

Figure 7. Residence times in the 2:1 mean motion resonance with Jupiter. The shortest residence times are $\ll 50$ Myr. Blank areas denote cells never visited by any orbit. Zhongguos and Griquas are denoted by yellow and red dots, respectively. The agreement between the longest residence times and the locations of the real asteroids is remarkable. According to this, the cluster around (11097) 1994 UD1 could survive in the resonance over several Gyr.

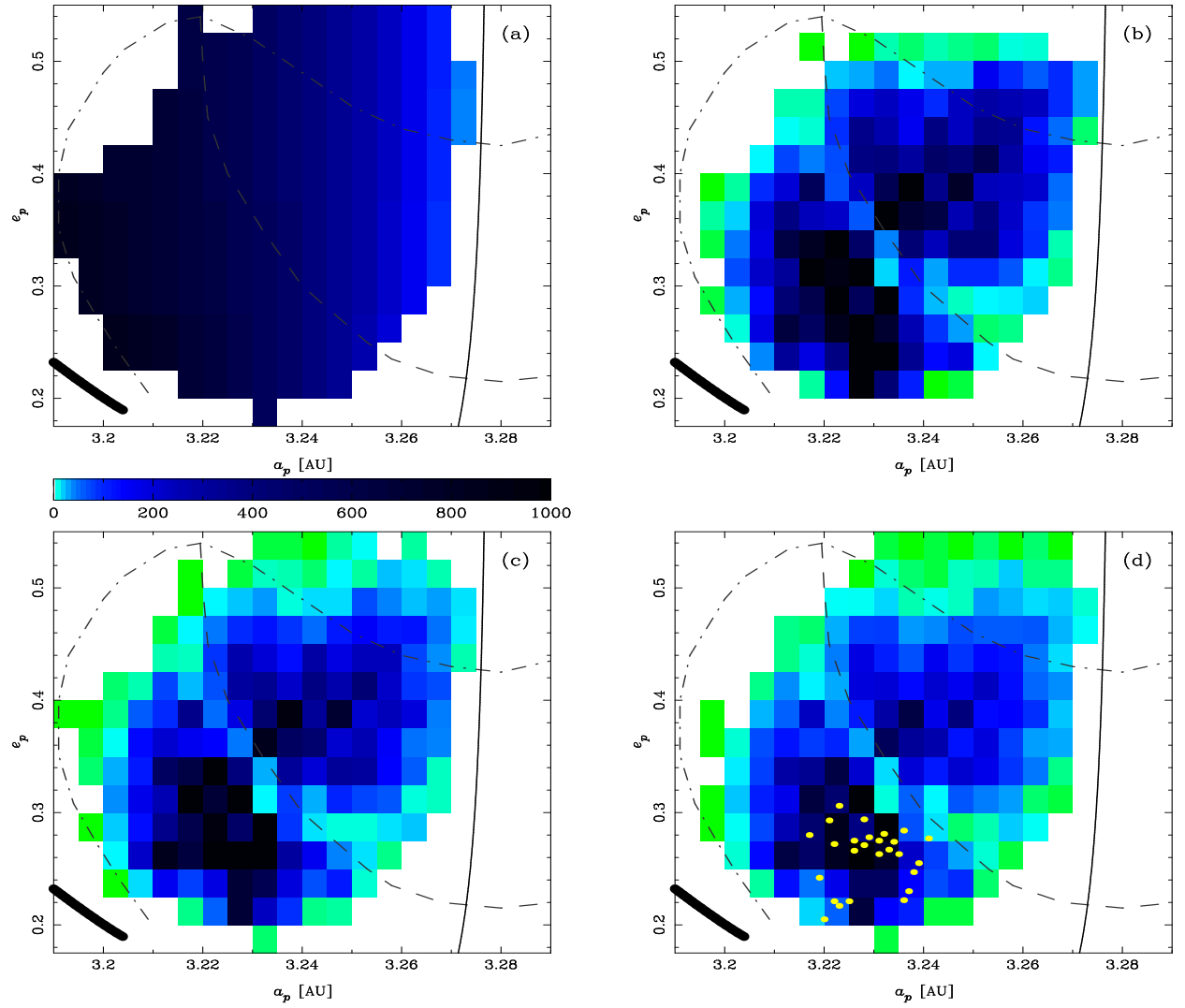


Figure 8. Initial distribution of the resonant orbits in our random-walk simulations (panel a), and final distributions at $t = 4.5$ Gyr using three different values of p_e : 0 (panel b), 0.4 (panel c), and 1 (panel d). The color scale denotes the number of particles per cell. The darker regions are the most populated ones. Panel (d) shows the location of stable asteroids (yellow dots).