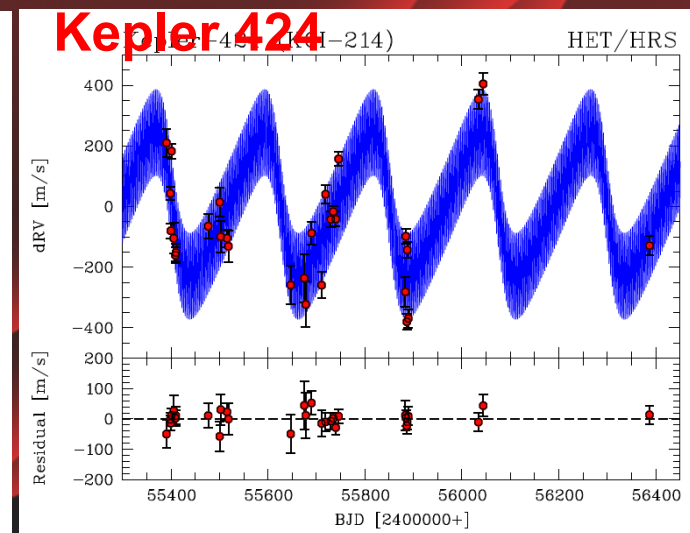
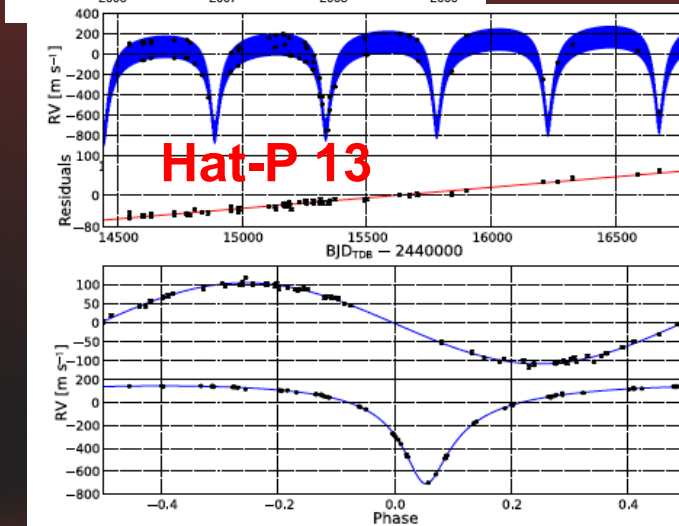
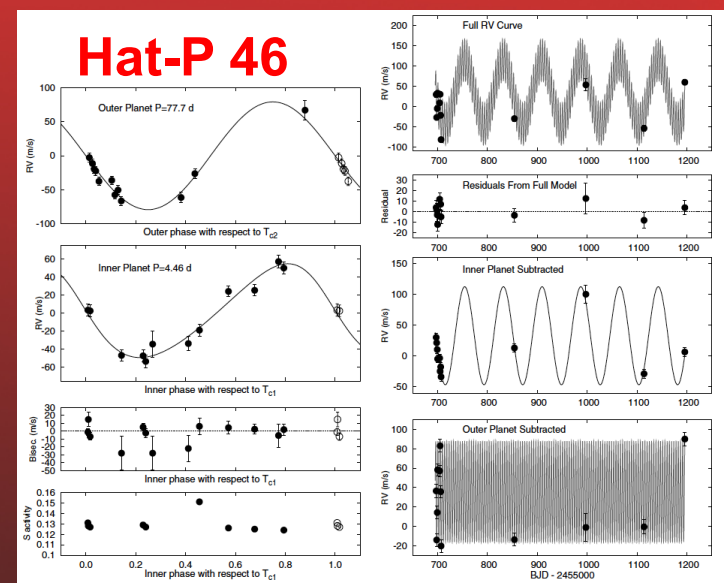
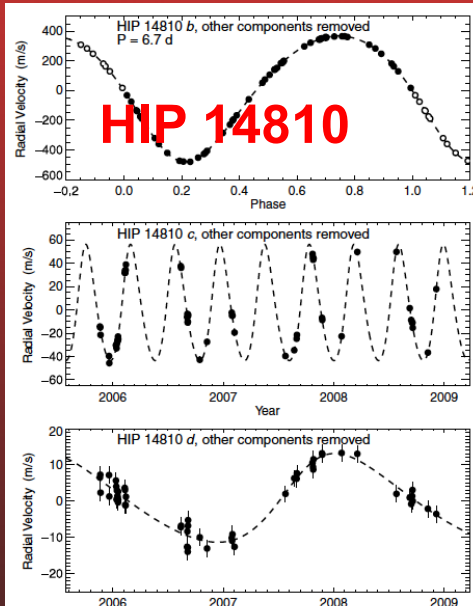
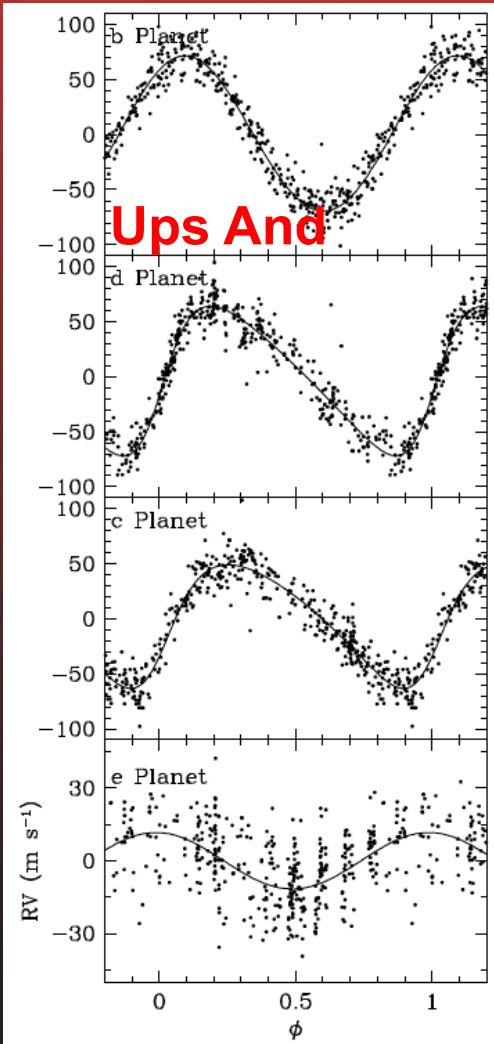


Two hot Jupiters from WASP with siblings

Marion Neveu-VanMalle

D. Queloz, D. Anderson, D. Brown, A. Collier Cameron,
L. Delrez, R. Díaz, M. Gillon, C. Hellier, E. Jehin,
T. Lister, F. Pepe, D. Ségransan,
A. Triaud, O. Turner, S. Udry

Only 5 hot Jupiters known with a “close” companion



Survey

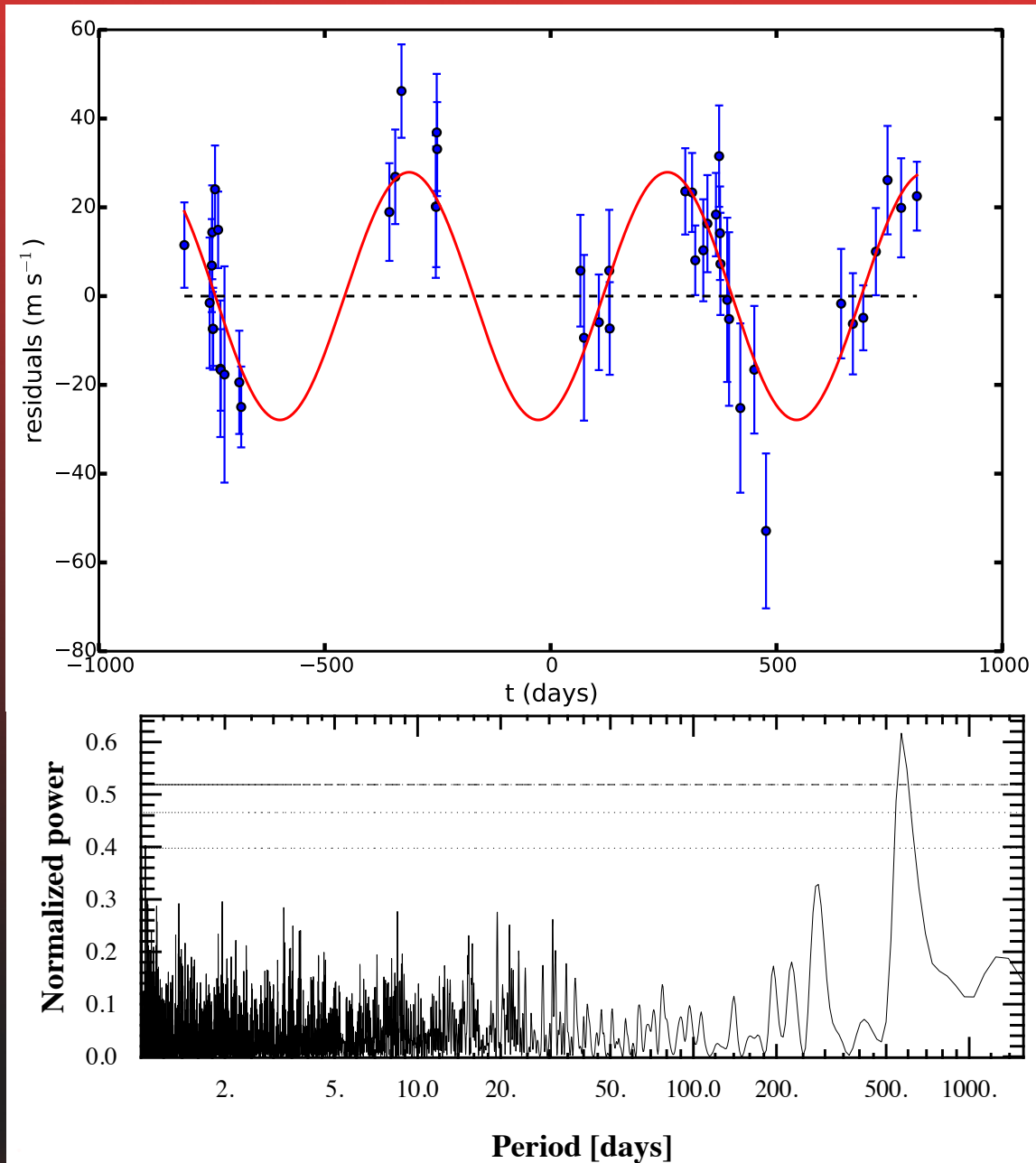


Radial velocities follow-up of the Southern WASP hot Jupiter hosts since 2008 with CORALIE in La Silla

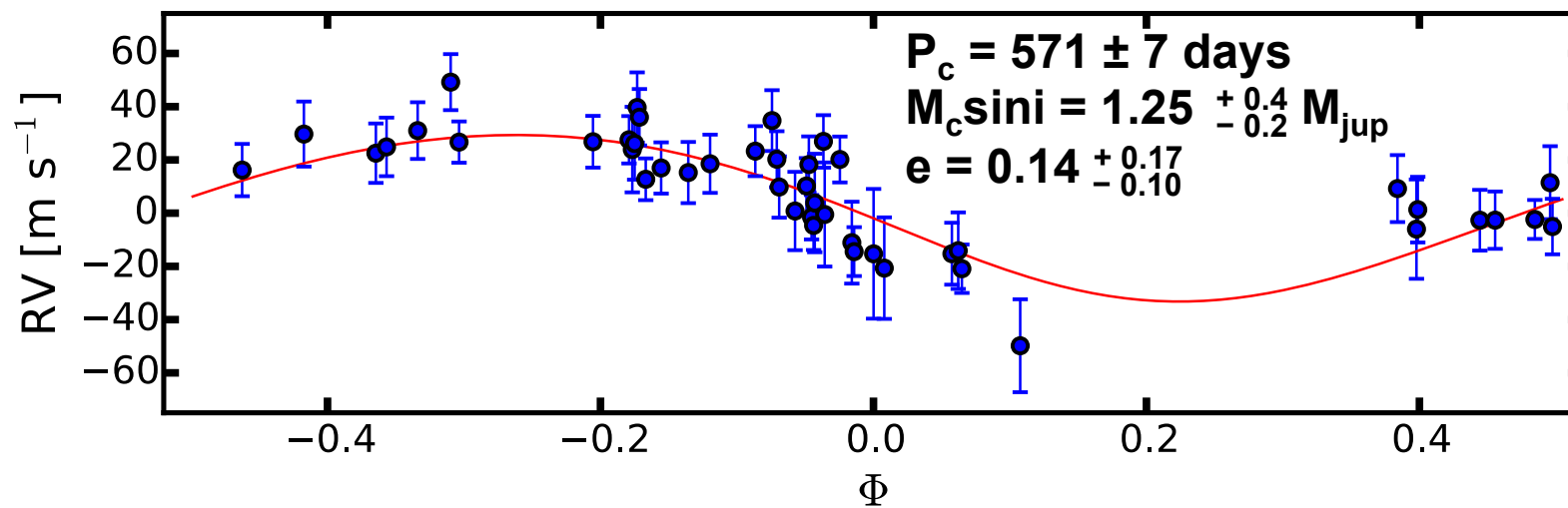
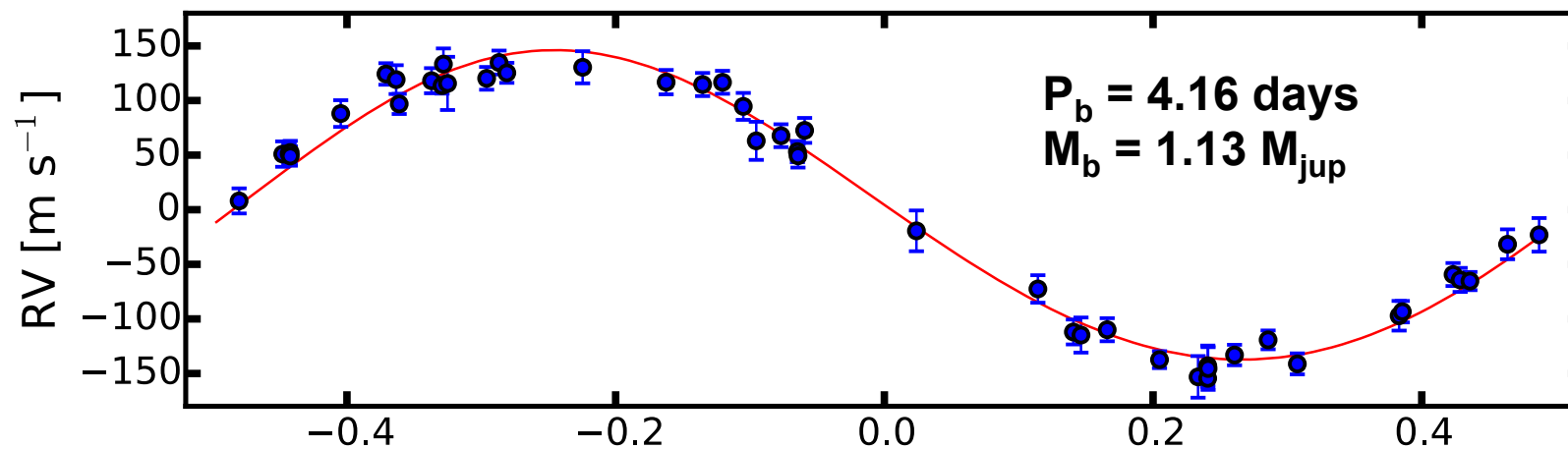
> 100 targets observed between 2 and 8 years

90 targets observed > 3 years

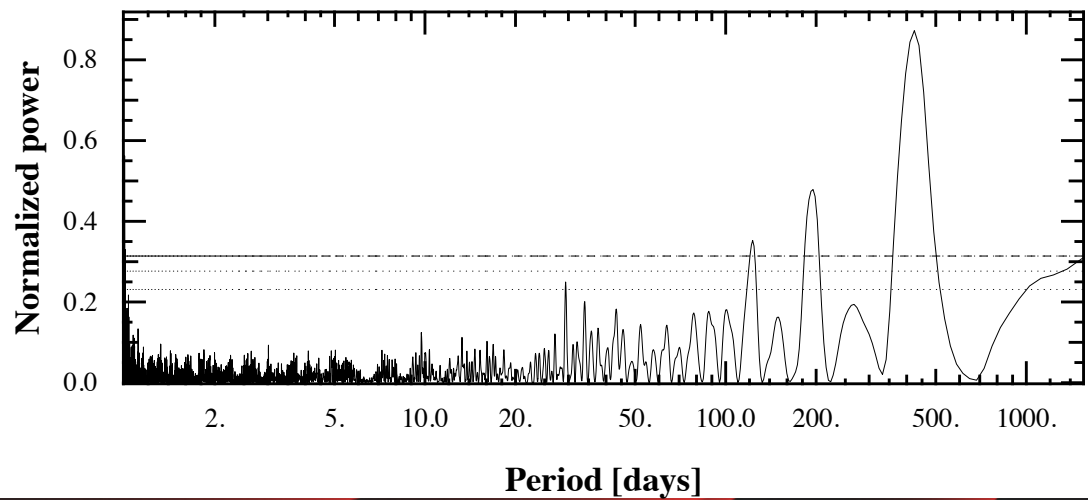
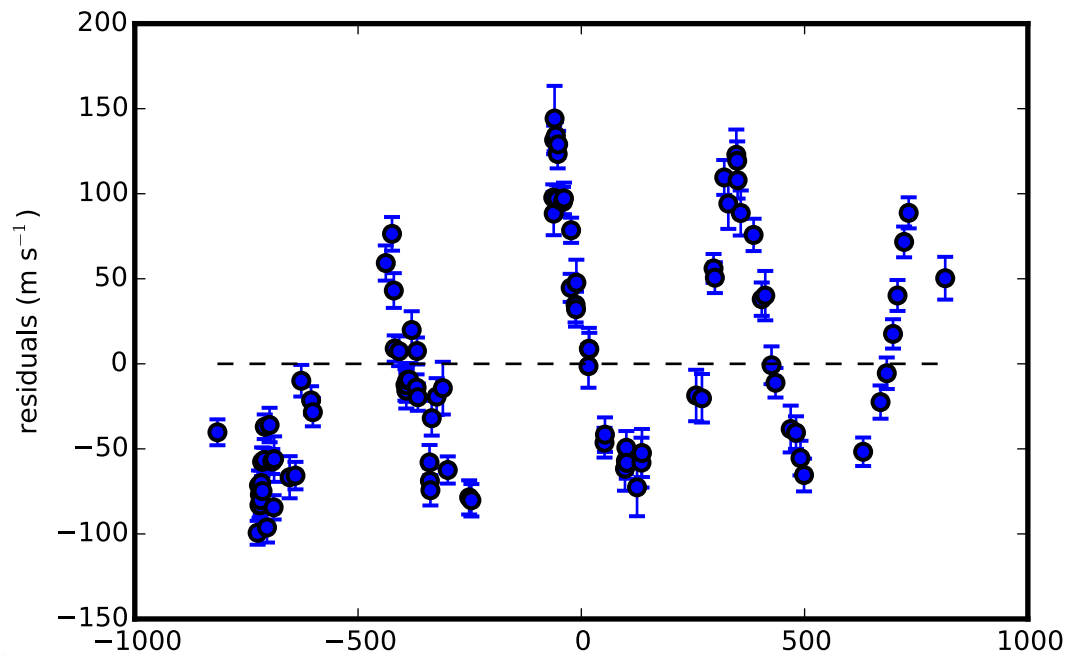
WASP-47



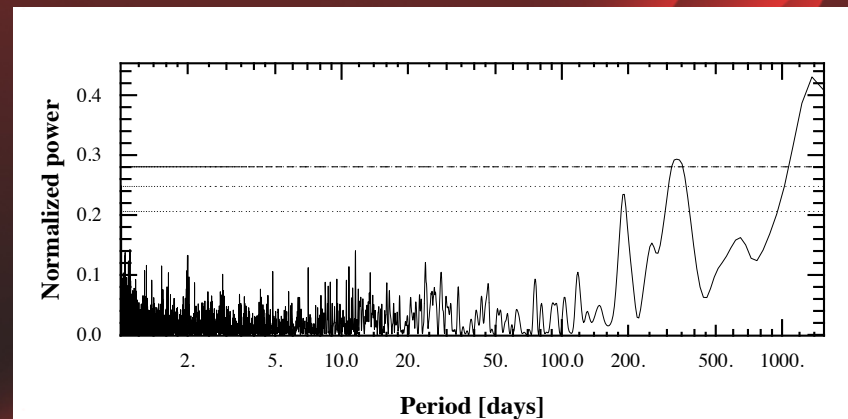
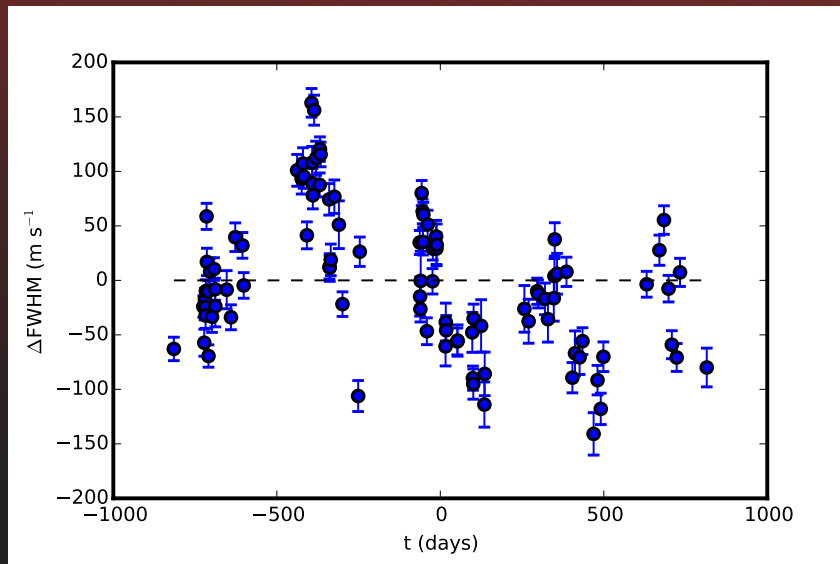
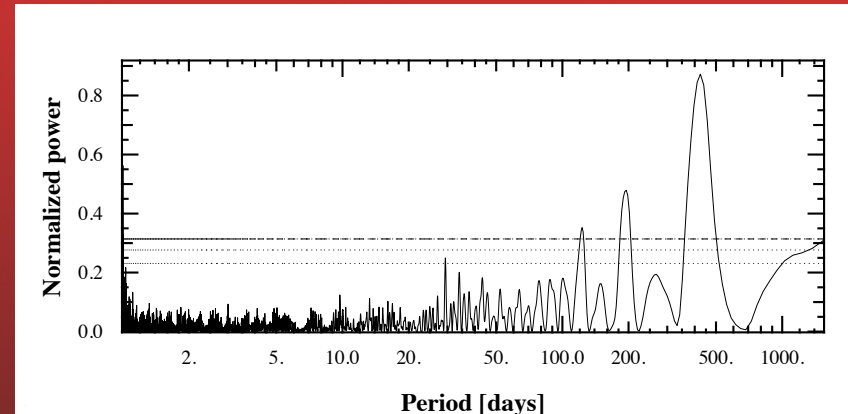
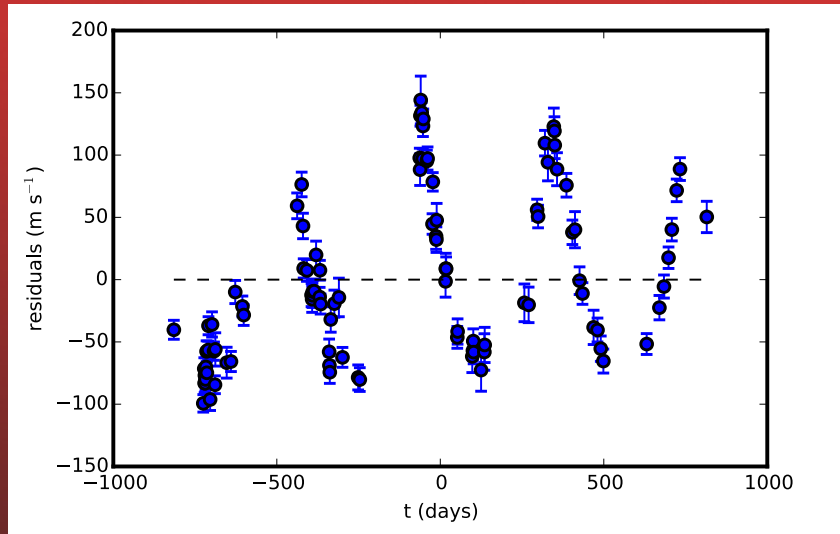
WASP-47



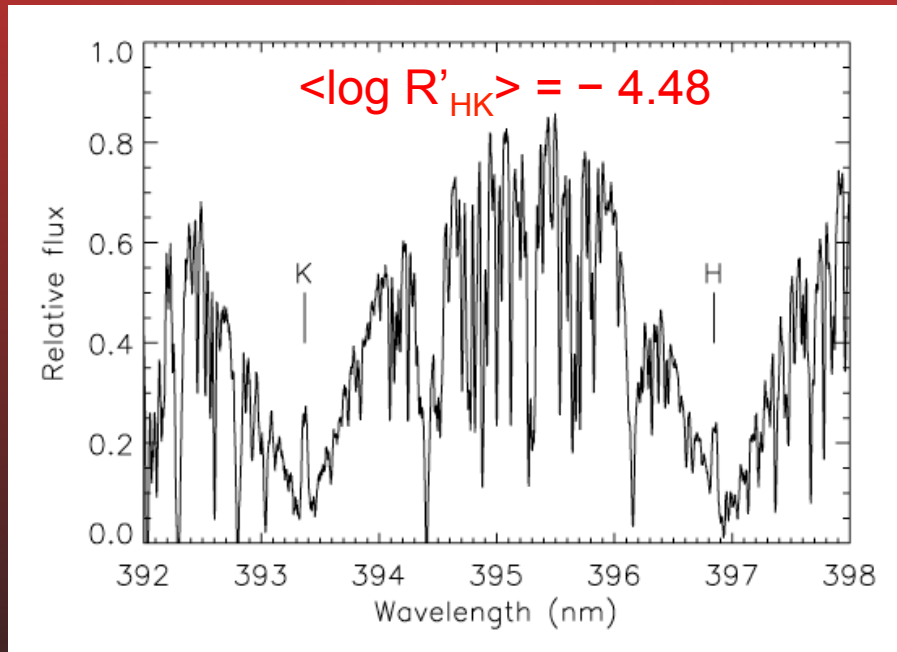
WASP-41



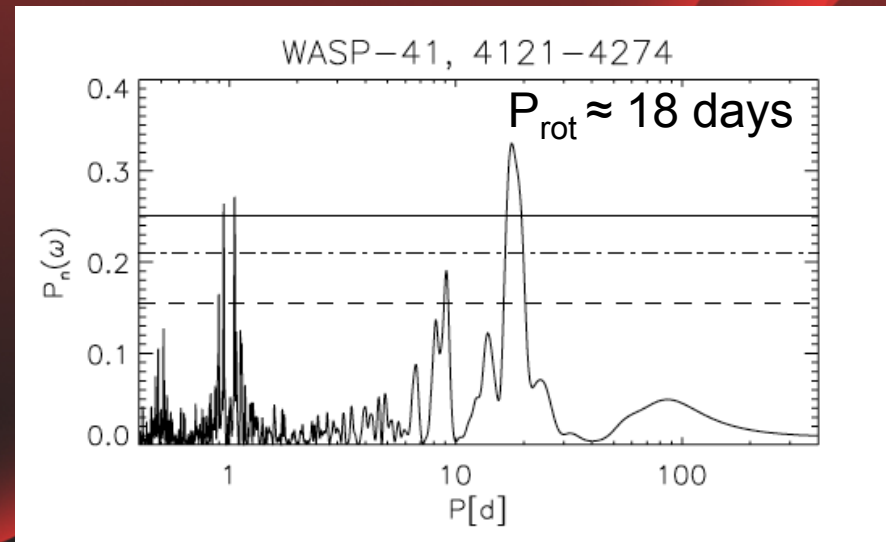
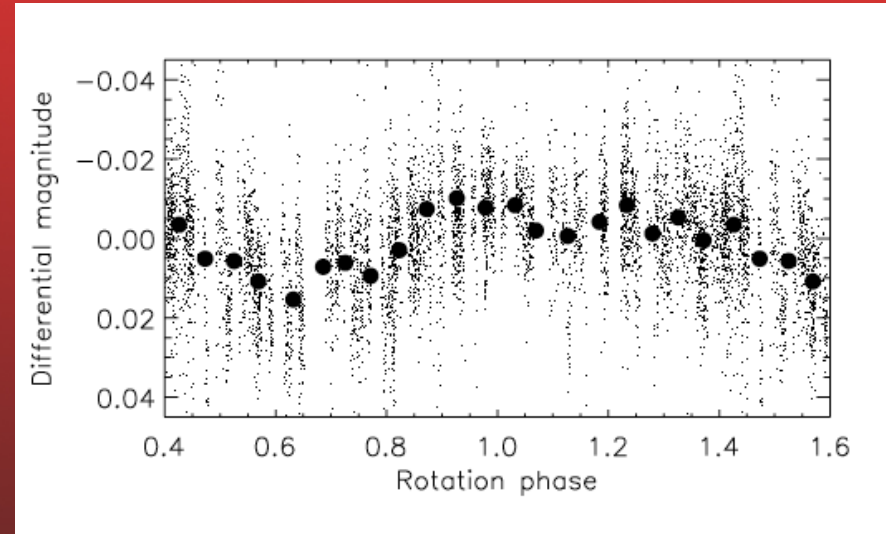
WASP-41 – a second planet?



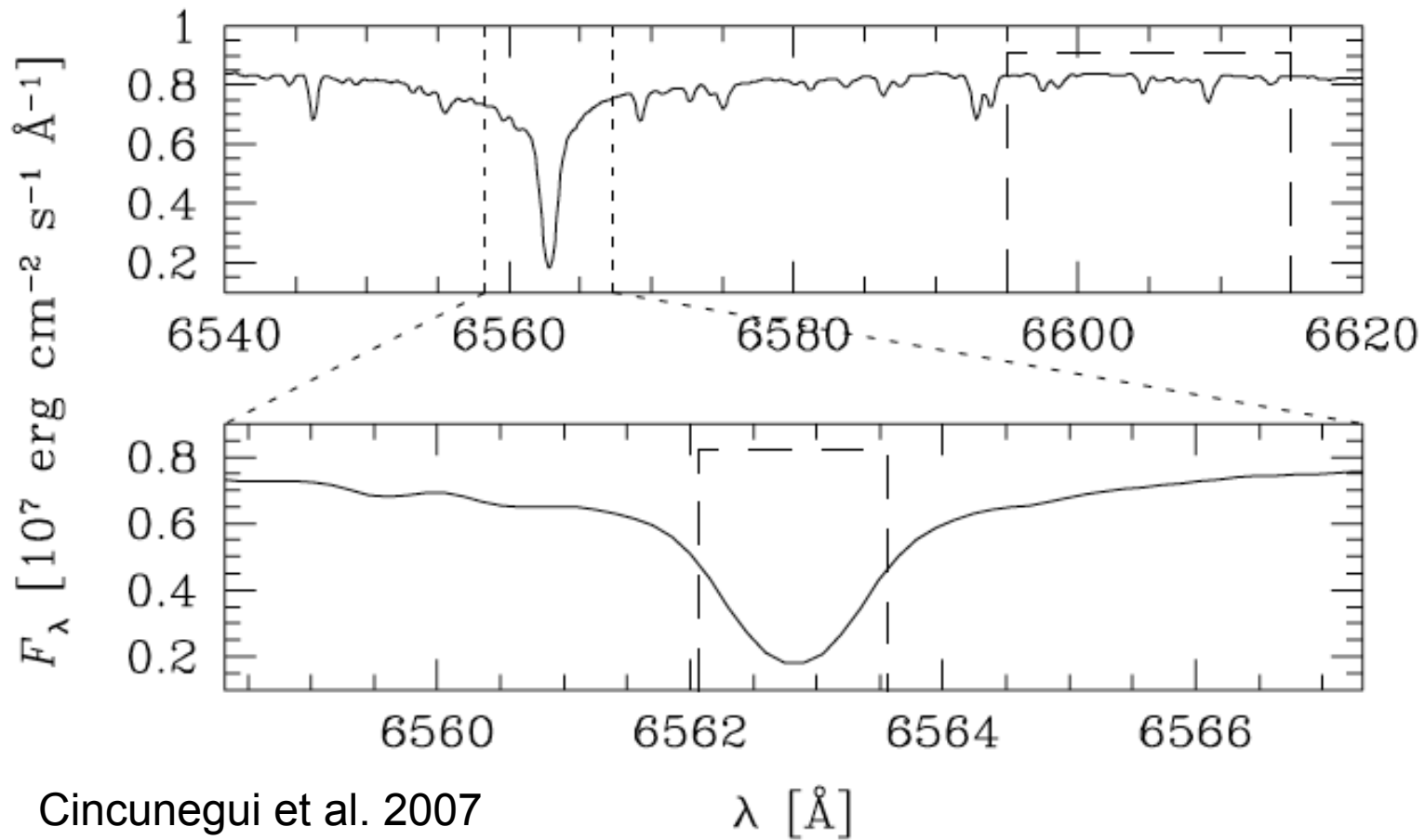
WASP-41 is chromospherically active



Maxted et al. 2011



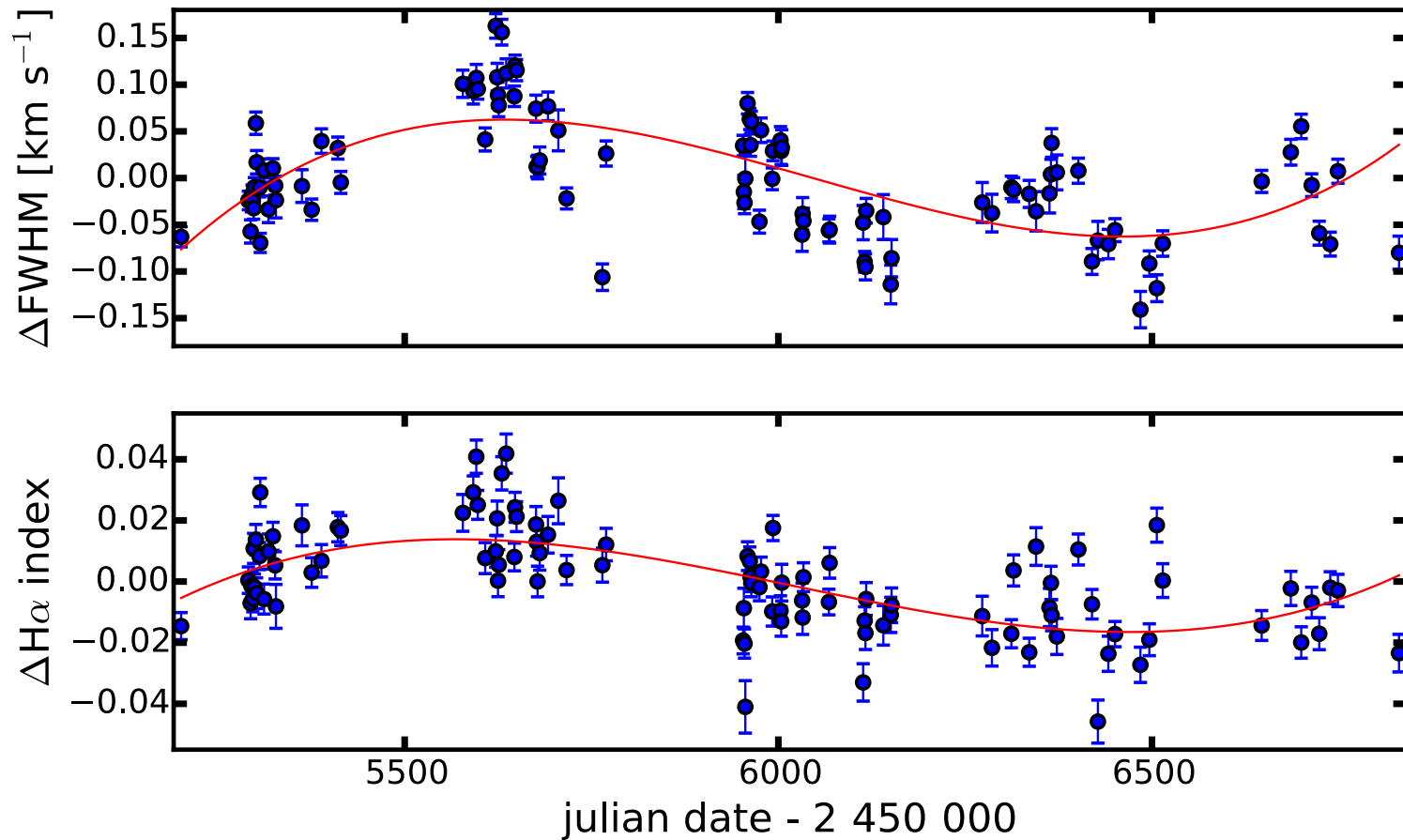
Measuring the H α emission



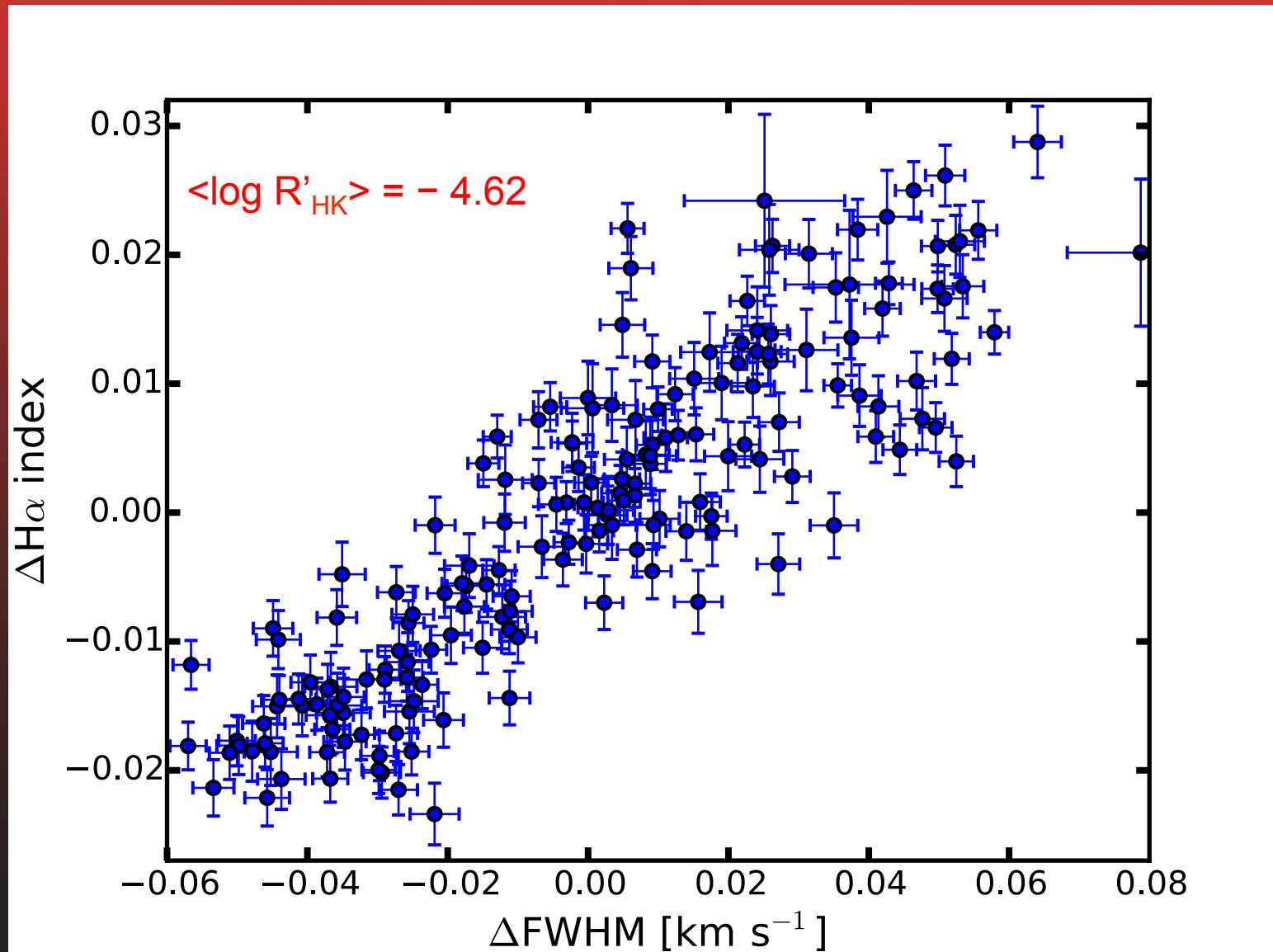
Gomes da Silva et al. 2014 :
H α correlated with Ca II (H&K) when $\log R'_{\text{HK}} \geq -4.7$

WASP-41

Detection of magnetic cycle?



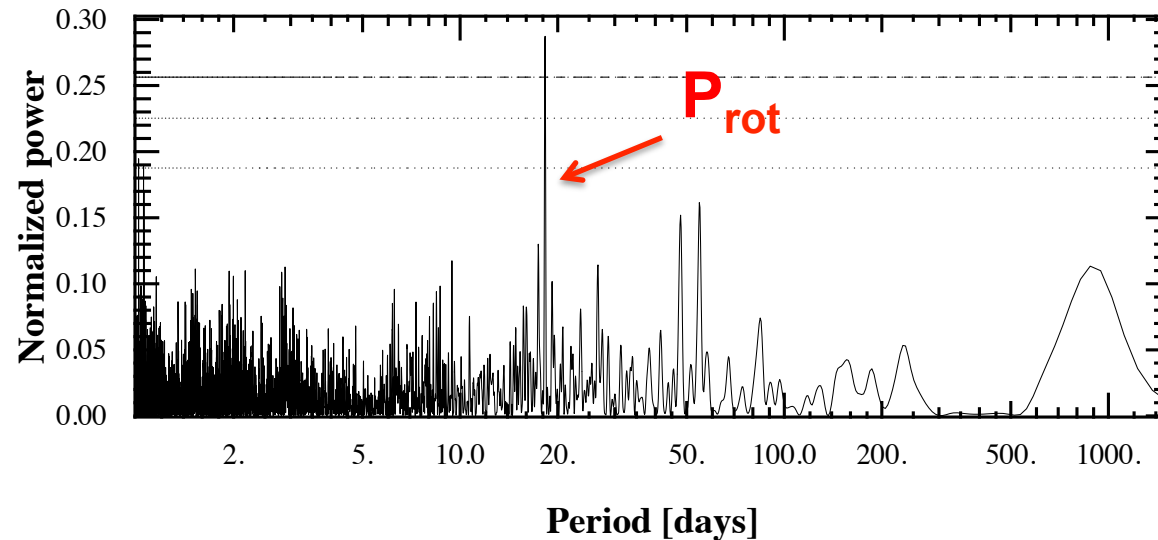
Activity similar to CoRoT-7



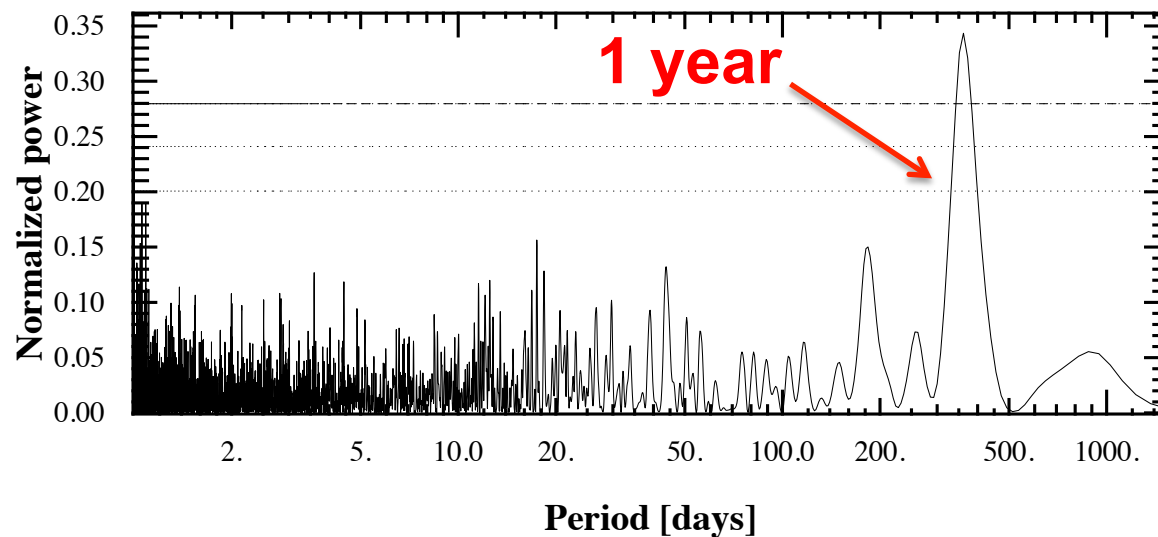
WASP-41

Additional activity-related signals?

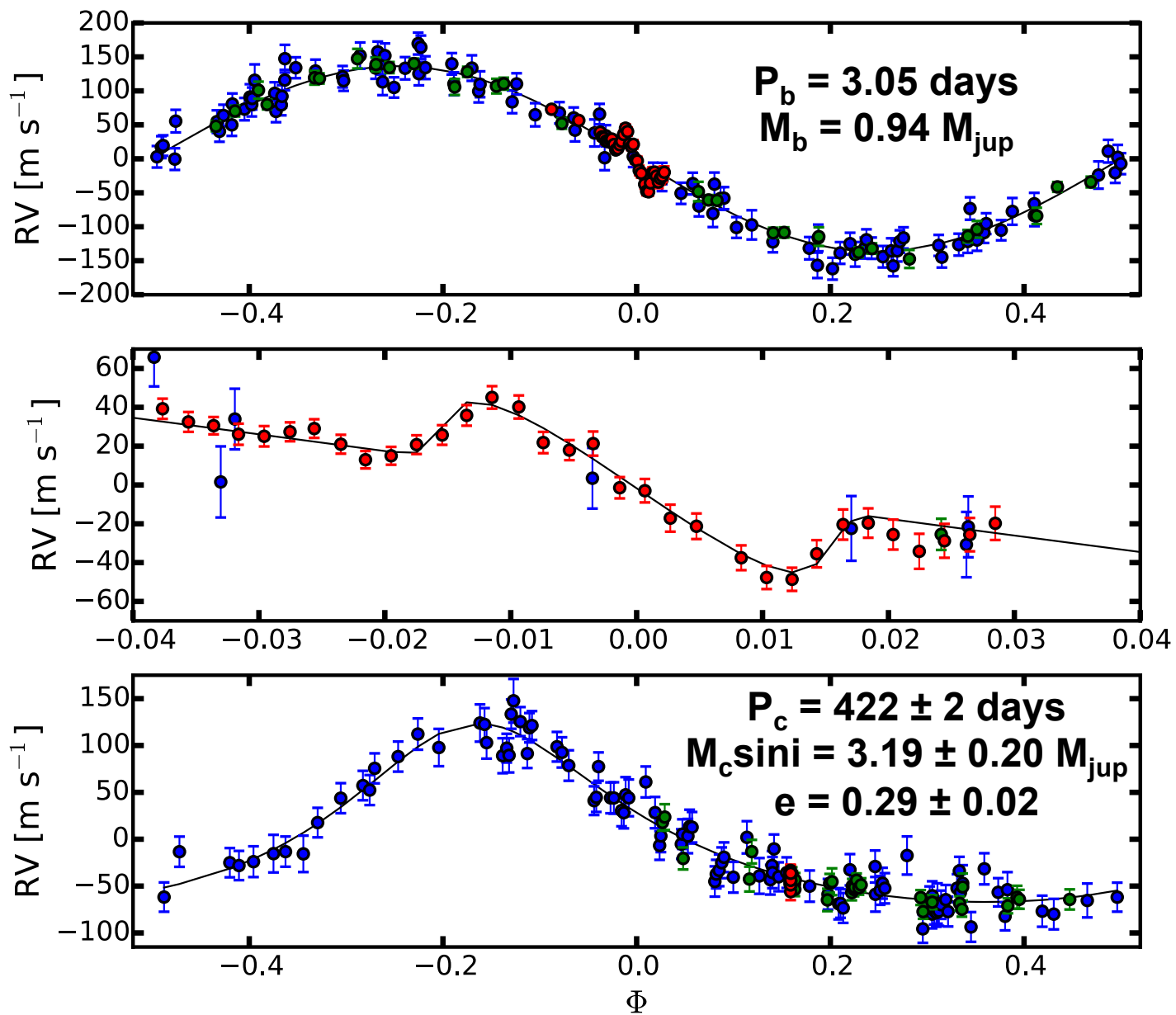
H α



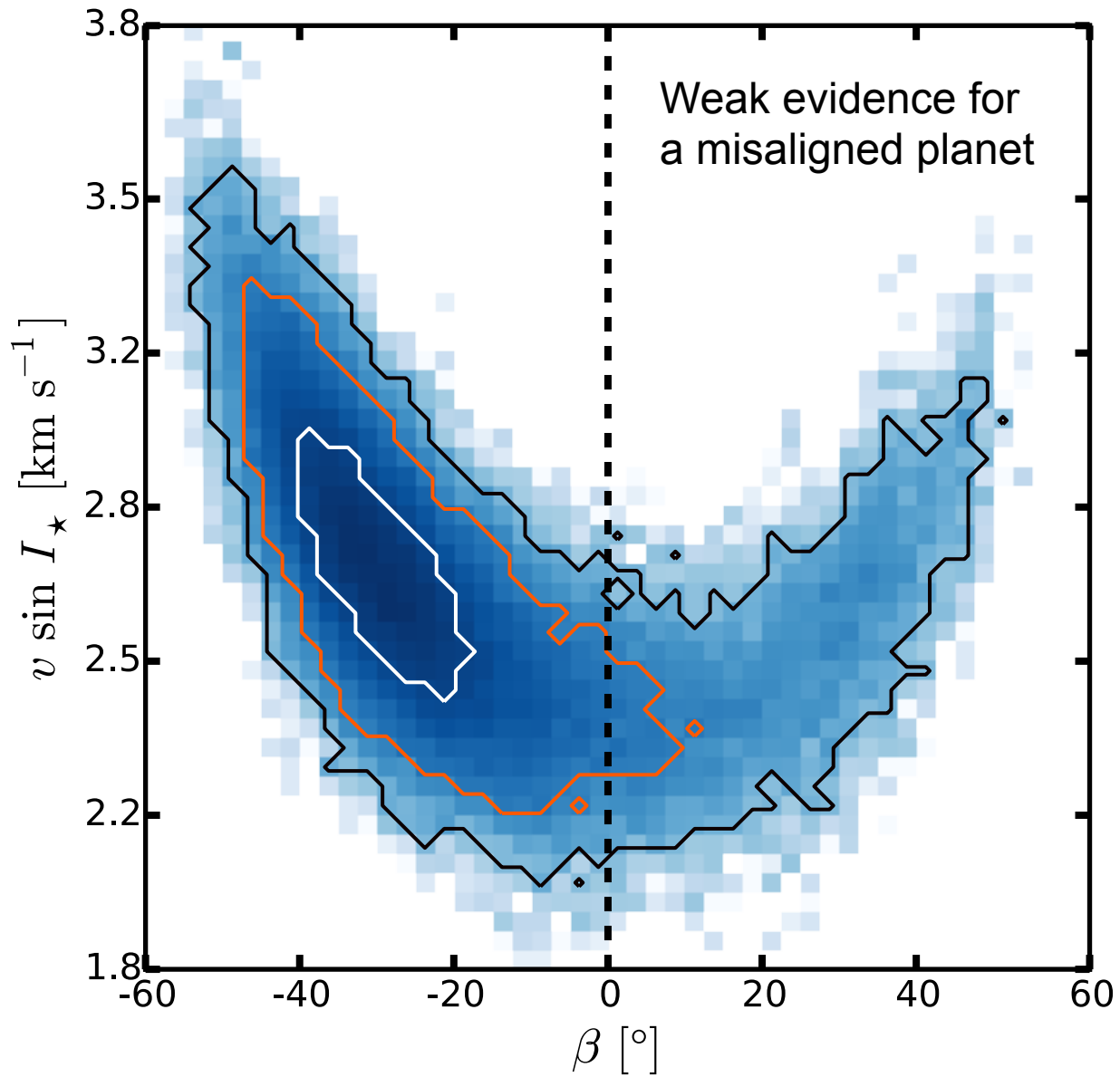
FWHM



WASP-41



WASP-41



Hot Jupiters in multiple systems

