

## MCMC Thermophysical Modeling Results\*

### 1. INTRODUCTION

Thermophysical modeling results for nine asteroids are documented in this file. Included is a series of tables with major physical characteristics and a series of plots for each object modeled.

**Table 1.** Physical characteristics from thermophysical modeling of various objects

Name	Diameter km	Albedo	Theta deg	Period hr	Crater Fraction	Model Type
02212	4.8786 <sup>+5.6%</sup> <sub>-4.8%</sub>	0.2586 <sup>+17.2%</sup> <sub>-17.2%</sub>	0.949 <sup>+29.8%</sup> <sub>-28.2%</sub>	6.36 <sup>+129.0%</sup> <sub>-71.5%</sub>	0.742 <sup>+0.18</sup> <sub>-0.322</sub>	Spherical
02212	4.7292 <sup>+7.7%</sup> <sub>-10.3%</sub>	0.2649 <sup>+21.7%</sup> <sub>-21.7%</sub>	0.2556 <sup>+142.3%</sup> <sub>-232.7%</sub>	20.0 <sup>+0.0%</sup> <sub>-0.0%</sub>	0.504 <sup>+0.338</sup> <sub>-0.358</sub>	Triaxial
07335	0.7153 <sup>+15.1%</sup> <sub>-16.0%</sub>	0.2633 <sup>+27.2%</sup> <sub>-27.2%</sub>	1.6573 <sup>+210.8%</sup> <sub>-151.7%</sub>	5.15 <sup>+147.6%</sup> <sub>-65.0%</sub>	0.424 <sup>+0.371</sup> <sub>-0.301</sub>	Spherical
07335	0.6475 <sup>+17.5%</sup> <sub>-18.2%</sub>	0.2918 <sup>+30.8%</sup> <sub>-30.8%</sub>	0.6187 <sup>+214.0%</sup> <sub>-265.5%</sub>	12.0 <sup>+0.0%</sup> <sub>-0.0%</sub>	0.476 <sup>+0.378</sup> <sub>-0.334</sub>	Triaxial
68950	1.2968 <sup>+13.5%</sup> <sub>-11.7%</sub>	0.2656 <sup>+25.7%</sup> <sub>-25.7%</sub>	1.4619 <sup>+62.5%</sup> <sub>-45.7%</sub>	47.0 <sup>+0.0%</sup> <sub>-0.0%</sub>	0.332 <sup>+0.326</sup> <sub>-0.195</sub>	Spherical
68950	0.7924 <sup>+4.5%</sup> <sub>-4.0%</sub>	0.4228 <sup>+25.5%</sup> <sub>-25.5%</sub>	0.084 <sup>+77.7%</sup> <sub>-89.4%</sub>	47.0 <sup>+0.0%</sup> <sub>-0.0%</sub>	0.515 <sup>+0.344</sup> <sub>-0.345</sub>	Triaxial
G1989	0.8633 <sup>+3.8%</sup> <sub>-8.3%</sub>	0.2747 <sup>+18.4%</sup> <sub>-18.4%</sub>	15.8421 <sup>+109.0%</sup> <sub>-88.4%</sub>	4.34 <sup>+90.2%</sup> <sub>-60.2%</sub>	0.408 <sup>+0.333</sup> <sub>-0.284</sub>	Spherical
G1989	0.8779 <sup>+6.4%</sup> <sub>-24.9%</sub>	0.2558 <sup>+28.6%</sup> <sub>-28.6%</sub>	20.3203 <sup>+91.1%</sup> <sub>-260.8%</sub>	4.31 <sup>+97.9%</sup> <sub>-57.8%</sub>	0.473 <sup>+0.327</sup> <sub>-0.309</sub>	Triaxial
02100	1.86 <sup>+15.0%</sup> <sub>-19.8%</sub>	0.1351 <sup>+36.1%</sup> <sub>-36.1%</sub>	10.3756 <sup>+137.5%</sup> <sub>-145.4%</sub>	4.66 <sup>+91.2%</sup> <sub>-61.9%</sub>	0.416 <sup>+0.345</sup> <sub>-0.289</sub>	Spherical
02100	1.2535 <sup>+23.7%</sup> <sub>-21.2%</sub>	0.2845 <sup>+39.5%</sup> <sub>-39.5%</sub>	2.8991 <sup>+153.9%</sup> <sub>-276.4%</sub>	19.8 <sup>+0.0%</sup> <sub>-0.0%</sub>	0.514 <sup>+0.335</sup> <sub>-0.339</sub>	Triaxial
85713	1.9357 <sup>+11.3%</sup> <sub>-6.6%</sub>	0.2198 <sup>+24.4%</sup> <sub>-24.4%</sub>	1.1442 <sup>+202.0%</sup> <sub>-97.3%</sub>	5.8 <sup>+135.9%</sup> <sub>-71.4%</sub>	0.388 <sup>+0.341</sup> <sub>-0.25</sub>	Spherical
85713	1.803 <sup>+32.9%</sup> <sub>-18.5%</sub>	0.2377 <sup>+46.0%</sup> <sub>-46.0%</sub>	1.7449 <sup>+213.2%</sup> <sub>-334.1%</sub>	5.37 <sup>+0.0%</sup> <sub>-0.0%</sub>	0.432 <sup>+0.369</sup> <sub>-0.302</sub>	Triaxial
23606	0.6383 <sup>+20.3%</sup> <sub>-19.7%</sub>	0.2057 <sup>+34.5%</sup> <sub>-34.5%</sub>	0.6717 <sup>+110.9%</sup> <sub>-266.3%</sub>	5.4 <sup>+180.9%</sup> <sub>-71.5%</sub>	0.578 <sup>+0.302</sup> <sub>-0.37</sub>	Spherical
23606	0.5823 <sup>+17.0%</sup> <sub>-12.3%</sub>	0.2245 <sup>+32.2%</sup> <sub>-32.2%</sub>	0.1132 <sup>+165.3%</sup> <sub>-192.3%</sub>	5.53 <sup>+195.5%</sup> <sub>-69.8%</sub>	0.469 <sup>+0.349</sup> <sub>-0.328</sub>	Triaxial
05189	0.6286 <sup>+20.9%</sup> <sub>-39.9%</sub>	0.2901 <sup>+42.1%</sup> <sub>-42.1%</sub>	7.1476 <sup>+134.3%</sup> <sub>-237.0%</sub>	4.48 <sup>+128.7%</sup> <sub>-62.1%</sub>	0.418 <sup>+0.371</sup> <sub>-0.293</sub>	Spherical
05189	0.6464 <sup>+19.9%</sup> <sub>-33.1%</sub>	0.261 <sup>+40.2%</sup> <sub>-40.2%</sub>	8.8367 <sup>+131.2%</sup> <sub>-237.2%</sub>	4.56 <sup>+122.4%</sup> <sub>-64.9%</sub>	0.494 <sup>+0.352</sup> <sub>-0.343</sub>	Triaxial
05693	0.9964 <sup>+22.2%</sup> <sub>-31.2%</sub>	0.2872 <sup>+38.3%</sup> <sub>-38.3%</sub>	6.2415 <sup>+145.9%</sup> <sub>-181.3%</sub>	4.92 <sup>+138.1%</sup> <sub>-65.5%</sub>	0.49 <sup>+0.34</sup> <sub>-0.334</sub>	Spherical
05693	0.9739 <sup>+25.5%</sup> <sub>-31.0%</sub>	0.2726 <sup>+42.3%</sup> <sub>-42.3%</sub>	11.0077 <sup>+137.3%</sup> <sub>-195.3%</sub>	2.5 <sup>+0.0%</sup> <sub>-0.0%</sub>	0.526 <sup>+0.348</sup> <sub>-0.381</sub>	Triaxial

\* Summer 2022

**Table 2.** Input paramaters for modeled objects

Name	H Magnitude	H Magnitude Uncertainty	Number of Epochs	Model Type
	mag	mag		
02212	13.53	0.2	2	Spherical
02212	13.53	0.2	2	Triaxial
07335	17.76	0.2	2	Spherical
07335	17.76	0.2	2	Triaxial
68950	16.39	0.2	7	Spherical
68950	16.39	0.2	7	Triaxial
G1989	17.35	0.2	4	Spherical
G1989	17.35	0.2	4	Triaxial
02100	16.35	0.2	3	Spherical
02100	16.35	0.2	3	Triaxial
85713	15.78	0.2	3	Spherical
85713	15.78	0.2	3	Triaxial
23606	18.27	0.2	2	Spherical
23606	18.27	0.2	2	Triaxial
05189	17.85	0.2	2	Spherical
05189	17.85	0.2	2	Triaxial
05693	16.79	0.2	1	Spherical
05693	16.79	0.2	1	Triaxial