## EARTH'S MINIMONS



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#### Heliocentric pre-capture orbits ("The Lip Distribution")



### Geocentric orbits



# Initial geocentric speed at 4-5 Hill radii from the Earth





Diameter of TCO [m]



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Wednesday, July 4, 2012



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#### Detectability of minimoons (in preparation by Bolin et al.)



# Capture mechanism



#### Capturable orbits and the Moon





## Gap in semimajor axis



#### Pre- vs. post-capture orbit



# Enabled

# Sclence

## Population statistics for small NEOs



### Remote laboratory for detailed long-term studies of small asteroids and meteoroids



## Laboratory analysis of an intact asteroid



### Encountering an object on a chaotic trajectory (in preparation by Patterson, Chyba, et al.)



### Ephemeris prediction: Orbital uncertainty



OpenOrb (Granvik et al. 2009)
<u>http://code.google.com/p/oorb/</u>

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