

# The APO-PSI TNO Search

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APO-PSI  
TNO  
SEARCH



# Why TNOs?

- Largely unexplored region of solar system
- Important in constraining solar system formation models
- Searches place limits on total mass, size distribution, bulk density, albedo



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# Why Small Telescopes?

- Numerous
- Ease of scheduling for dedication to long-term observing programs
- Wide fields maximize areal sky coverage and survey efficiency



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# The PT





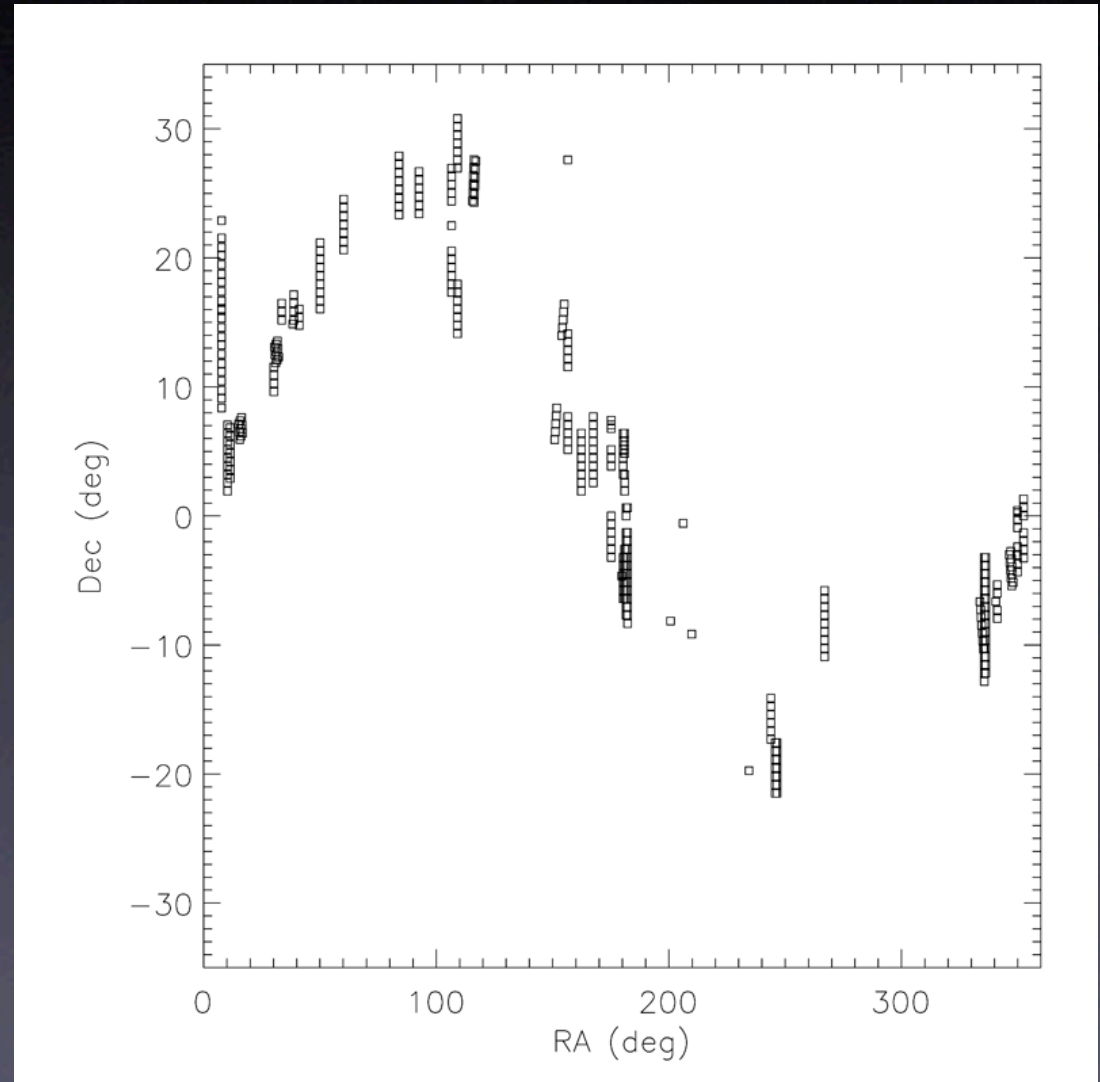
APO-PS1  
TNO  
SEARCH



# Search Area

156 deg<sup>2</sup> total

Most fields:  
 $-5^\circ < \beta < +5^\circ$

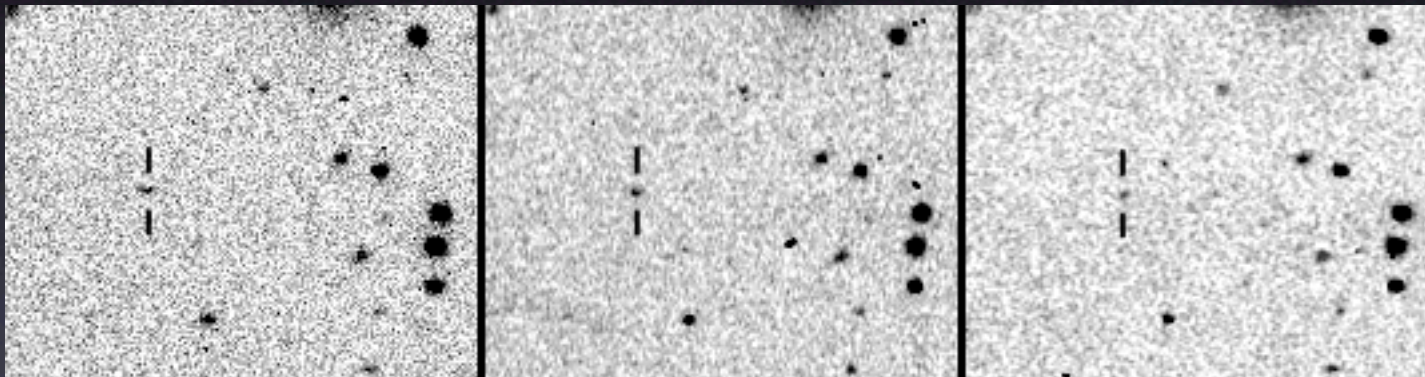




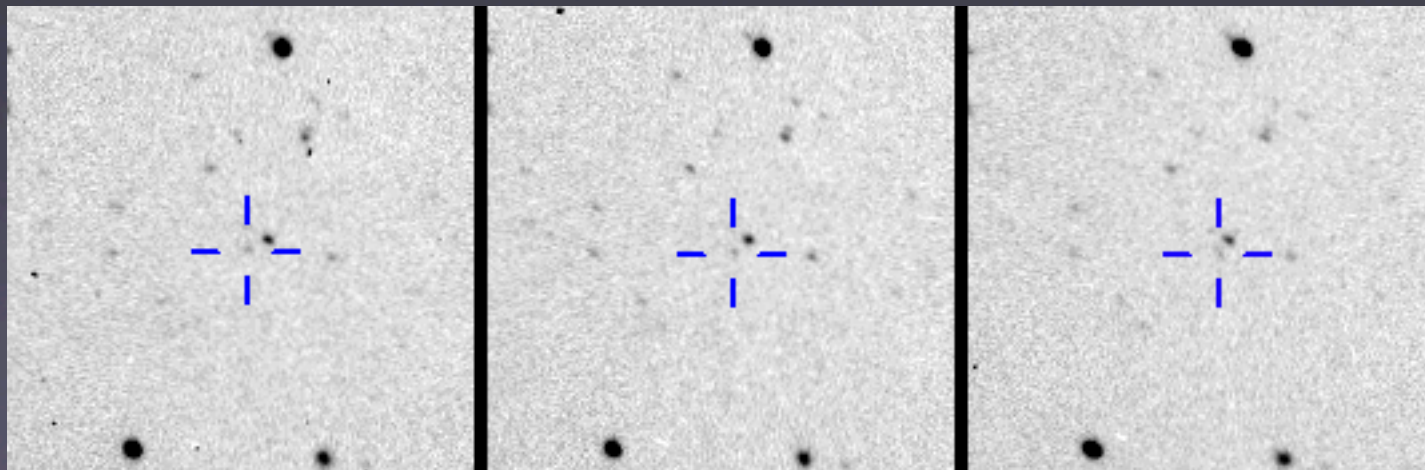
APO-PSI  
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# Example Detections



38628 Huya  
(= 2000 EB<sub>173</sub>)



Sycorax  
(Uranus XVII)

# Cumulative Luminosity Function

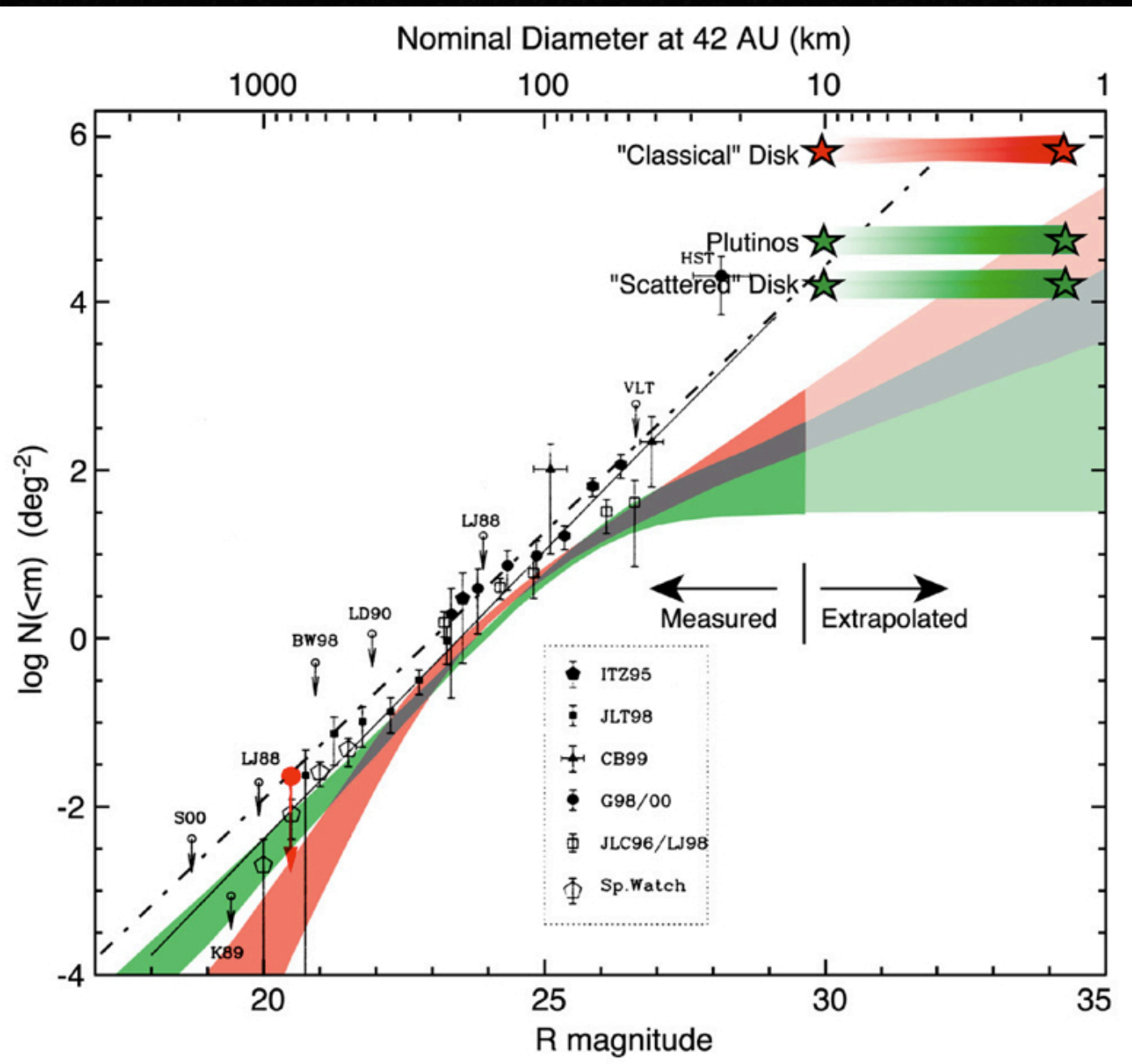


Figure 8 from Bernstein *et al.*, *AJ* **128**, 1364 (2004)