



Pipe-line evolution

Main evolution

1. Jitter correction on exo-planet channel
2. Jitter correction on seismology channel
3. PSF fitting on seismology "imagerie"
4. Photometry on exoplanet "imagerie"

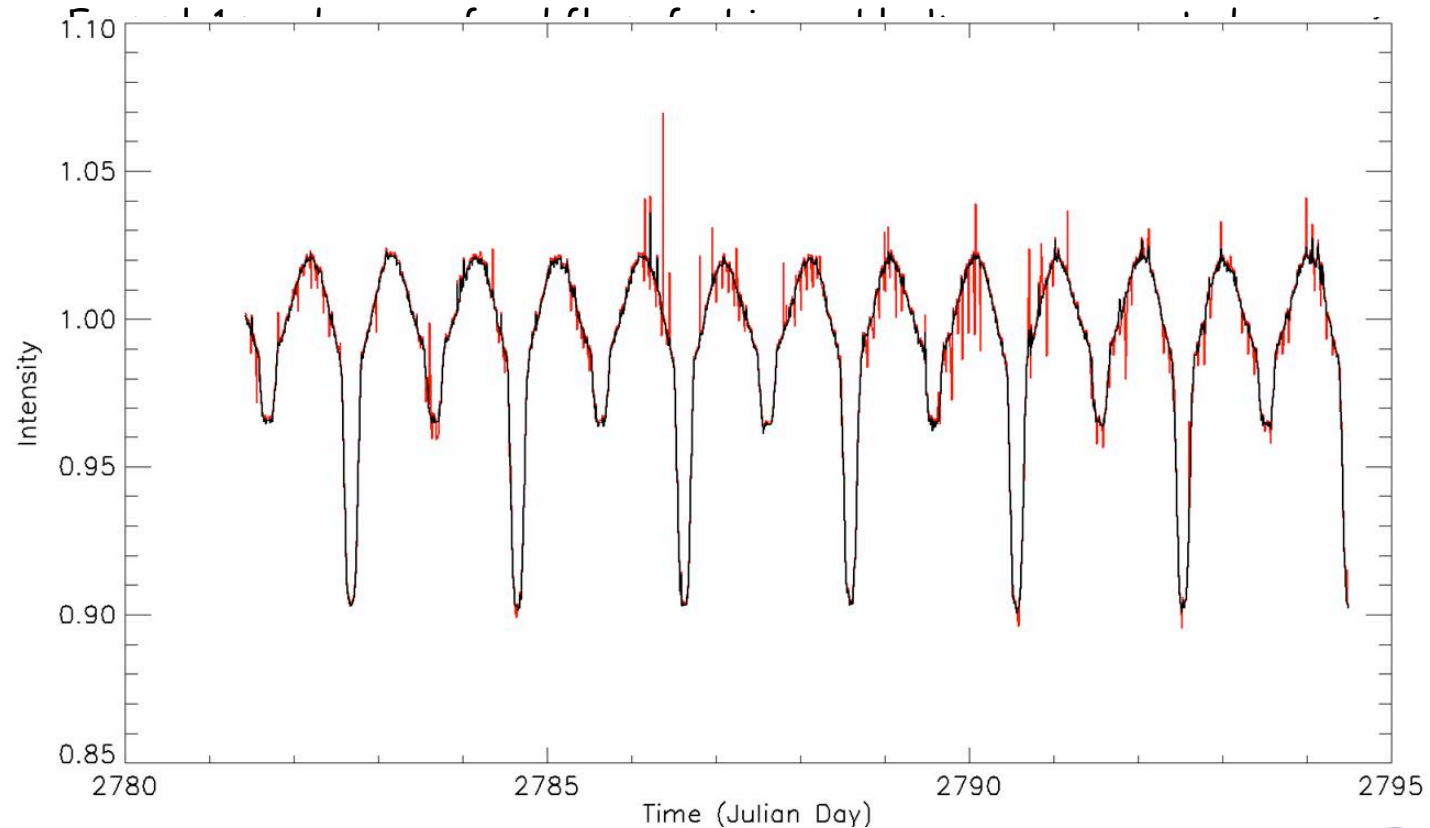


Jitter: exoplanet

A new method implemented on colored flux and on white light.

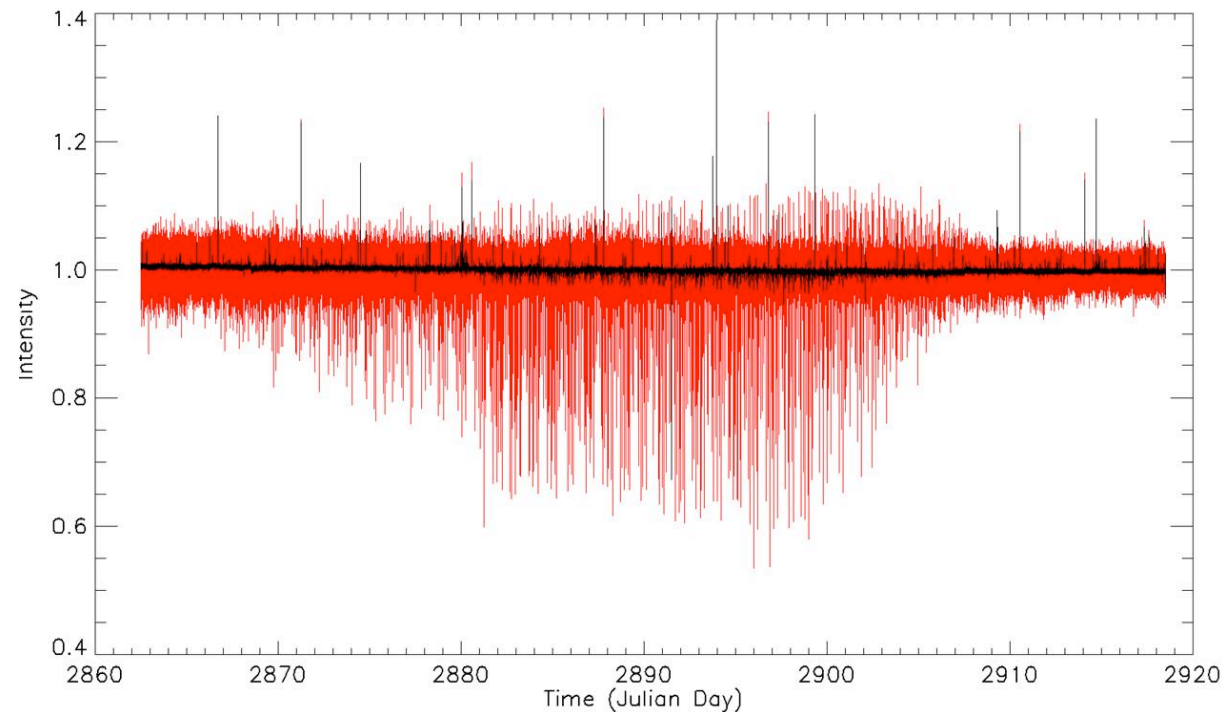
This method uses high resolution PSF (0.5 pixel)

Contributors: the brazilian connection (Fabio, Vanderlei, Leonardo)



Jitter: exoplanet

Example 2: red curve red flux of a constant star; black curve corrected.



When the depointing is large the correction is not perfect. "the rain" disappears almost completely.



Jitter: exoplanet

We estimate that the method works correctly on 80% of stars, depending on the PSF quality.

A systematic control of the correction efficiency will be done using the intensity of the orbit lines in spectrum before and after correction. This control will be ready at the end of december. The run LRc02 will be processed with this new method and only a visual inspection done on the quality of the correction.



Jitter: seismology

For depointing larger than 2 pixels (eclipses ingress/egress)
The corresponding points will be flagged and the light curves interpolated.
Applied on only few points per orbit.



PSF fitting on seismology "imagerettes"

Work in progress, will be probably ready at the end of this year.
Particularly efficient on the faintest stars $7.5 > V > 9$.

As we lose quite often imagerettes (connections problems with antenna).
A mixed light curve will be constructed using the PSF fit results and on board photometry.



Photometry on exoplanet "imagerettes"

The processing pipeline extracting the "imagerette" (40 bright stars) photometry will be delivered by Marseille end of october.
A document describing the method will be delivered also.

Roland has described the method during the 2nd CoI/GI meeting.

Another method using a PSF fit is under development.

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