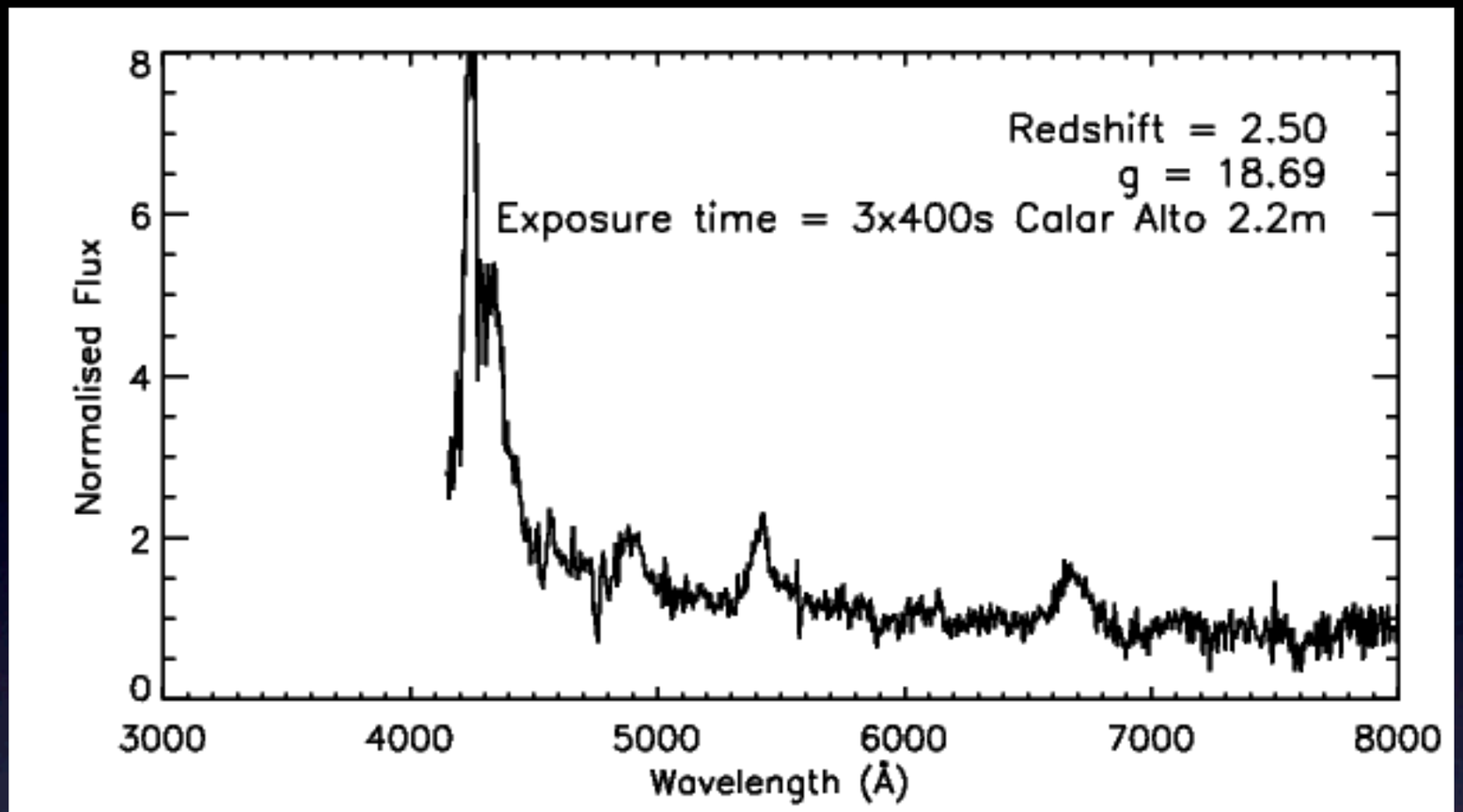
MOS Observations and LS Spectroscopy at high redshift

Natasha Maddox, SKA Postdoctoral Fellow, UCT

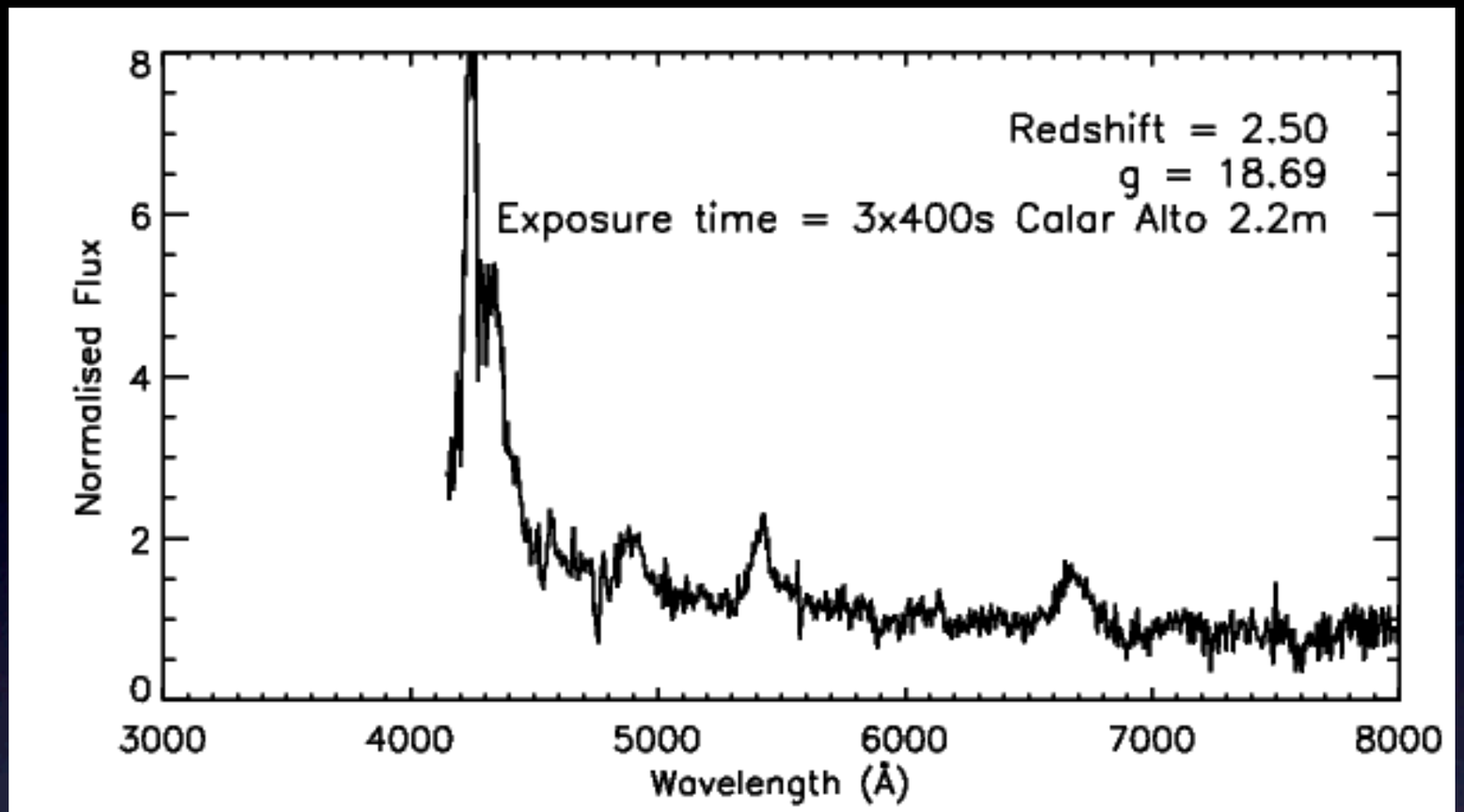
with thanks to:
Sarah Blyth, Andrew Baker, and all the SALT help people

LS spectrum: Quasar z=2.5



LS spectrum: Quasar z=2.5

- Look for intervening absorption systems (DLAs) in high redshift quasar spectra
- Use smaller telescopes to find candidates for further observations



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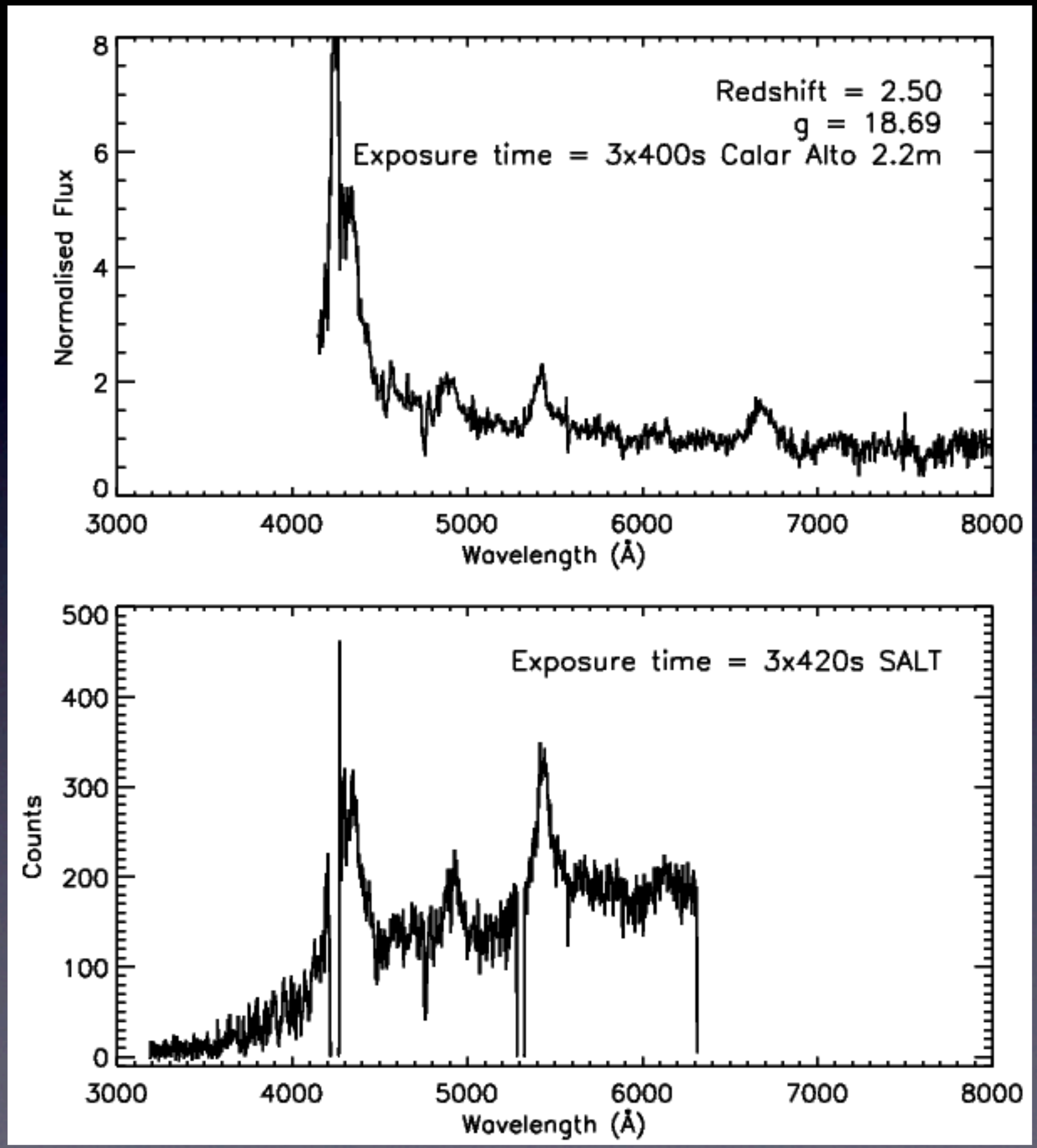

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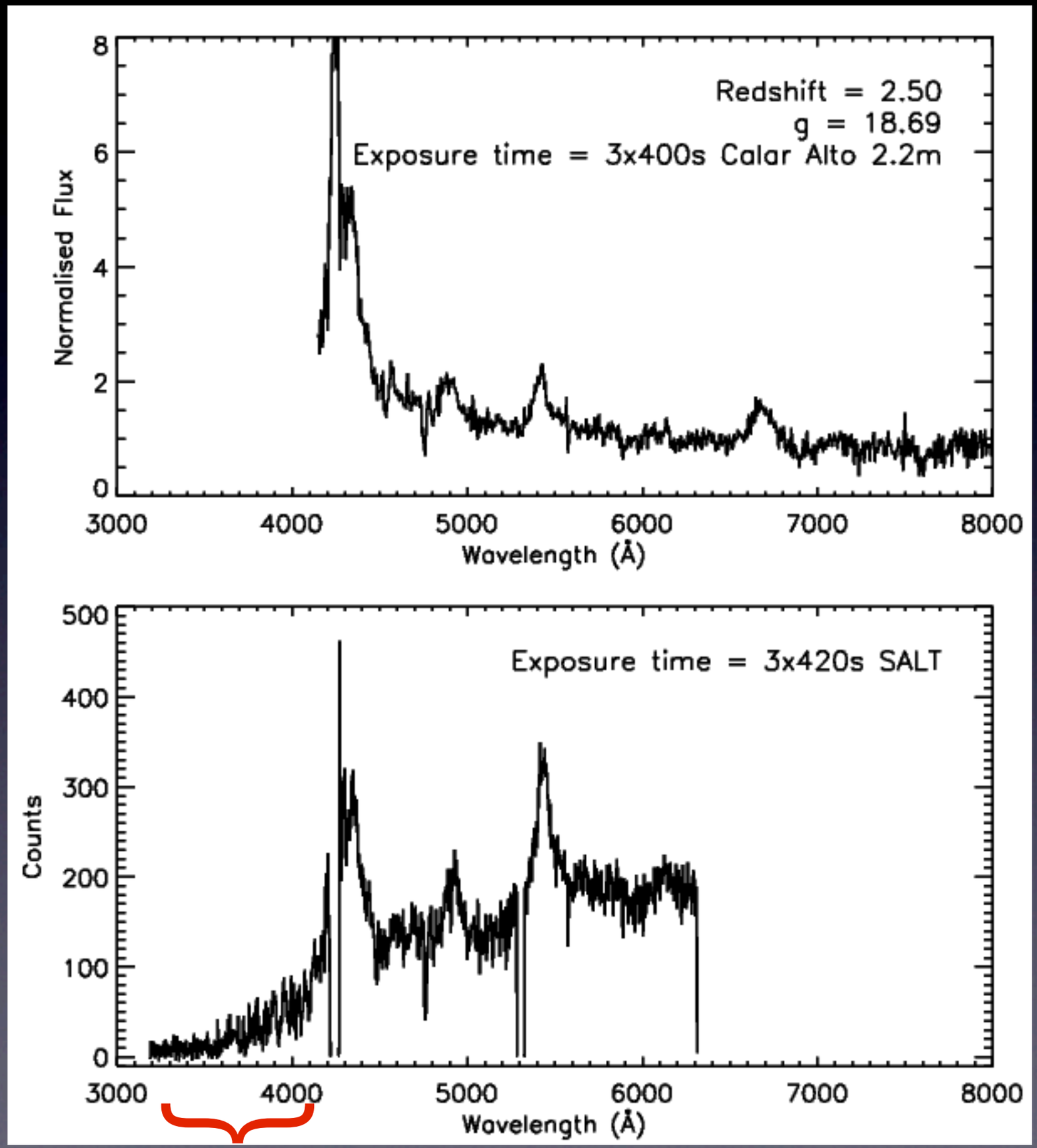
- Look for intervening absorption systems (DLAs) in high redshift quasar spectra
- Use smaller telescopes to find candidates for further observations
- Need good sensitivity as blue as possible



LS spectrum: Quasar z=2.6

- Look for intervening absorption systems (DLAs) in high redshift quasar spectra
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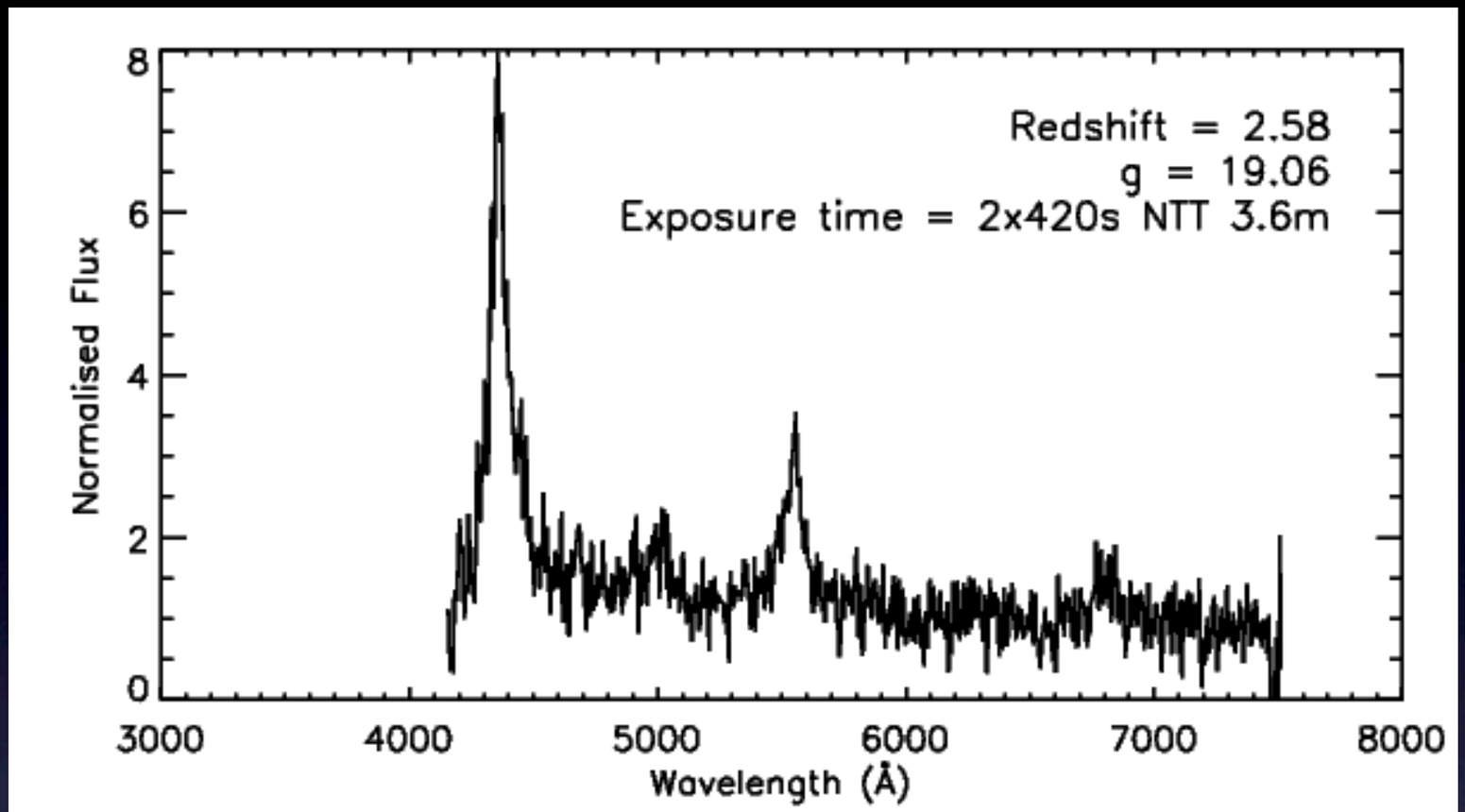

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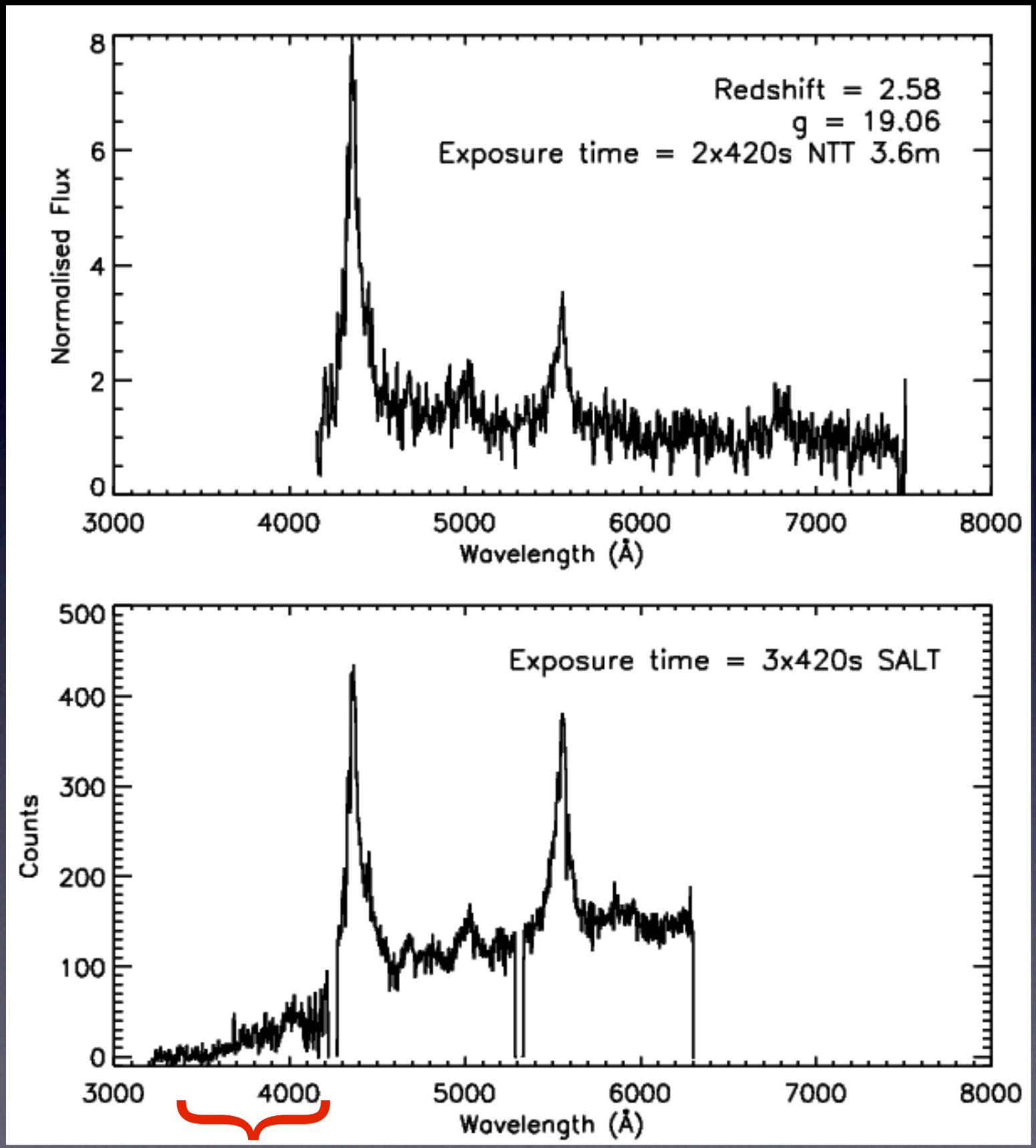
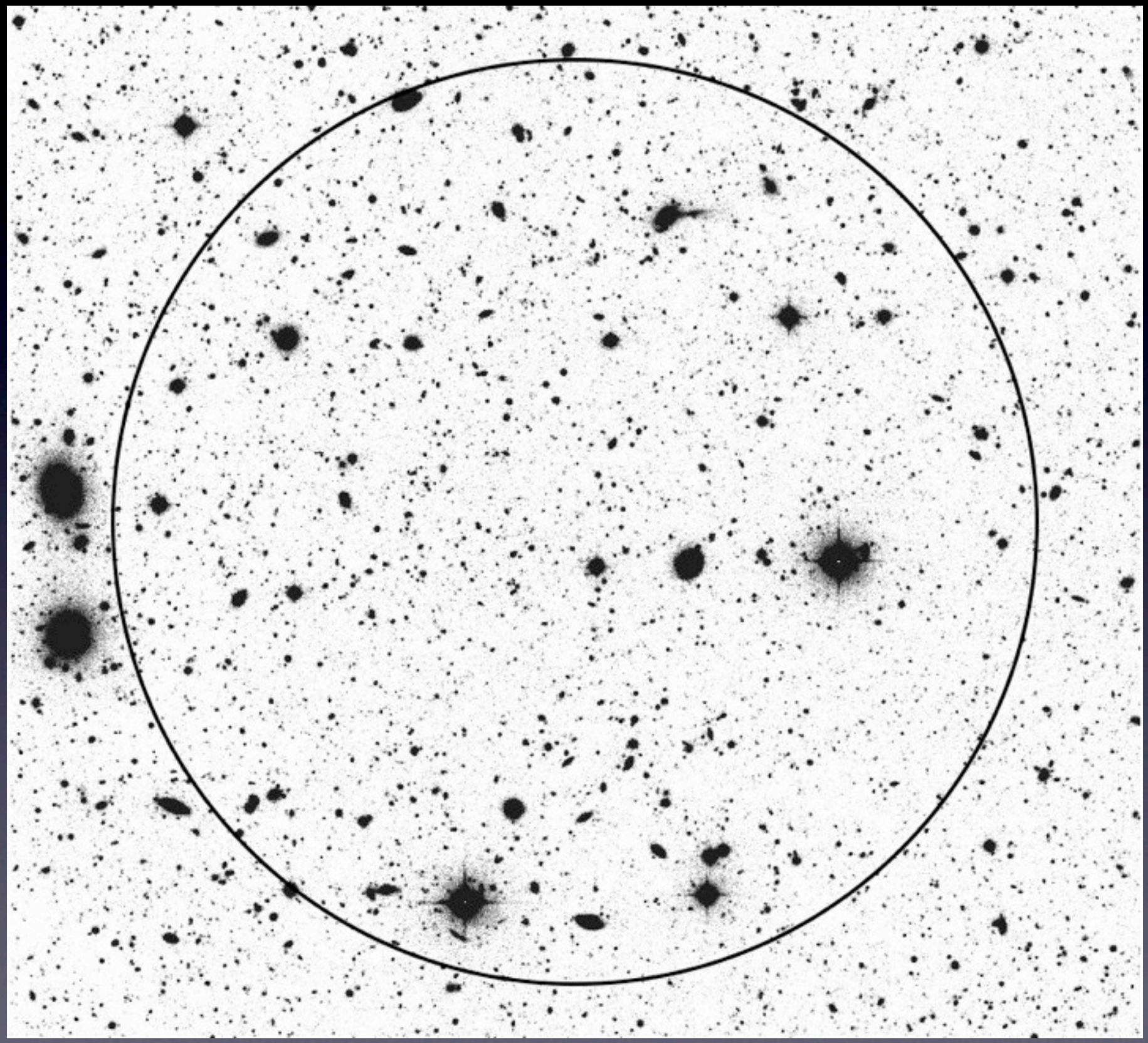
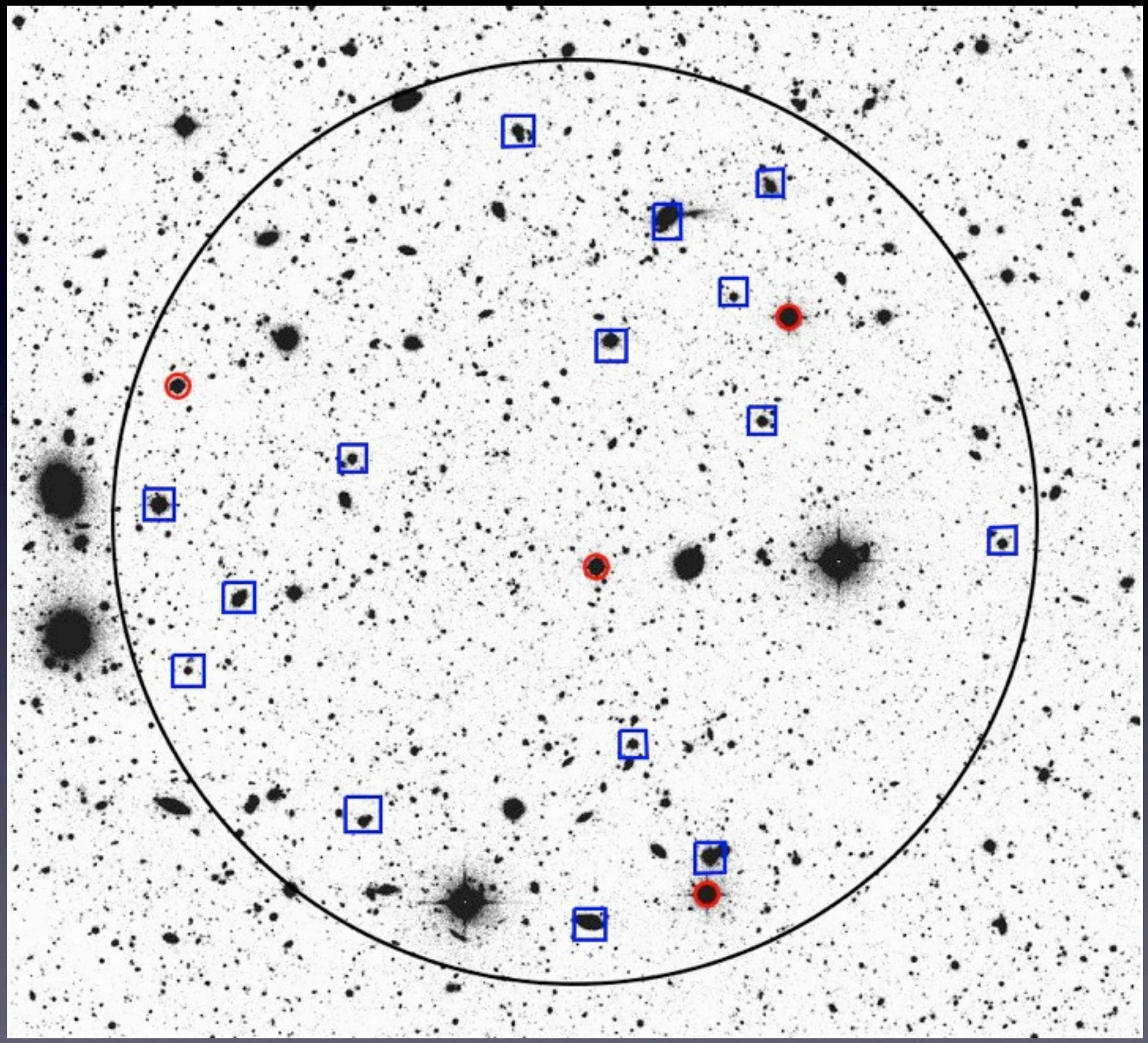


MOS Field of View: ECDF-S



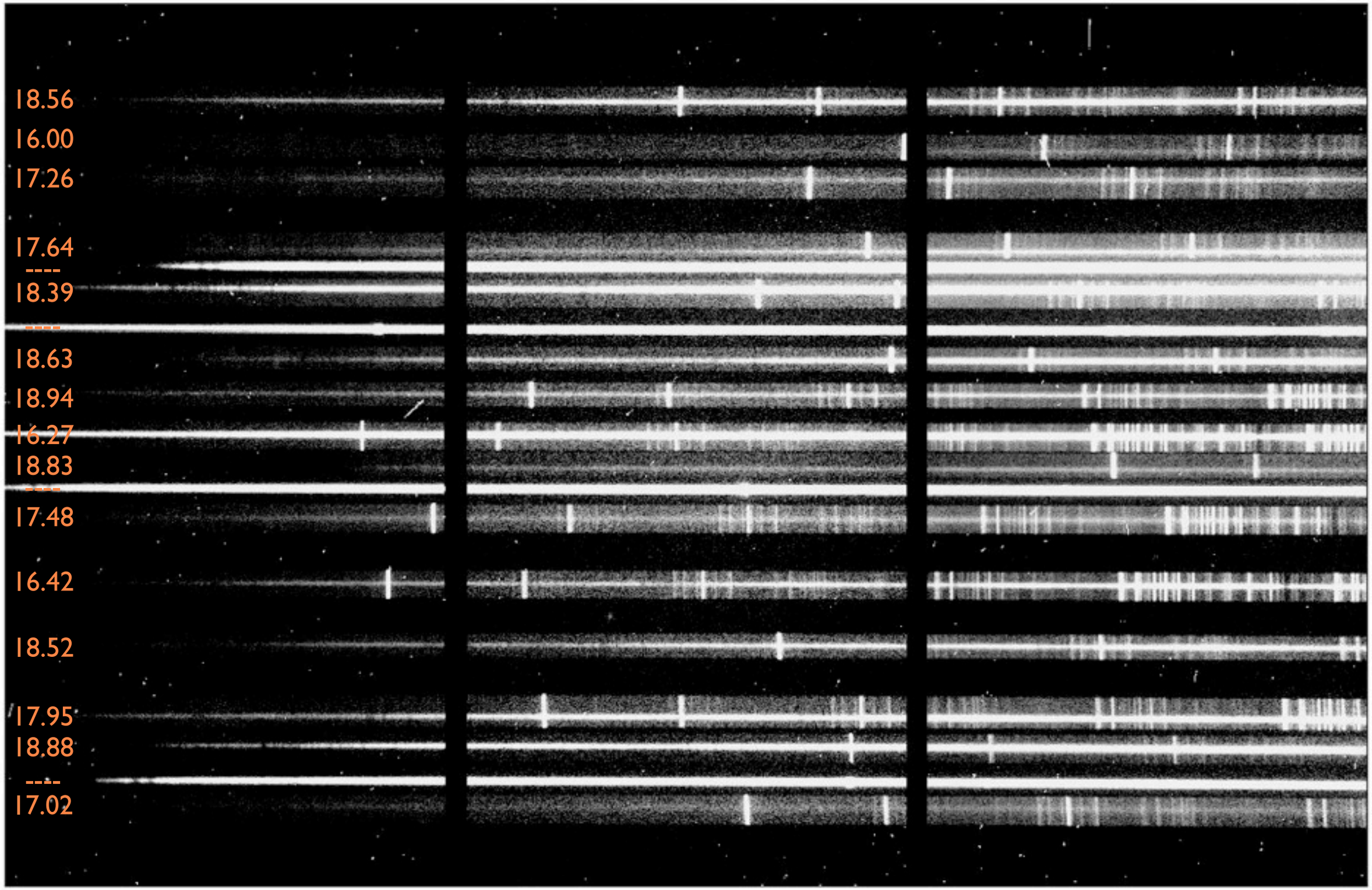
MOS Field of View: ECDF-S

15 slitlets
1.5” width
14--18” length

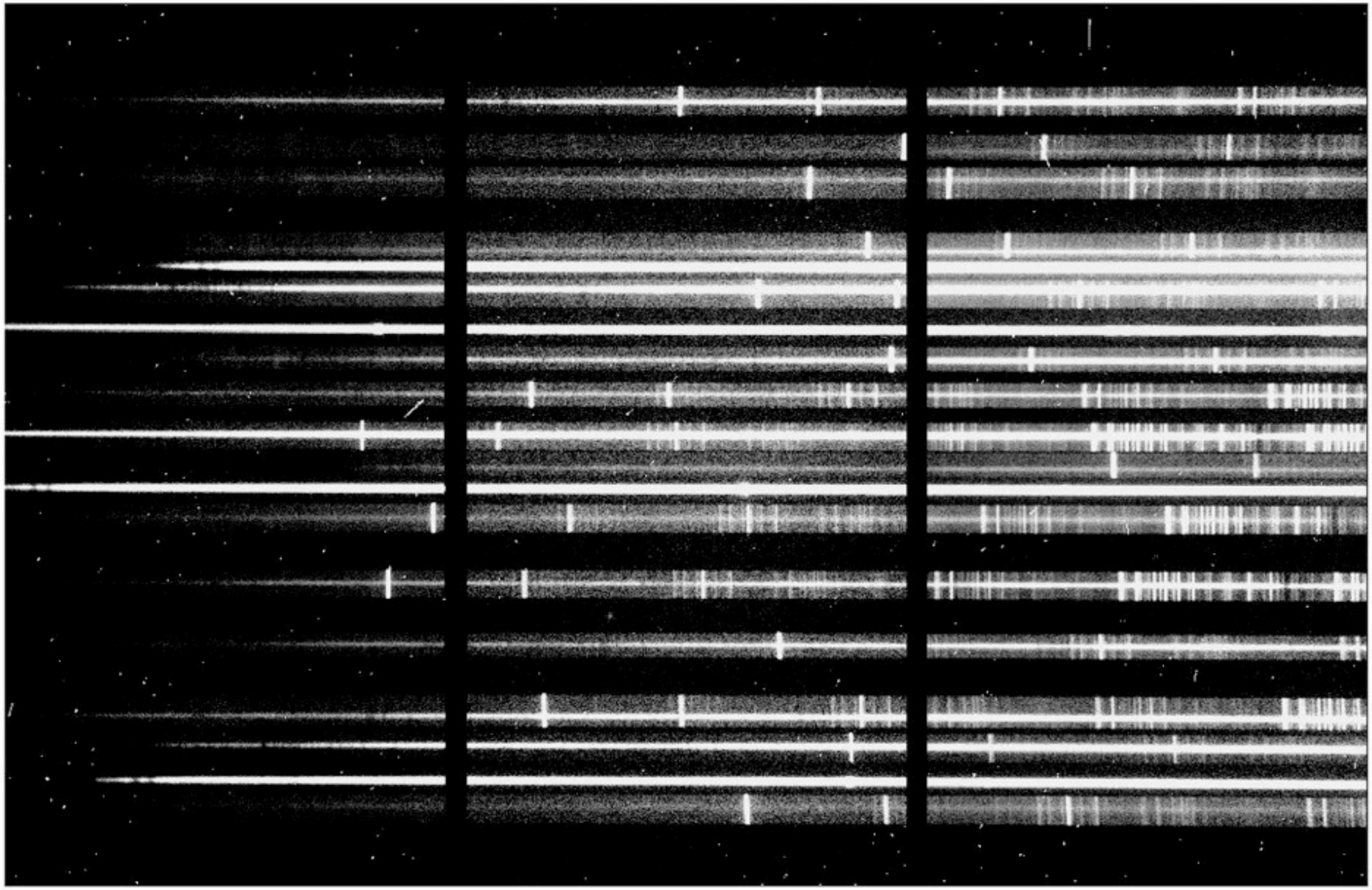


8’

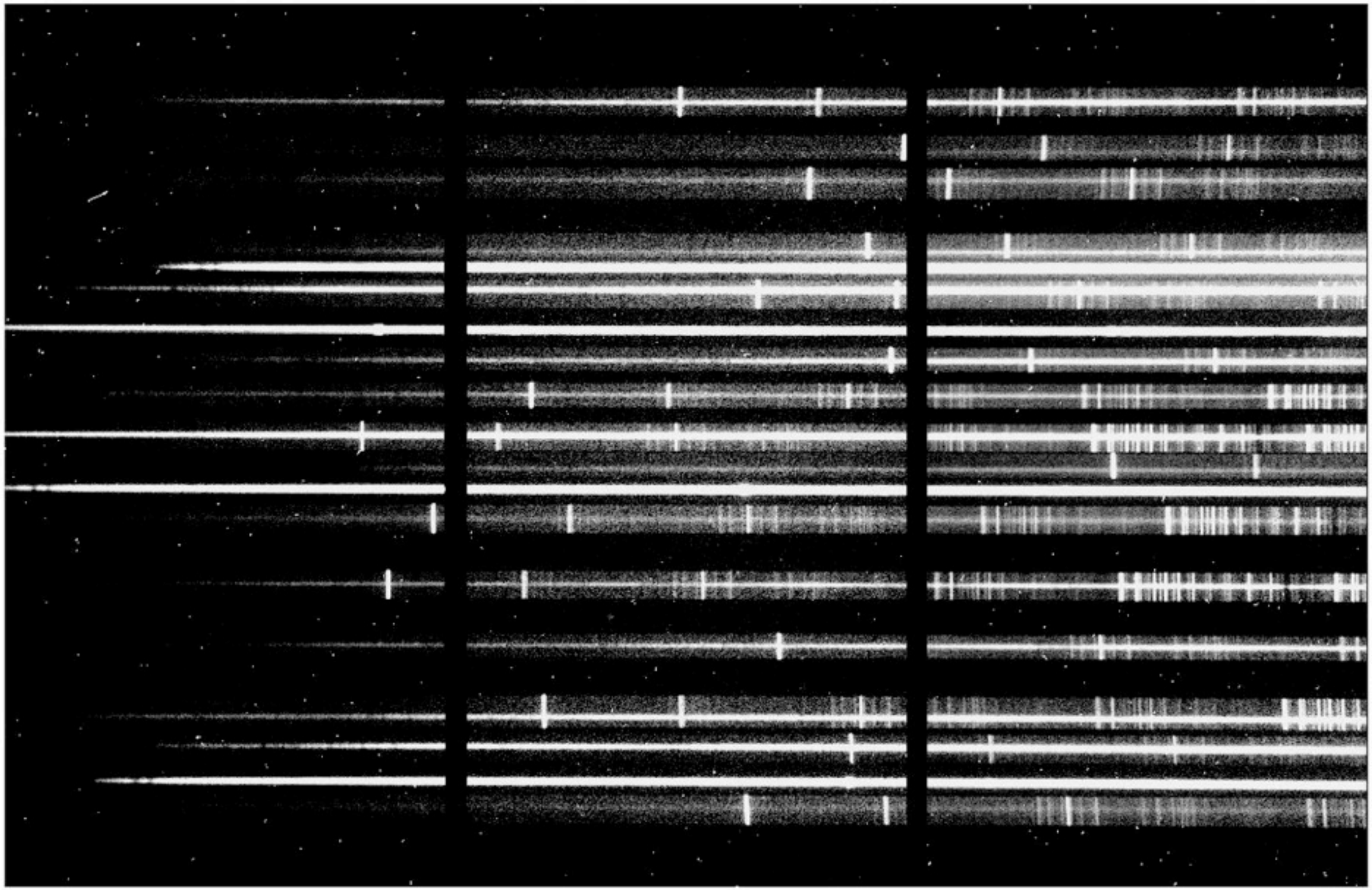
MOS Field: Magnitudes



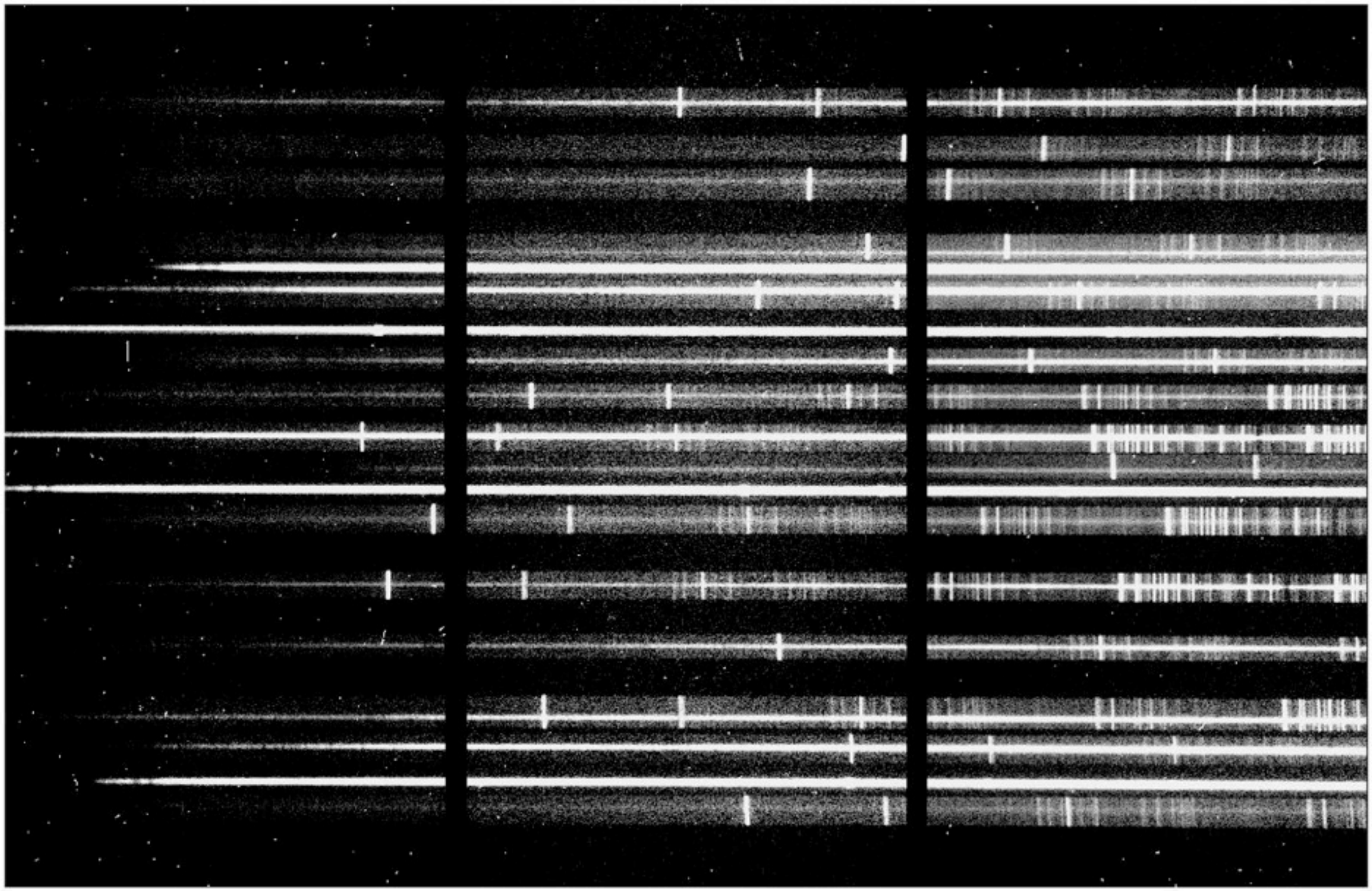
MOS Field: Exposure 1: 420s



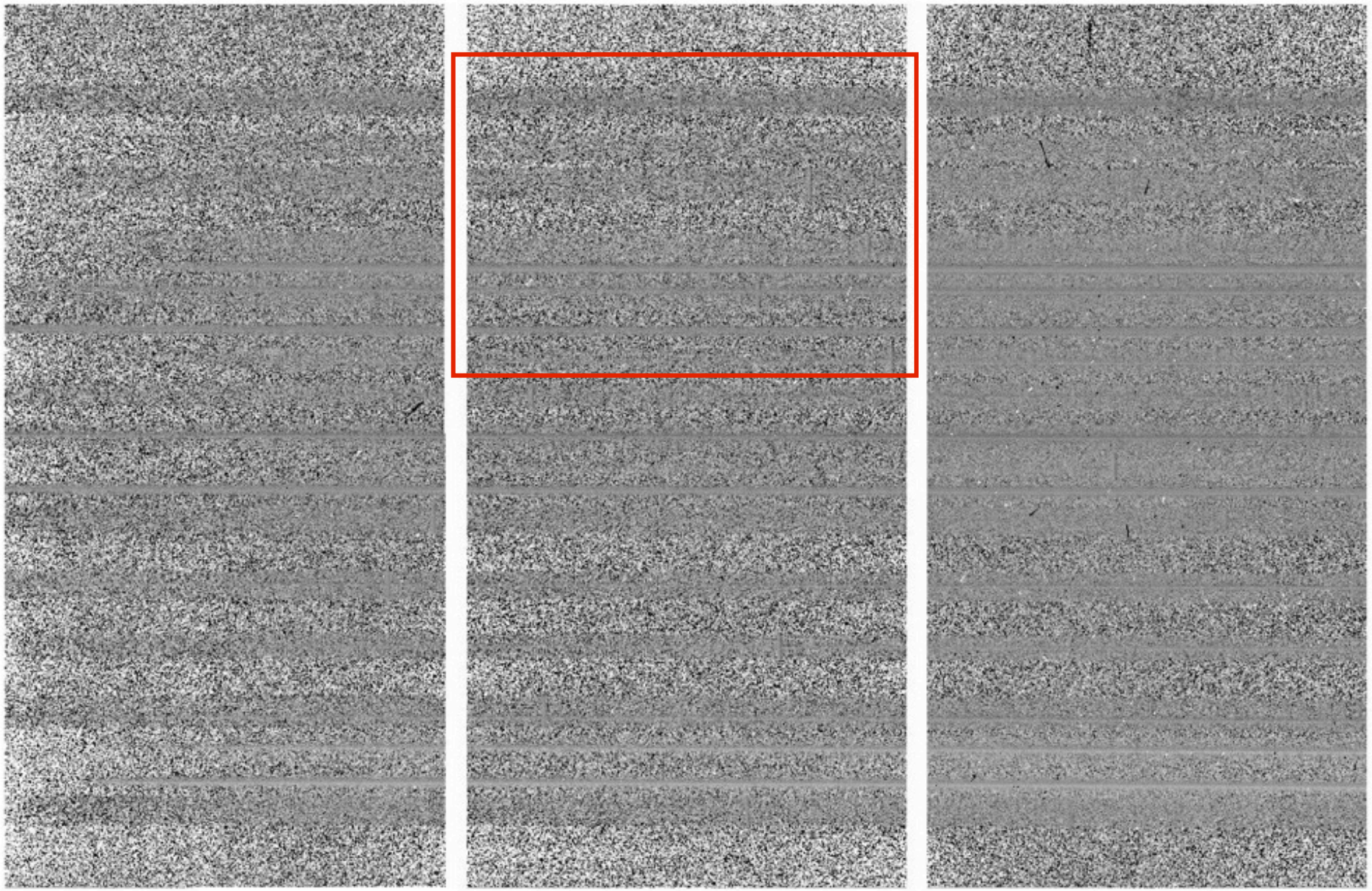
MOS Field: Exposure 2: 420s



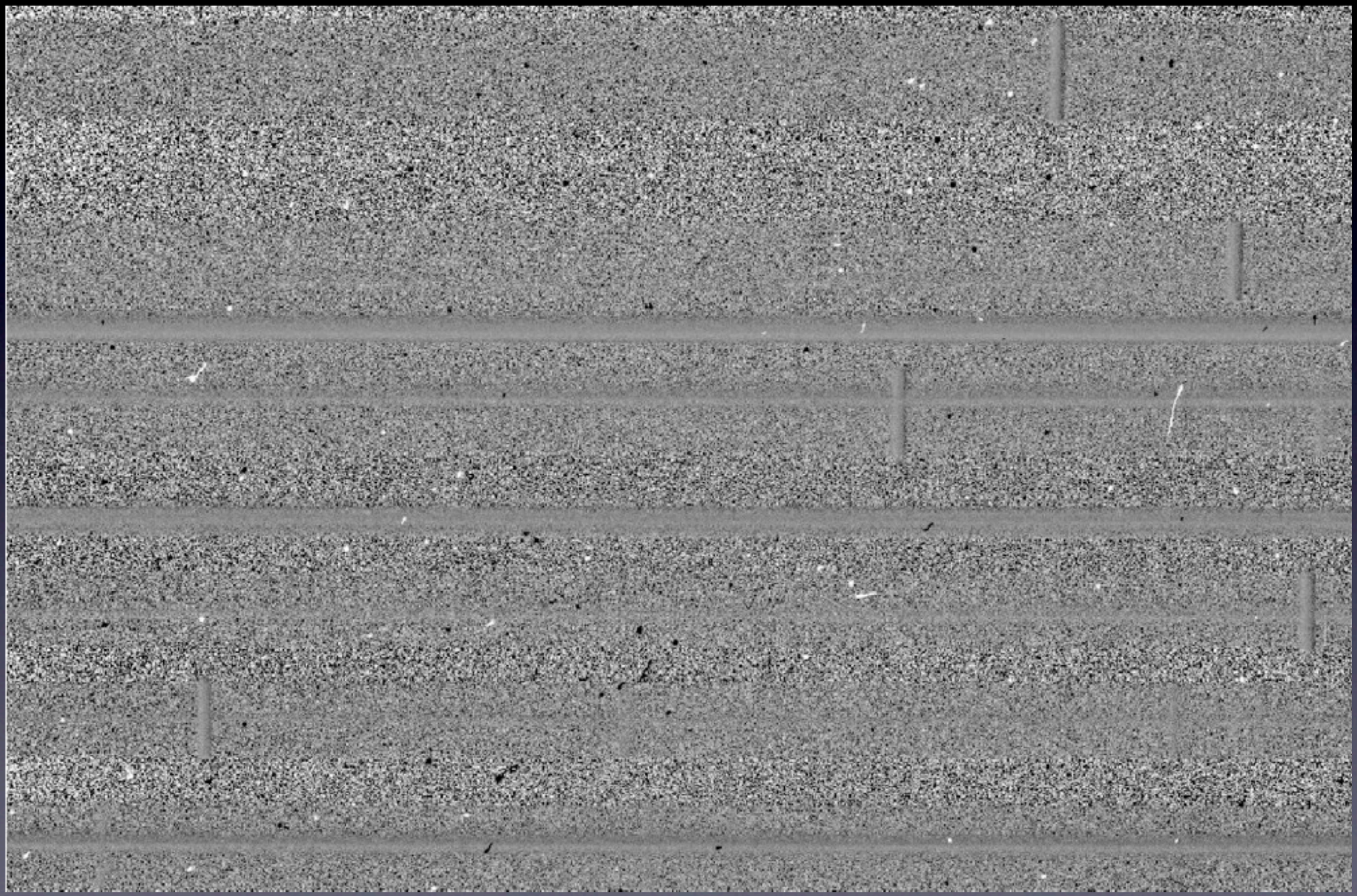
MOS Field: Exposure 3: 340s



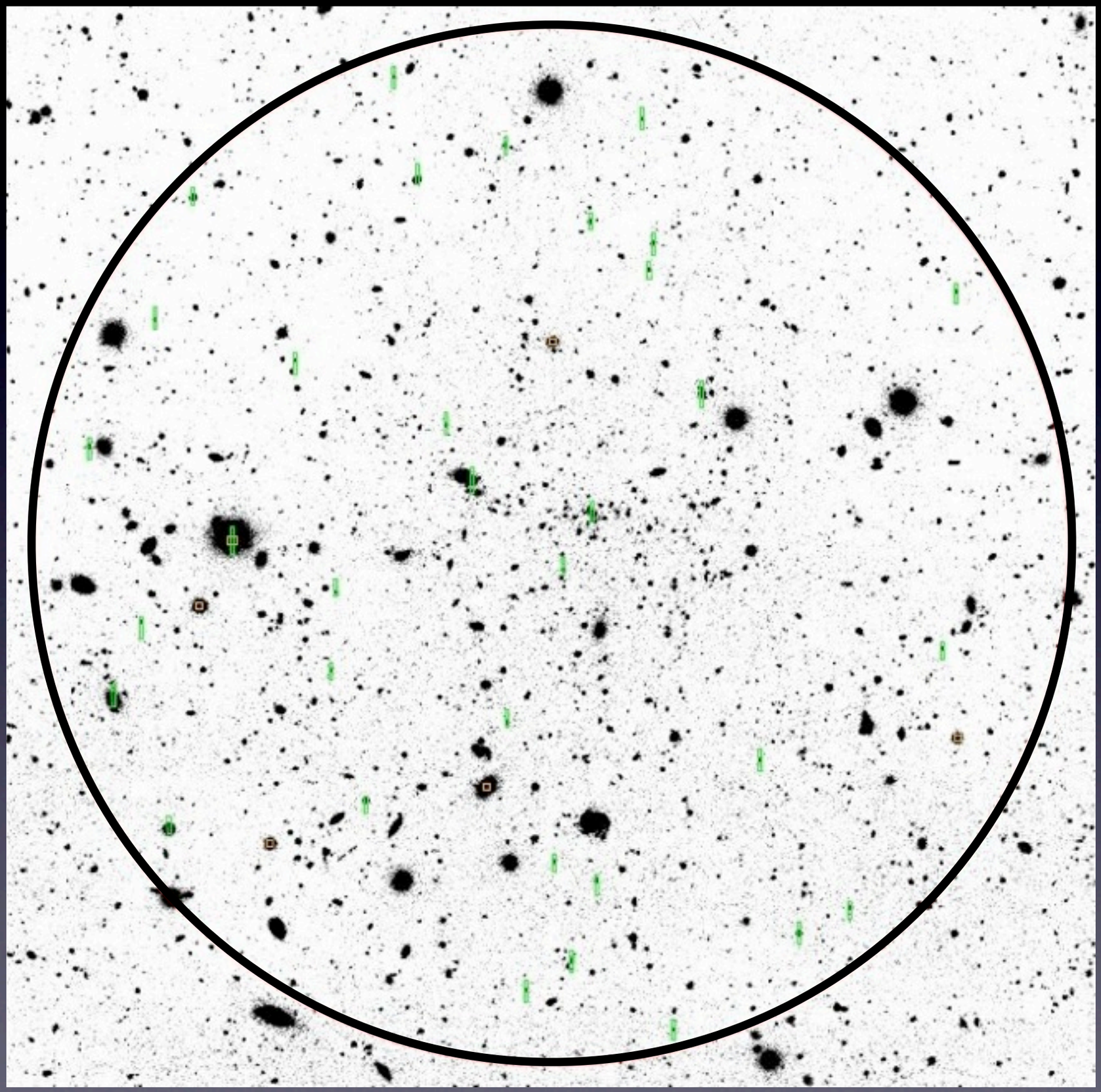
MOS Field: Exposure 1/2



MOS Field: Exposure 1/2

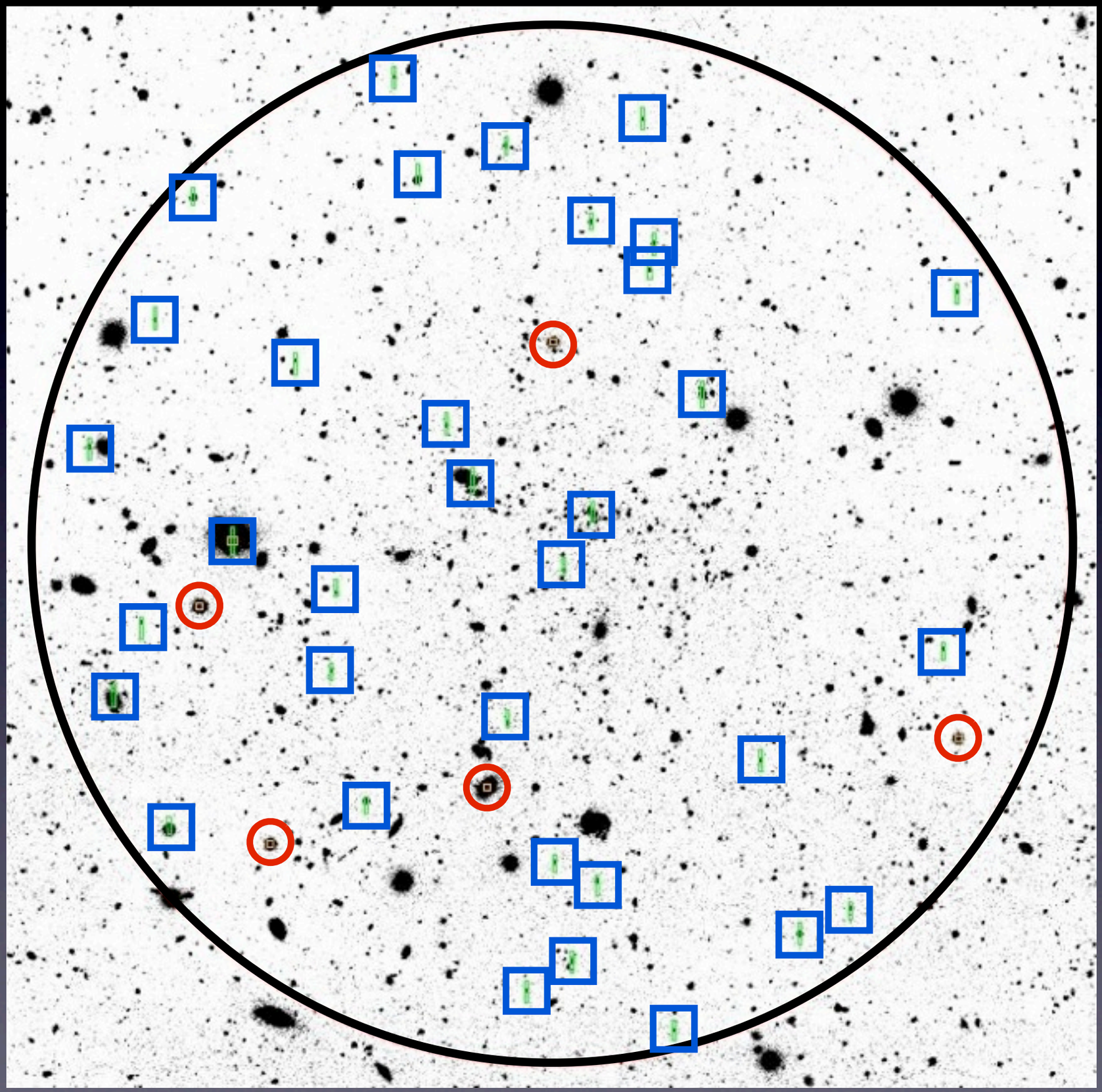


MOS Field: Cluster z=0.8

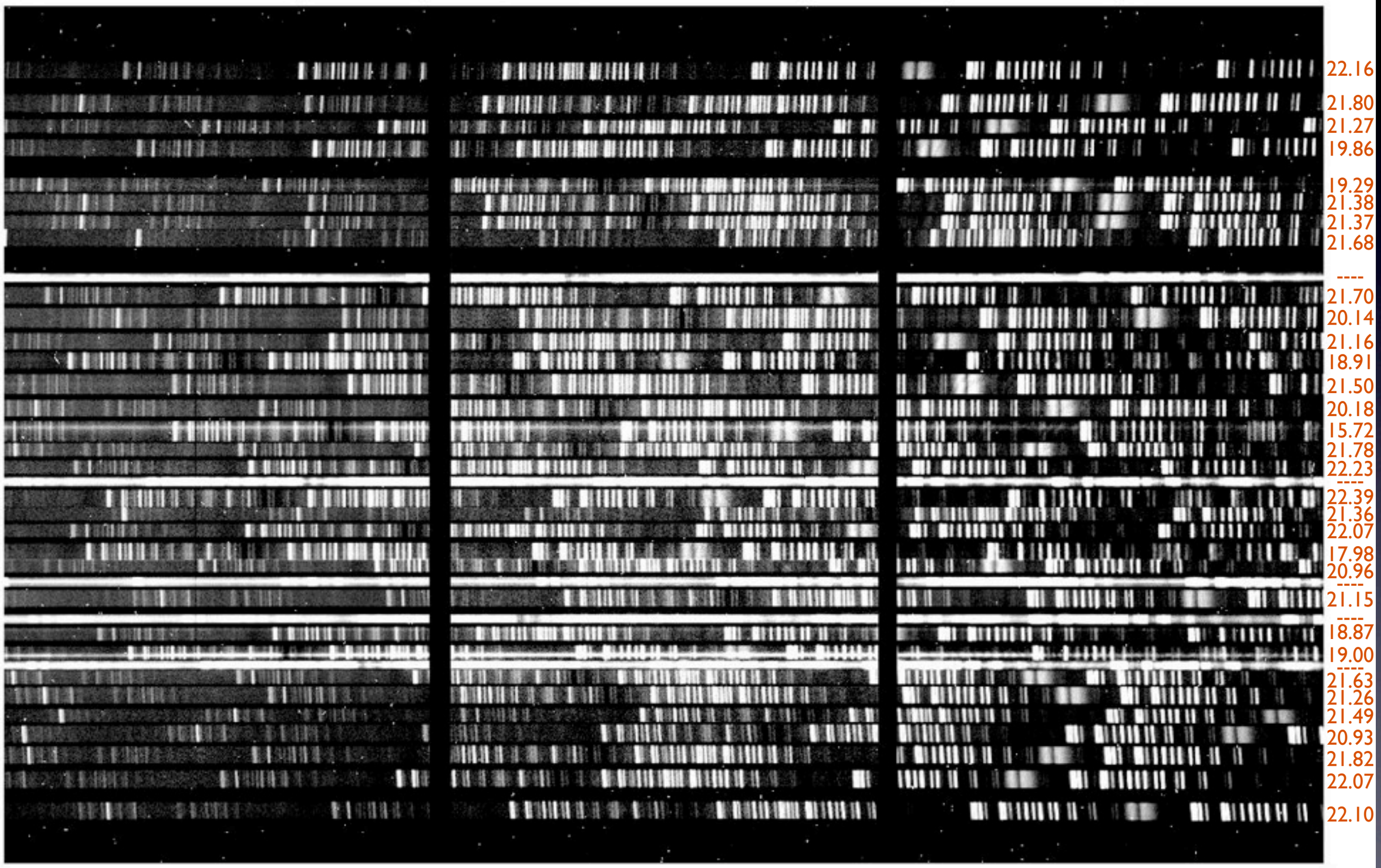


MOS Field: Cluster z=0.8

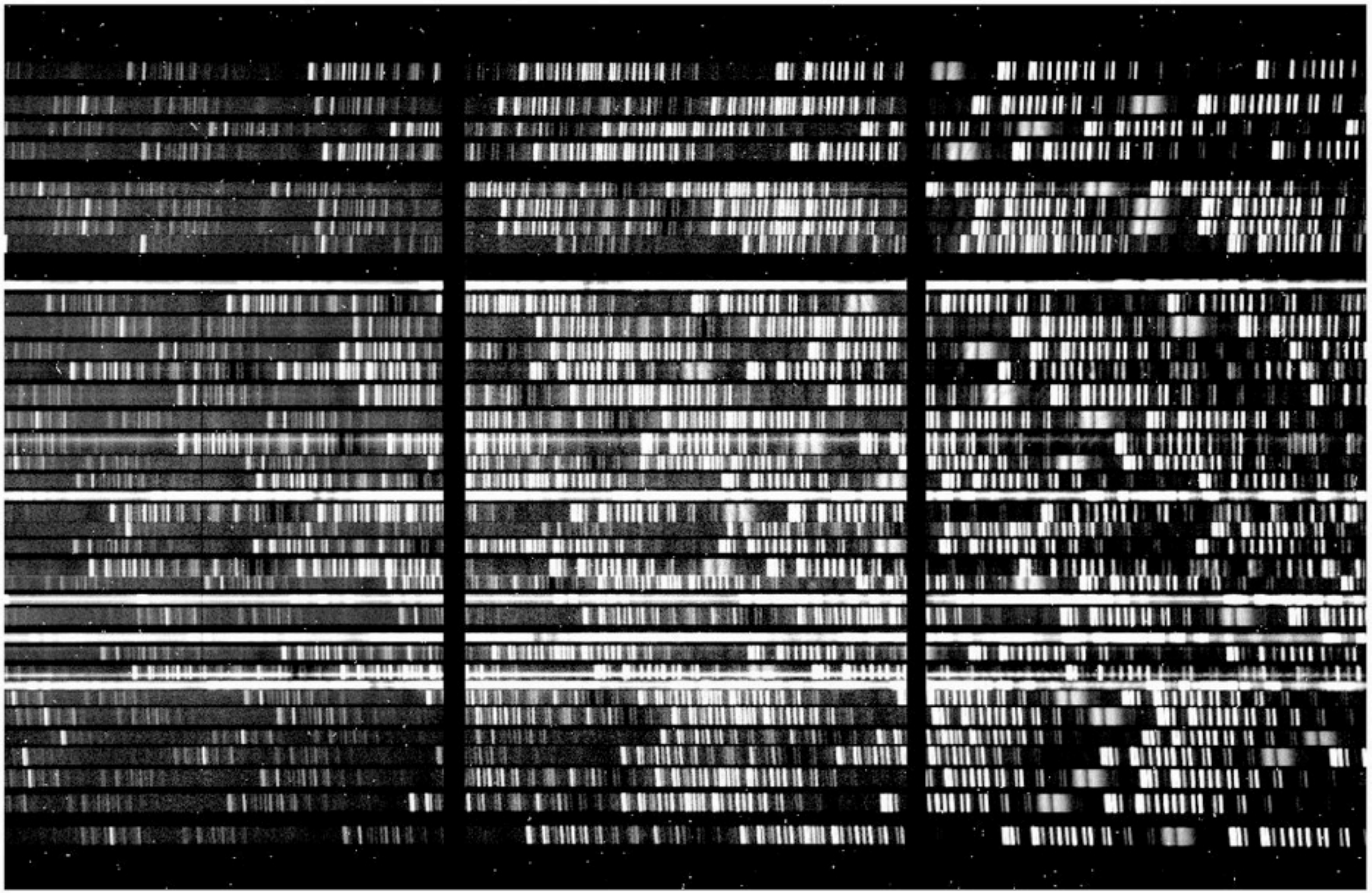
34 slitlets
1.5” width
8--12” length



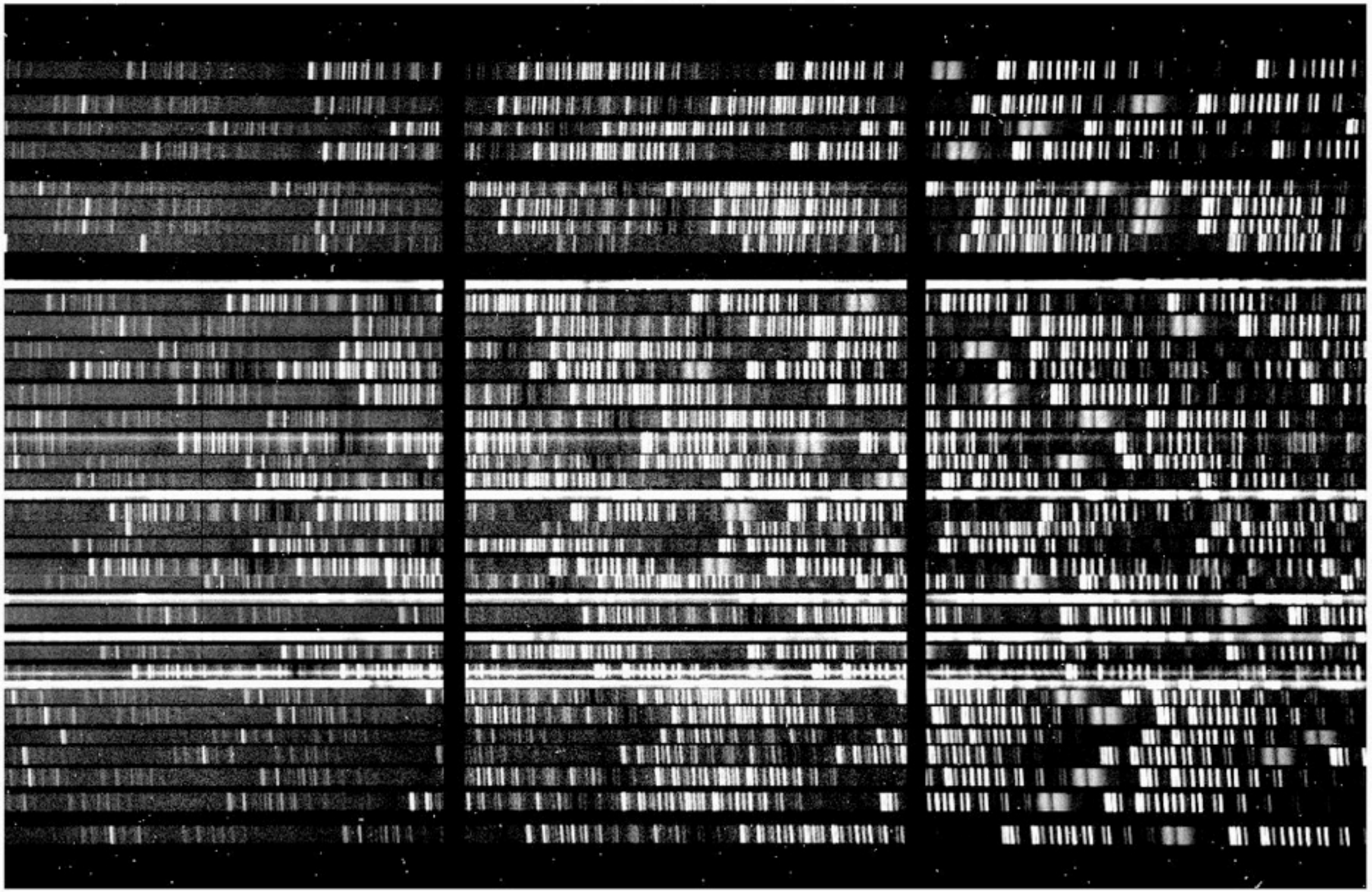
MOS Field: Magnitudes



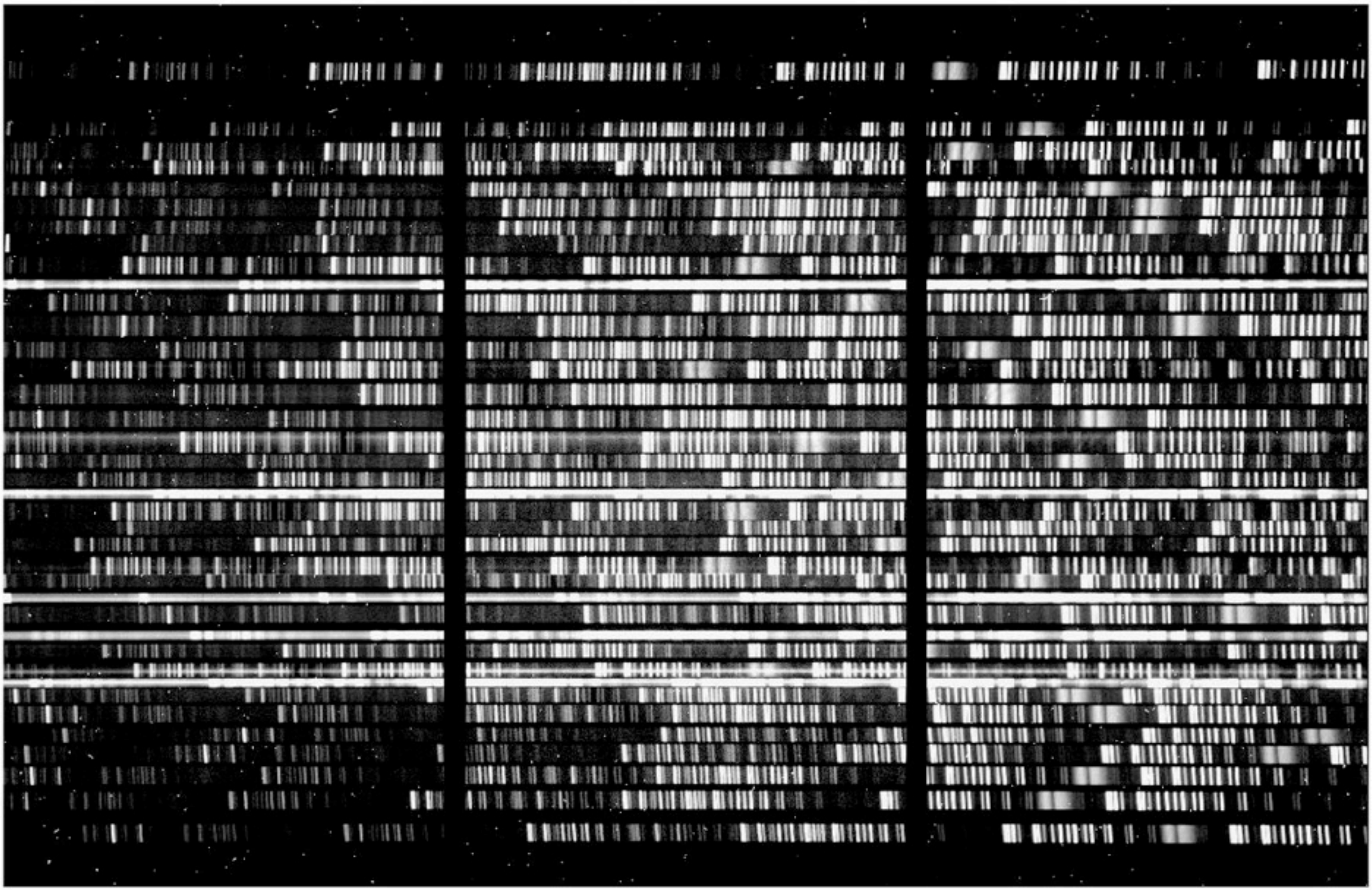
MOS Field: Exposure 1: 600s 10May



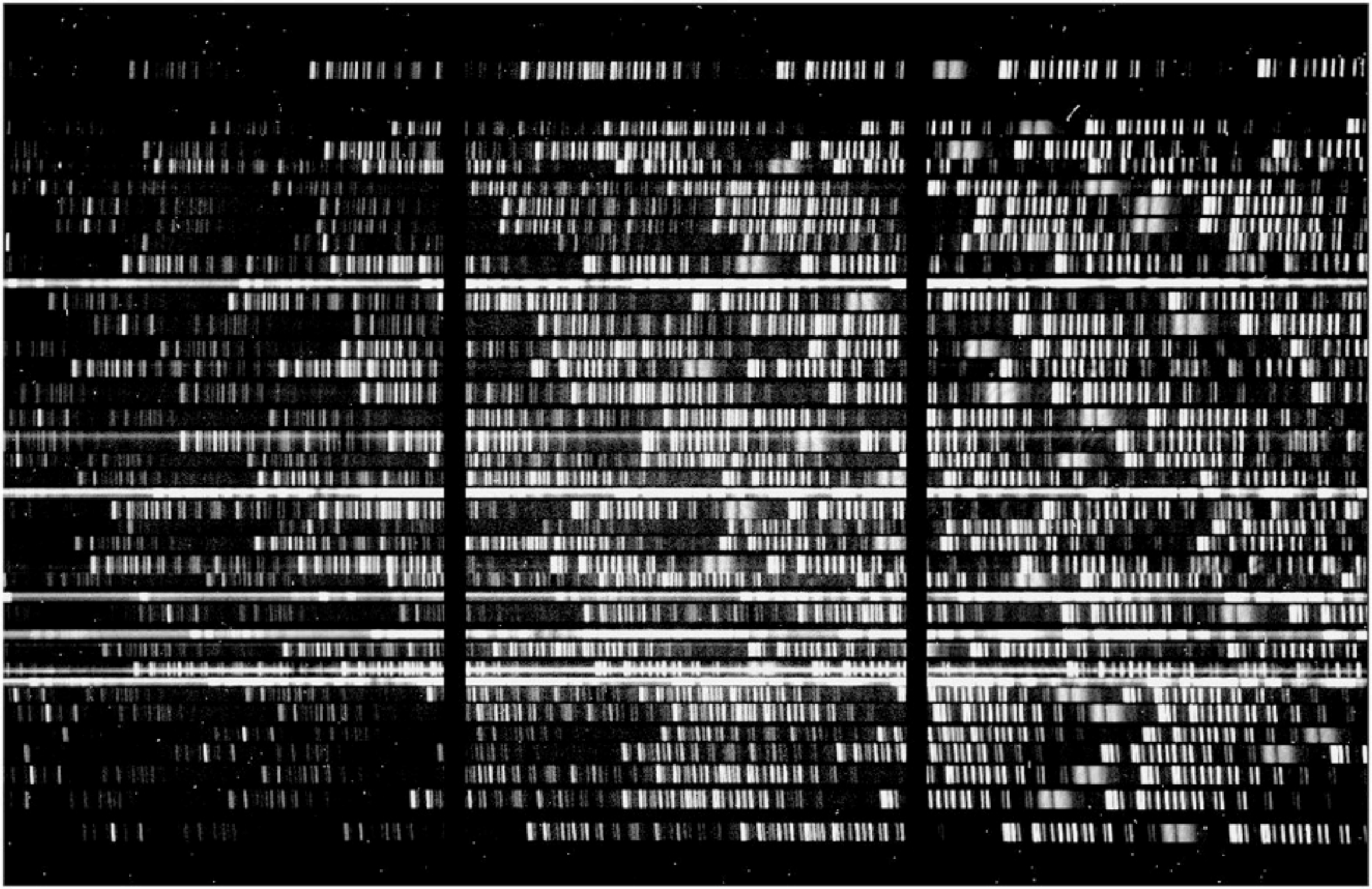
MOS Field: Exposure 2: 350s 10May



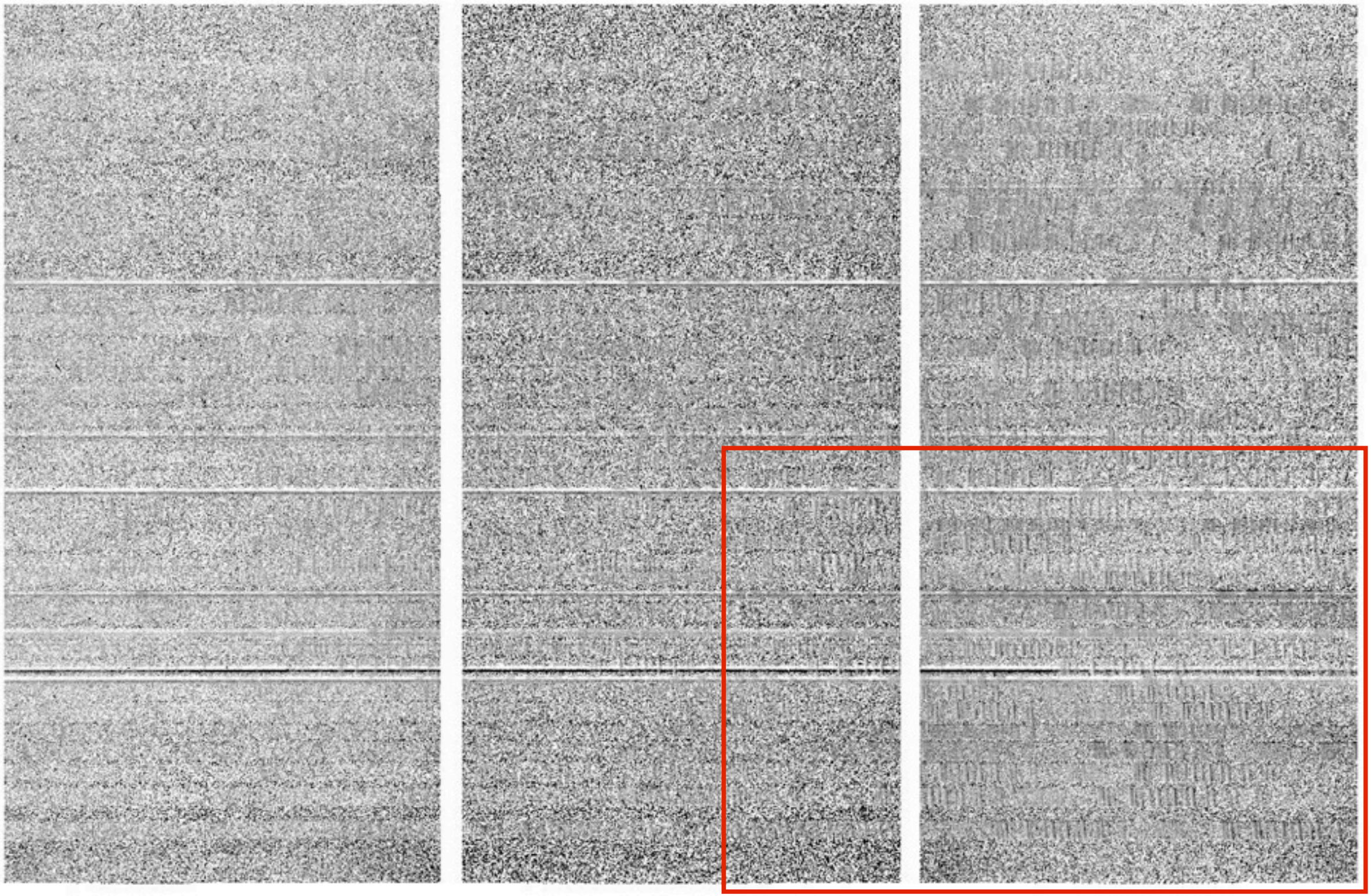
MOS Field: Exposure 1: 700s 14June



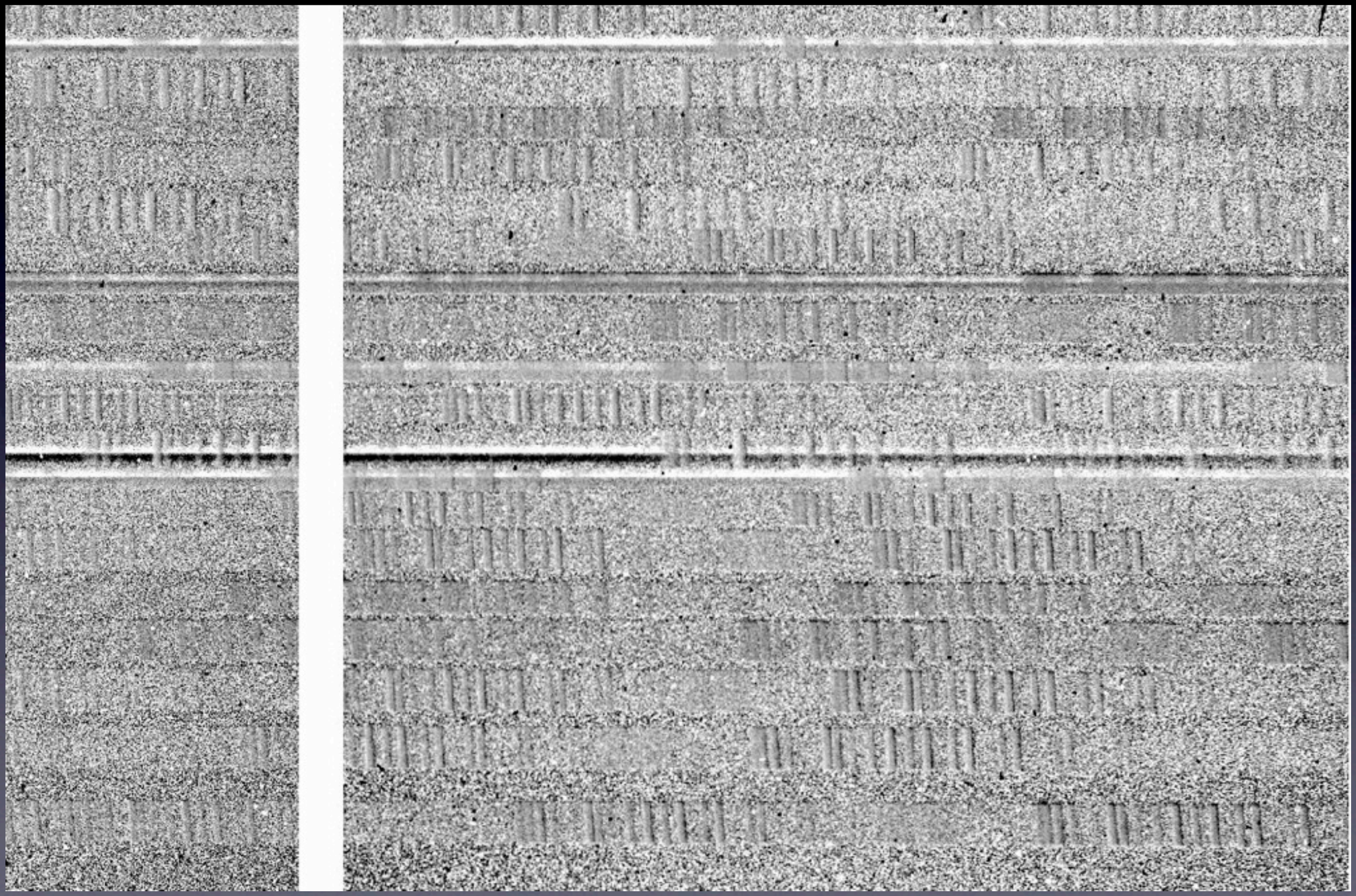
MOS Field: Exposure 2: 340s (with realignment)



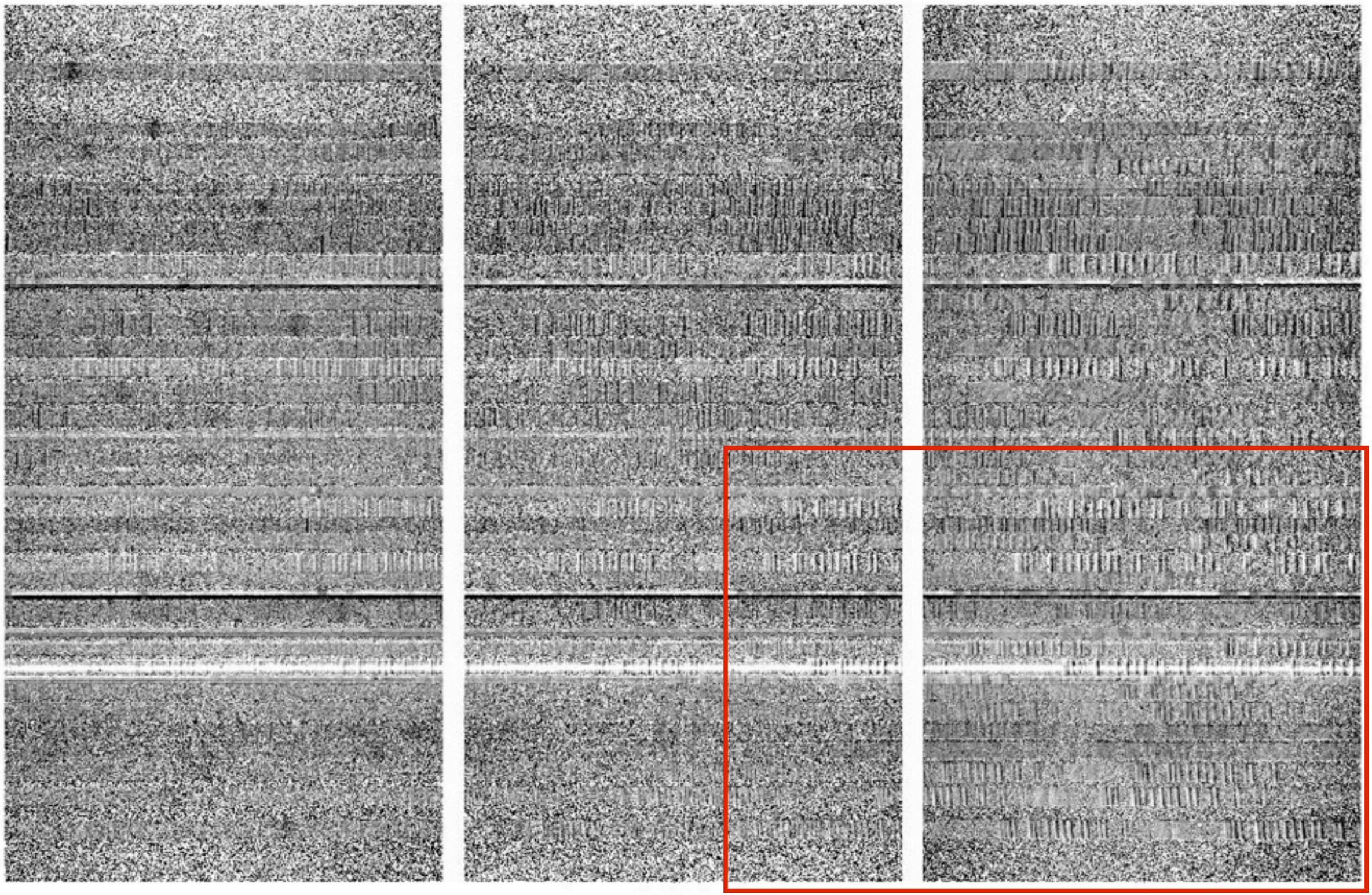
MOS Field: Exposure 1/2 10May



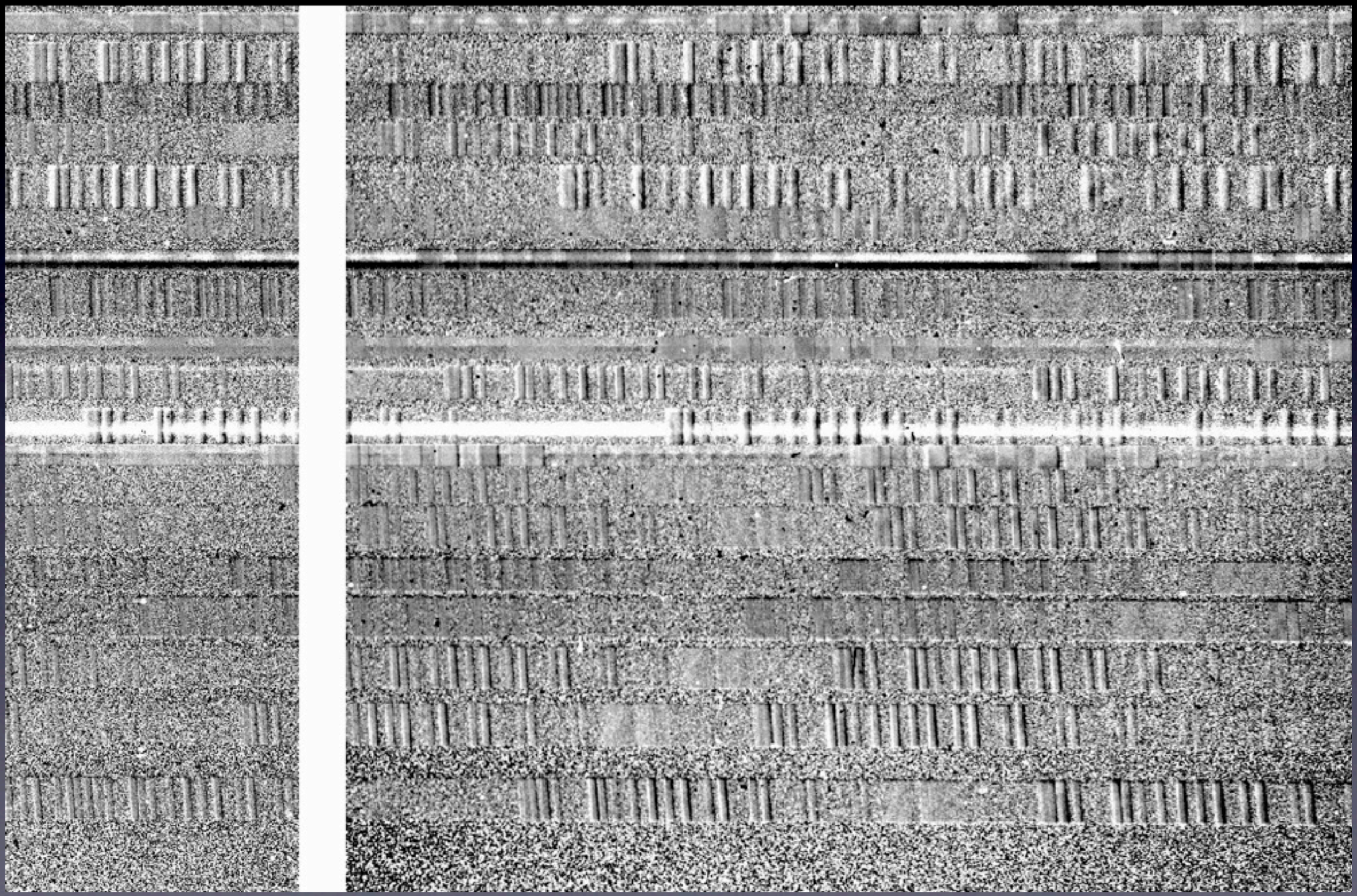
MOS Field: Exposure 1/2 10May



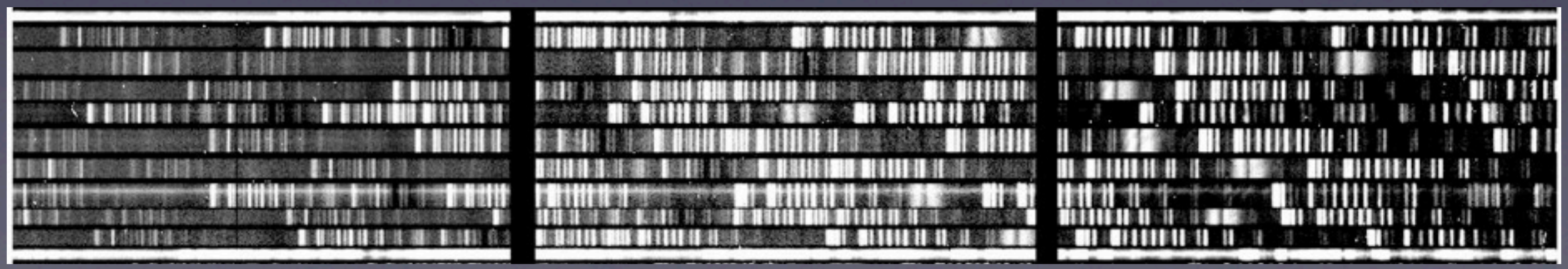
MOS Field: Exposure 1/2 14June



MOS Field: Exposure 1/2 14June

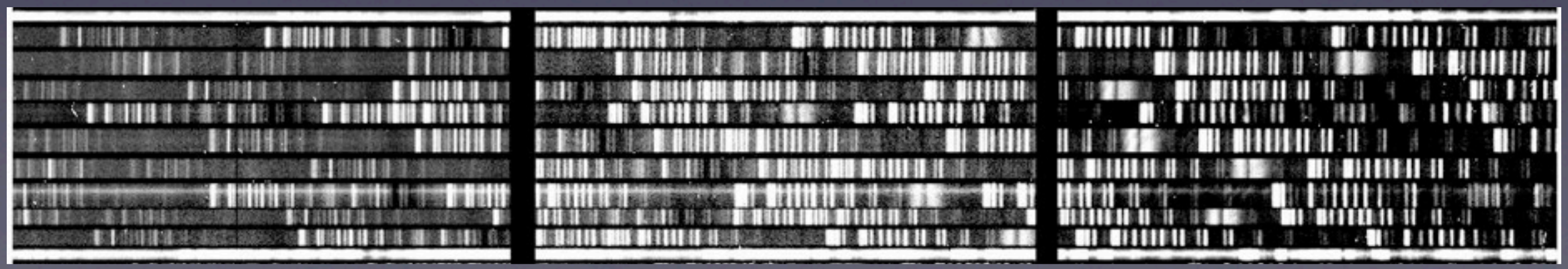


SALT MOS conclusions:



SALT MOS conclusions:

- The traces shift non-uniformly from exposure to exposure



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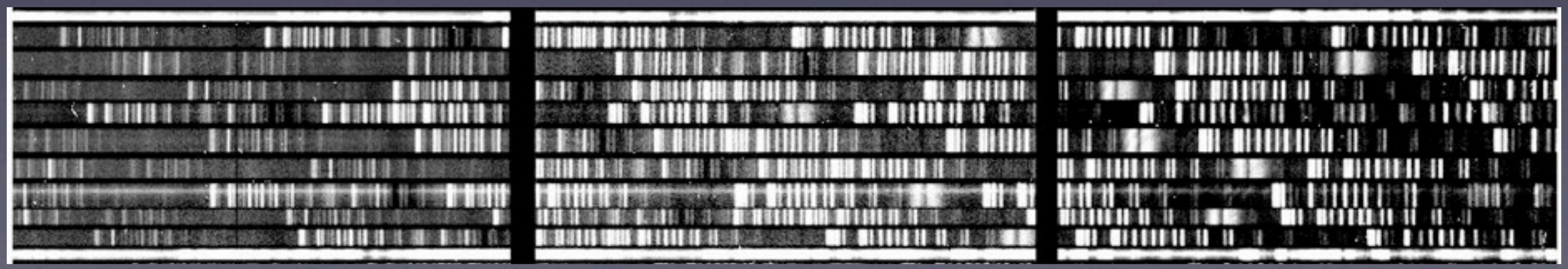

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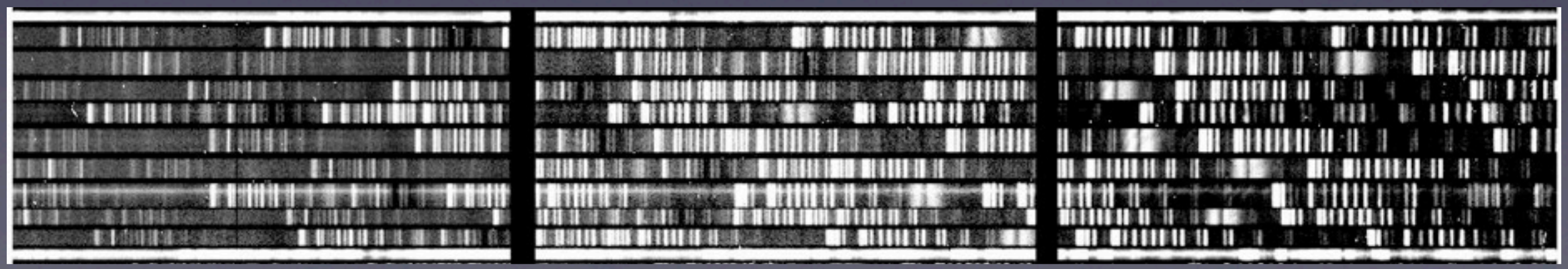

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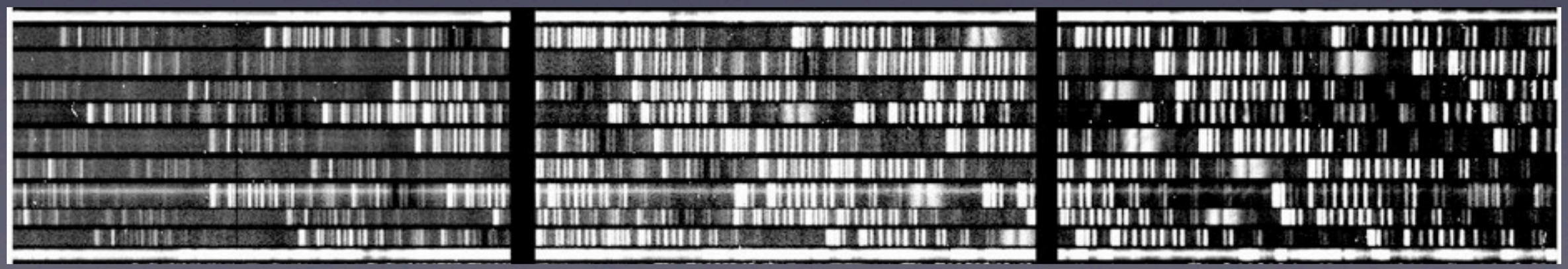

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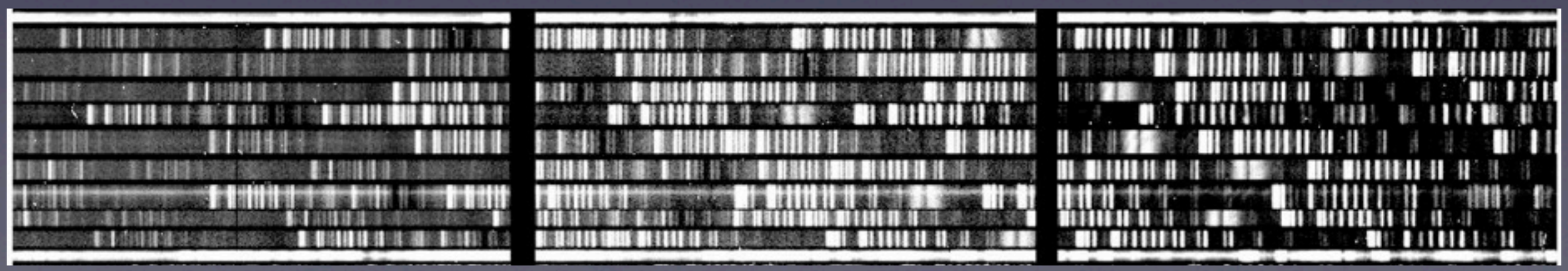

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- Slits close to the edge of the mask can be missed