

Run17 Initial DM QA

- 2nd and 3rd quartz (110922 and 110923) didn't work correctly, not sure why. ([PIPE2D-1458](#))
- HgCd line list needs updating (fix [PIPE2D-1415](#))

output saved: /work/wtg/dm_qa/2024-05-30/01

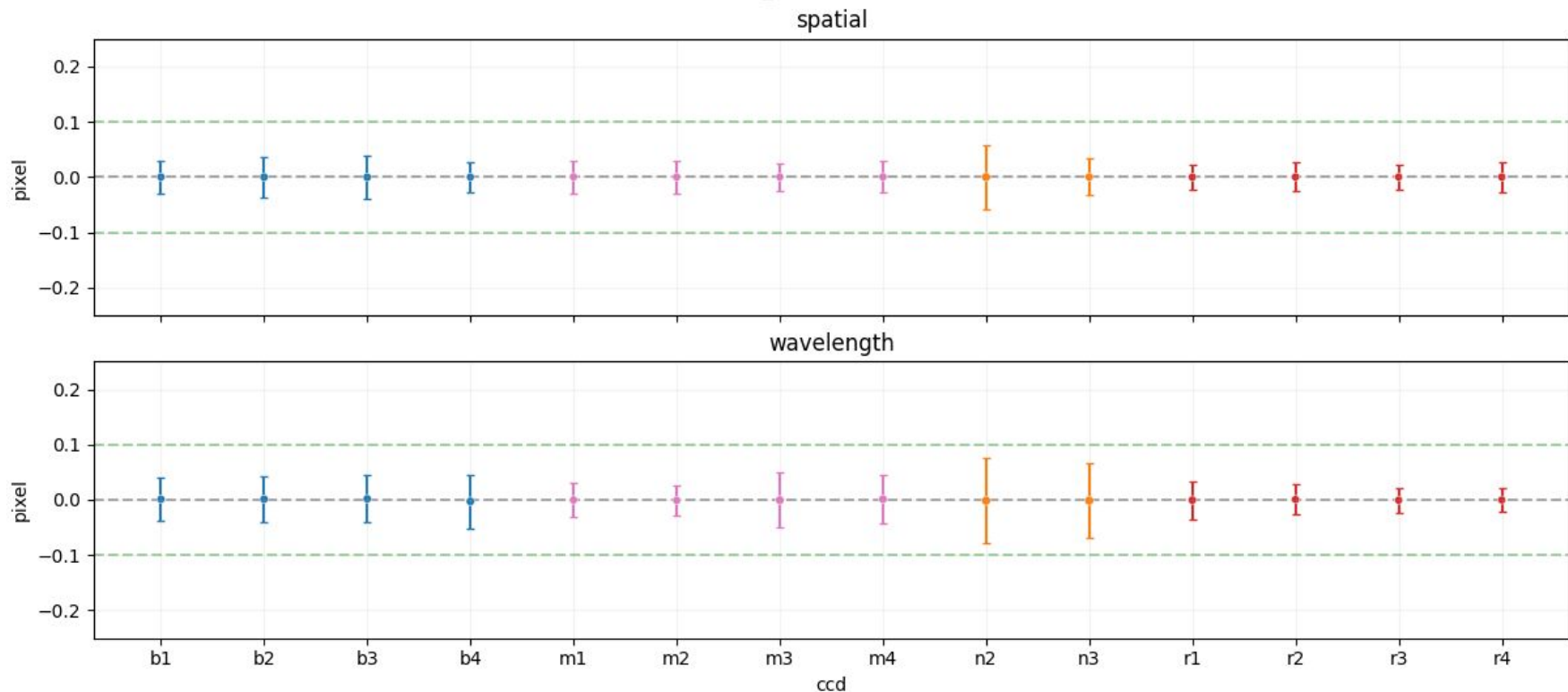
rerun: kiyoyabe/calibs/run17/20240529/check

calibs: /work/drp/CALIB-2024-05-v2

	spatial			wavelength		
	median	weightedRms	softenFit	median	weightedRms	softenFit
ccd						
b1	-0.000030	0.030026	0.026703	0.001040	0.038337	0.030910
b2	-0.000217	0.036692	0.036857	0.001170	0.041146	0.037381
b3	-0.000425	0.038925	0.037323	0.001839	0.042111	0.035095
b4	-0.000153	0.027208	0.021417	-0.002780	0.048511	0.041606
m1	0.000290	0.029713	0.027277	-0.000288	0.030585	0.029344
m2	-0.000072	0.029429	0.026592	-0.001027	0.027549	0.023276
m3	0.000044	0.025303	0.020965	-0.000552	0.049325	0.048164
m4	0.000210	0.028312	0.023840	0.001227	0.043231	0.039397
n2	-0.000184	0.057993	0.061132	-0.001612	0.077487	0.064461
n3	-0.000044	0.032902	0.033419	-0.001482	0.068242	0.066343
r1	-0.000236	0.023333	0.022522	-0.000571	0.034333	0.033003
r2	-0.000005	0.025690	0.024466	0.000518	0.027023	0.023133
r3	-0.000081	0.022856	0.021044	-0.000762	0.023130	0.019234
r4	-0.000131	0.026512	0.025622	-0.000328	0.022047	0.017892

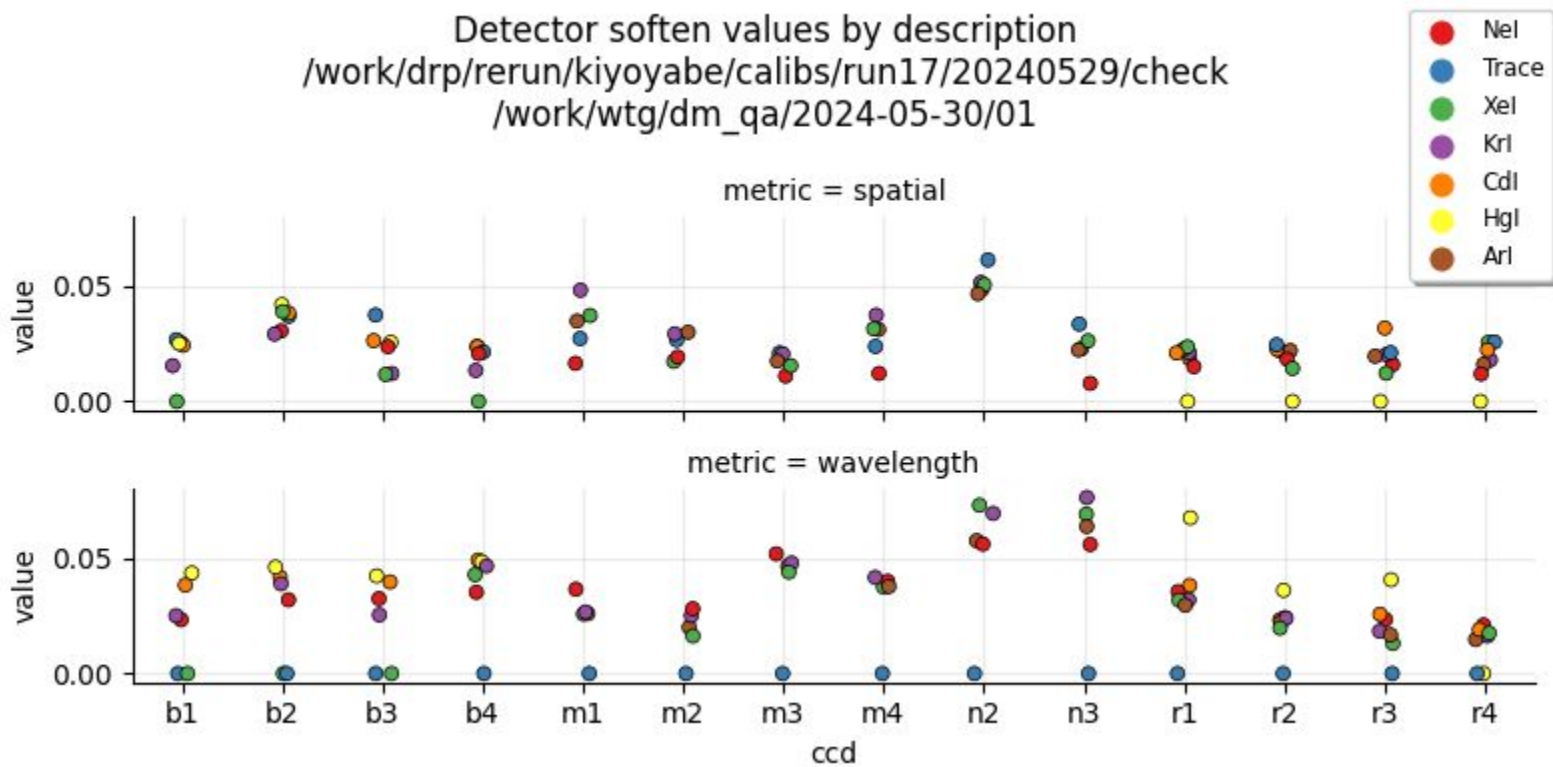
Medians

Detector Medians and 1-sigma weightedRms
/work/drp/rerun/kiyoyabe/calibs/run17/20240529/check
/work/wtg/dm_qa/2024-05-30/01



Soften values by description

Detector soften values by description
/work/drp/rerun/kiyoyabe/calibs/run17/20240529/check
/work/wtg/dm_qa/2024-05-30/01



DetectorMap Residuals

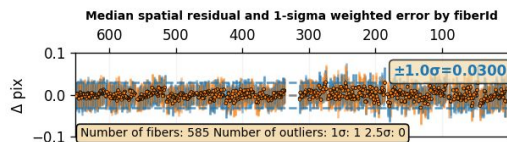
b1

DetectorMap Residuals

b1

b1

xResid

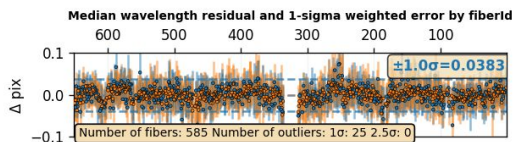


RESERVED:
 median = -0.00003
 rms = 0.03003
 soften = 0.02670
 fibers = 585
 Lines = 945265

USED:
 median = -0.00002
 rms = 0.02925
 soften = 0.02610
 fibers = 585
 Lines = 8502774

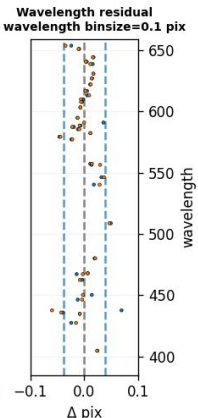
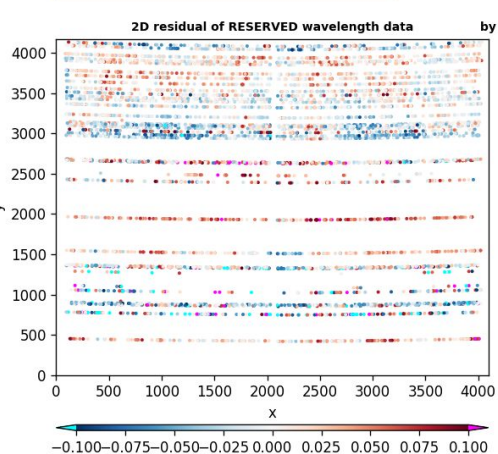
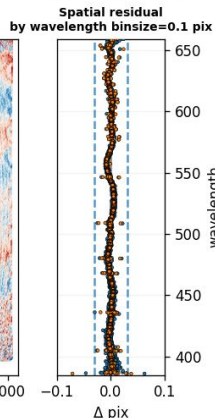
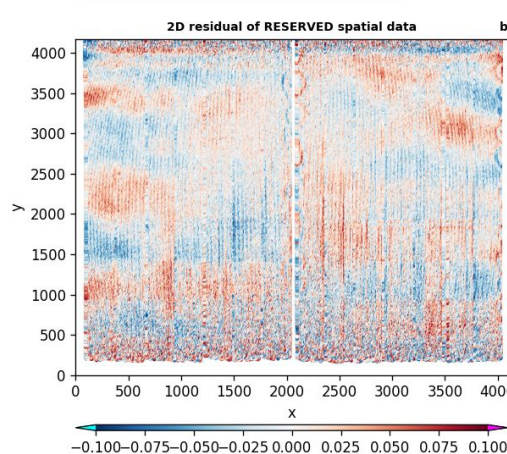
b1

yResid

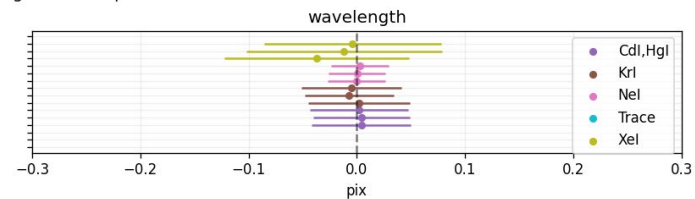
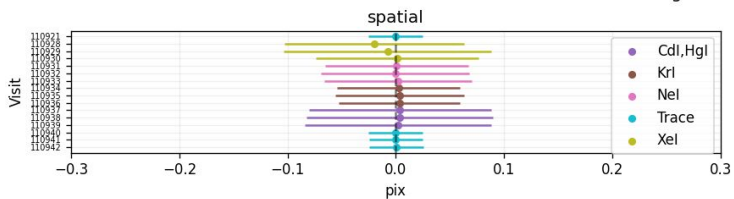


RESERVED:
 median = 0.00104
 rms = 0.03834
 soften = 0.03091
 fibers = 585
 Lines = 5419

USED:
 median = 0.00052
 rms = 0.03858
 soften = 0.03112
 fibers = 585
 Lines = 49020



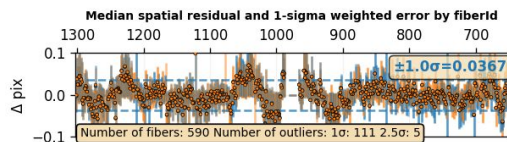
RESERVED median and 1-sigma weighted error per visit ccd='b1'



DetectorMap Residuals

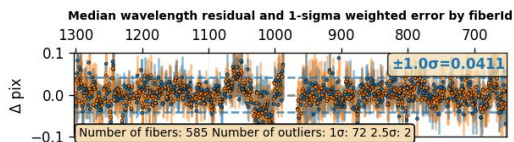
b2
DetectorMap Residuals

b2
xResid

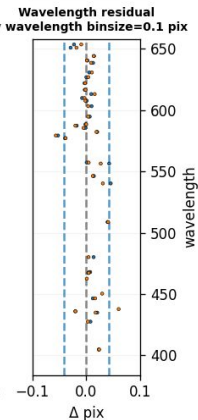
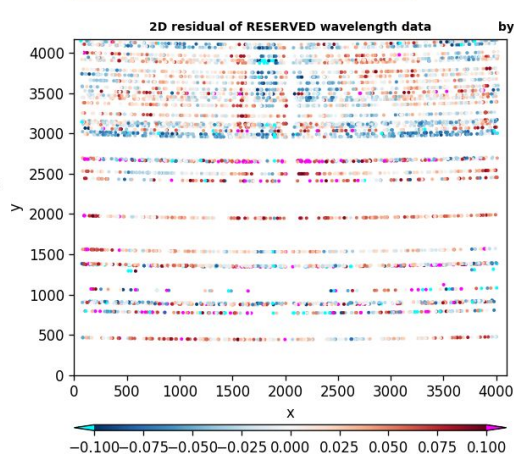
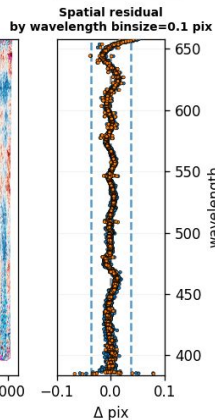
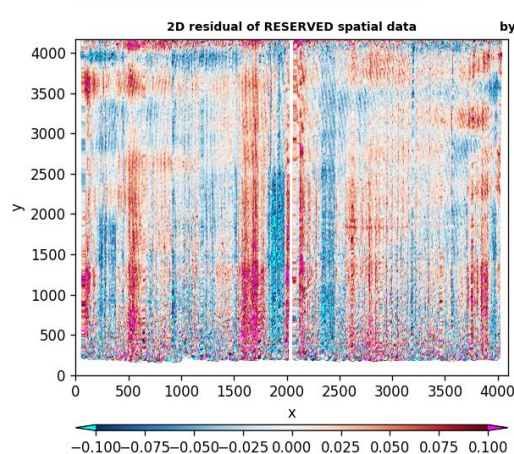


RESERVED:
 median = -0.00022
 rms = 0.03669
 soften = 0.03686
 fibers = 590
 Lines = 949665
 USED:
 median = -0.00024
 rms = 0.03660
 soften = 0.03666
 fibers = 594
 Lines = 8543553

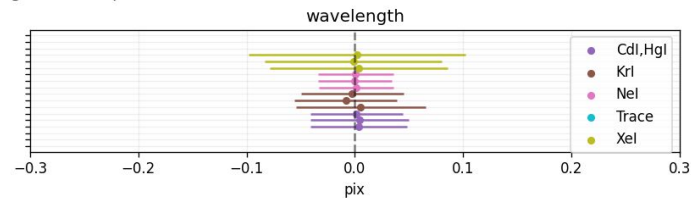
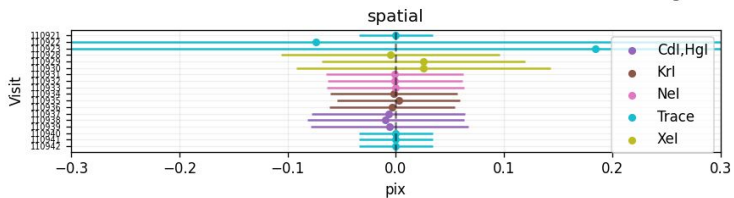
b2
yResid



RESERVED:
 median = 0.00117
 rms = 0.04115
 soften = 0.03738
 fibers = 585
 Lines = 5458
 USED:
 median = 0.00113
 rms = 0.04021
 soften = 0.03613
 fibers = 586
 Lines = 49804



RESERVED median and 1-sigma weighted error per visit ccd='b2'

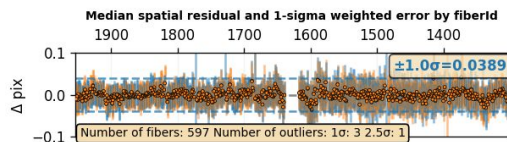


DetectorMap Residuals

b3

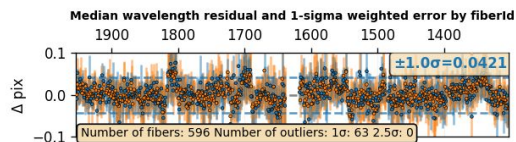
DetectorMap Residuals
b3

b3
xResid

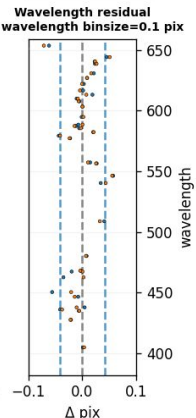
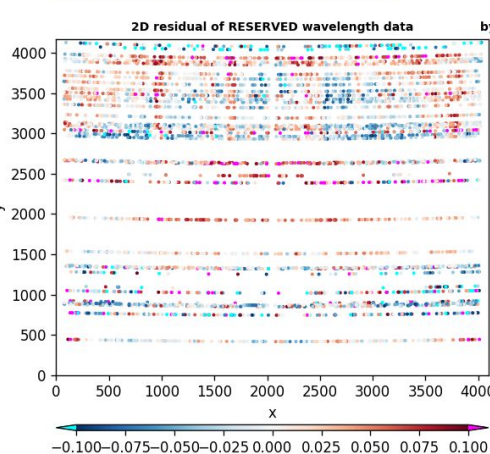
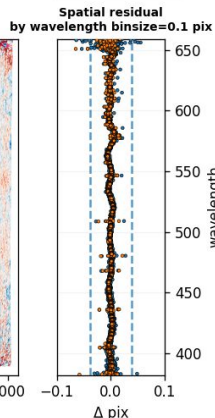
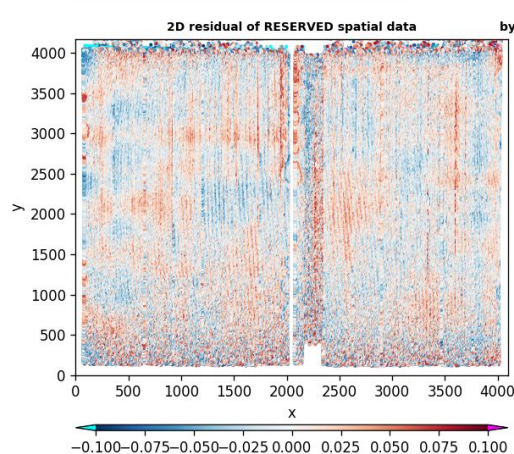


RESERVED:
median = -0.00042
rms = 0.03892
soften = 0.03732
fibers = 597
Lines = 942257
USED:
median = -0.00046
rms = 0.03193
soften = 0.02656
fibers = 601
Lines = 8446962

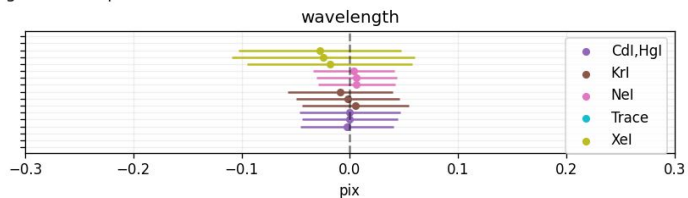
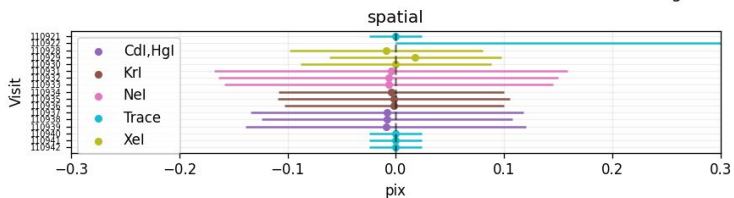
b3
yResid



RESERVED:
median = 0.00184
rms = 0.04211
soften = 0.03509
fibers = 596
Lines = 5509
USED:
median = 0.00213
rms = 0.04160
soften = 0.03547
fibers = 596
Lines = 49088



RESERVED median and 1-sigma weighted error per visit ccd='b3'



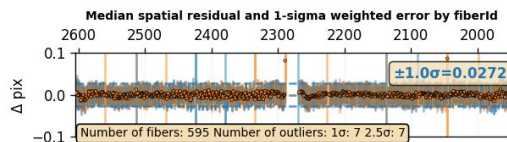
DetectorMap Residuals

b4

DetectorMap Residuals

b4

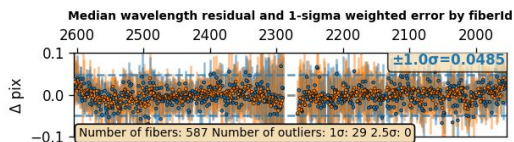
b4
xResid



RESERVED:
 median = -0.00015
 rms = 0.02721
 soften = 0.02142
 fibers = 595
 Lines = 947700

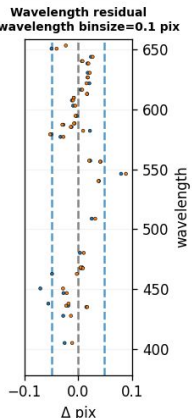
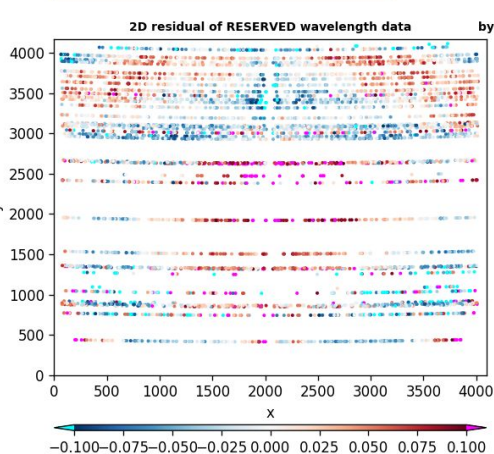
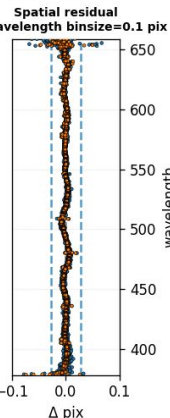
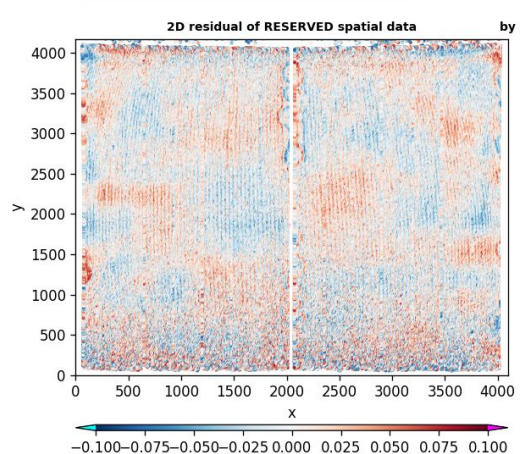
USED:
 median = -0.00016
 rms = 0.02624
 soften = 0.02094
 fibers = 600
 Lines = 8523754

b4
yResid

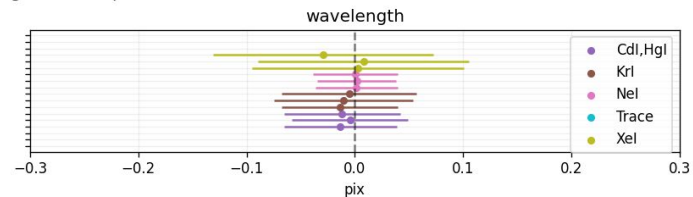
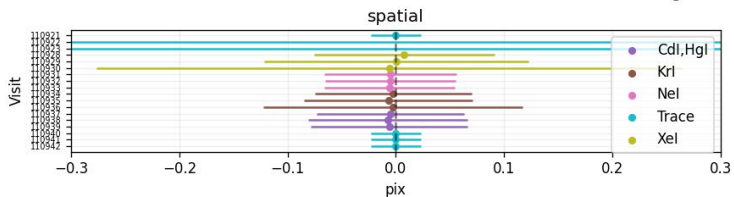


RESERVED:
 median = -0.00278
 rms = 0.04851
 soften = 0.04161
 fibers = 587
 Lines = 5448

USED:
 median = -0.00046
 rms = 0.04980
 soften = 0.04047
 fibers = 587
 Lines = 48413



RESERVED median and 1-sigma weighted error per visit ccd='b4'



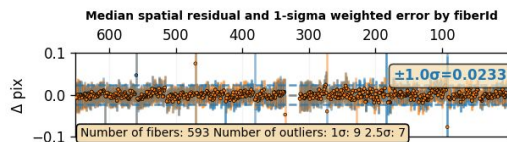
DetectorMap Residuals

r1

DetectorMap Residuals

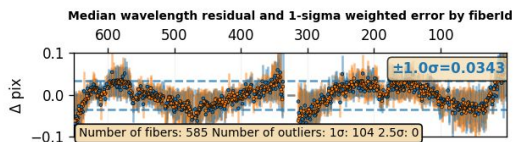
r1

r1
xResid

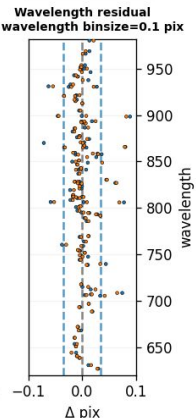
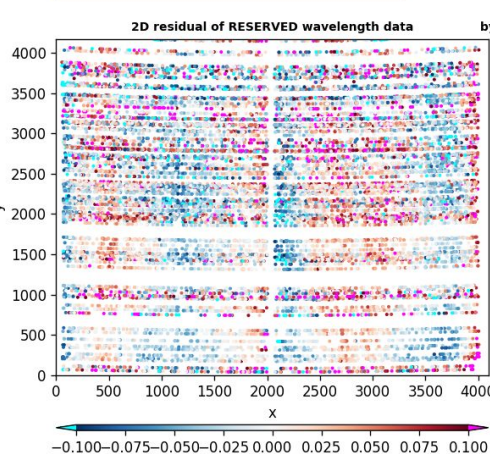
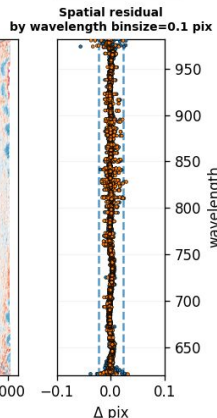
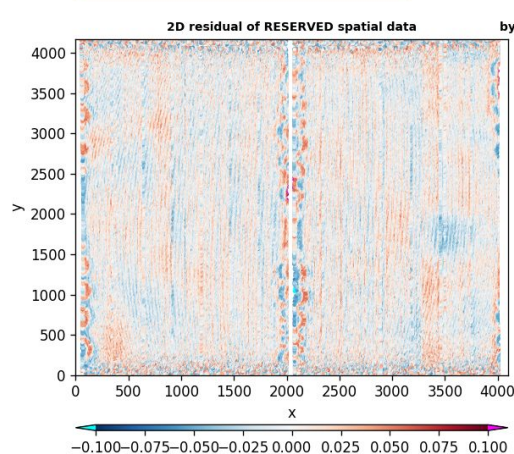


RESERVED:
 median = -0.00024
 rms = 0.02333
 soften = 0.02252
 fibers = 593
 Lines = 1089176
 USED:
 median = -0.00023
 rms = 0.02338
 soften = 0.02251
 fibers = 595
 Lines = 9798685

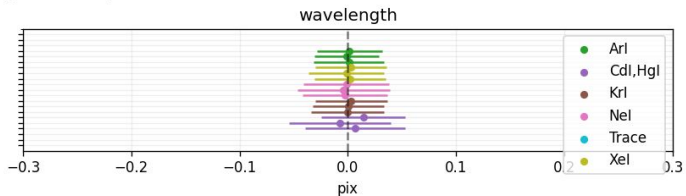
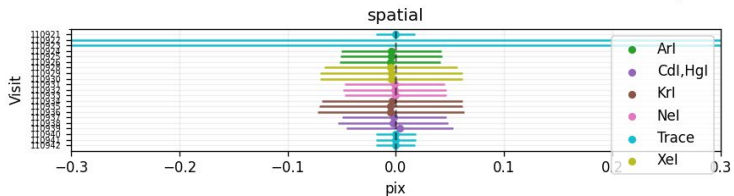
r1
yResid



RESERVED:
 median = -0.00057
 rms = 0.03433
 soften = 0.03300
 fibers = 585
 Lines = 17702
 USED:
 median = -0.00013
 rms = 0.03397
 soften = 0.03229
 fibers = 585
 Lines = 159523



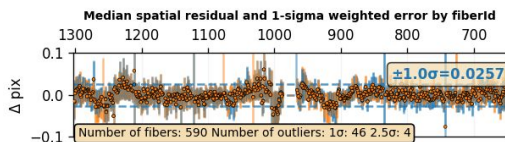
RESERVED median and 1-sigma weighted error per visit ccd='r1'



DetectorMap Residuals

DetectorMap Residuals

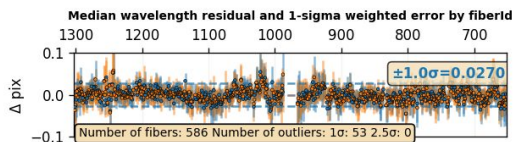
r2
xResid



RESERVED:
median = -0.00000
rms = 0.02569
soften = 0.02447
fibers = 590
Lines = 1081903

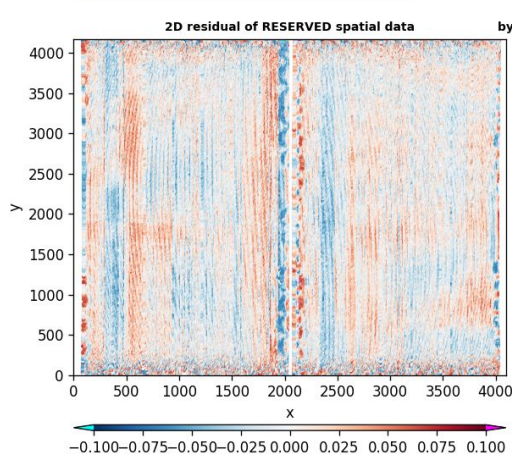
USED:
median = -0.00002
rms = 0.02566
soften = 0.02445
fibers = 594
Lines = 9736190

r2
yResid

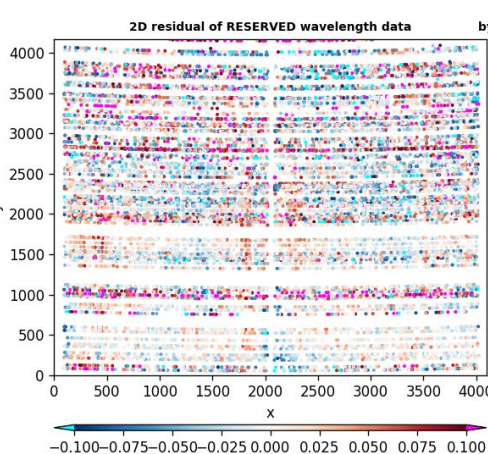
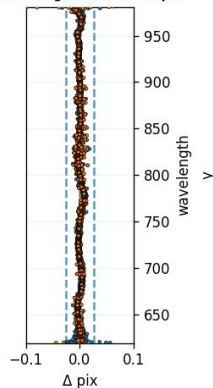


RESERVED:
median = 0.00052
rms = 0.02702
soften = 0.02313
fibers = 586
Lines = 17162

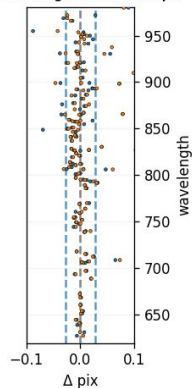
USED:
median = -0.00023
rms = 0.02669
soften = 0.02289
fibers = 586
Lines = 154227



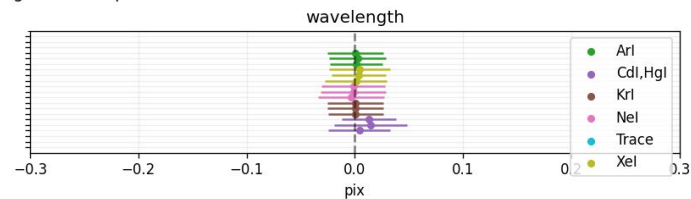
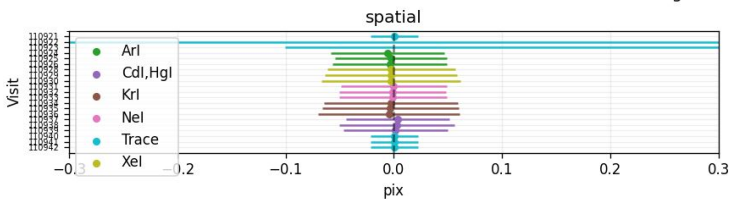
Spatial residual
by wavelength binsize=0.1 pix



Wavelength residual
by wavelength binsize=0.1 pix

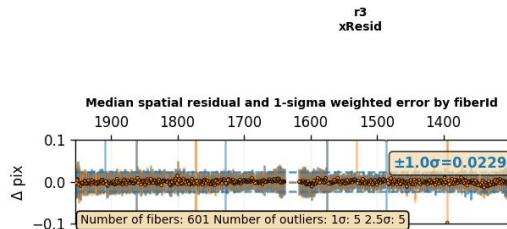


RESERVED median and 1-sigma weighted error per visit ccd='r2'



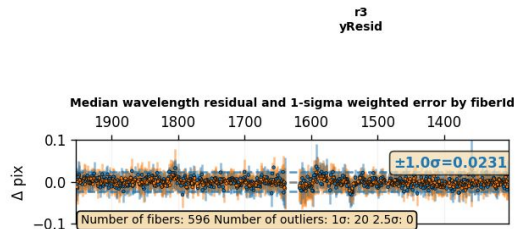
DetectorMap Residuals

DetectorMap Residuals



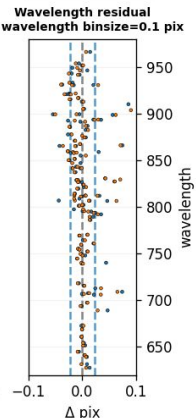
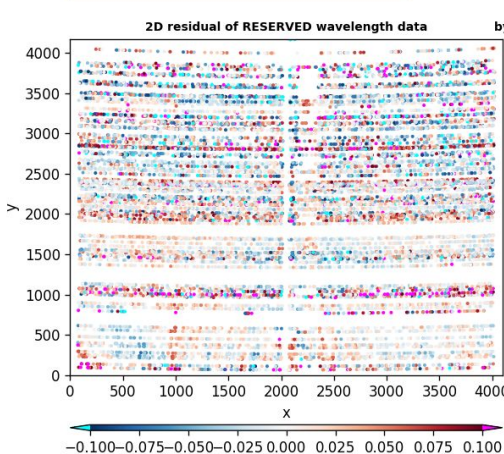
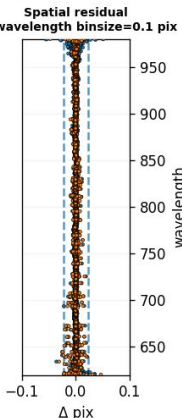
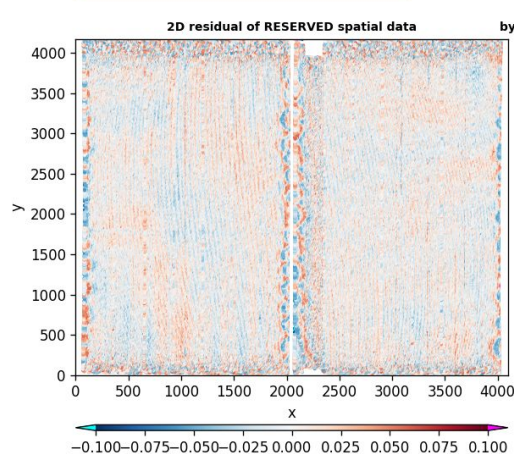
RESERVED:
 median = -0.00008
 rms = 0.02286
 soften = 0.02104
 fibers = 601
 Lines = 1060006

USED:
 median = -0.00006
 rms = 0.02278
 soften = 0.02094
 fibers = 604
 Lines = 9538025

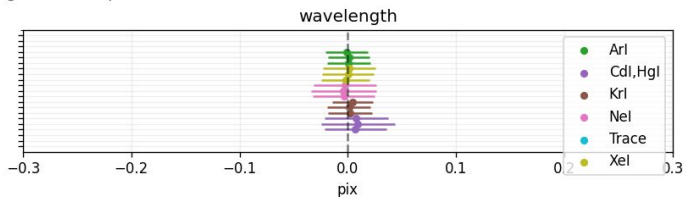
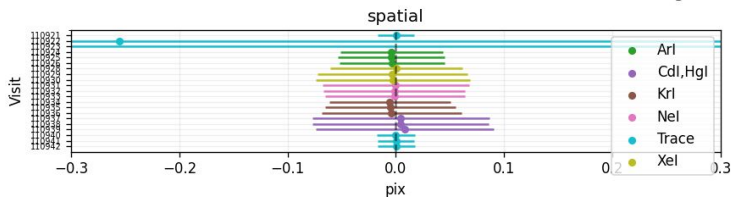


RESERVED:
 median = -0.00076
 rms = 0.02313
 soften = 0.01923
 fibers = 596
 Lines = 16231

USED:
 median = -0.00070
 rms = 0.02310
 soften = 0.01913
 fibers = 596
 Lines = 145448



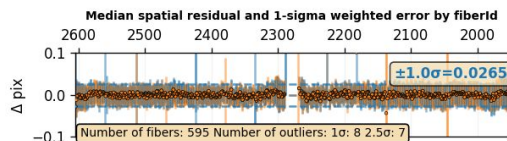
RESERVED median and 1-sigma weighted error per visit ccd='r3'



DetectorMap Residuals

r4
DetectorMap Residuals

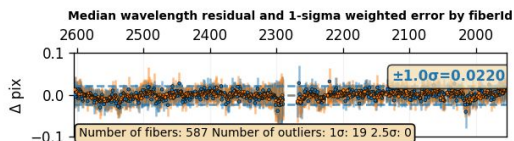
r4
xResid



RESERVED:
 median = -0.00013
 rms = 0.02651
 soften = 0.02562
 fibers = 595
 lines = 1046046

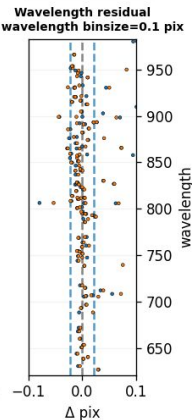
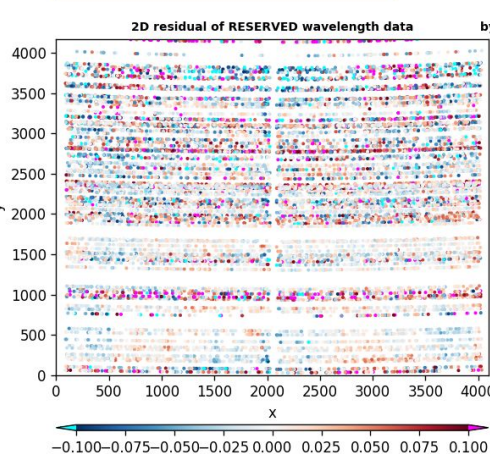
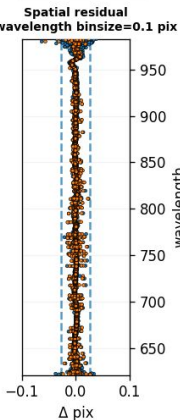
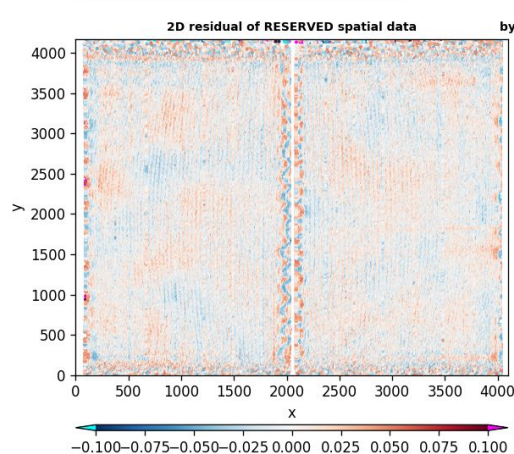
USED:
 median = -0.00017
 rms = 0.02636
 soften = 0.02502
 fibers = 601
 lines = 9410084

r4
yResid

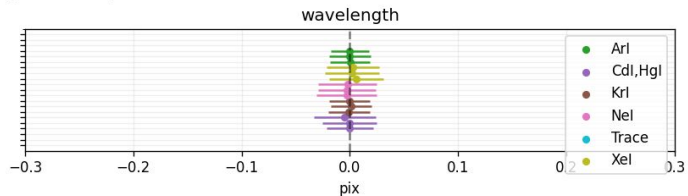
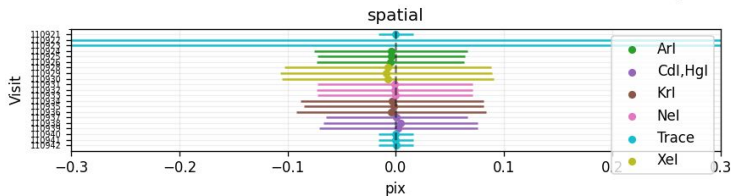


RESERVED:
 median = -0.00033
 rms = 0.02205
 soften = 0.01789
 fibers = 587
 lines = 16511

USED:
 median = -0.00020
 rms = 0.02196
 soften = 0.01793
 fibers = 587
 lines = 148384



RESERVED median and 1-sigma weighted error per visit ccd='r4'



DetectorMap Residuals

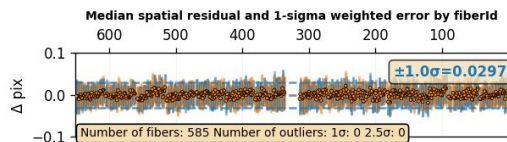
m1

DetectorMap Residuals

m1

m1

xResid

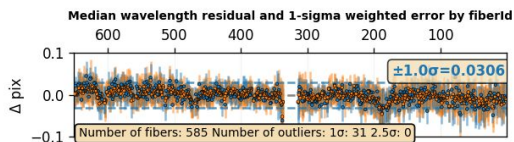


RESERVED:
 median = 0.00029
 rms = 0.02971
 soften = 0.02728
 fibers = 585
 Lines = 1550397

USED:
 median = 0.00034
 rms = 0.02888
 soften = 0.02527
 fibers = 585
 Lines = 13934559

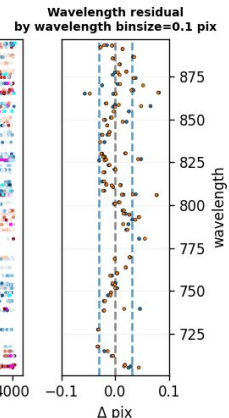
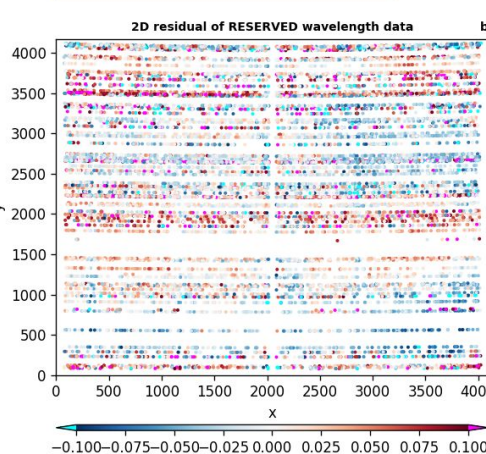
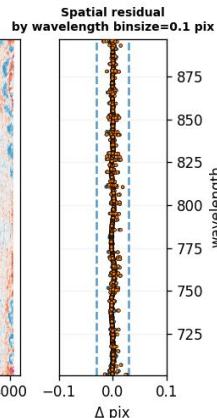
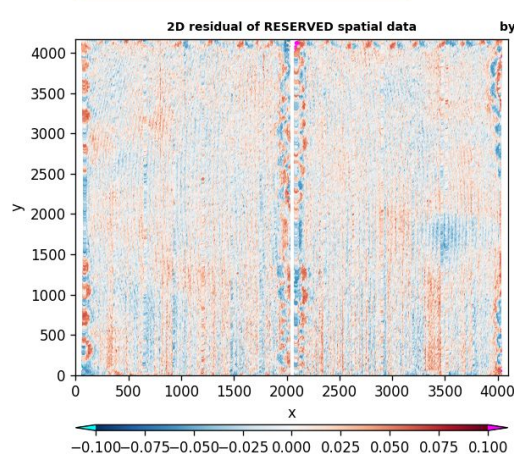
m1

yResid

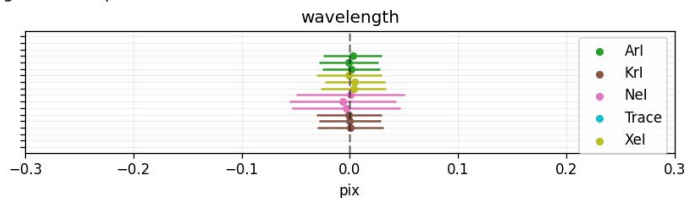
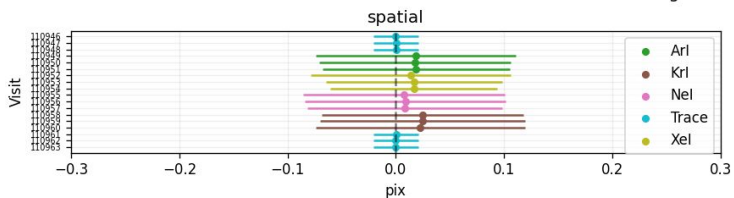


RESERVED:
 median = -0.00029
 rms = 0.03058
 soften = 0.02934
 fibers = 585
 Lines = 12366

USED:
 median = -0.00083
 rms = 0.03005
 soften = 0.02845
 fibers = 585
 Lines = 110387



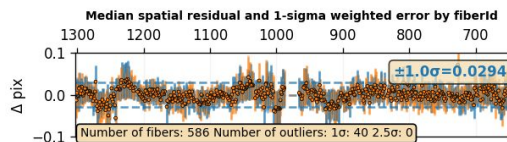
RESERVED median and 1-sigma weighted error per visit ccd='m1'



DetectorMap Residuals

m2

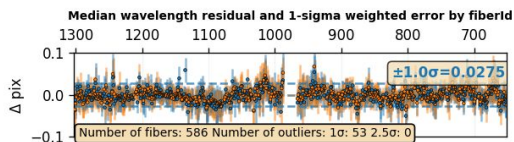
m2
xResid



RESERVED:
 median = -0.00007
 rms = 0.02943
 soften = 0.02659
 fibers = 586
 Lines = 1540023

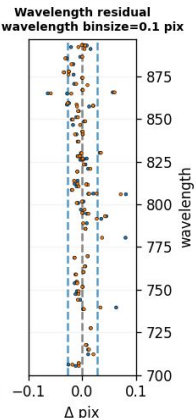
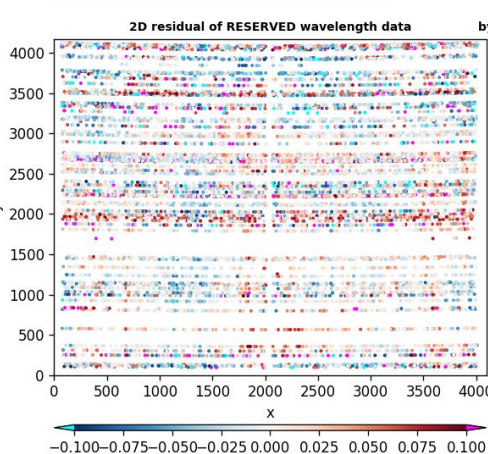
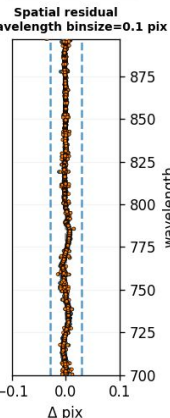
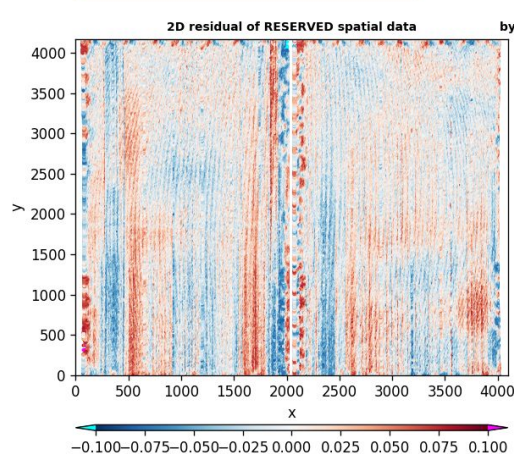
USED:
 median = -0.00006
 rms = 0.02930
 soften = 0.02646
 fibers = 586
 Lines = 1385878

m2
yResid

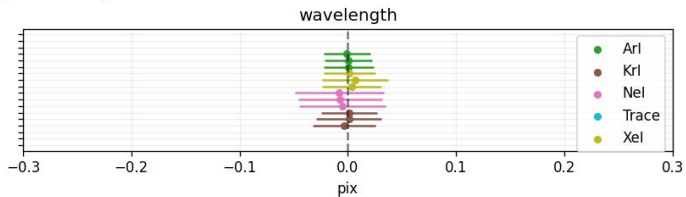
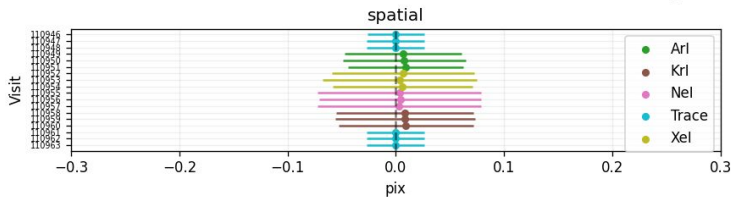


RESERVED:
 median = -0.00103
 rms = 0.02755
 soften = 0.02328
 fibers = 586
 Lines = 11710

USED:
 median = -0.00123
 rms = 0.02709
 soften = 0.02288
 fibers = 586
 Lines = 106147



RESERVED median and 1-sigma weighted error per visit ccd='m2'



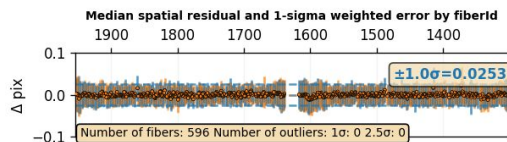
DetectorMap Residuals

m3

DetectorMap Residuals

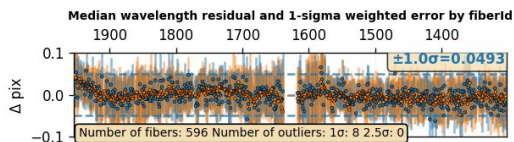
m3

m3
xResid

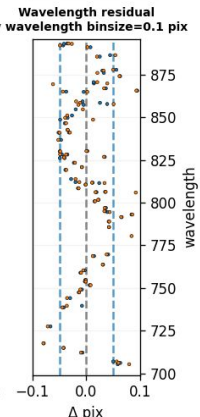
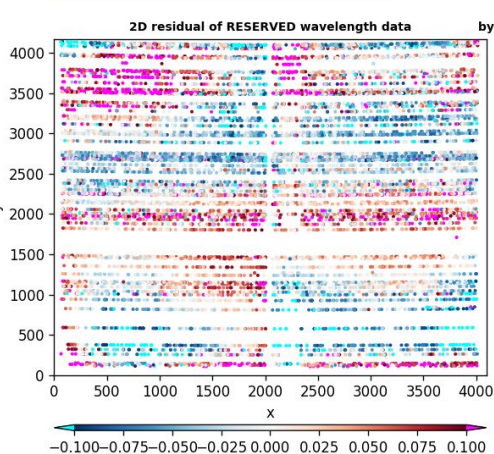
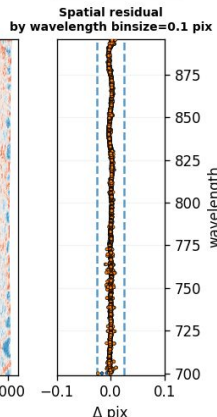
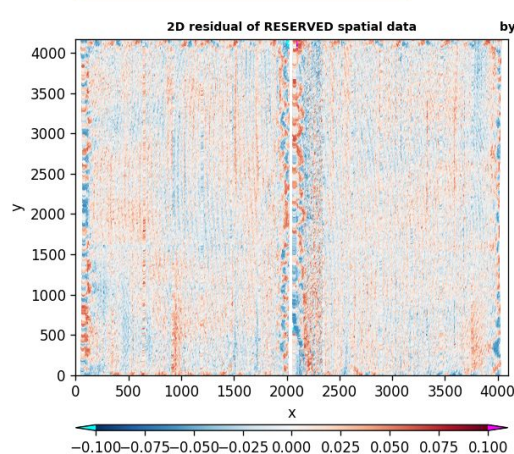


RESERVED:
 median = 0.00004
 rms = 0.02530
 soften = 0.02096
 fibers = 596
 lines = 1560088
 USED:
 median = 0.00007
 rms = 0.02530
 soften = 0.02079
 fibers = 596
 lines = 14031591

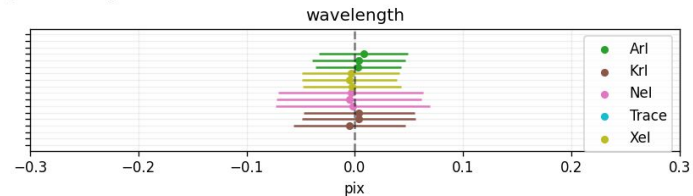
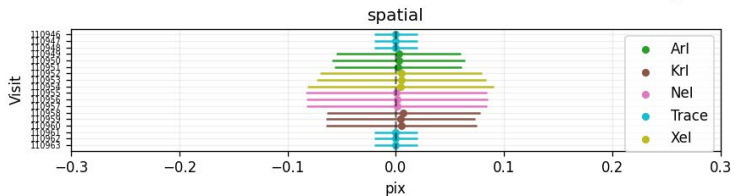
m3
yResid



RESERVED:
 median = -0.00055
 rms = 0.04932
 soften = 0.04816
 fibers = 596
 lines = 12046
 USED:
 median = -0.00064
 rms = 0.04952
 soften = 0.04914
 fibers = 596
 lines = 106829



RESERVED median and 1-sigma weighted error per visit ccd='m3'



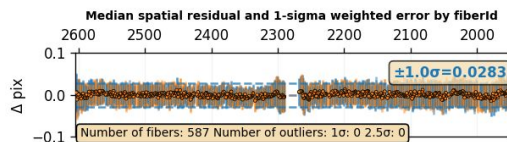
DetectorMap Residuals

m4

DetectorMap Residuals

m4

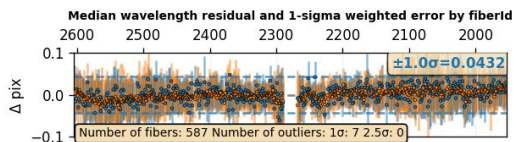
m4
xResid



RESERVED:
 median = 0.00021
 rms = 0.02831
 soften = 0.02384
 fibers = 587
 Lines = 1545645

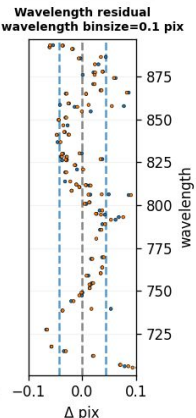
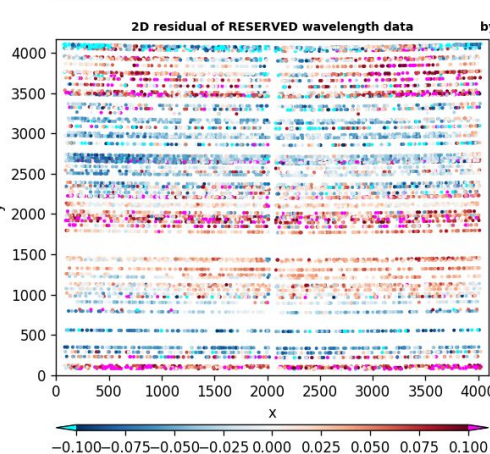
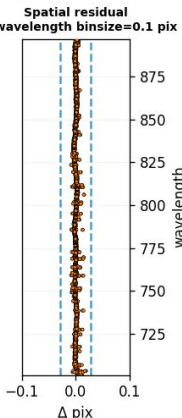
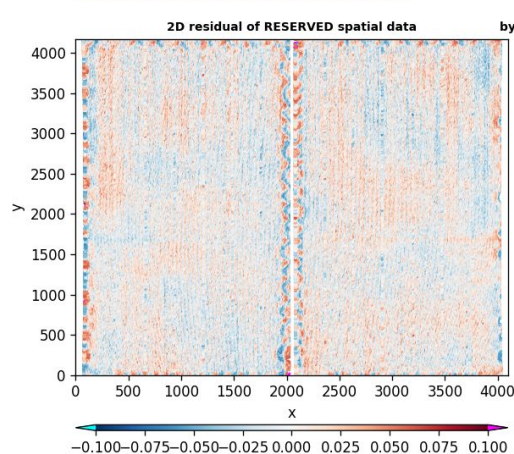
USED:
 median = 0.00023
 rms = 0.02824
 soften = 0.02356
 fibers = 587
 Lines = 13907663

m4
yResid

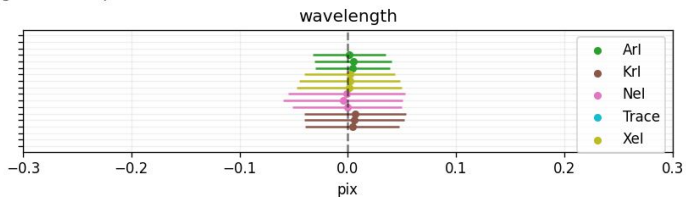
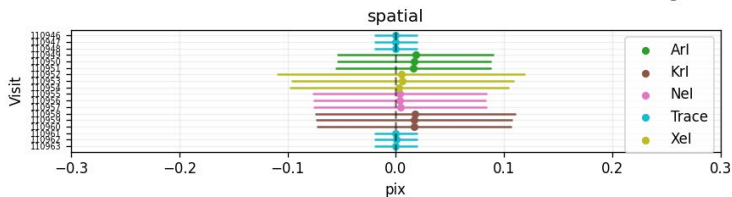


RESERVED:
 median = 0.00123
 rms = 0.04323
 soften = 0.03940
 fibers = 587
 Lines = 12100

USED:
 median = 0.00017
 rms = 0.04351
 soften = 0.03934
 fibers = 587
 Lines = 108334



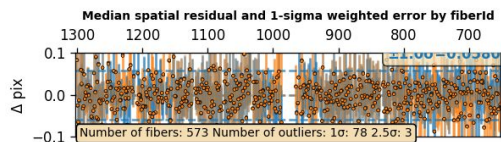
RESERVED median and 1-sigma weighted error per visit ccd='m4'



DetectorMap Residuals

n2
DetectorMap Residuals

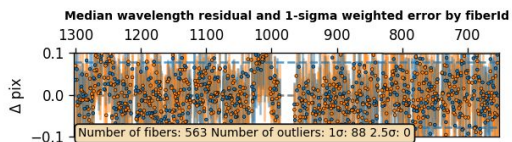
n2
xResid



RESERVED:
median = -0.0018
rms = 0.05799
soften = 0.06113
fibers = 573
lines = 849001

USED:
median = -0.00040
rms = 0.05797
soften = 0.06080
fibers = 574
lines = 7635913

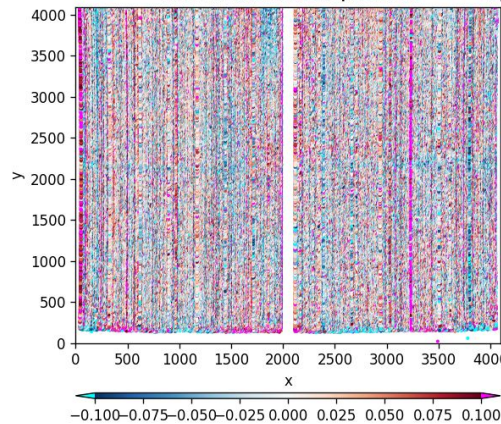
n2
yResid



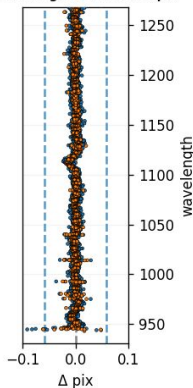
RESERVED:
median = -0.00161
rms = 0.07749
soften = 0.06446
fibers = 563
lines = 5922

USED:
median = -0.00181
rms = 0.07969
soften = 0.06654
fibers = 563
lines = 52370

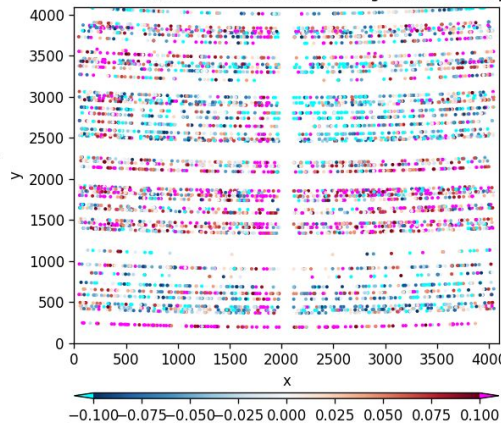
2D residual of RESERVED spatial data



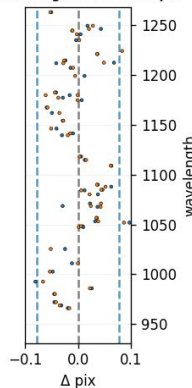
Spatial residual
by wavelength binsize=0.1 pix



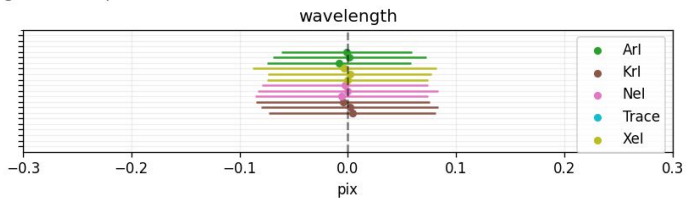
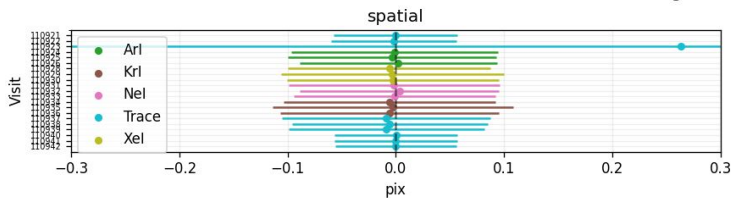
2D residual of RESERVED wavelength data



Wavelength residual
by wavelength binsize=0.1 pix



RESERVED median and 1-sigma weighted error per visit ccd='n2'



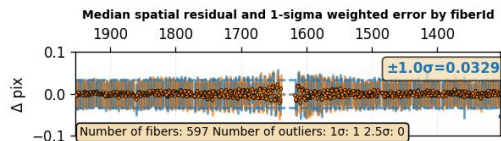
DetectorMap Residuals

n3

DetectorMap Residuals

n3

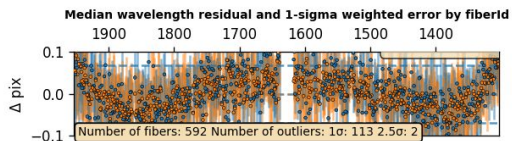
n3
xResid



RESERVED:
 median = -0.00004
 rms = 0.03290
 soften = 0.03342
 fibers = 597
 lines = 947202

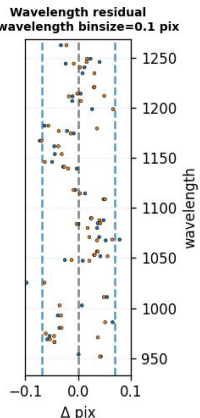
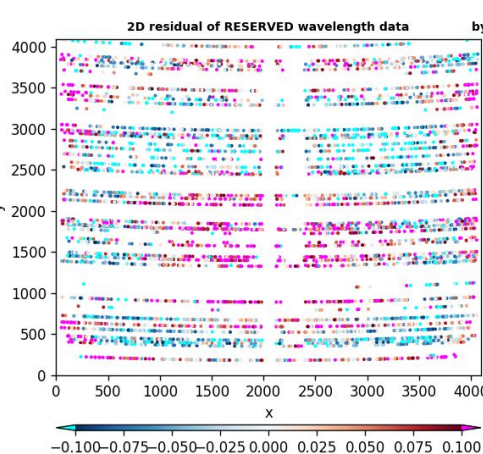
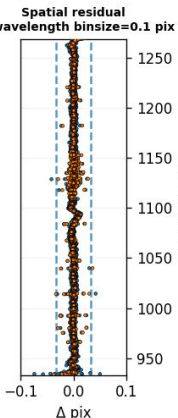
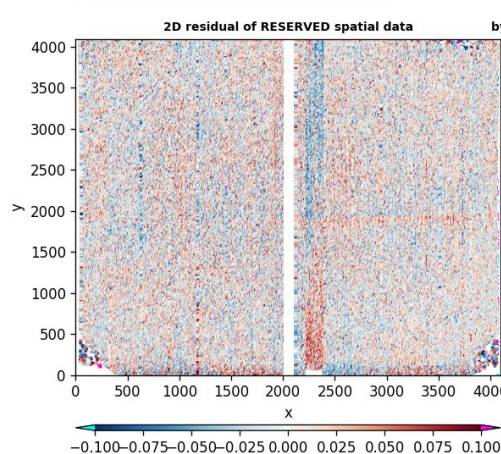
USED:
 median = -0.00002
 rms = 0.03295
 soften = 0.03341
 fibers = 597
 lines = 8521952

n3
yResid



RESERVED:
 median = -0.00148
 rms = 0.06824
 soften = 0.06634
 fibers = 592
 lines = 5545

USED:
 median = -0.00311
 rms = 0.06760
 soften = 0.06501
 fibers = 596
 lines = 49185



RESERVED median and 1-sigma weighted error per visit ccd='n3'

