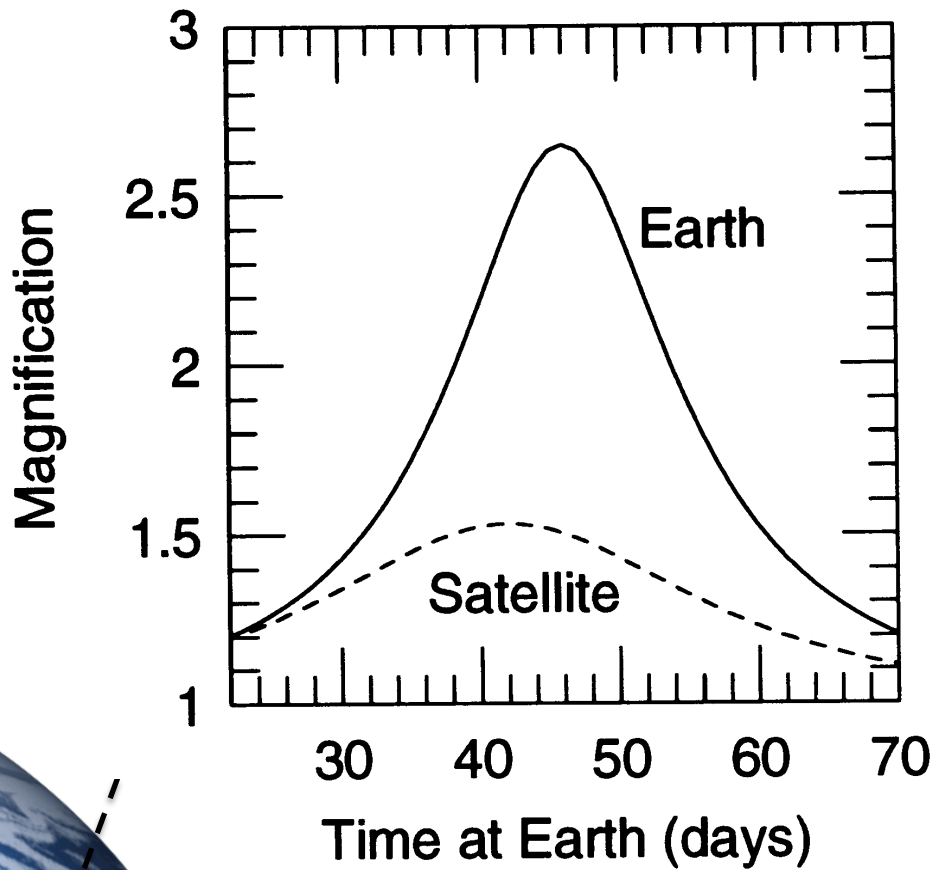
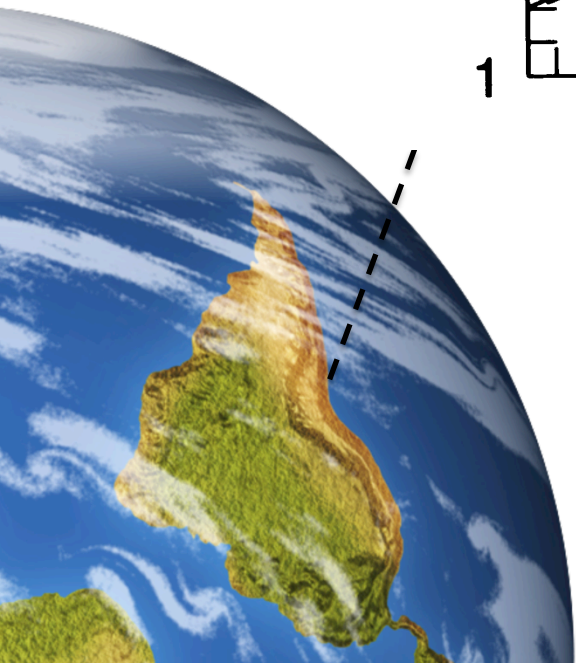


HARVARD-SMITHSONIAN
CENTER FOR ASTROPHYSICS

Spitzer as Microlens Parallax
Satellite: OGLE-2014-BLG-0939

Jennifer C. Yee
Sagan Fellow



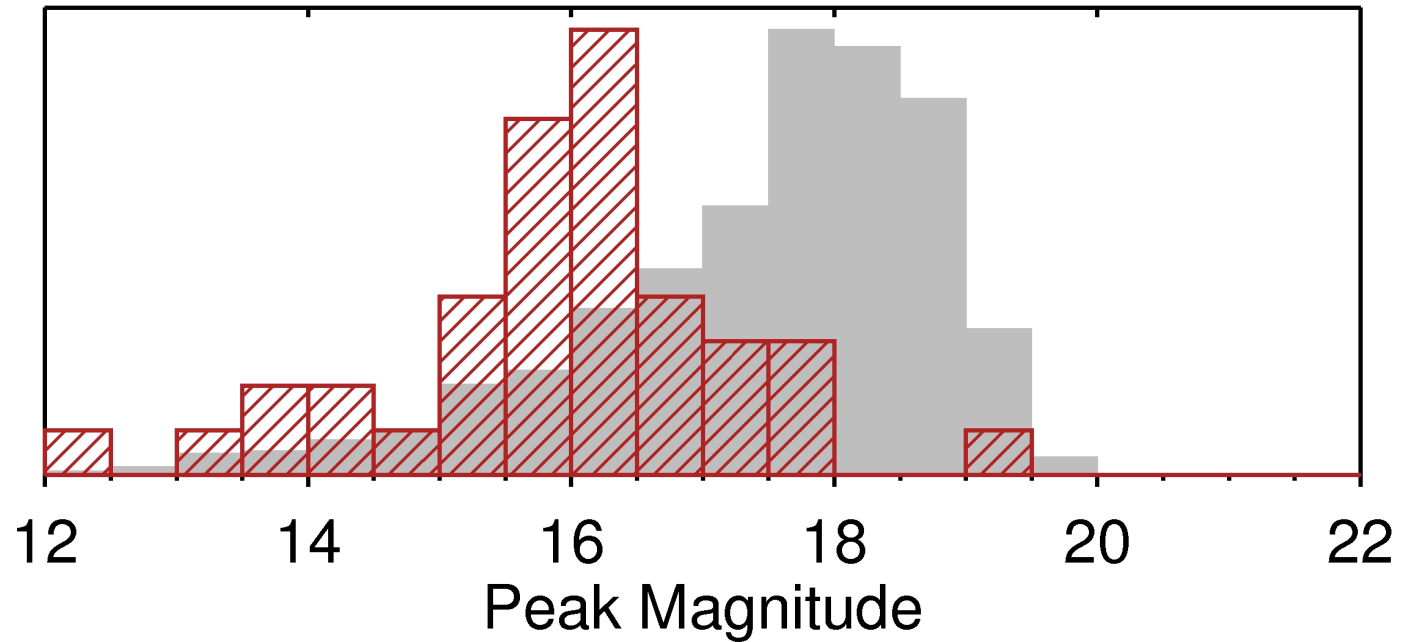
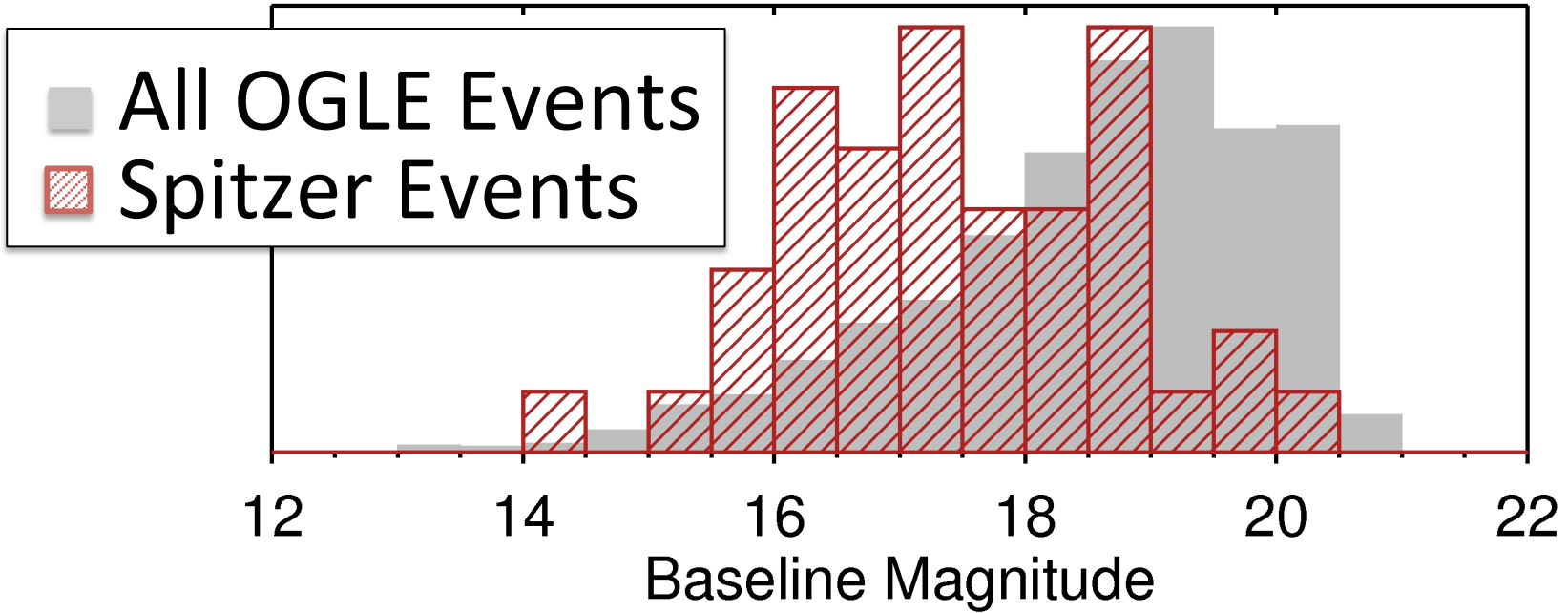
Spitzer Events (w/ ≥ 10 obs)

Point Lens 32

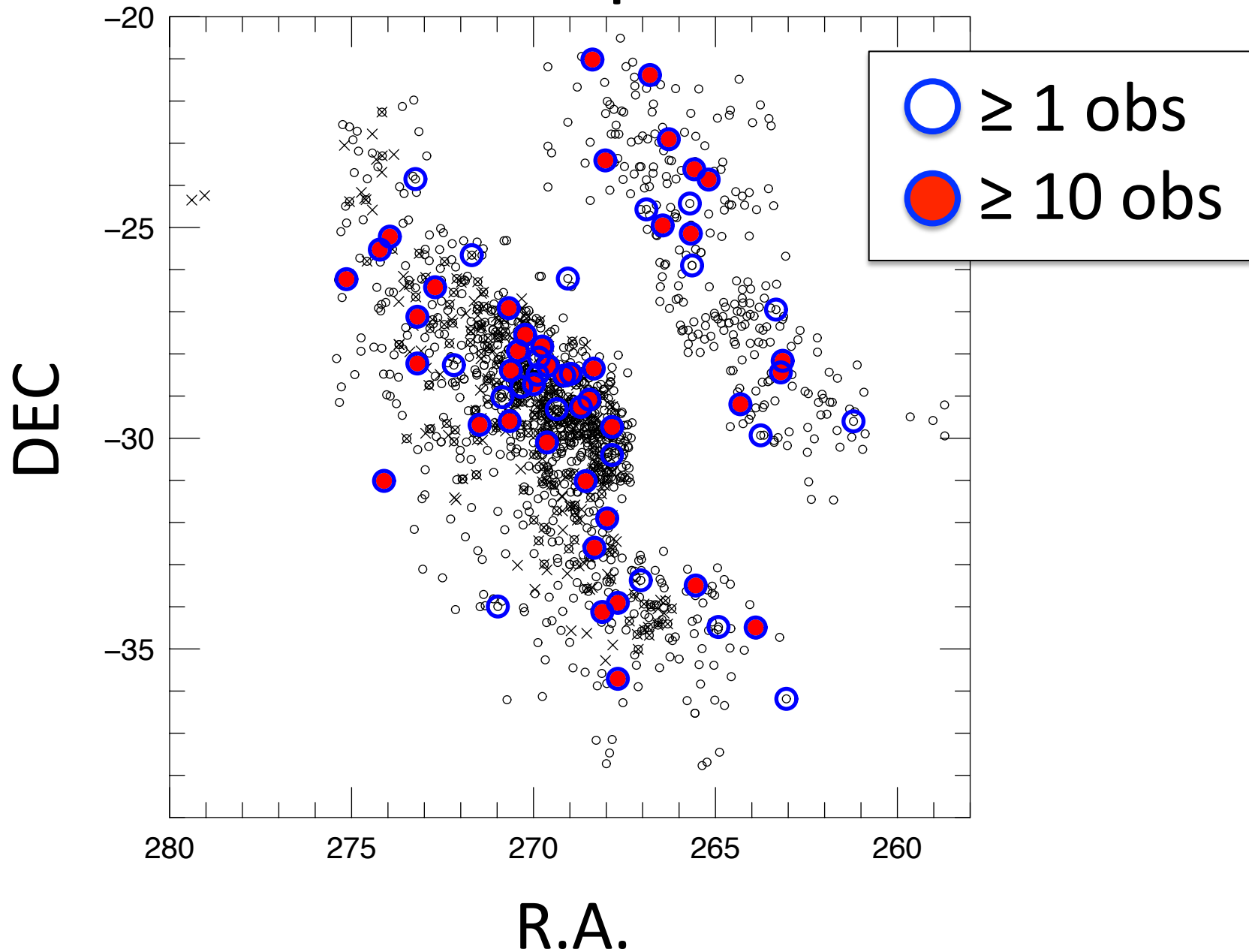
Binaries 7

Planets 3 (1+2?)

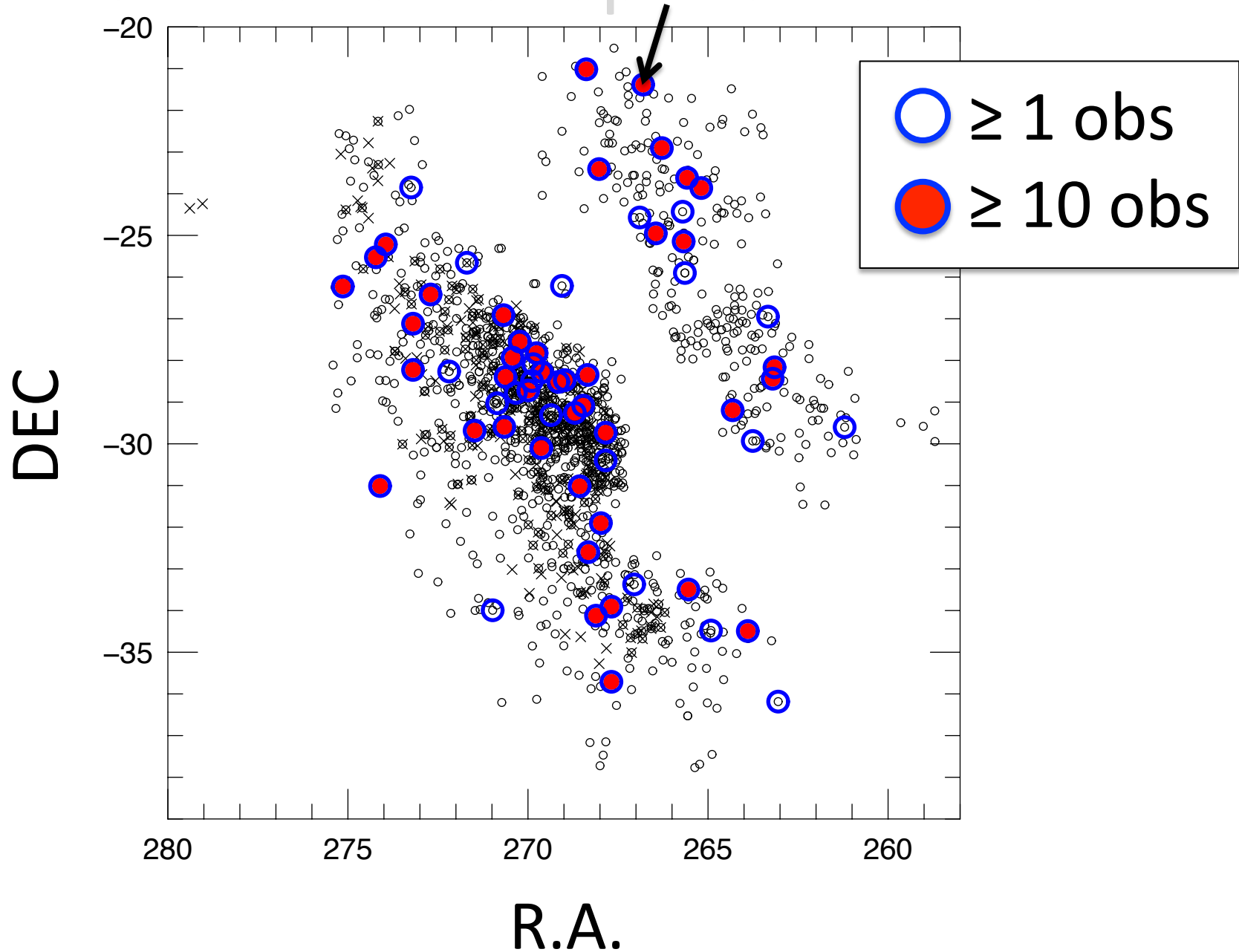
Total 42



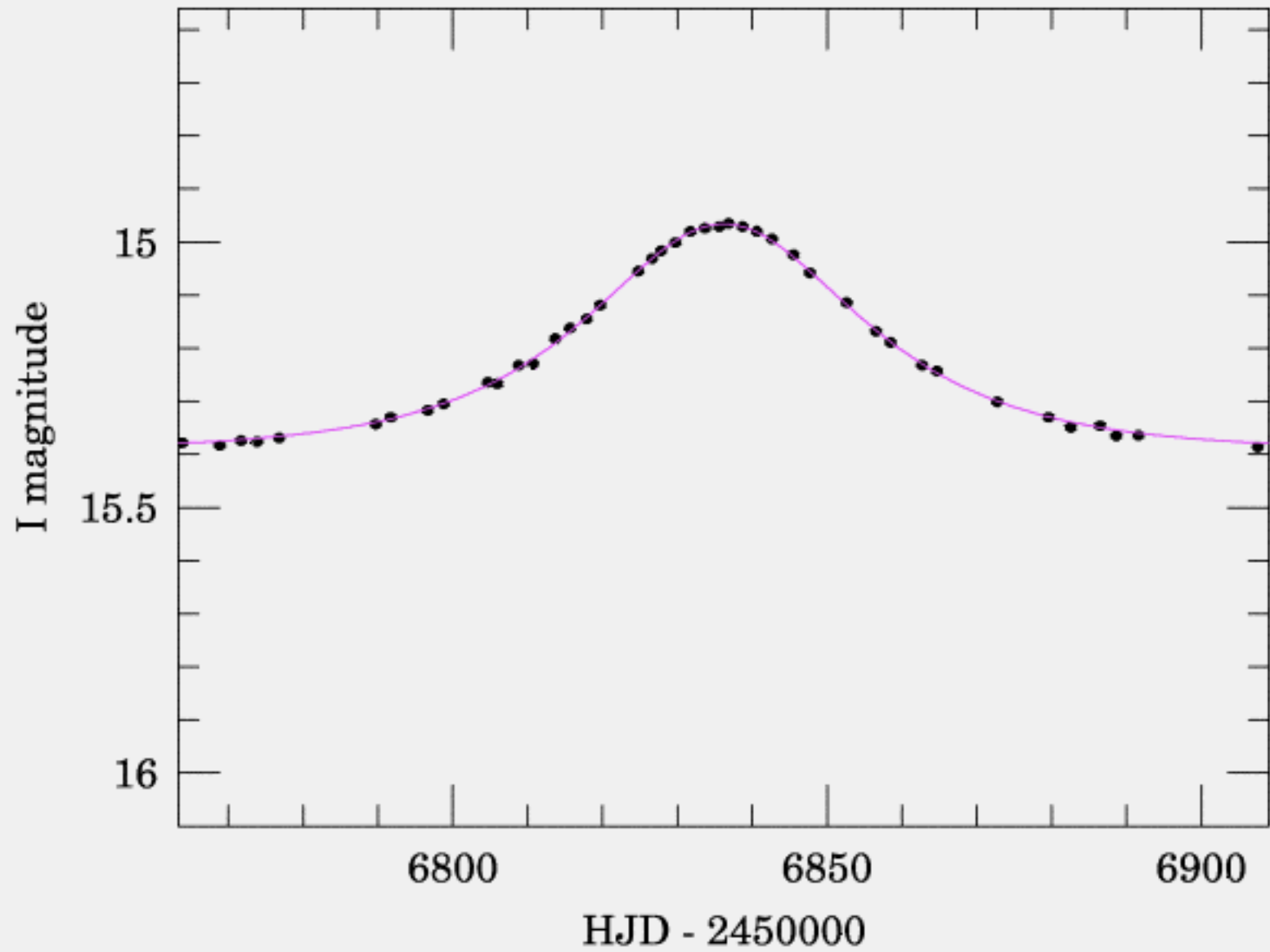
Distribution of Spitzer Events



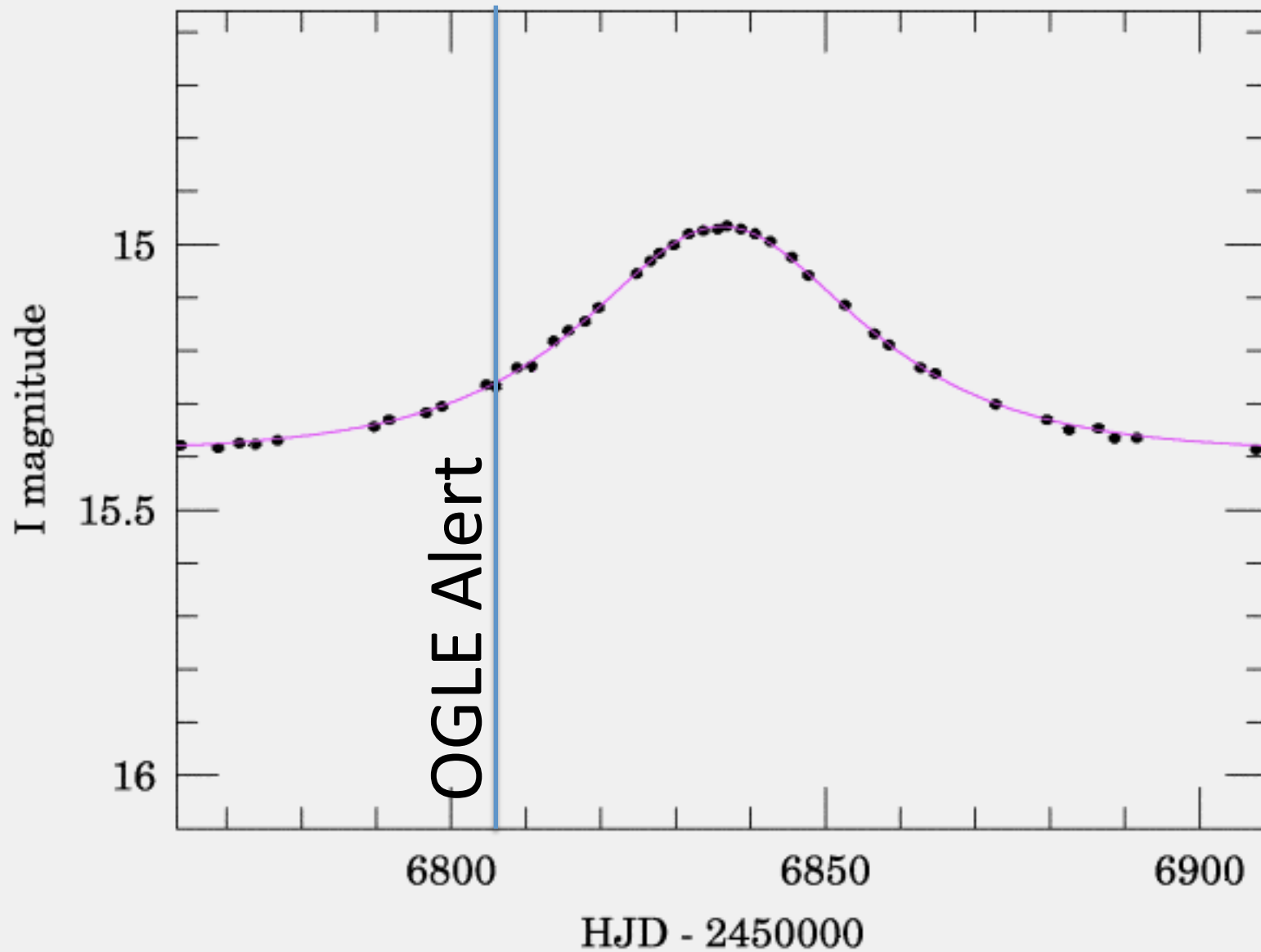
Distribution of OGLE-2014-BLG-0939



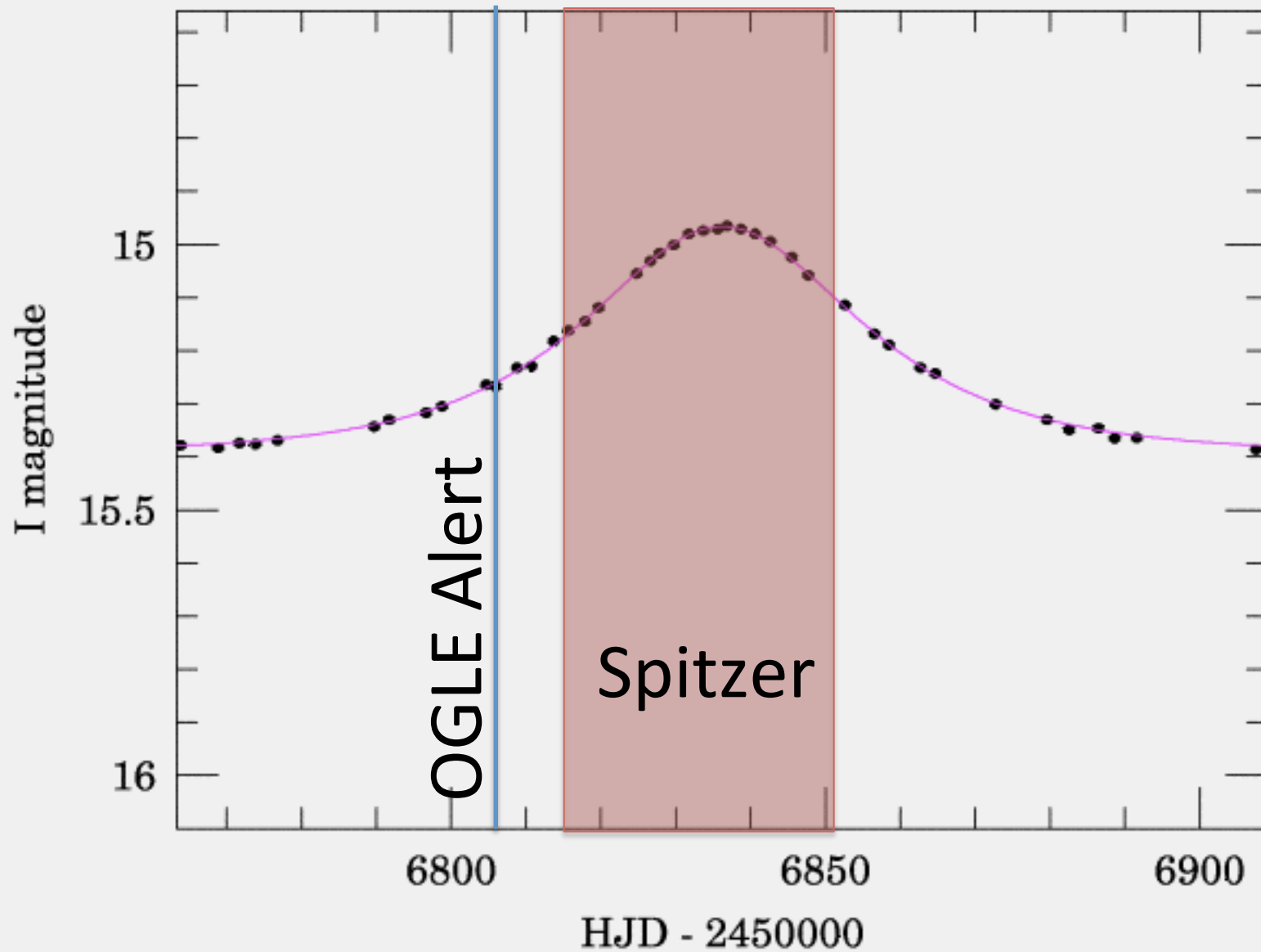
OGLE-2014-BLG-0939



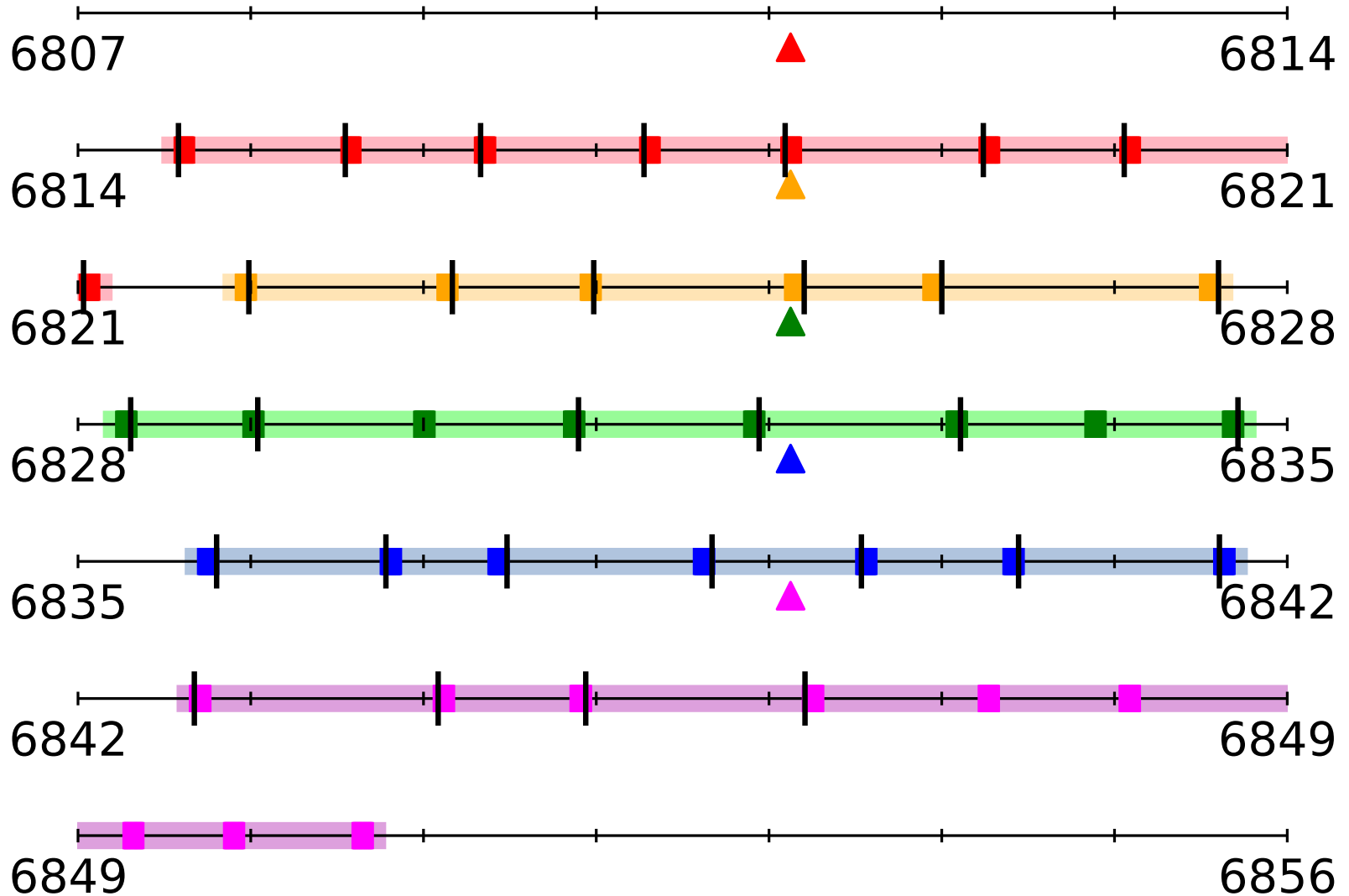
OGLE-2014-BLG-0939

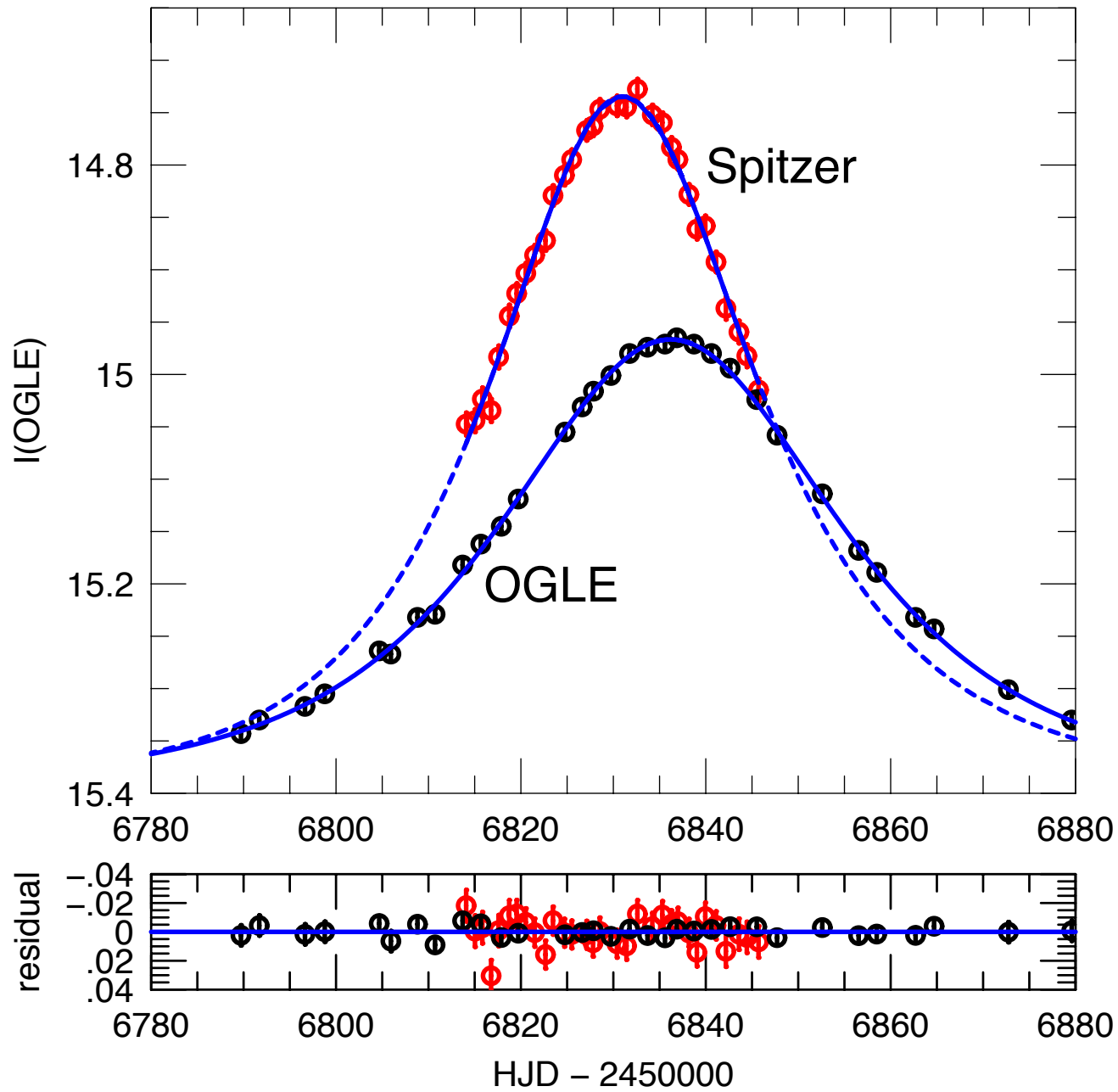


OGLE-2014-BLG-0939



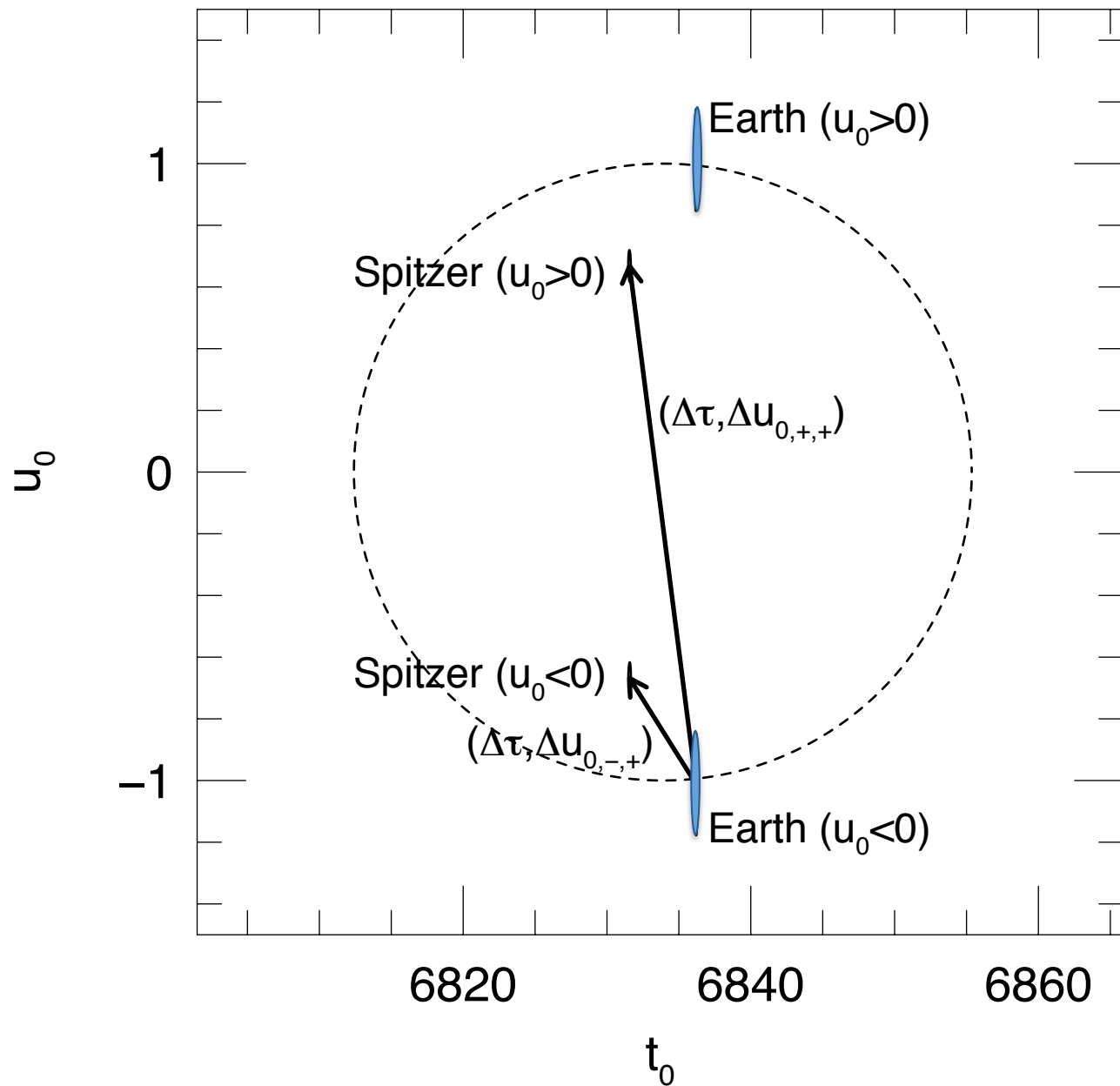
Timeline of Spitzer Observations





Earth

$\rightarrow t_{0,1}, \pm u_{0,1}$



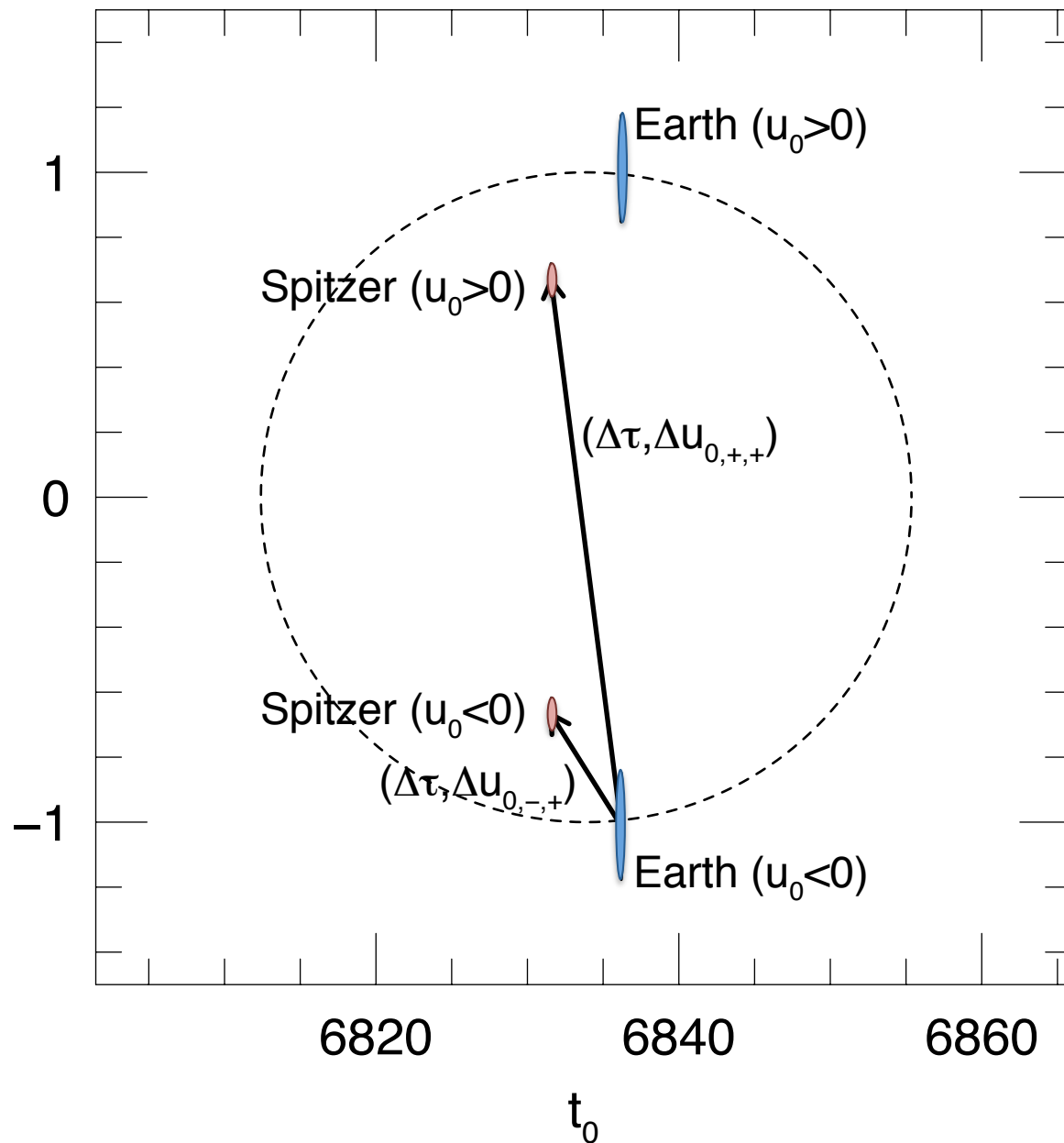
Earth

$\rightarrow t_{0,1}, \pm u_{0,1}$

Spitzer

$\rightarrow t_{0,2}, \pm u_{0,2}$

u_0



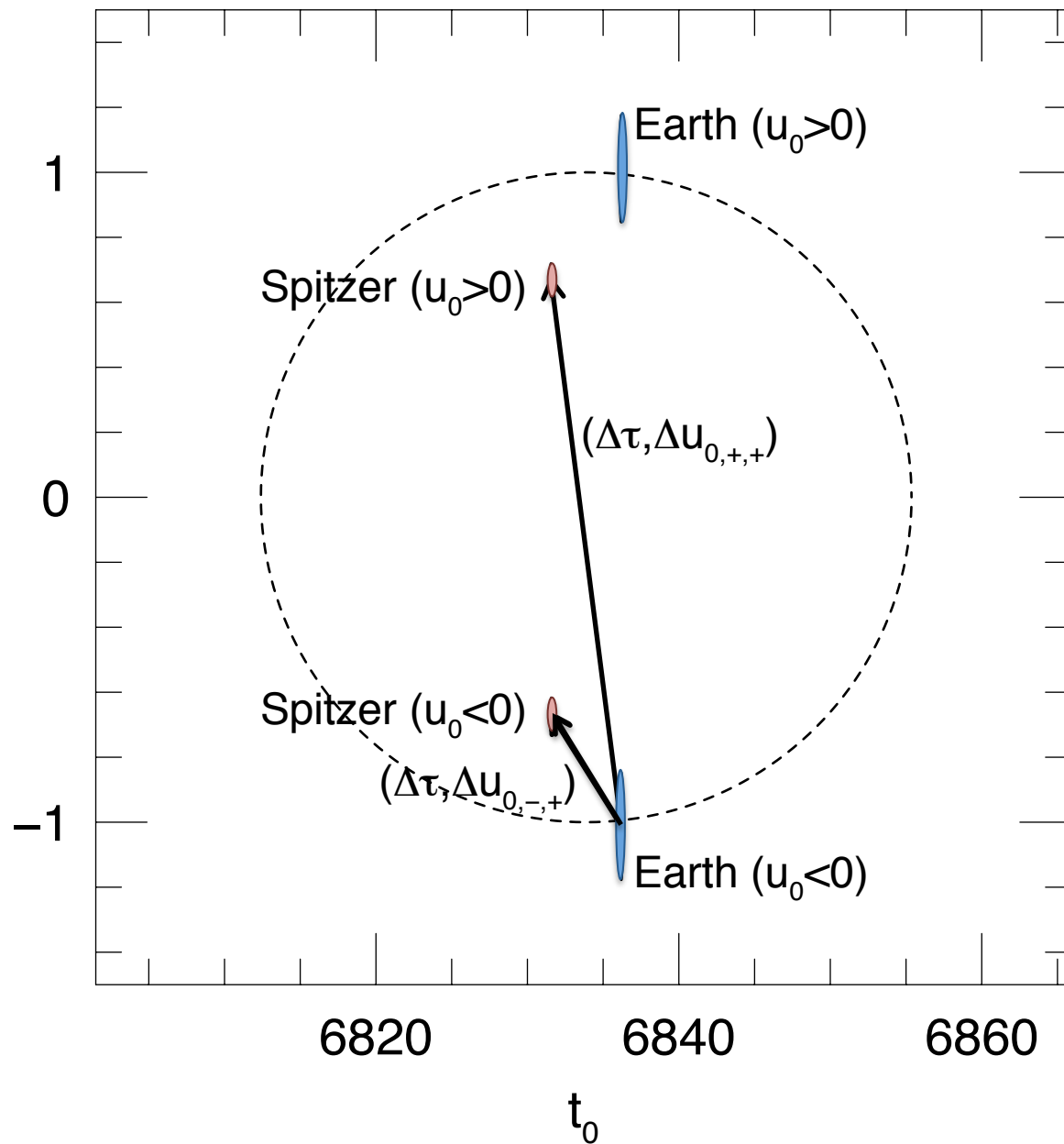
Earth

→ $t_{0,1}, \pm u_{0,1}$

Spitzer

→ $t_{0,2}, \pm u_{0,2}$

u_0



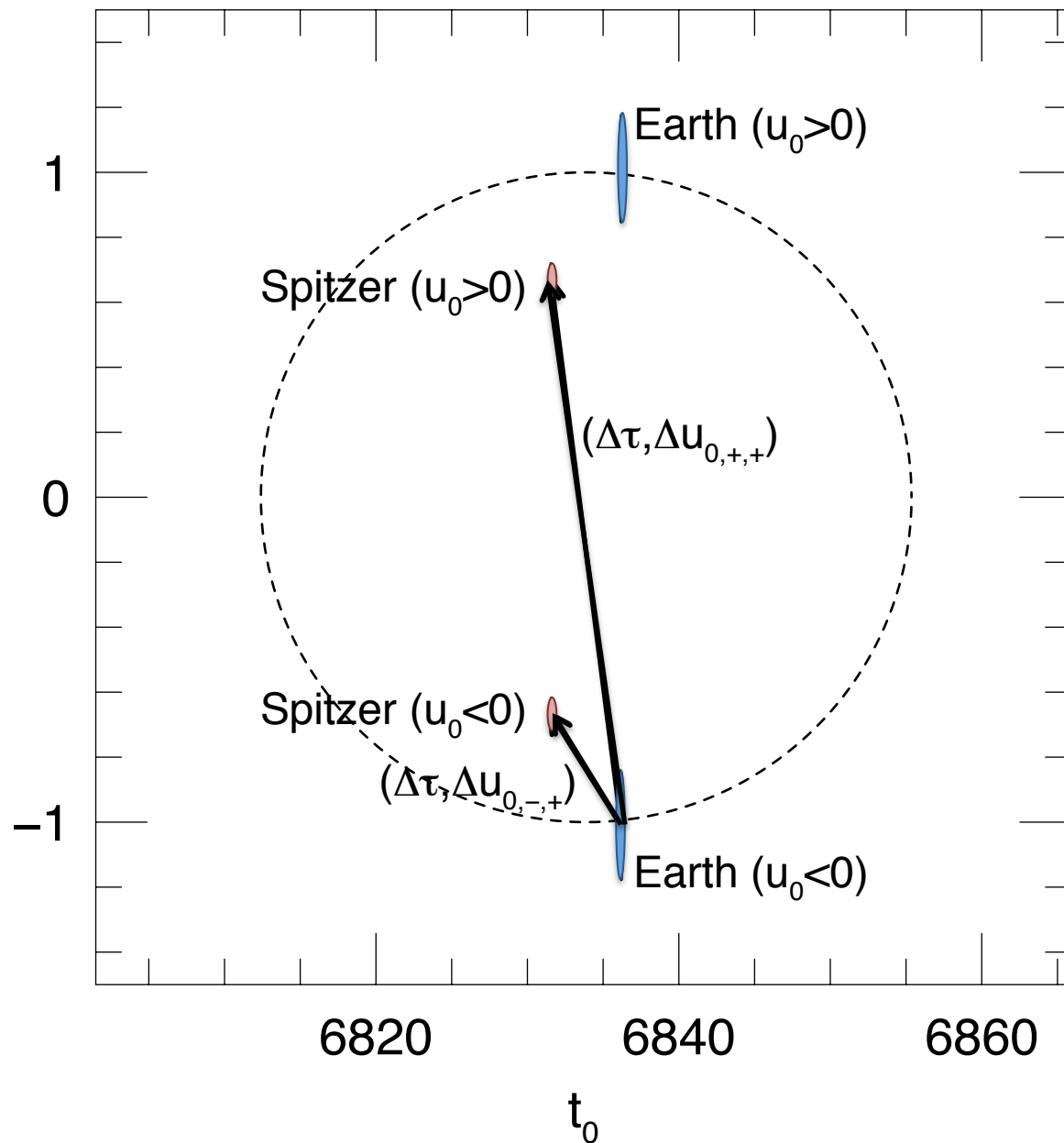
Earth

→ $t_{0,1}, \pm u_{0,1}$

Spitzer

→ $t_{0,2}, \pm u_{0,2}$

u_0



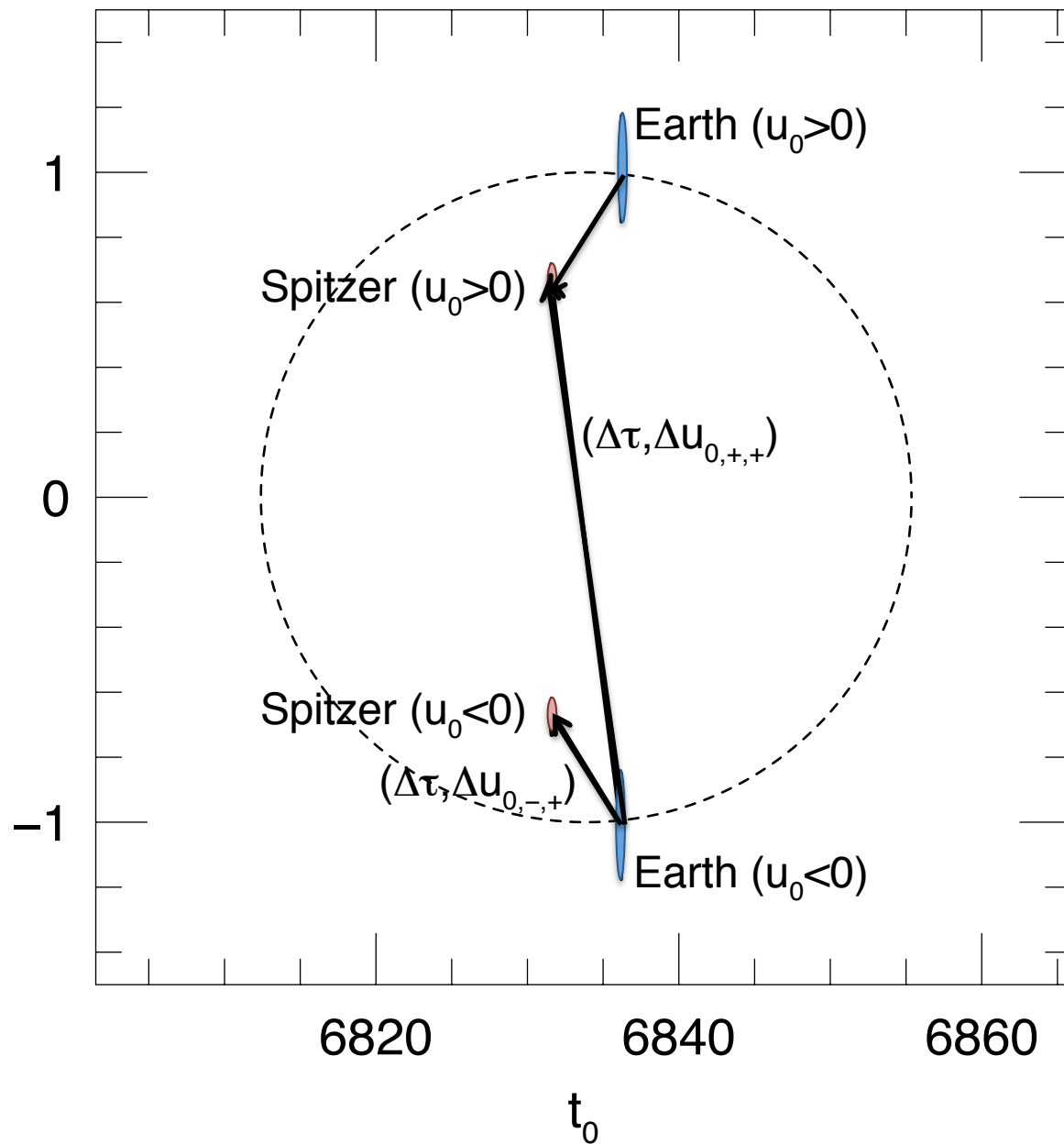
Earth

→ $t_{0,1}, \pm u_{0,1}$

Spitzer

→ $t_{0,2}, \pm u_{0,2}$

u_0



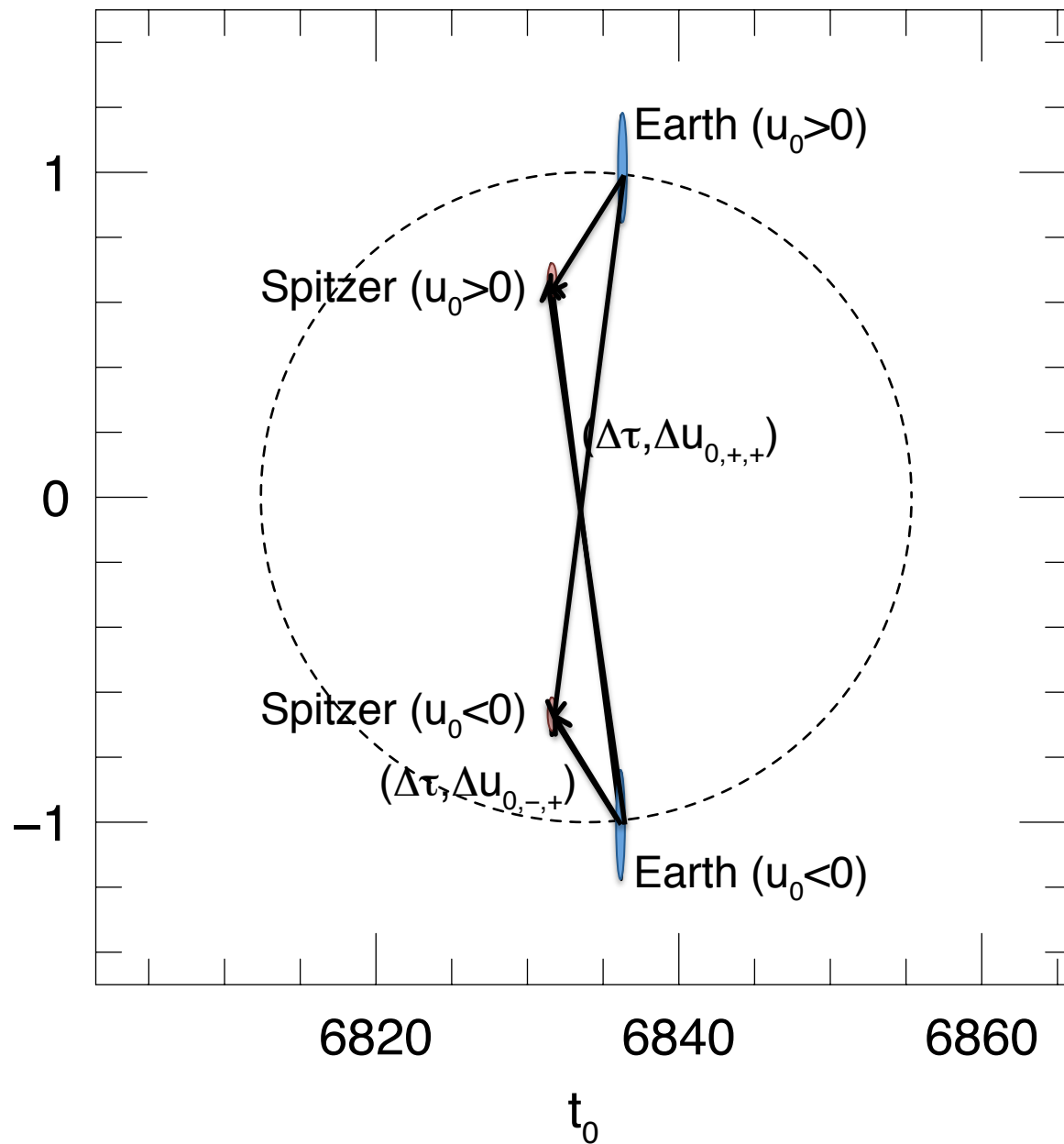
Earth

→ $t_{0,1}, \pm u_{0,1}$

Spitzer

→ $t_{0,2}, \pm u_{0,2}$

u_0



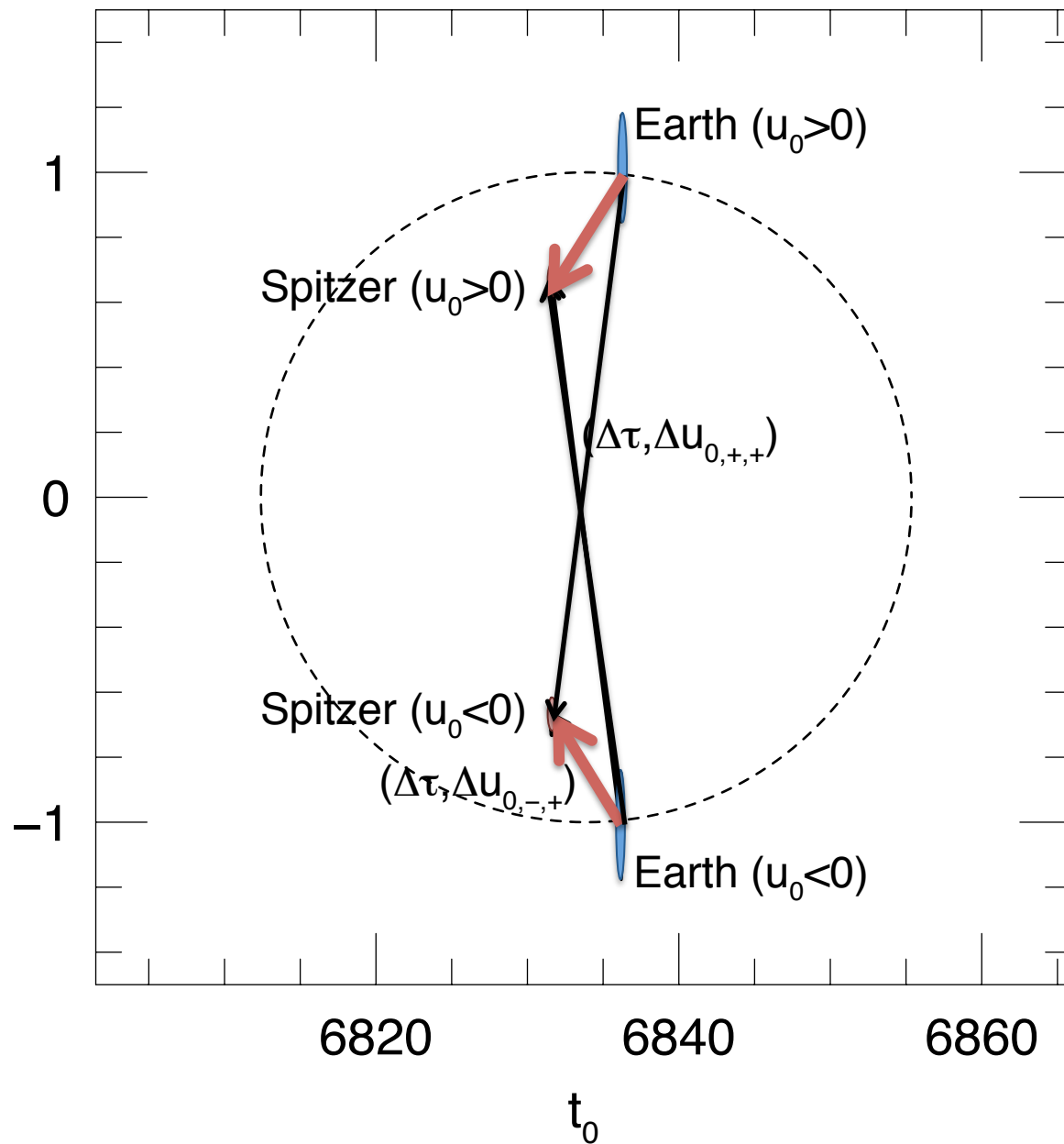
Earth

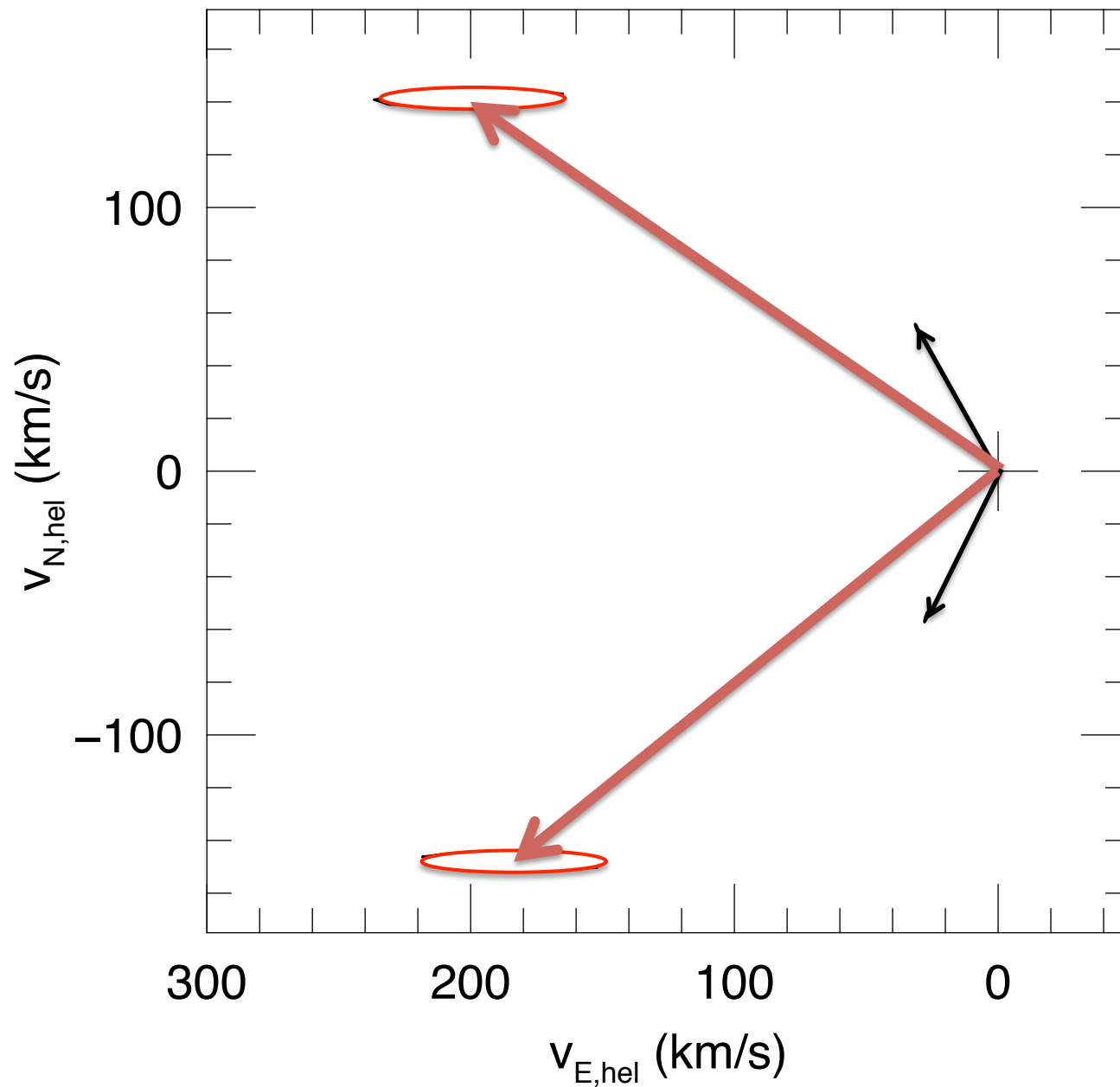
→ $t_{0,1}, \pm u_{0,1}$

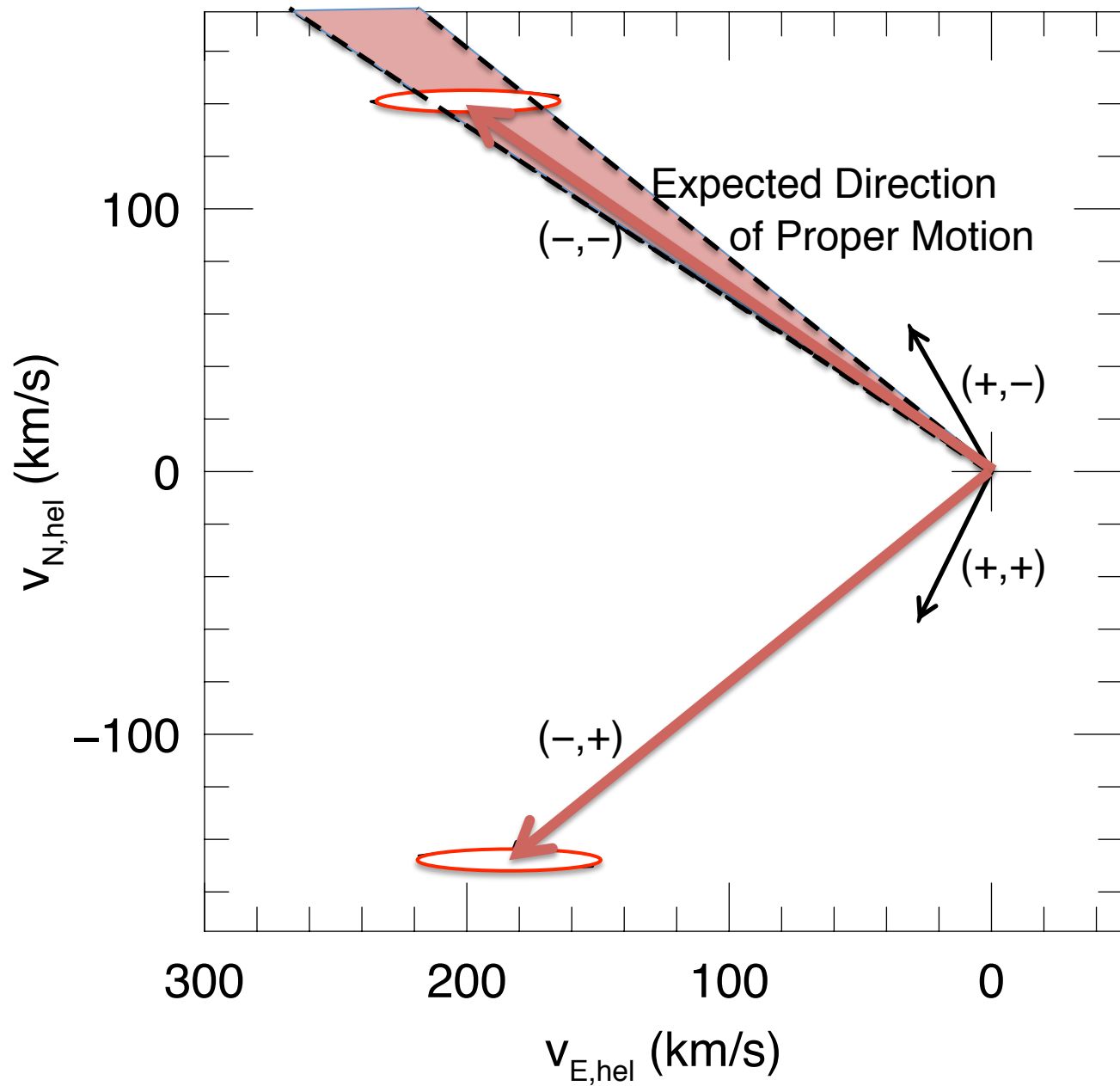
Spitzer

→ $t_{0,2}, \pm u_{0,2}$

u_0







$M = 0.23 \pm 0.07 M_{\odot}$
 $D_L = 3.1 \pm 0.4 \text{ kpc}$

