Plate 5. Scatter plot of osculating barycentric pericenter distance $q$ vs. osculating barycentric semimajor axis ($a$) at various times in the DLDW “cold” simulation of the formation of the Oort cloud. The points are color-coded to reflect the region in which the simulated comets formed. 

(a) Initial conditions for the simulation (0 m.y.).
(b) 1 m.y. into the simulation.
(c) 10 m.y. into the simulation.
(d) 100 m.y. into the simulation.
(e) 1000 m.y. into the simulation.
(f) Final results for the simulation, at 4000 m.y., i.e., roughly the present time. Note that in (f), there is a nearly empty gap for semimajor axes between about 200 and 1000 AU. Objects with $a$ in this range and $q$ in the planetary region evolve rapidly in $a$ at nearly constant $q$, thereby depleting this region, as discussed by DQT87.