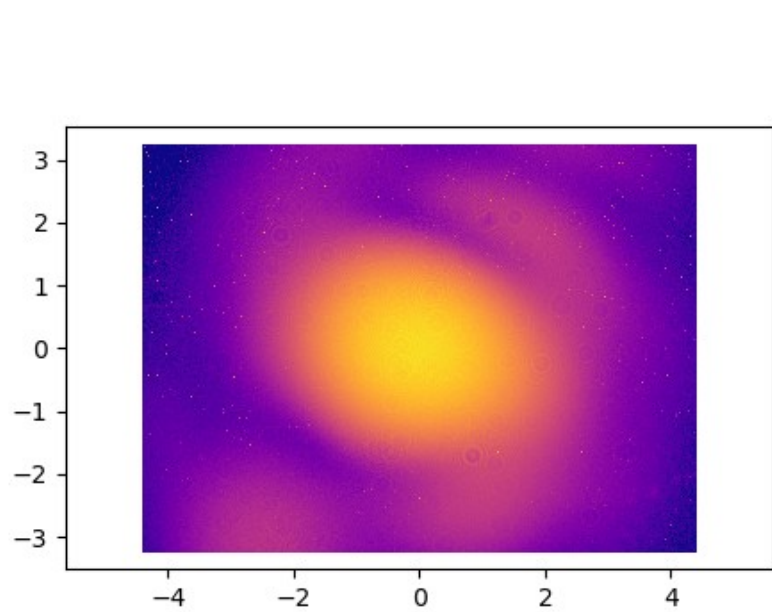# Cam5 vs PickOff Calibration
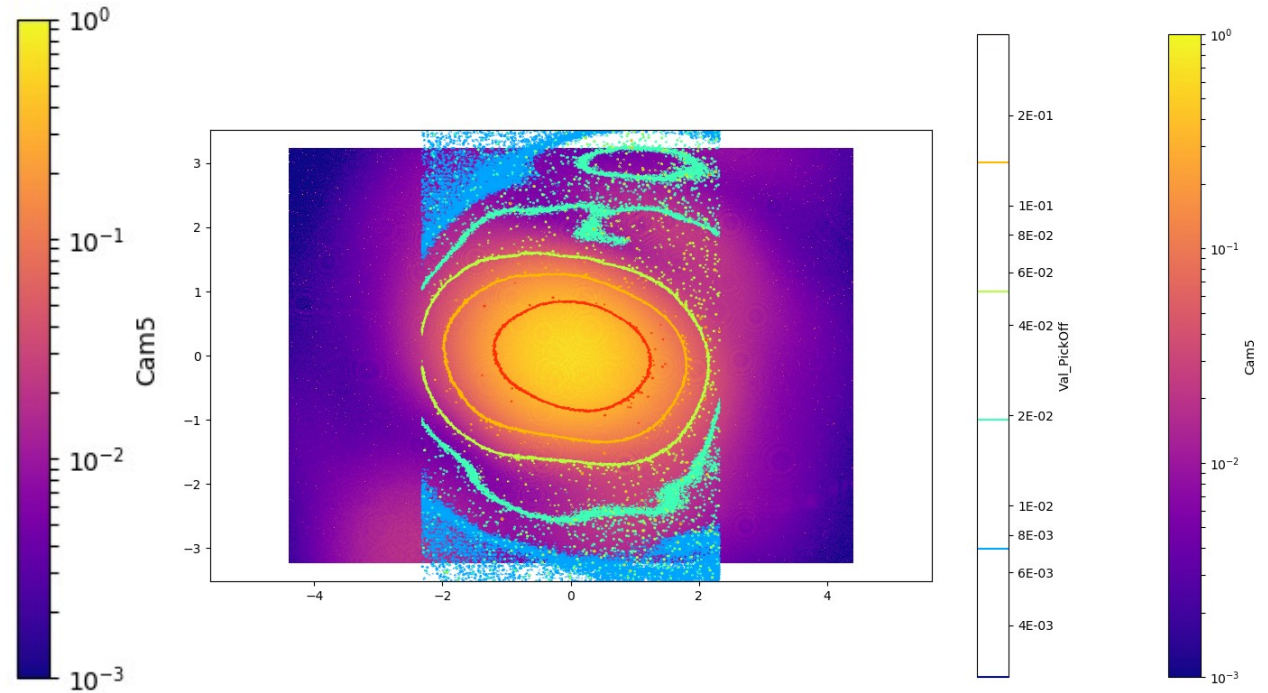## Valentina and Mark
03/25/2019

PickOff Calibration

- PickOff image has a lensing system → need to be calibrated by Cam5
- Orientation
  - Flip through vertical axis
  - 90 degrees rotation
- Shift the images to the center for overlapping comparison

- Method 1:
  - 2d Gaussian fitting (horizontal and vertical) for both Cam5 and PickOff
- Method 2:
  - Line out
  - Twice 1d Gaussian fitting
- Method 3:
  - Rotated 2d Gaussian fitting (find major/ minor axis and offset angle, theta): Cam5
  - Use theta as offset angle for PickOff's fitting
  - Then scale

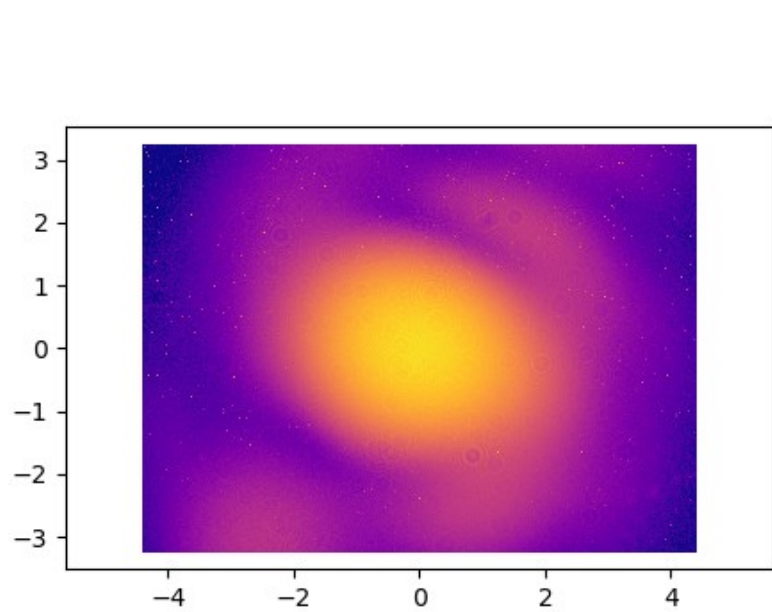# Result 1: Cam5 vs Scaled PickOff Horizontal and vertical
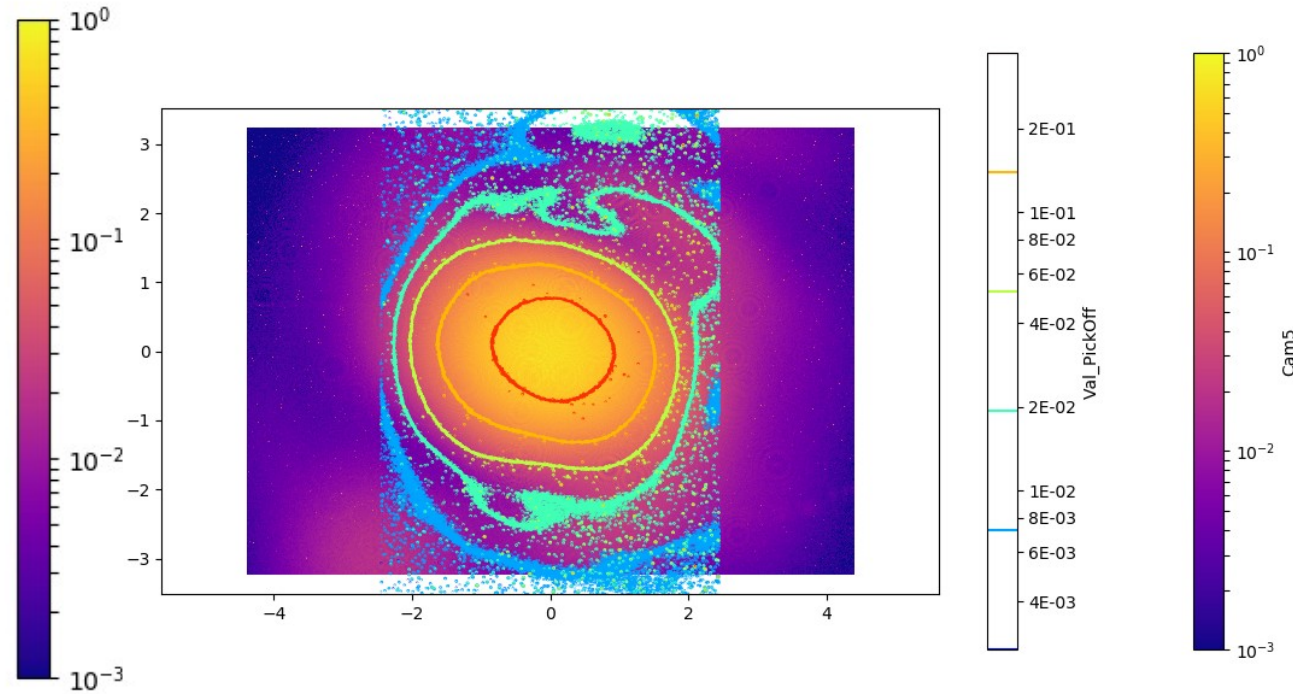

Cam5

Cam5+Valentina's PickOff
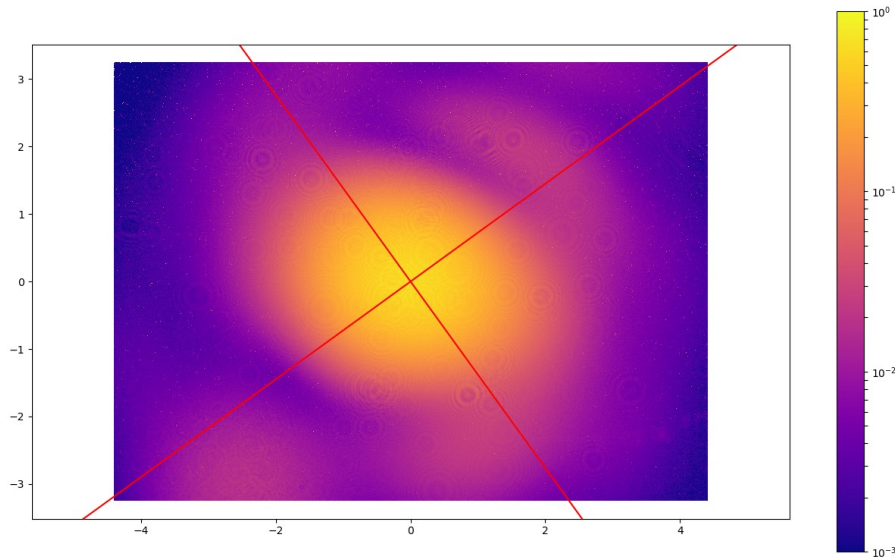
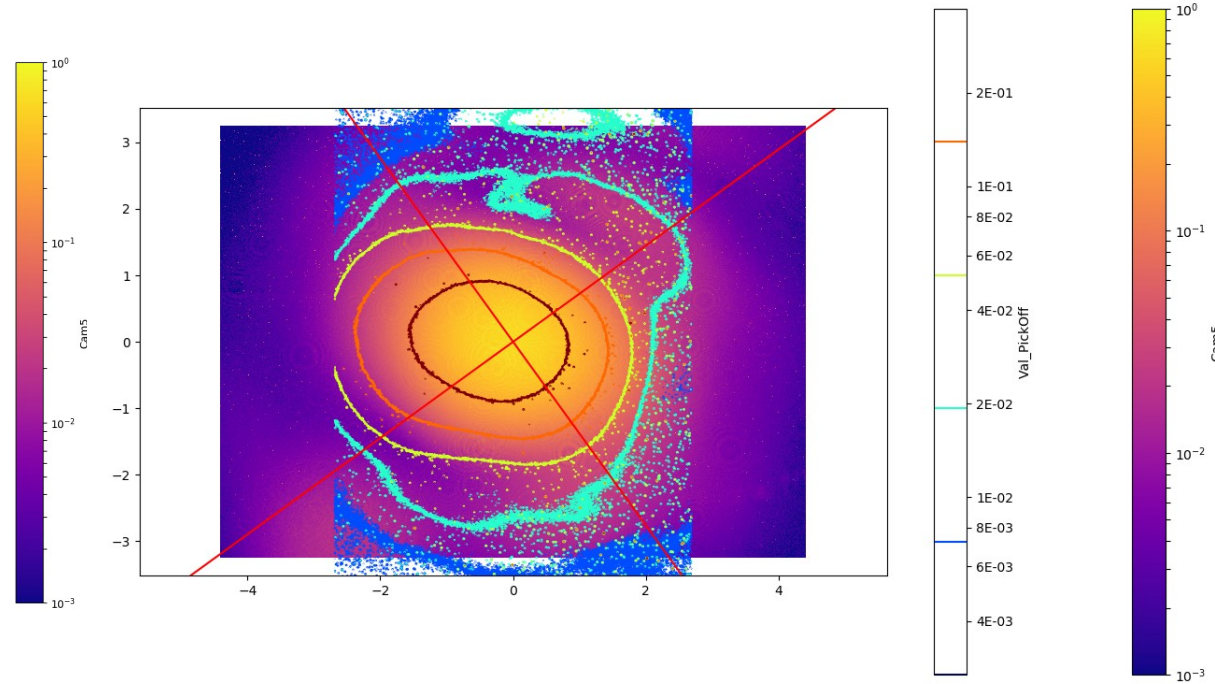# Result 2: Cam5 vs Scaled PickOff LineOut

Cam5

Cam5+Valentina's PickOff

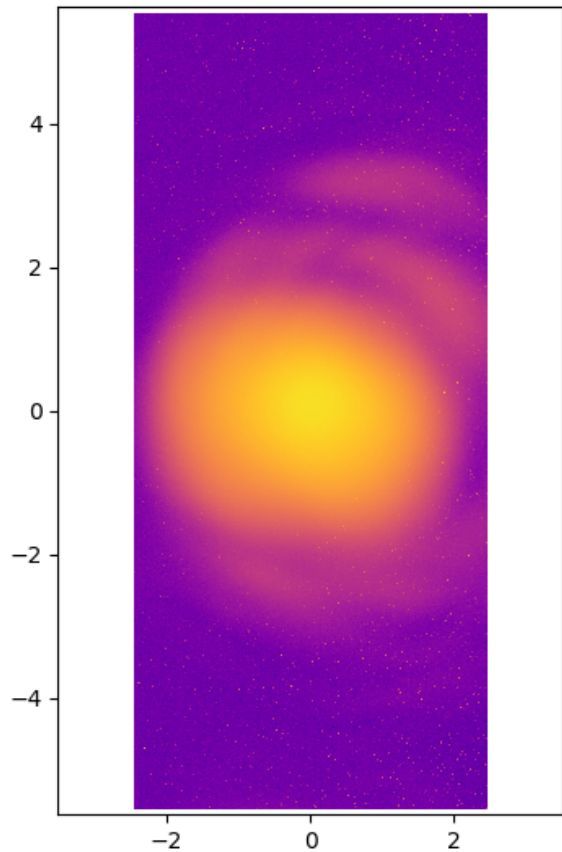# Result 3: Cam5 vs Scaled PickOff Offset Angle

Cam5

Cam5+Valentina's PickOff

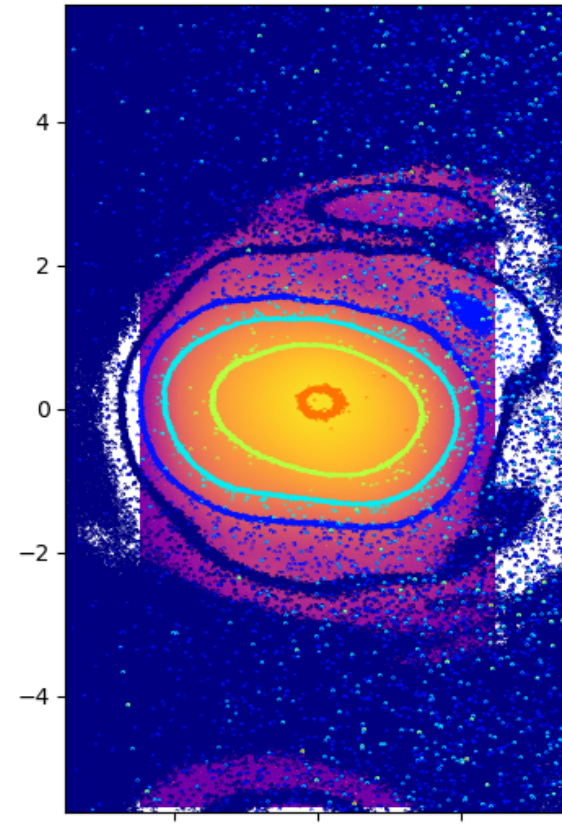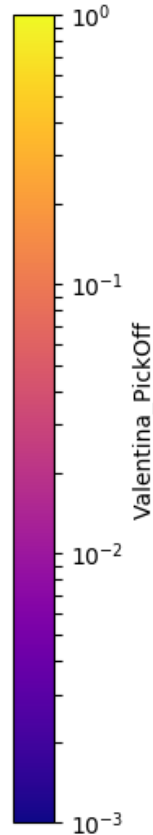# Cam5 vs Scaled PickOff Mark

Valentina's PickOff

Valentina's PickOff+ Mark's PickOff