

OPTIKA NIRKA

Mikio Kurita
KyotoUniversity
20240910
倉敷芸文館

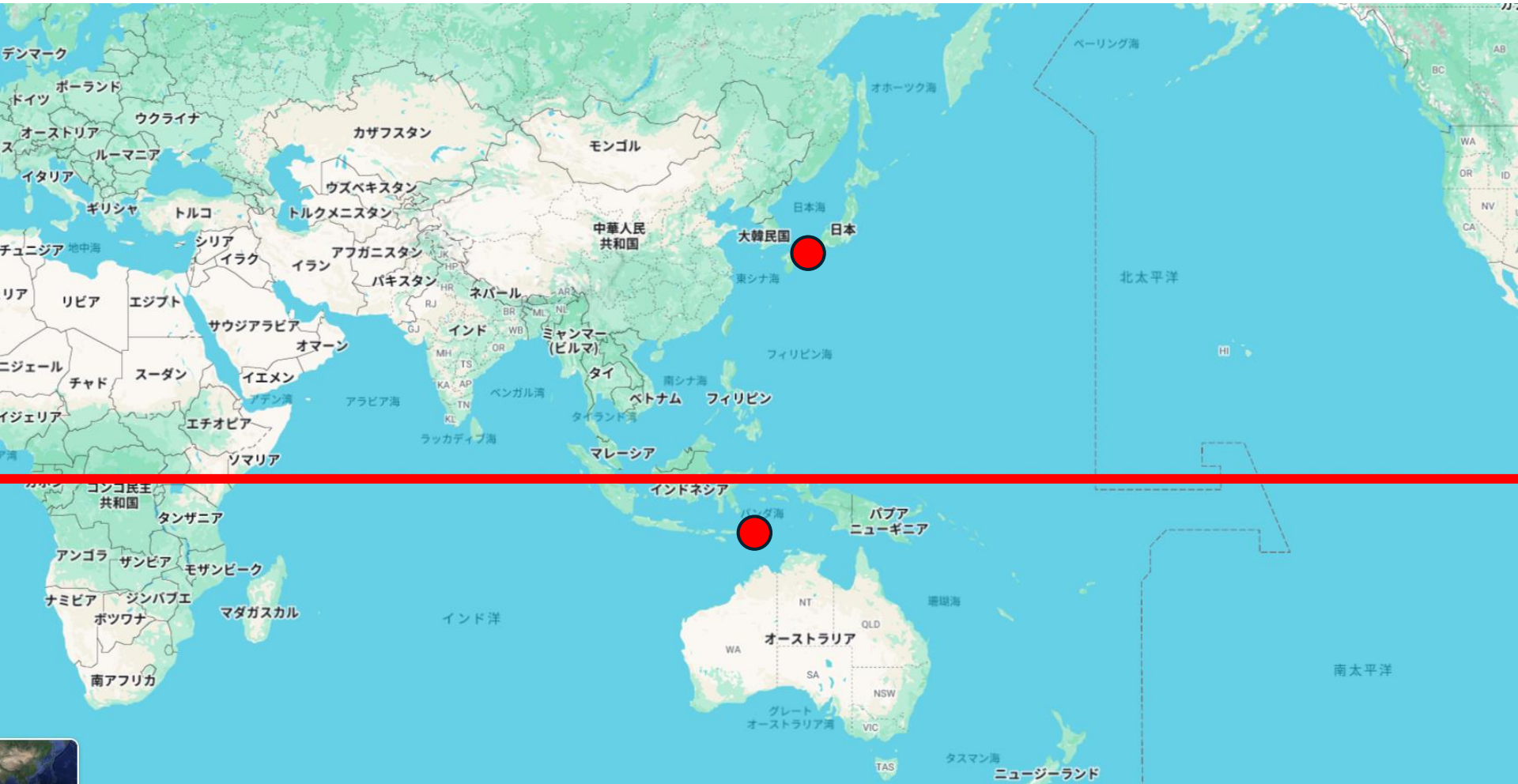
Background

9.6° S, 123.79°E

Elevation: 1,310m (341m Seimei)

Seeing: 0.93 arcsec

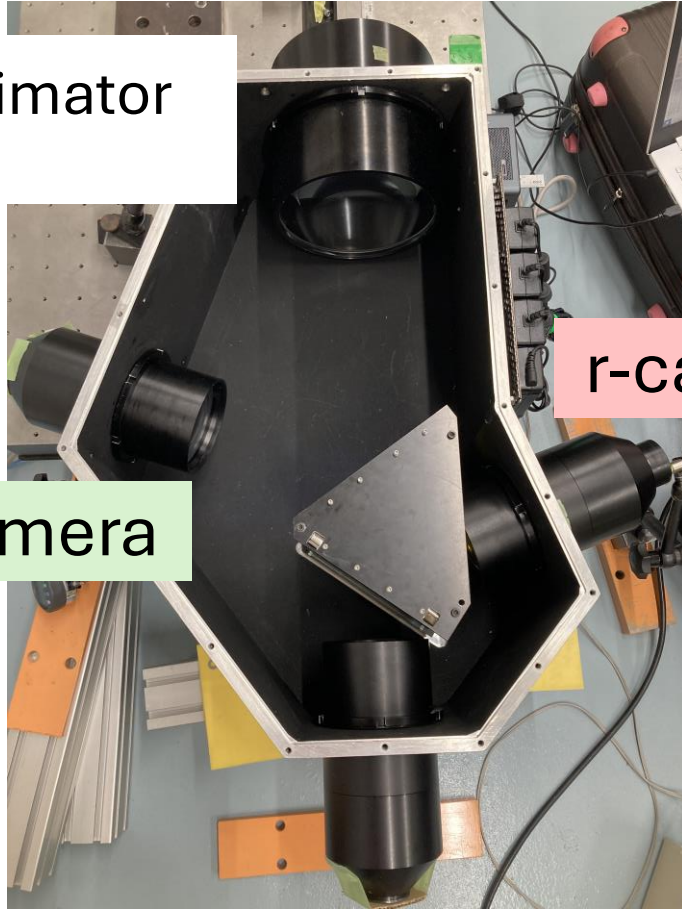
Clear night: > 60%



OPTIKA

	Specifications
Observable Band	Pan-STARRS g, r, i
Image Quality	0.8arcsec (EE > 73%)
FoV	12.5 x 12.5 arcmin ²
Throughput of Optics	> 80%
CCDs	3-E2V 42-40
Pixel size	13.5 μm
Format size	2048 × 2048 pixel ²
F	F/6.0 → F/2.0
Pixel Scale	0.37 arcsec/pix

Mechanical & Optical Design



Collimator

g-camera

i-camera

OPTIKA



~1m



コリメータ

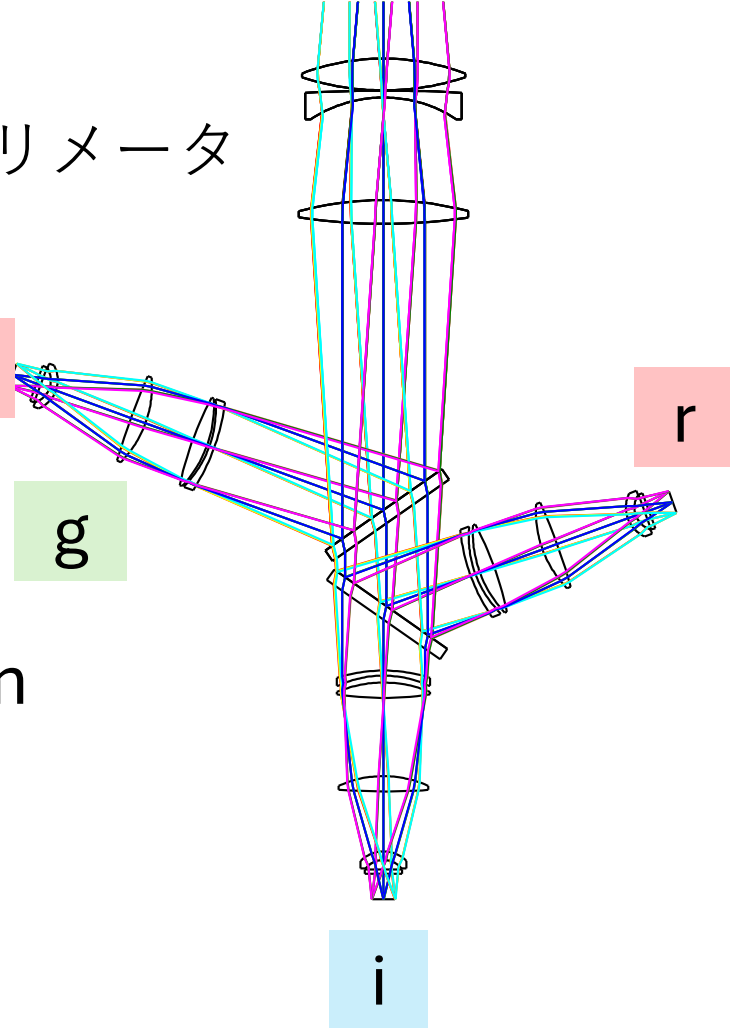
r-camera

g

r

i

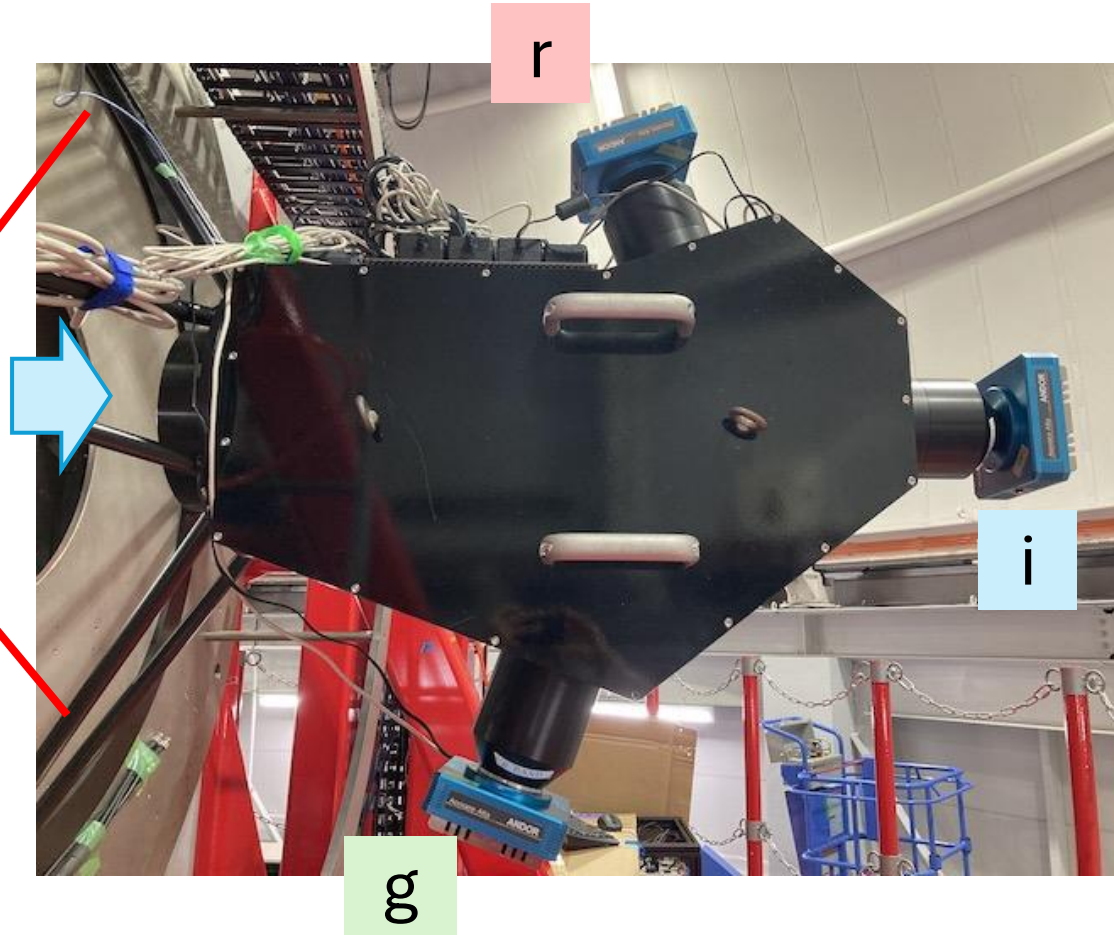
Optical Design



Test Obs.



OPTIKA on Seimei



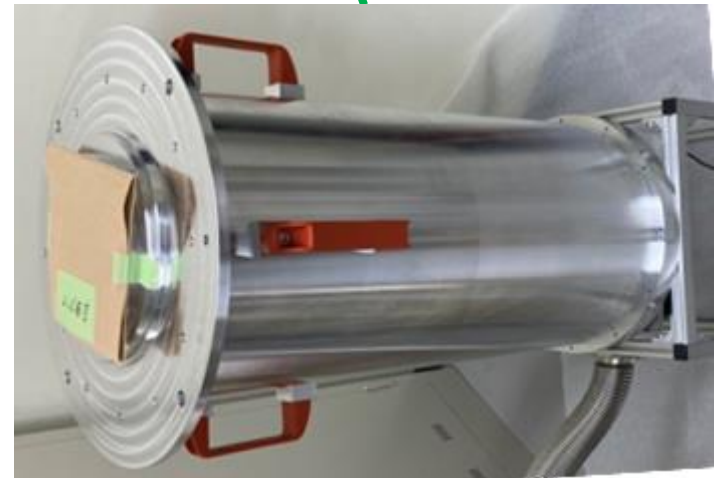
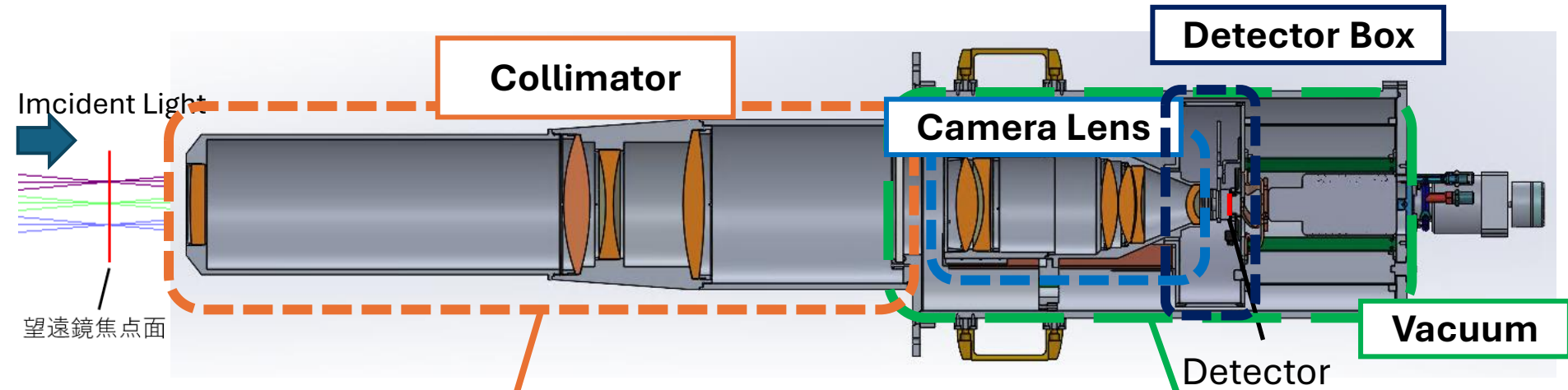
OPTIKA on Instrument Rotator



NIRKA

	Specifications
Observable Band	Y, J, H($\lambda=1.6 \mu\text{m}$)
Image Quality	0.8 arcsec (EE>73%)
FoV	$9 \times 9 \text{ arcmin}^2$
InGaAs Chip	1
Pixel size	$15 \mu\text{m}$
Format size	$1280 \times 1280 \text{ pixel}^2$
Operational Temperature	120 K
F	F/6.0 \rightarrow F/2.0
Pixel Scale	0.4 arcsec/pix

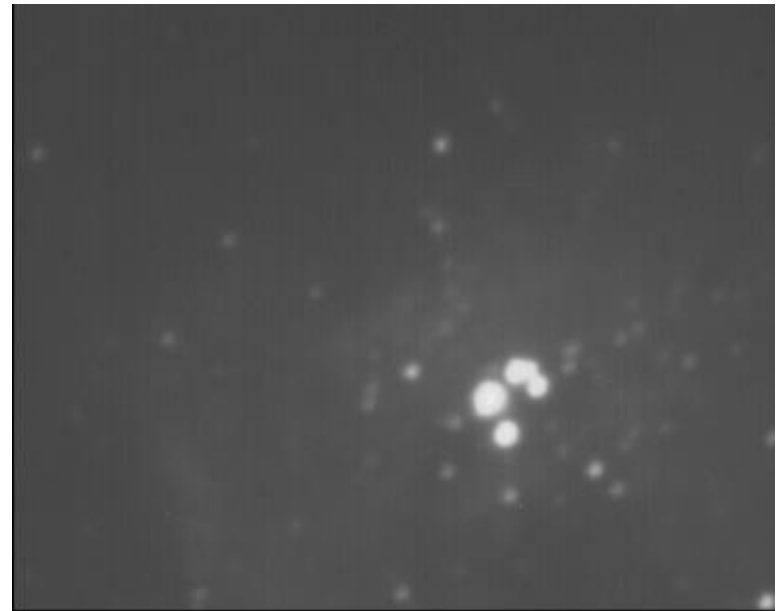
NIRKA



Test Obs.



Jupiter



M42

Multiband Camera & Telescope

