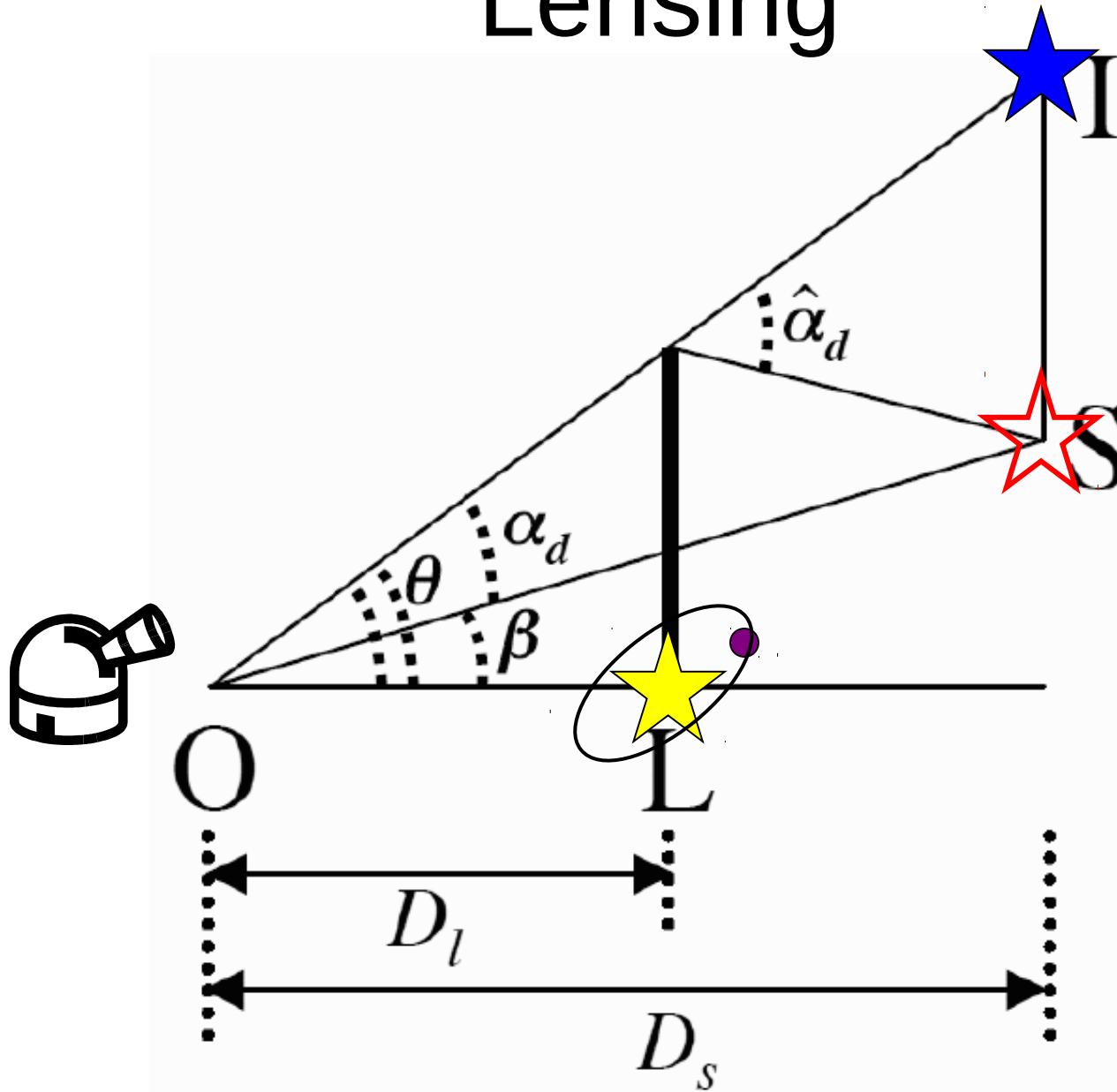
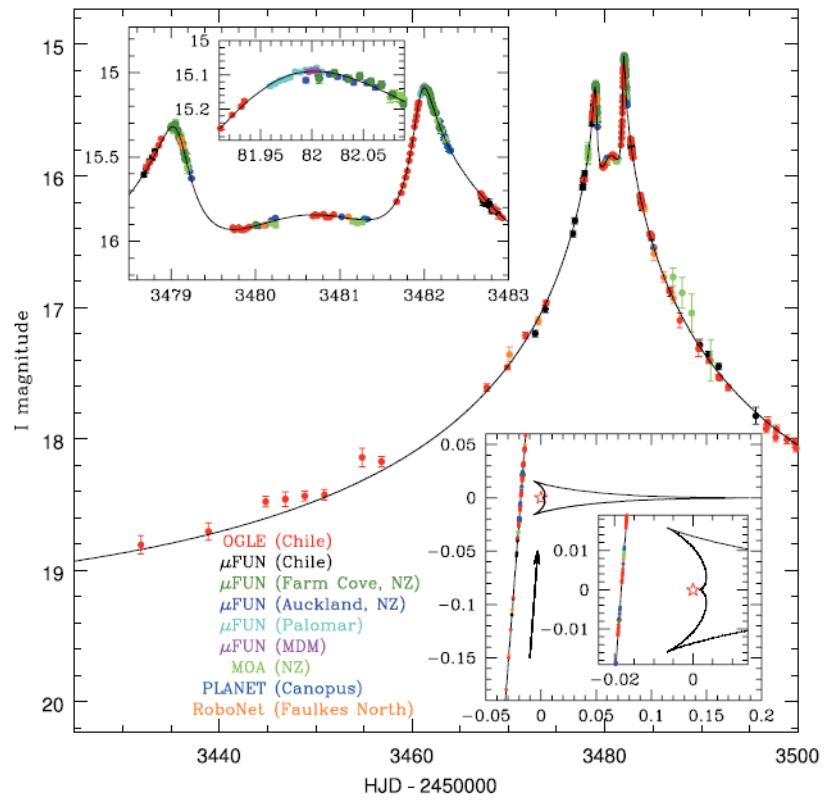


# Lensing



See Scott Gaudi's webpage for microlensing animations:  
<http://www.astronomy.ohio-state.edu/~gaudi/movies.html>

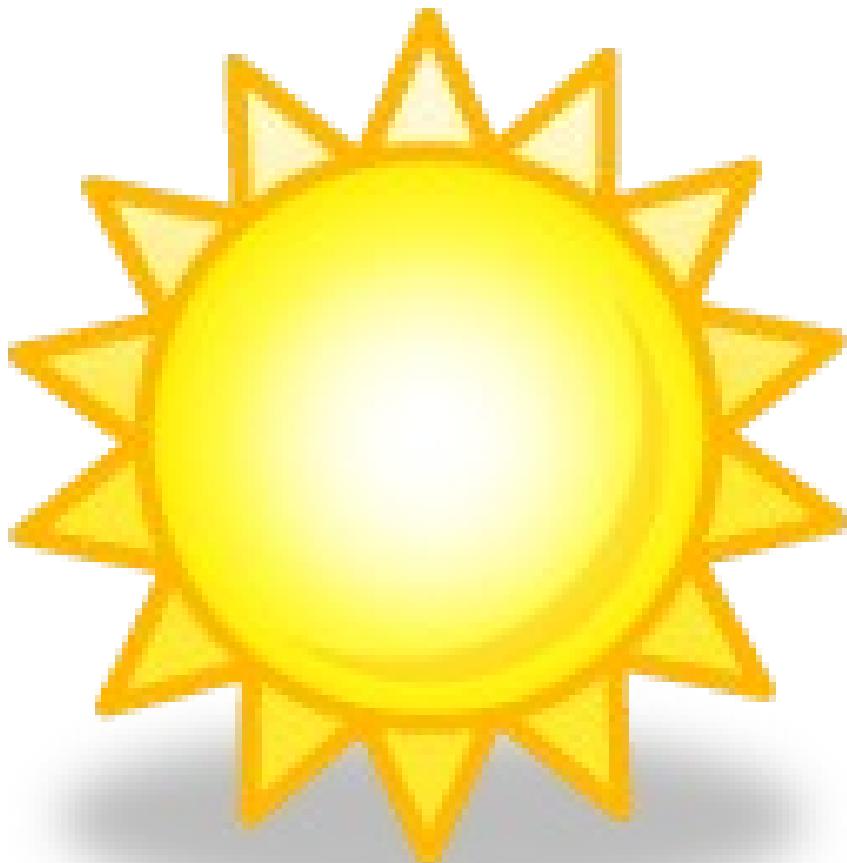
# Basic Information



Mass Ratio

Scaled Projected Separation

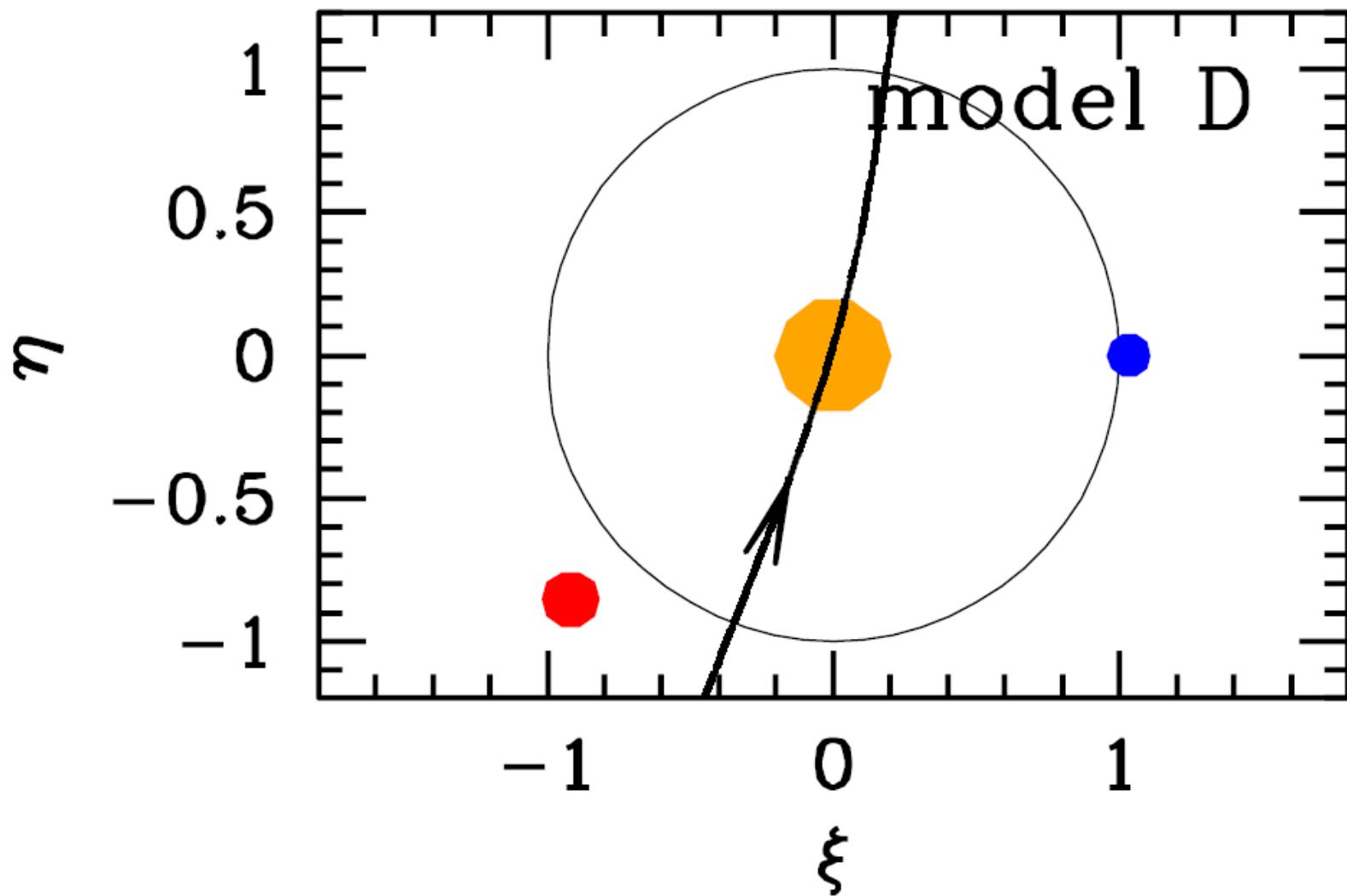
# Mass Ratio: q



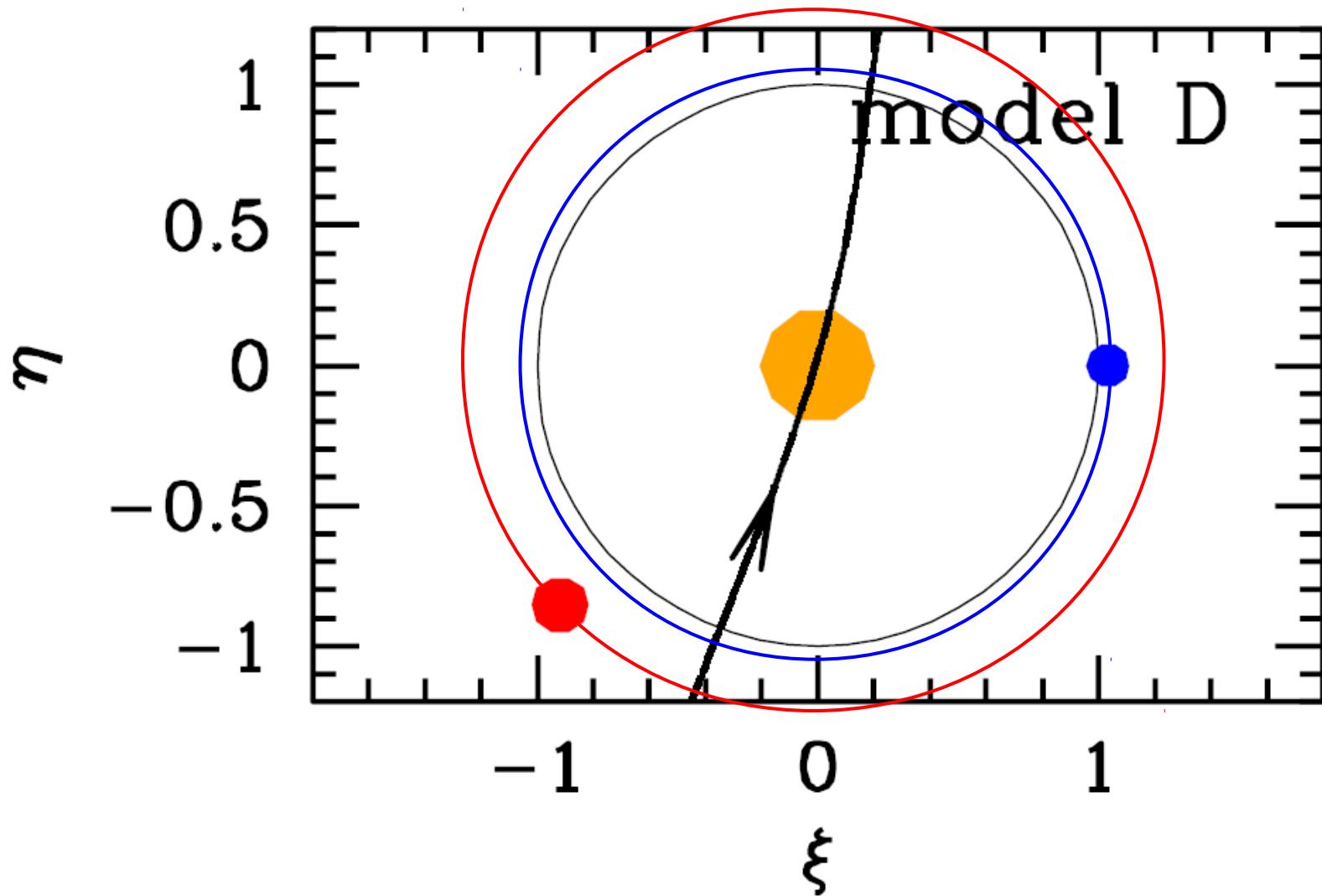
# Mass Ratio: q



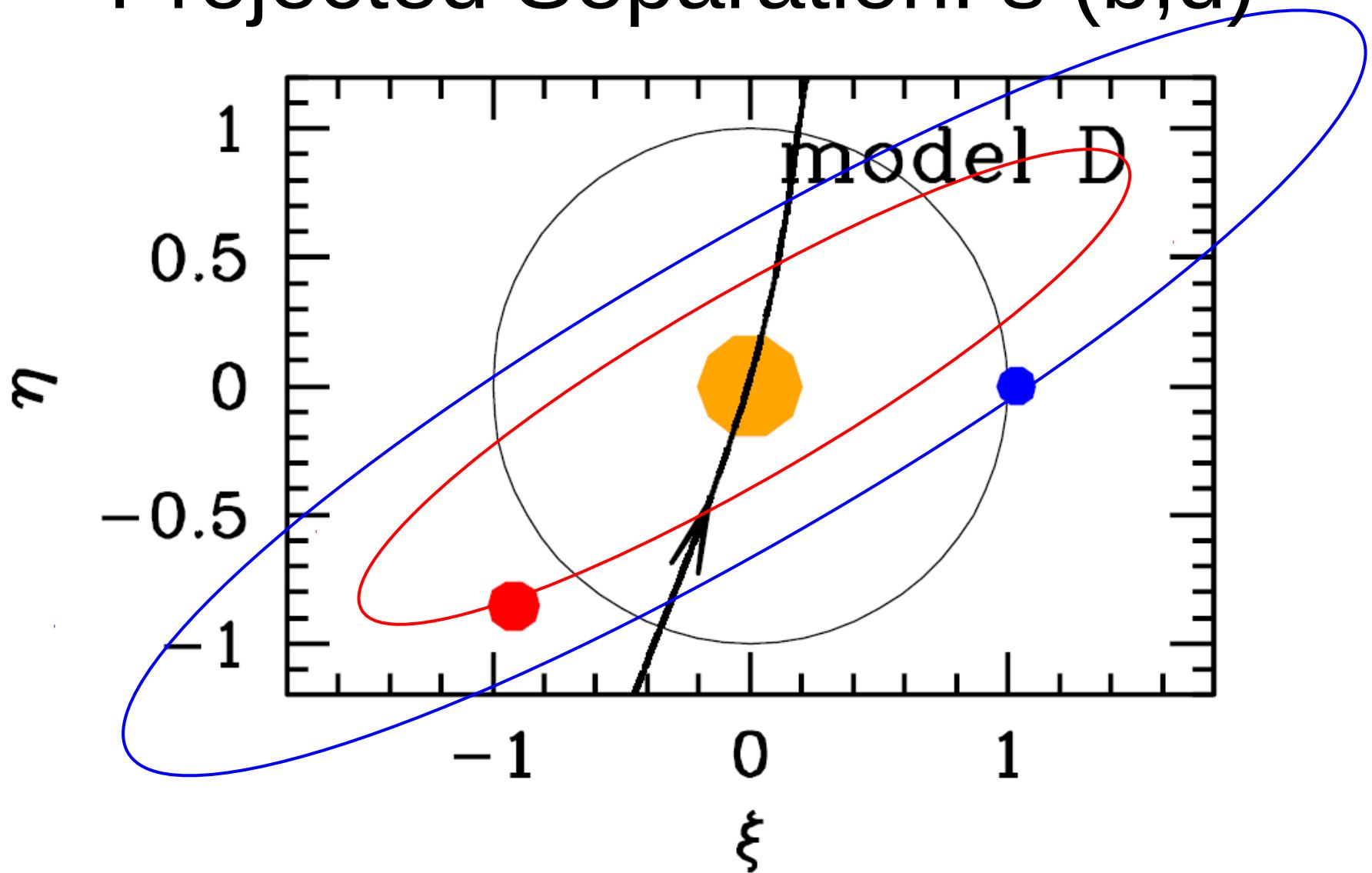
# Projected Separation: s (b,d)

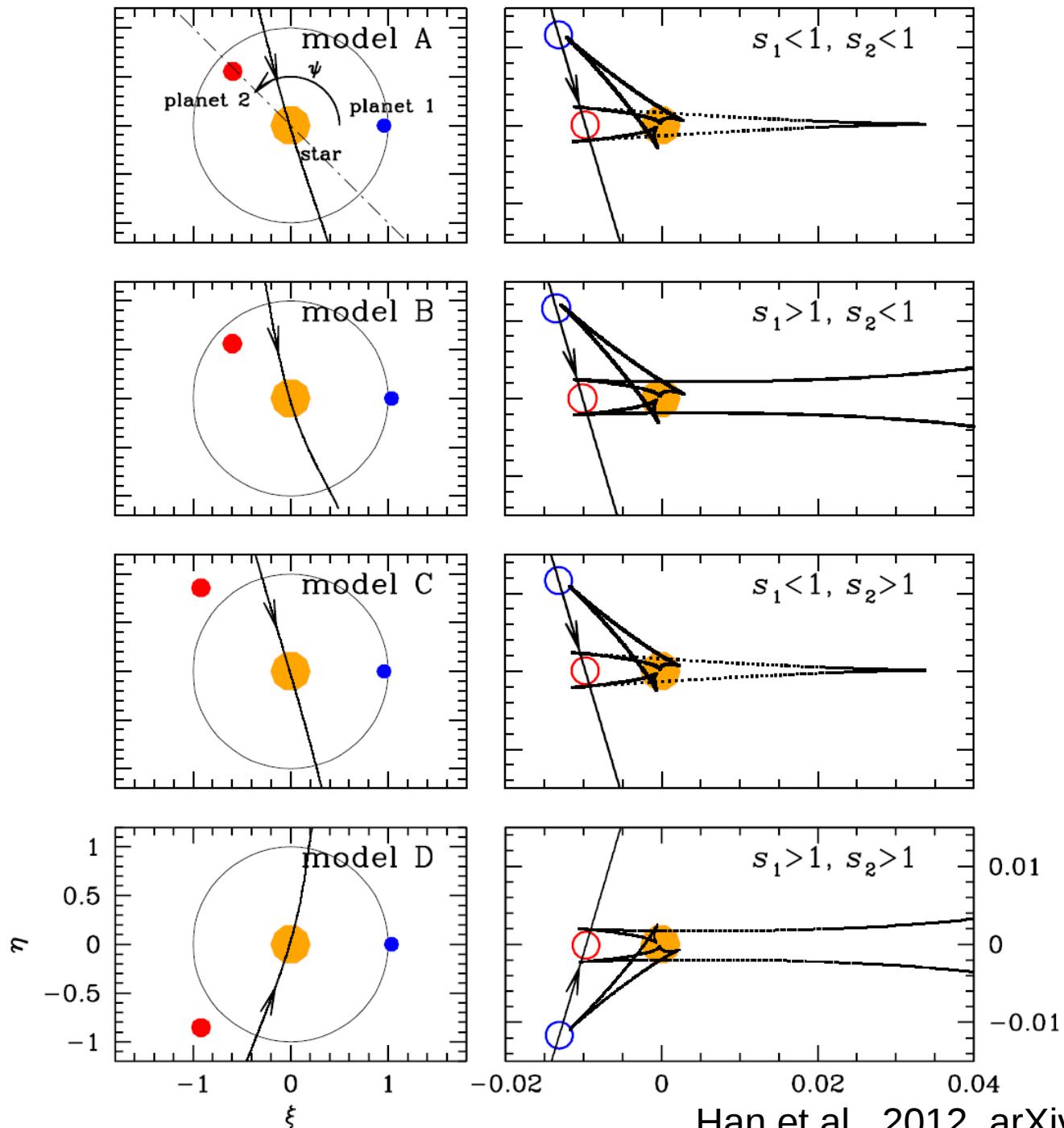


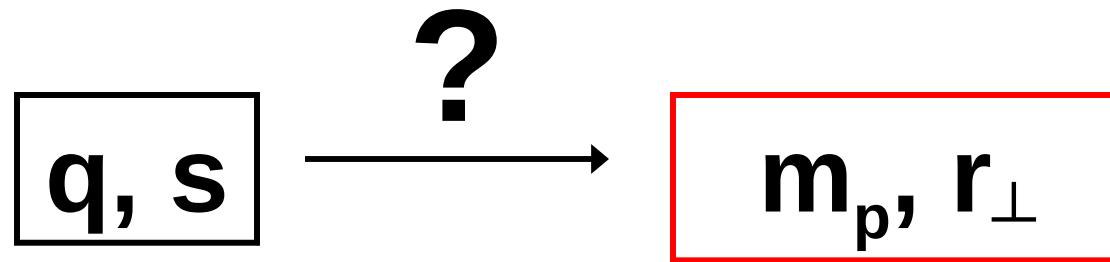
# Projected Separation: s (b,d)



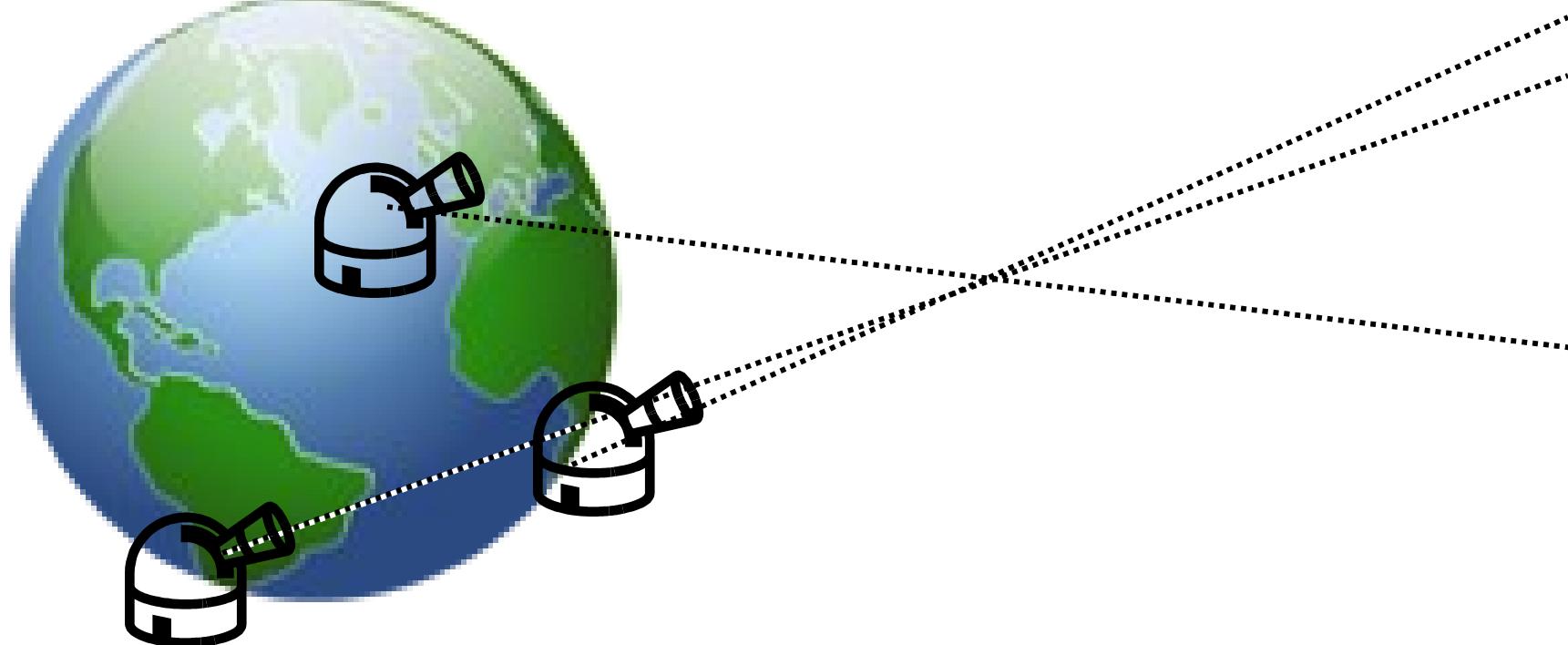
# Projected Separation: $s$ ( $b, d$ )



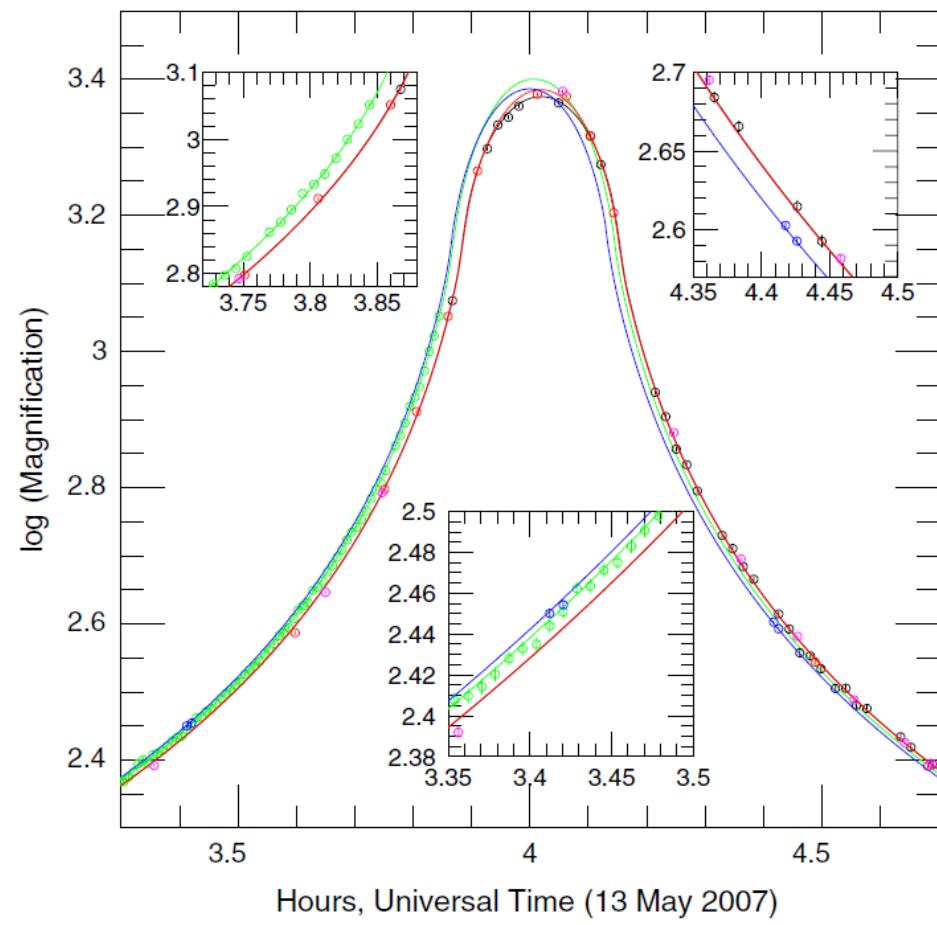
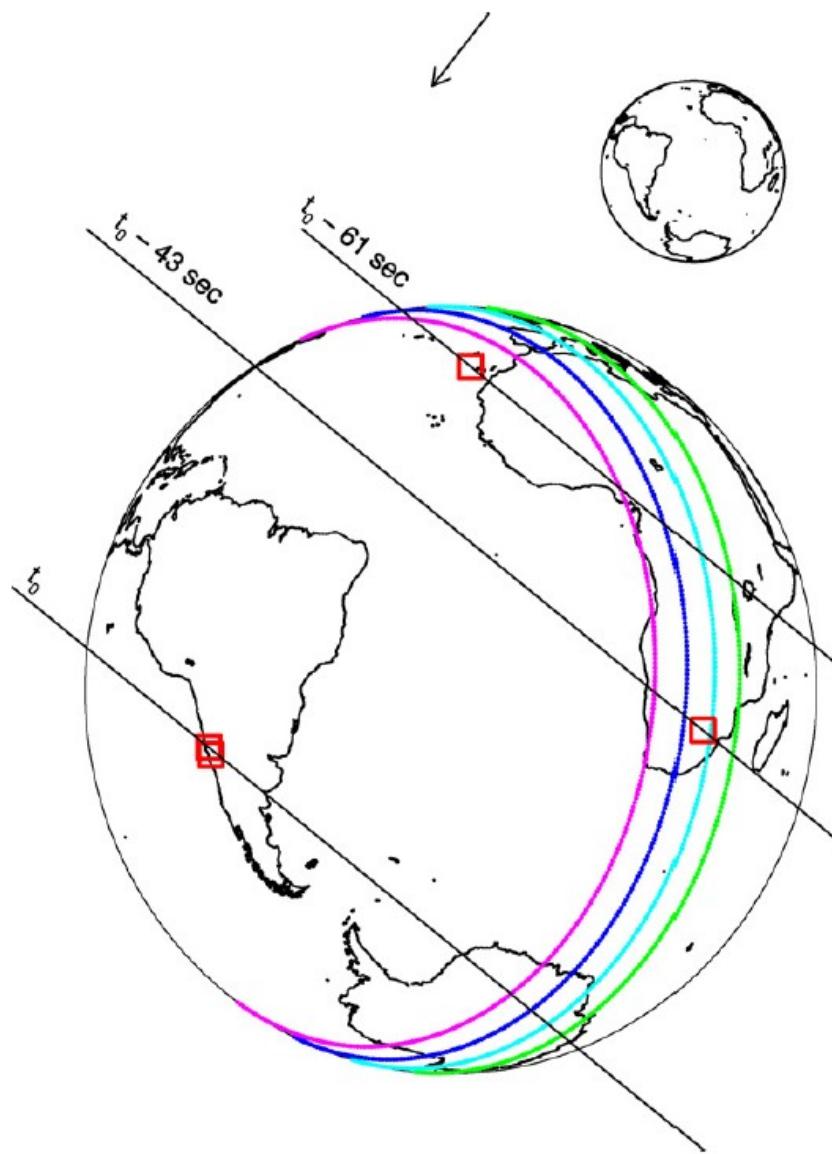




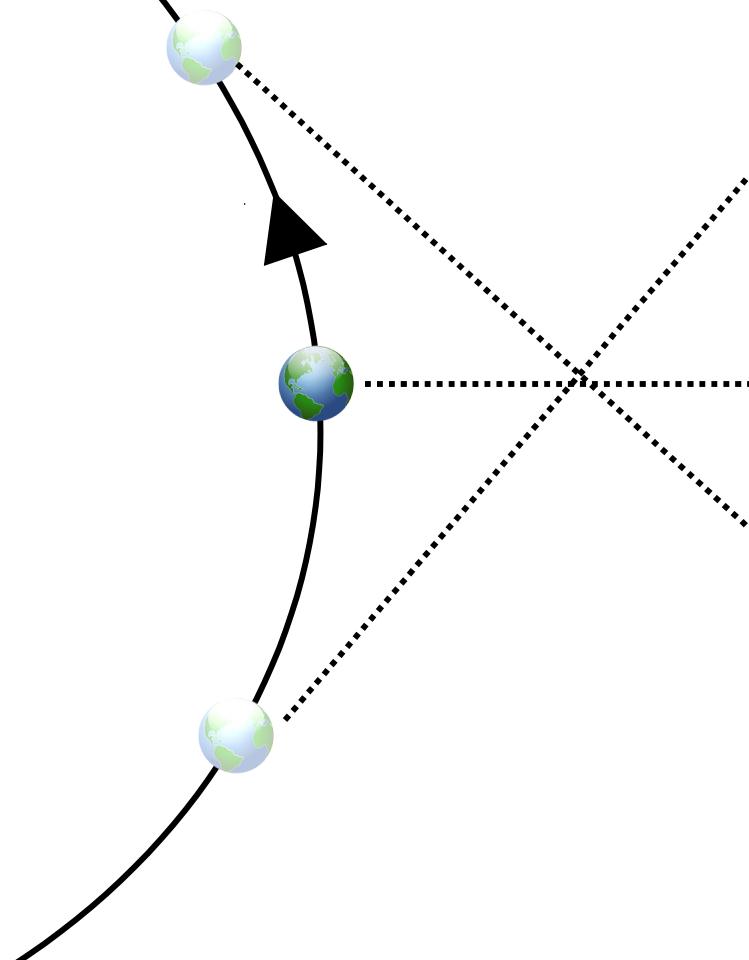
# Terrestrial Parallax



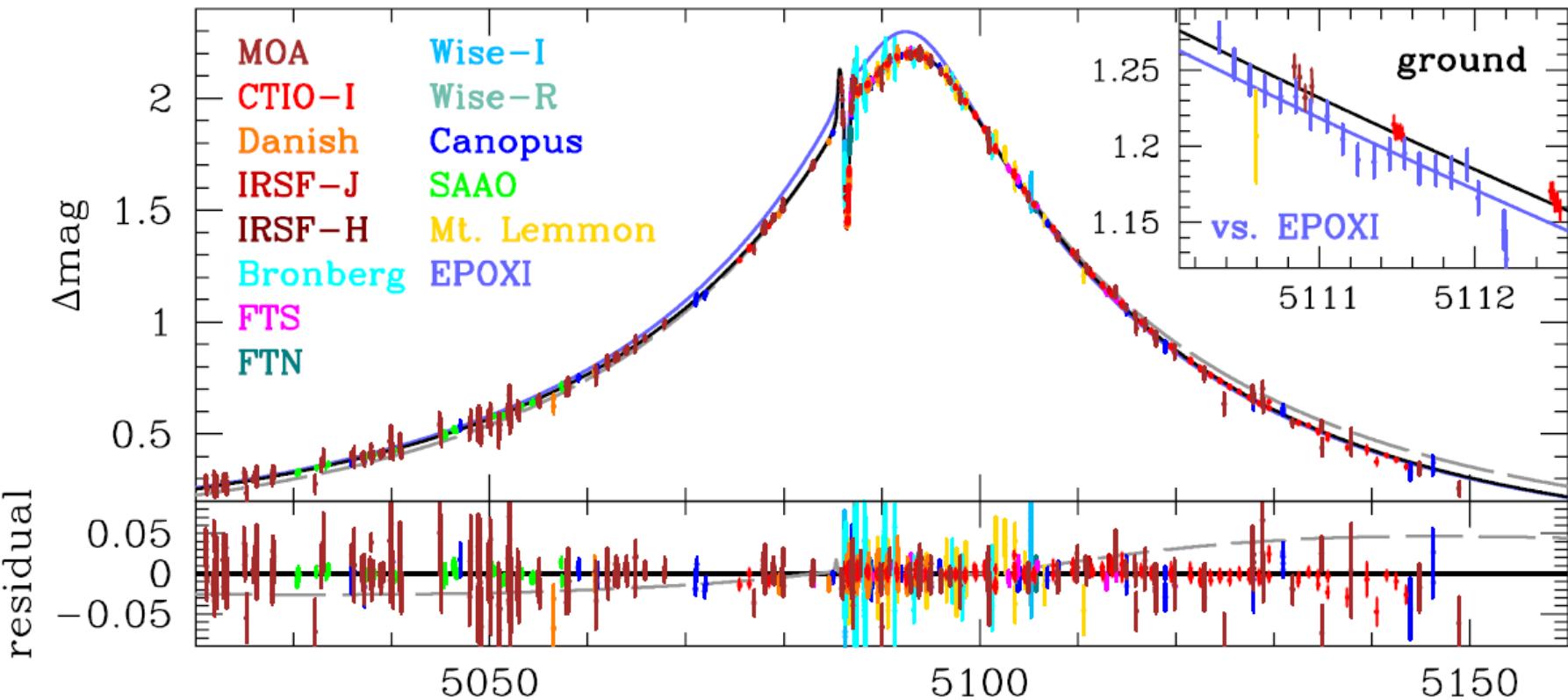
# OGLE-2007-BLG-224



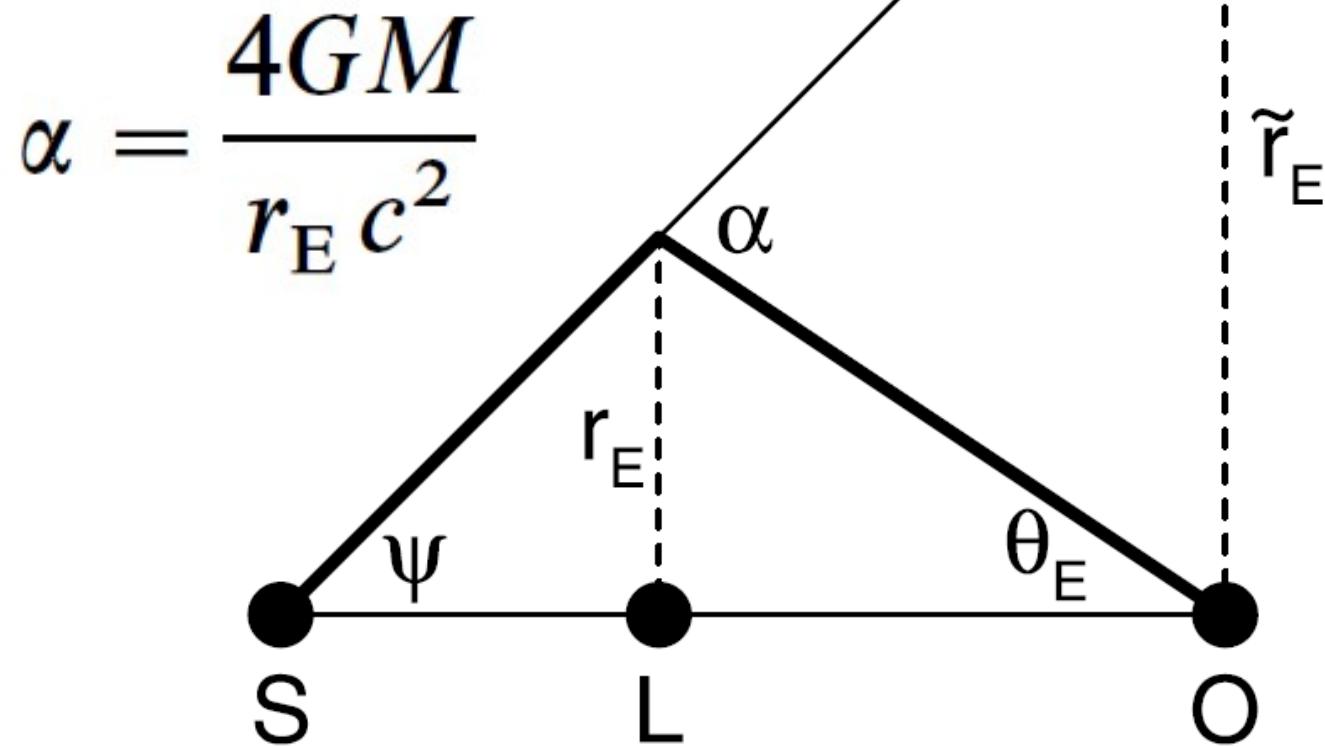
# Orbital Parallax



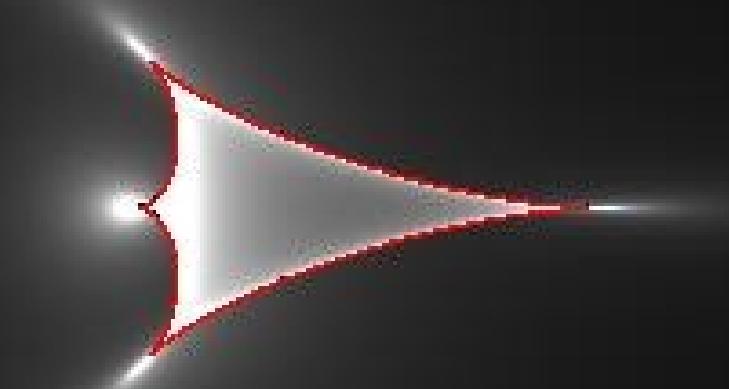
# MOA-2009-BLG-266



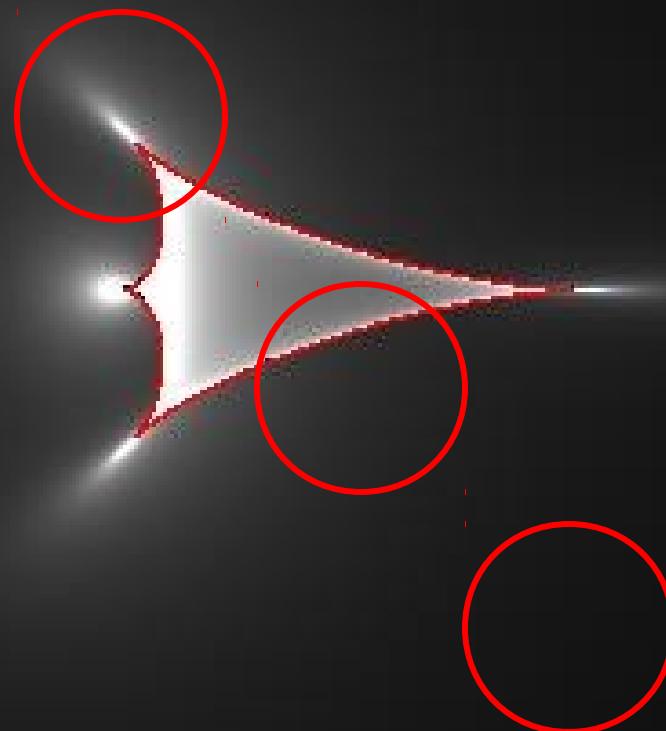
$$\pi_E \equiv \frac{AU}{\tilde{r}_E}$$



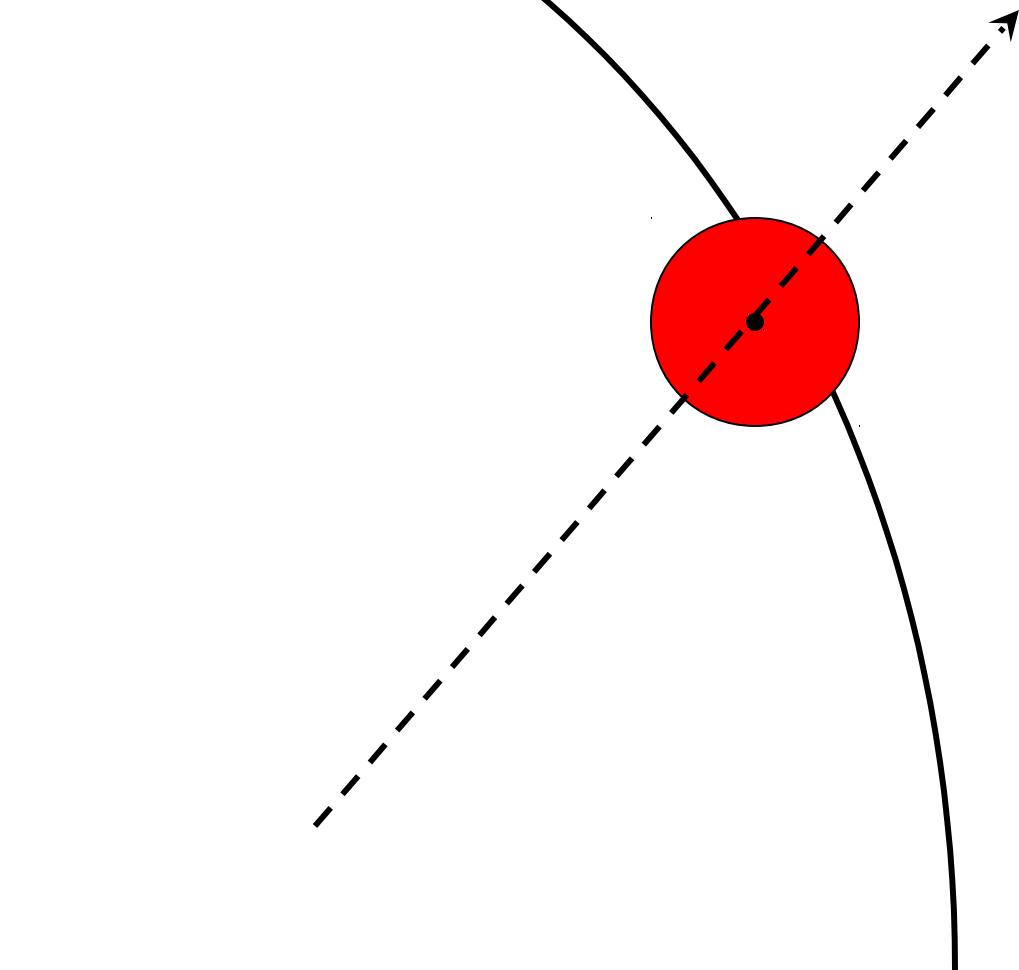
# Finite Source Effects



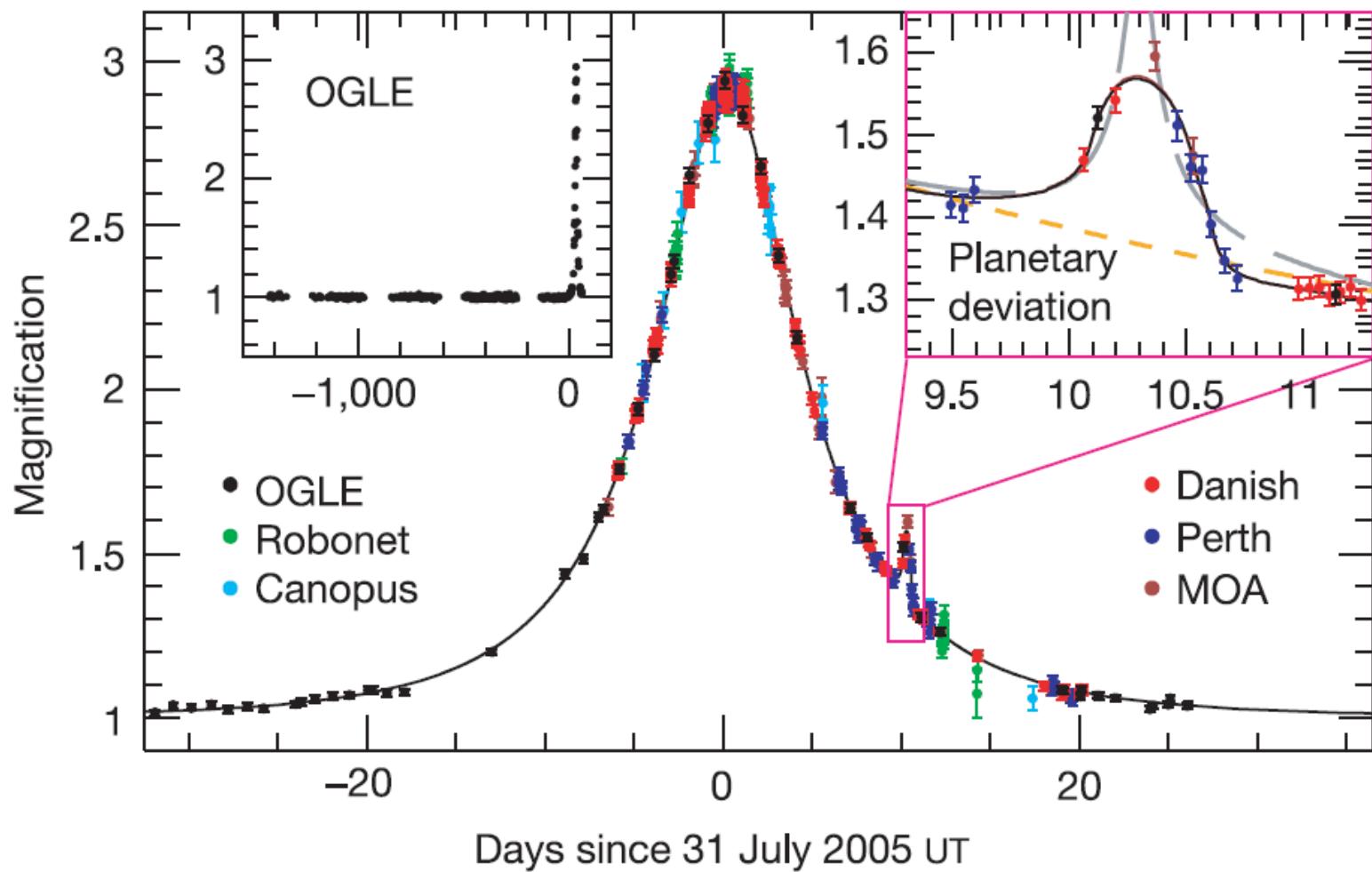
# Finite Source Effects



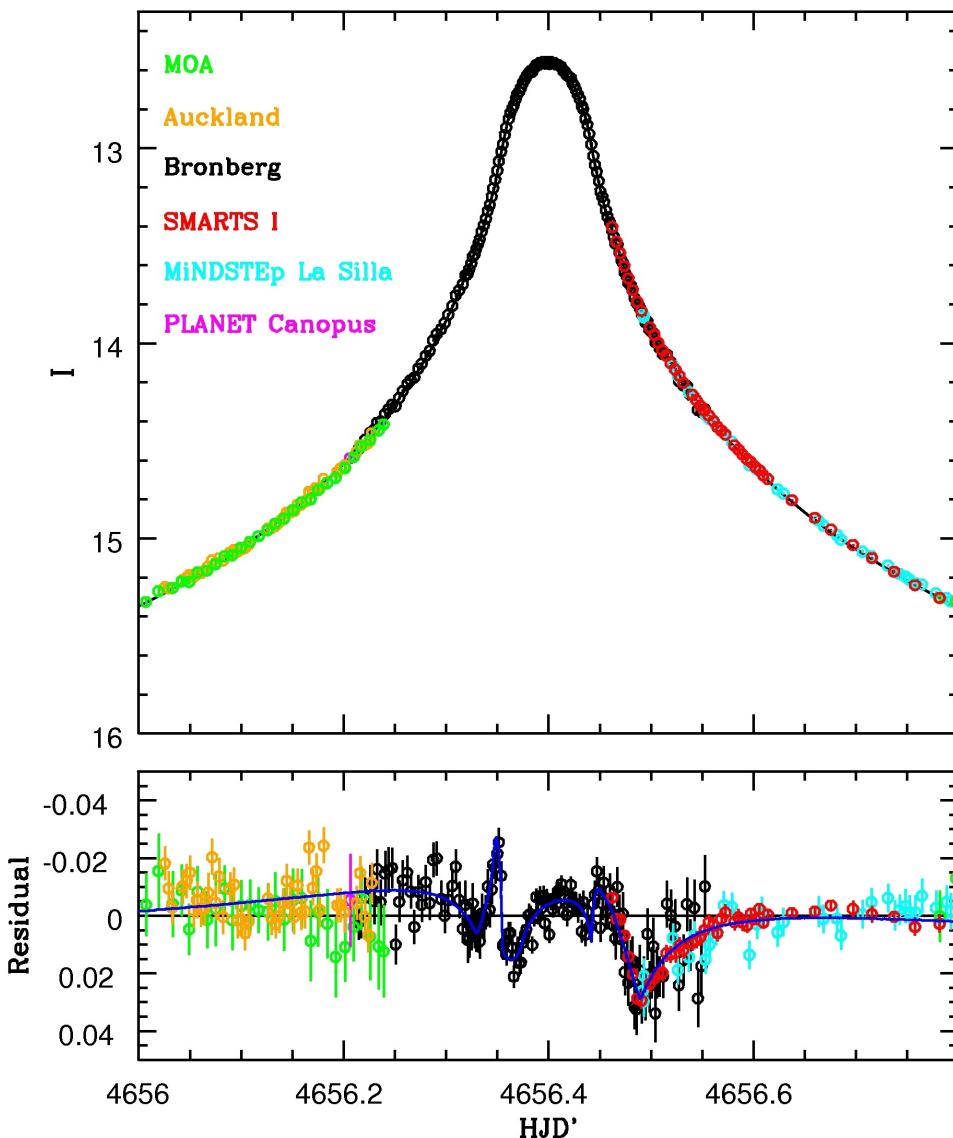
# Finite Source Effects



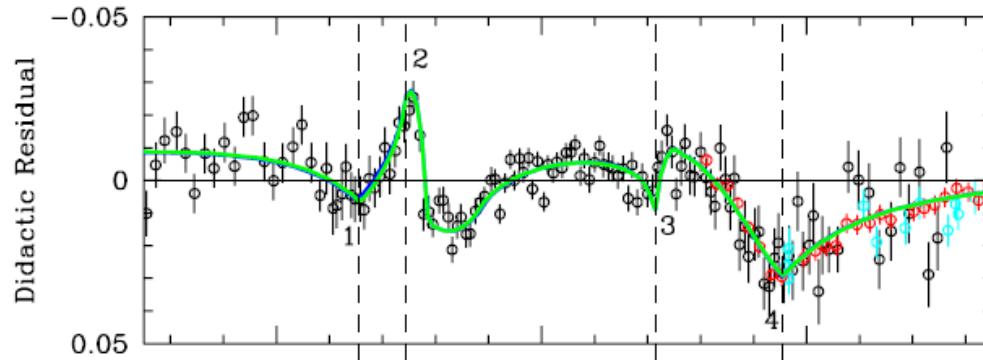
# OGLE-2005-BLG-390



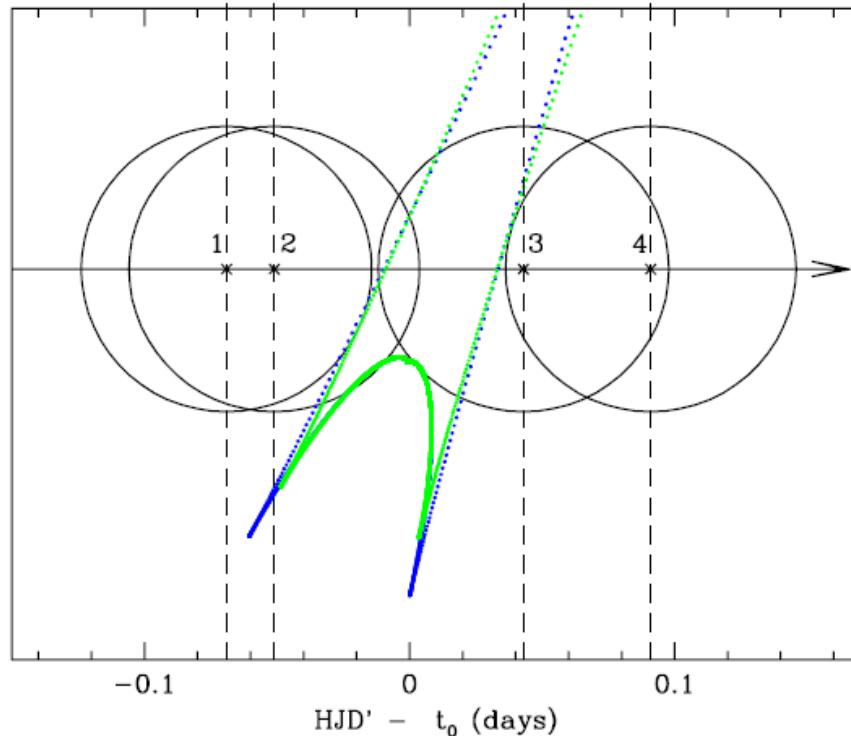
# MOA-2008-BLG-310



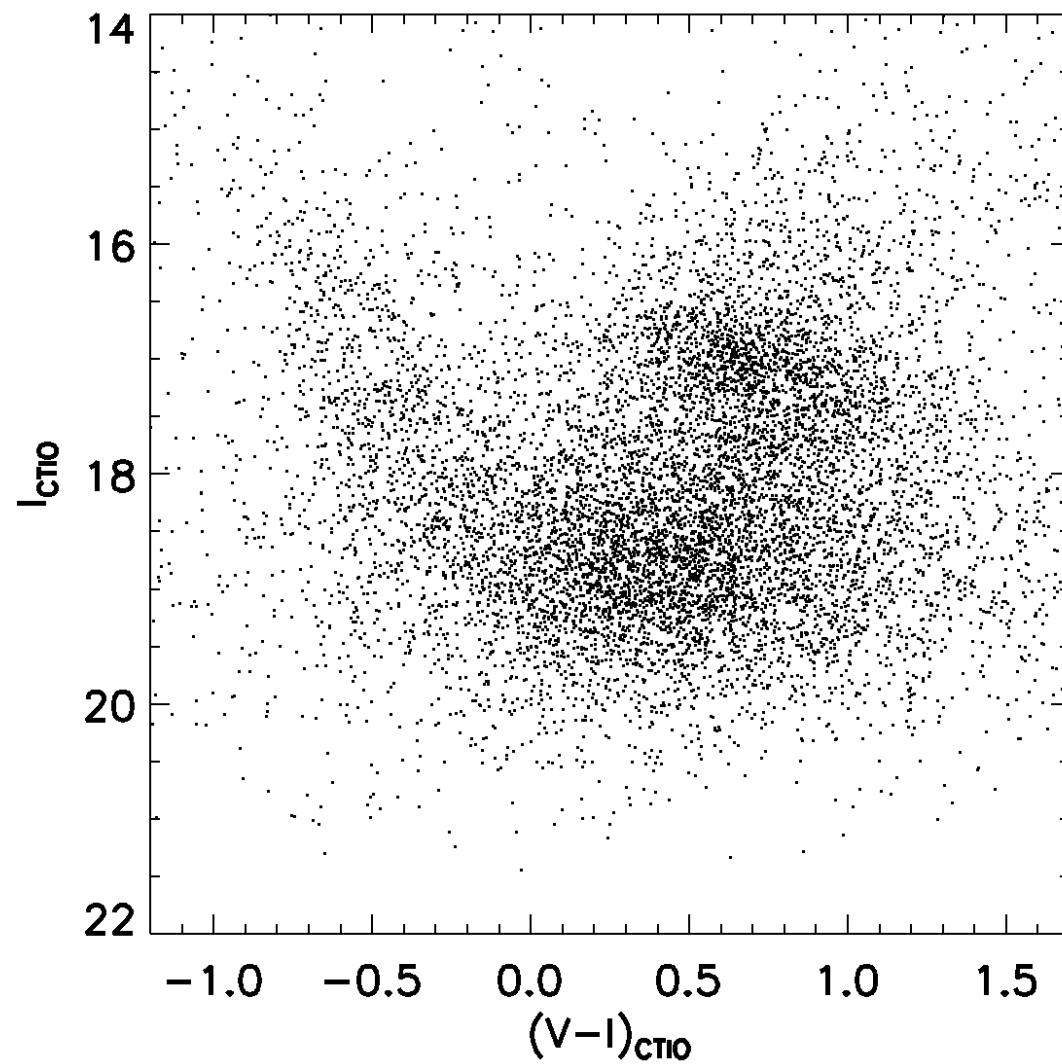
# MOA-2008-BLG-310



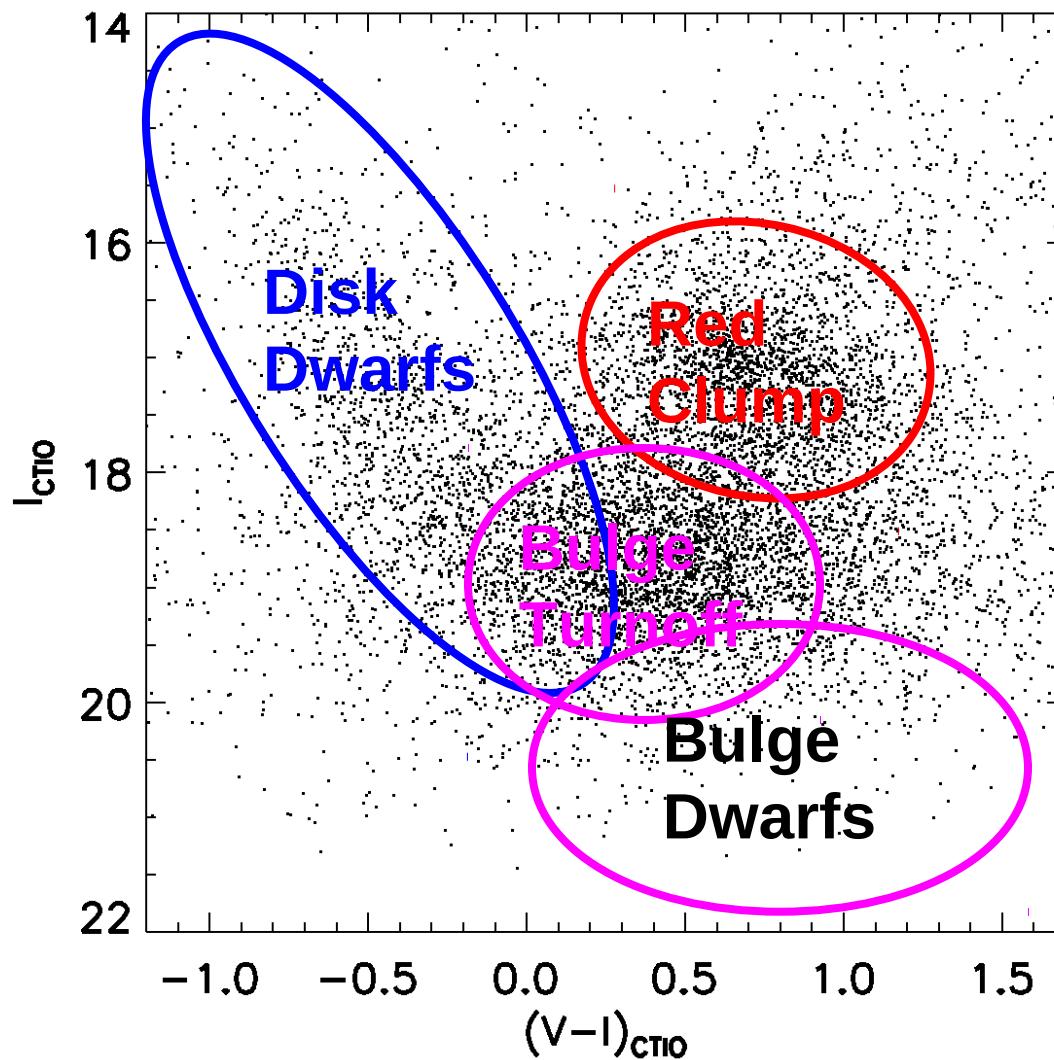
Wide Solution  
Close Solution  
 $\mu$ FUN Bronberg  
 $\mu$ FUN SMARTS I  
MiNDSTEp La Silla



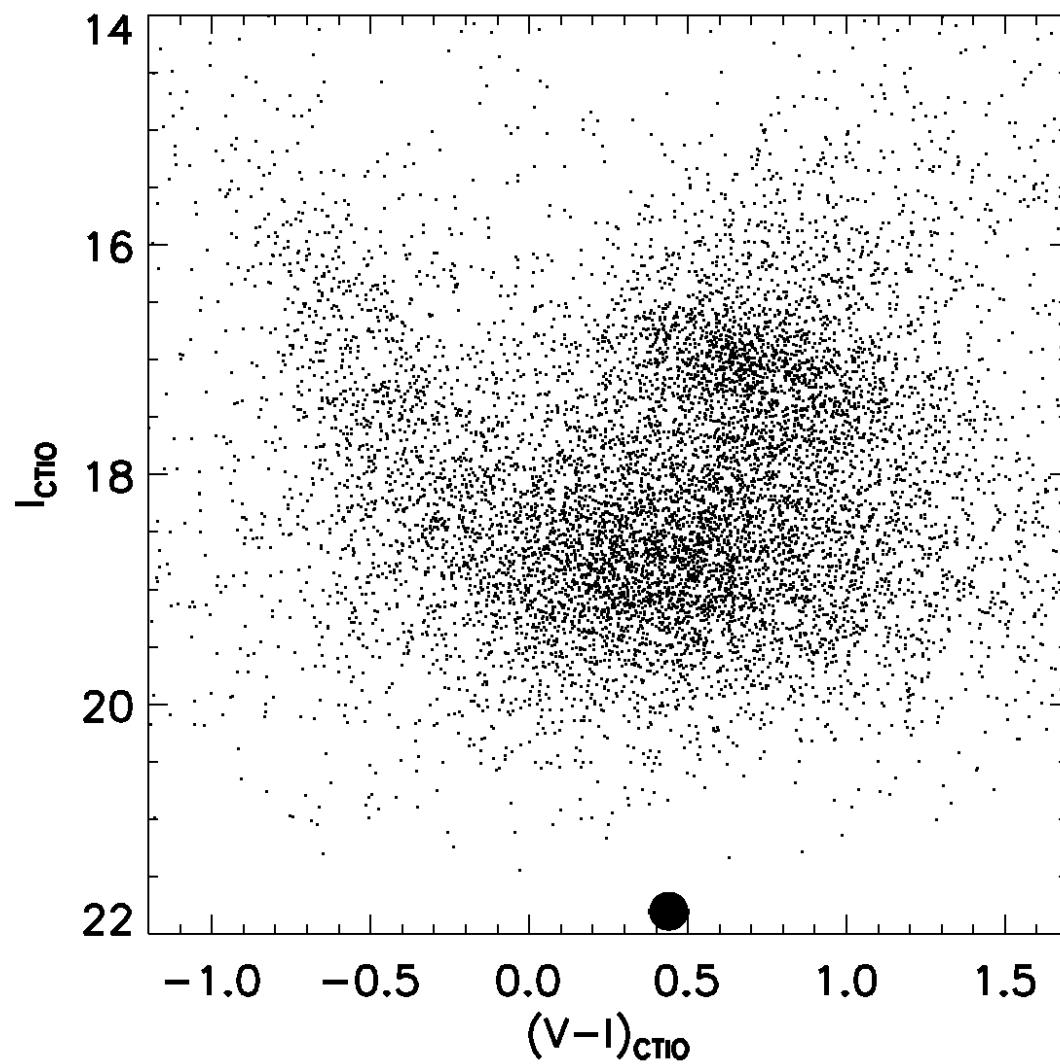
# CMD

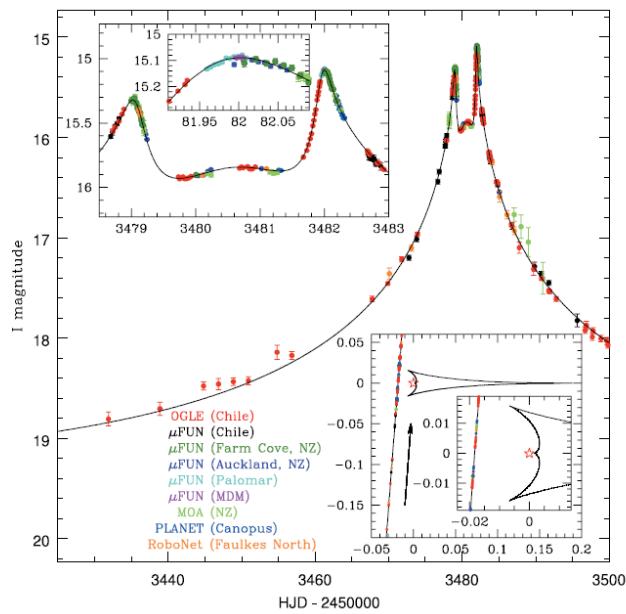
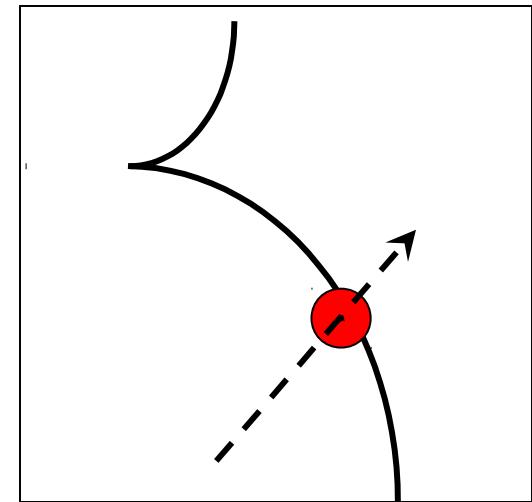
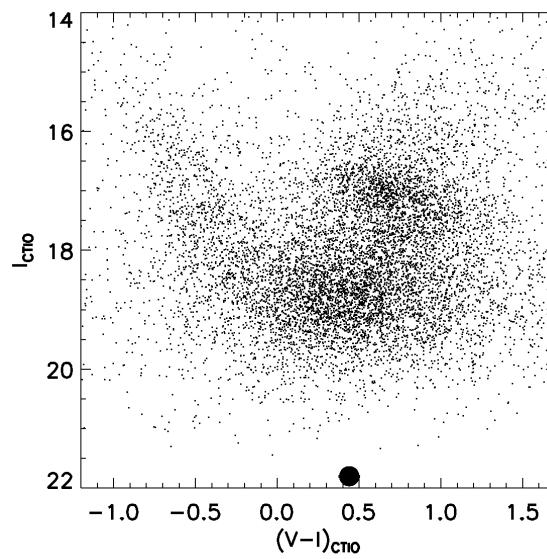
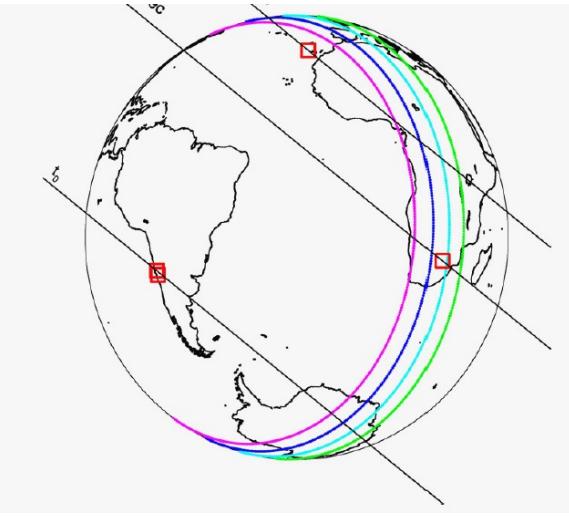


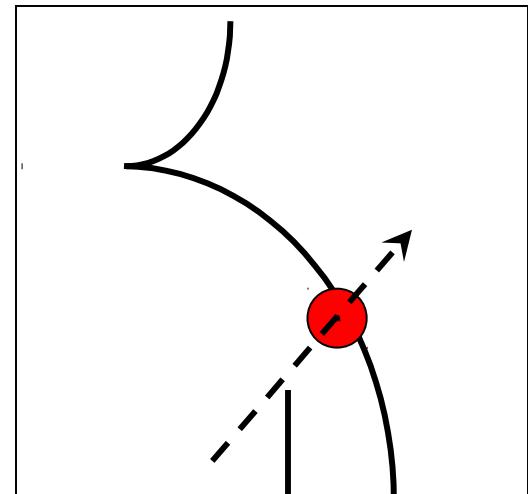
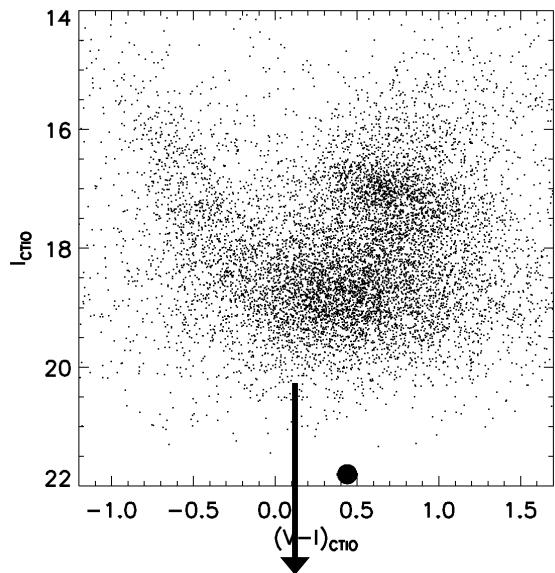
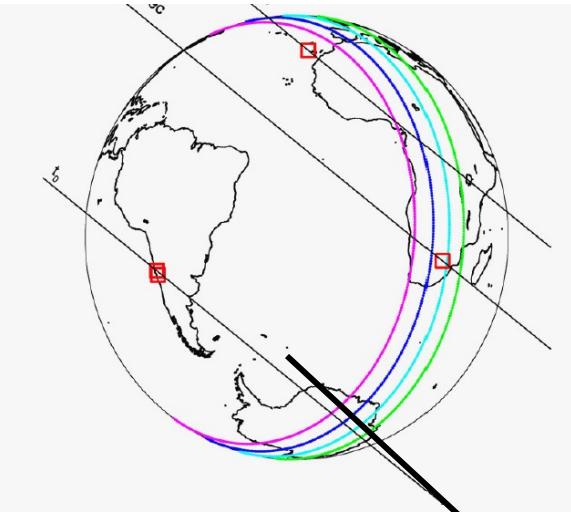
# CMD



# CMD

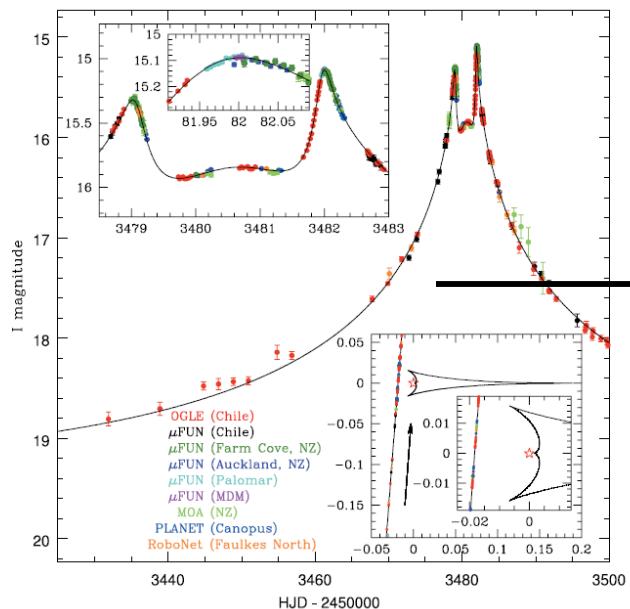






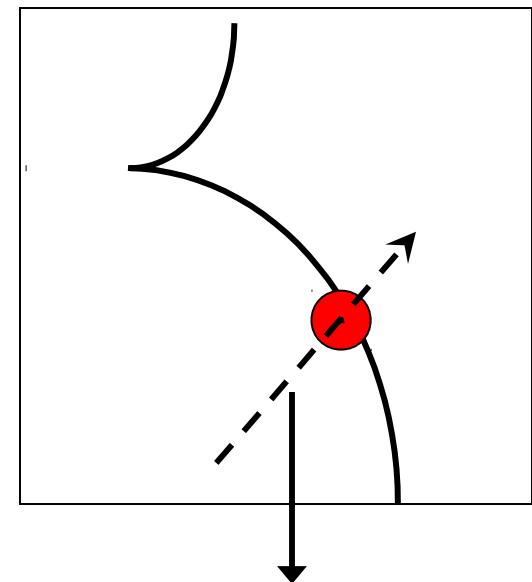
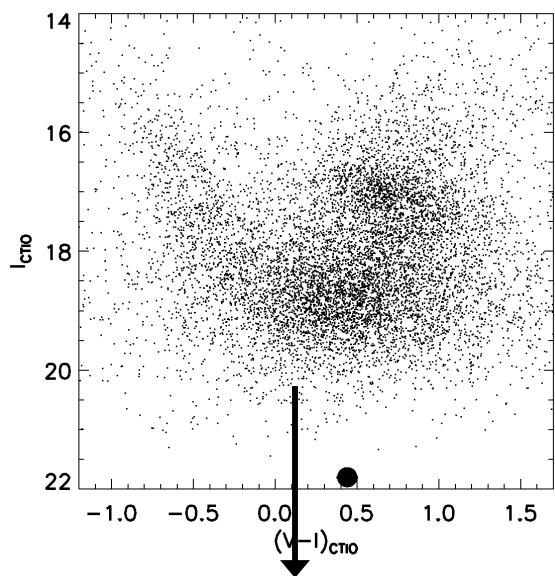
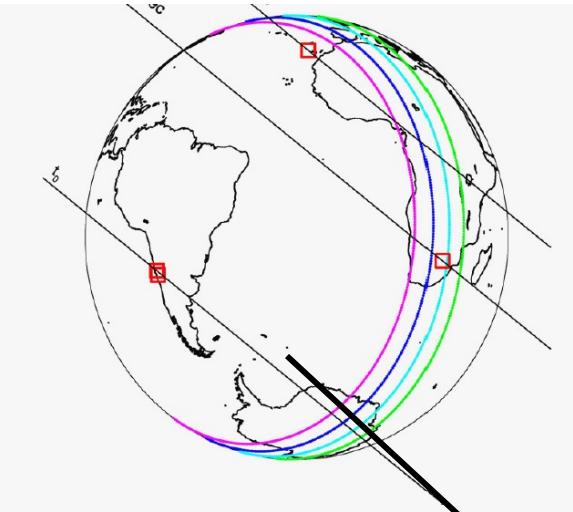
$$\theta_*$$

$$\rho$$



$$\pi_E$$

$$q, S$$



$\theta_*$

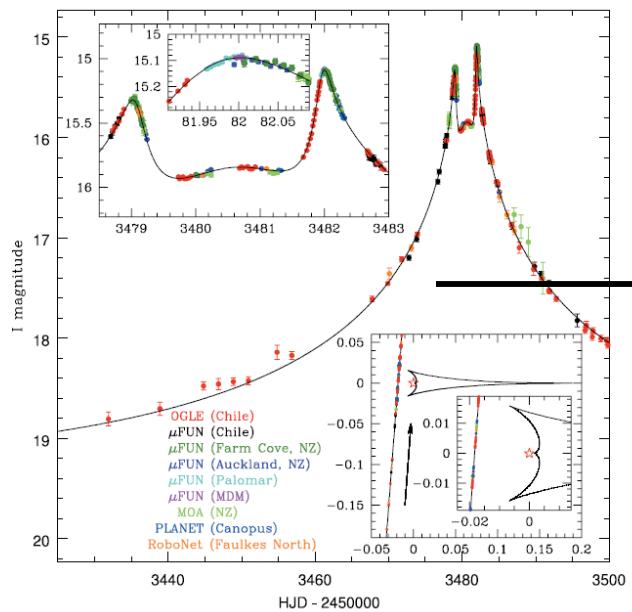
+

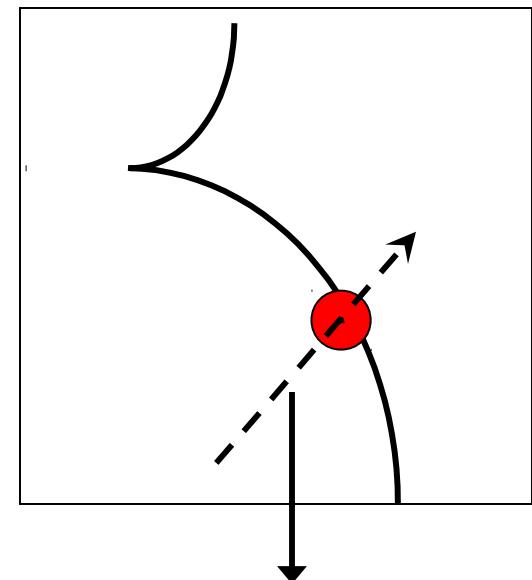
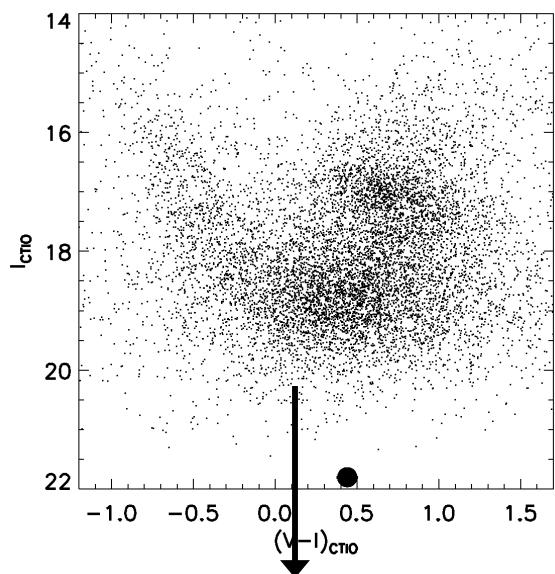
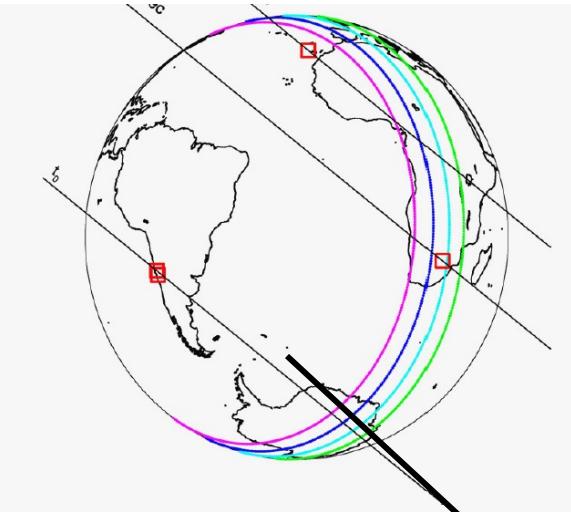
$\rho$

$\pi_E$

$\theta_E$

$q, S$





$\theta_*$

+

$\rho$

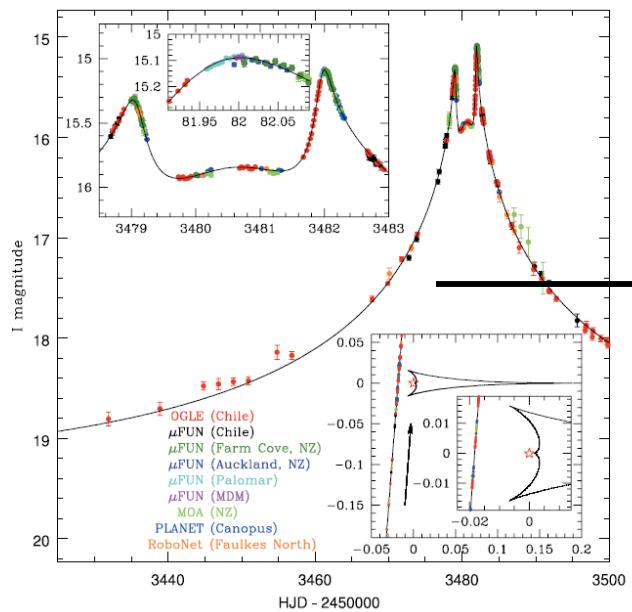
$\pi_E$

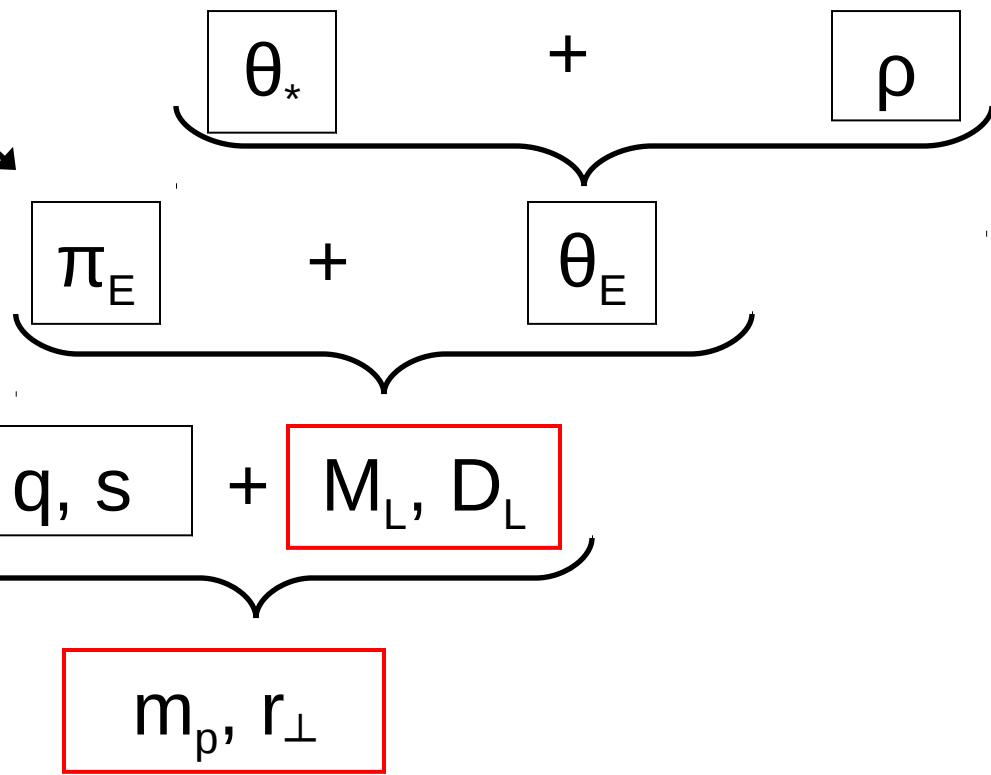
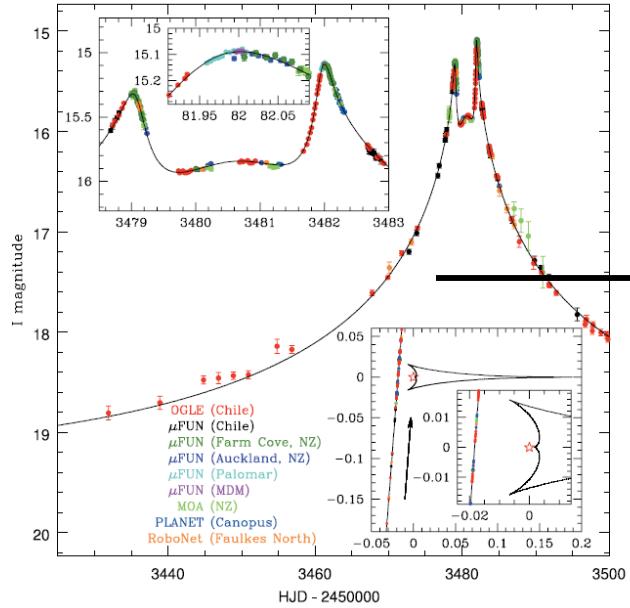
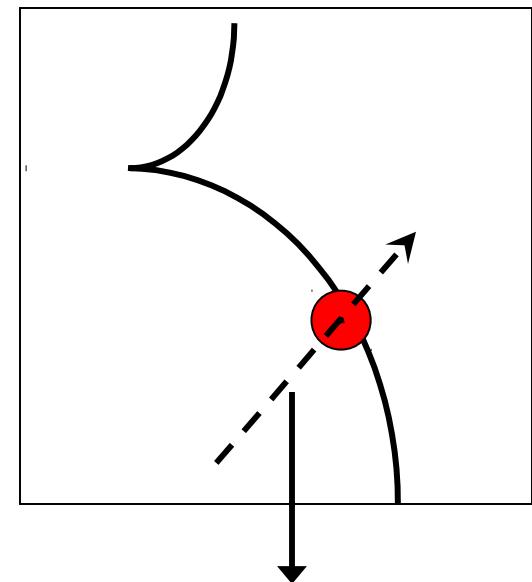
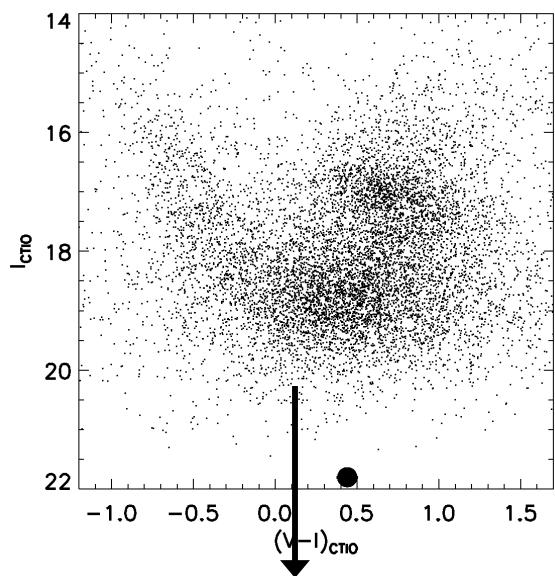
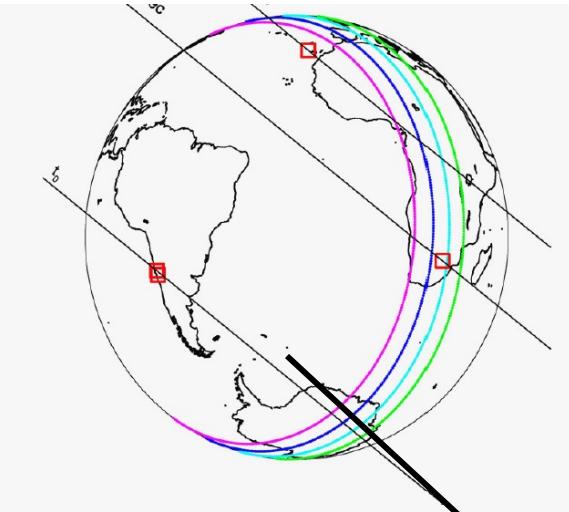
+

$\theta_E$

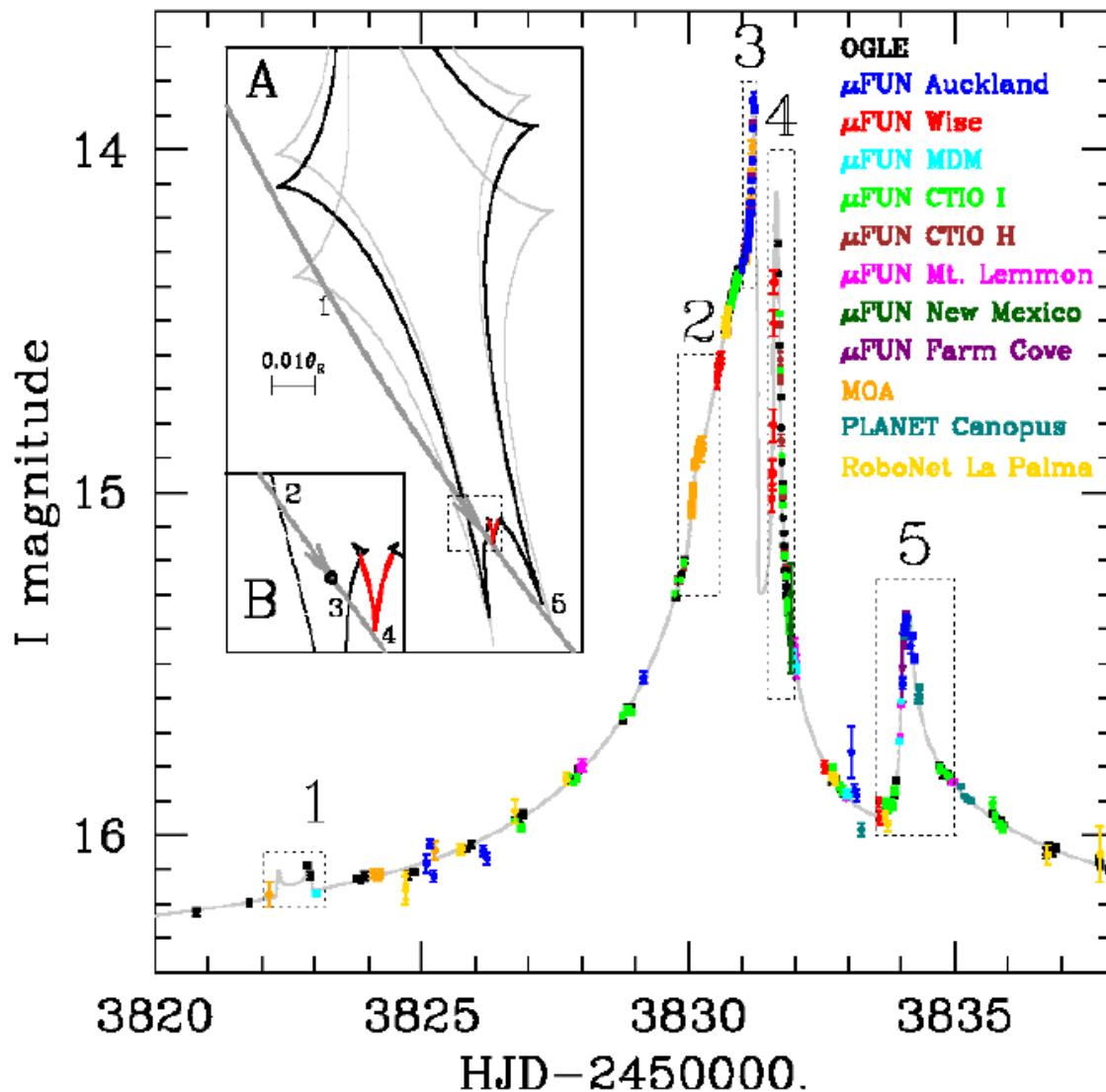
$q, S$

$M_L, D_L$

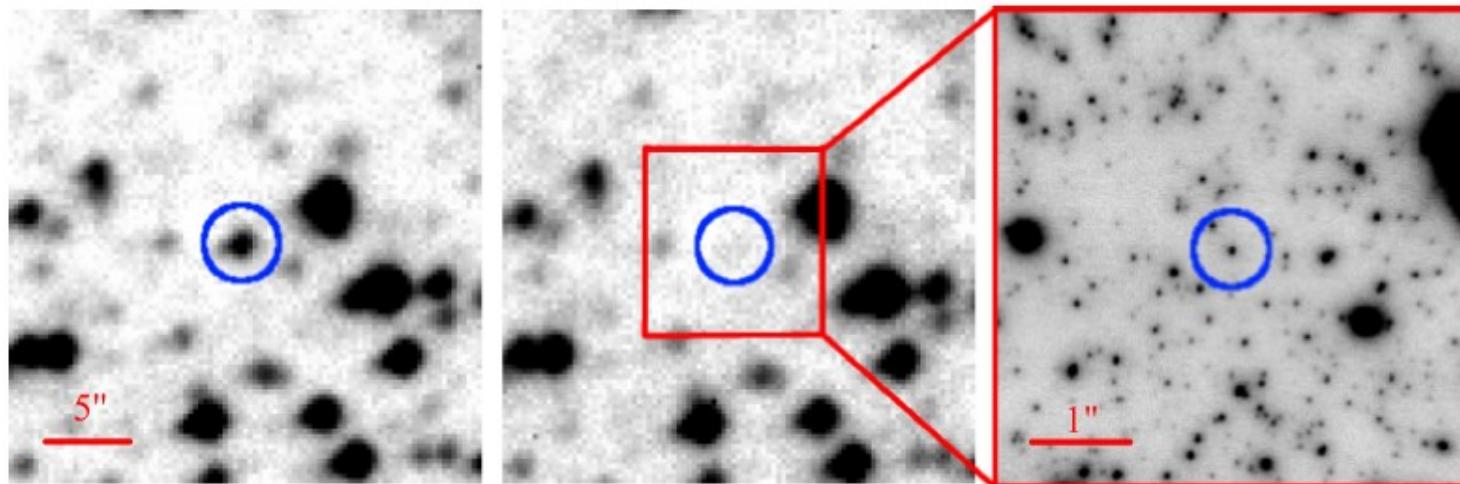




# Orbital Motion

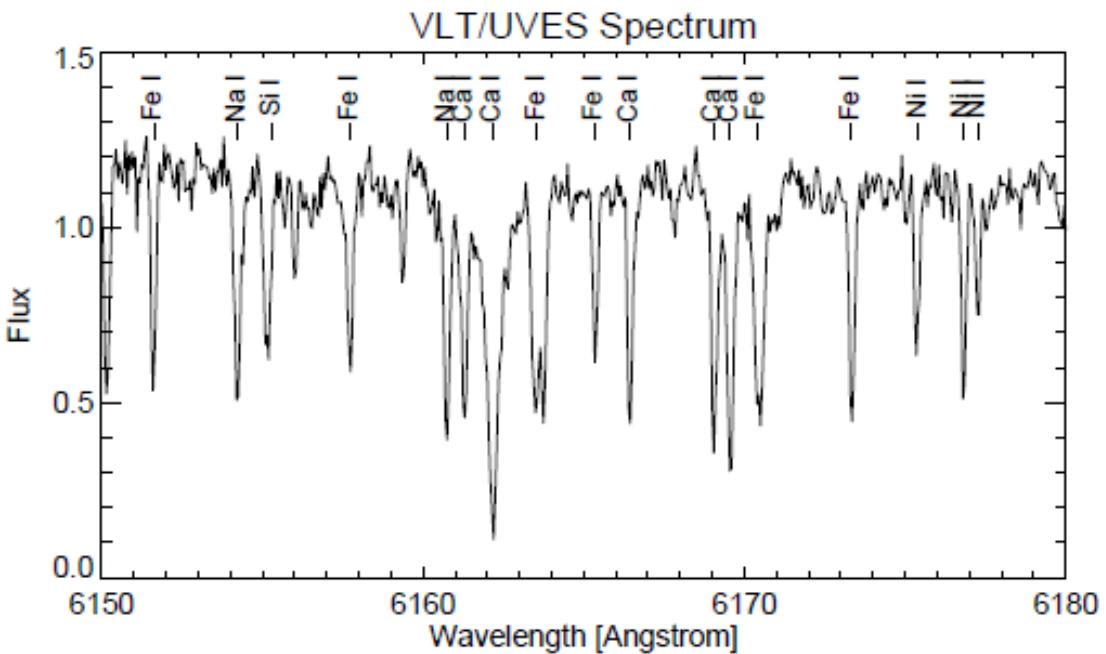
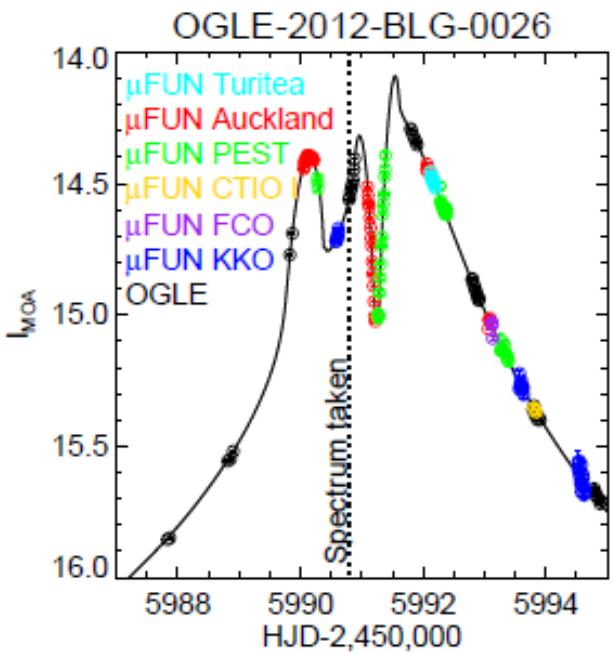


# Adaptive Optics Imaging

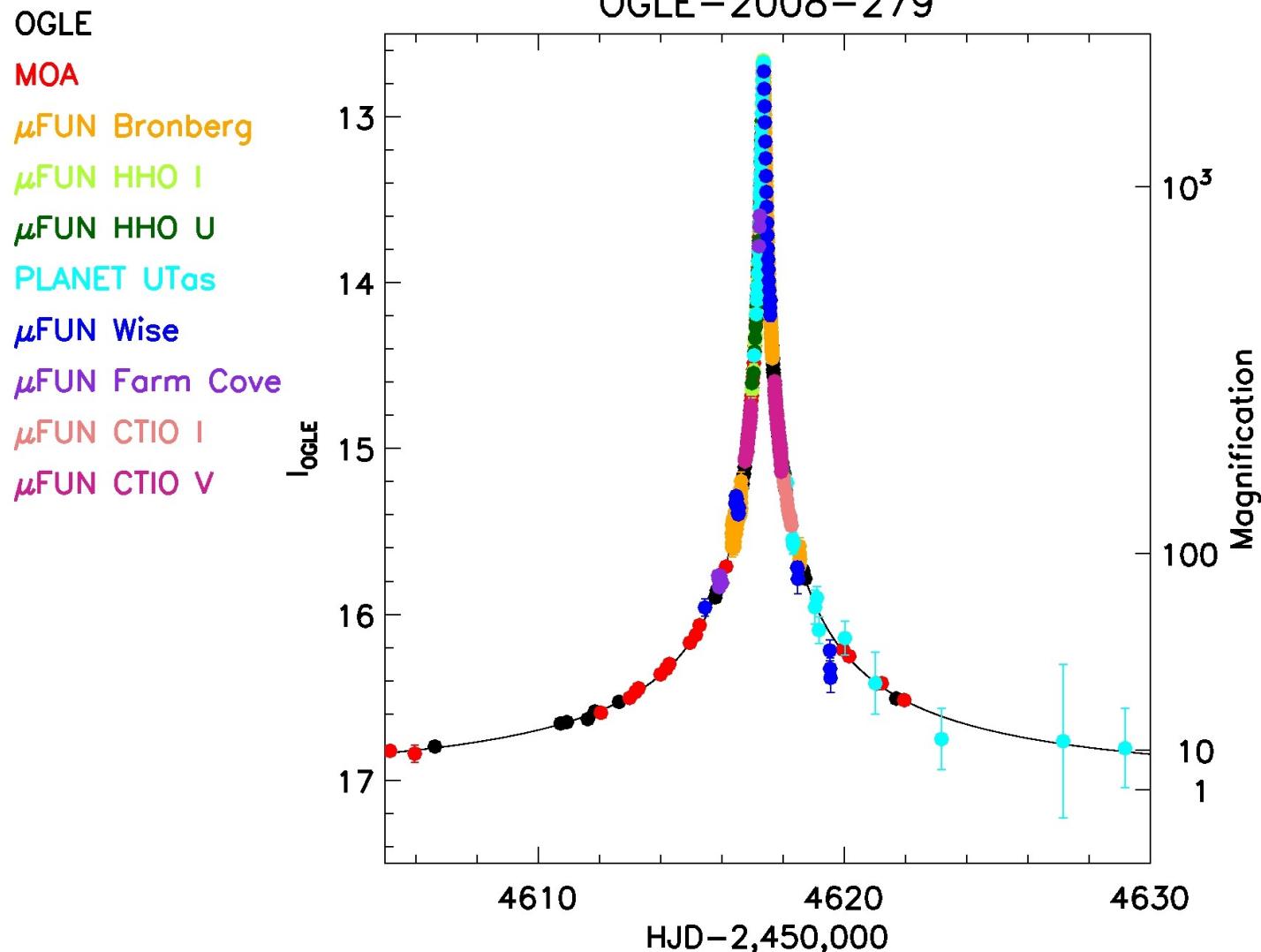


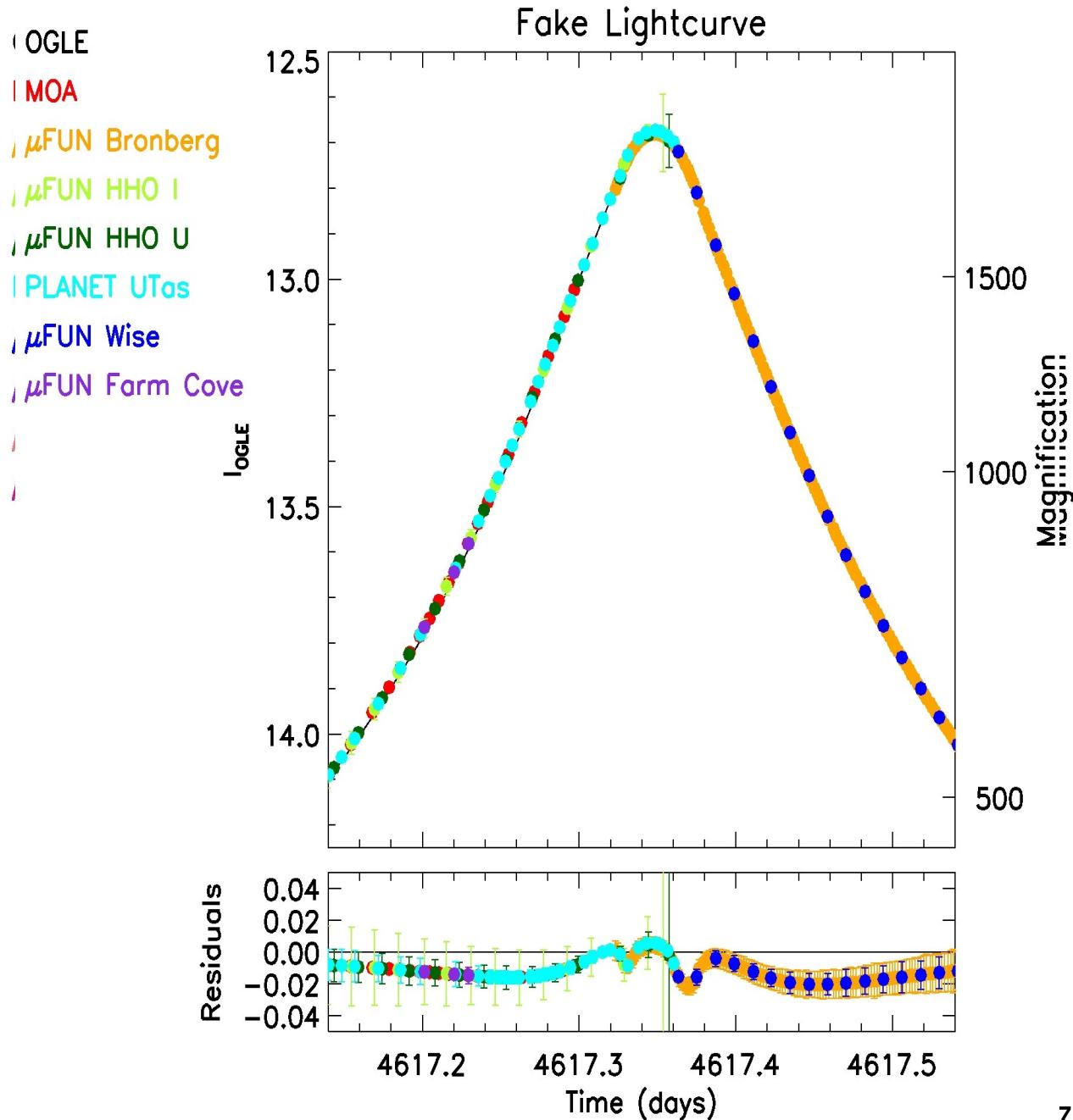
$M_L$

# Spectra

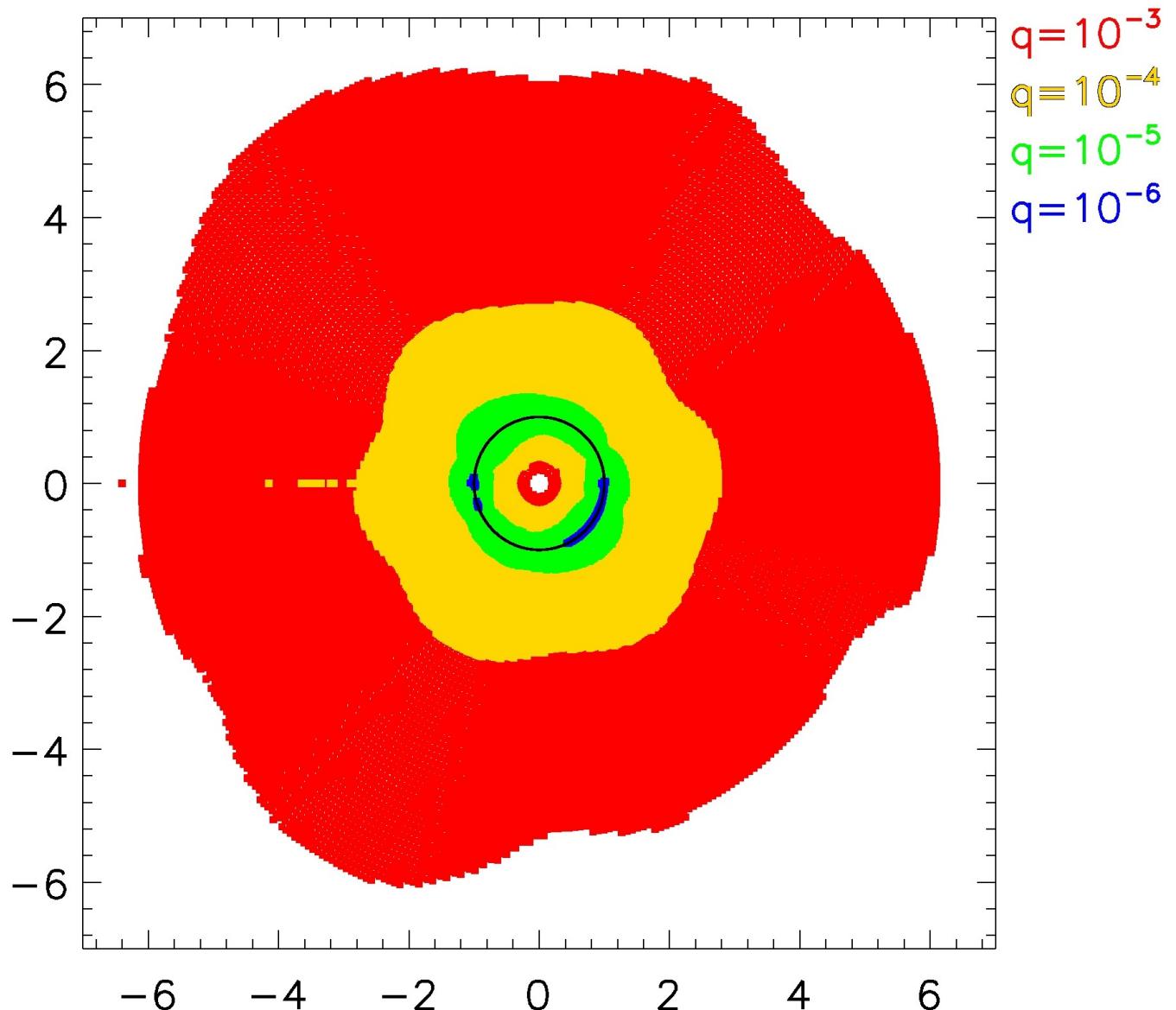


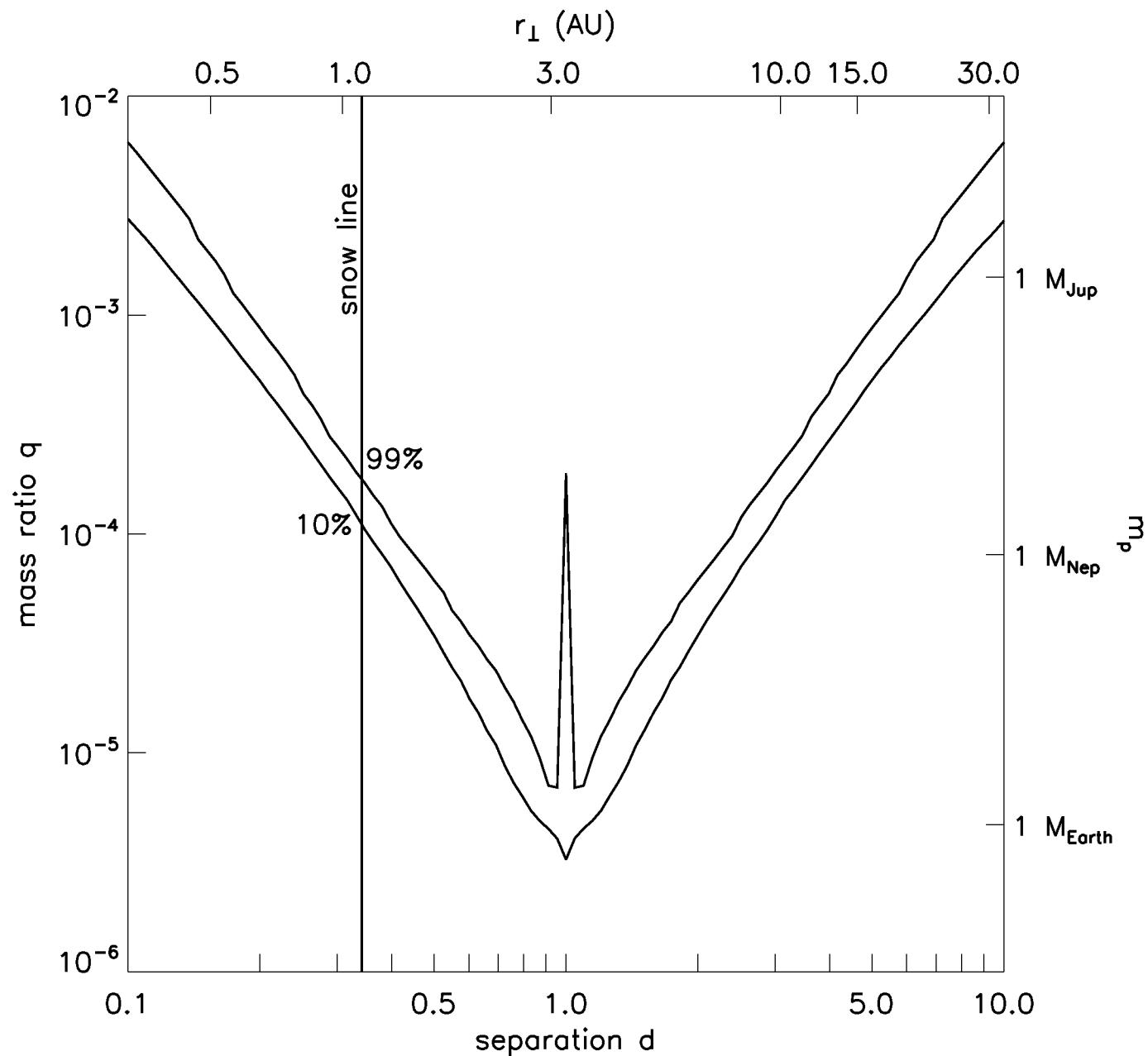
# OGLE-2008-279

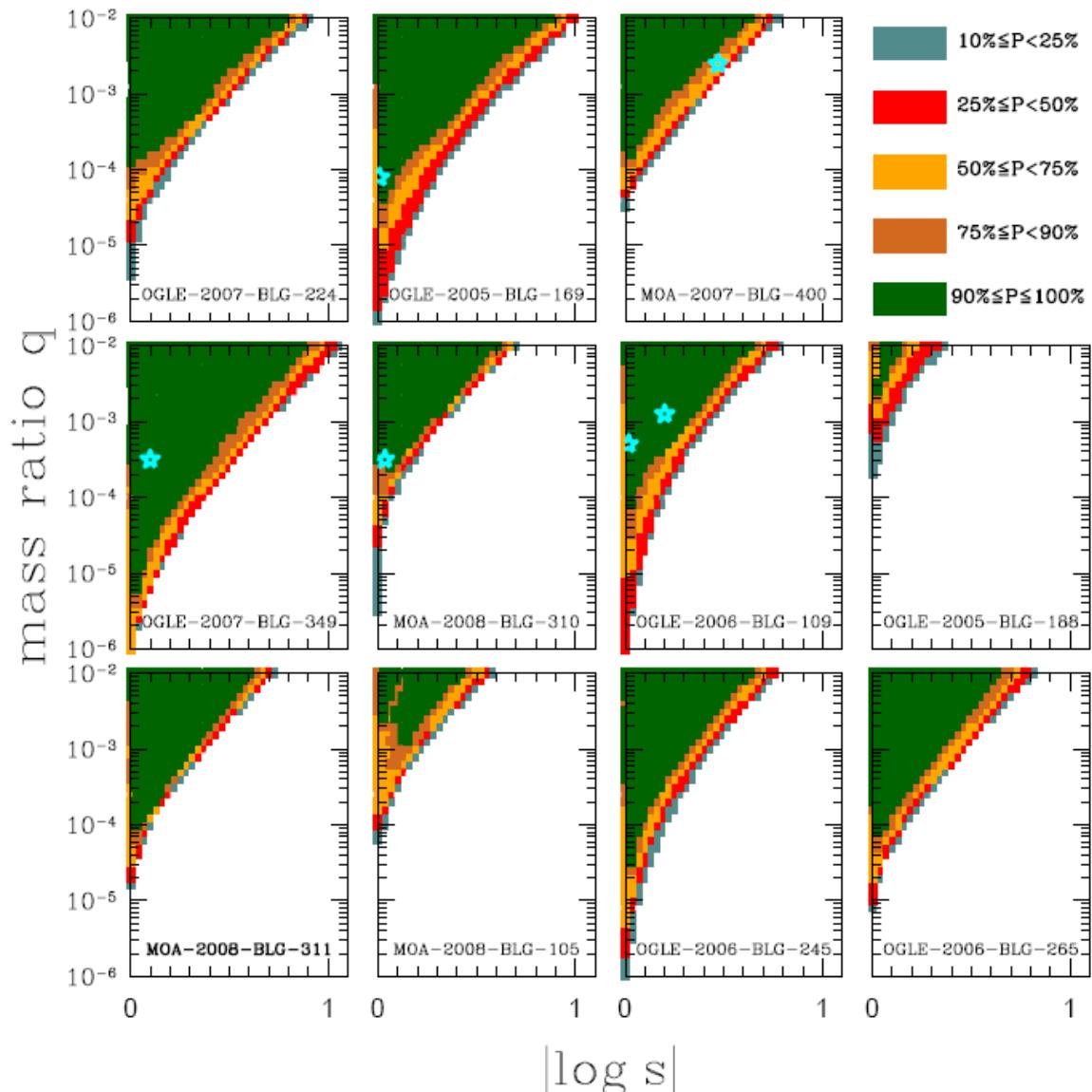


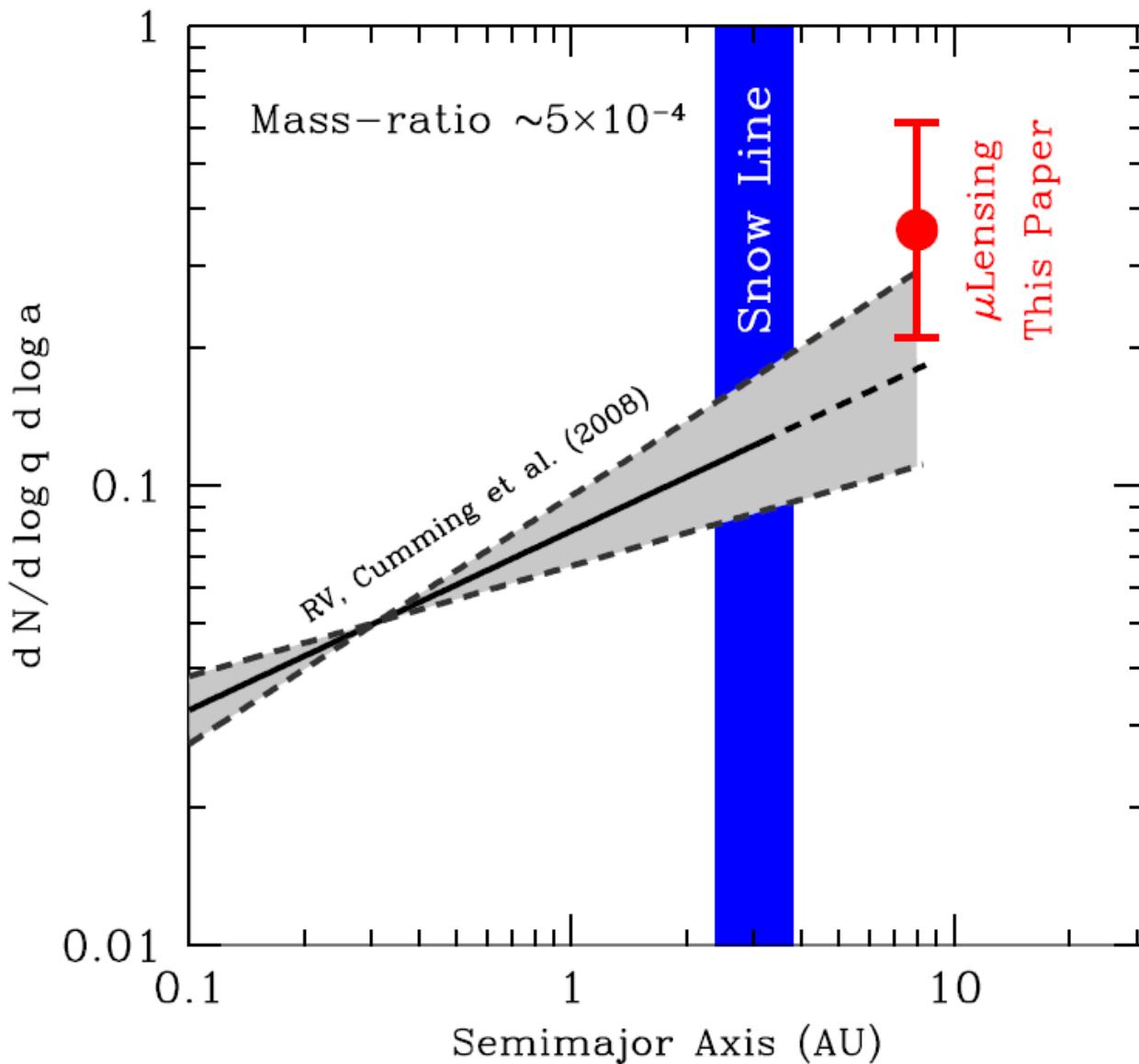


703, 2082









# Solar System Analogs

