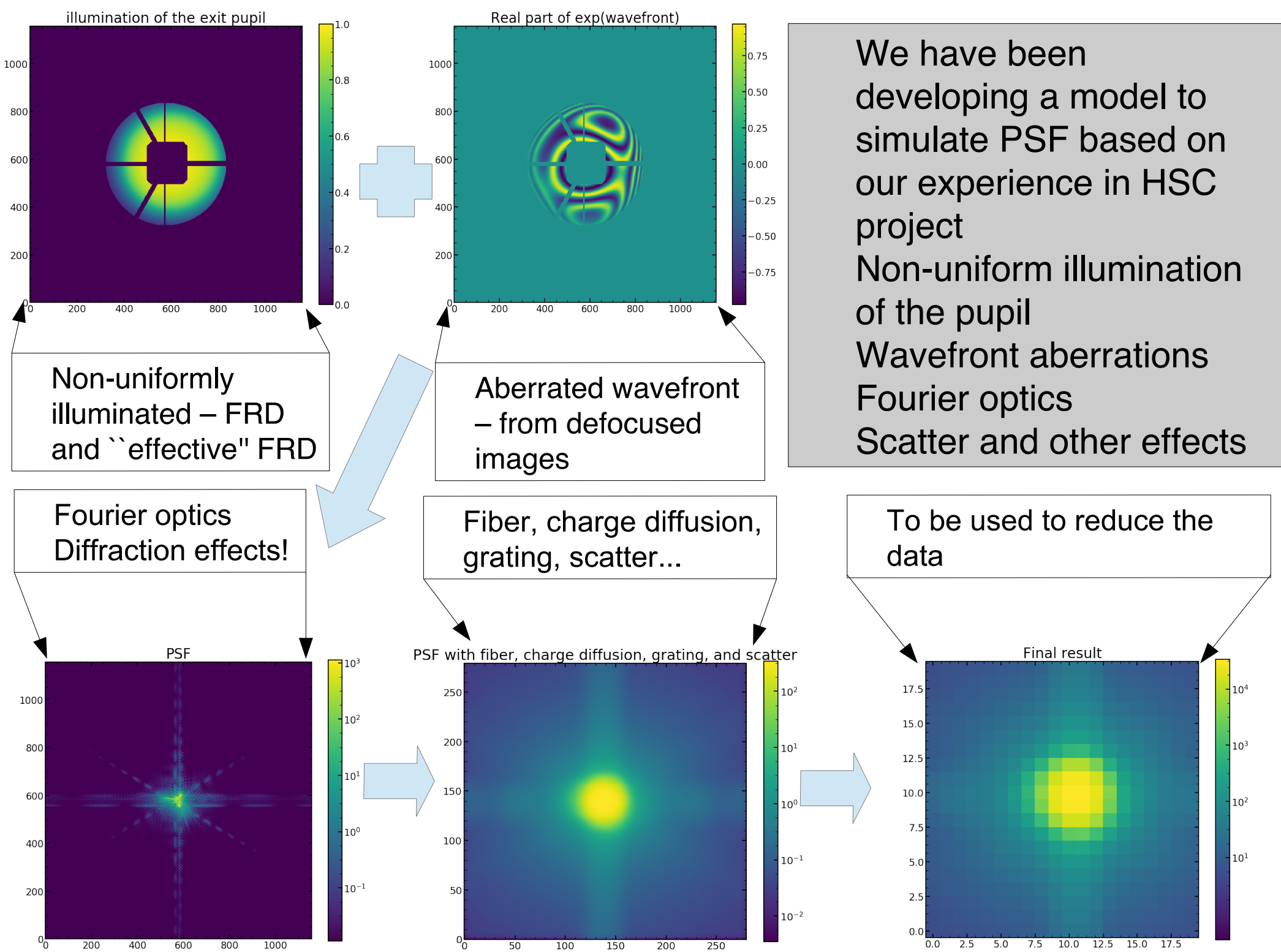


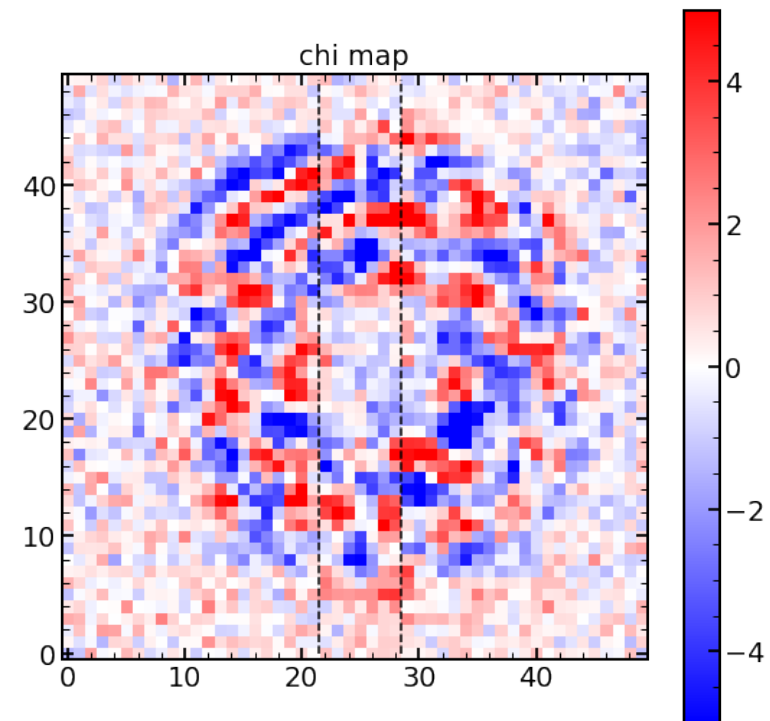
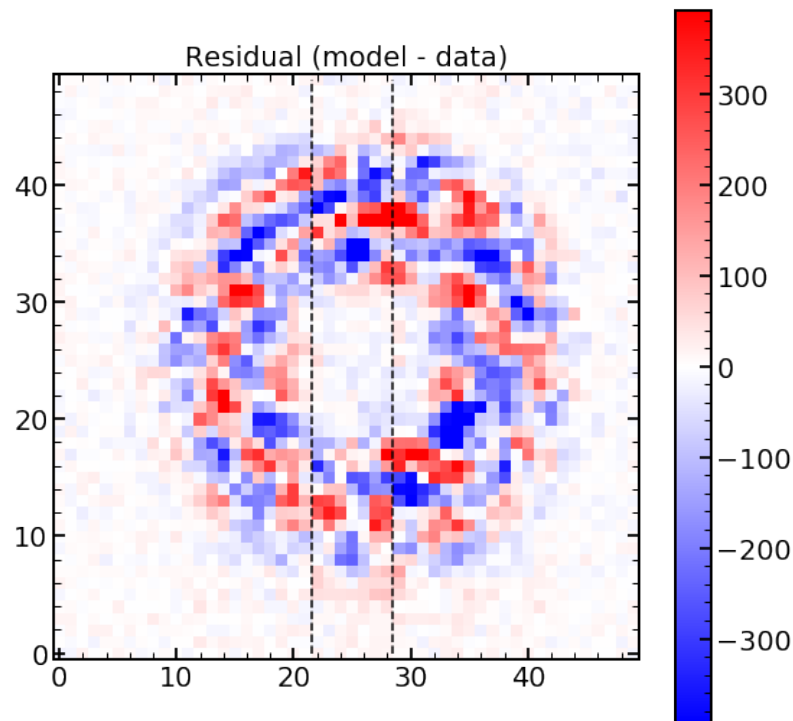
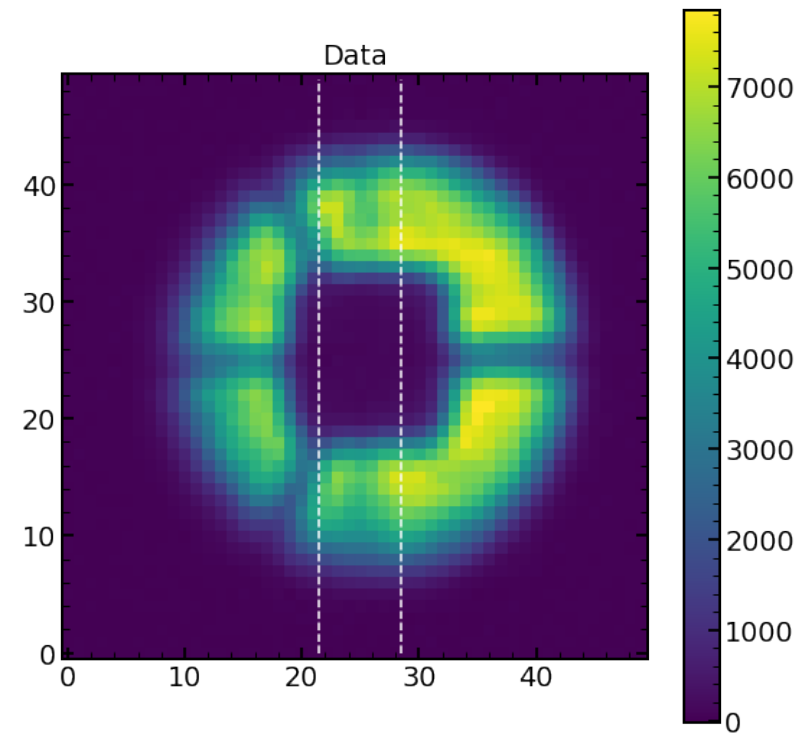
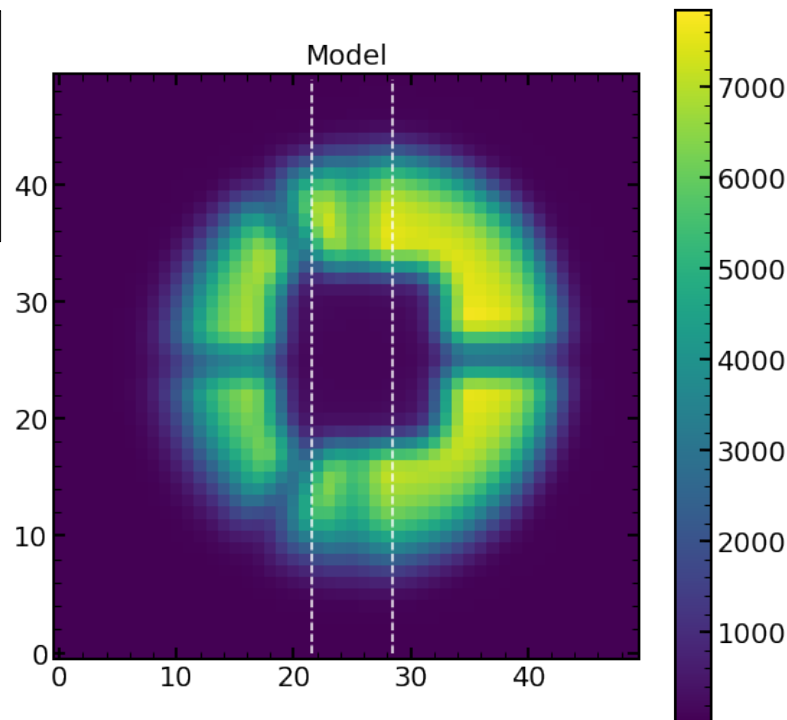
2D point spread function for Prime Focus Spectrograph

Monday morning update

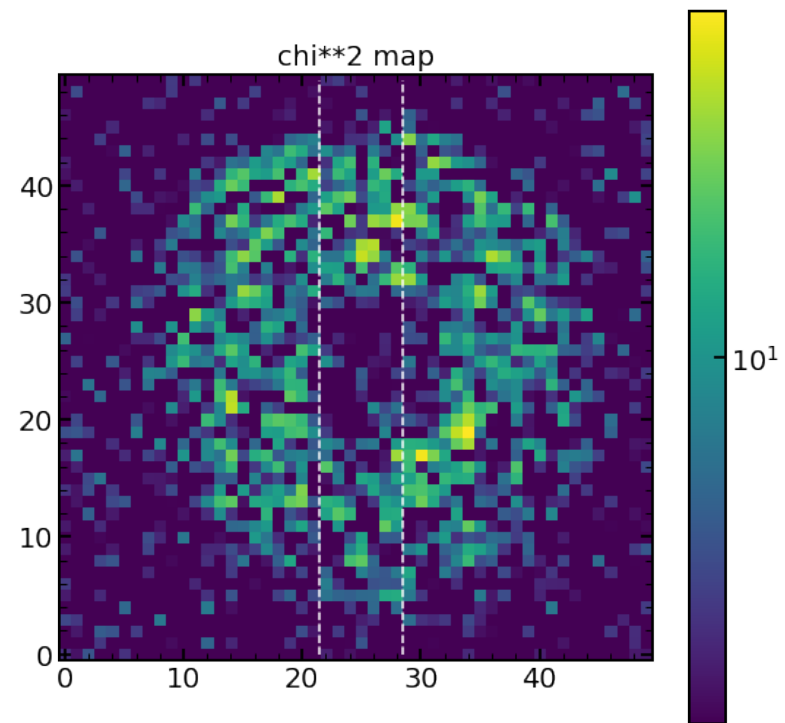
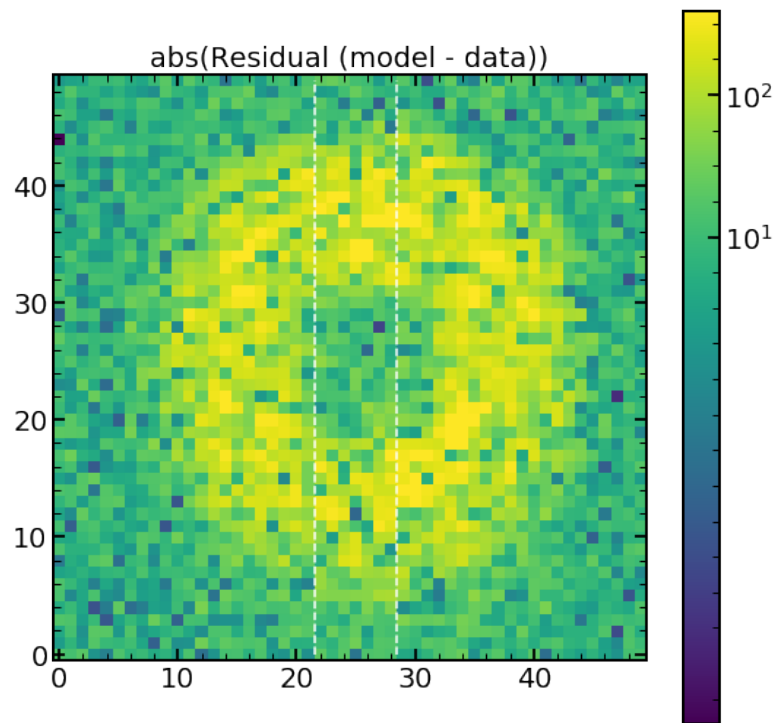
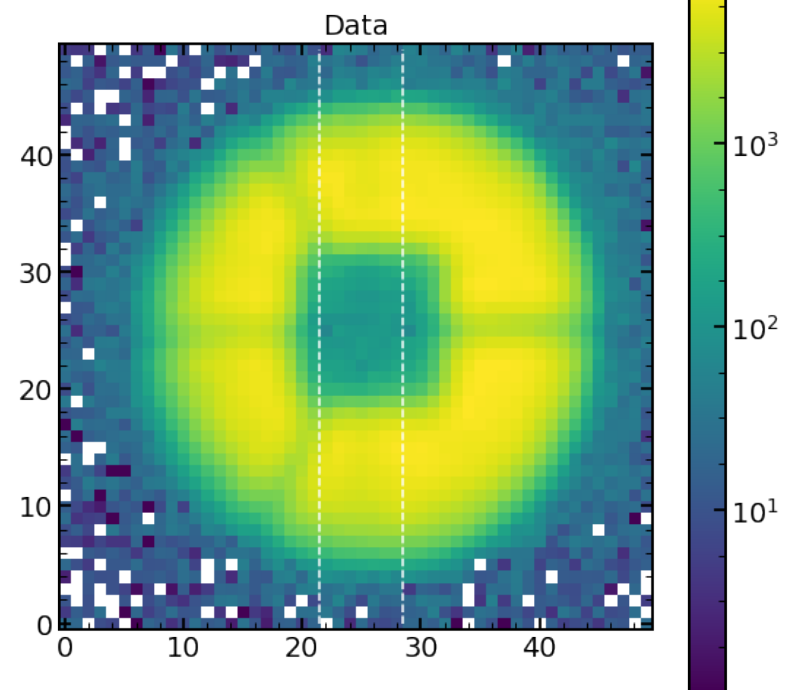
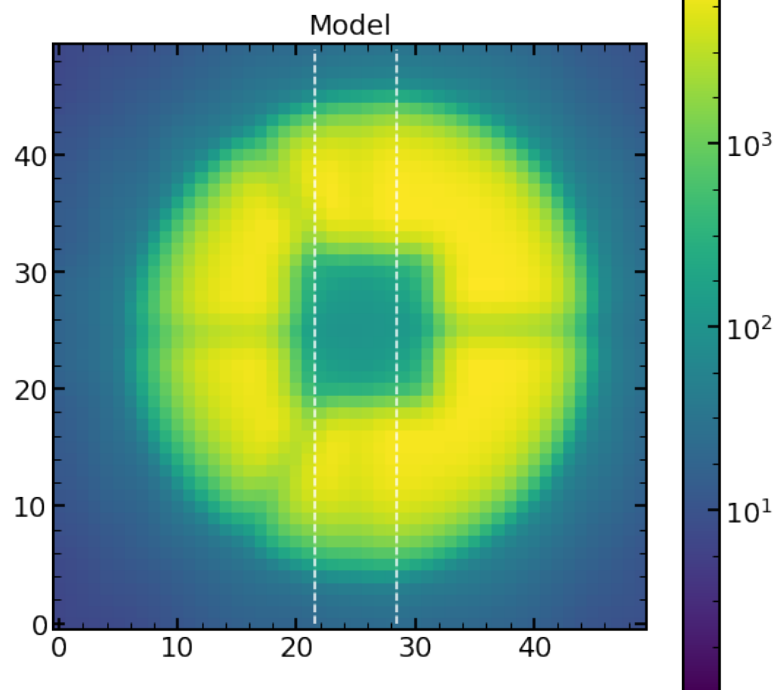
January 28, 2019



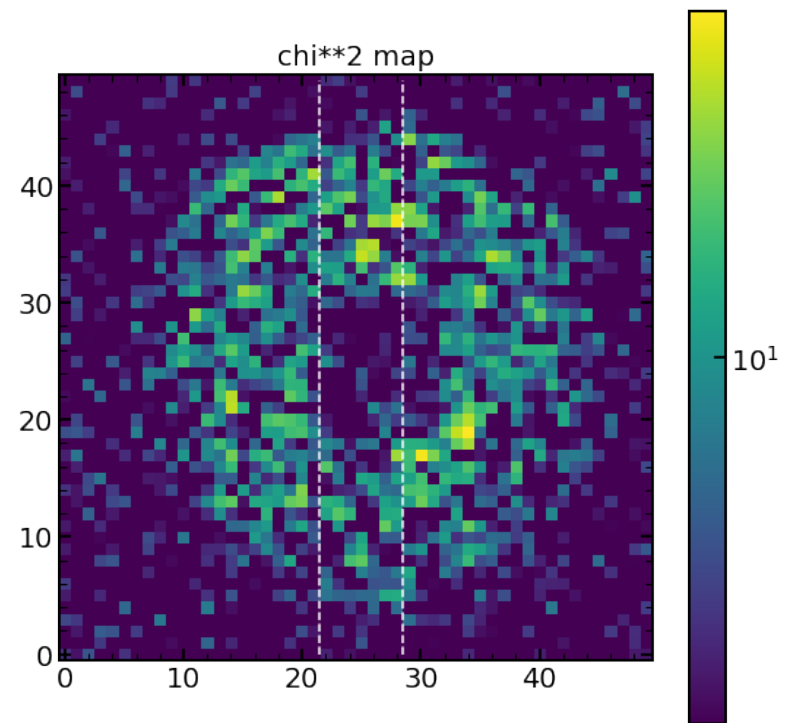
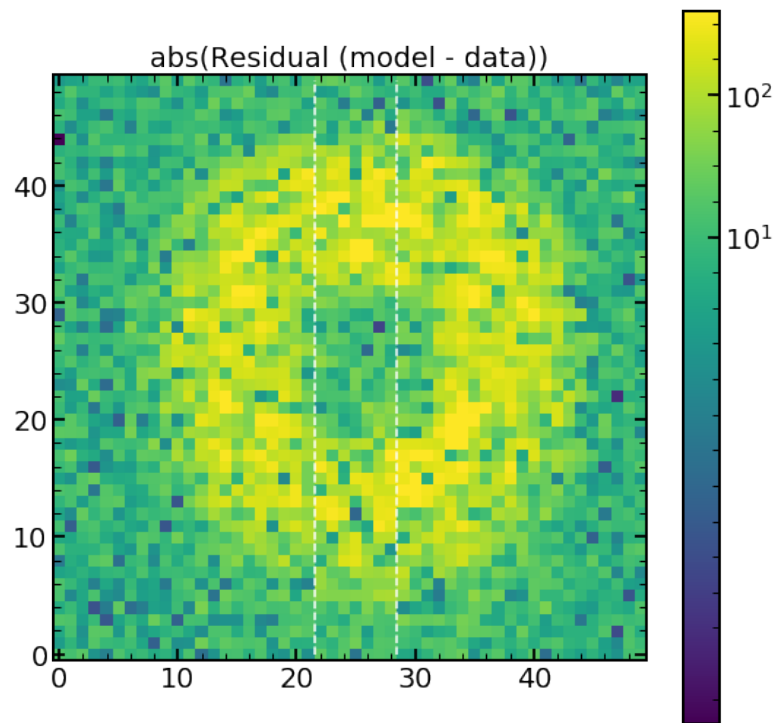
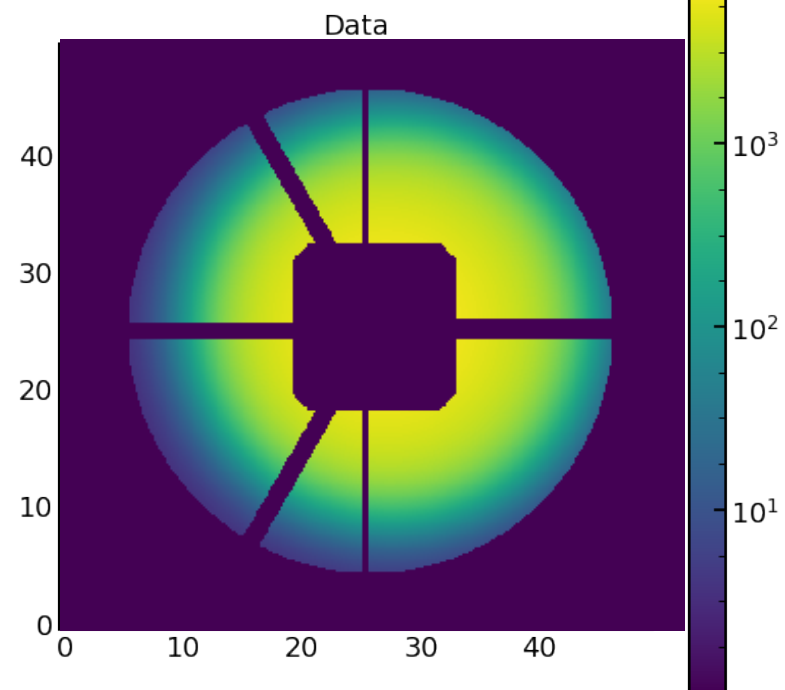
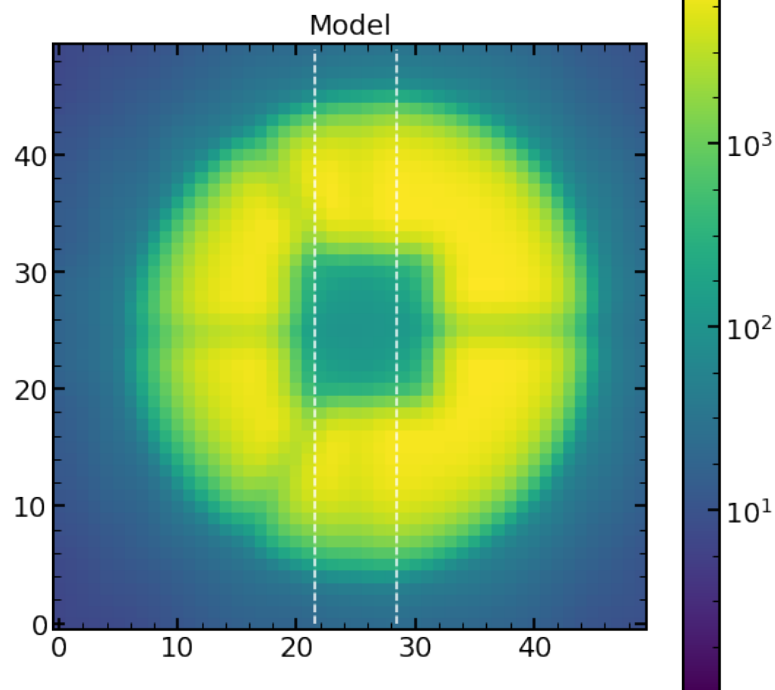
Defocused
data, example
in linear space

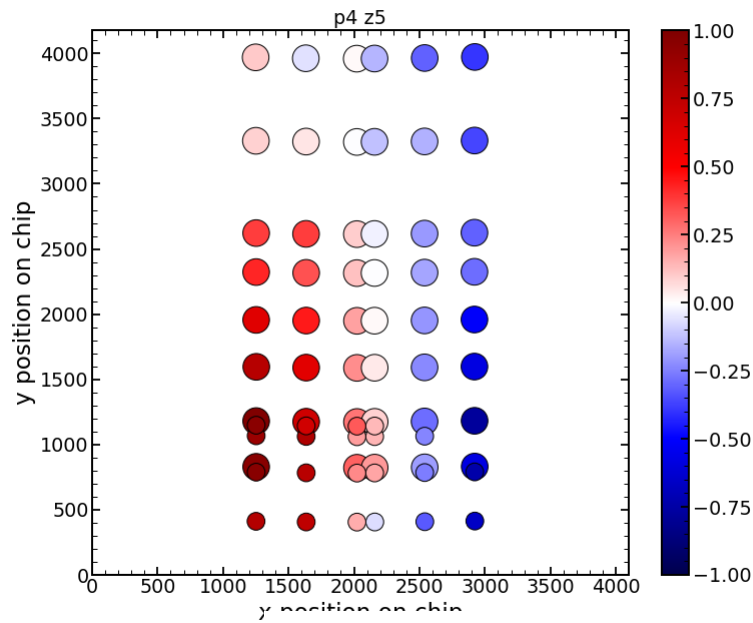


Defocused
data, example
in log space

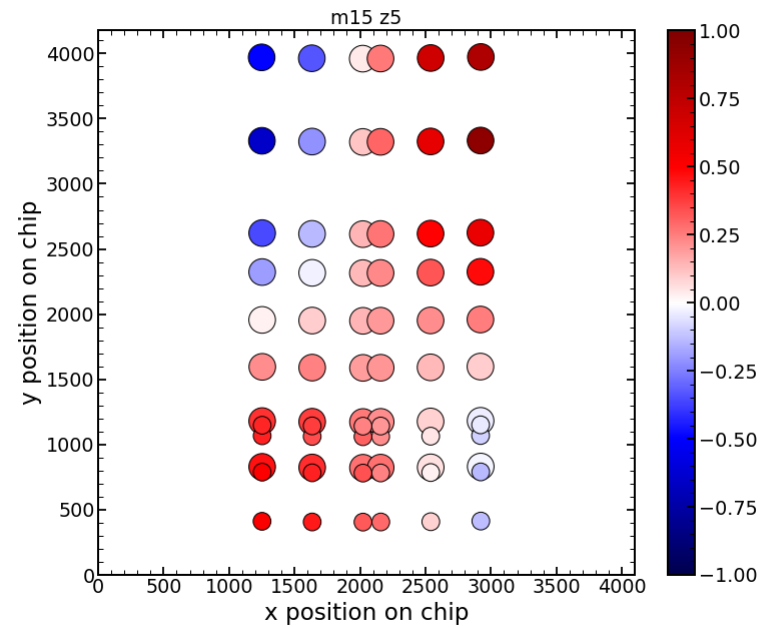
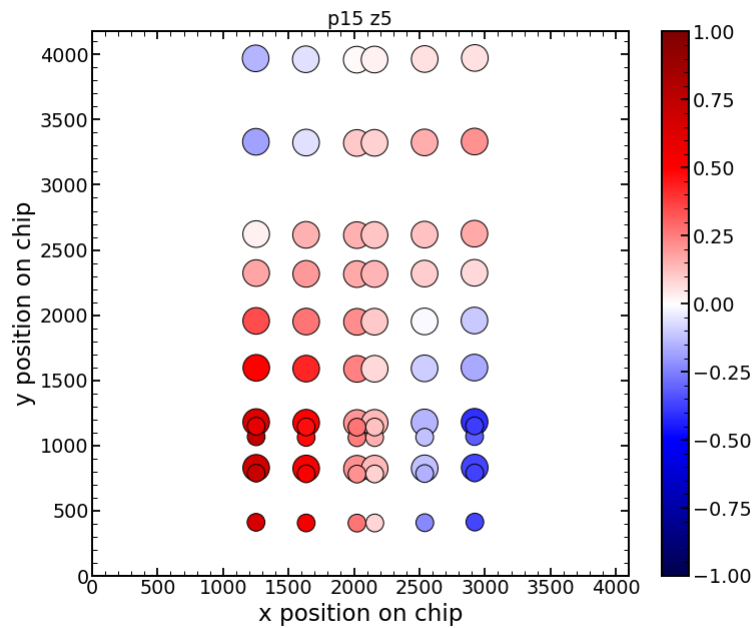
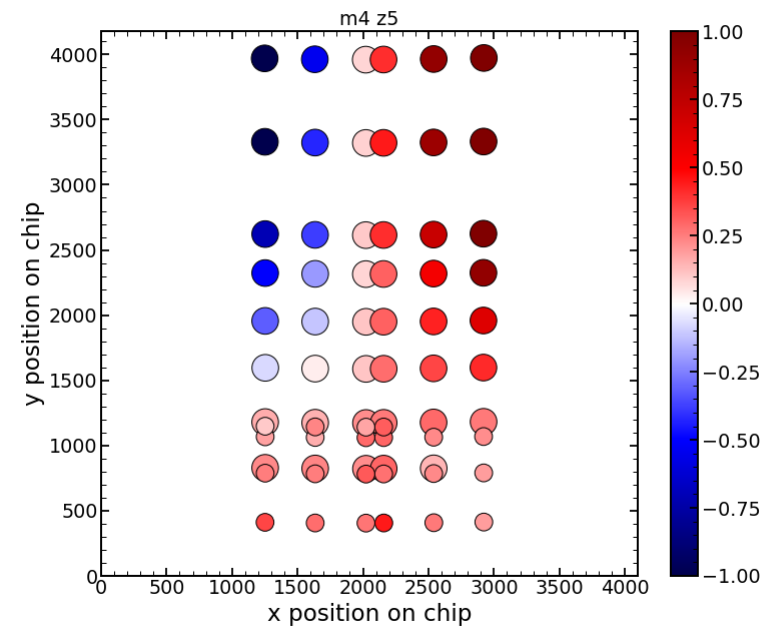


Defocused
data, example
in log space



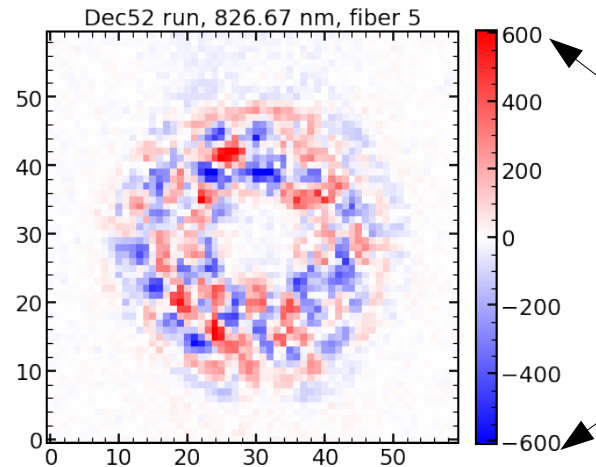


Change of single
component –
(vertical
astigmatism)

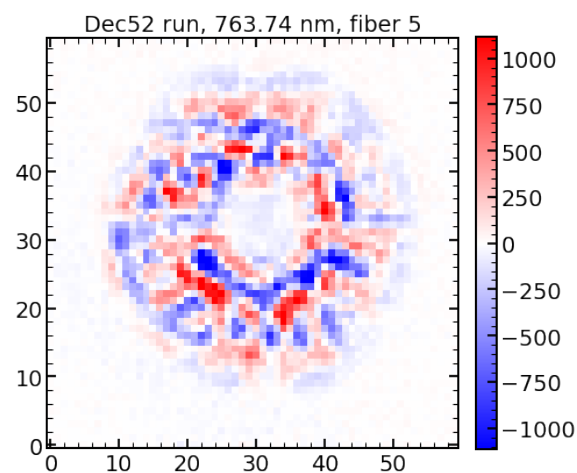
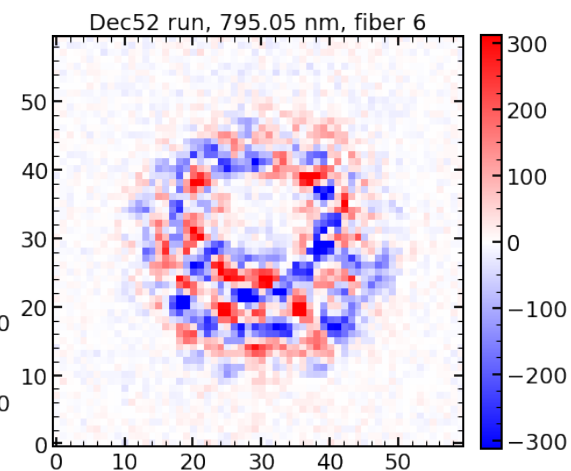
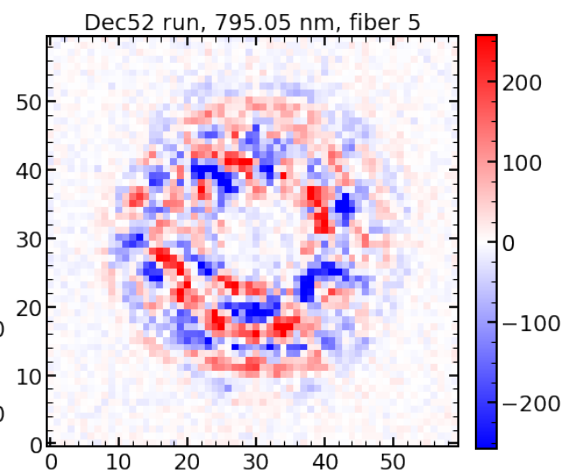
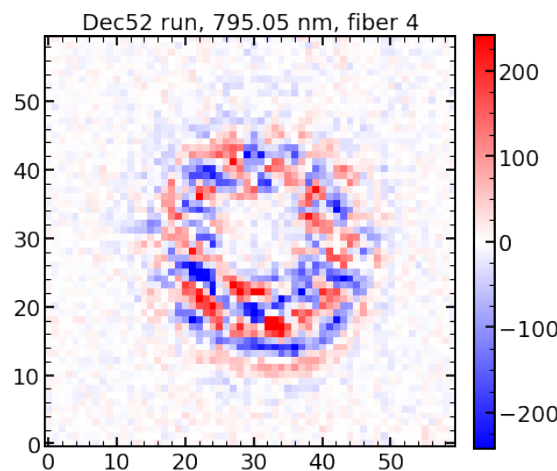


Changing defocus

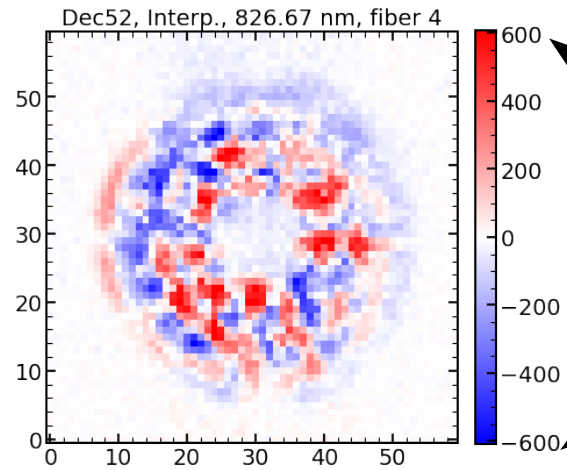
Direct Fits



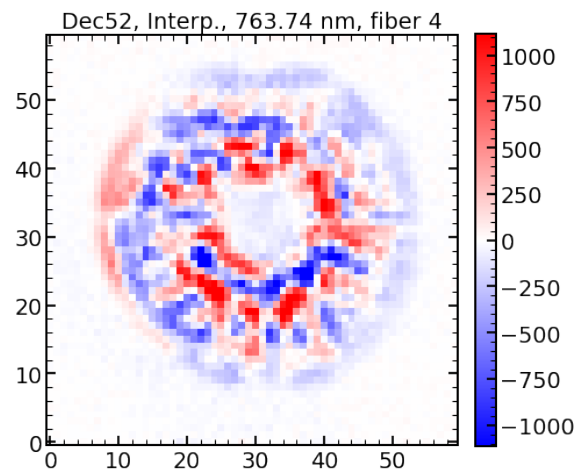
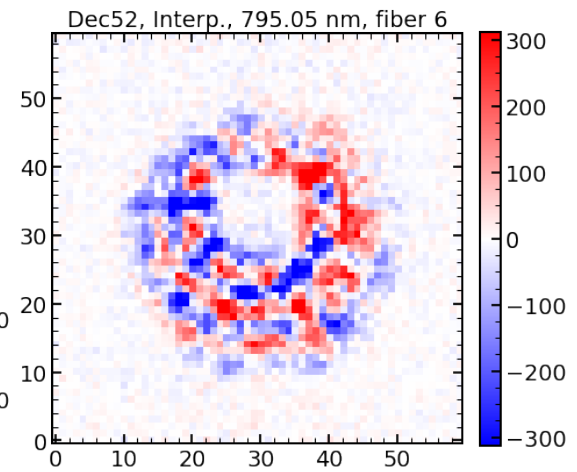
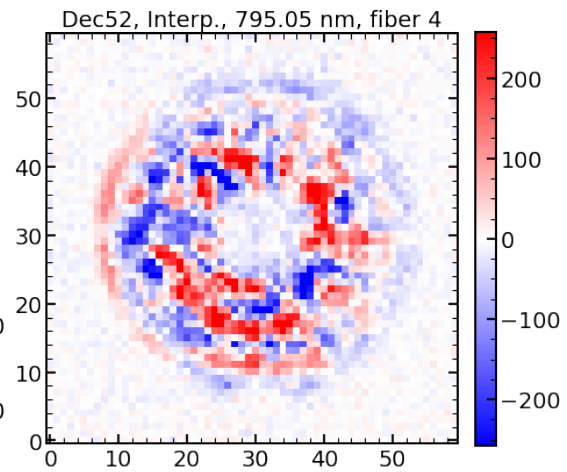
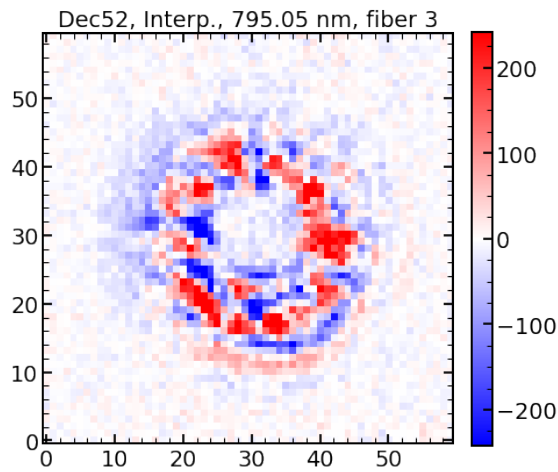
Residuals scaled to
5% of the maximal flux
in the data



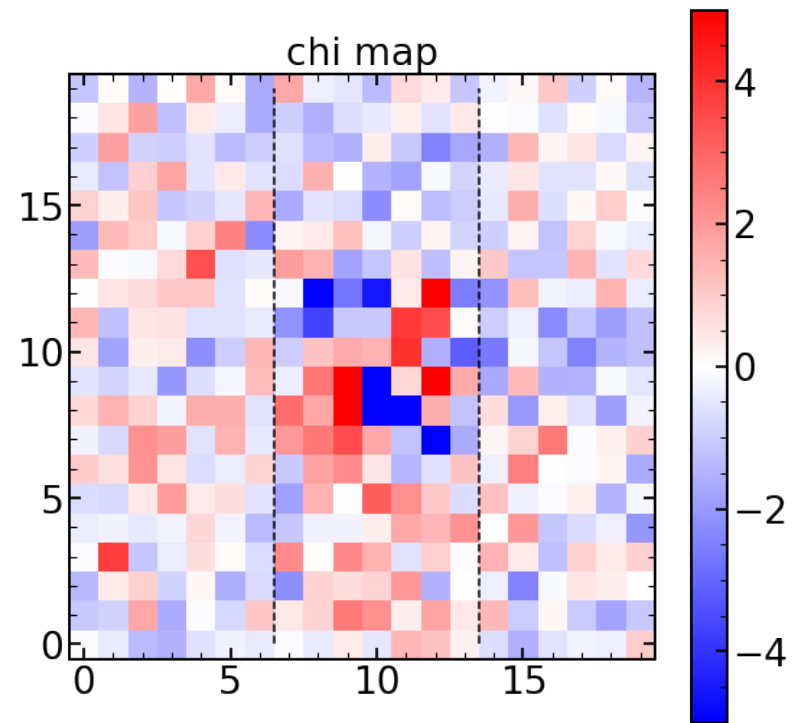
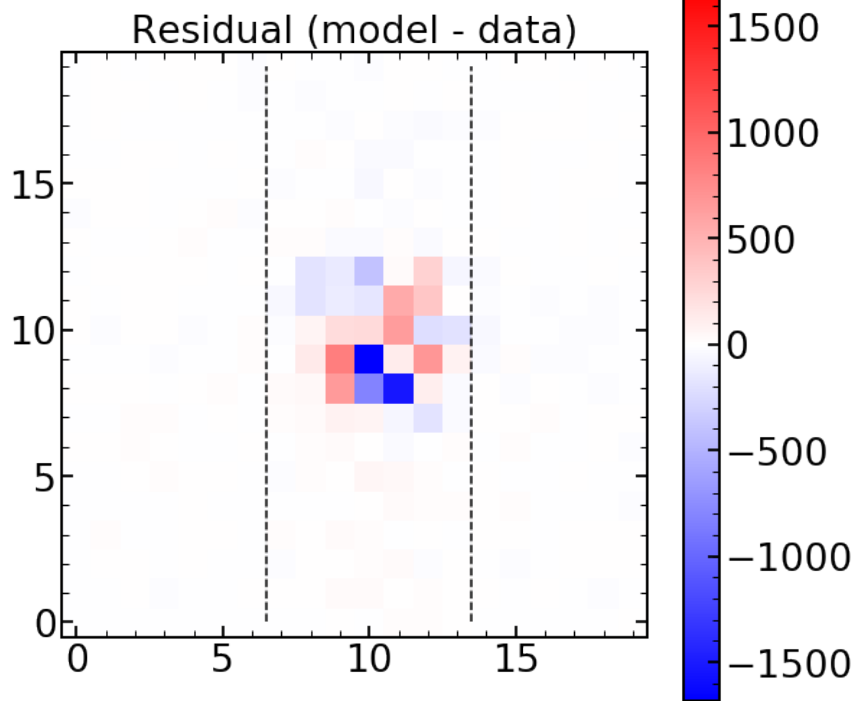
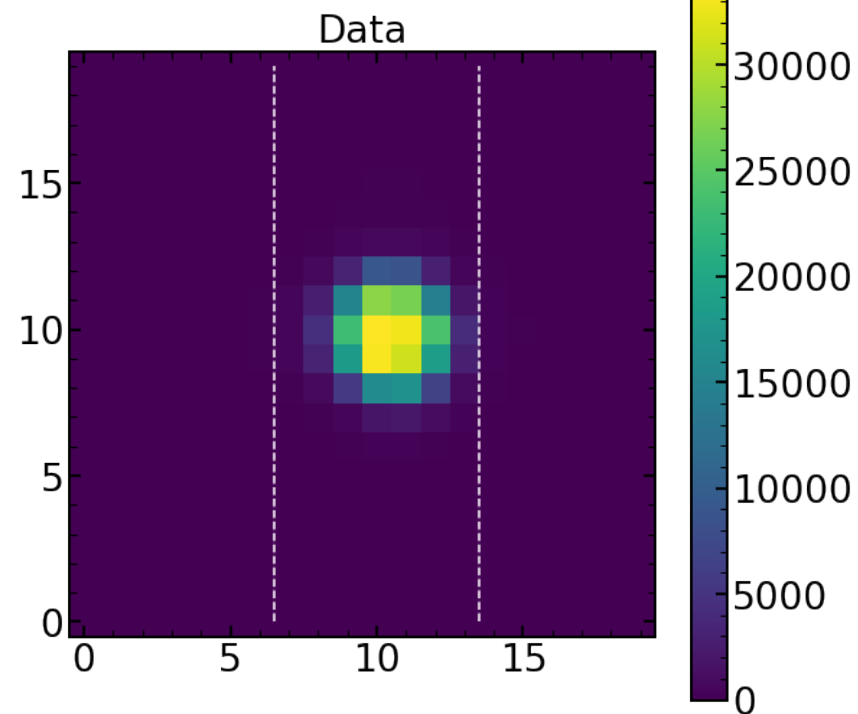
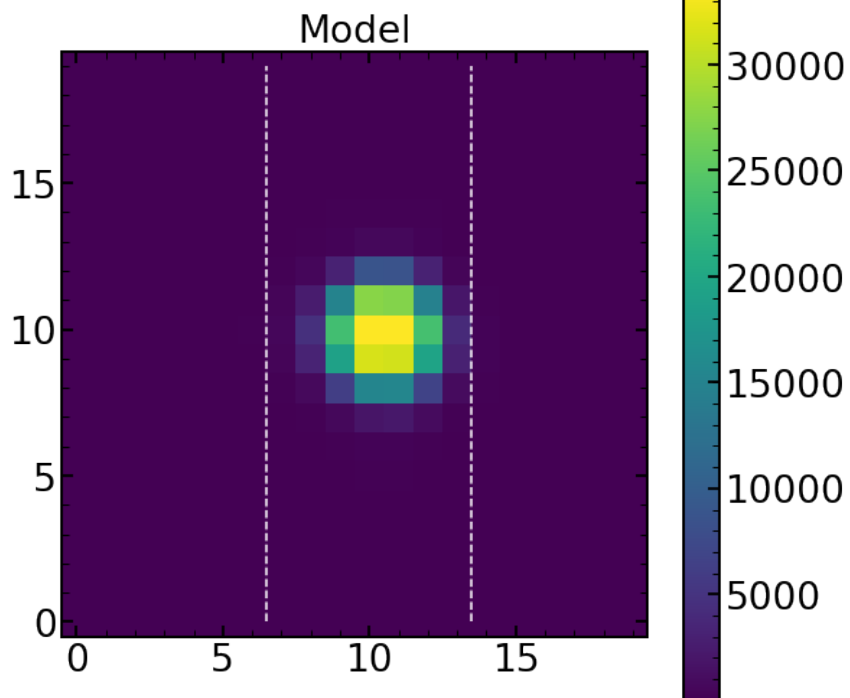
Interpolated Fits



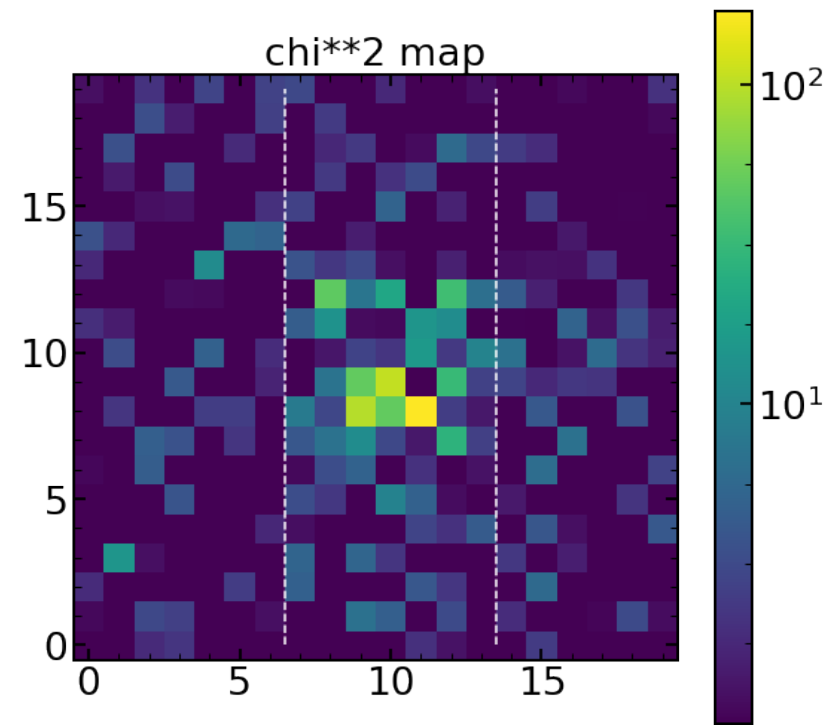
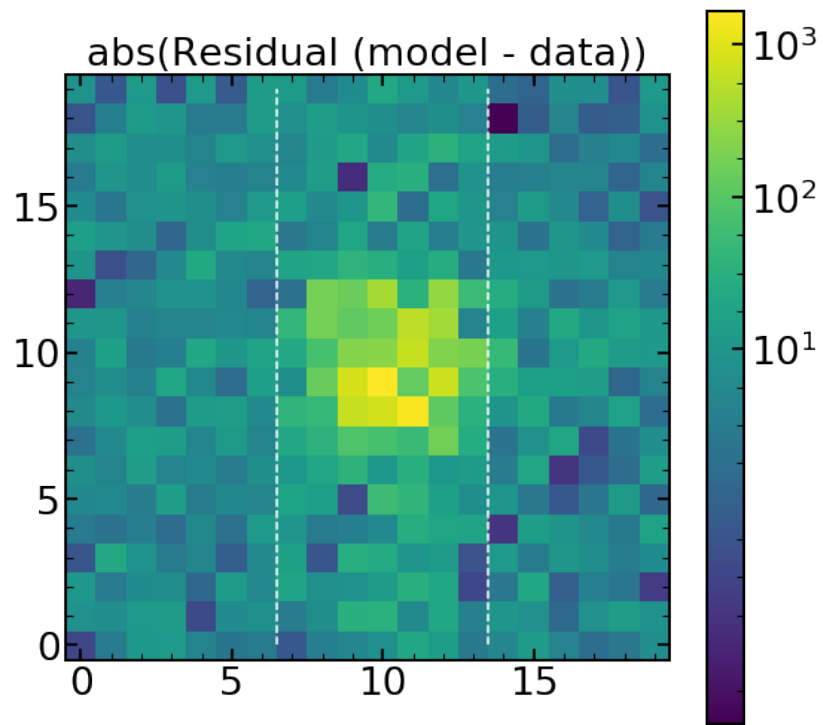
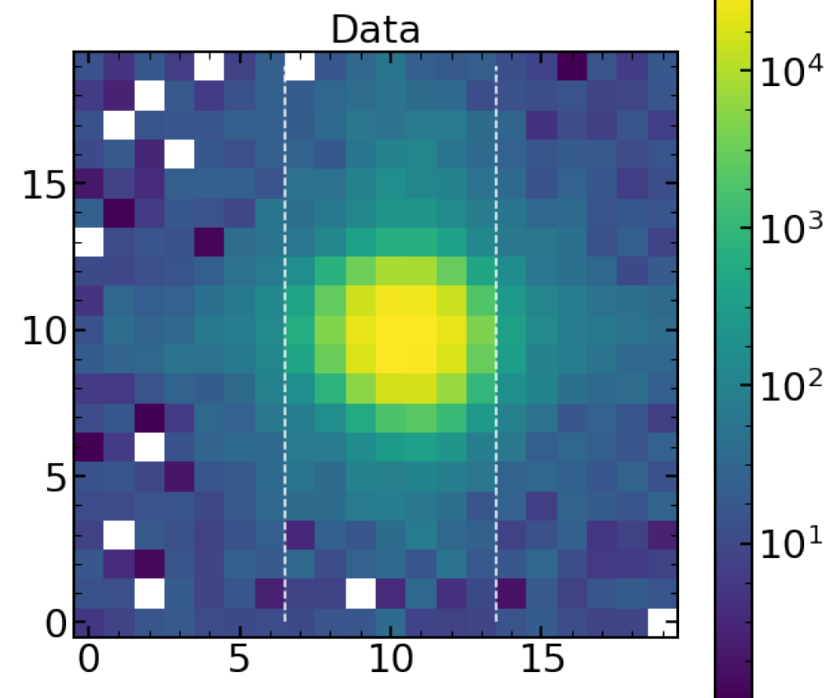
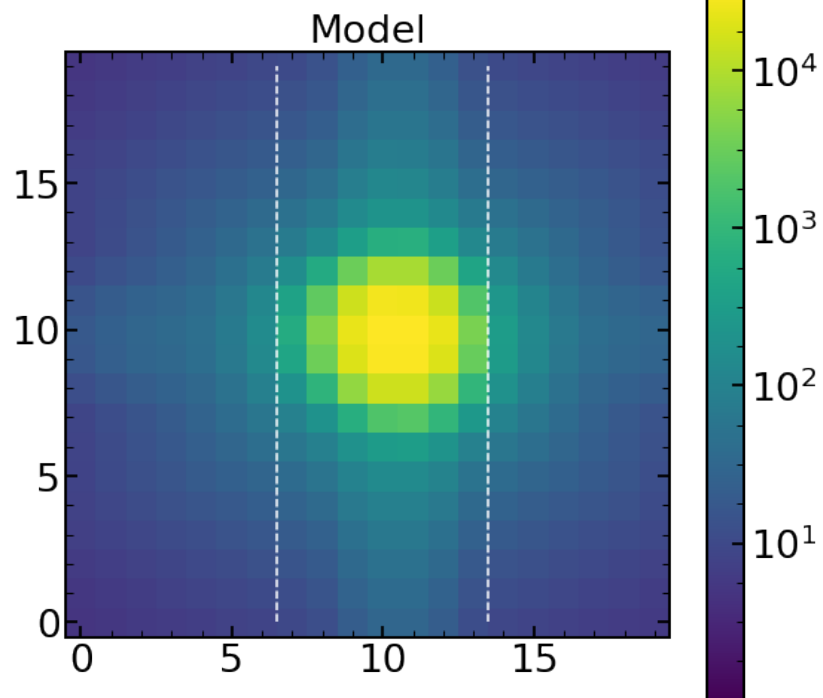
Residuals scaled to
5% of the maximal flux
in the data



Focused
data,
example in
linear space

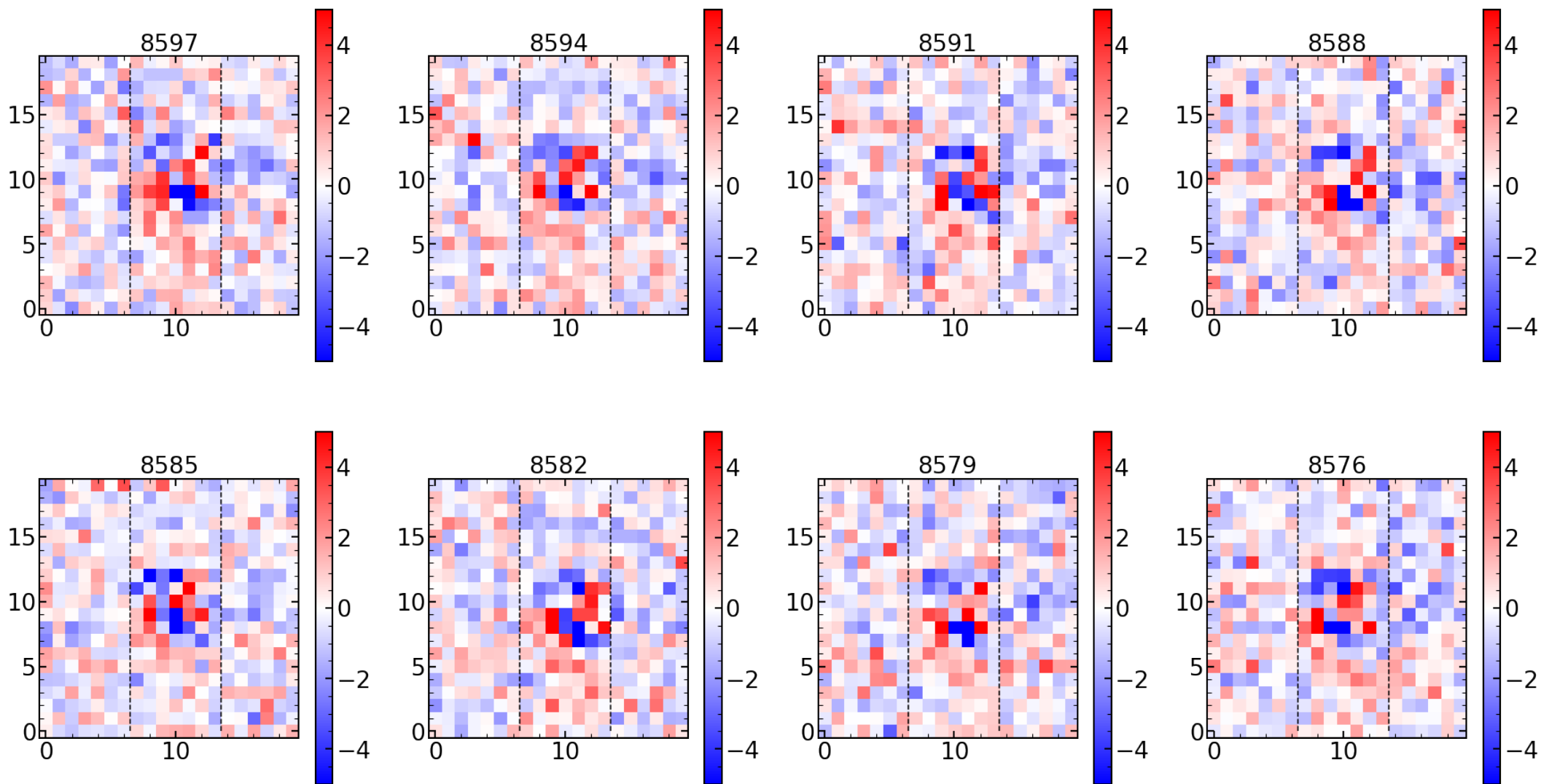


Focused
data,
example in
log space



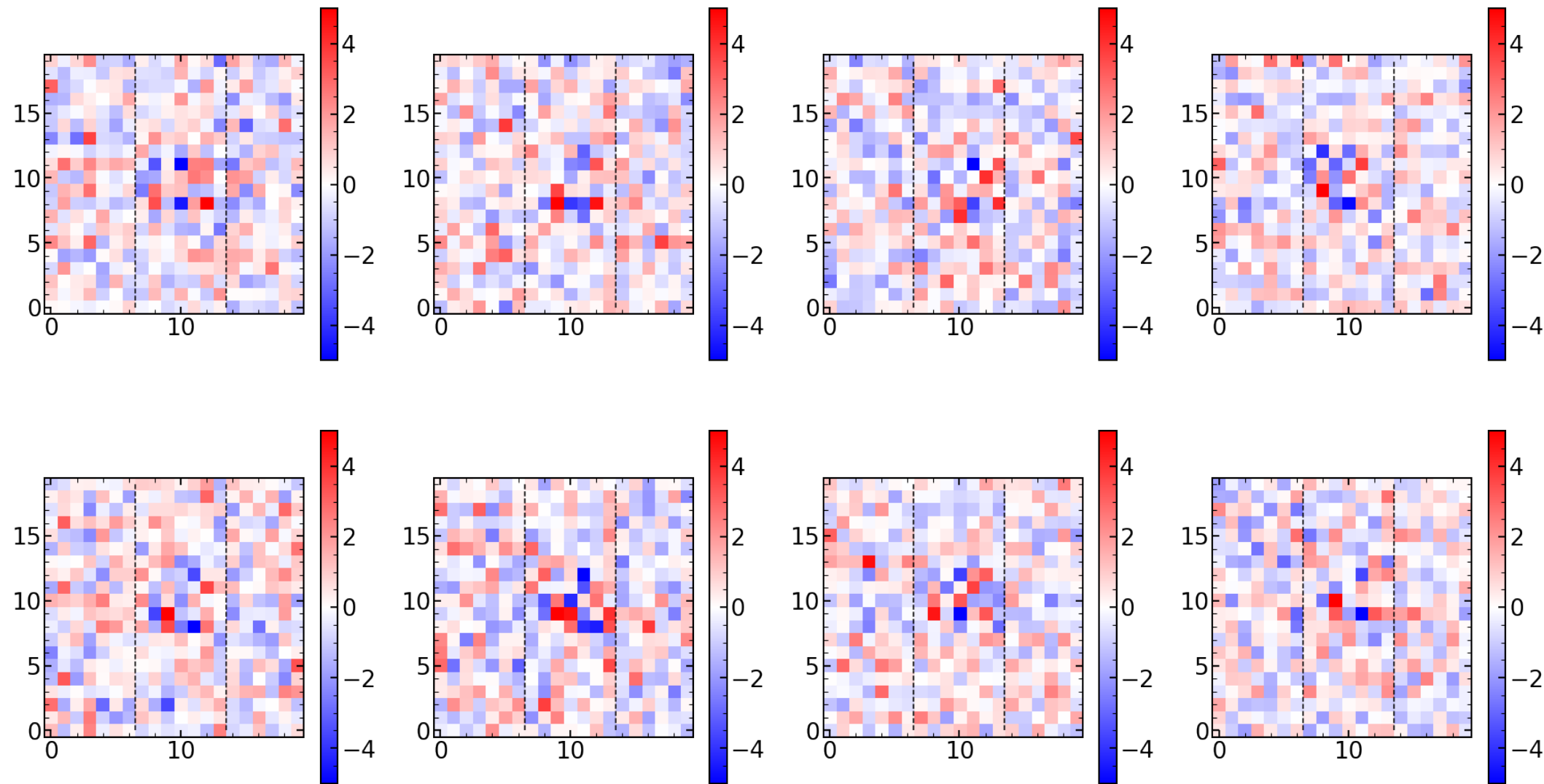
Residuals in the focused data, 8 different dithering positions

Residuals, up to Zernike 22 and Jan 15 modifications to centering'

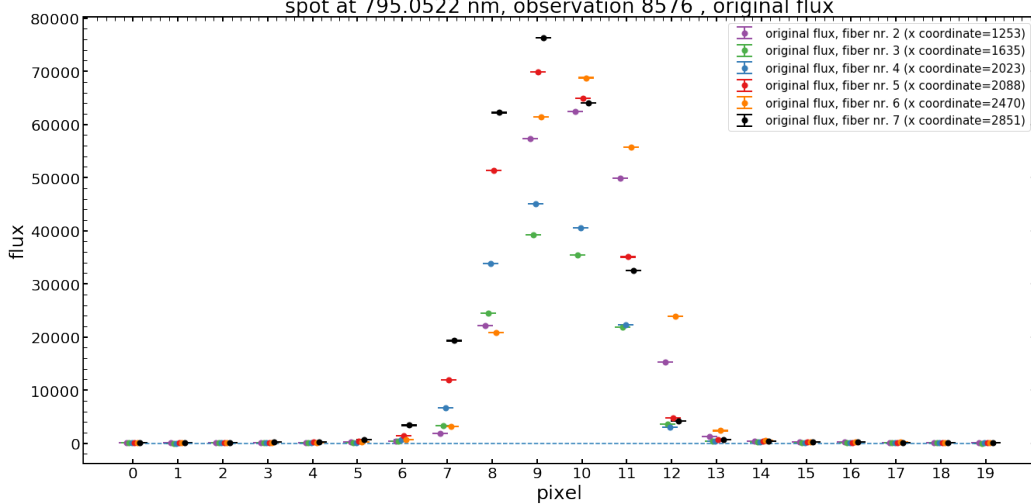


Residuals in the focused data, 8 different dithering positions, after Random forest cleaning applied

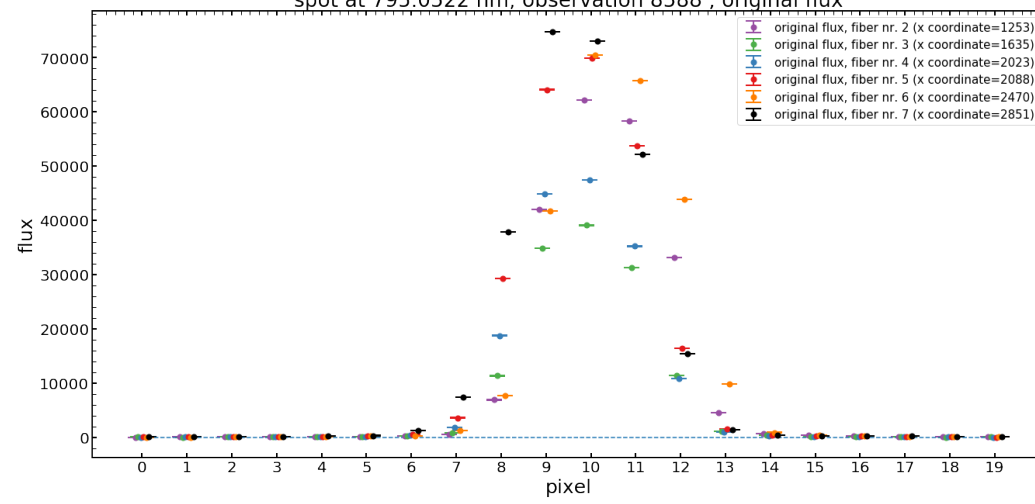
up to Zernike 22, Jan 15 modifications to centering, and Random Forest postprocessing



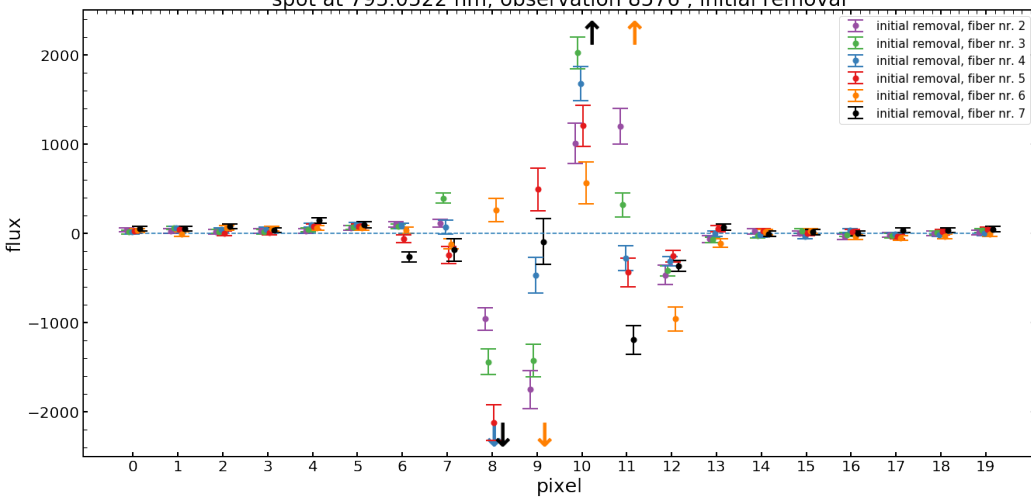
spot at 795.0522 nm, observation 8576 , original flux



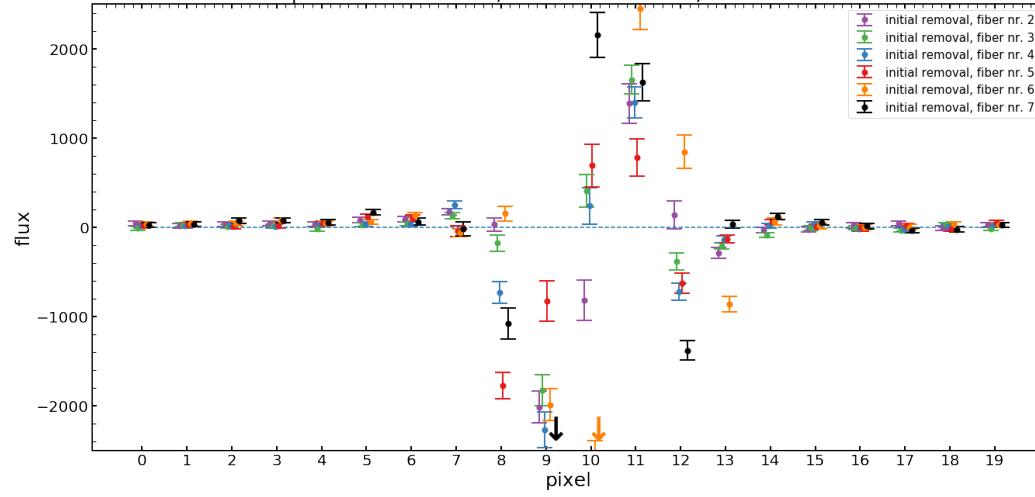
spot at 795.0522 nm, observation 8588 , original flux



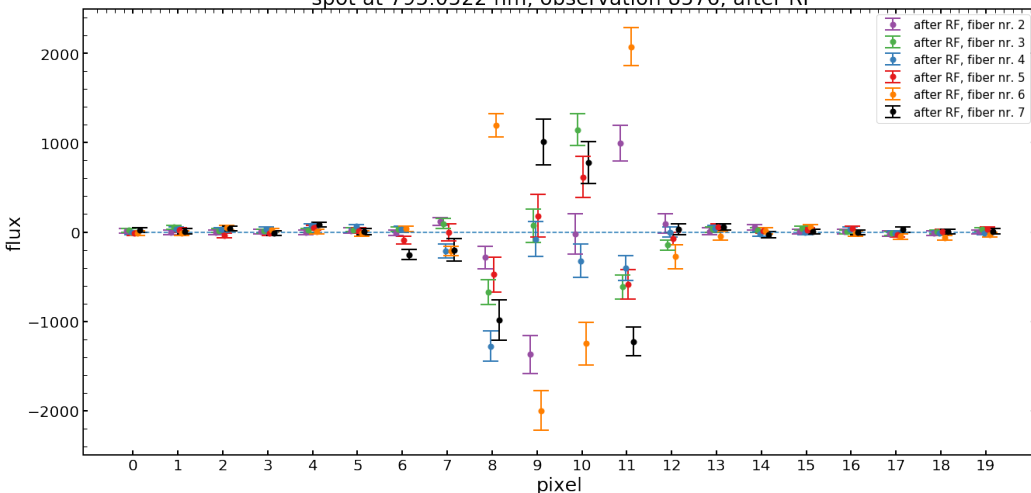
spot at 795.0522 nm, observation 8576 , initial removal



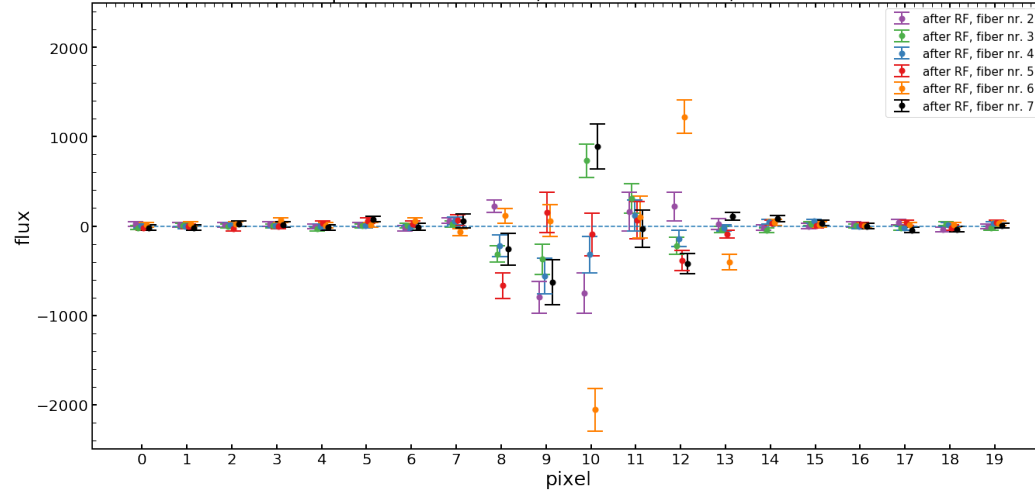
spot at 795.0522 nm, observation 8588 , initial removal



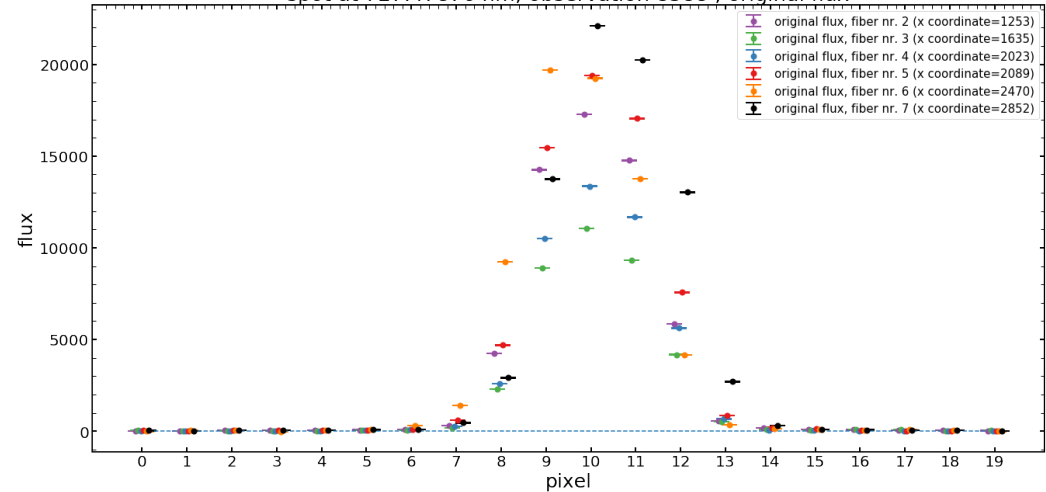
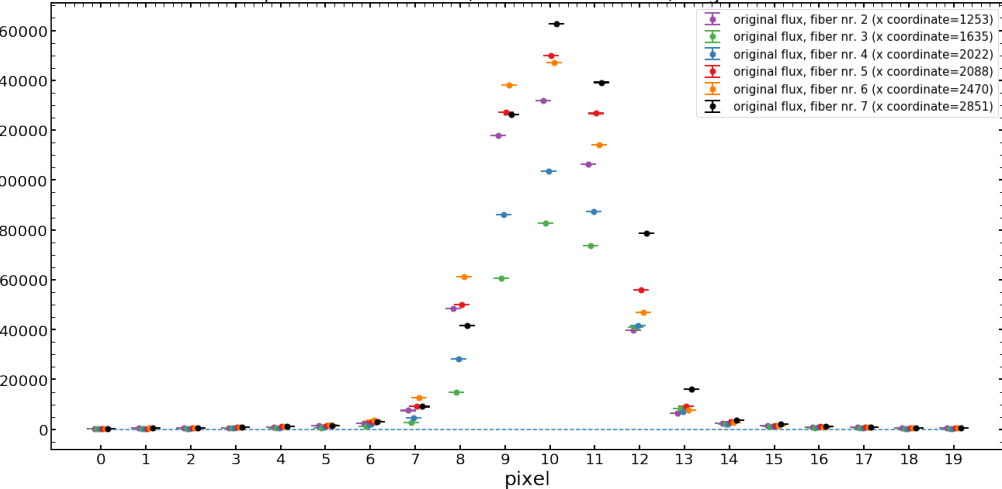
spot at 795.0522 nm, observation 8576 , after RF



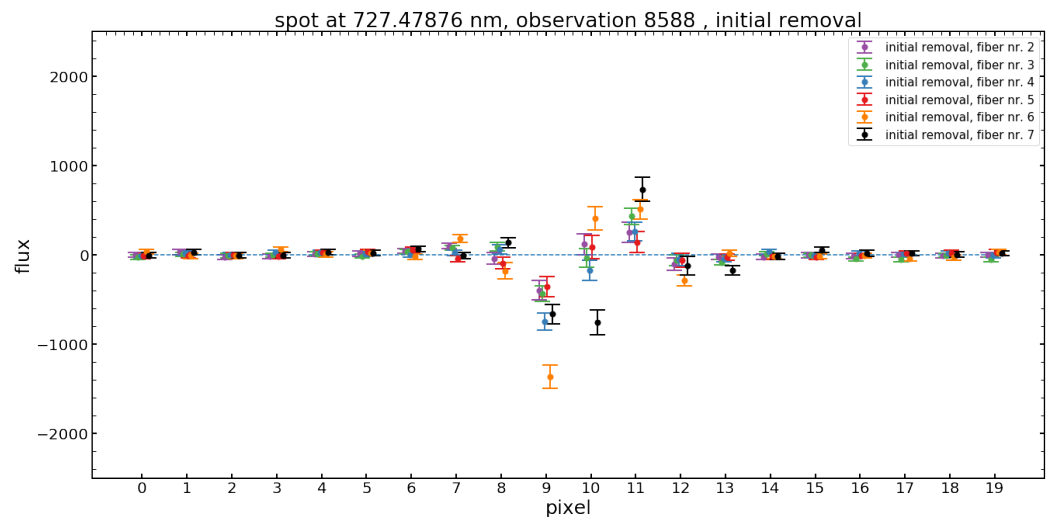
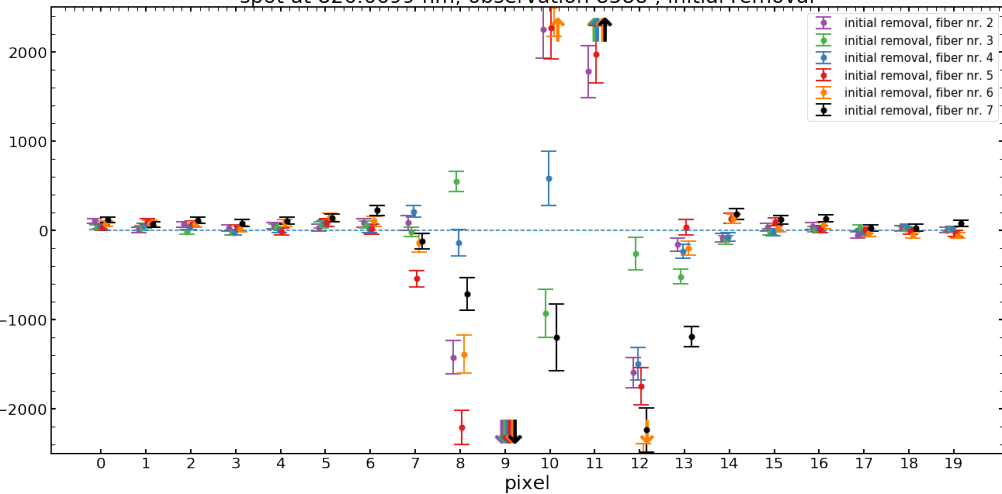
spot at 795.0522 nm, observation 8588 , after RF



spot at 826.6699 nm, observation 8588 , original flux



spot at 826.6699 nm, observation 8588 , initial removal



spot at 826.6699 nm, observation 8588, after RF

