

THE INTRACLUSTER LIGHT OF ABELL 85 AS SEEN BY THE HYPER SUPRIME-CAM

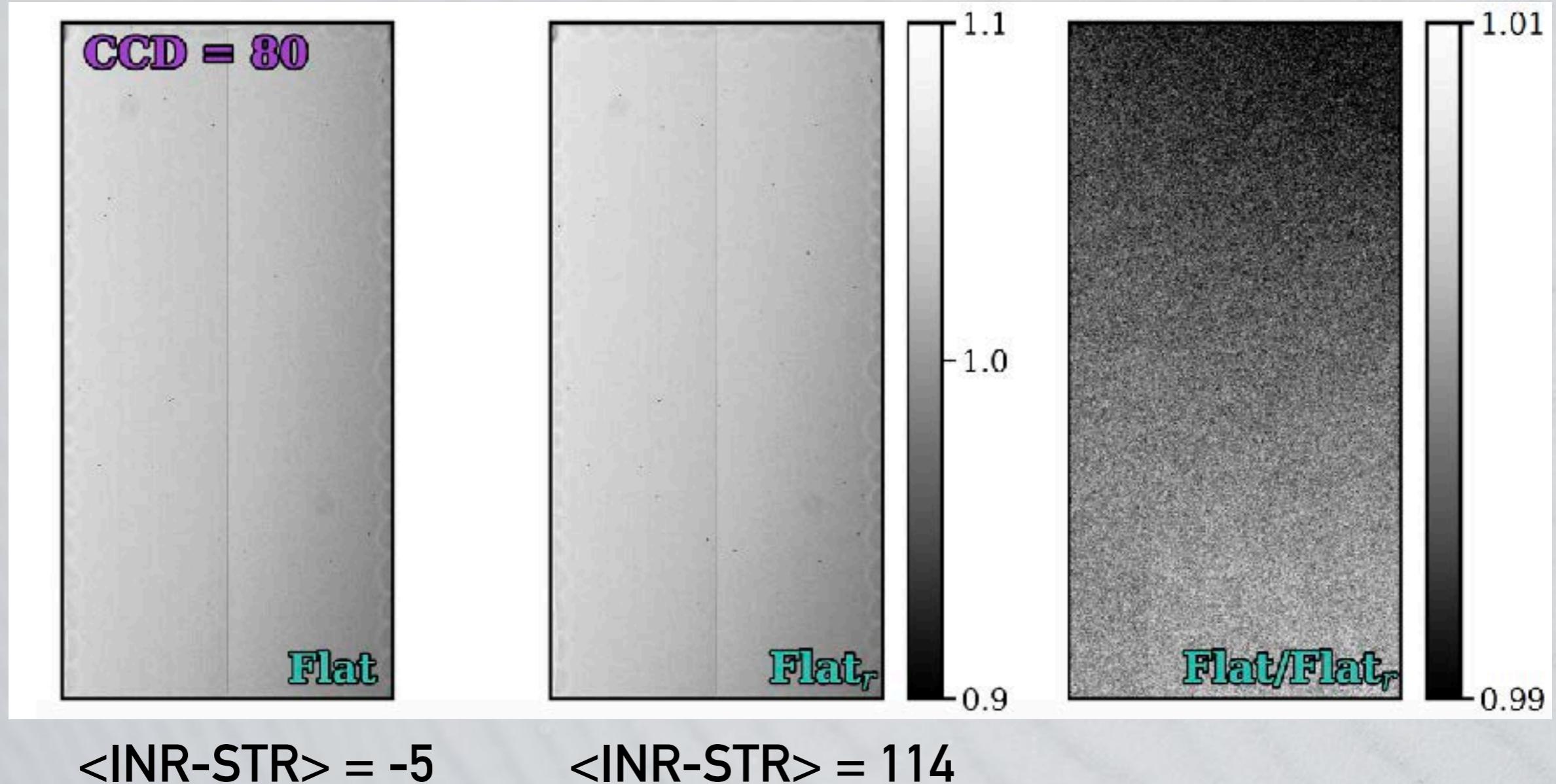


UNSW
SYDNEY

Mireia Montes

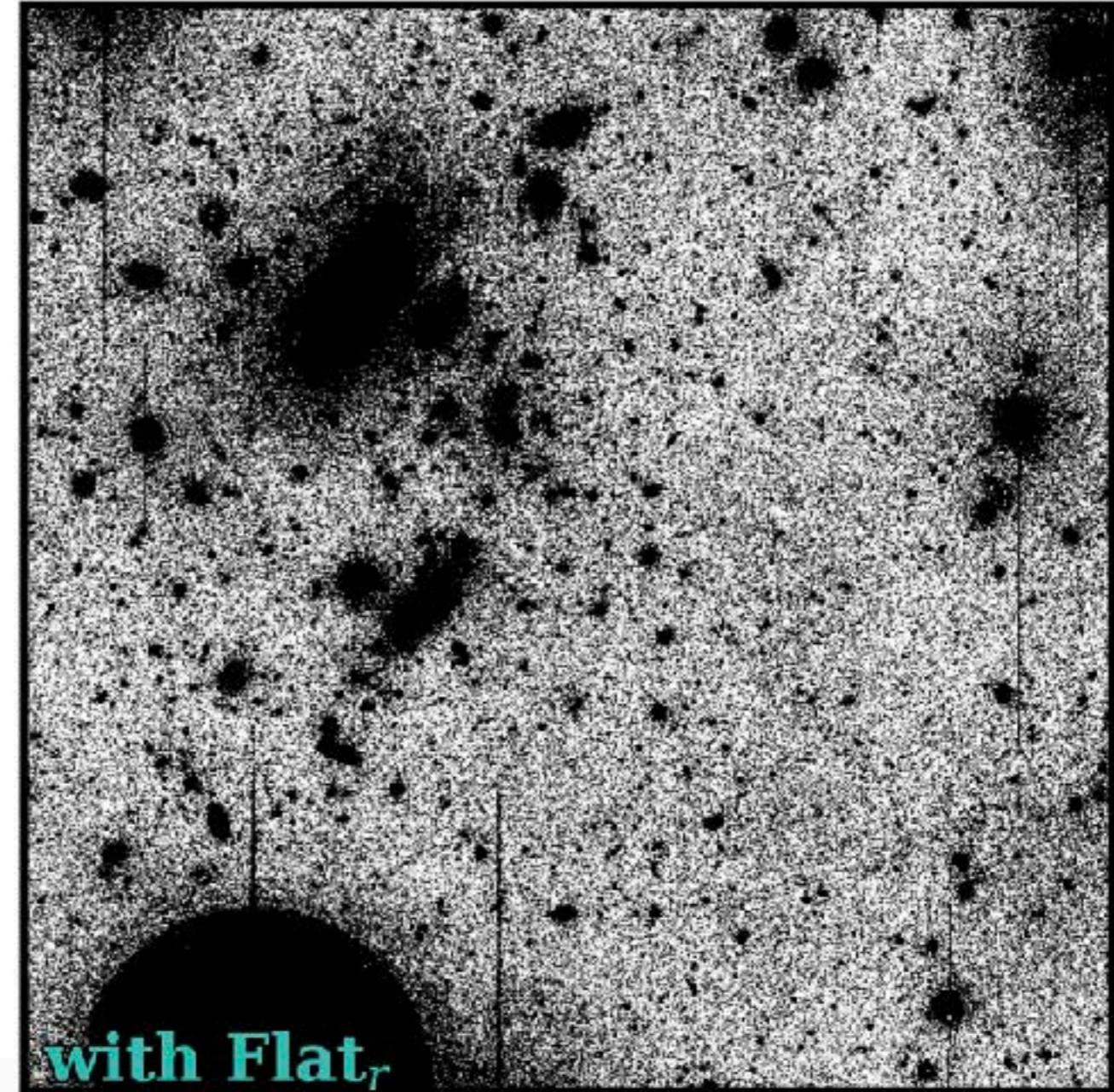
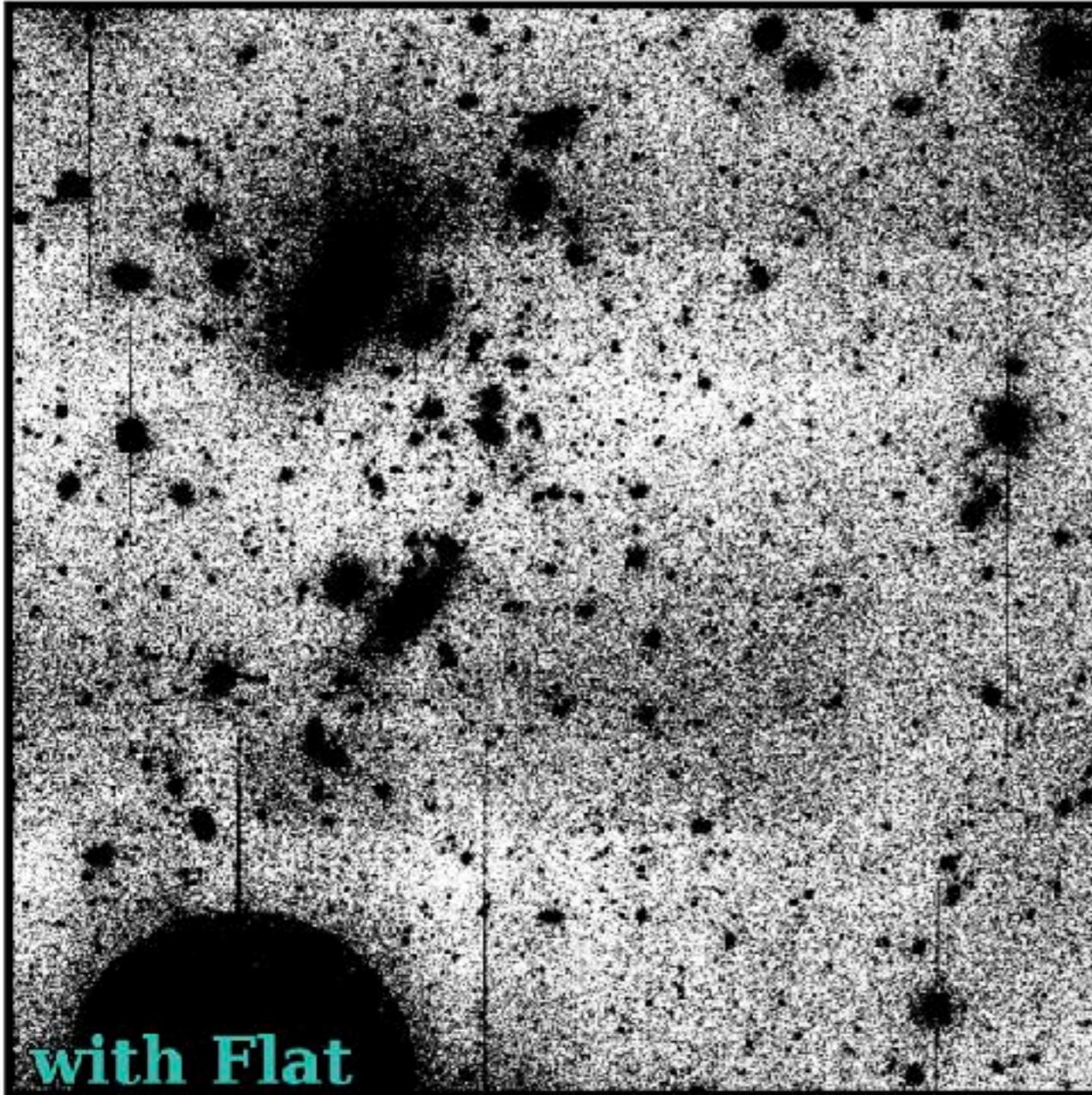


Flat-field correction



Gradient of 1% across the CCD

Flat-field correction



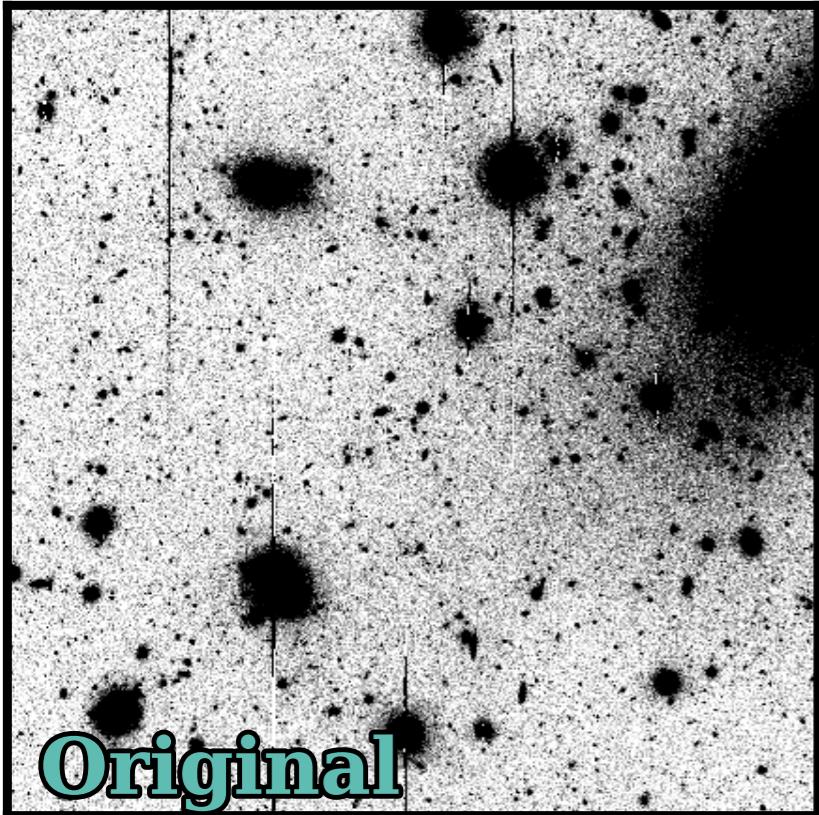
i-band

Sky subtraction

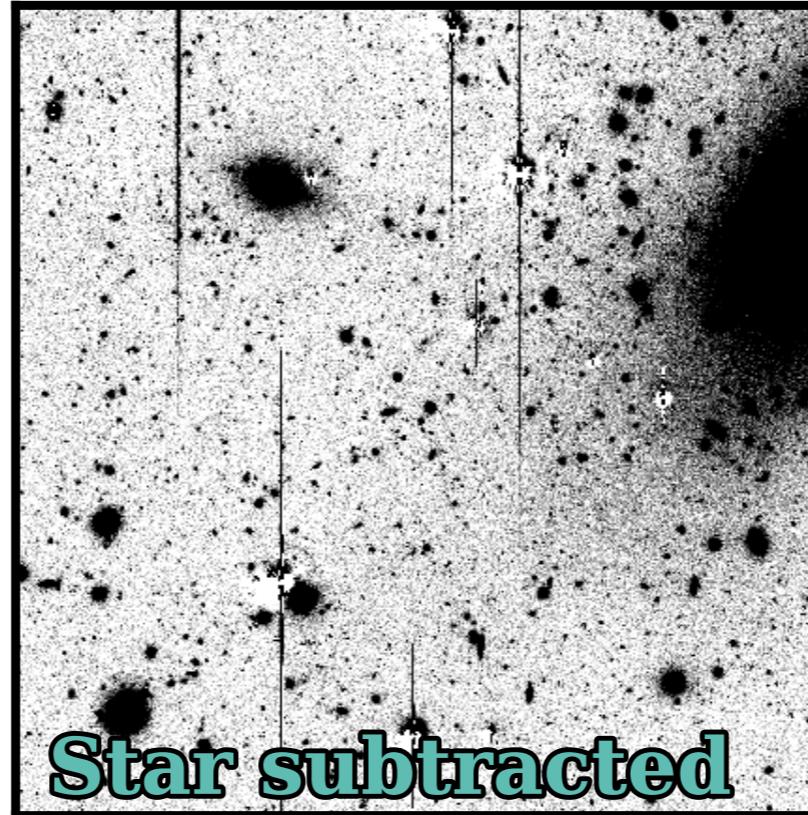


We subtract a **constant**
to each mosaic

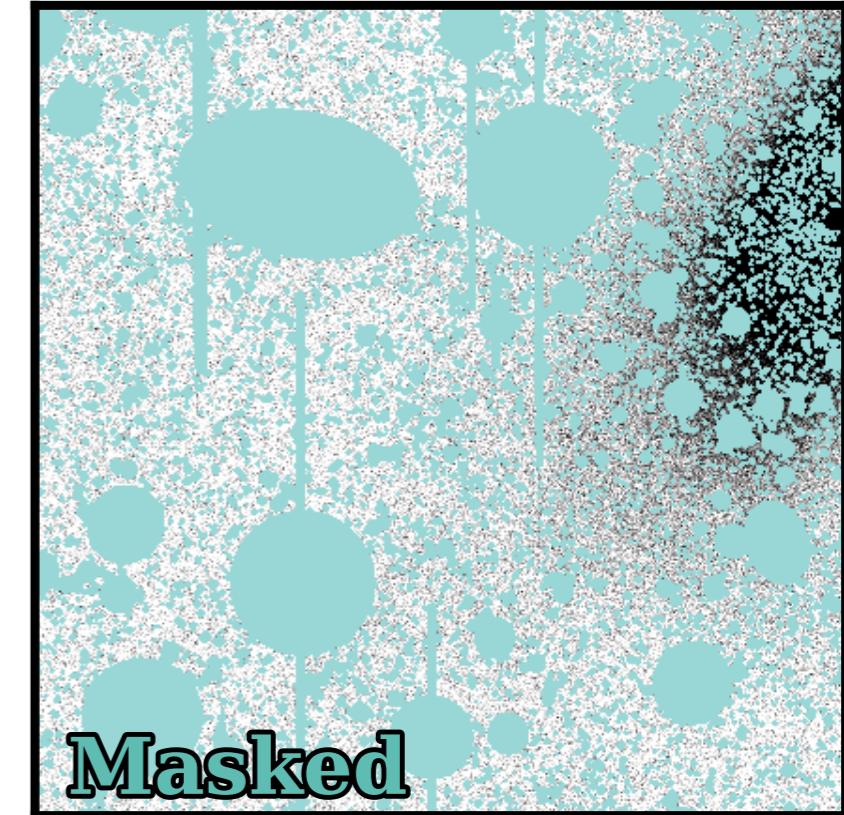
Star subtraction and masking



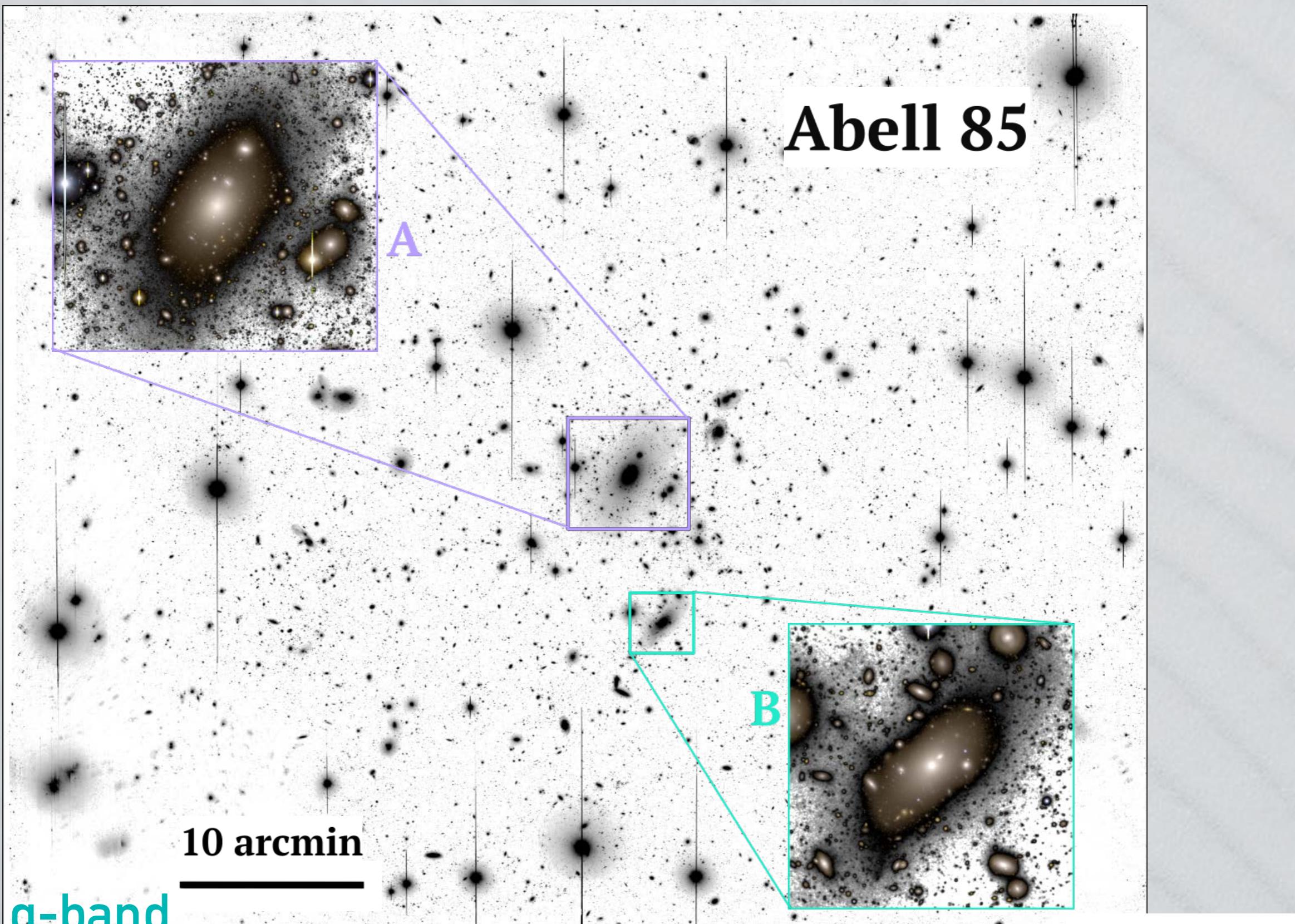
Original



Star subtracted



Masked



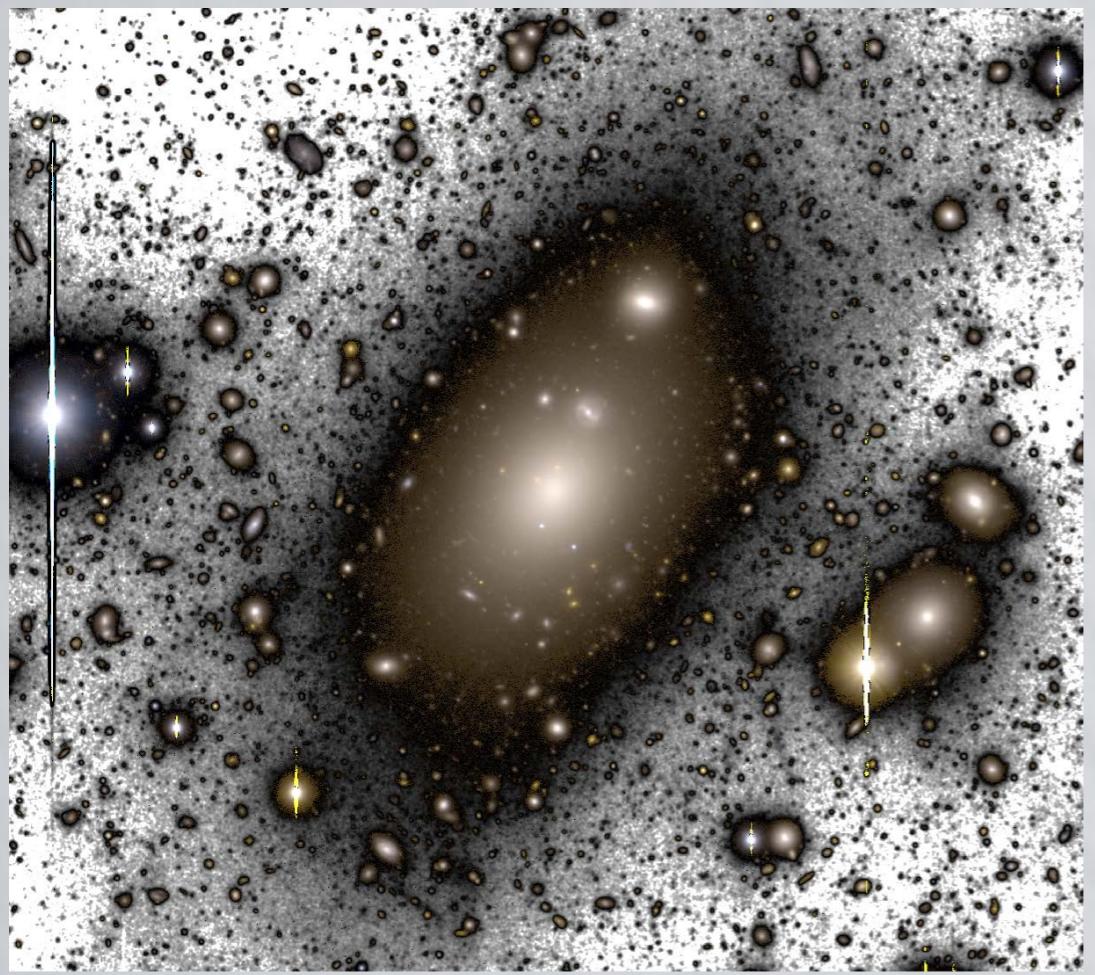
$g_{\text{lim}} = 28.5 \text{ mag/arcsec}^2$ (10" \times 10", 3 σ)

$i_{\text{lim}} = 27.2 \text{ mag/arcsec}^2$

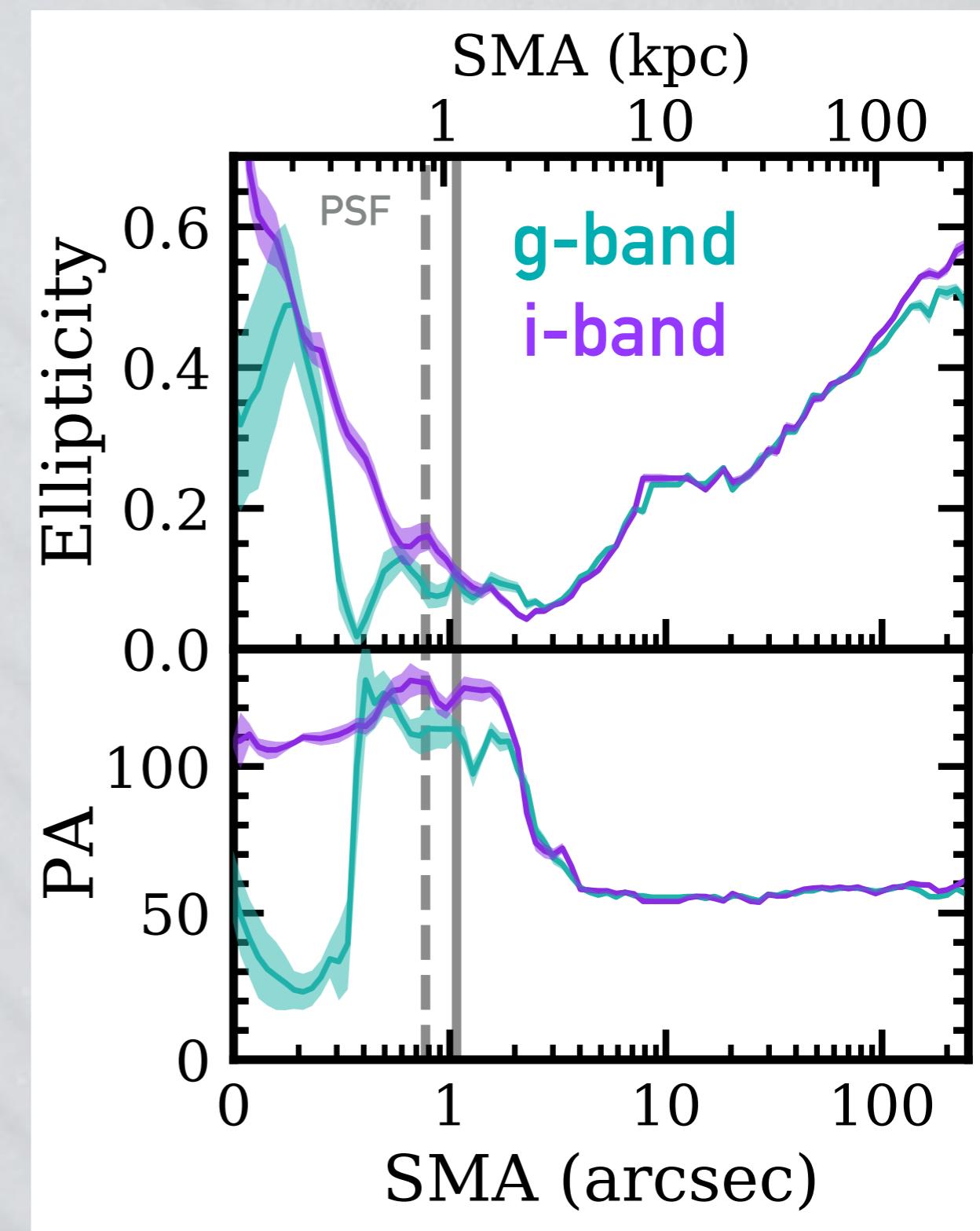
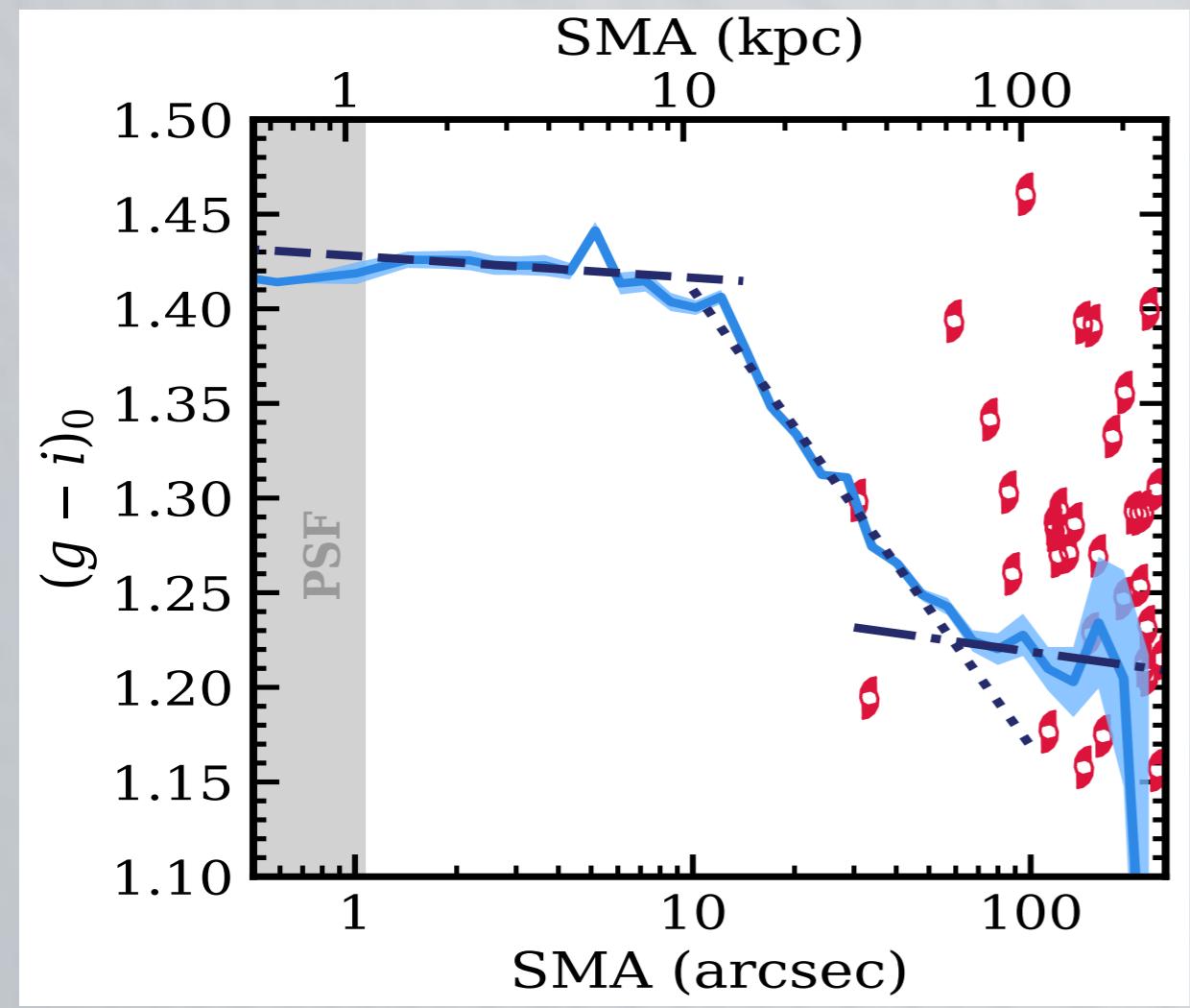
52' \times 52'

Abell 85

Only
30 mins!!



780'' x 700''



$$g-i \sim 1.23$$

$$M^* \sim 10^{10} M_{\odot}$$

Also
Montes & Trujillo 2014, 2018

LSB observers be like...

Thanks!



Join the LSST LSB Challenge #3: 'Do observers and simulators measure the same quantity of ICL?'

Ask Sarah Brough about the challenges ;)