

Science with LSST and Other Large Surveys

Solar System Breakout Group

1) Politics

2) Technical Issues

Politics

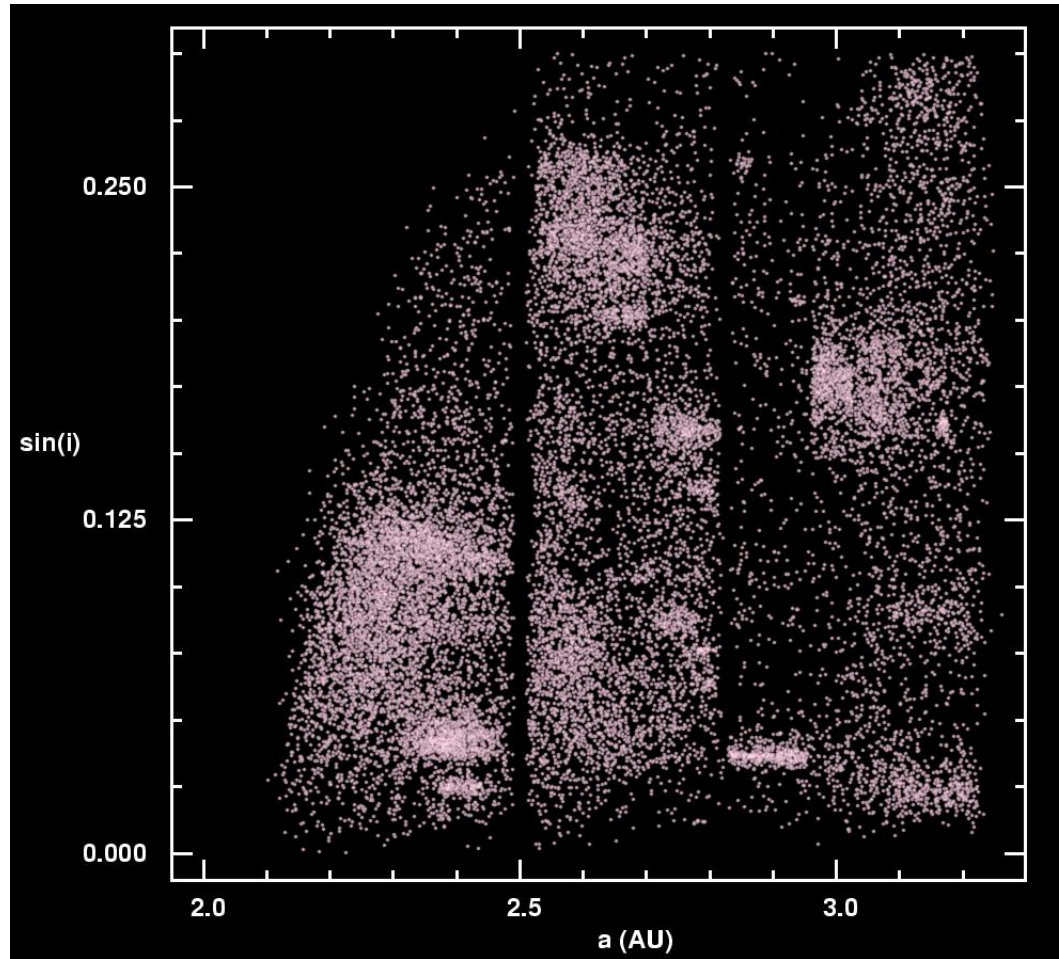
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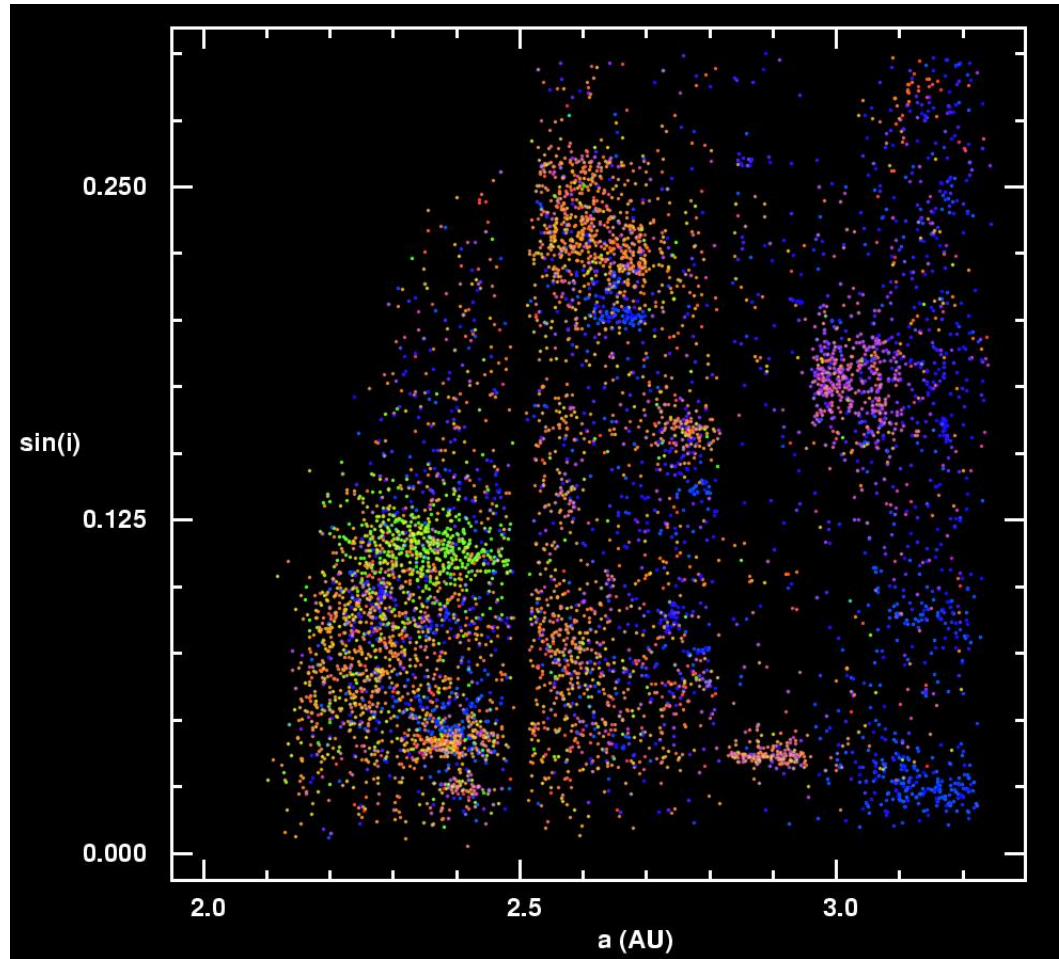
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The semi-major axis vs. (proper) inclination of a sample of known asteroids – note the strong clustering: asteroid dynamical families.



Each dot (asteroid) is color-coded using colors measured by SDSS: asteroids provide an excellent **record of the dynamical and chemical history of the Solar System**

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 1. First and foremost: colors for transient objects
 2. The deep survey can go deeper for a given maximum exposure time because of the larger LSSTs aperture
 3. Saved raw images (?)

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- Reprocessing of a small number of images along the orbits of (a small number of) “very interesting” objects will be required
- For comets, the low-order shape measurements (same as for galaxies) are acceptable – need to run specialized software for detailed modeling
- Real-time alert latency of 60 seconds (required by the transient science) is just fine for solar system (moving) objects

- The “goal” (in science requirements document) of universal (moving object) cadence for the whole sky (vs. only ecliptic region) may be closer to “requirement” status