.8		1	21 26 31.44		1	13 12 29.5	
21 26 31.49	A 65.7		4	26 31.68		4	12 24.8	
13 12 23.6	M_2 87.8		1	26 31.70		1	12 25.2	
	H 90.7		2	26 31.49		2	12 23.6	
7634 9.1	K 22.8		1	21 26 54.81		1	10 58 9.0	11
21 26 54.69	M_1 44.7		2	26 54.42		1	58 6.2	
10 58 7.5	St_1 [60.0]		2	26 54.69		2	58 7.2	
	H 92.1		3	26 54.69		3	58 7.5	
7635 7.3	L_1 97.0	L_1 97.0	3	21 26 56.26	L_1 97.0	3	12 42 23.8	39,
21 26 56.37	K 22.9	K 22.9	1	26 56.76	K 22.9	1	42 29.6	12
12 42 30.9	M_1 46.0	M_1 46.0	4	26 56.10	M_1 46.0	4	42 30.4	
	B 65.8	St_2 59.7	2	26 56.39	St_2 59.7	2	42 28.5	
	St_2 59.7	B 65.8	1	26 56.45	B 65.8	1	42 28.5	
	Nc 67.3, 68.8	Nc 67.3	2	26 56.30	Nc 68.8	2	42 28.7	
29498	G 77.7	G 77.7	4	26 56.37	G 77.7	4	42 29.9	
	H 90.8	H 90.8	3	26 56.37	H 90.8	3	42 30.9	
	E 04.5	E 04.5	3	26 56.44	E 04.5	3	42 30.5	
7639 9.1	M_1 45.8 ..		1	21 27 39.40		..	10 13 ..	
21 27 39.39	M_2 87.8		1	27 39.37		1	13 43.3	
10 13 40.7	H 90.1		5	27 39.39		5	13 40.7	

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Zones	α Eph.−H	δ Eph.−H	α Obs.−H	δ	α C−H.	δ	α adj.	δ	Δα	Δδ
117,119	-71.7	-71.7	+.53	+4.1	+.23	+3.3	16.54	28.5	+.13	-1.3
	-45.5	-45.5	+.06	+6.6	+.15	+2.1	16.45	31.1	+.04	-3.9
	-34.8	-34.8	+.01	+1.3	+.11	+1.6	16.41	28.0	.00	-0.8
	-31.9	-31.9	+.03	-1.6	+.10	+1.5	16.38	24.7	-.03	+2.5
			-.32	-4.6			16.31	25.2	-.10	+2.0
	+0.8	+0.8	+.09	+0.3	-.03	0.0	16.37	25.9	-.04	+1.3
							16.41	27.2		
	-45.9	-45.9	-.05	+5.9			31.40	30.4	-.15	-4.4
	-25.0	-25.0	+.19	+1.2			31.68	24.8	+.13	+1.2
	-2.9	-2.9	+.21	+1.6			31.64	25.3	+.09	+0.7
							31.49	23.6	-.06	+2.4
							31.55	26.0		
114.	-69.3	-69.3	+.12	+1.5	-.08	-0.7	54.61	6.8	+.01	+0.4
	-47.4	-47.4	-.27	-1.3	-.06	-0.5	54.38	7.1	-.22	+0.1
	-32.1	-32.1	.00	-0.3	-.04	-0.3	54.74	7.6	+.14	-0.4
			+.12	+1.0			54.69	7.5	+.09	-0.3
							54.60	7.2		
39,3,9	-93.8	-93.8	-.11	-7.1	-.07	-2.8	56.30	28.1	-.05	+2.0
127	-67.9	-67.9	+.39	-1.3	+.15	-1.2	56.52	29.7	+.17	+0.4
	-44.8	-44.8	-.27	-0.5	+.02	-1.1	56.06	31.3	-.29	-1.2
	-31.1	-31.1	+.02	-2.4	+.02	-0.8	56.48	30.0	+.13	+0.1
	-25.0	-25.0	+.08	-2.4	+.01	-0.6	56.37	30.8	+.02	-0.7
	-23.5	-22.0	-.07	-2.2	+.01	-0.6	56.30	29.5	-.05	+0.6
	-13.1	-13.1	.00	-1.0	+.01	-0.3	56.36	30.5	+.01	-0.4
		-80.8	-.05	+2.5			56.37	30.9	+.02	-0.8
	+13.7	+13.7	+.07	-0.4	-.01	+0.3	56.42	30.4	+.07	-0.3
							56.35	30.1		
	-44.3	..	+.01	..			39.36	...	+.01	..
	-2.3	-2.3	-.02	+2.6			39.31	43.4	-.04	-1.4
							39.39	40.7	+.04	+1.3
							39.35	42.0		

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Star	Epoch		Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	
7636 8.8	K	22.8		2	21 27 11.66		2	13 52 43.3	707
21 27 11.60	M_1	45.8		1	27 11.18		1	52 42.2	117,
13 52 44.9	St_2	59.7		2	27 11.59		2	52 41.5	
μ^{12}	A	72.7		2	27 11.65		2	52 44.2	
	H	92.8		3	27 11.60		3	52 44.9	
	Sk	95.3		2	27 11.70		2	52 44.1	
7637 8.7	L_1	97.7	L_1	97.7	2 21 27 12.22	L_1 97.7	2	10 59 7.9	1,
21 27 12.42	K	22.8	K	22.8	1 27 12.71	K 22.8	1	59 15.2	11
10 59 14.8	R_1	48.0	M_1	45.8	2 27 12.47	M_1 45.8	2	59 12.8	
[R_1]	M_1	45.8	R_1	48.0	1 27 [16.1]	R_1 48.0	1	59 14.4	
	St_1	[60.0]	St_1	60.0	2 27 12.28	St_1 60.0	2	59 16.3	
	A	70.7	A	70.7	4 27 12.39	A "	"	"	
	H	92.9	H	92.9	3 27 12.412	H 92.9	3	59 14.8	
7638 8.9	K	22.8			2 21 27 20.30		2	13 54 41.8	117,
21 27 19.86	St_2	59.8			2 27 19.81		2	54 2.1	
13 54 3.8	H	92.5			4 27 19.86		4	54 3.8	
7639 see 7640 next page	Sk	95.3			2 27 20.01		2	54 3.8	
7641 8.0	L_1	95.6	L_1	95.6	1 21 28 7.01	L_1 95.6	1	13 53 25.1	
21 28 7.04	P 172	00.0	P	00.0	4 28 6.85	P 00.0	6	53 31.6	
13 53 35.0	K	22.8	K	22.8	2 28 7.32	K 22.8	2	53 36.4	117,
	M_1	46.2	M_1	46.2	2 28 6.90	M_1 46.2	2	53 35.1	
	L_4	58.3, 61.8	L_4	58.3	2 28 7.16	St 59.6	2	53 38.1	
	St_2	59.6	St_2	59.6	2 28 7.09	L_4^2 61.8	1	53 38.4	
	A	69.7	A	69.7	2 28 7.18	A 69.7	2	53 36.6	
9533	R	71.8, 70.2	R	71.8	3 28 6.99	R 70.2	2	53 34.6	
29521	G	79.8	G	79.8	3 28 7.08	G 79.8	3	53 34.8	
	H	92.4	H	92.4	3 28 7.04	H 92.4	3	53 35.0	
	Sk	95.3	Sk	95.3	2 28 7.04	Sk 95.3	2	53 34.5	

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Zones	α Eph-H	δ	α Bs.-H	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
117,119	-70.0	-70.0	+.06	-1.6	-.24	-2.4	11.36	42.5	-.16	+1.2	✓
	-47.0	-47.0	-.42	-2.7	-.16	-1.6	11.14	43.1	-.38	+0.6	✓
	-33.1	-33.1	-.01	-3.4	-.11	-1.1	11.68	43.0	+.16	+0.7	✓
	-20.1	-20.1	+.05	-0.7	-.07	-0.7	11.65	44.2	+.13	-0.5	✓
			+.34	+3.4			11.60	44.9	+.08	-1.2	✓
	+2.5	+2.5	+.10	-0.8	+.08	+0.1	11.67 / 11.62	44.5 / 43.7	+.15	-0.8	✓
1, 39	-95.2	-95.2	-.20	-6.9	-.14	-2.7	12.28	12.1	-.11	+1.9	✓
114	-70.1	-70.1	+.29	+0.4	+.09	-1.8	12.51	13.0	+.12	+1.0	✓
	-47.1	-47.1	+.05	-2.0	-.01	-1.3	12.43	13.7	+.04	+0.3	✓
	-44.9	-44.9	(+3.7)	-0.4	(-.01)	-1.2	[16.9] 18	13.7	ab	+0.3	✓
	-32.9	-32.9	-.14	+1.5	-.01	-0.9	12.33	16.8	-.06	-2.8	✓
	-22.2	..	-.03	..	-.01	..	12.39	..	.00	..	✓
			-82.6	+.03	+2.7		12.42 / 12.39	14.8 / 14.0	+.03	-0.8	✓
117,119	-69.7	-69.7	+.44	+1.0	+.14	+0.2	20.00	4.0	+.06	-0.1	✓
	-32.7	-32.7	-.05	-1.7	+.07	+0.1	19.90	3.6	-.04	+0.3	✓
			-.20	-0.3			19.86	3.8	-.08	+0.1	✓
	+2.8	+2.8	+.15	0.0	-.01	0.0	19.98 / 19.94	4.2 / 3.9	+.04	-0.3	✓
9	-96.8	-96.8	-.03	-9.9	-.03	-5.8	7.01	29.2	-.04	+6.0	✓
	-92.4	-92.4	-.19	-3.4	-.03	-2.9	6.96	35.5	-.09	-0.3	✓
117,119	-69.6	-69.6	+.28	+1.4	-.02	+0.6	7.02	35.6	-.03	-0.4	✓
	-46.2	-46.2	-.14	+0.1	-.01	-1.4	6.86	36.0	-.19	-0.8	✓
	-34.1	-32.8	+.12	+3.1	-.01	-1.0	7.19	39.6	+.14	-4.4	✓
	-32.8	-30.6	+.05	-1.6	-.01	-0.9	7.18	34.2	+.13	+1.0	✓
	-22.7	-22.7	+.14	+1.6	-.01	-0.7	7.18	36.6	+.13	-1.4	✓
	-20.6	-22.2	-.05	-0.4	-.01	-0.7	7.08	35.1	+.03	+0.1	✓
	-12.6	-12.6	+.04	-0.2	.00	-0.4	7.07	35.4	+.02	-0.2	✓
			-83.2	+.03	+3.1		7.04	35.0	-.01	+0.2	✓
	+2.9	+2.9	.00	-0.5	.00	+0.1	7.01	34.9	-.04	+0.3	✓

→ 7.05 ✓ 35.2 mean

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	
7640 9.2	M_1 43.7		1	21 27 52.24		1	10 3 35.7	
21 27 52.63	M_2 85.7		1	27 52.74		1	3 34.9	
10 3 36.6	H 92.9		3	27 52.63		3	3 36.6	
7642 8.1	L 94.6		1	21 28 13.78		1	10 6 9.5	
21 28 13.79	K 22.8		2	28 14.50		2	6 13.1	102,
10 6 12.9	M_1 45.5		5	28 13.95		5	6 11.0	
	St_1 [60.0]		4	28 13.61		4	6 10.3	
	St_1 60.7		2	28 13.95		2	6 10.4	
	H 91.8		3	28 13.79		3	6 12.9	
7644 8.8	K 22.8		2	21 28 18.85		2	13 57 41.5	117,
21 28 18.32	St_2 59.7		2	28 18.16		2	57 38.4	
13 57 40.8	H 90.7		2	28 18.32		2	57 40.8	
	Sk 95.3		2	28 18.38		2	57 41.4	
7645 8.7	K 22.8	K 22.8	2	21 28 30.47	K 22.8	2	12 34 54.0	114,
21 28 29.80	M_1 45.5	M_1 45.5	H	28 30.33	M_1 45.5	H	34 51.4	
12 34 52.9	B 65.8	St_2 59.7	2	28 29.69	St_2 59.7	2	34 53.5	
	St_1 [60.0]	St_1 60.0	2	28 29.85	St_1 60.0	2	34 52.4	
	St_2 59.7	B 65.8	1	28 30.10	B 65.8	1	34 49.9	
	H 90.1	H 90.1	3	28 29.80	H 90.1	3	34 52.9	
7646 9.1	M_1 46.7		1	21 28 35.44		1	12 12 51.1	
21 28 35.23	Sj 62.7		1	28 35.13		1	12 48.5	
12 12 49.5	H 90.7		3	28 35.23		3	12 49.5	
7647 next page								
7648 8.9	K 22.8	K 22.8	1	21 28 58.08	K 22.8	1	12 46 35.5	11
21 28 57.88	M_1 44.7	M_1 44.7	1	28 58.14	M_1 44.7	1	46 28.5	
12 46 33.3	B 65.9	St_2 59.7	2	28 57.95	St_2 59.7	2	46 33.5	
	St_2 59.7	B 65.9	1	28 58.02	B 65.9	1	46 31.5	
	H 90.7	H 90.7	3	28 57.88	H 90.7	3	46 33.3	

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Jones	α Ep.−H	δ	α Ps.−H	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ	
	−49.2	49.2	−.39	−0.9			52.20	36.6 / 35.3	−.30	−0.5 / +0.8	✓
	−7.2	−7.2	+.11	−1.7			52.68	35.0	+.18	+1.1 / +0.6	✓
							52.63 / 52.50	36.6 / 35.6 / 36.1	+.18	−0.5 / −1.0	✓
1	−97.2	−97.2	−.01	−3.4	+.06	+1.3	13.85	14.2	−.05	−2.1	✓
102,125	−69.0	−69.0	+.71	+0.2	+.51	+0.1	14.30	13.0	+.40	−0.9	✓
	−46.3	−46.3	+.16	−1.9	+.16	+0.4	13.91	11.9	+.01	+0.2	✓
	−31.8	−31.8	−.18	−2.6	+.11	+0.3	13.66 / 13.86	10.9 / 9.7	−.24 / −.04	+1.2 / +2.4	✓
	−83.1	−34		−0.8			13.79 / 13.90	12.9 / 12.1	−.11	−0.8	✓
		−34		+0.1			18.32	40.8	−.05	0.0	✓
117,119	−67.9	−67.9	+.53	+0.7	+.23	−0.1	18.55	40.7	+.18	+0.1	✓
	−31.0	−31.0	−.16	−2.4	+.11	0.0	18.25	39.9	−.12	+0.9	✓
	+4.6	+4.6	+.06	+0.6	−.02	0.0	18.35 / 18.37	41.8 / 40.8	+.02	−1.0	✓
114,127	−67.3	−67.3	+.67	+1.1	+.45	+0.1	30.25	53.0	+.24	0.0	✓
	−44.6	−44.6	+.53	−1.5	+.30	0.0	30.29	52.3	+.28	+0.7	✓
	−30.4	−30.4	−.11	+0.6	+.20	0.0	29.78	55.0	−.23	−2.0	✓
	−30.1	−30.1	+.05	−0.5	+.20	0.0	29.90	52.9	−.11	+0.1	✓
	−24.3	−24.3	+.30	−3.0	+.16	0.0	30.02	52.2	+.01	+0.8	✓
			−.67	−0.1			29.80 / 30.01	52.9 / 53.0	−.21	+0.1	✓
	−44.0	−44.0	+.21	+1.6			35.40	52.0	+.13	−1.6	✓
	−28.0	−28.0	−.10	−1.0			35.17	49.6	−.10	+0.8	✓
							35.23 / 35.27	49.5 / 50.4	−.04	+0.9	✓
114	−67.9	−67.9	+.20	+2.2	.00	0.0	57.88	33.3	−.09	−0.3	✓
	−46.0	−46.0	+.26	−4.8	.00	0.0	58.10	29.4	+.13	+3.6	✓
	−31.0	−31.0	+.07	+0.2	.00	0.0	58.04	35.0	+.07	−2.0	✓
	−24.8	−24.8	+.14	−1.8	.00	0.0	57.94	33.8	−.03	−0.8	✓
			00	0.0			57.88	33.3	−.09	−0.3	✓ 57.97 33.0

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Star	Epoch		Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7647 8.0	L_1	95.6	L_1 95.6	1	21 28 49.69	L_1 95.6	1	13 55 42.3
21 28 49.36	P 177	00.0	P 00.0	4	28 49.14	P 00.0	4	55 39.6
13 55 39.9	K	22.8	K 22.8	2	28 49.76	K 22.8	2	55 43.2
	M_1	46.2	M_1 46.2	2	28 49.58	M_1 46.2	2	55 41.0
	L_4	57.5, 54.7	L_4 57.5	1	28 49.45	L_4 54.7	1	55 39.4
	L_3	62.7	L_3 62.7	1	28 49.30	L_3 62.7	1	55 40.7
9546	L_2	68.5, 70.2	L_2 68.5	4	28 49.40	L_2 70.2	2	55 40.3
29532	G	80.4	L_5 79.7	1	28 49.37	L_5 79.7	1	55 40.5
	L_5	79.7	G 80.4	4	28 49.39	G 80.4	4	55 40.9
	H	90.8	H 90.8	3	28 49.36	H 90.8	3	55 39.9
	Sk	95.3	Sk 95.3	2	28 49.46	Sk 95.3	2	55 41.3
7649 9.1	M_1	46.6	M_1 46.6	1	21 28 59.35	M_1 46.6	1	11 21 58.6
21 28 59.00	M_2	85.7	D_1 82.7	2	28 59.08	D_1 82.7	2	21 55.5
11 21 54.4	D_1	82.7	M_2 85.7	1	28 59.13	M_2 85.7	1	21 54.4
	H	88.7	H 88.7	3	28 59.00	H 88.7	3	21 54.4
7650 9.1	K	22.8		1	21 29 34.37		1	13 42 59.3
21 29 34.32	St_2	59.7		2	29 34.08		2	42 56.8
13 42 58.2	H	92.9, 92.3		4	29 34.32		4	42 58.2
	Sk	95.2		2	29 34.42		2	42 59.1
7651 9.0	K	22.9		1	21 29 53.40		1	13 22 7.0
21 29 52.90	M_1	44.7		1	29 53.19		1	22 8.4
13 22 8.8	St_2	59.7		2	29 53.06		2	22 7.0
	H	90.4		3	29 52.90		3	22 8.8
7652 8.9	K	22.8		1	21 30 3.54		1	10 44 42.9
21 30 3.23	M_1	44.7		2	30 3.19		2	44 39.7
10 44 41.1	St_1	[60.0]		2	30 3.35		2	44 39.3
	V	87.1		3	30 3.44		3	44 41.8
	H	88.7		3	30 3.23		3	44 41.1

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Zones	α Ep. − Nd	α Bs. − Nd	δ	α C − N. δ		α adj. δ	Δα	Δδ	
9	−95.2	−95.2	+.33	+2.4	+.33	+6.5	49.69	46.4	+.26 (5)	−4.5	✓
	−90.8	−90.8	−.22	−0.3	+.24	+5.0	49.25	43.5	−.18 (9)	−1.6	✓
117, 119	−68.0	−68.0	+.40	+3.3	+.10	+2.5	49.36 (4)	42.4	+.07 (2)	−0.5	✓
	−44.6	−44.6	+.22	+1.1	+.12	+2.5	49.54	41.9	+.18 (8)	0.0	✓
	−33.3	−36.1	+.09	−0.5	+.09	+2.0	49.48	40.2	+.05 (4)	+1.7	✓
	−28.1	−28.1	−.06	+0.8	+.07	+1.5	49.34	41.8	−.09 (10)	+0.1	✓
	−22.3	−20.6	+.04	+0.4	+.06	+1.1	49.49	40.8	+.06 (5)	+1.1	✓
	−11.1	−11.1	+.01	+0.6	+.03	+0.6	49.37	41.3	−.06 (7)	+0.6	✓
	−10.4	−10.4	+.03	+1.0	+.03	+0.6	49.38	41.5	−.05 (6)	+0.4	✓
	−81.6	−26		−5.5			49.36	39.9	−.07 (8)	+2.0	✓
	+4.5	+4.5	+.10	+1.4	−.01	−0.2	49.43	41.7	−.02 (1)	+0.2	✓
							49.43 (4)	41.9			
	−42.1	−42.1	+.35	+4.2			59.31	59.5	+.21	−3.4	✓
	−6.0	−6.0	+.08	+1.1			59.01	55.9	−.09	+0.2	✓
	−3.0	−3.0	+.13	0.0			59.07	54.5	−.08	+1.6	✓
							59.00	54.4	−.10	+1.7	✓
							59.10	56.1			
117	−70.1	−69.5	+.05	+1.1	−.26	0.0	34.06	58.2	−.18	+0.4	✓
	−33.2	−32.6	−.24	−1.4	−.12	0.0	34.14	58.3	−.07	+0.3	✓
			+.37	0.0			34.32	58.2			
			+.10	+0.9	+.01	0.0	34.39	59.5	+.08 +.15	+0.4 −0.9	✓ ✓
	+2.3	+2.9					34.24	58.6			
119	−67.5	−67.5	+.50	−1.8	+.22	−2.3	53.12	6.5	+.04	+1.8	✓
	−45.7	−45.7	+.29	−0.4	+.15	−1.6	53.15	9.3	+.07	−1.0	✓
	−30.7	−30.7	+.16	−1.8	+.10	−1.0	53.15	8.5	+.07	−0.2	✓
			−.33	+3.4			52.90	8.8	−.18	−0.5	✓
							53.08	8.3			
114	−65.9	−65.9	+.31	+1.8	+.11	−0.4	3.34	40.7	+.03	+0.1	✓
	−44.0	−44.0	−.04	−1.4	+.07	−0.3	3.15	40.6	−.16	+0.2	✓
	−28.7	−28.7	+.12	−1.8	+.05	−0.2	3.40	39.7	+.09	+1.1	✓
	−1.6	−1.6	+.21	+0.7	.00	0.0	3.42	41.9	+.11	−1.1	✓
			−.17	+0.6			3.23	41.1	−.08	−0.3	✓
										→ 3.31	40.8

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	
7653 8.7	L_1 95.6	L_1 95.6	1	21 30 4.31	L_1 95.6	1	13 24 48.7	
21 30 4.59	K 22.9	K 22.9	1	30 4.53	K 22.9	1	24 54.5	
13 24 52.1	M_1 44.9	M_1 44.9	2	30 4.62	M_1 44.9	2	24 50.6	
	L_4 54.6 ..	L_4 54.6	1	30 4.40	L_4 ..	..	..	
	St_2 59.6	St_2 59.6	2	30 4.55	St_2 59.6	2	24 52.2	
	A 69.7	A 69.7	3	30 4.59	A 69.7	3	24 53.2	
	L_5 79.8	L_5 79.8	1	30 4.68	L_5 79.8	1	24 52.7	
	H 90.0	H 90.0	3	30 4.59	H 90.0	3	24 52.1	
7654 8.8	L_1 00.8		1	21 30 9.38		1	12 14 6.0	
21 30 9.47	K 22.9		1	30 9.31		1	14 6.3	
12 14 7.3	M_1 45.4		3	30 9.25		3	14 6.8	
	L_4 54.7		1	30 9.27		2	14 7.9	
	St_1 [60.0]		2	30 9.24		2	14 6.6	
	L_5 78.7		1	30 9.36		2	14 6.2	
	H 89.7		3	30 9.47		3	14 7.3	
7655 8.4	K 22.8	K 22.8	3	21 30 19.34	K 22.8	3	10 25 48.2	
21 30 19.25	M_1 45.5	M_1 45.5	5	30 19.38	M_1 45.5	5	25 46.4	
10 25 48.0	St_1 [60.0]	Wc 59.8	2	30 19.31	St_1 60.0	1	25 47.2	
	Wc 59.8, 68.3	St_1 60.0	1	30 19.40	Sj 62.8	1	25 46.5	
	Sj 62.8	Sj 62.8	1	30 19.11	Wc 68.3	2	25 47.3	
	H 90.4	H 90.4	3	30 19.25	H 90.4	3	25 48.0	
7657 9.0	K 22.8		1	21 31 26.18		1	12 18 13.5	
21 31 25.91	St_1 [60.0]		2	31 25.73		2	18 10.3	
12 18 15.4	Sj 62.7		1	31 25.98		1	18 13.0	
	H 90.1		3	31 25.91		3	18 15.4	

For 7656 see next page

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Zones	α Ep-H	δ	α Bs.-H	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
9	-94.4	-94.4	-.28	-3.4	-.28	+0.7	4.31	52.8	-.20	+0.2	✓
119	-67.1	-67.1	-.06	+2.4	-.34	+1.9	4.25	54.0	-.26	-1.0	✓
	-45.1	-45.1	+.03	-1.5	-.17	+0.7	4.58	51.5	+.07	+1.5	✓
	-35.4	..	-.19	..	-.13	..	4.43	...	-.08	..	✓
	-30.4	-30.4	-.04	+0.1	-.12	+0.5	4.64	53.7	+.13	-0.7	✓
	-20.3	-20.3	.00	+1.1	-.08	+0.3	4.59	53.2	+.08	-0.2	✓
	-10.2	-10.2	+.09	+0.6	-.04	+0.2	4.68	53.5	+.17	-0.5	✓
		-80.8	+.38	-1.6			4.59	52.1	+.08	+0.9	✓
							4.51	53.0			
39	-88.9	-88.9	-.09	-1.3	-.05	+2.4	9.42	9.7	+.12	-2.0	✓
127	-66.8	-66.8	-.16	-1.0	-.40	-0.9	9.07	6.4	-.23	+1.3	✓
	-44.3	-44.3	-.22	-0.5	-.13	+0.4	9.21	7.7	-.09	0.0	✓
	-35.0	-35.0	-.20	+0.6	-.10	+0.4	9.30	8.7	.00	-1.0	✓
	-29.7	-29.7	-.23	-0.7	-.09	+0.3	9.29	7.1	-.01	+0.6	✓
	-11.0	-11.0	-.11	-1.1	-.03	+0.1	9.36	7.0	+.06	+0.7	✓
		-77.8	+.29	-1.0			9.47	7.3	+.17	+0.4	✓
							9.30	7.7			
{102, 114, 125}	-67.6	-67.6	+.09	+0.2	-.11	-0.6	19.14	47.4	-.13	+0.3	✓
	-44.9	-44.9	+.13	-1.6	-.07	-0.4	19.34	47.3	+.07	+0.4	✓
	-30.6	-30.4	+.06	-0.8	-.05	-0.3	19.31	47.7	+.04	0.0	✓
	-30.4	-27.6	+.15	-1.5	-.05	-0.2	19.45	47.6	+.18	+0.1	✓
	-27.6	-22.1	-.14	-0.7	-.04	-0.2	19.15	48.1	-.12	-0.4	✓
			+.16	+0.9			19.25	48.0	-.02	-0.3	✓
							19.27	47.7			
114	-67.3	-67.3	+.27	-1.9	+.07	-4.1	25.98	11.3	+.06	+1.6	✓
	-30.1	-30.1	-.18	-5.1	+.03	-1.8	25.78	10.7	-.14	+2.2	✓
	-27.4	-27.4	+.07	-2.4	+.03	-1.7	26.02	14.1	+.16	-1.2	✓
			-.10	+6.1			25.91	15.4	-.01	-2.5	✓
							25.92	12.9			

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Star		Epoch		Eph. α		Obs.	α 1900.0		Eph. δ		Obs.	δ 1900.0		Jon.
7656	8.4	L_1	95.6			1	21 31 17.34				1	13 54 14.2		9
21 31	16.81	R_1	49.0			1	31 16.83				1	54 24.4		
13 54	20.9	L_4	54.7			1	31 16.71				1	54 22.3		
		Sj	62.6			2	31 16.89				2	54 20.4		
		L_5	79.6			2	31 16.83				2	54 20.9		
		H	90.2			4	31 16.81				4	54 20.9		
		Sk	95.2			2	31 16.77				2	54 22.2		
		E	06.1, 05.5			3	31 16.82				4	54 22.4		
7658	8.8	K	22.9			1	21 31 30.31				1	13 1 3.7		11
21 31	29.89	St_2	59.7			2	31 29.78				2	0 58.8		
13 1	1.4	M_2	85.7			1	31 30.05				1	1 1.9		
		H	91.7			4	31 29.89				4	1 1.4		
7659	7.5	L_1	94.6	L_1	94.6	1	21 31 32.42		L_1	94.6	1	10 37 17.8		3
21 31	32.78	K	22.8	K	22.8	2	31 33.04		K	22.8	2	37 21.9		102,1
10 37	21.7	R_1	48.0	M_1	45.5	5	31 32.74		M_1	45.5	5	37 21.0		
		M_1	45.5	R_1	48.0	1	31 32.73		R_1	48.0	1	37 21.9		
				Sch	58.7	1	31 32.94	Sch		58.7	1	37 21.1		
		L_4	60.2, 61.8	St_1	60.0	2	31 32.60		St_1	60.0	2	37 21.2		
		St_1	[60.0]	L_4	60.2	6	31 32.80		L_4	61.8	2	37 20.0		
		Nc	67.3, 67.7	Sj	62.7	1	31 32.73		Sj	62.7	1	37 19.1		
		Sj	62.7	Nc	67.3	2	31 32.87		Nc	67.7	2	37 19.3		
		L_5	78.6	L_5	78.6	2	31 32.76		L_5	78.6	2	37 19.9		
		V	86.9	V	86.9	5	31 32.93		V	86.9	5	37 20.1		
		H	88.7	H	88.7	3	31 32.78		H	88.7	3	37 21.7		
		E	03.0	E	03.0	3	31 32.89		E	03.0	3	37 20.6		
7660	next page													
7661														
7662	9.0	K	22.9			1	21 32 1.85				1	13 15 37.5		11
21 32	1.27	St_2	59.7			2	32 1.18				2	15 35.3		
13 15	36.3	H	90.8			3	32 1.27				3	15 36.3		

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Zones	α Ep-H	δ	α Pos.	H δ	α C-H	δ	α adj.	δ	Δα	Δδ	
9	-94.6	-94.6	+.53	-6.7	+.53	-2.6	17.34	18.3	+.45	+3.5	✓
	-41.2	-41.2	+.02	+3.5	+.23	-1.1	16.91	23.7	+.02	-1.9	✓
	-35.5	-35.5	-.10	+1.4	+.20	-1.0	16.73	23.2	-.16	-1.4	✓
	-27.6	-27.6	+.08	-0.5	+.15	-0.7	16.93	21.5	+.04	+0.3	✓
	-10.6	-10.6	+.02	0.0	+.06	-0.3	16.83	21.7	-.06	+0.1	✓
			-.56	+2.7			16.81	20.9	-.08	+0.9	✓
	+5.0	+5.0	-.04	+1.3	-.28	+0.1	16.74	22.6	-.15	-0.8	✓
	+15.9	+15.3	+.01	+1.5	-.89	+0.4	16.80 / 16.89	22.3 / 21.8	-.09	-0.5	✓
119	-68.8	-68.8	+.42	+2.3	+.14	+1.8	30.03	3.2	+.09	-1.5	✓
	-32.0	-32.0	-.11	-2.6	+.06	+0.8	29.87	0.3	-.07	+1.4	✓
	-6.0	-6.0	+.16	+0.5	+.01	+0.2	29.98	2.0	+.04	-0.3	✓
			-.20	-2.6			29.89 / 29.94	1.4 / 1.7	-.05	+0.3	✓
3	-94.1	-94.1	-.36	-3.9	-.27	+1.1	32.51	22.8	-.27	-1.6	✓
102,127	-65.9	-65.9	+.26	+0.2	+.04	-0.5	32.82	21.2	+.04	+0.0	✓
	-43.2	-43.2	-.04	-0.7	-.06	+0.2	32.70	22.0	-.08	-0.8	✓
	-40.7	-40.7	-.05	+0.2	-.06	+0.2	32.81 / 32.92	21.2 / 22.1	+.03 / +.14	0.0 / -0.9	✓ ✓
	-28.7	-28.7	-.18	-0.5	-.04	+0.1	32.65	21.9	-.13	-0.7	✓
	-28.5	-26.9	+.02	-1.7	-.04	+0.1	32.82	20.9	+.04	+0.3	✓
	-26.0	-26.0	-.05	-2.6	-.04	+0.1	32.77	20.2	-.01	+1.0	✓
	-21.4	-21.0	+.09	-2.4	-.03	+0.1	32.87	20.1	+.09	+1.1	✓
	-10.1	-10.1	-.02	-1.8	-.01	0.0	32.76	20.7	-.02	+0.5	✓
	-1.8	-1.8	+.15	-1.6	.00	0.0	32.91	20.2	+.13	+1.0	✓
			-80.0	+.14	-0.4		32.78	21.7	.00	-0.5	✓
	+14.3	+14.3	+.11	-1.1	+.02	-0.1	32.87 / 32.78	20.5 / 21.2	+.09	+0.7	✓
119	-67.9	-67.9	+.58	+1.2	+.30	+0.7	1.57	37.0	+.20	-0.3	✓
	-31.1	-31.1	-.09	-1.0	+.14	+0.3	1.27	36.8	-.10	-0.1	✓
			-.44	-1.0			1.27 / 1.37	36.3 / 36.7	-.10	+0.4	✓

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Star		Epoch		Ep α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	Zone
7660	8.9	L_1	00.8	L_1	00.8	1	21 31 36.24	L_1	00.8	1	11 51 34.8	39
21 31	36.03	K	22.8	K	22.8	1	31 36.32	K	22.8	1	51 40.1	114
11 51	41.4	L_4	54.7 ..	L_4	54.7	1	31 36.05	L_4	..	..	..	
		St_1	[60.0]	St_1	60.0	5	31 35.70	St_1	60.0	5	51 37.4	
		L_5	79.8	L_5	79.8	1	31 35.90	L_5	79.8	1	51 37.5	
		H	90.7	H	90.7	3	31 36.03	H	90.7	3	51 41.4	
7661	7.5	L_1	97.7	L_1	97.7	2	21 31 56.26	L_1	97.7	2	11 54 29.0	3, 3
21 31	56.24	K	22.8	K	22.8	2	31 56.43	K	22.8	2	54 35.7	114, 1
11 54	33.6	M_1	45.3	M_1	45.3	4	31 56.18	M_1	45.3	4	54 30.9	
		L_4	54.7 56.7 80.2	L_4	54.7	1	31 56.29	L_4	56.7	2	54 33.4	
		St_1	[60.0]	St_1	60.0	3	31 56.27	St_1	60.0	3	54 33.2	
		L_5	80.2 79.8	L_5	80.2 79.8	2	31 56.29	L_5	80.2 79.8	2	54 31.2	
		H	91.8	H	91.8	4	31 56.24	H	91.8	4	54 33.6	
		E	04.2, 03.8	E	04.2	3	31 56.25	E	03.8	4	54 32.2	
7663	9.2	K	22.9			1	21 32 11.31			1	13 21 35.2	119
21 32	10.90											
13 21	32.7	H	93.1			3	32 10.90			3	21 32.7	
7664	8.8	M_1	46.2	M_1	46.2	2	21 32 11.53	M_1	46.2	2	11 28 20.6	
21 32	11.33	L_4	55.6 ..	L_4	55.6	3	32 11.46	L_4	..	..	28 ..	
11 28	21.6	D_1	83.7	D_1	83.7	1	32 11.28	D_1	83.7	1	28 25.8	
		D_2	96.7	H	90.7	4	32 11.33	H	90.7	4	28 21.6	
		H	90.7	D_2	96.7	4	32 11.38	D_2	96.7	3	28 21.2	
7665	9.0	M_1	43.7			1	21 32 17.91			1	10 27 9.8	
21 32	18.25	M_2	85.7			1	32 18.35			1	27 8.7	
10 27	5.2	H	93.1			3	32 18.25			3	27 5.2	

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Zones	α Eh−H	δ	α Bs.−H	δ	α C−H.	δ	α Adj.	δ	Δα	Δδ
39	−89.9	−89.9	+.21	−6.6	+.25	−2.9	36.28	38.5	+.26	+0.3
114	−67.9	−67.9	+.29	−1.3	+.09	−3.5	36.12	37.9	+.10	+0.9
	−36.0	..	+.02	..	+.08	..	36.07	...	+.05	..
	−30.7	−30.7	−.33	−4.0	+.07	−1.3	35.75	37.8	−.27	+1.0
	−10.9	−10.9	−.13	−3.9	+.02	−0.4	35.90	38.3	−.12	+0.5
	−78.9	−.22	+4.1				36.03	41.4	+.01	−2.6
							36.02	38.8		
3, 39	−94.1	−94.1	+.02	−4.6	+.08	−0.2	56.32	33.4	+.06	−0.2
114, 127	−69.0	−69.0	+.19	+2.1	−.03	+1.1	56.21	34.7	−.05	−1.5
	−46.5	−46.5	−.06	−2.7	+.01	+0.3	56.14	31.9	−.12	+1.3
	−34.1	−35.1	+.05	−0.2	+.01	+0.2	56.31	34.3	+.05	−1.1
	−31.8	−31.8	+.03	−0.4	+.01	+0.2	56.32	33.9	+.06	−0.7
	−11.6	−11.6	+.05	−2.4	.00	+0.1	56.29	32.0	+.03	+1.2
	−81.6	−.03	−0.6				56.24	33.6	−.02	−0.4
	+12.4	+12.0	+.01	−1.4	.00	−0.1	56.23	32.1	−.03	+1.1
							56.26	33.2		
119	−70.2	−70.2	+.41	+2.5	+.13	+2.0	11.03	34.7	+.07	−1.0
							10.90	32.7	−.06	+1.0
							10.96	33.7		
	−44.5	−44.5	+.20	−1.0			11.49	21.6	+.13	+1.0
	−35.1	..	+.13	..			11.48	...	+.12	..
	−7.0	−7.0	−.05	+4.2			11.20	26.2	−.16	−3.6
							11.33	21.6	−.03	+1.0
	+6.0	+6.0	+.05	−0.4			11.29	21.0	−.07	+1.6
							11.36	22.6		
	−49.4	−49.4	−.34	−4.6			17.87	10.8	−.26	−2.5
	−7.4	−7.4	+.10	+3.5			18.28	8.8	+.15	−0.5
							18.25	5.2	+.12	+3.1
							18.13	8.3		

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Star		Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	Zon
7666	8.2	L_3	40.7, ..			1	21 32 29.26			..	10	
21 32	29.25	M_1	45.1			3	32 29.68			3	2 43.6	
10 2	44.4	H	91.1			3	32 29.25			3	2 44.4	
7667	8.9	K	22.9			1	21 32 40.30			1	13 40 8.4	11
21 32	40.07	R_1	49.0			1	32 39.89			1	40 11.8	
13 40	6.2	St_2	59.7			1	32 39.70			1	40 7.5	
		A	65.7			3	32 40.36			3	40 4.7	
	9582	Q	73.8, ..			2	32 40.01			..	..	
		H	90.7			2	32 40.07			2	40 6.2	
		Sk	95.4			3	32 40.24			3	40 5.2	
7668	8.8	R_1	48.0	M_1	45.8	2	21 32 45.70	M_1	45.8	2	10 53 18.4	
21 32	45.56	M_1	45.8	R_1	48.0	3	32 45.48	R_1	48.0	3	53 17.1	
10 53	18.4	H	90.7	Sch H	58.7 / 90.7	1 / 3	32 45.62 / 32 45.56	Sch H	58.7 / 90.7	1 / 3	53 21.8 / 53 18.4	
7669	8.6	L_1	00.8	L_1	00.8	1	21 32 45.59	L_1	00.8	1	11 20 ~~41.2~~ 58.5	
21 32	46.75	M_1	45.8	M_1	45.8	1	32 45.94	M_1	45.8	1	20 57.5	
11 20	51.2	L_4	59.9, 61.6	L_4	59.9	3	32 46.20	Wc	55.7	2	21 24.3	
		Wc	69.2, 55.7	Wc	69.2	2	32 46.33	L_4	61.6	2	20 55.4	
Wc? μ		L_5	78.7	L_5	78.7	2	32 46.53	L_5	78.7	2	20 53.4	
		D_1	84.7	D_1	84.7	1	32 46.73	D_1	84.7	1	20 51.7	
		H	93.5	H	93.5	4	32 46.75	H	93.5	4	20 51.2	
7670	8.1	K	22.8			2	21 32 52.62			2	12 29 37.2	114
21 32	52.12	M_1	45.5			4	32 52.29			3	29 35.5	
12 29	38.6	St_1	[60.0]			2	32 51.97			2	29 38.2	
		H	89.2			2	32 52.12			2	29 38.6	

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Zones.	α Eph.-H	δ	α Res.-H	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
	-50.4	..	+.01	..			29.25	....	-.13	..	✓
	-46.0	-46.0	+.43	-0.8			29.64 ✓	44.6 ✓	+.26	-0.1	✓
							29.25	44.4	-.13	+0.1	✓
							29.38	44.5			
119	-67.8	-67.8	+.23	+2.2	-.05	+1.7	40.02 ✓	7.9 ✓	-.05	-0.5	✓
	-41.7	-41.7	-.18	+5.6	-.03	+1.0	39.97 ✓	11.1 ✓	-.10	-3.7	✓
	-31.0	-31.0	-.37	+1.3	-.02	+0.8	39.99	9.0	-.28	-1.6	✓
	-25.0	-25.0	+.29	-1.5	-.02	+0.6	40.36 ✓	4.7 ✓	+.29	+2.7	✓
	-16.9	..	-.06	..	-.01	..	40.10 ✓	....	+.03	..	✓
			+.07 ✓	-2.5 ✓			40.07	6.2	.00	+1.2	✓
	+4.7	+4.7	+.17	-1.0	+.03	-0.1	40.21 ✓	5.6 ✓	+.14	+1.8	✓
							40.07 ✓	7.4			
	+44.9	+44.9	+.14	0.0			45.66 ✓	18.4	+.06	+0.6	✓
	+42.7	+42.7	-.08	-1.3			45.56 ✓	16.4 ✓	-.04	+2.6	✓
							45.60 ✓	22.8 ✓	.00	-3.8	✓
							45.56	18.4	-.04	+0.6	✓
							45.60	19.0			
39	-92.7	-92.7	-1.16	0.0	-1.12	+3.7	45.63 ✓	54.9 ✓	-.66	-0.5	✓
	-47.7	-47.7	-.81	+6.3	-.58	+1.9	45.90	57.5	-.39	-3.1	✓
	-33.6	-37.8	-.55	-26.9	-.41	+1.5	46.22 ✓	[25.1] ✓	-.07	[+29.3]	
	-24.3	-31.9	-.42	+4.2	-.29	+1.3	46.33	56.3	+.04	-1.9	✓
	-14.8	-14.8	-.22	+2.2	-.18	+0.6	46.53 ✓	54.2 ✓	+.24	+0.2	✓
	-8.8	-8.8	-.02	+0.5	-.11	+0.4	46.65 ✓	52.1	+.36	+2.3	
			+1.21 ✓	-4.0 ✓			46.75	51.2	+.46	+3.2	✓
							46.29 ✓	54.4 55.8 ✓			
114,127	-66.4	-66.4	+.50	-1.4	+.28 ✓	-2.4	52.40 ✓	36.2	+.20	+1.1	✓
	-43.7	-43.7	+.17	-3.1	+.18	-1.6	52.25 ✓	35.5	+.05	+1.8	✓
	-29.2	-29.2	-.15	-0.4	+.12	-1.1	52.02 ✓	38.8	-.18	-1.5	✓
			-.42 ✓	+3.6 ✓			52.12	38.6	-.08	-1.3	✓
							52.20	37.3			

Error in Nc

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Star	Epoch	Ep α	Obs. α 1900.0	Ep. δ	Obs. δ 1900.0	Zon
7671 8.6.	K 22.8		2 21 33 1.60		2 9 42 11.3	102
21 33 1.42	M_1 43.7		1 33 1.34		1 42 12.2	
9 42 14.4	St_1 [60.0]		2 33 1.44		2 42 10.5	
μ^{12}	Sj 62.8		1 33 1.39		1 42 11.7	
	H 93.3		4 33 1.42		4 42 14.4	
	Db 93.8		2 33 1.43		2 42.13.2	
7672 9.1.	K 22.8		1 21 33 42.66		1 12 48 8.0	11
21 33 42.11	St_2 59.7		2 33 42.12		2 48 8.0	
12 48 10.4	H 93.0		4 33 42.11		4 48 10.4	
7673 9.2.	K 22.8		1 21 33 49.98		1 12 41 59.3	1
21 33 49.73						
12 41 57.9	H 91.2		3 33 49.73		3 41 57.9	
7674 8.9.	M_1 45.8		1 21 33 56.37		1 9 56 40.2	
21 33 56.26	M_2 85.7		1 33 56.39		1 56 40.2	
9 56 41.4	H 90.8		2 33 56.26		2 56 41.4	
	Db 93.8		2 33 56.26		2 56 41.5	
7675 9.5.	R_1 48.0		1 21 33 57.03		1 10 53 41.9	
21 33 57.22						
10 53 46.4	H 93.1		3 33 57.22		3 53 46.4	
7676 8.7.	K 22.9		1 21 34 2.42		1 10 22 27.6	12
21 34 2.34	M_1 45.8		1 34 2.43		1 22 30.2	
10 22 31.3	H 93.8		4 34 2.34		4 22 31.3	
μ^{12}						

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zones.	α Ep.−N	δ	α Ps.−N	δ	α C−N.	δ	α adj.	δ	Δα	Δδ	
102,125	−70.5	−70.5	+.18	−3.1	−.02	−3.2	1.40	11.2	−.01	+1.2	✓
	−49.6	−49.6	−.08	−2.2	−.01	−2.2	1.30	12.2	−.11	−0.2	✓
	−33.3	−33.3	+.02	−3.9	−.01	−1.5	1.49	11.0	+.08	+1.4	✓
	−30.5	−30.5	−.03	−2.7	−.01	−1.4	1.43	12.8	+.02	−0.2	✓
			+.03	+4.5			1.42	14.4	+.01	−2.0	✓
	+0.5	+0.5	+.01	−1.2	.00	0.0	1.43	12.9	+.02	−0.3	✓
							1.411	12.86			
114	−70.2	−70.2	+.55	−2.4	+.35	−4.6	42.46	5.8	+.20	+2.8	✓
	−33.3	−33.3	+.01	−2.4	+.17	−2.2	42.21	9.5	−.05	−0.9	✓
			−.50	+6.6			42.11	10.4	−.15	−1.8	✓
							42.26	8.6			
114	−68.4	−68.4	+.25	+1.4	+.05	−0.8	49.78	57.1	+.02	+0.4	✓
							49.73	57.9	−.03	−0.4	✓
							49.76	57.5			
	−45.0	−45.0	+.11	−1.2			56.33	41.2	+.04	−0.2	✓
	−5.1	−5.1	+.13	−1.2			56.32	40.3	+.03	+0.7	✓
							56.26	41.4	−.03	−0.4	✓
	+3.0	+3.0	.00	+0.1			56.26	41.2	−.03	−0.2	✓
							56.29	41.0			
	−45.1	−45.1	−.19	−4.5			57.11	41.2	−.05	+2.6	✓
							57.22	46.4	+.06	−2.6	✓
							57.16	43.8			
125	−70.9	−70.9	+.08	−3.7	−.14	−2.4	2.20	28.9	−.11	+1.6	✓
	−48.0	−48.0	+.09	−1.1	−.10	−1.6	2.39	31.2	+.08	−0.7	✓
			+.20	+3.4			2.34	31.3	+.03	−0.8	✓
							2.31	30.5			

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Star		Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0	
7677	7.1.	L_1	97.7			2	21 34 5.43				2	11 1 28.7	
21 34	5.56.	K	22.9			1	34 6.05				1	1 35.3	
11 1	37.1.	M_1	44.7			2	34 5.67				2	1 34.5	
		L_4	54.6, 57.2			2	34 5.47				2	1 36.0	
		St,	[60.0]			2	34 5.60				2	1 35.0	
		A	[72.8]			1	34 5.58				1	1 35.1	
	29650	G	77.8			4	34 5.66				4	1 36.5	
		H	89.8			2	34 5,56				2	1 37.1	
		E	98.7			3	34 5.66				3	1 38.3	
7678	8.7	L_1	97.7	L_1	97.7	2	21 34 7.45	L_1	97.7		2	10 46 38.5	
21 34	7.44	K	22.9	K	22.9	2	34 7.66	K	22.9		2	46 43.8	
10 46	43.4	R_1	48.0	M_1	43.7	1	34 7.43	M_1	43.7		1	46 41.6	
		M_1	43.7	R_1	48.0	1	34 7.42	R_1	48.0		1	46 41.0	
		L_4	54.7	L_4	54.7	1	34 7.38	L_4	54.7		1	46 44.3	
		L_5	78.7	L_5	78.7	2	34 7.58	L_5	78.7		2	46 43.9	
		M_2	85.7	M_2	85.7	1	34 7.66	M_2	85.7		1	46 46.4	
		H	90.9	H	90.9	2	34 7.44	H	90.9		2	46 43.4	
7679	8.5	R_1	48.0	M_1	45.7	5	21 34 12.54	M_1	45.7		5	13 4 29.7	
21 34	12.98	M_1	45.7	R_1	48.0	1	34 12.89	R_1	48.0		1	4 30.4	
13 4	30.6	H	89.7	H	89.7	2	34 12.98	H	89.7		2	4 30.6	
		E	05.8, 05.3	E	05.8	3	34 13.25	E	05.3		4	4 30.0	
7681	9.0	M_1	46.2			2	21 34 38.77				2	9 42 4.4	
21 34	38.70	H	90.8			2	34 38.70				2	42 6.6	
9 42	6.6	Dr	93.7			2	34 38.77				2	42 6.7	
7682	8.9	K	22.8			1	21 34 42.70				1	11 46 52.3	
21 34	42.66												
11 46	50.8	H	91.1			4	34 42.66				4	46 50.8	

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Zones	α Ep.−H	δ	α Bs.−H	δ	α C.−H	δ	α adj.	δ	Δα	Δδ	
3,39	−92.1	−92.1	−.13	−8.4	−.07	−4.0	5.49	33.1	−.12	+2.9	✓
127	−66.9	−66.9	+.19	−1.8	+.25	−1.7	5.81	35.4	+.20	+0.6	✓
	−45.1	−45.1	+.11	−2.6	+.05	−1.6	5.63	35.5	+.02	+0.5	✓
	−35.2	−32.6	−.09	−1.1	+.04	−1.2	5.49	36.9	−.12	−0.9	✓
	−29.8	−29.8	+.04	−2.1	+.03	−1.1	5.65	35.8	+.04	+0.2	✓
	−17.8	−17.8	+.02	−2.0	+.02	−0.6	5.58	35.1	−.03	+0.9	✓
	−12.0	−12.0	+.10	−0.6	+.01	−0.4	5.65	37.1	+.04	−1.1	✓
	−79.5	−.11	+3.6				5.56	37.1	−.05	−1.1	✓
	+8.9	+8.9	+.10	+1.2	−.01	+0.3	5.64 / 5.61	38.2 / 36.0	+.03	−2.2	✓
3,39	−93.2	−93.2	+.01	−4.9	+.07	−0.5	7.51	42.9	+.03	+0.7 (9)	✓
125,127	−68.0	−68.0	+.22	+0.4	−.01	+1.1	7.43	44.5	−.05	−0.9 (7)	✓
	−47.2	−47.2	−.01	−1.8	+.02	+0.2	7.39	42.6 (2)	−.09	+2.0 (+1.2)	✓
	−42.9	−42.9	−.02	−2.4	+.02	+0.2	7.50	40.3	+.02	+3.3 (5)	✓
	−36.2	−36.2	−.06	+0.9	+.01	+0.1	7.40	45.2	−.08	−1.6 (4)	✓
	−12.2	−12.2	+.14	+0.5	.00	0.0	7.58	44.7	+.10	−1.1 (−0.9)	✓
	−5.2	−5.2	+.22	+3.0	.00	0.0	7.59	46.5	+.11	−2.9 (7)	✓
	−80.6	−.04	−0.4				7.44 / 7.48	43.4 / 43.6 (8)	−.04	+0.2 (4)	✓
	−44.0	−44.0	−.11	−0.9			12.50	29.7 (30)	−.42	+0.3 (−0.5)	✓
	−41.7	−41.7	−.09	−0.2			12.97	29.7	+.05	+0.3 (5)	✓
							12.98	30.6	+.06	−0.6 (4)	✓
	+16.1	+15.6	+.27	−0.6			13.23 / 12.92	29.9 / 30.9 (2)	+.31	+0.1 (3)	✓
	−44.6	−44.6	+.07	−2.2			38.73	5.4	.00	+0.7	✓
							38.70	6.6	−.03	−0.5	✓
	+2.9	+2.9	+.07	+0.1			38.77 / 38.73	6.4 / 6.1	+.04	−0.3	✓
114	−68.3	−68.3	+.04	+1.5	−.16	−0.7	42.50	50.1	−.08	+0.3	✓
							42.66	50.8	+.08	−0.4	✓ 42.58 50.4 mean

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Star	Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0	
7683 8.1.	L_1	97.7	L_1	97.7	2	21 34 47.28		L_1	97.7	2	11 15 6.8	
21 34 47.35	K	22.8	K	22.8	1	34 47.85		K	22.8	1	15 11.9	
11 15 10.4	R_1	49.0	M_1	45.7	1	34 47.61		M_1	45.7	1	15 7.9	
	M_1	45.7	R_1	49.0	1	34 47.39		R_1	49.0	1	15 11.8	
	L_4	56.7, 58.8	L_4	56.7	2	34 47.30		Nc	55.8	3	15 9.9	
	St_1	[60.0]	St_1	60.0	3	34 47.31		L_4	58.8	2	15 10.4	
	Nc	68.7, 55.8	Sj	62.7	1	34 47.37		St_1	60.0	3	15 11.5	
	Sj	62.7	Nc	68.7	2	34 47.37		Sj	62.7	1	15 10.1	
	L_5	78.7	L_5	78.7	2	34 47.27		L_5	78.7	2	15 8.6	
	H	90.9	H	90.9	2	34 47.35		H	90.9	2	15 10.4	
7684 8.2.	K	22.9	K	22.9	1	21 34 50.22		K	22.9	1	10 14 21.2	
	Sch	58.7	V	85.7	1	34 50.38		Sch	58.7	1	14 28.5	
21 34 50.21	V	85.7	H	91.2	4	34 50.25		V	85.7	4	14 33.7	
10 14 33.0	C_2	95.0			3	34 50.21		H	91.2	3	14 33.0	
K?	H	91.2	C_2	95.0	2	34 50.24		C_2	95.0	2	14 34.0	
7685 8.3.	K	22.9			1	21 35 4.91				1	10 26 32.5	
21 35 4.64	M_1	43.7			1	35 4.37				1	26 36.7	
10 26 33.8	H	90.8			3	35 4.64				3	26 33.8	
7686 8.8.	K	22.9	K	22.9	1	21 35 12.62		K	22.9	1	10 39 43.8	
21 35 12.34	R_1	48.0	M_1	44.7	2	35 12.53		M_1	44.7	2	39 40.8	
10 39 42.8	M_1	44.7	R_1	48.0	2	35 12.30		R_1	48.0	2	39 44.2	
	H	93.8	H	93.8	4	35 12.34		H	93.8	4	39 42.8	
7687 8.9.	R_1	48.0			2	21 35 17.75				1	10 56 23.9	
21 35 17.91												
10 56 24.2	H	91.1			3	35 17.91				3	56 24.2	

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Zones	α Eph.-H	δ	α Obs-H	δ	α C-H.	δ	α adj.	δ	Δα	Δδ	
3,39	-93.2	-93.2	-.07	-3.6	-.01	+0.8	47.34	11.2	-.07	-0.6	✓
114	-68.1	-68.1	+.50	+1.5	+.30	-0.7	47.65	9.7	+.24	+0.9	✓
	-45.2	-45.2	+.26	-2.5	+.08	0.0	47.57	8.9	+.16	+1.7	✓
	-41.9	-41.9	+.04	+1.4	+.08	0.0	47.47	11.1	+.06	-0.5	✓
	-34.2	-35.1	-.05	-0.5	+.06	0.0	47.32	10.7	+.09	-0.1	✓
	-30.9	-32.1	-.04	0.0	+.06	0.0	47.36	11.3	-.05	-0.7	✓
	-28.2	-30.9	+.02	+1.1	+.05	0.0	47.41	12.1	.00	-1.5	✓
	-22.2	-28.2	+.02	-0.3	+.04	0.0	47.37	11.2	-.04	-0.6	✓
	-12.2	-12.2	-.08	-1.8	+.02	0.0	47.27	9.4	-.14	+1.2	✓
	-80.6	-.18		-0.1			47.35	10.4	-.06	+0.2	✓
							47.41	10.6			
125	-68.3	-68.3	+.01	(-11.8)	-.21	-10.5	50.00	22.5	-.20	+8.2	
							50.36	29.5	+.16	+1.2	✓
	-5.5	-5.5	+.04	+0.7	-.02	(-0.8)	50.23	33.8	+.03	-3.1	✓
			+.31	(+15.4)			50.21	33.0	+.01	-2.3	✓
	+3.8	+3.8	+.03	+1.0	+.01	(+0.6)	50.20	34.5	.00	-3.8	✓
							50.20	30.7			
125.	-67.9	-67.9	+.27	-1.3	+.05	0.0	4.69	33.8	+.14	+1.3	✓
	-47.1	-47.1	-.27	+2.9	+.03	0.0	4.33	37.7	-.22	-2.6	✓
			-.07	0.0			4.64	33.8	+.09	+1.3	✓
							4.55	35.1			
127	-70.9	-70.9	+.28	+1.0	+.04	+1.1	12.38	43.9	-.02	-0.9	✓
	-49.1	-49.1	+.19	-2.0	+.03	+0.8	12.49	41.8	+.09	+1.2	✓
	-45.8	-45.8	-.04	+1.4	+.03	+0.7	12.38	43.5	-.02	-0.5	✓
			-.06	-1.6			12.34	42.8	-.06	+0.2	✓
							12.40	43.0			
	-43.1	-43.1	-.16	-0.3			17.83	23.2	-.04	+0.5	✓
							17.91	24.2	+.04	-0.5	✓
							17.87	23.7			

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7688 9.0	M_1 43.7		1	21 35 33.42		1	10 39 37.1
21 35 33.42	M_2 85.7		1	35 33.67		1	39 37.0
10 39 35.9	H 93.1		3	35 33.42		3	39 35.9
7689 8.6	K 22.8	K 22.8	1	21 35 41.57	K 22.8	1	10 39 15.6
21 35 41.44	R_1 48.0	M_1 44.7	2	35 41.57	M_1 44.7	2	39 11.1
10 39 10.0	M_1 44.7	R_1 48.0	1	35 41.03	R_1 48.0	1	39 8.0
	St_1 [60.0]	St_1 60.0	2	35 41.38	St_1 60.0	2	39 8.3
	H 91.2, 91.4	H 91.2	3	35 41.44	H 91.4	2	39 10.0
7690 8.4	L_1 97.7	L_1 97.7	2	21 35 44.98	L_1 97.7	2	11 13 51.5
21 35 45.08	K 22.8	K 22.8	2	35 45.34	K 22.8	2	14 3.0
11 14 3.5	L_4 54.7	L_4 54.7	1	35 45.12	L_4 54.7	1	14 4.8
	St_1 [60.0]	St_1 60.0	1	35 44.98	Wc 55.8	3	14 3.2
	Wc 68.7, 55.8	Wc 68.7	2	35 45.15	St_1 60.0	1	14 5.6
	L_5 78.7	L_5 78.7	2	35 45.13	L_5 78.7	2	14 3.3
	H 90.7	H 90.7	3	35 45.08	H 90.7	3	14 3.5
7691 9.1	Sj 62.7		1	21 35 50.12		1	12 50 38.7
21 35 50.10							
12 50 40.4	H 91.8		4	35 50.10		4	50 40.4
7692 9.1	R_1 49.0	M 45.7	1	21 36 4.49	M_1 45.7	1	10 5 9.8
21 36 4.18	M_1 45.7	R_1 49.0	1	36 4.00	R_1 49.0	1	5 12.6
10 5 9.8	H 92.3	H 92.3	4	36 4.18	H 92.3	4	5 9.8
7694 9.0	M_1 44.8		1	21 36 18.64		1	12 11 3.9
21 36 18.76	M_2 85.7		2	36 18.84		2	11 5.8
12 11 4.8	H 89.7		2	36 18.76		2	11 4.8

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zones.	α Eph.-H	δ	α Bes.-H	δ	α C-H.	δ	α adj.	δ	Δα	Δδ	
	-49.4	-49.4	.00	+1.2			33.38	38.1	-.09	-1.1	✓
	-7.4	-7.4	+.25	+1.1			33.60	37.1	+.13	-0.1	✓
							33.42	35.9	-.05	+1.1	✓
							33.47	37.0			
114	-68.4	-68.6	+.13	+5.6	-.07	+3.4	41.37	13.4	-.01	-3.1	✓
	-46.5	-46.7	+.13	+1.1	-.05	+2.3	41.53	12.1	+.15	-1.8	✓
	-43.2	-43.4	-.41	-2.0	-.04	+2.2	41.11	7.3	-.27	+3.0	✓
	-31.2	-31.4	-.06	-1.7	-.03	+1.6	41.43	8.8	+.05	+1.5	✓
			+.10	-5.0			41.44	10.0	+.06	+0.3	✓
							41.38	10.3			
3,39	-93.0	-93.0	-.10	-12.0	-.04	-7.6	45.04	55.9	-.06	+7.1	✓
114,127	-67.9	-67.9	+.26	-0.5	+.04	-1.5	45.12	2.0	+.02	+1.0	✓
	-36.0	-36.0	+.04	+1.3	.00	-2.1	45.14	5.7	+.04	-2.7	✓
	-30.7	-34.9	-.10	-0.3	.00	-2.0	45.03	4.0	-.07	-1.0	✓
	-22.0	-30.7	+.07	+2.1	.00	-1.7	45.15	6.1	+.05	-3.1	✓
	-12.0	-12.0	+.05	-0.2	.00	-0.7	45.13	4.1	+.03	-1.1	✓
		-80.4	.00	+5.7			45.08	3.5	-.02	-0.5	✓
							45.10	3.0			
	-29.1	-29.1	+.02	-1.7			50.16	39.8	+.03	+0.3	✓
							50.10	40.4	-.03	-0.3	✓
							50.13	40.1			
	-46.6	-46.6	+.31	0.0			4.45	10.8	+.21	0.0	✓
	-43.3	-43.3	-.18	+2.8			4.08	11.9	-.16	-1.1	✓
							4.18	9.8	-.06	+1.0	✓
							4.24	10.8			
	-44.9	-44.9	-.12	-0.9			18.60	4.9	-.11	+0.3	✓
	-4.0	-4.0	+.08	+1.0			18.77	5.9	+.06	-0.7	✓
							18.76	4.8	+.05	+0.4	✓
							18.71	5.2			

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zon
7693 8.9	L_1 94.6		1	21 36 15.03		1	9 51 52.3	1
21 36 15.53	K 22.6		1	36 15.79		1	51 53.1	10
9 51 53.9	M_1 45.8		1	36 15.31		1	51 54.7	
	L_4 54.7, 58.7		1	36 15.34		1	51 54.2	
	St_1 [60.0]		2	36 15.28		2	51 52.5	
	Sj 62.7		2	36 15.44		2	51 52.3	
	L_5 79.7		2	36 15.50		2	51 54.2	
	H 93.7		4	36 15.53		4	51 53.9	
	Db 93.7		2	36 15.51		2	51 54.6	
7695 8.3	K 22.9	K 22.9	1	21 36 36.11	K 22.9	1	12 42 18.5	12
21 36 35.98	L_3 48.8, ..	M_1 46.4	3	36 36.03	L_3 ..	..	..	
12 42 18.0	M_1 46.4	L_3 48.8	1	36 36.01	M_1 46.4	3	42 18.0	
	St_2 59.7	St_2 59.7	2	36 35.71	St_2 59.7	2	42 18.7	
	H 89.7	H 89.7	3	36 35.98	H 89.7	3	42 18.0	
	E 02.7	E 02.7	3	36 36.03	E 02.7	3	42 19.8	
7696 8.7	K 22.8		1	21 36 49.98		1	12 9 12.8	11
21 36 49.65	St_1 [60.0]		2	36 49.48		2	9 7.2	
12 9 7.1	H 90.4		3	36 49.65		3	9 7.1	
7697 8.9	K 22.8		1	21 37 5.62		1	11 31 28.7	11
21 37 5.88	M_1 45.8		1	37 5.47		1	31 26.3	
11 31 26.5	St_1 [60.0]		1	37 5.54		1	31 23.3	
	Sj 62.7		1	37 5.57		1	31 27.9	
	H 88.7		3	37 5.88		3	31 26.5	
7698 8.8	M_1 45.7		1	21 37 11.07		1	10 22 13.4	
21 37 11.28	M_2 89.8		1	37 11.24		1	22 18.3	
10 22 16.9	H 91.0		3	37 11.28		3	22 16.9	

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Zones.	α Ep-H	δ	α Pos.-H	δ	α C-H.	δ	α adj.	δ	Δα	Δδ	
1.	-99.1	-99.1	-.50	-1.6	-.43	+3.1	15.10	57.0	-.31	-2.7	✓
102	-71.1	-71.1	+.26	-0.8	+.07	-2.3	15.60	51.6	+.19	+2.7	✓
	-47.9	-47.9	-.22	+0.8	-.10	+0.2	15.27	55.7	-.14	-1.4	✓
	-39.0	-35.0	-.19	+0.3	-.08	+0.2	15.36	55.1	-.05	-0.8	✓
	-33.7	-33.7	-.25	-1.4	-.07	+0.2	15.33	52.9	-.08	+1.4	✓
	-31.0	-31.0	-.09	-1.6	-.07	+0.2	15.48	53.4	+.07	+0.9	✓
	-14.0	-14.0	-.03	+0.3	-.03	+0.1	15.50	55.0	+.09	-0.7	✓
	-85.1		+.21	-0.5			15.53	53.9	+.12	+0.4	✓
	0.0	0.0	-.02	+0.7	.00	0.0	15.51 / 15.41	54.3 / 54.3	+.10	0.0	✓
127	-66.8	-66.8	+.13	+0.5	-.11	+0.6	35.87	18.6	-.07	+0.5	✓
	-43.3	..	+.05	..	-.07	...	35.99	...	+.05	..	✓
	-40.9	-43.3	+.03	0.0	-.07	+0.4	36.00	19.0	+.06	+0.1	✓
	-30.0	-30.0	-.27	+0.7	-.05	+0.3	35.80	20.2	-.14	-1.1	✓
			+.16	-0.9			35.98	18.0	+.04	+1.1	✓
	+13.0	+13.0	+.05	+1.8	+.02	-0.1	36.01 / 35.94	19.7 / 19.1	+.07	-0.6	✓
114	-67.6	-67.6	+.33	+5.7	+.13	+3.5	49.78	10.6	+.13	-2.2	✓
	-30.4	-30.4	-.17	+0.1	+.06	+1.6	49.53	7.5	-.12	+0.9	✓
			-.19	-5.2			49.65 / 49.65	7.1 / 8.4	.00	+1.3	✓
114	-65.9	-65.9	-.26	+2.2	-.46	0.0	5.42	26.5	-.17	+0.1	✓
	-42.9	-42.9	-.41	-0.2	-.30	0.0	5.43	27.3	-.16	-0.7	✓
	-28.7	-28.7	-.34	-3.2	-.20	0.0	5.59	23.7	.00	+2.9	✓
	-26.0	-26.0	-.31	+1.4	-.18	0.0	5.61	29.0	+.02	-2.4	✓
			+.70	0.0			5.88 / 5.59	26.5 / 26.6	+.29	+0.1	✓
	-45.3	-45.3	-.21	-3.5			11.03	14.4	-.13	+2.2	✓
	-1.2	-1.2	-.04	+1.4			11.17	18.4	+.01	-1.8	✓
							11.28 / 11.16	16.9 / 16.6	+.12	-0.3	✓

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	zon.
7699 8.6	L_1 00.8	L_1 00.8	1	21 37 12.74	L_1 00.8	1	12 29 50.3	3
21 37 12.69	K 22.9	K 22.9	1	37 12.69	K 22.9	1	29 52.4	12
12 29 53.8	M_1 46.0	M_1 46.0	3	37 12.40	M_1 46.0	3	29 55.4	
	L_4 61.7, 60.0	St_1 60.0	2	37 12.66	St_1 60.0	2	29 48.6	
	St_1 [60.0]	L_4 61.7	1	37 12.74	L_4 60.0	3	29 54.0	
	L_5 79.8	L_5 79.8	2	37 12.57	L_5 79.8	2	29 50.6	
	H 94.8	H 94.8	3	37 12.69	H 94.8	3	29 53.8	
7700 8.9	L_1 97.7	L_1 97.7	2	21 37 18.78	L_1 97.7	2	12 26 44.3	39,
21 37 18.56	K 22.9	K 22.9	1	37 19.01	K 22.9	1	26 44.8	12
12 26 48.4	L_4 61.7, 60.9	St_1 60.0	3	37 18.59	St_1 60.0	3	26 49.3	
	St_1 [60.0]	L_4 61.7	1	37 18.67	L_4 60.9	4	26 47.7	
	H 91.0	H 91.0	4	37 18.56	H 91.0	4	26 48.4	
7701 8.3	L_1 94.6		1	21 37 20.79		1	10 5 17.1	1
21 37 21.71	K 22.9		1	37 21.45		1	5 20.7	12
10 5 22.4	M_1 46.0		3	37 21.49		3	5 21.5	
	L_4 58.8		1	37 21.56		1	5 20.5	
	St_1 [60.0]		1	37 21.00		1	5 12.8	
	L_5 78.7		1	37 21.57		1	5 19.9	
	H 90.4		3	37 21.71		3	5 22.4	
7702 8.9	L_1 94.6		1	21 37 42.29		1	9 46 42.9	1
21 37 42.60	M_1 46.6		1	37 42.71		1	46 49.4	
9 46 49.5	L_4 54.6, 54.7		2	37 42.33		1	46 51.4	
	L_5 79.7		1	37 42.45		1	46 49.3	
	H 92.0		4	37 42.60		4	46 49.5	
	Db 93.7		2	37 42.61		2	46 50.9	

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zones	α Eph − H	δ	α Pos. − H	δ	α C − H	δ	α adj.	δ	Δα	Δδ	
39	−94.0	−94.0	+.05	−3.5	+.09	+0.2	12.78	54.0	+.16	−0.8	✓
127	−71.9	−71.9	.00	−1.4	−.24	−1.3	12.45	52.5	−.17	+0.7	✓
	−48.8	−48.8	−.29	+1.6	−.04	−0.3	12.36	56.4	−.26	−3.2	✓
	−34.8	−34.8	−.03	−5.2	−.03	−0.2	12.71	49.1	+.09	+4.1	✓
	−33.1	−34.8	+.05	+0.2	−.03	−0.2	12.76	54.9	+.14	−1.7	✓
	−15.0	−15.0	−.12	−3.2	−.01	−0.1	12.57	51.4	−.05	+1.8	✓
	−83.0		+.09	+0.7			12.69	53.8	+.07	−0.6	✓
							12.62	53.2			
39,3	−93.3	−93.3	+.22	−4.1	+.28	+0.3	18.84	48.7	+.14	−0.6	✓
127	−68.1	−68.1	+.45	−3.6	+.21	−3.5	18.77	44.9	+.07	+3.2	✓
	−31.0	−31.0	+.03	+0.9	+.09	−0.6	18.64	49.7	−.06	−1.6	✓
	−29.3	−30.1	+.11	−0.7	+.09	−0.6	18.69	48.6	−.01	−0.5	✓
	−80.7		−.30	+2.0			18.56	48.4	−.14	−0.3	✓
							18.70	48.1			
1	−95.8	−95.8	−.92	−5.3	−.85	−0.6	20.86	21.8	−.49	0.0	✓
125	−67.5	−67.5	−.26	−1.7	−.48	−0.4	21.23	22.0	−.12	−0.2	✓
	−44.4	−44.4	−.22	−0.9	−.36	−0.3	21.45	22.5	+.10	−0.7	✓
	−31.6	−31.6	−.15	−1.9	−.26	−0.2	21.58	21.4	+.23	+0.4	✓
	−30.4	−30.4	−.71	−9.6	−.25	−0.2	21.05	13.4	−.30	+8.4 ab	✓
	−11.7	−11.7	−.14	−2.5	−.10	−0.1	21.57	20.7	+.22	+1.1	✓
	−81.6		+.82	+0.6			21.71	22.4	+.36	−0.6	✓
							21.35	21.8			
1	−97.4	−97.4	−.31	−6.6	−.24	−1.9	42.36	47.6	−.15	+2.5	✓
	−45.4	−45.4	+.11	−0.1	−.11	−0.9	42.67	50.4	+.16	−0.3	✓
	−37.4	−37.3	−.27	+1.9	−.09	−0.7	42.35	52.3	−.16	−2.2	✓
	−12.3	−12.3	−.15	−0.2	−.03	−0.2	42.45	50.1	−.06	0.0	✓
			+.25	+2.0			42.60	49.5	+.09	+0.6	✓
	+1.7	+1.7	+.01	+1.4	.00	0.0	42.61	50.6	+.10	−0.5	✓
							42.51	50.1			

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Star	Epoch	Ep α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zone
7703 8.7	K 22.9	K 22.9	1	21 38 0.82	K 22.9	1	13 12 45.1	119
21 38 0.49	R_1 49.0	M_1 46.0	3	38 0.09	M_1 46.0	3	12 43.0	
13 12 48.3	M_1 46.0	R_1 49.0	2	38 0.24	R_1 49.0	2	49.0	
	St_2 59.7	St_2 59.7	2	38 0.38	St_2 59.7	2	12 44.1	
	A 76.9	A^2 76.9	1	38 0.58	A 76.9	1	12 49.9	
	H 91.0	H 91.0	4	38 0.49	H 91.0	4	12 48.3	
7704 9.5	R_1 48.0		1	21 38 0.24		1	10 44 26.4	
21 38 0.59								
10 44 24.9	H 91.7		4	38 0.59		4	44 24.9	
7706 8.4	K 22.9		1	21 38 11.50		1	11 35 42.1	12
21 38 11.30	M_1 45.8		2	38 11.38		2	35 41.0	
11 35 41.3	St_1 [60.0]		2	38 11.07		2	35 39.7	
	H 90.0		3	38 11.30		3	35 41.3	
7707 8.6	K 22.9		1	21 38 14.44		1	10 27 5.2	125
21 38 14.16	M_1 55.8		2	38 14.48		2	27 5.7	
10 27 3.7	St_1 [60.0]		2	38 14.19		2	27 3.8	
	H 89.7		3	38 14.16		3	27 3.7	
7708 9.1	M_1 45.8		1	21 38 32.32		1	11 29 55.3	
21 38 32.34	M_2 85.7		1	38 32.34		1	29 56.6	
11 29 55.5	H 88.7		3	38 32.34		3	29 55.5	
7709 8.3	M_1 46.2		2	21 38 55.85		2	11 14 0.0	
21 38 55.63								
11 14 4.6	H 90.7		3	38 55.63		3	14 4.6	

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Zones.	α Ep.−Hd	α Pz−Hd	αC−H.d	α adj.	δ	Δα	Δδ.	
119	−68.1 −68.1	+.33 −3.2	+.05 −3.7	0.54	44.6	+.13	+2.2	✓
	−45.0 −45.0	−.40 −5.3	+.03 −2.4	0.05	44.0	−.36	+2.8	✓
	−42.0 −42.0	−.25 +0.7	+.03 −2.3	0.32	48.3	−.09	−1.5	✓
	−31.3 −31.3	−.11 −4.2	+.02 −1.7	0.47	45.6	+.06	+1.2	✓
	−14.1 −14.1	+.09 +1.6	+.01 −0.8	0.58	49.9	+.17	−3.1	✓
		−.07 +5.4		0.49 / 0.41	48.3 / 46.8	+.08	−1.5	✓
	−43.7 −43.7	−.35 +1.5		0.32	25.7	−.14	−0.4	✓
				0.59 / 0.46	24.9 / 25.3	+.13	+0.4	✓
127	−67.1 −67.1	+.20 +0.8	−.04 +0.9	11.26	42.2	.00	−0.8	✓
	−44.2 −44.2	+.08 −0.3	−.03 +0.6	11.34	42.0	+.08	−0.6	✓
	−30.0 −30.0	−.23 −1.6	−.02 +0.4	11.12	40.2	−.14	+1.2	✓
		+.06 −1.3		11.30 / 11.26	41.3 / 41.4	+.04	+0.1	✓
125	−66.8 −66.8	+.28 +1.5	+.06 +2.8	14.22	6.5	−.04	−1.2	✓
	−33.9 −33.9	+.32 +2.0	+.03 +1.4	14.44	6.7	+.18	−1.4	✓
	−29.7 −29.7	+.03 +0.1	+.03 +1.2	14.24	4.3	−.02	+1.0	✓
		−.09 −4.2		14.16 / 14.26	3.7 / 5.3	−.10	+1.6	✓
	−42.9 −42.9	−.02 −0.2		32.28	56.3	−.02	−0.1	✓
	−3.0 −3.0	.00 +1.1		32.27	56.7	−.03	−0.5	✓
				32.34 / 32.30	55.5 / 56.2	+.04	+0.7	✓
	−44.5 −44.5	+.22 −4.6		55.81	1.0	+.09	+1.8	✓
				55.63 / 55.72	4.6 / 2.8	−.09	−1.8	✓

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Star		Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0		zon
7710	8.8	L_1	97.7			2	21 38	57.44			2	12 12	26	39,
21 38	57.49	K	22.9			1	38	57.53			1	12	9.5	12
12 12	10.5	M_1	45.3			2	38	57.35			2	12	9.5	
μ^{12}		L_4	54.7			1	38	57.49			1	12	8.0	
		St_1	[60.0]			2	38	57.35			2	12	8.3	
		L_5	79.0			3	38	57.46			3	12	10.5	
		M_2	85.7			1	38	57.65			1	12	11.4	
		H	90.1			3	38	57.49			3	12	10.5	
7711	8.5	L_1	97.7			2	21 39	0.10			2	12 13	47.6	39,
21 39	0.05	K	22.9			1	38	59.75			1	13	49.3	12
12 13	51.1	M_1	46.0			3	38	59.98			3	13	49.3	
μ^{12}		L_4	54.7			1	38	59.91			1	13	48.9	
		St_1	[60.0]			1	38	59.75			1	13	51.4	
		L_5	78.7			1	39	0.13			1	13	48.8	
		H	90.1			3	39	0.05			3	13	51.1	
7712	8.7	R_1	48.0	M_1	45.8	2	21 39	31.38	M_1	45.8	2	10 40	19.3	
21 39	31.11	M_1	45.8	R_1	48.0	6	39	30.93	R_1	48.0	6	40	19.7	
10 40	19.9	Sj	62.8	Sj	62.8	2	39	30.88	Sj	62.8	2	40	18.1	
		H	89.7	H	89.7	3	39	31.11	H	89.7	3	40	19.9	
		E	06.5	E	06.5	4	39	31.12	E	06.5	4	40	20.6	
7713	7.0	R_1	49.0	M_1	46.1	3	21 39	55.97	M_1	46.1	3	13 14	34.7	
21 39	56.34	M_1	46.1	R_1	49.0	2	39	56.34	R_1	49.0	2	14	36.5	
13 14	36.0	G 29756	77.6	G	77.6	5	39	56.26	G	77.6	4	14	34.9	
		H	89.7	H	89.7	4	39	56.34	H	89.7	4	14	36.0	

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zones	α Ep − H.d.	α Bs. − H.d.	α C − H.d.	α adj.	δ	Δα	Δδ	
39,3	−92.4 −92.4 −.05	−7.9	+.01	−3.5	57,50	7.0	+.06	+2.8 ✓
127	−67.2 −67.2 +.04	−1.6	+.20	−0.9	57.29	9.6	−.15	+0.2 ✓
	−44.8 −44.8 −.14	−1.0	−.05	−1.3	57,31	10.5	−.13	−0.7 ✓
	−35.4 −35.4 .00	−2,5	−.04	−1.0	57,51	8.9	+.07	+0.9 ✓
	−30.1 −30.1 −.14	−2.2	−.04	−0.8	57,40	8.8	−.04	+1.0 ✓
	−11.1 −11.1 −.03	0.0	−.01	−0.3	57,46	11.3	+.02	−1.5 ✓
	−4.4 −4.4 +.16	+0.9	−.01	−0.1	57.58	11.5	+14	−1.7 ✓
	−79.8	+12	+2.8		57.49 / 57.44	10.5 / 9.8	+.05	−0.7 ✓
39,3	−92.4 −92.4 +.05	−3,5	+.11	+0.9	0.16	52.0	+.23	−1.4 ✓
127	−67.2 −67.2 −.30	−1.8	−.54	−1.7	59,51	49.4	−.42	+1.2 ✓
	−44.1 −44.1 −.07	−1.8	−.12	−0,2	59,94	50.3	+.01	+0.3 ✓
	−35.4 −35.4 −.14	−2.2	−.10	−0,2	59.93	49.8	.00	+0.8 ✓
	−30.1 −30.1 −.30	+0.3	−.08	−0.2	59,80	51.9	−.13	−1.3 ✓
	−11.4 −11.4 +.08	−2.3	−.03	−0.1	0.13	49.6	+.20	+1.0 ✓
	−79.8	+27	+0.5		0.05 / 59.93	51.1 / 50.6	+.12	−0.5 ✓
	−43.9 −43.9 +.27	−0.6			31.34	20.3	+.24	−0.5 ✓
	−41.7 −41.7 −.18	−0.2			31,01	19.0	−.09	+0.8 ✓
	−26.9 −26.9 −.23	−1.8			30,92	19.2	−.18	+0.6 ✓
	— — —	—			31.11	19.9	+.01	−0,1 ✓
	+16.8 +16.8 +.01	+0.7			31.10 / 31.10	20,5 / 19.8	.00	−0.7 ✓
	−43.6 −43.6 −.37	−1.3			55.93	35.7	−.31	+0.1 ✓
	−40.7 −40.7 .00	+0.5			56.42	35.8	+.18	0.0 ✓
	−12.1 −12.1 −.08	−1.1			56,25	35,5	+.01	+0.3 ✓
					56,34 / 56.24	36.0 / 35.8	+.10	−0.2 ✓

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Star	Epoch		Eph. α		Obs.	α 1900.0	Eph. δ		Obs.	δ 1900.0	Tot.
7714 8.9	K	22.9			1	21 40 20.98			1	13 47 58.9	11
21 40 20.51	M_1	45.8			1	40 20.46			1	48 3.7	
13 48 3.8	St_2	59.7			2	40 20.50			2	48 0.7	
	Sj	62.6			1	40 20.60			1	48 2.0	
	A	[79.0]			1	40 20.84			1	48 4.2	
	H	90.8			3	40 20.51			3	48 3.8	
	Sk	95.2			2	40 20.63			2	48 3.9	
7715 8.7	M_1	46.4			3	21 40 22.08			3	12 59 22.1	
21 40 22.06	Sj	62.7			1	40 22.05			1	59 20.2	
12 59 23.6	H	93.1			3	40 22.06			3	59 23.6	
7716 7.7	K	22.9	K	22.9	1	21 40 53.50	K	22.9	1	13 3 35.0	11
21 40 53.30	M_1	46.0	M_1	46.0	4	40 53.28	M_1	46.0	3	3 32.3	
13 3 33.0	St_2	59.7	St_2	59.7	2	40 53.24	St_2	59.7	2	3 30.7	
	A	79.8	G	78.4	5	40 53.45	G	78.7	5	3 31.3	
29769	G	78.4, 78.7	A	79.8	1	40 53.32	A	79.8	1	3 34.0	
	H	94.8	H	94.8	3	40 53.30	H	94.8	3	3 33.0	
7717 & 7718 next page											
7720 8.7	L_1	97.7	L_1	97.7	2	21 41 18.57	L_1	97.7	2	12 9 7.7	39
21 41 18.58	P 271	00.0	P	00.0	11	41 18.51	P	00.0	14	9 5.6	
12 9 19.8	K	22.9	K	22.9	1	41 18.97	K	22.9	1	9 13.4	12
	L_3	46.8, ..	M_1	45.8	3	41 18.45	M_1	45.8	3	9 14.3	
	M_1	45.8	L_3	46.8	1	41 18.32	L_3	..	..	..	
	St_1	[60.0]	St_1	60.0	2	41 18.58	St_1	60.0	2	9 15.9	
	Nc	65.7, 66.2	Nc	65.7	3	41 18.58	Q	61.8	2	9 13.1	
	A	69.7	Q	69.6	4	41 18.59	Nc	66.2	4	9 16.8	
9680	Q	69.6, 61.8	A	69.7	3	41 18.67	A	69.7	3	9 19.2	
29781	G	78.4	G	78.4	5	41 18.67	G	78.4	5	9 17.6	
	C_1	90.0	C_1	90.0	3	41 18.70	C_1	90.0	3	9 19.8	
	H	90.8	H	90.8	2	41 18.58	H	90.8	2	9 19.8	

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Zones.	α Ep.-H.	δ Ep.-H.	α Bs.-H.	δ Bs.-H.	α C.-H.	δ	α adj.	δ	Δα	Δδ	
119	-67.9	-67.9	+.47	-4.9	+.19	-5.4	20.70	58.4	+.09	+4.6	✓
	-45.0	-45.0	-.05	-0.1	+.13	-3.6	20.42	4.7	-.19	-1.7	✓
	-31.1	-31.1	-.01	-3.1	+.09	-2.5	20.59	2.2	-.02	+0.8	✓
	-28.2	-28.2	+.09	-1.8	+.08	-2.3	20.64	3.1	+.03	-0.1	✓
	-11.8	-11.8	+.33	+0.4	+.03	-0.9	20.84	4.2	+.23	-1.2	✓
			-.28	+8.0			20.51	3.8	-.10	-0.8	✓
	+4.4	+4.4	+.12	+0.1	-.01	+0.1	20.60 / 20.61	4.3 / 3.0	-.01	-1.3	
	-46.7	-46.7	+.02	-1.5			22.04	23.1	-.02	-0.4	✓
	-30.4	-30.4	-.01	-3.4			22.09	21.3	+.03	+1.4	✓
							22.06 / 22.06	23.6 / 22.7	.00	-0.9	✓
119	-71.9	-71.9	+.20	+2.0	-.08	+1.5	53.22	34.5	-.09	-1.3	✓
	-48.8	-48.8	-.02	-0.7	-.05	+1.0	53.24	33.3	-.07	-0.1	✓
	-35.1	-35.1	-.06	-2.3	-.04	+0.7	53.33	32.2	+.02	+1.0	✓
	-16.4	-16.1	+.15	-1.7	-.02	+0.3	53.44	31.9	+.13	+1.3	✓
	-15.0	-15.0	+.02	+1.0	-.02	+0.3	53.32	34.0	+.01	-0.8	✓
			+.11	-2.1			53.30 / 53.31	33.0 / 33.2	-.01	+0.2	✓
39,3	-93.1	-93.1	-.01	-12.1	+.05	-7.7	18.63	12.1	+.04	+3.8	✓
	-90.8	-90.8	-.07	-14.2	+.11	-7.9	18.62	9.4	+.03	+6.5	✓
127	-67.9	-67.9	+.39	-6.4	+.15	-6.3	18.73	13.5	+.14	+2.4	✓
	-45.0	-45.0	-.13	-5.5	+.05	-3.9	18.41	15.3	-.18	+0.6	✓
	-44.0	..	-.26	..	+.05	..	18.31	...	-.28	..	✓
	-30.8	-30.8	.00	-3.9	+.04	-2.7	18.63	16.4	+.04	-0.5	✓
	-25.1	-29.0	00	-6.7	+.03	-2.5	18.58	13.6	-.01	+2.3	✓
	-21.2	-24.6	+.01	-3.0	+.03	-2.1	18.68	17.6	+.09	-1.7	✓
	-21.1	-21.1	+.09	-0.6	+.03	-1.8	18.67	19.2	+.08	-3.3	✓
	-12.4	-12.4	+.09	-2.2	+.01	-1.1	18.66	18.2	+.07	-2.3	✓
	-0.8	-0.8	+.12	00	.00	-0.1	18.62	19.5	+.03	-3.6	✓
		-805	-12	+8.7			18.58	19.8	-.01	-3.9	✓ 18.59, 159 mean

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Star			Epoch		Ep. α		Obs.	α 1900.0			Ep. δ		Obs.	δ 1900.0			Zon
7717	6.7		L_1	94.6	L_1	94.6	1	21	40	56.11	L_1	94.6	1	9	44	9.5	1
21	40	56.18	P	268 00.0	P	00.0	8		40	56.17	P	00.0	8		44	11.7	
9	44	14.0	K	22.9	K	22.9	1		40	56.53	K	22.9	1		44	13.4	125
	47 Capric. =		R_1	47.0 {44.0 50.0}	L_3	39.7	1		40	56.32	L_3	39.7	1		44	11.0	
			L_3	39.7	M_1	46.0	3		40	56.25	M_1	46.0	3		44	15.5	
			M_1	46.0	R_1	47.0	2		40	56.18	R_1	47.0	2		44	14.3	
			L_H	59.7, 57.7	L_H	59.7	1		40	56.10	Wc	56.8	3		44	14.8	
			St_1	[60.0]	St_1	60.0	2		40	55.95	L_H	57.7	2		44	14.1	
			Wc	67.7, 56.8	Sj	62.7	1		40	56.23	St_1	60.0	2		44	14.5	
			Sj	62.7	Wc	67.7	2		40	56.11	Sj	62.7	1		44	14.0	
			L_5	74.6	L_5	74.6	1		40	56.08	L_5	74.6	1		44	14.8	
			V	86.1	V	86.1	3		40	56.28	V	86.1	3		44	14.1	
			H	93.1	H	93.1	3		40	56.18	H	93.1	3		44	14.0	
			Db	94.2	Db	94.2	2		40	56.20	Db	94.2	2		44	14.5	
			E	99.8	E	99.8	3		40	56.20	E	99.8	3		44	15.0	
7718	8.7		M_1	45.8			1	21	41	4.93			1	11	16	44.2	
21	41	4.76	Wc	68.8, 55.8			2		41	4.85			3		16	45.6	
11	16	47.4	M_2	85.7			1		41	4.80			1		16	47.3	
			H	92.5			4		41	4.76			4		16	47.4	
7722	9.5		R_1	49.0			1	21	41	41.59			1	13	15	14.4	
21	41	41.01															
13	15	23.1	H	91.2, 90.8			4		41	41.01			4		15	23.1	
7723	9.0		R_1	48.0	M_1	45.8	1	21	41	45.16	M_1	45.8	1	10	36	14.1	
21	41	45.02	M_1	45.8	R_1	48.0	4		41	45.02	R_1	48.0	4		36	18.8	
10	36	15.6	H	91.4	H	91.4	3		41	45.02	H	91.4	3		36	15.6	

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Zones	α Eph-H	δ α Pos.-H	δ α C-H.	δ	α adj.	δ	Δα	Δδ
1	-98.5	-98.5 -.07	-4.5	.00 +0.2	56.18	14.2	-.02	+0.4
	-93.1	-93.1 -.01	-2.3	+.07 +0.5	56.28	15.5	+.08	-0.9
125	-70.2	-70.2 +.35	-0.6	+.13 +0.7	56.31	14.7	+.11	-0.1
	-53.4	-53.4 +.14	-3.0	+.04 +0.3	56.31	11.3	+.11	+3.3
	-47.1	-47.1 +.07	+1.5	+.04 +0.2	56.21	16.5	+.01	-1.9
	-46.1	-46.1 .00	+0.3	+.04 +0.2	56.26	13.6	+.06	+1.0
	-33.4	-36.3 -.08	+0.8	+.03 +0.2	56.12	15.6	-.08	-1.0
	-33.1	-35.4 -.23	+0.1	+.03 +0.2	56.00	15.0	-.20	-0.4
	-30.4	-33.1 +.05	+0.5	+.02 +0.2	56.27	14.9	+.07	-0.3
	-25.4	-30.4 -.07	0.0	+.02 +0.2	56.11	15.1	-.09	-0.5
	-18.5	-18.5 -.10	+0.8	+.01 +0.1	56.08	15.6	-.12	-1.0
	-7.0	-7.0 +.10	+0.1	+.01 0.0	56.26	14.2	+.06	+0.4
		-84.4 -.08	-0.5		56.18	14.0	-.02	+0.6
	+1.1	+1.1 +.02	+0.5	.00 0.0	56.20	14.2	.00	+0.4
	+6.7	+6.7 +.02	+1.0	.00 0.0	56.18 / 56.20	14.9 / 14.6	-.02	-0.3
	-46.7	-46.7 +.17	-3.2		4.89	45.2	+.08	+1.4
	-36.7	-36.7 +.09	-1.8		4.85	46.4	+.04	+0.2
	-6.8	-6.8 +.04	-0.1		4.73	47.4	-.08	-0.8
					4.76 / 4.81	47.4 / 46.6	-.05	-0.8
	-42.2	-41.8 +.58	-8.7		41.67	13.7	+.33	+4.7
					41.01 / 41.34	23.1 / 18.4	-.33	-4.7
	-45.6	-45.6 +.14	-1.5		45.12	15.1	+.04	+1.2
	-43.4	-43.4 .00	+3.2		45.10	18.1	+.02	-1.8
					45.02 / 45.08	15.6 / 16.3	-.06	+0.7

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Star		Epoch		Ep. α		Obs. α 1900.0		Ep. δ		Obs. δ 1900.0		Zone
7724	9.1	R_1	49.0			1	21 41 46.94			1	13 57 58.6	
21 41	46.87	H	92.8			3	41 46.87			3	57 55.9	
13 57	55.9	St	95.2			2	41 46.89			2	57 56.2	
7725	8.2	K	22.9			1	21 42 2.15			1	13 35 2.1	119
21 42	1.86	St_2	59.7			2	42 1.75			2	35 1.1	
13 35	3.9	Sj	62.7			1	42 1.57			1	35 3.0	
		H	95.1			3	42 1.86			3	35 3.9	
7726	8.9	K	22.9	K	22.9	1	21 42 6.18	K	22.9	1	10 13 7.3	125
21 42	6.68	M_1	46.6	M_1	46.6	1	42 6.56	M_1	46.6	1	13 8.6	
10 13	6.8	St_1	[60.0]	St_1	60.0	3	42 6.56	St_1	60.0	3	13 7.6	
		D_1	83.7	D_1	83.7	1	42 6.67	D_1	83.7	1	13 9.7	
		D_2	96.8	H	90.9	2	42 6.68	H	90.9	2	13 6.8	
		H	90.9	D_2	96.8	4	42 6.77	D_2	96.8	4	13 7.1	
7727	9.0	M_1	46.6			1	21 42 15.26			1	13 2 1.8	
21 42	15.41	M_2	85.7			1	42 15.45			1	2 2.9	
13 2	2.9	H	92.8			3	42 15.41			3	2 2.9	
7728	9.2	M_1	45.8			1	21 42 25.24			1	10 20 19.0	
21 42	25.31	M_2	87.8			1	42 25.47			1	20 20.7	
10 20	21.1	H	92.8			3	42 25.31			3	20 21.1	
7729	8.7	M_1	46.0			4	21 42 35.10			4	10 19 37.0	
21 42	34.95	L_4	54.7			1	42 35.15			1	19 38.0	
		sch L_4	58.4			1	42 35.31			1	19 36.5	
10 19	39.0	Sj	62.7			3	42 35.15			3	19 36.2	
		L_5	78.7			2	42 35.05			2	19 36.8	
		H	90.8			2	42 34.95			2	19 39.0	

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Zones.	α Eph-Hd	α Bs-Hd	δ C-H. δ		α Adj. δ		Δα	Δδ	
	-43.8 -43.8	+.07 +2.7			47.02	57.9	+.10	-1.1	✓
					46.87	55.9	-.05	+0.9	✓
	+2.4 +2.4	+.02 +0.3			46.86 / 46.92	56.6 / 56.8	-.06	+0.2	✓
119	-72.2 -72.2	+.29 -1.8	+.01	-2.3	1.87	1.6	+.07	+1.4	✓
	-35.4 -35.4	-.11 -2.8	.00	-1.1	1.84	2.6	+.04	+0.4	✓
	-32.4 -32.4	-.29 -0.9	.00	-1.0	1.61	4.1	-.19	-1.1	✓
		-.01 +3.2			1.86 / 1.89	3.9 / 3.0	+.06	-0.9	✓
125	-68.0 -68.0	-.54 +0.5	-.76	+1.8	5.92	8.6	-.58	-0.3	✓
	-44.3 -44.3	-.12 +1.8	-.50	+1.2	6.52	9.6	+.02	-1.3	✓
	-30.9 -30.9	-.12 +0.8	-.35	+0.8	6.61	8.0	+.12	+0.3	✓
	-7.2 -7.2	-.01 +2.9	-.08	+0.2	6.59	10.1	+.09	-1.8	✓
		+1.12 -2.6			6.68	6.8	+.18	+1.5	✓
	+5.9 +5.9	+.09 +0.3	+.66	-0.2	6.68 / 6.52	6.9 / 8.3	+.18	+1.4	✓
	-46.2 -46.2	-.15 -1.1			15.22	2.8	-.12	+0.1	✓
	-7.1 -7.1	+.04 0.0			15.38	3.0	+.04	-0.1	✓
					15.41 / 15.34	2.9 / 2.9	+.07	0.0	✓
	-47.0 -47.0	-.07 -2.1			25.20	20.0	-.10	+0.6	✓
	-5.0 -5.0	+.16 -0.4			25.40	20.8	+.10	-0.2	✓
					25.31 / 25.30	21.1 / 20.6	+.01	-0.5	✓
	-44.8 -44.8	+.15 -2.0			35.06	38.0	-.06	+0.1	✓
	-36.1 -36.1	+.20 -1.0			35.17	38.9	+.05	-0.8	✓
					35.29	37.6	+.17	+0.5	✓
	-28.1 -28.1	+.20 -2.8			35.19	37.3	+.07	+0.8	✓
	-12.1 -12.1	+.16 -2.2			35.05	37.6	-.07	+0.5	✓
					34.95 / 35.12	39.0 / 38.1	-.17	-0.9	✓

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Star		Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zone
7730	9.0	K 22.9		1	21 42 37.57		1	12 6 5.0	127
21 42 37.21		St_1 [60.0]		2	42 37.01		2	6 4.3	
12 6 6.9		Wc 69.7, 69.7		2	42 37.23		3	6 5.3	
		H 92.4		3	42 37.21		3	6 6.9	
7731	8.8	L_1 00.8	L_1 00.8	1	21 42 40.43	L_1 00.8	1	12 36 16.3	39
21 42 40.48		K 22.9	K 22.9	1	42 40.95	K 22.9	1	36 27.0	11
12 36 29.2		M_1 46.1	M_1 46.1	5	42 40.40	M_1 46.1	5	36 27.5	
μ^{12}		L_4 54.7	L_4 54.7	1	42 40.45	L_4 54.7	1	36 25.6	
		St_1 [60.0]	St_2 59.7	3	42 40.35	St_2 59.7	3	36 26.1	
		St_2 59.7	St_1 60.0	6	42 40.29	St_1 60.0	6	36 27.6	
		L_5 78.7	L_5 78.7	1	42 40.52	L_5 78.7	1	36 27.6	
		H 92.0	H 92.0	4	42 40.48	H 92.0	4	36 29.2	
7732	9.1	K 22.9		1	21 42 43.71		1	12 37 50.3	119
21 42 43.24		St_2 59.7		2	42 43.10		2	37 45.6	
12 37 46.8		H 92.8, 93.2		3	42 43.24		3	37 46.8	
7733	8.9	L_1 00.8		1	21 43 6.99		1	10 45 36.7	39
21 43 6.86		K 22.9		1	43 6.98		1	45 45.5	42
10 45 43.0		M_1 46.2		2	43 7.05		2	45 40.8	
		L_4 54.7, 56.7		1	43 7.02		3	45 42.1	
		St_1 [60.0]		3	43 6.72		3	45 41.0	
		L_5 79.8		1	43 6.99		1	45 39.9	
		H 88.7		2	43 6.86		2	45 43.0	
7735	9.5	L_1 62.7		1	21 43 35.73		1	11 28 6.6	
21 43 36.14		K 69.7		2	43 36.26		2	28 5.7	
11 28 4.3		H 93.8		4	43 36.14		4	28 4.3	

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zones	α Eph-Hd	δ Eph-Hd	α Obs.-Hd	δ	α C-H.d	δ	α adj.	δ	Δα	Δδ	
127	-69.5	-69.5	+.36	-1.9	+12	-1.8	37.33	5.1	+.12	+0.6	✓
	-32.4	-32.4	-.20	-2.6	+.06	-0.8	37.06	4.7	-.15	+1.0	✓
	-22.7	-22.7	+.02	-1.6	+.04	-0.6	37.23	6.1	+.02	-0.4	✓
			-.17	+2.6			37.21	6.9	.00	-1.2	✓
							37.21	5.7			
39	-91.2	-91.2	-.05	-12.9	-.01	-9.2	40.47	20.0	.00	+6.8	✓
119	-69.1	-69.1	+.47	-2.2	+.19	-2.7	40.67	26.5	+.20	+0.3	✓
	-45.9	-45.9	-.08	-1.7	+.05	-3.4	40.36	28.5	-.11	-1.7	✓
	-37.3	-37.3	-.03	-3.6	+.04	-2.8	40.47	26.5	.00	+0.3	✓
	-32.3	-32.3	-.13	-3.1	+.04	-2.4	40.44	27.6	-.03	-0.8	✓
	-32.0	-32.0	-.19	-1.6	+.04	-2.4	40.34	28.1	-.13	-1.3	✓
	-13.3	-13.3	+.04	-1.6	+.01	-1.0	40.52	28.4	+.05	-1.6	✓
			-80.2	-11	+7.4		40.48	29.2	+.01	-2.4	✓
							40.47	26.8			
119	-69.9	-70.3	+.47	+3.5	+.19	+3.0	43.43	49.8	+.14	-1.9	✓
	-33.1	-33.5	-.14	-1.2	+.09	+1.4	43.19	47.1	-.10	+0.8	✓
			-.27	-4.3			43.24	46.8	-.05	+1.1	✓
							43.29	47.9			
39	-87.9	-87.9	+.13	-6.3	+.17	-2.6	7.03	40.4	+.11	+1.9	✓
127	-65.8	-65.8	+.12	+2.5	-.12	+2.6	6.74	45.6	-.18	-3.3	✓
	-42.5	-42.5	+.19	-2.2	+.01	0.0	7.01	41.8	+.09	+0.5	✓
	-34.0	-32.0	+.16	-0.9	+.01	0.0	7.04	43.0	+.12	-0.7	✓
	-28.7	-28.7	-.14	-2.0	+.01	0.0	6.77	41.4	-.15	+0.9	✓
	-8.9	-8.9	+.13	-3.1	.00	0.0	6.99	40.7	+.07	+1.6	✓
			-76.8	-.03	0.0		6.86	43.0	-.06	-0.7	✓
							6.92	42.3			
	-31.1	-31.1	-41	+2.3			35.77	7.7	-29	-1.8	✓
	-24.1	-24.1	+.12	+1.4			36.26	5.7	+.20	+0.2	✓
							36.14	4.3	+.08	+1.6	✓
							36.06	5.9			

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Star	Eph.		Eph. α		Obs. α 1900.0		Eph. δ		Obs. δ 1900.0	
7736 9.2	R_1	49.0			1	21 44 12.89			2	13 1 56.9
21 44 12.62										
13 1 54.8	H	93.3			4	44 12.62			4	1 54.8
7737 6.4	L_1	95.6	L_1	95.6	1	21 44 16.92	L_1	95.6	1	13 11 14.6
21 44 16.77	P_{291}	00.0	P	00.0	9	44 16.86	P	00.0	9	11 20.0
13 11 21.8	K	22.9	K	22.9	1	44 17.47	K	22.9	1	11 23.8
P. XXI. 291	R_1	47.0	L_3	40.0	4	44 16.92	L_3	39.7	1	11 20.5
	L_3	40.0, 39.7	M_1	46.1	5	44 16.91	M_1	46.1	5	11 19.4
	M_1	46.1	R_1	47.0	8	44 16.74	R_1	47.0	8	11 22.1
	L_4	54.7, 56.2	L_4	54.7	1	44 16.80	L_4	56.2	2	11 22.1
	St_2	59.7	St_2	59.7	2	44 16.73	St_2	59.7	2	11 20.1
	Wc	67.5, 71.8	Q	67.2	4	44 16.79	Q	65.4	3	11 21.4
	L_5	79.6	Wc	67.5	3	44 16.82	Wc	71.8	3	11 21.6
	A	[79.0]	G	77.7	4	44 16.81	G	77.7	4	11 19.9
9708	Q	67.2, 65.4	A	79.0	1	44 16.76	A	79.0	1	11 19.5
29856	G	77.7	L_5	79.6	1	44 16.93	L_5	79.6	1	11 21.4
	H	92.8	H	92.8	3	44 16.77	H	92.8	3	11 21.8
	E	99.2	E	99.2	4	44 16.84	E	99.2	4	11 20.8
7738 9.2	R_1	49.0			1	21 44 25.76			1	13 23 12.1
21 44 25.91										
13 23 7.9	H	90.3			4	44 25.91			4	23 7.9
7739 9.4	R_1	49.0			1	21 44 28.58			1	13 28 26.3
21 44 28.83										
13 28 29.7	H	94.8			3	44 28.83			3	28 29.7

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Zones	α Ep − H δ	α Pos. − H δ	α C − H. δ	α Adj.	δ	Δα	Δδ
	−44.3 −44.3	+.27 +2.1		12.97	56.2	+.17	+0.7
				12.62 / 12.80	54.8 / 55.5	−.18	−0.7
11	−97.2 −97.2	+.15 −7.2	+.12 −4.0	16.89	17.8	+.02	+3.5
	−92.8 −92.8	+.09 −1.8	+.30 −1.4	16.97	23.8	+.10	−2.5
119	−69.9 −69.9	+.70 +2.0	+.42 +1.5	17.19	23.3	+.32	−1.9 ~~−2.0~~
	−52.8 −53.1	+.15 −1.3	+.17 −0.8	16.91	20.8	+.04	+0.5
	−46.7 −46.7	+.14 −2.4	+.15 −0.7	16.87	19.4	.00	~~+1.9~~ +1.0
	−45.8 −45.8	−.03 +0.3	+.15 −0.7	16.82	21.4	−.05	~~−0.1~~ 0.0
	−38.1 −36.6	+.03 +0.3	+.12 −0.5	16.82	23.0	−.05	−1.8
	−33.1 −33.1	−.04 −1.7	+.11 −0.5	16.82	21.6	−.05	−0.8
	−25.6 −27.4	+.02 −0.4	+.08 −0.4	16.88	21.9	+.01	−0.6
	−25.3 −21.0	+.05 −0.2	+.08 −0.3	16.82	22.4	−.05	−1.8
	−15.1 −15.1	+.04 −1.9	+.05 −0.2	16.80	20.5	−.07	+0.8
	−13.8 −13.8	−.01 −2.3	+.04 −0.2	16.76	19.5	−.11	+1.8
	−13.2 −13.2	+.16 −0.4	+.04 −0.2	16.93	22.2	+.06	−0.9
	−83.6	−.32 +1.5		16.77	21.8	−.10	−0.5
	+6.4 +6.4	+.07 −1.0	−.02 +0.1	16.82 / 16.87	20.7 / 21.34	−.05	+0.6
	−41.3 −41.3	−.15 +4.2		25.84	11.4	−.04	−1.8
				25.91 / 25.88	7.9 / 9.6	+.03	+1.7
	−45.8 −45.8	−.25 −3.4		28.66	25.6	−.08	+2.0
				28.83 / 28.74	29.7 / 27.6	+.09	−2.1

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Star		Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	zon
7741	8.2	L_1	97.7	2	21 44 41.85		2	12 4 18.1	39
21 44	41.86	K	22.9	1	44 41.99		1	4 24.6	12
12 4	24.8	M_1	45.3	2	44 41.56		2	4 22.6	
		L_4	57.4, 57.7	3	44 41.74		4	4 23.0	
		St_1	[60.0]	3	44 41.82		3	4 23.4	
		Nc	65.7, 66.2	3	44 41.85		4	4 22.9	
		L_5	78.8	1	44 41.89		1	4 22.7	
		H	91.7	3	44 41.86		3	4 24.8	
7742	8.5	L_1	97.7	2	21 44 49.34		2	11 48 22.8	39
21 44	49.13	K	22.9	1	44 49.24		1	48 33.3	0.2
11 48	33.5	M_1	44.8	1	44 49.07		1	48 31.6	
		L_4	59.6, 57.2	1	44 49.07		2	44 33.2	
		St_1	[60.0]	2	44 49.09		2	48 34.1	
		A	69.7	1	44 49.17		1	48 32.1	
		L_5	78.8	2	44 49.17		2	48 33.3	
		H	91.2	3	44 49.13		3	48 33.5	
		E	05.5	4	44 49.10		4	48 34.6	
7743	9.2	M_2	85.7	1	21 45 23.32		1	11 12 51.8	
21 45	23.41								
11 12	53.7	H	89.4	3	45 23.41		3	12 53.7	
7744	8.6	L_1	94.6	1	21 45 33.70		1	11 6 37.3	
21 45	34.82	M_1	46.1	2	45 34.52		2	6 38.0	
11 6	41.3	L_4	54.7	1	45 34.50		1	6 41.0	
		L_5	78.7	2	45 34.72		2	6 40.4	
		H	92.0	4	45 34.82		4	6 41.3	

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zones	α Sp−H d	α Bs.−H d	α C−H d	α adj.	δ	Δα	Δδ
39,3	−94.0 −94.0 −.01	−6.7	+.05 −2.3	41.91	22.5	+.11	+1.3 +1.2
127	−68.8 −68.8 +.13	−0.2	−.11 −0.1	41.75	24.7	−.05	−0.9 −1.6
	−46.4 −46.4 −.30	−2.2	−.02 −0.7	41.52	23.6	−.28	+0.2 +0.1
	−34.3 −34.0 −.12	−1.8	−.01 −0.5	41.74	23.9	−.06	−0.1 +0.7
	−31.7 −31.7 −.04	−1.4	−.01 −0.5	41.87	24.0	+.07	−0.2 −0.8
	−26.0 −25.5 −.01	−1.9	−.01 −0.4	41.85	23.7	+.05	+0.1 0.0
	−12.9 −12.9 +.03	−2.1	−.01 −0.2	41.89	23.5	+.09	+0.3 +0.2
	−81.4 +.04 +1.5			41.86 / 41.80	24.8 / 23.78	+.06	−1.0 −1.1
39,3	−93.5 −93.5 +.21	−10.7	+.27 −6.3	49.40	27.2	+.27	+5.7
027	−68.3 −68.3 +.11	−0.2	−.13 −0.1	49.00	33.4	−.13	−0.5
	−46.4 −46.4 −.06	−1.9	+.04 −1.9	49.03	32.6	−.10	+0.3
	−31.6 −34.0 −.06	−0.3	+.03 −1.4	49.09	34.0	−.04	−1.1
	−31.2 −31.2 −.04	+0.6	+.03 −1.2	49.14	34.6	+.01	−1.7
	−21.5 −21.5 +.04	−1.4	+.02 −0.9	49.17	32.1	+.04	+0.8
	−12.4 −12.4 +.04	−0.2	+.01 −0.5	49.17	34.1	+.04	−1.2
	−80.9 −.09 +4.0			49.13	33.5	.00	−0.6
	+14.3 +14.3 −.03	+1.1	−.13 +0.6	49.08 / 49.13	34.5 / 32.9	−.05	−1.6
	−3.7 −3.7 −.09	−1.9		23.25	51.9	−.08	+0.9
				23.41 / 23.33	53.7 / 52.8	+.08	−0.9
1	−97.4 −97.4 −.12	−4.0	−.05 +0.7	33.77	42.0	−.69	−0.9 −1.1
	−45.9 −45.9 −.30	−3.3	−.02 +0.3	34.48	39.0	+.02	+2.1 +1.9
	−37.3 −37.3 −.32	−0.3	−.02 +0.3	34.50	41.0	+.04	−0.8 −0.1
	−13.3 −13.3 −.10	−0.9	−.01 +0.1	34.72	41.2	+.26	−0.1 −0.3
	+.05 −0.7			34.82 / 34.46	41.3 / 40.9 / 41.1	+.36	−0.2 −0.4

48"? error in Paris

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zone
7745 9.0	M_1 45.8		1	21 45 38.72		1	9 55 25.3	
21 45 38.67	Sj 62.8		1	45 39.04		1	55 25.0	
9 55 28.6	H 91.5		4	45 38.67		4	55 28.6	
	Db 93.7		2	45 38.78		2	55 28.1	
7746 7.9	L_1 00.9	L_1 00.9	1	21 45 44.26	L_1 00.9	1	10 30 27.2	40
21 45 44.54	K 22.9	K 22.9	1	45 44.43	K 22.9	1	30 25.9	12
10 30 21.8	R_1 48.0	M_1 45.8	2	45 44.55	M_1 45.8	2	30 21.4	
	M_1 45.8	R_1 48.0	1	45 44.27	R_1 48.0	1	30 23.3	
	L_4 61.2, 61.7	St_1 60.0	2	45 44.31	St_1 60.0	2	30 21.1	
	St_1 [60.0]	L_4 61.2	2	45 44.59	L_4 61.7	2	30 21.0	
	Sj 62.7	Sj 62.7	1	45 44.36	Sj 62.7	1	30 19.2	
	H 90.4	H 90.4	3	45 44.54	H 90.4	3	30 21.8	
7747 9.0	K 22.9		1	21 46 3.88		1	12 41 53.1	11
21 46 3.18	St_2 59.7		2	46 3.10		2	41 49.9	
12 41 51.8	H 90.1		3	46 3.18		3	41 51.8	
7748 8.1	L_1 97.8	L_1 97.8	2	21 47 10.09	L_1 97.8	2	9 53 7.5	40,
21 47 9.97	K 22.9	K 22.9	1	47 10.34	K 22.9	1	53 9.0	12
9 53 11.4	R_1 49.0	L_3 40.8	3	47 9.97	L_3 ..	..	..	
	L_3 40.8, ..	R_1 49.0	1	47 10.11	R_1 49.0	1	53 12.1	
	L_4 56.0	L_4 56.0	4	47 9.95	L_4 56.0	3	53 10.1	
	St_1 [60.0]	St_1 60.0	2	47 9.82	St_1 60.0	2	53 9.9	
29924	G 77.8	G 77.8	4	47 10.03	G 77.8	4	53 9.6	
	L_5 79.6, 79.7	L_5 79.6	2	47 9.99	L_5 79.7	2	53 10.1	
	H 89.5	H 89.5	3	47 9.97	H 89.5	3	53 11.4	
	Db 93.7	Db 93.7	2	47 10.03	Db 93.7	2	53 11.1	

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Zones	α Ep-N.d	α Bs.-N.d	α C-N.d	α adj.	δ	Δα	Δδ
	-45.7 -45.7	+.05 -3.3		38.68	26.3	-.12	+0.9
	-28.7 -28.7	+.37 -3.6		39.08	26.1	+.28	+1.1
				38.67	28.6	-.13	-1.4
	+2.2 +2.2	+.11 -0.5		38.78 / 38.80	27.8 / 27.2	-.02	-0.6
40	-89.5 -89.5	-.28 +5.4	-.25 +8.4	44.29	30.2	-.12	-6.8
127	-67.5 -67.5	-.11 +4.1	-.35 +4.2	44.19	26.0	-.22	-2.6
	-44.6 -44.6	+.01 -0.4	-.17 +3.6	44.51	22.4	+.10	+1.0
	-42.4 -42.4	-.27 +1.5	-.16 +3.4	44.35	22.6	-.06	+0.8
	-30.4 -30.4	-.23 -0.7	-.12 +2.4	44.36	21.8	-.05	+1.6
	-29.2 -28.7	+.05 -0.8	-.11 +2.3	44.61	21.9	+.20	+1.5
	-27.7 -27.7	-.18 -2.6	-.11 +2.2	44.40	20.3	-.01	+3.1
	-78.5	+.38 -8.0		44.54 / 44.41	21.8 / 23.4	+.13	+1.6
119	-67.2 -67.2	+.70 +1.3	+.42 +0.8	3.60	52.6	+.28	-0.7
	-30.4 -30.4	-.08 -1.9	+.19 +0.4	3.19	51.4	-.13	+0.5
		-.62 -1.2		3.18 / 3.32	51.8 / 51.9	-.14	+0.1
40,1	-91.7 -91.7	+.12 -3.9	+.17 -0.1	10.14	11.3	+.11	-0.5
125	-66.6 -66.6	+.37 -2.4	+.15 -1.1	10.12	10.3	+.09	+0.5
	-48.7 ..	.00 ..	+.10 ..	9.96	...	-.07	..
	-40.5 -40.5	+.14 +0.7	+.08 -0.8	10.19	11.4	+.16	-0.5
	-33.5 -33.5	-.02 -1.3	+.07 -0.3	9.97	11.0	-.06	-0.2
	-29.5 -29.5	-.15 -1.5	+.06 -0.2	9.87	10.5	-.16	+0.8
	-11.7 -11.7	+.06 -1.8	+.02 -0.1	10.02	10.2	-.01	+0.6
	-9.9 -9.8	+.02 -1.3	+.02 -0.1	9.99	10.9	-.04	-0.1
	-79.2	-.20 +0.8		9.97	11.4	-.06	-0.6
	+4.2 +4.2	+.06 -0.3	-.01 0.0	10.03 / 10.03	10.8 / 10.8	.00	+0.1 / 0.0

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	zone
7749 8.9	M₁ 46.2		2	21 47 21.08		2	10 17 50.9	
21 47 21.01								
10 17 49.0	H 92.8		3	47 21.01		3	17 49.0	
7750 9.1	M₁ 46.7		1	21 47 23.57		1	12 0 2.1	
21 47 23.91	Sj 62.7		1	47 23.68		1	11 59 59.1	
12 0 0.3	H 93.0		4	47 23.91		4	12 0 0.3	
7751 8.5	K 22.9	K 22.9	1	21 47 31.36	K 22.9	1	13 26 37.2	119
21 47 30.77	R₁ 47.0	M₁ 46.7	1	47 30.82	M₁ 46.7	1	26 33.8	
13 26 43.2	M₁ 46.7	R₁ 47.0	1	47 30.61	R₁ 47.0	1	26 46.1	
	St₂ 59.7	St₂ 59.7	2	47 30.53	St₂ 59.7	2	26 42.5	
	Sj 62.7	Sj 62.7	1	47 30.84	Sj 62.7	1	26 41.6	
	A 79.8	A 79.8	1	47 30.80	A 79.8	1	26 45.4	
	H 88.7	H 88.7	3	47 30.77	H 88.7	3	26 43.2	
7752 8.7	M₁ 44.8		1	21 47 37.06		1	11 47 54.1	
21 47 37.03	M₂ 84.7		1	47 37.17		1	47 53.8	
11 47 55.3	H 92.4		3	47 37.03		3	47 55.3	
7753 7.1	L₁ 96.7	L₁ 96.7	3	21 47 39.08	L₁ 96.7	3	11 1 47.4	1,3,
21 47 39.62	K 22.9	K 22.9	1	47 40.03	K 22.9	1	1 52.0	12
11 1 53.5	R₁ 49.0	R₁ 49.0	1	47 39.68	R₁ 49.0	1	1 54.6	1
	L₄ 55.2, 56.4	L₄ 55.2	4	47 39.45	Nc 54.7	2	1 52.5	
	St₁ [60.0]	Nc 59.6	2	47 39.58	L₄ 56.4	H	1 51.7	
	Nc 59.6, 54.7	St₁ 60.0	3	47 39.62	St₁ 60.0	3	1 52.7	
9736	Q 74.9, 66.7	Q 74.9	10	47 39.61	Q 66.7	3	1 51.7	
29934	G 77.7	G 77.7	4	47 39.62	G 77.7	4	1 52.4	
	H 88.7	H 88.7	4	47 39.62	H 88.7	4	1 53.5	

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Zones	α Eph.-H. δ	α Bs.-H δ	α C-H. δ	α adj. δ	Δα	Δδ
	-46.6 -46.6 +.07	+1.9		21.04 51.9	+.02	-1.5
				21.01 49.0	-.01	+1.4
				21.02 50.4		
	-46.3 -46.3 -.34	+1.8		23.53 3.1	-.19	-1.9
	-30.3 -30.3 -.23	-1.2		23.72 0.2	.00	+1.0
				23.91 0.3	+.19	+0.9
				23.72 1.2		
119	-65.8 -65.8 +.59	-6.0	+.31 -6.5	31.08 36.7	+.28	+5.0
	-42.0 -42.0 +.05	-9.4	+.20 -4.2	30.78 34.8	-.02	+6.9
	-41.7 -41.7 -.16	+2.9	+.20 -4.1	30.69 45.4	-.11	-3.7
	-29.0 -29.0 -.24	-0.7	+.14 -2.9	30.62 44.0	-.18	-2.3
	-26.0 -26.0 +.07	-1.6	+.12 -2.6	30.88 42.7	+.08	-1.0
	-8.9 -8.9 +.03	+2.2	+.04 -0.9	30.80 45.4	.00	-3.7
	-.47	+9.9		30.77 43.2	-.03	-1.5
				30.80 41.7		
	-47.6 -47.6 +.03	-1.2		37.02 51.1	-.03	+2.3
	-7.7 -7.7 +.14	-1.5		37.10 53.9	+.05	-0.5
				37.03 55.3	-.02	-1.9
				37.05 53.4		
1,3,39	-92.0 -92.0 -.54	-6.1	-.47 -1.6	39.15 51.9	-.44	+1.0
127	-65.8 -65.8 +.41	-1.5	+.17 -1.4	39.79 52.1	+.20	+0.8
	-39.7 -39.7 +.06	+1.1	-.08 -0.8	39.76 53.9	+.17	-1.0
	-33.5 -34.0 -.17	-1.0	-.06 -0.6	39.47 53.3	-.12	-0.4
	-29.1 -32.3 -.04	-1.8	-.06 -0.6	39.58 52.6	-.01	+0.3
	-28.7 -28.7 .00	-0.8	-.05 -0.5	39.67 53.5	+.08	-0.6
	-13.8 -22.0 -.01	-1.8	-.03 -0.4	39.70 52.2	+.11	+0.7
	-11.0 -11.0 .00	-1.4	-.02 -0.2	39.61 53.0	+.02	-0.1
	-78.9	+.19 +1.9		39.62 53.5	+.03	-0.6
				39.59 52.9		

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Star	Epoch		Eph. α		Obs.	α 1900.0	Eph. δ		Obs.	δ 1900.0	Zone
7754 9.1	M_1	45.8			1	21 47 40.70			1	10 23 37.1	
21 47 40.34	M_2	85.7			1	47 40.28			1	23 37.8	
10 23 37.9	H	90.4			3	47 40.34			3	23 37.9	
7755 8.6	L_1	97.7			2	21 48 0.48			2	10 43 28.0	3,
21 48 0.71	K	22.9			1	48 0.92			1	43 31.9	12
10 43 32.3	R_1	49.0			1	48 0.53			1	43 29.3	
	L_4	54.7			1	48 0.57			1	43 33.1	
	St_1	[60.0]			2	48 0.67			2	43 34.6	
	L_5	79.7			1	48 0.72			1	43 32.9	
	H	93.8			4	48 0.71			4	43 32.3	
7756 7.8	L_1	97.7	L_1	97.7	4	21 48 15.05	L_1	97.7	4	10 46 55.6	3,40,
21 48 15.12	K	22.9	K	22.9	2	48 15.21	K	22.9	2	46 56.7	125,
10 46 57.4	R_1	49.0	R_1	49.0	1	48 15.27	R_1	49.0	1	46 58.8	
	L_4	61.2	Wc	58.7	3	48 15.37	Wc	56.9	9	46 56.4	
	St_1	[60.0]	St_1	60.0	2	48 14.98	St	60.0	2	46 55.9	
	Wc	58.7, 56.9	L_4	61.2	2	48 15.20	L_4	61.2	2	46 57.9	
	Sj	62.7	Sj	62.7	1	48 15.17	Sj	62.7	1	46 54.3	
9741	Q	72.8, 73.2	Q	72.8	3	48 15.25	Q	73.2	2	46 56.4	
29945	G	77.8	G	77.8	4	48 15.35	G	77.8	4	46 56.9	
	V	84.3	V	84.3	4	48 15.23	V	84.3	4	46 56.4	
	H	92.0	H	92.0	4	48 15.12	H	92.0	4	46 57.4	
	E	99.1	E	99.1	3	48 15.27	E	99.1	3	46 57.3	
7757 8.9	K	22.9	K	22.9	1	21 48 21.72	K	22.9	1	10 14 48.0	12
21 48 21.90	R_1	49.0	M_1	46.1	3	48 21.89	M_1	46.1	3	14 51.3	
10 14 50.0	M_1	46.1	R_1	49.0	1	48 21.76	R_1	49.0	1	14 54.0	
	St_1	[60.0]	St_1	60.0	2	48 21.71	St_1	60.0	2	14 48.6	
	H	90.8	H	90.8	2	48 21.90	H	90.8	2	14 50.0	

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Zones.	α Eph-Hd	α Bs.-Hd	α C-H.	δ	α Adj.	δ	Δα	Δδ	
	-44.6	-44.6	+.36	-0.8			40.66	38.1	+.26	-0.1	✓
	-4.7	-4.7	-.06	-0.1			40.21	37.9	-.19	+0.1	✓
							40.34	37.9	-.06	+0.1	✓
							40.40	38.0			
3,39	-96.1	-96.1	-.23	-4.3	-.17	+0.1	0.54	32.4	-.11	+0.2	✓
127	-70.9	-70.9	+.21	-0.4	-.03	-0.3	0.68	32.0	+.03	+0.6	✓
	-44.8	-44.8	-.18	-3.0	-.05	0.0	0.61	28.6	-.04	+4.0	✓
	-39.1	-39.1	-.14	+0.8	-.05	0.0	0.59	34.0	-.06	-1.4	✓
	-33.8	-33.8	-.04	+2.3	-.04	0.0	0.72	35.1	+.07	-2.5	✓
	-14.1	-14.1	+.01	+0.6	-.02	0.0	0.72	33.7	+.07	-1.1	✓
	-83.5		+.12	+0.1			0.71	32.3	+.06	+0.3	✓
							0.65	32.6			
3,40,1,39	-94.3	-94.3	-.07	-1.8	-.01	+2.3	15.11	59.7	-.10	-2.3	✓
125,127	-69.1	-69.1	+.09	-0.7	-.14	0.0	14.98	57.4	-.23	0.0	✓
	-43.0	-43.0	+.15	+1.4	-.04	+0.6	15.35	58.1	+.14	-0.7	✓
	-33.3	-35.1	+.25	-1.0	-.03	+0.5	15.37	57.2	+.16	+0.2	✓
	-32.0	-32.0	-.14	-1.5	-.03	+0.4	15.03	56.6	-.18	+0.8	✓
	-30.8	-30.8	+.08	+0.5	-.03	+0.4	15.22	58.8	+.01	-1.4	✓
	-29.3	-29.3	+.05	-3.1	-.03	+0.4	15.21	55.4	.00	+2.0	✓
	-19.2	-18.8	+.13	-1.0	-.02	+0.3	15.34	56.9	+.13	+0.5	✓
	-14.2	-14.2	+.23	-0.5	-.01	+0.2	15.34	57.5	+.13	-0.1	✓
	-7.7	-7.7	+.11	-1.0	-.01	+0.1	15.21	56.5	.00	+0.9	✓
	-81.7		+.09	-1.4			15.12	57.4	-.09	0.0	✓
	+7.1	+7.1	+.15	-0.1	+.01	-0.1	15.25	57.2	+.04	+0.2	✓
							15.21	57.4			
125	-67.9	-67.9	-.18	-2.0	-.40	-0.7	21.50	49.3	-.27	+1.5	✓
	-44.7	-44.7	-.01	+1.3	-.26	-0.4	21.85	52.3	+.08	-1.5	✓
	-41.8	-41.8	-.14	+4.0	-.25	-0.4	21.84	53.3	+.07	-2.5	✓
	-30.8	-30.8	-.19	-1.4	-.18	-0.3	21.76	49.0	-.01	+1.8	✓
			+.59	+1.0			21.90	50.0	+.13	+0.8	✓
							21.77	50.8			

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Star	Epoch.	Eph. α	Obs.	α 1900.0	Eph. δ	Obs. δ 1900.0	Zon.
7758 9.3.	R, 49.0		1.	21 48 24.67		1. 13 22 29.0	
21 48 25.04.							
13 22 28.6.	H 94.8		3.	48 25.04		3. 22 28.6	
7759 9.2.	R, 49.0		1.	21 48 33.29		1. 12 33 7.7	
21 48 34.06.							
12 33 7.9.	H 90.4		3.	48 34.06		3. 33 7.9	
7760 9.2.	Nc 68.7, 55.8		2.	21 48 40.32		2. 11 11 23.1	
21 48 40.24.							
11 11 23.0.	H 90.9		4.	48 40.24		4. 11 23.0	
7761 9.3.	K 22.9		1.	21 48 41.99		1. 13 19 44.0	11
21 48 41.35.	St_2 59.7		2.	48 41.33		2. 19 44.0	
13 19 43.8.	H 93.8		4.	48 41.35		4. 19 43.8	
7762 8.7.	K 22.9		1.	21 48 54.51		1. 11 50 9.7	12
21 48 54.32.	M_1 44.8		1.	48 54.62		1. 50 8.0	
11 50 10.3.	St_1 [60.0]		3.	48 54.04		3. 50 4.4	
	Nc 65.7, 66.9		3.	48 54.40		6. 50 7.3	
	H 91.1		3.	48 54.32		3. 50 10.3	
7763 8.9.	St_1 [60.0]		2.	21 48 59.94		2. 11 49 35.6	
21 49 0.04.	Nc 65.7, 71.8		2.	49 0.17		2. 49 37.3	
11 49 39.4.	M_2 85.7		1.	49 0.01		1. 49 40.8	
M_2	H 91.1		3.	49 0.04		3. 49 39.4	
7764 8.9.	M_1 44.8		1.	21 49 1.67		1. 12 8 52.7	
21 49 3.95.	A [79.0]		1.	49 3.92		1. 8 50.6	
12 8 58.3.	M_2 86.7		2.	49 3.96		2. 8 57.7	
	H 90.8		3.	49 3.95		3. 8 58.3	

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Zones.	α Ep.−Hd	δ Bs.−Hd	α C−Hd	δ	α adj.	δ	Δα	Δδ	
	-45.8 -45.8	−.37	+0.4		24.75	28.3	−.15	+0.1	✓
					25.04	28.6	+.14	−0.2	✓
					24.90	28.4			
	-41.4 -41.4	−.77	−0.2		33.37	7.0	−.35	+0.4	✓
					34.06	7.9	+.34	−0.5	✓
					33.72	7.4			
	-22.2 -35.1	+.08	+0.1		40.32	23.9	+.04	−0.5	✓
					40.24	23.0	−.04	+0.4	✓
					40.28	23.4			
119	-70.9 -70.9	+.64	+0.2	+.36 −0.3	41.71	43.5	+.22	+0.8	✓
	-34.1 -34.1	−.02	+0.2	+.17 −0.1	41.42	45.5	−.07	−1.2	✓
		−.51	+0.4		41.35	43.8	−.14	+0.5	✓
					41.49	44.3			
127	-68.2 -68.2	+.19	−0.6	−.05 −0.5	54.27	9.8	−.06	−1.4	✓
	-46.3 -46.3	+.30	−2.3	−.03 −0.3	54.58	9.0	+.25	−0.6	✓
	-31.1 -31.1	−.28	−5.9	−.02 −0.2	54.09	4.9	−.24	+3.5	✓
	-25.4 -24.2	+.08	−3.0	−.02 −0.2	54.40	8.1	+.07	+0.3	✓
		+.07	+0.7		54.32	10.3	−.03	−1.9	✓
					54.33	8.4			
	-31.1 -31.1	−.10	−3.8		59.99	36.0	−.05	+2.6	✓
	-25.4 -19.3	+.13	−2.1		0.17	38.1	+.13	+0.5	✓
	-5.4 -5.4	−.03	+1.4		59.94	40.9	−.10	−2.3	✓
					0.04	39.4	.00	−0.8	✓
					0.04	38.6			
	-46.0 -46.0	-2.28	−5.6		[1.63]	53.7	[2.29]	+1.4	✓
	-11.8 -11.8	−.03	−7.7		3.92	50.6	.00	+4.5	✓
	-4.1 -4.1	+.01	−0.6		3.89	57.8	−.03	−2.7	✓
					3.95	58.3	+.03	−3.2	✓ 3.92 55.1

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zon
7765 8.9	K 22.9		1	21 49 27.39		1	13 21 2.9	11
21 49 26.68	St_2 59.7		2	49 26.53		2	21 2.4	
13 21 4.6	H 89.0		4	49 26.68		4	21 4.6	
7766 8.1	L_1 97.7	L_1 97.7	2	21 49 38.50	L_1 97.7	2	12 26 28.2	39
21 49 38.88	L_2 03.8	L_2 03.8	1	49 39.05	L_2 03.8	1	26 33.2	
12 26 34.1	K 22.9	K 22.9	1	49 38.90	K 22.9	1	26 36.9	12
	L_3 41.8 ..	L_3 41.8	3	49 38.84	L_3 ..	..	26 33.2	
	M_1 46.0	M_1 46.0	4	49 38.78	M_1 46.0	4	26 32.6	
	L_4 59.0, 56.2	L_4 59.0	3	49 38.61	L_4 56.2	2	26 34.5	
	St_1 [60.0]	St_1 60.0	2	49 38.74	St_1 60.0	2	26 32.8	
	Wc 65.7, 65.7	Wc 65.7	5	49 38.90	Wc 65.7	3	26 33.7	
	A 76.7	A 76.7	2	49 38.86	A 76.7	2	26 35.1	
29976	G 79.7	L_5 78.6	1	49 38.79	L_5 78.6	1	26 33.5	
	L_5 78.6	G 79.7	3	49 38.82	G 79.7	3	26 35.0	
	H 93.1	H 93.1	3	49 38.88	H 93.1	3	26 34.1	
	E 04.5, 04.1	E 04.5	3	49 38.99	E 04.1	4	26 35.0	
7767 9.1	M_1 46.6		1	21 49 53.21		1	11 9 36.7	
21 49 52.89	M_2 88.7		2	49 52.93		2	9 38.2	
11 9 36.1	H 88.7		3	49 52.89		3	9 36.1	
7768 9.1	K 22.9		1	21 50 2.16		1	13 4 55.2	11
21 50 2.10	St_2 59.7		2	50 2.01		2	4 57.1	
13 4 58.5	H 93.3		4	50 2.10		4	4 58.5	
7770 9.0	M_1 45.8		1	21 50 33.07		1	10 54 21.0	
21 50 33.20	M_2 84.7		1	50 33.24		1	54 23.2	
10 54 23.8	H 90.1		3	50 33.20		3	54 23.8	

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Zones	α Ep-H	δ	α Pos.-H	δ	αC-H.	δ	α adj.	δ	Δα	Δδ	
119	-66.1	-66.1	+.71	-1.7	+.43	-2.2	27.11	2,4	+.31	+1.2	✓
	-29.3	-29.3	-.15	-2.2	+.19	-1.0	26.62	3.9	-.18	-0.3	✓
			-.65	+3.3			26.68 / 26.80	4.6 / 3.6	-.12	-1.0	✓
39,3	-95.4	-95.4	-.38	-5.9	-.32	-1.5	38.56	32.6	-.24	+2.0	✓
	-89.3	-89.3	+.17	-0.9	-.29	+0.7	38.93	34.5	+.13	+0.1	✓
127	-70.2	-70.2	+.02	+2.8	-.22	+2.9	38.66	37.0	-.14	-2.4	✓
	-51.3	"	-.04	"	-.17	"	38,83	"	+.03	"	✓
	-47.1	-47.1	-.10	-1.5	-.16	+0.4	38,74	33.6	-.06	+1.0	✓
	-34.1	-36.9	-.27	+0.4	-.11	+0.3	38,63	35.4	-.17	-0.8	✓
	-33.1	-33.1	-.14	-1.3	-.11	+0.3	38,79	33.4	-.01	+1.2	✓
	-27.4	-27.4	+.02	-0.4	-.09	+0.2	38,90	34.5	+.10	+0.1	✓
	-16.4	-16.4	-.02	+1.0	-.05	+0.1	38,86	35.1	+.06	-0.5	✓
	-14.5	-14.5	-.09	-0.6	-.05	+0.1	38,79	34.3	-.01	+0.3	✓
	-13.4	-13.4	-.06	+0.9	-.04	+0.1	38.81	35.6	+.01	-1.0	✓
			-82.8	+33	-0.8		38,88	34.1	+.08	+0.5	✓
	+11.4	+11.0	+.11	+0.9	+.04	-0.1	38,97 / 38.80	34.9 / 34.6	+.17	-0.3	✓
	-42.1	-42.1	+.32	+0.6			53.17	37.7	+.20	-0.3	✓
	0.0	0.0	+.04	+2.1			52,86	38.3	-.11	-0.9	✓
							52.89 / 52.97	36.1 / 37.4	-.08	+1.3	✓
119	-70.4	-70.4	+.36	-3.3	+.08	-3.8	2.18	54.7	+.05	+2.6	✓
	-33.6	-33.6	-.09	-1.4	+.04	-1.8	2.10	58.6	-.03	-1.3	✓
			-.11	+5.4			2.10 / 2.13	58,5 / 57.3	-.03	-1.2	✓
	-44.3	-44.3	-.13	-2.8			33.03	22.0	-.10	+1.0	✓
	-5.4	-5.4	+.04	-0.6			33.17	23.3	+.05	-0.3	✓
							33,20 / 33.13	23.8 / 23.0	+.07	-0.8	✓

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zon
7771 8.9	R_1 49.0	M_1 46.6	1	21 50 38.82	M_1 46.6	1	11 43 41.4	
21 50 39.34	M_1 46.6	R_1 49.0	1	50 39.69	R_1 49.0	1	43 38.6	
11 43 40.9	H 91.1	H 91.1	3	50 39.34	H 91.1	3	43 40.9	
7772 8.9	L_1 94.6	L_1 94.6	1	21 50 57.91	L_1 94.6	1	9 58 44.1	
21 50 58.04	R_1 48.0	M_1 45.8	1	50 57.72	M_1 45.8	1	58 47.3	
9 58 49.1	M_1 45.8	R_1 48.0	2	50 57.86	R_1 48.0	2	58 49.6	
	L_4 54.7 ..	L_4 54.7	1	50 58.04	L_4 ..	..	..	
	B 66.7	B 66.7	1	50 58.02	B 66.7	1	58 49.0	
	H 89.4	H 89.4	3	50 58.04	H 89.4	3	58 49.1	
7773 8.4	L_1 97.8	L_1 97.8	2	21 51 5.04	L_1 97.8	2	10 3 37.8	40,
21 51 5.26	K 22.9	K 22.9	1	51 5.54	K 22.9	1	3 37.0	12
10 3 37.5	R_1 48.0	M_1 46.1	3	51 5.39	M_1 46.1	3	3 39.1	
	L_3 52.7 ..	R_1 48.0	1	51 4.97	R_1 48.0	1	3 38.7	
	M_1 46.1	L_3 52.7	2	51 5.08	L_3 ..	..	..	
	L_4 .. 54.7	L_4 ..	..	..	L_4 54.7	1	3 35.9	
	St_1 [60.0]	St_1 60.0	3	51 5.20	St_1 60.0	3	3 39.8	
	Sj 62.7	Sj 62.7	1	51 5.42	Sj 62.7	1	3 38.5	
	L_5 78.7	L_5 78.7	1	51 5.24	L_5 78.7	1	3 36.6	
	H 90.8	H 90.8	3	51 5.26	H 90.8	3	3 37.5	
	E 05.5	E 05.5	5	51 5.27	E 05.5	5	3 38.0	
7774 8.7	L_1 95.6		1	21 51 30.55		1	13 49 27.2	1
21 51 30.25	K 22.9		1	51 30.67		1	49 30.7	11
13 49 30.7	M_1 46.2		2	51 30.35		2	49 27.5	
	L_4 55.7		3	51 30.31		3	49 30.3	
	St_2 59.7		2	51 30.14		2	49 30.2	
	L_5 78.7		2	51 30.35		2	49 29.9	
	H 90.8		3	51 30.25		3	49 30.7	
	SK 95.3		2	51 30.28		2	49 29.6	

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Zones	α Ep-H	δ	α Bs-H.	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
	-44.5	-44.5	-.52	+0.5			38.78	42.4	-.52	-2.0	✓
	-42.1	-42.1	+.35	-2.3			39.77	37.9	+.47	+2.5	✓
							39.34 / 39.30	40.9 / 40.4	+.04	-0.5	✓
1	-94.8	-94.8	-.13	-5.0	-.06	-0.3	57.98	48.8	+.04	+0.5	✓
	-43.6	-43.6	-.32	-1.8	-.03	-0.1	57.68	48.3	-.26	+1.0	✓
	-41.4	-41.4	-.18	+0.5	-.02	-0.1	57.94	48.9	.00	+0.4	✓
	-34.7	..	.00	..	-.02	..	58.06	...	+.12	..	✓
	-22.7	-22.7	-.02	-0.1	-.01	-0.1	57.94	51.4	.00	-2.1	✓
			+.06	+0.3			58.04 / 57.94	49.1 / 49.3	+.10	+0.2	✓
40, 1	-93.0	-93.0	-.22	+0.3	-.17	+0.1	5.09	41.6	-.14	-2.8	✓
125	-67.9	-67.9	+.28	-0.5	+.06	+0.8	5.32	38.3	+.09	+0.5	✓
	-44.7	-44.7	+.13	+1.6	-.03	+1.3	5.35	40.1	+.12	-1.3	✓
	-42.8	-42.8	-.29	+1.2	-.03	+1.3	5.05	38.0	-.18	+0.8	✓
	-38.1	..	-.18	..	-.03	..	5.07	...	-.16	..	✓
	..	-36.1	..	-1.6	..	+1.1	...	36.8	..	+2.0	✓
	-30.8	-30.8	-.06	+2.3	-.02	+0.9	5.25	40.3	+.02	-1.5	✓
	-28.1	-28.1	+.16	+1.0	-.02	+0.8	5.46	39.6	+.23	-0.8	✓
	-12.1	-12.1	-.02	-0.9	-.01	+0.4	5.24	37.4	+.01	+1.4	✓
		-80.4	+.07	-3.0			5.26	37.5	+.03	+1.3	✓
	+14.7	+14.7	+.01	+0.5	+.01	-0.4	5.25 / 5.23	37.9 / 38.8	+.02	+0.9	✓
11	-95.2	-95.2	+.30	-3.5	+.27	-0.3	30.52	30.4	+.19	0.0	✓
119	-67.9	-67.9	+.42	0.0	+.14	-0.5	30.39	30.2	+.06	+0.2	✓
	-44.6	-44.6	+.10	-3.2	+.11	-0.2	30.31	28.5	-.02	+1.9	✓
	-35.1	-35.1	+.06	-0.4	+.09	-0.2	30.33	31.2	.00	-0.8	✓
	-31.1	-31.1	-.11	-0.5	+.08	-0.2	30.23	31.1	-.10	-1.3	✓
	-12.1	-12.1	+.10	-0.8	+.03	-0.1	30.35	30.7	+.02	-0.3	✓
		-81.6	-.25	+0.5			30.25	30.7	-.08	-0.3	✓
	+4.5	+4.5	+.03	-1.1	-.01	0.0	30.25	30.0	+.08	+0.4	✓ 30.33 30.4 mean

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Star		Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0	
7775	8.5	M_1	45.8	M_1	45.8	2	21 51	38.35	M_1	45.8	2	13 27	17.2
21 51	38.47	Q 977	66.1, 65.3	Q	66.1	3	51	38.44	Q	65.3	2	27	21.9
13 27	21.2	H	89.7	H	89.7	3	51	38.47	H	89.7	3	27	21.2
7776	8.2	L_1	95.6	L_1	95.6	1	21 52	32.70	L_1	95.6	1	13 23	47.0
21 52	33.21	M_1	45.7	M_1	45.7	2	52	33.33	M_1	45.7	2	23	52.5
13 23	56.0	L_4	54.7	L_4	54.7	1	52	33.14	L_4	54.7	2	23	53.5
12		A	78.9	Q	66.1	3	52	33.09	Q	63.1	3	23	54.9
μ	977	Q	66.4, 63.1	L_5	78.8	2	52	33.21	L_5	78.8	2	23	55.2
		L_5	78.8	A	78.9	1	52	33.11	A	78.9	1	23	54.2
		M_2	85.7	D_1	83.7	3	52	33.23	D_1	83.7	3	23	54.7
		D_1	83.7	M_2	85.7	1	52	33.43	M_2	85.7	1	23	56.7
		H	90.1	H	90.1	3	52	33.21	H	90.1	3	23	56.0
7777	8.7	K	22.9			1	21 52	38.82			1	11 10	56.0
21 52	38.81	M_1	46.2			2	52	38.93			2	10	53.7
11 10	54.3	St,	[60.0]			2	52	38.73			2	10	54.2
		H	88.7			4	52	38.81			4	10	54.3
7778	8.8	L_3	44.8, ..	L_3	44.8	2	21 52	44.78	L_3	..	..	11 36	..
21 52	44.98	M_1	45.8	M_1	45.8	1	52	44.61	M_1	45.8	1	36	33.9
11 36	33.0	M_2	84.7	M_2	84.7	1	52	45.04	M_2	84.7	1	36	33.4
		H	90.1	H	90.1	3	52	44.98	H	90.1	3	36	33.0
For 7779 page 116													
7780	8.3	L_1	95.6			1	21 53	0.48			1	13 30	27.3
21 53	0.50	M_1	45.7			2	53	0.32			2	30	25.2
13 30	26.2	Q 978	63.8, 63.7			4	53	0.78			4	30	25.4
		L_5	79.2			2	53	0.53			2	30	25.0
		M_2	85.7			1	53	0.64			1	30	24.9
		H	93.4			3	53	0.50			3	30	26.2

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Zones	α Ep − H. δ	α Bs. − H. δ	α C − H. δ	α Adj. δ	Δα	Δδ	
	−43.9 −43.9	−.12 −4.0		38.31	18.2	−.13 +2.4	✓
	−23.6 −24.4	−.03 +0.7		38.53	22.4	+.09 −1.8	✓
				38.47 / 38.44	21.2 / 20.6	+.03 −0.6	✓
11	−94.5 −94.5	−.51 −9.0	−.54 −5.8	32.67	50.2	−.48 +4.4	✓
	−44.4 −44.4	+.12 −3.5	−.25 −2.7	33.29	53.5	+.14 +1.1	✓
	−35.4 −35.4	−.07 −2.5	−.20 −2.2	33.16	54.4	+.01 +0.2	✓
	−23.7 −27.0	−.12 −1.1	−.14 −1.6	33.18	55.4	+.03 −0.8	✓
	−11.3 −11.3	.00 −0.8	−.06 −0.7	33.21	56.0	+.06 −1.4	✓
	−11.2 −11.2	−.10 −1.8	−.06 −0.7	33.11	54.2	−.04 +0.4	✓
	−6.4 −6.4	+.02 −1.3	−.04 −0.4	33.15	55.1	.00 −0.5	✓
	−4.4 −4.4	+.22 +0.7	−.03 −0.3	33.36	56.8	+.21 −2.2	✓
		+.57 +6.1		33.21 / 33.15	56.0 / 54.6	+.06 −1.4	✓
127	−65.8 −65.8	+.01 +1.7	−.23 +1.8	38.58	56.1	−.18 −1.1	✓
	−42.5 −42.5	+.12 −0.6	−.15 +1.1	38.89	54.7	+.13 +0.3	✓
	−28.7 −28.7	−.08 −0.1	−.10 +0.8	38.78	54.7	+.02 +0.3	✓
		+.35 −2.7		38.81 / 38.76	54.3 / 55.0	+.05 +0.7	✓
	−45.3 ..	−.20 ..		44.77	...	−.05 ..	✓
	−44.3 −44.3	−.37 +0.9		44.57	34.9	−.25 −1.1	✓
	−54 −54	+.06 +0.4		44.97	33.5	+.15 +0.3	✓
				44.98 / 44.82	33.0 / 33.8	+.16 +0.8	✓
11	−97.8 −97.8	−.07 +1.1	−.10 +4.3	0.40	30.5	−.12 −3.9	✓
	−47.7 −47.7	−.18 −1.0	−.05 +2.1	0.28	26.2	−.24 +0.4	✓
	−29.6 −29.7	+.28 −0.8	−.03 +1.3	0.87	25.9	+.35 +0.7	✓
	−14.2 −14.2	+.03 −1.2	−.01 +0.6	0.53	25.8	+.01 +0.8	✓
	−7.7 −7.7	+.14 −1.3	−.01 +0.3	0.57	25.0	+.05 +1.6	✓
		+.10 −4.4		0.50 / 0.52	26.2 / 26.6	−.02 +0.4	✓

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Star		Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	zone
7779	8.5	L_1 00.8	L_1 00.8	1	21 52 54.11	L_1 00.8	1	12 34 39.1	39
21 52	54.92	L_2 03.8	L_2 03.8	1	52 55.12	L_2 03.8	1	34 42.6	
12 34	43.7	K 22.9	K 22.9	1	52 55.28	K 22.9	1	34. 43.7	127
		R_1 49.0	M_1 45.8	1	52 55.12	M_1 45.8	1	34 38.1	
		M_1 45.8	R_1 49.0	1	52 54.80	R_1 49.0	1	34 45.3	
		L_4 54.7, 57.7	L_4 54.7	1	52 54.90	L_4 57.7	1	34 42.3	
		St_1 [60.0]	St_2 59.7	2	52 54.80	St_2 59.7	2	34 41.7	
		St_2 59.7	St_1 60.0	2	52 54.68	St_1 60.0	2	34 41.2	
	9782	Q 63.4, 62.8	Q 63.4	3	52 54.97	Q 62.8	2	34 42.7	
		L_5 78.6	L_5 78.6	1	52 55.12	L_5 78.6	1	34 41.9	
		H 89.8	H 89.8	3	52 54.92	H 89.8	3	34 43.7	
		E_0 06.4	E_0 06.4	3	52 55.09	E_0 06.4	3	34 43.9	
7781	7.4	L_1 95.6	L_1 95.6	1	21 53 0.77	L_1 95.6	1	13 8 41.7	11
21 53	0.96	P 344 00.0	P 00.0	7	53 0.43	P 00.0	9	8 39.3	
13 8	36.7	R_1 47.0	M_1 45.8	2	53 0.91	M_1 45.8	2	8 36.6	
		L_3 46.7, =	L_3 46.7	3	53 0.92	L_3 46.7	4	8 38.0	
		M_1 45.8	Nc 46.8	12	53 0.98	Nc 46.8	11	8 39.1	
		Nc 46.8, 46.8	R_1 47.0	4	53 0.78	R_1 47.0	2	8 42.1	
	300.51	G 79.2	G 79.2	6	53 0.84	G 79.2	6	8 36.7	
		H 89.5	H 89.5	4	53 0.96	H 89.5	4	8 36.7	
7782 next page									
7783	8.8	L_1 00.8	L_1 00.8	1	21 53 12.14	L_1 00.8	1	12 27 21.4	39
21 53	12.36	L_2 03.8	L_2 03.8	1	53 12.66	L_2 03.8	1	27 28.0	
12 27	34.6	K 22.9	K 22.9	1	53 12.70	K 22.9	1	27 32.9	127
		L_4 61.2, 56.7	St_1 60.0	2	53 12.14	L_4 56.7	2	27 34.2	
		St_1 [60.0]	L_4 61.2	2	53 12.28	St_1 60.0	2	27 32.7	
	9797	Q 71.4, 68.8	Q 68.8, 71.1	4	53 12.35	Q 68.8	5	27 33.6	
		L_5 .. 78.7	L_5 78.7	..	53 ..	L_5 78.7	1	27 34.0	
		H 91.1	H 91.1	3	53 12.36	H 91.1	3	27 34.6	

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N

Zones	α Eph - H.d	α Obs. H.d	α C. - H.d	α Adj.	δ	Δα	Δδ	
39	-89.0 -89.0	-.81	-4.6	-.77	-0.9	54.15	42.8	+.16 -.75	+0.2	✓
	-86.0 -86.0	+.20	-1.1	-.36	-0.4	55.00	43.9	+.01 +.16	-0.9	✓
127	-66.9 -66.9	+.36	0.0	+.12	+0.1	55.04	43.8	+.05 +.14	-0.8	✓
	-44.0 -44.0	+.20	-5.6	-.18	-0.2	55.08	39.1	+.09 +.18	+3.9	✓
	-40.8 -40.8	-.12	+1.6	-.17	-0.2	54.88	44.6	-.11 -.02	-1.6	✓
	-35.1 -32.1	-.02	-1.4	-.15	-0.2	54.92	43.2	-.07 +.02	-0.2	✓
	-30.1 -30.1	-.12	-2.0	-.13	-0.2	54.89	[43.2]	-.10 -.01	ad -0.2	✓
	-29.8 -29.8	-.24	-2.5	-.13	-0.1	54.73	41.7	-.26 -.17	+1.3	✓
	-26.4 -27.0	+.05	-1.0	-.11	-0.1	55.06	43.2	+.07 +.16	-0.2	✓
	-11.2 -11.2	+.20	-1.8	-.05	-0.1	55.12	42.1	+.13 +.22	+0.3	✓
	-78.0	+42	+0.5			54.92	43.7	-.07 +.02	-0.7	✓
	+16.6 +16.6	+.17	+0.2	+.07	+0.1	55.07 / 54.90	43.8 / 43.0	+.08 +.17 (mid)	-0.8	✓
11	-93.9 -93.9	-.19	+5.0	-.22	+8.2	0.74	44.9	-.10	-5.0	✓
	-89.5 -89.5	-.53	+2.6	-.21	+7.8	0.54	43.0	-.30	-3.1	✓
	-43.7 -43.7	-.05	-0.1	-.10	+3.8	0.87	37.6	+.03	+2.3	✓
	-42.8 ..	-.04	+1.3	-.10	..	0.91	38.3	+.07	+1.6	✓
	-42.7 -42.7	+.02	+2.4	-.10	+3.7	0.98	39.9	+.14	0.0	✓
	-42.5 -42.5	-.18	+5.4	-.10	+3.7	0.86	41.4	+.02	-1.5	✓
	-10.3 -10.3	-.12	0.0	-.02	+0.9	0.82	37.3	-.02	+2.6	✓
		+23	-8.7			0.96 / 0.84	36.7 / 39.5	+.12	+3.2	✓
39	-90.3 -90.3	-.22	-13.2	-.18	-9.5	12.18	25.1	-.17	+7.3	✓
	-87.3 -87.3	+.30	-6.6	-.04	-6.1	12.54	29.3	+.19	+3.1	✓
127	-68.2 -68.2	+.34	-1.7	+.10	-1.6	12.46	33.0	+.11	-0.6	✓
	-31.1 -34.4	-.22	-0.4	-.02	-2.4	12.19	35.1	-.16	-2.7	✓
	-29.9 -31.1	-.08	-1.9	-.01	-2.2	12.30	33.2	-.05	-0.8	✓
	-22.3 -22.3	-.01	-1.0	-.01	-1.6	12.44	34.1	+.09	-1.7	✓
	-12.4 -12.4	..	-0.6	-.01	-0.9	...	34.8	..	-2.4	✓
	-79.2	+05	+7.0			12.36 / 12.35	34.6 / 32.4	+.01	-22 0.0	✓

St 2 min added to δ

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Star	Epoch	Ep. α	Obs	α 1900.0	Ep. δ	Obs.	δ 1900.0	zone
7782 8.2	L_1 95.6		1	21 53 5.61		1	13 43 43.9	H
21 53 5.64	K 22.8		2	53 6.04		2	43 45.6	117,11
13 43 45.1	M_1 46.7		1	53 5.90		1	43 44.5	
	L_4 54.7, 55.7		2	53 5.63		3	43 44.9	
	St_2 59.7		2	53 5.56		2	43 43.3	
	Sj 62.7		1	53 5.73		1	43 46.8	
	A 78.8		1	53 5.54		1	43 45.1	
	L_5 79.8		3	53 5.71		3	43 44.3	
	H 91.0		3	53 5.64		3	43 45.1	
	Sk 95.2		2	53 5.71		2	43 44.6	
7784 9.3	R_1 49.0		1	21 53 26.97		1	13 40 36.1	
21 53 26.76	H 90.8		3	53 26.76		3	40 42.2	
13 40 42.2	Sk 95.2		2	53 26.90		2	40 41.5	
7785 8.6	L_1 00.9	L_1 00.9	1	21 53 39.95	L_1 00.9	1	10 39 20.0	40
21 53 39.98	R_1 48.0	M_1 46.1	3	53 40.14	M_1 46.1	3	39 22.5	
10 39 24.1	M_1 46.1	R_1 48.0	1	53 40.21	R_1 48.0	1	39 24.7	
	L_4 59.0, 62.3	L_4 59.0	3	53 39.99	L_4 62.3	2	39 22.2	
	H 89.7	H 89.7	3	53 39.98	H 89.7	3	39 24.1	
7786 8.0	L_2 −,03.8	L_2 03.8	+	21 53 [40.37]	L_2 03.8	1	11 45 31.4	
21 53 40.15	R_1 49.0 }	L_3 44.8	1	53 40.38	..	..	45 ..	
11 45 32.3	L_3 44.8, 50.0 }	M_1 45.8	3	53 40.40	M_1 45.8	2	45 27.7	
	M_1 45.8	R_1 49.5	2	53 40.37	R_1 49.5	2	45 29.4	
	H 91.1	H 91.1	3	53 40.15	H 91.1	3	45 32.3	
7787 8.5	M_1 45.8		1	21 53 46.82		1	10 14 28.4	
21 53 46.71	M_2 84.7		1	53 47.08		1	14 26.3	
10 14 25.5	H 90.5		3	53 46.71		3	14 25.5	

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zones	α Ep. − H.δ	α Bs. − H.δ	α C − H.δ	α adj.	δ	Δα	Δδ	
H	−95.4 −95.4	−.03 −1.2	−.06 +2.0	5.58	47.1	−.11	−1.5	✓
117,119	−68.2 −68.2	+.40 +0.5	+.10 −0.3	5.74	44.8	+.05	+0.8	✓
	−44.3 −44.3	+.26 −0.6	+.01 +0.4	5.86	45.5	+.17	+0.1	✓
	−36.3 −35.3	−.01 −0.2	+.01 +0.4	5.72	45.8	+.03	−0.2	✓
	−31.3 −31.3	−.08 −1.8	+.01 +0.3	5.65	44.8	−.04	+0.8	✓
	−28.3 −28.3	+.09 +1.7	+.01 +0.3	5.77	47.9	+.08	−2.3	✓
	−12.2 −12.2	−.10 0.0	.00 +0.1	5.54	45.1	−.15	+0.5	✓
	−11.2 −11.2	+.07 −0.8	.00 +0.1	5.71	45.1	+.02	+0.5	✓
	−81.8	−.02	−1.0	5.64	45.1	−.05	+0.5	✓
	+4.2 +4.2	+.07 −0.5	.00 0.0	5.68 / 5.69	45.0 / 45.6	−.01	+0.6	✓
	−41.8 −41.8	+.21 −6.1		27.05	35.4	+.16	+4.4	✓
				26.76	42.2	−.13	−2.4	✓
	+44 +44	+.14 −0.7		26.87 / 26.89	41.9 / 39.8	−.02	−2.1	✓
40	−88.8 −88.8	−.03 −4.1	.00 −1.1	39.98	23.0	−.09	+0.2 5	✓
	−43.6 −43.6	+.16 −1.6	.00 −0.5	40.10	23.5	+.03	−0.1 0.0	✓
	−41.7 −41.7	+.23 +0.6	.00 −0.5	40.29	24.0	+.22	−0.6 5	✓
	−30.7 −27.4	+.01 −1.9	.00 −0.3	40.01	22.4 23.1	−.06	+1.0 0.4	✓
		.00 +1.2		39.98 / 40.07	24.1 / 23.4 5	−.09	−0.7 6	✓
	−87.3 −87.3	+.19 −0.9		[illegible]	32.7	[illegible]	−2.1	✓
	−46.3 ..	+.23 ..		40.37	..	+.04	..	✓
	−45.3 −45.3	+.25 −4.6		40.36	28.7	+.03	+1.9	✓
H	−41.6 −41.6	+.22 −2.9		40.45	28.7	+.12	+1.9	✓
3				40.15 / 40.33	32.3 / 30.6	−.18	−1.7	✓
	−44.7 −44.7	+.11 +2.9		46.78	29.4	−.05	−2.3	✓
	−5.8 −5.8	+.37 +0.8		47.01	26.4	+.18	+0.7	✓
				46.71 / 46.83	25.5 / 27.1	−.12	+1.6	✓

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Star		Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zone
7788	9.0	K 22.9		1	21 53 55.02		1	13 26 35.7	119
21 53	54.50	St_2 59.7		1	53 54.14		1	26 44.3	
13 26	38.2	Sj_2 62.6		1	53 54.58		1	26 37.8	
		A 78.9		1	53 54.48		1	26 37.7	
		H 90.5		4	53 54.50		4	26 38.2	
7789	8.9	K 22.8		1	21 54 14.23		1	13 54 30.9	117
21 54	13.91	R_1 48.0		1	54 13.90		1	54 32.5	
13 54	29.5	St_2 59.7		1	54 13.87		1	54 28.6	
		H_2 90.8		3	54 13.91		3	54 29.5	
		Sk 95.3		2	54 13.90		2	54 29.2	
7790	8.0	L_1 00.9		1	21 54 24.82		1	10 47 17.1	40
21 54	25.00	K 22.9		1	54 24.77		1	47 20.1	12
10 47	24.2	M_1 46.2		2	54 24.81		2	47 19.8	
		L_4 56.1, 56.7		3	54 24.91		4	47 21.9	
		St_1 [60.0]		3	54 24.79		3	47 22.2	
		Sj_1 62.7		1	54 24.83		1	47 21.7	
		L_5 80.0		3	54 25.07		3	47 23.9	
		H 88.7		4	54 25.00		4	47 24.2	
		E 03.4		3	54 25.10		3	47 25.2	
7791	8.9	K 22.9		1	21 54 43.22		1	13 10 51.7	119
21 54	42.35	R_1 47.0		2	54 42.64		1	10 50.6	
13 10	52.0	H 90.1		3	54 42.35		3	10 52.0	
7792	8.7	M_1 46.6		1	21 54 48.66		1	12 42 5.9	
21 54	49.29	M_2 85.2		2	54 49.42		2	42 6.6	
12 42	4.4	H_2 91.1		3	54 49.29		3	42 4.4	

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Zones	Sp-H. δ	α Pos.-H. δ	C-H. δ	α adj. δ	Δα	Δδ
119	-67.6 -67.6	+.52 -2.5	+.24 -3.0	54.74	35.2 +.23	+4.0
	-30.8 -30.8	-.36 +6.1	+.11 -1.4	54.23	45.8 -.28	-6.6
	-27.9 -27.9	+.08 -0.4	+.10 -1.2	54.62	38.9 +.11	+0.3
	-11.6 -11.6	-.02 -0.5	+.04 -0.5	54.48	37.7 -.03	+1.5
		-.36 +4.4		54.50	38.2 -.01	+1.0
				54.51	39.2	
117	-68.0 -68.0	+.32 +1.4	+.01 +0.3	13.92	29.8 -.01	+0.4
	-42.8 -42.8	-.01 +3.0	.00 +0.2	13.98	31.8 +.05	-1.6
	-31.1 -31.1	-.04 -0.9	.00 +0.1	13.96	30.1 +.03	+0.1
		-.01 -0.4		13.91	29.5 -.02	+0.7
	+41.5 +41.3	-.01 -0.3	.00 0.0	13.87	29.6 -.06	+0.6
				13.93	30.2	
40	-87.8 -87.8	-.18 -7.1	-.15 -4.1	24.85	20.1 -.03	+2.5
127	-65.8 -65.8	-.23 -4.1	-.47 -4.0	24.53	20.2 -.35	+2.4
	-42.5 -42.5	-.19 -4.4	-.17 -2.3	24.77	20.8 -.11	+1.8
	-32.6 -32.0	-.09 -2.3	-.13 -1.7	24.93	22.8 +.05	-0.2
	-28.7 -28.7	-.21 -2.0	-.11 -1.5	24.84	22.8 -.04	-0.2
	-26.0 -26.0	-.17 -2.5	-.10 -1.4	24.87	22.8 -.01	-0.2
	-8.7 -8.7	+.07 -0.3	-.03 -0.5	25.07	24.7 +.19	-2.1
	-76.8	+.40 +5.3		25.00	24.2 +.12	-1.6
	+14.7 +14.7	+.10 +1.0	+.06 +0.8	25.08	25.1 +.20	-2.5
				24.88	22.6	
119	-67.2 -67.2	+.87 -0.3	+.59 -0.8	42.94	51.2 +.27	-0.2
	-43.1 -43.1	+.29 -1.4	+.38 -0.5	42.72	49.9 +.05	+1.1
		-.88 +1.2		42.35	52.0 -.32	-1.0
				42.67	51.0	
	-44.5 -44.5	-.63 +1.5		48.62	6.9 -.47	-0.9
	-5.9 -5.9	+.13 +2.2		49.35	6.7 +.26	-0.7
				49.29	4.4 +.20	+1.6
				49.09	6.0	

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Star		Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0		Zone
7793	9.4	Wc	68.8			2	21	54 58.51			2	12	28 16.2	
21	54 58.54	A	78.9			1		54 58.58			1		28 21.4	
12	28 22.6	H	90.8			3		54 58.54			3		28 22.6	
7794	8.8	L_1	00.8	L_1	00.8	1	21	54 58.94	L_1	00.8	1	10	58 18.1	39
21	54 59.61	R_1	49.0	M_1	46.2	2		54 59.53	M_1	46.2	1		58 17.8	
10	58 16.4	M_1	46.2	R_1	49.0	1		54 59.08	R_1	49.0	1		58 16.9	
		L_4	59.0, 61.3	L_4	59.0	3		54 59.39	L_4	61.3	2		58 16.2	
		L_5	78.7, ..	L_5	78.7	1		54 59.66	L_5	..	..		..	
		H	91.1	H	91.1	3		54 59.61	H	91.1	3		58 16.4	
7795	8.8	K	22.9	K	22.9	1	21	55 1.88	K	22.9	1	13	19 58.6	11
21	55 1.44	R_1	47.0	M_1	46.7	1		55 0.85	M_1	46.7	1		19 54.7	
13	19 57.7	M_1	46.7	Wc	46.8	2		55 1.40	Wc	46.8	3		19 58.8	
		Wc	46.8	R_1	47.0	4		55 1.33	R_1	47.0	1		20 6.0	
		D_1	82.4	D_1	82.4	3		55 1.51	D_1	82.4	3		19 59.0	
		H	92.5	H	92.5	4		55 1.44	H	92.5	4		19 57.7	
7796	9.0	K	22.9			1	21	55 7.47			1	13	24 50.7	119
21	55 6.77	St_2	59.7			2		55 6.60			2		24 48.8	
13	24 53.8	A	78.9			1		55 6.79			1		24 50.1	
		H	91.2			3		55 6.77			3		24 53.8	
7797	9.0	K	22.9			1	21	55 24.46			1	11	54 13.0	127
21	55 23.55	St_1	[60.0]			2		55 23.59			2		54 15.8	
11	54 22.1	A	67.8			2		55 23.88			2		54 19.5	
		H	93.0			4		55 23.55			4		54 22.1	

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Zones.	α Ep − H.	δ α Bs. − H.	δ α C. − H.	δ	α adj.	δ	Δα	Δδ	
	−22.0	−22.0 −.03	−6.4		58.51	17.0	−.03	+3.3	✓
	−11.9	−11.9 +.04	−1.2		58.58 ✓	21.4 ✓	+.04	−1.1	✓
					58.54	22.6	.00	−2.3	✓
					58.54	20.3			
39	−90.3	−90.3 −.67	+1.7	−.63 +5.4	58.98	21.8	−.40	−3.7	✓
	−44.9	−44.9 −.08	+1.4	−.31 +2.7	59.49	18.8	+.11	−0.7	✓
	−42.1	−42.1 −.53	+0.5	−.29 +2.5	59.16 ✓	16.2 ✓	−.22	+1.9	✓
	−32.1	−29.8 −.22	−0.2	−.22 +1.8	59.41 ✓	17.1 ✓	+.03	+1.0	✓
	−12.4	.. +.05	..	−.09 ..	59.66 ✓	0.8	+.28	..	✓
		+.70 ✓	−6.0		59.61	16.4	+.23	+1.7	✓
					59.38	18.1 ✓			
119	−69.6	−69.6 +.44	+0.9	+.16 ✓ +0.4	1.60 ✓	58.1	+.25	+1.2	✓
	−45.8	−45.8 −.59	−3.0	+.11 +0.3	0.81 ✓	55.7	−.54 ✓	+3.6	✓
	−45.7	−45.7 −.04	+1.1	+.11 +0.3	1.40 ✓	59.6	+.05	−0.3	✓
	−45.5	−45.5 −.11	+8.3	+.10 +0.3	1.41 ✓	5.3 ✓	+.06	−6.0 ✓	✓
	−10.1	−10.1 +.07	+1.3	+.02 +0.1	1.43 ✓	59.4 ✓ 58.2	+.08	−0.1	✓
		−.23	−0.6 ✓		1.44 ✓	57.7	+.09	+1.6	✓
					1.35 ✓	59.3			
119	−68.3	−68.3 +.70	−3.1	+.42 −3.6 ✓	7.19 ✓	50.2 ✓	+.33	+0.9	✓
	−31.5	−31.5 −.17	−5.0	+.19 −1.7	6.69 ✓	50.8	−.17	+0.8	✓
	−12.3	−12.3 +.02	−3.7 ✓	+.08 −0.7	6.79 ✓	50.1	−.07	+1.0	✓
		−.61 ✓	+5.3		6.77	53.8	−.09	−2.7	✓
					6.86	51.1			
127	−70.1	−70.1 +.91	−9.1	+.67 −9.0 ✓	24.22 ✓	13.1 ✓	+.40 ✓	+4.6	✓
	−33.0	−33.0 +.04	−6.3	+.32 −4.2	23.64 ✓	16.2 ✓	−.18	+1.5	✓
	−25.2	−25.2 +.33	−2.6	+.24 −3.2	23.88 ✓	19.5 ✓	+.06	−1.8	✓
		−.96 ✓	+12.8 ✓		23.55	22.1	−.27	−4.4	✓
					23.82	17.7			

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	zone
7798 7.7	L_1 95.6	L_1 95.6	1	21 55 41.95	L_1 95.6	1	13 30 2.3	11
21 55 41.74	K 22.8	K 22.8	2	55 42.14	K 22.8	2	30 8.6	117,1
13 30 15.3	R_1 49.0	M_1 46.3	2	55 41.88	M_1 46.3	2	30 7.7	
	L_3 46.7, ..	L_3 46.7	1	55 41.65	L_3 ..	..	..	
	M_1 46.3	R_1 49.0	1	55 41.87	R_1 49.0	1	30 11.2	
	L_4 56.4, 57.2	L_4 56.4	3	55 41.75	L_4 57.2	2	30 9.5	
	St_2 59.7	Wc 57.8	2	55 41.83	Wc 57.8	2	30 12.4	
	Wc 57.8	St_2 59.7	2	55 41.68	St_2 59.7	2	30 9.5	
	Sj 62.7	Sj 62.7	1	55 41.79	Sj 62.7	1	30 10.4	
	A 78.9	Q 69.6	4	55 41.70	Q 65.2	2	30 12.0	
9807	Q 69.6, 65.2	A 78.9	1	55 41.78	A 78.9	1	30 13.1	
	C_2 95.0	H 91.1	3	55 41.74	H 91.1	3	30 15.3	
	H 91.1	C_2 95.0	2	55 41.79	C_2 95.0	2	30 16.1	
	E 00.7	E 00.7	3	55 41.73	E 00.7	3	30 16.2	
7799 8.7	K 22.9	K 22.9	1	21 55 51.15	K 22.9	1	11 49 20.4	12
21 55 50.68	R, 48.0	M_1 46.6	1	55 50.66	M_1 46.6	1	49 22.8	
11 49 25.2	M_1 46.6	R, 48.0	2	55 51.04	R, 48.0	2	49 24.5	
	St_1 [60.0]	St_1 60.0	2	55 50.76	St_1 60.0	2	49 27.4	
	A 65.6	A 65.6	1	55 50.97	A 65.6	1	49 20.7	
	H 93.6	H 93.6	4	55 50.68	H 93.6	4	49 25.2	
	E 05.1	E 05.1	5	55 50.82	E 05.1	5	49 24.7	
7800 next page								
7801 8.7	L_1 00.8	L_1 00.8	1	21 56 ~~17.78~~ 18.78	L_1 00.8	1	12 28 ~~22.2~~ 27.3	3
21 56 19.35	K .., 03.8	K 22.9	1	56 ~~17.84~~ 19.09	K 03.8	1	28 33.3	12
12 28 32.4	R, 48.0	R, 48.0	2	56 19.20	R, 48.0	..	28 31.	
	L_4 .., 61.7	St_1 60.0	1	56 19.31	St_1 60.0	1	28 28.3	
	St_1 [60.0]	L_4 ..	..	56 ..	L_4 61.7	2	28 28.8	
	Wc 72.8, 71.0	Q 65.6 61.6	5 10	56 19.19 ~~18.00~~	Q ~~66.0~~	4 ~~7~~	28 ~~20.7~~ 30.2	
9812	Q 61.6, 66.0 65.6 71.2	Wc 72.8	4	56 19.24	Wc 71.0 71.2	5	28 28.7	
	H 91.2	H 91.2	3	56 19.35	H 91.2	3	28 32.4	

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Zones	α Eph.-H.	δ	α Bz.-H.	δ	α C-H.	δ	α adj.	δ	Δα	Δδ	
11	-95.5	-95.5	+.21	-13.0	+.18	-9.8	41.92	5.5	+.12	+6.2	✓
117,119	-68.3	-68.3	+.40	-6.7	+.10	-7.5	41.84	7.8	+.04	+3.9	✓
	-44.8	-44.8	+.14	-7.6	+.08	-4.7	41.84	8.7	+.04	+3.0	✓
	-44.4	..	-.09	..	+.08	..	41.64	...	-.16	...	✓
	-42.1	-42.1	+.13	-4.1	+.07	-4.5	41.95	10.5	+.15	+1.2	✓
	-34.7	-33.9	+.01	-5.8	+.06	-3.6	41.77	10.4	-.03	+1.3	✓
	-33.3	-33.3	+.09	-2.9	+.06	-3.5	41.83	13.2	+.03	-1.5	✓
	-31.4	-31.4	-.06	-5.8	+.05	-3.3	41.77	11.0	-.03	+0.7	✓
	-28.4	-28.4	+.05	-4.9	+.05	-3.0	41.83	11.5	+.03	+0.2	✓
	-21.5	-25.9	-.04	-3.3	+.04	-2.7	41.79	12.5	-.01	-0.8	✓
	-12.2	-12.2	+.04	-2.2	+.02	-1.3	41.78	13.1	-.02	-1.4	✓
	-81.9	-.17	+10.6				41.74	15.3	-.06	-3.6	✓
	+3.9	+3.9	+.05	+0.8	-.01	+0.4	41.95	16.6	-.05	-4.9	✓
	+9.6	+9.6	-.01	+0.9	-.02	+1.0	41.71 / 41.80	16.1 / 11.7	-.09	-4.4	✓
127	-70.7	-70.7	+.47	-4.8	+.23	-4.7	50.91	20.5	+.07	+3.3	✓
	-47.0	-47.0	-.02	-2.4	+.16	-3.1	50.62	23.8	-.22	0.0	✓
	-45.6	-45.6	+.36	-0.7	+.15	-3.0	51.12	23.8	+.28	0.0	✓
	-33.6	-33.6	+.08	+2.2	+.11	-2.2	50.81	27.9	-.03	-4.1	✓
	-28.0	-28.0	+.29	-4.5	+.09	-1.8	50.97	20.7	+.13	+3.1	✓
		-.33	+6.6				50.68	25.2	-.16	-1.4	✓
	+11.5	+11.5	+.14	-0.5	-.04	+0.8	50.80 / 50.84	24.6 / 23.8	-.04	-0.8	✓
39	-90.4	-90.4	-1.57	-10.2	-1.53	-6.5	~~18.82~~ [17.82]	~~31.0~~ ~~25.9~~	-.35 [-1.24]	-.04 +2.0	✓
127	-68.3	-68.3	-1.51	-15.6	-1.75	-15.5	[17.60] [18.85]	~~34.6~~ [16.9] ~~28.2~~	-.32 [-1.46]	4.0 [+11.0]	✓
	-43.2	-43.2	-.15	-1.4	-.89	-6.0	19.28	[30±]	+.11 ~~+.22~~	..	✓
	-31.2	-31.2	-.04	-4.1	-.65	-4.3	19.36	28.8	+.19 +.30	+1.8 -0.9	✓
	..	-29.5	..	-3.6	..	-4.1	...	29.7	..	+0.9 -1.8	
	-29.6	-25.2	-1.35	-11.7	-.61	-3.5	~~19.28~~ 18.09	~~21.2~~	+.11	+6.7	✓
	-18.4	-20.2	-.11	-3.7	-.38	-2.8	19.24	29.5	+.07	+1.1 -1.5 -0.7	✓
	-79.4	+2.07	+13.9				19.35	~~30.7~~ 32.4	+.18	~~-4.5~~ -1.8	✓

19.17 30.6 → 19.06 27.9

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Star		Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	zone
7800	8.6	L_1 00.8	L_1 00.8	1	21 56 ~~18.78~~ 17.78	L_1 00.8	1	12 28 ~~27.3~~ 22.2	39
21	56 18.23	L_2 03.8	L_2 03.8	1	56 18.99	L_2 03.8	1	28 33.3	
12	28 22.1	K 22.9	K 22.9	1	56 ~~19.09~~ 17.84	K 22.9	1	28 ~~18.1~~ 16.8	127
		R_1 48.0	R_1 48.0	3	56 17.94	R_1 48.0	3	28 20.5	
		L_4 60.7, 59.8	L_1 60.0	3	56 17.85	L_4 59.8	7	28 19.4	
		L_1 [60.0]	L_4 60.7	4	56 18.07	L_1 60.0	3	28 20.9	
		Wc 72.8, 71.0	Q ~~65.6~~ 61.6	~~5~~ 10	56 ~~19.19~~ 18.00	Q ~~71.2~~ 66.0	5	28 19.4	
		L_5 78.8	Wc 72.8	4	56 18.19	Wc 71.0	~~4~~ 7	28 ~~30.2~~ 20.7	
	9813	Q ~~65.6, 71.2~~ 61.6, 66.0	L_5 78.8	1	56 18.23	Q ~~71.2~~	4	28 19.1	
		H 93.2	H 93.2	3	56 18.23	L_5 78.8	1	28 19.1	
						H 93.2	3	28 22.1	
7802	8.3	L_1 00.9	L_1 00.9	1	21 56 30.78	L_1 00.9	1	10 21 27.8	40
21	56 30.89	R_1 48.0	M_1 46.1	3	56 31.01	M_1 46.1	3	21 23.5	
10	21 23.0	M_1 46.1	R_1 48.0	3	56 30.80	R_1 48.0	3	21 24.6	
		L_5 81.8	L_5 81.8	2	56 31.10	L_5 81.8	2	21 22.3	
		H 89.7	H 89.7	3	56 30.89	H 89.7	3	21 23.0	
		E 04.8, 04.6	E 04.8	3	56 30.94	E 04.6	4	21 22.3	
7803	8.3	L_1 97.8		2	21 56 48.78		2	9 45 42.9	40
21	56 48.85	M_1 45.8		1	56 48.58		1	45 48.4	
9	45 49.4	B 52.7		1	56 48.88		1	45 48.0	
		Sch 58.6		1	56 49.19		1	45 47.2	
		H 91.2		3	56 48.85		3	45 49.4	
		Db 93.7		2	56 48.86		2	45 48.8	
7805	9.4	Wc 68.7, 55.8		2	21 57 25.93		2	11 8 23.4	
21	57 25.95								
11	8 22.7	H 89.7		3	57 25.95		3	8 22.7	
7806	9.2	M_1 46.6		1	21 57 40.49		1	11 55 59.6	
21	57 40.80	M_2 84.7		1	57 41.00		1	55 56.5	
11	55 58.1	H 90.1		3	57 40.80		3	55 58.1	

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zones.	α Ep-H.	δ	α Bs.-H	δ	αC.-H.	δ	α adj.	δ	Δα	Δδ
39	-92.4	-92.4	+.55	+5.2	+.59	+8.9	~~18.82~~ 17.82	~~31.0~~ 25.9	-.19	-5.0
	-89.4	-89.4	-.14	+1.2	+.66	+8.2	17.97	~~34.6~~ 31.0	+.58	~~-8.3~~
									-.04 -.27	
127	-70.3	-70.3	+.86	+6.0	+.62	+6.1	~~18.85~~ 17.60	~~28.2~~ 16.9	-.41	+4.0
	-45.2	-45.2	-.29	-1.6	+.33	+4.2	18.02	19.8	+.01 -.22	~~-5.5~~ +1.1 +2.9
	-33.2	-33.4	-.38	-2.7	+.25	+3.1	17.90	20.3	-.11 -.34	+0.6 ~~+2.4~~
	-32.5	-33.2	-.16	-1.2	+.24	+3.1	18.09	21.4	+.08 -.15	-0.5 ~~+1.3~~
	-27.6	-22.2	+.96	-2.7	+.20	+2.0	~~19.28~~ 18.09	~~20.2~~ 21.2	+.08 -.15	~~-0.3~~ ~~+1.5~~ ~~+2.5~~ +2.7
	-20.4	-22.0	-.04	+8.1	+.15	+2.0	18.19	~~30.7~~	+.18 -.05	
	-14.4	-14.4	.00	-3.0	+.11	+1.3	18.23	19.9	+.22 -.01	+1.6 ~~+2.8~~
	-81.4	-74.	-9.2				18.23	22.1	+.22 -.01	-1.2 +0.6
							18.~~36~~01	24.8 20.9		
40	-88.8	-88.8	-.11	+4.8	-.08	+7.8	30.81	30.8	-.12	-6.2
	-43.6	-43.6	+.12	+0.5	-.04	+3.8	30.97	24.5	+.04	+0.1
	-41.7	-41.7	-.09	+1.6	-.04	+3.7	30.88	23.9	-.05	+0.7
	-7.9	-7.9	+.21	-0.7	-.01	+0.7	31.10	23.1	+.17	+1.5
			+.09	-8.8			30.89	23.0	-.04	+1.6
	+15.1	+14.9	+.05	-0.7	+.01	-1.3	30.92	22.2	-.01	+2.4
							30.93	24.6		
40,1	-93.4	-93.4	-.07	-6.5	-.02	-2.7	48.83	46.7	-.01	+2.1
	-45.4	-45.4	-.27	-1.0	-.01	-1.3	48.54	49.4	-.30	-0.6
	-38.5	-38.5	+.03	-1.4	-.01	-1.1	48.80	50.4	-.04	-1.6
			+.02	+2.9			49.17	48.3	+.33	+0.5
							48.85	49.4	+.01	-0.6
	+2.5	+2.5	+.01	-0.6	.00	+0.1	48.86	48.5	+.02	+0.3
							48.84	48.8		
	-21.0	-33.9	-.02	+0.7			25.93	24.2	-.01	-0.8
							25.95	22.7	+.01	+0.7
							25.94	23.4		
	-43.5	-43.5	-.31	+1.5			40.45	0.6	-.28	-2.2
	-5.4	-5.4	+.20	-1.6			40.93	56.6	+.20	+1.8
							40.80	58.1	+.07	+0.3
							40.73	58.4		

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Star		Epoch		Eph. α		Obs.	α 1900.0		Eph. δ		Obs.	δ 1900.0		Zone
7807	7.6	L_1	95.6			1	21 58	43.38			1	13 30	6.0	11
21 58	43.05	P 379	00.0			5	58	43.34			5	30	6.3	
13 30	10.9	K	22.8			2	58	43.21			2	30	12.7	117,1
		M_1	46.4			3	58	42.98			3	30	9.7	
		L_4	56.7			2	58	43.03			2	30	12.5	
		St_2	59.7			2	58	42.92			2	30	9.3	
		L_3	62.7			1	58	43.10			1	30	10.5	
		A	78.8			1	58	42.95			1	30	16.0	
	30182	G	79.8			3	58	42.99			3	30	11.7	
		H	88.7			3	58	43.05			3	30	10.9	
		E	04.2			3	58	43.05			3	30	12.9	
7808	9.3	M_1	46.6	M_1	46.6	1	21 58	44.98	M_1	46.6	1	9 54	35.4	
21 58	45.25	M_2	87.8	D_1	84.4	3	58	45.40	D_1	84.7	2	54	35.2	
9 54	36.0	D_1	84.4, 84.7	M_2	87.8	1	58	45.06	M_2	87.8	1	54	35.4	
		H	89.1	H	89.1	3	58	45.25	H	89.1	3	54	36.0	
		Db	93.7	Db	93.7	2	58	45.27	Db	93.7	2	54	36.3	
7809	8.4	L_1	97.7			2	21 59	20.46			2	11 21	57.7	39,
21 59	19.92	K	22.9			1	59	20.20			1	21	59.5	127
11 22	7.1	L_4	60.2			2	59	20.13			2	22	4.0	
μ^2	μ	L_5	78.7			2	59	20.05			2	22	4.1	
		H	88.7			3	59	19.92			3	22	7.1	
7810	8.6	K	22.9			1	21 59	32.34			1	13 28	36.6	119
21 59	32.44	M_1	46.6			1	59	32.48			1	28	35.7	
13 28	40.6	St_2	59.7			2	59	32.06			2	28	37.3	
12		A	78.8			1	59	32.43			1	28	37.9	
μ		H	89.4, 89.6			3	59	32.44			3	28	40.6	

end of Vol. 3. Cat.

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zones	α Ep − H. δ	α Ps − H. δ		α C. − H. δ		α adj.	δ	Δα	Δδ	
11	−93.1	−93.1	+.33	−4.9	+.30	−1.7	43.35	9.2	+.27	+2.6	✓
	−88.7	−88.7	+.29	−4.6	+.09	−0.4	43.45	10.0	+.37	+1.8	✓
117,119	−65.9	−65.9	+.16	+1.8	−.14	+1.0	42.91	11.9	−.17	−0.1	✓
	−42.3	−42.3	−.07	−1.2	+.04	−0.3	42.94	10.7	−.14	+1.1	✓
	−32.0	−32.0	−.02	+1.6	+.03	−0.1	43.05	13.4	−.03	−1.6	✓
	−29.0	−29.0	−.13	−1.6	+.03	−0.1	43.01	10.8	−.07	+1.0	✓
	−26.0	−26.0	+.05	−0.4	+.03	−0.1	43.14	11.6	+.06	+0.2	✓
	−9.9	−9.9	−.10	+5.1	+.01	0.0	42.95	16.0	−.18	−4.2	✓
	−8.9	−8.9	−.06	+0.8	+.01	0.0	43.05	12.3	−.03	−0.5	✓
	−79.5	−.10		+0.4			43.05	10.9	−.03	+0.9	✓
	+15.5	+15.5	.00	+2.0	−.02	+0.1	43.03	12.8	−.05	−1.0	✓
							43.08	11.8			
	−42.5	−42.5	−.27	−0.6			44.94	36.4	−.21	−0.5	✓
	−4.7	−4.4	+.15	−0.8			45.32	35.6	+.17	+0.3	✓
	−1.3	−1.3	−.19	−0.6			44.99	35.5	−.16	+0.4	✓
							45.25	36.0	+.10	−0.1	✓
	+4.6	+4.6	+.02	+0.3			45.27	36.0	+.12	−0.1	✓
							45.15	35.9			
39,3	−91.0	−91.0	+.54	−9.4	+.60	−5.0	20.52	2.1	+.40	+1.6	✓
127	−65.8	−65.8	+.28	−7.6	+.04	−7.5	19.96	59.6	−.16	+4.1	✓
	−28.5	−28.5	+.21	−3.1	+.12	−2.3	20.15	4.9	+.03	−1.2	✓
	−10.0	−10.0	+.13	−3.0	+.04	−0.8	20.05	4.9	−.07	−1.2	✓
	−78.4	−.41		+8.0			19.92	7.1	−.20	−3.4	✓
							20.12	3.7			
119	−66.5	−66.7	−.10	−4.0	−.38	−4.5	32.06	36.1	−.24	+1.9	✓
	−42.8	−43.0	+.04	−4.9	−.24	−2.9	32.44	36.7	+.14	+1.3	✓
	−29.7	−29.9	−.38	−3.3	−.17	−2.0	32.15	38.8	−.15	−0.8	✓
	−10.6	−10.8	−.01	−2.7	−.06	−0.7	32.43	37.9	+.13	+0.1	✓
		+5.7		+6.7			32.44	40.6	+.14	−2.6	✓
							32.30	38.0			

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Star	Epoch		Eph. α		Obs.	α 1900.0	Eph. δ		Obs.	δ 1900.0
7811 8.9.	L_1	94.6.			1.	22 0 15.04.			1.	10 23 1.5.
22 0 15.42.	K	22.9.			1.	0 15.25.			1.	22 52.3.
10 22 56.7.	M_1	46.2.			2.	0 15.35.			2.	22 55.6.
$\mu^2 \cdot \mu^2$.	Wc	61.9, 58.3			3.	0 15.40.			4.	22 56.4.
	H	93.1.			6.	0 15.42.			6.	22 56.7.
7813 9.4.	A	76.8.			3.	22 0 34.01.			3.	11 17 20.6.
22 0 33.77.										
11 17 20.0.	H	95.5.			3.	0 33.77.			3.	17 20.0.
7814 8.8.	M_1	46.6.			2.	22 1 26.414.			2.	12 59 54.7.
22 1 26.73.										
12 59 57.0.	H	90.4.			3.	1 26.73.			3.	59 57.0.
7815 8.9.	L_1	00.8.			1.	22 1 32.89.			1.	10 53 33.7.
22 1 32.73.	K	22.9.			1.	1 32.04.			1.	53 41.4.
10 53 44.5.	M_1	46.6.			1.	1 32.85.			1.	53 47.6.
	St_1	[60.0]			1.	1 32.53.			1.	53 44.8.
	H	89.7, 88.7			3.	1 32.73.			2.	53 44.5.
7816 7.3.	L_1	00.8.	L_1	00.8.	1.	22 1 58.54.	L_1	00.8.	1.	10 56 5.0.
22 1 58.40.	K	22.9.	K	22.9.	2.	1 58.65.	K	22.9.	2.	56 6.2.
10 56 3.4.	M_1	46.6.	M_1	46.6.	1.	1 58.65.	M_1	46.6.	1.	56 1.6.
	L_4	61.4, 60.7	St_1	60.0.	3.	1 58.48.	St_1	60.0.	3.	56 4.1.
	St_1	[60.0]	L_4	61.4.	3.	1 58.50.	L_4	60.7.	2.	56 4.1.
	Wc	64.7, 61.1	Wc	64.7.	2.	1 58.44.	Wc	61.1.	3.	56 4.8.
	A	65.7.	A	65.7.	2.	1 58.46.	A	65.7.	2.	56 6.0.
30249.	G	78.7.	G	78.7.	3.	1 58.48.	G	78.7.	3.	56 4.6.
	H	91.2.	H	91.2.	3.	1 58.40.	H	91.2.	3.	56 3.4. 5.0.
	E	03.7.	E	03.7.	3.	1 58.48.	E	03.7.	3.	56 5.7.

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zones.	α Eph-Hd	δ	α Bs.-Hd.	δ	α C.-Hd.	δ	α adj.	δ	Δα	Δδ
1	-98.5	-98.5	-.38	+4.8	-.31	+0.1	15.11	6.2	-.14	-8.1
125	-70.2	-70.2	-.17	-4.4	-.39	-3.1	15.03	53.6	-.22	+4.5
	-46.9	-46.9	-.07	-1.1	-.19	-0.8	15.31	56.6	+.06	+1.5
	-31.2	-34.8	-.02	-0.3	-.13	-0.6	15.40	57.2	+.15	+0.9
		-84.4	+.41	+1.8			15.42	56.7	+.17	+1.4
							15.25	58.1		
	-18.7	-18.7	+.24	+0.6			34.01	20.6	+.12	-0.3
							33.77	20.0	-.12	+0.3
							33.89	20.3		
	-43.8	-43.8	-.29	-2.3			26.39	55.8	-.17	+0.6
							26.73	57.0	+.17	-0.6
							26.56	56.4		
39	-88.9	-87.9	+.16	-10.8	+.20	-7.1	32.93	37.4	+.17 +.36	+6.1
127	-66.8	-65.8	-.69	-3.1	-.93	-3.0	[31.80]	41.5	ab -.77	+2.0
	-43.1	-42.1	+.12	+3.1	-.20	-2.8	32.80	48.7	+.04 +.23	-5.2
	-29.7	-28.7	-.20	+0.3	-.14	-1.9	32.59	45.2	-.17 +.02	-1.7
		-77.8	-76.8	+.47	+6.6		32.73	44.5	-.03 +.16	-1.0
							32.576	43.5		
39	-90.4	-90.4	+.14	+1.6	+.18	+5.3	58.58	8.7	+.09	-3.3
127,129	-68.3	-68.3	+.25	+2.8	+.08	+3.1	58.48	6.5	-.01	-1.1
	-44.6	-44.6	+.25	-1.8	+.07	+2.4	58.60	2.7	+.11	+2.7
	-31.2	-31.2	+.08	+0.7	+.05	+1.7	58.54	4.9	+.05	+0.5
	-29.8	-30.5	+.10	+0.7	+.05	+1.6	58.52	5.0	+.03	+0.4
	-26.5	-30.1	+.04	+1.4	+.04	+1.6	58.44	5.6	-.05	-0.2
	-25.5	-25.5	+.06	+2.6	+.04	+1.4	58.46	6.0	-.03	-0.6
	-12.5	-12.5	+.08	+1.2	+.02	+0.7	58.46	5.2	-.03	+0.2
		-79.4	-.16	-5.3			58.40	5.0 3.4	-.09	+2.0 0.5
	+12.5	+12.5	+.08	+2.3	-.02	-0.7	58.46	5.6	-.03	-0.2
							58.49	5.43		

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zone
7817 8.8	L1 94.6	L1 94.6	1	22 1 59.48	L1 94.6	1	9 39 58.4	1
22 1 59.38	K 22.9	K 22.9	1	1 59.83	K 22.9	1	40 12.3	12
9 40 11.1	St1 [60.0]	St1 60.0	1	1 59.34	Nc 58.4	4	40 12.0	
	Nc 64.8, 58.4	Sj 62.8	2	1 59.46	St1 60.0	1	40 14.4	
	Sj 62.8	Nc 64.8	2	1 59.38	Sj 62.8	2	40 19.5	
	A 73.8	A 73.8	4	1 59.45	A 73.8	4	40 12.4	
	H 90.4	H 90.4	3	1 59.38	H 90.4	3	40 11.1	
	Db 93.7	Db 93.7	2	1 59.43	Db 93.7	2	40 11.6	
7818 7.7	L1 00.9	L1 00.9	1	22 2 27.33	L1 00.9	1	10 33 57.0	4
22 2 27.21	K 23.7	K 23.7	2	2 27.51	K 23.7	2	33 59.7	184,1
10 33 58.7	M1 45.8	M1 45.8	1	2 27.22	M1 45.8	1	33 58.2	
	L4 54.7	L4 54.7	1	2 27.12	L4 54.7	1	33 58.6	
	St1 [60.0]	St1 60.0	2	2 27.30	Nc 58.5	4	33 57.9	
	Nc 61.9, 58.5	Nc 61.9	3	2 27.33	St1 60.0	2	33 58.7	
9865	Q 70.8, 69.0	Q 70.8	2	2 27.21	Q 69.0	4	(32) 57.4	
30263	G 77.9	G 77.9	4	2 27.34	G 77.9	4	33 58.1	
	L5 79.7	L5 79.7	1	2 27.24	L5 79.7	1	33 57.6	
	V 85.5	V 85.5	4	2 27.24	V 85.5	4	33 57.6	
	H 89.7	H 89.7	3	2 27.21	H 89.7	3	33 58.7	
7820 9.1	Sj 62.7		1	22 2 46.39		1	9 51 11.6	
22 2 47.30	D1 81.8		1	2 47.50		1	51 7.8	
9 51 12.2	H 92.0		4	2 47.30		4	51 12.2	
	Db 94.3		2	2 47.30		2	51 12.8	
7821 8.9	M1 46.6		1	22 2 56.00		"	12 22 ...	
22 2 55.87	M 84.7		1	2 56.01		1	22 19.0	
12 22 22.2	H2 91.1		3	2 55.87		3	22 22.2	

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Zones.	α Ep-H d	α Bs.-H. d.	α G.-H. d	α adj.	δ	Δα	Δδ	
1	-95.8 -95.8	+.10 -12.7	+17 -8.0	59.55	3.1	+.09	+8.3	G
125	-67.5 -67.5	+.45 +1.2	+.23 +2.5	59.61	13.6	+.15	-2.2	
	-30.4 -32.0	-.04 +0.9	+.08 -1.1	59.40	12.8	-.06	-1.4	
	-27.6 -30.4	+.08 +3.3	+.07 -1.0	59.50	14.9	+.04	-3.5	
	-25.6 -27.6	.00 -0.6	+.06 -0.9	59.38	11.6	-.08	-0.2	
	-16.6 -16.6	+.07 +1.3	+.04 -0.6	59.45	12.4	-.01	-1.0	
	-81.6 -.25	+3.4		59.38	11.1	-.08	+0.3	
	+3.3 +3.3	+.05 +0.5	-.01 +0.1	59.43	11.3	-.03	+0.1	
				59.46	11.4			
40	-88.8 -88.8	+.12 -1.7	+.15 +1.3	27.36	0.0	+.09	-1.2	
184,186	-66.0 -66.0	+.30 +1.0	+.12 -0.6	27.33	58.1	+.06	+0.7	
	-43.9 -43.9	+.01 -0.5	+.07 +0.2	27.17	59.3	-.10	-0.5	
	-35.0 -35.0	-.09 -0.1	+.06 +0.2	27.14	59.5	-.13	-0.7	
	-29.7 -31.2	+.09 -0.8	+.05 +0.2	27.36	58.7	+.09	+0.1	
	-27.8 -29.7	+.12 0.0	+.05 +0.1	27.33	59.4	+.06	-0.6	
	-18.9 -20.7	.00 -1.3	+.03 +0.1	27.30	[57.9]	+.03	[ac +0.9]	Error in Decat
	-11.8 -11.8	+.13 -0.6	+.02 +0.1	27.32	58.7	+.05	+0.1	
	-10.0 -10.0	+.03 -1.1	+.02 0.0	27.24	58.4	-.03	+0.4	
	-4.2 -4.2	+.03 -1.1	+.01 0.0	27.22	57.7	-.05	+1.1	
	-77.4 -.17	-0.5		27.21	58.7	-.06	+0.1	
				27.27	58.8	(mth)		
	-29.3 -29.3	-.91 -0.6		[46.43]	12.7	[ab -.91]	-1.3	
	-10.2 -10.2	+.20 -4.4		47.42	8.2	+.08	+3.2	
	+2.3 +2.3	.00 +0.6		47.30	12.2	-.04	-0.8	
				47.30	12.5	-.04	-1.1	
				47.34	11.4			
	-44.5 -44.5	+.13 ..		55.95	##	+03	..	
	-6.4 -6.4	+.14 -3.2		5[5]4.94	19.1	+02	+1.5	
				55.87	22.2	-.05	-1.6	
				55.92	20.6			

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0
7822 7.8.	L_1	97.7	L_1	97.7	2	22 3 13.02	L_1	97.7	2	12 6 2.1
22 3 13.09.	K	22.9	K	22.9	2	3 13.16	K	22.9	2	6 6.7
12 6 7.9	L_3	48.7 ..	M_1	46.3	2	3 12.99	M_1	46.3	2	6 4.7
	M_1	46.3	Mc	47.6	2	3 13.08	L_3	..	..	..
	St_1	[60.0]	L_3	48.7	2	3 13.16	St_1	60.0	5	6 6.3
	Mc	47.6, 65.8	St_1	60.0	5	3 12.70	Sj	62.8	1	6 4.8
	Sj	62.8	Sj	62.8	1	3 13.08	Mc	65.8	3	6 7.7
	H	90.1	H	90.1	3	3 13.09	H	90.1	3	6 7.9
	E	03.2	E	03.2	3	3 13.20	E	03.2	3	6 7.8
7823 9.2.	Sj	62.7			1	22 3 20.48			1	10 7 40.1
22 3 20.59.										
10 7 38.6.	H	91.0			3	3 20.59			3	7 38.6
7824 7.1.	L_1	95.6	L_1	95.6	1	22 3 23.66	L_1	95.6	1	13 47 17.9
22 3 23.96	K	22.8	K	22.8	2	3 24.17	K	22.8	2	47 22.1
13 47 22.6.	M_1	46.2	M_1	46.2	2	3 23.72	M_1	46.2	2	47 21.1
	St_2	59.7	St_2	59.7	2	3 23.71	St_2	59.7	2	47 21.1
	A	78.8	Q	71.1	3	3 23.75	Q	67.8	2	47 23.5
	Q	71.1, 67.8	G	77.8	4	3 23.93	G	77.8	4	47 22.5
	G	77.8	A	78.8	1	3 23.68	A	78.8	1	47 26.9
	H	91.1	H	91.1	3	3 23.96	H	91.1	3	47 22.6
	Sk	95.2	Sk	95.2	2	3 23.94	Sk	95.2	2	47 23.1
7826 9.0.	K	23.7			1	22 3 45.22			1	10 30 49.0
22 3 45.11	M_1	46.6			1	3 45.48			1	30 46.8
10 30 45.9	St_1	[60.0]			2	3 45.00			2	30 47.2
	H	91.1			3	3 45.11			3	30 45.9

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zones	α Ep - H. d.	α Bs. - H. d.	α C. - H. d.	α adj.	δ	Δα	Δδ
3,39	-92.4 -92.4	-.07 -5.8	-.01 -1.4	13.08	6.5	+.04	+0.5
127,129	-67.2 -67.2	+.07 -1.2	-.10 -0.9	12.99	7.0	-.05	0.0
	-43.8 -43.8	-.10 -3.2	-.03 -0.6	12.94	5.8	-.10	+1.2
	-42.5 ..	-.01 ..	-.03 ..	13.08	...	+.04	..
	-41.4 -30.1	+.07 -1.6	-.03 -0.4	13.15	7.0	+.11	0.0
	-30.1 -27.3	-.39 -3.1	-.02 -0.4	12.76	5.9	-.28	+1.1
	-27.3 -24.3	-.01 -0.2	-.02 -0.3	13.12	8.5	+.08	-1.5
	-79.8	+.07 +1.4		13.09	7.9	+.05	-0.9
	+13.1 +13.1	+.11 -0.1	+.01 +0.2	13.18	7.7	+.14	-0.7
				13.04	7.0		
	-28.3 -28.3	-.11 +1.5		20.52	41.2	-.04	-1.3
				20.59	38.6	+.03	+1.3
				20.56	39.9		
11	-95.5 -95.5	-.30 -4.7	-.33 -1.5	23.63	21.1	-.18	+1.9
117,119	-68.3 -68.3	+.21 -0.5	-.09 -1.3	23.87	21.3	+.06	+1.7
	-44.9 -44.9	-.24 -1.5	-.12 -0.8	23.67	22.2	-.14	+0.8
	-31.4 -31.4	-.25 -1.5	-.08 -0.5	23.81	22.6	.00	+0.4
	-20.0 -23.3	-.21 +0.9	-.05 -0.4	23.84	24.0	+.03	-1.0
	-13.3 -13.3	-.03 -0.1	-.03 -0.2	23.91	23.1	+.10	-0.1
	-12.3 -12.3	-.28 +4.3	-.03 -0.2	23.68	26.9	-.13	-3.9
	-81.9	+.26 +1.7		23.96	22.6	+.15	+0.4
	+4.1 +4.1	-.02 +0.5	+.01 +0.1	23.91	23.5	+.10	-0.5
				23.81	23.0		
184	-67.4 -67.4	+.11 +3.1	-.08 +1.7	45.03	47.6	-.13	-0.4
	-44.5 -44.5	+.37 +0.9	-.05 +1.1	45.43	47.9	+.27	-0.7
	-31.1 -31.1	-.11 +1.3	-.04 +0.8	45.06	47.6	-.10	-0.4
		+.12 -2.5		45.11	45.9	-.05	+1.3
				45.16	47.2		

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7827 8.6	R, 49.0	M, 45.8	1	22 3 48.18	M, 45.8	1	11 0 54.6
22 3 48.28	M, 45.8	R, 49.0	1	3 48.09	R, 49.0	1	0 59.2
11 0 53.9	A 78.4	A 78.4	1	3 48.36	A 78.4	1	0 53.7
	H 89.7	H 89.7	3	3 48.28	H 89.7	3	0 53.9
7828 7.8	L, 97.7		2	22 3 57.53		2	11 51 11.2
22 3 57.64	K 22.9		2	3 57.87		2	51 16.4
11 51 19.1	M, 46.4		3	3 57.65		3	51 16.1
	L_4 54.7 58.6		1	3 57.48		1	51 15.4
	St, [60.0]		2	3 57.53		2	51 18.8
	L_5 79.8		1	3 57.59		1	51 17.2
	H 90.8		4	3 57.64		4	51 19.1
7829 9.0	K 22.9		1	22 4 10.33		1	13 25 53.7
22 4 9.71	St_2 59.7		2	4 9.73		2	25 53.6
13 25 55.4	H 90.8		3	4 9.71		3	25 55.4
7830 8.9	A 78.8		1	22 4 21.33		1	13 37 20.9
22 4 21.32	H 92.8		3	4 21.32		3	37 23.2
13 37 23.2	Sk 95.2		2	4 21.41		2	37 21.3
7831 9.3	M, 45.8		1	22 4 37.73		1	11 32 42.0
22 4 37.74	M_2 84.7		1	4 37.64		1	32 42.3
11 32 42.8	H 92.2		4	4 37.74		4	32 42.8
7832 9.1	L, 94.6		1	22 4 50.93		1	10 15 8.5
22 4 52.34	M, 46.2		2	4 52.58		2	15 10.9
10 15 11.7	D, 83.7		1	4 52.45		1	15 11.7
	H 89.7		3	4 52.34		3	15 11.7

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Jones.	α Ep − H.	δ	α Bs. − H.	δ	α C. − H.	δ	α adj.	δ	Δα	Δδ	
	−43.9	−43.9	−.10	+0.7			48.13	55.7	−.11	−0.3	✓
	−40.7	−40.7	−.19	+5.3			48.17	58.5	−.07	−3.1	✓
	−11.3	−11.3	+.08	−0.2			48.36	53.7	+.12	+1.7	✓
							48.28	53.9	+.04	+1.5	✓
							48.24	55.4			
3,39	−93.1	−93.1	−.11	−7.4	−.05	−3.0	57.59	16.1	−.01	+1.5	✓
127,129	−67.9	−67.9	+.23	−2.7	+.06	−2.4	57.70	16.7	+.10	+0.9	✓
	−44.4	−44.4	+.01	−3.0	.00	−1.5	57.60	17.2	.00	+0.4	✓
	−36.1	−32.2	−.16	−3.7	.00	−1.1	57.50	16.3	−.10	+1.3	✓
	−30.8	−30.8	−.11	−0.3	.00	−1.0	57.59	19.5	−.01	−1.9	✓
	−11.0	−11.0	−.05	−1.9	.00	−0.4	57.59	18.0	−.01	−0.4	✓
	−80.5	−.01	+3.4				57.64	19.1	+.04	−1.5	✓
							57.60	17.6			
119	−67.9	−67.9	+.62	−1.7	+.34	−2.2	10.05	52.2	+.19	+2.2	✓
	−31.1	−31.1	+.02	−1.8	+.16	−1.0	9.83	55.1	−.03	−0.9	✓
		−.50	+3.2				9.71	55.4	−.15	−1.2	✓
							9.86	54.2			
	−14.0	−14.0	+.01	−2.3			21.33	20.9	−.01	+1.0	✓
	—	—	—	—			21.32	23.2	−.02	−1.3	✓
	+2.4	+2.4	+.09	−1.9			21.38	21.7	+.04	+0.2	✓
							21.34	21.9			
	−46.4	−46.4	−.01	−0.8			37.68	43.1	+.02	−0.3	✓
	−7.5	−7.5	−.10	−0.5			37.57	42.4	−.09	+0.4	✓
							37.74	42.8	+.08	0.0	✓
							37.66	42.8			
1	−95.1	−95.1	−1.41	−3.2	−1.34	+1.5	[51.00]	13.2	[−1.41] ab	−1.0	✓
	−43.5	−43.5	+.24	−0.8	−.61	+0.7	52.53	12.0	+.12	+0.2	✓
	−6.0	−6.0	+.11	0.0	−.08	+0.1	52.37	12.1	−.04	+0.1	✓
		+1.41	−1.6				52.34	11.7	−.07	+0.5	✓
							52.41	12.2			

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0
7833 9.0	L_1 95.6	L_1 95.6	1	22 4 55.08	L_1 95.6	1	12 49 44.6
22 4 54.65	K_1 22.9	K 22.9	1	4 55.31	K 22.9	1	49 35.7
12 49 36.8	M_1 45.8	M_1 45.8	1	4 55.14	M_1 45.8	1	49 36.5
	L_4 58.3, 61.8	L_4 58.3	2	4 54.82	St_2 59.7	2	49 38.9
	St_2 59.7	St_2 59.7	2	4 54.40	L_4 61.8	1	49 39.0
	L_5 79.7	L_5 79.7	1	4 54.82	L_5 79.7	1	49 37.0
	H 89.7, 89.3	H 89.7	3	4 54.65	H 89.3	3	49 36.8
7834 8.1	L_1 97.8		2	22 5 3.22		2	9 52 43.3
22 5 3.62	K 23.4		3	5 3.70		3	52 47.7
9 52 45.6	M_1 44.9		1	5 3.30		1	52 46.3
	L_4 56.7, 58.7		2	5 3.50		1	52 45.0
	St_1 [60.0]		1	5 3.68		1	52 45.0
	L_3 62.7		1	5 3.49		1	52 40.8
	L_5 78.7		2	5 3.66		2	52 46.5
	H 90.5		5	5 3.62		5	52 45.6
	Dr 93.7		2	5 3.61		2	52 45.8
7835 6.5	P_{418} 00.0	P 00.0	9	22 5 11.45	P 00.0	9	11 18 46.2
22 5 11.75	K 22.9	K 22.9	1	5 11.67	K 22.9	1	18 52.1
11 18 45.1	L_3 49.0, 45.6	L_3 49.0	9	5 11.63	L_3 45.6	2	18 48.7
	St_1 [60.0]	St_1 60.0	2	5 11.39	St_1 60.0	2	18 46.8
	A 78.9	G 78.7	3	5 11.67	G 78.7	3	18 45.9
	G 78.7	A 78.9	1	5 11.72	A 78.9	1	18 46.1
	H 91.0	H 91.0	3	5 11.75	H 91.0	3	18 45.1
	E 99.4	E_0 99.4	3	5 11.73	E_0 99.4	3	18 46.2
7836 9.1	M_1 45.8		1	22 5 12.51		1	11 33 13.8
22 5 13.11	M_2 84.7		1	5 12.82		1	33 11.0
11 33 16.2	H 91.1		3	5 13.11		3	33 16.2

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zones	α Ep−H	δ	α Ps.−H	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ	
11	−94.1	−94.1	+.43	+7.8	+.40	+11.0	55.05	47.8	+.19	−8.4	✓
127	−66.8	−66.8	+.66	−1.1	+.42	−1.0	55.07	35.8	+.21	+3.6	✓
	−43.9	−43.9	+.49	−0.3	+.22	+2.7	55.09	37.6	+.23	+1.8	✓
	−31.4	−30.0	+.17	+2.1	+.16	+1.9	54.84	40.4	−.02	−1.0	✓
	−30.0	−27.9	−.25	+2.2	+.15	+1.7	54.50	39.9	−.36	−0.5	✓
	−10.0	−10.0	+.17	+0.2	+.05	+0.6	54.82	37.8	−.04	+1.6	✓
	−80.4	−.51		−6.2			54.65	36.8	−.21	+2.6	✓
							54.86	39.4			
9,40	−92.7	−92.7	−.40	−2.3	−.35	+1.5	3.27	47.1	−.25	−1.2	✓
125 (184,186)	−67.1	−67.1	+.08	+2.1	−.11	+1.5	3.51	44.1	−.01	−1.2	✓
	−45.6	−45.6	−.32	+0.7	−.13	+0.9	3.25	47.4	−.27	−1.5	✓
	−33.8	−31.8	−.12	−0.6	−.10	+0.6	3.52	45.9	.00	0.0	✓
	−30.5	−30.5	+.06	−0.6	−.09	+0.6	3.74	45.6	+.22	+0.3	✓
	−27.8	−27.8	−.13	−4.8	−.08	+0.5	3.53	41.9	+.01	+4.0	✓
	−11.8	−11.8	+.04	+0.9	−.03	+0.2	3.66	47.3	+.14	−1.4	✓
	−79.9	+.29		−1.9			3.62	45.6	+.10	+0.3	✓
	+3.2	+3.2	−.01	+0.2	+.09	−0.1	3.61	45.5	+.09	+0.4	✓
							3.52	45.9			
	−91.0	−91.0	−.30	+1.1	−.43	+9.5	11.56	49.9	−.05	−2.1	✓
127	−68.1	−68.1	−.08	+7.0	−.32	+7.1	11.43	52.2	−.18	−4.4	✓
	−42.0	−45.4	−.12	+3.6	−.20	+4.7	11.62	49.0	+.01	−1.2	✓
	−31.0	−31.0	−.36	+1.7	−.15	+3.2	11.45	44.6	−.16	+0.2	✓
	−12.3	−12.3	−.08	+0.8	−.06	+1.3	11.65	46.5	+.04	+1.3	✓
	−12.1	−12.1	−.03	+1.0	−.06	+1.3	11.72	46.1	+.11	+1.7	✓
	—	—	+.47	−10.4			11.75	45.1	+.14	+2.7	✓
	+8.4	+8.4	−.02	+1.1	+.04	−0.9	11.71	46.1	+.10	+1.7	✓
							11.61	47.8			
	−45.3	−45.3	−.60	−2.4			12.46	14.9	−.31	−0.8	✓
	−6.4	−6.4	−.29	−5.2			12.75	11.1	−.02	+3.0	✓
							13.11	16.2	+.34	−2.1	✓
							12.77	14.14			

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	zone
7837 6.3	L_1 97.7	L_1 97.7	2	22 5 16.56	L_1 97.7	2	12 3 23.2	3,3
22 5 16.74	P 00.0	P 00.0	18	5 16.56	P 00.0	12	3 20.8	
12 3 24.2	K 22.9	K 22.9	2	5 16.76	K 22.9	2	3 25.0	127,12
e Aquar.	R_1 47.0	M_1 46.6	2	5 16.36	M_1 46.6	2	3 24.3	
	L_3 48.8 ..	R_1 47.0	3	5 16.62	R_1 47.0	3	3 26.1	
	M_1 46.6	Wc 47.6	22	5 16.63	L_3 "	..	..	
	L_4 61.4, 64.8	L_3 48.8	7	5 16.72	Wc 54.5	12	3 24.3	
	St 1 [60.0]	St 1 60.0	2	5 16.67	St 1 60.0	2	3 25.0	
	Wc 47.6, 54.5	Lr L_4 61.4	3	5 16.66	Lr 63.9	1	3 25.0	
		Lr 63.9	1	5 16.86	L_4 64.8	2	3 25.0	
	Q 67.8, 70.0	Q 67.8	3	5 16.59	Q 70.0	4	3 24.1	
30315	G 77.7	G 77.7	4	5 16.73	G 77.7	4	3 23.6	
	L_5 79.0	L_5 79.0	4	5 16.67	L_5 79.0	4	3 24.9	
	H 92.4	H 92.4	3	5 16.74	H 92.4	3	3 24.2	
	E 00.8, 02.0	E 00.8	4	5 16.78	E 02.0	5	3 25.2	
7838 8.8	R_1 48.0 ..		1	22 5 25.34		..	12 9 ..	
22 5 25.49								
12 9 57.7	H 91.1		3	5 25.49		3	9 57.7	
7839 9.0	L_1 94.6 97.7		1	22 5 51.81		1	10 12 53.7	1
22 5 51.45	K 23.3		2	5 51.78		2	13 0.0	125,18
10 13 3.8	M_1 46.6		1	5 51.76		1	13 0.3	
	L_4 54.7 ..		2	5 51.57		..	..	
	St 1 [60.0]		2	5 51.49		2	13 0.7	
	L_5 78.7 ..		1	5 51.76		..	..	
	H 90.5		3	5 51.45		3	13 3.8	
7841 9.1	M_1 45.9		2	22 6 2.48		2	13 43 3.5	
22 6 2.27	A 78.8		2	6 2.30		2	43 5.0	
13 43 3.7	H 93.2		3	6 2.27		3	43 3.7	
	St 95.2		2	6 2.30		2	43 3.5	

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zones	α Eph.−H.	δ Eph.−H.	α Bes.−H.	δ Bes.−H.	α C.−H.	δ C.−H.	α adj.	δ adj.	Δα	Δδ	
3,39	−94.7	−94.7	−.18	−1.0	−.12	+3.4	16.62		27.6	−.04	−2.4 ✓
	−92.4	−92.4	−.18	−3.4	−.15	+2.5	16.67		24.5	+.01	+0.7 ✓
127,129	−69.5	−69.5	+.02	+08	−.15	+1.1	16.59		25.3	−.07	−0.1 ✓
	−45.8	−45.8	−.38	+0.1	−.07	+1.2	16.31		25.4	−.35	−0.2 ✓
	−45.4	−45.4	−.12	+1.9	−.07	+1.2	16.70		25.4	+.04	−0.2 ✓
	−44.8	..	−.11	..	−.07	..	16.63		...	−.03	.. ✓
	−43.6	−37.9	−.02	+0.1	−.07	+1.0	16.71		25.1	+.05	+0.1 ✓
	−32.4	−32.4	−.07	+0.8	−.05	+0.9	16.73		25.8	+.07	−0.6 ✓
									24.3		+0.9 ✓
	−31.0	−27.6	−.08	+0.8	−.05	+0.7	16.68		25.9	+.02	−0.7 ✓
							16.77		~~24.3~~	+.11	
	−24.6	−22.4	−.15	−0.1	−.04	+0.6	16.68		24.6	+.02	+0.6 ✓
	−14.7	−14.7	−.01	−0.6	−.02	+0.4	16.71		24.2	+.05	+1.0 ✓
	−13.4	−13.4	−.07	+0.7	−.02	+0.4	16.67		25.7	+.01	−0.5 ✓
	−82.1		+.16	−2.7			16.74		24.2	+.08	+1.0 ✓
	+8.4	+9.6	+.04	+1.0	+.01	−0.3	16.76		25.1	+.10	+0.1 ✓
							16.66		25.2		
	−43.1	−43.1	−.15	..			25.42		...	−.04	.. ✓
							25.49		57.7	+.03	.. ✓
							25.46				
1	−95.9	−95.9	+.36	−10.1	+43	−5.4	51.88		58.4	+.23	+2.5 ✓
125,186	−67.2	−67.2	+.33	−3.8	+.13	−4.0	51.58		59.8	−.07	+1.1 ✓
	−43.9	−43.9	+.31	−.35	+.15	−2.5	51.71		1.4	+.06	−0.5 ✓
	−35.8	..	+.12	..	+.12	..	51.59		...	−.06	.. ✓
	−30.5	−30.5	+.04	−3.1	+.10	−1.8	51.55		1.1	−.10	−0.2 ✓
	−11.8	−11.8	+.31	..	+.04	−0.7	51.76		...	+.11	.. ✓
	−81.6		−.34	+5.8			51.45		3.8	−20	−2.9 ✓
							51.65		0.9		
	−47.3	−47.3	+.21	−0.2			2.43		4.6	+11	−0.3 ✓
	−14.4	−14.4	+.03	+1.3			2,30		5.0	−02	−0.7 ✓
							2.27		3.7	−.05	+0.6 ✓
	+2.0	+2.0	+.03	−0.2			2.27		3.9	−05	+0.4 ✓ 2.32

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7842 8.6	L_1 97.7	L_1 97.7	2	22 6 15.02	L_1 97.7	2	11 30 59.9
22 6 14.97	K 22.9	K 22.9	1	6 15.64	K 22.9	1	31 9.9
11 31 9.8	R_1 49.0	M_1 45.4	2	6 15.05	M_1 45.4	2	31 6.8
	L_3 48.7, —	L_3 48.7	2	6 15.24	~~L_3~~ —	1	31 ~~7.0~~
	M_1 45.4	R_1 49.0	1	6 15.09	Wc 47.9	2	31 5.6
					L_3 48.7	1	31 7.0
	L_4 54.7, 57.0	L_4 54.7	2	6 15.05	R_1 49.0	1	31 1.0
	St, [60.0]	St, 60.0	2	6 14.65	L_4 57.0	4	31 6.4
	Wc 68.7, 47.9	Wc 68.7	2	6 14.99	St, 60.0	2	31 9.9
	~~H~~ 91.1	~~H~~ 91.1	3	6 14.97	H 91.1	3	31 9.8
7843 8.9	R_1 49.0		1	22 6 15.20		..	11 50 ..
22 6 15.35							
11 50 36.4	H 90.8		3	6 15.35		3	50 36.4
7844 8.7	L_1 94.6	L_1 94.6	1	22 6 31.78	L_1 94.6	1	10 14 15.8
22 6 31.57	K 23.3	K 23.3	2	6 31.72	K 23.3	2	14 16.3
10 14 18.4	M_1 46.2	M_1 46.2	2	6 31.69	M_1 46.2	2	14 18.1
	L_4 54.7, 57.4	B 52.9	2	6 31.74	B 52.9	2	14 16.7
	B 52.9	L_4 54.7	1	6 31.45	L_4 57.4	3	14 17.9
		sch 58.7	1	6 31.63	sch 58.7	1	14 19.8
	St, [60.0]	St, 60.0	2	6 31.39	St, 60.0	2	14 18.7
	S_1 62.7	S_1 62.7	1	6 31.60	S_1 62.7	1	14 17.3
	L_5 78.7	L_5 78.7	2	6 31.65	L_5 78.7	2	14 18.2
	H 90.8	H 90.8	3	6 31.57	H 90.8	3	14 18.4
7845 8.8	R_1 43.0		1	22 6 52.01		1	12 5 26.3
22 6 51.95	M_1 46.6		1	6 51.98		1	5 24.1
12 5 24.6	Wc 69.8, 58.3		4	6 52.04		2	5 26.0
	~~H~~ 91.0		3	6 51.95		3	5 24.6

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zones	α Ep − H d	α Bs. − H d	α C − H. d	α adj. δ	Δα	Δδ
3, 39	−93.4 −93.4	+.05 −9.9	+.11 −5.5	15.08	4.3	+.01 +2.8
127	−68.2 −68.2	+.67 +0.1	+.43 +0.2	15.40	10.0	+.33 −2.9
	−45.7 −45.7	+.08 −3.0	+.15 −1.5	15.00	7.9	−.07 −0.8
	−42.4 ..	+.27 −2.8	+.14 ..	15.23	~~4.3~~	+.16 −0.2
	−42.1 −43.2	+.12 −4.2	+.14 −1.4	15.17	6.4	+.10 +0.7
					7.3	−0.2
	−36.4 −42.1	+.08 −8.8	+.12 −1.4	15.07	0.3	.00 +6.8
	−31.1 −34.1	−.32 −3.4	+.10 −1.1	14.71	7.3	−.36 −0.2
	−22.4 −31.1	+.02 +0.1	+.07 −1.0	14.99	10.4	−.08 −3.3
	−80.8	−.33 +3.3		14.97 / 15.07	9.8 / 7.1	−.10 −2.7
	−41.8 ..	−.15 ..		15.28	...	−.04 ..
				15.35 / 15.32	36.4	+.03 ..
1	−96.2 −96.2	+.21 −2.6	+.28 +2.1	31.85	20.5	+.25 −1.5
125, 186	−67.5 −67.5	+.15 −2.1	−.05 −2.3	31.52	16.1	−.08 +2.9
	−44.6 −44.6	+.12 −0.3	+.06 0.0	31.64	19.2	+.04 −0.2
	−37.9 −37.9	+.17 −1.7	+.05 0.0	31.66	19.1	+.06 −0.1
	−36.1 −33.4	−.12 −0.5	+.05 0.0	31.47 / 31.66	18.8 / 20.9	−.13 +0.2 / .00 −1.9
	−30.8 −30.8	−.18 +0.3	+.04 0.0	31.45	19.2	−.15 −0.2
	−28.1 −28.1	+.03 −1.1	+.04 0.0	31.64	18.4	+.04 +0.6
	−12.1 −12.1	+.08 −0.2	+.02 0.0	31.65	19.0	+.05 0.0
	−81.8	−.14 +0.1		31.57 / 31.60	18.4 / 19.05	−.03 +0.6
	−48.0 −48.0	+.06 +1.7		52.09	25.6	+.09 0.0
	−44.4 −44.4	+.03 −0.5		51.93	25.2	−.07 +0.4
	−21.2 −32.7	+.09 +1.4		52.04	26.8	+.04 −1.2
				51.95 / 52.00	24.6 / 25.6	−.05 +1.0

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs	δ 1900.0	zon.
7846 7.1	L_1 97.7	L_1 97.7	2	22 6 57.05	L_1 97.7	2	11 33 28.4	3, 3
22 6 57.08	K 22.9	K 22.9	1	6 57.04	K 22.9	1	33 32.0	127
11 33 32.7	R_1 43.0	R_1 43.0	1	6 57.27	R_1 43.0	1	33 36.3	
	L_3 47.5, 46.9	M_1 45.4	2	6 57.01	M_1 45.4	2	33 32.2	
	M_1 45.4	L_3 47.5	21	6 57.06	L_3 46.9	11	33 31.9	
	L_4 56.4, 55.7	Wc 47.7	5	6 57.11	Wc 47.7	5	33 32.1	
	St_1 [60.0]	L_4 56.4	3	6 57.00	L_4 55.7	1	33 31.3	
	Wc 47.7	St_1 60.0	2	6 56.92	St_1 60.0	2	33 34.9	
	Sj 62.8	Sj 62.8	1	6 56.84	Sj 62.8	1	33 31.4	
	A 78.9	Q 67.3	6	6 56.92	Q 63.4	3	33 32.1	
9911	Q 67.3, 63.4	A 78.9	1	6 57.05	A 78.9	1	33 31.6	
	L_5 79.7	L_5 79.7	1	6 57.22	L_5 79.7	1	33 31.7	
	D_2 96.8	H 91.1	3	6 57.08	H 91.1	3	33 32.7	
	C_2 95.0	C_2 95.0	3	6 57.07	C_2 95.0	3	33 32.0	
	H 91.1	D_2 96.8	4	6 57.15	D_2 96.8	4	33 32.8	
7847 9.1	R_1 49.0	L_3 48.9	1	22 7 19.29	L_3 ..	..	11 54 ..	
22 7 19.03	L_3 48.9, ..	R_1 49.0	3	7 19.15	R_1 49.0	3	54 23.2	
11 54 19.3	H 91.2	H 91.2	3	7 19.03	H 91.2	3	54 19.3	
7848 8.5	K 22.9	K 22.9	1	22 7 19.64	K 22.9	1	10 55 12.2	127
22 7 19.42	R_1 50.0	M_1 45.8	1	7 19.34	M_1 45.8	1	55 10.0	
10 55 12.5	M_1 45.8	R_1 50.0	1	7 19.35	R_1 50.0	1	55 12.4	
	St_1 [60.0]	St_1 60.0	2	7 19.05	St_1 60.0	2	55 12.0	
	M_2 84.7	M_2 84.7	2	7 19.31	M_2 84.7	2	55 9.7	
	H 90.8	H 90.8	2	7 19.42	H 90.8	2	55 12.5	
	E 04.5	E 04.5	3	7 19.45	E 04.5	3	55 11.4	

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zones	α Eph − H	δ α Bes. − H	δ α C − H.	δ	α adj	δ	Δα	Δδ
3,39	−93.4	−93.4 −.03	−4.3	+.03 +0.1	57.11	32.8	+.06	+0.1
127	−68.2	−68.2 −.04	−0.7	−.28 −0.6	56.80	32.1	−.25	+0.8
	−48.1	−48.1 +.19	+3.6	−.07 −0.1	57.35	35.6	+.30	−2.7
	−45.7	−45.7 −.07	−0.5	−.07 −0.1	56.96	33.3	−.09	−0.4
	−43.6	−44.2 −.02	−0.8	−.07 −0.1	57.05	32.2	.00	+0.7
	−43.4	−43.4 +.03	−0.6	−.07 −0.1	57.11	32.9	+.06	0.0
	−34.7	−35.4 −.08	−1.4	−.05 −0.1	57.02	32.2	−.03	+0.7
	−31.1	−31.1 −.16	+2.2	−.05 −0.1	56.98	35.7	−.07	−2.8
	−28.3	−28.3 −.24	−1.3	−.04 −0.1	56.88	32.5	−.17	+0.4
	−2.38	−27.7 −.16	−0.6	−.04 −0.1	57.01	32.6	−.04	+0.3
	−12.2	−12.2 −.03	−1.1	−.02 0.0	57.05	31.6	.00	+1.3
	−11.4	−11.4 +.14	−1.0	−.02 0.0	57.22	32.5	+.17	+0.4
	−80.8	+.15 +0.3			57.08	32.7	+.03	+0.2
	+3.9	+3.9 −.01	−0.7	+.06 0.0	57.03	32.4	−.02	+0.5
	+5.7	+5.7 +.07	+0.1	+.09 0.0	57.06 / 57.05	32.6 / 32.9	+.01	+0.3
	−42.3	.. +26	..		19.28	...	+.10	..
	−42.2	−42.2 +.12	+3.9		19.23	22.5	+.05	−1.6
					19.03 / 19.18	19.3 / 20.9	−.15	+1.6
127	−67.9	−67.9 +.22	−0.3	−.02 −0.2	19.40	12.3	+.07	−0.7
	−45.0	−45.0 −.08	−2.5	−.01 −0.1	19.29	11.1	−.04	+0.5
	−40.8	−40.8 −.07	−0.1	−.01 −0.1	19.43	11.7	+.10	−0.1
	−30.8	−30.8 −.37	−0.5	−.01 −0.1	19.11	12.5	−.22	−0.9
	−6.1	−6.1 −.11	−2.8	.00 0.0	19.24	9.8	−.09	+1.8
		+.03 +0.3			19.42	12.5	+.09	−0.9
	+13.7	+13.7 +.03	−1.1	.00 0.0	19.43 / 19.33	11.3 / 11.6	+.10	+0.3

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0
7849 8.6	M, 45.8		3	22 7 39.34		2	13 30 58.9
22 7 39.00	A 78.9		1	7 39.12		1	31 4.1
13 31 7.2	H 92.7		3	7 39.00		3	31 7.2
	E 06.4		3	7 39.04		3	31 9.8
	48.0	R, 48.0	3	47.96	R, 48.0	3	8.0
7850 9.0	R, ~~50.0~~	L3 ~~48.7~~	1	22 7 ~~48.03~~	L3 ~~48.8~~	1	11 40 5.5
22 7 48.85	L3 48.7 48.8	R, ~~50.0~~	1	48.03	L3 48.8	1	5.5
11 40 10.3	H 93.8	H 93.8	4	7 47.96 48.85	R, ~~50.0~~ H 93.8	4	40 ~~8.0~~ 10.3
7851 9.0	K 23.7		2	22 7 55.77		2	9 37 43.5
22 7 55.74	St, [60.0]		2	7 55.60		2	37 39.0
9 37 39.7	H 91.4		3	7 55.74		3	37 39.7
	Bb 93.7		2	7 55.58		2	37 39.6
7852 9.0	M, 44.8		1	22 7 59.82		1	13 30 11.4
22 8 0.02	A 78.9		1	7 59.97		1	30 18.6
13 30 19.8	M_2 88.3		2	8 0.13		2	30 20.7
	H 91.1		3	8 0.02		3	30 19.8
	E 05.7		2	8 0.19		2	(31) 20.5
7854 9.0	R, 49.0		2	22 8 13.77		2	11 47 12.2
22 8 13.95							
11 47 13.0	H 91.1		3	8 13.95		3	47 13.0
7855 8.9	K 23.7		1	22 8 27.23		1	13 11 47.8
22 8 26.82	St_2 59.7		2	8 26.22		2	11 41.1
13 11 43.5	Q 71.5, 66.7		3	8 26.58		2	11 42.7
	H 92.1		3	8 26.82		3	11 43.5

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zones	α Σp − H δ	α Ps. − H. δ.	α C − H. δ		α adj.	δ	Δα	Δδ	
	−46.9 −46.9	+.34 −8.3			39.29 ✓	0.0 ✓	+.18	+5.2	✓
	−13.8 −13.8	+.12 −3.1			39.12 ✓	4.1 ✓	+.01	+1.1	✓
					39.00	7.2	−.11	−2.0	✓
	+13.7 +13.7	+.04 +2.6			39.02 ✓	9.7 ✓	−.09	−4.5	✓
					39.11	5.2			
	−45.8 −45.8	−.89 −2.3			48.04 ✓	7.3 ✓	−.26	+0.5	✓
	−45.1 −45.0	−.82 −4.8			48.02	5.8	−.28	+2.0	✓
					48.85	10.3	+.55	−2.5	✓
					48.30	7.8			
184,186	−67.7 −67.7	+.03 +3.8	−.15 ✓	+2.2 ✓	55.59 ✓	41.9 ✓	−.05	−1.8	✓
	−31.4 −31.4	−.14 −0.7 ✓	−.07	+1.0	55.66 ✓	39.4	+02	+0.7	✓
		+.22 ✓ −3.2			55.74	39.7	+.10	+0.4	✓
	+2.3 +2.3	−.16 −0.1	+.01	−0.1	55.58 ✓	39.3 ✓	−.06	+0.8	✓
					55.64	40.1			
	−46.3 −46.3	−.20 −8.4			59.77 ✓	12.5	−.23 ✓	+5.8	✓
	−12.2 −12.2	−.05 −1.2			59.97 ✓	18.6	−.03	−0.8	✓
	−2.8 −2.8	+.11 +0.9			0.06	20.8	+.06	−2.1	✓
	— —	— —			0.02	19.8	+.02	−1.9	✓
	+14.6 +14.6	+.17 +0.7			0.17	[20.4 ~~18.4~~	+.17	[ac ~~2.0~~]	✓
					0.00 ✓	17.9			
	−42.1 −42.1	−.18 −0.8			13.85 ✓	11.5 ✓	−.05	+0.7	✓
					13.95	13.0	+.05	−0.8	✓
					13.90	12.2			
189	−68.4 −68.4	+.41 +4.3	+.15 ✓	+4.1 ✓	26.97 ✓	47.6 ✓	+.27	−3.4	✓
	−32.4 −32.4	−.60 −2.4	+.07	+1.9	26.32 ✓	42.6 ✓	−.38	+1.6	✓
	−20.6 −25.4	−.24 −0.8	+.05	+1.5	26.67 ✓	43.2 ✓	−.03	+1.6	✓
		−.22 ✓ −6.0			26.82	43.5	+.12	+0.7	✓
					26.70 ✓	44.2			

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7853 7.5	L_1 97.7	L_1 97.7	2	22 8 5.84	L_1 97.7	2	12 25 7.2
22 8 5.52	P_{20} 00.0	P 00.0	7	8 5.54	P 00.0	7	25 6.5
12 25 13.3	K 22.9	K 22.9	1	8 5.58	K 22.9	1	25 12.9
40 Aquarii	R_1 49.0	M_1 45.7	2	8 5.61	M_1 45.7	2	25 11.0
μ 12	L_3 50.5, ..	R_1 49.0	2	8 5.64	L_3 ..	..	..
	M_1 45.7	L_3 50.5	9	8 5.52	R_1 49.0	2	25 11.8
	L_4 54.7, 58.7	L_4 54.7	1	8 5.46	L_4 58.7	2	25 12.0
	St_1 [60.0]	St_1 60.0	2	8 5.44	St_1 60.0	2	25 12.7
	A 78.9	A 78.9	1	8 5.61	A 78.9	1	25 10.7
30375	G 80.5	L_5 79.7	1	8 5.55	L_5 79.7	1	25 12.5
	L_5 79.7	G 80.5	4	8 5.54	G 80.5	4	25 13.5
	H 90.9	H 90.9	2	8 5.52	H 90.9	2	25 13.3
7856 8.8	K 22.9	K 22.9	1	22 8 35.25	K 22.9	1	12 5 0.9
22 8 35.08	M_1 44.8	M_1 44.8	1	8 34.99	M_1 44.8	1	5 2.5
12 5 4.6	St_1 [60.0]	Wc 47.6	2	8 35.07	Wc 47.6	2	5 2.8
μ 12	Wc 47.6	St_1 60.0	1	8 34.87	St_1 60.0	1	5 2.9
	H 90.7	H 90.7	2	8 35.08	H 90.7	2	5 4.6
7857 8.3	L_1 95.1	L_1 95.1	2	22 9 9.74	L_1 95.1	2	12 45 0.2
22 9 9.68	K 23.2	K 23.2	3	9 9.78	K 23.2	3	45 4.6
12 45 2.6	L_3 41.8, ..	L_3 41.8	2	9 9.56	L_3 ..	..	..
	M_1 46.3	M_1 46.3	2	9 9.73	M_1 46.3	2	45 0.6
	L_4 54.7	L_4 54.7	1	9 9.65	L_4 54.7	2	45 4.1
	St_2 59.7	St_2 59.7	2	9 9.58	St_2 59.7	2	45 2.2
	A 78.8	L_5 78.7	2	9 9.67	L_5 78.7	2	45 1.5
	L_5 78.7	A 78.8	1	9 9.41	A 78.8	1	45 7.2
	H 91.1	H 91.1	3	9 9.68	H 91.1	3	45 2.6

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zones	α Eph − H. δ	α Pos. − H δ.	α C. − H. δ	α adj. δ	Δα	Δδ	
39, 3	-93.2 -93.2	+.32 −6.1	+.38 −1.7	5.90	11.6	+.32	+0.8 ✓
	-90.9 -90.9	+.02 −6.8	+.19 −0.9	5.65	10.2	+.07	+2.2 ✓
129	-68.0 -68.0	+.06 −0.4	−.04 +0.1	5.48	13.4	−.10	−1.0 ✓
	-45.2 -45.2	+.09 −2.3	+.09 −0.5	5.56	12.1	−.02	+0.3 ✓
	-41.9 ..	+.12 ..	+.09 ..	5.72	...	+.14	.. ✓
	-40.4 -41.9	.00 −1.5	+.08 −0.4	5.51	11.1	−.07	+1.3 ✓
	-36.2 -32.2	−.06 −1.3	+.08 −0.3	5.48	12.9	−.10	−0.5 ✓
	-30.9 -30.9	−.08 −0.6	+.06 −0.3	5.50	13.4	−.08	−1.0 ✓
	-12.0 -12.0	+.09 −2.6	+.03 −0.1	5.61	10.7	+.03	+1.7 ✓
	-11.2 -11.2	+.03 −0.8	+.02 −0.1	5.55	13.3	−.03	−0.9 ✓
	-10.4 -10.4	+.02 +0.2	+.02 −0.1	5.52	14.1	−.06	−1.7 ✓
	-80.6	−.21 +1.0		5.52 / 5.58	13.3 / 12.4	−.06	−0.9 ✓
127	-67.8 -67.8	+.17 −3.7	−.07 −3.6	35.01	1.0	.00	+2.2 ✓
	-45.9 -45.9	−.09 −2.1	−.05 −2.4	34.94	3.6	−.07	−0.4 ✓
	-43.1 -43.1	−.01 −1.8	−.04 −2.3	35.07	3.6	+.06	−0.4 ✓
	-30.7 -30.7	−.21 −1.7	−.03 −1.6	34.93	3.4	−.08	−0.2 ✓
		+.10 +5.3		35.08 / 35.01	4.6 / 3.2	+.07	−1.4 ✓
11, 3	-96.0 -96.0	+.06 −2.4	+.09 +1.7	9.77	4.3	+.14	−0.4 ✓
{127, 129, 189}	-67.9 -67.9	+.10 +2.0	−.10 +2.1	9.58	4.7	−.05	−0.8 ✓
	-49.3 ..	−.12 ..	.00 ..	9.55	...	−.08	.. ✓
	-44.8 -44.8	+.05 −2.0	.00 +1.0	9.68	1.7	+.05	+2.2 ✓
	-36.4 -36.4	−.03 +1.5	.00 +0.8	9.67	5.0	+.04	−1.1 ✓
	-31.4 -31.4	−.10 −0.4	.00 +0.7	9.68	3.7	+.05	+0.2 ✓
	-12.4 -12.4	−.01 −1.1	.00 +0.3	9.67	2.3	+.04	+1.6 ✓
	-12.3 -12.3	−.27 +4.6	.00 +0.3	9.41	7.2	−.22	−3.3 ✓
	-82.0	+.01 −2.3		9.68 / 9.63	2.6 / 3.9	+.05	+1.3 ✓

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep δ		Obs.	δ 1900.0
7858 8.7	K	22.9	K	22.9	1	22 9 14.17	K	22.9	1	11 45 56.2
22 9 14.09	R_1	49.0	M_1	45.7	2	9 14.24	M_1	45.7	2	45 55.3
11 45 56.0	L_3	48.8 ..	L_3	48.8	1	9 14.20	L_3	..	..	..
	M_1	45.7	R_1	49.0	2	9 13.90	R_1	49.0	1	45 57.2
	St_1	[60.0]	St_1	60.0	2	9 13.99	St_1	60.0	2	45 55.3
	H	91.2	H	91.2	3	9 14.09	H	91.2	3	45 56.0
7859 9.1	K	22.9			1	22 9 18.99			1	11 48 35.9
22 9 18.80	St_1	[60.0]			2	9 18.46			2	48 37.1
11 48 36.3	H	92.6			4	9 18.80			4	48 36.3
7860 9.1	M_1	46.2			2	22 9 42.87			2	10 31 34.1
22 9 43.04										
10 31 35.3	H	91.1			3	9 43.04			3	31 35.3
7861 9.1	A	78.9			1	22 9 55.72			1	13 14 14.1
22 9 57.79	D_1	81.8			1	9 58.23			1	14 15.3
13 14 15.8	H	89.7			3	9 57.79			3	14 15.8
7862 9.0	M_1	45.8			1	22 10 12.57			1	10 36 22.9
22 10 12.02	Sj	62.8			1	10 12.22			1	36 25.1
10 36 29.4	A	69.7			2	10 12.34			2	36 28.0
	H	92.3			4	10 12.02			4	36 29.4
7863 8.9	K	23.7	K	23.7	1	22 10 17.15	K	23.7	1	10 6 55.4
22 10 17.07	R_1	48.0	M_1	45.4	2	10 17.09	M_1	45.4	2	6 50.0
10 6 52.1	M_1	45.4	R_1	48.0	1	10 16.99	R_1	48.0	1	6 55.5
	St_1	[60.0]	St_1	60.0	2	10 16.92	St_1	60.0	2	6 55.6
	H	91.1	H	91.1	3	10 17.07	H	91.1	3	6 52.1

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zones	α Ep.−H	δ α Bs.−H	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ	
127	-68.3	-68.3	+.08	+0.2	-.16	+0.3	13.93	56.3	-.14	-0.1	✓
	-45.5	-45.5	+.15	−0.7	-.10	+0.2	14.19	56.4	+.12	−0.2	✓
	-42.4	"	+.11	"	-.10	"	14.19	"	+.12	"	✓
	-42.2	-42.2	-.19	+1.2	-.10	+0.2	13.98	56.5	-.09	−0.3	✓
	-31.2	-31.2	-.10	−0.7	-.07	+0.1	14.05	55.8	-.02	+0.4	✓
			+.23	−0.4							
							14.09	56.0	+.02	+0.2	✓
							14.07	56.2			
127	-69.7	-69.7	+.19	−0.4	-.05	−0.3	18.75	36.0	+.06	+0.6	✓
	-32.6	-32.6	-.34	+0.8	-.02	−0.1	18.52	37.5	-.17	−0.9	✓
			+.07	+0.4			18.80	36.3	+.11	+0.3	✓
							18.69	36.6			
	-44.9	-44.9	-.17	−1.2			42.82	35.2	-.11	0.0	✓
							43.04	35.3	+.11	−0.1	✓
							42.93	35.2			
	-108	-108	-2.07	−1.7			[55.72]	14.1 [ab 2.25]		+1.1	✓
	-7.9	-7.9	+.44	−0.5			58.15	15.7	+.18	−0.5	✓
							57.79	15.8	-.18	−0.6	✓
							57.97	15.2			
	-46.5	-46.5	+.55	−6.5			12.52	24.0	+.23	+2.9	✓
	-29.5	-29.5	+.20	−4.3			12.26	26.2	-.03	+0.7	✓
	-22.6	-22.6	+.32	−1.4			12.34	28.0	+.05	−1.1	✓
							12.02	29.4	-.27	−2.5	✓
							12.29	26.9			
186	-67.4	-67.4	+.08	+3.3	-.09	+1.6	16.98	53.7	-.05	−0.2	✓
	-45.7	-45.7	+.02	−2.1	-.06	+1.1	17.04	51.1	+.01	+2.4	✓
	-43.1	-43.1	-.08	+3.4	-.06	+1.0	17.07	54.8	+.04	−1.3	✓
	-31.1	-31.1	-.15	+3.5	-.04	+0.7	16.98	56.0	-.05	−2.5	✓
			+.13	−2.4							
							17.07	52.1	+.04	+1.4	✓
							17.03	53.5			

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs	δ 1900.0	Z
7864 8.9.	K 23.7		1.	22 10 28.16		1.	13 44 9.5	1
22 10 28.06.	St_2 59.7		3.	10 27.76		3.	44 7.6	
13 44 10.4.	A [79.0]		1.	10 27.84		1.	44 6.3	
	H 90.9		2.	10 28.06		2.	44 10.4	
	St 95.2		2.	10 28.12		2.	44 9.8	
7865 8.9.	K 22.9.	K 22.9.	2.	22 11 8.49.	K 22.9.	2.	12 9 45.8	127
22 11 8.57.	R_1 48.0.	M_1 44.8.	1.	11 8.73.	M_1 44.8.	1.	9 47.1	
12 9 47.7.	M_1 44.8.	R_1 48.0.	1.	11 8.23.	R_1 48.0.	1.	9 45.4	
	St_1 [60.0]	St_1 60.0.	2.	11 8.47.	St_1 60.0.	2.	9 45.8	
	Nc 69.7, 69.3	Nc 69.7.	2.	11 8.78.	Nc 69.3.	2.	9 46.6	
	H 91.1.	H 91.1.	3.	11 8.57.	H 91.1.	3.	9 47.7	
7866 8.8.	K 22.9.	K 22.9.	1.	22 11 23.13.	K 22.9.	1.	11 41 19.4	12
22 11 22.69.	R_1 49.0.	L_3 48.7.	4.	11 22.96.	L_3 ..	..	41 ..	
11 41 23.2.	L_3 48.7, ..	R_1 49.0.	3.	11 22.82.	R_1 49.0.	3.	41 21.3	
μ^2 μ^2	H 92.0.	H 92.0.	4.	11 22.69.	H 92.0.	4.	41 23.2	
7867 8.8.	L_1 94.6		1.	22 11 23.47.		1.	11 0 57.9	
22 11 23.86.	M_1 45.8.		3.	11 24.18.		3.	2.1	
11 1 0.3.	L_4 54.7.		1.	11 23.73.		1.	0 58.0	
	L_5 78.8.		1.	11 23.71.		1.	0 59.8	
	H 91.1.		3.	11 23.86.		3.	1 0.3	
7m 7868 & 7869 with page								
7870 8.8.	A 78.9.		1.	22 11 29.11.		1.	13 31 4.6	
22 11 29.00.								
13 31 7.7.	H 94.1.		4.	11 29.00.		4.	31 7.7	
7871 9.1.	R_1 49.0, ..		1.	22 12 4.57.		..	11 46 ..	
22 12 4.48.								
11 46 8.4.	H 90.8.		2.	12 4.48.		2.	46 8.4	

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Zones.	α Ep.−H.	δ	α Bs.−H.	δ	αC−H.	δ	α adj.	δ	Δα	Δδ	
189	−67.2	−67.2	+.10	−0.9	−.16	−1.1	27.90	9.3	−.05	−0.3	✓
	−31.2	−31.2	−.30	−2.8	−.07	−0.5	27.86	9.1	−.09	0.0	✓
	−11.9	−11.9	−.22	−4.1	−.03	−0.2	27.84	6.3	−.11	+2.8	✓
			+.24	+1.6							
	—	—					28.06	10.4	+.11	−1.3	✓
	+4.3	+4.3	+.06	−0.6	+.01	+0.1	28.09	10.2	+.14		✓
							27.95	9.1		−1.1	✓
127,129	−68.2	−68.2	−.08	−1.9	−.25	−1.6	8.32	46.1	−.21	+0.6	✓
	−46.3	−46.3	+.16	−0.6	−.17	−1.1	8.68	48.2	+.15	−1.5	✓ Begin here
	−43.1	−43.1	−.34	−2.3	−.16	−1.0	8.31	44.7	−.22	+2.0	✓
	−31.1	−31.1	−.10	−1.9	−.12	−0.7	8.53	46.2	.00	+0.5	✓
	−21.4	−21.8	+.21	−1.1	−.08	−0.5	8.78	47.4	+.25	−0.7	✓
			+.37	+2.3							
							8.57	47.7	+.04	−1.0	✓
							8.53	46.7			
127	−69.1	−69.1	+.44	−3.8	+.20	−3.7	22.89	19.5	+.03	+1.6	✓
	−43.3	..	+.27	..	+.13	..	22.95	...	+.09	..	✓
	−43.0	−43.0	+.13	−1.9	+.12	−2.3	22.90	20.6	+.04	+0.5	✓
			−.29	+5.4							
							22.69	23.2	−.17	−2.1	✓
							22.86	21.1			
3	−96.5	−96.5	−.39	−2.4	−.30	+2.6	23.56	2.9	−.24	−1.7	✓
	−45.3	−45.3	+.32	+1.8	−.14	+1.2	24.13	3.2	+.33	−2.0	✓
	−36.4	−36.4	−.13	−2.3	−.11	+1.0	23.75	58.9	−.05	+2.3	✓
	−12.3	−12.3	−.15	−0.5	−.04	+0.3	23.71	0.6	−.09	+0.6	✓
			+.31	−2.7							
							23.86	0.3	+.06	+0.9	✓
							23.80	1.2			
	−15.2	−15.2	+.11	−3.1			29.11	4.6	+.05	+1.6	✓
							29.00	7.7	−.06	−1.5	✓
							29.06	6.2			
	−41.8	..	+.09	..			4.65	...	+.09	..	✓
							4.48	8.4	−.08		✓
							4.56				

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7868 7.8.	L_1 00.8	L_1 00.8	1	22 11 25.07	L_1 00.8	1	12 8 42.4
22 11 25.11.	K 22.9	K 22.9	2	11 25.15	K 22.9	1	8 47.1
12 8 47.9.	R_1 48.0	L_3 40.7	1	11 25.01	L_3 ..	..	..
	L_3 40.7, ..	M_1 45.8	3	11 24.85	M_1 45.8	3	8 47.2
	M_1 45.8	R_1 48.0	4	11 24.94	R_1 48.0	4	8 47.4
	L_4 54.7	L_4 54.7	1	11 24.86	L_4 54.7	2	8 46.7
	St_1 [60.0]	St_1 60.0	2	11 24.70	St_1 60.0	2	8 46.6
	Wc 69.7, 69.3	Wc 69.7	2	11 25.15	Wc 69.3	2	8 47.4
	L_5 79.7	L_5 79.7	1	11 25.11	L_5 79.7	1	8 47.1
	H 91.1	H 91.1	3	11 25.11	H 91.1	3	8 47.9
	E 02.4, 03.2	E 02.4	3	11 25.13	E 03.2	4	8 48.6
7869 6.0.	L_4 95.6	L_1 95.6	1	22 11 26.78	L_1 95.6	1	13 19 48.3
22 11 26.76.	P 41 00.0	P 00.0	6	11 26.44	P 00.0	6	19 45.6
13 19 49.2.	L_3 45.1, 42.4	L_3 45.1	15	11 26.75	L_3 42.4	9	19 48.8
	L_4 56.7, 57.3	L_4 56.7	3	11 26.64	Wc 55.7	10	19 48.9
	Wc 68.0, 55.7	Q 65.4	3	11 26.70	L_4 57.3	2	19 48.3
	A 78.8	Wc 68.0	4	11 26.76	Q 65.2	2	19 49.1
30426	G 79.8	A 78.8	1	11 26.70	A 78.8	1	19 53.9
	Q 65.4, 65.2	G 79.8	3	11 26.83	G 79.8	3	19 48.6
	H 90.9	H 90.9	2	11 26.76	H 90.9	2	19 49.2
	E 99.4	E 99.4	3	11 26.81	E 99.4	3	19 49.3
7872 8.6.	L_1 00.8		1	22 12 17.38		1	12 44 11.5
22 12 17.85.	K 23.2		3	12 18.06		3	44 19.4
12 44 19.0.	M_1 44.8		1	12 17.88		1	44 16.7
	L_4 54.7, 58.7		1	12 17.85		1	44 18.2
	St 59.9		2	12 17.93		2	44 16.6
	L_5 78.8		2	12 17.88		2	44 17.6
	H 90.4		3	12 17.85		3	44 19.0

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Zones	α Eph.-H.d	α As.-H.d.	α C.-H.d.	α adj.	δ	Δα	Δδ
39	-90.3 -90.3	-.04 -5.5	.00 -1.8	25.11	46.1	+.11	+1.5
127,129α	-68.2 -68.2	+.04 -0.8	-.13 -0.7	24.98	47.2	-.02	+0.4
	-50.4 ..	-.10 ..	-.04 ..	25.00	..	.00	..
	-45.3 -45.3	-.26 -0.7	-.04 -0.7	24.80	48.3	-.20	-0.7
	-43.1 -43.1	-.17 -0.5	-.03 -0.7	25.02	46.7	+.02	+0.9
	-36.4 -36.4	-.25 -1.2	-.03 -0.6	24.88	47.6	-.12	0.0
	-31.1 -31.1	-.41 -1.3	-.02 -0.5	24.76	47.3	-.24	+0.3
	-21.4 -21.8	+.04 -0.5	-.02 -0.3	25.15	48.2	+.15	-0.6
	-11.4 -11.4	.00 -0.8	-.01 -0.2	25.11	47.9	+.11	-0.3
	-79.2	+.08 +1.6		25.11	47.9	+.11	-0.3
	+11.3 +12.1	+.02 +0.7	+.01 +0.2	25.11 / 25.00	48.5 / 47.6	+.11	-0.9
11	-95.3 -95.3	+.03 -0.9	.00 +2.3	26.76	51.5	+.03	-1.5
	-90.9 -90.9	-.32 -3.6	.00 +2.2	26.55	49.2	-.18	+0.8
	-45.8 -48.5	-.01 -0.4	.00 +1.2	26.74	49.1	+.01	+0.9
	-34.2 -35.2	-.12 -0.3	.00 +0.8	26.67	49.8	-.09	+0.2
	-25.5 -33.6	-.06 -0.9	.00 +0.8	26.79	49.2	+.06	+0.8
	-22.9 -25.7	.00 -0.1	.00 +0.6	26.76	49.7	+.03	+0.3
	-12.1 -12.1	-.06 +4.7	.00 +0.3	26.70	53.9	-.03	-3.9
	-11.1 -11.1	+.07 -0.6	.00 +0.3	26.81	49.2	+.08	+0.8
		.00 -2.4		26.76	49.2	+.03	+0.8
	+8.5 +8.5	+.05 +0.1	.00 -0.2	26.79 / 26.73	49.2 / 50.0	+.06	+0.8
39	-89.6 -89.6	-.47 -7.5	-.43 -3.8	17.42	15.2	-.40 ~~-.34~~	+3.0
{127,129,189}	-67.2 -67.2	+.21 +0.4	+.01 +0.5	17.48	19.5	+.04 ~~-.30~~	-1.3
	-45.6 -45.6	+.03 -2.3	-.12 -1.0	17.83	17.8	+.01 ~~+.07~~	+0.4
	-35.7 -31.7	.00 -0.8	-.10 -0.7	17.85	19.1	+.05 ~~+.09~~	-0.9
	-30.5 -30.5	+.08 -2.4	-.08 -0.6	18.03	18.1	+.21 ~~+.27~~	+0.1
	-11.6 -11.6	+.03 -1.4	-.03 -0.2	17.88	18.4	+.06 ~~+.12~~	-0.2
	-78.4	+.27 +2.1		17.85 / 17.76	19.0 / 18.2	+.03 +.09	-0.8

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0
7873 8.7	L_1	97.1	L_1	97.1	3	22 12 31.03	L_1	97.1	3	10 14 21.9
22 12 31.71	K	23.4	K	23.4	3	12 31.61	K	23.4	3	14 24.2
10 14 26.8	M_1	45.8	M_1	45.8	4	12 31.74	M_1	45.8	4	14 24.9
	L_4	61.7 61.7	B	52.9	1	12 31.59	B	52.9	1	14 24.5
	B	52.9	St_1	60.0	2	12 31.50	St_1	60.0	2	14 24.4
	St_1	[60.0]	L_4	61.7	2	12 31.67	L_4	61.7	2	14 25.8
	A	69.7	A	69.7	3	12 31.62	A	69.7	3	14 28.6
	L_5	78.8	L_5	78.8	2	12 31.67	L_5	78.8	2	14 25.5
	H	89.7	H	89.7	3	12 31.71	H	89.7	3	14 26.8
	E	04.2	E	04.2	3	12 31.90	E	04.2	3	14 26.9
7874 9.0	K	23.7			1	22 13 15.60			1	12 35 40.1
22 13 15.31	St_2	59.7			2	13 15.07			2	35 32.8
12 35 35.4	A	78.9			2	13 15.29			2	35 33.2
	H	90.1			3	13 15.31			3	35 35.4
7875 9.0	L_1	00.9	L_1	00.9	1	22 13 32.48	L_1	00.9	1	9 42 50.8
22 13 32.31	K	23.3	K	23.3	2	13 32.51	K	23.3	2	42 47.7
9 42 53.7	M_1	45.8	M_1	45.8	1	13 32.75	M_1	45.8	1	42 52.0
	L_4	54.6	B	52.9	1	13 32.50	B	52.9	1	42 48.9
	B	52.9	L_4	54.6	1	13 32.19	L_4	54.6	1	42 47.3
	St	[60.0]	St_1	60.0	2	13 32.19	St_1	60.0	2	42 51.7
	Sj	62.8	Sj	62.8	1	13 32.17	Sj	62.8	1	42 50.1
	L_5	76.8	L_5	76.8	1	13 32.30	L_5	76.8	1	42 52.4
	H	90.1	H	90.1	3	13 32.31	H	90.1	3	42 53.7
	Db	93.7	Db	93.7	2	13 32.29	Db	93.7	2	42 53.7

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zones	α Ep.−H	δ α Bs.−H.	δ α C.−H.	δ	α adj.	δ	Δα	Δδ	
40,14,1	−92.6	−92.6	−.68	−4.9	−.63	−0.8	31.08	26.0	−.50	+0.3	✓
125 (84,186)	−66.3	−66.3	−.10	−2.6	−.29	−3.2	31.42	23.6	−.16	+2.7	✓
	−43.9	−43.9	+.03	−1.9	−.25	−1.1	31.69	26.0	+.11	+0.3	✓
	−36.8	−36.8	−.12	−2.3	−.21	−0.9	31.51	26.9	−.07	−0.6	✓
	−29.7	−29.7	−.21	−2.4	−.17	−0.7	31.56	24.9	−.02	+1.4	✓
	−28.0	−28.0	−.04	−1.0	−.16	−0.7	31.69	26.7	+.11	−0.4	✓
	−20.0	−20.0	−.09	+1.8	−.12	−0.5	31.62	28.6	+.04	−2.3	✓
	−10.9	−10.9	−.04	−1.3	−.06	−0.3	31.67	26.3	+.09	0.0	✓
	−79.4		+.58	+2.5			31.71	26.8	+.13	−0.5	✓
	+14.5	+14.5	+.19	+0.1	+.08	+0.4	31.88 / 31.58	26.8 / 26.3	+.30	−0.5	✓
189	−66.4	−66.4	+.29	+4.7	+.03	+4.5	15.34	39.9	+.06	−4.2	✓
	−30.4	−30.4	−.24	−2.6	+.02	+2.1	15.17	34.3	−.11	+1.4	✓
	−11.2	−11.2	−.02	−2.2	+0.1	+0.8	15.29	33.2	+.01	+2.5	✓
			−.05	−6.8			15.31 / 15.28	35.4 / 35.7	+.03	+0.3	✓
40	−89.2	−89.2	+.17	−2.9	+.20	+0.1	32.51	53.8	+.16	−2.0	✓
125,184	−66.8	−66.8	+.20	−6.0	.00	−6.0	32.31	47.7	−.04	+4.1	✓
	−44.3	−44.3	+.44	−1.7	+.06	−1.7	32.70	53.1	+.35	−1.3	✓
	−37.2	−37.2	+.19	−4.8	+.05	−1.4	32.42	51.3	+.07	+0.5	✓
	−35.5	−35.5	−.12	−6.4	+.05	−1.3	32.21	48.2	−.14	+3.6	✓
	−30.1	−30.1	−.12	−2.0	+.04	−1.1	32.25	52.1	−.10	−0.3	✓
	−27.3	−27.3	−.14	−3.6	+.04	−1.0	32.21	51.2	−.14	+0.6	✓
	−13.3	−13.3	−.01	−1.3	+.02	−0.5	32.30	53.2	−.05	−1.4	✓
	−78.0		−.13	+3.8			32.31	53.7	−.04	−1.9	✓
	+3.6	+3.6	−.02	0.0	.00	+0.1	32.29 / 32.35	53.4 / 51.8	−.06	−1.6	✓

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7876 8.2	L_1 97.7	L_1 97.7	2	22 13 35.74	L_1 97.7	2	12 3 24.0
22 13 35.70	K 22.9	K 22.9	2	13 35.90	K 22.9	2	3 29.1
12 3 30.7	M_1 46.7	M_1 46.7	1	13 35.82	M_1 46.7	1	3 30.1
	L_4 54.7	L_4 54.7	1	13 35.63	L_4 54.7	1	3 29.2
	St_1 [60.0]	St_1 60.0	2	13 35.58	St_1 60.0	2	3 27.7
	Sj 62.8	Sj 62.8	1	13 35.60	Sj 62.8	1	3 27.9
	A 78.8	L_5 78.6	1	13 35.74	L_5 78.6	1	3 30.1
	L_5 78.6	A 78.8	1	13 35.73	A 78.8	1	3 33.3
	H 90.1	H 90.1	3	13 35.70	H 90.1	3	3 30.7
7877 6.6	L_1 95.6	L_1 95.6	1	22 13 38.52	L_1 95.6	1	13 48 16.4
22 13 38.70	P 56 00.0	P 00.0	9	13 38.23	P 00.0	9	48 16.2
13 48 20.6	K 23.7	K 23.7	1	13 38.50	K 23.7	1	48 24.5
45 Aquar.	R_1 47.0	L_3 43.5	24	13 38.53	L_3 41.7	6	48 18.9
μ_1 μ_2	L_3 43.5, 41.7	M_1 45.9	2	13 38.39	M_1 45.9	2	48 18.2
	M_1 45.9	R_1 47.0	2	13 38.53	R_1 47.0	2	48 19.4
	L_4 55.6, 56.4	L_4 55.6	3	13 38.53	L_4 56.4	3	48 19.1
	St_2 59.7	St_2 59.7	2	13 38.44	St_2 59.7	2	48 18.3
	Wc 61.4, 70.5	Wc 61.4	4	13 38.70	Wc 70.5	3	48 19.1
9982	Q 70.2, 71.5	Q 70.2	3	13 38.59	Q 71.5	4	48 19.3
30471	G 77.8	G 77.8	4	13 38.65	G 77.8	4	48 19.7
	H 92.0	H 92.0	4	13 38.70	H 92.0	4	48 20.6
	E 02.3	Sk 95.2	2	13 38.70	Sk 95.2	2	48 20.5
	Sk 95.2	E 02.3	5	13 38.78	E 02.3	5	48 20.3
7878 8.5	K 22.9		1	22 13 59.38		1	11 17 30.6
22 13 58.85	M_1 44.9		1	13 59.12		1	17 31.2
11 17 29.9	St_1 [60.0]		2	13 58.77		2	17 30.2
	H 89.4		3	13 58.85		3	17 29.9

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Zones	α Sh − H	δ	α Bs − H	δ	α C − H.	δ	α adj.	δ	Δα	Δδ	
39,3	−92.4	−92.4	+.04	−6.7	+.10	−2.3	35.80	28.4	+.09	+1.7	✓
127,129	−67.2	−67.2	+.20	−1.6	+.03	−1.3	35.73	29.4	+.02	+0.7	✓
	−43.4	−43.4	+.12	−0.6	+.03	−1.0	35.77	31.2	+.06	−1.1	✓
	−35.4	−35.4	−.07	−1.5	+.03	−0.8	35.65	30.1	−.06	0.0	✓
	−30.1	−30.1	−.12	−3.0	+.02	−0.7	35.64	28.3	−.07	+1.8	✓
	−27.3	−27.3	−.10	−2.8	+.02	−0.6	35.64	29.0	−.07	+1.1	✓
	−11.5	−11.5	+.04	−0.6	+.01	−0.3	35.74	30.9	+.03	−0.8	✓
	−11.3	−11.3	+.03	+2.6	+.01	−0.3	35.73	33.3	+.02	−3.2	✓
	−79.8	−.08	+2.3				35.70	30.7	−.01	−0.6	✓
							35.71	30.7			
11	−96.4	−96.4	−.18	−4.2	−.21	−1.0	38.49	19.6	−.07	+0.6	✓
	−92.0	−92.0	−.47	−4.4	−.38	+1.5	38.34	19.8	−.22	+0.4	✓
189	−68.3	−68.3	−.20	+3.9	−.46	+3.7	38.24	24.83	−.32	−4.1	✓
	−48.5	−50.3	−.17	−1.7	−.20	+1.1	38.52	19.2	−.04	+1.0	✓
	−46.1	−46.1	−.31	−2.4	−.19	+0.7	38.34	19.3	−.22	+0.9	✓
	−45.0	−45.0	−.17	−1.2	−.18	+0.7	38.61	18.7	+.05	+1.5	✓
	−36.4	−35.6	−.17	−1.5	−.15	+0.6	38.55	20.0	−.01	+0.2	✓
	−32.3	−32.3	−.26	−2.3	−.13	+0.5	38.54	19.8	−.02	+0.4	✓
	−30.6	−21.5	.00	−1.5	−.13	+0.3	38.70	19.9	+.14	+0.3	✓
	−21.8	−20.5	−.11	−1.3	−.09	+0.3	38.68	19.9	+.12	+0.3	✓
	−14.2	−14.2	−.05	−0.9	−.06	+0.2	38.63	20.3	+.07	−0.1	✓
	−82.4	+.41	−1.6				38.70	20.6	+.14	−0.4	✓
	+3.2	+3.2	.00	−0.1	+.01	−0.1	38.67	20.9	+.11	−0.7	✓
	+10.3	+10.3	+.08	−0.3	+.04	−0.2	38.76	20.2	+.20	0.0	✓
							38.56	20.2			
127	−66.5	−66.5	+.53	+0.7	+.29	+0.8	59.14	30.7	+.17	+0.2	✓
	−44.5	−44.5	+.27	+1.3	+.20	+0.5	59.07	32.3	+.10	−1.4	✓
	−29.4	−29.4	−.08	+0.3	+.13	+0.4	58.83	30.7	−.14	+0.2	✓
		−.44	−1.2								
							58.85	29.9	−.12	+1.0	✓
							58.97	30.9			

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Star		Epoch		Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	
7879	8.5.	K	22.9.		1.	22 14 13.81.		1.	12 25 5.3.	12
22 14	13.76.	M_1	46.2.		2.	14 13.48.		2.	25 4.5.	
12 25	4.7.	St_1	[60.0].		2.	14 13.56.		2.	25 4.7.	
		H	90.4.		3.	14 13.76.		3.	25 4.7.	
7880	8.5.	L_1	00.9.		1.	22 14 19.00.		1.	10 18 4.8.	4(
22 14	19.01.	K	23.7.		2.	14 19.14.		2.	18 7.4.	184,1
10 18	7.2.	M_1	45.5.		3.	14 19.27.		2.	18 4.0.	
		L_4	54.7, 56.7.		1.	14 18.86.		2.	18 6.4.	
		St_1	[60.0].		2.	14 18.87.		2.	18 5.4.	
		L_5	78.7.		3.	14 19.05.		2.	18 5.2.	
		H	89.7.		3.	14 19.01.		3.	18 7.2.	
7881	8.3.	L_1	95.1.		2.	22 14 55.52.		2.	12 43 18.6.	11,
22 14	55.74.	K	22.9.		2.	14 55.65.		2.	43 22.8.	127,1
12 43	25.0.	M_1	46.4.		3.	14 55.46.		2.	43 20.1.	
		L_4	54.7.		1.	14 55.68.		1.	43 25.0.	
		St_2	59.7.		2.	14 55.39.		2.	43 21.1.	
	9990.	Q	67.8, 68.7.		5.	14 55.63.		4.	43 23.6.	
		L_5	79.8.		1.	14 55.78.		1.	43 24.7.	
		H	90.0.		4.	14 55.74.		4.	43 25.0.	
		E	07.5.		4.	14 55.84.		4.	43 25.0.	
7882	9.2.	A	78.9.		2.	22 14 56.50.		2.	12 25 4.8.	
22 14	56.59.									
12 25	3.7.	H	94.8.		3.	14 56.59.		3.	25 3.7.	
7883	9.1.	K	23.7.		2.	22 15 8.11.		2.	10 43 46.6.	184,1
22 15	8.04.	St_1	[60.0].		2.	15 7.88.		2.	43 45.2.	
10 43	47.8.	H	90.1.		3.	15 8.04.		3.	43 47.8.	

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Zones	α Ep - H.d	α Bs. - H.d	α C. - H.d	α adj.	δ	Δα	Δδ	
129	-67.5 -67.5	+.05 +0.6	-.05 +1.1	13.71	5.8	+.08	-0.5	✓
	-44.2 -44.2	-.28 -0.2	-.03 +0.7	13.43	5.6	-.20	-0.3	✓
	-30.4 -30.4	-.20 0.0	-.02 +0.5	13.62	5.2	-.01	+0.1	✓
		+.07 -1.6		13.76 / 13.63	4.7 / 5.3	+.13	+0.6	✓
40	-88.8 -88.8	-.01 -2.4	+.02 +0.6	19.03	7.8	+.02	-1.4	✓
184,186	-66.0 -66.0	+.13 +0.2	-.05 -1.4	18.96	5.8	-.05	+0.6	✓
	-44.2 -44.2	+.26 -3.2	-.01 -0.2	19.22	5.1	+.21	+1.3	✓
	-35.0 -33.0	-.15 -0.8	-.01 -0.2	18.88	7.3	-.13	-0.9	✓
	-29.7 -29.7	-.14 -1.8	-.01 -0.1	18.93	5.9	-.08	+0.5	✓
	-11.0 -11.0	+.04 -2.0	+.00 -0.1	19.05	6.0	+.04	+0.4	✓
		-77.4 +.02 +0.5		19.01 / 19.01	7.2 / 6.4	.00	-0.8	✓
11, 3	-94.9 -94.9	-.22 -6.4	-.16 -2.3	55.55	22.7	-.08	+1.8 (2)	✓
127,129	-67.1 -67.1	-.09 -2.2	-.26 -1.9	55.48	23.1	-.15	+0.9 (8)	✓
	-43.6 -43.6	-.28 -4.9	-.11 -1.1	55.41	21.2	-.22	+2.8 (7)	✓
	-35.3 -35.3	-.06 0.0	-.09 -0.9	55.70	25.9	+.07	-1.9 (-2.0)	✓
	-30.3 -30.3	-.35 -3.9	-.08 -0.8	55.49	22.6	-.14	+1.4 (3)	✓
	-22.2 -21.3	-.11 -1.4	-.06 -0.6	55.72	24.2	+.09	-0.2 (3)	✓
	-10.2 -10.2	+.04 -0.3	-.03 -0.3	55.78	25.4 (5)	+.15	-1.4 (6)	✓
		-81.0 +.26 +2.6		55.74	25.1 (0)	+.11	-1.7 (1)	✓
	+17.5 +17.5	+.10 0.0	+.05 +0.5	55.82 / 55.63	24.9 / 24.0 / 23.9	+.19	-0.9 (-1.0)	✓
	-15.9 -15.9	-09 +1.1		56.50	4.8	-.04	-0.6	✓
				56.59 / 56.54	3.7 / 4.2	+.05	+0.5	✓
184,186	-66.4 -66.4	+.07 -1.2	-.11 -2.8	7.93	45.0	-.04	+1.1	✓
	-30.1 -30.1	-.16 -2.6	-.05 -1.3	7.94	45.6	-.03	+0.5	✓
		+.17 +4.2		8.04 / 7.97	47.8 / 46.1	+.07	-1.7	✓

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Star	Epoch	Ep. α	Obs. α 1900.0	Ep. δ	Obs. δ 1900.0	
7884 8.9.	K 22.9		2, 22 15 20.51		2, 12 45 47.2	127,
22 15 20.39.	M_1 46.6		1, 15 20.09		1, 45 45.4	
12 45 51.8.	St_2 59.7		2, 15 20.17		2, 45 49.3	
	H 90.2		5, 15 20.39		5, 45 51.8	
7885 9.0.	K 22.9		1, 22 16 7.03		1, 12 41 16.4	127
22 16 2.62.	St_2 59.7		2, 16 2.40		2, 41 17.4	
12 41 20.0.	Q 9996 68.6, 68.7		6, 16 2.54		4, 41 19.1	
K?	H 89.8		2, 16 2.62		2, 41 20.0	
7887 8.1.	K 23.7		1, 22 16 22.96		1, 13 3 22.4	18
22 16 22.79.	M_1 46.3		2, 16 22.80		2, 3 17.7	
13 3 23.0.	St_2 59.7		2, 16 22.61		2, 3 19.4	
	H 90.1		3, 16 22.79		3, 3 23.0	
7888 9.3.	Sj 62.8		1, 22 16 29.43		1, 11 42 52.9	
22 16 29.68.						
11 42 52.7.	H 90.1		3, 16 29.68		3, 42 52.7	
7889 9.0.	L_1 98.3		2, 22 16 35.53		2, 10 6 43.3	40,
22 16 35.67.	R_1 48.0		2, 16 35.41		2, 6 53.2	
10 6 51.4.	L_4 54.7		1, 16 35.77		1, 6 47.3	
	Sj 62.8		1, 16 35.68		1, 6 48.3	
	L_5 78.6		1, 16 35.60		1, 6 50.1	
	H 89.7		3, 16 35.67		3, 6 51.4	

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zones	α Eph-H.	δ	α Pos.-H.	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
127,129	-67.3	-67.3	+.12	-4.6	-.05	-4.3	20.34	47.5	+.08	+1.7	✓
	-43.6	-43.6	-.30	-6.4	-.03	-2.8	20.04	46.5	-.22	+2.7	✓
	-30.5	-30.5	-.22	-2.5	-.02	-2.0	20.27	50.8	+.01	-1.6	✓
			+.07	+6.4			20.39	51.8	+.13	-2.6	✓
							20.26	49.2			
127	-66.9	-66.9	+4.41	-3.6	+4.17	-3.5	[6.79]		ab [+4.21]	+2.3	✓
	-30.1	-30.1	-.22	-2.6		-1.6	2.50	18.9	-.08	-0.1	✓
	-21.2	-21.1	-.08	-0.9		-1.1	2.63	19.7	+.05	-0.9	✓
				+5.2			2.62	20.0	+.04	-1.2	✓
							2.58	18.8			
189	-66.4	-66.4	+.17	-0.6	-.09	-0.8	22.70	22.2	-.04	-1.0	✓
	-43.8	-43.8	+.01	-5.3	-.06	-0.5	22.75	18.8	+.01	+2.4	✓
	-30.4	-30.4	-.18	-3.6	-.04	-0.4	22.71	20.9	-.03	+0.3	✓
			+.14	+1.2			22.79	23.0	+.05	-1.8	✓
							22.74	21.2			
	-27.3	-27.3	-.25	+0.2			29.47	54.0	-.11	-0.6	✓
							29.68	52.7	+.10	+0.7	✓
							29.58	53.4			
40,14	-91.4	-91.4	-.14	-8.1	-.10	-4.3	35.57	47.1	-.07	+2.8	✓
	-41.7	-41.7	-.26	+1.8	-.05	-2.0	35.49	52.5	-.15	-2.6	✓
	-35.0	-35.0	+.10	-4.1	-.04	-1.6	35.79	48.2	+.15	+1.7	✓
	-26.9	-26.9	+.01	-3.1	-.03	-1.3	35.72	49.4	+.08	+0.5	✓
	-11.1	-11.1	-.07	-1.3	-.01	-0.5	35.61	50.9	-.03	-1.0	✓
			+.11	+4.7			35.67	51.4	+.03	-1.5	✓
							35.64	49.9			

K secs.

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Star		Epoch		Ep. α		Obs.	α 1900.0		Ep. δ		Obs.	δ 1900.0	
7890	8.0	L_1	97.7 ~~95.4~~	L_1	~~95.4~~ 97.7	2	22 16	53.53	L_1	~~95.4~~ 97.7	2	11 21	0.5
22 16	53.30	K	22.9	K	22.9	1	16	53.78	K	22.9	1	21	6.7
11 21	6.5	L_3 R_1	40.7 49.0	L_3 M_1	40.7 45.4	4 2	16	53.56 L_3 53.60	L_3 M_1	40.7 45.4	2 2	21 21	5.1 5.0
		M_1	45.4	Wc	48.6	2	16	53.46	Wc	48.6	3	21	5.8
		L_4	54.7, 55.7	R_1	49.0	4	16	53.73	R_1	49.0	3	21	3.4
		St_1	[60.0]	L_4	54.7	1	16	53.39	L_4	55.7	1	21	5.0
		Wc	48.6	St_1	60.0	2	16	53.26	St_1	60.0	2	21	5.6
		A	63.9	A	63.9	2	16	53.55	A	63.9	2	21	4.0
		H	90.4	H	90.4	3	16	53.30	H	90.4	3	21	6.5
		E	07.4	E	07.4	3	16	53.32	E	07.4	3	21	7.8
7891	8.8	L_1	00.8	L_1	00.8	1	22 17	30.21	L_1	00.8	1	11 44	32.0
22 17	29.87	K	22.9	K	22.9	2	17	30.09	K	22.9	2	44	38.4
11 44	39.7	L_3	47.8	M_1	46.6	2	17	30.03	M_1	46.6	2	44	41.2
		M_1	46.6	L_3	..	..		..	L_3	47.8	1	44	41.1
		L_4	56.7, 58.7	L_4	56.7	2	17	29.94	L_4	58.7	1	44	37.5
		St_1	[60.0]	St_1	60.0	1	17	30.08	St_1	60.0	1	44	37.8
		Wc	69.8	Sj	62.7	1	17	29.88	Sj	62.7	1	44	39.1
		Sj	62.7	Wc	69.8	3	17	30.02	Wc	69.8	2	44	37.7
		L_5	79.8	L_5	79.8	1	17	29.55	L_5	79.8	1	44	37.1
		M_2	85.7	M_2	85.7	1	17	30.07	M_2	85.7	1	44	37.4
		H	90.4	H	90.4	3	17	29.87	H	90.4	3	44	39.7
7892	8.9	L_1	00.9			1	22 18	30.38			1	10 11	40.2
22 18	30.10	K	23.7			2	18	30.23			2	11	43.5
10 11	40.6	L_4	54.7, 58.7			1	18	29.98			1	11	39.7
		L_5	78.7			3	18	30.11			2	11	38.4
		H	91.5			4	18	30.10			4	11	40.6

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zones	αEp-H.	δ	αBs.-H	δ	αC-H.	δ	α Adj.	δ	Δα	Δδ	
3, 39	-92.7	-92.7	+.23	-6.0	+.29	-1.6	53.59	4.9	+.09	+0.7	✓
129	-67.5	-67.5	+.48	+0.2	+.38	+0.7	53.68	5.6	+.18	0.0	✓
	-49.7	-49.7	+.26	-1.4	+.21	-0.3	53.55	5.4	+.05	+0.2	✓
	-45.0	-45.0	+.30	-1.5	+.19	-0.3	53.55	6.1	+.05	-0.5	✓
	-41.8	-41.8	+.16	-0.7	+.18	-0.3	53.46	6.6	-.04	-1.0	✓
	-41.4	-41.4	+.43	-3.1	+.17	-0.2	53.81	2.7	+.31	+2.9	✓
	-35.7	-34.7	+.09	-1.5	+.15	-0.2	53.41	5.9	-.09	-0.3	✓
	-30.4	-30.4	-.04	-0.9	+.13	-0.2	53.32	6.2	-.18	-0.6	✓
	-26.5	-26.5	+.25	-2.5	+.11	-0.2	53.55	4.0	+.05	+1.6	✓
		-80.1	-42	+0.6			53.30	6.5	-.20	-0.9	✓
	+17.0	+17.0	+.02	+1.3	-.07	+0.1	53.30 / 53.50	7.7 / 5.6	-.20	-2.1	✓
39	-89.6	-89.6	+.34	-7.7	+.38	-4.0	30.25	35.7	+.29	+3.3	✓
127, 129	-67.5	-67.5	+.22	-1.3	+.05	-1.0	29.92	38.7	-.04	+0.3	✓
	-43.8	-43.8	+.16	+1.5	+.12	-1.4	29.98	42.3	+.02	-3.3	✓
	..	-42.6	..	+1.4	..	-1.4	...	41.4	..	-2.4	✓
	-33.7	-31.7	+.07	-2.2	+.09	-1.0	29.96	38.4	.00	+0.6	✓
	-30.4	-30.4	+.21	-1.9	+.08	-1.0	30.14	38.3	+.18	+0.7	✓
	-27.7	-27.7	+.01	-0.6	+.07	-0.9	29.92	40.2	-.04	-1.2	✓
	-20.6	-20.6	+.15	-2.0	+.06	-0.7	30.02	38.5	+.06	+0.5	✓
	-10.6	-10.6	-.32	-2.6	+.03	-0.3	29.56	37.9	-.40	+1.1	✓
	-4.7	-4.7	+.20	-2.3	+.01	-0.2	30.00	37.5	+.04	+1.5	✓
		-78.6	-27	+3.2			29.87 / 29.96	39.7 / 39.0	-.09	-0.7	✓
40	-90.6	-90.6	+.28	-0.4	+.31	+2.6	30.41	43.2	+.27	-2.1	✓
184, 186	-67.8	-67.8	+.13	+2.9	-.05	+1.3	30.05	41.9	-.09	-0.8	✓
	-36.8	-32.8	-.12	-0.9	+.06	+0.8	30.00	40.6	-.14	+0.5	✓
	-12.8	-12.8	+.01	-2.2	+.02	+0.3	30.12	39.2	-.02	+1.9	✓
		-79.2	-16	-2.5			30.10 / 30.14	40.6 / 41.1	-.04	+0.5	✓

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7893 8.9	1C 22.9		1	22 18 37.86		1	11 23 25.7
22 18 37.73	M_1 45.8		1	18 37.62		1	23 25.4
11 23 26.6	H 89.8		3	18 37.73		3	23 26.6
7894 9.3	B 55.9		3	22 18 47.32		3	13 51 9.6
22 18 47.32	H 91.0		4	18 47.32		4	51 15.2
13 51 15.2	SK 95.2		2	18 47.52		2	51 12.9
7895 8.7	L_1 00.8	L_1 00.8	1	22 18 47.86	L_1 00.8	1	11 41 26.9
22 18 48.42	1C 22.9	K 22.9	1	18 47.72	K 22.9	1	41 34.3
11 41 32.7	L_3 47.6, 40.7	M_1 46.6	2	18 48.23	L_3 40.7	1	41 31.6
	M_1 46.6	L_3 47.6	2	18 48.47	M_1 46.6	2	41 30.9
	L_4 54.7	L_4 54.7	1	18 48.27	L_4 54.7	1	41 30.1
	Wc 66.4, 67.5	Wc 66.4	3	18 48.33	Wc 67.5	3	41 32.4
	L_5 80.7	L_5 80.7	1	18 48.36	L_5 80.7	1	41 30.9
	M_2 85.7	M_2 85.7	1	18 48.40	M_2 85.7	1	41 32.7
	H 90.8	H 90.8	3	18 48.42	H 90.8	3	41 32.7
7896 7.7	L_1 98.3	L_1 98.3	2	22 18 50.64	L_1 98.3	2	10 42 6.1
22 18 50.24	P 83 00.0	P 00.0	4	18 50.81	P 00.0	4	42 5.1
10 42 11.5	K 22.9	K 22.9	1	18 51.10	1C 22.9	1	42 10.4
P XXII. 83 =	R_1 49.0	M_1 44.9	1	18 50.65	M_1 44.9	1	42 9.7
	M_1 44.9	R_1 49.0	1	18 50.64	R_1 49.0	1	42 11.9
	L_4 54.7	L_4 54.7	1	18 50.43	L_4 54.7	1	42 12.8
	L_5 79.8	G 79.7	3	18 50.48	G 79.7	3	42 10.3
30577	G 79.7	L_5 79.8	1	18 50.33	L_5 79.8	1	42 9.8
	H 91.1	H 91.1	3	18 50.24	H 91.1	3	42 11.5
	E 04.8	E 04.8	3	18 50.26	E 04.8	3	42 11.6

E. omitted from Cat.

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Zones	α Ep. − H.δ	α Ps − H.δ	αC. − H.δ	α adj.	δ	Δα	Δδ
127	-66.9 -66.9	+.13 −0.9	−.11 −0.8	37,62	25.8	−.02	+0.5
	-44.0 -44.0	−.11 −1.2	−.07 −0.5	37,57	26.5	−.07	−0.2
		+16 +1.2		37,73	26.6	+.09	−0.3
				37.64	26.3		
	-35.1 -35.1	.00 −5.6		47.24	12.0	−.11	+1.5
				47,32	15.2	−.03	−1.7
	+4.2 +4.2	+.20 −2.3		47.49	13.3	+.14	+0.2
				47.35	13.5		
39	-90.0 -90.0	−.56 −5.8	−.52 −2.1	47.90	30.6	−.31	+1.7
129	-67.9 -67.9	−.70 +1.6	−.80 +2.1	47,62	34.8	−.59	−2.5
	-44.2 -50.1	−.19 −1.1	−.37 0.0	48.18	31.9	−.03	+0.4
	-43.2 -44.2	+.05 −1.8	−.36 0.0	48.46	32.0	+.25	+0.3
	-36.1 -36.1	−.15 −2.6	−.30 0.0	48.29	31.0	+.08	+1.3
	-24.4 -23.3	−.09 −0.3	−.20 0.0	48.33	33.2	+.12	−0.9
	-10.1 -10.1	−.06 −1.8	−.08 0.0	48.37	31.7	+.16	+0.6
	-5.1 -5.1	−.02 0.0	−.04 0.0	48.33	32.8	+.12	−0.5
		−79.0 +.84 0.0		48.42	32.7	+.21	−0.4
				48.21	32.3		
40,14	-92.8 -92.8	+.40 −5.4	+.44 −1.6	50,68	9.9	+.13	+1.0
	-91.1 -91.1	+.57 −6.4	+.60 −1.5	50,92	8.7	+.37	+2.2
127	-68.2 -68.2	+.86 −1.1	+.62 −1.0	50,86	10.5	+.31	+0.4
	-46.2 -46.2	+.41 −1.8	+.30 −0.7	50,60	10.8	+.05	+0.1
	-42.1 -42.1	+.40 +0.4	+.28 −0.7	50,72	11.2	+.17	−0.3
	-36.4 -36.4	+.19 +1.3	+.24 −0.6	50,45	13.7	−.10	−2.8
	-11.4 -11.4	+.24 −1.2	+.08 −0.2	50,46	10.9	−.09	0.0
	-11.3 -11.3	+.09 −1.7	+.07 −0.2	50.34	10.6	−.21	+0.3
		−80.5 +.66 +1.6		50,24	11.5	−.31	−0.6
	+13.7 +13.7	+.02 +0.1	−.09 +0.2	50,24	11.5	−.31	−0.6
				50,55	10.9		

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0
7897 9.0.	K 23.7.		1.	22 19 7.52.		1.	13 42 7.9.
22 19 7.04.	St_2 59.7.		2.	19 6.85.		2.	42 3.2.
13 42 6.2.	M_2 86.8.		1.	19 7.00.		1.	42 7.0.
	H 91.1.		3.	19 7.04.		3.	42 6.2.
	SK 99.1, 98.2		3.	19 7.21.		4.	42 5.4.
7898 8.6.	L_1 98.3	L_1 98.3.	2.	22 19 11.19.	L_1 98.3.	2.	10 18 18.9.
22 19 11.25.	K 23.7.	K 23.7.	2.	19 11.40.	K 23.7.	2.	18 25.0.
10 18 24.6.	L_4 61.7.	St_1 60.0.	2.	19 10.86.	St_1 60.0.	2.	18 24.0.
	St_1 [60.0].	L_4 61.7.	1.	19 11.43.	L_4 61.7.	1.	18 23.5.
	L_5 78.8.	L_5 78.8.	2.	19 11.42.	L_5 78.8.	2.	18 23.0.
	V 86.8, 86.7	V 86.8.	5.	19 11.49.	V 86.7.	4.	18 25.1.
	H 90.9.	H 90.9.	2.	19 11.25.	H 90.9.	2.	18 24.6.
7899 8.4.	L_1 00.8.	L_1 00.8.	1.	22 19 12.80.	L_1 00.8.	1.	11 39 40.2.
22 19 12.32.	K 22.9.	K 22.9.	2.	19 12.58.	K 22.9.	2.	39 48.7.
11 39 47.1.	L_3 47.0, 47.1.	M_1 46.4.	3.	19 12.66.	M_1 46.4.	3.	39 47.3.
	M_1 46.4.	L_3 47.0.	32.	19 12.36.	L_3 47.1.	23.	39 47.4.
	L_4 60.3.	St_1 60.0.	2.	19 12.11.	St_1 60.0.	2.	39 50.2.
	St_1 [60.0].	L_4 60.3.	3.	19 12.30.	L_4 60.3.	3.	39 46.1.
	Nc 66.4, 66.8	S_j 62.8.	1.	19 12.26.	S_j 62.8.	1.	39 46.6.
	S_j 62.8.	Nc 66.4.	3.	19 12.35.	Nc 66.8.	2.	39 48.0.
	L_5 80.7.	L_5 80.7.	1.	19 12.23.	L_5 80.7.	1.	39 46.2.
	H 91.1.	H 91.1.	3.	19 12.32.	H 91.1.	3.	39 47.1.
7901 9.3.	K 23.7.		1.	22 19 14.08.		1.	10 27 14.9.
22 19 14.10.							
10 27 13.3.	H 92.9.		3.	19 14.10.		3.	27 13.3.

For 7900 see next page

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zones	α Eph. − H.O.	α Bes. − H.O.	α C. − H.O.	α adj.	δ	Δα	Δδ	
189	−67.4 −67.4	+.48	+1.7	+.22 +1.5	7.26	7.7	+.19	−1.4	✓
	−31.4 −31.4	−.19	−3.0	+.10 +0.7	6.95	4.7	−.12	+1.6	✓
	−4.3 −4.3	−.04	+0.8	+.01 +0.1	6.93	7.1	−.14	−0.8	✓
		−33.	−2.2		7.04	6.2	−.03	+0.1	✓
	+8.0 +7.1	+.17	−0.8	−.03 −0.2	7.18 / 7.07	5.8 / 6.3	+.11	+0.5	✓
14,40	−92.6 −92.6	−.06	−5.7	−.02 −1.9	11.23	22.7	−.05	+1.4	✓
184,186	−67.2 −67.2	+.15	+0.4	−.03 −1.2	11.22	23.4	−.06	+0.7	✓
	−30.9 −30.9	−.39	−0.6	−.01 −0.6	10.92	24.5	−.36	−0.4	✓
	−29.2 −29.2	+.18	−1.1	−.01 −0.6	11.45	24.4	+.17	−0.3	✓
	−12.1 −12.1	+.17	−1.6	.00 −0.2	11.43	23.8	+.15	+0.3	✓
	−4.1 −4.2	+.24	+0.5	.00 −0.1	11.47	25.2	+.19	−1.1	✓
	−79.9	+.03	+1.9		11.25 / 11.28	24.6 / 24.1	−.03	−0.5	✓
39	−90.3 −90.3	+.48	−6.9	+.52 −3.2	12.84	43.9	+.45	+3.8	✓
127,129	−68.2 −68.2	+.26	+1.6	+.09 +1.9	12.41	49.0	+.02	−1.3	✓
	−44.7 −44.7	+.34	+0.2	+.17 −0.4	12.61	48.4	+.22	−0.7	✓
	−44.1 −44.0	+.04	+0.3	+.17 −0.4	12.35	47.7	−.04	0.0	✓
	−31.1 −31.1	−.21	+3.1	+.12 −0.2	12.17	50.7	−.22	−3.6	✓
	−30.8 −30.8	−.02	−1.0	+.12 −0.2	12.32	47.0	−.07	+0.7	✓
	−28.3 −28.3	−.06	−0.5	+.11 −0.2	12.30	47.7	−.09	0.0	✓
	−24.7 −24.3	+.03	+0.9	+.10 −0.2	12.35	48.8	−.04	−1.1	✓
	−10.4 −10.4	−.09	−0.9	+.04 −0.1	12.24	47.0	−.15	+0.7	✓
	−79.2	−.39	+0.8		12.32 / 12.39	47.1 / 47.7	−.07	+0.6	✓
186	−69.2 −69.2	−.02	+1.6	−.19 −0.1	13.91	13.2	−.09	0.0	✓
					14.10 / 14.00	13.3 / 13.2	+.10	−0.1	✓

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Star	Epoch		Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zo
7900 8.2	L_1	95.6		1	22 19 13.13		1	13 41 24.2	1
22 19 12.42	K	23.7		1	19 12.78		1	41 29.2	18
13 41 26.7	L_4	54.7		1	19 12.50		1	41 26.9	
	St_2	59.7		1	19 12.11		1	41 27.4	
	A	77.8		2	19 12.48		2	41 27.9	
	L_5	79.7		1	19 12.49		1	41 28.0	
	H	91.8		4	19 12.42		4	41 26.7	
	Sk	95.3		2	19 12.40		2	41 27.3	
7902 9.1	K	23.7		1	22 19 22.14		1	13 43 14.5	18
22 19 22.35	St_2	59.9		2	19 22.12		2	43 14.8	
13 43 16.7	H	92.6		4	19 22.35		4	43 16.7	
	Sk	97.1		3	19 22.45		3	43 15.9	
7903 8.4	L_1	95.6		1	22 19 23.32		1	13 27 46.4	17
22 19 23.55	L_4	54.7		1	19 23.55		1	27 48.3	
13 27 48.4	Nc	68.8, 55.7		2	19 23.70		2	27 49.0	
	A	78.9		1	19 23.55		1	27 47.9	
	L_5	79.7		1	19 23.70		1	27 49.0	
	H	90.9		2	19 23.55		2	27 48.4	
7904 9.0	K	23.7		1	22 19 25.97		1	10 6 30.6	186
22 19 26.04	R_1	48.0		1	19 25.81		1	6 29.3	
10 6 28.2	St_1	[60.0]		1	19 25.93		1	6 30.3	
	H	91.3		4	19 26.04		4	6 28.2	

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zones	α Eph.−H.C.	α Bs.−H.C.	δ Eph.−H.C.	δ Bs.−H.C.	α adj.	δ	Δα	Δδ
11	−96.2	−96.2	+4.71	−2.5	+.68	+0.7	13.10	27.4	+.58	+0.6
189	−68.1	−68.1	+.36	+2.5	+.10	+2.3	12.52	29.0	.00	−1.0
	−37.1	−37.1	+.08	+0.2	+.17	+0.7	12.52	27.8	.00	+0.2
	−32.1	−32.1	−.31	+0.7	+.15	+0.6	12.21	28.9	−.31	−0.9
	−14.0	−14.0	+.06	+1.2	+.07	+0.3	12.48	27.9	−.04	+0.1
	−12.1	−12.1	+.07	+1.3	+.06	+0.2	12.50	28.8	−.02	−0.8
	−82.2	−47.	−1.8				12.42	26.7	−.10	+1.3
	+3.5	+3.5	−.02	+0.6	−.02	−0.1	12.37 / 12.52	27.7 / 28.0	−.15	+0.3
189	−68.9	−68.9	−.21	−2.2	−.47	−2.4	21.88	14.3	−.34	+1.6
	−32.7	−32.7	−.23	−1.9	−.22	−1.1	22.22	16.3	.00	−0.4
			+.68	+3.5			22.35	16.7	+.13	−0.8
	+4.5	+4.5	+.10	−1.8	+.03	+0.2	22.42 / 22.22	16.3 / 15.9	+.20	−0.4
11	−95.3	−95.3	−.23	−2.0	−.26	+1.2	23.29	49.6	−.27	−0.6
	−36.2	−36.2	.00	−0.1	−.10	+0.5	23.57	48.5	+.01	+0.5
	−22.1	−35.2	+.15	+0.6	−.06	+0.5	23.70	49.8	+.14	−0.8
	−12.0	−12.0	.00	−0.5	−.03	+0.2	23.57	47.9	−.01	+1.2
	−11.2	−11.2	+.15	+0.6	−.03	+0.1	23.71	49.8	+.15	−0.8
			+.27	−1.3			23.55 / 23.56	48.4 / 49.8	−.01	+0.8
186	−67.6	−67.6	−.07	+2.4	−.24	+0.7	25.80	28.9	−.13	+0.2
	−43.3	−43.3	−.23	+1.1	−.16	+0.4	25.89	28.6	−.05	+0.5
	−31.3	−31.3	−.11	+2.1	−.11	+0.3	25.99	30.7	+.06	−1.6
			+.36	−1.0			26.04 / 25.93	28.2 / 29.1	+.11	+0.9

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zo
7905 8.6	L_1 95.7		1	22 19 26.39		1	9 55 59.2	1
22 19 26.44	K 23.7		1	19 26.44		1	56 8.5	18
9 56 6.2	M_1 45.8		1	19 26.51		1	56 3.3	
	L_4 54.7		1	19 26.33		1	56 3.5	
	St_1 [60.0]		2	19 26.36		2	56 5.5	
	L_5 79.7		1	19 26.55		1	56 5.0	
	H 91.3		2	19 26.44		2	56 6.2	
	Db 93.7		2	19 26.44		2	56 7.2	
7906 8.6	L_1 00.8	L_1 00.8	1	22 19 30.47	L_1 00.8	1	11 53 39.9	3
22 19 30.40	K 22.9	K 22.9	2	19 30.56	K 22.9	2	53 38.4	127,
11 53 42.5	R_1 49.0	R_1 49.0	1	19 30.29	R_1 49.0	1	53 42.6	
	L_4 61.2, 67.7	St_1 60.0	2	19 30.25	St_1 60.0	2	53 41.3	
	St_1 [60.0]	L_4 61.2	2	19 30.45	L_4 67.7	1	53 37.7	
	A 78.9	L_5 78.8	1	19 30.40	L_5 78.8	1	53 39.6	
	L_5 78.8	A 78.9	1	19 30.47	A 78.9	1	53 38.6	
	H 91.2	H 91.2	3	19 30.40	H 91.2	3	53 42.5	
7908 8.9	Kc 23.7	K 23.7	1	22 19 47.33	K 23.7	1	13 30 38.0	18
22 19 47.00	St_2 59.9	St_2 59.9	1	19 47.03	Nc 55.7	2	30 35.2	
13 30 35.8	Nc 68.8, 55.7	Nc 68.8	2	19 46.98	St_2 59.9	1	30 35.5	
	A 78.9	A 78.9	1	19 47.00	A 78.9	1	30 32.7	
	H 92.8	H 92.8	3	19 47.00	H 92.8	3	30 35.8	
7909 8.9	L_3 62.7		1	22 20 1.43		1	11 41 17.9	
22 20 1.40	M_2 85.7		1	20 1.41		1	41 16.9	
11 41 15.8	H 91.8		H	20 1.40		H	41 15.8	

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Zones	α Ep. − N	δ	α Bs. − N	δ	α C. − N.	δ	α adj.	δ	Δα	Δδ	
14	−95.6	−95.6	−.05	−7.0	.00	−2.5	26.44	3.7	+.02	+1.9	✓
184	−67.6	−67.6	.00	+2.3	−.19	+0.9	26.25	7.1	−.17	−1.5	✓
	−45.5	−45.5	+.07	−2.9	−.05	−0.5	26.46	4.4	+.04	+1.2	✓
	−36.6	−36.6	−.11	−2.7	−.04	−0.4	26.35	4.4	−.07	+1.2	✓
	−31.3	−31.3	−.08	−0.7	−.04	−0.3	26.42	6.0	.00	−0.4	✓
	−11.6	−11.6	+.11	−1.2	−.01	−0.1	26.56	5.8	+.14	−0.2	✓
		−81.6	+.12	+1.0			26.44	6.2	+.02	−0.6	✓
	+2.4	+2.4	.00	+1.0	.00	0.0	26.44 / 26.42	6.9 / 5.6	+.02	−1.3	✓
39	−90.4	−90.4	+.07	−2.6	+.11	+1.1	30.51	43.6	+.09	−2.8	✓
127, 129	−68.3	−68.3	+.16	−4.1	−.01	−3.8	30.39	38.7	−.03	+2.1	✓
	−42.2	−42.2	−.11	+0.1	+.03	−0.7	30.37	41.9	−.05	−1.1	✓
	−31.2	−31.2	−.15	−1.2	+.02	−0.5	30.31	41.8	−.11	−1.0	✓
	−30.0	−23.5	+.05	−4.8	+.02	−0.4	30.47	38.6	+.05	+2.2	✓
	−12.4	−12.4	.00	−2.9	+.01	−0.2	30.41	40.4	−.01	+0.4	✓
	−12.3	−12.3	+.07	−3.9	+.01	−0.2	30.47	38.6	+.05	+2.2	✓
		−79.4	−.06	+1.7			30.40 / 30.42	42.5 / 40.8	−.02	−1.7	✓
189	−69.1	−69.1	+.33	+2.2	+.07	+2.0	47.07	37.8	+.03	−1.9	✓
	−32.9	−37.1	+.03	−0.6	+.03	+1.1	47.13	36.0	+.09	−0.1	✓
	−24.0	−32.9	−.02	−0.3	+.02	+1.0	46.98	37.0	−.06	−1.1	✓
	−13.9	−13.9	.00	−3.1	+.01	+0.4	47.00	32.4	−.04	+3.2	✓
			−.10	−2.9			47.00 / 47.04	35.8 / 35.9	−.04	+0.1	✓
	−29.1	−29.1	+.03	+2.1			1.47	19.0	+.07	−1.7	✓
	−6.1	−6.1	+.01	+1.1			1.34	17.0	−.06	+0.3	✓
							1.40 / 1.40	15.8 / 17.3	.00	+1.5	✓

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Star		Epoch		Ep. α		Obs.	α 1900.0			Ep. δ		Obs.	δ 1900.0		
7910	9.0	K	22.9			1	22	20	3.49			1	12	35	4.0
22	20	3.50	St	59.7		2		20	3.18			2		35	1.5
			L_4 2	61.7		1		20	3.59			1		35	2.9
12	35	3.9	H	92.5		3		20	3.50			3		35	3.9
7911	8.5	L_1	00.8	L_1	00.8	1	22	20	11.64	L_1	00.8	1	12	24	46.6
22	20	11.92	K	22.9	K	22.9	2		20	12.18	K	22.9	2		24	57.1
12	24	56.4	R_1	49.0	M_1	46.4	3		20	11.93	M_1	46.4	2		24	58.1
			M_1	46.4	R_1	49.0	1		20	11.83	R_1	49.0	1		24	58.3
			St_1	[60.0]	St_1	60.0	2		20	11.56	St_1	60.0	2		24	57.7
			L_4 A	61.0, 63.8	L_4	61.0	4		20	11.89	L_4	63.8	2		24	55.9
			L_5	78.8	A	78.8	1		20	12.07	A	78.8	1		24	57.3
			H	90.8	L_5	78.8	2		20	11.91	L_5	78.8	2		24	55.3
					H	90.8	2		20	11.92	H	90.8	2		24	56.4
7913	8.7	L_1	95.6			1	22	20	48.74			1	13	18	24.1
22	20	48.53	K	23.7		1		20	49.18			1		18	34.9
			L_4	.. 58.7		..			...			1		18	29.0
13	18	29.6	St_2	59.7		2		20	48.40			2		18	25.4
			A	[72.0]		1		20	48.72			1		18	30.3
			L_5	78.7		2		20	48.62			2		18	27.7
			H	91.8		4		20	48.53			4		18	29.6
7914	8.2	L_1	00.8	L_1	00.8	1	22	20	53.72	L_1	00.8	1	12	33	25.7
22	20	53.38	K	23.2	K	23.2	3		20	53.78	K	23.2	3		33	31.7
12	33	31.4	M_1	45.8	M_1	45.8	1		20	53.67	M_1	45.8	1		33	28.6
			L_4 St_2	.. 54.7 59.7	L_4	..	..		20	.. ..	L_4	54.7	1		33	31.3
			L_5	80.7	St_2	59.7	2		20	53.36	St_2	59.7	2		33	29.6
			H	90.2	L_5	80.7	2		20	53.52	L_5	80.7	2		33	31.6
					H	90.2	2		20	53.38	H	90.2	2		33	31.4

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zones	α Ep.−H.d	α Bs.−H.d	αC.−H.d	α adj.	δ	Δα	Δδ	
129	-69.6	-69.6 −.01	+0.1 −.11	+0.6	3.39	4.5	−.05	−0.7 ✓
	-32.8	-32.8 −.32	−2.4 −.05	+0.3	3.28	3.0	−.16	+0.8 ✓
	-30.8	-30.8 +.09	−1.0 −.05	+0.3	3.61 ✓	3.8 ✓	+.17	0.0 ✓
		+.16 ✓	−0.9		3.50	3.9	+.06	−0.1 ✓
					3.44	3.8		
39	-90.0	-90.0 −.28	−9.8 −.24	−6.1	11.68 ✓	50.3 ✓	−.20	+6.3 ✓
127,129	-67.9	-67.9 +.26	+0.7 +.09 ✓	+1.0	12.01	57.4 ✓	+.13	−0.8 ✓
	+44.4	+44.4 +.01	+1.7 −.04	−1.4	11.88	59.2	.00	−2.6 ✓
	-41.8	-41.8 −.09	+1.9 −.04	−1.3	11.91 ✓	57.6	+.03	−1.0 ✓
	-30.8	-30.8 −.36	+1.3 −.03	−1.0	11.62 ✓	58.2 ✓	−.26	−1.6 ✓
	-29.8	-27.0 −.03	−0.5 −.03	−0.9	11.91 ✓	56.8 ✓	+.03	−0.2 ✓
	-12.0	-12.0 +.15	+0.9 −.01	−0.4	12.07 ✓	57.3 ✓	+.19	−0.7 ✓
	-12.0	-12.0 −.01	−1.1 −.01	−0.4	11.92	56.1 ✓	+.04	+0.5 ✓
		−79.0 ✓	+.09 ✓ +3.2		11.92	56.4	+.04	+0.2 ✓
					11.88	56.6		
11	-96.2	-96.2 +.21	−5.5 +.18	−2.3 ✓	48.71	27.3	+.04	+2.3 ✓
189	-68.1	-68.1 +.65	+5.3 +.39 ✓	+5.1	48.92	34.7 ✓	+.25	−5.1 ✓
	..	-33.1 ..	−0.6	+0.6	...	29.9 ✓		−0.3 ✓
	-32.1	-32.1 −.13	−4.2 +.11	+0.5	48.50 ✓	26.9	−.17	+2.7 ✓
	-19.8	-19.8 +.19	+0.7 +.07	+0.3	48.72 ✓	30.3 ✓	+.05	−0.7 ✓
	-13.1	-13.1 +.09	−1.9 +.05	+0.2	48.63 ✓	28.5 ✓	−.04	+1.1 ✓
		−82.2 ✓	−3.5 ✓ −1.7 ✓		48.53	29.6	−.14	0.0 ✓
					48.67	29.6		
39	-89.4	-89.4 +.34	−5.7 +.38 ✓	−2.0	53.76	29.4 ✓	+.20	+1.7 ✓
{127,129 189}	-67.0	-67.0 +.40	+0.3 +.20 ✓	+0.4	53.58 ✓	31.8 ✓	+.02	−0.7 ✓
	-44.4	-44.4 +.29	−2.8 +.16	−0.4	53.62	29.7 ✓	+.06	+1.4 ✓
	..	-35.5 ..	−0.1 ..	−0.4	...	32.2 ✓	..	−1.1 ✓
	-30.5	-30.5 −.02	−1.8 +.11	−0.3	53.46	31.1	−.10	0.0 ✓
	-9.5	-9.5 +.14	+0.2 +.04	−0.1	53.53 ✓	32.4 ✓	−.03	−1.3 ✓
		−78.2 ✓	−3.7 ✓ +1.0		53.38	31.4	−.18	−0.3 ✓
					53.56 ✓	31.1 ✓		

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0
7916 6.9	L_1	97.7	L_1	97.7	2	22 21 22.94	L_1	97.7	2	11 44 9.5
22 21 23.01	P 98	00.0	P	00.0	9	21 22.62	P	00.0	10	44 10.0
11 44 11.6	K	22.9	K	22.9	2	21 22.88	K	22.9	2	44 11.5
	L_3	48.0, 47.7	M_1	46.4	3	21 22.79	M_1	46.4	2	44 13.3
	M_1	46.4	L_3	48.0	27	21 22.91	L_3	47.7	7	44 11.7
	L_4	54.6, 54.7	L_4	54.6	3	21 22.91	L_4	54.7	1	44 11.2
	St_1	[60.0]	St_1	60.0	2	21 22.79	St_1	60.0	2	44 11.5
	Nc	68.7, 66.8	Nc	68.7	3	21 22.92	Nc	66.8	2	44 11.8
	Q	71.4, 68.2	Q	71.4	8	21 22.89	Q	68.2	4	44 [0.5]
	G	78.8	G	78.8	3	21 22.95	G	78.8	3	44 11.5
	L_5	79.8	L_5	79.8	1	21 22.97	L_5	79.8	1	44 10.4
	M_2	85.7	M_2	85.7	1	21 23.19	M_2	85.7	1	44 12.5
	H	89.7	H	89.7	3	21 23.01	H	89.7	3	44 11.6
	Σ	04.2, 04.1	Eo	04.2	3	21 23.02	Eo	04.1	4	44 12.0
7917 8.8	L_1	~~95.4~~ 97.7			2	22 21 30.49			2	11 51 29.6
22 21 30.48	π	22.9			2	21 30.75			2	51 31.4
11 51 30.5	L_4 St_1	54.7, 56.7 [60.0]			1 2	21 30.33 21 30.35			2 2	51 29.2 51 29.1
	A	78.9			1	21 30.49			1	51 29.6
	L_5	80.1			3	21 30.39			3	51 29.8
	H	89.8			2	21 30.48			2	51 30.5
	Σ	04.2			3	21 30.48			3	51 29.7
7918 8.9	L_3	48.6, ..	M_1	45.4	2	22 21 31.23	M_1	45.4	2	11 8 0.5
22 21 31.24	M_1	45.4	L_3	48.6	1	21 31.24	L_3	..	..	..
11 8 4.2	L_4	[illegible] not ∫	—							
	Sj	62.7	Sj	62.7	1	21 31.25	Sj	62.7	1	8 4.1
	H	90.4	H	90.4	3	21 31.24	H	90.4	3	8 4.2

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zones	α Ep.-H.	δ	α Bs.-H.	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
3,39	-92.0	-92.0	-.07	-2.1	-.01	+2.3	23.00	13.9	+.09	-1.4	✓
	-89.7	-89.7	-.39	-1.6	-.18	+1.4	22.73	13.5	-.18	-1.0	✓
127,129	-66.8	-66.8	-.13	-0.1	-.30	+0.2	22.71	11.8	-.20	+0.7	✓
	-43.3	-43.3	-.22	+1.7	-.09	+0.7	22.74	14.4	-.17	-1.9	✓
	-41.7	-42.0	-.10	+0.1	-.08	+0.7	22.90	12.0	-.01	+0.5	✓
	-35.1	-35.0	-.10	-0.4	-.07	+0.6	22.92	12.1	+.01	+0.4	✓
	-29.7	-29.7	-.22	-0.1	-.06	+0.5	22.85	12.3	-.06	+0.2	✓
	-21.0	-22.9	-.09	+0.2	-.04	+0.4	22.92	12.6	+.01	-0.1	✓
	-18.3	-21.5	-.12	-11.1	-.04	+0.3	22.98	[1.1]	+.07	[ab +11.4]	✓
	-10.9	-10.9	-.06	-0.1	-.02	+0.2	2 28.93	12.1	+.02	+0.4	✓
	-9.9	-9.9	-.04	-1.2	-.02	+0.2	22.98	11.2	+.07	+1.3	✓
	-4.0	-4.0	+.18	+0.9	-.01	+0.1	23.12	12.6	+.21	-0.1	✓
		-79.4	+.20	-1.6			23.01	11.6	+.10	+0.9	✓
	+14.5	+14.4	+.01	+0.4	+.03	-0.2	23.00 / 22.91	11.9 / 12.5	+.09	+0.6	✓
3,39	-92.1	-92.1	+.01	-0.9	+.07	+3.5	30.55	34.0	+.09	-3.3	✓
127,129	-66.9	-66.9	+.27	+0.9	+.10	+1.2	30.58	31.7	+.12	-1.0	✓
	-35.1	-33.1	-.15	-1.3	+.04	+1.0	30.34	30.1	-.12	+0.6	✓
	-29.8	-29.8	-.13	-1.4	+.03	+0.9	30.41	29.6	-.05	+1.1	✓
	-10.9	-10.9	+.01	-0.9	+.01	+0.3	30.49	29.6	+.03	+1.1	✓
	-9.7	-9.7	-.09	-0.7	+.01	+0.3	30.40	30.6	-.06	+0.1	✓
		-79.5	-.11	-3.0			30.48	30.5	+.02	+0.2	✓
	+14.4	+14.4	.00	-0.8	-.02	-0.4	30.46 / 30.46	29.6 / 30.7	.00	+1.1	✓
	-45.0	-45.0	-.01	-3.7			31.18	1.6	-.06	+2.1	✓
	-41.8	"	.00	"			31.23	"	-.01	"	✓
							"	"	"	"	
	-27.7	-27.7	+.01	-0.1			31.29	5.2	+.05	-1.5	✓
							31.24 / 31.24	4.2 / 3.7	.00	-0.5	✓

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Star		Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	
7920	8.9	K	23.7			2	22 21 43.26			2	10 27 14.5	184,1
22 21	43.08	St$_1$	[60.0]			2	21 43.02			2	27 11.4	
10 27	10.9	Sj	62.8			1	21 42.96			1	27 8.7	
		L$_2$	70.1, 68.0			4	21 43.01			3	27 11.6	
		H	90.3			2	21 43.08			2	27 10.9	
7921	9.0	A	78.9			2	22 21 54.56			2	12 59 1.2	
22 21	54.78											
12 58	59.4	H	89.7			2	21 54.78			2	58 59.4	
7923	8.5	L$_1$	95.6	L$_1$	95.6	1	22 22 8.66	L$_1$	95.6	1	12 46 49.4	11
22 22	8.47	K	23.7	K	23.7	1	22 7.99	K	23.7	1	46 54.6	18
12 46	52.4	M$_1$	45.8	M$_1$	45.8	1	22 8.95	M$_1$	45.8	1	46 45.3	
		L$_4$ St$_2$	58.2, 60.3	L$_4$	58.2	6	22 8.70	St$_2$	59.7	2	46 51.4	
		St$_2$	59.7	St$_2$	59.7	2	22 8.49	L$_4$	60.3	5	46 50.9	
		Sj	62.8	Sj	62.8	1	22 8.54	Sj	62.8	1	46 49.5	
		H	89.8	H	89.8	3	22 8.47	H	89.8	3	46 52.4	
7924	9.1	K	23.7			1	22 22 14.62			1	13 34 16.6	18
22 22	15.07	St$_2$	59.7			1	22 14.79			1	34 9.8	
13 34	12.4	D$_1$	83.2			2	22 15.64			2	34 10.5	
		H	90.9			2	22 15.07			2	34 12.4	
7925	8.9	L$_1$	95.6	L$_1$	95.6	1	22 22 22.26	L$_1$	95.6	1	12 47 36.7	11
22 22	21.77	K	23.3	K	23.3	2	22 22.06	K	23.3	2	47 36.1	127
12 47	35.4	St$_2$	59.7	St$_2$	59.7	2	22 21.61	L$_4$	58.2	2	47 32.1	
		L$_4$	61.7, 58.2	L$_4$	61.7	1	22 21.95	St$_2$	59.7	2	47 34.2	
		L$_5$	81.1	L$_5$	81.1	3	22 21.81	L$_5$	81.1	3	47 35.7	
		H	92.5	H	92.5	3	22 21.77	H	92.5	3	47 35.4	
7926	9.4	R$_1$	48.0			2	22 22 44.22			2	10 3 59.6	
22 22	44.61	H	92.8			3	22 44.61			3	3 56.8	
10 3	56.8											

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zones	α Ep.−H.	δ	α Ps.−H.	δ	αC.−H.	δ	α adj.	δ	Δα	Δδ	
184,186	-66.6	-66.6	+.18	+3.6	.00	+2.0	43.08	12.9	+.01	−1.4	✓
	-30.3	-30.3	−.06	+0.5	.00	+0.9	43.08	11.8	+.01	−0.3	✓
	-27.5	-27.5	−.12	−2.2	.00	+0.8	43.00	9.8	−.07	+1.7	✓
	-20.2	-22.3	−.07	+0.7	.00	+0.7	43.10	12.2	+.03	−0.7	✓
			.00	−3.0			43.08	10.9	+.01	+0.6	✓
							43.07	11.5			
	-10.8	-10.8	−.22	+1.8			54.56	1.2	−.11	−0.9	✓
							54.78	59.4	+.11	+0.9	✓
							54.67	0.3			
11	-94.2	-94.2	+.19	−3.0	+.06	+0.2	8.63	52.6	−.02 +.11	−1.0	✓
189	-66.1	-66.1	−.48	+2.2	−.74	+2.0	[7.73]	54.4	−.79	−2.8	✓
	-44.0	-44.0	+.48	−7.1	−.18	+0.6	8.90	46.4	+.25 +.38	+5.2	✓
	-31.6	-30.1	+.23	−1.0	−.13	+0.4	8.71	52.9	+.19 .06	−1.3	✓
	-30.1	-29.5	+.02	−1.5	−.13	+0.4	8.59	51.8	−.06	−0.2	✓
	-27.0	-27.0	+.07	−2.9	−.11	+0.4	8.58	50.6	−.07 +.06	+1.0	✓
			−80.2	+.42	−1.4		8.47	52.4	−.18 −.05	−0.8	✓
							8.52 65	51.6			
189	-67.2	-67.2	−.45	+4.2	−.71	+4.0	14.36	16.4	−.61	−3.6	✓
	-31.2	-31.2	−.28	−2.6	−.33	+1.9	14.89	11.3	−.08	+1.5	✓
	-7.7	-7.7	+.57	−1.9	−.77	+0.5	15.56	10.9	+.59	+1.9	✓
			+1.06	−6.0			15.07	12.4	+.10	+0.4	✓
							14.97	12.8			
11	-96.9	-96.9	+.49	+1.3	+.46	+4.5	22.23	39.9	+.35	−3.8	✓
127,11,189	-69.2	-69.2	+.29	+0.7	+.04	+0.5	21.89	35.9 36.4	−.07	+0.2	✓
	-32.8	-34.3	−.16	−3.3	+.10	+1.0	21.71	33.6	−.17	+3.1 +2.5	✓
	-30.8	-32.8	+.18	−1.2	+.09	+1.0	21.96	35.7	+.08	+0.4 +1.6	✓
	-11.4	-11.4	+.04	+0.3	+.03	+0.3	21.82	36.5	−.06	−0.4	✓
			-83.0	-.30	-3.0		21.77	35.4	−.11	+0.7	✓
							21.88	36.1			
	-44.8	-44.8	−.39	+2.8	+.13	+1.3	44.30	58.9	−.16	−1.1	✓
							44.61	56.8	+.15	+1.0	✓
							44.46	57.8			

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Star	Epoch	Eph. α	Obs. α 1900.0	Eph. δ	Obs. δ 1900.0	
7927 8.5	L_1 97.7 ~~95.4~~		2 22 22 49.27		2 12 24 1.5	39,
22 22 49.26	$\mathcal{K}$ 22.9		2 22 49.45		2 24 3.5	127,
12 24 3.4	M_1 46.4		3 22 49.41		3 24 2.7	
	L_4 59.0		3 22 49.29		3 24 3.0	
	St_1 [60.0]		2 22 49.26		2 24 3.5	
	M_2 85.7		1 22 49.43		1 24 3.5	
	H 91.0		4 22 49.26		4 24 3.4	
7928 8.7	Sj 62.7		1 22 23 12.71		1 11 52 7.9	
22 23 12.74	A 78.9		1 23 12.86		1 52 9.0	
11 52 8.2	H 94.5		3 23 12.74		3 52 8.2	
7930 9.0	$\mathcal{K}$ 22.9		1 22 23 28.40		1 12 44 21.8	12
22 23 27.96	St_2 59.7		2 23 27.65		2 44 22.1	
12 44 26.5	L_5 81.8		1 23 28.15		1 44 26.0	
μ^{12}	H 91.1		3 23 27.96		3 44 26.5	
7932 8.8	L_1 ~~97.7~~		2 22 23 33.83		2 12 11 54.2	3, 3
22 23 33.50	M_1 46.6		1 23 33.40		1 12 3.1	
	L_4 59.8, 57.8		1 23 33.53		2 12 0.3	
12 11 58.5	L_5 78.7, 78.8		2 23 33.58		1 11 58.3	
	H 89.7		2 23 33.50		2 11 58.5	
7935 8.7	L_1 98.3	L_1 98.3	2 22 23 45.20	L_1 98.3	2 10 26 44.0	40,
22 23 45.54	K 23.7	K 23.7	1 23 45.87	K 23.7	1 26 54.3	186
10 26 49.2	L_4 54.7, ~~54.7~~	L_4 54.7	1 23 45.61	L_4 54.7	1 26 48.0	
	B 60.9, 59.2	St_1 60.0	1 23 45.31	B 59.2	3 26 49.7	
	St_1 [60.0]	B 60.9	4 23 45.46	St_1 60.0	1 26 51.9	
	Nc 70.5, 69.8	Sj 62.8	1 23 45.52	Sj 62.8	1 26 46.8	
	Sj 62.8	Q 68.4	5 23 45.51	Q 68.2	2 26 48.5	
10052	Q 68.4, 68.2	Nc 70.5	3 23 45.56	Nc 69.8	3 26 48.4	
	L_5 79.7	L_5 79.7	1 23 45.63	~~L_4 79.7~~	+ ~~26 48.0~~	
	H 90.1	H 90.1	3 23 45.54	L_5 79.7	1 26 48.6	
				H 90.1	3 26 49.2	

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zones	α Eph-H.d	α Obs.-H.d	α C.-H.d	α adj.	δ	Δα	Δδ	
39,3	-93.3 -93.3	+.01 -1.9	+.07 +2.5	49.33	5.9	+.01	-1.8	✓
127,129	-68.1 -68.1	+.19 +0.1	+.02 +0.4	49.28	3.8	-.04	+0.3	✓
	-44.6 -44.6	+.15 -0.7	+.03 +0.8	49.36	3.8	+.04	+0.3	✓
	-32.0 -32.0	+.03 -0.4	+.02 +0.6	49.30	3.9	-.02	+0.2	✓
	-31.0 -31.0	.00 +0.1	+.02 +0.6	49.32	4.0	.00	+0.1	✓
	-5.3 -5.3	+.17 +0.1	.00 +0.1	49.36	3.6	+.04	+0.5	✓
	-80.7	-.06 -1.8		49.26	3.4	-.06	+0.7	✓
				49.32	4.1			
	-31.8 -31.8	-.03 -0.3		12.75	9.0	-.03	-0.3	✓
	-15.6 -15.6	+.12 +0.8		12.86	9.0	+.08	-0.3	✓
				12.74	8.2	-.04	+0.5	✓
				12.78	8.7			
127	-68.2 -68.2	+.44 -4.7	+.20 -4.6	28.16	21.9	+.15	+2.8	✓
	-31.4 -31.4	-.31 -4.4	+.09 -2.1	27.75	23.6	-.26	+1.1	✓
	-9.3 -9.3	+.19 -0.5	+.03 -0.6	28.16	26.8	+.15	-2.1	✓
		-.29 +6.7		27.96	26.5	-.05	-1.8	✓
				28.01	24.7			
3,39	-92.0 -92.0	+.33 -4.3	+.39 +0.1	33.89	58.6	+.32	+1.7	✓
	-43.1 -43.1	-.10 +4.6	+.18 0.0	33.35	4.2	-.22	-3.9	✓
	-29.9 -31.9	+.03 +1.8	+.13 0.0	33.54	1.2	-.03	-0.9	✓
	-11.0 -10.9	+.08 -0.2	+.05 0.0	33.59	59.1	+.02	+1.2	✓
		-.42 -0.1		33.50	58.5	-.07	+1.8	✓
				33.57	0.3			
40,14	-91.8 -91.8	-.34 -5.2	-.30 -1.4	45.24	47.8	-.28	+2.6	✓
186	-66.4 -66.4	+.33 +5.1	+.16 +3.4	45.70	52.6	+.18	-2.8	✓
	-35.4	- -1.2	+0.5		48.8		+1.0	✓
	-35.4 -30.9	+.07 +0.5	-.03 +0.4	45.62	52.1	+.10	-2.3	✓
	-30.1 -30.1	-.23 +2.7	-.03 +0.4	45.37	52.4	-.15	-2.6	✓
	-29.2 -27.3	-.08 -2.4	-.03 +0.4	45.38	47.9	-.14	+1.9	✓
	-27.3 -21.9	-.02 -0.7	-.02 +0.3	45.56	49.1	+.04	+0.7	✓
	-21.7 -20.3	-.03 -0.8	-.02 +0.3	45.60	49.2	+.08	+0.6	✓
	-19.6 -	+.02 -	-.02	45.56	...	+.04	..	✓
	-10.4 -10.4	-.09 -0.6	-.01 +0.1	45.64	49.4	+.12	+0.4	✓
	-79.1	+.09 -1.3		45.54	49.2	+.02	+0.6	✓

→ 4552 49.8 mean

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Star		Epoch		Eph. α		Obs.	α 1900.0	Eph. δ		Obs.	δ 1900.0	
7936	9.2	B	64.4, 64.8	St,	60.0	1	22 23 46.65	St,	60.0	1	10 27 27.5	20
22 23	46.52	St,	[60.0]	B	64.4	3	23 46.52	B	64.8	2	27 22.5	
10 27	20.8	Wc	70.3, 72.8	Wc	70.3	4	23 46.54	Wc	72.8	3	27 22.8	
		H	94.8	H	94.8	3	23 46.52	H	94.8	3	27 20.8	
7937	8.2	L1	98.3	L1	98.3	2	22 23 47.33	L1	98.3	2	10 14 49.6	40,
22 23	47.80	P 110	00.0	P	00.0	20	23 47.65	P	00.0	20	14 47.2	
10 14	59.0	K	23.7	K	23.7	2	23 47.79	K	23.7	2	14 54.9	184,
12		M1	45.5	M	45.5	3	23 47.84	M1	45.5	3	14 54.1	
μ		St,	[60.0]	Sch	58.7	1	23 47.67	Sch	58.7	1	14 53.7	
		L4 A	62.2, 61.7 69.7	St1	60.0	1	23 47.67	St1	60.0	1	14 56.4	
		G	79.7	L4	62.2 62.8	4	23 47.74	L4	61.7	5	14 55.8	
	30667	L5	78.8	Lr		1	23 47.59	Lr	62.8	1	14 54.4	
		V	86.0	A	69.7	3	23 47.77	A	69.7	3	14 59.4	
		H	90.8	L5	78.8	1	23 47.90	L5	78.8	1	14 57.6	
				G	79.7	3	23 47.86	G	79.7	3	14 58.1	
				V	86.0	4	23 47.81	V	86.0	4	14 57.4	
				H	90.8	2	23 47.80	H	90.8	2	14 59.0	
7938	8.8	L1	98.3			2	22 24 1.58			2	10 10 21.4	40,
22 24	1.81	P 114	00.0			9	24 1.70			9	10 24.3	184,
10 10	26.3	K	23.7			2	24 2.00			2	10 29.1	184,
		M1	45.5			3	24 1.89			3	10 25.2	
		L4 Sch St,	56.7 58.8 [60.0]			2	24 1.85			2	10 25.8	
	30669	G	79.8			2	24 1.84			1	10 26.3	
		H	92.9			3	24 1.84			3	10 25.8	
		E	07.0			3	24 1.81			3	10 26.3	
						3	24 1.86			3	10 26.4	
7940	8.9	K	22.9			1	22 24 23.79			1	12 2 1.5	127
22 24	23.15	St,	[60.0]			2	24 23.02			2	1 58.7	
12 2	3.7	H	91.1			3	24 23.15			3	2 3.7	

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Zones	α Eph.−H.	δ α Bs.−H.	δ	α C.−H.	δ	α adj.	δ	Δα	Δδ	
	−34.8	−34.8	−.47	+6.3		46.11	27.5	−.29	−3.3	✓
	−30.4	−30.0	.00	+1.7		46.44	24.9	+.04	−0.7	✓
	−24.5	−22.0	+.02	+2.0		46.54	23.6	+.14	+0.6	✓
						46.52	20.8	+.12	+3.4	✓
						46.40	24.2			
40,14	−92.5	−92.5	−.47	−9.4	−.43 −5.6	47.37	53.4	−.34	+2.6	✓
	−90.8	−90.8	−.15	−1.8	−.35 −6.4	47.76	50.7	+.05	+5.3	✓
184,186	−67.1	−67.1	−.01	−4.1	−.19 −5.7	47.61	53.3	−.10	+2.7	✓
	−45.3	−45.3	+.04	−4.9	−.18 −3.2	47.79	55.2	+.08	+0.8	✓
						47.64	54.9	−.07	+1.1	✓
	−30.8	−30.8	−.13	−2.6	−.12 −2.2	47.73	57.0	+.02	−1.0	✓
	−28.6	−29.1	−.06	−3.2	−.11 −2.1	47.75	56.7	+.04	−0.7	✓
						47.50	53.7	−.21	+2.3	✓
	−21.1	−21.1	−.03	+0.4	−.08 −1.5	47.77	59.4	+.06	−3.4	✓
	−12.0	−12.0	+.10	−1.4	−.05 −0.9	47.91	58.4	+.20	−2.4	✓
	−11.1	−11.1	+.06	−0.9	−.04 −0.8	47.84	58.7	+.13	−2.7	✓
	−4.8	−4.8	+.01	−1.6	−.02 −0.3	47.79	57.5	+.08	+1.5	✓
		−79.8	+.39	+7.1		47.80	59.0	+.09	−3.0	✓
						47.71	56.0			
40,14	−94.6	−94.6	−.23	−4.9	−.19 −1.1	1.62	25.2	−.14	+1.3	✓
184,186	−92.9	−92.9	−.11	−2.0	−.29 −3.6	1.52	22.4	−.24	−1.3	✓
184,186	−69.2	−69.2	+.19	+2.8	−.18 −1.7	1.82	27.5	+.06	−1.0	✓
	−47.4	−47.4	+.08	−1.1	−.12 −1.2	1.84	26.3	+.08	+0.2	✓
	−36.2	−36.2	+.04	−0.5	−.09 −0.9	1.86	26.8	+.01	−0.5	✓
	−32.9	−32.9	−.17	0.0	−.09 −0.8	1.80	26.8	+.02	+0.3	✓
							26.8	−.06	−0.3	✓
	−13.1	−13.1	+.03	−0.5	−.03 −0.3	1.82	26.4	+.06	+0.1	✓
		−93.8	+.26	+2.5		1.81	26.3	+.05	+0.2	✓
	+14.1	+14.1	+.05	+0.1	+.04 +0.4	1.84	26.3	+.08	+0.2	✓
						1.769	26.25			
127	−68.2	−68.2	+.64	−2.2	+.40 −2.1	23.55	1.6	+.29	−0.1	✓
	−31.1	−31.1	−.13	−5.0	+.18 −1.0	23.08	59.1	−.08	+2.4	✓
			−.59	+3.1		23.15	3.7	−.11	−2.2	✓
						23.26	1.5			

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Star	Epoch		Eph α		Obs.	α 1900.0	Eph. δ		Obs.	δ 1900.0	
7941 8.5	L_1	98.3			2	22 24 26.16			2	10 33 16.0	40,
22 24 26.12	K	23.3			2	24 26.36			2	33 20.4	129,
10 33 19.4	M_1	45.4			2	24 26.24			2	33 17.3	
	St_1	[60.0]			2	24 25.89			2	33 20.0	
	H	92.3			4	24 26.12			4	33 19.4	
7942 8.4	L_1	97.7			2	22 24 26.92			2	12 13 27.6	3,
22 24 27.08	K	22.9			1	24 27.29			1	13 33.5	12
12 13 34.9	M_1	46.6			2	24 27.12			2	13 33.6	
	RH St_1	54.7, 55.2 [60.0]			1 2	24 26.92 24 26.92			2 2	13 32.4 13 33.0	
	H	90.8			2	24 27.08			2	13 34.9	
7943 8.6	K	22.9			1	22 24 28.36			1	12 2 3.6	12
22 24 28.06											
12 2 1.3	H	91.7			2	24 28.06			2	2 1.3	
A 5857 5858											
7944 7.2	L_1	95.6	L_1	95.6	1	22 24 39.57	L_1	95.6	1	13 25 36.9	3,
22 24 40.44	K	23.7	K	23.7	1	24 40.28	K	23.7	1	25 41.3	18
13 25 38.0	R_1	43.0	L_3	42.8	11	24 40.08	L_3	41.9	5	25 37.6	
	L_3	42.8, 41.9	R_1	43.0	1	24 40.05	R_1	43.0	1	25 41.6	
	M_1	45.8	M_1	45.8	1	24 40.25	M_1	45.8	1	25 35.0	
	L_4 not 7		—				L_4	—			
	St_2	59.7	Wc	59.0	3	24 40.22	Wc	53.8	3	25 37.3	
	Wc	59.0, 53.8	St_2	59.7	2	24 40.08	St_2	59.7	2	25 36.3	
5857? 5858	A mean	72.7	Q	67.7	4	24 40.25	Q	66.5	4	25 38.2	
10059	Q	67.7, 66.5	A	72.7	4	24 40.43	A	72.7	4	25 38.0	
30680	G	78.8	G	78.8	3	24 40.44	G	78.8	3	25 37.2	
	H	89.8	H	89.8	2	24 40.44	H	89.8	2	25 38.0	
	E	05.1	E	05.1	3	24 40.81	E	05.1	3	25 37.9	

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zones	α Ep-H	δ α Bs-H.	δ α C.-H.	δ	α adj. δ	Δα	Δδ	
40,144	-94.0	-94.0 +.04	-3.4	+.08	+0.4	26.20	19.8	+.06	-0.2	✓
129,184	-69.0	-69.0 +.24	+1.0	+.10	+0.6	26.22	20.0	+.08	-0.4	✓
	-46.9	-46.9 +.12	-2.1	+.05	+0.3	26.19	18.4	+.05	+1.2	✓
	-32.3	-32.3 -.23	+0.6	+.04	+0.2	25.95	20.5	-.19	-0.9	✓
		-81.5 -.11	-0.6			26.12	19.4	-.02	+0.2	✓
						26.14	19.6			
3,39	-93.1	-93.1 -.16	-7.3	-.10	-2.9	26.98	32.0	-.03	+1.5	✓
127	-67.9	-67.9 +.21	-1.4	-.03	-1.3	27.05	33.6	+.04	+0.1	✓
	-44.2	-44.2 +.04	-1.3	-.04	-1.1	27.07	34.4	+.06	-1.2	✓
	-36.1	-35.6 -.16	-2.5	-.03	-0.9	26.92	32.4	-.08	+1.4	✓
	-30.8	-30.8 -.16	-1.9	-.02	-0.8	26.98	33.5	-.03	+0.2	✓
		-80.5 +.08	+2.6			27.08	34.9	+.07	-1.4	✓
						27.01	33.5			
127	-68.8	-68.8 +.30	+2.3	+.06	+2.4	28.12	3.7	+.03	-1.2	✓
						28.06	1.3	-.03	+1.2	✓
						28.09	2.5			
3,39	-94.2	-94.2 -.87	-1.1	-.81	+3.3	39.63	41.3	-.61	-2.7	✓
189	-66.1	-66.1 -.16	+3.3	-.42	+3.1	40.02	41.1	-.22	-2.5	✓
	-47.0	-47.9 -.36	-0.4	-.36	+1.9	40.07	37.9	-.17	+0.7	✓
	-46.8	-46.8 -.39	+3.6	-.36	+1.9	40.13	40.9	-.11	-2.3	✓
	-44.0	-44.0 -.19	-3.0	-.34	+1.8	40.20	36.1	-.04	+2.5	✓
	-30.8	-36.0 -.22	-0.7	-.24	+1.4	40.22	38.1	-.02	+0.5	✓
	-30.1	-30.1 -.36	-1.7	-.23	+1.2	40.18	37.8	-.06	+0.8	✓
	-22.1	-23.3 -.19	+0.2	-.17	+0.9	40.34	38.8	+.10	-0.2	✓
	-17.1	-17.1 -.01	0.0	-.13	+0.7	40.43	38.0	+.19	+0.6	✓
	-11.0	-11.0 .00	-0.8	-.08	+0.4	40.42	37.8	+.18	+0.8	✓
		-80.2 +.77	-4.0			40.44	38.0	+.20	+0.6	✓
	+15.3	+15.3 +.37	-0.1	+.12	-0.6	40.79	37.8	+.55	+0.8	✓
						40.24	38.6			

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	
7945 8.8	L_1	00.8			1	22 24 45.20			1	11 42 55.2	3
22 24 45.18	K	22.9			1	24 44.90			1	42 55.4	12
11 42 55.2	L_4	58.8			1	24 45.11			1	42 55.2	
	L_3	62.7			1	24 45.00			1	42 54.5	
	H	91.7			2	24 45.18			2	42 55.2	
7949 8.4	L_1	97.7	L_1	97.7	2	22 25 34.93	L_1	97.7	2	11 8 14.9	3,
22 25 35.08	P_{125}	00.0	P	00.0	7	25 34.80	P	00.0	7	8 15.3	
11 8 17.6	K	22.9	K	22.9	2	25 34.64	K	22.9	2	8 18.2	127,1
P XXII 125 =	R_1	50.0	L_3	40.8	1	25 35.01	L_3	..	..	..	
	L_3	40.8, ..	M_1	44.9	1	25 35.20	M_1	44.9	1	8 14.5	
	M_1	44.9	R_1	50.0	5	25 35.05	R_1	50.0	1	8 18.9	
	L_4	56.0, 54.7	L_4	56.0	3	25 34.95	L_4	54.7	2	8 18.8	
	St_1	[60.0]	St_1	60.0	2	25 34.69	St_1	60.0	2	8 21.4	
10070	Q	66.4, 67.3	Q	66.4	6	25 34.93	Q	67.3	2	8 17.0	
30700	G	79.8	G	79.8	3	25 35.05	G	79.8	3	8 18.2	
	L_5	81.7	L_5	81.7	1	25 35.18	L_5	81.7	1	8 17.8	
	H	89.7	H	89.7	2	25 35.08	H	89.7	2	8 17.6	
7950 8.8	L_1	97.7	L_1	97.7	2	22 25 48.25	L_1	97.7	2	11 6 58.8	3,
22 25 48.30	P_{126}	00.0	P	00.0	7	25 48.20	P	00.0	6	7 3.3	
11 7 6.6	K	22.9	K	22.9	2	25 48.45	K	22.9	2	7 6.1	127,1
P XXII 126 =	R_1	50.0	L_3	40.8	1	25 48.26	L_3	..	..	..	
	L_3	40.8, ..	M_1	44.9	1	25 48.49	M_1	44.9	1	7 2.0	
	M_1	44.9	R_1	50.0	5	25 48.28	R_1	50.0	2	7 9.8	
	L_4	54.7	L_4	54.7	1	25 48.13	L_4	54.7	1	7 4.9	
	St_1	[60.0]	St_1	60.0	2	25 48.13	St_1	60.0	2	7 6.2	
10076	Q	64.8, 64.4	Q	64.8	3	25 48.15	Q	64.4	3	7 6.3	
30707	G	80.5	G	80.5	4	25 48.24	G	80.5	4	7 7.0	
	L_5	81.4	L_5	81.4	3	25 48.27	L_5	81.4	3	7 6.5	
	H	90.9	H	90.9	2	25 48.30	H	90.9	2	7 6.6	

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Zones	α Ep. − Hd	α Res. − H. d.	α C. − H. d.	α adj.	δ	Δα	Δδ	
39	−90.9 −90.9	+.02 0.0	+.06, +3.7	45.24	58.9	+.16	−2.6	✓
129	−68.8 −68.8	−.28 +0.2	−.38 +0.7	44.80	55.9	−.28	+0.4	✓
	−32.9 −32.9	−.07 0.0	−.07 +0.9	45.12	56.1	+.04	+0.2	✓
	−29.0 −29.0	−.18 −0.7	−.06 +0.8	45.04	55.6	−.04	+0.7	✓
	−79.8	+.20 −2.8		45.18	55.2	+.10	+1.1	✓
				45.08	56.3			
3, 39	−92.0 −92.0	−.15 −2.7	−.09 +1.7	34.99	19.3	+.02	−0.7	✓
	−89.7 −89.7	−.28 −2.3	−.39 +1.4	34.91	18.8	−.06	−0.2	✓
127, 129	−66.8 −66.8	−.44 +0.6	−.61 +0.9	34.47	18.5	−.50	+0.1	✓
	−48.9 ..	−.07 ..	−.22 ..	35.00	...	+.03	..	✓
	−44.8 −44.8	+.12 −3.1	−.20 +0.7	35.15	15.6	+.18	+3.0	✓
	−39.7 −39.7	−.03 +1.3	−.17 +0.6	35.13	18.2	+.16	+0.4	✓
	−33.7 −35.0	−.13 +1.2	−.15 +0.6	34.96	19.7	−.01	−1.1	✓
	−29.7 −29.7	−.39 +3.8	−.13 +0.5	34.75	21.9	−.22	−3.3	✓
	−23.3 −22.4	−.15 −0.6	−.10 +0.4	35.02	17.6	+.05	+1.0	✓
	−9.9 −9.9	−.03 +0.6	−.04 +0.2	35.03	18.8	+.06	−0.2	✓
	−8.0 −8.0	+.10 +0.2	−.04 +0.1	35.19	18.6	+.22	0.0	✓
	−79.4	+.44 −1.6		35.08	17.6	+.11	+1.0	✓
				34.97	18.6			
3, 39	−93.2 −93.2	−.05 −7.8	+.01 −3.4	48.31	3.2	+.03	+3.1	✓
	−90.9 −90.9	−.10 −3.3	−.01 −2.0	48.31	6.8	+.03	−0.5	✓
127, 129	−68.0 −68.0	+.15 −0.5	−.02 −0.2	48.28	6.4	.00	−0.1	✓
	−50.1 ..	−.04 ..	−.01 ..	48.25	...	−.03	..	✓
	−46.0 −46.0	+.19 −4.6	.00 −1.0	48.44	3.1	+.16	+3.2	✓
	−40.9 −40.9	−.02 +3.2	.00 −0.9	48.36	9.1	+.08	−2.8	✓
	−36.2 −36.2	−.17 −1.7	.00 −0.8	48.14	5.8	−.14	+0.5	✓
	−30.9 −30.9	−.17 −0.4	.00 −0.7	48.19	6.7	−.09	−0.4	✓
	−26.1 −26.5	−.15 −0.3	.00 −0.6	48.24	6.9	−.04	−0.6	✓
	−10.4 −10.4	−.06 +0.4	.00 −0.2	48.30	7.6	+.02	−1.3	✓
	−9.5 −9.5	−.03 −0.1	.00 −0.2	48.28	7.3	.00	−1.0	✓
	−80.6	+.01 +2.2		48.30	6.6	+.02	−0.3	✓
				48.28	6.3			

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Star		Epoch		Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zon
7952	8.9	M_1	46.6		1	22 25 53.41		1	11 37 48.1	
22 25	53.41	M_2	86.7		2	25 53.41		2	37 38.3	
11 37	40.6	H	94.0		4	25 53.41		4	37 40.6	
7953	9.0	M_1	45.8		1	22 26 1.00		1	10 10 40.6	
		Sch	58.4		1	26 0.76		1	10 40.4	
22 26	0.70	M_2	85.7		1	26 0.68		1	10 38.1	
10 10	41.4	H	92.2		3	26 0.70		3	10 41.4	
7954	7.3	L_1	97.7	L_1	97.7	2	22 26 22.49	L_1	97.7	2	11 24 58.1	3,
22 26	23.13	P 130	00.0	P	00.0	6	26 22.91	P	00.0	6	24 56.6	
11 25	4.5	K	22.9	K	22.9	2	26 22.86	K	22.9	2	25 2.6	127,
	58 Aquar.	R_1	49.0	L_3	43.8	10	26 22.98	L_3	45.1	2	25 2.3	
		L_3	43.8, 45.1	M_1	45.8	1	26 22.87	M_1	45.8	1	24 57.2	
		M_1	45.8	R_1	49.0	1	26 22.96	R_1	49.0	1	25 3.9	
		L_4	54.7, 58.6	L_4	54.7	1	26 22.95	L_4	58.6	1	25 2.8	
		St_1	[60.0]	St_1	60.0	2	26 22.95	St_1	60.0	2	25 2.8	
		Wc	62.2, 68.8	Wc	62.2	4	26 23.17	Q	64.4	3	25 2.8	
	10081	Q	65.0, 64.4	Q	65.0	4	26 23.07	Wc	68.8	2	25 3.4	
	30720	G	77.7	G	77.7	4	26 23.17	G	77.7	4	25 3.6	
		L_5	78.8	L_5	78.8	1	26 23.23	L_5	78.8	1	25 3.8	
		Sn	80.0	Sn	80.0	7	26 23.06	Sn	80.0	10	25 4.0	
		H	92.0	H	92.0	4	26 23.13	H	92.0	4	25 4.5	
7955	9.0	K	22.9			2	22 27 5.05			2	11 18 9.5	127,
22 27	4.86	R_1	50.0			1	27 4.88			1	18 11.9	
11 18	10.4	St_1	[60.0]			1	27 4.89			1	18 10.4	
		H	92.4			3	27 4.86			3	18 10.4	

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zones.	α Ep. − H	δ	α Bs. − H	δ	α C. − H.	δ	α adj.	δ	Δα	Δδ
	−47.4	−47.4	.00	+7.5			53.36	49.2	−.01	−6.5
	−7.3	−7.3	00	−2.3			53.34	38.4	−.03	+4.3
							53.41	40.6	+.04	+2.1
							53.37	42.7		
	−46.4	−46.4	+.30	−0.8			0.95	41.7	+.20	−1.0
							0.73	41.6	−.02	−0.9
	−6.5	−6.5	−.02	−3.3			0.61	38.2	−.14	+2.5
							0.70	41.4	−.05	−0.7
							0.75	40.7		
3,39	−94.3	−94.3	−.64	−6.4	−.58	−2.0	22.55	2.5	−.45	+0.5
	−92.0	−92.0	−.22	−7.9	−.57	−2.0	23.02	0.1	+.02	+2.9
127,129	−69.1	−69.1	−.27	−1.9	−.44	−1.6	22.69	2.9	−.31	+0.1
	−48.2	−46.9	−.15	−2.2	−.30	−1.0	22.97	2.6	−.03	+0.4
	−46.2	−46.2	−.26	−7.3	−.29	−1.0	22.82	58.2	−.18	+4.7
	−43.0	−43.0	−.17	−0.6	−.27	−0.9	23.04	3.2	+.04	−0.2
	−37.3	−33.4	−.18	−1.7	−.23	−0.7	22.96	3.7	−.04	−0.7
	−32.0	−32.0	−.18	−1.7	−.20	−0.7	23.01	3.6	+.01	−0.6
	−29.8	−27.6	+.04	−1.7	−.18	−0.6	23.17	3.4	+.17	−0.4
	−27.0	−23.2	−.06	−1.1	−.17	−0.5	23.16	4.2	+.16	−1.2
	−14.3	−14.3	+.04	−0.9	−.09	−0.3	23.15	4.2	+.15	−1.2
	−13.2	−13.2	+.10	−0.7	−.08	−0.3	23.24	4.6	+.24	−1.6
	−12.0	−12.0	−.07	−0.5	−.07	−0.3	23.09	4.3	+.09	−1.3
		−81.7	+.62	+2.2			23.13	4.5	+.13	−1.5
							23.00	3.0		
127,129	−69.5	−69.5	+.19	−0.9	+.02	−0.6	4.88	9.8	−.03	+0.8
	−42.4	−42.4	+.02	+1.5	+.01	−0.4	4.96	11.2	+.05	−0.6
	−32.4	−32.4	+.03	0.0	+.01	−0.3	4.95	10.8	+.04	−0.2
			−.03	+0.9			4.86	10.4	−.05	+0.2
							4.91	10.6		

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Star		Epoch		Ep. α		Obs.	α 1900.0			Ep. δ		Obs.	δ 1900.0		
7956	8.7	L_1	94.6	L_1	94.6	1	22	27	9.05	L_1	94.6	1	11	27	20.1
22	27	9.25	K	22.9	K	22.9	2		27	9.37	K	22.9	2		27	18.7
11	27	20.3	L_3	51.7, ..	M_1	45.4	2		27	9.48	M_1	45.4	2		27	14.7
			M_1	45.4	L_3	51.7	1		27	9.17	L_3	..	..			..
			L_4	61.2, 61.2	St	60.0	2		27	9.13	St	60.0	2		27	18.5
			St	[60.0]	L_4	61.2	2		27	9.15	L_4	61.2	2		27	17.0
			Q	66.0, 67.0	Q	66.0	4		27	9.14	Q	67.0	4		27	17.2
			L_5	78.8	L_5	78.8	2		27	9.16	L_5	78.8	2		27	17.8
			H	92.5	H	92.5	3		27	9.25	H	92.5	3		27	20.3
7957	9.1	L_1	00.9			1	22	27	41.16			1	9	47	10.2
22	27	41.77	K	23.7		1		27	41.17			1		47	15.3
9	47	14.7	R_1	48.0		1		27	40.81			1		47	15.3
			L_4 St	56.7, 54.7		2		27	41.45			1		47	12.0
			St	[60.0]		2		27	41.09			2		47	14.1
			Q	75.8, ..		3		27	41.47			..		..	..
			L_5	78.8		2		27	41.70			2		47	13.9
			H	90.1		3		27	41.77			3		47	14.7
			Db	93.7		2		27	41.74			2		47	14.6
7958	9.2	L_1	00.9	L_1	00.9	1	22	27	53.09	L_1	00.9	1	9	43	37.4
22	27	52.66	K	23.7	K	23.7	2		27	52.70	K	23.7	2		43	41.0
9	43	38.1	R_1	48.0	M_1	44.9	1		27	52.63	M_1	44.9	1		43	37.2
			M_1	44.9	R_1	48.0	1		27	52.32	R_1	48.0	1		43	39.9
			L_4 St	58.7	L_4 St	58.7	1		27	52.71	St	58.7	1		43	36.3
			St	[60.0]	St	60.0	2		27	52.37	St	60.0	2		43	37.7
			H	90.2	H	90.2	4		27	52.66	H	90.2	4		43	38.1
			Db	93.8	Db	93.8	3		27	52.54	Db	93.8	3		43	38.2
7959	8.4	K	22.9			1	22	28	23.92			1	11	2	8.6
		R_1	50.0			1		28	24.17			1		2	9.5
22	28	24.03	St	[60.0]		2		28	23.81			2		2	9.0
11	2	8.7	Sj	62.8		1		28	23.78			1		2	8.9
			Ft	89.4		3		28	24.03			3		2	8.7

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Zones	α Eph-H.	δ	α Pos.-H.	δ	α C-H.	δ	α adj.	δ	Δα	Δδ	
3	-97.9	-97.9	-.20	-0.2	-.11	+4.8	9.14	25.1	-.07	-5.9	✓
127,129	-69.6	-69.6	+.12	-1.6	-.05	-1.3	9.20	19.0	-.01	+0.2	✓
	-47.1	-47.1	+.23	-5.6	-.05	+1.0	9.43	15.8	+.22	+3.4	✓
	-40.8	"	-.08	"	-.04	"	9.16	"	-.05	"	✓
	-32.5	-32.5	-.12	-1.8	-.03	+0.7	9.19	19.0	-.02	+0.2	✓
	-31.3	-31.3	-.10	-3.3	-.03	+0.7	9.16	17.9	-.05	+1.3	✓
	-26.5	-25.5	-.11	-3.1	-.03	+0.5	9.23	17.8	+.02	+1.4	✓
	-13.7	-13.7	-.09	-2.5	-.01	+0.3	9.17	18.6	-.04	+0.6	✓
		-83.8	+.10	-2.1			9.25	20.3	+.04	-1.1	✓
							9.21	19.2			
40	-89.2	-89.2	-.61	-4.5	-.58	-1.5	41.19	13.2	-.20	+0.9	✓
186	-66.4	-66.4	-.60	+0.6	-.77	-1.1	41.00	13.6	-.39	+0.5	✓
	-42.1	-42.1	-.96	+0.6	-.37	+0.7	40.89	14.6	-.50	-0.5	✓
	-33.4	-35.4	-.32	-2.7	-.29	+0.6	41.46	12.9	+.07	+1.2	✓
	-30.1	-30.1	-.68	-0.6	-.26	+0.5	41.15	14.5	-.24	-0.4	✓
	-14.3	"	-.30	"	-.12	"	41.56	"	+.17	"	✓
	-11.3	-11.3	-.07	-0.8	-.10	+0.2	41.71	14.7	+.32	-0.6	✓
		-77.8	+.87	+1.7			41.77	14.7	+.38	-0.6	✓
	+3.6	+3.6	-.03	-0.1	+.03	+0.1	41.74	14.3	+.35	-0.2	✓
							41.39	14.1			
40	-89.3	-89.3	+.43	-0.7	+.46	+2.3	53.12	40.4	+.50	-1.8	✓
184,186	-66.5	-66.5	+.04	+2.9	-.14	+1.3	52.52	39.4	-.10	-0.8	✓
	-45.3	-45.3	-.03	-0.9	+.10	+1.0	52.58	38.3	-.04	+0.3	✓
	-42.2	-42.2	-.34	+1.8	+.09	+1.0	52.40	39.2	-.22	-0.6	✓
	-31.5	-31.5	+.05	-0.8	+.07	+0.7	52.72	37.2	+.10	+1.4	✓
	-30.2	-30.2	-.29	-0.4	+.06	+0.7	52.43	38.1	-.19	+0.5	✓
		-77.9	-.21	-2.3			52.66	38.1	+.04	+0.5	✓
	+3.6	+3.6	-.12	+0.1	-.01	-0.1	52.54	37.9	-.08	+0.7	✓
							52.62	38.6			
129	-66.5	-66.5	-.11	-0.1	-.21	+0.4	23.82	9.1	-.14	+0.1	✓
	-39.4	-39.4	+.14	+0.8	-.13	+0.2	24.25	8.8	+.29	+0.4	✓
	-29.4	-29.4	-.22	+0.3	-.09	+0.2	23.87	9.5	-.09	-0.3	✓
	-26.6	-26.6	-.25	+0.2	-.09	+0.2	23.82	10.0	-.14	-0.8	✓
			+.32	-0.6			24.03	8.4	+.07	+0.5	✓

→ 23.96 9.2 mean

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Star	Epoch		Ep α		Obs.	α 1900.0	Ep - δ		Obs.	δ 1900.0	
7960 8.4	K	23.7			1	22 28 30.50			1	12 54 10.7	189
22 28 30.13	St_2	59.7			2	28 30.01			2	54 2.6	
12 54 9.3	Sj_2	62.7			1	28 30.31			1	54 6.7	
	H	89.8			3	28 30.13			3	54 9.3	
7961 9.6	R_1	49.0			2	22 28 34.12			2	10 36 24.2	
22 28 34.77											
10 36 19.4	H	90.8			4	28 34.77			4	36 19.4	
7962 8.7	K	23.3			2	22 28 46.29			2	12 40 29.3	127,18
22 28 46.14	M_1	46.7			1	28 45.83			1	40 24.9	
12 40 27.3	St_2	59.7			2	28 45.83			2	40 25.0	
	H	91.3			4	28 46.14			4	40 27.3	
7963 7.4	L_1	98.3	L_1	98.3	2	22 28 50.50	L_1	98.3	2	10 7 23.9	40
22 28 50.55	P 1/2	00.0	P	00.0	5	28 50.72	P	00.0	5	7 26.0	
10 7 27.1	K	23.7	K	23.7	2	28 51.11	K	23.7	2	7 30.1	184,186
P.XXII 142 =	R_1	46.0	L_3	44.9	13	28 50.69	L_3	39.7	2	7 25.0	
	L_3	44.9, 39.7	M_1	45.4	2	28 50.99	M_1	45.4	2	7 25.3	
	M_1	45.4	R_1	46.0	3	28 50.57	R_1	46.0	3	7 27.9	
	L_4	57.8, 57.0	L_4	57.8	3	28 50.48	L_4	57.0	4	7 26.2	
	St_1	[60.0]	St_1	60.0	2	28 50.71	St_1	60.0	2	7 25.5	
	Wc	70.2, 66.7	Wc	70.2	4	28 50.65	Wc	66.7	3	7 27.4	
30774	G	77.7	G	77.7	4	28 50.61	G	77.7	4	7 26.2	
	L_5	79.3	L_5	79.3	2	28 50.60	L_5	79.3	2	7 26.7	
	V	86.3	V	86.3	4	28 50.51	V	86.3	4	7 25.6	
	H	90.1	H	90.1	3	28 50.55	H	90.1	3	7 27.1	
	E	03.4	E	03.4	3	28 50.58	E	03.4	3	7 27.2	

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Zones	α Ep-Hd δ	α Pos.-H. δ	α C.-H. δ	α adj. δ	Δα	Δδ	
189	-66.1 -66.1	+.37 +1.4	+.11 +1.2	30.24	10.5 +.03	-2.6	✓
	-30.1 -30.1	-.12 -6.7	+.05 +1.2	30.11	4.1 -.10	+3.8	✓
	-27.1 -27.1	+.18 -2.6	+.05 +0.5	30.35	7.8 +.14	+0.1	✓
		+.17 -1.8		30.13	9.3 -.08	-1.4	✓
				30.21	7.9		
	-41.8 -41.8	-.65 +4.8		34.20	23.5 -.28	-2.1	✓
				34.77	19.4 +.29	+2.0	✓
				34.48	21.4		
127,189	-68.0 -68.0	+.15 +2.0	-.10 +2.0	46.04	29.3 +.07	-2.0	✓
	-44.6 -44.6	-.31 -2.4	-.07 +1.3	45.78	26.0 -.19	+1.3	✓
	-31.6 -31.6	-.31 -2.3	-.05 +0.9	45.93	26.5 -.04	+0.8	✓
		+.15 -2.9		46.14	27.3 +.17	0.0	✓
				45.97	27.3		
4014	-91.8 -91.8	-.05 -3.2	-.01 +0.6	50.54	27.7 -.12	-0.5	✓
	-90.1 -90.1	+.17 -1.1	+.21 +1.2	50.83	29.5 +.17	-2.3	✓
184,186	-66.4 -66.4	+.56 +3.0	+.38 +1.4	50.93	28.5 +.27	-1.3	✓
	-45.2 -50.4	+.14 -2.1	+.10 +0.7	50.68	25.3 +.02	+1.9	✓
	-44.7 -44.7	+.44 -1.8	+.10 +0.6	50.94	26.4 +.28	+0.8	✓
	-44.1 -44.1	+.02 +0.8	+.10 +0.6	50.65	27.2 -.01	0.0	✓
	-32.3 -33.1	-.07 -0.9	+.07 +0.4	50.49	27.1 -.17	+0.1	✓
	-30.1 -30.1	+.16 -1.6	+.07 +0.4	50.77	26.3 +.11	+0.9	✓
	-19.9 -23.4	+.10 +0.3	+.05 +0.3	50.65	28.2 -.01	-1.0	✓
	-12.4 -12.4	+.06 -0.9	+.03 +0.2	50.59	26.8 -.07	+0.4	✓
	-10.8 -10.8	+.05 -0.4	+.02 +0.1	50.61	27.5 -.05	-0.3	✓
	-3.8 -3.8	-.04 -1.5	+.01 0.0	50.49	25.7 -.17	+1.5	✓
	-79.1	-.23 -1.3		50.55	27.1 -.11	+0.1	✓
	+13.3 +13.3	+.03 +0.1	-.03 -0.2	50.56	27.1 -.10	+0.1	✓
				50.66	27.2		

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Star	Epoch	Eph. α	Obs. α 1900.0	Eph. δ	Obs. δ 1900.0	Zone
7964 9.1	M, 44.9		1 22 29 4.68		1 10 45 55.5	
22 29 4.36	M₂ 84.7		1 29 4.34		1 45 58.7	
10 46 1.0	H 90.8		3 29 4.36		3 46 1.0	
7965 8.8	L, 98.3		2 22 29 5.16		2 9 49 11.4	40,1
22 29 4.85	K 23.7		2 29 5.12		2 49 16.1	184,1
9 49 15.9	M, 45.8		1 29 5.08		1 49 15.5	
	Lu St, 57.0, 57.4 [60.0]		4 29 4.89		3 49 14.2	
	St,		2 29 4.79		2 49 14.8	
	Sj 62.7		1 29 4.93		1 49 14.1	
	H 90.1		3 29 4.85		3 49 15.9	
	Db 93.7		2 29 4.86		2 49 16.5	
	Schv 58.1		1 22 29 17.90		1 9 39 15.0	
7966 9.0	H 90.8		3 22 29 17.69		3 9 39 12.6	
22 29 17.69						
9 39 12.6	Db 93.8		2 29 17.69		2 39 13.3	
7967 8.9	K 23.3	K 23.3	4 22 29 30.96	K 23.3	4 10 37 13.5	(127,1 (184,1
22 29 30.86	R, 48.0	M, 44.9	1 29 31.00	M, 44.9	1 37 7.4	
10 37 12.4	M, 44.9	R, 48.0	1 29 31.05	R, 48.0	1 37 14.7	
	H 90.0	H 90.0	4 29 30.86	H 90.0	4 37 12.4	
7968 8.9	R, 49.0		1 22 29 43.90		1 9 45 29.1	
22 29 43.92	H 92.0		4 29 43.92		4 45 29.8	
9 45 29.8	Db 93.8		2 29 43.91		2 45 28.9	
7970 7.8	K 23.7		1 22 30 28.59		1 13 23 21.5	189
22 30 28.46	M, 46.3		2 30 28.43		2 23 28.8	
13 23 25.5	St₂ 59.7		2 30 28.37		2 23 21.3	
	Sj 62.7		1 30 28.44		1 23 22.7	
	L 68.8, 63.3		3 30 28.35		2 23 22.9	
	H 88.7		3 30 28.46		3 23 25.5	

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Zones.	α Ep. − H.	δ	α Bs. − H.	δ	αC − H.	δ	α adj.	δ	Δα	Δδ	
	−45.9	−45.9	+.32	−.55			4.63	56.6	+.21	+2.2	✓
	−6.1	−6.1	−.02	−2.3			4.27	58.8	−.15	0.0	✓
							4.36 / 4.42	1.0 / 58.8	−.06	−2.2	✓
40,14	−91.8	−91.8	+.31	−4.5	+.35	−0.7	5.20	15.2	+.25	+0.4 (3)	✓
184,186	−66.4	−66.4	+.27	+0.2	+.09	−1.4	4.94	14.5	−.01	+1.1 (0)	✓
	−44.3	−44.3	+.23	−0.4	+.12	−0.6	5.03	16.6	+.08	−1.8 (1)	✓
	−33.1	−32.7	+.04	−1.7	+.09	−0.4	4.90	15.1	−.05	+0.8 (4)	✓
	−30.1	−30.1	−.06	−1.1	+.08	−0.4	4.85	15.3	−.10	+0.8 (2)	✓
	−27.4	−27.4	+.08	−1.8	+.08	−0.4	4.97	15.2	+.02	+0.4 (3)	✓
	−79.1	−.28	+1.3				4.85	15.9 / ~~16.8~~	−.10	−0.4 / ~~−1.2~~	✓
	+3.6	+3.6	+.01	+0.6	−.01	0.0	4.86 / 4.95	16.2 / 15.6	−.09	−0.6 (7)	✓
							17.87	16.2	+.12	−2.3	✓
							17.69	12.6	−.06	+1.3	✓
	+3.0	+3.0	.00	−0.7			17.69 / 17.75	13.0 / 13.9	−.06	+0.9	✓
(127,129) (184,186)	−66.7	−66.7	+.10	+1.1	−.08	+0.5	30.78	12.9	−.15	−0.9	✓
	−45.1	−45.1	+.14	−5.0	−.05	+0.3	30.95	8.5	+.02	+3.5	✓
	−42.0	−42.0	+.19	+2.3	−.05	+0.3	31.13	14.0	+.20	−2.0	✓
			+.12	−0.7			30.86 / 30.93	12.4 / 12.0	−.07	−0.4	✓
	−43.0	−43.0	−.02	−0.7			43.98	28.4	+.04	+0.5	✓
							43.92	29.8	−.02	−0.9	✓
	+1.8	+1.8	−.01	−0.9			43.91 / 43.94	28.6 / 28.9	−.03	+0.3	✓
189	−65.0	−65.0	+.13	−4.0	−.13	−4.2	28.33	21.3	−.10	+1.5 / ~~+3.2~~	✓
	−42.4	−42.4	−.03	+3.3	−.08	−2.8	28.38	29.9 (1)	−.05	+2.9 / ~~−5.4~~	✓
	−29.0	−29.0	−.09	−4.2	−.06	−1.9	28.47	22.8	+.04	0.0 / +1.7	✓
	−26.0	−26.0	−.02	−2.8	−.05	−1.7	28.48	23.8	+.05	−1.0 / +0.7	✓
	−19.9	−25.4	−.11	−2.6	−.04	−1.7	28.44	23.5	+.01	−0.7 / +1.0	✓
			+.20	+6.5			28.46	25.5	+.03	−2.7 / −1.6	✓

28.43 / 24.5 (228) mean

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Star	Epoch		Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	Zone
7971 9.2	K	22.9		2	22 30 40.19		2	12 7 6.8	127,1
22 30 39.87	St_1	[60.0]		2	30 39.80		2	7 4.9	
12 7 5.9	D_1	84.6		1	30 39.96		1	7 2.0	
	H	91.5		4	30 39.87		4	7 5.9	
7972 8.9	K	23.7		1	22 30 54.49		1	13 27 22.7	18
22 30 54.58	St_2	59.7		2	30 54.34		2	27 17.9	
13 27 21.5	H	89.8		3	30 54.58		3	27 21.5	
7973 8.8	K	23.7		1	22 31 1.52		1	13 8 46.4	18
22 31 1.13	St_2	59.7		2	31 0.94		2	8 41.8	
13 8 44.5	H	90.4		3	31 1.13		3	8 44.5	
7974 8.7	K	23.7		1	22 31 22.09		1	10 48 28.9	18
22 31 22.35	R_1	49.0		1	31 22.41		1	48 20.3	
10 48 24.0	St_1	[60.0]		2	31 21.97		2	48 26.4	
	Wc	64.9, 66.8		6	31 22.29		2	48 26.2	
	H	89.8		4	31 22.35		3	48 24.0	
7975 8.5	K	23.7		1	22 31 28.40		1	12 54 3.8	18
22 31 28.31	St_2	59.9		2	31 28.25		2	53 58.6	
12 53 58.7	Sj	62.7		1	31 28.19		1	53 58.8	
	H	90.4		3	31 28.31		3	53 58.7	
7976 9.1	K	23.7		2	22 31 31.37		2	9 54 45.8	184,1
22 31 31.28	St_1	[60.0]		2	31 31.25		2	54 40.1	
9 54 41.8	H	90.4		3	31 31.28		3	54 41.8	
	Rb	93.8		2	31 31.32		2	54 42.4	

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Zones.	α Ep.−Hδ	α Bs.−H.δ.	α C−H.δ	α adj.	δ	Δα	Δδ	
127,129	−68.6 −68.6	+.32 +0.9	+.15 +1.2	40.02	7.1	+.11	−1.9	✓
	−31.5 −31.5	−.07 −1.0	+.07 +0.5	39.86	5.3	−.05	−0.1	✓
	−6.9 −6.9	+.09 −3.9	+.02 +0.1	39.88	2.4	−.03	+2.8	✓
		−.22 −1.7		39.87 / 39.91	5.9 / 5.2	−.04	−0.7	✓
189	−66.1 −66.1	−.09 +1.2	−.35 +1.0	54.23	22.5	−.19	−1.4	✓
	−30.1 −30.1	−.24 −3.6	−.16 +0.5	54.44	19.4	+.02	+1.7	✓
		+.53 −1.5		54.58 / 54.42	21.5 / 21.1	+.16	−0.4	✓
189	−66.7 −66.7	+.39 +1.9	+.13 +1.7	1.26	46.2	+.12	−1.5	✓
	−30.7 −30.7	−.19 −2.7	+.06 +0.8	1.04	43.3	−.10	+1.4	✓
		−.19 −2.5		1.13 / 1.14	44.5 / 44.7	−.01	+0.2	✓
186	−66.1 −66.1	−.26 +4.9	−.43 +3.2	21.92	27.2	−.30	−2.3	✓
	−40.8 −40.8	+.06 −3.7	−.27 +2.0	22.49	19.6	+.27	+5.3	✓
	−29.8 −29.8	−.38 +2.4	−.19 +1.4	22.03	26.8	−.19	−1.9	✓
	−24.9 −23.0	−.06 +2.2	−.16 +1.1	22.29	27.0	+.07	−2.1	✓
		+.65 −4.8		22.35 / 22.22	24.0 / 24.9	+.13	+0.9	✓
189	−66.7 −66.7	+.09 +5.1	−.17 +4.9	28.14	3.6	−.12	−3.0	✓
	−30.5 −30.5	−.06 −0.1	−.08 +2.2	28.35	0.1	+.09	+0.5	✓
	−27.7 −27.7	−.12 +0.1	−.07 +2.0	28.23	59.9	−.03	+0.7	✓
		+.25 −7.3		28.31 / 28.26	58.7 / 0.6	+.05	+1.9	✓
184,186	−66.7 −66.7	+.09 +4.0	−.09 +2.4	31.19	44.2	−.09	−2.1	✓
	−30.4 −30.4	−.03 −1.7	−.04 +1.1	31.31	40.4	+.03	+1.7	✓
		+.13 −3.6		31.28	41.8	.00	+0.3	✓
	+3.4 +3.4	+.04 +0.6	.00 −0.1	31.32 / 31.28	42.1 / 42.1	+.04	0.0	✓

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Star		Epoch		Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zon
7977	8.8	K	23.3		2	22 31 32.70		2	12 43 55.0	129,18
22 31	32.40									
12 43	54.6	H	92.8		4	31 32.40		4	43 54.6	
7978	8.7	K	23.7		2	22 31 40.43		2	9 54 31.0	184,1
22 31	40.10	St	[60.0]		2	31 39.96		2	54 28.5	
9 54	29.3	Sj	62.7		1	31 40.08		1	54 28.1	
		H	90.4		3	31 40.10		3	54 29.3	
		Db	93.8		2	31 40.06		2	54 27.3	
7979	8.1	M_1	46.7		1	22 31 46.58		1	13 24 57.4	
22 31	46.60	R (1013)	68.8, 63.3		3	31 46.56		2	24 57.2	
13 24	58.2	G (30828)	77.7		4	31 46.63		4	24 56.8	
		M_2	85.7		1	31 46.78		1	24 58.1	
		H	91.1		3	31 46.60		3	24 58.2	
7980	8.3	L_1	94.6		1	22 31 47.32		1	12 14 51.6	3
22 31	47.85	K	22.9		2	31 47.54		2	14 55.1	127,1
12 14	56.7	L_3	40.8, ..		1	31 47.60			..	
		M_1	45.3		2	31 47.66		2	14 55.2	
		L_4	54.7, 56.7		1	31 47.72		2	14 56.0	
		St,	[60.0]		1	31 47.81		1	14 52.6	
		Sj	62.8		1	31 47.71		1	14 53.2	
	L5	G	78.8		1	31 47.84		1	14 55.5	
		H	91.1		3	31 47.85		3	14 56.7	
		E	03.1		3	31 47.96		3	14 57.0	
7985	9.2	Sj	62.7		1	22 32 51.82		1	13 18 15.5	
22 32	51.68									
13 18	18.3	H	89.6		3	32 51.68		3	18 18.3	

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Zones.	α Ep.−Hd	δ Pos.−H.	δ C.−H.		α adj.	δ	Δα	Δδ	
129,189	−69.5	−69.5	+.30	+0.4	+.12	+0.6	32.52	55.2	+.06	−0.3	✓
							32.40	54.6	−.06	+0.3	✓
							32.46	54.9			
184,186	−66.7	−66.7	+.33	+1.7	+.15	+0.1	40.25	29.4	+.14	−0.6	✓
	−30.4	−30.4	−.14	−0.8	+.07	0.0	40.02	28.9	−.09	−0.1	✓
	−27.7	−27.7	−.02	−1.2	+.06	0.0	40.12	29.2	+.01	−0.4	✓
			−.22	−0.1			40.10	29.3	−.01	−0.5	✓
	+3.4	+3.4	−.04	−2.0	−.07	0.0	40.06	27.0	−.05	+1.8	✓
							40.11	28.8			
	−44.4	−44.4	−.02	−0.8			46.53	58.5	−.09	−0.5	✓
	−22.3	−27.8	−.04	−1.0			46.65	57.8	+.03	+0.2	✓
	−13.4	−13.4	+.03	−1.4			46.60	57.4	−.02	+0.6	✓
	−5.4	−5.4	+.18	−0.1			46.70	58.2	+.08	−0.2	✓
							46.60	58.2	−.02	−0.2	✓
							46.62	58.0			
3	−96.5	−96.5	−.53	−5.1	−.44	−0.1	47.41	56.6	−.29	−0.8	✓
127,129	−68.2	−68.2	−.31	−1.6	−.48	−1.3	47.37	55.4	−.33	+0.4	✓
	−50.3	"	−.25	"	−.28	"	47.59	"	−.11	"	✓ Begin here
	−45.8	−45.8	−.19	−1.5	−.26	−0.4	47.61	56.3	−.09	−0.5	✓
	−36.4	−34.4	−.13	−0.7	−.20	−0.3	47.73	56.9	+.03	−1.1	✓
	−31.1	−31.1	−.04	−4.1	−.17	−0.2	47.87	53.1	+.17	+2.7	✓
	−28.3	−28.3	−.14	−3.5	−.16	−0.2	47.75	54.3	+.05	+1.5	✓
	−12.3	−12.3	−.01	−1.2	−.07	−0.1	47.85	56.2	+.15	−0.4	✓
			−82.4	+56	+0.8		47.85	56.7	+.15	−0.9	✓
	+12.0	+12.0	+.11	+0.3	+.07	+0.1	47.94	56.9	+.24	−1.1	✓
							47.70	55.8			
	−26.9	−26.9	+.14	−2.8			51.86	16.6	+.09	+0.8	✓
							51.68	18.3	−.09	−0.9	✓
							51.77	17.4			

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	zone
7981 8.5	K	23.7	K	23.7	1	22 31 58.21	K	23.7	1	10 47 22.6	184
22 31 57.64	R_1	49.0	M_1	45.4	2	31 58.24	M_1	45.4	2	47 16.2	
10 47 18.1	M_1	45.4	R_1	49.0	3	31 57.78	R_1	49.0	3	47 19.7	
	St_1	[60.0]	St_1	60.0	2	31 57.45	St_1	60.0	2	47 20.0	
	Wc	64.9. 67.3	Wc	64.9	6	31 57.78	Wc	67.3	2	47 17.5	
	H	90.1	H	90.1	3	31 57.64	H	90.1	3	47 18.1	
7982 8.5	L_1	95.6			1	22 32 34.52			1	13 53 19.5	19
22 32 34.29	K	23.7			1	32 34.60			1	53 24.6	18
13 53 23.5	M_1	45.9			2	32 34.41			2	53 21.9	
	B	55.7			3	32 34.47			3	53 18.7	
	H	57.4; 56.7			3	32 34.46			2	53 22.6	
		90.4			3	32 34.29			3	53 23.5	
	St	95.3			2	32 34.32			2	53 21.7	
	Σ	07.2			4	32 34.33			4	53 22.3	
7983 8.5	K	23.7			1	22 32 35.48			1	13 42 57.0	18
22 32 35.50	M_1	45.7			1	32 35.64			1	42 50.8	
13 42 54.6	St_2	59.7			2	32 35.33			2	42 52.2	
	M_2	84.7			1	32 35.62			1	42 53.5	
	H	89.7			3	32 35.50			3	42 54.6	
	St	97.1			3	32 35.53			3	42 54.8	
7984 8.9	K	23.7	K	23.7	1	22 32 43.01	K	23.7	1	9 55 24.2	18
22 32 42.82	R_1	48.0	M_1	44.9	1	32 42.46	M_1	44.9	1	55 21.1	
9 55 23.5	M_1	44.9	R_1	48.0	1	32 42.64	R_1	48.0	1	55 26.0	
	St_1	[60.0]	St_1	60.0	2	32 42.64	St_1	60.0	2	55 24.3	
	Sj	62.7	Sj	62.7	1	32 43.07	Sj	62.7	1	55 23.0	
	H	90.1	H	90.1	3	32 42.82	H	90.1	3	55 23.5	
	Db	93.8	Db	93.8	2	32 42.89	Db	93.8	2	55 25.2	

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Zones.	α Ep.-H δ	α Bs.-H δ	α C.-H. δ		α adj. δ		Δα	Δδ	
184	-66.4 -66.4	+.57	+4.5	+.38	+3.1	58.02	21.2	+.19	-2.2	✓
	-44.7 -44.7	+.60	-1.9	+.25	+2.1	58.19	17.3	+.36	+1.7	✓
	-41.1 -41.1	+.14	+1.6	+.23	+1.9	57.86	19.0	+.03	0.0	✓
	-30.1 -30.1	-.19	+1.9	+.17	+1.4	57.51	20.4	-.32	-1.4	✓
	-25.2 -22.8	+.14	-0.6	+.14	+1.1	57.78	18.3	-.05	+0.7	✓
		-.57	-4.7			57.64	18.1	-.19	+0.9	✓
						57.83	19.0			
11	-94.8 -94.8	+.23	-4.0	+.20	-0.8	34.49	22.7	+.12	+0.1	✓
189	-66.7 -66.7	+.31	+1.1	+.05	+0.9	34.34	24.4	-.03	-1.6	✓
	-44.5 -44.5	+.12	-1.6	+.07	0.0	34.36	23.0	-.01	-0.2	✓
	-34.7 -34.7	+.18	-4.8	+.05	0.0	34.39	21.1	+.02	+1.7	✓
	-33.0 -33.7	+.17	-0.9	+.05	0.0	34.47	23.5	+.10	-0.7	✓
	-80.8	-.15	-0.1			34.29	23.5	-.08	-0.7	✓
	+4.9 +4.9	+.03	-1.8	.00	0.0	34.29	22.1	-.08	+0.7	✓
	+16.8 +16.8	+.04	-1.2	-.03	0.0	34.31	22.2	-.06	+0.6	✓
						34.37	22.8			
189	-66.0 -66.0	-.02	+2.4	-.28	+2.2	35.22	56.8	-.24	-2.5	✓
	-44.0 -44.0	+.14	-3.8	-.18	+1.5	35.59	51.9	+.13	+2.4	✓
	-30.0 -30.0	-.17	-2.4	-.13	+1.0	35.43	53.7	-.03	+0.6	✓
	-5.0 -5.0	+.12	-1.1	-.02	+0.2	35.54	53.6	+.08	+0.7	✓
	— —	+.42	-3.3			35.50	54.6	+.04	-0.3	✓
	+7.4 +7.4	+.03	+0.2	+.03	-0.2	35.50	55.2	+.04	-0.9	✓
						35.46	54.3			
186	-66.4 -66.4	+.19	+0.7	+.02	-1.0	42.84	22.5	+.06	+1.4	✓
	-45.2 -45.2	-.36	-2.4	+.01	-0.7	42.41	22.2	-.37	+1.7	✓
	-42.1 -42.1	-.18	+2.5	+.01	-0.6	42.72	25.3	-.06	-1.4	✓
	-30.1 -30.1	-.18	+0.8	+.01	-0.5	42.70	24.6	-.08	-0.7	✓
	-27.4 -27.4	+.25	-0.5	+.01	-0.4	43.11	24.1	+.33	-0.2	✓
	— —	+.03	+1.5			42.82	23.5	+.04	+0.4	✓
	+3.7 +3.7	+.07	+1.7	.00	+0.1	42.89	24.9	+.11	-1.0	✓
						42.78	23.9			

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Star		Epoch	Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	
7986	8.4	L_1 97.1	L_1	97.1	3	22 33 40.98	L_1	97.1	3	10 37 21.0	40,3,
22 33	41.29	K 22.9	K	22.9	2	33 41.44	K	22.9	2	37 25.4	127,12
10 37	23.7	R_1 48.0	L_3	39.7	..	..	L_3	39.7	2	37 24.8	
		L_3 .. 39.7	M_1	45.5	3	33 41.38	M_1	45.5	3	37 23.5	
		M_1 45.5	R_1	48.0	2	33 41.29	R_1	48.0	2	37 25.5	
		L_4 54.6, 54.7	L_4	54.6	1	33 41.20	L_4	54.7	1	37 24.0	
		St_1 [60.0]	St_1	60.0	2	33 41.12	St_1	60.0	2	37 24.5	
10142		Q 72.0, 70.5	Q	72.0	4	33 41.18	Q	70.5	3	37 24.6	
		L_5 79.8	L_5	79.8	4	33 41.25	L_5	79.8	4	37 23.5	
		H 89.8	H	89.8	3	33 41.29	H	89.8	3	37 23.7	
5904											
7987	7.1	L_1 96.7	L_1	96.7	4	22 34 0.62	L_1	96.7	4	10 32 49.5	{12,4 3,
22 34	0.33	P 170 00.0	P	00.0	8	34 0.87	P	00.0	9	32 47.8	
10 32	53.3	K 22.9	K	22.9	2	34 0.82	K	22.9	2	32 52.9	127,12
64 Aquar.		R_1 45.0	R_1	45.0	3	34 0.53	L_3	41.6	7	32 52.7	
		L_3 46.1, 41.6	M_1	45.5	3	34 0.76	R_1	45.0	3 X	32 51.8	
		M_1 45.5	L_3	46.1	11	34 0.55	M_1	45.5	3	32 52.7	
		L_4 54.7	L_4	54.7	2	34 0.38	L_4	54.7	1	32 53.8	
		Sch	Sch	58.4	1	34 0.36	Sch	58.4	1	32 52.9	
		St_1 [60.0]	St_1	60.0	2	34 0.35	St_1	60.0	2	32 51.6	
			Dr.	63.9	1	34 0.47	Dr	63.9	1	32 53.6	
5904		A 71.7	A	71.7	1	34 0.36	Q	69.4	3	32 53.4	
10143		Q 73.1, 69.4	Q	73.1	3	34 0.45	A	71.7	1	32 55.3	
		L_5 79.7	G	78.7	3	34 0.41	G	78.7	4	32 52.4	
30868		G 78.7	L_5	79.7	1	34 0.43	L_5	79.7	1	32 53.1	
		Sn 80.0	Sn	80.0	15	34 0.43	Sn	80.0	22	32 53.6	
		H 91.4, 91.8	H	91.4	5	34 0.33	H	91.8	4	32 53.3	
		E 01.8, 03.7	E	01.8	3	34 0.33	E	03.7	3	32 53.6	
7988	9.1	K 23.7			1	22 34 11.99			1	10 6 28.7	186
22 34	12.32	M_1 45.8			1	34 12.31			1	6 26.9	
10 6	24.4	St_1 [60.0]			2	34 12.17			2	6 27.5	
		H 90.1			3	34 12.32			3	6 24.4	

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Zones.	α Ep-N.d	α Ps.-N.d	α C.-N.d	α adj.	δ	Δα	Δδ	
40,3,14	-92.7 -92.7	-.31 -2.7	-.25 +1.5	41.04	25.2	-.21	-0.4	✓
127,129	-66.9 -66.9	+.15 +1.7	-.02 +2.0	41.27	25.7	+.02	-0.9	✓
	-50.1 -50.1	.. +1.1	-.09 +1.1	...	25.1	..	-0.3	✓
	-44.3 -44.3	+.09 -0.2	-.08 +1.0	41.33	24.6	+.08	+0.2	✓
	-41.8 -41.8	.00 +1.8	-.07 +0.9	41.37	24.8	+.12	0.0	✓
	-35.2 -35.1	-.09 +0.3	-.06 +0.8	41.21	24.9	-.04	-0.1	✓
	-29.8 -29.8	-.17 +0.8	-.05 +0.7	41.18	24.9	-.07	-0.1	✓
	-17.8 -19.3	-.11 +0.9	-.03 +0.4	41.27	25.2	+.02	-0.4	✓
	-10.0 -10.0	-.04 -0.2	-.02 +0.2	41.26	24.2	+.01	+0.6	✓
	-79.8	+.17 -2.2		41.29 / 41.25	23.7 / 24.8	+.04	+1.1	✓
{12,40 / 3,14}	-94.7 -95.1	+.29 -3.8	+.32 +0.5	0.65	53.8	+.15	-0.5	✓
	-91.4 -91.8	+.54 -5.5	+.36 +0.2	0.98	51.2	+.48	+2.1	✓
127,129	-68.5 -68.9	+.49 -0.4	+.32 -0.1	0.65	53.2	+.15	+0.1	✓
	-46.4 -50.2	+.20 -0.6	+.18 +0.1	0.61	53.0	+.11	+0.3	✓
	-45.9 -46.8	+.13 -1.5	+.18 +0.1	0.71	51.1	+.21	+2.2	✓
	-45.3 -46.3	+.22 -0.6	+.18 +0.1	0.54	53.8	+.04	-0.5	✓
	-36.7 -37.1	+.05 +0.5	+.14 +0.1	0.39	54.7	-.11	-1.4	✓
				0.33	54.1	-.17	-0.8	✓
	-31.4 -31.8	+.02 -1.7	+.12 +0.1	0.41	52.3	-.09	+1.0	✓
				0.38	52.9	-.12	+0.4	✓
	-19.7 -22.4	+.03 +0.1	+.08 0.0	0.36	54.0	-.14	-0.7	✓
	-18.3 -20.1	+.12 +2.0	+.07 0.0	0.54	55.3	+.04	-2.0	✓
	-12.7 -13.1	+.08 -0.9	+.05 0.0	0.38	53.0	-.12	+0.3	✓
	-11.7 -12.1	+.10 -0.2	+.05 0.0	0.44	53.8	-.06	-0.5	✓
	-11.4 -11.8	+.10 +0.3	+.04 0.0	0.46	53.9	-.04	-0.6	✓
	-81.6 -82.0	-.39 -0.2		0.33	53.3	-.17	0.0	✓
	+10.4 +11.9	.00 +0.3	-.04 0.0	0.31 / 0.50	53.5 / 53.3	-.19	-0.2	✓
186	-66.4 -66.4	-.33 +4.3	-.50 +2.6	11.82	27.0	-.34	-0.2 / 0.0	✓
	-44.3 -44.3	-.01 +2.5	-.33 +1.7	12.26	28.0	+.10	-1.8	✓
	-30.1 -30.1	-.15 +3.1	-.23 +1.2	12.23	27.8	+.07	-1.0 / -0.8	✓
		+.75 -3.9		12.32 / 12.16	24.4 / 25.1 / 26.8	+.16	+2.4 / +1.9	

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Star	Epoch	Eph. α	Obs.	α 1900.0	Eph. δ	Obs.	δ 1900.0	zon.
7989 8.4	L_1 95.6	L_1 95.6	1	22 34 13.04	L_1 95.6	1	13 7 32.0	11
22 34 14.46	K 23.7 23.7	K 23.7	1	34 13.98	K 23.7	1	7 45.2	18
13 7 52.4	R_1 46.0	R_1 46.0	1	34 13.93	R_1 46.0	1	7 44.1	
	L_4 54.7							
	M_1 46.3	M_1 46.3	2	34 13.97	M_1 46.3	2	7 43.2	
	B 65.9	L_4 54.7	1	34 13.90	L_4 54.7	2	7 45.1	
	St_2 59.9	St_2 59.9	2	34 14.22	St_2 59.9	2	7 48.2	
	Sj 62.7	Sj 62.7	1	34 14.17	Sj 62.7	1	7 44.8	
10149	Q 72.1, 70.8	B 65.9	8	34 14.30	B 65.9	8	7 46.6	
	L_5 78.8	Q 72.1	3	34 14.25	Q 70.8	4	7 46.7	
	M_2 87.9	L_5 78.8	1	34 14.45	L_5 78.8	1	7 50.2	
	C_1 90.0	M_2 87.9	1	34 14.57	M_2 87.9	1	7 50.6	
	H 90.1	C_1 90.0	3	34 14.74	C_1 90.0	3	7 53.6	
		H 90.1	3	34 14.46	H 90.1	3	7 52.4	
7990 8.7	M_1 45.8		1	22 34 24.48		1	12 48 32.2	
22 34 24.69	Sj 62.8		1	34 24.74		1	48 36.4	
12 48 40.9	H 89.8		3	34 24.69		3	48 40.9	
5911 A								
7991 7.3	L_1 98.3	L_1 98.3	2	22 34 50.48	L_1 98.3	2	9 52 54.0	40,
22 34 51.36	P 176 00.0	P 00.0	10	34 50.25	P 00.0	11	52 56.7	
9 52 54.1	K 23.7	K 23.7	2	34 50.78	K 23.7	2	53 0.2	184, 1
	L_3 39.4 38.7	L_3 39.4	9	34 50.82	L_3 38.7	2	52 55.7	
	M_1 45.5	M_1 45.5	3	34 50.94	M_1 45.5	3	52 54.3	
		Sch 58.7	1	34 51.11	Sch ~~58.7~~	+	~~52.2~~ ~~52.5~~	
	L_4 59.8, 54.7	L_4 59.8	1	34 50.97	L_4 54.7 58.7	1	53 55.8 52.5	
		Cr 61.8	1	34 50.98	Dr 61.8	1	52 55.7	
	B 63.7	Sj 62.7	2	34 51.04	Sj 62.7	2	52 54.5	
	Sj 62.7	B 63.7	4	34 51.14	Q 63.3	2	52 56.3	
5911	A 77.8 93.7	Q 68.6	4	34 51.02	B 63.7	4	52 56.3	
10155	Q 68.6, 63.3	G 77.8	4	34 51.22	G 77.8	4	52 53.9	
30886	G 77.8	A 77.8	2	34 51.26	A 77.8	2	52 54.1	
	L_5 79.8	L_5 79.8	1	34 51.11	L_5 79.8	1	52 55.2	
	V 84.6	V 84.6	4	34 51.21	V 84.6	4	52 54.4	
	C_1 90.0	C_1 90.0	3	34 51.36	C_1 90.0	3	52 55.4	
	H 90.5	H 90.5	3	34 51.36	H 90.5	3	52 54.1	
							54.8	

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zones	α Ep.-H.	δ	α Bs.-H	δ	α C.-H.	δ	α adj.	δ	Δα	Δδ	
									fr	fr	
11	-94.5	-94.5	-1.42	-20.4	-1.45	-17.2	13.01	35.2	[-1.12]	[+2.0]	
189	-66.4	-66.4	-.48	-7.2	-.74	-7.4	13.72	45.0	-.41	+2.2	
	-44.1	-44.1	-.53	-8.3	-.60	-6.7	14.01	43.4	-.12	+3.8	
	-43.8	-43.8	-.49	-9.2	-.60	-6.7	13.92	44.3	-.21	+2.9	
	-35.4	-35.4	-.56	-7.3	-.48	-5.4	13.91	46.0	-.22	+1.2	
	-30.2	-30.2	-.24	-4.2	-.41	-4.6	14.32	49.7	+.19	-2.5	
	-27.4	-27.4	-.29	-7.6	-.37	-4.2	14.21	45.9	+.08	+1.3	
	-24.2	-24.2	-.16	-5.8	-.33	-3.7	14.22	49.0	+.09	-1.8	
	-18.0	-19.3	-.21	-5.7	-.24	-3.0	14.34	47.3	+.21	-0.1	
	-11.3	-11.3	-.01	-2.2	-.15	-1.7	14.46	50.9	+.33	-3.7	
	-2.2	-2.2	+.11	-1.8	-.03	-0.3	14.49	50.7	+.36	-3.5	
	-0.1	-0.1	+.28	+1.2	0.0	0.0	14.67	53.5	+.54	-6.3	
	-80.4		+1.36	+15.3			14.46	52.4	+.33	-5.2	
							14.13	47.2			
	-44.0	-44.0	-.21	-8.7		-6.7	24.43	33.3	-.20	+3.9	
	-27.0	-27.0	+.05	-4.5		-4.1	24.78	37.5	+.15	-0.3	
							24.69	40.9	+.06	-3.7	
							24.63	37.2			
40,14	-92.2	-92.2	-.88	-0.1	-.84	+3.7	50.52	57.8	-.49	-1.8	
	-90.5	-90.5	-1.11	+2.6	-.91	+4.7	50.36	0.1	-.65	-4.1	
184,186	-66.8	-66.8	-.58	+6.1	-.76	+4.5	50.60	58.6	-.41	-2.6	
	-51.1	-51.8	-.54	+1.6	-.52	+2.7	50.81	56.0	-.20	0.0	
	-45.0	-45.0	-.42	+0.2	-.45	+2.3	50.89	55.4	-.12	+0.6	
							51.08	53.4	+.07		
52.5	-30.7	-35.8	-.39	+1.7	-.31	+1.9	50.98	56.4	-.03	-0.7	
							50.89	53.7		+2.3	
								55.0	-.12	+1.0	
	-27.8	-27.8	-.32	+0.4	-.28	+1.4	51.08	55.6	+.07	+0.4	
	-26.8	-27.2	-.22	+2.2	-.27	+1.4	51.06	56.9	+.05	-0.9	
	-21.9	-26.8	-.34	+2.2	-.22	+1.4	51.11	58.7	+.10	-2.7	
	-12.7	-12.7	-.14	-0.2	-.13	+0.7	51.19	54.5	+.18	+1.5	
	-12.7	-12.7	-.10	0.0	-.13	+0.7	51.26	54.1	+.25	+1.9	
	-10.7	-10.7	-.25	+1.1	-.11	+0.6	51.12	55.9	+.11	+0.1	
	-5.9	-5.9	-.15	+0.3	-.06	+0.3	51.19	54.5	+.18	+1.5	
	-0.5	-0.5	.00	+1.3	-.01	0.0	51.29	54.3	+.28	+0.7	
							51.36	54.1	+.35	+1.9	
	-79.5		+1.01	-5.2	+.03	-0.2	51.34	54.5	+.36	+1.3	
	+3.2										

> 51.01 ✓ 56.0 55.9 mean

mean taken see page 221 for note.

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	zon
7992 8.6.	K	22.9.			2	22 35 3.74			2	12 7 35.7	127,1
22 35 3.43.	M_1	45.8.			4	35 3.65			4	7 33.8	
12 7 34.6.	St_1	[60.0]			2	35 3.21			2	7 35.2	
	L_5	79.7			3	35 3.45			3	7 34.7	
	H	89.5			3	35 3.43			3	7 34.6	
7995 8.7.	K	23.7			1	22 36 5.65			1	13 8 47.7	189
22 36 5.45.	St_2	59.7			2	36 5.29			2	8 40.2	
13 8 44.7.	H	90.1			3	36 5.45			3	8 44.7	
7996 6.6.	L_1	95.6	L_1	95.6	2	22 36 7.55	L_1	95.6	2	12 45 4.7	13,1
22 36 7.86.	K	22.9	K	22.9	2	36 7.99	K	22.9	2	45 3.6	127,12
12 45 7.0.	L_4 M_1	54.7, 55.2 46.1	M_1	46.1	3	36 7.87	M_1	46.1	3	45 4.6	
12 μ	St_2	59.7	L_4	54.7	1	36 8.00	L_4	55.2	2	45 5.1	
	L_5	79.8	St_2	59.7	2	36 7.54	St_2	59.7	2	45 5.3	
	H	90.4	L_5	79.8	1	36 7.86	L_5	79.8	1	45 6.9	
	E	02.8, 05.4	H	90.4	3	36 7.86	H	90.4	3	45 7.0	
			E	02.8	3	36 7.91	E	05.4	3	45 7.6	
7997 9.2.	Sj	62.7			1	22 36 26.87			1	13 24 10.4	
22 36 27.06.											
13 24 12.3.	H	92.2			4	36 27.06			4	24 12.3	
7998 9.5.	R_1	48.0			1	22 36 [26.72]			1	10 44 32.1	
22 36 33.91.	D_1	81.7			1	36 33.95			1	44 36.4	
10 44 38.1.	H	91.6			4	36 33.91			4	44 38.1	
8000 8.8.	M_1	45.4			2	22 37 5.82			2	10 53 27.3	
22 37 5.80.	H	91.8			4	37 5.80			4	53 29.3	
10 53 29.3.											

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zones.	α Ep-H	δ	α Bs-H	δ	αC.-H.	δ	α adj.	δ	Δα	Δδ	
127,129	-66.6	-66.6	+.31	+1.1	+.14	+1.4	3.57	36.0	+.10	-0.7	✓
	-43.7	-43.7	+.22	-0.8	+.09	+0.9	3.60	34.9	+.13	+0.4	✓
	-29.5	-29.5	-.22	+0.6	+.06	+0.6	3.27	35.6	-.20	-0.3	✓
	-9.8	-9.8	+.02	+0.1	+.02	+0.2	3.46	35.4	-.01	-0.1	✓
			-.21	-2.1			3.43	34.6	-.04	+0.7	✓
							3.47	35.3			
189	-66.4	-66.4	+.20	+3.0	-.06	+2.8	5.39	47.5	-.02	-2.9	✓
	-30.4	-30.4	-.16	-4.5	-.03	+1.3	5.39	41.7	-.02	+2.9	✓
			+.09	-4.2			5.45	44.7	+.04	-0.1	✓
							5.41	44.6			
13,11	-94.8	-94.8	-.31	-2.3	-.30	+0.4	7.56	7.4	-.25	-0.9	✓
127,129	-67.5	-67.5	+.13	-3.4	-.04	-3.1	7.82	3.9	+.01	+2.6	✓
	-44.3	-44.3	+.01	-2.4	-.09	-0.8	7.82	5.7	+.01	+0.8	✓
	-35.7	-35.2	+.14	-1.9	-.07	-0.6	8.01	6.0	+.20	+0.5	✓
	-30.7	-30.7	-.32	-1.7	-.06	-0.5	7.64	6.8	-.17	-0.3	✓
	-10.6	-10.6	.00	-0.1	-.02	-0.2	7.87	7.6	+.06	-1.1	✓
	-81.2		+.21	+1.7			7.86	7.0	+.05	-0.5	✓
	+12.4	+15.0	+.05	+0.6	+.03	+0.3	7.89	7.5	+.08	-1.0	✓
							7.81	6.5			
	-29.5	-29.5	-.19	-1.9			26.91	11.5	-.07	+0.4	✓
							27.06	12.3	+.08	-0.4	✓
							26.98	11.9			
	-43.6	-43.6	-7.19	-6.0			[26.80]	31.4 [-7.09] ab		+4.0	✓ "Sum 10s"
	-9.9	-9.9	+.04	-1.7			33.87	36.8	-.02	-1.4	✓
							33.91	38.1	+.02	-2.7	✓
							33.89	35.4			
	-46.4	-46.4	+.02	-2.0			5.77	28.4	-.01	+0.4	✓
							5.80	29.3	+.02	-0.5	✓
							5.78	28.8			

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Star	Epoch	Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zon
7999 8.3	L_1 97.4	L_1 97.4	3	22 36 44.34	L_1 97.4	3	10 38 50.6	40,14
22 36 44.15	P 188 00.0	P 00.0	4	36 44.00	P 00.0	5	38 51.1	
10 38 54.4	K 23.3	K 23.3	4	36 44.41	K 23.3	4	38 54.0	{127,12 184,18
P XXII, 188 =	R_1 48.0	L_3 39.6	1	36 44.42	L_3 ..	"	..	
	L_3 39.6 ..	M_1 45.4	2	36 44.15	M_1 45.4	2	38 51.9	
	M_1 45.4	R_1 48.0	2	36 44.34	R_1 48.0	2	38 54.9	
	Sch L_4 61.1, 62.1	Sch 58.7 L_4 61.1	2 3	36 44.29 36 44.31	Sch 58.7 L_4 62.1	2 3	38 52.9 38 53.2	
	Nc 64.4, 66.2	Nc 64.4	3	36 44.24	Nc 66.2	2	38 53.6	
30918	G 80.7	G 80.7	3	36 44.20	G 80.7	3	38 55.6	
	H 90.1	H 90.1	3	36 44.15	H 90.1	3	38 54.4	
8001 7.9	L_1 95.6	L_1 95.6	2	22 37 14.51	L_1 95.6	2	13 4 57.5	13,1
22 37 14.63	K 23.7	K 23.7	1	37 14.96	K 23.7	1	5 0.0	18
13 4 58.1	M_1 45.8	M_1 45.8	4	37 14.74	M_1 45.8	4	4 56.1	
	St_2 59.9	St_2 59.9	2	37 14.71	L_4 58.2	2	4 56.9	
	L_4 Sj 61.8, 58.2 62.7	L_4 61.8	1	37 14.75	St_2 59.9	2	4 57.3	
	L_5 79.8	Sj 62.7	1	37 14.84	Sj 62.7	1	4 [10.8]	
	H 90.4	L_5 79.8	1	37 14.63	L_5 79.8	1	4 57.0	
		H 90.4	3	37 14.63	H 90.4	3	4 58.1	
8002 8.6	L_1 98.3		2	22 37 14.67		2	10 26 24.1	40,1
22 37 15.09	K 23.4		3	37 14.35		3	26 29.3	{129 184,18
10 26 30.0	M_1 45.4		2	37 14.55		2	26 28.7	
	St_1 [60.0]		2	37 14.99		2	26 29.9	
	L_4 65.2 H 90.8		2 3	37 15.03 37 15.09		2 3	26 29.1 26 30.0	
8003 9.4	R_1 49.0		1	22 37 25.73		1	10 46 5.5	
22 37 25.90								
10 46	H 93.8		4	37 25.90		4	46 5.9	

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Zones.	α Ep.-H.	δ	α Bs.-H.	δ	αC.-H.	δ	α adj.	δ	Δα	Δδ	
40,14,12	-92.7	-92.7	+.19	-3.8	+.20	+0.2	44.35	54.6	+.10	-0.3	✓
	-90.1	-90.1	-.15	-3.3	+.16	-0.5	44.11	54.5	-.14	-0.2	✓
{127,129 184,186}	-66.8	-66.8	+.26	-0.4	+.08	-1.0	44.23	53.4	-.02	+0.9	✓
	-50.5	..	+.27	..	+.12	..	44.41	...	+.16	..	✓
	-44.7	-44.7	.00	-2.5	+.08	-0.2	44.10	53.0	-.15	+1.3	✓
	-42.1	-42.1	+.19	+0.5	+.08	-0.2	44.42	54.2	+.17	+0.1	✓
							44.26	54.1	+.01	+0.2	✓
	-29.0	-28.0	+.16	-1.2	+.05	-0.1	44.32	54.1	+.07	+0.2	✓
	-25.7	-23.9	+.09	-0.7	+.05	-0.1	44.24	54.5	-.01	-0.2	✓
	-9.4	-9.4	+.05	+1.2	+.02	0.0	44.17	56.2	-.08	-1.9	✓
		-79.8	-.18	+0.5			44.15	54.4	-.10	-0.1	✓
							44.25	54.3			
13,11	-94.8	-94.8	-.12	-0.6	-.11	+2.1	14.52	0.2	-.18	-1.7	✓
189	-66.7	-66.7	+.33	+1.9	+.07	+1.7	14.70	59.8	.00	-1.3	✓
	-44.6	-44.6	+.11	-2.0	-.01	+1.1	14.69	57.2	-.01	+1.3	✓
	-30.5	-32.2	+.08	-1.2	-.01	+0.8	14.81	57.8	+.11	+0.7	✓
	-28.6	-30.5	+.12	-0.8	-.01	+0.7	14.76	58.8	+.06	-0.3	✓
	-27.7	-27.7	+.21	-47.3	-.01	+0.7	14.88	[11.9]	+.18	[13.4]	✓
	-10.6	-10.6	.00	-1.1	.00	+0.3	14.64	57.9	-.06	+0.8	✓
		-80.8	+.02	-2.4			14.63	58.1	-.07	+0.4	✓
							14.70	58.5			
40,14	-92.5	-92.5	-.42	-5.9	-.38	-2.1	14.17	27.9	-.67	+1.5	✓
{129 184,186}	-67.4	-67.4	+.26	-0.7	+.11	-1.6	15.20	28.4	+.36	+1.0	✓
	-45.4	-45.4	-.54	-1.3	-.08	-1.0	14.50	29.8	-.34	-0.4	✓
	-30.8	-30.8	-.10	-0.1	-.05	-0.7	15.05	30.3	+.21	-0.9	✓
	-25.6	-25.6	-.06	-0.9	-.04	-0.6	15.04	30.0	+.20	-0.6	✓
		-80.0	+.17	+2.3			15.09	30.0	+.25	-0.6	✓
							14.93	29.4			
	-44.8	-44.8	-.17	-0.4			25.81	4.8	-.05	+0.6	✓
							25.90	5.9	+.04	-0.5	✓
							25.86	5.4			

αC ✓ { error in δ "badly cut in δ"

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	Epoch		Ep. α	Obs.	α 1900.0	Ep. δ	Obs.	δ 1900.0	Zone
5923 A									
8004 8.7	L_1	95.6	L_1 95.6	1	22 37 38.46	L_1 95.6	1	12 52 22.5	11
22 37 38.78	K	23.7	K 23.7	1	37 38.84	K 23.7	1	52 24.5	18
12 52 24.6	L_4 M$_1$	.. 54.7 45.8	M$_1$ 45.8	1	37 38.62	M$_1$ 45.8	1	52 24.1	
	St_2	59.9	L_4 ..	..	37 ..	L_4 54.7	1	52 23.3	
	Sj	62.8	St_2 59.9	2	37 38.74	St_2 59.9	2	52 19.8	
5923	A	75.7	Sj 62.8	1	37 38.73	Sj 62.8	1	52 21.5	
	L_5	78.7	A 75.7	2	37 38.79	A 75.7	2	52 22.4	
	H	92.2	L_5 78.7	1	37 38.92	L_5 78.7	1	52 22.0	
5925 A			H 92.2	4	37 38.78	H 92.2	4	52 24.6	
8005 8.5	L_1	95.6		1	22 37 42.33		1	12 51 23.2	11
22 37 42.68	K	23.7		1	37 42.63		1	51 25.6	18
12 51 24.1	M$_1$	46.2		2	37 42.59		2	51 21.4	
	L_4 St_2	54.6 59.7		1 2	37 42.70 37 42.67		.. 2	.. 51 20.5	
5925	A	75.7		1	37 42.85		1	51 23.7	
	H	90.4		3	37 42.68		3	51 24.1	
8006 8.7	K	23.7		1	22 37 45.31		1	9 40 36.9	184
22 37 44.93	St	[60.0]		2	37 45.02		2	40 35.3	
9 40 36.9	Sj	62.7		1	37 45.10		1	40 36.0	
μ	Q	71.3, 68.0		4	37 44.89		4	40 36.3	
	H	91.1		3	37 44.93		3	40 36.9	
	Qb	93.7		2	37 44.93		2	40 37.4	
	Σ	04.1		3	37 44.92		3	40 37.8	
8009 8.8	K	22.9		2	22 38 33.24		2	12 0 34.9	127,129
22 38 33.39	St$_1$	[60.0]		2	38 33.15		2	0 32.5	
12 0 33.7	H	89.5		3	38 33.39		3	0 33.7	

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Zones	α Eph-H.	δ Eph-H.	α Ps.-H.	δ Ps.-H.	α C.-H.	δ C.-H.	α adj.	δ	$\Delta\alpha$	$\Delta\delta$	
11	-96.6	-96.6	-.32	-2.1	-.35	+1.1	38.43	25.7	-.28	-2.0	✓
189	-68.5	-68.5	+.06	-0.1	-.20	-0.3	38.58	24.3	-.13	-0.6	✓
	-46.4	-46.4	-.16	-0.5	-.15	+0.2	38.57	25.2	-.14	-1.5	✓
	..	-37.5	..	-1.3	..	+0.2	...	24.2	..	-0.5	✓
	-32.3	-32.3	-.04	-4.8	-.11	+0.2	38.84	21.3	+.13	+2.4	✓
	-29.4	-29.4	-.05	-3.1	-.10	+0.1	38.77	22.6	+.06	+1.1	✓
	-16.5	-16.5	+.01	-2.2	-.05	+0.1	38.79	22.4	+.08	+1.3	✓
	-13.5	-13.5	+.14	-2.6	-.04	+0.1	38.93	22.9	+.22	+1.0	✓
		-82.6	+33	-0.5			38.78 / 38.71	24.6 / 23.7	+.07	-0.9	✓
11	-94.8	-94.8	-.35	-0.9	-.38	+2.3	42.30	26.4	-.30	-2.4	✓
189	-66.7	-66.7	-.05	+1.5	-.31	+1.3	42.37	25.4	-.23	-1.4	✓
	-44.2	-44.2	-.09	-2.7	-.19	+1.0	42.54	22.5	-.06	+1.5	✓
	-35.8	..	+.02	..	-.15	..	42.41	...	+.11	..	✓
	-30.7	-30.7	-.01	-3.6	-.13	+0.7	42.77	22.0	+.17	+2.0	✓
	-14.7	-14.7	+.17	-0.4	-.06	+0.3	42.85	23.7	+.25	+0.3	✓
		-80.8	+43	-2.2			42.68 / 42.60	24.1 / 24.0	+.08	-0.1	✓
184	-67.4	-67.4	+.38	0.0	+.19	-1.4	45.12	35.5	+.11	+1.2	✓
	-31.1	-31.1	+.09	-1.6	+.09	-0.7	45.08	35.7	+.07	+1.0	✓
	-28.4	-28.4	+.17	-0.9	+.08	-0.6	45.14	37.1	+.13	-0.4	✓
	-19.8	-23.1	-.04	-0.6	+.06	-0.5	44.98	36.9	-.03	-0.2	✓
	—	—	—	—			44.93	36.9	-.08	-0.2	✓
	+2.6	+2.6	.00	+0.5	-.01	+0.1	44.93	37.1	-.08	-0.4	✓
	+13.0	+13.0	-.01	+0.9	-.04	+0.3	44.90	37.7	-.11	-1.0	✓
		-28	+2.1				45.01	36.7			
127,129	-66.6	-66.6	-.15	+1.2	-.32	+1.5	33.07	35.2	-.15	-1.3	✓
	-29.5	-29.5	-.24	-1.2	-.14	+0.7	33.21	32.9	-.01	+1.0	✓
		+.48	-2.3				33.39 / 33.22	33.7 / 33.9	+.17	+0.2	✓

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Star		Epoch		Eh. α	Obs.	α 1900.0	Eh. δ	Obs.	δ 1900.0	Zon
8007	7.0	L_1	97.4	L_1 97.4	3	22 37 45.61	L_1 97.4	3	10 37 33.9	14,40
22 37	45.57	P 198	00.0	P 00.0	6	37 45.68	P 00.0	9	37 32.6	
10 37	35.6	K	22.9	K 22.9	2	37 45.84	K 22.9	2	37 37.2	127,12
	65 aquar =	R_1	49.0	L_3 40.1	3	37 45.77	L_3 ..	..	..	
		L_3 40.1	..	M_1 44.9	1	37 45.70	M_1 44.9	1	37 35.4	
		M_1	44.9	R_1 49.0	2	37 45.68	R_1 49.0	2	37 38.0	
				Sch 58.7	2	37 45.64 Sch	58.7	2	37 35.4	
		L_4	61.2	L_4 61.2	2	37 45.53	L_4 61.2	2	37 36.1	
		Nc 64.4,	66.8	Nc 64.4	3	37 45.63	Nc 66.8	2	37 35.9	
30938		G	80.3	G 80.3	4	37 45.55	G 80.3	4	37 36.9	
		H	90.1	H 90.1	3	37 45.57	H 90.1	3	37 35.6	
8010	8.6	L_3 41.8,	..	L_3 41.8	2	20 38 45.50	L_3 ..	..	..	
22 38	45.29	M_1	45.8	M_1 45.8	2	38 45.39	M_1 45.8	1	13 12 32.3	
13 12	36.8	L_4	not g.	—		—				
		M_2	88.8	M_2 88.8	1	38 45.38	M_2 88.8	1	12 36.0	
		H	90.1	H 90.1	3	38 45.29	H 90.1	3	12 36.8	
8014	7.4	L_1	95.7	L_1 95.7	1	22 40 5.30	L_1 95.7	1	10 10 3.9	14
22 40	5.53	P 209	00.0	P 00.0	8	40 5.34	P 00.0	8	10 7.3	
10 10	11.2	K	23.7	K 23.7	2	40 5.57	K 23.7	2	10 12.9	184,18
		M_1	45.4	M_1 45.4	2	40 5.55	M_1 45.4	2	10 10.5	
		L_4 54.7,	58.7 [60.0]	L_4 54.7	1	40 5.63	L_4 58.7	3	10 10.5	
				Sch 58.7	2	40 5.37 Sch	58.7	2	10 9.3	
10190		Q 68.0,	66.7	St_1 60.0	2	40 5.39	St_1 60.0	2	10 10.8	
Mag. 7 3/4	30987	G	79.8	Q 68.0	5	40 5.52	Q 66.7	H	10 11.6	
10	30986	L_5	78.7	L_5 78.7	2	40 5.53	L_5 78.7	2	10 11.7	
		H	88.8	G 79.8	3	40 5.49	G 79.8	4	10 10.1	
				H 88.8	3	40 5.53	H 88.8	3	10 11.2	

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Zones	α Ep.-N.	δ	α Obs.-N.	δ	α C.-N.	δ	α Adj.	δ	Δα	Δδ	
14,40,12	-92.7	-92.7	+.04	-1.7	+.05	+2.3	45.62	37.9	-.03	-1.0	✓
	-90.1	-90.1	+.11	-3.0	+.08	+2.3	45,79	36.0	+.14	+0.9	✓
127,129	-67.2	-67.2	+.27	+1.6	+.10	+1.9	45.67	37.5	+.02	-0.6	✓
	-50.0	..	+.20	..	+.04	..	45,76	...	+.11	..	✓
	-45.2	-45.2	+.13	-0.2	+.04	+1.2	45.65	36.5	.00	+0.4	✓
	-41.1	-41.1	+.11	+2.4	+.04	+1.1	45.76	37.3	+.11	-0.4	✓
							45161	36.6	-.04	+0.3	✓
	-28.9	-28.9	-.04	+0.5	+.03	+0.8	45.54	37.0	-.11	-0.1	✓
	-25.7	-23.3	+.06	+0.3	+.02	+0.6	45.63	36.7	-.02	+0.2	✓
	-9.8	-9.8	-.02	+1.3	+.01	+0.3	45.52	37.5	-.13	-0.6	✓
	-80.0	-.09	-2.6		..		45.57	35.6	-.08	+1.3	✓
							45.65	36.9			
	-48.3	..	+.21	..			45,49	...	+.13	..	✓
	-44.3	-44.3	+.10	-4.5			45.34	33.5	-.02	+2.0	✓
							...	...	..	..	
	-1.3	-1.3	+.09	-0.8			45,30	36.1	-.06	-0.6	✓
							45,29	36.8	-.07	-1.3	✓
							45.36	35.5			
14	-93.1	-93.1	-.23	-7.3	-.18	-2.8	5.35	8.4	-.13	+2.7	✓
	-88.8	-88.8	-.19	-3.9	-.18	-1.5	5.45	10.7	-.03	+0.4	✓
186,186	-65.1	-65.1	+.04	+1.7	-.14	+0.1	5.39	11.3	-.09	-0.2	✓
	-43.4	-43.4	+.02	-0.7	-.09	-0.7	5,50	11.7	+.02	-0.6	✓
	-34.1	-30.1	+.10	-1.7	-.10	-0.5	5.64	11.4	+.16	-0.3	✓
							5.34	10.5	-.14	+0.6	✓
	-28.8	-28.8	-.14	-0.4	-.06	-0.5	5.46	11.5	-.03	-0.4	✓
	-20.8	-22.1	-.01	+0.4	-.04	-0.4	5.61	12.2	+.13	-1.1	✓
	-10.1	-10.1	.00	+0.5	-.02	-0.2	5.54	12.6	+.06	-1.3	✓
	-9.0	-9.0	-.04	-1.1	-.02	-0.2	5.46	10.7	-.02	+0.4	✓
	-79.1	+.20	+1.7				5.53	11.2	+.05	-0.1	✓
							5.48	11.1			

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Star	Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	Zon
8015 8.0	L_1	95.6	L_1	95.6	2	22 40 8.72	L_1	95.6	2	13 31 46.6	13,1
22 40 8.92	K	23.7	K	23.7	1	40 9.01	K	23.7	1	31 55.0	189
13 31 55.0	M_1	46.1	M_1	46.1	3	40 8.83	M_1	46.1	3	31 52.0	
	St_2	59.7	St_2	59.7	2	40 8.50	St_2	59.7	2	31 50.1	
	L_4 Sj	61.0, 64.2 / 62.7	L_4	61.0	5	40 8.88	Sj	62.7	1	31 52.2	
	L_5	75.8	Sj	62.7	1	40 9.00	L_4	64.2	2	31 52.7	
	H	91.3	L_5	75.8	4	40 8.86	L_5	75.8	4	31 53.0	
	E	05.5	H	91.3	4	40 8.92	H	91.3	4	31 55.0	
			E	05.5	3	40 9.03	E	05.5	3	31 54.2	
8016 8.5	K	22.9			2	22 40 51.02			2	12 3 53.1	127,1
22 40 50.75	M_1	45.8			1	40 50.80			1	3 49.4	
12 3 53.7	St_1	[60.0]			1	40 50.50			1	3 50.9	
μ^{12}	L_5	79.7			3	40 50.64			3	3 52.8	
	H	91.3			4	40 50.75			4	3 53.7	
	E	03.8			3	40 50.74			3	3 53.8	
8017 8.3	K	22.9			1	22 40 51.09			1	12 41 11.0	127
22 40 51.25	M_1	46.3			2	40 51.54			2	41 9.0	
12 41 8.8	St_2	59.9			2	40 51.16			2	41 8.5	
	Sj	62.8			1	40 51.26			1	41 9.2	
	H	90.1			3	40 51.25			3	41 8.8	
5935											
8018 6.8	L_1	95.7	L_1	95.7	1	22 40 58.19	L_1	95.7	1	11 41 24.1	12
22 40 58.10	K	22.9	K	22.9	2	40 58.06	K	22.9	2	41 27.7	127,12
11 41 29.8	M_1	45.8	M_1	45.8	2	40 58.26	M_1	45.8	2	41 28.5	
	L_4 St_1	54.7, 55.2 / [60.0]	L_4	54.7	2	40 58.09	L_4	55.2	2	41 28.7	
μ^{12}			St_1	60.0	2	40 57.97	St_1	60.0	2	41 28.3	
5935	A	[75.0]	A	75.0	1	40 58.03	A	75.0	1	41 28.2	
31005	G	77.8	L_5 G	75.8 / 77.8	2 / 4	40 57.95 / 40 58.11	L_5 G	75.8 / 77.8	2 / 4	41 28.3 / 41 28.8	
	L_5	75.8	H	89.1	3	40 58.10	H	89.1	3	41 29.8	
	H	89.1	E	00.7	3	40 58.05	E	00.7	3	41 30.5	
	E	00.7									

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Zones	α Eph − H.O.	α Obs. − H.O.	α C. − H.O.	α adj. δ	Δα	Δδ	
13, 11	−95.7	−95.7	−.20	−8.4	−.19	−5.7	8.73	49.3	−.11	+3.9	✓
189	−67.6	−67.6	+.09	0.0	−.17	−0.2	8.75	54.8	−.09	−1.6	✓
	−45.2	−45.2	−.09	−3.0	−.10	−1.6	8.78	53.2	−.06	0.0	✓
	−31.6	−31.6	−.42	−4.9	−.07	−1.1	8.60	51.6	−.24	+1.6	✓
	−30.3	−28.6	−.04	−2.8	−.07	−1.0	8.89	53.3	+.05	−0.1	✓
	−28.6	−27.1	+.08	−2.3	−.06	−1.0	9.04	53.6	+.20	−0.4	✓
	−15.5	−15.5	−.06	−2.0	−.03	−0.6	8.87	53.8	+.03	−0.5	✓
		−81.6	+.22	+3.6			8.92	55.0	+.08	−1.8	✓
	+14.2	+14.2	+.11	−0.8	+.03	+0.5	9.01 / 8.84	54.1 / 53.2	+.17	−0.9	✓
127, 129	−68.4	−68.4	+.27	−0.6	+.10	−0.3	50.85	53.4	+.14	−0.7	✓
	−45.5	−45.5	+.05	−4.3	+.07	−0.2	50.75	50.6	+.04	+2.1	✓
	−31.3	−31.3	−.25	−2.8	+.05	−0.1	50.56	51.3	−.15	+1.4	✓
	−11.6	−11.6	−.11	−0.9	+.02	0.0	50.65	53.5	−.06	−0.8	✓
			−.15	+0.4			50.75	53.7	+.04	−1.0	✓
	+12.5	+12.5	−.01	+0.1	−.02	0.0	50.72 / 50.71	53.7 / 52.7	+.01	−1.0	✓
127	−67.2	−67.2	−.16	+2.2	−.40	+2.3	50.85	11.1	−.38	−1.0	✓
	−43.8	−43.8	+.29	+0.2	−.26	+1.5	51.49	10.2	+.26	−0.1	✓
	−30.2	−30.2	−.09	−0.3	−.18	+1.0	51.26	10.0	+.03	+0.1	✓
	−27.3	−27.3	+.01	+0.4	−.16	+0.9	51.30	10.3	+.07	−0.2	✓
			+.60	−3.4			51.25 / 51.23	8.8 / 10.1	+.02	+1.3	✓
12	−93.4	−93.4	+.09	−5.7	+.04	−1.1	58.14	28.7	+.08	+0.5	✓
127, 129	−66.2	−66.2	+.04	−2.1	−.21	−1.8	57.89	28.0	−.17	+1.2	✓
	−43.3	−43.3	+.16	−1.3	−.05	−0.8	58.21	29.7	+.15	−0.5	✓
	−34.4	−33.9	+.01	−1.1	−.04	−0.6	58.10	29.6	+.04	−0.4	✓
	−29.1	−29.1	−.13	−1.5	−.03	−0.5	58.03	29.0	−.03	+0.2	✓
	−14.1	−14.1	−.07	−1.6	−.02	−0.3	58.03	28.2	−.03	+1.0	✓
	−13.3	−13.3	−.15	−1.5	−.01	−0.2	57.96	29.2	−.10	+0.2	✓
	−11.3	−11.3	+.01	−1.0	−.01	−0.2	58.08	29.4	+.02	−0.2	✓
		−79.8	+.11	+1.8			58.10	29.8	+.04	−0.6	✓
	+11.6	+11.6	−.05	+0.7	+.01	+0.2	58.03 / 58.06	30.4 / 29.2	−.03	−1.2	✓

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Star		Epoch	Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	
8019 8.5	L_1	98.3	L_1	98.3	2	22 41 4.65	L_1	98.3	2	10 13 4.7	40,
22 41 4.39	P 213	00.0	P	00.0	8	41 4.69	P	00.0	8	13 8.9	
10 13 20.7	R_1	48.0	M_1	45.4	2	41 4.67	M_1	45.4	2	13 17.9	
P.XXII 213	L_4	54.7									
	M_1	45.4	R_1	48.0	1	41 4.51	R_1	48.0	1	13 17.8	
μ μ'	Q	69.1, 67.2	Sch ~~58.7~~	~~58.7~~	2	41 4.57	Sch ~~58.7~~	~~58.7~~	2	13 16.2	
			L_4	54.7	1	41 4.56	L_4	54.7	1	13 14.6	
31007	G	79.7	Sch 58.7	58.7	2	41 4.57	Sch	58.7	2	13 16.2	
	L_5	78.8	Q	69.1	4	41 4.52	Q	67.2	4	13 18.8	
	H	89.8	L_5	78.8	2	41 4.42	L_5	78.8	2	13 18.7	
			G	79.7	3	41 4.42	G	79.7	3	13 19.1	
			H	89.8	3	41 4.39	H	89.8	3	13 20.7	
8020 9.2	R_1	48.0			2	22 42 22.31			2	10 35 55.9	
22 42 22.48											
10 35 56.0	H	91.5, 92.4			4	.42 22.48			4	35 56.0	
8021 8.4	K	23.7			1	22 42 28.24			1	13 2 3.7	18
22 42 27.65	M_1	46.1			3	42 27.87			3	1 59.5	
13 2 1.5	St_2	59.7			2	42 27.35			2	2 0.5	
	H	91.3			4	42 27.65			4	2 1.5	
5944 A											
8025 7.2	L_1	95.7	L_1	95.7	1	22 43 14.42	L_1	95.7	1	11 4 59.5	12
22 43 14.40	P 223	00.0	P	00.0	6	43 14.68	P	00.0	7	4 57.7	
11 5 1.3	K	22.9	K	22.9	2	43 14.51	K	22.9	2	5 2.7	127,12
	L_3	42.0, 39.7	L_3	42.0	10	43 14.39	L_3	39.7	3	5 0.9	
	M_1	44.9	M_1	44.9	1	43 14.66	M_1	44.9	1	5 1.2	
	L_4	56.2	L_4	56.2	2	43 14.38	L_4	56.2	2	5 2.8	
	St_1	[60.0]	St_1	60.0	2	43 14.40	St_1	60.0	2	5 1.2	
5944	A	75.8	Q	64.1	4	43 14.29	Q	63.4	3	5 1.5	
10214	Q	64.1, 63.4	A	75.8	2	43 14.49	A	75.8	2	5 2.2	
31061	G	78.9	L_5	76.0	5	43 14.42	L_5	76.0	5	5 1.4	
	L_5	76.0	G	78.9	4	43 14.45	G	78.9	4	5 0.0	
			Sn	80.0	16	43 14.43	Sn	80.0	27	5 1.6	
	Sn	80.0	H	90.1	3	43 14.40	H	90.1	3	5 1.3	
	H	90.1, 89.8	E	99.8	3	43 14.43	E	99.8	3	5 1.6	

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zones	α Ep-H.δ	α Pos.-H.δ	α C.-H.δ	α adj. δ	Δα	Δδ	
40,14	-91.5 -91.5	+.26 -16.0	+30 -12.2	4.69	8.5 +.13	+8.4	✓
	-89.8 -89.8	+.30 -11.8	+.30 -11.9	4.80	12.2 +.24	+4.7	✓
	-44.4 -44.4	+.28 -2.8	+.15 -5.9	4.61	19.1 +.05	-2.2	✓
	-41.8 -41.8	+.12 -2.9	+.14 -5.6	4.59 (4.53)	17.1 (17.5) +.03	-0.2	✓
	-35.1 -35.1	+.17 -6.1	+.12 -4.7	4.57 (4.53)	15.6 +.01 (17.5) +.03	+1.3 -0.6	✓ ✓
	-20.7 -22.6	+.13 -1.9	+.07 -3.0	4.61	19.4 +.05	-2.5	✓
	-11.0 -11.0	+.03 -2.0	+.04 -1.5	4.43	19.7 -.13	-2.5	✓
	-10.1 -10.1	+.03 -1.6	+.03 -1.3	4.39	19.7 -.17	-2.8	✓
		-.33 +13.3		4.39 / 4.56	20.7 -.17 (17.0 16.9)	-3.8	✓
	-43.5 -44.4	-.17 -0.1	+.14 -5.9	22.39	55.2 -.05	+0.4	✓
				22.48 / 22.44	56.0 +.04 / 55.6	-0.4	✓
189	-67.6 -67.6	+.59 +2.2	+.33 +2.0	27.98	3.5 +.26	-1.6	✓
	-45.2 -45.2	+.22 -2.0	+.22 +1.4	27.81	0.7 +.09	+1.2	✓
	-31.6 -31.6	-.30 -1.0	+.15 +0.9	27.45	2.0 -.27	-0.1	✓
		-.49 -3.0		27.65 / 27.72	1.5 -.07 / 1.9	+0.4	✓
12	-94.4 -94.4	+.02 -1.8	-.03 +2.8	14.37	4.1 -.08	-2.0	✓
	-90.1 -90.1	+.28 -3.6	-.05 +2.5	14.79	1.0 +.34	+1.1	✓
127,129	-67.2 -67.2	+.11 +1.4	-.06 +1.7	14.22 (34)	3.0 -.11	-0.9	✓
	-48.1 -50.4	-.01 -0.4	-.03 +1.4	14.38	1.2 -.07	+0.9	✓
	-45.2 -45.2	+.26 -0.1	-.03 +1.3	14.60	2.4 +.15	-0.3	✓
	-33.9 -33.9	-.02 +1.5	-.02 +0.9	14.39	3.8 -.06	-1.7	✓
	-30.1 -30.1	.00 -0.1	-.02 +0.8	14.46	1.9 +.01	+0.2	✓
	-26.0 -26.7	-.11 +0.2	-.02 +0.7	14.38	2.1 -.07	0.0	✓
	-14.3 -14.3	+.09 +0.9	-.01 +0.4	14.49	(2) 2.2 +.04	-0.1	✓
	-14.1 -14.1	+.02 +0.1	-.01 +0.4	14.43	2.1 -.02	0.0	✓
	-11.2 -11.2	+.05 -1.3	-.01 +0.3	14.42	0.6 -.03	+1.5	✓
	-10.1 -10.1	+.03 +0.3	-.01 +0.3	14.46	2.0 +.01	+0.1	✓
		-80.8 +.06 -2.8		14.40	1.3 -.05	+0.8	✓
	-9.7 -9.7	+.03 +03	+.01 -0.3	14.41	1.5 +.04	+0.6	✓

14.44 (5) 2.8 mean

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Star		Epoch		Ep. α		Obs.	α 1900.0	Ep. δ		Obs.	δ 1900.0	zon.
8026	8.5	M,	45.8			1	22 43 30.34			1	12 21 24.7	
22 43	30.07	Sj	62.8			2	43 29.94			2	21 23.2	
12 21	24.1	H	90.1			3	43 30.07			3	21 24.1	
8027	7.9	L,	95.7	L,	95.7	1	22 44 10.04	L,	95.7	1	11 52 37.9	12
22 44	10.18	K	22.9	K	22.9	2	44 10.30	K	22.9	2	52 41.2	127.1
11 52	42.5	L4 M,	54.7 45.5	M,	45.5	3	44 10.31	M,	45.5	3	52 39.9	
				L4	54.7	1	44 10.18	L4	54.7	1	52 41.1	
		St,	[60.0]	St,	60.0	2	44 9.97	St,	60.0	2	52 39.4	
		L5	79.7	L5	79.7	1	44 10.20	L5	79.7	1	52 40.4	
		H	90.8	H	90.8	3	44 10.18	H	90.8	3	52 42.5	
8028	9.3	B	54.8			1	22 44 13.28			1	13 48 47.3	
22 44	12.85	H	90.8			3	44 12.85			3	48 46.9	
13 48	46.9	SK	95.3			2	44 12.88			2	48 46.7	
8030	9.1	K	22.9			1	22 44 29.68			1	11 35 45.7	12
22 44	29.82	St,	[60.0]			2	44 29.77			2	35 47.4	
11 35	45.5	H	91.8			4	44 29.82			4	35 45.5	
8031	9.1	R,	50.0	M,	44.9	1	22 44 51.31	M,	44.9	1	10 47 44.0	
22 44	51.20	M,	44.9	R,	50.0	1	44 51.05	R,	50.0	1	47 46.2	
10 47	48.0	H	91.2	H	91.2	3	44 51.20	H	91.2	3	47 48.0	
8032	8.4	L,	95.7	L,	95.7	1	22 44 51.69	L,	95.7	1	10 56 4.0	12
22 44	51.66	K	22.9	K	22.9	2	44 52.13	K	22.9	2	56 9.7	127.1
10 56	11.2	M,	44.9	M,	44.9	1	44 51.75	M,	44.9	1	56 8.6	
		L4	60.0, 60.2	St,	60.6	2	44 51.45	St,	60.6	2	56 11.1	
		St,	[60.0]	L4	60.0	4	44 51.86	L4	60.7	3	56 10.7	
		H	92.9	H	92.9	3	44 51.66	H	92.9	3	56 11.2	

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zones	αEp−H.	δ	αBs.−H.	δ	αC.−H.	δ	α adj.	δ	Δα	Δδ	
	-44.3	-44.3	+.27	+0.6			30.28	25.9	+17	-1.1	✓
	-27.3	-27.3	-.13	-0.9			29.98	24.3	-.13	+0.5	✓
							30.07	24.1	-.04	+0.7	✓
							30.17	24.8			
12	-95.1	-95.1	-.14	-4.6	-.19	.00	9.99	42.5	-.15	-1.0	✓
127,129	-67.9	-67.9	+.12	-1.3	-.05	-1.0	10.13	41.5	-.01	0.0	✓
	-45.3	-45.3	+.13	-2.6	-.07	-0.3	10.25	41.1	+.11	+0.4	✓
	-36.1	-36.1	.00	-1.4	-.05	-0.2	10.19	42.1	+.05	-0.6	✓
	-30.8	-30.8	-.21	-3.1	-.05	-0.2	10.03	39.9	-.11	+1.6	✓
	-11.1	-11.1	+.02	-2.1	+.02	-0.1	10.21	41.1	+.07	+0.4	✓
		-81.5	+.15	+0.6			10.18	42.5	+.04	-1.0	✓
							10.14	41.5			
	-36.0	-36.0	+.43	+0.4			13.20	49.7	+.23	-1.8	✓
	—	—	—	—			12.85	46.9	-.12	+1.0	✓
	+4.5	+4.5	+.03	-0.2			12.85	47.1	-.12	+0.8	✓
							12.97	47.9			
129	-68.9	-68.9	-.14	+0.2	-.24	+0.7	29.58	46.2	-.16	+0.3	✓
	-31.8	-31.8	-.05	+1.9	-.11	+0.3	29.83	47.7	+.09	-1.2	✓
			+.35	-1.0			29.82	45.5	+.08	+1.0	✓
							29.74	46.5			
	-46.3	-46.3	+.11	-4.0			51.25	45.2	+.06	+1.0	✓
	-41.2	-41.2	-.15	-1.8			51.13	45.5	-.06	+0.7	✓
							51.20	48.0	+.01	-1.8	✓
							51.19	46.2			
12	-97.2	-97.2	+.03	-7.2	-.02	-2.6	51.64	8.6	-.07	+1.7	✓
127,129	-70.0	-70.0	+.47	-1.5	+.30	-1.2	51.96	10.0	+.25	+.03	✓
	-48.0	-48.0	+.09	-2.6	+.08	-1.1	51.69	9.8	-.02	+0.5	✓
	-32.9	-32.9	-.21	-0.1	+.06	-0.8	51.51	11.5	-.09	+0.9	✓
	-32.9	-32.2	+.20	-0.5	+.06	-0.7	51.87	11.7	-.20	-1.2	✓
									+.16	-1.4	✓
		-83.6	-.17	+2.3			51.66	11.2	-.05	-0.9	✓
							51.71	10.3			

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Db 0
Sk 0
St_1 0
Mc 0
D_1 0
D_2 0
B 0
V 0
Q 0
G 0
Sn 0
A 0
M_1 0
L_2 0
L_4 0 (30)
31951 L_3 0 (1) 7890 H. Brought forward to 1900.0 & added to P.M. Vol XI p. 164
P 0
C_2 0
C_1 0
St_2 0
G 0
K 0
L_1 0
M_2 0
31181 L_5 0 (1) 7980 H. Brought forward to 1900.0 & added to P.M. vol. XI p. 198.
R_1 0
R_2 no stars
E 0

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