



# The Search of Transits and WTS Follow Up at the IAC

## RoPACS Network Meeting

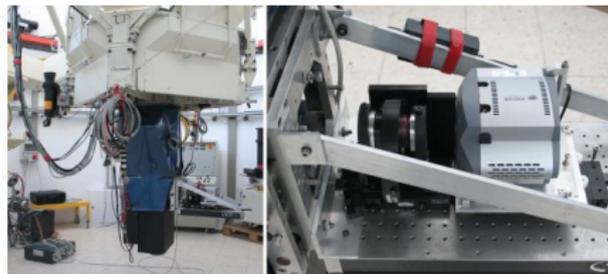
Felipe Murgas

Instituto de Astrofísica de Canarias

# 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

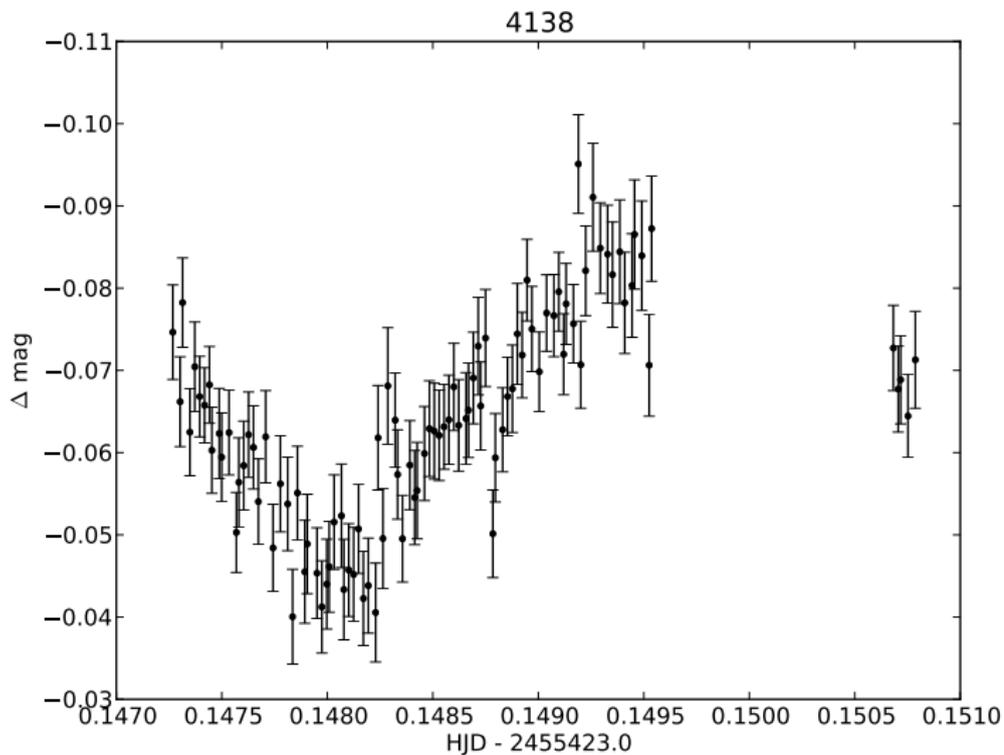
- 1024x1024 CCD
- Min. exposure time 130 ms
- Search for transits in M dwarfs with TCS
- High temporal resolution: Transit Timing Variations
- First light: 4th of August 2010
- 27 days of observations and tests (4th-31st Aug.)
- Pipeline to reduce data
- Photometry

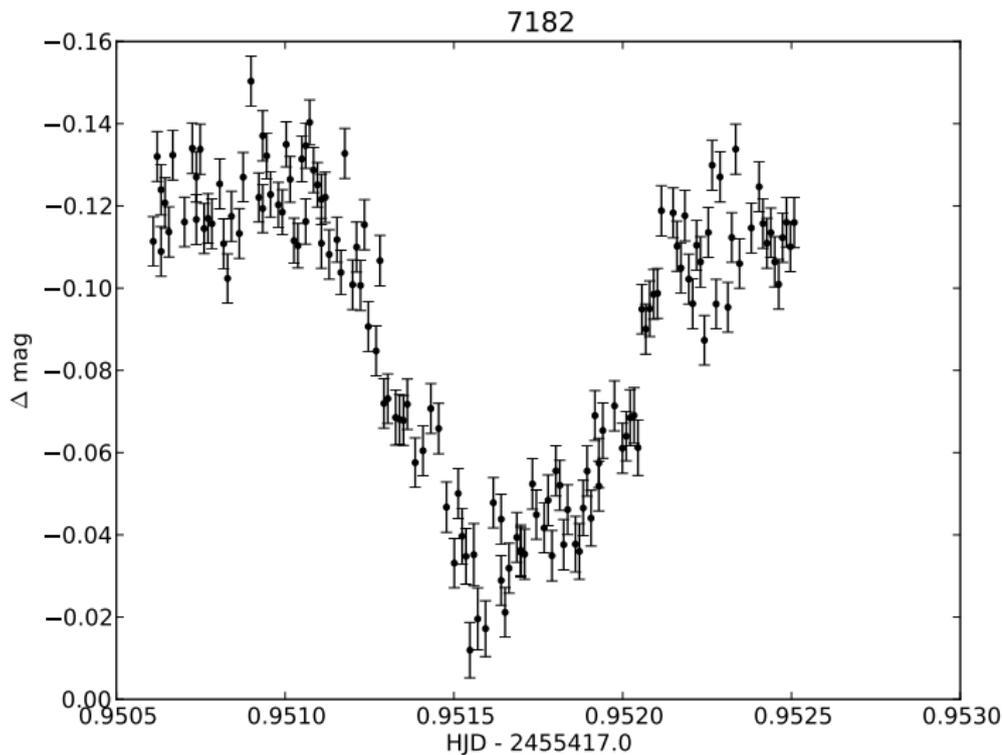
# WTS Follow Up

- FastCam project: TCS and IAC80
- Nights with no transits: RoPACS candidates
- Training for ESR
- i SDSS
- 1 candidate per night
- 5 candidates observed

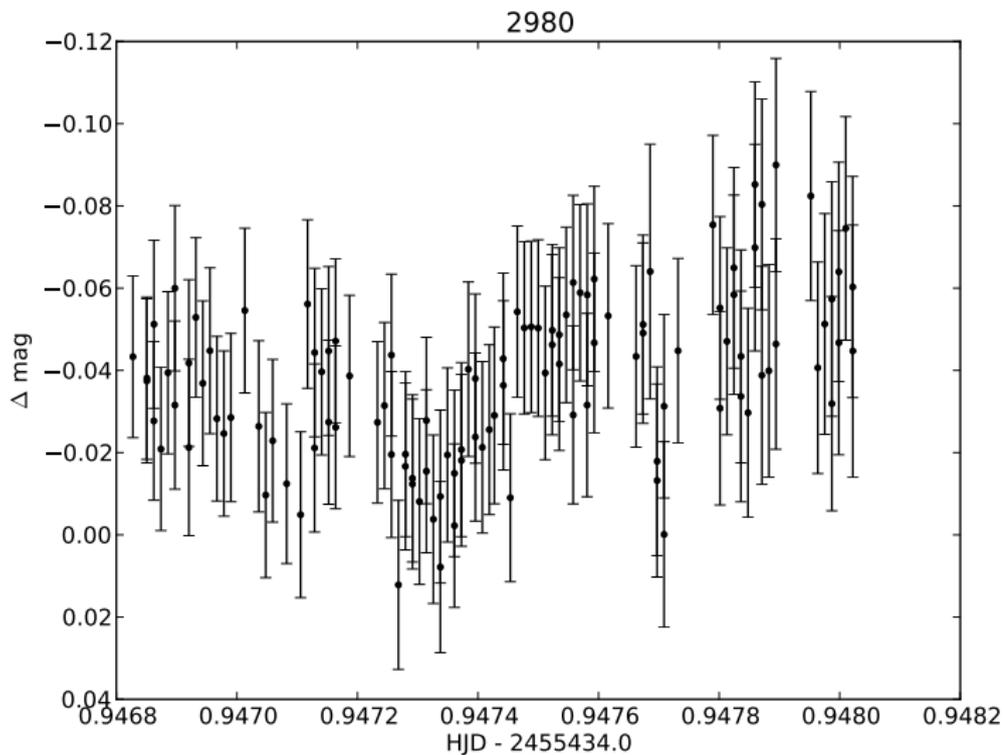


# WTS Follow Up





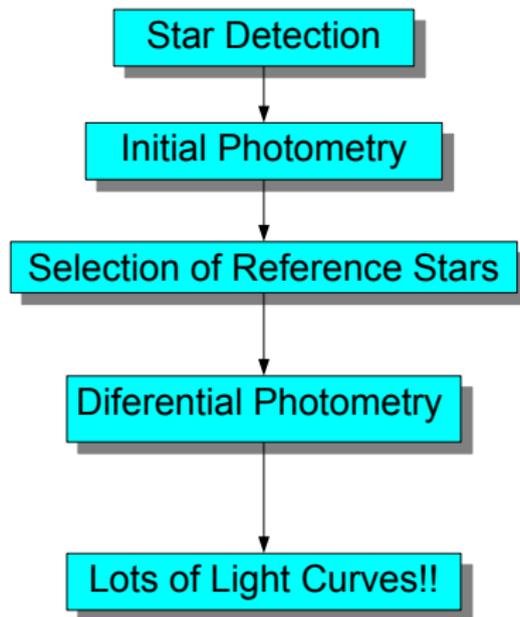
# WTS Follow Up

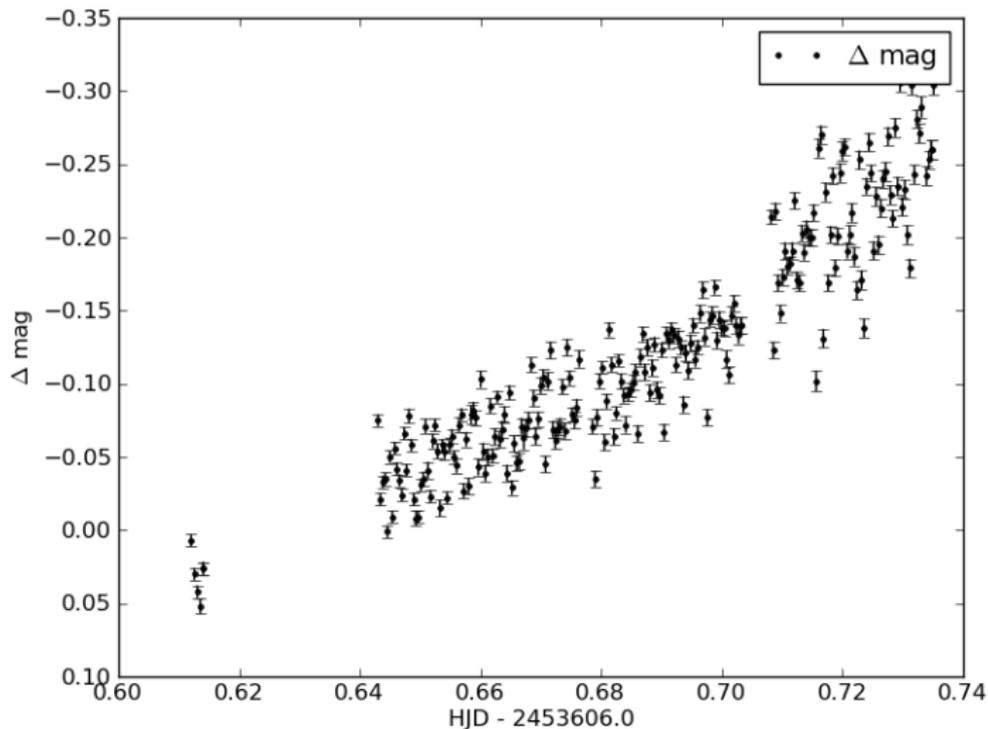


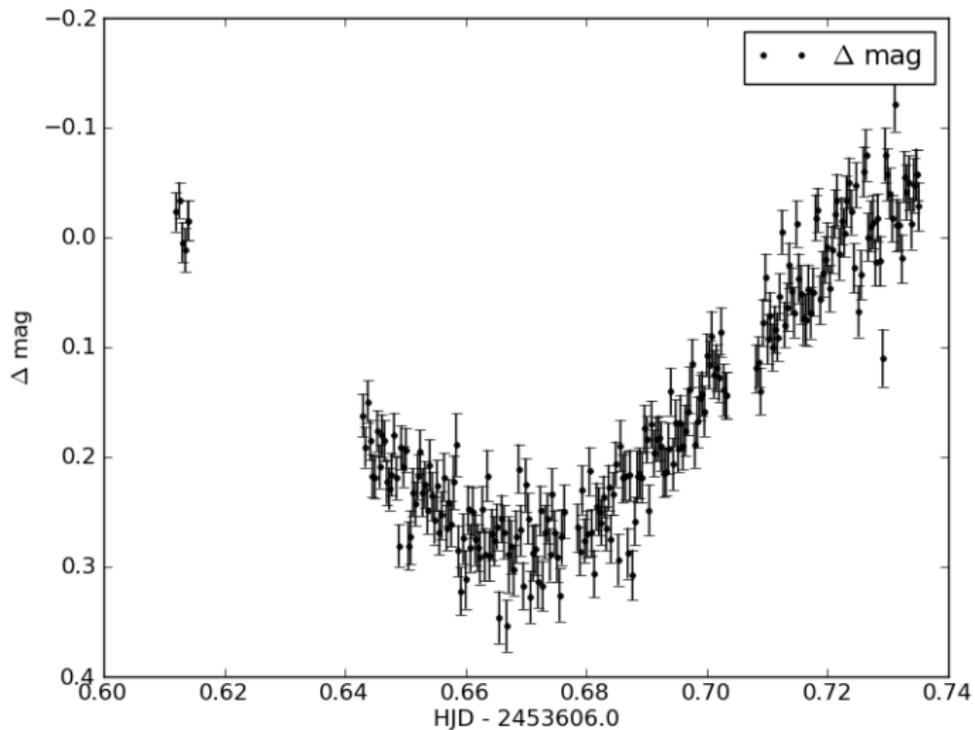
## Search for Transits in Open Clusters

- Transits and rotational periods
- Pleiades, IC 4665, Orion, M35, etc.
- Pyraf scripts for data reduction and photometry
- Automatized diferential photometry

# Optical Ground Station (OGS)







## What's next...

- Finish the whole data set
- Cluster membership of stars that show variations
- ... follow up?

# Thank you