Data treatments and deliveries
Jitter correction
On-going corrections
Future deliveries

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Jitter corrections and aberrations

Relativistic aberration produce a radial shift of the stars position ~ 0.3 px max.
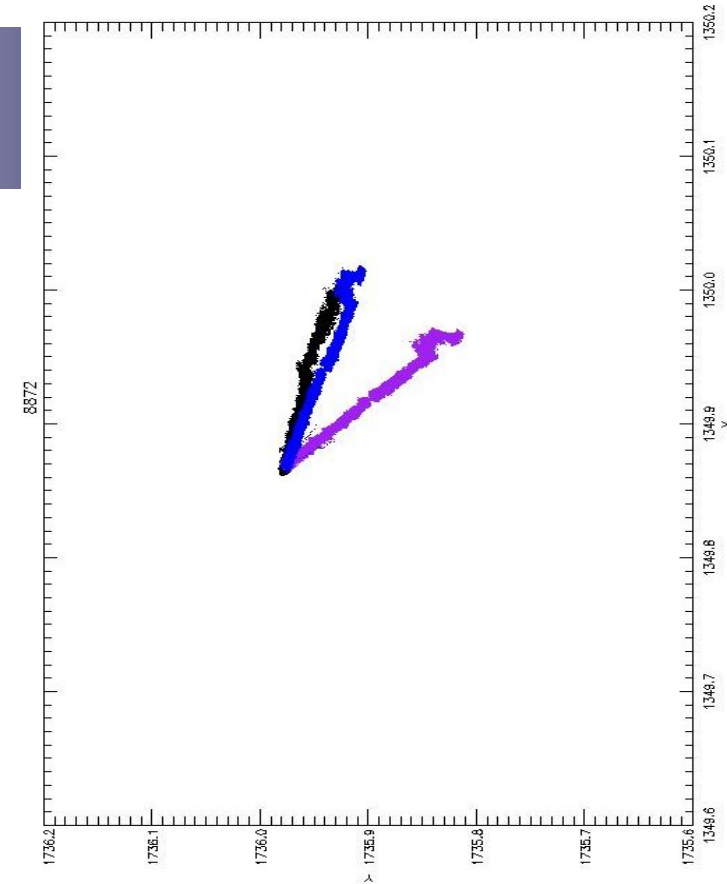
It gives a dilatation (resp contraction) of the field of the of view, equivalent to
a focal length slow variation. To day the jitter correction method assume a constant
Focal length. The new method take into account a long term focal length variation.
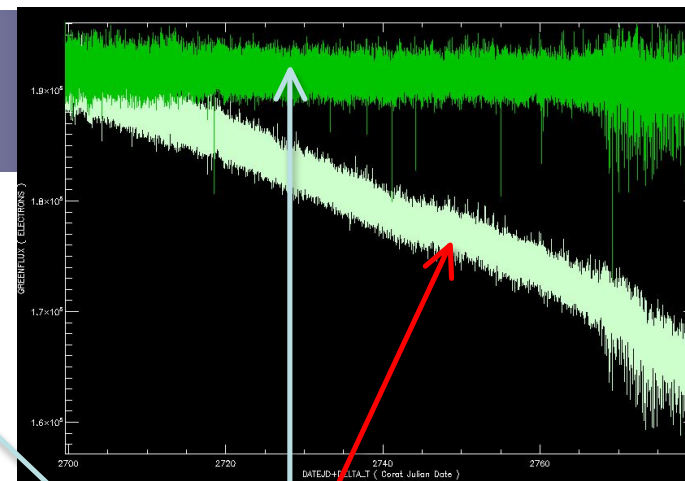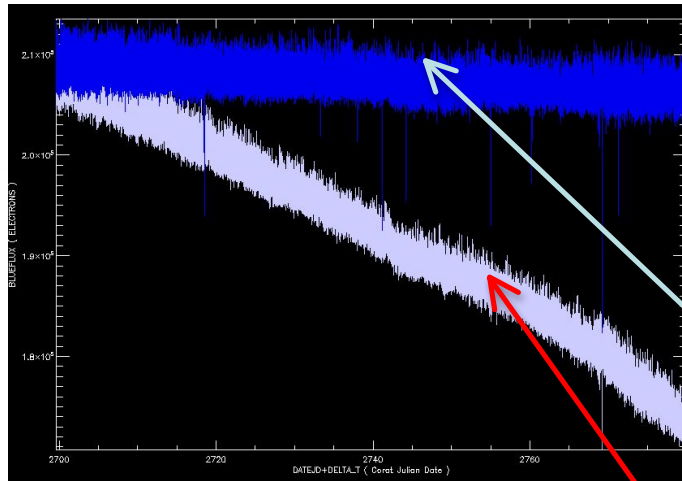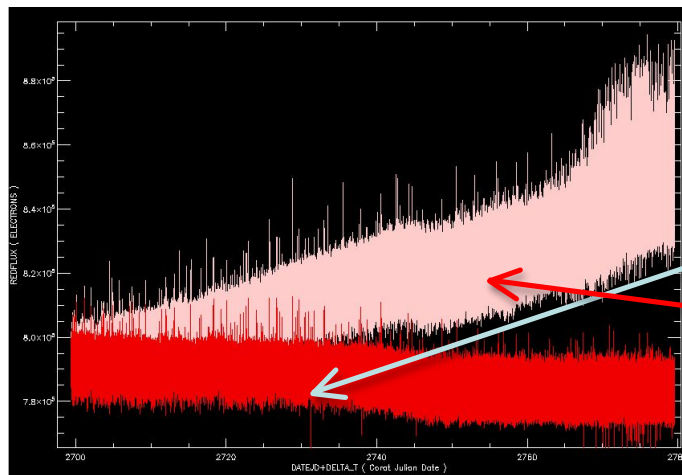
CCD E2
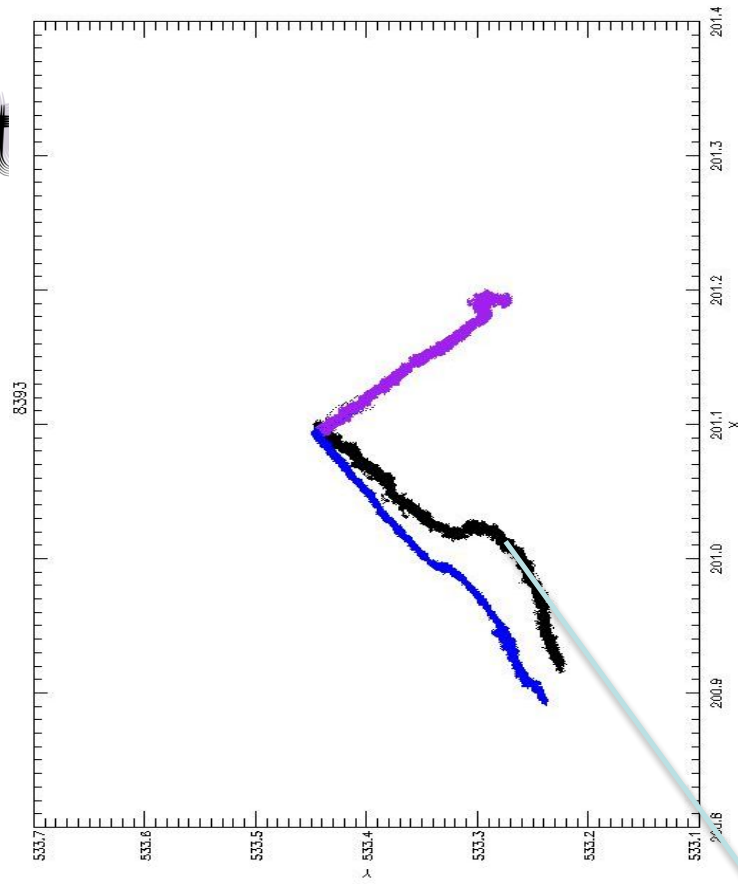
CCD E1

Temperature variation of the first lens of the OD

Black : measured motion on 5 months
Violet : model with constant focal length
Blue : model with variable focal length

Jitter effect corrected with variable focal length

Jitter effect corrected with constant focal length

Pipe-lines and production : current work

- **Parameters**
  - Detection of outliers in exo-field data
  - Test on detection over on the duration of the orbit (6184 sec – 12 pts/512 s – 97 pts/32 s)
    - Currently : 9 pts – 100 pts
- **Software**
  - Correction of the photometric efficiency still to be included into the exo pipe-line
  - Correction of the effect of the tuning of the CCD temperature not yet included (seismo and exo pipe-lines)
    - <= Lack of manpower for N2 pipe-line
    - Benjamin Gardes at LAM will include these corrections (May-June)
- **Planning**
  - These corrections as well as detection of the outliers (if validated)will be included in the pipe-lines in June 2011
    - New runs will include these corrections
    - A new release of the previous runs will be delivered in July 2011 (N1 ready, N2 to be produced)

Next versions and deliveries

- LAM will improve the exo imagette pipe-line (July-Dec.2011)
  – Better reconstruction of (slightly) saturated imagettes
  – Better elimination of contaminants
- Still pending
  – Use of seismo imagettes in order to fill in seismo light curves
- The corrections of the aberrations will be included in the N1 pipe-line in Sept.2011
  – N1 and N2 seismo and exo on-board light curves have to be re-processed
    - Probably the last version of the exo on-board light curves
    - For seismo light curves, depends on the use of imagettes