

# Verification & Validation of the SC2 images

- Code verification setup
  - LODEEN virtual machine
  - 1Gb memory, 40Gb disk
  - Checkout the SC2 OUSIM PF

```
svn co [...]EuclidSIM/branches/R_R3.0_issue_1749
```

- Run the smoke tests

```
python tests/smoke/test_nip.py
```

```
python tests/smoke/test_nis.py
```

```
python tests/smoke/test_vis.py
```

- The input XML is
  - ➔ tests/data/nip\_input\_configuration.xml
- Input instrument switches can be easily modified

```
<FilterWheelPos>Y</FilterWheelPos>  
<SourceSampling>3</SourceSampling>  
<ProcessingSteps>  
  <ReadoutNoise>1</ReadoutNoise>  
  <DarkCurrent>1</DarkCurrent>  
  <Bias>1</Bias>  
  <CrossTalk>0</CrossTalk>  
  <BadPixels>0</BadPixels>  
  <Cosmics>1</Cosmics>  
  <Background>0</Background>  
</ProcessingSteps>
```

## 1. Check the images and match with object positions

- Open the TU catalogs with topcat

`topcat myTU*Catalog.fits`

- Open images with DS9

`ds9 –mosaicimage EUC-TEST-*fits`

- Broadcast topcat table into ds9 catalog
- Match positions on images for the brightest objects

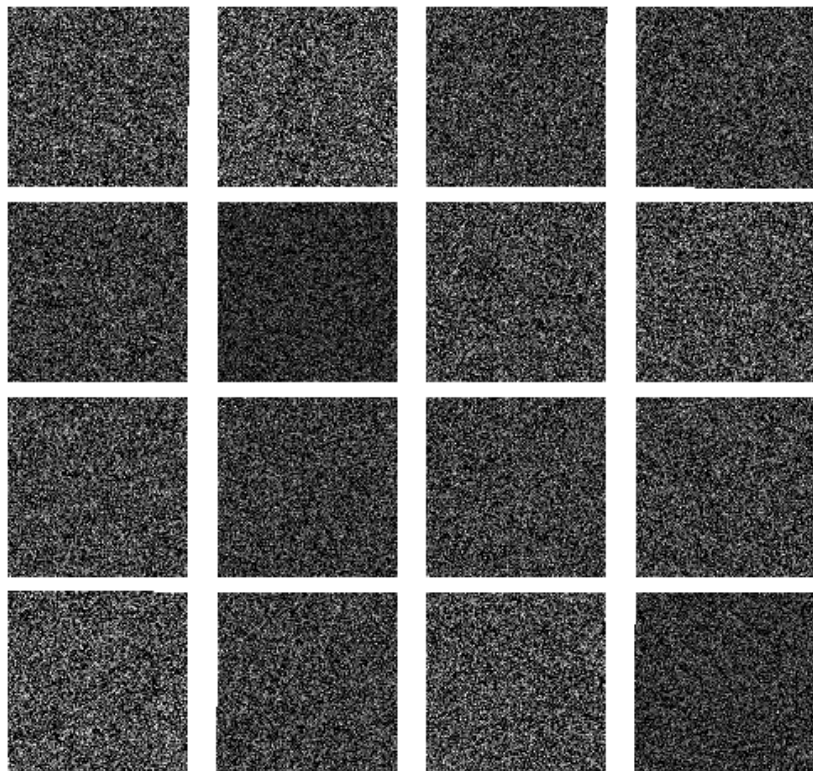
**Rq: For NIS images, extract the 16 images with python script before displaying in ds9**

## 2. Check the output XML

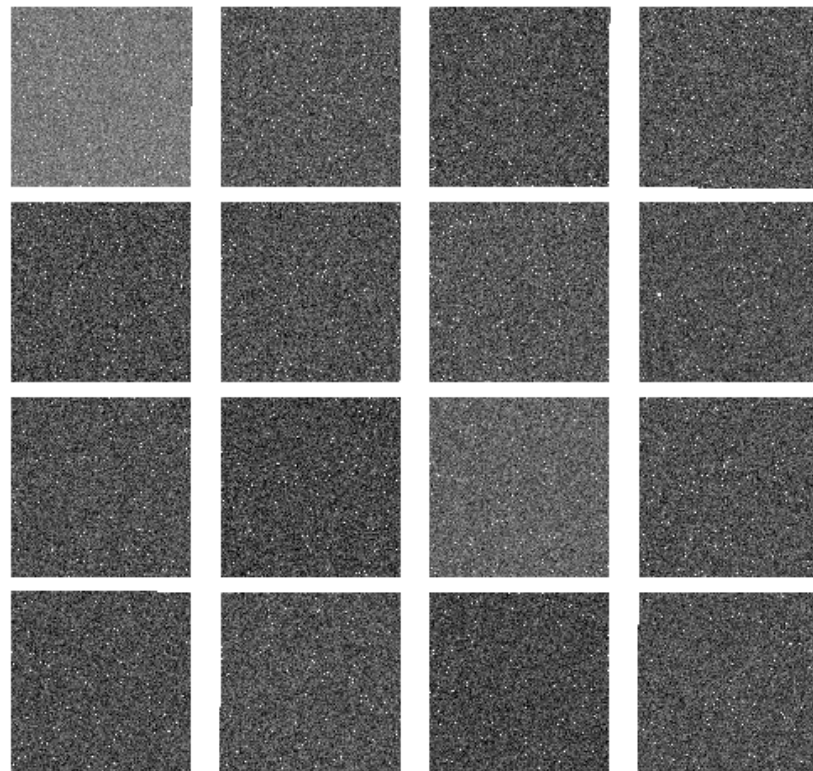
- Validate XML format with output XML with Oxygen XML
- Check the values by eye

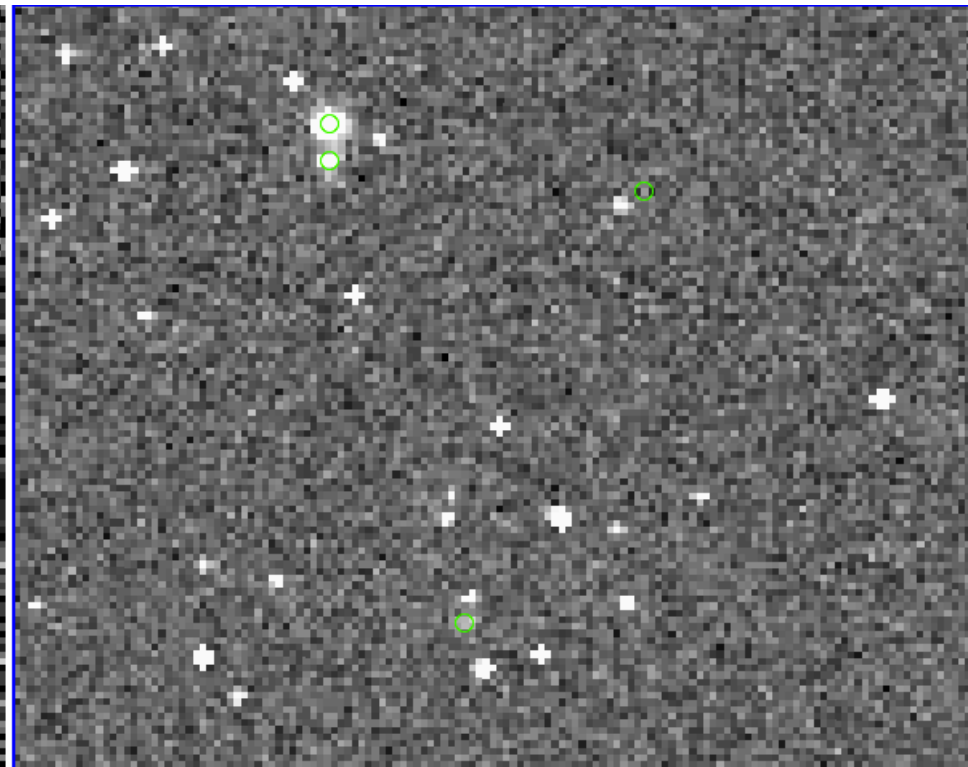
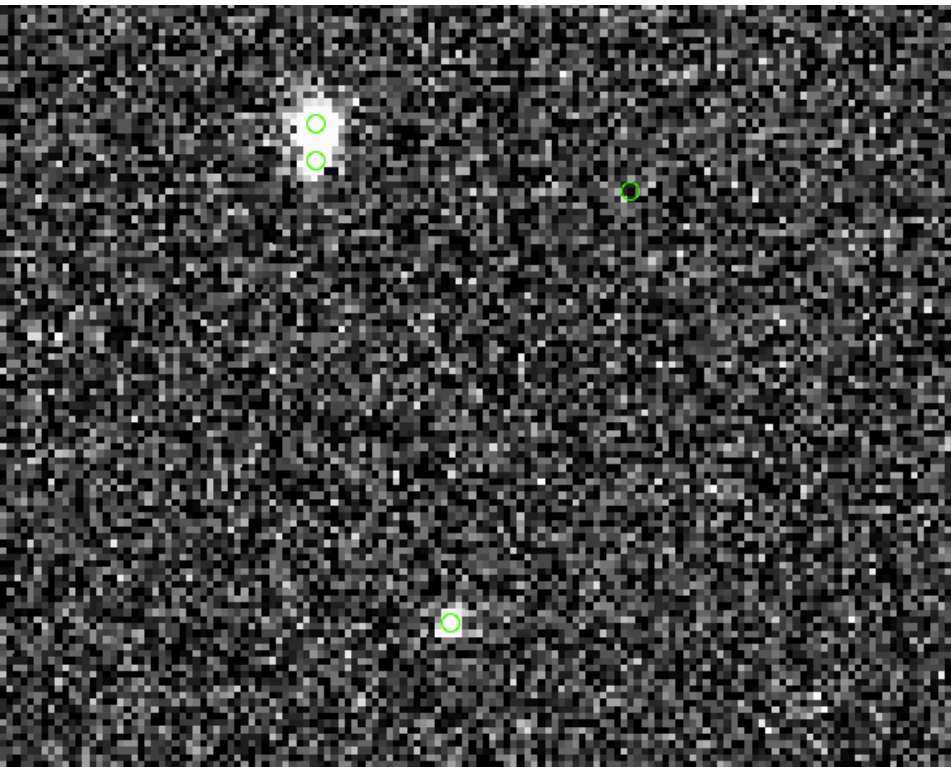
**Todo: Check the FITS keywords from the XML definition**

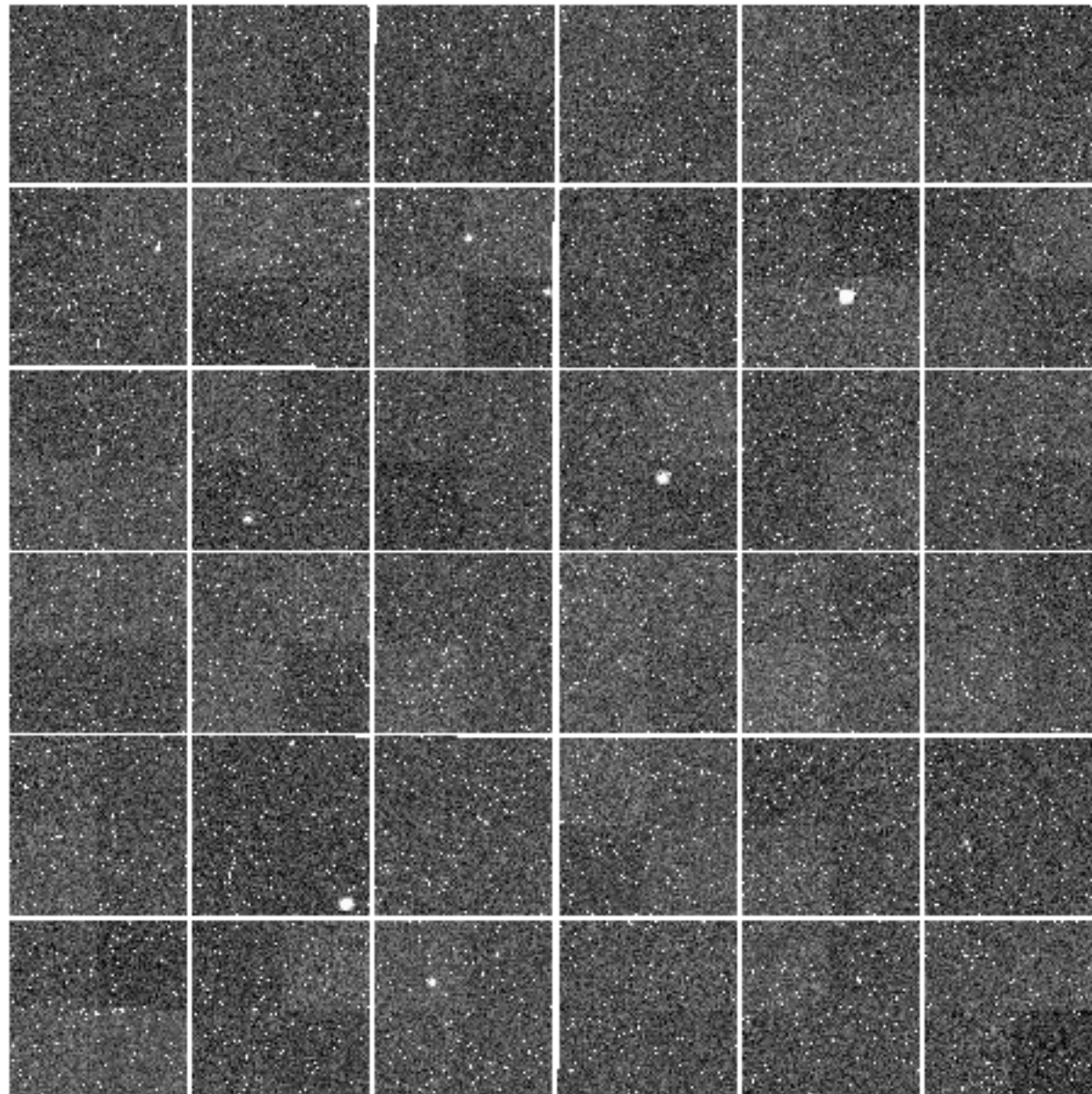
NIP Y without cosmics/background

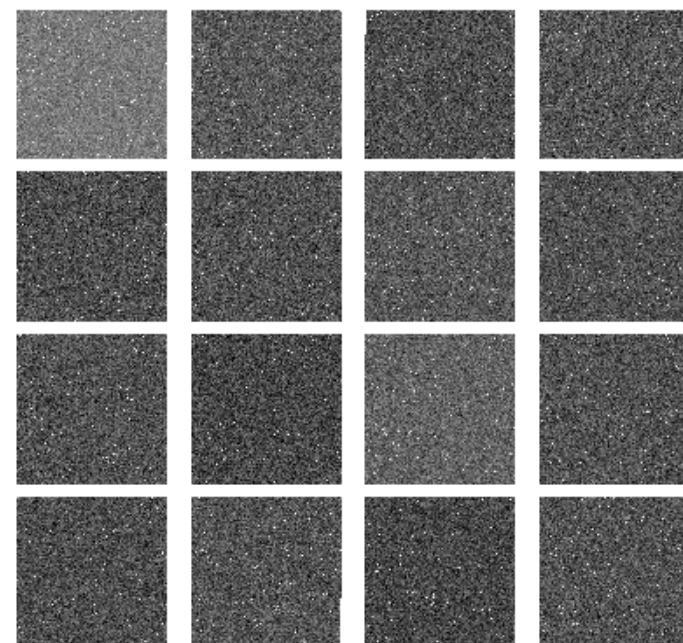
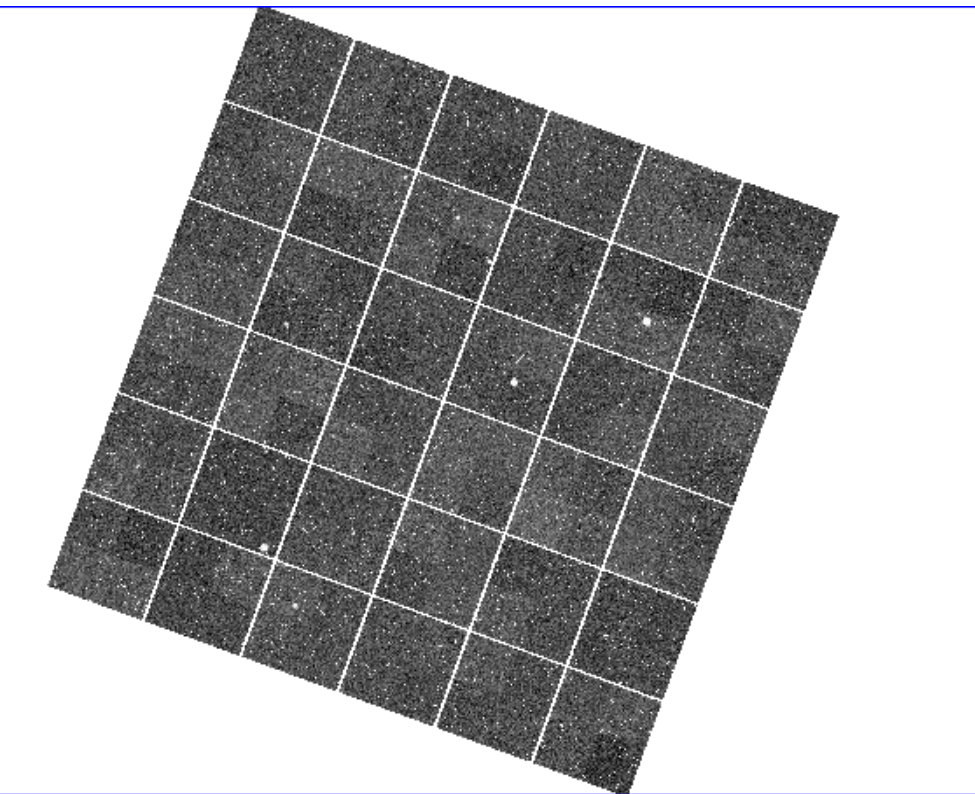


NIP Y with cosmics/background

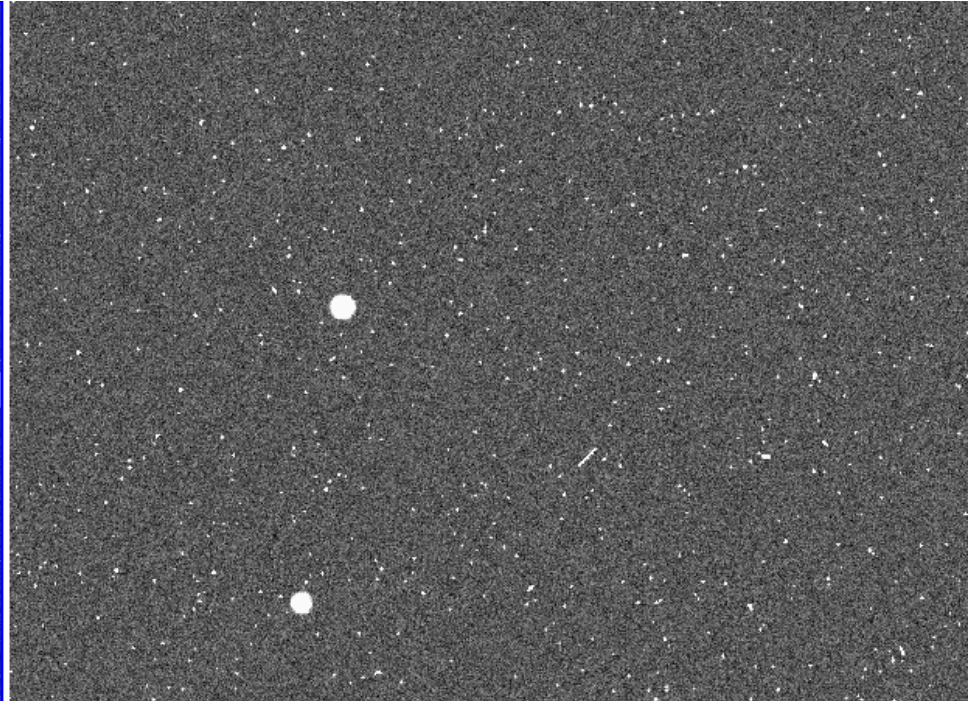
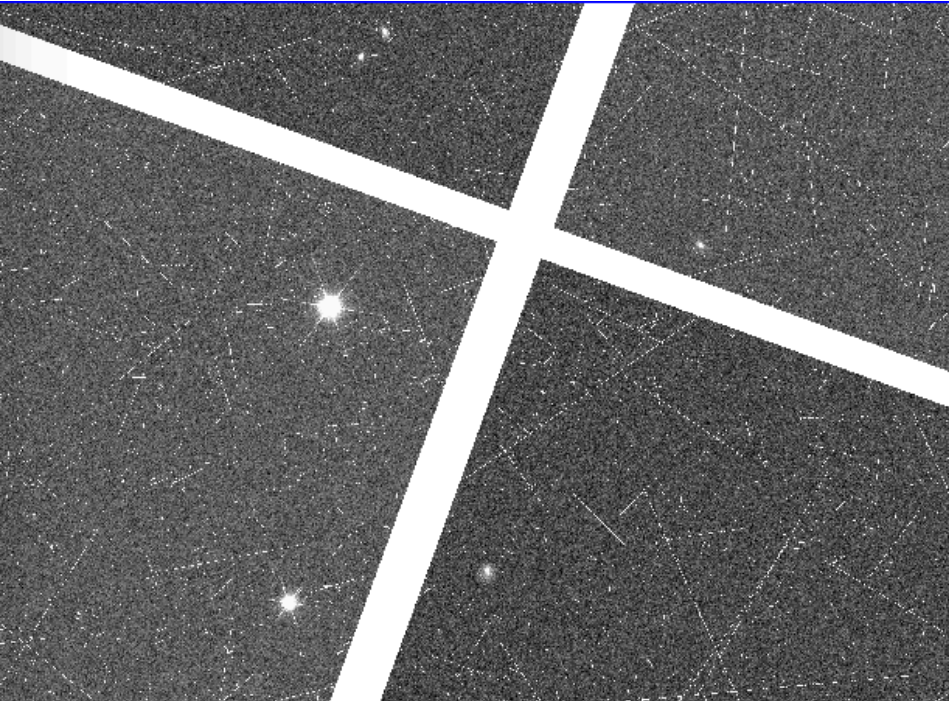






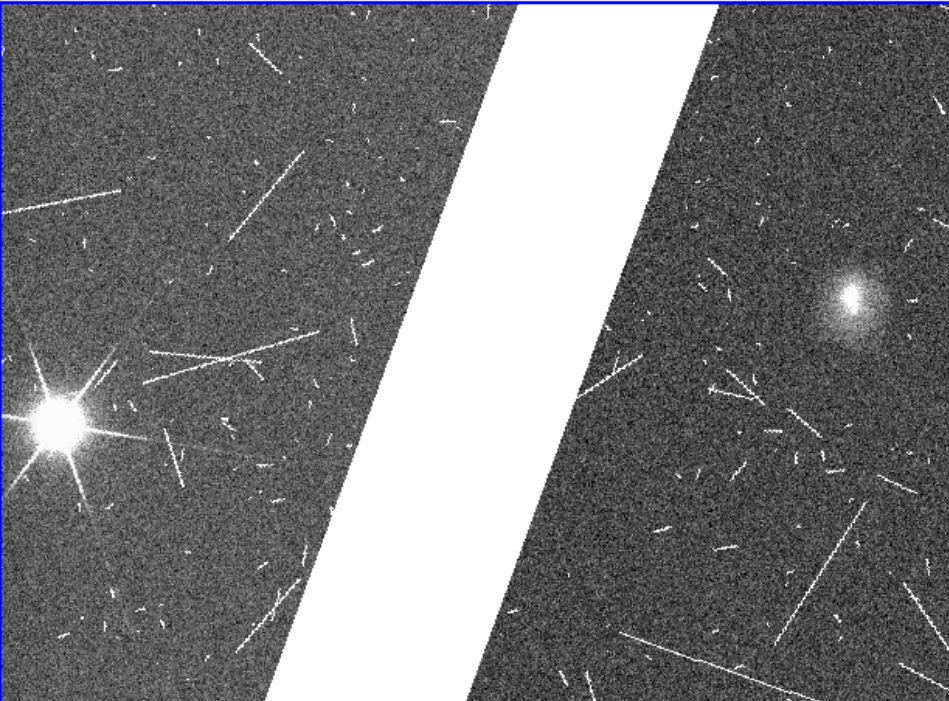






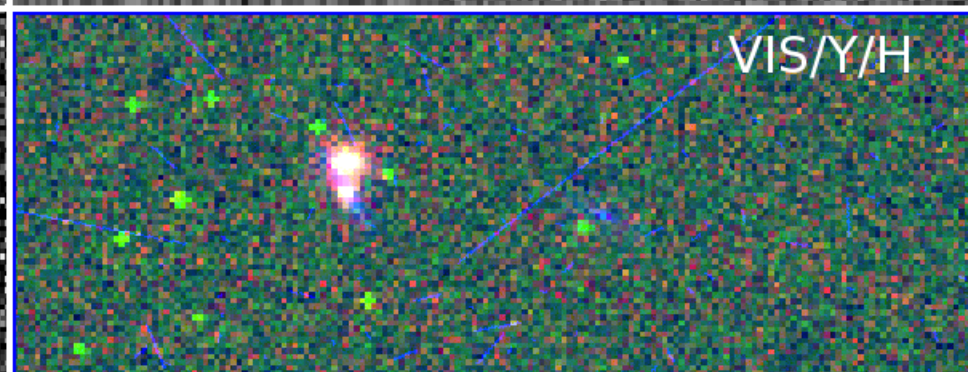
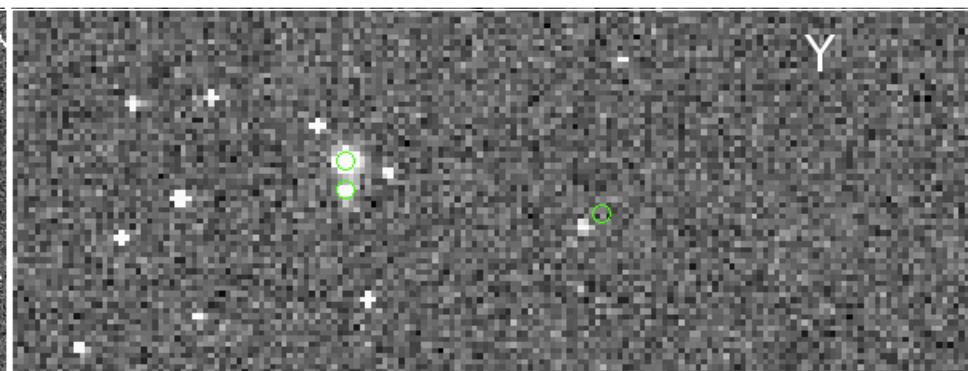
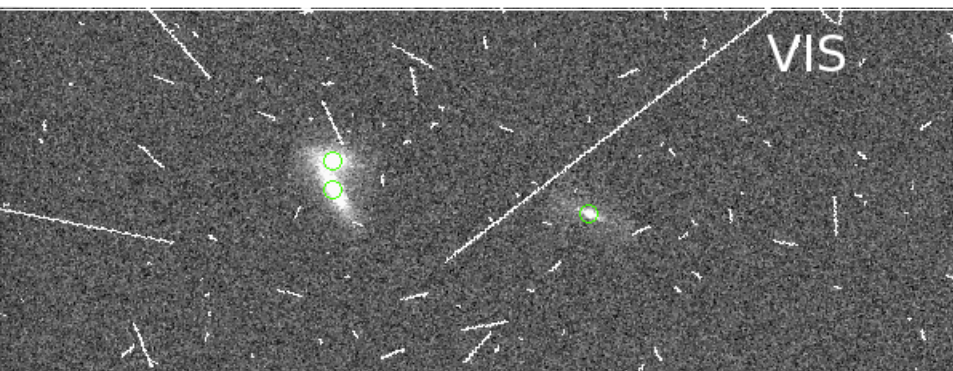
# Comparison of VIS and NIP

EUCLID  
CONSORTIUM



# Comparison of VIS and NIP

EUCLID  
CONSORTIUM



# Comparison of VIS, NIP and NIS

EUCLID  
CONSORTIUM

