



# Investigation of spectral continua in solar flares



Ondřej Procházka

Faculty of Mathematics and Physics -

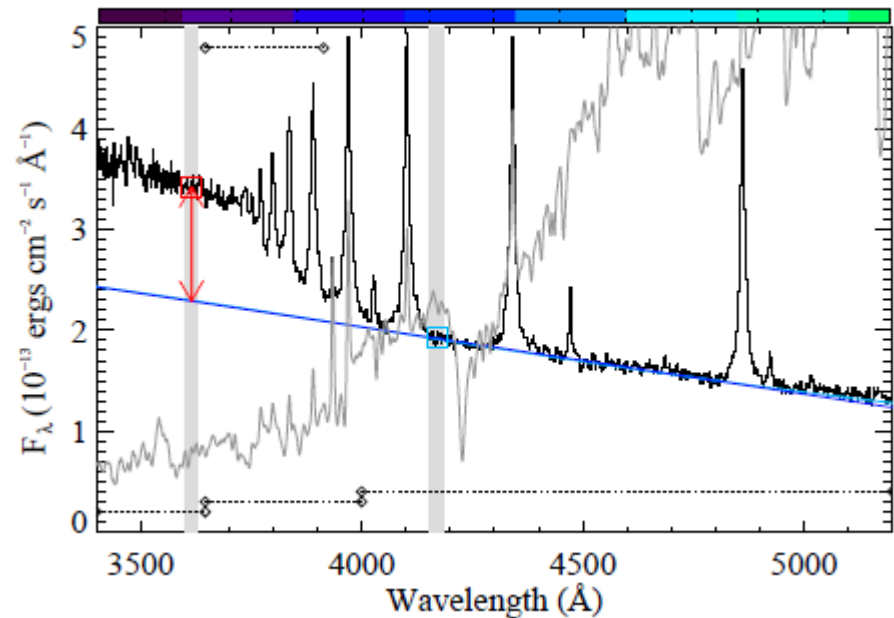
- Charles University in Prague

Astronomical Institute, Ondřejov

# Goal

- We are trying to detect an increase of flux in Balmer continuum during flares

Adam F. Kowalski: Time-Resolved Properties and Global Trends in dMe Flares from Simultaneous Photometry and Spectra, 2012  
- a flare on AD Leo 3 April 2010  
- spectral class M



# Observatory

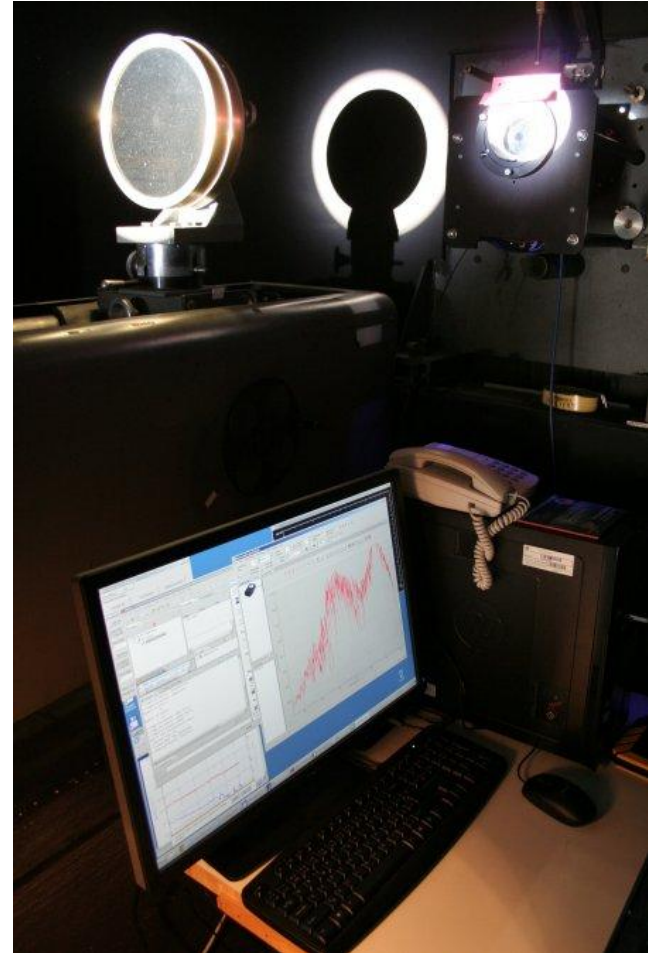
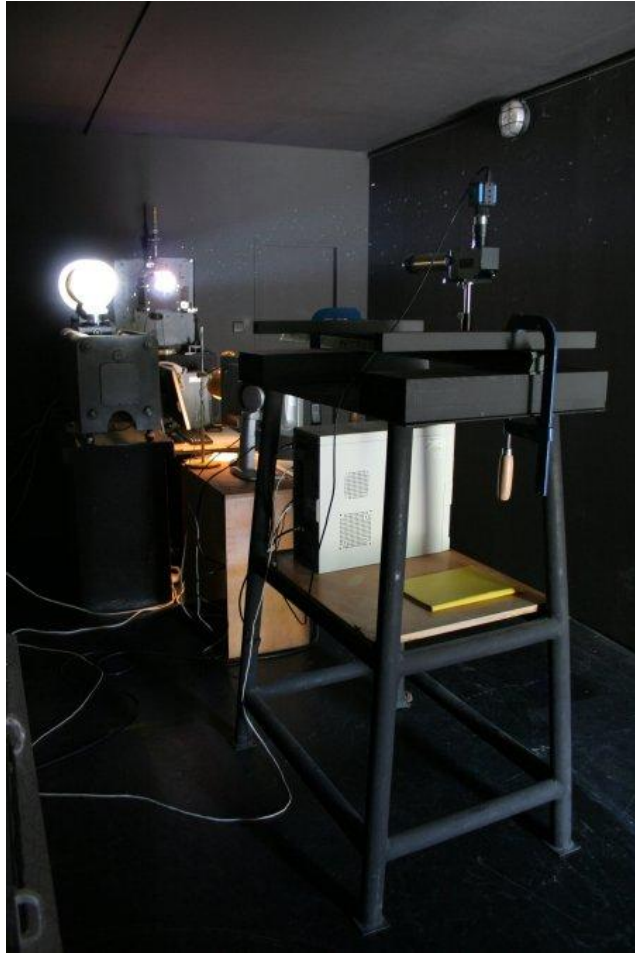


Astronomical Institute,  
Academy of Science,  
Ondřejov, Czech Republic

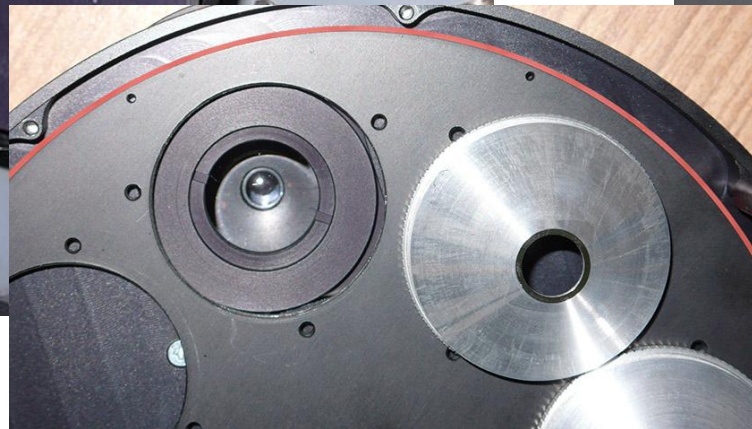
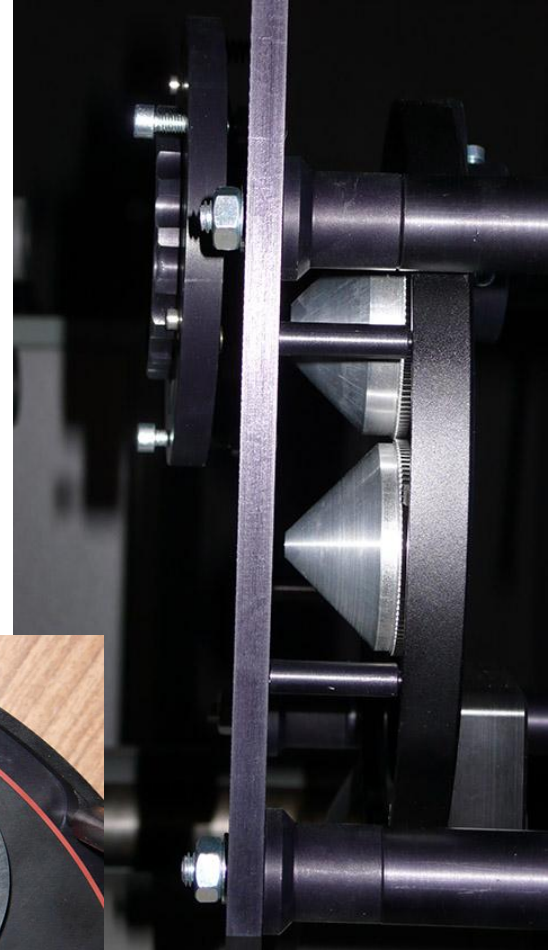
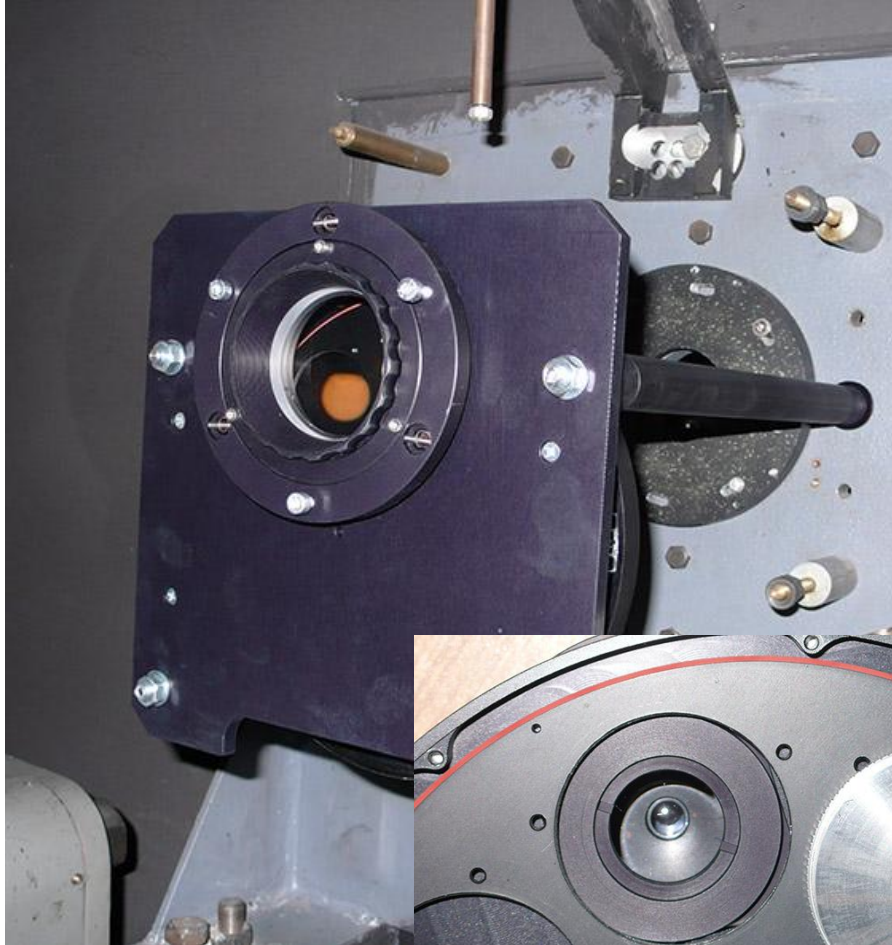




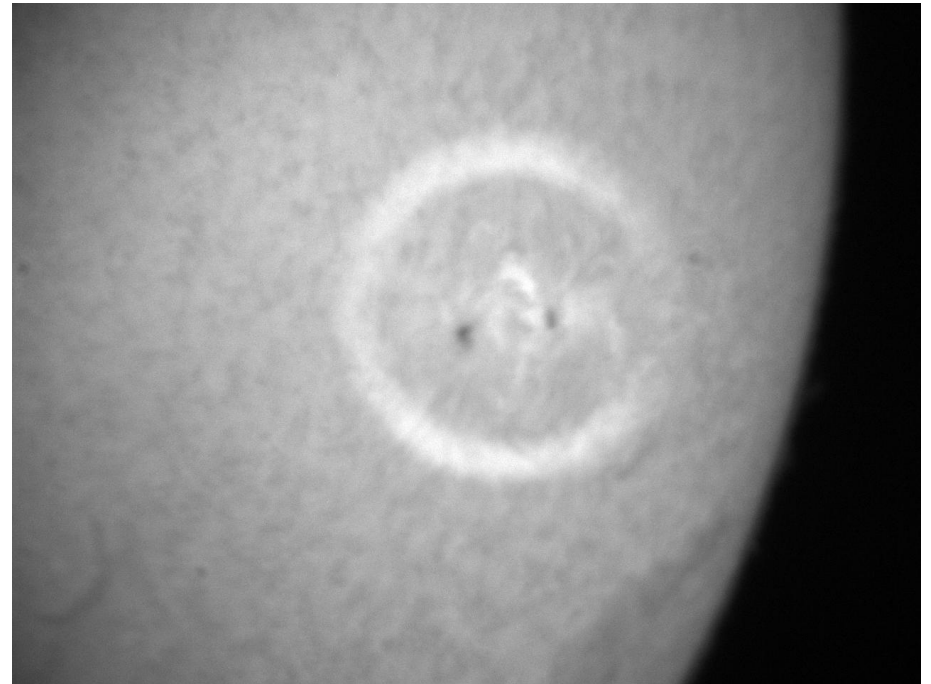
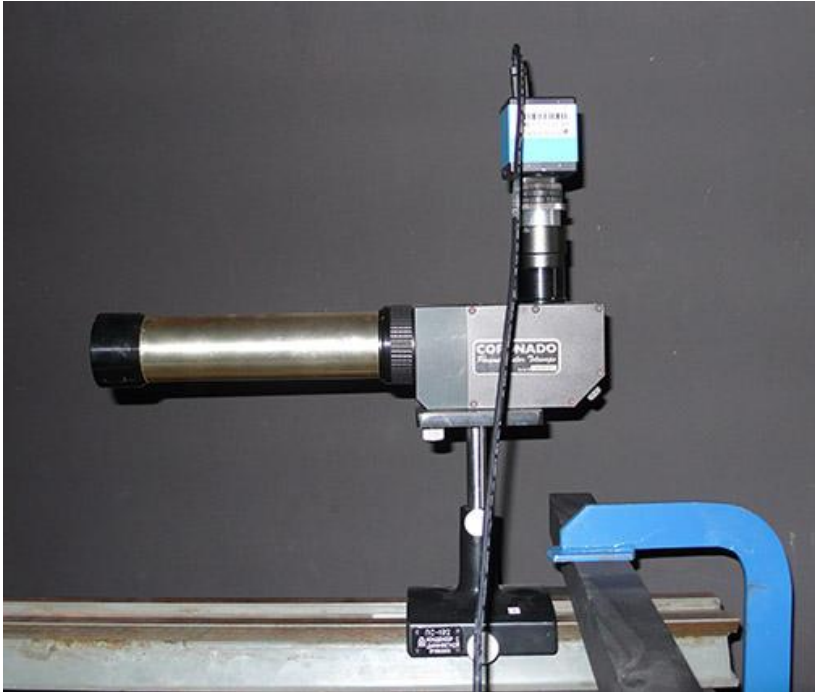
# Instruments



# Instruments

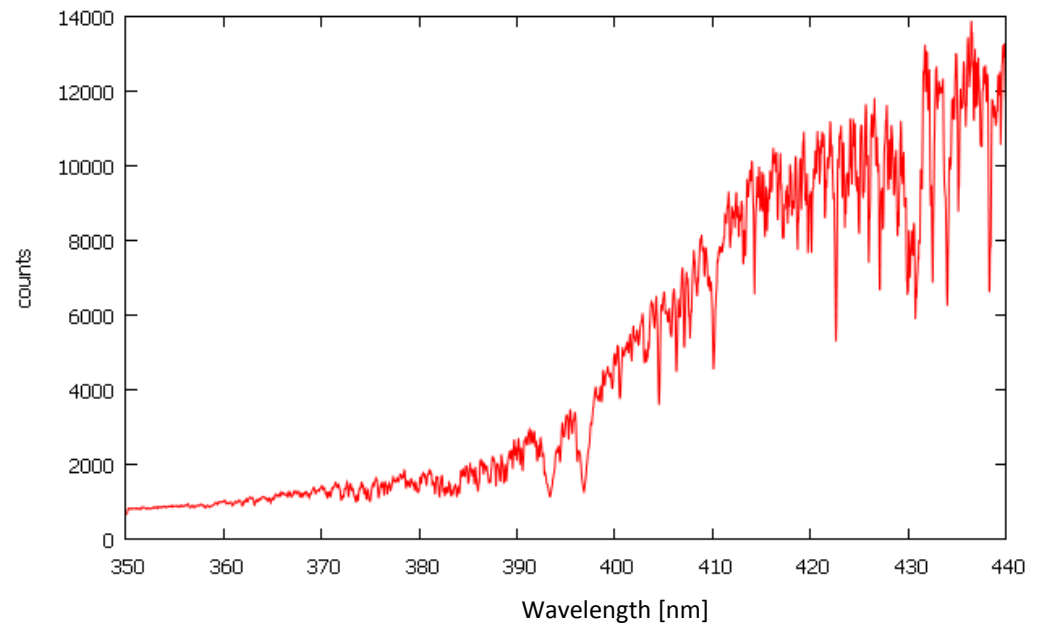


# Slit-jaw camera

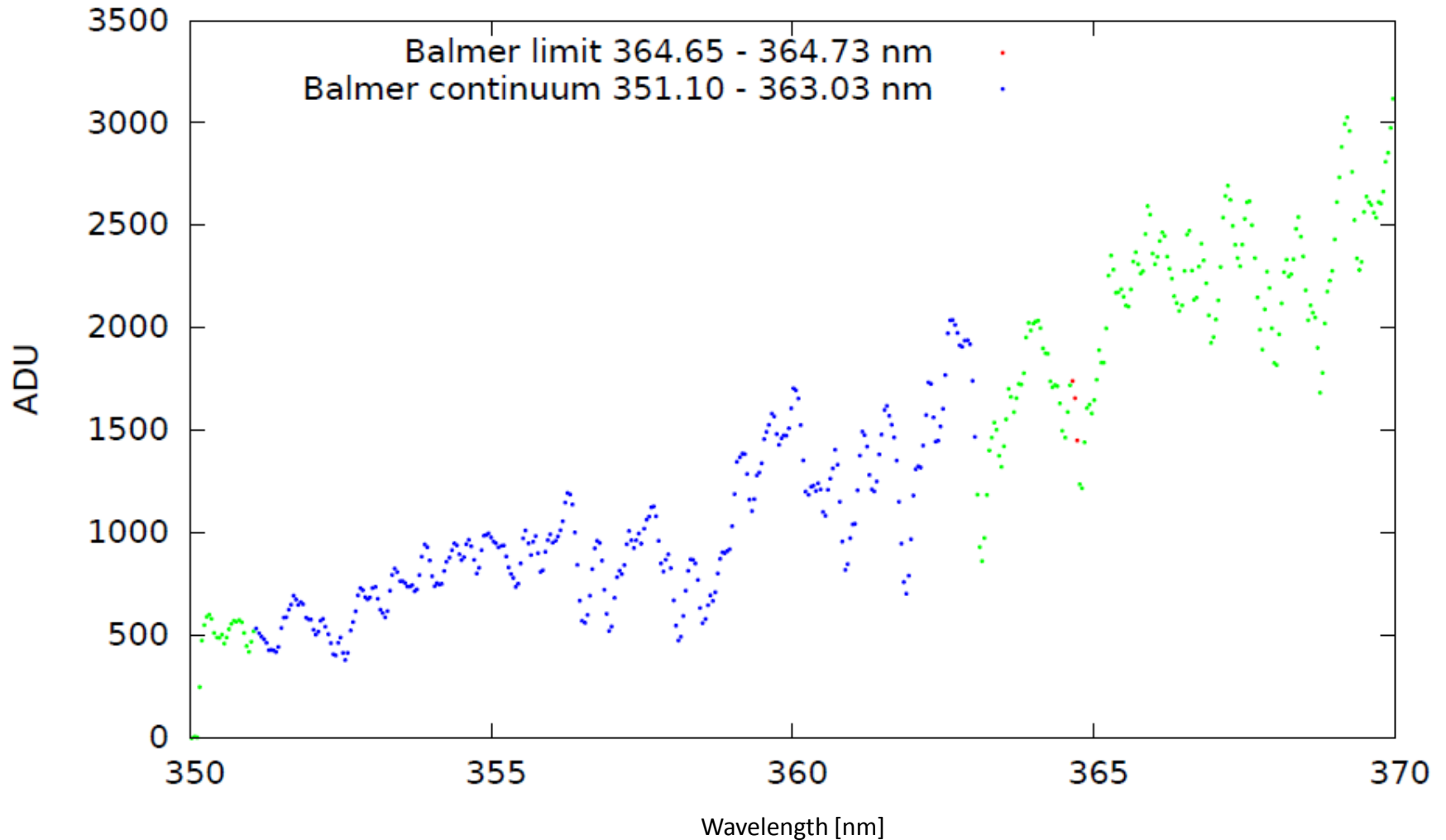


# Spectrometer Ocean Optics HR4000

- Spectral resolution: 30 pixels/nm
- Range: 350 – 440 nm
- Minimum integration time: 3.8 ms

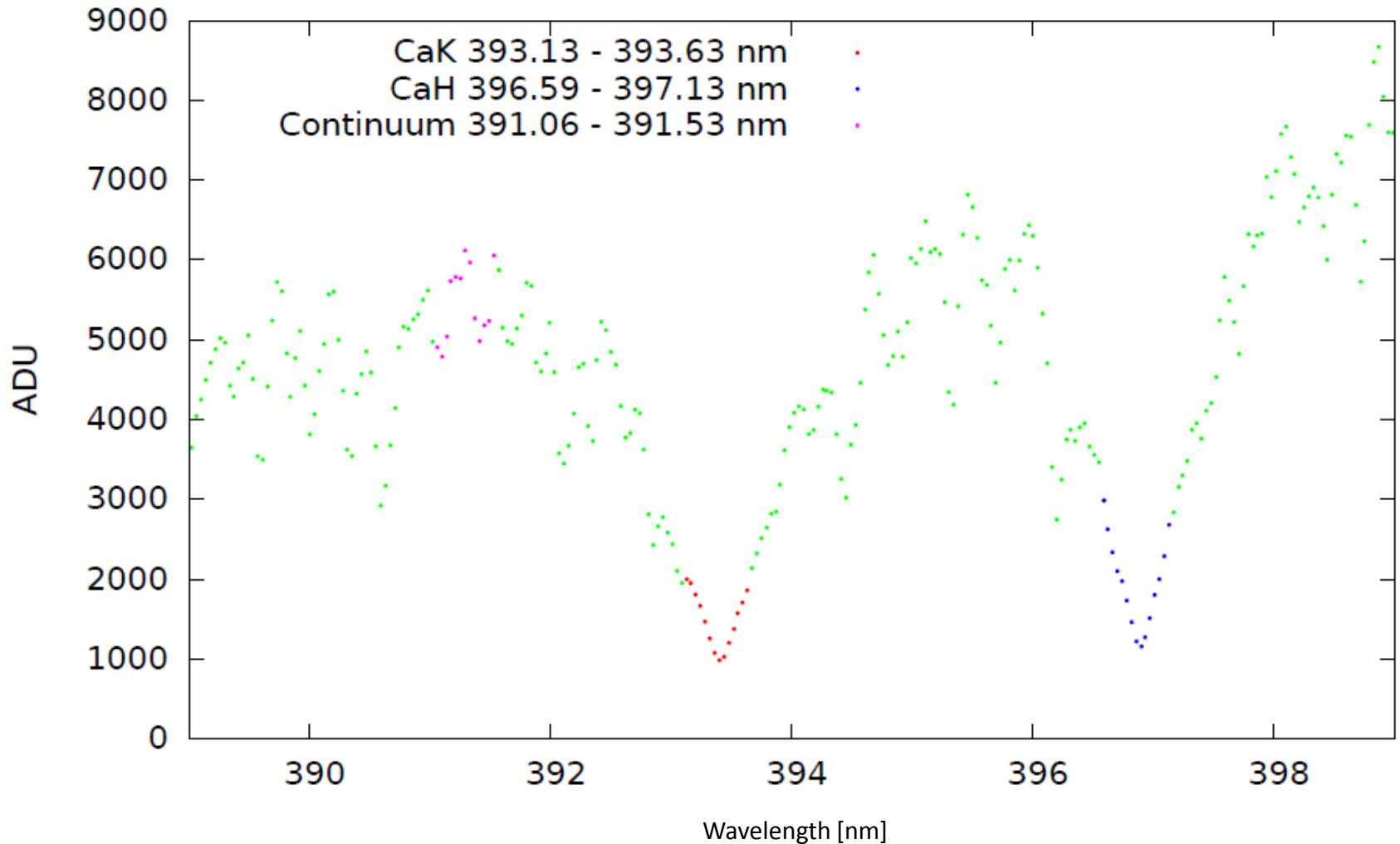


# Spectral channels

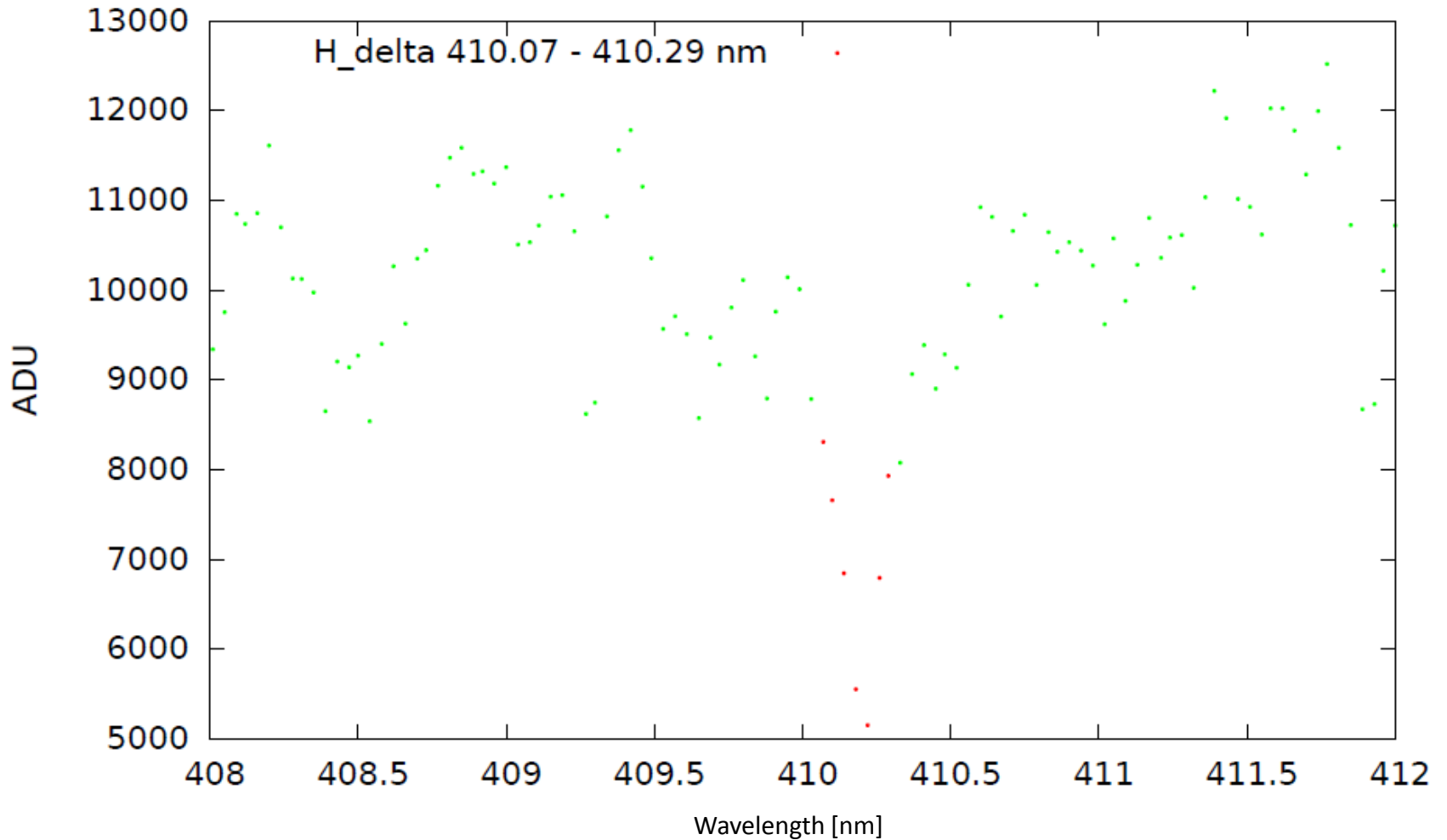




# Spectral channels

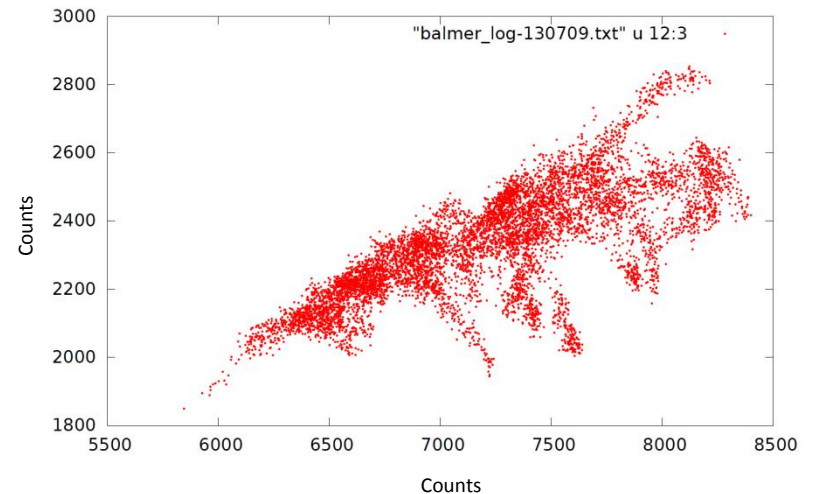
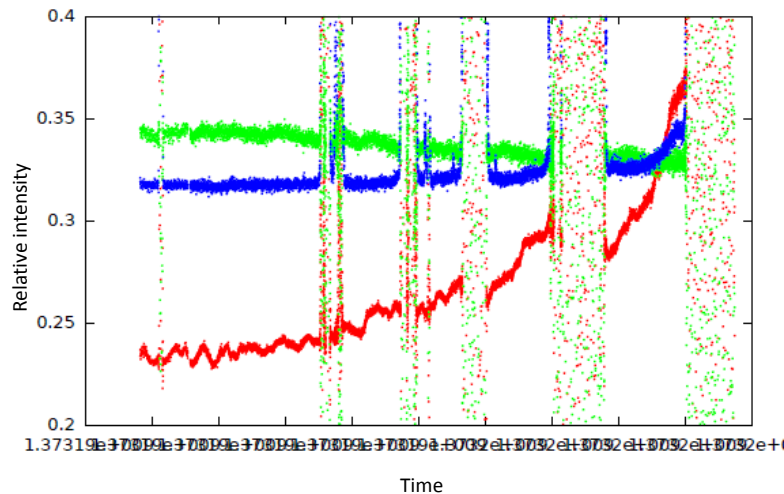
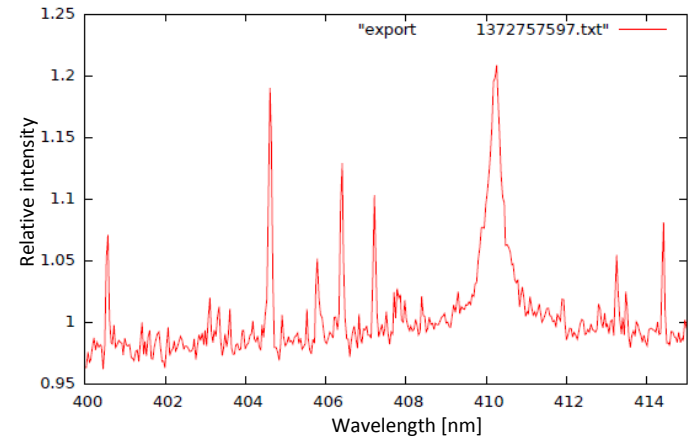


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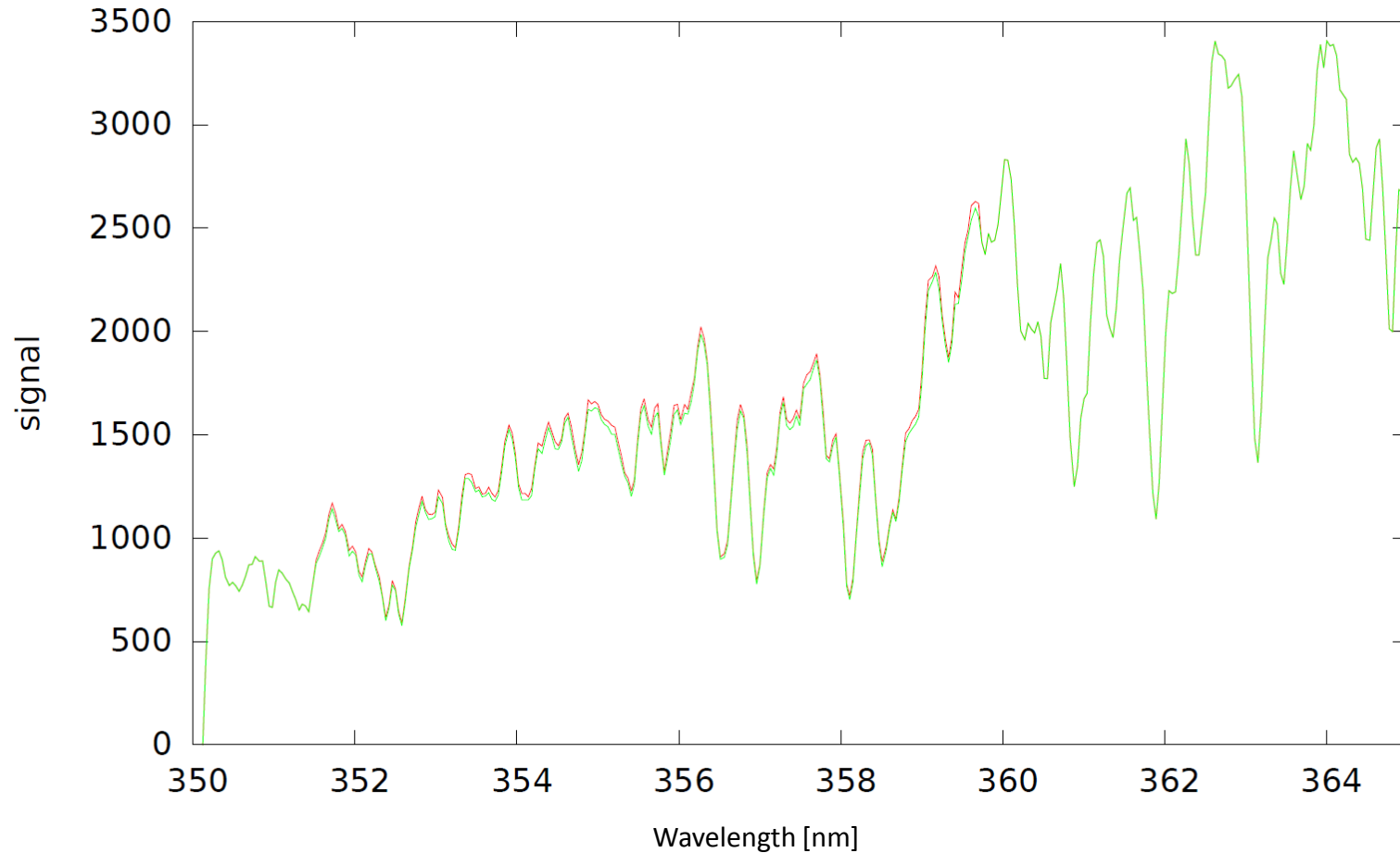


# Processing

- How to do it?
  - Analysis of a “single” spectra
  - Light curves
  - Statistical analysis

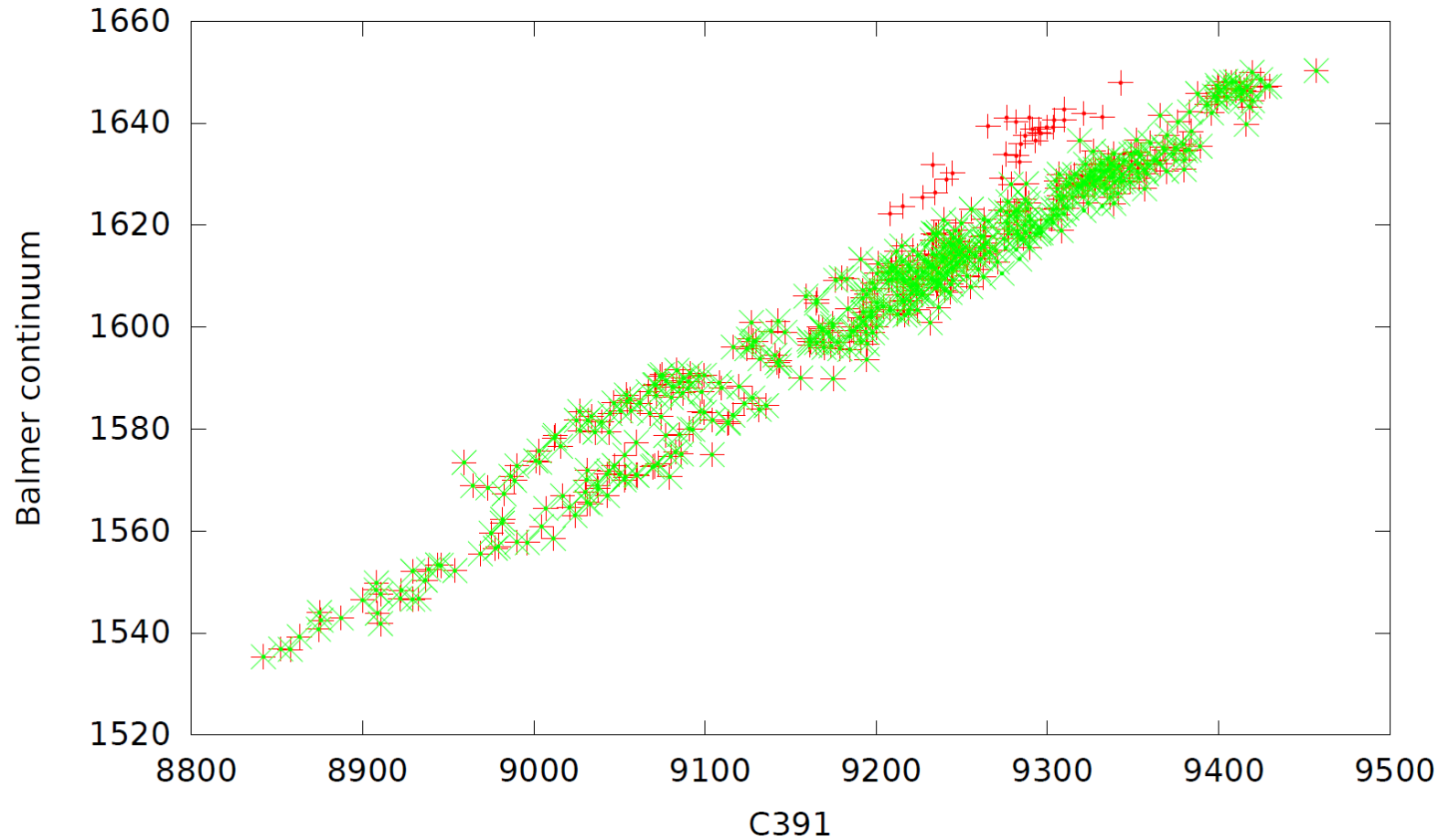


# Flare simulation

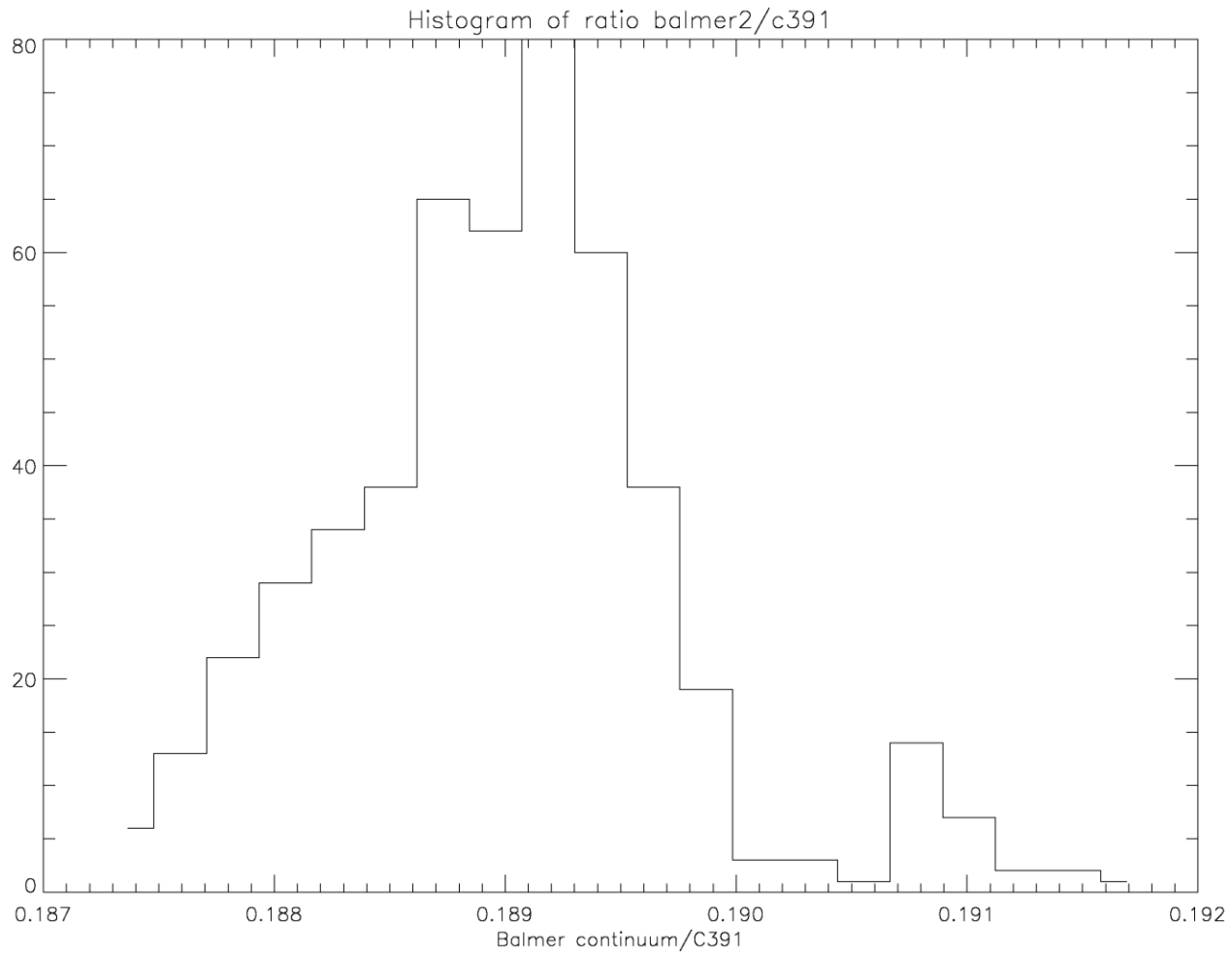




# Flare simulation



# Flare simulation



# Expectations

Our experiment will be moved to a telescope with better parameters

Results?



HSFA2