

Rosetta NAVCAM



NAVCAM

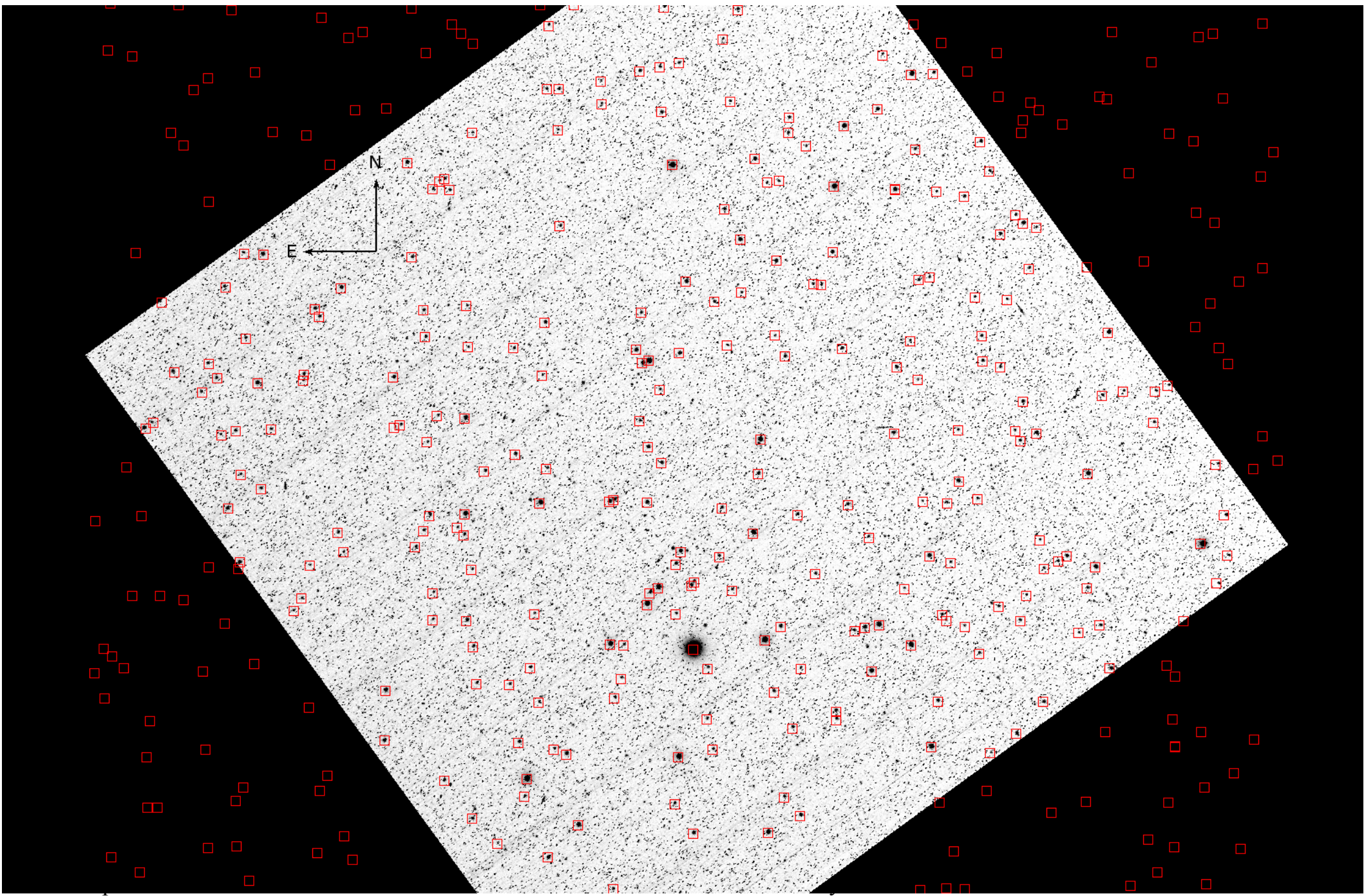
- Two independent cameras
- 1024x1024 pixel CCD
- 17 arcsec pixels → 5 deg FOV
- 12-bit ADC (max. DN=4096)
- Limiting magnitude: $M_v=11$ yields $SNR=5$ in 7 s
- No calibration, but there is documentation on how to transform Johnson BV magnitudes into instrument magnitude:
 - $M_i = V - 0.383(B-V)^2 - 0.109(B-V) + 0.199$

NAVCAM Data

- NAVCAM-2-AST1 = Steins flyby
 - A series of images at 14.3h, -5.0d (Steins)
 - Followed by a few images in asteroid tracking mode
- NAVCAM-2-AST2 = Lutetia flyby
 - Most at 11.9h, 1.5d (Lutetia)
 - Some near ~8h ~17d, ~10h, ~4d (?)
 - What are the purposes of these images?

Geometry

- Some geometry information is included in the image labels:
 - Sun-Spacecraft vector in Ecliptic J2000 coords
 - RA, Dec of the field-of-view
- **More information should be included**, nominally:
 - Position angle of Celestial N and E (or equivalent)
 - Asteroid-spacecraft distance





Lutetia approach

