

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
1 Ceres	3	9.074170	0.06	332.0 298.0 322.0 352.0 346.0	+70.0 +78.0 +78.0 +80.0 +82.0	186.6	−58.0							Saint-Pe, 93 Drummond, 98 Thomas, 05 Drummond, 08 Drummond, 14
2 Pallas		7.8132	0.16	228.0 211.0 200.0 44.0 49.0 54.0 100.0 70.0 35.0 32.0 35.6 34.0 30.0 35.0 30.0	+43.0 +38.0 +40.0 +4.0 +6.0 −6.0 −22.0 +15.0 −12.0 −21.0 −12.6 −27.0 −16.0 −12.0 −13.0	220.0 148.0 157.0	+15.0 +55.0 +53.0	224.0 229.0	−4.0 −6.0	328.0 337.0	−55.0 −53.0	7.8106 <		

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
<i>(continuation)</i>														
8 Flora	2 2+ 2	12.865	0.11	193.0	+15.0	13.0	-15.0	13.0	-16.0	198.0	-33.0	7.135	Y	Gehrels, 62
				11.0	+41.0	191.0	+15.0					7.138847	Y	Taylor, 77
				15.0	+25.0	195.0	+15.0						Y	Magnusson, 86
				18.0	+33.0	193.0	+16.0						Y	Zappala, 86
				8.0	+35.0	187.0	+5.0					7.138847	Y	De Angelis, 95
				15.0	+25.0								Y	Mitchell, 95
				20.0	+10.0							7.138841	Y	Kaasalainen, 02
				15.0	+25.0							7.1388	Y	Ostro, 10
				20.0	+14.0	199.0	-2.0					7.138840		Durech, 11
				16.0	+15.0	196.0	+2.0					7.138843		Hanus, 13
				19.0	+19.0	198.0	+5.0					7.138843		Hanus, 16
				18.0	+19.0							7.138843	Y	Viikinkoski, 17
				19.0	+56.0							7.1388431	Y	Hanus, 19
				157.0	+10.0									
				148.0	+45.0	328.0	+45.0	148.0	-45.0	328.0	-45.0		Y	Gehrels, 62
				135.0	+43.0	327.0	+32.0	147.0	-32.0	315.0	-43.0		Y	Hollis, 87
				139.0	+14.0	319.0	-14.0						Y	Di Martino, 89
				122.0	+37.0	302.0	-37.0						Y	De Angelis, 95
9 Metis	2 2 2	5.079	0.32	160.0	+16.0							12.79900	Y	Blanco, 98
				335.0	-5.0	155.0	+6.0					12.86667		Torppa, 03
				335.0	-5.0	155.0	+6.0					12.86667		Durech, 11
				342.0	-6.0							12.86667	Y	Hanus, 13
				342.0	-6.0									Hanus, 17
				348.0	+76.0	168.0	-76.0							
				156.0	+15.0	336.0	-15.0					5.04	Y	Chang, 62
				191.0	+56.0	21.0	-56.0						Y	Gehrels, 62
				186.0	+43.0	2.0	+26.0	182.0	-26.0	6.0	-43.0		Y	Zappala, 79
				183.0	+25.0	1.0	+9.0					5.0791776	Y	Zappala, 84
				180.0	+30.0		+20.0					5.07917	Y	Drummond, 88
				181.0	+23.0		+7.0					5.07918	Y	Magnusson, 90
				185.0	+31.0							5.07918	Y	Drummond, 91
				181.0	+23.0	359.0	+9.0					5.07918	Y	De Angelis, 95
				180.0	+21.0							5.079176	Y	Torppa, 03
				180.0	+22.0							5.079176	Y	Marchis, 06
				-1.0	-99.0							5.079176	Y	Durech, 11
10*Hygiea	4 4 3 4	27.630	0.33	176.0	+20.0									Durech, 11w
				180.0	+22.0									Drummond, 12
				182.0	+20.0							5.079176	Y	Hanus, 13
				112.0	-41.0	299.0	-39.0					27.65909	Y	Hanus, 17
				100.0	-34.0	285.0	-34.0					27.62326		Cellino, 19
				117.0	-37.0	304.0	-35.0					27.62345	Y	Blanco, 98
				113.0	-38.0	300.0	-37.0	302.0	-42.0	102.0	+42.0	27.62333	Y	Lopez-Gonzalez, 00
				118.0	+44.0	298.0	-44.0					27.62321	Y	Kaasalainen, 02
				120.0	+34.0	295.0	+43.0					27.62321		Durech, 11
				115.0	-30.0	300.0	-30.0					27.62321	Y	Hanus, 11
				122.0	-44.0	312.0	-42.0					27.65905		Hanus, 13
				122.0	-44.0	312.0	-42.0					27.6591		Hanus, 17
				312.0	-42.0	122.0	-44.0					27.6591		Cellino, 19
				303.0	-35.0	115.0	-36.0					27.65906	Y	Blanco, 98
				45.0	+50.0							27.6581		Stephens, 08
				73.0	-51.0	253.0	+51.0	64.0	+38.0	244.0	-38.0	13.7286	Y	Hanus, 13
				165.0	+15.0	345.0	+15.0					13.72205	Y	Hanus, 17
				311.0	+14.0	128.0	+14.0					13.72205	Y	Cellino, 19
12 Victoria	3	8.6599	0.42	312.0	+16.0	127.0	+15.0							
				140.0	+23.0									
				242.0	+17.0	62.0	-17.0					8.654		Tempesti, 69
				9.0	+55.0	176.0	+40.0					8.660796	Y	Dotto, 95
				137.0	+55.0							8.65990	Y	Torppa, 03
13 Egeria	2	7.045	0.47	174.0	-17.0							8.66034		Hanus, 16
				174.0	-34.0							8.66034	Y	Viikinkoski, 17
14 Irene	2 2 2	15.028	0.16	103.0	+13.0	283.0	-13.0						Y	Blanco, 00
				44.0	+21.0	238.0	+11.0					7.04667		Hanus, 11
				50.0	+20.0	232.0	+7.0					7.046673	Y	Hanus, 17
15*Eunomia	R R R R R	6.083	0.53	90.0	-34.0	270.0	+34.0						Y	Blanco, 98
				97.0	-22.0	268.0	-24.0					15.02991		Hanus, 11
				95.0	-11.0							15.02986		Hanus, 13
				91.0	-14.0							15.02988	Y	Viikinkoski, 17
				-1.0	-99.0							6.08275		Groeneveld, 54
				337.0	-82.0							6.08275	Y	Cailliate, 56
				-1.0	-90.0							6.08275		Van Houten-Groeneveld, 58
				70.0	-74.0							6.08275		Cailliate, 60
				-1.0	-90.0							6.0806		Scaltriti, 75

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
(continuation)														
16 Psyche	P	4.196	0.34	-1.0	-99.0							6.0806		Lupishko, 85
	2			164.0	+52.0	344.0	-52.0	170.0	+57.0	350.0	-57.0		Y	Piironen, 85
	2			171.0	+61.0	286.0	+73.0					6.082753	Y	Magnusson, 86
	3-			82.0	-78.0	352.0	-61.0					6.082753	Y	Drummond, 88
	3-			-1.0	-99.0								Y	Michalowski, 88
	3-			108.0	-74.0	350.0	-59.0					6.083	Y	Magnusson, 90
	3-			106.0	-73.0							6.082753	Y	Drummond, 91
	3-			96.0	-63.0							6.082753		De Angelis, 92
	R			-1.0	-99.0									Krugly, 92
	2			102.0	-76.0	354.0	-57.0					6.082755	Y	Michalowski, 93
	3-			106.0	-73.0							6.082753	Y	De Angelis, 95
	3			3.0	-67.0							6.082752	Y	Kaasalainen, 02
				-1.0	-99.0							6.0827		Nathues, 05
				3.0	-67.0							6.082753		Hanus, 13
	R			-1.0	-67.0							6.082752	Y	Viikinkoski, 17
				160.0	+69.0							6.0827		Cellino, 19
				225.0	+5.0							4.19595		Zhou, 82
				222.0	+4.0	42.0	-4.0					4.1959	Y	Lupishko, 83
				40.0	+23.0	217.0	+31.0	37.0	-31.0	220.0	-23.0		Y	Zappala, 84
				39.0	+35.0	220.0	+40.0	40.0	-40.0	219.0	-35.0		Y	Tedesco, 85
				41.0	+33.0	223.0	+37.0					4.19554		Tedesco, 85
				-1.0	-99.0									Zhou, 85
				37.0	+14.0	216.0	+21.0					4.196		Magnusson, 86
				215.0	-17.0							4.19595	Y	Drummond, 88
				37.0	+0.0	217.0	+8.0	37.0	-8.0	217.0	+8.0			Lumme, 90
				35.0	-19.0	216.0	-12.0					4.19595	Y	Magnusson, 90
	2			215.0	-17.0							4.195948	Y	Drummond, 91
				33.0	+25.0	211.0	+29.0	31.0	-29.0	213.0	-25.0		Y	Dotto, 92
				35.0	-27.0	215.0	-22.0					4.19595	Y	De Angelis, 93
				222.0	+9.0								Y	Brown, 95
17 Thetis	3	12.27048	0.40	35.0	-9.0	216.0	-2.0					4.195947	Y	Kaasalainen, 02
				36.0	-3.0								Y	Drummond, 08
	2			33.0	-7.0	213.0	+1.0					4.195948		Durech, 11
				32.0	-7.0							4.195948		Hanus, 13
				32.0	-7.0							4.195948		Hanus, 16
				28.0	-6.0							4.195948	Y	Hanus, 17
	3			32.0	-8.0							4.195951	Y	Drummond, 18
				69.0	+43.0	268.0	+55.0	88.0	-55.0	249.0	-43.0		Y	Zappala, 86
				253.0	-33.0							12.27048	Y	Michalowski, 95
	3			58.0	+12.0	240.0	+25.0					12.26603	Y	Torppa, 03
	3			55.0	+10.0	236.0	+20.0					12.26603	Y	Durech, 09
18 Melpomene	3	11.570	0.34	236.0	+20.0							12.26603		Durech, 11
				240.0	+22.0							12.26603		Hanus, 16
				341.0	-36.0							11.57323		Hoffmann, 90
	3			199.0	-24.0	8.0	-37.0					11.57144	Y	Torppa, 03
19 Fortuna		7.4432	0.30	11.0	+14.0							11.57031		Hanus, 16
				-1.0	-99.0							11.570306	Y	Hanus, 17
	2			68.0	+52.0							7.44322	Y	Drummond, 88
	2			70.0	+50.0	250.0	+50.0					7.44322	Y	Magnusson, 90
20*Massalia	2	8.098	0.27	68.0	+52.0							7.44322	Y	Drummond, 91
				98.0	+51.0	266.0	+48.0					7.443216	Y	De Angelis, 95
	2			65.0	+49.0	245.0	-49.0	244.0	+48.0	64.0	-48.0		Y	Blanco, 98
	4			98.0	+58.0	277.0	+60.0					7.443223	Y	Torppa, 03
				60.0	+63.0	230.0	+63.0					7.4432	Y	Lopez-Gonzalez, 05
	3			110.0	+58.0	49.0	-61.0					7.443224	Y	Drummond, 11
	4			98.0	+57.0							7.443224	Y	Durech, 11w
				98.0	+87.0							7.44322		Hanus, 13
				96.0	+56.0							7.44322		Hanus, 16
				97.0	+69.0							7.443222	Y	Hanus, 17
				10.0	+78.0	190.0	-78.0							Chang, 62
				30.0	+49.0	207.0	+51.0	27.0	-51.0	210.0	-49.0		Y	Barucci, 85
21 Lutetia		8.1655	0.25	30.0	+54.0	205.0	+79.0	25.0	-79.0	210.0	-54.0		Y	McCheyne, 85
				20.0	+80.0	200.0	+80.0					8.098		Magnusson, 86
				-1.0	-99.0									Krugly, 92
				31.0	+69.0	208.0	+69.0					8.09759	Y	Dotto, 95
				27.0	+38.0	207.0	+38.0					8.09757	Y	Szabo, 99
	2			179.0	+39.0		+40.0					8.09902	Y	Kaasalainen, 02
				304.0	+76.0							8.09759		Hanus, 16
				61.0	+43.0							8.0973		Cellino, 19
				-1.0	-99.0							8.1666		Lupishko, 87
				42.0	+40.0	223.0	+48.0	43.0	-48.0	222.0	-40.0		Y	Lupishko, 87
				48.0	+31.0	233.0	+38.0	53.0	-38.0	228.0	-31.0		Y	Dotto, 92
				55.0	+44.0	241.0	+40.0					8.160624	Y	Michalowski, 92
21 Lutetia	2			33.0	+9.0	214.0	+15.0	2.0				8.1659	Y	Michalowski, 93
				41.0	+42.0							8.16060	Y	De Angelis, 95

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(continuation)														
22 Kalliope	3 2 3	4.1483	0.53	50.0	+10.0	230.0	+10.0					8.1636	Y	Lagerkvist, 95
				240.0	+37.0							8.1717	Y	Michalowski, 96
				41.0	+51.0	221.0	+51.0					8.1659	Y	Szabo, 99
				39.0	+3.0	220.0	+3.0					8.165455	Y	Torppa, 03
				53.0	-5.0							8.168269	Y	Faury, 09
				52.0	-6.0							8.168270	Y	Carry, 10
				56.0	-7.0								Y	Durech, 17
				215.0	+45.0	35.0	-45.0					4.148	Y	Scaltriti, 78
				215.0	+45.0	35.0	-45.0					4.13	Y	Zappala, 79
				13.0	+17.0	214.0	+42.0	34.0	-42.0	193.0	-17.0		Y	Zappala, 84
				19.0	-11.0	199.0	+14.0					4.1474	Y	Magnusson, 86
				203.0	+29.0	23.0	-29.0	201.0	+22.0	21.0	-22.0		Y	Surdej, 86
				194.0	-8.0							4.148199	Y	Drummond, 88
				18.0	+0.0	204.0	+23.0	24.0	-23.0	198.0			Y	Lumme, 90
				20.0	-23.0	195.0	+2.0					4.1482	Y	Magnusson, 90
23 Thalia	2 3 3	12.312	0.3	18.0	-23.0							4.14820	Y	Michalowski, 90
				193.0	-7.0							4.148199	Y	Drummond, 91
				190.0	-1.0							4.1482	Y	De Angelis, 92
				10.0	+12.0	203.0	+45.0	23.0	-45.0	190.0	-12.0		Y	Dotto, 92
				190.0	-1.0							4.148197	Y	De Angelis, 95
				196.0	+3.0							4.148200	Y	Kaasalainen, 02
				-1.0	-99.0									Tungalag, 02
				195.0	+7.0							4.148199	Y	Descamps, 08
				197.0	-3.0									Descamps, 08
				196.0	+3.0							4.148200		Durech, 11
				196.0	+3.0							4.148200		Hanus, 13
				196.0	+4.0							4.148201		Hanus, 16
				195.0	+2.0							4.14820	Y	Hanus, 17
				-1.0	-99.0									Tancredi, 91
				198.0	+72.0	354.0	+47.0					12.321504	Y	Michalowski, 93
24 Themis	2 2+ 2 2 3	8.374	0.14	15.0	-55.0	180.0	-35.0					12.3168	Y	Lagerkvist, 95
				359.0	-55.0							12.31220	Y	Torppa, 03
				159.0	-45.0	343.0	-69.0					12.31241		Hanus, 13
				159.0	-40.0							12.31241		Hanus, 16
				158.0	-45.0	341.0	-73.0					12.31241208	Y	Viikinkoski, 17
				274.0	+52.0	94.0	-52.0						Y	Blanco, 98
				120.3	+43.7							8.37677	Y	Higley, 08
				331.0	+52.0	137.0	+59.0					8.37419		Hanus, 16
				138.0	+69.0	328.0	+70.0					8.374187	Y	Viikinkoski, 17
				347.0	+10.0							9.93540		Hanus, 13
				47.0	+0.0	227.0	+4.0	47.0	-4.0	227.0			Y	Blanco, 00
				63.7	-37.9	240.2	-40.3					13.10957	Y	Li, 12
				88.0	-52.0							13.10977	Y	Hanus, 16
				-1.0	-99.0							13.109777	Y	Li, 16
27 Euterpe	2 2	10.4082	0.25	261.0	-30.0	83.0	-39.0					10.40818	Y	Stephens, 12
				82.0	+44.0	265.0	+39.0					10.40193		Hanus, 16
				93.0	+18.0	285.0	+37.0	105.0	-37.0	273.0	-18.0		Y	Zappala, 84
				73.0	+17.0	265.0	+43.0						Y	Michalowski, 93
				-1.0	-6.0							15.70785		Durech, 09
				282.0	+6.0	102.0	-8.0					15.70785		Durech, 11
				278.0	+13.0	96.0	+1.0					15.70785		Hanus, 11
				102.0	-8.0							15.70785		Hanus, 13
				99.0	-16.0							15.70785	Y	Viikinkoski, 17
				165.0	+45.0	345.0	+45.0	165.0	-45.0	345.0	-45.0	5.390	Y	Tedesco, 81
				160.0	+53.0	320.0	+45.0	140.0	-45.0	340.0	-53.0		Y	McCheyne, 84
				142.0	+50.0	308.0	+40.0	128.0	-40.0	322.0	-50.0		Y	Zappala, 84
				135.0	-15.0	320.0	-25.0					5.390120	Y	Magnusson, 86
				136.0	-33.0							5.3901	Y	Drummond, 88
				133.0	-17.0	318.0	-25.0					5.390119	Y	Magnusson, 90
28*Bellona	2 U 2 2 2	15.706	0.31	136.0	-33.0							5.390118	Y	Drummond, 91
				145.0	-43.0							5.390120	Y	De Angelis, 95
				138.0	-21.0							5.390119	Y	Kaasalainen, 02
				138.0	-21.0							5.390119		Hanus, 13
				136.0	-20.0							5.390119		Hanus, 16
				323.0	-26.0							5.390119	Y	Hanus, 17
				151.0	+60.0							5.3893		Cellino, 19
				114.0	+34.0	293.0	+33.0						Y	Michalowski, 96
				286.0	+21.0	107.0	+21.0					13.68718	Y	Durech, 06
				107.0	+23.0	284.0	+20.0					13.68717	Y	Durech, 09
30*Urania	3 3	13.686	0.45											

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference		
(continuation)																
31 Euphrosyne		5.530	0.11	107.0	+23.0	284.0	+20.0					13.68717		Hanus, 13		
				252.0	+31.0					13.6854		Cellino, 19				
	2			186.0	+67.0	317.0	+4.0	137.0	−4.0	6.0	−67.0		Y	Barucci, 85		
					178.0	+72.0	315.0	+5.0	135.0	−5.0	358.0	−72.0		Y	McCheyne, 85	
					126.0	−31.0								Y	Michalowski, 93	
32 Pomona	1	9.448	0.31	300.0	+75.0	282.0	+30.0	102.0	−30.0	120.0	−75.0	5.56039		Y	Licandro, 94	
					273.0	−60.0								Y	Kryszczynska, 96	
					200.0	+0.0	330.0	−30.0					5.53159		Y	Torppa, 08
	3				88.0	+66.0	290.0	+6.0					5.534		Y	Hanus, 16
													5.529597			
34 Circe	3	12.15	0.25	91.0	+34.0	263.0	+46.0	83.0	−46.0	271.0	−34.0			Y	Zappala, 86	
					103.0	+59.0	267.0	+70.0					9.4476		Y	Erikson, 93
					83.0	+33.0	253.0	+43.0						Y	De Angelis, 95	
	2				89.0	+43.0	260.0	+57.0					9.4477		Y	Dotto, 95
						267.0	+58.0						9.44767		Y	Kaasalainen, 02
35 Leukothea	3	31.900	0.43	113.0	+17.0	293.0	−17.0							Y	Blanco, 00	
					94.0	+35.0	275.0	+51.0					12.17458		Y	Durech, 09
					94.0	+35.0	275.0	+51.0					12.17458			Durech, 11
	2				94.0	+35.0	275.0	+51.0					12.17458			Hanus, 13
36 Atalante	2	9.93	0.17	17.0	+0.0	197.0	+0.0					31.962			Pilcher, 09	
					−1.0	−99.0						31.900			Pilcher, 10	
					15.0	+7.0	196.0	+0.0					31.9009			Hanus, 16
	3			119.0	−19.0	299.0	+19.0							Y	Blanco, 98	
					75.0	+18.0	250.0	−30.0					9.930129		Y	Warner, 11w
37 Fides	3	7.3335	0.28	45.0	−49.0	190.0	−55.0					9.92692			Hanus, 16	
	2			100.0	+5.0	280.0	−5.0					7.3338		Y	Magnusson, 86	
					85.0	−26.0	264.0	−34.0					7.33350		Y	Torppa, 03
38 Leda	2	12.838	0.16	270.0	+19.0	89.0	+27.0					7.33253			Hanus, 11	
					270.0	+19.0							7.332527			Hanus, 13
	2			160.0	−17.0	343.0	−6.0					12.836164		Y	Franco, 13	
39*Laetitia	2	5.138	0.53	280.0	−66.0							5.14731			Cailliate, 56	
					114.0	+28.0	294.0	−28.0					5.138			Van Houten-Groeneveld, 58
					283.0	−61.0							5.14731		Y	Cailliate, 60
	3			130.0	+10.0	310.0	−10.0							Y	Gehrels, 62	
					121.0	+37.0	301.0	−37.0						Y	Sather, 76	
40*Harmonia	1	8.910	0.33	128.0	+38.0	339.0	+48.0	159.0	−48.0	308.0	−38.0			Y	McCheyne, 84	
					116.0	+49.0	338.0	+57.0	158.0	−57.0	296.0	−49.0		Y	Zappala, 84	
					−1.0	−99.0							5.138		Y	Lupishko, 85
	2			111.0	+56.0	5.0	+70.0	185.0	−70.0	291.0	−56.0			Y	McCheyne, 85	
					129.0	+30.0	324.0	+35.0					5.138			Magnusson, 86
41 Daphne	3	5.988	0.45	318.0	+26.0							5.138238		Y	Drummond, 88	
					125.0	+19.0	317.0	+26.0	137.0	−26.0	305.0	−19.0			Y	Lumme, 90
					130.0	+29.0	325.0	+37.0					5.138240		Y	Magnusson, 90
	2			319.0	+28.0							5.138239		Y	Drummond, 91	
					325.0	+23.0							5.138238		Y	De Angelis, 95
41 Daphne	3	5.988	0.45	323.0	+35.0							5.138237		Y	Kaasalainen, 02	
					323.0	+32.0							5.138238		Y	Carry, 10
					323.0	+32.0							5.138238			Durech, 11
	2				323.0	+32.0						5.138238			Hanus, 13	
					322.0	+30.0							5.138238			Hanus, 16
41 Daphne	2	5.988	0.45	323.0	+32.0							5.138238		Y	Hanus, 17	
					311.0	−23.0							4.9543			Cellino, 19
	1			−1.0	−99.0									Y	Tancredi, 91	
					208.0	+21.0							8.91005		Y	Michalowski, 93
41 Daphne	2	5.988	0.45	22.0	+28.0	203.0	+38.0	12.0	+34.0	201.0	+41.0	8.90849		Y	Lopez-Gonzalez, 99	
					22.0	+31.0	206.0	+39.0					8.90848			Hanus, 11
					22.0	+31.0							8.908483			Hanus, 13
	2				22.0	+34.0						8.90848			Hanus, 16	
					22.0	+38.0							8.908485		Y	Viikinkoski, 17
41 Daphne	2	5.988	0.45	19.0	+82.0							8.9132			Cellino, 19	
	2			15.0	+36.0	157.0	+28.0	195.0	−36.0	337.0	−28.0			Y	Barucci, 83	
					19.0	+35.0	159.0	+32.0	199.0	−35.0	339.0	−32.0			Y	Barucci, 85
41 Daphne	2	5.988	0.45	186.0	−40.0	335.0	−33.0					5.98800		Y	Magnusson, 86	
					18.0	+48.0	135.0	+43.0	198.0	−48.0	315.0	−43.0			Y	Zappala, 86
					334.0	−32.0							5.98799		Y	Drummond, 88
	2				197.0	−36.0	344.0	−38.0					5.98799		Y	Magnusson, 90
					340.0	−32.0							5.98798		Y	Drummond, 91
41 Daphne	2	5.988	0.45	190.0	−27.0	343.0	−31.0					5.987983		Y	De Angelis, 95	
	2															

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
(continuation)														
42*Isis	3	13.590	0.32	198.0	-32.0							5.98798	Y	Kaasalainen, 02
	3			198.0	-32.0							5.98798		Durech, 11
	2			198.0	-31.0							5.987980		Matter, 11
				198.0	-32.0							5.98798		Hanus, 13
				199.0	-30.0							5.98798		Hanus, 16
				195.0	-32.0							5.987981	Y	Hanus, 17
				199.0	-32.0							5.987981	Y	Carry, 18
	2			122.0	-36.0	302.0	+36.0							
	2			117.0	-5.0	288.0	-16.0					13.59700	Y	Blanco, 98
	3			120.0	-14.0	294.0	-23.0					13.59701	Y	Denchev, 98
43 Ariadne	2	5.76218	0.73	106.0	+40.0	302.0	+28.0					13.58364		Torppa, 03
				106.0	+40.0							13.58364		Hanus, 11
				113.0	+45.0							13.58364		Hanus, 13
				108.0	+47.0							13.58364		Hanus, 16
				288.0	-1.0							13.5905	Y	Viikinkoski, 17
														Cellino, 19
				73.0	+40.0	249.0	+43.0	69.0	-43.0	253.0	-40.0		Y	McCoy, 84
				73.0	+25.0	248.0	+20.0	68.0	-20.0	253.0	-25.0		Y	Barucci, 86
				78.0	+13.0	256.0	+13.0					5.76222	Y	Drummond, 88
				55.0	-16.0	241.0	-21.0					5.76188		Michalowski, 88
44*Nysa		6.422	0.52	68.0	-14.0	251.0	-16.0					5.76199	Y	Magnusson, 90
	2			248.0	-10.0							5.76199	Y	Drummond, 91
				249.0	-14.0							5.76196	Y	De Angelis, 92
				72.0	+13.0	250.0	+8.0	70.0	-8.0	252.0	-13.0		Y	Detal, 92
				-1.0	-9.0								Y	Krugly, 92
	2			68.0	-22.0	253.0	-28.0					5.76198	Y	Michalowski, 93
				72.0	+13.0	250.0	+8.0	70.0	-8.0	252.0	-13.0		Y	Detal, 94
				249.0	-14.0							5.76196	Y	De Angelis, 95
				251.0	-9.0							5.76198	Y	Dotto, 95
				71.0	-25.0	251.0	-25.0					5.76196	Y	Szabo, 99
45 Eugenia	3	5.699	0.30	253.0	-15.0							5.761990	Y	Kaasalainen, 02
				252.0	-9.0							5.76199	Y	Hanus, 17
				178.0	-84.0							6.417083		Caillate, 56
				358.0	+84.0							6.415425		Chang, 62
				105.0	+30.0	285.0	-30.0							Gehrels, 62
				100.0	+50.0	280.0	-50.0					6.48	Y	Zappala, 79
				94.0	+59.0	288.0	+63.0					6.421		Magnusson, 83
				100.0	+60.0	265.0	+55.0					6.421416		Taylor, 83
				99.0	+49.0	295.0	+54.0	115.0	-54.0	279.0	-49.0		Y	Zappala, 84
				105.0	+57.0	300.0	+61.0					6.421416	Y	Magnusson, 86
46*Hestia		21.040	0.12	112.0	+46.0	304.0	+47.0	124.0	-47.0	292.0	-46.0			Lumme, 90
				92.0	+47.0	283.0	+49.0					6.421417	Y	De Angelis, 93
	3			99.0	+58.0							6.421417		Kaasalainen, 02
				108.0	-30.0							6.4215		Cellino, 19
				127.0	-44.0							5.69915	Y	Drummond, 88
				115.0	-34.0	286.0	-26.0					5.69915		Taylor, 88
				128.0	+16.0	313.0	+25.0	133.0	-25.0	308.0	-16.0			Lumme, 90
				125.0	-35.0	296.0	-26.0					5.69915	Y	Magnusson, 90
	2			127.0	-44.0							5.699149	Y	Drummond, 91
	U			-1.0									Y	Tancredi, 91
47 Aglaja		13.178	0.17	109.0	-27.0							5.69916	Y	De Angelis, 95
				-1.0									Y	Lagerkvist, 95
				106.0	-42.0	313.0	-41.0					5.69915	Y	Lopez-Gonzalez, 99
				123.0	-33.0							5.699143	Y	Kaasalainen, 02
				123.0	-33.0							5.69914		Hanus, 13
				125.0	-34.0							5.699151		Hanus, 16
				127.0	-36.0							5.699152	Y	Hanus, 17
				291.0	+13.0	110.0	+7.0					21.040101	Y	Franco, 19
				330.0	-3.0									
				139.0	+33.0	313.0	+19.0					13.1892	Y	Millis, 89
48 Doris	2	11.89	0.36											Michalowski, 96
	2			113.0	+27.0	293.0	-27.0							
51 Nemausa		7.783	0.25	297.0	+61.0	108.0	+47.0					11.89010		Blanco, 98
				296.0	+57.0							11.89010	Y	Hanus, 16
														Viikinkoski, 17
				133.0	-61.0							7.7848		Kristensen, 91
				306.0	-53.0							7.782936		Kristensen, 93
				356.0	-62.0								Y	De Angelis, 95
				160.0	-68.0							7.78294		Kristensen, 97
				34.0	-60.0	175.0	-65.0					7.78484	Y	Lopez-Gonzalez, 05
				169.0	-62.0	347.0	-68.0					7.78484		Hanus, 16
				169.0	-64.0							7.784840	Y	Hanus, 17

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference						
52 Europa	1	5.6304	0.12	17.0	+37.0	203.0	+38.0	23.0	-38.0	180.0	-37.0			Y	Barucci, 86					
				80.0	+65.0									Y	Michalowski, 93					
				84.0	-55.0	250.0	-40.0							Y	Dotto, 95					
				63.0	-32.0	257.0	-18.0							Y	Michalowski, 95					
				251.0	+46.0	261.0	+60.0							5.632846		Lopez-Gonzalez, 99				
				71.0	+35.0									5.63005						
				251.0	+31.0	262.0	+46.0	67.0	+25.0	254.0	+38.0			5.629958	Y	Kaasalainen, 02				
				251.0	+35.0									5.62995	Y	Michalowski, 04				
				251.0	+35.0									5.629958	Y	Marchis, 06				
				251.0	+35.0									5.629958		Durech, 11				
				255.0	+35.0									5.62996		Hanus, 13				
				254.0	+36.0									5.629957	Y	Merline, 13				
53 Kalypso	2	9.036	0.14												Hanus, 17					
				168.0	+12.0	349.0	+8.0							9.035058	Y	Franco, 16				
54 Alexandra	2	7.024	0.28	-1.0	-99.0											Tancredi, 91				
				160.0	+45.0	290.0	+55.0							7.0264		Belskaya, 93				
				307.0	+20.0	122.0	-36.0	325.0	-37.0					7.02263		Torppa, 08				
				318.0	+23.0	156.0	+13.0							7.0226456	Y	Warner, 08				
				318.0	+23.0	156.0	+13.0							7.022649		Durech, 11				
				156.0	+13.0	318.0	+23.0							7.022641	Y	Durech, 11w				
				156.0	+13.0									7.02264		Hanus, 13				
				152.0	+19.0									7.02264		Hanus, 16				
				155.0	+17.0									7.022642	Y	Hanus, 17				
				55 Pandora	2	4.8040	0.33	36.0	+32.0	226.0	+19.0	46.0	-19.0	216.0	-32.0					Zappala, 86
								202.0	-26.0									4.80382	Y	Drummond, 88
								32.0	+40.0	224.0	+32.0							4.80383	Y	Drummond, 91
239.0	+28.0													4.80383	Y	Michalowski, 93				
50.0	-18.0	216.0	-34.0											4.80385	Y	De Angelis, 95				
25.0	+30.0	220.0	+30.0											4.80405	Y	Lagerkvist, 95				
28.0	+48.0	232.0	+42.0											4.80404	Y	Michalowski, 96				
225.0	+10.0													4.804044	Y	Torppa, 03				
223.0	+18.0													4.804043		Durech, 11				
56 Melete	2	18.147	0.16					110.0	+28.0	290.0	-28.0					18.122818	Y	Warner, 11w		
								103.0	-27.0	282.0	-5.0					18.1482		Hanus, 16		
								103.0	-26.0	283.0	-3.0					18.14817	Y	Viikinkoski, 17		
60 Echo		25.208	0.22	95.0	+34.0	275.0	+42.0					25.1574	Y	Michalowski, 93						
				91.0	-25.0	272.0	-17.0					25.2285	Y	Durech, 16						
62 Erato	2	9.2213	0.22																	
63 Ausonia	2	9.298	0.47	87.0	+22.0	269.0	+23.0					9.21819			Hanus, 11					
				-1.0	-99.0															
				127.0	+38.0	298.0	+28.0	118.0	-28.0	307.0	-38.0				Y	Zappala, 83				
				120.0	-30.0	305.0	-30.0							9.29757	Y	Zappala, 84				
				-1.0	-99.0									9.294		Magnusson, 86				
				313.0	+42.0									9.29758	Y	Lupishko, 87				
				122.0	-26.0	310.0	-40.0							9.29766	Y	De Angelis, 95				
				305.0	+36.0	125.0	-36.0								Y	Michalowski, 96				
				120.0	-15.0	304.0	-22.0							9.29759	Y	Blanco, 00				
				120.0	-15.0									9.29759	Y	Torppa, 03				
																Durech, 11				
				64 Angelina	2	8.752	0.42	119.0	+29.0	299.0	+27.0					8.75468	Y		Michalowski, 93	
138.0	+31.0	317.0	-33.0												Shevchenko, 03					
139.0	+15.0	318.0	+15.0									8.75164	Y		Durech, 06					
137.0	+14.0	317.0	+17.0									8.75032			Durech, 11					
135.0	+6.0	315.0	+5.0									8.75171			Hanus, 16					
65 Cybele	2	6.0814	0.12	26.0	-52.0							3.98704	Y		Drummond, 88					
				25.0	-49.0									4.04052	Y	Drummond, 91				
				34.0	-23.0									4.04052	Y	De Angelis, 95				
				53.0	-4.0	233.0	-4.0									Pilcher, 11				
				-1.0	-99.0									6.081434	Y	Franco, 15				
208.0	-3.0									6.081435	Y	Viikinkoski, 17								
66 Maja	2	9.73509	0.45	162.0	-50.0	342.0	+50.0													
				156.0	+62.0	336.0	-62.0									Blanco, 98				
				49.0	-70.0	225.0	-68.0					9.73570	Y		Blanco, 00					
68 Leto	2	14.848	0.53												Hanus, 16					
				103.0	+43.0	290.0	+23.0					14.84547			Durech, 11					
				103.0	+43.0	290.0	+23.0					14.84547			Hanus, 11					
				103.0	+43.0							14.84547			Hanus, 13					

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
69 Hesperia	2 3 2	5.655	0.23	131.0	+42.0	315.0	+59.0					5.65974		Velichko, 89 Krugly, 92
				-1.0	-99.0									
				243.0	+51.0									
				70.0	-42.0									
				73.0	-45.0									
71 Niobe	2 2 2+	35.864	0.25	250.0	+17.0	71.0	-2.0	64.0	+39.0	244.0	-39.0	5.65520	Y	Torppa, 03
				250.0	+17.0									
				94.0	-14.0									
				110.0	+13.0									
				88.0	-33.0									
72 Feronia		8.097	0.15	287.0	-39.0	102.0	-55.0					8.09068		Hanus, 13
				102.0	-55.0									
				100.0	-51.0									
73 Klytia	2 2+	8.297	0.35	38.0	+75.0	237.0	+73.0					8.28307	Y	Marciniak, 08
				266.0	+68.0									
75 Eurydike		5.357	0.15	253.0	+30.0							5.35619	Y	Tungalag, 02
76 Freia		9.973	0.33	139.0	+25.0		+40.0					9.968286	Y	Stephens, 08
				139.0	+14.0									
				138.0	+12.0									
77 Frigga	2 2	9.012	0.20	57.0	+39.0	236.0	-40.0						Y	Blanco, 98
79 Eurynome	3	5.978	0.25	64.0	+45.0	226.0	+52.0					5.97769	Y	Michalowski, 90
				62.0	+26.0									
				56.0	+28.0									
				40.0	+35.0									
				65.0	-36.0									
80 Sappho	2 2 3 3 3	14.030	0.40	64.0	+15.0	54.0	+24.0					5.97857	Y	Torppa, 08
				228.0	+30.0									
				46.0	+10.0									
				194.0	-26.0									
				6.0	-16.0									
82 Alkmene	3 3 2 2+	12.999	0.54	194.0	-26.0							14.03087	Y	Durech, 11
				194.0	-26.0									
				195.0	-22.0									
				349.0	-43.0									
				164.0	-34.0									
83 Beatrix	2 2 2	10.16	0.18	164.0	-25.0	349.0	-33.0					13.00078	Y	Durech, 06
				164.0	-28.0									
				3.0	-37.0									
				6.0	-46.0									
				172.0	-31.0									
85 Io	2 2 2 3 3	6.875	0.18	173.0	-38.0			123.0	-82.0	300.0	-89.0	10.11311	Y	Krugly, 94
				120.0	+89.0									
				285.0	-52.0									
				105.0	-45.0									
				95.0	-65.0									
87 Sylvia	2 2 2 2 3 4	5.184	0.50	95.0	-65.0							6.874783	Y	Durech, 11
				90.0	-68.0									
				89.0	+52.0									
				66.0	+67.0									
				89.0	+52.0									
88 Thisbe	2 2 1 2 2	6.042	0.18	84.0	+55.0	297.0	+50.0					5.183662	Y	Michalowski, 93
				86.0	+45.0									
				71.0	+66.0									
				71.0	+66.0									
				96.0	+39.0									
				71.0	+66.0							5.18364	Y	De Angelis, 95
				82.0	+64.0									
				72.0	+67.0									
				32.0	+69.0									
				129.0	+78.0									
				40.0	+70.0	200.0	+70.0	25.0	-54.0	212.0	-69.0	6.04133	Y	Zappala, 86
				110.0	+58.0									
				243.0	+74.0									

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
<i>(continuation)</i>														
89 Julia	3	11.387	0.25	207.0	+48.0	247.0	+50.0					6.04130	Y	Torppa, 03
	2			72.0	+60.0							6.04131		Durech, 11
				72.0	+60.0							6.04131		Hanus, 13
				82.0	+69.0							6.04132		Hanus, 16
				79.0	+68.0							6.04132		Hanus, 17
90 Antiope	3	16.509	0.88	8.0	−13.0							11.38834	Y	Durech, 11
	3			8.0	−13.0							11.38834		Hanus, 13
				15.0	−13.0							11.38834		Hanus, 17
92 Undina	3	15.941	0.20	200.0	+38.0							16.5051	Y	Descamps, 07
	2			199.5	+39.8							16.505046		Descamps, 09
	2			190.0	+38.0									Bartczak, 14
93 Minerva	1	5.982	0.20	4.0	+50.0	190.0	+73.0					15.93612	Y	Warner, 11w
	1			237.0	−26.0							15.95209		Warner, 14
	3			230.0	+0.0							5.9823		Harris, 99
94 Aurora	3	7.22	0.18	189.0	+10.0	216.0	+21.0					5.97909	Y	Tungalag, 02
	1			49.0	−40.0							5.98313		Torppa, 08
	3			190.0	+15.0							5.981767		Tungalag, 12
	1			21.0	+21.0							5.981768		Marchis, 13
	3			20.0	+21.0									Hanus, 17
95 Arethusa	2	8.705	0.35	58.0	+16.0	242.0	+4.0					7.226191	Y	Marciniak, 11
	2			65.0	+9.0							7.22619		Hanus, 16
	3			244.0	+3.0							7.22619		Hanus, 17
97 Klotho	3	35.15	0.30	149.0	+33.0							8.70221		Durech, 11
	3			119.0	+23.0							8.70221		Hanus, 16
	2			340.0	+8.0	161.0	+40.0					35.11749	Y	Tungalag, 02
98 Ianthé		16.479	0.34	−1.0	+30.0							35.2510		Hanus, 11
				359.0	+30.0							35.2510		Hanus, 13
99 Dike		18.127	0.22	286.0	+18.0							16.4801		Hanus, 16
				233.0	+50.0							18.1191		Hanus, 16
				85.0	+24.0							23.7427		Hanus, 16
103 Hera		23.740	0.45	112.0	+2.0	292.0	−4.0					8.98059		Hanus, 16
104 Klymene		8.984	0.3	192.0	+68.0	240.0	+8.9					18.54998	Y	Tungalag, 02
105 Artemis	3	37.150	0.17	233.5	−42.5							35.15506		Higley, 08
107 Camilla		4.844	0.53	71.0	+61.0							4.84393	Y	Drummond, 88
				74.0	+55.0	239.0	+76.0					4.84393		Magnusson, 90
	2			229.0	+73.0							4.84393		Drummond, 91
				230.0	+69.0							4.84394		De Angelis, 95
	3+			72.0	+51.0							4.84393		Torppa, 03
	3			73.0	+54.0							4.843928		Durech, 11
				73.0	+54.0							4.843928		Hanus, 13
				72.0	+51.0							4.843928		Hanus, 16
				75.0	+55.0							4.843928	Y	Hanus, 17
				68.0	+58.3							4.843927		Pajuelo, 18
	3			259.0	−6.0									
108 Hecuba		14.256	0.12	79.0	+13.0								Y	Blanco, 98
110 Lydia	2	10.927	0.26	24.0	+75.0	210.0	+78.0					10.92580		Michalowski, 96
	2			149.0	−55.0							10.925808		Durech, 07
	3			345.0	−51.0							10.92581	Y	Warner, 09
	2			148.0	−39.0									Hanus, 16
112 Iphigenia		31.466	0.30	101.0	−66.0	286.0	−50.0					31.4625		Hanus, 16
113 Amalthea		9.950	0.22	70.0	−18.0							9.93768	Y	Tungalag, 02
114 Kassandra		10.7431	0.25	196.0	−55.0	4.0	−58.0					10.74358	Y	Durech, 18

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
115 Thyra	2 2 1 2	7.241	0.20	175.0 17.0 35.0	+60.0 -30.0 +33.0	330.0 197.0	+60.0 +30.0	178.0	-35.0	358.0	+35.0	7.2376 7.24142	Y Y Y	Dotto, 95 Blanco, 98 Michalowski, 04
116 Sirona		12.028	0.42	51.0	-53.0	222.0	-53.0					12.03251	Y	Durech, 16
117 Lomia		9.127	0.35	312.0	-40.0	117.0	-18.0					9.12417		Hanus, 16
119*Althaea		11.484	0.36	21.0 -1.0 339.0	-77.0 -62.0 -67.0	181.0	-61.0					11.48037 11.46512 11.46514	Y	Tungalag, 02 Durech, 09 Hanus, 11
120 Lachesis	R 2	46.551	0.22	256.0	+39.0	82.0	+55.0					46.5508		Hanus, 16
121 Hermione	2 2 2 1 3	5.55128	0.62	163.0 40.0 60.0 -1.0 359.0 4.0 1.0 2.0	+12.0 +32.0 -42.0 -99.0 +8.0 +14.0 +16.0 +13.0	342.0 220.0	+30.0 -32.0	162.0	-30.0	343.0	-12.0	9.238 5.55 5.550877 5.55088 5.550881 5.550877	Y Y Y Y Y Y	De Angelis, 95 Blanco, 96 Blanco, 98 Marchis, 05 Descamps, 09 Kaasalainen, 12 Hanus, 16 Viikinkoski, 17
122 Gerda	2 2 1	10.685	0.26	26.0 26.0 26.0 201.0 30.0	+31.0 +31.0 +31.0 +22.0 +20.0	190.0 190.0 190.0 23.0 209.0	-39.0 +39.0 -39.0 +20.0 +22.0					10.68724 10.6872	Y Y Y	Shevchenko, 08 Shevchenko, 09 Shevchenko, 12 Hanus, 16 Devogele, 17
125 Liberatrix	2 2 3	3.968	0.71	80.0 -1.0 228.0 15.0 95.0	+74.0 -99.0 +71.0 +47.0 +68.0	181.0 280.0	+53.0 +74.0					3.96821 3.96822 3.96821 3.96820 3.968198	Y Y Y Y Y	Drummond, 88 Magnusson, 90 Drummond, 91 De Angelis, 95 Durech, 07
127 Johanna		12.7988	0.21	98.0	-59.0	261.0	-69.0					12.79954	Y	Marciniak, 12
129*Antigone	2 2 2 2 2 2 2 2 3 2 2 3	4.9572	0.42	331.0 20.0 196.0 38.0 195.0 42.0 194.0 207.0 202.0 207.0 207.0 211.0 198.0 264.0	+30.0 +50.0 +64.0 +27.0 +65.0 +36.0 +72.0 +58.0 +52.0 +58.0 +58.0 +55.0 +58.0 -5.0	133.0 180.0	+48.0 +72.0	313.0	-48.0	151.0	-30.0	4.957 4.95717 4.95716 4.95717 4.95716 4.957154 4.957154 4.95715 4.957160 4.957156 4.9570	Y Y Y Y Y Y Y Y Y Y Y Y	Barucci, 85 Magnusson, 86 Drummond, 88 Magnusson, 90 Drummond, 91 Dotto, 92 De Angelis, 95 Torppa, 03 Drummond, 09 Durech, 11 Hanus, 13 Hanus, 16 Hanus, 17 Cellino, 19
130 Elektra	1 2 1 1 4 4 3 3 3	5.225	0.58	190.0 180.0 190.0 246.0 192.0 64.0 64.0 160.0 64.0 64.0 176.0 69.0	-81.0 -85.0 -81.0 -32.0 -83.0 -88.0 -88.0 -85.0 -88.0 -88.0 -89.0 -88.0	240.0	-40.0					5.22468 5.22466 5.224683 5.22466 5.22468 5.224664 5.224664 5.22466 5.224664 5.22466 5.224663 5.224663	Y Y Y Y Y Y Y Y Y Y Y	Drummond, 88 Magnusson, 90 Drummond, 91 Michalowski, 93 De Angelis, 95 Marchis, 06 Durech, 07 Torppa, 08 Durech, 11 Hanus, 13 Hanus, 16 Hanus, 17
131*Vala	3	5.1812	0.32	54.0	+29.0	243.0	+30.0					5.180810	Y	Franco, 19
132 Aethra	3 3 3 2+	5.1684	0.52	337.0 337.0 326.0	+71.0 +70.0 +67.0							5.168270 5.168274 5.16827	Y Y	Durech, 06 Durech, 09 Hanus, 11
133 Cyrene	P P 2 R	12.708	0.26	-1.0 349.0 -1.0	-99.0 -54.0 -35.0	145.0	-57.0					12.708 12.70868 12.70858		Harris, 84 Hanus, 11 Durech, 18

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
135 Hertha	2 2 2 2 3 4	8.403	0.30	-1.0 135.0 126.0 106.0 118.0 96.0 272.0 277.0	+99.0 +46.0 -28.0 +2.0 +52.0 +58.0 +52.0 +53.0	310.0 310.0 286.0 291.0 274.0	+43.0 -31.0 -2.0 +47.0 +53.0	130.0	-43.0	315.0	-46.0	8.3476 8.40571 8.40061 8.40060 8.40060	Y Y Y Y Y Y	Tancredi, 91 Dotto, 92 Michalowski, 93 Lagerkvist, 95 Michalowski, 96 Torppa, 03 Durech, 11w Hanus, 17
136*Austria	R R	11.4969	0.4	-1.0 118.0 117.0	+63.0 +57.0 +53.0	333.0 357.0	+75.0 +81.0					11.49660 11.49665 11.49662	Y	Durech, 09 Durech, 16 Hanus, 16
137 Meliboea	1 1	25.676	0.20	149.0	+8.0	329.0	-8.0						Y	Blanco, 00
138 Tolosa		10.101	0.45	40.0 49.0	+30.0 -42.0	230.0 222.0	+30.0 -39.0					10.0976 10.10306	Y Y	Lopez-Gonzalez, 05 Durech, 16
139 Juewa	1 1	20.991	0.20	117.0	+50.0								Y	Michalowski, 93
140 Siwa	3 3	34.445	0.15	8.0	-13.0							11.38834		Durech, 11
144 Vibilia		13.819	0.20	248.0 250.0	+56.0 +58.0	54.0	+48.0					13.82516 13.82517	Y	Hanus, 16 Hanus, 17
145 Adeona		15.071	0.15	77.0	+11.0	122.0	-3.0					15.0709		Wang, 18
146 Lucina	3 3	18.557	0.15	139.0 305.0 304.0	-14.0 -41.0 -41.0	305.0	-41.0					18.55397 18.5540 18.55387	Y Y	Durech, 09 Hanus, 13 Viikinkoski, 17
147 Protogeneia		7.8528	0.28	269.0	+15.0	90.0	+14.0					7.85232		Hanus, 13
148 Gallia	2 2	20.664	0.32	135.0	-25.0	294.0	-8.0					20.665266	Y	Warner, 11w
149 Medusa		26.023	0.56	333.0	-73.0	156.0	-76.0					26.0454		Hanus, 13
150 Nuwa	1 1 1	8.1347	0.31	253.0 257.0 359.0	+1.0 +1.0 +25.0	73.0 77.0 177.0	-1.0 -1.0 +22.0	73.0	-27.0	253.0	+27.0	8.140 8.13456	Y Y	Blanco, 96 Blanco, 98 Hanus, 16
152 Atala	2 2 2 3 3—	6.246	0.50	202.0 199.0 347.0 347.0 347.0	+63.0 +62.0 +47.0 +46.0 +47.0	348.0 347.0	+41.0 +47.0					6.24472 6.24472 6.24472 6.24472 6.24472	Y Y Y Y	Durech, 06 Durech, 09 Durech, 11 Hanus, 11 Hanus, 13
153*Hilda	2 2 1	5.9585	0.23	149.0 149.0	+29.0 +29.0	329.0 329.0	-32.0 -32.0					5.9587	Y Y	Shevchenko, 09 Shevchenko, 09
154 Bertha		25.224	0.10	28.0	+34.0	234.0	+32.0					25.2285		Hanus, 16
155 Scylla	2	7.9597	0.46	201.0 346.0	+69.0 +41.0	356.0	+53.0					7.95880 7.95878		Hanus, 16 Hanus, 18
157 Dejanira		15.825	0.52	319.0	-64.0	146.0	-33.0					15.8287		Hanus, 13
158 Koronis	3 3 2 3	14.218	0.43	19.0 30.0 -1.0 30.0 85.0	-69.0 -64.0 -99.0 -64.0 +30.0	201.0 225.0	-72.0 -70.0	35.0	-65.0	220.0	-68.0	14.20570 14.20569 14.20569	Y Y	Slivan, 96 Slivan, 03 Tungalag, 03 Durech, 11 Tungalag, 12
159 Aemilia		24.476	0.24	139.0	+68.0	348.0	+59.0					24.4787	Y	Marciniak, 18

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
160 Una	2	11.033	0.18											
	2			125.0	-33.0	308.0	-41.0					11.033176	Y	Marciniak, 09
161 Athor	2	7.280	0.27											
	2			209.0	+47.0	29.0	-47.0	1.0	+48.0	181.0	-48.0		Y	Blanco, 98
	1+			170.0	+0.0	350.0	+0.0					7.281	Y	Pilcher, 08
	2			6.0	-8.0	186.0	+8.0						Y	Pilcher, 10
	2			350.0	-6.0	170.0	+4.0					7.280087	Y	Franco, 12
162 Laurentia	2	11.8686	0.37											
	2			139.0	+64.0	313.0	+51.0					11.86917		Hanus, 11
163 Erigone	R	16.136	0.37											
	R			-1.0	-60.0							16.1403		Hanus, 11
				276.0	-69.0							16.1402	Y	Durech, 16
				191.0	-75.0	358.0	-73.0					16.1403	Y	Durech, 18
164 Eva		13.66	0.36											
				54.0	-10.0							13.66380		Hanus, 16
165 Loreley	1	7.226	0.17											
	1			159.0	-65.0	319.0	+65.0						Y	Blanco, 98
	3			346.0	+29.0							7.226669	Y	Durech, 07
	3			174.0	+29.0							7.224387		Durech, 11
	2			174.0	+34.0							7.22439		Hanus, 11
				174.0	+29.0							7.22439		Hanus, 13
				178.0	+31.0							7.224390	Y	Hanus, 17
166 Rhodope		4.715	0.36											
				345.0	-22.0	173.0	-3.0					4.714793		Hanus, 13
167 Urda	2+	13.07	0.39											
	2+			36.0	-77.0	227.0	-74.0					13.07	Y	Slivan, 96
				-1.0	-99.0									Tungalag, 03
	3			249.0	-68.0	107.0	-69.0					13.06133		Warner, 08
	2			249.0	-68.0	107.0	-69.0					13.06133		Durech, 11
170 Maria		13.120	0.30											
				103.0	-18.0	289.0	-5.0					13.1313212		Kim, 14
171 Ophelia		6.66535	0.46											
				149.0	+40.0	333.0	+35.0					6.665430	Y	Wang, 15
				144.0	+29.0	329.0	+23.0					6.66454		Hanus, 16
172 Baucis		27.417	0.41											
				171.0	-64.0	14.0	-57.0					27.4097	Y	Devogele, 17
173 Ino	2	6.15	0.16											
	2			198.0	-21.0	356.0	-47.0					6.163	Y	Michalowski, 93
	2			186.0	-22.0	5.0	-21.0						Y	De Angelis, 95
	2			178.0	-14.0	344.0	-30.0					6.11651	Y	Michalowski, 05
174 Phaedra	2	5.744	0.58											
	2			265.0	+5.0	93.0	+34.0					5.75025	Y	Durech, 06
	2			94.0	+36.0	266.0	+14.0					5.75025		Hanus, 11
	2			265.0	+5.0							5.750249	Y	Marciniak, 11
176 Iduna	1	11.2877	0.43											
	1			85.0	+36.0	265.0	-36.0						Y	Blanco, 00
				83.0	+24.0	219.0	+68.0					11.28784	Y	Durech, 16
				156.0	+78.0	85.0	+29.0					11.28783	Y	Durech, 18
				191.0	+71.0	156.0	+73.0					11.28783		Wang, 18
178 Belisana		12.323	0.38											
				260.0	+20.0	79.0	+9.0					12.32139		Hanus, 13
179 Klytaemnestra		11.173	0.55											
				65.0	-6.0	248.0	-9.0					11.17342		Hanus, 16
180 Garumna		23.866	0.6											
				41.0	-64.0	196.0	-64.0					23.8592		Hanus, 16
182 Elsa	2	80.088	0.72											
	2			72.0	-84.0	224.0	-82.0					80.166	Y	Durech, 09
	2+			67.0	-87.0	222.0	-85.0					80.166	Y	Durech, 11w
183 Istria		11.77	0.31											
				85.0	+20.0							11.76897		Hanus, 13
184 Dejopeja	3	6.4416	0.3											
	3			192.0	+42.0	12.0	+49.0					6.44221	Y	Durech, 06
	3			200.0	+52.0	18.0	+54.0					6.441111	Y	Marciniak, 07
	3			14.0	+51.0	196.0	+50.0					6.441119	Y	Durech, 09
				200.0	+52.0	18.0	+54.0					6.44111		Hanus, 13
185 Eunike		21.797	0.22											
				136.0	+4.0	314.0	-18.0					21.80634	Y	Pilcher, 14

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
186 Celuta		19.842	0.55	88.0	−54.0	235.0	−77.0					19.8435	Y	Durech, 16
187 Lamberta	2+ 2+ R	10.670	0.32	6.0 −1.0 153.0	−59.0 −58.0 −56.0	158.0	−48.0					10.66703 10.66703 10.66703	Y	Durech, 06 Hanus, 11 Hanus, 16
188 Menippe	2 2	11.98	0.28	32.0	+48.0	198.0	+25.0					11.9765		Hanus, 11
189 Phthia		22.346	0.28	26.0	+35.0	197.0	+45.0					22.3416		Hanus, 16
190 Ismene	2 2 1	6.5210	0.16	118.0 118.0 118.0	+23.0 +23.0 +23.0	298.0 298.0 298.0	−30.0 −30.0 −30.0						Y Y	Shevchenko, 08 Shevchenko, 09 Shevchenko, 12
192 Nausikaa	2 2 2 3	13.625	0.20	130.0 325.0 326.0 −1.0	+40.0 −45.0 +33.0 −99.0	310.0	−40.0					13.622 13.6241 13.62170 13.6217	Y Y	Scaltriti, 76 Dotto, 95 Kaasalainen, 02 Marchis, 06
193 Ambrosia		6.581	0.53	141.0	−11.0	328.0	−17.0					6.58166		Hanus, 13
196 Philomela	2 2 2 2 2 2 1 3	8.3340	0.33	78.0 99.0 102.0 105.0 277.0 98.0 92.0 111.0	+26.0 −16.0 +26.0 −20.0 +20.0 −20.0 +36.0 −41.0	266.0 273.0 287.0 285.0	+24.0 −22.0 +26.0 −20.0	86.0 107.0	−24.0 −26.0	258.0 282.0	−26.0 −26.0		Y Y Y Y Y Y Y Y	Michalowski, 92 Michalowski, 93 Licandro, 94 De Angelis, 95 Kryszczyńska, 96 Blanco, 98 Lopez-Gonzalez, 05 Durech, 07
199 Byblis		5.2201	0.15	344.0	−24.0	165.0	+9.0					5.22063		Hanus, 13
201 Penelope	2 2 2 2 2 2 2 2 2 3 3	3.7474	0.73	78.0 80.0 74.0 85.0 258.0 93.0 258.0 84.0 84.0 84.0	−3.0 −35.0 −2.0 −40.0 −22.0 −14.0 −27.0 −32.0 −15.0 −15.0	258.0 260.0 261.0 260.0	+4.0 −25.0 −34.0 −25.0					3.74708 3.74746 3.74709 3.74745 3.74744 3.747465 3.74744 3.747362 3.74745 3.74745	Y Y Y Y Y Y Y Y Y Y	Drummond, 88 Magnusson, 90 Drummond, 91 Erikson, 93 Michalowski, 93 De Angelis, 95 Michalowski, 96 Tungalag, 02 Torppa, 03 Hanus, 13
205 Martha	2 2	14.911	0.50	358.0	−35.0							14.9117	Y	Durech, 18
208 Lacrimosa	2 2 2	14.085	0.33	20.0 −1.0 176.0	−75.0 −99.0 −68.0	176.0	−68.0	170.0	−68.0	350.0	−71.0	14.0769 14.0769	Y	Slivan, 96 Tungalag, 03 Durech, 11
209 Dido		5.7366	0.33	221.0	+37.0									Zhang, 07
210 Isabella		6.672	0.38	100.0	−14.0	278.0	−26.0					6.67190		Hanus, 16
211 Isolda		18.365	0.14	−1.0	−99.0									Tungalag, 03
212 Medea		10.283	0.16	40.0	−24.0	220.0	−33.0					10.28414		Hanus, 16
214 Aschera	2 2	6.835	0.23	274.0 123.0	+64.0 −37.0	93.0 306.0	−64.0 −42.0					6.83369	Y	Shevchenko, 03 Durech, 16
216*Kleopatra	2 2 2 3 3 3 3 3	5.385	1.22	71.0 67.0 72.0 −1.0 69.0 71.0 69.0	+21.0 +15.0 +20.0 −99.0 +10.0 +19.0 +10.0	234.0 231.0 235.0	+38.0 +31.0 +34.0	51.0	−31.0	247.0	−15.0	5.38527 5.399 5.38528 5.385263 5.38529 5.38528 5.38528	Y Y Y Y Y Y Y	Magnusson, 83 Zappala, 83 Magnusson, 86 Lupishko, 87 Drummond, 88 Magnusson, 90 Drummond, 91

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
<i>(continuation)</i>														
217 Eudora	2	25.272	0.31	78.0	+25.0	229.0	+45.0	49.0	-45.0	258.0	-25.0	5.385277 5.38528 5.385280 5.385280 5.3862	Y	Dotto, 92
	3			72.0	+18.0								Y	De Angelis, 95
				73.0	+21.0								Y	Kaasalainen, 12
				74.0	+20.0								Y	Hanus, 17
	4			74.0	+20.0									Shepard, 18
218 Bianca	2	6.337	0.27	255.0	+57.0							25.262		Cellino, 19
	2			131.0	-4.0	317.0	+11.0						Y	Durech, 18
220 Stephania	2	18.198	0.45	340.0	+60.0							6.337 6.33717 6.337172		Kryszczyńska, 96
	2+			305.0	+17.0	121.0	-10.0						Y	Durech, 07
	3			305.0	+17.0								Y	Durech, 11w
221 Eos		10.443	0.12	26.0	-50.0	223.0	-62.0					18.2087		Hanus, 13
	1			24.0	-60.0	224.0	-59.0						Y	Durech, 17
222 Lucia	1	7.8371	0.41	300.0	+0.0							10.436		Harris, 83
	2			72.0	+20.0	252.0	-22.0						Y	Shevchenko, 08
	1			72.0	+20.0	252.0	-22.0						Y	Shevchenko, 09
				72.0	+20.0	252.0	-22.0							Shevchenko, 12
	3			119.0	-37.0	289.0	-23.0							Hanus, 16
225 Henrietta		7.3556	0.24	119.0	-37.0	289.0	-23.0					7.83671 7.83668		Hanus, 18
	P			106.0	+50.0	293.0	+49.0							Hanus, 13
				-1.0	-99.0									Oszkiewicz, 17
226 Weringia		11.147	0.38	97.0	+35.0							11.14849		Wang, 18
	1			241.0	-56.0								Y	Michalowski, 93
227 Philosophia	1	26.468	0.20	135.0	+13.0							26.4614	Y	Michalowski, 00
	1			284.0	-14.0									Hanus, 16
230 Athamantis		24.0055	0.26	95.0	+19.0	272.0	-1.0					26.4614	Y	Marciniak, 18
	1			60.0	-51.0	240.0	+51.0	91.0	-44.0	271.0	+44.0		Y	Blanco, 98
	3-			74.0	+27.0	238.0	+28.0						Y	Torppa, 03
233 Asterope		19.70	0.35	74.0	+27.0	237.0	+29.0					19.69801 19.6981 19.6981 19.69803		Hanus, 13
	2			129.0	+38.0	308.0	+58.0						Y	Durech, 06
	2			-1.0	+49.0									Hanus, 11
	P			132.0	+36.0	322.0	+59.0							Hanus, 16
				316.0	+58.0								Y	Hanus, 17
234 Barbara		26.4744	0.28	144.0	-38.0							24.4744	Y	Hanus, 17
														Tanga, 15
236 Honoria	1	12.336	0.27	358.0	+66.0	178.0	-66.0					12.3375	Y	Blanco, 96
	1			178.0	-66.0	358.0	+66.0						Y	Blanco, 98
	1			196.0	+54.0	36.0	+44.0						Y	Devogele, 17
237 Coelestina		29.215	0.25	42.0	+14.0	230.0	+30.0					29.1758		Hanus, 16
238 Hypatia	2	8.8749	0.21	139.0	+27.0	337.0	+50.0	157.0	-50.0	319.0	-27.0		Y	De Angelis, 95
239 Adrastea	2	18.4707	0.51	226.0	-70.0							18.4717	Y	Durech, 16
241 Germania		15.51	0.17	94.0	+44.0	256.0	+42.0					15.51852	Y	Lopez-Gonzalez, 00
242 Kriemhild		4.5478	0.27	100.0	-40.0	285.0	-15.0					4.545174		Hanus, 13
243 Ida		4.634	0.86									4.63363 4.63363 4.633638 4.633632		
	2			75.0	-56.0	264.0	-64.0	81.0	-55.0	263.0	-56.0		Y	Binzel, 93
	3			262.0	-67.0									Davies, 96
	3			85.0	-47.0	262.0	-55.0						Y	Kaasalainen, 01
245 Vera	2	14.38	0.26	259.0	-66.0	74.0	-61.0					14.35651		Hanus, 13
246 Asporina		16.222	0.47	265.0	-51.0	96.0	-50.0					16.25222 16.25222		Hanus, 16
	2			242.0	-29.0	52.0	-67.0						Y	Durech, 06
				235.0	-10.0	47.0	-36.0							Hanus, 16

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
247 Eukrate		12.093	0.18	103.0	−22.0							12.09480		Hanus, 16
249 Ilse		84.94	0.34	3.0	+85.0	222.0	+41.0					84.995		Hanus, 16
250 Bettina	2 2 1 2 1 2 1 1 3	5.0545	0.45	104.0 96.0 85.0 99.0 102.0 272.0 −1.0 275.0 282.0 100.0 101.0	−16.0 +46.0 −9.0 −16.0 −30.0 −32.0 −99.0 +1.0 −12.0 +17.0 +9.0			103.0	−21.0	276.0	−46.0	5.05494 5.05492 5.05492 5.054940 5.05444	Y Y Y Y Y	Drummond, 91 Dotto, 92 Michalowski, 92 Erikson, 93 Michalowski, 93 De Angelis, 95 Lagerkvist, 95 Blanco, 00 Torppa, 03 Hanus, 13 Viikinkoski, 17
251 Sophia	R 2	20.216	0.61	229.0 −1.0 235.0	−45.0 −54.0 −52.0	24.0	−74.0					20.2221 20.2221 20.2222		Hanus, 16 Durech, 18 Hanus, 18
252 Clementina	2 2	10.864	0.44	121.0	+46.0	307.0	+59.0					10.86190	Y	Durech, 18
254 Augusta		5.8949	0.75	56.0 179.0	−69.0 −52.0	215.0 25.0	−75.0 −53.0					5.89503 5.89505	Y	Durech, 16 Hanus, 16
256 Walpurga	P P	16.664	0.58	−1.0	+59.0							16.66015		Durech, 18
257 Silesia		15.7095	0.30	5.0	−53.0	176.0	−46.0					15.7097		Hanus, 13
258 Tyche	2 2 2	10.041	0.43	72.0 224.0	+20.0 −4.0	222.0 40.0	+40.0 −9.0	42.0	−40.0	252.0	−20.0	10.04008	Y	Blanco, 00 Hanus, 11
260 Huberta		8.29	0.34	23.0	−28.0	206.0	−19.0					8.29055		Hanus, 13
263 Dresda	2	16.809	0.55	−1.0 103.0 101.0 99.0	−99.0 +73.0 +55.0 +54.0	282.0 +76.0 280.0 +58.0 272.0 +61.0						16.81389 16.8138 16.8139	Y Y	Tungalag, 03 Slivan, 09 Durech, 16 Hanus, 16
264 Libussa	2 2	9.2276	0.59	157.0	+18.0	338.0	−9.0					9.22794		Hanus, 11
265 Anna		11.681	0.48	109.0	−53.0							11.6903		Hanus, 13
268 Adorea		7.80	0.20	−1.0	−99.0									Tungalag, 03
270 Anahita	2 2 2	15.06	0.32	300.0 285.0 30.0 15.0	+65.0 +53.0 −35.0 −50.0							15.045521 15.04789 15.05950 15.05906	Y Y Y	Erikson, 00 Tungalag, 02 Durech, 16 Hanus, 16
271 Penthesilea		18.787	0.33	225.0	+49.0	42.0	+53.0					18.7875		Hanus, 16
272 Antonia	R R	3.8548	0.43	−1.0 293.0	−70.0 −90.0							3.85480 3.85480		Hanus, 11 Hanus, 13
274 Philagoria		17.938	0.51	138.0 328.0	−52.0 −71.0	303.0 154.0	−58.0 −65.0					17.94072 17.9410	Y	Durech, 16 Hanus, 16
276 Adelheid	3 3 2	6.315	0.17	9.0 9.0 9.0	−4.0 −4.0 −4.0	198.0 199.0 199.0	−20.0 −20.0 −20.0					6.319204 6.31920 6.31920	Y	Marciniak, 07 Durech, 11 Hanus, 13
277 Elvira	2+ 2+ 2 2+	29.69	0.59	56.0 −1.0 64.0 121.0	−81.0 −99.0 −77.0 −84.0	249.0	−79.0	50.0	−79.0	240.0	−79.0	29.6922 29.69218 29.6922	Y Y Y	Slivan, 03 Tungalag, 03 Slivan, 09 Hanus, 11

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
278 Paulina	3 3 3 2+	6.497	0.51	307.0 123.0 307.0	+29.0 +45.0 +31.0	119.0 311.0 118.0	+36.0 +28.0 +38.0					6.49387 6.49387 6.49387	Y Y Y	Durech, 06 Durech, 09 Hanus, 11
279 Thule		23.896	0.10	70.0	+0.0	250.0	+0.0							Pilcher, 14
281 Lucretia		4.348	0.38	−1.0 353.0 −1.0 128.0	−99.0 −57.0 −54.0 −49.0	146.0	−51.0					4.348 4.349711 4.349710 4.349711	Y	Taylor, 76 Durech, 06 Hanus, 11 Hanus, 13
283 Emma	2+ 2+ 3	6.896	0.53	80.0 85.0	+37.0 +37.0	261.0 251.0	+28.0 +22.0					6.59522 6.895221	Y Y	Michalowski, 06 Durech, 11w Hanus, 13
287 Nephthys	1 1 1	7.605	0.37	279.0 99.0 356.0	−54.0 +54.0 +36.0	279.0	−54.0 +39.0					7.580 7.60411	Y Y	Blanco, 96 Blanco, 98 Hanus, 16
290 Bruna		13.807	0.55	286.0	−80.0	37.0	−74.0					13.8055		Hanus, 13
291 Alice	2+ 2+ 3 2	4.313	0.55	66.0 70.0 69.0	+54.0 +56.0 +51.0	247.0 253.0 249.0	+55.0 +54.0 +56.0	70.0	+56.0	253.0	+54.0	4.32 4.31601 4.316011	Y	Kryszczyńska, 96 Kryszczyńska, 08 Hanus, 11
292 Ludovica	2 2 2 2	8.93	0.78	106.0 108.0	+40.0 +40.0	295.0 295.0	+19.0 +12.0					8.92633 8.92633	Y	Durech, 06 Hanus, 11
293 Brasilia		8.173	0.30	103.0	−7.0	274.0	−34.0					8.17410		Hanus, 16
296 Phaëtusa		4.5385	0.70	145.0 146.0	+53.0 +53.0	326.0 330.0	+60.0 +52.0					4.538091 4.53809	Y	Durech, 16 Hanus, 16
297 Caecilia		4.163	0.27	223.0	−53.0	47.0	−33.0					4.151388		Hanus, 13
302 Clarissa	2 2 2	14.381	0.6	28.0 28.0	−72.0 −72.0	190.0 190.0	−72.0 −72.0					14.47670 14.47670		Durech, 11 Hanus, 11
304 Olga	P P	18.36	0.24	−1.0	+52.0							19.2606		Durech, 18
306 Unitas	3 3 2	8.736	0.30	79.0 120.0 79.0 82.0	−35.0 +66.0 −35.0 −30.0	253.0	−17.0					8.73875 8.73875	Y Y	Durech, 06 Zhang, 07 Durech, 11 Durech, 17
310 Margarita	2 2	12.070	0.37	225.0	−35.0	42.0	−33.0					12.0710		Hanus, 11
311 Claudia	2+ 2+	7.532	0.89	−1.0 24.0 −1.0 214.0	−99.0 +48.0 −99.0 +43.0	209.0	+49.0	24.0	+48.0	209.0	+48.0	7.531375 7.53138	Y Y	Slivan, 02 Slivan, 03 Tungalag, 03 Hanus, 11
312 Pierretta	R R 2	10.282	0.32	−1.0 82.0	−52.0 −39.0	256.0	−58.0					10.20768 10.20764		Durech, 09 Hanus, 11
313 Chaldaea	P P	8.392	0.24	−1.0 219.0	+33.0 +34.0	45.0	+10.0					8.38992 8.38993		Hanus, 11 Hanus, 16
315 Constantia		5.345	0.57	162.0	+56.0	353.0	+45.0					5.34750		Hanus, 16
317 Roxane		8.169	0.75	220.0	−62.0	40.0	−70.0					8.16961		Hanus, 16
321 Florentina	2+ 2+	2.871	0.52	93.0	−60.0	264.0	−61.0	91.0	−60.0	264.0	−63.0	2.870866	Y	Slivan, 03

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
324 Bamberg		29.43	0.12	177.0 149.0	-62.0 +68.0	329.0	-68.0					29.458		Drummond, 08 Sato, 15
327 Columbia		5.9320	0.42	52.0	+43.0	238.0	+26.0					5.93183		Hanus, 16
329 Svea		22.778	0.22	33.0	+51.0	157.0	+47.0					22.7670	Y	Marciniak, 18
333 Badenia	2	9.862	0.33	3.0	-48.0	179.0	-27.0					9.8609	Y	Durech, 18
334 Chicago	2	7.361	0.67	13.0	+32.0 -59.0	188.0 180.0	+42.0 +59.0	198.0	-46.0	18.0	+46.0	9.1979	Y Y	Michalowski, 93 Blanco, 98
335 Roberta	2	12.054	0.78	80.0	+15.0	258.0	+25.0	78.0	-25.0	260.0	-15.0		Y	Blanco, 00
336 Lacadiera	2	13.70	0.34	194.0	+39.0	37.0	+54.0					13.69552		Hanus, 11
337 Devosa	2	4.653	0.75	199.0 199.0 193.0 209.0	-51.0 +59.0 -73.0 +43.0							4.65139 4.6347 4.65139 4.65368	Y Y Y Y	Michalowski, 92 Michalowski, 93 De Angelis, 95 Torppa, 03
338 Budrosa	2	4.6084	0.47	152.0 172.0 348.3 233.0	+24.0 +16.0 +2.9 +25.0	321.0	+33.0	141.0	-33.0	332.0	-24.0	4.59945 4.61033	Y Y Y	Gil-Hutton, 95 Tungalag, 02 Li, 12 Tungalag, 12
340 Eduarda	2	8.0062	0.32	188.0	-43.0	18.0	-47.0					8.00613		Hanus, 11
343*Ostara	2	109.87	0.52	103.0	+64.0	294.0	+48.0					110.028		Hanus, 16
344 Desiderata		10.747	0.18	-1.0	-99.0									Tungalag, 03
345 Tercidina		12.371	0.23	346.0	-55.0							12.37082		Hanus, 13
347 Pariana		4.0529	0.50	-1.0 230.0	-99.0 +30.0							4.052986	Y	Tungalag, 03 Caspari, 10
349*Dembowska	2	4.701	0.41	150.0 163.0 -1.0 153.0 148.0 157.0 153.0 152.0 150.0 -1.0 149.0 322.0 328.0	+25.0 +49.0 -99.0 +35.0 +35.0 +30.0 +36.0 +40.0 +23.0 -99.0 +41.0 +18.0 -44.0	330.0 330.0	+5.0 +29.0	150.0	-29.0	343.0	-49.0	4.70120 4.70148 4.70120 4.70120 4.701200 4.70122 4.70121 4.701207 4.701204 4.70120 4.7012	Y Y Y Y Y Y Y Y Y Y Y Y	Magnusson, 86 Zappala, 86 Lupishko, 87 Drummond, 88 Lumme, 90 Magnusson, 90 Drummond, 91 De Angelis, 95 Torppa, 03 Majaess, 08 Durech, 11w Hanus, 13 Cellino, 19
350 Ornamenta	3	9.178	0.26	184.0	-29.0							9.180414	Y	Marciniak, 09
351 Yrsa		13.29	0.45	20.0	-70.0	193.0	-41.0					13.3120		Hanus, 13
352 Gisela	1	7.490	0.70	213.0 24.0	+53.0 -21.0	33.0 206.0	-53.0 -28.0					7.48008	Y	Blanco, 00 Hanus, 13
353 Ruperto-Carola		2.73898	0.32	47.0 183.0	-55.0 -58.0	220.0 43.0	-46.0 -64.0					2.738962 2.738963	Y	Durech, 16 Hanus, 16
354*Eleonora	P	4.277	0.49	-1.0 132.0 137.0 355.0 159.0	+35.0 +45.0 +44.0 +36.0 +22.0	357.0 3.0 175.0 339.0	+38.0 +28.0 -36.0 +2.0	177.0 183.0	-38.0 -28.0	312.0 317.0	-45.0 -44.0	4.27718	Y Y Y Y Y	Lupishko, 81 Zappala, 84 Burchi, 85 Piironen, 85 Magnusson, 86

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
(continuation)														
355 Gabriella	2+	4.830	0.42	170.0	+39.0	6.0	+2.0					4.277182	Y	Drummond, 88
	2			148.0	+35.0	350.0	+21.0					4.27719	Y	Magnusson, 90
	2+			4.0	+9.0							4.277183	Y	Drummond, 91
	2+			5.0	+22.0							4.27718	Y	De Angelis, 95
	3			356.0	+20.0							4.277180	Y	Kaasalainen, 02
	2			144.0	+54.0							4.277186		Hanus, 11
				144.0	+54.0							4.277186		Hanus, 13
				162.0	+43.0							4.277184		Hanus, 16
				161.0	+41.0							4.277186	Y	Viikinkoski, 17
	2			332.0	+71.0	164.0	+78.0					4.82899	Y	Durech, 06
360 Carlova	2	6.183	0.49	−1.0	+69.0							4.82899		Durech, 09
	P			341.0	+78.0	197.0	+70.0					4.82899		Hanus, 11
	2			159.0	+88.0	341.0	+83.0					4.828994	Y	Marciniak, 12
	2			108.0	+51.0	337.0	+47.0	157.0	−47.0	288.0	−51.0		Y	Dotto, 95
	2+			105.0	+47.0							6.18959		Michalowski, 00
	2+			124.0	+60.0	346.0	+56.0					6.189594	Y	Durech, 06
	2			95.0	+40.0							6.1895928	Y	Wang, 06
	2+			350.0	+55.0	129.0	+65.0					6.189596	Y	Durech, 09
				112.0	+56.0	335.0	+55.0					6.189592	Y	Wang, 15
				3.0	+56.0							6.18959		Hanus, 16
361 Bononia		13.835	0.25	355.0	+56.0							6.189594	Y	Hanus, 17
				294.0	+13.0	115.0	+45.0					13.80634		Hanus, 16
362 Havnia		16.92	0.17	96.0	+39.0	273.0	+40.0					16.918773	Y	Wang, 15
364 Isara	2	9.156	0.40	282.0	+44.0	86.0	+42.0					9.15751		Hanus, 13
	2													
365 Corduba		12.705	0.15	255.0	+33.0	80.0	+4.0					12.7054		Hanus, 16
367 Amicitia	3	5.05538	0.90											
	3			30.0	+52.0	217.0	+59.0					5.05501	Y	Kryszczyńska, 08
	2			203.0	+38.0							5.05502		Hanus, 11
369 Aëria		4.778	0.13	−1.0	−99.0									Tungalag, 03
371 Bohemia		10.7391	0.18	93.0	+49.0	256.0	+43.0					10.73965		Hanus, 13
372 Palma	2	8.567	0.17											
	2			241.0	+7.0	61.0	−7.0	44.0	+78.0	224.0	−78.0		Y	Blanco, 98
	3−			68.0	+2.0							8.59103	Y	Torppa, 03
	2			221.0	−47.0	44.0	+17.0					8.58189		Durech, 11
	2			221.0	−47.0	44.0	+17.0					8.58189		Hanus, 11
373 Melusina	2	12.97	0.25	234.0	−5.0	51.0	+54.0					8.57964		Hanus, 16
	2			19.0	−48.0	147.0	−61.0					12.98632	Y	Durech, 18
376 Geometria	2	7.74	0.19											
	2			50.0	+36.0	230.0	+38.0					7.734		Kryszczyńska, 96
	3			57.0	−22.0	240.0	−35.0					7.734	Y	Michalowski, 05
	3			68.0	+2.0							7.71002	Y	Torppa, 08
	2			239.0	+45.0	63.0	+53.0					7.71097		Hanus, 11
377 Campania	2−	11.664	0.27											
	2−			266.0	+0.0	86.0	+0.0	86.0	+3.0	266.0	−3.0		Y	Blanco, 98
378 Holmia	3−	4.450	0.21	47.0	+67.0	196.0	+66.0					11.66440	Y	Marciniak, 08
	3−			130.0	+60.0	286.0	+76.0					4.440427	Y	Marciniak, 08
381 Myrrha		6.572	0.36											
				3.0	+48.0	160.0	+77.0					6.57198	Y	Durech, 16
382 Dodona		4.113	0.42	219.0	+72.0	37.0	+43.0					6.57196		Hanus, 16
386 Siegena	3−	9.763	0.18	83.0	+61.0	249.0	+54.0					4.113228	Y	Michalowski, 04
	3−													
387 Aquitania	1	24.144	0.25											
	1			236.0	−14.0	56.0	+14.0						Y	Blanco, 98
				104.0	−10.0	289.0	+25.0					9.76503	Y	Marciniak, 12
				289.0	+25.0							9.76503		Hanus, 16
				287.0	+26.0							9.76503	Y	Hanus, 17
387 Aquitania		24.144	0.25	142.0	+51.0							24.14	Y	Devogele, 17
				123.0	+46.0							24.14012	Y	Hanus, 17

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
389 Industria	2 2 2 3	8.53	0.34	98.0 127.0 293.0 98.0	-55.0 -52.0 -23.0 -38.0	314.0 307.0 103.0 291.0	-50.0 +52.0 -28.0 -29.0					8.49520 8.49520	Y Y Y Y	Michalowski, 93 Blanco, 98 Durech, 06 Hanus, 16
390 Alma	R R R R	3.74097	0.42	-1.0 -1.0 53.0	-64.0 -60.0 -50.0	275.0	-76.0					3.74116 3.74116 3.74117		Durech, 09 Hanus, 11 Hanus, 13
391 Ingeborg	R R	26.391	0.79	-1.0 305.0 354.0	-60.0 -52.0 -65.0							26.4145 26.4149 26.4146	Y	Hanus, 13 Durech, 16 Hanus, 16
394 Arduina	R R 2	16.53	0.69	-1.0 160.0 -79.0 195.0	-71.0 -69.0 -79.0 -61.0	353.0 191.0 56.0	-80.0 -49.0 -79.0					16.6218 16.6217 16.62157 16.6217	Y	Durech, 09 Hanus, 11 Durech, 16 Hanus, 16
399 Persephone	2 2	9.136	0.41	36.0	+63.0	231.0	+33.0					9.14639		Hanus, 11
400*Ducrosa	2 2	6.8678	0.62	328.0	+56.0	158.0	+62.0					6.86788		Hanus, 11
402 Chloë		10.664	0.37	312.0 306.0	-49.0 -61.0	160.0 162.0	-37.0 -41.0					10.66844 10.6684	Y	Hanus, 16 Devogele, 17
403 Cyane		12.283	0.45	65.0	+35.0	275.0	+33.0					12.2700		Hanus, 13
404 Arsinoë		8.887	0.38	25.0	+57.0							8.88766		Hanus, 13
406 Erna		8.789	0.35	357.0	-49.0	161.0	-60.0					8.79079		Hanus, 13
407 Arachne		22.627	0.31	64.0 241.0	-49.0 -63.0	268.0 43.0	-63.0 -58.0					22.6264 22.6263	Y	Durech, 16 Hanus, 16
409 Aspasia	2 2 2 3	9.022	0.19	73.0 65.0 177.0 72.0 3.0 3.0 2.0 4.0	+48.0 +55.0 +15.0 +43.0 +30.0 +30.0 +28.0 +30.0	253.0 205.0 3.0	-48.0 +45.0 +30.0	216.0	+35.0	36.0	-35.0	9.01704 9.021455 9.02145 9.02144 9.02145 9.02145	Y Y Y Y Y Y Y	Blanco, 98 Lopez-Gonzalez, 05 Warner, 08 Drummond, 09 Durech, 11 Hanus, 13 Hanus, 16 Hanus, 17
411 Xanthe	2 2 1	11.344	0.23	58.0 58.0 58.0	+40.0 +40.0 +40.0	240.0 240.0 240.0	-55.0 -55.0 -55.0					11.408	Y Y	Shevchenko, 08 Shevchenko, 09 Shevchenko, 12
413 Edburga	2 2	15.773	0.53	202.0	-45.0							15.7715		Hanus, 11
416 Vaticana	3— 3— 3 3	5.372	0.38	132.0 97.0 291.0	+58.0 +49.0 +12.0	310.0	+22.0					5.372 5.371594 5.371597	Y Y Y	Michalowski, 00 Durech, 06 Durech, 09
417 Suevia		7.034	0.22	13.0	+23.0	186.0	+20.0					7.01848	Y	Marciniak, 12
419 Aurelia	2 2	16.784	0.27	192.0 354.0	+34.0 +43.0	13.0 174.0 173.0	-34.0 +42.0 +35.0					16.80 16.78091	Y Y	Blanco, 00 Hanus, 16 Hanus, 17
423 Diotima	2 2 2 3 3 4	4.775	0.20	170.0 140.0 -1.0 351.0 351.0 351.0 354.0 354.0	+63.0 +55.0 -99.0 +4.0 +4.0 +4.0 +0.0 +0.0	345.0	+31.0	165.0	-31.0	350.0	-63.0	4.77468 4.7753 4.775376 4.77538 4.775377 4.775377 4.775377	Y Y Y Y Y Y Y	Zappala, 86 Dotto, 95 Marchis, 06 Durech, 07 Hanus, 13 Hanus, 16 Hanus, 16 Hanus, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
426 Hippo	R	34.3	0.22	−1.0	−33.0							67.504		Durech, 18
427 Galene	R	3.705	0.68	72.0	−57.0	272.0	−75.0					3.706036	Y	Durech, 16
430 Hybris	1	7.205	0.54	19.0	−68.0	188.0	−79.0					7.21655		Hanus, 18
432 Pythia	1	8.252	0.15	301.0	−65.0								Y	Blanco, 00
433*Eros	1	5.270	1.40	4.0	+45.0	184.0	−45.0							Rosenhagen, 32
				29.0	+22.0									Zesewitsch, 32
				2.0	+53.0	182.0	−53.0						Y	Krug, 36
				169.0	−62.0									Watson, 37
				353.0	+13.0							5.270254		Beyer, 53
				10.0	+46.0							5.270253	Y	Cailliate, 56
				13.0	+28.0								Y	Vesely, 71
				−1.0	−99.0									Chen, 76
				16.0	+12.0							5.2704	Y	Dunlap, 76
				15.0	+9.0								Y	Millis, 76
				17.0	+10.0							5.2702		Scaltriti, 76
				15.0	+20.0								Y	Lumme, 81
				23.0	+37.0								Y	Drummond, 85
				22.0	+9.0							5.27011		Taylor, 85
				16.0	+6.0									Koshkin, 86
				17.2	+11.3							5.27026		Yeomans, 00
				16.0	+19.0							5.2702529	Y	Kaasalainen, 01
				17.0	+11.0							5.270226	Y	Miller, 02
				17.2	+11.4									French, 20
434 Hungaria	2+	26.521	0.75	159.0	+65.0	117.0	+64.0					26.4880	Y	Durech, 06
	2+			109.0	+67.0							26.4879		Hanus, 16
435 Ella		4.623	0.38	59.0	+64.0	247.0	+58.0					4.622802	Y	Marciniak, 12
436 Patricia	2	16.133	0.28	124.0	−30.0	339.0	−58.0					16.1320		Hanus, 11
439 Ohio	2	37.46	0.24	39.0	−54.0	260.0	−30.0					37.4675	Y	Durech, 18
440 Theodora	2	4.828	0.72	80.0	−88.0	260.0	−88.0					4.83658		Hanus, 11
441 Bathilde	2	10.446	0.20	285.0	+55.0	122.0	+43.0					10.44313		Hanus, 13
446 Aeternitas	2	15.7413	0.51	356.0	+52.0	210.0	+60.0					15.73473	Y	Lucas, 12
450 Brigitta	2	10.7657	0.31	32.0	−16.0	203.0	−26.0					10.764372		Hanus, 16
				32.0	−16.0	203.0	−26.0					10.76437	Y	Hanus, 18
451 Patientia	2	9.727	0.10	153.0	+67.0	345.0	+25.0	165.0	−25.0	333.0	−67.0		Y	Zappala, 86
				−1.0	−99.0									Di Martino, 87
				39.0	+21.0	163.0	+25.0					9.741190	Y	Michalowski, 05
455 Bruchsalia	2	11.85	0.35	231.0	−29.0	71.0	−31.0					11.8400		Hanus, 11
				242.0	−13.0	73.0	−21.0					11.8401		Hanus, 16
458 Hercynia	2	21.806	0.48	274.0	+33.0	86.0	+14.0					21.81	Y	Devoegele, 17
				74.0	+14.0	262.0	+32.0					21.8136	Y	Durech, 18
462 Eriphyla	2	8.659	0.39	−1.0	−99.0									Tungalag, 03
				106.0	+39.0	293.0	+39.0					8.65890	Y	Slivan, 09
				119.0	+7.0	301.0	+5.0					8.65890	Y	Durech, 18
471*Papagena	1	7.113	0.13	−1.0	−99.0									Licandro, 94
	2			21.0	+31.0	201.0	−31.0							Blanco, 00
	3			29.0	+41.0	22.0	+40.0	235.0	+56.0			7.11364		Torppa, 08
	2			223.0	+67.0							7.11539		Durech, 11
				223.0	+67.0							7.11539		Hanus, 11
				221.0	+62.0							7.115390	Y	Hanus, 17
				29.0	+1.0							7.1152		Cellino, 19
474 Prudentia		8.572	0.90	150.0	−58.0	297.0	−46.0					8.57228	Y	Durech, 16
				301.0	−54.0	136.0	−64.0					8.57227		Hanus, 16

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
478 Tergeste		16.101	0.29											
				2.0	−42.0	216.0	−56.0					16.10308	Y	Marciniak, 18
480 Hansa		16.19	0.58											
				−1.0	−99.0									
				352.0	+18.0	173.0	−32.0					16.1894		Tungalag, 03 Hanus, 16
482 Petrina		11.7922	0.56											
				94.0	+2.0	274.0	+37.0					11.79212	Y	Durech, 16
				281.0	+61.0	94.0	+24.0					11.79214		Hanus, 16
484 Pittsburghia	2+	10.63	0.42											
	2+			72.0	+39.0							10.64976	Y	Durech, 06
	2+			69.0	+47.0							10.64976	Y	Durech, 09
	2+			70.0	+46.0							10.64977	Y	Hanus, 11
485 Genua	2	17.59	0.16											
	2			329.0	−36.0	170.0	−39.0					17.6193		Hanus, 11
486 Cremona	2	65.15	1.00											
	2			227.0	+59.0	31.0	+30.0					65.151		Hanus, 11
487 Venetia	3	13.34	0.30											
	3			268.0	−24.0							13.34153	Y	Erikson, 00
	3			259.0	−30.0							13.33170	Y	Tungalag, 02
				78.0	+3.0	252.0	+3.0					13.34133	Y	Marciniak, 18
489 Comacina	2+	9.02	0.33											
	2+			96.0	−46.0	265.0	−11.0					9.02319	Y	Durech, 06
				265.0	−16.0	88.0	−43.0					9.02321		Hanus, 16
490 Veritas		7.930	0.58											
				56.0	+34.0	231.0	+43.0					7.92811		Hanus, 16
495 Eulalia	2	28.967	0.37											
	2			224.0	+2.0	44.0	−2.0					29.2		Binzel, 87
	3			38.0	+35.0	212.0	+46.0					28.96589	Y	Vokrouhlicky, 16
497 Iva		4.620	0.50											
				121.0	−22.0	303.0	−32.0					4.620850		Hanus, 16
499 Venusia	2	13.48	0.36											
	2			37.0	+50.0	212.0	+46.0					13.4871		Hanus, 11
502 Sigune	R	10.922	0.66											
	R			−1.0	−44.0							10.92667		Hanus, 13
				178.0	−36.0							10.92666		Hanus, 16
505 Cava	2	8.1789	0.27											
	2			113.0	+4.0	293.0	−10.0							
	2			138.0	+40.0	325.0	+27.0							
				131.0	−21.0	304.0	−44.0					8.180050	Y	Young, 85
													Y	Michalowski, 96
													Y	Marciniak, 12
506 Marion		13.546	0.35											
				88.0	+22.0	264.0	−7.0					13.549826	Y	Wang, 15
507 Laodica		4.706	0.47											
				102.0	−55.0	312.0	−49.0					4.70657		Hanus, 13
509 Iolanda		12.306	0.45											
				245.0	+65.0	98.0	+38.0					12.2907		Hanus, 13
510 Mabella	R	19.4	0.25											
	R			−1.0	−59.0							19.4304		Hanus, 11
511*Davida	1	5.1297	0.25											
	1			122.0	+10.0	302.0	−10.0					5.16		Gehrels, 62
	2			306.0	+34.0	126.0	−34.0					5.167		Chang, 63
	2−			285.0	+45.0									Vesely, 85
	2			291.0	+37.0	307.0	+32.0	127.0	−32.0				Y	Drummond, 86
	2			92.0	+33.0	303.0	+34.0	123.0	−34.0	272.0	−33.0		Y	Zappala, 86
	3			300.0	+32.0							5.129363	Y	Drummond, 88
	2+			99.0	+26.0	299.0	+26.0					5.129364	Y	Magnusson, 90
	3			300.0	+32.0							5.129363	Y	Drummond, 91
	2			96.0	+32.0	303.0	+31.0					5.12936	Y	Michalowski, 93
	2+			292.0	+22.0							5.129365	Y	De Angelis, 95
	4			303.0	+44.0							5.129367	Y	Torppa, 03
	4			297.0	+26.0							5.129363	Y	Marchis, 06
				297.0	+21.0									Conrad, 07
				298.0	+22.0							5.129365		Hanus, 16
				299.0	+24.0							5.129363	Y	Viikinkoski, 17
				307.0	+33.0							5.1296		Cellino, 19
512 Taurinensis		5.585	0.43											
				324.0	+65.0							5.58203		Hanus, 13

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
513 Centesima		5.23	0.45											
516 Amherstia	2	7.4842	0.60	149.0	+4.0	332.0	+15.0					5.32399	Y	Durech, 16
	2			75.0	+63.0	256.0	+55.0	76.0	-55.0	255.0	-63.0		Y	De Angelis, 95
	2			76.0	+30.0								Y	Michalowski, 96
	3-			75.0	+17.0	225.0	-17.0					7.47920	Y	Michalowski, 00
	2			80.0	+53.0	253.0	+22.0					7.48430	Y	Durech, 09
	2+			254.0	+22.0	81.0	+54.0					7.48431	Y	Hanus, 11
518 Halawe		14.310	0.55											
				120.0	-66.0	292.0	-58.0					14.31765	Y	Durech, 16
519 Sylvania		17.962	0.40											
				106.0	+9.0	286.0	-13.0					17.9647		Hanus, 13
520 Franziska		16.507	0.51											
				122.0	-50.0	301.0	-59.0					16.5044	Y	Durech, 16
				282.0	-79.0	114.0	-45.0					16.5045		Hanus, 16
523 Ada		10.03	0.70											
				152.0	-70.0	357.0	-70.0					10.03242	Y	Durech, 16
526 Jena		9.474	0.35											
				5.0	+36.0	183.0	+48.0					9.51664		Hanus, 16
529 Preziosa	2	27.	0.56											
	2			175.0	-17.0	1.0	-40.0					25.9391		Hanus, 11
				178.0	-10.0	2.0	-25.0					25.9391		Hanus, 16
	1+			178.0	-10.0	2.0	-25.0					25.9391	Y	Hanus, 18
531 Zerlina		16.706	0.70											
				78.0	-84.0							16.7073		Hanus, 13
532 Herculina	1	9.405	0.25											
	1			132.0	-59.0								Y	Drummond, 85
	1			96.0	-1.0							9.405	Y	Taylor, 87
	2+			284.0	+34.0							9.405034	Y	Kwiatkowski, 92
	1			87.0	-7.0							9.40490	Y	De Angelis, 95
	3-			291.0	+18.0							9.40493	Y	Michalowski, 95
	2			295.0	+18.0								Y	Michalowski, 96
	2			91.0	+21.0	271.0	+21.0					9.40491	Y	Szabo, 99
	3			288.0	+11.0							9.404951	Y	Kaasalainen, 02
				100.0	+9.0							9.40494		Hanus, 16
				103.0	+11.0							9.40494	Y	Hanus, 17
534 Nassovia	2	9.382	0.37											
	2			58.0	+50.0	246.0	+51.0					9.46895	Y	Slivan, 03
				-1.0	-99.0									Tungalag, 03
	2			60.0	+47.0	247.0	+49.0					9.46891	Y	Slivan, 09
	3-			66.0	+41.0	252.0	+42.0					9.46889	Y	Hanus, 11
537 Pauly	1	16.168	0.20											
	1			290.0	+40.0	110.0	-40.0						Y	Blanco, 00
				31.0	+32.0	211.0	+51.0					16.2961		Hanus, 16
				31.0	+32.0	211.0	+51.0					16.2961		Hanus, 16
540 Rosamunde	P	9.351	0.66											
	P			-1.0	+57.0							9.34778		Durech, 09
	2			301.0	+81.0	127.0	+62.0					9.34779		Hanus, 13
543 Charlotte		10.718	0.28											
				333.0	+59.0	172.0	+49.0					10.7184		Hanus, 13
544*Jetta	R	7.745	0.52											
	R			-1.0	-66.0							7.74526		Durech, 09
	2			275.0	-84.0	31.0	-67.0					7.74528		Hanus, 11
550*Senta	R	20.555	0.41											
	R			-1.0	-64.0							20.5727		Durech, 09
	R			-1.0	-63.0							20.5726		Hanus, 11
	2			63.0	-40.0	258.0	-58.0					20.5726		Hanus, 13
553 Kundry	2	12.605	0.61											
	2			197.0	+73.0	359.0	+64.0					12.6025		Hanus, 13
556 Phyllis	3	4.293	0.47											
	3			209.0	+41.0	34.0	+54.0					4.292623	Y	Marciniak, 07
558 Carmen	2	11.387	0.31											
	2			77.0	-35.0	254.0	-17.0					11.39324	Y	Durech, 18
561 Ingwelde	2	12.012	0.38											
	2			89.0	+68.0							12.0118	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
562 Salome	3 2—	6.351	0.37	78.0	+41.0	275.0	+28.0					6.35031	Y	Hanus, 16 Hanus, 16 Hanus, 18 Hanus, 18
				54.0	+56.0	268.0	+44.0					6.350305		
				54.0	+56.0	268.0	+44.0					6.35030		
				63.0	−40.0	257.0	−56.0					20.5726		
564 Dudu	2 2—	8.882	0.55	73.0	−51.0	213.0	−36.0					8.88504		Hanus, 16
565 Marbachia				334.0	−22.0	163.0	−47.0					4.58782		
567 Eleutheria				317.0	+33.0	131.0	+53.0					7.71743		
568 Cheruskia				141.0	−2.0							13.20869		
572 Rebekka	2 2	5.6497	0.40	1.0	+54.0	158.0	+39.0					5.65009	Y	Hanus, 13
573 Recha				74.0	−24.0	252.0	−48.0					7.16586		
				252.0	−48.0	76.0	−26.0					7.165847		
				76.0	−26.0							7.16585		
575 Renate	2 2	3.676	0.20	183.0	−19.0	6.0	+3.0					3.6603283		Warner, 00
578 Happelia				339.0	+62.0							10.06450		
579 Sidonia				96.0	+7.0	276.0	−7.0					16.5		
580 Selene				62.0	+66.0	269.0	+50.0					9.4929		
581 Tauntonia	2 2	16.54	0.20	203.0	−49.0							24.994	Y	Durech, 18
582 Olympia				135.0	+3.0							36.3635		
584 Semiramis				327.0	−55.0							5.06893		
				110.0	−40.0	320.0	−30.0					5.0689		
	3— 3— 2 2 3— 2+ 2+ 3— 2	5.068	0.44	327.0	−55.0							5.06893	Y	Drummond, 88 Magnusson, 90 Drummond, 91 Michalowski, 93 De Angelis, 95 Michalowski, 96 Torppa, 03 Hanus, 11
				112.0	−51.0							5.068950		
				122.0	−56.0	315.0	−43.0					5.06894		
				334.0	−51.0							5.06895		
				106.0	−39.0							5.06892		
				106.0	−56.0	315.0	−32.0					5.06893		
585 Bilkis				136.5	+29.0							8.5738209		
587 Hypsipyle				232.0	+36.0	55.0	+32.0					13.6816		
588 Achilles				175.0	+0.0	335.0	+0.0					7.306		
590 Tomyris				273.0	−47.0	120.0	−46.0					5.55248	Y	Hanus, 11 Hanus, 16 Hanus, 18
	2 2	5.562	0.93	113.0	−35.0	274.0	−29.0					5.5524818		
				113.0	−35.0	274.0	−29.0					5.55248		
595 Polyxena				42.0	+7.0	221.0	−4.0					11.794162		
596 Scheila	2 2	15.8480	0.22	264.0	−18.0	89.0	−9.0					15.8666		Hanus, 16
600 Musa					−74.0	208.0	−46.0					5.88638		
601 Nerthus				173.0	+44.0	20.0	+32.0					13.5899		
606 Brangäne				183.0	+20.0	354.0	+26.0					12.29067		
607 Jenny	2 2	8.521	0.26	210.0	−40.0	35.0	−17.0					8.52234	Y	Stephens, 18
608 Adolfine				342.0	+43.0	171.0	+30.0					8.34489		

ASTEROID SPIN AXES

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
665 Sabine	3 3	4.294	0.45	310.0	−77.0							4.2940296	Y	Michalowski, 06
669 Kypria		14.283	0.64	31.0	+40.0	189.0	+49.0					14.2789		Hanus, 13
670 Ottegebe		10.045	0.35	127.0	+77.0	304.0	+68.0					10.03991	Y	Durech, 16
674 Rachele	2 2	30.982	0.18	128.0	+75.0							10.03991		Hanus, 16
675 Ludmilla	2 2 2 3—	7.717	0.38	12.0	+2.0			205.0	−50.0			30.95666	Y	Tungalag, 02
				12.0	+0.0								Y	Tungalag, 12
				12.0	−45.0	15.0	−35.0					7.71722	Y	Velichko, 95
				20.0	−36.0	215.0	−54.0					7.717215	Y	Torppa, 03
				49.0	+74.0	196.0	+49.0					7.715486	Y	Durech, 11
678 Fredegundis	2 2	11.61624	0.27	60.0	+30.0	230.0	+30.0	60.0	−30.0	230.0	−30.0	11.61364	Y	Stephens, 08
679 Pax	2 2 1 2	8.452	0.32	65.0	−5.0	245.0	+5.0						Y	Shevchenko, 08
				65.0	−5.0	245.0	+5.0						Y	Shevchenko, 09
				42.0	−5.0	220.0	+32.0					8.456016	Y	Marciniak, 11
				65.0	−5.0	245.0	+5.0							Shevchenko, 12
				219.0	+29.0	40.0	−28.0					8.45645		Wang, 18
681 Gorgo		6.4606	0.42	310.0	−50.0	150.0	−50.0					6.46063		Hanus, 16
682 Hagar		4.8503	0.52	93.0	−71.0	277.0	−35.0					4.850417	Y	Durech, 16
				56.0	−78.0	255.0	−57.0					4.85042		Hanus, 16
683 Lanzia	2 2 2 2	8.630	0.20	198.0	+5.0	342.0	+55.0	162.0	−55.0	18.0	−55.0		Y	De Angelis, 95
				15.0	−52.0	195.0	−52.0					4.71397	Y	Kiss, 99
				244.0	+44.0							8.62926	Y	Dunckel, 09
685 Hermia	2 2	50.40	0.92	197.0	+87.0	29.0	+79.0					50.387		Hanus, 11
686 Gersuind		6.3127	0.37	127.0	+56.0							6.31240	Y	Durech, 16
				125.0	+53.0	260.0	+58.0					6.31240		Hanus, 16
687 Tinette		7.3962	0.28	271.0	+18.0	100.0	+43.0					7.39710		Hanus, 16
689 Zita		6.425	0.62	8.0	−72.0	256.0	−61.0					6.42391	Y	Durech, 16
690 Wratislavia	3— 3—	8.64	0.31	177.0	+17.0	359.0	+45.0					8.61798		Michalowski, 06
692 Hippodamia	R R	8.98	0.50	−1.0	−52.0							8.99690		Hanus, 11
				233.0	−53.0							8.99690		Hanus, 16
694 Ekard	2 2 2 2 2 3—	5.925	0.50	96.0	+32.0							5.9219	Y	Drummond, 88
				105.0	+29.0	267.0	+56.0					5.92192	Y	Drummond, 91
				98.0	+40.0							5.92190	Y	Michalowski, 93
				98.0	+40.0							5.92190	Y	De Angelis, 95
				89.0	−48.0							5.92200	Y	Torppa, 03
695 Bella	2+ 2+ 2	14.222	0.59	308.0	−51.0							14.21898	Y	Durech, 06
				87.0	−55.0	314.0	−56.0					14.21900		Hanus, 11
				81.0	−58.0	308.0	−49.0					14.2190116		Kim, 14
698 Ernestina		5.0363	0.67	193.0	−68.0							5.03661	Y	Durech, 16
				213.0	−66.0	76.0	−49.0					5.03660		Hanus, 16
699 Hela		3.3962	0.55	45.0	+44.0	197.0	+31.0					3.396232	Y	Marciniak, 12
700 Auravictrix	2 2 1	6.075	0.43	86.0	−58.0	265.0	+56.0						Y	Shevchenko, 08
				86.0	−58.0	265.0	+56.0						Y	Shevchenko, 09
				86.0	−58.0	265.0	+56.0						Y	Shevchenko, 12
				54.0	+33.0	249.0	+47.0					6.07489	Y	Durech, 16

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
704*Interamnia	2 2 2	8.727	0.17	-1.0 43.0 47.0 51.0 36.0 47.0 -1.0 87.0	-99.0 -21.0 -3.0 +22.0 +12.0 +66.0 -99.0 +62.0	224.0 -22.0 227.0 +1.0						8.72729 8.72896717 8.71234	Y Y Y Y	Yang, 65 Michalowski, 93 De Angelis, 95 Michalowski, 95 Drummond, 08 Drummond, 09 Sato, 14 Hanus, 20
706 Hirundo		22.027	0.9	91.0 92.0	+70.0 +66.0	250.0 244.0	+45.0 +54.0					22.0161 22.0160	Y	Durech, 16 Hanus, 16
708 Raphaela		20.918	0.45	37.0	+27.0	217.0	+22.0					20.8894		Hanus, 13
714 Ulula	2+ 2+ 2+ 3- 2	6.998	0.65	41.0 40.0 224.0 42.0	-5.0 -4.0 -10.0 -9.0	224.0 225.0 41.0 227.0	-9.0 -13.0 -5.0 -14.0					6.99838 6.99838 6.99837 6.998377	Y Y Y Y	Durech, 06 Durech, 09 Hanus, 11 Marciniak, 11
718 Erida		17.447	0.37	78.0	-56.0	257.0	-52.0					17.4462	Y	Durech, 16
720 Bohlinia	2 2	8.919	0.46	33.0 -1.0	+52.0 -99.0	239.0	+40.0	40.0	+43.0	230.0	+41.0	8.918602	Y	Slivan, 03 Tungalag, 03
721 Tabora	2 2	7.982	0.30	172.0	+53.0	343.0	+38.0					7.98121	Y	Durech, 18
723 Hammonia	2 2	5.436	0.18	146.0	+22.0	330.0	+21.0					5.4348	Y	Durech, 18
725 Amanda		3.749	0.42	145.0	-63.0	320.0	-70.0					3.74311		Hanus, 13
727 Nipponia		5.0687	0.22	172.0	+11.0	333.0	+5.0					5.0687459		Kim, 14
729 Watsonia		25.230	0.30	88.0	-79.0							25.195	Y	Devogele, 17
731 Sorga		8.184	0.72	83.0	+40.0	275.0	+21.0					8.18633		Hanus, 13
732 Tjilaki		12.34	0.33	160.0	+23.0	353.0	+24.0					12.3411		Hanus, 13
733 Mocia	P P P	11.374	0.29	-1.0 -1.0	+36.0 +53.0							11.37611 11.37618		Hanus, 11 Durech, 18
742 Edisona		18.52	0.30	46.0 170.0 170.0	-54.0 -39.0 -39.0	175.0 9.0 9.0	-43.0 -65.0 -65.0					18.5833 18.58334 18.5833	Y	Hanus, 16 Hanus, 16 Hanus, 18
744 Aguntina		17.47	0.50	44.0	-58.0	227.0	-51.0					17.4690	Y	Durech, 16
746 Marlu	R R	7.787	0.23	-1.0 202.0	-54.0 -66.0	64.0	-27.0					7.78887 7.78887		Hanus, 11 Hanus, 16
747 Winchester	1 1 2 2 3	9.4146	0.18	27.0 353.0 166.0 304.0	+50.0 +39.0 -44.0 -60.0	173.0 296.0	-39.0 -61.0					9.402 9.414807 9.41480	Y Y Y	Michalowski, 93 De Angelis, 95 Marciniak, 09 Durech, 11
749 Malzovia		5.9279	0.30	53.0 55.0 242.0	+37.0 +46.0 +61.0	242.0 246.0 50.0	+46.0 +55.0 +58.0					5.92749 5.92748 5.92748	Y	Durech, 16 Hanus, 16 Hanus, 18
753 Tiflis	2 2 2	9.85	0.8	3.0 5.0	-13.0 +36.0	194.0 199.0	+80.0 +57.0					9.825983 9.8259	Y	Durech, 06 Hanus, 11
756 Lilliana		7.834	0.83	201.0	+31.0	53.0	+36.0					7.83250		Hanus, 16
757 Portlandia	2+ 2+	6.5837	0.45	321.0 263.0	-77.0 -69.0	124.0 90.0	-66.0 -56.0					6.58113 6.58112	Y	Durech, 06 Hanus, 16

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
758 Mancunia		12.7253	0.27	111.0	+48.0	306.0	+44.0					12.72011		Hanus, 16
761 Brendelia	2	57.96	0.25	209.0	−44.0							57.995	Y	Durech, 18
762 Pulcova	2	5.839	0.42	20.0	−12.0	196.0	−42.0					5.83977	Y	Durech, 16
				194.0	−42.0	17.0	−14.0					5.83977		Hanus, 16
769 Tatjana		35.08	0.34	176.0	+54.0	347.0	+38.0					35.0637	Y	Durech, 16
770 Bali	2+	5.8190	0.65	68.0	+44.0	256.0	+40.0					5.81894	Y	Durech, 09
	2+			70.0	+50.0	262.0	+45.0					5.81894	Y	Hanus, 11
771 Libera	2+	5.892	0.57	64.0	−78.0							5.890423	Y	Marciniak, 09
775 Lumière	2+	6.103	0.28	89.0	+54.0	248.0	+47.0					6.10300	Y	Durech, 18
776 Berbericia	1	7.668	0.26	8.0	+23.0							7.66689	Y	Tungalag, 02
	1			347.0	+12.0							7.66701	Y	Durech, 07
	3			170.0	+59.0	347.0	+11.0					7.66701	Y	Torppa, 08
	3			346.0	+25.0							7.66701		Hanus, 16
784 Pickeringia	P	13.144	0.40	−1.0	+58.0							13.1699		Hanus, 11
	P			99.0	+67.0	283.0	+30.0					13.16995	Y	Durech, 16
				282.0	+35.0	103.0	+68.0					13.16998		Hanus, 16
787 Moskva	2	6.056	0.68	80.0	+36.0	260.0	−36.0						Y	Shevchenko, 08
	2			80.0	+36.0	260.0	−36.0						Y	Shevchenko, 09
	1			333.0	+61.0	122.0	+27.0					6.055795	Y	Svoren, 09
	2			80.0	+36.0	260.0	−36.0							Shevchenko, 12
				331.0	+59.0	126.0	+27.0					6.05581		Hanus, 13
				334.0	+44.0	132.0	+11.0					6.0558066		Kim, 14
789 Lena		5.848	0.50	192.0	+39.0							5.84239	Y	Durech, 16
	1			121.0	+56.0	287.0	+77.0					5.87234		Hanus, 18
791 Ani	2	11.174	0.38	94.0	−25.0	269.0	+4.0					11.16954	Y	Durech, 18
792 Metcalfia	2	9.17	0.76	88.0	−14.0	274.0	−13.0					9.17821		Hanus, 13
797 Montana		4.5463	0.41	6.0	+61.0	179.0	+45.0					4.54619		Hanus, 16
798 Ruth		8.550	0.36	84.0	+27.0							8.55068		Hanus, 16
800 Kressmannia	2	4.464	0.40	345.0	+37.0	172.0	+34.0					4.460963	Y	Hanus, 11
	2			−1.0	−99.0									Cantu, 16
802 Epyaxa		4.392	0.70	347.0	−87.0							4.39012		Hanus, 16
	2.5			179.0	−87.0							4.39012		Hanus, 18
803 Picka		5.0742	0.47	218.0	+34.0	53.0	+41.0					5.07478		Hanus, 13
804 Hispania	2	14.845	0.24	90.0	+28.0	270.0	−28.0						Y	Michalowski, 92
	2			107.0	+49.0	227.0	+50.0	47.0	−50.0	287.0	−49.0		Y	De Angelis, 95
807 Ceraskia		7.368	0.49	325.0	+23.0	132.0	+26.0					7.37390		Hanus, 13
808 Merxia	2	30.631	0.70	26.0	+54.0	192.0	+57.0					30.630		Hanus, 11
809 Lundia	2	15.4142	1.12	120.0	+18.0							15.418	Y	Kryszczynska, 09
	3			122.0	+22.0							15.418		Bartczak, 17
	3			−1.0	−99.0									Oszkiewicz, 17
810 Atossa	P	4.385	0.55	12.0	+67.0	188.0	+69.0					4.38547		Hanus, 11

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
812 Adele		5.8587	0.69	301.0	+44.0	154.0	+69.0					5.85746		Hanus, 13
816 Juliana		10.557	0.57	124.0	−8.0	304.0	+10.0					10.5627		Hanus, 13
819 Barnardiana		66.70	0.82	169.0	+46.0	334.0	+47.0					66.698		Hanus, 13
822 Lalage		3.345	0.67	343.0	−74.0	133.0	−75.0					3.346503	Y	Durech, 18
823 Sisigambis	P	146.	0.7	−1.0	+57.0							146.58		Hanus, 11
825 Tanina	P	6.940	0.54	33.0	+53.0	216.0	+63.0					6.93981	Y	Durech, 06
	2			38.0	+51.0	232.0	+53.0					6.93981	Y	Kryszczyńska, 08
	2			−1.0	+54.0							6.93981		Durech, 09
	3			46.0	+48.0	231.0	+60.0					6.93981		Hanus, 11
	P													
	2													
829 Academia		7.891	0.44	71.0	−41.0	245.0	−67.0					7.89321	Y	Durech, 16
830 Petropolitana		39.0	0.42	217.0	+36.0	34.0	+41.0					37.347		Hanus, 16
832 Karin	2	18.348	0.65	242.0	+46.0	59.0	+44.0					18.3512		Hanus, 11
	2			52.0	+49.0	230.0	+47.0					18.3512976		Slivan, 12
838 Seraphina	2	15.67	0.30	18.0	+4.0	192.0	+32.0					11.7245	Y	Durech, 18
842 Kerstin	2	18.716		18.0	+78.0							18.716	Y	Durech, 18
	2													
844 Leontina		6.7859	0.26	302.0	+68.0							6.78303	Y	Durech, 16
847 Agnia	2	14.827	0.51	341.0	+18.0	162.0	+13.0					14.8247		Hanus, 11
849 Ara	2	4.116	0.53	214.0	−37.0	16.0	−6.0					4.116391	Y	Durech, 06
	2+			17.0	−10.0	213.0	−33.0					4.116391	Y	Durech, 09
	3			10.0	−25.0	223.0	−40.0					4.116391	Y	Marciniak, 09
	2+			223.0	−40.0							4.116391		Durech, 11
	3			223.0	−41.0							4.116391	Y	Hanus, 17
852 Wladilena	2	4.6134	0.31	53.0	+24.0	235.0	+21.0	55.0	−21.0	233.0	−24.0		Y	De Angelis, 95
	2			30.0	+30.0	210.0	+30.0	30.0	−30.0	210.0	−30.0	4.62	Y	Kiss, 99
				181.0	−48.0	46.0	−53.0					4.613301		Hanus, 13
	3			181.0	−48.0							4.61330		Hanus, 18
855*Newcombia	3	3.003	0.41	287.0	−72.0	61.0	−73.0					3.003687	Y	Stephens, 20
	3													
	3													
856 Backlunda		12.08	0.35	42.0	+44.0	226.0	+73.0					12.02894		Hanus, 16
857 Glasenappia		8.20	1.00	227.0	+48.0	38.0	+34.0					8.20757		Hanus, 13
867 Kovacia		8.6772	0.86	200.0	−44.0	38.0	−50.0					8.67807		Hanus, 13
870 Manto		122.30	0.80	96.0	+30.0	283.0	+35.0					122.166		Hanus, 16
872 Holda		5.945	0.47	77.0	+24.0	253.0	+32.0					5.94052		Hanus, 16
873 Mechthild		11.006	0.33	249.0	−52.0	51.0	−61.0					11.00639		Hanus, 16
874 Rotraut		14.297	0.29	201.0	−41.0	2.0	−36.0					14.3007		Hanus, 13
875 Nymphe		12.618	0.46	42.0	+31.0	196.0	+42.0					12.6213		Hanus, 13
				47.0	+32.0	200.0	+46.0					12.6212926		Kim, 14
876 Scott	2	11.817	0.35	105.0	−18.0	262.0	−35.0					11.8178	Y	Durech, 18
	2													

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
877 Walküre	P P	17.424	0.44	-1.0 68.0 262.0	+53.0 +58.0 +71.0	253.0 47.0	+61.0 +66.0					17.4214 17.4217 17.4217	Y	Hanus, 11 Durech, 16 Hanus, 16
879 Ricarda	2 2	82.9	0.37	86.0	-1.0	266.0	+4.0					95.802	Y	Durech, 18
881 Athene		13.895	0.53	123.0 115.0	-58.0 -77.0	337.0 338.0	-47.0 -43.0					13.89449 13.8943	Y	Durech, 16 Hanus, 16
884 Priamus	2 2	6.8605	0.40	-1.0	-32.0							6.86137	Y	Stephens, 17
885 Ulrike		4.90	0.72	13.0	-64.0	207.0	-60.0					4.906164	Y	Durech, 16
887 Alinda	2 2	73.97	0.35	190.0	+33.0							73.8257		Tungalag, 02
889 Erynia	2 2	9.89	0.67	187.0	-60.0	335.0	-74.0					9.8749		Hanus, 11
890 Waltraut		12.581	0.36	30.0 30.0 30.0	+69.0 +69.0 +69.0	123.0 123.0	+72.0 +72.0					12.58308 12.5831 12.58309	Y	Hanus, 16 Hanus, 18 Hanus, 18
891 Gunhild		11.892	0.37	-1.0	-99.0							10.556	Y	Kozdon, 16
896 Sphinx	2 2	21.038	0.16	172.0	+20.0	352.0	+42.0					12.95209	Y	Durech, 18
897 Lysistrata		11.26	0.11	109.0	-55.0	299.0	-29.0					11.2742816		Kim, 14
898 Hildegard		24.855	0.36	344.0	+27.0	164.0	+8.0					24.8544		Hanus, 16
899 Jokaste	R R	6.245	0.31	-1.0	-58.0							6.24812		Hanus, 11
900 Rosalinde		16.689	0.52	276.0	+70.0	90.0	+39.0					16.6868		Hanus, 13
906 Repsolda	2 2	15.368	0.24	108.0	-48.0							15.367	Y	Durech, 18
908 Buda		14.572	0.41	40.0	+5.0	225.0	+16.0					14.57498		Hanus, 16
915 Cosette	3 3 2+	4.445	1.02	185.0 350.0	+50.0 +56.0	348.0 189.0	+55.0 +61.0					4.469741 4.469742	Y Y	Durech, 09 Hanus, 11
918 Itha		3.47393	0.30	59.0 72.0	-59.0 -54.0	249.0	-72.0					3.473810 3.473808	Y Y	Durech, 16 Durech, 18
919 Ilsebill	R R	5.0325	0.25	-1.0	-53.0							5.03348		Durech, 18
920 Rogeria		12.244	0.31	238.0	-15.0	47.0	-35.0					12.5749		Hanus, 13
925 Alphonsina	2+ 2+ 2	7.880	0.57	294.0 296.0	+41.0 +41.0							7.87754 7.87754		Durech, 11 Hanus, 11
928*Hildrun		14.13	0.34	247.0	-29.0	86.0	-63.0					14.1163		Hanus, 16
933 Susi		4.6222	0.40	55.7	-20.8							4.62194	Y	Li, 12
934 Thüringia	2 2	8.166	0.66	120.0	-52.0							8.16534		Hanus, 11
936 Kunigunde	2 2	9.3650	0.34	47.0	+57.0	234.0	+50.0					8.82653		Hanus, 13
943 Begonia		15.66	0.36	209.0	-75.0							15.6593	Y	Durech, 16

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
944 Hidalgo	3 3	10.063	0.53	281.0 277.0	+5.0 +16.0							10.05863 10.05822	Y	Durech, 07 Hanus, 16
951 Gaspra	3— 3 2 4 3 3 3 2	7.042	1.0	−1.0 15.0 19.0 20.0 19.0 19.0 20.0 20.0 20.0	−99.0 +24.0 +20.0 +22.0 +21.0 +29.0 +19.0 +26.0 +23.0	198.0	+13.0					7.042 7.04207 7.04207 7.04207 7.042058 7.04201 7.042027	Y Y Y Y Y Y Y	Goldader, 91 Barucci, 92 De Angelis, 92 Magnusson, 92 Davies, 94 De Angelis, 95 Kaasalainen, 01 Tungalag, 02 Hanus, 13
955 Alstede		5.19	0.67	54.0 64.0	+38.0 +57.0	240.0 246.0	+13.0 +23.0					5.18735 5.18734	Y Y	Durech, 16 Durech, 18
958 Asplinda		16.543	0.64	41.0 228.0	+48.0 +33.0	226.0 46.0	+35.0 +45.0					25.3050 16.556100	Y	Hanus, 13 Warner, 18
961 Gunnie	2 2 2	21.366	0.10	37.0	+24.0	220.0	+7.0					21.361	Y	Durech, 18
966 Muschi	P P	5.355	0.44	−1.0	+57.0							5.35531		Durech, 09
968 Petunia		61.280	0.38	355.0	−78.0							61.160	Y	Durech, 16
976 Benjamina	2 2	9.701	0.60	354.0	+80.0							9.7080	Y	Durech, 18
979 Ilsewa		42.61	0.31	352.0	−66.0							42.8982	Y	Durech, 16
980 Anacostia		20.117	0.21	24.0	+35.0	203.0	−5.0					20.114	Y	Devogele, 17
984 Gretia	3 3 2 3	5.778	0.8	245.0 46.0 92.0	+52.0 +47.0 +67.0	48.0 247.0	+12.0 +48.0	228.0	−12.0	226.0	−47.0	5.778025 5.778026	Y Y Y	Behrend, 97w Blanco, 00 Marciniak, 08
986 Amelia		9.52	0.43	80.0	+30.0	282.0	+30.0					9.51856		Hanus, 16
994 Otthild		5.95	0.15	183.0	−50.0	41.0	−39.0					5.94819		Hanus, 13
996 Hilaritas		10.05	0.70	100.0	−56.0	281.0	−57.0					10.05154	Y	Durech, 16
998 Bodea		8.574	0.68	7.0 336.0	−59.0 −70.0	72.0	−56.0					8.57412 8.57412	Y	Durech, 16 Hanus, 18
1002 Olbersia	1 2 2	10.244	0.38	220.0	+35.0	16.0	+54.0					10.2367		Hanus, 11
1003 Lilofee	P P P	8.255	0.57	−1.0	−99.0							8.24991		Hanus, 13
1010 Marlene	P P	31.06	0.37	−1.0 299.0	+46.0 +42.0	106.0	+47.0					31.066 31.0651		Hanus, 11 Hanus, 16
1011 Laodamia		5.17247	0.45	95.0	−85.5	272.0	−88.0					5.172794	Y	Apostolovska, 14
1012 Sarema	2+ 2+ 2+	10.32	0.81	51.0 45.0	+64.0 +67.0	254.0 253.0	+53.0 +63.0					10.30708 10.30708	Y Y	Durech, 09 Hanus, 11
1013 Tombecka	2 2 2 1.5	6.053	0.50	4.0 54.0 16.0	+62.0 +46.0 +57.0	244.0 243.0	+34.0 +51.0					6.05017 6.05018 6.05017	Y Y Y	Durech, 06 Durech, 18 Hanus, 18
1017 Jacqueline		7.87	0.72	7.0 364.0	+55.0 +68.0	170.0 115.0	+65.0 +85.0					7.87149 7.87148	Y	Durech, 16 Hanus, 18
1019 Strackea	1 R R	4.044	0.25	−1.0	−99.0									Apostolovska, 11

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
1021 Flammario		12.160	0.40	32.0	+22.0	216.0	+55.0					12.15186		Hanus, 16
1022 Olympiada	2 2 2+	3.822	0.66	40.0 46.0	+18.0 +10.0	250.0 242.0	+71.0 +52.0					3.833594 3.83359	Y Y	Warner, 08 Hanus, 11
1023 Thomana		17.56	0.36	86.0	−65.0	272.0	−42.0					17.5611		Hanus, 16
1025 Riema	2 2	3.588	0.25	141.0	+11.0	321.0	−13.0					6.557		Shevchenko, 03
1029 La Plata	2 2	15.310	0.58	119.0	+30.0	274.0	+44.0					15.3101	Y	Durech, 18
1035 Amata		9.081	0.44	31.0	+69.0	247.0	+29.0					9.08215	Y	Durech, 16
1036 Ganymed	P P R 3−	10.297	0.45	−1.0 −1.0 214.0 −1.0 190.0 198.0	−99.0 −99.0 −73.0 −99.0 −78.0 −79.0							10.308 10.31 10.313 10.3096 10.31284 10.31304	 Y Y Y	Lupishko, 87 Hahn, 89 Kaasalainen, 02 Velichko, 12 Hanus, 15 Viikinkoski, 17
1039 Sonneberga	2 2	34.2	0.41	17.0	+51.0	192.0	+51.0					34.9671	Y	Durech, 18
1040 Klumpkea		59.2	0.77	172.0	+48.0							56.588		Hanus, 13
1050 Meta		6.142	0.46	60.0	−42.0	198.0	−79.0					6.14188	Y	Durech, 16
1056 Azalea		11.893	0.79	252.0	+51.0	64.0	+41.0					15.0276		Hanus, 13
1061 Paeonia		7.9971	1.00	155.0	−50.0							7.99710	Y	Durech, 16
1069 Planckia	2 2	8.665	0.42	197.0	+83.0							8.65848	Y	Durech, 18
1070 Tunica	R R	15.673	0.32	−1.0	−58.0							15.5763		Durech, 18
1073 Gellivara	R R	11.32	0.35	−1.0	−50.0							16.8472		Durech, 18
1075 Helina		44.9	0.91	123.0 127.0 127.0	−33.0 −43.0 −43.0	284.0 280.0 280.0	−34.0 −44.0 −44.0					44.6768 44.6770 44.677	Y Y	Durech, 16 Hanus, 16 Hanus, 18
1077 Campanula	2	3.85085	0.40	178.0	+76.0	313.0	+59.0					3.850486	Y	Durech, 16
1080 Orchis		16.1	0.31	255.0	+27.0	71.0	+28.0					16.0657		Hanus, 16
1081 Reseda		7.3002	0.34	92.0	−69.0	256.0	−76.0					7.30136	Y	Durech, 16
1082 Pirola		15.8525	0.62	123.0	−42.0	300.0	−38.0					15.8540	Y	Durech, 16
1083 Salvia		4.23	0.61	165.0	−59.0	358.0	−58.0					4.281429	Y	Durech, 16
1087 Arabis	2 2	5.794	0.40	334.0 155.0 155.0	−7.0 +25.0 +25.0	155.0 331.0 331.0	+12.0 +5.0 +5.0					5.79501 5.794995 5.79500	 Y	Hanus, 11 Hanus, 16 Hanus, 18
1088 Mitaka	3 3 2+	3.0361	0.62	115.0 280.0	−46.0 −71.0	278.0	−72.0					3.035377 3.035378	Y Y	Durech, 09 Hanus, 11
1089 Tama	R R	16.44	0.41	−1.0 193.0	−21.0 +32.0	9.0	+28.0					16.4655 16.4461		Durech, 09 Hanus, 13
1095 Tulipa		2.78721	0.23	142.0	+40.0	349.0	+56.0					2.787153	Y	Durech, 18

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
1098 Hakone		7.142	0.40	40.0	+43.0							7.14117	Y	Durech, 16
1102 Pepita	2	5.1054	0.36	25.0	-34.0	231.0	-30.0					5.10532		Hanus, 11
1103 Sequoia	2	3.03784	0.53	82.0	-75.0	209.0	-76.0					3.037975	Y	Durech, 06
	2			-1.0	-48.0							3.037977		Hanus, 11
	R			60.0	-59.0							3.037976		Hanus, 16
1105 Fragaria	2	5.4312	0.33	24.0	+3.0	202.0	+21.0					5.431437	Y	Durech, 18
1107 Lictoria	2	8.5616	0.30	82.0	+57.0	303.0	+57.0					8.5610	Y	Durech, 18
1110 Jaroslawa	2	97.4	0.80	236.0	+75.0							97.278		Hanus, 16
1111 Reinmuthia		4.02	0.95	356.0	+68.0	153.0	+78.0					4.007347		Hanus, 13
1117 Reginita	2	2.946	0.33		+43.0	174.0	+47.0					2.946472	Y	Franco, 19
1118 Hansky	2	15.61	0.38	224.0	-87.0							25.305	Y	Durech, 18
1119 Euboea	2	11.41	0.50	71.0	+61.0	280.0	+54.0					11.39823	Y	Durech, 16
				79.0	+75.0	282.0	+55.0					11.3981		Hanus, 16
1121 Natascha		13.197	0.51	16.0	+59.0	209.0	+50.0					13.19717	Y	Durech, 16
1123 Shapleya	P	52.92	0.38	-1.0	+57.0							52.867		Durech, 18
1125 China	P	5.367	0.62	132.0	-46.0	305.0	-49.0					5.36863		Hanus, 16
1126 Otero		3.64808	0.70	44.0	+75.0	240.0	+56.0					3.64800		Hanus, 13
1127 Mimi		12.749	0.95	224.0	-57.0							12.74557	Y	Durech, 16
	1			221.0	-62.0							12.74555		Hanus, 18
1130 Skuld		4.810	0.61	24.0	+36.0	200.0	+35.0					4.80764		Hanus, 13
1135 Colchis		23.47	0.46	7.0	-54.0	168.0	-56.0					23.4827	Y	Durech, 16
				139.0	-58.0	330.0	-81.0					23.4830		Hanus, 16
1137 Raïssa		142.79	0.56	220.0	-66.0	40.0	-77.0					143.644		Hanus, 16
1140 Crimea	2	9.77	0.30	12.0	-73.0	175.0	-22.0					9.7869		Hanus, 11
	2			175.0	-22.0							9.78693		Hanus, 13
	1.5			78.0	-50.0	267.0	-51.0					5.66079	Y	Durech, 16
1147 Stavropolis		5.66070	0.42	148.0	-9.0	322.0	-9.0					6.54449		Hanus, 11
1148 Rarahu	2	6.5447	0.94	146.0	-2.0	326.0	-2.0					6.54448		Hanus, 16
	2			146.0	-2.0	326.0	-2.0					6.54448	Y	Hanus, 18
1150 Achaia		60.99	0.72	126.0	-65.0	315.0	-60.0					61.071	Y	Durech, 16
				169.0	-69.0	347.0	-62.0					61.072		Hanus, 16
1158 Luda		6.863	0.22	267.0	+21.0	88.0	+67.0					6.8750690		Kim, 14
1160 Illyria	P	4.1025	0.91	-1.0	+47.0							4.10295		Hanus, 13
1165 Imprinetta	2	8.107	0.20	39.0	-82.0							10.8087	Y	Durech, 18
	2													

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
1168 Brandia	2 2	11.444	0.62									11.4425	Y	Durech, 18
1170*Siva	2 2	3.120	0.27	310.0	+65.0							15.92947	Y	Durech, 18
1172*Äneas	R R	8.705	0.62									8.70139		Durech, 18
1173*Anchises	R R	11.595	0.73	−1.0	−26.0									Horner, 12
1175 Margo		6.0136	0.40	−1.0	−99.0									
1182 Ilona	2 2	29.8553	1.2	184.0	−43.0	353.0	−17.0					6.01375		Hanus, 16
1185 Nikko	P P	3.79	0.50	34.0	−42.0	190.0	−59.0					29.8754	Y	Durech, 18
1187 Afra		14.0701	0.40	−1.0	+46.0							3.78615		Hanus, 11
1188 Gothlandia	R R R	3.4916	0.81	40.0	+34.0	226.0	+13.0					14.06993	Y	Durech, 16
				−1.0	−52.0							3.491820		Durech, 09
				−1.0	−63.0							3.491820		Hanus, 11
				334.0	−84.0							3.491820		Hanus, 13
1192 Prisma	R R	6.558	1.16	−1.0	−65.0							6.55836		Hanus, 13
				133.0	−78.0							6.55836		Hanus, 16
1197 Rhodesia	2 2	16.060	0.32	56.0	−56.0							16.0558	Y	Durech, 18
1199 Geldonia	R R	57.939	0.20	−1.0	−49.0							57.939		Durech, 18
1204 Renzia		7.885	0.49											
				130.0	−44.0	312.0	−51.0					7.88697	Y	Durech, 16
				142.0	−50.0	305.0	−45.0					7.88695		Hanus, 16
1206 Numerowia		4.7743	0.63	64.0	−50.0	271.0	−69.0					4.77529	Y	Durech, 16
1207 Ostenia	R R 2	9.073	0.7	−1.0	−57.0							9.07129		Durech, 09
				310.0	−77.0	124.0	−51.0					9.07129		Hanus, 11
				183.0	−63.0	51.0	−59.0					9.071295		Hanus, 16
	2			183.0	−63.0	51.0	−59.0					9.07130	Y	Hanus, 18
1210 Morosovia		15.2616	0.56											
				62.0	−69.0	245.0	−77.0					15.26088		Hanus, 16
	2			62.0	−69.0	245.0	−77.0					15.26088	Y	Hanus, 18
1214*Richilde	R R 2	9.860	0.33	−1.0	−59.0							9.86687		Hanus, 11
				59.0	−64.0	275.0	−46.0					9.86688	Y	Durech, 18
1218 Aster	2 2	3.1581	0.35	58.0	+67.0	260.0	+66.0					3.158091	Y	Durech, 18
1219 Britta	R R	5.575	0.75	−1.0	−99.0							5.5750		Binzel, 87
				72.0	−66.0	241.0	−66.0					5.57556	Y	Durech, 16
				61.0	−2.0	223.0	−68.0					5.57557	Y	Durech, 18
1220*Crocus	2 2	491.4	1.00											
				26.0	+48.0	165.0	+80.0					488.6	Y	Durech, 18
1223 Neckar	3 3 2+	7.81	0.45	70.0	+45.0	225.0	+42.0					7.75705	Y	Michalowski, 00
				73.0	+44.0	258.0	+39.0	73.0	+44.0	259.0	+41.0	7.82124	Y	Slivan, 03
				−1.0	−99.0									Tungalag, 03
	3−			252.0	+28.0	69.0	+30.0					7.82401	Y	Hanus, 11
1226 Golia	2 2	4.097	0.35	49.0	−23.0	218.0	−37.0					4.473578	Y	Durech, 18
1230 Riceia		6.60444	0.64	37.0	−63.0							6.67317	Y	Durech, 16
1231 Auricula		3.9816	0.75	57.0	−57.0	225.0	−85.0					3.981580	Y	Durech, 16
1236 Thaïs	2 2	47.9891	0.20											
				31.0	+43.0							47.9891	Y	Durech, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
1241*Dysona		8.6092	0.25	125.0	−68.0							8.60738		Hanus, 13
1244 Deira		210.6	0.50	314.0	−46.0	107.0	−56.0					216.98		Hanus, 16
1245 Calvinia		4.8523	0.7	52.0	−51.0	235.0	−43.0					4.85148	Y	Durech, 16
1248 Jugurtha		12.910	1.40	254.0	−89.0							12.19047	Y	Durech, 16
1249 Rutherfordia		18.242	0.81	32.0	+74.0	197.0	+65.0					18.2183		Hanus, 13
1251 Hedera		19.9000	0.61	124.0	−70.0	266.0	−62.0					19.9020	Y	Durech, 16
				271.0	−53.0	115.0	−62.0					19.9020	Y	Durech, 18
1255 Schilowa		29.536	0.26	156.0	−4.0	338.0	+15.0					29.4674		Hanus, 13
1263 Varsavia	2+	7.1639	0.28	341.0	−14.0							7.16495		Durech, 11
1270 Datura	P	3.359	0.61	−1.0	+59.0							3.358100		Durech, 09
	P			60.0	+76.0	264.0	+77.0					3.358100	Y	Vokrouhlicky, 09
1273 Helma	R	6.0851	0.32	−1.0	−46.0							6.08648		Durech, 18
1275 Cimbria	R	5.65	0.57	85.0	−61.0	271.0	−31.0					5.65454	Y	Durech, 16
1276 Uccia	P	4.90768	0.40	−1.0	−49.0							4.90748		Hanus, 13
	P			154.0	−69.0							4.907470	Y	Durech, 18
	1			235.0	−28.0							8.60740		Hanus, 18
1278 Kenya		188.	0.75	164.0	−66.0	281.0	−77.0					187.60		Hanus, 16
1281 Jeanne		15.3	0.45	153.0	+19.0	338.0	+32.0					15.30379	Y	Durech, 16
1282*Utopia	R	13.623	0.36	−1.0	−39.0							13.6228		Hanus, 11
1283 Komsomolia	2	32.175	0.40	76.0	+31.0	261.0	+48.0					32.1955	Y	Durech, 18
1286 Banachiewicz	2	8.63	0.54	214.0	+62.0	64.0	+60.0					8.63043		Hanus, 13
1288 Santa	R	7.605	0.46	−1.0	−59.0							7.62504		Durech, 18
1289 Kutaïssi	2	3.60	0.42	164.0	−76.0	340.0	−75.0					3.624174	Y	Slivan, 09
1291 Phryne	2	5.58410	0.86	106.0	+35.0	277.0	+59.0					5.58414		Hanus, 11
	2			109.0	+33.0	281.0	+56.0					5.584139	Y	Hanus, 16
	2			109.0	+33.0	281.0	+56.0					5.584139		Hanus, 18
1294 Antwerpia		6.63	0.42	128.0	−66.0	246.0	−76.0					6.62521	Y	Durech, 16
1299 Mertona		4.977	0.59	73.0	+35.0	253.0	+56.0					4.97691	Y	Durech, 16
1301 Yvonne	2	7.320	0.90	39.0	+41.0							7.31968		Hanus, 11
1307 Cimmeria	P	2.820	0.31	−1.0	+63.0							2.820723		Hanus, 13
1310 Villigera		7.830	0.46	3.0	+63.0	240.0	+26.0					7.83001		Hanus, 16
1311 Knopfia	2	19.296	0.20	74.0	−35.0	260.0	−34.0					32.3276	Y	Durech, 18
1312 Vassar	2	7.932	0.35	104.0	−50.0	250.0	−29.0					7.93189	Y	Durech, 16
				251.0	−23.0							7.93190		Hanus, 16

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
1317 Silvretta		7.048	0.45											
				45.0	−57.0	161.0	−46.0					7.06797		Hanus, 13
1320 Impala		6.1713	0.52											
				151.0	−57.0	254.0	−70.0					6.17081	Y	Durech, 16
				186.0	−43.0	126.0	−70.0					6.17081	Y	Durech, 18
1321*Majuba	P	5.207	0.43											
	P			−1.0	+58.0							5.22031		Durech, 18
1328 Devota	2	17.49	0.20											
	2			132.0	−32.0	312.0	−20.0					17.1066	Y	Durech, 18
1331 Solvejg	2	19.30	0.44											
	2			69.0	−46.0	248.0	−41.0					19.2892	Y	Durech, 18
1332 Marconia		19.16	0.4											
				37.0	+31.0	220.0	+31.0					19.2264	Y	Durech, 16
1333 Cevenola	2	4.877	1.1											
	2			38.0	−86.0	220.0	−44.0					4.87932		Hanus, 11
1334 Lundmarka		6.2497	0.88											
				79.0	−75.0							6.25033	Y	Durech, 16
1335 Demoulina	2	74.86	0.78											
	2			126.0	+60.0	318.0	+58.0					74.943	Y	Durech, 18
1337 Gerarda	2	12.52	0.23											
	2			64.0	+29.0	240.0	+69.0					12.47036	Y	Durech, 18
1339 Désagneauxa	P	9.380	0.48											
	P			−1.0	+65.0							9.37510		Hanus, 13
				63.0	+53.0	225.0	+42.0					9.37514	Y	Durech, 16
				230.0	+66.0	106.0	+72.0					9.375096		Hanus, 16
				230.0	+66.0	106.0	+72.0					9.37510	Y	Hanus, 18
1349 Bechuana	1+	15.692	0.30											
				153.0	+32.0	314.0	+46.0					15.6873	Y	Durech, 16
1350 Rosselia	R	8.140	0.54											
	R			−1.0	−58.0							8.14011		Hanus, 11
				67.0	−64.0	246.0	−58.0					8.14008	Y	Durech, 16
1352 Wawel		16.97	0.44											
				37.0	+55.0	201.0	+52.0					16.9542	Y	Durech, 16
				200.0	+59.0	32.0	+61.0					16.9543		Hanus, 16
1353 Maartje	2	22.930	0.46											
	2			266.0	+73.0	92.0	+57.0					22.9926		Hanus, 13
				285.0	+73.0	119.0	+41.0					22.9924		Hanus, 16
	2			285.0	+73.0	119.0	+41.0					22.9924	Y	Hanus, 18
1356 Nyanza	2	12.422	0.28											
	2			149.0	−31.0	327.0	−49.0					12.41064	Y	Durech, 18
1360 Tarka		8.87	0.73											
				323.0	−55.0							8.86606		Hanus, 16
1361 Leuschneria	2	12.075	0.75											
	2			158.0	−39.0	336.0	−48.0					12.07463	Y	Durech, 18
1364 Safara	2	7.25	0.36											
	2			197.0	+32.0	10.0	+12.0					7.14908	Y	Hanus, 18
1366 Piccolo		16.57	0.33											
				352.0	+49.0	201.0	+55.0					16.1834		Hanus, 16
1368 Numidia	R	3.64	0.35											
	R			−1.0	−50.0							3.640740		Hanus, 11
				201.0	−62.0							3.640739		Hanus, 16
1378 Leonce	2	4.3250	0.63											
	2			210.0	−67.0	46.0	−77.0					4.32527		Hanus, 13
1379*Lomonosowa	R	24.488	0.63											
	R			−1.0	−62.0							24.4845		Hanus, 11
				72.0	−84.0	265.0	−46.0					24.4846	Y	Durech, 16
1380 Volodia		6.19570	0.15											
				82.0	+54.0	261.0	+29.0					6.19570	Y	Durech, 18
1382 Gerti	2	3.082	0.38											
	2			268.0	+23.0	87.0	+28.0					3.081545		Hanus, 11

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
1386 Storeria	1.5	8.67	1.40	227.0 297.0	−57.0 −67.0	297.0	−67.0					8.67795 8.67795		Hanus, 13 Hanus, 18
1388 Aphrodite		11.9432	0.65	325.0 325.0	+35.0 +35.0	137.0 137.0	+66.0 +66.0					11.94389 11.94389	Y	Hanus, 16 Hanus, 18
1389 Onnie	2 R R	22.5	0.34	−1.0 183.0	−56.0 −75.0		−79.0					23.0447 23.0447		Hanus, 11 Hanus, 13
1390 Abastumani	P P	17.100	0.15	−1.0	+6.0							13.16482		Durech, 18
1391 Carelia		5.87822		21.0	−79.0	208.0	−43.0					5.87822	Y	Durech, 16
1393 Sofala		16.5931	0.48	319.0	+28.0	134.0	+41.0					16.5931		Hanus, 13
1396 Outeniqua	P P 2	3.08158	0.51	−1.0 61.0	+62.0 +55.0	242.0	+42.0					3.08175 3.081748	Y	Hanus, 13 Durech, 18
1400 Tirela		13.356	0.55	58.0	−80.0	297.0	−41.0					13.35384	Y	Durech, 16
1401 Lavonne		3.9338	0.26	204.0	+23.0	27.0	+44.0					3.93261		Hanus, 13
1403 Idelsonia	2 2	5.458	1.12	141.0	+4.0	325.0	+9.0					5.45924	Y	Durech, 18
1407 Lindelöf		31.151	0.34	147.0	+36.0							31.0941	Y	Durech, 16
1413 Roucarie	2 2	6.357	0.50	124.0	+15.0	310.0	+33.0					6.53058	Y	Durech, 18
1419 Danzig	2 2	8.1202	0.92	22.0	+76.0	193.0	+62.0					8.11957		Hanus, 11
1422 Strömgrenia	2 2	3.5051	0.34	22.0	+63.0	192.0	+58.0					3.504623	Y	Durech, 18
1423 Jose	2 2	12.307	0.96	78.0	−82.0							12.3127		Hanus, 13
1424 Sundmania		93.73	0.42	51.0	+76.0	275.0	+58.0					94.537		Hanus, 16
1430 Somalia		6.913	0.45	297.0	+42.0	128.0	+47.0					6.90907		Hanus, 16
1431 Luanda	2 2	4.141	1.00	79.0	+54.0							4.13591	Y	Durech, 18
1432 Ethiopia		9.8458	0.40	41.0	+44.0	225.0	+54.0					9.84425		Hanus, 13
1436 Salonta		8.870	0.34	223.0	+18.0	57.0	+35.0					8.86985		Hanus, 13
1437 Diomedes	2 2	24.49	0.70	320.0	+1.0							24.501	Y	Durech, 18
1439 Vogtia	2 2	12.898	0.37	255.0	+71.0	76.0	+67.0					12.934244	Y	Warner, 18
1446 Sillanpää	2 2	9.6602	0.71	129.0	+76.0	288.0	+63.0					9.65855		Hanus, 13
1449 Virtanen		30.495	0.74	89.0 307.0	+61.0 +58.0	302.0 99.0	+61.0 +58.0					30.5006 30.5005	Y	Durech, 16 Hanus, 16
1450 Raimonda		12.66	0.57	231.0	−56.0	71.0	−60.0					12.6344		Hanus, 13
1452 Hunnia	P P	17.2	0.34	−1.0	+55.0							41.6922		Durech, 18
1459 Magnya		4.678	0.84	159.0 73.0 72.0	−75.0 −54.0 −59.0	198.0 198.0 207.0	−55.0 −55.0 −51.0					4.679100 4.679102 4.67911	Y Y	Silva, 15 Durech, 16 Hanus, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
1463 Nordenmarkia	2	5.918	0.17											
	2			188.0	+32.0	356.0	+42.0					5.91899	Y	Durech, 18
1464 Armisticia	2	7.50	0.54											
	2			194.0	-54.0	35.0	-69.0					7.46699		Hanus, 13
1472 Muonio		8.706	0.48											
				249.0	+61.0	42.0	+62.0					8.70543		Hanus, 13
1482 Sebastiana	2	10.489	0.78											
	2			262.0	-68.0	91.0	-67.0					10.48965		Hanus, 11
1484 Postrema		12.1923	0.23											
				19.0	+44.0	250.0	+64.0					12.18978	Y	Durech, 16
1486 Marilyn		4.566	0.48											
				83.0	-57.0	270.0	-62.0					4.566945	Y	Durech, 16
				88.0	-66.0	267.0	-66.0					4.56695		Hanus, 16
1490 Limpopo		6.647	0.26											
				319.0	+22.0	142.0	+2.0					6.65164		Hanus, 13
1493 Sigrid	P	43.296	0.6											
	P			-1.0	+78.0							43.179		Hanus, 13
				183.0	+69.0	350.0	+69.0					43.1795	Y	Durech, 16
1494 Savo	2	5.35011	0.63											
	2			248.0	-68.0	83.0	-66.0					5.35059		Hanus, 11
				50.0	-65.0	233.0	-68.0					5.35059	Y	Durech, 16
1495 Helsinki		5.33116	0.83											
				355.0	-39.0							5.33131		Hanus, 13
1496 Turku		6.47	0.51											
				75.0	-75.0							6.47375	Y	Durech, 16
1500 Jyväskylä		8.82750												
				123.0	-75.0	268.0	-79.0					8.82750	Y	Durech, 16
1503 Kuopio	2	9.957	0.90											
	2			34.0	-56.0	263.0	-76.0					9.9586		Hanus, 11
	2			170.0	-86.0	27.0	-61.0					9.9586		Hanus, 13
1508 Kemi		9.196	0.55											
				352.0	+72.0	166.0	+73.0					9.19182		Hanus, 16
1510 Charlois	2	5.866	0.23											
	2			47.0	-24.0	226.0	-25.0					15.9844	Y	Durech, 18
1514 Ricouxa	P	10.438	0.62											
	P			-1.0	+71.0							10.42466		Durech, 09
	2			251.0	+75.0	68.0	+69.0					10.42468		Hanus, 11
1518 Rovaniemi		5.249	0.26											
				62.0	+60.0	265.0	+45.0					5.25047		Hanus, 13
1521 Seinäjoki		4.32	0.15											
				63.0	-18.0	230.0	-37.0					4.328159	Y	Durech, 16
1527 Malmquista	2	14.077	0.54											
	2			274.0	+80.0							14.0591		Hanus, 13
1528 Conrada		6.321	0.49											
				250.0	-51.0	93.0	-66.0					6.32154		Hanus, 13
1529 Oterma	2	14.321	0.18											
	2			59.0	-71.0							14.339108	Y	Warner, 18
1531*Hartmut	2	25.62	0.26											
	2			38.0	-22.0	229.0	-31.0					25.5330	Y	Durech, 18
1533 Saimaa	2	7.115	0.26											
	2			332.0	-70.0							7.1174	Y	Durech, 18
1534 Näsi		7.94	0.51											
				82.0	+23.0	268.0	+13.0					7.93161		Hanus, 16
1540 Kevola	2	20.082	0.33											
	2			96.0	-71.0							5.00453	Y	Durech, 18
1542 Schalén	2	7.516	0.49											
	2			92.0	+41.0	268.0	+52.0					7.5153	Y	Durech, 18
1545 Thernöe		17.20	0.76											
				164.0	-75.0	352.0	-80.0					17.20321	Y	Durech, 16
	1			346.0	-62.0	168.0	-62.0					17.2030		Hanus, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
1546 Izsák		7.350	0.31	124.0	+32.0	322.0	+60.0					7.33200		Hanus, 16
1547 Nele		7.0998	0.65	159.0	+28.0	318.0	+50.0					7.09742	Y	Durech, 16
1548 Palomaa		7.4961	0.50	72.0	−61.0	232.0	−32.0					7.49966	Y	Durech, 16
1551*Argelander		4.063	0.50	3.0	−81.0	183.0	−72.0					4.058350	Y	Durech, 16
1552 Bessel		8.996	0.29	61.0	−50.0	221.0	−57.0					8.96318		Hanus, 16
	1+			61.0	−50.0	221.0	−57.0					8.96318	Y	Hanus, 18
1554 Yugoslavia		3.8879	0.74	281.0	−34.0	78.0	−64.0					3.88766		Hanus, 13
1555 Dejan	2	16.960	0.52	39.0	+34.0	222.0	+20.0					22.2459	Y	Durech, 18
1557 Roehla	2	5.67899		124.0	−38.0	329.0	−57.0					5.67899	Y	Durech, 16
				124.0	−41.0	326.0	−54.0					5.678999		Hanus, 16
	1+			124.0	−41.0	326.0	−54.0					5.67900	Y	Hanus, 18
1559 Kustaanheimo		4.302	0.29	275.0	+29.0	94.0	+33.0					4.30435		Hanus, 13
1561 Fricke		15.15330		320.0	+71.0							15.15330	Y	Durech, 16
1566 Icarus	2	2.2726	0.22	49.0	+0.0	229.0	+0.0					2.273		Gehrels, 70
	2			214.0	+5.0							2.27364	Y	De Angelis, 95
	2			270.0	−81.0								Y	Greenberg, 17
1568 Aisleen	2	6.683	0.41	109.0	−68.0							6.67597		Hanus, 11
1571 Cesco	2	27.3967		72.0	+61.0							27.3967	Y	Durech, 18
1572 Posnania	3−	8.048	0.40	46.0	−65.0							8.04943	Y	Michalowski, 01
	3−			205.0	−82.0	85.0	−63.0					8.04945		Hanus, 13
1580 Betulia	2	6.1324	0.70	140.0	+20.0	320.0	−20.0					6.130	Y	Tedesco, 78
	2			80.0	+12.0	212.0	−5.0					6.156	Y	Drummond, 90
	2			133.0	+22.0							6.13836	Y	Kaasalainen, 04
	3			136.0	+22.0							6.13836	Y	Magri, 07
1582*Martir	2	9.84	0.46	235.0	−63.0							12.37670	Y	Durech, 18
1592 Mathieu	2	28.46	0.50	94.0	−14.0	269.0	−7.0					28.4821	Y	Durech, 16
1597*Laugier		8.0199	0.71	345.0	−78.0							8.02272	Y	Durech, 16
1600 Vyssotsky	2	3.2011	0.28	356.0	+7.0	219.0	+54.0					3.201264	Y	Warner, 08
1604 Tombaugh	2	7.24	0.35	166.0	+34.0	323.0	+36.0					7.0359	Y	Durech, 18
1607 Mavis	2	6.1339	0.53		+59.0	222.0	+70.0					6.14775		Hanus, 13
1614 Goldschmidt	U	16.540	0.15	−1.0								8.873	Y	Kozdon, 16
1618 Dawn	U	43.19	0.65	39.0	−60.0	215.0	−51.0					43.219		Hanus, 13
1619 Ueta	2	2.720	0.44	−1.0	+39.0							2.717943		Hanus, 13
	P			99.0	+49.0	295.0	+37.0					2.718238	Y	Durech, 16
1620 Geographos	1+	5.22204	2.03	20.0	−60.0							5.22331	Y	Dunlap, 74
	1+			54.0	−52.0							5.223328	Y	Michalowski, 94
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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
<i>(continuation)</i>														
1621 Druzhba	3 3 3 3 3	99.20	0.75	54.0 56.0 55.0 55.0 58.0	−52.0 −47.0 −46.0 −45.0 −49.0							5.223328 5.223326 5.223327 5.223326 5.223336	Y Y Y Y Y	Kwiatkowski, 95 Magnusson, 96 Hudson, 99 Kaasalainen, 01 Durech, 08
1623 Vivian	R R	20.5209	0.85	240.0	+71.0							99.100		Hanus, 16
1627 Ivar	U U 2 3 3	4.795	1.48	−1.0 147.0 145.0 338.0 299.0 334.0 336.0	+13.0 +34.0 +34.0 +40.0 +27.0 +39.0 +37.0	333.0 325.0 336.0	+18.0 +34.0 +39.0	145.0	−34.0	325.0	−34.0	4.798 4.7989 4.795170 4.79604 4.79517 4.7951689	Y Y Y Y Y Y	Lupishko, 86 Velichko, 90 Kiss, 99 Kaasalainen, 04 Warner, 14 Hanus, 15 Crowell, 17
1630 Milet	4	32.55	0.37	304.0	+34.0	121.0	+40.0					32.485		Hanus, 13
1632 Sieböhme	2 2	56.65	0.47	74.0	+73.0							56.644	Y	Durech, 18
1633 Chimay	2 2	6.5911	0.58	322.0	+77.0	116.0	+81.0					6.59064		Hanus, 13
1634 Ndola		64.23	0.4	261.0	+45.0	66.0	+34.0					64.255		Hanus, 13
1635 Bohrmann	2 2	5.864	0.50	5.0	−38.0	185.0	−36.0					5.86427		Hanus, 11
1637 Swings	2 2	10.264	0.28	43.0	+37.0	232.0	+26.0					10.26957	Y	Durech, 18
1641 Tana		7.95	0.33	102.0 102.0	+39.0 +39.0	276.0 276.0	+18.0 +18.0					8.019710 8.01971	Y Y	Hanus, 16 Hanus, 18
1643 Brown	2	5.932	0.50	140.0	+64.0	353.0	+84.0					5.93124	Y	Durech, 16
1647 Menelaus	2 2	17.74	0.32	157.0	+26.0	330.0	+23.0					17.745	Y	Durech, 18
1648 Shajna		6.4156	1.11	94.0 117.0	+47.0 +54.0	278.0 306.0	+50.0 +53.0					6.41368 6.41369	Y	Durech, 16 Hanus, 16
1652 Hergé	2 2	16.36	0.42	93.0	+28.0	269.0	+35.0					16.3072	Y	Durech, 18
1659 Punkaharju	2 2	5.01	0.43	259.0	−71.0	75.0	−22.0					5.01327		Hanus, 11
1663 van den Bos		740.	0.80	248.0	+62.0	43.0	+51.0					748.72	Y	Durech, 18
1665 Gaby	P P	66.	0.49	−1.0 261.0	+49.0 +41.0	66.0	+32.0					67.905 67.911		Hanus, 11 Hanus, 16
1666 van Gent	2 2	4.16504	0.42	127.0	−44.0							4.165792	Y	Durech, 18
1672 Gezelle		40.72	0.56	44.0 45.0	+73.0 +79.0	234.0	+82.0					40.6821 40.6824	Y	Durech, 16 Hanus, 16
1676 Kariba		3.1673	0.65	71.0 74.0	+74.0 +74.0	279.0 281.0	+56.0 +60.0					3.167336 3.167338	Y	Durech, 16 Hanus, 16
1677 Tycho Brahe	R R	3.848	0.46	−1.0	−59.0							3.856651		Durech, 18
1682*Karel	2 2	3.37485	0.47	232.0	+32.0	51.0	+41.0					3.37485		Hanus, 11
1685 Toro	2 2 2	10.1995	1.80	200.0 220.0	+55.0 +30.0							10.196 10.19540	Y Y	Dunlap, 73 De Angelis, 95

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
<i>(continuation)</i>														
	2 2			-1.0 94.0 71.0	-99.0 -65.9 -69.0							10.195 10.197810 10.19782	Y Y Y	Torppa, 05 Warner, 13 Durech, 18
1687 Glarona		6.498	0.75	132.0	+76.0	274.0	+70.0					6.49595	Y	Durech, 16
1691 Oort	2 2	10.2705	0.38	45.0	+68.0	223.0	+58.0					10.2684		Hanus, 13
1693 Hertzprung	2 2	8.825	0.45	45.0	+47.0	255.0	+48.0					8.84228	Y	Durech, 18
1699 Honkasalo	2 2	11.1159	0.32	4.0	+45.0	182.0	+57.0					11.15569	Y	Durech, 18
1701 Okavango	1.5 1.5	13.204	0.45	281.0	-70.0	118.0	-60.0					13.19176		Hanus, 18
1703 Barry	2 2	107.1	0.50	46.0	-76.0	221.0	-71.0					107.04		Hanus, 13
1704 Wachmann		3.314	0.40	267.0	+41.0	90.0	+40.0					3.31391		Hanus, 13
1705 Tapio	2 2	54.8	0.44	106.0	-57.0	265.0	-48.0					25.5438	Y	Durech, 18
1708 Pólit	2 2	7.520	0.50	2.1	+47.5							7.50776446	Y	Clark, 16
1709 Ukraina	2 2	7.28	0.66	165.0	-61.0	2.0	-40.0					7.30517		Hanus, 11
1715 Salli		11.087	0.61	95.0	-24.0	254.0	-48.0					11.08867		Hanus, 13
1716 Peter		11.514	0.52	52.0	-60.0	252.0	-52.0					11.51720	Y	Durech, 16
1719 Jens	R R	5.87	0.55	-1.0 286.0	-56.0 -88.0	55.0	-42.0					5.87016 5.87016		Hanus, 11 Hanus, 13
1723 Klemola		6.2545	0.41	52.0 252.0 252.0	-54.0 -35.0 -35.0	239.0 80.0 80.0	-56.0 -58.0 -58.0					6.25609 6.256098 6.25610	Y Y Y	Durech, 16 Hanus, 16 Hanus, 18
1730 Marceline	3	3.837	1.00	95.0 264.0	+56.0 +68.0	303.0 82.0	+81.0 +44.0					3.836550 3.836544	Y	Durech, 16 Hanus, 16
1732 Heike	P P	4.742	0.32	-1.0	+52.0							4.741995		Durech, 18
1733 Silke		7.89393	0.47	141.0	-63.0	302.0	-58.0					7.89457	Y	Durech, 16
1735 ITA		12.599	0.40	39.0	-46.0	178.0	-52.0					12.6103		Hanus, 16
1738 Oosterhoff	R R	4.4486	0.54	-1.0 121.0 13.0	-72.0 -62.0 -68.0	301.0 -80.0 176.0	-80.0 -64.0					4.44896 4.448955 4.44896	Y	Hanus, 13 Durech, 16 Hanus, 18
1741*Giclas	1	2.943	0.15	105.0	+30.0	288.0	+24.0					2.9425198		Pravec, 19
1742 Schaifers	2 2	8.56	1.46	57.0	+52.0	247.0	+68.0					8.53271		Hanus, 11
1743 Schmidt		17.45	0.36	69.0	-62.0	261.0	-53.0					17.4599	Y	Durech, 16
1746 Brouwer		19.724	0.35	21.0	-67.0	158.0	-71.0					19.7255		Hanus, 16
1747 Wright	2 2	5.2896	0.61	227.0	+31.0							5.28796		Hanus, 11
1750 Eckert		375.	0.87	176.0	+60.0							377.5		Hanus, 16
1752 van Herk	2 2	88.450		144.0	+19.0	324.0	+28.0					88.450	Y	Durech, 18

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
1753 Mieke		8.8	0.2	121.0	+67.0	321.0	+35.0					10.19942	Y	Durech, 16
1758 Naantali		5.4699	0.46	150.0	-60.0							5.47369	Y	Durech, 16
1762 Russell	P P 2	12.797	0.46	-1.0 8.0	+38.0 +89.0							12.79374 12.7933	Y	Durech, 18 Durech, 18
1763 Williams	R R	36.	0.3	-1.0	-63.0							88.030		Durech, 18
1767 Lampland	2 2	35.399		186.0	-53.0	340.0	-47.0					35.399	Y	Durech, 18
1768 Appenzella		5.1839	0.53	39.0	+45.0	227.0	+40.0					5.18335	Y	Durech, 16
1772 Gagarin	2 2	10.96	0.41	183.0	-46.0 +22.0	180.0 358.0	-31.0 +5.0					10.94130 10.93791		Hanus, 11 Hanus, 16
1774 Kulikov		3.832	0.40	54.0	-50.0	237.0	-46.0					3.830791	Y	Durech, 16
1785 Wurm		3.2693	0.30	11.0	+57.0	192.0	+47.0					3.26934		Hanus, 13
1786 Raahe	2 2	18.72	0.48	88.0	+45.0							30.175	Y	Durech, 18
1789 Dobrovolsky		4.8125	0.70	319.0	+30.0	137.0	+34.0					4.811096		Hanus, 16
1791 Patsayev	R R	19.809	0.28	-1.0	-49.0							19.8365		Durech, 18
1792 Reni		15.95	0.54	122.0	-41.0	260.0	-50.0					15.94121	Y	Durech, 16
1793 Zoya		5.750	0.44	52.0 238.0	+59.0 +64.0	227.0 62.0	+59.0 +64.0					5.75187 5.751872	Y	Durech, 16 Hanus, 16
1799 Koussevitzky	2 2	6.318	0.40	58.0	-61.0							6.3256	Y	Durech, 18
1801 Titicaca		3.2106	0.50	48.0	+51.0	260.0	+57.0					3.211233	Y	Durech, 16
1805 Dirikis	2 2	23.0	0.45	4.0	+48.0	188.0	+61.0					23.4543		Hanus, 13
1809 Prometheus	P P	22.447	0.49	-1.0	+58.0							22.4611		Durech, 18
1814 Bach		7.2408	1.14	126.0	+66.0	317.0	+64.0					7.23954	Y	Durech, 16
1816 Liberia		3.086	0.39	73.0	-68.0							3.086156		Hanus, 16
1819 Laputa		9.8004	0.51	149.0	-48.0							9.79965	Y	Durech, 16
1820 Lohmann		14.0554	0.55	62.0 264.0	+67.0 +65.0	250.0 69.0	+58.0 +55.0					14.04497 14.0449	Y	Durech, 16 Hanus, 16
1824 Haworth	2 2	17.8223		1.0	+41.0	181.0	+41.0					17.8223	Y	Durech, 18
1825 Klare	1 1	4.744	0.90	200.0 115.0 2.0	+70.0 -61.0 -58.0	20.0 315.0	+80.0 -69.0					4.7423303 4.742885 4.74288	Y Y	Krueng, 14 Durech, 16 Hanus, 16
1833 Shmakova		3.93	0.58	88.0	+47.0	336.0	+84.0					3.838235	Y	Durech, 16
1835 Gajdariya	2 2	6.3276	0.50	34.0	+74.0	204.0	+69.0					6.33768		Hanus, 13
1836 Komarov	2 2	8.8015	0.56	18.0	+79.0	197.0	+62.0					8.07992	Y	Durech, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
1837 Osita	1.5 P P	3.81862	0.59	167.0 36.0 305.0	−64.0 −52.0 −65.0	352.0 228.0 126.0	−54.0 −58.0 −63.0					3.81879 3.81880 3.81880		Hanus, 13 Hanus, 16 Hanus, 18
1838 Ursa		16.141	0.80	−1.0 51.0 42.0	+47.0 +66.0 +64.0	286.0 284.0	+32.0 +29.0					16.1635 16.16358 16.1635	Y	Hanus, 13 Durech, 16 Hanus, 16
1840 Hus		4.780	0.85	298.0	−77.0							4.749057	Y	Durech, 16
1841 Masaryk	R R 2 2	7.53	0.52	122.0	+62.0	305.0	+59.0					7.54301	Y	Durech, 16
1848 Delvaux		3.637	0.69	−1.0	−65.0							3.639112		Durech, 18
1849 Kresák		31.716	0.19	140.0	+61.0							31.716	Y	Durech, 18
1855 Korolev	2 2 2	4.6568	0.76	90.0	+52.0	262.0	+64.0					4.656199	Y	Durech, 16
1858 Lobachevskij		5.413	0.48	80.0	+50.0	255.0	+48.0					5.41208	Y	Durech, 16
1860 Barbarossa		3.255	0.35	45.0	+30.0	238.0	+63.0					3.254853	Y	Durech, 16
1862 Apollo	2 2 2	3.065	1.15	56.0 38.0 −1.0	−26.0 −36.0 −99.0							3.06544 3.0661 3.0662	Y	Harris, 87 De Angelis, 95 Torppa, 05
1863 Antinous		7.453	0.33	50.0 48.0 48.0	−71.0 −72.0 −72.0							3.065448 3.065448 3.065448	Y Y	Kaasalainen, 07 Durech, 08 Rozitis, 13
1864 Daedalus		8.572	1.04	108.0	+56.0							7.454130	Y	Warner, 17
1865 Cerberus	2 2	6.8039	2.3	67.0	−80.0							8.571974	Y	Warner, 18
1873 Agenor	2 2	20.60	0.08	298.0 311.0	−72.0 −78.0							6.80328 6.803286		Durech, 12 Hanus, 15
1889 Pakhmutova	2 2	17.490	0.50	117.0	+56.0							20.631	Y	Durech, 18
1892 Lucienne	2 2 2	9.31	0.42	22.0	−76.0	167.0	−40.0					17.5157		Hanus, 11
1900 Katyusha		9.4999	0.74	26.0	−40.0	213.0	−61.0					9.31556		Hanus, 16
1902 Shaposhnikov		20.977	0.42	94.0	−46.0	291.0	−48.0					9.50358	Y	Durech, 16
1905 Ambartsumian	2 2 2	92.153	0.5	326.0	+37.0	144.0	+79.0					20.9959		Hanus, 16
1906 Naef		11.009	0.99	52.0	−64.0	241.0	−68.0					92.153		Hanus, 13
1925 Franklin–Adams		2.978	0.32	72.0	−70.0							11.00818	Y	Durech, 16
1927 Suvanto	2 2 2	8.164	0.63	277.0	+57.0	66.0	+48.0					2.978301		Hanus, 16
1930 Lucifer		13.056	0.44	74.0	+73.0	278.0	+23.0					8.16154		Hanus, 13
1932 Jansky		64.496		32.0	+17.0	211.0	−19.0					13.0536		Hanus, 11
1933 Tintchen	2 2	3.671	0.55	101.0	−73.0	282.0	−70.0					64.496	Y	Durech, 18
1935 Lucerna	R R	15.86044		113.0	+26.0	309.0	+36.0					3.67062		Hanus, 13
				−1.0	−53.0							15.86044		Durech, 18

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
1939 Loretta	2 2	23.88	0.20	21.0	−72.0	201.0	−72.0					23.931	Y	Durech, 18
1942 Jablunka		8.91158		156.0	−73.0							8.91158	Y	Durech, 16
1945 Wesselink		3.5473	0.55	190.0	−78.0	336.0	−60.0					3.547454	Y	Durech, 16
1946*Walraven		10.21	0.96	259.0	−80.0	80.0	−59.0					10.2101		Hanus, 16 Oszkiewicz, 17
	R			−1.0	−99.0									
1949 Messina		3.6491	0.37	138.0	−64.0	326.0	−51.0					3.649308	Y	Durech, 16
1950 Wempe		16.788	0.98	90.0	−41.0							16.7953		Hanus, 13
1958 Chandra	2 2	7.070	0.38	152.0	−35.0	310.0	−43.0					7.05692	Y	Durech, 18
1963*Bezovec		18.160	0.60	219.0	+7.0							18.1655		Hanus, 13
1966 Tristan	P P	3.477216		−1.0	+50.0							3.477216		Durech, 18
1969 Alain	2 2	32.4	0.75	48.0	−61.0	234.0	−59.0					27.2490	Y	Durech, 18
1970 Sumeria	R R	12.0131	0.44	−1.0	−54.0							12.01206		Durech, 18
1975 Pikelner	2 2	11.2768		74.0	+38.0							11.2768	Y	Durech, 18
1978 Patrice		5.8813	0.13	21.0	+13.0	203.0	+18.0					5.881213	Y	Durech, 16
1980 Tezcatlipoca	3 3	7.24612	1.01	334.0	−65.0							7.25225 7.25226	Y	Kaasalainen, 04 Hanus, 15
				324.0	−69.0									
1985 Hopmann		17.480	0.44	107.0	−81.0							17.4787	Y	Durech, 16
1987 Kaplan	2 2 2	9.453	0.65	356.0	−58.0	233.0	−89.0					9.45950 9.45950		Hanus, 13 Hanus, 18
	P P			352.0	−52.0									
1993 Guacolda		3.584923		−1.0	+50.0							3.584923		Durech, 18
1996 Adams		3.311	0.60	107.0	+55.0							3.31114 3.3111390		Hanus, 13 Kim, 14
				106.0	+56.0	281.0	+17.0							
1997*Leverrier		8.0155	0.40	96.0	+46.0	274.0	+40.0					8.01532	Y	Durech, 16
2001 Einstein	2 2	5.487	1.02	90.0	−70.0							5.48503 5.48503	Y	Warner, 10 Hanus, 16
				87.0	−43.0									
2002 Euler		5.9929	0.31	30.0	+44.0	188.0	+47.0					5.99264		Hanus, 13
2004 Lexell	R R	5.4429	0.53	−1.0	−47.0							5.443187		Durech, 18
2020 Ukko	2 2	25.478	0.52	131.0	−7.0	313.0	+11.0					25.4807	Y	Durech, 18
2021 Poincaré	P P	4.4056	0.80	−1.0	+44.0							4.405538		Durech, 18
2036 Sheragul	1 1 P	5.4130	1.50	306.0	−35.8	117.3	−28.9					5.4159690 5.41285	Y	Clark, 16 Durech, 18
				−1.0	+56.0									
2058 Róka	R R	10.04	0.40	−1.0	−53.0							10.08855		Durech, 18
2063 Bacchus	3— 3—	14.904	0.42	24.0	−26.0							15.648	Y	Benner, 99

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
2064 Thomsen		4.233	0.78	118.0	−72.0	334.0	−56.0					4.244023	Y	Durech, 16
2081 Sázava	R	66.202		−1.0	−48.0							66.202		Durech, 18
2086 Newell	R	78.2	1.0	−1.0	−60.0							78.09		Hanus, 13
2090 Mizuho	2	5.47	0.30	231.0	−22.0							5.4793	Y	Durech, 18
2094 Magnitka	2	6.1124	0.86	107.0	+57.0	272.0	+48.0					6.11219		Hanus, 13
2100 Ra–Shalom	2	19.797	0.55	194.0	−73.0	359.0	−58.0					19.8201	Y	Kaasalainen, 04
	2			75.0	+16.0							19.793	Y	Shepard, 08
				313.0	−45.0							19.8201	Y	Durech, 12
				292.0	−65.0							19.8200	Y	Durech, 18
2104*Toronto	2	8.97	0.49	306.0	−74.0							8.9667	Y	Durech, 18
2110*Moore–Sitterly	R	3.34474	0.50	−1.0	−70.0							3.3447293	Y	Polishook, 14
	R			91.0	−75.0	270.0	−77.0					3.344727	Y	Pravec, 19
2111 Tselina	2	6.563	0.29	102.0	+19.0	282.0	+53.0					6.5631	Y	Durech, 18
2112 Ulyanov	2	3.041	0.36	156.0	+48.0	334.0	+65.0					3.04071		Hanus, 13
2120 Tyumenia	2	17.507	0.39	92.0	+23.0	244.0	+45.0					17.4991	Y	Durech, 18
2127 Tanya	2	7.864	0.40	64.0	+61.0							7.8523	Y	Durech, 18
2147 Kharadze	2	14.115	0.52	180.0	−13.0	347.0	−45.0					14.1384	Y	Durech, 18
2156 Kate	2	5.6228	0.88	49.0	+74.0							5.62215		Hanus, 11
2177 Oliver	P	6.11	0.45	−1.0	+56.0							6.10518		Durech, 18
2180 Marjaleena	P	7.396	0.43	85.0	+50.0	238.0	+54.0					8.346256		Hanus, 16
	1+			85.0	+50.0	238.0	+54.0					8.34626	Y	Hanus, 18
2181 Fogelin	2	14.07	0.57	77.0	+20.0	255.0	−6.0					14.0729	Y	Durech, 18
2192 Pyatigoriya	2	8.7162		139.0	+44.0	338.0	+81.0					8.7162	Y	Durech, 18
2203 van Rhijn	2	30.55	0.38	63.0	−76.0							30.607	Y	Durech, 18
2204 Lyyli	2	11.056	0.52	64.0	−66.0	252.0	−14.0					11.06211	Y	Durech, 18
2230 Yunnan	2	10.0381		2.0	+64.0	154.0	+73.0					10.0381	Y	Durech, 18
2275 Cuitlahuac	2	6.2891	1.10	9.0	−65.0							6.29005	Y	Durech, 16
2295 Matusovskij	2	3.950405		129.0	−47.0	316.0	−43.0					3.950405	Y	Durech, 18
2306 Bauschinger	2	21.69	0.77		−64.0	225.0	−65.0					21.6704		Hanus, 16
2313 Aruna		8.90	0.79	94.0	−80.0	283.0	−70.0					8.88618	Y	Durech, 16
				80.0	−75.0							8.88620		Hanus, 16
2332 Kalm	2	22.8	0.39	80.0	+52.0							11.51175	Y	Durech, 18
2336 Xinjiang	R	37.2993	0.12	−1.0	−50.0							37.2993		Durech, 18
	R													

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
2358 Bahner		10.848	0.43		+57.0	193.0	+52.0					10.8528		Hanus, 16
2372 Proskurin	R	18.184	0.60									18.1856		Durech, 18
2374 Vladvysotskij	R	5.398	0.48	-1.0	-59.0									
2381 Landi	R	3.989	1.04	-1.0	-46.0							5.41401		Durech, 18
				54.0	-87.0	237.0	-45.0					3.986045	Y	Durech, 16
				220.0	-36.0	14.0	-66.0					3.986041		Hanus, 16
2382 Nonie		15.085	0.49									15.1117		Hanus, 16
2384 Schulhof		3.294	0.44											
				196.0	-60.0	45.0	-42.0					3.29367		
				173.0	-81.0	65.0	-54.0					3.293677	Y	Hanus, 13
2386 Nikonov	2	5.8944												Vokrouhlicky, 16
	2			52.0	+51.0	242.0	+33.0					5.8944	Y	Durech, 18
2393*Suzuki		7.934	0.40											
				80.0	+53.0	222.0	+38.0					9.2875		Hanus, 16
2395 Aho		7.88033												
				160.0	+47.0	340.0	+46.0					7.88033	Y	Durech, 16
2397 Lappajärvi	2	9.044	0.65											
	2			77.0	-55.0	251.0	-35.0					9.0532	Y	Durech, 18
2425 Shenzhen		14.715	0.80											
				50.0	+58.0	265.0	+40.0					9.83818	Y	Durech, 16
2429 Schürer	2	6.66	0.77											
	2			235.0	-26.0							6.5119	Y	Durech, 18
2430 Bruce Helin	2	128.	0.67											
	2			177.0	-68.0							129.75		Hanus, 13
2445 Blazhko	R	3.6197	0.57											
	R			-1.0	-55.0							3.566024		Durech, 18
2446 Lunacharsky	R	3.613	0.41											
	R			-1.0	-49.0							3.607447		Durech, 18
2455 Somville	2+	2.8287	0.18											
	2+			224.0	-68.0	39.0	-49.0					2.82868	Y	Franco, 15
2459 Spellmann	P	6.5334	0.65											
	P			-1.0	+45.0							6.53344		Durech, 18
2467*Kollontai	2	17.656	0.44											
	2			112.0	-35.0	294.0	-42.0					17.6569	Y	Durech, 18
2478 Tokai	P	25.885	0.90											
	P			-1.0	+33.0							25.9172		Durech, 18
2483 Guinevere		14.733	1.38											
				19.0	+70.0	194.0	+59.0					14.73081	Y	Durech, 16
	2			19.0	+70.0							14.730644	Y	Warner, 18
2495 Noviomagum		6.645	1.06											
				12.0	-57.0							6.65168		Hanus, 16
2499 Brunk	2	5.88693												
	2			114.0	-52.0	294.0	-50.0					5.88693	Y	Durech, 18
2501 Lohja		3.8084	0.45											
				124.0	+84.0							3.808348	Y	Husarik, 14
				105.0	+41.0	278.0	+29.0					3.808360	Y	Durech, 18
	2			117.0	+82.0							3.80835292		Husarik, 18
2510 Shandong		5.9463	0.44											
				256.0	+27.0	71.0	+27.0					5.94639		Hanus, 13
2511*Patterson		4.144	0.95											
				194.0	+50.0	10.0	+31.0					4.14065	Y	Durech, 18
2528 Mohler		6.49130												
				56.0	-64.0	246.0	-54.0					6.49130	Y	Durech, 16
2550 Houssay	R	9.78916												
	R			-1.0	-39.0							9.78916		Durech, 18

ASTEROID SPIN AXES

Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
2562 Chaliapin	R R	11.45	0.40	−1.0	−66.0							11.45656		Durech, 18
2568 Maksutov	2 2	7.5930	0.49	62.0	+35.0	257.0	+39.0					7.59193	Y	Durech, 18
2573 Hannu Olavi	2 2	4.9355	0.37	19.0	+28.0	216.0	+43.0					4.93246	Y	Durech, 18
2579 Spartacus		3.63599	0.39	30.6	+22.6	208.6	+9.0					3.637355	Y	Warner, 12w
2581 Radegast		8.753	0.82	57.0	+56.0	230.0	+53.0					8.75121	Y	Durech, 16
2587 Gardner	2 2	11.631	0.48	351.0	+49.0							11.6268	Y	Durech, 18
2592 Hunan	2 2	49.9871		185.0	−73.0	357.0	−72.0					49.9871	Y	Durech, 18
2606 Odessa		8.2426	0.80	25.0	−81.0	283.0	−88.0					8.2444		Hanus, 13
2609 Kiril–Metodi	2 2	4.9433	0.80	40.0	+38.0	218.0	+28.0					4.94204	Y	Durech, 18
2616 Lesya	R R	9.2168	0.51	−1.0	−44.0							9.21760		Durech, 18
2617 Jiangxi		11.7743	0.57	224.0	+76.0	1.0	+54.0					11.7730		Hanus, 13
2627 Churyumov	2 2	7.66	0.84	141.0	−45.0	307.0	−70.0					7.6531	Y	Durech, 18
2630 Hermod		19.4283		74.0	+50.0	256.0	+45.0					19.4283	Y	Durech, 16
2634*James Bradley	2 2	16.284	0.37	120.0	−58.0							16.514	Y	Durech, 18
2644 Victor Jara	R R	5.37430		−1.0	−60.0							5.37430		Durech, 18
2656 Evenkia	P P	7.0847	0.72	−1.0	+55.0							7.08661		Durech, 18
2659 Millis	2 2	6.132	0.84	290.0 117.0 109.0	−55.0 −55.0 −49.0	112.0 294.0 288.0	−54.0 −52.0 −48.0					6.12464 6.12464 6.12464	Y	Hanus, 11 Durech, 16 Hanus, 16
2663 Miltiades	2 2	3.957489		186.0	+52.0	351.0	+48.0					3.957489	Y	Durech, 18
2677 Joan	2 2	16.98	0.52	53.0	−53.0	253.0	−35.0					16.97876	Y	Durech, 18
2683 Brian	2 2	22.528		112.0	−34.0	294.0	−50.0					22.528	Y	Durech, 18
2686 Linda Susan	2 2	8.7222		51.0	−52.0	268.0	−78.0					8.7222	Y	Durech, 18
2700 Baikonur	2 2	10.566	0.66	76.0	+66.0	283.0	+74.0					10.55573	Y	Durech, 18
2704 Julian Loewe	R R	2.6382	0.35	−1.0	−99.0									Oszkiewicz, 17
2709 Sagan		5.2564	0.63	302.0	−14.0	124.0	−35.0					5.25636		Hanus, 13
2713 Luxembourg		3.579	0.64	164.0	+4.0	343.0	+4.0					3.58132		Hanus, 16
2718 Handley	2 2	13.09803		84.0	−52.0	261.0	−53.0					13.09803	Y	Durech, 18
2725 David Bender		9.956	0.37	198.0	−37.0	58.0	−57.0					9.95798		Hanus, 16
2740 Tsoj	2 2	22.042	0.89	273.0	−46.0							22.0448	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
2741 Valdivia		4.098	0.47											
				269.0	−31.0	103.0	−59.0					4.09668		Hanus, 16
2743 Chengdu	2	8.32053	0.45											
	2			67.0	+45.0	224.0	+50.0					8.33205	Y	Durech, 18
2760 Kacha	2	13.0	0.06											
	2			101.0	−30.0							53.040	Y	Durech, 18
2785 Sedov		5.49	0.45											
				206.0	+48.0	26.0	+54.0					5.47761		Hanus, 16
2791 Paradise		9.81	0.34											
				100.0	−16.0							9.80729		Hanus, 16
2802 Weisell		14.683	0.37											
				255.0	−50.0	112.0	−63.0					37.705		Hanus, 16
2818 Juvenalis	R	3.640494												
	R			−1.0	−52.0							3.640494		Durech, 18
2830 Greenwich	2	24.	0.5											
	2			315.0	+34.0							80.573	Y	Durech, 18
2836 Sobolev		4.754883												
				82.0	−51.0	270.0	−79.0					4.754883	Y	Durech, 16
2839 Annette		10.4595	0.92											
				341.0	−49.0	154.0	−36.0					10.4609		Hanus, 13
2867 Šteins	3	6.049	0.31											
	3			250.0	−89.0							6.04681	Y	Lamy, 08
				94.0	−86.0							6.0467905	Y	Lamy, 08
				95.0	−85.0							6.04681	Y	Jorda, 12
				142.0	−83.0								Y	Durech, 17
2884 Reddish	2	14.310	0.90											
	2			201.0	−84.0							35.537	Y	Durech, 18
2911 Miahelena	2	4.201	0.69											
	2			129.0	−42.0	294.0	−35.0					4.201878	Y	Durech, 18
2919 Dali	P	7.43	0.45											
	P			−1.0	+52.0							7.42527		Durech, 18
2925 Beatty	P	3.6612	0.43											
	P			−1.0	+44.0							3.661547		Durech, 18
2939 Coconino	P	4.68138	0.46											
	P			−1.0	+45.0							4.681094		Durech, 18
2947 Kippenhahn	P	10.430	0.43											
	P			−1.0	+38.0							10.95528		Durech, 18
2948 Amosov		7.3996	1.20											
				267.0	−64.0	33.0	−73.0					7.39889		Hanus, 16
2951 Perepadin	2	4.781	0.76											
	2			83.0	−65.0	223.0	−80.0					4.780779	Y	Durech, 18
2953 Vysheslavia		6.2945	0.23											
				−1.0	−99.0							6.2945		Vokrouhlicky, 06
2957 Tatsuo		6.8191	0.53											
				81.0	+45.0	248.0	+32.0					6.82043		Hanus, 13
2962 Otto		2.67756	0.17											
				230.0	−58.0							2.53632		Hanus, 16
2985 Shakespeare	2	6.06	0.57											
	2			142.0	−44.0	326.0	−52.0					6.05815	Y	Durech, 18
2991 Bilbo		4.0637	0.40											
				277.0	+54.0	90.0	+51.0					4.06175		Hanus, 13
2992 Vondel	2	18.849	0.50											
	2			152.0	+38.0	342.0	+44.0					18.8455	Y	Durech, 18
2993 Wendy	R	4.456	0.68											
	R			−1.0	−62.0							4.409024		Durech, 18
2997 Cabrera	P	5.31070												
	P			−1.0	+55.0							5.31070		Durech, 18
3015 Candy		4.625	1.05											
				306.0	+43.0							4.63519895	Y	Clark, 16
				142.0	−26.0	346.0	−70.0					4.625223	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
3017 Petrovič	R	4.08033	0.62											
	R			−1.0	−73.0							4.08037		Hanus, 13
3019 Kulin	P	92.577												
	P			−1.0	+57.0							92.577		Durech, 18
3021 Lucubratio	2	12.0934	0.23											
	2			53.0	−29.0							12.10054	Y	Durech, 18
3030 Vehrenberg	R	4.812	0.60											
	R			−1.0	−41.0							4.813071		Durech, 18
3044 Saltykov	R	35.3573	0.34											
	R			−1.0	−49.0							36.9775		Durech, 18
3059 Pryor	2	24.544	0.60											
	2			66.0	+52.0	238.0	+56.0					24.5466	Y	Durech, 18
3085 Donna	2	4.79790												
	2			144.0	−43.0	329.0	−35.0					4.79790	Y	Durech, 18
3086 Kalbaugh	2	5.180	0.84											
	2			90.0	−45.0							5.17910	Y	Warner, 10
				63.0	−51.0							5.17907	Y	Durech, 16
3090 Tjossem	R	42.8932												
	R			−1.0	−47.0							42.8932		Durech, 18
3096 Bezruč	R	27.3662												
	R			−1.0	−50.0							27.3662		Durech, 18
3097*Tacitus		8.7759	0.51											
				229.0	+71.0	72.0	+62.0					8.7759		Hanus, 13
3102 Krok		149.4	1.6											
				−1.0	−99.0							151.8		Pravec, 05
3103 Eger	P	5.7103	1.18											
	P			−1.0	−99.0							5.707		Velichko, 92
	3			10.0	−50.0							5.706772	Y	Kaasalainen, 02
				226.0	−70.0							5.710156	Y	Durech, 12
3109 Machin	R	20.3	0.46											
	R			−1.0	−51.0							20.2912		Durech, 18
3119 Dobronravin	R	6.39902												
	R			−1.0	−47.0							6.39902		Durech, 18
3122*Florence	2	2.3581	0.37											
	2			164.0	−86.0							2.3583	Y	Franco, 18
3131 Mason–Dixon	2	19.748	0.70											
	2			294.0	+57.0							19.703	Y	Durech, 18
3134 Kostinsky	2	14.7	0.40											
	2			276.0	+88.0							14.6755	Y	Durech, 18
3169 Ostro		6.503	1.13											
				50.0	+54.0	230.0	−54.0						Y	Descamps, 07
3170 Dzhanibekov		6.0724	0.64											
				217.0	+60.0	21.0	+64.0					6.07168		Hanus, 13
3179 Beruti	R	5.383	0.84											
	R			−1.0	−55.0							5.38261		Durech, 18
3183 Franzkaiser	2	38.0358												
	2			92.0	+50.0	279.0	+50.0					38.0358	Y	Durech, 18
3199 Nefertiti	3	3.021	0.30											
	3			197.0	−22.0							3.020167	Y	Kaasalainen, 04
3200 Phaethon	2	3.604	0.34											
	2			97.0	−11.0	276.0	−15.0					3.59060		Krugly, 02
				85.0	−20.0							3.6032	Y	Ansdell, 14
				319.0	−39.0							3.603958	Y	Hanus, 16
				318.0	−47.0							3.603957	Y	Hanus, 18
	3			308.0	−52.0	322.0	−40.0					3.603957	Y	Kim, 18
	3.0													
3210 Lupishko	2	14.255	0.74											
	2			42.0	+55.0							14.2490	Y	Durech, 18
3225 Hoag	2	2.3717	0.23											
	2			45.0	+45.0	225.0	+45.0					2.37219408	Y	Warner, 10
3228 Pire	2	11.538	0.50											
	2			40.0	−50.0	214.0	−43.0					11.54203	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
3247 Di Martino		5.445	0.51	53.0	-70.0	231.0	-75.0					5.44517		Hanus, 16
3258 Somnium		5.3379	0.80	119.0	-47.0	274.0	-71.0					5.33083		Hanus, 16
3261 Tvardovskij		5.36852		90.0	+65.0	280.0	+68.0					5.36852	Y	Durech, 16
3266 Bernardus		10.757	1.14	227.0	-32.0							10.75954		Hanus, 16
3272 Tillandz	P	4.74961	0.67	-1.0	+48.0							4.749232		Durech, 18
3279 Solon	P	8.0969	0.85	268.0	-70.0							8.1043		Hanus, 13
3281 Maupertuis	2	6.7295	1.22	62.0	-66.0	231.0	-74.0					6.72984	Y	Durech, 16
3285 Ruth Wolfe	2	3.919	0.20	142.0	+33.0							3.93494		Hanus, 16
3286 Anatoliya		5.81029		52.0	+51.0	293.0	+76.0					5.81029	Y	Durech, 16
3301 Jansje		9.4340	0.70	1.0	+28.0	173.0	+40.0					9.42533		Hanus, 16
3314 Beals	2	5.4616	0.70	159.0	-42.0	358.0	-46.0					5.46233	Y	Durech, 18
3325 TARDIS	2	11.5681		142.0	-50.0	338.0	-79.0					11.5681	Y	Durech, 18
3326 Agafonikov	R	8.11801		-1.0	-54.0							8.11801		Durech, 18
3343*Nedzel	R	5.4620	0.87	-1.0	-58.0							5.463570		Durech, 18
3364 Zdenka	2	7.584	0.49	135.0	-50.0	304.0	-48.0					7.58502	Y	Durech, 18
3370 Kohsai	R	4.907	0.73	-1.0	-54.0							4.903953		Durech, 18
3374 Namur	2	13.8542		217.0	+34.0							13.8542	Y	Durech, 18
3375 Amy	2	3.255633		165.0	-50.0	343.0	-49.0					3.255633	Y	Durech, 16
3399 Kobzon	R	11.57020		-1.0	-54.0							11.57020		Durech, 18
3401*Vanphilos	R	4.2261	0.62	-1.0	-52.0							4.225268		Durech, 18
3407 Jimmysimms	R	6.819	0.95	34.0	+53.0	259.0	+82.0					6.82069	Y	Durech, 16
3411*Debetencourt	P	9.93	0.43	-1.0	+54.0							9.93753		Durech, 18
3420 Standish	2	10.3869		355.0	+76.0							10.3869	Y	Durech, 18
3421 Yangchenning	2	4.990	0.34	129.0	-2.0	309.0	+3.0					4.99166	Y	Durech, 18
3428 Roberts	2	3.278	0.58	63.0	+49.0	231.0	+49.0					3.27835		Hanus, 16
3451 Mentor	2	7.702	0.63	81.0	+18.0							7.6966	Y	Durech, 18
3455 Kristensen		8.111	0.45	9.0	+10.0	186.0	+10.0					8.09218		Hanus, 16
3467 Bernheim	2	16.5190		23.0	-44.0	202.0	-34.0					16.5190	Y	Durech, 18
3478 Fanale	2	3.245	0.60	95.0	+64.0	297.0	+62.0					3.244843		Hanus, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
3492 Petra–Pepi	2 2	47.05	0.55	9.0	−57.0	202.0	−16.0					46.570		Hanus, 13
3494*Purple Mountain		5.8575	0.43	−1.0	−99.0								Y	Cantu, 16
3522 Becker	2 2	30.9114		125.0	+50.0	313.0	+62.0					30.9114	Y	Durech, 18
3525*Paul	2 2	13.4116	0.1	10.0	−3.0	214.0	+27.0					13.4116	Y	Durech, 18
3536 Schleicher	R R	5.79	0.94	−1.0	−56.0							5.80666		Durech, 18
3544 Borodino		5.442	0.65	104.0	−57.0	267.0	−53.0					5.43459	Y	Durech, 16
				294.0	−60.0	157.0	−57.0					5.43460		Hanus, 16
3548*Eurybates	U U	8.711	0.20	−1.0								8.702724	Y	Mottola, 16
3561 Devine	2— 2—	9.61	0.23	95.0	−38.0	261.0	−28.0					9.622158	Y	Warner, 18
3565 Ojima	2 2	15.4510		99.0	+66.0	294.0	+68.0					15.4510	Y	Durech, 18
3566 Levitan	R R	5.61403		−1.0	−59.0							5.61403		Durech, 18
3572 Leogoldberg	2 2	10.10068		117.0	−38.0	295.0	−30.0					10.10068	Y	Durech, 18
3573 Holmberg		6.5431	1.03	142.0	+50.0	318.0	+52.0					6.54245	Y	Durech, 16
3611*Dabu	2 2	31.9351	0.68	14.0	+33.0	180.0	+47.0					31.2785	Y	Durech, 18
3649 Guillermina	R R	3.882648		−1.0	−59.0							3.882648		Durech, 18
3656 Hemingway	R R	5.626	0.87	−1.0	−56.0							5.63027		Durech, 18
3657 Ermolova		2.6064	0.26	261.0	−41.0							2.606513	Y	Husarik, 14
				259.0	−35.0	87.0	+30.0					2.606512	Y	Husarik, 16
3668 Ilfpetrov	2 2	15.268	0.82	132.0	+42.0	316.0	+51.0					11.57729	Y	Durech, 18
3674 Erbisbühl	2 2	11.28	0.79	55.0	−34.0							11.28291	Y	Durech, 18
3678 Mongmanwai	2 2	4.184	0.73	125.0	−65.0							4.18297		Hanus, 11
3690 Larson	2 2	6.6571	0.45	87.0	+32.0	263.0	+32.0					6.65682	Y	Durech, 18
3693 Barringer		6.626	0.54	243.0	−43.0							6.62564		Hanus, 16
3700 Geowilliams	R R	14.387	0.50	−1.0	−55.0							14.38991		Durech, 18
3706 Sinnott	R R	4.0380	0.67	−1.0	−58.0							4.037992		Durech, 18
3722 Urata		5.567	0.58	260.0	−22.0	77.0	−9.0					5.5671		Hanus, 13
3725 Valsecchi		3.57	0.52	77.0	−54.0	242.0	−53.0					3.56973		Hanus, 16
3735 Třeboň		8.471	0.55	51.0	−54.0	236.0	−69.0					8.47251	Y	Durech, 16
3738 Ots	2 2	4.17025	0.74	82.0	+56.0	264.0	+57.0					4.170135	Y	Durech, 18
3746 Heyuan		16.3010		170.0	+66.0	333.0	+70.0					16.3010	Y	Durech, 16

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
3749*Balam	R R	2.80483	0.19	-1.0 49.0	-40.0 -69.0	250.0	-71.0					2.80494 2.8049167	Y Y	Polishook, 14 Pravec, 19
3752 Camillo		37.846	1.1	256.0	-14.0							37.881		Hanus, 16
3755*Lecointe	2 2	27.920	0.30	137.0	+22.0	318.0	+39.0					27.8899	Y	Durech, 18
3758 Karttunen		12.50101		74.0	-72.0	202.0	-52.0					12.50101	Y	Durech, 16
3764*Holmesacourt	P P	3.27618	0.52	-1.0	+42.0							3.275879		Durech, 18
3767 DiMaggio	2 2	6.581	0.71	145.0	-33.0	301.0	-36.0					6.57887	Y	Durech, 18
3772*Piaf	P P	5.376	0.53	-1.0	+53.0							5.37615		Durech, 18
3773 Smithsonian		6.9804	1.04	121.0 257.0	-62.0 -51.0	81.0	-50.0					6.98132 6.98132	Y	Durech, 16 Hanus, 16
3775*Ellenbeth	P P	24.246	0.49	-1.0	+57.0							24.2400		Durech, 18
3776 Vartiovuori	2 2	11.3414	0.12	190.0	-83.0							11.3414	Y	Durech, 18
3786 Yamada	P P	4.034	0.65	-1.0 77.0 100.0 84.0	+56.0 +61.0 +54.0 +52.0	236.0 205.0 218.0	+63.0 +60.0 +48.0					4.03294 4.0329422 4.032946 4.03295	Y	Hanus, 13 Kim, 14 Durech, 16 Hanus, 16
3787 Aivazovskij		2.95395	0.24	75.0	+59.0	238.0	+57.0					2.980807		Hanus, 16
3788 Steyaert	2 2	18.467	0.57	67.0	-86.0							29.966	Y	Durech, 18
3808 Tempel	2 2	7.45073		109.0	+32.0	300.0	+43.0					7.45073	Y	Durech, 18
3809 Amici	R R	5.71	0.39	-1.0	-56.0							5.72352		Durech, 18
3813 Fortov	2 2	12.3	0.76	75.0	-60.0	265.0	-59.0					11.71538	Y	Durech, 18
3822 Segovia		11.03204		43.0	+58.0	265.0	+72.0					11.03204	Y	Durech, 16
3857 Cellino	R R	3.656529		-1.0	-56.0							3.656529		Durech, 18
3871 Reiz	2 2	10.99156		43.0	-54.0							10.99156	Y	Durech, 18
3877 Braes	R R	5.8155	0.65	-1.0	-64.0							5.81590		Durech, 18
3896*Pordenone	R R	4.009	0.38	-1.0	-32.0							4.400366		Hanus, 13
3903*Kliment Ohridski	P P	28.3496	0.19	-1.0	+3.0							28.3496		Durech, 18
3908 Nyx	2 2 3 3	4.42601	0.46	177.0 43.0 292.0	+23.0 +71.0 +71.0	312.0 290.0	+61.0 +68.0					4.42584 4.42601	Y Y Y	Drummond, 90 Benner, 02 Kaasalainen, 04
3910 Liszt		4.73	0.60	104.0	-46.0	290.0	-66.0					4.736280	Y	Durech, 16
3918 Brel		3.0980	0.28	71.0	+58.0	238.0	+47.0					3.09679		Hanus, 16
3922 Heather	P P	5.045	0.60	-1.0	+58.0							5.04447		Durech, 18
3933 Portugal	2 2	8.56077		133.0	+46.0	313.0	+43.0					8.56077	Y	Durech, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
3948 Bohr	2 2	24.884	0.90	117.0	+40.0	302.0	+53.0					24.8935	Y	Durech, 18
3952 Russellmark	P P	5.090	0.90	−1.0	+50.0							5.089098		Durech, 18
3962 Valyaev	2 2	16.440	0.44	98.0	+44.0	261.0	+59.0					16.43192	Y	Durech, 18
4015 Wilson–Harrington		3.5736	0.12	132.0	−34.0							3.576	Y	Urakawa, 12
4037 Ikeya		4.057537		92.0	+67.0	270.0	+44.0					4.057537	Y	Durech, 16
4044 Erikhøg	2 2	7.99649		11.0	+40.0							7.99649	Y	Durech, 18
4060*Deipylos	P P	9.298	0.18	−1.0								9.3316		Stephens, 19
4075 Sviridov	2 2	6.66321	0.36	17.0	+89.0	329.0	+62.0					6.6626	Y	Durech, 18
4077 Asuka	2 2	7.919	0.65	42.0 57.0 57.0	+38.0 +45.0 +45.0	246.0 266.0 266.0	+47.0 +44.0 +44.0					7.9231 7.92309 7.92309		Hanus, 11 Hanus, 16 Hanus, 18
4080 Galinskij		7.3600	1.01	209.0	−74.0							7.35845		Hanus, 16
4084 Hollis	P P	4.453823		−1.0	+60.0							4.453823		Durech, 18
4089 Galbraith		4.9123	0.96	64.0	+69.0	218.0	+50.0					4.91316	Y	Durech, 16
4097 Tsurugisan	P P	16.0758		−1.0	+54.0							16.0758		Durech, 18
4105 Tsia	2 2	12.58745	0.12	96.0	+47.0	245.0	+56.0					12.58745	Y	Durech, 18
4131 Stasik	2 2	16.5405		31.0	−64.0	203.0	−70.0					16.5405	Y	Durech, 18
4169*Celsius	2 2	10.887	0.44	68.0	−48.0	250.0	−72.0					10.89065	Y	Durech, 18
4202 Minitti	P P	5.005	0.50	−1.0	+51.0							5.07411		Durech, 18
4209*Briggs	R R	12.22	0.47	−1.0	−56.0							12.2530		Hanus, 13
4222 Nancita	2 2	3.8732	0.97	45.0	−42.0	238.0	−40.0					3.872921	Y	Durech, 18
4252 Godwin	2 2	11.623	0.42	93.0	+18.0	274.0	+29.0					11.61502	Y	Durech, 18
4262 DeVorkin	P P	6.1619	0.47	−1.0	+46.0							6.16231		Durech, 18
4265 Kani		5.7279	0.75	74.0 106.0	+67.0 +60.0	277.0 310.0	+72.0 +54.0					5.727574 5.72755	Y	Durech, 16 Hanus, 16
4271 Novosibirsk	2 2	8.850	0.52	105.0	+58.0	320.0	+60.0					8.8469	Y	Durech, 18
4284 Kaho		4.0584	0.63	6.0	−21.0	193.0	+0.0					4.05763		Hanus, 16
4317*Garibaldi	1 1	8.917	0.20	164.0	+28.0							8.933050		Warner, 18
4325 Guest	P P	5.30406		−1.0	+39.0							5.30406		Durech, 18
4345 Rachmaninoff	P P	4.484230		−1.0	+49.0							4.484230		Durech, 18
4352 Kyoto	2 2	21.9352	0.74	155.0	+42.0	341.0	+28.0					21.922	Y	Durech, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
4359 Berlage	R R	7.413	0.90	−1.0	−50.0							7.41553		Durech, 18
4366 Venikagan	2 2	60.48	0.06	14.0	+38.0	188.0	+37.0					60.48	Y	Durech, 18
4369 Seifert	2 2	30.573	0.31	15.0	−30.0	170.0	−56.0					30.617	Y	Durech, 18
4374 Tadamori	2 2	4.50474	0.94	7.0	−54.0	190.0	−41.0					4.504947	Y	Durech, 18
4399 Ashizuri	2 2	2.829	0.32	266.0	−48.0	45.0	−61.0					2.830302		Hanus, 13
4424 Arkhipova	2 2	14.673	0.45	176.0	−42.0	319.0	−43.0					14.68006	Y	Durech, 18
4439 Muroto	R R	8.31429		−1.0	−35.0							8.31429		Durech, 18
4448 Phildavis	2 2	14.914	0.73	39.0	+25.0	247.0	+43.0					14.92631	Y	Durech, 18
4451 Grieve	2 2	6.864	0.80	177.0	−68.0	341.0	−63.0					6.8600	Y	Durech, 18
4458 Oizumi	R R	11.40650		−1.0	−58.0							11.40650		Durech, 18
4461 Sayama	R R	40.73	0.97	−1.0	−54.0							40.7141		Durech, 18
4467 Kaidanovskij	P P	19.1454	0.03	−1.0	+54.0							19.1454		Hanus, 13
4483 Petöfi	2 2	4.33309	1.05	107.0	+40.0							4.33299		Warner, 11
4486 Mithra	2 2	67.5	1.	337.0	+19.0	154.0	−19.0					67.5	Y	Brozovic, 10
4490 Bambery		5.815	1.16	53.0	+59.0							5.82345		Hanus, 16
4505 Okamura	R R	6.6687	0.50	−1.0	−50.0							6.66905		Durech, 18
4507 Petercollins		6.58	0.40	143.0	+55.0	323.0	+49.0					6.57933		Hanus, 13
4515 Khrennikov	R R	6.08011		−1.0	−59.0							6.08011		Durech, 18
4518 Raikin	R R			−1.0	−54.0							9.63607		Durech, 18
4529*Webern		3.46903	0.49	26.0	+38.0	196.0	+59.0					3.46903		Hanus, 16
	1+			26.0	+38.0	196.0	+59.0					3.46903	Y	Hanus, 18
4530 Smoluchowski	R R	10.13741		−1.0	−53.0							10.13741		Durech, 18
4554 Fanyinka		4.779	0.40	220.0	+55.0	64.0	+63.0					4.77502		Hanus, 16
4559 Strauss	P P	10.0792	0.40	−1.0	+52.0							10.08016		Durech, 18
4562 Poleungkuk	2 2	9.477	0.77	80.0	−60.0	270.0	−75.0					9.47069	Y	Durech, 18
4570 Runcorn		20.	0.12	123.0	+57.0	287.0	+31.0					20.1514		Hanus, 16
4574 Yoshinaka	R R	7.02736		−1.0	−50.0							7.02736		Durech, 18
4575 Broman	2 2	10.774	0.65	181.0	−66.0	303.0	−61.0					10.7735	Y	Durech, 18
4606 Saheki	2 2 2	4.969	0.68	44.0	+59.0	222.0	+68.0					4.97347		Hanus, 13
				40.0	+68.0	222.0	+65.0					4.97347		Hanus, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
4611 Vulkaneifel		3.756	0.71	5.0	−86.0	197.0	−50.0					3.75635		Hanus, 13
4613 Mamoru	2	5.388	0.41	280.0	−53.0							5.38872	Y	Durech, 18
4641 Ayako	2	5.3126	0.88	178.0	−46.0	359.0	−50.0					5.313079	Y	Durech, 16
4660 Nereus		15.1	0.8	25.0	+80.0							15.16		Brozovic, 09
4674 Pauling	1	2.5306	0.14		+0.0	180.0	+0.0					2.53130	Y	Warner, 11
4678 Ninian	2	56.72	1.04	58.0	+68.0	250.0	+67.0					56.701	Y	Durech, 18
4732 Froeschlé	2	6.00083	0.17	105.0	−25.0	289.0	−24.0					12.0479	Y	Durech, 18
4736 Johnwood	2—	6.210	0.93	60.0	+60.0							6.21576		Warner, 10
4751 Alicemanning	2	15.894	0.56	94.0	−53.0	270.0	−41.0					16.20158	Y	Durech, 18
4764 Joneberhart	2	5.483	1.17	219.0	−36.0							5.48411		Hanus, 16
4765*Wasserburg		3.6231	0.60	235.0	+8.0							3.625554	Y	Pravec, 19
4767 Sutoku	2	92.447	0.08	77.0	+48.0	252.0	+60.0					92.447	Y	Durech, 18
4769 Castalia	2	4.095	1.0	253.0	−56.0	62.0	−7.0					4.095		Hudson, 97
	2			253.0	−56.0	242.0	+7.0							Erikson, 00
4779 Whitley	P	7.31059		−1.0	+49.0							7.31059		Durech, 18
4796 Lewis	P	3.5086	0.50	−1.0	−99.0									Oszkiewicz, 17
4800 Veveri	1+	6.21570		274.0	−40.0	95.0	−65.0					6.21570		Hanus, 16
				274.0	−40.0	95.0	−65.0					6.21570	Y	Hanus, 18
4801 Ohře		32.000	0.60	121.0	−74.0	266.0	−85.0					31.9990	Y	Durech, 16
4810 Ruslanova	2	69.763		124.0	+55.0							69.763	Y	Durech, 18
4813 Terebizh	2	10.20365		94.0	−32.0	265.0	−57.0					10.20365	Y	Durech, 18
4877 Humboldt	2	3.491213		218.0	−77.0	340.0	−55.0					3.491213	Y	Durech, 16
4879 Zykina	R	13.7266	0.64	−1.0	−66.0							13.72856		Durech, 18
4896 Tomoegozen	R	8.869	0.65	276.0	−66.0							8.87996	Y	Durech, 16
4905*Hiromi		6.0428	0.55	185.0	−87.0							6.044838		Pravec, 19
4910*Kawasato	2	4.659	0.40	355.0	+35.0	165.0	+31.0					4.66271	Y	Stephens, 19
4917*Yurilvovia	2	4.17744		224.0	+20.0	48.0	+1.0					4.17744		Hanus, 16
4918 Rostropovich	2	20.1407		113.0	−27.0	292.0	−23.0					20.1407	Y	Durech, 18
4930 Rephiltim	2	5.243	0.32	264.0	−72.0							5.24273	Y	Durech, 18
4944*Kozlovskij	R	3.5719	0.60	−1.0	−63.0							3.573028		Durech, 18

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
4954 Eric		12.056	0.80	-1.0 269.0 86.0	-99.0 +52.0 -54.0							12.05581 12.05207		Tungalag, 03 Warner, 11 Hanus, 13
4957 Brucemurray	3— 3—	2.892	0.38	358.0	-50.0							2.8922	Y	Kaasalainen, 04
4961*Timherder	2 2	4.121	0.45	16.0	+58.0	204.0	+36.0					4.121566	Y	Durech, 18
4963 Kanroku	2 2	2.616	0.13	225.0	+22.0							2.6519		Sokova, 18
4974 Elford	R R	6.5635	0.58	-1.0	-52.0							6.56506		Durech, 18
4976 Choukyongchol	2 2	4.416	0.88	72.0	+43.0	236.0	+38.0					4.419470	Y	Durech, 18
4979 Otawara	2 2	2.707	0.28	50.0	-30.0							2.70662	Y	Fornasier, 03
4995 Griffin		26.37	0.82	243.0	+68.0	355.0	+70.0					26.3920	Y	Durech, 16
5006 Teller		10.898	0.69	84.0	+66.0	301.0	+57.0					10.90225	Y	Durech, 16
5008*Miyazawakenji		49.239	0.18	144.0	-52.0	322.0	-25.0					49.239		Hanus, 16
5026*Martes		4.4243	0.69	354.0 11.0	+80.0 +62.0	197.0	+47.0					4.424087 4.424079	Y Y	Polishook, 14 Pravec, 19
5047 Zanda	2 2	3.810598		108.0	-45.0	296.0	-57.0					3.810598	Y	Durech, 18
5052 Nancyruth	R R	17.204	0.89	-1.0	-57.0							17.2103		Durech, 18
5059 Saroma	2 2	4.074	0.66	33.0	-59.0	215.0	-30.0					4.0744	Y	Durech, 18
5086 Demin	R R	13.16422		-1.0	-57.0							13.16422		Durech, 18
5111 Jacliff		2.839	0.18	259.0	-45.0							2.83990		Hanus, 16
5130 Ilioneus	2 2	14.768	0.37	128.0	-19.0	303.0	-8.0					14.7357	Y	Durech, 18
5138 Gyoda	2 2	8.4159		157.0	-90.0							8.4159	Y	Durech, 18
5145 Pholus	2 2 2	9.980	0.60	149.0 145.0	+26.0 +30.0	325.0	-30.0	155.0	+5.0	335.0	-5.0	9.98221	Y	Farnham, 01 Tegler, 05
5150*Fellini	P P	5.1953	0.61	-1.0	-99.0									Oszkiewicz, 17
5155 Denisyuk	2 2	31.5617		69.0	-34.0	240.0	-36.0					31.5617	Y	Durech, 18
5195 Kaendler		5.33756		67.0	-59.0	212.0	-50.0					5.33756	Y	Durech, 16
5196 Bustelli	2 2	7.76965		5.0	-36.0	166.0	-25.0					7.76965	Y	Durech, 18
5208 Royer		3.866	0.44	258.0	+74.0	54.0	+37.0					3.88494		Hanus, 16
5213 Takahashi	R R	95.977		-1.0	-48.0							95.977		Durech, 18
5231 Verne		4.320	0.84	175.0	-45.0	359.0	-88.0					4.32058		Hanus, 16
5236 Yoko	R R	2.7692	0.44	-1.0	-57.0							2.769011		Durech, 18
5248 Scardia	R R	6.04650		-1.0	-64.0							6.04650		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
5281 Lindstrom		9.2511		238.0	-72.0	84.0	-81.0					9.2511		Hanus, 13
5285 Krethon	2 2	12.04	0.46	182.0	-89.0							12.0247	Y	Durech, 18
5299 Bittesini		4.679660		76.0	+60.0	251.0	+49.0					4.679660	Y	Durech, 16
5304 Bazhenov	R R	8.93669		-1.0	-62.0							8.93669		Durech, 18
5317 Verolacqua		3.022	0.60	224.0	-51.0							3.02181		Hanus, 16
5320 Lisbeth	2 2	45.6442		133.0	-60.0	308.0	-55.0					45.6442	Y	Durech, 18
5323 Fogh	R R	15.549	0.61	-1.0	-45.0							15.5570		Durech, 18
5325 Silver		4.02361	0.28	288.0	+72.0							4.023569	Y	Husarik, 14
				286.0	+73.0							4.02356	Y	Husarik, 16
5327 1989 EX_1	2 2	8.71997	1.34	4.0	-50.0	193.0	-35.0					8.72121	Y	Durech, 18
5332 Davidaguilar		5.803	1.2	266.0	-21.0							5.80285		Hanus, 16
5344 Ryabov	2 2	18.490		9.0	+90.0	286.0	+71.0					18.490	Y	Durech, 18
5354 Hisayo	2 2	14.29164		112.0	+25.0							14.29164	Y	Durech, 18
5357 Sekiguchi	2 2	5.41	0.72	275.0	-50.0							5.40586	Y	Durech, 18
5361 Goncharov	R R	13.12799		-1.0	-47.0							13.12799		Durech, 18
5377*Komori	R R	5.4492	0.89	-1.0	-56.0							5.44880		Durech, 18
5385 Kamenka	2 2	6.683	0.26	168.0	+23.0							6.6719	Y	Durech, 18
5387 Casleo	P P	4.051486		-1.0	+44.0							4.051486		Durech, 18
5406 Jonjoseph	R R	3.555	0.57	-1.0	-53.0							3.555354		Durech, 18
5412 Rou	R R	7.78166		-1.0	-57.0							7.78166		Durech, 18
5414 Sokolov	P P	27.2478		-1.0	+60.0							27.2478		Durech, 18
5416 Estremadoyro	2 2	20.7506		136.0	+44.0	317.0	+29.0					20.7506	Y	Durech, 18
5418 Joyce	2 2	20.96	0.53	194.0	-53.0	323.0	-44.0					20.9179	Y	Durech, 18
5447 Lallement	R R	7.64218		-1.0	-49.0							7.64218		Durech, 18
5449 1992 US_5	P P	3.329	0.41	-1.0	+53.0							3.301050		Durech, 18
5451 Plato	2 2	6.19	0.50	186.0	+43.0	339.0	+56.0					6.19296	Y	Durech, 18
5461 Autumn		20.0929		249.0	-26.0	79.0	-43.0					20.0929		Hanus, 13
5464 Weller	P P	3.288	0.40	-1.0	+48.0							3.290513		Durech, 18
5488 Kiyosato		8.787	0.71	19.0	+23.0	242.0	+62.0					8.76307	Y	Durech, 16
5489 Oberkochen		5.625	0.59	23.0	-62.0	194.0	-38.0					5.62439	Y	Durech, 16
				195.0	-41.0	13.0	-66.0					5.62439		Hanus, 16

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Asteroid	Q	Period	Amp	L ₁	B ₁	L ₂	B ₂	L ₃	B ₃	L ₄	B ₄	Sid. period	Mod	Reference
5494 Johanmohr		5.727	0.98											
				137.0	−65.0	323.0	−62.0					5.72752	Y	Durech, 16
5502 Brashear	2	19.2922												
	2			57.0	−14.0	230.0	−36.0					19.2922	Y	Durech, 18
5587 1990 SB	3	5.0522	1.26											
	3			250.0	−61.0							5.05227	Y	Kaasalainen, 04
5594 Jimmiller	2	25.264	0.67											
	2			260.0	−31.0							25.275	Y	Durech, 18
5596 Morbidelli		5.4000	0.57											
				173.0	−80.0							5.40043		Hanus, 16
5599*1991 SG ₁	P	3.6195	0.36											
	P			−1.0	−99.0									Oszkiewicz, 17
5625 Jamesferguson		6.6735	1.10											
				265.0	−52.0	97.0	−78.0					6.67411		Hanus, 13
5630 Billschaefer	P	69.	0.9											
	P			−1.0	+63.0							69.500		Durech, 18
5647 Sarojininaidu		6.144	0.45											
				253.0	+77.0	119.0	−19.0					6.13867		Hanus, 13
5657*Groombridge	2	7.4349	0.45											
	2			90.0	−49.0	264.0	−15.0					7.43566	Y	Durech, 18
5685 Sanenobufukui		3.388	0.70											
				122.0	−63.0	327.0	−58.0					3.387871	Y	Durech, 16
5700 Homerus	P	4.95518												
	P			−1.0	+51.0							4.95518		Durech, 18
5723 Hudson		4.475115												
				72.0	−73.0	255.0	−58.0					4.475115	Y	Durech, 16
5738 Billpickering		10.4	0.45											
				2.0	−66.0							10.38264	Y	Durech, 16
5754 1992 FR ₂	P	8.9021	0.97											
	P			−1.0	−99.0									Oszkiewicz, 17
	R			−1.0	−61.0							8.90275		Durech, 18
5755 1992 OP ₇	2	5.5752												
	2			51.0	+78.0	190.0	+88.0					5.5752	Y	Durech, 18
5760 Mittlefehldt	R	5.48720												
	R			−1.0	−57.0							5.48720		Durech, 18
5776*1989 UT ₂		4.34079												
				105.0	−76.0	350.0	−46.0					4.340787	Y	Durech, 16
	R			−1.0	−72.0							4.34079		Hanus, 16
5795 Roshchina	2	5.376907												
	2			103.0	+37.0	289.0	+24.0					5.376907	Y	Durech, 18
5826 Bradstreet	2	5.55	0.63											
	2			76.0	−74.0	280.0	−71.0					5.53921	Y	Durech, 18
5836 1993 MF	2	4.9543	0.88											
	2			149.0	−73.0	331.0	−53.0					4.954799	Y	Warner, 17
5841 Stone	1	2.890	0.11											
	1			195.0	+0.0							2.889026	Y	Warner, 10
5875 Kuga	R	5.551	0.35											
	R			−1.0	−99.0									Oszkiewicz, 17
5883 Josephblack	2	17.542												
	2			38.0	+7.0	228.0	+21.0					17.542	Y	Durech, 18
5891 Gehrig	R	3.57	0.76											
	R			−1.0	−52.0							3.572616		Durech, 18
5902 Talima	2	22.3628	1.34											
	2			252.0	−42.0							22.3733	Y	Durech, 18
5925 1994 CP ₁	R	5.4002	0.54											
	R			−1.0	−65.0							5.40075		Durech, 18
5929 Manzano		3.7596	1.01											
				130.0	−71.0	244.0	−40.0					3.759432	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
5940 Feliksobolev	2 2	7.620	0.34	59.0	+29.0	264.0	+19.0					7.62033	Y	Durech, 18
5942 Denzilrobert	2 2	14.31031		72.0	+54.0	284.0	+42.0					14.31031	Y	Durech, 18
5952 Davemonet	R R	2.6388	0.23	-1.0	-57.0							4.512546		Durech, 18
5960*Wakkanai		4.96283	0.66	226.0	-69.0	69.0	-61.0					4.96286		Hanus, 13
5984 Lysippus	P P	4.870934		-1.0	+52.0							4.870934		Durech, 18
5993 Tammydickinson		9.44711		52.0	-65.0	241.0	-78.0					9.44711	Y	Durech, 16
6000 United Nations		3.262	0.45	13.0	-84.0							3.26191		Hanus, 16
6026*Xenophanes		3.78170	0.40	266.0	-54.0	80.0	-56.0					3.78170		Hanus, 16
6051 Anaximenes	2 2	38.9111	0.29	113.0	-28.0	281.0	-8.0					38.9111	Y	Durech, 18
6053 1993 BW ₃	3— 3— 3 2	2.573	0.50	175.0 108.0 178.0	-9.0 -6.0 +12.0	359.0 345.0 357.0	-26.0 -14.0 -12.0					2.57371 2.57390 2.57342	Y Y Y	Pravec, 97 Durech, 02 Kaasalainen, 02
6057 Robbia	R R	5.801	0.54	-1.0	-54.0							5.79971		Durech, 18
6060 Doudleby	R R	11.878	0.65	-1.0	-54.0							11.87877		Durech, 18
6066 Hendricks	P P	5.780	0.63	-1.0	+65.0							5.77911		Durech, 18
6070*Rheinland	2 2	4.27333	0.58	4.0 110.0 124.0 124.0	-76.0 -60.0 -87.0 -87.0	290.0	-60.0					4.27371 4.273715 4.2737137 4.2737137	Y Y Y Y	Vokrouhlicky, 11 Polishook, 14 Vokrouhlicky, 17 Pravec, 19
6087 Lupo		4.712	0.66	248.0	-16.0							4.71654		Hanus, 16
6091 Mitsuru	2 2	5.853	0.80	112.0	-20.0	310.0	-33.0					5.85558	Y	Durech, 18
6121 Plachinda	2 2	4.0863	0.35	136.0	+38.0							4.085744	Y	Durech, 18
6136 Gryphon		16.476	0.61	134.0 87.0 87.0	+57.0 +52.0 +52.0	337.0 310.0 310.0	+63.0 +62.0 +62.0					16.4683 16.46836 16.4684	Y Y Y	Durech, 16 Hanus, 16 Hanus, 18
6159 Andréseloy	2 2	10.639	0.78	266.0	+67.0	62.0	+67.0					10.6590		Hanus, 13
6161*Vojno-Yasenetsky		7.983	0.90	64.0	+70.0	217.0	+41.0					7.98095	Y	Durech, 16
6166 Univsima		9.6	0.6	80.0	-42.0	242.0	-59.0					11.37655	Y	Durech, 16
6167 Narmanskij	2 2	5.41192		165.0	-48.0	350.0	-50.0					5.41192	Y	Durech, 18
6173 Jimwestphal	2 2	2.908	0.41	93.0	-30.0							2.90849	Y	Durech, 18
6179*Brett	R R	9.403	0.70	-1.0	-42.0							9.4063		Hanus, 13
6192 Javiergorosabel		78.85	0.95	61.0	+67.0	239.0	+75.0					78.631		Hanus, 16
6234 Sheilawolfman	P P	11.784	0.75	-1.0	+49.0							11.78387		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
6257 Thorvaldsen	2 2	82.654		52.0	−47.0	204.0	−49.0					82.654	Y	Durech, 18
6262 Javid	2 2	8.02	0.49	93.0	+76.0	275.0	+66.0					8.02054		Hanus, 13
6276 Kurohone		6.345	0.87	147.0	+63.0	322.0	+62.0					6.34850	Y	Durech, 16
6279 1977 UO_5	R R	9.964	0.49	−1.0	−53.0							9.96566		Durech, 18
6297 1988 VZ_1	2 2	4.441968		64.0	−55.0	244.0	−55.0					4.441968	Y	Durech, 18
6304 Josephus Flavius	R R	6.49119		−1.0	−62.0							6.49119		Durech, 18
6332 Vorarlberg	2 2	7.63393		11.0	−50.0	191.0	−58.0					7.63393	Y	Durech, 18
6338 Isaosato	2 2	4.97689		146.0	+84.0							4.97689	Y	Durech, 18
6360 1978 UA_7	P P	10.60568		−1.0	+62.0							10.60568		Durech, 18
6385 Martindavid	R R	5.476	0.51	−1.0	−60.0							5.47485		Durech, 18
6403 Steverin	2 2	3.4905	0.47	246.0	+77.0	109.0	+73.0					3.49119		Hanus, 13
6406 Mikejura		6.819	1.18	17.0	−61.0	216.0	−52.0					6.81816	Y	Durech, 16
	R			20.0	−63.0	221.0	−55.0					6.81818		Hanus, 16
				−1.0	−99.0									Oszkiewicz, 17
6410 Fujiwara		7.0073	0.85	148.0	−59.0	296.0	−81.0					7.00667	Y	Durech, 16
				243.0	−85.0							7.00669		Hanus, 16
6420 Riheijyaya	R R	8.25354		−1.0	−62.0							8.25354		Durech, 18
6422 Akagi		7.74	0.77	213.0	−38.0							7.74756	Y	Durech, 16
6444 Ryuzin	R R	7.9290	0.98	−1.0	−53.0							7.92933		Durech, 18
6457 Kremsmünster	R R	3.867840		−1.0	−52.0							3.867840		Durech, 18
6458 Nouda		4.201	0.92	63.0	−2.0	240.0	+21.0					4.2030968		Kim, 14
6464 Kaburaki	2 2	4.80052	0.35	76.0	−57.0	236.0	−41.0					4.801066	Y	Durech, 18
6469 Armstrong	R R	5.965	0.70	−1.0	−50.0							6.01686		Durech, 18
6476 1987 VT	2 2	10.7973	0.57	129.0	+38.0	304.0	+6.0					10.79854	Y	Durech, 18
6479 Leoconnolly	R R	5.11	0.75	−1.0	−51.0							5.11260		Durech, 18
6487 Tonyspear		74.91	1.24	165.0	−90.0							74.501	Y	Durech, 16
6489 Golevka	2 2 2+	6.026	1.03	345.0	+45.0	350.0	+25.0	190.0	−55.0			6.0262	Y	Mottola, 97
				202.0	−45.0							6.0289	Y	Hudson, 00
				208.0	−47.0							6.02971	Y	Kaasalainen, 01
6510 Tarry		6.370	0.54	84.0	−72.0	249.0	−37.0					6.36490	Y	Durech, 16
6517 Buzzi		8.648	0.84	227.0	−75.0							8.64468		Hanus, 16
6518 Vernon	P P	4.88249	0.54	−1.0	+54.0							4.82158		Durech, 18
6581 Sobers	R R	6.6338	1.14	−1.0	−49.0							6.63462		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
6590 Barolo		8.36814	0.67											
6635 Zuber	2	5.5355	0.75	171.0	+59.0	313.0	+63.0					8.35928	Y	Durech, 16
6638 1989 CA	2			262.0	-77.0	286.0	-34.0					5.53564		Hanus, 18
6649 Yokotatakao	R	3.878	0.31	-1.0	-44.0							3.877233		Durech, 18
	R			-1.0	-60.0							7.55878		Durech, 18
6665 Kagawa	2	6.7494		40.0	-36.0							6.7494	Y	Durech, 18
6671 Concari	2	5.22042		69.0	+57.0	204.0	+78.0					5.22042	Y	Durech, 16
6716 1990 RO ₁	R	28.1578		-1.0	-53.0							28.1578		Durech, 18
6719 Gallaj	R	4.430	0.95	60.0	-63.0	252.0	-59.0					4.429487	Y	Durech, 16
6743*Liu	R	7.364	0.40	-1.0	-57.0							7.35550		Durech, 18
6744 Komoda	2	3.110	0.40	81.0	-58.0	233.0	-48.0					3.105289	Y	Durech, 18
6751*van Genderen	2	3.143	0.60	-1.0	+54.0							3.142854		Durech, 18
6755 Solov'yanenko	P	8.1681	0.32	224.0	+54.0	47.0	+58.0					8.1680		Hanus, 16
6767 Shirvindt	P	10.7866	0.48	-1.0	+50.0							10.78857		Durech, 18
6794 Masuisakura	R	4.58	0.62	-1.0	-60.0							4.588151		Durech, 18
	R			154.0	-29.0	345.0	-57.0					4.58811	Y	Durech, 18
6796 Sundsvall	2	4.887226		200.0	-56.0	359.0	-53.0					4.887226	Y	Durech, 18
6814 Steffl	2	5.43521		144.0	-37.0	323.0	-34.0					5.43521	Y	Durech, 18
6825 Irvine	2	3.61588	0.85	-1.0	-57.0							3.615903		Durech, 18
6830 Johnbackus	R	4.93137		-1.0	-56.0							4.93137		Durech, 18
6837 Bressi	R	5.74145		138.0	-34.0	351.0	-50.0					5.74145	Y	Durech, 18
6882 Sormano	2	3.690	0.71	43.0	-33.0	248.0	-58.0					3.998344	Y	Durech, 16
6884 Takeshisato	2	51.0731		113.0	+22.0	299.0	+30.0					51.0731	Y	Durech, 18
6905 Miyazaki	2	2.7418	0.14	33.0	+7.0	214.0	-4.0					2.733348		Hanus, 16
6915*1992 HH	R	4.76345	0.61	-1.0	-59.0							4.763672		Durech, 18
6923 Borzacchini	R	6.55174		-1.0	-58.0							6.55174		Durech, 18
6979 Shigefumi	R	12.10795		195.0	+39.0	350.0	+41.0					12.10795	Y	Durech, 18
6987 Onioshidashi	2	35.6657		-1.0	-41.0							35.6657		Durech, 18
6990 Toya	2	15.622	0.43	174.0	-36.0	352.0	-42.0					15.6245	Y	Durech, 18
7001 Noether	2	9.5809	0.70	13.0	-66.0							9.58191	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
7022 1992 JN_4	2 2	5.517	0.32	4.0	+84.0	337.0	+56.0					5.5154	Y	Durech, 18
7043*Godart	2 2	8.4531	0.75	73.0	+62.0	235.0	+80.0					8.4518		Hanus, 13
7055 Fabiopagan	R R	4.16845	0.59	-1.0	-61.0							4.16878		Hanus, 13
7072 Beijingdaxue		5.304	0.99	72.0	+56.0	262.0	+64.0					5.304419	Y	Durech, 16
7106 Kondakov		7.59690		63.0	+58.0	268.0	+81.0					7.59690	Y	Durech, 16
7142 Spinoza	2 2	12.375	0.61	134.0	+49.0	315.0	+48.0					12.40882	Y	Durech, 18
7166 Kennedy	R R	3.659	0.52	-1.0	-46.0							3.659227		Durech, 18
7169 Linda	2 2	27.864	0.88	11.0	-60.0	198.0	-61.0					27.864		Hanus, 13
7182 Robinvaughan	P P	8.81110		-1.0	+47.0							8.81110		Durech, 18
7192 Cieleospace	2 2	6.3546	0.57	104.0	+31.0	290.0	+55.0					6.35584	Y	Durech, 18
7201 Kuritariku		48.849		22.0	+67.0	249.0	+64.0					48.849		Hanus, 13
7211 Xerxes	2 2	13.5718	0.58	80.0	-63.0							13.56669	Y	Durech, 18
7233 Majella		3.812	0.66	298.0	-87.0	80.0	-71.0					3.81240		Hanus, 16
7238 Kobori	2 2	17.2242		42.0	-83.0	238.0	-88.0					17.2242	Y	Durech, 18
7264 Hirohatanaka	R R	97.812		-1.0	-61.0							97.812		Durech, 18
7285 Seggewiss	R R	3.460	0.52	-1.0	-47.0							3.459936		Durech, 18
7289 Kamegamori		3.831	0.73	108.0	-39.0	268.0	-54.0					3.831182	Y	Durech, 16
7292 Prosperin	2 2	5.58891		29.0	+33.0	223.0	+27.0					5.58891	Y	Durech, 18
7304 Namiki	R R	8.8712	0.95	-1.0	-46.0							8.87383		Durech, 18
7318 Dyukov		4.856	0.63	65.0	-64.0	239.0	-44.0					4.856335	Y	Durech, 16
7321 Minervahoyt	R R	83.177	0.83	-1.0	-62.0							82.295		Durech, 18
7333 Bec-Borsenberger	2 2	12.727	0.88	106.0	-50.0	315.0	-47.0					12.73012	Y	Durech, 18
7343 Ockeghem		3.7547	0.23	70.0 39.0	+50.0 +57.0	260.0 231.0	-40.0 +20.0					3.7554 3.754939	Y	Polishook, 14 Pravec, 19
7360 Moberg	R R	4.5842	0.41	-1.0	-18.0							4.58533		Hanus, 13
7403 Choustník	P P	4.5298	0.62	-1.0	+53.0							4.530261		Durech, 18
7428 Abekuniomi	2 2	86.553		129.0	-47.0							86.553	Y	Durech, 18
7432 1993 HL_5	2 2	6.95710		4.0	-73.0	201.0	-62.0					6.95710	Y	Durech, 18
7445 Trajanus	P P	6.10802		-1.0	+39.0							6.10802		Durech, 18
7457 Veselov	2 2	12.2002		16.0	+88.0							12.2002	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
7458 1984 DE_1	2 2	16.7	0.33	48.0	+39.0	232.0	+17.0					15.7543	Y	Durech, 18
7477 1993 LC	2 2	74.240	1.09	117.0	-73.0	293.0	-34.0					74.093	Y	Durech, 18
7505 Furusho	R R	4.139	0.75	-1.0	-55.0							4.139775		Durech, 18
7517*Alisondoane		9.701	1.13	314.0	-60.0	123.0	-51.0					9.7094		Hanus, 13
7531 Pecorelli	P P	3.34	0.59	-1.0	+24.0							3.339581		Durech, 18
7535 1995 WU_2	R R	4.589353		-1.0	-58.0							4.589353		Durech, 18
7585 1991 PK_8	2 2	9.47919		147.0	-7.0	322.0	-14.0					9.47919	Y	Durech, 18
7590 Aterui	P P	5.58993		-1.0	+50.0							5.58993		Durech, 18
7616 Sadako	2 2	11.0148	0.21	185.0	-70.0	339.0	-37.0					11.0085	Y	Durech, 18
7632 Stanislav		5.29073		234.0	-50.0	46.0	-45.0					5.29073		Hanus, 13
7650 Kaname	2 2	18.172	0.49	58.0	-86.0							18.177	Y	Durech, 18
7652 1991 RL_5	P P	5.251978		-1.0	+55.0							5.251978		Durech, 18
7660 Alexanderwilson		5.924	0.86	321.0	-44.0							5.91818		Hanus, 16
7690 Sackler	R R	7.76925		-1.0	-57.0							7.76925		Durech, 18
7732 1978 VE_9	P P	3.396852		-1.0	+56.0							3.396852		Durech, 18
7755 Haute-Provence	P P	7.07529		-1.0	+61.0							7.07529		Durech, 18
7783 1994 JD		31.83	0.85	70.0	-71.0							31.8661	Y	Durech, 16
7785 1994 QW	R R	82.484		-1.0	-45.0							82.484		Durech, 18
7811 Zhaojiuzhang	P P	3.354	0.67	-1.0	+51.0							3.355703		Durech, 18
7835 Myroncope		7.43019		72.0	-64.0	288.0	-55.0					7.43019	Y	Durech, 16
7837 Mutsumi	2 2	14.30442	0.40	127.0	-1.0	310.0	-32.0					14.30442	Y	Durech, 18
7859 Lhasa	2 2	10.70350		13.0	-43.0	180.0	-46.0					10.70350	Y	Durech, 18
7896 Švejk		16.20582		86.0	+36.0	266.0	+35.0					16.20582		Durech, 16
7899 Joya	R R	85.658		-1.0	-47.0							85.658		Durech, 18
7905 Juzoitami		2.728	0.66	105.0	-76.0	226.0	-55.0					2.72744		Hanus, 13
7927 Jamiegilmour	R R	7.18979		-1.0	-62.0							7.18979		Durech, 18
7964 1995 DD_2		10.224	0.84	74.0	-73.0	264.0	-49.0					10.22553	Y	Durech, 16
8043 Fukuhara		22.7606		96.0	-41.0							22.7606		Hanus, 16
8044 Tsuchiyama	R R	8.82006		-1.0	-62.0							8.82006		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
8066 Poldimeri	2 2	18.420		205.0	-69.0	342.0	-88.0					18.420	Y	Durech, 18
8085 1989 CD_8	P P	7.75	0.20	-1.0	+48.0							7.76224		Durech, 18
8091 1992 BG	2 2	8.5630	1.11	59.0	-67.0	244.0	-45.0					8.56457	Y	Durech, 18
8108 Wieland	P P	28.5696		-1.0	+37.0							28.5696		Durech, 18
8132 Vitginzburg		7.28	0.47	33.0	-66.0	193.0	-48.0					7.27529		Hanus, 13
8140 Hardersen	2 2	18.4172		68.0	-60.0	277.0	-51.0					18.4172	Y	Durech, 18
8157 1988 XG_2	P P	8.51876		-1.0	+47.0							8.51876		Durech, 18
8181 Rossini	R R	13.253	0.49	-1.0	-50.0							13.25550		Durech, 18
8223 Bradshaw	P P	9.408	0.54	-1.0	+66.0							9.40628		Durech, 18
8250 Cornell	P P	7.04109		-1.0	+47.0							7.04109		Durech, 18
8261 Ceciliejulie	2 2	14.009	0.43	58.0	-52.0	237.0	-55.0					13.98634	Y	Durech, 18
8281 1991 PC_{18}	R R	12.635	0.71	-1.0	-61.0							12.65389		Durech, 18
8292 1992 SU_{14}	2 2	19.802		32.0	+20.0							19.802	Y	Durech, 18
8354 1989 RF	P P	8.298	0.59	-1.0	+51.0							8.31526		Durech, 18
8359 1989 WD		2.89111	0.70	121.0	-68.0	274.0	-68.0					2.89103		Hanus, 13
8380 Tooting	2 2	36.929	0.72	85.0	+17.0	248.0	+33.0					36.8942	Y	Durech, 18
8402 1994 GH_9	2 2	13.5383	0.23	133.0	-21.0	312.0	+4.0					13.57748	Y	Durech, 18
8409 Valentaugustus	P P	7.36573		-1.0	+56.0							7.36573		Durech, 18
8443 Svecica	2 2	20.998	0.65	261.0	+48.0							20.994	Y	Durech, 18
8454 Micheleferrero	2 2	6.727	0.36	53.0	+40.0	242.0	+34.0					6.71191	Y	Durech, 18
8528 1992 SC_{24}	2 2	5.02116		14.0	+67.0	183.0	+45.0					5.02116	Y	Durech, 18
8567 1996 HW_1	3 3	8.7573	1.01	281.0	-31.0							8.76243	Y	Magri, 11
				283.0	-34.0							8.76239		Hanus, 16
	3			281.0	-31.0							8.76243	Y	Howell, 18
8573 Ivanka		8.03312		100.0	-70.0	344.0	-78.0					8.03312	Y	Durech, 16
8633 Keisukenagao	2 2	4.857162		133.0	+75.0	280.0	+56.0					4.857162	Y	Durech, 18
8636 Malvina	2 2	16.994	0.47	130.0	-56.0	302.0	-59.0					16.9860	Y	Durech, 18
8654 1990 KC_1	R R	6.94119		-1.0	-57.0							6.94119		Durech, 18
8656 Cupressus	P P	9.50117		-1.0	+51.0							9.50117		Durech, 18
8661 Ratzinger	R R	4.301035		-1.0	-22.0							4.301035		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
8713 Azusa	2 2	91.936		219.0	+53.0							91.936	Y	Durech, 18
8770 Totanus	2 2	14.867		118.0	-67.0	294.0	-69.0					14.867	Y	Durech, 18
8830 1988 VZ	P P	7.16038		-1.0	+61.0							7.16038		Durech, 18
8859 1991 PQ_{11}	2 2	3.90	0.69	119.0	-52.0	318.0	-42.0					3.898921	Y	Durech, 18
8860 Rohloff		18.8411		37.0	-58.0							18.8411		Hanus, 16
8871 Svanberg	2 2	4.888086		60.0	+27.0	246.0	+63.0					4.888086	Y	Durech, 18
8873 1992 UM_2	2 2	5.93581	1.18	157.0	-46.0	336.0	-49.0					5.93581	Y	Durech, 18
8880 1993 FT_{33}	P P	3.700931		-1.0	+54.0							3.700931		Durech, 18
8887 Scheeres	P P	2.9827	0.18	-1.0	+47.0							2.983903		Durech, 18
8908 1995 WY_6	R R	3.026	0.48	-1.0	-48.0							3.462382		Durech, 18
8916 1996 CC	R R	6.01055		-1.0	-51.0							6.01055		Durech, 18
8969 Alexandrinus	P P	4.690237		-1.0	+61.0							4.690237		Durech, 18
8986 Kineyayasuyo	R R	4.68	0.49	-1.0	-62.0							4.682167		Durech, 18
9008 Bohšternberk	2 2	35.6604	0.47	91.0	-59.0	254.0	-47.0					72.502	Y	Durech, 18
9028 Konrádbeneš	P P	3.71141	0.35	-1.0	+49.0							3.711361		Durech, 18
9033 Kawane	2 2	5.7656	0.45	195.0	-21.0							5.76537	Y	Durech, 18
9034 Oleyuria	2 2	12.60235		71.0	+33.0	252.0	+54.0					12.60235	Y	Durech, 18
9052 Uhland	2 2	76.541		75.0	+22.0	253.0	+18.0					76.541	Y	Durech, 18
9091 Ishidatakaki	P P	10.6	0.97	-1.0	+52.0							6.58071		Durech, 18
9112 Hatsulars	2 2	36.5372		65.0	+50.0	249.0	+45.0					36.5372	Y	Durech, 18
9158 Platè	2 2	5.16491		119.0	-52.0							5.16491	Y	Durech, 18
9196 Sukagawa	2 2	7.10	1.13	57.0	+52.0							7.10002	Y	Durech, 18
9204 Mörike	R R	80.483		-1.0	-54.0							80.483		Durech, 18
9274 Amylorell	2 2	5.518	0.71	85.0	-48.0	270.0	-62.0					5.49631	Y	Durech, 18
9299 Vinceteri	2 2	87.8047	0.67	228.0	-63.0							87.95	Y	Durech, 18
9326 Ruta	2 2	8.14533		59.0	+49.0	250.0	+60.0					8.14533	Y	Durech, 18
9364 Clusius	P P	8.9155	1.06	-1.0	+57.0							8.91654		Durech, 18
9379 Dijon	2 2	3.273103		85.0	-54.0	268.0	-58.0					3.273103	Y	Durech, 18
9440 1997 FZ_1		5.196349		97.0	-64.0	278.0	-65.0					5.196349	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
9444 1997 JA	P	15.30992		-1.0	+48.0							15.30992		Durech, 18
9542 Eryan	P	2.79473		200.0	-5.0	21.0	-22.0					2.79473		Hanus, 16
9563 Kitty		5.367	0.72	272.0	-28.0	91.0	-34.0					5.38191		Hanus, 16
9566 Rykhlova	2	8.800	0.95	152.0	-58.0							8.57173	Y	Durech, 18
9582 1990 EL ₇	R	5.79899	0.52	-1.0	-50.0							5.79982		Durech, 18
9622 Terryjones	P	8.938	0.69	-1.0	+48.0							8.94272		Durech, 18
9723 Binyang	P	12.40	1.11	-1.0	+55.0							12.38823		Durech, 18
9734 1986 CB ₂	P	9.29035		-1.0	+57.0							9.29035		Durech, 18
9770 Discovery	R	3.947	0.70	-1.0	-52.0							3.946662		Durech, 18
9782 Edo	P	4.085	0.67	-1.0	+51.0							4.056270		Durech, 18
9783*Tensho-kan	P	3.0111	0.19	350.0	-86.0							3.0108		Pravec, 19
9827 1958 TL ₁	2	10.70735		331.0	-74.0							10.70735	Y	Durech, 18
9869 Yadoumaru	2	7.57860		50.0	+40.0	226.0	+41.0					7.57860	Y	Durech, 18
9898 Yoshiro	2	6.53146		12.0	-58.0	202.0	-43.0					6.53146	Y	Durech, 18
9900 Llull	R	183.319	0.88	-1.0	-51.0							38.0062		Durech, 18
9938 Kretlow	2	8.76900		62.0	-28.0	240.0	-26.0					8.76900	Y	Durech, 18
9948 1990 QB ₂	R	3.53	0.77	-1.0	-54.0							3.524769		Durech, 18
9969 Braille	4	226.4	0.9	314.0	+65.0							226.4	Y	Oberst, 01
9971 Ishihara	4	6.715	1.06	42.0	+76.0	223.0	+60.0					6.71574	Y	Durech, 16
9980 1995 BQ ₃	P	22.8890		-1.0	+39.0							22.8890		Durech, 18
9983 Rickfienberg	P	5.2963	1.30	120.0	-58.0	248.0	-77.0					5.29616	Y	Durech, 16
10061 Ndolaprata	2	10.1264	0.74	147.0	-54.0	358.0	-57.0					10.12649	Y	Durech, 18
10064 Hirosetamotsu	2	8.052	0.74	78.0	-45.0	240.0	-57.0					12.1277		Hanus, 16
10069 Fontenelle	R	20.8392		-1.0	-51.0							20.8392		Durech, 18
10096 1991 RK ₅	2	5.34569		75.0	+54.0							5.34569	Y	Durech, 18
10115 1992 SK	3	7.319	1.03	99.0	-3.0							7.31832	Y	Busch, 06
10119 Remarque	R	6.811	0.50	-1.0	-62.0							6.81007		Durech, 18
10166 Takarajima	R	5.3712	0.84	-1.0	-60.0							5.37089		Durech, 18
10275 Nathankaib	2	47.860		56.0	-43.0	249.0	-56.0					47.860	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
10281 Libourel		7.572	0.70	183.0	−88.0							7.57192	Y	Durech, 16
10288 Saville	2	5.80412		131.0	−64.0	325.0	−40.0					5.80412	Y	Durech, 18
10325 Bexa	2	16.3299		171.0	−33.0	346.0	−46.0					16.3299	Y	Durech, 18
10338 1991 RB_{11}	2	10.55	0.73	85.0	−56.0	262.0	−54.0					13.48417	Y	Durech, 18
10343 Church	R	13.72005		−1.0	−47.0							13.72005		Durech, 18
10396 1997 SW_{33}	R	15.755	0.50	−1.0	−64.0							15.76400		Durech, 18
10406 1997 WZ_{29}	2	6.7520		14.0	−86.0	184.0	−86.0					6.7520	Y	Durech, 18
10412 Tsukuyomi	2	4.115592		39.0	−67.0	188.0	−42.0					4.115592	Y	Durech, 18
10449 Takuma	2	7.33	0.46	87.0	−44.0	264.0	−39.0					7.31068	Y	Durech, 18
10465 Olkin	R	7.4403	0.50	−1.0	−59.0							7.44117		Durech, 18
10472 Santana–Ros		5.98599		73.0	+37.0	249.0	+43.0					5.98599	Y	Durech, 16
10477 Lacumparsita	2	5.21677	0.55	167.0	−53.0	315.0	−33.0					5.21748	Y	Durech, 18
10478 Alsabti	R	3.488554		−1.0	−59.0							3.488554		Durech, 18
10503 1987 SG_{13}	P	5.29806		−1.0	+50.0							5.29806		Durech, 18
10507 1988 ER_1	R	3.729382		−1.0	−38.0							3.729382		Durech, 18
10533 1991 PT_{12}	2	17.20735		110.0	+13.0	293.0	+8.0					17.20735	Y	Durech, 18
10559 Yukihisa	2	5.797	0.45	111.0	+28.0	305.0	+43.0					5.79714	Y	Durech, 18
10570 Shibayasuo	2	4.987	0.98	142.0	+47.0	326.0	+39.0					4.98791	Y	Durech, 18
10627 Ookuninushi		4.334986		3.0	+49.0	204.5	+89.0					4.334986	Y	Durech, 16
10631 1998 BM_{15}	P	6.17821		−1.0	+55.0							6.17821		Durech, 18
10656 Albrecht	2	14.490	0.35	102.0	−14.0	282.0	−34.0					14.46056	Y	Durech, 18
10705 1981 SL	R	3.511233		−1.0	−38.0							3.511233		Durech, 18
10763 Hlawka	2	6.6833		128.0	+30.0							6.6833	Y	Durech, 18
10772 1990 YM		68.98	1.3	16.0	+46.0							68.82		Hanus, 13
10777 1991 EB_5	P	5.38319	0.48	−1.0	+47.0							5.38321		Durech, 18
10779 1991 LW	2	18.3	0.72	149.0	−48.0	340.0	−70.0					18.4825	Y	Durech, 18
10784 Noailles	R	2.820678	0.40	−1.0	−50.0							2.820678		Durech, 18
10790 1991 XS	2	8.4917	0.40	171.0	+52.0	357.0	+55.0					8.4894	Y	Durech, 18
10826 1993 SK_{16}		13.835	0.61	260.0	−56.0	60.0	−34.0					13.8327		Hanus, 13

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
10829 Matsuobasho	P	5.02581		-1.0	+41.0							5.02581		Durech, 18
10854 1995 DO_1	R	46.9991		-1.0	-62.0							46.9991		Durech, 18
10855 1995 DR_1	P	68.4254	1.03	-1.0	+48.0							68.300		Durech, 18
10868 1996 RF_5	R	80.145		-1.0	-38.0							80.145		Durech, 18
10934 Pauldelvaux	P	6.29331		-1.0	+58.0							6.29331		Durech, 18
10936 1998 FN_{11}	P	25.70	0.40	-1.0	+45.0							24.5979		Durech, 18
10995 1978 NS	R	15.62716		-1.0	-7.0							15.62716		Durech, 18
11019 Hansrott	R	3.009043		-1.0	-58.0							3.009043		Durech, 18
11045 1990 HH_1	R	3.973296		-1.0	-51.0							3.973296		Durech, 18
11052 1990 WM		5.06904		194.0	-49.0	351.0	-78.0					5.06904	Y	Durech, 16
11058 1991 PN_{10}		6.517	0.78	234.0	-64.0							6.51669		Hanus, 16
11099 Sonodamasaki	P	7.251	0.37	-1.0	+24.0							7.24714		Durech, 18
11148 Einhardress		7.77240		121.0	-69.0	296.0	-64.0					7.77240	Y	Durech, 16
11174 Carandrews	2	4.51	0.83	123.0	-58.0	279.0	-79.0					4.495845	Y	Durech, 18
11187 Richoliver	R	14.55	0.45	-1.0	-50.0							66.315		Durech, 18
11196 Michanikos	P	5.17865		-1.0	+59.0							5.17865		Durech, 18
11209 1999 GP_{18}	R	8.21707		-1.0	-57.0							8.21707		Durech, 18
11214 1999 HP_8	2	10.28759		126.0	-51.0	323.0	-60.0					10.28759	Y	Durech, 18
11220 1999 JM_{25}	2	11.280	0.61	120.0	-43.0	313.0	-35.0					11.27965	Y	Durech, 18
11228 Botnick	2	13.58487		7.0	-42.0	188.0	-35.0					13.58487	Y	Durech, 18
11404 Wittig	R	13.424	0.69	-1.0	-39.0							13.42557		Durech, 18
11407 1999 CV_{50}	2	55.645		118.0	-61.0	302.0	-62.0					55.645	Y	Durech, 18
11409 Horkheimer	P	10.27274		-1.0	+58.0							10.27274		Durech, 18
11429 Demodokus	2	50.16	0.18	31.0	-77.0							50.23	Y	Durech, 18
11432 Kerkhoven	R	19.3609		-1.0	-59.0							19.3609		Durech, 18
11434 Lohnert	P	16.428	0.90	-1.0	+50.0							16.4296		Durech, 18
11479 1986 EP_5	2	6.91	0.50	99.0	+41.0	281.0	+46.0					6.88334	Y	Durech, 18
11505 1990 DW_2	R	5.94920		-1.0	-53.0							5.94920		Durech, 18
11555 1993 CR_1	P	3.32095	0.70	-1.0	+61.0							3.313259		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
11618 1996 EX_1	2 2	40.2337		101.0	+19.0	289.0	+56.0					40.2337	Y	Durech, 18
11659 1997 EX_{41}	2 2	15.58218		6.0	+63.0	181.0	+59.0					15.58218	Y	Durech, 18
11675 Billboyle	2 2	3.331653		87.0	-65.0	270.0	-55.0					3.331653	Y	Durech, 18
11676 1998 CQ_2	2 2	7.87741		23.0	-43.0	202.0	-46.0					7.87741	Y	Durech, 18
11682 Shiwaku	2 2	4.01885		25.0	+68.0	206.0	+74.0					4.01885	Y	Durech, 18
11700*1998 FT_{115}		5.4	0.64	82.0	-64.0	280.0	-72.0					5.52303	Y	Durech, 16
11705 1998 GN_7	P P	3.7187	0.45	-1.0	+23.0							3.718589		Durech, 18
11742 1999 JZ_5	P P	12.17299		-1.0	+49.0							12.17299		Durech, 18
11785 Migaic	2 2	20.716	0.30	61.0	+48.0	260.0	+46.0					20.7197	Y	Durech, 18
11796 Nirenberg	2 2	43.4745		32.0	+53.0	204.0	+57.0					43.4745	Y	Durech, 18
11797 Warell	R R	3.816218		-1.0	-49.0							3.816218		Durech, 18
11823 Christen	2 2	16.3133		46.0	+46.0	233.0	+43.0					16.3133	Y	Durech, 18
11839 1986 QX_1	R R	15.4350		-1.0	-54.0							15.4350		Durech, 18
11900 Spinoy	2 2	4.368240		4.0	-46.0	182.0	-45.0					4.368240	Y	Durech, 18
11908 Nicaragua	R R	4.118827		-1.0	-62.0							4.118827		Durech, 18
11958 Galiani		9.801	0.96	12.0	+47.0							8.24720	Y	Durech, 16
11968 Demariotte	R R	16.6287		-1.0	-68.0							16.6287		Durech, 18
11995 1995 YB_1		12.66498		70.0	-80.0	238.0	-68.0					12.66498	Y	Durech, 16
12003 Hideosugai	2 2	9.0157		32.0	-90.0							9.0157	Y	Durech, 18
12045 Klein		8.9686	0.55	77.0	-22.0							9.00648	Y	Durech, 16
12088 Macalintal	2 2	3.342	0.57	98.0	+41.0	265.0	+50.0					3.341929	Y	Durech, 18
12097 1998 HG_{121}	2 2	6.850	0.42	80.0	+26.0	267.0	+38.0					6.85200	Y	Durech, 18
12220 Semenchur	2 2	5.992	0.64	350.0	+53.0							5.96389	Y	Durech, 18
12232 1986 QZ_2	2 2	32.8150		115.0	+28.0	292.0	+4.0					32.8150	Y	Durech, 18
12279 Laon	2 2	5.59803		160.0	-47.0	328.0	-76.0					5.59803	Y	Durech, 18
12290 1991 LZ	P P	21.96	0.16	-1.0	+43.0							93.874		Durech, 18
12291 Gohnaumann	2 2	3.22070		252.0	+52.0							3.22070	Y	Durech, 18
12304 1991 SR_1	2 2	65.814		67.0	-70.0	267.0	-37.0					65.814	Y	Durech, 18
12334 1992 WD_3	P P	11.44027		-1.0	+47.0							11.44027		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
12374 Rakhat	2	18.170	0.31											
	2			53.0	+47.0	258.0	+67.0					18.1846	Y	Durech, 18
12375 1994 NO_1	P	39.5042												
	P			-1.0	+60.0							39.5042		Durech, 18
12376 Cochabamba	P	6.32068	0.37											
	P			-1.0	+10.0							7.28150		Durech, 18
12383 Eboshi	2	48.7598												
	2			85.0	-53.0	210.0	-53.0					48.7598	Y	Durech, 18
12384 Luigimartella		6.440	0.80											
				4.0	-50.0	160.0	-60.0					6.44220	Y	Durech, 16
12415 Wakatatakayo	P	4.3606	0.68											
	P			-1.0	+50.0							4.359270		Durech, 18
12417 1995 TC_8	2	5.10890												
	2			350.0	+35.0							5.10890	Y	Durech, 18
12421 Zhenya	R	7.70523												
	R			-1.0	-53.0							7.70523		Durech, 18
12515 Suiseki	P	20.7202	0.48											
	P			-1.0	+53.0							20.7335		Durech, 18
12551 1998 QQ_{39}		11.202	0.95											
				123.0	+50.0	299.0	+44.0					11.19841	Y	Durech, 16
12591 1999 RT_{133}	P	18.4175												
	P			-1.0	+46.0							18.4175		Durech, 18
12753 Povenmire		17.5752	1.12											
				138.0	-28.0	295.0	-48.0					17.5740	Y	Durech, 16
12774 Pfund		7.34295												
				121.0	+53.0	308.0	+62.0					7.34295	Y	Durech, 16
12797 1995 WL_4	R	8.50897												
	R			-1.0	-50.0							8.50897		Durech, 18
12822 1996 XD_1	R	5.11236												
	R			-1.0	-35.0							5.11236		Durech, 18
12908 Yagudina	P	12.28394												
	P			-1.0	+48.0							12.28394		Durech, 18
12961 4262 $T-2$	2	5.31117												
	2			66.0	-47.0	233.0	-39.0					5.31117	Y	Durech, 18
12979 Evgalvasil'ev		5.78331												
				45.0	-68.0	203.0	-62.0					5.78331	Y	Durech, 16
13002 1982 BJ_{13}		3.13844												
				58.0	-50.0	245.0	-57.0					3.13844		Hanus, 13
13035 1989 UA_6	2	10.639	0.57											
	2			142.0	+46.0	323.0	+37.0					10.65696	Y	Durech, 18
13059 Ducuroir		13.850	0.78											
				117.0	+71.0	311.0	+73.0					13.84864	Y	Durech, 16
13176 Kobedaitenken	2	15.5790												
	2			141.0	+68.0	324.0	+26.0					15.5790	Y	Durech, 18
13236 1998 HF_{96}	R	7.20099												
	R			-1.0	-51.0							7.20099		Durech, 18
13338 1998 SK_{119}		4.129105												
				86.0	-42.0	240.0	-70.0					4.129105	Y	Durech, 16
13355 1998 TP_{17}	2	3.657467												
	2			350.0	+30.0							3.657467	Y	Durech, 18
13371 1998 VH_5	2	64.581												
	2			2.0	-36.0	183.0	-50.0					64.581	Y	Durech, 18
13393 1999 ND_9	P	5.084686												
	P			-1.0	+62.0							5.084686		Durech, 18
13436 Enid	2	11.67828												
	2			170.0	+53.0	351.0	+54.0					11.67828	Y	Durech, 18
13446 Almarkim	P	5.5116												
	P			-1.0	+53.0							5.51163		Durech, 18
	2			48.0	+54.0	230.0	+53.0					5.5116	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
13482 Igorfedorov	2 2	13.55	0.56											
				120.0	-38.0	288.0	-42.0					13.42631	Y	Durech, 18
13488 Savanov	R R	5.678	0.72	-1.0	-36.0							5.67941		Durech, 18
13530 Ninnemann	R R	4.719767		-1.0	-46.0							4.719767		Durech, 18
13534 Alain-Fournier	2 2	6.214	0.92	176.0	+65.0	355.0	+64.0					6.21407	Y	Durech, 18
13535 1991 RS_{13}		5.22705		127.0	-64.0	318.0	-60.0					5.22705	Y	Durech, 16
13585 Justinsmith	2 2	50.281		150.0	-18.0	331.0	-33.0					50.281	Y	Durech, 18
13629 1995 WD_2	R R	6.91630		-1.0	-54.0							6.91630		Durech, 18
13643 Takushi	2 2	83.838	1.00	70.0	-62.0							82.130	Y	Durech, 18
13649 1996 PM_4	2 2	5.51386		99.0	+72.0	282.0	+70.0					5.51386	Y	Durech, 18
13709 1998 QE_{13}	2 2	55.961		110.0	-44.0	275.0	-36.0					55.961	Y	Durech, 18
13737 1998 RU_{76}	2 2	7.74	0.86	323.0	-49.0							7.73740	Y	Durech, 18
13809 1998 XJ_{40}	2 2	40.256	0.41	66.0	-27.0	225.0	-30.0					3.81363	Y	Durech, 18
13836 1999 XF_{24}	R R	4.85677	0.68	-1.0	-47.0							4.856946		Durech, 18
13856 1999 XZ_{105}	2 2	4.4475	0.45	174.0	+20.0	356.0	+46.0					4.447894	Y	Durech, 18
13872 2649 $P-L$	2 2	4.56275		57.0	-64.0	256.0	-42.0					4.56275	Y	Durech, 18
13925 1986 QS_3	2 2	6.33755	0.50	6.0	-59.0							6.33726	Y	Durech, 18
13952 Nykvist		7.349	1.17	13.0	+58.0	193.0	+67.0					7.35225	Y	Durech, 16
13964 La Billardière	P P	6.23621		-1.0	+61.0							6.23621		Durech, 18
14016 Steller	2 2	3.797	0.78	359.0	+7.0							3.712846	Y	Durech, 18
14031 Rozyo		2.900652		41.0	-62.0	180.0	-60.0					2.900652	Y	Durech, 16
14044 1995 VS_1		9.25874		95.0	-47.0	253.0	-57.0					9.25874	Y	Durech, 16
14046 Keikai	R R	7.74604		-1.0	-56.0							7.74604		Durech, 18
14095 1997 PE_2	R R	19.532	0.58	-1.0	-29.0							19.6687		Durech, 18
14098 Šimek	2 2	9.29614		24.0	+7.0	204.0	+8.0					9.29614	Y	Durech, 18
14128 1998 QX_{92}	R R	4.457755		-1.0	-50.0							4.457755		Durech, 18
14165 1998 UZ	2 2	6.97151		51.0	-54.0	257.0	-53.0					6.97151	Y	Durech, 18
14180 1998 WY_5	2 2	14.56991		178.0	-45.0	352.0	-50.0					14.56991	Y	Durech, 18
14197 1998 XK_{72}		10.6453	0.67	192.0	-74.0	38.0	-62.0					10.6453		Hanus, 16
14203 Hocking		9.08566		106.0	+81.0	240.0	+52.0					9.08566	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
14257 2000 AR_{97}		13.584	0.67	57.0	+67.0							13.57929	Y	Durech, 16
14260 2000 AF_{119}	P	3.825760		-1.0	+58.0							3.825760		Durech, 18
14268 2000 AK_{156}	2	7.51	0.27	119.0	-11.0							7.5121	Y	Durech, 18
14362 1988 MH	2	3.639	0.44	188.0	+6.0							3.64387	Y	Durech, 18
14376 1989 ST_{10}	2	5.614	0.64	139.0	+58.0	340.0	+68.0					5.8481	Y	Durech, 18
14410 1991 RR_1	2	12.4272		342.0	-76.0							12.4272	Y	Durech, 18
14420 Massey	P	4.07522	0.65	-1.0	+65.0							4.075465		Durech, 18
14425 Fujimimachi	R	20.7775		-1.0	-55.0							20.7775		Durech, 18
14465 1993 NB	2	4.9703	0.69	188.0	-32.0	341.0	-39.0					4.97053	Y	Durech, 18
14523 1997 GV_{21}	P	7.63597	0.05	-1.0	+1.0							7.63597		Durech, 18
14541 1997 SF	R	7.69532		-1.0	-56.0							7.69532		Durech, 18
14551 Itagaki	2	5.94719	0.63	76.0	+60.0	267.0	+51.0					5.94641	Y	Durech, 18
14578 1998 QO_{93}	R	38.2600		-1.0	-47.0							38.2600		Durech, 18
14627 Emilkowalski	2	11.131	0.86	256.0	+48.0							11.13002	Y	Durech, 18
14666 1999 CG_{17}	P	5.46132	0.54	-1.0	+52.0							5.46153		Durech, 18
14667 1999 CS_{19}	2	9.18435		90.0	-57.0	287.0	-64.0					9.18435	Y	Durech, 18
14671 1999 RM_{49}	R	7.579	0.82	-1.0	-60.0							7.58172		Durech, 18
14691 2000 AK_{119}		3.652	0.84	38.0	-54.0	248.0	-68.0					3.652412	Y	Durech, 16
14739 Edgarchavez	R	5.90622		-1.0	-54.0							5.90622		Durech, 18
14818 Mindeli	P	5.27919	0.30	-1.0	+58.0							5.279418		Durech, 18
14822 1984 SR_5	R	12.16644		-1.0	-56.0							12.16644		Durech, 18
14832 Alechinsky	R	8.07	1.30	-1.0	-54.0							8.01395		Durech, 18
14844 1988 VT_3	P	6.41745		-1.0	+59.0							6.41745		Durech, 18
14872 Hoher List	2	6.14518		97.0	-48.0	284.0	-56.0					6.14518	Y	Durech, 18
14877 Zauberflote	P	4.281	0.40	-1.0	+63.0							4.734214		Durech, 18
14883 1991 PT_{11}	2	8.15607		87.0	+41.0	267.0	+48.0					8.15607	Y	Durech, 18
14889 1991 VX_2	2	16.096	0.41	70.0	+33.0	251.0	+18.0					16.0879	Y	Durech, 18
14918*1994 BP_4	R	7.554	0.81	-1.0	-50.0							7.55646		Durech, 18
14925 Naoko	2	5.650939		86.0	+48.0	271.0	+36.0					5.650939	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
14938*1995 DN	2 2	7.8185	0.61	182.0	-26.0	346.0	-29.0					7.81771	Y	Durech, 18
14946 1996 AN_2	P P	5.148	0.42	-1.0	+39.0							5.15783		Durech, 18
14974 Počátky	R R	21.728	0.68	-1.0	-52.0							21.7299		Durech, 18
15014 Annagekker	R R	27.4682		-1.0	-31.0							27.4682		Durech, 18
15032 Alexlevin	2 2	4.405511		158.0	-66.0	353.0	-46.0					4.405511	Y	Durech, 18
15050 Heddal	P P	4.768	0.76	-1.0	+59.0							4.769102		Durech, 18
15062 1999 AL_2	P P	6.821	0.54	-1.0	+52.0							6.81945		Durech, 18
15091 Howell	2 2	10.86318		13.0	+61.0	200.0	+46.0					10.86318	Y	Durech, 18
15105 2000 BJ_4	2 2	6.2570	0.60	108.0	+71.0							6.2570	Y	Durech, 18
15110 2000 CE_{62}	2 2	5.462	1.03	35.0	+52.0	213.0	+34.0					5.46210	Y	Durech, 18
15125 2000 EZ_{41}	P P	7.22719		-1.0	+54.0							7.22719		Durech, 18
15224 Penttilä	P P	4.377	0.64	-1.0	+43.0							4.377107		Durech, 18
15276 Diebel	2 2	13.32997		58.0	-52.0	222.0	-10.0					13.32997	Y	Durech, 18
15290 1991 TF_1	2 2	14.33958		70.0	-49.0	246.0	-18.0					14.33958	Y	Durech, 18
15387 Hanazukayama	P P	11.35597		-1.0	+53.0							11.35597		Durech, 18
15492 Nyberg	R R	8.256	0.29	-1.0	-30.0							8.25244		Durech, 18
15496 1999 DQ_3	2 2	88.1332	0.66	23.0	+89.0							81.21	Y	Durech, 18
15549 2000 FN	R R	55.09	1.00	-1.0	-56.0							55.102		Durech, 18
15552 Sandashoukan	2 2	33.62	1.44	131.0	+5.0	316.0	-31.0					33.5993	Y	Durech, 18
15613*2000 GH_{136}	R R	3.3	1.02	-1.0	-53.0							3.418366		Durech, 18
15614 Pillinger	P P	39.561	0.80	-1.0	+42.0							44.3322		Durech, 18
15621*Erikhovland	R R	5.3426	0.89	-1.0	-35.0							5.34226		Hanus, 13
15677 1980 TZ_5		5.614	0.78	75.0	-64.0	226.0	-75.0					5.61479	Y	Durech, 16
15710 Böcklin	R R	7.52272		-1.0	-54.0							7.52272		Durech, 18
15735*Andakerkhoven	2 2	21.8725	0.65	107.0	-17.0	281.0	-19.0					22.5355	Y	Durech, 18
15769 1993 FP_{23}	2 2	5.794	0.85	292.0	-31.0							5.79336	Y	Durech, 18
15782 1993 ON_8	R R	9.00397		-1.0	-54.0							9.00397		Durech, 18
15796 1993 TZ_{38}	2 2	6.21276		68.0	+38.0	252.0	+52.0					6.21276	Y	Durech, 18
15824 1994 WM_1	2 2	28.5797		125.0	-36.0	290.0	-77.0					28.5797	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
15917 Rosahavel	2 2	10.21938												
15920 1997 UB_{25}	2 2	12.20051		79.0	-58.0	276.0	-44.0					10.21938	Y	Durech, 18
15955 Johannesgmunden	2 2	9.4985		122.0	-50.0	316.0	-44.0					12.20051	Y	Durech, 18
15987 1998 XV_{10}	R R	64.700		327.0	-85.0							9.4985	Y	Durech, 18
16003 1999 BX_2	P P	19.7891		-1.0	-49.0							64.700		Durech, 18
16009 1999 CM_8		16.70	0.65	-1.0	+52.0							19.7891		Durech, 18
16025 1999 CA_{104}	2 2	10.55733		283.0	+44.0							8.3476		Hanus, 13
16029 1999 DQ_6	2 2	5.95	0.76	135.0	+15.0	313.0	+29.0					10.55733	Y	Durech, 18
16055 1999 JQ_{56}	2 2	94.273	1.05	94.0	+85.0							5.9537	Y	Durech, 18
16061 1999 JQ_{117}	2 2	12.25800		123.0	-38.0	288.0	-36.0					94.351	Y	Durech, 18
16138 1999 XV_{119}	R R	6.19344		-1.0	-62.0							12.25800		Durech, 18
16173 2000 AC_{98}	2 2	6.4842	0.36	4.0	-39.0	173.0	-23.0					6.19344	Y	Durech, 18
16216 2000 DR_4		10.36816		37.0	-48.0	209.0	-37.0					6.48550		Hanus, 16
16226 Beaton	R R	9.59127		130.0	-66.0							10.36816	Y	Durech, 16
16227 2000 DY_{73}	2 2	3.557035		-1.0	-59.0							9.59127		Durech, 18
16270 2000 JH_{48}	2 2	40.5435		156.0	-49.0	337.0	-45.0					3.557035	Y	Durech, 18
16285 3047 $P-L$	2 2	3.677733		39.0	+40.0	230.0	+27.0					40.5435	Y	Durech, 18
16403 1984 WJ_1	2 2	7.5391	0.18	21.0	-36.0	181.0	-51.0					3.677733	Y	Durech, 18
16423 1988 BZ_3	P P	3.3048	0.33	216.0	+30.0	13.0	+48.0					7.53748		Hanus, 13
16444 Godefroy	P P	6.13782		-1.0	+57.0							3.304792		Durech, 18
16468 1990 HW_1		94.13		-1.0	+64.0							6.13782		Durech, 18
16528 Terakado	R R	23.38	0.63	119.0	-84.0							94.13		Hanus, 16
16579 1992 GO	P P	10.99646		-1.0	-53.0							23.4004		Durech, 18
16669*Rionuevo	2 2	4.953	0.92	-1.0	+58.0							10.99646		Durech, 18
16689 Vistula	P P	4.040915		61.0	-73.0							4.95361	Y	Durech, 18
16712 1995 SW_{29}	2 2	17.1699		-1.0	+53.0							4.040915		Durech, 18
16771 1996 UQ_3	2 2	4.95609		161.0	+10.0	324.0	+1.0					17.1699	Y	Durech, 18
16783 Bychkov	R R	6.87297		49.0	+63.0	253.0	+41.0					4.95609	Y	Durech, 18
16786 1997 AT_1		4.023	0.52	-1.0	-43.0							6.87297		Durech, 18
				178.0	+56.0	307.0	+60.0					4.020902	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
16789 1997 AU_3	2 2	72.9217	0.49									73.519	Y	Durech, 18
16847*Sanpoloamosciano		8.183	0.56									8.1845 8.184371	Y	Hanus, 13 Franco, 19
16897 1998 DH_{10}	2 2 2	9.18344	0.43	91.0 90.0	-24.0 -39.0	286.0	-20.0					9.18959	Y	Durech, 18
16927*1998 FX_{68}	R R	33.856	0.73	97.0	+46.0	283.0	+55.0					33.8781		Durech, 18
16955*1998 KU_{48}		5.2608	0.51	-1.0	-58.0							5.26062	Y	Durech, 16
16971 1998 WJ_3	P P	43.1120		122.0	-48.0	264.0	-51.0					43.1120		Durech, 18
17000*Medvedev	P P	6.856	0.69	-1.0	+45.0							6.87830		Durech, 18
17018 1999 DB_1	2 2	5.31832		-1.0	+64.0							5.31832	Y	Durech, 18
17028 1999 FJ_5	2 2	12.80411		86.0	-40.0	272.0	-41.0					12.80411	Y	Durech, 18
17111 1999 JH_{52}	2 2	8.89934	0.56	40.0	+18.0	221.0	+13.0					8.89847	Y	Durech, 18
17139 Malyshev	2 2	4.202622		157.0	+46.0	328.0	+62.0					4.202622	Y	Durech, 16
17154 1999 JS_{121}	R R	2.89186	0.31	131.0	+43.0	313.0	+64.0					2.891981		Durech, 18
17161 1999 LQ_{13}	R R	7.720	0.62	-1.0	-58.0							7.72216		Durech, 18
17196*Mastrodemos	R R	5.27282	0.23	-1.0	-62.0							5.271384		Durech, 18
17279 Jeniferevans	2 2	6.51152		-1.0	-60.0							6.51152	Y	Durech, 18
17323 3284 $T-1$	P P	6.21291		339.0	+46.0							6.21291		Durech, 18
17329 1277 $T-2$	2 2	9.07938		-1.0	+49.0							9.07938	Y	Durech, 18
17404 1986 TZ_3	R R	14.04109		269.0	-36.0							14.04109		Durech, 18
17407 Teige	R R	4.82592		-1.0	-60.0							4.82592		Durech, 18
17428*Charleroi	2— 2—	5.335	0.19	-1.0	-50.0							5.989413	Y	Warner, 18
17465 Inawashiroko	R R	25.1984		329.0	-35.0	145.0	-49.0					25.1984		Durech, 18
17511 1992 QN	2 2	5.9902	1.10	-1.0	-42.0							5.986762	Y	Warner, 18
17567*Hoshinoyakata	2 2	19.882	0.40	120.0	-18.0							19.891	Y	Durech, 18
17589 1995 BR_{10}	R R	6.99815		325.0	-87.0							6.99815		Durech, 18
17610 1995 UU_1	R R	5.93	0.97	-1.0	-49.0							5.92960		Durech, 18
17727 1997 YU_{11}	R R	3.523620		-1.0	-55.0							3.523620		Durech, 18
17754 1998 DN_8	P P	12.11500		-1.0	-56.0							12.11500		Durech, 18
17873 1998 XO_{96}	2 2	10.69335		-1.0	+44.0							10.69335	Y	Durech, 18
17877 1999 AZ_{22}	P P	12.553	0.33	135.0	-50.0	318.0	-57.0					12.55269		Durech, 18
				-1.0	+43.0									Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
17893 Arlot	P	4.809207		−1.0	+62.0							4.809207		Durech, 18
17906 1999 FG_{32}	P	7.81874	0.31	−1.0	+37.0							7.82134		Durech, 18
17983 Buhrmester	P	11.74096												
17997 1999 JN_{78}	2	5.04678	0.58	109.0	+28.0	296.0	+34.0					11.74096	Y	Durech, 18
18049 1999 RX_{195}	2	4.096077		−1.0	−54.0							5.04624		Durech, 18
18057 1999 VK_{10}	R	8.51475		−1.0	−53.0							4.096077		Durech, 18
18092 Reinhold	R	18.20644		−1.0	−51.0							8.51475	Y	Durech, 18
18156 Kamisaibara	R	11.9198	0.51	23.0	−88.0	221.0	−55.0					18.20644		Durech, 18
18159 Andrewcook	2	19.5251	0.38	130.0	+45.0	326.0	+11.0					11.9166	Y	Durech, 18
18187 2000 QQ_{53}	2	67.104		−1.0	+46.0							19.3827	Y	Durech, 18
18196 Rowberry	P	49.107		−1.0	+59.0							67.104		Durech, 18
18278 Drymas	P	28.087	0.63	−1.0	−58.0							49.107		Durech, 18
18387 1992 GN_3	R	11.83566		−1.0	−64.0							28.0818		Durech, 18
18395 Schmiedmayer	R	4.47765	0.47	73.0	−43.0	251.0	−47.0					11.83566		Durech, 18
18425 1993 YL	2	4.966008		5.0	+57.0	189.0	+65.0					4.477653	Y	Durech, 18
18487 1996 AU_3	2	6.512	0.72	245.0	−45.0	91.0	−70.0					4.966008	Y	Durech, 18
18595 1998 BR_1	2	6.02033		−1.0	−53.0							6.59077		Hanus, 16
18641 1998 EG_{10}	R	5.2461	0.97	−1.0	−99.0							6.02033		Durech, 18
18666 1998 FT_{53}	R	5.5970		316.0	+49.0									Oszkiewicz, 17
18831 1999 NP_{37}	2	14.01785		279.0	−65.0							5.5970	Y	Durech, 18
18842 1999 RB_{22}	2	9.6	0.49	−1.0	−60.0							14.01785	Y	Durech, 18
18889 2000 CC_{28}	R	20.7316		74.0	−30.0	238.0	−48.0					9.06861		Durech, 18
18989 2000 RV_{26}	2	5.21891		87.0	−50.0	280.0	−29.0					20.7316	Y	Durech, 18
18997 Mizrahi	2	5.93845		31.0	−57.0	214.0	−56.0					5.21891	Y	Durech, 18
19086 1978 VB_3	2	6.26	0.70	91.0	−44.0	235.0	−52.0					5.93845	Y	Durech, 18
19091 1978 XX	2	4.219087		138.0	+65.0	326.0	+35.0					6.26140	Y	Durech, 18
19136 Strassmann	2	10.512	0.92	56.0	−57.0	211.0	−52.0					4.219087	Y	Durech, 18
19181 1991 SD_1	2	5.12791		−1.0	−51.0							10.51693	Y	Durech, 18
19187 1991 VU_2	R	5.82416		218.0	+33.0							5.12791		Durech, 18
	2											5.82416	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
19327 1996 XH_{19}	2	3.9878	0.57											
	2			48.0	-56.0	205.0	-23.0					3.988545	Y	Durech, 18
19388 1998 DQ_3	2	8.92431												
	2			67.0	+34.0	244.0	+68.0					8.92431	Y	Durech, 18
19389 1998 DD_{14}	P	7.417	0.51											
	P			-1.0	+54.0							7.41239		Durech, 18
19457 Robcastillo	2	4.35485	0.64											
	2			101.0	+49.0	288.0	+69.0					4.354966	Y	Durech, 18
19479 1998 HG_{97}	2	39.0847												
	2			120.0	+63.0	309.0	+49.0					39.0847	Y	Durech, 18
19489 1998 HL_{149}	R	2.714	0.48											
	R			-1.0	-53.0							2.714679		Durech, 18
19501 1998 KC_{50}	P	9.13015												
	P			-1.0	+52.0							9.13015		Durech, 18
19559 1999 JY_{80}	P	6.16874												
	P			-1.0	+60.0							6.16874		Durech, 18
19600 1999 NV_{41}	R	16.3813												
	R			-1.0	-54.0							16.3813		Durech, 18
19690 1999 RD_{212}	2	25.4988												
	2			55.0	+42.0	231.0	+25.0					25.4988	Y	Durech, 18
19698 1999 SR_4	P	5.381	0.59											
	P			-1.0	+51.0							5.380150		Durech, 18
19757*2000 GK_1	R	5.192	0.45											
	R			-1.0	-54.0							5.19215		Durech, 18
19798 2000 RP_{51}	R	3.958476												
	R			-1.0	-53.0							3.958476		Durech, 18
19848 Yeungchuchiu		3.450	0.70											
				190.0	-68.0							3.45104		Hanus, 13
19919 Pogorelov	P	13.511	0.85											
	P			-1.0	+50.0							13.50696		Durech, 18
19985 1990 GD	2	5.326506												
	2			56.0	+64.0	246.0	+45.0					5.326506	Y	Durech, 18
20124 1995 WJ_{36}	2	16.657	0.84											
	2			79.0	-47.0	231.0	-44.0					16.6689	Y	Durech, 18
20179 1996 XX_{31}	2	7.594	0.60											
	2			-1.0	-69.0							7.59631	Y	Durech, 18
20320 1998 GH_8	P	21.2534	0.43											
	P			-1.0	+51.0							21.2438		Durech, 18
20329 Manfro		8.80724												
				92.0	-55.0	258.0	-63.0					8.80724	Y	Durech, 16
20432 1999 BD_{12}	R	22.6622	0.36											
	R			-1.0	-39.0							22.6422		Durech, 18
20524 Bustersikes	2	39.0635	0.60											
	2			44.0	-28.0	251.0	-40.0					39.0902	Y	Durech, 18
20531 Stevebabcock	P	22.6199												
	P			-1.0	+50.0							22.6199		Durech, 18
20570 Molchan		4.132	0.54											
				40.0	-52.0	244.0	-59.0					4.132007	Y	Durech, 16
20700 1999 VG_{145}	R	3.706628												
	R			-1.0	-50.0							3.706628		Durech, 18
20705 1999 WH_3	R	16.1953												
	R			-1.0	-47.0							16.1953		Durech, 18
20721 1999 XA_{105}	2	5.3478												
	2			74.0	-33.0	259.0	+11.0					5.3478	Y	Durech, 18
20723 1999 XH_{113}	2	4.75643	0.45											
	2			69.0	-27.0	258.0	-52.0					4.758810	Y	Durech, 18
20725 1999 XP_{120}		3.601296												
				170.0	+67.0	334.0	+45.0					3.601296	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
20740 Sémary	P P	7.970	0.87	−1.0	+42.0							7.96507		Durech, 18
20753 2000 AW_{211}	2 2	6.13027		13.0	−28.0	167.0	−57.0					6.13027	Y	Durech, 18
20755 2000 BX_6	P P	13.10973		−1.0	+62.0							13.10973		Durech, 18
20771 2000 QY_{150}	P P	8.29981		−1.0	+35.0							8.29981		Durech, 18
20842 2000 UG_{75}	P P	3.664	0.43	−1.0	+48.0							22.0212		Durech, 18
20986 1981 EL_{37}	2 2	16.7482		16.0	−49.0	237.0	−59.0					16.7482	Y	Durech, 18
21024 1989 GD_3	R R	5.76534		−1.0	−54.0							5.76534		Durech, 18
21028 1989 TO		3.6644	0.50	86.0	+0.0	292.0	−62.0					3.66527	Y	Stephens, 15
21045 1990 SQ_1	2 2	10.06609		106.0	+58.0	273.0	+29.0					10.06609	Y	Durech, 18
21093 1992 EK_6	P P	10.60480		−1.0	+51.0							10.60480		Durech, 18
21119 1992 UJ	R R	12.886	0.77	−1.0	−55.0							12.94076		Durech, 18
21248 1995 YP_1	2 2	9.79732		164.0	−56.0	343.0	−44.0					9.79732	Y	Durech, 18
21411 Abifraeman		11.02020		249.0	−63.0							11.02020	Y	Durech, 16
21422 Alexacarey	P P	4.786498		−1.0	+53.0							4.786498		Durech, 18
21458 Susank	P P	7.28757		−1.0	+51.0							7.28757		Durech, 18
21475 Jasonclain	R R	5.27240		−1.0	−53.0							5.27240		Durech, 18
21489 1998 JU	R R	7.124	0.71	−1.0	−36.0							7.12324		Durech, 18
21557 Daniellitt	2 2	4.233	0.52	15.0	−12.0	195.0	−39.0					4.234092	Y	Durech, 18
21586 Pourkaviani	R R	27.0489		−1.0	−53.0							27.0489		Durech, 18
21598 1998 WP_9	2 2	50.063		58.0	−71.0	254.0	−60.0					50.063	Y	Durech, 18
21660 Velenia	R R	15.0738	0.36	−1.0	−56.0							15.05024		Durech, 18
21666 1999 RW_1	P P	7.493	0.73	−1.0	+57.0							7.09383		Durech, 18
21671 Warrener	2 2	4.516737		74.0	+22.0	254.0	+56.0					4.516737	Y	Durech, 18
21689 1999 RL_{38}	2 2	10.0846	0.61	51.0	−69.0	242.0	−55.0					10.08457	Y	Durech, 18
21699 Wolpert	2 2	87.848		110.0	−53.0	278.0	−58.0					87.848	Y	Durech, 18
21749 1999 RM_{172}	P P	4.865500		−1.0	+60.0							4.865500		Durech, 18
21828 1999 TN_{92}	2 2	14.92464		100.0	−47.0	274.0	−42.0					14.92464	Y	Durech, 18
21900 Orus	U U	13.45	0.18	−1.0								13.48617	Y	Mottola, 16
21904 1999 VV_{12}	2 2	5.4324	0.41	225.0	+73.0							5.4324	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
22018 1999 XK_{105}		17.0575		61.0	+45.0	228.0	+31.0					17.0575	Y	Durech, 16
22092 2000 AQ_{199}	2	18.854	0.35	161.0	-30.0							18.8183	Y	Durech, 18
22150 2000 WM_{49}	2	14.62126		57.0	+45.0	352.0	+78.0					14.62126	Y	Durech, 18
22176 2000 XG_{36}	2	4.794	0.48	53.0	-35.0	261.0	-74.0					4.794707	Y	Durech, 18
22275*Barentsen	R	40.424	0.67	-1.0	-54.0							40.4793		Durech, 18
22298 1990 EJ	R	2.985538		64.0	-42.0	244.0	-72.0					2.985538	Y	Durech, 16
22601 1998 HD_{124}	2	11.8785	0.76	122.0	+57.0	324.0	+42.0					11.87848	Y	Durech, 18
22667 1998 QA_{26}	P	6.27055		-1.0	+54.0							6.27055		Durech, 18
22733 1998 SN_{132}	P	10.76981		-1.0	-59.0							10.76981		Durech, 18
22752 1998 VS_{34}	R	5.87528	0.78	-1.0	-51.0							5.87373		Durech, 18
22773 1999 CV_{17}	R	17.50658			+56.0	187.0	+58.0					17.50658	Y	Durech, 18
22894 1999 TW	2	9.43945		125.0	-48.0	305.0	-39.0					9.43945	Y	Durech, 18
22972 1999 VR_{12}	2	22.659		90.0	+57.0							22.659	Y	Durech, 18
23004 1999 VH_{114}	2	7.147	0.78	103.0	-50.0	326.0	-82.0					7.14783	Y	Durech, 18
23142 2000 AM_{165}	2	21.6660		132.0	+44.0	358.0	+74.0					21.6660	Y	Durech, 18
23166 Bilal	P	19.9893		-1.0	+36.0							19.9893		Durech, 18
23177 2000 JD_{58}	P	4.3819	0.59	-1.0	+53.0							4.383858		Durech, 18
23184 2000 OD_{36}	P	29.09	1.20	215.0	-38.0	347.0	-76.0					54.225	Y	Durech, 18
23254 Chikatoshi	2	7.03219		33.0	+40.0	222.0	+42.0					7.03219	Y	Durech, 18
23436 Alekfursenko	2	3.628	0.42	-1.0	+54.0							3.627672		Durech, 18
23440 1986 QH_1	P	14.33721		-1.0	+58.0							14.33721		Durech, 18
23443 Kikwaya	P	5.151741		-1.0	-56.0							5.151741		Durech, 18
23459 1989 ST_4	R	4.207035		-1.0	-56.0							4.207035		Durech, 18
23547 Tognelli	R	5.798	0.66	-1.0	-45.0							5.79916		Durech, 18
23558 1994 PW_{26}	R	8.25997		71.0	+45.0	268.0	+56.0					8.25997	Y	Durech, 18
23578 Baedeker	2	8.17154		141.0	-53.0							8.17154	Y	Durech, 16
23598 1995 WL_{13}	2	10.577	0.69	90.0	+41.0	276.0	+50.0					10.57780	Y	Durech, 18
23707 Chambliss	2	5.06632		185.0	+79.0	334.0	+35.0					5.06632	Y	Durech, 16
23780 1998 QT_{10}	P	9.55043		-1.0	+47.0							9.55043		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
23873 1998 RL_{76}		13.856	1.23	56.0	−74.0							13.86111	Y	Durech, 16
23902 1998 SN_{64}	R	3.636	0.73	−1.0	−37.0							3.635316		Durech, 18
23948*1998 UQ_{18}	R	5.675	0.47	−1.0	−60.0							5.668437		Durech, 18
23967*1998 XQ_{12}	R	5.46334	0.94	−1.0	−34.0							5.47479		Durech, 18
24188 Matthewage	2	70.5357	0.83	340.0	+35.0							70.555	Y	Durech, 18
24192 1999 XM_{30}	P	19.9	0.46	−1.0	+52.0							19.9153		Durech, 18
24314 2000 AQ_2	P	12.9068	0.25	−1.0	+56.0							12.90256		Durech, 18
24324 2000 AT_{51}	2	5.8951		132.0	+53.0							5.8951	Y	Durech, 18
24404 2000 AB_{194}	R	3.721	0.54	−1.0	−58.0							3.720686		Durech, 18
24405 2000 AT_{197}		20.1835		170.0	+49.0	12.0	+46.0					20.1835		Hanus, 16
24427 2000 CN_{21}	P	13.82376		−1.0	+29.0							13.82376		Durech, 18
24611 Svetochka	P	23.1328		−1.0	+56.0							23.1328		Durech, 18
24613 1978 VL_3	P	7.82599		−1.0	+59.0							7.82599		Durech, 18
24681 Granados	R	7.62529		−1.0	−57.0							7.62529		Durech, 18
24703 1991 PA	R	6.77589		−1.0	−53.0							6.77589		Durech, 18
24859 1996 BP_{11}	2	11.05170		152.0	−59.0	308.0	−52.0					11.05170	Y	Durech, 18
24971 1998 FG_{77}	2	39.9001		127.0	+55.0	313.0	+47.0					39.9001	Y	Durech, 18
25021*Nischaykumar		2.5344	0.07	284.0	−86.0							2.5344		Pravec, 19
25026 1998 QF_{23}	2	12.66397		63.0	+44.0	246.0	+28.0					12.66397	Y	Durech, 18
25122 Kaitlingus	P	6.25217		−1.0	+56.0							6.25217		Durech, 18
25143 Itokawa		12.132	1.45	−1.0	−99.0									
	3			−1.0	−99.0									
	3			355.0	−84.0	39.0	−87.0					12.132	Y	Ostro, 01
				320.0	−75.0							12.15	Y	Abe, 02 Kaasalainen, 03 Ohba, 03
25173 1998 SN_{71}	R	2.470317		−1.0	−3.0							2.470317		Durech, 18
25199 Jiahegu	P	8.33716		−1.0	+61.0							8.33716		Durech, 18
25300 Andyromine	R	21.4655		−1.0	−31.0							21.4655		Durech, 18
25329 1999 JO_{84}	R	34.9603		−1.0	−62.0							34.9603		Durech, 18
25385 1999 UC_3	P	31.7790		−1.0	+53.0							31.7790		Durech, 18
25427 Kratchmarov	2	6.22659		155.0	−52.0	339.0	−60.0					6.22659	Y	Durech, 18
25503 1999 XW_{93}	R	7.51579		−1.0	−57.0							7.51579		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
25508 1999 XC_{96}	2 2	9.94330		133.0	-57.0	340.0	-59.0					9.94330	Y	Durech, 18
25525 1999 XM_{113}	R R	12.64230		-1.0	-44.0							12.64230		Durech, 18
25542 Garabedian	2 2	10.55227		141.0	+37.0	312.0	+61.0					10.55227	Y	Durech, 18
25572 1999 XJ_{197}	R R	5.58825		-1.0	-65.0							5.58825		Durech, 18
25589 1999 XY_{231}	P P	5.37592		-1.0	+51.0							5.37592		Durech, 18
25620 Jayaprakash	P P	7.01200		-1.0	+54.0							7.01200		Durech, 18
25623 2000 AY_{47}	2 2	4.618905		197.0	-61.0							4.618905	Y	Durech, 18
25727 Karsonmiller	2 2	38.9373		119.0	-50.0	275.0	-28.0					38.9373	Y	Durech, 18
25804 2000 CC_{89}	P P	8.74095		-1.0	+49.0							8.74095		Durech, 18
25820 2000 DB_{56}	2 2	12.05893		108.0	+24.0	327.0	+55.0					12.05893	Y	Durech, 18
25843 2000 EQ_{84}	R R	9.70248		-1.0	-54.0							9.70248		Durech, 18
25845 2000 EO_{86}	2 2	15.12858		130.0	+57.0	350.0	+72.0					15.12858	Y	Durech, 18
25846 2000 EF_{93}	2 2	16.9713		123.0	+27.0	300.0	+55.0					16.9713	Y	Durech, 18
25884*Asai		4.9169	0.55	159.0	-57.0							4.917246	Y	Pravec, 19
25887 2000 SU_{308}	2 2	21.975	0.72	48.0	+81.0	296.0	+74.0					21.8916	Y	Durech, 18
25891 2000 WK_9		4.1375	0.22	-1.0	-99.0								Y	Cantu, 16
25922 2001 DY_{21}	R R	5.86656	0.37	-1.0	-48.0							5.86523		Durech, 18
25934 2001 DC_{74}	P P	19.1	0.90	-1.0	+57.0							31.8226		Durech, 18
25983 2001 FR_{57}	P P	28.6720		-1.0	+48.0							28.6720		Durech, 18
26176 1996 GD_2	2 2	19.2578		121.0	-55.0	297.0	-37.0					19.2578	Y	Durech, 18
26241 1998 QY_{40}		12.835	0.76	40.0	+45.0							12.83303	Y	Durech, 16
26348 1998 XO_{94}	2 2	15.695	0.21	166.0	+21.0	357.0	+51.0					15.7017	Y	Durech, 18
26356 Aventini	R R	19.4433		-1.0	-46.0							19.4433		Durech, 18
26387 1999 TG_2		5.14720		94.0	-46.0	325.0	-79.0					5.14720	Y	Durech, 16
26410 1999 XZ_{34}	P P	5.619	0.38	-1.0	+39.0							5.62007		Durech, 18
26416*1999 XM_{84}		2.907	0.20	183.0	-83.0							2.9660		Pravec, 19
26460 2000 AZ_{120}		5.48	0.90	9.0	-87.0	230.0	-47.0					5.45444	Y	Durech, 16
26481 2000 AS_{200}	P P	4.170573		-1.0	+55.0							4.170573		Durech, 18
26490 2000 AN_{245}	2 2	9.12207		50.0	-43.0	264.0	-61.0					9.12207	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
26520 2000 CQ_{75}	2	3.970	0.37											
	2			30.0	+43.0	214.0	+76.0					3.969849	Y	Durech, 18
26582 2000 EV_{107}	R	5.014	0.85	-1.0	-43.0							5.01409		Durech, 18
	R													
26792 1975 LY		79.15										79.15		Hanus, 13
				226.0	+68.0									
26912 1996 JG_1	P	14.031	0.42	-1.0	+34.0							14.02984		Durech, 18
	P													
26990 Culbertson	2	5.53176												
	2			113.0	-41.0	273.0	-54.0					5.53176	Y	Durech, 18
27172 1999 AN_{34}	R	9.890	0.53	-1.0	-55.0							9.89031		Durech, 18
	R													
27225 1999 GB_{17}		3.85341	0.57											
				72.0	+54.0	266.0	+31.0					3.853858	Y	Durech, 16
27229 1999 JX_{37}	R	9.77540		-1.0	-49.0							9.77540		Durech, 18
	R													
27278 2000 AU_{61}	2	5.780	0.39											
	2			210.0	+25.0	353.0	+46.0					5.77761	Y	Durech, 18
27303 Leitner	R	38.541	0.74	-1.0	-46.0							38.4666		Durech, 18
	R													
27305 2000 AJ_{203}	2	17.4163												
	2			159.0	-1.0	338.0	+19.0					17.4163	Y	Durech, 18
27360*2000 DH_{107}	R	11.199	0.64	-1.0	-59.0							11.20759		Durech, 18
	R													
27443 2000 FH_{49}	R	5.30523		-1.0	-51.0							5.30523		Durech, 18
	R													
27471 2000 GG_{76}	2	12.47	0.69											
	2			78.0	-35.0	257.0	-38.0					12.38311	Y	Durech, 18
27797 1993 FQ_{17}	R	5.60246		-1.0	-57.0							5.60246		Durech, 18
	R													
27835 1994 PZ_{13}	P	88.947		-1.0	+49.0							88.947		Durech, 18
	P													
27893 1996 HK_{25}	P	45.8946		-1.0	+48.0							45.8946		Durech, 18
	P													
27903 1996 RS_{11}	P	4.056373		-1.0	+60.0							4.056373		Durech, 18
	P													
27938 Guislain	R	27.3868		-1.0	-46.0							27.3868		Durech, 18
	R													
28059 Kiliaan	R	3.4382	0.47	-1.0	-55.0							3.437795		Durech, 18
	R													
28100 1998 RG_{69}	2	5.43391												
	2			87.0	-48.0	266.0	-41.0					5.43391	Y	Durech, 18
28130 Troemper	P	74.869		-1.0	+56.0							74.869		Durech, 18
	P													
28133 Kylebardwell		5.46284												
				126.0	-49.0	310.0	-56.0					5.46284	Y	Durech, 16
28324 Davidcampeau	R	10.77855		-1.0	-54.0							10.77855		Durech, 18
	R													
28328 1999 CN_{125}	R	4.345279		-1.0	-46.0							4.345279		Durech, 18
	R													
28343 1999 FG_9	2	10.00444												
	2			101.0	-34.0	254.0	-67.0					10.00444	Y	Durech, 18
28347 1999 FD_{22}	2	24.2936												
	2			50.0	-27.0	236.0	-48.0					24.2936	Y	Durech, 18
28371*1999 GG_{39}	R	4.056	0.77	-1.0	-61.0							4.062305		Durech, 18
	R													
28378 1999 JN_{24}	2	4.89224												
	2			16.0	-59.0	167.0	-46.0					4.89224	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
28575 McQuaid	2	14.24440												
28594 2000 EF_{134}	2			57.0	+33.0	255.0	+43.0					14.24440	Y	Durech, 18
	P	30.2062	0.38											
	P			-1.0	+53.0							28.9985		Durech, 18
28675 Suejohnston	2	7.174	0.56											
	2			94.0	-46.0	273.0	-45.0					7.18008	Y	Durech, 18
28699 2000 GN_{89}	2	45.4871												
	2			214.0	-47.0							45.4871	Y	Durech, 18
28709 2000 GY_{96}	2	49.1825												
	2			15.0	-44.0	192.0	-43.0					49.1825	Y	Durech, 18
28736 2000 GE_{133}		4.658	0.44											
				249.0	-52.0	134.0	-84.0					4.65442		Hanus, 16
28763 2000 HK_{13}	R	35.1458												
	R			-1.0	-62.0							35.1458		Durech, 18
28887 2000 KQ_{58}		6.8429	0.55											
				11.0	-61.0	191.0	-21.0					6.84315	Y	Durech, 16
				182.0	-35.0	354.0	-78.0					6.84315		Hanus, 16
28908 2000 NY_6	2	14.10574												
	2			97.0	+24.0	262.0	+33.0					14.10574	Y	Durech, 18
28910 2000 NH_{11}	2	5.971	0.65											
	2			110.0	-27.0	304.0	-24.0					5.97426	Y	Durech, 18
28954 Feiyiou	2	12.16569												
	2			88.0	-68.0	246.0	-60.0					12.16569	Y	Durech, 18
29075 1950 DA	4	2.1216	0.20											
	4			88.6	+77.7	187.4	-89.5					2.12160	Y	Busch, 07
29122 Vasadze	2	63.522												
	2			80.0	-37.0	259.0	-57.0					63.522	Y	Durech, 18
29170*1990 OA_3	R	8.089	0.87											
	R			-1.0	-49.0							8.08758		Durech, 18
29265 1993 FV_{18}	2	60.4414	0.70											
	2			79.0	+53.0	273.0	+51.0					60.356	Y	Durech, 18
29292 Conniewalker	P	30.6	0.63											
	P			-1.0	+34.0							28.1618		Durech, 18
29308 1993 UF_1		9.810	1.11											
				71.0	-56.0	246.0	-83.0					9.79348	Y	Durech, 16
29317 1994 PR_9	P	31.4016												
	P			-1.0	+54.0							31.4016		Durech, 18
29343 1995 CK_{10}	2	63.852	0.62											
	2			123.0	+52.0	253.0	+32.0					63.703	Y	Durech, 18
29450 Tomohiroohno	R	8.97841												
	R			-1.0	-49.0							8.97841		Durech, 18
29487 1997 VU_8	R	3.05923	0.53											
	R			-1.0	-42.0							3.059060		Durech, 18
29521 1997 YK_{14}	2	6.20217												
	2			68.0	+59.0	247.0	+32.0					6.20217	Y	Durech, 18
29543 1998 BV_{29}	2	74.571												
	2			29.0	+47.0	215.0	+64.0					74.571	Y	Durech, 18
29628 1998 TX_{30}	2	5.409	0.49											
	2			161.0	+46.0	337.0	+30.0					5.406288	Y	Durech, 18
29762 Panasiewicz	R	13.106	0.61											
	R			-1.0	-42.0							13.11064		Durech, 18
29777 1999 CK_{46}		3.630	0.49											
				32.0	+56.0	224.0	+40.0					3.627265	Y	Durech, 16
29820 1999 CW_{149}	R	49.4811												
	R			-1.0	-58.0							49.4811		Durech, 18
29863 1999 FC_{43}	2	19.312	0.62											
	2			124.0	+33.0	316.0	+38.0					19.3145	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
29887 1999 GN_{34}	2 2	3.239488		171.0	-53.0	350.0	-50.0					3.239488	Y	Durech, 18
29906 1999 HF_{12}	R R	13.61084		-1.0	-48.0							13.61084		Durech, 18
29919 1999 JD_{23}	2 2	9.26738		145.0	-28.0	328.0	-56.0					9.26738	Y	Durech, 18
30072 2000 EP_{93}	2 2	6.08136		128.0	+25.0	312.0	+53.0					6.08136	Y	Durech, 18
30221 LeDonne	P P	41.0563		-1.0	+52.0							41.0563		Durech, 18
30307 Marcelriesz	P P	6.51171		-1.0	+54.0							6.51171		Durech, 18
30408 2000 KW_{55}	2 2	3.846427		96.0	+40.0	295.0	+39.0					3.846427	Y	Durech, 18
30517 2001 LJ_{15}	R R	7.41001	0.59	-1.0	-60.0							7.41229		Durech, 18
30577 2001 OU_{103}	2 2	60.046		11.0	+56.0							60.046	Y	Durech, 18
30596 Amdeans	2 2	23.1340		114.0	+35.0	294.0	+37.0					23.1340	Y	Durech, 18
30657 3258 $T-1$	P P	8.36123		-1.0	+51.0							8.36123		Durech, 18
30670 1283 $T-2$	P P	10.4	1.2	-1.0	+62.0							10.11682		Durech, 18
30734 1981 ES_3	P P	3.776	0.59	-1.0	+51.0							3.776843		Durech, 18
30895 1993 FH_{23}	2 2	23.9522		25.0	-62.0	235.0	-56.0					23.9522	Y	Durech, 18
31060 1996 TB_6		5.103	0.80	103.0 216.0	-52.0 -66.0	253.0 74.0	-76.0 -39.0					5.104323 5.10432	Y	Durech, 16 Hanus, 16
31109 Janpalouš	2 2	5.146452		139.0	-60.0	350.0	-49.0					5.146452	Y	Durech, 18
31201 Michellegrand	P P	7.08206		-1.0	+43.0							7.08206		Durech, 18
31205 1998 BW	2 2	20.907	0.66	312.0	+51.0							20.9093	Y	Durech, 18
31239 Michaeljames	P P	2.980232		-1.0	+54.0							2.980232		Durech, 18
31257 1998 DG_{35}	2 2	7.66308	0.63	105.0	-43.0	299.0	-62.0					7.66121	Y	Durech, 18
31288 1998 FZ_{59}	2 2	40.2038		95.0	-34.0	256.0	-67.0					40.2038	Y	Durech, 18
31383 1998 XJ_{94}		4.1678	0.58	110.0	-74.0	279.0	-63.0					4.16818		Hanus, 13
31430 1999 BX_8	R R	54.870		-1.0	-51.0							54.870		Durech, 18
31459 1999 CB_{17}	P P	22.4134		-1.0	+59.0							22.4134		Durech, 18
31485 1999 CM_{51}		6.001	0.68	94.0	-36.0	316.0	-56.0					6.00262	Y	Durech, 16
31587 1999 FQ_{32}	R R	9.93292		-1.0	-51.0							9.93292		Durech, 18
31604 1999 GH_4	R R	13.10092		-1.0	-56.0							13.10092		Durech, 18
31610 1999 GC_6	P P	5.506	0.43	-1.0	+54.0							5.50414		Durech, 18
31648 1999 GL_{53}	R R	3.475	0.84	-1.0	-51.0							3.474186		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
31710 1999 JC_{52}	P	6.89750		-1.0	+49.0							6.89750		Durech, 18
31753 1999 JL_{94}	2	14.6636		105.0	-5.0	278.0	-9.0					14.6636	Y	Durech, 18
31755 1999 JA_{96}	2	17.8605		25.0	-60.0	212.0	-34.0					17.8605	Y	Durech, 18
31975 Johndean	R	5.77116		-1.0	-44.0							5.77116		Durech, 18
32103 2000 KF_{52}	2	4.96536		231.0	-43.0							4.96536	Y	Durech, 18
32227 2000 OM_{25}	R	69.6468	0.82	-1.0	-57.0							69.579		Durech, 18
32286 2000 PS_{24}	2	4.994138		121.0	-50.0							4.994138	Y	Durech, 18
32366 2000 QA_{142}	R	5.40165		-1.0	-54.0							5.40165		Durech, 18
32400 2000 QK_{220}	R	6.57818		-1.0	-57.0							6.57818		Durech, 18
32483 2000 SM_{362}	2	10.821	0.69	2.0	+32.0							10.82206	Y	Durech, 18
32497 2000 XF_{18}	2	24.578		214.0	+15.0							24.578	Y	Durech, 18
32507 2001 LR_{15}	2	8.26802		297.0	-69.0							8.26802	Y	Durech, 18
32575 2001 QY_{78}		4.5344	0.86	60.0	-70.0	223.0	-64.0					4.535495	Y	Durech, 16
32588 2001 QD_{124}	R	27.4754		-1.0	-35.0							27.4754		Durech, 18
32627 2001 RO_{69}	2	41.9397		126.0	+18.0	306.0	+12.0					41.9397	Y	Durech, 18
32776 Nriag		3.985	0.60	239.0	-59.0	102.0	-76.0					3.98679		Hanus, 16
32799 1990 QN_1		9.49636		71.0	+75.0	258.0	+72.0					9.49636	Y	Durech, 16
32814 1990 XZ		2.8509	0.15	71.0	+34.0	320.0	-20.0					2.85022	Y	Stephens, 15
32837 1992 EK_7	2	23.0986		54.0	-48.0	237.0	-42.0					23.0986	Y	Durech, 18
32858 Kitakamigawa	P	4.008341		-1.0	+60.0							4.008341		Durech, 18
33116*1998 BO_{12}		6.345	0.38	244.0	+69.0	45.0	+54.0					6.34669		Hanus, 16
33131 1998 CW_3	R	8.34994		-1.0	-55.0							8.34994		Durech, 18
33181 Aalokpatwa	2	7.38092		150.0	-46.0	333.0	-54.0					7.38092	Y	Durech, 18
33206 1998 FB_{60}	2	54.518		184.0	+74.0	314.0	+51.0					54.518	Y	Durech, 18
33218 1998 FO_{106}	2	12.43206		76.0	-34.0	254.0	-58.0					12.43206	Y	Durech, 18
33342 1998 WT_{24}		3.697	0.65	15.0	-22.0							3.6970		Busch, 08
	2—			1.0	+10.0							3.69375	Y	Warner, 16
33412 Arjunsutra	2	11.21794		287.0	-53.0							11.21794	Y	Durech, 18
33476 Gilanareiss	R	6.74189		-1.0	-57.0							6.74189		Durech, 18
33489 1999 GF_9	R	6.74	0.97	-1.0	-60.0							6.75103		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
33535 Alshaikh	R	6.08403	0.72	−1.0	−58.0							6.08403		Durech, 18
33566 1999 JZ ₂₅	2	73.368		76.0	−49.0	273.0	−26.0					73.368	Y	Durech, 18
33666 1999 JO ₉₄	2	11.78290												
33776 1999 RB ₁₅₈	R	16.9593		−1.0	−44.0							11.78290		Durech, 18
33820 2000 AB ₁₄₁	R			46.0	+64.0	247.0	+42.0					16.9593	Y	Durech, 16
33854 2000 HH ₅₃	2	5.20006		14.0	+84.0	201.0	+41.0					5.20006	Y	Durech, 18
33913 2000 LK ₁₄	2	4.423484		114.0	−56.0	236.0	−78.0					4.423484	Y	Durech, 16
33974 2000 ND ₁₇	P	4.93124		−1.0	+3.0							4.93124		Durech, 18
34064 2000 OK ₅₁	P	4.67868		132.0	−55.0	347.0	−65.0					4.67868	Y	Durech, 16
34093 2000 PP ₁₁	2	3.902	0.63	150.0	−20.0	330.0	+5.0					3.902766	Y	Durech, 18
34095 2000 PW ₁₁	2	4.91912		163.0	−38.0	327.0	−63.0					4.91912	Y	Durech, 18
34290 2000 QQ ₁₅₀	R	4.598	0.53	−1.0	−49.0							4.598176		Durech, 18
34318 2000 QV ₁₉₂	R	5.55003	0.45	58.0	+18.0	239.0	−3.0					5.55075	Y	Durech, 18
34368 2000 RA ₄₁	2	6.35105		81.0	−70.0	237.0	−36.0					6.35105	Y	Durech, 16
34384 2000 RW ₆₁	P	8.88082		−1.0	+62.0							8.88082		Durech, 18
34450 2000 SZ ₈₀	P	4.003	0.44	−1.0	+59.0							3.694171		Durech, 18
34484 2000 SR ₁₂₄	P	5.123550		83.0	−36.0	257.0	−34.0					5.123550	Y	Durech, 18
34499 2000 SL ₁₅₀	2	6.174	0.80	236.0	−55.0							6.17519	Y	Durech, 16
34529 2000 SD ₂₁₂	2	9.02586		116.0	−59.0	268.0	−80.0					6.17516		Hanus, 16
34817 Shiominemoto	P	3.71	0.65	−1.0	+53.0							9.02586		Durech, 18
34956 1327 T−2	R	6.382	0.87	−1.0	−54.0							3.574467		Durech, 18
35218 1994 WU ₂	R	12.45949		201.0	+36.0							6.37750	Y	Durech, 18
35447 1998 CW ₂	R	11.56991		−1.0	−45.0							12.45949		Durech, 18
35595 1998 HO ₁₁₆	R	5.30621		138.0	−56.0	304.0	−68.0					11.56991	Y	Durech, 16
35622 1998 JF ₄	2	11.42100		−1.0	−53.0							5.30621		Durech, 18
35694 1999 CP ₅₄	2	5.46417		92.0	−21.0	272.0	+22.0					11.42100	Y	Durech, 18
35815 1999 JO ₄₈	2	7.01	0.51	24.0	−62.0	203.0	−51.0					5.46417	Y	Durech, 18
35928 1999 JV ₁₀₇	2	9.74307		115.0	−63.0	294.0	−57.0					7.01510	Y	Durech, 18
	2	7.26361		39.0	−36.0	207.0	−39.0					9.74307	Y	Durech, 18
	2			137.0	−52.0	302.0	−75.0					7.26361	Y	Durech, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
35953 1999 KJ_{15}	2 2	40.1878	0.77	12.0	−60.0							40.1878	Y	Durech, 18
35965 1999 LH_{13}		6.75898		63.0	−70.0	245.0	−55.0					6.76072	Y	Durech, 16
36158 1999 RL_{216}	R R	8.79596	0.65	−1.0	−61.0							8.79596		Durech, 18
36187 Travisbarman	2 2	8.65		82.0	+24.0	268.0	+34.0					8.65272	Y	Durech, 18
36200 1999 TA_{97}	P P	5.63664		−1.0	+58.0							5.63664		Durech, 18
36232 1999 US_{26}	R R	22.5974		−1.0	−57.0							22.5974		Durech, 18
36303 2000 JM_{54}		4.93652	0.64	55.0	−48.0	225.0	−46.0					4.93652	Y	Durech, 16
36461 2000 QC_9	R R	10.38832		−1.0	−63.0							10.38832		Durech, 18
36487 2000 QJ_{42}		8.151		127.0	−66.0	332.0	−50.0					8.14982	Y	Durech, 16
36724 2000 RS_{43}	2 2	19.4850		78.0	+8.0	260.0	−19.0					19.4850	Y	Durech, 18
36944 2000 SD_{249}		6.09677	1.01	96.0	−69.0	295.0	−76.0					6.09677	Y	Durech, 16
37018 2000 TE_{60}	P P	47.623		−1.0	+54.0							47.623		Durech, 18
37035 2000 UQ_{10}	R R	9.05947		−1.0	−56.0							9.05947		Durech, 18
37265 2000 XT_{17}	R R	7.63811		−1.0	−56.0							7.63811		Durech, 18
37351 2001 TE_{36}	R R	12.71947	0.99	−1.0	−57.0							12.71947		Durech, 18
37393 2001 XF_{24}	R R	10.04107		−1.0	−51.0							10.04107		Durech, 18
37613 1993 FE_{40}	2 2	7.622		11.0	−51.0	180.0	−41.0					7.62298	Y	Durech, 18
37882 1998 FE_{49}	R R	6.021		−1.0	−49.0							6.02209		Durech, 18
37985 1998 HF_{144}	2 2	9.21507	0.37	60.0	+48.0	240.0	+65.0					9.21507	Y	Durech, 18
38120 1999 JN_{39}	2 2	12.62024		109.0	−27.0	263.0	−46.0					12.62024	Y	Durech, 18
38382 1999 RZ_{175}	2 2	7.40863		105.0	+40.0	281.0	+70.0					7.40863	Y	Durech, 18
38409 1999 RK_{205}	2 2	4.95927		19.0	+58.0	180.0	+30.0					4.95927	Y	Durech, 18
38456 1999 TO_6	P P	8.04713	0.67	−1.0	+57.0							8.04713		Durech, 18
38507 1999 TD_{192}	2 2	5.49916		315.0	+64.0							5.49916	Y	Durech, 18
38650 2000 ON_{17}	2 2	4.78164		122.0	+47.0	330.0	+40.0					4.78078	Y	Durech, 18
38761 2000 RH_3	R R	6.04882		−1.0	−37.0							6.04882		Durech, 18
38950 2000 ST_{295}	2 2	6.19077	0.67	82.0	−77.0							6.19044	Y	Durech, 18
39072 2000 VM_{17}	R R	45.0117		−1.0	−61.0							45.0117		Durech, 18
39091 2000 VX_{54}	R R	14.21810		−1.0	−28.0							14.21810		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
39510 1982 DU	R	15.5822		-1.0	-49.0							15.5822		Durech, 18
39543 Aubriet	R	8.06554		-1.0	-49.0							8.06554		Durech, 18
39555 1992 EY_{32}	R	20.8472		-1.0	-51.0							20.8472		Durech, 18
39762 1997 FE_1	2	5.90702		57.0	+48.0	246.0	+37.0					5.90702	Y	Durech, 18
39863 1998 DL_{15}	R	9.04880		-1.0	-60.0							9.04880		Durech, 18
39886 1998 EL_{12}	R	3.530461		-1.0	-57.0							3.530461		Durech, 18
39910 1998 FJ_{37}	P	4.922023		-1.0	+29.0							4.922023		Durech, 18
40104 1998 QE_4	P	4.475	0.60	144.0	-87.0							4.475241	Y	Durech, 16
40129 1998 QY_{45}	2	7.89727		54.0	-34.0	218.0	-74.0					7.89727	Y	Durech, 18
40131 1998 QJ_{48}	P	6.79377		-1.0	+39.0							6.79377		Durech, 18
40165 1998 QP_{102}	2	7.419	0.43	331.0	+86.0							7.4192	Y	Durech, 18
40223 1998 SX_{142}	2	11.00092		133.0	-36.0	338.0	-63.0					11.00092	Y	Durech, 18
40232 1998 UD	2	42.0699		59.0	-72.0							42.0699	Y	Durech, 18
40267 1999 GJ_4	2	4.9567	1.11	33.0	+58.0							4.95707	Y	Durech, 18
40353 1999 NB_{13}	R	6.05433		-1.0	-66.0							6.05433		Durech, 18
40397 1999 NY_{55}	R	76.1465	0.61	-1.0	-61.0							76.166		Durech, 18
40478 1999 RT_{54}	R	3.886734		184.0	-66.0	358.0	-65.0					3.886734	Y	Durech, 16
40642 1999 RW_{181}	R	4.856372		-1.0	-50.0							4.856372		Durech, 18
40701 1999 RG_{235}	R	3.63	1.2	-1.0	-54.0							3.621524		Durech, 18
40734 1999 SB_{19}	R	6.61769		-1.0	-56.0							6.61769		Durech, 18
40806 1999 TX_{41}	R	6.41500		82.0	-69.0	269.0	-64.0					6.41500	Y	Durech, 16
40832 1999 TH_{95}	R	14.84511		-1.0	-52.0							14.84511		Durech, 18
40852 1999 TX_{105}	2	5.327753		68.0	-60.0	257.0	-36.0					5.327753	Y	Durech, 18
41005 1999 UJ_{13}	R	5.55	0.99	-1.0	-42.0							5.55011		Durech, 18
41042 1999 VB_2	2	20.384	0.88	114.0	+30.0	309.0	+1.0					20.3544	Y	Durech, 18
41051 1999 VR_{10}	R	4.04	0.55	-1.0	-55.0							4.066510		Durech, 18
41056 1999 VX_{20}	R	5.99719		-1.0	-62.0							5.99719		Durech, 18
41083 1999 VO_{50}	2	26.0375		7.0	+35.0	189.0	+34.0					26.0375	Y	Durech, 18
41354 2000 AW_{33}	R	16.9963		-1.0	-54.0							16.9963		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
41358 2000 AJ_{54}	P	4.891	0.81											
	P			-1.0	+57.0							4.89657		Durech, 18
41394 2000 AW_{162}	2	25.0200		2.0	-68.0	188.0	-47.0					25.0200	Y	Durech, 18
41404 2000 AG_{187}	R	61.538												
	R			-1.0	-56.0							61.538		Durech, 18
41709 2000 UH_{56}	2	3.40907	0.29											
	2			144.0	+60.0							3.409190	Y	Durech, 18
41799 2000 WL_{19}	P	6.27753	0.82											
	P			-1.0	+51.0							6.27776		Durech, 18
41875 2000 WZ_{100}	R	12.87363												
	R			-1.0	-55.0							12.87363		Durech, 18
41964 2000 XW_{36}	R	15.480	0.69											
	R			-1.0	-57.0							15.4682		Durech, 18
42264 2001 QZ_{30}	R	9.77	1.20											
	R			-1.0	-44.0							9.76370		Durech, 18
42265 2001 QL_{69}	P	8.6	0.85											
	P			-1.0	+61.0							6.45405		Durech, 18
42284 2001 TV_8	2	5.1053	0.70											
	2			136.0	-44.0	322.0	-65.0					5.10626	Y	Durech, 18
42490 1991 SU	2	7.953	0.78											
	2			89.0	+33.0	285.0	+44.0					7.95022	Y	Durech, 18
42496 1991 XB_1	R	4.612	0.19											
	R			-1.0	-16.0							9.91536		Durech, 18
42695 1998 KM_{54}	P	16.058	0.57											
	P			-1.0	+53.0							16.1063		Durech, 18
42714 1998 QW_{38}	P	9.59611												
	P			-1.0	+54.0							9.59611		Durech, 18
42749 1998 SL_{25}	2	6.97656												
	2			138.0	-52.0	336.0	-82.0					6.97656	Y	Durech, 18
42923 1999 SR_{18}		8.392	1.20											
				46.0	+69.0							8.3889		Hanus, 16
43153 1999 XC_{118}	R	3.463976												
	R			-1.0	-57.0							3.463976		Durech, 18
43163 1999 XB_{127}		5.20660												
				154.0	-59.0							5.20660	Y	Durech, 16
43218 2000 AE_{143}	R	3.464356												
	R			-1.0	-51.0							3.464356		Durech, 18
43484 2001 BF_{43}	R	84.287												
	R			-1.0	-44.0							84.287		Durech, 18
43775 Tiepolo	R	8.42050												
	R			-1.0	-42.0							8.42050		Durech, 18
43895 1995 UC_4	2	4.847	0.46											
	2			142.0	+45.0	320.0	+37.0					4.846351	Y	Durech, 18
43987 1997 JR_9	2	12.01876												
	2			115.0	-23.0	285.0	-12.0					12.01876	Y	Durech, 18
44249 1998 QH_{42}	2	12.70795												
	2			12.0	+42.0	213.0	+17.0					12.70795	Y	Durech, 18
44400 1998 ST_{97}	R	10.522	0.89											
	R			-1.0	-54.0							10.55977		Durech, 18
44417*1998 SS_{146}		7.63346	0.80											
				353.0	-48.0							7.63346		Hanus, 18
	1+			353.0	-48.0							7.63346	Y	Hanus, 18
44600 1999 RU_{10}		6.211	1.09											
				267.0	-24.0							6.21130	Y	Durech, 16
44612*1999 RP_{27}		4.9070	0.49											
				60.0	-50.0	240.0	-50.0					4.907068	Y	Polishook, 14
				8.0	-73.0	193.0	-69.0					4.907058		Pravec, 19
44620*1999 RS_{43}		3.1393	0.11											
				155.0	+86.0							3.1393		Pravec, 19

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
45130 1999 XQ_{91}	2	5.324	0.76											
	2			69.0	+56.0	253.0	+66.0					5.323909	Y	Durech, 18
45328 2000 AM_{74}	2	40.6826												
	2			120.0	-58.0	280.0	-53.0					40.6826	Y	Durech, 18
45410 2000 AA_{144}	R	7.48192												
	R			-1.0	-47.0							7.48192		Durech, 18
45430 2000 AW_{169}	2	60.458												
	2			121.0	+50.0	328.0	+34.0					60.458	Y	Durech, 18
45466 2000 AZ_{201}	R	7.58673												
	R			-1.0	-65.0							7.58673		Durech, 18
45510 Kashuba	R	27.461	0.62											
	R			-1.0	-58.0							27.4299		Durech, 18
45543*2000 CQ_{36}	2	7.549	0.68											
	2			168.0	-36.0	322.0	-36.0					7.55509	Y	Durech, 18
45553*2000 CO_{48}	R	3.6	0.63											
	R			-1.0	-59.0							3.515815		Durech, 18
45632 2000 DS_{106}	R	7.01335												
	R			-1.0	-49.0							7.01335		Durech, 18
45783 2000 OV_{16}	2	15.5635												
	2			102.0	-49.0	284.0	-48.0					15.5635	Y	Durech, 18
45864 2000 UO_{97}		5.135	1.7											
				44.0	-66.0	179.0	-84.0					5.13544	Y	Durech, 16
				218.0	-82.0							5.135	Y	McNeill, 18
45898 2000 XQ_{49}	2	5.417	1.14											
	2			319.0	+46.0							5.41642	Y	Durech, 18
46286 2001 KR_{37}	R	7.93385												
	R			-1.0	-40.0							7.93385		Durech, 18
46376 2001 XD_3		5.73569												
				121.0	+55.0							5.73569	Y	Durech, 16
46450 3039 $P-L$	2	9.27819												
	2			154.0	+36.0	330.0	+55.0					9.27819	Y	Durech, 18
46537 1981 EV_{45}	2	5.85	0.89											
	2			28.0	+49.0	207.0	+43.0					6.84803	Y	Durech, 18
46539 Viktortikhonov	2	16.743	0.45											
	2			320.0	+49.0							25.7385	Y	Durech, 18
46556 1991 FU_3	2	62.178												
	2			174.0	-64.0	350.0	-60.0					62.178	Y	Durech, 18
46629 1994 PS_{38}	2	8.39	0.90											
	2			98.0	-64.0	284.0	-62.0					8.38010	Y	Durech, 18
46670 1996 NU	2	5.15273												
	2			66.0	-66.0	256.0	-20.0					5.15273	Y	Durech, 18
46936 1998 SN_{67}	R	6.72333												
	R			-1.0	-53.0							6.72333		Durech, 18
47035 1998 WS		3.99	0.15											
				72.0	+71.0							3.99590	Y	Warner, 12
47048 1998 WW_{18}	2	17.29	0.14											
	2			123.0	+16.0	296.0	+21.0					12.82438	Y	Durech, 18
47061 1998 XZ_{43}	R	7.46888												
	R			-1.0	-57.0							7.46888		Durech, 18
47085 1999 AW_2	2	16.4840												
	2			21.0	-41.0	199.0	-38.0					16.4840	Y	Durech, 18
47116 1999 CL_{64}	P	19.712	0.55											
	P			-1.0	+50.0							19.7240		Durech, 18
47127 1999 CJ_{103}	2	4.370	0.71											
	2			24.0	-34.0	226.0	-70.0					4.370848	Y	Durech, 18
47144 Faulkes	2	7.67345												
	2			157.0	-37.0	336.0	-54.0					7.67345	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
47153 1999 RD_{132}	R	7.61087		−1.0	−54.0							7.61087		Durech, 18
47242 1999 VY_{50}	R	4.79133		−1.0	−52.0							4.79133		Durech, 18
47256 1999 VA_{72}	R	13.34779		−1.0	−59.0							13.34779		Durech, 18
47343 1999 XL_{45}	R	9.19636		−1.0	−55.0							9.19636		Durech, 18
47508 2000 AQ_{58}	R	5.05521		12.0	−49.0	196.0	−26.0					5.05521	Y	Durech, 16
47574 2000 AF_{171}		4.324751		104.0	−36.0	279.0	−49.0					4.324751	Y	Durech, 16
47614 2000 BO_{14}	2	5.50432	0.48	140.0	+39.0	320.0	+22.0					5.50432	Y	Durech, 18
47617 2000 BC_{27}	2	5.59006		20.0	−55.0	158.0	−64.0					5.59006	Y	Durech, 18
47678 2000 CT_{75}	2	9.453	0.55	159.0	+54.0							9.4505	Y	Durech, 18
47798 2000 EP_{45}	P	6.840	0.60	−1.0	+59.0							6.84466		Durech, 18
47832 2000 EC_{113}	R	4.971162		−1.0	−62.0							4.971162		Durech, 18
47841 2000 EO_{121}	R	2.887	0.46	−1.0	−51.0							2.886674		Durech, 18
47858 2000 EB_{158}	R	6.715	1.08	−1.0	−57.0							6.71729		Durech, 18
47911 2000 GT_{76}	R	5.686	0.71	−1.0	−59.0							5.68412		Durech, 18
48196 2001 JU_1	P	9.69035		−1.0	+53.0							9.69035		Durech, 18
48268 2002 AK_1		4.250546		72.0	−69.0	234.0	−35.0					4.250546	Y	Durech, 16
48543 1993 TJ_{14}	R	6.56127	0.70	−1.0	−51.0							6.56127		Durech, 18
48823 1997 WN_{36}	P	8.86506		−1.0	+56.0							8.86506		Durech, 18
48842 1998 BA_{44}		6.184	0.64	86.0	+83.0	254.0	+43.0					6.17996	Y	Durech, 16
48981 1998 QD_{45}	2	6.979	0.55	150.0	−42.0	339.0	−34.0					6.97621	Y	Durech, 18
48997 1998 QT_{51}	R	6.55436		−1.0	−60.0							6.55436		Durech, 18
49079 1998 RJ_{62}	2	14.73531		73.0	+5.0	254.0	−8.0					14.73531	Y	Durech, 18
49088 1998 RS_{68}	2	7.05232		138.0	−44.0	333.0	−65.0					7.05232	Y	Durech, 18
49257*1998 TJ_{31}		3.3896	0.81	112.0	+6.0							3.3896	Y	McNeill, 18
49513 1999 CK_{28}	P	29.2137		−1.0	+41.0							29.2137		Durech, 18
49577 1999 CB_{124}	P	17.5523		−1.0	+39.0							17.5523		Durech, 18
49591 1999 DO_2	P	5.09173		−1.0	+53.0							5.09173		Durech, 18
49607 1999 FC_{28}	P	42.133	0.61	−1.0	+66.0							42.1690		Durech, 18
49616 1999 FY_{42}	2	7.397	0.96	88.0	−45.0							7.39678	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
49628 1999 GV_{16}	R	3.567980		-1.0	-59.0							3.567980		Durech, 18
49629 1999 GF_{20}	P	14.54127		-1.0	+48.0							14.54127		Durech, 18
50038 2000 AT_{54}	2	7.26	0.82	29.0	+36.0	208.0	+54.0					7.23044	Y	Durech, 18
50093 2000 AT_{96}	2	5.76910		117.0	-51.0	282.0	-50.0					5.76910	Y	Durech, 18
50285 2000 CB_{25}	R	8.39345		-1.0	-55.0							8.39345		Durech, 18
50381 2000 CG_{89}	R	9.657	0.61	-1.0	-54.0							9.65990		Durech, 18
50694 2000 EM_{124}	P	3.962	0.69	-1.0	+56.0							3.988200		Durech, 18
50769 2000 FH_3	R	8.44545		-1.0	-56.0							8.44545		Durech, 18
50774 2000 FK_{12}	R	5.36553	0.50	-1.0	-54.0							5.36532		Durech, 18
50776 2000 FS_{12}	2	11.156	0.36	64.0	+34.0	299.0	+32.0					16.7993	Y	Durech, 18
50816 2000 FU_{31}	2	34.1182	0.68	335.0	-51.0							67.937	Y	Durech, 18
51042 2000 GJ_{134}	R	5.02896		-1.0	-47.0							5.02896		Durech, 18
51227 2000 JK_{25}	2	9.84392		89.0	-29.0	263.0	-62.0					9.84392	Y	Durech, 18
51369 2000 WD_{158}	P	11.20539		-1.0	+20.0							11.20539		Durech, 18
51472 2001 FU_{53}	P	4.503525		-1.0	+52.0							4.503525		Durech, 18
51656 2001 JD	R	11.908	0.45	-1.0	-46.0							11.90921		Durech, 18
51822 2001 OB_{25}	2	4.67130		80.0	-77.0							4.67130	Y	Durech, 18
51832 2001 OS_{46}	2	19.757	0.94	80.0	+23.0	277.0	+43.0					20.8929	Y	Durech, 18
51857 2001 OA_{105}	2	4.313	0.73	78.0	+59.0	257.0	+29.0					4.31349	Y	Durech, 18
51894 2001 QU_{26}	R	21.9278		-1.0	-52.0							21.9278		Durech, 18
51909 2001 QD_{60}	2	7.28470		79.0	-26.0	262.0	-51.0					7.28470	Y	Durech, 18
51915 Andry	2	14.89562		124.0	-20.0	305.0	-1.0					14.89562	Y	Durech, 18
51951 2001 QD_{222}	2	26.3277		109.0	-2.0	290.0	+25.0					26.3277	Y	Durech, 18
52076 2002 RE_{29}	R	6.26154		-1.0	-58.0							6.26154		Durech, 18
52344 Yehudimenuhin	2	4.374596		177.0	-23.0	358.0	-71.0					4.374596	Y	Durech, 18
52421 Daihoji	2	22.5465		44.0	+34.0	277.0	+58.0					22.5465	Y	Durech, 18
52439 1994 QL	2	44.8454		182.0	-25.0							44.8454	Y	Durech, 18
52624 1997 VW_8	P	6.19341		-1.0	+48.0							6.19341		Durech, 18
52695 1998 FG_{32}	2	15.692	0.76	318.0	-29.0							15.74289	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
52723 1998 GP_2		11.90781												
52741 1998 HW_{116}	R	7.24709		86.0	-39.0	224.0	-56.0					11.90781	Y	Durech, 16
52760 1998 ML_{14}	R			-1.0	-62.0							7.24709		Durech, 18
52820 1998 RS_2	U	14.28	0.15	-1.0								14.28		Sharkey, 16
52844 1998 RB_{66}	U	2.13412		228.0	-57.0	58.0	-48.0					2.13412		Hanus, 13
52870 1998 SC_{26}	P	4.832832		-1.0	+59.0							4.832832		Durech, 18
52909 1998 SZ_{86}	P	4.126138		156.0	-33.0	332.0	-40.0					4.126138	Y	Durech, 18
53185 1999 CZ_{44}	2	6.17653		340.0	+52.0							6.17653	Y	Durech, 18
53186 1999 CB_{45}	2	8.33249	0.58	-1.0	+48.0							8.32895		Durech, 18
53362 1999 JY_{76}	P	13.191	0.63	-1.0	-58.0							13.20487		Durech, 18
53476 2000 AQ_{49}	R	5.30555		164.0	-45.0	353.0	-74.0					5.30555	Y	Durech, 18
53799 2000 EP_{118}	R	6.05626	0.61	-1.0	-49.0							6.05506		Durech, 18
53802 2000 EQ_{120}	R	7.29468	0.52	-1.0	-54.0							7.31407		Durech, 18
53812 2000 EL_{136}	P	75.566		-1.0	+52.0							75.566		Durech, 18
53843 Antjekrog	P	7.42340		71.0	-41.0	205.0	-62.0					7.42340	Y	Durech, 18
53975 2000 GA_{68}	2	4.213	0.29	227.0	+42.0							4.213444	Y	Durech, 18
54030 2000 GF_{105}	2	7.25263		-1.0	-50.0							7.25263		Durech, 18
54058 2000 GG_{134}	R	5.539371		136.0	-59.0	309.0	-64.0					5.539371	Y	Durech, 18
54114 2000 HZ_{12}	2	8.19137		-1.0	+41.0							8.19137		Durech, 18
54155 2000 HR_{46}	2	5.28459		6.0	-38.0	182.0	-45.0					5.28459	Y	Durech, 18
54222 2000 JF	P	14.56830		-1.0	+49.0							14.56830		Durech, 18
54298 2000 JE_{62}	P	5.487	0.36	-1.0	-44.0							5.49198		Durech, 18
54391 2000 KO_{67}	R	58.539		343.0	+77.0							58.539	Y	Durech, 18
54432 2000 LG_{31}	2	8.22493		77.0	-13.0	258.0	+12.0					8.22493	Y	Durech, 18
54445 2000 MW_5	2	7.11	1.49	-1.0	-60.0							7.09475		Durech, 18
54453*2000 NL_{15}	R	5.288	0.64	-1.0	+57.0							5.29060		Durech, 18
54503 2000 OV_{53}	P	5.855	0.75	9.0	-53.0	165.0	-50.0					5.21692	Y	Durech, 18
54509 YORP	2	8.45185		-1.0	-52.0							8.45185		Durech, 18
54598 Bienor	R	0.2029	0.89	180.0	-8.5							0.20290068	Y	Taylor, 07
		9.14	0.75	35.0	+50.0									Fernandez-Valenzuela, 17

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Asteroid	<i>Q</i>	Period	Amp	<i>L</i> ₁	<i>B</i> ₁	<i>L</i> ₂	<i>B</i> ₂	<i>L</i> ₃	<i>B</i> ₃	<i>L</i> ₄	<i>B</i> ₄	Sid. period	Mod	Reference
54606 2000 <i>RA</i> ₂₈	P	5.07471	0.46	−1.0	+56.0							5.07570		Durech, 18
54674 2000 <i>XN</i> ₄	P	20.2529		−1.0	+39.0							20.2529		Durech, 18
54808 2001 <i>ME</i> ₂₄	P	10.62366		332.0	−21.0							10.62366	Y	Durech, 18
54809 2001 <i>MN</i> ₂₄	2	10.10544		−1.0	+50.0							10.10544		Durech, 18
54827 Kurpfalz	P	5.8764	0.54	72.0	−49.0	242.0	−46.0					5.877186	Y	Vokrouhlicky, 17
				72.0	−49.0	242.0	−46.0					5.877186		Pravec, 19
54850 2001 <i>OZ</i> ₁₁		4.222157		20.0	−68.0	189.0	−48.0					4.222157	Y	Durech, 16
55200 2001 <i>RO</i> ₁₉		18.3910		14.0	−70.0	186.0	−58.0					18.3910	Y	Durech, 16
55667 6691 <i>P−L</i>	2	58.545		54.0	+62.0	246.0	+48.0					58.545	Y	Durech, 18
55734 1986 <i>WD</i> ₆	2	8.24865		65.0	−13.0	246.0	−50.0					8.24865	Y	Durech, 18
55760 1992 <i>BL</i> ₁	2	8.0813	0.32	318.0	−36.0							8.08610	Y	Durech, 18
55946 1998 <i>HP</i> ₂₄	2	37.0183		5.0	+34.0	257.0	+66.0					37.0183	Y	Durech, 18
55987 1998 <i>SO</i> ₂₇	2	43.6580		−1.0	−58.0							43.6580		Durech, 18
56048*1998 <i>XV</i> ₃₉	R	7.03141	0.27	88.0	+31.0	267.0	+10.0					7.03141	Y	Pravec, 19
56131 1999 <i>CY</i> ₄₈	2	4.388211		52.0	+51.0	258.0	+62.0					4.388211	Y	Durech, 18
56232*1999 <i>JM</i> ₃₁	2	5.729239	0.50	190.0	−80.0							5.729239	Y	Pravec, 19
56460 2000 <i>GE</i> ₉₆	R	5.22140		−1.0	−60.0							5.22140		Durech, 18
56589 2000 <i>JH</i> ₃₃	P	4.450598		−1.0	+53.0							4.450598		Durech, 18
56652 2000 <i>KJ</i> ₄₈	P	45.9758		141.0	−43.0	316.0	−43.0					45.9758	Y	Durech, 18
56950 2000 <i>SA</i> ₂	2	4.89149		−1.0	−59.0							4.89149		Durech, 18
57046 2001 <i>KW</i> ₅₅	R	3.418974		122.0	+7.0	303.0	+8.0					3.418974	Y	Durech, 18
57304 2001 <i>QV</i> ₁₉₈	2	7.04639	0.50	−1.0	+60.0							7.04651		Durech, 18
57359 Robcrawford	P	5.73448		−1.0	−57.0							5.73448		Durech, 18
57394 2001 <i>RD</i> ₈₄	R	6.74	0.63	65.0	+68.0	241.0	+59.0					6.7199		Hanus, 13
57429 2001 <i>SX</i> ₃₃	2	13.87758		90.0	−60.0	267.0	−47.0					13.87758	Y	Durech, 18
57458 2001 <i>SX</i> ₇₃	2	5.06370		18.0	−61.0	181.0	−42.0					5.06370	Y	Durech, 18
57540 2001 <i>TE</i> ₁₈	2	4.493437		163.0	−47.0	345.0	−52.0					4.493437	Y	Durech, 18
57843 2001 <i>XO</i> ₅₉	2	8.18273		44.0	−71.0	214.0	−47.0					8.18273	Y	Durech, 18
57860 2001 <i>XS</i> ₂₁₄	2	12.923	0.59	−1.0	−48.0							12.91845		Durech, 18
57994 2002 <i>RR</i> ₈₆	R	6.93848	0.18	−1.0	+57.0							6.88070		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
58319 1994 PZ_{37}	P	73.045												
	P			-1.0	+60.0							73.045		Durech, 18
58360 1995 LM	2	31.0533												
	2			39.0	-37.0	228.0	-65.0					31.0533	Y	Durech, 18
58540 1997 ET_{17}	R	4.509	0.41											
	R			-1.0	-51.0							4.570972		Durech, 18
58631 1997 WE_2	2	9.98306												
	2			99.0	-31.0							9.98306	Y	Durech, 18
58854 1998 HV_{87}	R	4.954	0.63											
	R			-1.0	-52.0							4.95370		Durech, 18
58931 Palmys	2	11.33218												
	2			56.0	-83.0	218.0	-52.0					11.33218	Y	Durech, 18
59072 1998 VV_9	2	7.29820												
	2			41.0	+40.0	223.0	+30.0					7.29820	Y	Durech, 18
59108 1998 WG_{27}	R	8.37022												
	R			-1.0	-60.0							8.37022		Durech, 18
59150 1998 XV_{90}	2	10.54229												
	2			182.0	-54.0	355.0	-48.0					10.54229	Y	Durech, 18
59230 1999 CY	R	45.4919												
	R			-1.0	-53.0							45.4919		Durech, 18
59313 1999 CF_{88}	P	10.61225												
	P			-1.0	+54.0							10.61225		Durech, 18
59473 1999 HT_1	R	7.43277												
	R			-1.0	-53.0							7.43277		Durech, 18
59570 1999 JX_{48}	R	7.83102												
	R			-1.0	-62.0							7.83102		Durech, 18
59880 1999 RS_{119}	2	3.604130												
	2			34.0	+54.0	184.0	+69.0					3.604130	Y	Durech, 18
59920 1999 RO_{162}	P	4.368980												
	P			-1.0	+58.0							4.368980		Durech, 18
60151 1999 UZ_6	2	13.8836	0.75											
	2			18.0	+56.0	179.0	+86.0					13.8836	Y	Vokrouhlicky, 17
60194 1999 VU_{43}	2	8.56094												
	2			86.0	-54.0	265.0	-57.0					8.56094	Y	Durech, 18
60362 2000 AU_{103}	P	3.991475												
	P			-1.0	+57.0							3.991475		Durech, 18
60531 2000 EF_{50}	P	8.61225												
	P			-1.0	+38.0							8.61225		Durech, 18
60628 2000 FX_{24}	2	53.327												
	2			73.0	-67.0	197.0	-61.0					53.327	Y	Durech, 18
60642 2000 FP_{37}	2	8.75864												
	2			3.0	-56.0	181.0	-53.0					8.75864	Y	Durech, 18
60744*2000 GB_{93}		9.71054	0.67											
				202.0	-69.0							9.71054	Y	Pravec, 19
61364 2000 PH_{20}	2	59.927												
	2			179.0	-50.0	356.0	-62.0					59.927	Y	Durech, 18
61469 2000 QJ_{35}	R	40.4448												
	R			-1.0	-50.0							40.4448		Durech, 18
61602 2000 QB_{92}	P	23.8129												
	P			-1.0	+50.0							23.8129		Durech, 18
62008 2000 RR_{39}	R	5.58611												
	R			-1.0	-63.0							5.58611		Durech, 18
62112 2000 RM_{99}	R	7.036	0.73											
	R			-1.0	-43.0							7.03625		Durech, 18
62383 2000 SS_{156}	P	44.4885												
	P			-1.0	+55.0							44.4885		Durech, 18
62396 2000 SE_{170}	R	4.240958												
	R			-1.0	-50.0							4.240958		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
62468 2000 SA_{214}	2 2	11.971	0.97	197.0	-26.0							11.89945	Y	Durech, 18
62550 2000 SM_{263}	R R	24.9799		-1.0	-57.0							24.9799		Durech, 18
62641 2000 SZ_{358}	P P	6.55243		-1.0	+54.0							6.55243		Durech, 18
63157 2000 YL_2	R R	63.568		-1.0	-52.0							63.568		Durech, 18
63166*2000 YW_{17}		9.94934	0.66	68.0 68.0	+63.0 +63.0	304.0 304.0	+50.0 +50.0					9.94934 9.94934	Y	Hanus, 16 Hanus, 18
63642 2001 QK_{97}	2 2	56.918		192.0	-87.0							56.918	Y	Durech, 18
63977 2001 SQ_{79}	P P	9.96639		-1.0	+55.0							9.96639		Durech, 18
64005 2001 SF_{121}	2 2	9.28811		12.0	-39.0	194.0	-54.0					9.28811	Y	Durech, 18
64292 2001 UF_{13}	2 2	15.438	0.64	141.0	+34.0	322.0	+43.0					15.4326	Y	Durech, 18
64480 2001 VG_{45}		6.49717		128.0	-60.0	265.0	-72.0					6.49717	Y	Durech, 16
64506 2001 VJ_{76}	2 2	4.337107		63.0	-72.0	240.0	-43.0					4.337107	Y	Durech, 18
64588 2001 XX_3	R R	5.8288	0.83	-1.0	-61.0							5.82971		Durech, 18
64599 2001 XD_{19}	R R	9.88382	0.82	-1.0	-56.0							9.89378		Durech, 18
64938 2001 YH_{116}	2 2	18.1030	0.66	138.0	-74.0	317.0	-72.0					18.1030	Y	Durech, 18
65307 2002 JD_{64}	R R	15.74956		-1.0	-56.0							15.74956		Durech, 18
65441 2002 TF_{291}	R R	3.55382	0.55	-1.0	-54.0							7.10432		Durech, 18
65453 2002 VJ_{68}	R R	6.70497		-1.0	-56.0							6.70497		Durech, 18
65461 2002 WU_{12}	2 2	10.21178		47.0	+26.0							10.21178	Y	Durech, 18
65638 1981 DN_1	R R	8.68373		-1.0	-45.0							8.68373		Durech, 18
65713 1992 UQ_1	R R	15.11168		-1.0	-49.0							15.11168		Durech, 18
65803 Didymos		2.2593	0.08	157.0	+19.0	329.0	-70.0							Scheirich, 09
66063 1998 RO_1		2.4924	0.16	277.0	+37.0	274.0	+48.0							Scheirich, 09
66076 1998 RD_{53}		8.95075	0.63	100.0	-54.0	233.0	-66.0					8.93855	Y	Durech, 16
66288 1999 JE_{20}	2 2	11.82657		88.0	-34.0	274.0	-37.0					11.82657	Y	Durech, 18
66391 Moshup		2.7650	0.24	326.0 341.0	-65.0 -56.0							2.7645		Ostro, 06 Scheirich, 09
66451 1999 OS_2	R R	3.345612		-1.0	-49.0							3.345612		Durech, 18
67005 1999 XZ_{120}	2 2	8.32669		73.0	-59.0	262.0	-56.0					8.32669	Y	Durech, 18
67117 2000 AA_{117}	R R	70.564		-1.0	-60.0							70.564		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
67186 2000 CF_{25}	P	5.55259		-1.0	+50.0							5.55259		Durech, 18
67210 2000 DF_{29}	2	6.72473		155.0	+53.0							6.72473	Y	Durech, 18
67298 2000 GD_{91}	R	7.685	0.61	-1.0	-7.0							7.68481		Durech, 18
67324 2000 HC_{69}	R	7.78982		-1.0	-38.0							7.78982		Durech, 18
67333 2000 HG_{103}	2	25.7624		139.0	-23.0	311.0	-31.0					25.7624	Y	Durech, 18
67404 2000 PG_{26}	2	5.398	0.70	149.0	+69.0							5.39877		Hanus, 16
68147 2001 AW_{44}	2	5.44099		320.0	-63.0							5.44099	Y	Durech, 18
68262 2001 EW_9	2	8.27175	0.70	11.0	-56.0							8.27099	Y	Durech, 18
68266 2001 ES_{14}	2	39.8480		121.0	+41.0	336.0	+40.0					39.8480	Y	Durech, 18
68436 2001 RC_{85}	P	8.42749		-1.0	+42.0							8.42749		Durech, 18
68439 2001 RB_{104}	2	7.59213		35.0	-35.0	211.0	-24.0					7.59213	Y	Durech, 18
68513 2001 UL_{167}	2	5.76099		38.0	-42.0	239.0	-76.0					5.76099	Y	Durech, 18
68617 2002 AL_{159}	2	12.37150		108.0	-47.0	288.0	-45.0					12.37150	Y	Durech, 18
68719 Jangyeongsil	R	61.336		-1.0	-58.0							61.336		Durech, 18
69075 2003 AZ_{52}	P	10.88813		-1.0	+60.0							10.88813		Durech, 18
69117 2003 EX_2	P	4.74608		13.0	+70.0							4.74608	Y	Durech, 16
69142 2003 FL_{115}		7.389	0.56	90.0	+55.0							7.391455	Y	Pravec, 19
69168 3515 $P-L$	R	4.527668		-1.0	-54.0							4.527668		Durech, 18
69267 1988 RO_6	P	6.44372		-1.0	+51.0							6.44372		Durech, 18
69740 1998 KK_{26}	2	28.4570		86.0	-46.0	298.0	-36.0					28.4570	Y	Durech, 18
69971 Tanzi	P	32.540	0.44	-1.0	+23.0							32.5823		Durech, 18
70038 1999 CF_{80}	2	5.46337		130.0	+36.0							5.46337	Y	Durech, 18
70042 1999 CZ_{122}	R	9.34364		-1.0	-57.0							9.34364		Durech, 18
70872 1999 VP_{157}	2	15.4956		77.0	-15.0	262.0	+1.0					15.4956	Y	Durech, 18
70957 1999 XQ_5	P	7.51103		-1.0	+9.0							7.51103		Durech, 18
70973 1999 XY_{20}	R	13.28886		-1.0	-61.0							13.28886		Durech, 18
71011 1999 XE_{45}		4.69449		91.0	-24.0	264.0	-31.0					4.69449	Y	Durech, 16
71027 1999 XS_{62}	R	14.43339		-1.0	-62.0							14.43339		Durech, 18
71136 1999 XV_{178}	P	68.985		-1.0	+54.0							68.985		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
71256 2000 AV ₁₆	P	34.1474	0.47	-1.0	+55.0							34.1474		Durech, 18
71295 2000 AG ₅₉	R	7.46045		-1.0	-51.0							7.46045		Durech, 18
71368 2000 AX ₁₃₇	P	4.662272		-1.0	+55.0							4.662272		Durech, 18
71606 2000 DY ₁₀₁	2	10.75111		150.0	+53.0	348.0	+44.0					10.75111	Y	Durech, 18
71617 2000 EM ₂₈	2	3.64792			-62.0	141.0	-32.0					3.648047	Y	Durech, 18
72388 2001 CC ₁₆	R	4.565042		-1.0	-61.0							4.565042		Durech, 18
72409 2001 CV ₂₇	R	4.457836		-1.0	-55.0							4.457836		Durech, 18
72622 2001 FE ₂₆	R	10.38380		-1.0	-50.0							10.38380		Durech, 18
72682 2001 FV ₆₃	P	3.765570		-1.0	+58.0							3.765570		Durech, 18
72742 2001 FY ₁₀₈	2	14.04860		154.0	-52.0							14.04860	Y	Durech, 18
73442 Feruglio	R	8.56036	0.78	-1.0	-54.0							8.56036		Durech, 18
73511 Lovas	P	4.73814		-1.0	+51.0							4.73814		Durech, 18
73614 2229 T-3	2	13.09419		119.0	+52.0	287.0	+24.0					13.09419	Y	Durech, 18
73692 Gürtler	P	6.42306		-1.0	+46.0							6.42306		Durech, 18
73695 1991 RL ₁₇	P	6.07245		-1.0	+58.0							6.07245		Durech, 18
73757 1994 CH ₁₀	2	3.894523		71.0	-53.0	223.0	-57.0					3.894523	Y	Durech, 18
74155 1998 QK ₉₃		15.9680		264.0	+50.0							15.9680	Y	Durech, 16
74228 1998 SJ ₁₅	2	10.22798		32.0	-27.0	202.0	-35.0					10.22798	Y	Durech, 18
74281 1998 SE ₁₂₆	2	8.06472		41.0	-56.0	192.0	-34.0					8.06472	Y	Durech, 18
74569 1999 NR ₇	P	4.872449		-1.0	+44.0							4.872449		Durech, 18
74838 1999 TK ₃₄	2	19.4841	0.69	78.0	+47.0	267.0	+52.0					19.4841	Y	Durech, 18
75088 1999 VV ₂₉	2	5.74917		97.0	-52.0	277.0	-54.0					5.74917	Y	Durech, 18
75167 1999 VF ₁₂₈	2	10.27743		190.0	-56.0	350.0	-55.0					10.27743	Y	Durech, 16
75281 1999 XF ₂₂	2	77.024		139.0	+72.0							77.024	Y	Durech, 18
75364 1999 XZ ₇₄	P	33.567		-1.0	+54.0							33.5698		Durech, 18
75495 1999 XM ₁₈₁		14.682		64.0	-32.0	252.0	-64.0					14.69041	Y	Durech, 16
75653 2000 AG ₆₄	2	27.2394		256.0	-42.0							27.2394	Y	Durech, 18
76163 2000 EB ₂₇	2	23.8598		315.0	-36.0							23.8598	Y	Durech, 18
76176 2000 EK ₃₅	2	17.0111		70.0	-29.0	244.0	-31.0					17.0111	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
76214 2000 EV_{64}		9.27775		168.0	+28.0							9.27775	Y	Durech, 16
76293 2000 EV_{127}	R	8.87279	0.77	-1.0	-54.0							8.87449		Durech, 18
76516 2000 GX_{39}	2	13.80653		27.0	-64.0	218.0	-64.0					13.80653	Y	Durech, 18
76616 2000 GV_{172}	2	16.923	0.76	261.0	-40.0							16.8740	Y	Durech, 18
76674 2000 HC_{58}	R	6.774	0.69	-1.0	-50.0							6.77410		Durech, 18
77086 2001 DB_{36}	P	7.00072		-1.0	+55.0							7.00072		Durech, 18
77594 2001 KQ_{21}	2	16.40749		175.0	-50.0	356.0	-54.0					16.40749	Y	Durech, 18
77677 2001 MA_{25}	2	5.304712		139.0	-69.0	326.0	-55.0					5.304712	Y	Durech, 16
77694 2001 NT_{18}	R	6.862	0.99	-1.0	-64.0							6.86406		Durech, 18
78283 2002 PR_{42}	R	20.0564		-1.0	-58.0							20.0564		Durech, 18
78418 2002 QH_{38}	R	8.56669		-1.0	-51.0							8.56669		Durech, 18
78420 2002 QU_{40}		4.90	1.10	123.0	-46.0	327.0	-45.0					4.91365	Y	Durech, 16
78505 2002 RS_{84}	2	28.0544		65.0	+45.0	229.0	+59.0					28.0544	Y	Durech, 18
78549 2002 RS_{126}	2	25.0870		116.0	+58.0	298.0	+37.0					25.0870	Y	Durech, 18
78576 2002 RB_{228}	2	17.4497		19.0	-64.0	187.0	-54.0					17.4497	Y	Durech, 18
78656 2002 TL_{73}	R	8.023	0.73	-1.0	-61.0							8.01826		Durech, 18
78673 2002 TP_{114}	P	4.911	0.59	-1.0	+44.0							4.911566		Durech, 18
79056 1132 $T-3$	2	11.005	0.45	66.0	+48.0	238.0	+50.0					11.02562	Y	Durech, 18
79186 1993 QN	2	50.110		75.0	-22.0	232.0	-31.0					50.110	Y	Durech, 18
79436 1997 TD_6	2	3.635352	0.79	70.0	-53.0	201.0	-68.0					3.635352	Y	Durech, 16
79535 1998 QW_{23}	2	92.785		127.0	+53.0	330.0	+52.0					92.785	Y	Durech, 18
79733 1998 SU_{134}	R	8.38756	0.69	-1.0	-52.0							8.38756		Durech, 18
79895 1999 BF_5	R	10.4935	0.53	-1.0	-52.0							10.50841		Durech, 18
80003 1999 FW_{50}	R	4.82302		-1.0	-45.0							4.82302		Durech, 18
80051 1999 JO_{56}	P	5.63224		-1.0	+56.0							5.63224		Durech, 18
80112 1999 RN_{61}		4.923622		70.0	-58.0	247.0	-39.0					4.923622	Y	Durech, 16
80276 1999 XL_{32}		5.56	0.77	60.0	+38.0	275.0	+63.0					5.57148	Y	Durech, 16
80956 2000 DV_{101}	R	11.11358		-1.0	-36.0							11.11358		Durech, 18
81628 2000 HF_{76}	P	5.077	0.78	-1.0	+56.0							5.07644		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
81722 2000 JY_{34}	2	20.8607	0.45	6.0	+44.0	209.0	+72.0					20.8607	Y	Durech, 18
81740 2000 JA_{46}	2	9.343		100.0	-72.0	310.0	-47.0					9.34151	Y	Durech, 16
81895 2000 LP_{31}	P	15.6030		-1.0	+42.0							15.6030		Durech, 18
81911 2000 NV_9	P	6.95480	0.53	136.0	+23.0	334.0	+49.0					6.95480	Y	Durech, 16
82007 2000 RU_{34}	2	7.17943		145.0	-41.0	337.0	-36.0					7.17943	Y	Durech, 18
82032 2000 SQ_{103}	2	6.08292		43.0	-44.0	203.0	-60.0					6.08292	Y	Durech, 18
82055 2000 TY_{40}	P	13.57226	0.25	-1.0	+39.0							13.57226		Durech, 18
82294 2001 KO_{38}	P	3.113827		190.0	+73.0							3.113827	Y	Durech, 18
82315 2001 KF_{59}	2	22.395		190.0	-38.0							22.4031	Y	Durech, 18
82642 2001 PX_5	2	11.61144	0.34	53.0	+37.0	241.0	+67.0					11.61144	Y	Durech, 16
82685 2001 PG_{33}	R	12.41845		-1.0	-50.0							12.41845		Durech, 18
83723 2001 TN_{98}	R	29.3891		-1.0	-47.0							29.3891		Durech, 18
83867 2001 UC_{77}	R	53.4915	0.54	155.0	+22.0	347.0	+35.0					52.353	Y	Durech, 18
83939 2001 VX_{105}	2	8.77974		-1.0	+59.0							8.77974		Durech, 18
83953 2001 WA_{97}	P	12.65515		177.0	-42.0	357.0	-51.0					12.65515	Y	Durech, 18
83973 2002 AS_{181}	2	3.84631	0.51	46.0	-14.0	228.0	-50.0					3.845491	Y	Durech, 18
83991 2002 MS_1	2	8.24500		111.0	-65.0							8.24500	Y	Durech, 18
84367 2002 TL_{114}	2	6.05565		69.0	-79.0							6.05565	Y	Durech, 18
84752 2002 XT_{11}	2	6.58529	0.53	68.0	-9.0	245.0	-28.0					6.58529	Y	Durech, 18
84902 Porrentruy	R	8.28926		-1.0	-48.0							8.28926		Durech, 18
84992 2003 YM_{100}	R	3.484818		72.0	-69.0	226.0	-50.0					3.484818	Y	Durech, 18
85190 Birgitroth	2	20.8846	0.53	-1.0	-54.0							20.8957		Durech, 18
85362 1995 WR_{32}	R	15.72008		1.0	-51.0	159.0	-19.0					15.72008	Y	Durech, 18
85489 1997 SV_2	2	5.79502		317.0	-56.0							5.79502	Y	Durech, 16
85532 1997 WD_{21}	2	4.768	0.51	117.0	-75.0							4.76820	Y	Durech, 16
85828 1998 XN_{53}	R	12.27879		-1.0	-57.0							12.27879		Durech, 18
86109 1999 RV_{118}	2	5.745		81.0	-54.0	293.0	-51.0					5.74448	Y	Durech, 18
86164 1999 RG_{207}	2	31.5186	1.51	57.0	-15.0	241.0	-26.0					31.5186	Y	Durech, 18
86257 1999 TK_{207}	2	32.408		28.0	-60.0							32.4029		Hanus, 16

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
86519 2000 DM_{68}	P	5.504	0.59	−1.0	+40.0							5.50496		Durech, 18
86696 2000 FO_{49}	R	4.87	1.41	−1.0	−51.0							4.86947		Durech, 18
87473 2000 QK_{137}	2	19.0587		121.0	+35.0	293.0	+50.0					19.0587	Y	Durech, 18
87806 2000 SR_{140}	2	6.49	0.99	−1.0	−53.0							6.54342		Durech, 18
87932 2000 SW_{343}	R	13.9726	0.26	172.0	+13.0	345.0	+59.0					13.9859	Y	Durech, 18
88161 2000 XK_{18}	2	6.806	0.80	195.0	+53.0	340.0	+70.0					6.80480	Y	Durech, 16
88217 2001 AY_{28}	2	4.099000		15.0	+47.0	240.0	+56.0					4.099000	Y	Durech, 18
88462 2001 QM_{99}	2	5.6	0.70	48.0	+49.0	229.0	+30.0					5.52726	Y	Durech, 18
88500 2001 QZ_{138}	2	5.11358		−1.0	−54.0							5.11358		Durech, 18
88628 2001 RF_{34}	R	5.90	0.80	104.0	−56.0							5.88242	Y	Durech, 18
89066 2001 TZ_{147}	2	6.19578		124.0	+66.0	339.0	+58.0					6.19578	Y	Durech, 18
89309 2001 VN_{36}	2	73.145	1.4	60.0	+63.0	270.0	+57.0					73.145		Vokrouhlicky, 17
89433 2001 WM_{41}	2	7.77410		72.0	+61.0	245.0	+79.0					7.77410	Y	Durech, 18
89764 2002 AW_{61}	2	5.93511	0.53	8.0	−45.0	152.0	−60.0					5.93513	Y	Durech, 16
89884 2002 CS_{226}	R	8.29081		−1.0	−59.0							8.29081		Durech, 18
89932 2002 EV_{85}	R	11.7563	0.63	46.0	+46.0	204.0	+62.0					11.77157	Y	Durech, 18
89948 2002 GJ_{57}	2	8.858	0.69	134.0	+33.0							8.86036	Y	Durech, 18
90075 2002 VU_{94}	2	7.879	0.65	73.0	−50.0							7.878512	Y	Warner, 18
90227 2003 BM_{19}	3	6.42921		−1.0	+59.0							6.42921		Durech, 18
90265 2003 CL_5	P	23.42	1.80	11.0	+71.0							23.4153	Y	Vokrouhlicky, 17
90431 2004 BY_{55}	2	12.296	0.93	−1.0	−53.0							12.30569		Durech, 18
91063 1998 FX_{62}	R	15.240	0.80	53.0	−44.0	191.0	−60.0					11.66510	Y	Durech, 16
91065 1998 FM_{66}	2	17.7284		10.0	−54.0	170.0	−48.0					17.7284	Y	Durech, 18
91139 1998 KL_{47}	2	5.834	0.65	−1.0	−48.0							5.84686		Durech, 18
91186 1998 RO_{66}	R	6.87970		−1.0	−60.0							6.87970		Durech, 18
91533*1999 RY_{199}	R	3.85	1.22	−1.0	+58.0							3.854345		Durech, 18
91943 1999 VA_{64}	P	4.79640	0.76	−1.0	+59.0							4.79640		Durech, 18
92124 1999 XE_{104}	P	10.84059		−1.0	−53.0							10.84059		Durech, 18
92265 2000 BO_{22}	R	20.5273		124.0	+41.0	276.0	+48.0					20.5273	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
92729 2000 QX_{99}	2	25.6209	0.76	38.0	−64.0	215.0	−52.0					25.6209	Y	Durech, 18
92993 2000 RA_{76}	2	77.5244		51.0	−29.0	222.0	−55.0					77.786	Y	Durech, 18
93004 2000 RB_{86}	R	5.43301		−1.0	−58.0							5.43301		Durech, 18
93028 2000 RF_{98}	R	5.15212		36.0	−35.0	255.0	−75.0					5.15212	Y	Durech, 18
93640 2000 UU_{86}	R	24.6819	0.66	−1.0	−57.0							24.6819		Durech, 18
93679 2000 VO_{11}	R	8.99911		−1.0	−53.0							8.99911		Durech, 18
93832 2000 WU_{77}	R	6.61439		−1.0	−53.0							6.61439		Durech, 18
94117 2000 YE_{102}	P	6.79498		−1.0	+61.0							6.81793		Durech, 18
94808 2001 XM_{167}		10.66092	0.59	9.0	−59.0	197.0	−63.0					10.66092	Y	Durech, 16
95146 2002 AV_{165}	R	32.4759		−1.0	−1.0							32.4759		Durech, 18
95498 2002 EG_{35}	R	25.0006		−1.0	−58.0							25.0006		Durech, 18
96155 1973 HA	2	15.59		5.0	−44.0	171.0	−27.0					17.6041	Y	Durech, 18
96276 1995 VG_{11}	2	13.46601	0.85	101.0	+42.0	285.0	+28.0					13.46601	Y	Durech, 18
96461 1998 HS_{36}	2	12.67641		166.0	−60.0	344.0	−72.0					12.67641	Y	Durech, 16
96967 1999 TG_{189}	2	10.67939		122.0	−28.0	313.0	−43.0					10.67939	Y	Durech, 18
97109 1999 VD_{79}	2	17.0950		54.0	−60.0							17.0950	Y	Durech, 18
97346 2000 AF_{10}		7.65364	0.85	11.0	+42.0	222.0	+50.0					7.65364	Y	Durech, 16
97564 2000 DM_{88}	P	9.33586		−1.0	+34.0							9.33586		Durech, 18
97600 2000 EY_{65}	R	9.55334		−1.0	−46.0							9.55334		Durech, 18
97730 2000 GA_{169}	R	4.66032		−1.0	−50.0							4.66032		Durech, 18
98463 2000 UL_{81}	2	10.15655	0.85	133.0	−17.0							10.15655	Y	Durech, 18
98800 2000 YN_{114}	2	14.23574		153.0	+39.0	332.0	+41.0					14.23574	Y	Durech, 18
98916 2001 BU_{68}	R	3.584884		−1.0	−52.0							3.584884		Durech, 18
99028 2001 DC_{98}	2	4.97459		126.0	−70.0	288.0	−62.0					4.97459	Y	Durech, 18
99053 2001 EU_{15}	R	20.4073	0.85	−1.0	−55.0							20.4073		Durech, 18
99620 2002 GP_{85}	2	5.90106		74.0	−68.0	238.0	−64.0					5.90106	Y	Durech, 18
99667 2002 JO_1	2	5.07877		86.0	−57.0	262.0	−42.0					5.07877	Y	Durech, 16
99760 2002 JN_{100}	R	7.475		−1.0	−60.0							7.47784		Durech, 18
99840 2002 NN_{28}	2	9.01580		46.0	+44.0	229.0	+44.0					9.01580	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
99942 Apophis		30.56	1.14	250.0	-75.0							30.56		Pravec, 14
100784 1998 FM_{61}	P	4.301	0.40	-1.0	+60.0							4.302184		Durech, 18
100815 1998 FQ_{125}	P	5.32866		-1.0	+61.0							5.32866		Durech, 18
101251 1998 SE_{92}	P	9.46252		-1.0	-49.0							9.46252		Durech, 18
101537 1998 YX_{14}	R	17.0944		33.0	-57.0	200.0	-27.0					17.0944	Y	Durech, 18
101595 1999 BJ_{26}	2	17.15708		-1.0	+30.0							17.15708		Durech, 18
101636 1999 CO_{42}	P	8.24356		-1.0	-45.0							8.24356		Durech, 18
101685 1999 CA_{114}	R	4.574506		-1.0	+57.0							4.574506		Durech, 18
101955 Bennu	P	4.2968	0.35	45.0	-88.0							4.29746	Y	Nolan, 13
102390 1999 TP_{155}	3	53.427		76.0	-13.0	255.0	+2.0					53.427	Y	Durech, 18
103242 2000 AL_3	2	5.57192		3.0	-72.0	172.0	-58.0					5.57192	Y	Durech, 18
103698 2000 CH_{77}	2	7.48719		170.0	-53.0	322.0	-66.0					7.48719	Y	Durech, 18
103705 2000 CW_{82}	2	5.29916	0.54	-1.0	-47.0							5.29618		Durech, 18
103946 2000 DG_{72}	R	8.48544		73.0	+62.0	258.0	+59.0					8.48544	Y	Durech, 18
104374 2000 FN_{30}	2	11.64349		20.0	+43.0	185.0	+61.0					11.64349	Y	Durech, 18
104792 2000 HJ_{37}	2	10.83600		199.0	-28.0	353.0	-65.0					10.83600	Y	Durech, 18
105823 2000 SF_{143}	2	6.48938		-1.0	+49.0							6.48938		Durech, 18
105978 2000 SJ_{266}	P	3.857700		-1.0	+55.0							3.857700		Durech, 18
106563 2000 WR_{85}	P	5.69347		290.0	-52.0							5.69347	Y	Durech, 18
106685 2000 WE_{156}	2	63.123		-1.0	-61.0							63.123		Durech, 18
106714 2000 WZ_{173}	R	10.06645		-1.0	+54.0							10.06645		Durech, 18
106908 2000 YX_{48}	P	6.68336		-1.0	-60.0							6.68336		Durech, 18
107797 2001 FF_{55}	R	18.9606		66.0	-46.0	255.0	-19.0					18.9606	Y	Durech, 18
107858 2001 FB_{79}	2	11.82106		-1.0	+57.0							11.82106		Durech, 18
107910 2001 FT_{99}	P	13.06788		-1.0	-44.0							13.06788		Durech, 18
108228 2001 HN_{37}	R	17.7379		-1.0	-58.0							17.7379		Durech, 18
108365 2001 KU_{15}	R	5.114	0.62	-1.0	-33.0							5.11350		Durech, 18
108475 2001 KH_{58}	R	5.54469		67.0	+18.0	252.0	+37.0					5.54469	Y	Durech, 18
109214 2001 QJ_{85}	2	6.81070	0.33	118.0	-49.0	259.0	-28.0					6.81070	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
109400 2001 QY_{179}	R R	5.05910		-1.0	-58.0							5.05910		Durech, 18
109909 2001 SR_{24}	2 2	4.276122		25.0	+58.0	227.0	+37.0					4.276122	Y	Durech, 18
111029 2001 VW_{19}	2 2	63.104		101.0	+2.0	270.0	+30.0					63.104	Y	Durech, 18
111300 2001 XZ_{56}	R R	4.76168		-1.0	-52.0							4.76168		Durech, 18
111697 2002 CD_{15}	2 2	6.72333		62.0	+52.0	255.0	+66.0					6.72333	Y	Durech, 18
112356 2002 NY_{14}	2 2	23.5376		121.0	-36.0	305.0	-34.0					23.5376	Y	Durech, 18
112441 2002 OL_3	R R	7.378	0.83	-1.0	-58.0							7.37181		Durech, 18
112915 2002 QC_{60}	2 2	3.246051		296.0	+52.0							3.246051	Y	Durech, 18
112953 2002 RF_{11}	2 2	4.218608		97.0	+57.0	300.0	+66.0					4.218608	Y	Durech, 18
114174 2002 VN_{75}		3.86711		339.0	-18.0							3.86711		Hanus, 16
114885 2003 QG_{16}	R R	3.951822		-1.0	-58.0							3.951822		Durech, 18
115577 2003 UO_{88}	R R	4.86444		-1.0	-60.0							4.86444		Durech, 18
115755 2003 UQ_{204}	2 2	7.59222		40.0	+21.0	274.0	+60.0					7.59222	Y	Durech, 18
116376 2003 YF_{113}	R R	21.1813		-1.0	-49.0							21.1813		Durech, 18
116380 2003 YU_{116}	P P	14.64507		-1.0	+54.0							14.64507		Durech, 18
116563 2004 BO_{83}	R R	7.83382	0.67	-1.0	-60.0							7.83884		Durech, 18
116956 2004 HG_3	2 2	6.64289		14.0	-58.0	156.0	-50.0					6.64289	Y	Durech, 18
116989 2004 HW_{42}	2 2	56.595	0.70	2.0	-1.0							3.405264	Y	Durech, 18
117108 2004 PU_1	2 2	7.56003		92.0	-66.0	258.0	-71.0					7.56003	Y	Durech, 18
117149 2004 PW_{103}	R R	20.5764		-1.0	-54.0							20.5764		Durech, 18
117324 2004 WW_4	P P	30.256	0.71	-1.0	+57.0							30.3209		Durech, 18
117539 Celletti	P P	8.96342		-1.0	+58.0							8.96342		Durech, 18
118625 2000 HF_{28}	R R	4.733	0.75	-1.0	-38.0							4.733017		Durech, 18
118644 2000 JR_5	R R	10.97807		-1.0	-51.0							10.97807		Durech, 18
118890 2000 UM_{41}	R R	10.90763		-1.0	-36.0							10.90763		Durech, 18
120334 2004 OS_{12}	P P	4.883120		-1.0	+49.0							4.883120		Durech, 18
120796 1998 FF_{58}	2 2	15.9701		75.0	+35.0	255.0	+39.0					15.9701	Y	Durech, 18
121366 1999 TZ_{65}	2 2	13.46913		90.0	+51.0	261.0	+58.0					13.46913	Y	Durech, 18
121608 Mikemoreau	R R	24.797	0.44	-1.0	-49.0							24.7642		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
123693 2000 YQ ₁₀₁	2 2	7.41107		312.0	−78.0							7.41107	Y	Durech, 18
123736 2001 AQ ₁₁	2 2	8.15196		89.0	−42.0	270.0	−33.0					8.15196	Y	Durech, 18
123839 2001 CD ₂₂	2 2	11.72224		101.0	+39.0	259.0	+37.0					11.72224	Y	Durech, 18
124044 2001 FB ₁₄₁	R R	16.3965		−1.0	−53.0							16.3965		Durech, 18
124901 2001 TE ₅₂	R R	7.51768		−1.0	−54.0							7.51768		Durech, 18
125648 2001 XS ₆₆	R R	7.58109		−1.0	−18.0							7.58109		Durech, 18
126807 2002 ES ₃₉	2 2	5.49350		144.0	−55.0	330.0	−55.0					5.49350	Y	Durech, 18
127172 2002 GF ₁₅₄	2 2	5.097	0.64	45.0	−56.0							5.09932	Y	Durech, 18
129764 1999 GK ₂₅	R R	3.881270		−1.0	−56.0							3.881270		Durech, 18
130005 1999 VE ₄₃	2 2	4.014444		105.0	+31.0							4.014444	Y	Durech, 18
130032 1999 VE ₉₈	2 2	10.37715		94.0	+58.0							10.37715	Y	Durech, 18
130281 2000 EM	R R	14.2919		−1.0	−49.0							14.2919		Durech, 18
130319 Danielpelham	P P	7.39637		−1.0	+59.0							7.39637		Durech, 18
130412 2000 OT ₄₅	P P	23.5943		−1.0	+50.0							23.5943		Durech, 18
130467 2000 QO ₇₈	P P	16.52468		−1.0	+34.0							16.52468		Durech, 18
131043 2000 YU ₂₅	2 2	9.31419		107.0	−40.0	280.0	−57.0					9.31419	Y	Durech, 18
131249 2001 FP ₁₂	2 2	4.192907		102.0	−42.0	278.0	−44.0					4.192907	Y	Durech, 18
131777 2002 AE ₂₁	2 2	4.872	0.55	131.0	−55.0	311.0	−60.0					4.87305	Y	Durech, 18
131823 2002 AY ₉₇	2 2	6.77100		250.0	−49.0							6.77100	Y	Durech, 18
133223 2003 QY ₈₇	2 2	6.90318		8.0	−49.0	195.0	−44.0					6.90318	Y	Durech, 18
133692 2003 UN ₂₁₇	P P	15.7945		−1.0	+50.0							15.7945		Durech, 18
134001 2004 VL ₉	2 2	9.15196		159.0	−45.0	324.0	−32.0					9.15196	Y	Durech, 18
134108 2004 XP ₁₅₈	P P	8.45516		−1.0	+58.0							8.45516		Durech, 18
134361 1994 RF	2 2	8.10359	0.43	57.0	+22.0	236.0	+33.0					8.14758	Y	Durech, 18
134740 2000 AX ₁₈₇	2 2	7.98646		148.0	−54.0	289.0	−51.0					7.98646	Y	Durech, 18
134752 2000 BQ ₃₅	2 2	9.441	0.75	64.0	−66.0							9.36834	Y	Durech, 18
135164*2001 QH ₂₄₈	P P	4.035	0.23	−1.0	+53.0							20.8787		Durech, 18
135370 2001 TE ₁₃₃	2 2	31.215	0.51	76.0	+50.0	290.0	+20.0					33.6457	Y	Durech, 18
135414 2001 UP ₂₄	R R	13.8910		−1.0	−45.0							13.8910		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
136317 2004 BO_{57}	P	55.803	0.56	-1.0	+17.0							55.384		Durech, 18
136514 2005 QT_{36}	2	9.42571		35.0	+62.0	221.0	+45.0					9.42571	Y	Durech, 18
136769 1996 OD	R	6.80216		-1.0	-46.0							6.80216		Durech, 18
138352 2000 GS_{116}	2	7.909	0.62	84.0	+25.0	261.0	-7.0					5.34007	Y	Durech, 18
138479 2000 KU_2	R	6.33908		-1.0	-49.0							6.33908		Durech, 18
138577 2000 QX_{122}	R	48.411		-1.0	-34.0							48.411		Durech, 18
138636 2000 RJ_{18}	2	8.845	0.87	273.0	-54.0							8.84693	Y	Durech, 18
138831 2000 UD_{68}	2	2.286890		281.0	-34.0							2.286890	Y	Durech, 18
139922 2001 RV_{123}	R	5.87658		-1.0	-55.0							5.87658		Durech, 18
140416 2001 TF_{87}	2	6.93437		249.0	-63.0							6.93437	Y	Durech, 18
140506 2001 TJ_{163}	R	27.1331		-1.0	-30.0							27.1331		Durech, 18
140720 2001 UO_{93}	2	41.5295		105.0	+14.0							41.5295	Y	Durech, 18
141002 2001 WY_{30}	R	6.39745		-1.0	-53.0							6.39745		Durech, 18
142460 2002 TJ_6	R	18.0439		-1.0	-44.0							18.0439		Durech, 18
142960 2002 VJ_{79}	P	5.34492		-1.0	+59.0							5.34492		Durech, 18
143173 2002 XF_{67}	2	3.307149		40.0	-33.0							3.307149	Y	Durech, 18
143183 2002 XE_{77}	R	25.2486		-1.0	-52.0							25.2486		Durech, 18
143913 2003 YF_{74}	2	8.69302		108.0	-42.0	271.0	-65.0					8.69302	Y	Durech, 18
143985 2003 YT_{153}	2	10.019	0.55	91.0	-34.0	248.0	-47.0					10.02321	Y	Durech, 18
144806 2004 HC_{61}	R	71.958		-1.0	-53.0							71.958		Durech, 18
146217 2000 VX_{50}		6.81211		44.0	+63.0	183.0	+75.0					6.81211		Hanus, 16
147344 2003 BK_{67}	P	5.18587		-1.0	+64.0							5.18587		Durech, 18
147395 2003 EE_{62}	2	31.0271		227.0	-59.0	357.0	-73.0					31.0271	Y	Durech, 18
150030 2005 VD_{60}	2	8.61270		66.0	+22.0	247.0	-1.0					8.61270	Y	Durech, 18
152291 2005 TD_{24}	R	6.50572		-1.0	-56.0							6.50572		Durech, 18
152361 2005 UX_{140}		3.66232		292.0	+39.0	86.0	+56.0					3.66232		Hanus, 16
153216 2000 YR_{19}	2	41.4211		56.0	+84.0	312.0	+40.0					41.4211	Y	Durech, 18
153591 2001 SN_{263}		3.423	0.27	309.0	-80.0									Becker, 15
154244 2002 KL_6	2	4.6063	1.15	129.0	-89.0							4.610233	Y	Warner, 17

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
154852 2004 RE_{61}	2 2	9.209	0.74	114.0	−45.0	310.0	−49.0					9.21707	Y	Durech, 18
156691 2002 LR_5	2 2	4.98588		90.0	+10.0	262.0	+57.0					4.98588	Y	Durech, 18
158093 2000 WT_{89}	R R	5.28095		−1.0	−49.0							5.28095		Durech, 18
159864 2004 PH_{50}	2 2	8.41806		73.0	+47.0	268.0	+52.0					8.41806	Y	Durech, 18
159919 2004 XU_{163}	P P	3.993503		−1.0	+47.0							3.993503		Durech, 18
161301 2003 MH_1	P P	4.58683		−1.0	+59.0							4.58683		Durech, 18
161989 Cacus		3.7538	1.1	254.0	−62.0							3.755067	Y	Durech, 18
162156 1999 BU_{28}	R R	2.403865		−1.0	−59.0							2.403865		Durech, 18
162173 Ryugu		7.627	0.16	327.0 125.0 73.0 −1.0	+35.0 +90.0 −62.0 −99.0							7.6273922 7.63 7.6312	Y Y	Abe, 08 Hasegawa, 08 Muller, 11 Muller, 17
162421 2000 ET_{70}	3 3 4	8.947	0.60	80.0 −1.0	−50.0 −99.0							8.96 8.9444	Y Y	Naidu, 13 Marshall, 17
163430 2002 RO_{67}	2 2	13.6398		39.0	+81.0	191.0	+42.0					13.6398	Y	Durech, 18
163627 2002 UB_7	P P	7.24848		−1.0	+54.0							7.24848		Durech, 18
164131 2003 YL_{43}	R R	20.6268	0.68	−1.0	−53.0							20.6268		Durech, 18
164573 2006 KK_{122}	P P	36.4048		−1.0	+16.0							36.4048		Durech, 18
164806 1999 JA_{110}	2 2	9.01624		121.0	+13.0	300.0	+3.0					9.01624	Y	Durech, 18
167857 2005 EE_{10}	P P	20.3148		−1.0	+19.0							20.3148		Durech, 18
168062 2006 BB_{266}	P P	12.07370		−1.0	+50.0							12.07370		Durech, 18
168241 2006 KD_{86}	2 2	5.40435		112.0	−73.0							5.40435	Y	Durech, 18
168466 1999 JM_{112}	2 2	13.51291		97.0	−61.0	288.0	−35.0					13.51291	Y	Durech, 18
171239 2005 KO_{10}	P P	21.1895		−1.0	+55.0							21.1895		Durech, 18
171989 2001 TS_{203}	2 2	5.27394	0.22	165.0	−38.0	358.0	−62.0					9.51712	Y	Durech, 18
172984 2006 HK_{89}	2 2	4.67726		302.0	+44.0							4.67726	Y	Durech, 18
173515 2000 UY_{79}	P P	17.784	0.58	−1.0	+52.0							5.34721		Durech, 18
174120 2002 JC_{146}	2 2	34.8838		61.0	+48.0	288.0	+72.0					34.8838	Y	Durech, 18
175706 1996 FG_3		3.5942	0.2	242.0	−84.0									Scheirich, 09
179530 2002 CA_{196}	P P	9.61289		−1.0	+55.0							9.61289		Durech, 18
182476 2001 SD_{116}	R R	5.86414		−1.0	−55.0							5.86414		Durech, 18
184953 2005 WL_{91}	2 2	6.09104		91.0	−45.0	271.0	−44.0					6.09104	Y	Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
185851 2000 DP_{107}		2.7754	0.19	291.0	+80.0	31.0	-61.0							Scheirich, 09
186109 2001 TH_{80}	P	4.220	0.46	-1.0	+48.0							4.218891		Durech, 18
186924 2004 PD_{60}	2	23.8134		78.0	+25.0	253.0	+34.0					23.8134	Y	Durech, 18
188101 2001 YQ_{66}	P	5.64836		-1.0	+40.0							5.64836		Durech, 18
189260 2004 WY_8	2	5.99141		53.0	+53.0	263.0	+48.0					5.99141	Y	Durech, 18
192136 2006 DS_{160}	R	8.34054		-1.0	-47.0							8.34054		Durech, 18
193585 2001 BB_{26}	2	8.14028		72.0	-46.0	274.0	-43.0					8.14028	Y	Durech, 18
195324 2002 EO_{123}	P	5.34281		-1.0	+50.0							5.34281		Durech, 18
195664 2002 OM	R	10.02050		-1.0	-50.0							10.02050		Durech, 18
196921 2003 TL_{57}	2	6.14583		192.0	+51.0							6.14583	Y	Durech, 18
197433 2003 YA_{80}	2	7.00036		53.0	+55.0	227.0	+29.0					7.00036	Y	Durech, 18
197520 2004 DP_{10}	P	9.43268		-1.0	+43.0							9.43268		Durech, 18
198549 2004 XB_{133}	P	6.65894		-1.0	+44.0							6.65894		Durech, 18
199206 2006 AN_{19}	R	5.55706		-1.0	-22.0							5.55706		Durech, 18
201115 2002 JX_{12}	2	7.17971		16.0	+40.0	208.0	+56.0					7.17971	Y	Durech, 18
202574 2006 FD_{14}	R	4.73956		-1.0	-38.0							4.73956		Durech, 18
203873 2002 XR_{41}	R	5.60872		-1.0	-58.0							5.60872		Durech, 18
204890 2007 TR_{305}	P	20.3747		-1.0	+39.0							20.3747		Durech, 18
206167*2002 TS_{242}		3.944	1.05	57.0	-67.0							3.944	Y	McNeill, 18
206648 2003 YL_9	2	12.2176		281.0	-36.0							12.2176	Y	Durech, 18
209015 2003 CT_{13}	R	6.10736		-1.0	-57.0							6.10736		Durech, 18
213276 2001 OD_{45}	P	18.9562		-1.0	+58.0							18.9562		Durech, 18
214869 2007 PA_8	3	102.24	0.58	-1.0	-99.0								Y	Brozovic, 17
216209 2006 UA_{61}	R	6.50916		-1.0	-53.0							6.50916		Durech, 18
218863 2006 WO_{127}	R	3.274928		-1.0	-48.0							3.274928		Durech, 18
222599 2001 XZ_{14}	2	5.260	0.48	135.0	+67.0	322.0	+40.0					7.39956	Y	Durech, 18
223302 2003 NH_3	2	18.1650		169.0	+45.0							18.1650	Y	Durech, 18
225974 2002 CG_{160}	R	5.72761		-1.0	-49.0							5.72761		Durech, 18
226051 2002 GC_{113}	R	2.946893		-1.0	-52.0							2.946893		Durech, 18

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Asteroid	Q	Period	Amp	L_1	B_1	L_2	B_2	L_3	B_3	L_4	B_4	Sid. period	Mod	Reference
226214 2002 VV_{58}	P	8.74017	0.33	-1.0	+25.0							8.74017		Durech, 18
230229 2001 TH_{199}	P	6.04890		-1.0	+51.0							6.04890		Durech, 18
232360 2002 XB_{67}	P	10.15270		-1.0	+60.0							10.15270		Durech, 18
232888 2004 XG_{17}	P	2.541844		38.0	+47.0	231.0	+58.0					2.541844	Y	Durech, 18
232944 2005 CL_{34}	R	9.92389	0.33	-1.0	-55.0							9.92389		Durech, 18
236074 2005 JW_{126}	R	3.29050		127.0	+26.0	300.0	+13.0					3.29050	Y	Durech, 18
236504 2006 GC_{31}	P	8.98467		-1.0	+62.0							8.98467		Durech, 18
236635 2006 KS_{33}	P	5.51188		-1.0	+63.0							5.51188		Durech, 18
238565 2004 XQ_{74}	P	5.46762	0.33	120.0	-63.0	264.0	-50.0					5.46762	Y	Durech, 18
238676 2005 EC_{193}	P	8.52647		-1.0	+64.0							8.52647		Durech, 18
240780 2005 SA_{221}	P	6.89216		105.0	+50.0	253.0	+58.0					6.89216	Y	Durech, 18
242912 2006 MM_{11}	P	11.91368		-1.0	+52.0							11.91368		Durech, 18
243029 2006 UF_{261}	P	8.48089	0.33	-1.0	+56.0							8.48089		Durech, 18
243370 2008 WA_{112}	P	19.3603		-1.0	+51.0							19.3603		Durech, 18
247164 2000 YL_{131}	P	14.2605		76.0	-22.0	247.0	-48.0					14.2605	Y	Durech, 18
248428 2005 SK_{269}	P	4.171044		32.0	-30.0	224.0	-55.0					4.171044	Y	Durech, 18
249307 2008 UE_{77}	P	15.9268	0.33	15.0	+28.0	236.0	+52.0					15.9268	Y	Durech, 18
249801 2000 YS_{93}	R	11.44319		-1.0	-49.0							11.44319		Durech, 18
250248 2003 AY_{45}	P	8.26198		-1.0	+52.0							8.26198		Durech, 18
250843 2005 UL_{175}	R	6.61973		-1.0	-1.0							6.61973		Durech, 18
252253 2001 QX_{125}	P	14.1006	0.07	-1.0	+48.0							14.1006		Durech, 18
276049*2002 CE_{26}	P	3.2930		317.0	-20.0								Y	Shepard, 06
279317 2009 XH_1	P	4.25276		-1.0	+49.0							4.25276		Durech, 18
279436 2010 NN_{112}	P	4.39273		-1.0	+54.0							4.39273		Durech, 18
280694 2005 FX_4	R	9.80455	0.30	-1.0	-57.0							9.80455		Durech, 18
284895 2009 SW_{168}	P	8.76281		-1.0	+23.0							8.76281		Durech, 18
289664 2005 GV_{127}	R	4.204315		-1.0	-61.0							4.204315		Durech, 18
306606 2000 LU_{36}	P	6.71136		199.0	-40.0	345.0	-69.0					6.71136	Y	Durech, 18
308635 2005 YU_{55}	1	19.31	0.30	22.0	-35.0	339.0	+84.0							Merline, 11
	1			170.0	-83.0									Merline, 12
				60.0	-60.0									Muller, 13

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Asteroid	<i>Q</i>	Period	Amp	<i>L</i> ₁	<i>B</i> ₁	<i>L</i> ₂	<i>B</i> ₂	<i>L</i> ₃	<i>B</i> ₃	<i>L</i> ₄	<i>B</i> ₄	Sid. period	Mod	Reference
341843 2008 <i>EV</i> ₅	3 3	3.725	0.15	180.0	−84.0							3.725	Y	Busch, 11
348400*2005 <i>JF</i> ₂₁		2.4149	0.16	112.0	+5.0	335.0	+50.0					2.4188	Y	Monteiro, 18
367943 Duende		8.724	1.79	70.0	−5.0	245.0	+0.0							Benson, 20
374851 2006 <i>VV</i> ₂	2 2	2.425	0.57	29.0	+37.0							2.410541	Y	Vereshchagina, 11
436724 2011 <i>UW</i> ₁₅₈	2 2	0.61073	2.05	290.0	−39.0							0.610752	Y	Carbognani, 16
455213 2001 <i>OE</i> ₈₄		0.4865	0.6	115.0	−80.0	229.0	−80.0					0.486542	Y	Polishook, 17
486958*Arrokoth		15.918	0.17	312.5	−8.2							15.918		Porter, 19
488515 2001 <i>FE</i> ₉₀	2 2	0.4777	2.13	200.0	−77.0							0.477393	Y	Hicks, 09

F o o t n o t e. The Table includes information about spin axis properties (ecliptic coordinates of spin vector pole and sidereal period) for any minor planet for which corresponding data have been reported. For each object the Table contains the summary line (the first one) and detail entries. The summary line gives the number and name (if any) of the object along with the adopted period of lightcurve and amplitude. The details line gives the additional information such as quality rating, pole solutions, sidereal period, and publication reference. Posting on a web site are given as the current year + “*w*” (e. g., Warner, 11w). An asterisk (*) between the asteroid number and name denotes a new or significantly changed entry.

The *Q* value gives assessment of the quality of the pole solution and closely parallels the reliability ratings assigned to lightcurves.

0 Later proven to be wrong.

1 May be completely wrong.

2 Good determination, pole likely correct to 15 – 20°, but may be 2 ambiguous with two or more solutions that are possible, or the sense of rotation is not determined.

3 Reliable determination of both spin axis direction and sense of rotation, i. e., prograde or retrograde.

4 Reliable determination. Same as *Q* = 3 but a shape model has been determined by inversion, adaptive optics observations, or radar, or ambiguous models have been eliminated by occultation profile matching.

P A prograde rotation has been determined but no specific pole position has been determined.

R A retrograde rotation has been determined by no specific pole position has been determined.

U Undetermined. For example, a sidereal period may have been reported, but neither a spin axis or sense of rotation (pro/retrograde) was given.

If the *Q* value is blank, the given pole solution has not yet been reviewed under the new rating system. Then in details lines ecliptic longitude and latitude of the first solution, those of the second one and so on are given. In column “Sid. period” the sidereal period of spin axis solution is given. In the penultimate column symbol “Y” means that shape model has been reported.

A more complete and thorough catalog is maintained by Kryszczyńska et al. at the Poznan Observatory in Poland. This catalog can be accessed via <http://vesta.astro.amu.edu.pl/Science/Asteroids/>.

Josef Durech also maintains a list of spin axis solutions, with shape models and data files: Durech et al. (2010), DAMIT: a database of asteroid models, AA, 513, A46; <https://astro.troja.mff.cuni.cz/projects/damit/>.