Data processing of VST/OmegaCAM data: FAQs
Paola Popesso - 2022-04-25 - Comments (0) - data processing FAQ for each instrument

**Data processing of VST/OmegaCAM data: Frequently asked questions**

- **Are there any known problems with OmegaCAM data?**
  
  **Answer:** The quality control group keeps a list of known problems at
  

- **Where can I download the OmegaCAM pipeline to reduce my data?**
  
  **Answer:** ESO does not offer a data-reduction pipeline for OmegaCAM. The ESO OmegaCAM pipeline is exclusively used for quality control, i.e. it processes data to monitor the instrument's proper performance, and does not produce science-grade data products.

- **My data shows an extended, bright feature - what can this be?**
  
  **Answer:** It is likely that some reflections from the moon are affecting your data. These reflections are unpredictable and have been found to be more frequent when the target is closer than ~40deg to the bright moon. You might also want to check:

  [http://www.eso.org/sci/observing/PublicSurveys/useful_links/OmegaCAM_images.html](http://www.eso.org/sci/observing/PublicSurveys/useful_links/OmegaCAM_images.html)

  where we provide a collection of example OmegaCAM images, illustrating some special data features.

  A comprehensive description of features visible in OmegaCAM detectors can also be found in the [quality control web pages](http://www.eso.org/observing/dfo/quality/OMEGACAM/qc/features.html).

- **A number of OmegaCAM filters show vignetting in their central regions. What are the causes for this and what are the dimensions of these features?**
**Answer:** A number of OmegaCAM filters are not monolithic, but consist of four segments (each covering 8 detectors) that have a central cross-shaped support structure. This support creates a vignetting effect that will be visible in 20 detectors which is significantly larger than the gaps present between adjacent CCD's. The affected filters are: B_JOHNN, V_JOHNN, H_ALPHAAA, NB_659, NB_852, and the effect looks like this (for the H_ALPHAAA filter):

![Vignetting Effect](image)

When using these filters, one needs to take the vignetting into account when choosing a dither pattern. A conservative accounting for the total size of the vignette area can be summarized as:

<table>
<thead>
<tr>
<th>Filter</th>
<th>North/South Vignetting</th>
<th>East/West Vignetting</th>
</tr>
</thead>
<tbody>
<tr>
<td>B_JOHNN</td>
<td>1405 pixels (300 arcsec)</td>
<td>1405 pixels (300 arcsec)</td>
</tr>
<tr>
<td>V_JOHNN</td>
<td>1430 pixels (306 arcsec)</td>
<td>1410 pixels (302 arcsec)</td>
</tr>
<tr>
<td>H_ALPHAAA</td>
<td>1418 pixels (305 arcsec)</td>
<td>1407 pixels (302 arcsec)</td>
</tr>
<tr>
<td>NB_659</td>
<td>1418 pixels (305 arcsec)</td>
<td>1407 pixels (302 arcsec)</td>
</tr>
</tbody>
</table>

- Some OmegaCAM detectors show an odd central stripe in the bias and master bias images.

**Answer:** Two OmegaCAM detectors (ESO_CCD_#68 and #90) show a centrally elevated structure in their bias frames. This structure, however, remains constant with the underlying bias level and can be easily corrected.