

This homework is about the paper Levinson, H. F., et al. 2008, "Origin of the structure of the Kuiper belt during a dynamical instability in the orbits of Uranus and Neptune," *Icarus*, 196, 258.

1. This question is about Fig. 1 of Levinson, H. F., et al, 2008, *Icarus*, 196. 258.
  - a. (3 pts.) What is the scattered disk? Circle these on the figure.
  - b. (3 pt.) What are Plutinos? Circle them on the figure.
  - c. (3 pts.) What is the classical Kuiper Belt? Circle them on the figure.
2. (4 pts.) Explain the dynamical instability in the orbits of Uranus and Neptune.
3. (8 pts.) Summarize the paper by Levinson et al. in one paragraph. Write this for someone who has taken Phy183. You must address these questions: What question did they try answer? What did they do? What did they find out?
4. Levinson et al. make point (vi) on p. 259.
  - a. (2 pts.) What is the correlation that they discuss?
  - b. (5 pts.) What did their computer simulation tell them about this point? How do they account for this correlation?

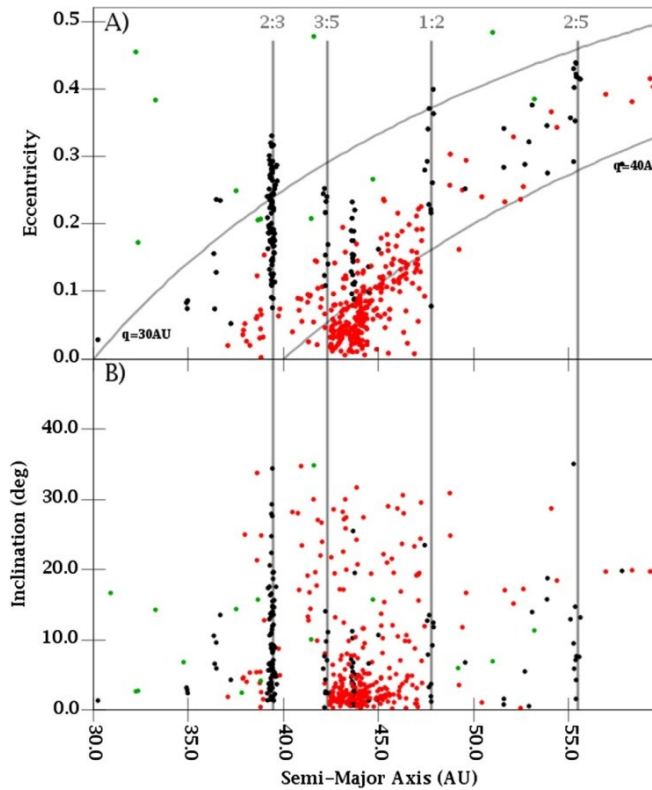


Figure 1 from Levinson et al.