

# JWST Master Class Workshop

## Integral Field Spectroscopy

Johan Richard





# Integral Field Spectroscopy

# Concept



MIRI and NIRSpec use Image Slicer IFUs



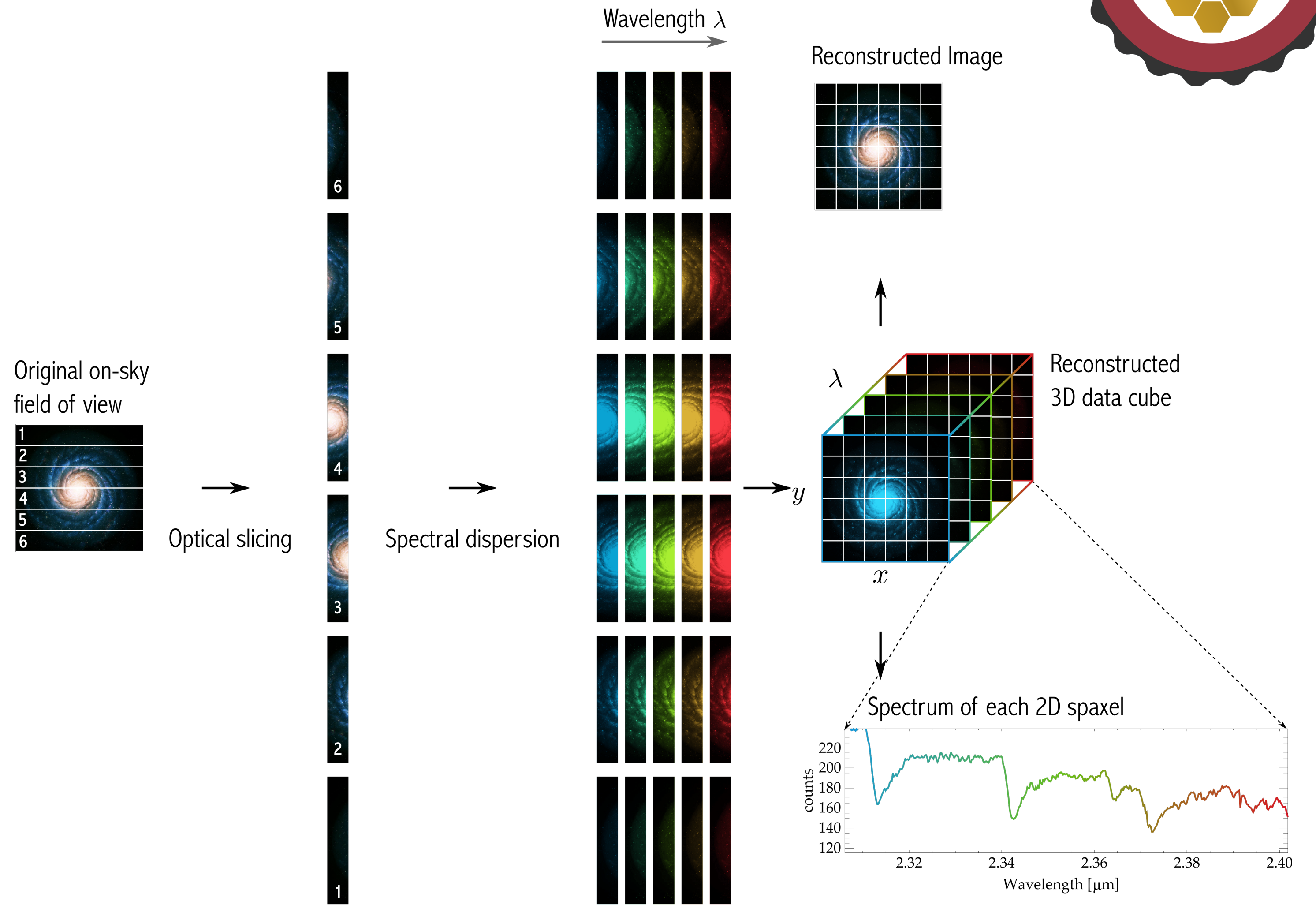
Slices are dispersed in wavelength



Signal Recorded on detector



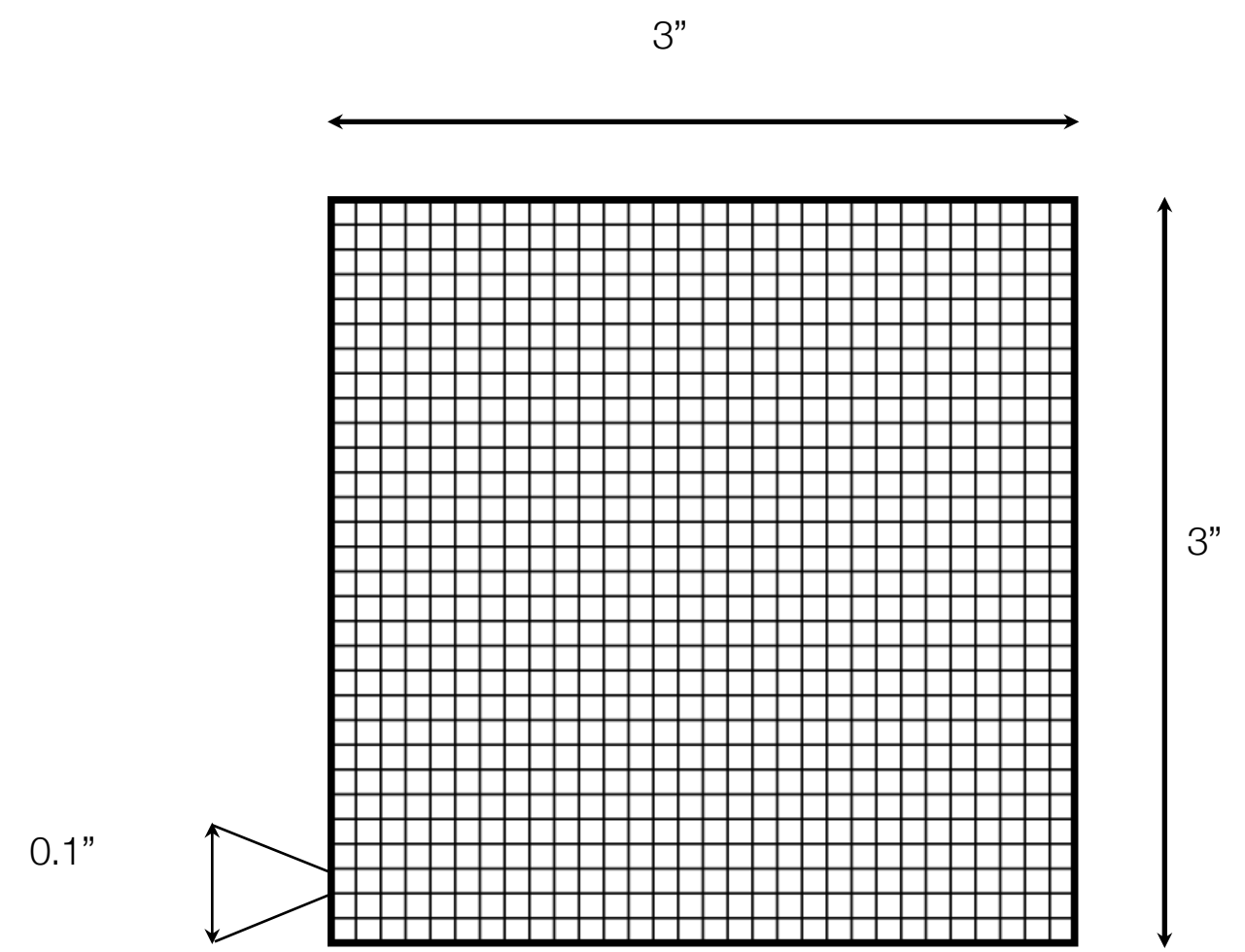
Pipeline constructs cubes from slices



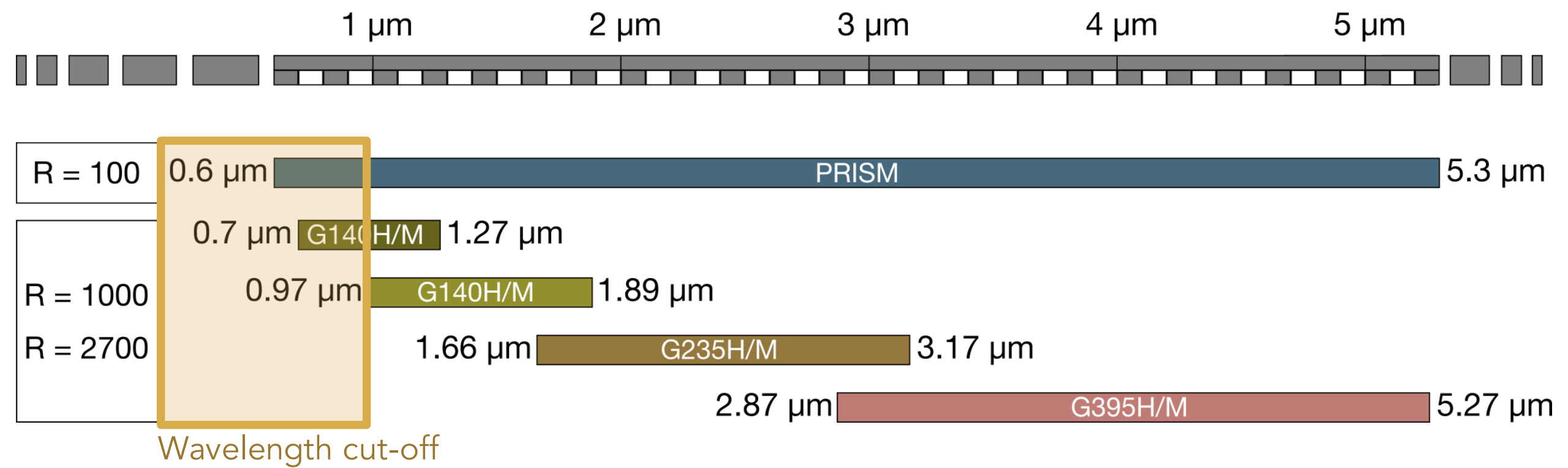
# NIRSpec: IFU Overview



Concept	Advanced Image Slicer Module
Number of Slices	30
Field of View	3" x 3"
Spaxel Size	0.1" x 0.1"



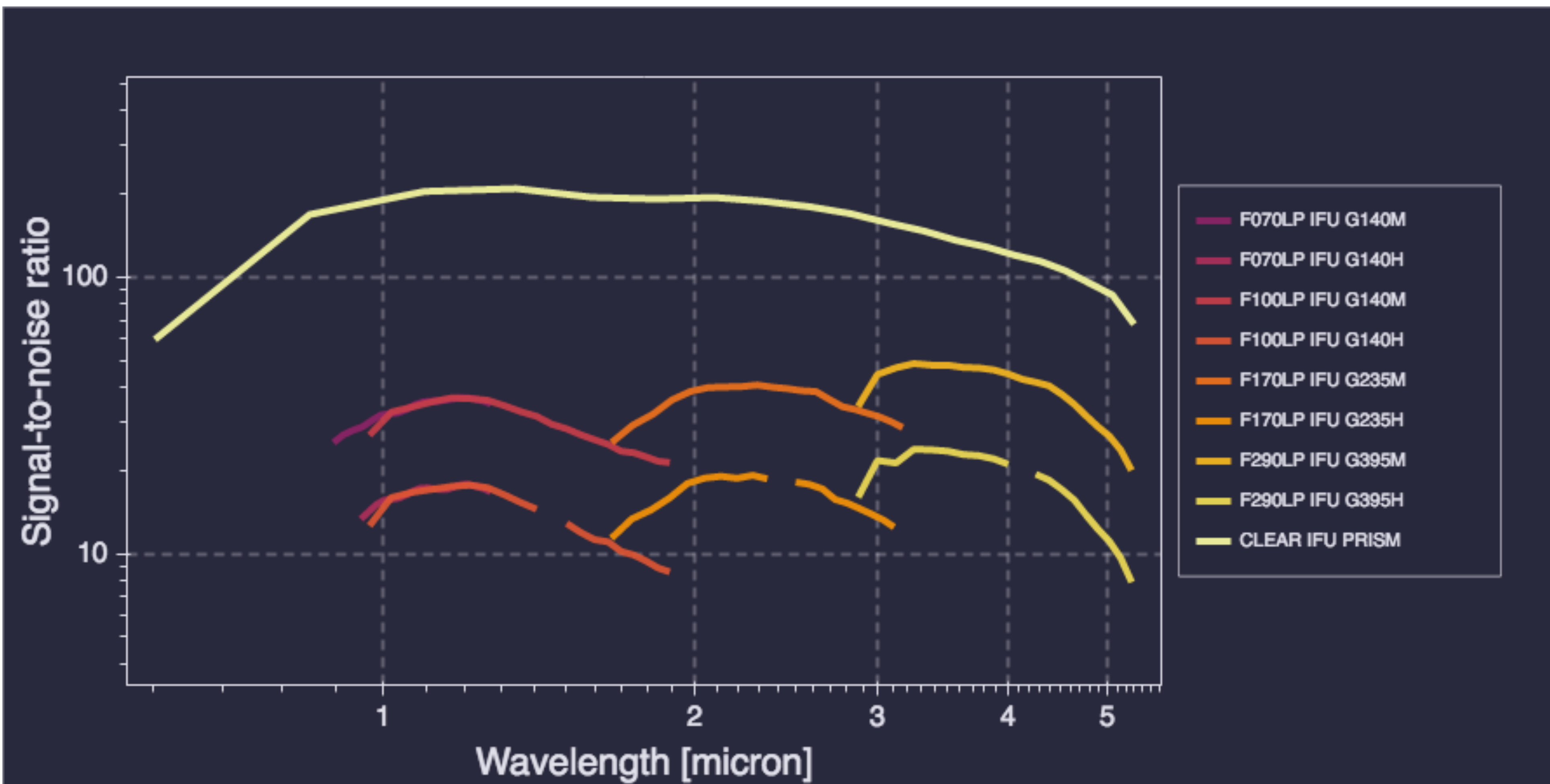
## Configurations



# NIRSpec IFS: Sensitivity

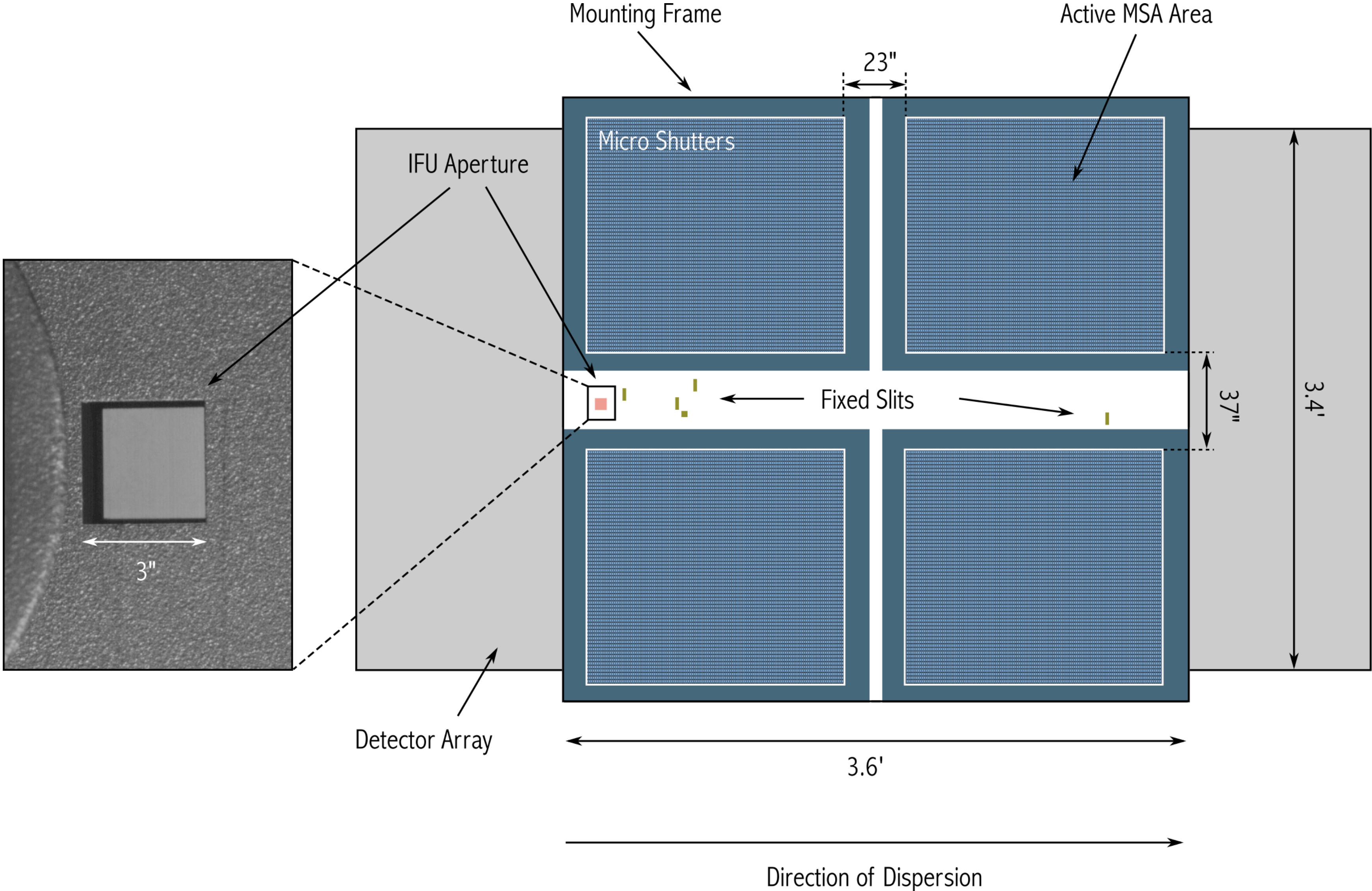


PS, 18 ABmag, 300s

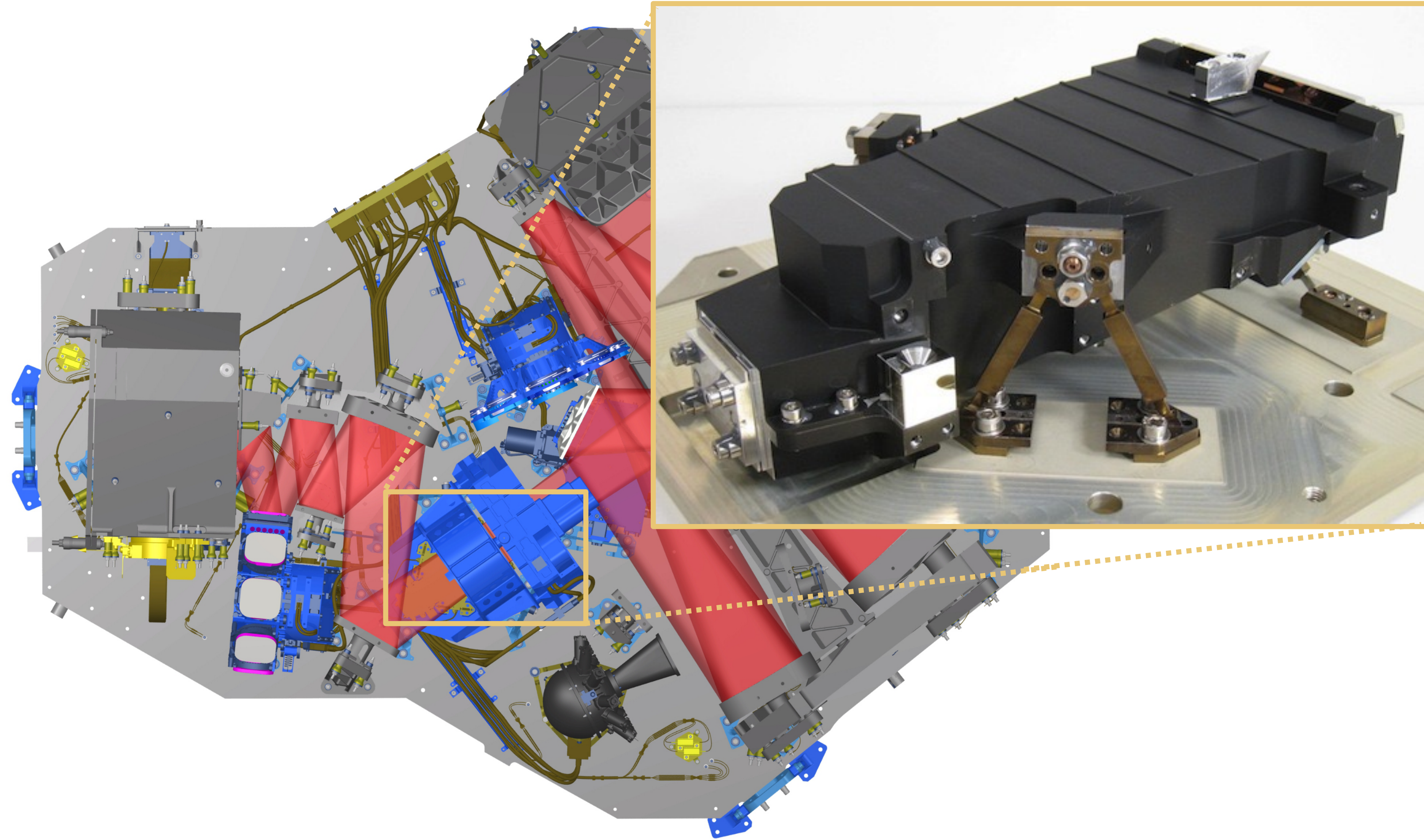


**DISCLAIMER:** Data taken from <https://jist.stsci.edu/jist>, will likely change with new ETC release

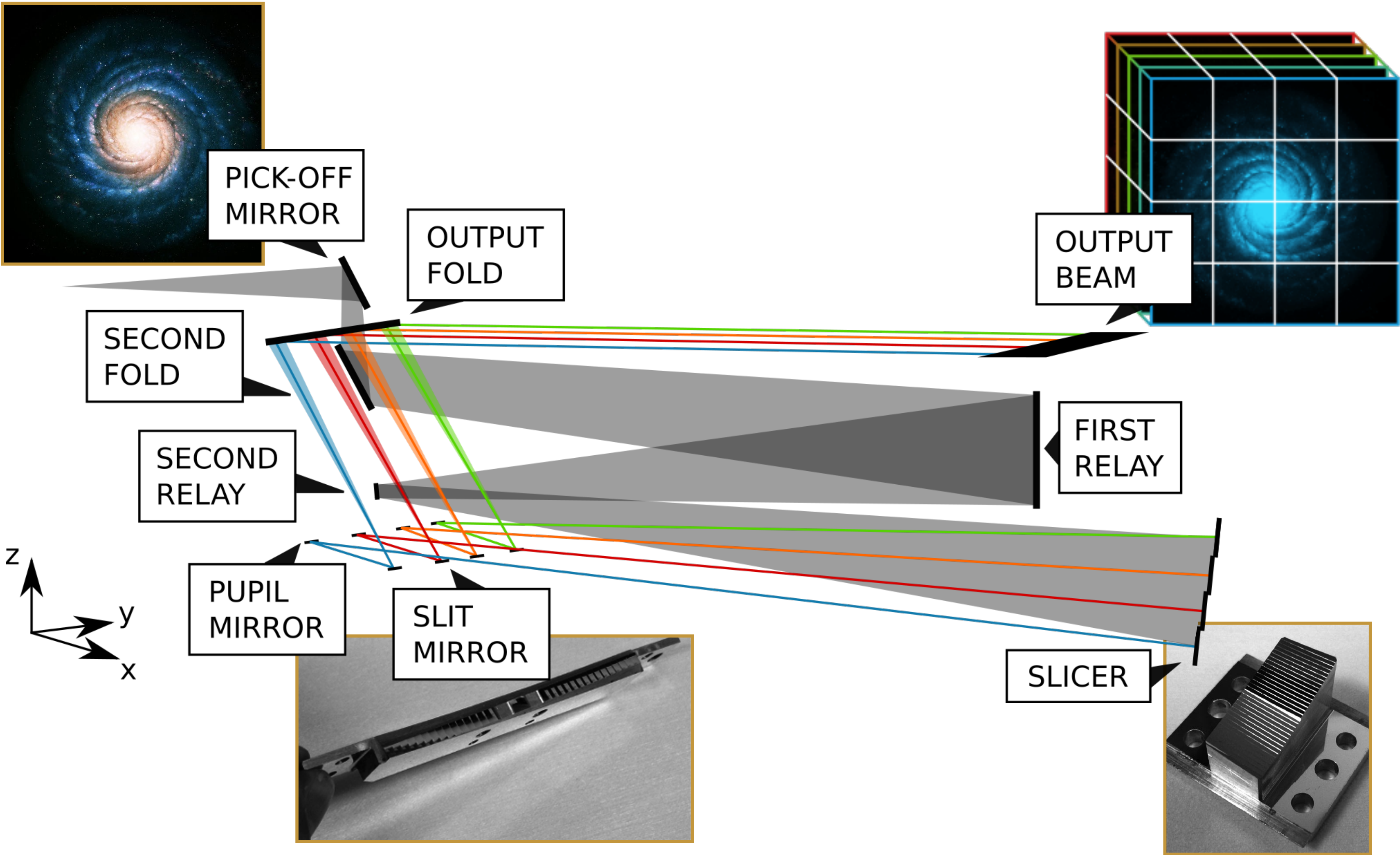
# NIRSpec: Hardware



# NIRSpec: Hardware



# NIRSpec: Light Path

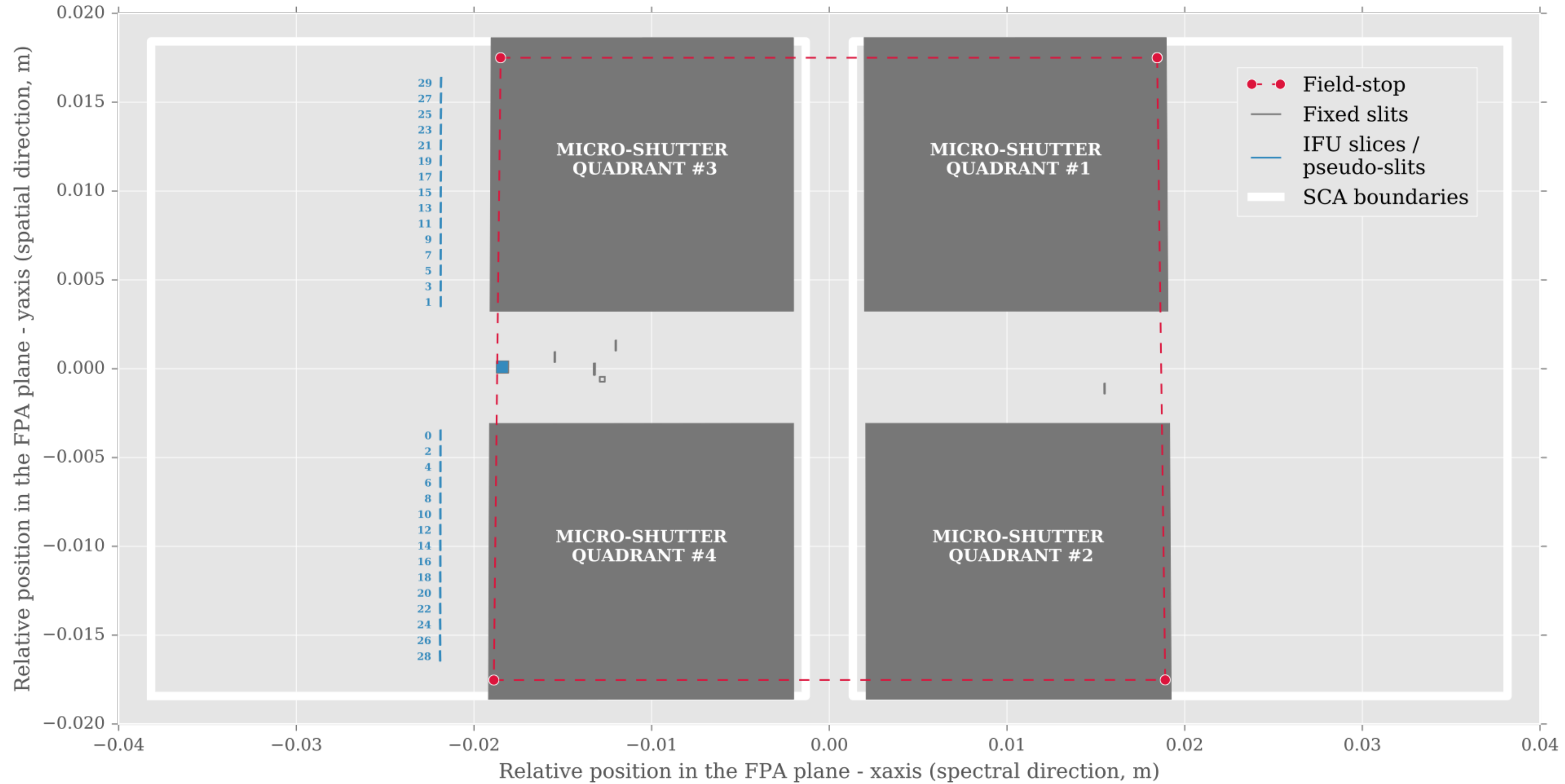




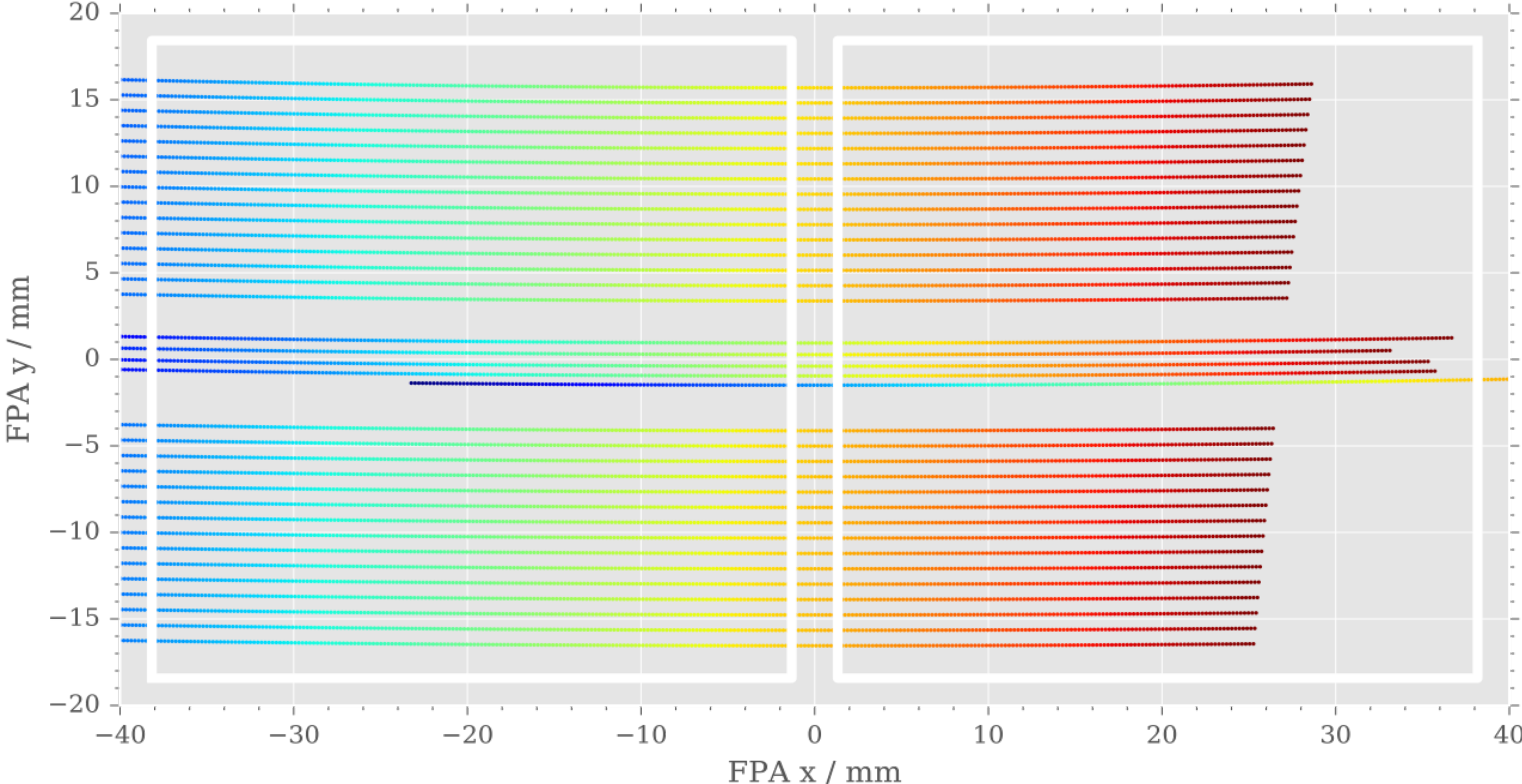
# NIRSpec: Location of Slits on Detector



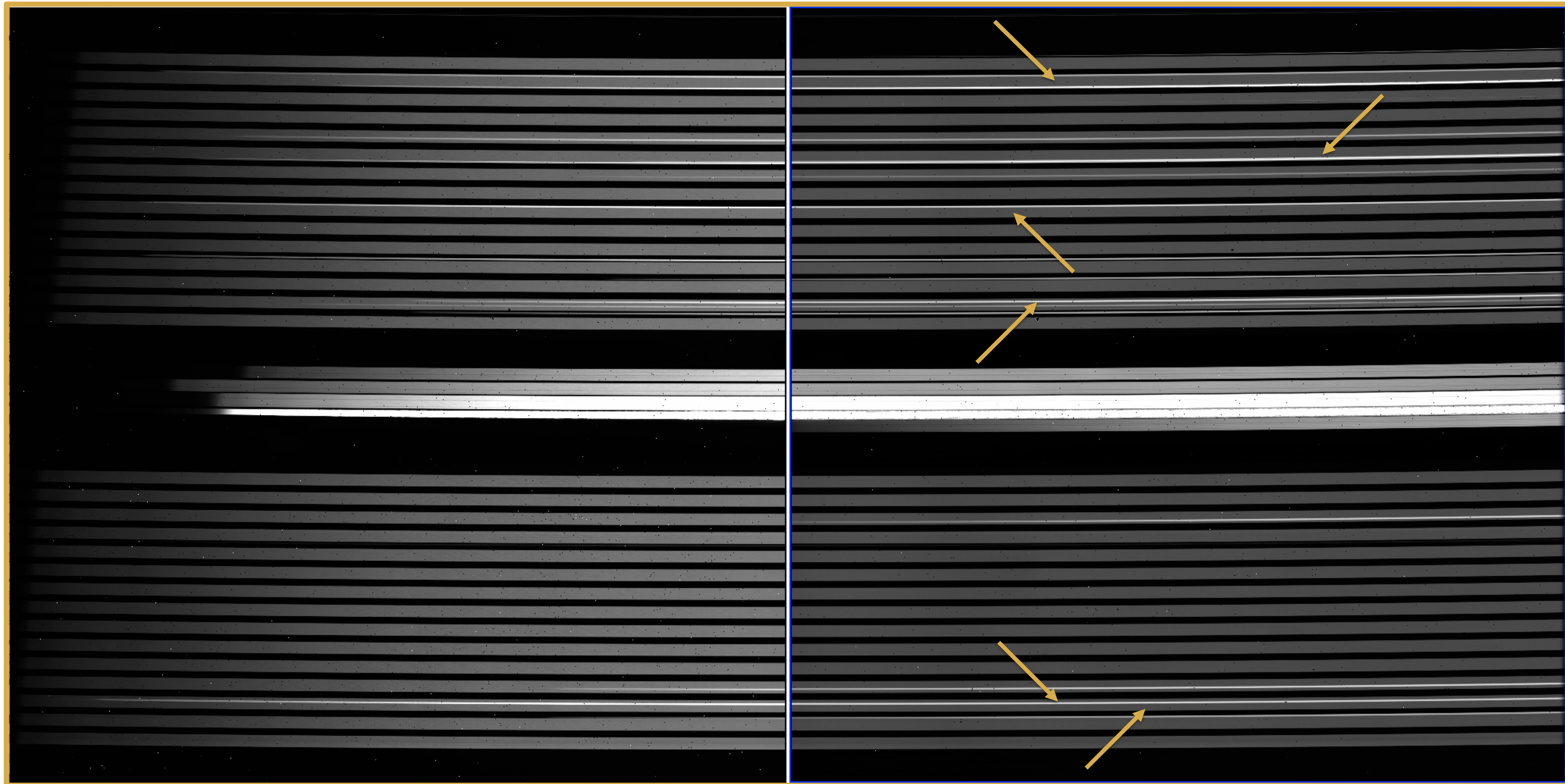
Layout of the NIRSpec field-of-view in the plane of the detectors



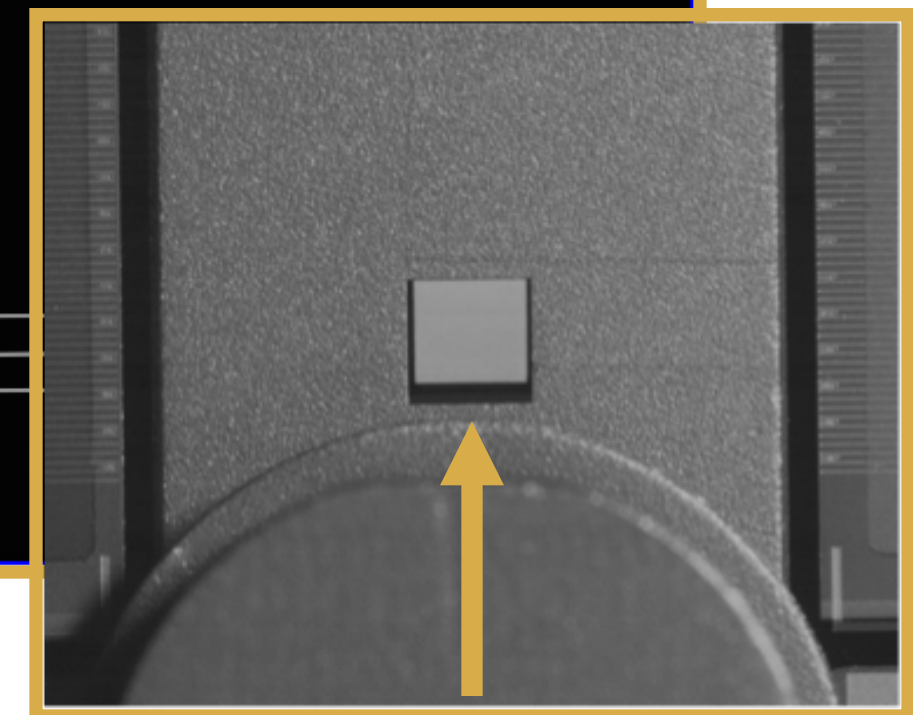
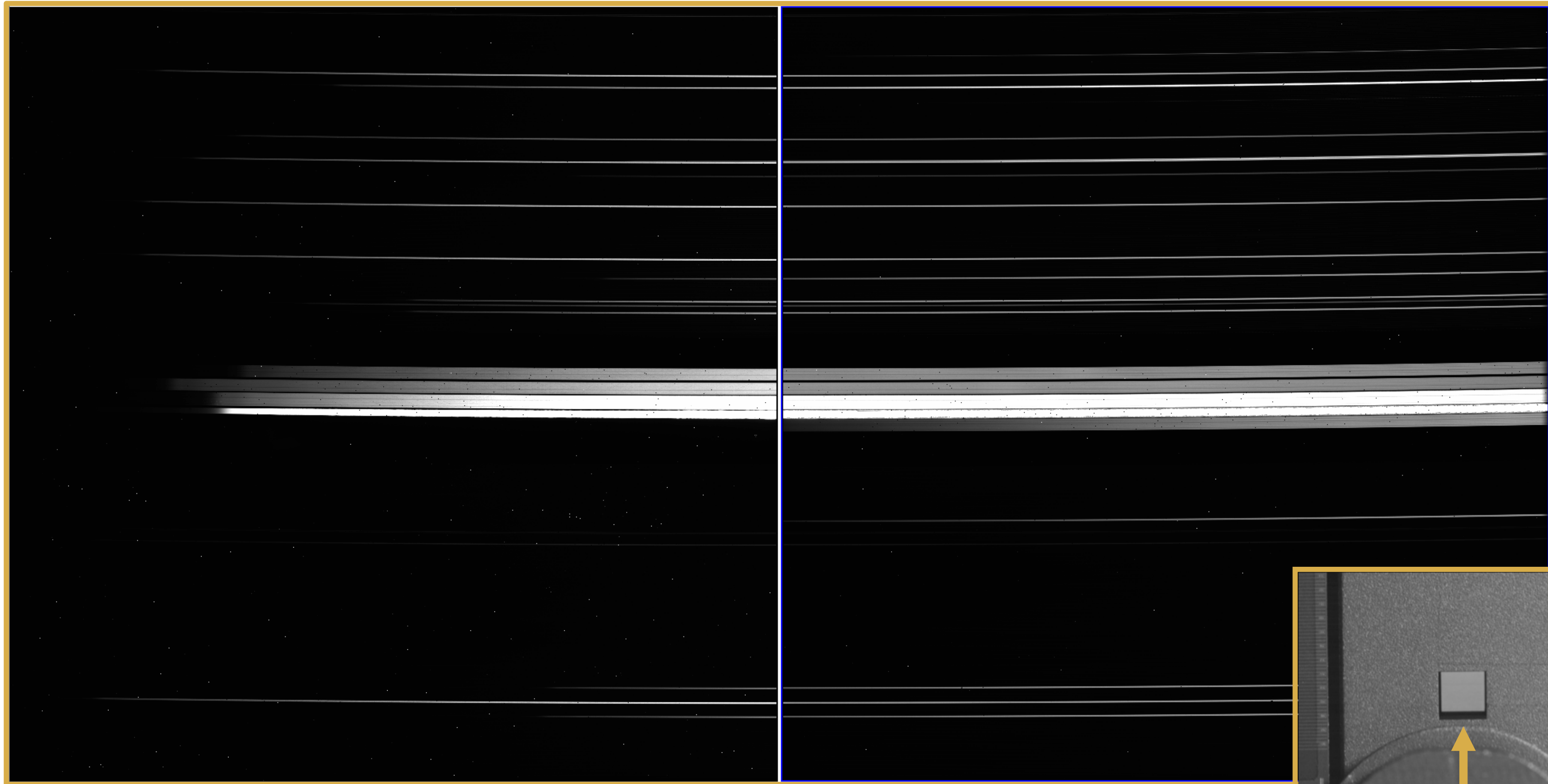
# NIRSpec: Dispersed



# NIRSpec: MSA Leakage



# NIRSpec: MSA Leakage



# NIRSpec: MSA Leakage

