

Detrending pipeline

ZTF France @ LPC

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Detrending wazzis

16 x 4 x (3080, 3078) is a total focal plane image.

Raw images

Science image

Calibration



Bias

20/day



Flat

5-7/led/day

Objects



Raw exposure

Lots



Raw Exposure



Master Bias



Master Flat

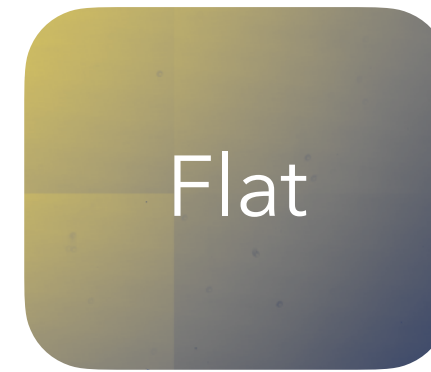


Science Exposure

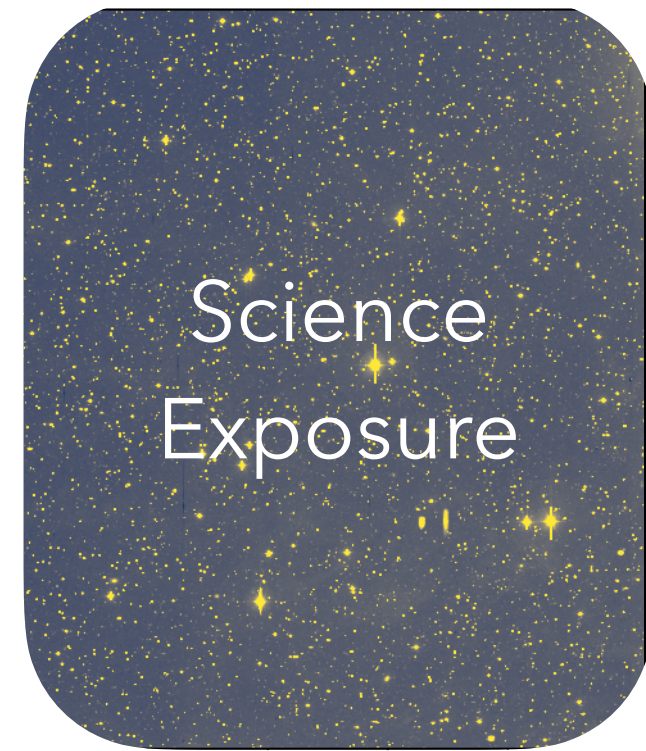
Detrending flow

At each time a **raw** image is opened :

1. Overscan correction applied , model computed on [5,25] pixel range.
2. NL correction.



5-7/led/day
N_led = 11



Calibration

10/day to remove dilation effects.

→ Reduced to 1 master bias.

Each corrected by master bias
→ 3 filter master flat.

Status : Pipes are there



- Straightforward for master bias prod.

Dask implementation for it to be fast.

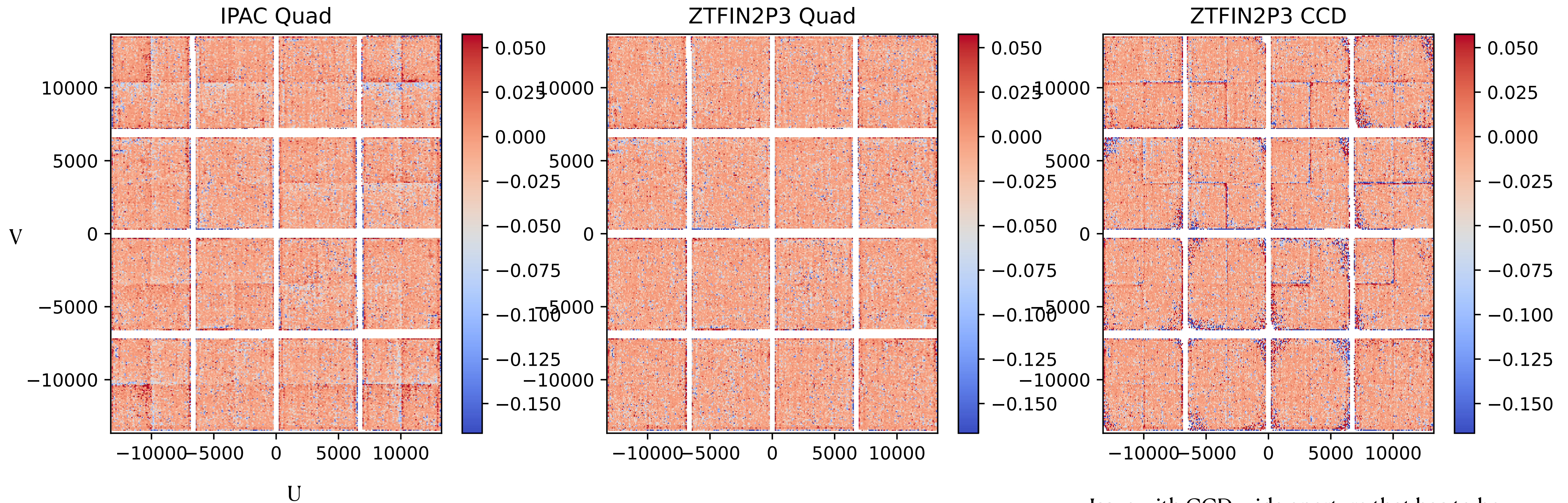
- Not that efficient for master flat creation.
(need a bit of data wrangling to optimize operations)

- Efficient-ish for science exposures (for now...)

Status : Choices still need to be validated.

10 pixel radius $m - \tilde{m}$ for 2019 starflats exposure

*!Need to be
« starflatted » !*



Issue with CCD-wide aperture that has to be investigated.

Challenges & questions & to be discussed (asap) :

/ After validation of starflat /

What kind of data products ?

What data ?
Up to when (year , month) ?

Pocket Effects & other corrections → what about data before 2019/11 ?

Should some daily calibration master be produced right now (e.g daily bias at least)?

Last minute choices → Range of correction for the overscan ? What else ?

Do we want to set data production deliverable goals ?