



PDRs4all: Simulate NIRCam Observations of an Extended Source

Amélie Canin

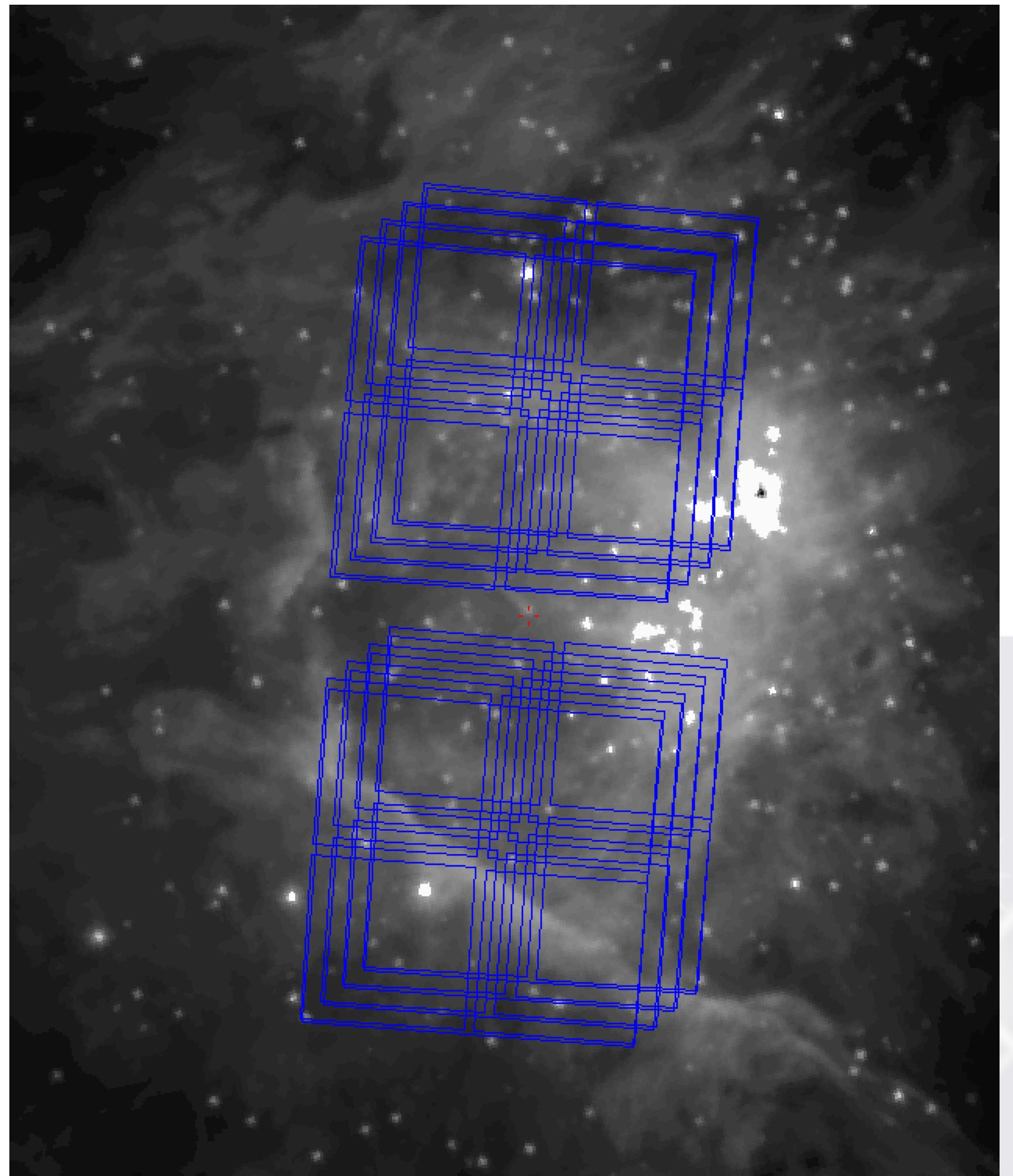
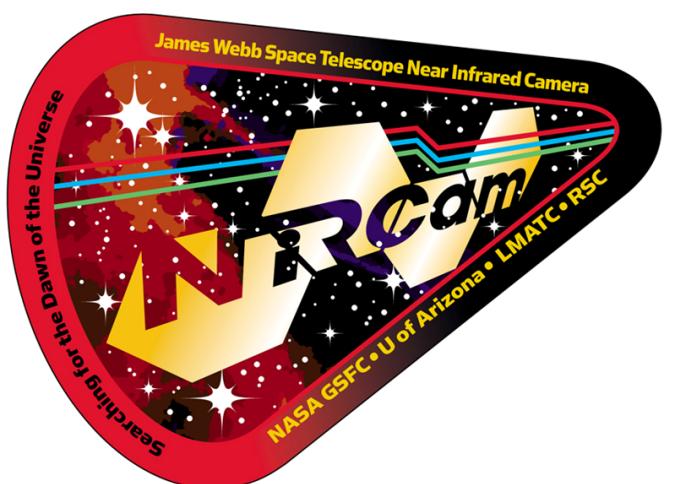
Useful links

- JWST documentation: <https://jwst-docs.stsci.edu>
- MIRAGE documentation: <https://mirage-data-simulator.readthedocs.io/en/latest/>
- MIRAGE Git: <https://github.com/spacetelescope/mirage>
- Pipeline documentation: <https://jwst-pipeline.readthedocs.io/en/latest/jwst/introduction.html>
- Pipeline Git: <https://github.com/spacetelescope/jwst/>
- Help Desk: https://stsci.service-now.com/jwst?id=sc_category&sys_id=e15706fc0a0a0aa7007fc21e1ab70c2f

Near Infrared Camera: NIRCam

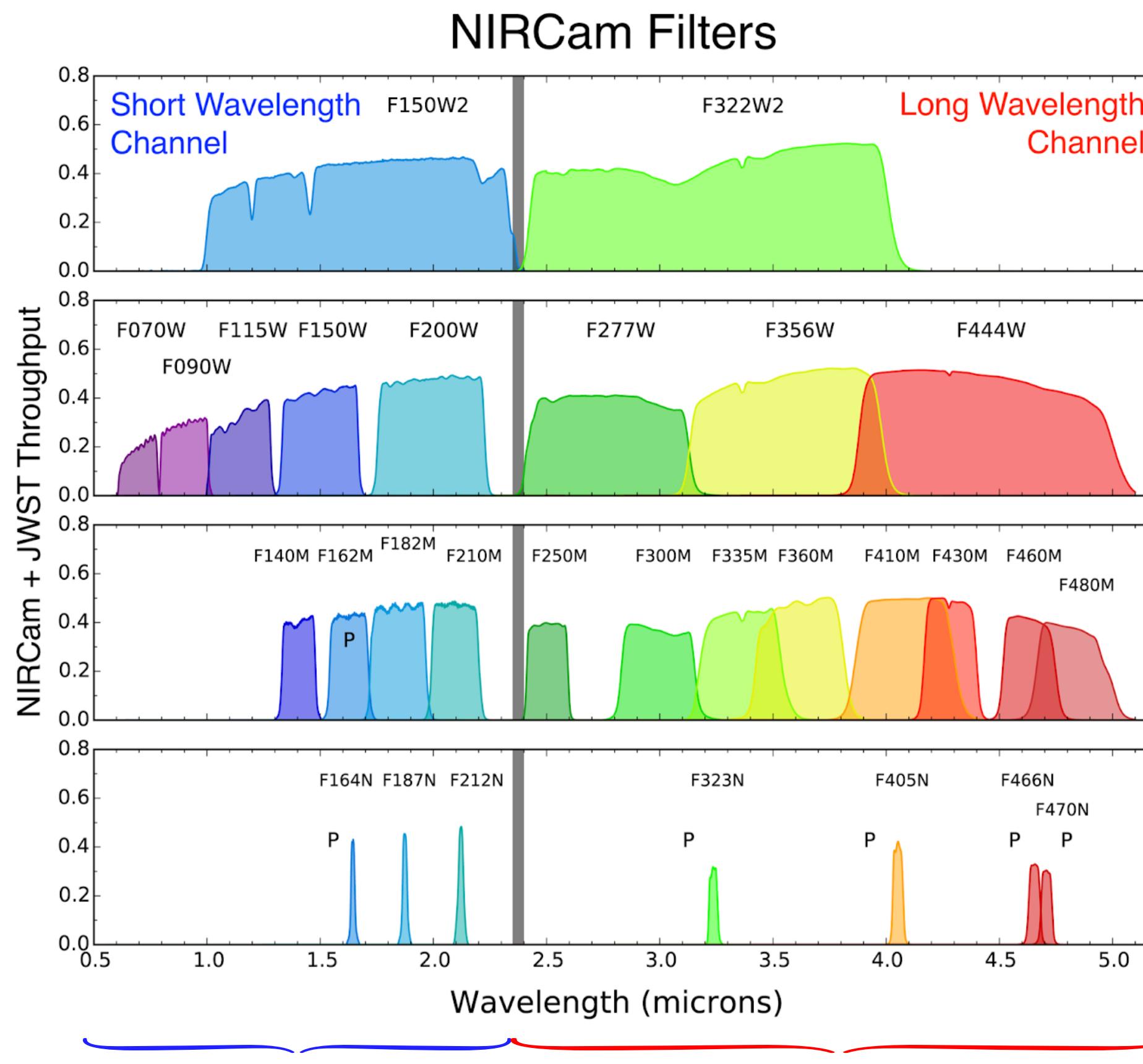
NIRCam observing modes for sciences:

- **Imaging**
- Coronagraphic imaging
- Wide field slitless spectroscopy
- Time-series imaging
- Grism time series



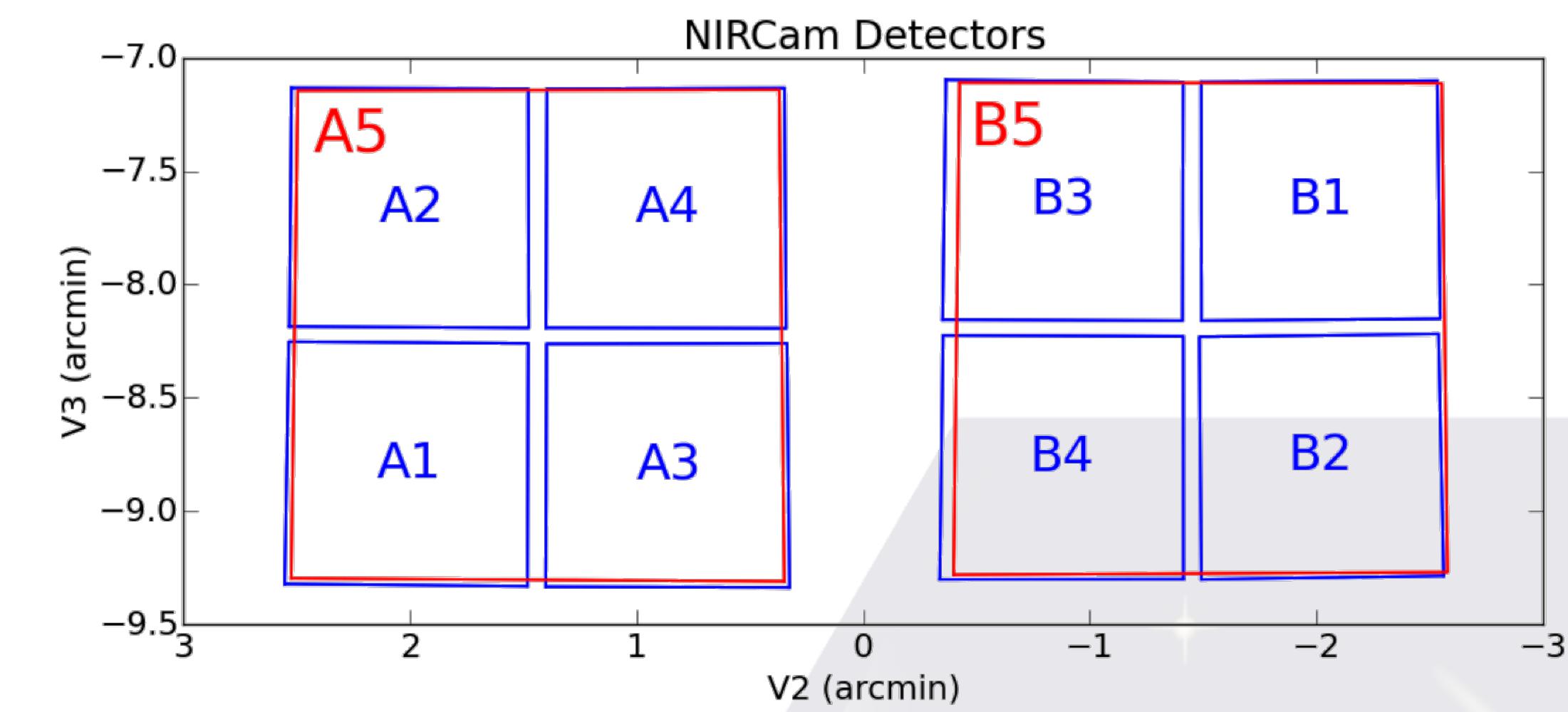
Field of view

Near Infrared Camera: NIRCam



Detectors A1234, B1234

Detectors A5, B5



<https://jwst-docs.stsci.edu/near-infrared-camera/nircam-instrumentation/nircam-detector-overview>

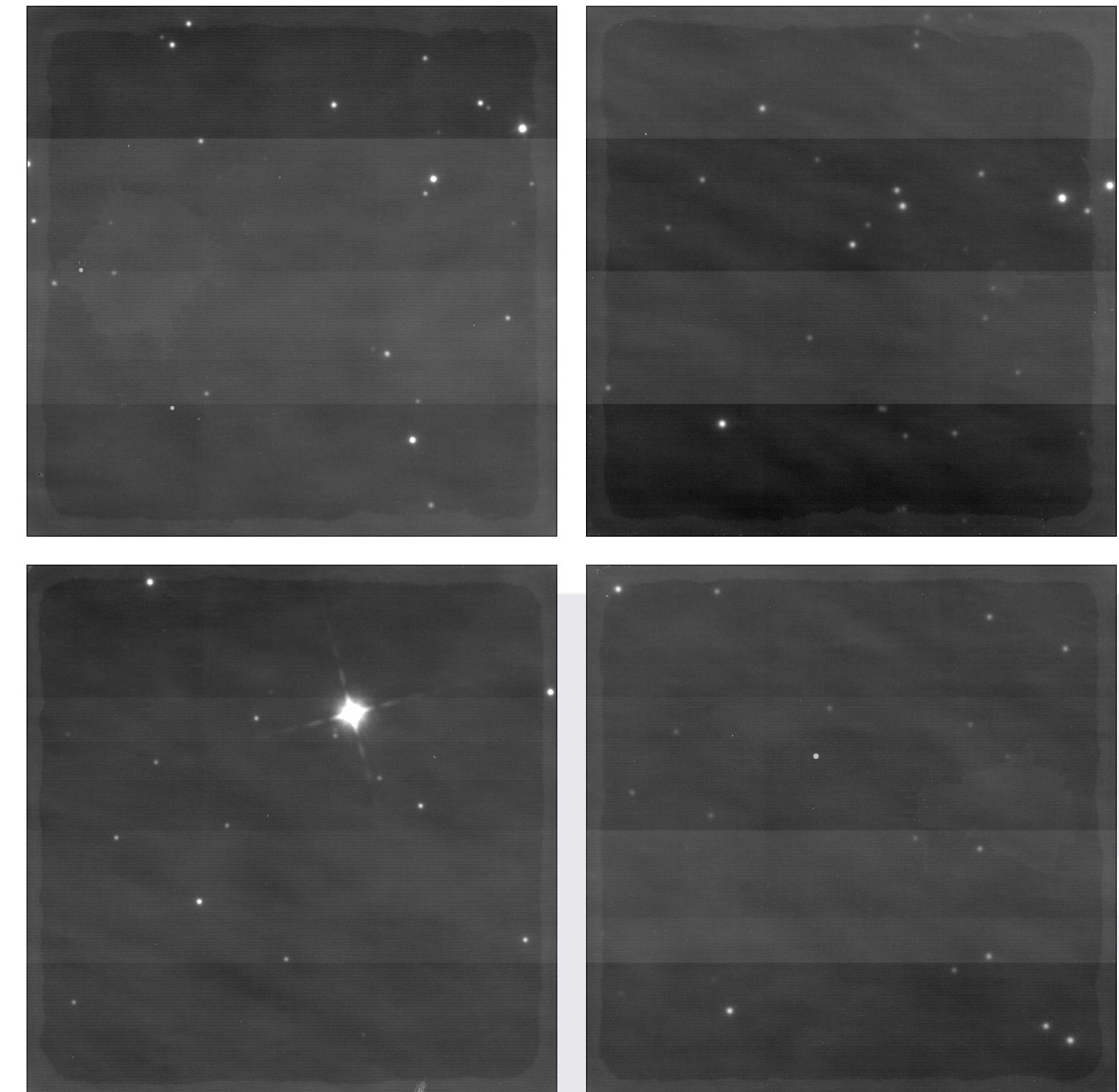
Notebook I

Creating NIRCam Imaging Data



Scene image

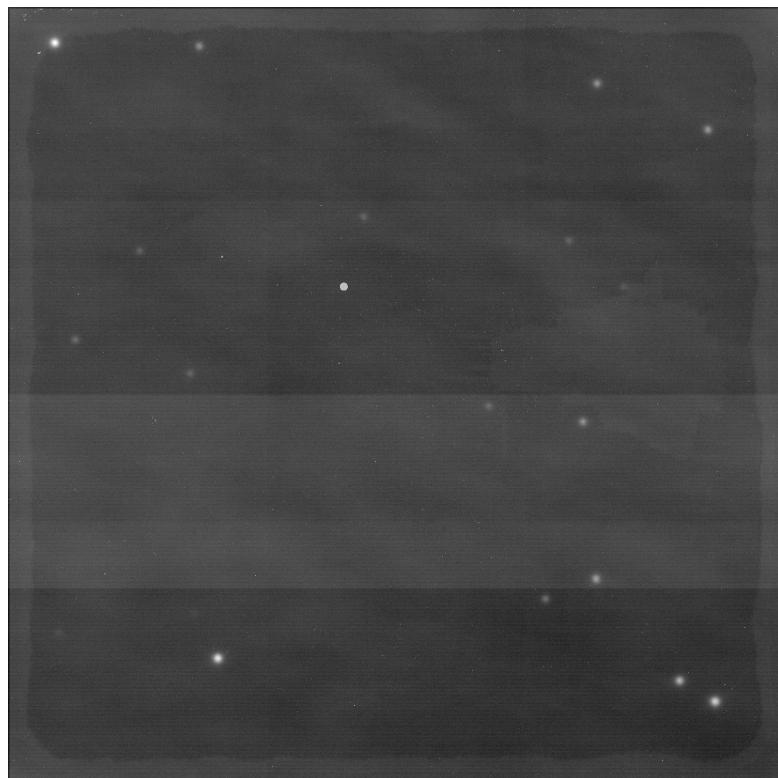
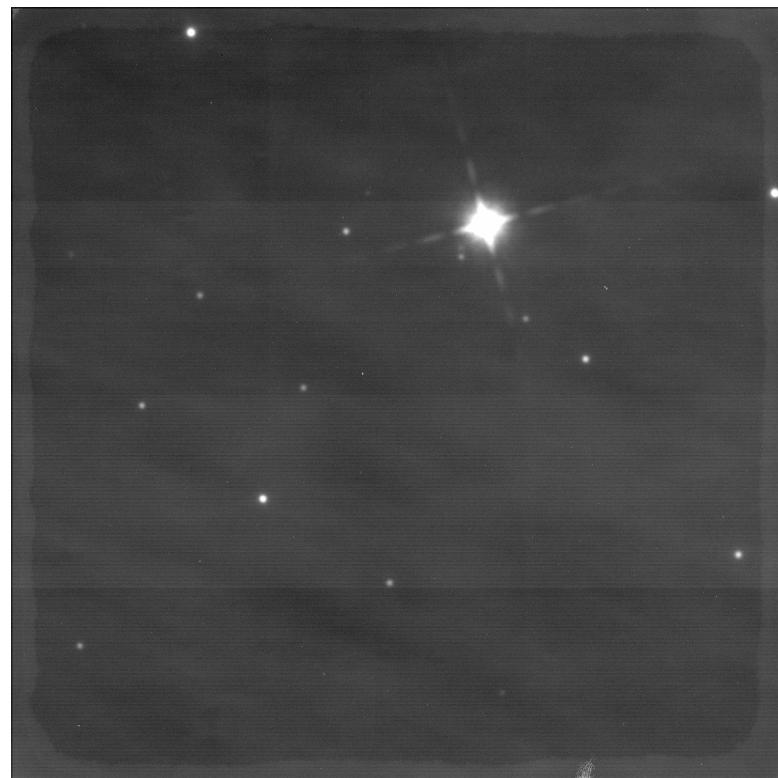
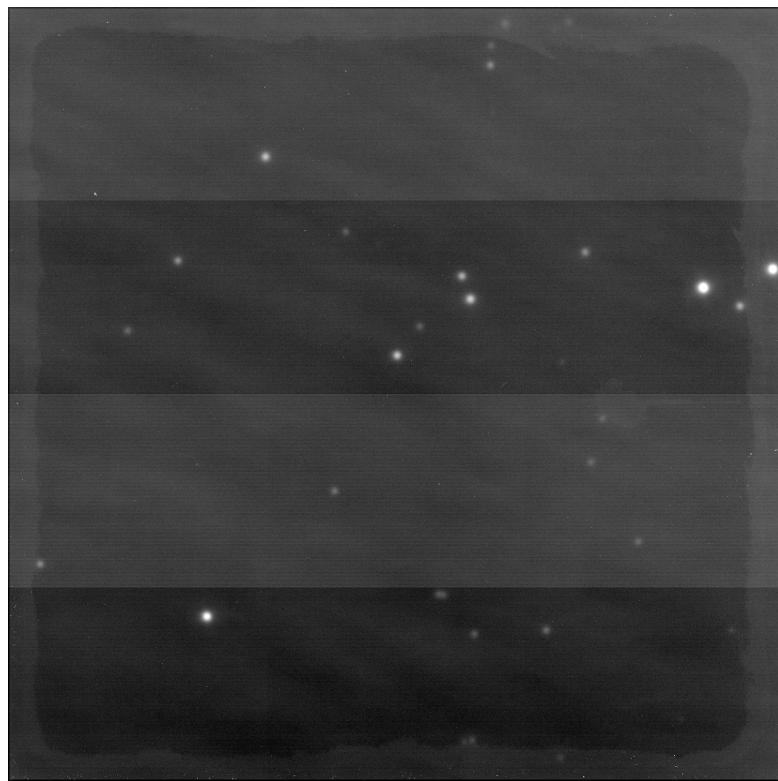
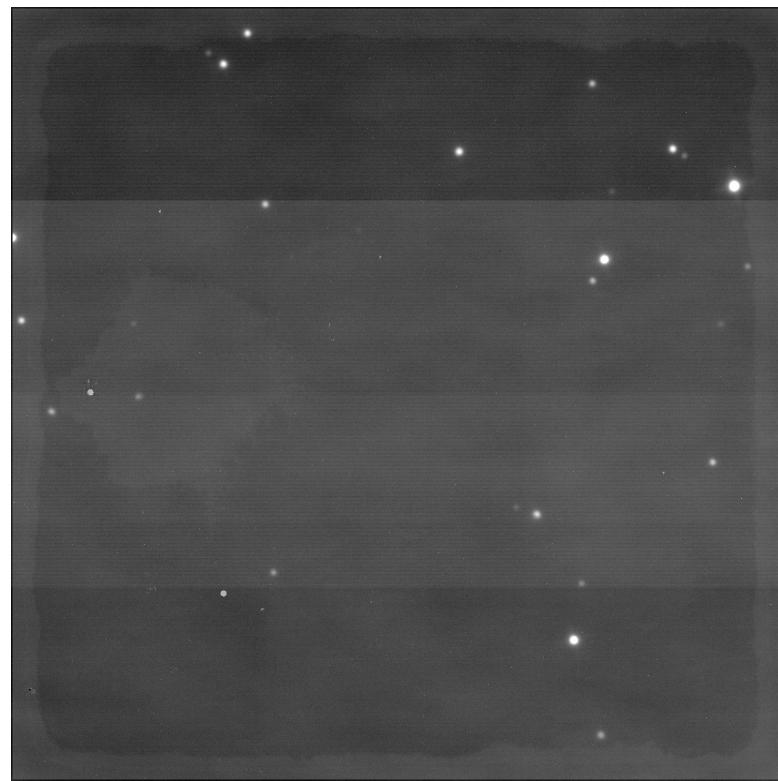
MIRAGE Simulator



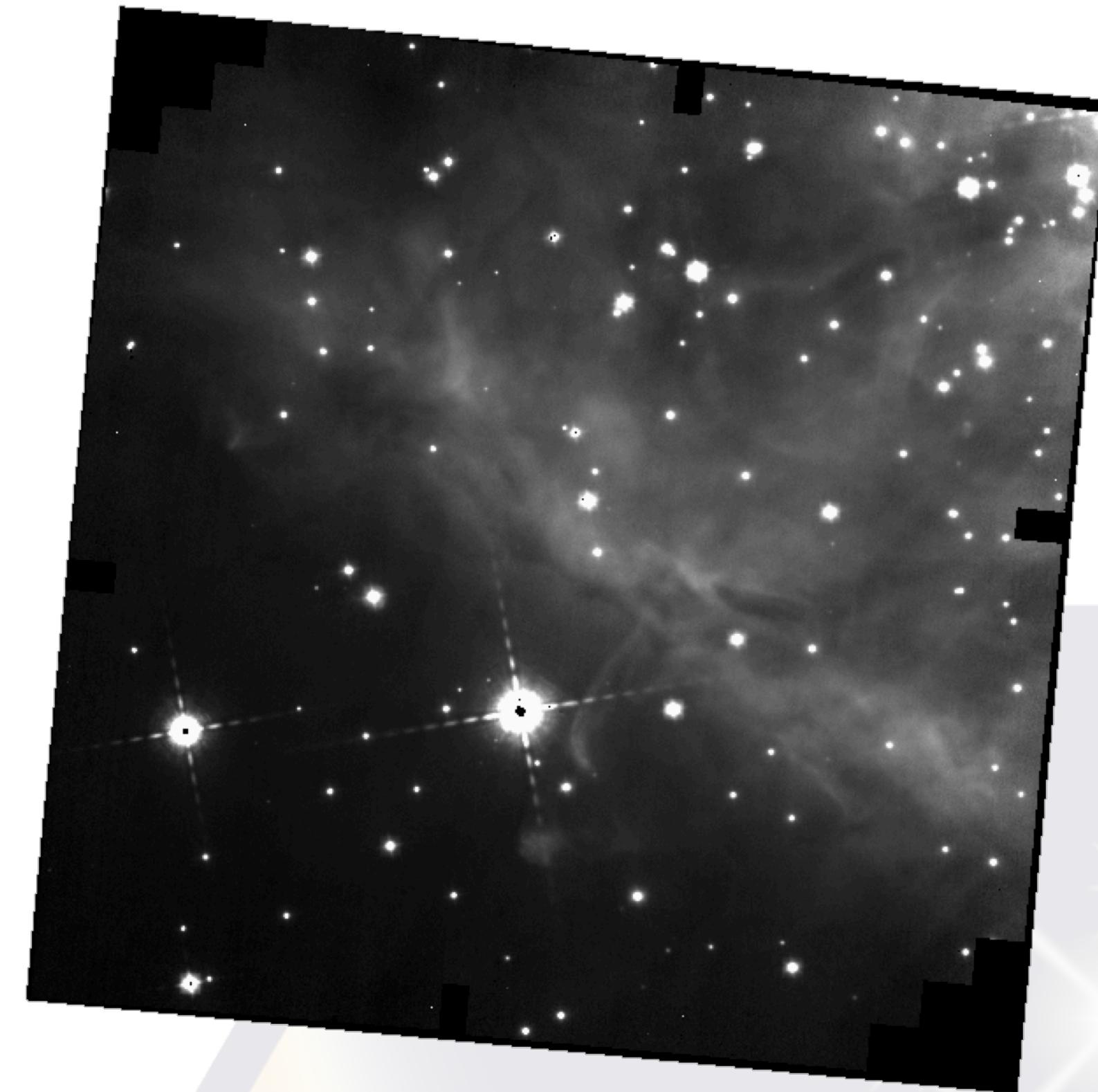
Raw data

Notebook 2

Reducing NIRCam Imaging Data



Reducing Pipeline

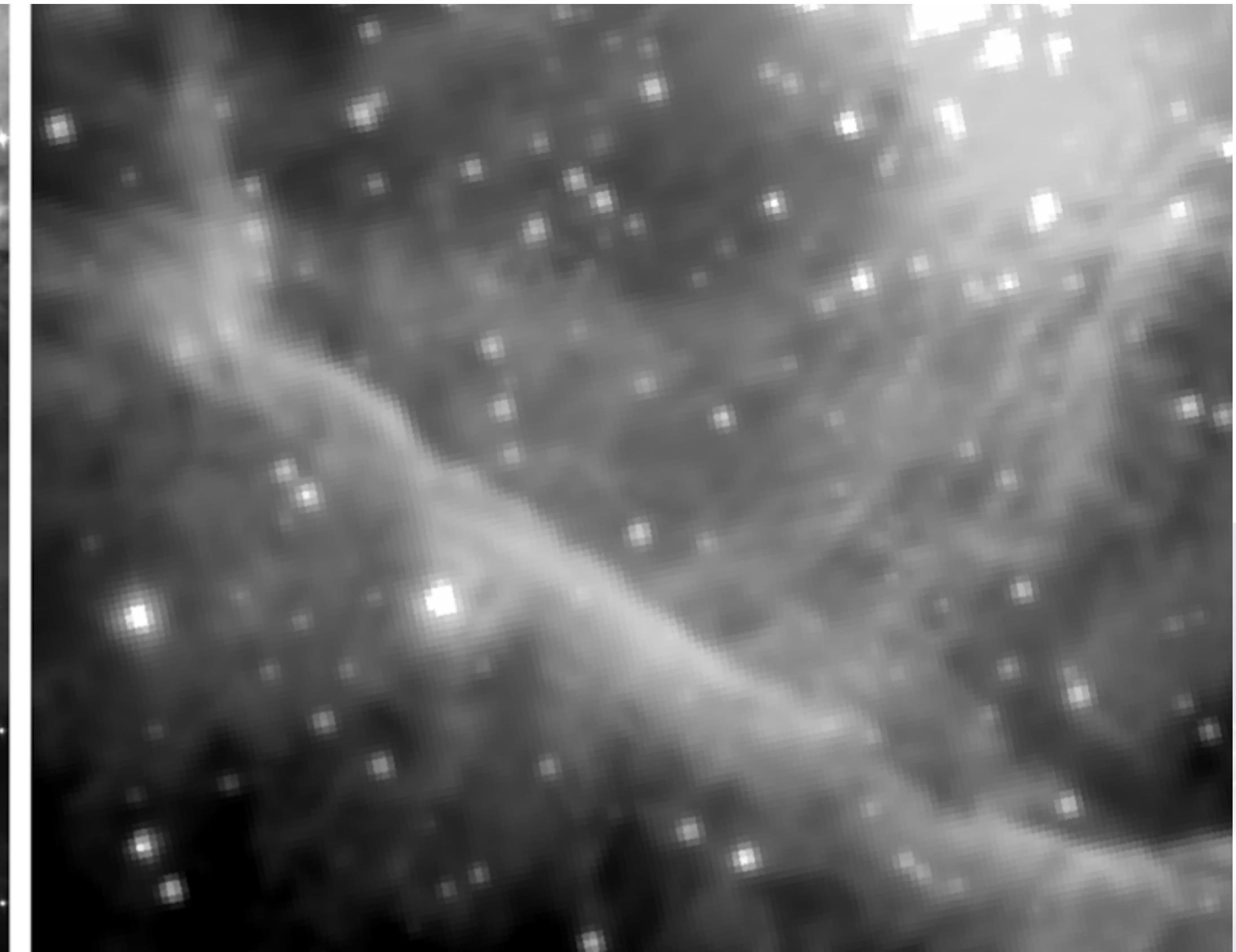


Scene images

HST, 1.36 μm



Spitzer, 3.6 μm



NIRCam simulator filter F140M

Short Wavelength

NIRCam simulator filter F335M

Long Wavelength