Part G: Acceleration Solutions

No. HIP	Acceleration at J1991.25 $g_{\alpha*}$ mas/yr^2	g_δ	$\sigma_{g_{\alpha*}}$ mas/yr^2	σ_{g_δ}	F_g	Third-Order Motion at J1991.25 $\dot{g}_{\alpha*}$ mas/yr^3	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$ mas/yr^3	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	Note N
1	2	3	4	5	6	7	8	9	10	11	12
62	−6.41	−5.16	2.69	1.71	3.53						
68	3.04	−7.04	2.50	1.66	5.33						
104	9.75	5.97	2.79	1.38	5.63						
305	−4.26	9.95	2.97	1.40	7.11						
340	3.16	−0.99	3.19	2.99	1.15	−29.08	−17.63	8.87	6.97	3.84	
493	−0.60	3.96	1.63	1.34	3.58						
611	−17.65	−2.38	3.33	3.24	5.42	19.19	−25.18	9.25	7.91	4.15	
646	−7.51	−2.83	2.53	1.02	4.02						
648	6.77	3.36	1.80	1.52	4.19	−17.15	9.84	4.31	4.40	4.96	
695	0.18	6.17	1.13	1.66	3.73						
741	11.84	5.29	3.24	2.38	4.07						
787	−16.53	−5.60	8.72	4.91	2.21	56.17	37.26	19.37	10.96	4.40	
807	−10.14	−6.24	2.61	1.90	4.20						
864	0.77	−7.28	2.99	2.42	3.78						
886	3.00	4.78	2.39	1.44	3.54						
898	−21.89	11.03	8.12	5.15	4.04						
928	−8.18	1.98	1.94	1.24	4.61						
944	−1.75	−4.32	2.97	3.01	2.06	24.44	−11.76	6.62	11.76	3.70	
971	8.51	7.41	1.99	1.38	6.33						
983	−10.30	−2.45	2.77	1.10	4.89						
1026	1.18	−5.54	1.40	1.52	3.64						
1065	−5.91	−4.76	2.46	1.26	4.07						
1067	−6.86	−3.61	1.97	1.22	3.79						
1103	6.06	9.66	2.09	1.65	5.86						
1133	−14.34	1.46	2.04	1.42	7.49						
1139	5.55	−3.55	1.45	1.69	3.93						
1164	−1.52	−6.36	2.01	1.86	3.59						
1175	−13.42	4.65	3.89	1.72	4.12						
1249	0.94	−3.84	1.96	1.23	3.59						
1274	1.22	7.33	3.77	1.89	3.89						
1341	16.44	2.15	2.31	1.99	7.24						
1351	−0.22	−13.49	3.44	2.29	6.81						
1399	16.38	−5.38	4.21	4.90	4.21						
1420	14.36	−10.55	5.60	3.89	4.78						
1476	4.17	3.85	1.41	1.90	4.36						
1701	4.51	−5.40	2.57	2.21	3.54						
1707	−5.79	−0.74	1.27	1.75	4.60						
1742	8.52	11.32	3.02	2.23	5.47						
1777	−1.76	6.70	1.19	1.65	4.59						
1781	9.95	−9.13	2.38	3.67	4.55						
1812	5.04	3.37	2.70	1.33	3.52						
1844	1.58	−7.04	1.96	1.89	3.77						
1867	14.38	8.60	2.52	1.97	7.57	7.24	−32.19	9.42	5.54	5.90	
1892	−4.29	4.34	1.69	1.54	3.89	14.45	−5.90	4.20	5.14	3.48	
1976	13.44	−15.08	3.36	1.98	12.37						
1984	−0.47	6.57	2.61	1.69	3.91						
1985	1.51	−12.41	3.05	2.37	5.29	−15.38	22.99	6.20	7.64	3.97	
2003	−3.95	4.67	2.44	1.61	3.74						
2015	−8.35	−7.22	2.58	1.79	4.52						
2081	−20.46	−10.33	1.60	1.54	13.71						
2169	−9.83	1.19	3.11	1.88	4.35						
2205	3.75	−6.34	1.97	1.95	3.59						
2217	−6.58	3.09	1.91	1.85	3.66						
2288	23.31	6.07	3.97	2.58	5.97						
2308	6.36	3.40	2.27	2.03	3.48						
2383	−5.00	8.62	1.06	1.03	8.76						
2397	9.23	−15.57	2.63	2.03	9.26						
2458	−95.37	−9.06	15.84	10.48	6.02	179.38	34.51	40.02	29.06	4.48	
2534	−6.05	6.62	2.26	2.18	4.04						
2645	−12.76	3.52	3.07	3.12	5.28	−4.60	34.38	6.92	6.37	6.08	
2677	−1.21	4.53	2.45	1.80	3.56						
2760	20.81	2.48	1.85	1.70	11.30	2.42	−17.76	4.22	4.94	3.60	
2777	29.76	−5.26	6.09	3.82	5.10	75.92	−29.90	22.27	8.81	4.09	
2809	3.64	7.94	2.06	2.28	3.89						
2856	10.49	−6.04	3.19	1.50	5.12						
2908	−1.35	−6.28	2.14	1.60	3.94						
3000	−7.50	8.52	3.28	2.66	5.76						
3042	−11.41	−1.31	1.83	1.58	6.24	16.50	−6.54	5.77	5.65	3.51	
3076	−6.23	0.77	1.92	1.89	3.45						
3175	−5.52	−6.33	2.12	1.52	4.52						
3362	−14.13	8.96	3.93	3.04	4.81						
3405	−6.41	1.59	0.99	0.98	6.78						
3412	4.28	3.56	1.83	1.36	3.56						
3463	8.45	7.43	4.44	2.15	4.07						
3490	−6.72	−2.71	1.32	1.35	5.19						
3561	2.10	8.27	2.21	2.27	3.74						
3578	15.45	3.65	2.66	2.71	7.41	−21.89	0.43	6.52	6.76	3.74	
3587	0.25	−7.37	1.32	1.36	5.45						
3697	−0.29	6.24	1.99	1.38	4.66	−8.39	−24.02	5.18	5.01	4.80	
3741	−9.20	−3.37	3.01	1.47	4.20	31.10	−15.79	7.69	4.38	5.03	
3825	10.51	−2.84	2.81	1.69	4.32						
3829	−33.87	6.41	9.71	7.36	4.33						
3834	5.78	3.28	1.80	1.58	3.49						
3870	9.03	8.60	4.60	2.58	3.64						
3903	2.75	−17.20	2.06	1.78	9.66	0.44	23.88	6.27	4.99	4.80	P
3919	4.87	−4.27	1.37	1.20	5.34						P
3973	−6.65	−1.15	1.80	1.46	3.84						
3999	−10.18	−7.01	2.60	1.46	6.69						
4079	−8.26	0.08	2.34	1.93	3.83						
4100	6.47	−2.80	1.71	1.38	4.45						
4131	−1.96	−5.85	1.81	1.35	4.36						
4166	−6.90	4.70	3.01	2.36	3.82						
4197	−11.35	7.64	2.23	1.63	7.55	31.04	13.90	9.38	4.81	5.10	
4283	7.27	4.65	1.27	1.83	8.71						
4292	−8.40	−4.67	1.47	1.41	7.15	17.12	−4.06	3.46	3.66	4.96	
4342	6.97	0.04	1.75	1.37	4.29						
4387	6.94	2.12	1.96	1.50	3.68						
4395	−7.79	−11.30	1.93	1.58	8.06	−5.48	−16.47	4.42	4.36	3.90	
4408	2.17	9.90	3.25	2.64	3.75						
4437	−1.00	5.64	1.59	1.60	3.54						

No. HIP	Acceleration at J1991.25 $g_{\alpha*}$ mas/yr^2	g_δ	$\sigma_{g_{\alpha*}}$ mas/yr^2	σ_{g_δ}	F_g	Third-Order Motion at J1991.25 $\dot{g}_{\alpha*}$ mas/yr^3	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$ mas/yr^3	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	Note N
1	2	3	4	5	6	7	8	9	10	11	12
4446	10.40	2.57	1.14	1.62	9.69						
4506	−11.22	0.89	3.42	2.01	3.56						
4511	0.79	6.12	2.51	1.66	3.80						
4522	−7.86	−1.33	2.28	1.77	3.92						
4546	−5.61	3.20	1.96	1.84	3.50						
4598	−15.33	2.25	4.49	2.17	3.69						
4625	7.98	1.22	2.28	2.16	3.51						
4696	4.31	8.83	2.39	1.20	7.64						
4757	3.81	−7.44	1.81	1.85	4.17						
4826	−7.03	7.80	1.76	1.94	6.02						
4844	3.61	3.78	1.14	1.16	4.24						
4967	16.50	13.86	6.19	3.27	5.45						
5045	3.10	5.27	2.55	1.19	4.91						
5141	6.01	−5.38	2.86	1.71	4.56						
5162	−7.14	−3.83	1.92	2.40	3.76						
5178	−7.71	11.15	3.34	3.83	3.61						
5219	8.76	1.41	2.71	1.47	3.47						
5248	11.07	0.33	2.15	1.51	5.27						
5310	17.60	3.54	2.39	1.69	7.39	−15.53	−42.21	9.26	4.97	9.23	
5313	−8.50	−19.91	2.53	1.30	16.93						
5333	2.60	6.35	1.71	1.41	5.06	−3.49	−18.41	5.20	3.69	5.59	
5346	17.56	5.41	2.62	1.53	7.93						
5366	−9.25	4.69	1.44	1.97	6.72						
5465	−8.21	7.43	1.98	2.40	6.59						
5515	−0.51	−5.38	2.45	1.53	3.54						
5564	−14.48	1.85	4.31	3.53	3.44						
5598	7.59	1.27	1.69	1.65	4.51						
5635	−6.97	0.82	2.00	2.59	3.49						
5666	9.68	5.63	1.59	1.16	6.75						
5678	−4.92	7.68	4.37	2.34	4.32						
5697	5.37	13.31	3.06	2.31	6.23						
5822	−8.14	−0.71	2.14	1.74	3.86						
5871	0.97	−6.05	3.58	1.78	3.55						
5959	3.34	−4.79	2.48	1.78	3.44						
5965	−1.79	9.60	4.61	2.84	3.64						
6014	−3.49	−6.56	1.74	2.20	3.90						
6202	−9.34	−14.62	3.66	3.82	3.85						
6233	8.58	6.78	3.45	1.82	4.30						
6253	−5.10	−2.66	1.34	1.66	4.20						
6303	−11.17	6.49	2.15	1.82	5.56						
6322	−5.66	−2.58	1.92	2.08	3.45						
6333	6.58	2.28	1.81	1.39	3.68						
6339	−47.01	3.87	4.52	1.96	10.82						
6395	−5.65	0.41	1.17	1.51	4.84						
6441	4.57	6.79	3.14	1.91	3.56						
6464	2.60	−5.31	2.39	1.89	3.87						
6483	−5.93	4.24	2.17	2.35	3.44						
6549	10.98	2.47	2.77	1.91	3.97						
6570	35.25	3.60	10.96	8.61	3.50						
6588	7.36	−8.52	4.51	3.26	4.09						
6591	−7.82	0.53	1.93	1.62	4.78						
6615	−6.08	4.67	1.87	2.24	3.94						
6712	2.00	−25.05	2.49	1.70	14.80						
6713	−19.89	2.45	4.97	2.99	4.30						
6737	−7.45	2.64	2.05	2.01	3.64						
6758	−8.24	−10.79	4.58	3.00	3.60						
6768	3.73	−3.85	1.41	1.52	3.82						
6818	15.48	−18.15	9.63	9.26	4.43						
6951	8.50	−7.63	2.46	1.82	6.17						
6989	7.09	−1.17	2.26	1.64	3.48						
7036	−3.69	−4.97	3.21	1.97	2.89	−25.80	−9.60	7.79	5.77	3.57	
7131	6.07	8.49	2.37	2.14	3.98						
7148	3.67	−4.48	2.10	1.54	4.07						
7174	−9.63	1.23	3.21	1.99	3.54						
7181	4.70	−4.89	2.55	1.64	3.65						
7298	9.44	0.79	0.99	1.73	9.72						
7305	−4.40	−4.33	1.51	1.63	3.84						
7320	8.56	2.37	2.25	2.10	4.01						
7369	−0.07	7.42	3.00	2.08	3.90						
7439	4.09	−7.74	2.26	1.34	5.86						
7565	−9.90	−3.36	2.60	1.86	3.81						
7568	4.07	−8.17	1.17	1.42	7.70						
7580	0.95	−8.12	1.89	1.65	6.10						
7588	−7.92	6.63	1.53	1.10	8.55						P
7651	5.02	−8.04	2.32	1.55	5.23						P
7663	4.84	−3.93	1.85	1.51	3.44						
7700	2.86	−6.93	2.52	1.45	4.78						
7711	9.37	−1.26	2.27	1.65	4.80						
7712	14.69	2.56	4.01	2.51	3.71						
7718	−9.59	−8.73	2.62	1.73	5.61						
7719	4.83	−3.32	1.35	1.07	4.49						
7743	−6.45	10.54	2.41	3.09	4.10						
7803	−10.62	−1.68	3.00	2.22	3.54						
7825	−9.86	−4.16	2.34	1.37	5.44	9.63	−13.17	5.49	3.80	3.75	
7837	−5.02	−5.07	3.51	1.66	4.67						
7852	−18.57	−1.51	2.59	2.42	8.52						
7869	4.93	11.67	2.08	2.49	5.24	−8.84	−35.06	4.82	7.25	5.19	
7894	−1.89	−6.35	3.10	1.78	3.62						
7903	−12.68	−7.56	3.44	1.79	7.67						
7918	−1.68	−4.23	2.06	1.21	4.14						
7924	3.06	−6.15	3.41	1.77	3.60						
7955	15.89	−7.40	1.82	1.57	10.08	5.83	16.45	5.66	4.33	3.81	
7974	−2.26	10.56	1.72	1.75	6.04						
8133	10.69	−1.73	1.68	2.03	6.48						
8135	−2.31	−5.43	1.74	1.39	3.98						
8136	−3.66	−9.72	3.38	2.88	3.46						
8185	5.05	−2.89	1.58	2.11	3.45						
8235	4.46	3.29	1.65	1.56	3.46						
8372	−8.92	8.97	2.89	3.22	3.97	−0.36	−41.64	6.64	8.47	4.92	
8394	3.58	−10.41	2.57	2.64	4.87						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
8472	3.36	5.74	1.60	1.88	3.47						
8590	0.77	25.34	8.42	8.26	3.59						
8645	−4.82	3.30	2.01	2.04	4.58						
8653	−1.65	1.66	2.79	2.60	1.40	−42.24	−68.29	10.61	10.97	6.70	
8718	10.70	−2.09	2.90	2.33	3.96						
8844	0.01	23.48	8.95	7.26	3.54						
8920	−15.36	1.02	4.46	3.27	3.48						
9007	0.57	−4.71	1.25	1.09	4.39						
9065	−0.63	9.67	1.86	2.35	4.36						
9095	9.63	4.55	1.79	1.41	5.93	−14.72	−20.44	7.04	5.17	3.96	
9148	−12.50	9.09	1.99	2.21	9.86						
9216	−0.01	7.85	3.24	2.69	3.78						
9260	−19.71	7.40	4.03	2.73	4.94						
9306	6.50	−3.21	1.91	2.35	3.87						P
9544	−6.22	−9.88	2.33	1.64	7.12	26.57	−0.21	5.31	5.38	5.07	
9634	5.88	9.82	3.20	2.49	4.26						
9754	−0.63	5.05	1.28	1.30	3.97						
9803	−7.35	−0.21	1.86	2.22	4.05						
9852	−4.45	2.42	1.45	1.32	3.62						
10053	−2.46	−22.69	3.62	3.03	7.59	61.47	7.69	18.05	12.98	3.53	
10091	−1.41	6.39	1.68	1.65	4.14						
10111	5.75	−0.68	1.26	1.24	4.73						
10160	0.58	3.80	2.38	2.22	2.20	17.40	17.27	9.88	6.83	4.97	
10194	−2.36	5.31	1.96	1.85	4.66						
10255	2.01	13.55	5.97	3.58	3.83	−35.41	−30.86	13.29	9.41	3.77	
10356	−43.41	11.11	3.76	4.16	13.10						
10385	18.32	−13.68	5.02	5.42	4.66						
10420	2.28	−5.54	1.37	1.61	3.73						
10454	−8.90	16.54	5.41	3.09	5.48						
10547	−6.64	−0.39	1.38	1.61	4.87						
10611	−5.71	−5.28	1.91	2.48	4.05						
10757	−12.72	−6.21	3.52	3.73	3.65						
10786	−2.48	9.09	2.22	2.40	3.96						
10889	−3.14	5.96	2.95	2.35	3.61						
11007	10.23	−5.91	3.49	3.32	3.49						
11037	−0.90	8.05	2.06	2.08	3.96						
11072	13.04	−14.40	2.00	1.78	15.16						
11080	−0.48	−8.78	2.55	2.66	3.66						
11114	23.04	−1.44	4.77	2.67	4.88						
11223	0.12	8.12	6.53	3.16	3.83						
11245	2.27	13.53	2.76	2.73	4.99						
11250	−4.28	−8.44	1.31	1.61	6.62						
11274	8.93	12.52	3.05	3.29	3.91						
11314	−8.23	12.31	5.12	4.01	3.60						P
11340	−13.90	−2.50	4.05	3.38	3.57						
11349	12.65	−5.83	3.19	3.01	5.08	23.63	31.28	8.27	7.45	4.43	
11355	21.80	0.13	3.99	4.25	5.86						
11380	1.28	3.68	2.77	1.84	3.44						
11395	10.45	−2.37	2.27	1.58	4.74						
11409	21.21	17.45	5.18	6.24	4.10	−18.73	−60.83	23.99	17.03	4.00	
11502	−2.51	14.33	1.81	1.98	7.27						
11537	1.40	−26.89	3.90	3.40	8.46	−91.85	12.30	14.27	14.27	9.05	
11552	−3.84	14.82	3.80	2.89	6.20	55.22	11.39	12.89	13.10	5.34	
11576	0.34	10.31	2.25	2.48	4.16						
11750	−4.54	−11.76	3.85	3.48	3.47						
11753	−7.60	−2.38	1.46	1.50	5.32						
11757	−5.00	−7.78	1.08	1.15	7.88						
11802	−6.36	9.98	1.06	1.30	9.50						
11885	−4.20	6.44	2.59	2.47	3.45						
11906	4.97	−5.80	1.36	1.50	4.47						
11923	−12.68	0.08	1.63	1.95	8.28						
11927	−18.53	3.58	4.92	3.11	3.87						
11939	−33.43	23.01	10.26	6.19	4.13						
11948	−15.07	−9.42	3.46	3.08	4.69						
12017	−0.08	−10.88	4.48	3.18	3.53						
12070	−14.59	−12.56	2.30	2.30	6.83						
12099	2.66	12.64	5.00	2.93	4.78	15.00	52.71	18.89	11.58	4.70	
12112	−4.96	−3.07	1.47	1.74	3.95						
12139	−10.16	16.87	7.05	5.74	3.69	−91.23	−75.00	29.74	24.50	3.88	
12232	0.31	−3.90	1.08	1.12	3.48						
12354	5.84	7.79	2.90	2.33	3.74						
12413	−22.88	−32.94	1.98	1.45	24.16	1.38	−60.20	6.02	4.91	12.49	
12416	4.84	−13.43	2.35	2.49	5.50						
12425	−4.80	−16.56	3.23	3.23	5.28						
12473	−24.45	15.02	5.75	3.49	5.34						
12536	3.64	−8.24	2.38	3.01	3.93						
12636	16.44	−9.82	4.50	3.60	3.66						
12720	4.90	−8.65	3.49	3.52	5.63						
12746	6.06	13.38	3.22	3.41	3.95						
12778	5.23	1.54	1.63	1.72	3.23	−3.54	−34.62	4.73	5.10	6.80	
12816	−1.91	−8.67	2.21	2.24	4.13						
12820	−2.38	−13.36	4.98	3.43	3.96						
12843	16.47	−20.76	1.88	2.15	20.90						
12889	1.29	−9.94	1.36	1.35	7.44						
12923	25.60	36.94	5.02	5.76	6.63						
13008	−3.97	8.33	1.67	1.43	8.48						
13055	−8.27	1.77	1.01	1.35	8.20						
13060	−2.32	−5.51	1.79	1.44	3.91						
13081	18.49	3.45	2.94	1.65	6.74						
13098	7.00	−2.52	2.00	1.70	3.62						
13120	5.39	−2.48	2.71	2.19	3.46						
13151	2.41	−12.05	4.71	3.55	3.46						
13176	6.62	6.72	1.76	2.10	3.99						
13222	−7.47	7.60	2.25	2.97	4.10						
13225	−5.38	8.66	1.90	1.76	5.18	16.36	−1.65	4.52	5.00	3.62	
13326	−6.59	10.82	4.33	3.48	3.49						
13350	5.36	−3.65	2.27	1.94	4.04						
13460	−5.55	11.34	2.79	2.61	4.35						
13477	−12.64	−18.27	3.71	5.57	3.58						
13569	−7.65	−3.15	1.51	1.86	5.75	12.32	9.41	4.27	5.86	3.71	

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
13579	−6.18	7.47	4.53	1.99	4.10						
13702	6.06	8.02	2.91	1.83	4.41						
13830	−14.26	8.97	5.03	3.34	4.02						
13835	3.71	−4.59	1.82	1.68	4.34						
13880	11.91	−6.10	4.74	4.43	3.57						
14048	37.71	−1.36	4.21	3.03	10.69						
14056	2.71	4.38	1.21	1.53	3.75						
14133	24.07	−12.38	5.96	5.85	4.09	89.32	−71.09	29.00	20.43	3.49	
14136	23.29	14.41	4.28	5.10	5.83						
14168	−6.00	11.49	5.47	2.82	4.34	−137.53	−2.81	28.64	8.76	6.96	
14253	17.55	2.87	4.64	3.14	3.80						
14273	16.03	−0.31	4.33	4.03	3.73						
14292	−15.14	−4.24	3.73	2.14	4.22						
14388	−28.91	20.17	10.26	13.34	3.55						
14415	9.69	0.46	1.89	1.77	5.15						
14502	−2.30	3.40	0.95	1.11	3.72						
14539	−8.80	5.66	4.53	4.89	3.91						
14757	−4.98	4.81	1.38	1.69	6.23	−25.40	−24.07	5.02	6.87	5.06	
14763	26.96	−1.88	6.32	3.76	4.31	93.25	−27.53	26.95	14.52	4.13	P
14777	8.28	1.16	3.14	2.89	3.81	−16.39	−33.97	6.80	7.12	6.84	
14832	−10.54	−1.51	2.37	2.13	4.46						
14868	11.04	14.00	1.60	1.76	10.65						
14959	3.11	13.38	9.02	2.95	4.56						
15010	−0.59	−11.37	3.20	3.65	3.50						
15014	26.40	−8.94	7.29	3.99	3.66						
15029	7.01	10.30	2.69	2.77	4.04						
15106	1.50	−8.32	1.20	1.51	5.53						
15121	−5.50	8.35	3.87	3.48	3.51						
15136	0.88	−0.54	2.62	2.31	0.48	−20.11	−4.25	5.94	6.80	3.44	
15241	0.08	−7.93	2.07	2.04	4.38						P
15244	7.09	−6.91	3.07	2.41	4.65						
15279	−10.28	3.06	3.36	1.90	3.58						
15307	1.89	−10.83	1.99	3.09	3.51						
15357	−5.65	1.42	1.01	1.59	5.61						
15394	28.54	6.77	4.20	3.76	7.04						
15406	45.49	−3.87	11.66	6.50	3.93						
15438	−0.87	−5.48	1.71	1.65	3.34	5.46	34.74	4.50	6.00	6.63	
15539	11.08	−0.42	2.80	2.70	4.29	36.79	35.66	12.12	11.21	3.45	
15568	−2.51	3.81	1.08	1.37	3.55						
15589	4.38	7.07	2.06	3.22	3.64						
15591	1.93	6.78	2.24	1.96	3.46						
15643	−6.81	5.21	1.50	1.58	6.68						
15645	−6.75	−11.93	1.78	1.98	6.77	22.29	10.62	5.18	6.43	4.39	
15769	8.94	−0.97	2.21	2.47	4.82	−22.73	11.46	6.14	6.69	4.59	
15831	−6.89	0.69	2.08	1.72	3.44						
15886	−18.00	−7.58	1.63	1.75	11.49	14.64	16.81	4.18	5.47	4.70	
15895	−1.99	5.77	2.22	1.89	3.59						
15900	12.72	1.24	5.76	5.53	2.53	−75.87	3.03	18.38	18.03	4.33	
15914	3.72	−7.11	2.84	2.62	4.10						
15920	−4.67	−6.29	1.92	1.70	4.00						
16022	−4.00	11.72	1.68	1.89	6.72						
16075	−8.04	−9.44	3.76	2.52	3.75						
16088	11.27	7.79	3.84	3.36	3.56						
16159	−17.07	−9.95	5.73	3.87	4.06						
16174	17.19	−9.18	6.14	3.42	4.01						
16193	−3.15	−9.24	4.01	2.31	4.05						
16259	14.27	10.44	3.92	3.78	3.67						
16277	5.76	−1.01	2.26	3.17	3.67						
16308	−10.81	−2.08	3.61	2.06	3.62	−11.32	42.38	17.63	9.64	4.49	
16329	−3.39	11.63	5.67	3.30	3.62						
16370	−2.01	−18.11	2.51	1.85	10.17	6.31	−36.20	5.41	5.64	6.43	
16418	13.34	4.19	1.68	1.90	7.96	−21.48	−30.78	4.49	5.51	7.30	
16454	4.00	−11.28	1.83	2.17	5.20						
16489	−6.88	−0.52	1.38	1.77	4.99	−10.79	18.29	4.29	5.64	3.49	
16661	−13.12	8.61	1.65	1.41	11.31	13.67	−13.04	4.16	4.64	3.94	
16696	−7.03	−5.89	2.10	2.28	3.70						
16738	−8.46	11.71	4.55	2.45	5.48						
16745	4.44	9.76	2.25	2.57	3.99						
16777	14.51	3.94	4.66	3.19	3.46						
16804	−2.09	−9.57	2.48	2.76	3.48						
16851	3.15	−10.84	1.12	1.29	9.06						
16853	−1.54	−5.61	1.86	1.66	3.53						
16855	7.74	8.02	2.45	2.74	3.85						
16870	5.59	−3.06	1.17	1.25	6.19						
16928	−4.53	9.44	2.87	3.60	4.62						
16981	5.24	6.20	1.88	2.00	3.86						
17023	−0.05	6.42	1.75	1.83	3.70						
17026	−8.38	12.17	3.33	1.82	7.48						
17098	13.83	1.61	2.56	1.98	5.42	−19.21	3.93	7.86	8.39	3.72	
17108	5.96	−2.13	1.27	1.87	5.11	−13.38	−4.25	3.56	4.72	3.97	
17153	6.85	−8.81	1.55	1.95	5.60						
17175	2.09	10.14	1.65	2.15	4.77						
17184	20.98	19.66	2.13	3.15	11.33	−39.07	3.58	5.70	9.46	7.03	
17209	−1.57	6.95	1.44	2.04	3.60						
17210	4.57	7.29	1.84	2.50	3.50						
17269	1.38	6.45	1.78	1.67	3.90						
17333	5.36	5.98	1.48	1.90	4.62						P
17370	−4.89	7.09	1.20	1.33	7.31						
17395	4.47	8.41	2.94	2.39	3.64						
17451	−10.41	−31.11	6.03	6.68	4.90						
17466	23.48	6.93	8.09	4.07	4.78	−5.70	−57.14	45.13	19.05	3.99	
17478	−9.71	9.84	4.70	3.02	4.35						
17480	13.21	−6.86	11.56	3.66	2.15	106.68	−40.64	56.58	10.83	4.17	
17491	−14.41	−0.99	2.40	2.67	6.95						
17543	−1.28	−6.41	1.41	1.62	3.96						
17557	−22.67	−15.17	8.61	4.34	3.76						
17586	17.20	11.05	4.65	2.51	5.45						
17653	−5.54	−13.34	2.30	3.00	4.68						
17662	−7.70	8.94	5.30	3.00	3.60						
17714	−2.70	−16.74	5.92	3.33	5.13						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
17726	−12.83	−19.47	6.94	3.74	5.21						
17730	6.22	13.26	3.89	3.31	4.08						
17771	−0.06	5.88	2.34	1.69	3.61						
17772	4.46	−1.97	1.55	1.33	3.65						
17820	3.16	30.26	2.18	2.46	13.18						
17997	6.82	8.63	2.27	3.00	3.65						
18003	0.60	−6.14	2.21	1.73	3.88						
18038	−12.02	8.11	4.66	2.63	3.77						
18071	16.43	12.87	5.90	4.76	3.48						
18074	−5.53	−6.35	2.15	1.85	3.60						
18098	12.20	5.75	4.06	2.59	3.66						
18105	41.94	43.17	8.81	5.10	10.04	−21.64	−108.50	42.95	28.63	3.79	
18123	−3.72	−7.00	2.08	1.70	4.12						
18199	−5.64	−8.63	2.03	1.78	4.85	24.24	3.78	4.29	4.19	5.65	
18308	16.41	3.16	13.53	6.67	3.76						
18331	0.21	18.06	3.57	3.16	5.73	34.20	−55.70	10.98	10.91	5.14	
18401	−7.38	−0.94	1.40	1.45	5.28	0.61	−13.98	3.38	4.03	3.51	
18438	−1.48	9.80	1.20	1.60	6.24	−9.28	−16.06	3.09	4.21	4.90	
18443	1.36	13.45	6.94	3.49	3.90						
18448	−8.03	−3.51	1.90	2.80	5.77						
18525	3.73	−8.06	2.67	2.32	3.48						
18530	−4.12	−6.23	1.59	2.06	3.45						
18559	−10.46	12.57	4.64	2.31	6.15						
18595	3.42	−10.02	4.11	1.92	5.31						
18609	−0.11	−8.51	4.48	2.24	3.80						
18658	−5.07	14.21	5.32	2.10	7.17	−13.08	44.22	22.42	12.20	3.62	
18678	−8.27	6.96	2.40	2.13	4.15						
18690	1.46	−14.69	2.53	3.91	3.79						
18704	9.45	8.42	2.95	2.30	4.39						
18723	−3.30	2.40	0.91	1.29	4.09						
18750	−5.40	−2.34	1.68	1.86	3.62						
18844	6.46	3.30	1.31	1.43	4.93						
18951	7.04	6.10	2.31	2.91	3.51						
18994	−9.15	12.11	2.56	2.05	9.40						
19004	−2.35	−8.86	2.07	2.39	3.74						
19012	11.27	−11.89	3.84	2.11	6.91	−42.12	−3.45	12.33	10.23	4.59	
19134	12.96	−8.44	4.36	3.38	3.45	28.16	−35.34	22.61	9.79	3.62	
19136	−6.69	−15.14	3.26	3.22	5.39						
19147	7.70	−6.35	3.15	2.40	4.68						
19195	−1.47	−4.84	1.27	1.79	3.55						
19209	−5.89	−23.34	4.05	4.42	5.29						
19218	−7.19	−16.55	3.20	4.35	4.09						
19219	−1.16	18.71	7.87	6.14	3.95						
19248	5.29	2.55	2.00	2.32	3.67						P
19322	−9.31	3.47	2.29	1.91	5.10						
19335	−3.35	−4.72	1.54	1.32	3.58						
19359	−18.83	11.20	9.06	6.63	4.17						
19396	4.42	3.41	1.34	2.13	3.63						
19481	4.83	−3.18	3.67	3.22	3.77						
19538	−1.44	−13.49	3.88	4.04	4.00						
19590	2.57	−7.23	3.31	2.05	3.53	19.34	25.30	12.67	11.06	4.52	
19670	1.02	−6.91	1.38	2.31	3.73						
19704	0.89	−6.47	1.19	1.66	4.12						
19798	1.94	−8.10	1.71	1.96	4.14						
19811	7.77	−15.26	2.71	1.61	10.14	−31.37	9.28	8.36	6.98	5.94	
19911	−38.37	39.60	5.85	2.77	15.01	−109.96	8.80	25.31	13.13	4.36	
19912	16.60	−1.96	5.87	3.14	3.52						
19914	13.27	16.03	6.92	4.88	3.52						
19930	12.40	12.03	3.62	3.79	3.48						
19963	6.23	−2.71	1.24	1.41	5.60						
19972	−3.32	−8.43	1.29	2.83	3.52						
19977	18.62	11.99	4.90	5.01	3.82						
20041	10.89	9.84	5.16	3.35	3.52						
20065	−1.31	−8.39	2.91	2.52	3.61						
20072	5.70	−8.02	3.76	2.38	4.18						
20153	−6.25	6.24	1.53	1.72	4.73						
20258	6.81	−7.36	3.83	2.19	3.89						
20282	−12.72	−2.07	3.71	2.28	3.49						
20289	−10.25	7.01	1.63	2.07	7.56						
20302	7.57	−9.92	2.71	3.46	3.79						
20441	−55.76	−40.02	9.04	7.46	6.22	130.88	35.56	55.82	50.44	3.80	
20541	−9.19	−15.69	1.96	1.50	10.97						
20576	−11.54	6.03	3.42	2.50	3.79	7.34	46.93	20.82	10.79	5.32	
20618	−4.83	−5.71	1.62	1.77	4.92						
20639	6.56	−1.23	1.47	1.89	4.53						
20879	5.96	4.50	1.67	2.20	3.99						
20999	5.50	−4.79	1.93	2.60	3.45						
21200	6.31	7.05	1.87	2.08	4.75	−20.85	−3.28	6.06	6.70	3.48	
21206	−9.58	−3.77	2.55	2.16	3.76						
21276	−14.10	−10.83	2.93	2.64	5.60	50.28	−94.33	11.88	11.72	8.15	
21304	−6.14	−9.96	3.14	2.86	3.52						
21370	2.70	9.52	2.17	2.10	4.59						
21415	0.17	−7.70	3.63	3.18	3.56						
21442	−2.83	−7.29	2.65	2.13	3.51						
21496	4.64	−12.18	4.88	3.65	3.48						
21539	−10.39	6.37	2.24	3.09	5.48						
21543	17.46	3.00	6.97	5.24	2.64	−61.36	35.56	29.38	15.32	3.99	
21560	7.67	−3.53	1.53	2.08	5.07						
21588	38.40	3.97	3.99	2.57	9.90						
21673	10.75	8.06	5.86	4.45	2.02	−55.53	−87.46	22.14	12.71	7.01	
21775	6.95	−18.29	2.66	2.82	7.02	−19.85	16.88	6.82	8.70	3.88	
21778	−8.53	7.11	1.47	1.77	6.52						
21879	−5.16	−7.45	2.86	2.66	3.65						
21897	6.38	4.90	1.60	1.74	5.16						
21928	13.88	11.43	4.01	3.85	3.47						
21976	−13.45	7.62	4.10	2.29	4.99						
21985	−9.56	7.02	2.61	3.44	3.81						
22003	−0.98	−33.49	6.20	4.61	7.43	−59.60	−57.75	31.39	24.57	3.46	
22021	4.44	24.94	6.72	4.68	5.41	41.86	73.18	46.47	20.15	3.64	
22034	2.17	−3.16	1.67	1.46	3.51						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
22055	−14.15	−4.34	3.66	2.42	4.30	46.13	38.30	19.79	12.04	4.11	
22097	3.50	4.24	1.48	1.96	3.50						
22106	−8.54	−7.79	2.65	2.19	3.87						
22123	−5.21	−6.04	1.78	2.52	3.91						
22137	12.98	4.31	6.80	2.99	3.64						
22189	15.03	−3.65	3.67	2.05	4.37						
22221	6.49	−17.06	3.08	1.87	10.42	21.05	−11.31	11.37	9.36	3.52	
22223	−1.83	−10.21	3.26	2.52	4.45						
22227	0.68	−12.68	3.42	2.90	5.90						
22350	3.86	−35.13	7.33	6.20	9.14	−107.04	−83.45	29.11	26.61	3.81	
22387	−8.70	0.16	1.08	1.57	8.12						
22460	−21.58	−0.70	6.14	3.10	3.79						
22496	15.56	0.65	4.34	2.43	3.64						
22508	3.42	−0.47	0.84	1.38	4.11						
22515	4.87	−0.06	1.32	2.33	3.69						
22541	−6.16	9.21	2.72	2.69	3.52						
22581	−12.41	−2.86	3.00	3.73	4.14						
22602	20.94	−6.47	1.74	2.57	12.47	−44.07	31.30	5.50	7.20	8.66	
22758	13.87	6.48	4.07	5.84	4.12						
22854	2.18	−3.53	1.82	1.46	3.59						
22944	4.56	−5.16	1.97	1.62	3.46						
23006	−5.99	−6.38	1.83	1.77	4.22						
23079	2.56	−4.10	1.55	1.65	3.50						
23122	−9.79	−6.42	1.84	2.00	6.31	9.57	18.51	5.49	5.53	4.31	
23141	20.30	−5.89	4.62	3.40	7.81						
23181	−16.76	−0.25	4.45	2.98	3.94						
23185	−5.25	−1.57	1.04	1.42	5.18						
23192	1.93	5.35	2.26	1.66	3.58						
23266	40.12	−9.06	6.90	2.99	6.38						
23343	−17.75	−10.14	4.64	3.95	3.88						
23368	−5.74	−2.01	1.45	2.62	3.96						
23422	−17.75	−12.99	3.44	1.78	8.81						
23474	6.47	−0.05	1.84	1.66	4.25						
23483	8.30	6.42	2.90	2.08	5.27						
23498	−1.98	7.21	3.45	2.25	3.80						
23541	−12.50	0.44	3.27	3.11	3.83	24.31	9.51	11.00	12.01	3.53	
23550	−2.69	11.43	2.76	2.11	7.37						
23611	13.40	13.45	3.21	2.35	5.72						
23641	28.37	18.28	3.33	3.77	10.25						
23701	−28.61	0.89	7.12	3.66	4.02						
23704	8.04	7.12	4.33	2.21	4.37						
23766	−7.36	−4.51	1.51	1.29	6.04						
23781	−4.95	−2.89	1.48	2.13	3.52						
23785	9.51	−0.78	1.52	1.72	6.27						
23818	14.50	13.62	1.52	1.47	12.10						
23871	3.56	−3.18	1.91	1.59	4.17						
23881	−11.96	−15.59	3.01	2.50	7.69	22.82	1.06	6.65	6.21	3.65	
23896	−8.37	10.30	3.69	1.98	5.32	1.00	29.61	12.09	8.29	4.19	
24010	0.75	21.43	3.33	1.58	13.59						
24016	−3.53	10.38	2.19	1.62	9.00						
24091	6.26	−8.51	2.12	2.55	4.09						
24156	−19.26	−17.34	6.57	4.71	5.18						
24164	−0.58	6.40	3.29	2.26	3.99						
24202	7.23	−9.74	2.09	2.44	4.71						
24250	1.16	−7.35	2.82	3.17	2.38	−21.37	12.07	6.91	11.26	3.90	
24254	−7.11	3.31	1.28	1.96	5.56	12.19	−9.36	3.12	4.06	4.28	
24329	9.70	−1.10	1.61	3.05	6.09						
24336	−16.08	−7.62	4.16	3.25	3.87						
24343	5.87	3.44	1.67	2.56	3.76						
24419	−4.70	16.26	2.60	2.32	7.48	39.78	−9.26	8.19	9.53	4.86	
24424	−10.21	−4.90	1.79	3.00	5.82						
24450	−7.84	−2.37	2.79	1.82	3.65						
24480	18.48	6.19	4.54	2.56	4.83	8.46	35.77	12.50	10.68	3.70	
24532	4.54	8.60	1.16	1.91	5.77	−18.10	−1.08	3.47	4.50	5.32	
24543	7.18	−11.06	5.22	3.42	4.74						
24557	−13.47	−5.66	3.98	2.69	3.46						
24617	6.72	−0.57	1.67	2.25	4.03						
24642	−3.60	3.50	2.39	1.63	3.65						
24656	5.10	−1.65	1.43	1.57	3.64						
24847	2.33	−3.67	1.78	1.23	3.48						
24859	2.89	5.15	1.28	1.65	4.11						
24860	10.04	1.65	1.34	1.90	7.52						
24886	−1.06	−8.44	1.64	2.49	3.52						
24948	2.41	2.98	0.85	1.54	3.58						
24971	−15.77	−11.41	3.29	1.83	6.93	39.44	−6.44	7.09	5.04	6.51	
24999	5.87	2.67	1.64	2.25	3.76						
25029	4.24	−14.72	1.70	2.38	6.59						
25071	4.07	−2.42	1.72	2.80	2.61	−9.24	−38.63	4.83	9.36	4.27	
25141	13.49	5.46	3.91	2.60	3.45						
25172	5.64	−7.56	1.40	1.60	5.50						
25222	32.13	0.10	1.96	1.84	16.79						
25282	9.73	−2.76	2.66	1.97	4.94						
25341	7.39	10.51	5.97	2.83	3.77						
25414	−6.74	1.02	1.97	1.75	3.57						
25425	−0.27	9.36	2.06	2.41	3.91						
25433	0.15	11.30	5.17	3.16	3.64						
25488	−6.51	−8.04	1.00	1.08	10.47						
25540	−2.46	−22.43	9.20	5.54	4.07						
25581	0.62	8.44	1.65	2.17	3.90						
25627	5.06	−3.71	1.63	2.13	3.53						
25647	−0.51	11.07	1.49	1.76	6.41	18.84	−10.05	3.89	5.52	5.70	P
25696	8.68	−0.03	2.88	1.74	3.51						
25704	12.50	−19.42	7.92	3.98	5.48						
25737	7.47	1.87	2.21	1.51	3.77						
25859	−1.23	−6.42	1.18	1.28	5.56						
25895	−4.07	−7.03	2.55	2.41	3.81						
25905	12.94	0.41	4.17	2.16	3.28	4.52	20.87	8.38	5.88	3.59	
25938	−2.42	−6.35	2.93	1.73	3.72						
26228	20.33	−7.23	8.63	6.28	4.32						
26264	4.90	−4.19	1.35	1.21	4.39						P

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
26346	7.64	−10.13	2.88	2.73	3.90						
26363	2.23	−5.68	3.08	1.96	4.90						
26366	−8.23	−1.09	2.52	1.72	3.63						
26412	−3.65	37.26	1.46	2.86	13.87						
26499	−8.70	0.09	2.19	3.12	4.26	14.12	10.05	5.87	6.55	3.87	
26507	6.39	−1.35	1.79	2.38	3.59						
26545	−1.19	−9.08	1.22	1.52	6.40						
26560	−13.94	12.55	5.25	3.46	4.43						
26580	−16.40	5.26	5.02	3.18	8.10						
26610	5.79	−11.93	1.80	1.71	6.99						
26691	17.13	6.36	4.31	3.33	4.27						
26700	−6.18	−2.12	2.13	1.77	3.52						
26715	2.57	5.03	2.82	2.05	3.49						
26887	−6.32	8.43	3.83	2.15	4.05						
26950	−60.87	−12.61	12.83	8.98	4.81	−200.72	14.51	40.07	38.45	5.15	
26965	8.83	−3.19	1.78	2.36	5.14						
26988	−5.54	−6.67	2.46	1.70	3.98						
27118	13.71	−3.71	2.86	2.04	6.05						
27196	−19.68	−3.34	3.76	2.64	5.24	−6.75	−65.74	18.67	12.87	5.11	
27202	−7.67	10.43	3.33	2.84	5.08	12.94	35.47	8.66	11.10	3.54	
27246	−6.35	11.86	1.23	2.10	7.22	12.44	2.35	3.43	4.83	3.66	
27253	−4.17	7.31	3.00	2.09	3.52						
27266	−10.26	1.41	3.35	2.30	3.69						
27371	−5.96	14.76	1.44	2.08	8.13						
27490	−0.67	−8.90	2.86	2.26	4.12						
27502	−3.30	−8.90	3.02	2.31	4.34						
27602	10.75	3.96	3.37	2.37	3.79						
27605	−32.53	−1.82	4.78	3.40	7.20	31.79	−38.80	24.21	17.58	7.92	
27612	−7.79	8.37	4.37	3.09	6.83						
27625	2.28	−7.09	3.49	2.02	4.04						
27637	5.00	−9.37	2.94	2.68	3.53						
27670	1.01	6.25	0.96	1.57	4.05						
27673	3.10	−9.76	3.23	2.17	4.69						
27708	−5.29	−5.99	2.11	2.46	4.06						
27715	5.77	1.65	1.46	1.84	4.16						
27756	−3.37	−4.58	1.64	1.70	3.53						
27788	−3.87	0.31	1.02	1.12	3.79						
27812	−5.12	2.06	1.40	1.61	3.73						
27873	3.63	7.32	1.64	1.96	4.23	−6.30	−24.89	4.60	4.74	5.70	
27890	−12.19	−1.63	1.50	1.21	8.82						
27959	11.63	−4.53	3.08	3.08	3.88						
27963	−16.33	9.68	4.52	2.89	5.25						
27970	2.12	1.04	2.54	2.32	0.87	−44.27	−6.09	7.49	6.67	6.41	
27983	−9.46	0.43	1.49	1.83	6.42						
28010	2.61	4.08	0.97	1.14	4.70						
28083	7.85	0.08	2.01	2.55	4.02						
28112	−2.31	4.69	1.09	1.27	4.04						
28124	8.24	1.54	5.87	3.73	1.43	−38.34	20.83	17.52	11.97	4.14	
28128	−6.43	0.44	1.89	1.89	3.59						
28185	−10.64	−9.96	4.02	2.61	3.82						
28243	3.89	−3.50	0.97	1.48	5.23						
28333	−20.04	−1.32	1.72	2.09	11.65	42.79	−38.59	4.42	5.00	12.13	
28340	5.80	6.40	4.24	2.08	3.45						
28358	18.02	19.81	3.21	2.20	9.93	−15.43	12.27	16.11	8.69	4.47	
28391	−11.60	7.44	3.06	2.46	3.91						
28435	0.29	5.04	1.51	1.41	3.58						
28525	17.21	−8.03	2.77	3.20	6.25	−16.90	58.48	6.24	8.70	6.74	
28539	0.29	−7.42	2.69	2.15	4.31						
28579	12.24	0.72	1.46	1.28	8.94						
28626	−14.08	3.40	4.00	2.02	4.09	34.96	43.53	13.66	9.02	5.01	
28672	−10.37	−5.78	2.96	2.66	3.53						
28677	−11.07	−11.90	2.45	1.42	8.38						
28743	−6.47	3.02	1.93	1.46	3.53						
28811	−10.37	0.90	2.76	2.39	4.04						
28889	−7.69	−6.78	3.18	3.36	3.44						
28934	−3.57	−4.87	1.38	1.74	3.99						
28943	−2.47	5.09	1.24	1.33	3.92						
29079	12.89	14.84	6.79	3.77	3.96						
29132	20.81	14.38	6.22	4.28	3.80						
29150	−2.02	5.56	1.13	1.19	4.73						
29191	−4.14	−5.47	2.21	2.31	3.54						
29218	−8.39	−7.89	3.27	1.80	5.15						
29268	8.66	5.60	1.63	2.40	5.64						
29274	−7.25	0.81	2.42	1.72	3.53						
29320	5.85	−2.19	1.90	1.74	4.02						
29326	−2.67	−6.31	3.03	2.12	3.56						
29345	−2.44	7.20	3.68	2.04	3.54						
29466	1.75	7.13	1.83	1.76	4.74						
29513	14.74	5.29	2.77	2.92	5.69						
29580	12.03	−0.68	3.92	1.84	4.11						
29619	−7.65	5.73	2.16	2.14	3.73						
29653	7.28	2.82	2.00	1.87	3.86						
29692	−4.68	−14.13	2.09	2.07	6.98	29.56	3.67	6.40	4.94	5.20	
29752	9.67	1.50	4.00	2.68	2.42	15.76	24.69	9.84	6.66	3.73	
29804	−5.20	−6.84	1.51	2.20	5.11						
29822	−2.76	−12.81	3.52	3.65	3.51						
29873	−22.61	13.95	4.29	2.41	7.92	−29.92	−71.77	18.86	12.98	5.93	
29886	22.85	9.23	5.75	3.90	3.97						
29907	−4.19	3.88	1.25	1.52	3.84						
29970	2.22	4.08	1.27	1.28	3.86						
29984	−7.18	2.47	2.07	2.57	3.54						
29988	25.30	−30.74	9.92	6.78	5.52						
29993	4.63	−8.55	2.42	1.85	4.62						
30010	9.18	2.29	2.83	2.09	3.71						
30064	−3.45	3.86	1.26	1.40	3.51						
30113	−7.56	4.52	1.97	3.11	4.57	20.53	1.06	5.32	6.55	3.87	
30121	2.03	5.20	1.23	1.50	3.99						
30153	−1.11	−4.31	0.90	1.21	3.61						
30165	−10.05	14.22	3.84	2.27	6.38						
30318	10.22	3.72	2.20	1.60	4.65						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
30624	−8.33	−4.54	1.76	2.85	4.90						
30762	0.48	−6.66	3.88	1.84	4.90						
30783	−25.22	57.13	10.61	22.59	3.57						G
30828	12.53	2.87	1.90	1.63	6.66						
30849	0.14	4.21	1.44	1.77	2.40	−26.03	7.42	3.88	4.14	6.88	
30884	−3.12	−6.86	1.41	2.33	3.58						
30920	21.98	19.73	5.25	4.81	5.06						
30955	1.80	8.96	4.42	2.14	4.20						
31029	−12.01	−2.16	3.94	3.04	3.46						
31072	−6.23	−1.57	1.27	1.10	5.29						
31084	−0.91	−4.17	2.48	1.58	3.49						
31123	−9.24	2.90	1.72	1.98	5.47	14.75	10.22	4.77	6.30	3.84	
31266	2.00	5.72	1.69	1.31	4.90						
31269	4.78	2.86	1.49	1.45	3.85						
31280	−2.74	14.41	1.27	3.17	5.00						
31284	−0.85	8.20	1.60	1.36	6.06						
31410	0.27	−7.80	1.35	1.76	4.43						
31416	4.72	−0.16	0.98	1.16	4.86						
31435	−11.67	−8.21	3.75	2.63	3.70						
31479	3.52	−6.00	3.44	1.58	4.84						
31503	−10.23	−7.54	2.75	2.01	4.30						
31555	20.85	15.04	2.89	5.67	7.44						
31657	3.28	7.92	3.85	2.07	3.83						
31809	−1.32	5.86	1.80	1.54	3.87						
31949	−9.72	−2.87	1.67	1.53	6.14						
31956	−10.23	1.31	5.01	2.01	3.58						
31995	−5.07	3.44	3.52	1.52	3.74						
32158	−3.52	8.29	4.67	2.38	4.10						
32208	−4.64	4.13	1.30	2.75	4.16	5.76	−55.41	3.97	13.02	4.58	
32212	−5.02	−3.86	1.91	1.24	3.81						
32364	−0.60	−7.70	6.47	2.82	3.79						
32433	11.32	1.64	3.07	1.60	3.74						
32441	5.94	6.03	3.89	1.77	3.62						
32520	6.42	−6.57	2.29	1.66	4.56						
32594	−13.62	−3.30	2.05	1.58	7.15						
32659	−22.05	10.90	3.65	2.58	7.83	27.77	−10.00	8.46	5.74	4.04	
32673	9.27	20.84	4.66	2.89	7.46	129.55	42.07	26.92	16.22	5.34	
32721	−5.82	9.70	2.72	2.25	4.31						
32888	−16.86	−6.93	4.90	2.35	3.99						
32908	5.25	4.77	2.06	1.71	4.01						
32945	8.31	10.71	2.33	3.08	4.82						
32951	5.36	−0.58	1.54	1.75	3.49						
32963	6.03	3.35	1.92	1.69	4.27						
33012	2.12	5.39	1.14	1.41	4.73						
33015	−1.73	−4.66	1.27	2.00	2.77	−9.80	−44.19	3.55	9.32	5.29	
33082	−4.37	−8.46	1.92	1.08	8.29						
33085	4.26	11.29	4.42	1.56	7.82						
33112	−7.34	0.12	2.08	1.55	3.68						
33116	−5.30	−6.71	2.67	2.61	4.12						
33184	−11.47	−3.19	1.63	1.30	7.88						
33279	−10.25	0.26	2.89	1.59	3.85						
33405	−6.10	−0.83	3.43	2.78	1.78	23.96	−18.14	7.19	5.34	5.08	
33418	−3.38	−4.54	1.85	1.63	4.06						
33420	4.85	−1.53	1.51	1.06	3.70						
33423	22.98	−7.40	2.68	1.56	8.66						
33469	−2.54	−10.10	4.46	3.12	3.59						
33517	4.92	−1.57	1.50	1.37	3.50						
33542	−11.64	3.79	3.37	1.51	4.45						
33578	−5.97	−3.28	2.14	1.33	4.11						
33608	−2.70	6.06	2.44	1.67	3.70						
33628	−1.97	−5.32	4.61	3.73	1.44	35.67	−19.26	9.65	7.25	4.46	
33644	−7.41	−3.54	2.07	1.23	3.87						
33735	11.30	0.75	2.71	1.93	4.19						
33779	0.40	5.11	1.35	1.38	4.03						P
33817	−11.39	3.50	1.19	2.18	9.58						
33823	3.13	5.08	2.88	1.41	3.62						
33929	−9.52	0.84	2.47	1.83	4.04						P
34002	−4.18	7.38	2.68	2.02	3.79						
34052	0.33	34.45	1.92	3.40	10.22	−28.66	51.03	5.41	15.02	6.09	
34059	2.99	7.41	1.15	1.28	6.40						
34082	−2.78	−8.64	2.65	3.34	2.66	28.16	−10.85	6.81	8.80	4.55	
34105	−7.27	5.58	1.17	1.08	7.59						P
34136	−2.98	−7.24	4.68	1.65	4.71						
34185	7.46	3.95	2.38	1.68	3.84						
34212	−23.73	3.41	2.28	1.79	10.77	6.85	17.30	5.23	4.14	4.52	
34248	2.73	3.70	1.05	1.23	4.05						P
34257	2.40	−5.04	4.91	1.78	3.46						
34341	3.47	13.84	3.35	2.25	6.27						
34424	8.63	5.86	1.36	1.38	7.50						
34442	1.30	−4.99	1.60	1.33	3.78						
34447	5.37	0.94	1.60	1.78	3.65						
34553	−5.00	8.70	4.03	2.43	3.62						
34555	−5.05	−2.10	1.13	1.32	4.75						
34563	−0.47	7.27	3.59	1.40	5.20						
34628	−5.63	−26.78	3.49	4.47	6.35						
34630	123.87	56.76	34.81	14.08	4.04						
34709	4.81	1.80	1.21	1.88	4.04						
34804	−27.32	−8.82	6.67	3.39	4.81						
34806	12.95	−9.93	4.47	2.94	4.46	−65.86	1.68	23.70	7.57	3.56	
34812	8.60	8.07	4.72	1.88	4.41						
34885	3.50	−4.62	3.35	1.26	3.90						
34890	1.69	−9.86	2.52	2.50	4.01						
34910	2.89	10.37	3.10	2.35	4.41						
34926	−16.29	−18.12	4.11	2.57	7.98	19.36	28.37	13.08	5.60	5.07	
34947	−4.78	3.62	2.07	1.14	3.70						
34961	−1.71	−12.26	2.76	2.32	5.64						
35091	2.70	−9.91	2.34	2.00	5.00						
35095	2.79	4.94	1.31	1.39	4.59						
35179	0.10	−6.25	1.56	1.75	3.57						
35211	11.19	15.89	2.40	2.14	9.51	16.10	−23.91	6.29	5.19	4.92	

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
35243	2.95	7.24	2.10	1.89	3.95	2.92	15.30	7.16	4.27	3.72	
35270	−2.54	5.73	1.78	2.23	3.45						
35283	−6.19	4.27	2.97	1.28	3.79						
35339	−7.07	6.08	4.58	1.24	5.74						
35387	−6.89	−3.48	1.89	2.15	4.52						
35409	−19.35	1.93	5.36	1.70	3.85						
35487	3.04	−2.79	1.40	1.15	3.64						
35642	1.07	−12.30	2.07	1.73	7.13						
35680	7.10	6.66	4.75	2.06	3.52						
35697	−0.33	11.79	3.23	1.47	8.14						
35737	1.78	3.63	1.83	1.02	3.69						
35793	15.82	−23.93	5.41	10.56	3.62						
35796	−14.10	0.56	3.35	1.99	4.30	33.62	−9.49	10.56	4.55	4.13	
35994	−1.89	−5.57	2.87	1.64	3.62						
36081	−1.79	3.64	1.50	1.27	3.60						
36189	9.58	1.46	2.52	1.28	4.04						
36207	10.71	9.45	4.75	1.50	6.34						
36291	−3.88	−8.00	2.50	1.41	6.07						
36301	1.07	−8.13	4.48	1.84	4.42						
36304	−9.10	−2.00	1.03	1.39	9.49						
36357	13.10	−3.42	5.36	1.85	3.47						
36396	6.45	−3.38	1.82	1.35	4.23						
36429	−7.87	−8.70	3.34	1.56	5.61						
36497	−9.55	−2.00	2.15	1.17	5.01						
36528	−4.99	2.69	0.89	1.20	7.14						
36554	3.15	−5.15	1.49	1.41	4.12						
36557	4.97	11.77	1.83	0.95	12.44						
36559	4.97	5.15	1.97	2.24	3.47						
36569	−7.08	−8.67	2.63	2.46	3.53						
36650	14.06	−3.87	2.99	2.27	5.08						
36661	−3.26	−13.88	5.89	3.71	3.85						
36689	2.44	4.19	2.01	1.16	4.26						
36713	0.12	−6.35	1.42	1.60	3.97						
36785	6.95	−3.97	2.39	1.43	3.78						
36787	0.17	7.84	1.22	1.16	6.77						
36873	−13.54	−5.25	4.70	3.70	3.70						
36893	−2.97	−10.60	3.75	2.67	4.48	−126.20	56.55	18.30	14.00	7.34	
36917	−9.78	0.89	1.54	1.87	6.38	−6.57	19.96	6.53	4.06	4.92	
36932	−4.08	0.73	1.19	1.56	3.50						
36957	0.85	5.19	1.26	1.20	4.48						
36962	15.79	1.46	3.78	3.04	4.43	−28.78	1.30	7.10	5.39	4.09	
36990	13.69	−4.15	3.68	1.80	4.17						
37058	19.51	−0.77	3.27	3.76	6.05	−42.63	−2.44	7.09	7.33	6.03	
37072	−8.09	0.71	2.08	1.05	3.89						
37085	6.11	−1.87	1.82	1.75	3.47						
37190	−12.99	−0.25	3.56	1.79	3.66						
37262	11.50	0.42	1.77	2.88	6.50	−15.25	−11.60	4.68	6.37	3.59	
37360	−10.82	1.61	1.55	1.71	6.99	18.49	11.26	4.20	4.28	5.28	
37375	−3.61	−3.81	1.86	1.03	3.75						
37420	7.28	−1.48	3.03	1.02	3.69						
37435	−5.31	−3.79	3.71	1.68	3.61						
37514	5.30	−7.95	1.29	1.82	6.42	−12.67	15.27	3.58	4.32	5.12	
37541	2.17	−5.32	1.30	1.46	3.75						
37570	−2.91	−6.04	2.49	1.52	4.07						
37584	3.95	4.01	2.81	1.27	3.78						
37631	−6.14	−3.78	1.70	1.78	5.08						
37713	3.62	14.31	1.43	2.43	6.43						
37720	−6.63	2.45	1.31	1.50	5.06						
37775	10.23	2.35	2.97	1.74	4.73						
37803	4.16	−2.88	1.12	2.21	3.98						
37853	0.16	−6.33	1.06	1.24	5.11						
37941	3.41	0.37	3.55	2.51	0.96	−30.85	2.74	9.01	5.38	3.67	
37986	9.49	−6.54	3.06	1.68	4.49						
38104	−16.52	−20.31	5.85	4.51	5.25	−120.39	21.03	35.34	10.02	3.49	
38119	−3.98	5.39	3.59	1.56	3.46						
38127	−11.23	−1.57	1.58	2.34	7.15	−4.21	23.14	5.29	6.17	3.75	
38134	4.20	−4.82	1.86	1.52	4.15						
38152	−0.64	5.81	1.43	1.27	4.68						
38160	18.02	−6.95	1.27	1.27	14.59						
38213	−2.88	−8.80	4.46	3.92	3.50						
38229	4.71	6.09	1.80	2.01	4.68						
38255	−20.31	−5.45	5.62	3.62	3.79						
38289	1.28	−8.20	4.07	1.88	4.48						
38297	−5.19	9.58	2.68	2.83	3.57						
38319	9.33	−2.23	2.40	1.32	3.89						
38344	−5.44	−1.59	1.71	1.54	3.94						
38405	8.14	1.93	3.59	3.29	3.78						
38407	2.57	−5.72	1.55	1.63	3.54						
38414	−18.08	3.47	1.17	1.61	15.74	12.63	0.18	3.21	3.47	3.94	D
38422	9.68	11.40	4.84	3.75	4.86	−31.15	−12.04	10.81	7.13	3.92	
38427	−2.78	6.48	2.02	1.93	3.44						
38465	−5.57	7.11	3.84	2.04	3.72						
38469	6.89	3.34	3.17	2.82	3.76						
38493	9.20	8.95	4.25	2.16	5.09						
38586	12.55	−7.09	5.83	1.64	4.33						
38673	−13.74	−10.19	8.41	2.86	3.77						
38691	−3.52	7.78	2.10	2.05	3.86						
38742	−8.44	6.30	2.36	2.00	4.59						
38817	−7.71	5.36	2.78	1.78	3.98						
38827	−4.41	7.96	1.54	1.04	8.90						
38833	−6.51	−5.26	2.05	1.51	4.70						
38836	2.40	4.92	1.71	1.49	3.91						
38846	−2.67	1.70	0.94	0.87	3.53						
38887	−5.29	−0.61	1.25	1.08	4.25						
38938	−3.92	5.40	1.63	1.53	4.10						
38977	4.16	1.97	1.25	1.40	3.71						
39062	−6.81	6.13	1.33	1.41	7.14						
39085	1.95	6.76	2.95	2.16	3.44						
39121	−7.57	9.42	1.54	2.36	5.59	18.48	−8.00	4.28	5.14	4.51	
39165	2.85	3.95	1.53	1.36	3.54						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
39198	5.04	6.48	2.31	1.76	4.94						
39221	4.82	−8.59	1.94	1.41	6.09						
39222	7.97	0.42	2.85	2.00	3.70						
39261	−5.73	4.07	1.24	1.15	5.53						P
39267	−12.61	−1.11	3.17	1.99	4.84						
39309	−9.04	12.35	8.06	3.47	3.56						
39353	−5.58	3.50	0.97	1.01	7.07						
39355	5.87	−7.44	1.73	1.95	5.75	−32.07	−10.92	4.20	3.84	7.81	
39424	13.91	3.37	2.27	1.28	9.55						D
39442	−3.74	−6.06	1.50	2.15	4.13						
39523	−14.23	2.42	2.94	1.77	4.94						
39553	−8.11	12.84	3.97	3.60	3.74						
39560	2.67	12.37	3.43	3.36	4.03						
39611	14.48	0.58	3.68	2.80	4.00						
39707	15.78	−0.11	3.94	3.25	4.08						
39718	12.01	−1.81	2.68	3.30	5.12	−28.90	−8.23	7.18	7.36	4.03	
39774	7.46	−2.08	2.29	1.40	3.84						
39785	−19.86	15.52	4.02	2.53	7.18	−3.59	62.63	11.72	12.52	6.06	
39804	6.56	4.00	2.38	2.65	3.56						
39942	4.08	6.12	1.68	1.61	4.15						
39943	8.63	−6.12	2.62	2.21	4.02						
39957	−2.94	−5.21	1.25	0.90	6.07						
40039	11.41	−1.51	3.44	2.29	3.48						
40046	−12.93	−19.84	1.77	2.36	9.80	38.13	55.92	5.79	7.52	9.06	
40132	18.09	−0.31	5.21	2.03	3.59						
40253	15.34	−11.80	6.30	3.46	5.18	−62.49	24.25	29.54	7.15	3.54	
40304	16.59	3.08	4.83	2.01	4.55						
40400	−16.05	7.81	4.44	2.93	3.76						
40462	11.96	12.26	1.94	1.56	8.34						
40472	15.27	27.24	3.61	2.48	12.43	−3.86	−39.67	9.32	5.84	7.07	
40496	−0.35	−10.85	2.89	3.09	3.56						
40506	6.85	−0.66	1.27	1.19	5.46						
40512	−10.53	−5.60	5.01	2.24	3.60						
40518	15.87	18.71	6.95	5.98	4.22						
40526	−26.44	−6.91	4.91	1.86	6.83						
40536	−0.66	9.84	6.24	2.16	4.65						
40724	−41.60	29.09	6.24	5.23	8.86	−94.17	−153.01	29.21	29.75	7.34	
40805	2.54	9.73	3.32	3.00	3.74						
40861	1.38	−10.32	1.95	2.35	4.43	18.35	8.70	6.26	6.39	4.07	
40864	0.84	−4.49	2.17	1.19	3.83						
40944	9.66	2.66	2.82	1.68	3.92						
41016	−0.16	13.89	3.39	3.59	3.89						
41117	−3.33	11.91	2.52	1.78	6.73						
41191	0.17	4.01	1.80	1.25	3.60						
41249	8.88	5.68	1.79	1.60	6.36						
41283	−4.97	10.10	3.46	2.73	3.70						
41375	−10.48	−1.62	2.28	2.07	5.16						P
41386	2.47	−5.64	1.53	1.29	4.66						
41396	−6.57	5.04	1.98	2.05	3.78						
41471	−25.89	0.53	5.99	3.55	4.36	5.55	128.00	28.02	18.33	6.99	
41513	−24.75	−12.04	6.98	3.63	4.62						
41524	7.97	−4.06	4.64	2.41	2.38	22.18	−38.39	15.72	10.87	3.54	
41574	6.56	10.08	4.70	2.19	5.08	−88.09	46.40	21.08	17.11	4.32	
41630	8.88	2.54	2.93	2.69	4.22						
41713	10.76	3.40	3.19	2.80	4.46						
41732	9.22	−10.06	3.41	3.14	3.88						
41762	12.47	−10.91	5.43	3.07	3.69						
41810	22.66	20.20	4.86	2.78	7.55						
41837	5.52	3.04	1.41	1.15	4.95						
41866	10.22	−1.95	2.08	1.66	4.95						
41868	−0.84	−4.27	2.84	1.97	3.86						
41871	−6.15	−0.89	1.47	1.20	4.27						
41893	14.84	2.54	2.45	1.62	6.52						
41903	3.10	2.80	6.06	2.67	1.15	−59.92	21.46	16.44	8.85	3.95	P
41940	2.68	−6.97	2.95	1.81	3.88						
41947	−2.90	−4.78	1.16	1.48	3.56						
42035	3.86	−10.10	3.15	2.21	4.63						
42064	−2.54	9.13	2.08	1.75	5.26						
42080	7.09	−4.05	1.59	1.05	5.90						
42103	5.38	−1.20	1.65	1.80	3.78						
42206	−3.80	2.26	1.30	1.03	3.61						
42227	8.36	−2.79	2.88	1.75	3.89						P
42238	13.78	−5.61	2.84	1.92	4.85						
42263	6.40	2.31	2.73	1.41	3.48						
42278	29.87	6.39	5.36	2.99	5.92						
42338	−7.09	−15.64	3.53	5.55	4.79	49.95	18.77	11.33	12.27	5.21	
42351	15.47	−10.97	4.10	2.56	4.78						
42358	−6.10	8.64	3.67	2.45	3.55						
42389	−0.08	7.75	3.01	2.05	4.03						
42391	−1.00	8.78	3.46	2.54	3.64						
42392	13.20	12.02	10.60	4.34	3.50						
42408	−10.95	−13.45	2.80	2.65	7.82						
42453	3.07	2.62	0.99	1.10	3.88						
42466	6.38	−8.16	3.34	1.71	4.88						
42536	6.63	−2.49	1.63	1.03	5.63						
42542	−4.46	12.80	4.45	2.49	5.15	3.39	−48.07	14.95	12.62	4.38	P
42658	−12.19	−3.93	5.18	2.36	3.68						
42732	1.75	−6.31	2.87	1.59	3.97						
42783	−27.20	−8.18	5.17	4.38	6.30						
42820	−5.49	−4.71	2.54	1.84	3.50						
42901	6.07	−2.24	1.44	1.56	4.31						
42957	10.39	−4.59	2.77	2.14	3.90						
43002	4.10	−6.11	1.78	1.26	4.96						
43006	9.73	−7.74	4.59	2.17	3.89						
43059	−4.13	−0.64	1.19	1.36	3.47						
43074	3.52	−10.01	3.05	2.28	4.42						
43092	−2.60	−7.11	2.02	1.60	4.68						
43102	7.05	−6.56	3.23	2.00	3.63						
43316	−3.79	8.30	2.25	1.85	4.94						
43417	−8.36	11.86	3.18	1.20	9.89						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
43429	−21.17	1.48	7.25	3.11	3.59						
43454	9.33	6.25	2.98	2.68	5.01						
43463	10.27	2.97	3.05	2.71	4.23						
43558	−1.57	−14.04	2.10	1.86	8.57	32.49	2.73	8.10	5.30	4.52	
43589	−3.26	−2.62	1.13	1.09	3.45						
43649	11.85	−9.72	3.70	2.78	3.73						
43654	11.13	5.30	3.55	2.88	4.16						
43660	−18.41	4.28	5.10	3.25	4.36						
43703	7.23	2.66	2.23	2.08	3.92						
43740	−11.57	3.96	3.56	2.38	3.53						
43825	−10.25	6.63	1.35	1.85	7.89	21.27	16.06	4.54	4.96	6.72	
43882	−1.58	−13.81	3.83	3.23	4.64						
43903	0.52	7.59	1.30	1.10	6.98						
43929	9.95	1.64	2.81	4.66	3.64						
43984	5.14	−3.66	2.45	1.75	4.45	−17.87	−7.76	5.47	4.41	3.58	
44014	−16.31	−16.77	2.51	2.10	19.58						
44066	7.18	−11.60	4.20	2.44	4.89						
44129	−11.77	−1.26	2.89	1.59	4.31						
44142	−2.81	−6.53	1.90	1.34	5.80						
44228	−1.51	−10.77	3.56	3.69	3.68						
44240	−8.72	−4.64	1.55	1.54	6.88						
44251	−1.29	−3.65	0.93	1.14	3.44						
44313	−12.80	−7.89	3.34	3.33	6.16						
44319	−4.39	3.23	1.20	1.72	4.08						
44387	32.50	1.20	9.30	7.84	3.62						
44393	5.24	15.40	1.56	2.36	8.15	13.46	−19.23	5.04	6.43	3.66	
44515	0.87	−7.18	2.60	1.69	4.28						
44546	6.43	−3.06	1.94	1.69	3.45						
44578	−8.18	−6.01	3.58	2.08	3.77						
44594	−8.50	−6.55	4.46	1.55	4.74						
44675	16.59	−2.82	4.06	2.70	4.09						
44680	3.13	−7.11	1.71	1.93	4.34						
44690	12.49	−4.32	2.86	2.25	4.50						
44707	−4.86	6.86	4.21	1.71	4.65						
44821	10.60	8.69	3.08	2.15	4.66						
44842	−15.48	−3.79	2.95	1.95	5.46						
44946	−6.13	10.32	2.62	1.39	7.43						
45035	−1.10	8.24	2.76	2.53	3.55						
45080	4.97	−0.01	1.13	1.31	5.16						
45168	5.49	3.71	1.24	1.34	5.59						
45223	0.72	−6.60	3.04	1.69	3.97						
45246	−2.46	−5.57	1.24	1.39	4.15						
45320	−6.50	−0.78	1.56	1.85	4.28	15.23	−15.49	4.75	4.55	4.57	
45326	−4.70	−2.60	1.00	1.71	4.72						
45336	1.43	−18.57	3.01	2.03	9.41						
45341	0.38	5.61	2.88	1.59	3.57						
45383	−2.14	−6.30	2.90	1.57	4.35						
45390	8.54	−0.42	2.38	1.70	3.59						
45442	−29.02	5.16	6.61	3.13	4.40						
45474	−2.42	−6.78	3.42	2.15	3.73						
45484	−1.76	10.78	3.39	2.23	4.84						
45522	5.28	−2.68	2.01	1.35	3.71						
45532	7.39	4.21	1.73	1.49	5.36						
45626	−7.67	−0.32	2.12	1.95	3.64						
45705	19.46	−6.33	1.86	2.13	10.75	−1.19	26.08	4.77	5.43	4.85	
45754	2.93	1.84	0.69	1.21	4.40						
45788	−0.78	−5.80	2.59	1.60	3.75						
45790	58.82	−1.42	13.11	7.33	4.55	−83.75	32.71	21.14	16.23	4.02	
45920	−7.20	1.29	1.13	1.47	6.41	12.66	−4.51	3.28	3.50	4.15	
45954	−10.01	−8.06	5.07	2.97	3.69						
45961	−8.32	−7.13	3.54	2.31	4.86						
45995	−1.80	3.93	0.90	1.22	4.07						
46026	−3.30	6.18	1.51	1.32	4.85						
46030	−5.95	−1.76	1.44	1.53	4.14						
46081	0.60	6.01	0.76	1.11	5.42						
46100	27.71	−2.85	6.06	3.65	4.67	−60.40	19.55	16.92	9.88	3.65	
46173	−1.37	−6.40	1.31	1.27	5.64						
46189	−7.14	−9.39	8.02	2.72	3.51						
46275	12.48	6.43	3.16	1.94	5.17						
46357	−1.71	8.89	3.56	2.38	3.83						
46371	−22.81	−10.88	2.40	2.28	10.95	0.07	−32.13	12.09	5.83	5.81	
46414	−5.91	−4.90	2.19	1.79	4.00						
46441	−4.79	4.00	2.45	1.40	3.64						
46449	19.66	−18.38	5.99	2.22	10.28						
46460	6.43	7.86	1.41	1.17	7.92						
46476	−9.15	−3.50	1.01	1.76	9.55						
46605	−14.81	−10.10	2.76	2.22	7.01	17.17	−20.98	7.76	6.51	4.70	
46620	−4.26	−6.71	0.97	0.99	8.49						P
46660	18.30	−3.90	4.67	3.70	3.99						
46744	−7.86	−14.97	3.25	1.93	8.66	−21.08	19.38	13.39	5.69	3.64	
46776	11.84	1.53	3.58	1.43	3.91						
46799	4.55	6.04	4.17	1.67	3.93						
46824	−7.65	7.32	2.47	2.56	3.87						
46839	10.30	−5.22	1.39	1.80	7.58	−16.10	−3.37	3.74	4.33	4.40	
46857	−12.81	−12.79	5.66	3.03	6.01						
46868	7.46	4.25	2.49	1.82	4.49						
46871	20.13	6.15	5.88	3.00	4.22						
46932	6.59	−11.20	3.15	3.13	3.91	66.55	7.86	14.05	13.11	5.00	
46976	4.68	0.04	1.06	1.59	4.43						
46979	5.31	6.61	1.18	1.53	5.40						
46984	−11.78	−18.87	4.00	2.98	7.79						
47115	−4.14	−1.46	1.26	1.20	3.49						
47205	1.59	−8.44	2.71	1.68	5.16						D
47244	−17.07	4.47	3.13	2.50	5.46						
47266	31.06	−8.65	6.97	2.24	9.33						
47267	−4.11	−4.59	1.09	1.25	4.25						
47302	−1.46	6.64	2.88	1.93	3.49						
47352	−2.84	−6.46	2.33	1.72	4.31						
47369	−9.68	−16.70	3.61	1.44	11.85						
47374	−2.92	6.80	3.07	1.95	3.49						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
47415	−9.65	4.56	2.99	1.69	3.62						
47517	2.87	12.62	1.84	1.95	6.49						
47573	17.16	−0.02	3.56	1.82	5.43						
47576	−15.22	21.94	4.67	3.38	6.51	8.69	−40.50	12.42	8.28	5.09	
47831	13.71	−0.92	3.95	2.35	3.47						
47840	9.23	−2.31	2.84	1.78	3.90	12.59	−12.47	5.80	4.16	3.76	
47881	−2.27	3.61	1.00	1.57	3.58						
47888	−1.61	9.20	0.95	1.46	6.96						
47970	8.47	−4.13	2.23	1.94	4.23						
48095	−1.23	4.50	1.27	1.04	4.45						
48146	−10.22	7.27	4.22	2.29	3.59						
48285	−7.23	−2.75	1.95	1.81	3.74						
48339	5.76	0.21	1.26	1.26	4.84						
48362	0.70	8.65	2.37	2.29	3.86						
48390	15.02	15.78	1.87	1.14	16.40						
48413	5.33	4.51	1.95	1.29	5.01						
48482	−4.26	−9.47	3.68	3.24	3.71						
48515	4.77	−5.72	2.04	1.42	4.33						
48630	−3.75	−8.87	2.39	1.35	6.78						
48642	−0.11	9.93	3.19	1.26	7.88	26.52	24.94	8.90	4.27	6.62	
48703	1.33	−20.11	1.54	1.84	11.86	20.69	−4.41	4.05	4.43	5.87	
48742	−5.80	−21.75	3.28	1.31	16.61	−9.64	24.98	9.24	4.09	6.14	
48751	−7.06	5.84	3.08	1.43	4.72						
48783	−10.64	6.03	4.22	3.40	4.78						
48818	−10.97	2.96	3.11	1.96	3.57						
48893	−0.12	6.99	1.23	1.04	6.85						
48910	−9.08	−1.57	2.19	1.78	4.31						
48922	2.87	−7.65	2.24	2.57	3.89						
48962	−5.96	6.23	2.28	1.95	3.69						
48963	−2.26	9.21	2.67	2.09	4.45						
48990	33.95	1.17	3.58	2.13	10.36	20.15	39.90	14.70	7.37	5.42	
49035	−6.47	−0.61	2.21	1.82	3.45						
49039	7.83	−16.70	2.27	2.00	9.42	1.02	17.06	5.78	4.66	3.68	
49104	−5.92	9.19	3.31	2.54	3.65						
49150	15.10	0.39	2.31	2.00	8.01						
49260	1.33	−6.47	5.13	1.88	4.46						
49297	11.88	−6.45	2.84	1.54	5.73						
49320	−0.26	−7.47	2.54	2.03	4.08						
49364	1.81	−6.89	1.99	1.75	3.94						
49434	4.17	2.96	0.98	1.58	5.39						
49445	2.07	−5.62	2.48	1.59	3.62						
49455	18.61	6.52	5.71	2.20	3.65						
49469	−9.96	2.46	3.02	4.10	3.46						
49492	−49.94	36.37	10.53	6.80	6.33	113.95	−79.14	34.17	23.44	4.15	
49508	−8.67	5.29	3.09	2.00	3.61						
49610	2.74	4.30	1.87	1.41	3.77						P
49617	−5.07	13.72	3.84	2.21	6.30						
49618	−5.26	4.99	1.69	2.42	3.91						
49621	−0.43	−7.45	2.66	2.01	3.74						
49623	1.05	29.23	2.80	1.80	16.33	15.98	−18.98	10.31	5.69	4.15	
49641	−4.58	−4.89	2.45	1.90	3.76						
49650	22.84	5.82	6.23	5.45	3.89						
49698	1.25	6.11	1.14	1.05	5.93						
49738	−13.39	−6.67	2.39	1.87	7.14						
49755	−4.31	7.59	3.02	2.19	3.47						P
49767	−4.56	1.86	1.04	1.93	4.50						
49806	10.53	−17.61	3.98	3.58	5.32						
49850	5.62	−12.90	3.39	1.82	7.19	55.61	16.80	13.04	7.52	4.70	
49856	−6.32	8.23	2.26	1.99	4.62						
49876	1.22	−6.70	1.50	1.63	4.11						
49888	3.90	4.55	2.41	1.81	3.51						
49903	−19.75	2.28	5.74	4.51	3.71						
49919	6.17	10.85	2.02	1.55	8.88						
49973	8.83	−9.41	4.44	3.14	3.78						
50020	−4.11	4.62	1.82	1.63	4.16						
50084	−11.04	−15.76	3.10	1.92	9.13						
50103	4.40	7.17	1.16	1.41	5.69	−10.66	7.79	3.08	3.61	4.96	
50342	−9.05	−1.60	2.89	2.26	3.97						
50372	7.22	12.14	2.72	1.86	6.55	46.53	4.96	8.47	5.86	5.62	
50391	−1.13	4.17	1.00	1.18	4.03						
50590	−1.98	−4.41	1.16	1.22	4.01						
50760	−6.66	−4.36	2.76	2.15	3.52						
50787	0.33	1.71	2.22	1.82	0.98	−14.54	24.19	8.81	5.36	4.89	
50796	−10.90	22.33	6.51	5.84	3.88						
50831	5.08	−12.94	5.38	2.64	5.15	−33.08	36.59	19.18	8.81	4.62	
50865	14.47	−1.67	6.15	2.48	2.39	−53.49	−21.13	14.16	11.41	3.78	
50866	2.52	5.62	2.07	1.78	3.72						
50870	6.59	−5.04	2.36	1.66	3.67						
50910	8.08	−4.95	3.01	1.93	3.54						
50927	8.38	7.70	2.81	2.33	6.23						
51157	23.36	1.38	3.69	2.04	6.50	−39.45	27.66	12.96	7.94	5.62	
51382	−2.82	−7.11	2.98	2.00	3.61						
51408	−7.16	−9.73	1.84	1.74	7.02						
51502	−35.82	4.93	1.71	1.79	22.76	12.15	14.83	5.98	4.38	3.57	
51511	3.44	−7.00	1.74	1.79	4.50						
51540	5.78	2.07	2.29	1.91	3.60						
51733	−7.42	−10.60	2.02	1.52	8.46						
51846	−9.02	−0.45	2.65	1.62	3.54						
51859	4.87	6.08	3.00	2.00	3.57						
51980	81.17	−90.40	14.92	20.36	5.48						
51998	−6.70	0.47	1.26	1.33	5.33						
52113	−5.41	−4.53	1.56	1.47	5.65						
52177	6.31	4.27	2.42	2.06	3.65						
52207	5.04	10.71	2.85	1.75	6.36						
52241	22.84	4.19	7.38	6.53	3.52						
52278	−2.23	−5.66	1.34	1.35	4.23						
52332	−0.16	−19.27	1.26	1.24	15.59						
52407	5.12	−7.69	1.22	1.40	6.01						
52422	18.33	3.70	2.41	1.49	8.34	−2.49	−27.43	7.01	4.07	6.75	
52444	−2.65	−6.45	2.28	1.65	4.30						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
52478	2.71	2.16	1.14	1.34	3.56						
52510	−15.83	12.62	3.47	2.08	8.76						
52883	−3.07	−3.55	1.08	1.09	6.04						
52907	−2.21	−9.27	1.75	1.95	5.73						
52924	−2.25	−6.45	0.91	1.12	6.43						
52953	0.76	−9.21	1.78	1.84	5.11	−1.14	22.40	4.60	5.05	4.67	
52958	17.84	−8.05	4.74	2.98	4.55						
53009	−6.97	3.72	2.09	1.70	4.18						
53128	3.02	4.67	1.83	1.47	3.56						
53145	−5.45	−4.51	2.04	1.83	4.35	−2.28	38.17	6.79	5.53	7.03	
53215	10.07	−13.61	3.23	2.61	6.14	−42.01	13.15	12.68	7.24	3.62	
53217	2.46	−33.56	2.25	2.60	15.02	−33.33	11.93	9.51	9.54	3.76	
53238	−11.61	14.42	4.40	3.02	4.96						
53259	−4.54	−5.46	1.84	1.56	5.11						
53295	−5.20	−2.85	1.84	1.79	3.65						
53379	16.28	0.34	1.63	1.43	9.99	−25.80	13.34	4.22	3.87	7.20	
53424	−9.90	0.16	2.96	2.27	3.51						
53522	26.60	9.26	5.42	2.96	5.67						
53541	−15.81	−2.67	4.14	3.07	4.50						
53557	7.22	−11.94	2.09	1.39	10.01						
53559	1.75	6.69	2.95	1.88	3.59						
53611	6.23	−0.44	1.72	1.97	3.65						
53660	1.96	34.11	3.87	5.52	6.26						
53701	−6.07	0.09	1.64	1.40	3.74						
53710	11.70	−1.52	2.69	2.06	4.38						
53750	4.56	2.39	1.08	1.19	4.25						
53871	−9.19	−2.26	1.78	1.87	5.23						
53882	−13.56	7.34	3.61	3.79	3.86						
53970	9.84	7.45	4.05	2.36	3.44						
53976	−7.74	−8.66	3.92	3.03	3.45						
54104	9.73	−8.00	2.01	2.32	4.88						
54233	7.69	−4.27	1.22	1.61	6.68						
54320	−2.46	6.97	2.18	1.75	4.13						
54329	−5.13	−0.74	2.17	2.23	4.85						
54418	−14.43	−42.58	2.76	3.35	16.50	−5.53	40.98	7.63	8.36	4.98	
54469	11.29	−0.87	2.16	1.96	5.26						
54507	11.54	1.71	2.49	2.73	4.91						
54571	−2.45	6.57	1.73	1.21	5.52						
54594	7.48	2.50	2.09	2.02	3.58						
54624	−4.46	−2.50	1.27	1.02	4.16						
54657	−6.22	−1.48	1.48	1.56	4.41						
54671	4.05	1.78	1.20	1.27	3.79						
54682	−6.56	1.01	1.52	1.52	5.72						
54737	15.52	−10.13	3.07	2.60	5.49						
54739	11.94	−5.97	3.45	2.61	3.70						
54805	−0.82	−7.04	3.03	2.42	3.49						
54845	13.05	6.14	3.52	2.75	4.87	35.32	−19.04	13.50	7.08	3.91	
54954	10.14	−10.20	5.89	3.32	4.28						
55016	3.70	−7.73	2.49	1.58	5.30						
55206	18.35	−22.33	5.65	6.80	3.56						
55278	−6.47	7.67	2.23	1.70	4.84						
55323	−18.11	−1.92	3.92	3.23	7.01						
55390	23.11	−1.45	6.00	3.81	3.92						
55407	−2.30	−9.61	1.67	2.02	4.80						
55442	−8.04	7.91	10.01	6.25	1.57	17.38	−91.71	37.54	26.77	3.44	
55467	−0.66	−9.65	4.03	2.80	3.65						
55483	−4.64	−3.49	1.47	1.18	4.48						
55576	6.60	2.34	1.65	1.87	5.01						
55598	−8.63	8.25	1.77	1.30	6.36						
55636	8.77	−6.19	1.75	1.54	5.12						
55689	6.47	1.98	2.17	2.18	3.99						
55738	21.83	11.69	2.35	1.90	10.80	−3.81	−24.86	5.91	5.00	4.98	
55746	4.05	5.34	1.72	1.25	4.75						
55816	7.47	8.80	3.24	2.21	4.95						
55908	19.50	8.30	5.50	6.04	3.93						
56081	−1.44	4.62	1.72	1.34	3.46						
56128	14.68	−6.17	9.09	5.05	3.06	−68.46	−56.04	23.79	10.72	5.26	
56350	24.83	−32.52	13.75	9.81	3.49						
56364	9.54	7.90	3.52	1.86	4.88	−22.58	8.04	6.79	4.31	3.60	
56369	1.24	7.21	2.98	2.12	3.47						
56380	−4.92	−7.86	3.26	2.12	3.79						
56414	1.98	12.09	2.54	2.03	5.96						
56439	−14.31	2.60	3.56	2.86	4.02						
56510	−10.24	0.15	0.91	1.06	11.25						
56517	−6.36	11.74	3.23	3.17	3.72						
56524	9.15	6.15	3.72	2.84	4.09						
56529	−11.43	0.17	3.23	4.37	3.58						
56639	−4.89	4.46	1.68	1.40	3.52						
56700	14.33	−9.52	1.74	2.30	9.08	−19.44	−6.19	3.98	6.51	4.89	
56740	−5.36	−3.68	1.47	2.37	3.65						
56754	−3.81	−8.31	1.36	1.36	6.62	−18.93	−4.19	3.51	4.20	5.42	
56760	5.56	−3.49	1.74	2.46	3.95						
56826	11.80	−2.94	2.01	1.73	6.00						
56859	23.08	5.40	6.87	5.06	4.97						
56896	5.63	−5.57	2.51	2.49	3.50						
56925	2.71	−7.89	1.99	2.13	3.81						
57001	−0.14	−6.64	1.79	1.31	5.74						
57034	−3.83	12.72	3.57	2.36	5.45						
57058	−12.62	9.79	4.57	3.12	3.84						
57072	−0.70	12.56	2.09	3.12	4.31	21.04	−32.48	5.45	6.65	5.36	
57078	3.58	−7.46	1.75	1.50	4.99						
57155	−6.36	10.20	2.06	1.94	5.29						
57240	11.22	−1.40	3.23	2.08	3.50						
57297	−2.00	−4.32	1.49	1.44	3.50						
57414	−5.94	−3.93	2.44	1.66	4.92						
57422	5.52	−7.04	3.89	2.48	2.88	58.56	12.93	15.80	7.25	7.07	
57449	2.74	11.68	3.65	4.04	3.66						
57495	2.86	4.21	1.20	1.40	3.81						
57574	11.21	−5.72	1.71	1.30	7.31						
57669	5.49	4.71	1.65	1.52	3.96	21.46	−5.58	7.50	5.70	4.59	

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
57683	3.10	−5.72	1.69	1.90	3.57						
57796	−4.36	−7.81	1.42	1.60	5.28						
57804	−1.32	−7.54	3.27	1.74	4.38						
57822	−2.82	8.80	2.05	2.15	4.12						
57863	16.34	−1.93	4.54	3.28	3.60						
57865	7.59	−9.20	2.09	2.33	5.54	−34.48	−0.41	5.24	6.36	6.60	
57878	−10.33	−4.99	4.25	2.13	3.98						
57888	8.16	−21.52	3.18	2.00	10.97	9.11	31.09	13.64	6.33	5.03	
57938	−0.60	9.73	2.37	2.59	4.14						
57947	−5.86	7.35	1.83	1.94	5.68						
57998	5.89	2.85	1.78	1.10	4.52						
58036	79.38	18.42	15.38	7.01	5.16	−281.36	−88.52	51.31	30.71	5.57	
58045	4.90	−13.42	2.82	2.30	7.00	5.88	20.97	6.25	6.01	3.53	
58052	−9.31	−2.66	2.91	1.87	3.46						
58093	1.64	−9.04	2.38	1.29	8.18						
58099	−2.29	9.35	7.16	2.48	3.95						
58222	−3.36	−8.42	1.93	1.18	7.40						
58273	−9.80	3.46	3.53	2.28	3.68						
58377	−0.90	4.41	2.79	1.37	3.53						
58382	−9.54	0.06	2.53	1.60	3.79						
58405	−2.43	−11.78	3.16	1.58	7.86						
58435	−0.81	8.66	1.96	2.01	4.31						
58572	−3.40	−5.07	1.44	1.61	3.90						
58684	−14.83	−4.84	2.64	2.61	5.99	18.24	18.35	7.70	5.37	4.21	P
58804	3.24	−4.45	1.55	1.63	3.66						
58861	−4.47	6.24	1.97	1.80	3.60						
58871	3.21	8.23	3.71	1.99	4.59						
58881	−8.16	5.29	2.21	1.45	4.55						
58924	0.62	−5.66	1.29	1.08	5.25						
58942	−6.74	−1.20	1.72	1.22	3.97						
58951	−9.96	3.02	3.00	1.53	3.65						
59000	1.26	7.62	2.84	2.63	3.51						
59015	4.69	−5.52	2.13	0.96	6.08						
59030	−10.05	−3.38	1.41	1.18	7.33						
59043	3.36	−3.41	1.71	1.31	3.59						
59085	13.26	−10.50	2.76	2.27	7.60						
59125	−5.35	−2.38	2.08	1.02	3.68						
59140	1.00	−5.60	2.23	1.48	3.81						
59171	−6.93	0.16	1.95	1.49	3.75						
59173	−6.81	11.35	1.30	1.70	8.19	7.27	−14.33	2.98	4.60	4.15	
59229	−0.33	−3.83	1.12	1.06	3.62						P
59318	3.60	7.36	2.21	2.16	3.51						
59332	9.12	3.26	2.37	1.83	4.14						
59352	−2.70	5.25	2.26	1.05	5.06						
59389	−3.99	−2.19	1.00	1.13	4.19						
59398	−8.56	−4.08	2.26	1.91	3.95						
59437	3.55	7.67	2.40	2.16	3.56						
59445	1.27	11.92	5.28	3.95	3.58						
59449	19.20	1.92	1.73	2.57	11.43	−22.29	7.27	3.57	6.10	7.00	
59519	−12.90	8.52	3.50	2.65	4.06						
59541	0.03	4.75	2.41	3.81	1.30	12.93	−17.12	5.07	8.69	3.83	
59609	22.54	4.60	4.86	1.88	4.67						
59632	6.20	−13.51	3.47	3.47	3.92	14.75	18.35	9.33	7.26	3.46	
59703	3.58	3.77	2.38	1.62	3.53						
59728	8.01	2.44	1.98	2.32	5.56	−12.61	−13.52	5.47	5.75	4.52	
59748	−15.78	−0.87	2.62	3.35	6.22						
59893	−12.72	0.77	7.43	3.41	1.82	38.32	20.92	15.07	8.01	3.67	
59926	10.57	−6.65	2.01	1.51	7.01	−9.97	−18.37	4.78	4.08	4.77	
60024	−5.96	−2.63	1.56	2.04	4.23						
60059	7.99	9.28	1.51	1.42	8.11	−21.93	−6.22	3.35	4.31	6.55	
60061	−8.91	−12.49	3.35	1.80	7.45						
60097	−16.09	7.02	5.13	1.85	6.27						
60104	4.37	7.97	3.87	2.31	3.60	39.95	−11.06	11.56	6.89	4.20	
60129	−0.59	−7.80	1.74	1.48	6.55						
60228	−14.73	−9.62	3.79	3.05	4.34						
60299	8.51	−7.49	2.75	2.18	4.30	16.17	14.47	7.18	5.11	3.88	
60329	5.79	−4.00	1.40	1.43	5.48	−17.26	−14.00	3.25	4.30	5.54	
60349	−1.44	7.72	1.84	1.85	4.25						
60476	−1.07	4.31	2.25	1.96	2.21	−7.11	−20.51	5.41	5.47	4.40	
60512	0.91	13.01	3.82	4.03	3.27	−8.67	−60.61	18.79	9.51	6.37	
60514	0.94	9.15	2.04	1.37	6.89	6.66	16.52	5.75	3.65	4.83	
60538	21.93	−4.16	5.75	2.92	3.88						
60684	−18.85	1.45	5.48	3.54	3.46						
60724	4.35	0.87	1.25	1.53	3.49						
60731	−4.52	4.72	1.43	1.18	5.56						
60752	−4.04	2.33	1.42	1.29	3.48						
60810	−12.14	0.88	3.58	2.22	3.52						
60978	13.37	2.27	1.22	1.16	11.14						
60998	3.77	7.81	1.03	1.09	8.05						
61067	−8.41	1.72	1.83	1.67	4.83						
61148	−4.93	7.23	2.33	2.56	3.46						
61172	1.47	−4.52	1.66	1.18	3.83						
61201	1.74	−9.67	2.11	2.46	3.94						
61260	1.29	−6.38	1.40	1.57	4.18						
61274	4.66	12.84	3.16	3.14	4.52	−48.56	−9.50	7.88	8.75	6.35	
61377	−2.56	8.07	2.06	1.93	4.32						
61496	−2.95	−6.25	1.99	1.76	4.15	−9.71	16.84	5.73	4.87	3.63	P
61597	−3.40	−12.26	1.15	1.23	10.98						
61607	−9.58	−4.19	2.46	1.74	5.04						
61627	−7.19	−2.53	2.49	2.06	3.55						
61720	−14.55	0.12	1.95	1.30	7.59						
61734	11.86	7.81	2.03	2.00	6.68	−13.99	8.89	4.68	5.14	3.49	
61771	−15.86	−2.10	4.87	3.47	4.03						
61834	−6.77	7.47	6.59	2.38	3.59						
61841	−5.56	−7.33	1.38	1.59	6.14						
61859	10.46	−0.17	3.02	2.42	3.58						
61897	5.71	4.05	2.32	2.02	3.58						
61904	6.50	1.66	2.47	1.75	3.51						
61921	4.80	−15.01	2.43	1.82	8.44	−34.44	16.80	6.86	5.17	5.21	
61928	−3.42	−12.52	1.32	1.64	8.03						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
61939	6.85	−1.77	4.12	3.01	1.67	−8.78	38.20	13.01	8.84	4.45	
62153	3.36	10.40	4.80	3.63	3.45						
62167	3.66	7.88	3.26	2.35	3.50						
62180	−9.04	3.75	2.88	1.78	3.55						
62256	−6.26	−2.89	3.02	2.07	3.51						
62258	−10.12	7.83	2.64	2.54	4.33	−6.02	−22.44	7.87	7.59	3.65	
62434	23.59	−11.45	1.48	1.36	16.97	−22.97	7.81	3.64	3.79	6.67	
62487	2.82	9.82	2.97	1.82	5.52						
62534	−4.64	−3.84	1.59	1.35	3.87						
62580	−2.31	−0.36	2.87	2.21	0.86	−9.84	17.14	11.44	5.74	3.66	
62600	−3.61	−3.77	1.25	1.32	3.62						
62639	−1.34	7.85	2.56	1.57	5.01						
62655	1.92	−5.23	1.19	1.31	4.12						
62699	17.67	−11.02	2.69	2.35	8.71	−28.42	12.53	6.87	7.89	4.90	
62703	0.33	5.30	0.99	1.09	4.99						
62711	−3.08	−6.70	1.66	1.53	4.69						
62800	0.68	−14.37	3.74	2.44	6.16	−52.08	−1.13	14.85	6.35	3.63	
62915	−3.03	5.02	2.07	1.49	3.37	18.84	6.63	5.77	4.84	4.92	D
62957	5.75	−14.40	3.81	3.25	4.43						
63088	−9.46	−6.14	3.01	2.38	4.52						
63096	−1.66	8.97	2.05	1.86	5.40	−14.27	−17.15	4.38	6.48	3.79	
63129	5.17	−5.11	2.09	1.57	3.66						
63207	2.04	15.09	2.90	2.56	6.04						
63235	3.74	−8.45	1.78	1.62	5.35						
63249	10.34	7.62	2.18	1.63	7.28						
63331	8.75	0.57	2.38	1.45	3.69						
63340	−6.83	2.07	1.12	1.60	6.12						
63350	7.49	0.71	2.11	1.40	3.55						
63404	11.71	0.36	3.36	2.39	3.55						
63413	2.15	−11.03	4.59	2.84	3.93						
63414	−0.53	7.16	1.66	1.47	5.25						
63418	−9.11	1.55	2.17	1.93	4.39	20.61	−24.25	6.71	6.13	4.69	
63459	7.85	8.50	2.46	1.26	7.82						
63496	1.65	−11.20	2.51	2.24	5.82						
63510	1.84	10.26	3.45	2.78	4.41						
63544	5.01	−5.91	1.91	2.38	3.91						
63599	−9.37	6.21	1.56	2.88	7.55						
63651	6.15	0.16	1.63	1.58	3.81						
63686	5.12	−9.32	1.71	1.63	7.02						
63743	1.63	8.22	2.89	2.03	4.61						
63746	−3.73	−2.66	2.04	1.78	3.51						
63783	−10.39	−2.53	3.19	2.61	4.53						
63828	−1.03	−9.26	2.17	1.69	5.49						
63880	5.40	−5.58	2.38	2.14	3.63						
63890	−11.58	−0.48	2.71	1.82	4.28						
63917	−15.44	1.21	3.33	3.07	5.00						
63938	1.16	9.57	2.26	1.53	7.00						
63944	13.91	−6.72	2.90	2.88	5.09						
63995	−21.48	−10.94	3.00	2.30	7.80	−24.23	25.43	11.11	6.67	5.23	
64003	−15.36	−3.09	2.89	1.43	5.39						
64006	2.13	6.28	1.72	2.69	3.65						
64166	2.11	−4.35	1.85	1.22	3.74						
64185	1.80	−10.58	3.20	3.40	3.11	−22.98	51.70	7.80	8.69	6.30	
64219	−9.13	5.58	2.24	1.63	4.44	4.92	17.09	5.97	4.63	4.30	
64256	−17.59	20.49	4.46	8.08	3.95						
64305	9.56	4.23	3.49	2.34	4.22						
64312	1.90	7.47	2.23	1.77	4.88						P
64323	−8.12	−14.53	3.56	1.82	8.06						
64444	1.84	26.48	2.86	3.93	8.71						
64496	−7.24	3.52	2.00	1.85	3.69						
64621	−14.79	2.04	2.66	2.96	5.67	21.42	−16.10	6.64	7.16	4.28	
64666	9.65	−8.58	3.72	2.26	3.97						
64687	−12.37	−7.66	4.04	2.55	4.12						
64701	0.11	8.08	2.72	1.57	5.15	−3.96	−18.32	8.65	5.22	3.62	
64822	−12.71	3.17	2.34	1.51	6.00	−70.14	3.76	12.08	4.95	7.43	
64856	−3.92	3.57	1.43	1.36	3.45						
64872	−8.99	20.26	2.19	2.27	10.16						
64933	3.52	2.36	1.15	1.33	3.69						
64934	11.31	2.35	2.56	2.78	4.42						
64975	8.25	−12.10	5.39	2.90	4.73						
65074	−3.68	5.13	1.72	1.37	3.83						
65120	16.67	−20.32	7.22	5.51	3.80						
65198	6.10	−5.92	2.00	1.71	3.69						
65230	6.43	−8.68	1.52	1.44	8.78	−5.83	18.05	4.29	3.76	5.30	
65283	12.46	4.13	3.51	1.62	4.23						
65374	−8.34	−5.02	2.04	1.79	4.37						
65386	−15.53	−4.60	3.24	2.46	5.36						
65401	7.94	−8.43	3.11	2.31	4.00						
65411	−3.78	−6.71	3.01	2.35	3.58						P
65473	−3.38	−7.29	2.10	2.11	3.95						
65483	5.45	1.39	2.10	1.95	4.22						
65535	−3.58	−10.68	2.77	1.98	6.00						
65621	−15.29	1.88	3.04	2.04	5.04						
65644	−1.81	1.79	3.45	1.77	1.08	17.13	13.46	9.37	5.53	3.60	
65662	1.62	−14.07	5.87	2.93	6.26	−24.59	16.87	23.99	8.54	4.02	
65698	−10.21	−1.24	1.64	1.47	6.23	17.93	3.68	4.04	4.08	4.45	
65775	0.96	−6.46	1.66	1.88	3.68						
65886	10.49	−0.93	2.89	1.66	3.81						
65887	6.37	1.96	2.51	2.27	4.47						
65929	3.60	4.12	2.47	3.01	3.64						
65964	−12.13	−3.22	2.91	1.84	4.31						
66001	12.36	6.80	3.79	2.48	3.87						
66019	−10.22	−8.31	3.83	1.83	4.60	−34.76	−23.16	13.93	6.51	3.56	
66041	−9.71	−0.28	1.76	1.89	5.52						
66109	1.87	−5.49	1.32	1.65	3.97						
66229	9.22	10.50	3.30	1.97	6.09						
66244	9.44	−0.23	3.22	2.12	2.97	−31.52	−27.87	10.30	6.59	5.86	
66289	−6.68	6.05	2.02	1.74	7.16						
66290	−10.42	9.46	2.08	1.31	8.08						
66319	7.93	−4.10	3.32	1.78	3.57						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
66321	−11.17	1.22	2.60	2.27	4.46						
66340	3.68	−11.06	1.83	1.65	6.89						
66362	−12.16	−4.06	3.77	2.08	3.77						
66454	4.34	2.20	1.18	1.93	4.58						
66474	−8.20	−1.94	1.92	2.02	4.30						
66563	−5.09	−4.99	2.29	1.29	3.99						
66618	14.11	28.60	2.97	2.52	11.48	26.93	−15.13	6.41	6.23	5.72	
66657	−3.81	0.93	1.02	1.57	3.74						P
66741	−15.38	−0.29	3.23	3.07	5.43						
66849	−6.26	−5.28	1.72	1.53	5.00	18.31	5.96	4.89	4.71	4.08	
66915	−1.35	−9.50	2.27	1.90	5.19						
66982	11.09	−7.48	2.76	2.35	4.10						
67005	3.60	2.21	1.15	1.28	3.63						
67009	0.59	9.68	1.55	1.40	7.03						
67061	−10.79	1.89	3.15	2.53	3.45						
67170	−3.63	9.14	2.25	2.46	3.85						
67351	7.26	−4.06	2.18	2.24	4.48						
67379	−10.05	−0.53	2.08	1.79	5.70						
67412	−5.91	7.84	3.07	2.02	4.05						
67446	−11.62	−1.93	2.48	1.73	5.30						
67485	2.70	−4.36	1.02	1.49	4.04						
67528	3.19	4.16	1.27	1.61	3.58						
67529	−9.34	−11.64	2.14	1.70	7.99	17.76	−4.91	5.20	4.63	3.64	
67553	0.00	9.04	3.13	2.87	3.63						
67583	−5.54	−5.43	1.53	1.64	5.10						
67742	−6.13	3.73	1.81	1.37	4.38						
67755	−4.24	7.92	1.92	2.09	4.27	28.94	0.59	4.85	7.63	6.21	
67773	−1.81	18.48	1.79	1.88	10.11						
67808	−7.43	19.99	5.16	2.92	7.32						
67880	4.15	−19.13	2.97	2.31	8.55	−34.34	18.44	7.18	6.49	5.49	
67957	−3.25	−9.66	2.52	1.80	5.44						
68004	3.17	−12.52	4.75	2.87	5.10						
68035	2.25	0.68	2.58	1.53	0.99	−19.70	10.34	5.03	4.34	4.41	
68072	−7.31	−3.08	2.35	3.26	3.46						
68276	−3.33	−4.26	2.14	1.76	4.19						
68277	22.07	4.98	4.05	3.51	5.85	−38.74	−28.31	10.55	12.67	4.60	
68286	3.31	−6.30	2.19	2.24	3.45						
68489	6.81	−2.98	1.97	2.67	3.53						
68507	2.31	−9.14	3.31	3.19	2.99	−18.51	−28.38	7.79	7.65	5.45	
68523	3.31	17.35	3.19	2.11	8.39	16.84	−25.94	5.81	5.40	5.21	
68619	6.48	−10.92	2.99	1.93	5.71						
68623	−12.27	−2.73	2.04	1.74	6.26	14.61	−15.74	4.38	4.88	4.87	
68653	13.09	−0.81	3.80	2.81	3.45						
68716	5.67	−9.88	3.34	2.68	3.90						
68718	10.63	−11.30	3.36	2.84	4.40						
68722	12.34	5.18	3.50	2.37	3.93						
68723	6.97	3.91	2.39	1.98	3.36	−7.13	−26.83	5.26	6.61	4.10	
68816	−2.94	4.74	1.20	1.68	3.66						
69022	−3.86	−11.79	4.04	2.82	4.20						
69114	−10.95	2.06	1.81	2.16	6.06						
69143	12.74	−5.90	4.51	2.71	4.82						
69160	−3.94	−2.87	2.61	2.42	3.57						
69195	4.97	5.55	2.50	2.35	3.94						
69238	10.49	−10.31	1.49	1.70	10.18						
69318	21.94	−13.57	3.83	3.42	5.73						
69339	21.80	−4.63	5.70	4.53	3.84						
69441	−18.84	−2.20	4.08	3.49	4.93	−14.97	34.63	17.43	10.57	4.35	
69469	2.30	5.33	1.39	1.55	4.01						
69527	−1.21	−4.31	1.45	1.23	3.95						
69528	−18.49	30.13	3.82	2.87	10.84						
69535	3.70	28.59	1.82	2.26	12.77	2.05	−34.16	4.17	5.42	6.42	
69539	1.79	3.88	1.27	1.15	3.62						
69575	4.08	5.29	2.60	2.10	2.65	23.34	−3.76	7.64	6.04	3.91	
69651	8.88	12.79	5.13	3.46	4.10						
69699	−0.81	−5.34	1.50	1.54	3.49						
69704	−3.76	−7.99	1.34	1.19	8.23						
69739	6.20	−1.28	1.60	1.88	4.00						
69802	1.40	5.60	1.57	1.55	3.91						
69910	−6.00	−6.18	2.29	2.99	3.49						
69929	−12.75	−2.24	2.91	1.64	4.38						P
70140	7.46	2.49	1.83	1.78	4.13						
70363	4.67	3.71	1.37	1.46	4.82						
70435	−9.28	10.19	1.73	1.94	7.27						
70445	−12.33	0.10	3.12	2.76	3.97						
70561	3.12	−16.05	2.91	2.26	7.14						
70637	8.51	−1.98	1.81	1.60	5.36	−18.19	−20.06	4.30	4.28	5.80	
70663	−8.80	18.97	2.55	2.21	8.81	8.08	−25.00	5.62	5.48	4.62	
70689	−4.57	4.33	1.53	1.77	3.45						
70833	−0.29	9.11	2.12	2.23	4.24						
70839	−1.39	−20.12	3.26	1.86	10.95						
70918	1.32	4.13	1.46	1.35	3.65						
70931	8.44	−0.15	2.06	1.94	4.37	5.86	16.88	5.82	9.53	4.00	
71125	5.05	12.14	2.30	2.70	4.74	−24.90	−16.21	5.75	7.10	4.83	
71136	4.00	10.84	4.33	3.26	3.60						
71192	−3.28	3.71	1.10	1.53	3.69						
71236	12.17	−4.24	3.50	2.06	3.66						
71368	0.78	10.36	1.98	2.68	4.92						
71400	1.20	−3.78	2.11	1.99	3.78						
71440	3.04	17.80	2.91	2.56	7.20	−41.33	7.78	6.61	9.60	8.29	
71471	10.21	−4.63	3.91	2.35	3.50						
71519	−4.04	−9.63	2.84	4.14	3.55						
71544	−6.17	−4.85	2.41	1.47	4.14						
71572	11.97	−7.64	2.54	2.90	4.71						
71653	7.49	6.21	1.91	1.72	5.92	−16.25	4.82	4.20	4.46	3.94	
71789	2.77	7.65	1.87	2.15	3.76						
71862	−16.94	−1.94	4.61	2.49	4.00						
71933	−3.85	−4.26	1.74	1.78	3.88						
71966	7.16	−8.82	2.83	2.87	4.15						
72059	−1.49	6.13	1.51	1.78	3.85						
72092	13.36	11.64	2.04	2.22	7.65						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
72158	12.19	3.30	2.99	1.66	4.33						
72170	4.47	13.43	6.50	3.71	3.65						
72192	−9.80	9.93	2.08	3.57	4.71						
72268	3.90	4.60	2.60	2.69	3.49						P
72286	−6.35	3.28	1.78	2.04	3.72						
72316	−11.48	0.80	3.06	2.09	3.78						
72358	5.71	−0.91	1.54	2.00	3.71						
72388	−8.74	−5.32	3.61	2.78	3.51						
72603	−1.32	11.28	2.52	1.78	6.76						
72638	6.25	7.87	2.56	2.61	4.11						
72661	7.99	−18.24	4.61	4.68	3.92						
72744	9.19	−10.28	4.81	3.44	3.56						
72803	−10.56	8.85	2.25	1.78	5.90						
72811	13.73	−14.25	5.46	3.81	3.75						
72875	−10.81	0.68	3.05	2.63	4.17						
72886	9.83	−14.22	2.73	3.66	4.08						
72916	24.40	7.34	13.23	11.60	1.96	−169.23	59.72	28.79	30.75	6.36	
72939	−12.54	−5.24	2.55	2.18	5.65						
73012	15.27	12.28	4.10	2.83	5.48						
73032	−7.52	−7.80	5.51	4.39	3.57						
73116	−12.49	−4.76	3.27	2.56	4.82						
73154	1.15	4.41	1.30	1.63	3.65						
73170	2.24	8.10	3.58	2.72	4.42						
73189	0.13	6.15	3.77	1.94	3.44						
73204	13.40	3.82	4.30	4.39	5.36	−40.55	25.14	12.37	16.16	3.80	
73206	4.80	7.76	1.38	1.47	5.85						
73241	−0.45	6.86	1.90	2.72	3.57						
73251	−12.81	−2.06	3.60	3.93	3.56						
73258	−12.32	−25.38	5.87	6.18	6.21						
73366	−8.06	2.25	1.88	1.62	4.42	21.52	−23.81	6.05	5.76	4.57	
73372	4.25	5.01	2.32	2.07	2.67	−20.31	0.12	5.56	6.07	3.79	
73408	−5.01	2.19	1.46	1.75	4.04						
73430	10.91	7.90	3.88	3.74	4.11						
73450	−4.38	1.96	1.33	1.41	3.60						
73535	−3.69	10.17	3.93	2.77	3.75						
73561	−4.99	5.95	2.13	2.23	3.68						
73566	7.35	7.06	3.17	2.04	3.86						
73569	−8.28	−11.69	4.63	5.92	3.61						
73637	5.06	−13.34	1.96	1.91	7.86	−6.27	18.76	5.83	7.56	3.59	
73645	−5.92	1.37	1.48	1.71	5.17						
73704	−7.21	26.05	10.23	6.73	5.03						
73768	8.10	5.51	2.94	2.51	4.63	−32.59	14.81	9.93	11.40	3.67	
73862	−5.27	9.64	3.16	2.00	4.83						
73934	−9.48	15.74	2.87	2.39	6.96	−15.29	−29.23	7.63	6.97	4.54	
73939	10.38	−8.19	3.21	1.78	5.25						
73952	23.30	16.82	9.32	6.26	3.45						
74034	11.05	−27.54	3.90	9.71	4.03						
74068	24.71	−13.73	4.12	3.35	8.76	−11.14	47.49	10.62	14.25	3.44	
74069	8.19	−4.32	2.37	2.24	3.79						
74087	9.48	−1.35	1.98	1.89	5.63						
74103	−6.73	−11.45	3.84	4.62	4.34						
74164	37.49	−38.38	9.33	7.76	5.42						
74192	−4.73	1.57	1.33	1.69	4.49						
74203	−4.95	−5.50	2.91	3.00	3.67						
74233	1.95	−8.31	2.21	2.40	3.55						
74264	5.70	−0.42	4.57	4.37	1.25	61.61	79.59	21.20	13.59	5.91	
74297	−8.95	6.30	2.38	3.41	4.12						
74329	5.08	−11.48	2.34	2.84	4.06						
74452	11.45	0.62	3.14	2.74	3.67						
74467	−8.74	−22.89	5.09	4.63	6.22						
74485	−11.31	−2.96	3.74	3.37	3.65						
74588	−2.93	12.46	2.88	3.43	3.71						
74727	6.36	5.31	2.45	2.11	3.80						
74730	−36.06	42.09	1.71	1.82	25.80						
74749	4.63	11.83	4.80	2.25	6.08						
74815	102.60	73.91	76.47	45.47	2.10	567.91	204.59	194.62	126.06	4.76	
74831	−2.44	−7.95	2.99	2.29	4.28	13.52	15.80	6.89	6.39	3.79	
74832	3.34	−6.63	2.62	1.93	3.46						
74875	10.18	0.76	1.78	1.48	6.05						
74896	12.19	−10.07	2.80	3.24	4.47	−1.85	42.18	10.18	7.38	5.75	
74928	5.20	1.94	1.50	1.57	3.69						
75019	11.11	−9.14	3.26	2.81	3.96						
75029	−2.48	−11.29	1.48	1.76	6.46						
75141	−8.43	−4.43	2.53	1.83	5.33	19.79	3.79	5.68	5.04	4.24	P
75152	−10.93	−0.23	1.63	1.49	6.79	−3.35	−14.94	4.29	4.36	3.49	
75256	−0.49	7.61	1.47	1.43	5.55						
75347	−12.97	2.13	3.83	4.43	3.55						
75411	13.97	−5.10	1.80	1.98	8.47	−8.54	36.28	6.58	8.10	5.26	
75429	23.03	9.73	7.51	5.00	3.76						
75456	3.73	7.86	3.02	3.22	4.09						
75468	−12.45	5.84	4.46	2.69	3.56						
75487	−14.37	−8.28	4.78	2.52	4.44	46.78	61.17	27.99	11.55	5.36	
75676	9.61	−19.74	2.20	1.98	10.82						
75718	−41.21	34.47	3.23	1.87	21.76						
75752	−5.17	1.39	1.46	1.64	3.68						
75870	−3.75	−6.19	1.41	1.59	5.84						
75880	−14.53	3.41	3.25	3.36	4.69	15.95	18.57	8.22	9.34	3.62	
76002	3.77	−5.41	1.58	2.12	4.44						
76008	4.44	−0.86	1.00	1.45	4.45						
76041	−1.56	15.58	1.48	1.44	10.96						
76067	−4.12	−13.05	1.78	2.23	5.92	0.89	22.88	6.11	7.88	3.72	
76121	−22.08	3.64	6.36	5.09	3.52						
76245	23.26	4.67	6.67	2.34	4.10						
76259	17.09	2.89	3.70	1.79	4.76	14.04	−49.64	17.05	9.87	5.45	
76293	−7.60	−14.75	4.54	2.78	5.65						
76304	−6.04	−6.55	2.75	2.08	4.81						
76376	2.28	10.99	2.33	1.76	6.95	9.58	−15.81	4.82	4.71	4.04	
76383	−3.59	10.66	2.23	2.05	5.20						
76504	−4.77	8.59	2.40	2.11	4.10						
76538	−5.74	−3.93	2.08	2.14	3.94						
76568	−9.93	−5.83	1.20	1.19	8.89						
76574	4.75	−8.43	5.34	2.79	3.20	−4.63	40.52	25.27	9.82	4.18	
76594	7.85	4.30	1.74	1.56	5.38						
76600	7.75	−3.51	2.29	1.73	3.52						
76629	−11.13	5.67	2.71	2.97	4.12						
76855	−3.43	−7.66	2.04	2.22	3.68						
76880	9.27	11.16	5.19	2.38	4.69						
76933	−4.13	12.66	3.68	3.20	3.97						
77031	−2.89	8.07	1.81	2.06	3.94						
77063	−7.74	0.92	2.05	1.92	3.79						
77067	−2.78	−8.39	1.81	1.53	6.20						
77075	0.07	−9.75	3.58	2.86	3.80						
77082	41.08	23.12	15.88	6.26	3.71						
77117	5.17	−19.14	3.31	3.15	6.65	−51.58	8.29	14.47	11.77	5.67	
77172	3.00	−8.74	3.00	2.52	3.47	−33.18	36.06	9.99	8.67	4.50	
77262	−0.50	13.24	5.02	2.56	5.17						
77290	4.33	2.13	1.29	1.55	3.84						
77302	−2.46	10.73	5.98	3.06	3.54						
77305	−0.47	30.12	4.65	4.21	7.63	−17.54	−28.71	9.96	10.78	3.92	
77349	−36.73	27.25	5.53	4.13	8.17						
77360	17.24	−3.94	4.46	2.02	4.34						
77374	−26.25	15.22	5.91	4.69	4.50	49.77	−57.10	13.42	11.58	5.06	
77445	0.71	5.15	1.29	1.50	3.72						
77456	−110.03	2.44	28.09	8.36	3.94						
77484	−3.53	2.10	1.48	1.83	3.46						
77514	15.42	−5.97	9.49	15.43	1.72	58.42	−113.47	24.54	36.16	4.67	
77516	10.51	−2.76	3.05	1.73	3.70						
77528	−7.36	−0.19	1.70	1.91	4.36						
77642	5.47	6.73	3.23	1.95	3.78						
77650	−3.85	10.33	3.46	2.90	3.61						
77724	−8.74	−10.03	3.22	2.41	4.20						
77811	−1.73	16.37	4.82	3.66	4.78	76.73	48.69	23.98	16.43	4.50	P
77911	−5.30	5.16	2.89	1.56	3.46						
77932	0.22	−7.70	3.44	2.17	3.65						
77933	−5.01	−3.37	1.77	2.01	3.49						
77979	21.08	−30.00	6.43	3.80	8.84						
78045	0.27	5.35	2.88	2.02	2.74	16.50	25.82	15.01	6.05	4.38	
78218	−7.21	−1.36	1.92	2.63	3.77						
78225	−12.46	9.17	3.98	2.03	5.28	35.93	−49.56	13.11	10.72	4.68	
78258	−2.56	7.85	3.35	2.20	3.59						
78281	3.45	8.07	1.89	1.94	4.42						
78400	32.44	−32.82	4.07	1.82	23.03	8.48	89.86	18.17	9.23	10.14	
78414	−11.29	−10.73	3.77	3.78	5.29	−53.18	7.74	18.09	21.34	4.61	
78439	17.21	−1.34	4.82	3.10	3.72						
78445	−7.84	8.35	1.78	1.41	6.08						
78457	−6.91	−10.61	2.88	2.68	4.06	36.18	29.77	6.26	6.70	6.38	
78481	8.08	2.61	2.08	2.00	4.41	−19.20	13.11	5.49	5.59	4.01	
78590	0.50	7.68	1.73	2.04	3.78						
78593	0.64	−4.30	7.95	4.59	0.94	48.80	−88.15	29.47	21.78	4.14	
78679	4.32	3.92	1.60	1.90	3.67						
78709	−13.94	−9.24	1.74	2.16	10.12						
78734	−32.45	30.37	4.59	4.45	7.51						
78754	−6.51	1.51	1.92	1.68	3.61						
78805	−1.60	−8.48	3.24	2.73	3.57						
78817	−12.28	7.73	3.44	1.85	5.54						
78825	−10.40	−3.34	2.93	2.49	3.57						
78850	2.86	−11.60	3.23	2.57	4.93						
78870	1.62	−13.17	3.89	2.02	6.89						
78872	14.61	21.80	12.87	5.81	3.77						P
78877	7.15	−4.53	1.99	1.81	3.80						
78897	17.88	4.43	4.90	2.60	4.73						
78914	2.58	−11.73	1.44	1.29	9.71						
78916	10.31	14.23	2.00	2.11	8.18						
78924	2.73	64.46	15.07	10.95	5.89						
78943	18.77	−19.12	6.56	4.47	4.32						
78973	−3.98	−3.07	3.33	3.20	3.58						
78993	16.33	3.94	2.95	2.31	5.54						
79119	20.14	−20.52	1.18	1.34	21.49						
79125	8.71	4.73	1.79	1.59	5.02						
79230	9.07	−5.96	1.87	1.64	5.06						
79231	−9.50	−12.78	3.48	2.42	7.71						
79317	2.27	−11.27	3.83	3.35	4.20						
79358	−9.08	−6.98	1.23	1.53	9.59						
79361	−10.56	−8.70	4.00	3.64	3.45						
79375	8.27	−27.65	3.46	2.91	9.60						
79408	3.84	−13.03	1.72	2.58	5.07	−30.97	47.73	6.40	11.89	5.09	
79450	−6.33	7.37	5.97	5.30	1.44	−60.85	99.55	16.94	19.39	5.13	
79472	−5.25	4.65	1.46	1.54	4.81						
79478	−9.63	−6.11	2.89	2.12	4.53						
79520	−19.54	−0.13	3.81	2.24	5.16						
79606	15.56	14.40	8.63	3.55	4.12						
79647	3.79	5.68	1.46	1.65	4.22						
79671	−17.22	−10.48	7.09	4.48	3.61						
79680	4.83	−3.73	1.46	1.96	3.75						
79769	1.90	17.18	5.34	6.40	3.54						
79780	−9.18	−1.88	1.56	2.13	6.24						
79796	−7.22	8.89	3.49	3.75	3.57	−34.38	−19.27	9.94	12.95	3.47	
79812	−19.00	−7.27	3.07	2.18	6.39						
79838	−5.11	−8.68	1.71	2.34	4.18						
80018	−23.05	6.54	7.42	6.75	3.67						
80111	8.46	1.90	1.60	1.67	5.30						
80160	3.21	6.90	2.35	2.33	4.61						
80178	9.93	4.16	3.32	2.22	3.44						
80187	5.83	−9.09	4.06	2.68	3.51						
80268	2.63	12.50	5.50	4.75	3.62						
80278	12.13	−2.90	3.63	3.52	3.79						
80363	−13.89	6.79	3.00	2.46	8.31						
80414	3.92	7.63	1.33	1.59	6.53						
80439	6.20	22.00	4.77	6.14	4.23						
80460	1.23	−5.72	1.37	1.66	3.51						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
80463	−3.32	6.08	1.73	1.71	4.00						P
80492	−2.31	22.44	8.31	7.31	3.95	−89.02	107.54	33.49	29.97	3.63	
80498	−5.59	10.39	2.83	2.71	4.55						
80533	−5.42	−5.52	1.47	2.20	3.75						
80673	13.47	−6.74	2.38	1.92	5.66						
80781	−11.72	21.71	6.53	7.58	3.55	54.51	−35.55	12.33	14.82	5.28	
80793	1.03	22.23	3.97	1.86	12.46	53.89	−19.30	18.56	8.70	3.77	
80809	−3.93	−0.99	1.56	1.49	2.97	16.97	−6.72	3.85	4.19	4.78	
80878	7.19	42.26	15.77	16.88	4.16						
80895	10.57	−7.05	4.18	2.59	2.93	−14.09	27.98	11.67	9.25	3.71	
80902	−3.91	−1.98	1.27	1.80	3.66						
80958	−7.59	1.69	2.21	2.77	3.44						
80964	−6.78	−6.04	2.21	1.43	4.79						
81041	−1.44	7.44	2.20	2.13	3.51						
81093	−15.26	12.36	4.76	2.60	5.72						
81177	−12.79	−5.29	2.38	2.24	5.68						
81198	7.13	−9.41	3.38	2.51	4.87						
81238	−5.74	−22.88	7.04	6.64	3.50						
81288	9.14	−0.09	2.75	2.55	3.76						
81345	−0.33	1.15	3.34	2.38	0.48	23.84	−16.33	10.46	9.85	3.88	
81371	7.18	25.54	3.94	3.41	7.50						
81390	−0.96	1.25	2.62	2.76	0.75	−17.12	20.63	6.14	6.77	4.27	
81421	−21.85	0.14	4.39	2.22	5.17						
81437	−3.57	−2.56	1.10	1.21	3.56						
81450	−27.84	−29.89	13.65	8.67	3.47						
81476	0.33	9.34	2.62	1.89	4.96						
81601	−6.37	−6.85	2.13	2.23	3.93						
81630	−4.89	2.35	1.41	2.36	3.51						
81658	2.91	−4.51	1.35	2.86	3.75	12.78	28.75	4.54	8.30	3.70	
81716	−11.25	−11.30	5.25	3.15	3.62						
81844	15.21	−2.31	4.89	2.18	3.46						
81879	4.14	11.00	2.27	2.31	4.87	−19.24	−22.69	5.45	5.91	4.61	
81897	−11.92	8.17	2.96	1.83	5.39	28.25	16.68	8.27	6.39	4.60	
81974	−4.34	8.27	2.15	2.43	3.78						
82007	−8.03	3.25	4.08	2.05	2.96	−50.61	−20.63	19.88	7.32	4.05	
82059	10.64	23.29	3.50	2.92	8.31	62.61	−10.81	10.95	12.50	8.92	
82089	−9.74	10.52	3.91	3.02	3.49						P
82157	8.43	−19.77	8.53	4.91	4.06						
82284	−22.55	−13.34	5.05	4.57	4.93	−131.17	−68.21	38.95	18.99	3.85	
82369	33.82	31.64	4.25	2.02	17.55	139.70	−31.71	19.34	9.79	7.58	
82406	18.47	3.66	5.82	3.42	3.79						
82451	−18.88	10.13	5.24	3.83	3.81						
82621	1.18	−8.94	2.69	2.23	5.52						
82639	−7.77	−3.43	3.64	2.66	3.70						
82677	1.02	−5.47	1.60	1.53	3.75						
82696	−0.62	22.94	9.68	5.01	4.58						
82885	−24.60	−7.14	6.88	3.29	3.81						
82956	−6.17	−5.70	3.31	2.49	5.38						
83056	15.41	16.10	3.08	4.87	5.38						
83138	6.84	2.46	1.85	1.55	4.47	−2.33	17.23	5.23	5.12	4.10	
83191	12.37	−2.04	3.54	2.72	3.71						
83259	1.72	−8.03	1.54	1.86	4.43						
83260	−2.22	6.55	2.02	1.86	4.05						
83267	−9.09	5.09	2.63	3.74	3.56						
83275	−0.76	8.79	1.45	2.46	3.61						
83283	19.22	−10.78	9.35	3.65	3.73						
83309	−1.01	5.97	1.30	1.67	3.69						
83326	−4.09	4.70	2.21	2.62	3.46						
83363	−10.35	6.65	2.51	2.38	5.54						
83365	4.46	7.89	1.02	1.34	6.87						
83372	21.02	−9.11	8.20	2.23	6.64	36.98	33.26	21.91	8.74	4.11	
83441	2.36	9.44	1.64	1.76	5.43						
83455	−8.33	4.82	2.65	1.88	3.45						
83456	5.85	4.41	2.65	2.19	4.38						
83507	2.17	−8.54	2.32	2.85	3.51						
83640	−4.79	7.27	1.32	2.22	4.29						
83662	21.68	−6.75	6.28	3.21	3.96						
83665	3.27	8.14	2.77	2.26	3.67						
83731	6.59	10.77	5.46	2.91	4.12						
83770	−2.21	12.46	2.88	2.20	6.01						
83816	1.32	6.51	2.31	1.70	3.93	−16.10	−16.00	6.07	4.72	3.64	
83844	−6.40	11.24	3.47	3.72	3.51						
83846	−32.40	−3.35	4.12	2.31	8.03	31.16	50.99	13.96	9.78	7.20	
83894	8.43	−12.42	3.26	2.65	4.76						
83895	4.37	8.37	0.98	1.36	7.51						P
84018	20.58	−17.97	7.15	5.05	3.93						
84162	−3.77	−3.25	2.78	2.07	3.46						
84212	43.14	−27.89	15.49	8.88	4.41						
84219	3.97	−1.76	1.11	1.52	3.71						
84309	−0.18	10.72	2.16	2.42	4.84						
84402	−14.27	−22.00	3.82	2.49	11.35						
84438	−13.56	−9.63	5.67	2.33	4.52						
84457	−11.29	0.94	3.18	2.33	4.02						
84468	4.68	11.84	3.08	2.68	4.71						
84520	−5.45	−11.81	1.50	1.82	6.93						
84544	−9.89	3.70	3.05	2.61	3.56						
84631	−7.36	4.18	1.82	2.16	4.19	−3.78	−20.45	6.76	6.19	3.53	
84652	55.05	−26.69	8.38	4.63	7.74						
84728	−225.57	216.00	25.86	25.13	9.85						
84803	−12.61	0.62	3.66	2.60	3.76						
84821	7.90	4.32	1.28	1.52	7.00						
84855	−5.49	0.77	1.29	1.77	4.45						
84886	−0.07	7.07	2.01	1.95	3.75						
84903	7.76	1.37	2.96	1.92	3.62						
84948	−3.23	10.49	3.54	2.87	3.98						P
85010	−4.56	−2.88	2.21	1.57	3.92						
85081	28.96	−5.94	4.37	2.83	6.65						
85132	−10.13	2.78	2.99	2.06	3.52						
85141	7.71	−5.18	2.56	1.74	3.80						
85143	11.14	−13.71	3.62	2.68	7.94	−34.18	−9.01	11.19	10.32	3.88	

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
85281	−4.25	10.82	4.28	2.83	3.95						
85326	−6.17	−10.98	3.86	2.76	4.95						
85360	−5.48	−10.04	4.40	2.01	5.61	54.51	−26.61	11.76	9.22	4.66	
85394	−1.84	−8.09	2.98	2.13	3.94	36.61	16.84	7.89	5.88	4.81	
85433	−6.41	2.29	1.65	2.13	4.67						
85470	1.96	−6.16	2.41	1.79	3.72						
85472	−1.75	−12.38	3.13	3.68	3.49						
85503	−0.53	−15.76	3.23	3.92	4.26						
85536	−7.15	10.35	3.85	2.61	4.00						
85609	−8.29	6.39	1.41	2.06	6.26						
85635	−19.96	7.68	5.37	3.93	3.83						
85671	−2.54	5.45	1.16	1.76	3.51						
85687	−5.81	−1.85	1.53	1.76	3.80						
85710	4.88	5.58	4.49	3.19	3.54						
85820	2.50	−5.60	4.23	2.64	2.50	55.93	−28.24	12.48	9.89	4.51	
85875	5.92	−8.26	2.57	1.72	4.81						
85886	−9.32	17.84	8.11	4.78	3.77						
85906	5.45	−0.64	1.51	1.56	3.90						
85963	9.04	−18.64	3.07	1.89	11.09						
85989	10.70	−6.10	3.98	2.16	3.73						
86032	−11.79	−6.66	1.77	2.00	6.93						D
86069	−9.99	−6.40	6.28	4.62	4.49						
86170	13.06	56.70	4.72	3.41	16.69	48.61	90.81	20.59	14.87	6.12	
86184	−8.28	21.34	1.89	1.81	12.09	20.85	−12.55	4.38	4.49	5.70	
86243	5.63	8.41	7.55	4.92	3.65						
86256	13.63	9.30	5.75	3.48	3.67						
86258	−9.05	−8.78	2.13	4.05	5.58	24.82	24.16	6.30	9.55	4.82	
86301	6.28	4.53	1.67	2.40	3.98	−8.43	−18.51	4.11	5.31	3.78	
86302	9.65	−1.11	1.50	1.62	6.73						
86420	−3.66	6.26	2.16	1.62	3.92						
86561	7.60	4.43	1.30	1.73	6.73	9.27	−10.01	4.21	4.23	3.76	
86642	9.30	20.47	1.15	1.40	16.13						
86722	9.67	−0.84	2.12	2.08	5.44						
86782	−3.97	−4.05	1.22	1.27	4.36						
86819	4.92	9.99	3.86	2.89	7.66						
86997	6.81	−6.91	2.64	2.65	3.66						
87034	−5.58	−17.25	4.47	3.18	5.98	−28.13	−17.85	9.54	7.02	4.24	
87035	−1.80	12.66	4.90	3.27	3.89						
87098	−4.51	−0.60	1.25	1.40	3.61						
87114	0.86	4.56	1.26	1.26	3.64						
87118	3.44	9.20	1.17	2.07	5.88						
87212	−6.82	−5.28	1.15	1.18	6.87						
87222	3.99	−11.14	2.70	2.57	4.34						
87304	16.09	3.36	6.26	4.34	4.33						
87429	27.33	−15.97	7.84	5.40	3.58						
87494	−7.29	−7.24	2.16	1.75	5.79						
87496	7.68	−2.73	2.58	1.69	3.62						
87655	0.31	−8.83	1.81	1.62	5.82						
87730	−2.79	−6.25	1.67	1.68	3.72						
87822	−6.25	3.77	1.82	1.49	3.81						
87931	−4.42	0.87	1.22	1.25	3.63						
88033	4.71	10.50	5.53	3.46	3.67						
88188	3.84	−17.83	2.68	2.90	6.54						
88281	−6.83	−2.80	2.65	1.75	3.54						
88301	−6.57	−7.65	3.87	3.04	4.27						
88345	17.94	10.70	7.79	3.81	3.61						
88446	70.55	15.53	15.71	34.84	4.77	−165.54	51.25	47.16	90.77	3.95	
88471	3.66	−1.25	1.27	1.40	3.61						
88565	9.82	−1.36	1.03	1.05	9.80						
88595	−9.03	−1.86	4.07	2.79	3.79						
88686	−1.10	5.38	1.11	1.45	3.90						
88732	0.88	−1.50	2.35	2.53	0.87	−21.13	−3.10	5.52	11.01	3.85	
88756	8.52	−4.35	2.75	2.28	3.73						
88767	−4.68	−8.10	2.03	2.13	4.23						
88788	−3.86	15.28	1.50	1.59	9.74	−10.10	−20.73	4.39	3.95	5.36	
88889	3.25	−8.12	1.59	1.86	4.86						
88903	11.00	4.25	3.77	2.12	3.48						
88917	−34.94	0.23	4.87	3.07	7.19	−2.75	39.84	19.41	10.25	4.98	
88949	12.10	3.33	5.43	2.38	3.80						
89010	8.21	−7.43	4.44	2.33	3.61						
89042	−0.28	−4.29	1.72	1.07	4.11						
89105	17.19	−9.39	6.51	3.67	3.93						
89154	−3.88	−8.26	2.00	2.06	4.04						
89181	−5.95	3.41	1.95	1.36	3.63						
89193	−0.98	9.19	2.35	2.76	3.62						
89270	10.04	7.89	2.34	2.33	4.63						
89292	8.85	−5.17	2.75	1.95	3.51						
89363	15.26	−2.26	3.96	2.19	3.85						
89387	−16.81	−9.17	5.75	4.64	3.48						
89392	9.42	2.96	3.53	2.12	4.31						
89485	7.74	−7.69	3.56	2.07	4.00	−42.31	−1.60	9.72	5.70	4.35	
89521	−6.93	9.32	2.37	1.79	5.85						
89581	9.58	10.22	3.42	3.79	3.78						
89601	−3.80	−3.80	1.78	1.43	3.46						
89606	−6.26	11.99	2.72	1.73	7.25						
89663	10.42	0.50	1.72	1.83	6.14						
89707	−7.28	16.08	5.03	4.65	3.54						
89724	9.88	2.17	3.31	1.98	4.81						
89977	8.02	4.07	2.33	2.53	3.45						
90041	4.24	3.96	1.86	1.38	3.51						
90083	0.31	11.07	2.10	1.40	8.59						
90098	−19.34	3.52	3.07	2.00	6.51	−24.73	27.43	13.69	6.38	4.59	
90112	1.59	−11.93	7.34	3.72	3.45						
90135	−6.85	−7.06	1.59	1.19	8.81						
90163	0.99	5.66	1.51	1.23	4.72						
90207	10.63	4.48	2.26	1.55	5.68						
90217	10.92	−6.00	3.54	1.96	3.69						
90271	11.11	−8.51	1.91	1.69	6.82						
90272	−7.63	−8.74	3.31	2.52	4.39						
90276	1.30	6.61	1.75	1.91	3.50						

No. HIP	Acceleration at J1991.25 $g_{\alpha*}$ mas/yr^2	g_δ	$\sigma_{g_{\alpha*}}$ mas/yr^2	σ_{g_δ}	F_g	Third-Order Motion at J1991.25 $\dot{g}_{\alpha*}$ mas/yr^3	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$ mas/yr^3	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	Note N
1	2	3	4	5	6	7	8	9	10	11	12
90292	10.72	12.37	4.70	2.61	7.56						
90335	2.54	−8.49	2.12	1.90	4.56	−17.41	10.40	4.85	4.60	4.34	
90632	17.73	−13.10	2.88	2.25	10.49						
90884	−6.90	−9.03	2.03	1.40	7.59						
91007	−3.63	−7.22	3.09	2.08	3.47						
91065	11.14	−0.33	2.00	1.49	5.66						
91076	9.46	−10.38	5.66	3.02	3.46						
91101	7.44	−1.88	2.08	2.19	3.77						
91151	3.60	−3.77	1.41	1.65	3.94						
91201	0.60	7.72	2.54	2.01	3.85						
91215	8.74	1.43	2.46	1.65	3.79						
91240	−4.12	−9.60	3.97	2.67	3.61						
91289	0.09	−5.55	1.80	1.60	3.48						
91350	−3.60	25.32	4.40	4.88	5.20	1.61	−38.90	16.14	11.32	3.73	
91356	3.62	5.81	1.43	1.48	4.43						
91415	0.83	−6.64	2.18	1.29	5.15						
91421	−0.97	9.82	1.51	1.55	6.44						
91426	−9.32	−12.79	5.53	3.40	3.90						
91435	1.41	−12.44	2.08	1.69	7.38						
91508	−11.95	7.06	4.74	2.12	3.91						
91527	4.38	−8.10	3.81	2.25	3.73						
91534	1.04	−5.27	2.10	1.53	3.50						
91598	7.50	−1.65	2.12	1.48	3.54						
91626	22.12	31.03	7.97	5.21	6.59	111.25	−58.65	35.27	13.35	4.46	
91665	8.26	23.51	4.46	3.36	7.01	3.72	−30.86	8.72	6.03	5.21	
91674	−9.14	−3.70	1.12	1.30	8.74						
91780	12.62	−3.55	2.50	2.61	5.45						
91845	−1.56	−4.97	1.79	1.03	4.86						
91927	−7.48	1.15	1.49	1.97	5.22						
91937	1.52	−7.99	1.90	1.76	4.80						
91997	−7.75	−2.90	1.36	2.23	6.44						
92040	−5.58	−8.45	1.13	1.10	8.58						
92059	163.44	−9.64	58.78	29.25	3.91						
92161	−15.06	2.35	1.74	1.39	10.39						
92205	−2.63	7.83	3.96	2.84	4.81						
92258	−15.93	4.27	2.63	3.00	6.07	32.22	−6.18	6.71	9.20	4.89	
92262	−5.20	3.50	1.99	1.09	3.93						
92308	−8.65	4.38	2.60	1.23	4.46						
92342	27.35	12.04	5.39	3.86	6.28						
92352	−9.59	−2.78	1.08	1.16	9.01						
92415	3.58	−11.68	4.86	2.03	5.85						
92461	3.77	−4.34	1.86	1.46	3.83						
92511	10.38	−8.65	4.37	3.06	4.23						
92527	10.72	−12.29	5.36	2.31	5.44						
92551	3.26	3.31	1.01	1.21	4.17						
92574	4.77	6.39	2.11	1.66	3.93						
92605	1.14	6.38	2.43	1.70	3.77						
92689	−15.25	2.80	1.91	2.07	8.04	25.46	29.91	4.84	6.11	6.77	
92691	−1.77	−4.95	1.37	1.48	3.54						
92741	8.02	−8.82	2.69	2.09	5.62						
92845	−2.51	−5.66	3.64	2.33	2.69	−1.80	23.53	8.70	6.71	3.63	
92864	6.19	−7.87	5.15	2.02	4.07						
92872	3.50	9.22	1.46	1.02	9.61						D
92879	−8.22	−0.26	1.95	1.45	4.35						
92891	4.07	−1.89	1.10	1.29	4.04						
92931	−1.29	7.36	3.42	2.27	3.61						
92958	−3.92	6.35	3.47	1.48	4.40						
92959	12.22	13.70	4.07	2.61	5.57						
93085	21.32	−11.96	3.63	2.42	6.68						
93176	−0.23	−7.93	1.44	2.32	3.51						
93189	14.71	−10.87	5.43	3.78	3.48						
93261	19.31	−18.14	10.07	5.29	3.70						
93305	−1.94	−10.44	1.91	2.82	3.93						
93320	−4.32	−21.90	4.67	5.93	3.69						
93342	7.28	−3.17	1.72	1.24	4.70						
93441	4.54	−3.62	2.08	1.35	3.74						
93455	2.65	7.00	3.83	1.85	3.81						
93507	−9.04	−4.72	3.16	1.55	4.79						
93546	−1.63	24.52	4.07	2.60	9.43	−6.97	−20.23	19.79	6.42	3.99	
93571	−9.93	−9.78	2.16	1.90	5.97						
93619	19.72	−8.30	7.07	7.15	4.02						
93640	6.58	1.47	1.21	1.62	5.49						
93652	8.39	−3.25	2.02	1.41	4.79						
93709	−9.08	−5.77	2.78	1.97	3.46						
93795	−6.04	−5.78	2.28	1.47	4.45						
93797	−44.36	−44.10	6.71	5.50	9.77	37.73	56.24	12.69	10.69	5.74	
93814	1.70	−4.81	2.11	1.51	3.94						
93815	−9.51	−3.71	3.63	1.24	4.69						
93823	13.94	−7.10	4.52	1.86	4.43						
93844	−6.82	−4.96	2.63	1.23	5.02						
93860	0.07	−11.57	2.94	1.92	6.63						
93878	−12.49	−1.73	3.65	2.24	3.45						
93892	−1.55	−6.15	1.94	1.39	4.89						
94035	12.81	2.91	4.24	1.73	3.47						
94111	−10.20	10.97	5.36	1.75	6.29						
94236	5.04	8.74	1.70	1.05	9.01						
94257	5.94	18.45	2.94	5.80	3.53						
94371	−20.36	1.79	2.71	3.43	8.12						D
94478	4.96	−9.32	3.65	2.74	3.51	3.71	21.48	7.72	6.09	3.75	
94638	0.28	−4.32	1.91	1.20	3.64						
94648	6.07	−9.80	1.43	1.65	6.79	−12.00	7.40	3.67	3.56	3.83	
94666	1.85	10.88	1.40	2.12	5.39						
94668	−23.07	26.31	8.00	2.80	9.40						
94735	6.33	4.76	2.66	1.40	4.12						
94751	−1.75	−5.00	1.87	1.39	3.64						
94810	4.05	−5.58	1.45	2.04	3.83						
94917	5.18	3.40	1.98	1.16	3.97						
94997	64.13	−7.26	15.27	8.13	4.61						
95028	−5.92	−1.58	1.61	1.55	3.87						
95067	1.16	−6.21	1.06	1.86	3.45						

No. HIP	Acceleration at J1991.25 $g_{\alpha*}$ mas/yr^2	g_δ	$\sigma_{g_{\alpha*}}$ mas/yr^2	σ_{g_δ}	F_g	Third-Order Motion at J1991.25 $\dot{g}_{\alpha*}$ mas/yr^3	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$ mas/yr^3	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	Note N
1	2	3	4	5	6	7	8	9	10	11	12
95149	−2.19	29.57	9.65	5.96	6.57	−0.69	−26.70	15.12	9.12	3.53	
95158	9.06	2.99	2.62	1.55	4.57						
95203	−7.74	−11.13	2.39	1.20	10.19						
95221	13.62	0.53	1.89	1.14	7.22						
95239	−8.71	−12.39	3.99	3.23	4.07	75.02	22.75	18.74	6.08	6.05	
95241	10.16	17.38	4.00	2.30	7.91	−37.64	−28.55	17.97	5.23	7.50	
95260	2.60	−2.52	1.35	2.19	2.05	−20.74	−14.40	5.69	10.96	4.23	
95271	−2.90	7.24	1.65	1.69	4.81	−29.02	−16.52	6.68	5.89	4.54	
95282	−6.71	4.29	1.85	1.46	4.98						
95287	11.37	−1.35	1.49	1.10	7.65						
95294	9.16	−2.49	3.69	0.93	3.53						
95309	−3.70	−8.29	2.08	1.81	4.91						
95383	−3.02	8.92	1.64	2.52	3.54	−12.18	−15.99	4.48	6.75	4.21	
95423	−0.20	7.43	1.37	1.97	3.79						
95453	8.69	−3.72	3.03	2.20	3.36	−24.32	−22.42	6.67	4.68	5.90	
95457	2.45	5.17	2.50	1.30	4.08						
95469	−3.53	9.10	4.50	1.49	6.11						
95476	0.56	−13.83	1.93	3.91	3.54						
95499	0.43	5.90	2.79	1.49	3.99						
95595	14.33	4.29	3.80	2.96	4.09						
95626	4.25	−8.92	1.73	2.33	4.14						
95677	−5.18	−3.90	2.04	1.01	4.13						
95696	10.10	17.23	4.34	3.09	6.20	−9.27	−32.97	9.13	7.05	4.76	
95717	−2.72	−7.99	1.55	1.32	6.81						
95720	13.50	−12.25	1.35	2.04	10.44	−37.42	46.80	3.88	7.26	10.13	
95770	6.10	−9.89	1.49	2.42	5.71	−4.93	37.07	4.56	10.71	3.47	
95809	29.01	4.55	8.22	3.33	3.82						
95820	1.66	3.90	1.85	1.09	3.63						
95827	−12.89	−5.71	7.35	1.75	3.98						
95878	6.26	−5.72	1.91	1.43	5.83						
95893	−9.57	6.20	2.41	1.49	7.75						
95908	−7.90	3.73	1.21	1.70	6.61						
95924	−7.47	5.01	2.74	1.91	3.65						
95982	−4.21	12.14	4.72	2.41	5.15						
95992	2.49	12.15	1.98	2.27	6.10	−27.20	4.66	5.39	7.36	5.14	
96043	11.79	−5.48	3.90	2.23	3.92						
96239	15.70	−6.60	4.69	3.49	4.33						
96431	3.84	−13.00	7.34	3.85	3.89						
96608	−4.75	−1.79	1.70	1.38	3.55						
96642	−1.16	−8.05	1.95	2.34	3.47						
96651	−5.55	3.51	1.80	1.81	3.58						
96662	3.65	−6.26	1.53	1.27	5.86						
96679	1.62	7.08	1.12	1.23	5.85						
96754	−6.93	−4.58	2.37	1.24	4.20						
96769	−9.52	2.09	2.78	1.46	4.13						
96807	−9.33	−1.76	2.45	0.94	4.42						
97071	5.10	5.23	2.11	1.80	3.45						
97077	4.85	−0.72	1.10	1.63	4.46						
97080	39.96	9.05	12.69	4.20	3.77						
97144	−0.66	−4.52	1.95	0.89	5.54						
97173	−2.74	3.69	2.94	1.29	3.70						
97176	−3.53	−8.27	3.13	2.52	3.64						
97302	15.76	2.14	3.82	2.19	4.19						
97312	−9.06	16.25	5.91	4.61	3.58						
97321	−14.92	9.03	1.45	1.68	11.57	43.16	6.21	3.90	5.04	11.08	
97334	−4.86	6.06	1.95	2.02	4.17						
97351	8.72	3.83	2.19	1.19	4.31						P
97353	−14.52	−9.05	4.68	2.85	4.09	−0.13	24.25	13.22	6.03	4.12	
97370	3.52	−7.82	4.81	1.95	4.25						
97387	−4.61	4.14	1.53	1.61	3.80						
97393	3.05	9.48	2.47	1.35	7.84						
97439	−5.67	−4.42	1.72	2.23	3.63						
97446	3.21	−4.61	1.25	1.27	4.24						D
97512	25.06	22.80	8.16	5.10	4.59						
97598	−1.82	3.94	4.28	1.23	3.50						
97613	−3.40	4.30	3.11	2.32	4.12						
97676	−12.54	−28.96	4.05	4.48	6.49						
97691	−3.08	−7.05	3.92	2.05	3.49						
97744	−9.44	5.89	1.88	2.58	5.20	18.98	−6.17	4.97	5.56	3.88	
97745	−3.04	11.23	2.59	2.37	5.43						
97752	−7.30	−0.63	1.32	1.81	5.54	13.78	14.77	3.95	4.41	4.58	
97783	9.08	−20.20	3.92	2.96	9.14	−34.10	33.60	8.61	6.47	8.92	
97850	−7.59	4.38	4.53	2.95	3.47						
97866	−8.23	−12.94	5.38	3.95	3.51						
97977	−11.06	6.05	5.80	5.61	3.62						
98006	−12.65	3.81	2.17	2.10	5.84	17.38	9.84	5.24	5.58	3.68	
98066	−3.65	−34.70	2.48	1.33	30.66						
98108	9.75	6.37	3.17	2.03	3.97						
98138	−1.83	3.13	1.23	1.85	2.39	−11.57	17.52	3.58	4.29	5.08	
98144	1.54	−7.12	4.55	3.23	2.25	−39.73	−29.95	14.87	10.30	3.78	
98152	8.29	−4.86	2.71	1.49	5.92						
98153	−12.14	−20.28	4.25	5.19	3.92						
98156	−3.01	−4.82	1.61	1.41	4.11						
98169	−2.82	4.03	1.47	1.09	3.71						
98180	15.03	−16.11	8.78	4.63	3.51						
98226	1.30	−11.35	3.48	2.17	5.76						
98258	11.95	−4.12	3.44	3.14	4.84						
98351	5.57	−3.26	3.06	1.82	3.52						
98398	−8.30	−10.60	3.03	2.99	3.66						
98411	30.71	11.13	9.68	6.24	3.83						
98478	10.56	−6.86	1.43	1.58	7.56	−8.27	−22.87	5.13	3.88	6.37	
98490	−3.90	−3.08	1.34	1.09	4.35						
98533	1.11	6.64	1.71	1.25	5.36						
98541	−6.99	−1.48	1.87	1.55	4.06						
98555	8.30	−5.79	4.16	4.06	3.58						
98570	−2.54	9.52	3.57	3.20	3.95						
98609	0.26	−3.69	0.90	0.95	3.95						
98646	13.26	−10.97	3.54	3.84	5.22						
98647	−4.15	3.04	1.23	1.86	4.31						
98704	0.47	−17.71	2.40	2.34	7.59	3.80	20.16	6.64	5.59	3.70	

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
98729	6.29	0.82	1.85	1.51	3.52						
98768	−5.34	6.33	2.34	1.96	3.67						
98829	−9.89	−13.10	2.47	3.10	5.79	19.49	27.62	6.81	8.04	4.37	
98860	−10.41	−6.59	3.37	2.50	3.49						
98878	−45.77	−12.68	5.59	2.23	8.64						
98946	−1.40	−10.93	1.33	1.76	6.50	4.31	12.73	4.56	3.87	3.70	
98948	8.85	6.20	3.36	1.66	3.77						
98954	−10.49	−5.04	3.60	2.48	3.66	0.60	−46.56	10.81	12.02	3.93	
98972	17.56	4.63	5.79	2.97	3.52						
98974	−13.21	0.94	4.06	3.29	4.04						
99013	−0.09	5.66	1.44	1.27	4.57						P
99090	−5.79	6.70	1.07	1.29	8.24						
99149	−0.96	11.43	5.88	1.94	6.85						
99184	−16.27	14.01	8.15	3.10	5.92						
99245	−19.72	2.73	5.70	2.28	4.22						
99289	−4.84	8.33	7.07	2.58	3.99						
99297	0.65	13.57	7.44	2.66	5.50						
99321	−3.50	7.56	1.33	1.16	6.92						
99389	−24.68	3.42	6.36	5.62	3.90						
99420	−5.97	3.13	1.08	1.16	6.03						
99500	3.67	−1.33	1.06	0.99	3.62						
99522	12.81	3.07	3.38	3.04	3.80						
99588	6.32	13.24	3.78	3.46	4.07						
99608	−2.08	8.35	4.18	3.42	3.44						
99611	16.17	3.96	5.08	2.59	3.35	2.27	37.24	15.54	10.20	3.81	
99631	−3.10	7.00	4.60	1.57	5.14						
99708	2.12	12.27	4.04	3.50	3.75						
99714	5.91	9.88	3.08	2.45	4.09						
99731	4.60	−1.07	1.06	1.27	4.47						
99863	−0.36	−5.40	1.03	1.31	4.13						
99893	−7.11	−0.55	1.48	1.66	4.87	15.21	1.37	4.67	3.89	3.45	
100040	4.29	−1.96	3.63	3.07	1.30	−29.09	3.30	7.56	6.60	3.85	
100041	1.64	−5.50	1.43	1.62	3.54						
100043	9.32	−3.88	2.11	1.65	4.76						
100057	−15.54	−9.98	5.54	2.49	4.24						
100081	−4.77	1.65	1.23	1.08	4.09						
100129	−21.00	−8.17	3.91	3.88	5.63						
100142	−4.10	−1.03	1.27	1.22	3.49						P
100201	2.58	21.75	3.51	3.12	6.98						
100244	6.71	14.87	5.59	2.96	5.04	50.76	48.06	17.94	10.73	4.62	
100437	−5.47	−5.66	1.53	1.55	5.64	5.44	15.30	3.85	3.47	4.85	
100441	5.73	3.34	1.62	1.74	3.61						
100463	11.71	12.35	3.35	2.81	4.65						
100802	−20.01	12.77	6.89	8.55	4.28						
100934	−0.48	−8.00	4.33	2.70	3.96						
101023	2.96	3.63	1.39	1.64	3.79						P
101078	−3.49	7.08	2.06	2.16	3.97						
101126	−1.56	7.17	2.45	2.24	3.76						
101143	5.28	5.46	3.48	2.53	2.86	−58.86	−19.36	16.40	7.75	3.67	
101144	6.57	−10.18	1.79	2.69	4.30						
101184	−10.73	−7.35	1.25	1.23	10.36						
101192	−12.70	−1.23	3.07	2.27	4.38						
101217	4.13	13.99	7.21	4.05	3.55						
101224	7.91	−12.61	6.83	3.68	3.98						
101234	−18.11	−0.49	1.57	2.52	11.59	21.41	−7.48	4.73	5.39	4.71	
101260	−5.51	−6.42	1.55	1.59	4.86	−6.66	14.55	4.31	3.48	4.54	
101285	−5.48	−0.36	1.13	1.00	4.89						
101344	−6.38	1.01	6.82	4.07	0.98	41.15	70.12	15.95	9.90	7.20	
101427	1.86	−6.34	1.29	1.05	6.22						
101483	−32.01	−7.27	2.86	2.04	12.42	1.40	18.29	10.29	5.55	3.45	
101517	1.99	−4.61	1.60	1.75	2.64	12.64	7.97	4.63	5.87	4.58	
101526	−6.96	−16.22	2.73	2.66	6.11						
101675	0.19	−10.14	3.47	2.18	4.72						
101684	−6.58	4.08	1.99	1.44	4.03	−19.68	−15.30	6.17	4.15	5.01	
101867	−6.51	15.43	1.69	1.21	15.09						
101941	7.17	−0.61	1.89	1.54	3.86						
101965	−2.00	8.20	1.46	1.28	6.43						
102007	3.34	6.03	3.03	1.66	3.70						
102021	14.83	2.47	4.44	2.93	3.44						
102076	5.46	−4.74	4.61	3.19	1.94	−42.83	30.14	19.25	7.11	5.49	
102093	−0.17	7.87	2.34	1.87	4.23						
102107	−4.15	−9.70	3.49	2.79	3.50						
102145	8.77	4.99	2.77	2.35	4.10						
102177	2.51	−4.50	1.65	1.29	3.59						
102332	−20.77	0.27	10.14	6.38	2.06	−101.67	62.96	32.47	28.70	5.67	
102357	15.80	−0.06	4.29	3.19	3.98						
102388	5.50	−2.47	2.14	1.28	3.53						
102431	−3.10	1.70	1.02	0.97	3.47						
102443	4.53	5.53	1.91	1.73	3.78						
102497	9.39	2.34	2.66	1.53	3.53						
102502	4.66	6.87	1.45	1.82	4.84	18.64	−15.53	4.21	4.31	5.62	
102556	−3.70	−6.36	1.98	2.64	4.05						
102626	−35.22	−10.80	3.59	3.17	10.92						
102642	5.21	−11.43	1.94	1.65	6.93						
102688	17.44	8.96	3.32	2.53	5.76						
102693	7.49	13.79	2.30	1.72	8.18						
102703	−16.82	−2.86	4.22	1.54	4.15						
102726	−25.05	−22.18	6.80	7.47	3.86						
102732	18.14	10.21	5.83	7.63	3.88						P
102738	−4.33	−11.39	3.72	3.20	3.60						
102749	3.43	2.70	1.14	1.23	4.20						
102758	−0.73	6.09	2.28	1.41	4.41						
102809	1.03	13.61	4.78	3.90	3.49						
102824	−5.16	1.05	1.42	1.63	4.06						
102827	−4.86	0.66	1.22	1.25	3.98						P
102878	4.87	3.93	2.76	1.55	2.83	−51.08	−16.47	12.72	4.74	4.48	
102914	−18.21	28.13	8.21	4.62	6.69						
102922	3.57	13.50	3.40	3.83	3.68						
103004	3.55	−8.16	1.41	1.49	6.69	21.37	−4.72	4.70	4.19	5.26	
103019	14.04	−16.30	5.11	4.08	6.70						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
103081	−9.11	4.46	2.61	1.44	4.65						
103102	−11.38	0.93	3.23	2.22	3.72						
103115	8.57	3.09	2.15	1.71	4.50						
103260	−6.42	3.78	2.47	1.31	3.78						
103278	−4.11	0.44	1.02	1.46	4.49						
103399	−2.57	−5.90	2.87	1.54	3.83						
103465	−16.26	5.70	5.50	4.38	3.76						
103528	−0.57	−1.38	1.44	2.57	0.66	14.47	11.43	3.78	4.77	4.63	
103609	−16.45	20.71	5.96	3.38	7.23						
103626	2.85	−14.85	4.23	3.72	4.74						
103640	6.96	−3.19	2.77	2.51	3.59						
103671	25.44	1.69	6.75	3.22	3.87						
103678	−4.00	−6.99	3.76	2.74	2.60	61.16	−4.30	15.50	9.51	4.20	
103681	3.15	14.03	4.83	2.42	5.81	−16.40	−44.73	19.01	9.38	5.88	
103688	7.00	−7.63	5.57	2.08	5.05						
103744	−6.96	3.26	3.05	1.45	3.68						
103793	−2.66	−6.06	1.35	1.88	3.78						
103814	14.41	−6.21	4.12	2.77	4.94	−7.45	20.75	8.19	5.70	4.40	
103955	4.62	0.51	1.33	1.21	3.65						
103956	3.29	−2.21	1.05	0.94	3.72						
103987	−11.85	−18.11	5.38	2.99	6.10	−13.16	29.03	16.82	6.85	4.55	
104096	0.39	−1.61	3.37	3.72	0.47	−12.38	−44.18	11.77	11.01	4.01	
104097	7.18	−8.07	5.65	3.62	3.47						
104101	−23.13	20.45	4.87	3.02	8.77	46.95	4.52	11.92	7.26	3.96	
104114	−2.16	−8.94	2.86	2.54	3.52						
104116	11.57	8.09	3.57	3.16	4.21						
104190	−0.79	−10.15	1.53	2.53	4.11	−2.07	36.60	3.86	5.20	7.04	
104219	8.97	6.80	4.85	2.39	3.05	−51.30	−7.42	12.56	6.44	4.09	
104305	6.00	−2.62	2.25	1.35	3.86						
104309	3.65	−7.20	1.23	2.04	3.97						
104323	−11.18	−2.64	2.17	1.83	5.66	15.47	−11.26	6.22	4.35	3.47	
104339	−6.24	−8.28	2.73	2.28	4.30						
104347	8.77	−4.99	1.48	1.90	6.05						
104351	33.34	57.79	12.57	9.75	5.97						
104441	12.34	4.25	3.67	2.50	3.37	−29.22	35.43	10.74	5.55	8.34	
104454	4.45	−1.97	1.25	1.39	3.81						
104481	1.68	−27.79	3.97	1.79	15.94						
104486	−6.89	−1.51	1.92	1.62	3.62						
104518	−5.45	−2.88	1.62	1.71	3.48						
104538	22.80	−2.92	3.67	1.61	6.28						
104668	9.52	−3.90	3.23	2.00	3.64						
104732	−2.26	4.53	1.17	1.23	4.29						
104750	−1.32	−8.80	2.36	1.13	7.81						
104897	−28.11	3.06	6.59	1.41	4.58						
104911	−10.44	−7.10	5.61	3.75	2.60	9.98	26.69	13.64	7.61	3.53	
104969	−5.22	−0.08	1.39	1.24	3.76						
104989	5.64	−6.71	2.30	1.98	4.32						
105027	11.62	7.91	3.82	2.67	3.62						
105091	−3.43	−0.84	0.97	1.01	3.66						P
105102	−2.48	−1.19	0.85	1.02	3.52						
105138	−5.88	−3.26	0.67	1.00	10.14						
105141	11.71	−0.71	3.00	1.92	3.92						
105214	−12.57	1.53	1.43	1.23	9.21						
105241	−22.34	12.56	7.11	4.47	4.47						
105253	−2.84	10.44	7.13	3.01	3.50						
105294	−2.51	14.81	2.17	2.49	5.96						
105305	−2.41	6.53	1.92	1.73	3.96						
105350	13.07	0.47	3.54	1.91	3.73						
105358	−4.17	6.02	3.06	1.88	3.97						
105359	−18.15	−22.93	11.81	6.55	4.53	115.92	36.34	31.42	15.28	5.25	
105404	−13.47	13.03	5.02	2.67	4.88	55.77	3.43	11.28	8.59	4.94	
105406	4.27	−1.41	0.84	1.03	5.08						
105410	12.46	−3.72	3.88	2.49	4.09	−10.10	19.45	11.04	6.24	3.55	
105496	1.95	19.19	4.19	3.65	5.27						
105504	20.90	−9.51	10.79	3.20	3.70						
105511	2.40	13.84	1.32	1.04	13.38						
105662	4.47	−3.37	2.12	1.29	3.90						
105667	23.47	−1.92	5.66	2.50	4.15						
105676	−2.39	−6.04	0.99	1.38	5.81						
105695	1.77	−4.69	1.96	1.66	3.68						
105734	7.22	−7.63	5.75	2.24	3.46						
105761	23.93	−1.58	6.72	1.92	3.69						
105818	−7.29	5.09	1.60	1.51	7.03						
105820	−7.23	5.31	1.87	2.11	4.08						
105879	3.47	6.99	1.77	1.47	4.76						
105893	5.27	−0.16	1.22	1.30	4.33						
105903	−3.13	−4.97	1.30	1.22	4.48						
105906	−25.20	−18.72	2.40	1.93	15.04	41.33	−14.53	8.51	5.76	4.87	
105911	−3.94	7.15	2.00	1.74	5.70						
106170	−8.03	2.07	1.80	1.52	4.52						
106274	6.35	−4.43	1.59	1.52	5.27						
106300	−6.54	−1.54	1.83	1.45	3.58						
106311	15.55	−1.00	2.44	2.50	6.40	−14.86	−42.15	7.78	7.29	6.89	
106409	−7.75	5.90	1.66	1.46	5.10						
106560	0.74	5.18	3.36	2.08	2.62	−28.82	−12.36	7.99	6.68	3.88	
106641	−12.74	−6.85	2.37	1.58	6.22						
106657	4.88	−0.87	1.14	1.53	4.28						
106705	−0.99	12.87	2.86	2.25	6.39						
106781	−24.91	4.00	3.43	2.59	9.08						
106831	16.06	−13.13	6.95	4.71	3.67	140.98	−11.59	34.03	12.87	4.22	
106863	−0.23	4.92	1.38	1.41	3.52						
106968	−8.46	1.56	2.40	1.16	3.56						
106971	−9.21	−1.89	2.00	1.78	4.64						
107186	−4.62	−5.06	1.33	1.38	5.77						
107297	−6.87	7.36	2.16	1.59	6.03						
107463	6.44	−6.53	2.71	1.98	4.61						
107466	9.29	−16.12	2.71	2.93	6.36	−30.15	21.92	7.50	7.26	5.22	
107477	−7.56	0.64	2.13	1.62	3.72						
107498	12.39	7.43	2.88	2.57	4.67						
107596	−5.00	6.56	3.15	1.42	4.96						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
107627	11.36	9.61	3.04	1.78	5.88						
107630	3.98	−6.59	2.48	1.71	4.53						
107663	−8.06	−6.47	2.64	2.14	3.67						
107731	12.12	0.33	3.74	1.94	3.28	−8.32	−22.47	8.18	6.19	3.73	
107735	−7.76	−5.06	4.37	1.49	3.92						
107816	7.28	7.50	3.37	1.80	4.95						
107834	−1.55	7.49	2.28	1.31	5.95						
107835	−4.84	−1.37	1.29	1.11	4.21						
107958	9.41	0.58	1.40	1.89	7.06						
108085	4.70	−7.50	1.85	1.10	7.45						
108142	9.80	3.74	2.94	1.81	3.69						
108172	−5.61	1.90	1.28	1.59	4.64	15.56	12.10	3.62	4.14	5.03	
108232	−5.74	−0.11	1.23	1.14	5.01						
108258	4.22	5.89	1.41	1.33	4.74						
108287	−1.32	−4.75	1.27	1.31	3.66						
108340	−7.45	1.15	1.58	1.74	4.73	4.77	16.54	5.25	4.77	3.73	
108391	−5.73	11.60	3.05	3.23	3.75						
108398	4.86	5.81	2.29	2.00	3.70	−21.49	−5.43	5.95	4.88	3.74	
108401	8.18	3.05	1.78	1.58	4.66						
108560	−6.66	−6.47	5.75	2.27	3.07	64.47	−21.57	17.64	7.50	4.28	
108866	−2.68	6.07	2.01	1.91	4.05						
108898	−5.82	−4.80	2.42	1.64	3.46						
108940	−2.23	−14.35	6.00	3.97	3.64						
108964	−14.03	3.68	4.29	1.78	3.55						
108966	−4.93	−11.98	1.92	2.77	4.39	27.85	14.72	8.62	11.89	3.51	
109011	10.12	9.81	4.43	2.55	4.19						
109065	8.67	3.43	1.13	1.07	7.93						
109101	−17.61	3.26	4.77	2.78	4.27						
109122	12.63	18.80	3.22	1.94	10.10	−19.96	20.00	11.62	5.75	3.61	
109126	5.17	6.17	1.56	1.41	5.07						
109128	5.64	−5.80	3.04	2.56	3.48						
109137	−3.56	6.11	1.89	1.99	4.15						
109158	16.45	−2.54	3.85	3.44	4.28						
109221	−7.56	9.53	2.36	2.06	6.75						
109226	−0.82	6.73	4.83	1.91	4.09						
109234	5.97	−2.06	1.41	1.96	4.96						
109352	2.90	−2.45	0.86	1.39	4.73						
109361	0.65	−5.15	1.25	1.54	3.63						
109427	5.46	−8.93	2.67	1.73	5.73						
109443	−8.09	8.20	2.86	2.07	4.94	38.27	4.77	6.23	4.92	6.15	
109470	−21.79	−2.60	3.13	2.43	7.03	21.65	33.89	8.59	6.14	5.94	
109521	−12.31	10.96	1.10	1.07	15.11						
109640	−8.69	−0.88	2.42	2.42	3.69						
109676	17.33	6.25	4.46	5.04	3.99						
109693	−7.00	2.78	1.41	1.05	6.07						
109727	0.47	4.24	1.14	1.22	3.50						
109736	−11.40	−5.00	3.08	2.00	4.22						
109800	0.93	7.37	1.88	2.21	3.55						
109839	−5.04	−6.73	2.56	1.86	3.70						
109857	10.22	−5.66	1.31	1.68	9.63	−19.32	−25.96	4.35	4.16	6.57	P
109871	−6.66	−6.41	3.03	1.90	3.78						
109895	3.94	−8.36	3.74	2.21	4.20						
109947	−11.81	−2.11	3.30	2.45	3.58						
109973	0.37	−6.72	2.06	1.94	4.17						
110035	−13.90	1.56	3.89	1.78	3.58						
110048	−6.37	5.13	2.22	2.03	3.44						
110098	−10.65	1.13	2.73	2.56	4.11						
110240	−4.28	−6.38	2.50	1.53	4.42						
110355	−9.21	−0.08	1.30	1.49	7.76	15.01	−7.89	3.52	3.71	4.31	
110358	−1.89	−5.49	2.97	1.61	3.71						
110369	−1.40	−8.70	3.08	2.31	3.88						
110388	−10.38	−5.76	3.75	2.17	3.66						
110439	19.30	6.97	4.02	3.12	4.85	−47.03	−7.98	12.40	8.54	3.80	
110468	−7.49	6.13	2.16	2.38	5.39						
110486	−3.84	3.39	1.52	1.65	4.39						
110514	−13.95	−14.37	8.12	4.25	4.96						
110574	18.72	−5.96	3.60	2.87	6.21	−41.36	−0.88	13.69	15.11	3.46	
110580	12.02	5.50	3.85	2.07	4.07						
110624	−7.16	1.95	2.67	2.16	3.85						P
110626	2.85	−6.14	2.10	1.71	4.16						
110660	23.62	−3.80	6.05	5.44	4.46						
110704	−6.07	2.20	1.25	1.11	5.70						
110729	−6.66	1.46	1.89	1.53	3.56						
110841	−5.25	3.23	1.76	1.62	3.60						
110978	−9.67	8.51	6.63	4.85	4.02	−68.85	8.31	16.61	13.57	5.66	
111004	5.68	−5.83	2.95	2.69	3.99						
111045	20.74	−7.12	2.55	2.36	11.69						
111127	13.05	1.10	2.88	1.69	4.55	−20.62	−15.12	8.46	5.50	3.45	
111132	1.05	6.40	1.44	1.43	4.49						
111292	−8.48	−1.10	2.34	2.68	3.68						
111381	−6.18	−6.13	3.56	2.11	3.85						
111442	5.24	7.33	1.33	1.27	6.28						
111541	15.31	−4.87	4.14	1.83	4.09	−12.44	−17.78	9.59	5.17	3.84	
111560	−10.57	−1.03	2.52	1.92	4.21						
111691	−0.08	7.27	3.61	2.01	3.71						
111707	6.21	−5.68	2.41	2.01	4.16	21.06	25.39	6.24	5.15	5.64	
111738	8.13	−0.72	2.14	1.79	4.05						
111759	−17.95	10.23	5.71	2.96	4.39						
111835	20.86	41.60	10.50	8.10	5.23	−6.87	−74.58	30.32	18.28	4.21	
111867	−7.58	1.14	1.91	2.15	4.16						
111892	−38.66	−3.10	3.40	1.93	13.07						
111913	3.85	9.87	2.65	1.86	5.31						
111943	−1.57	6.07	2.32	1.53	4.14						
111954	−1.29	2.85	3.41	2.00	1.44	−12.80	17.43	8.61	4.92	3.61	
112003	−3.80	12.11	2.50	2.00	6.92	10.59	−20.64	8.47	6.09	3.64	
112040	4.96	−16.49	5.77	5.48	3.75						
112046	−12.34	−6.00	3.94	3.10	3.61						
112051	1.84	−3.69	0.99	1.07	5.35						
112052	−12.58	−10.03	4.49	3.36	3.70						
112072	8.64	−1.86	2.39	2.60	3.86						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
112114	−3.11	−4.33	1.81	1.78	3.55						
112222	23.89	−8.44	2.77	3.04	12.19	−27.67	51.44	9.32	7.41	7.50	
112240	7.41	11.12	2.81	2.44	4.74						
112320	−5.73	0.88	1.77	2.00	3.67						
112372	−22.64	−5.46	2.10	1.88	11.88	36.36	37.38	6.55	5.38	9.18	
112405	3.94	1.36	1.10	0.98	3.83						
112415	−4.05	0.09	3.64	2.62	1.12	12.87	26.27	10.15	7.07	3.85	
112426	−4.68	1.78	1.33	1.34	3.75						
112494	−17.24	−26.87	6.35	6.37	4.41	−12.35	74.68	32.28	31.83	3.87	
112545	6.28	−4.42	2.19	1.85	3.85						
112646	−3.87	−6.06	2.20	1.86	4.00						
112853	−4.62	−13.89	2.80	3.36	4.17						
112957	7.43	−2.53	1.35	1.23	5.93						
112985	10.50	−6.23	6.16	4.55	3.61						
113002	3.47	−8.51	5.57	3.96	3.44						
113204	6.46	−7.27	2.80	1.57	4.78						
113227	0.74	−4.67	1.25	1.01	4.98						
113245	−3.07	4.79	1.29	1.34	4.62						
113249	−3.70	−2.62	1.20	1.28	3.99						
113336	6.16	−14.12	3.75	2.58	5.73						
113367	14.85	0.40	3.39	2.12	4.40						
113368	5.01	−4.30	2.53	2.86	3.96						
113426	−10.04	4.07	3.01	3.05	3.61						
113455	4.01	−3.94	1.82	1.18	4.40						
113557	9.50	0.71	1.79	1.41	5.34						
113610	−8.11	−2.65	2.14	1.58	3.95						
113659	−5.68	−8.38	2.78	2.40	3.72						
113712	17.71	−12.59	7.52	5.77	3.77						
113785	9.45	−7.74	2.80	4.69	5.25	−21.12	9.24	6.97	9.42	4.15	
113884	−16.00	−27.32	2.83	2.18	13.58	−11.69	42.81	11.64	6.46	6.77	
113929	9.09	−5.39	2.89	2.26	4.04						
113959	5.64	−4.28	2.30	2.05	3.50						
114040	9.34	−6.21	2.86	2.31	4.02						
114072	−5.65	−1.64	1.07	1.20	5.92						
114181	8.64	−12.79	3.24	4.11	5.12						
114313	8.03	37.10	4.84	4.91	8.21	91.53	−12.51	21.21	21.51	5.99	
114389	11.63	2.97	2.89	2.66	4.04						
114430	9.98	−23.53	0.96	0.88	28.95						
114485	0.20	5.09	1.33	1.30	3.92						
114501	−5.36	4.15	1.14	1.19	5.49						
114564	−4.55	6.33	1.80	1.91	3.76						
114610	−6.78	0.98	1.90	1.57	3.73						
114639	−10.54	−1.79	2.74	1.90	3.86						
114653	−15.53	5.25	4.99	4.31	3.47						
114724	−8.75	2.18	2.25	1.79	4.93						
114882	2.06	19.11	4.60	5.81	3.65						
114884	−0.12	−7.96	1.86	1.49	5.35						
114952	−39.86	15.99	5.04	2.68	8.36						
114996	4.26	5.46	0.87	1.00	8.40						
115053	6.55	−11.68	3.80	2.95	4.52						
115080	−1.12	17.03	2.81	3.53	4.85						
115081	14.95	−3.45	4.28	4.30	4.36						
115122	4.77	14.50	3.03	3.66	4.01						
115140	−7.53	−3.30	1.82	1.84	4.18						
115191	−3.27	−1.49	0.97	1.25	3.47						
115271	7.13	2.93	1.66	1.32	4.30						
115288	−4.00	8.84	2.55	2.25	4.80						
115360	3.48	−1.41	1.26	1.26	3.89						
115548	−4.99	−0.29	1.51	1.36	4.03						
115551	11.54	5.41	4.84	2.85	3.47						
115761	6.48	3.53	1.91	2.02	4.61	−36.80	−8.05	6.77	7.21	7.08	
115774	8.36	1.56	2.38	2.24	3.69						
115809	4.83	−2.71	1.61	1.96	3.54						
115873	14.47	−4.24	2.70	3.33	5.36	−15.90	−24.36	6.33	8.76	4.44	
115919	5.53	−3.87	1.91	1.72	4.40	3.84	22.52	6.08	4.78	4.71	
115991	−5.84	−2.56	1.52	1.33	3.85						
116108	−0.82	6.17	1.86	1.73	4.16						
116125	7.78	20.53	4.21	4.21	5.46	−25.77	25.17	14.02	20.45	4.92	
116136	4.77	2.83	2.38	1.43	3.87						
116168	−13.70	7.01	2.40	2.13	7.30	7.79	−19.15	8.01	5.43	3.99	
116229	−14.05	15.28	4.26	4.31	4.17						
116233	−16.85	12.65	3.43	2.71	8.40						
116240	−18.80	−1.14	6.87	2.82	3.73						
116241	−3.56	−13.89	2.71	3.77	3.74						
116348	6.75	−0.56	2.18	1.78	3.66						
116390	−6.22	−4.18	1.86	1.89	4.64						
116394	−11.48	8.38	1.74	1.95	6.87						
116403	8.29	−0.06	2.35	1.90	3.61						
116433	−21.50	14.02	8.00	3.35	4.34						
116478	4.21	−10.16	2.21	1.83	7.58	22.84	−8.59	5.54	4.71	5.66	
116516	8.25	3.01	2.43	2.35	3.50						
116536	0.36	11.58	1.16	1.20	9.66						
116555	13.30	5.93	3.60	2.39	3.85						
116597	−4.95	5.55	1.90	1.91	3.65						
116702	−3.67	−7.62	2.22	2.07	3.73						
116727	1.51	6.10	1.12	1.11	5.75						
116728	−1.17	−24.75	2.38	2.08	12.00	22.01	22.71	8.34	5.19	5.46	
116761	12.21	−18.02	4.71	3.20	5.87	−27.66	28.15	9.19	7.40	4.78	
116789	−5.22	0.42	1.48	1.89	3.54						
116791	−5.16	7.85	4.65	4.84	3.70	−14.59	−58.62	14.10	11.95	5.08	
116835	4.14	−3.83	1.33	1.27	3.87						
117057	2.60	17.49	2.54	2.99	6.00	−29.01	17.79	7.27	12.57	4.54	
117085	7.02	−9.43	4.20	4.40	3.82						
117092	−2.14	5.48	2.00	1.36	4.03						
117125	−4.44	−0.45	1.26	1.00	3.53						
117200	4.80	−7.77	1.94	1.91	5.84						
117201	−4.82	−9.12	2.31	1.73	5.28						
117229	−12.27	−4.19	2.48	1.63	5.62						
117237	5.65	−10.94	3.09	2.73	4.91						
117393	10.23	−17.66	2.35	3.10	10.26	4.58	35.69	6.43	7.37	5.05	

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
117409	−2.89	6.34	2.78	1.81	4.30						
117450	−1.00	8.94	1.52	1.49	6.00	−18.25	−20.64	3.84	4.31	7.84	
117493	4.24	−1.41	1.25	1.32	3.76						
117513	4.96	−13.02	2.79	2.03	6.51	39.54	23.55	8.64	5.47	6.86	
117574	9.41	6.96	3.75	2.94	3.73						
117607	2.08	−4.47	2.95	1.44	4.09						
117727	9.35	0.98	2.56	1.64	3.86						
117774	8.19	1.60	2.34	1.26	3.51						
117795	−9.68	8.21	3.90	3.30	3.44	37.10	12.43	10.94	10.02	3.77	
117906	−6.89	1.46	1.85	1.51	4.22						
117958	4.97	−6.46	2.89	2.64	3.70						

No.	Acceleration at J1991.25					Third-Order Motion at J1991.25					Note
HIP	$g_{\alpha*}$	g_δ	$\sigma_{g_{\alpha*}}$	σ_{g_δ}	F_g	$\dot{g}_{\alpha*}$	$\dot{g}_\delta$	$\sigma_{\dot{g}_{\alpha*}}$	$\sigma_{\dot{g}_\delta}$	$F_{\dot{g}}$	N
	mas/yr^2		mas/yr^2			mas/yr^3		mas/yr^3			
1	2	3	4	5	6	7	8	9	10	11	12
117972	14.25	−1.53	2.39	2.01	6.67						
117977	−14.41	−1.12	4.35	2.02	3.61						
117998	−2.59	−6.97	2.06	1.69	4.30						
118007	6.11	3.21	1.21	1.10	5.75						
118034	0.49	−4.32	4.39	1.32	3.68						
118079	2.15	−5.72	1.62	1.42	4.67						P
118086	−5.60	−22.49	9.96	5.54	4.08						
118088	0.89	6.55	2.33	1.86	3.54						
118121	0.83	4.06	0.96	0.92	4.44						
118163	3.20	−12.90	5.58	3.46	3.75						
118286	−4.78	2.98	2.44	1.19	3.46						P