



Identifying False Positives: Follow-up Photometry and Lucky Imaging

RoPACS Network Meeting

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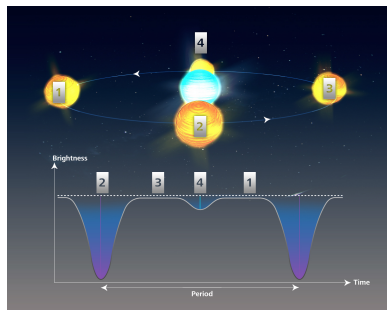
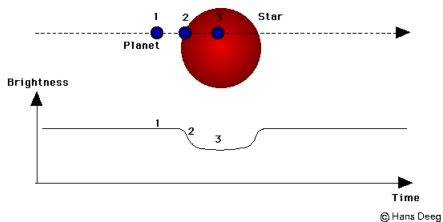
Instituto de Astrofísica de Canarias

December 3rd 2010

Photometric Follow up

Why?

- Confirmation of the transit
- Photometry is cheaper than spectroscopy
- Light Curve: eliminate candidates



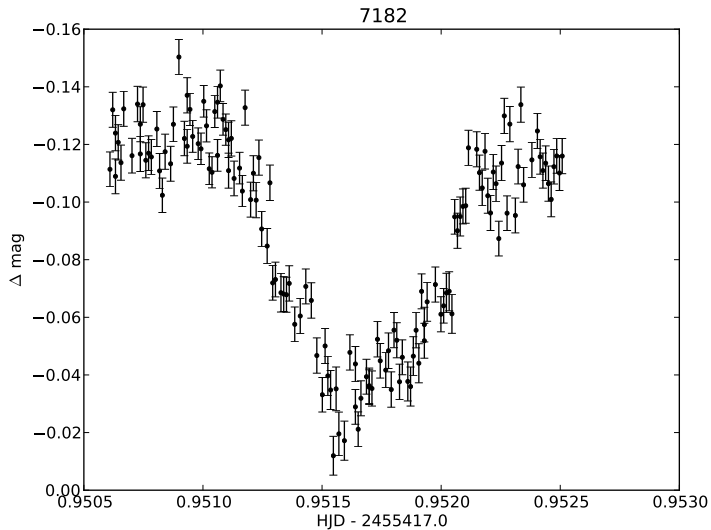
Photometric Follow up

Facilities

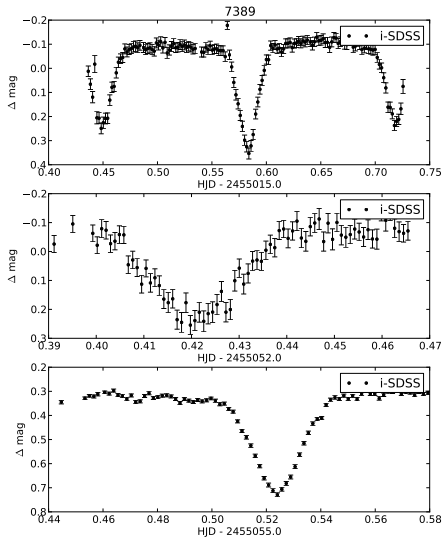
- IAC80 telescope (80cm)
 - 11 nights so far
 - 15 candidates observed
- INT telescope (2.5m)
 - Proposal for 17hr field
 - Service night(s) in December



Results



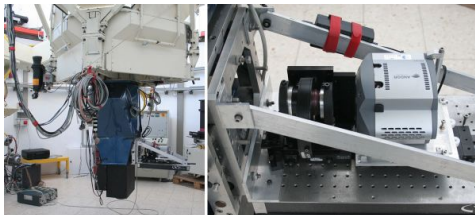
Results



Wide Field FastCam

FastCam

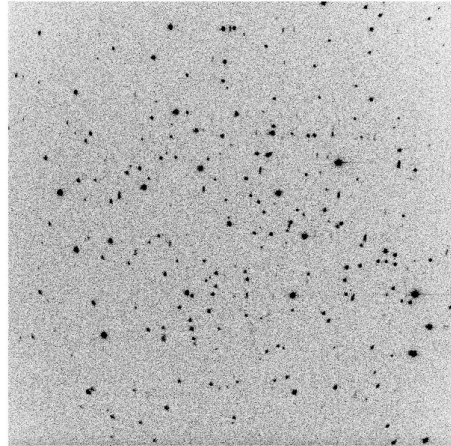
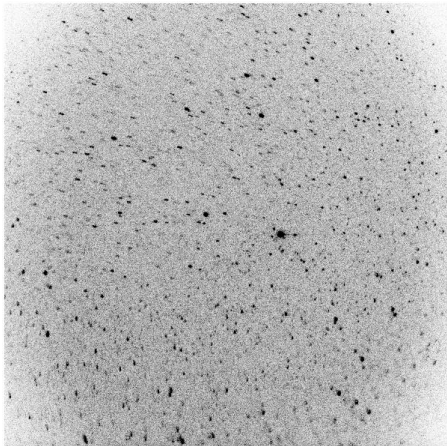
- Developed by the IAC and the Universidad Politecnica de Cartagena
- Very fast readout speed 512x512 CCD
- Small field of view
- TCS, NOT, WHT, GTC



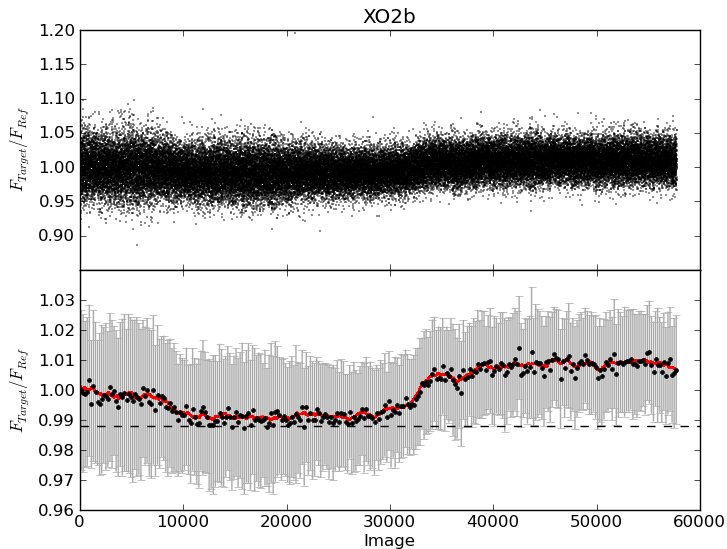
...Wide Field FastCam: same idea as FastCam but with a bigger field of view and CCD

- 1024x1024 CCD
- Min. exposure time 130 ms
- Search for transits in M dwarfs with TCS
- First light: 4th of August 2010
- August, October and November ✓
- December and January

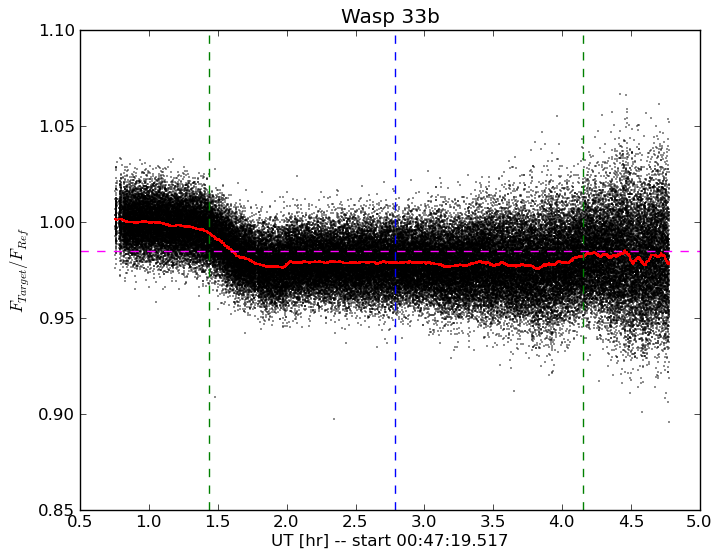
Some Problems



Results



Results



- Improve the flats
- Explore the photometry
- Faster photometry
- New observations



Thank you