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Erratum

Stability of planetary orbits in binary systems

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This paper studies the stability of S-type and P-type planetary orbits in binary systems. Stability limits are expressed in units of R_{AG}/R_{AB}, where R_{AG} denotes the distance between the primary star and the planet and R_{AB} denotes the distance between the two stars. The presentation about S-type orbits is correct, but concerning the P-type orbits (where the planet is orbiting both stars), the R_{AG}/R_{AB} ratios given in the paper are consistently too small by a factor of two, although the computations themselves are correct. This affects Sect. 4.2 of the paper, where Table 5 and Fig. 6 need to be modified (for corrections, see below). Moreover, in the Abstract, the Conclusions, and Sect. 4.3, it should read: for P-type orbits, the regions of stability also depend on that distance ratio, in the range of 3.50 and 4.90, again depending on the mass ratio.

Table 5. Stability of P-type orbits in binary systems.

Binary System	M_B/M_A	R_{AG} [AU]	R_{AG}/R_{AB}	Orbital Stability
2	0.60	22.0	4.40	U
		23.0	4.60	MS
		24.0	4.80	S
4	0.33	11.0	4.40	U
		11.1	4.44	MS
		11.2	4.48	S

Note: Simulations were performed for giant planets with $M_G = 1\ M_{Jup}$ based on 1000 orbits.

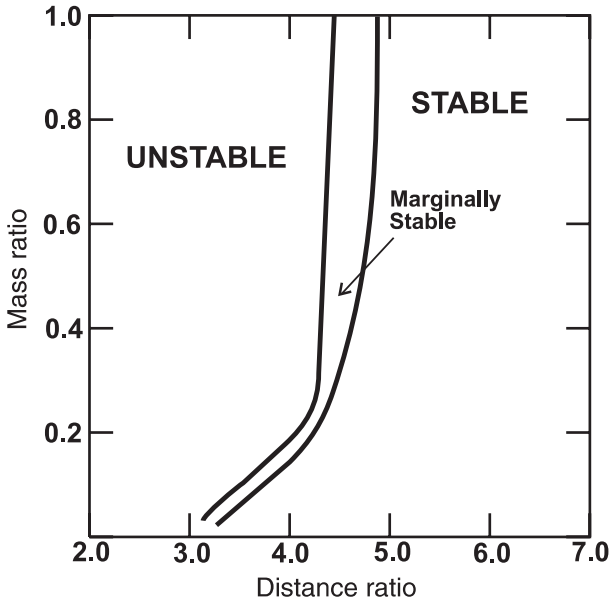

Fig. 6. Range of mass ratios and separation ratios corresponding to stable, marginally stable and unstable outer (P-type) planetary orbits in binary systems. The simulations are based on 1000 orbits.