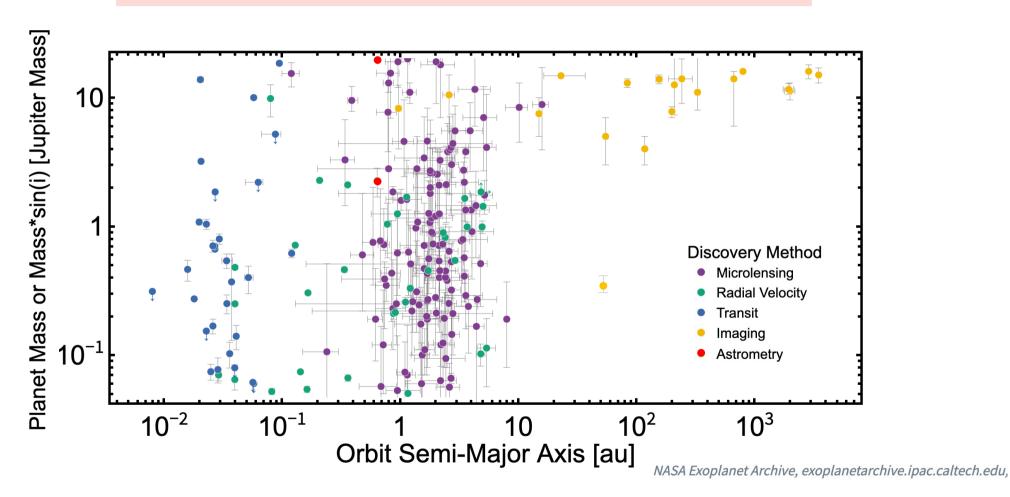
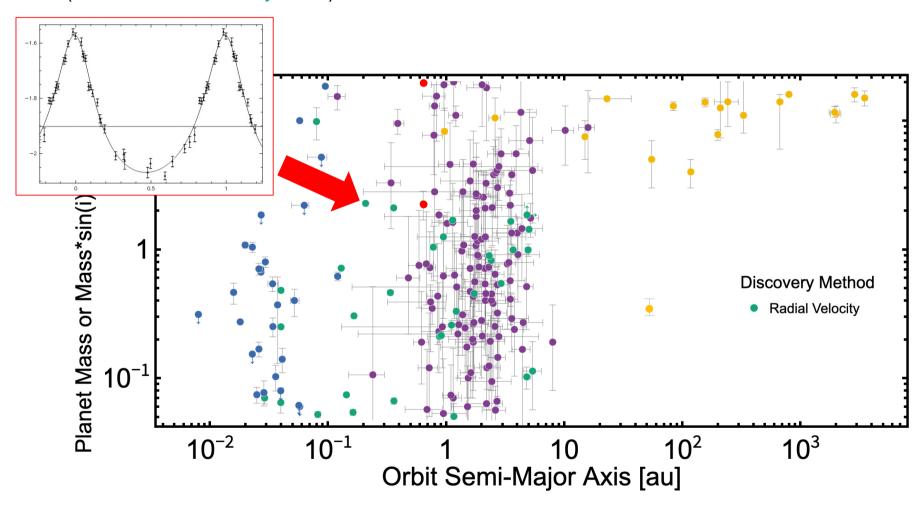
# **Session - Giant planets around M dwarfs**

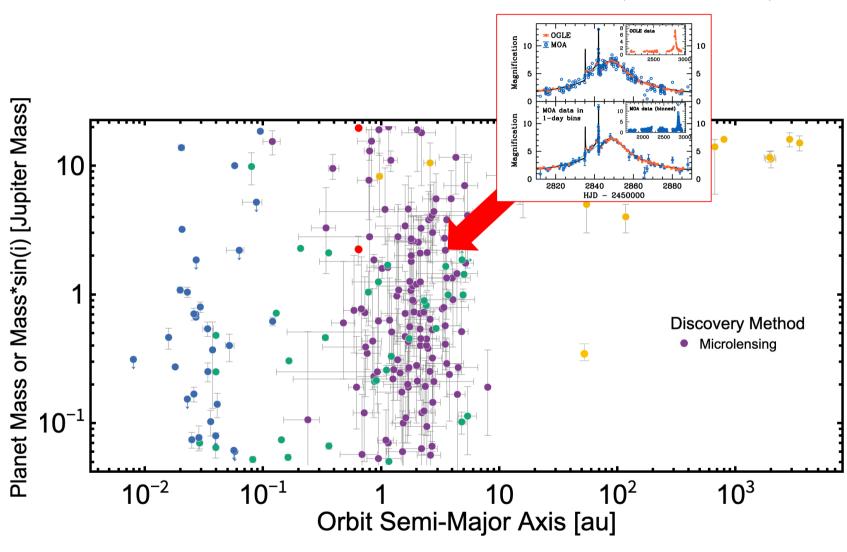
**Short Introduction** 



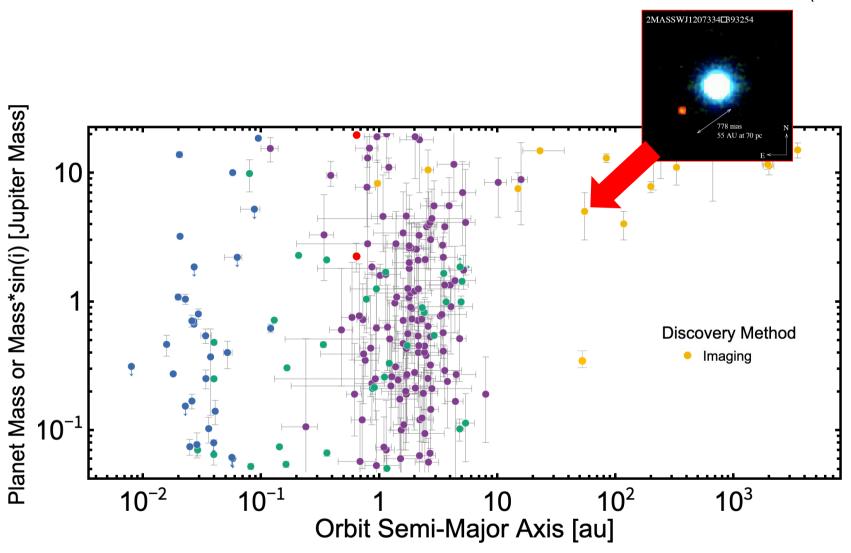
### Gl876b (Delfosse+1998 / Marcy+1998)

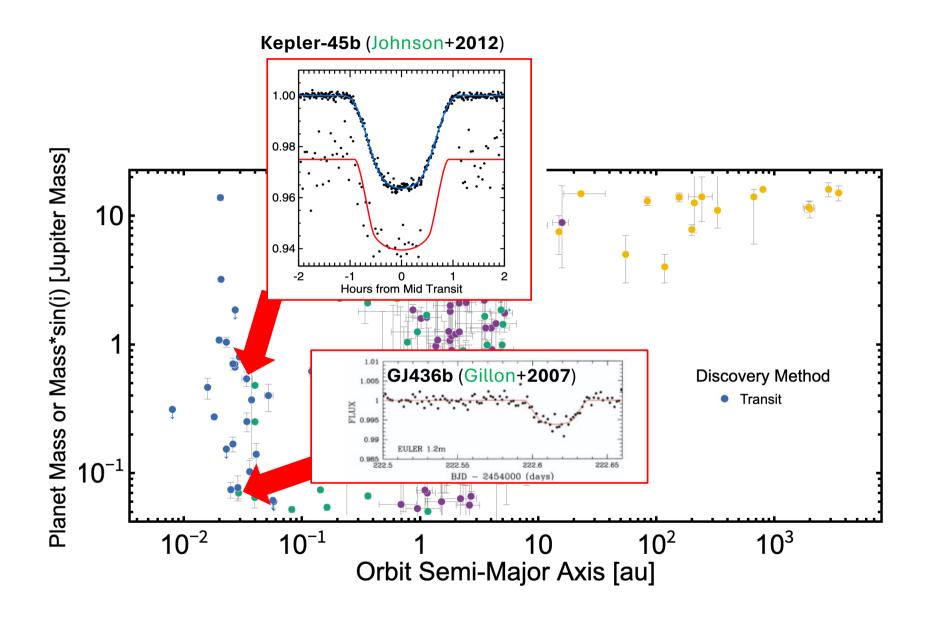


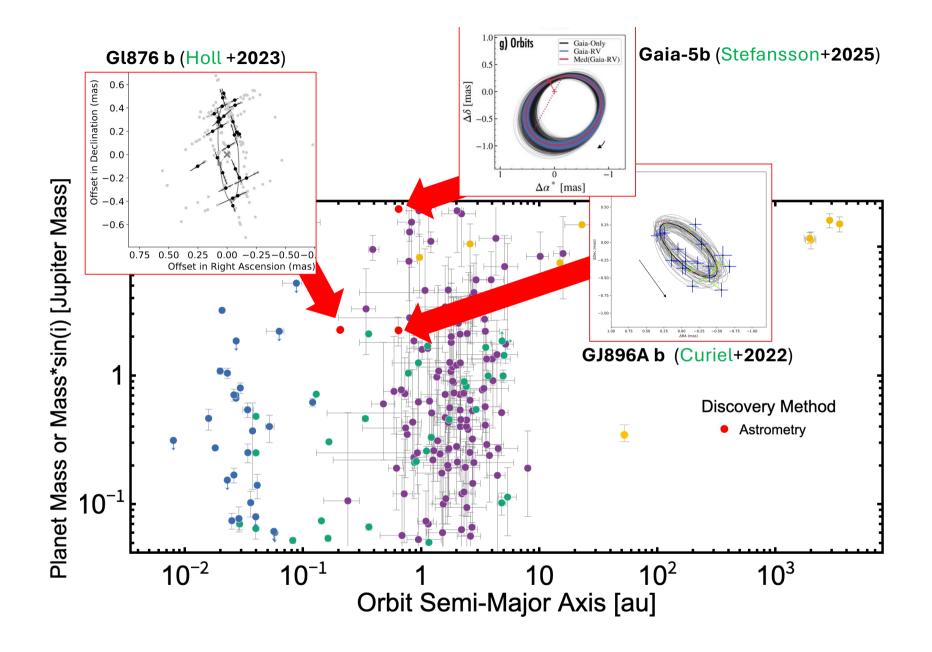
#### OGLE2003-BLG-235Lb (Bond et al. 2004)

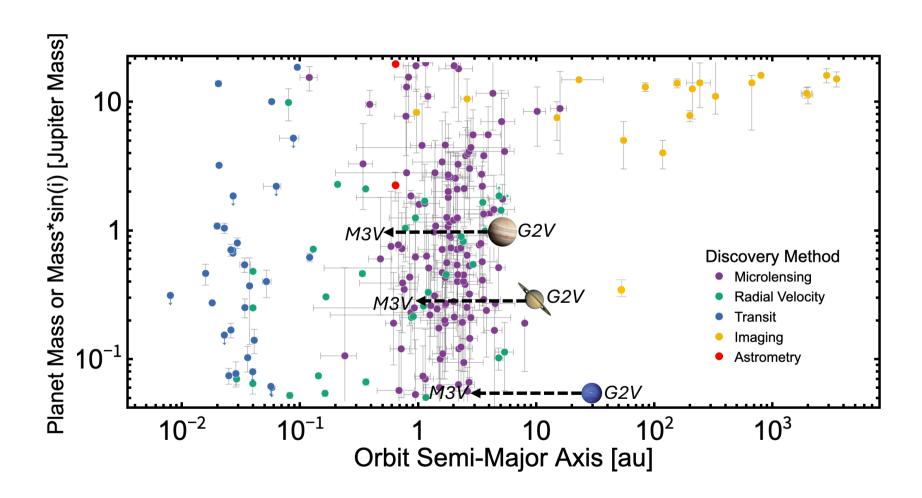


#### 2MASSWJ 1207334-393254 (Chauvin+2004)







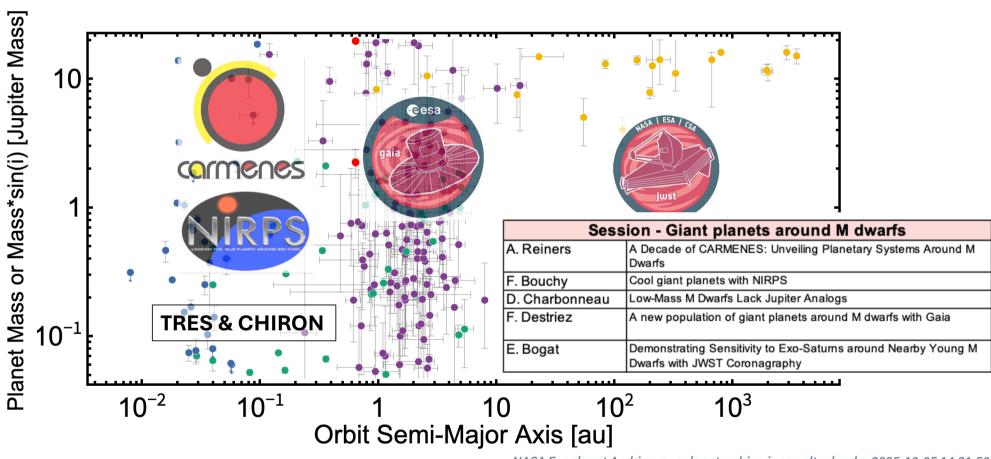


### **Session - Giant planets around M dwarfs**

#### **Scientific questions**

- Occurence rate of giant planets around M dwarfs (0.3 0.6  $M_{\odot}$ ), late M dwarfs (0.1 0.3  $M_{\odot}$ ) and Ultra Cool dwarfs (<0.1  $M_{\odot}$ ),
- Relationship with host star properties (mass, abundances, multiplicity, age, ....),
- Architecture of planetary systems around M dwarfs (radius gap, multiplicity, solar-system like, ....),
- Constrain formation and evolution processes,
- Identify temperate exoplanets & golden targets for future direct imaging and atmospheric characterization

## **Session - Giant planets around M dwarfs**



Best strategies to identify planets amenable for direct imaging with ELT?

Gap in the parameter space with present surveys?

Are there good agreements in occurence rates from different surveys?