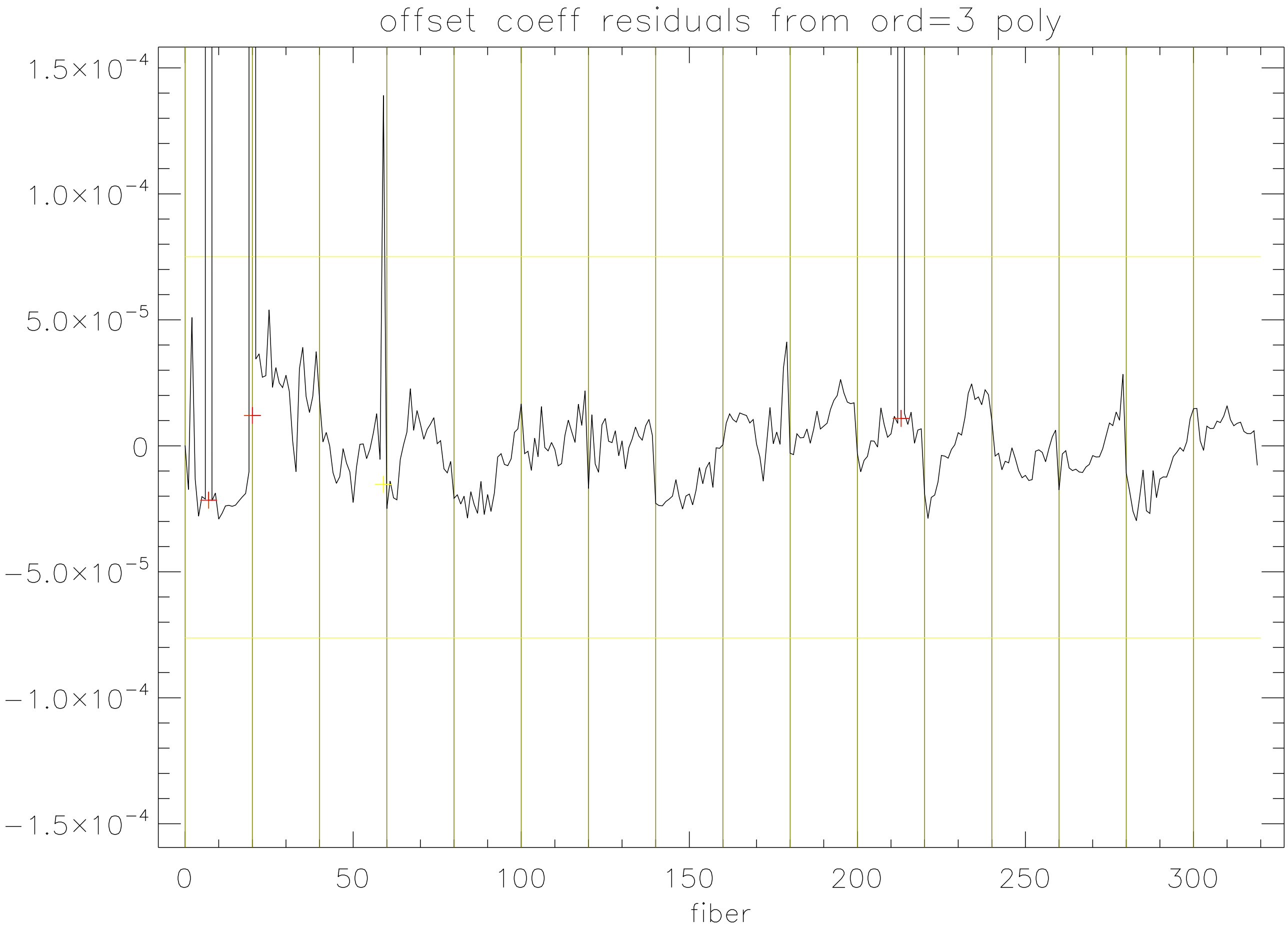
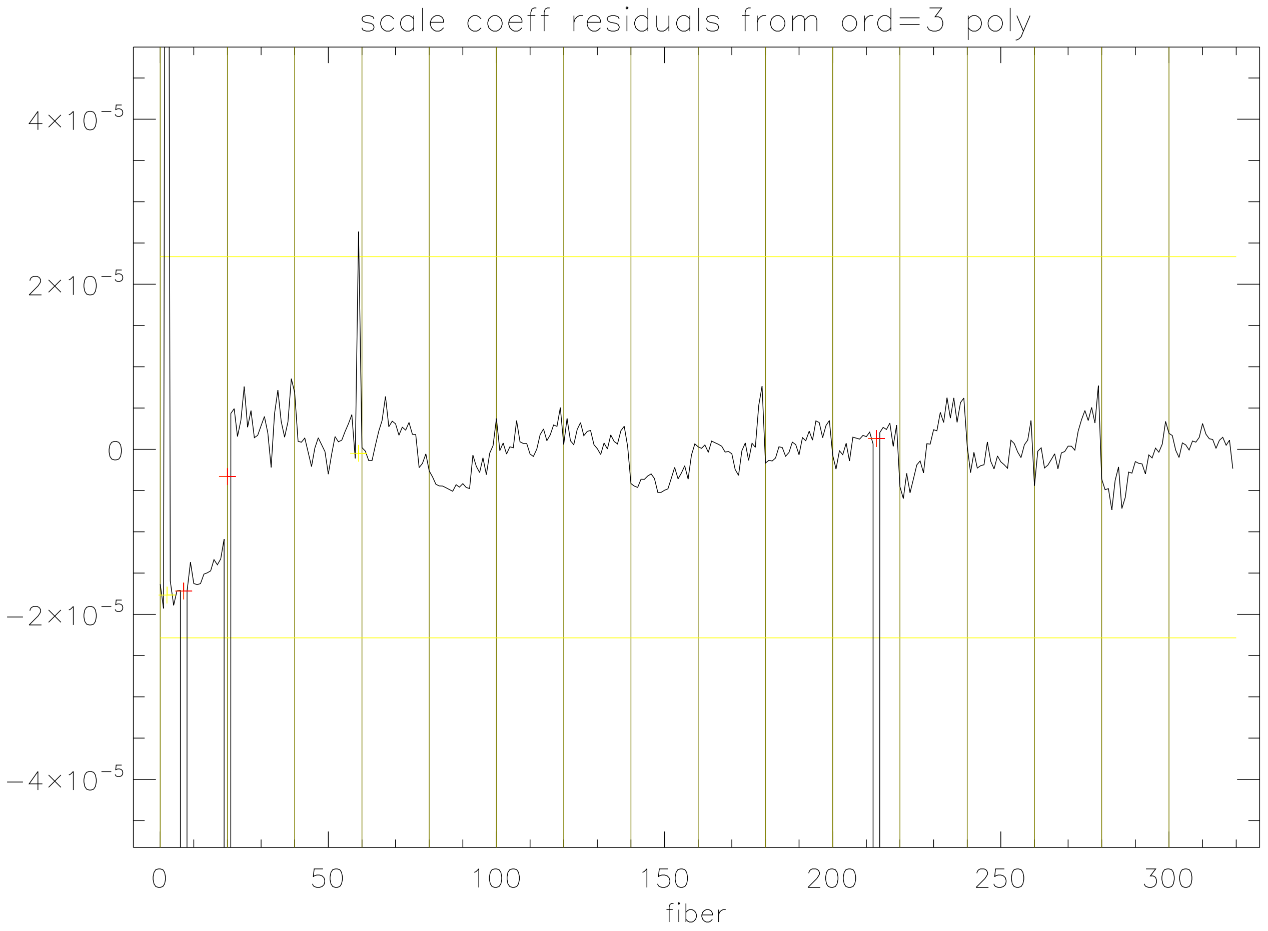
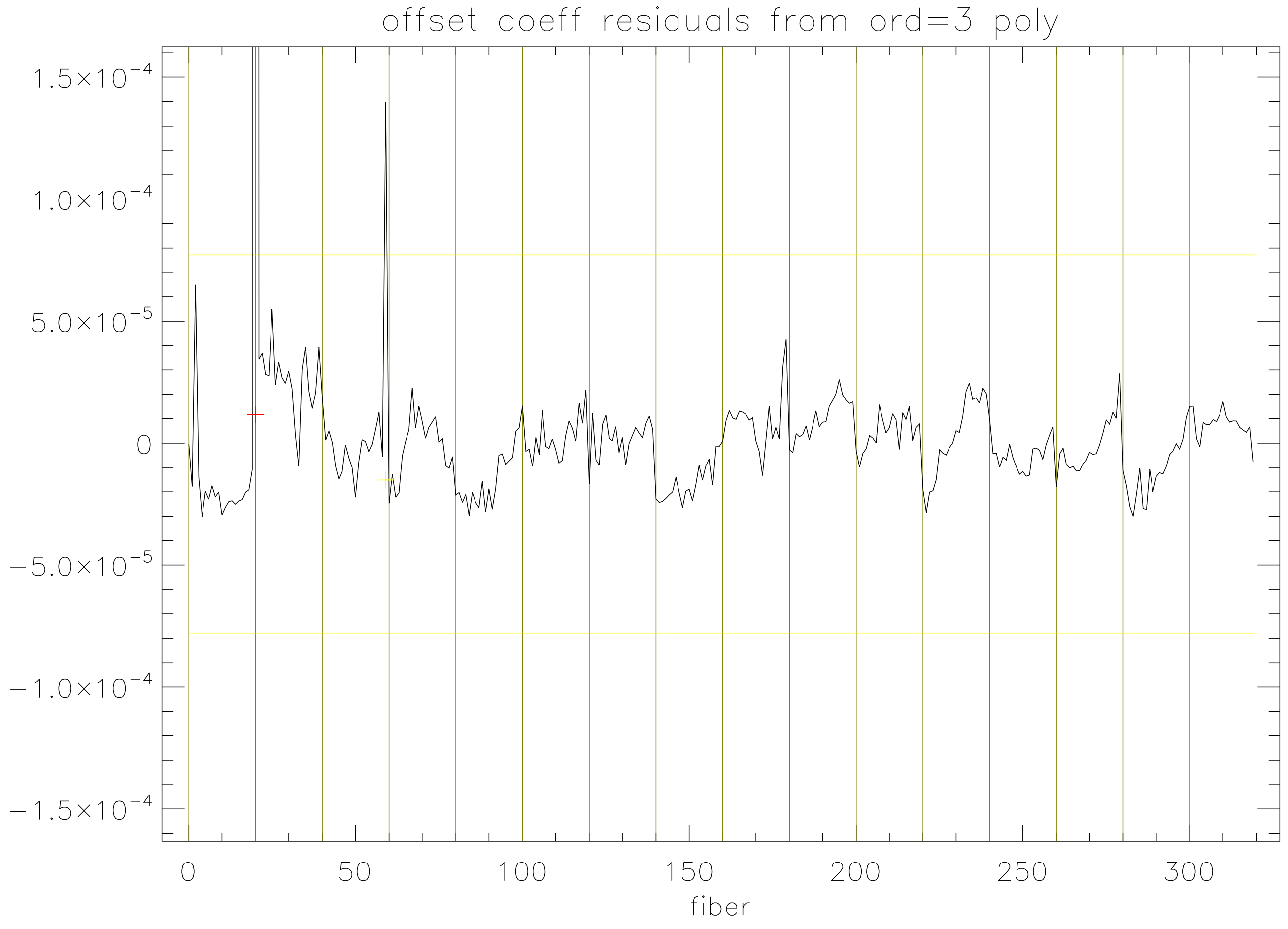
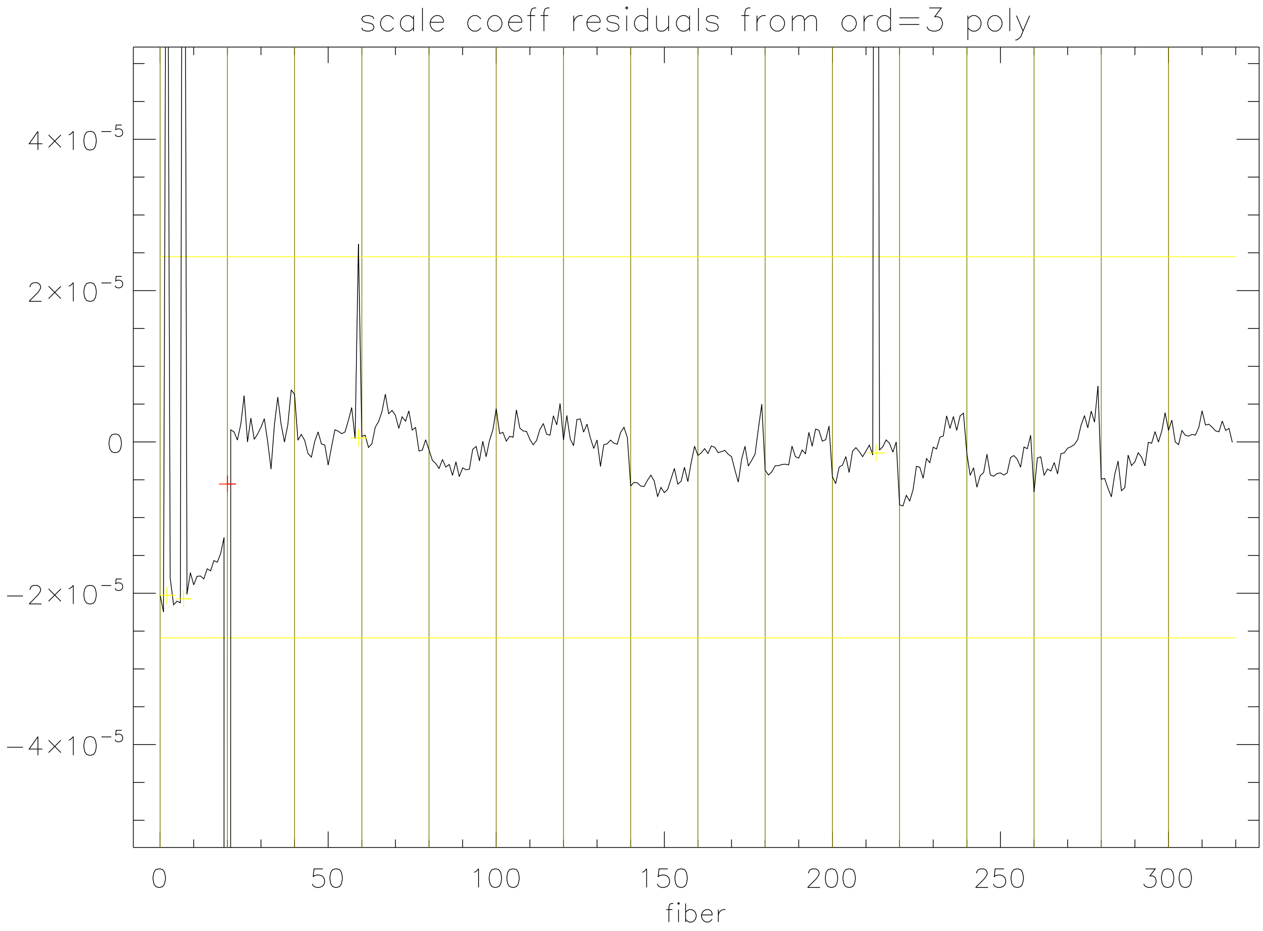
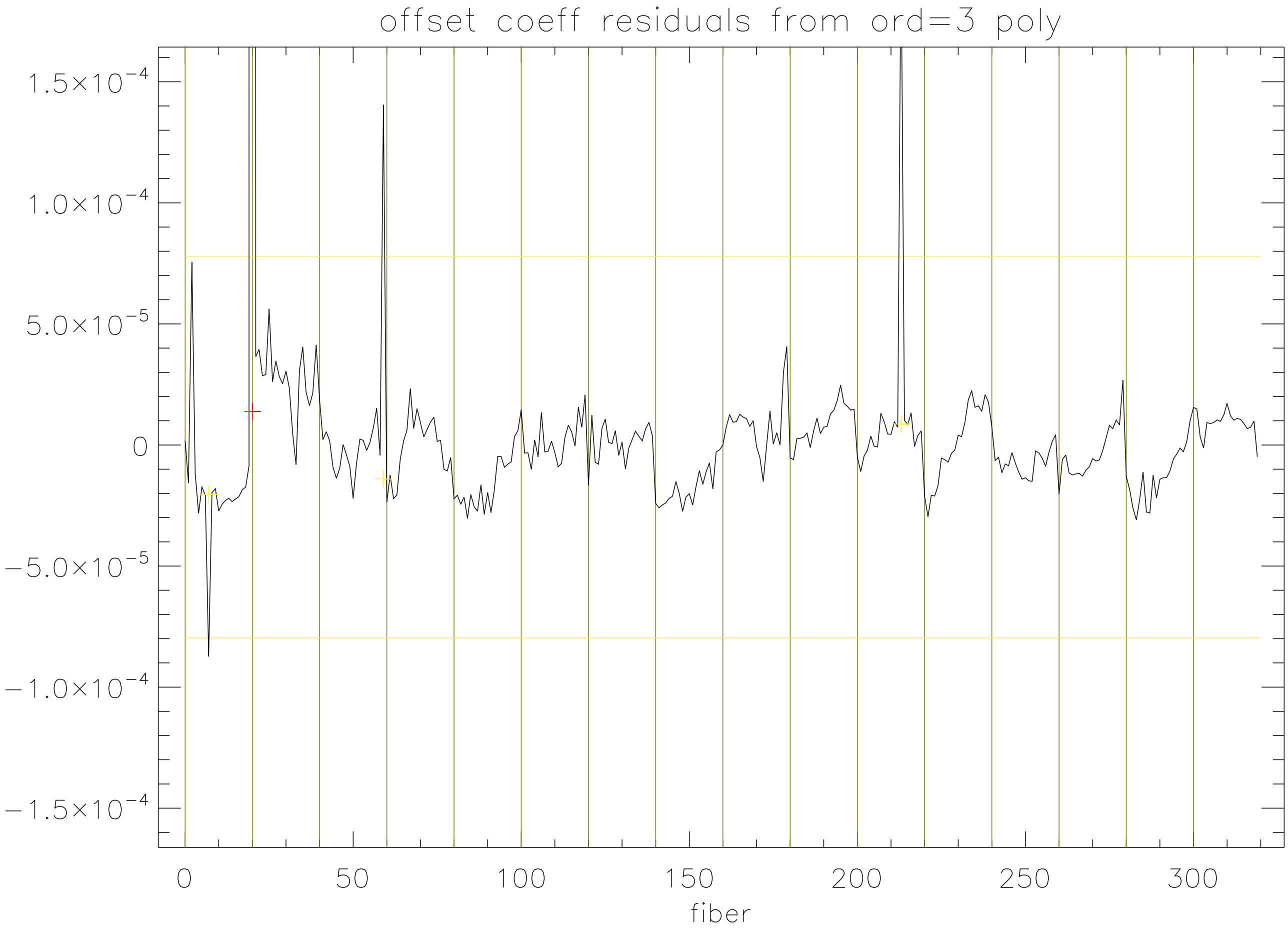
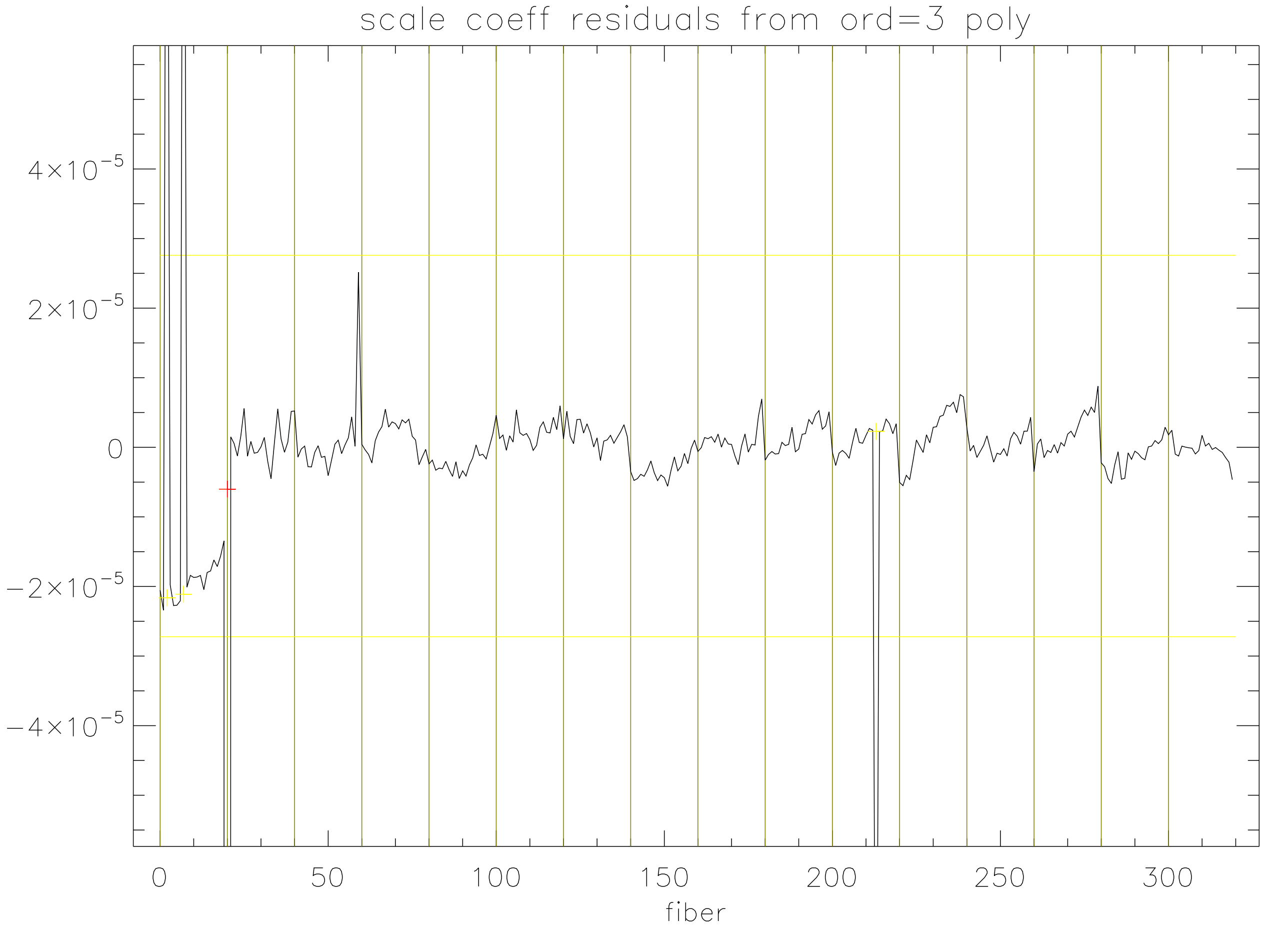

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

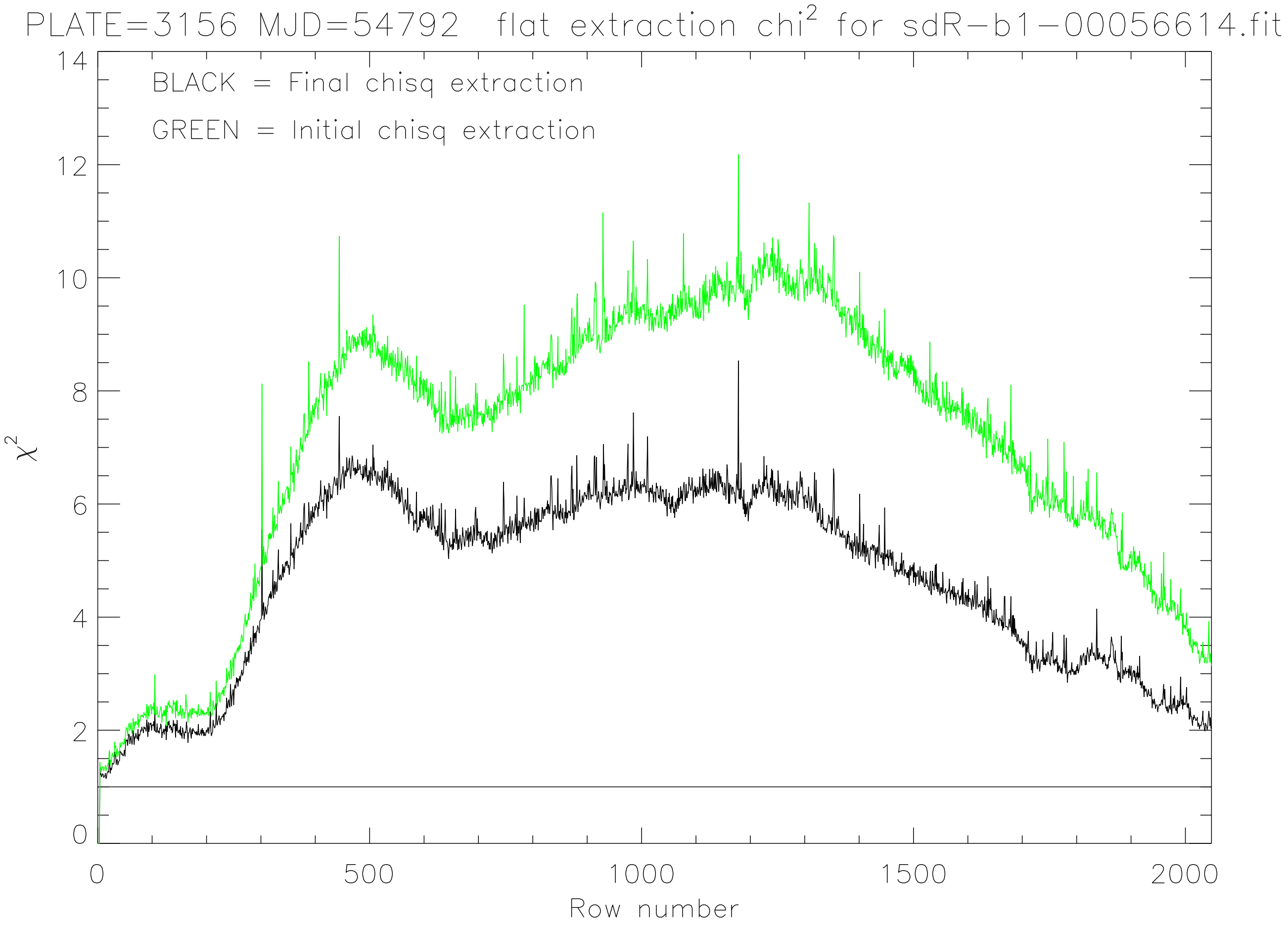

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
-2×10^{-5}
-4×10^{-5}
0
50
100
150
200
250
300
fiber

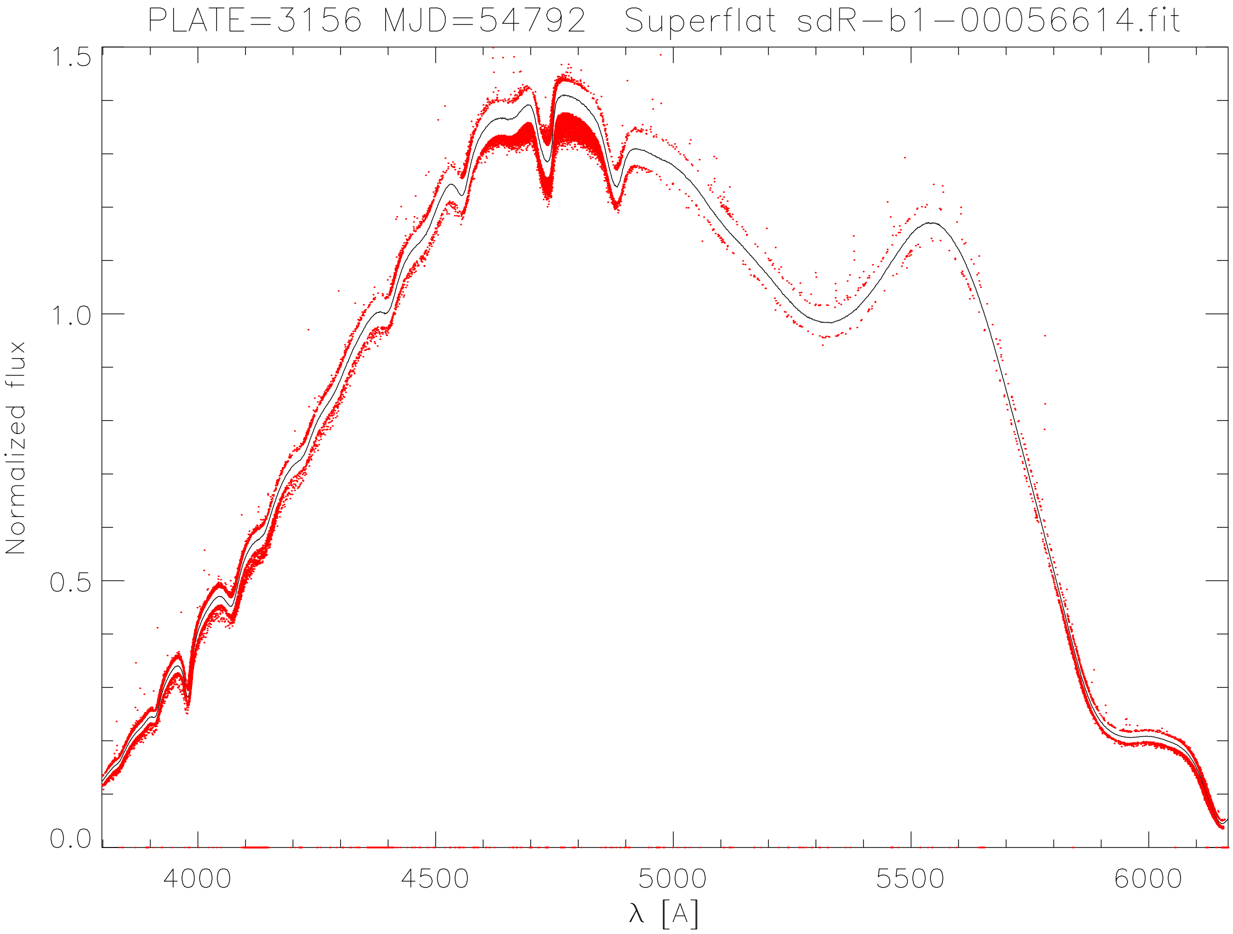

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

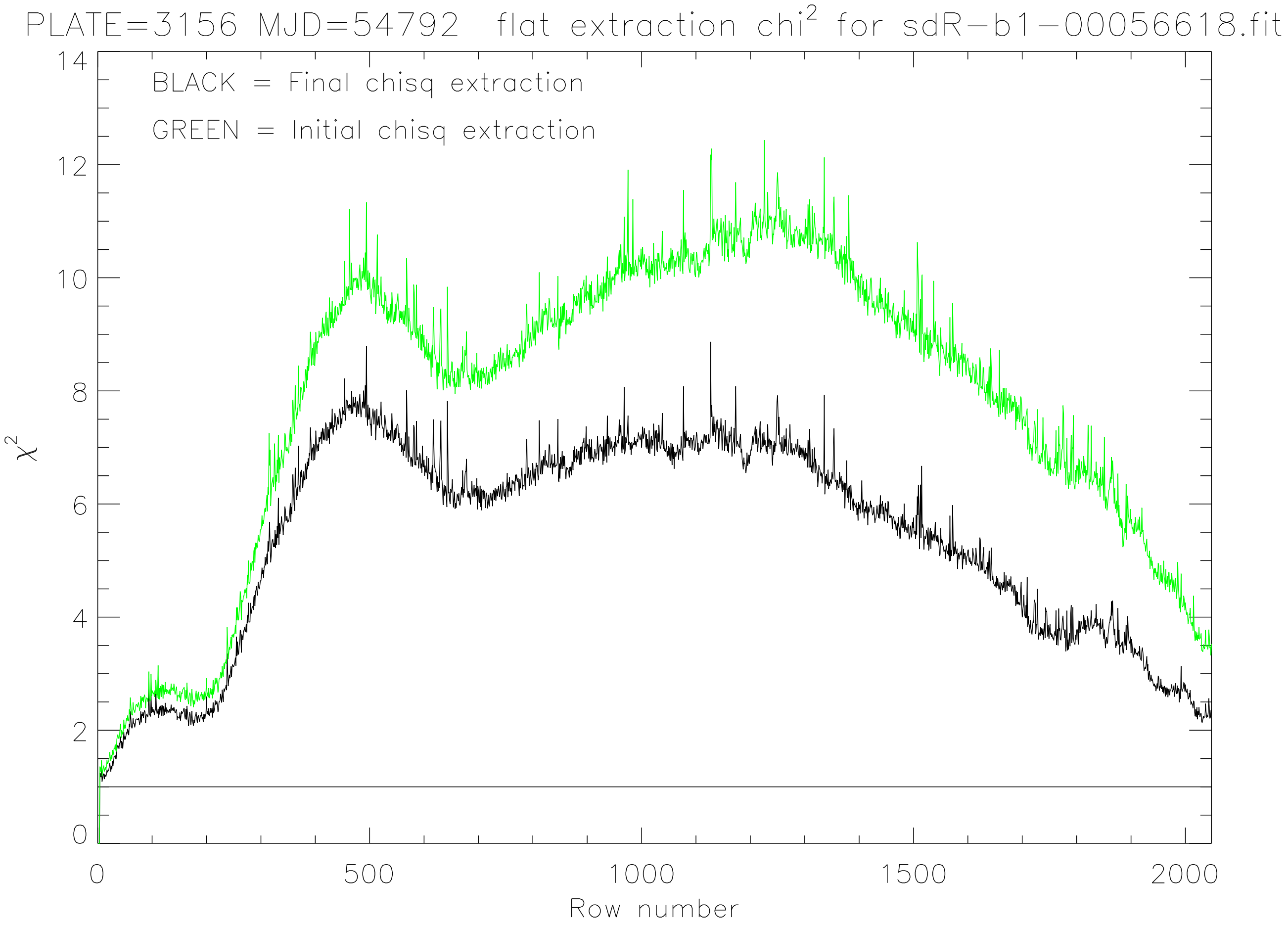

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

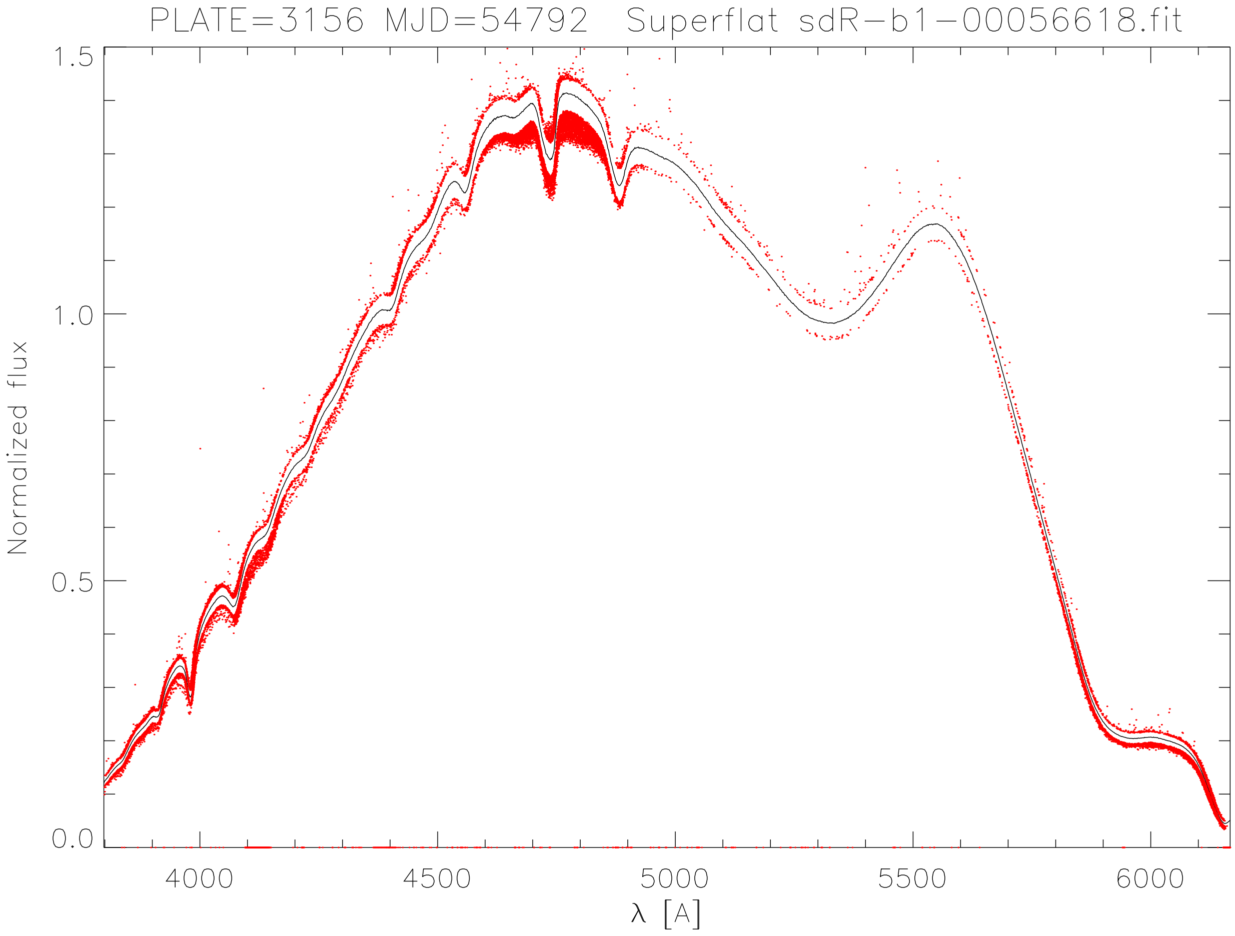

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

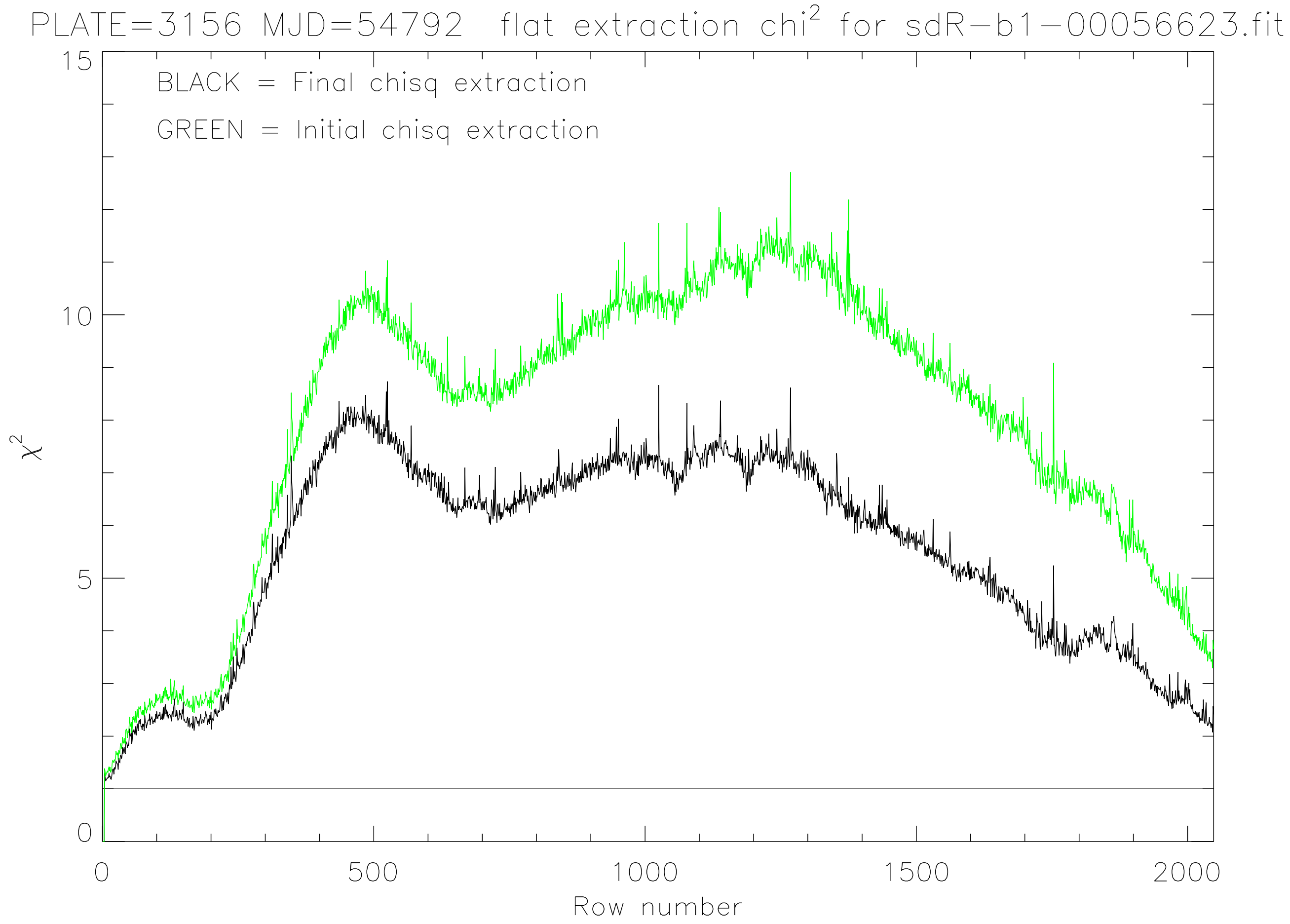

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

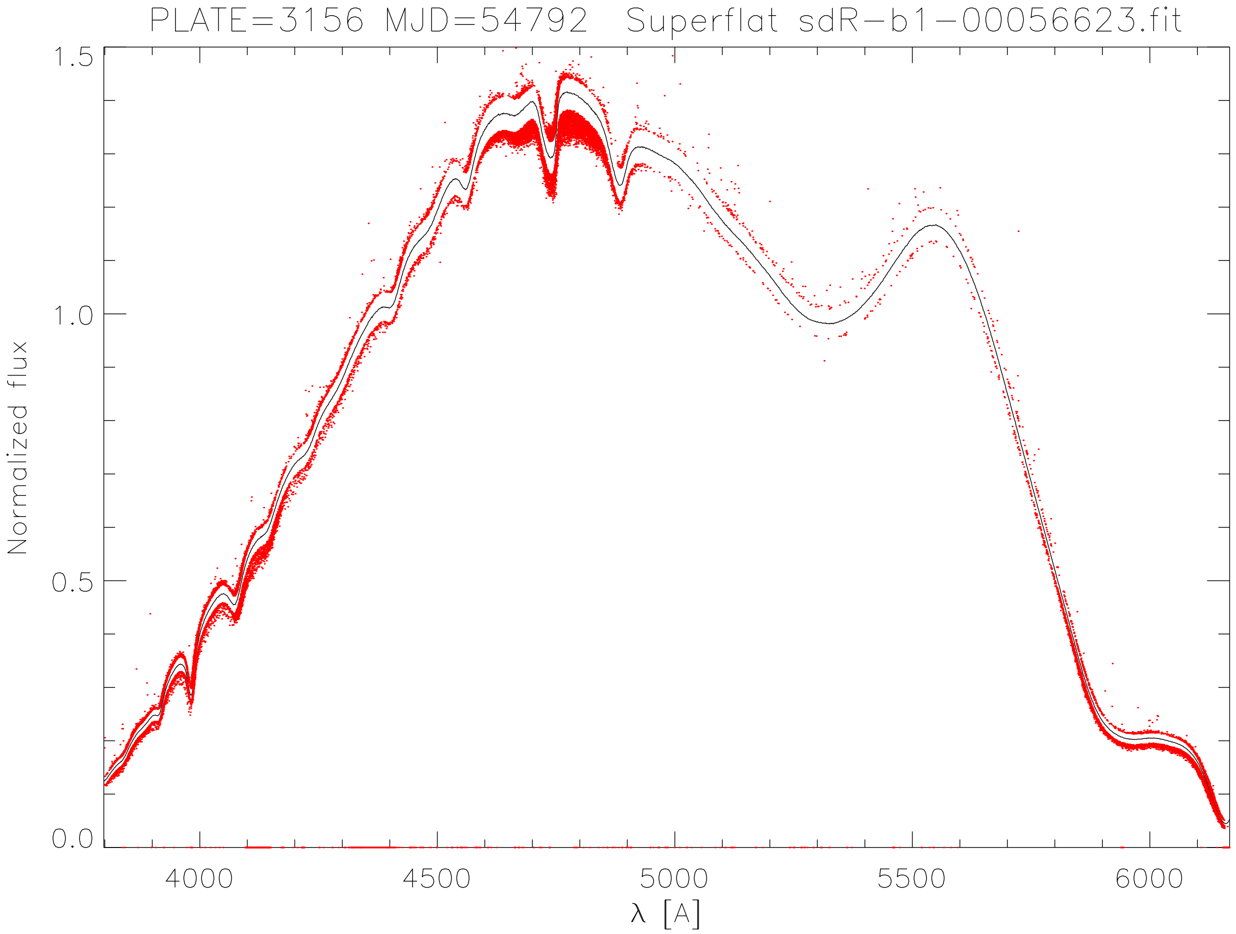

PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-b1-00056614.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

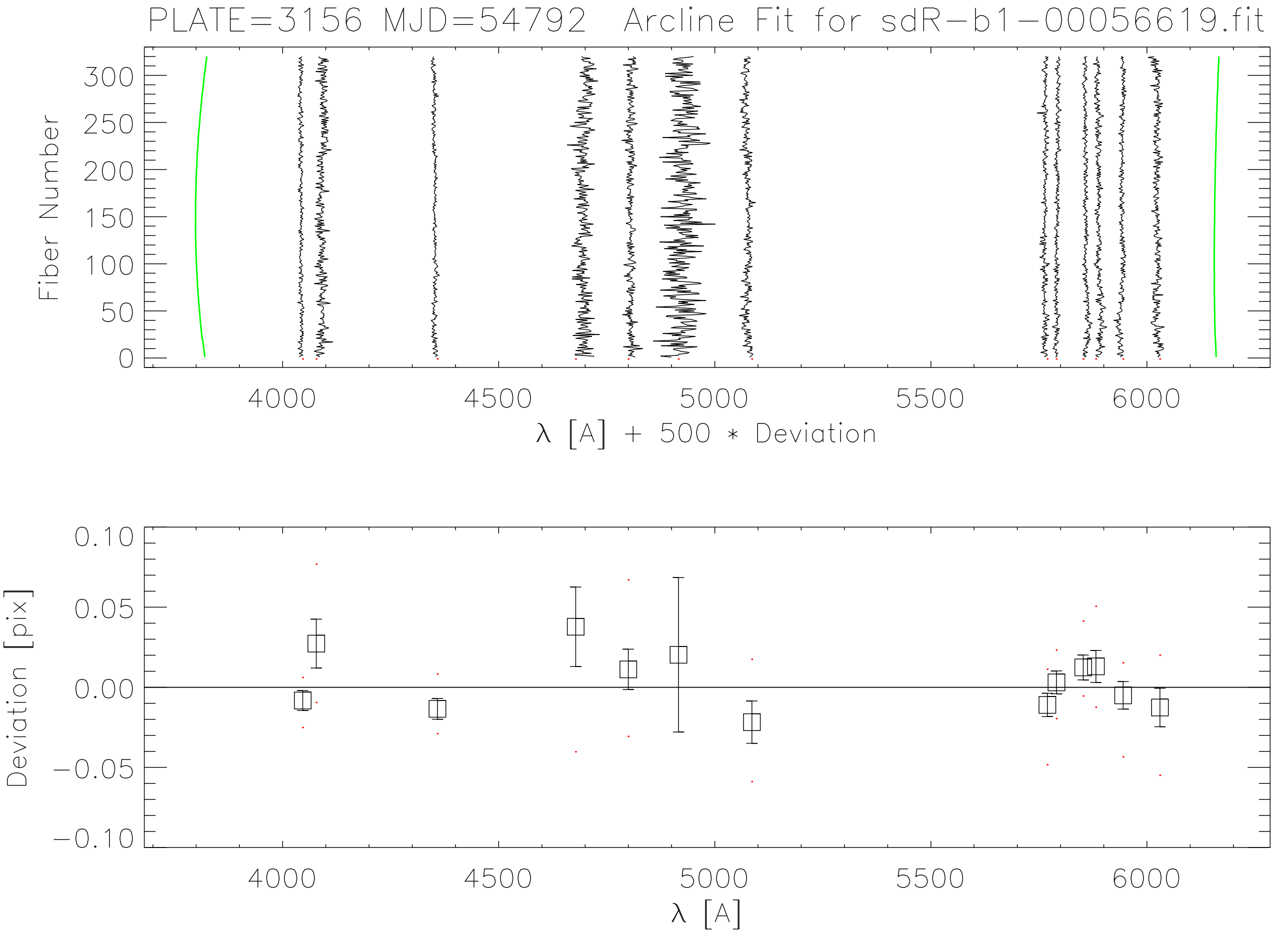

PLATE=3156 MJD=54792 Superflat sdR-b1-00056614.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]


PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-b1-00056618.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number


PLATE=3156 MJD=54792 Superflat sdR-b1-00056618.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

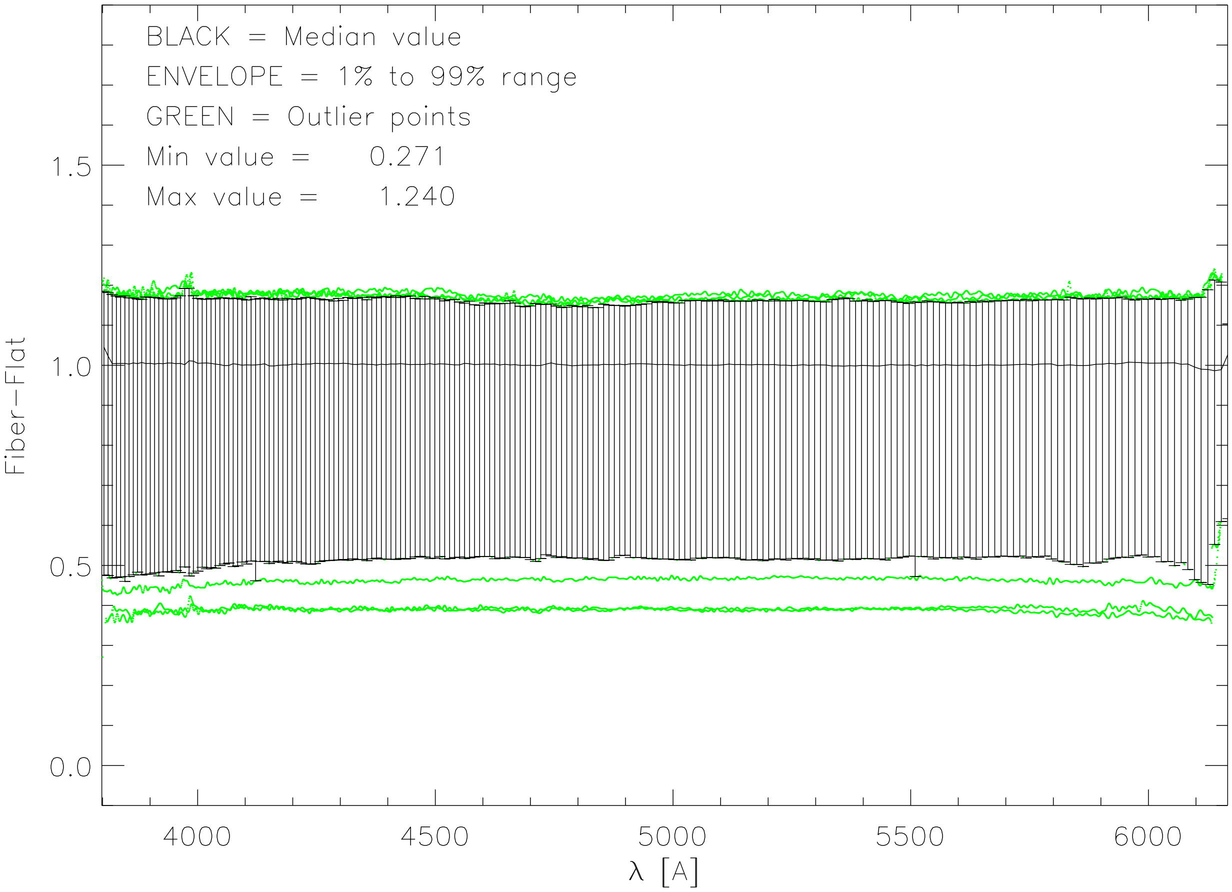

PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-b1-00056623.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number


PLATE=3156 MJD=54792 Superflat sdR-b1-00056623.fit
1.5
1.0
0.5
0.0
Normalized flux
4000
4500
5000
5500
6000
λ [A]

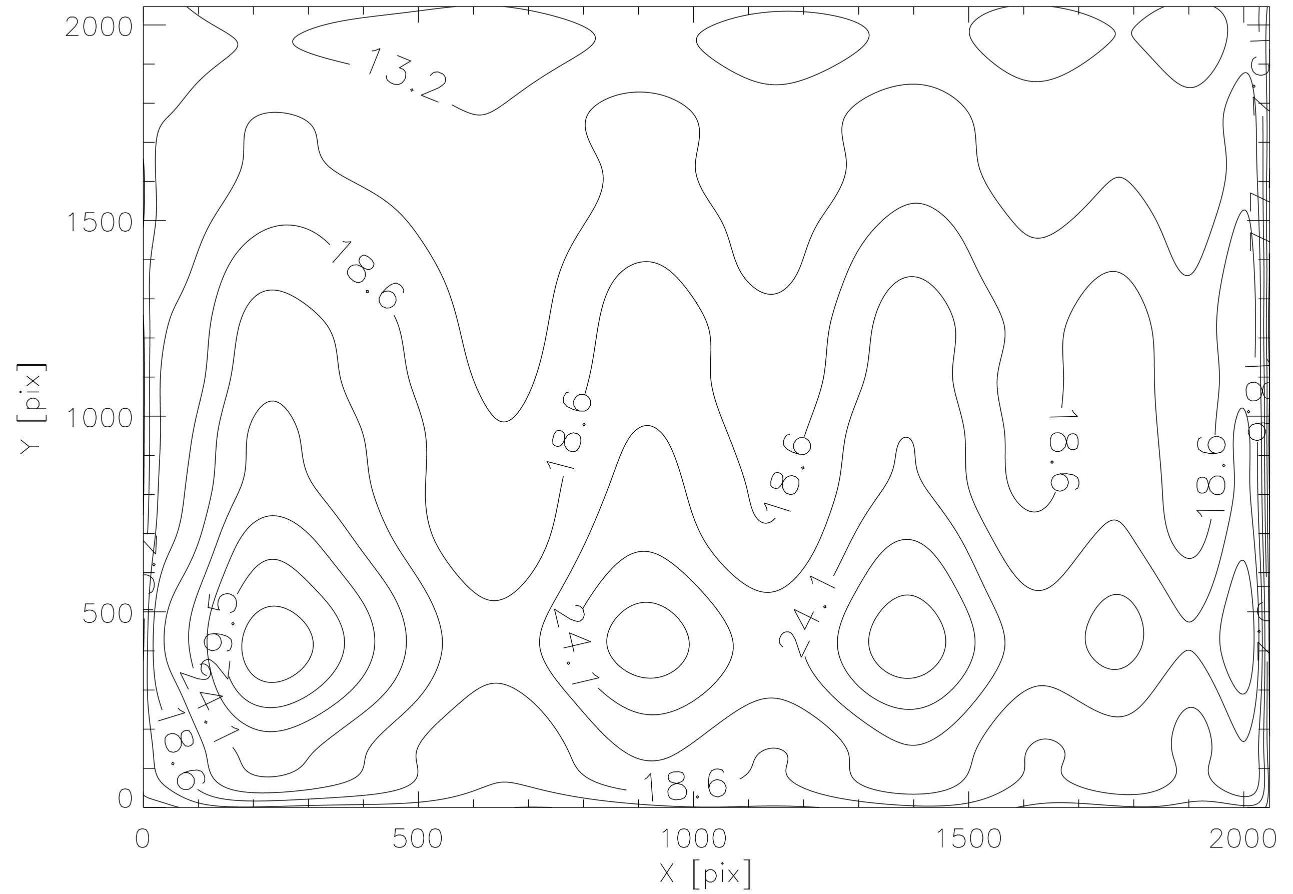


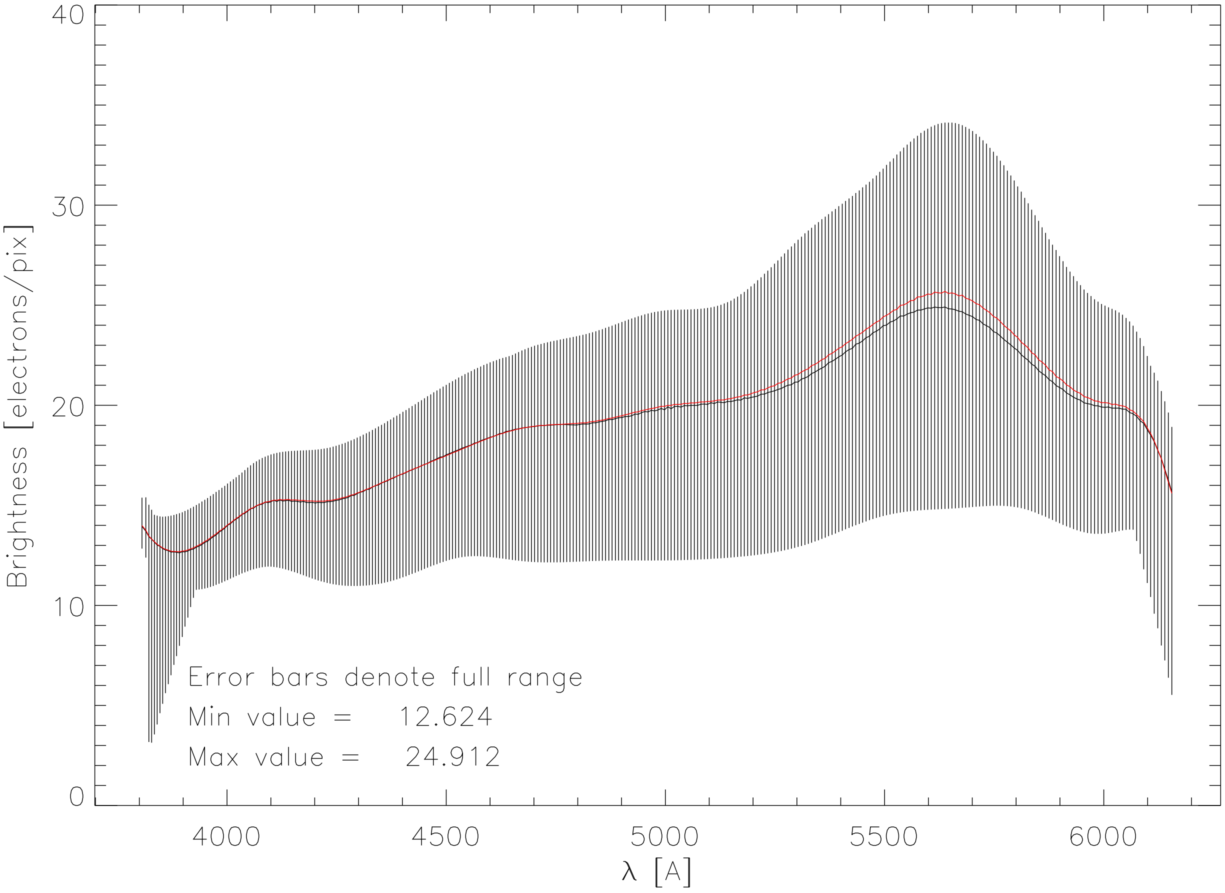
Tue Mar 9 18:06:56 2010

PLATE=3156 MJD=54792 Fiber−Flats for sdR−b1−00056618.fit



Tue Mar 9 18:07:03 2010


PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056616.f
Y [pix]
X [pix]
0
500
1000
1500
2000
13.2
18.6
24.1
29.5

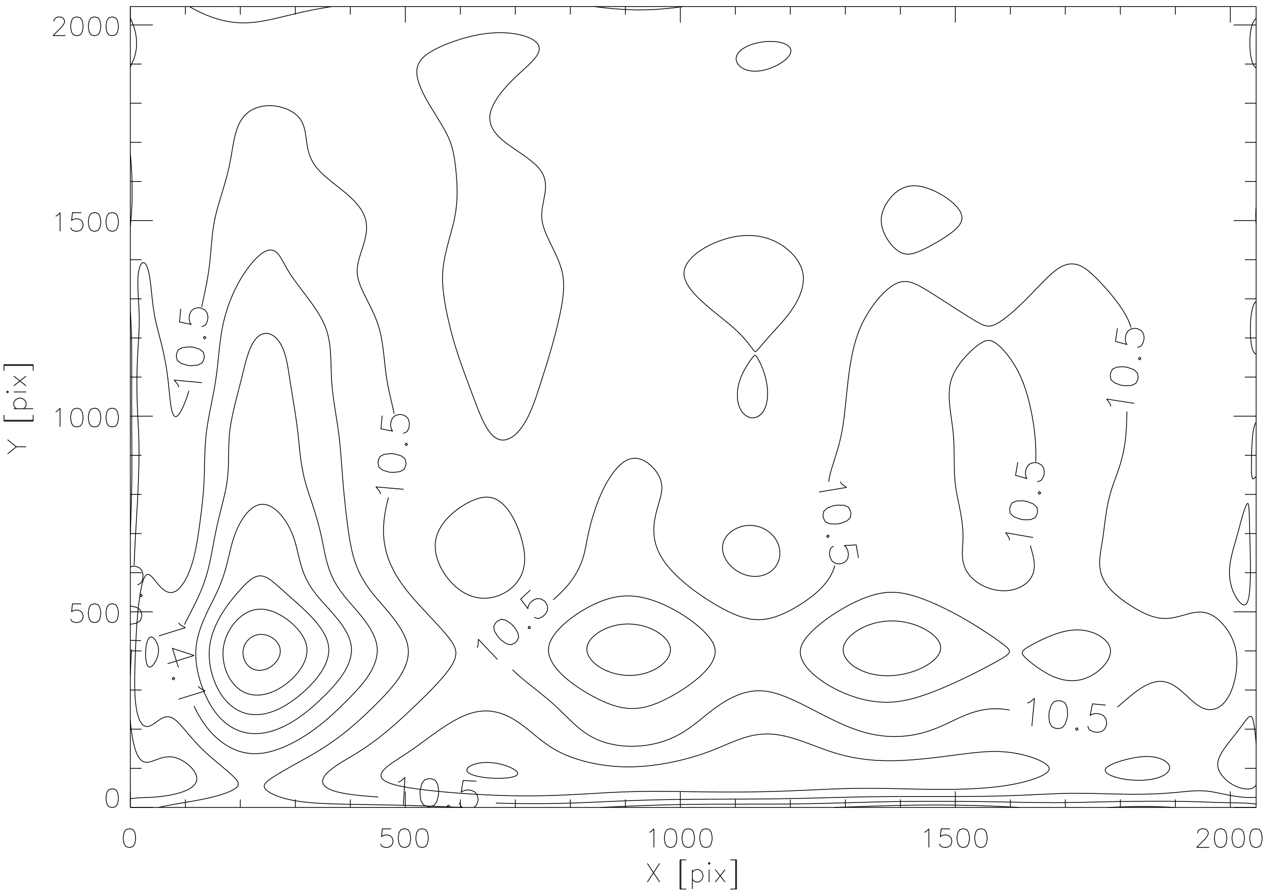

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056616.f

Error bars denote full range

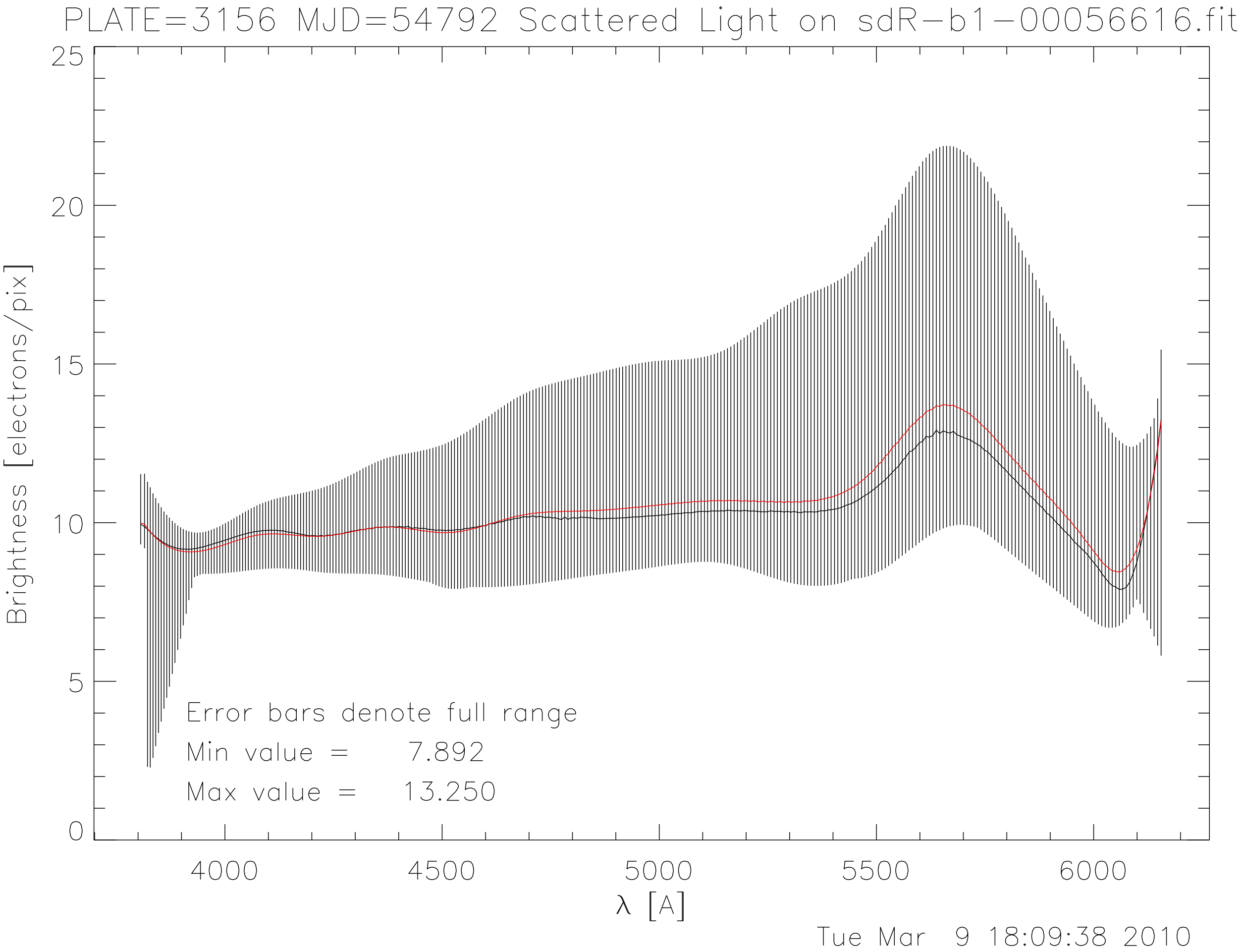
Min value = 12.624

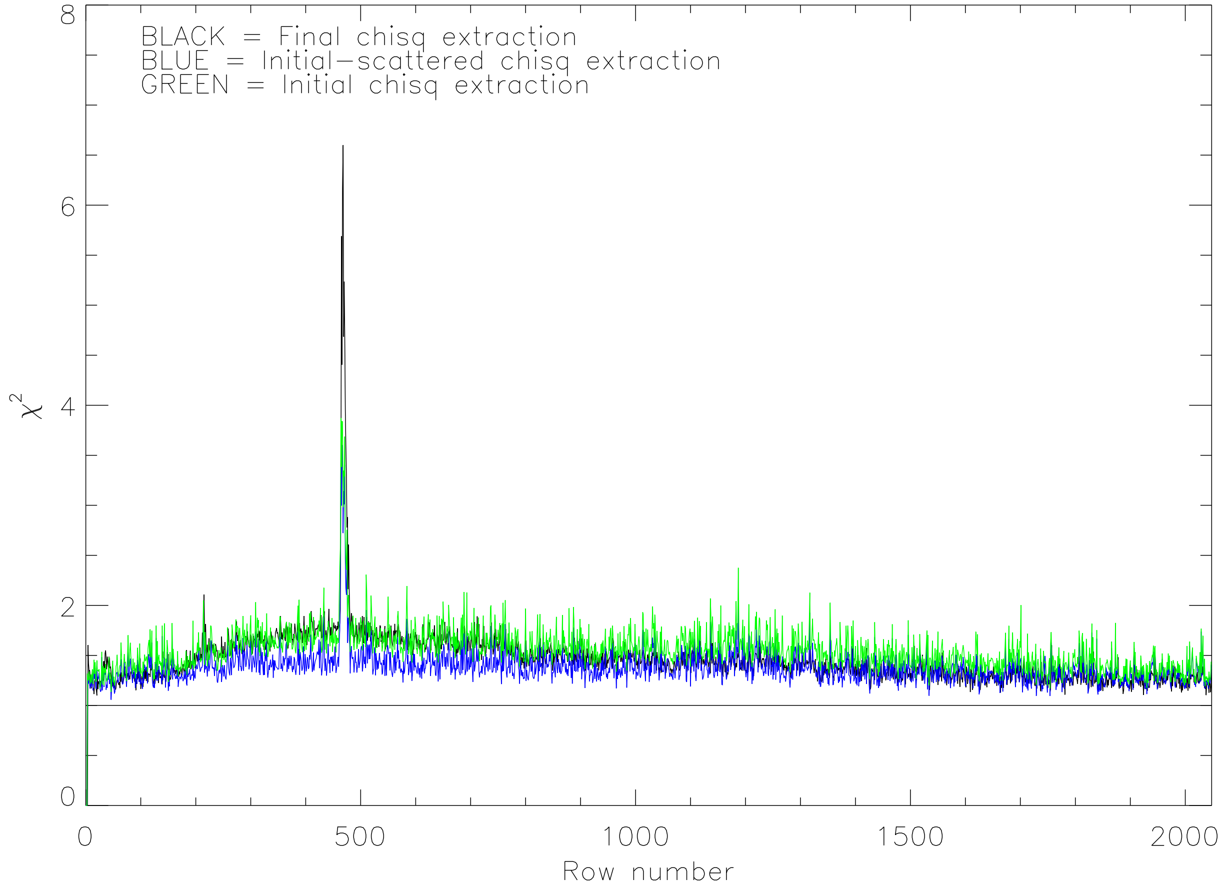
Max value = 24.912

Tue Mar 9 18:07:39 2010

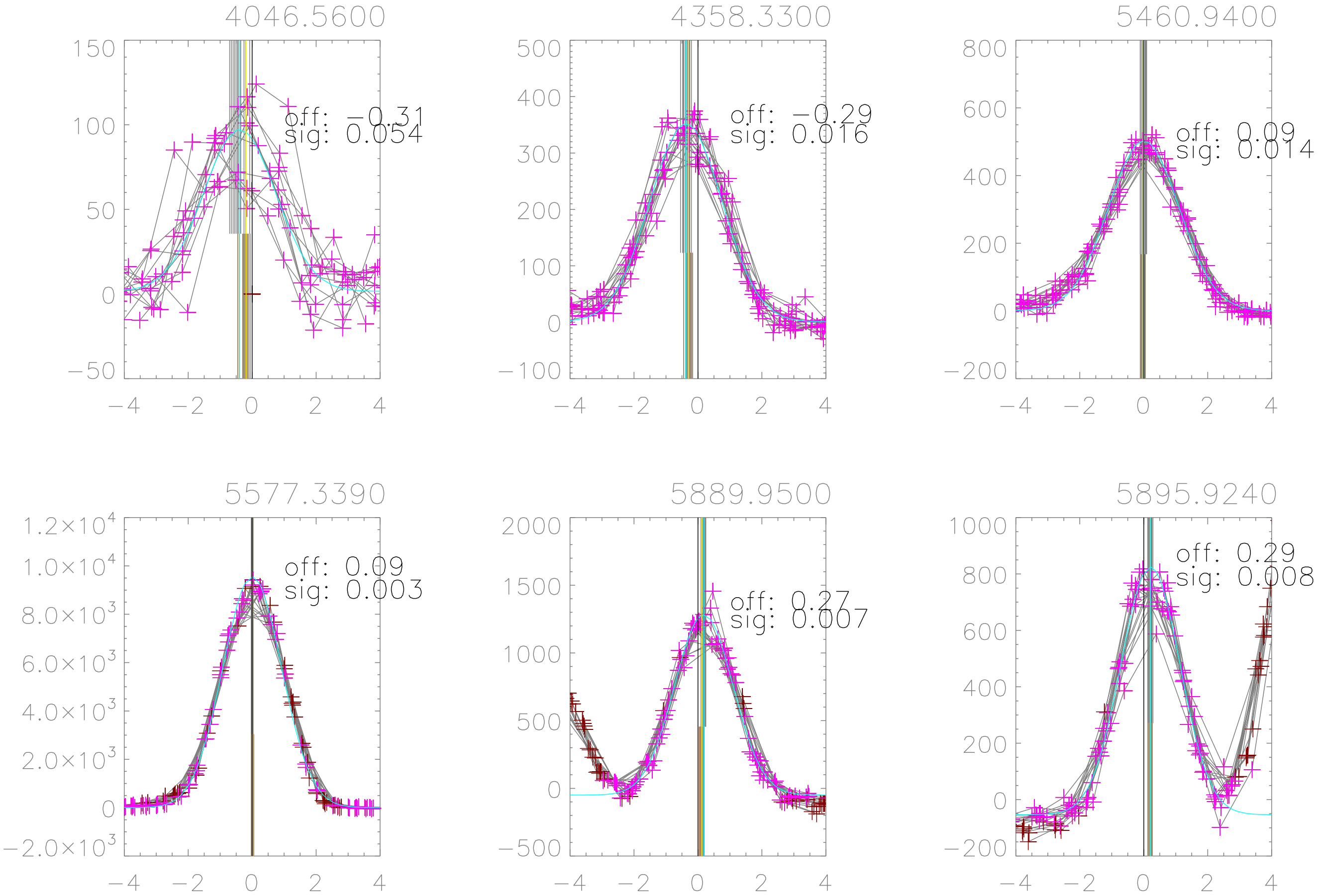


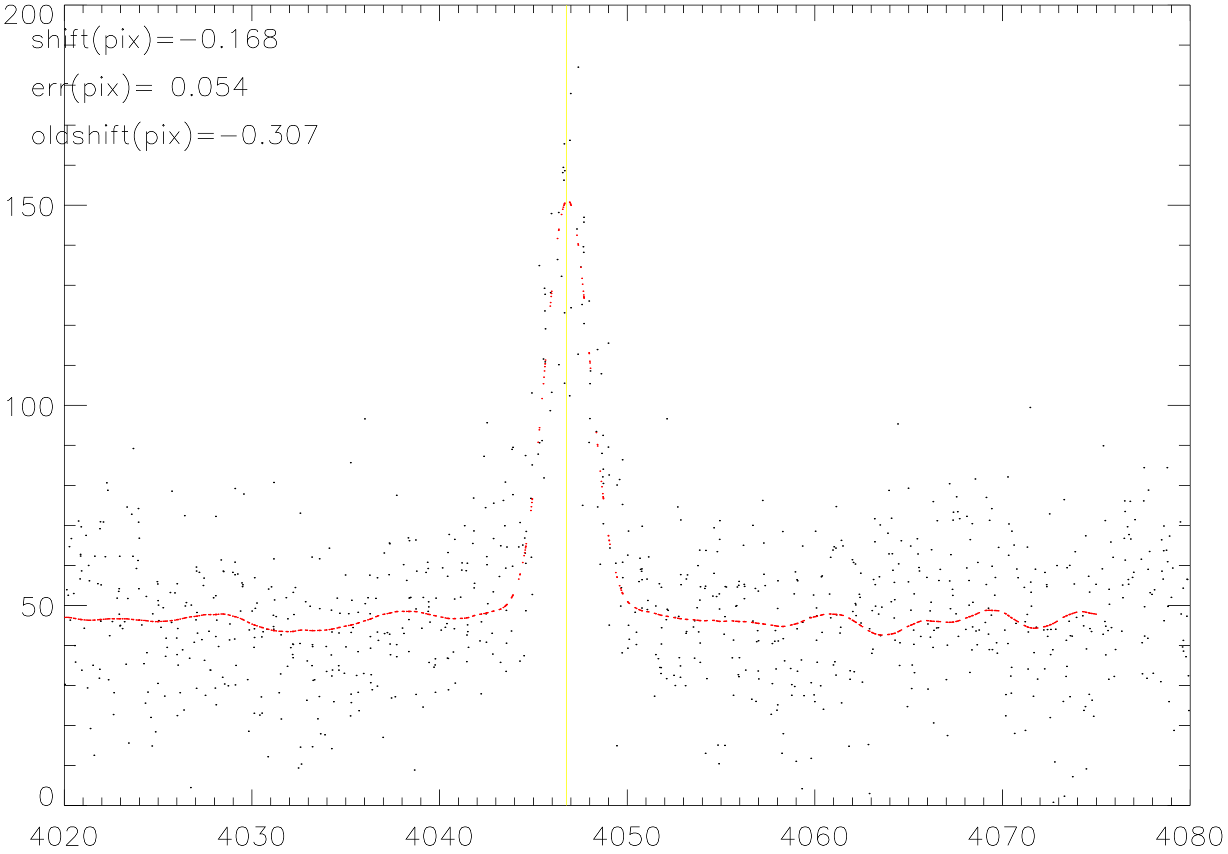
PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056616.fit

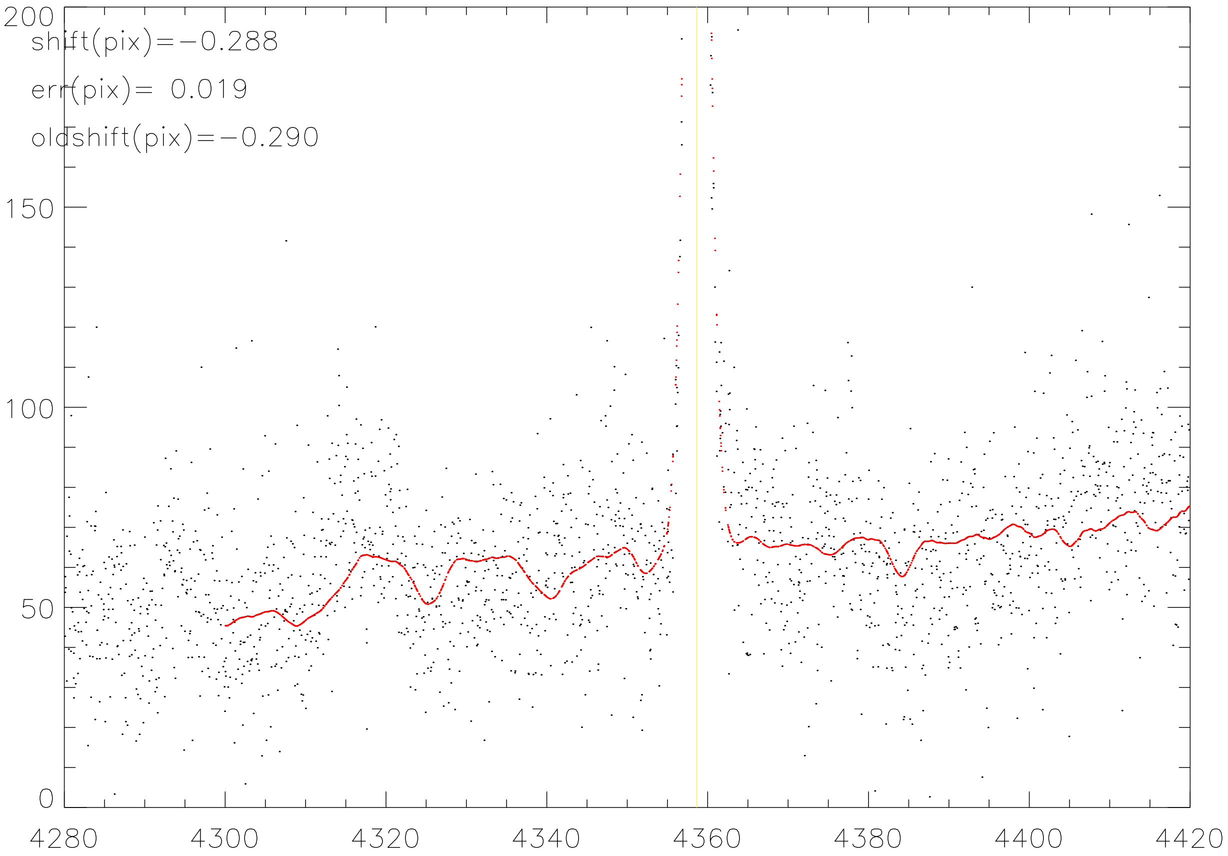

PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056616.fit
Brightness [electrons/pix]
0
5
10
15
20
25
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.892
Max value = 13.250
Tue Mar 9 18:09:38 2010

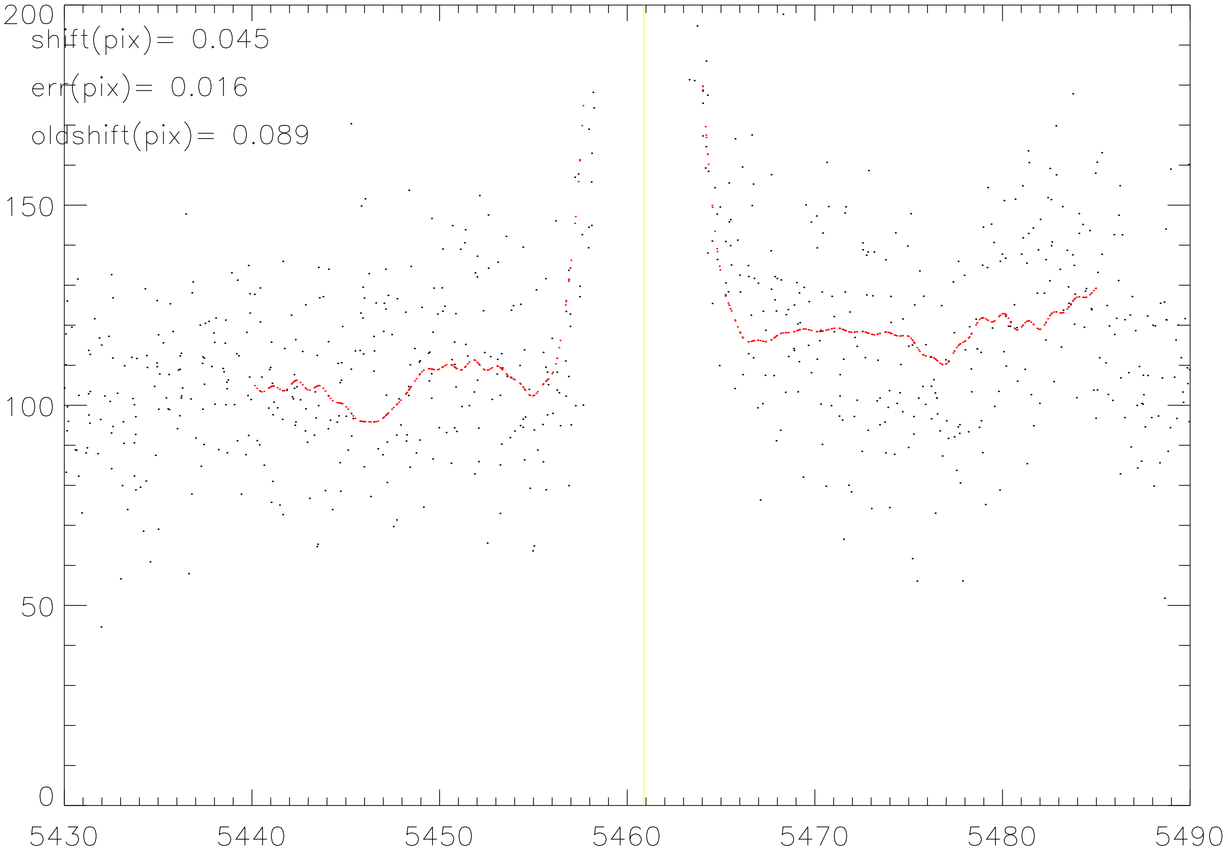


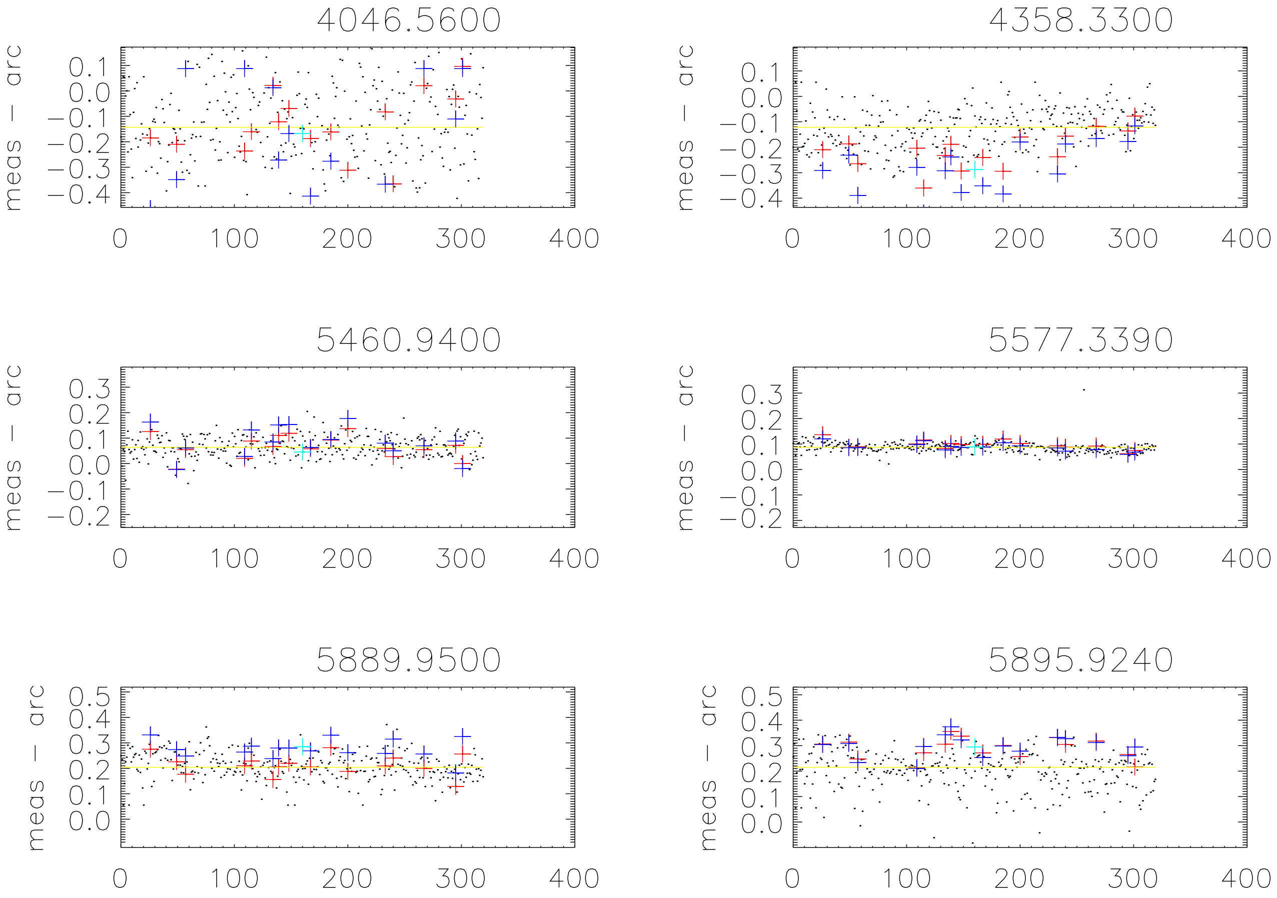
PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b1-00056616.fit

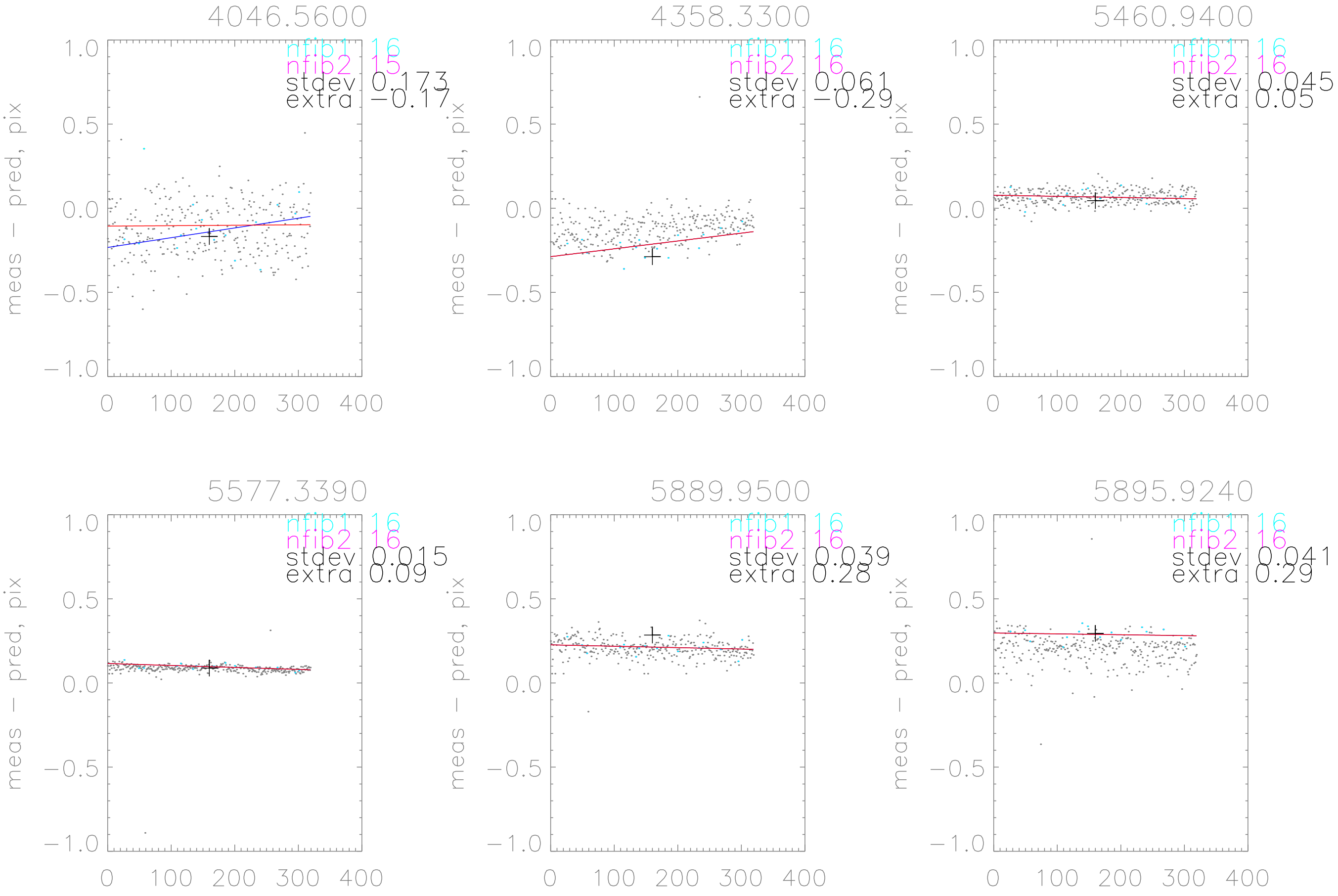

4046.5600
off: −0.31
sig: 0.054
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.29
sig: 0.016
500
400
300
200
100
0
−100
5460.9400
off: 0.09
sig: 0.014
800
600
400
200
0
−200
5577.3390
off: 0.09
sig: 0.003
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
−2.0×10^3
5889.9500
off: 0.27
sig: 0.007
2000
1500
1000
500
0
−500
5895.9240
off: 0.29
sig: 0.008
1000
800
600
400
200
0
−200

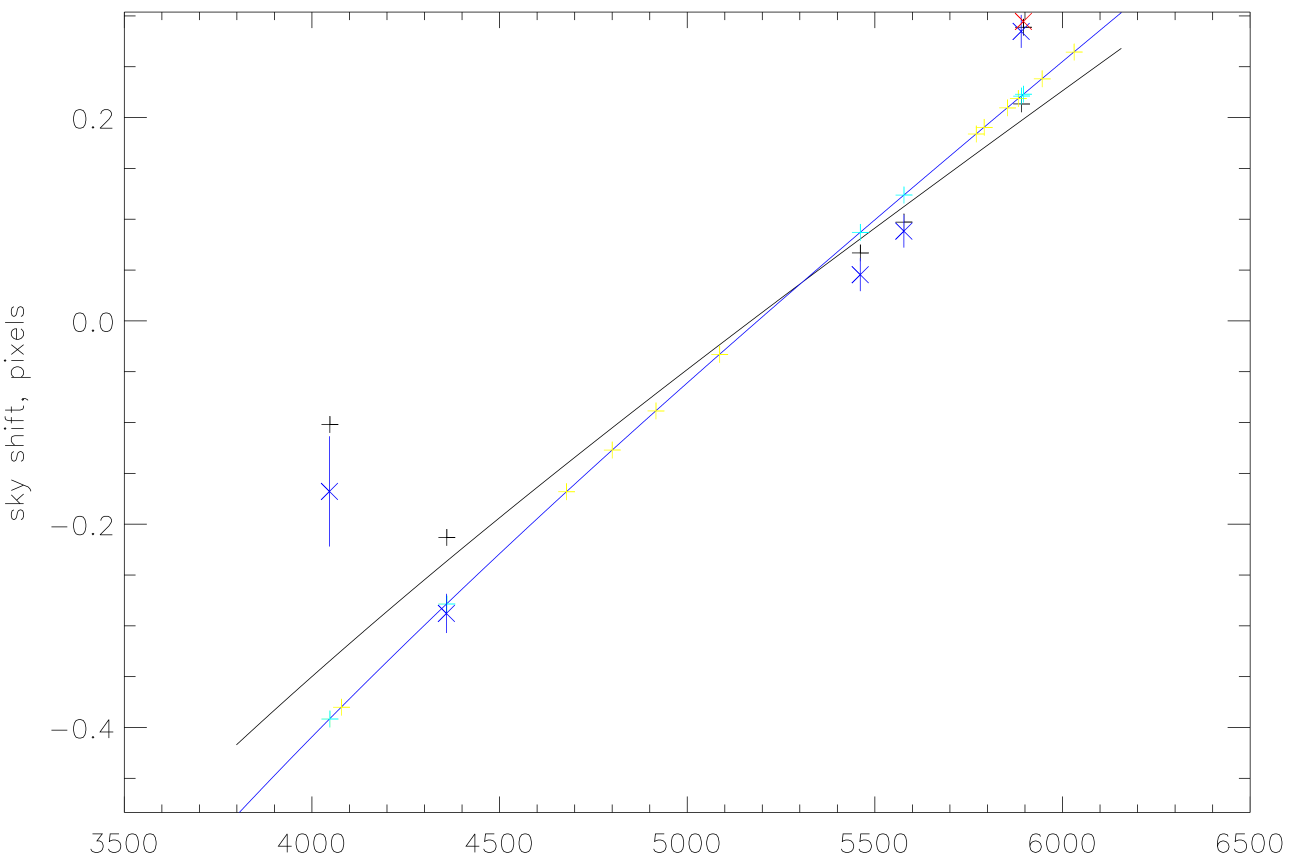

shift(pix)=−0.168
err(pix)= 0.054
oldshift(pix)=−0.307
0
50
100
150
200
4020
4030
4040
4050
4060
4070
4080

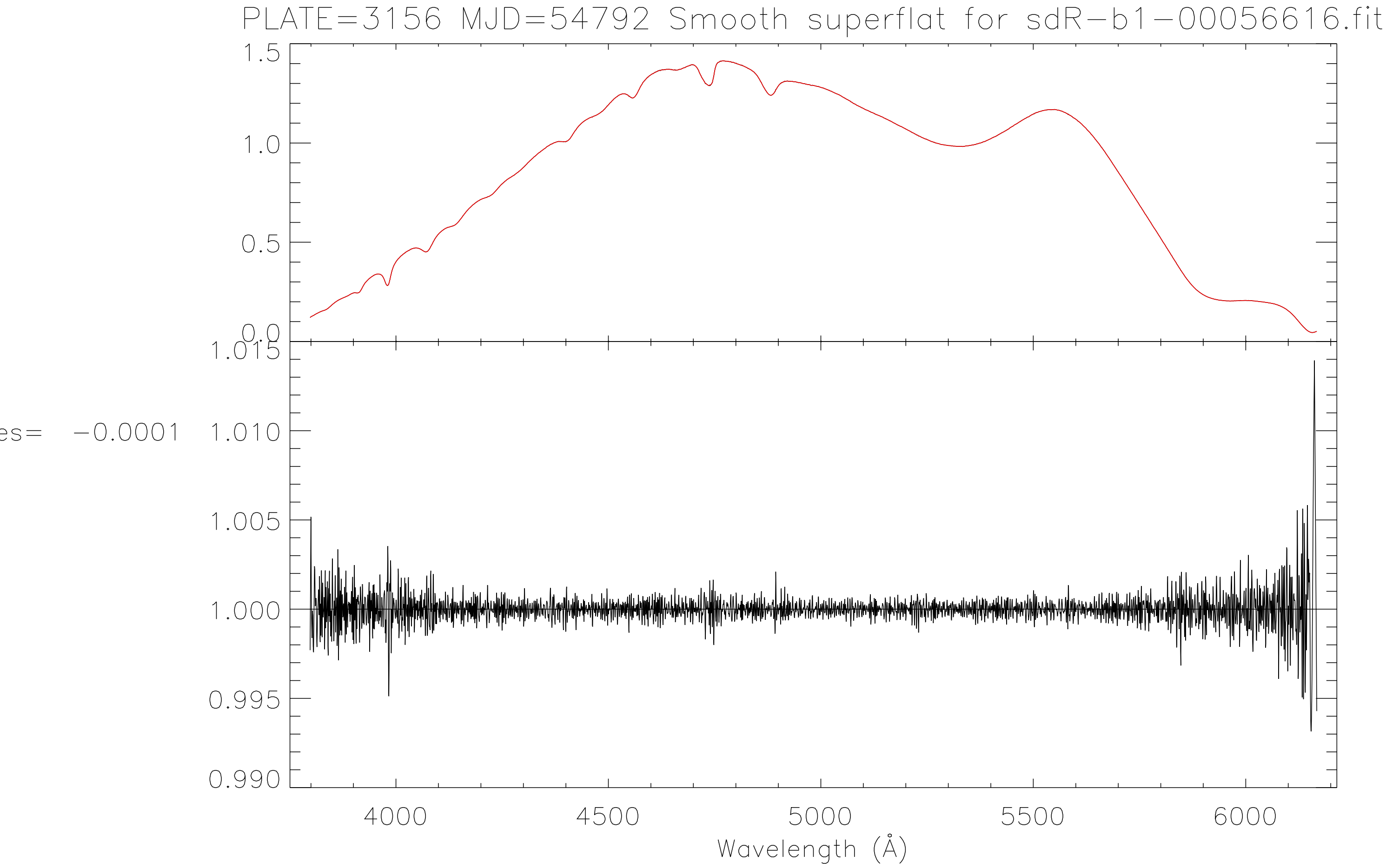

shift(pix)=−0.288
err(pix)= 0.019
oldshift(pix)=−0.290
0
50
100
150
200
4280
4300
4320
4340
4360
4380
4400
4420

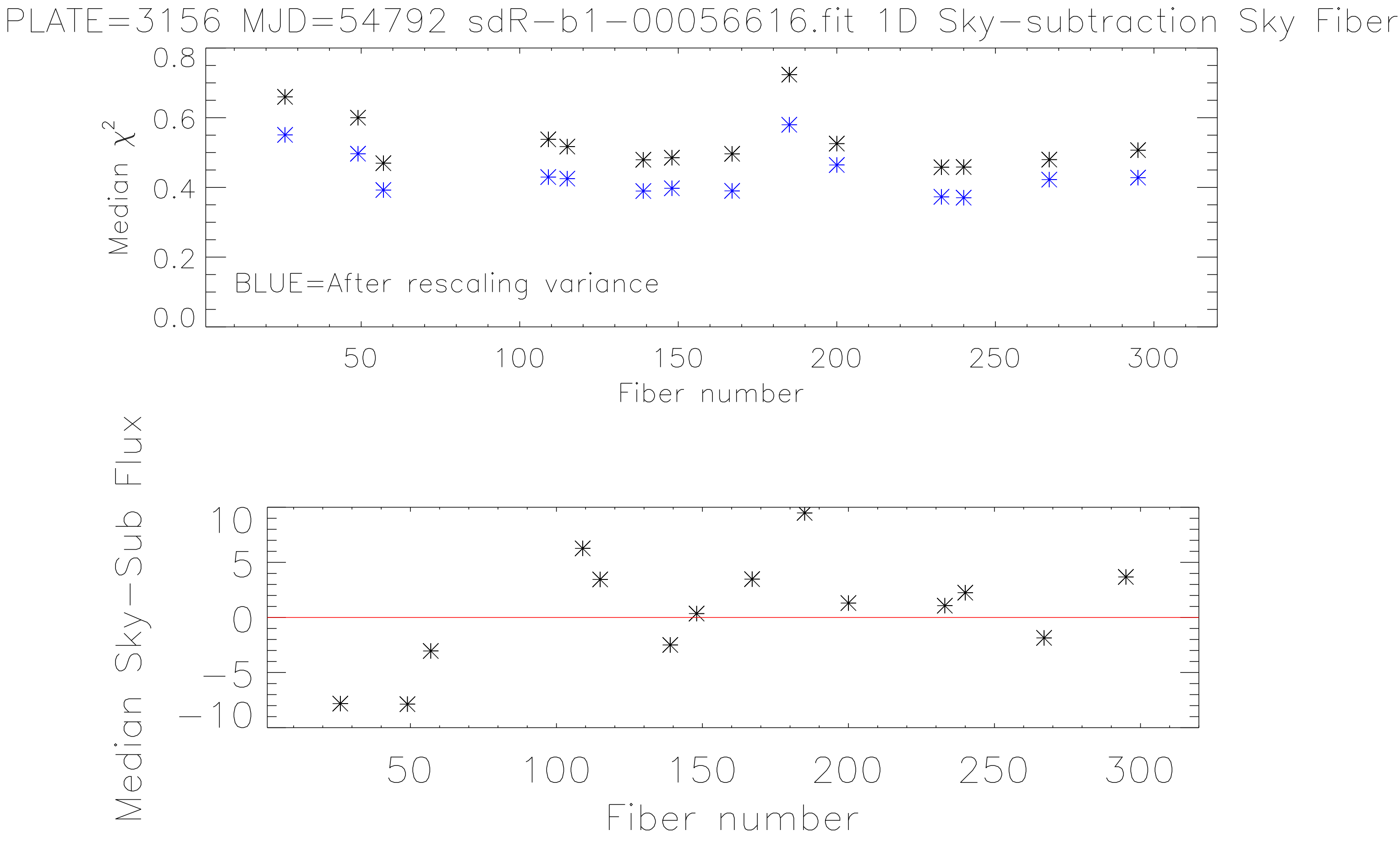

shift(pix)= 0.045
err(pix)= 0.016
oldshift(pix)= 0.089
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

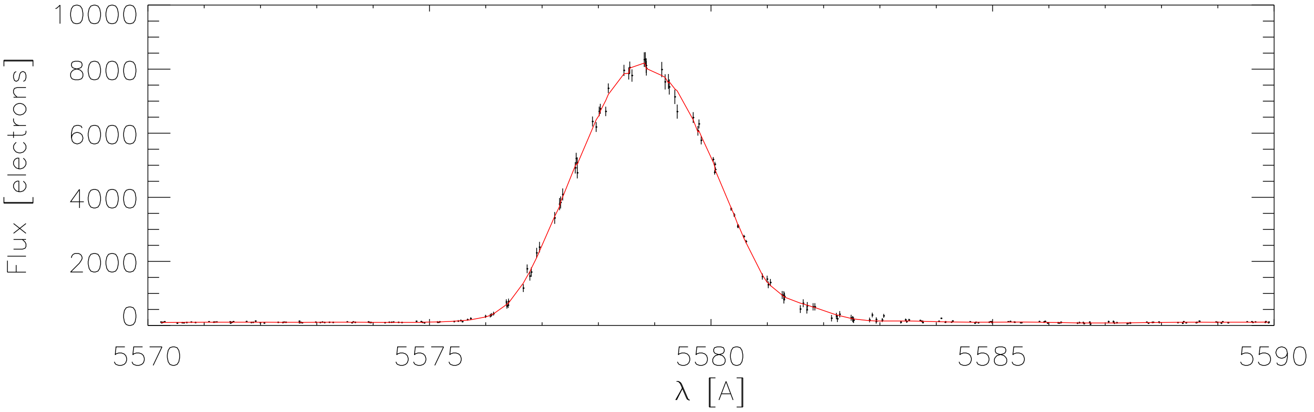

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0.5
0.4
0.3
0.2
0
100
200
300
400


4046.5600
nfib1 16
nfib2 15
stdev 0.173
extra −0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.061
extra −0.29
5460.9400
nfib1 16
nfib2 16
stdev 0.045
extra 0.05
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.09
5889.9500
nfib1 16
nfib2 16
stdev 0.039
extra 0.28
5895.9240
nfib1 16
nfib2 16
stdev 0.041
extra 0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

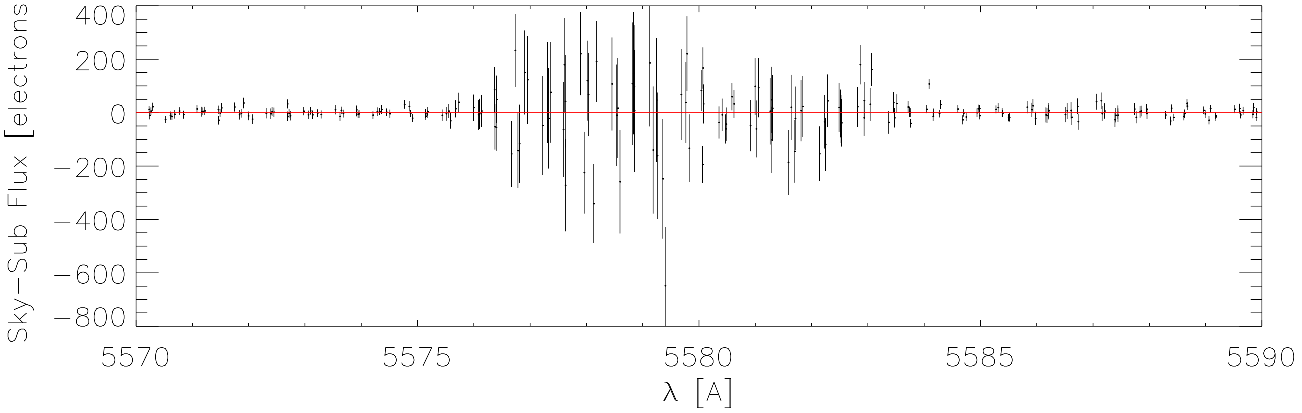

sky shift, pixels
0.2
0.0
−0.2
−0.4
3500
4000
4500
5000
5500
6000
6500


PLATE=3156 MJD=54792 Smooth superflat for sdR-b1-00056616.fit
1.5
1.0
0.5
0.0
1.015
es=
-0.0001
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3156 MJD=54792 sdR-b1-00056616.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number



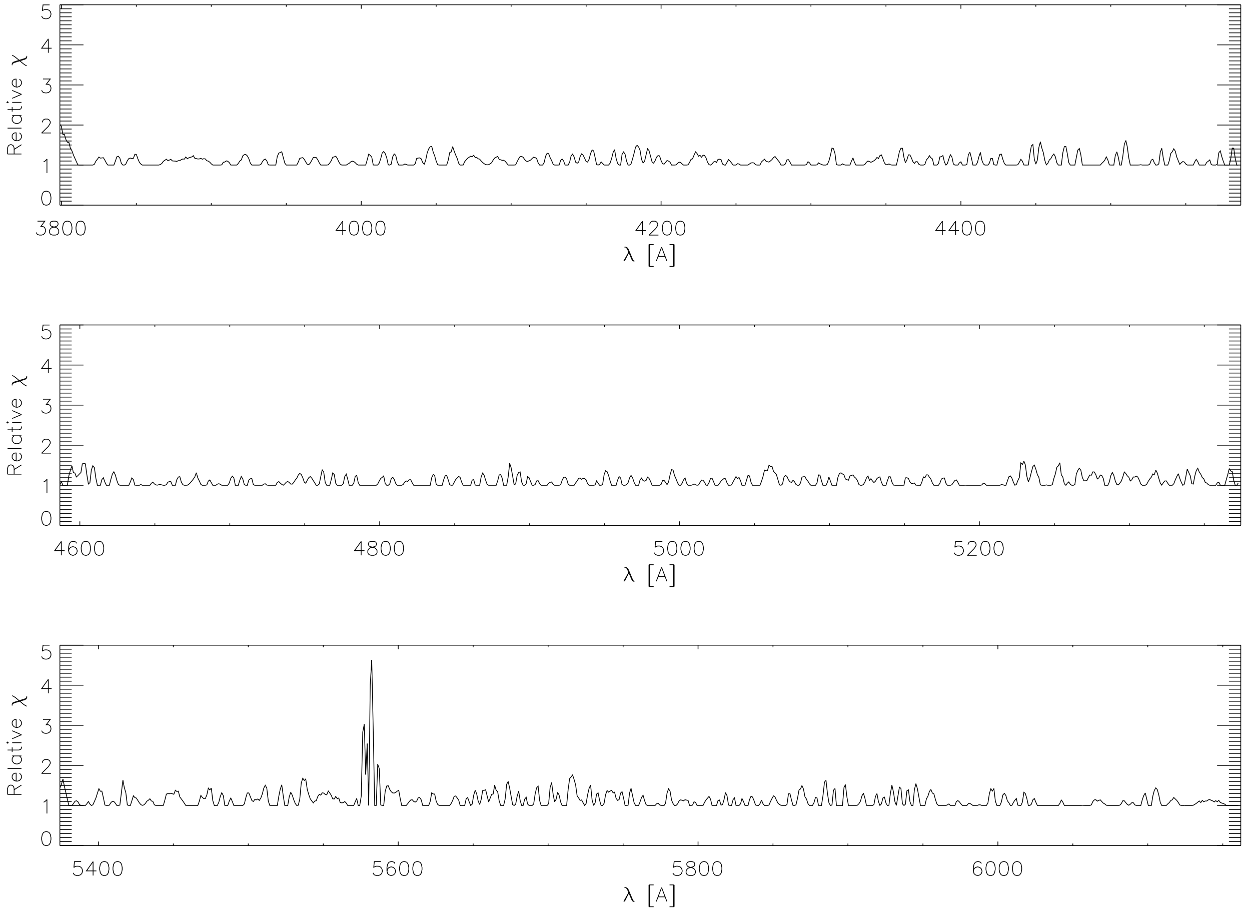
PLATE=3156 MJD=54792 sdR-b1-00056616.fit 1D Sky-subtraction Sky Fibers

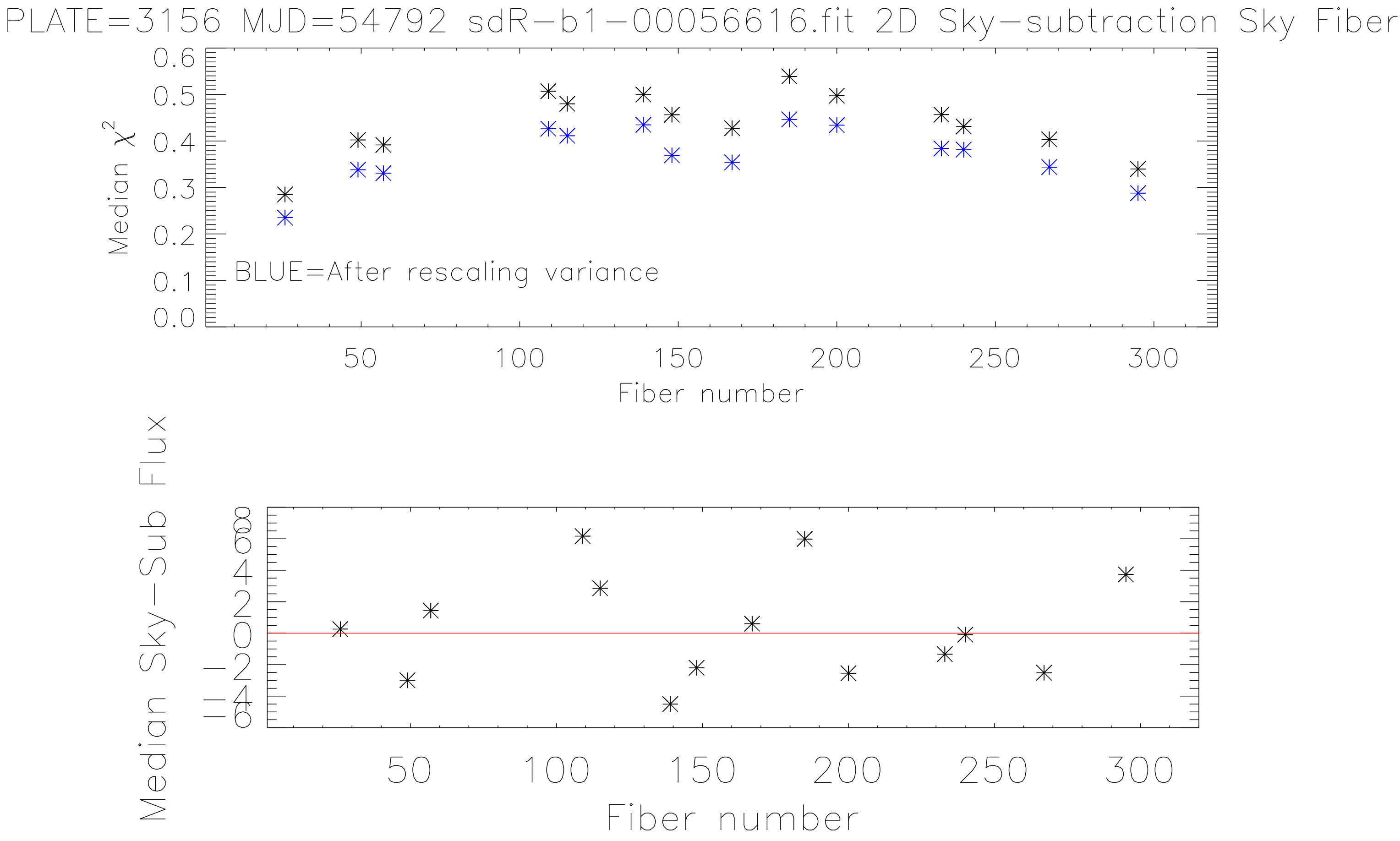


PLATE=3156 MJD=54792 sdR-b1-00056616.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 14

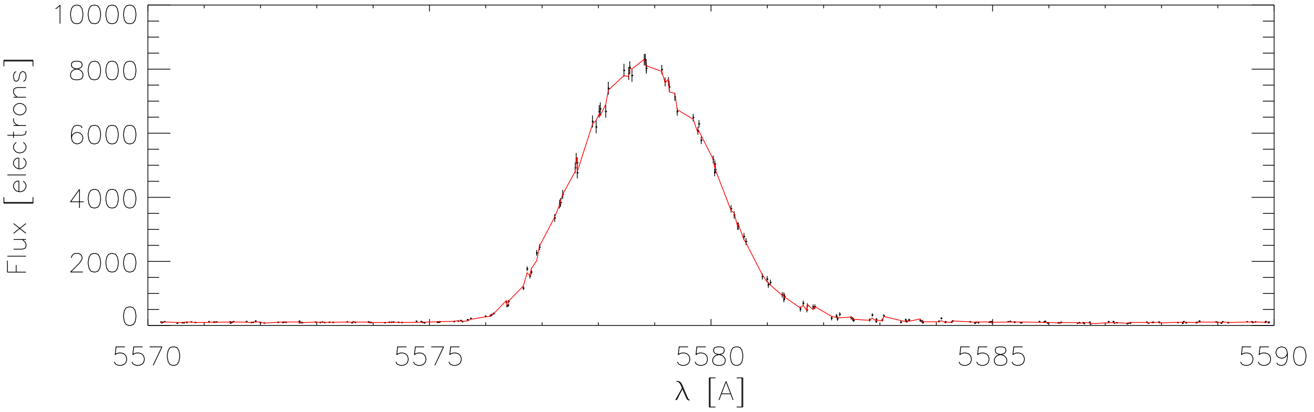
PLATE=3156 MJD=54792 sdR-b1-00056616.fit 1D Sky-subtraction Rescaled Errors



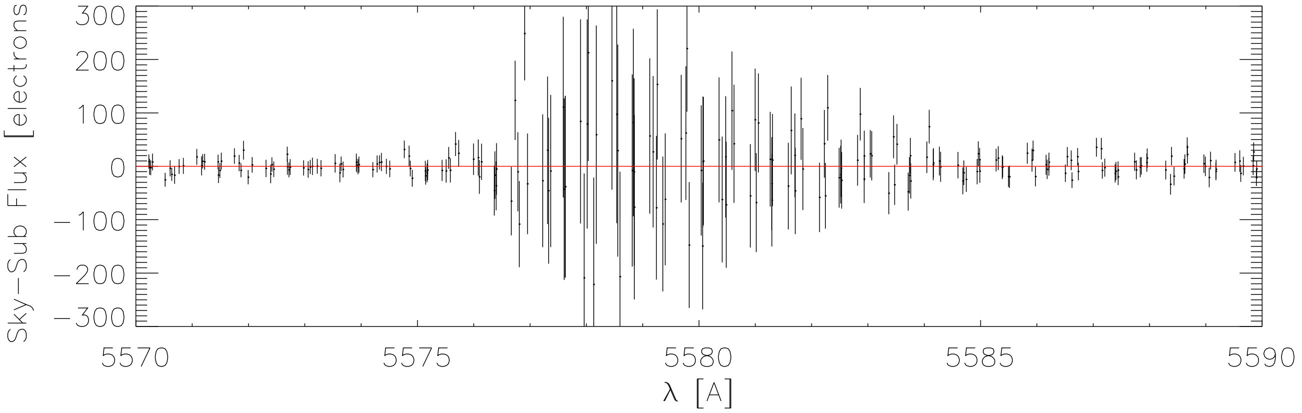


PLATE=3156 MJD=54792 sdR-b1-00056616.fit 2D Sky-subtraction Sky Fiber

PLATE=3156 MJD=54792 sdR-b1-00056616.fit 2D Sky-subtraction Sky Fibers

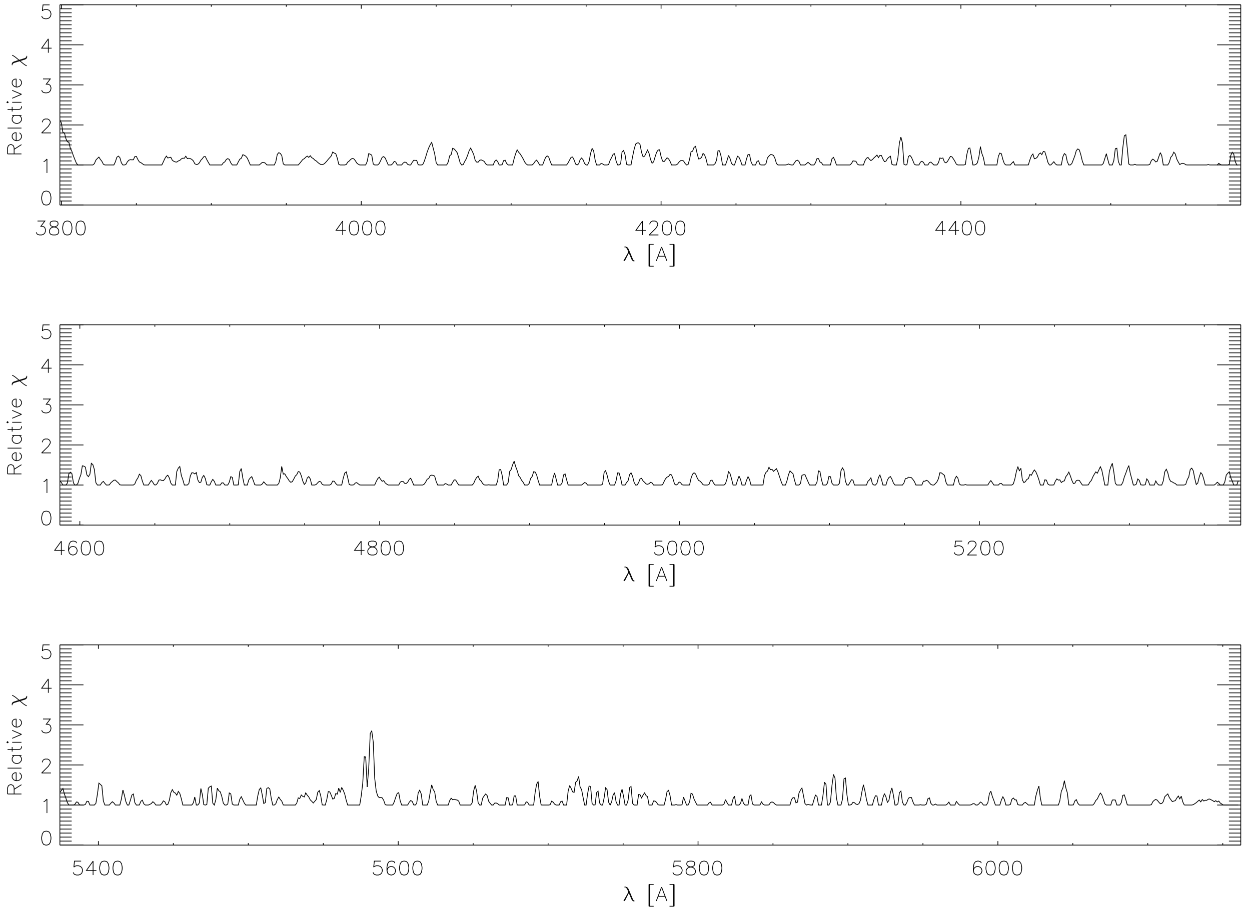


PLATE=3156 MJD=54792 sdR-b1-00056616.fit 2D Sky-subtraction Sky-subtracted Sky F

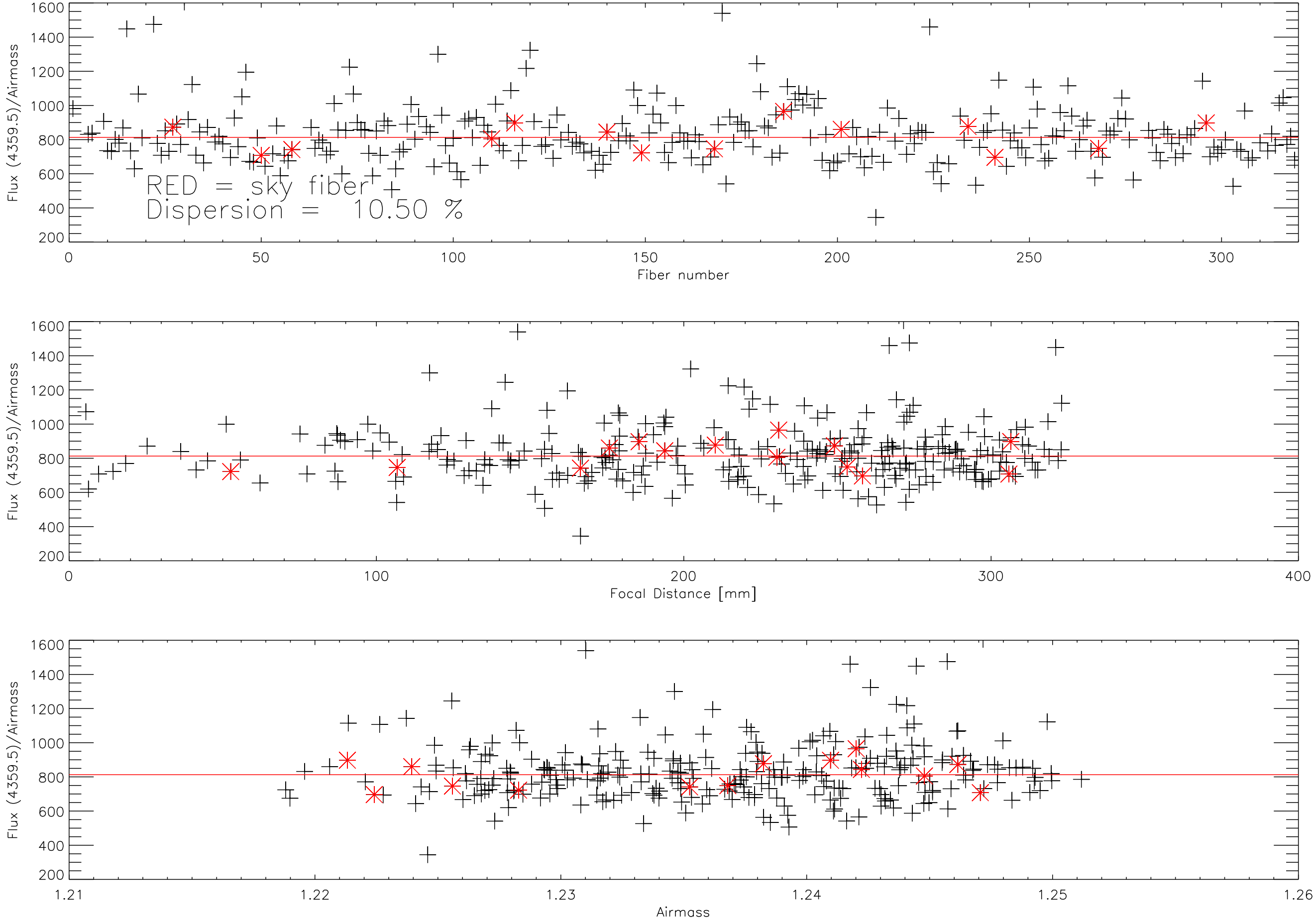


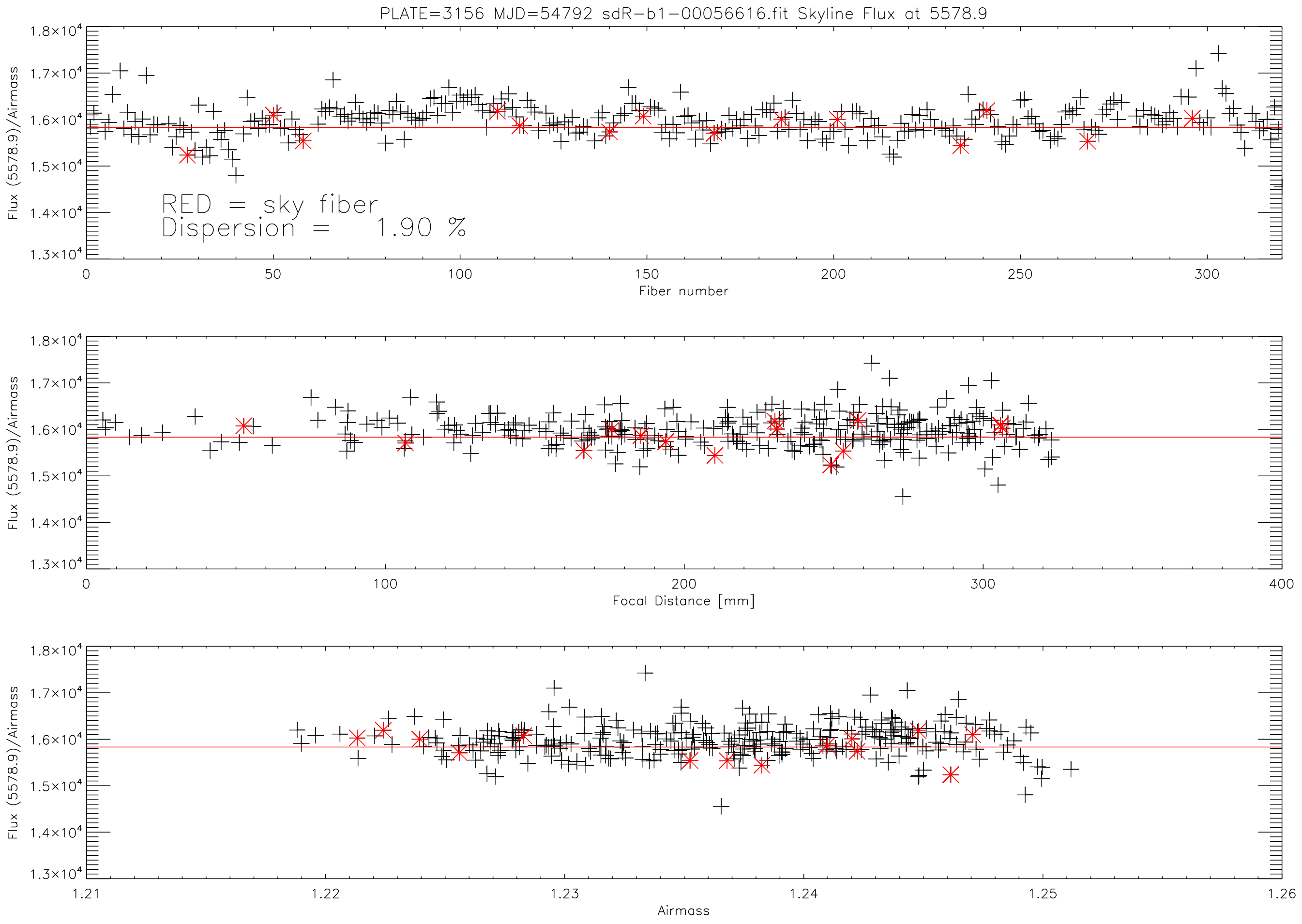
Number of sky fibers = 14

PLATE=3156 MJD=54792 sdR-b1-00056616.fit 2D Sky-subtraction Rescaled Errors

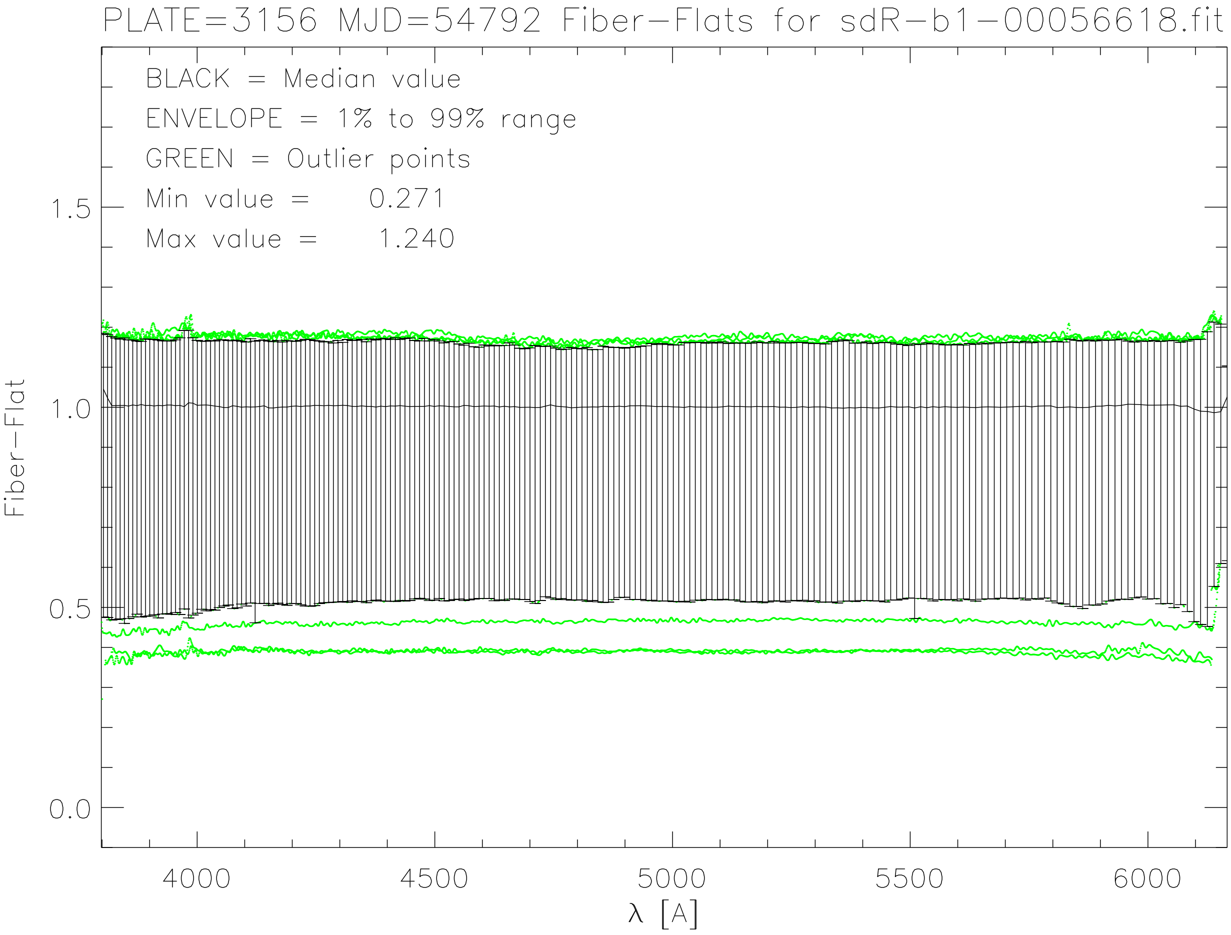


PLATE=3156 MJD=54792 sdR-b1-00056616.fit Skyline Flux at 4359.5





PLATE=3156 MJD=54792 sdR-b1-00056616.fit Skyline Flux at 5578.9



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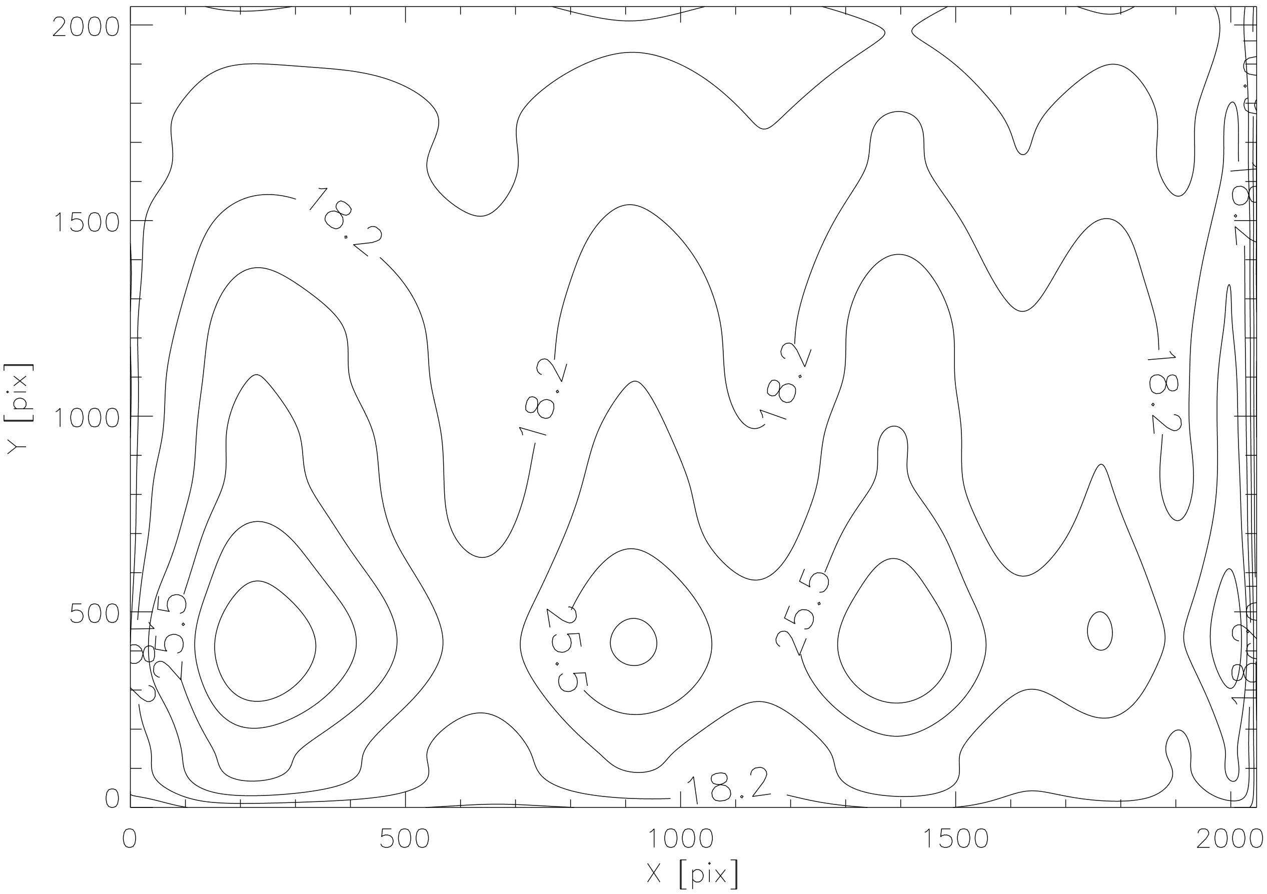
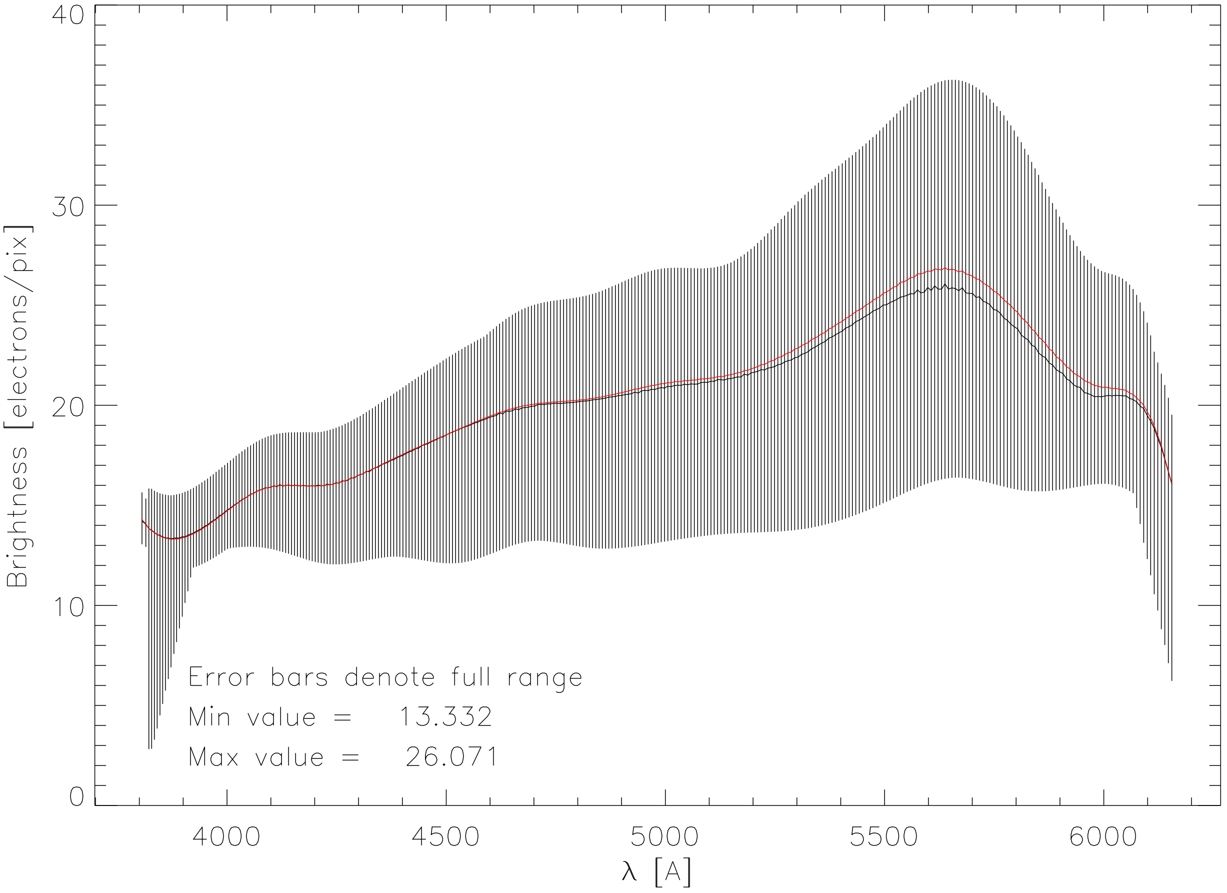
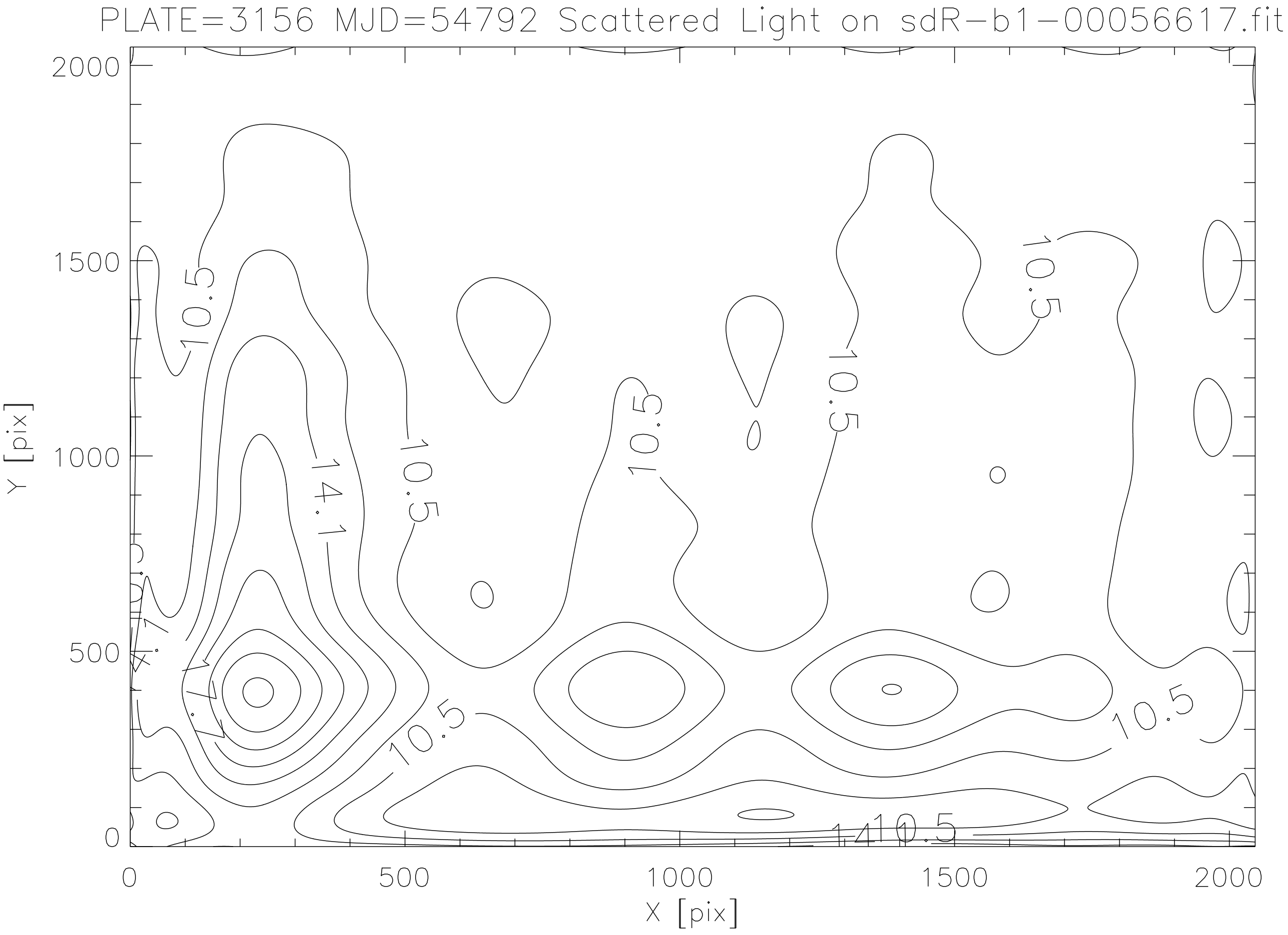
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056617.f

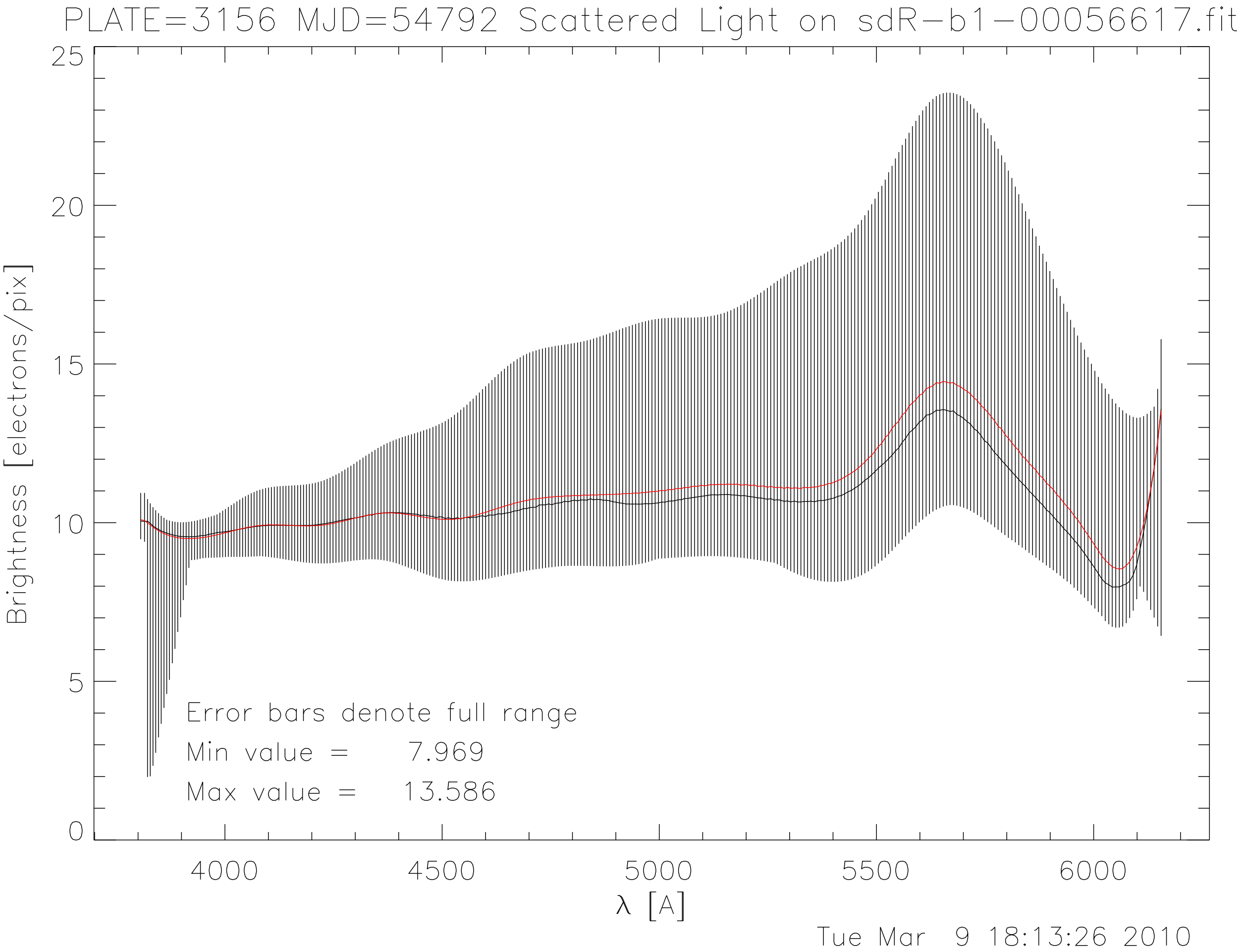


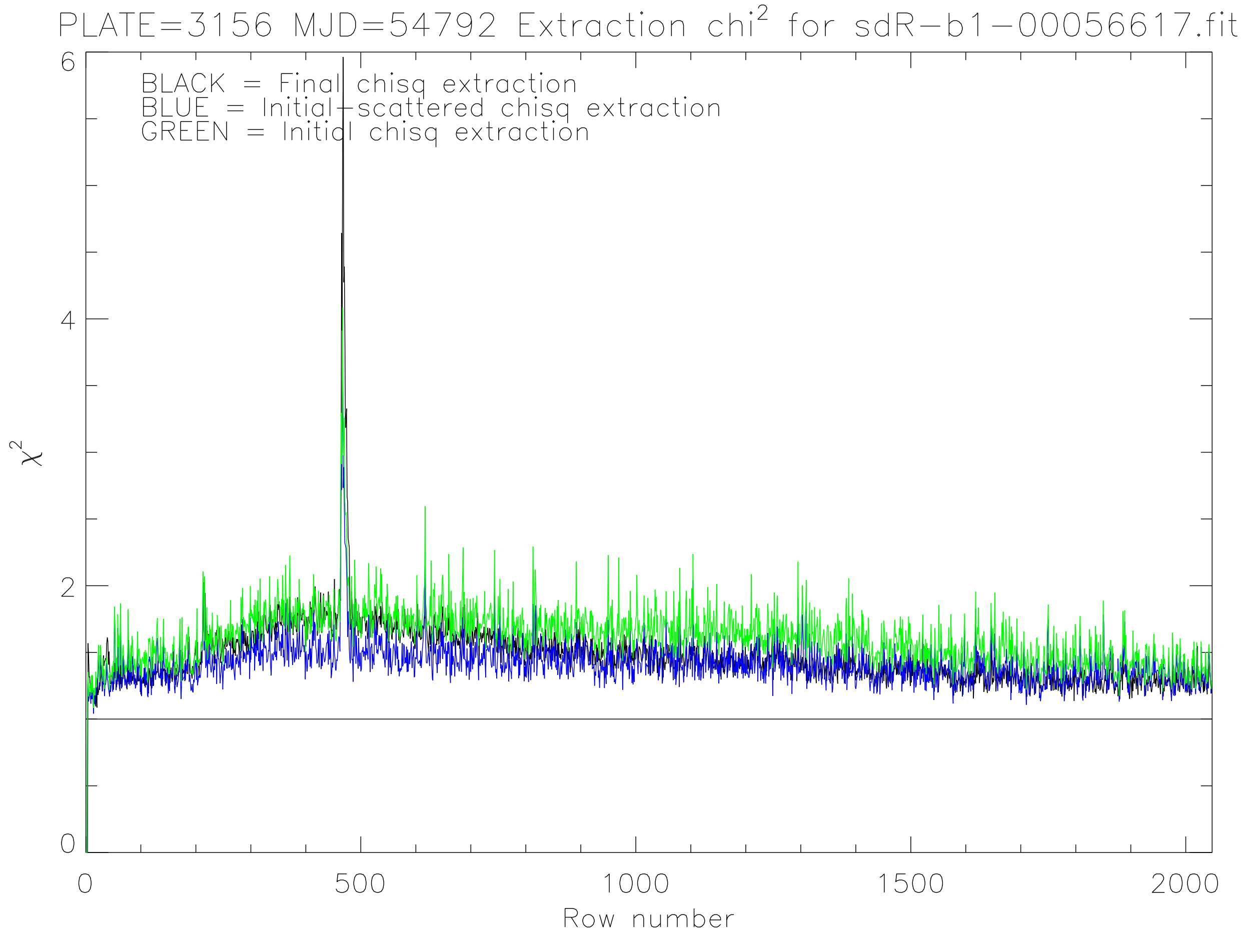
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056617.f

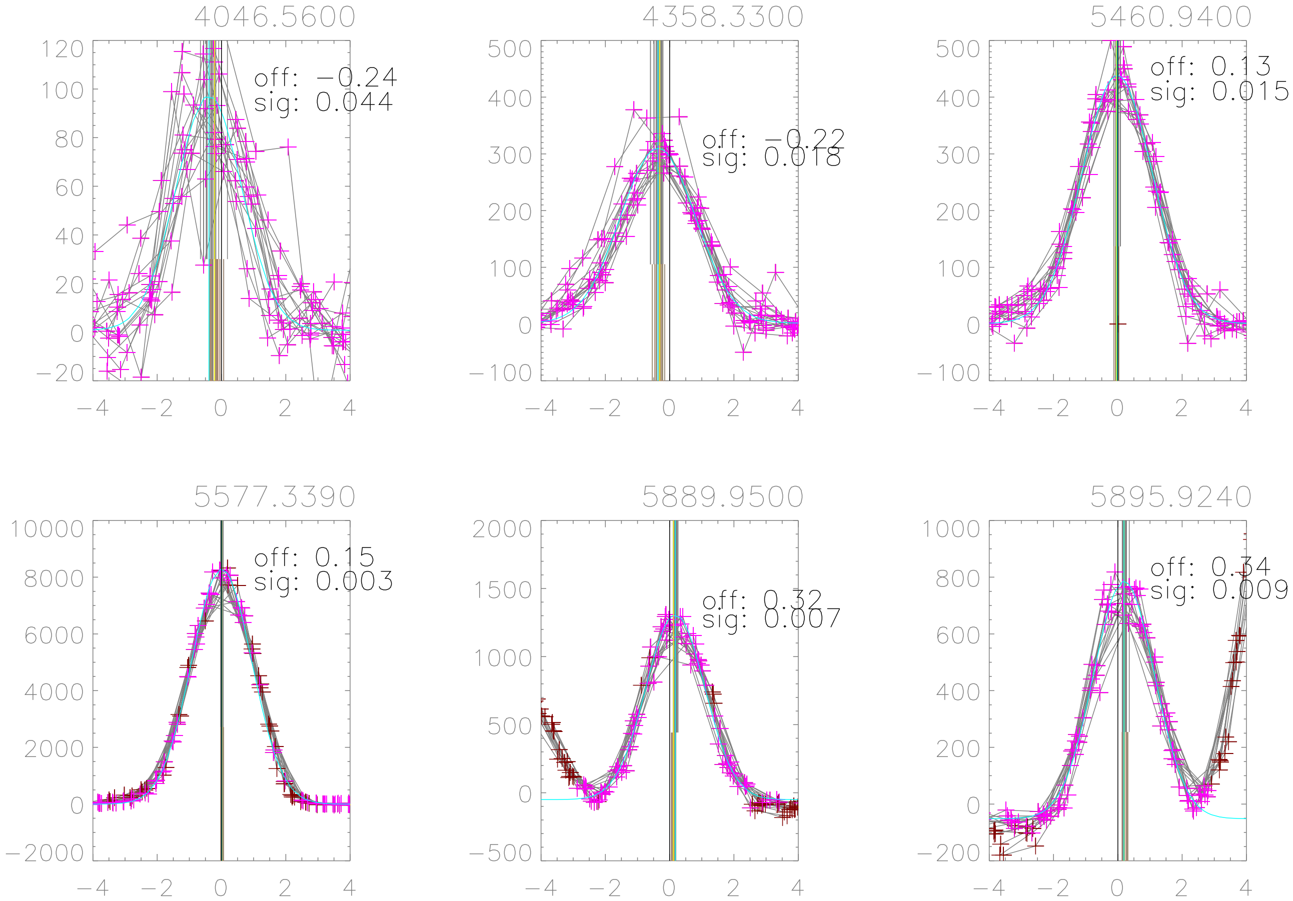


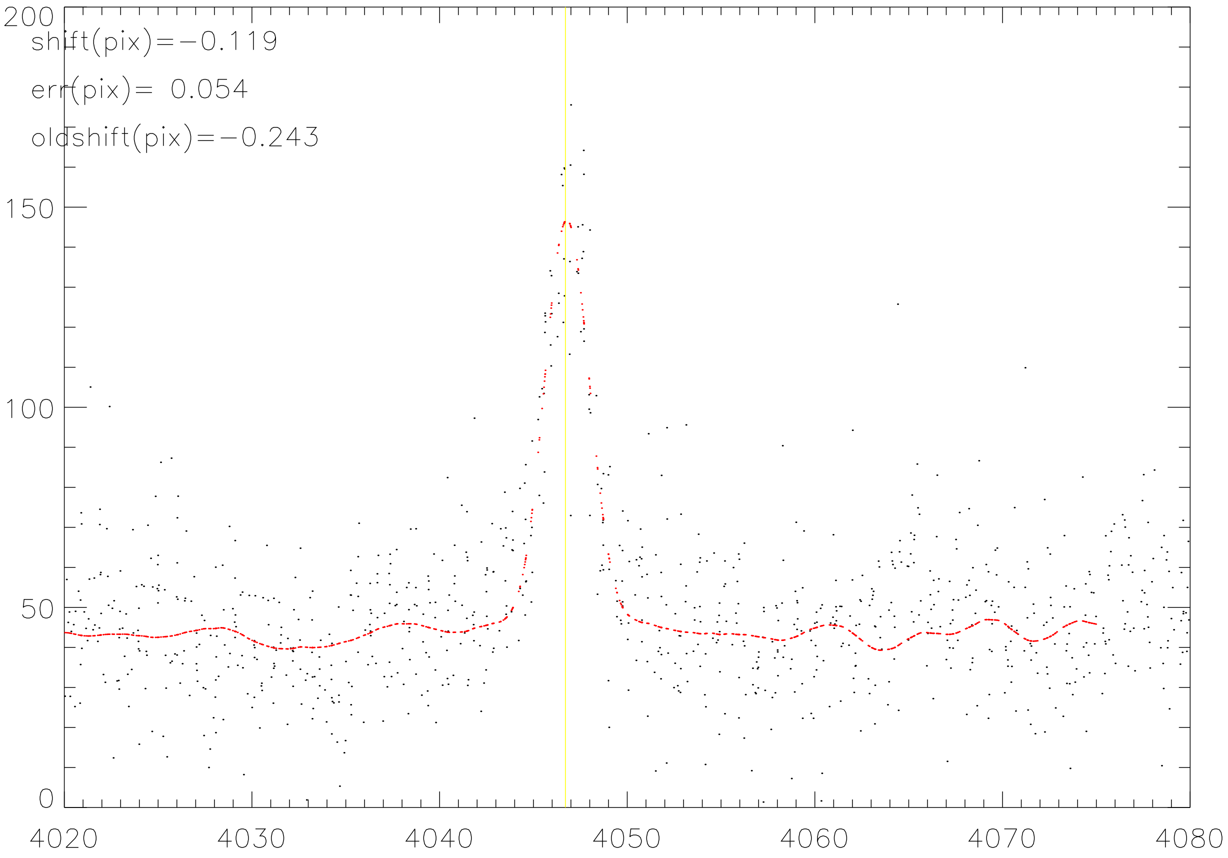
Tue Mar 9 18:11:20 2010

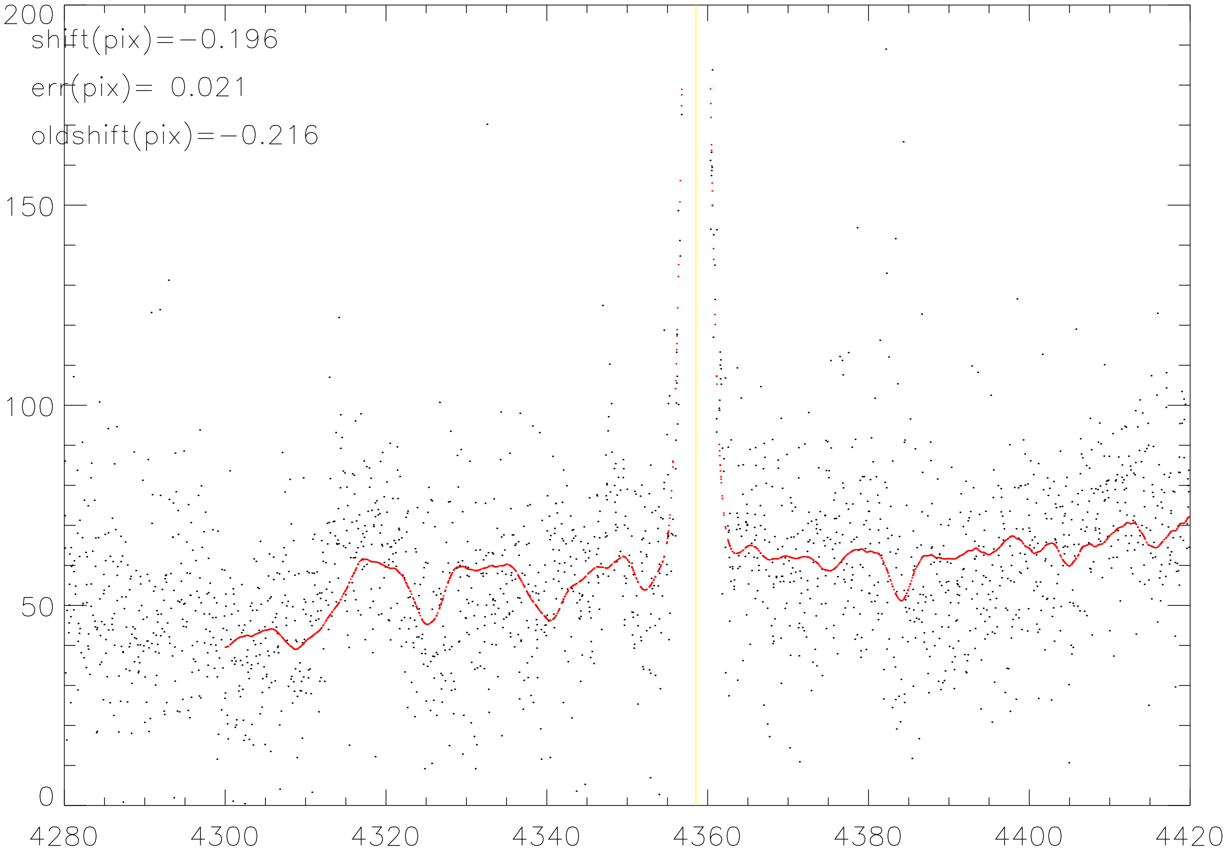

PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056617.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
14.1
17.7
1410.5

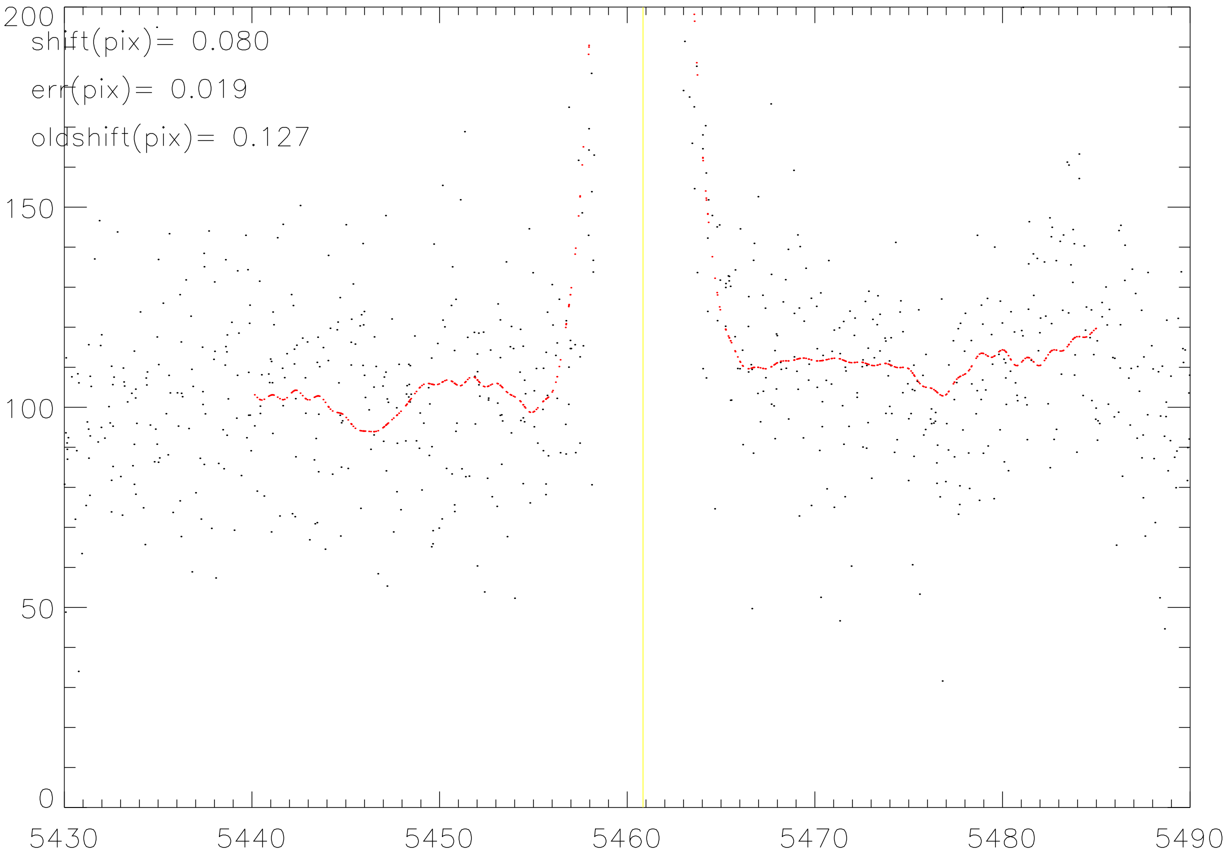

PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056617.fit
Brightness [electrons/pix]
0
5
10
15
20
25
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.969
Max value = 13.586
Tue Mar 9 18:13:26 2010

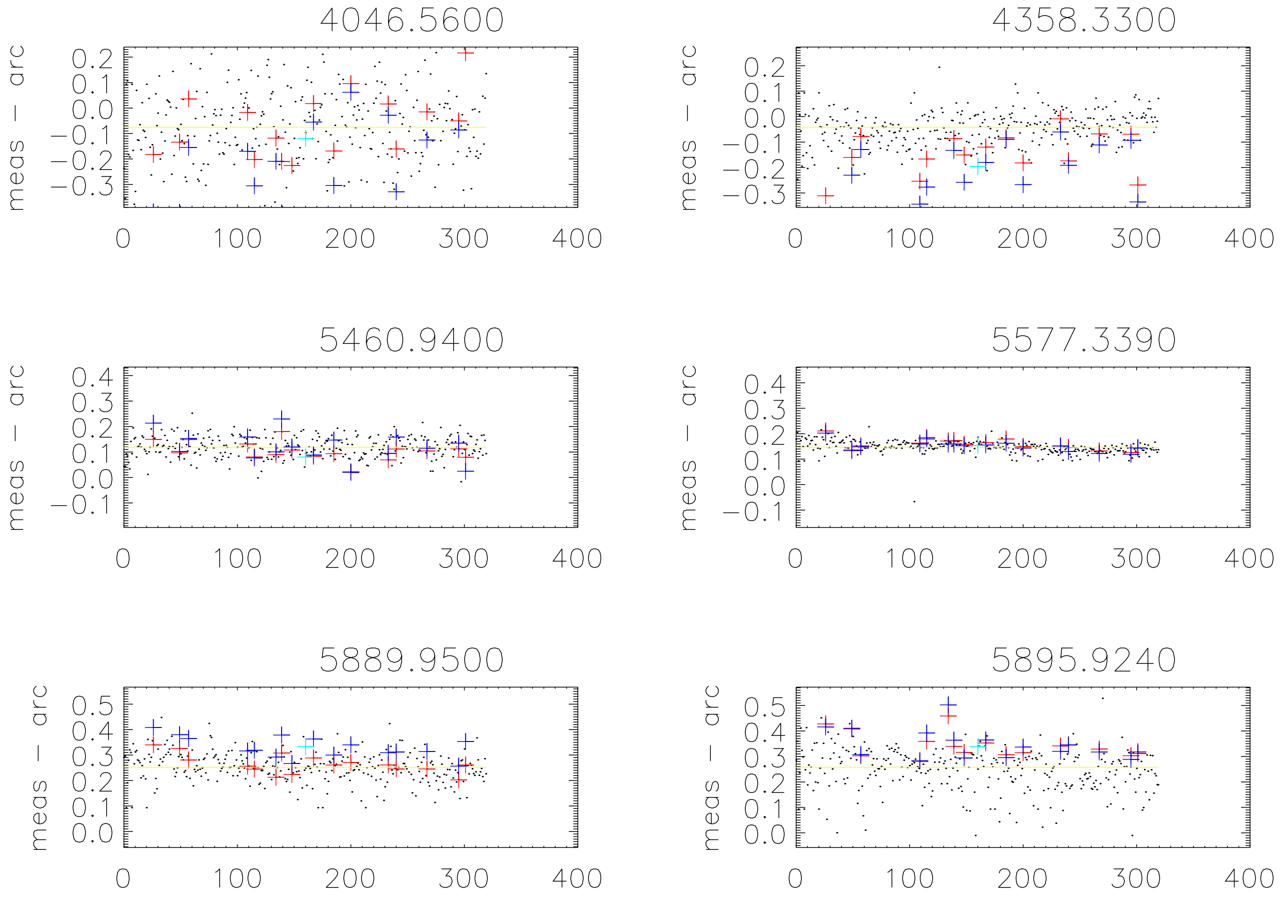

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b1-00056617.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

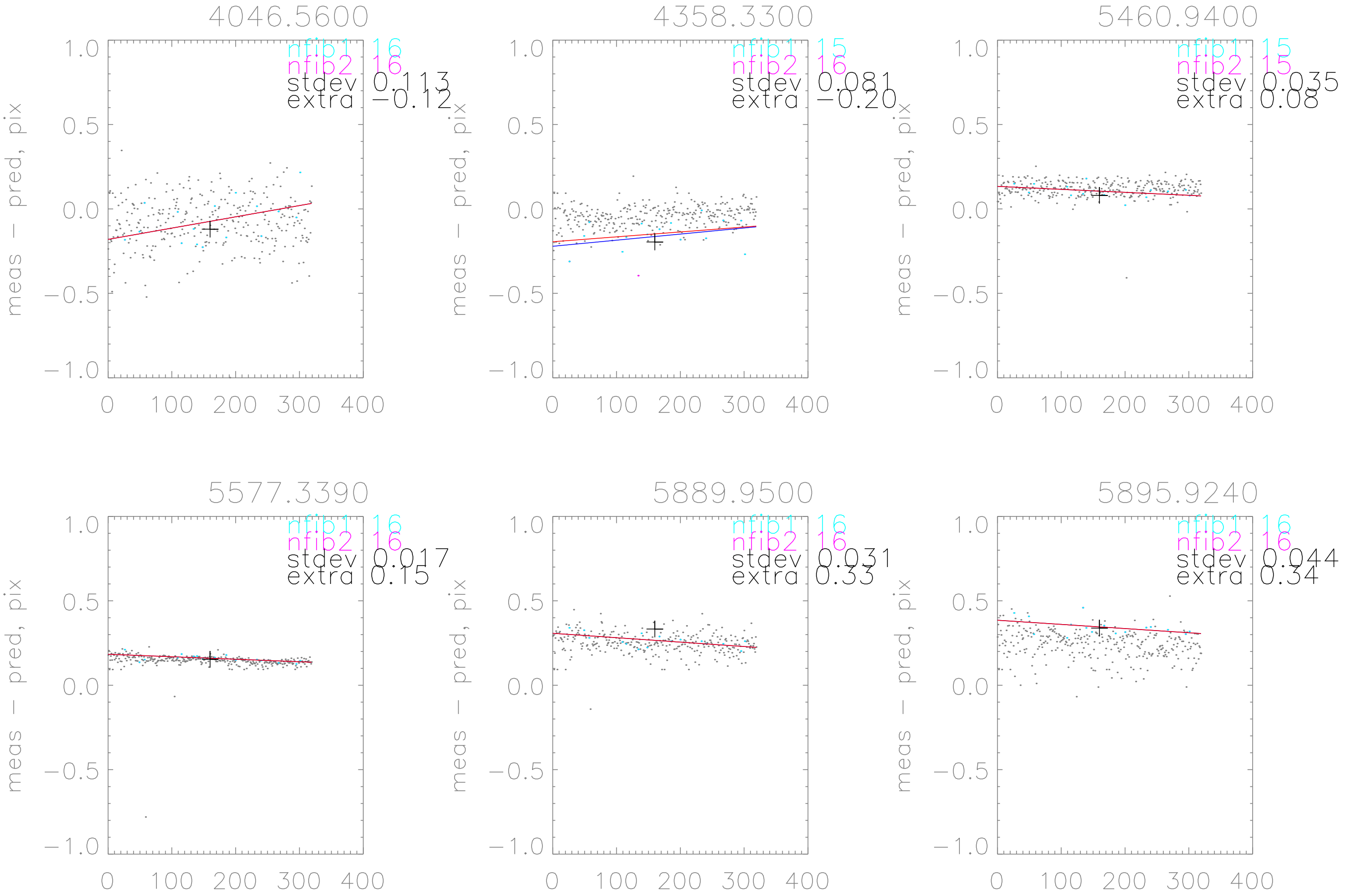

4046.5600
off: −0.24
sig: 0.044
4358.3300
off: −0.22
sig: 0.018
5460.9400
off: 0.13
sig: 0.015
5577.3390
off: 0.15
sig: 0.003
5889.9500
off: 0.32
sig: 0.007
5895.9240
off: 0.34
sig: 0.009
−4
−2
0
2
4

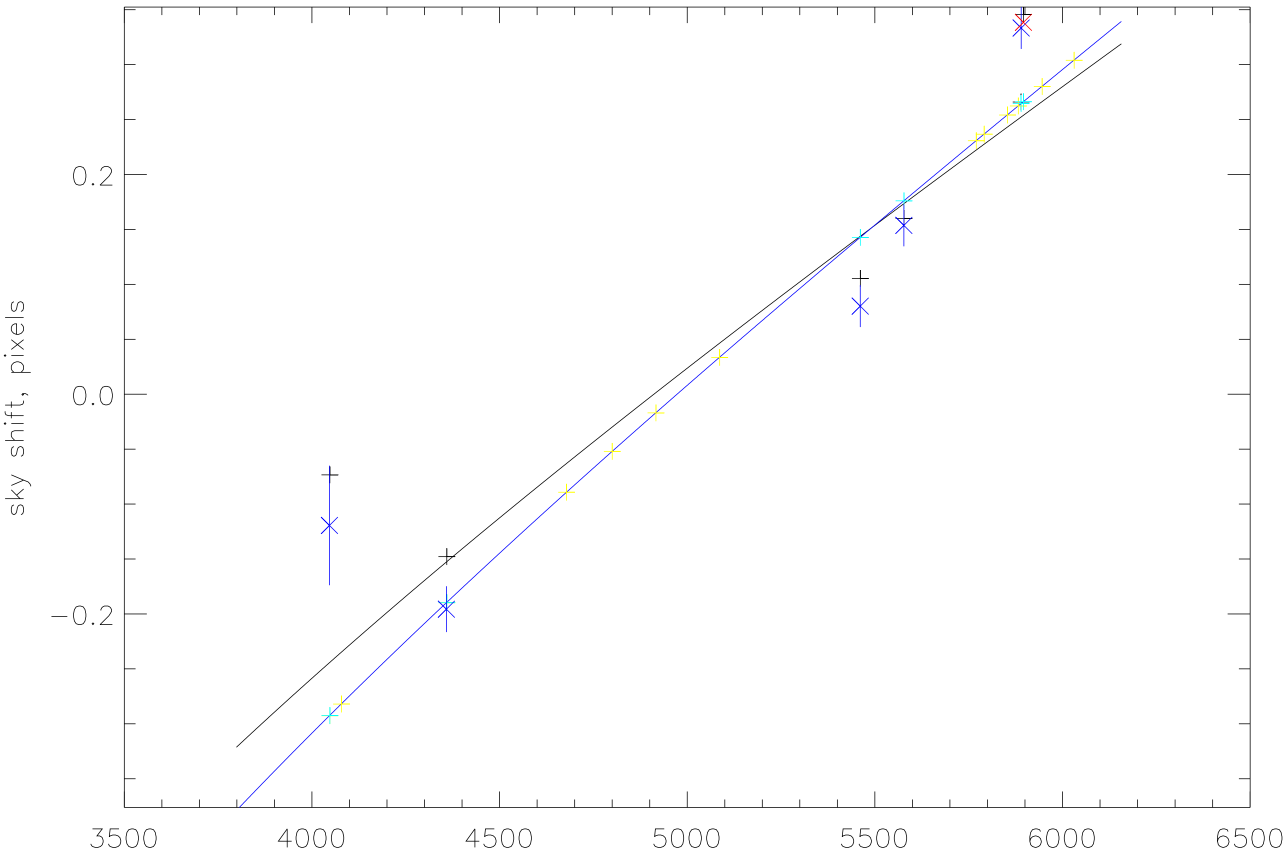

shift(pix)=−0.119
err(pix)= 0.054
oldshift(pix)=−0.243
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

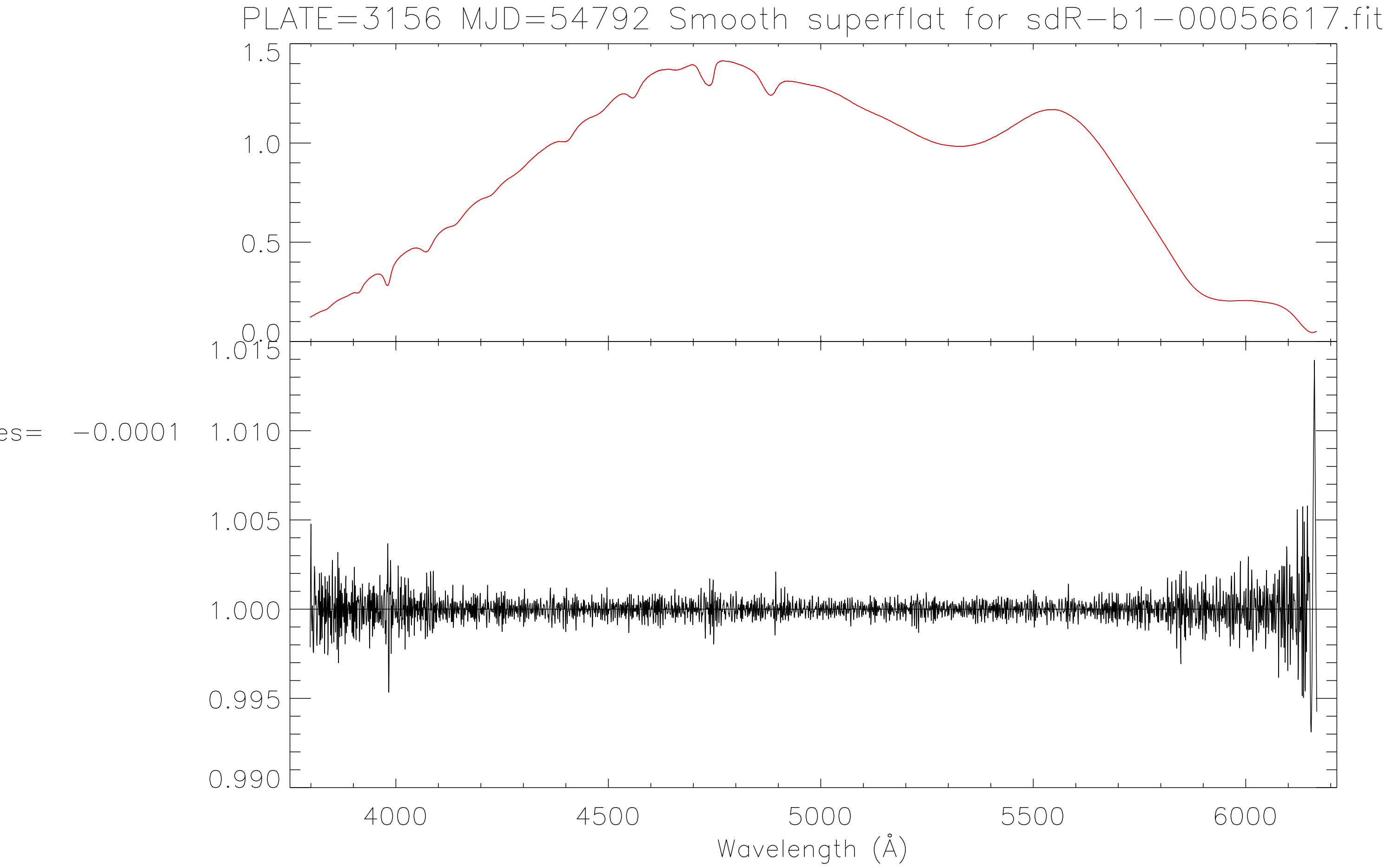

shift(pix)=−0.196
err(pix)= 0.021
oldshift(pix)=−0.216
0
50
100
150
200
4280
4300
4320
4340
4360
4380
4400
4420

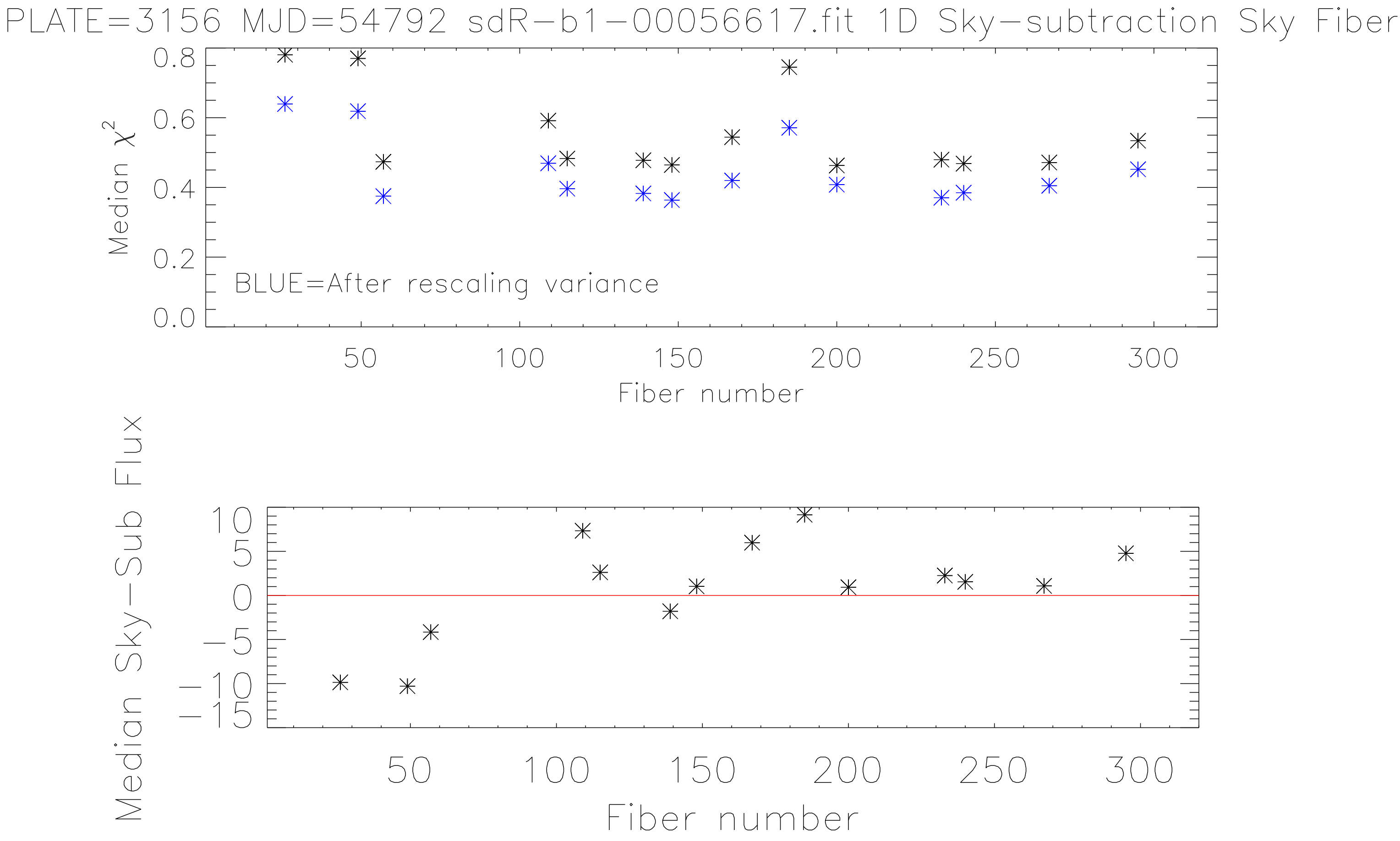

shift(pix)= 0.080
err(pix)= 0.019
oldshift(pix)= 0.127
0
50
100
150
200
5430
5440
5450
5460
5470
5480
5490


4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400
4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400
5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400
5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400
5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400
5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

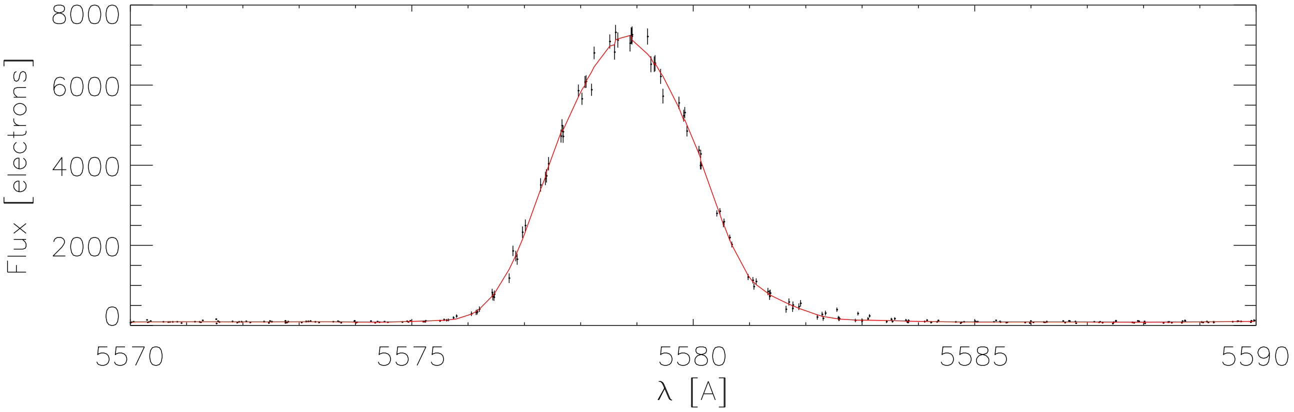

4046.5600
nfib1 16
nfib2 16
stdev 0.113
extra −0.12
4358.3300
nfib1 15
nfib2 16
stdev 0.081
extra −0.20
5460.9400
nfib1 15
nfib2 15
stdev 0.035
extra 0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.15
5889.9500
nfib1 16
nfib2 16
stdev 0.031
extra 0.33
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra 0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.2
0.0
−0.2
3500
4000
4500
5000
5500
6000
6500

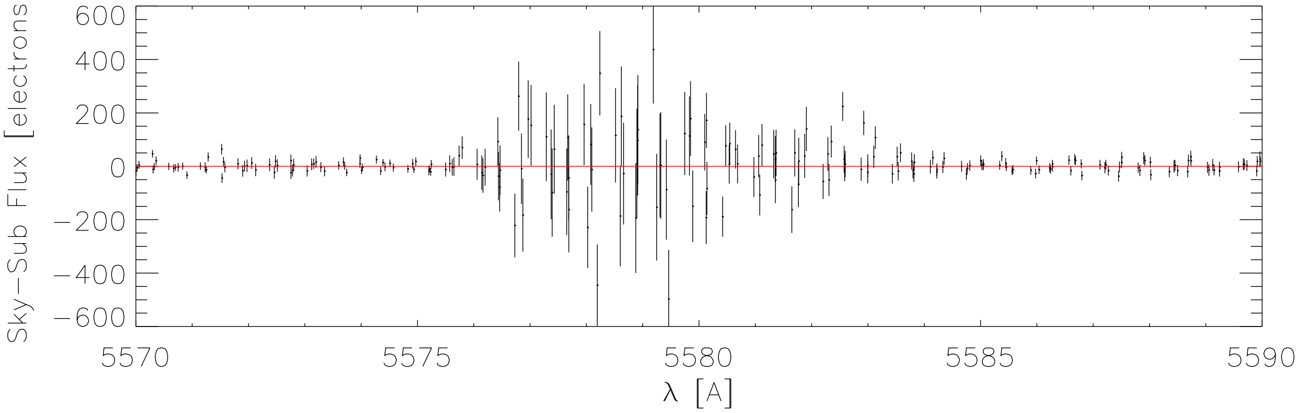

PLATE=3156 MJD=54792 Smooth superflat for sdR-b1-00056617.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es=   −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3156 MJD=54792 sdR-b1-00056617.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

PLATE=3156 MJD=54792 sdR-b1-00056617.fit 1D Sky-subtraction Sky Fibers

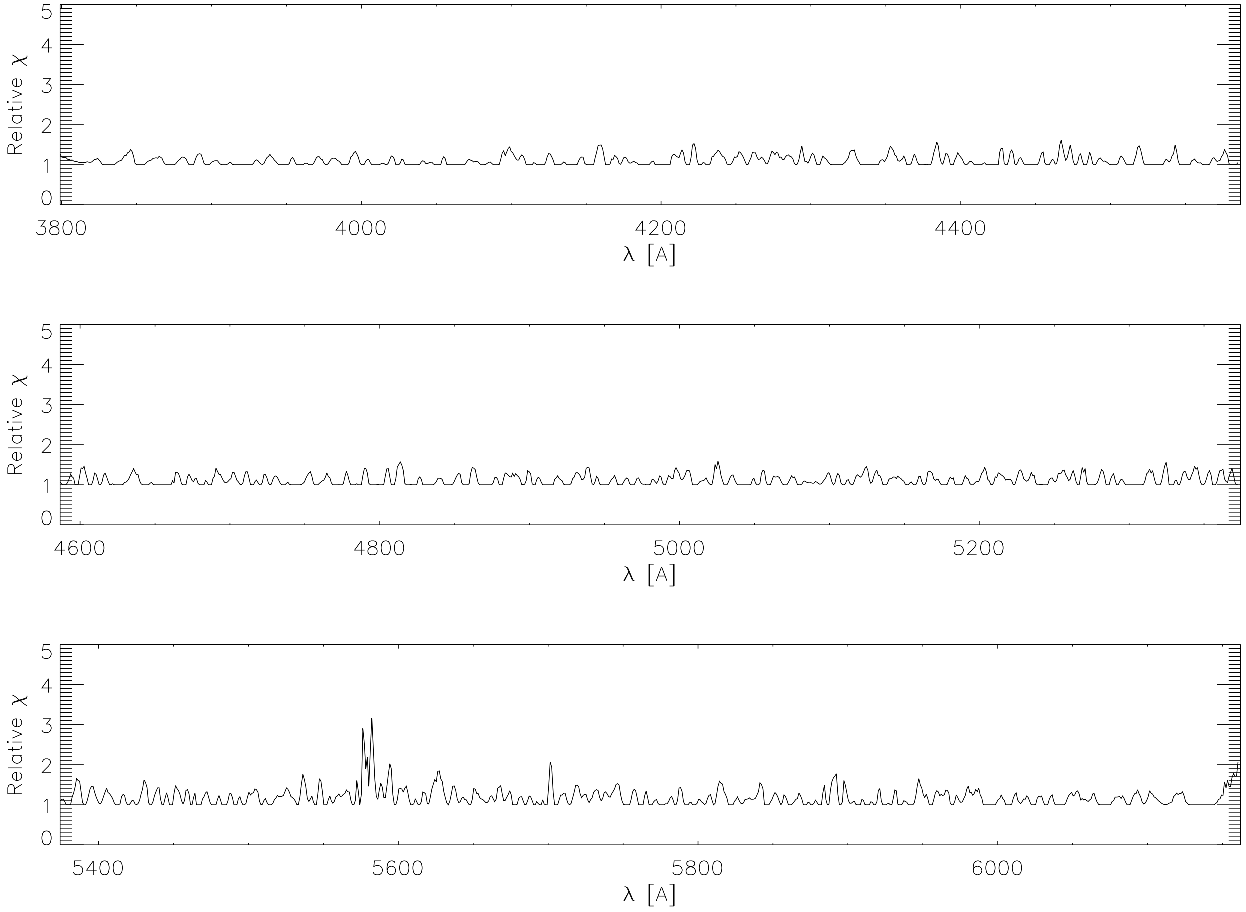


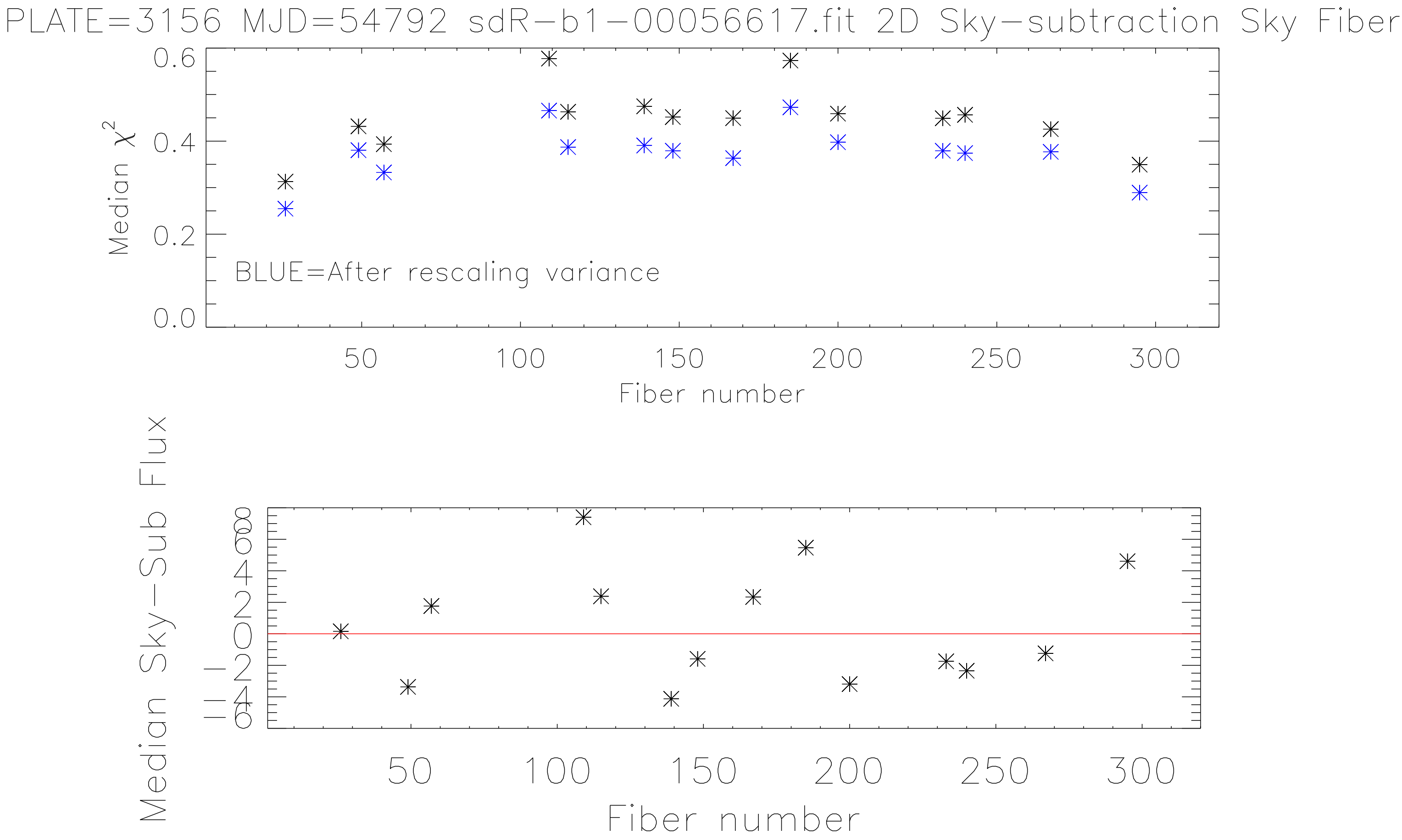
PLATE=3156 MJD=54792 sdR-b1-00056617.fit 1D Sky-subtraction Sky-subtracted Sky F

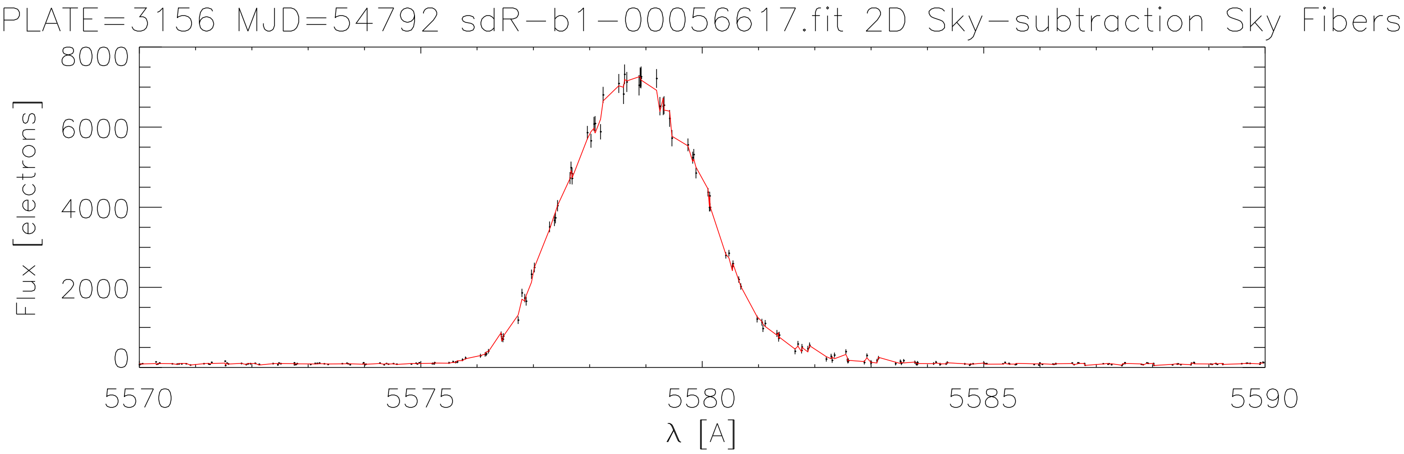


Number of sky fibers = 14

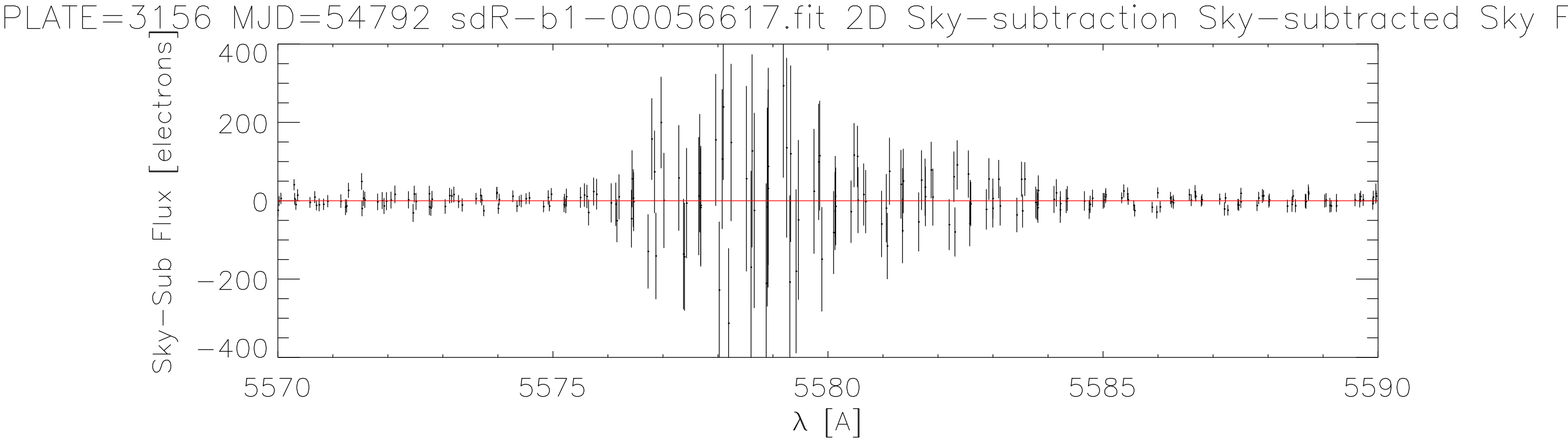
PLATE=3156 MJD=54792 sdR-b1-00056617.fit 1D Sky-subtraction Rescaled Errors




PLATE=3156 MJD=54792 sdR-b1-00056617.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number



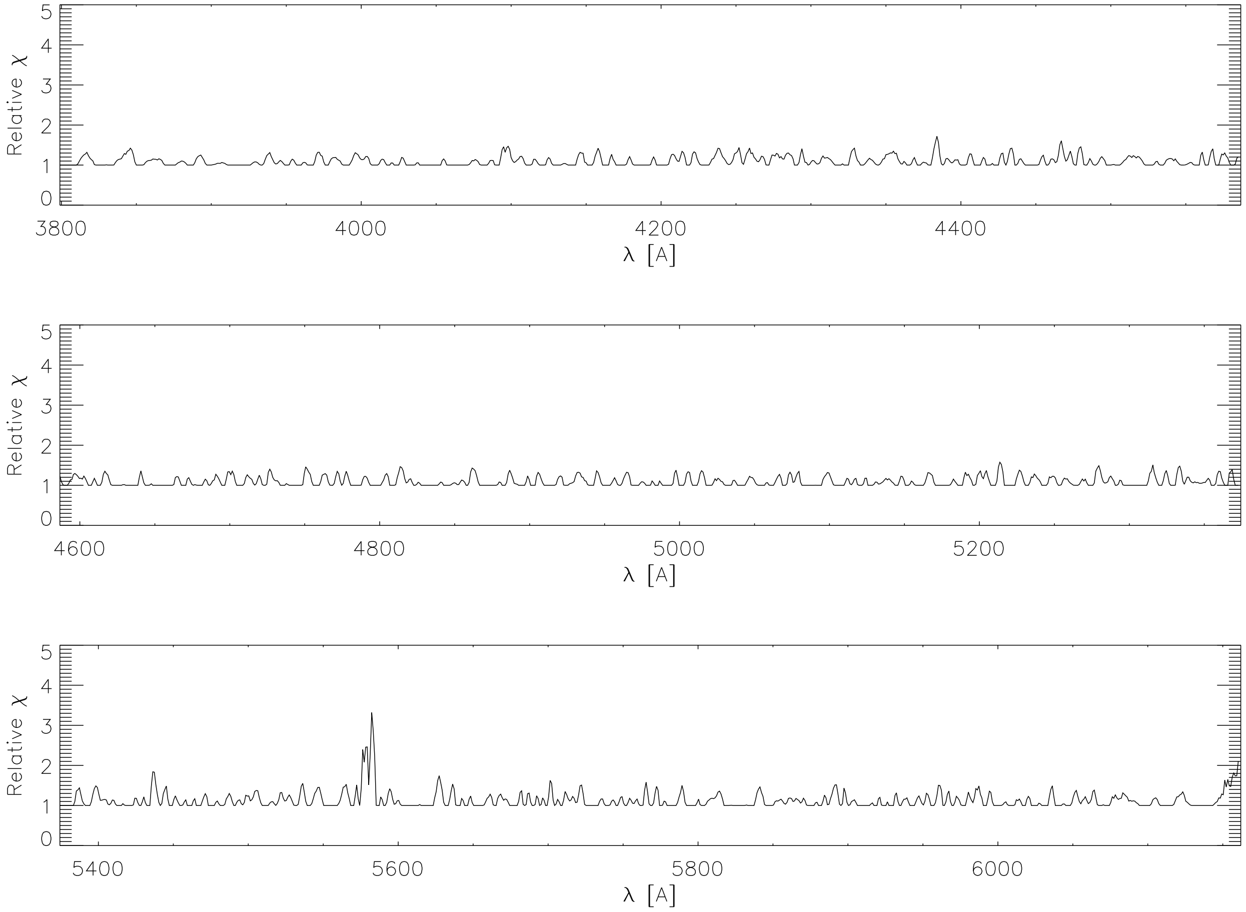
PLATE=3156 MJD=54792 sdR-b1-00056617.fit 2D Sky-subtraction Sky Fibers

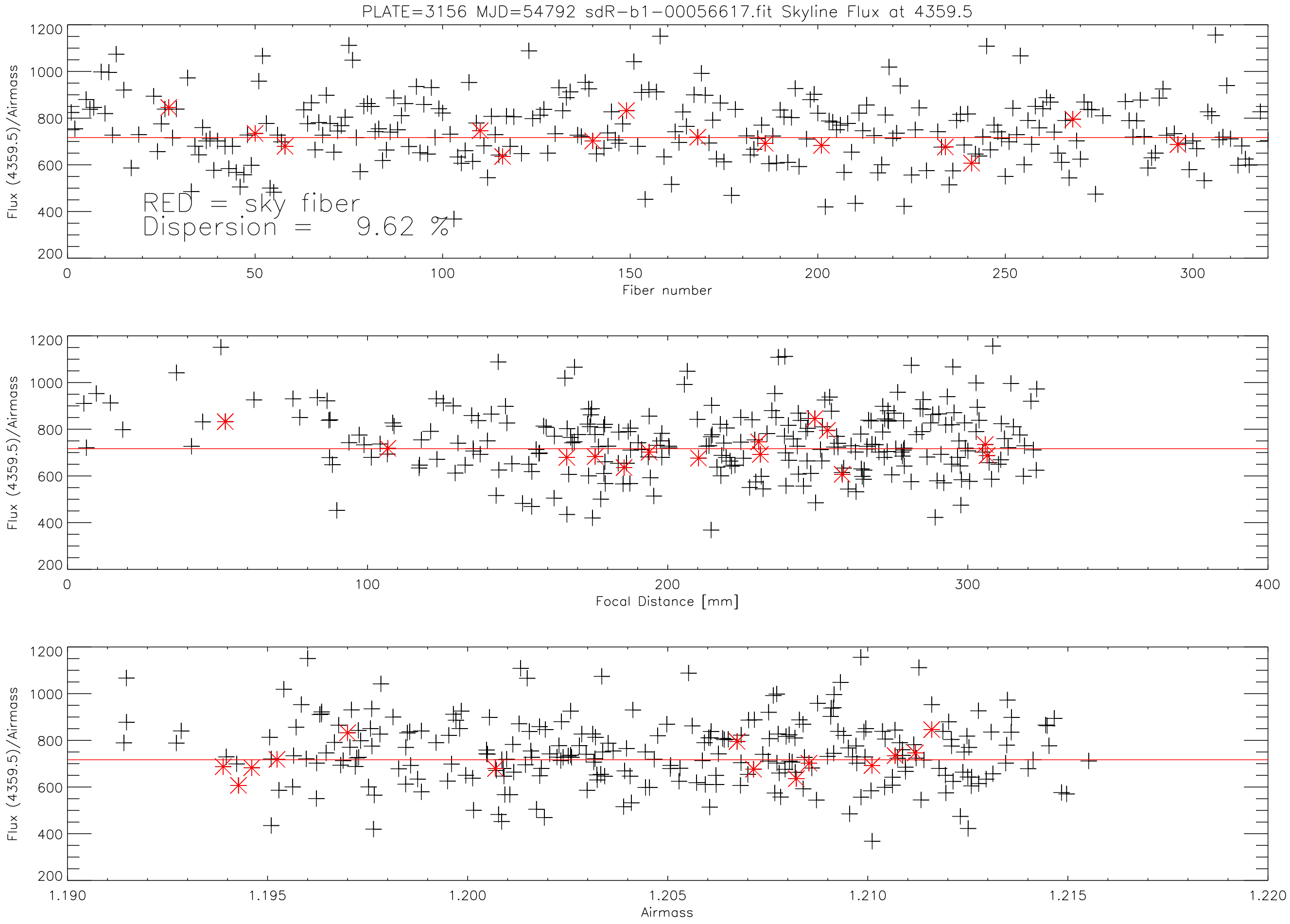


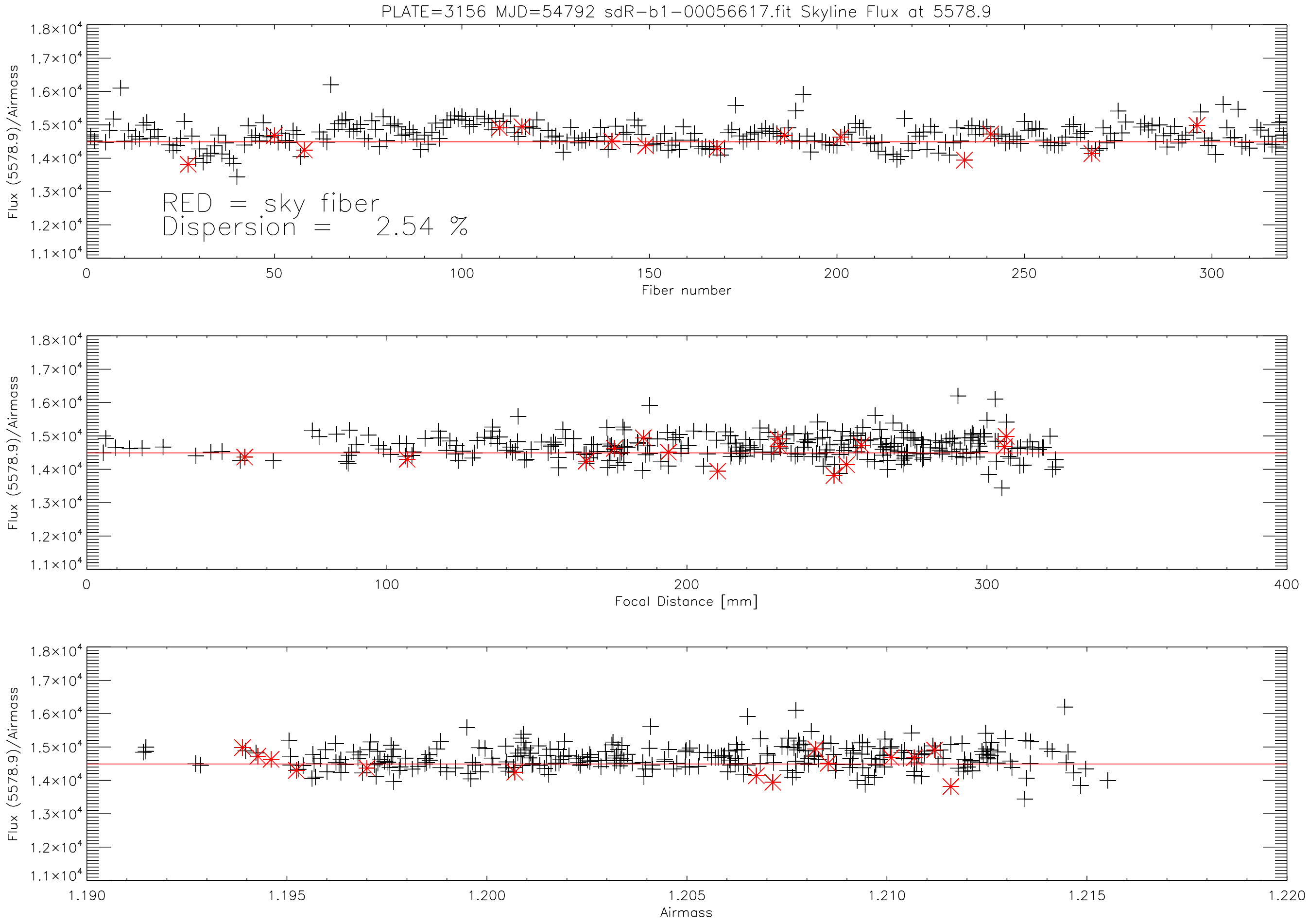
PLATE=3156 MJD=54792 sdR-b1-00056617.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 14

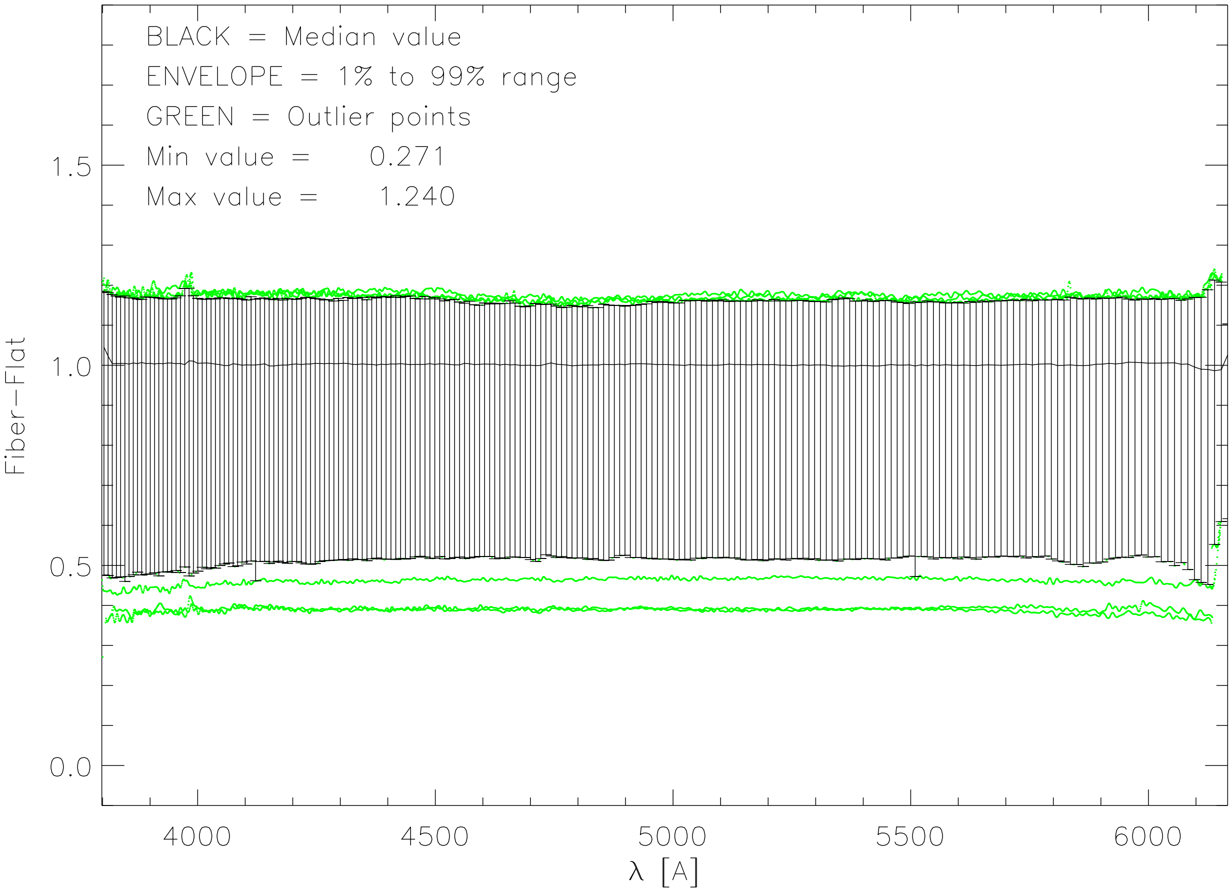
PLATE=3156 MJD=54792 sdR-b1-00056617.fit 2D Sky-subtraction Rescaled Errors



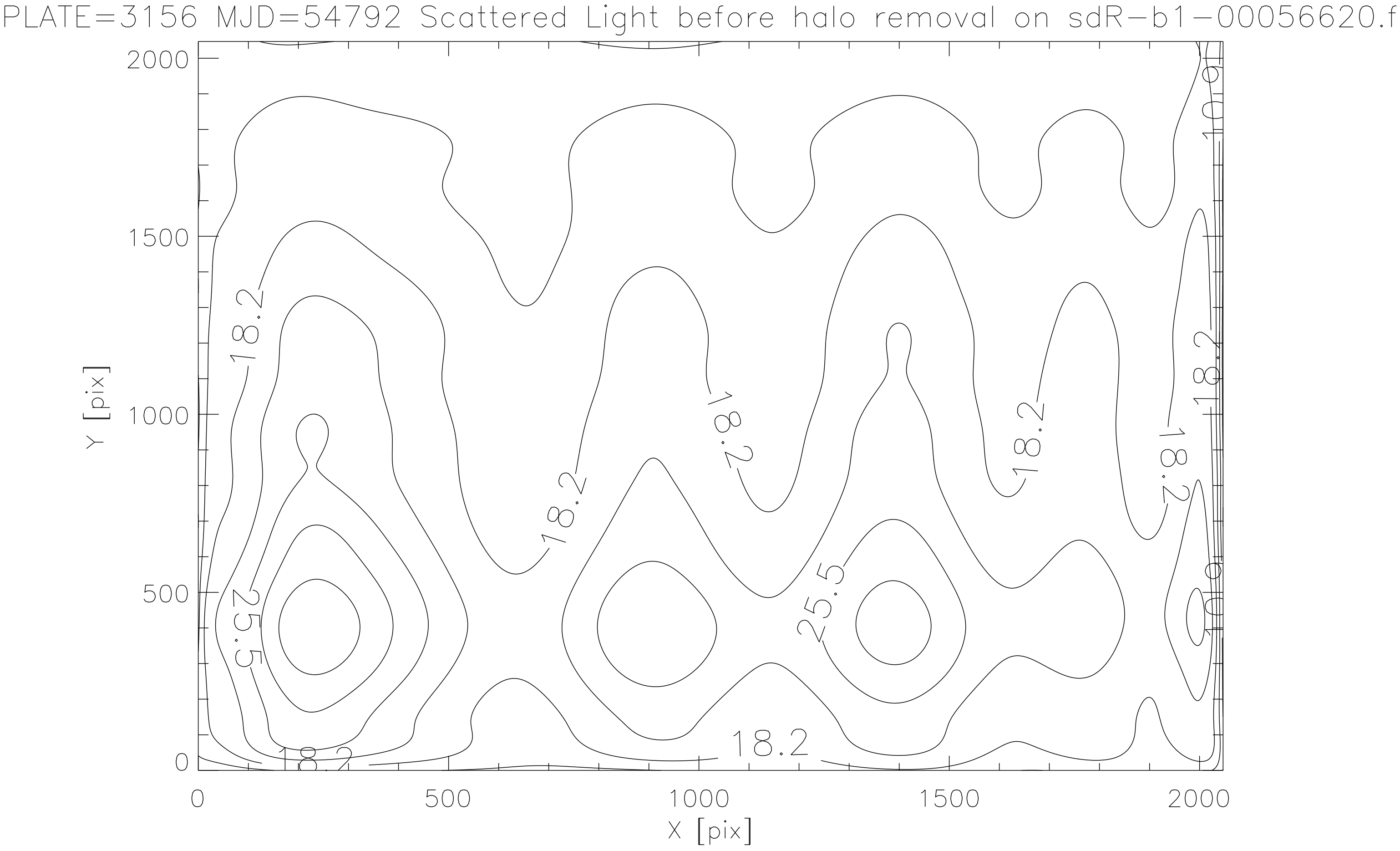

PLATE=3156 MJD=54792 sdR-b1-00056617.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
RED = sky fiber
Dispersion = 9.62 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
1.190
1.195
1.200
1.205
1.210
1.215
1.220
Airmass


PLATE=3156 MJD=54792 sdR-b1-00056617.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.8×10⁴
1.7×10⁴
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
RED = sky fiber
Dispersion = 2.54 %
0
50
100
150
200
250
300
Fiber number
Focal Distance [mm]
400
1.190
1.195
1.200
1.205
1.210
1.215
1.220
Airmass

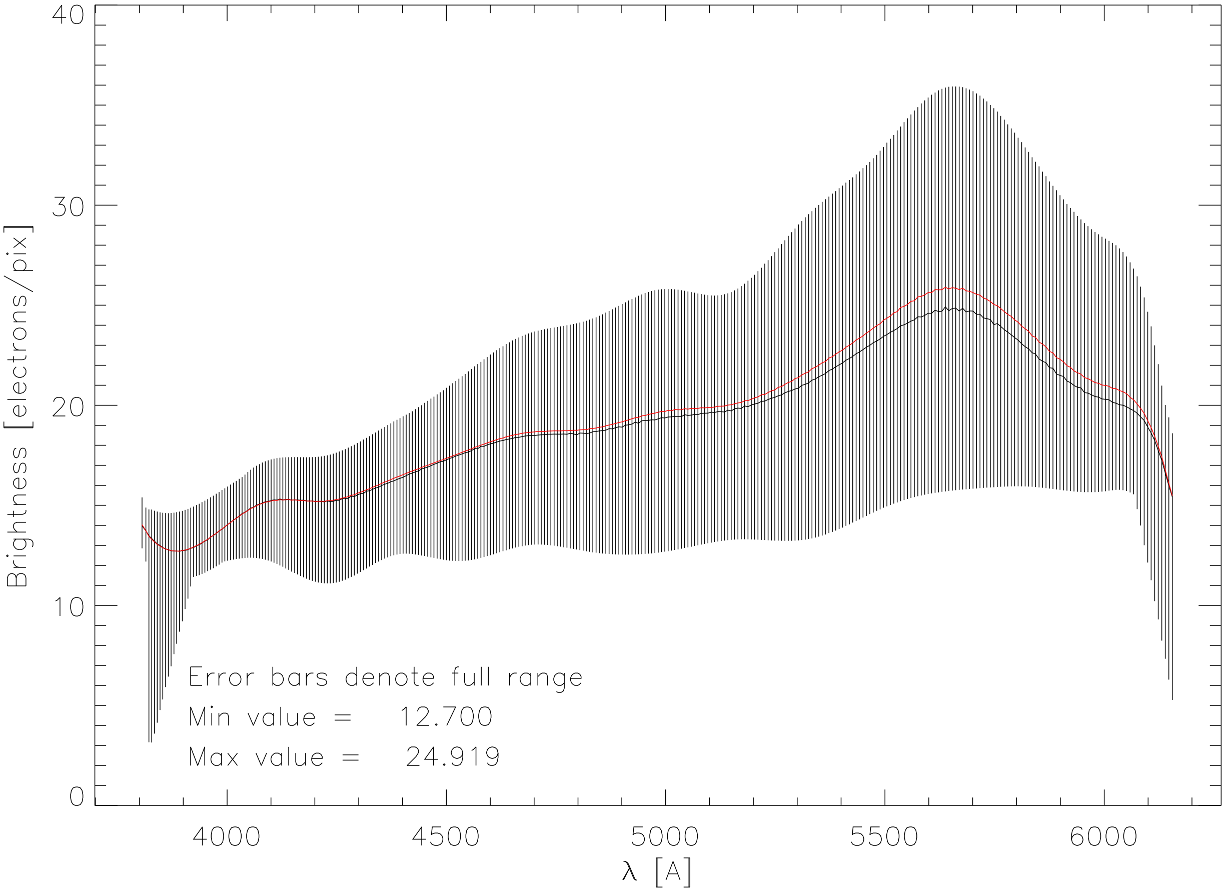
PLATE=3156 MJD=54792 Fiber−Flats for sdR−b1−00056618.fit



Tue Mar 9 18:14:32 2010

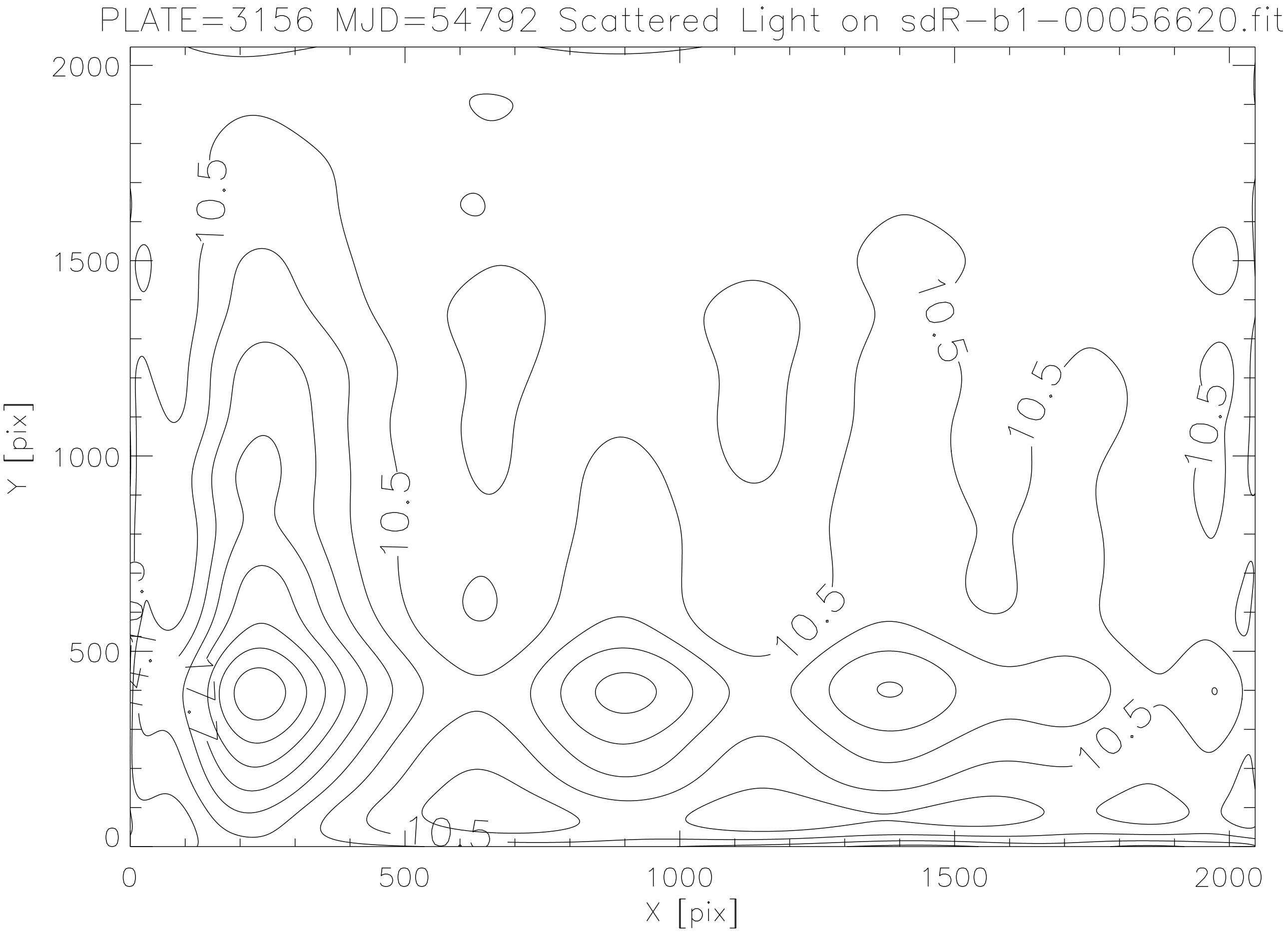


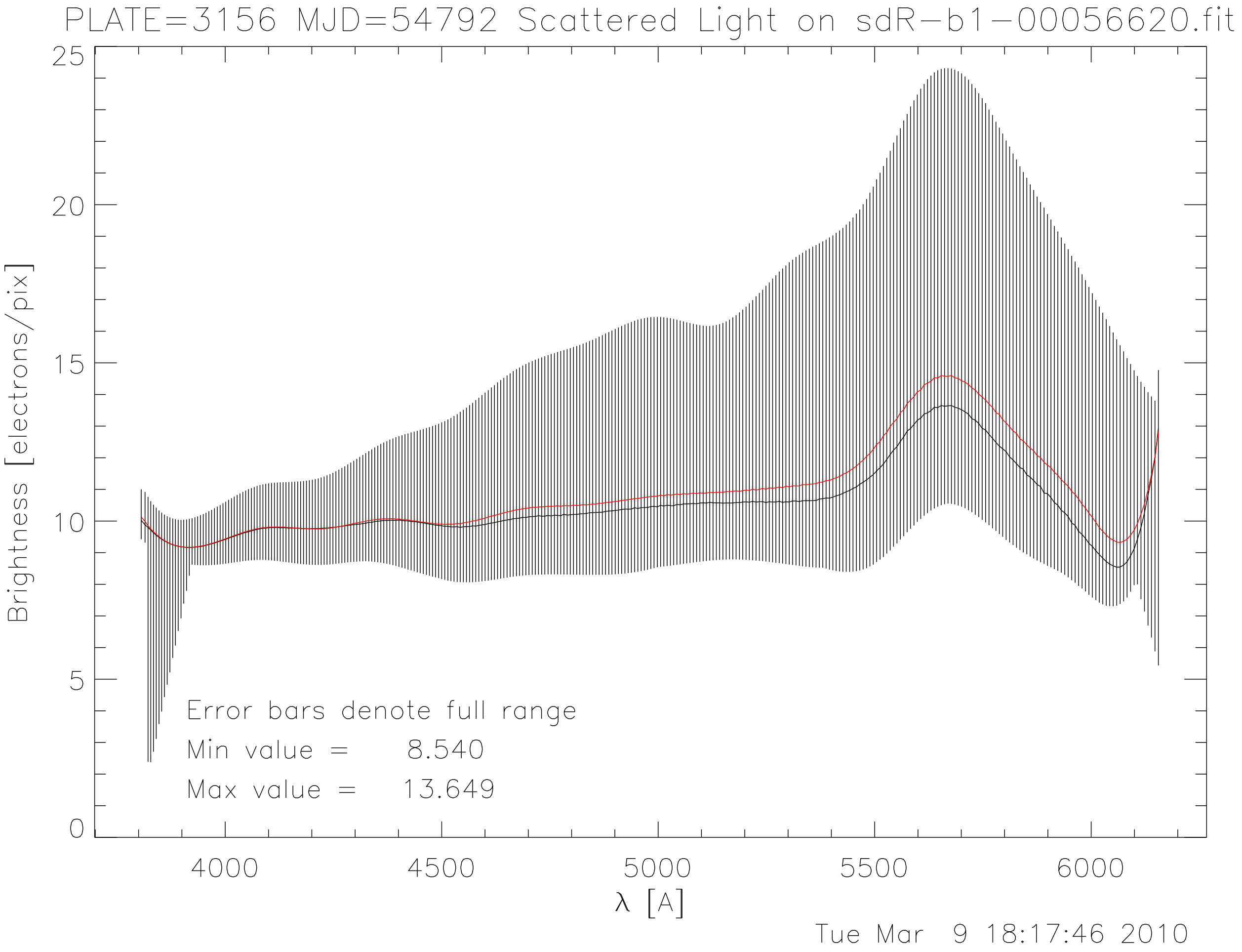
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056620.f



PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056620.f

Tue Mar 9 18:15:11 2010


PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056620.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
10.5
10.5
10.5
10.5
10.5
10.5
10.5
10.5
10.5
11.0



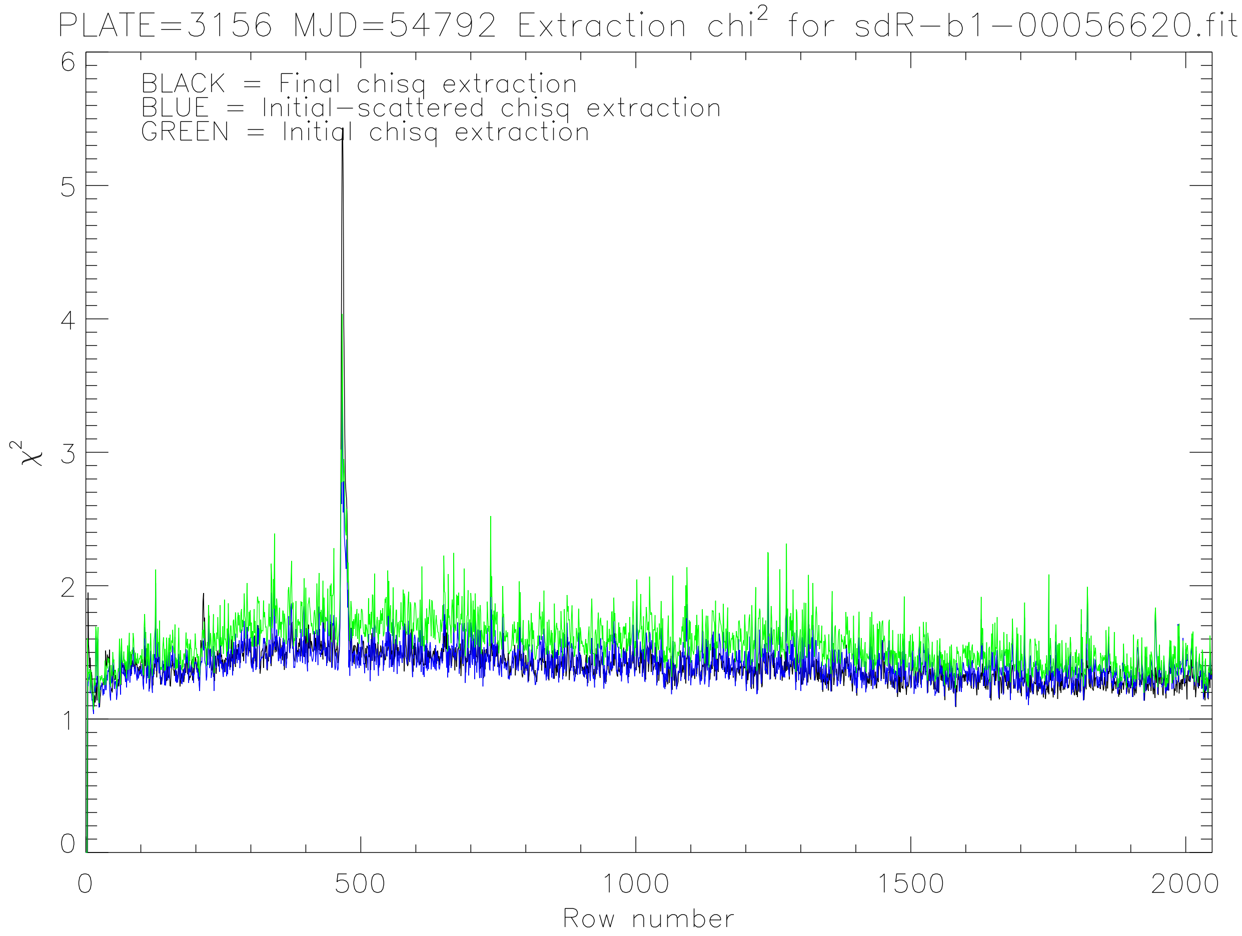
PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056620.fit

Error bars denote full range

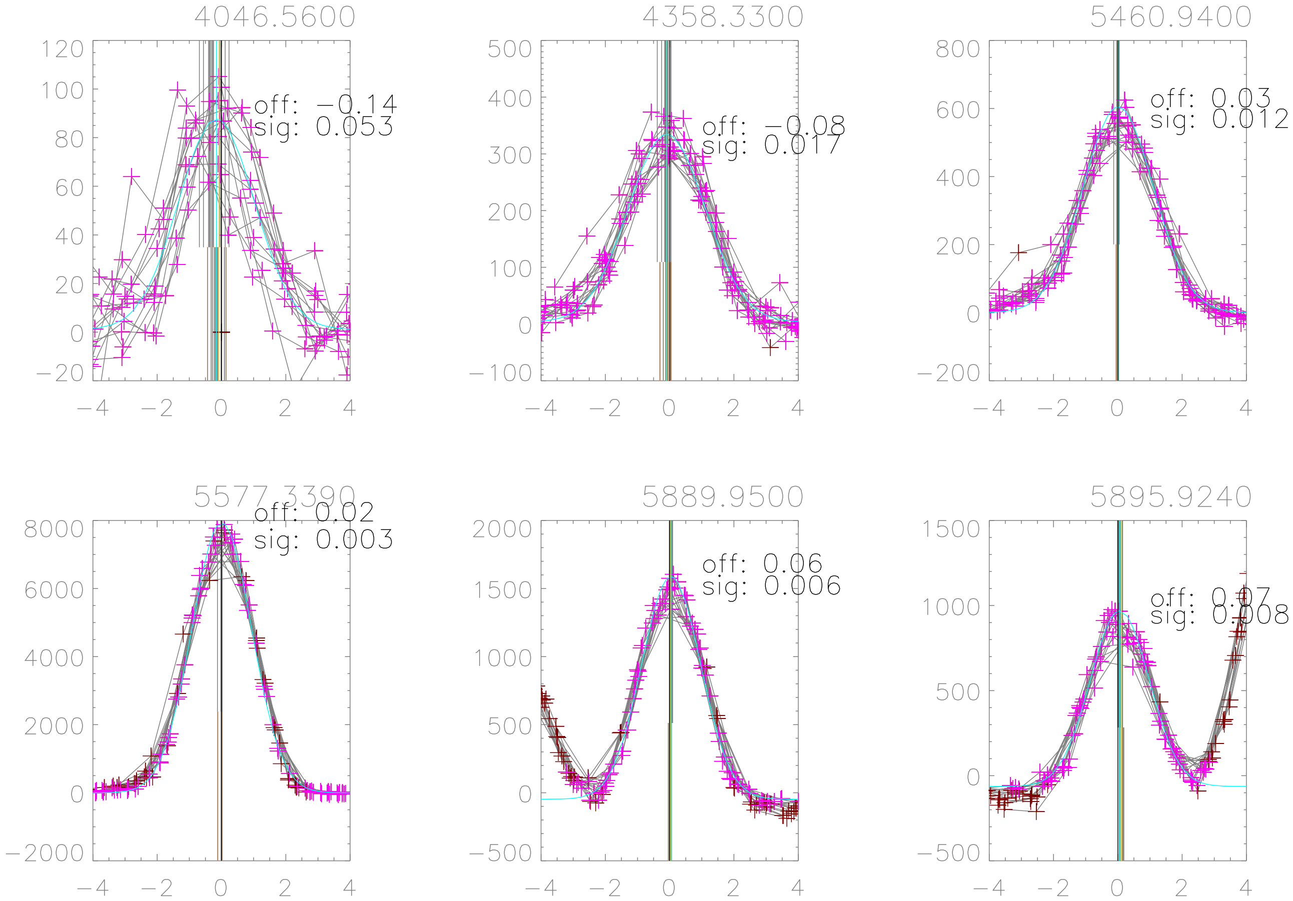
Min value = 8.540

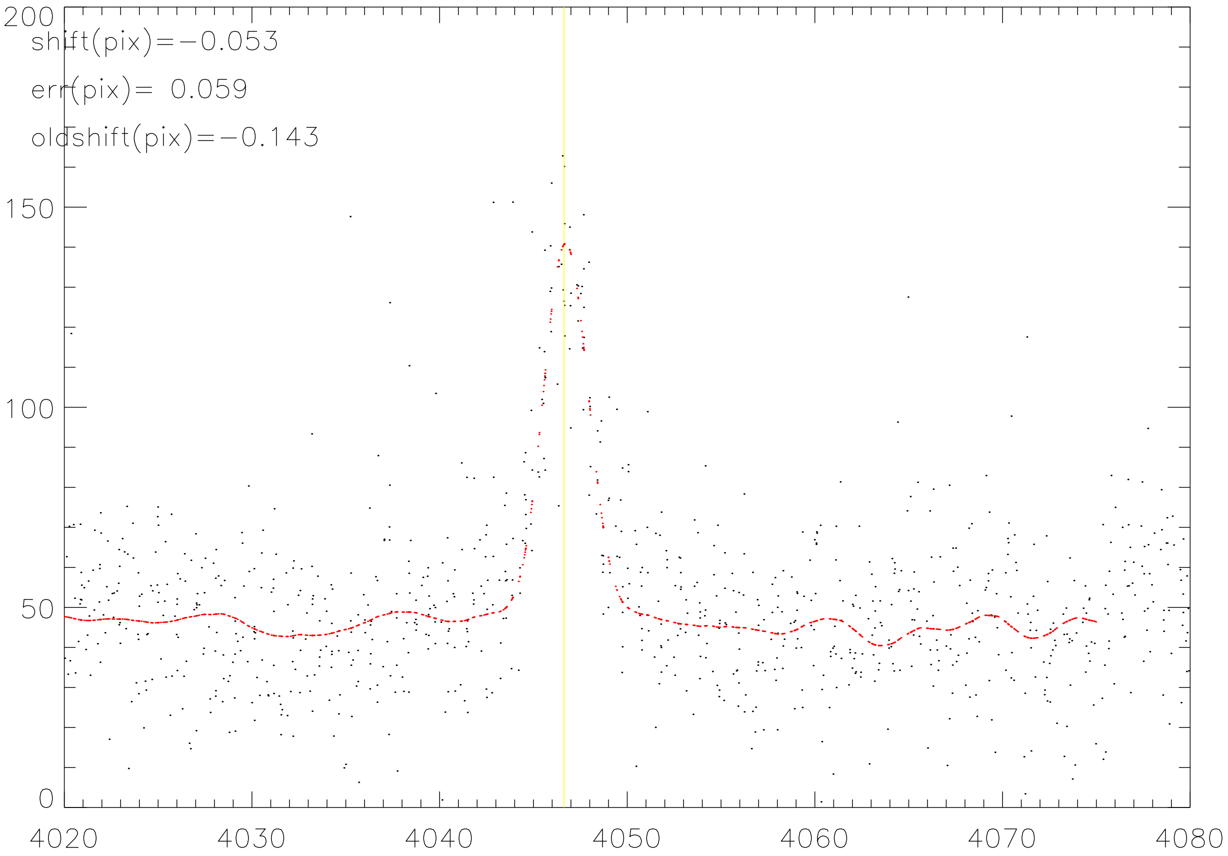
Max value = 13.649

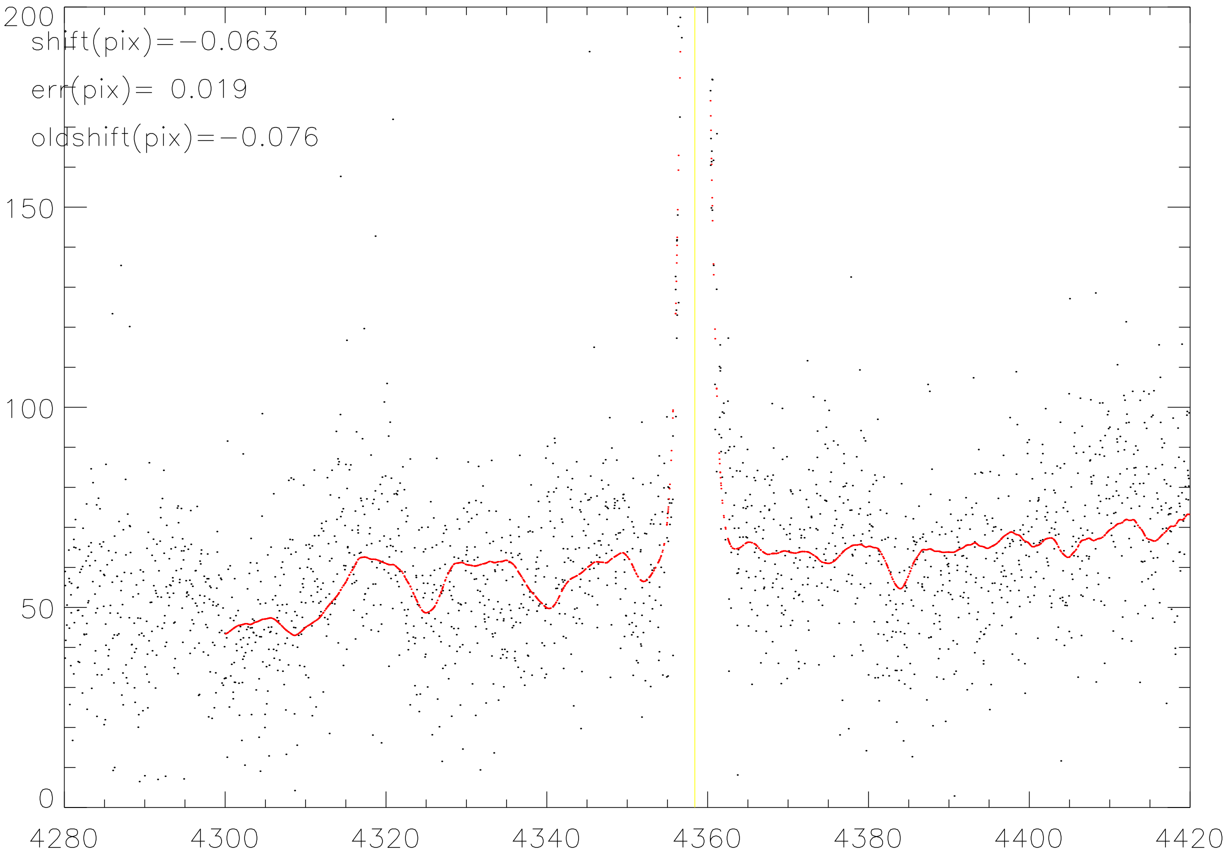
Tue Mar 9 18:17:46 2010

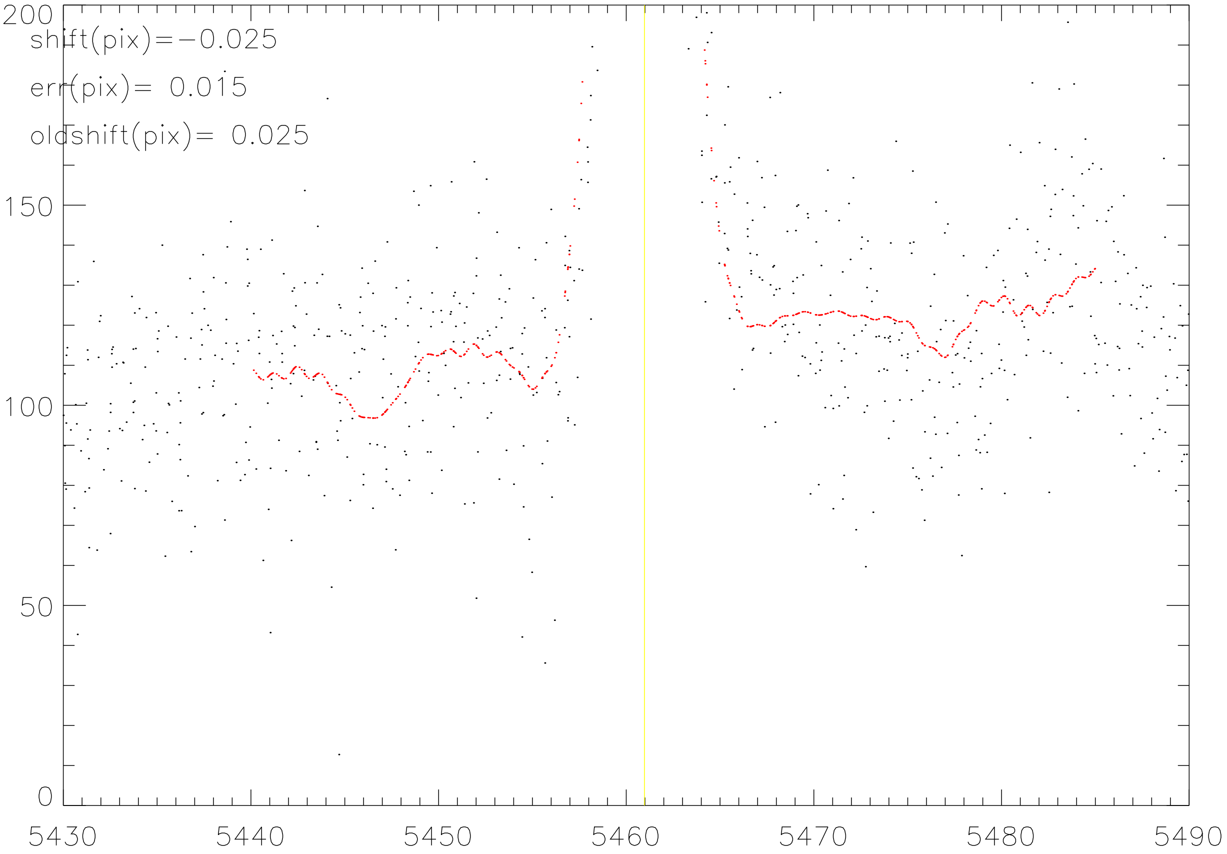


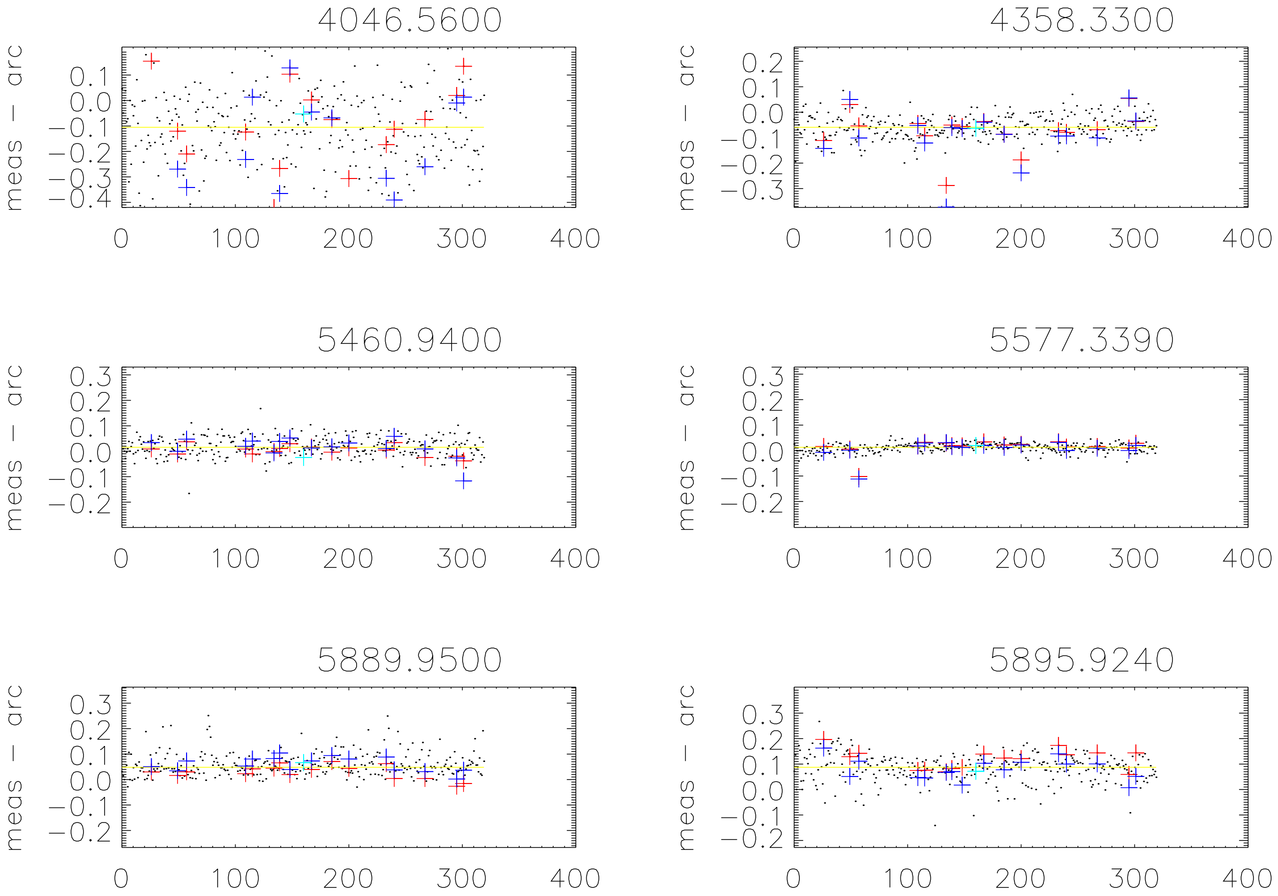
PLATE=3156 MJD=54792 Extraction χ^2 for sdR-b1-00056620.fit

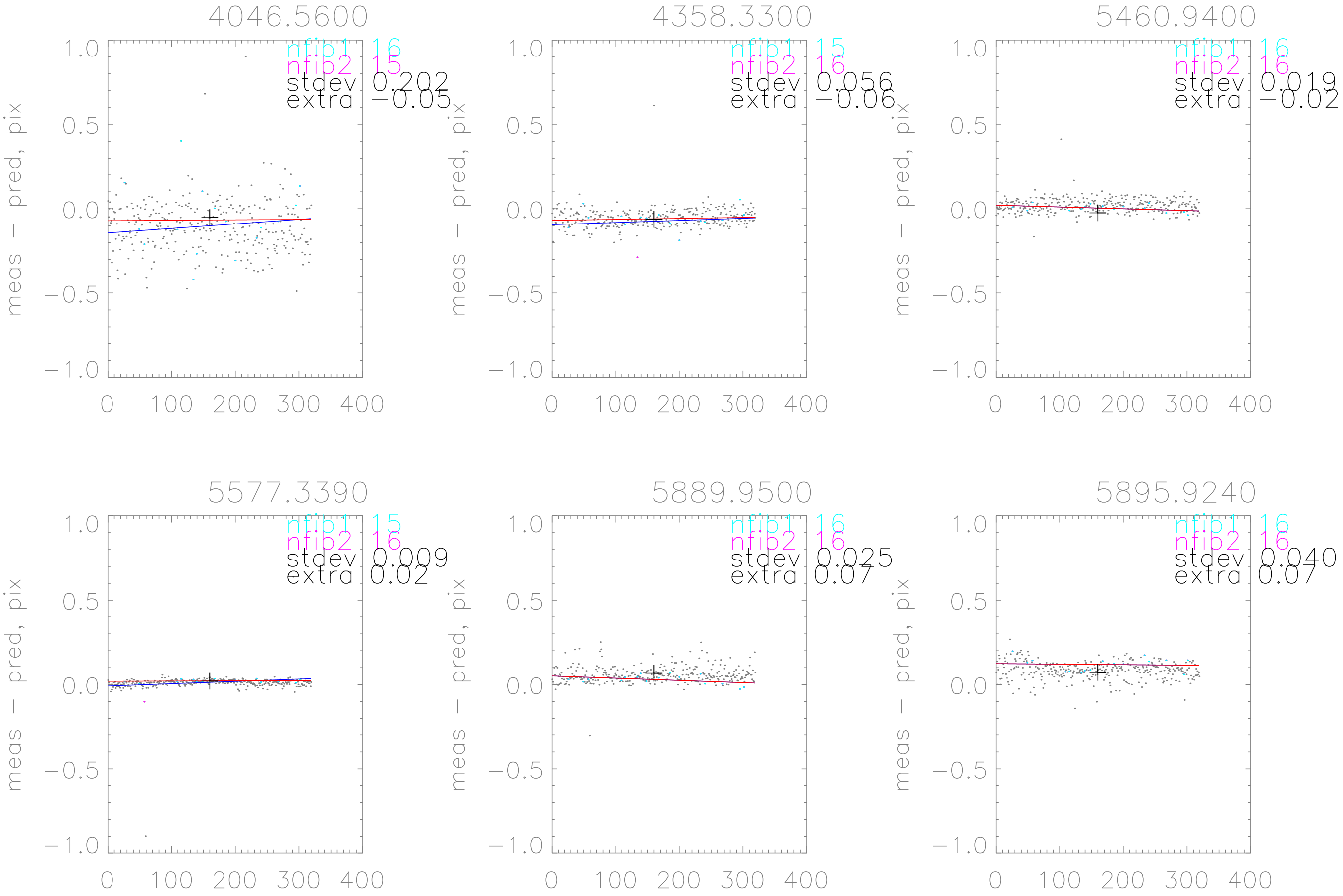

4046.5600
off: −0.14
sig: 0.053
120
100
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.08
sig: 0.017
500
400
300
200
100
0
−100
5460.9400
off: 0.03
sig: 0.012
800
600
400
200
0
−200
5577.3390
off: 0.02
sig: 0.003
8000
6000
4000
2000
0
−2000
5889.9500
off: 0.06
sig: 0.006
2000
1500
1000
500
0
−500
5895.9240
off: 0.07
sig: 0.008
1500
1000
500
0
−500

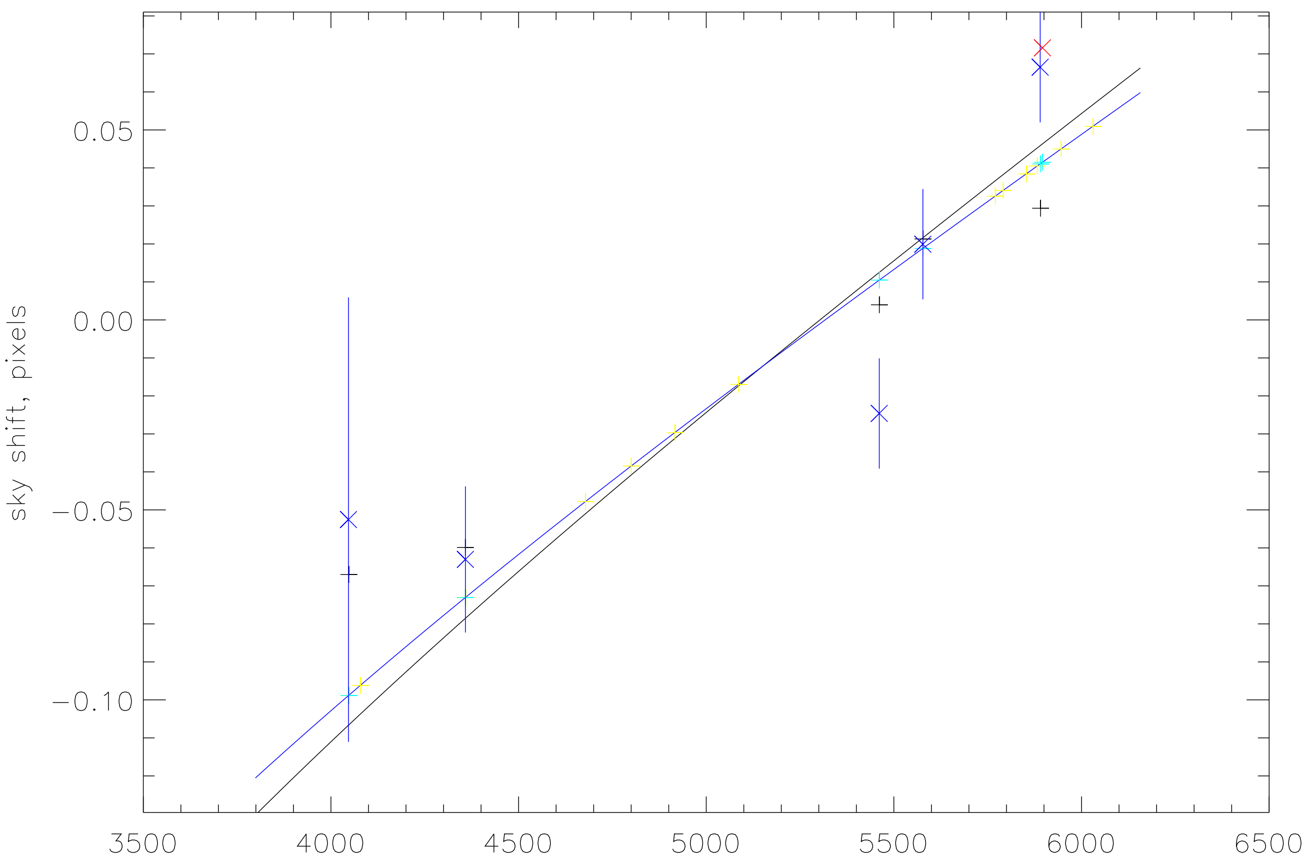

shift(pix)=−0.053
err(pix)= 0.059
oldshift(pix)=−0.143
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

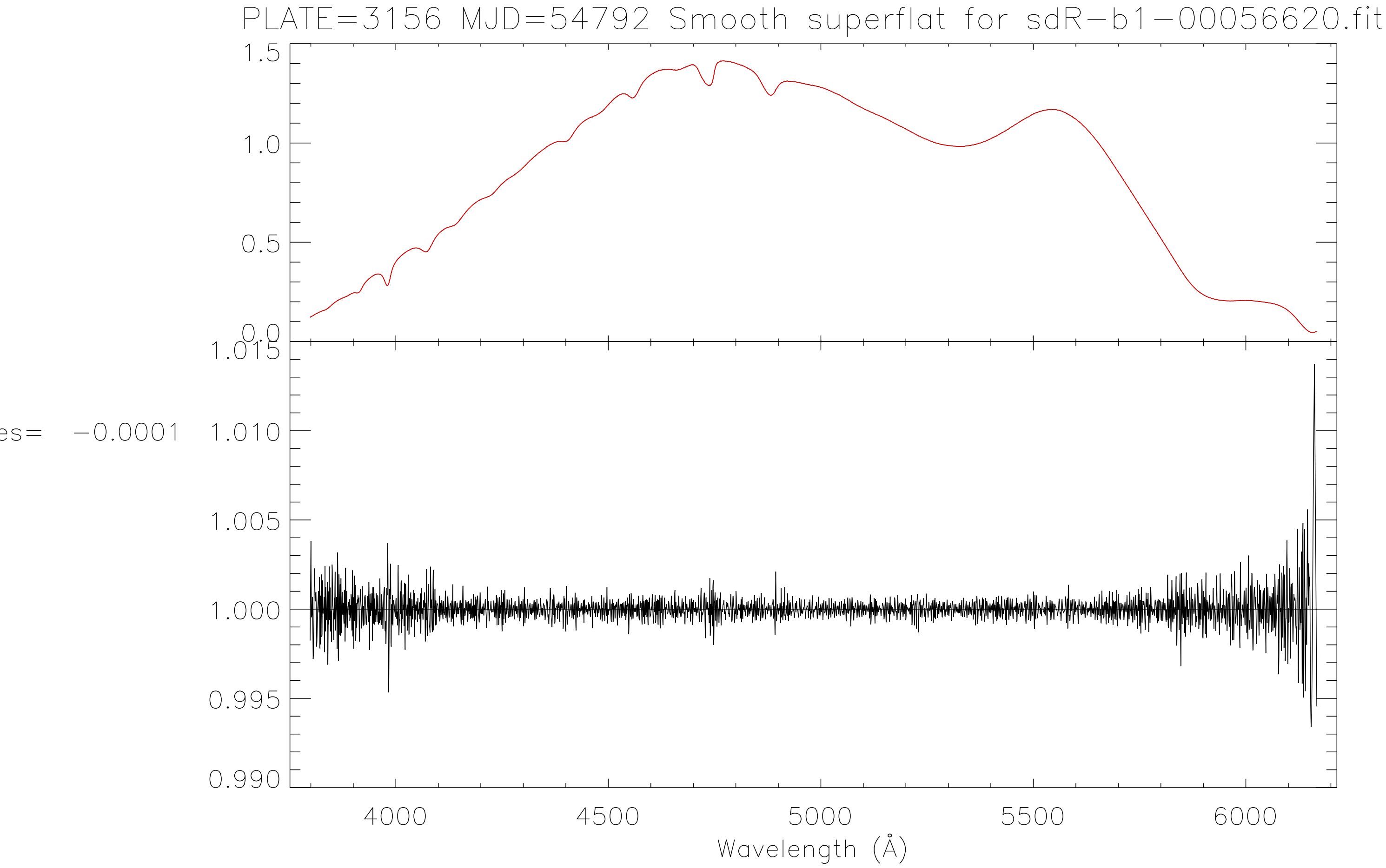

shift(pix)=−0.063
err(pix)= 0.019
oldshift(pix)=−0.076
0
50
100
150
200
4280
4300
4320
4340
4360
4380
4400
4420

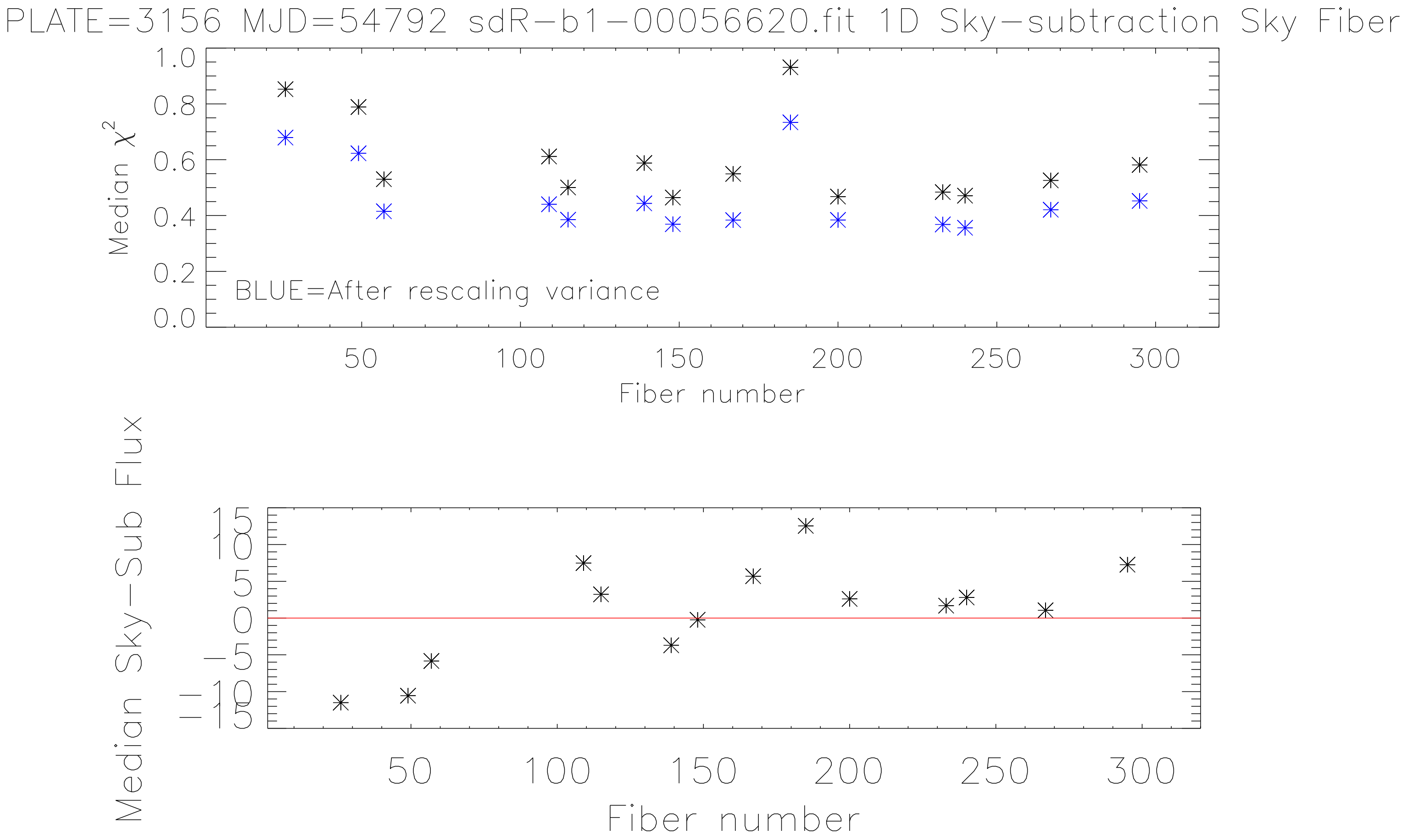

shift(pix)=−0.025
err(pix)= 0.015
oldshift(pix)= 0.025
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

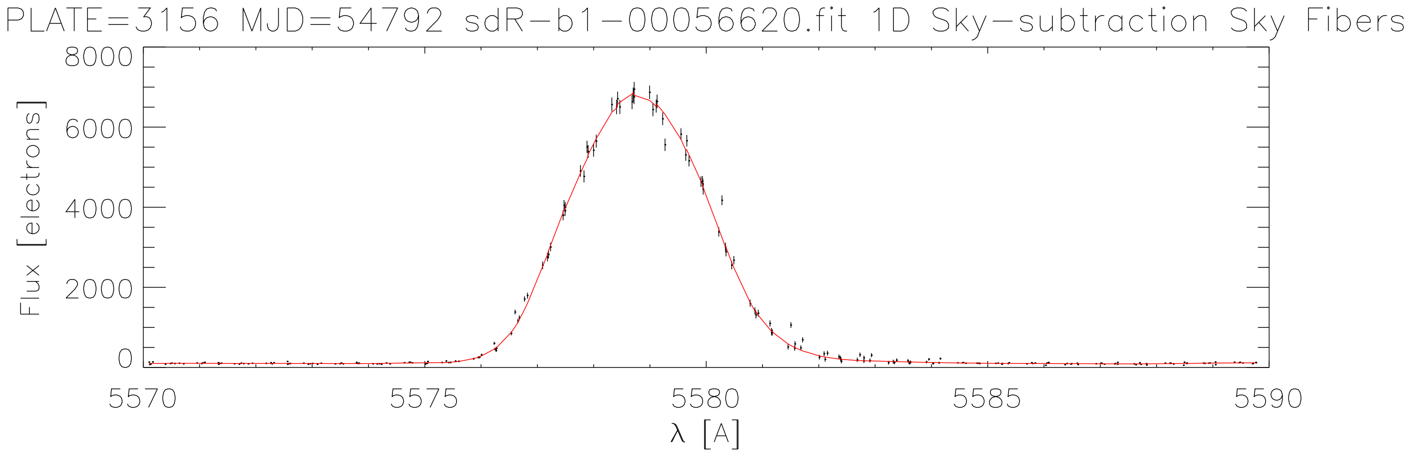

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

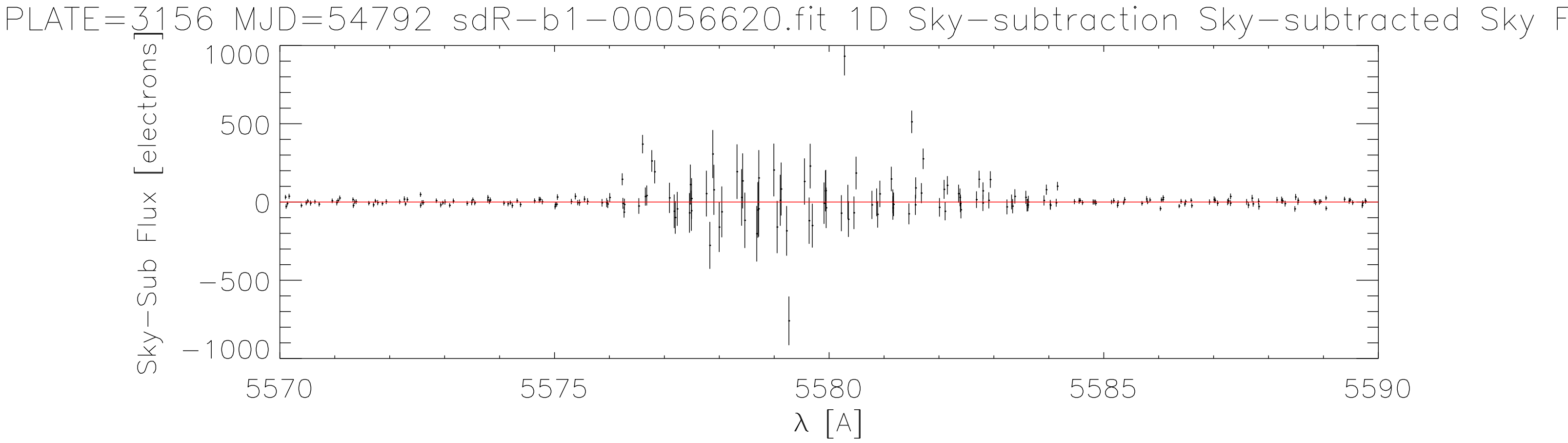

4046.5600
nfib1 16
nfib2 15
stdev 0.202
extra −0.05
4358.3300
nfib1 15
nfib2 16
stdev 0.056
extra −0.06
5460.9400
nfib1 16
nfib2 16
stdev 0.019
extra −0.02
5577.3390
nfib1 15
nfib2 16
stdev 0.009
extra 0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra 0.07
5895.9240
nfib1 16
nfib2 16
stdev 0.040
extra 0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500


PLATE=3156 MJD=54792 Smooth superflat for sdR-b1-00056620.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

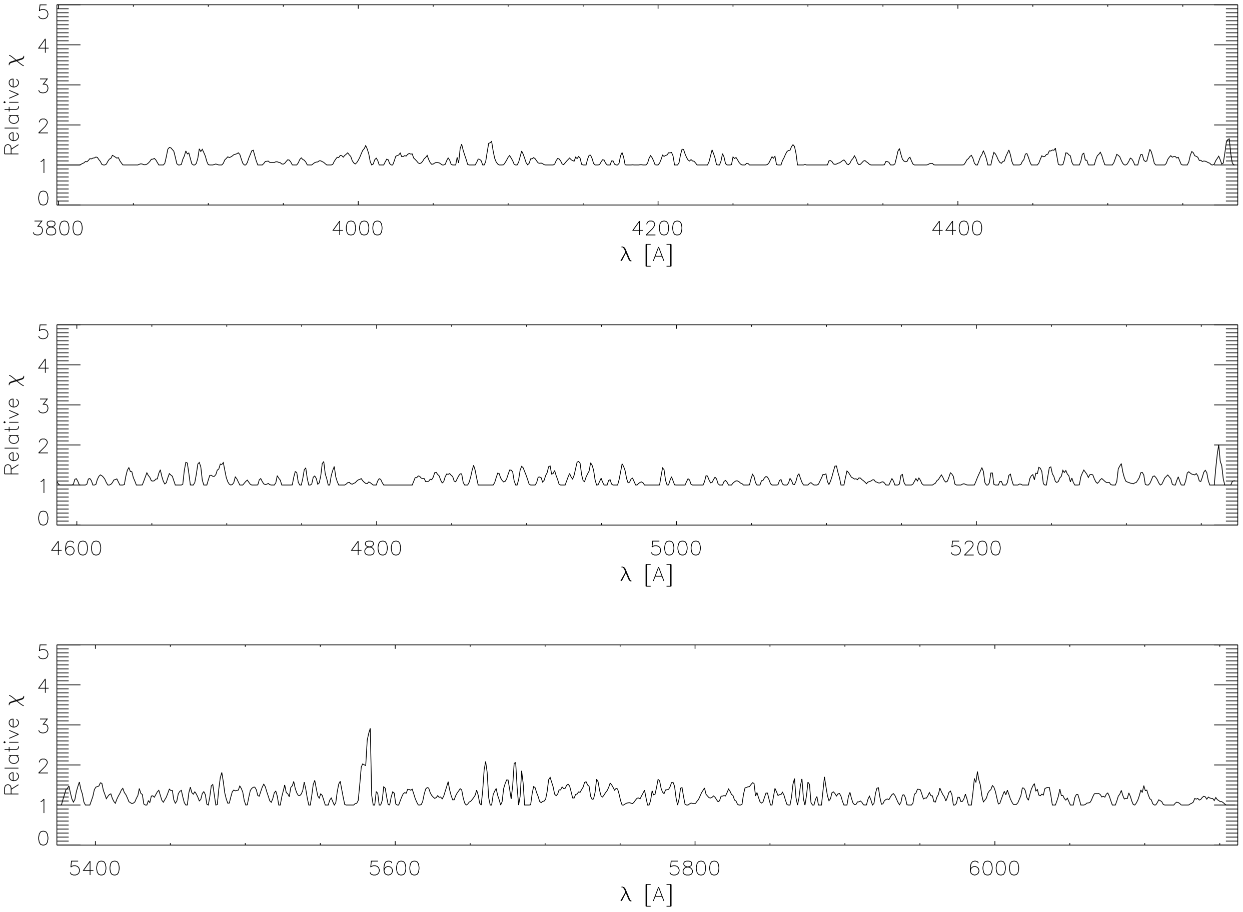

PLATE=3156 MJD=54792 sdR-b1-00056620.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

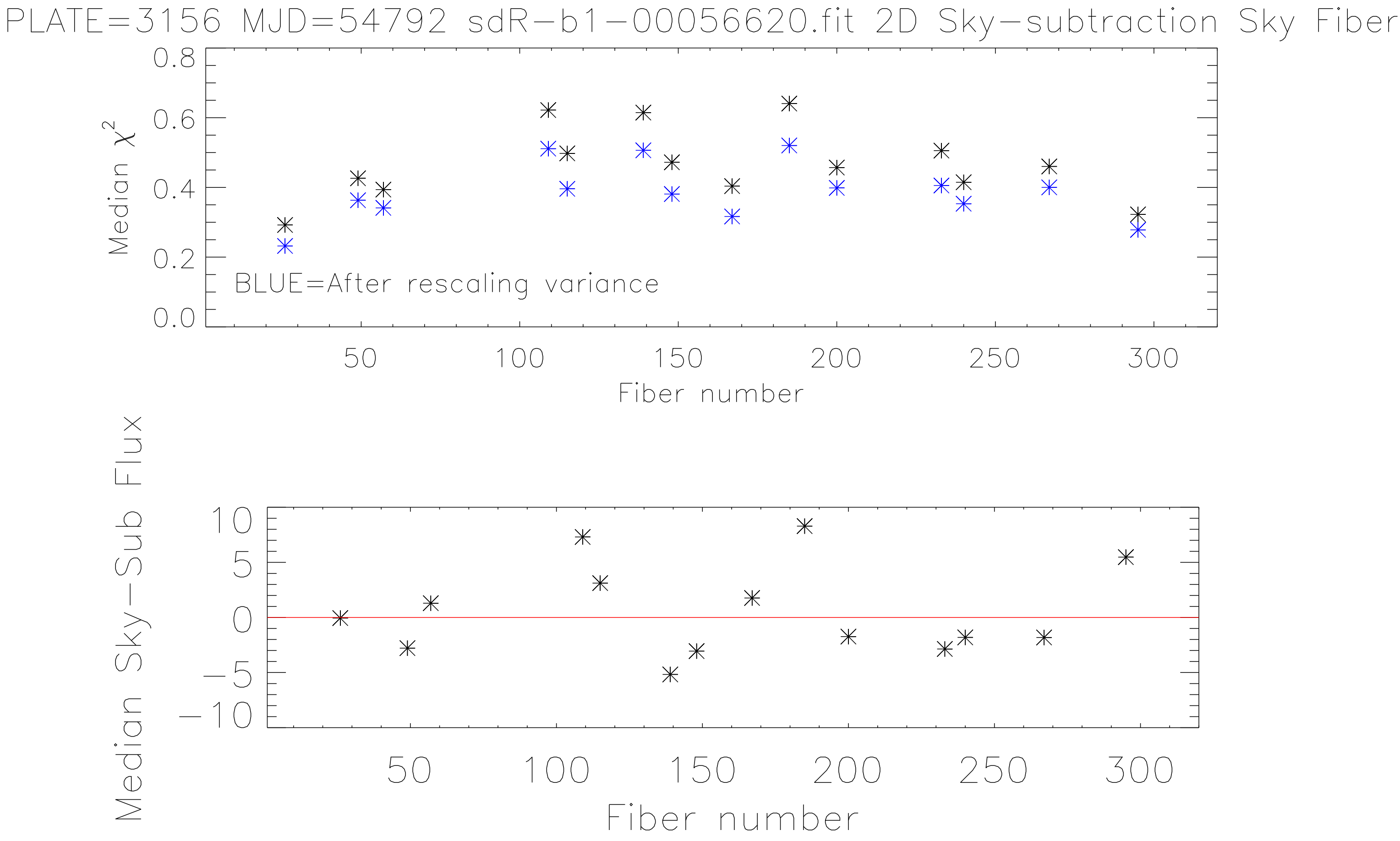

PLATE=3156 MJD=54792 sdR-b1-00056620.fit 1D Sky-subtraction Sky Fibers
8000
6000
4000
2000
0
Flux [electrons]
5570
5575
5580
5585
5590
λ [A]

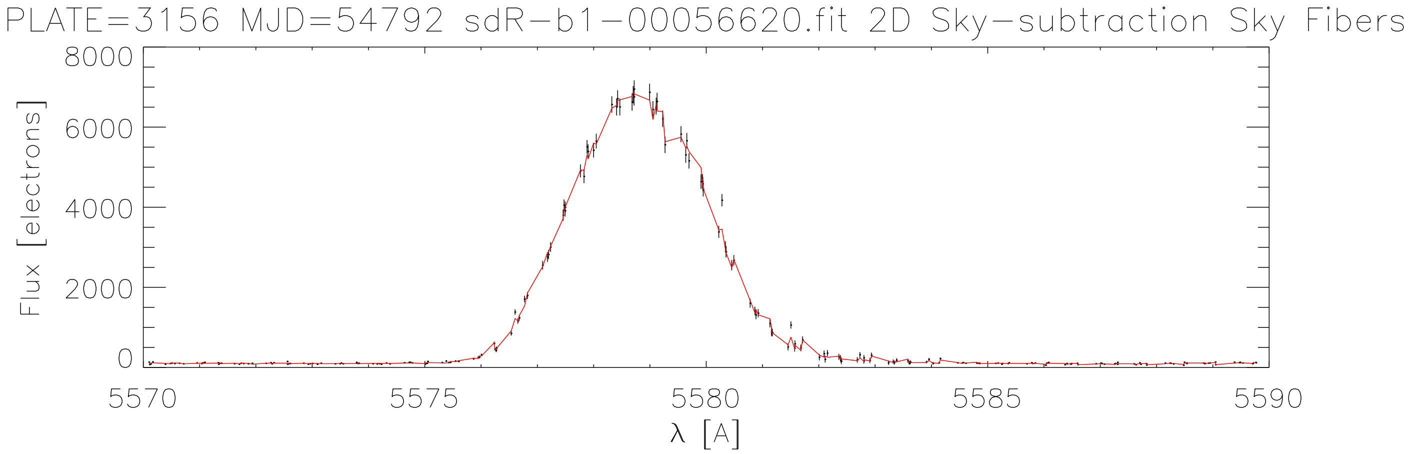

PLATE=3156 MJD=54792 sdR-b1-00056620.fit 1D Sky-subtraction Sky-subtracted Sky F
1000
500
0
−500
−1000
Sky-Sub Flux [electrons]
5570
5575
5580
5585
5590
λ [A]

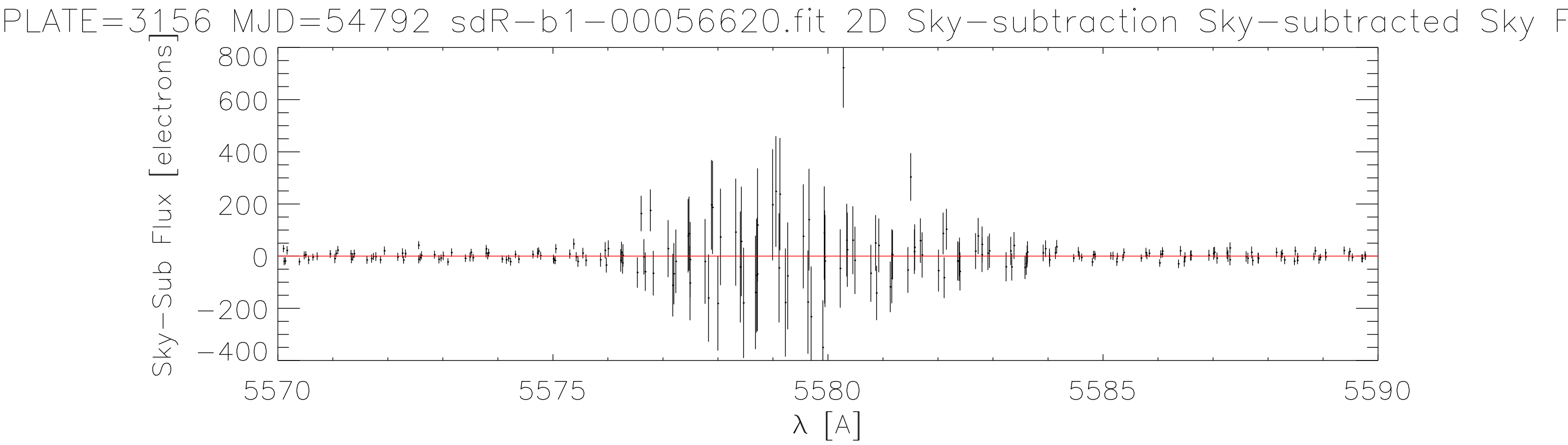
Number of sky fibers = 14

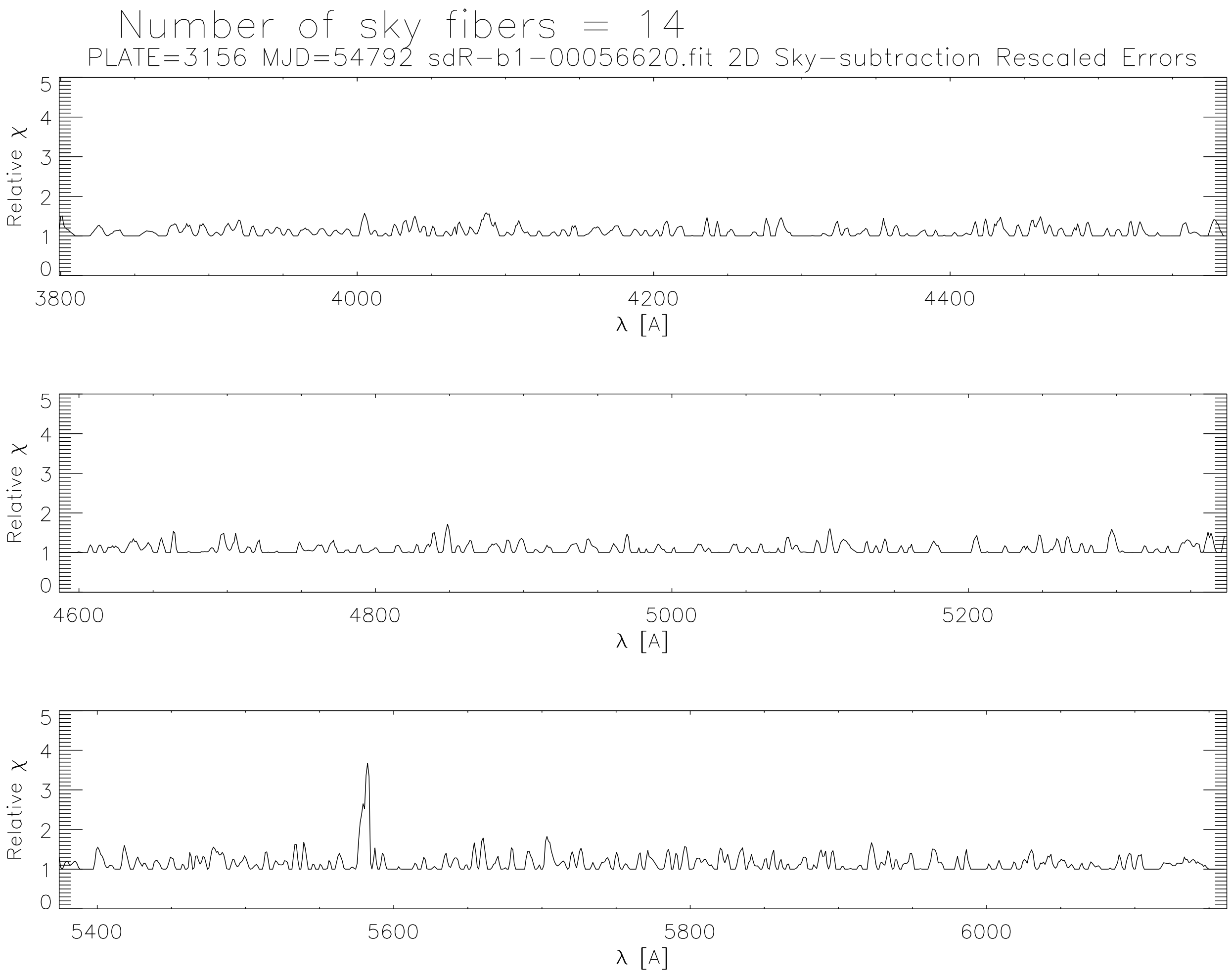
PLATE=3156 MJD=54792 sdR-b1-00056620.fit 1D Sky-subtraction Rescaled Errors

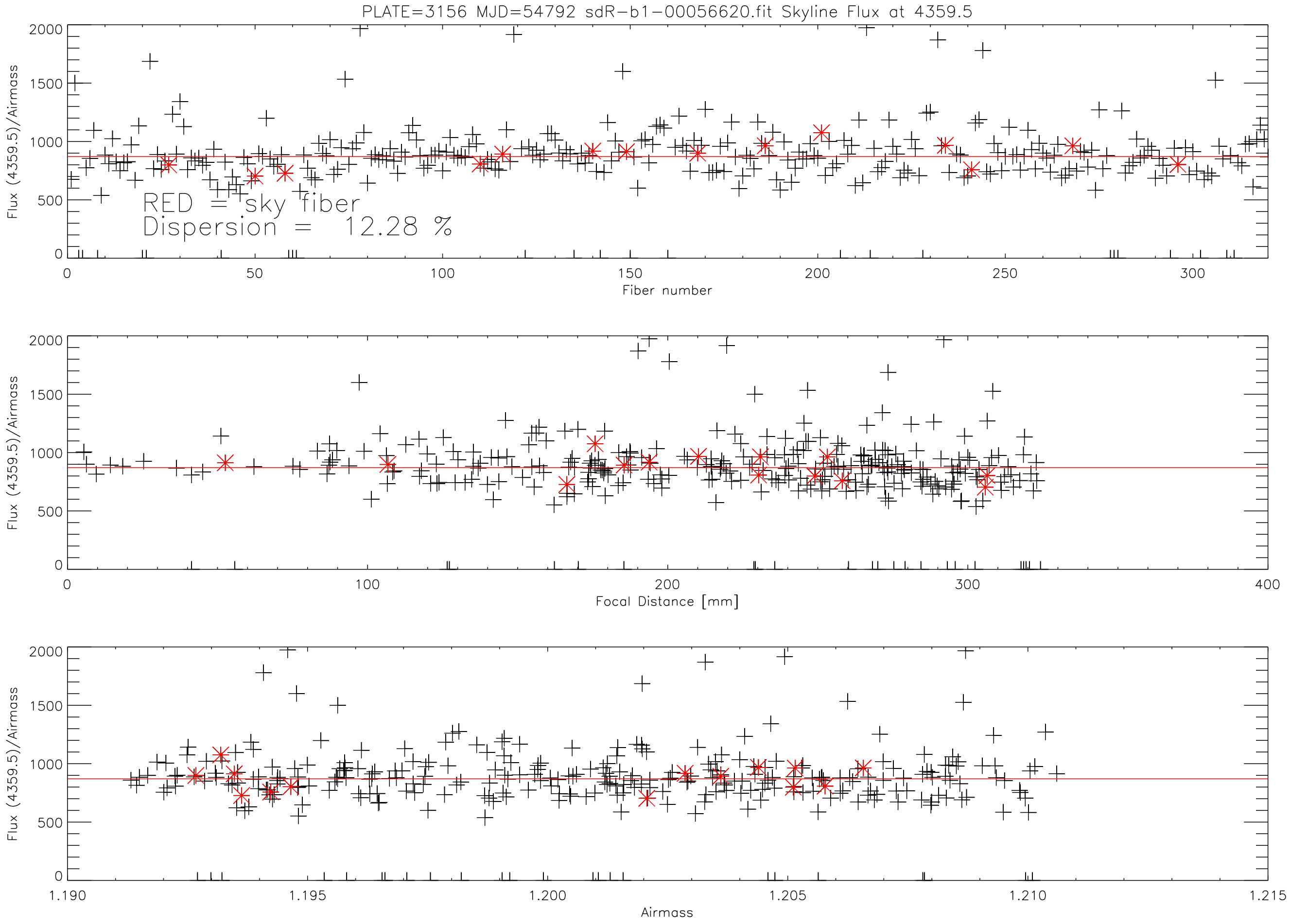


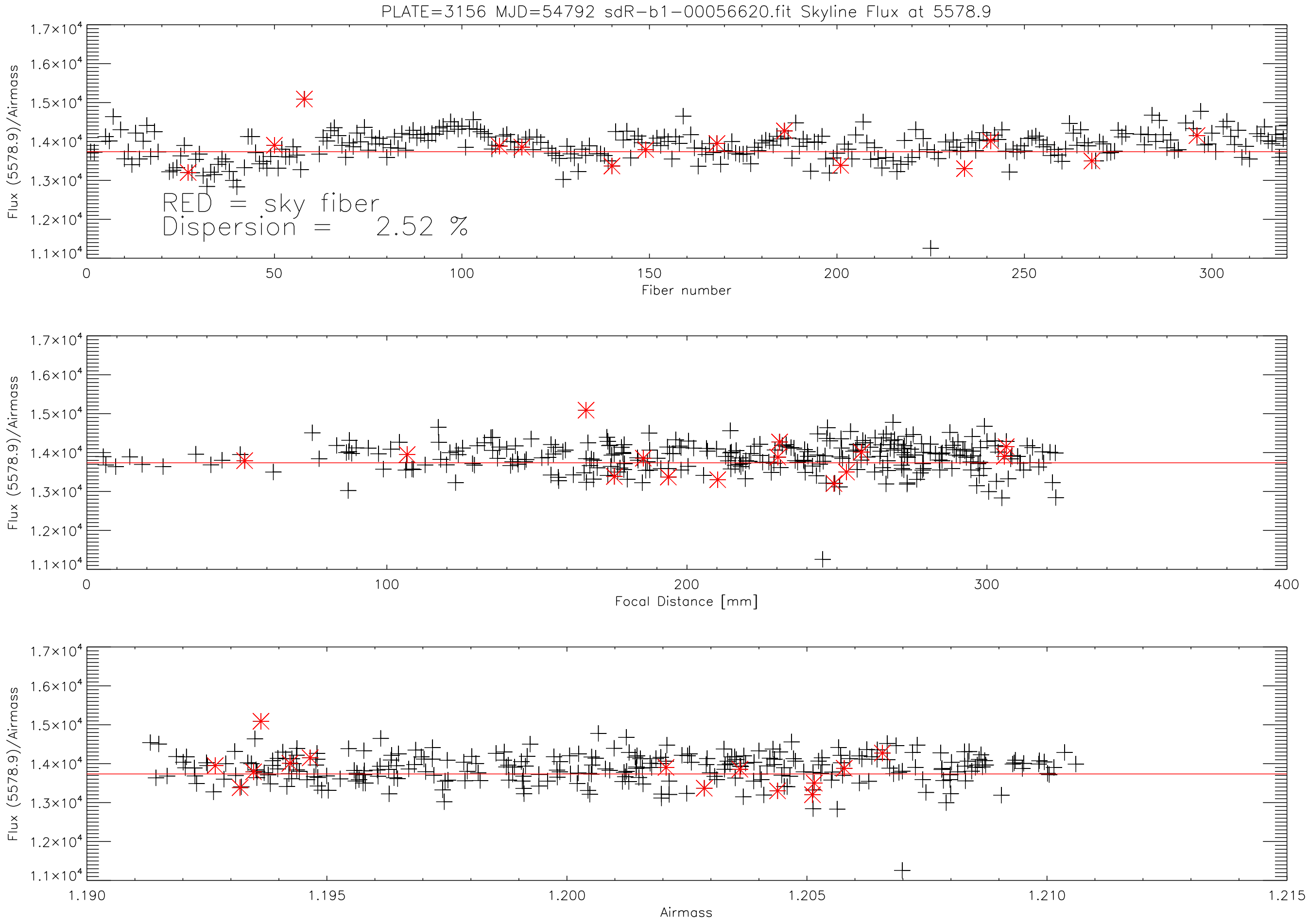

PLATE=3156 MJD=54792 sdR-b1-00056620.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

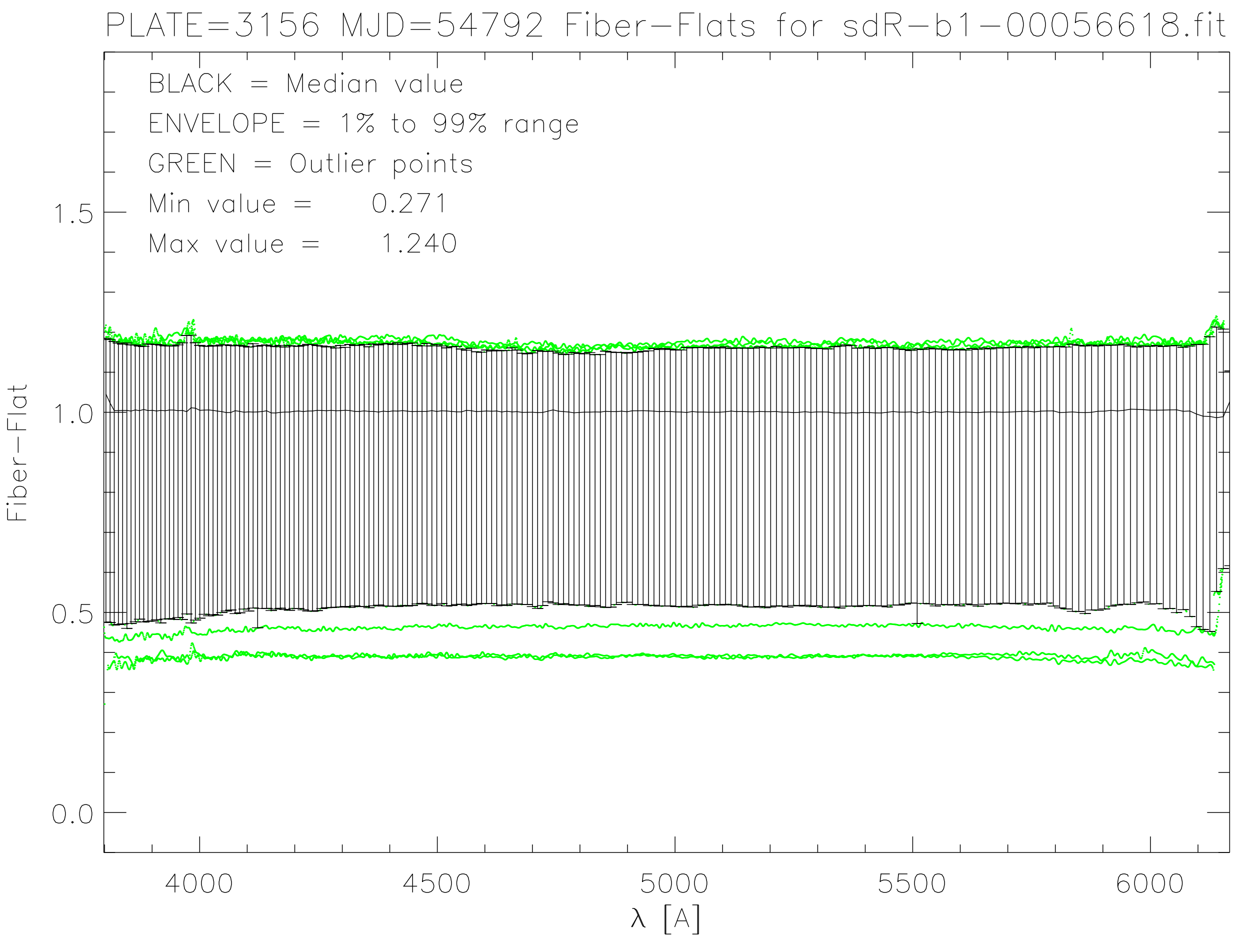

PLATE=3156 MJD=54792 sdR-b1-00056620.fit 2D Sky-subtraction Sky Fibers


PLATE=3156 MJD=54792 sdR-b1-00056620.fit 2D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 14
PLATE=3156 MJD=54792 sdR-b1-00056620.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]


PLATE=3156 MJD=54792 sdR-b1-00056620.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2000
1500
1000
500
0
RED = sky fiber
Dispersion = 12.28 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2000
1500
1000
500
0
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2000
1500
1000
500
0
1.190
1.195
1.200
1.205
1.210
1.215
Airmass


PLATE=3156 MJD=54792 sdR-b1-00056620.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 2.52 %
Flux (5578.9)/Airmass
1.1×10^4
1.2×10^4
1.3×10^4
1.4×10^4
1.5×10^4
1.6×10^4
1.7×10^4
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.190
1.195
1.200
1.205
1.210
1.215



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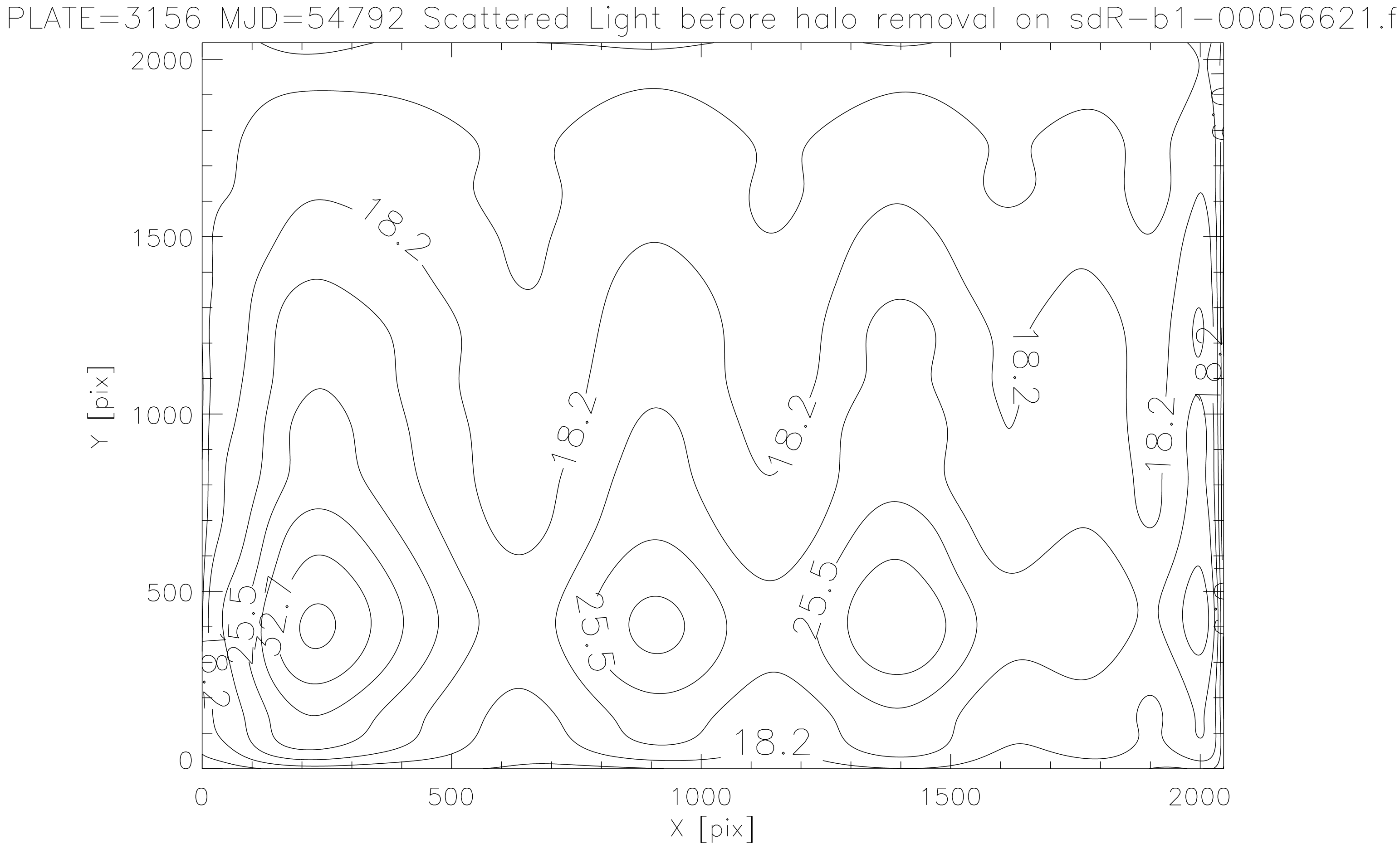
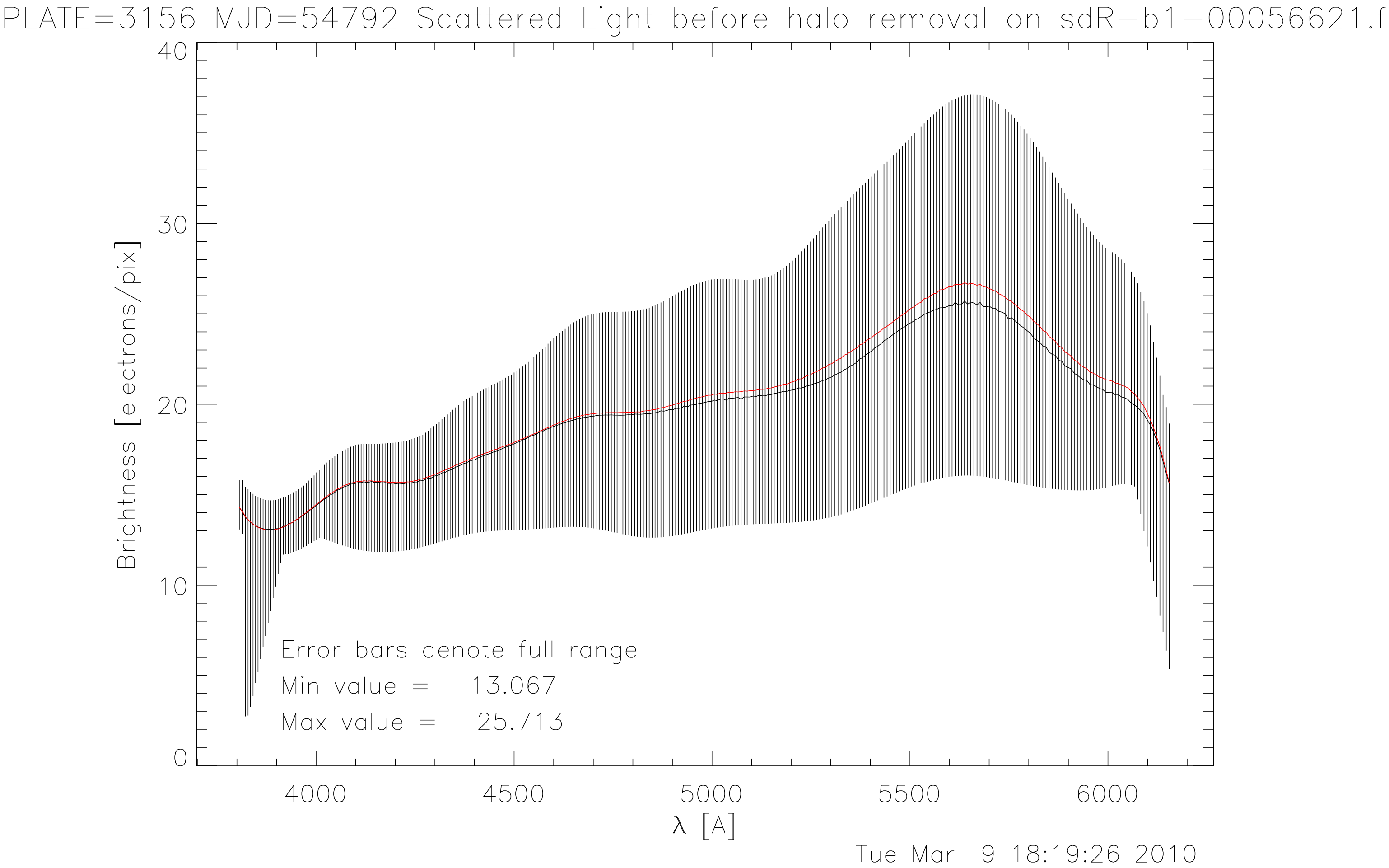
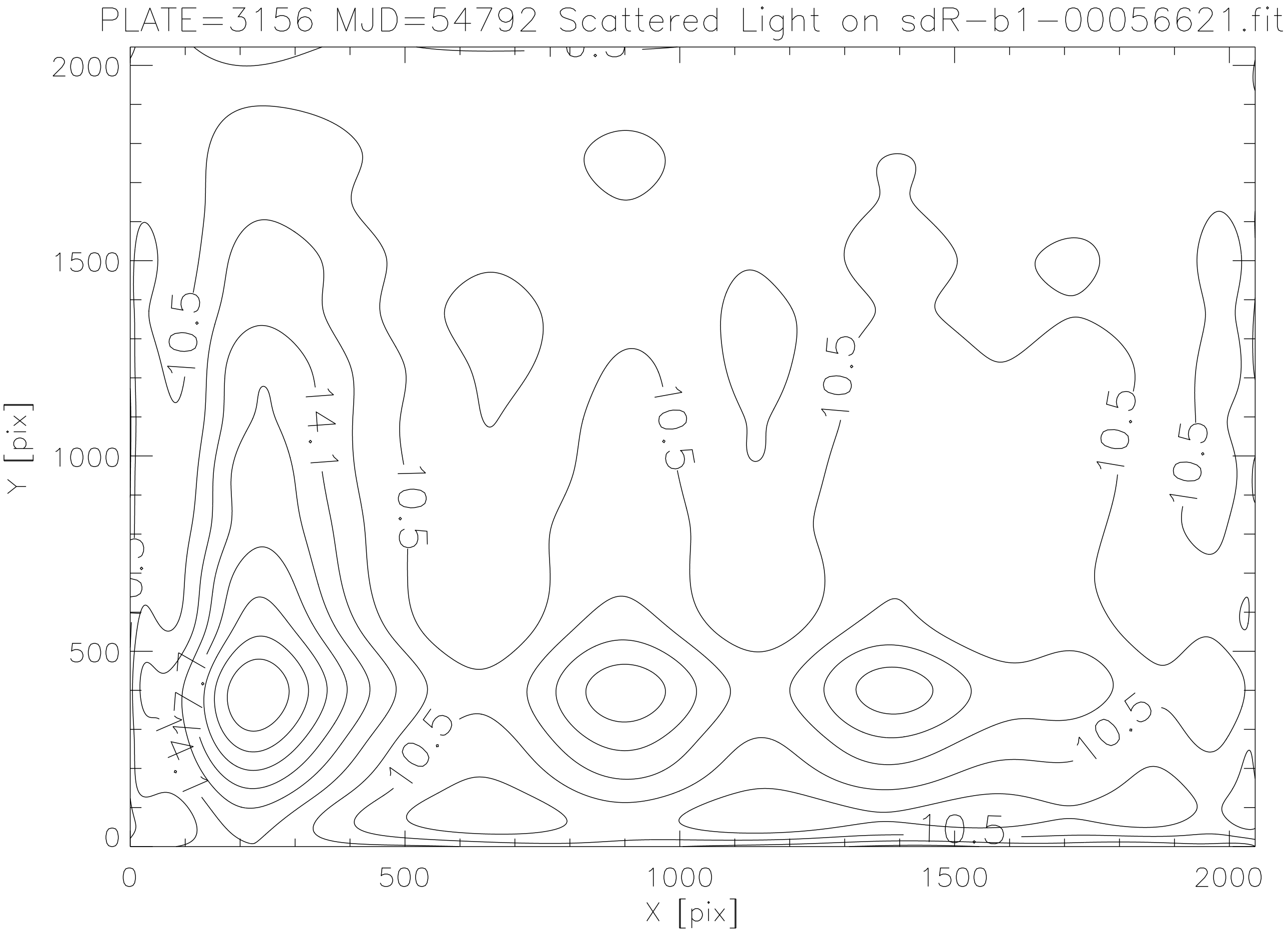
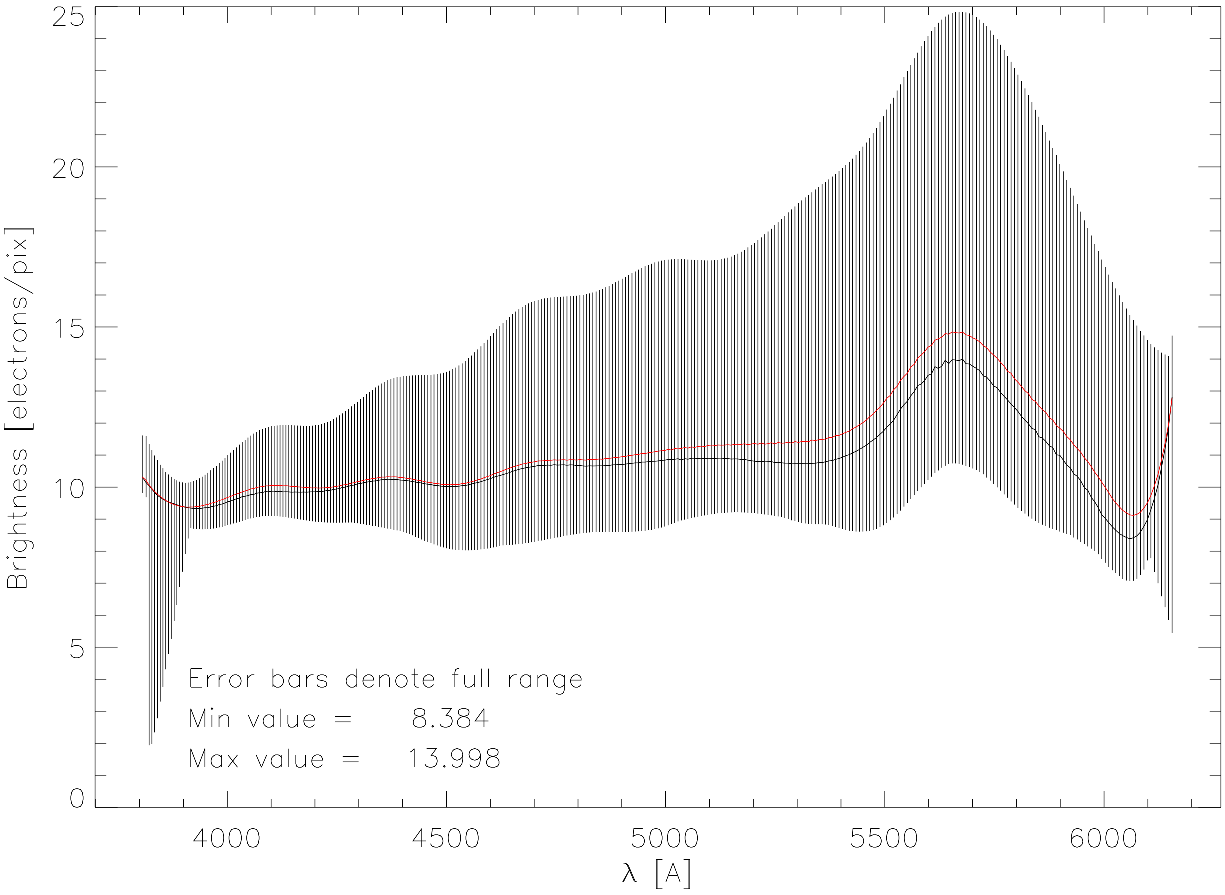

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056621.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
18.2
25.5
32.7
18.2
18.2
18.2
18.2
18.2
18.2
18.2
25.5
25.5
25.5
18.2


PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056621.f
Brightness [electrons/pix]
0
10
20
30
40
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 13.067
Max value = 25.713
Tue Mar 9 18:19:26 2010


PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056621.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
10.5
10.5
10.5
10.5
10.5
10.5
10.5
10.5
10.5
10.5
14.1
14.1
17.

PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056621.fit



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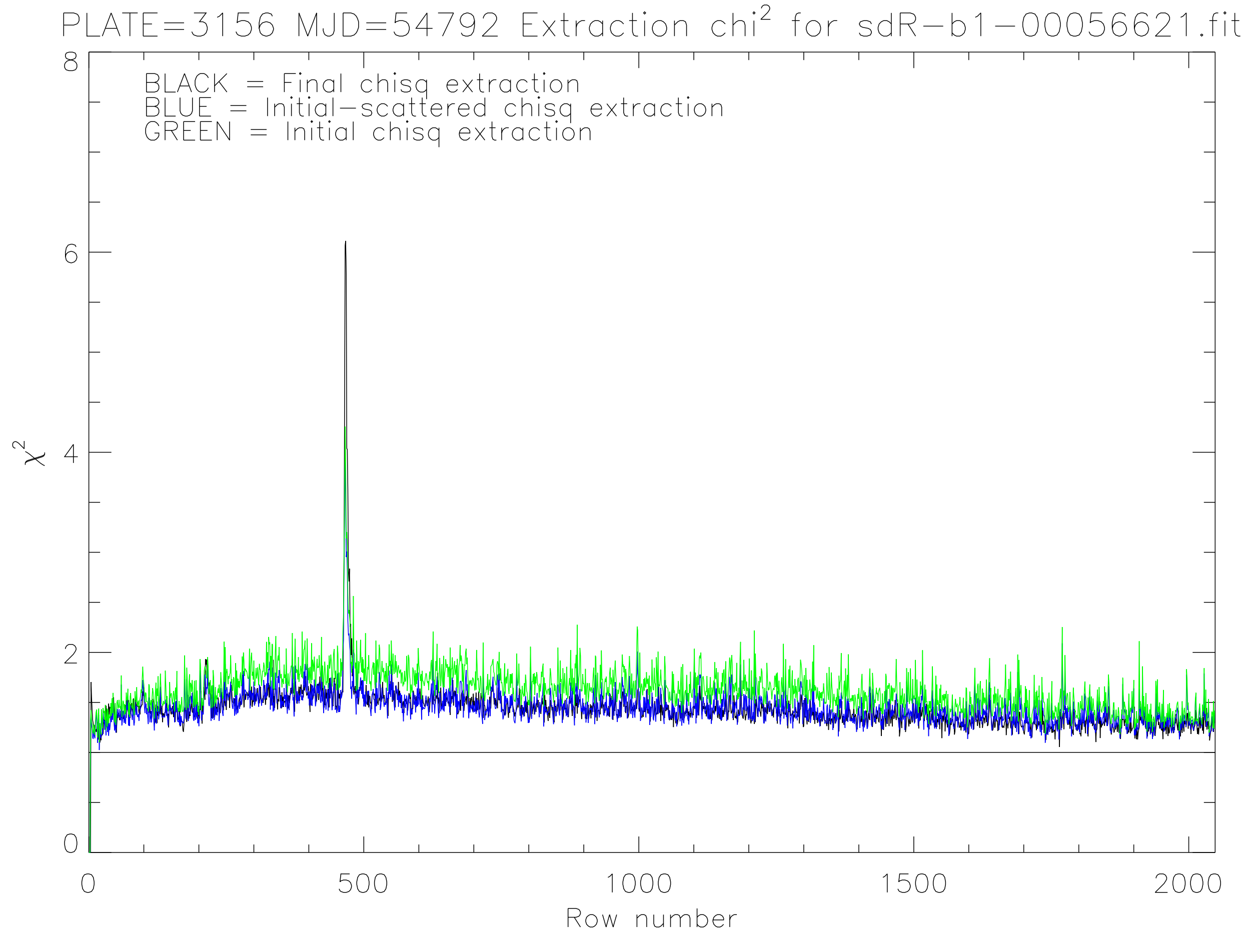
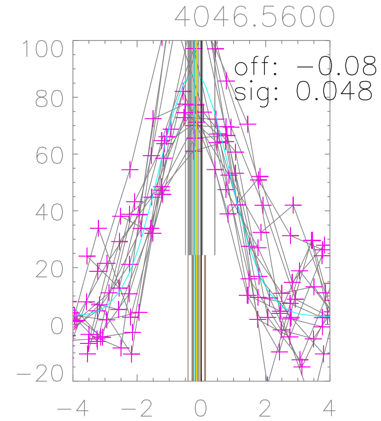
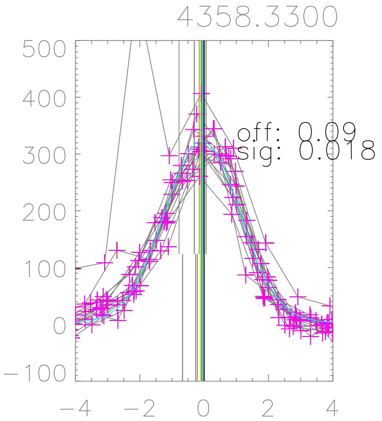
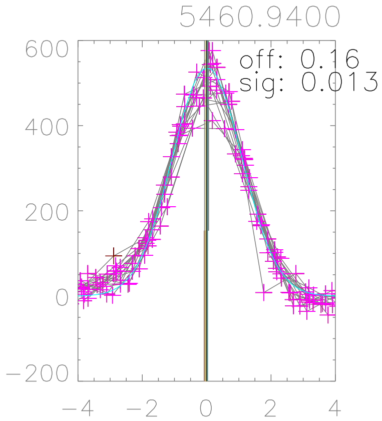
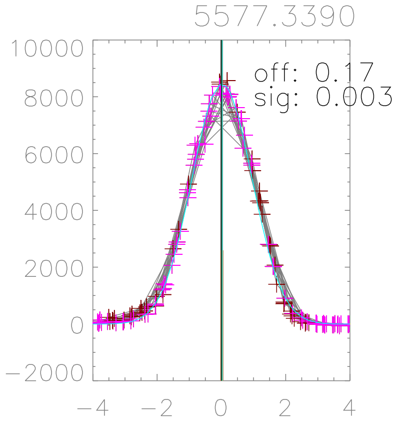
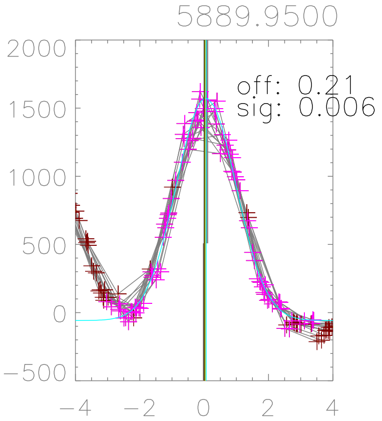

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b1-00056621.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

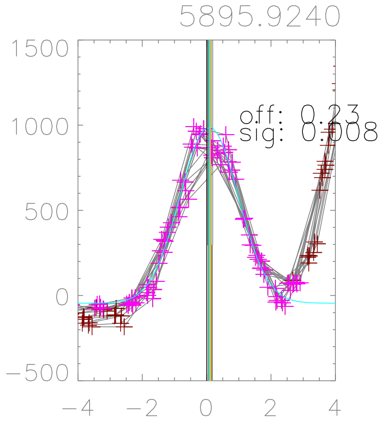

4046.5600
off: −0.08
sig: 0.048
100
80
60
40
20
0
−20
−4
−2
0
2
4

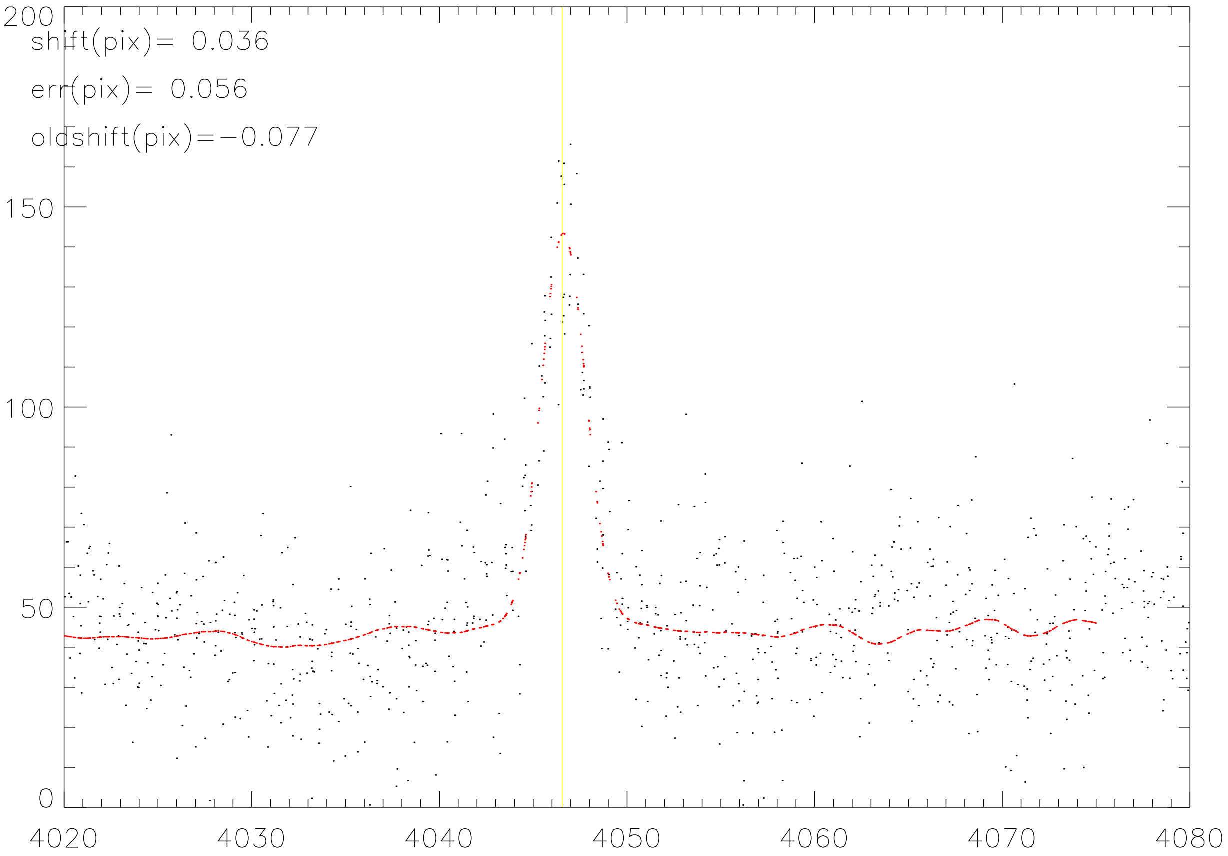

4358.3300
off: 0.09
sig: 0.018
500
400
300
200
100
0
−100
−4
−2
0
2
4

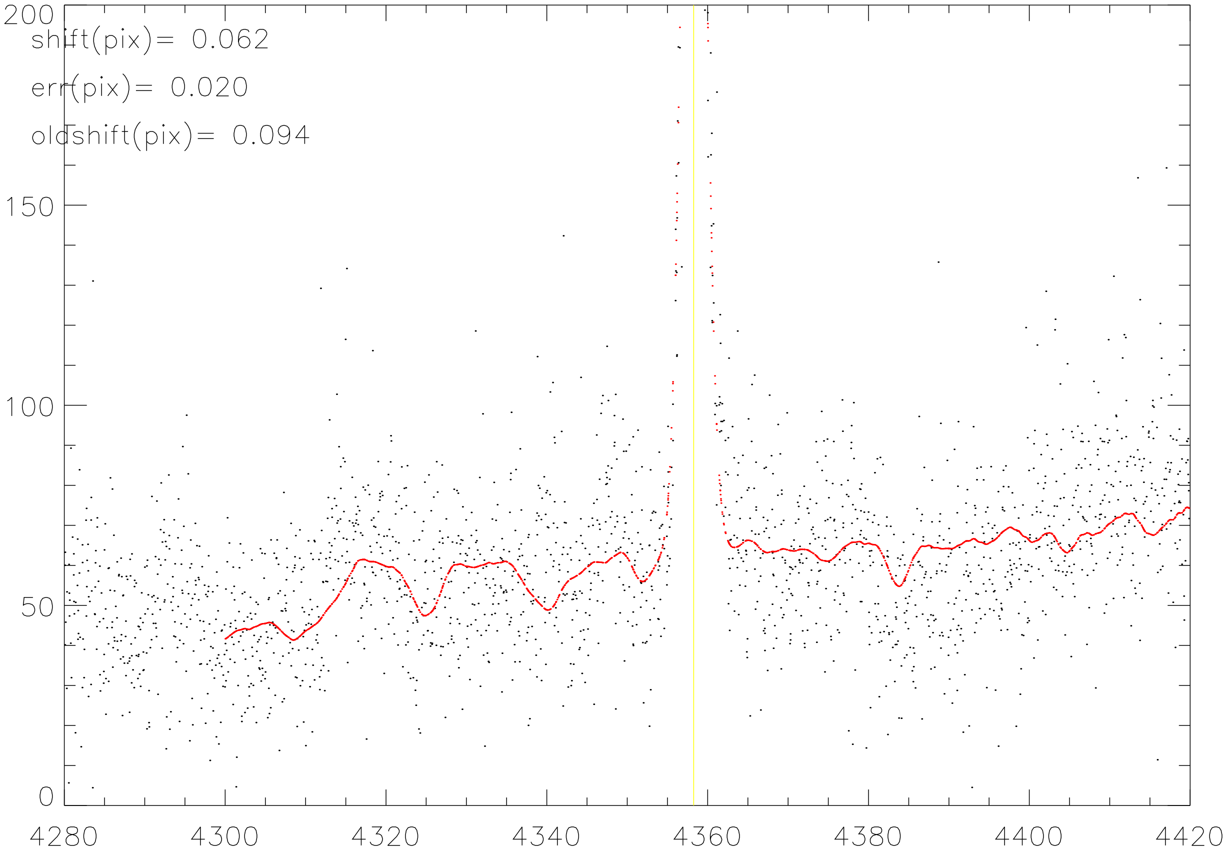

5460.9400
off: 0.16
sig: 0.013
600
400
200
0
−200
−4
−2
0
2
4

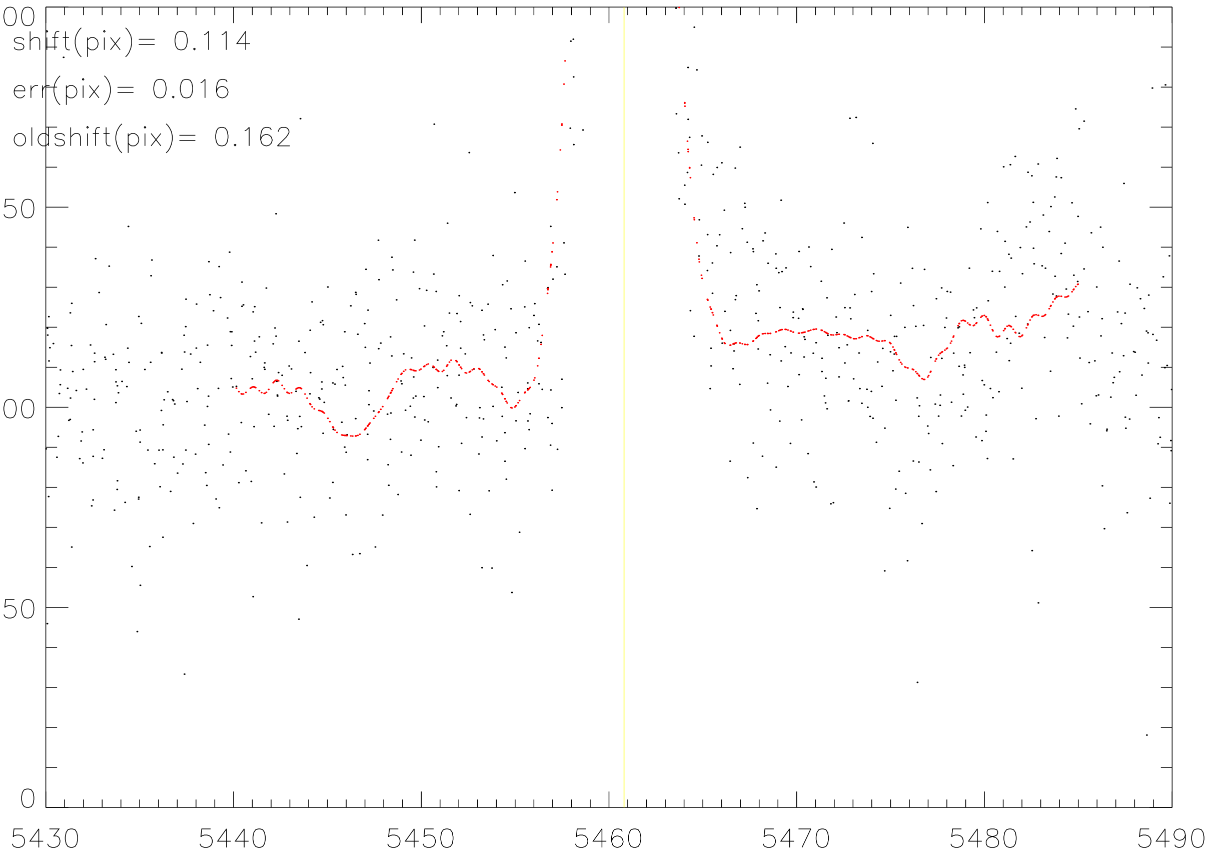

5577.3390
off: 0.17
sig: 0.003
10000
8000
6000
4000
2000
0
−2000
−4
−2
0
2
4

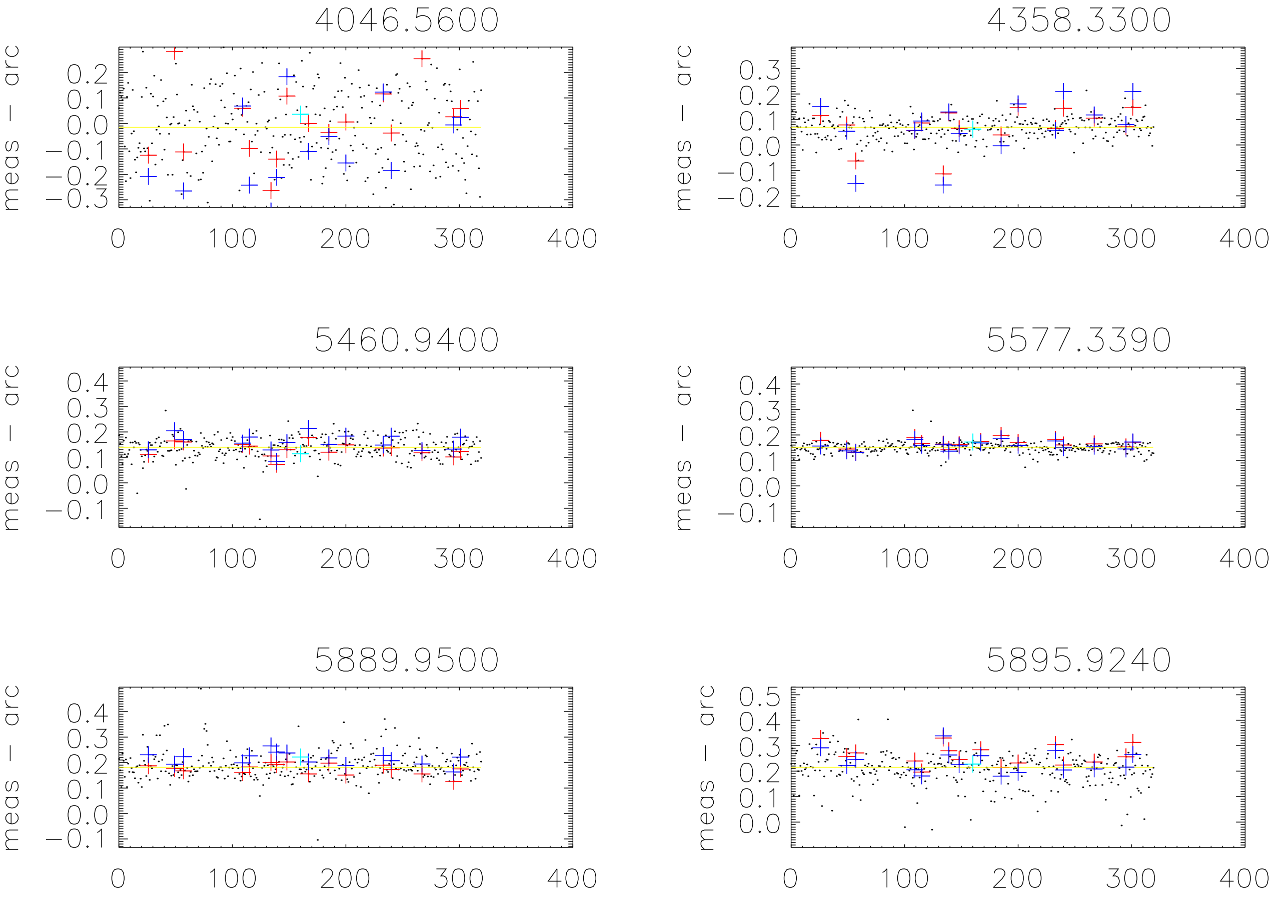

5889.9500
off: 0.21
sig: 0.006
2000
1500
1000
500
0
−500
−4
−2
0
2
4

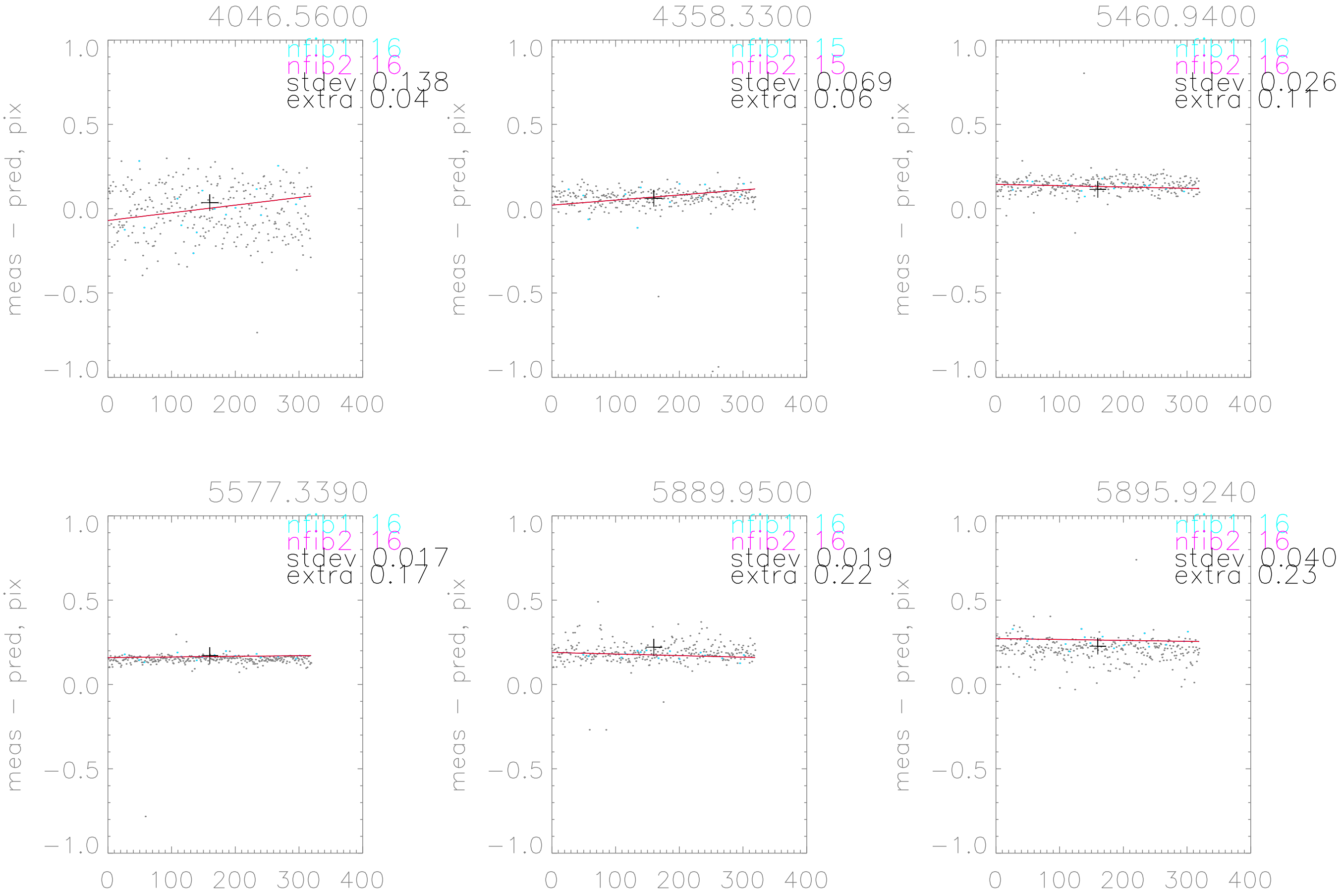

5895.9240
off: 0.23
sig: 0.008
1500
1000
500
0
−500
−4
−2
0
2
4

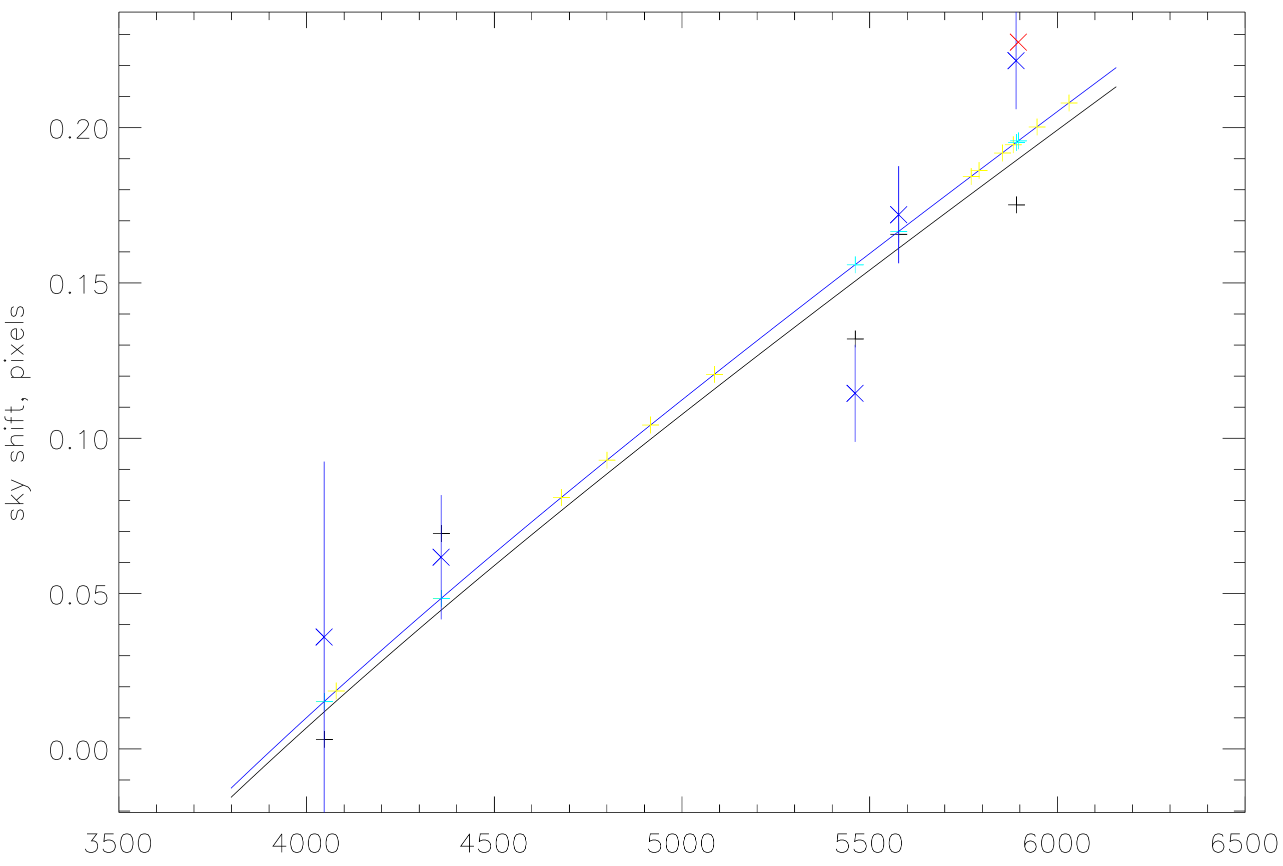

shift(pix)= 0.036
err(pix)= 0.056
oldshift(pix)=−0.077
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

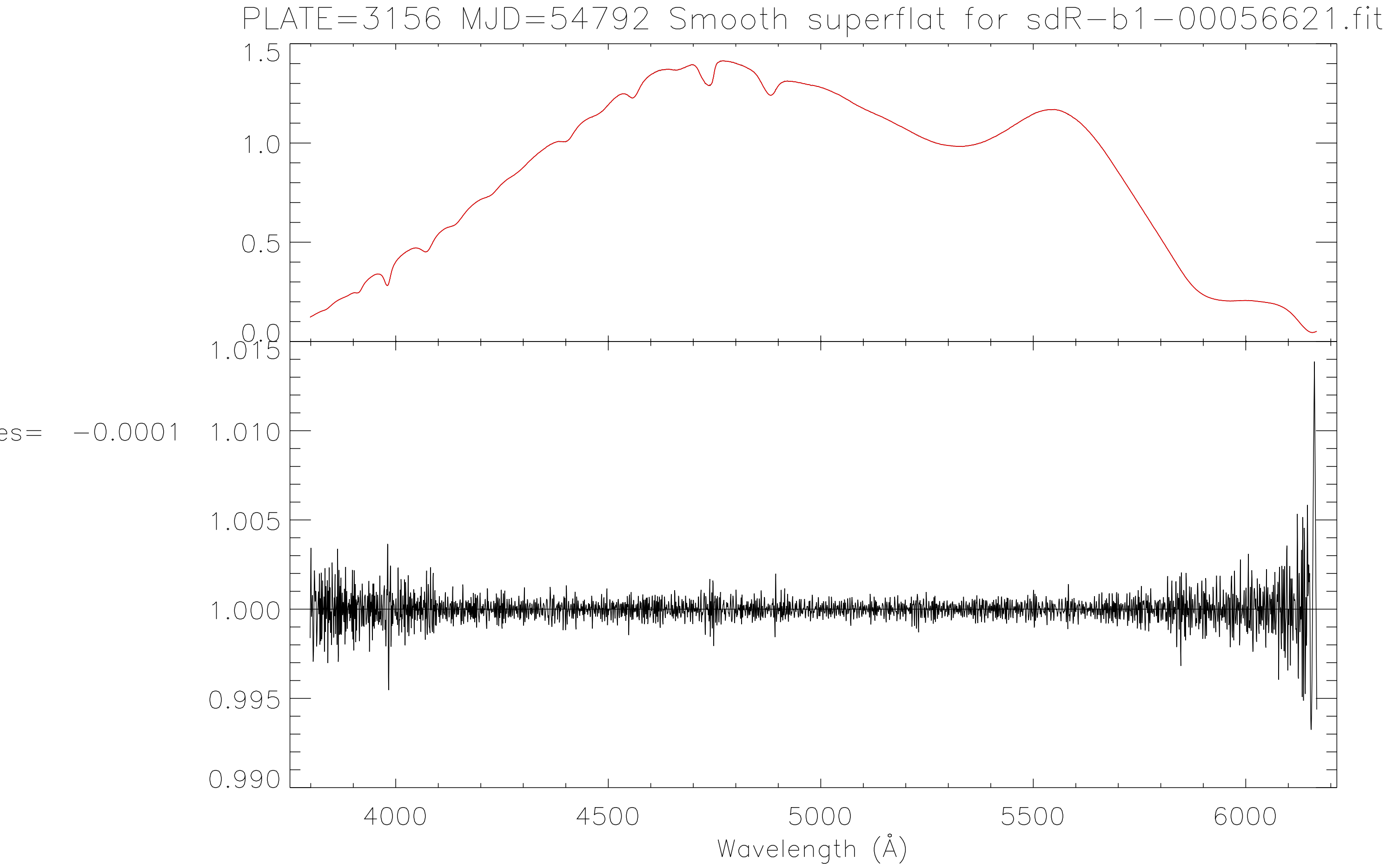

shift(pix)= 0.062
err(pix)= 0.020
oldshift(pix)= 0.094
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

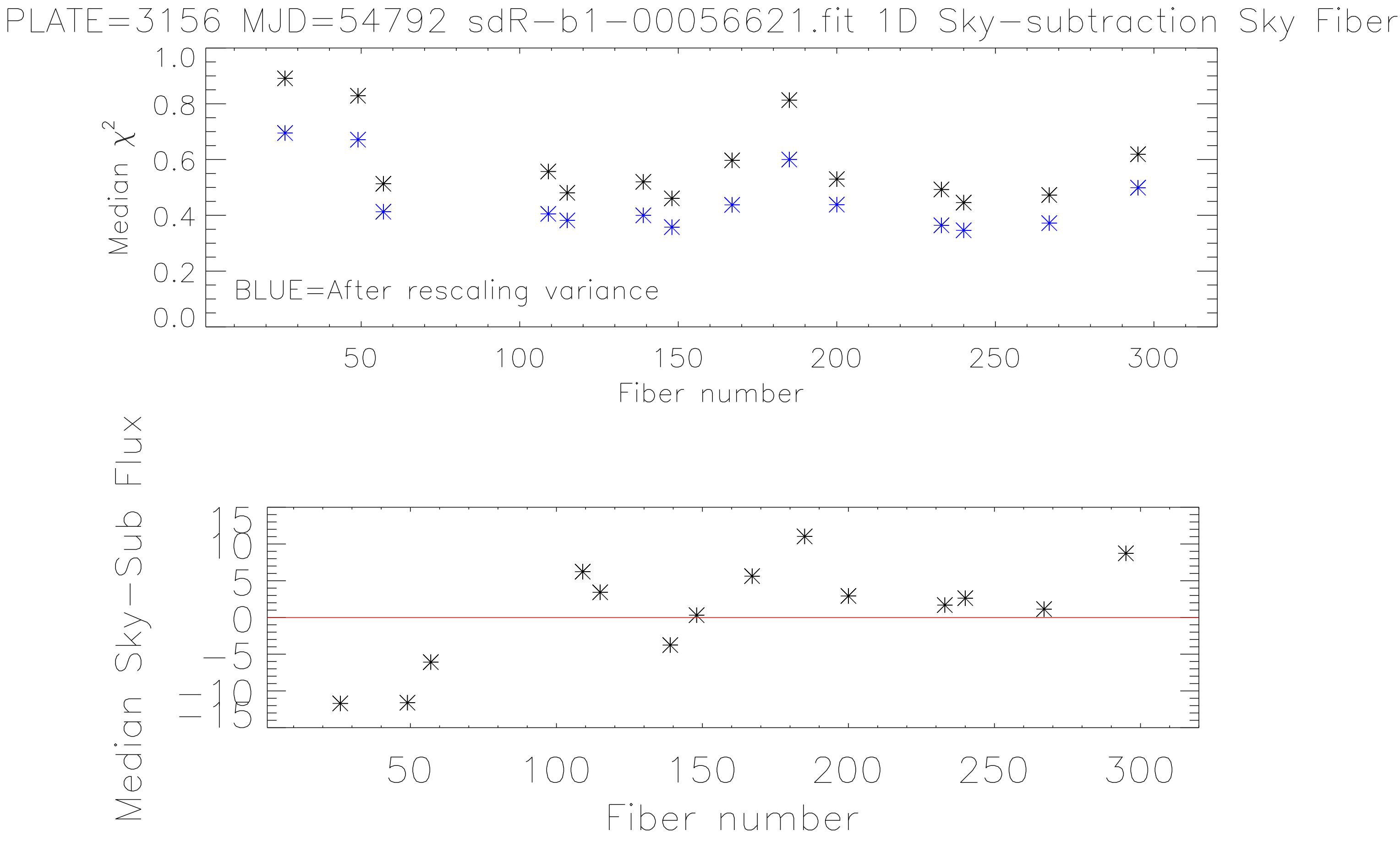

shift(pix)= 0.114
err(pix)= 0.016
oldshift(pix)= 0.162
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

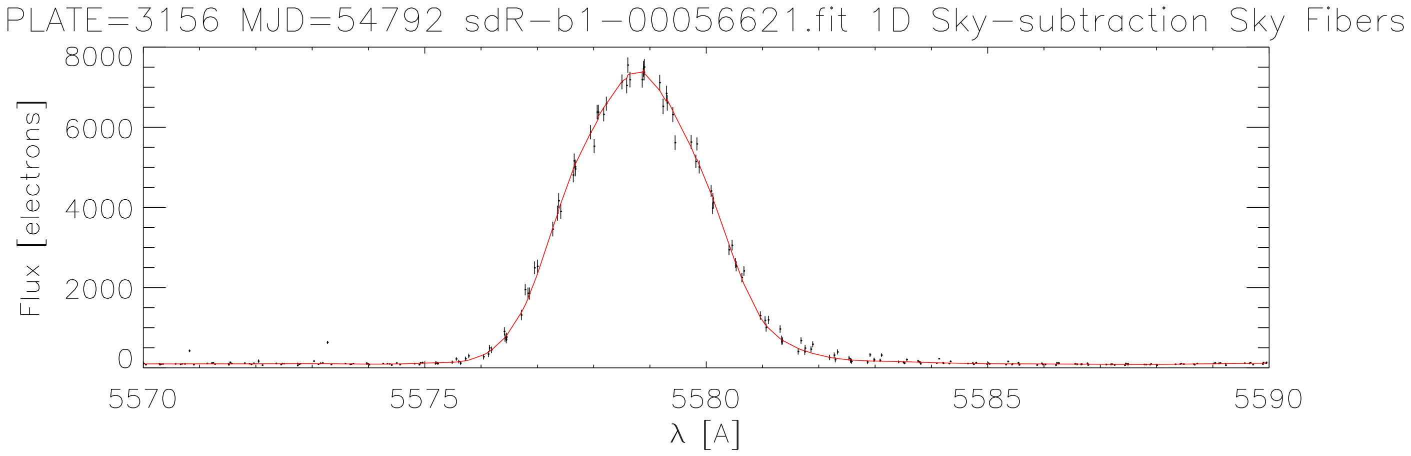

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

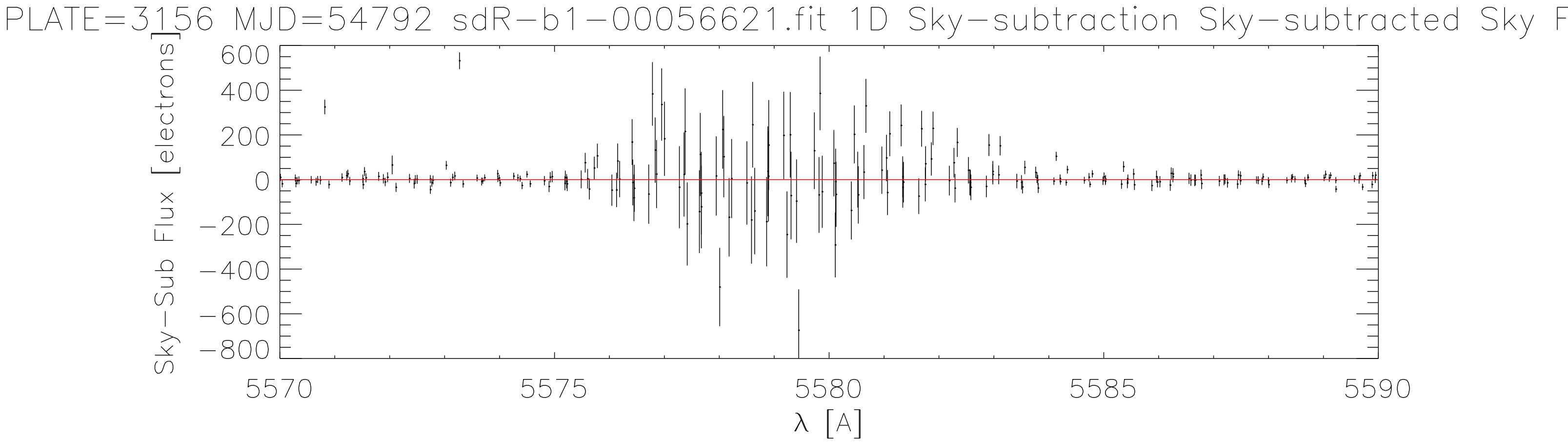

4046.5600
nfib1 16
nfib2 16
stdev 0.138
extra 0.04
4358.3300
nfib1 15
nfib2 15
stdev 0.069
extra 0.06
5460.9400
nfib1 16
nfib2 16
stdev 0.026
extra 0.11
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.17
5889.9500
nfib1 16
nfib2 16
stdev 0.019
extra 0.22
5895.9240
nfib1 16
nfib2 16
stdev 0.040
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.00
0.05
0.10
0.15
0.20
3500
4000
4500
5000
5500
6000
6500


PLATE=3156 MJD=54792 Smooth superflat for sdR-b1-00056621.fit
1.5
1.0
0.5
0.0
es= −0.0001
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

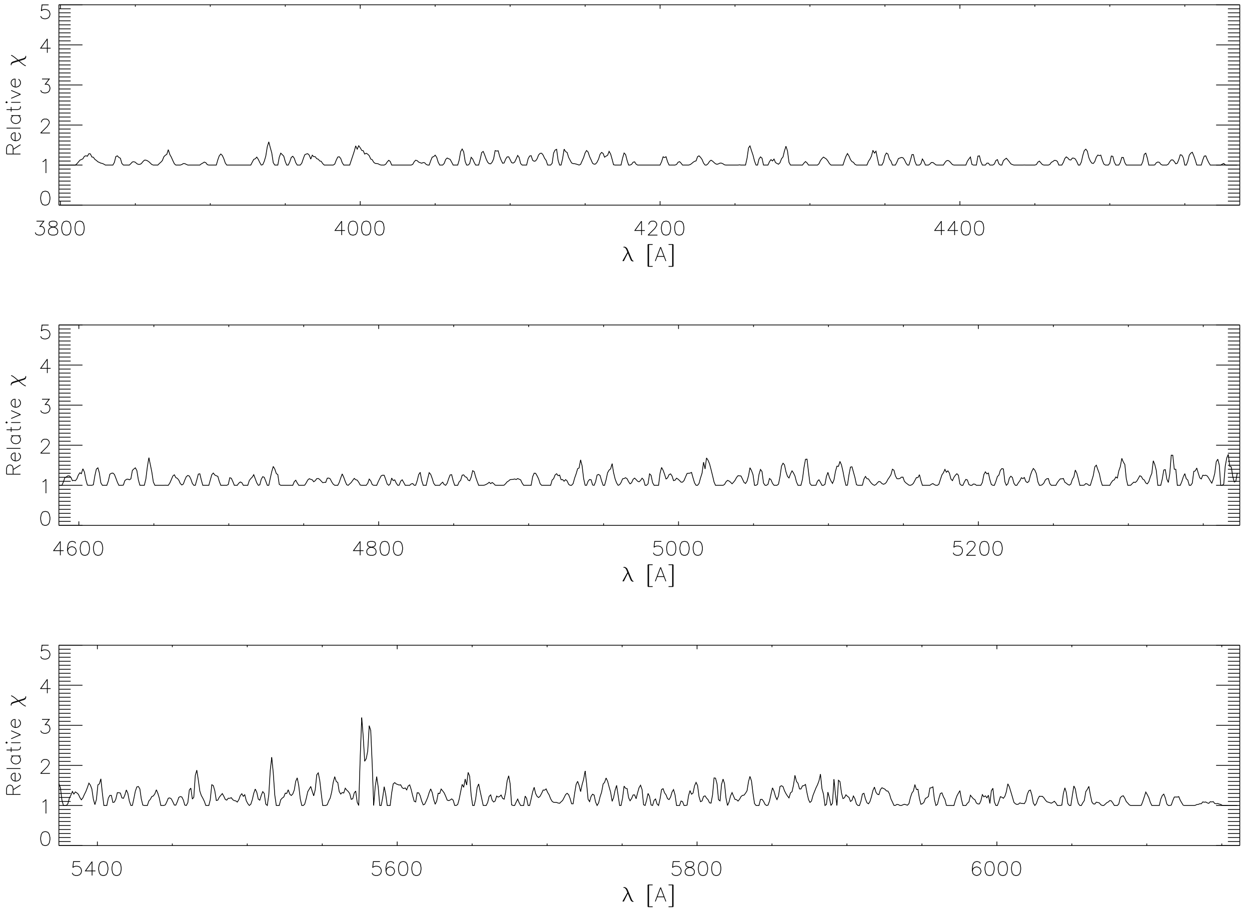

PLATE=3156 MJD=54792 sdR-b1-00056621.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number

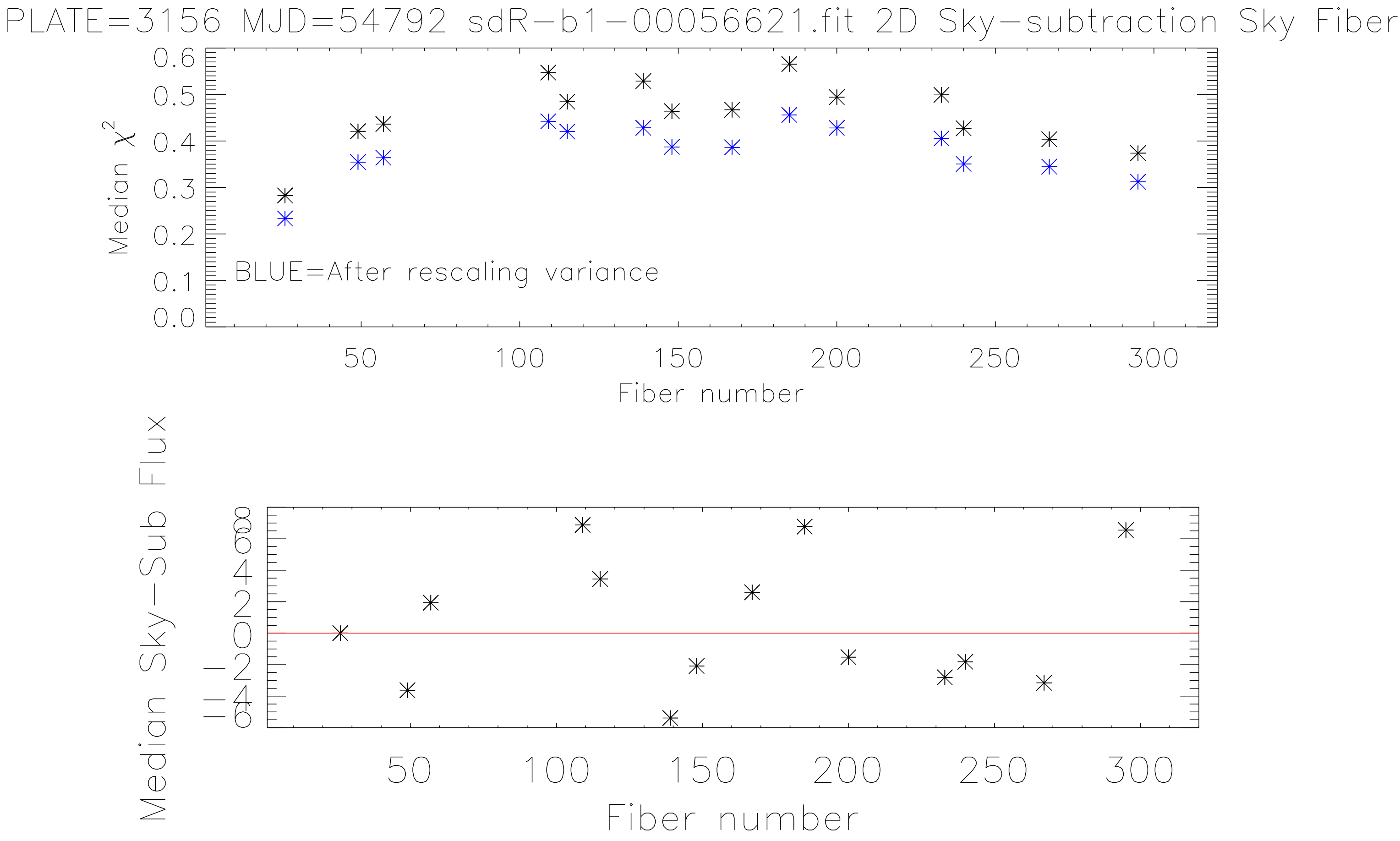

PLATE=3156 MJD=54792 sdR-b1-00056621.fit 1D Sky-subtraction Sky Fibers

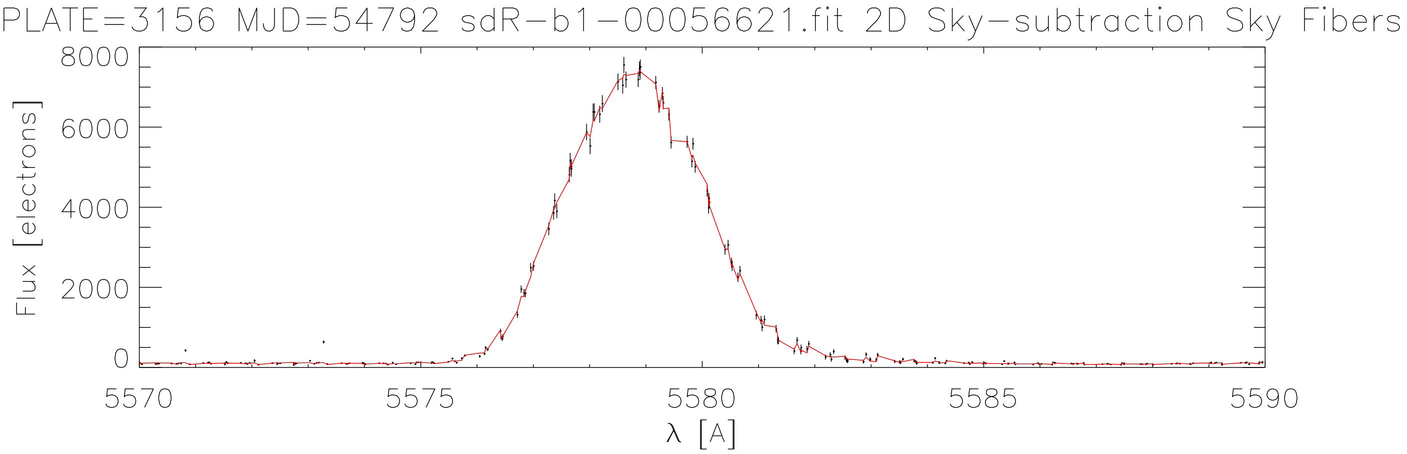

PLATE=3156 MJD=54792 sdR-b1-00056621.fit 1D Sky-subtraction Sky-subtracted Sky F

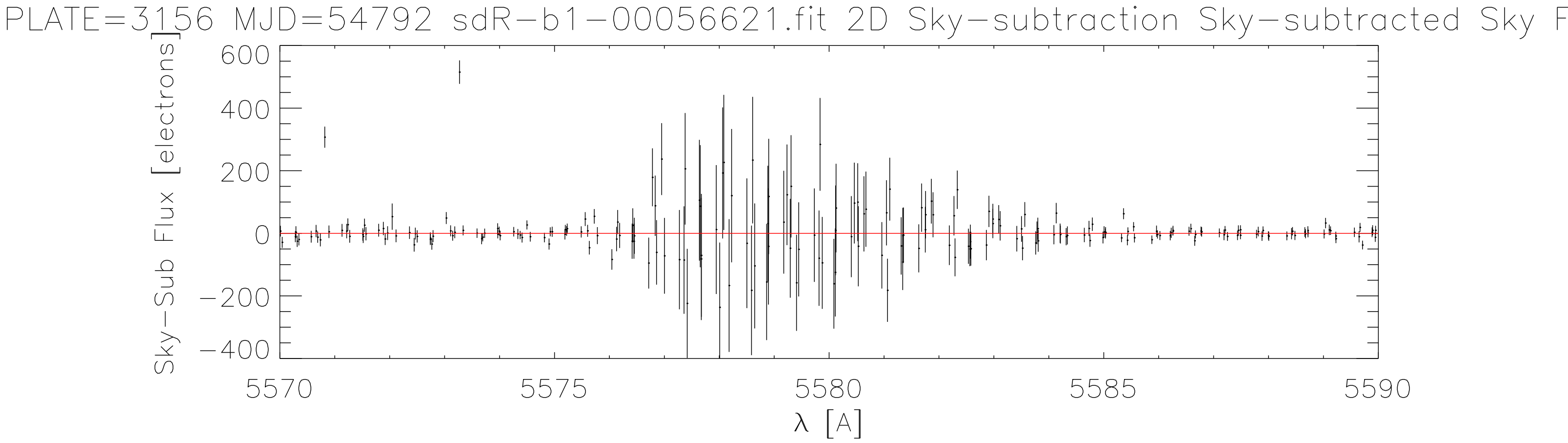
Number of sky fibers = 14

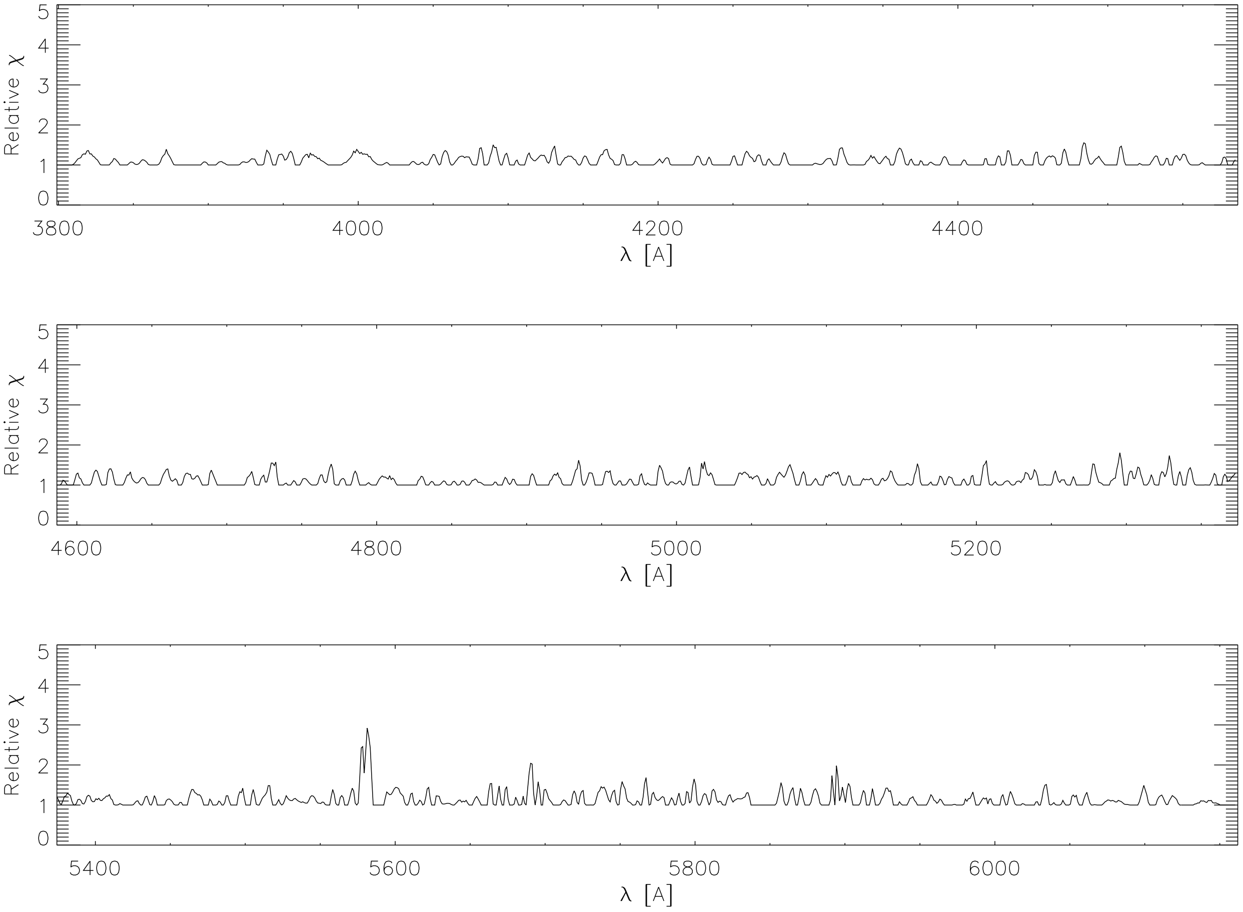
PLATE=3156 MJD=54792 sdR-b1-00056621.fit 1D Sky-subtraction Rescaled Errors




PLATE=3156 MJD=54792 sdR-b1-00056621.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

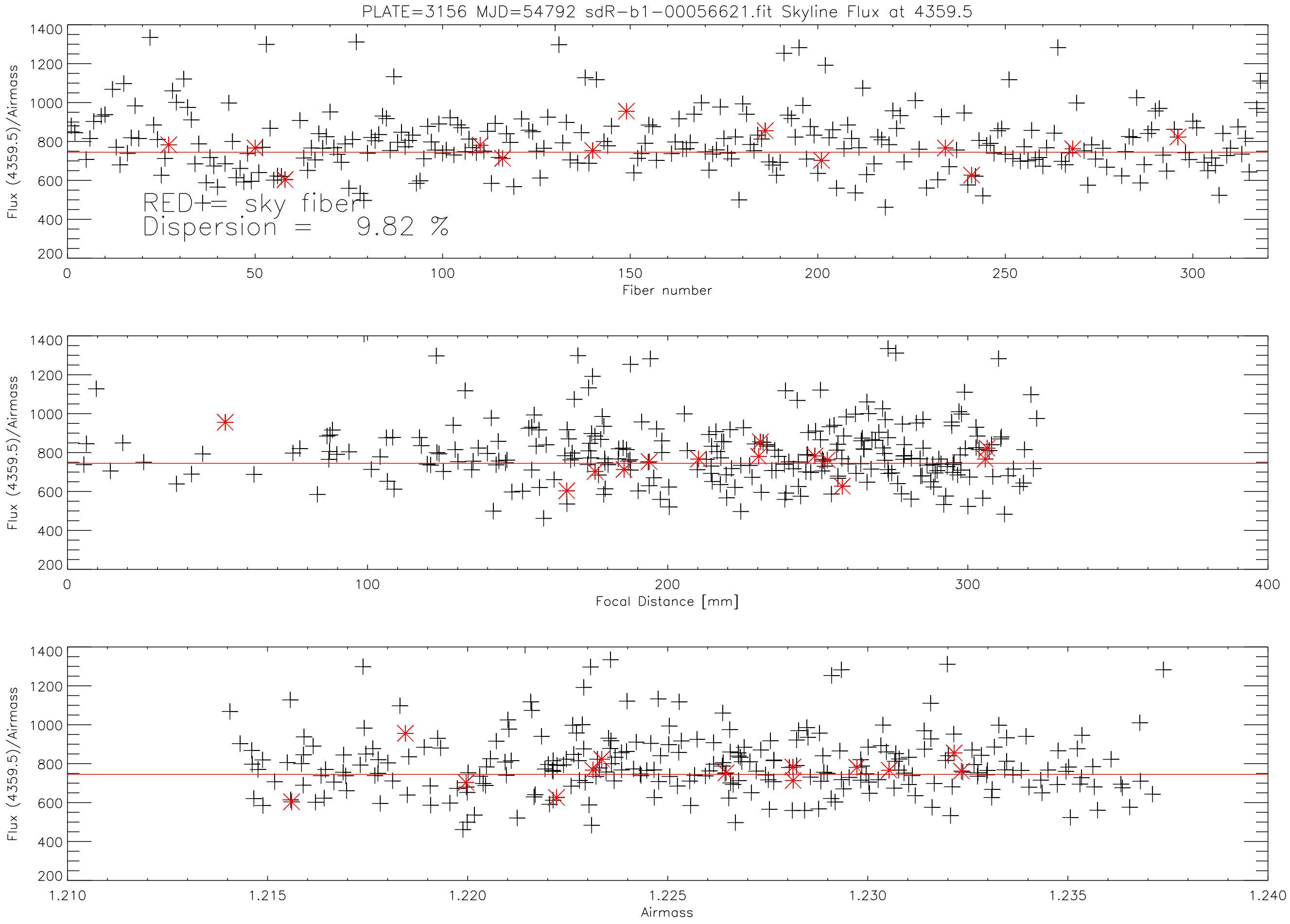

PLATE=3156 MJD=54792 sdR-b1-00056621.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

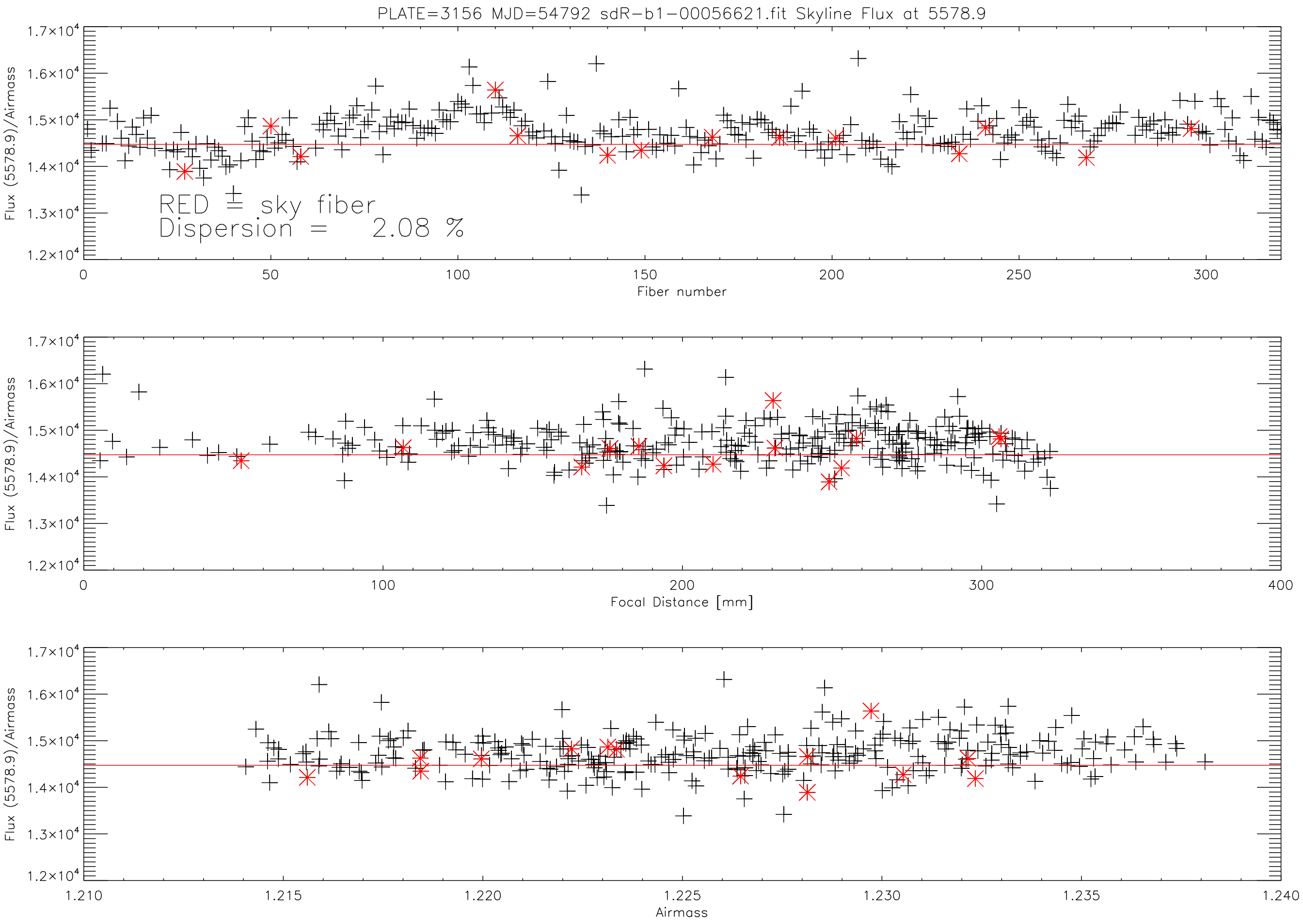

PLATE=3156 MJD=54792 sdR-b1-00056621.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]



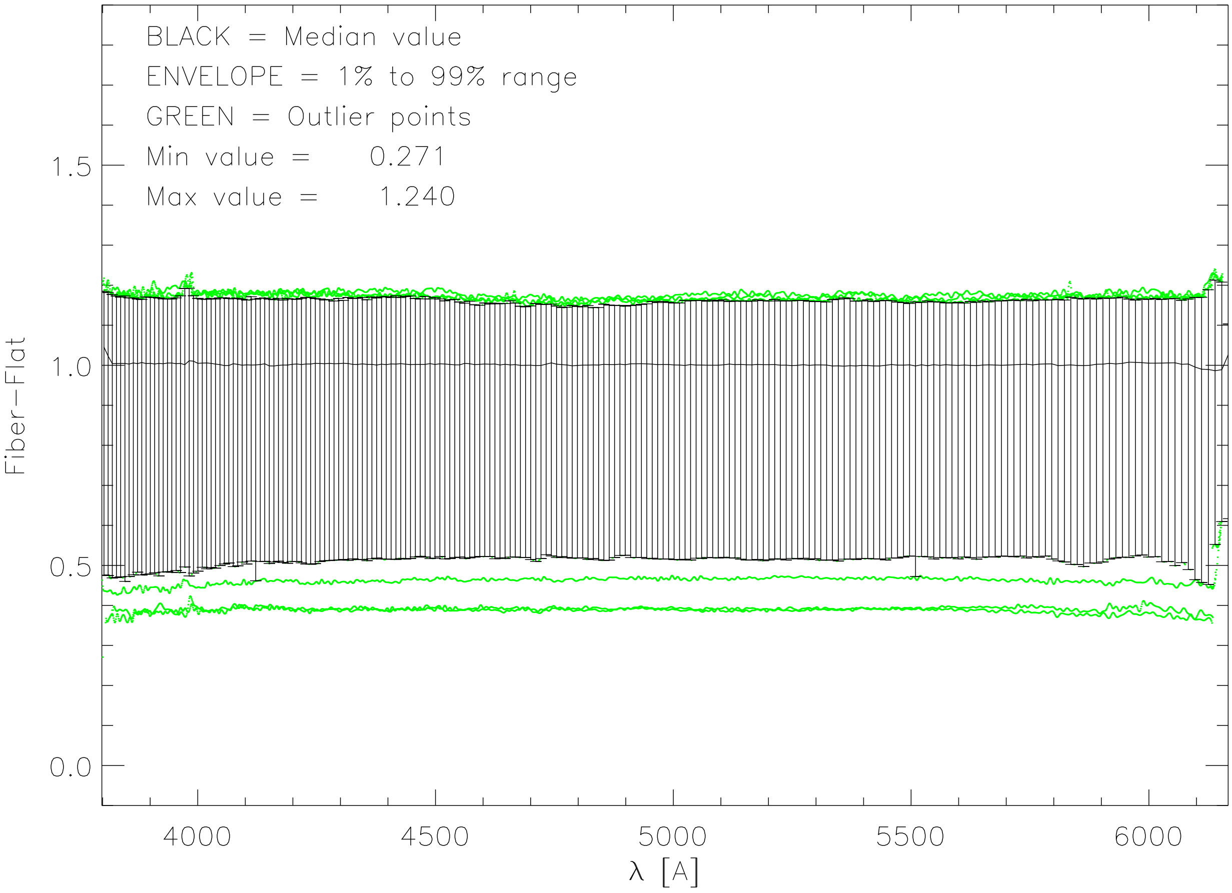
Number of sky fibers = 14

PLATE=3156 MJD=54792 sdR-b1-00056621.fit 2D Sky-subtraction Rescaled Errors


PLATE=3156 MJD=54792 sdR-b1-00056621.fit Skyline Flux at 4359.5
RED+= sky fiber
Dispersion = 9.82 %
Flux (4359.5)/Airmass
1400
1200
1000
800
600
400
200
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.210
1.215
1.220
1.225
1.230
1.235
1.240
Airmass


PLATE=3156 MJD=54792 sdR-b1-00056621.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.7×10⁴
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
RED ± sky fiber
Dispersion = 2.08 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.7×10⁴
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.7×10⁴
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.210
1.215
1.220
1.225
1.230
1.235
1.240
Airmass

PLATE=3156 MJD=54792 Fiber−Flats for sdR−b1−00056618.fit



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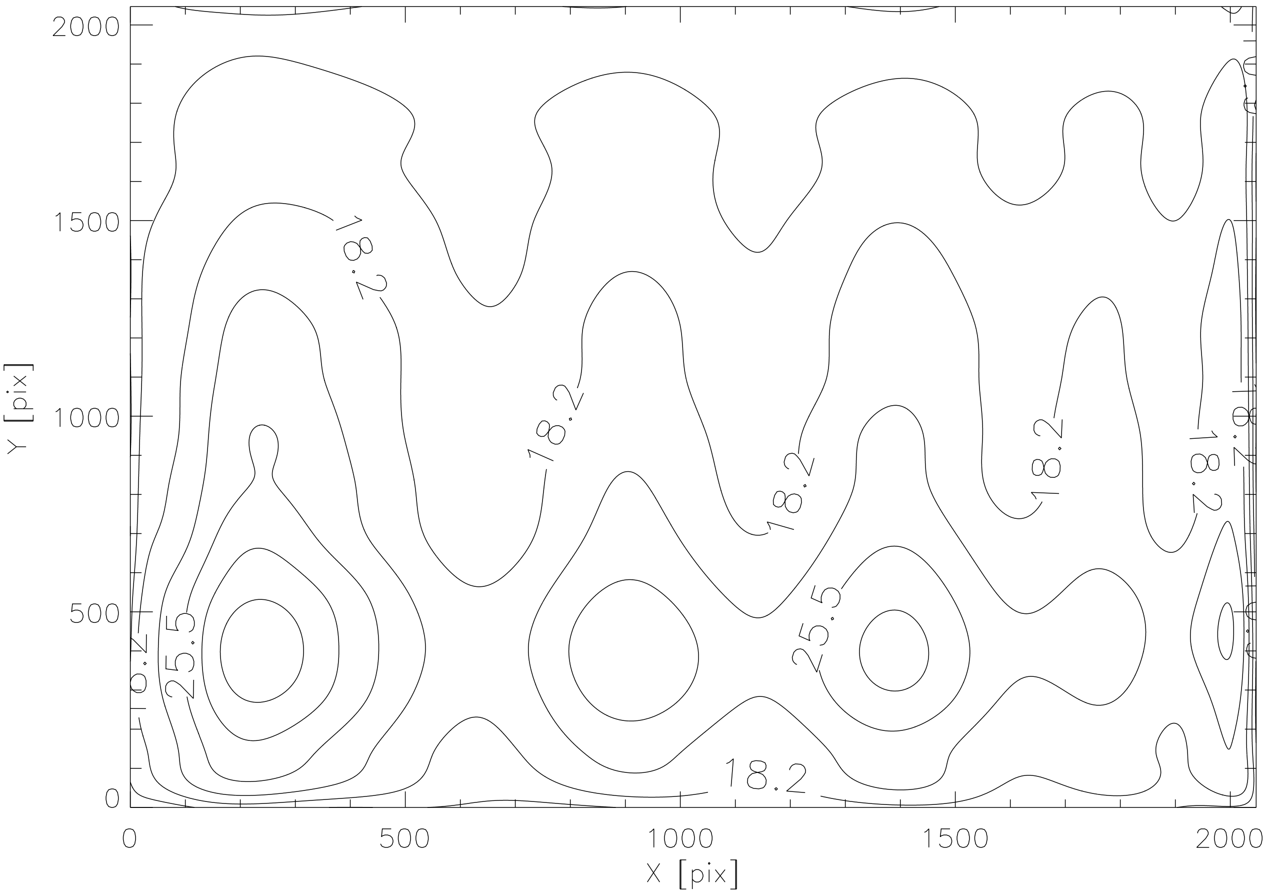
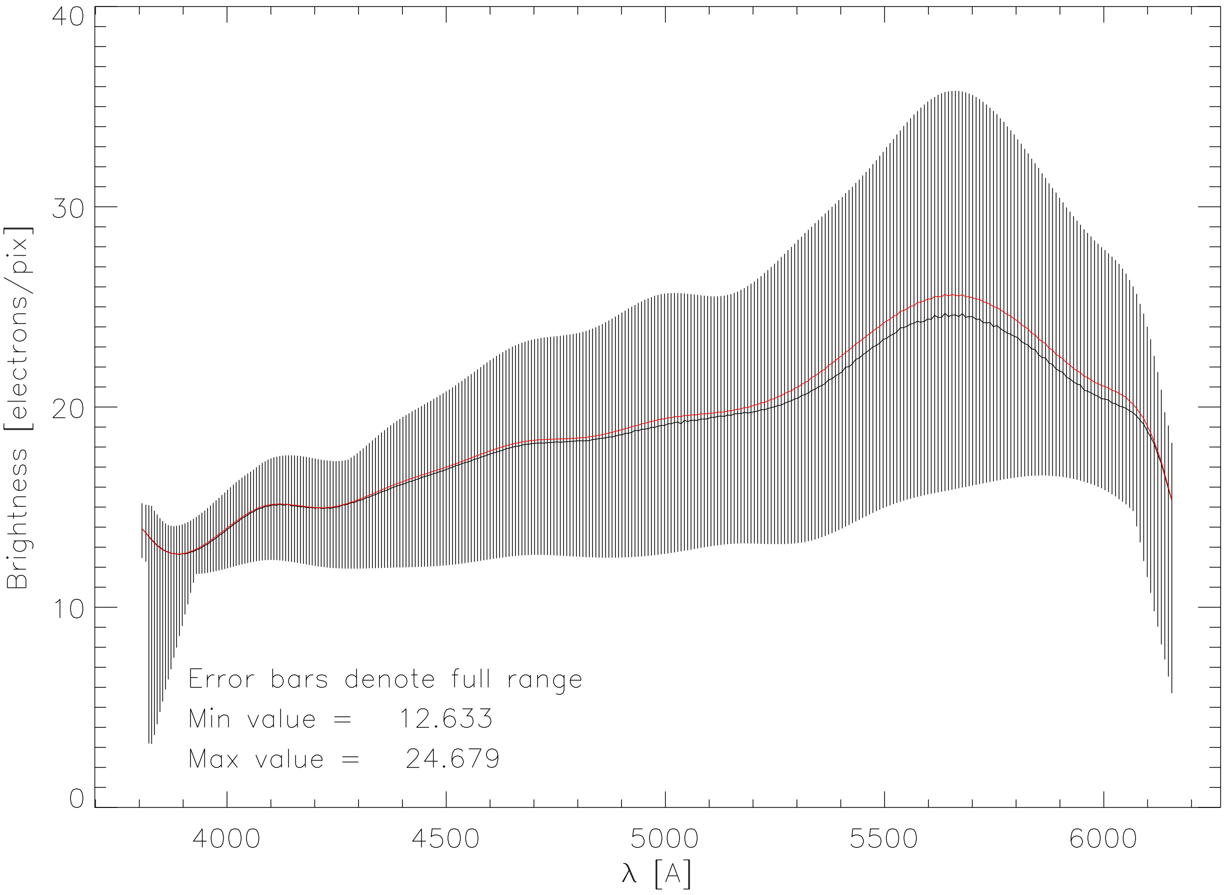
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056622.f





PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b1-00056622.f

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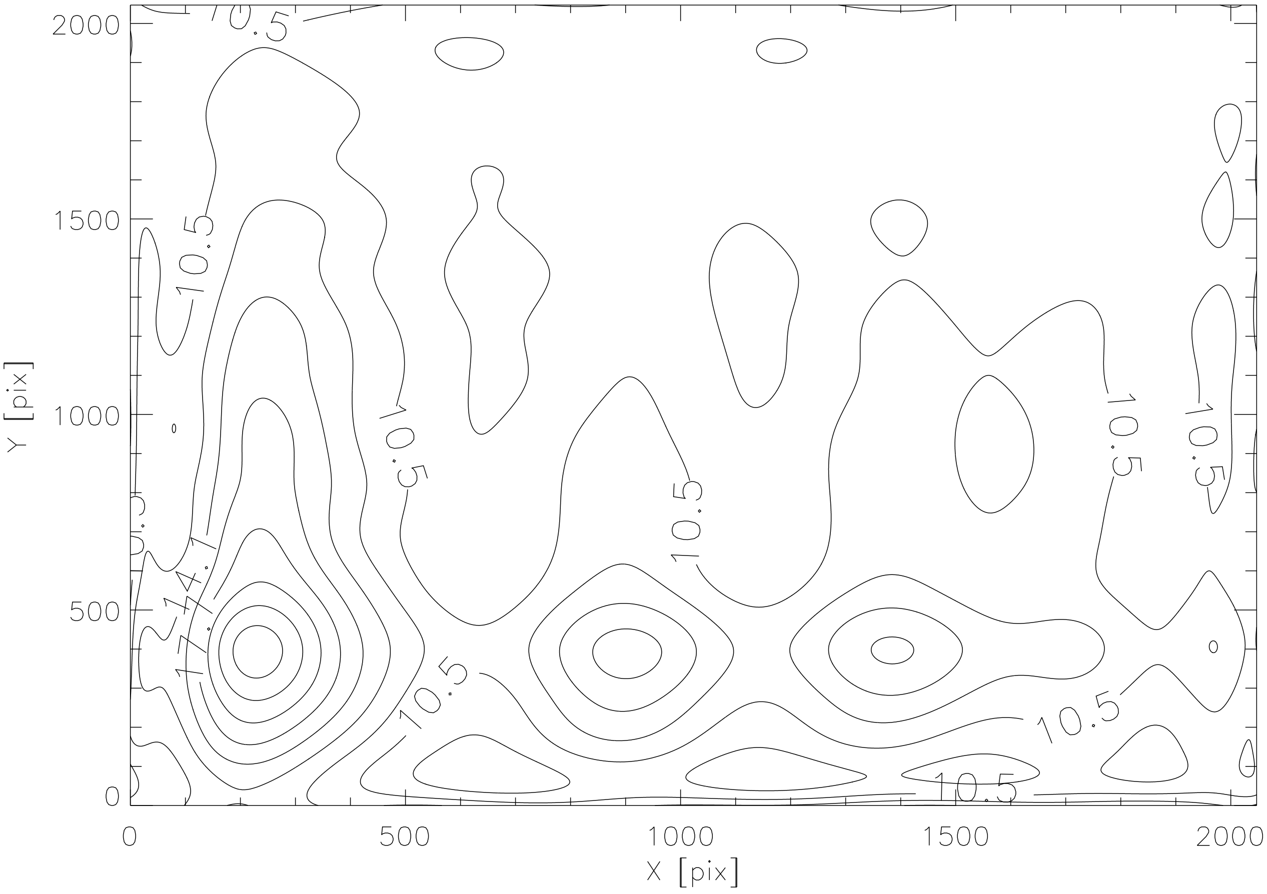
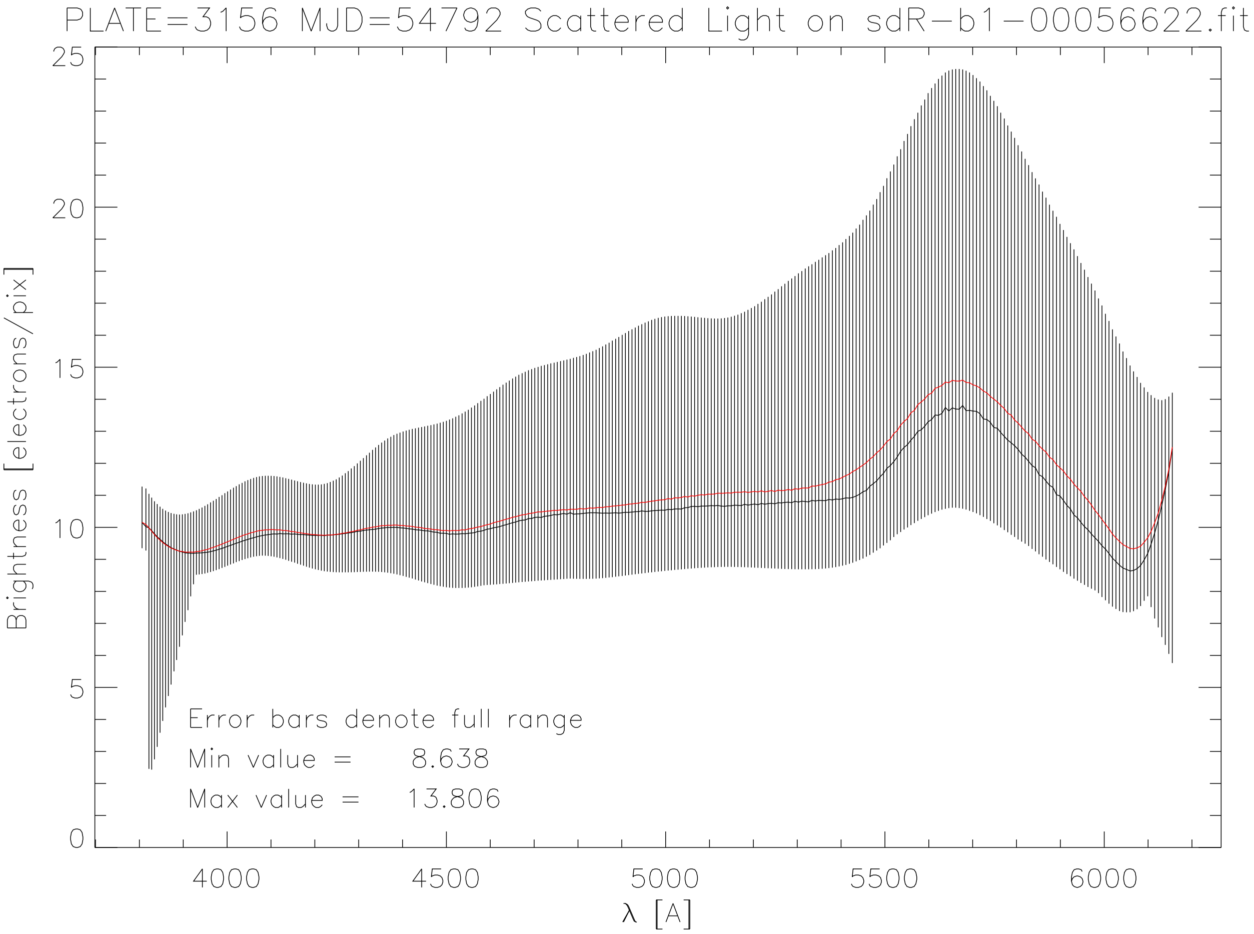


PLATE=3156 MJD=54792 Scattered Light on sdR-b1-00056622.fit



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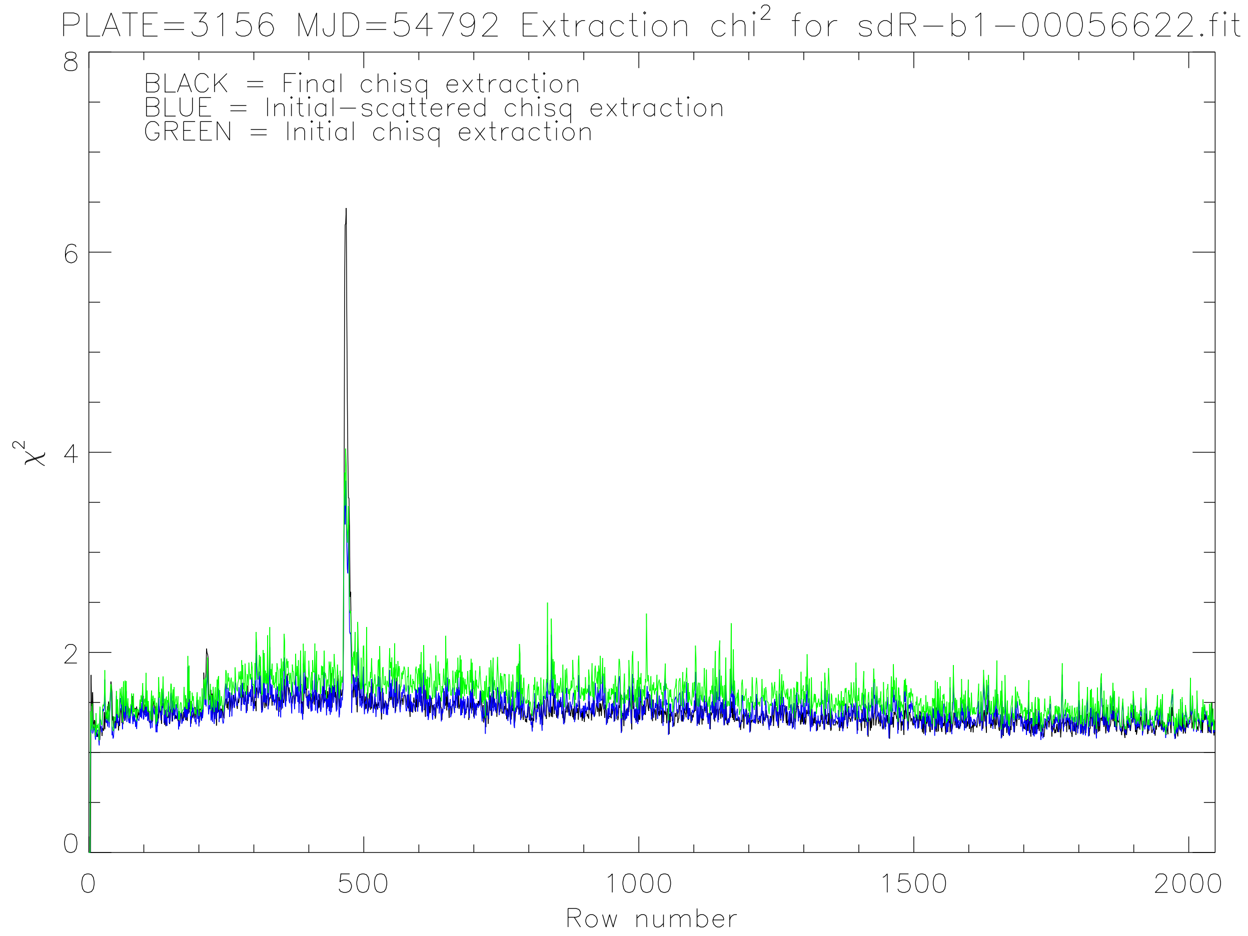
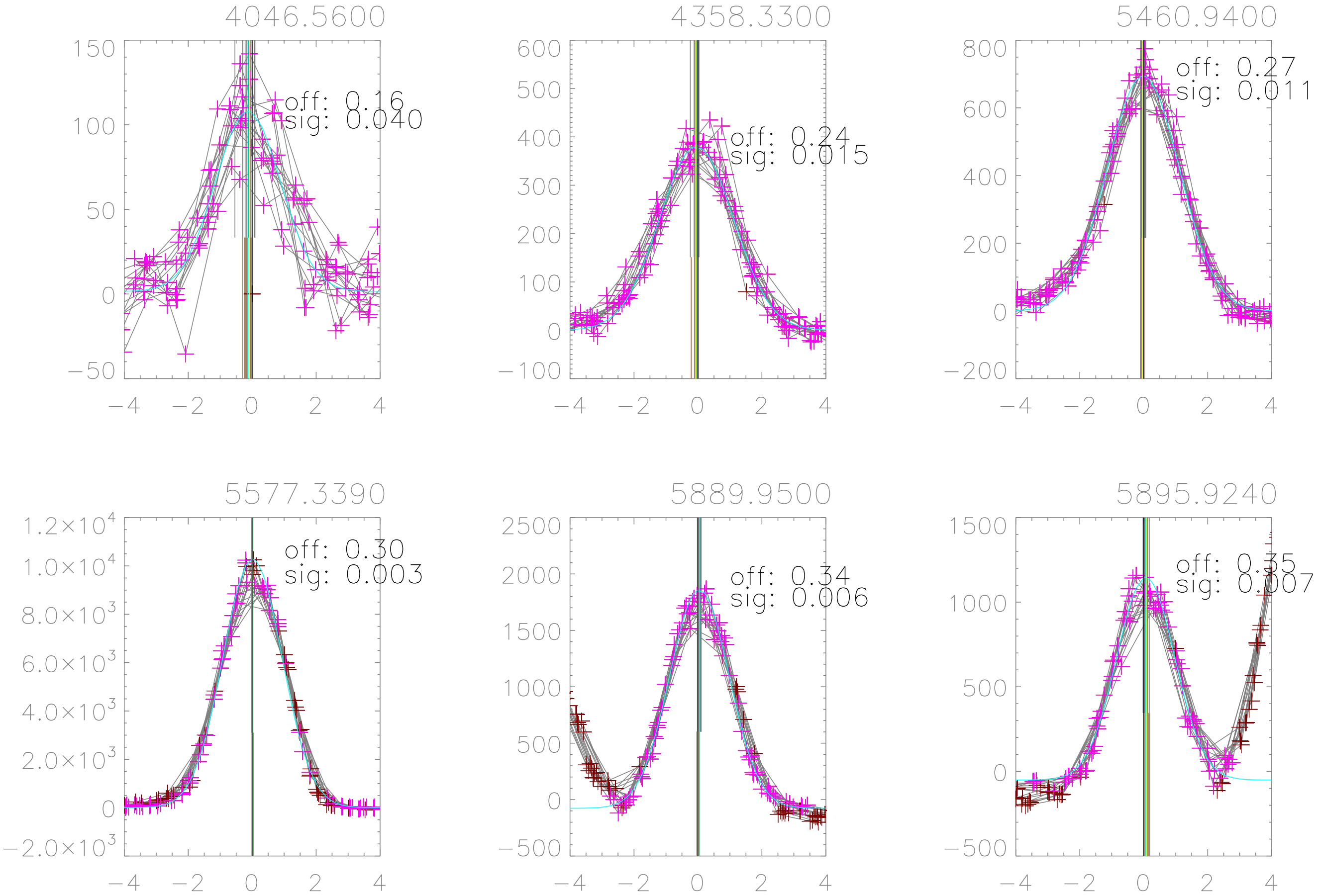
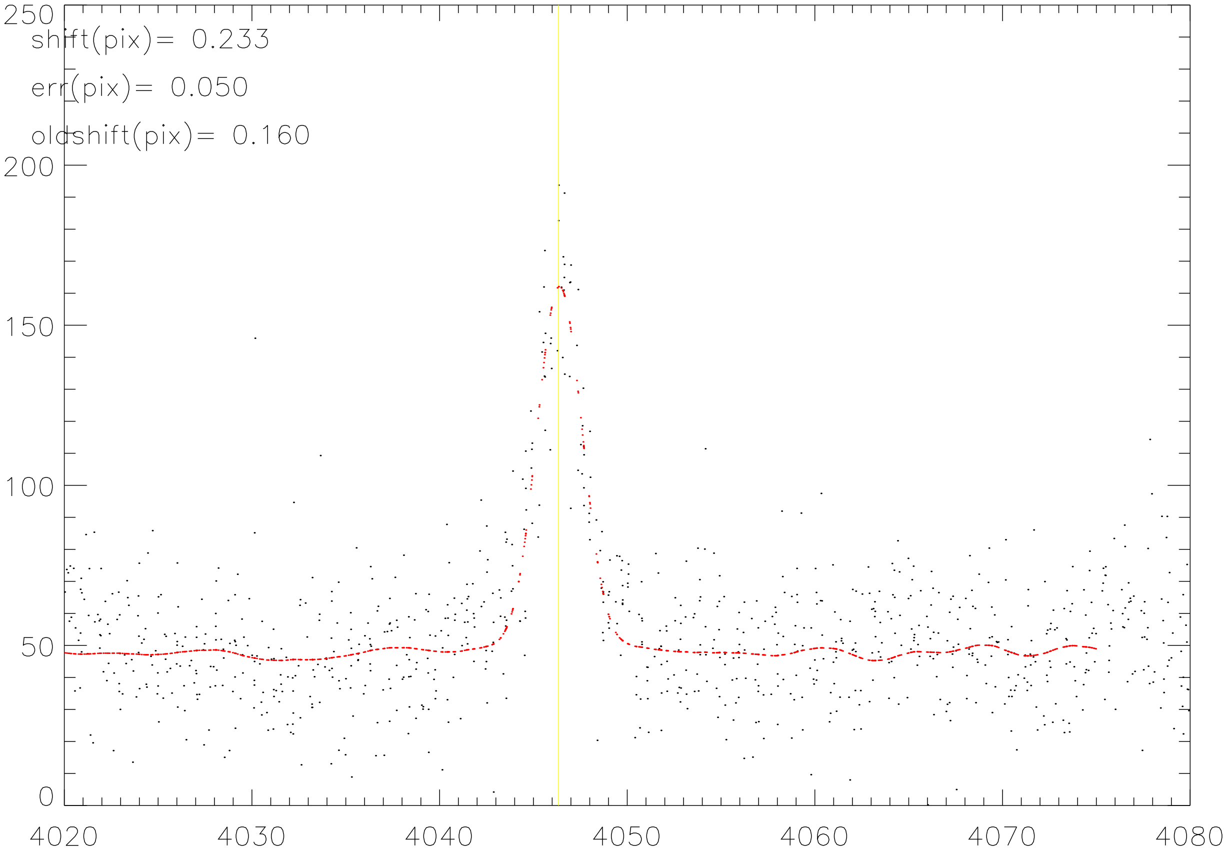
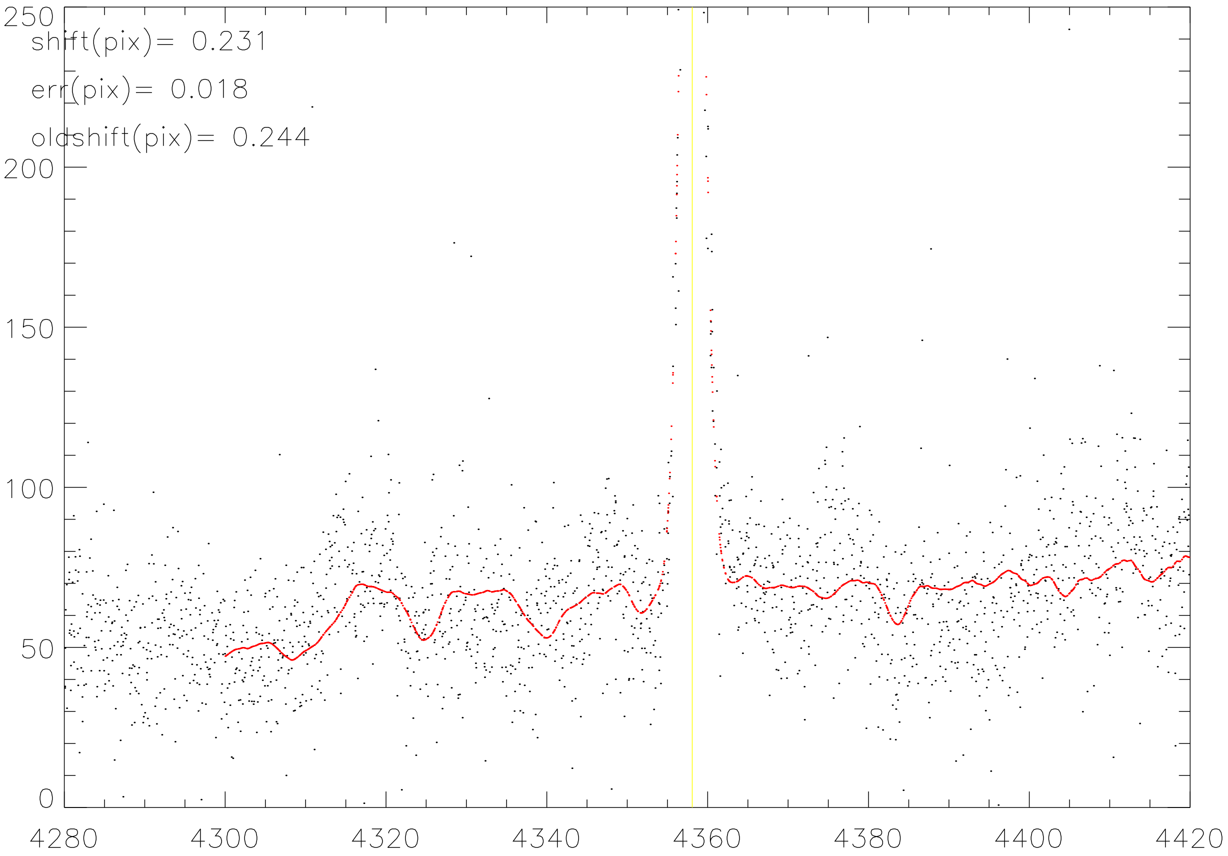
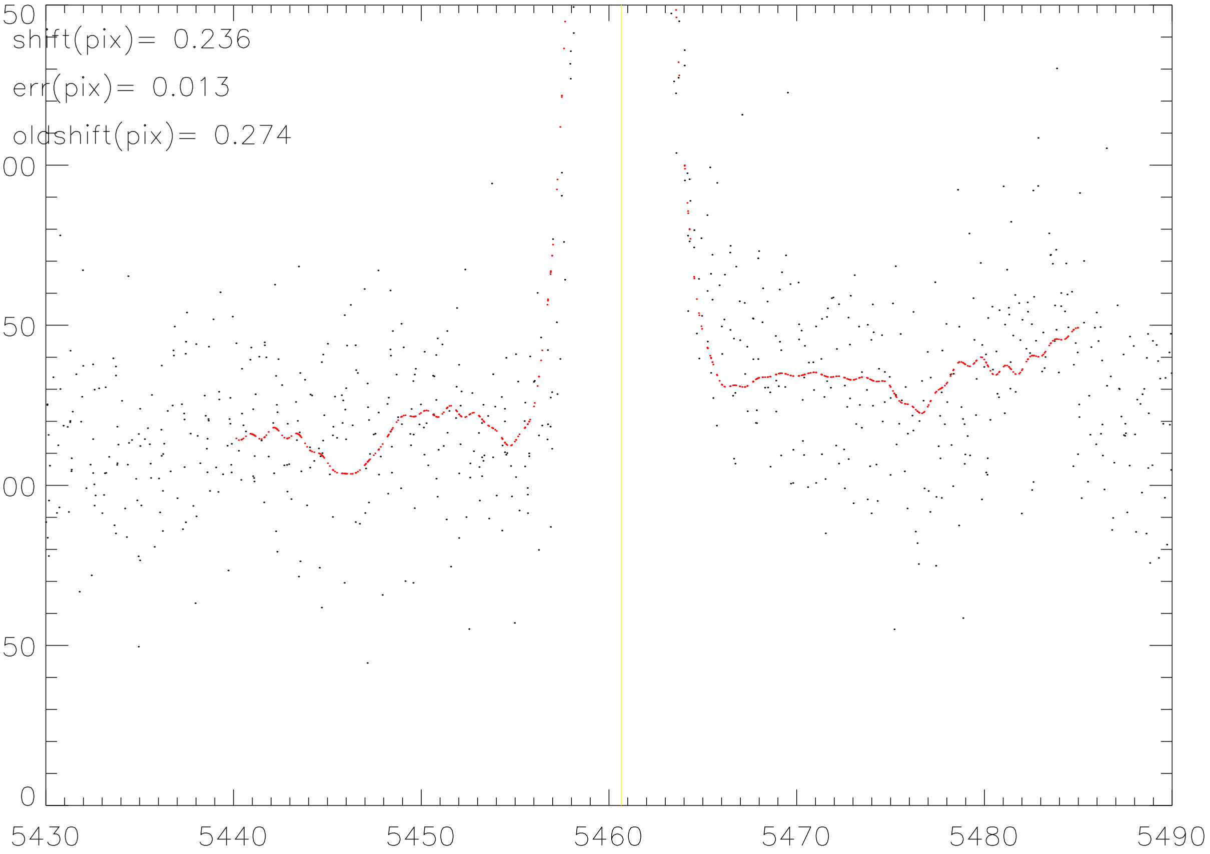
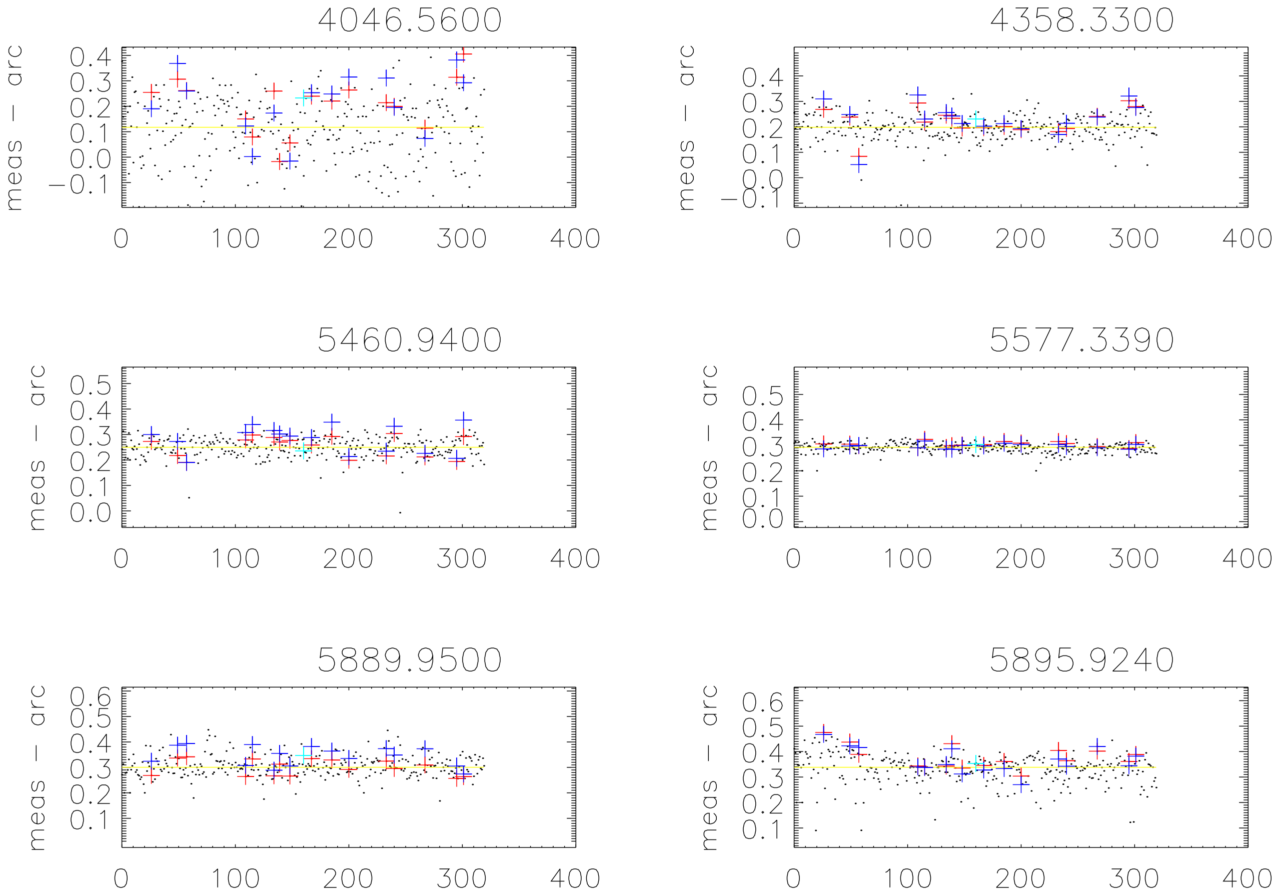

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b1-00056622.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

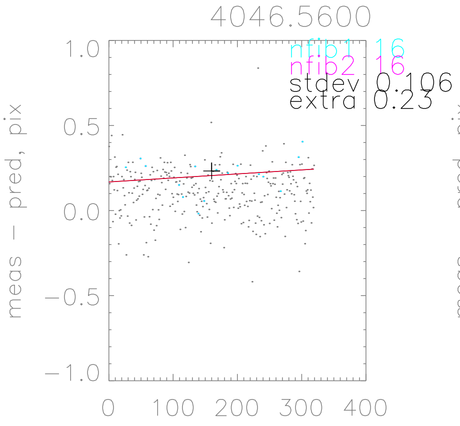

4046.5600
off: 0.16
sig: 0.040
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: 0.24
sig: 0.015
600
500
400
300
200
100
0
−100
5460.9400
off: 0.27
sig: 0.011
800
600
400
200
0
−200
5577.3390
off: 0.30
sig: 0.003
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
−2.0×10^3
5889.9500
off: 0.34
sig: 0.006
2500
2000
1500
1000
500
0
−500
5895.9240
off: 0.35
sig: 0.007
1500
1000
500
0
−500

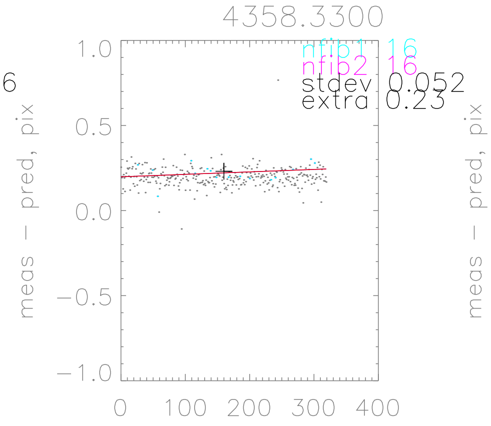

shift(pix)= 0.233
err(pix)= 0.050
oldshift(pix)= 0.160
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

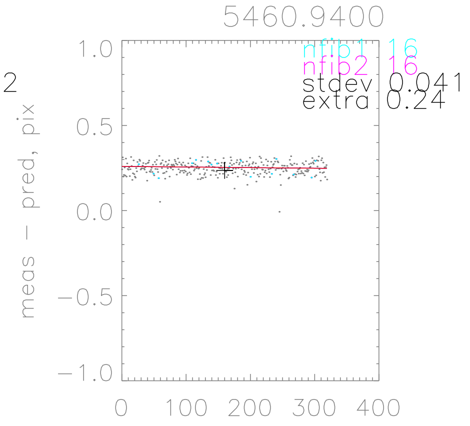

shift(pix)= 0.231
err(pix)= 0.018
oldshift(pix)= 0.244
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

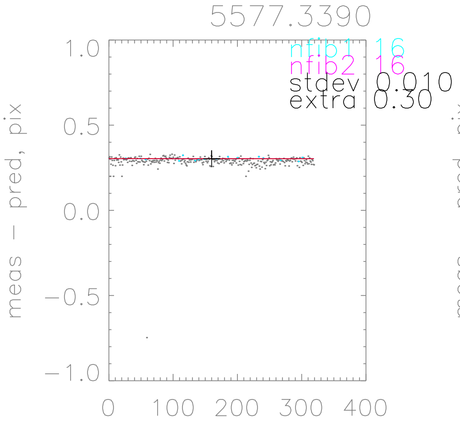

shift(pix)= 0.236
err(pix)= 0.013
oldshift(pix)= 0.274
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

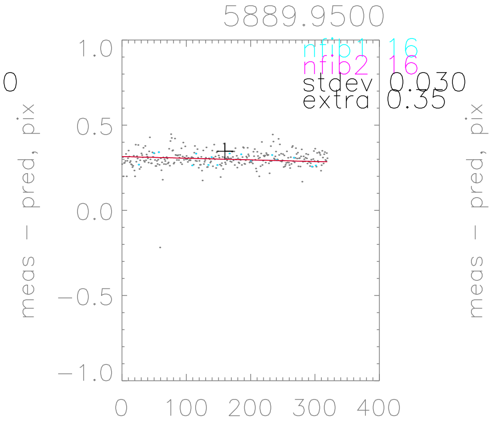

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400
−0.1
0.0
0.1
0.2
0.3
0.4
0.5
0.6

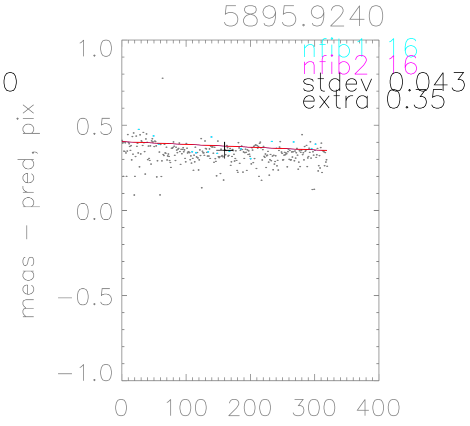

4046.5600
nfib1 16
nfib2 16
stdev 0.106
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

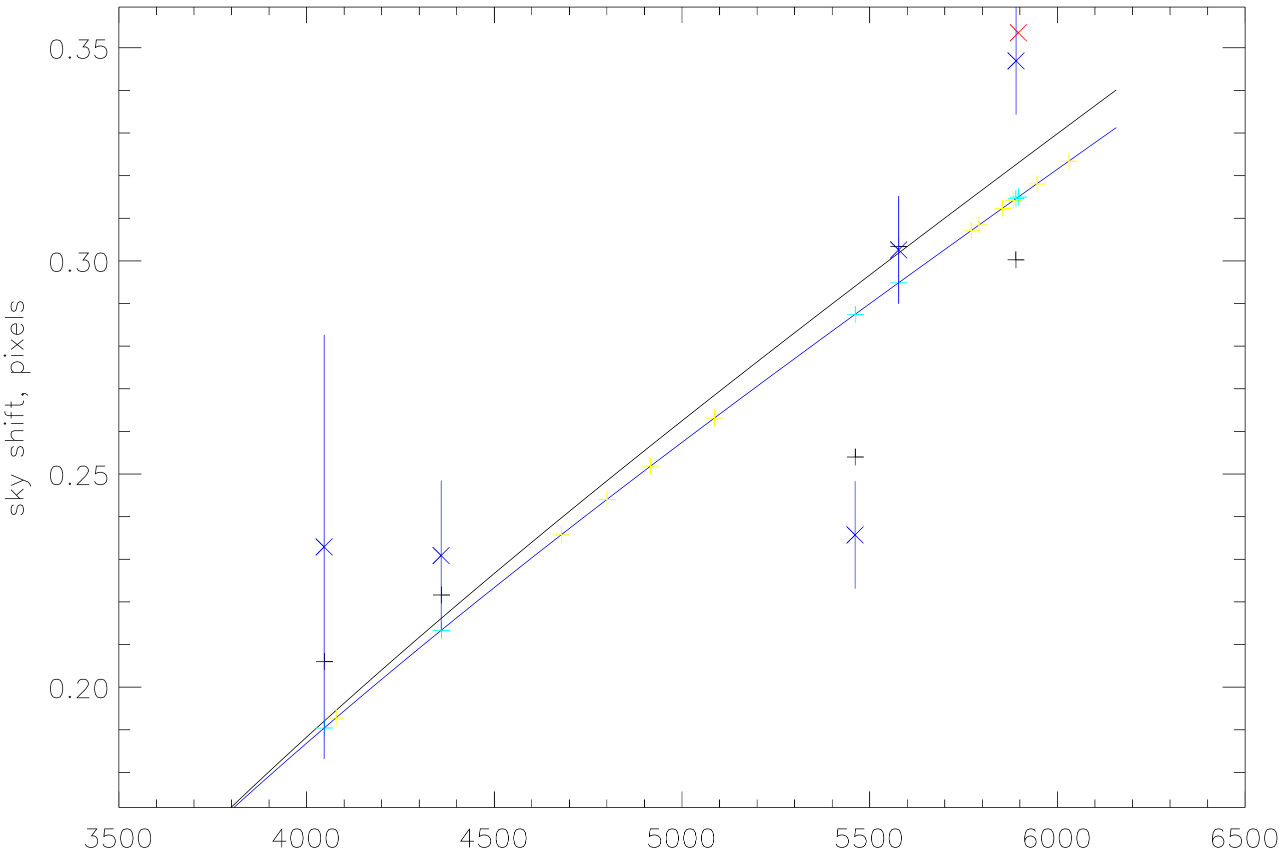

4358.3300
nfib1 16
nfib2 16
stdev 0.052
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

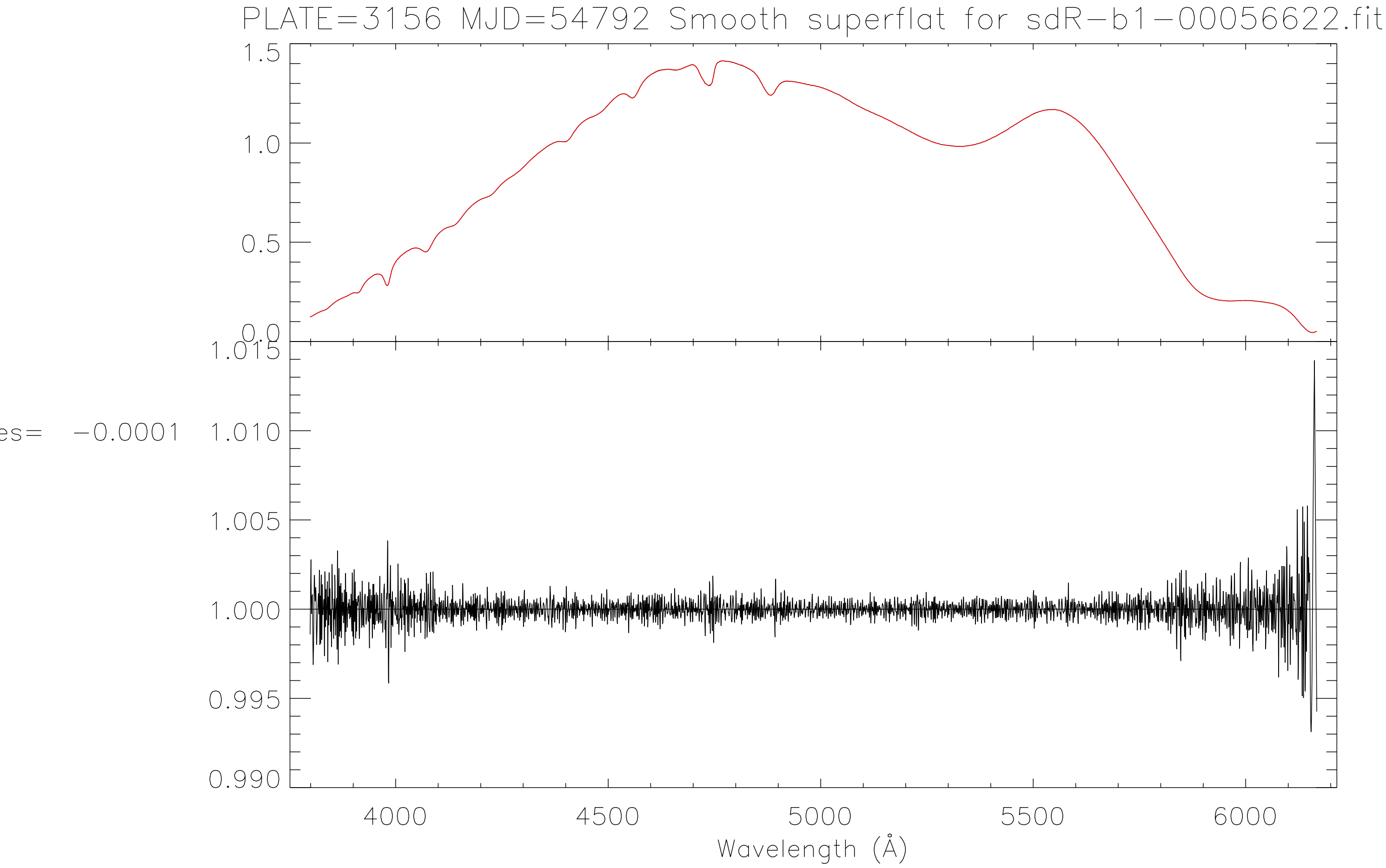

5460.9400
nfib1 16
nfib2 16
stdev 0.041
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

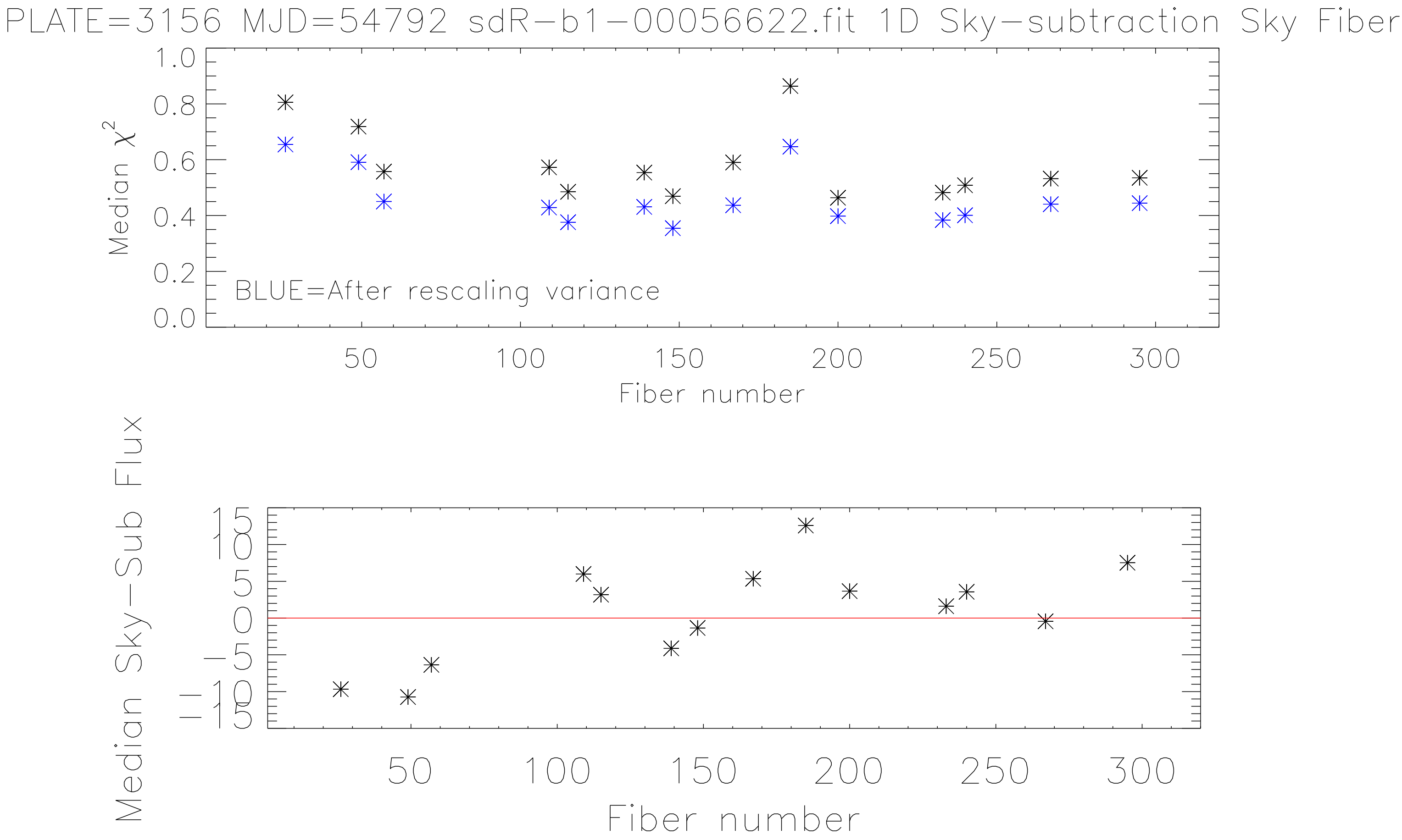

5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra 0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

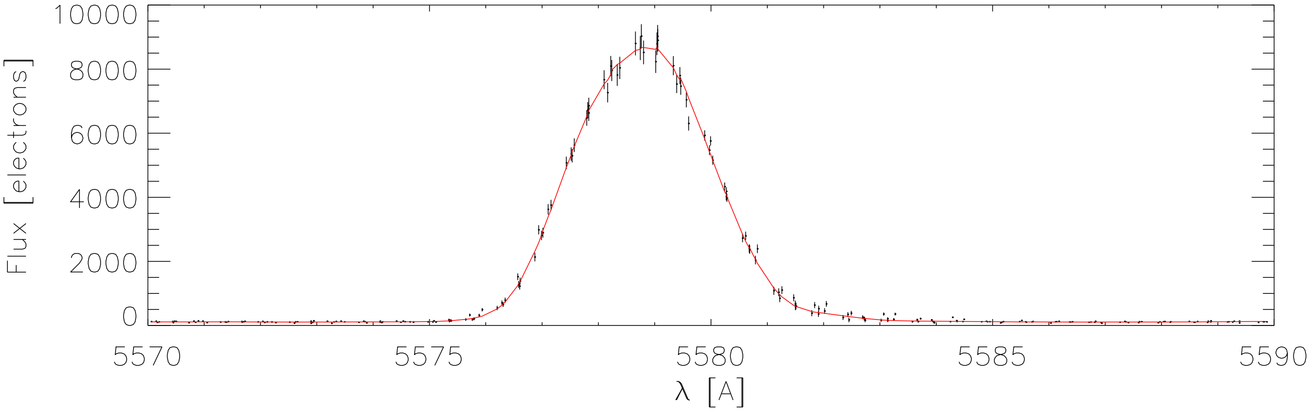

5895.9240
nfib1 16
nfib2 16
stdev 0.043
extra 0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.20
0.25
0.30
0.35
3500
4000
4500
5000
5500
6000
6500

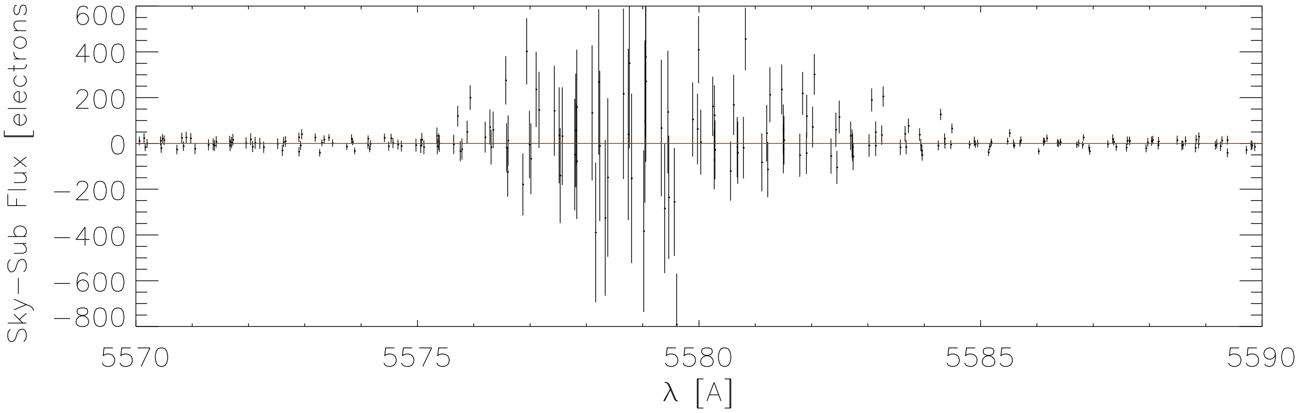

PLATE=3156 MJD=54792 Smooth superflat for sdR-b1-00056622.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= -0.0001
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3156 MJD=54792 sdR-b1-00056622.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

PLATE=3156 MJD=54792 sdR-b1-00056622.fit 1D Sky-subtraction Sky Fibers

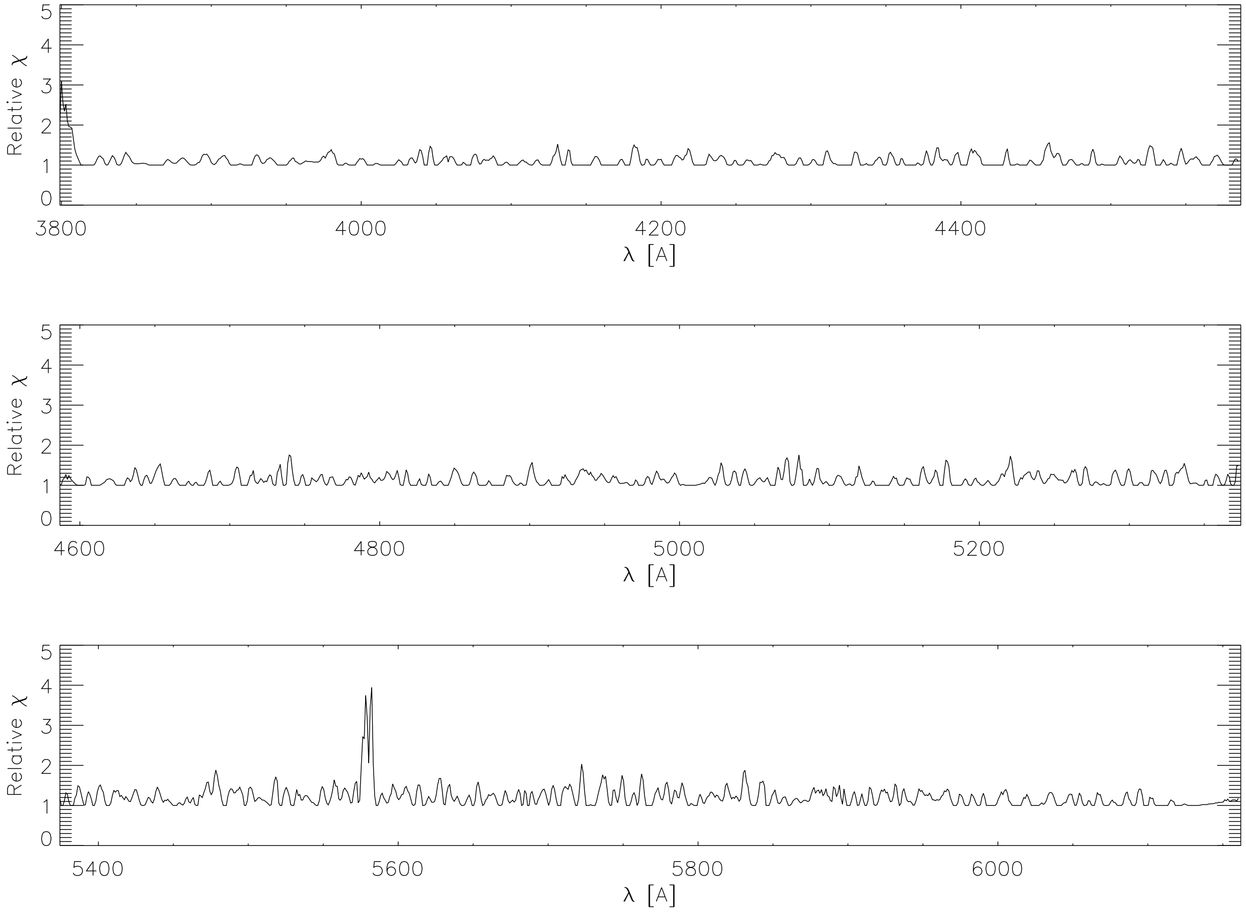


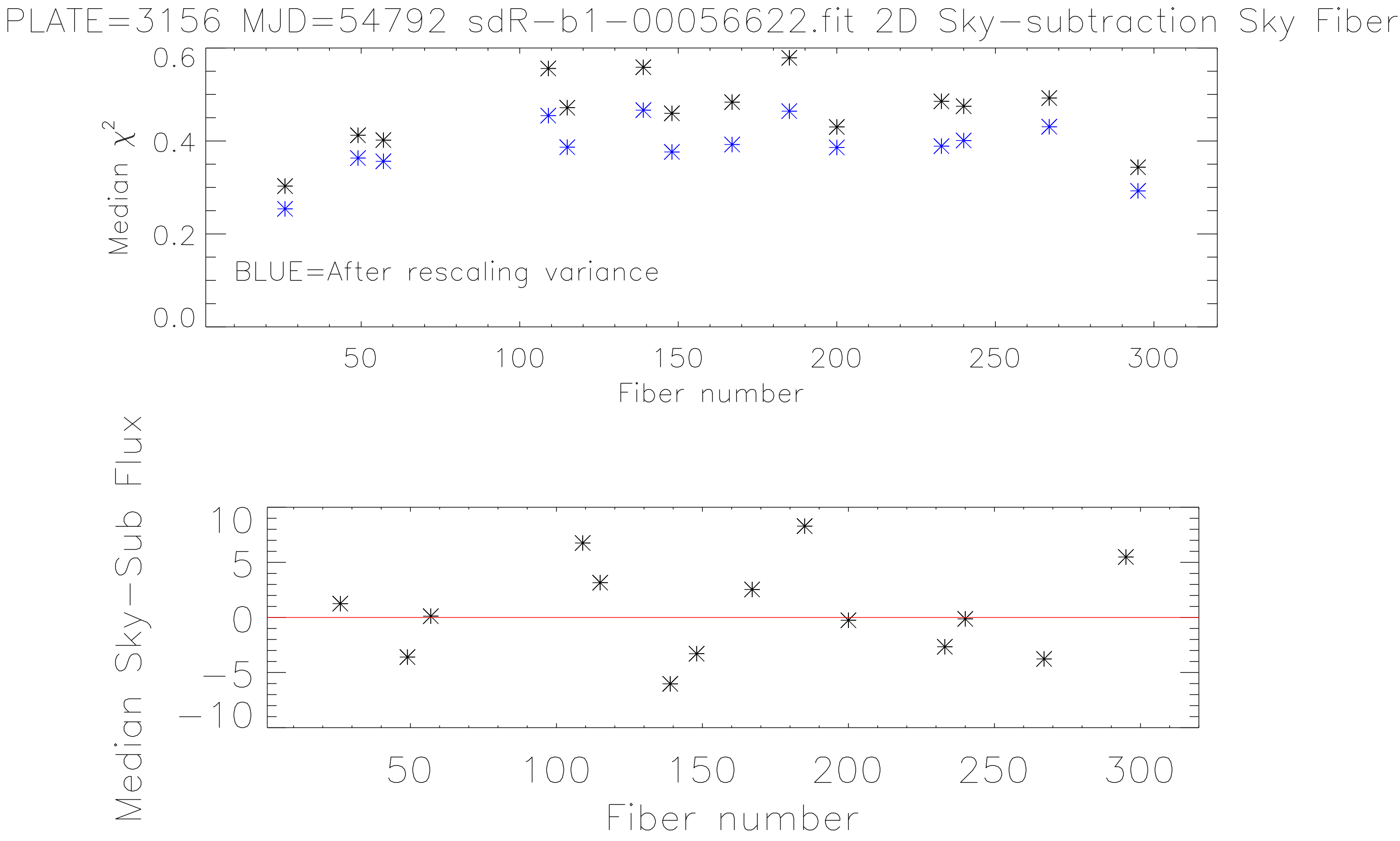
PLATE=3156 MJD=54792 sdR-b1-00056622.fit 1D Sky-subtraction Sky-subtracted Sky F

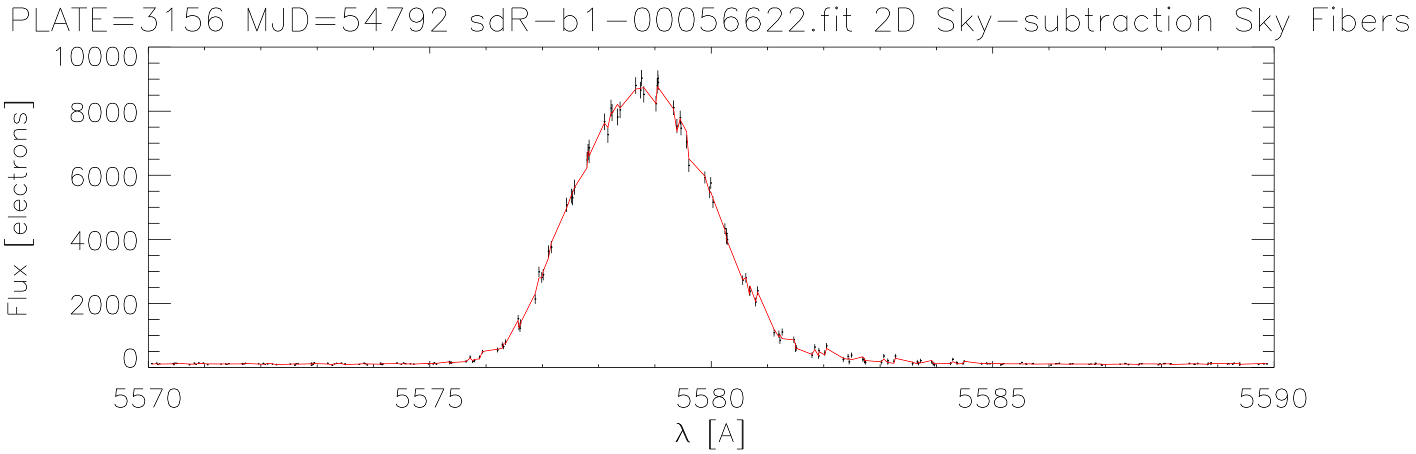


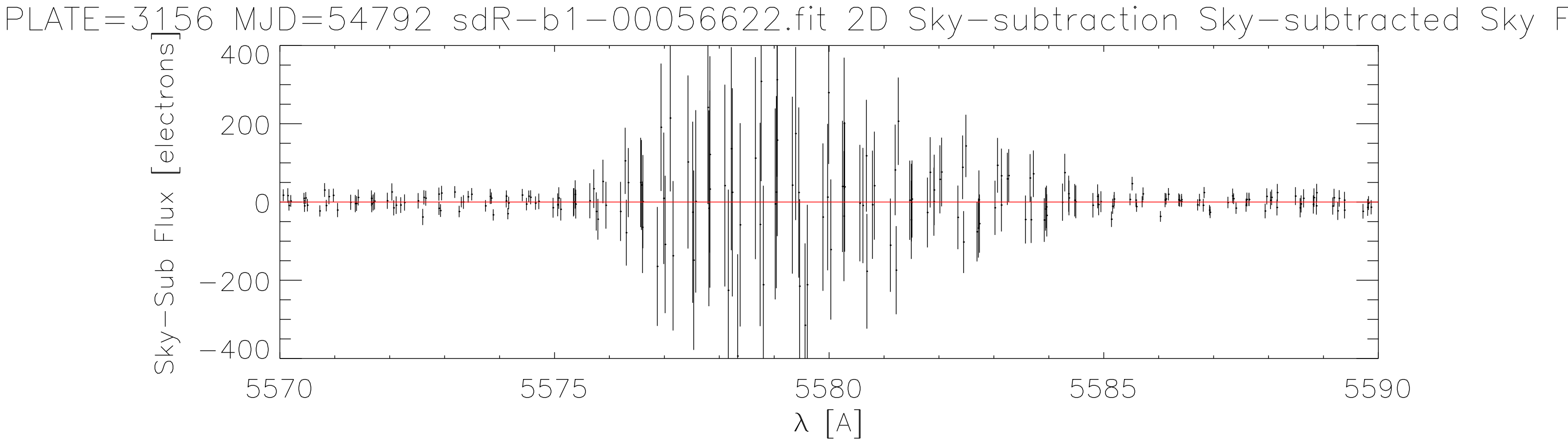
Number of sky fibers = 14

PLATE=3156 MJD=54792 sdR-b1-00056622.fit 1D Sky-subtraction Rescaled Errors



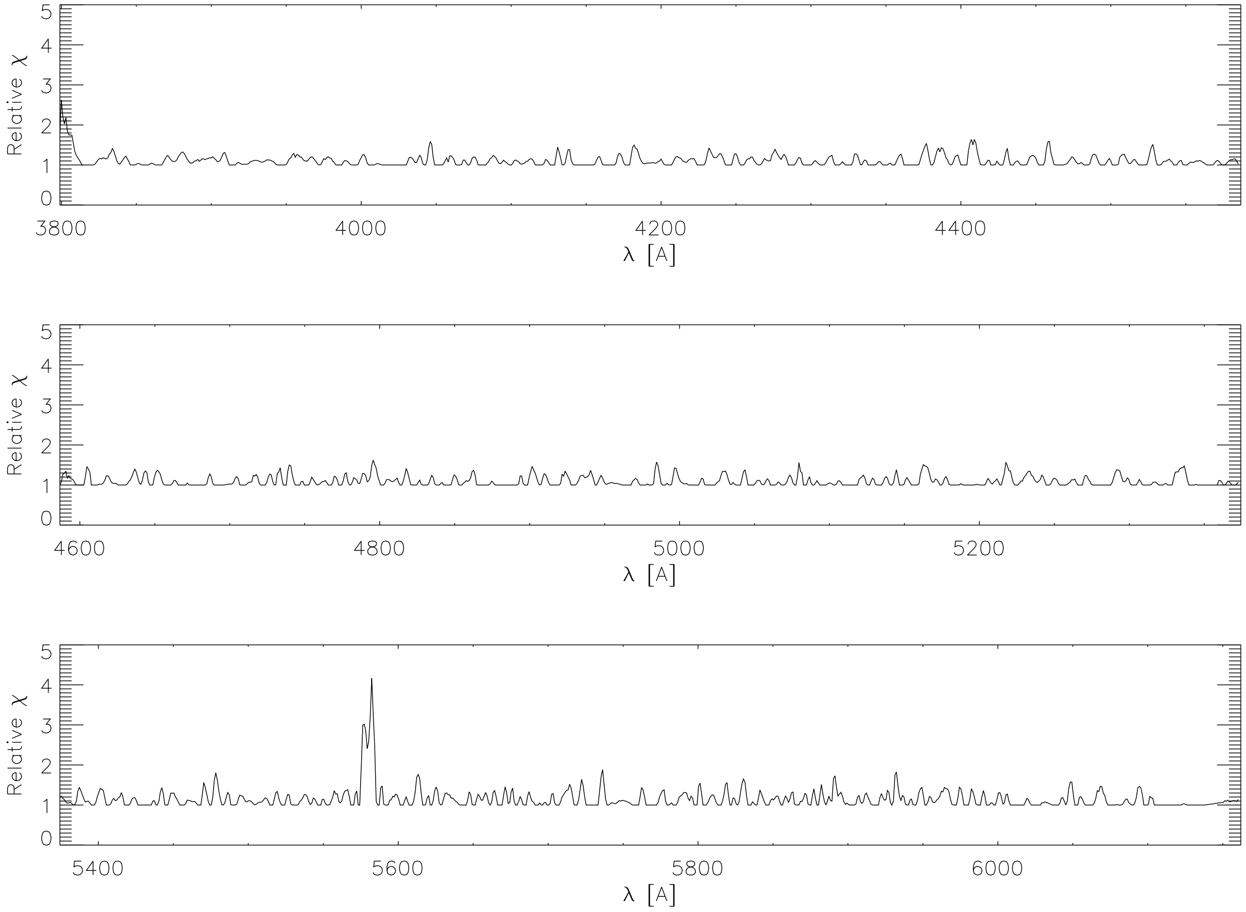

PLATE=3156 MJD=54792 sdR-b1-00056622.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number

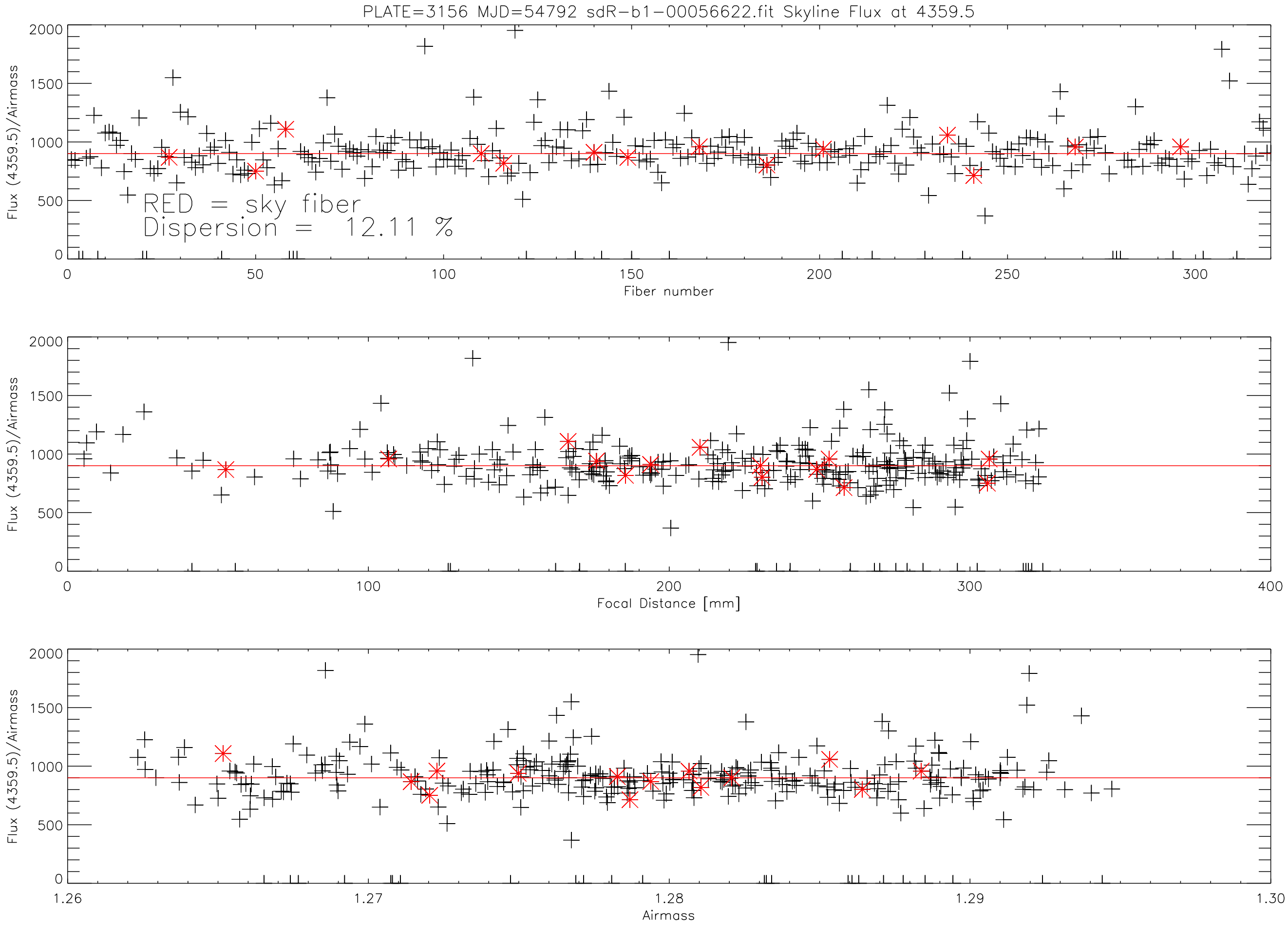

PLATE=3156 MJD=54792 sdR-b1-00056622.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

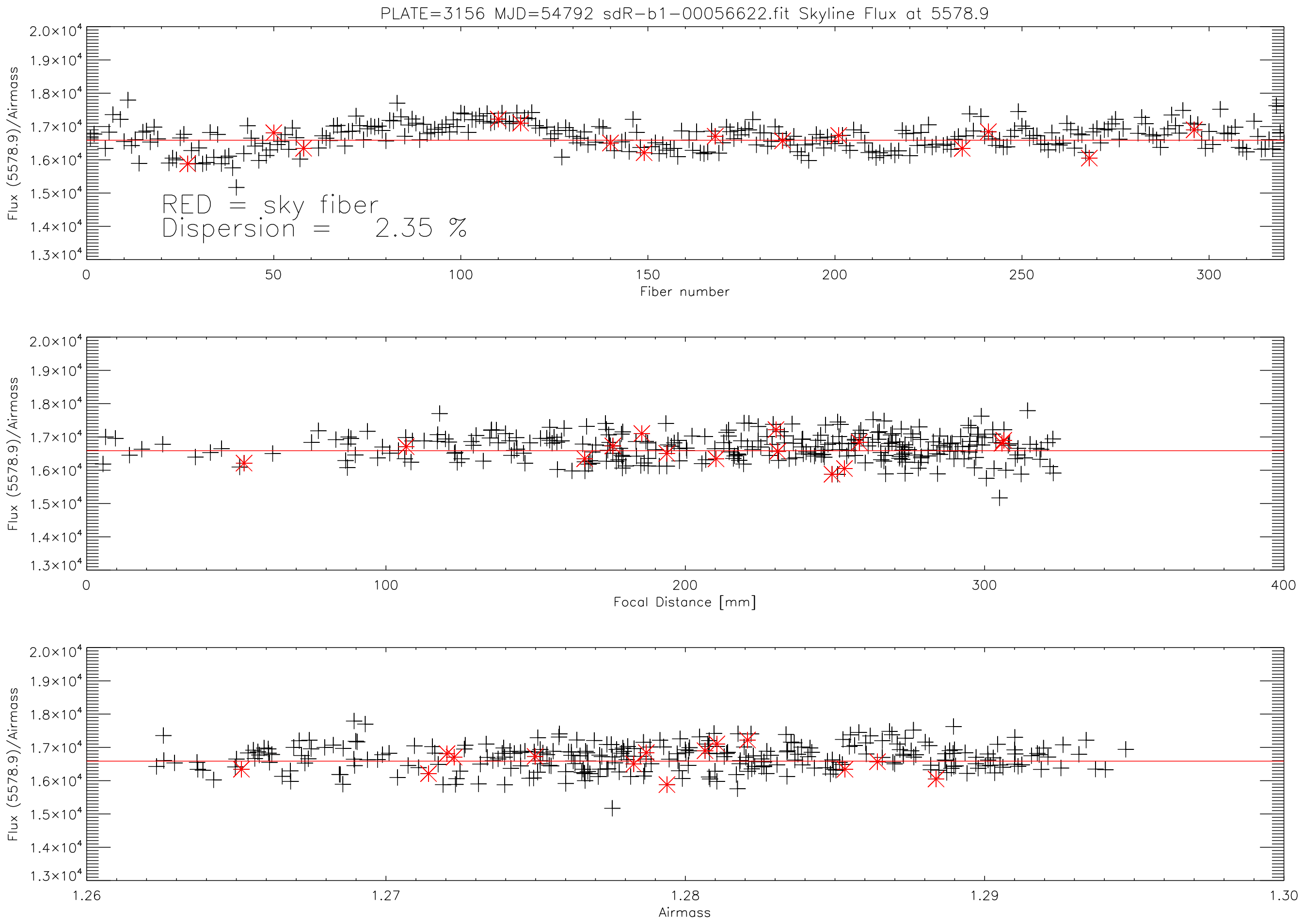

PLATE=3156 MJD=54792 sdR-b1-00056622.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

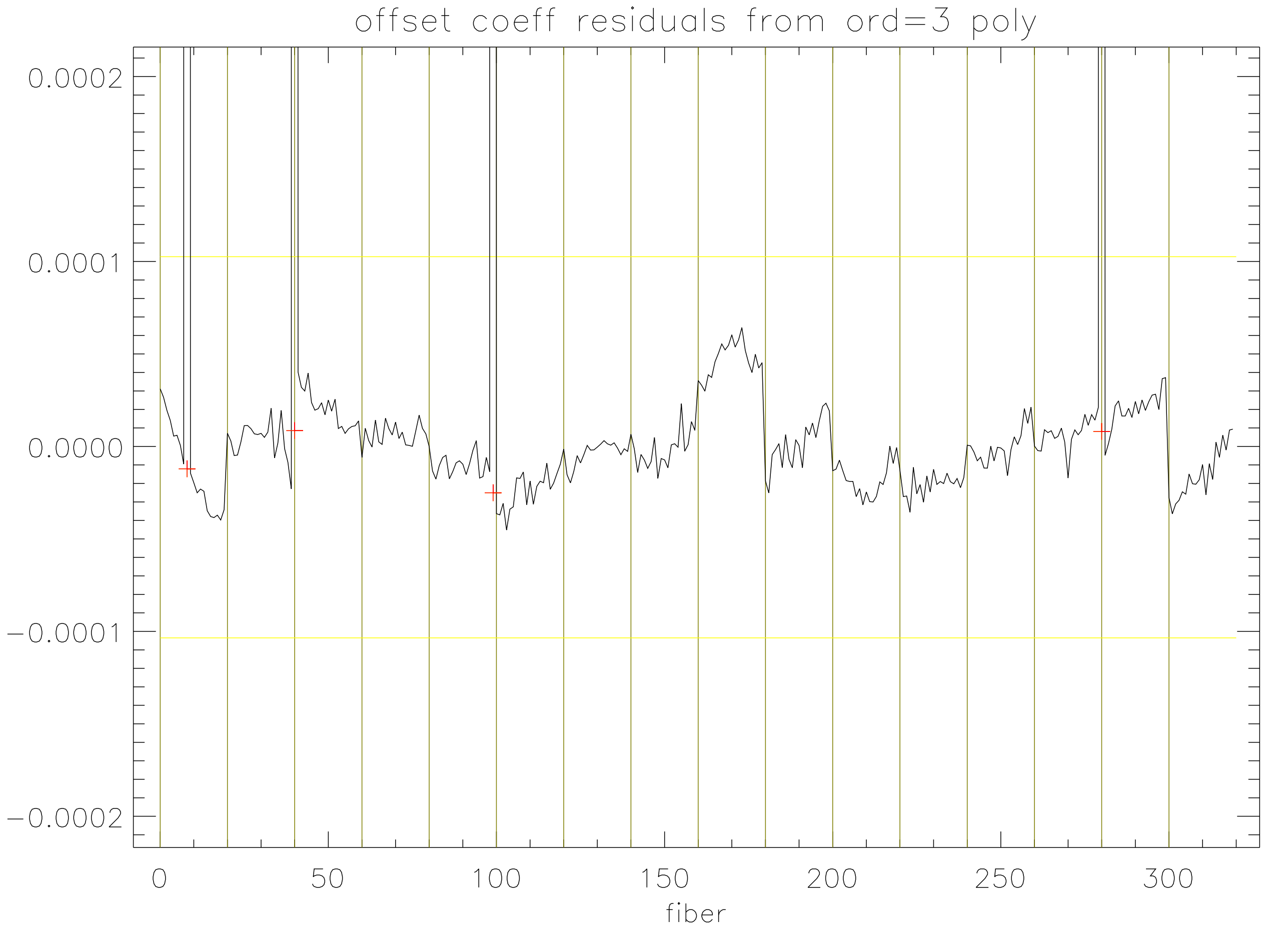
Number of sky fibers = 14

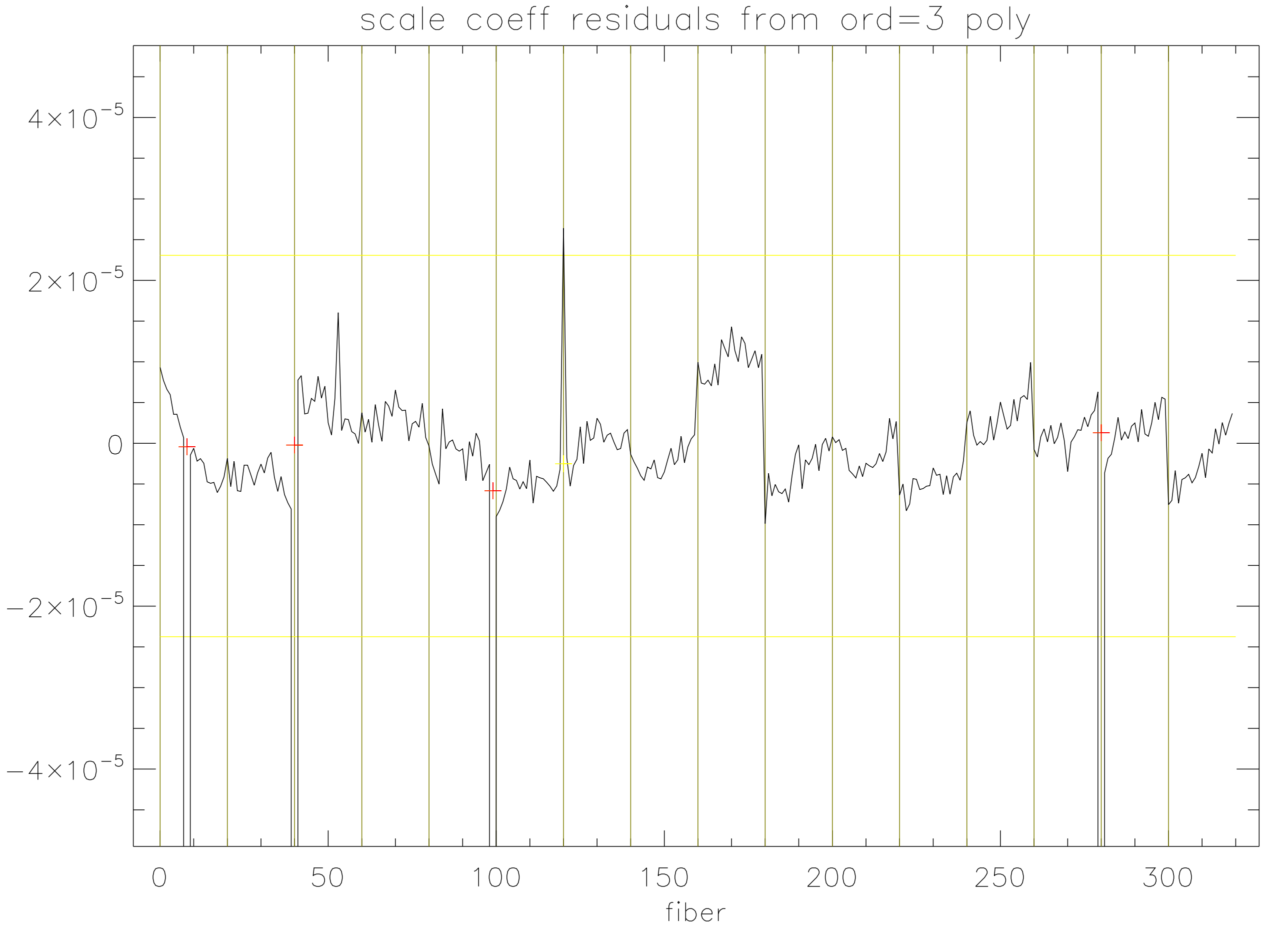
PLATE=3156 MJD=54792 sdR-b1-00056622.fit 2D Sky-subtraction Rescaled Errors

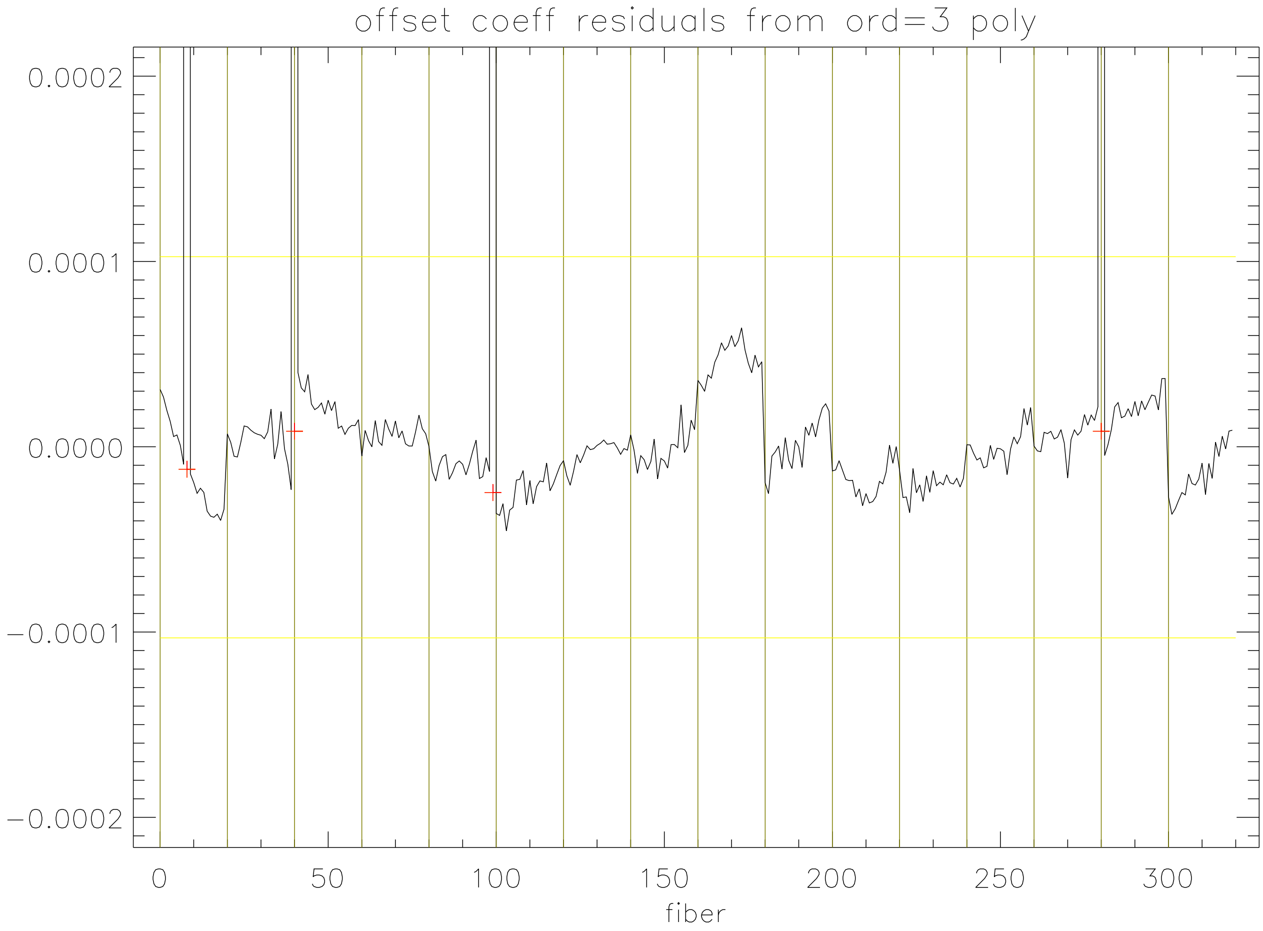


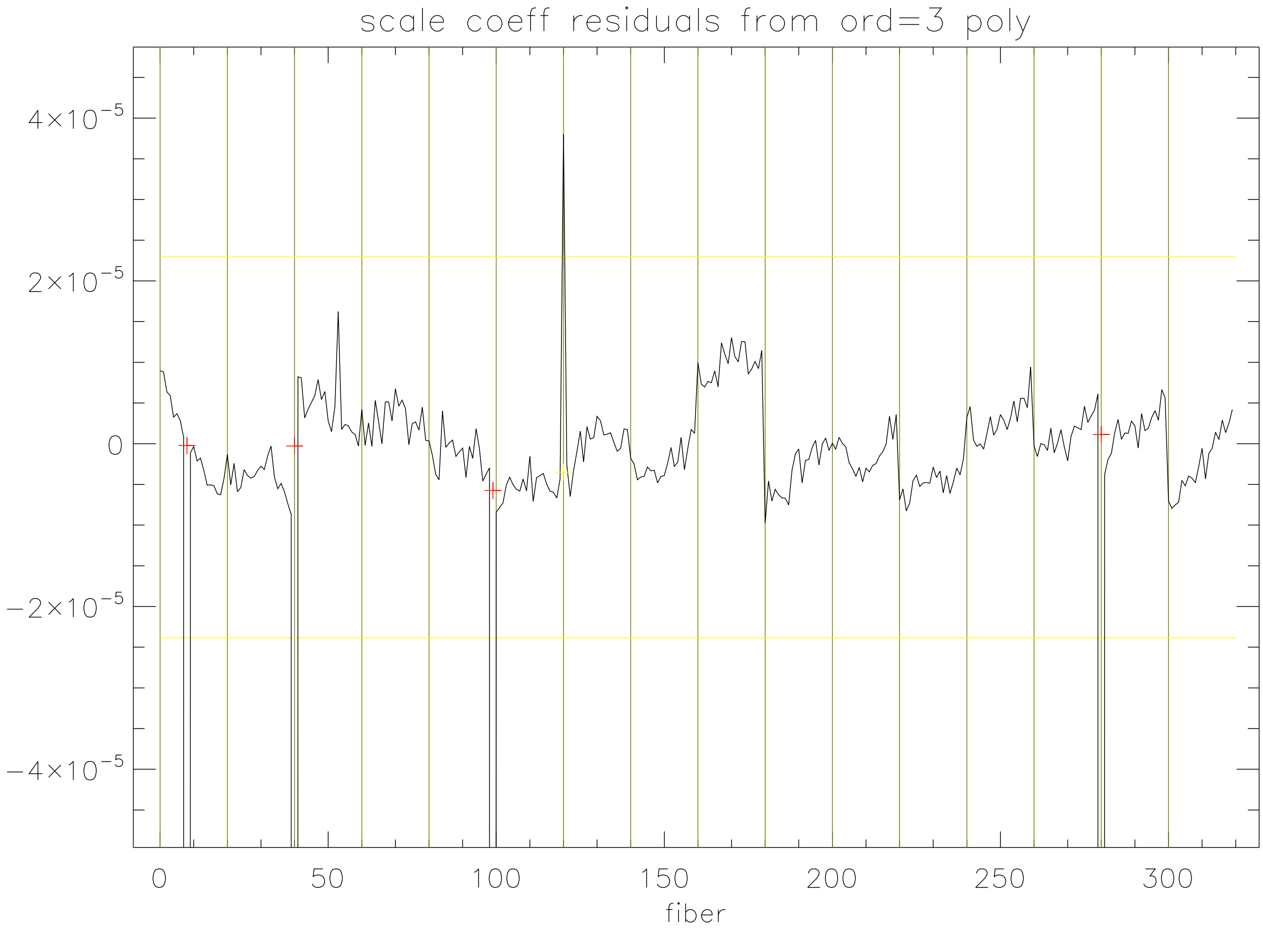

PLATE=3156 MJD=54792 sdR-b1-00056622.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2000
1500
1000
500
0
RED = sky fiber
Dispersion = 12.11 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2000
1500
1000
500
0
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2000
1500
1000
500
0
1.26
1.27
1.28
1.29
1.30
Airmass

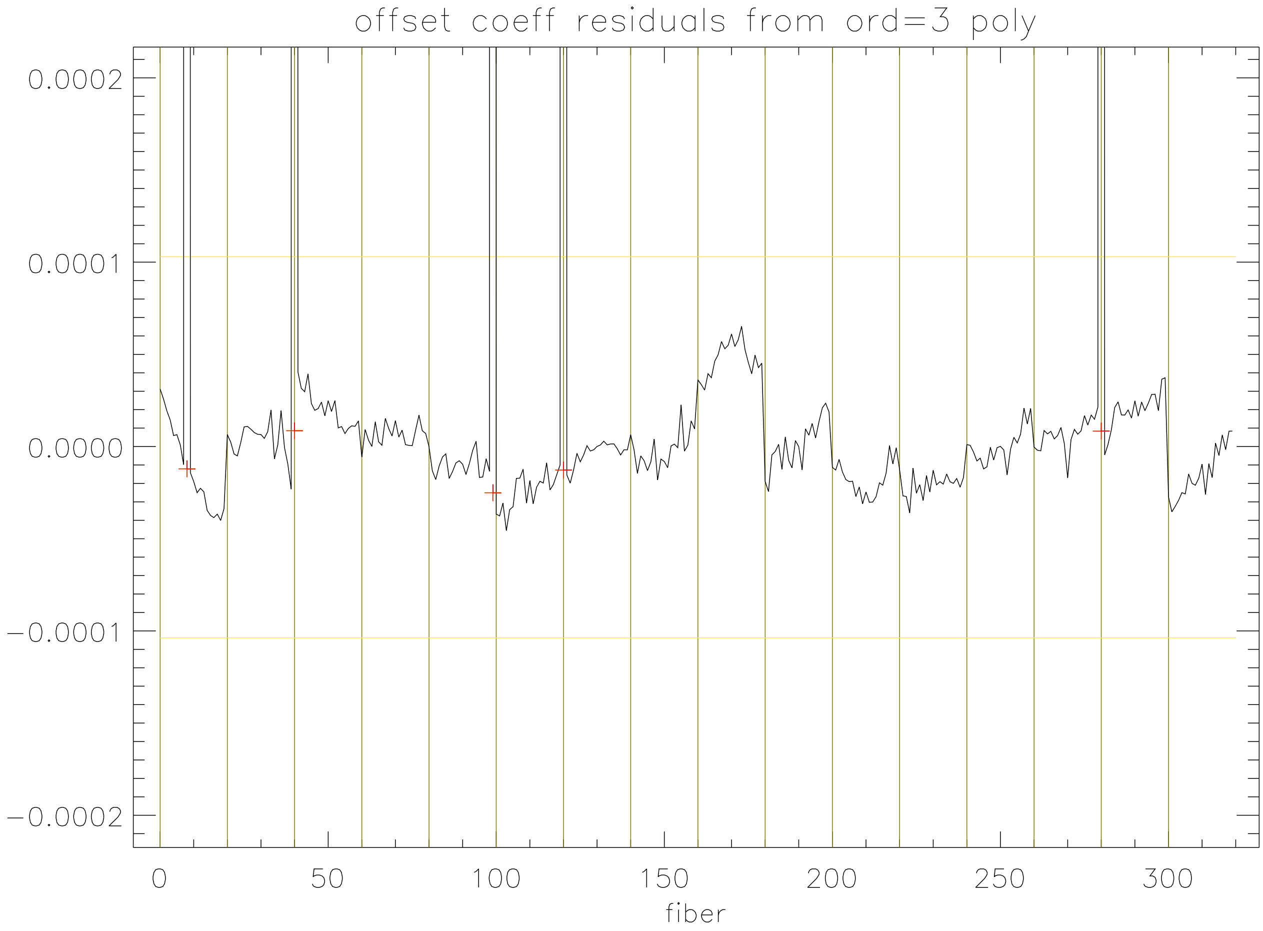

PLATE=3156 MJD=54792 sdR-b1-00056622.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
RED = sky fiber
Dispersion = 2.35 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.26
1.27
1.28
1.29
1.30
Airmass

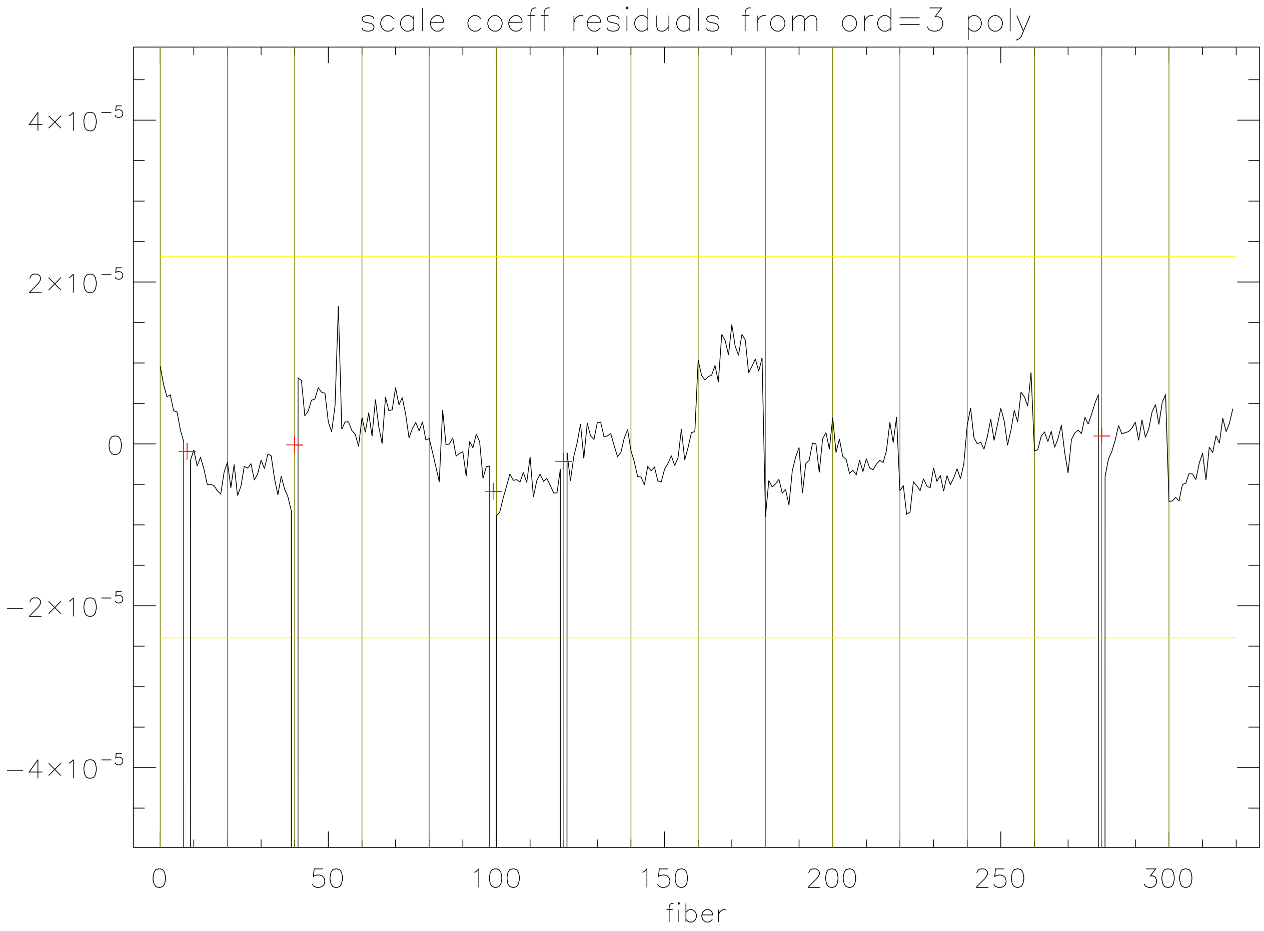

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

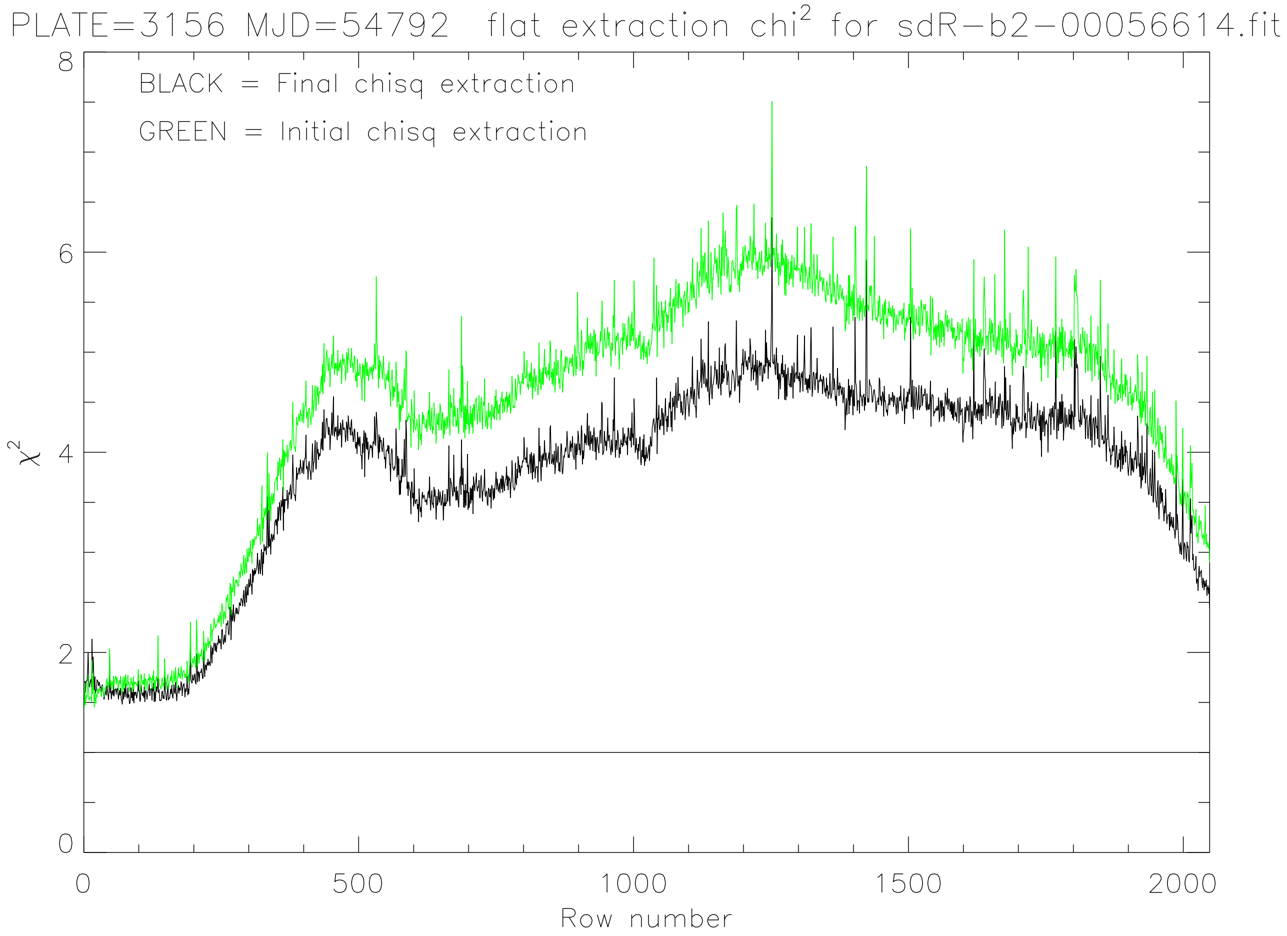

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

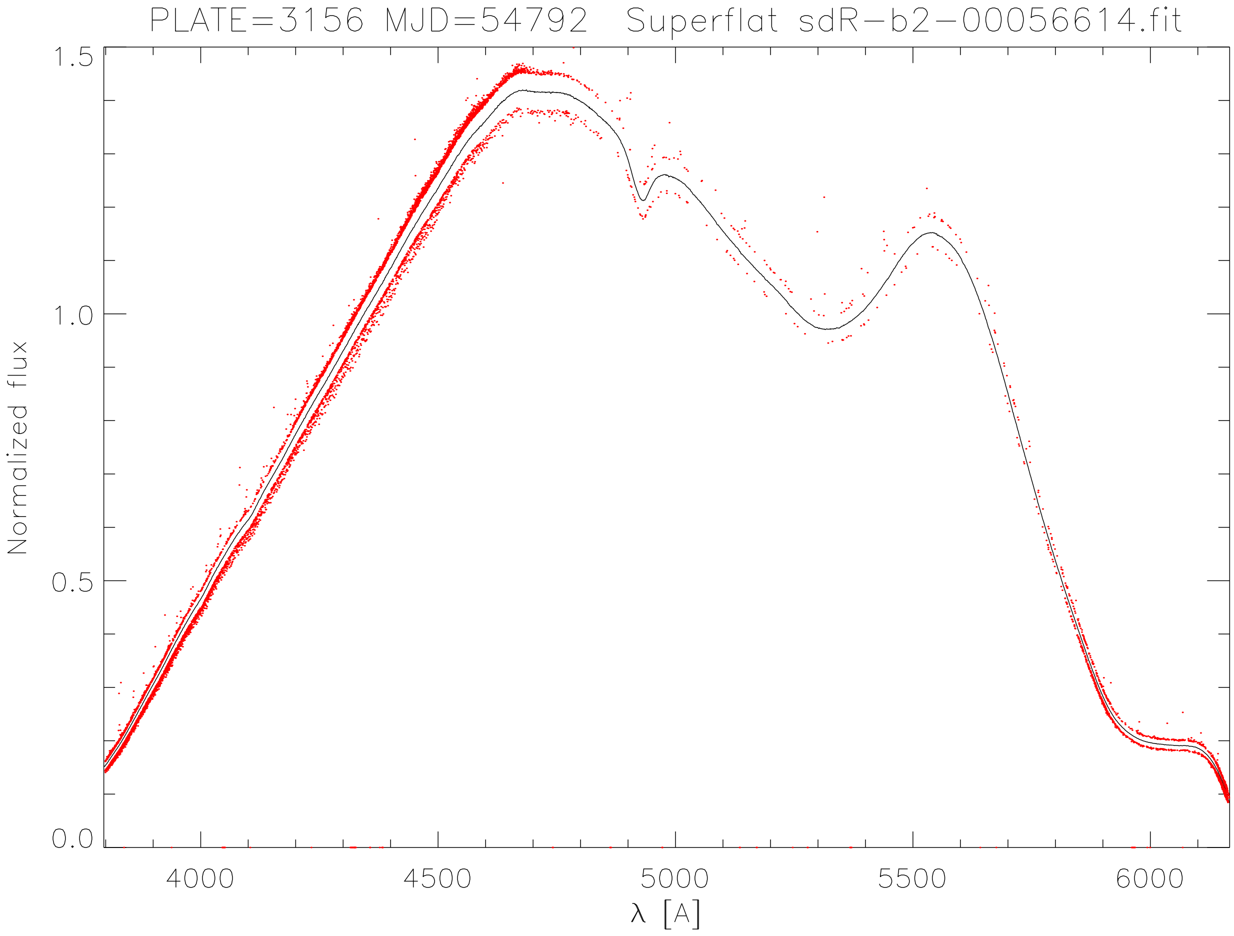

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

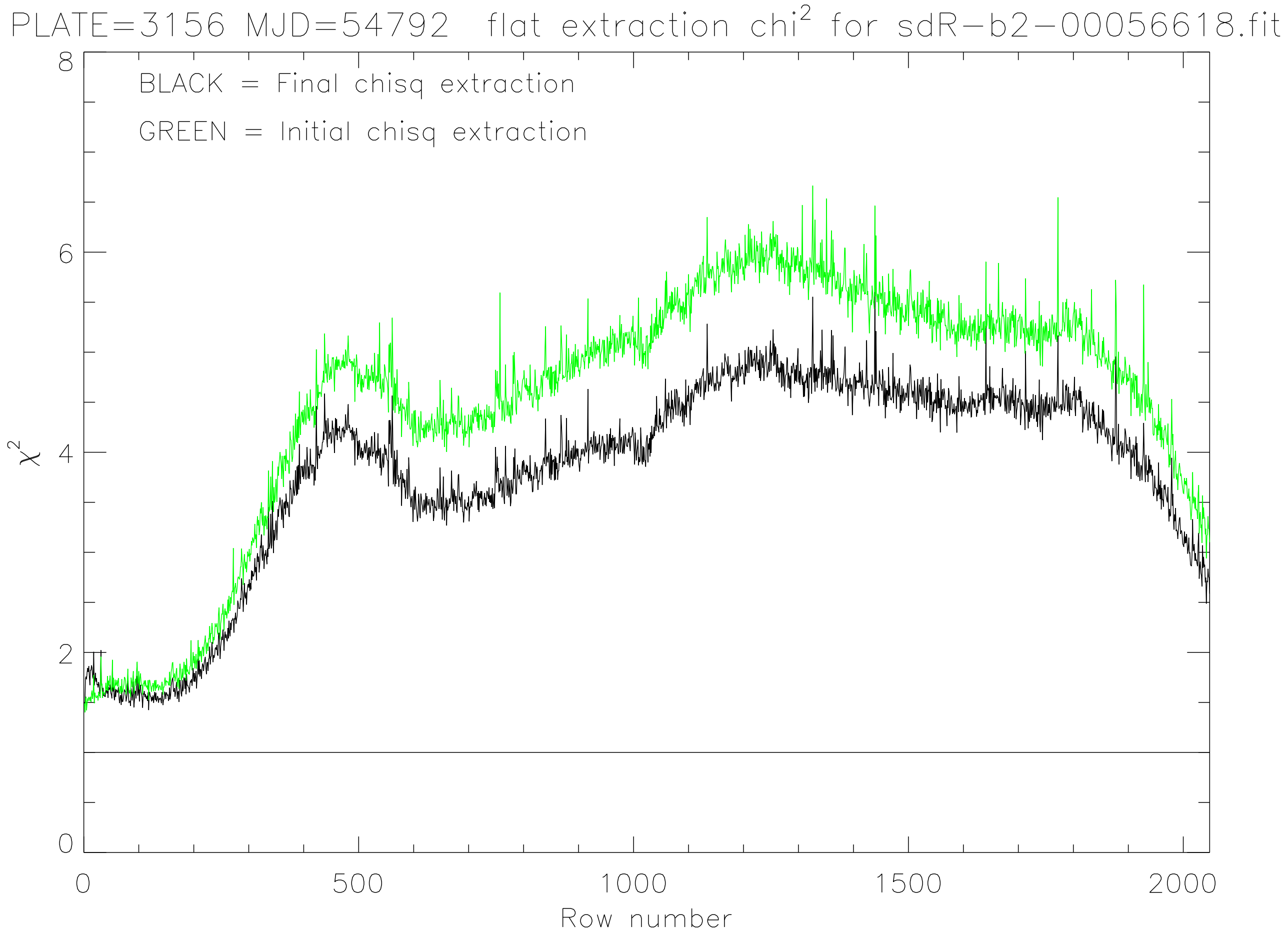

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

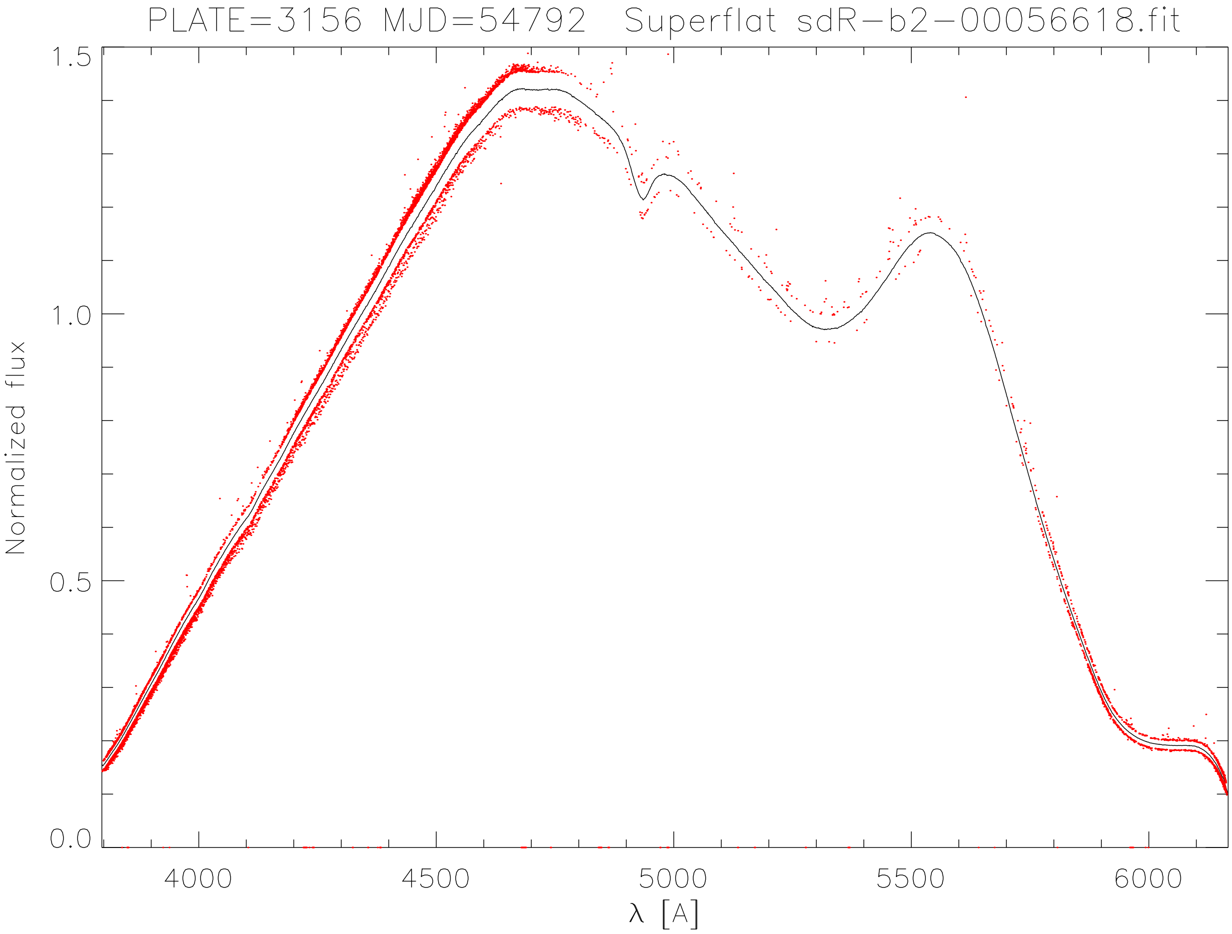

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

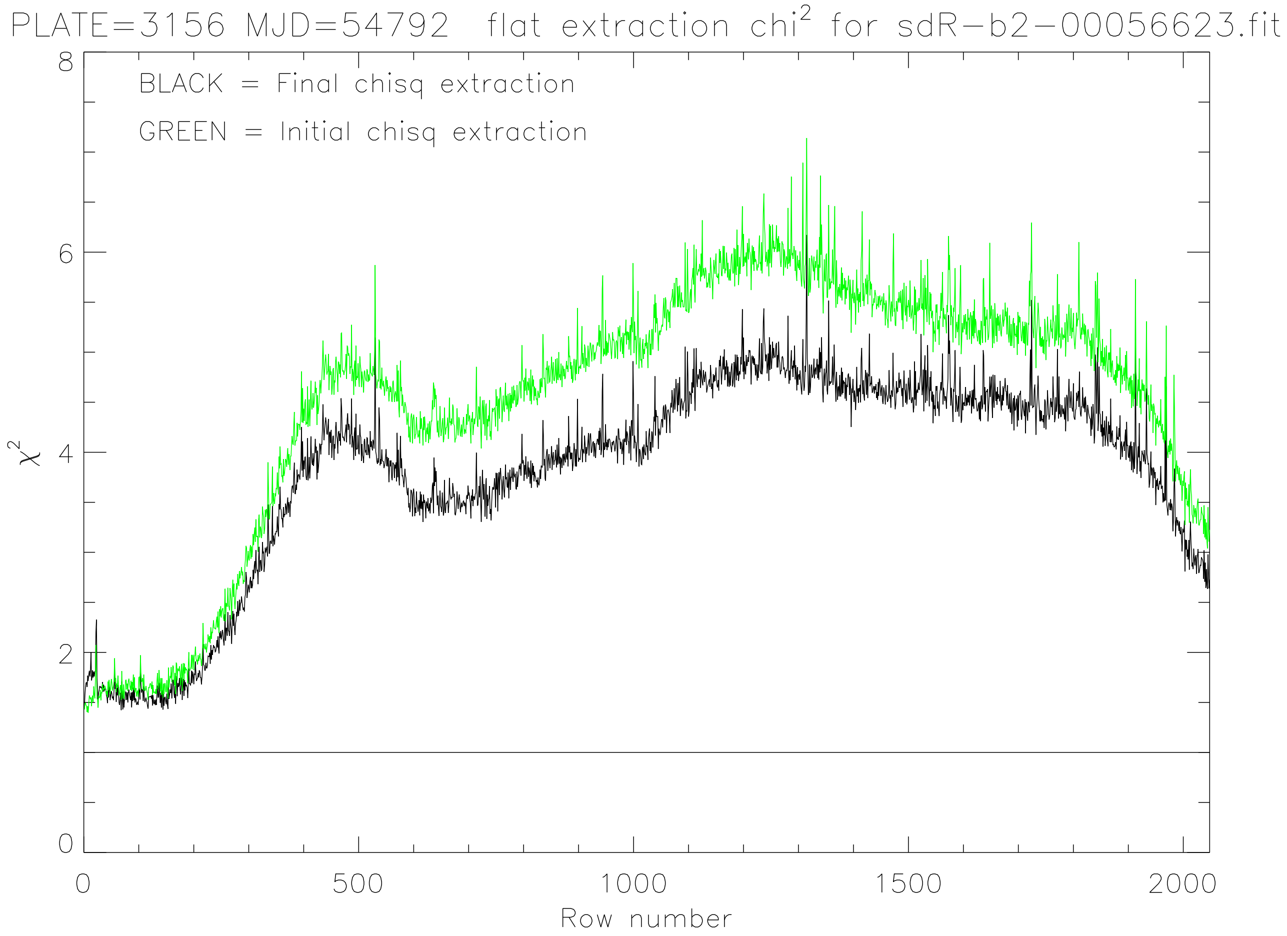

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

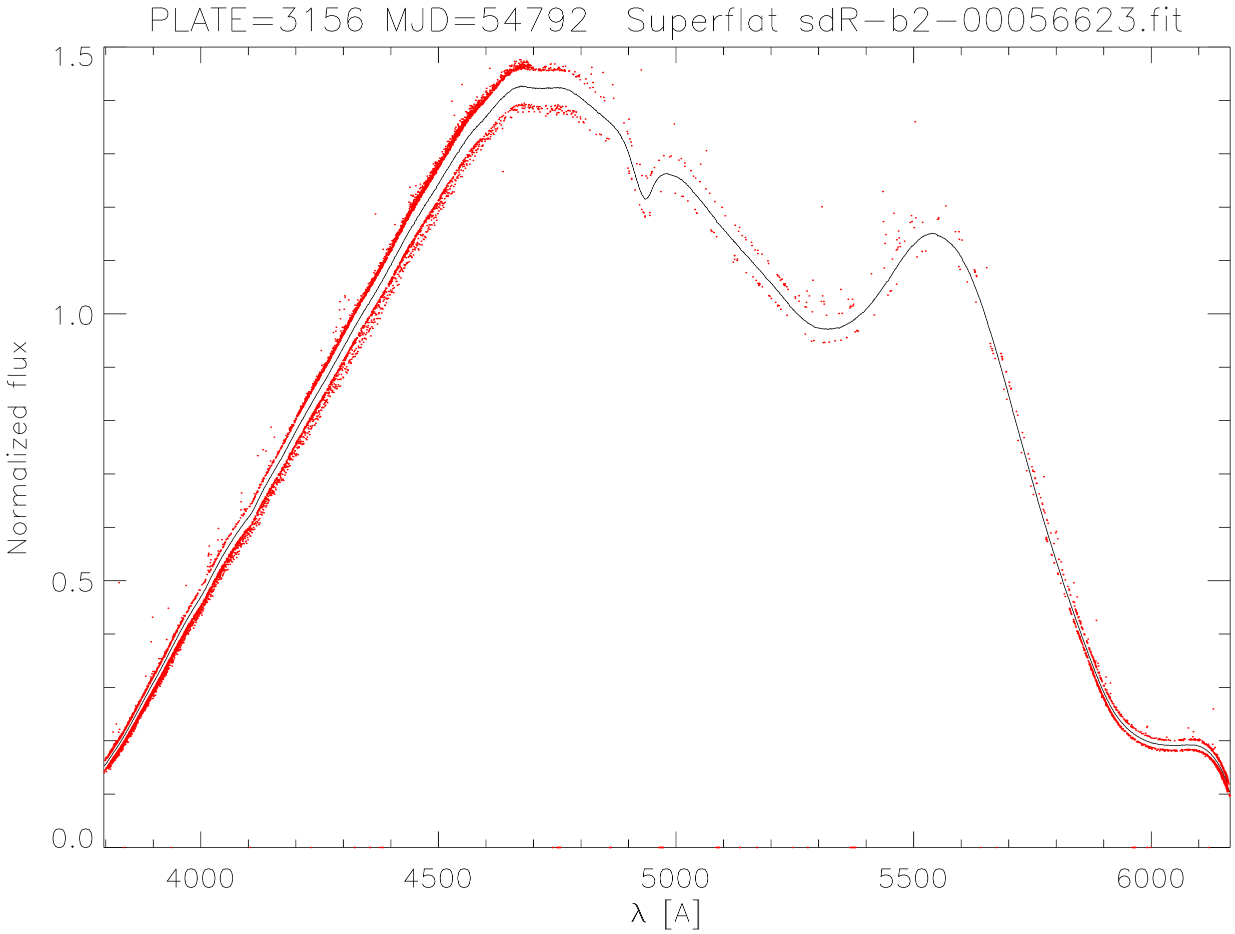

PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-b2-00056614.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

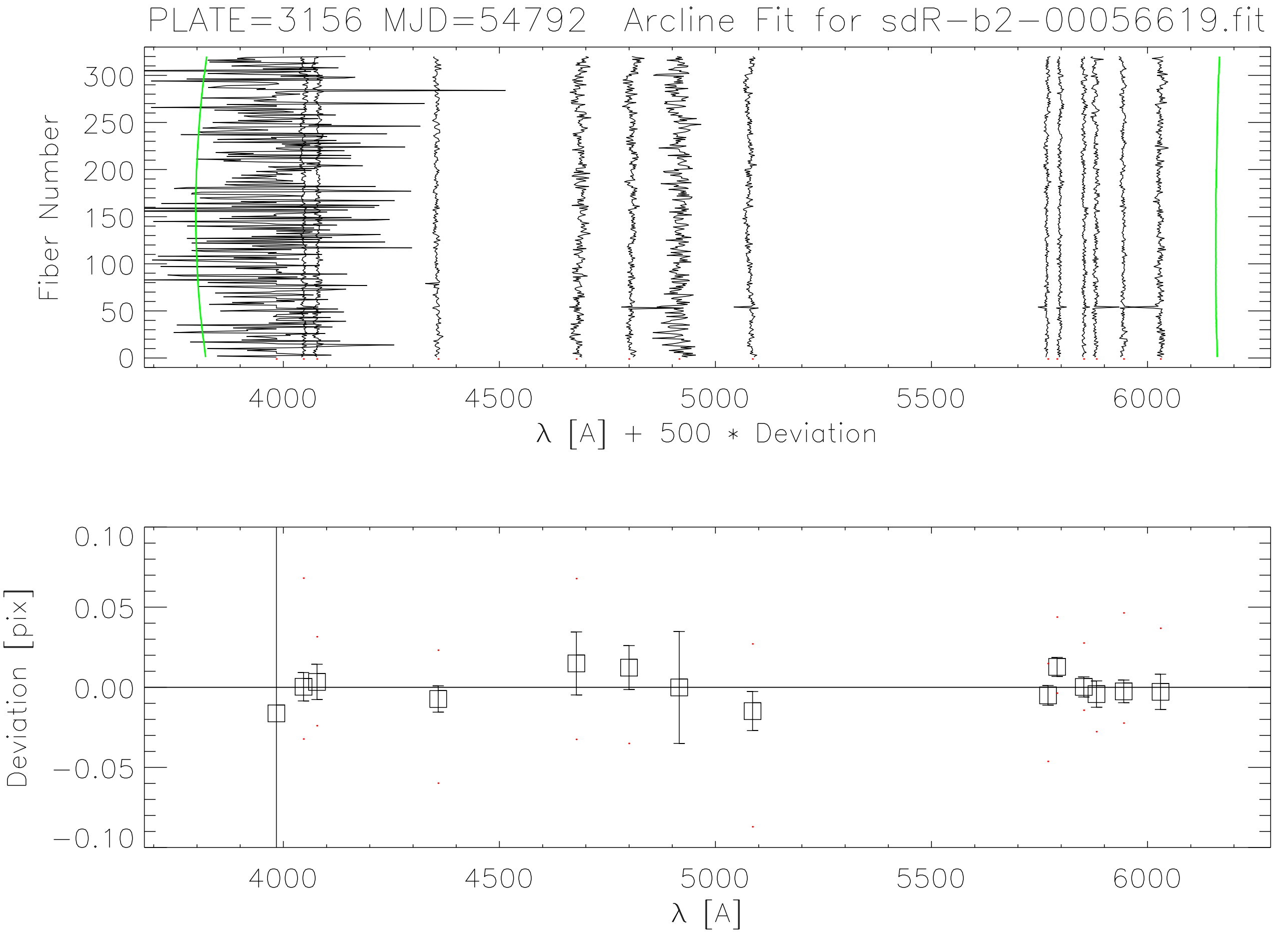

PLATE=3156 MJD=54792 Superflat sdR-b2-00056614.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]


PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-b2-00056618.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number


PLATE=3156 MJD=54792 Superflat sdR-b2-00056618.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

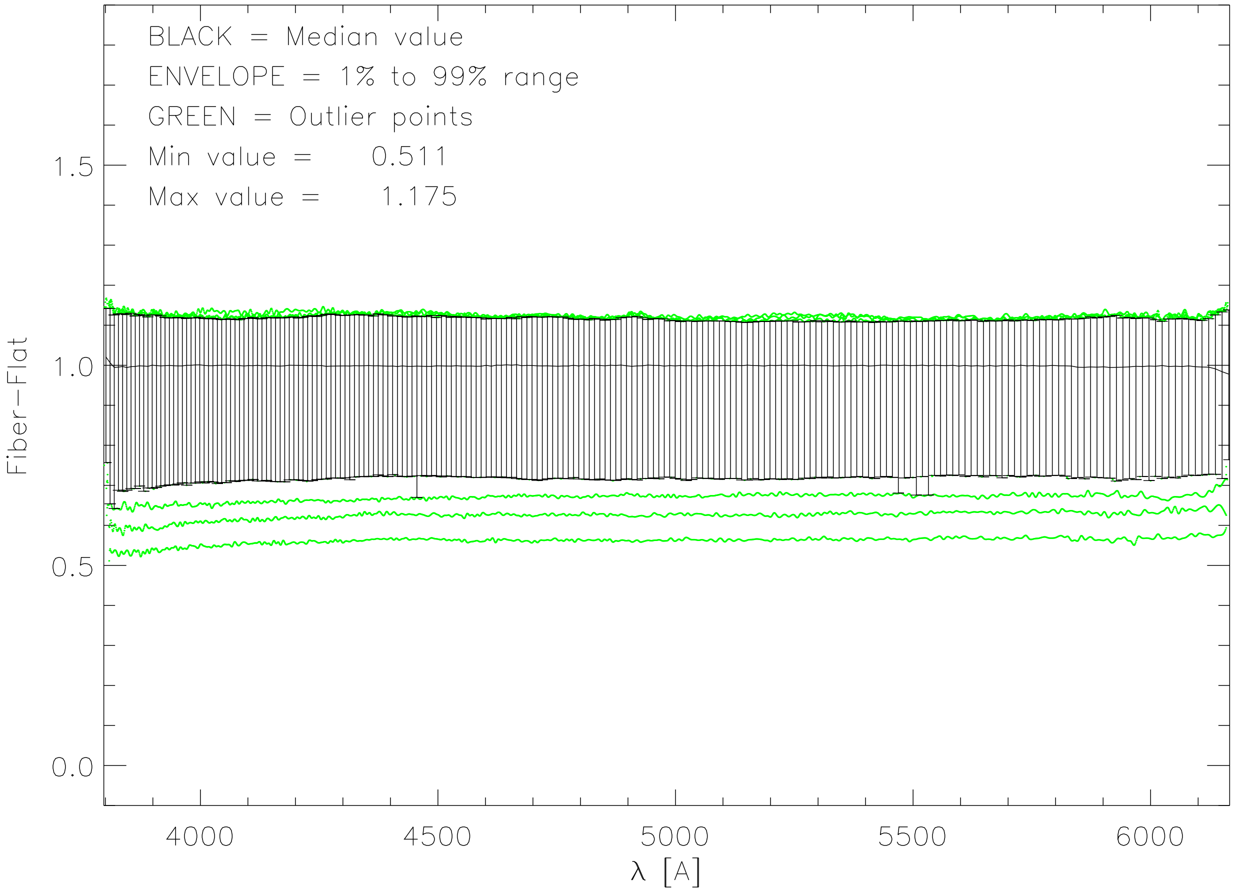

PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-b2-00056623.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number


PLATE=3156 MJD=54792 Superflat sdR-b2-00056623.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

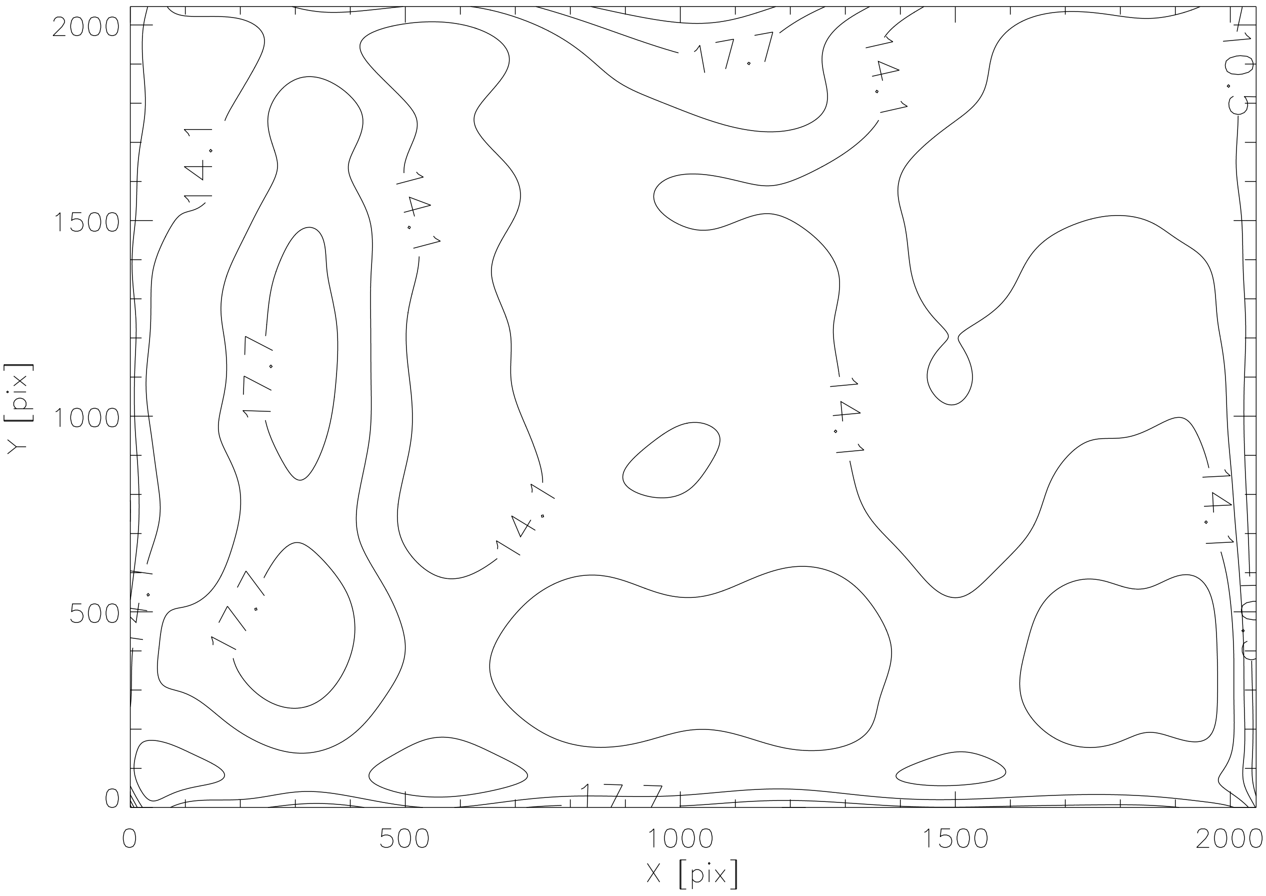


Tue Mar 9 18:38:03 2010

PLATE=3156 MJD=54792 Fiber−Flats for sdR−b2−00056618.fit

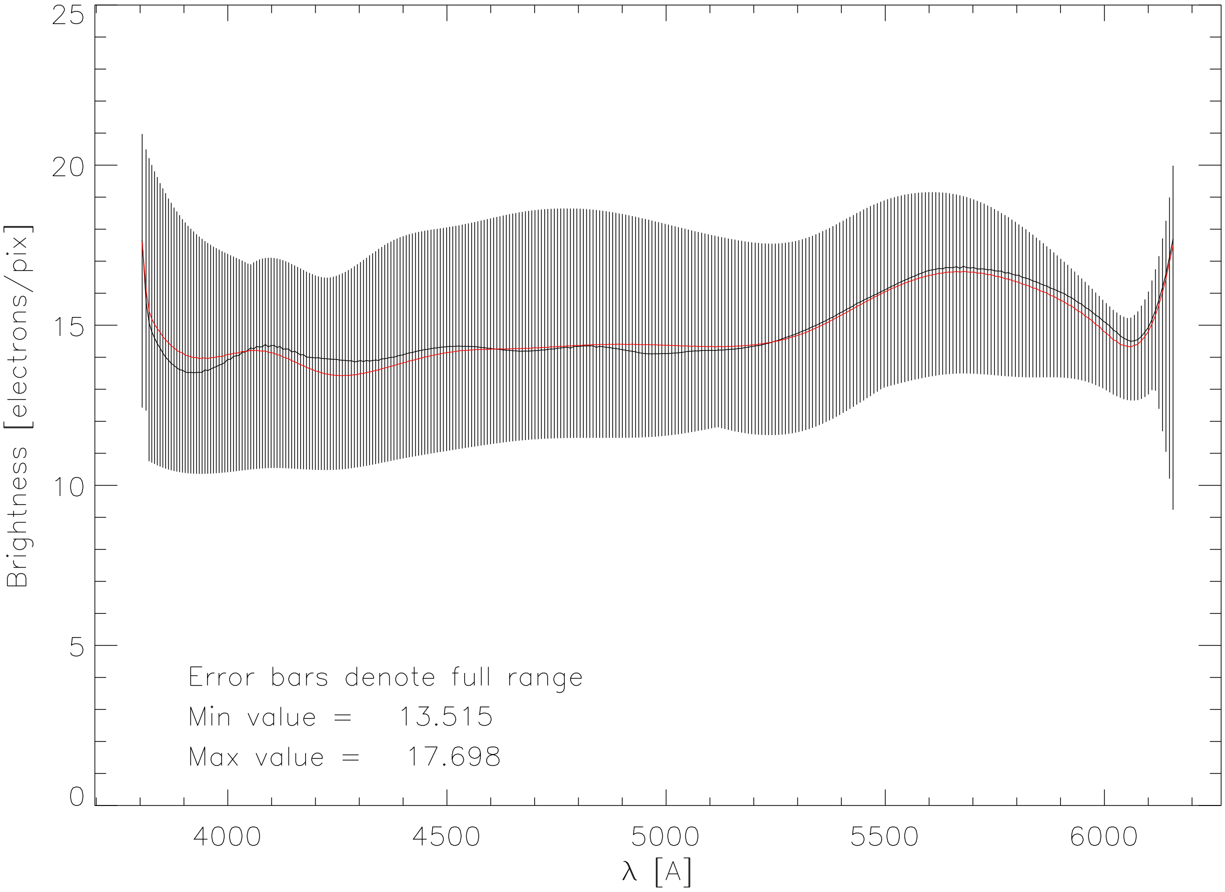


Tue Mar 9 18:38:09 2010



PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056616.f

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056616.f

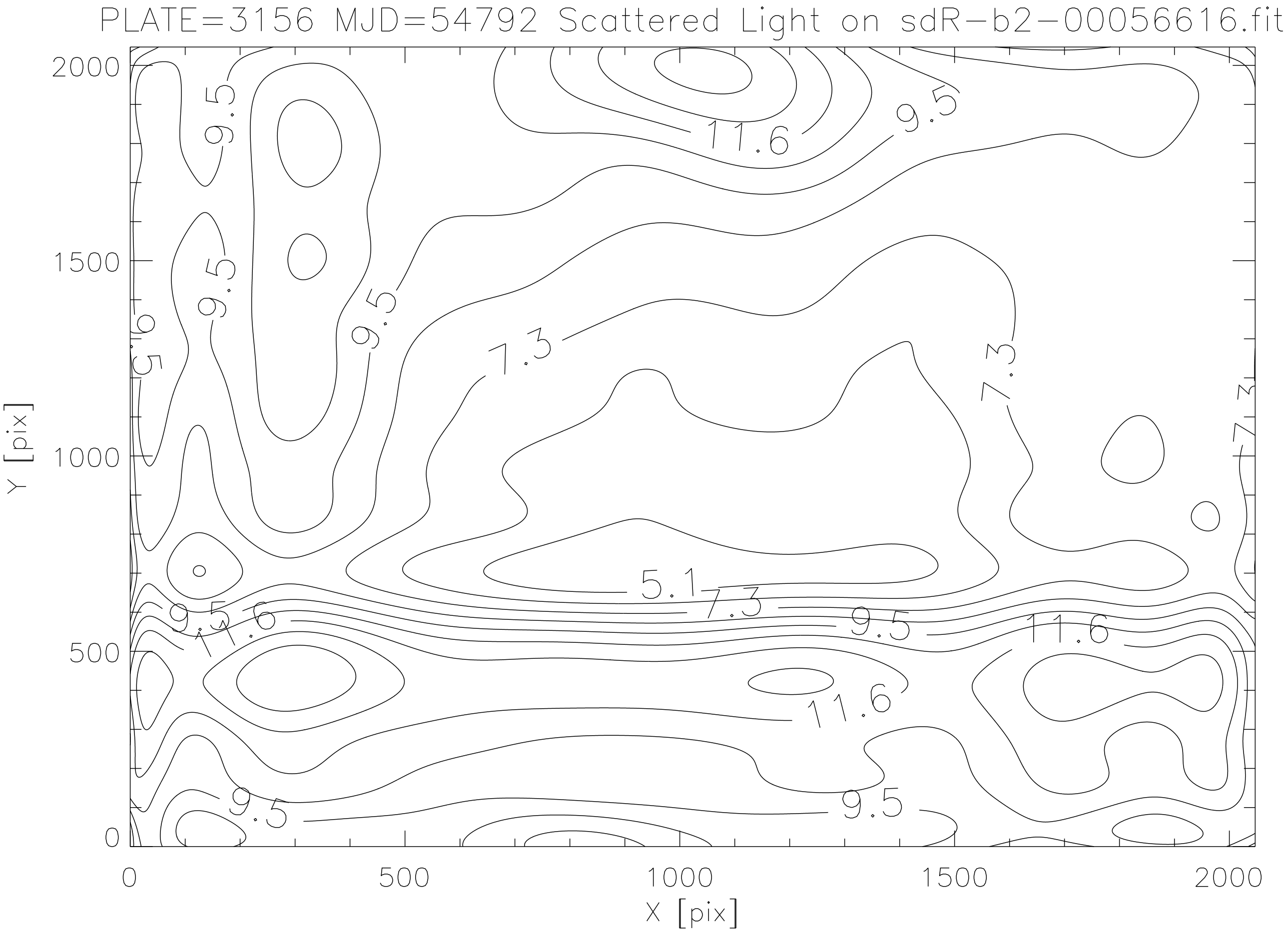


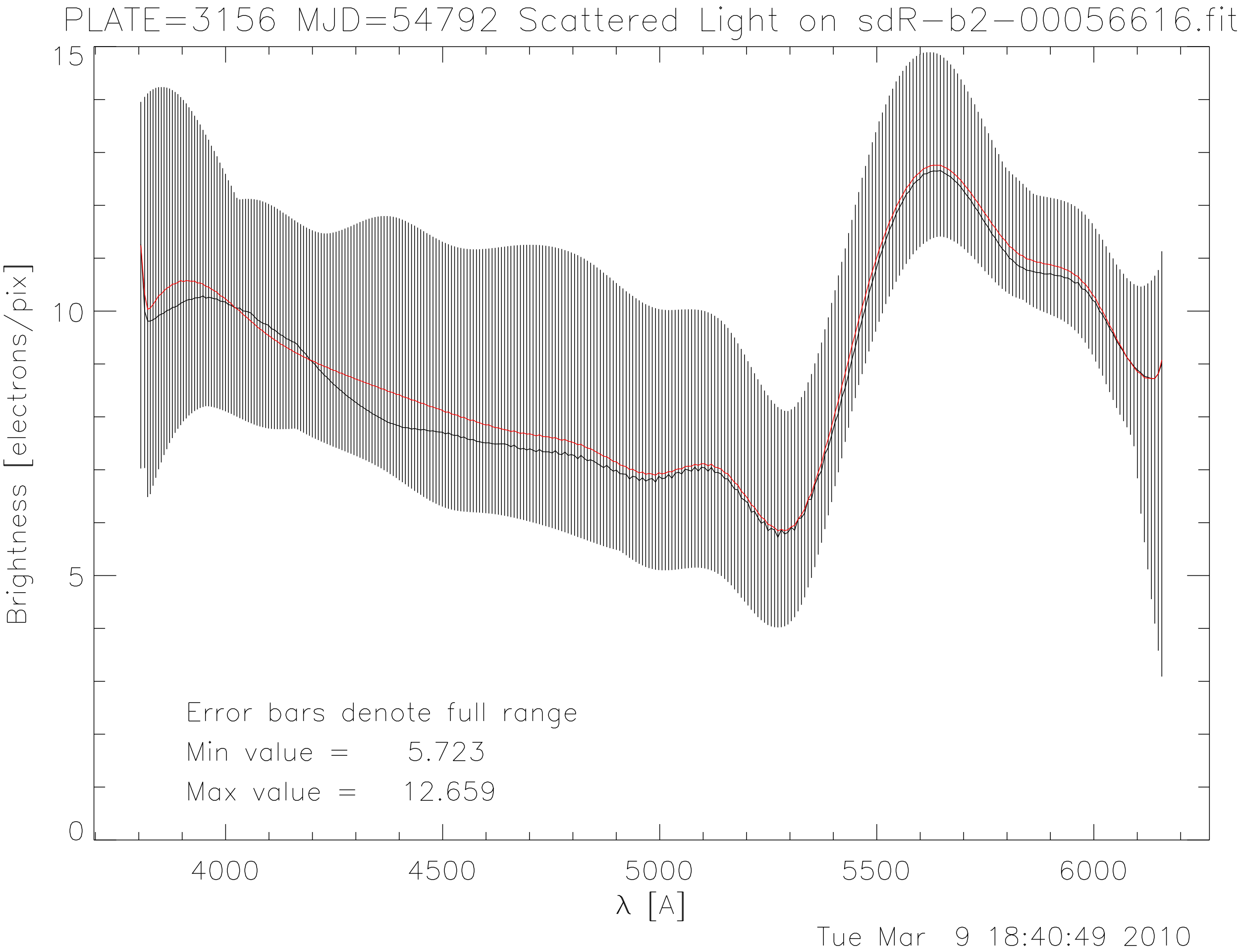
Error bars denote full range

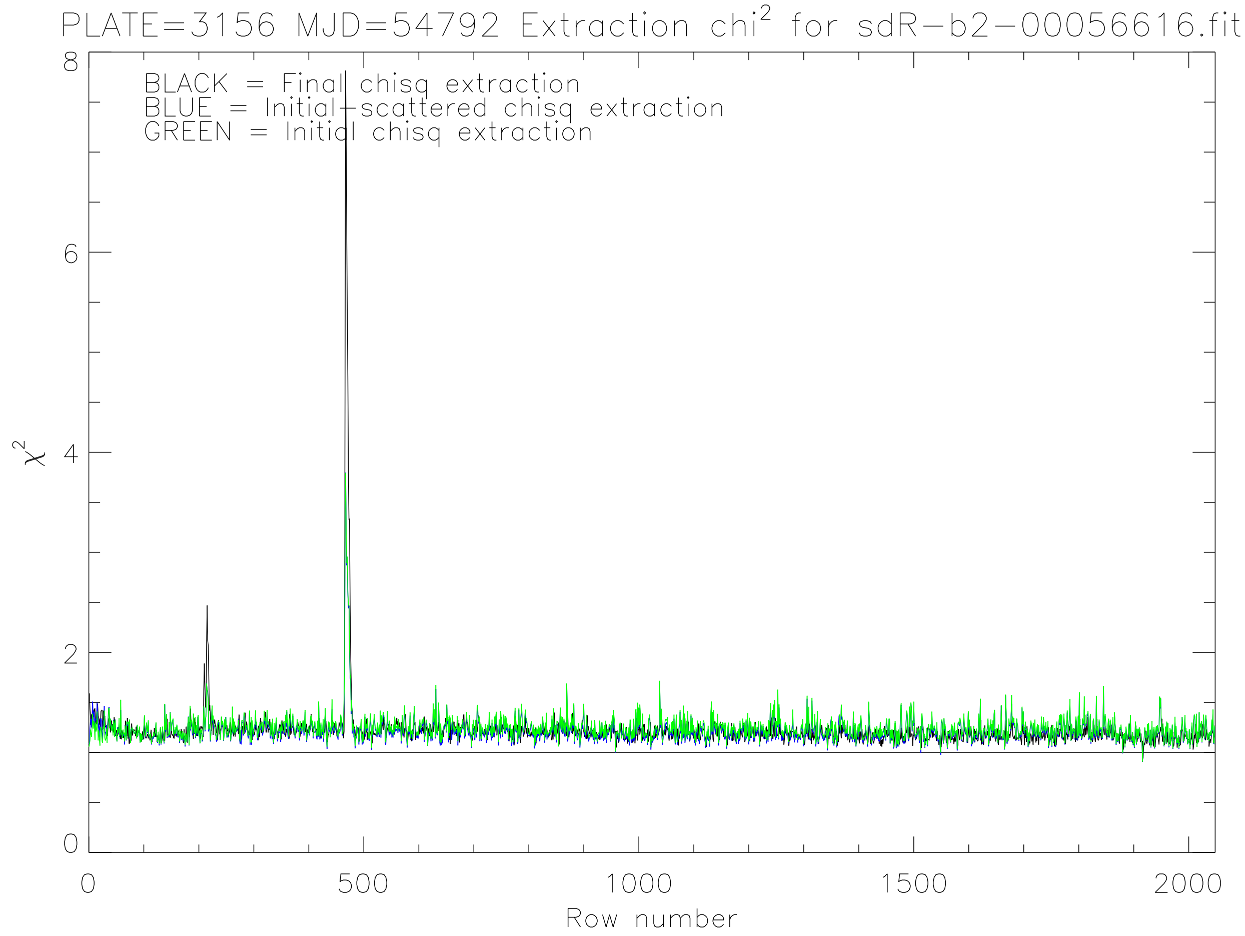
Min value = 13.515

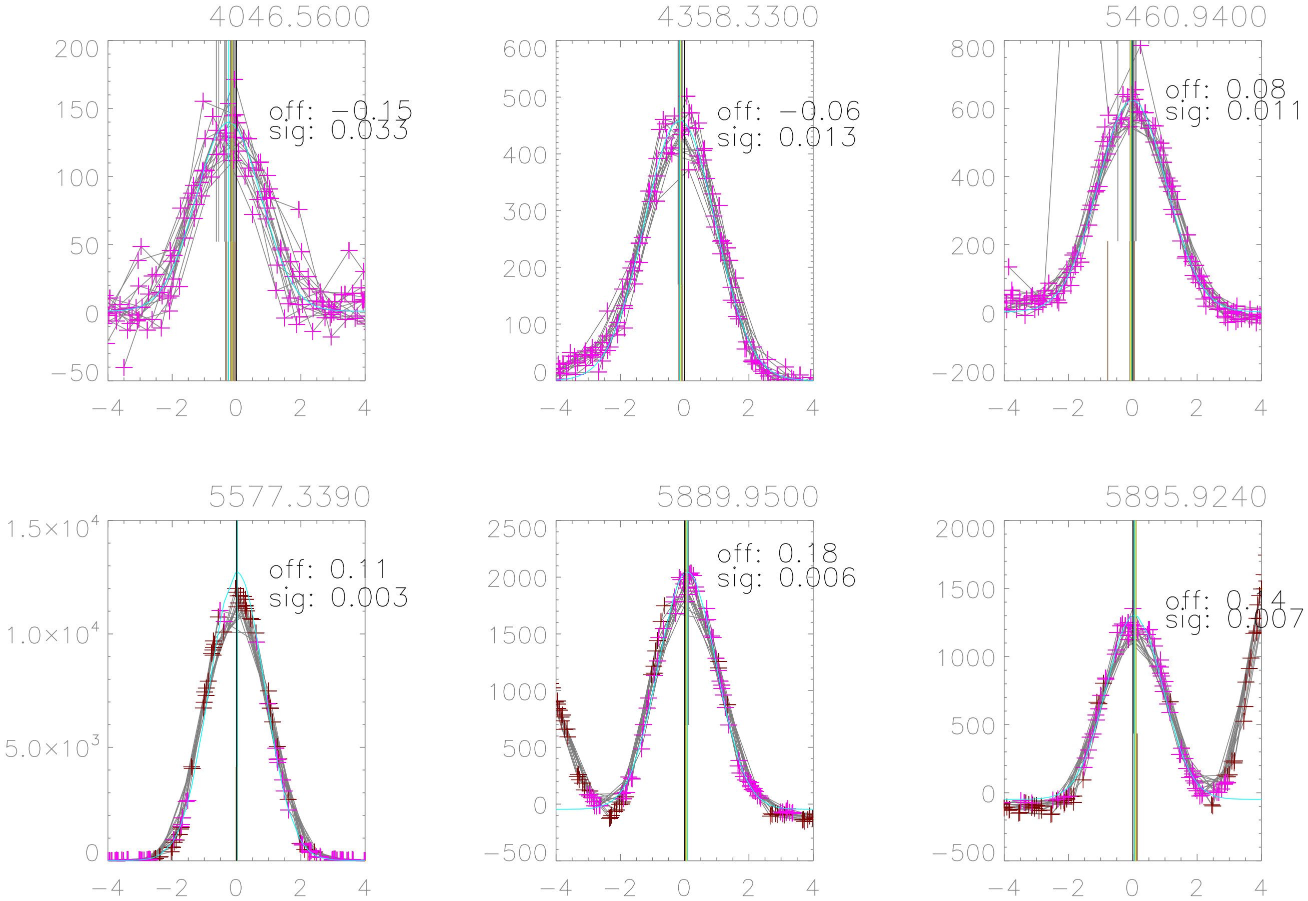
Max value = 17.698

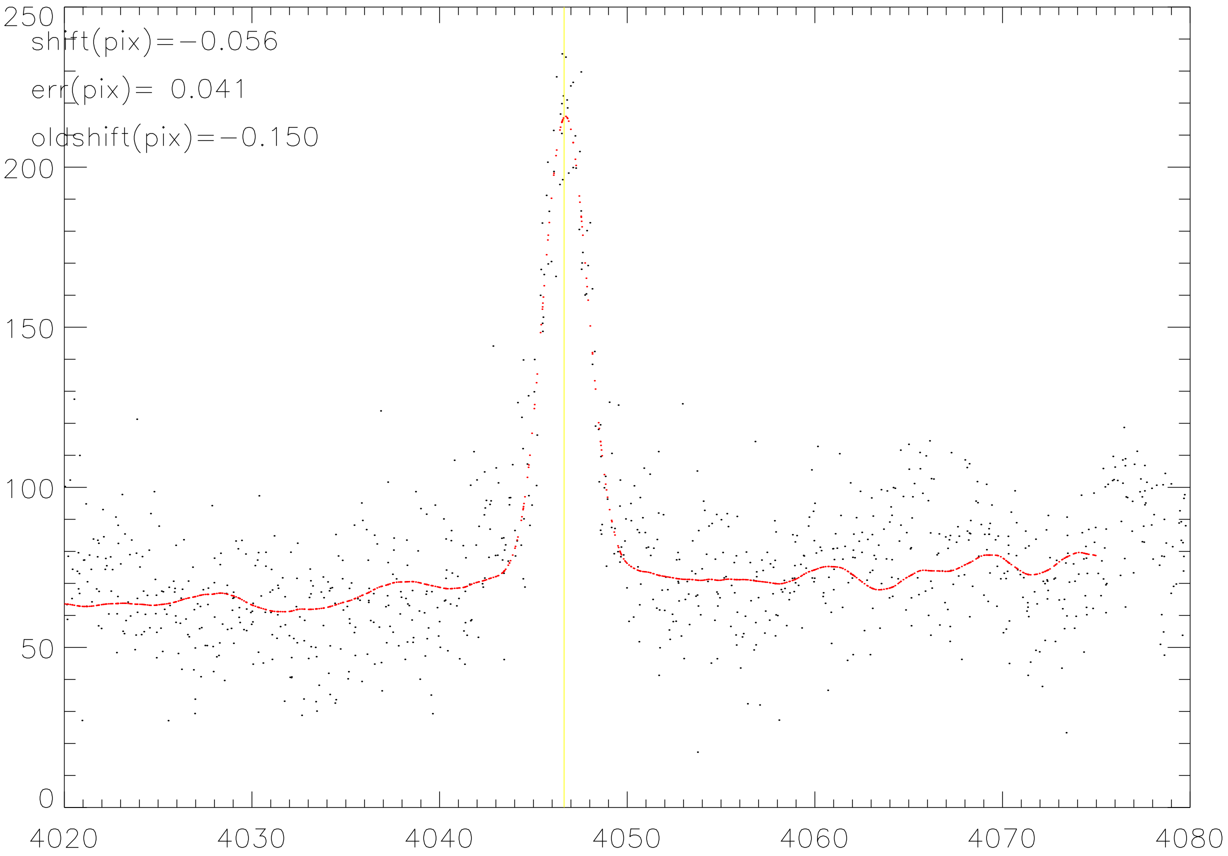
Tue Mar 9 18:38:44 2010

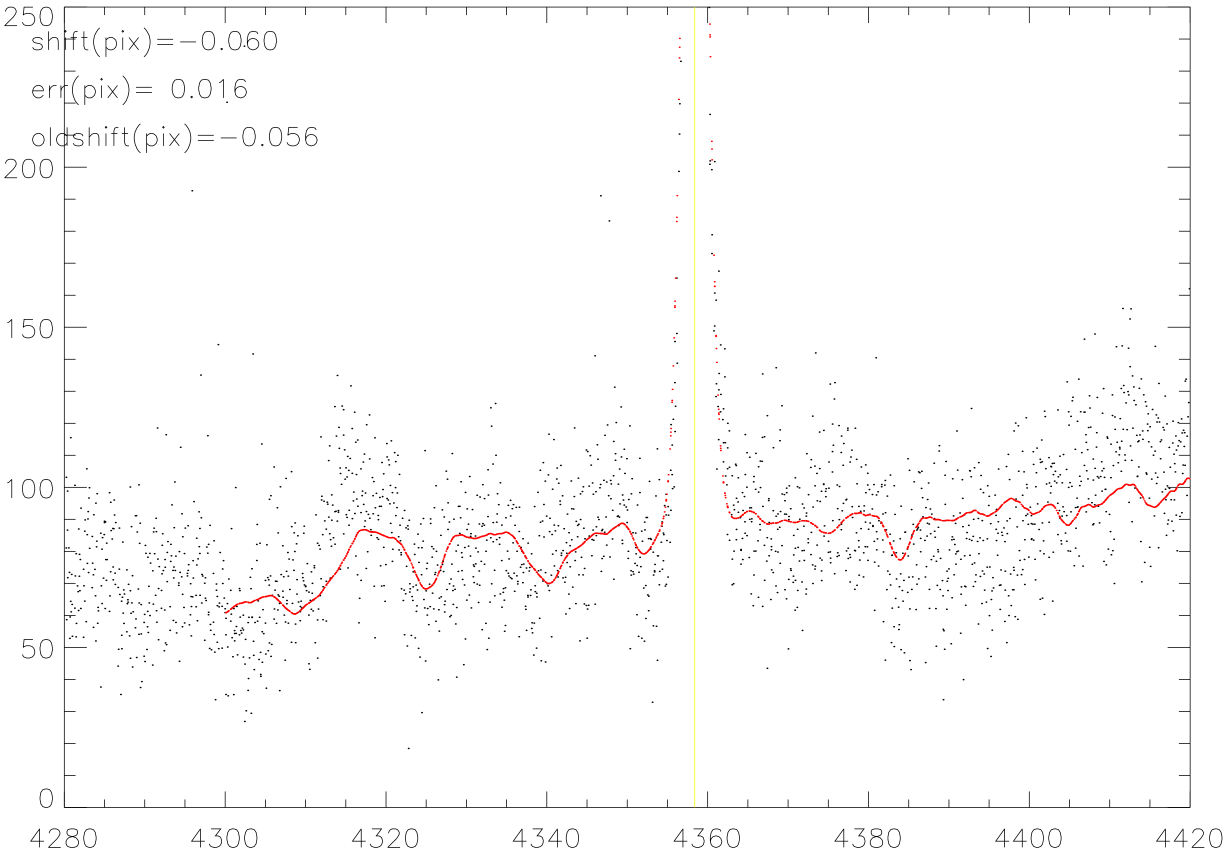

PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056616.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
9.5
11.6
7.3
5.1

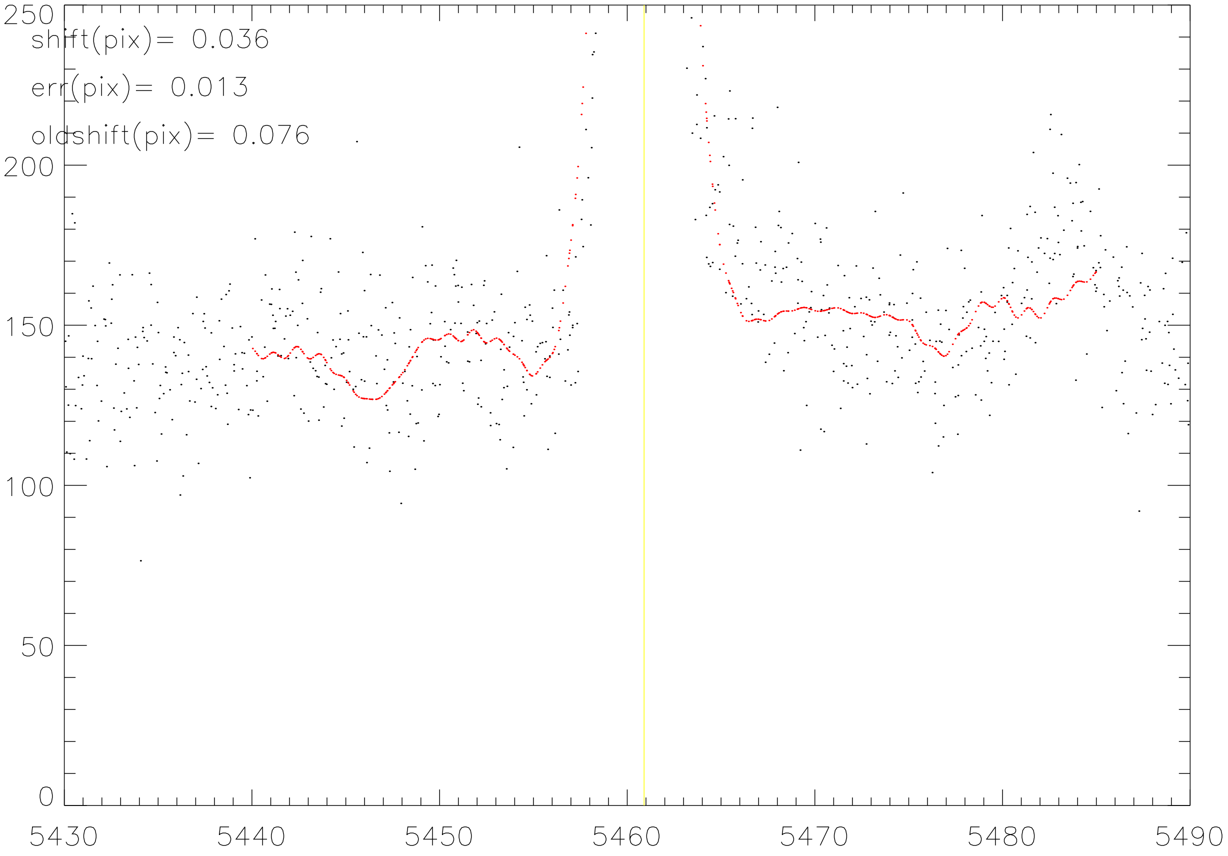

PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056616.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.723
Max value = 12.659
Tue Mar 9 18:40:49 2010


PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b2-00056616.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

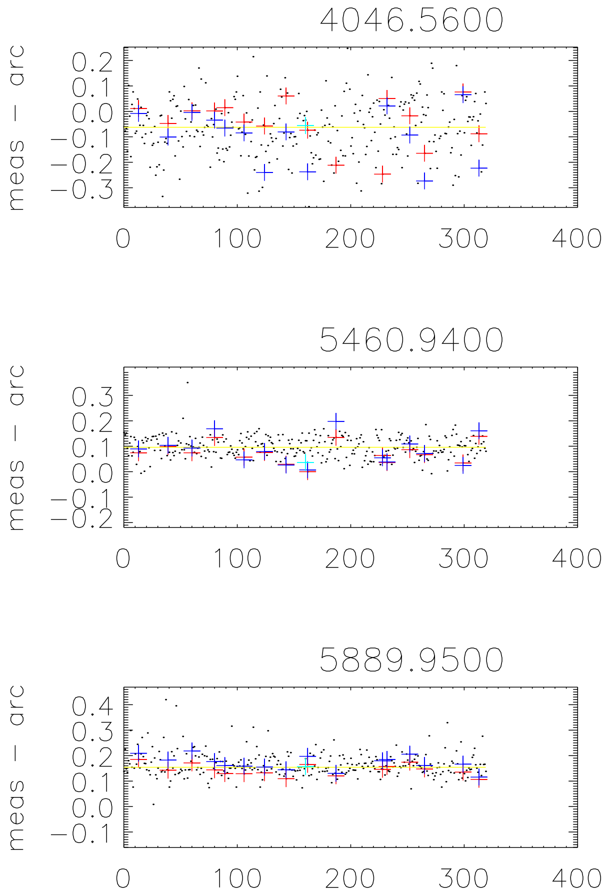

4046.5600
off: −0.15
sig: 0.033
4358.3300
off: −0.06
sig: 0.013
5460.9400
off: 0.08
sig: 0.011
5577.3390
off: 0.11
sig: 0.003
5889.9500
off: 0.18
sig: 0.006
5895.9240
off: 0.14
sig: 0.007
200
150
100
50
0
−50
600
500
400
300
200
100
800
600
400
200
−200
1.5×10⁴
1.0×10⁴
5.0×10³
2500
2000
1500
1000
500
−500
−4
−2
2
4

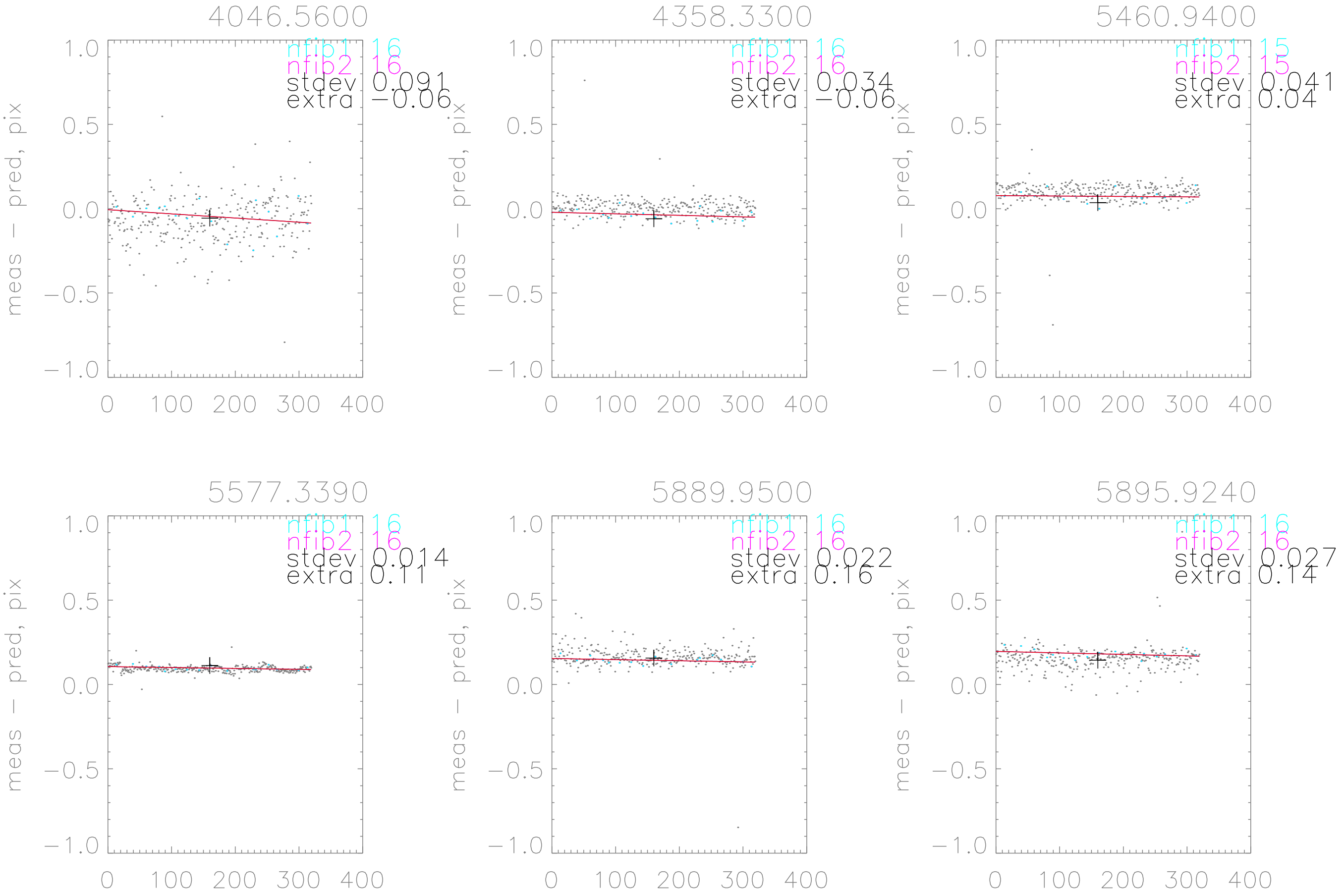

shift(pix)=−0.056
err(pix)= 0.041
oldshift(pix)=−0.150
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

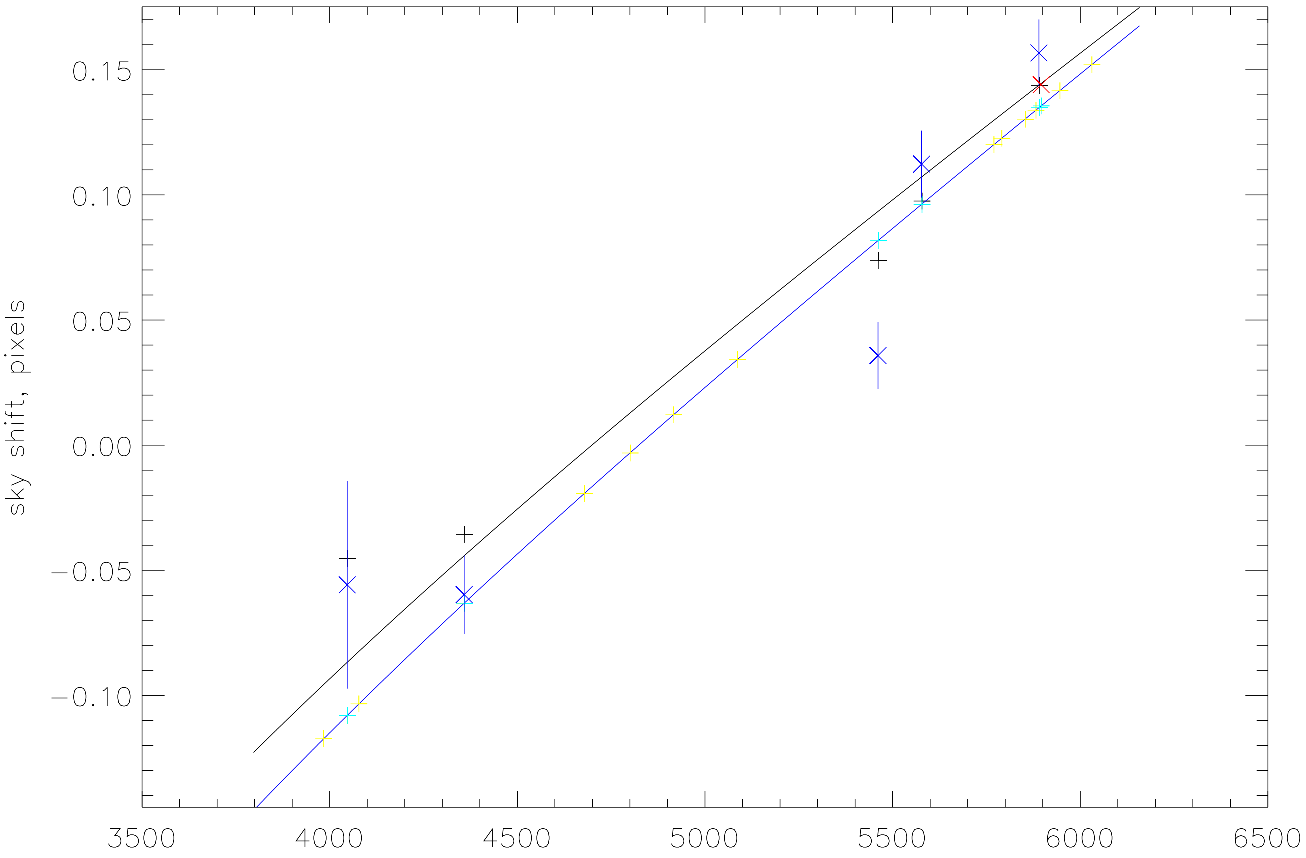

shift(pix)=−0.060
err(pix)= 0.016
oldshift(pix)=−0.056
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

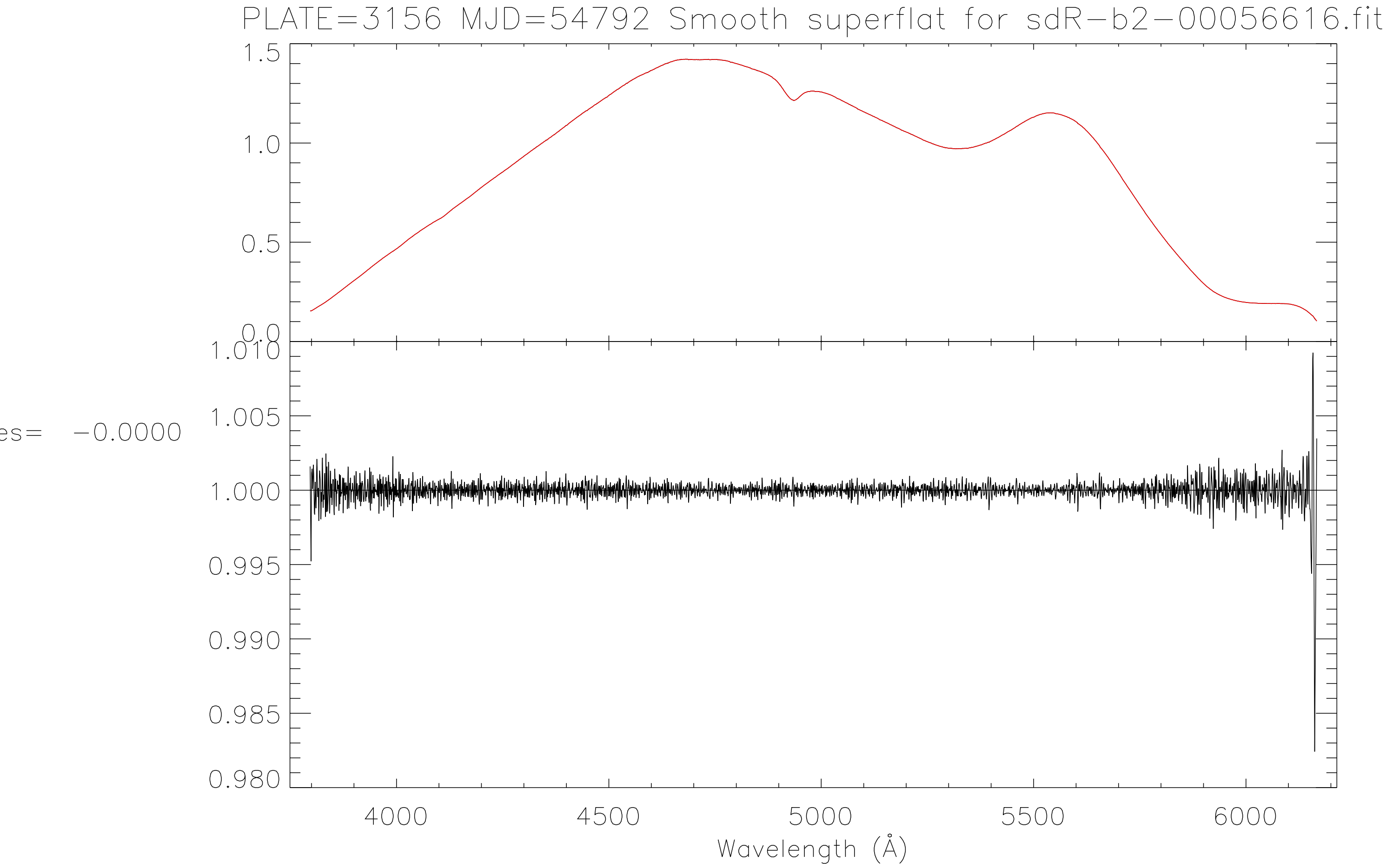


shift(pix)= 0.036
err(pix)= 0.013
oldshift(pix)= 0.076
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

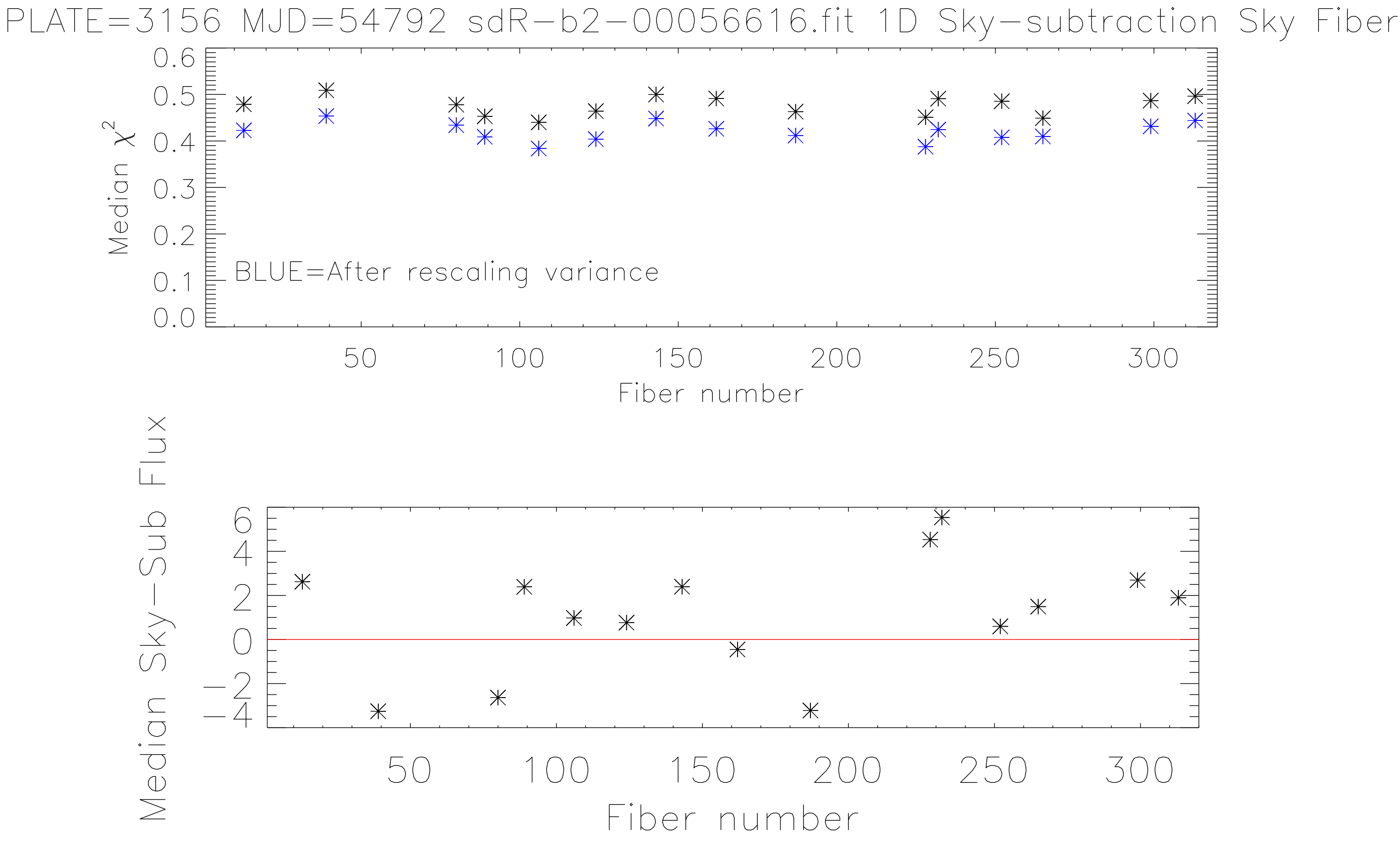

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas - arc
0
100
200
300
400
-0.3
-0.2
-0.1
0.0
0.1
0.2
0.3
0.4

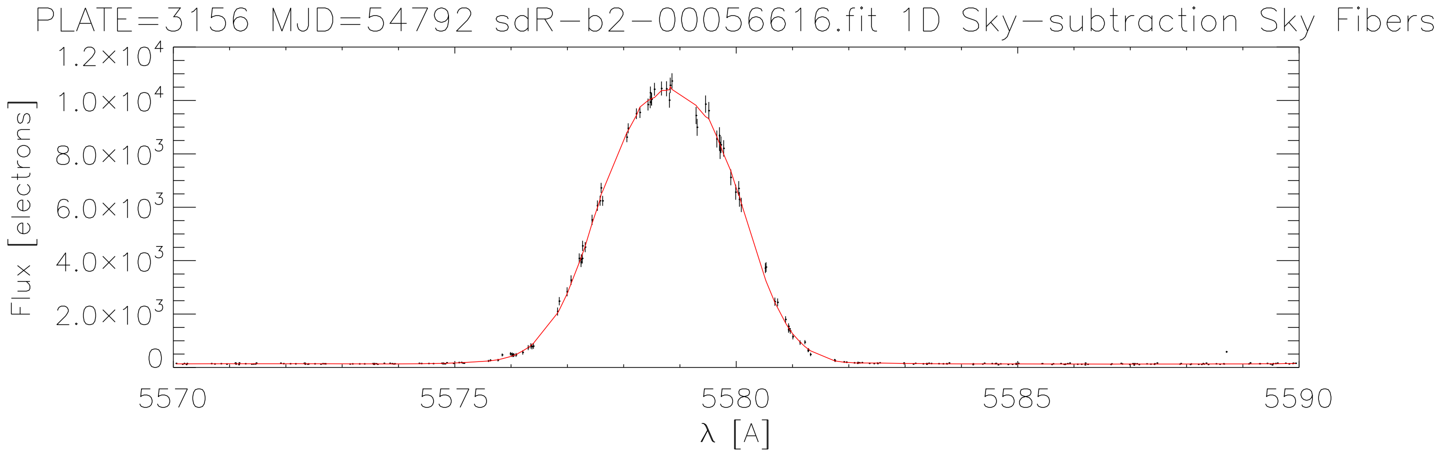

4046.5600
nfib1 16
nfib2 16
stdev 0.091
extra −0.06
4358.3300
nfib1 16
nfib2 16
stdev 0.034
extra −0.06
5460.9400
nfib1 15
nfib2 15
stdev 0.041
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.022
extra 0.16
5895.9240
nfib1 16
nfib2 16
stdev 0.027
extra 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

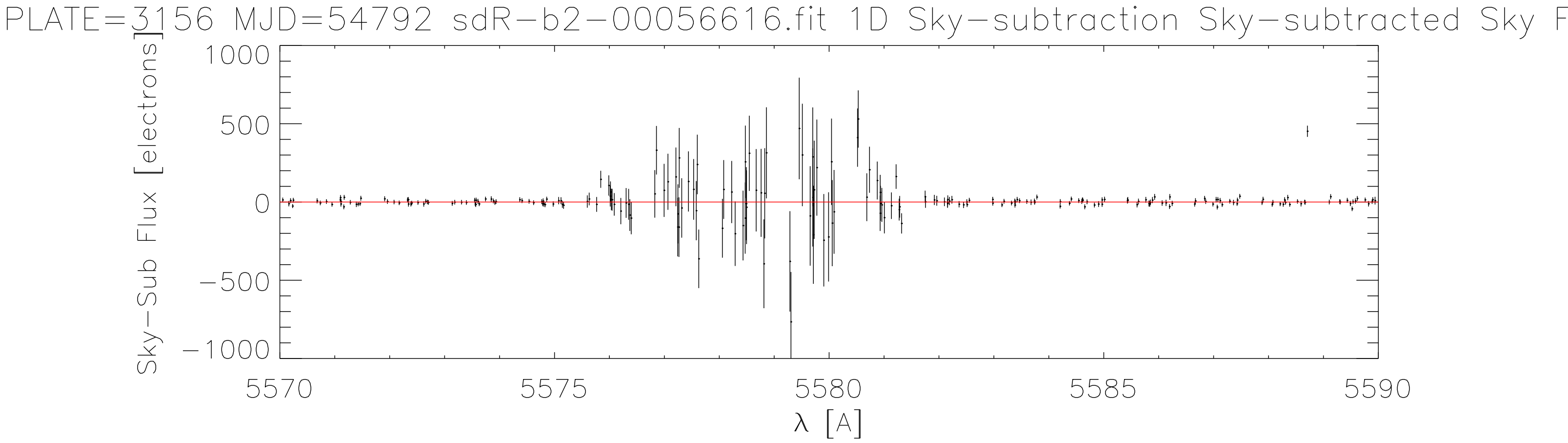

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500



PLATE=3156 MJD=54792 Smooth superflat for sdR-b2-00056616.fit

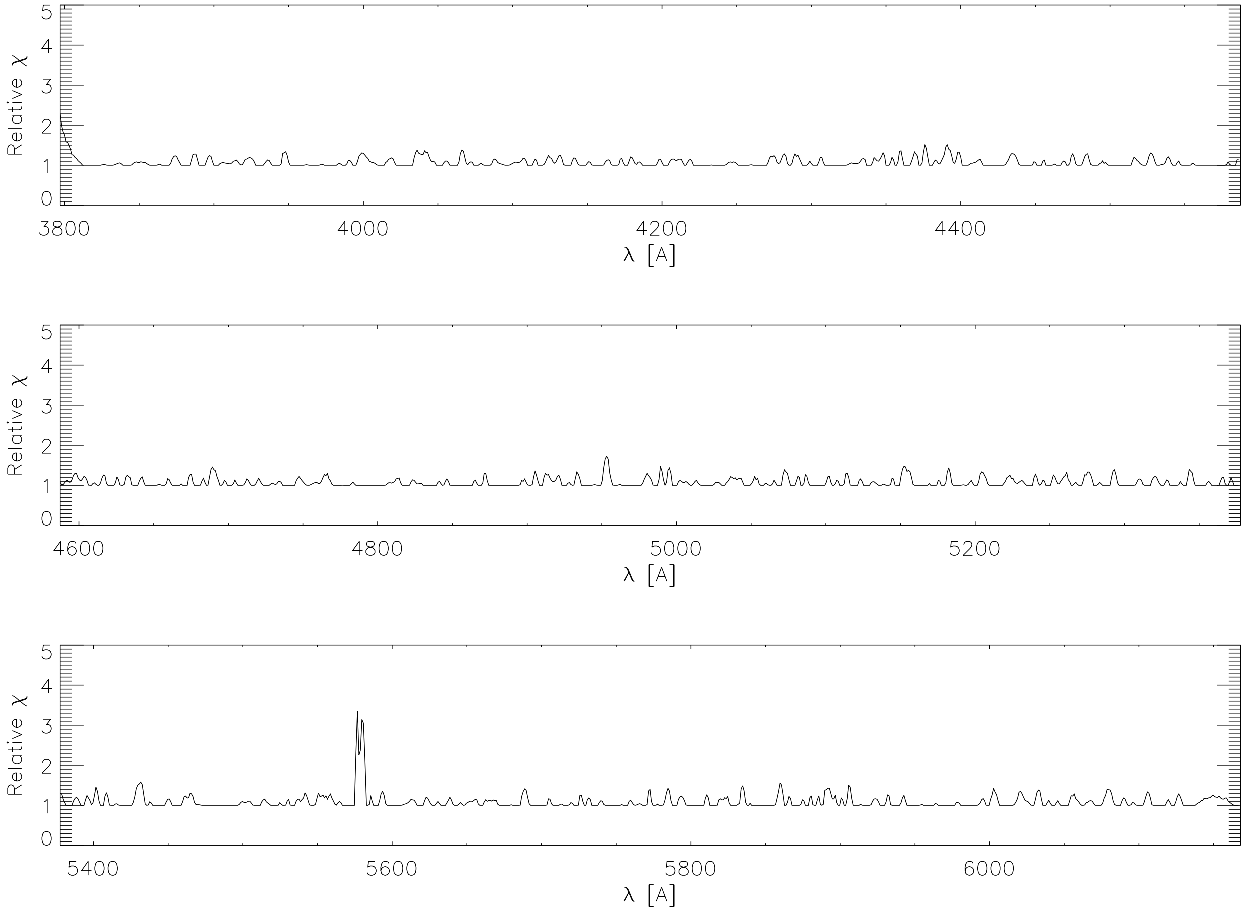

PLATE=3156 MJD=54792 sdR-b2-00056616.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

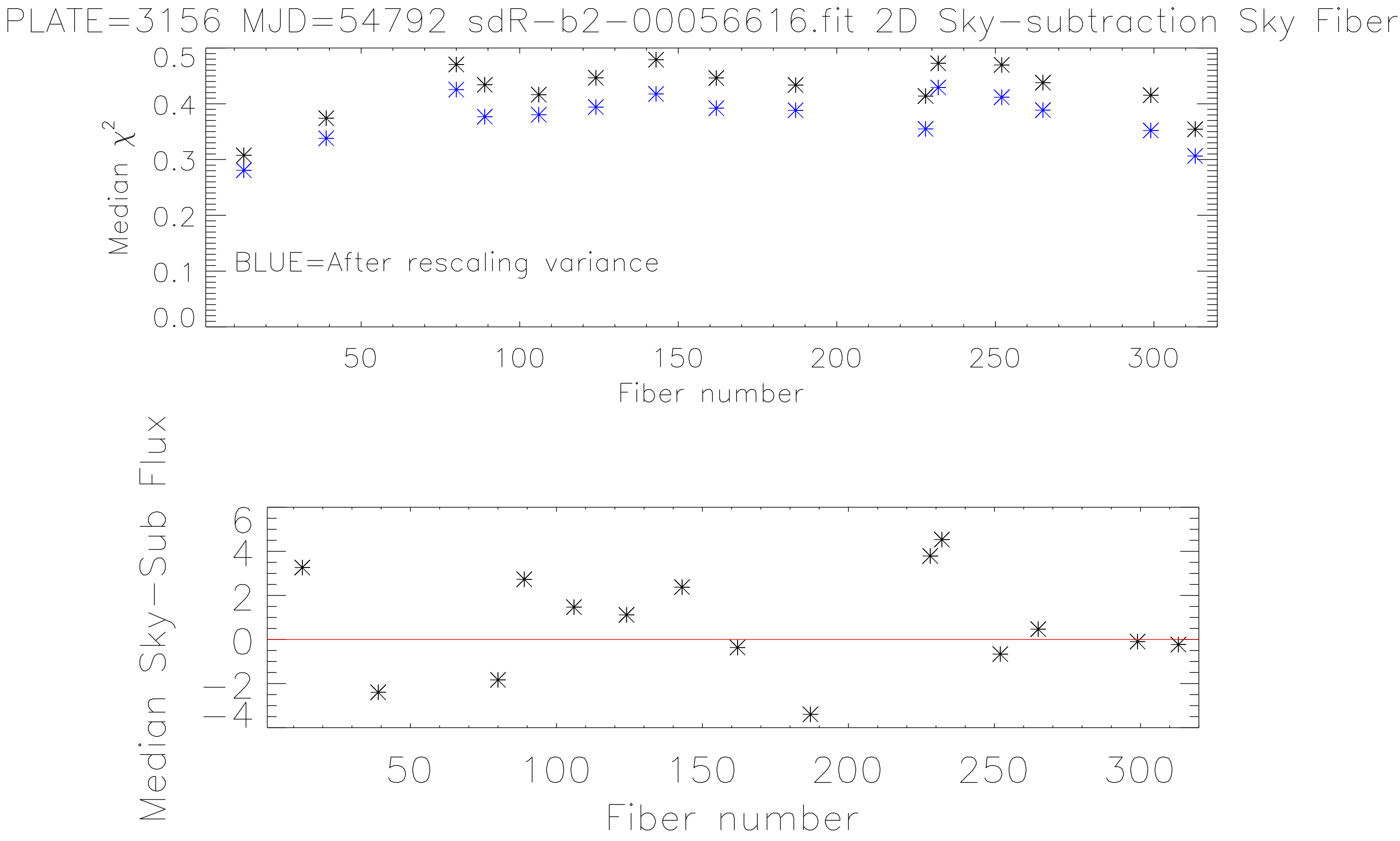

PLATE=3156 MJD=54792 sdR-b2-00056616.fit 1D Sky-subtraction Sky Fibers

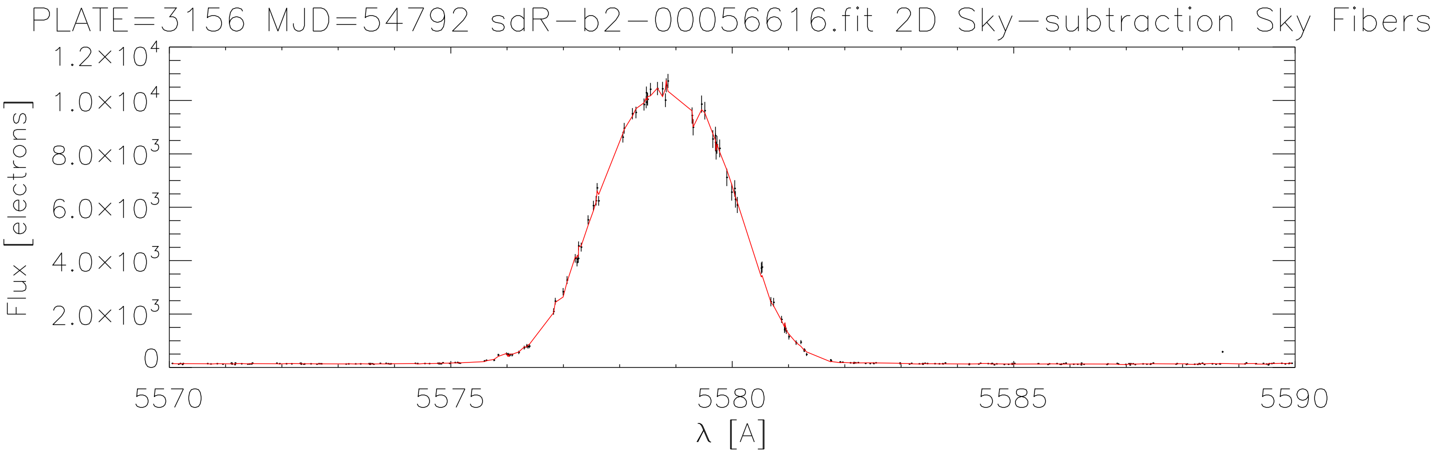

PLATE=3156 MJD=54792 sdR-b2-00056616.fit 1D Sky-subtraction Sky-subtracted Sky F

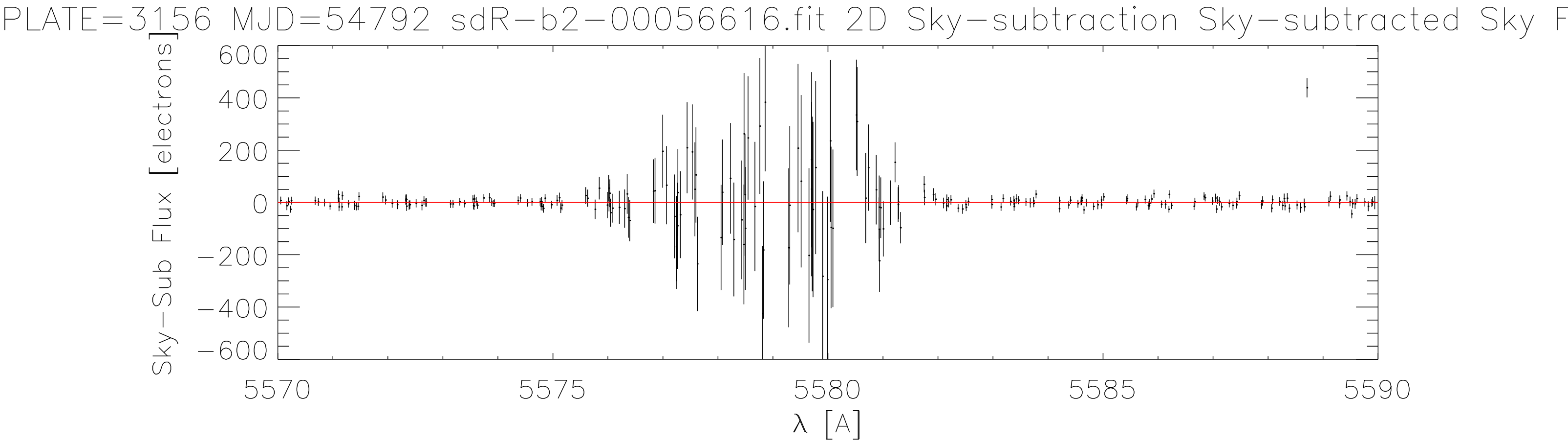
Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-b2-00056616.fit 1D Sky-subtraction Rescaled Errors



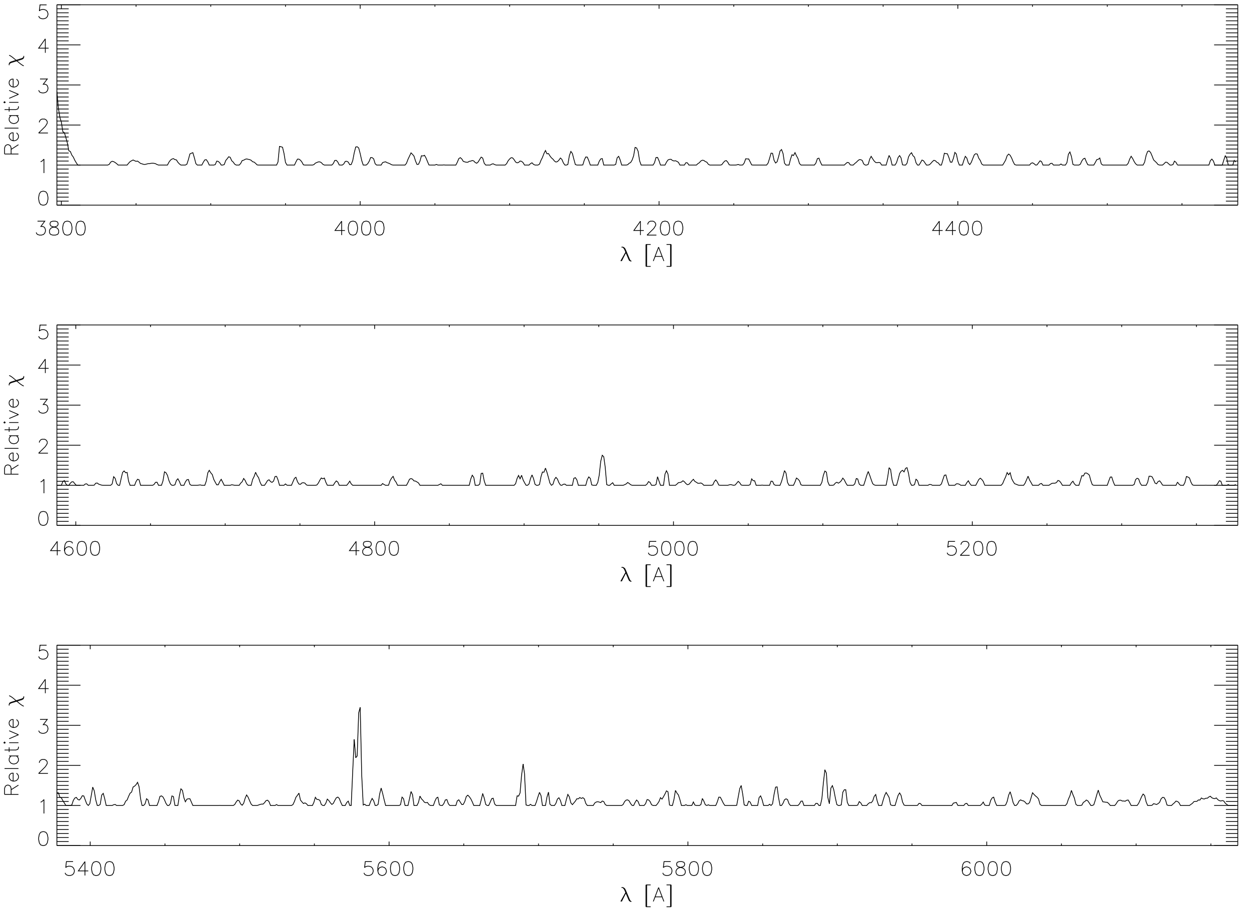

PLATE=3156 MJD=54792 sdR-b2-00056616.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

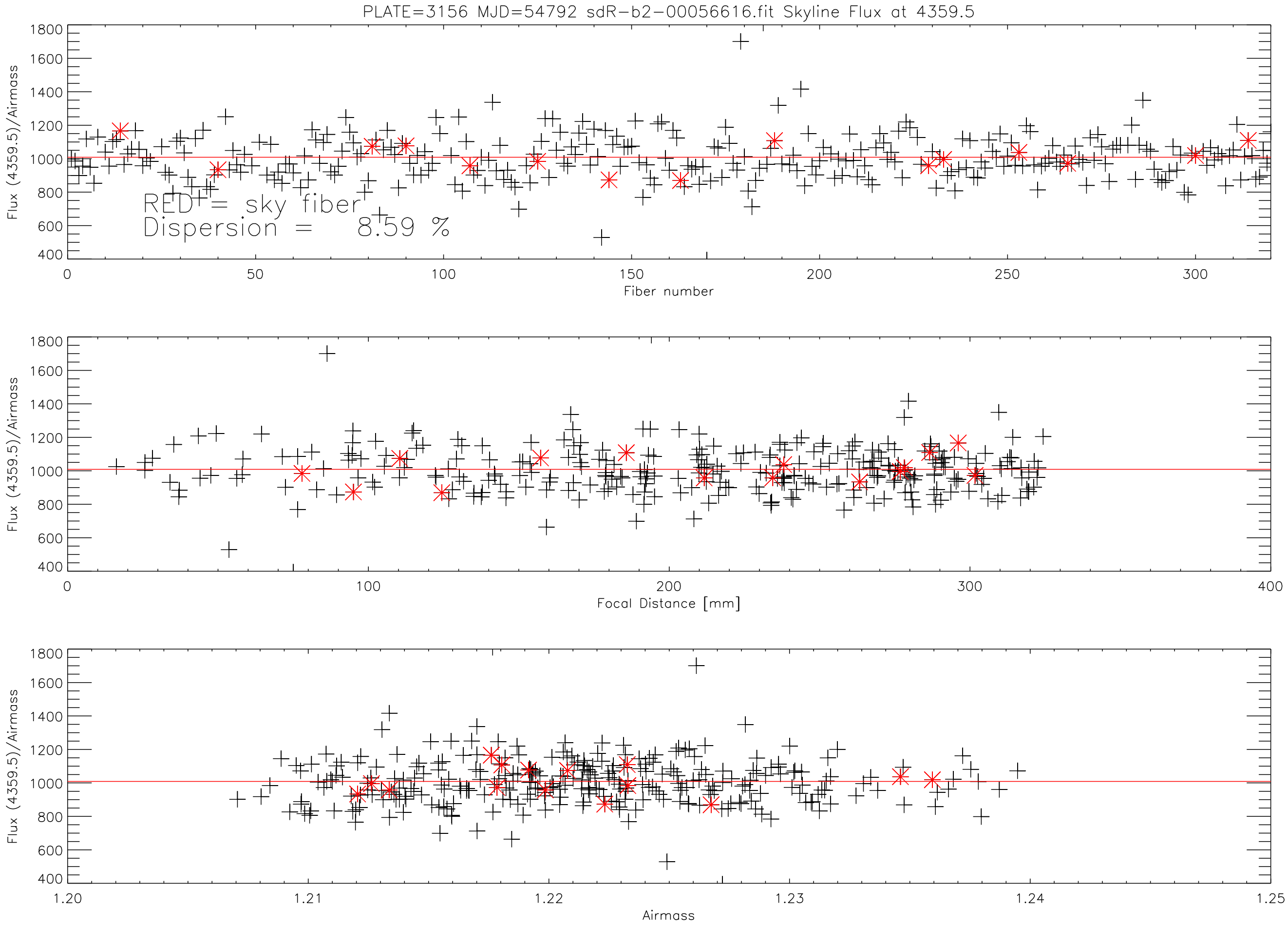

PLATE=3156 MJD=54792 sdR-b2-00056616.fit 2D Sky-subtraction Sky Fibers

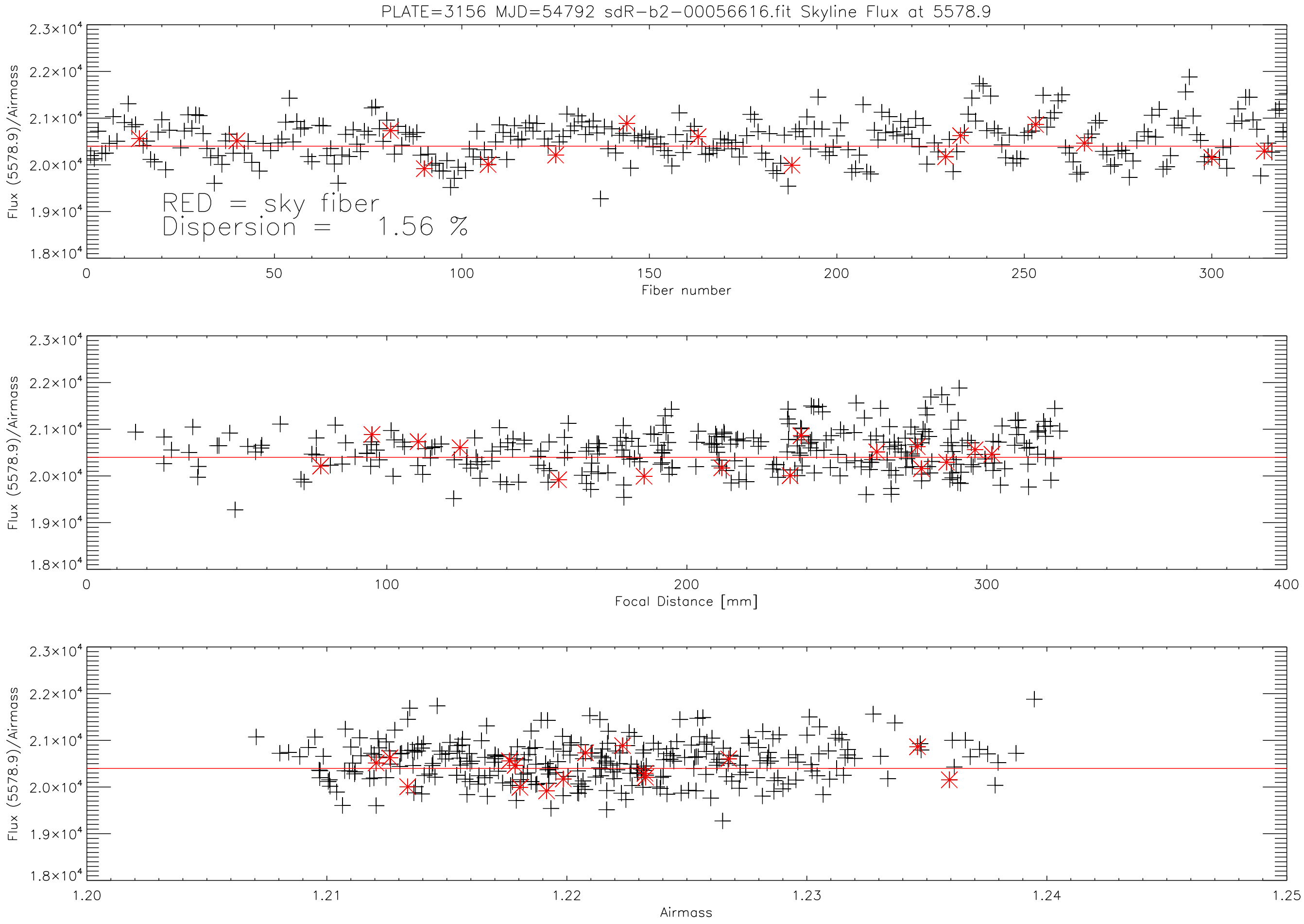

PLATE=3156 MJD=54792 sdR-b2-00056616.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 15

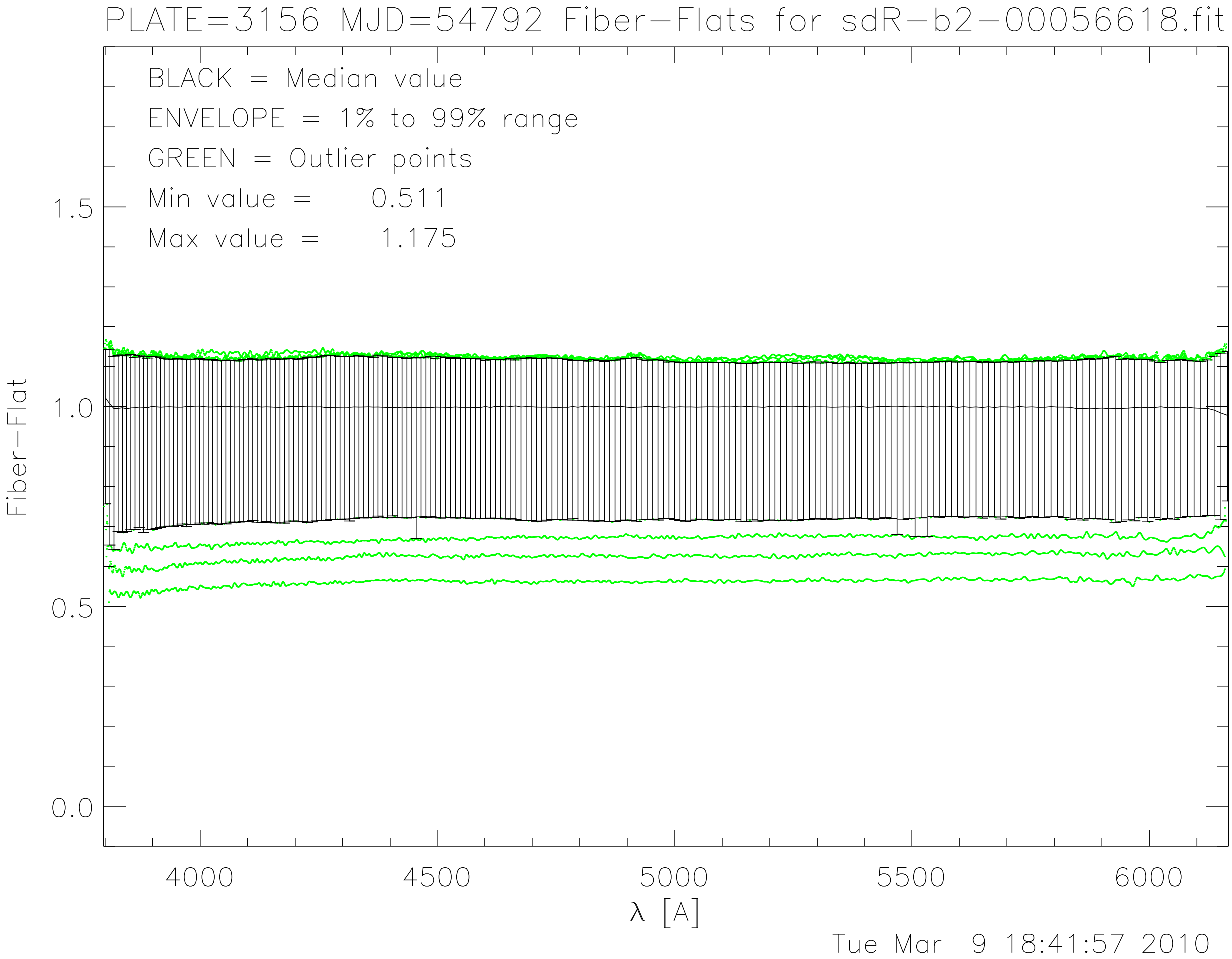
PLATE=3156 MJD=54792 sdR-b2-00056616.fit 2D Sky-subtraction Rescaled Errors

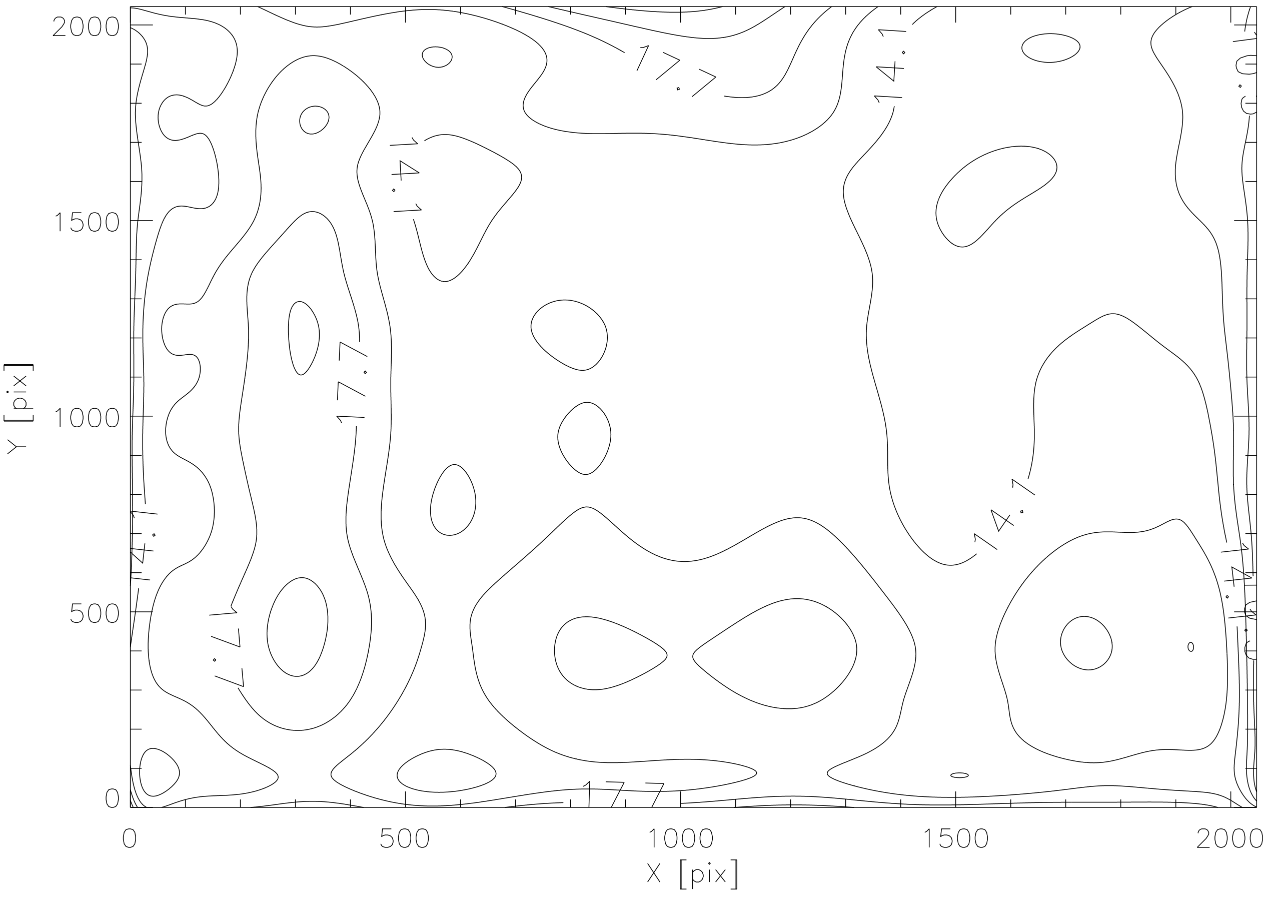



PLATE=3156 MJD=54792 sdR-b2-00056616.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
600
400
RED = sky fiber
Dispersion = 8.59 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.20
1.21
1.22
1.23
1.24
1.25
Airmass

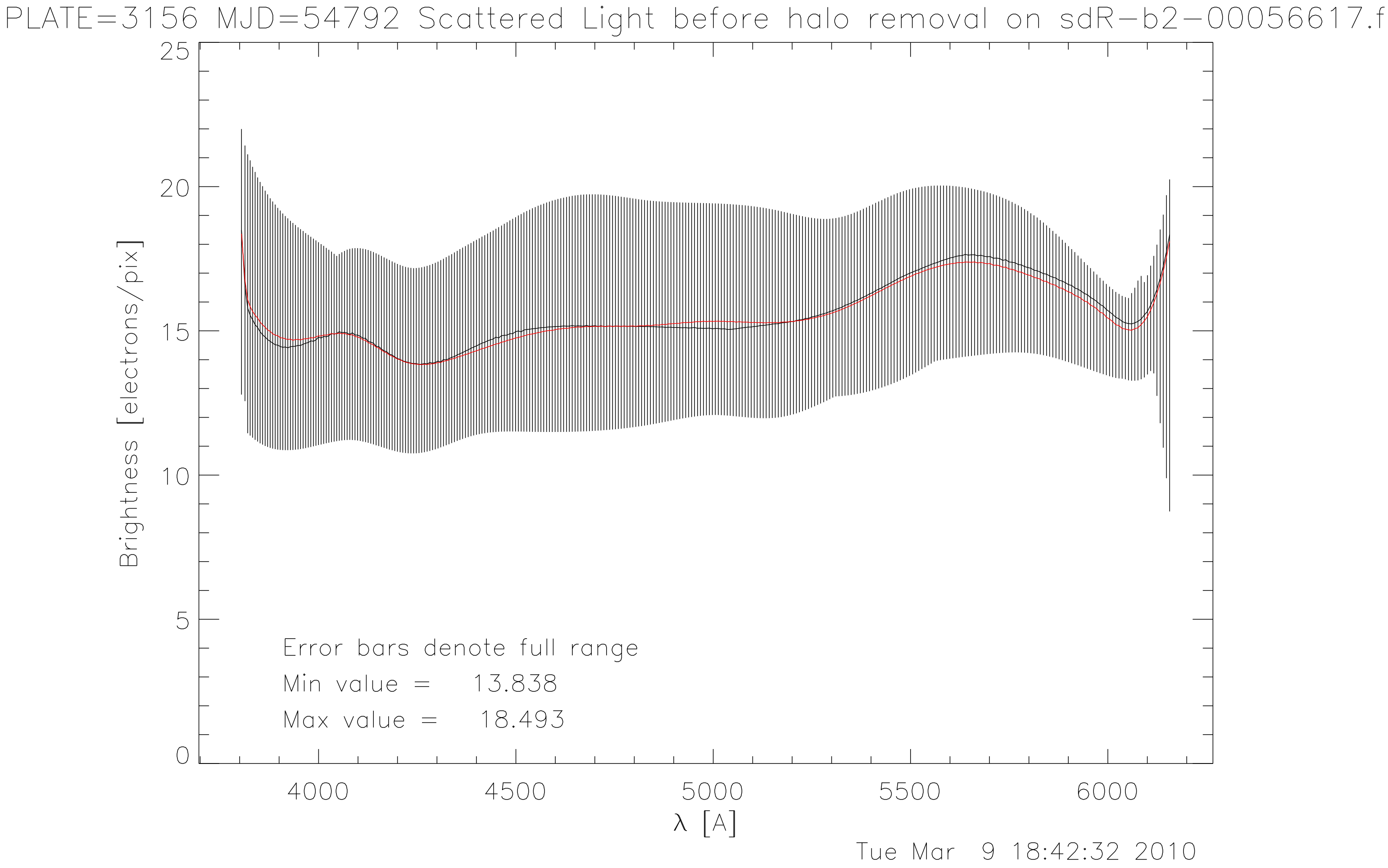


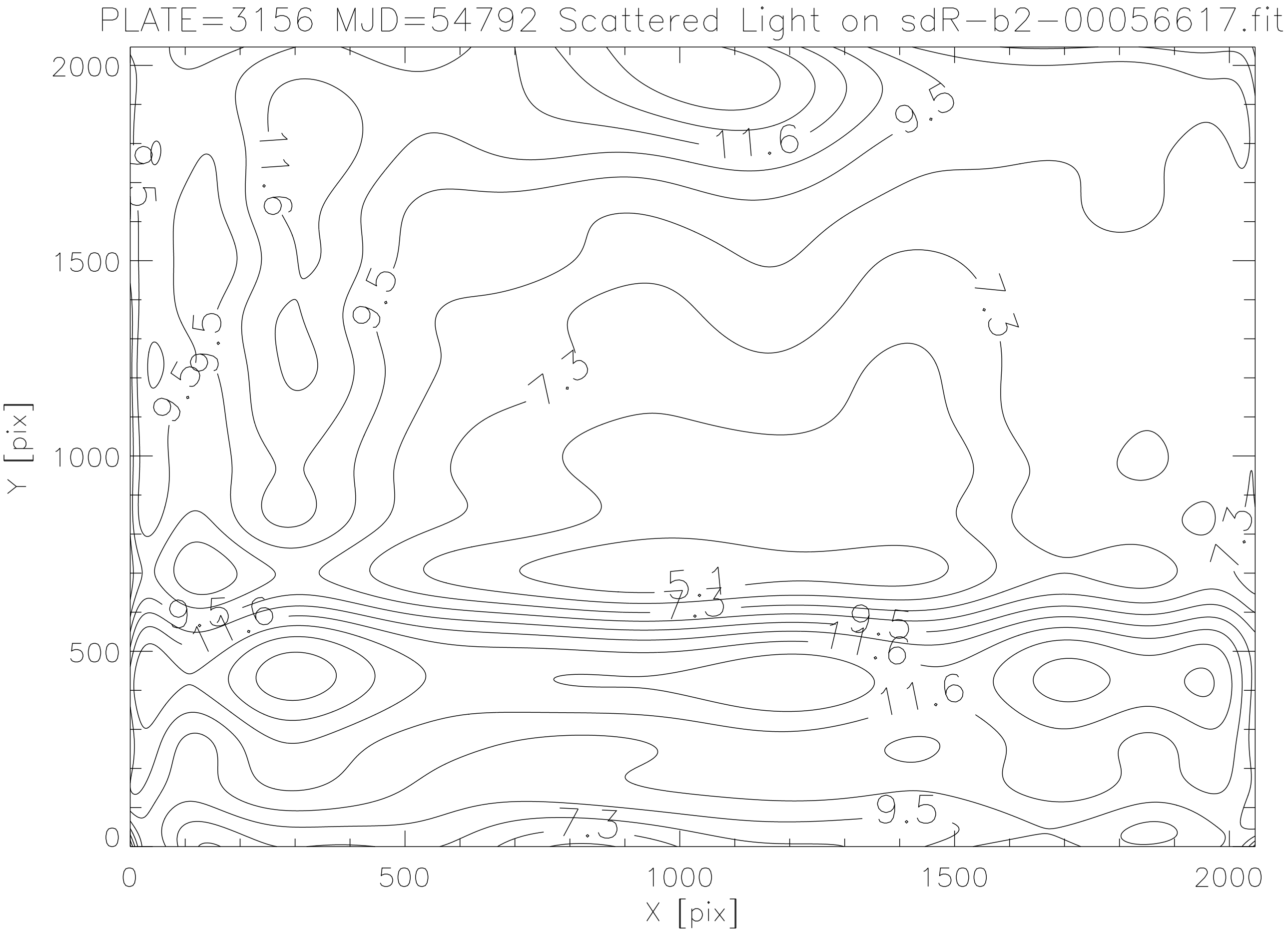
PLATE=3156 MJD=54792 sdR-b2-00056616.fit Skyline Flux at 5578.9

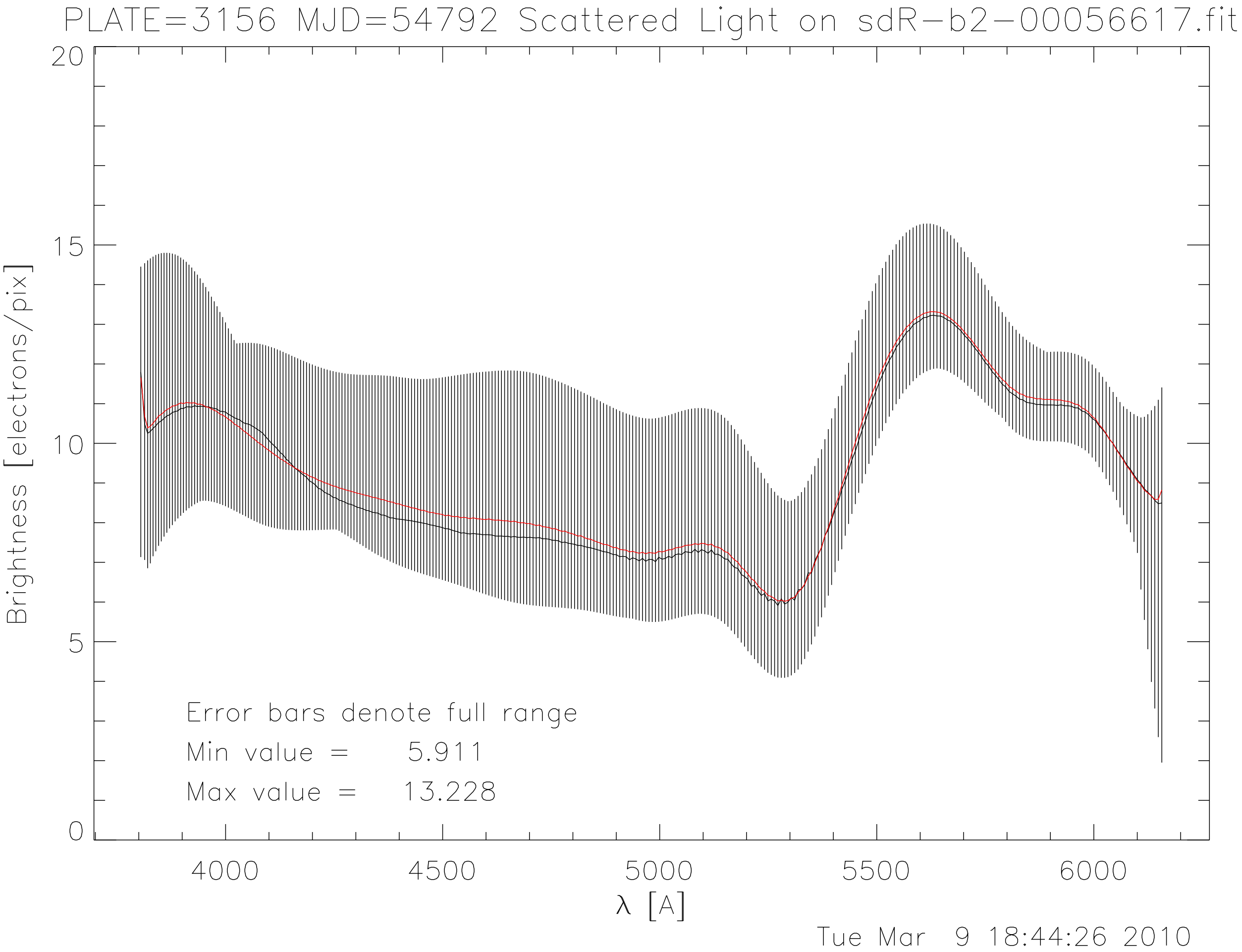

PLATE=3156 MJD=54792 Fiber−Flats for sdR−b2−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.511
Max value = 1.175
Fiber−Flat
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]
Tue Mar 9 18:41:57 2010

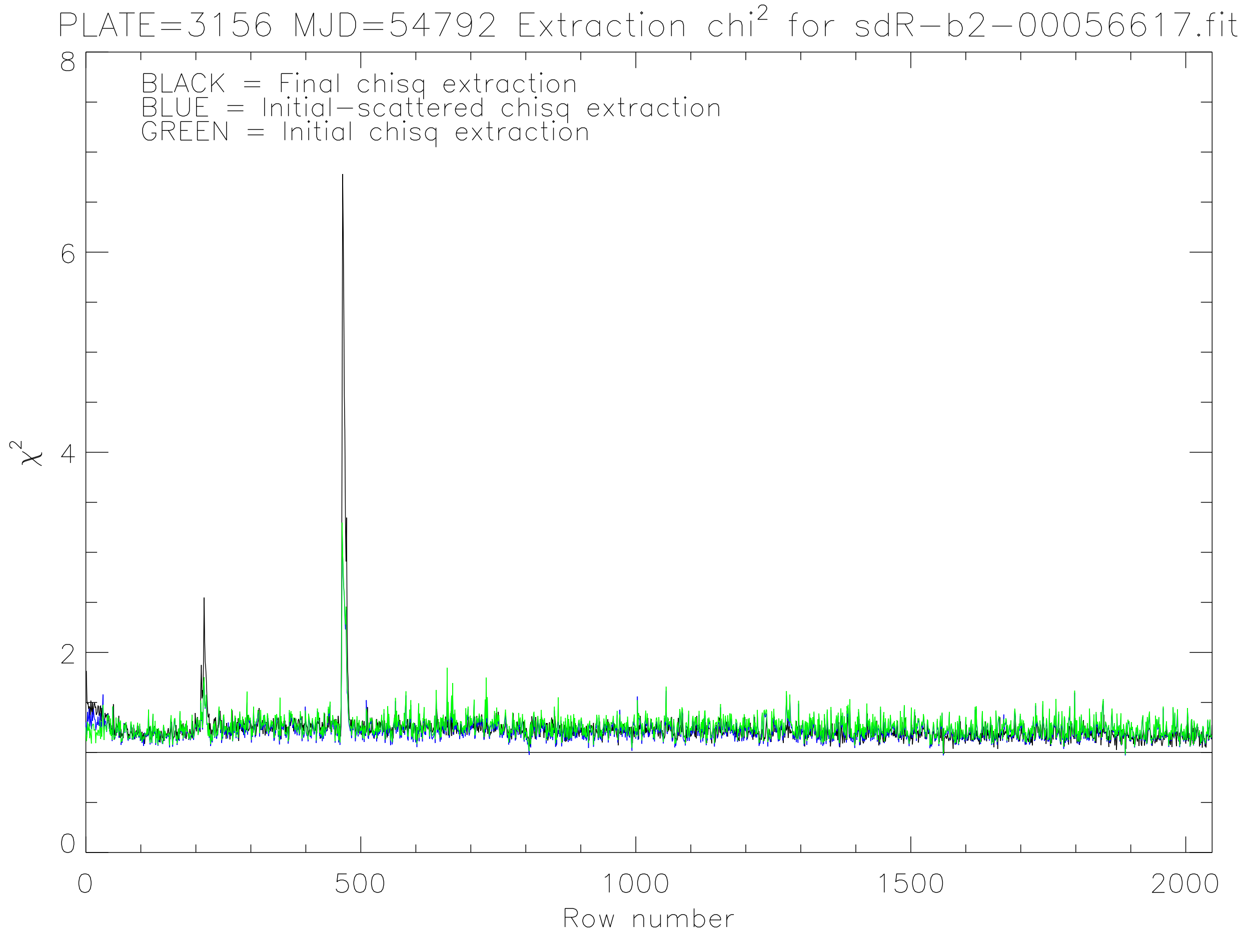


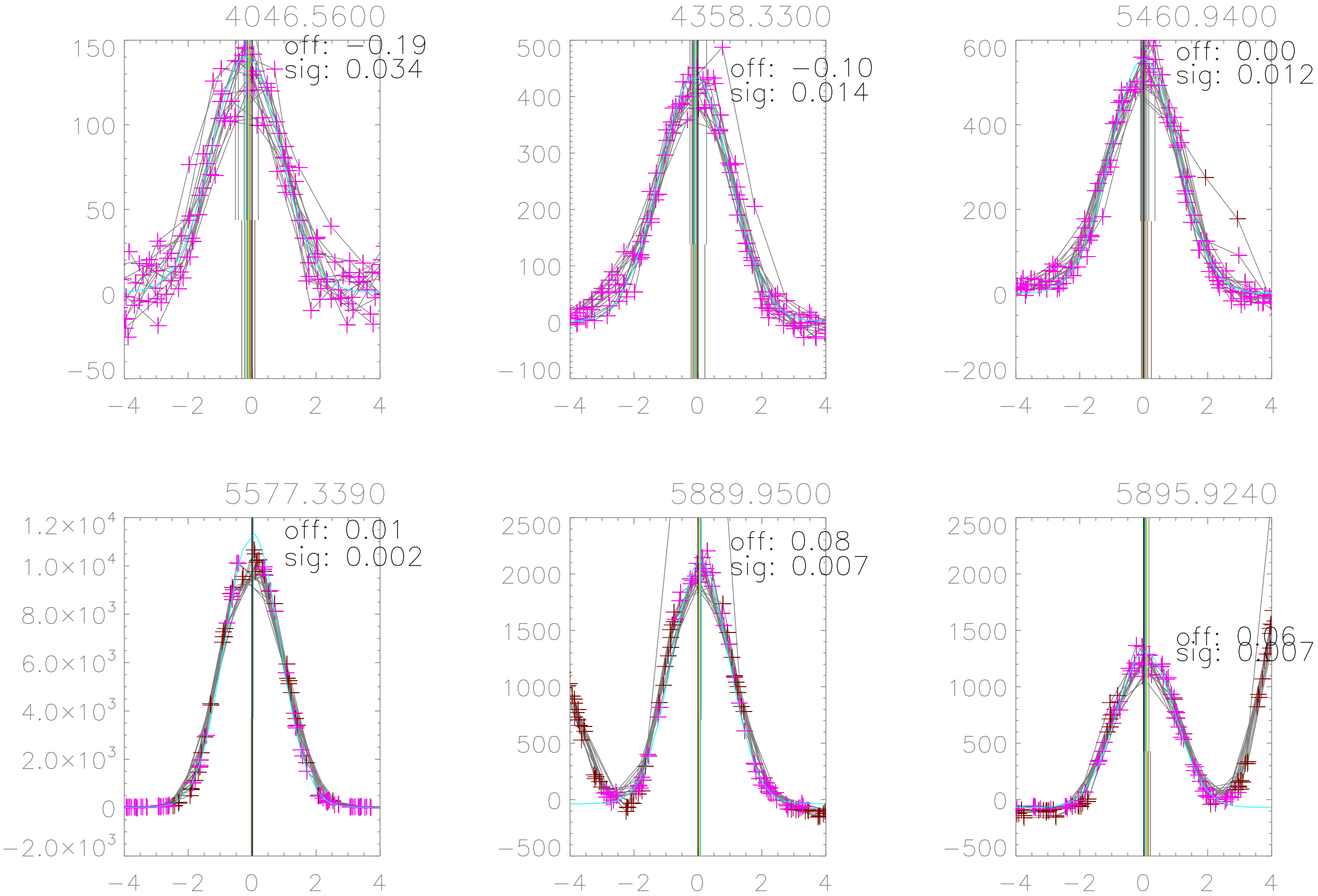
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056617.f

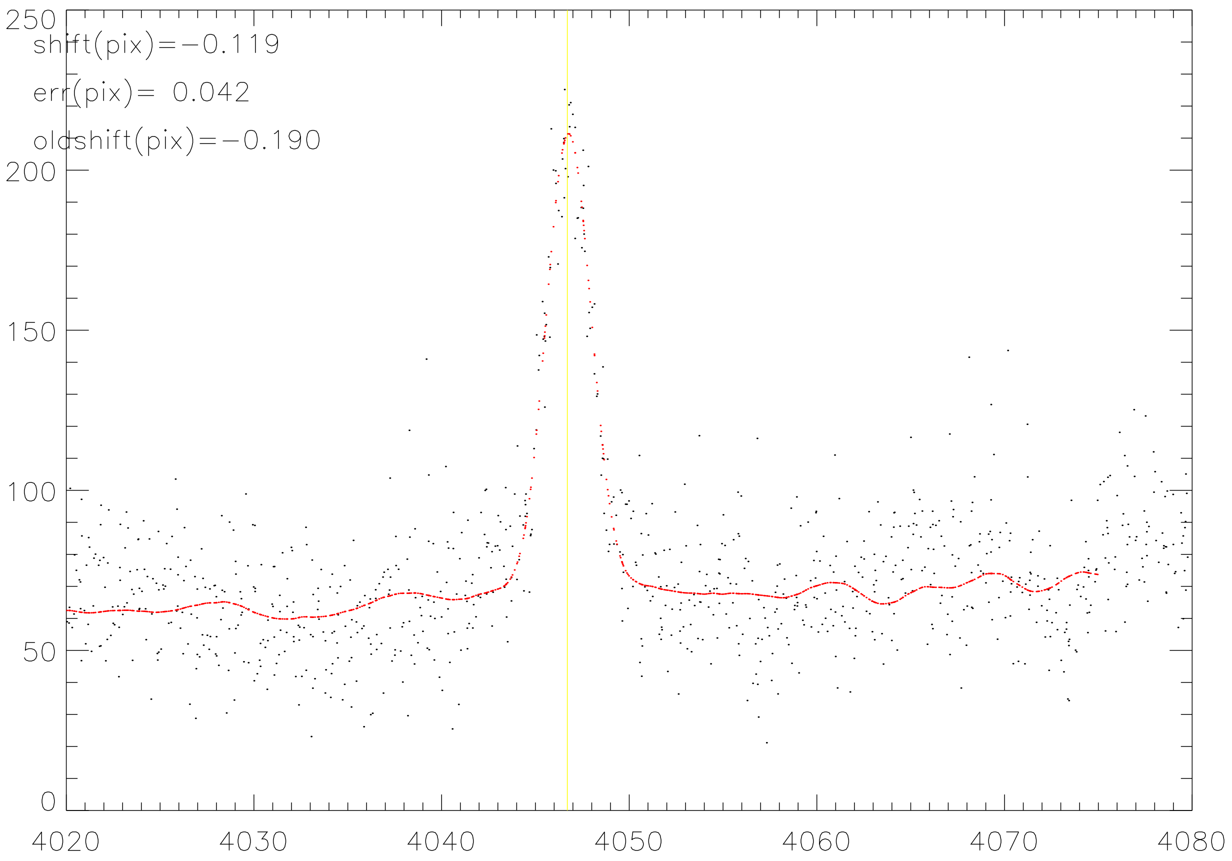

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056617.f
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 13.838
Max value = 18.493
Tue Mar 9 18:42:32 2010

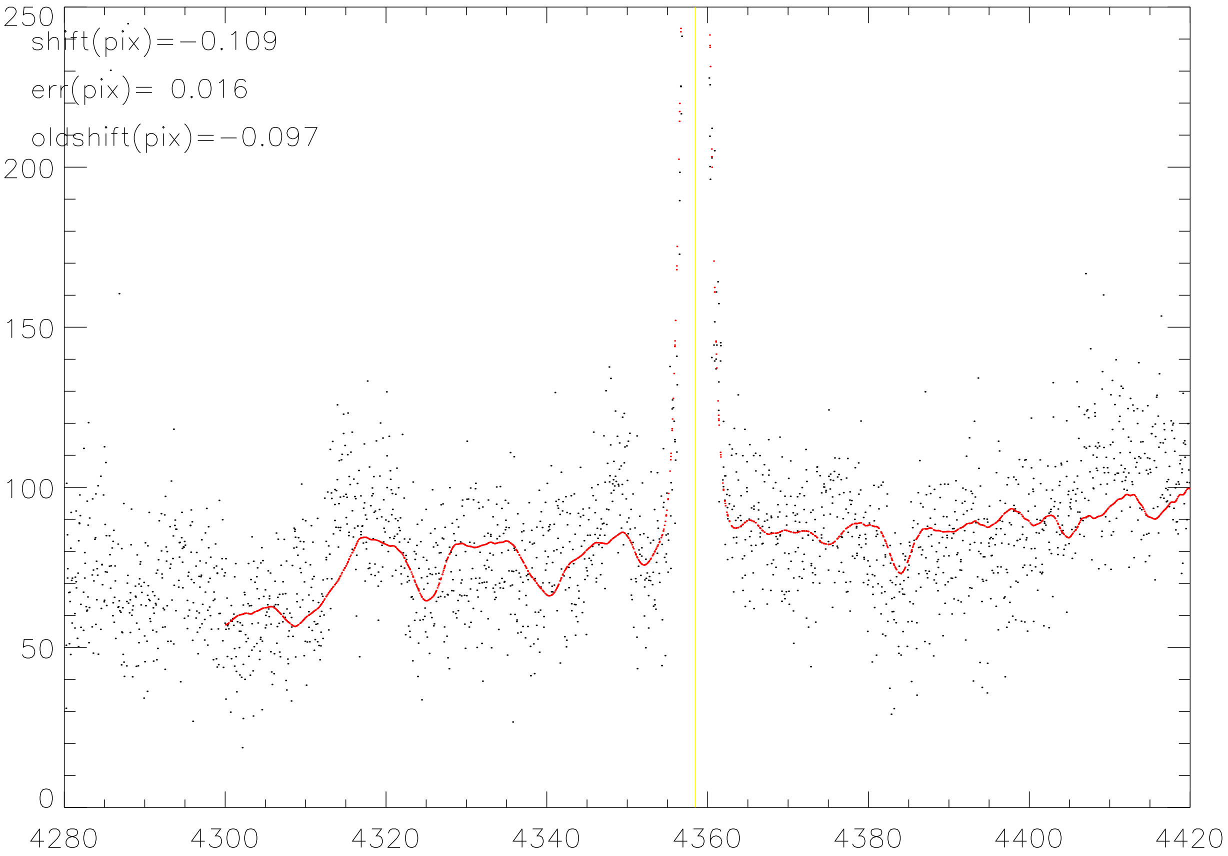

PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056617.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
11.6
9.5
8.5
7.3
5.1

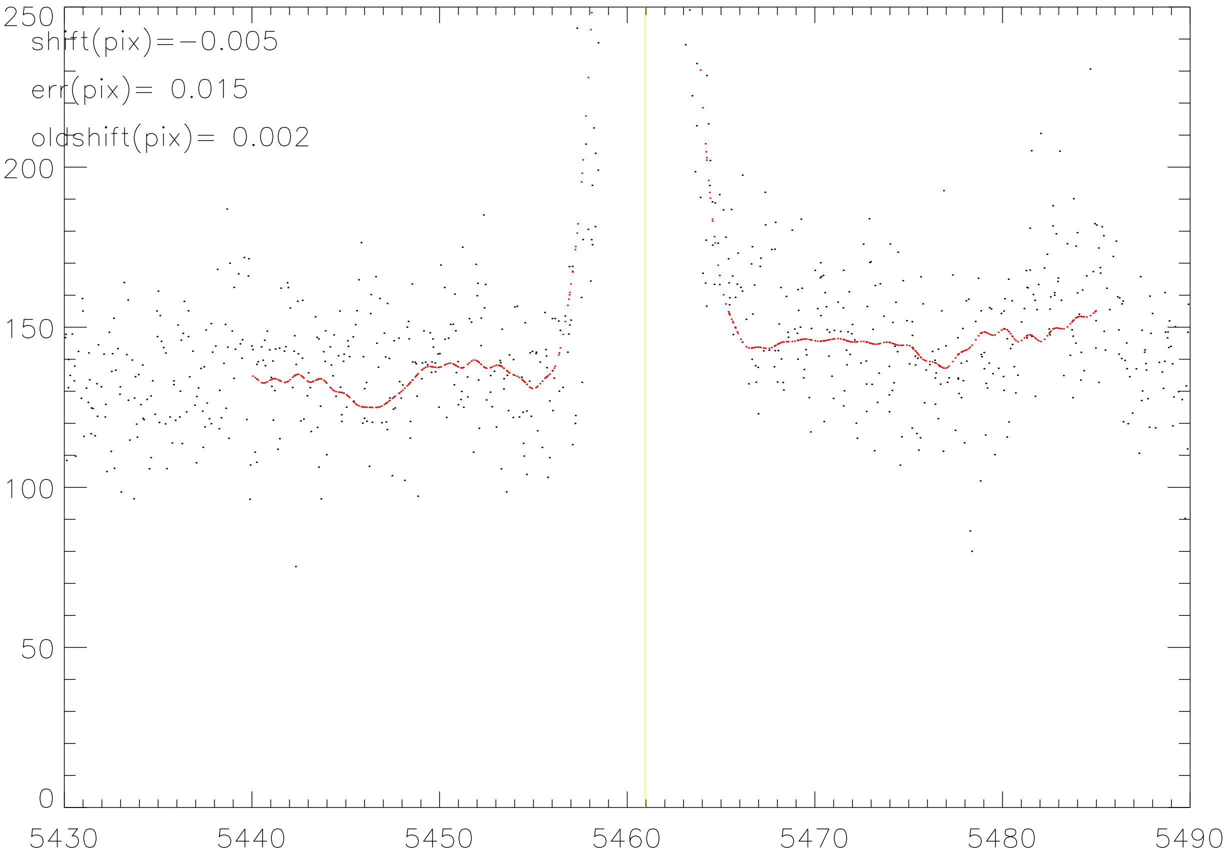

PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056617.fit
Brightness [electrons/pix]
0
5
10
15
20
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.911
Max value = 13.228
Tue Mar 9 18:44:26 2010

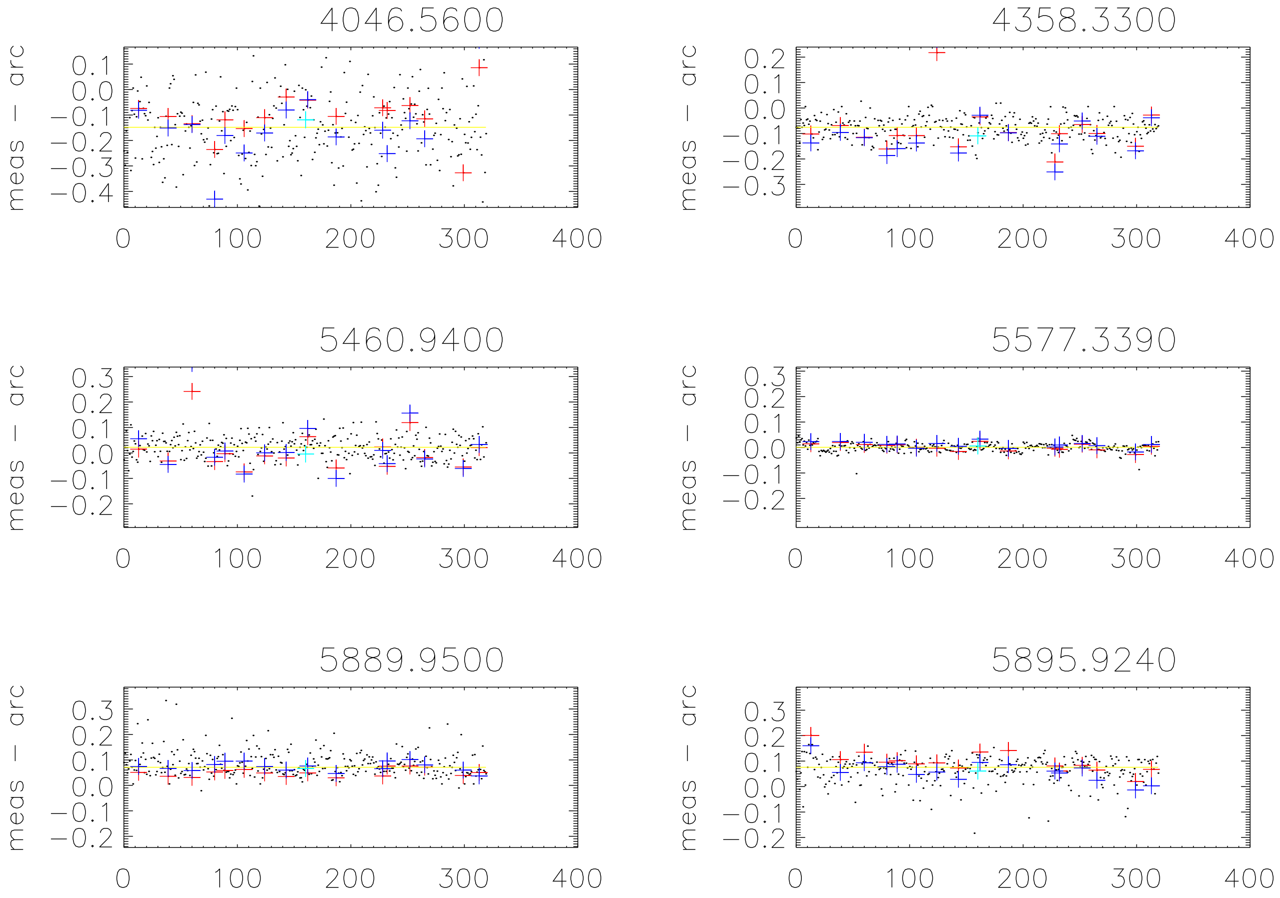

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b2-00056617.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

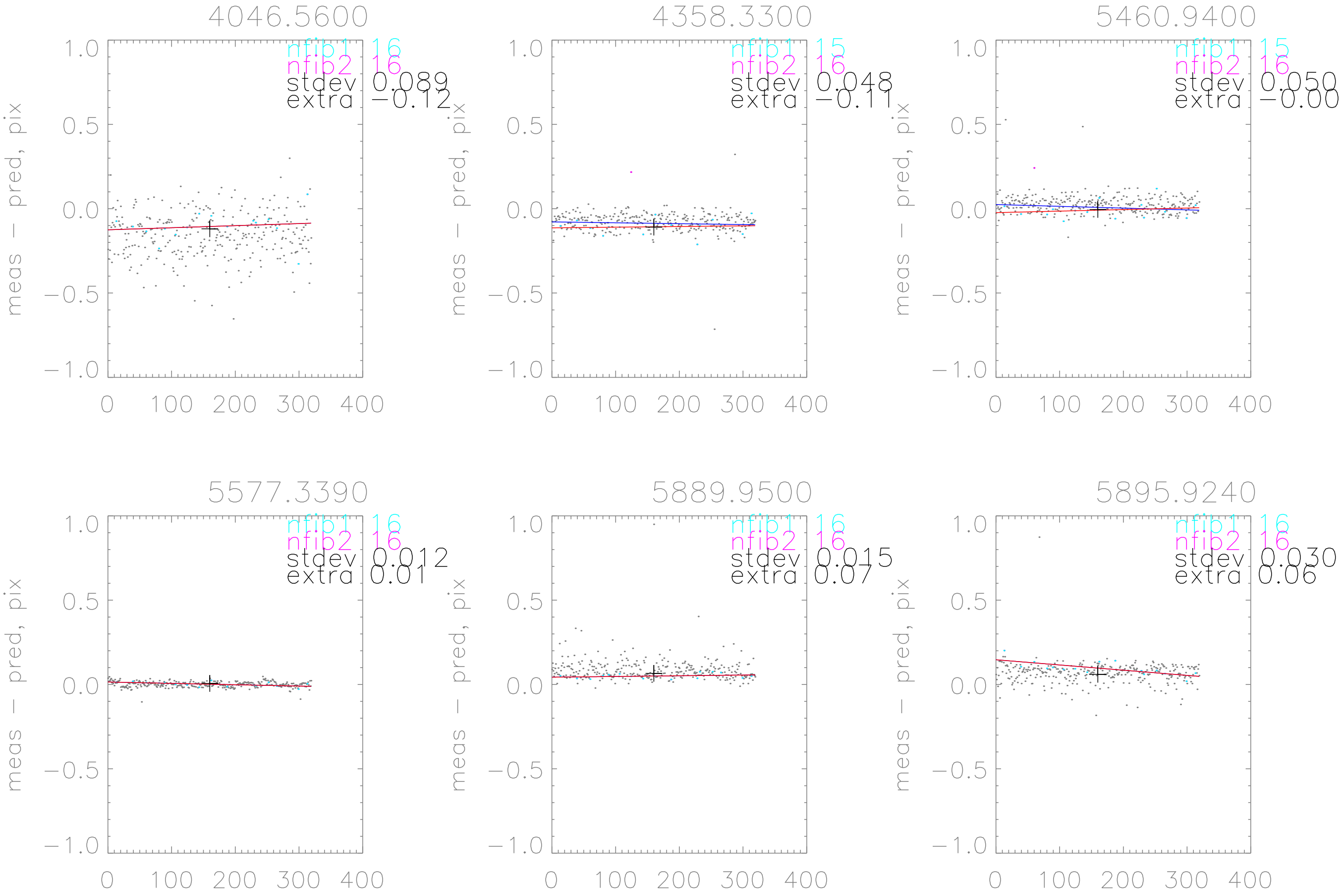

4046.5600
off: −0.19
sig: 0.034
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.10
sig: 0.014
500
400
300
200
100
0
−100
5460.9400
off: 0.00
sig: 0.012
600
400
200
0
−200
5577.3390
off: 0.01
sig: 0.002
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
−2.0×10^3
5889.9500
off: 0.08
sig: 0.007
2500
2000
1500
1000
500
0
−500
5895.9240
off: 0.06
sig: 0.007

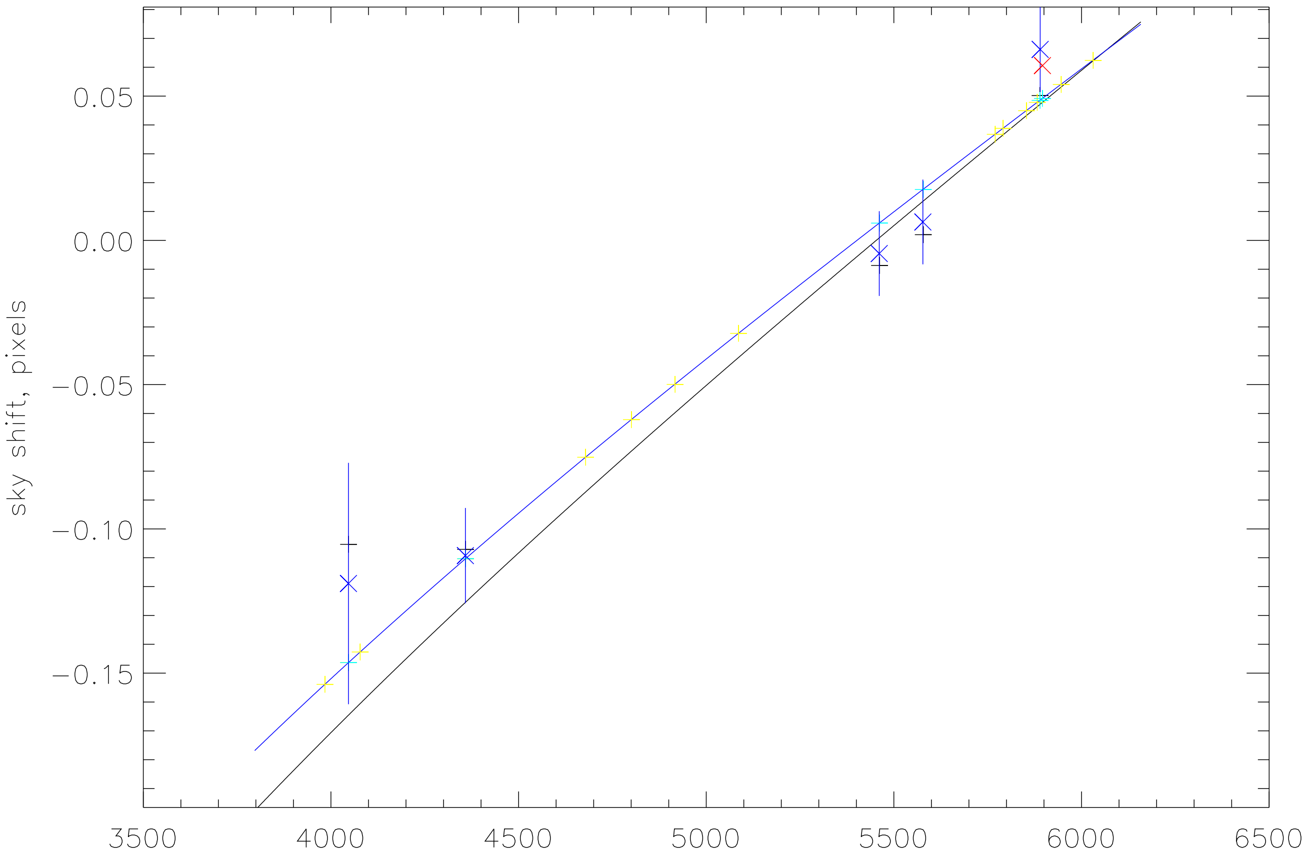

shift(pix)=−0.119
err(pix)= 0.042
oldshift(pix)=−0.190
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

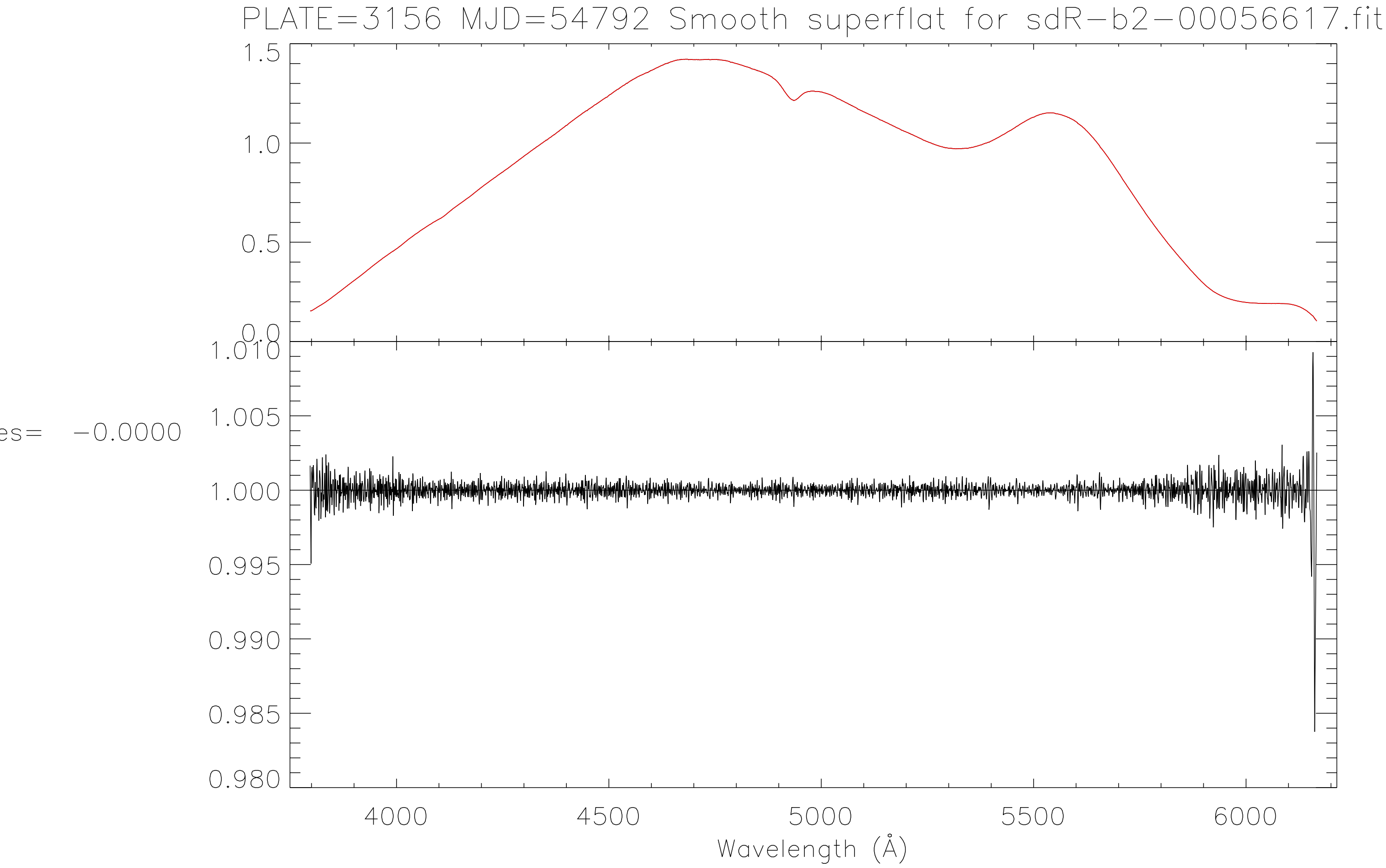

shift(pix)=−0.109
err(pix)= 0.016
oldshift(pix)=−0.097
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

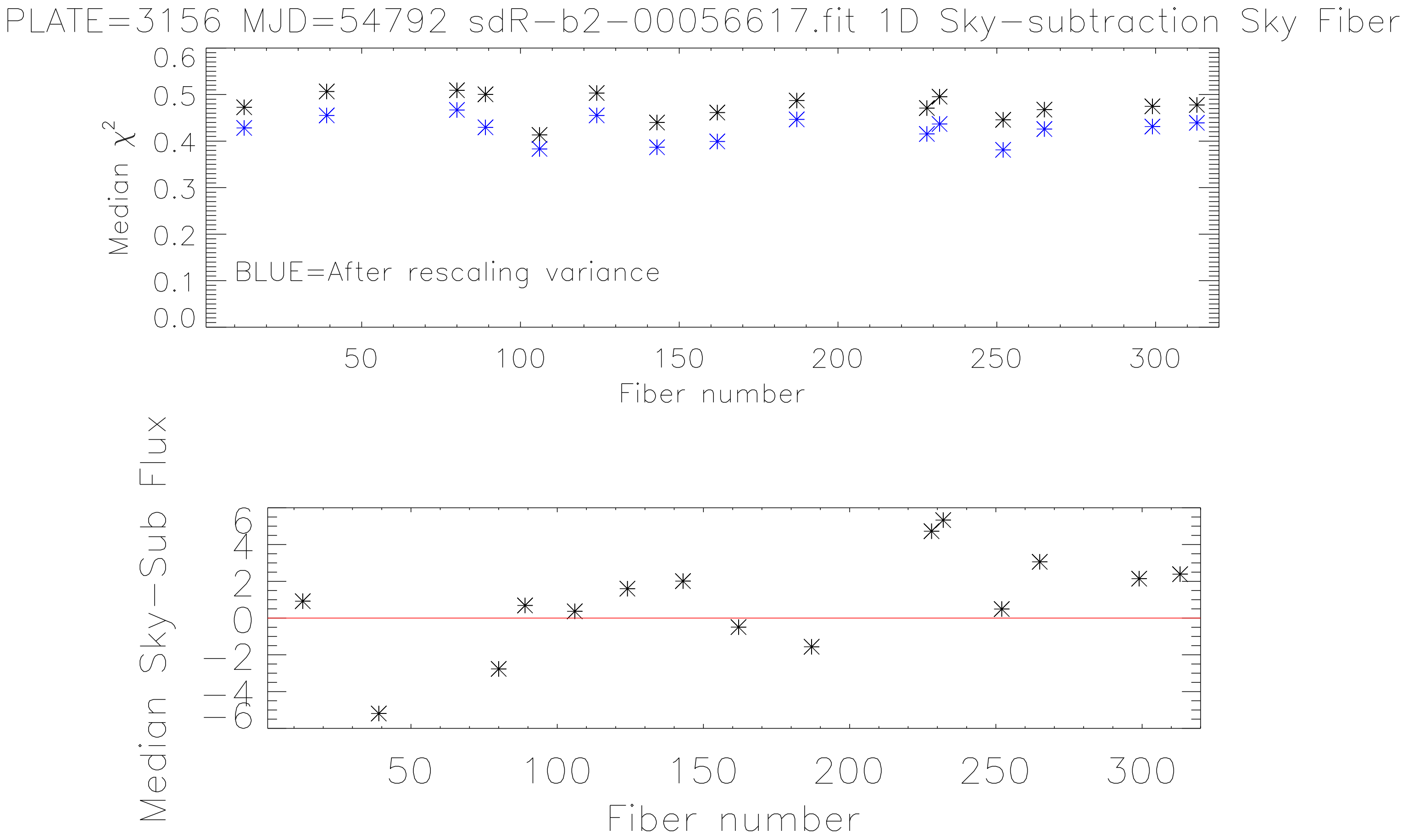

shift(pix)=-0.005
err(pix)= 0.015
oldshift(pix)= 0.002
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

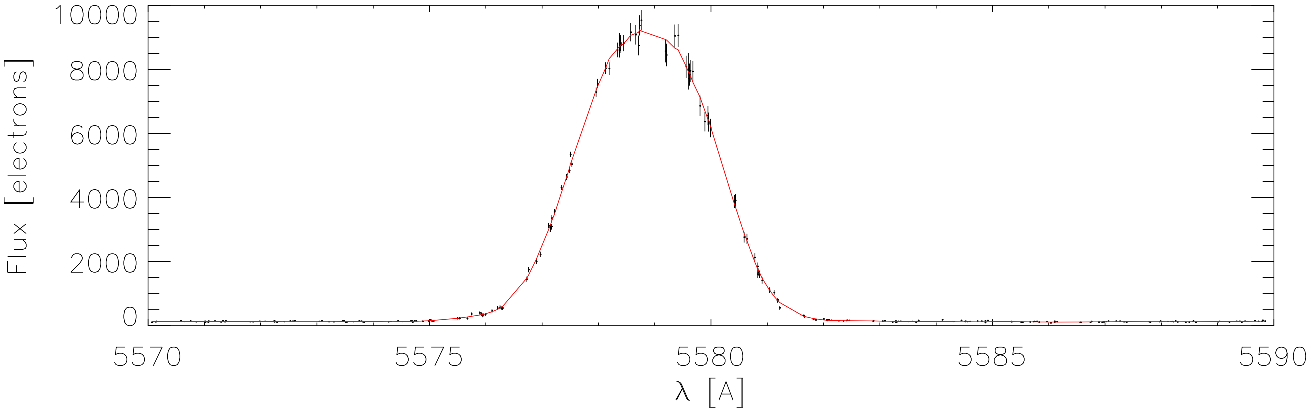

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.089
extra −0.12
4358.3300
nfib1 15
nfib2 16
stdev 0.048
extra −0.11
5460.9400
nfib1 15
nfib2 16
stdev 0.050
extra −0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.015
extra 0.07
5895.9240
nfib1 16
nfib2 16
stdev 0.030
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

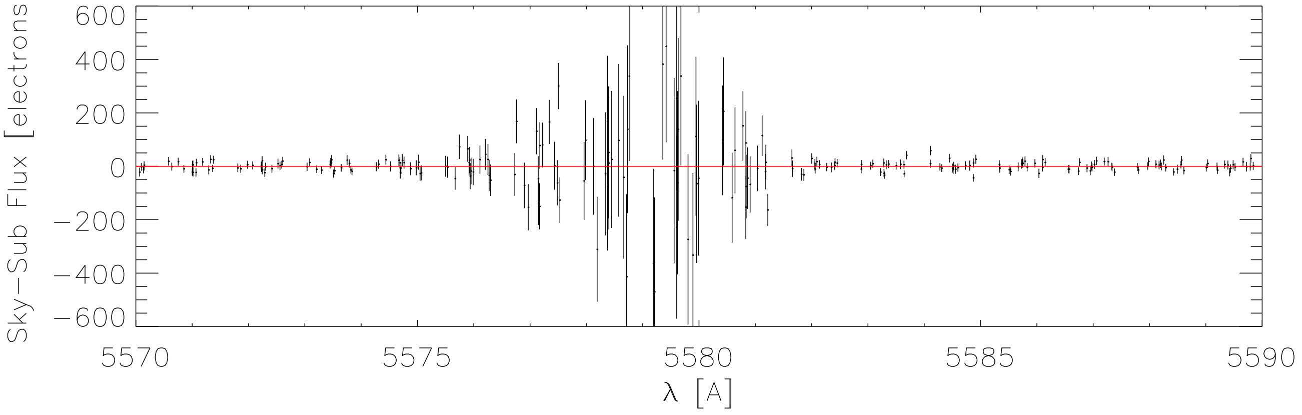

sky shift, pixels
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500


PLATE=3156 MJD=54792 Smooth superflat for sdR-b2-00056617.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3156 MJD=54792 sdR-b2-00056617.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
−2
−4
−6
50
100
150
200
250
300
Fiber number



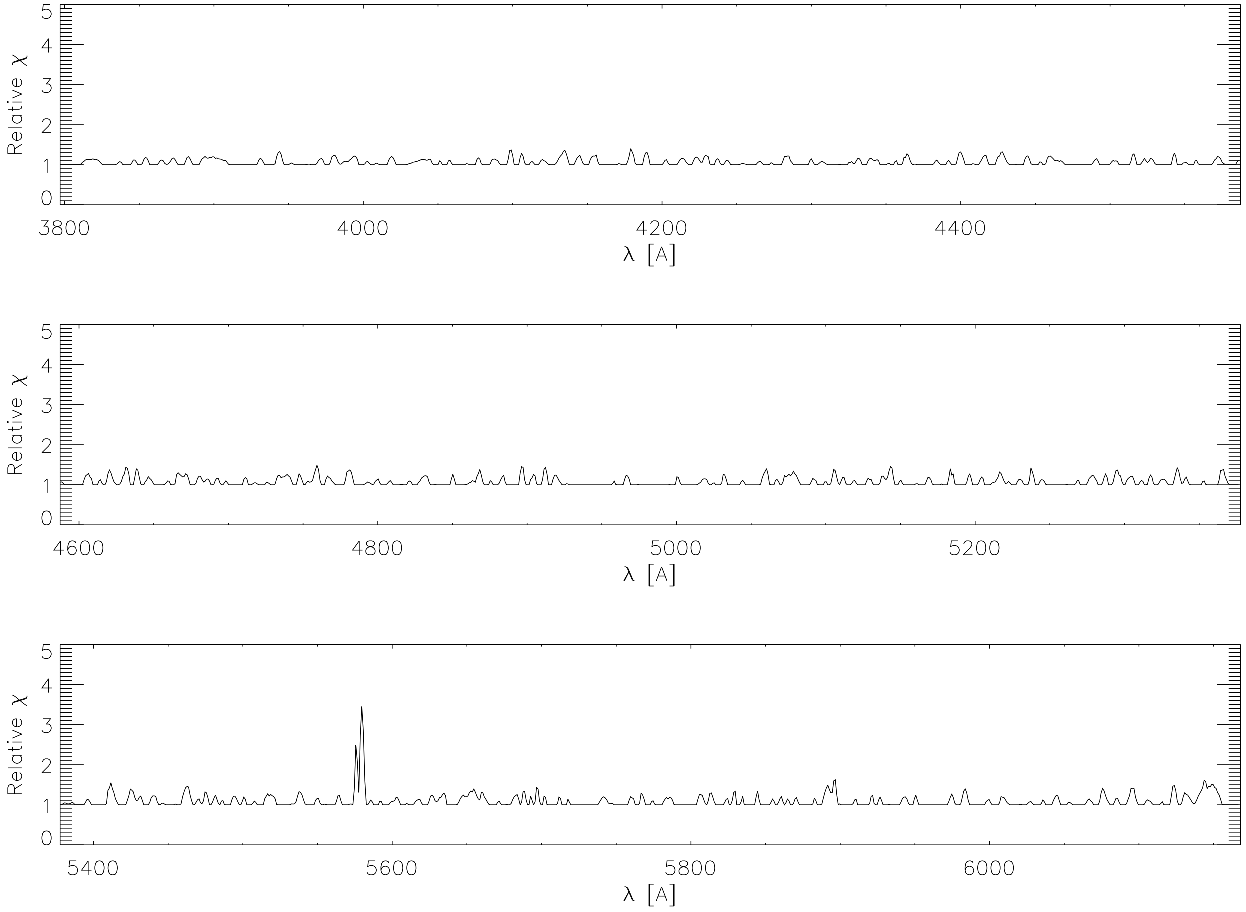
PLATE=3156 MJD=54792 sdR-b2-00056617.fit 1D Sky-subtraction Sky Fibers

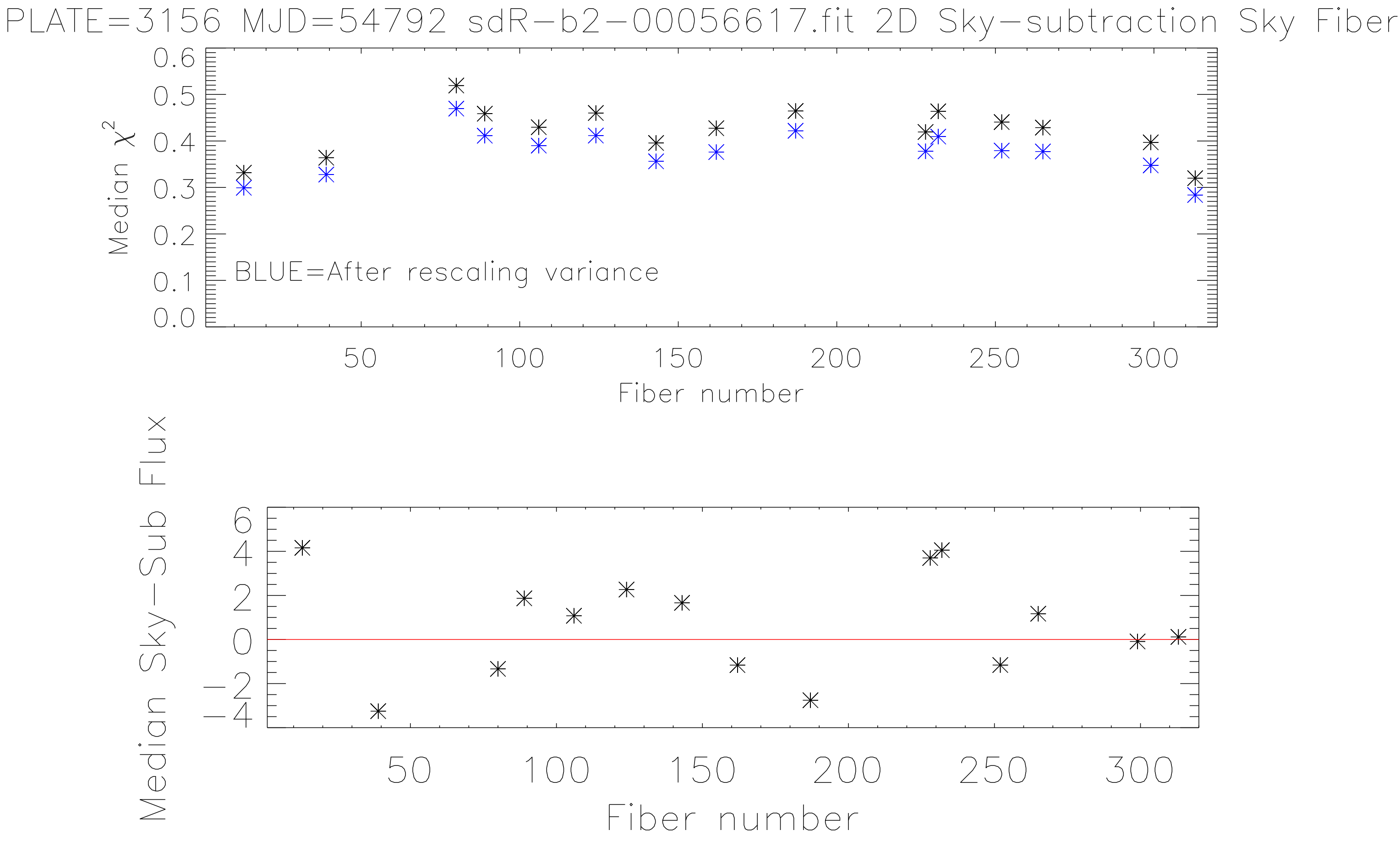


PLATE=3156 MJD=54792 sdR-b2-00056617.fit 1D Sky-subtraction Sky-subtracted Sky F

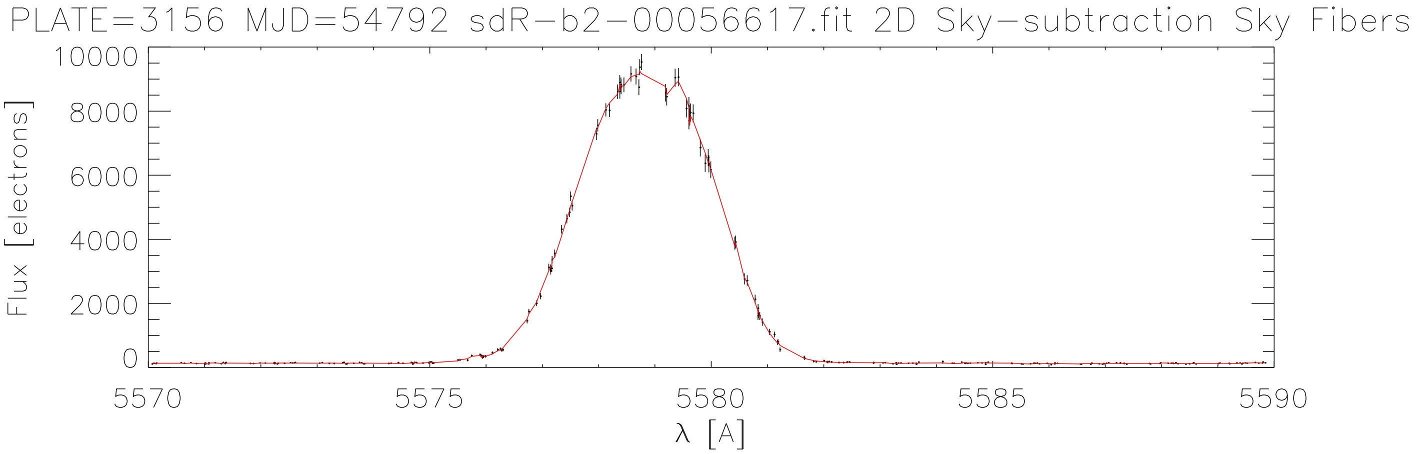
Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-b2-00056617.fit 1D Sky-subtraction Rescaled Errors

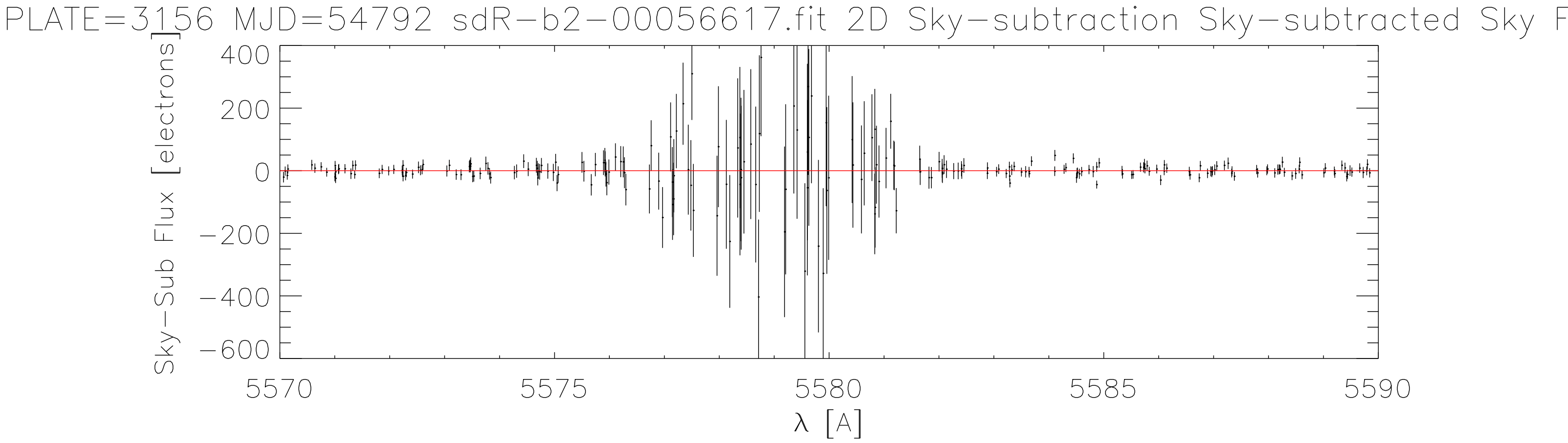




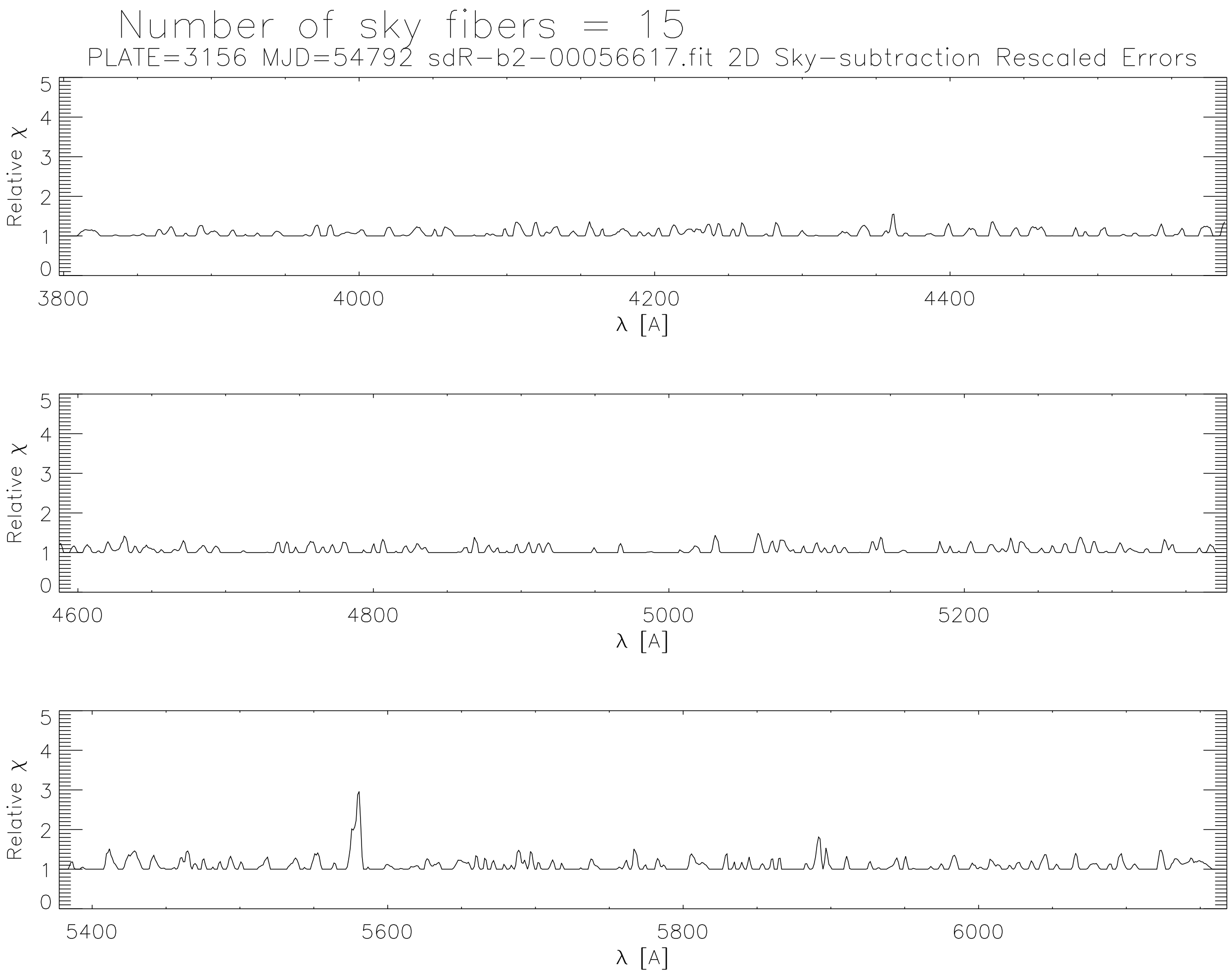
PLATE=3156 MJD=54792 sdR-b2-00056617.fit 2D Sky-subtraction Sky Fiber

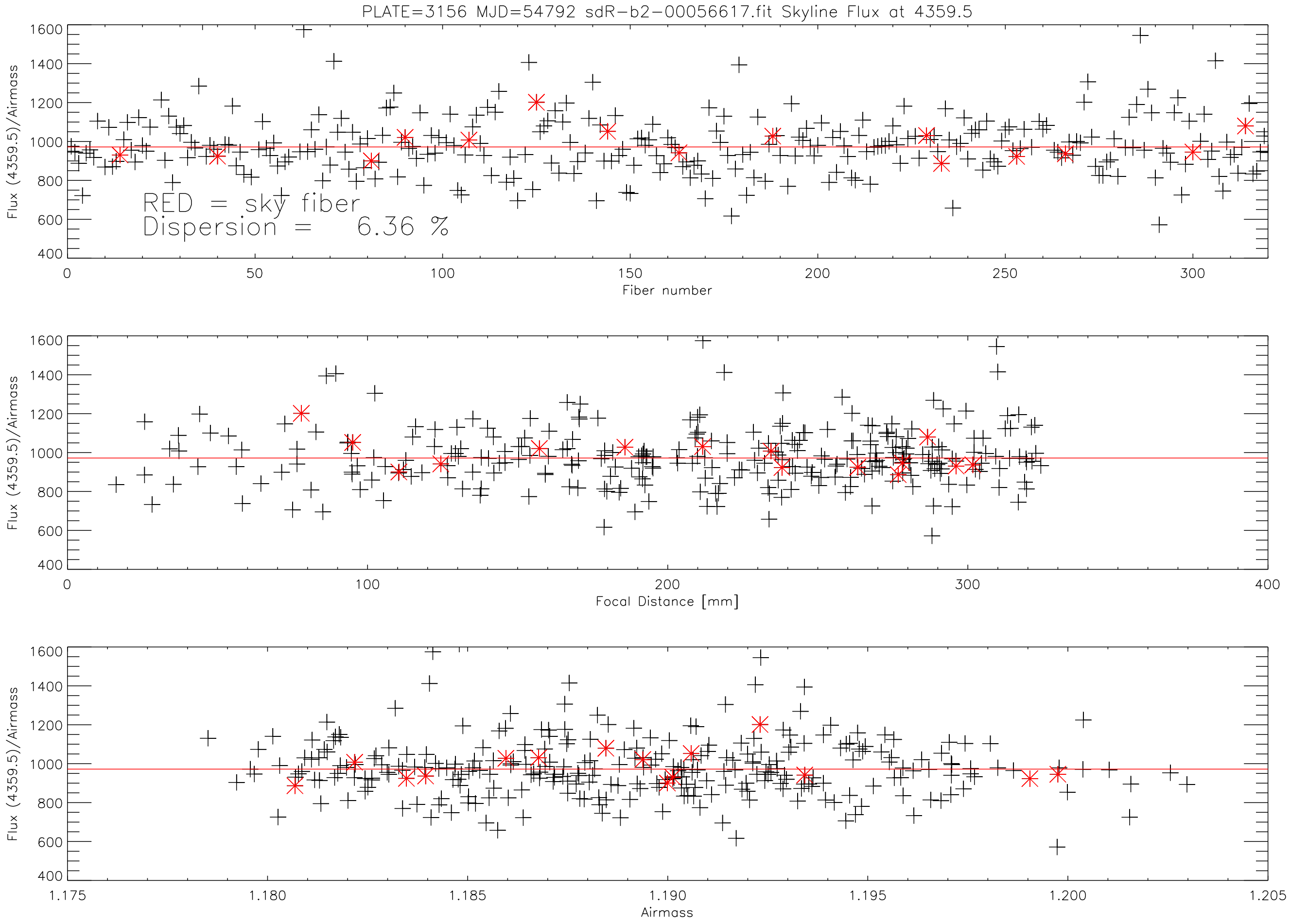


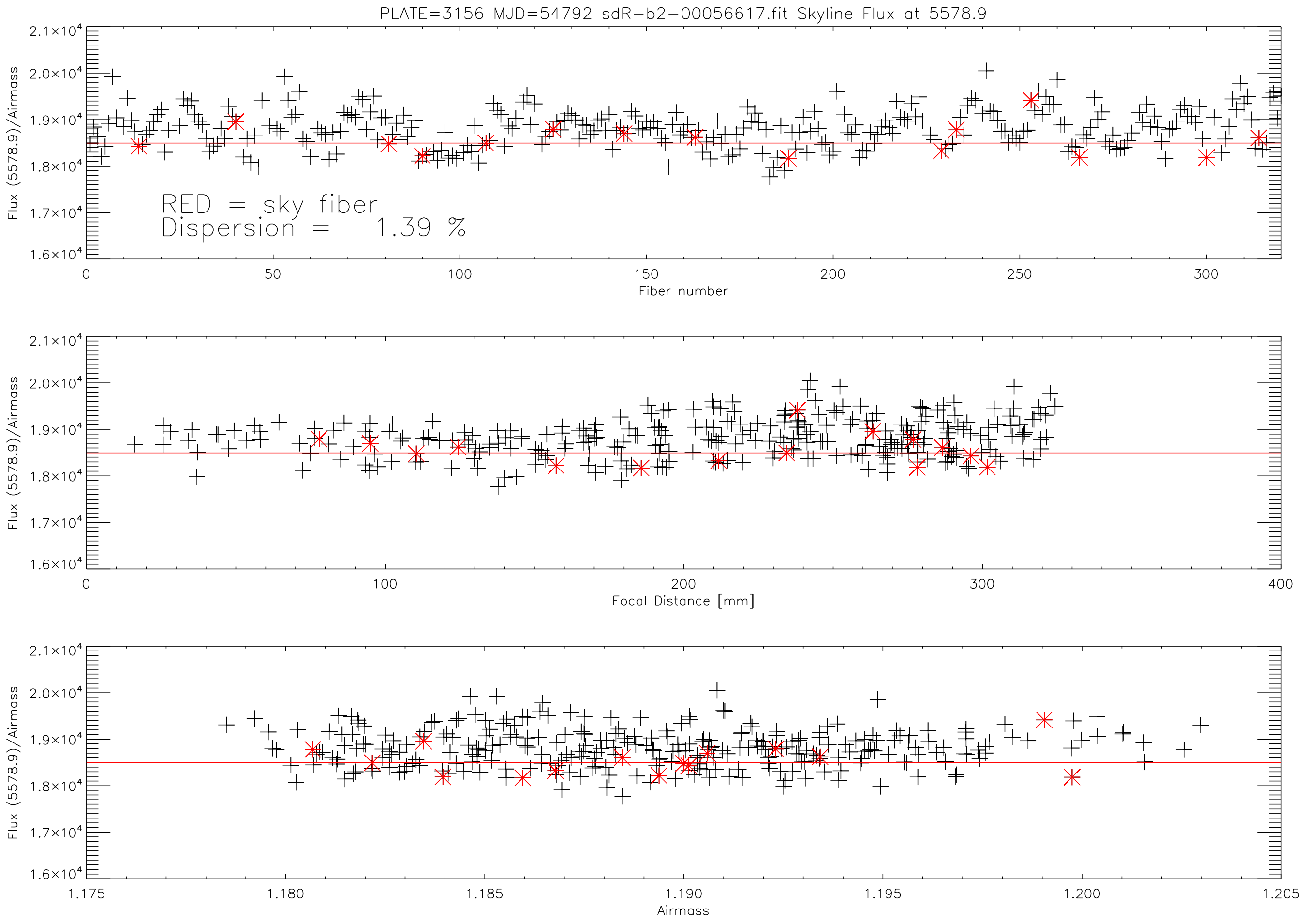
PLATE=3156 MJD=54792 sdR-b2-00056617.fit 2D Sky-subtraction Sky Fibers

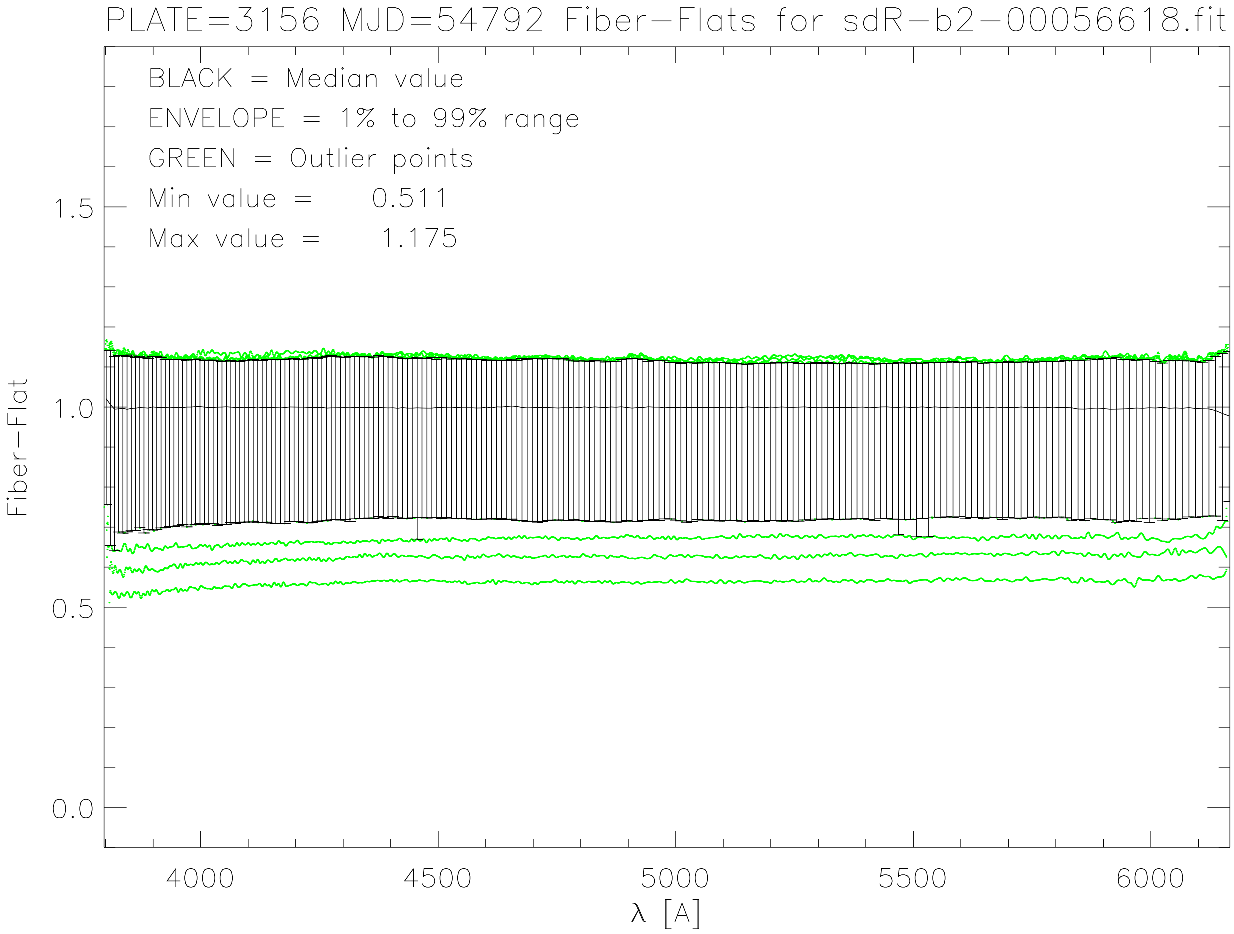


PLATE=3156 MJD=54792 sdR-b2-00056617.fit 2D Sky-subtraction Sky-subtracted Sky F

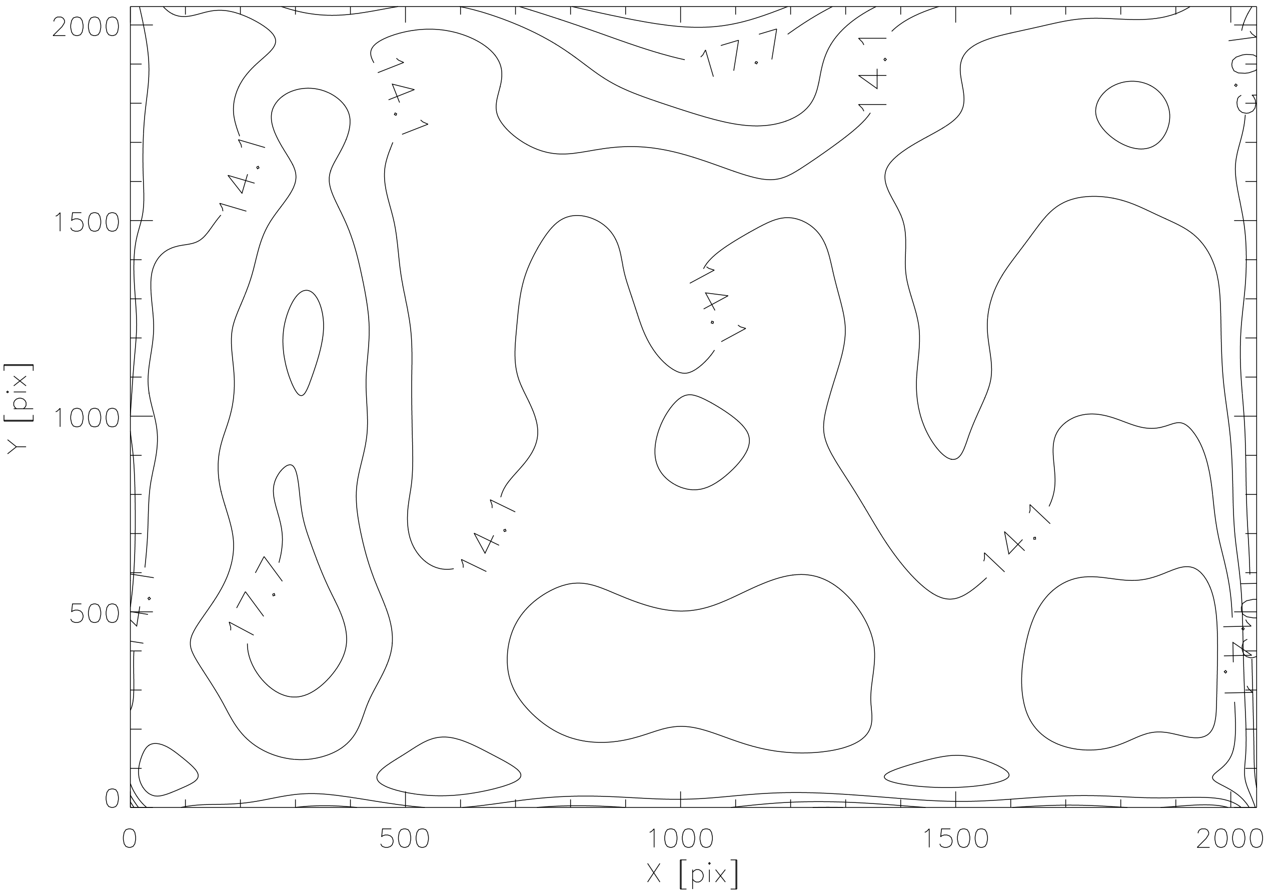

Number of sky fibers = 15
PLATE=3156 MJD=54792 sdR-b2-00056617.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]


PLATE=3156 MJD=54792 sdR-b2-00056617.fit Skyline Flux at 4359.5


PLATE=3156 MJD=54792 sdR–b2–00056617.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.39 %
Flux (5578.9)/Airmass
2.1×10^4
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass

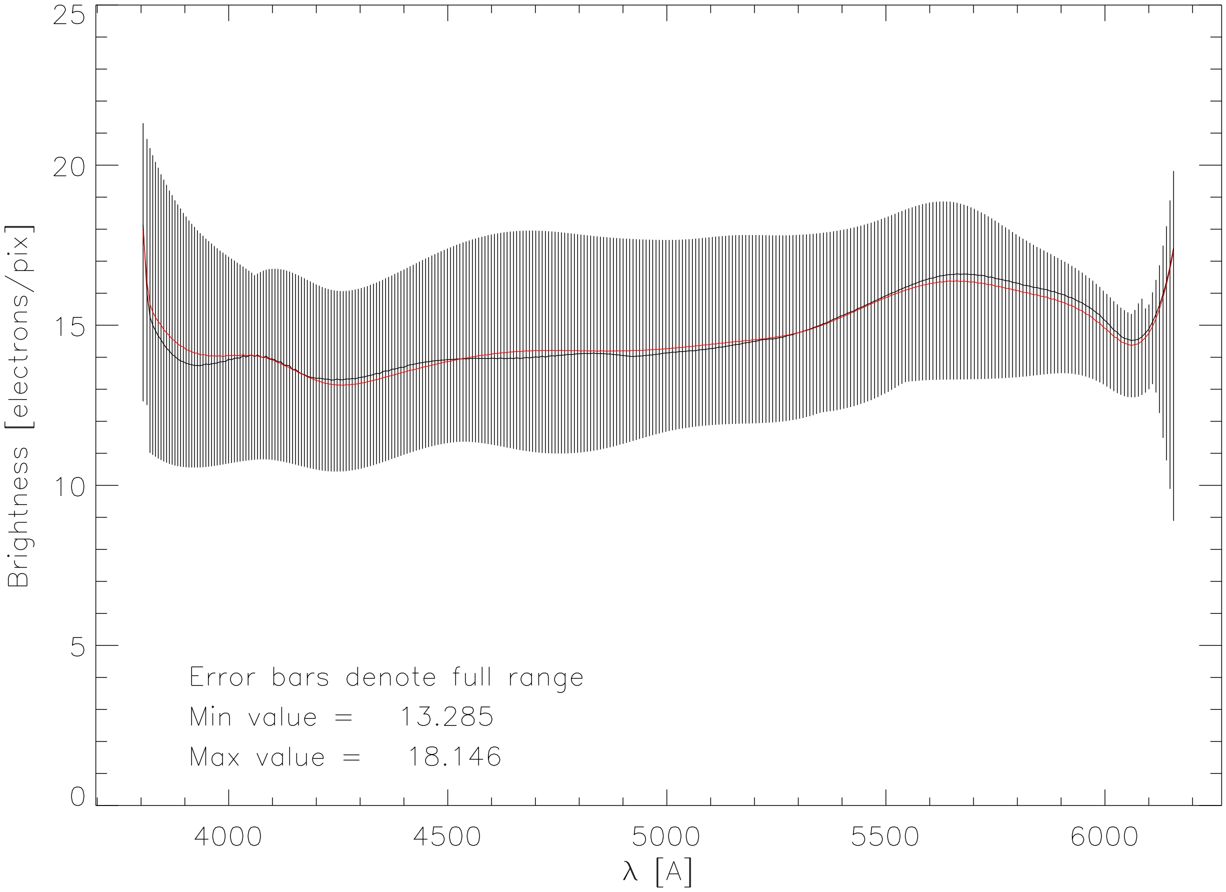


Tue Mar 9 18:45:28 2010



PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056620.f

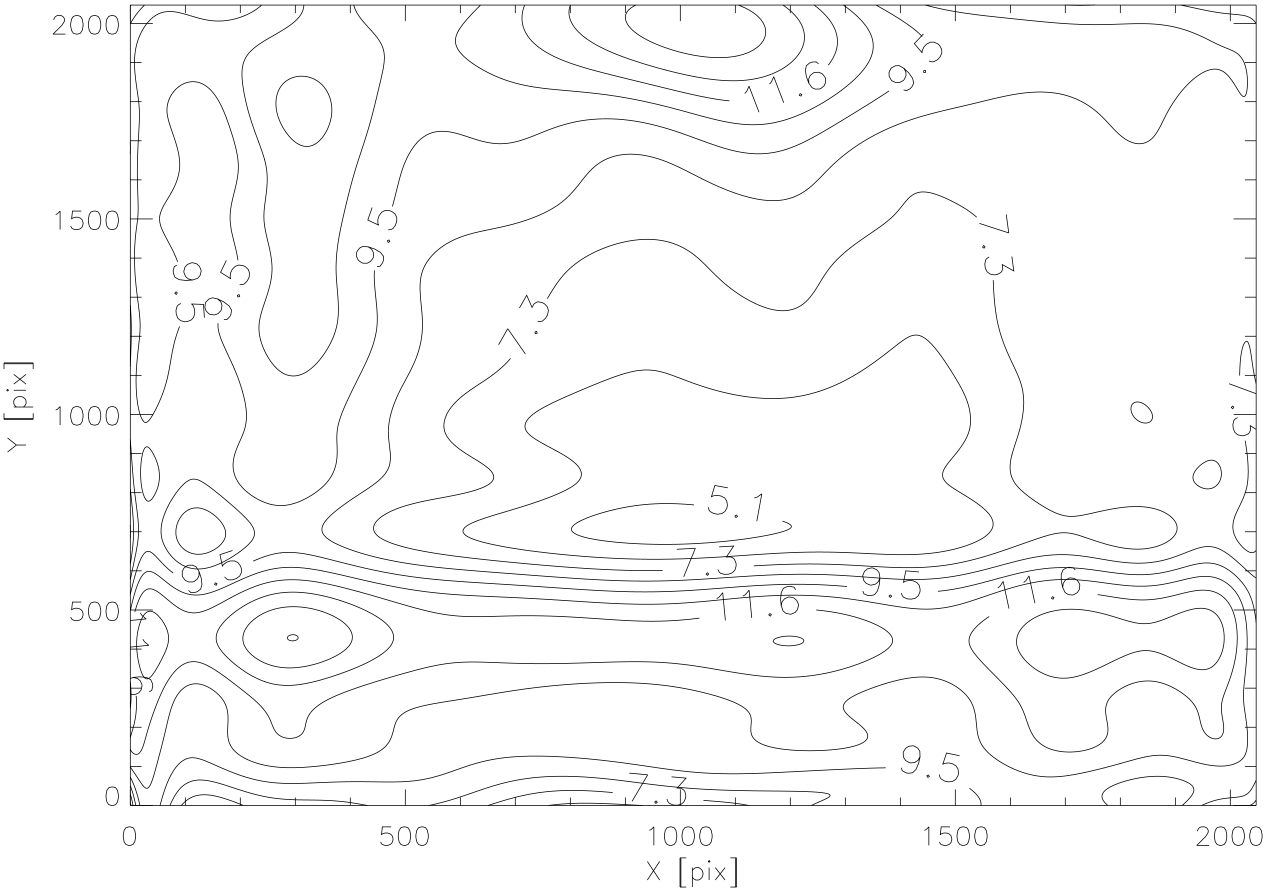
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056620.f

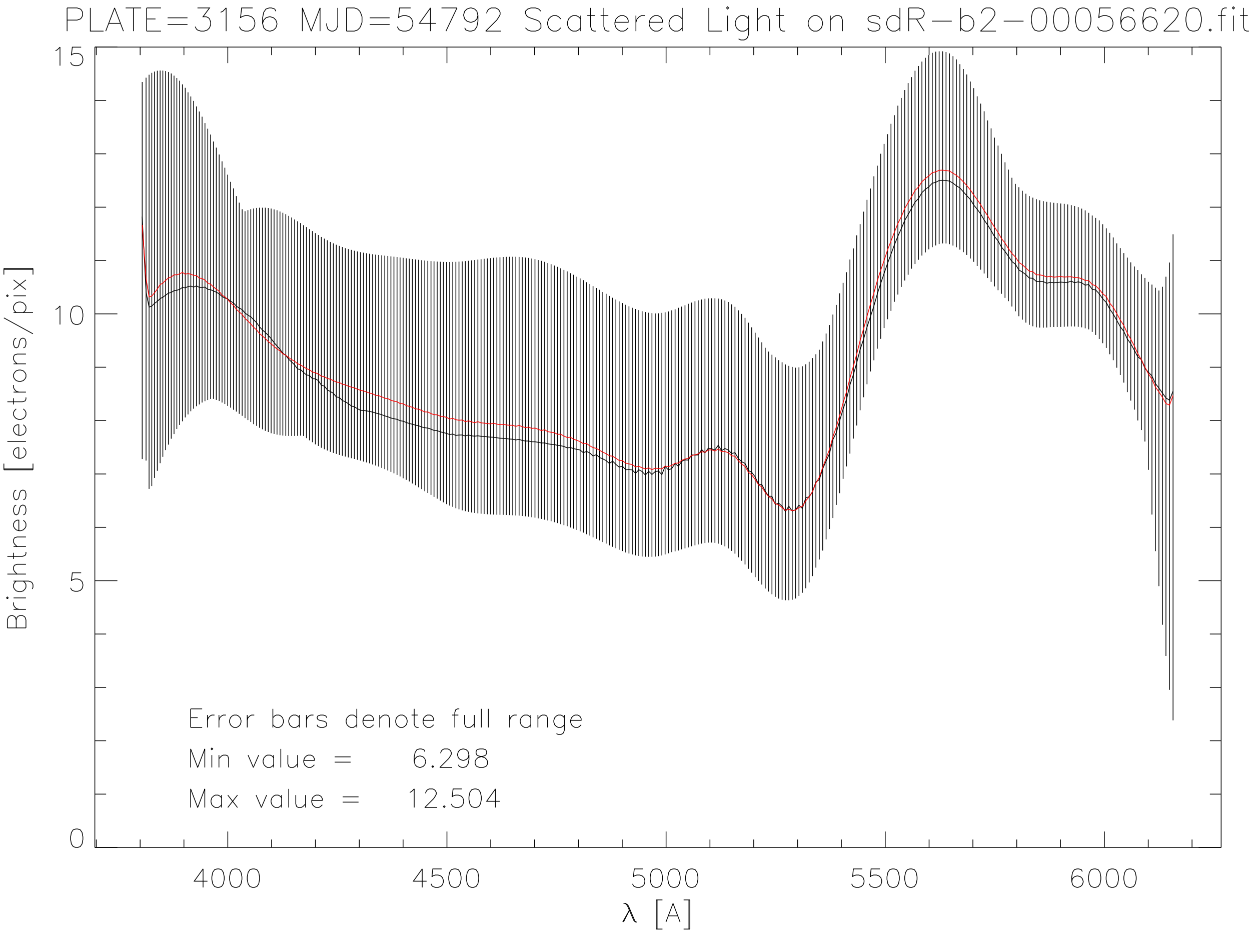


Error bars denote full range
Min value = 13.285
Max value = 18.146

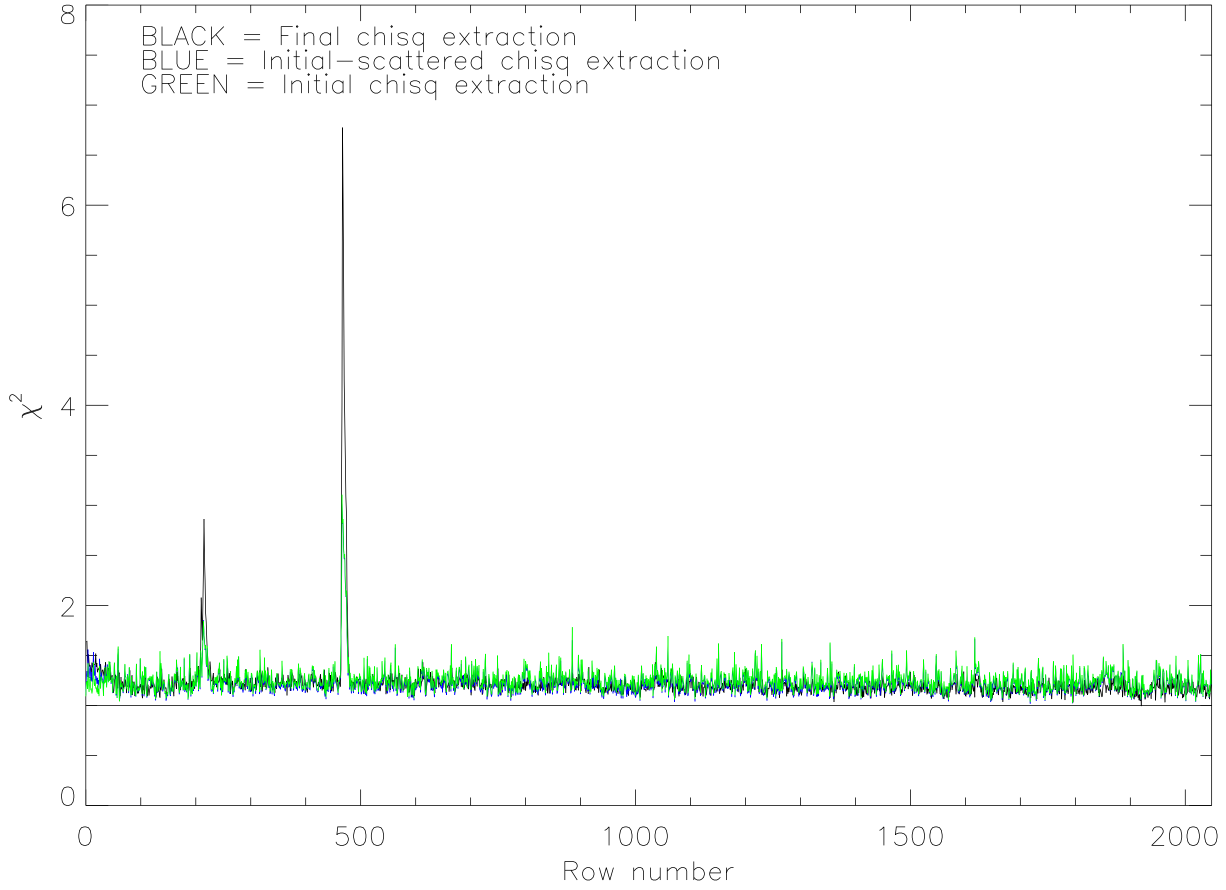
Tue Mar 9 18:46:02 2010

PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056620.fit

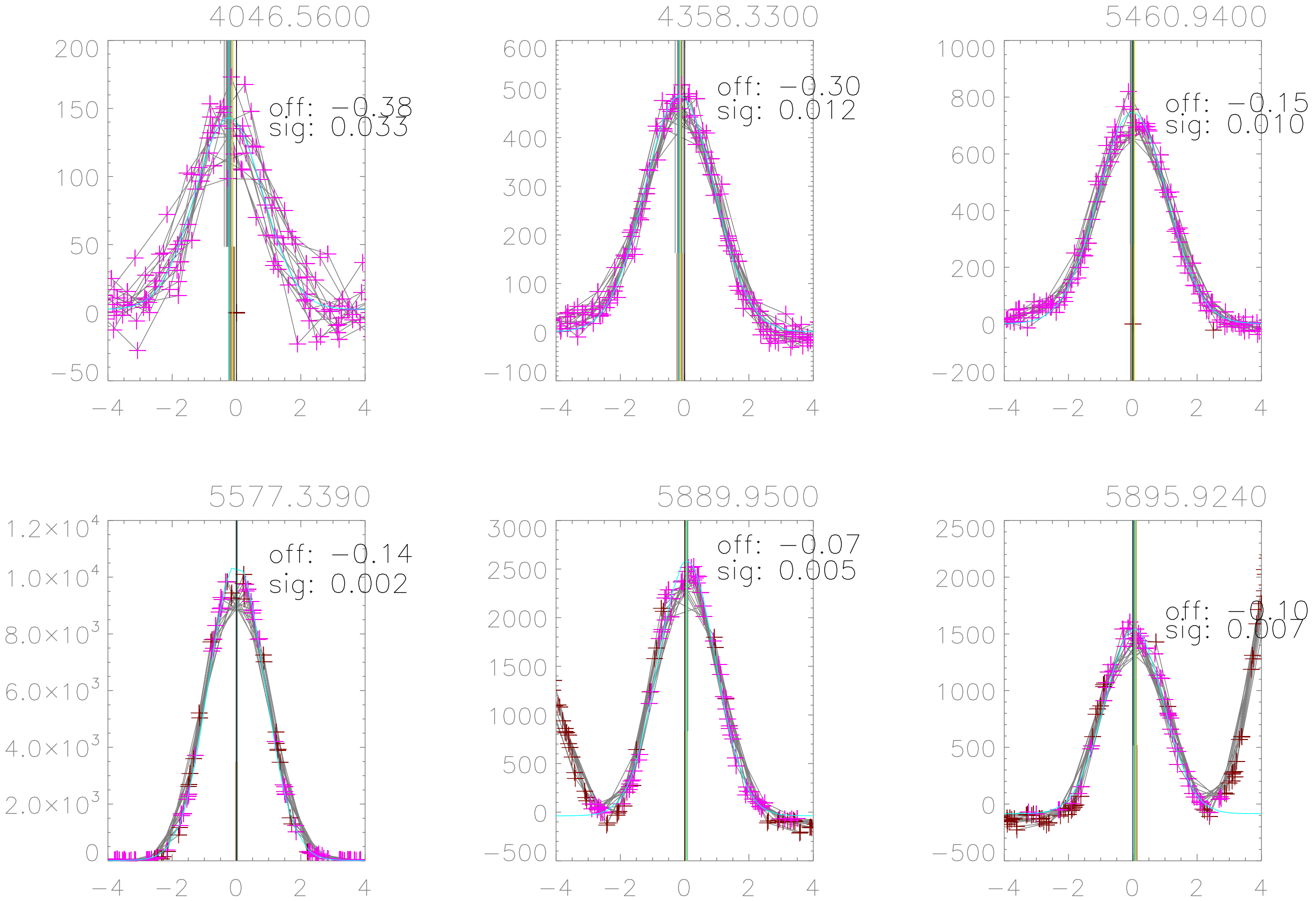


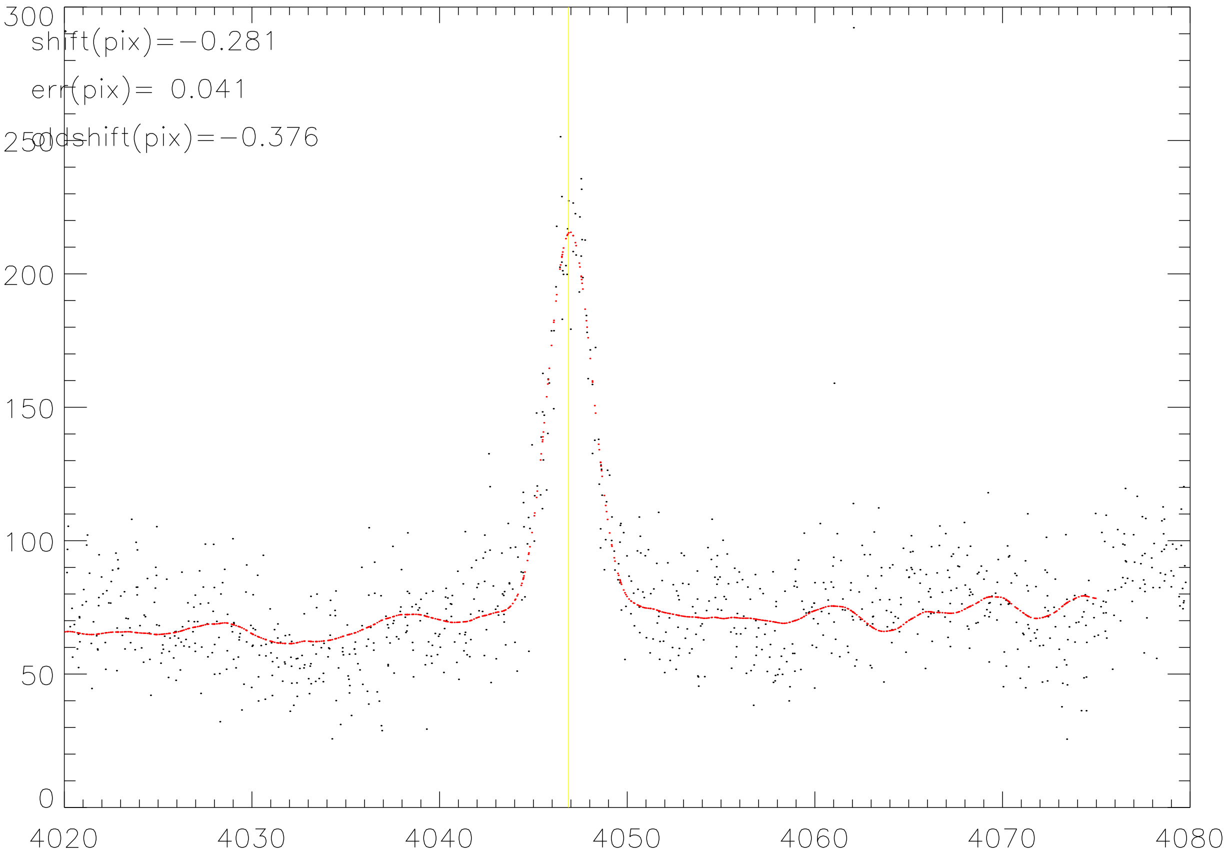


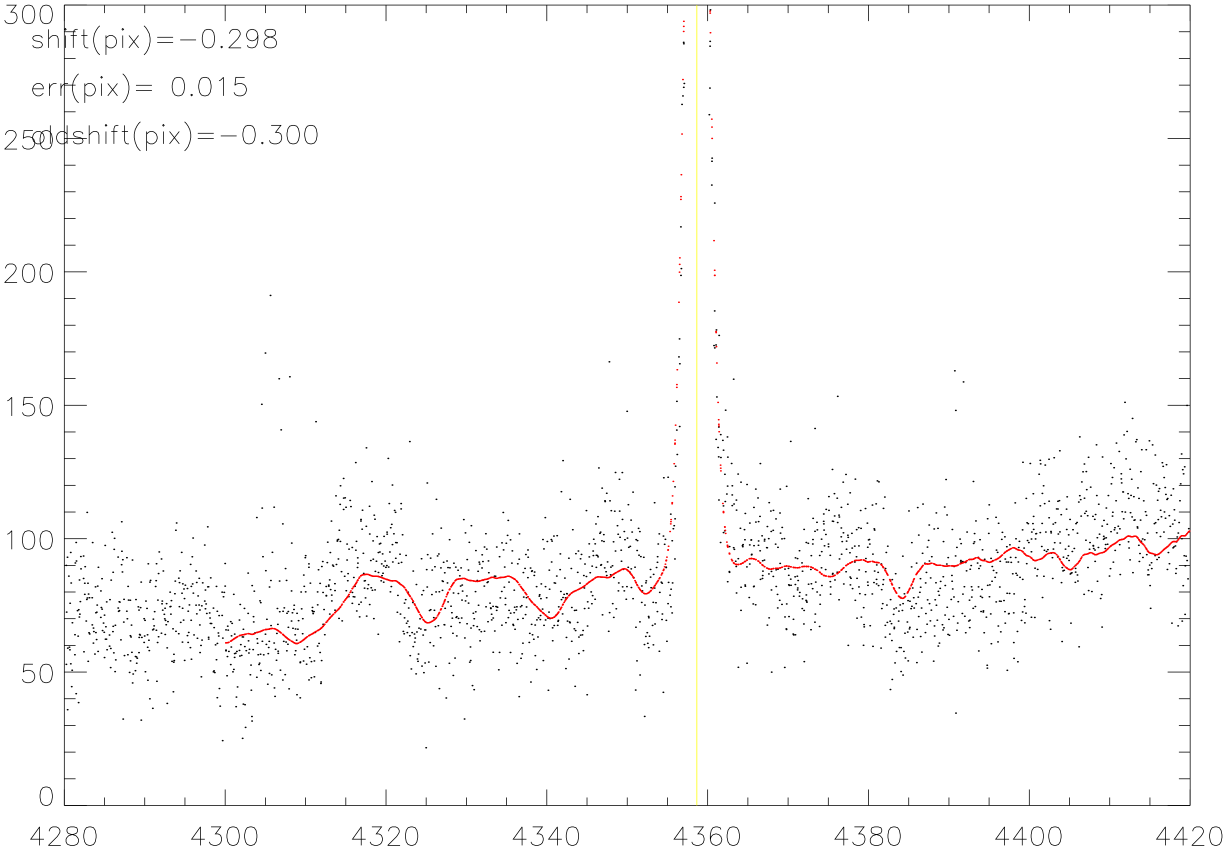
Tue Mar 9 18:47:59 2010

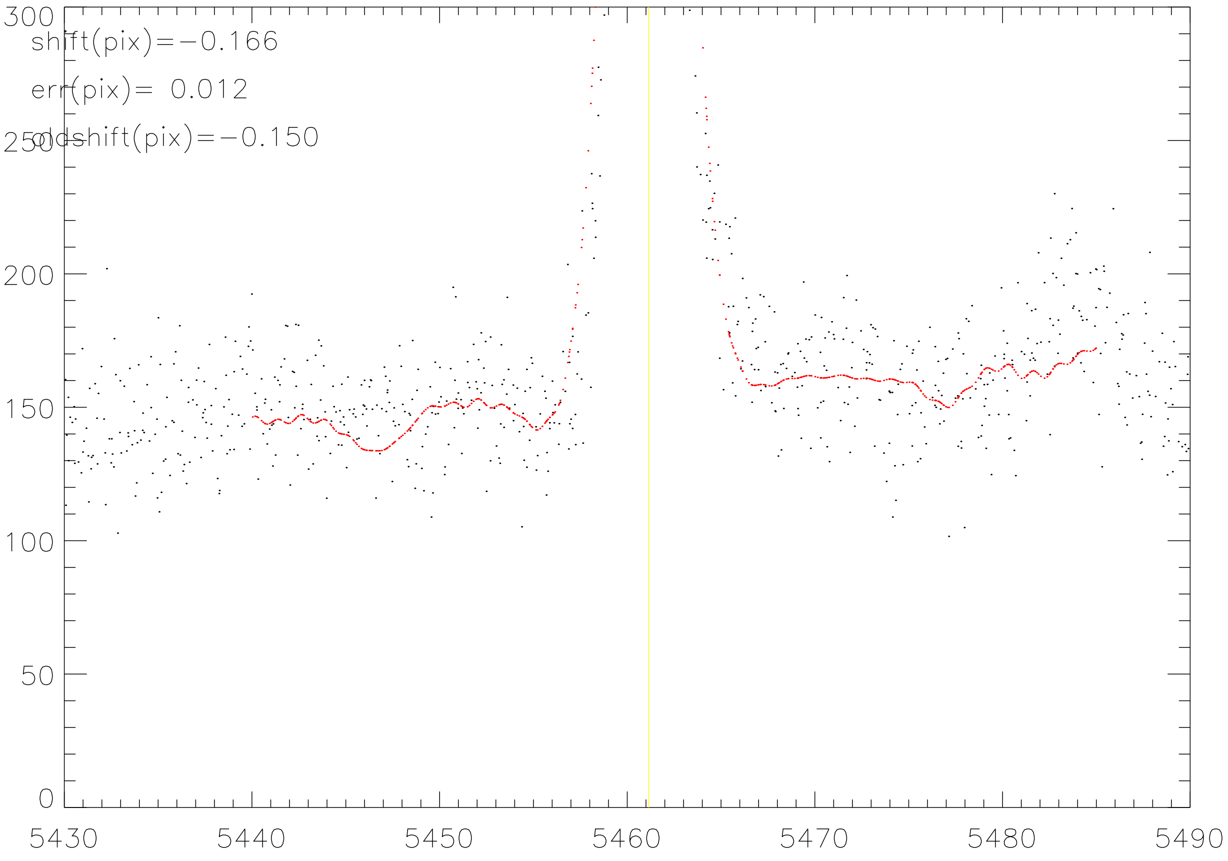


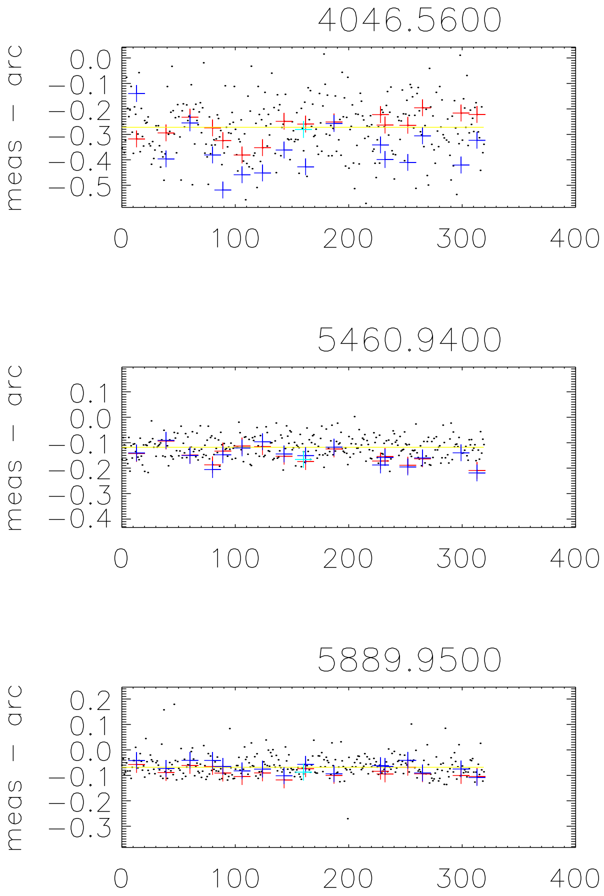
PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b2-00056620.fit

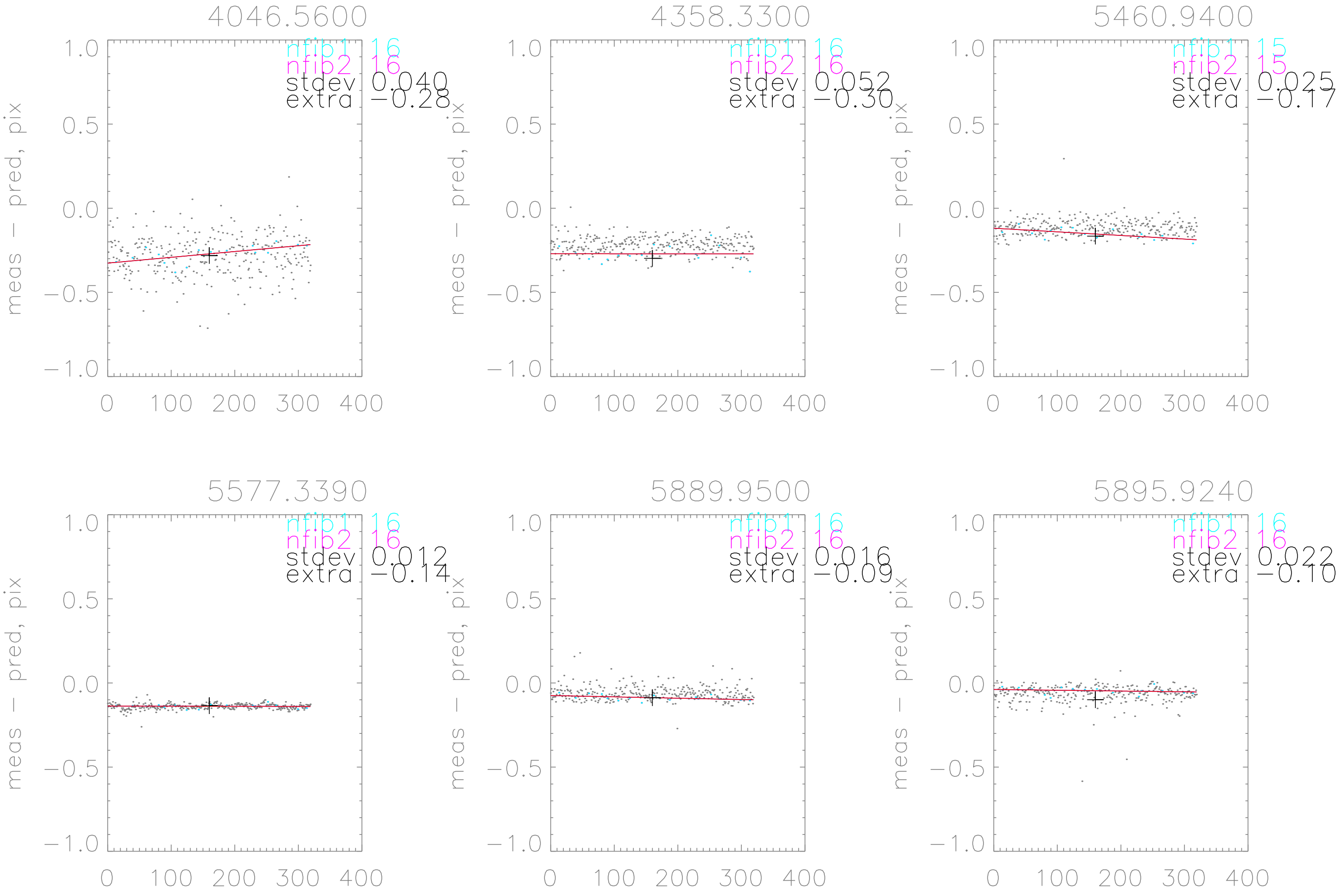

4046.5600
off: −0.38
sig: 0.033
200
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.30
sig: 0.012
600
500
400
300
200
100
0
−100
5460.9400
off: −0.15
sig: 0.010
1000
800
600
400
200
0
−200
5577.3390
off: −0.14
sig: 0.002
1.2×10⁴
1.0×10⁴
8.0×10³
6.0×10³
4.0×10³
2.0×10³
0
5889.9500
off: −0.07
sig: 0.005
3000
2500
2000
1500
1000
500
0
−500
5895.9240
off: −0.10
sig: 0.007
2500
2000
1500
1000
500
0
−500

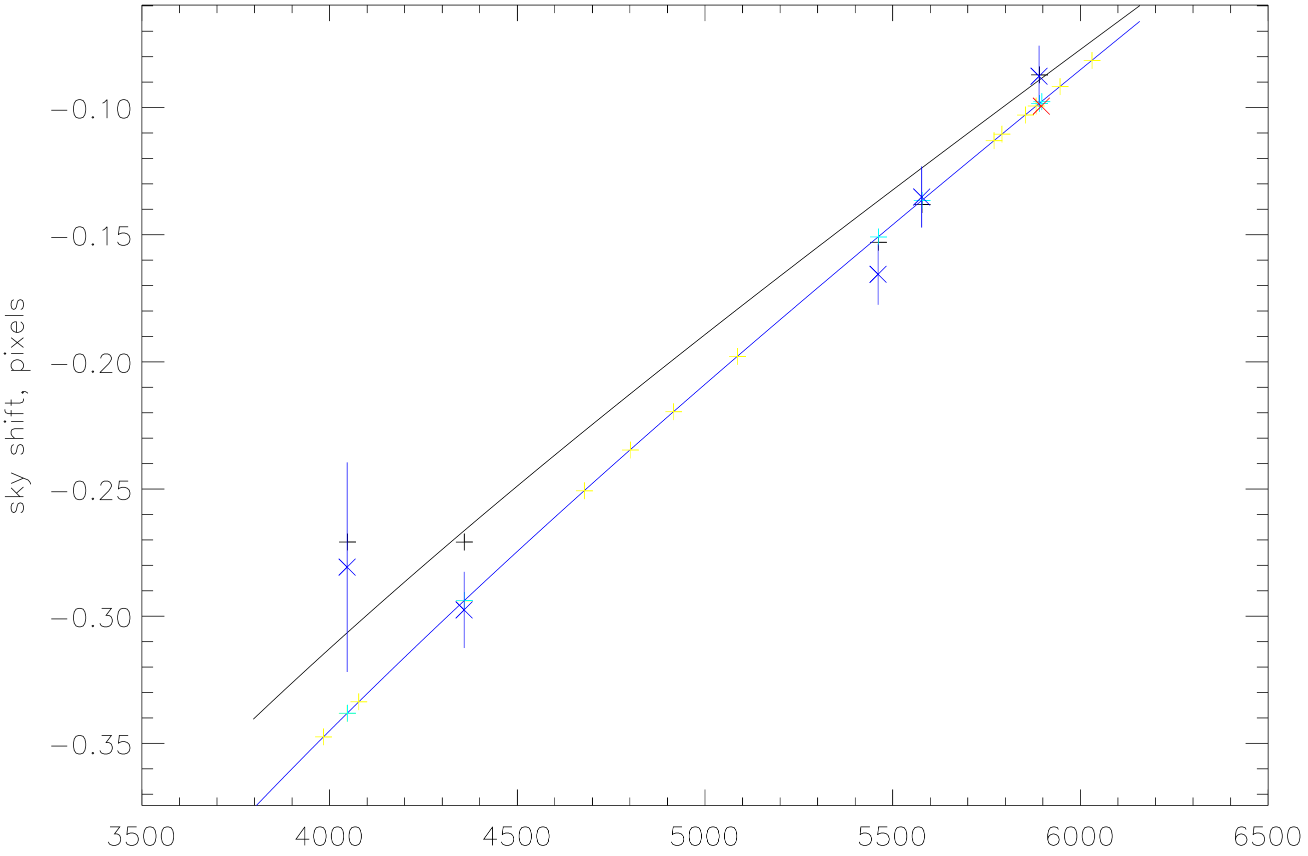

shift(pix)=−0.281
err(pix)= 0.041
oldshift(pix)=−0.376
0
50
100
150
200
250
300
4020
4030
4040
4050
4060
4070
4080

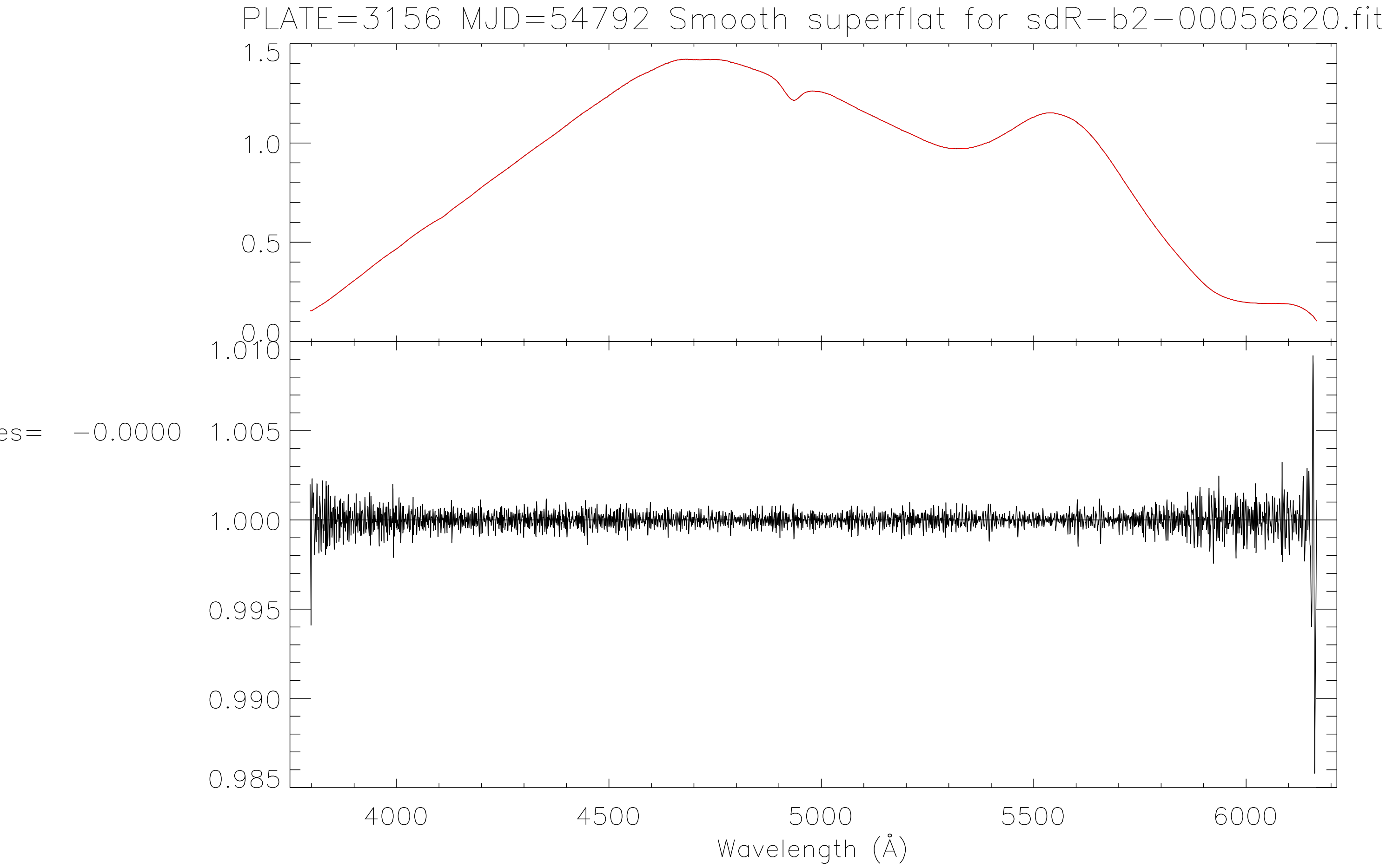

shift(pix)=−0.298
err(pix)= 0.015
oldshift(pix)=−0.300
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

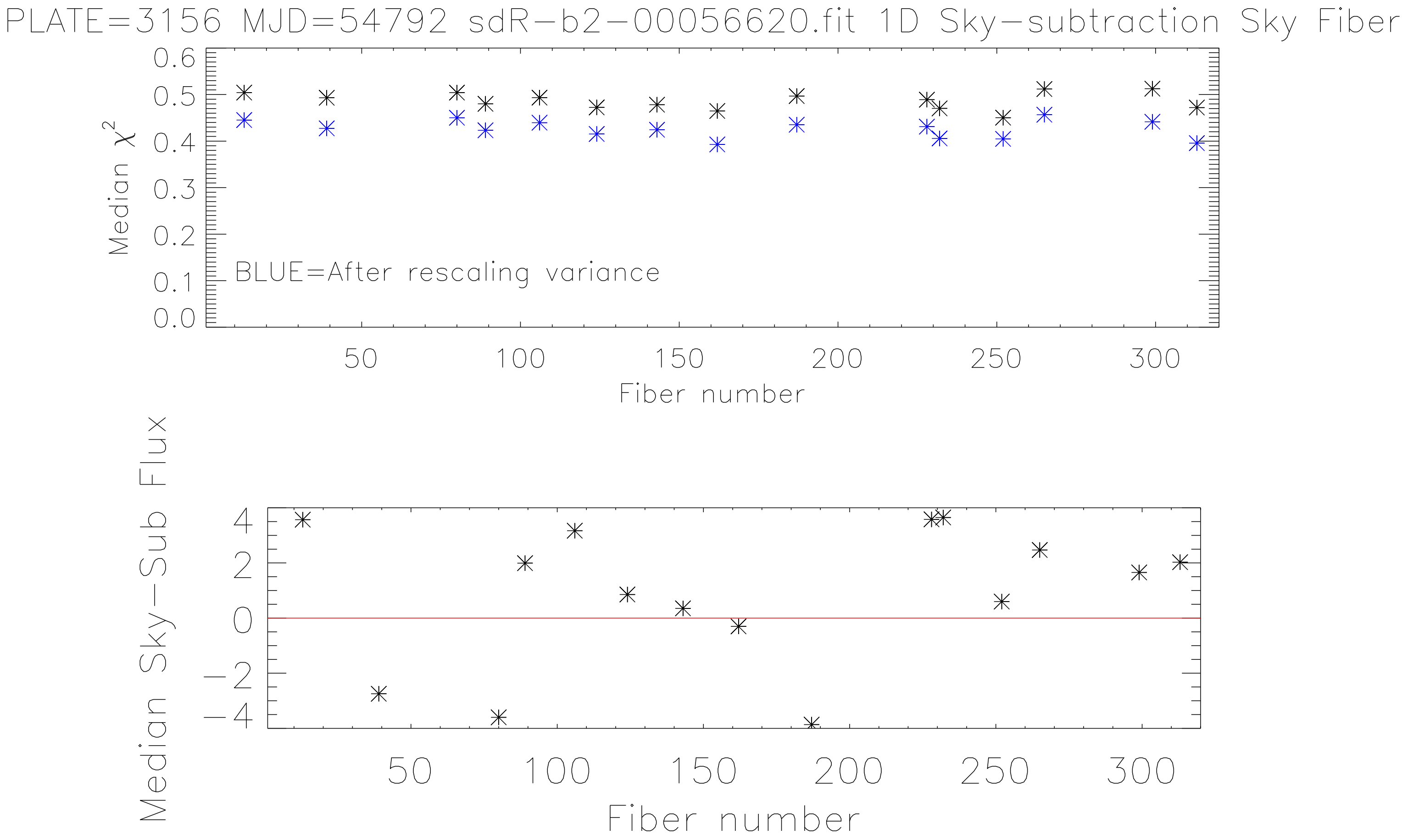

shift(pix)=−0.166
err(pix)= 0.012
oldshift(pix)=−0.150
0
50
100
150
200
250
300
5430
5440
5450
5460
5470
5480
5490

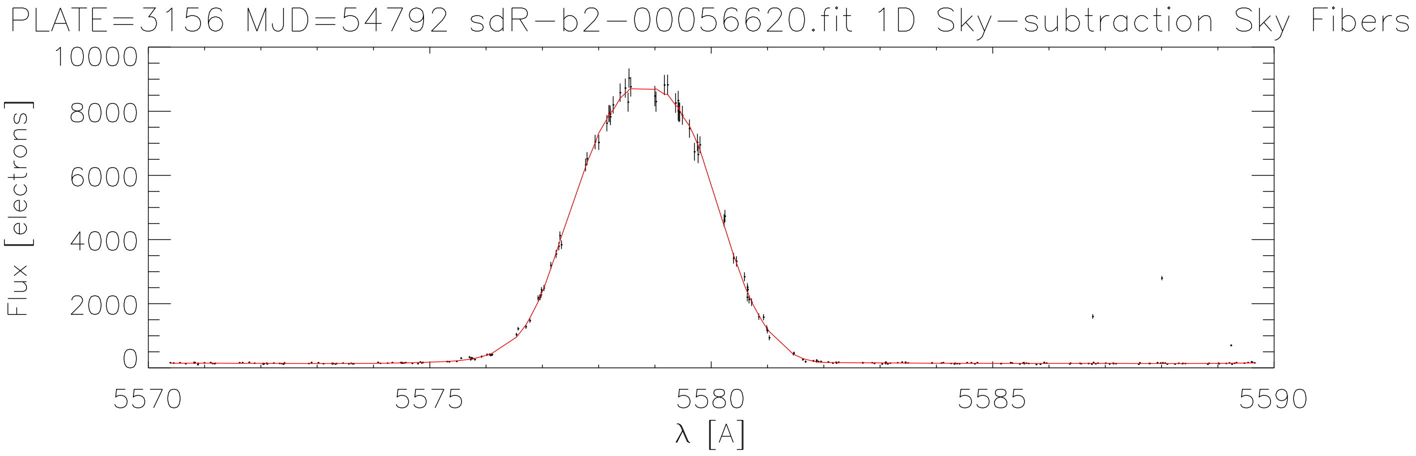

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0.2
0.1
0
100
200
300
400

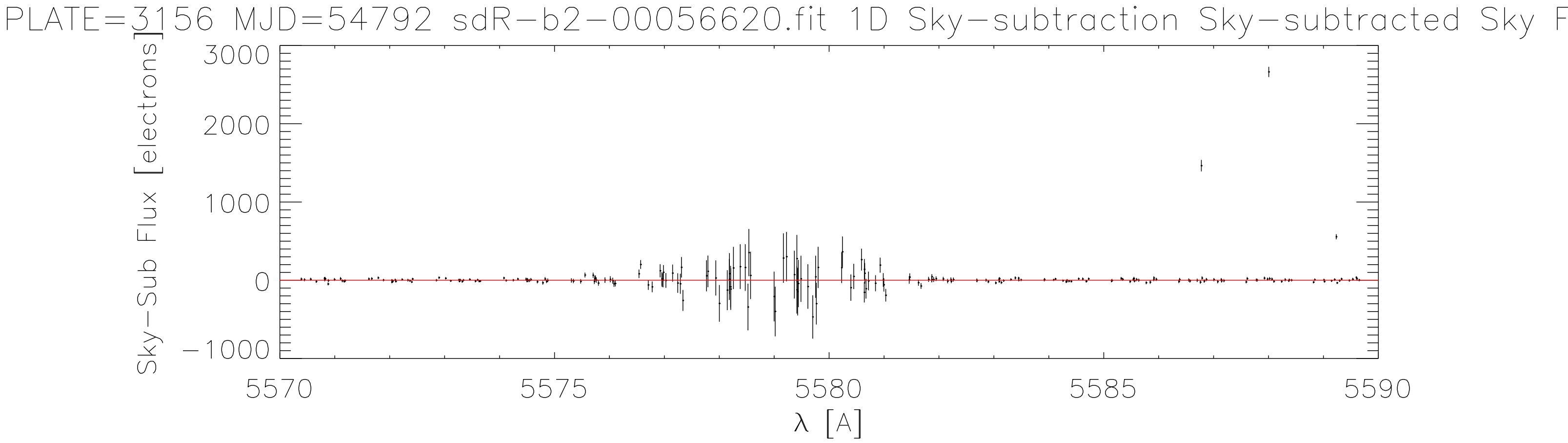

4046.5600
nfib1 16
nfib2 16
stdev 0.040
extra −0.28
4358.3300
nfib1 16
nfib2 16
stdev 0.052
extra −0.30
5460.9400
nfib1 15
nfib2 15
stdev 0.025
extra −0.17
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra −0.14
5889.9500
nfib1 16
nfib2 16
stdev 0.016
extra −0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.022
extra −0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
−0.10
−0.15
−0.20
−0.25
−0.30
−0.35
3500
4000
4500
5000
5500
6000
6500


PLATE=3156 MJD=54792 Smooth superflat for sdR-b2-00056620.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

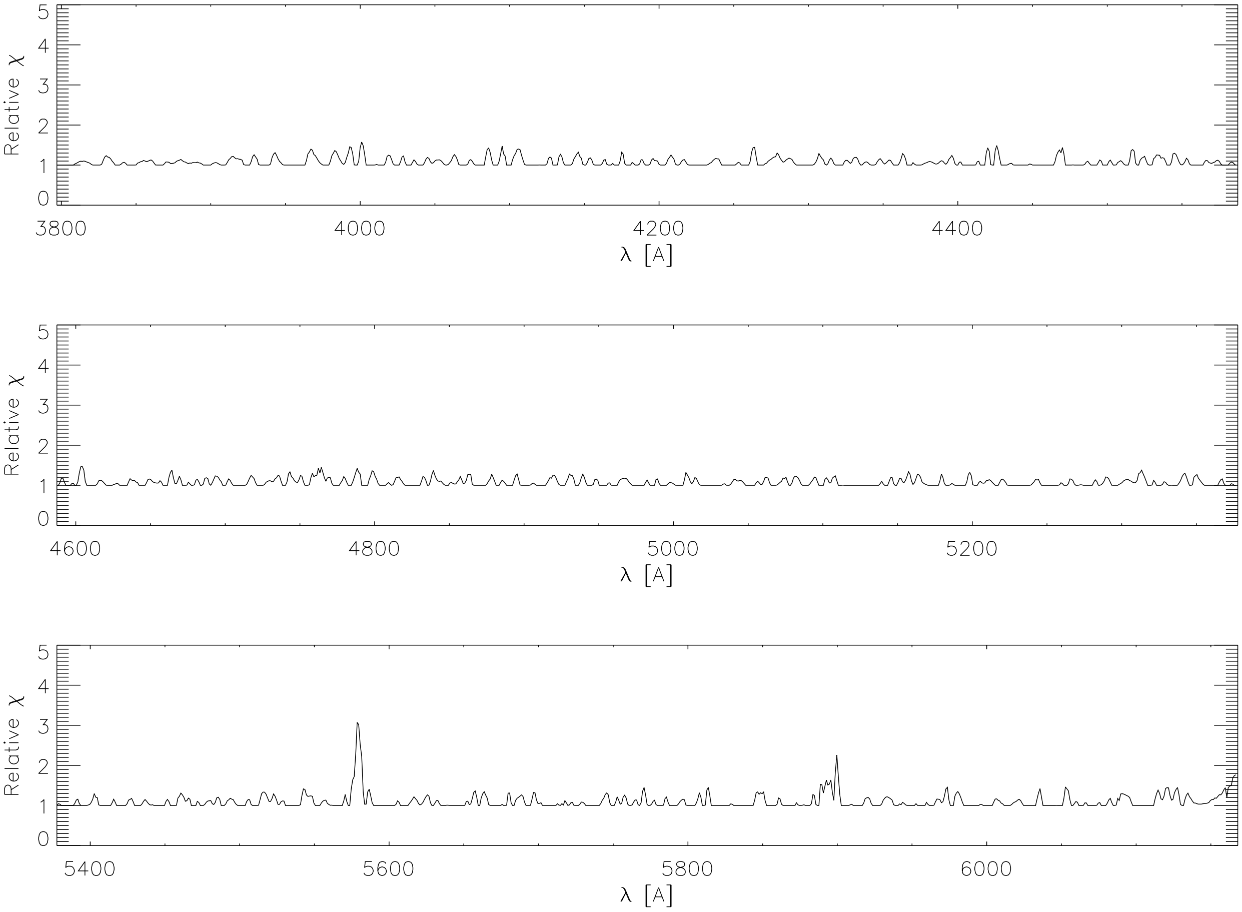

PLATE=3156 MJD=54792 sdR-b2-00056620.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

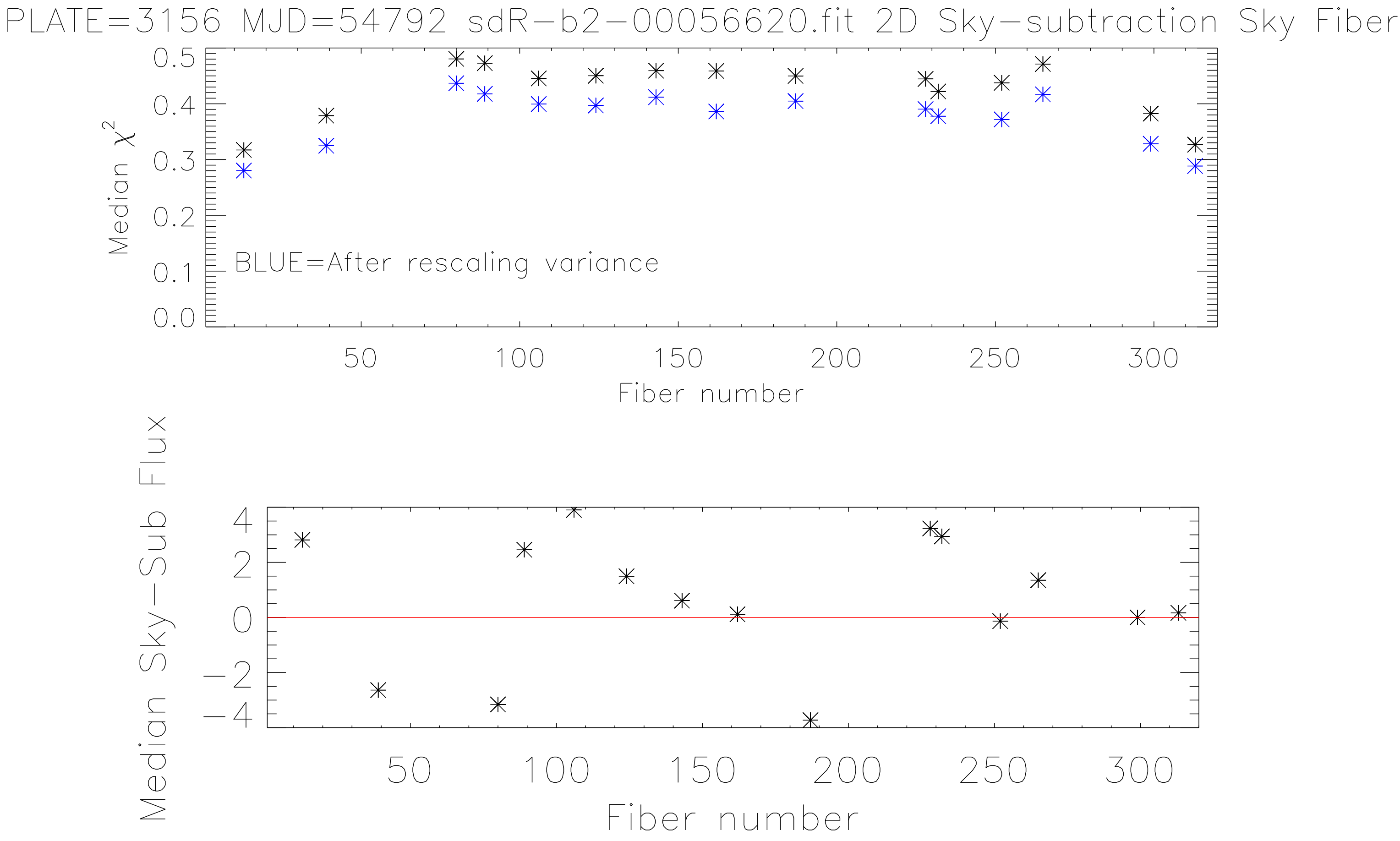

PLATE=3156 MJD=54792 sdR-b2-00056620.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

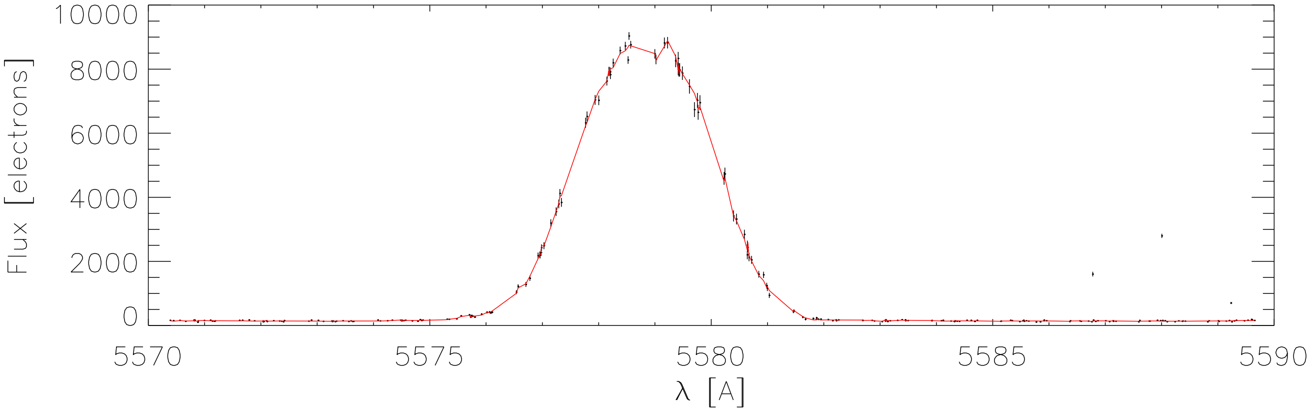

PLATE=3156 MJD=54792 sdR-b2-00056620.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 15

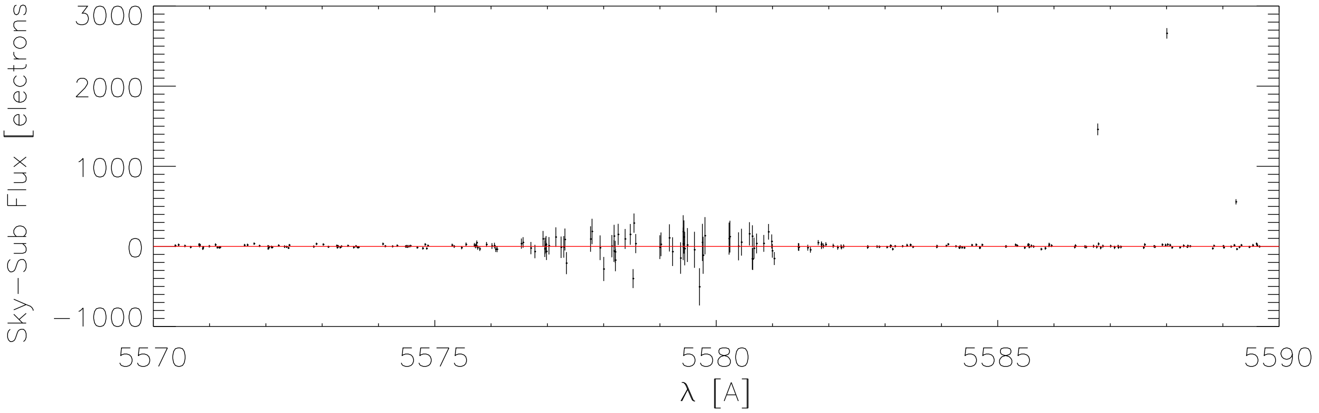
PLATE=3156 MJD=54792 sdR-b2-00056620.fit 1D Sky-subtraction Rescaled Errors




PLATE=3156 MJD=54792 sdR-b2-00056620.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number



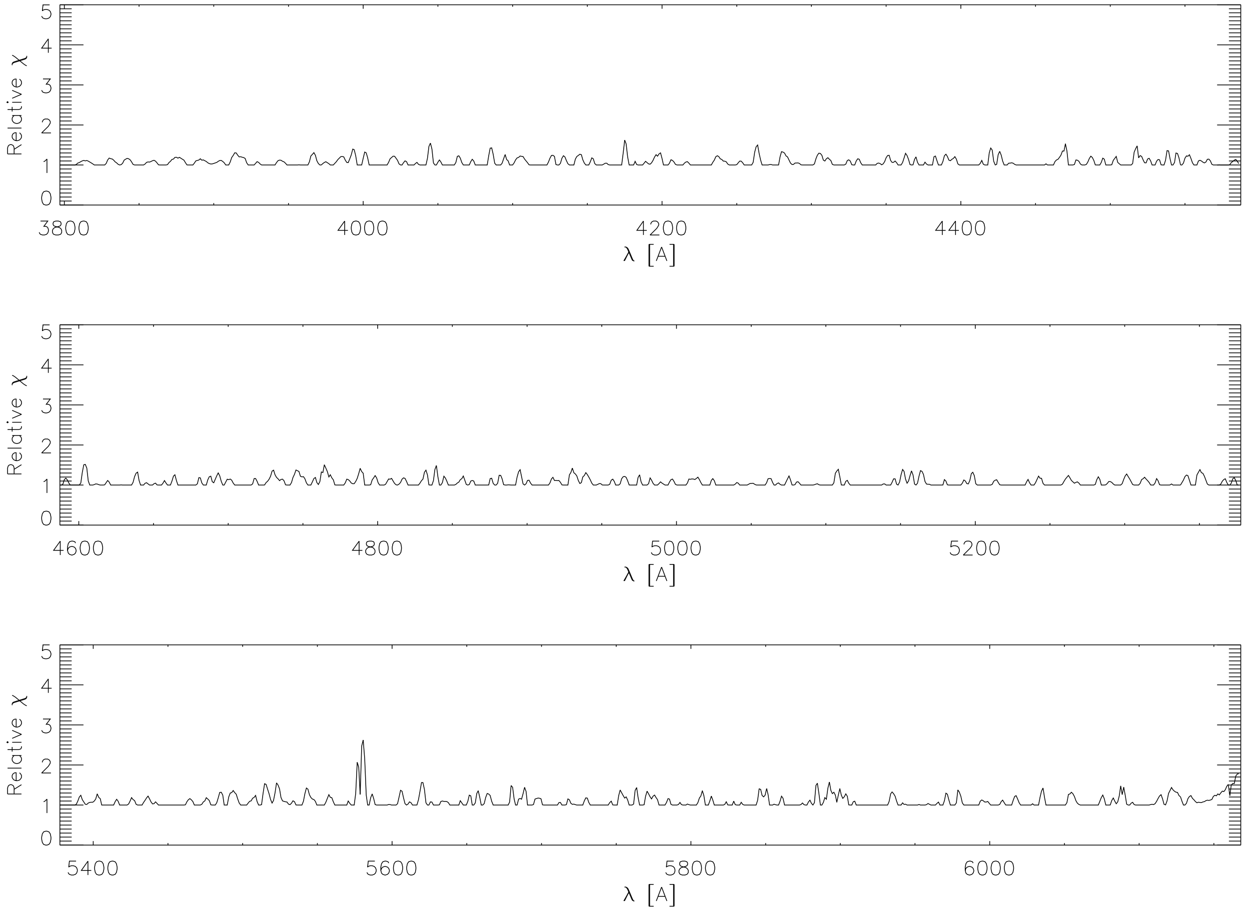
PLATE=3156 MJD=54792 sdR-b2-00056620.fit 2D Sky-subtraction Sky Fibers

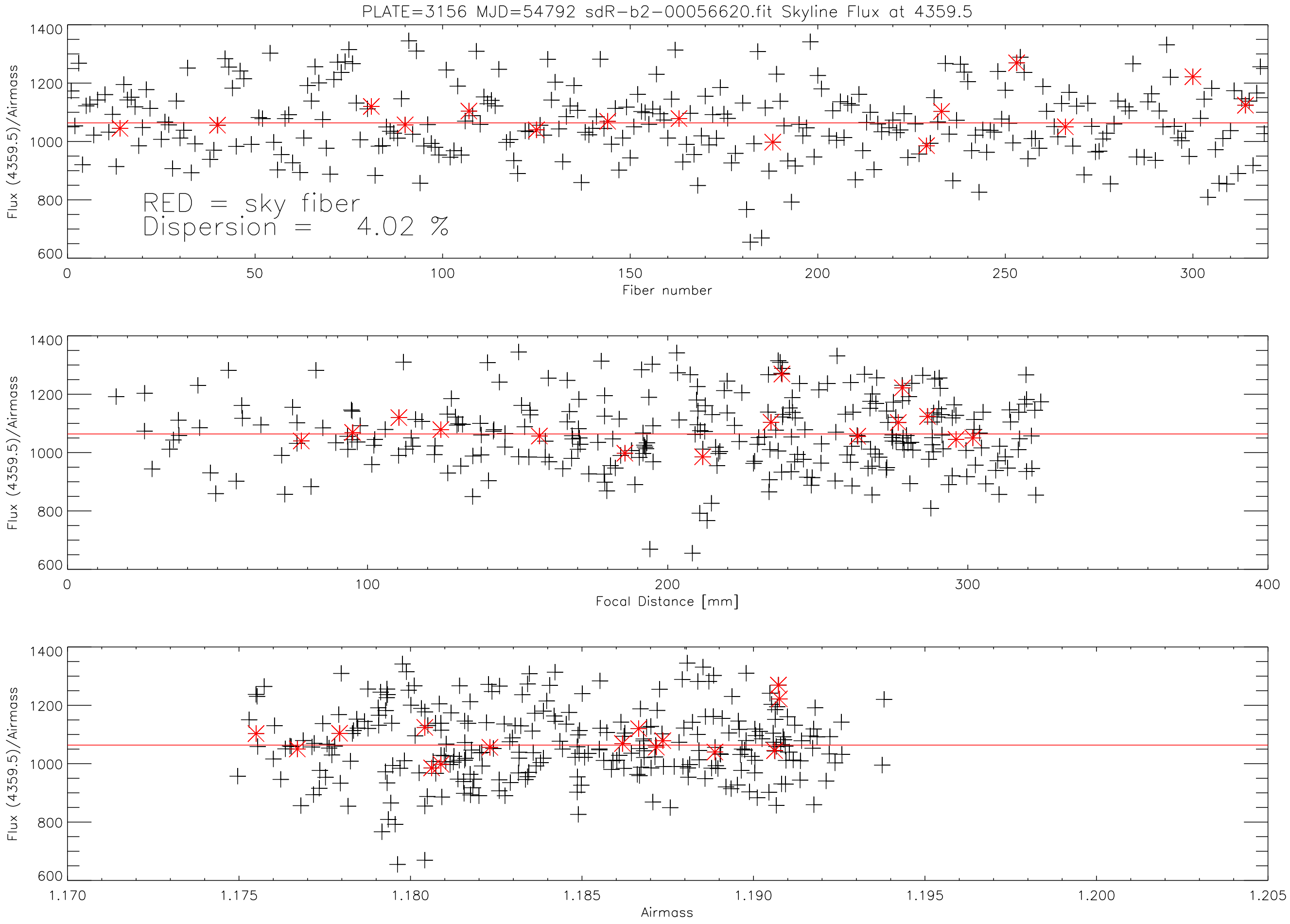


PLATE=3156 MJD=54792 sdR-b2-00056620.fit 2D Sky-subtraction Sky-subtracted Sky F

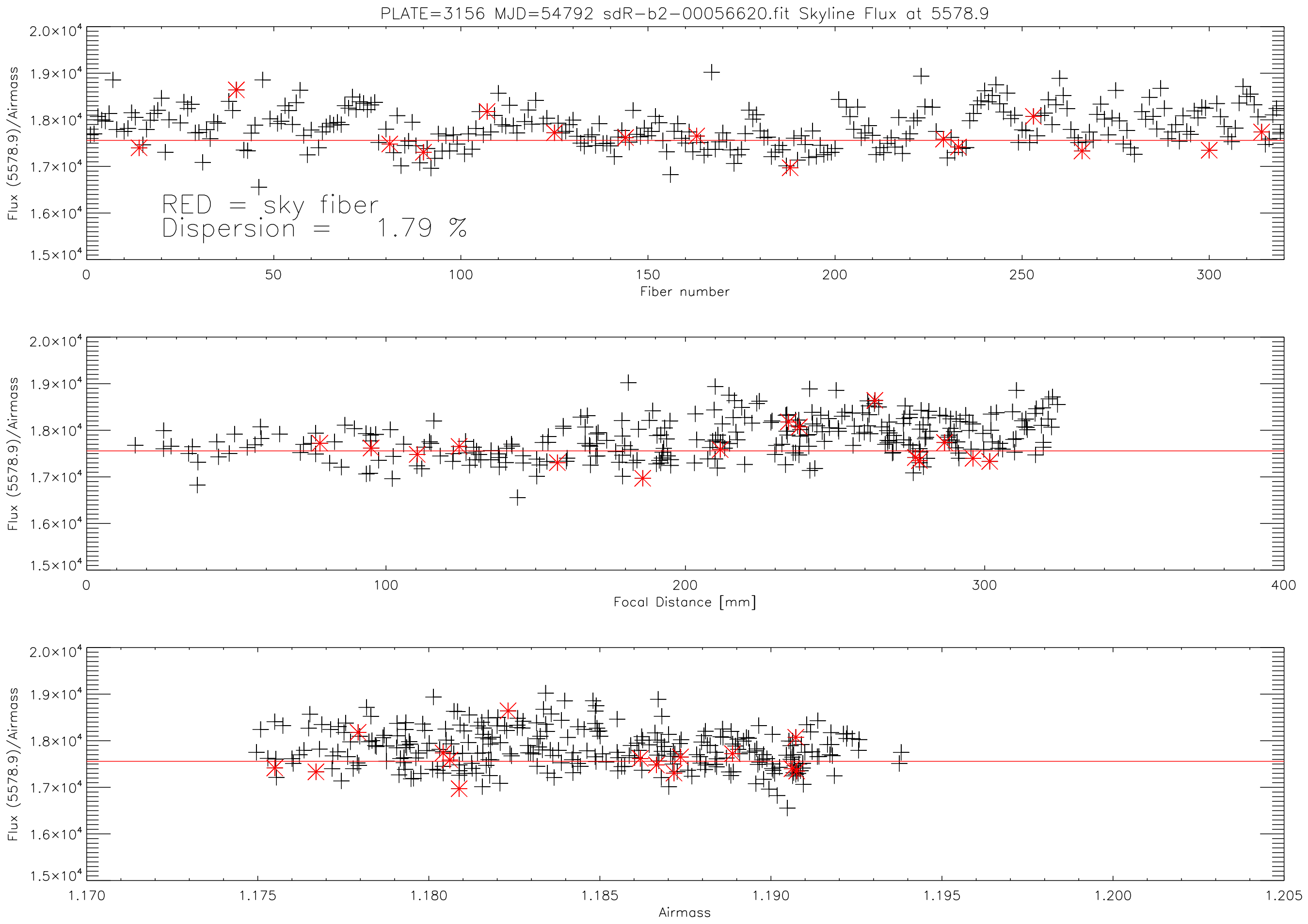
Number of sky fibers = 15

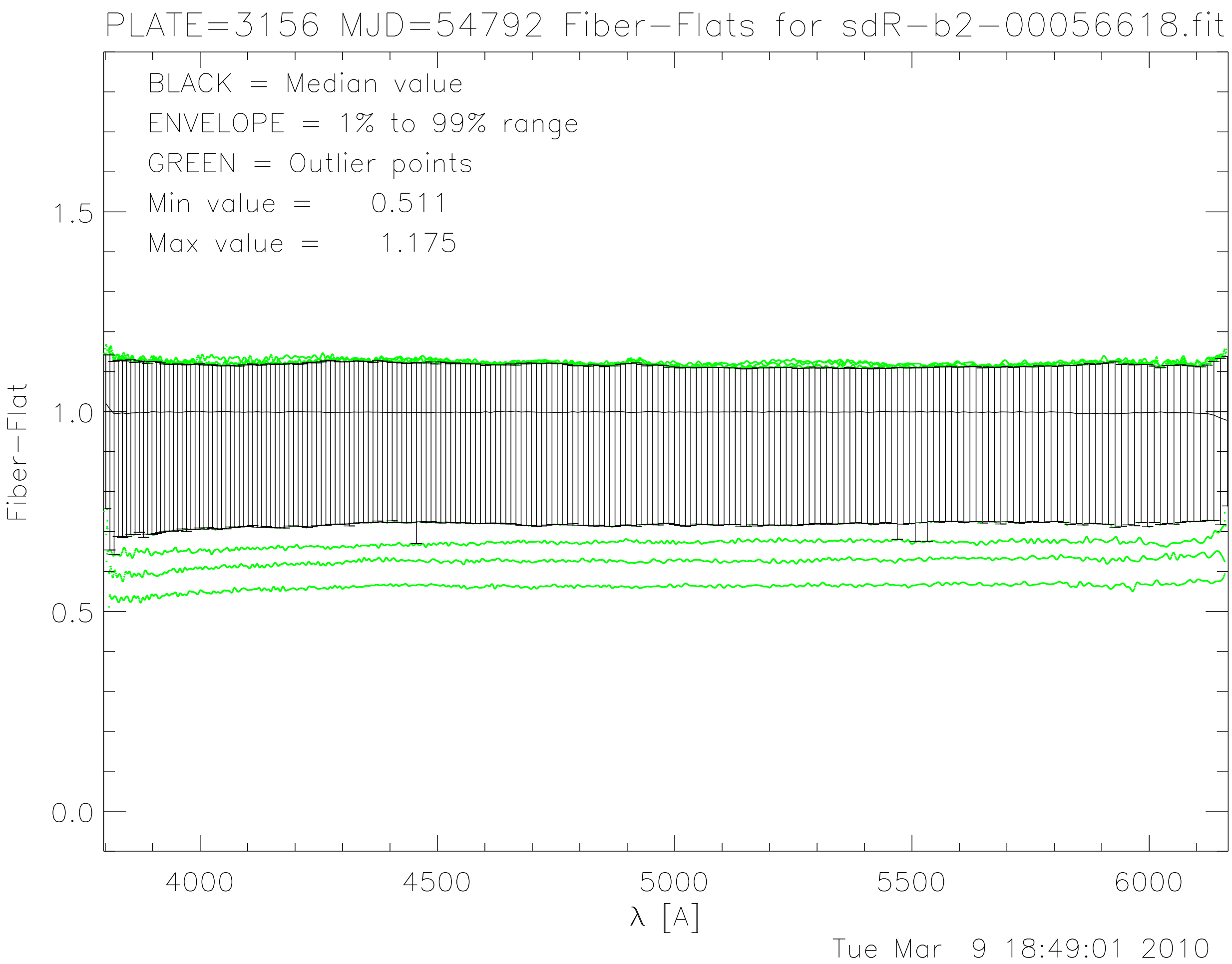
PLATE=3156 MJD=54792 sdR-b2-00056620.fit 2D Sky-subtraction Rescaled Errors

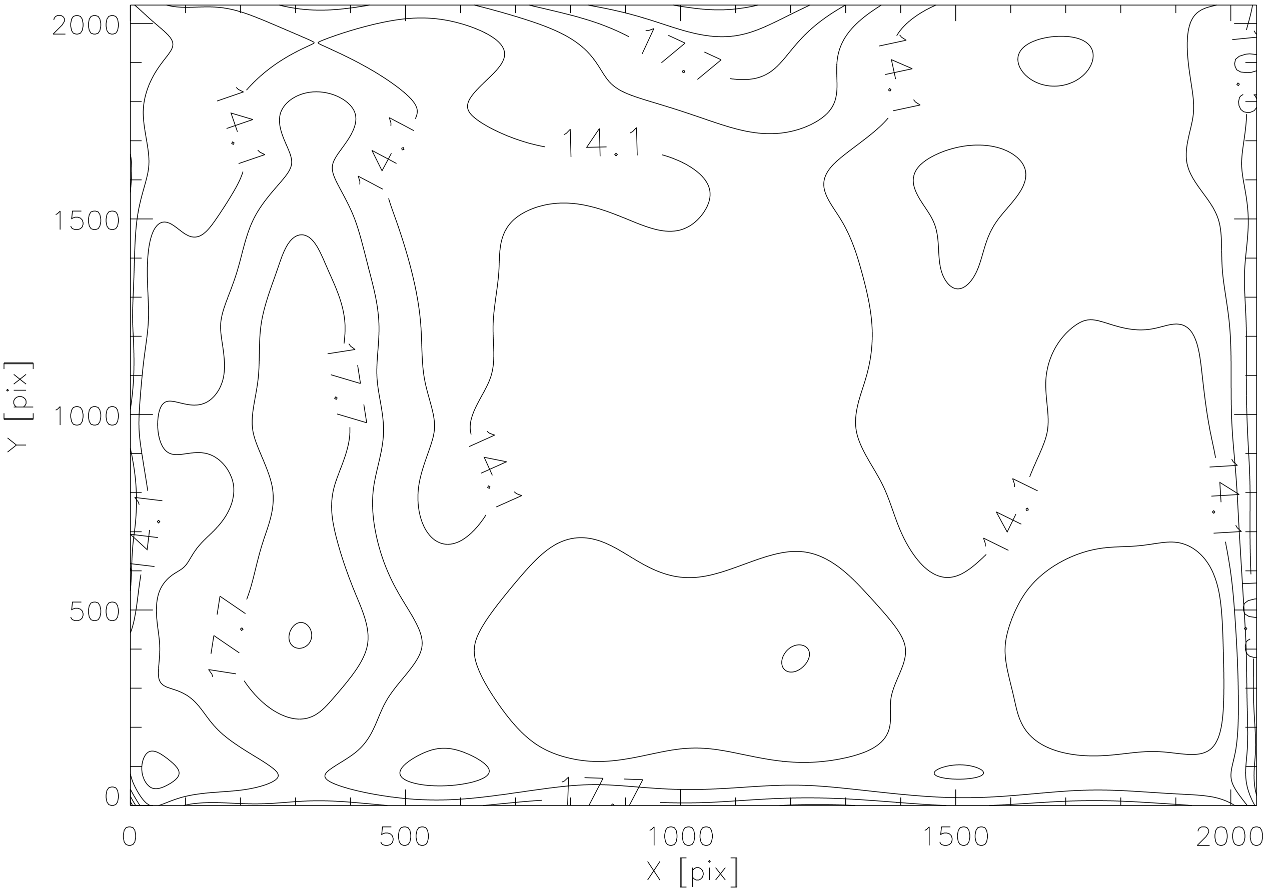




PLATE=3156 MJD=54792 sdR-b2-00056620.fit Skyline Flux at 4359.5

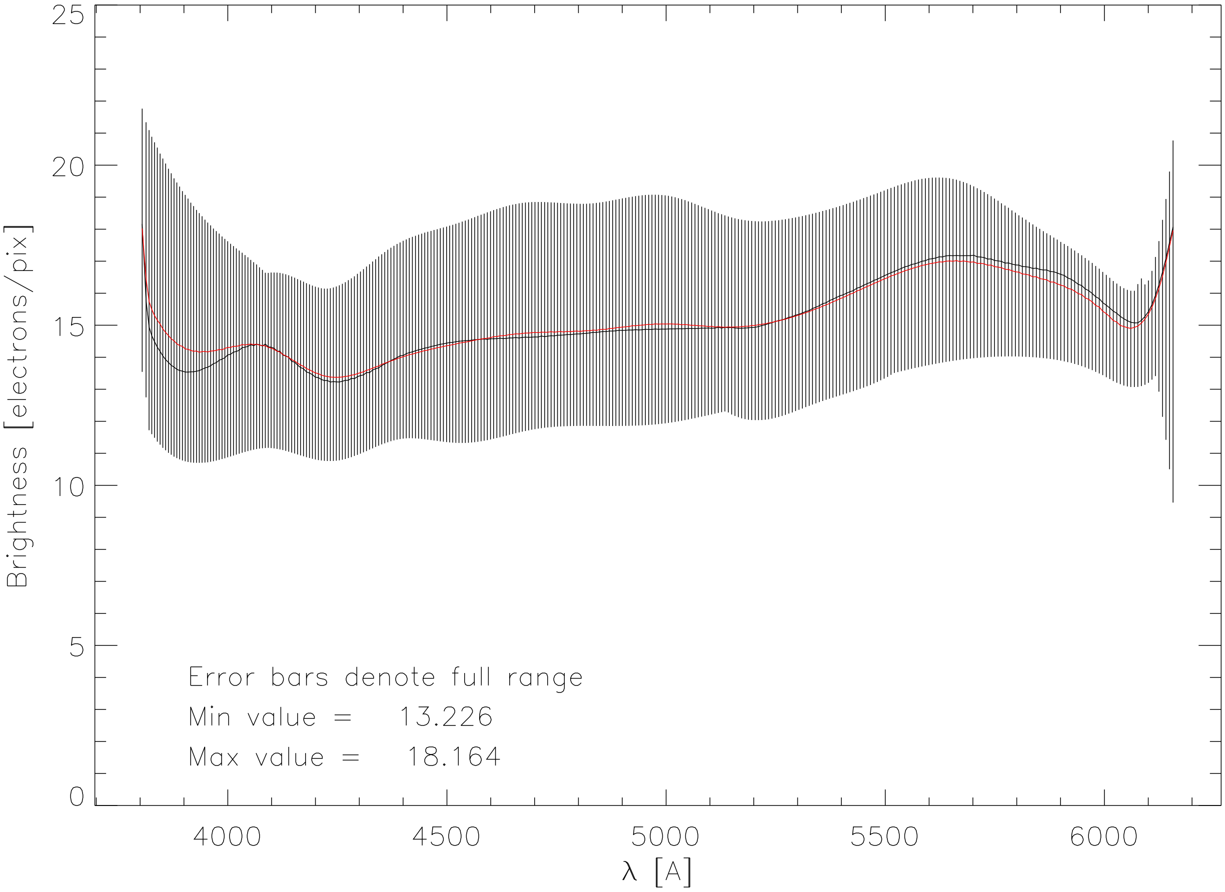

PLATE=3156 MJD=54792 sdR-b2-00056620.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.79 %
Flux (5578.9)/Airmass
2.0×10⁴
1.9×10⁴
1.8×10⁴
1.7×10⁴
1.6×10⁴
1.5×10⁴
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.170
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass


PLATE=3156 MJD=54792 Fiber−Flats for sdR−b2−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.511
Max value = 1.175
Fiber−Flat
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]
Tue Mar 9 18:49:01 2010

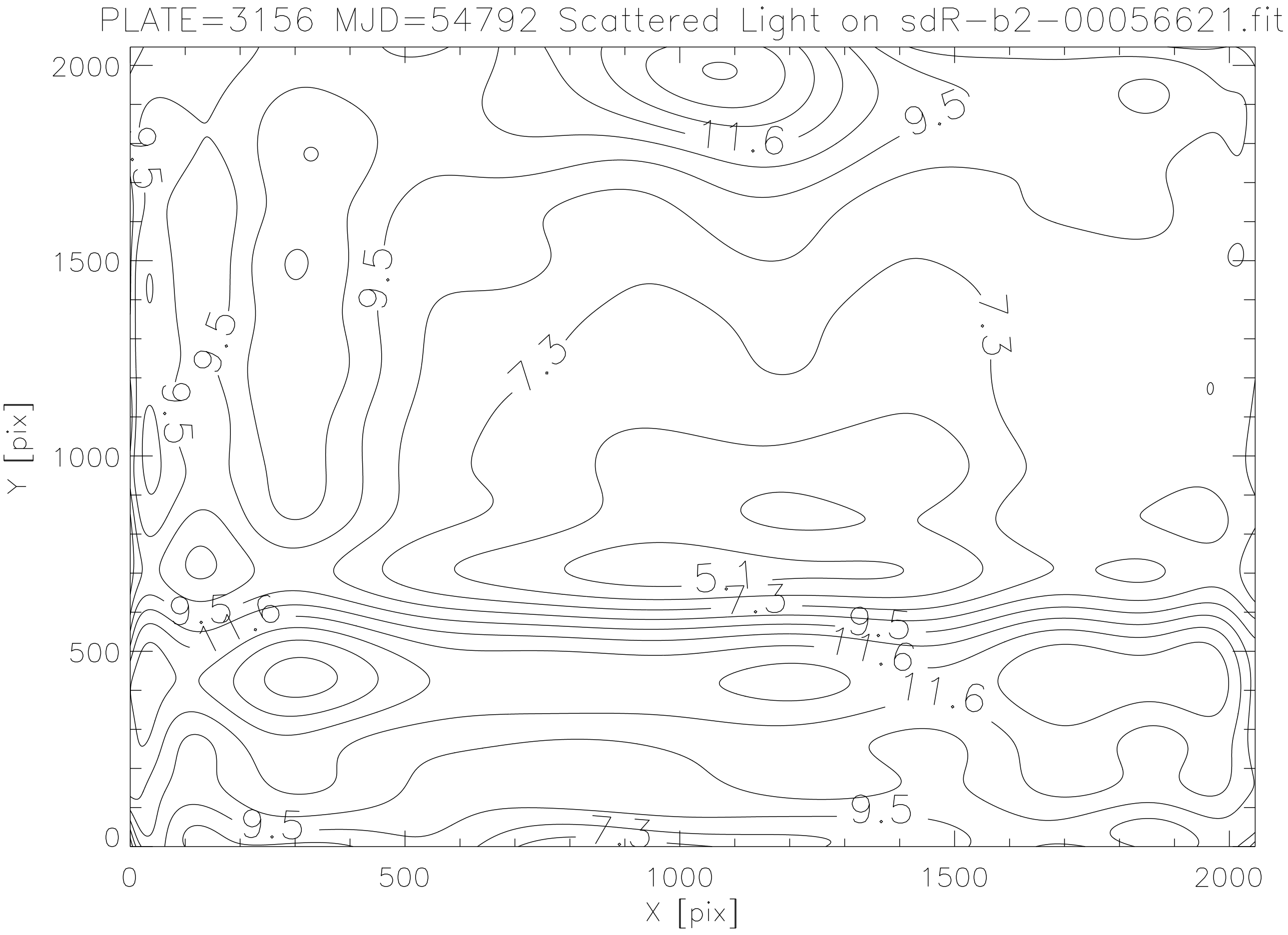


PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056621.f

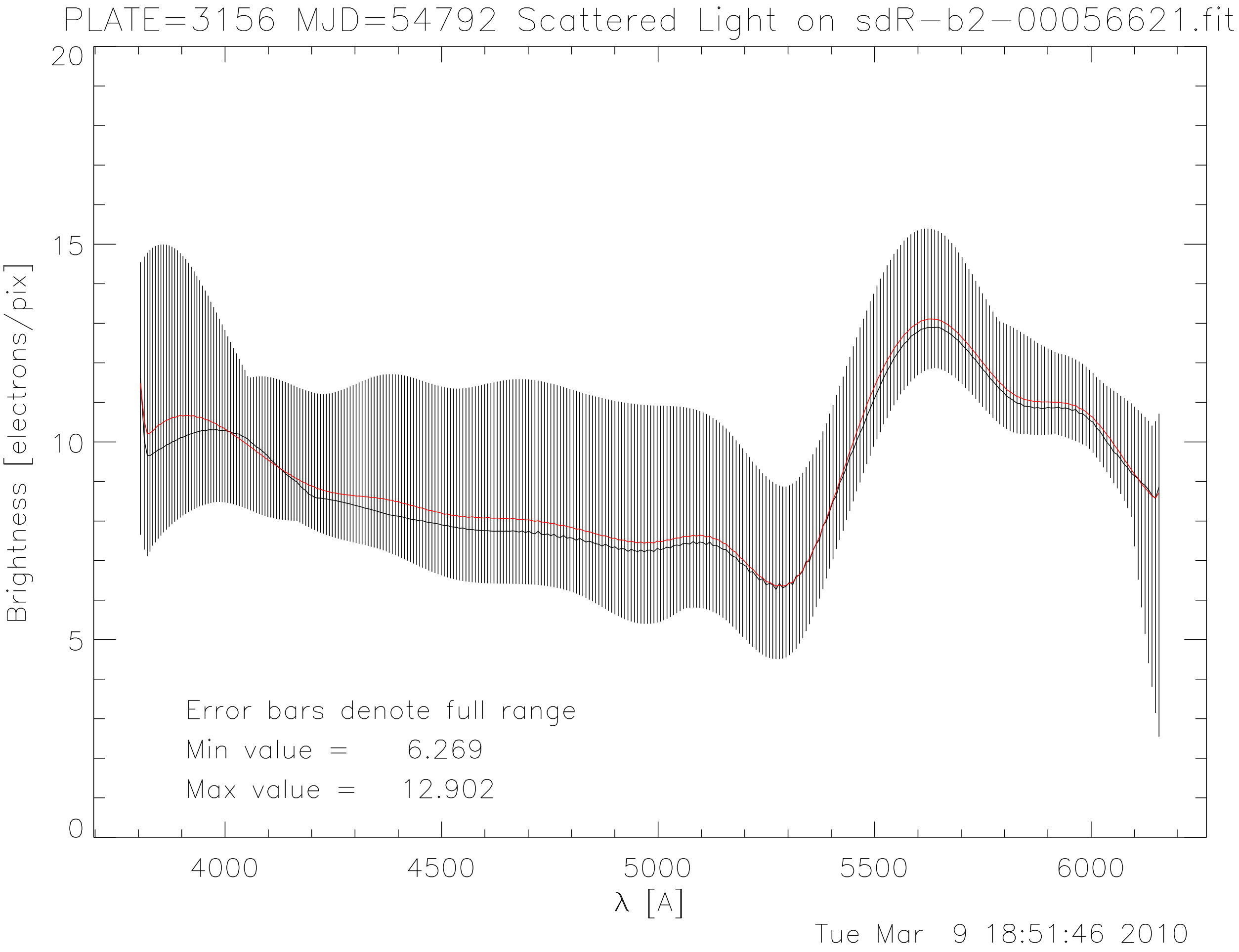
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056621.f

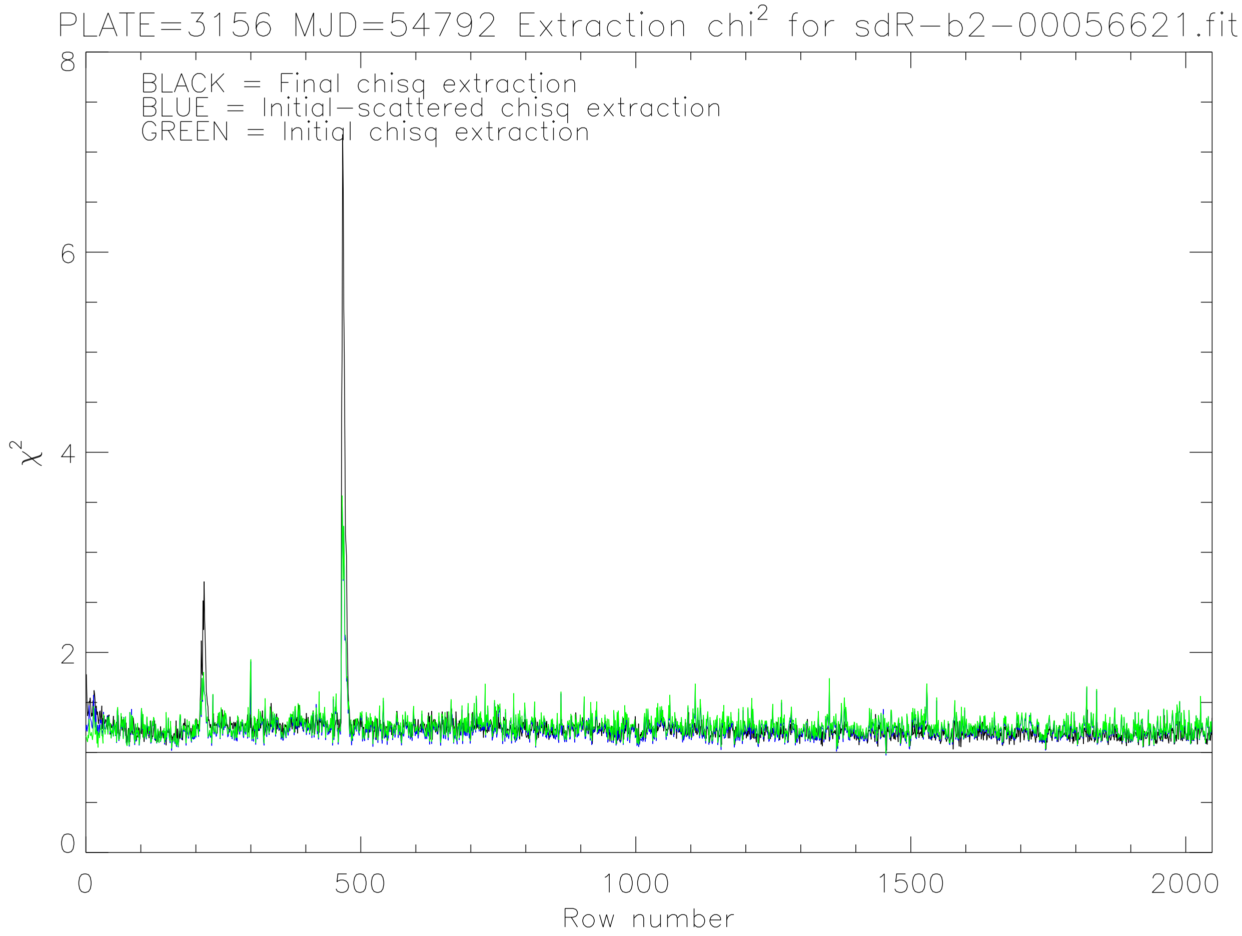


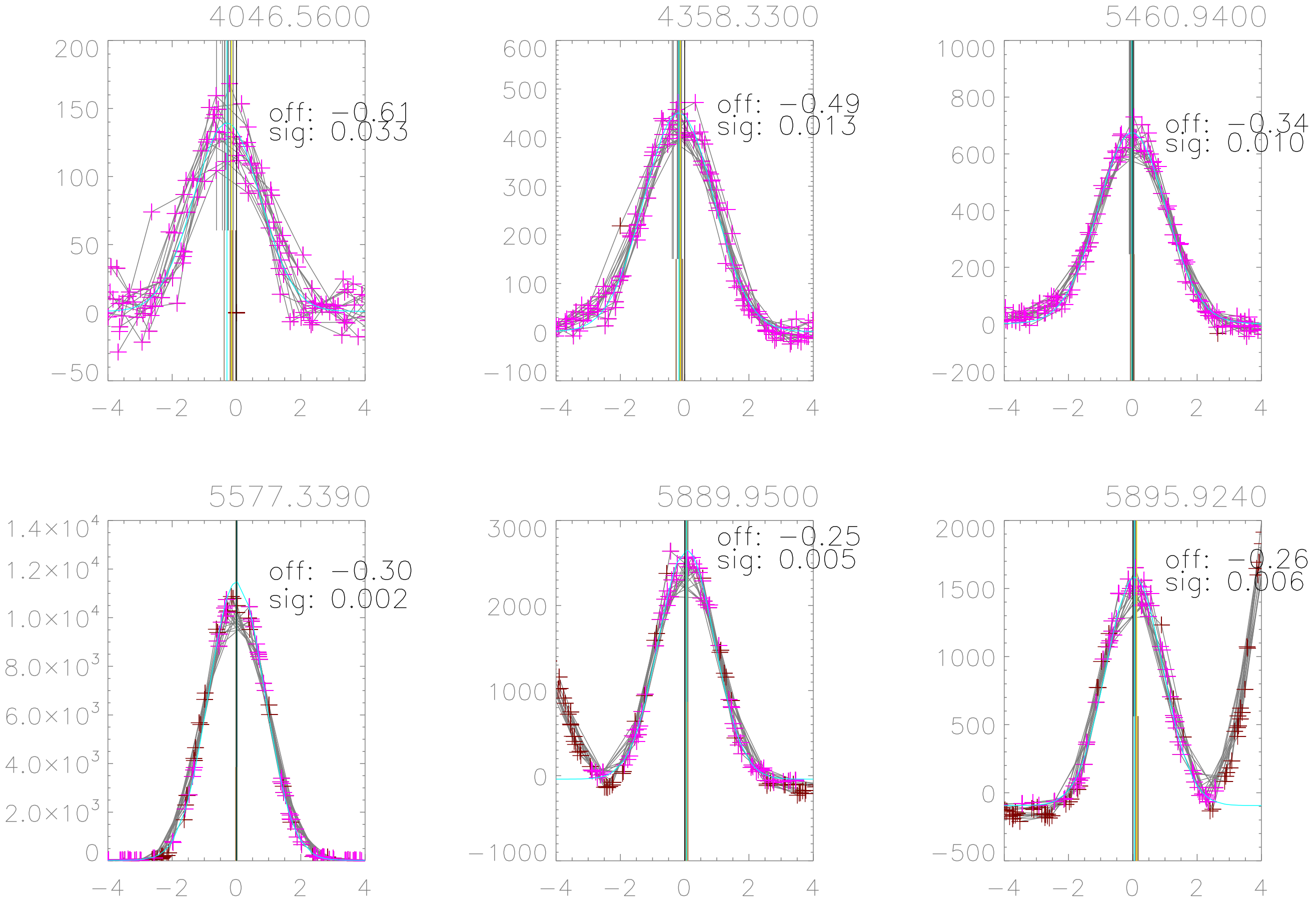
Tue Mar 9 18:49:36 2010

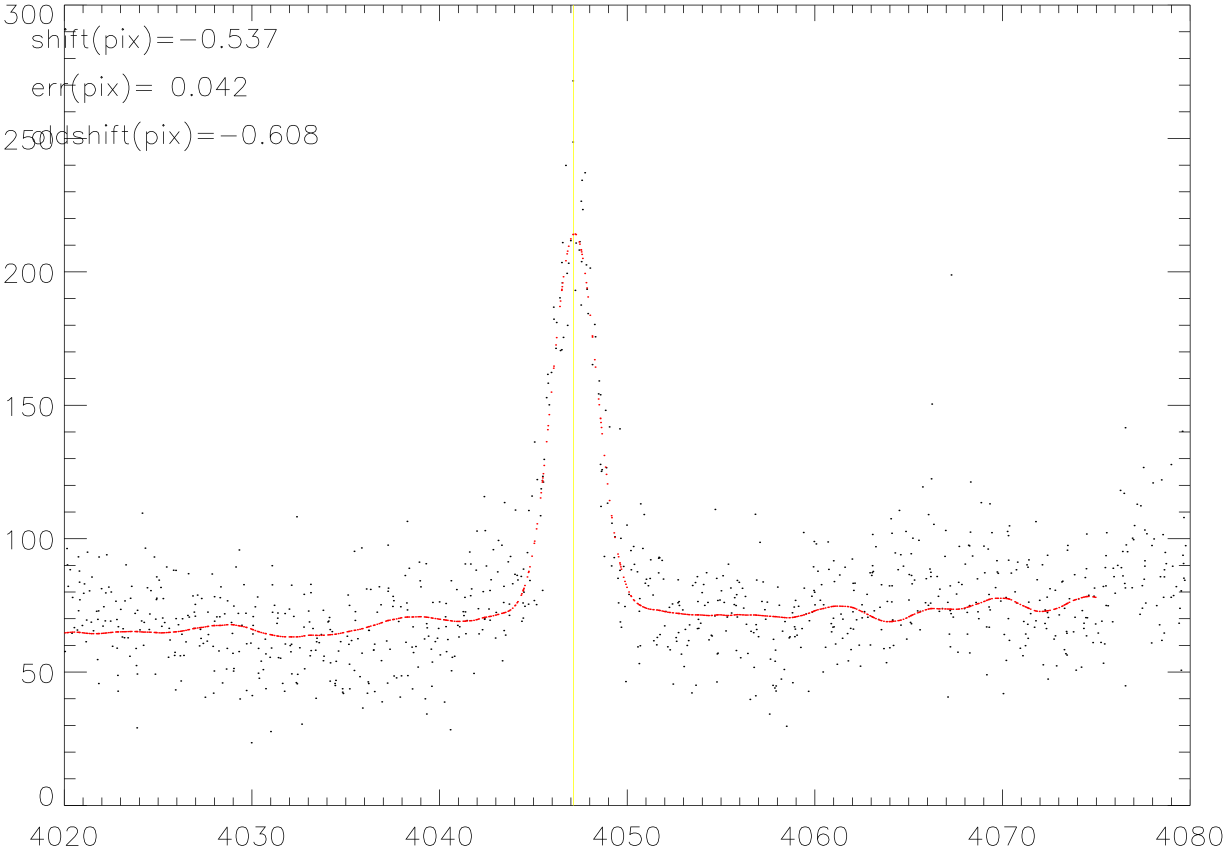


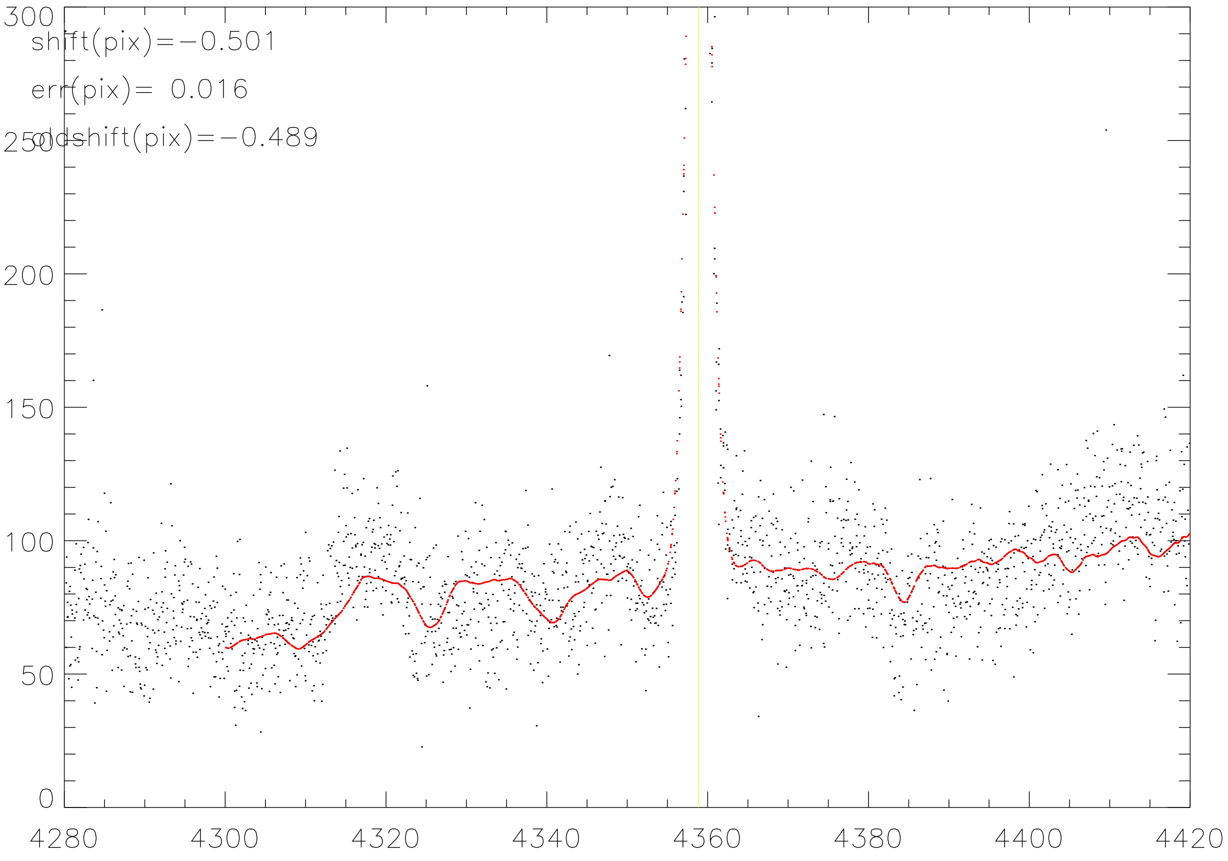
PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056621.fit

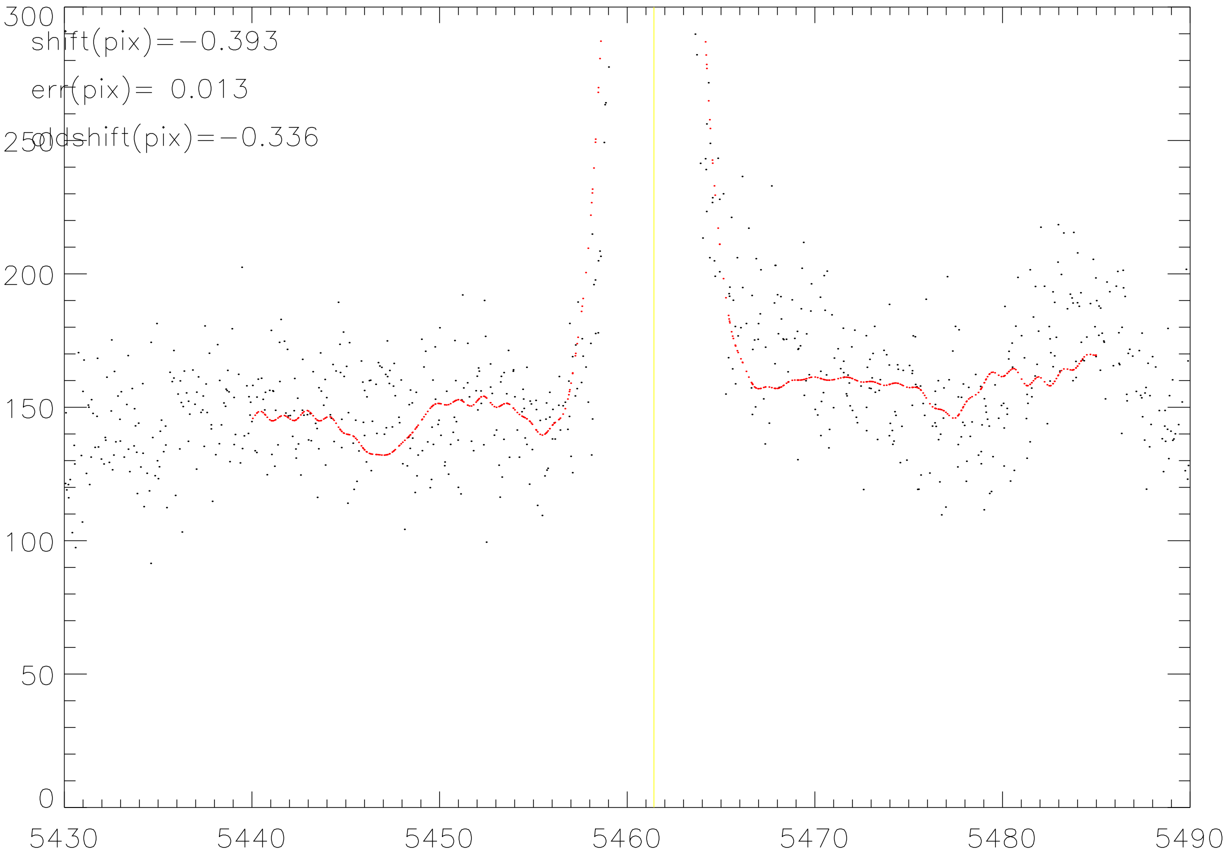

PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056621.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.269
Max value = 12.902
Tue Mar 9 18:51:46 2010

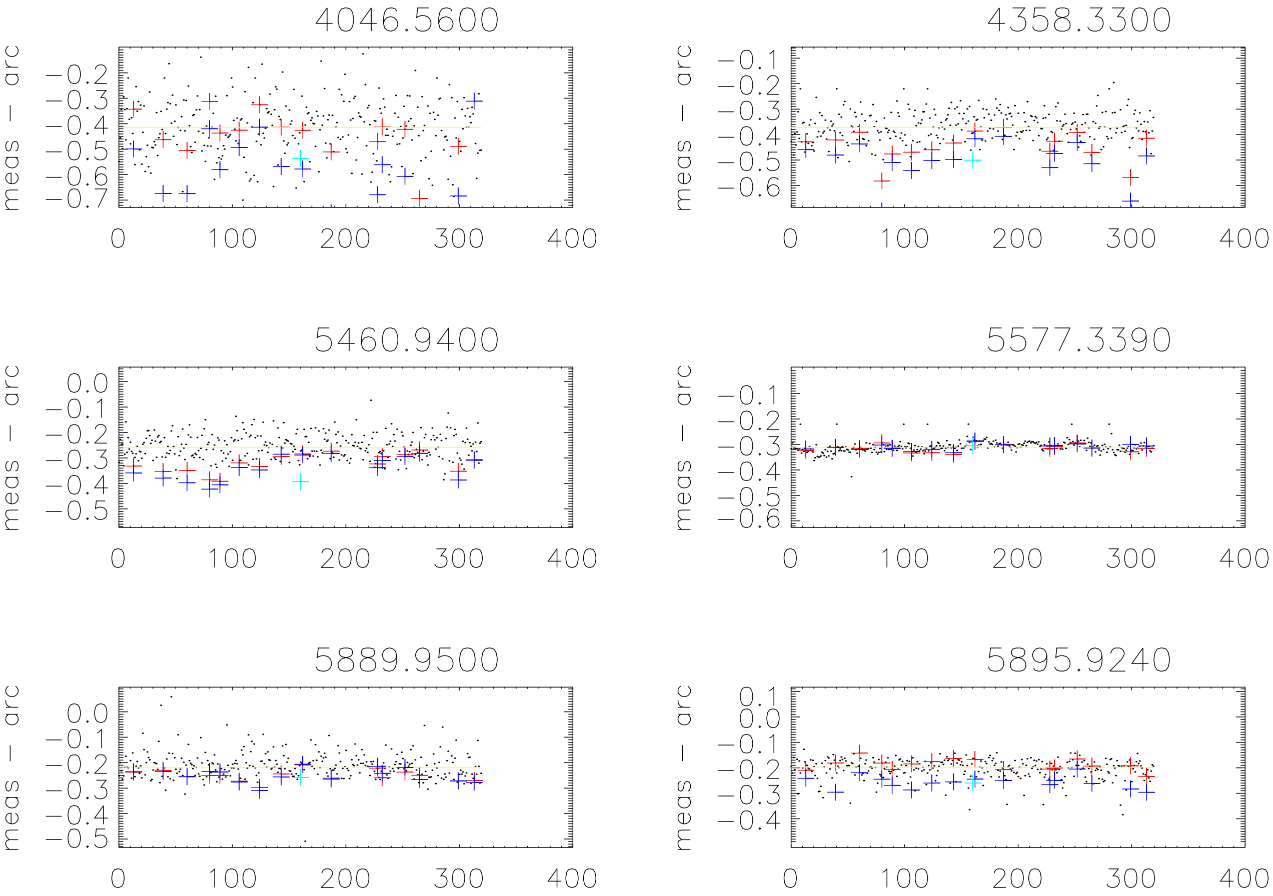

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b2-00056621.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
0
500
1000
1500
2000

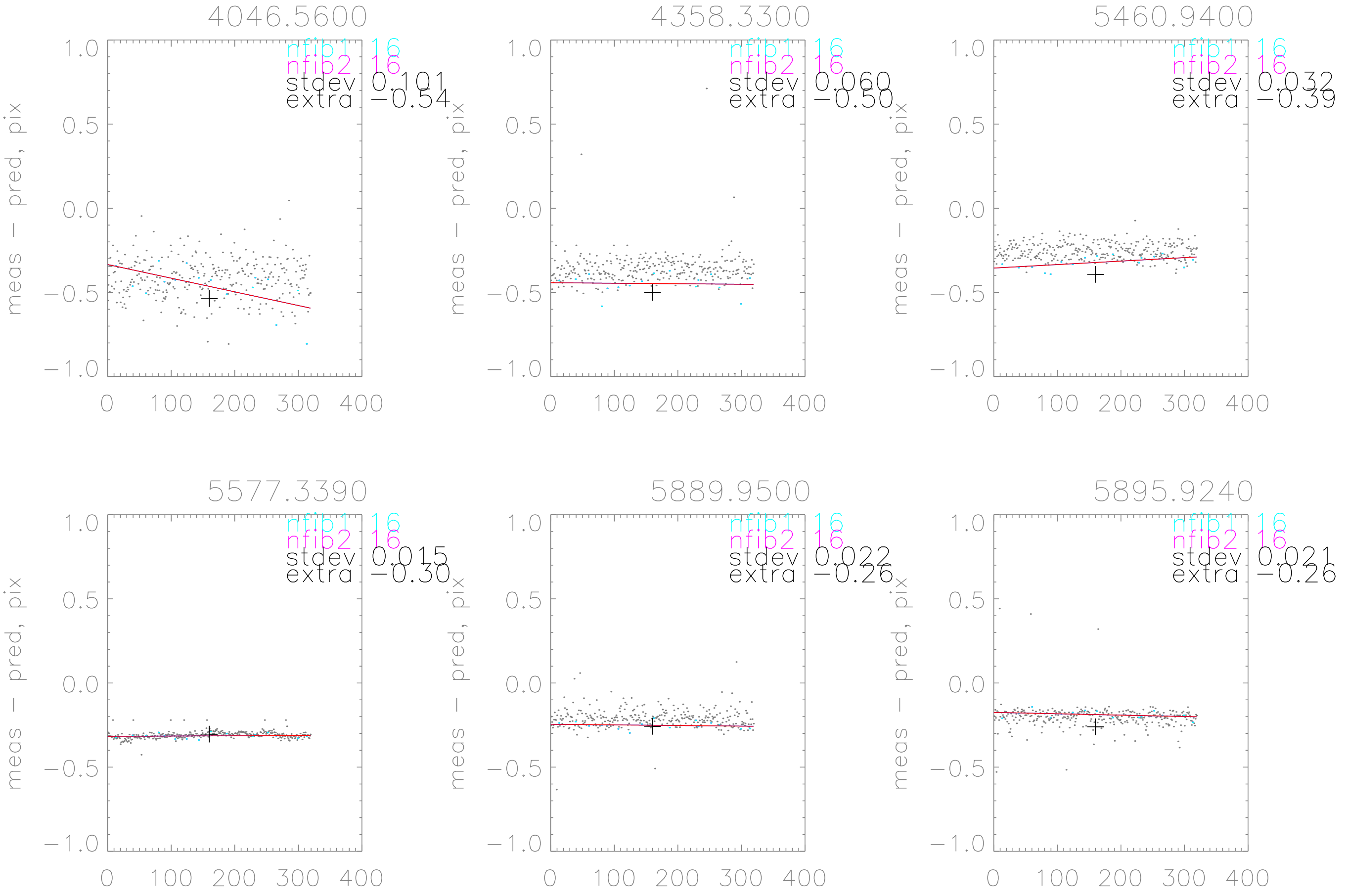

4046.5600
off: −0.61
sig: 0.033
−50
0
50
100
150
200
4358.3300
off: −0.49
sig: 0.013
−100
0
100
200
300
400
500
600
5460.9400
off: −0.34
sig: 0.010
−200
0
200
400
600
800
1000
5577.3390
off: −0.30
sig: 0.002
0
2.0×10^3
4.0×10^3
6.0×10^3
8.0×10^3
1.0×10^4
1.2×10^4
1.4×10^4
5889.9500
off: −0.25
sig: 0.005
−1000
0
1000
2000
3000
5895.9240
off: −0.26
sig: 0.006
−500
0
500
1000
1500
2000
−4
−2
0
2
4

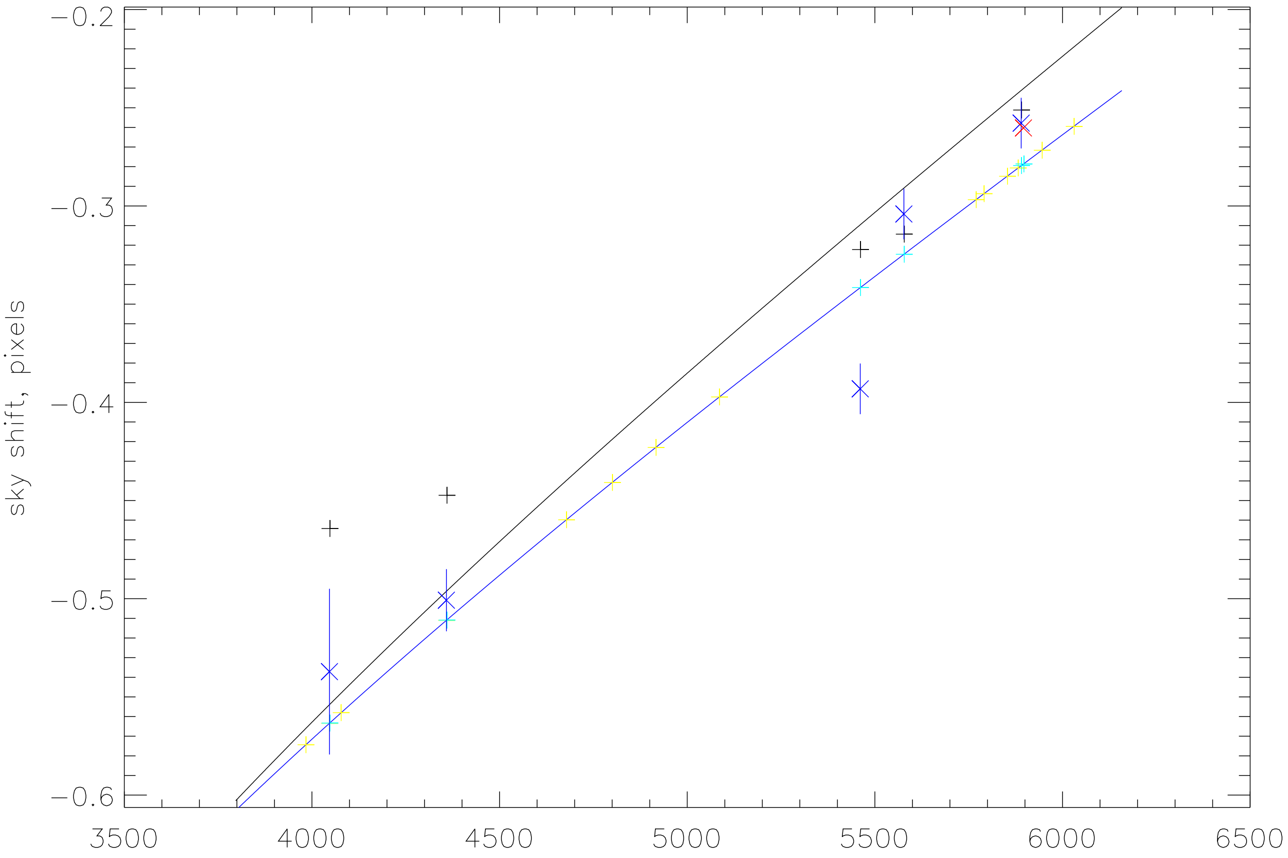

shift(pix)=−0.537
err(pix)= 0.042
oldshift(pix)=−0.608
0
50
100
150
200
250
300
4020
4030
4040
4050
4060
4070
4080

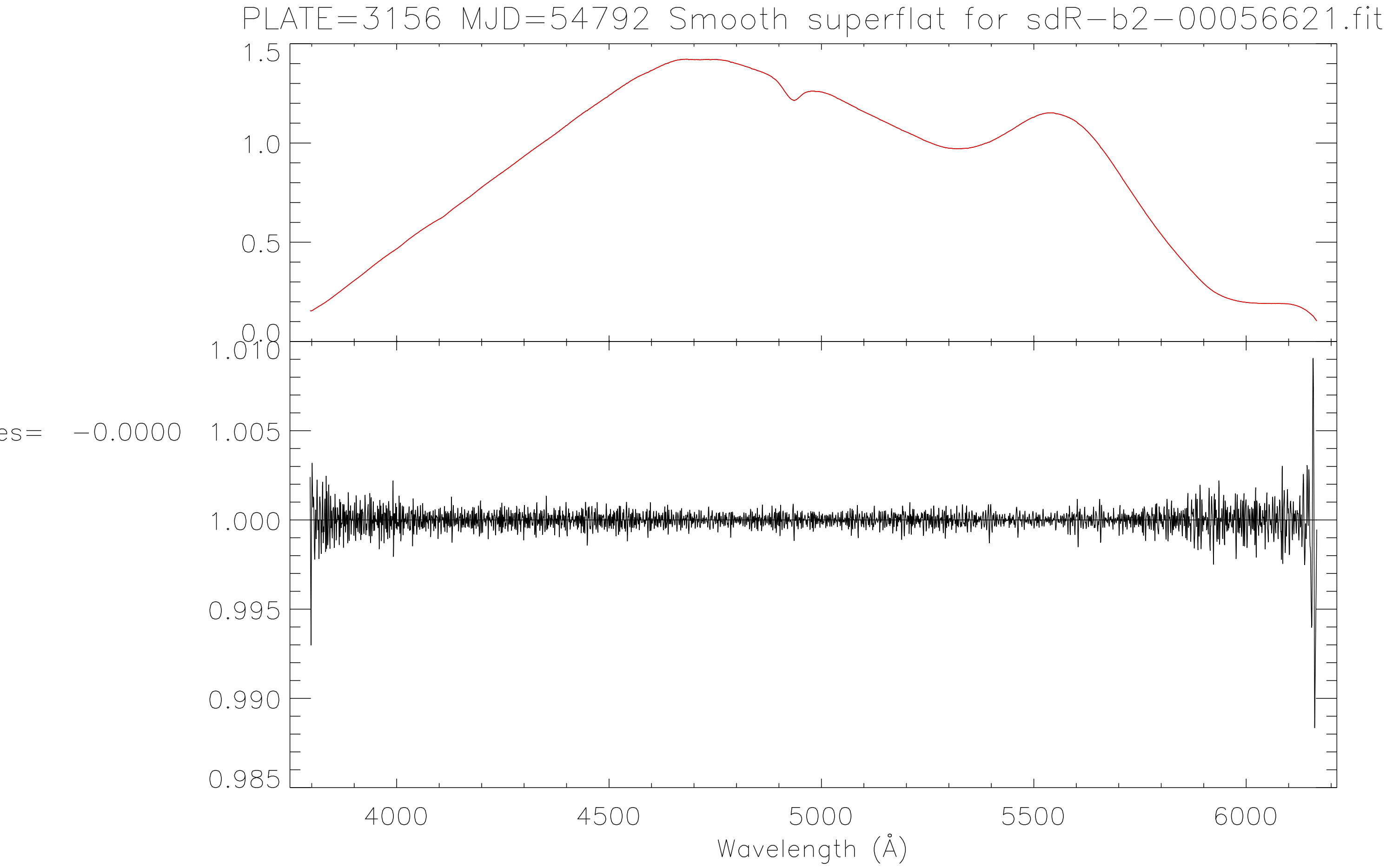

shift(pix)=-0.501
err(pix)= 0.016
oldshift(pix)=-0.489
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

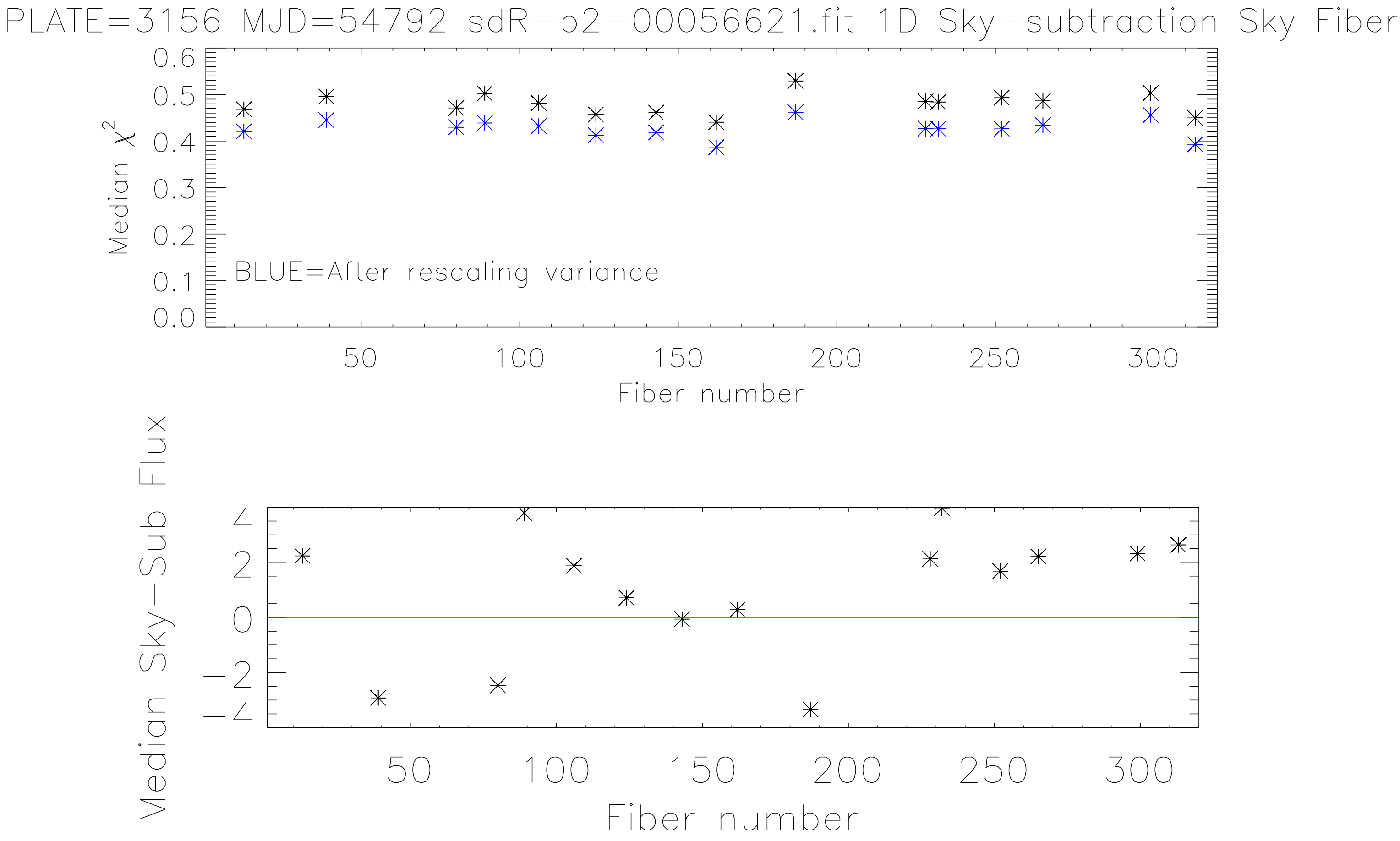

shift(pix)=−0.393
err(pix)= 0.013
oldshift(pix)=−0.336
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

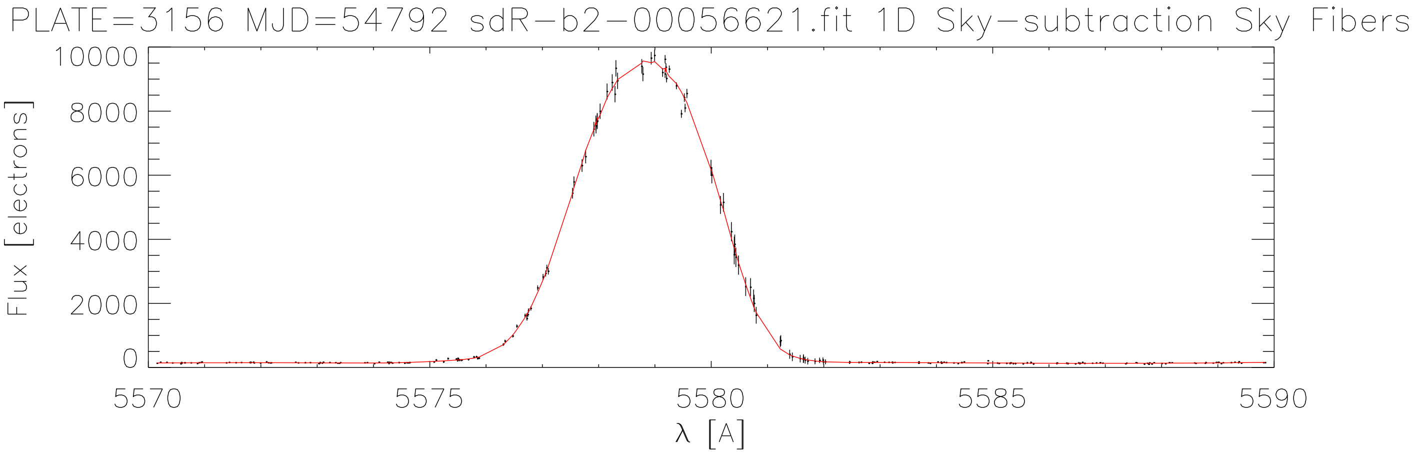

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400
−0.7
−0.6
−0.5
−0.4
−0.3
−0.2
−0.1
0.0
0.1

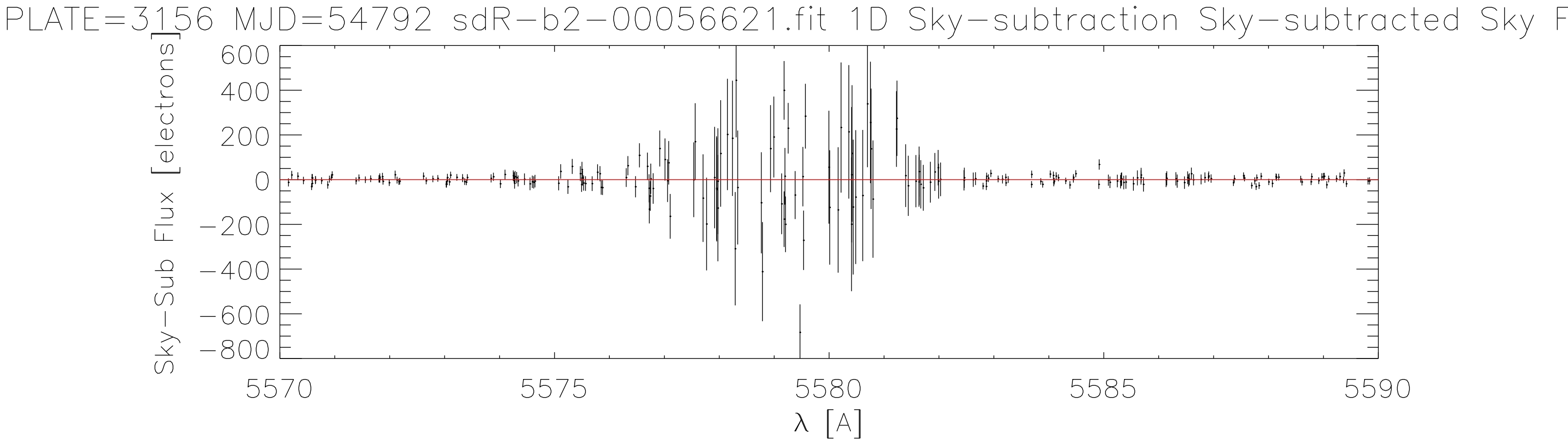

4046.5600
nfib1 16
nfib2 16
stdev 0.101
extra −0.54
4358.3300
nfib1 16
nfib2 16
stdev 0.060
extra −0.50
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra −0.39
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.30
5889.9500
nfib1 16
nfib2 16
stdev 0.022
extra −0.26
5895.9240
nfib1 16
nfib2 16
stdev 0.021
extra −0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
−0.2
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500


PLATE=3156 MJD=54792 Smooth superflat for sdR-b2-00056621.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es=   -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

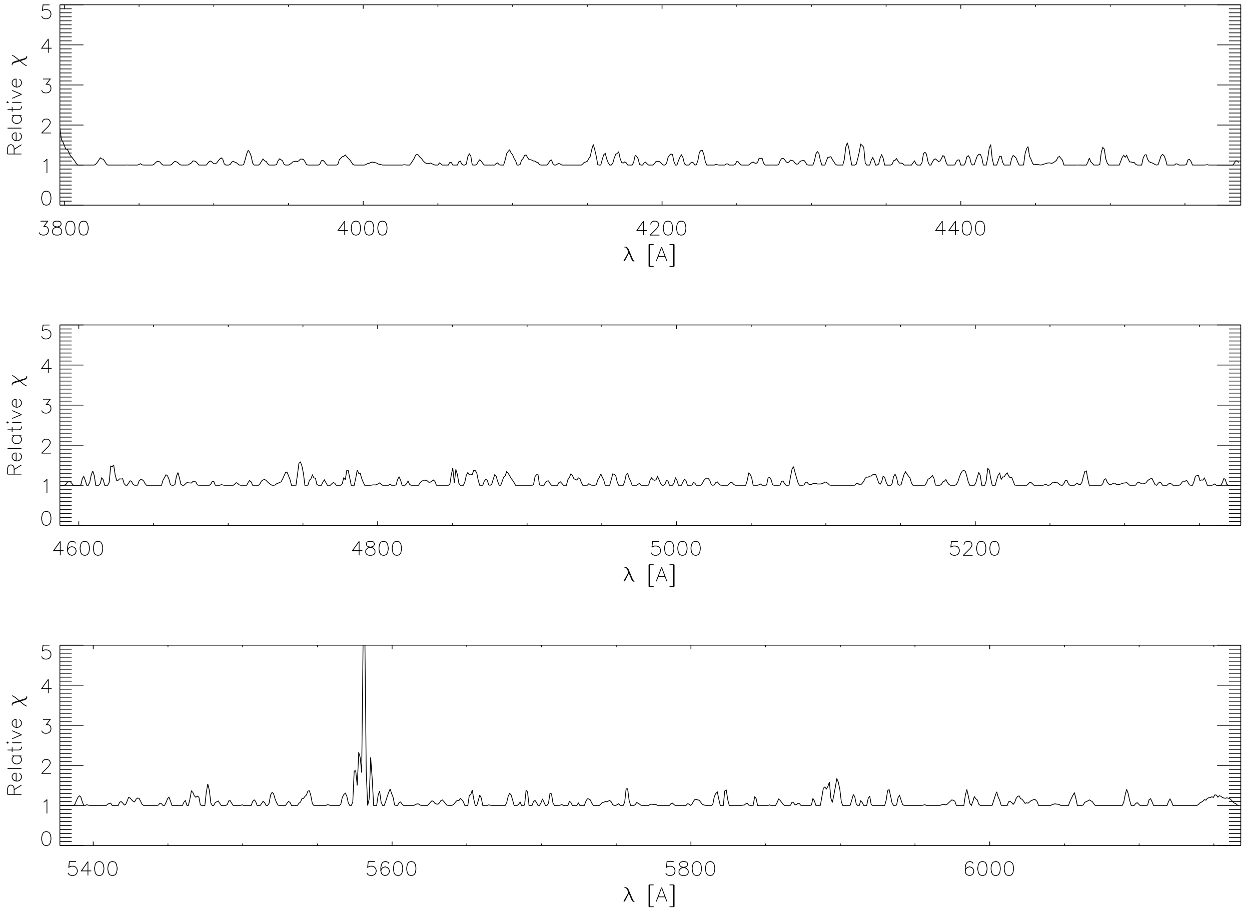

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

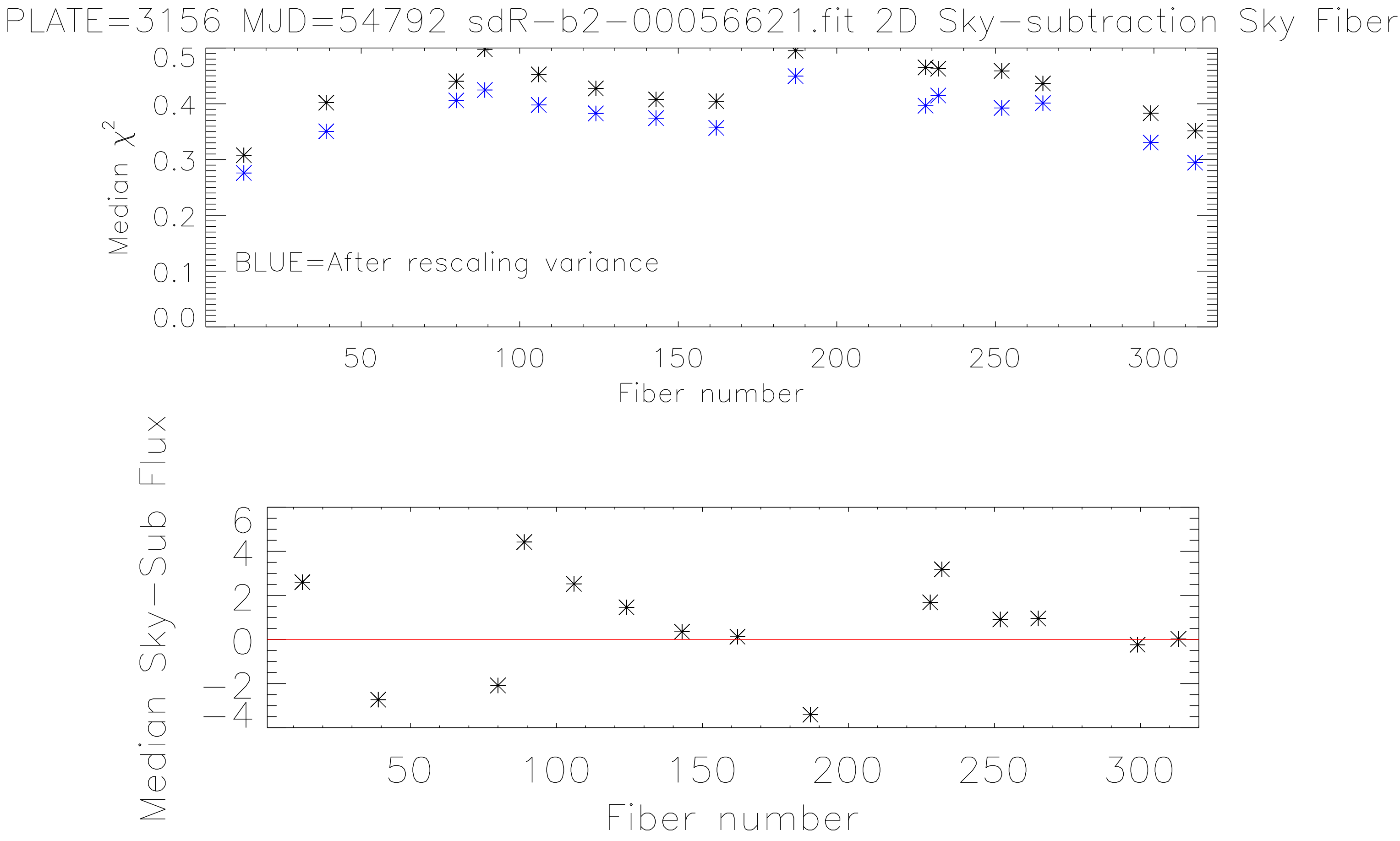

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

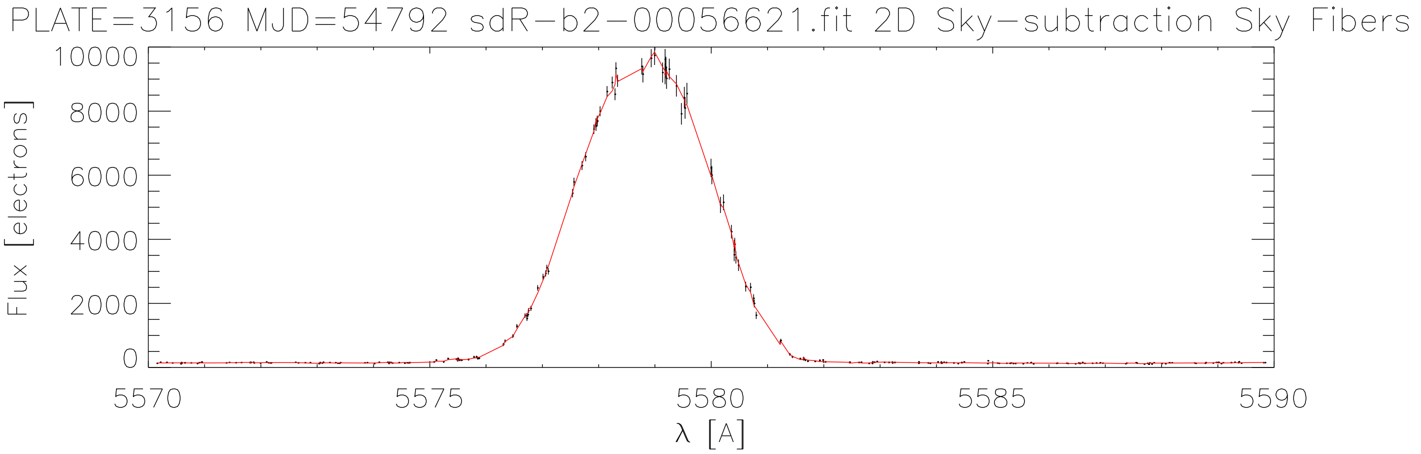

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

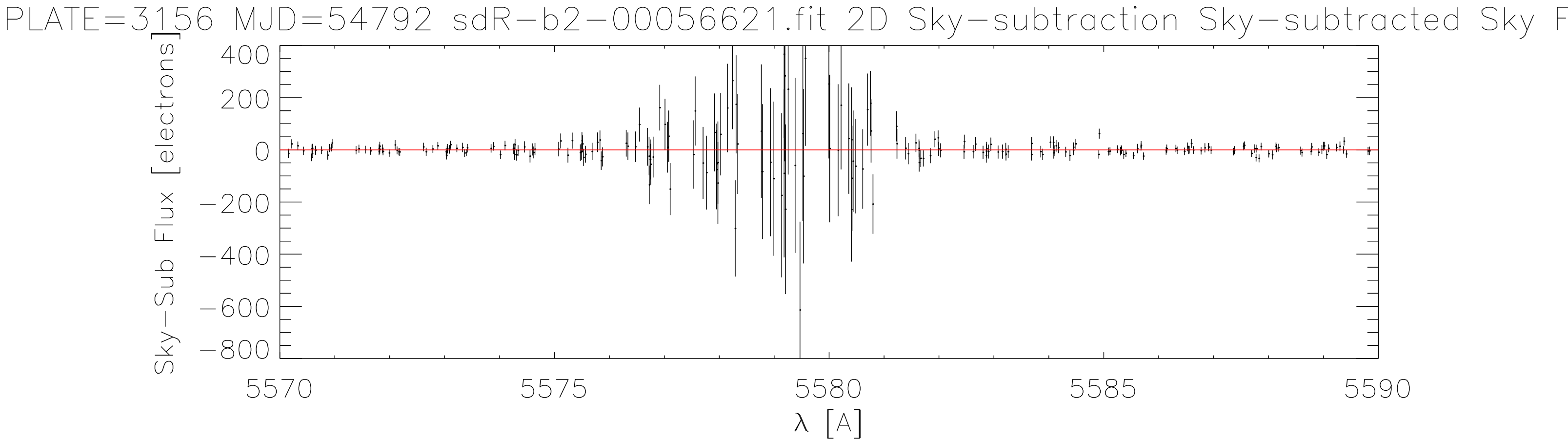
Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 1D Sky-subtraction Rescaled Errors



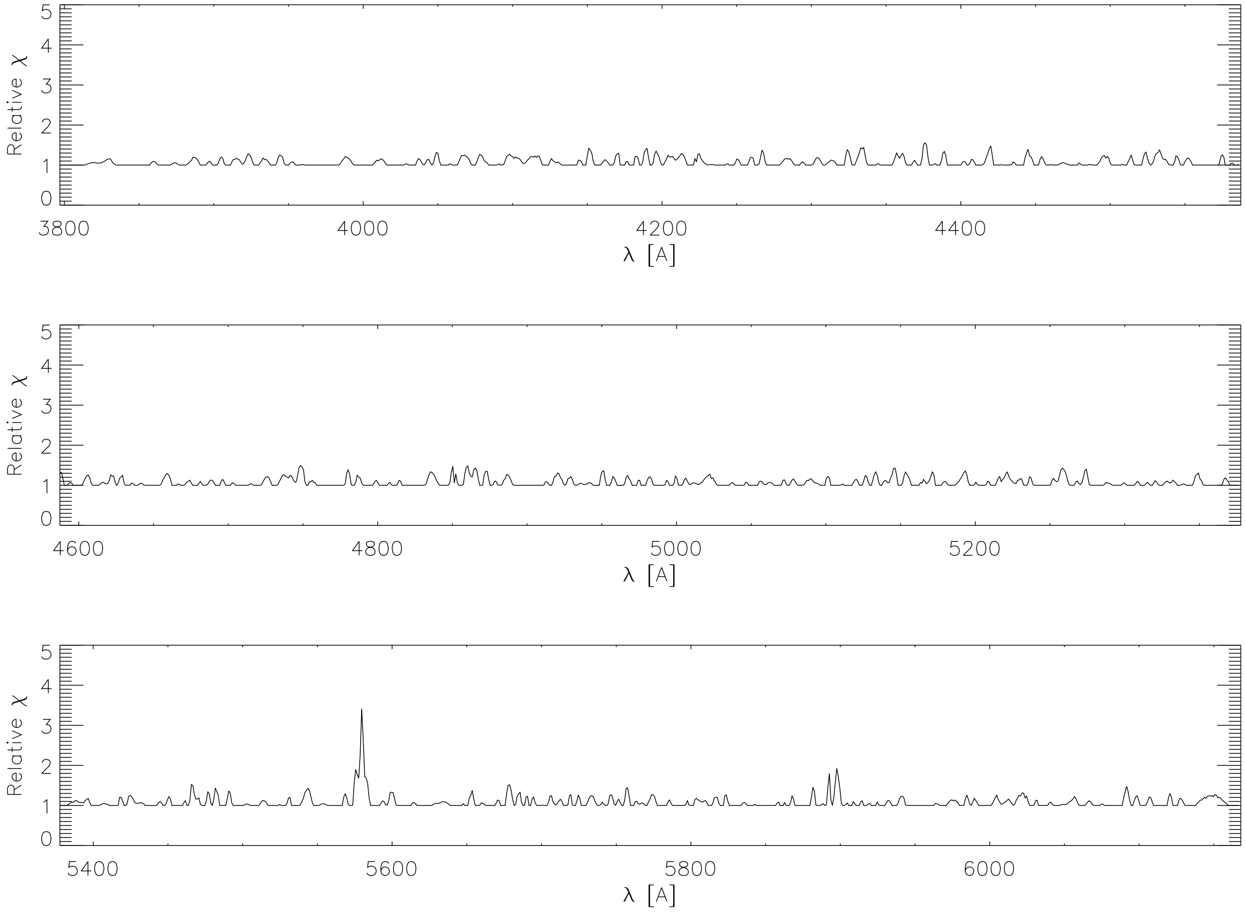

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

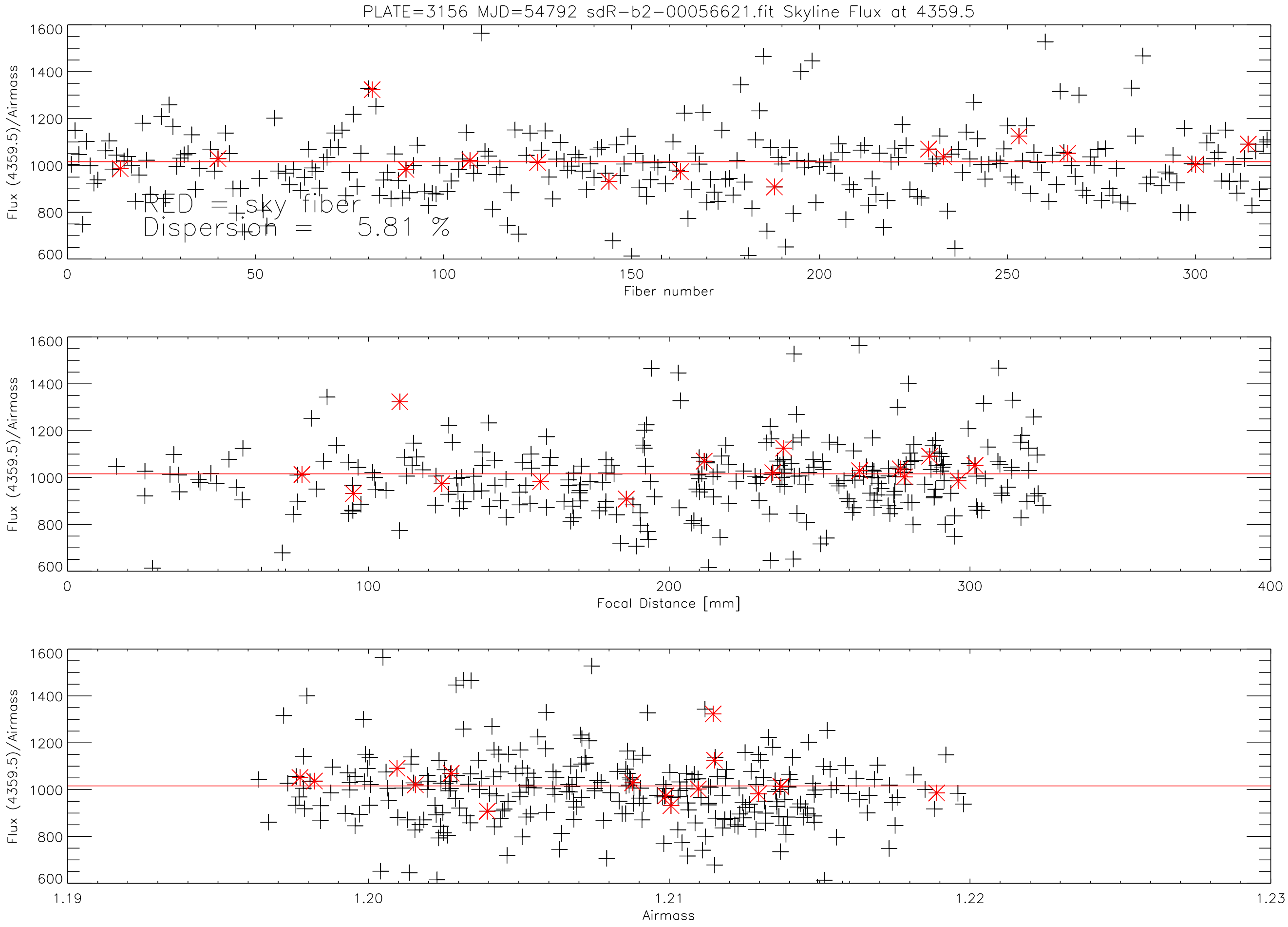

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 2D Sky-subtraction Sky Fibers

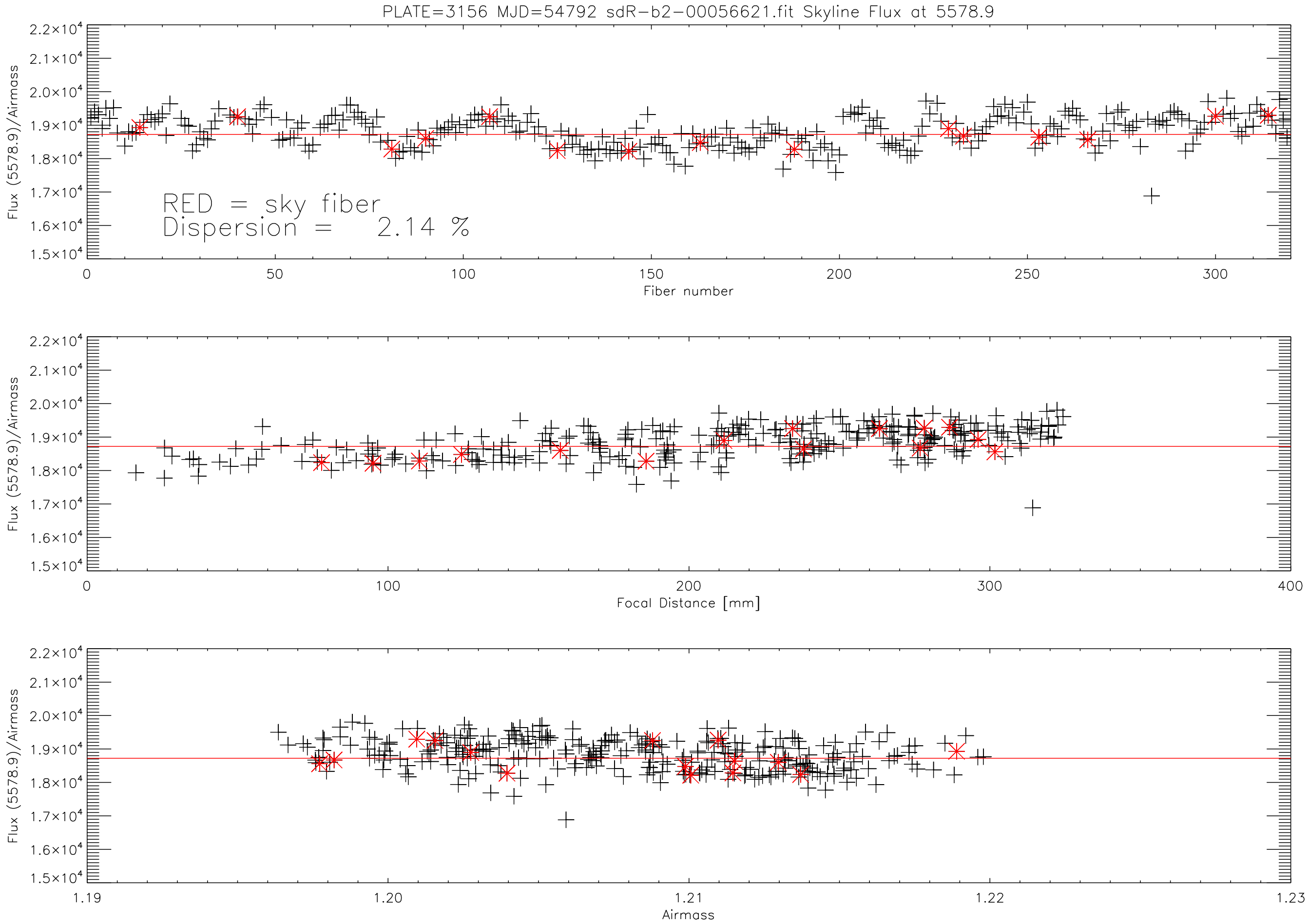

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 2D Sky-subtraction Sky-subtracted Sky F

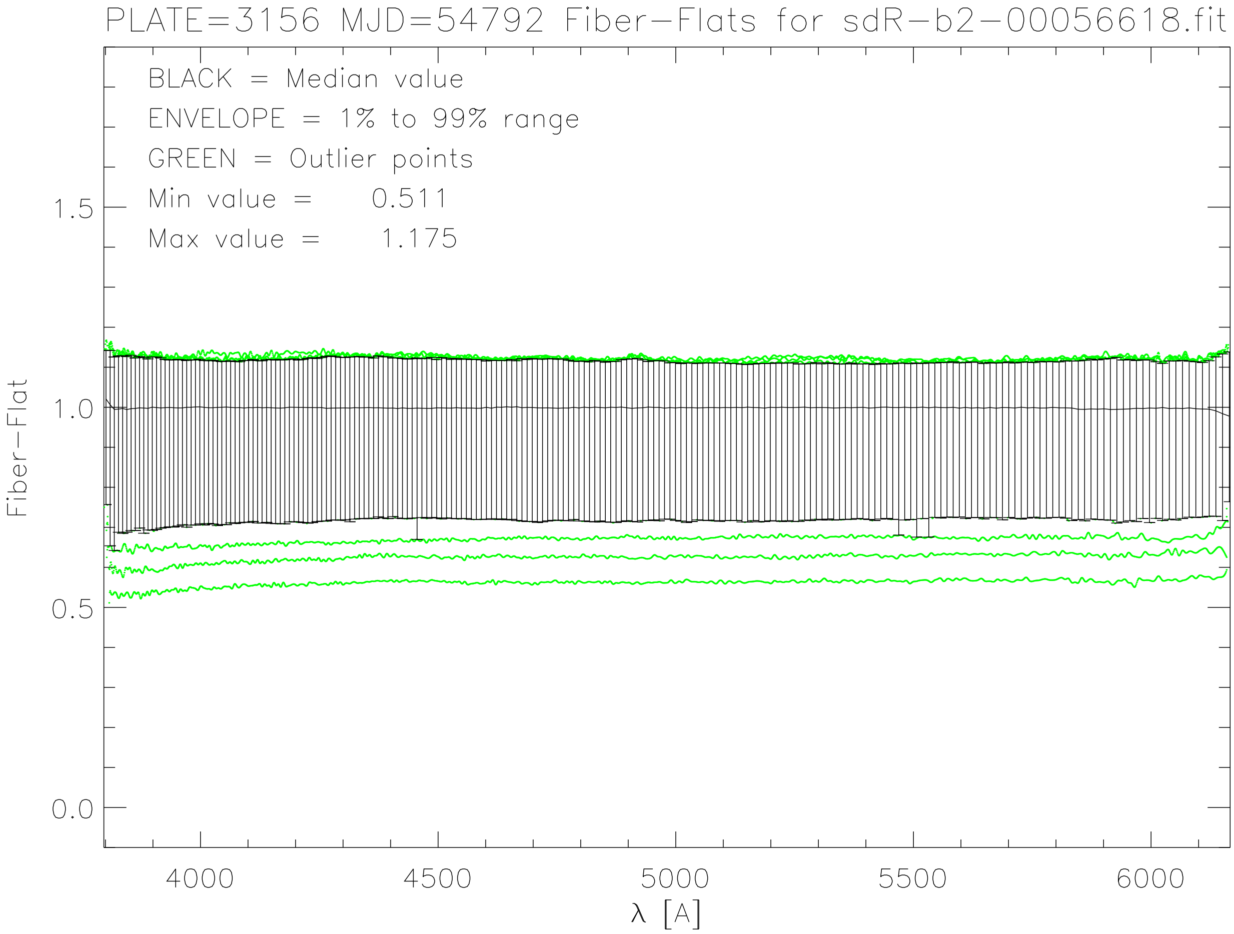
Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-b2-00056621.fit 2D Sky-subtraction Rescaled Errors

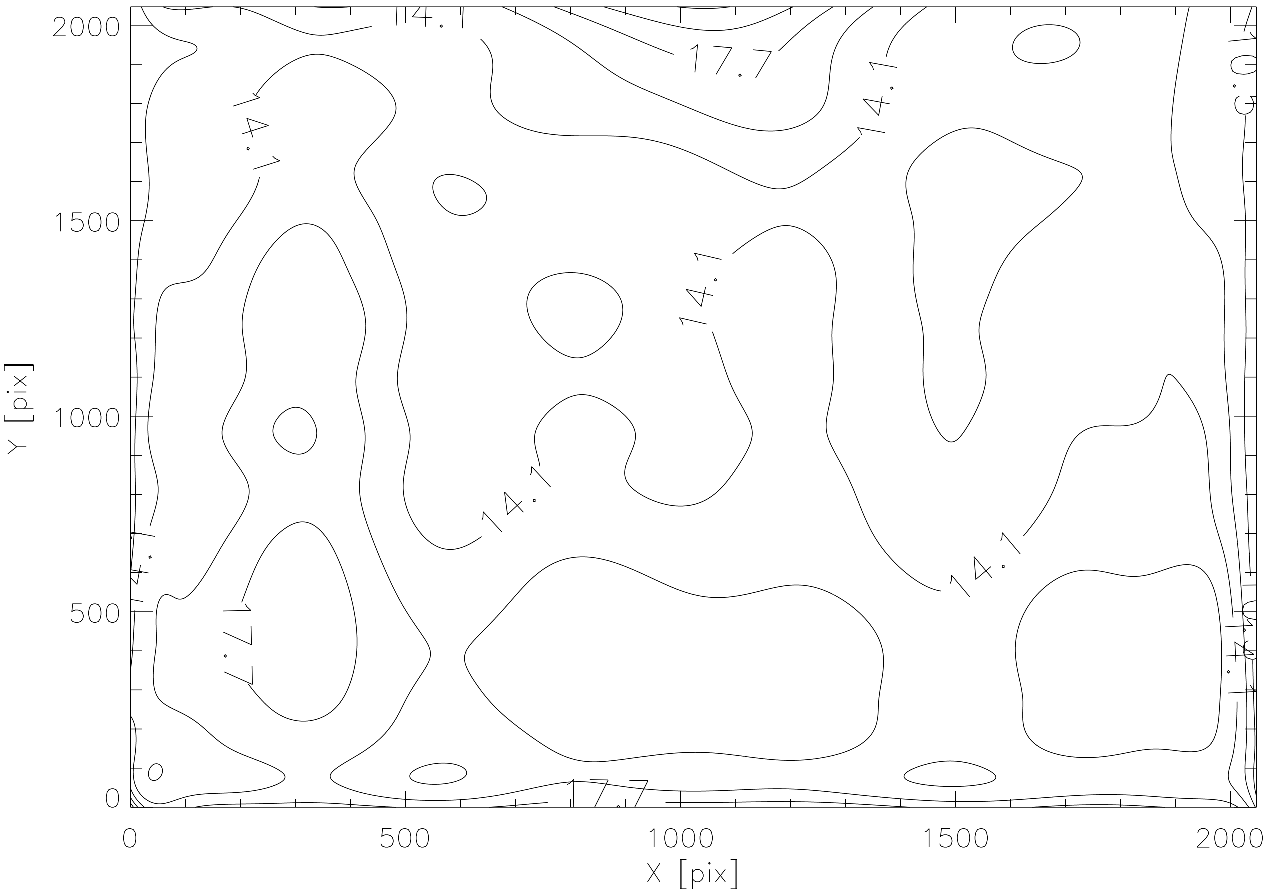



PLATE=3156 MJD=54792 sdR-b2-00056621.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 5.81 %
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
1.19
1.20
1.21
1.22
1.23
Airmass

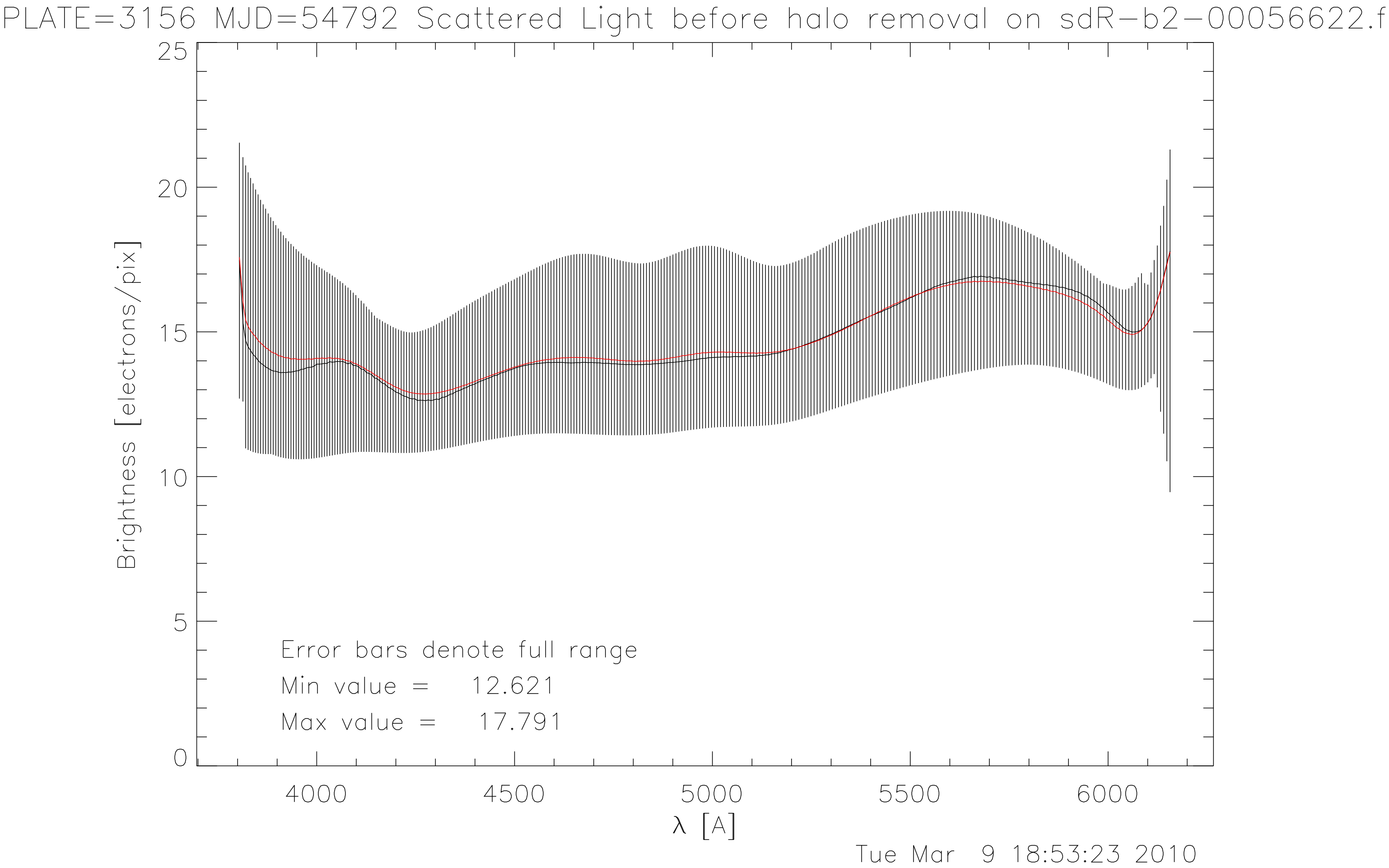

PLATE=3156 MJD=54792 sdR-b2-00056621.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 2.14 %
Flux (5578.9)/Airmass
2.2×10^4
2.1×10^4
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.19
1.20
1.21
1.22
1.23
Airmass

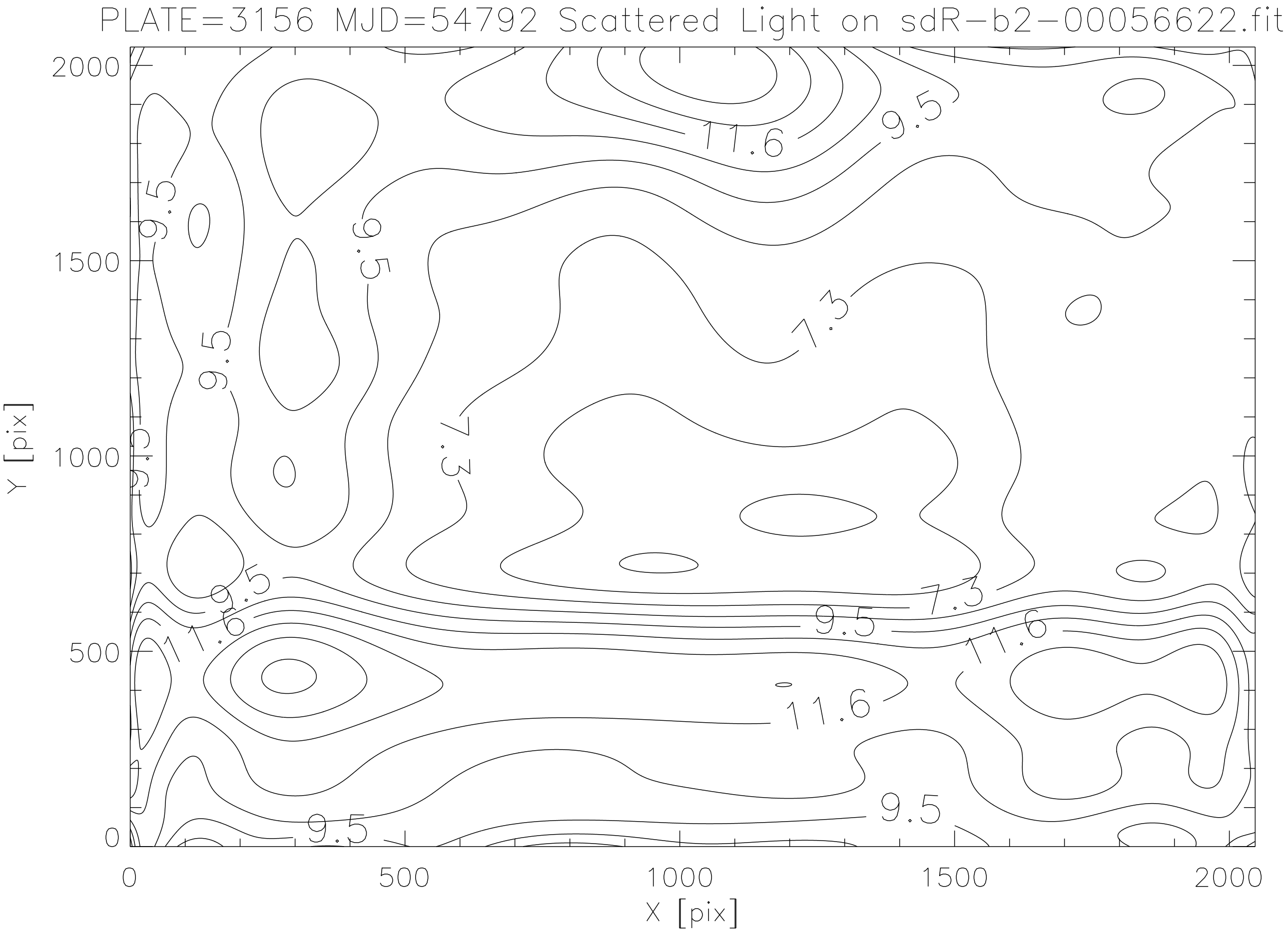


Tue Mar 9 18:52:50 2010

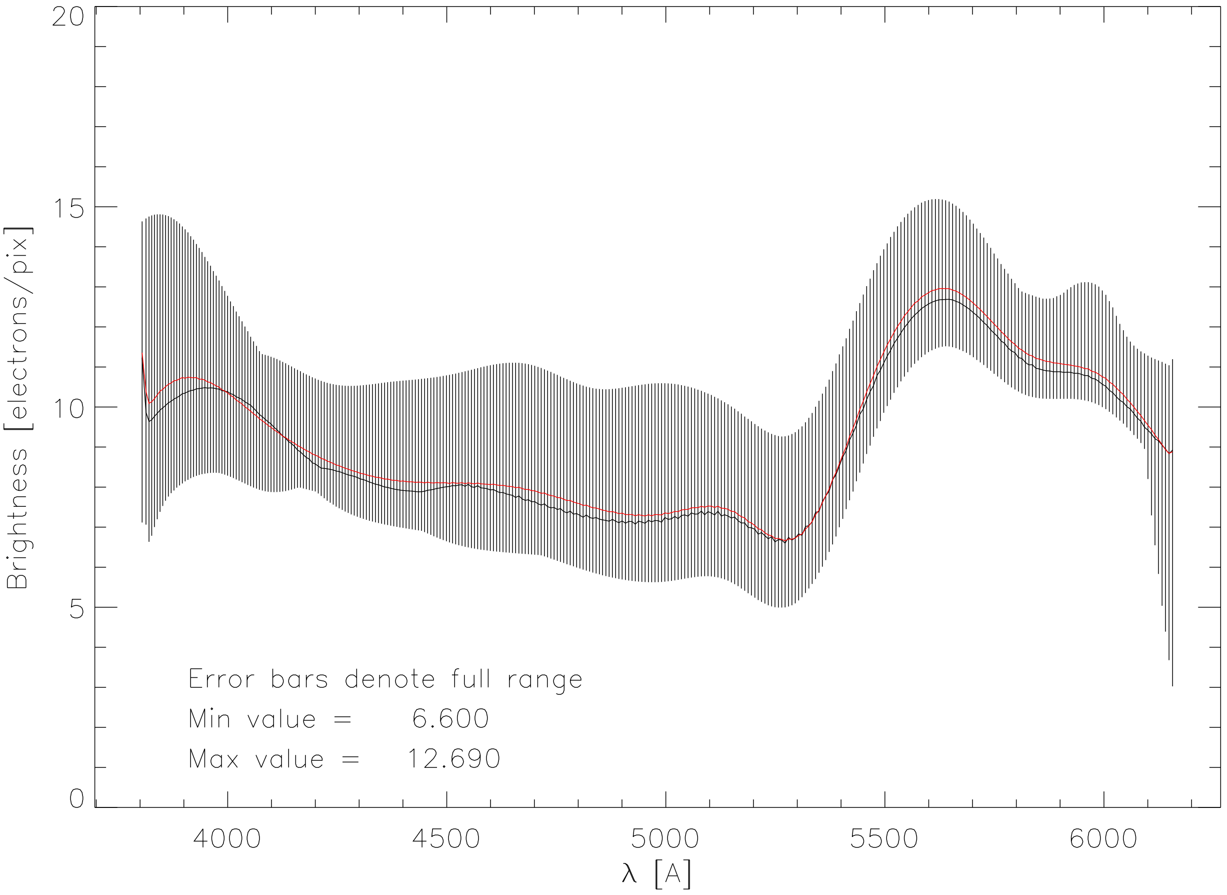


PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056622.f


PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-b2-00056622.f
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 12.621
Max value = 17.791
Tue Mar 9 18:53:23 2010

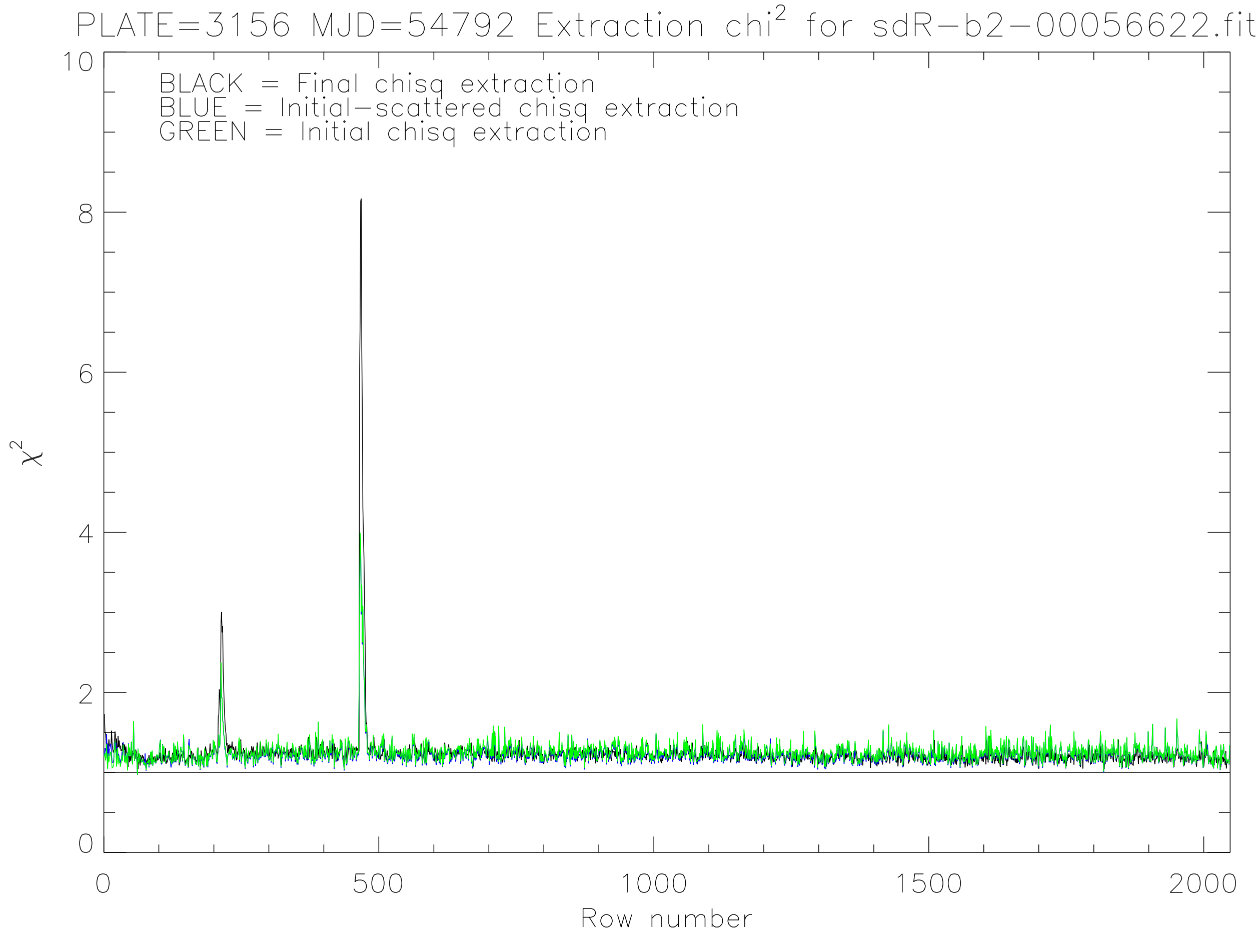


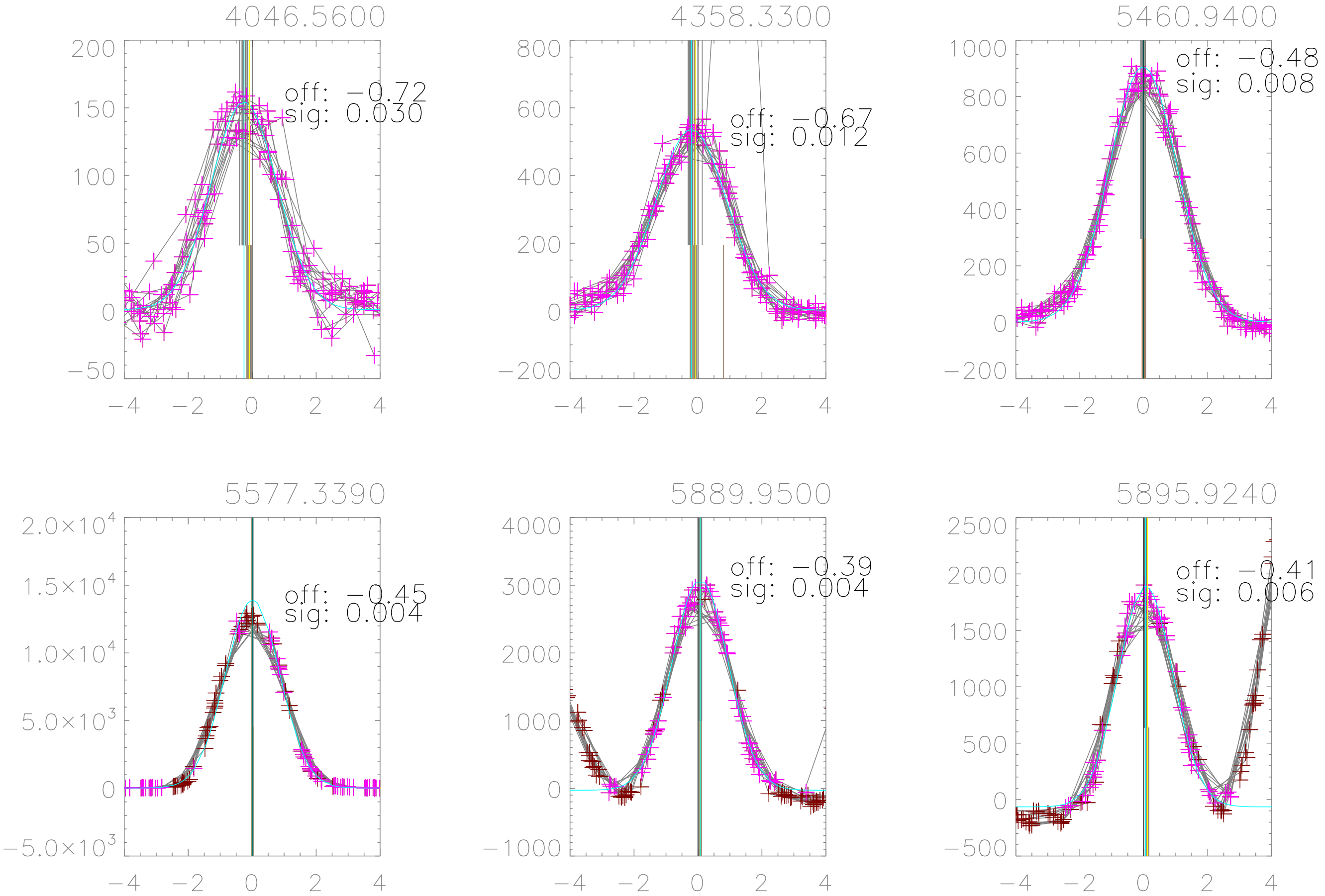
PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056622.fit

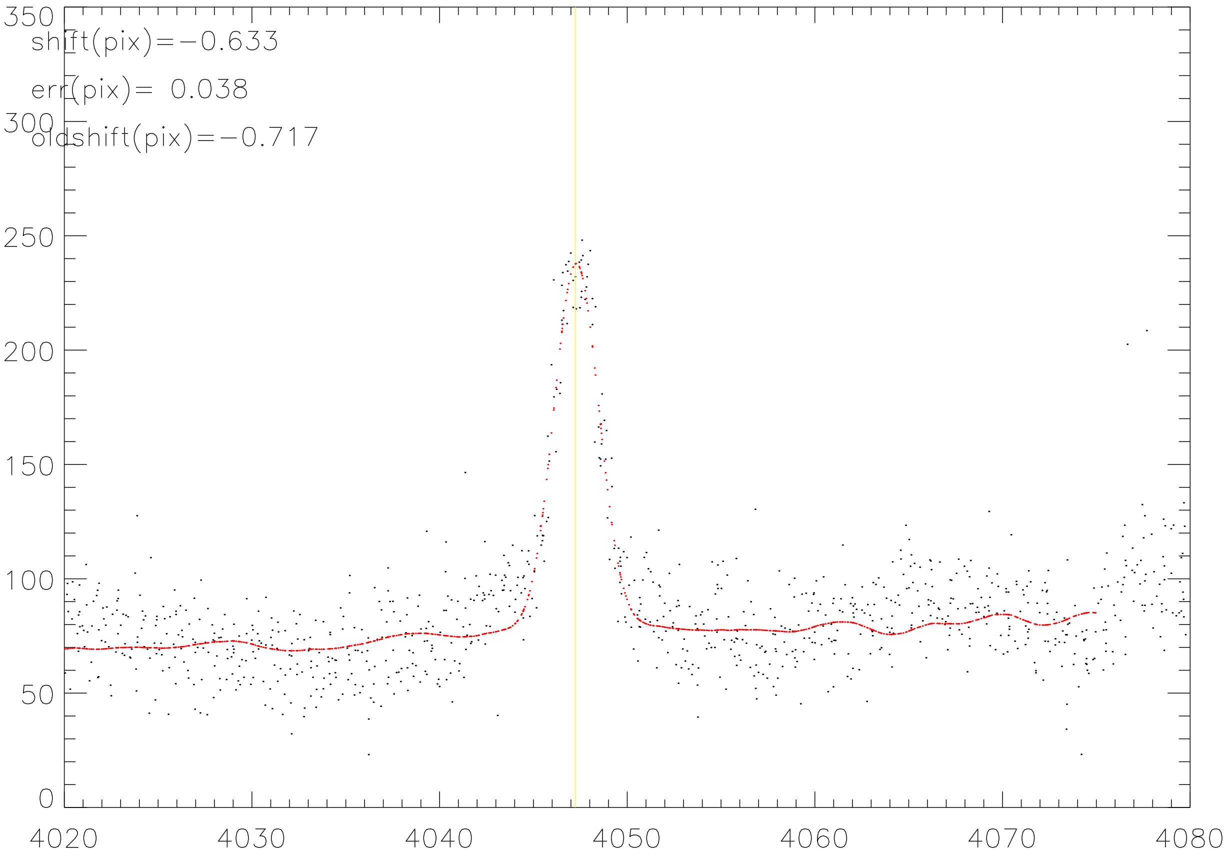


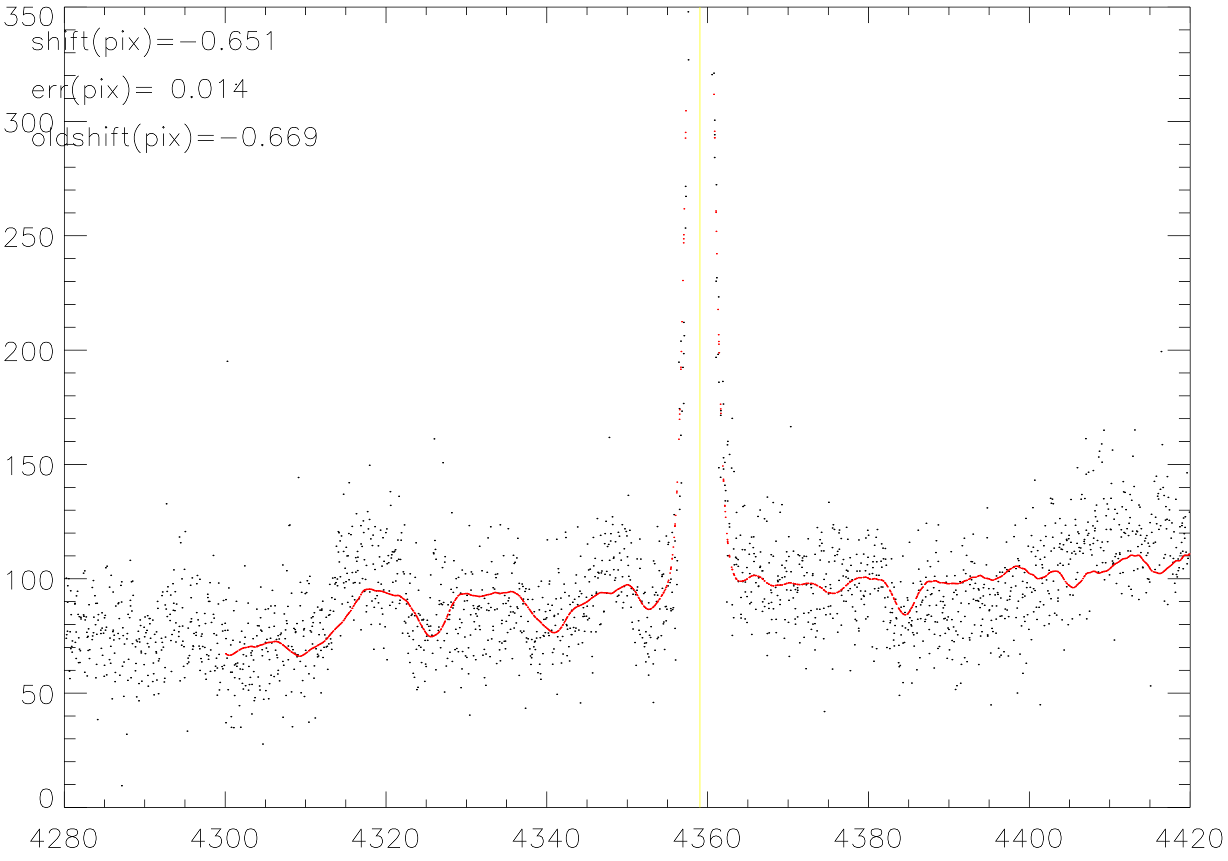
PLATE=3156 MJD=54792 Scattered Light on sdR-b2-00056622.fit

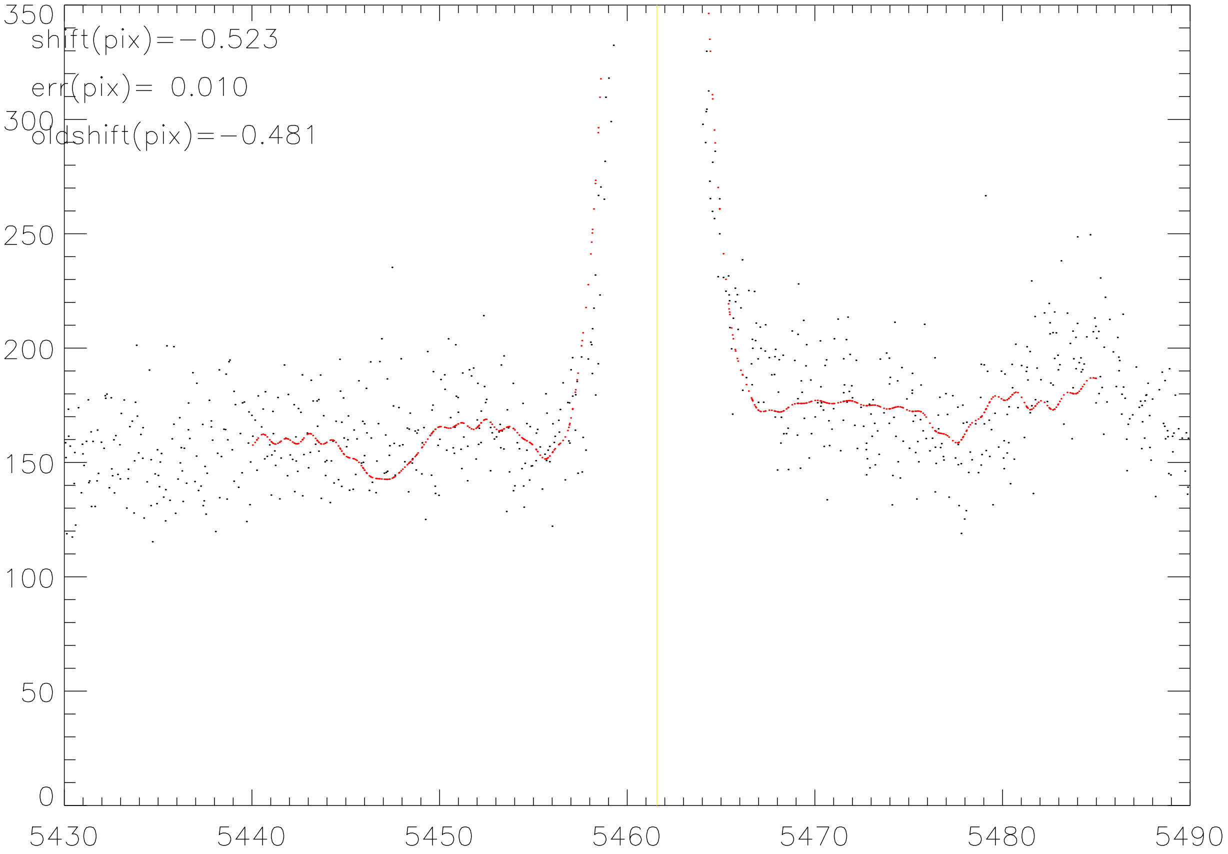
Tue Mar 9 18:55:28 2010

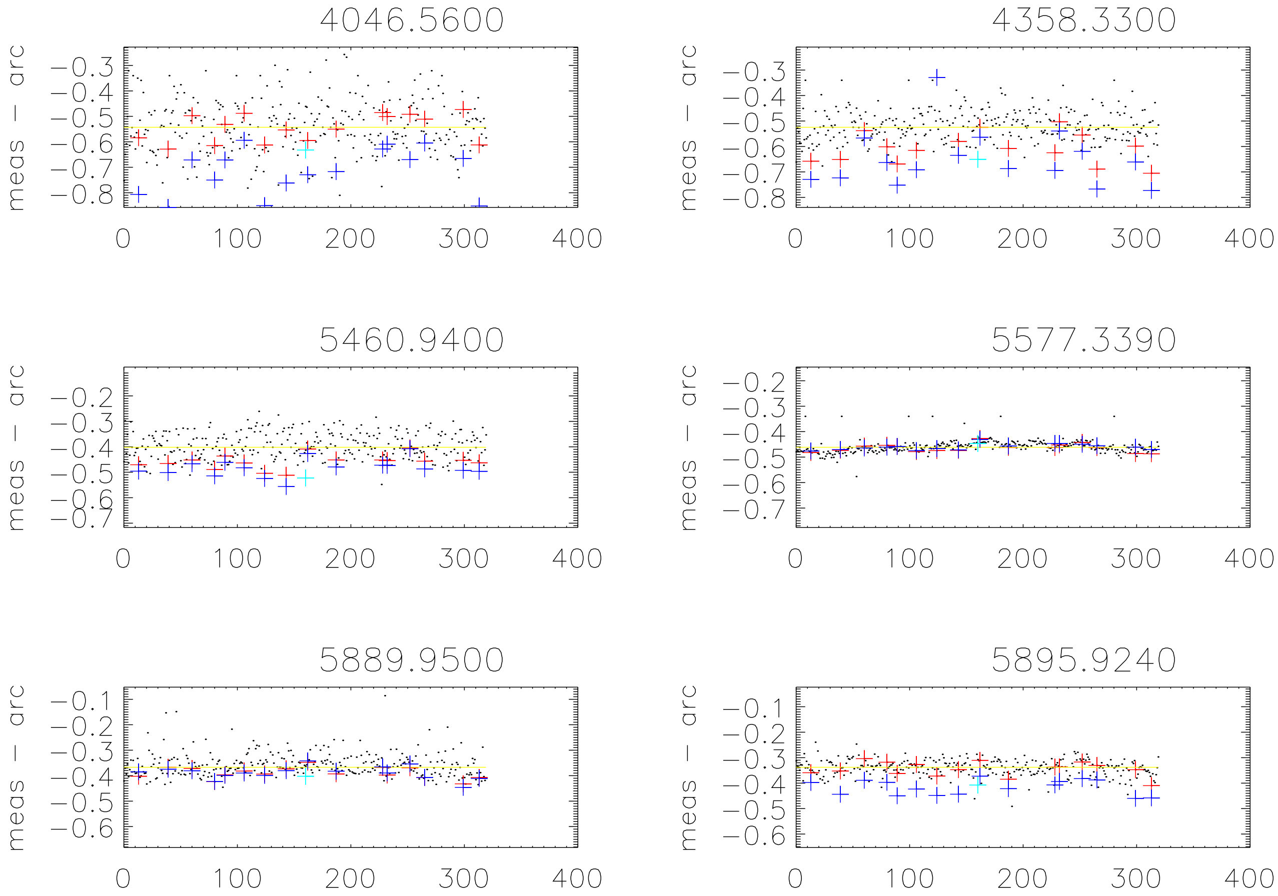

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-b2-00056622.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
Row number
0
500
1000
1500
2000

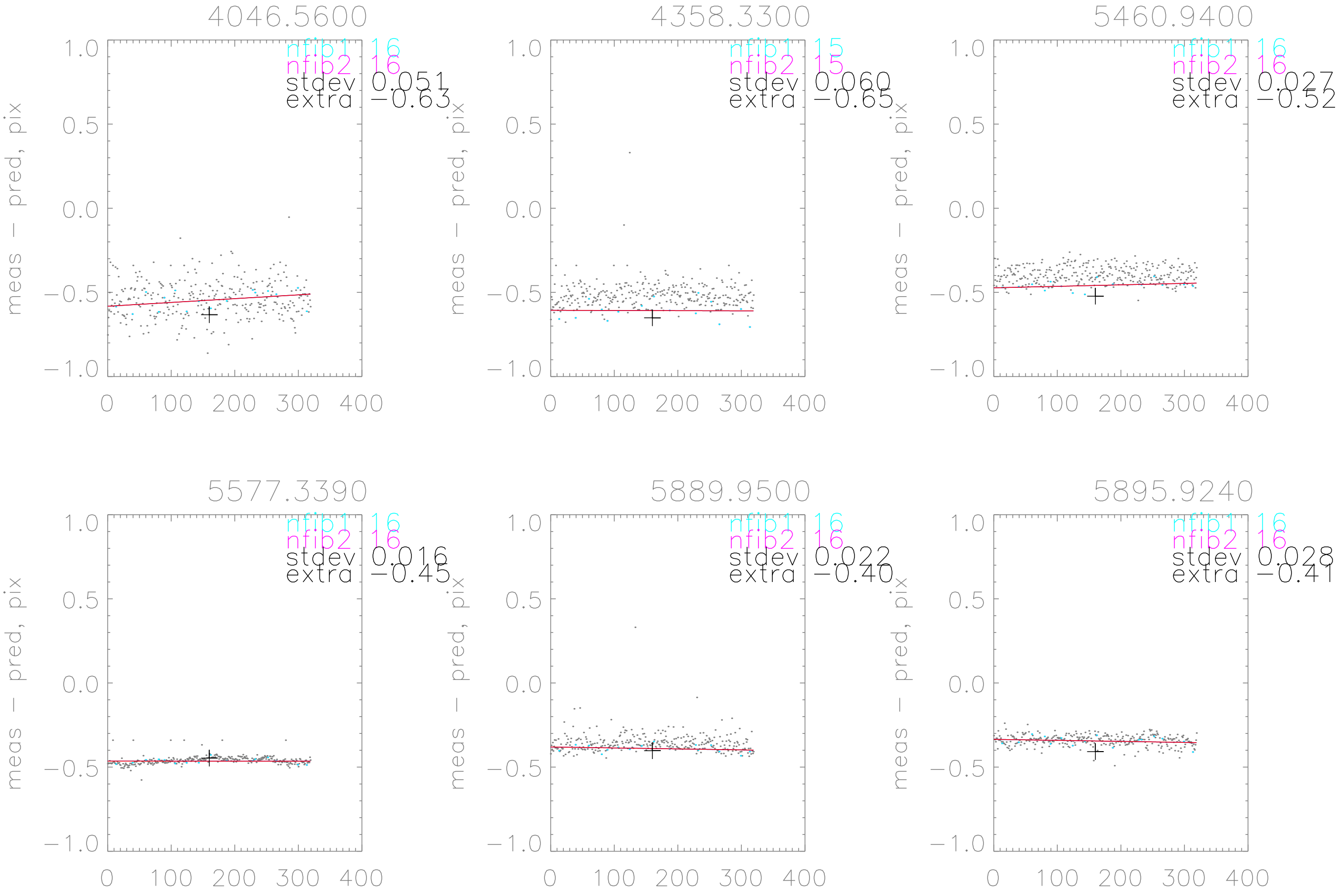

4046.5600
off: −0.72
sig: 0.030
200
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.67
sig: 0.012
800
600
400
200
0
−200
5460.9400
off: −0.48
sig: 0.008
1000
800
600
400
200
0
−200
5577.3390
off: −0.45
sig: 0.004
2.0×10⁴
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
5889.9500
off: −0.39
sig: 0.004
4000
3000
2000
1000
0
−1000
5895.9240
off: −0.41
sig: 0.006
2500
2000
1500
1000
500
0
−500

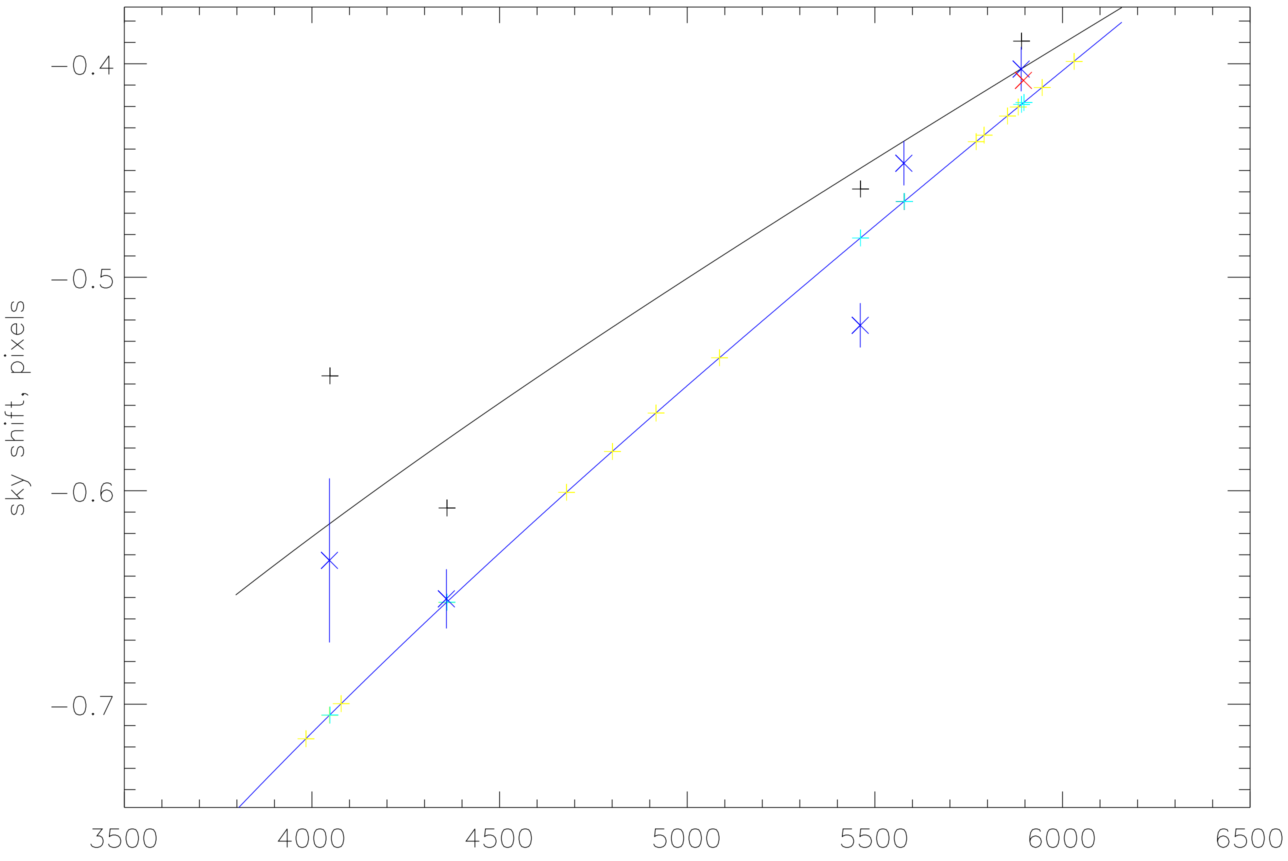

shift(pix)=−0.633
err(pix)= 0.038
oldshift(pix)=−0.717
350
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

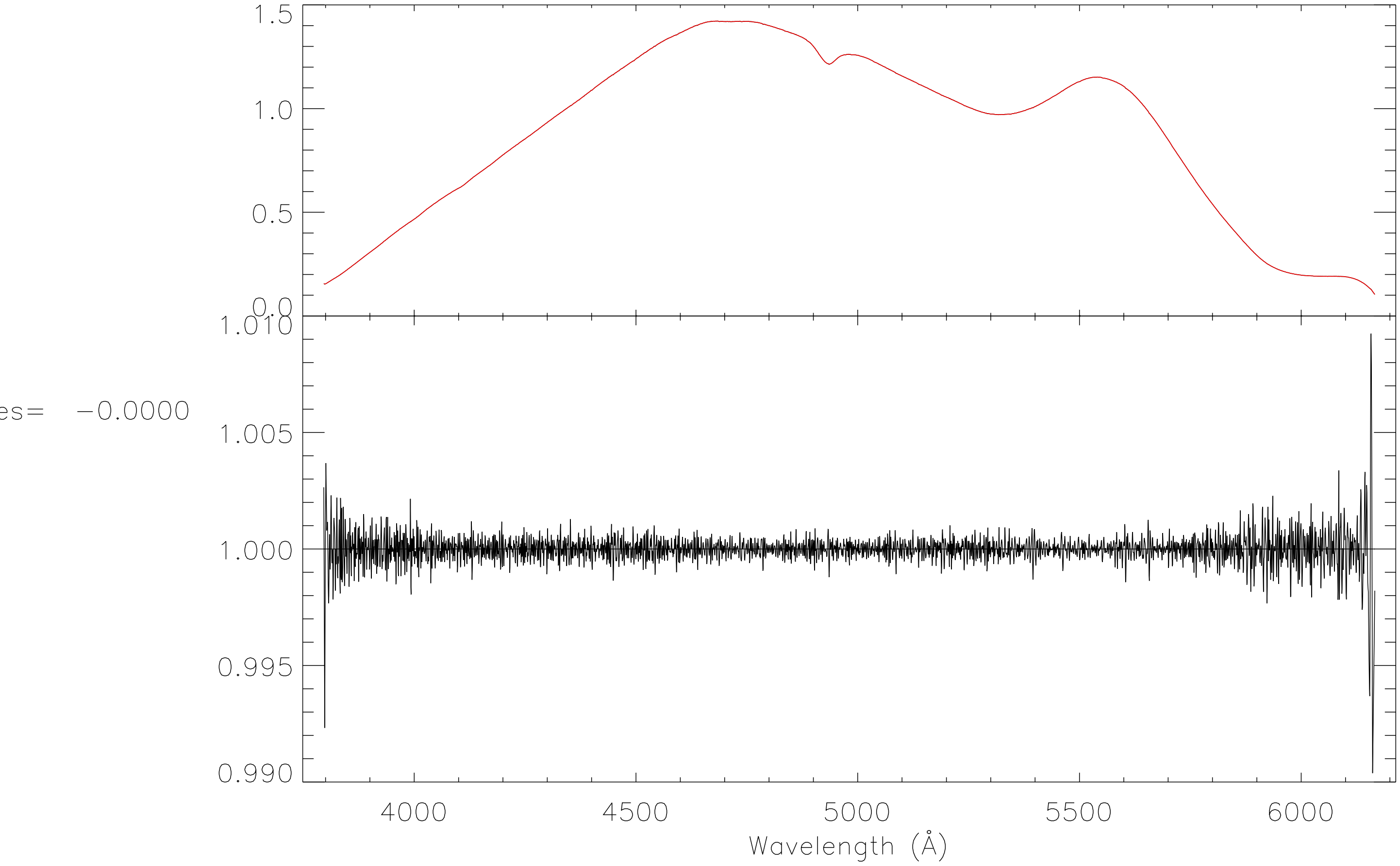

shift(pix)=−0.651
err(pix)= 0.014
oldshift(pix)=−0.669
350
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)=−0.523
err(pix)= 0.010
oldshift(pix)=−0.481
350
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

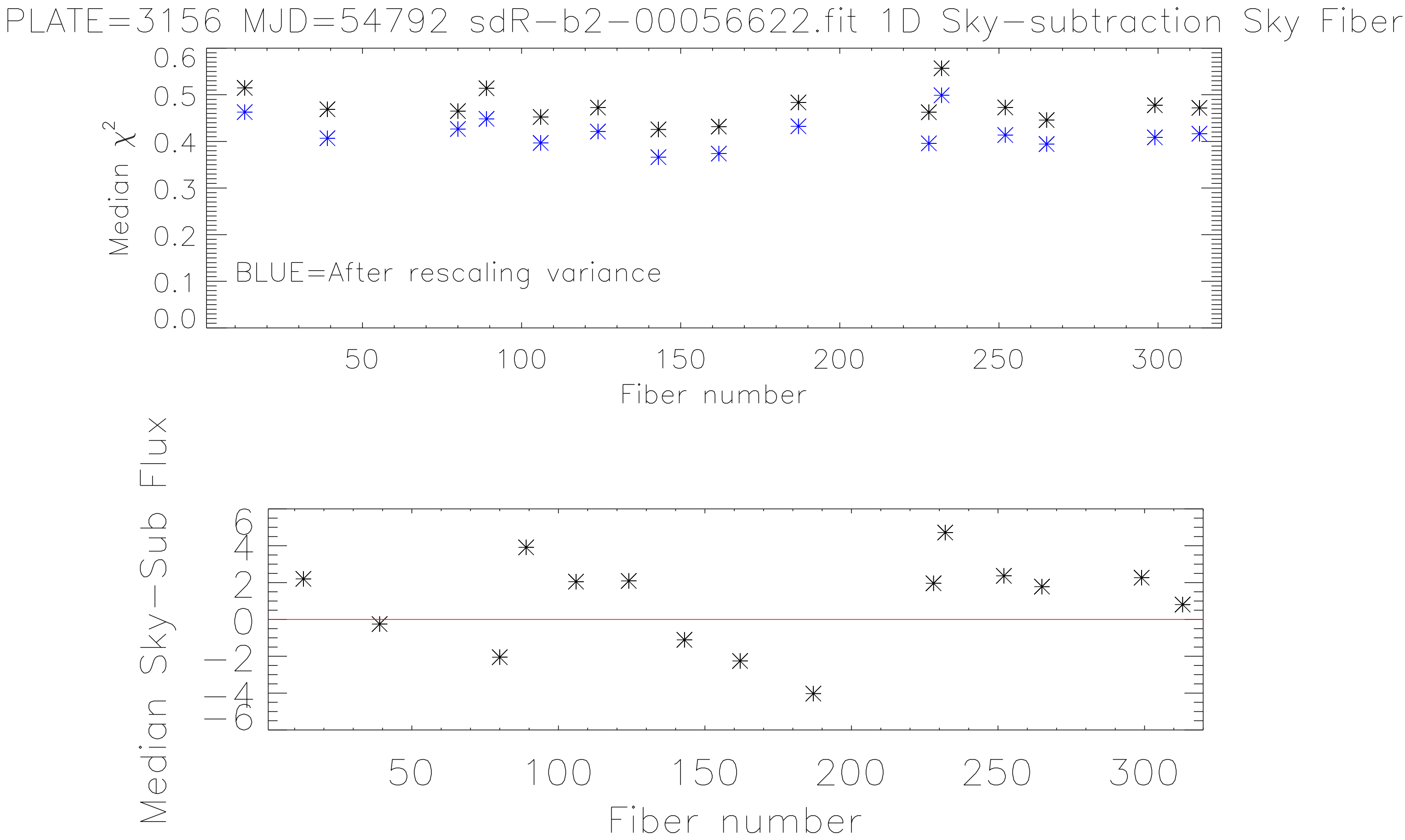

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

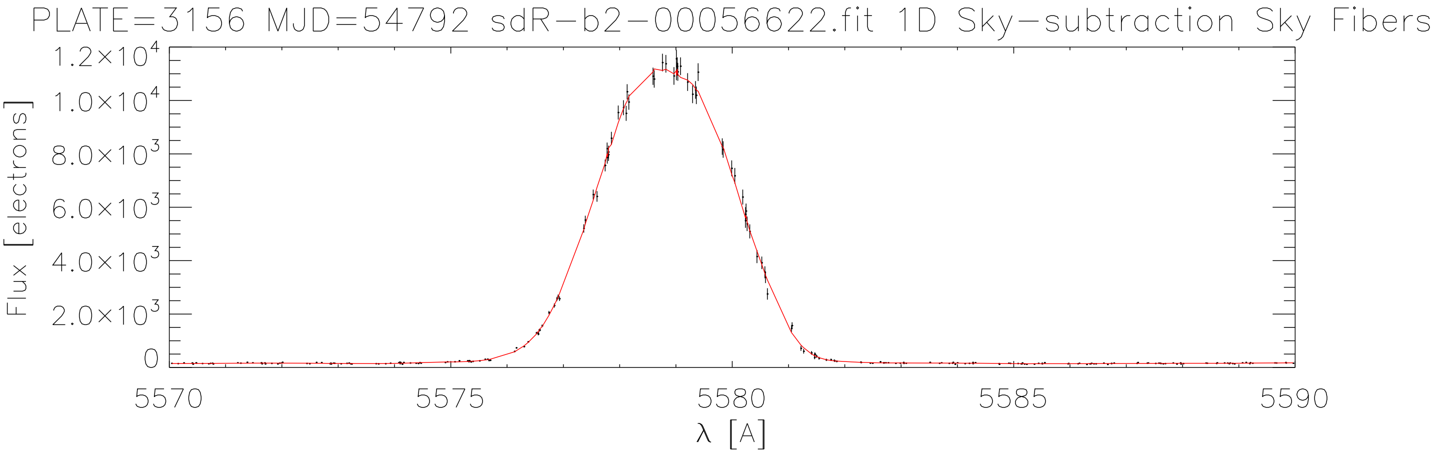

4046.5600
nfib1 16
nfib2 16
stdev 0.051
extra −0.63
4358.3300
nfib1 15
nfib2 15
stdev 0.060
extra −0.65
5460.9400
nfib1 16
nfib2 16
stdev 0.027
extra −0.52
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.45
5889.9500
nfib1 16
nfib2 16
stdev 0.022
extra −0.40
5895.9240
nfib1 16
nfib2 16
stdev 0.028
extra −0.41
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

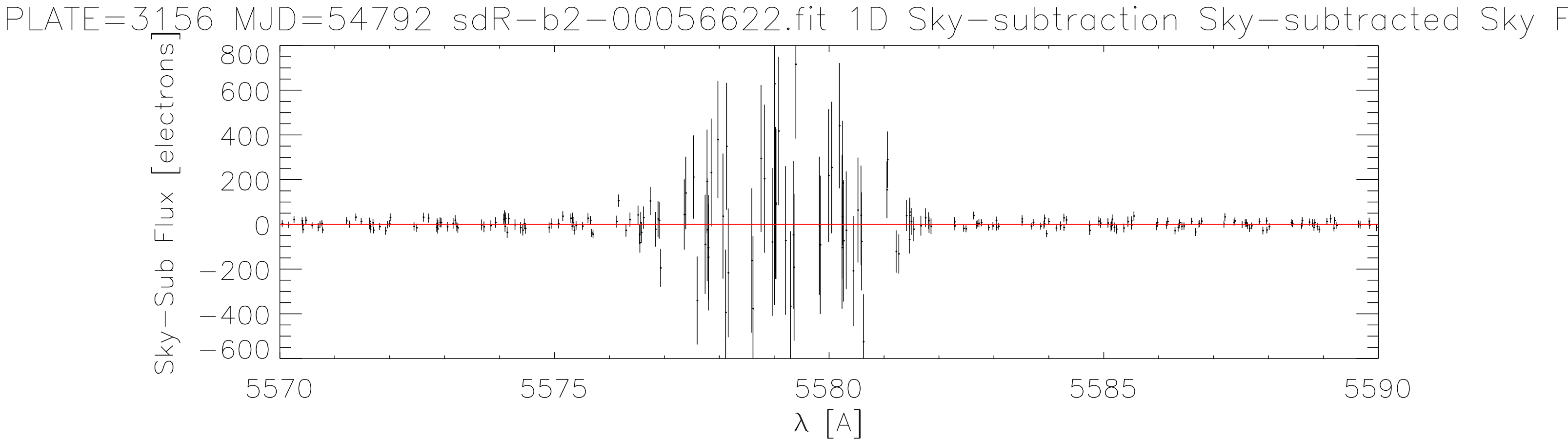

sky shift, pixels
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500



PLATE=3156 MJD=54792 Smooth superflat for sdR-b2-00056622.fit

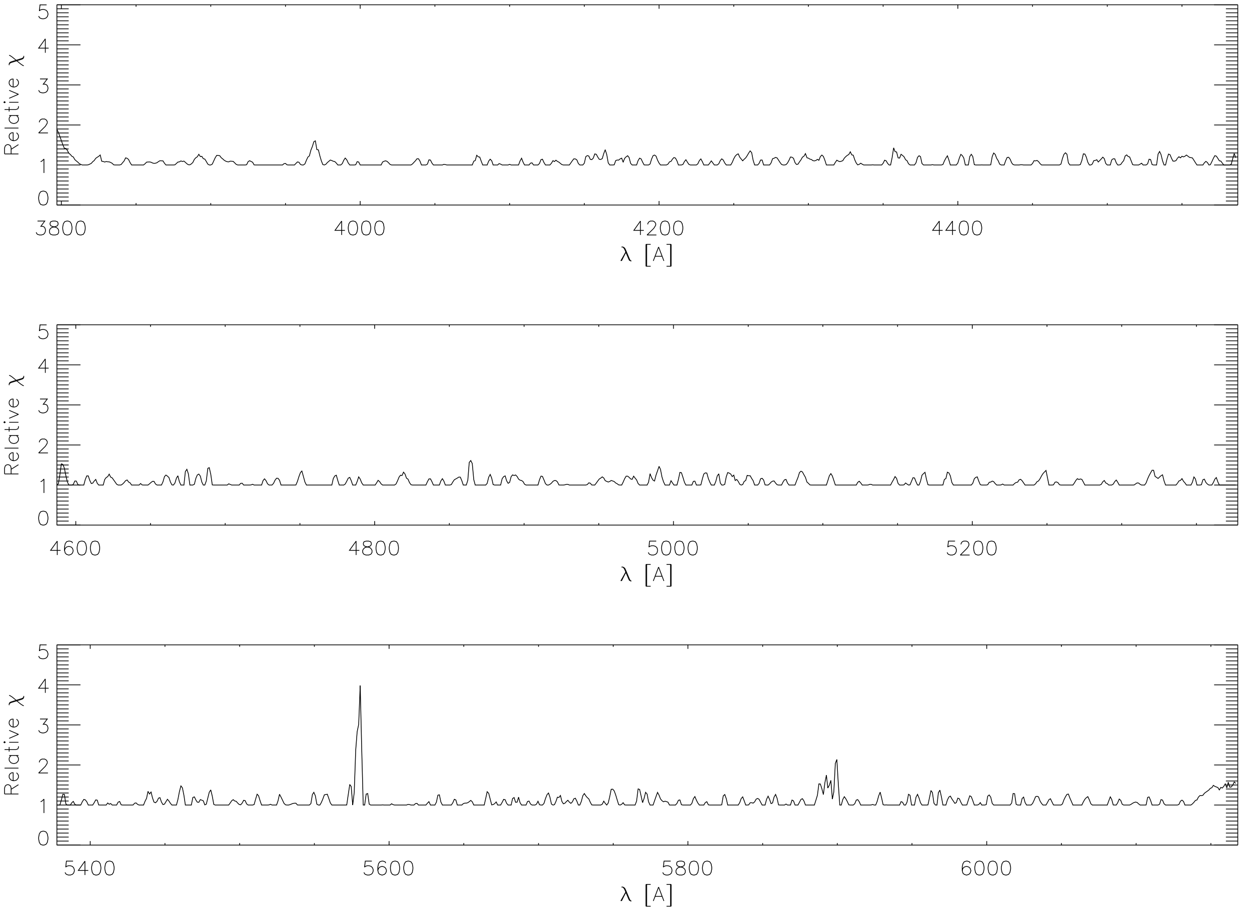

PLATE=3156 MJD=54792 sdR-b2-00056622.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−6
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

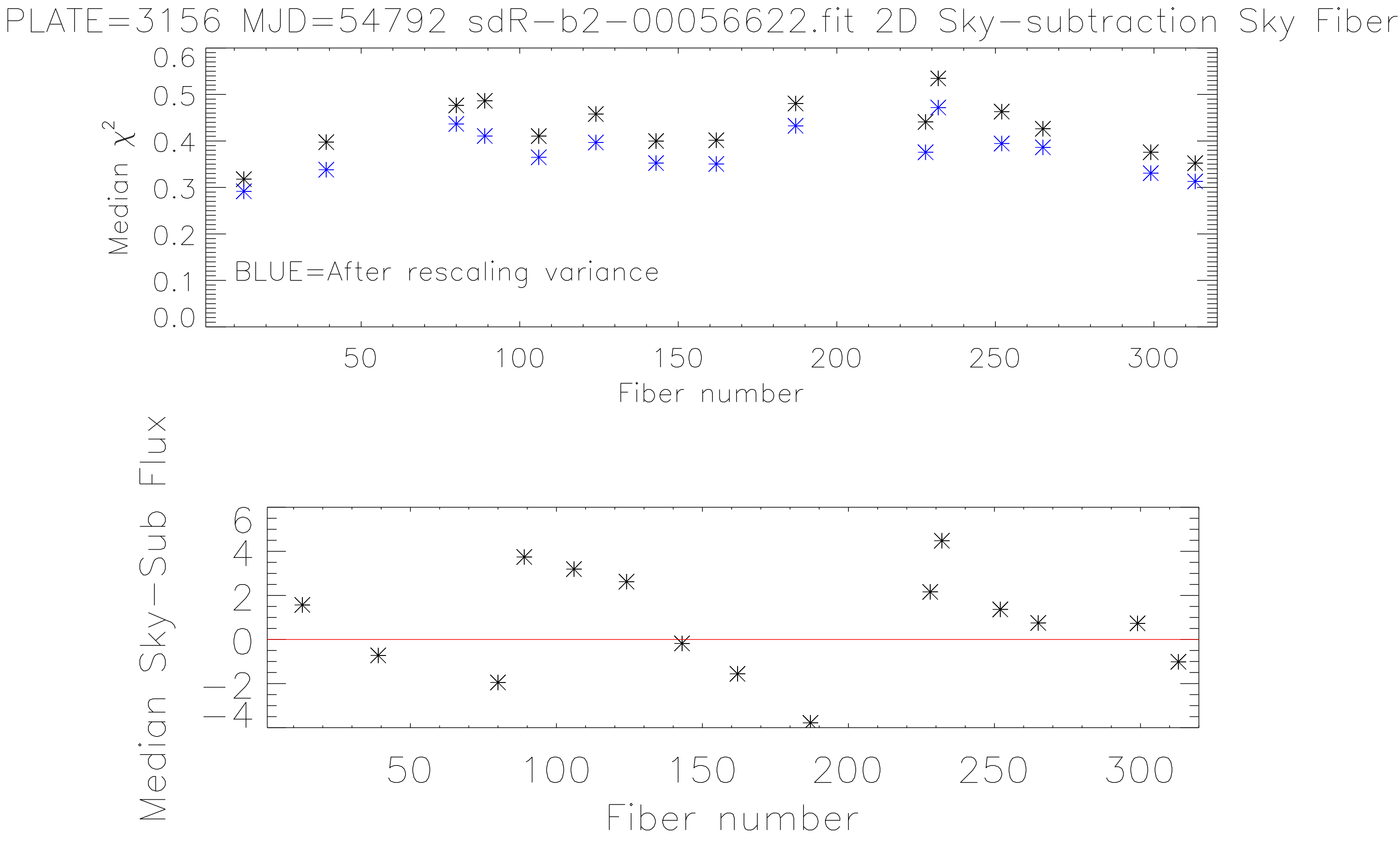

PLATE=3156 MJD=54792 sdR-b2-00056622.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10⁴
1.0×10⁴
8.0×10³
6.0×10³
4.0×10³
2.0×10³
0
5570
5575
5580
5585
5590
λ [A]


PLATE=3156 MJD=54792 sdR-b2-00056622.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

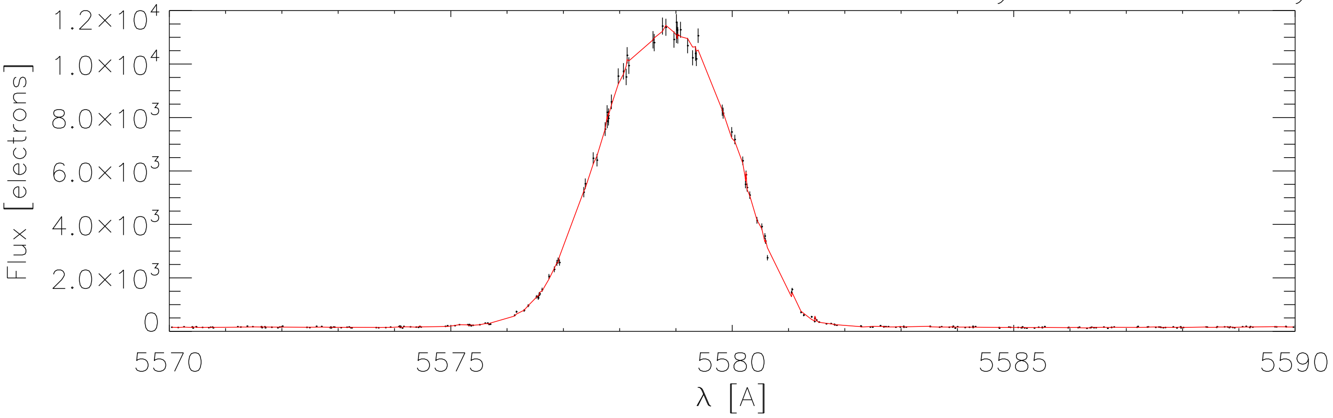
Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-b2-00056622.fit 1D Sky-subtraction Rescaled Errors

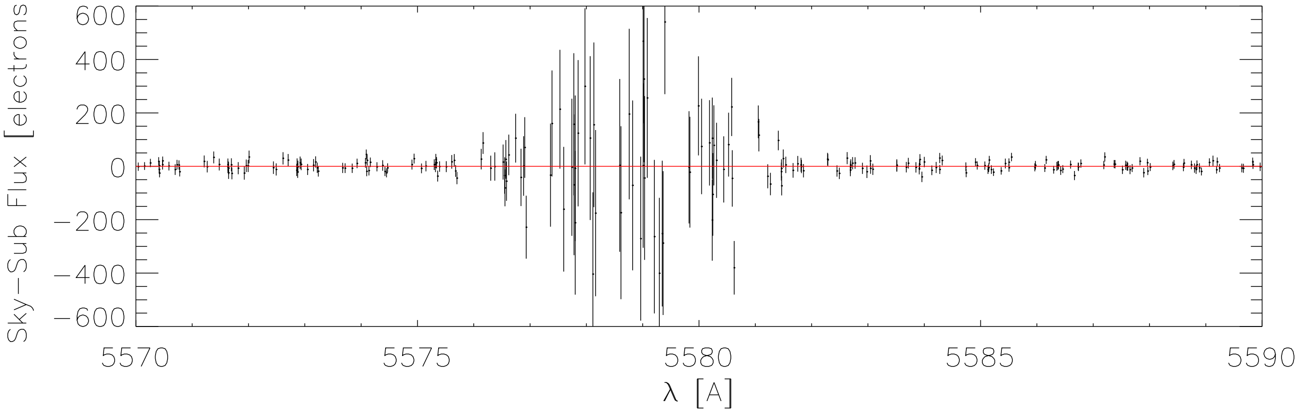



PLATE=3156 MJD=54792 sdR-b2-00056622.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

PLATE=3156 MJD=54792 sdR-b2-00056622.fit 2D Sky-subtraction Sky Fibers

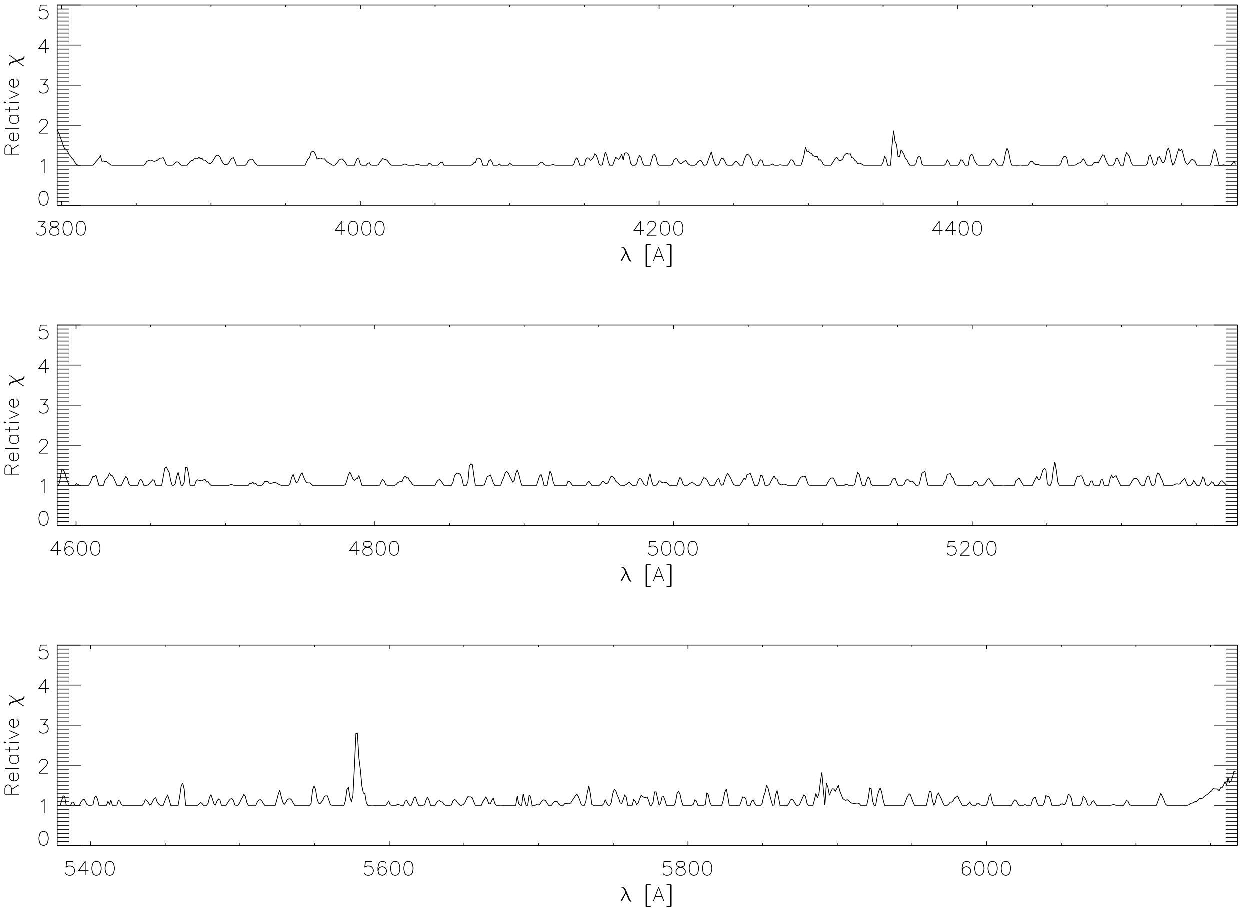


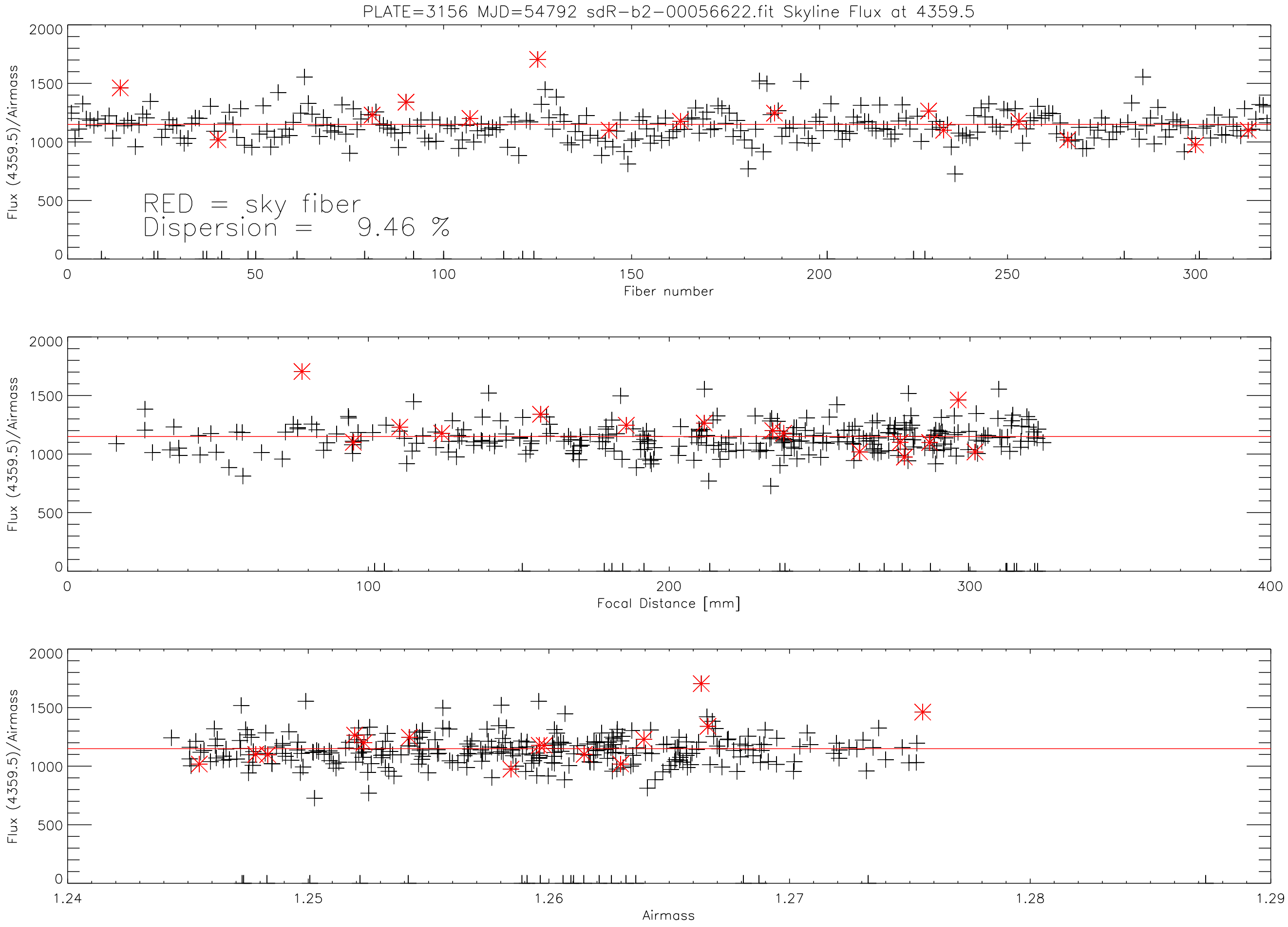
PLATE=3156 MJD=54792 sdR-b2-00056622.fit 2D Sky-subtraction Sky-subtracted Sky F

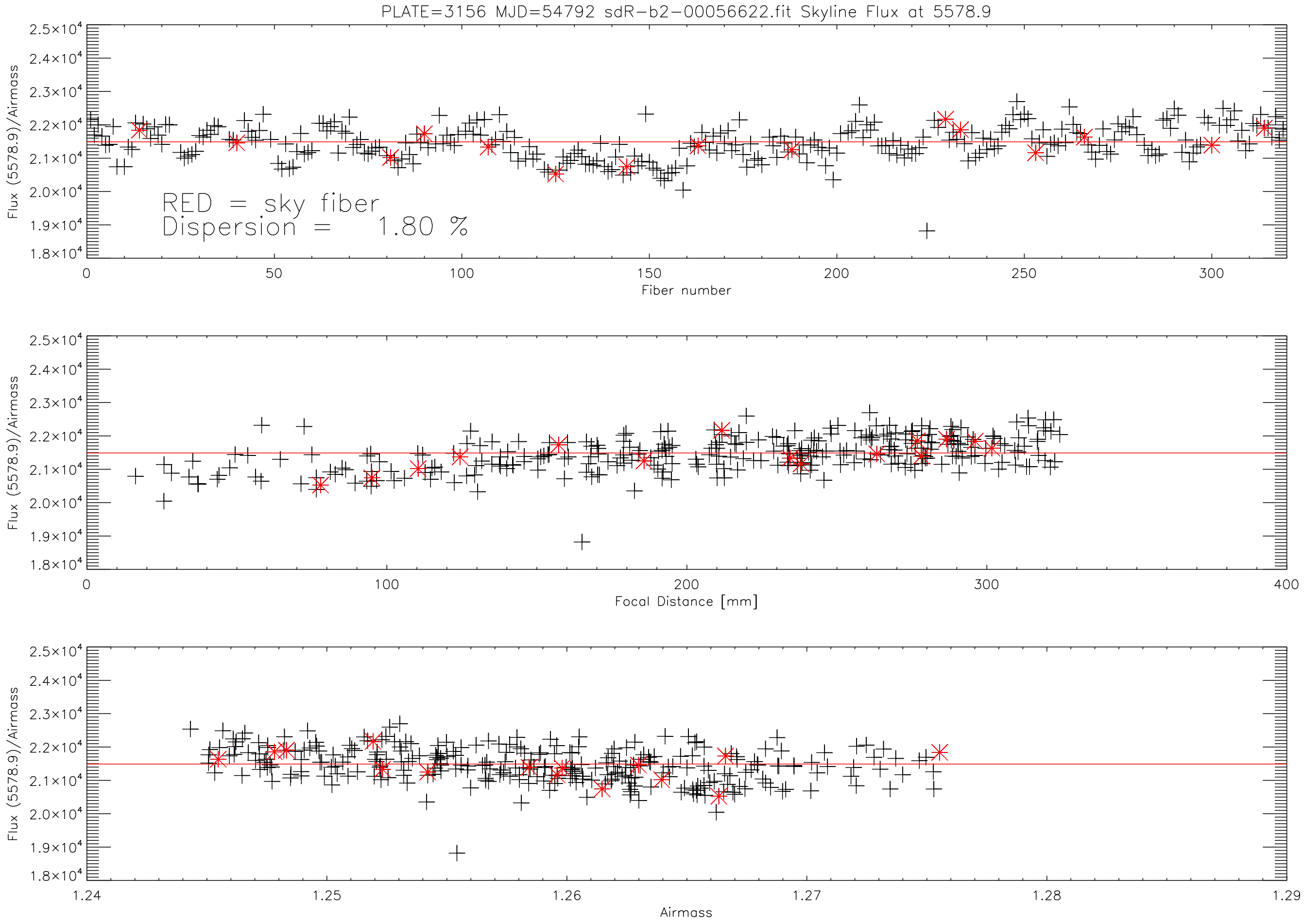


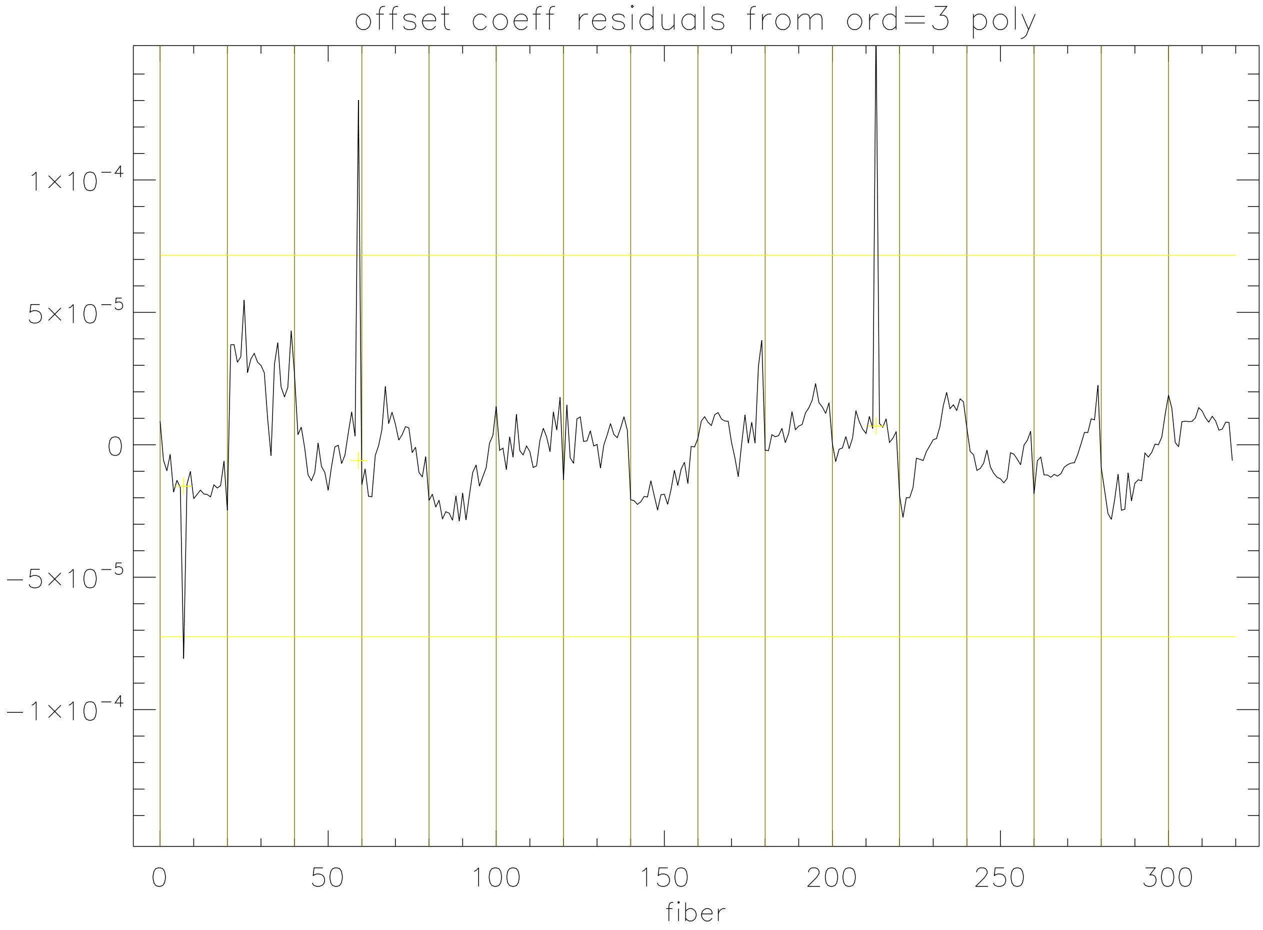
Number of sky fibers = 15

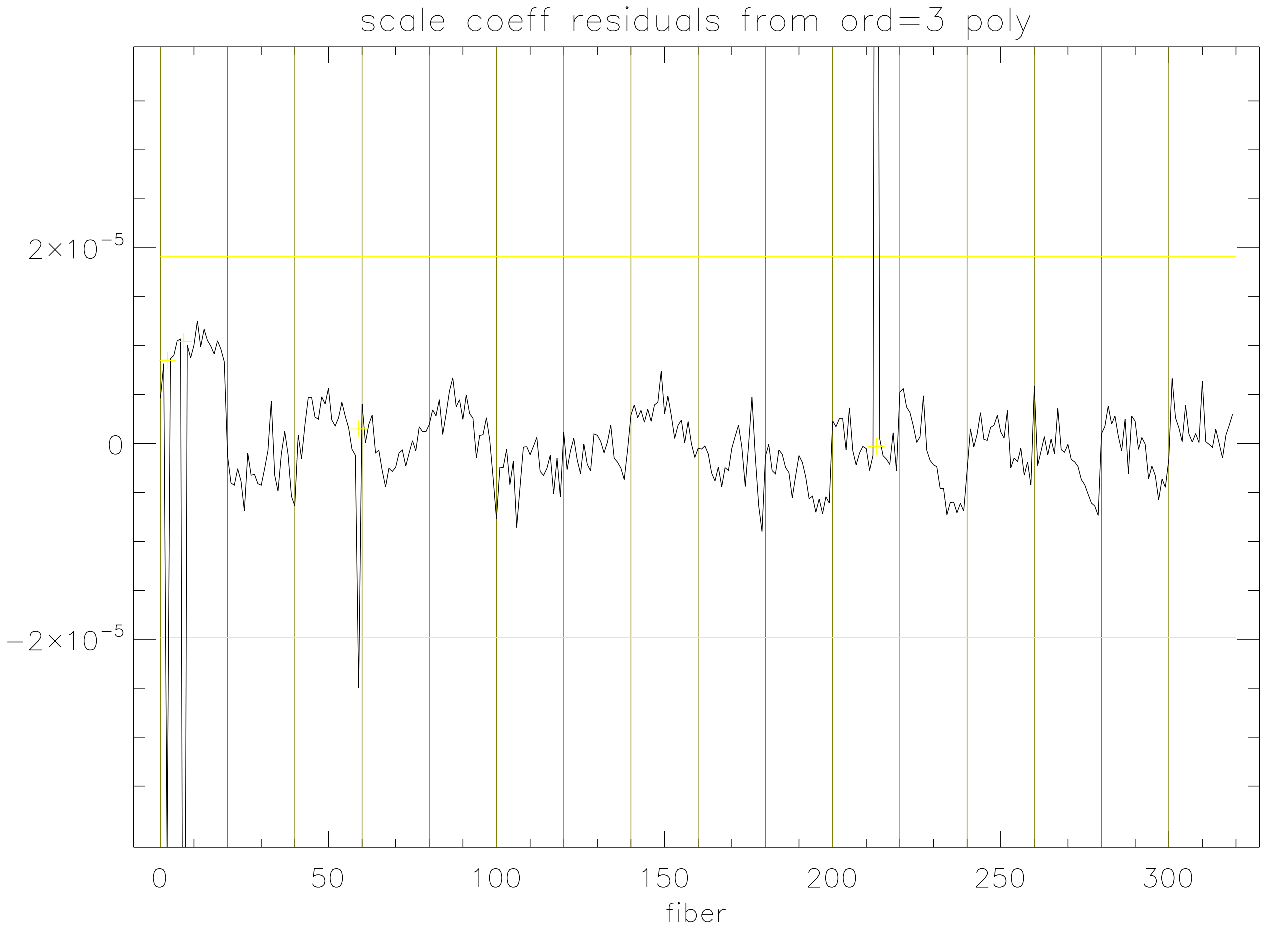
PLATE=3156 MJD=54792 sdR-b2-00056622.fit 2D Sky-subtraction Rescaled Errors

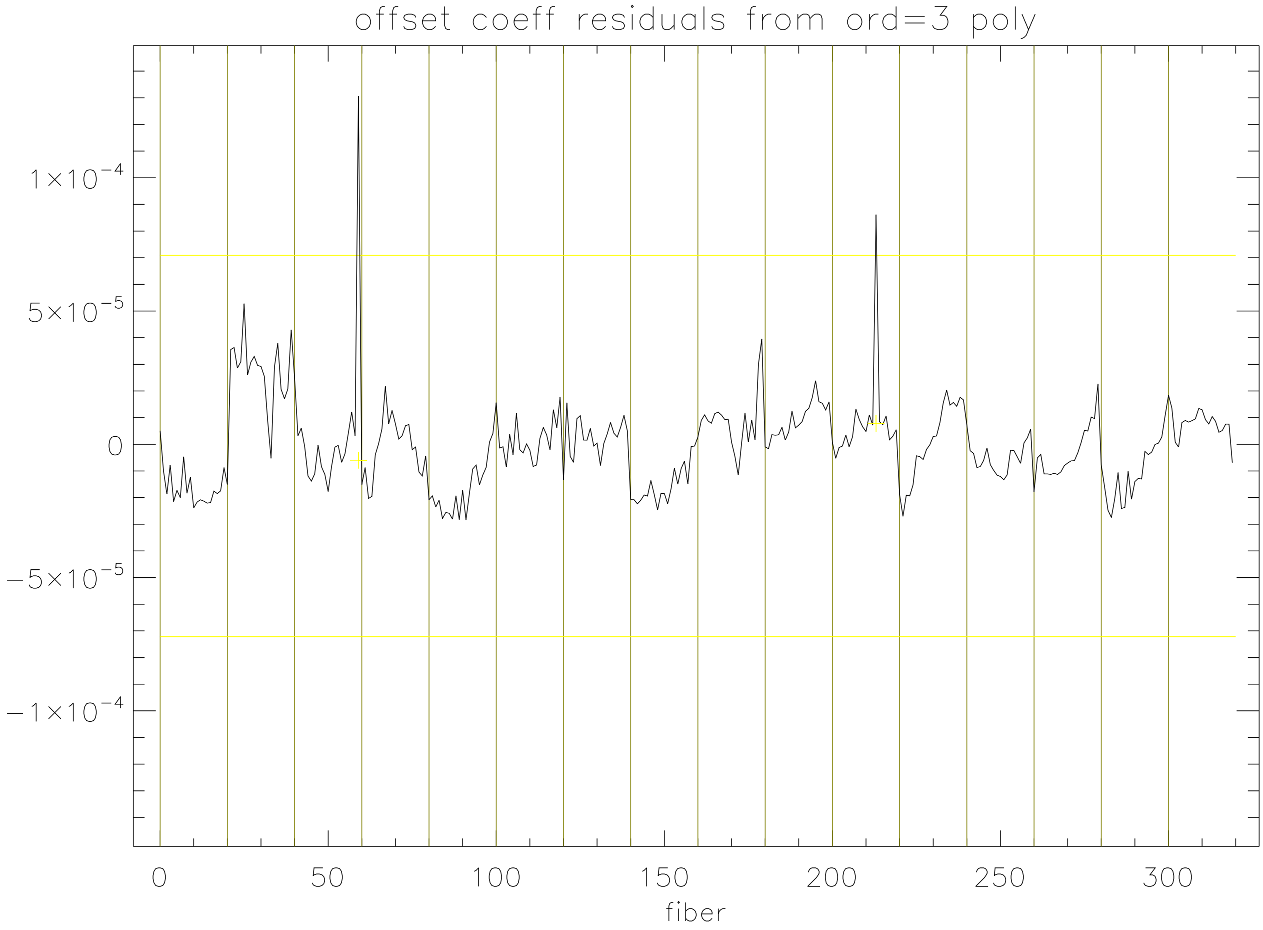


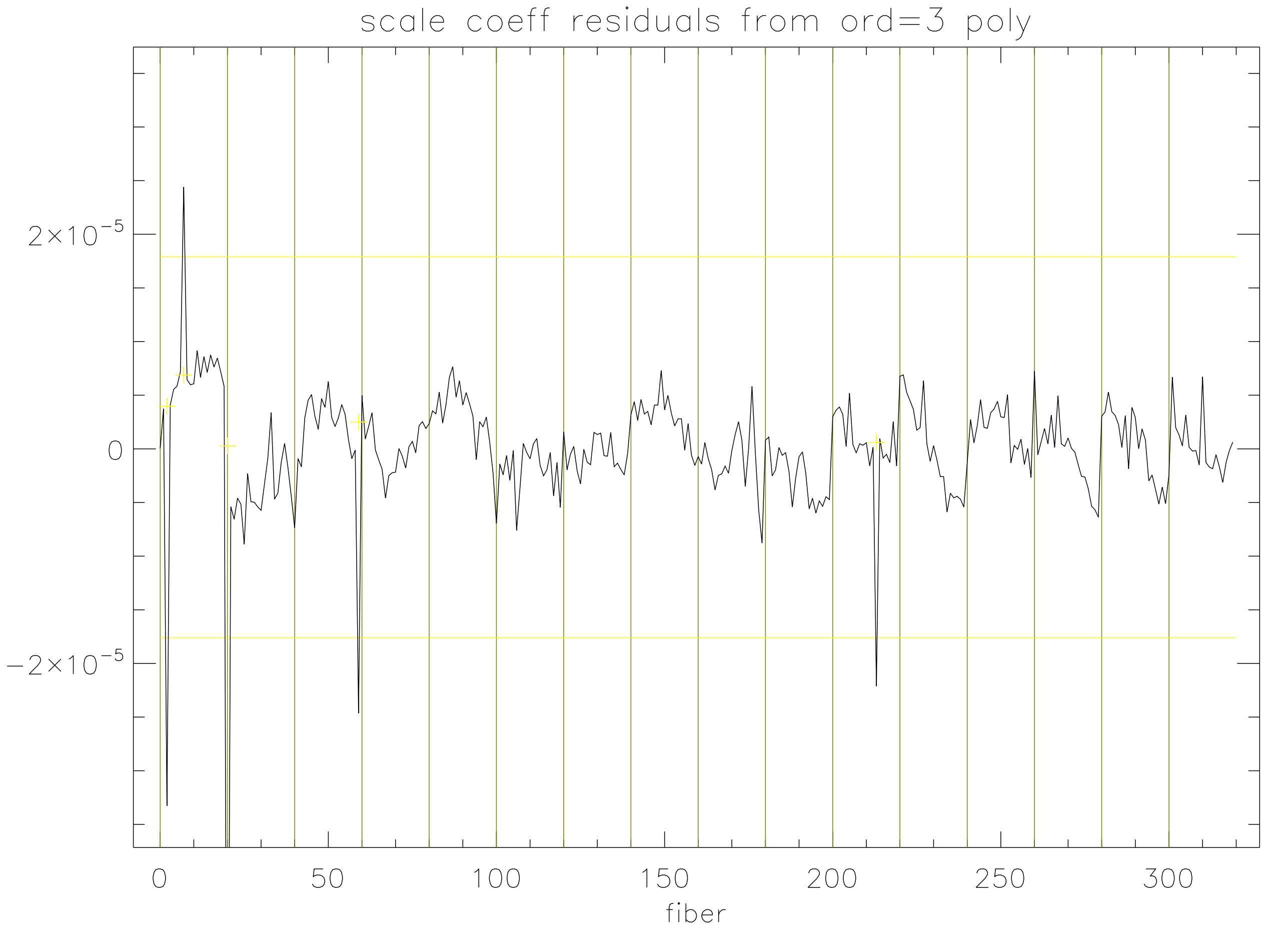

PLATE=3156 MJD=54792 sdR-b2-00056622.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2000
1500
1000
500
0
RED = sky fiber
Dispersion = 9.46 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2000
1500
1000
500
0
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2000
1500
1000
500
0
1.24
1.25
1.26
1.27
1.28
1.29
Airmass

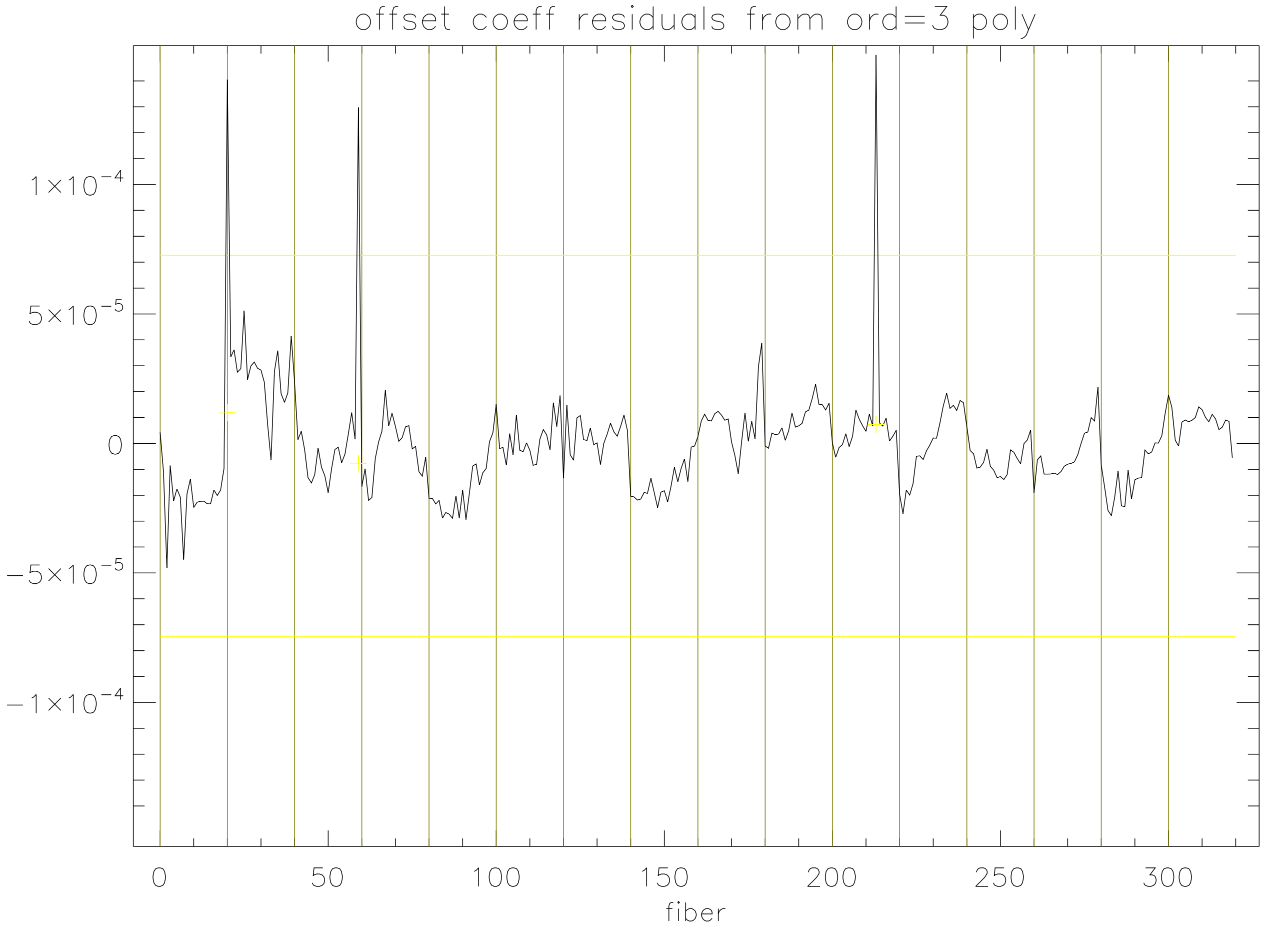

PLATE=3156 MJD=54792 sdR-b2-00056622.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.5×10⁴
2.4×10⁴
2.3×10⁴
2.2×10⁴
2.1×10⁴
2.0×10⁴
1.9×10⁴
1.8×10⁴
RED = sky fiber
Dispersion = 1.80 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.24
1.25
1.26
1.27
1.28
1.29
Airmass

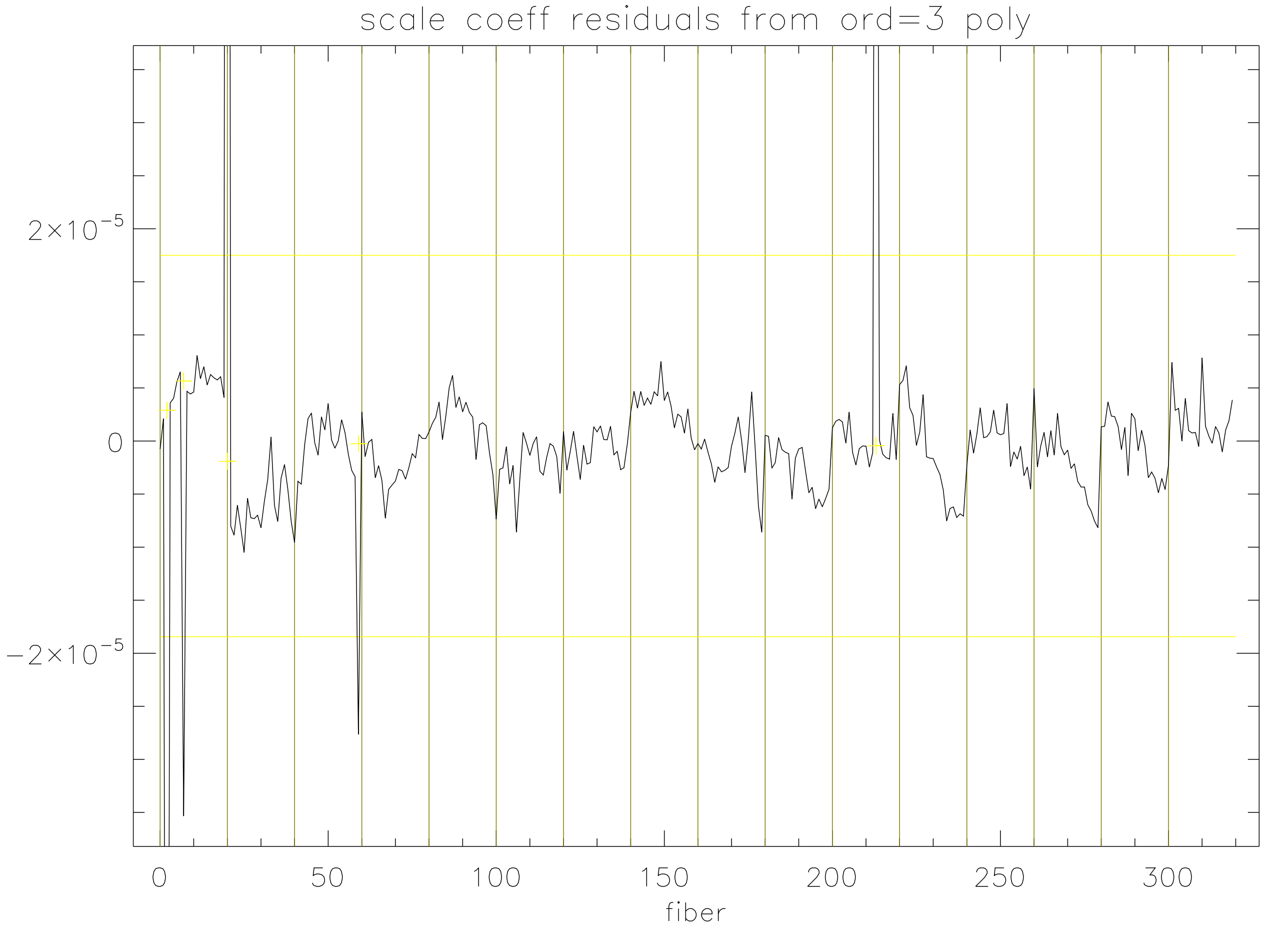

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

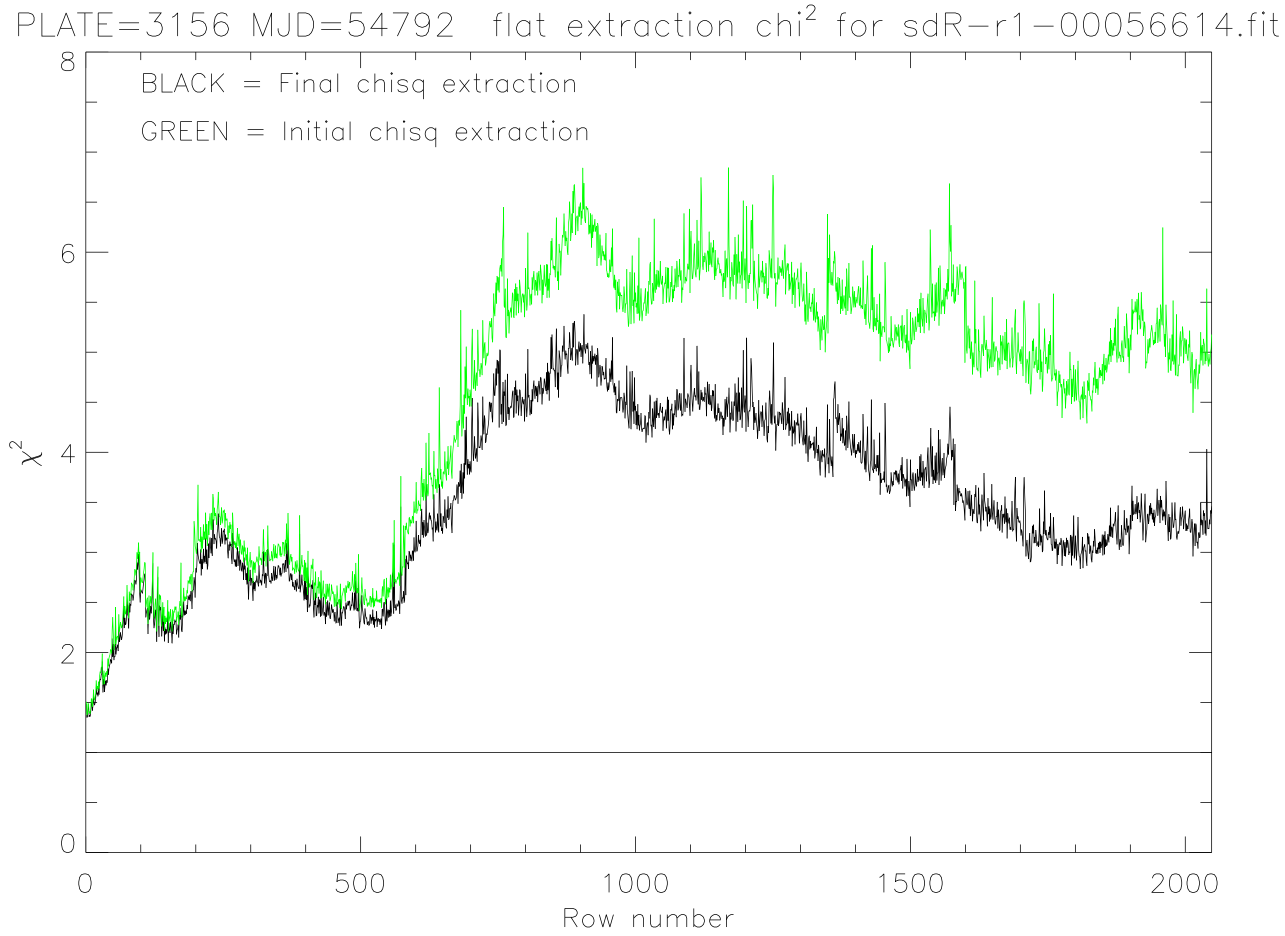

scale coeff residuals from ord=3 poly
2×10^{-5}
0
-2×10^{-5}
0
50
100
150
200
250
300
fiber

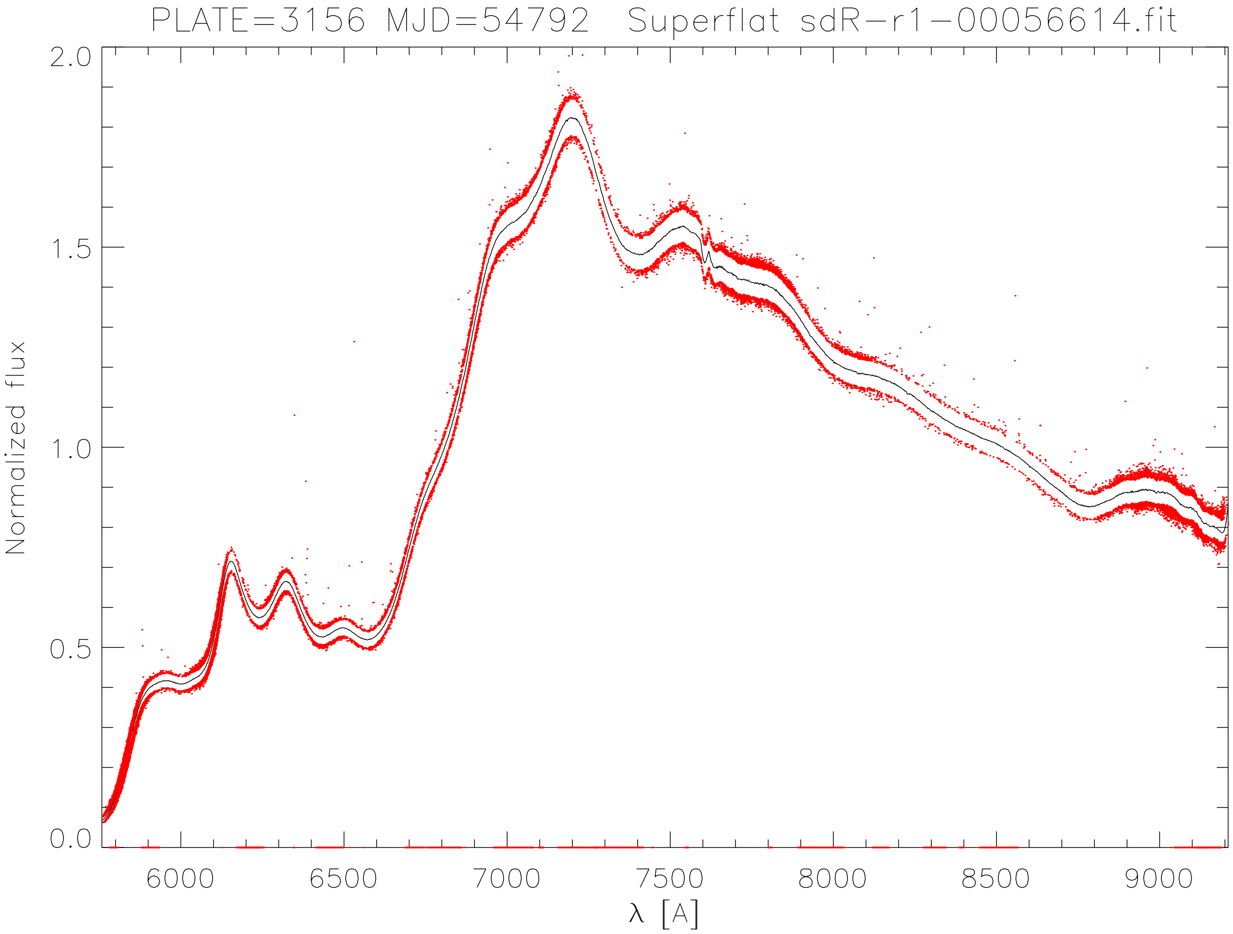

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

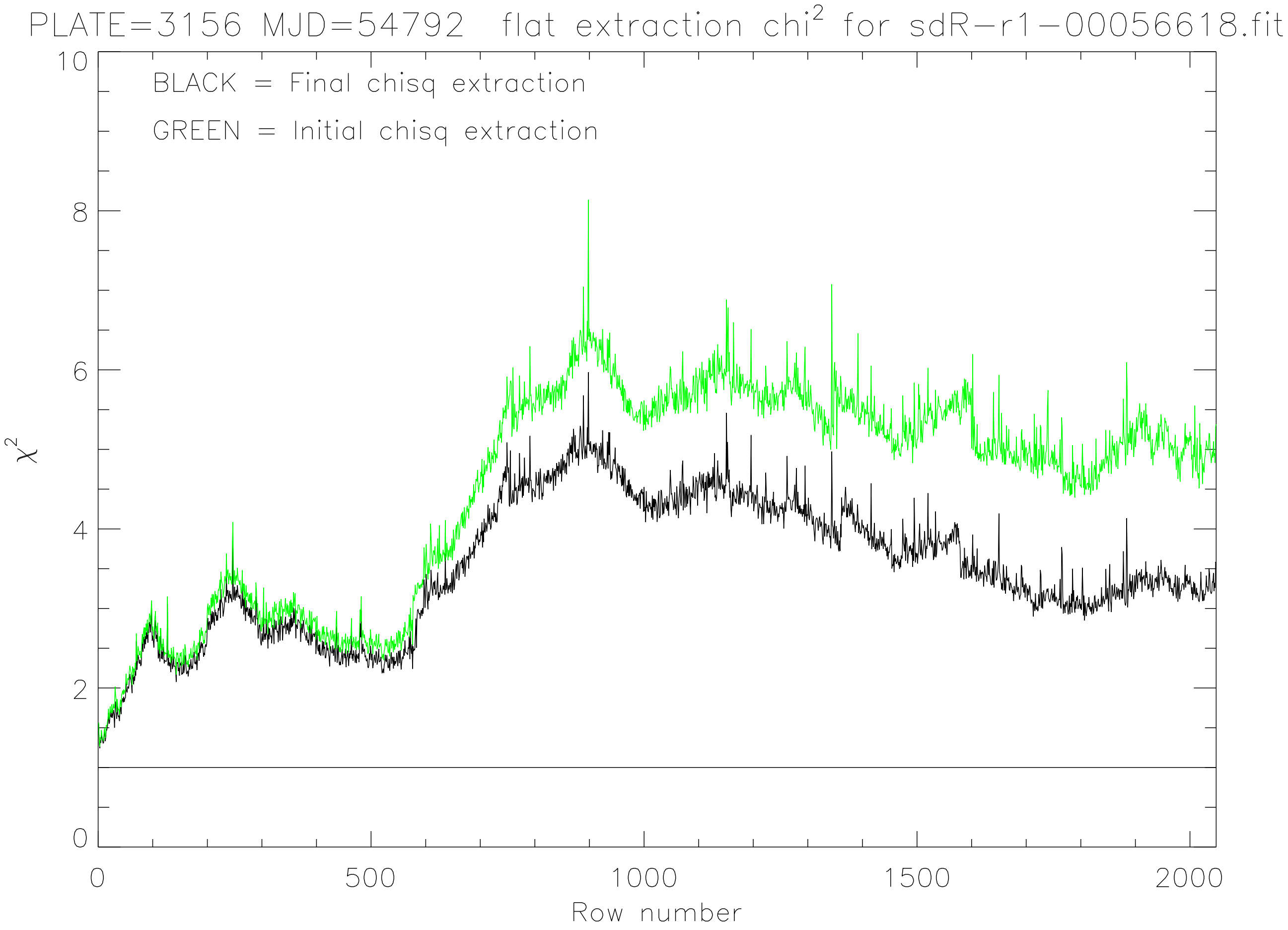

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber


offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

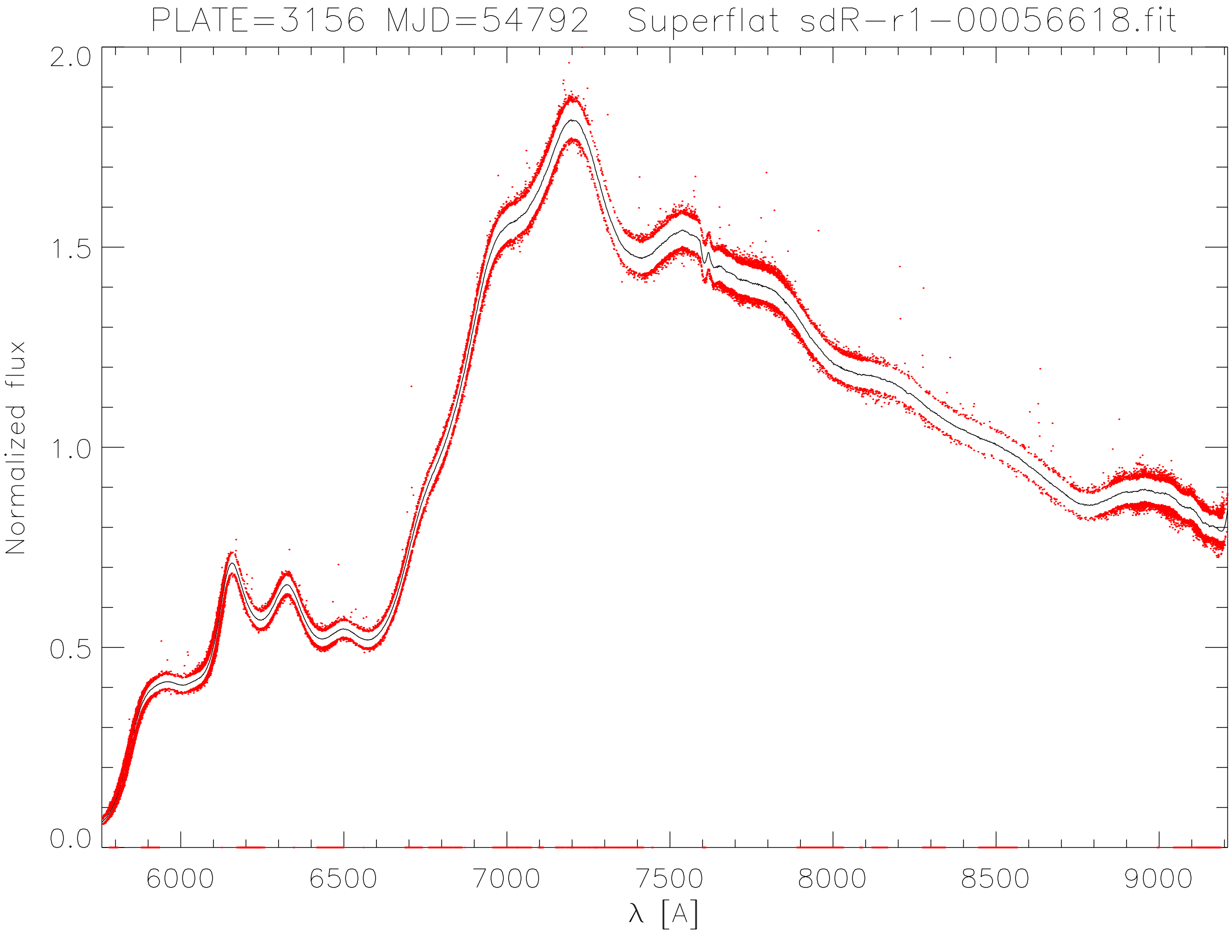

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

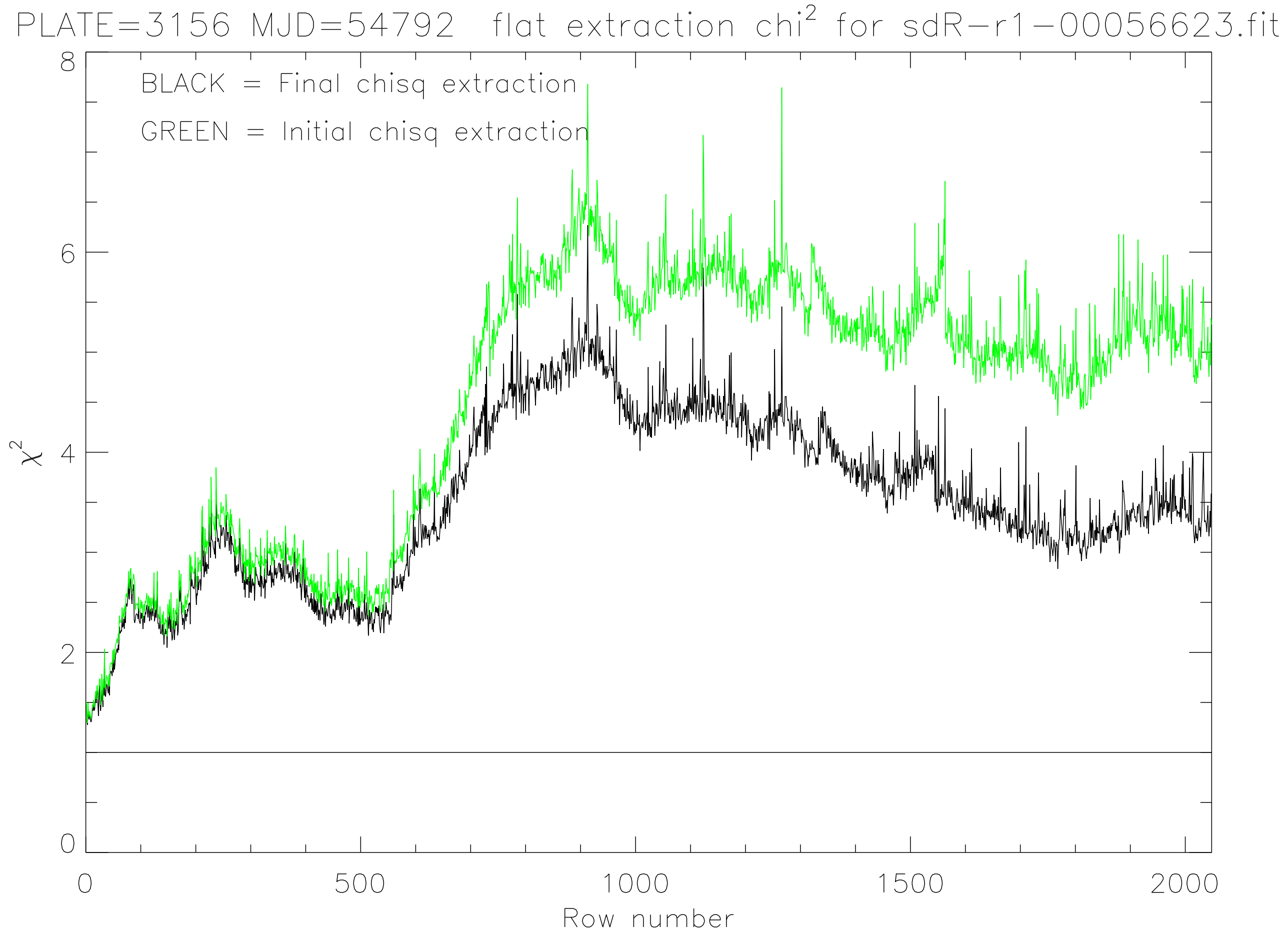

PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-r1-00056614.fit

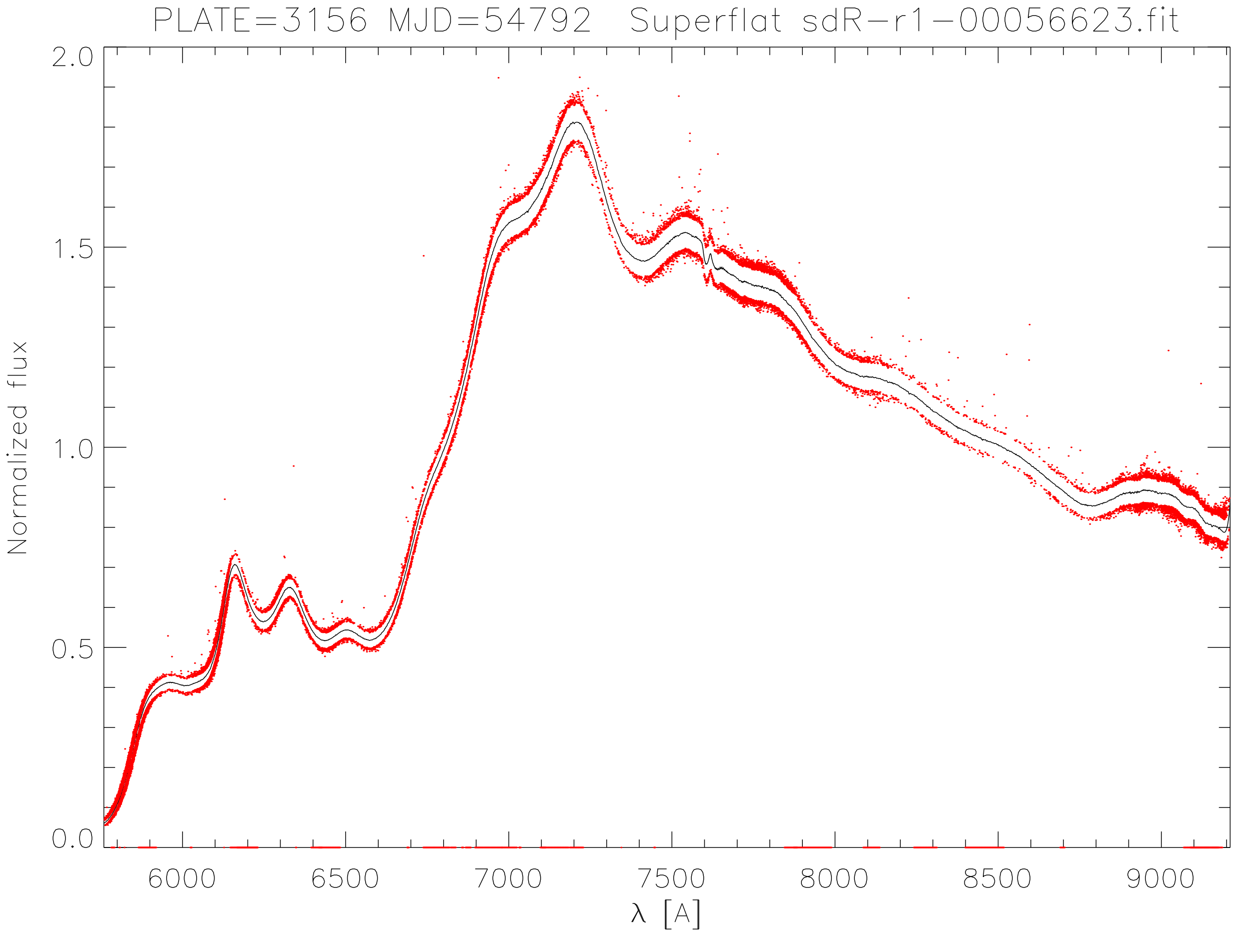

PLATE=3156 MJD=54792 Superflat sdR-r1-00056614.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

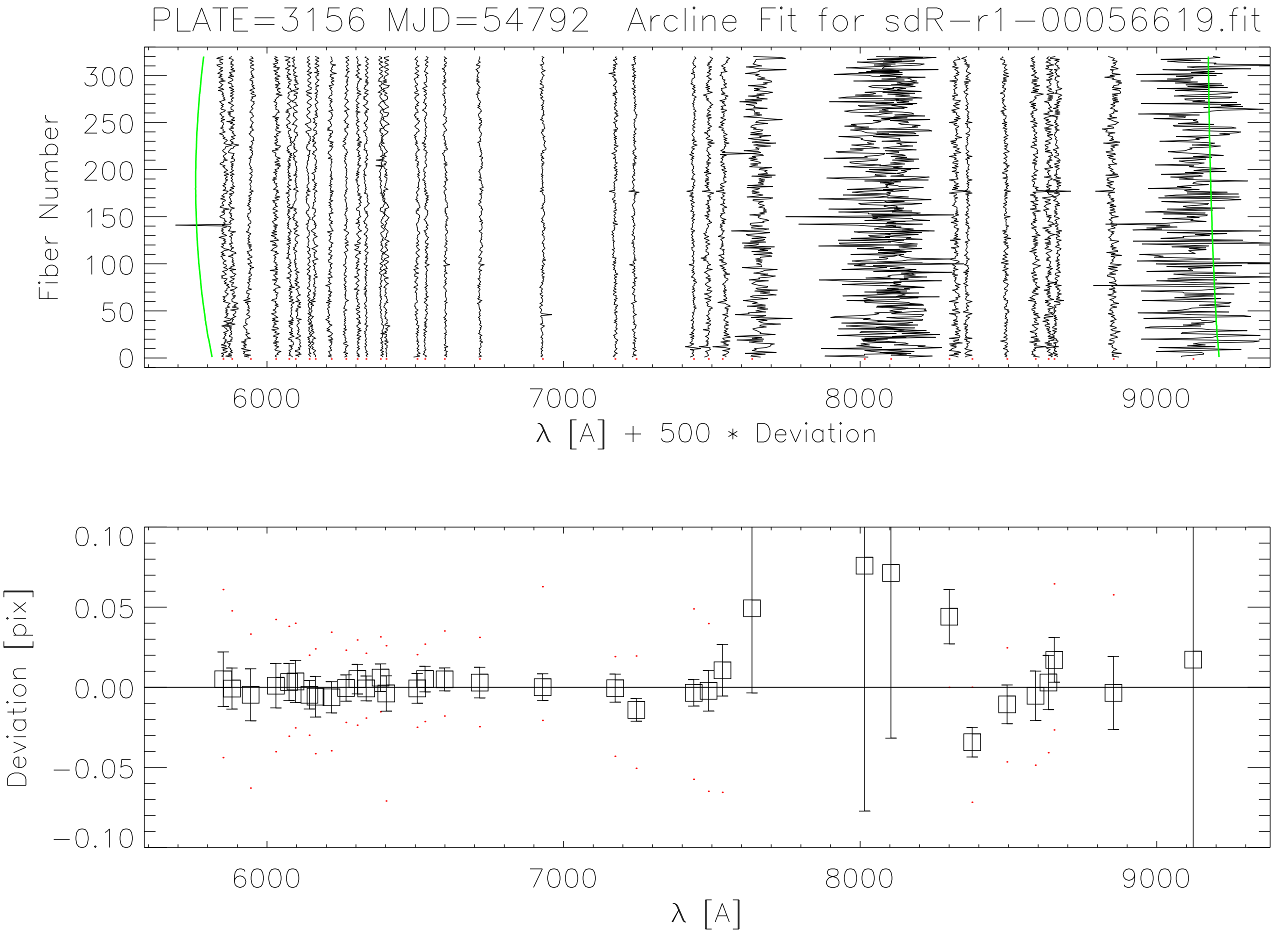


PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-r1-00056618.fit

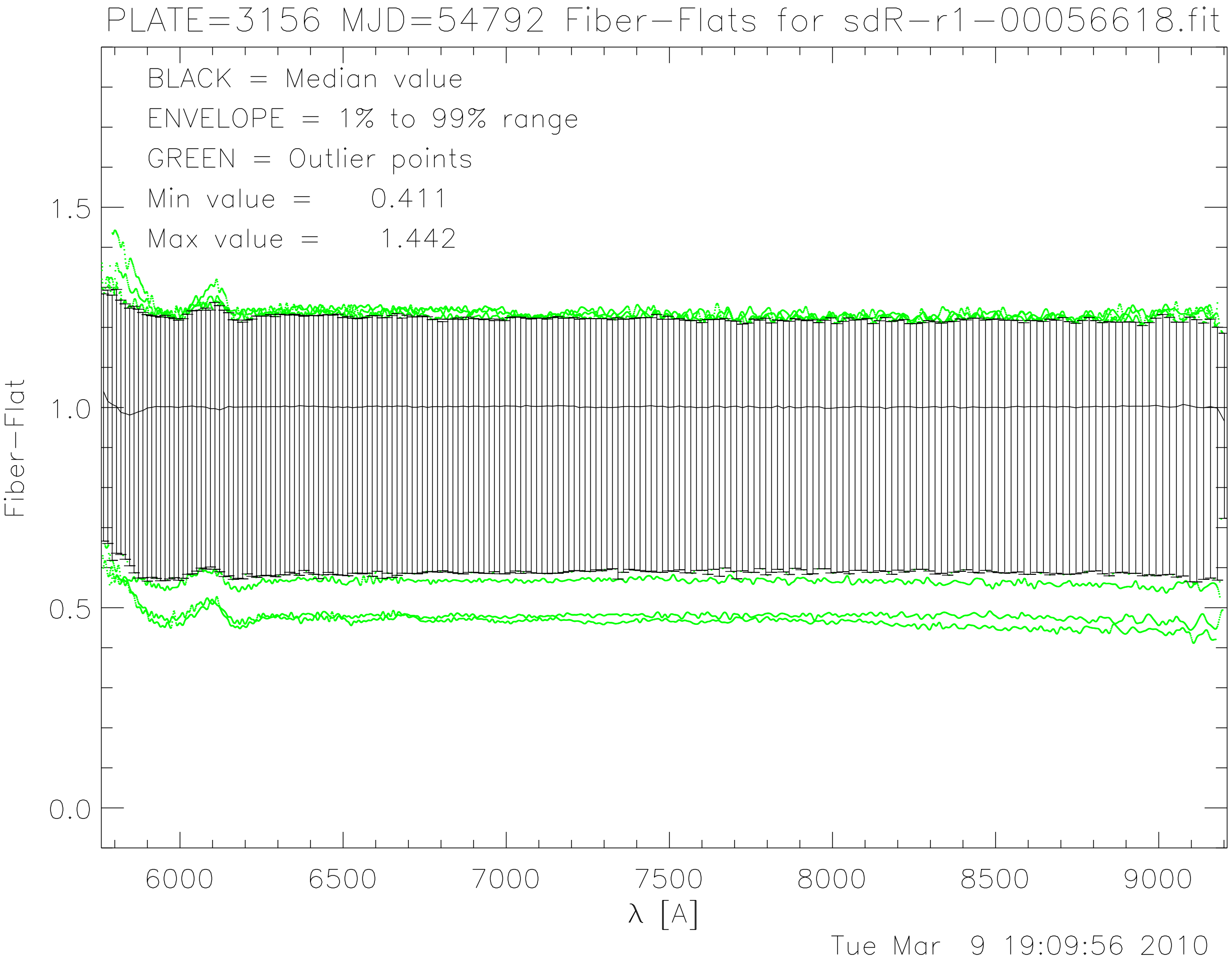

PLATE=3156 MJD=54792 Superflat sdR-r1-00056618.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

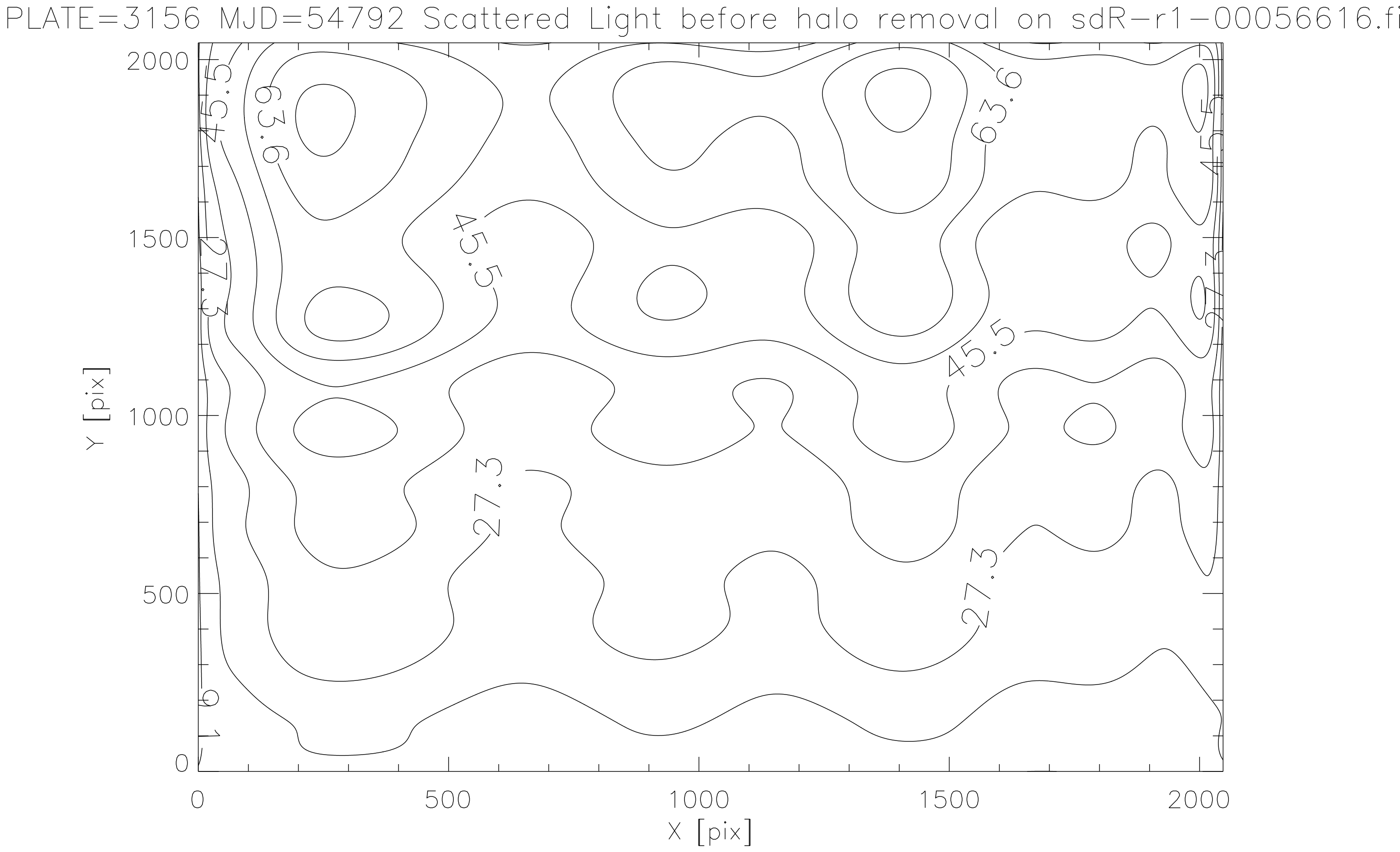

PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-r1-00056623.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number


PLATE=3156 MJD=54792 Superflat sdR-r1-00056623.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

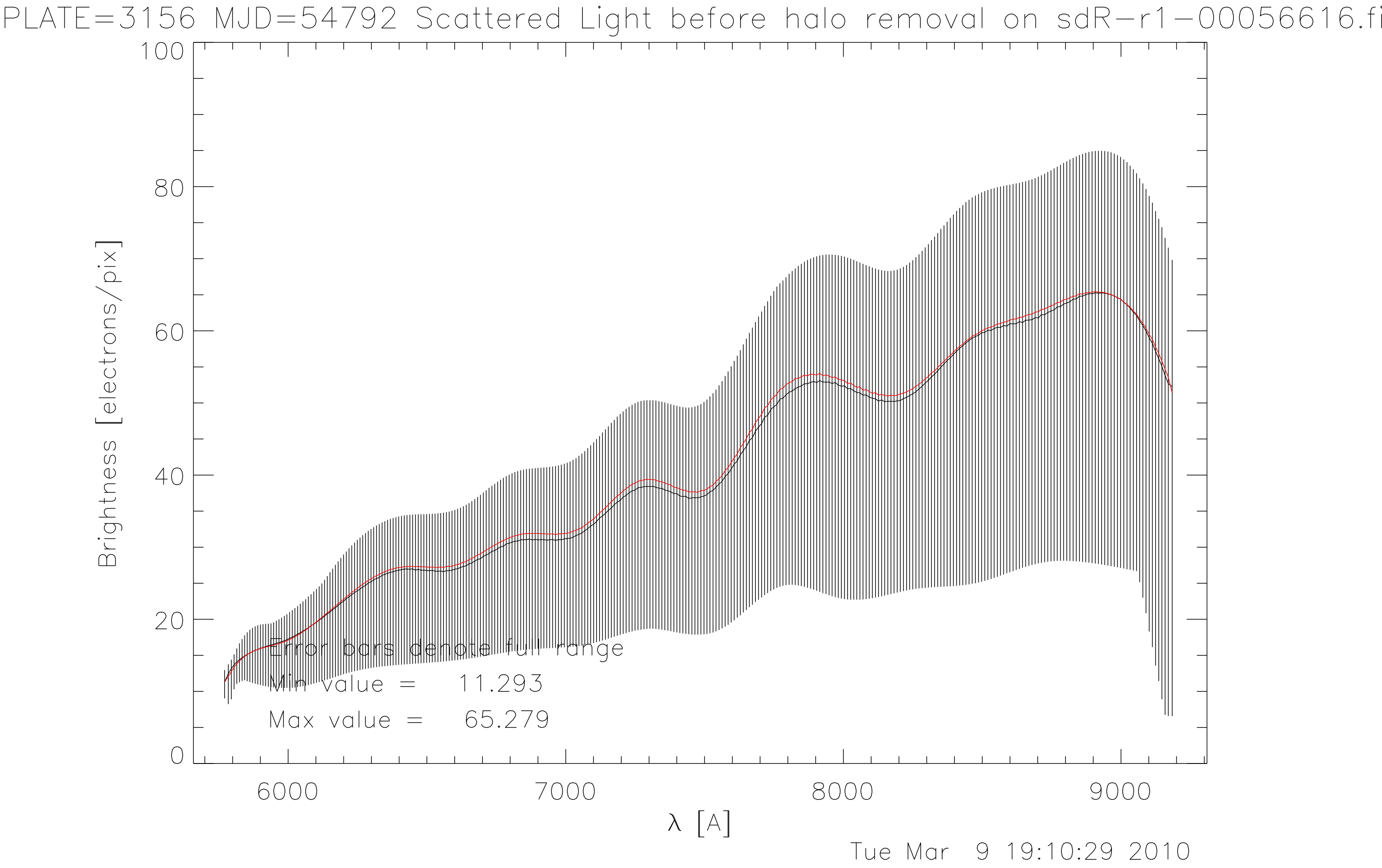


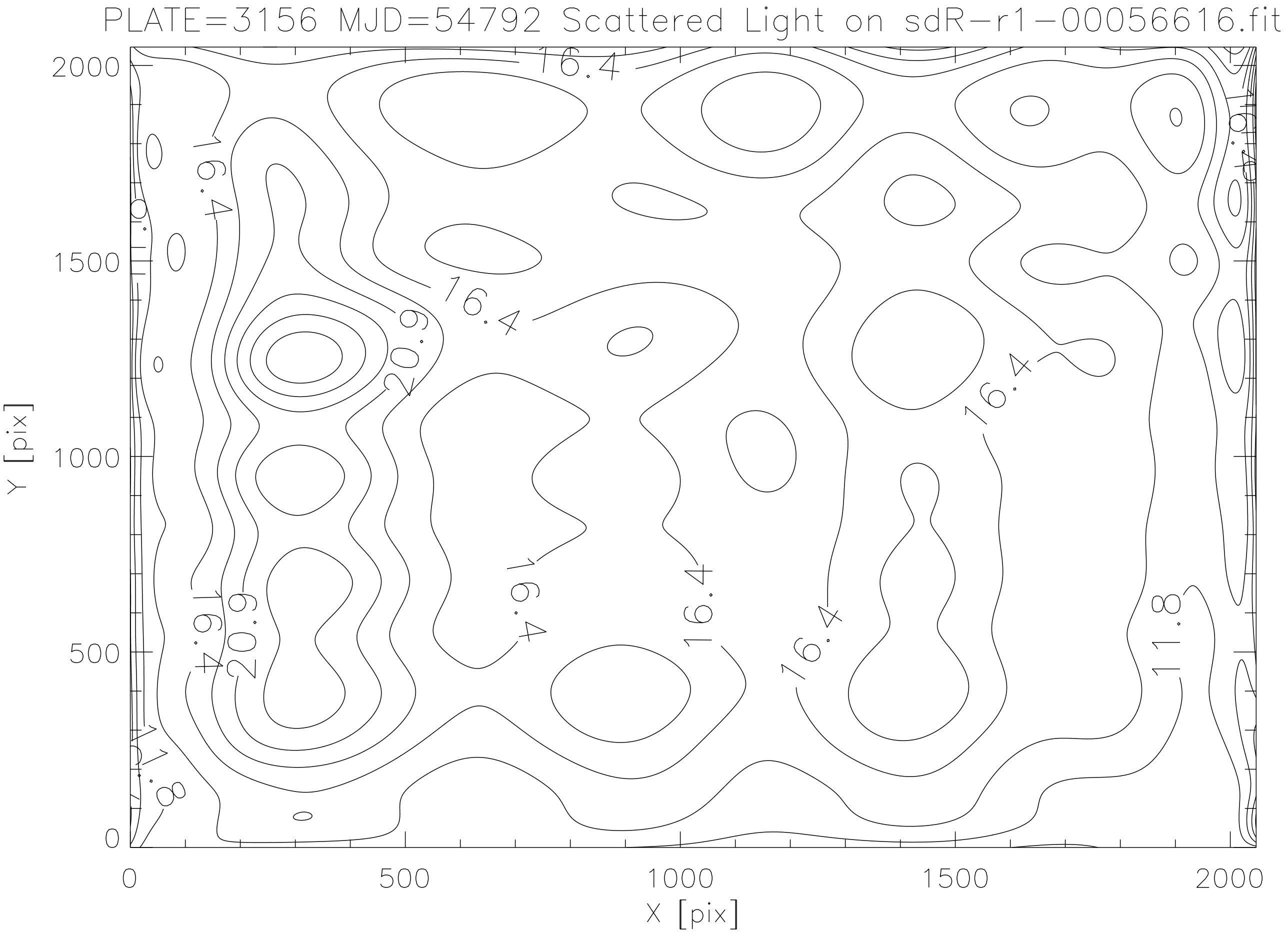
Tue Mar 9 19:09:50 2010


PLATE=3156 MJD=54792 Fiber−Flats for sdR−r1−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.411
Max value = 1.442
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 9 19:09:56 2010

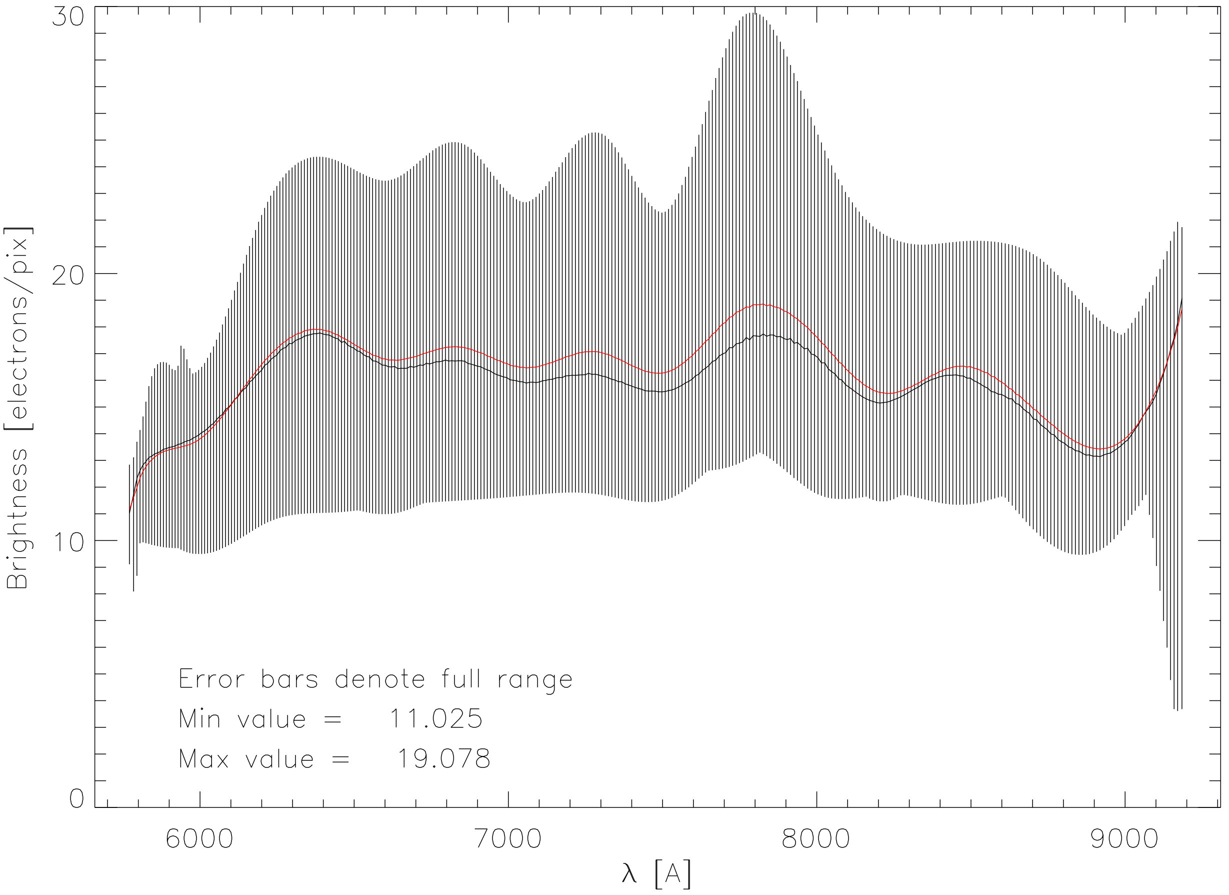


PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056616.fi

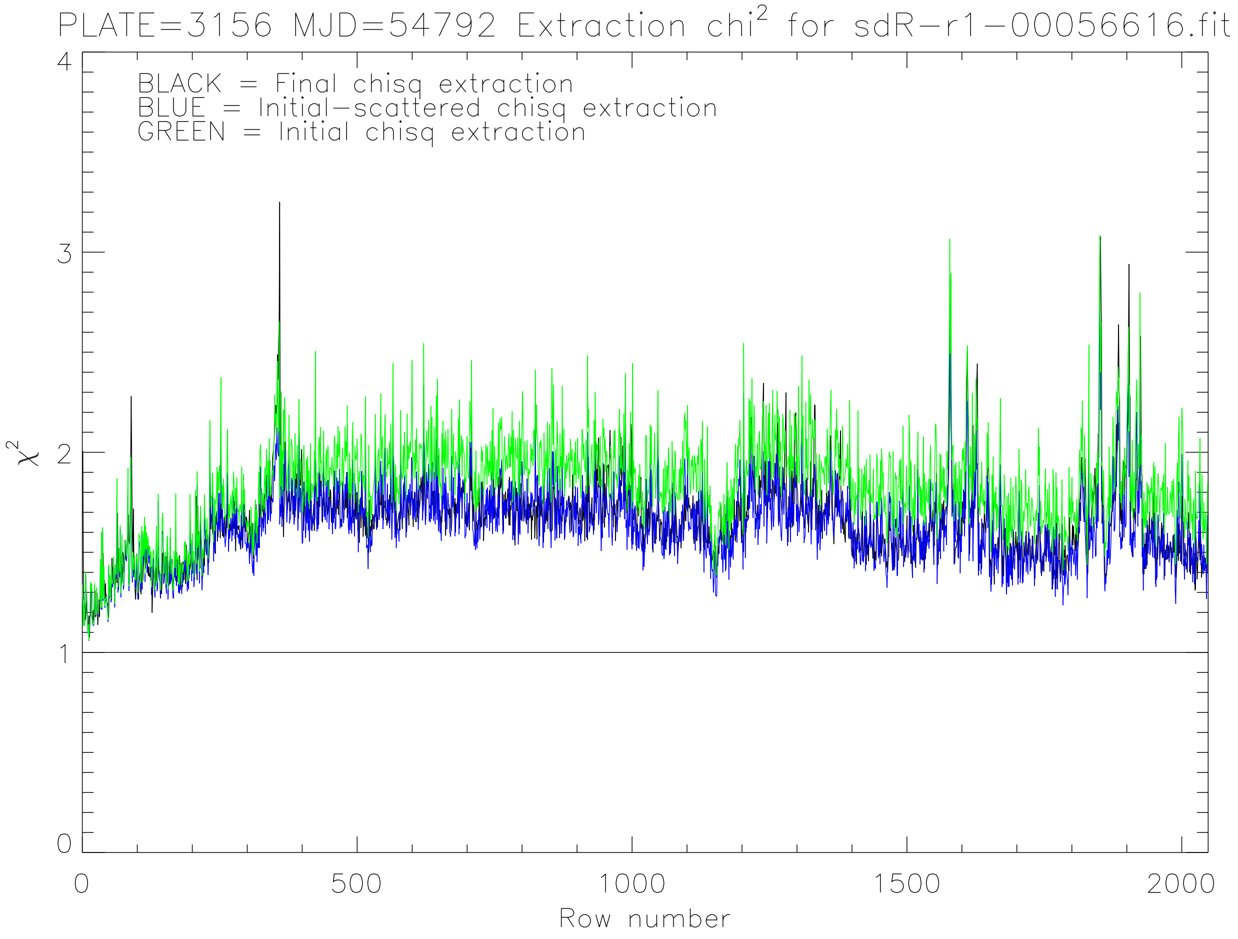

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056616.fi
Brightness [electrons/pix]
λ [A]
0
20
40
60
80
100
6000
7000
8000
9000
Error bars denote full range
Min value = 11.293
Max value = 65.279
Tue Mar 9 19:10:29 2010

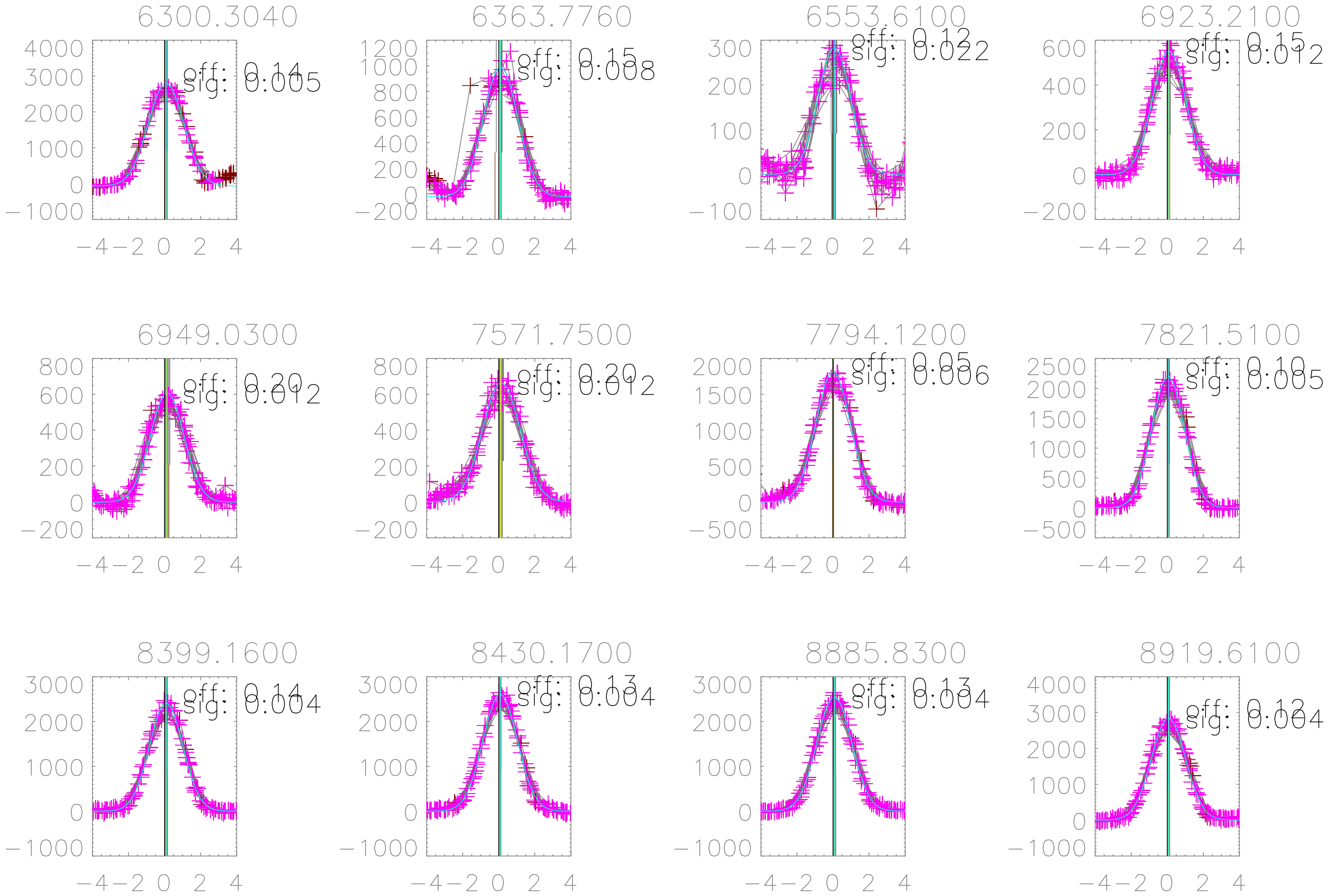

PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056616.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
20.9
11.8

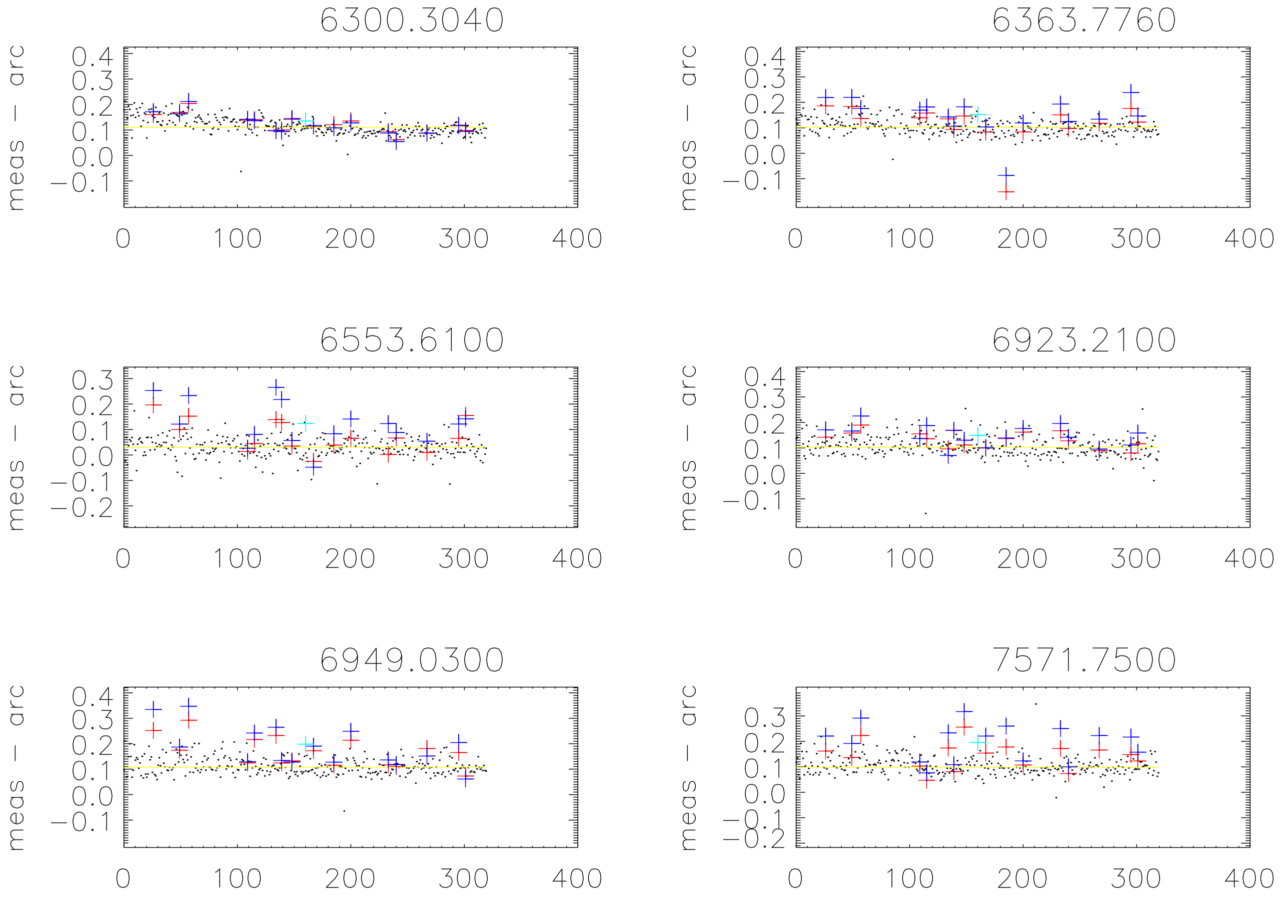
PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056616.fit

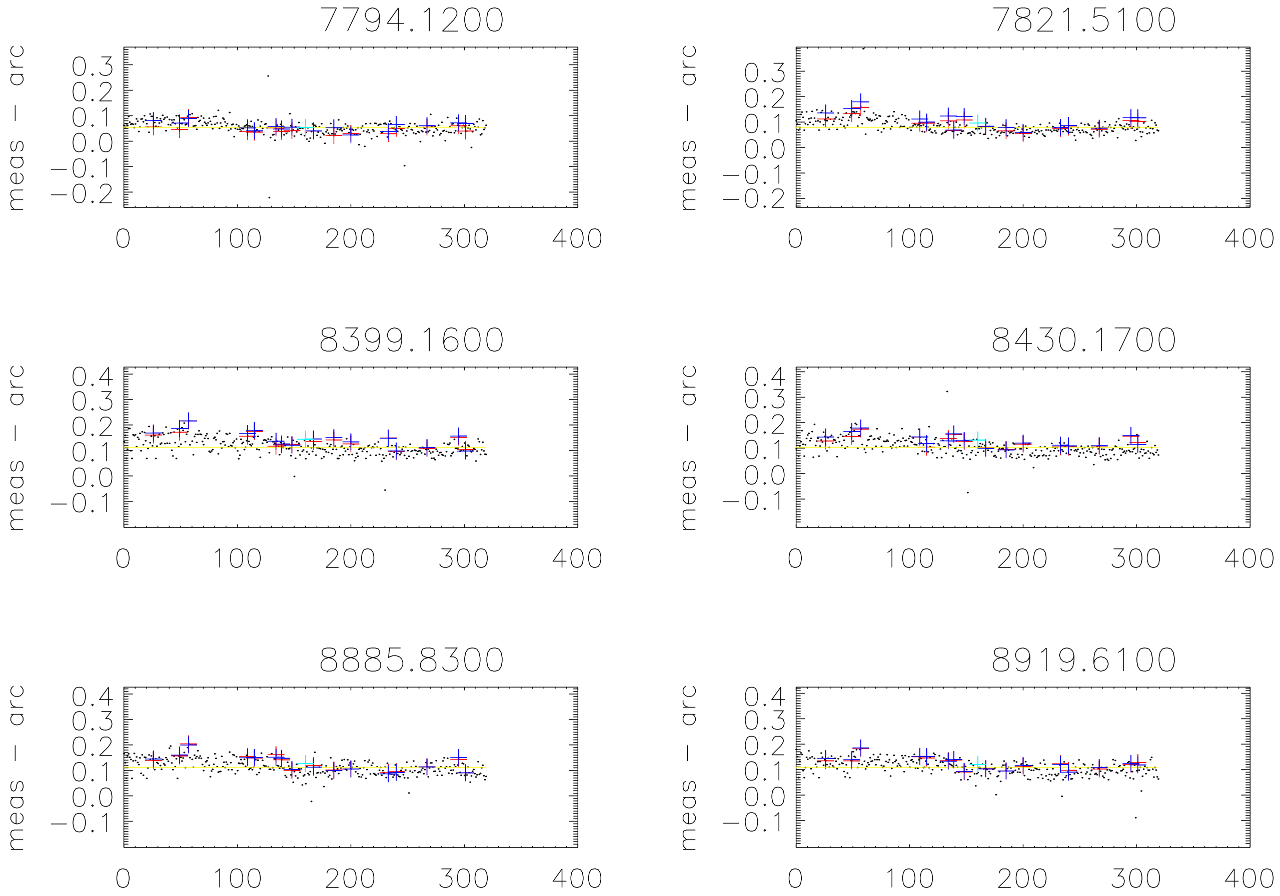


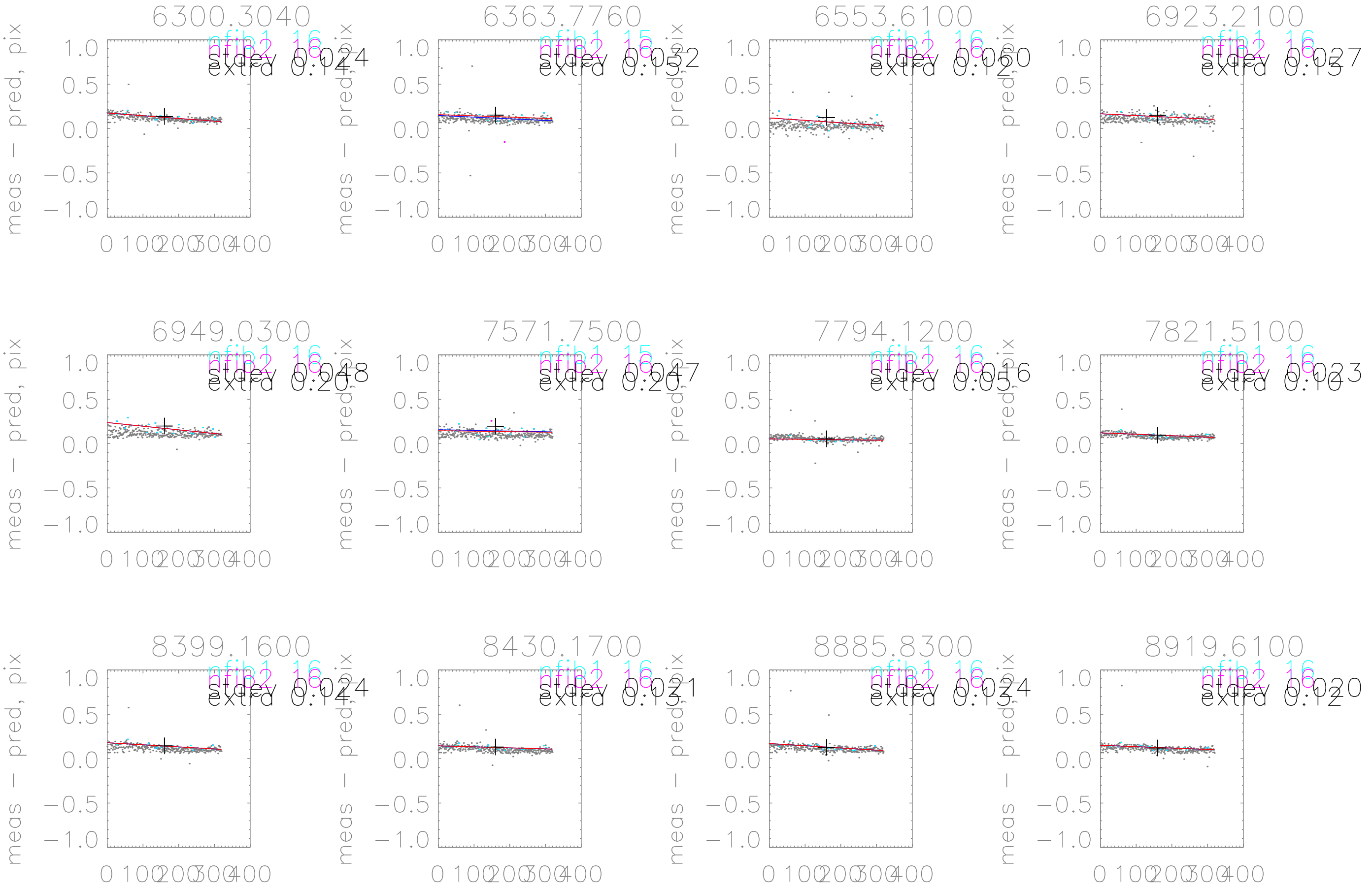
Tue Mar 9 19:12:24 2010

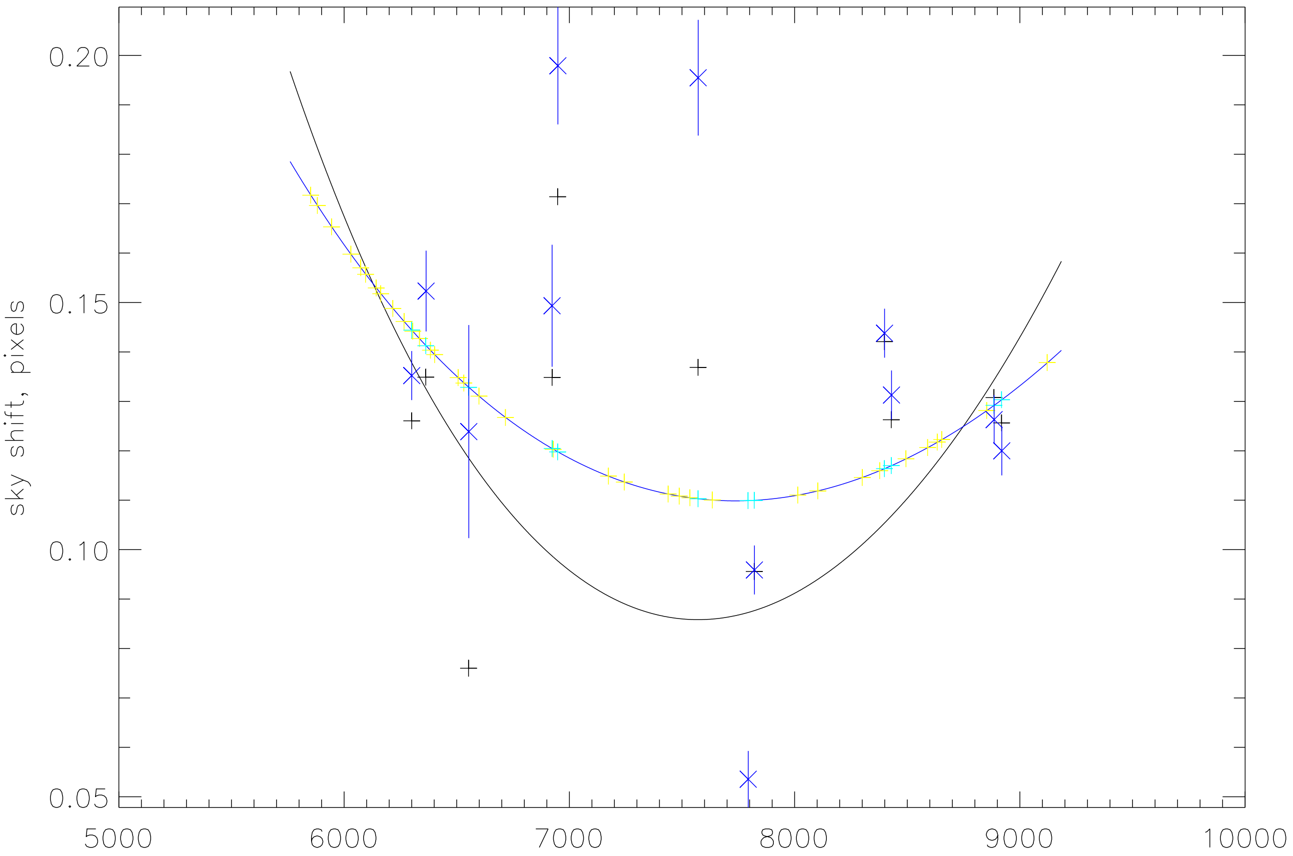

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r1-00056616.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

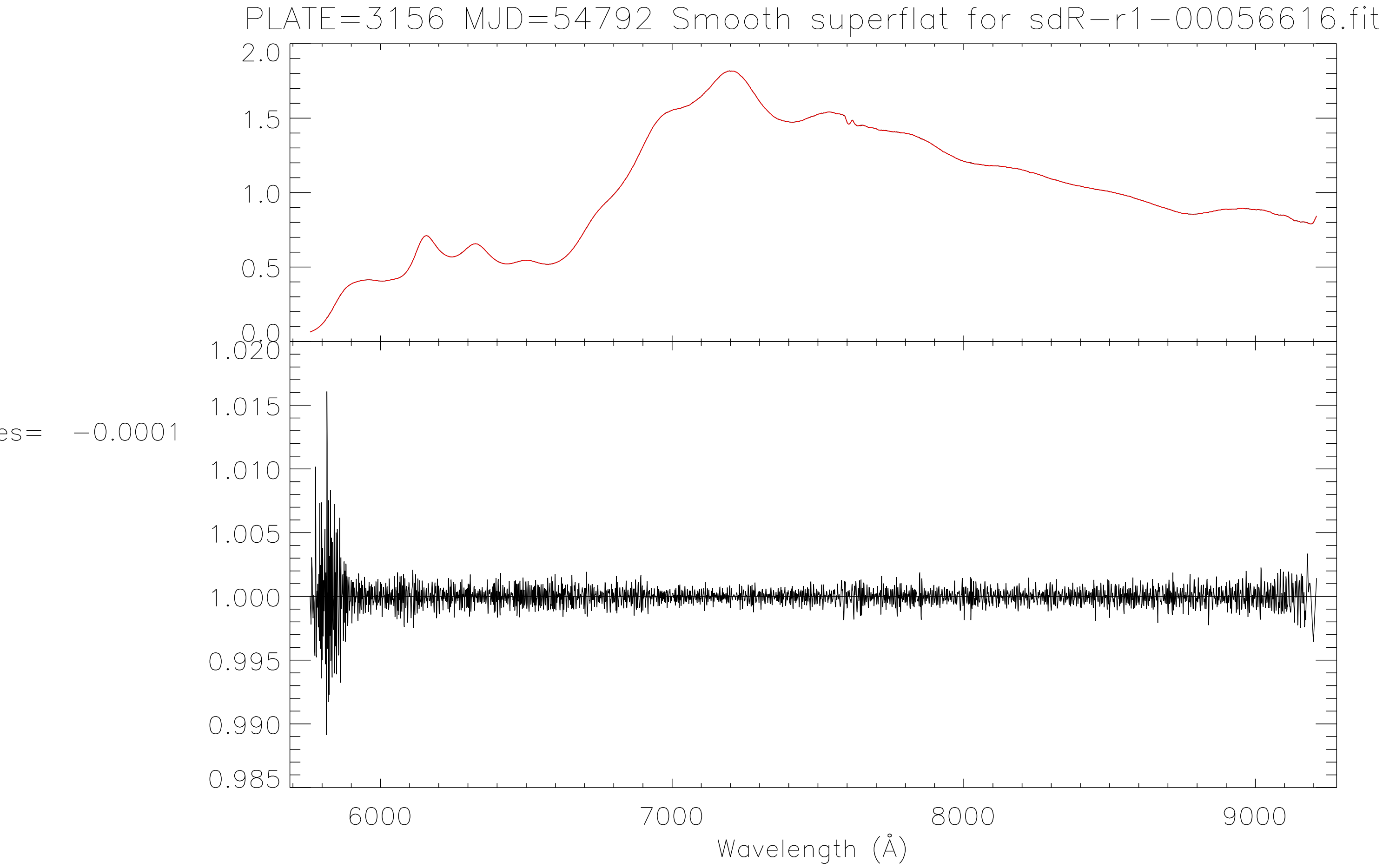

6300.3040
off: 0.14
sig: 0.005
6363.7760
off: 0.15
sig: 0.008
6553.6100
off: 0.12
sig: 0.022
6923.2100
off: 0.15
sig: 0.012
6949.0300
off: 0.20
sig: 0.012
7571.7500
off: 0.20
sig: 0.012
7794.1200
off: 0.05
sig: 0.006
7821.5100
off: 0.10
sig: 0.005
8399.1600
off: 0.14
sig: 0.004
8430.1700
off: 0.13
sig: 0.004
8885.8300
off: 0.13
sig: 0.004
8919.6100
off: 0.12
sig: 0.004
−4 −2 0 2 4

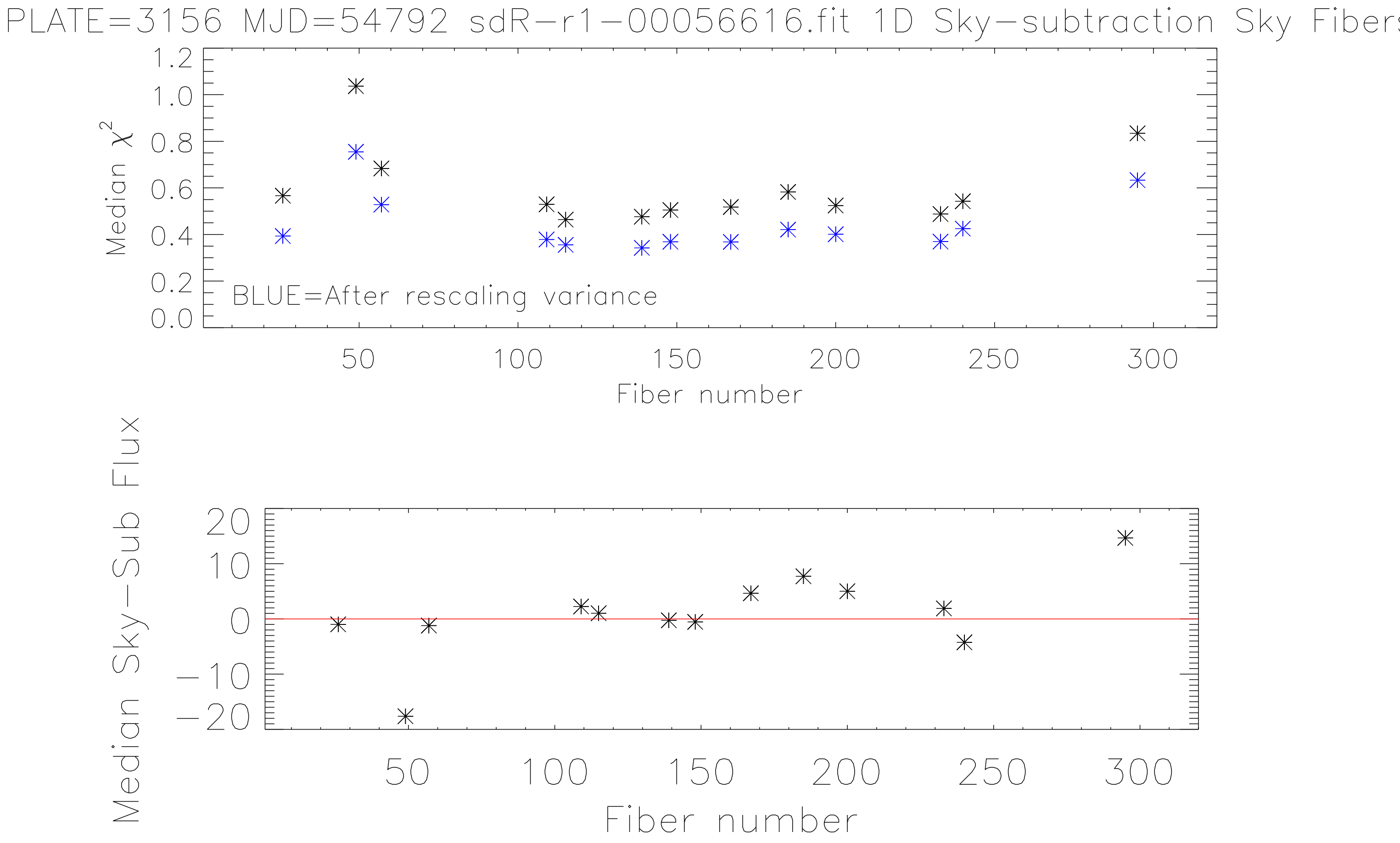

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0.4
0
100
200
300
400


6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd 0.14
6363.7760
nfib1 15
nfib2 16
stdev 0.032
extrd 0.15
6553.6100
nfib1 16
nfib2 16
stdev 0.060
extrd 0.12
6923.2100
nfib1 16
nfib2 16
stdev 0.027
extrd 0.15
6949.0300
nfib1 16
nfib2 16
stdev 0.048
extrd 0.20
7571.7500
nfib1 15
nfib2 16
stdev 0.047
extrd 0.20
7794.1200
nfib1 16
nfib2 16
stdev 0.016
extrd 0.05
7821.5100
nfib1 16
nfib2 16
stdev 0.023
extrd 0.10
8399.1600
nfib1 16
nfib2 16
stdev 0.024
extrd 0.14
8430.1700
nfib1 16
nfib2 16
stdev 0.031
extrd 0.13
8885.8300
nfib1 16
nfib2 16
stdev 0.024
extrd 0.13
8919.6100
nfib1 16
nfib2 16
stdev 0.020
extrd 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

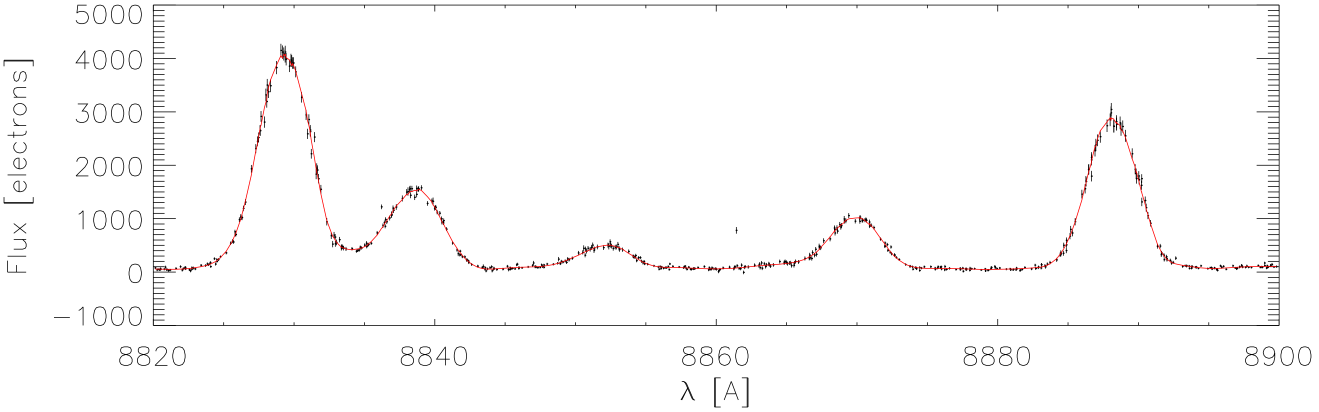

sky shift, pixels
0.20
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000


PLATE=3156 MJD=54792 Smooth superflat for sdR-r1-00056616.fit
2.0
1.5
1.0
0.5
0.0
1.020
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
6000
7000
8000
9000
Wavelength (Å)

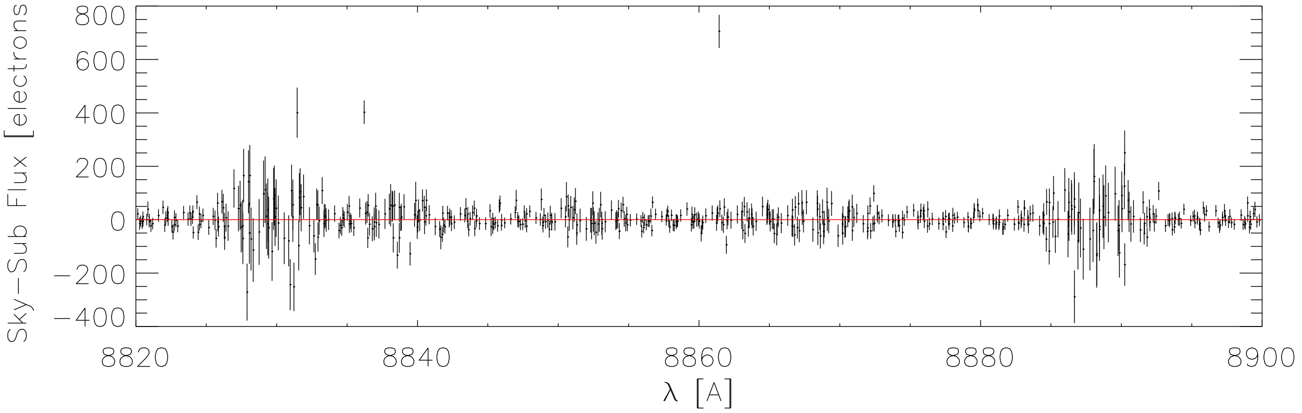


PLATE=3156 MJD=54792 sdR-r1-00056616.fit 1D Sky-subtraction Sky Fiber

PLATE=3156 MJD=54792 sdR-r1-00056616.fit 1D Sky-subtraction Sky Fibers

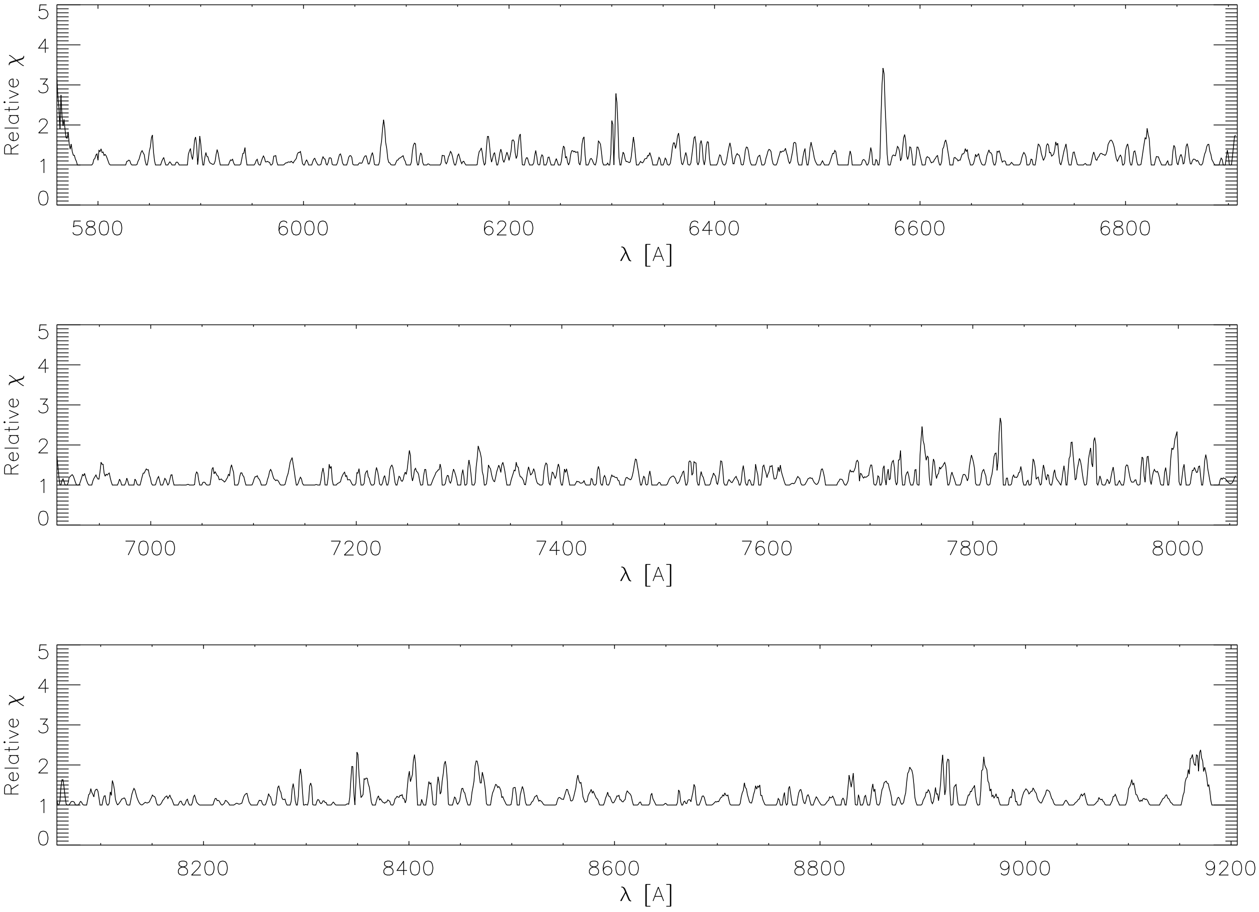


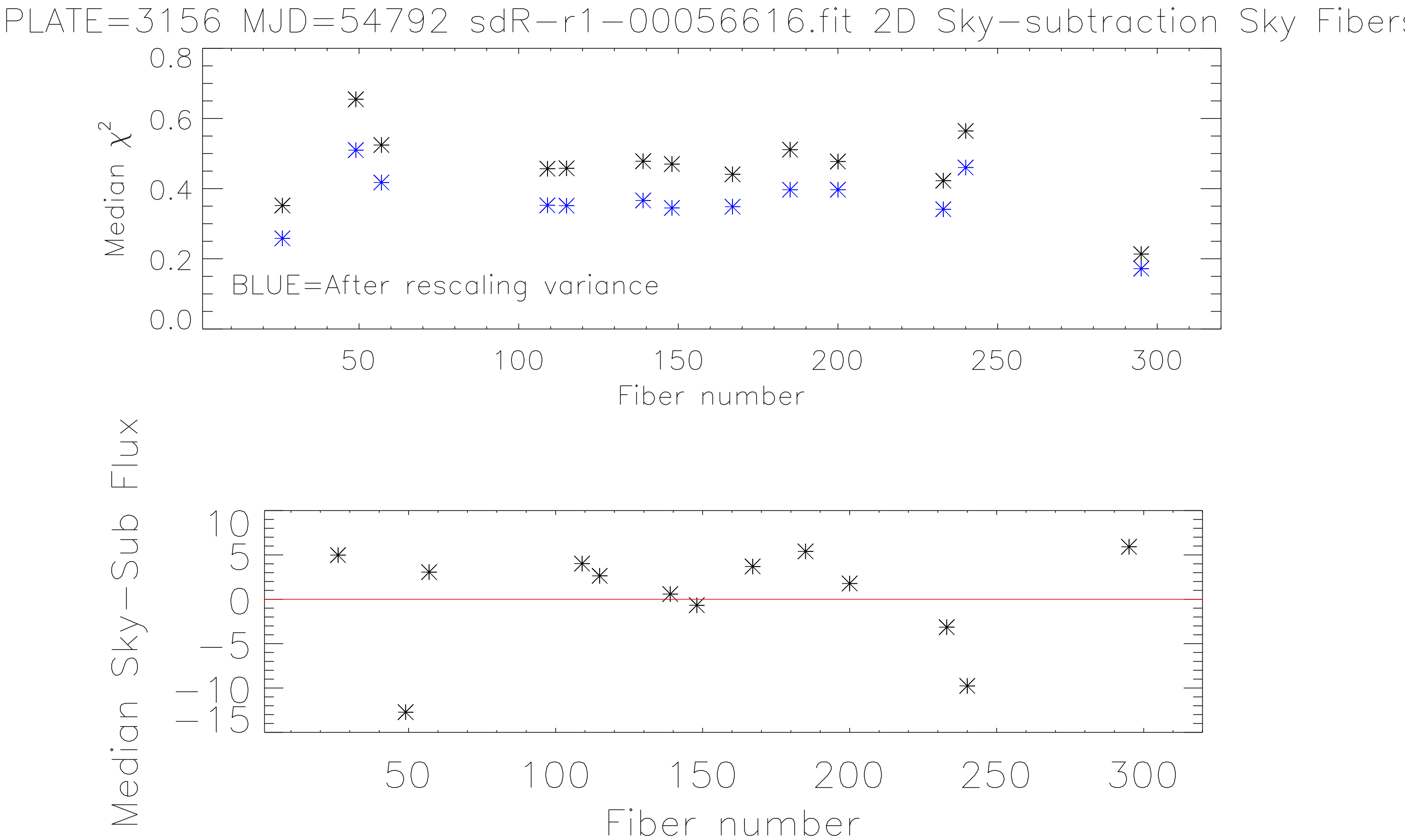
PLATE=3156 MJD=54792 sdR-r1-00056616.fit 1D Sky-subtraction Sky-subtracted Sky F



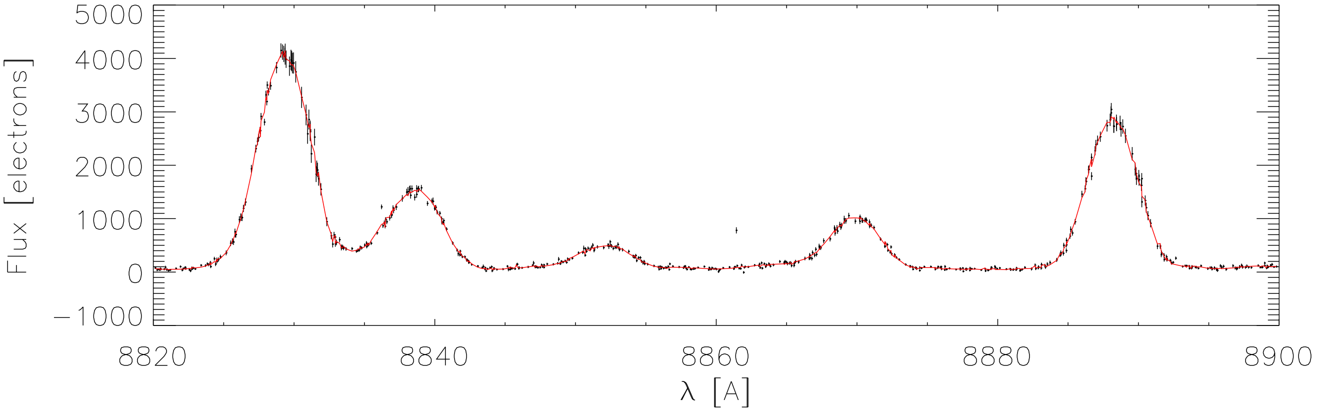
Number of sky fibers = 13

PLATE=3156 MJD=54792 sdR-r1-00056616.fit 1D Sky-subtraction Rescaled Errors

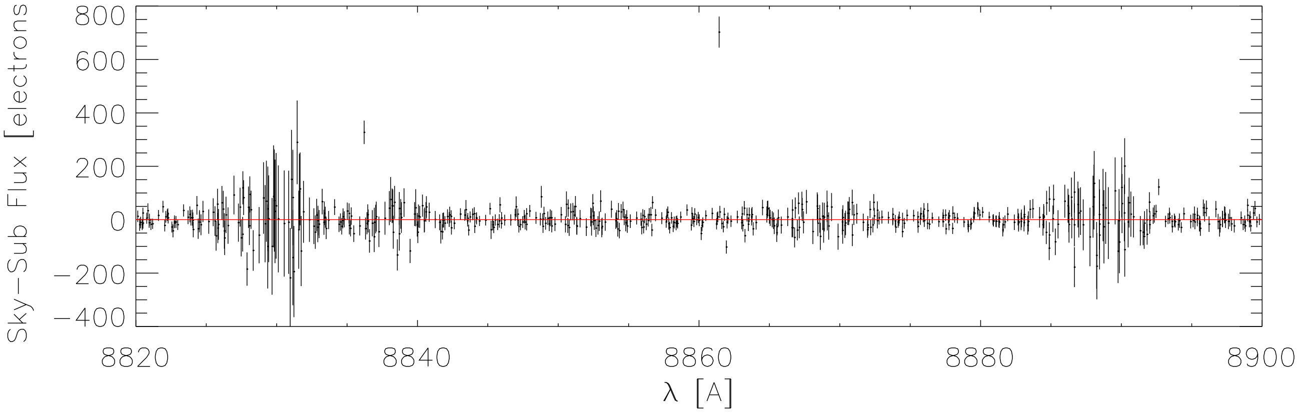



PLATE=3156 MJD=54792 sdR-r1-00056616.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number

PLATE=3156 MJD=54792 sdR-r1-00056616.fit 2D Sky-subtraction Sky Fibers

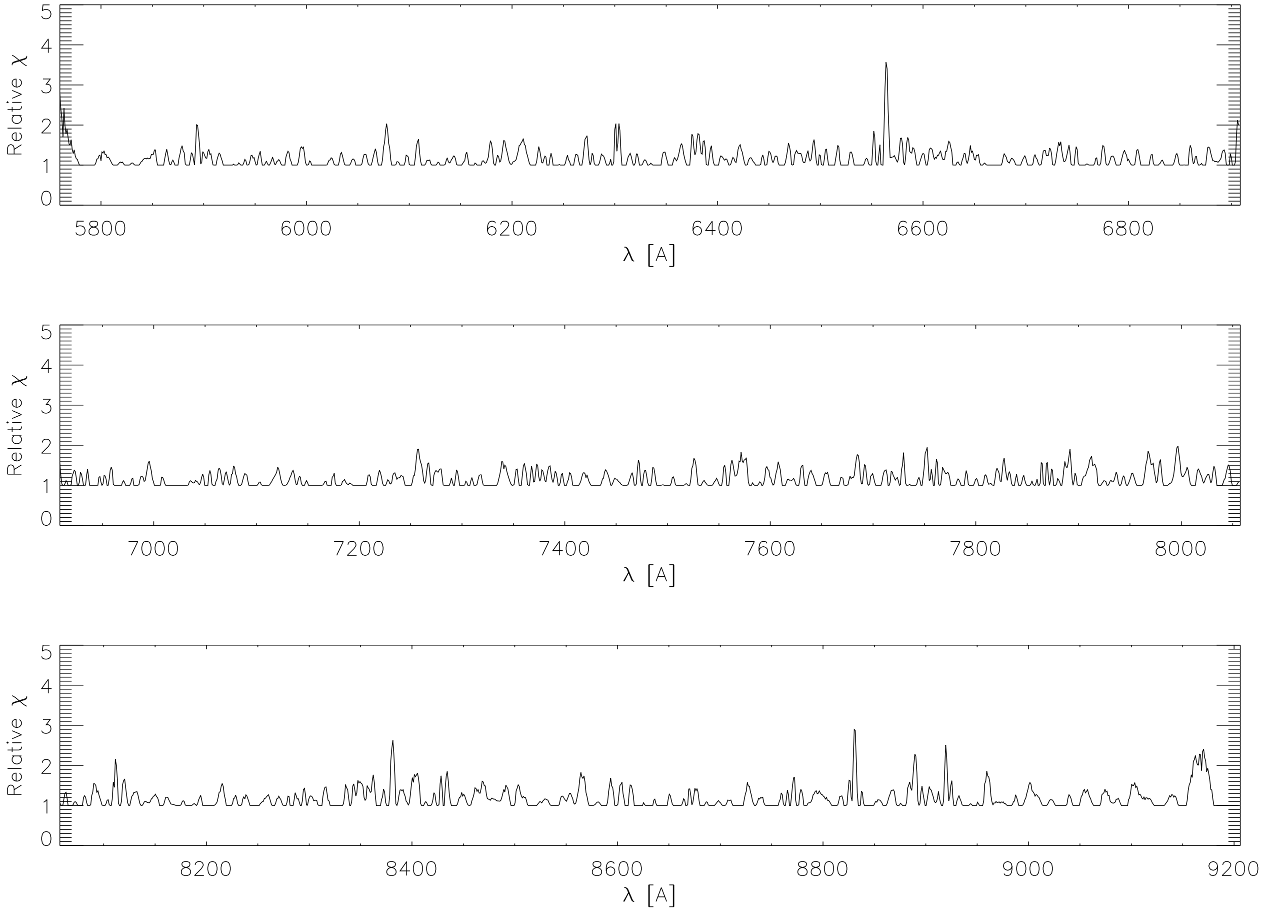


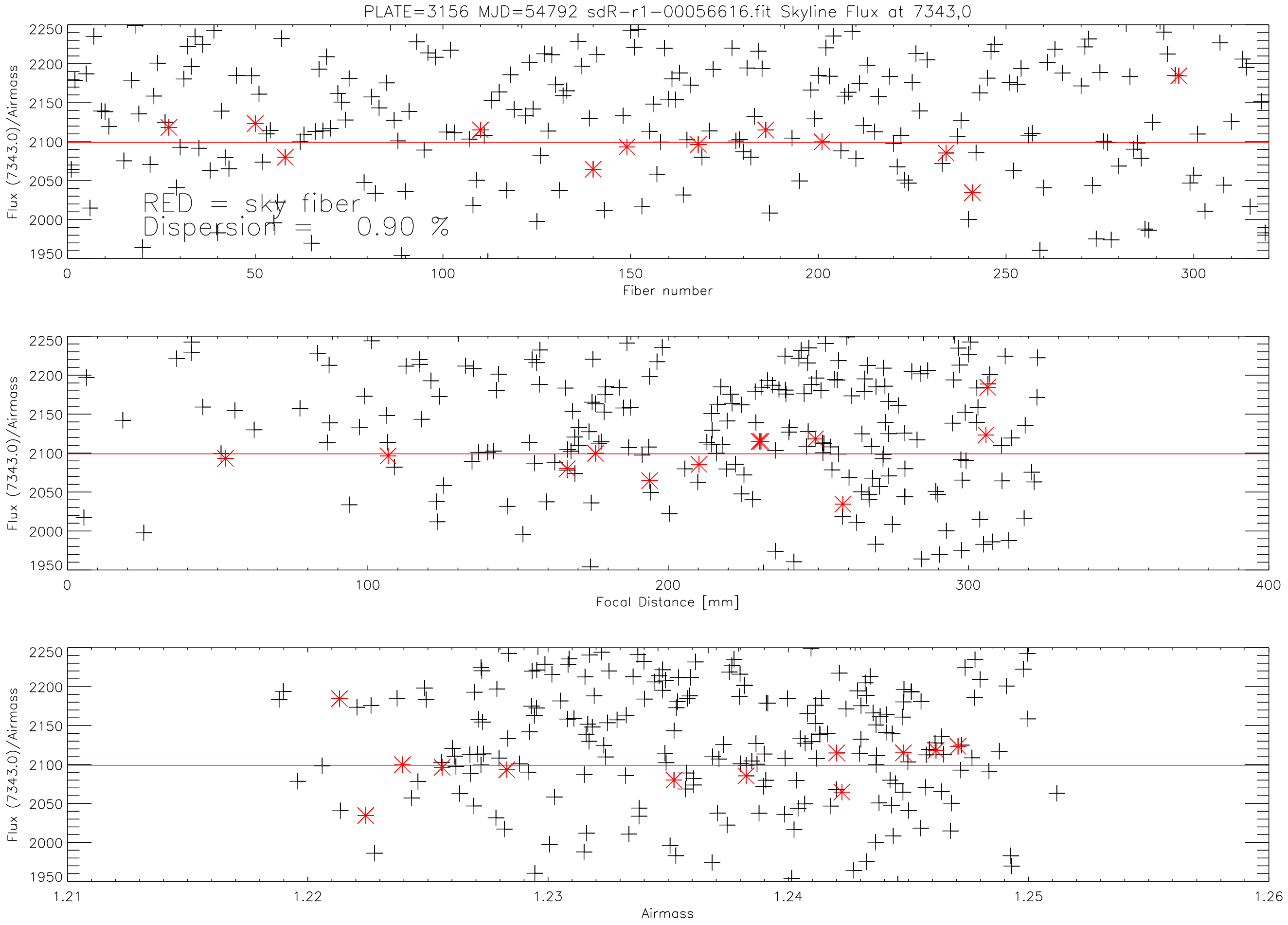
PLATE=3156 MJD=54792 sdR-r1-00056616.fit 2D Sky-subtraction Sky-subtracted Sky F

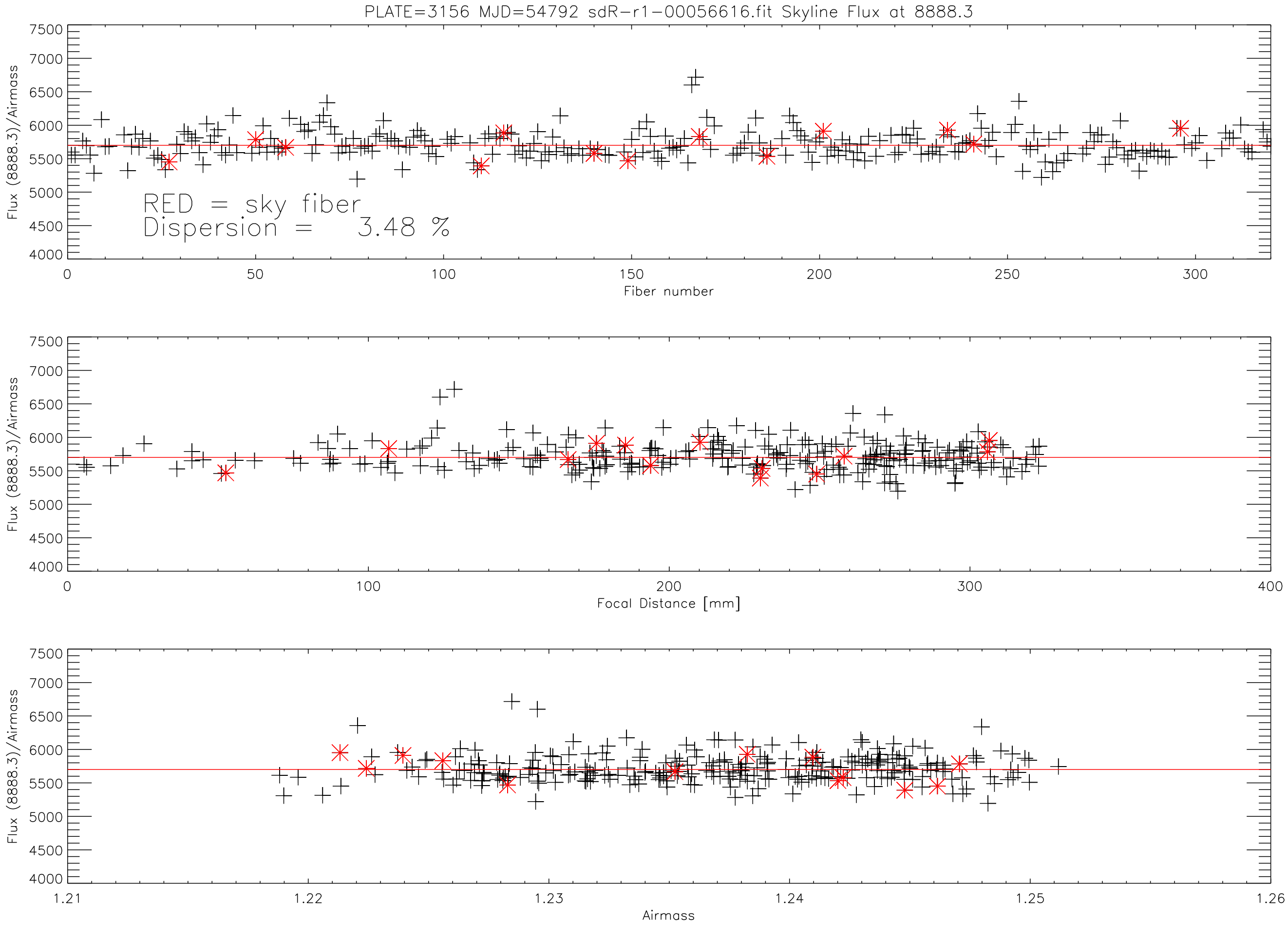


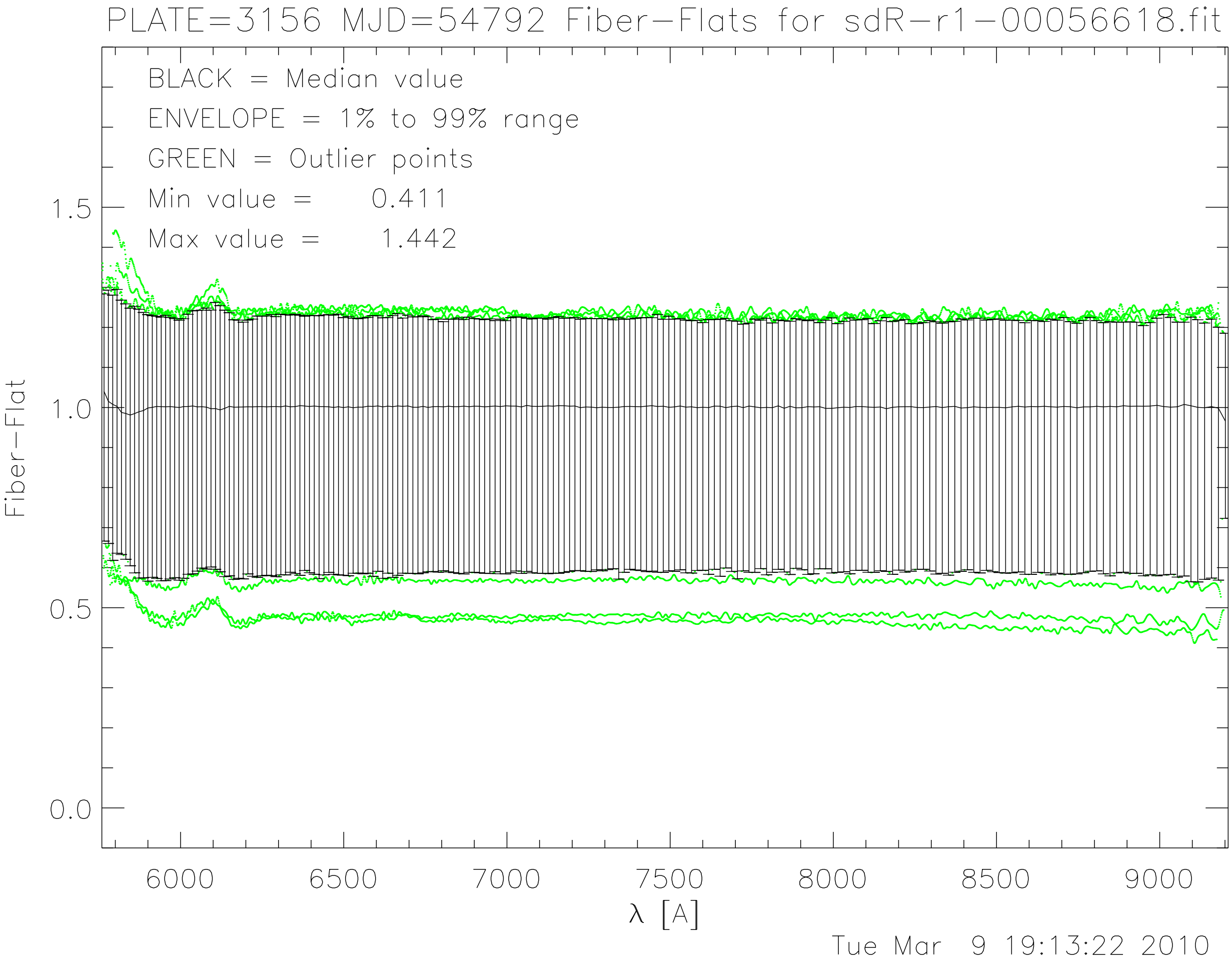
Number of sky fibers = 13

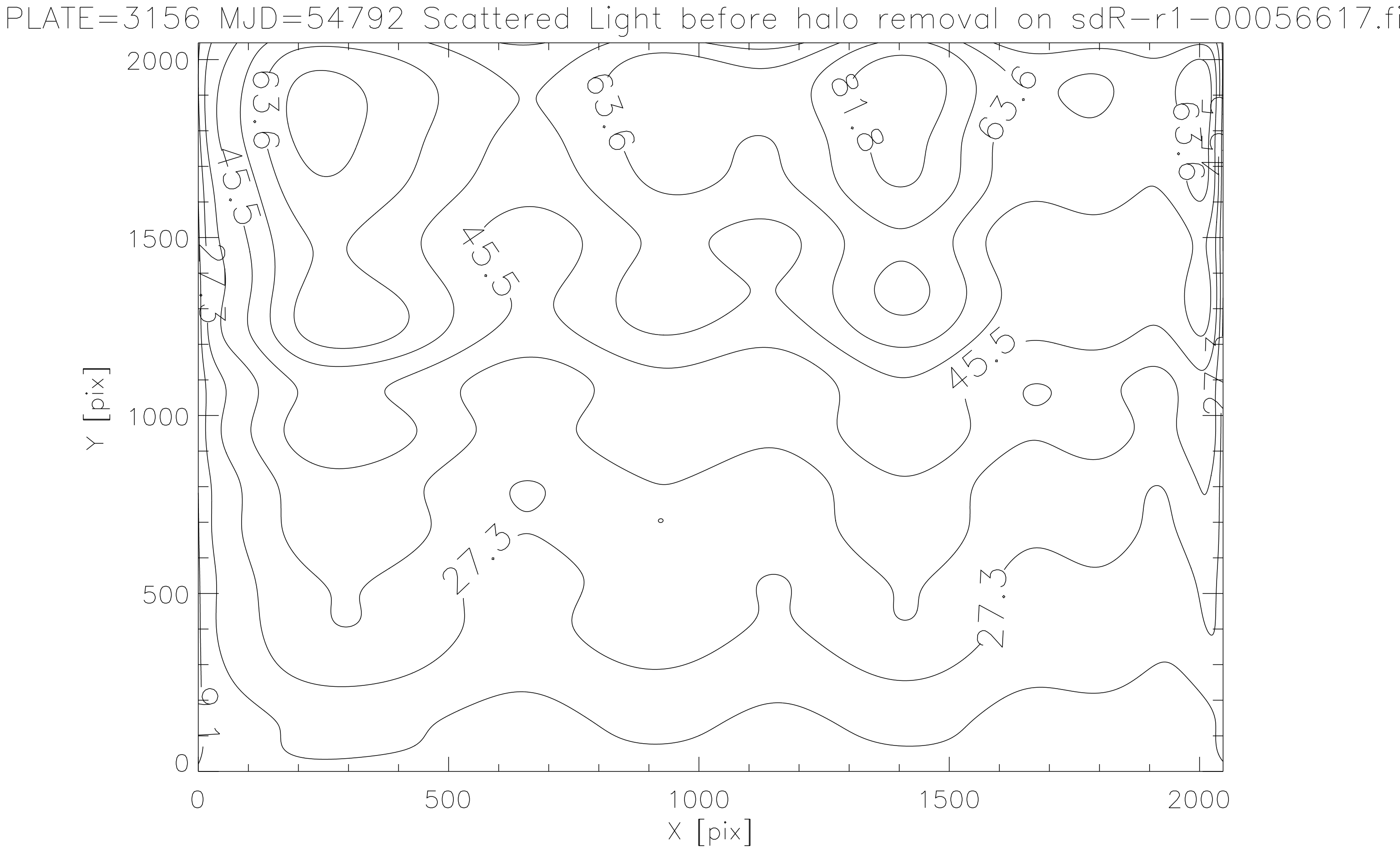
PLATE=3156 MJD=54792 sdR-r1-00056616.fit 2D Sky-subtraction Rescaled Errors

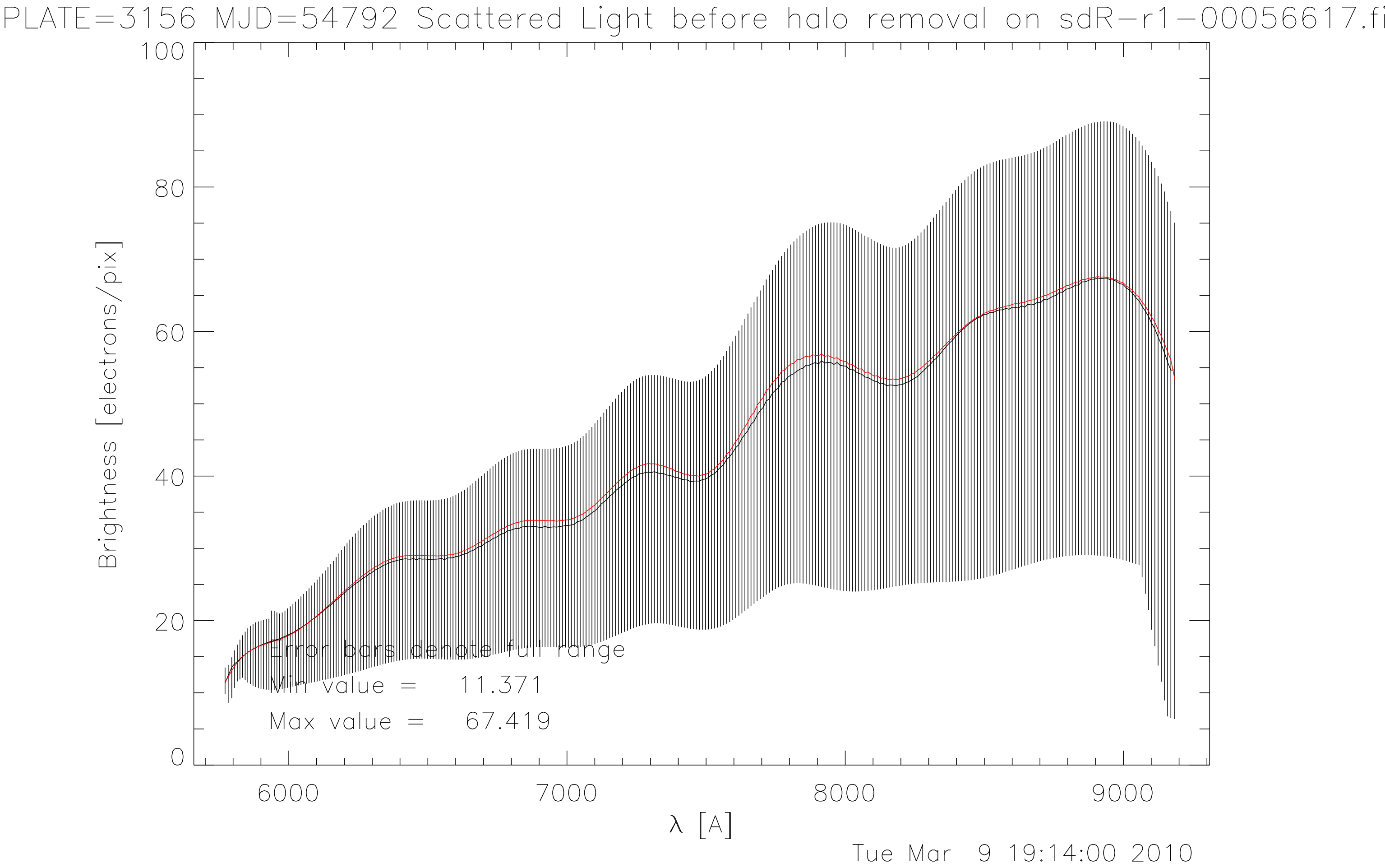


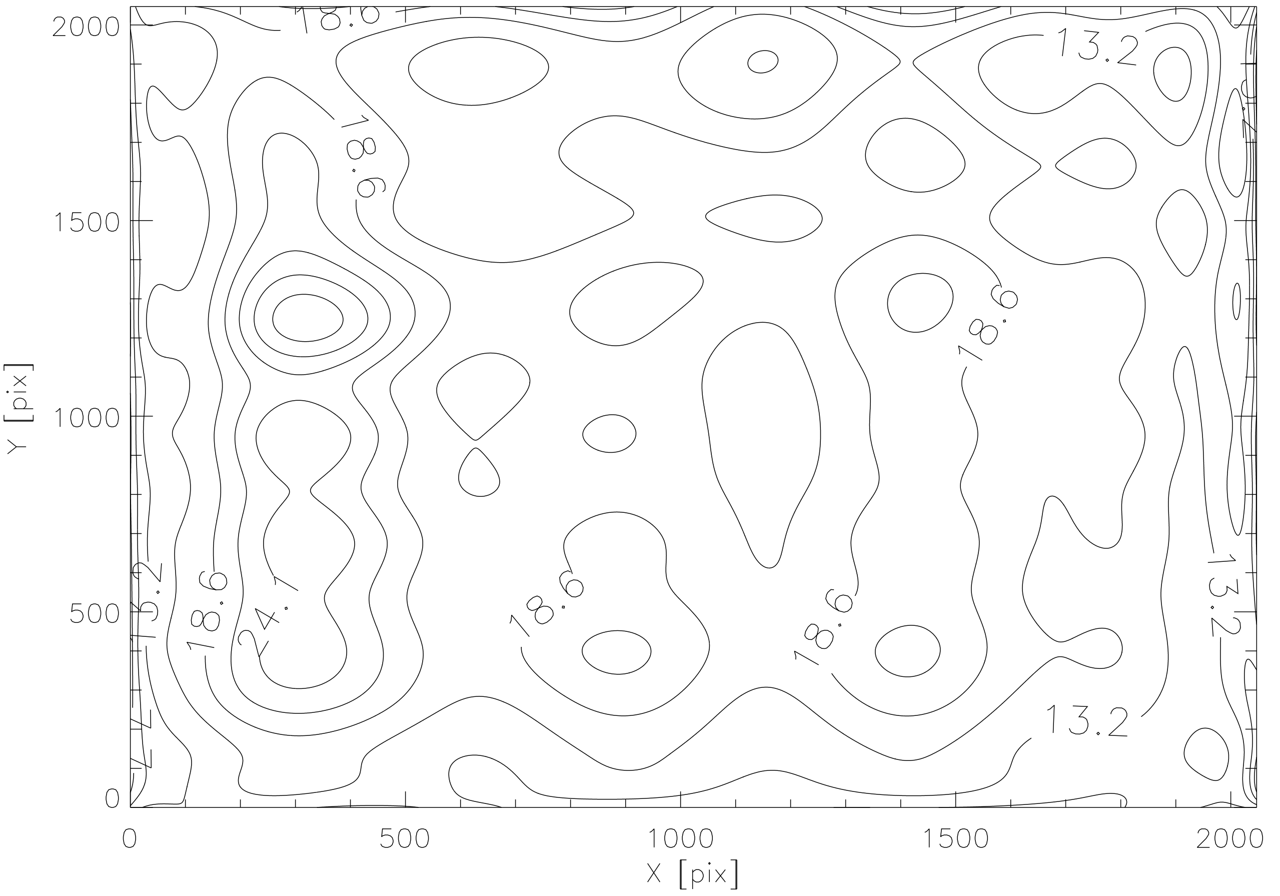

PLATE=3156 MJD=54792 sdR-r1-00056616.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2250
2200
2150
2100
2050
2000
1950
RED = sky fiber
Dispersion = 0.90 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2250
2200
2150
2100
2050
2000
1950
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2250
2200
2150
2100
2050
2000
1950
1.21
1.22
1.23
1.24
1.25
1.26
Airmass


PLATE=3156 MJD=54792 sdR-r1-00056616.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 3.48 %
Flux (8888.3)/Airmass
7500
7000
6500
6000
5500
5000
4500
4000
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.21
1.22
1.23
1.24
1.25
1.26
Airmass

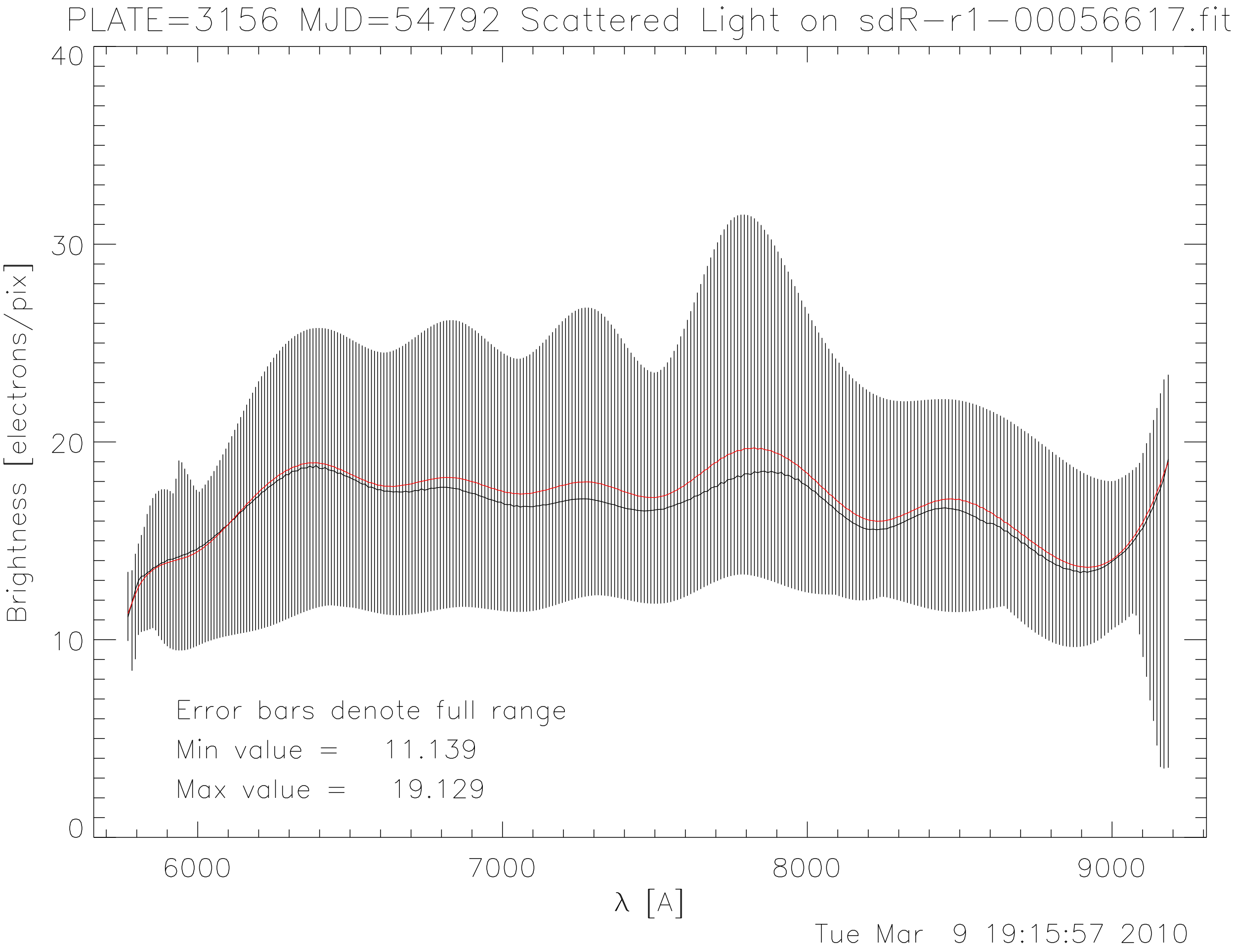

PLATE=3156 MJD=54792 Fiber−Flats for sdR−r1−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.411
Max value = 1.442
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 9 19:13:22 2010

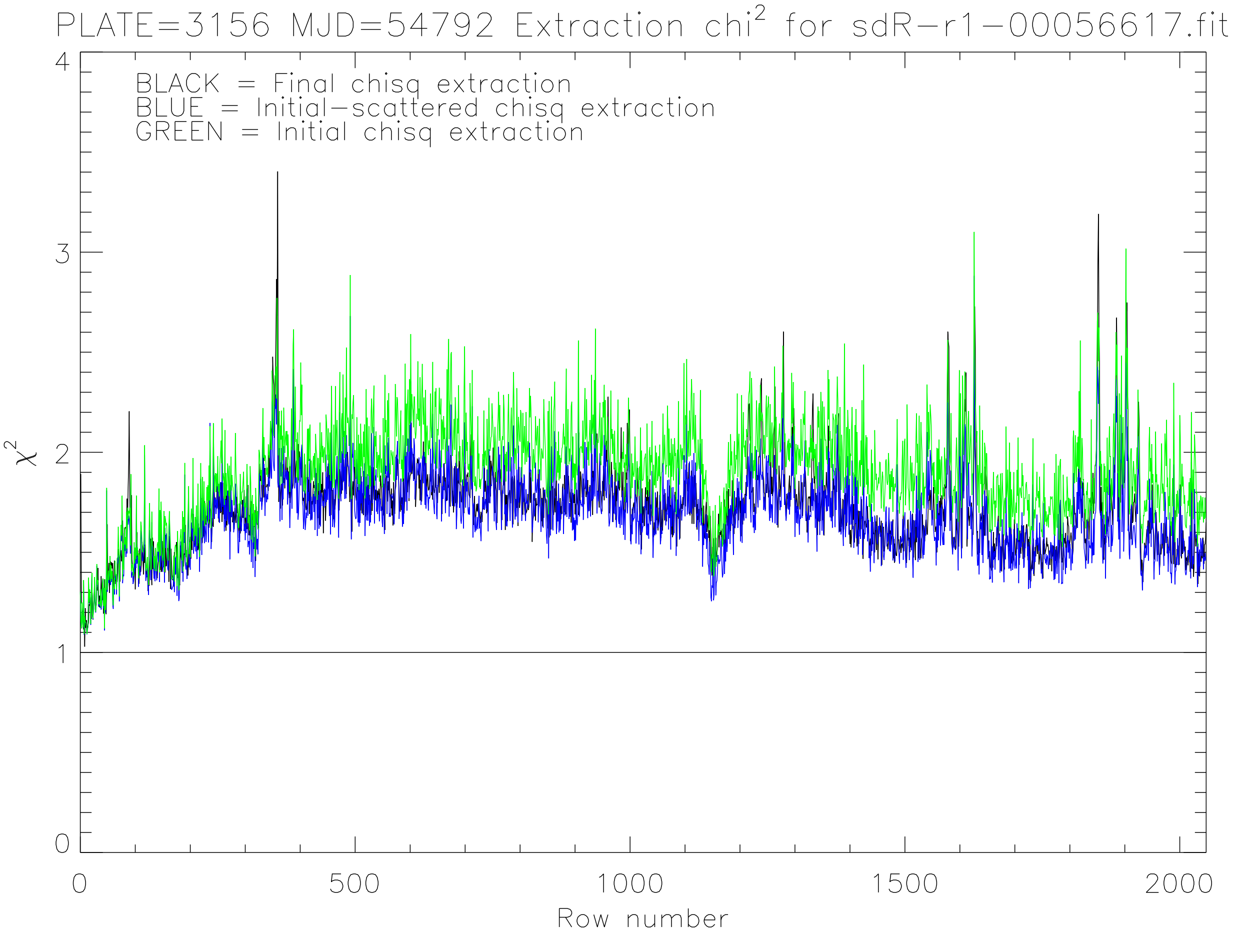

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056617.fi

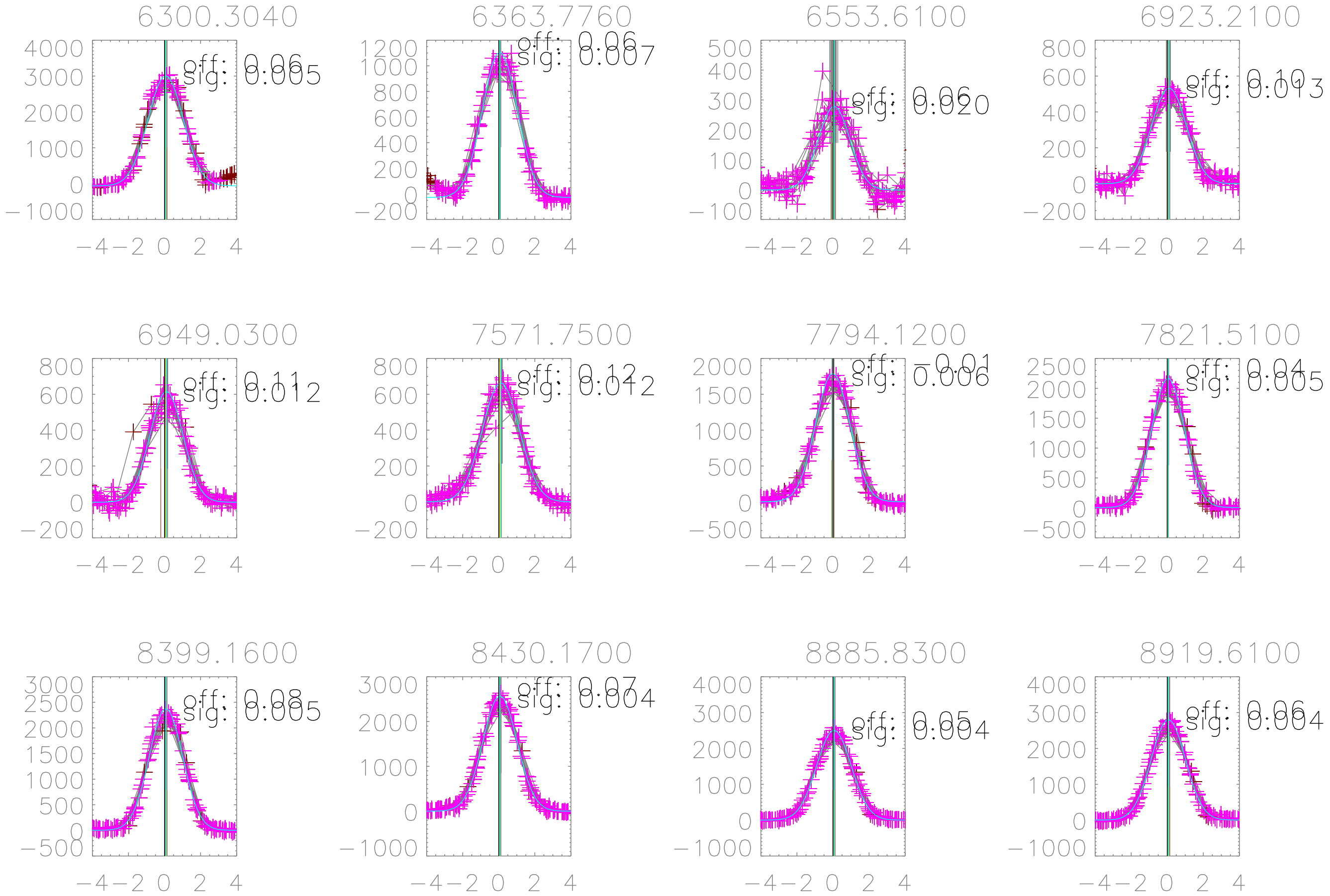

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056617.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.371
Max value = 67.419
Tue Mar 9 19:14:00 2010

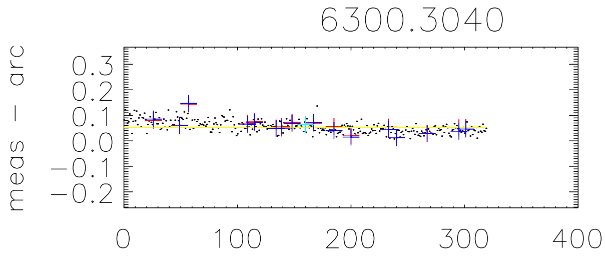


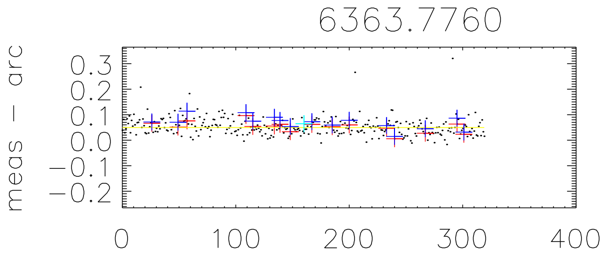
PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056617.fit

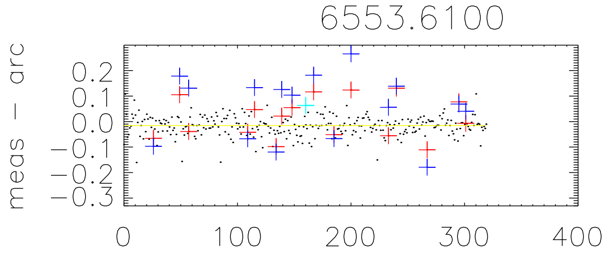

PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056617.fit
Brightness [electrons/pix]
0
10
20
30
40
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.139
Max value = 19.129
Tue Mar 9 19:15:57 2010

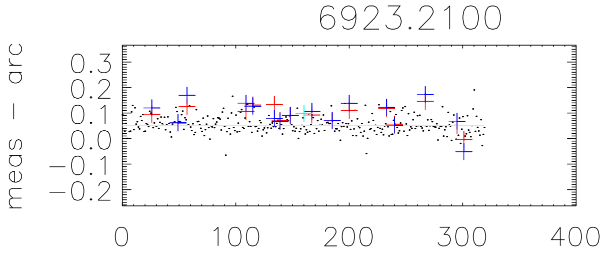

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r1-00056617.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

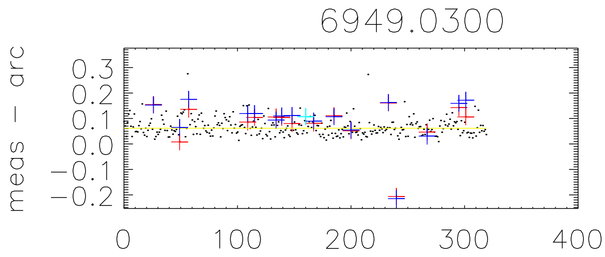

6300.3040
off: 0.06
sig: 0.005
6363.7760
off: 0.06
sig: 0.007
6553.6100
off: 0.06
sig: 0.020
6923.2100
off: 0.10
sig: 0.013
6949.0300
off: 0.11
sig: 0.012
7571.7500
off: 0.12
sig: 0.012
7794.1200
off: −0.01
sig: 0.006
7821.5100
off: 0.04
sig: 0.005
8399.1600
off: 0.08
sig: 0.005
8430.1700
off: 0.07
sig: 0.004
8885.8300
off: 0.05
sig: 0.004
8919.6100
off: 0.06
sig: 0.004
−4 −2 0 2 4

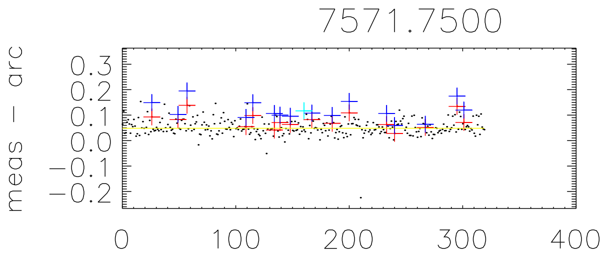

6300.3040
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

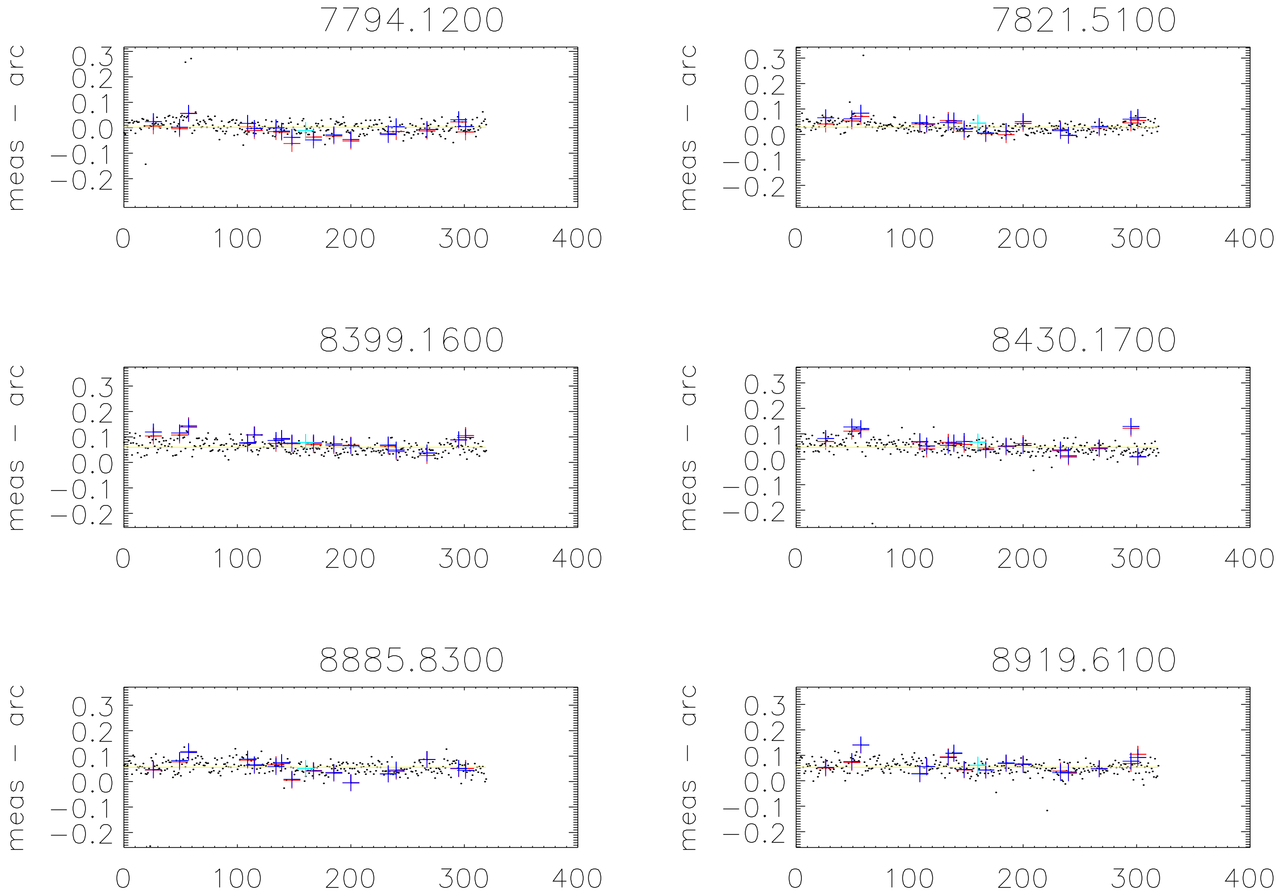

6363.7760
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

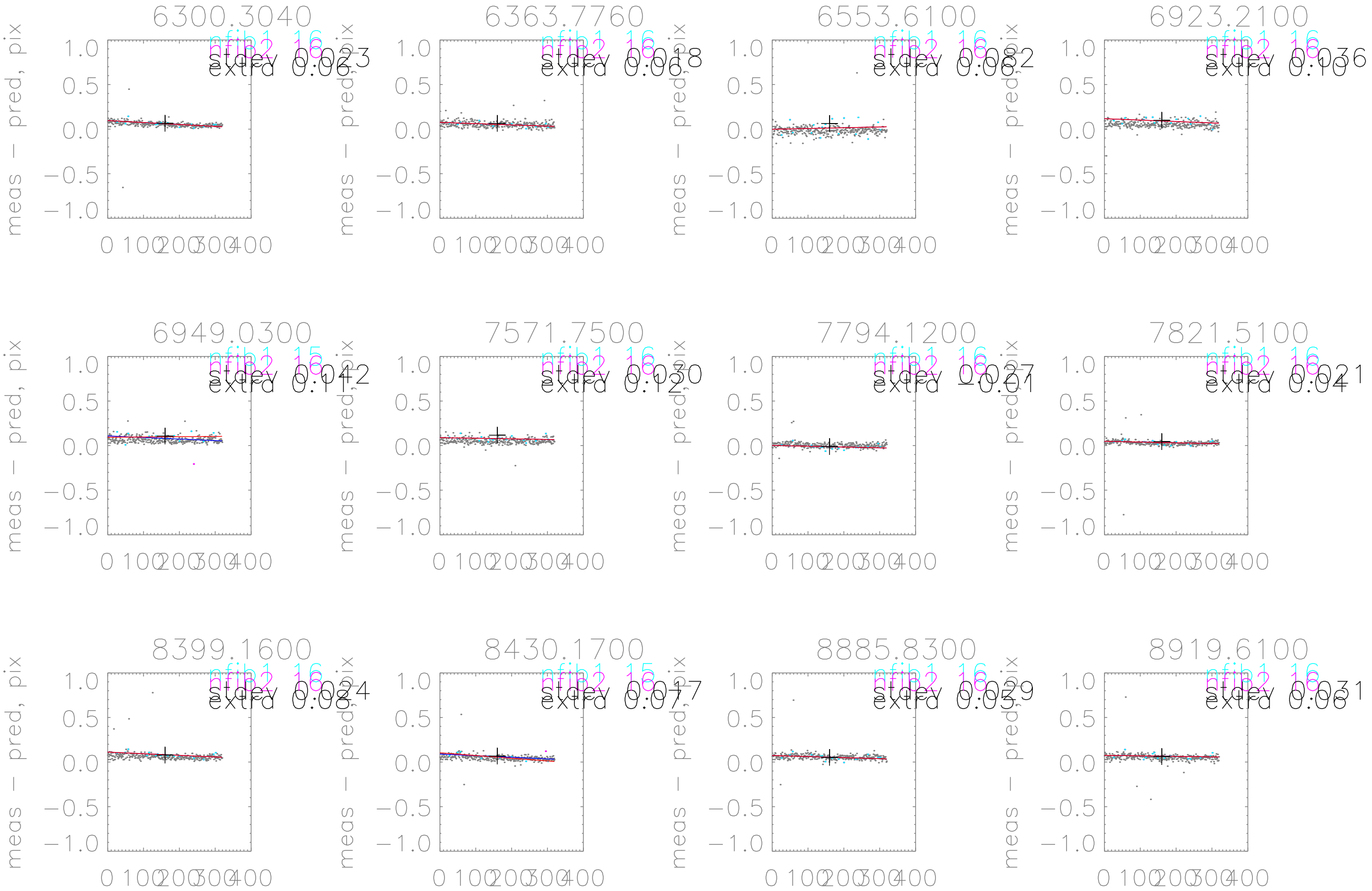

6553.6100
meas – arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

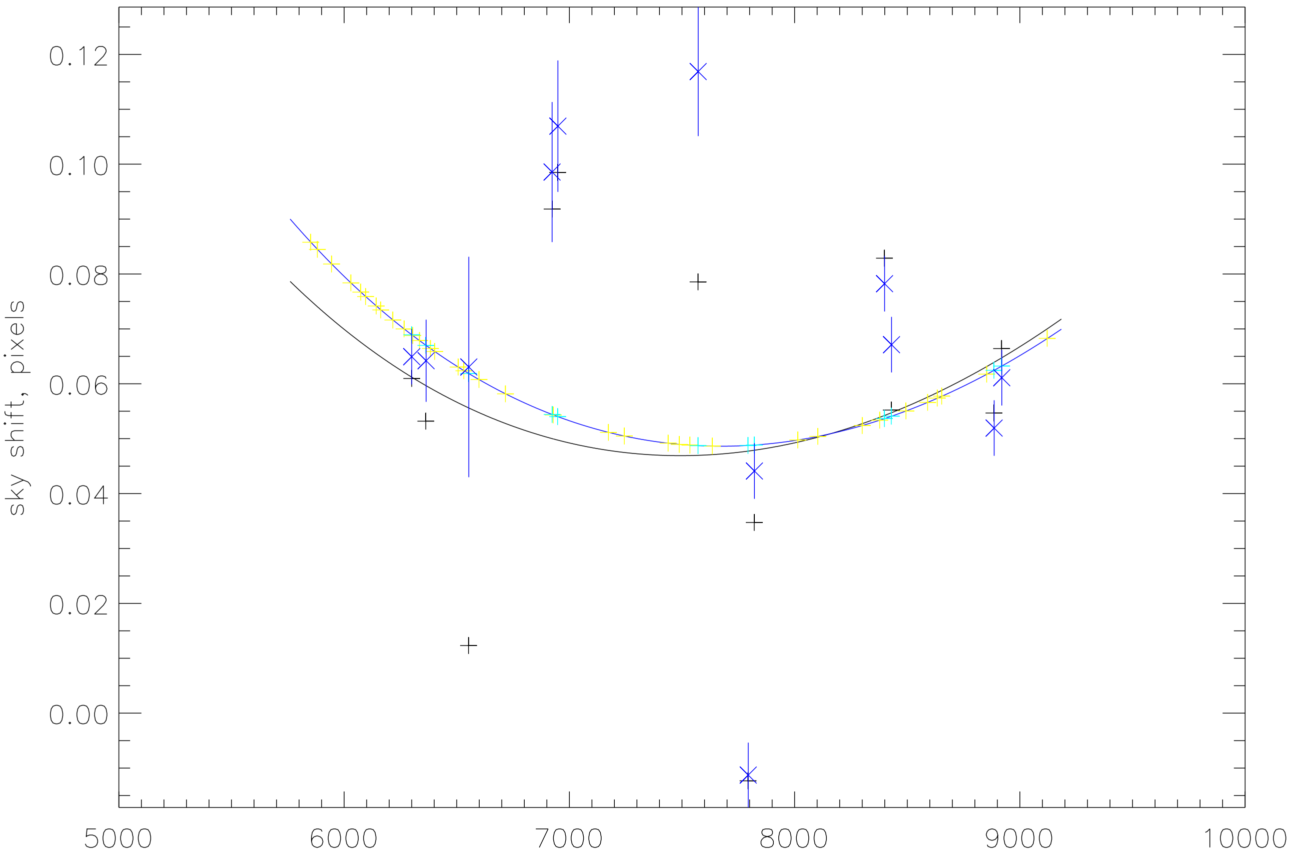

6923.2100
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

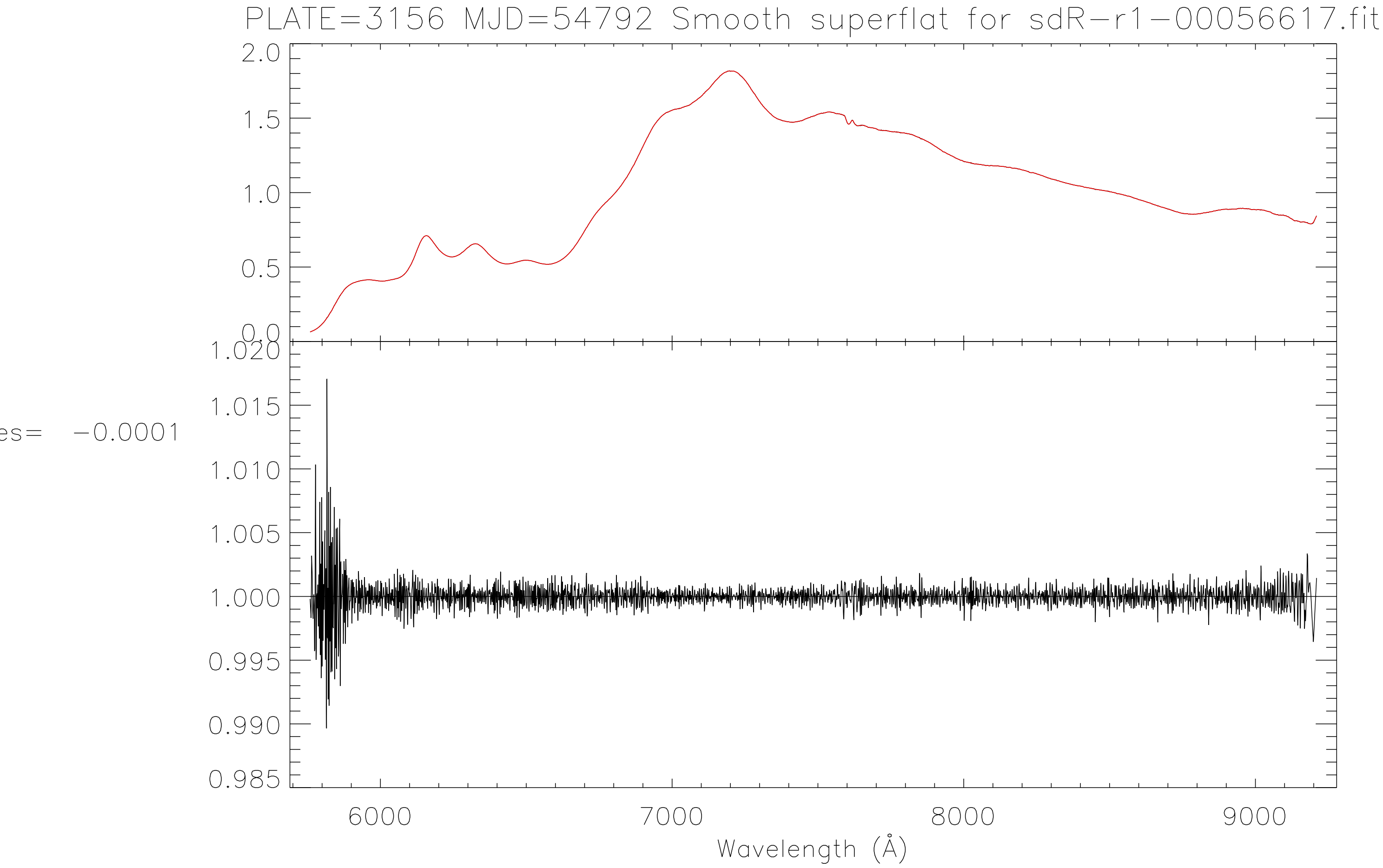

6949.0300
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

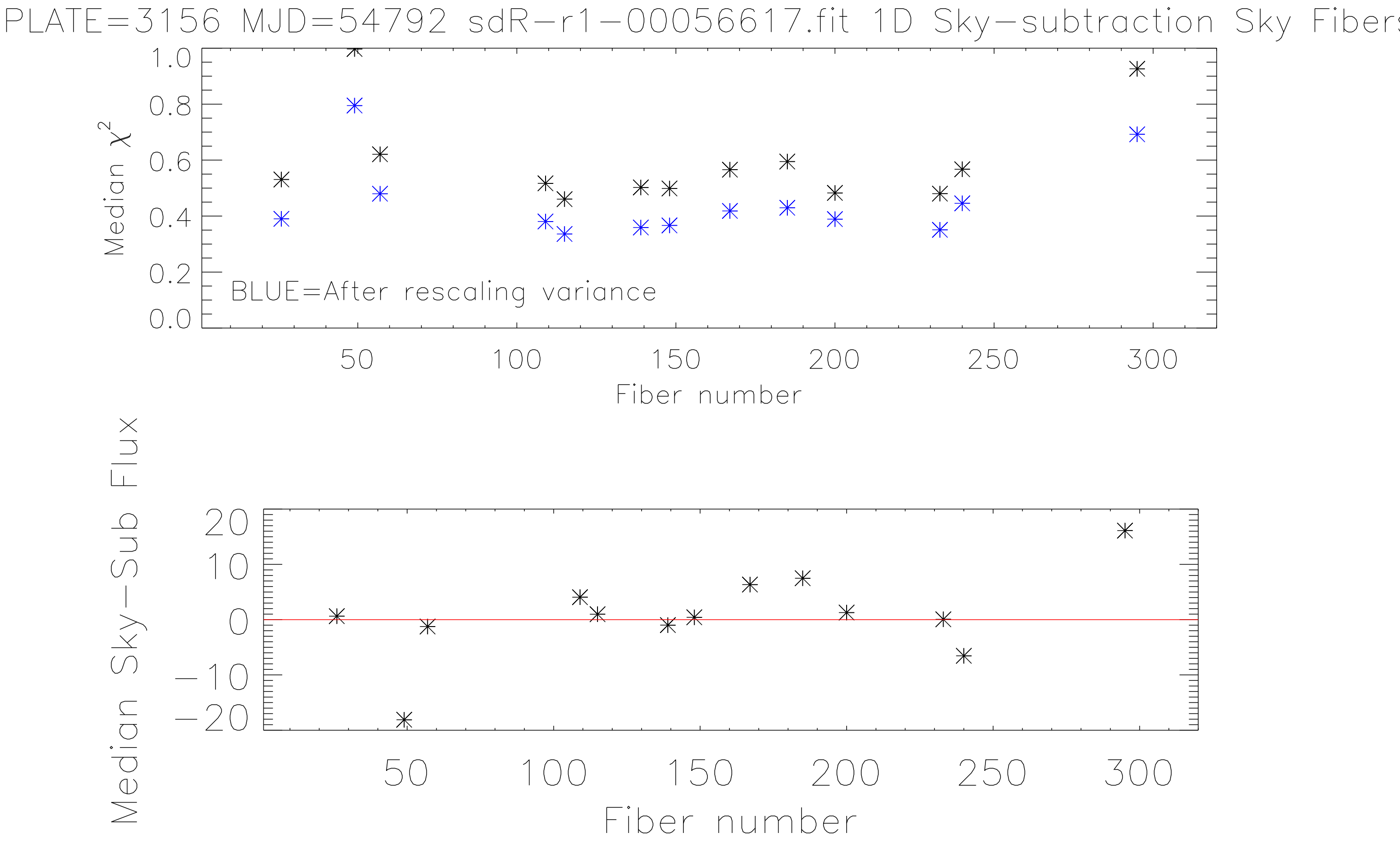

7571.7500
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

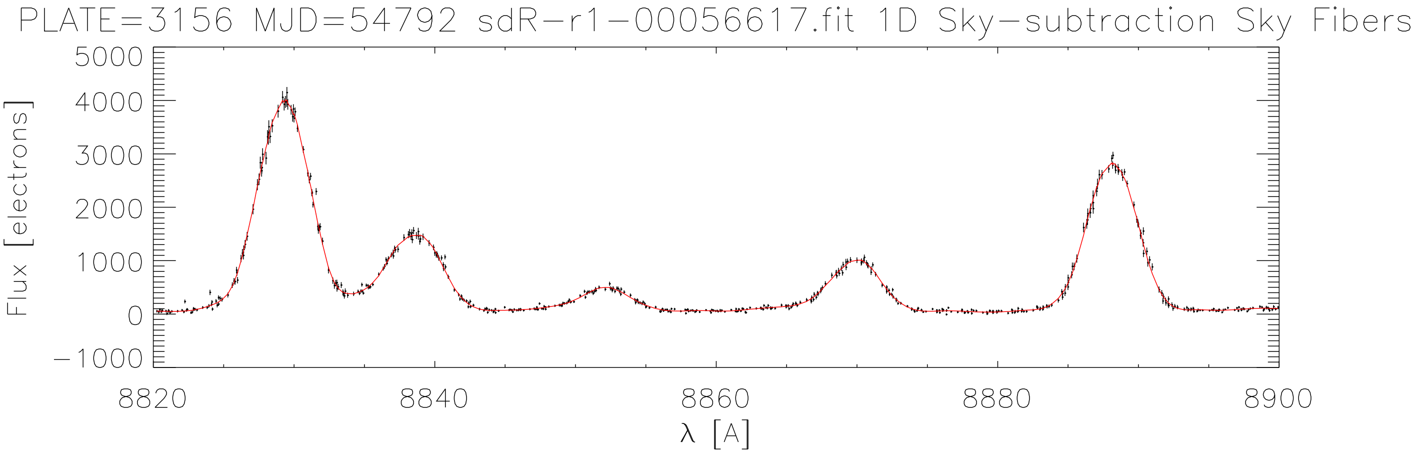

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

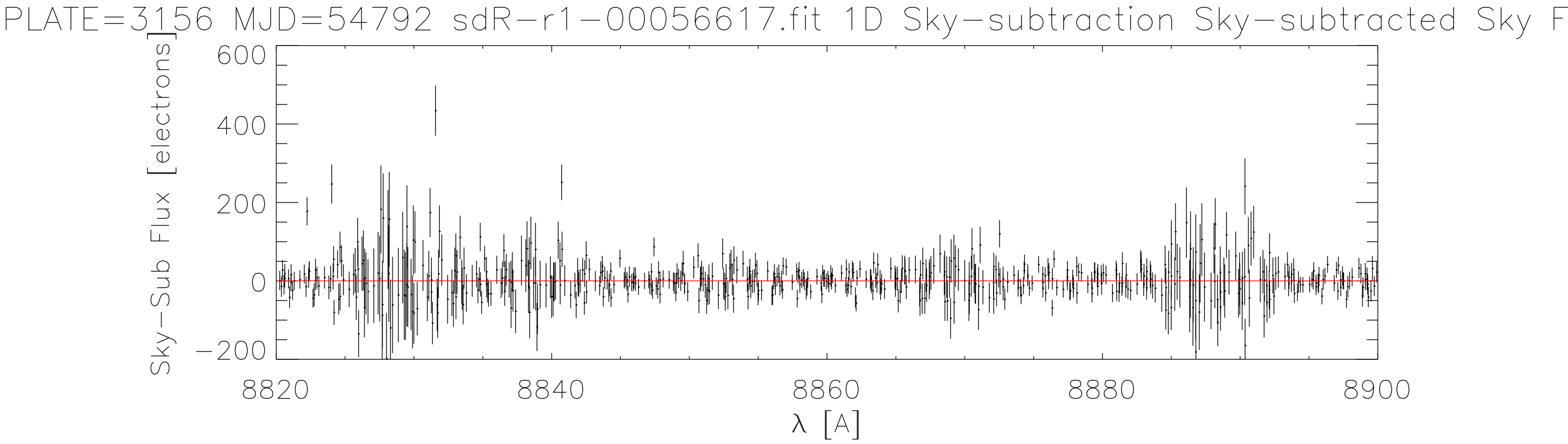

6300.3040
nfib1 16
nfib2 16
stdev 0.023
extrd 0.06
6363.7760
nfib1 16
nfib2 16
stdev 0.018
extrd 0.06
6553.6100
nfib1 16
nfib2 16
stdev 0.082
extrd 0.06
6923.2100
nfib1 16
nfib2 16
stdev 0.036
extrd 0.10
6949.0300
nfib1 15
nfib2 16
stdev 0.042
extrd 0.11
7571.7500
nfib1 16
nfib2 16
stdev 0.030
extrd 0.12
7794.1200
nfib1 16
nfib2 16
stdev 0.027
extrd −0.01
7821.5100
nfib1 16
nfib2 16
stdev 0.021
extrd 0.04
8399.1600
nfib1 16
nfib2 16
stdev 0.024
extrd 0.08
8430.1700
nfib1 15
nfib2 16
stdev 0.017
extrd 0.07
8885.8300
nfib1 16
nfib2 16
stdev 0.029
extrd 0.05
8919.6100
nfib1 16
nfib2 16
stdev 0.031
extrd 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.12
0.10
0.08
0.06
0.04
0.02
0.00
5000
6000
7000
8000
9000
10000


PLATE=3156 MJD=54792 Smooth superflat for sdR-r1-00056617.fit
2.0
1.5
1.0
0.5
0.0
1.020
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es=   −0.0001
6000
7000
8000
9000
Wavelength (Å)

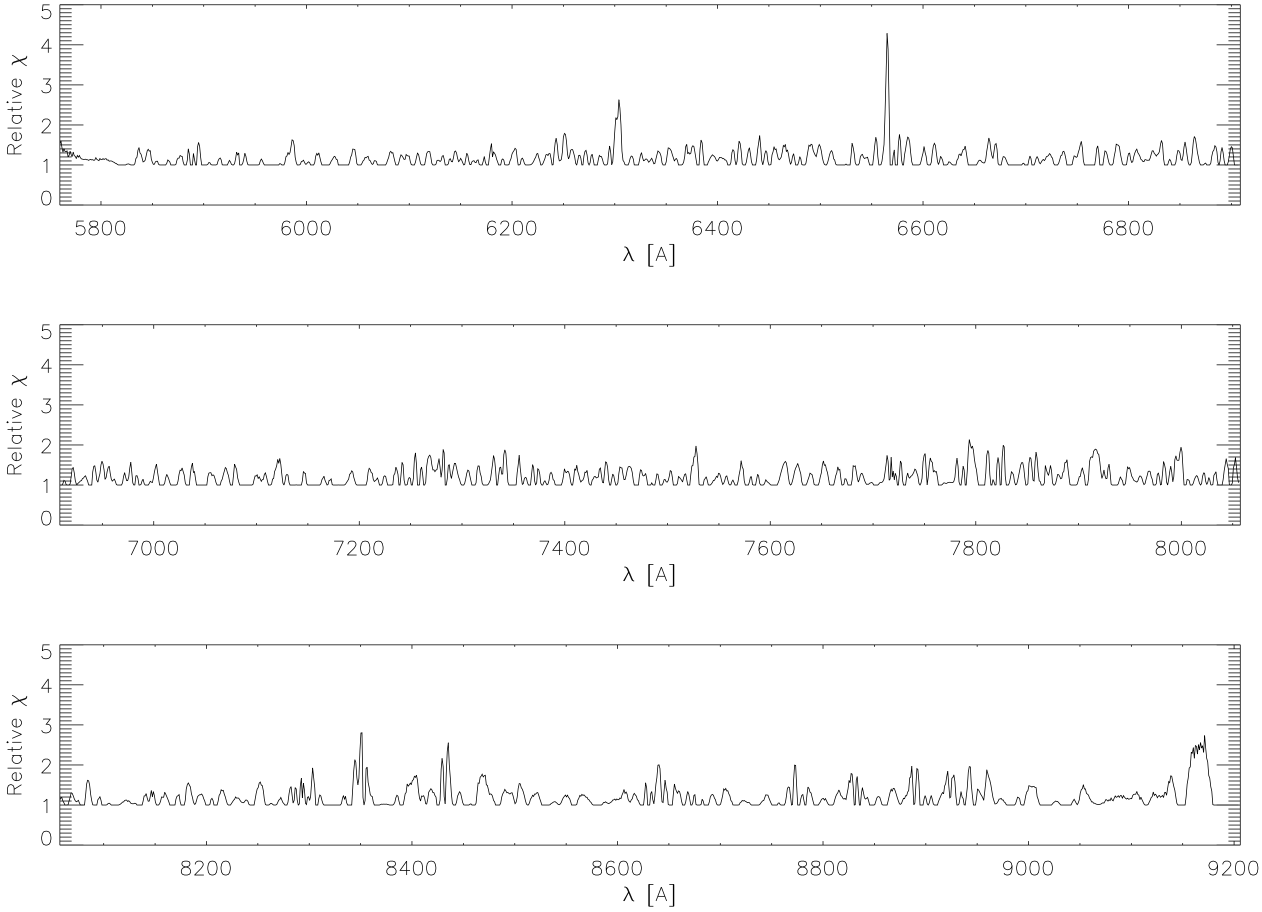

PLATE=3156 MJD=54792 sdR-r1-00056617.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
−10
−20
50
100
150
200
250
300
Fiber number

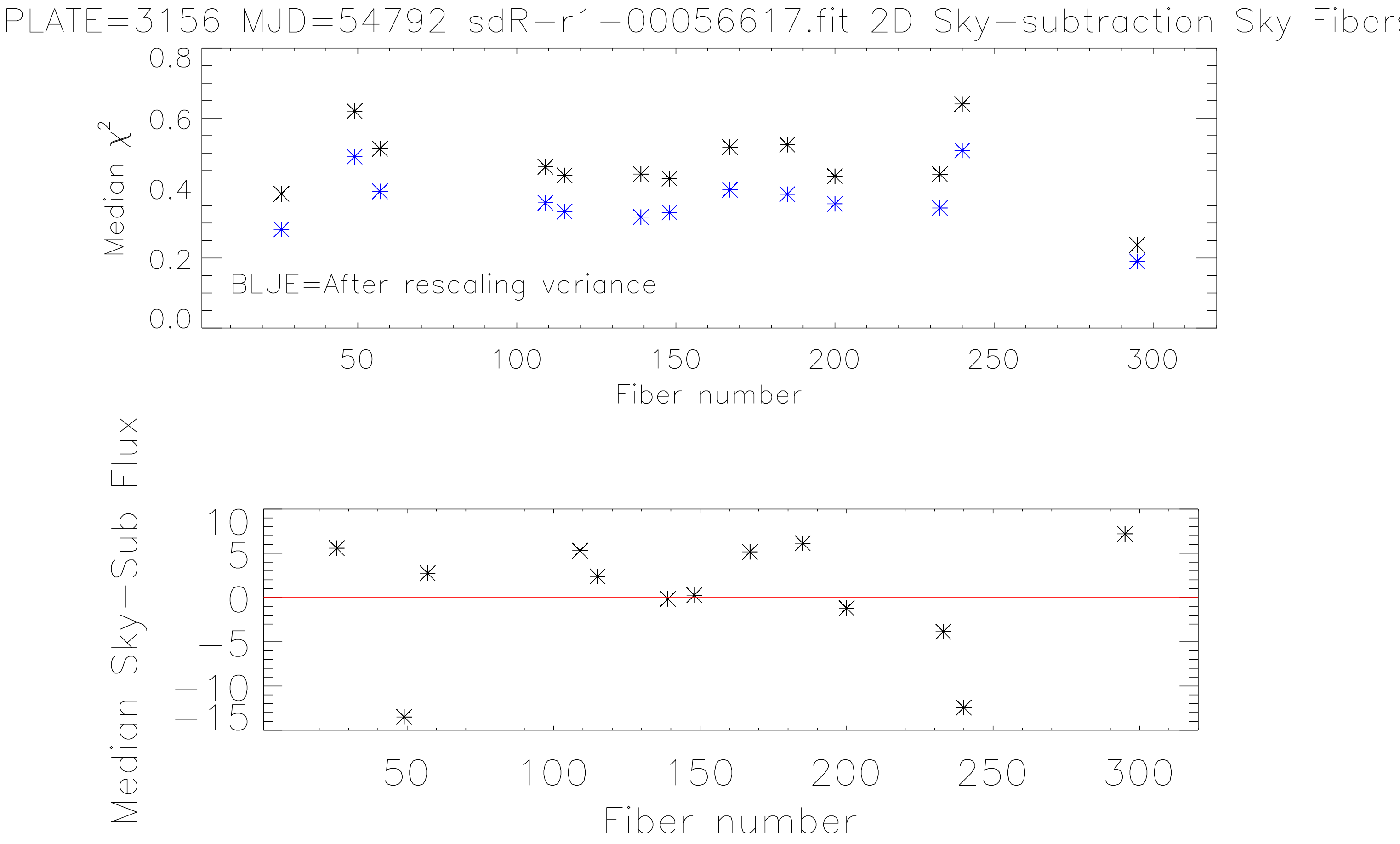

PLATE=3156 MJD=54792 sdR-r1-00056617.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

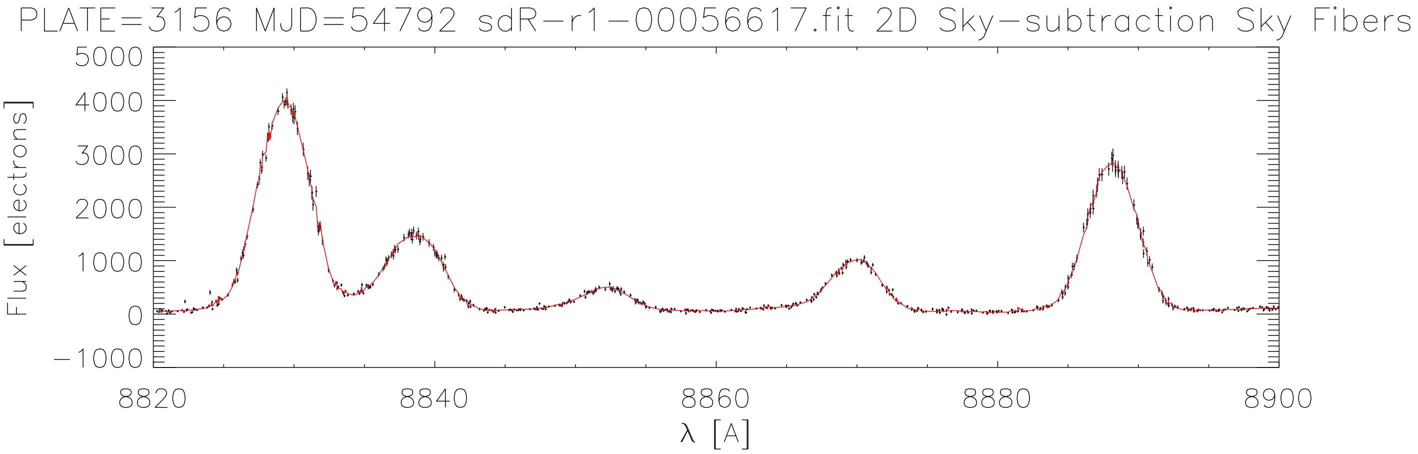

PLATE=3156 MJD=54792 sdR-r1-00056617.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

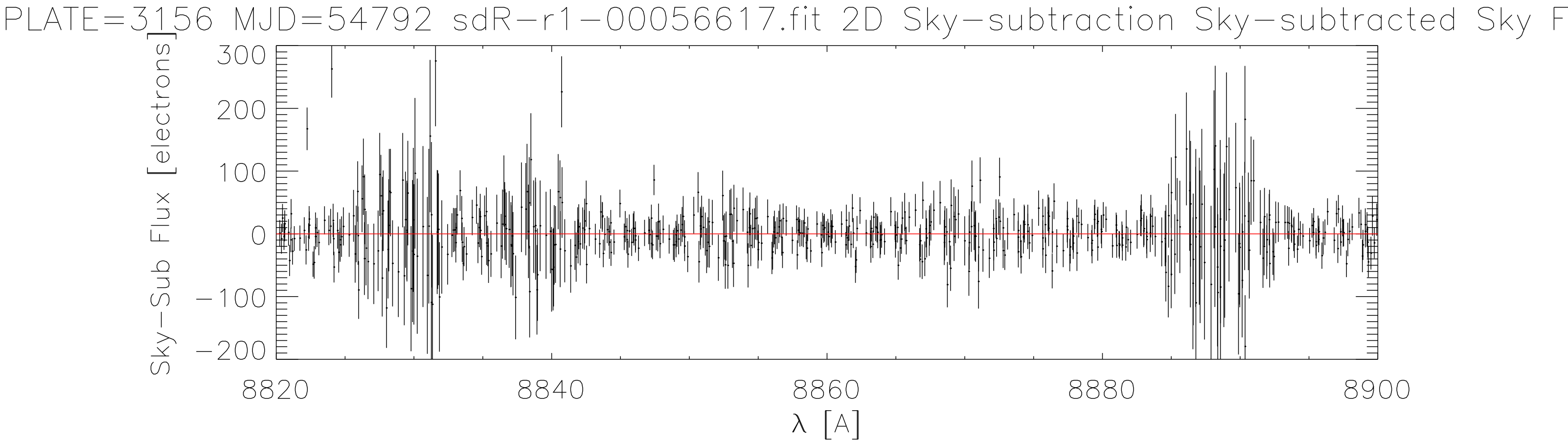
Number of sky fibers = 13

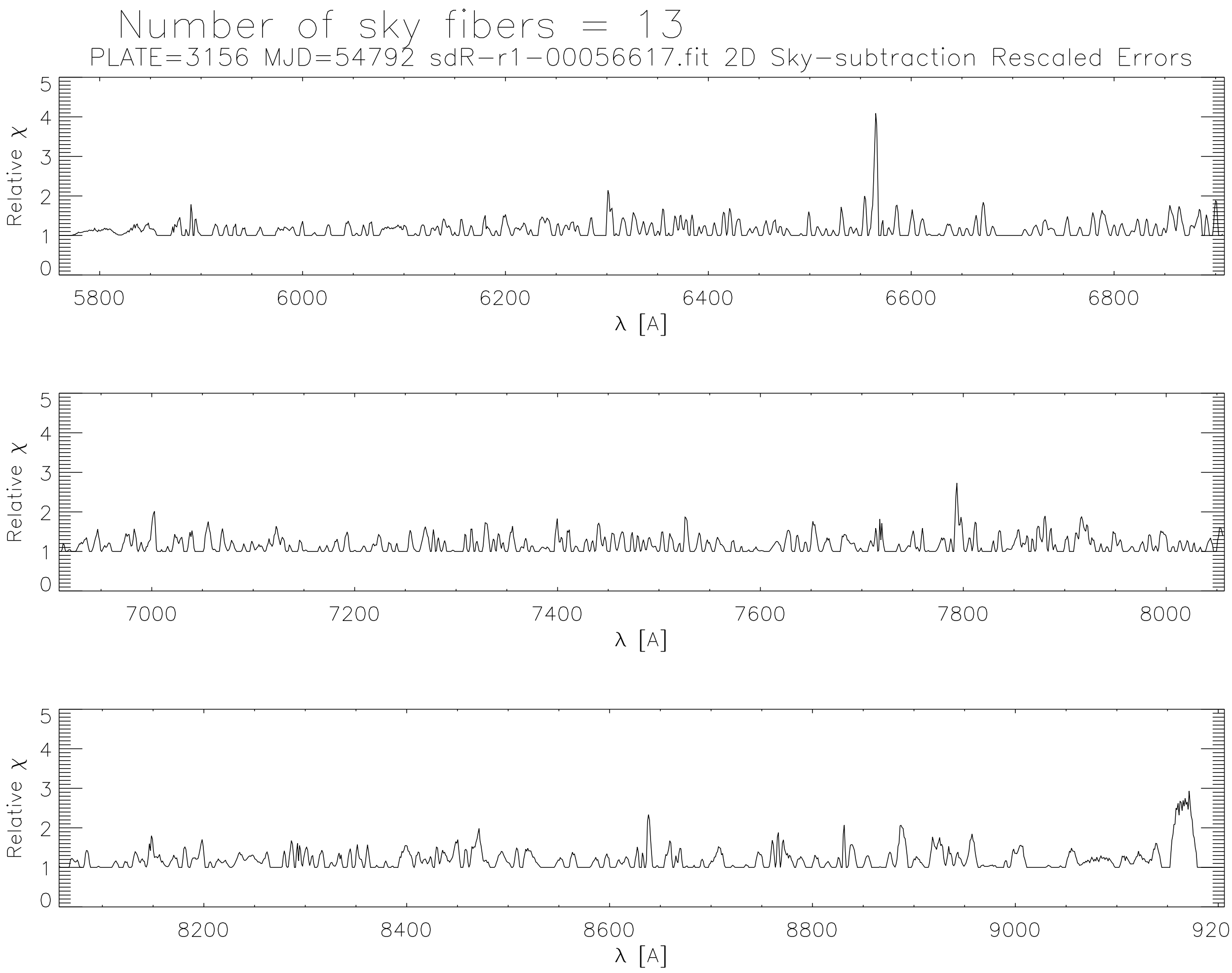
PLATE=3156 MJD=54792 sdR-r1-00056617.fit 1D Sky-subtraction Rescaled Errors




PLATE=3156 MJD=54792 sdR-r1-00056617.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number

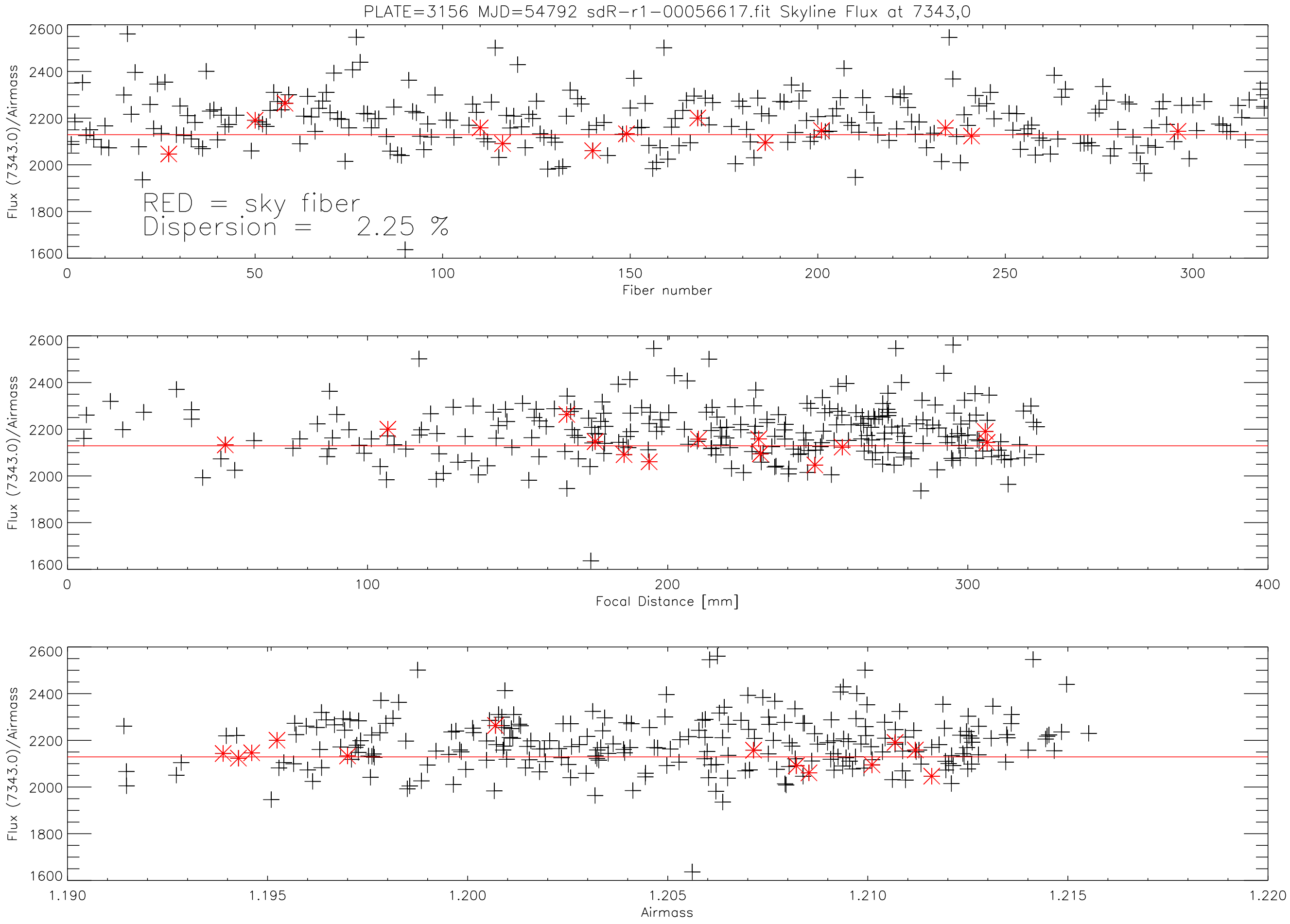

PLATE=3156 MJD=54792 sdR-r1-00056617.fit 2D Sky-subtraction Sky Fibers

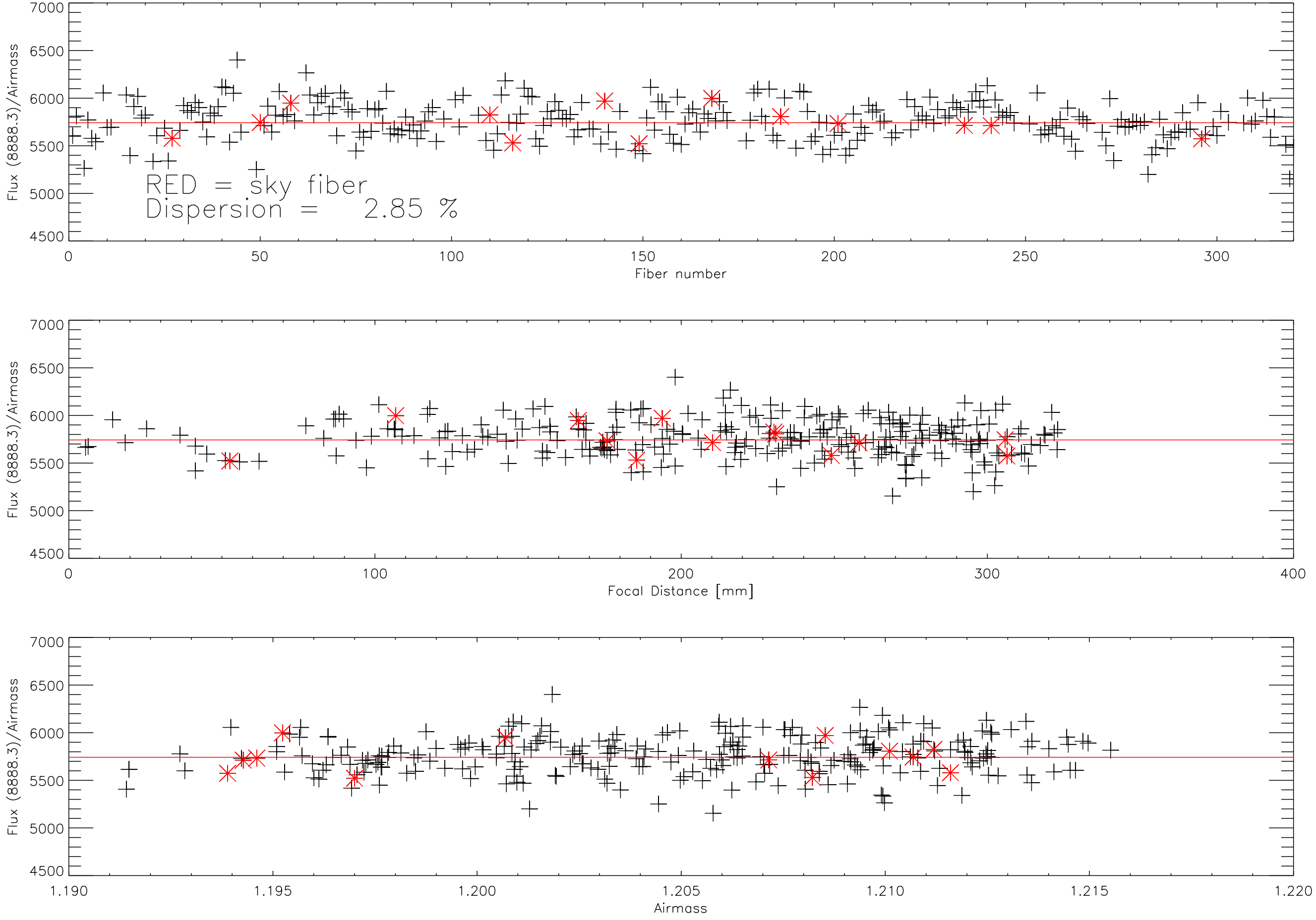

PLATE=3156 MJD=54792 sdR-r1-00056617.fit 2D Sky-subtraction Sky-subtracted Sky F

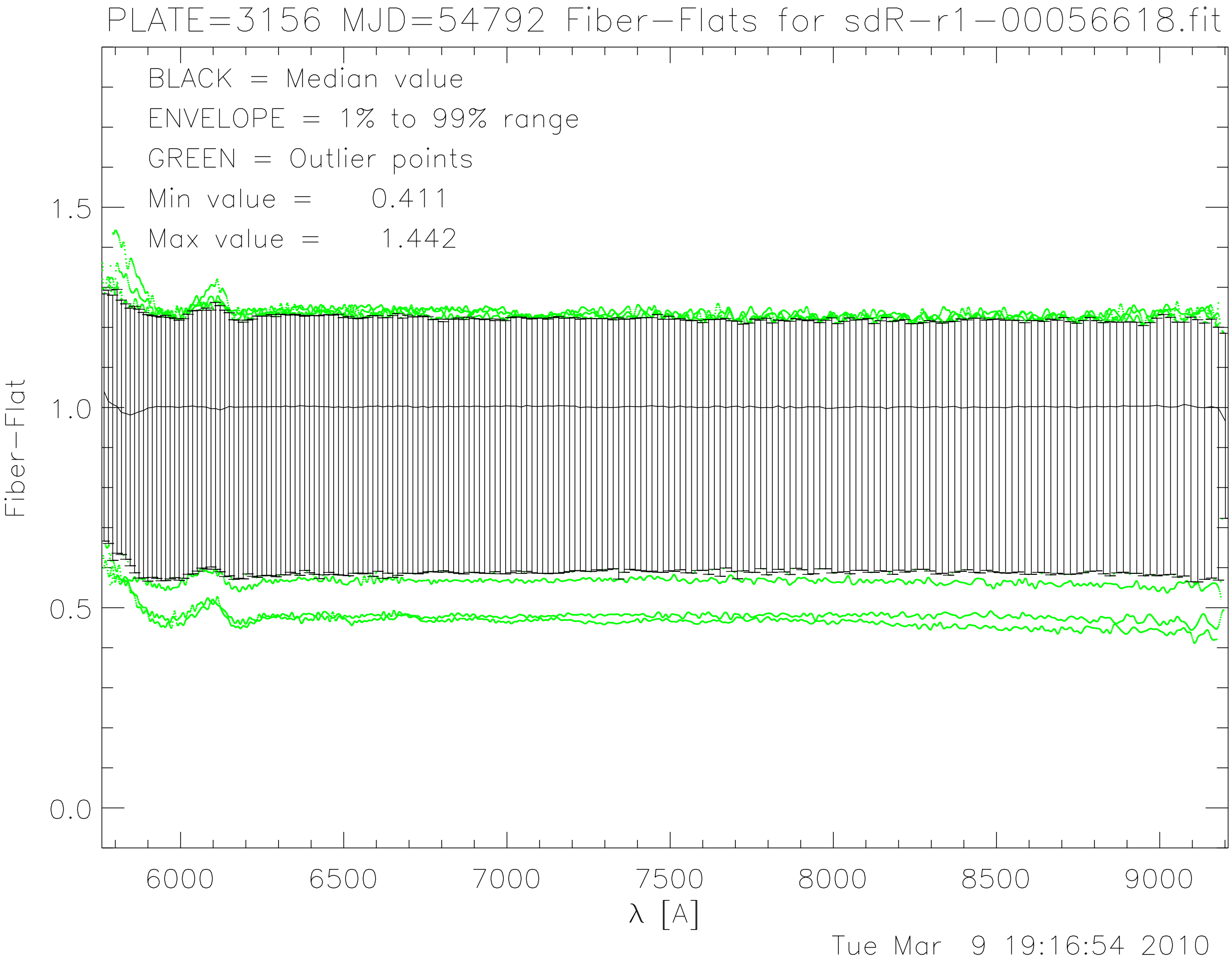


Number of sky fibers = 13

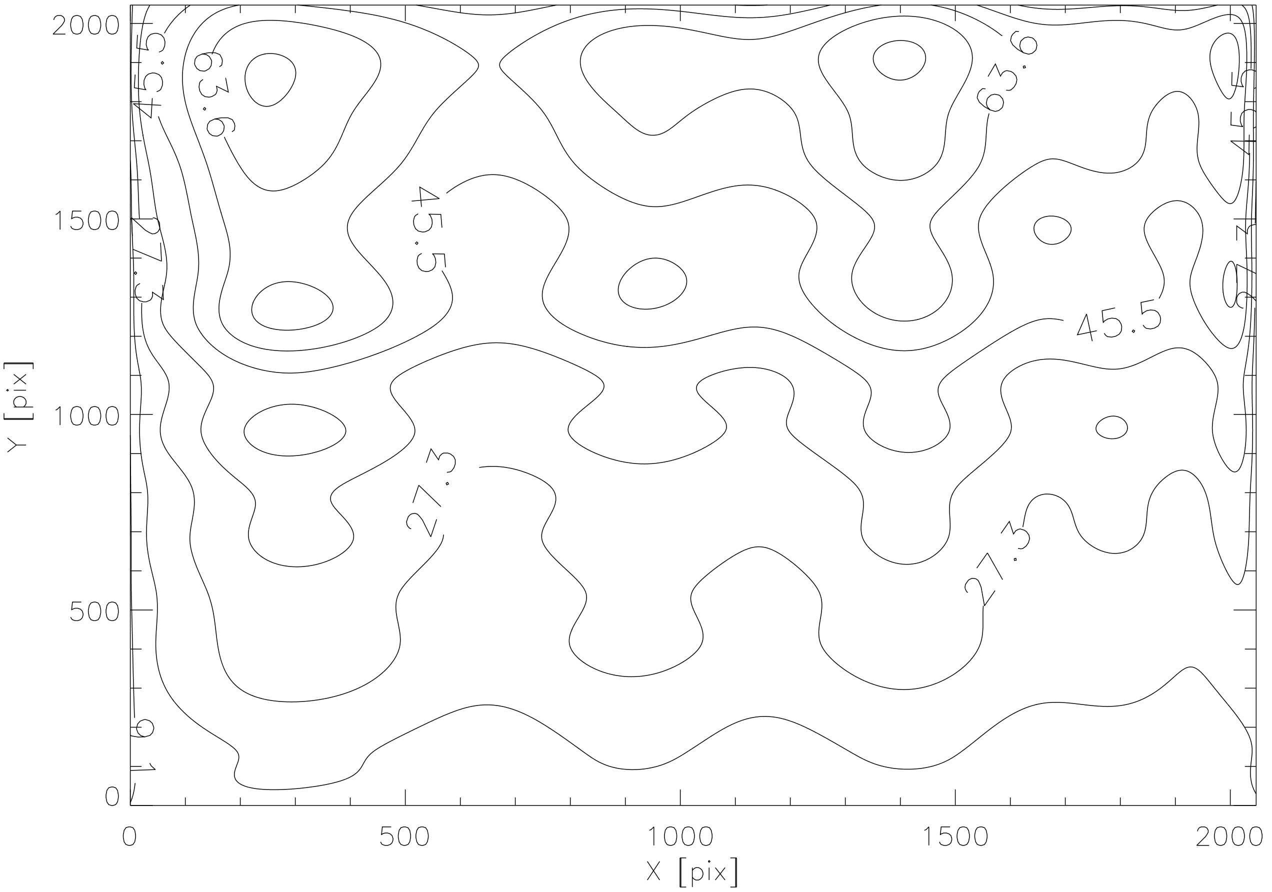
PLATE=3156 MJD=54792 sdR-r1-00056617.fit 2D Sky-subtraction Rescaled Errors

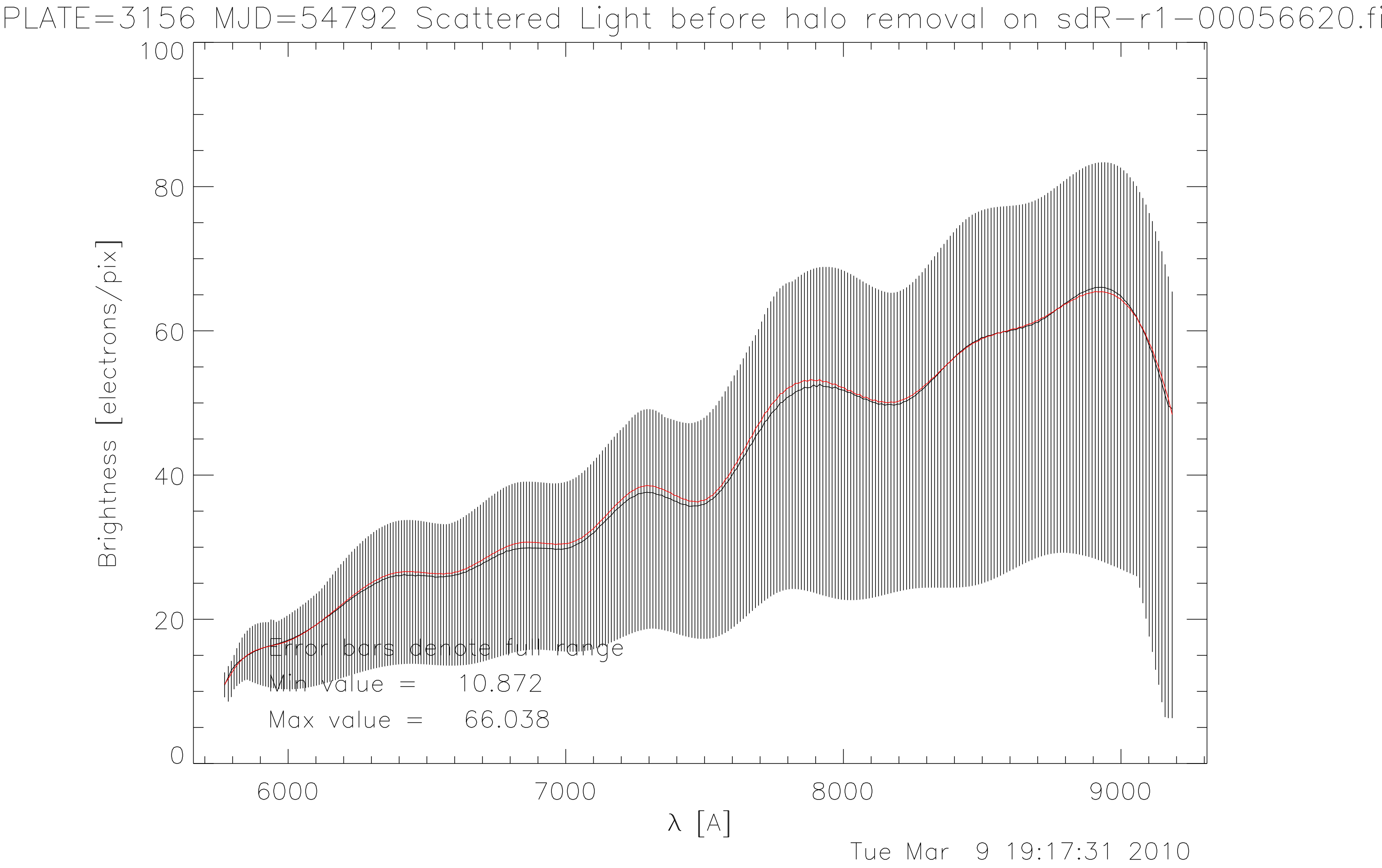

PLATE=3156 MJD=54792 sdR-r1-00056617.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.25 %
Flux (7343.0)/Airmass
1600
1800
2000
2200
2400
2600
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.190
1.195
1.200
1.205
1.210
1.215
1.220

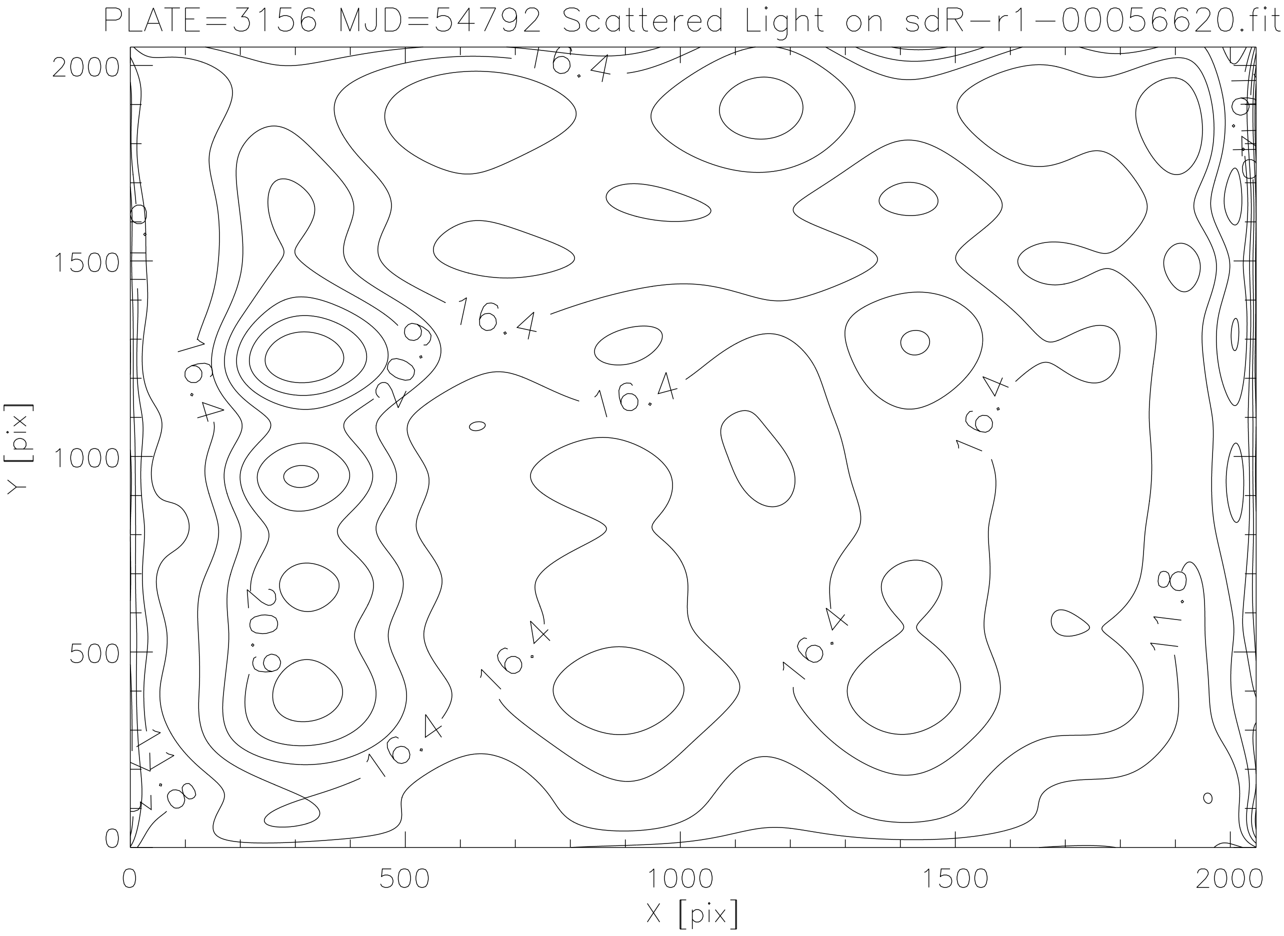

PLATE=3156 MJD=54792 sdR-r1-00056617.fit Skyline Flux at 8888.3

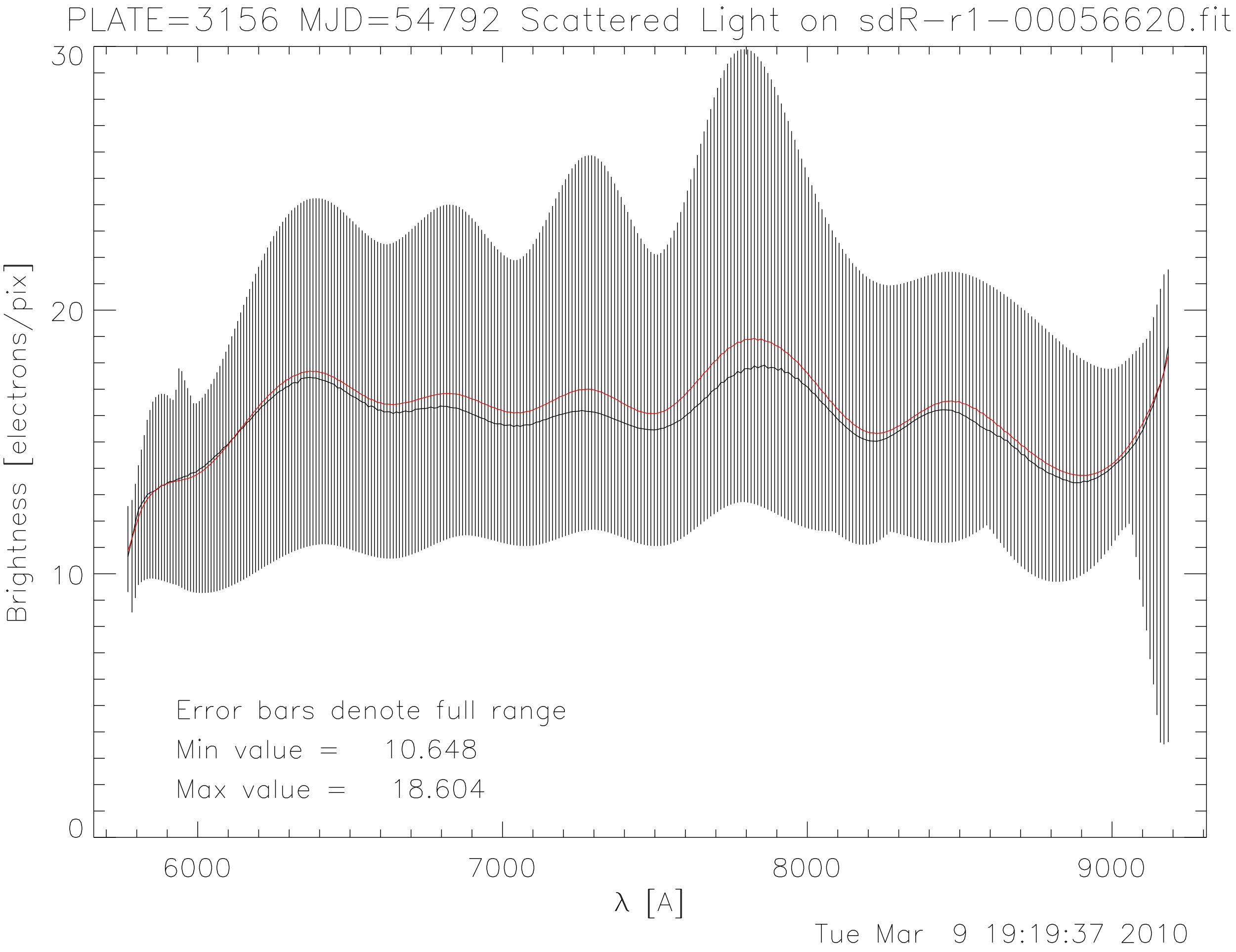

PLATE=3156 MJD=54792 Fiber−Flats for sdR−r1−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.411
Max value = 1.442
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 9 19:16:54 2010

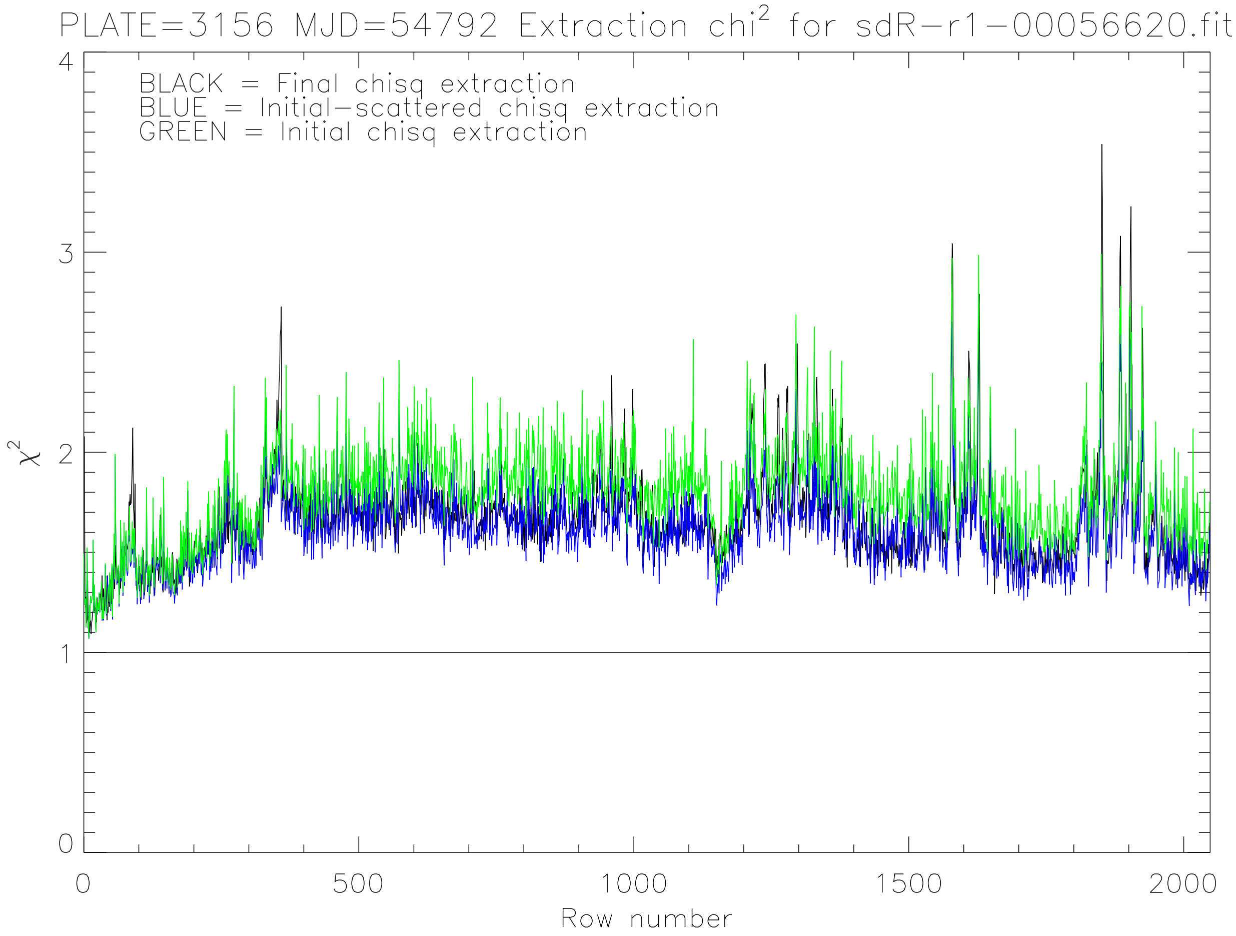
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056620.fi

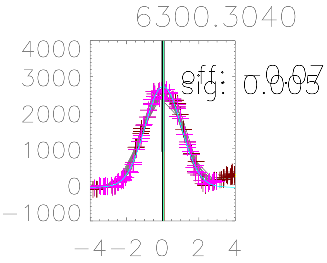


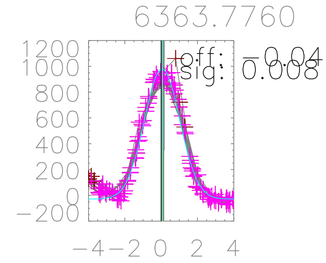

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056620.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.872
Max value = 66.038
Tue Mar 9 19:17:31 2010

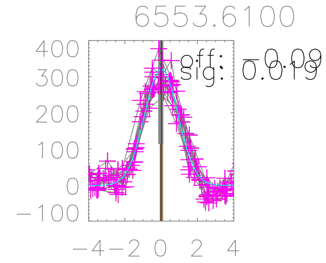

PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056620.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
16.4
20.9
11.8

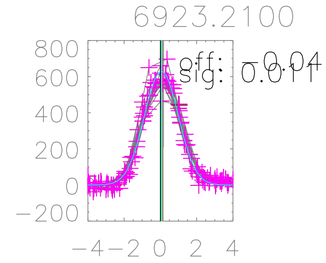

PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056620.fit
Brightness [electrons/pix]
0
10
20
30
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   10.648
Max value =   18.604
Tue Mar 9 19:19:37 2010

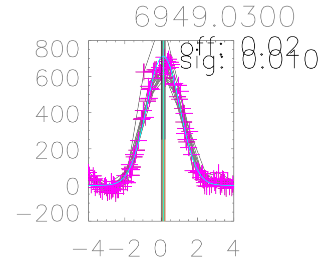

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r1-00056620.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

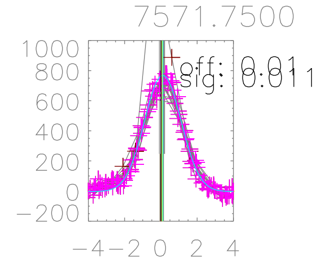

6300.3040
off: −0.07
sig: 0.005
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4

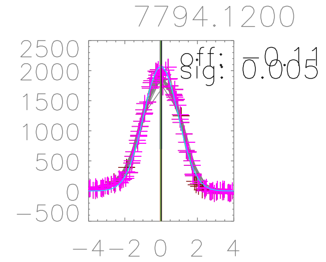

6363.7760
off: −0.04
sig: 0.008
1200
1000
800
600
400
200
0
−200
−4 −2 0 2 4

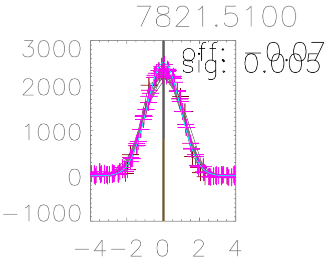

6553.6100
off: −0.09
sig: 0.019
400
300
200
100
0
−100
−4 −2 0 2 4

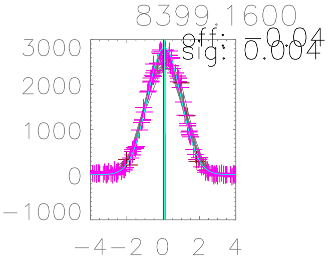

6923.2100
off: −0.04
sig: 0.011
800
600
400
200
0
−200
−4 −2 0 2 4

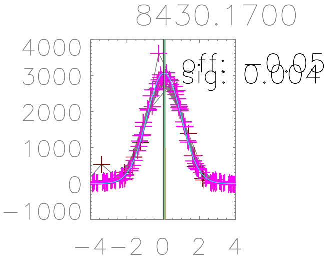

6949.0300
off: 0.02
sig: 0.010
800
600
400
200
0
−200
−4 −2 0 2 4

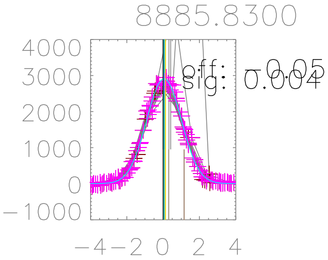

7571.7500
off: 0.01
sig: 0.011
1000
800
600
400
200
0
−200
−4 −2 0 2 4

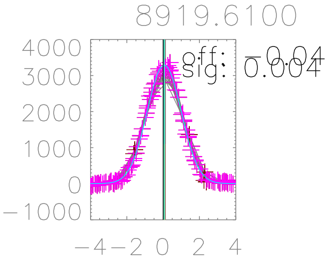

7794.1200
off: −0.11
sig: 0.005
2500
2000
1500
1000
500
0
−500
−4 −2 0 2 4

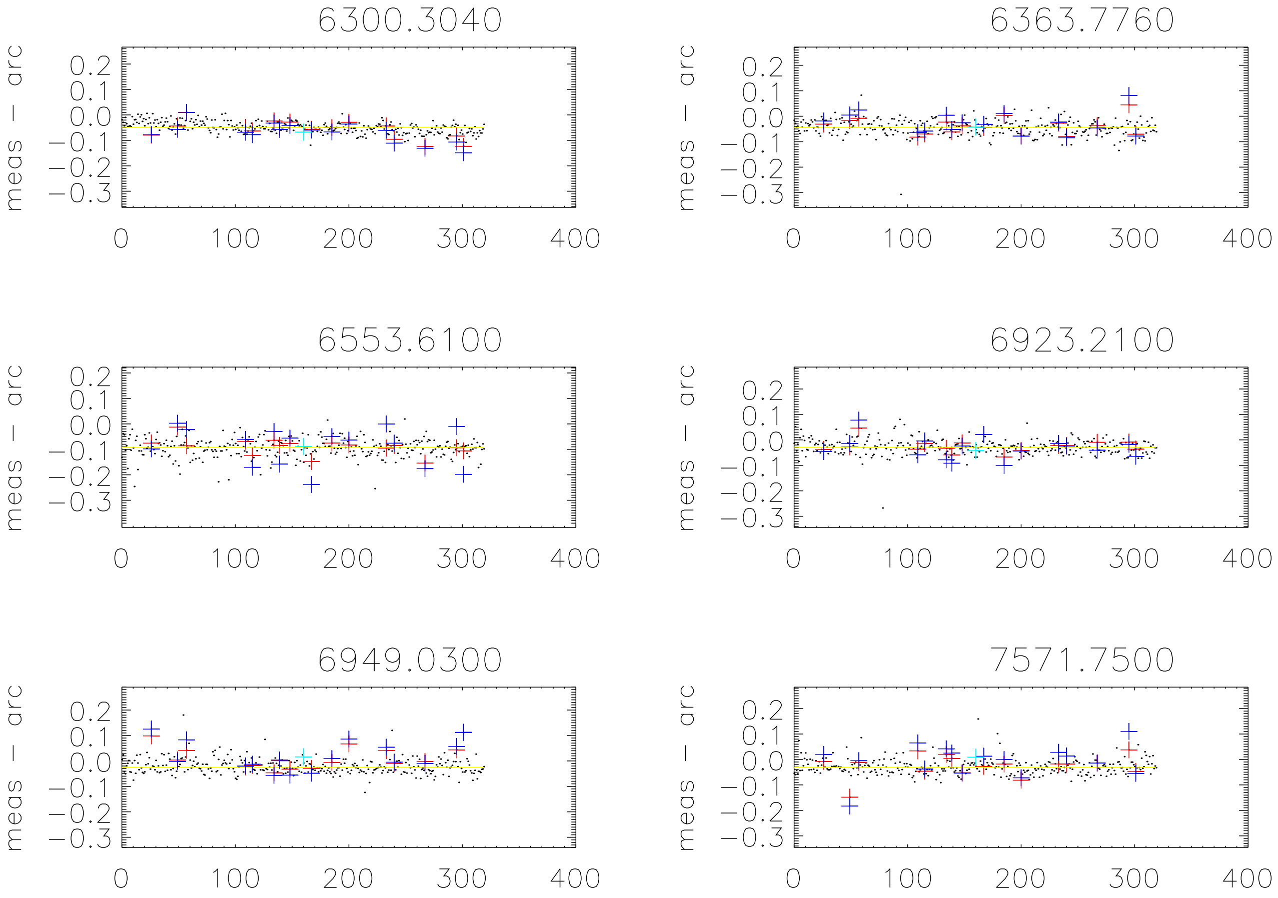

7821.5100
off: −0.07
sig: 0.005
3000
2000
1000
0
−1000
−4 −2 0 2 4

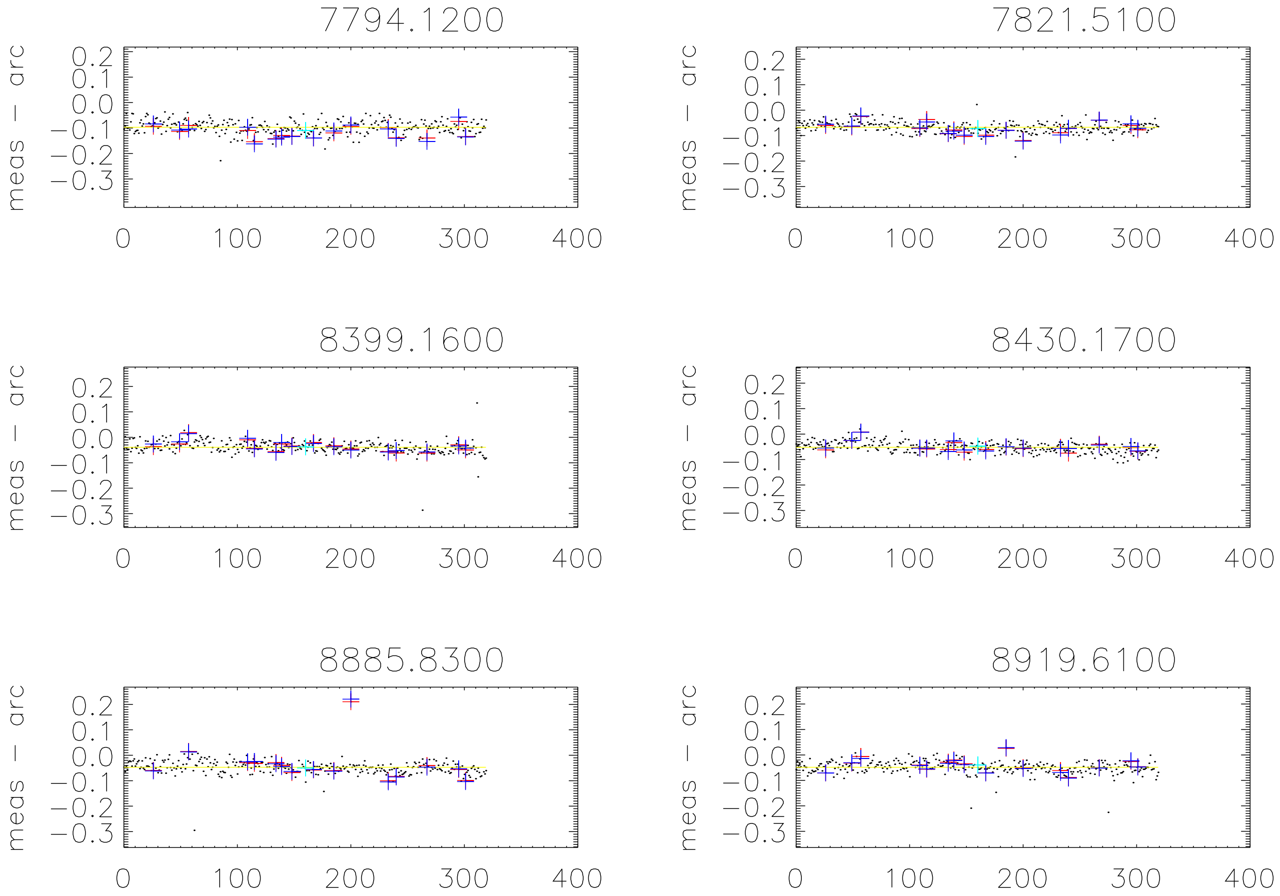

8399.1600
off: −0.04
sig: 0.004
3000
2000
1000
0
−1000
−4 −2 0 2 4

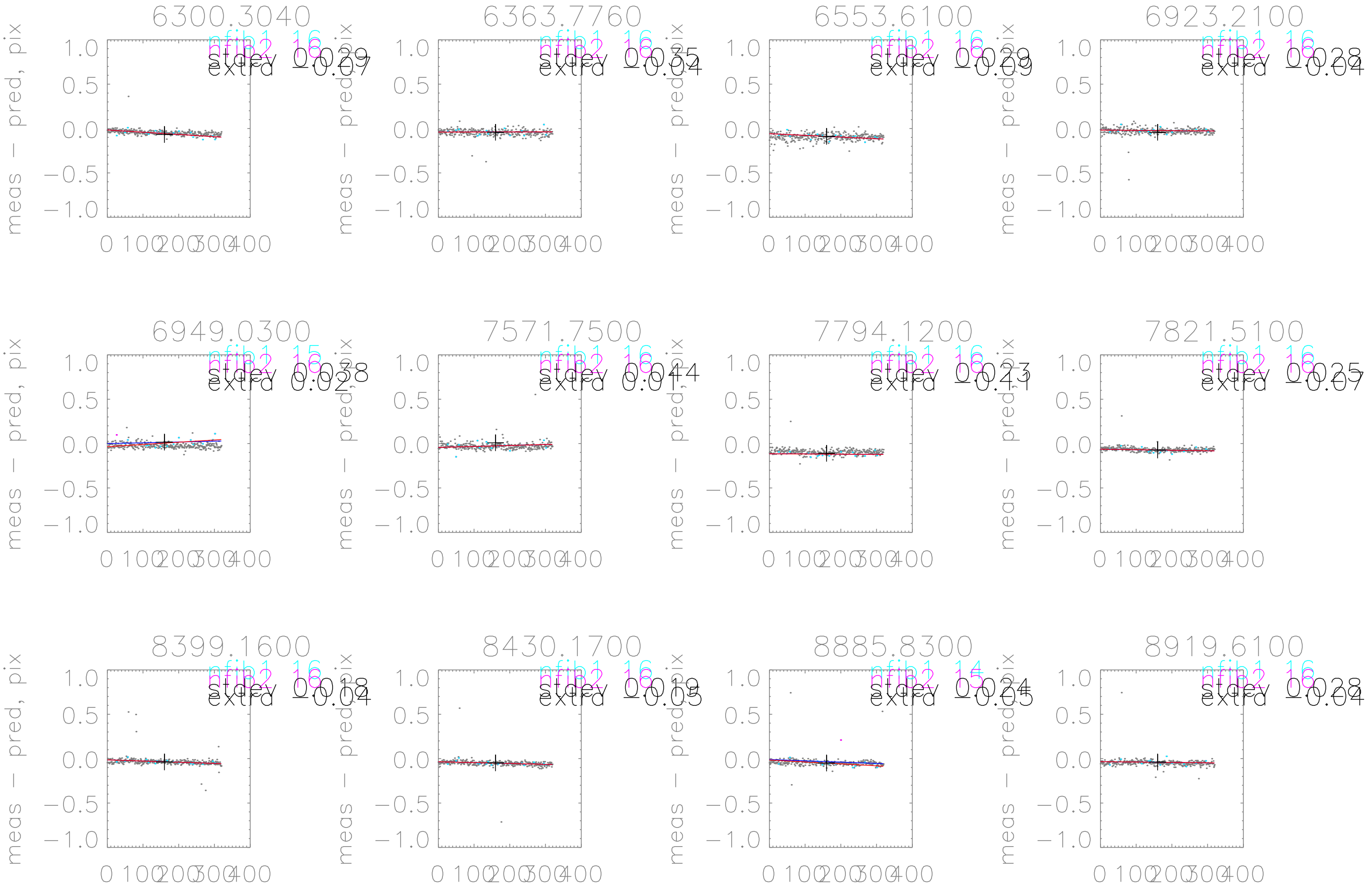

8430.1700
off: −0.05
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4

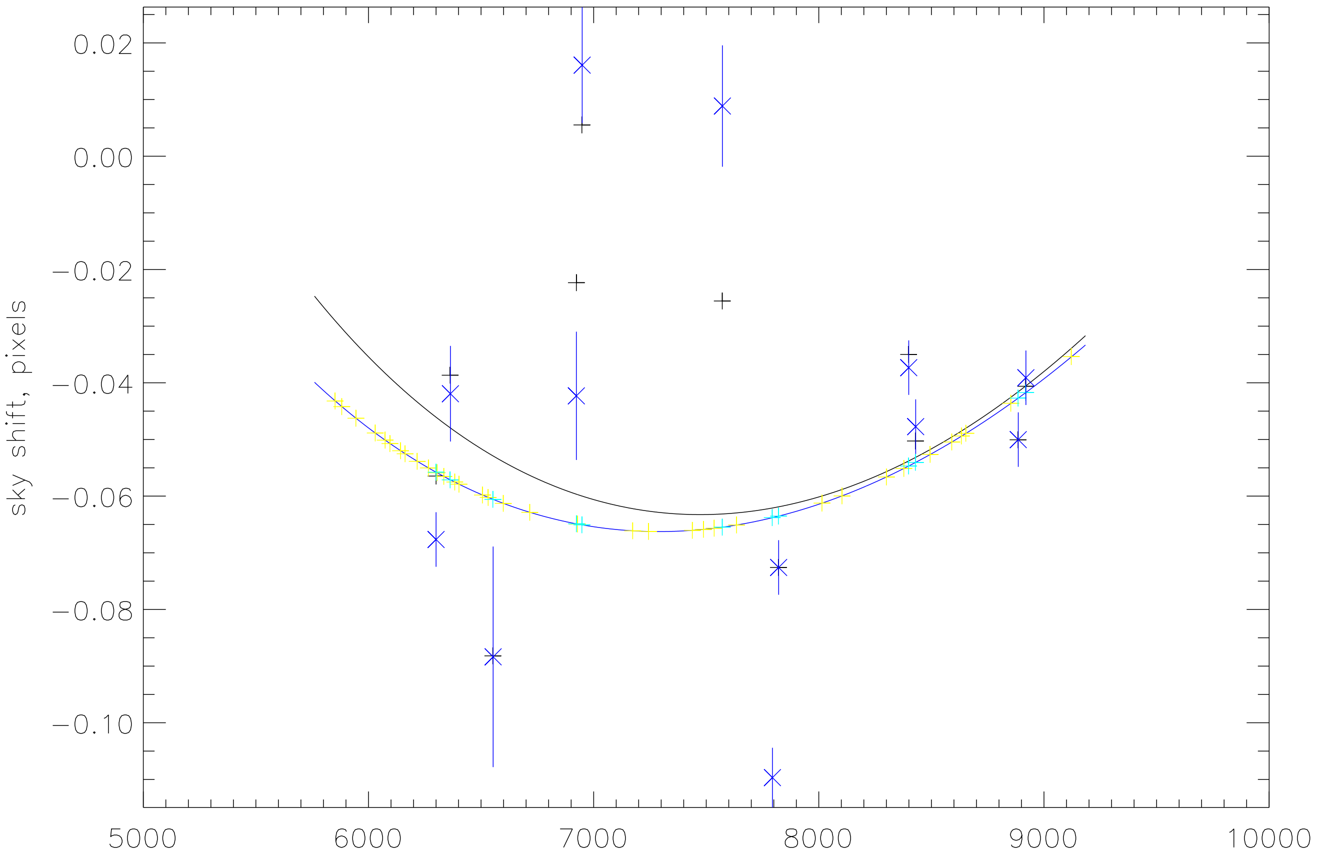

8885.8300
off: −0.05
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4

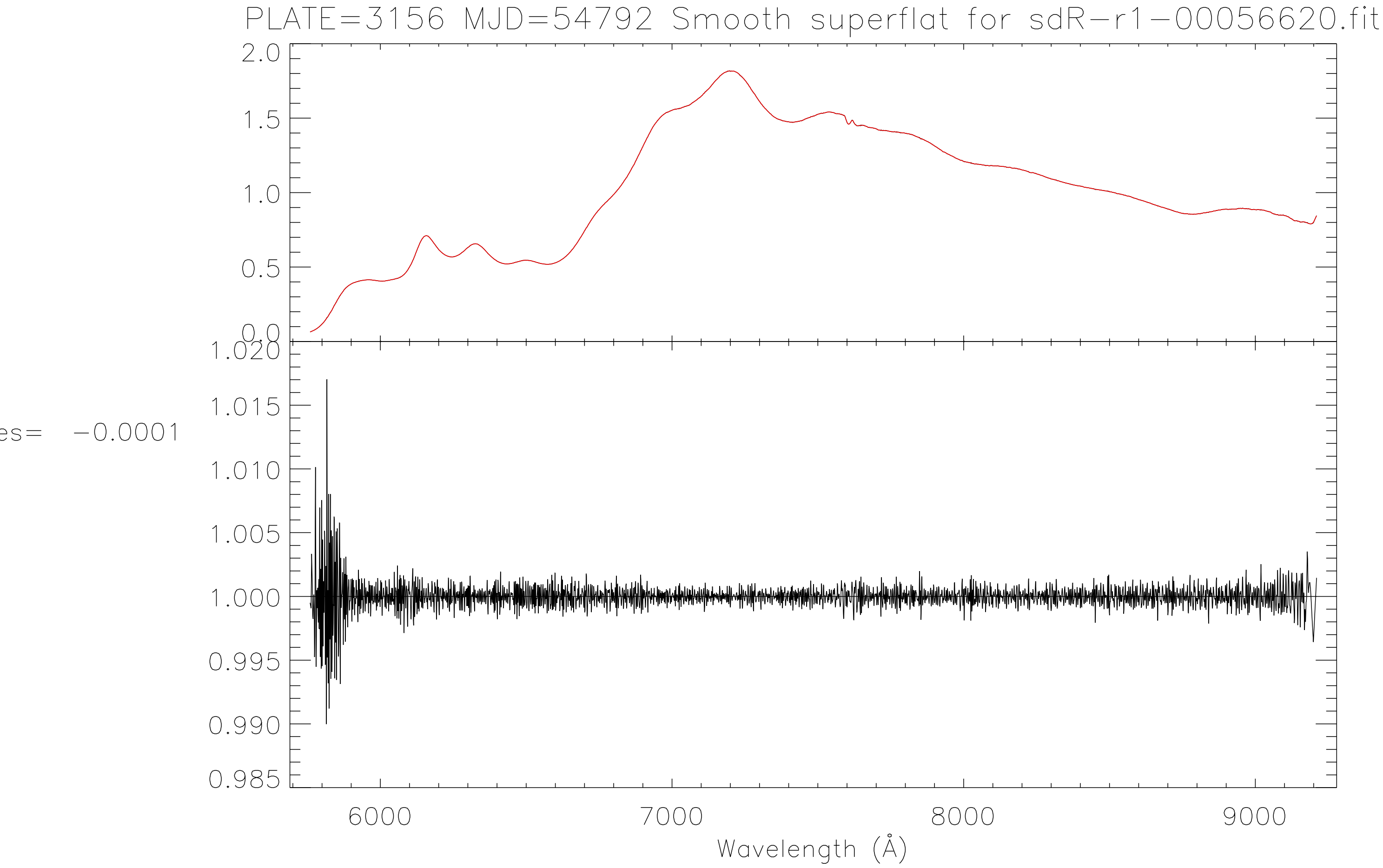

8919.6100
off: −0.04
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4

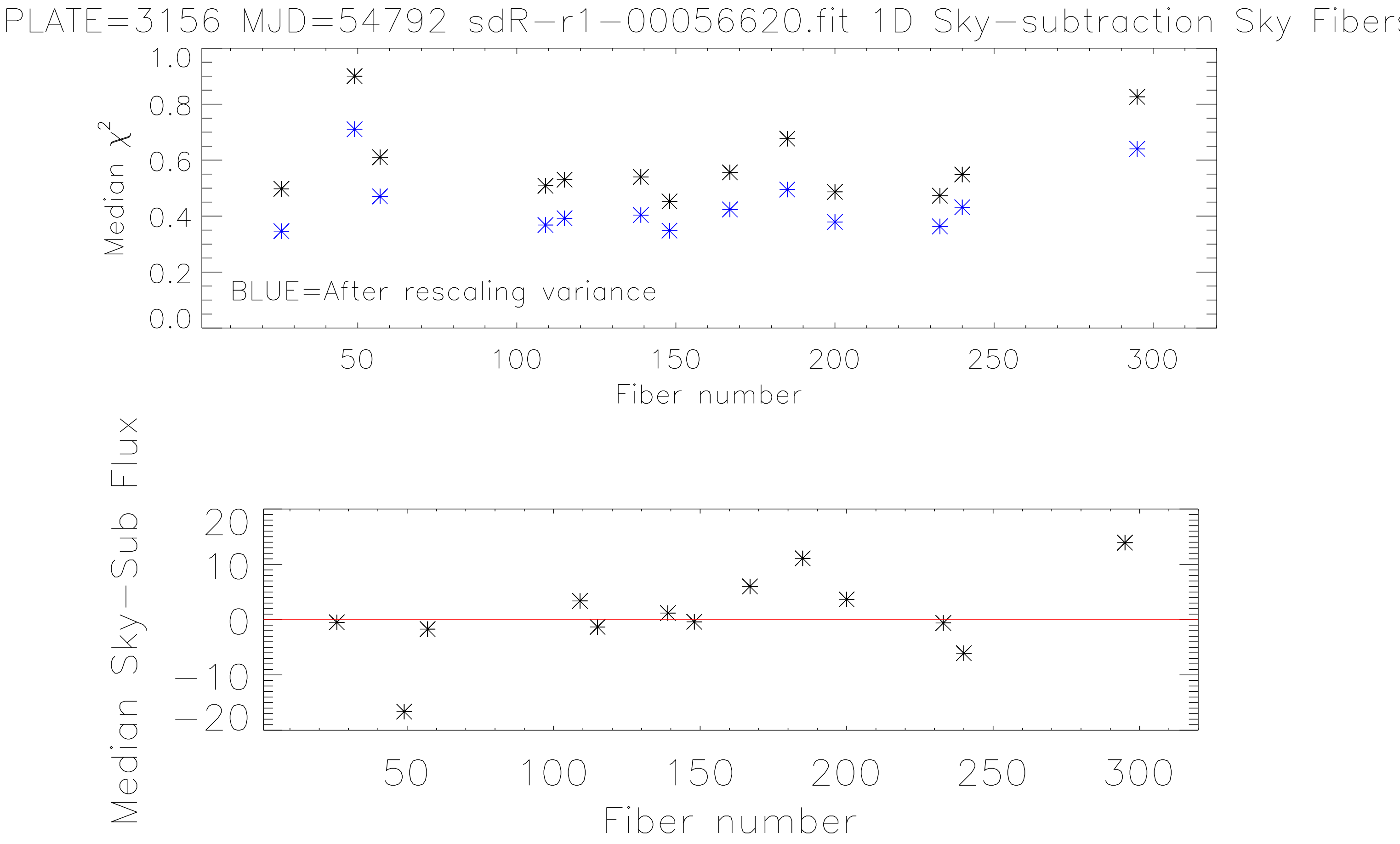

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

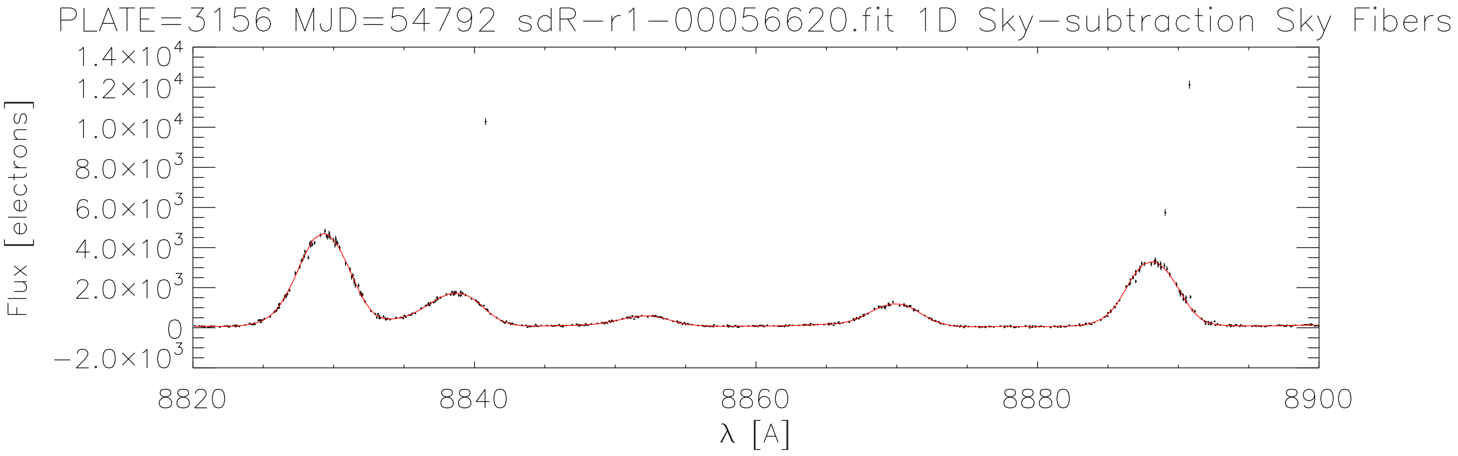

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

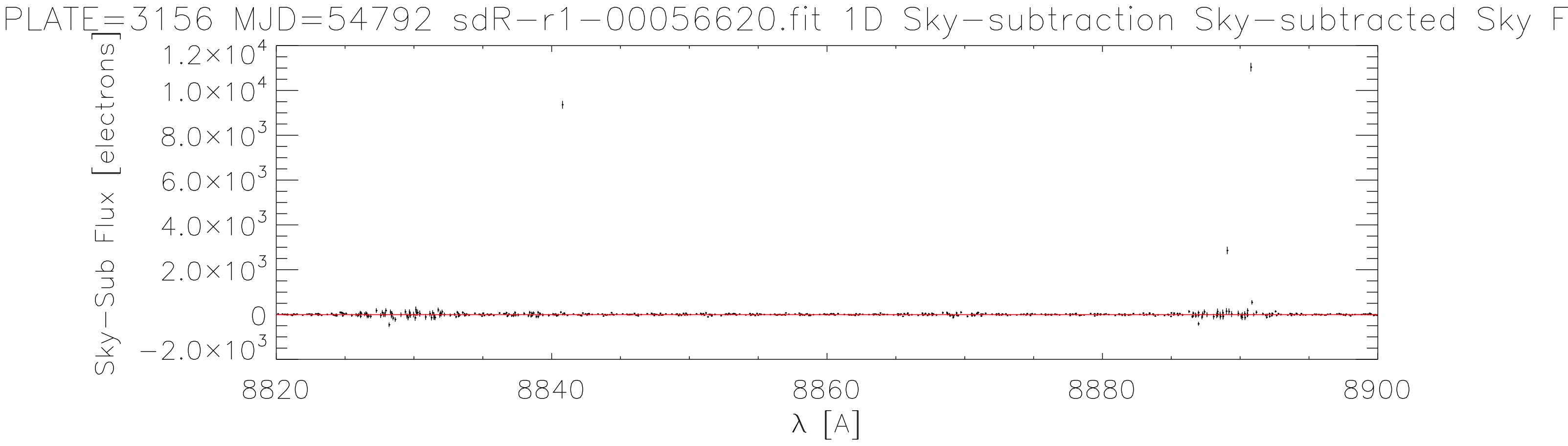

6300.3040
nfib1 16
nfib2 16
stdev 0.029
extrd −0.07
6363.7760
nfib1 16
nfib2 16
stdev 0.035
extrd −0.04
6553.6100
nfib1 16
nfib2 16
stdev 0.029
extrd −0.09
6923.2100
nfib1 16
nfib2 16
stdev 0.028
extrd −0.04
6949.0300
nfib1 15
nfib2 16
stdev 0.038
extrd 0.02
7571.7500
nfib1 16
nfib2 16
stdev 0.044
extrd 0.01
7794.1200
nfib1 16
nfib2 16
stdev 0.023
extrd −0.11
7821.5100
nfib1 16
nfib2 16
stdev 0.025
extrd −0.07
8399.1600
nfib1 16
nfib2 16
stdev 0.018
extrd −0.04
8430.1700
nfib1 16
nfib2 16
stdev 0.019
extrd −0.05
8885.8300
nfib1 14
nfib2 15
stdev 0.024
extrd −0.05
8919.6100
nfib1 16
nfib2 16
stdev 0.028
extrd −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


sky shift, pixels
0.02
0.00
−0.02
−0.04
−0.06
−0.08
−0.10
5000
6000
7000
8000
9000
10000


PLATE=3156 MJD=54792 Smooth superflat for sdR-r1-00056620.fit
2.0
1.5
1.0
0.5
0.0
1.020
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
6000
7000
8000
9000
Wavelength (Å)

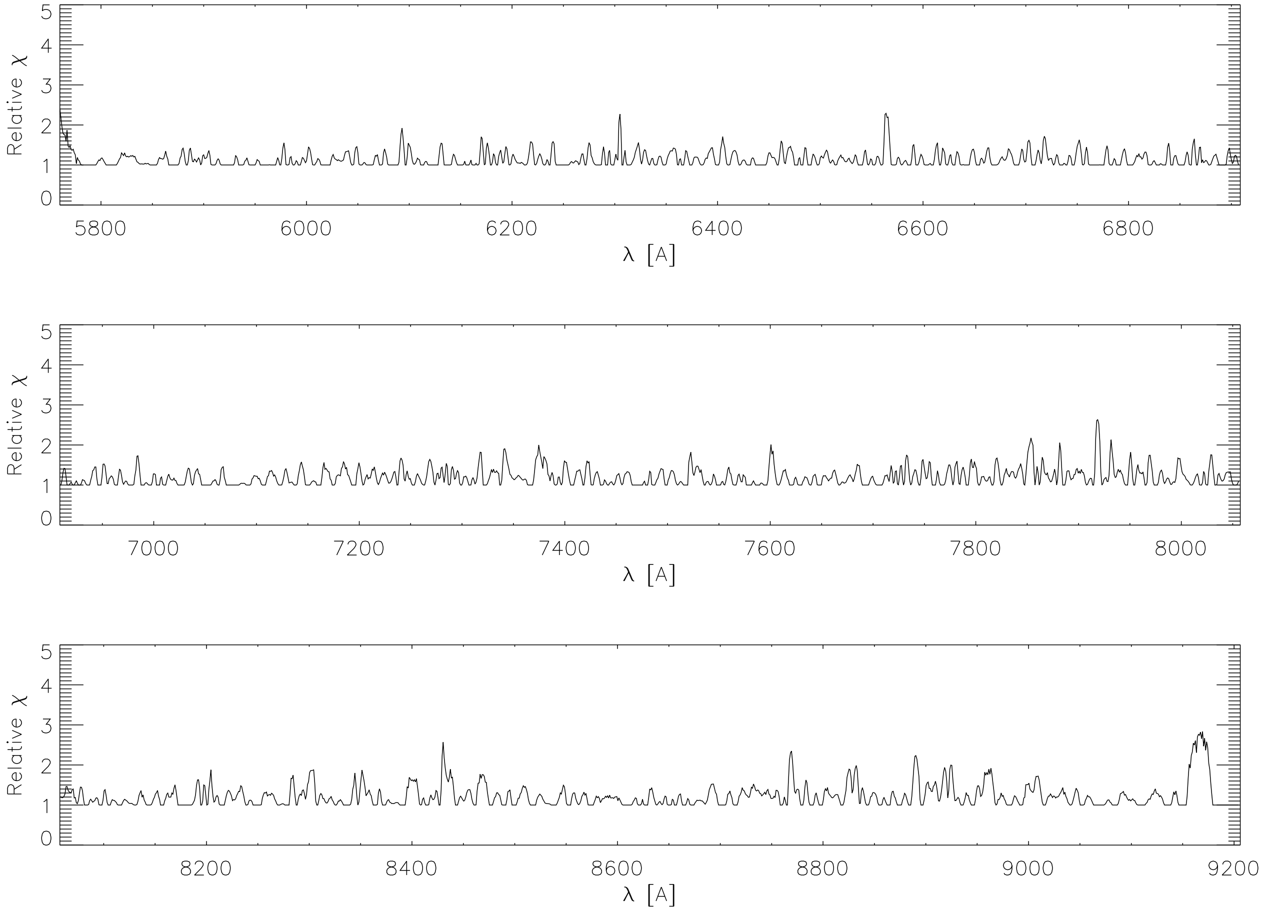

PLATE=3156 MJD=54792 sdR-r1-00056620.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
−10
−20
50
100
150
200
250
300
Fiber number

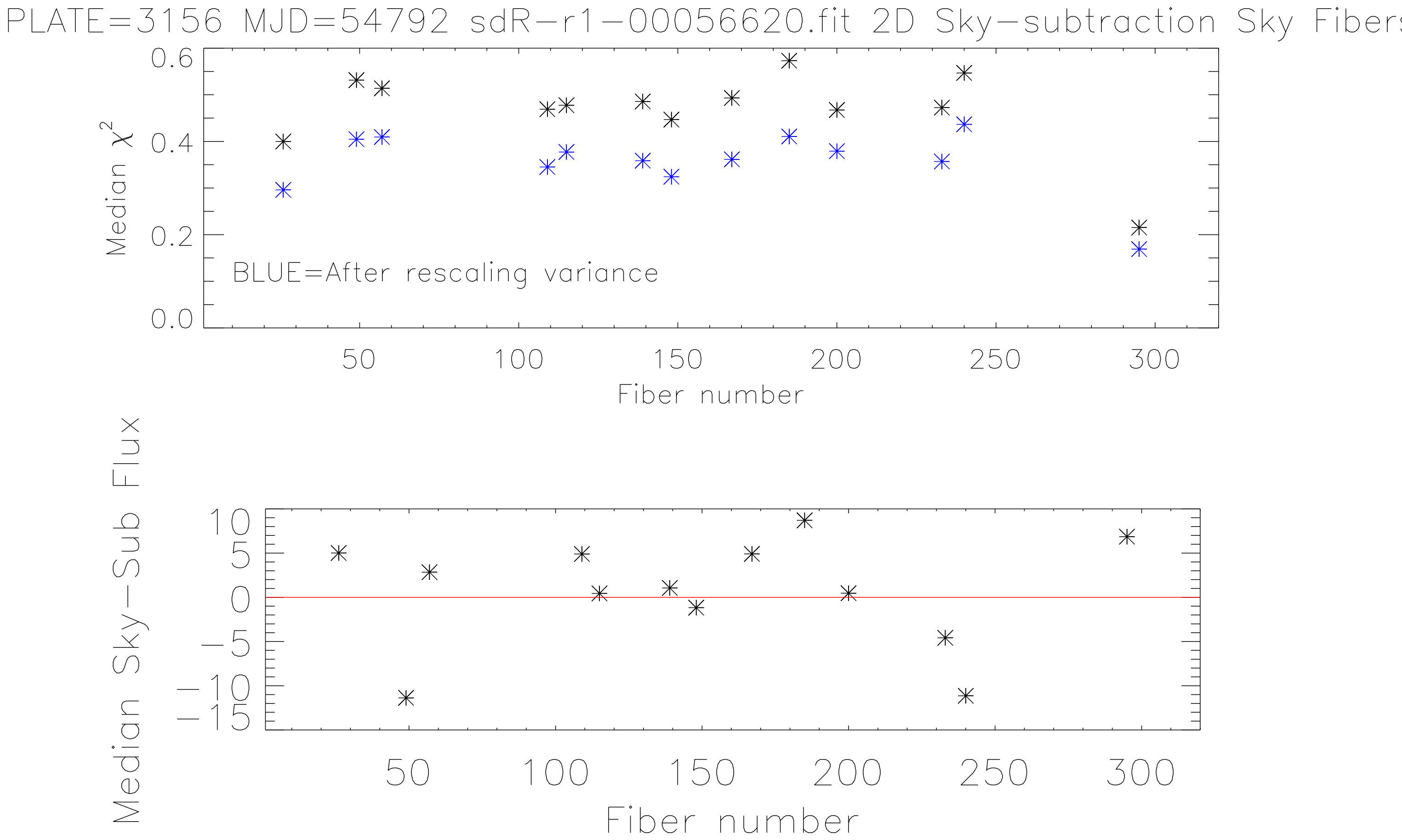

PLATE=3156 MJD=54792 sdR-r1-00056620.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
−2.0×10^3
8820
8840
8860
8880
8900
λ [A]

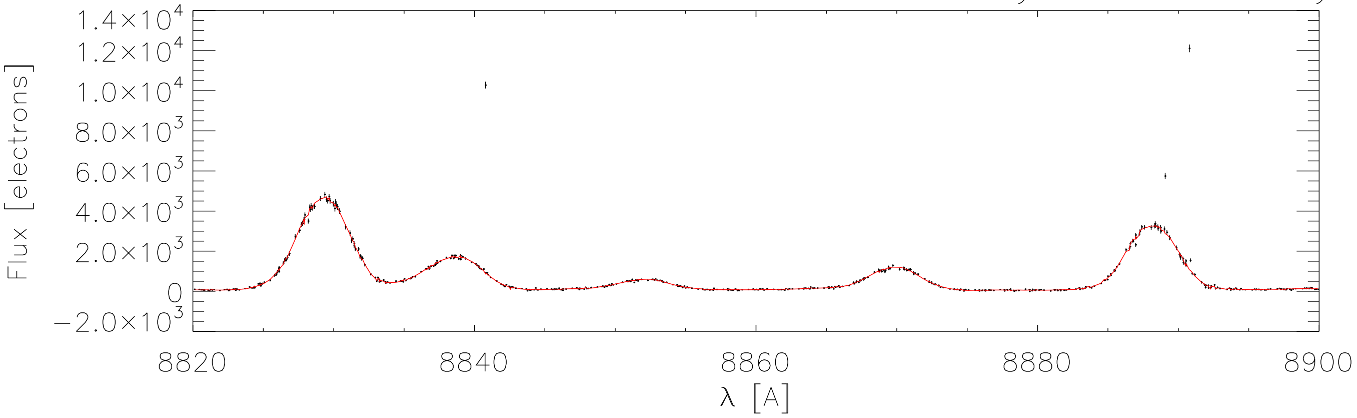

PLATE=3156 MJD=54792 sdR-r1-00056620.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
−2.0×10^3
8820
8840
8860
8880
8900
λ [A]

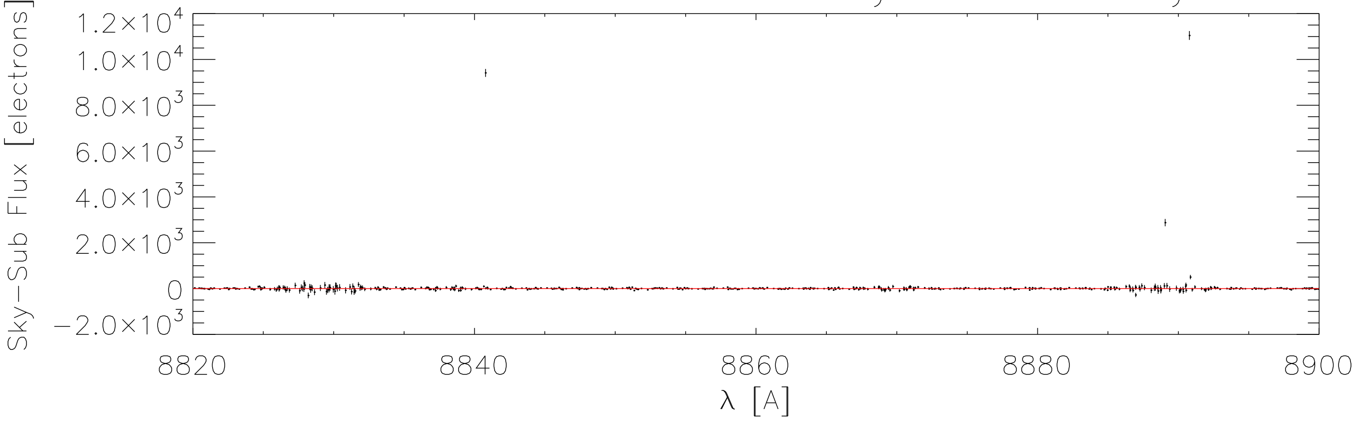
Number of sky fibers = 13

PLATE=3156 MJD=54792 sdR-r1-00056620.fit 1D Sky-subtraction Rescaled Errors



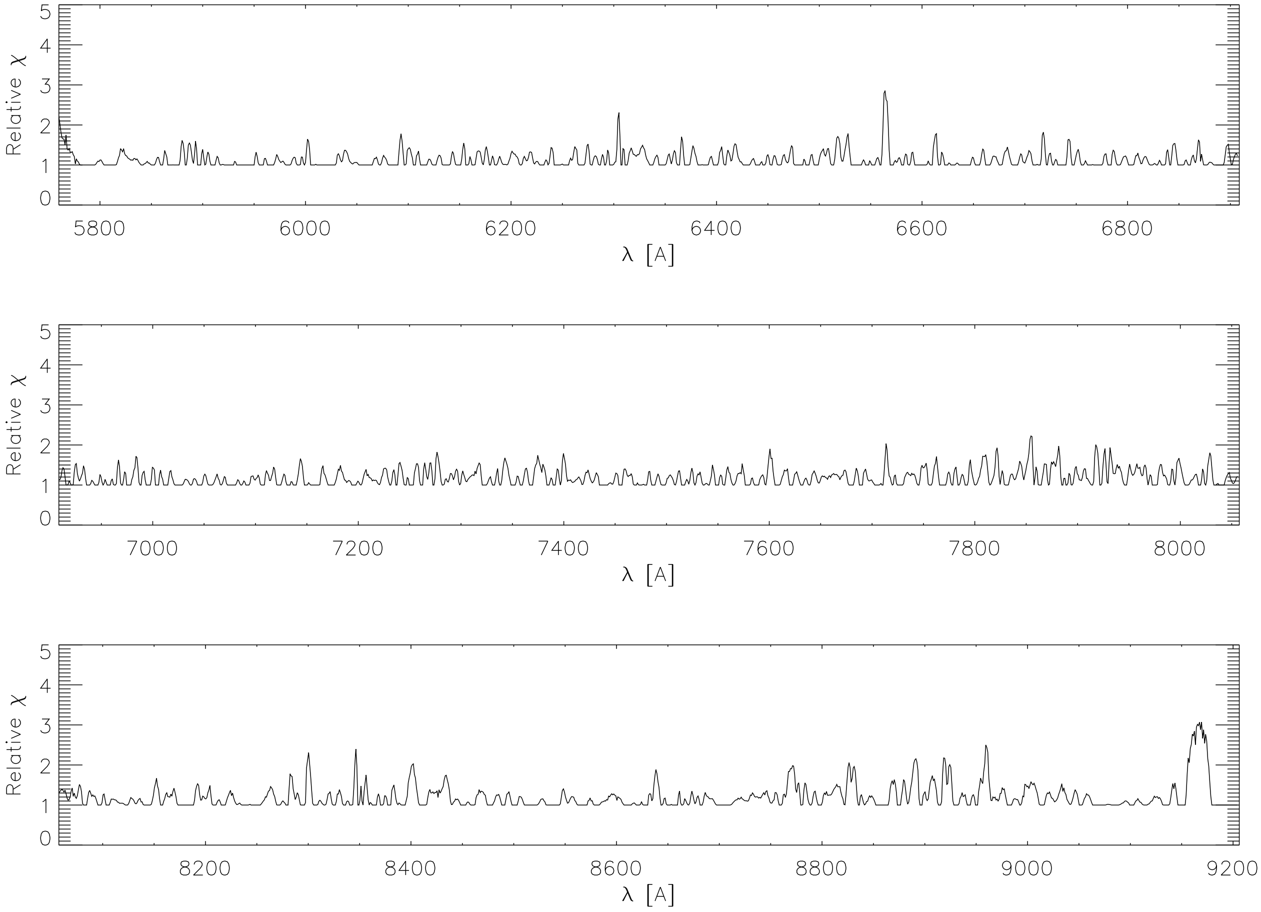

PLATE=3156 MJD=54792 sdR-r1-00056620.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number


PLATE=3156 MJD=54792 sdR-r1-00056620.fit 2D Sky-subtraction Sky Fibers

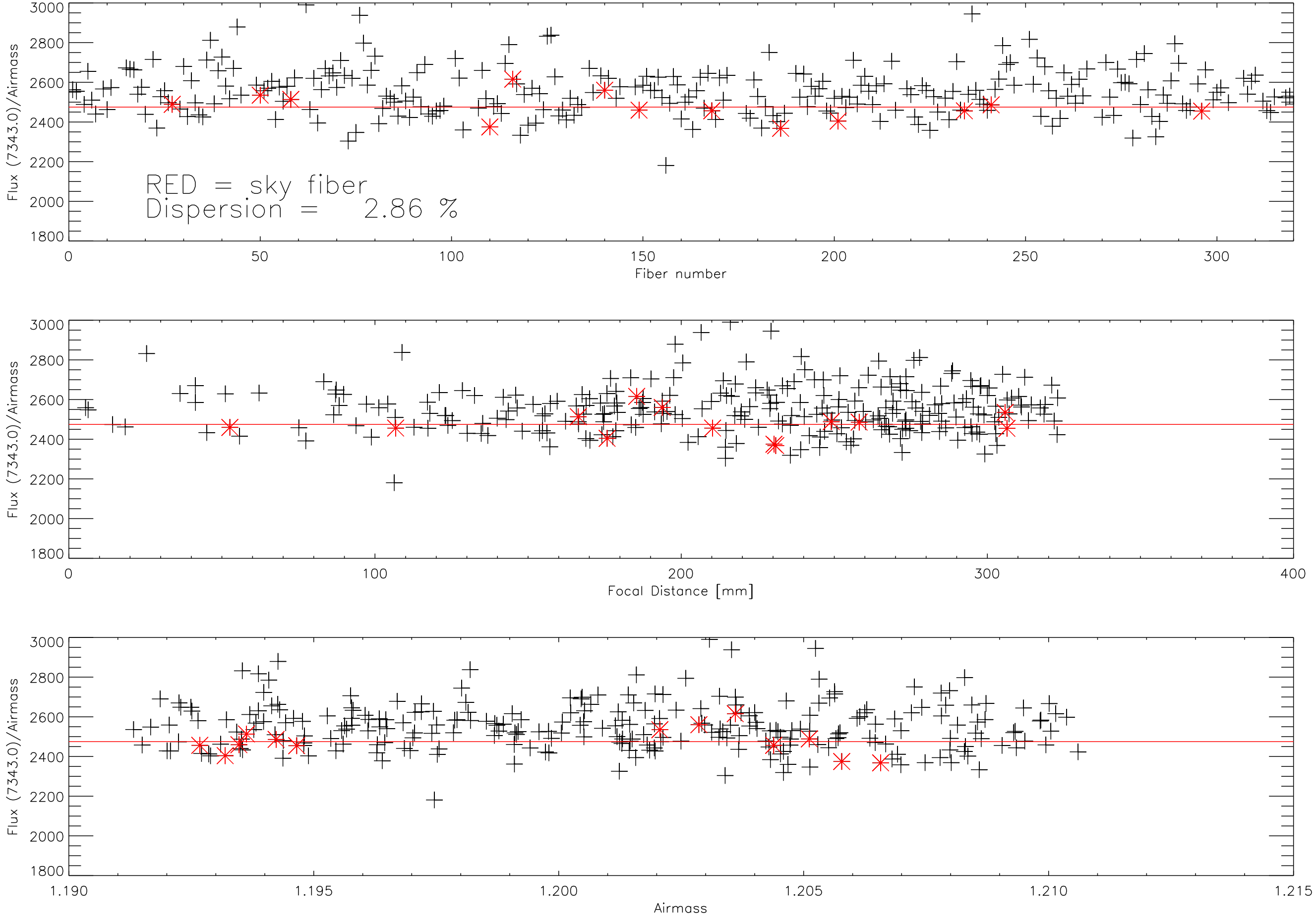

PLATE=3156 MJD=54792 sdR-r1-00056620.fit 2D Sky-subtraction Sky-subtracted Sky F

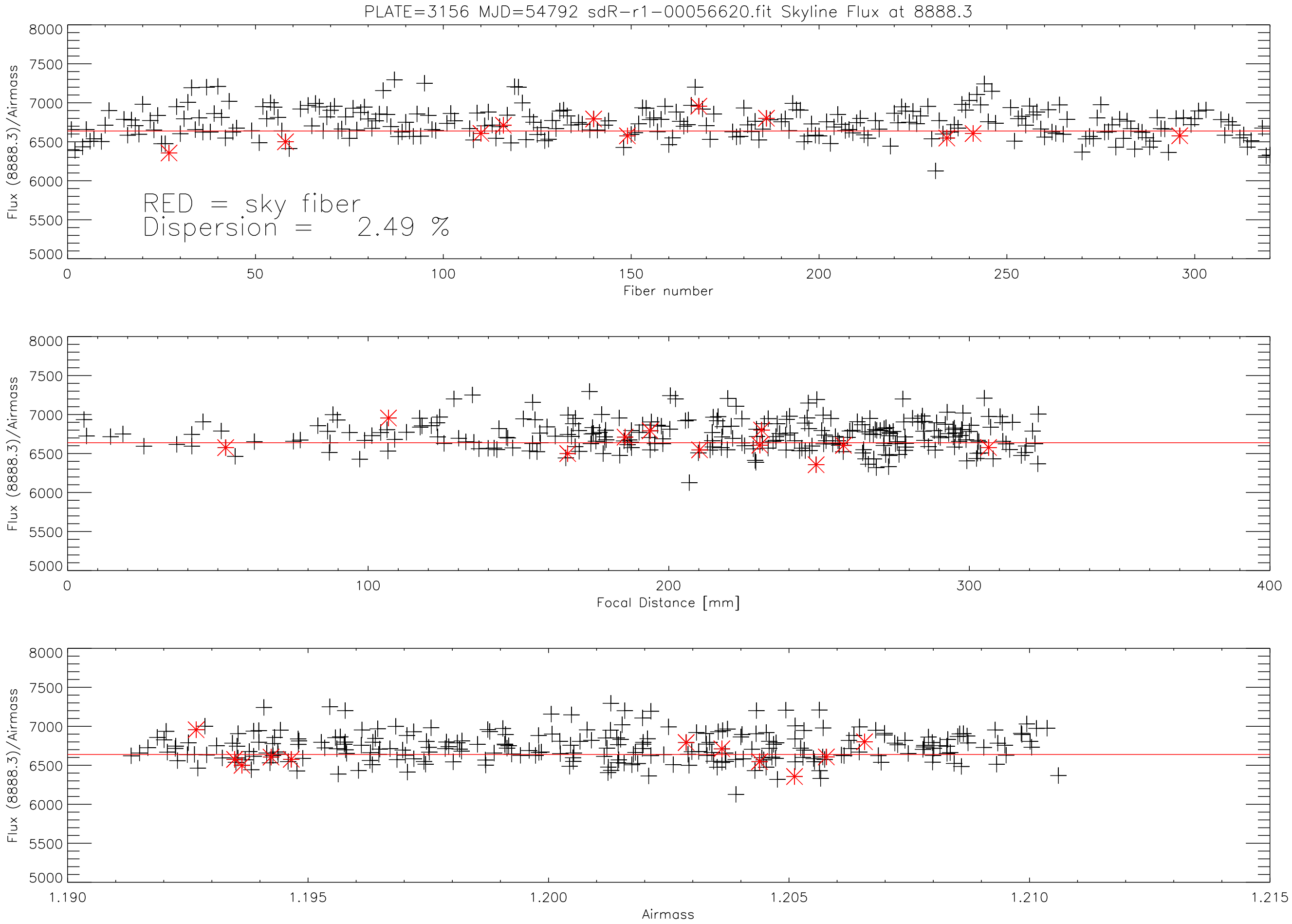
Number of sky fibers = 13

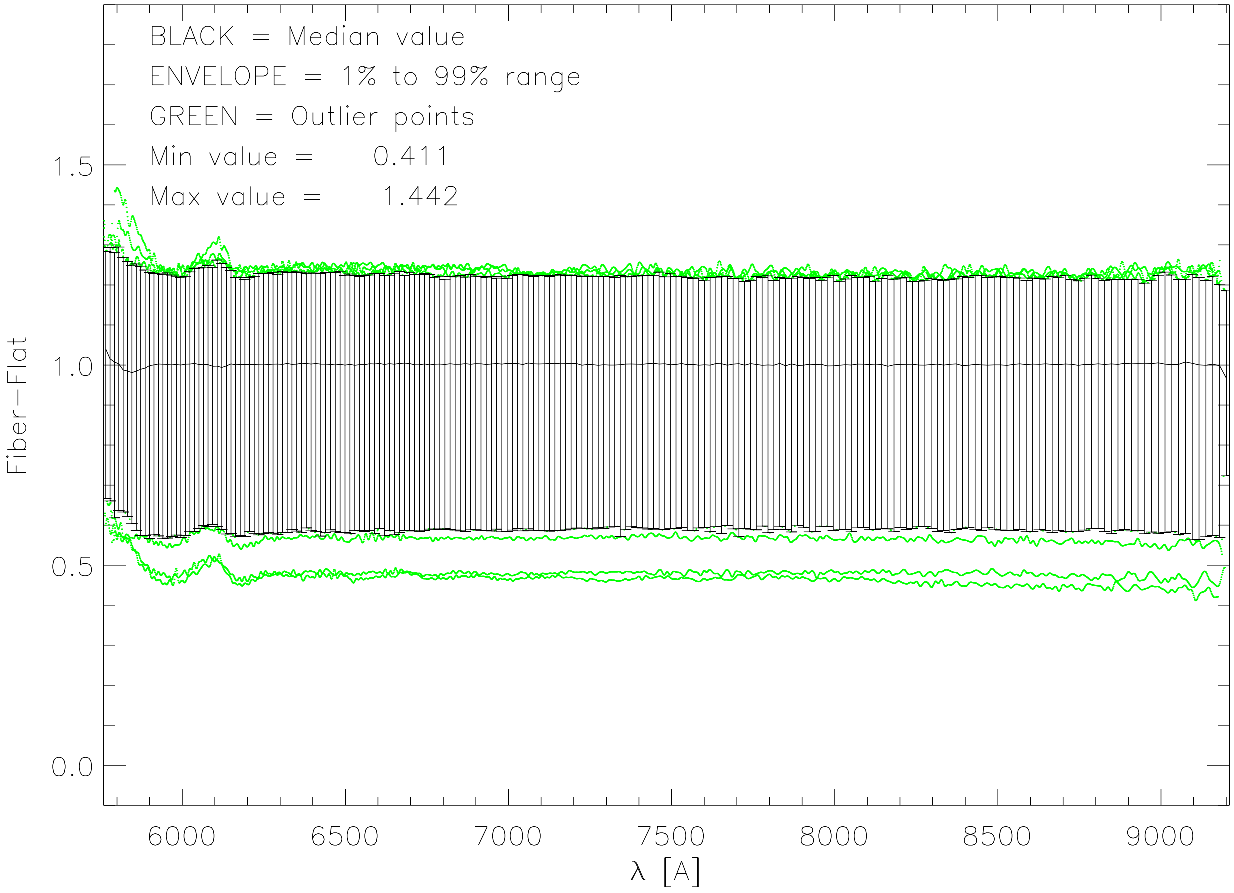
PLATE=3156 MJD=54792 sdR-r1-00056620.fit 2D Sky-subtraction Rescaled Errors



PLATE=3156 MJD=54792 sdR-r1-00056620.fit Skyline Flux at 7343,0



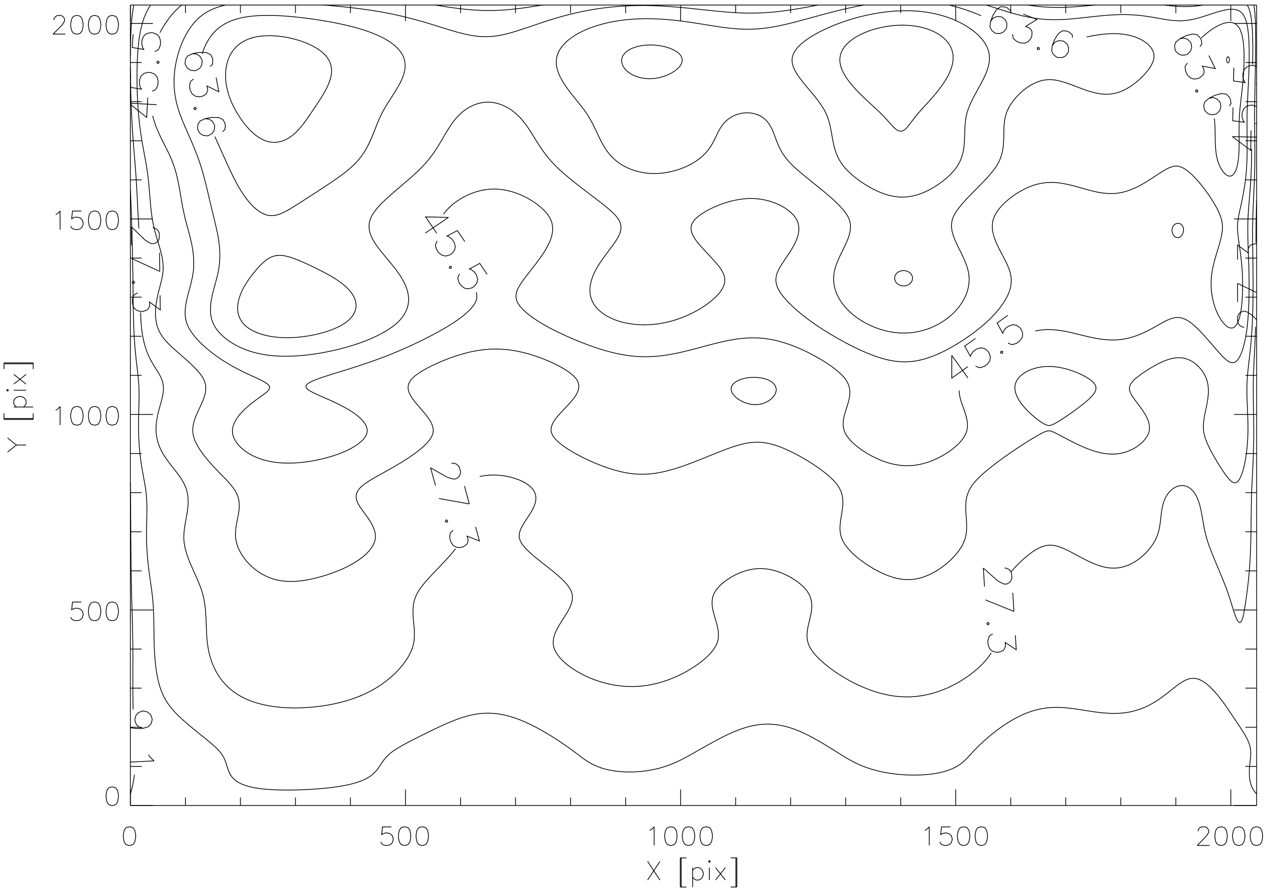

PLATE=3156 MJD=54792 sdR-r1-00056620.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
8000
7500
7000
6500
6000
5500
5000
RED = sky fiber
Dispersion = 2.49 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
8000
7500
7000
6500
6000
5500
5000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
8000
7500
7000
6500
6000
5500
5000
1.190
1.195
1.200
1.205
1.210
1.215
Airmass



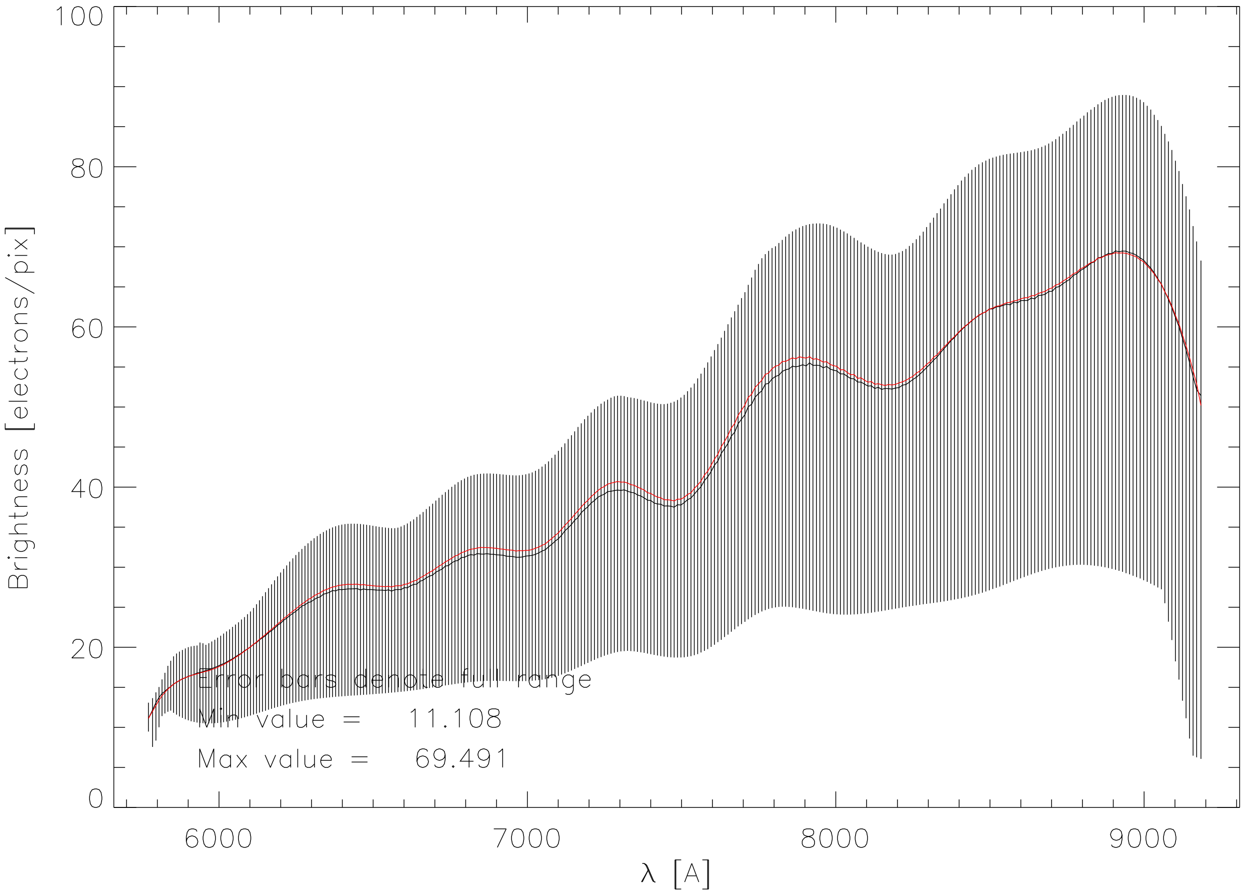
PLATE=3156 MJD=54792 Fiber–Flats for sdR–r1–00056618.fit

Tue Mar 9 19:20:37 2010

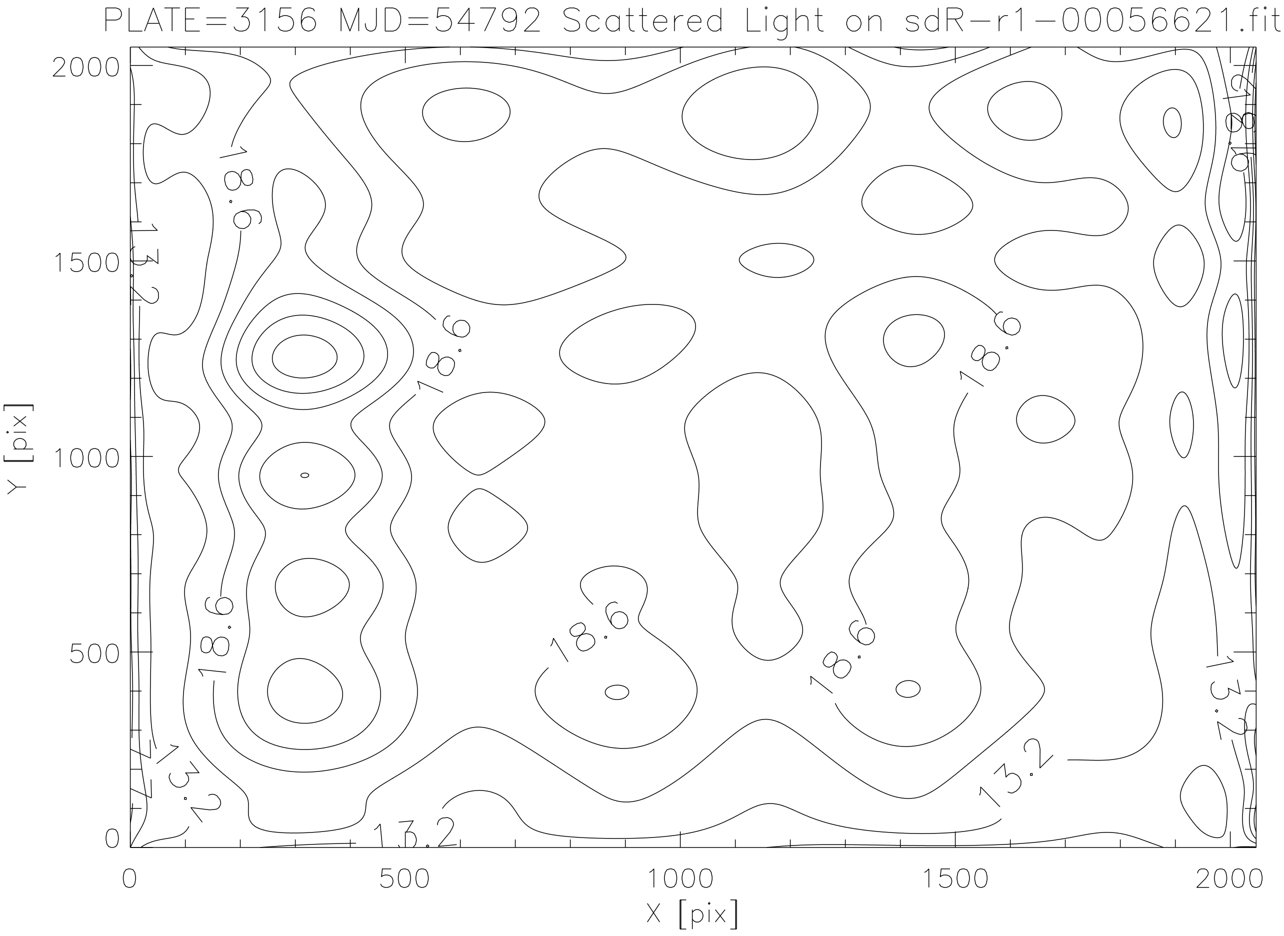
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056621.fi

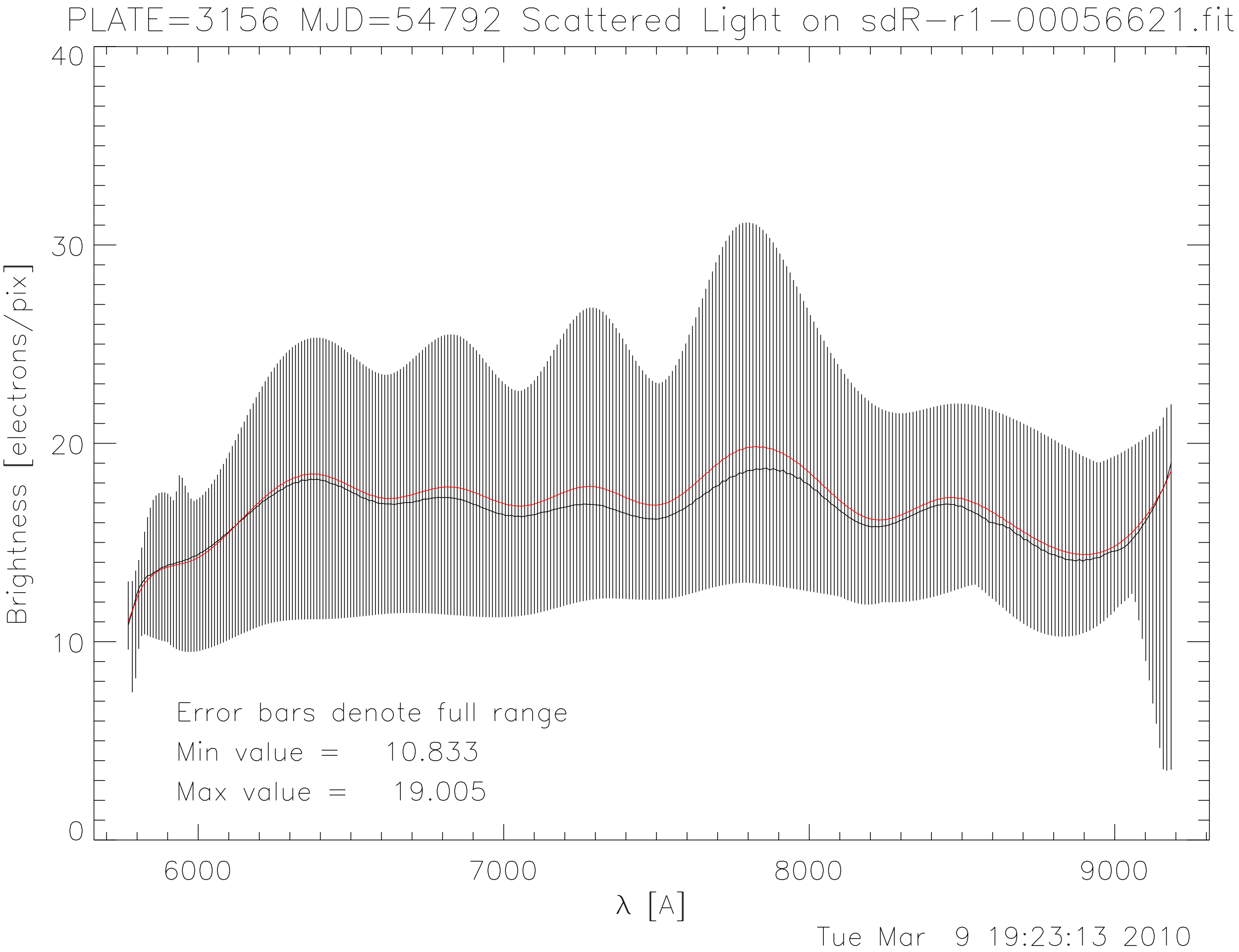


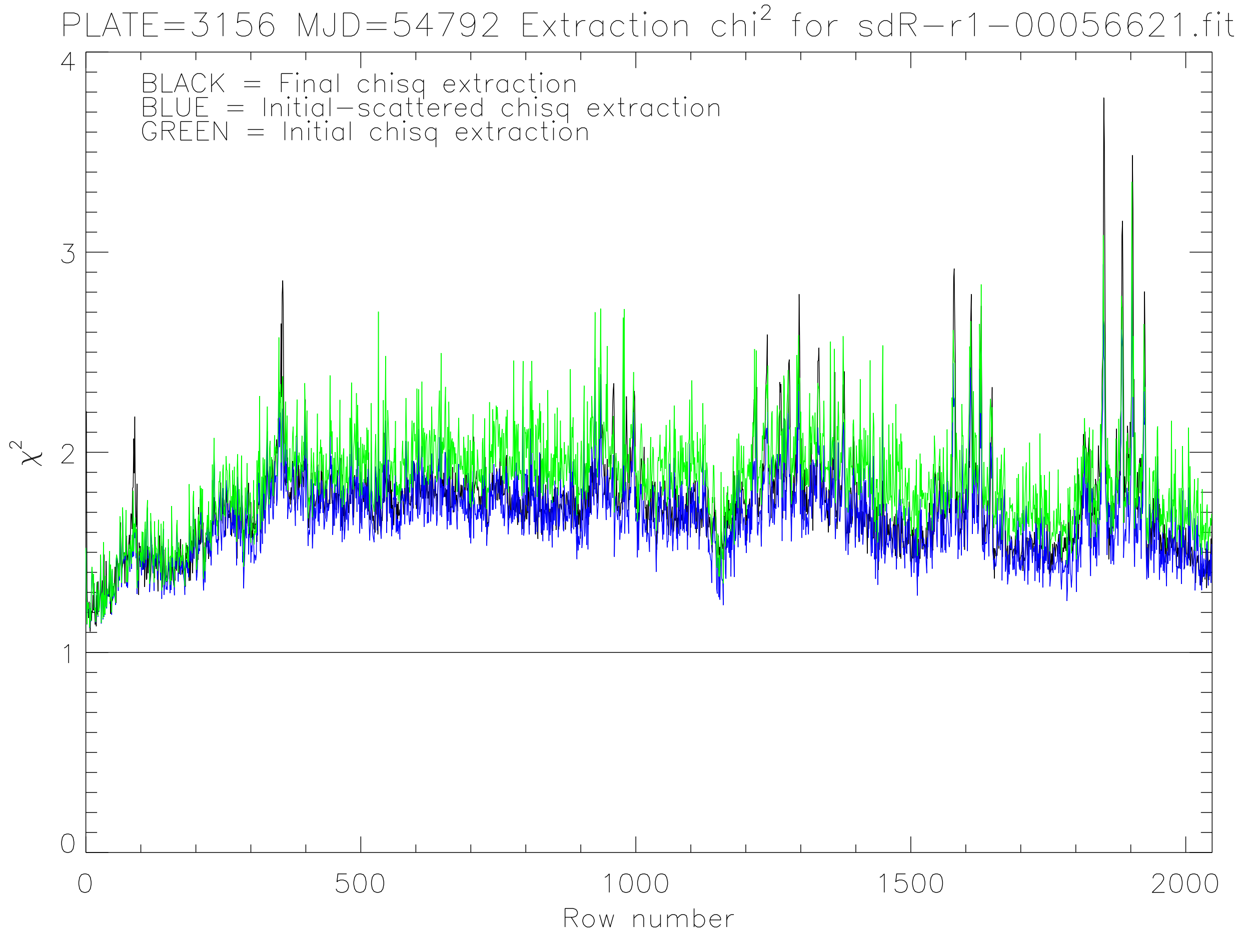
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056621.fi

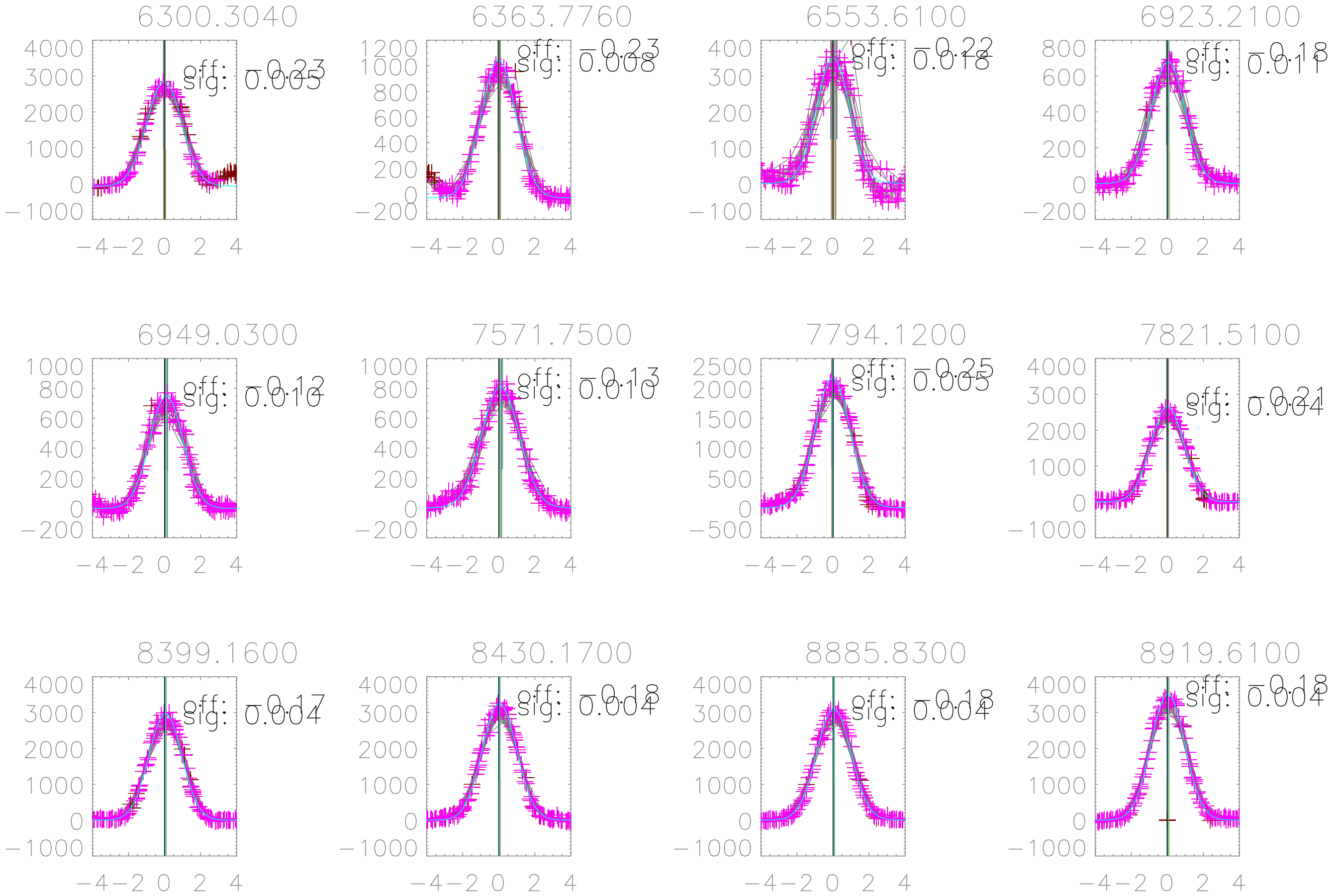


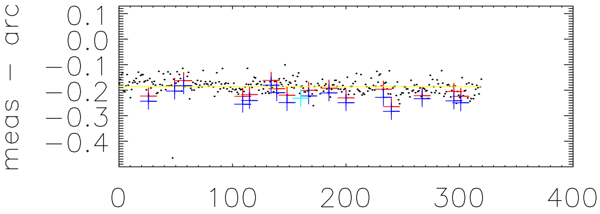
Tue Mar 9 19:21:12 2010

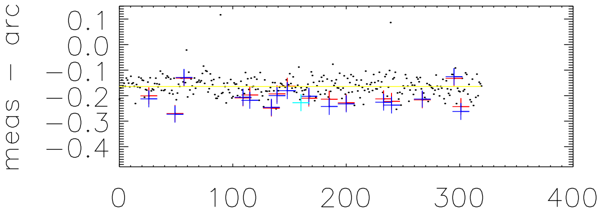

PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056621.fit

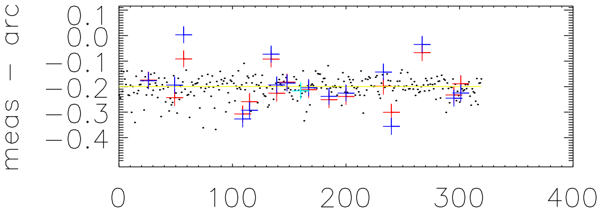

PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056621.fit
Brightness [electrons/pix]
0
10
20
30
40
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.833
Max value = 19.005
Tue Mar 9 19:23:13 2010

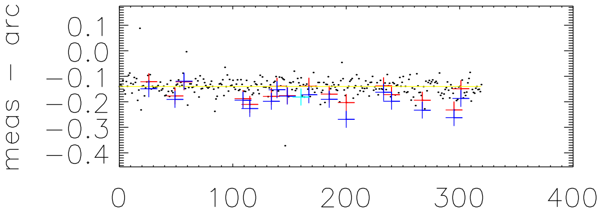

PLATE=3156 MJD=54792 Extraction chi^2 for sdR−r1−00056621.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

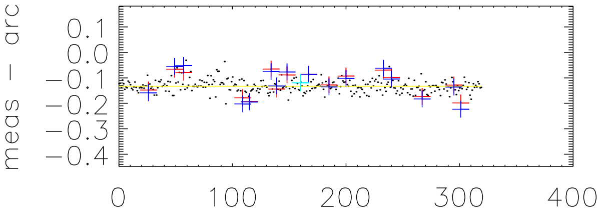

6300.3040
off: −0.23
sig: 0.005
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4
6363.7760
off: −0.23
sig: 0.008
1200
1000
800
600
400
200
0
−200
−4 −2 0 2 4
6553.6100
off: −0.22
sig: 0.018
400
300
200
100
0
−100
−4 −2 0 2 4
6923.2100
off: −0.18
sig: 0.011
800
600
400
200
0
−200
−4 −2 0 2 4
6949.0300
off: −0.12
sig: 0.010
1000
800
600
400
200
0
−200
−4 −2 0 2 4
7571.7500
off: −0.13
sig: 0.010
1000
800
600
400
200
0
−200
−4 −2 0 2 4
7794.1200
off: −0.25
sig: 0.005
2500
2000
1500
1000
500
0
−500
−4 −2 0 2 4
7821.5100
off: −0.21
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4
8399.1600
off: −0.17
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4
8430.1700
off: −0.18
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4
8885.8300
off: −0.18
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4
8919.6100
off: −0.18
sig: 0.004
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4

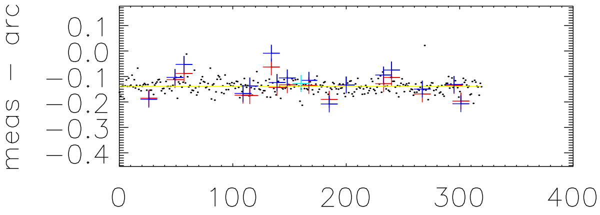

6300.3040

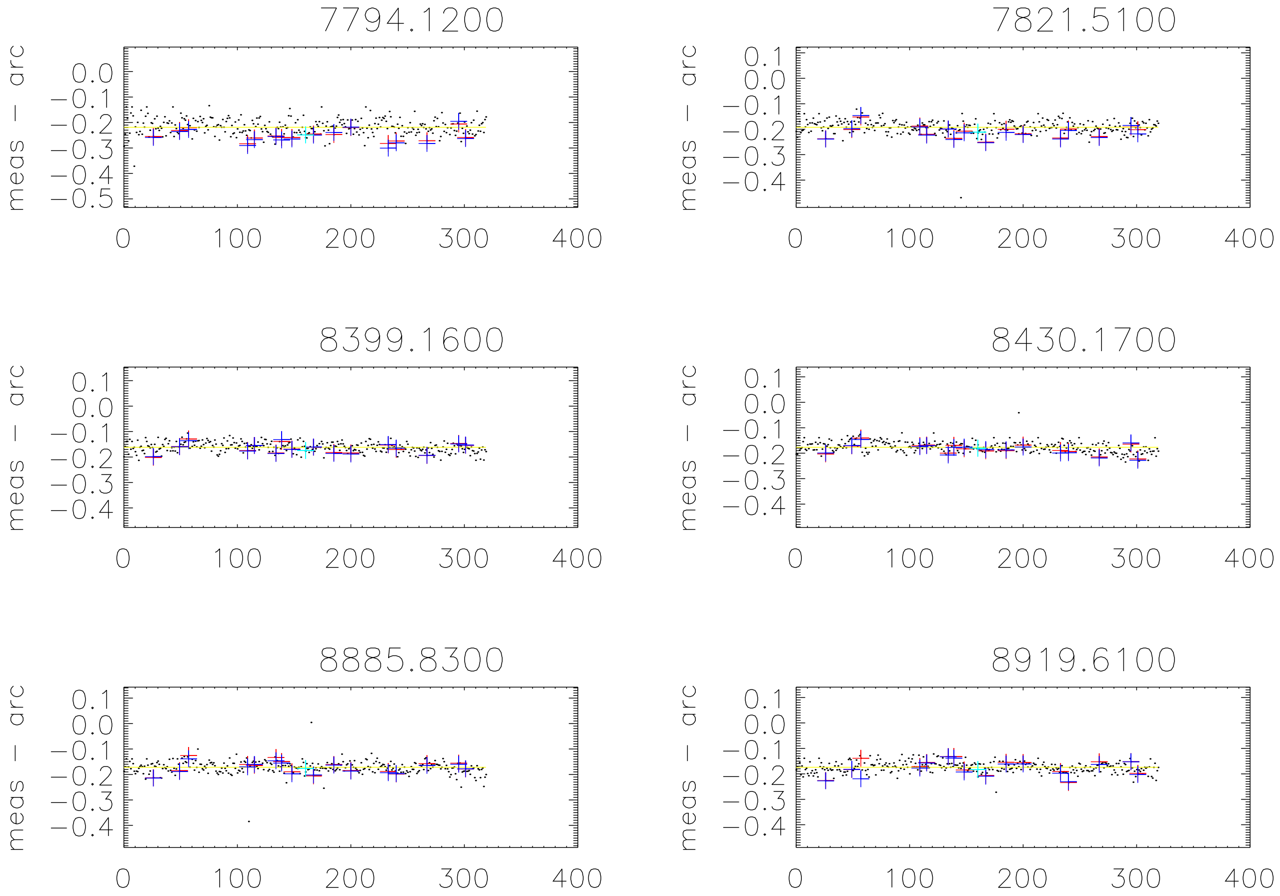

6363.7760

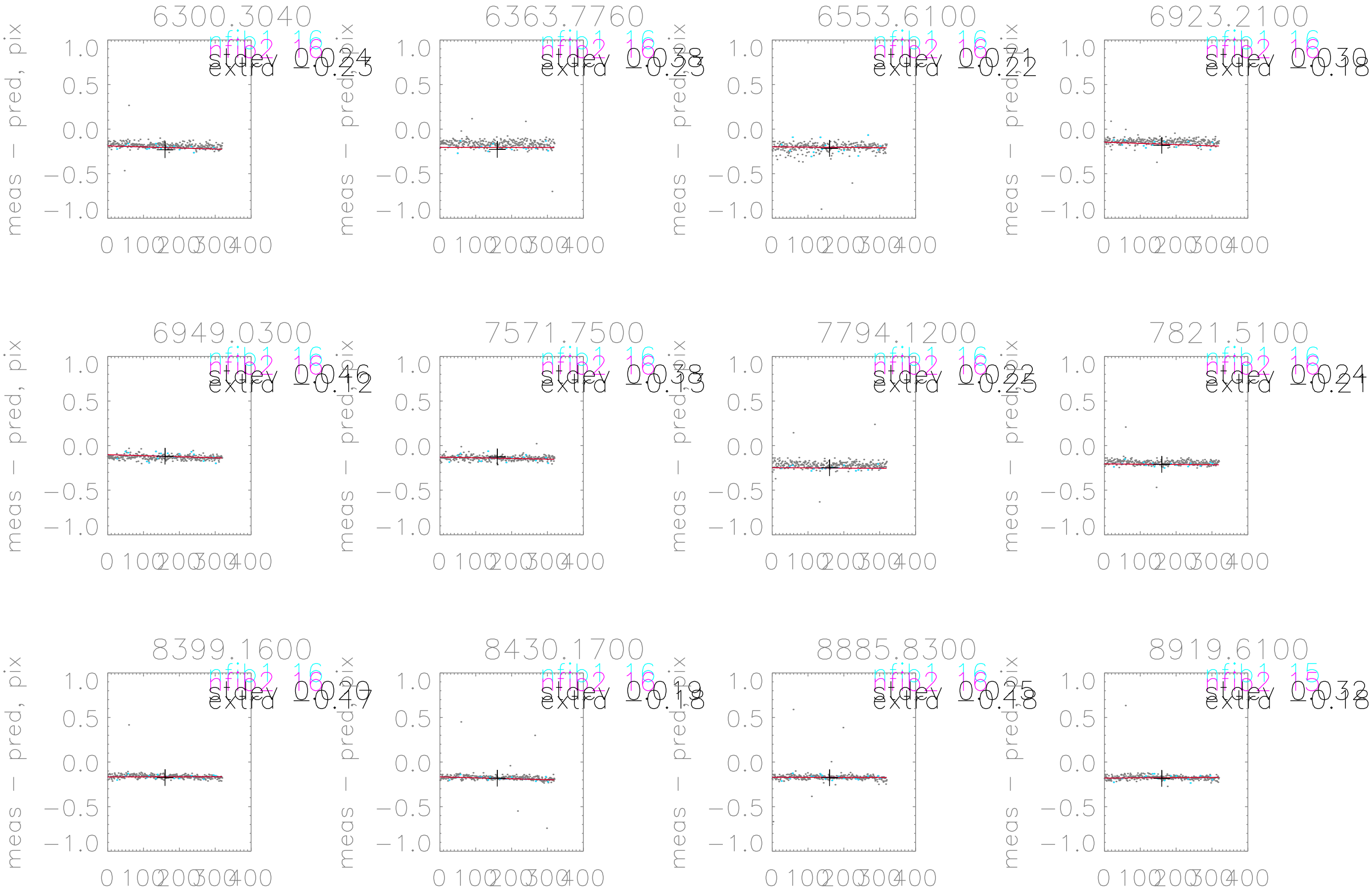

6553.6100

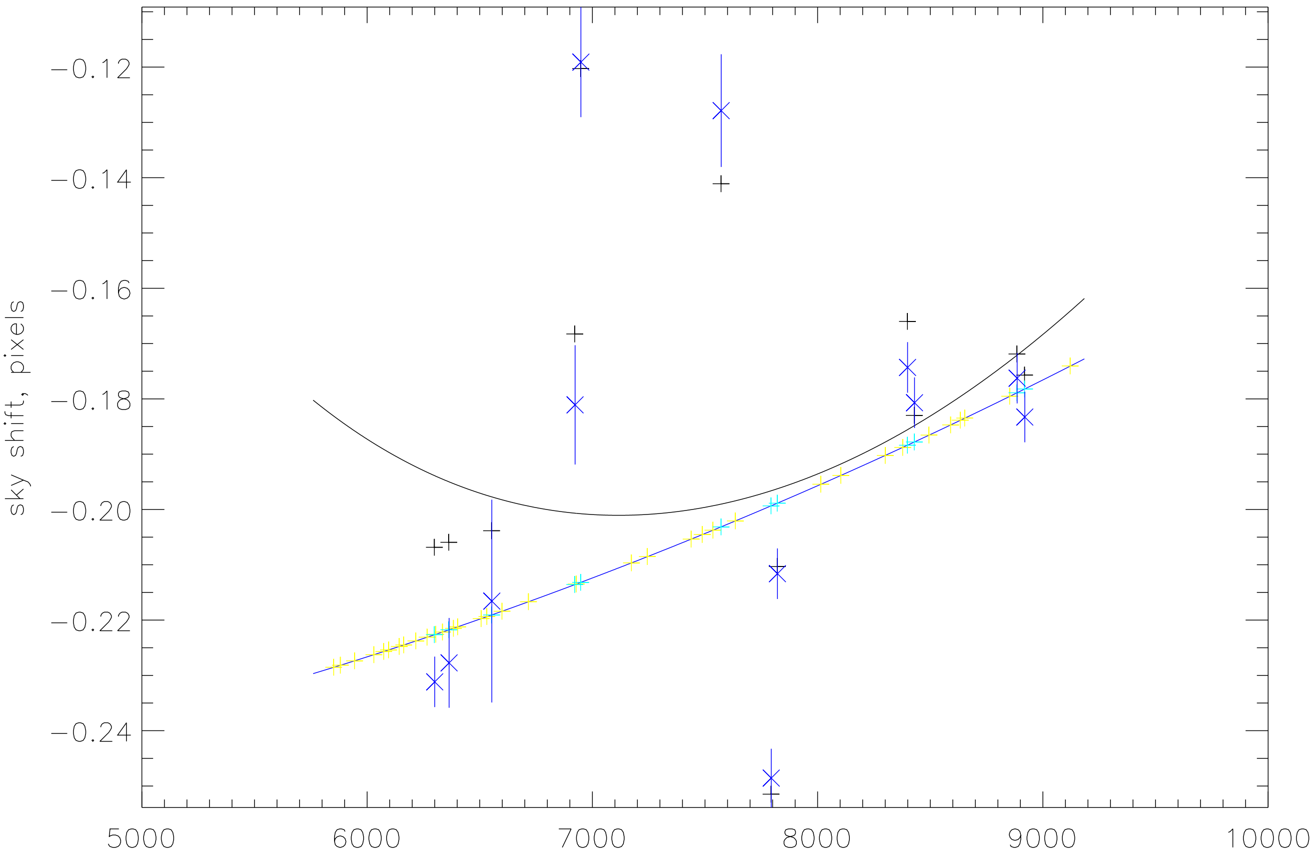

6923.2100

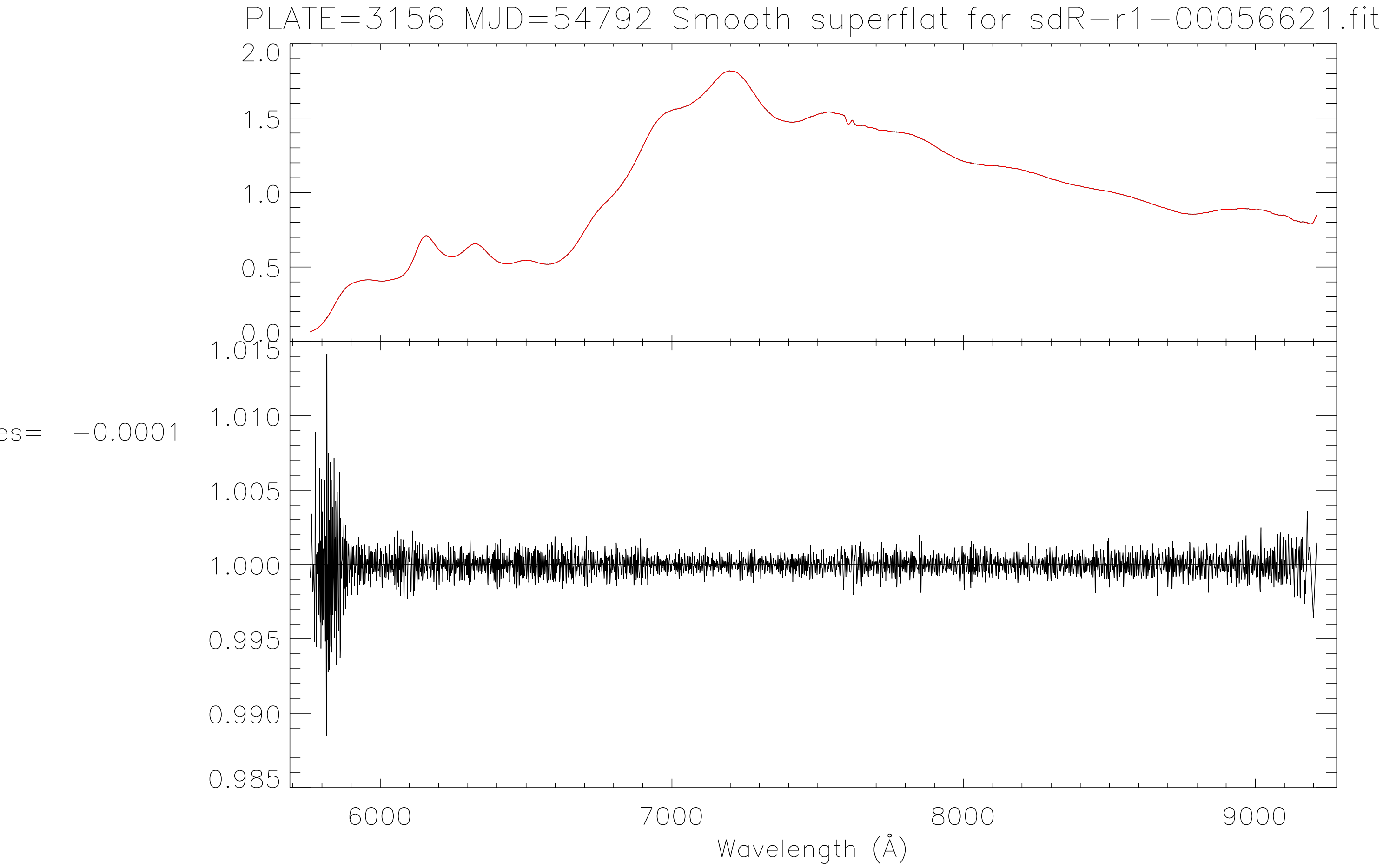

6949.0300

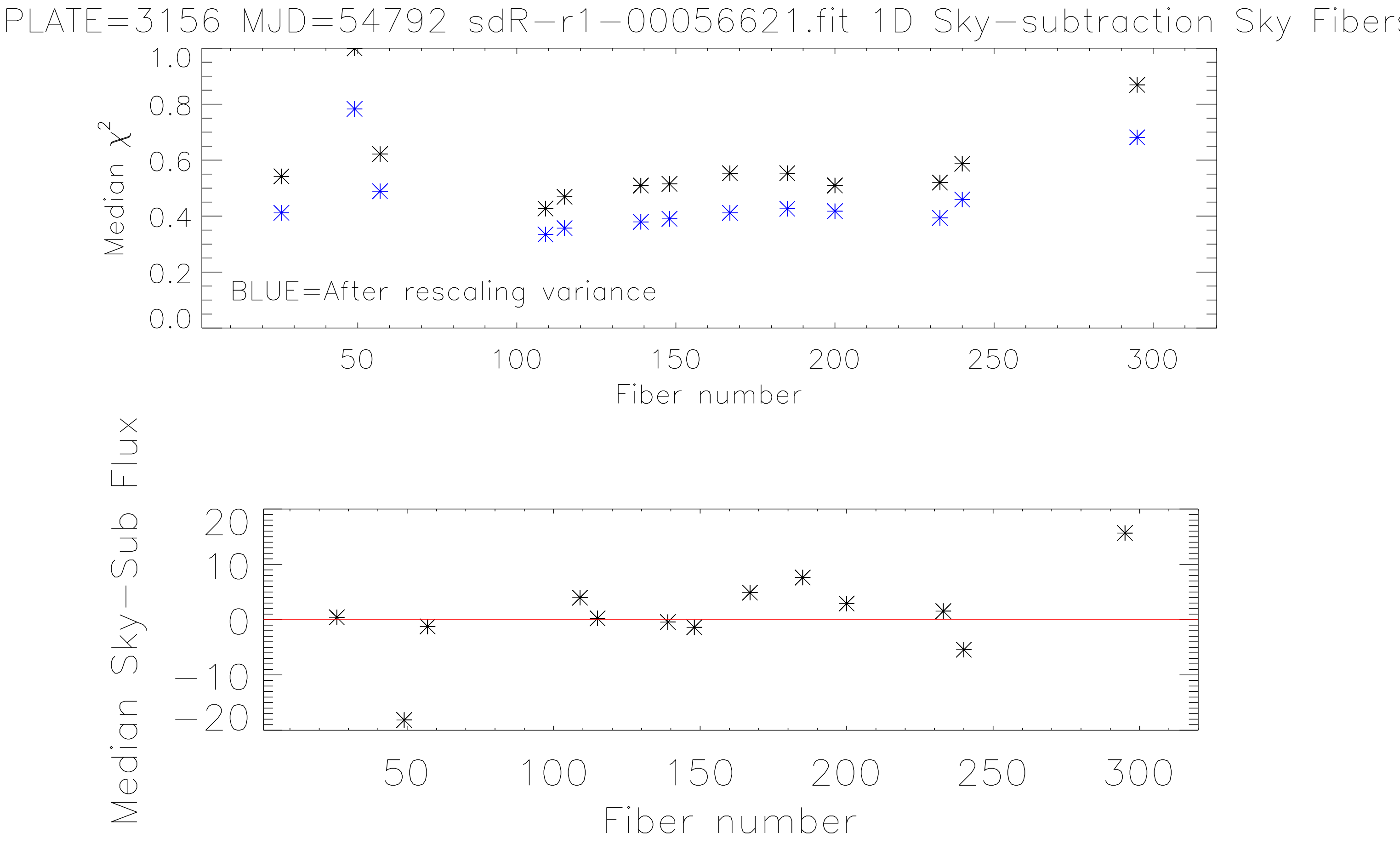

7571.7500

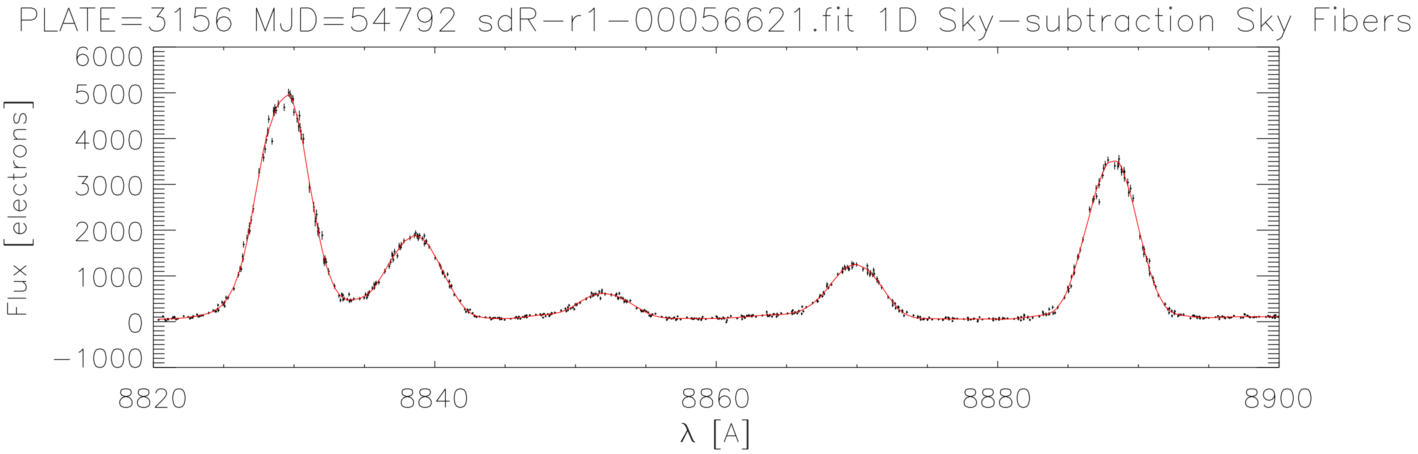

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd −0.23
6363.7760
nfib1 16
nfib2 16
stdev 0.028
extrd −0.23
6553.6100
nfib1 16
nfib2 16
stdev 0.071
extrd −0.22
6923.2100
nfib1 16
nfib2 16
stdev 0.030
extrd −0.18
6949.0300
nfib1 16
nfib2 16
stdev 0.046
extrd −0.12
7571.7500
nfib1 16
nfib2 16
stdev 0.038
extrd −0.13
7794.1200
nfib1 16
nfib2 16
stdev 0.022
extrd −0.25
7821.5100
nfib1 16
nfib2 16
stdev 0.024
extrd −0.21
8399.1600
nfib1 16
nfib2 16
stdev 0.020
extrd −0.17
8430.1700
nfib1 16
nfib2 16
stdev 0.019
extrd −0.18
8885.8300
nfib1 16
nfib2 16
stdev 0.025
extrd −0.18
8919.6100
nfib1 15
nfib2 15
stdev 0.032
extrd −0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

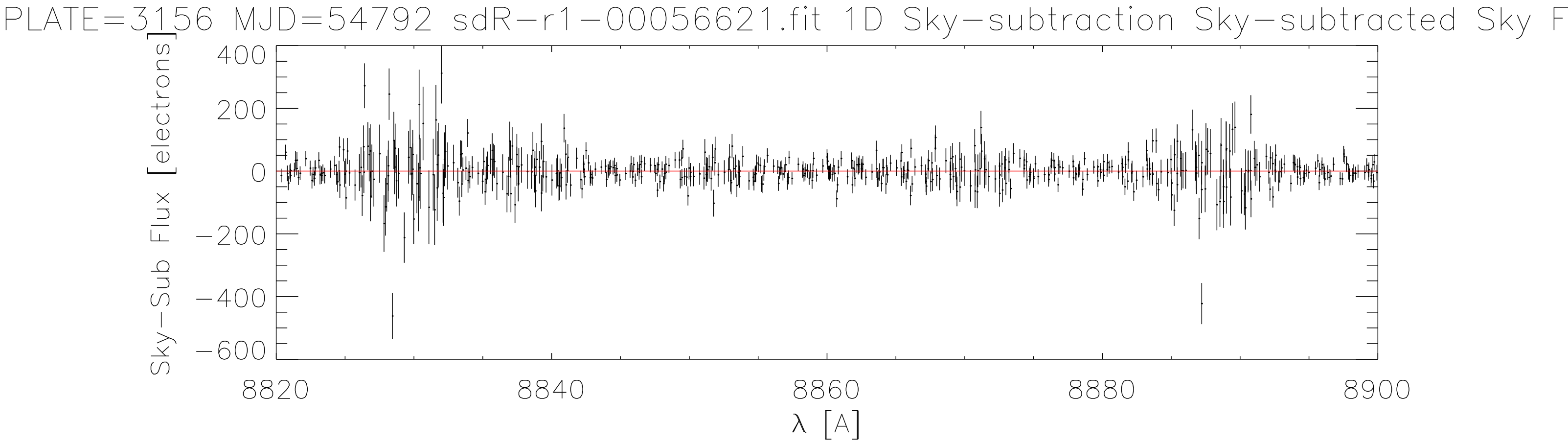

sky shift, pixels
−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
−0.24
5000
6000
7000
8000
9000
10000


PLATE=3156 MJD=54792 Smooth superflat for sdR-r1-00056621.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
6000
7000
8000
9000
Wavelength (Å)


PLATE=3156 MJD=54792 sdR-r1-00056621.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
−10
−20
50
100
150
200
250
300
Fiber number



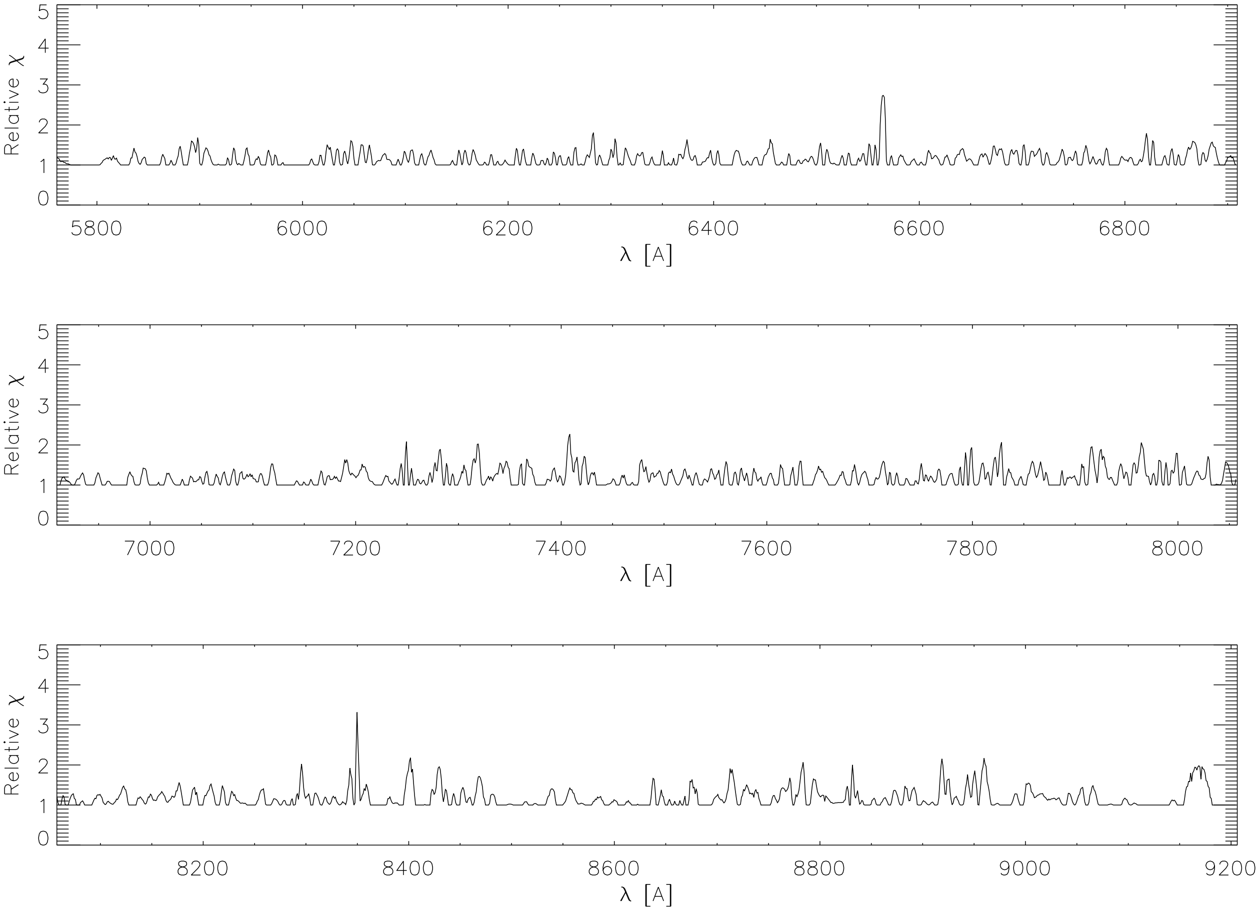
PLATE=3156 MJD=54792 sdR-r1-00056621.fit 1D Sky-subtraction Sky Fibers

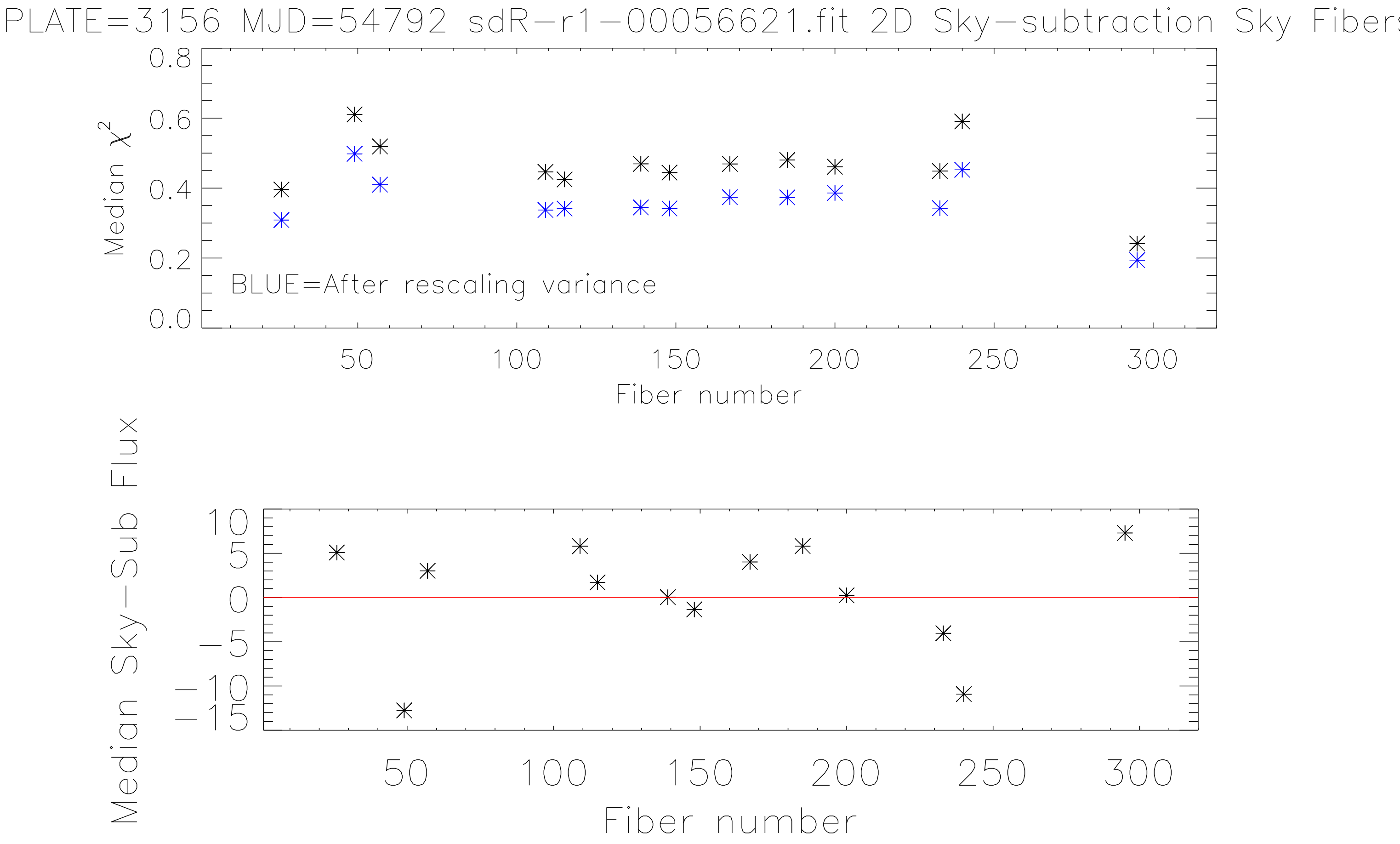


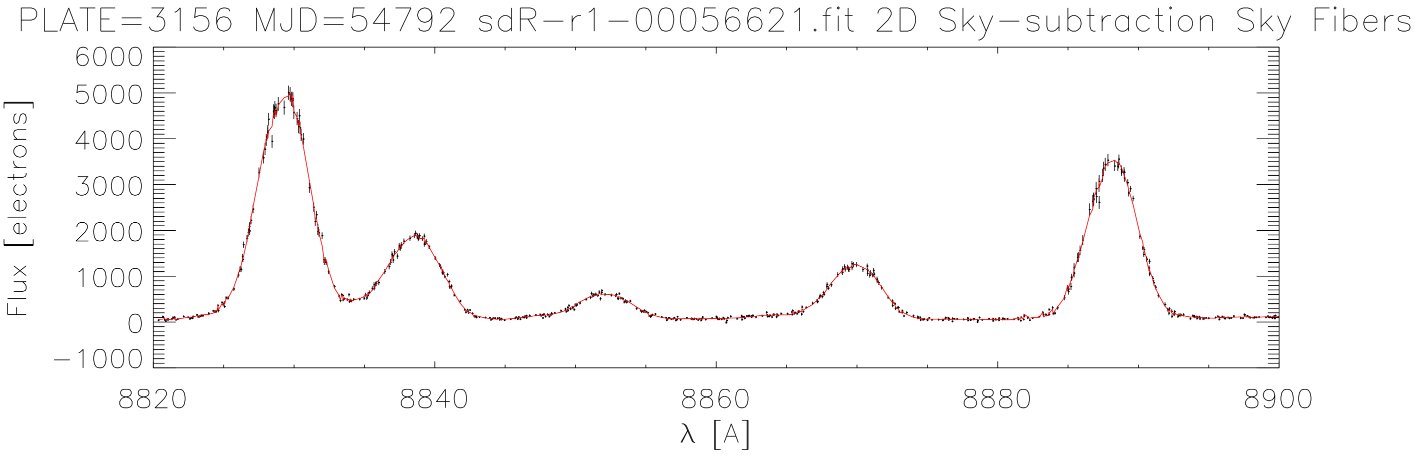
PLATE=3156 MJD=54792 sdR-r1-00056621.fit 1D Sky-subtraction Sky-subtracted Sky F

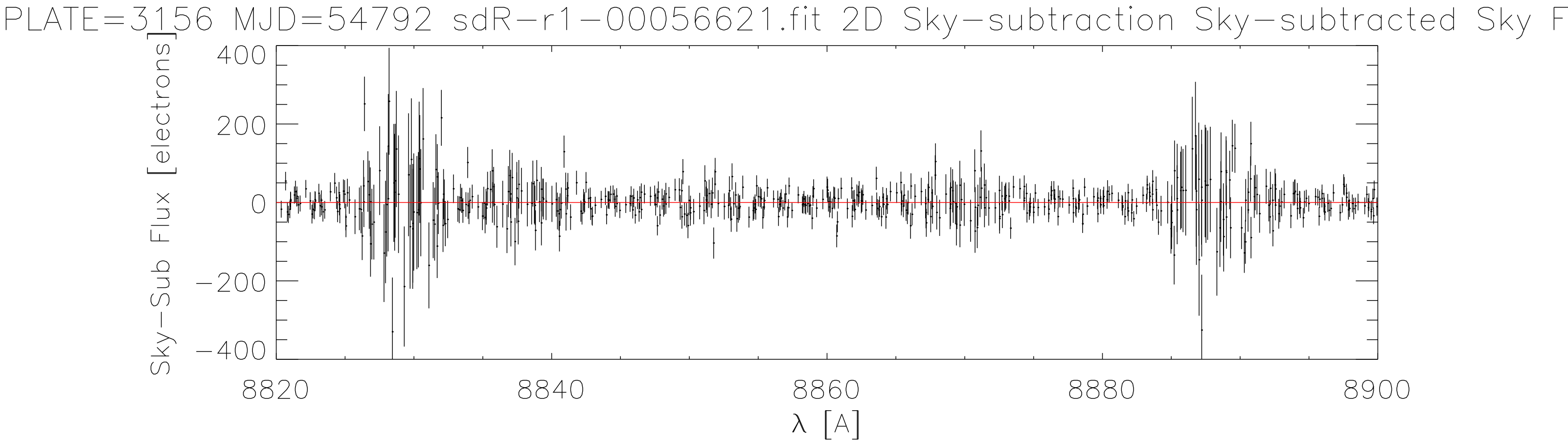
Number of sky fibers = 13

PLATE=3156 MJD=54792 sdR-r1-00056621.fit 1D Sky-subtraction Rescaled Errors



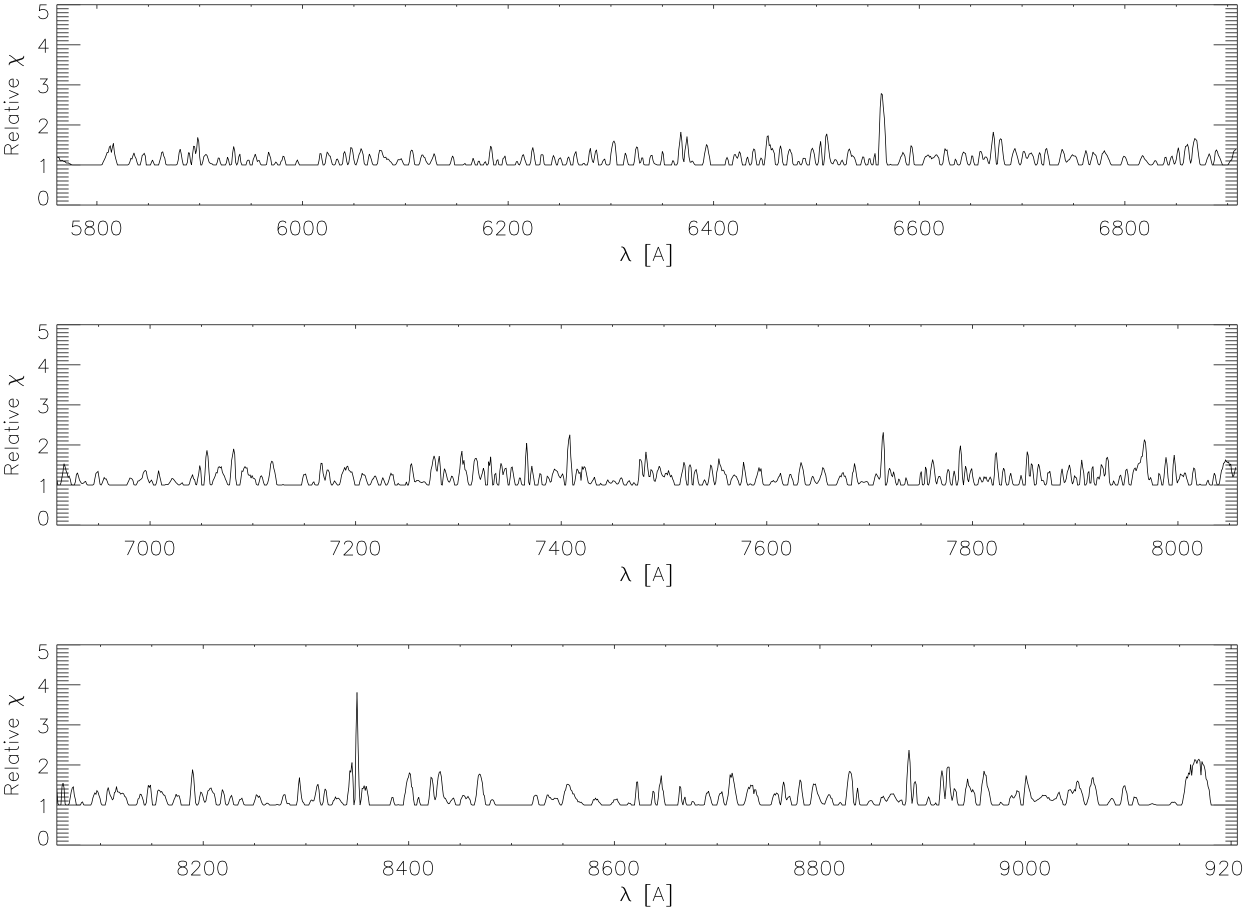

PLATE=3156 MJD=54792 sdR-r1-00056621.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
50
100
150
200
250
300
Fiber number

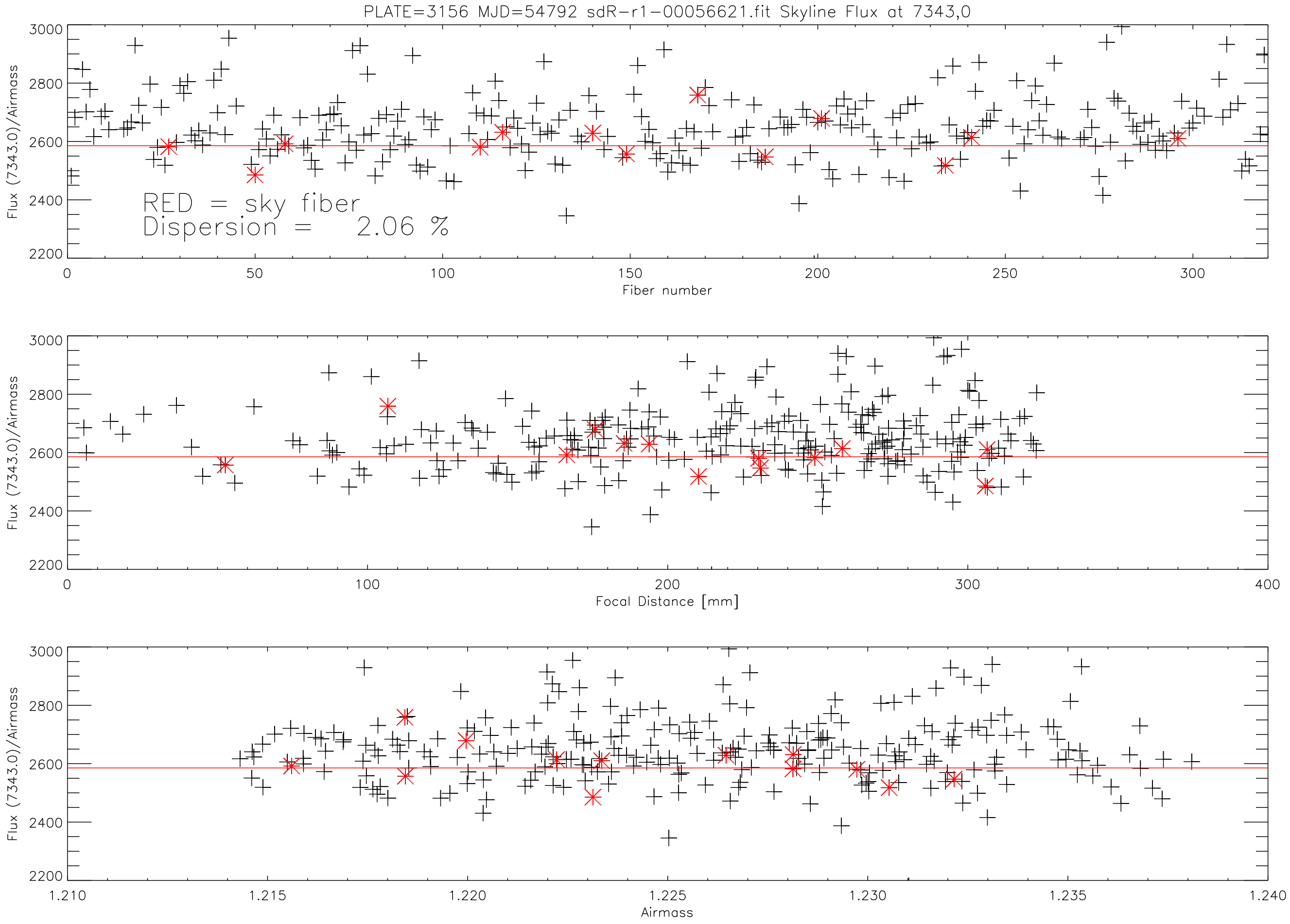

PLATE=3156 MJD=54792 sdR-r1-00056621.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

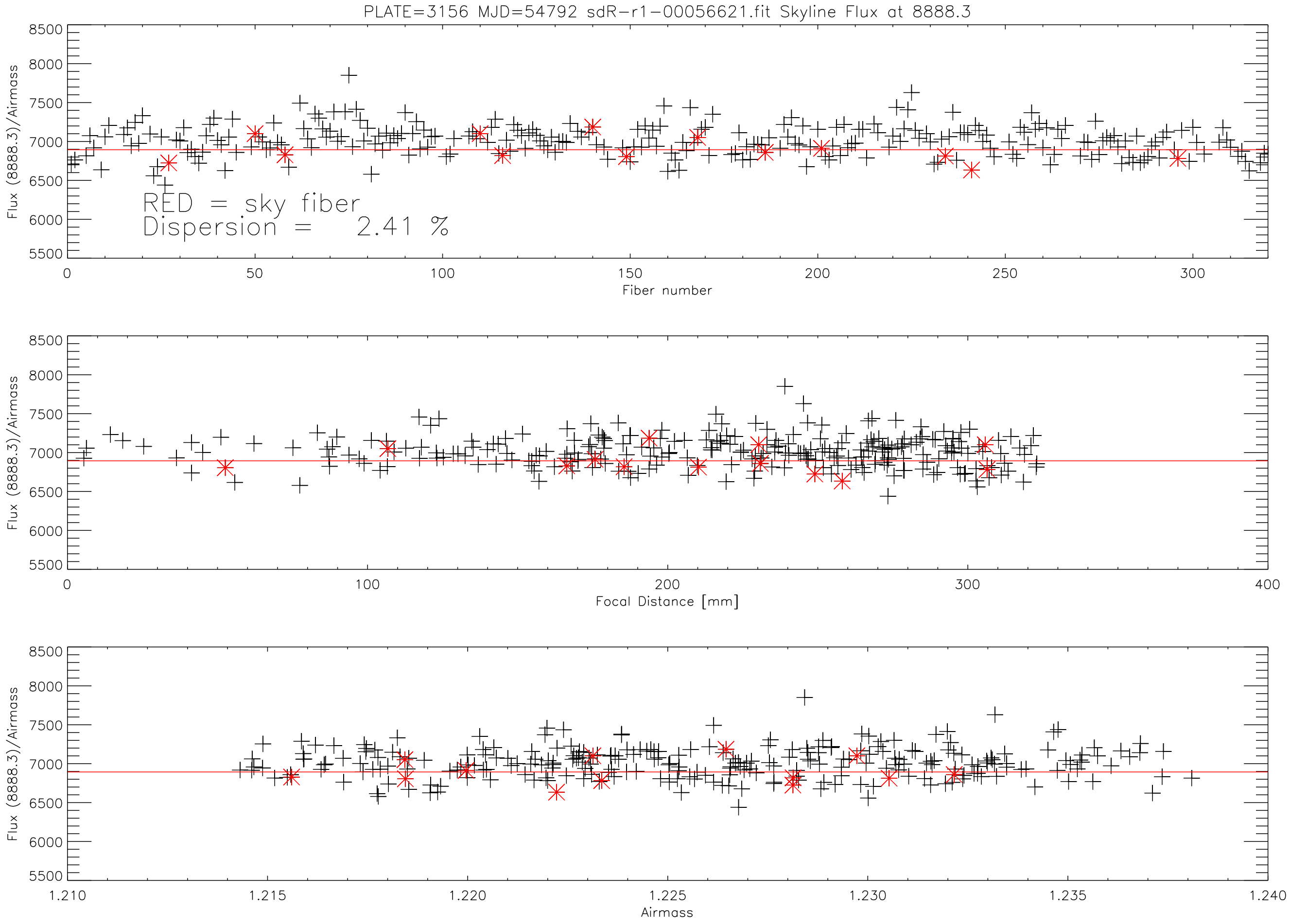

PLATE=3156 MJD=54792 sdR-r1-00056621.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 13

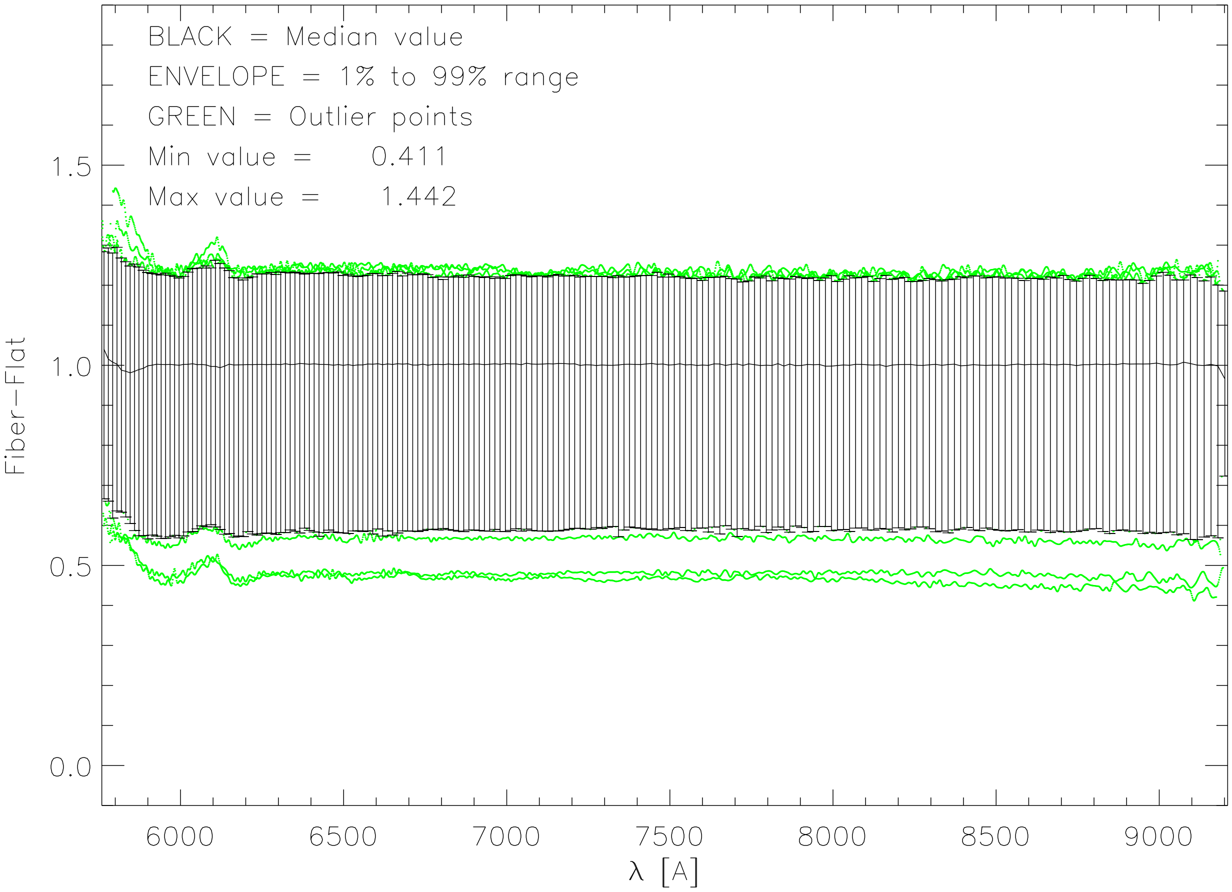
PLATE=3156 MJD=54792 sdR-r1-00056621.fit 2D Sky-subtraction Rescaled Errors



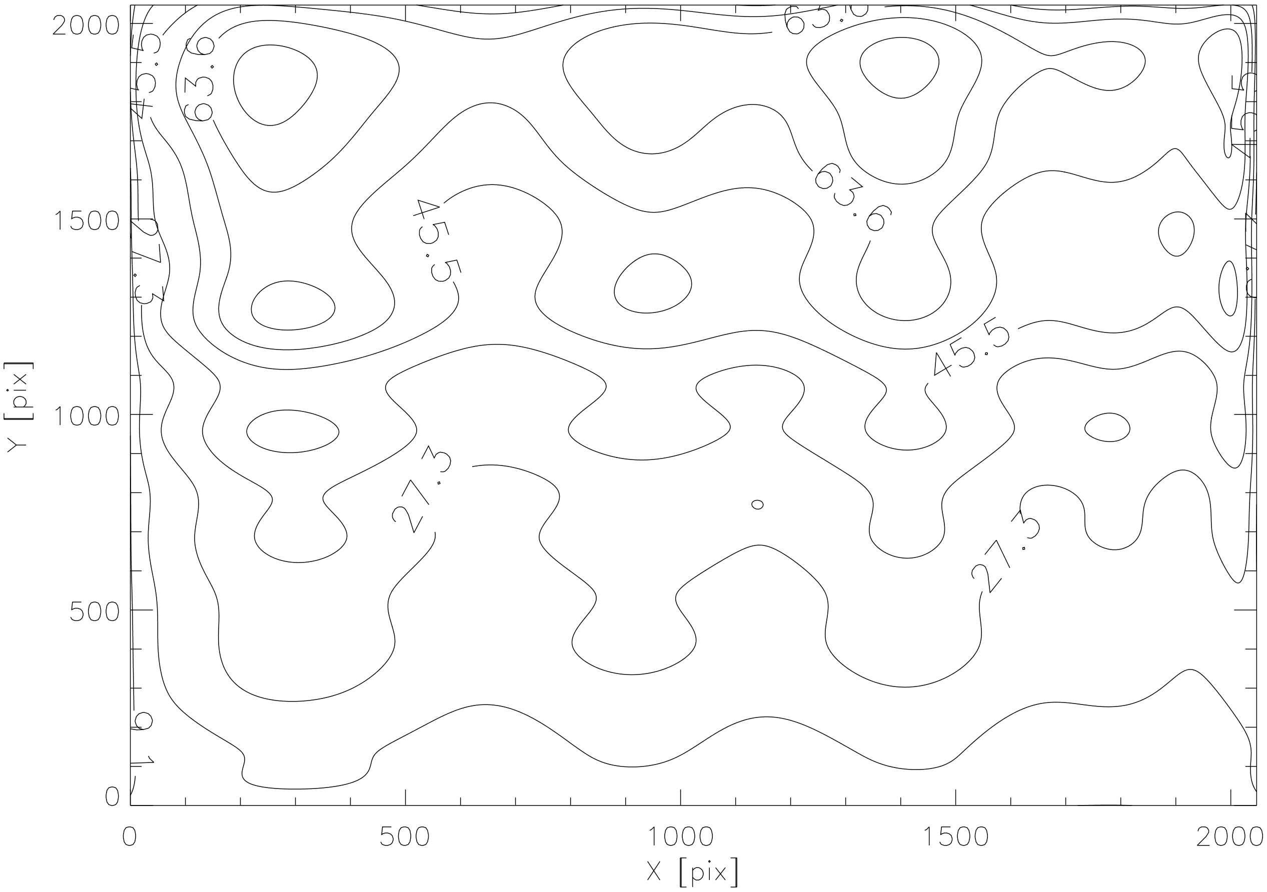

PLATE=3156 MJD=54792 sdR-r1-00056621.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
RED = sky fiber
Dispersion = 2.06 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
1.210
1.215
1.220
1.225
1.230
1.235
1.240
Airmass

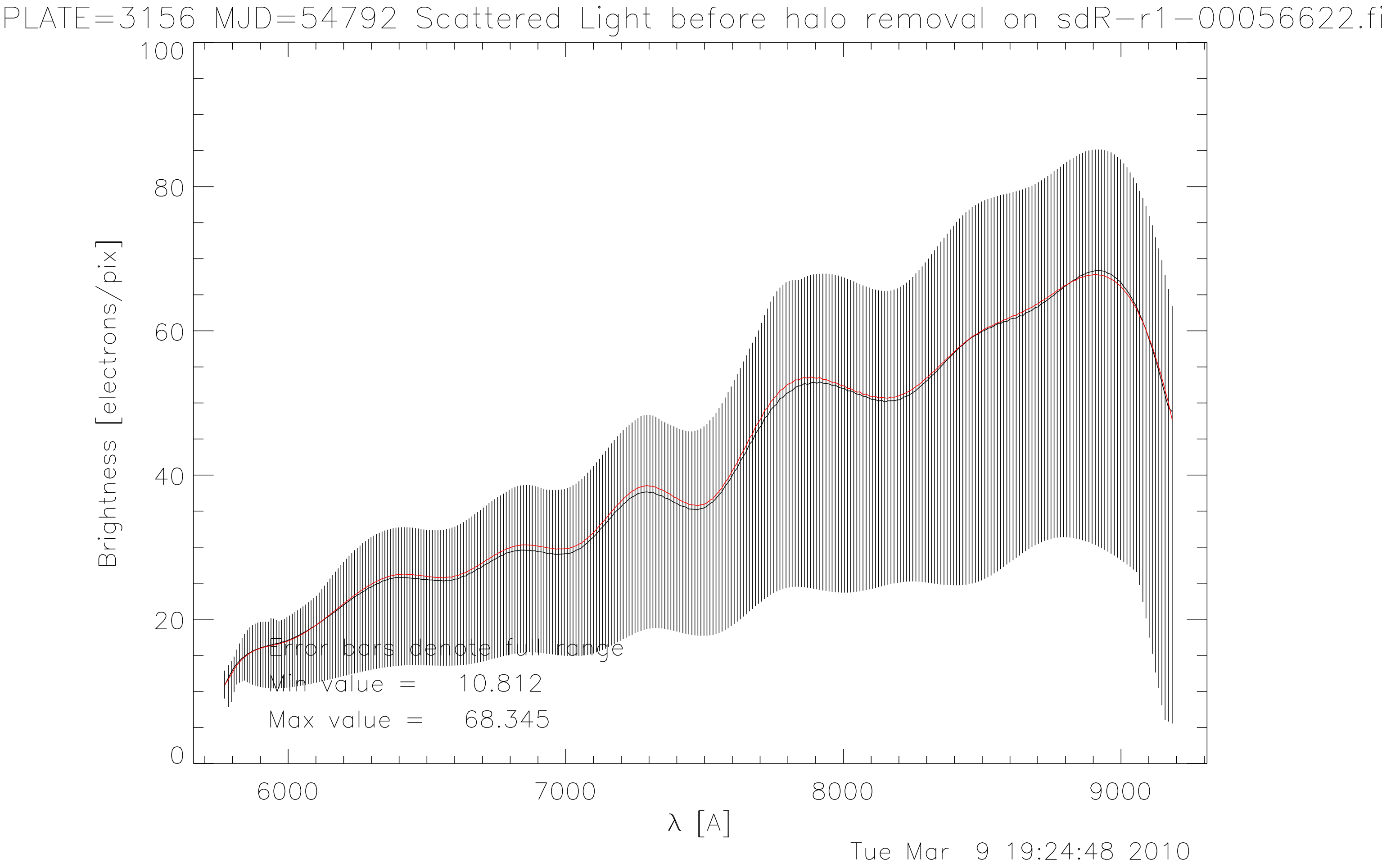

PLATE=3156 MJD=54792 sdR−r1−00056621.fit Skyline Flux at 8888.3

PLATE=3156 MJD=54792 Fiber−Flats for sdR−r1−00056618.fit

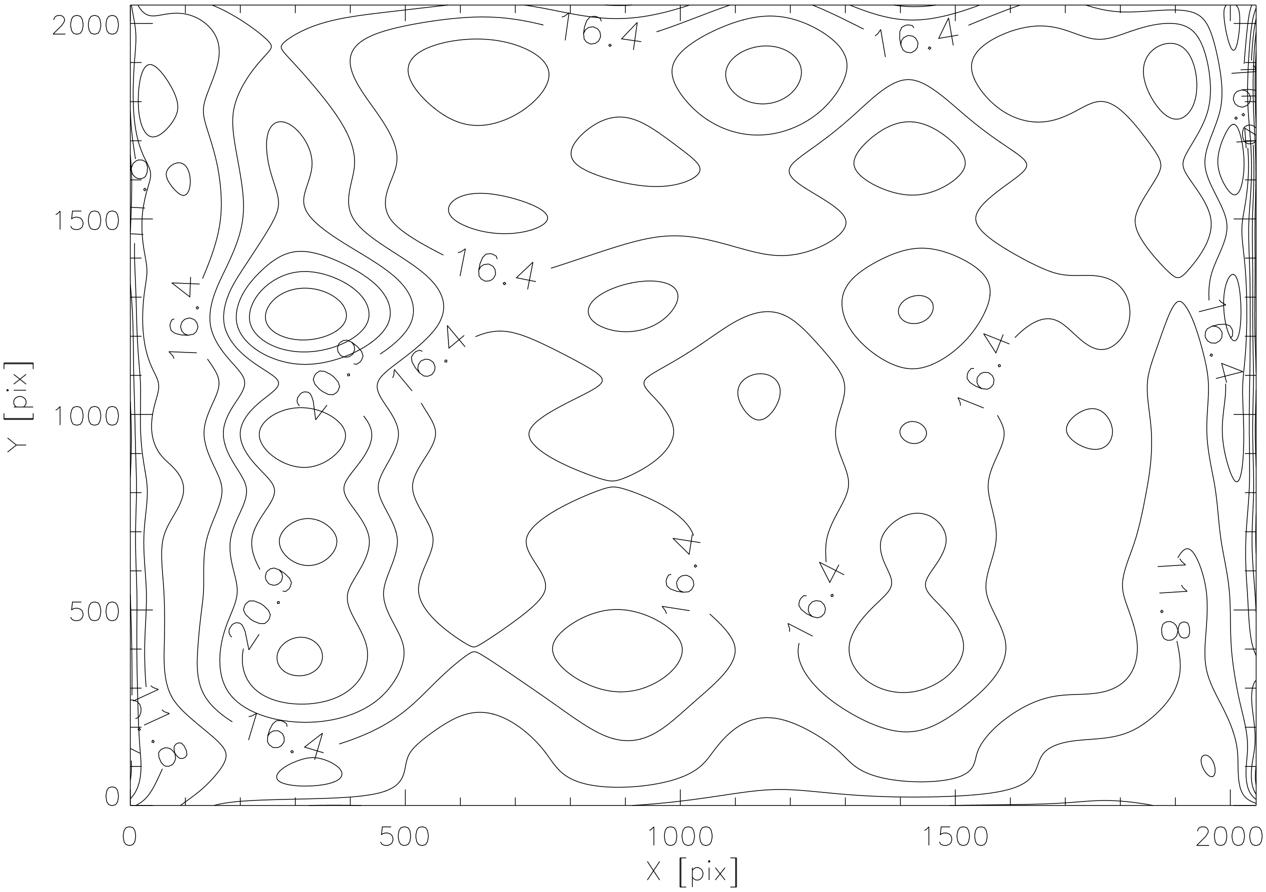


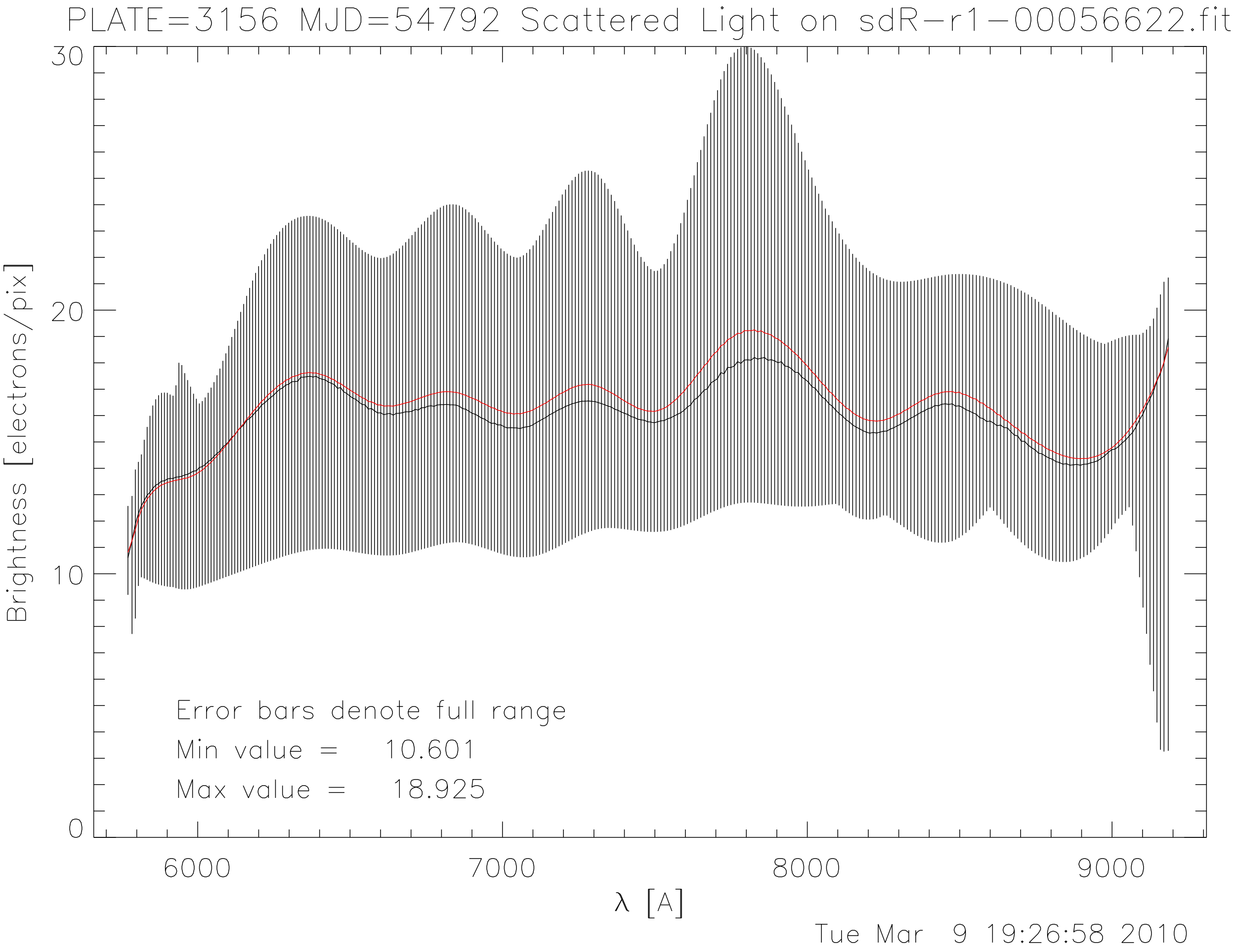
Tue Mar 9 19:24:11 2010

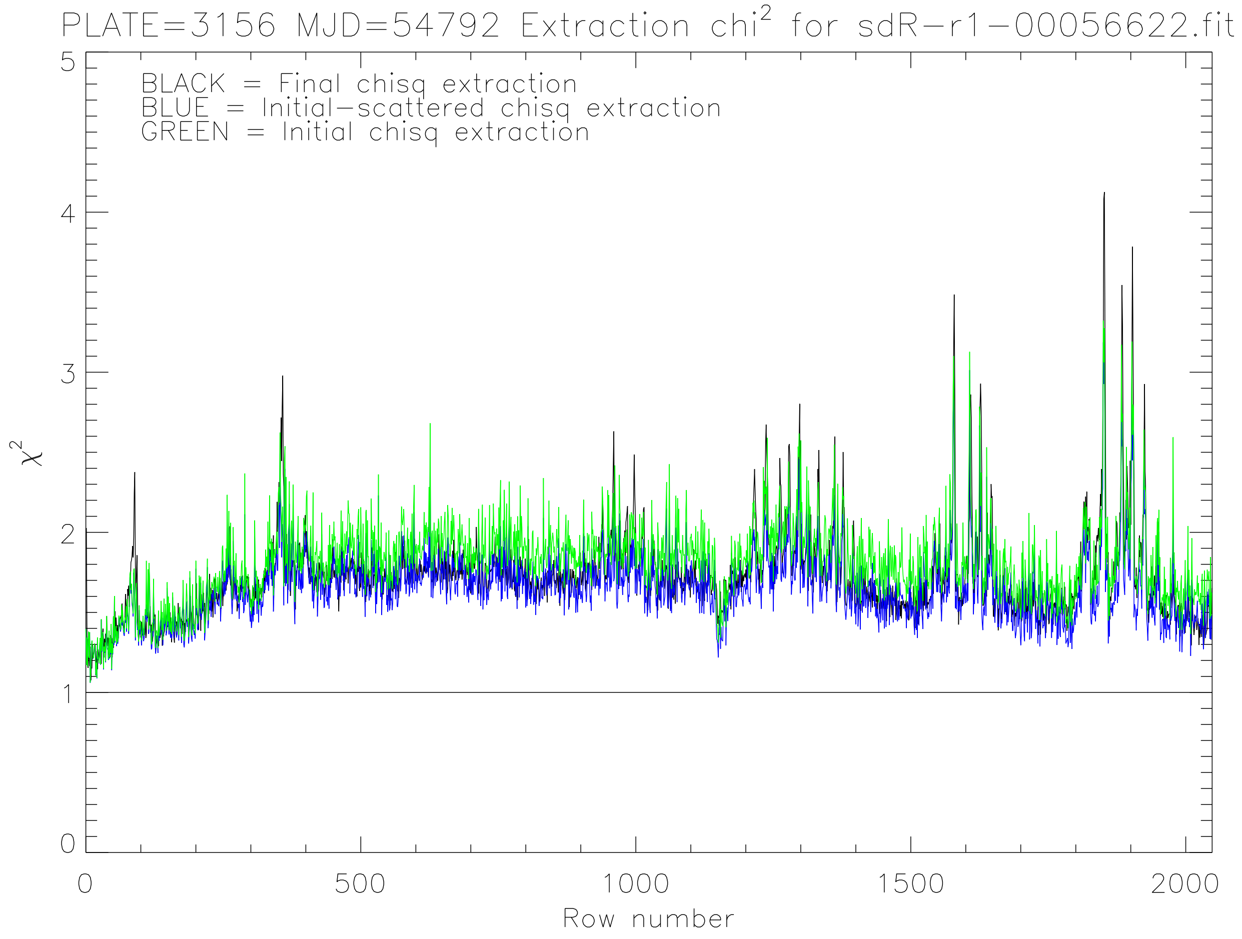

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056622.fi

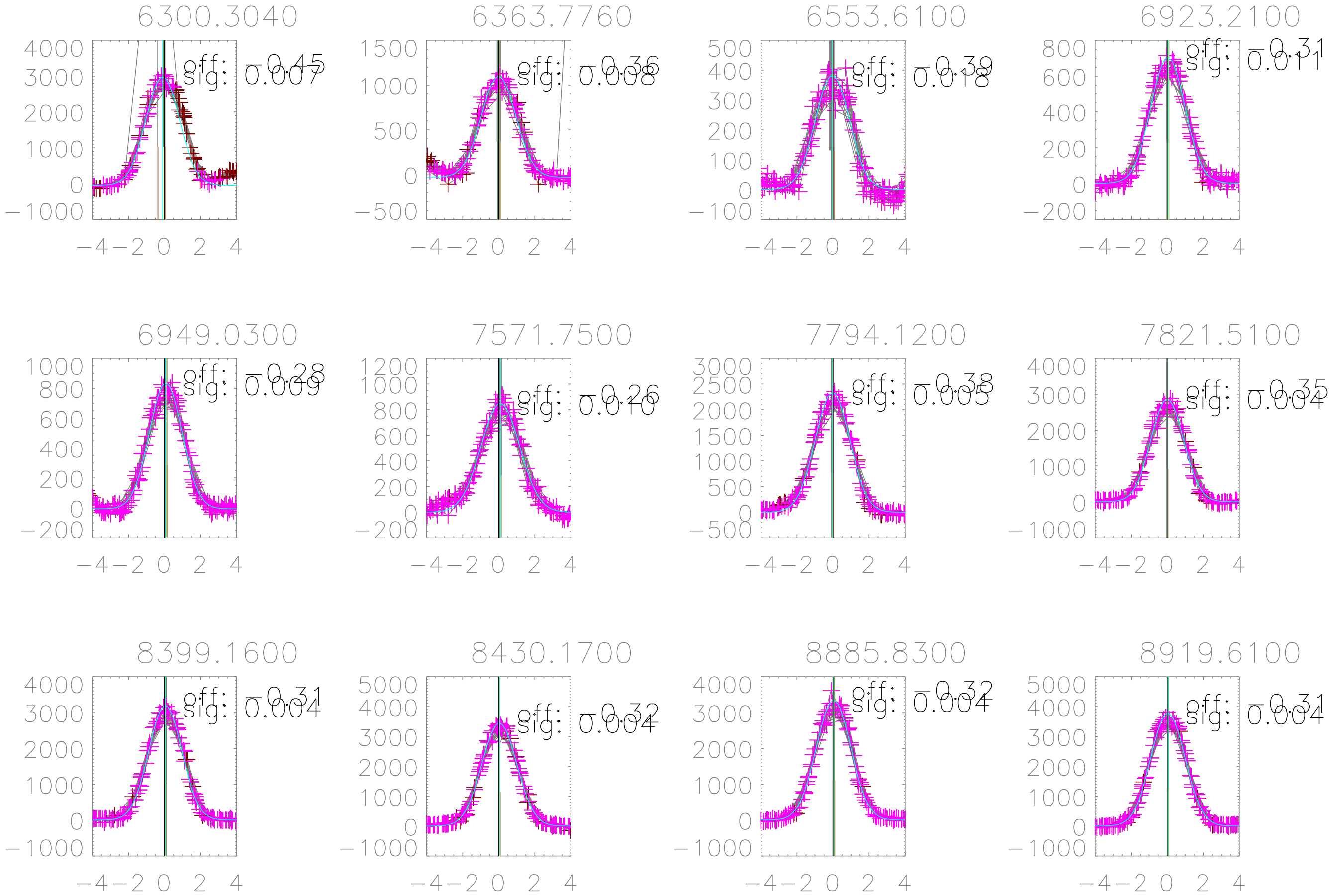

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r1-00056622.fi
Brightness [electrons/pix]
λ [A]
0
20
40
60
80
100
6000
7000
8000
9000
Error bars denote full range
Min value = 10.812
Max value = 68.345
Tue Mar 9 19:24:48 2010

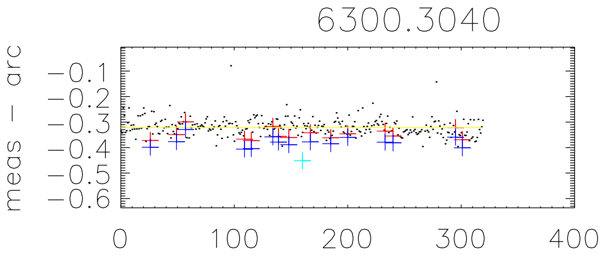
PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056622.fit

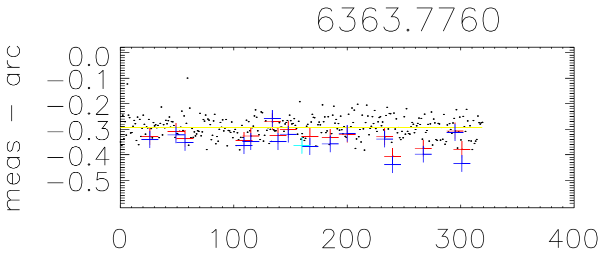


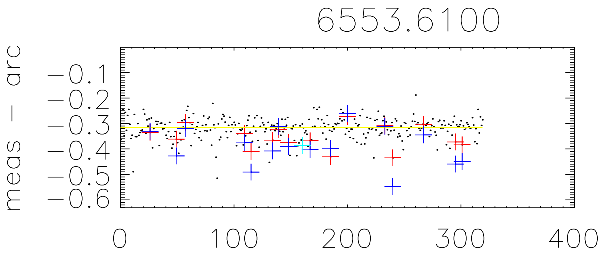

PLATE=3156 MJD=54792 Scattered Light on sdR-r1-00056622.fit

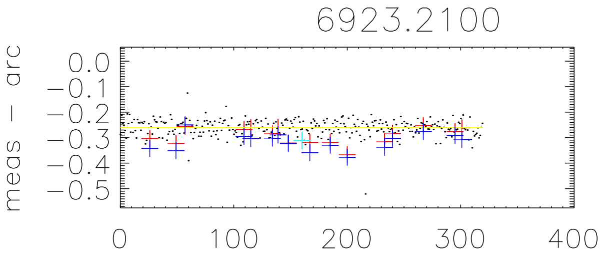

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r1-00056622.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

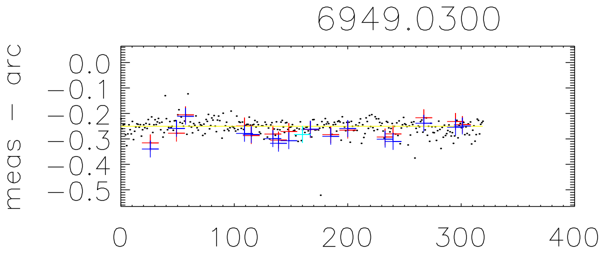

6300.3040
off: −0.45
sig: 0.007
6363.7760
off: −0.36
sig: 0.008
6553.6100
off: −0.39
sig: 0.018
6923.2100
off: −0.31
sig: 0.011
6949.0300
off: −0.28
sig: 0.009
7571.7500
off: −0.26
sig: 0.010
7794.1200
off: −0.38
sig: 0.005
7821.5100
off: −0.35
sig: 0.004
8399.1600
off: −0.31
sig: 0.004
8430.1700
off: −0.32
sig: 0.004
8885.8300
off: −0.32
sig: 0.004
8919.6100
off: −0.31
sig: 0.004
−4 −2 0 2 4

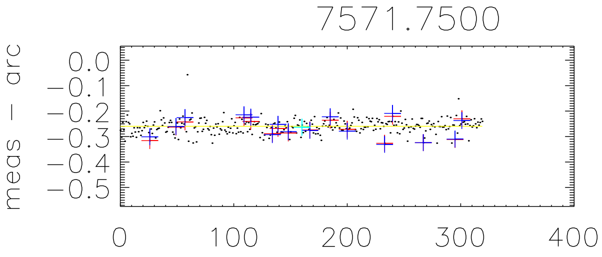

6300.3040

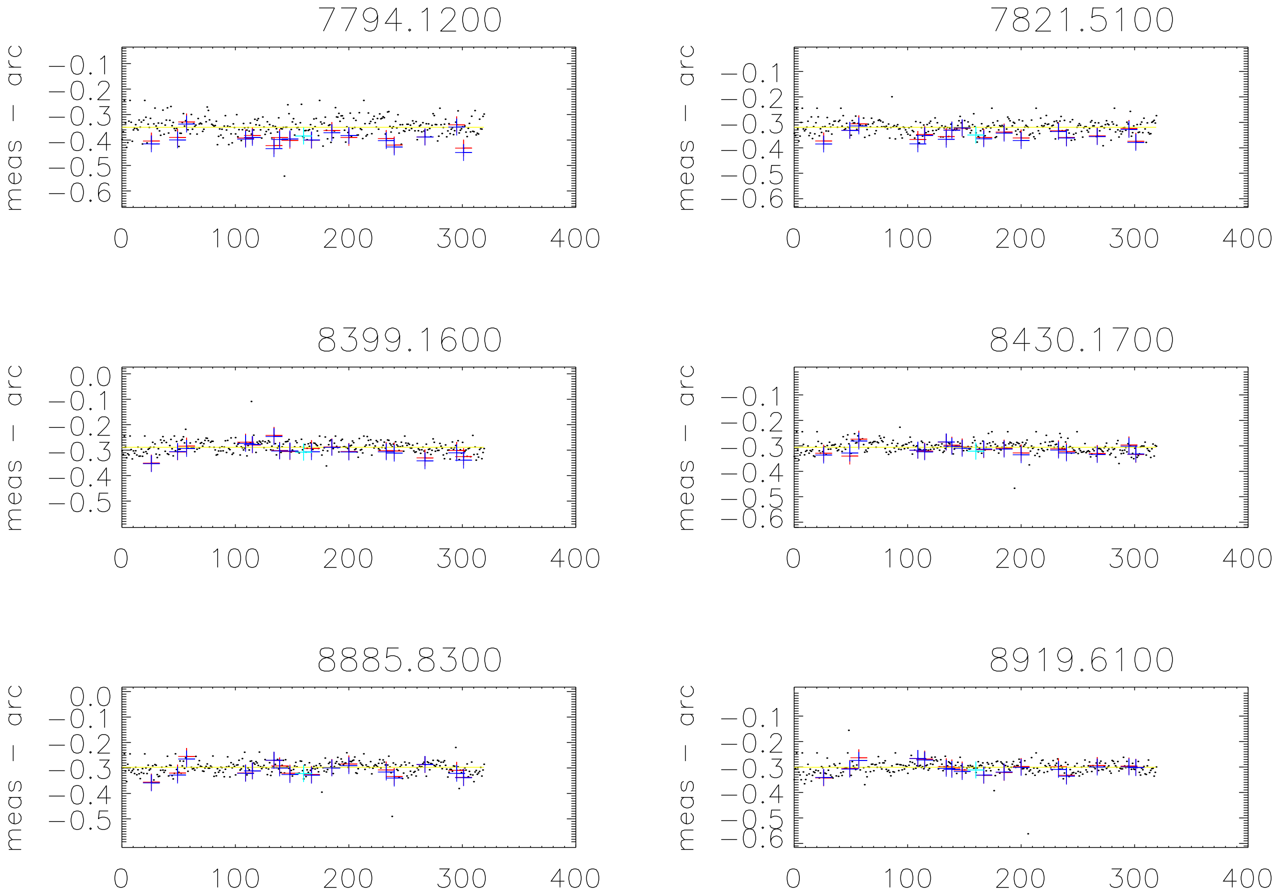

6363.7760


6553.6100


6923.2100


6949.0300


7571.7500


7794.1200

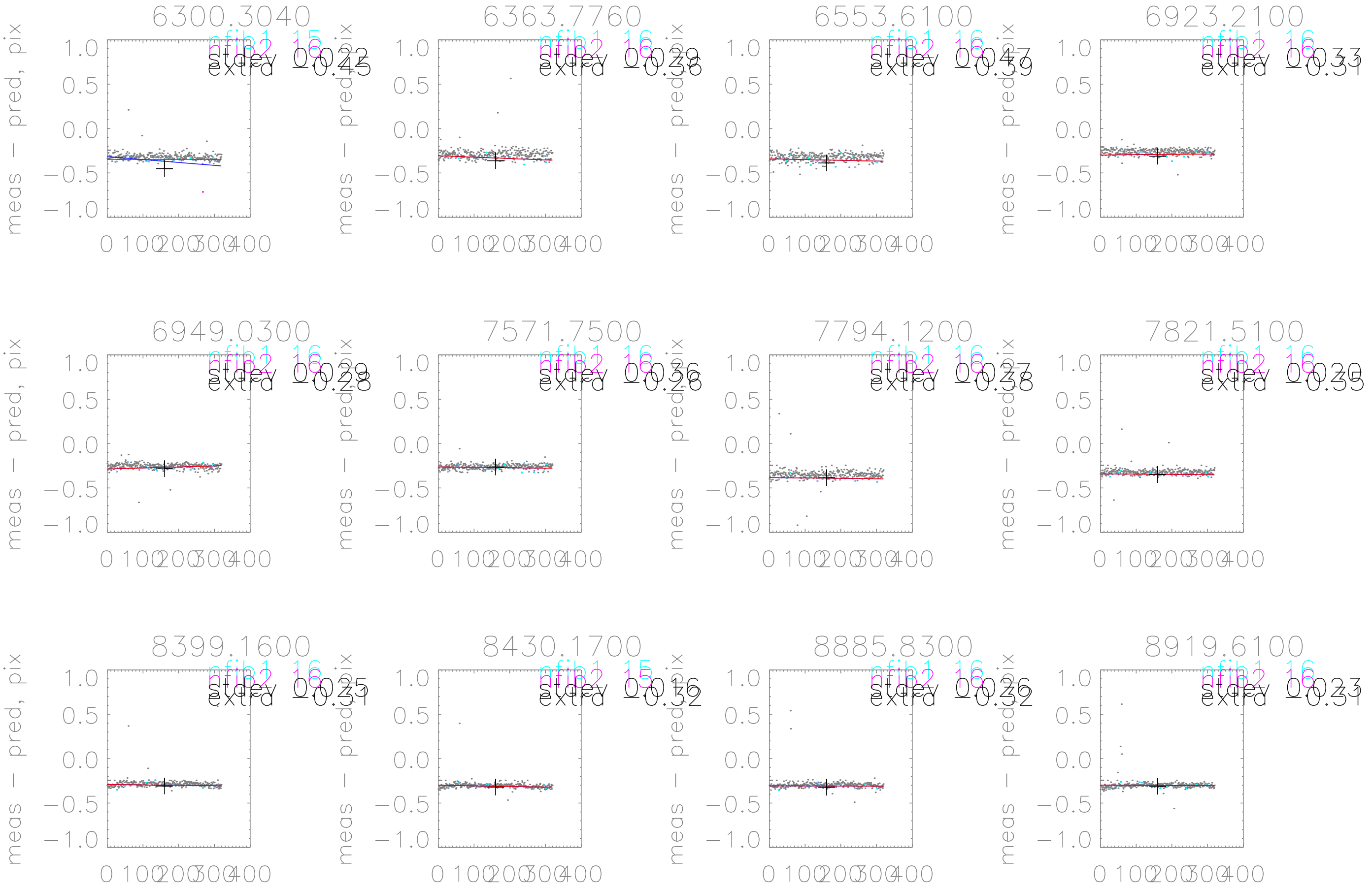
7821.5100

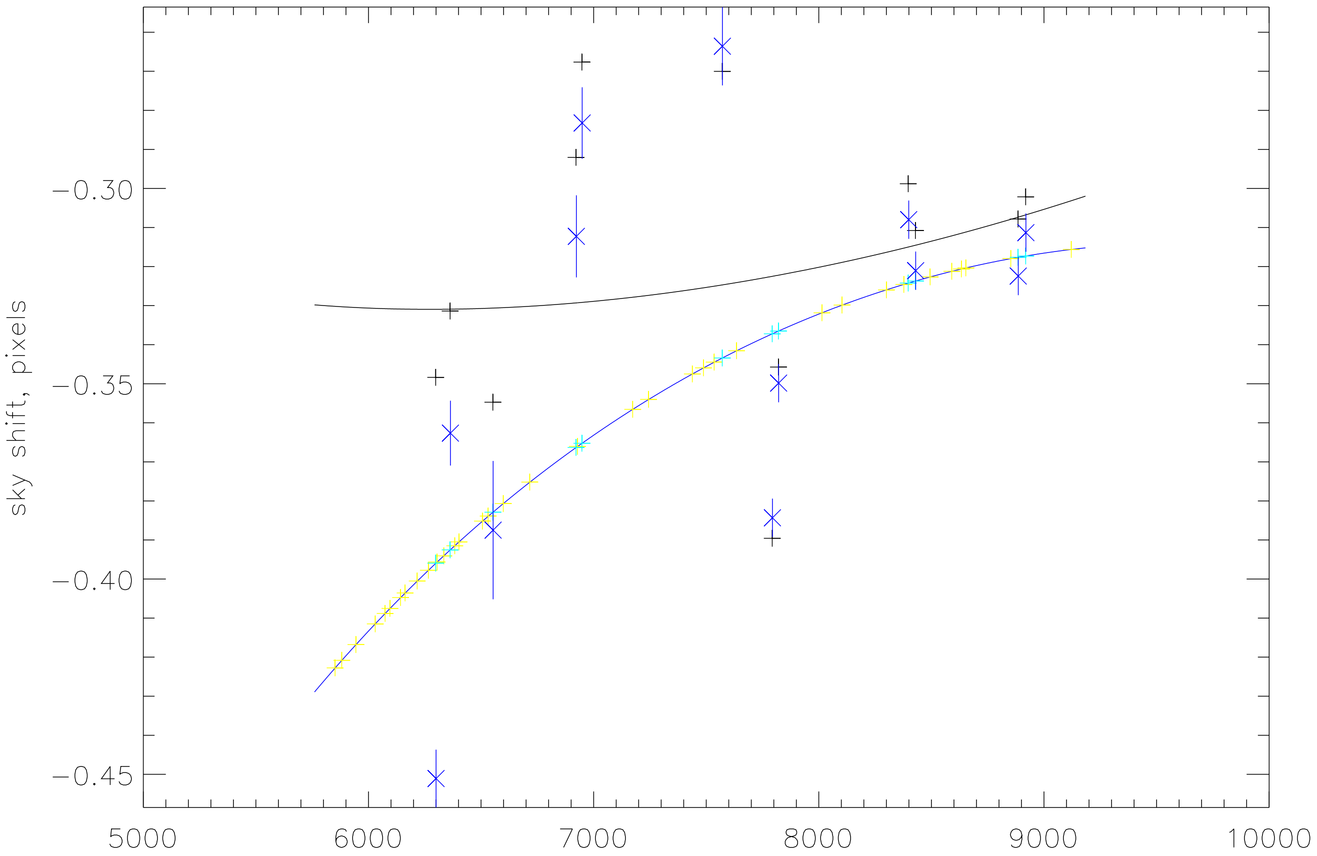
8399.1600

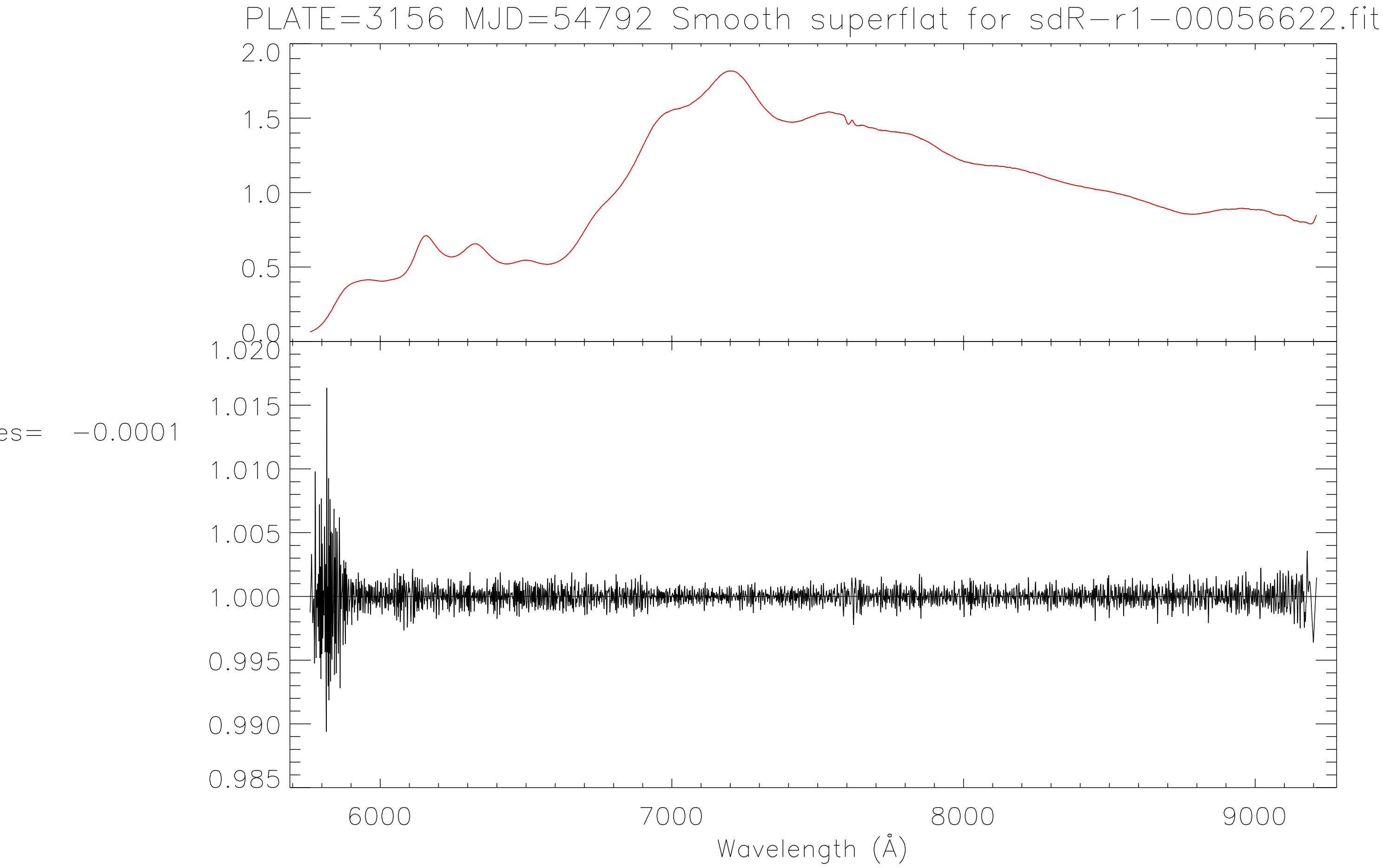
8430.1700

8885.8300

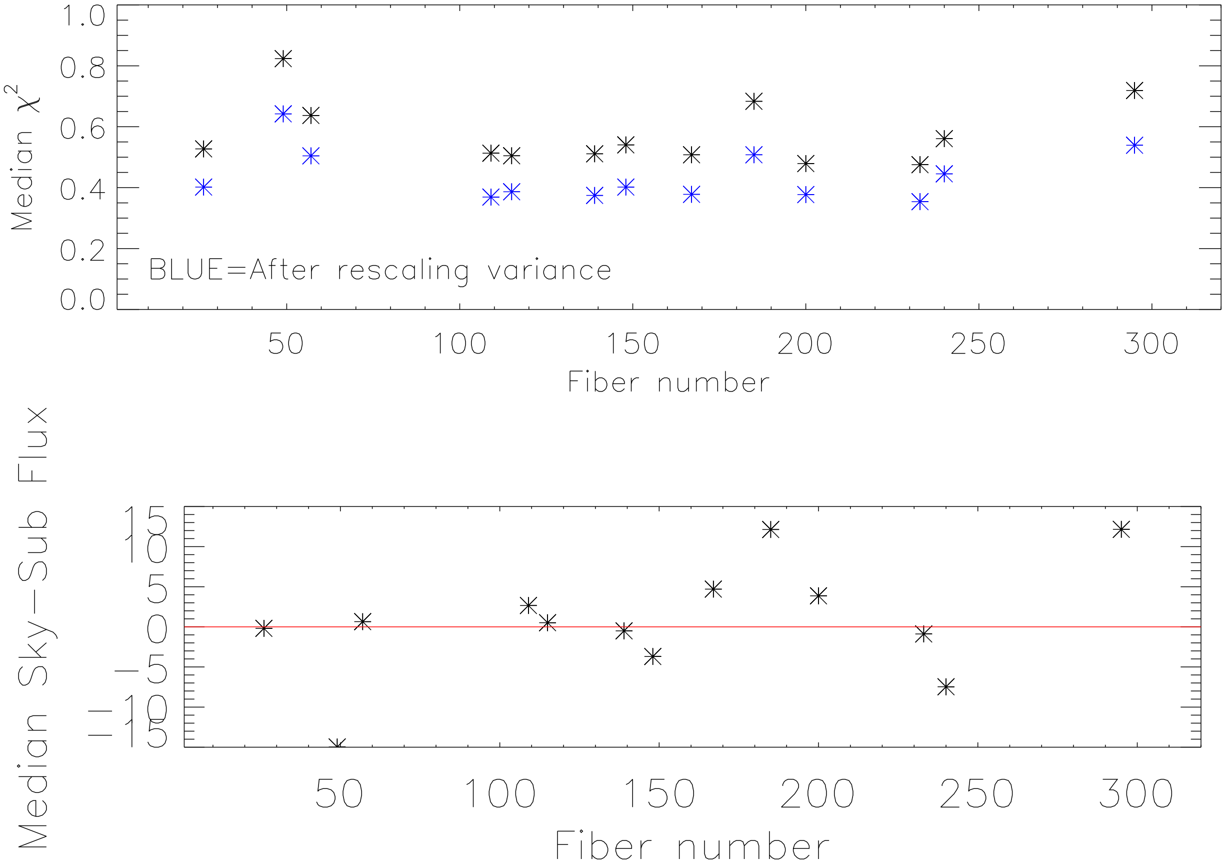
8919.6100

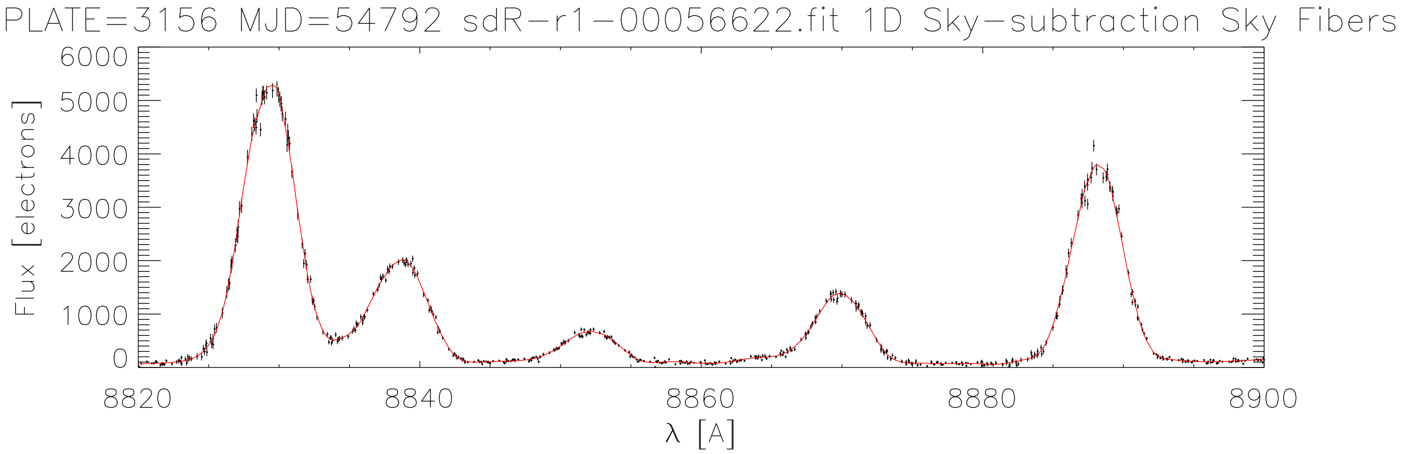

6300.3040
nfib1 15
nfib2 16
stdev 0.022
extrd −0.45
6363.7760
nfib1 16
nfib2 16
stdev 0.029
extrd −0.36
6553.6100
nfib1 16
nfib2 16
stdev 0.047
extrd −0.39
6923.2100
nfib1 16
nfib2 16
stdev 0.033
extrd −0.31
6949.0300
nfib1 16
nfib2 16
stdev 0.029
extrd −0.28
7571.7500
nfib1 16
nfib2 16
stdev 0.036
extrd −0.26
7794.1200
nfib1 16
nfib2 16
stdev 0.037
extrd −0.38
7821.5100
nfib1 16
nfib2 16
stdev 0.020
extrd −0.35
8399.1600
nfib1 16
nfib2 16
stdev 0.025
extrd −0.31
8430.1700
nfib1 15
nfib2 15
stdev 0.016
extrd −0.32
8885.8300
nfib1 16
nfib2 16
stdev 0.026
extrd −0.32
8919.6100
nfib1 16
nfib2 16
stdev 0.023
extrd −0.31
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

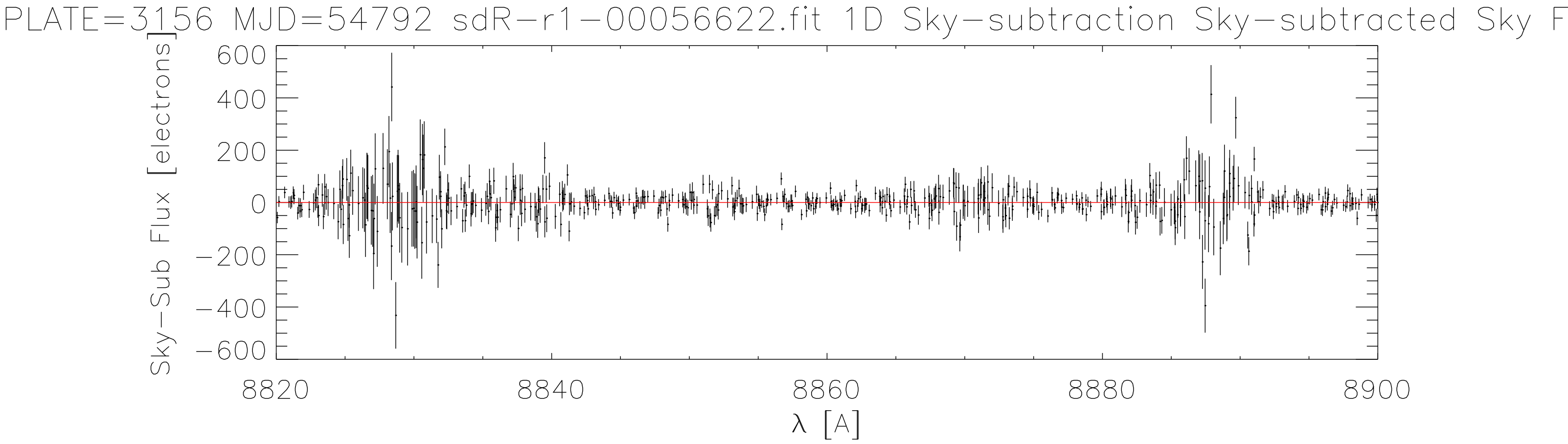

sky shift, pixels
−0.30
−0.35
−0.40
−0.45
5000
6000
7000
8000
9000
10000


PLATE=3156 MJD=54792 Smooth superflat for sdR-r1-00056622.fit
2.0
1.5
1.0
0.5
0.0
1.020
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0001
6000
7000
8000
9000
Wavelength (Å)

PLATE=3156 MJD=54792 sdR-r1-00056622.fit 1D Sky-subtraction Sky Fibers

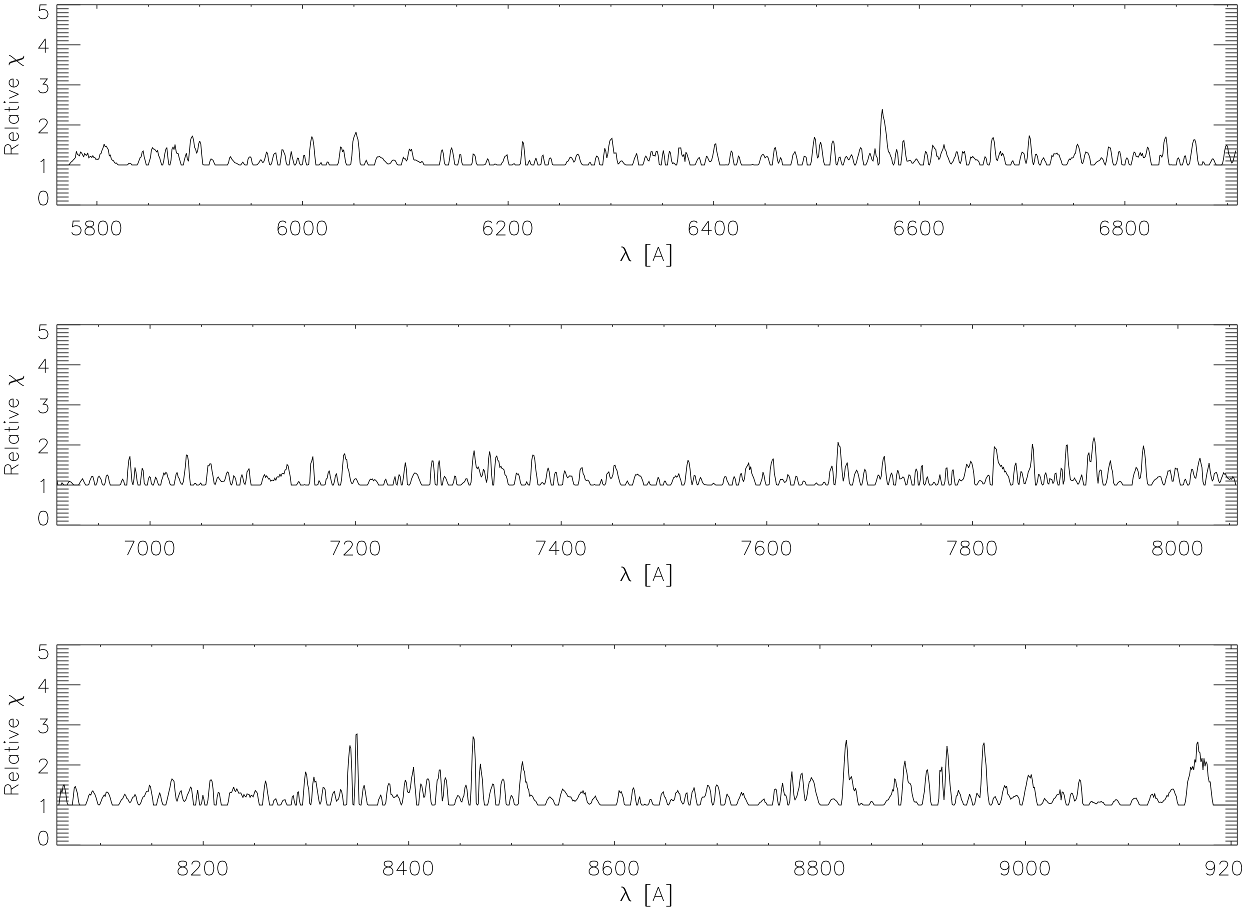


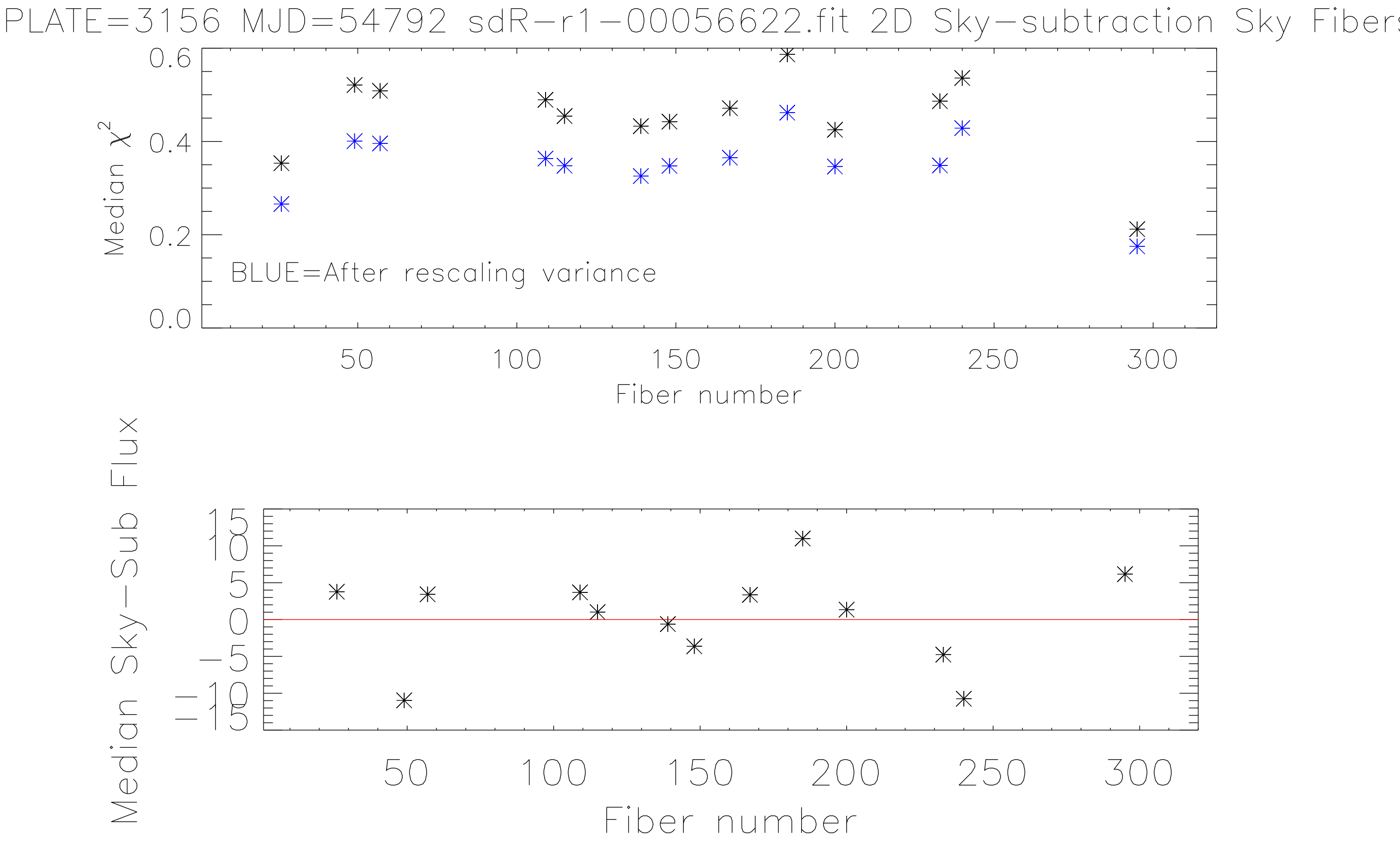

PLATE=3156 MJD=54792 sdR-r1-00056622.fit 1D Sky-subtraction Sky Fibers


PLATE=3156 MJD=54792 sdR-r1-00056622.fit 1D Sky-subtraction Sky-subtracted Sky F

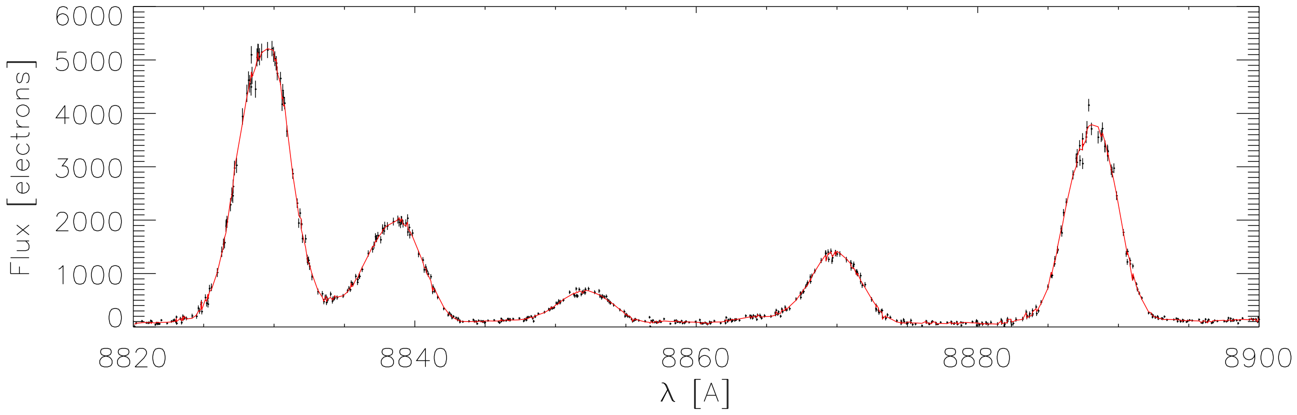
Number of sky fibers = 13

PLATE=3156 MJD=54792 sdR-r1-00056622.fit 1D Sky-subtraction Rescaled Errors

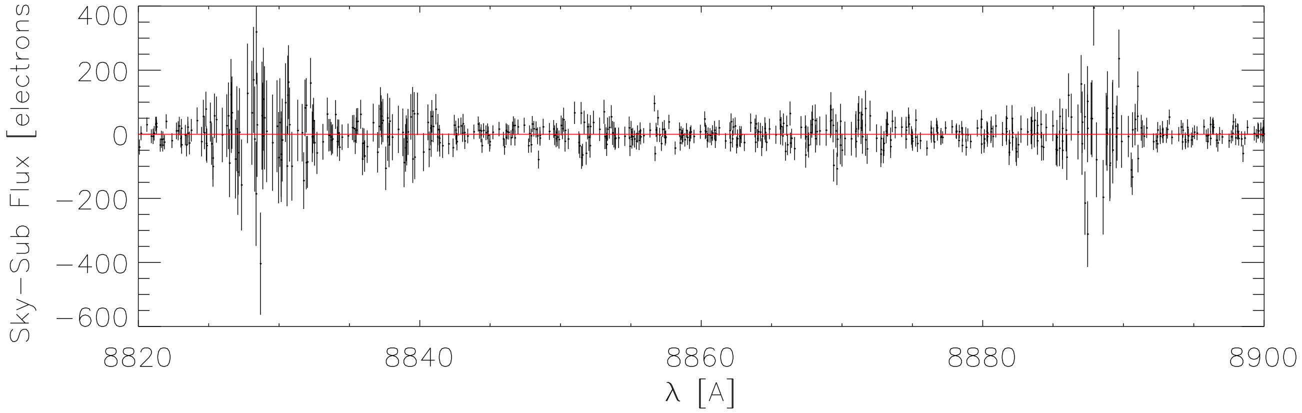


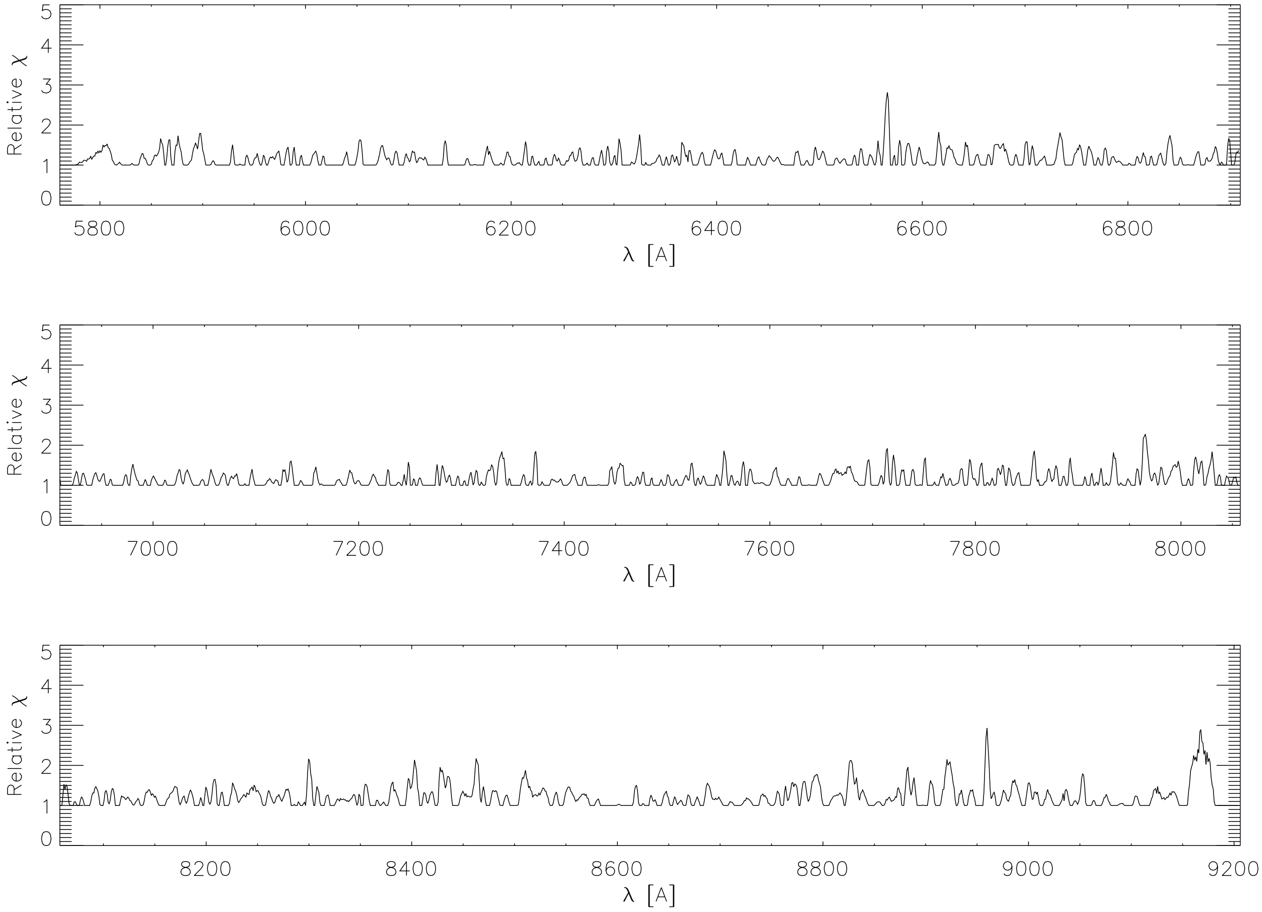

PLATE=3156 MJD=54792 sdR-r1-00056622.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
15
50
100
150
200
250
300
Fiber number

PLATE=3156 MJD=54792 sdR-r1-00056622.fit 2D Sky-subtraction Sky Fibers



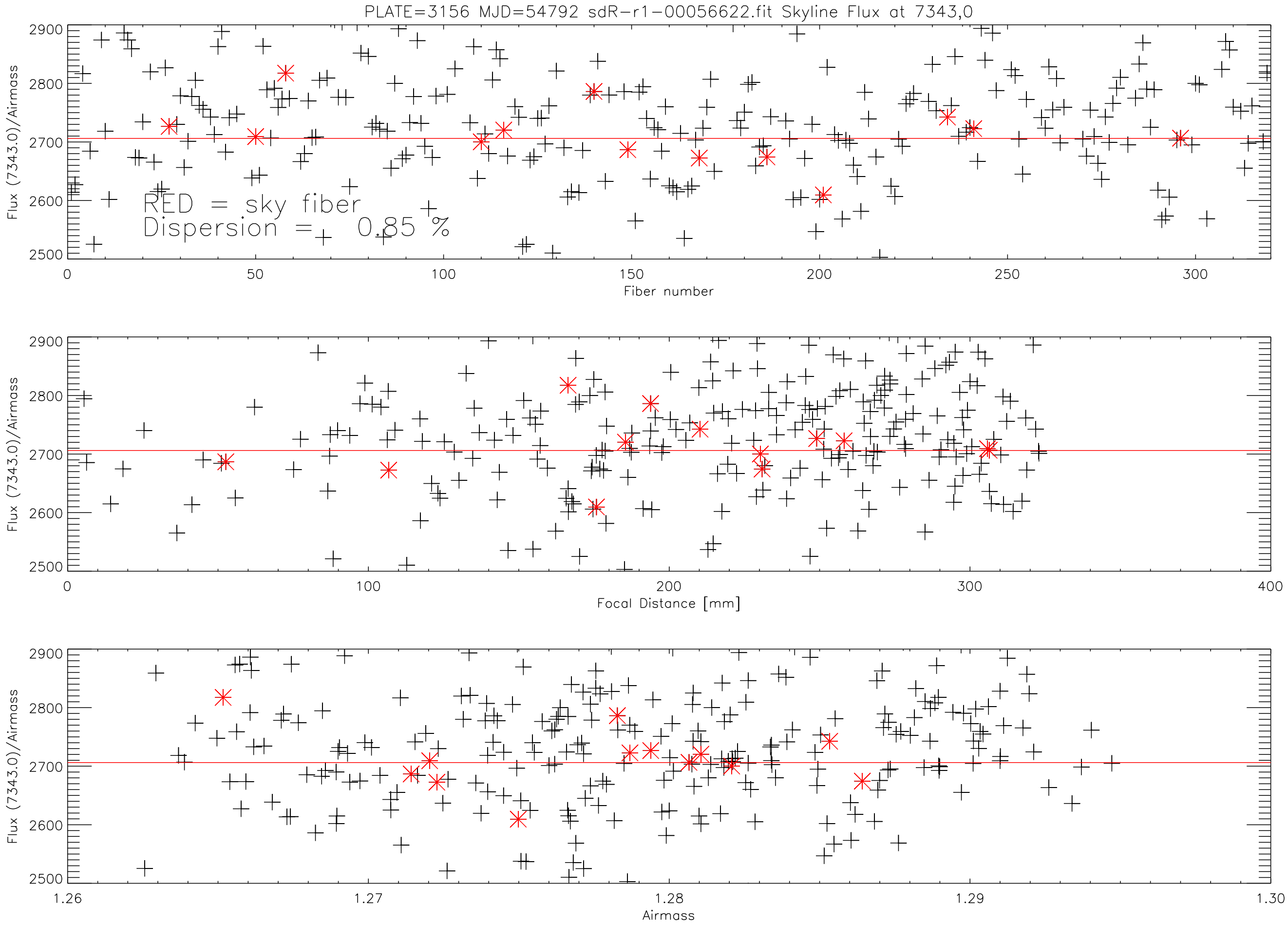
PLATE=3156 MJD=54792 sdR-r1-00056622.fit 2D Sky-subtraction Sky-subtracted Sky F

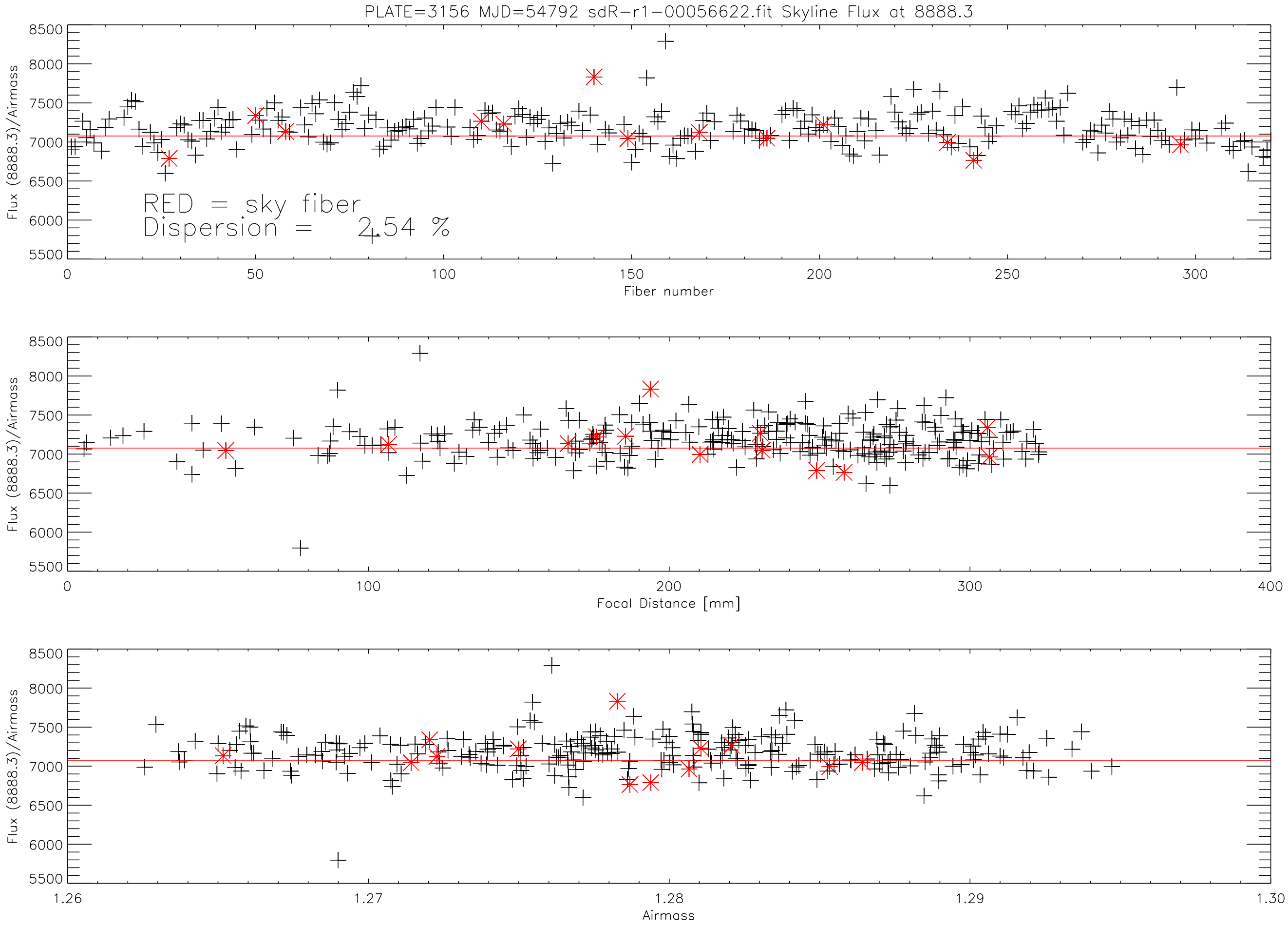


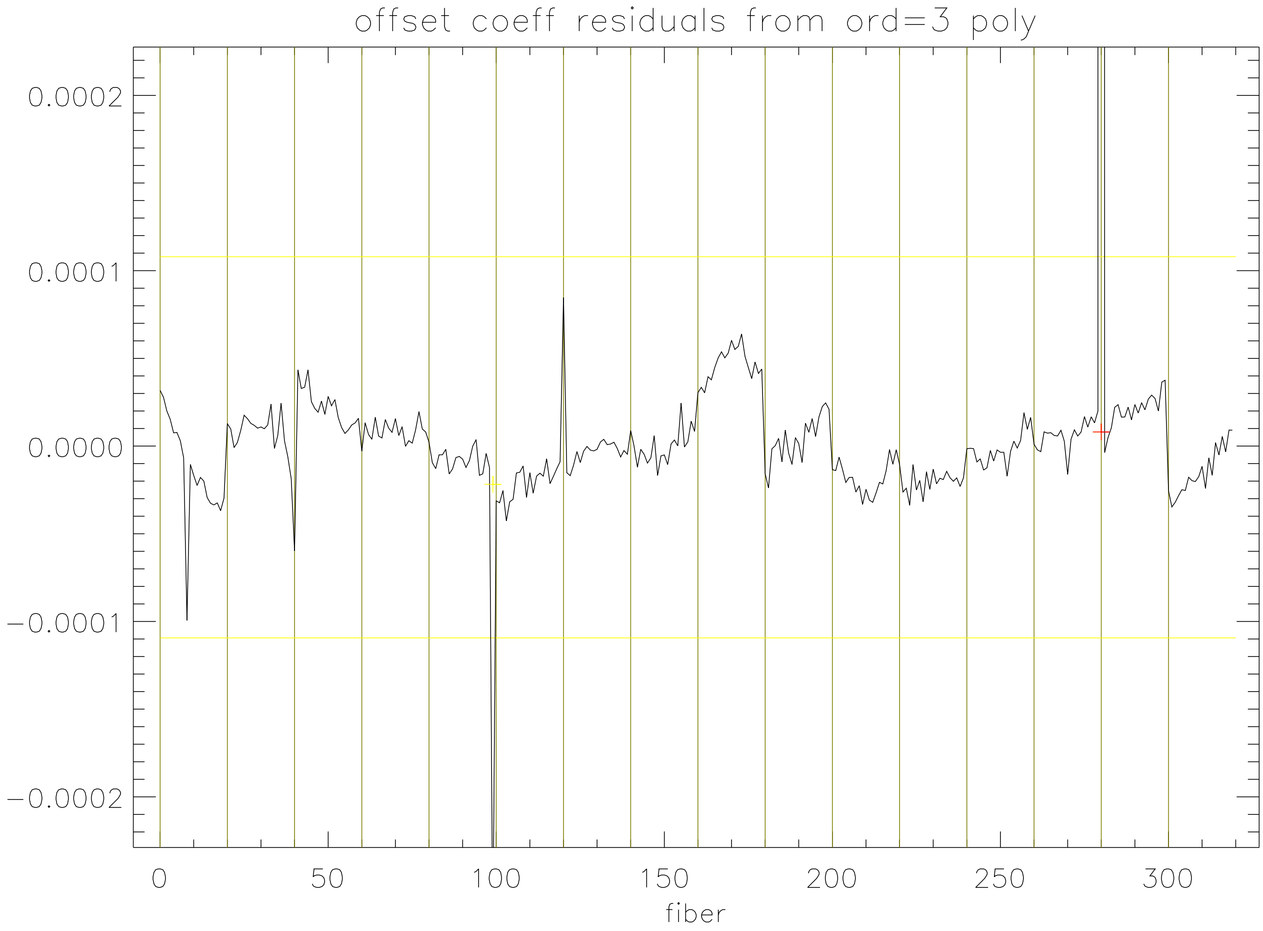


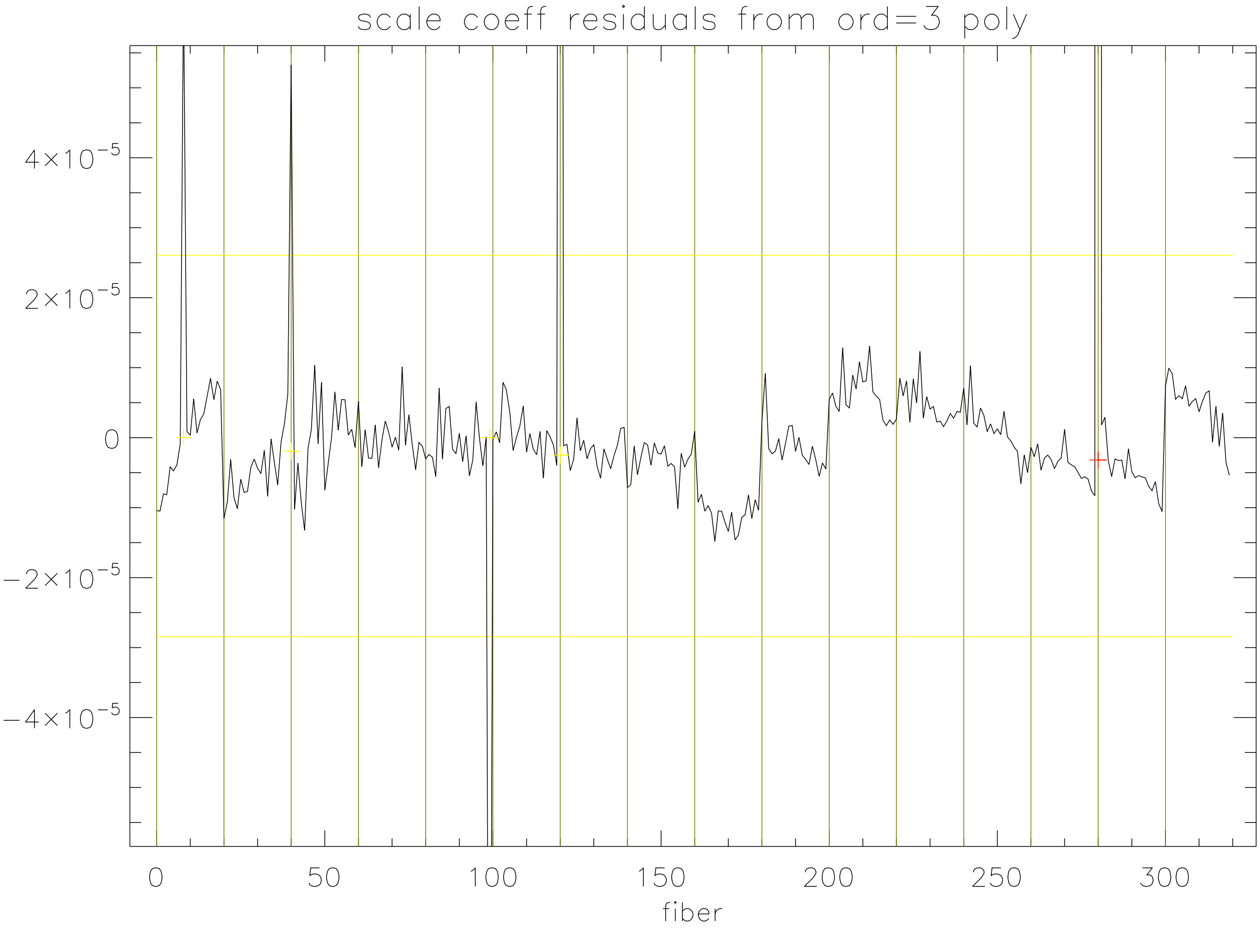
Number of sky fibers = 13

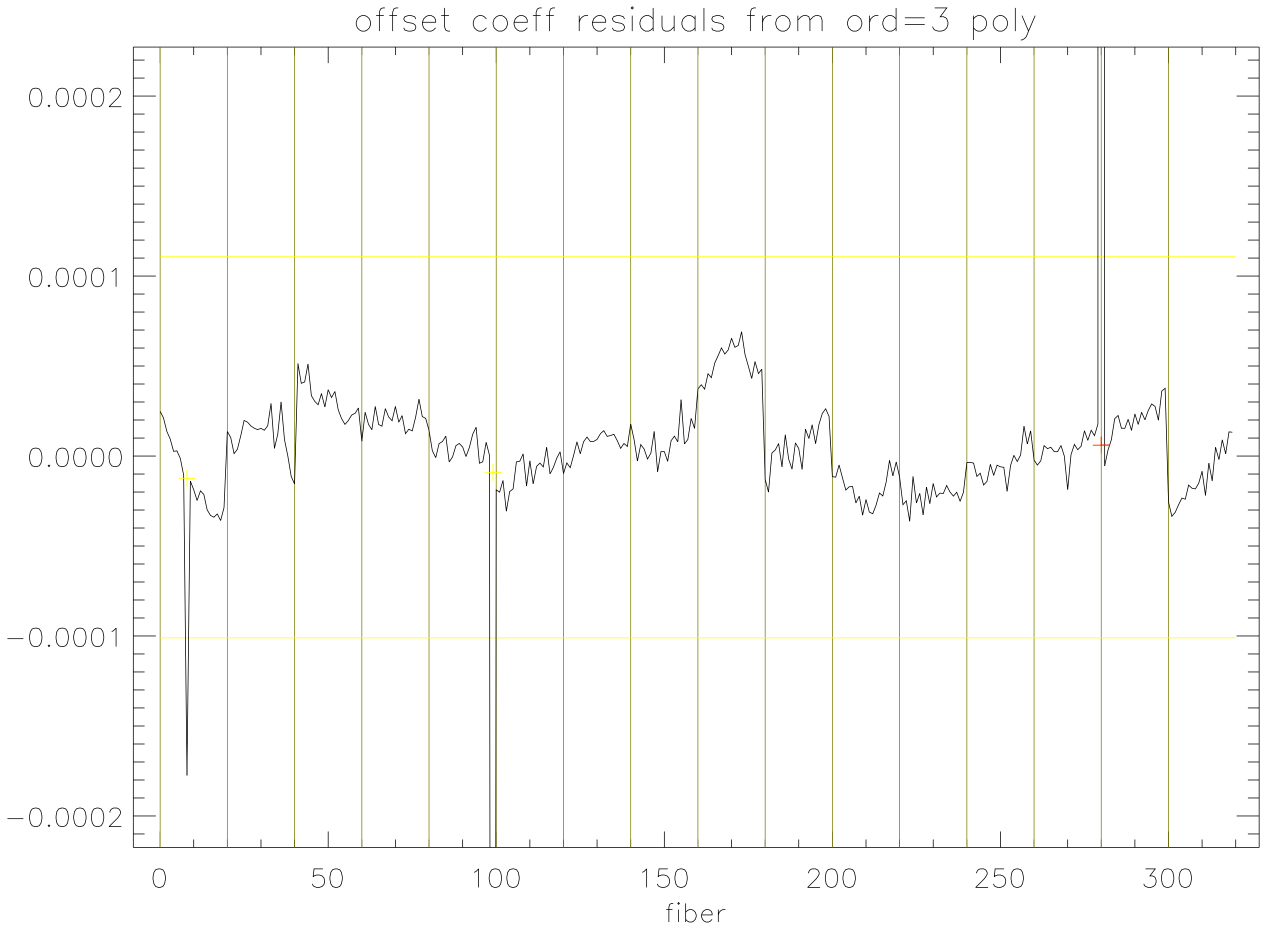
PLATE=3156 MJD=54792 sdR-r1-00056622.fit 2D Sky-subtraction Rescaled Errors

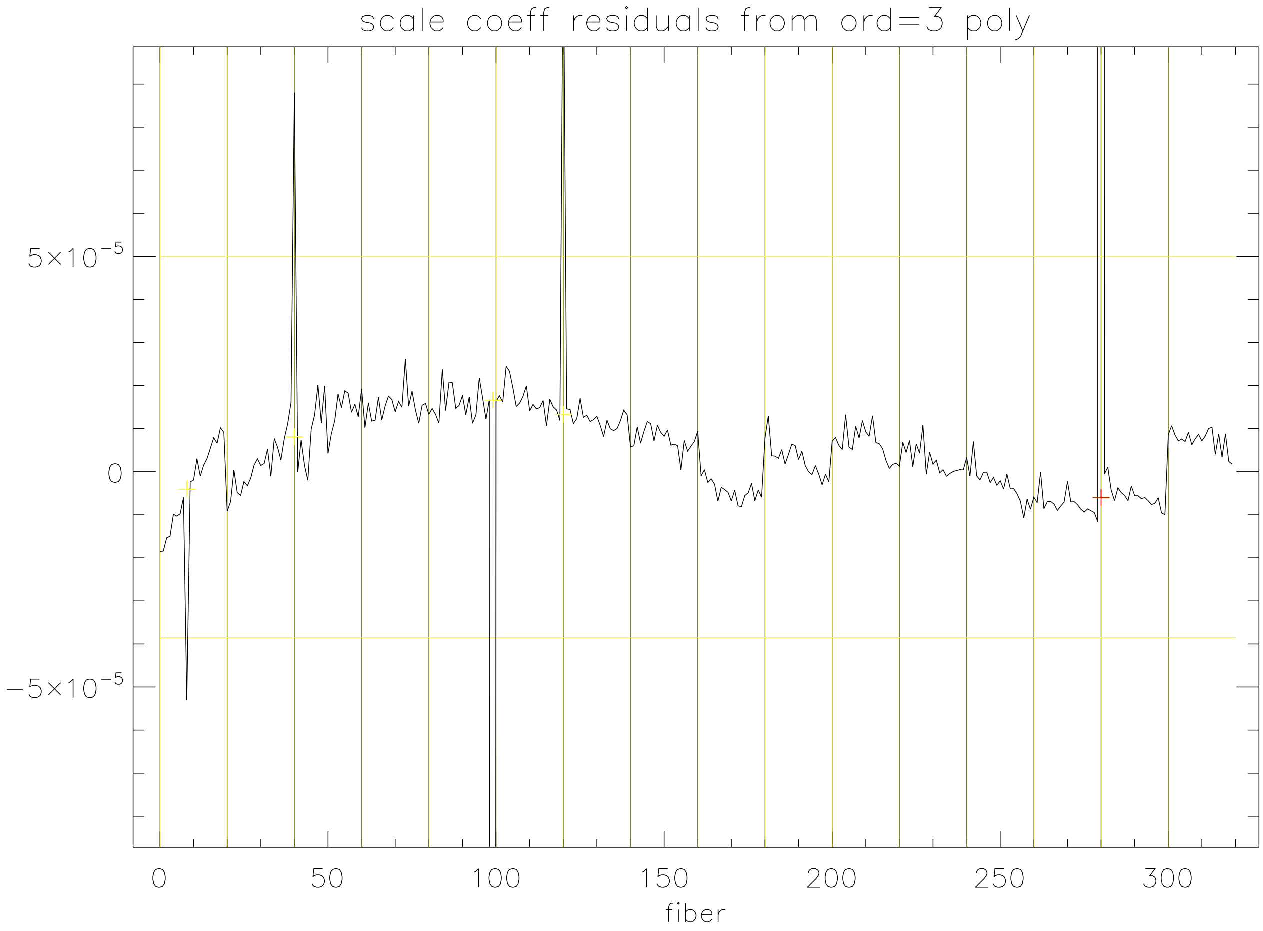

PLATE=3156 MJD=54792 sdR-r1-00056622.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 0.85 %
Flux (7343.0)/Airmass
2500
2600
2700
2800
2900
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.26
1.27
1.28
1.29
1.30
Airmass

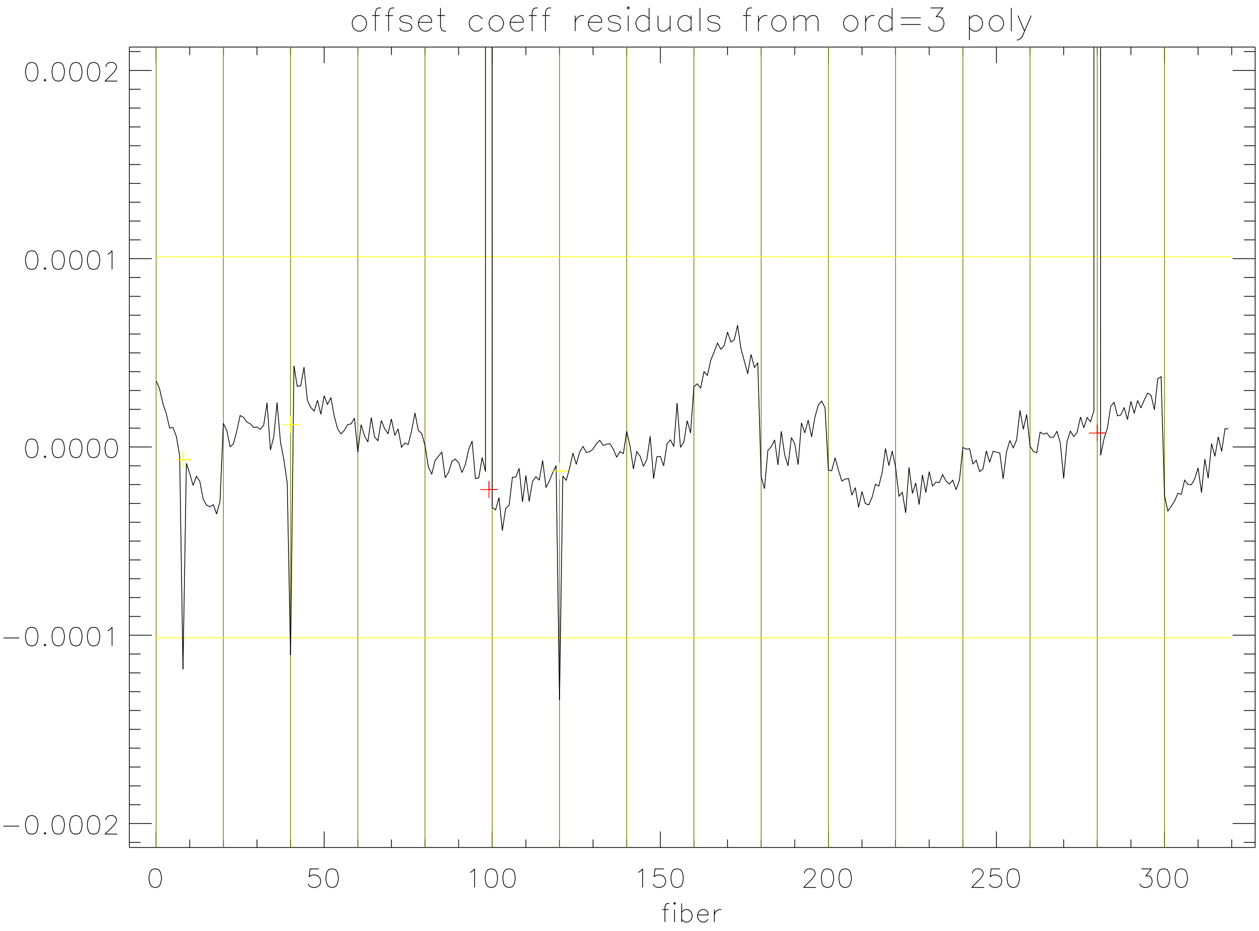

PLATE=3156 MJD=54792 sdR-r1-00056622.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 2.54 %
Flux (8888.3)/Airmass
8500
8000
7500
7000
6500
6000
5500
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
8500
8000
7500
7000
6500
6000
5500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
8500
8000
7500
7000
6500
6000
5500
1.26
1.27
1.28
1.29
1.30
Airmass

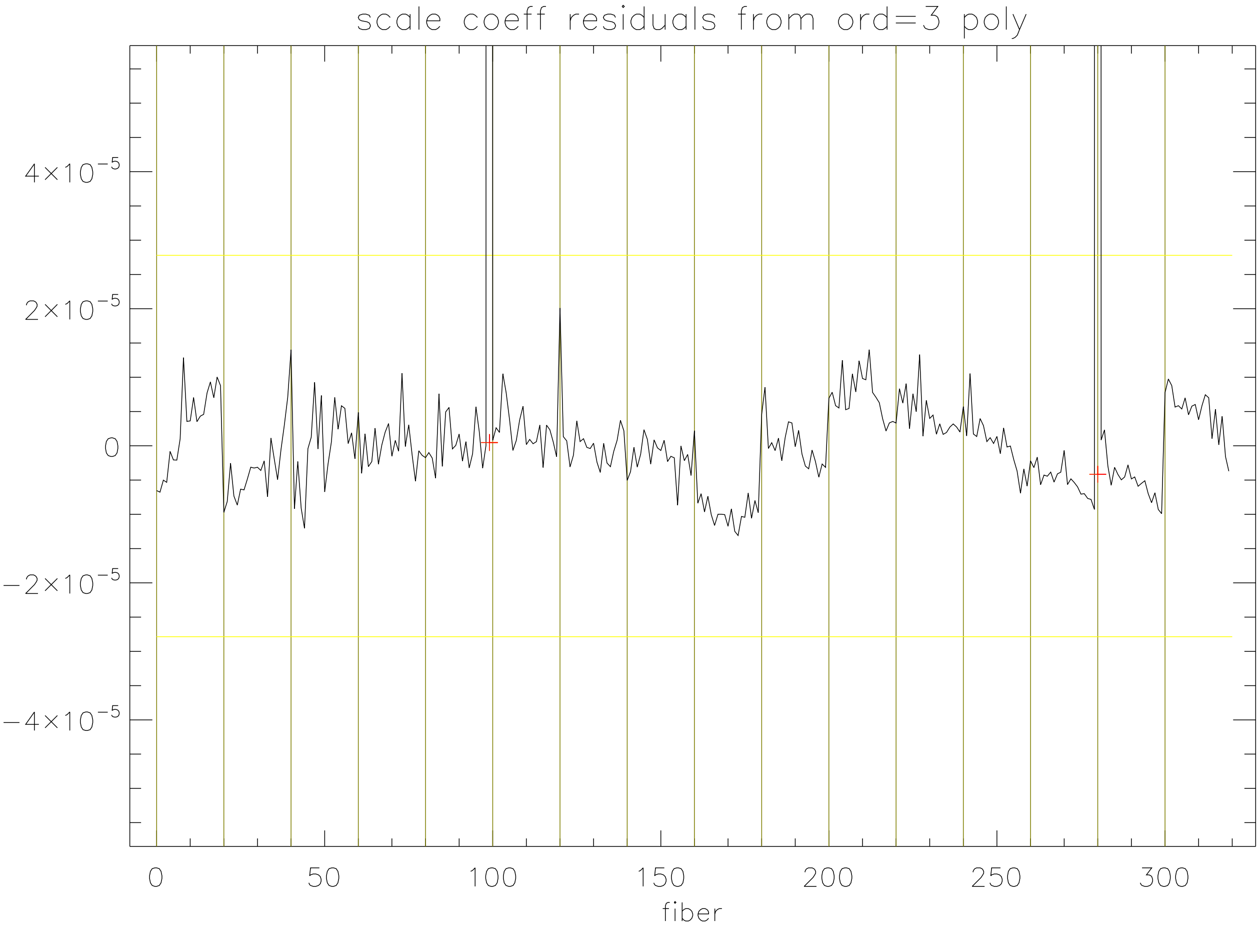

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

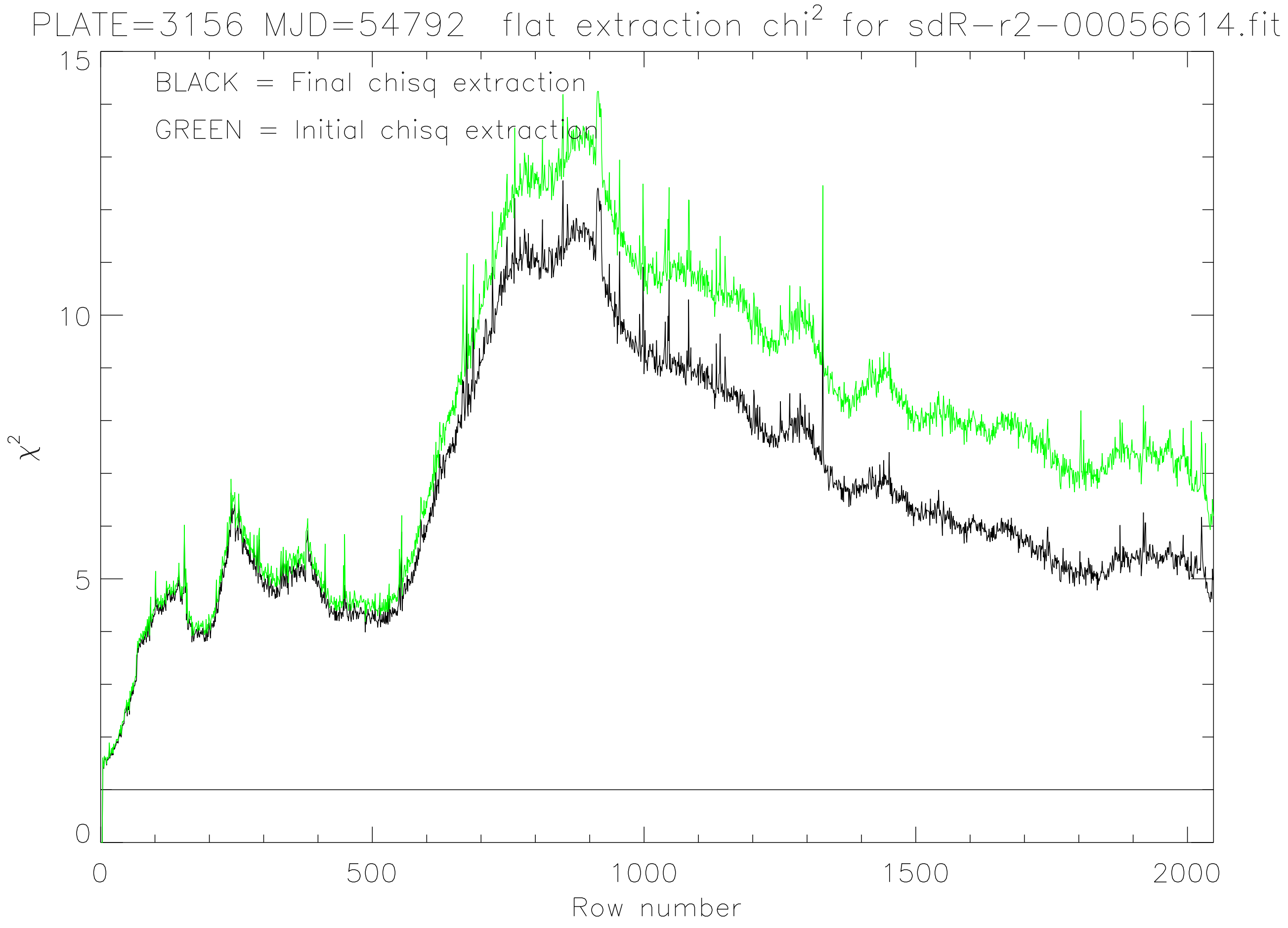

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

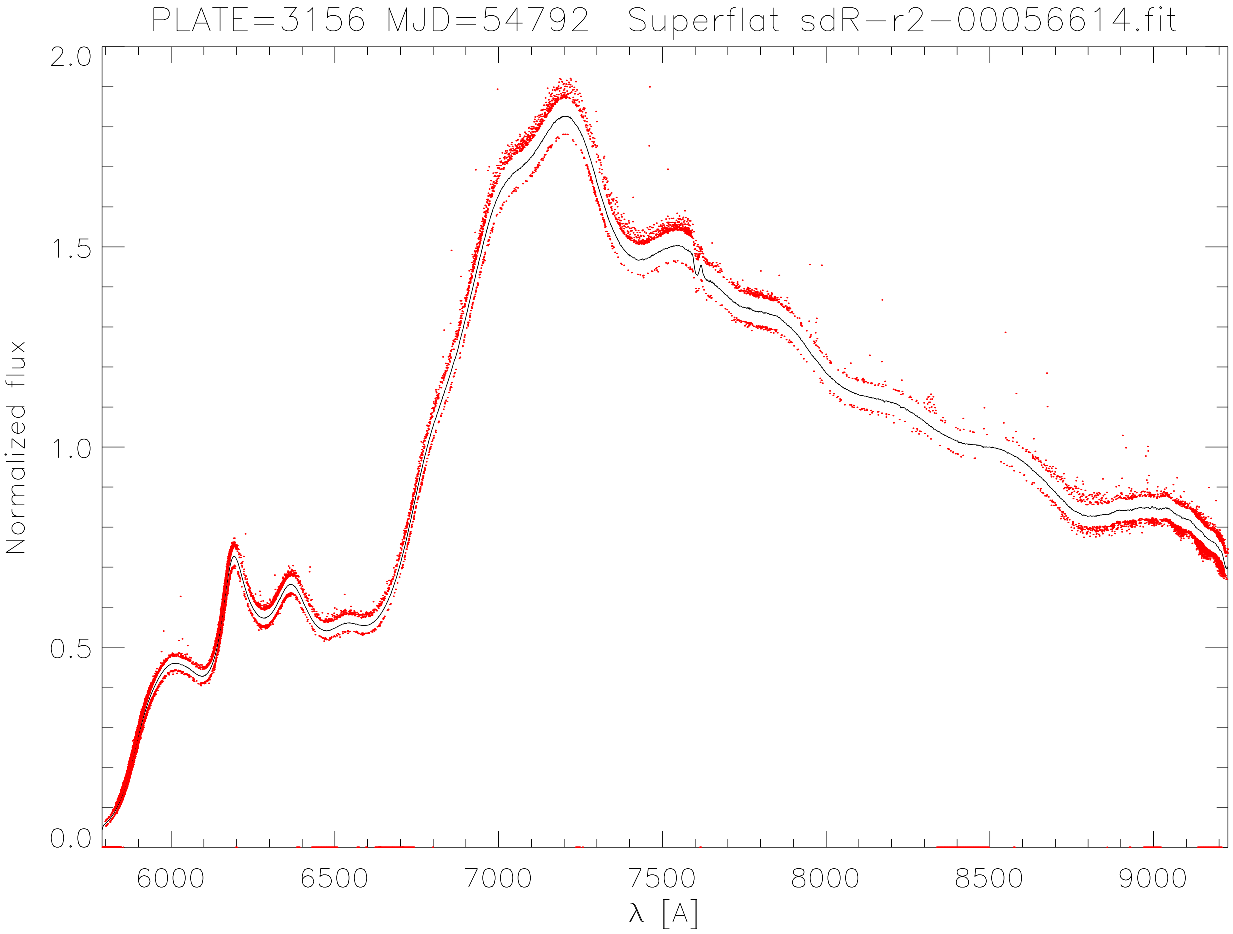

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

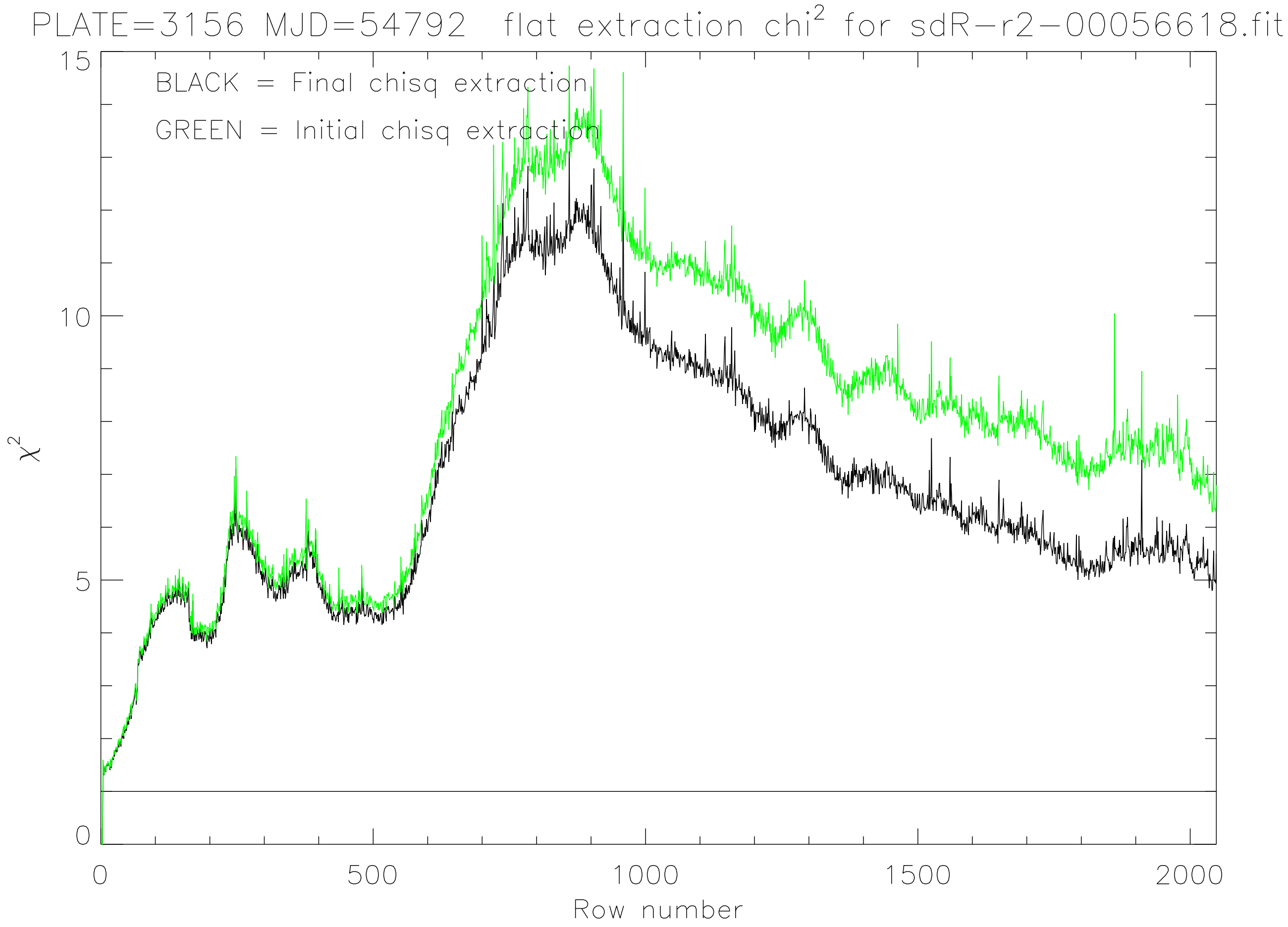

scale coeff residuals from ord=3 poly
5×10^{-5}
0
−5×10^{-5}
0
50
100
150
200
250
300
fiber

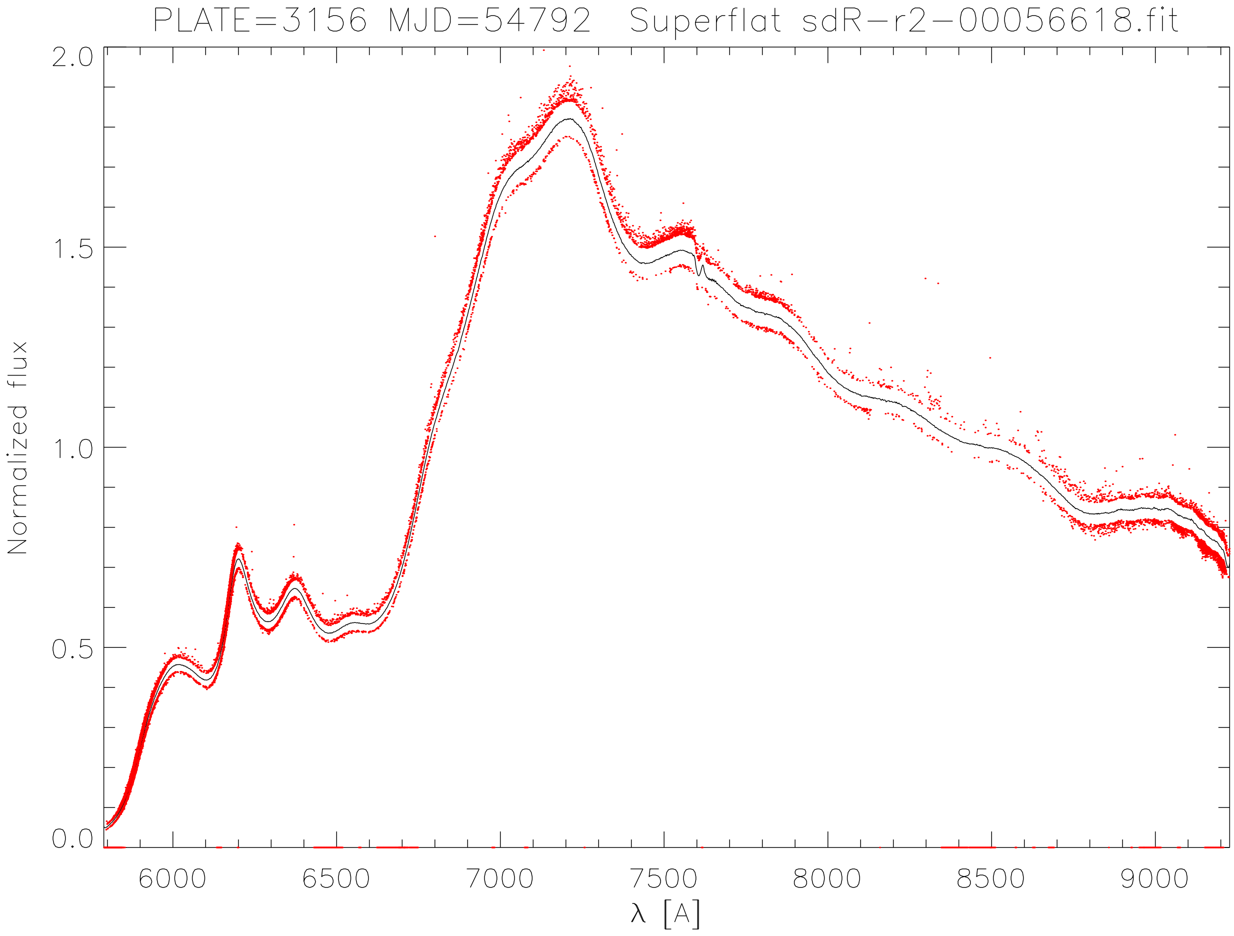

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

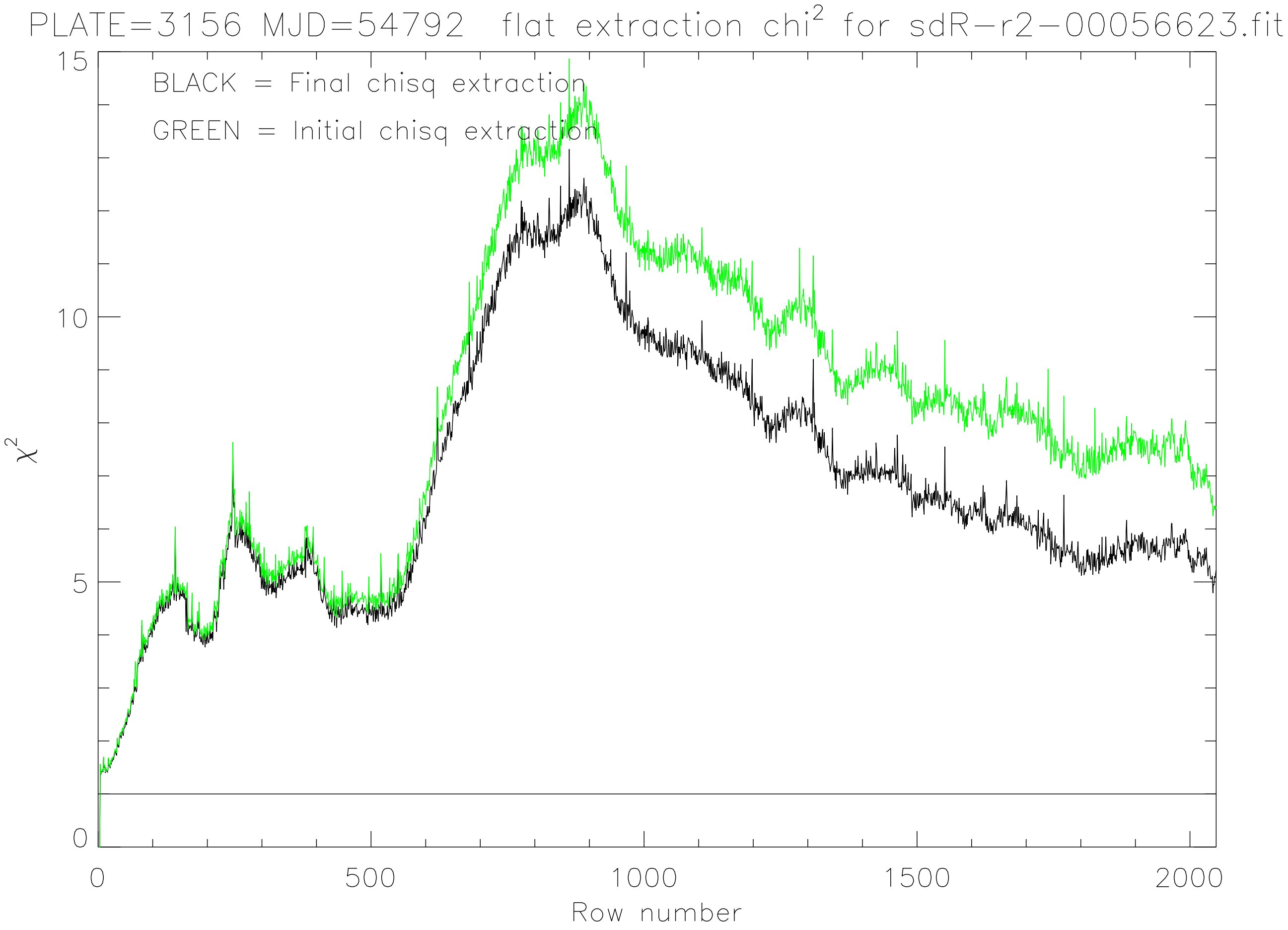

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber


PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-r2-00056614.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

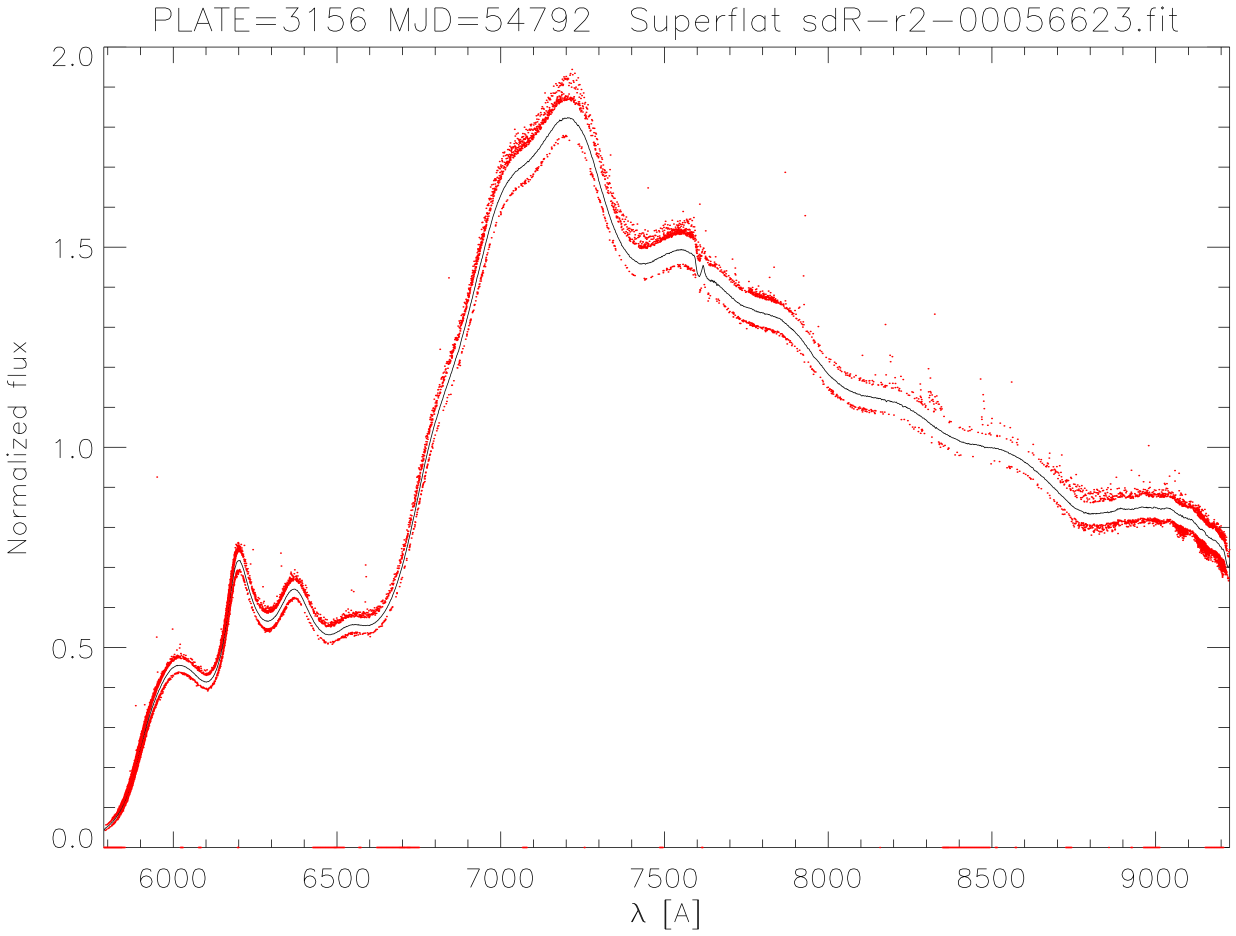

PLATE=3156 MJD=54792 Superflat sdR-r2-00056614.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-r2-00056618.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

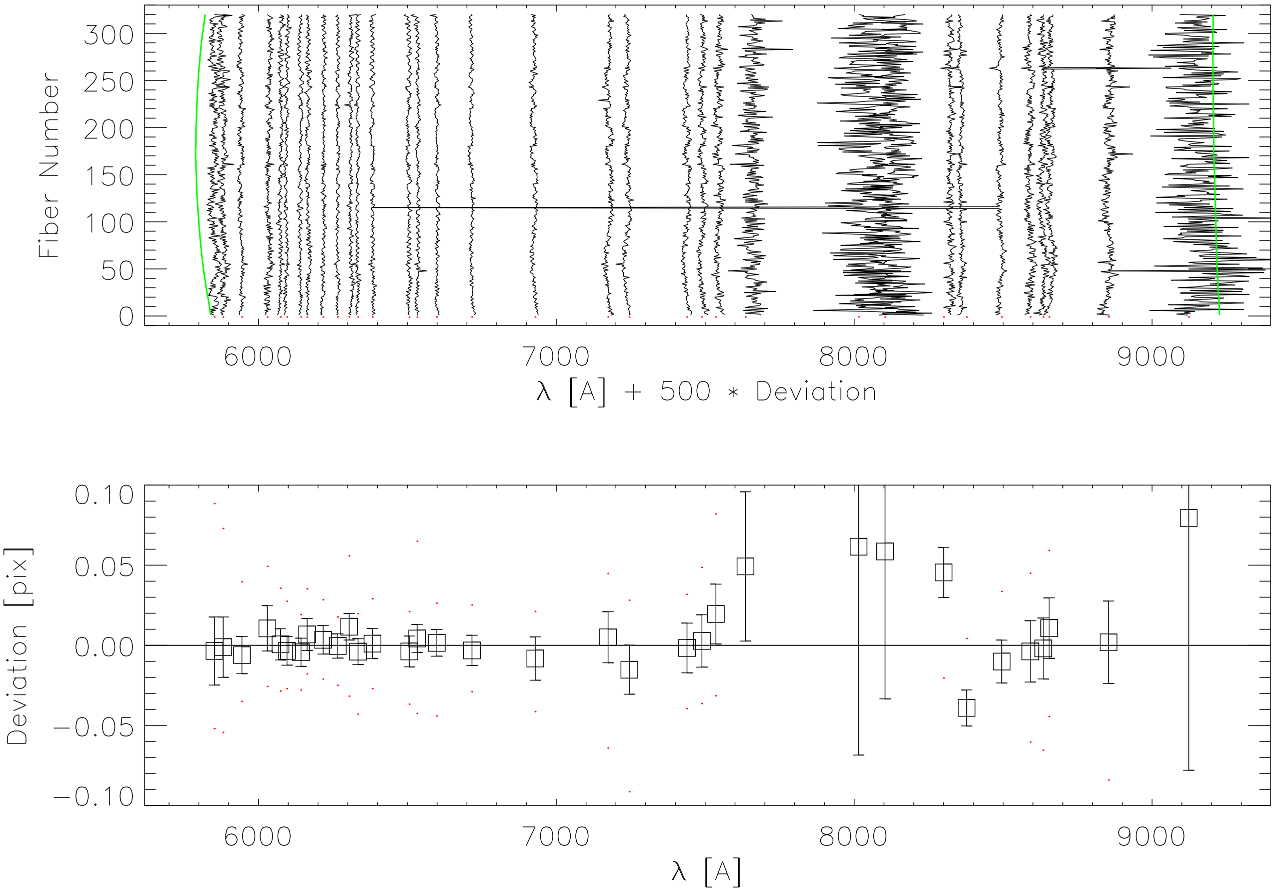

PLATE=3156 MJD=54792 Superflat sdR-r2-00056618.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]



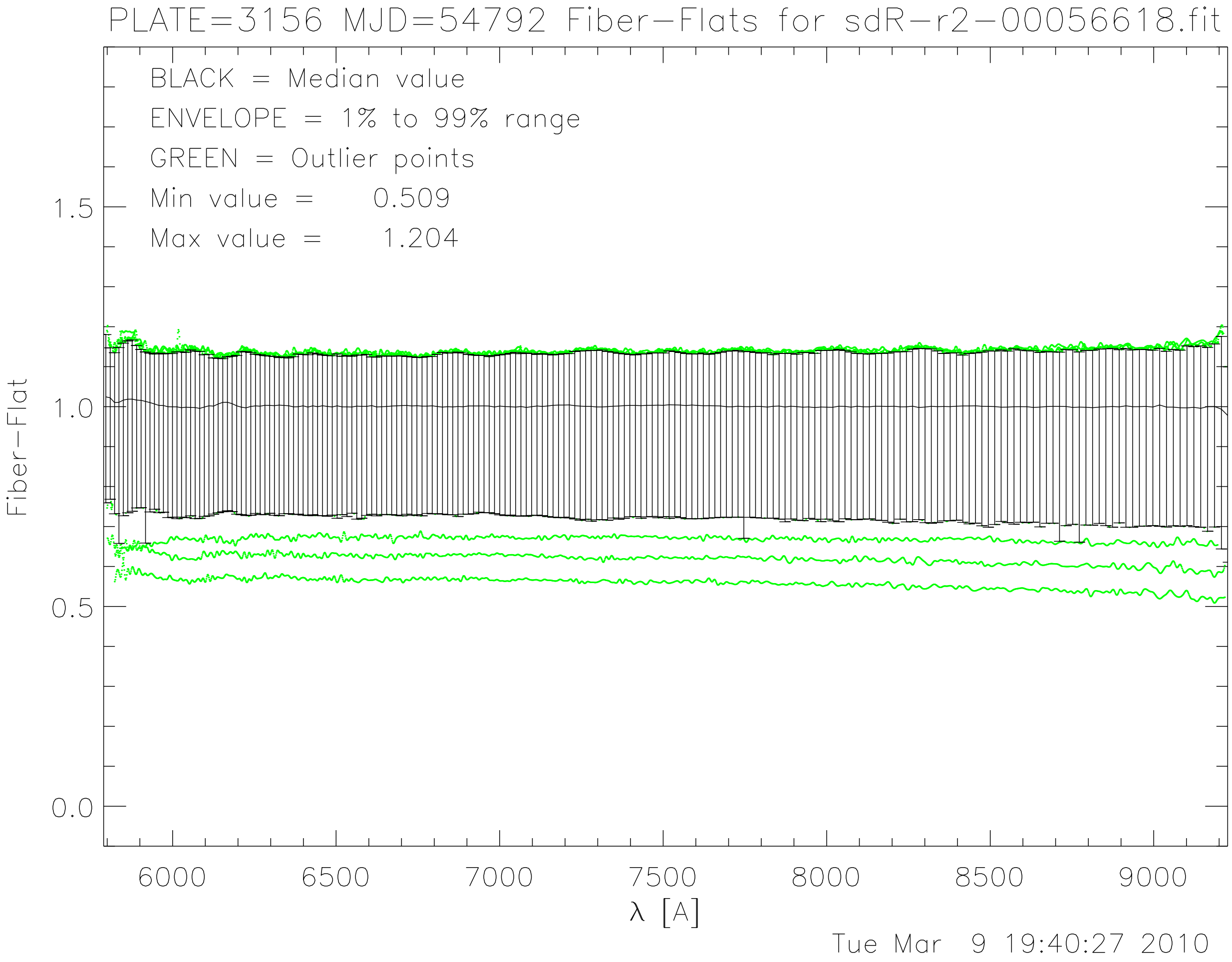
PLATE=3156 MJD=54792 flat extraction chi^2 for sdR-r2-00056623.fit

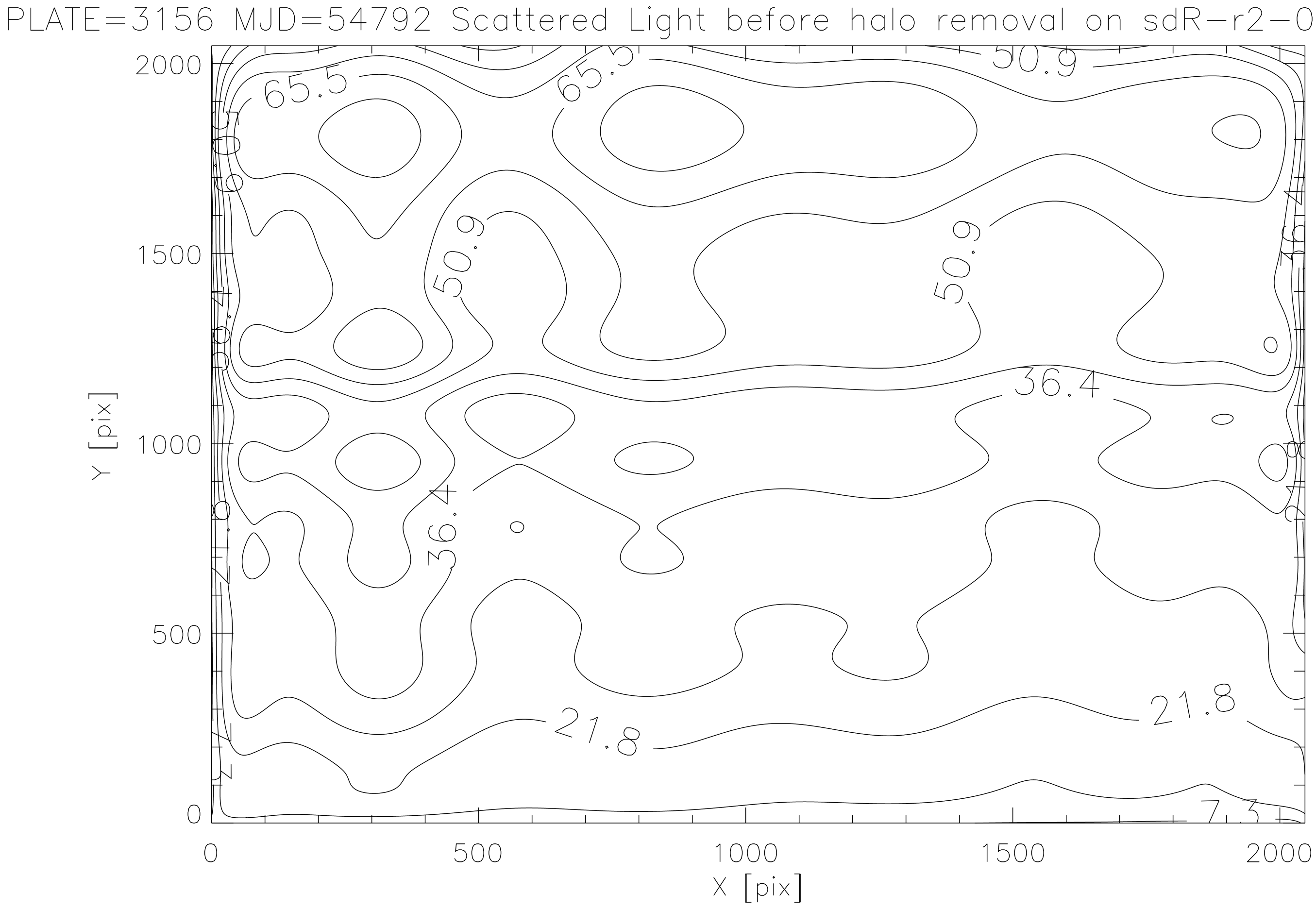

PLATE=3156 MJD=54792 Superflat sdR-r2-00056623.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

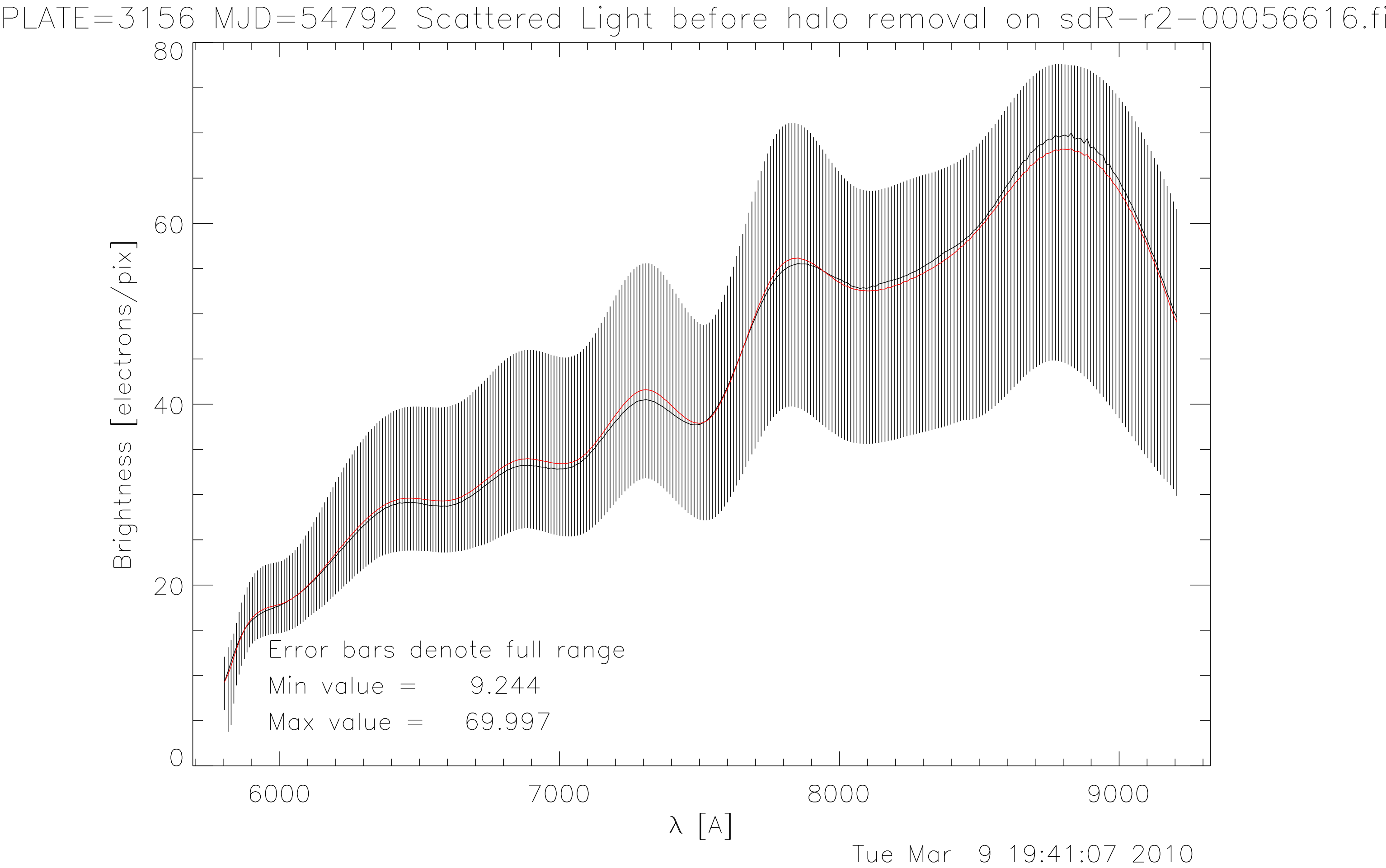
PLATE=3156 MJD=54792 Arcline Fit for sdR-r2-00056619.fit

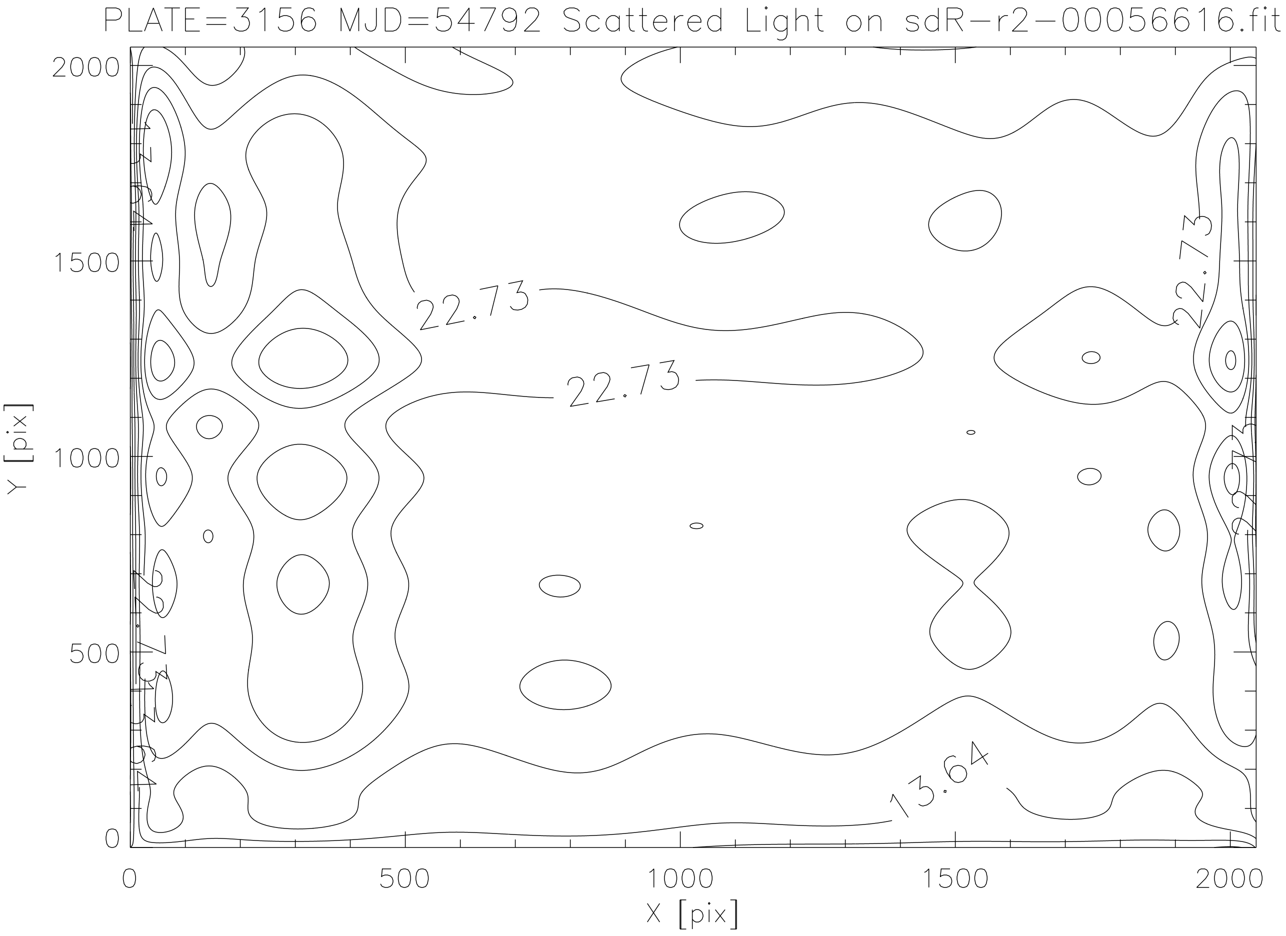


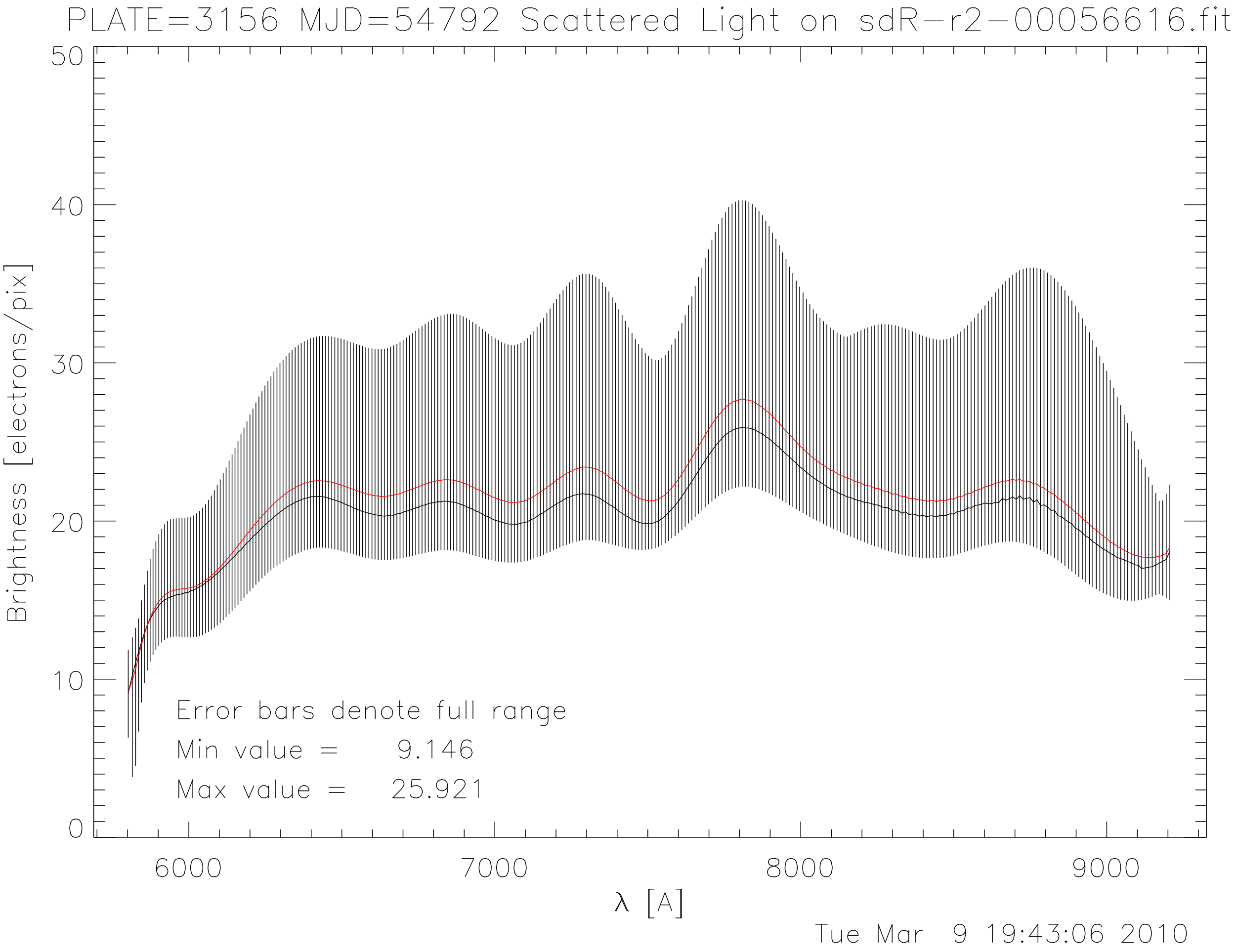
Tue Mar 9 19:40:23 2010

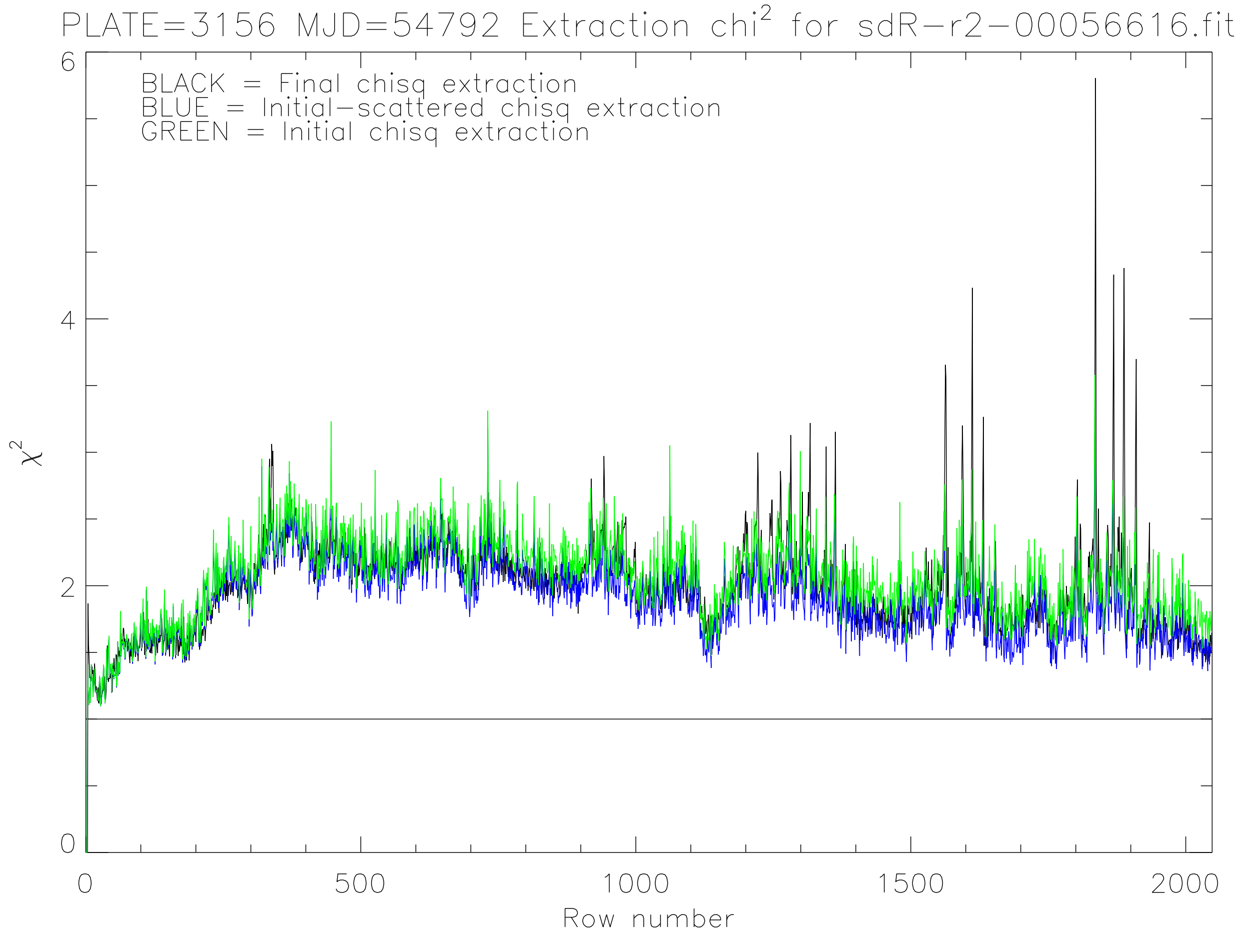

PLATE=3156 MJD=54792 Fiber−Flats for sdR−r2−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.509
Max value = 1.204
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 9 19:40:27 2010

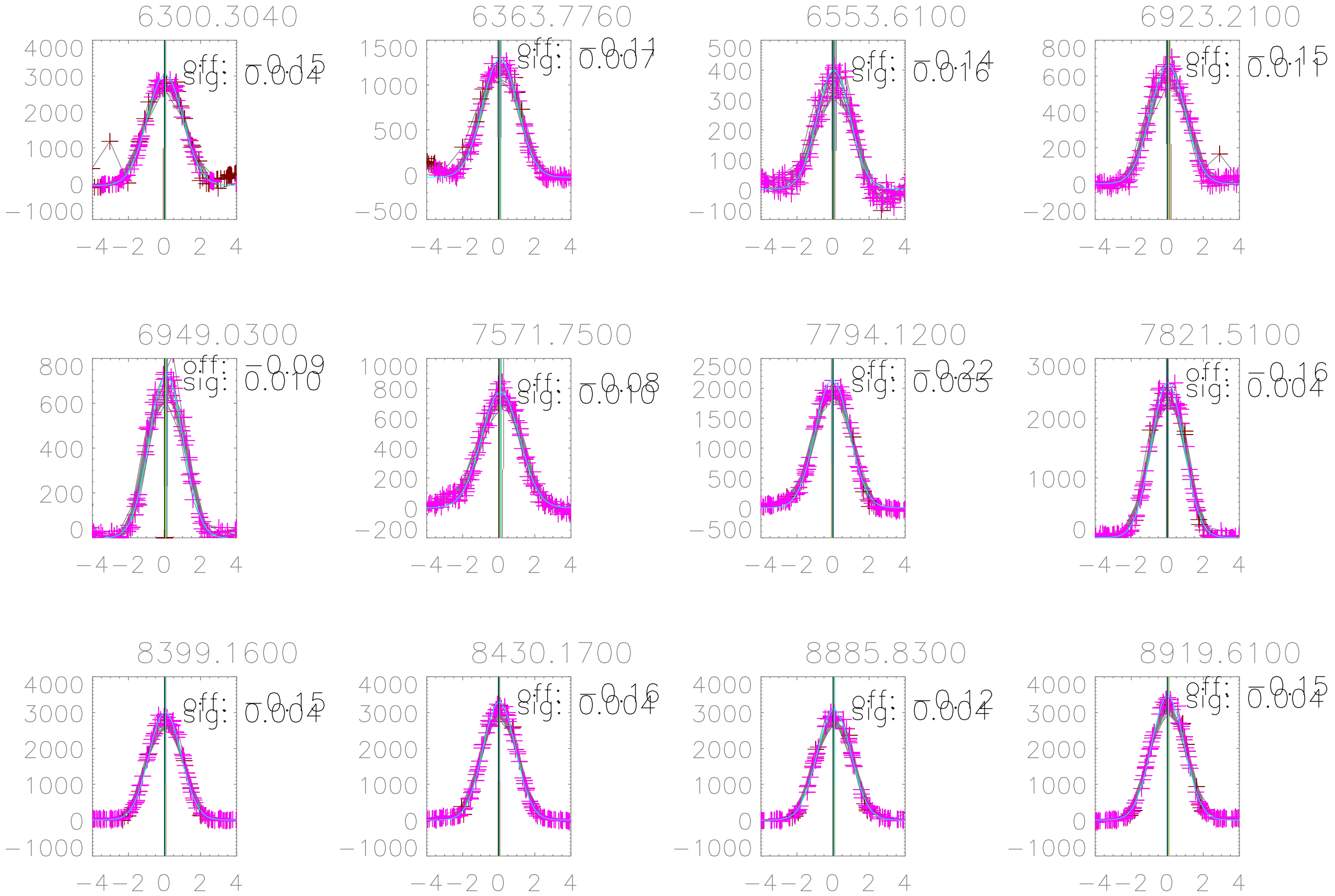

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056616.fi
65.5
65.5
50.9
50.9
50.9
36.4
36.4
36.4
21.8
21.8
21.8
7.3
Y [pix]
0
500
1000
1500
2000
X [pix]
0
500
1000
1500
2000

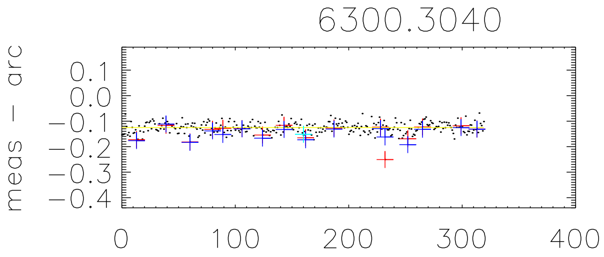

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056616.fi
Brightness [electrons/pix]
0
20
40
60
80
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.244
Max value = 69.997
Tue Mar 9 19:41:07 2010

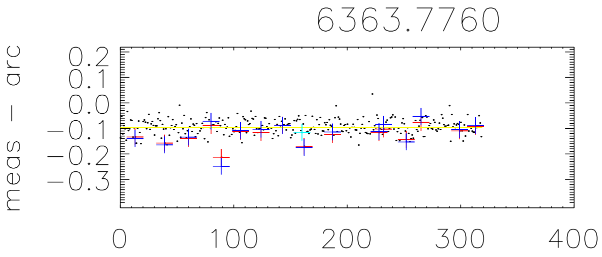

PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056616.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
22.73
22.73
22.73
22.73
22.73
13.64
13.64
13.64

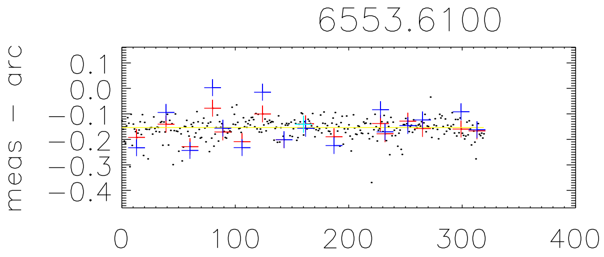

PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056616.fit
Brightness [electrons/pix]
0
10
20
30
40
50
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.146
Max value = 25.921
Tue Mar 9 19:43:06 2010

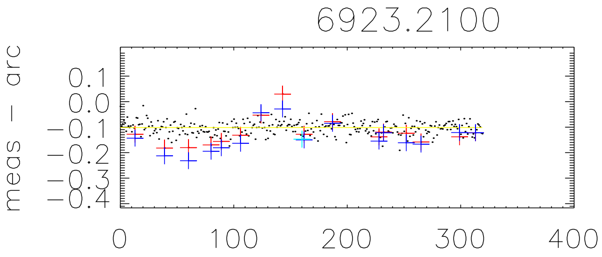

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r2-00056616.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

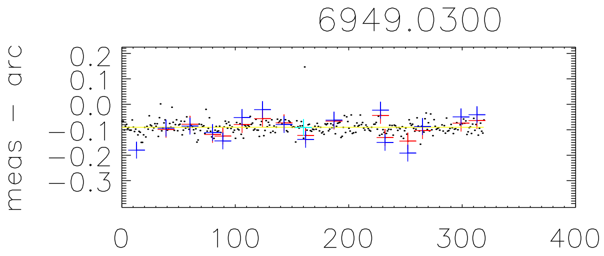

6300.3040
off: −0.15
sig: 0.004
6363.7760
off: −0.11
sig: 0.007
6553.6100
off: −0.14
sig: 0.016
6923.2100
off: −0.15
sig: 0.011
6949.0300
off: −0.09
sig: 0.010
7571.7500
off: −0.08
sig: 0.010
7794.1200
off: −0.22
sig: 0.005
7821.5100
off: −0.16
sig: 0.004
8399.1600
off: −0.15
sig: 0.004
8430.1700
off: −0.16
sig: 0.004
8885.8300
off: −0.12
sig: 0.004
8919.6100
off: −0.15
sig: 0.004
−4 −2 0 2 4

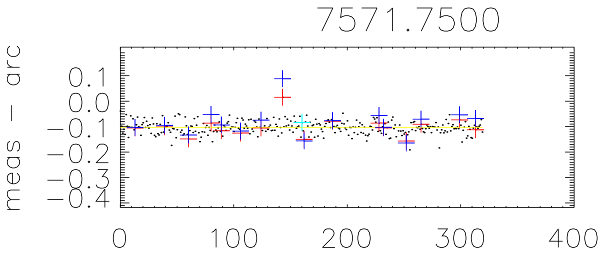

6300.3040
meas – arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

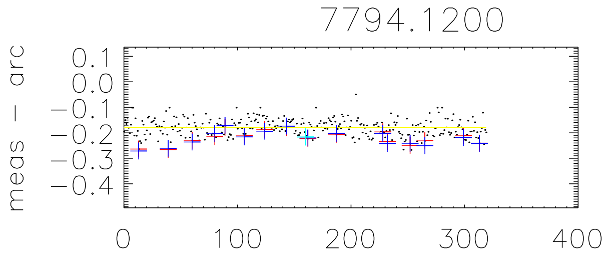

6363.7760
meas – arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

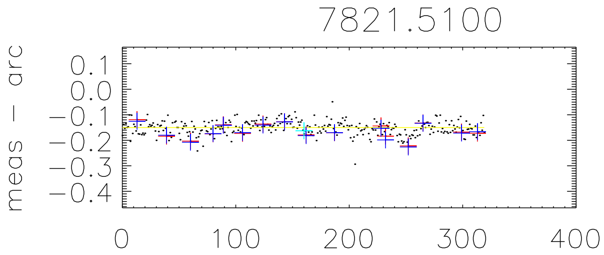

6553.6100
meas – arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

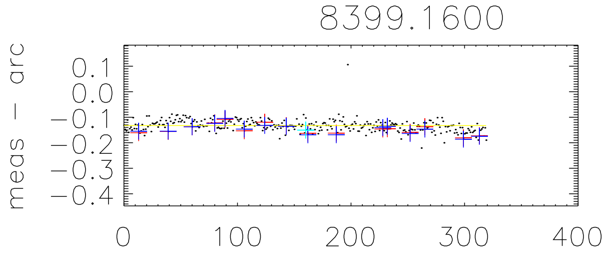

6923.2100
meas – arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

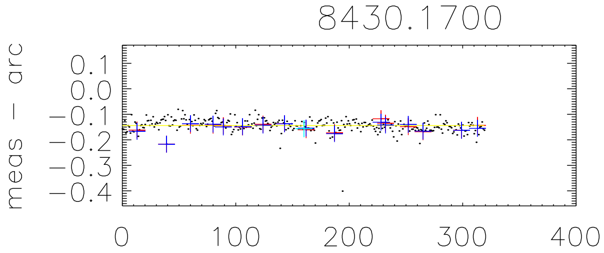

6949.0300
meas – arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

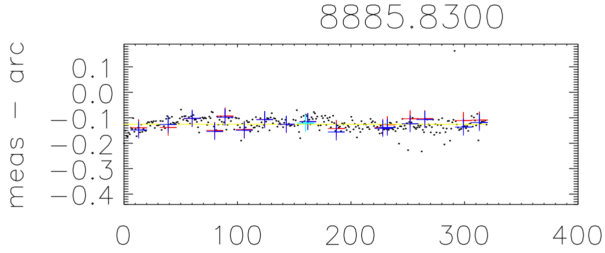

7571.7500
meas – arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

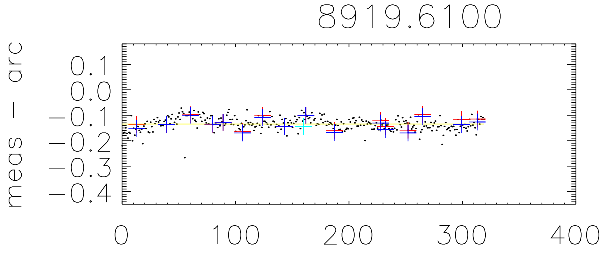

7794.1200

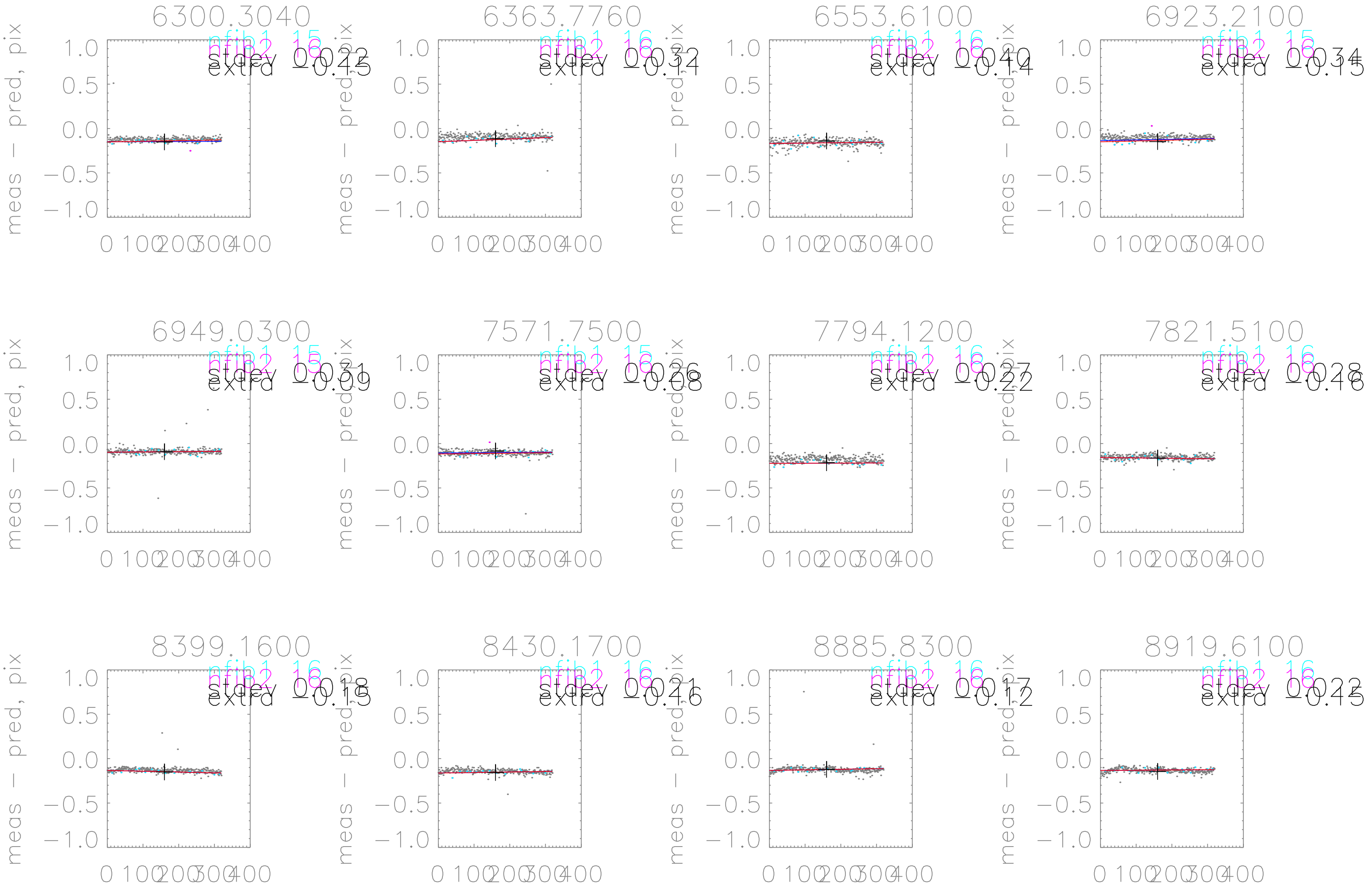

7821.5100

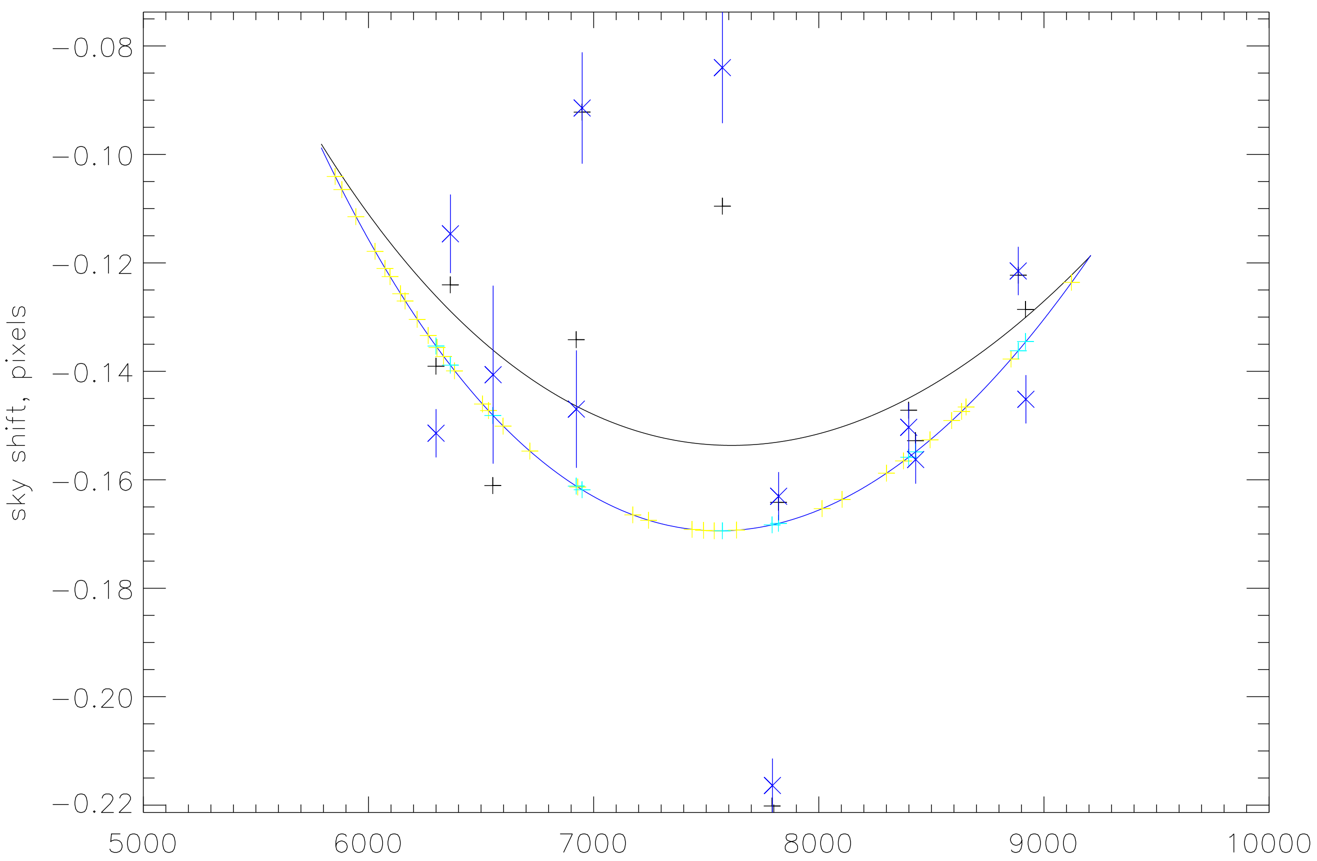

8399.1600

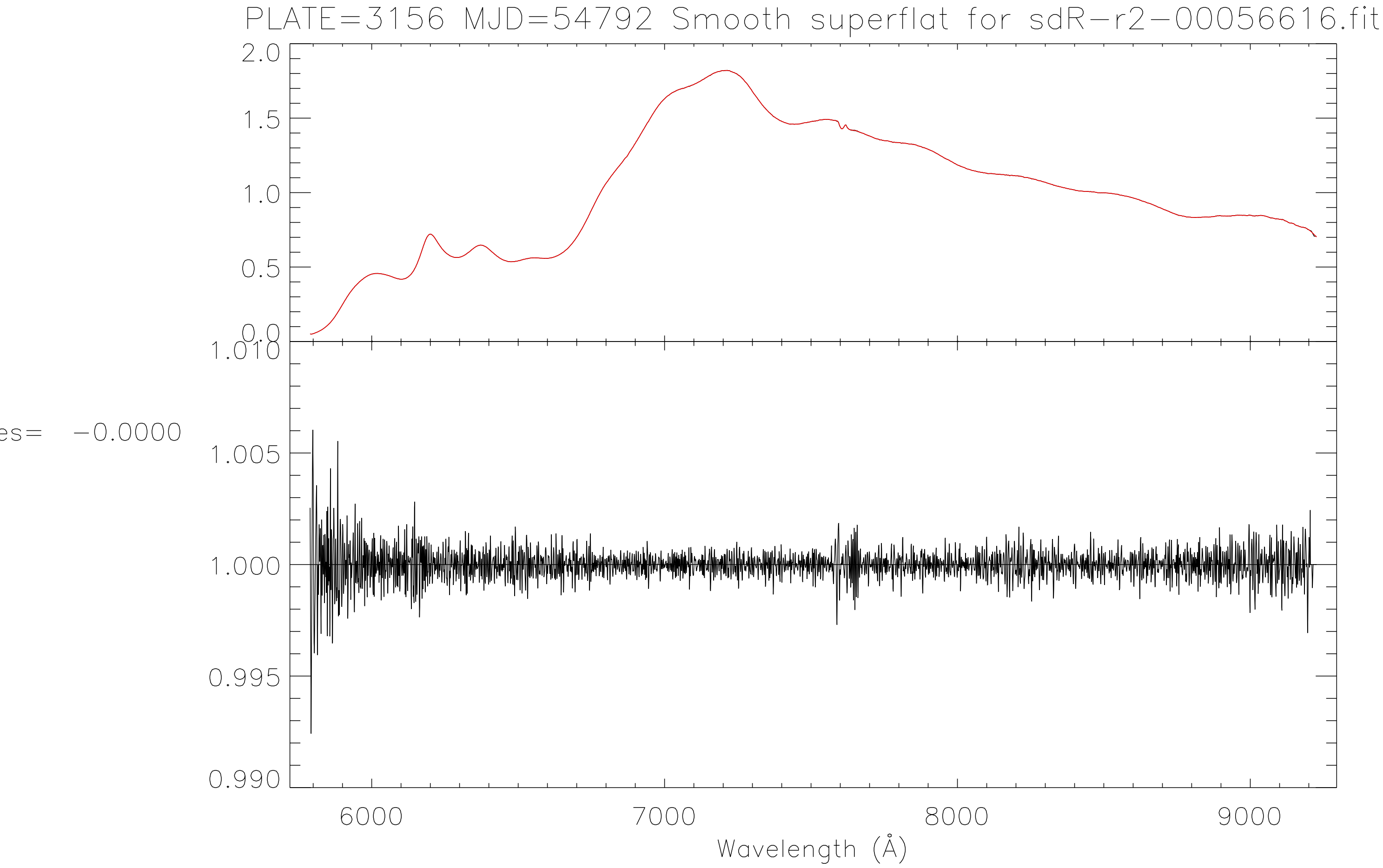

8430.1700

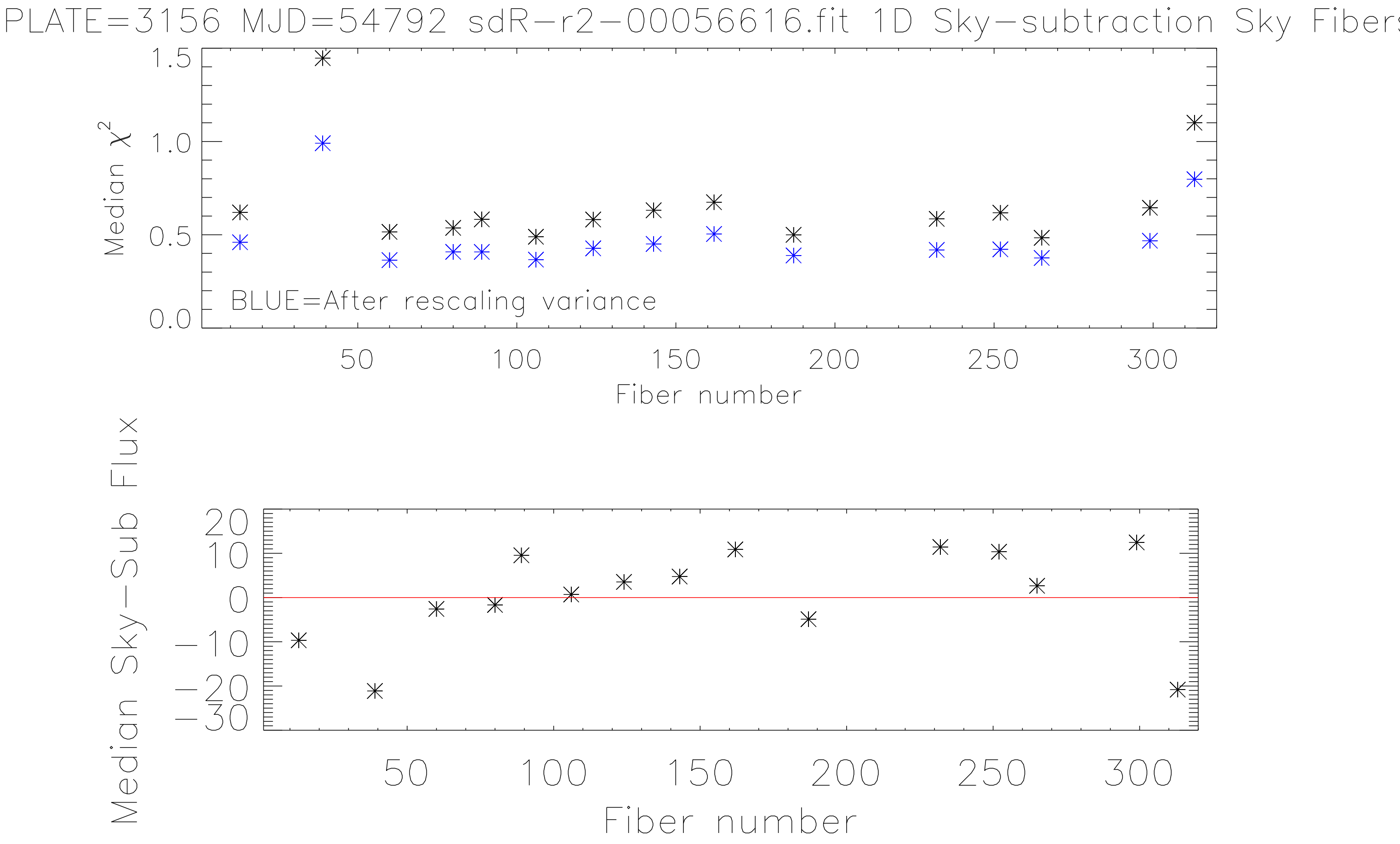

8885.8300

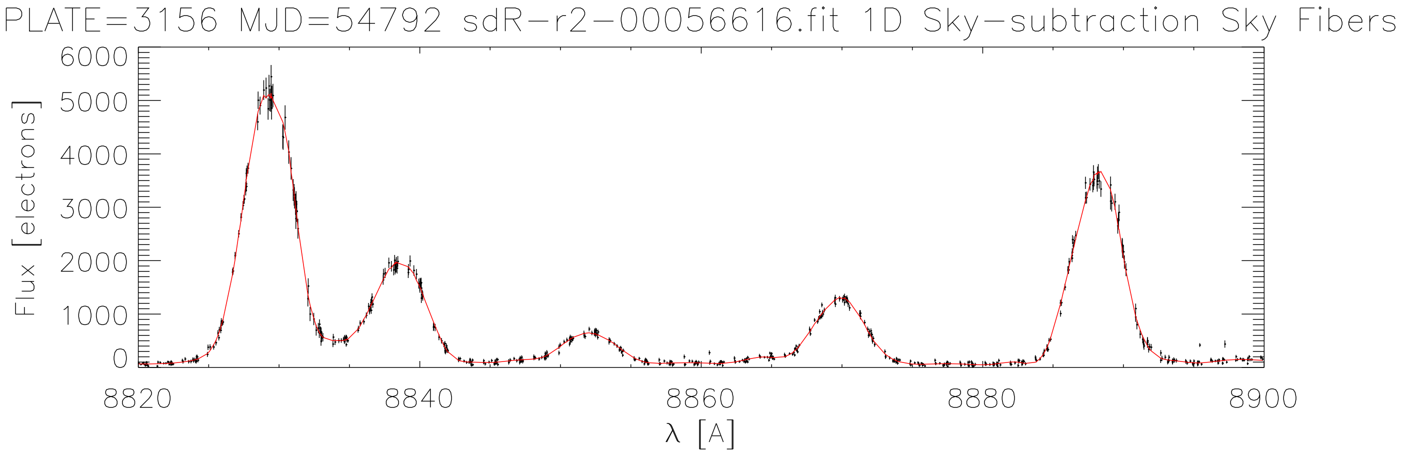

8919.6100

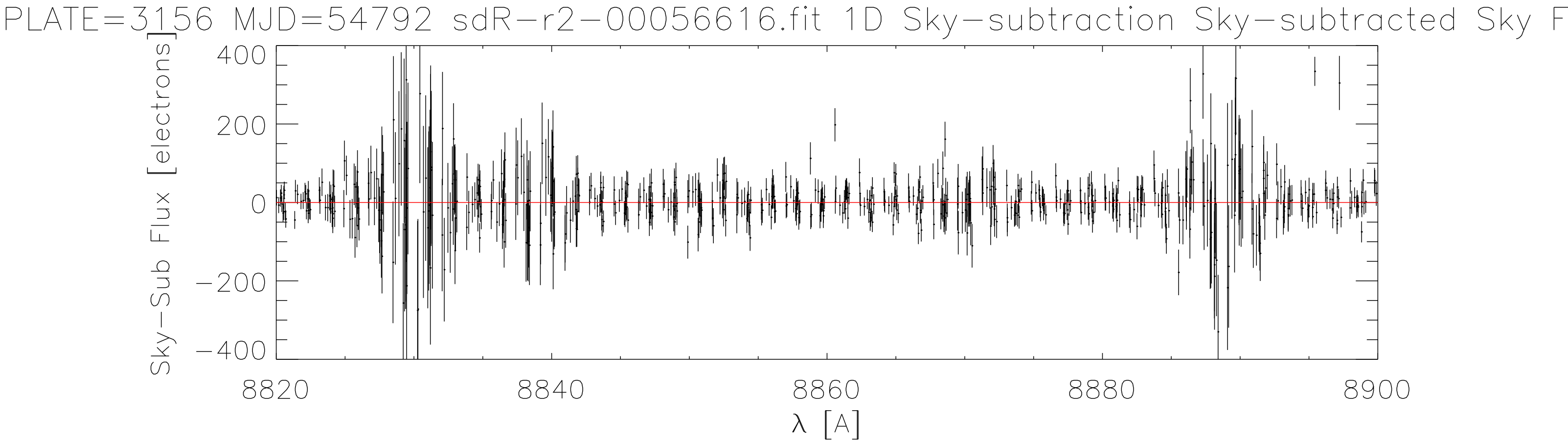

6300.3040
nfib1 15
nfib2 16
stdev 0.022
extrd −0.15
6363.7760
nfib1 16
nfib2 16
stdev 0.032
extrd −0.14
6553.6100
nfib1 16
nfib2 16
stdev 0.040
extrd −0.14
6923.2100
nfib1 15
nfib2 16
stdev 0.034
extrd −0.15
6949.0300
nfib1 15
nfib2 15
stdev 0.031
extrd −0.09
7571.7500
nfib1 15
nfib2 16
stdev 0.026
extrd −0.08
7794.1200
nfib1 16
nfib2 16
stdev 0.027
extrd −0.22
7821.5100
nfib1 16
nfib2 16
stdev 0.028
extrd −0.16
8399.1600
nfib1 16
nfib2 16
stdev 0.018
extrd −0.15
8430.1700
nfib1 16
nfib2 16
stdev 0.021
extrd −0.16
8885.8300
nfib1 16
nfib2 16
stdev 0.017
extrd −0.12
8919.6100
nfib1 16
nfib2 16
stdev 0.022
extrd −0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

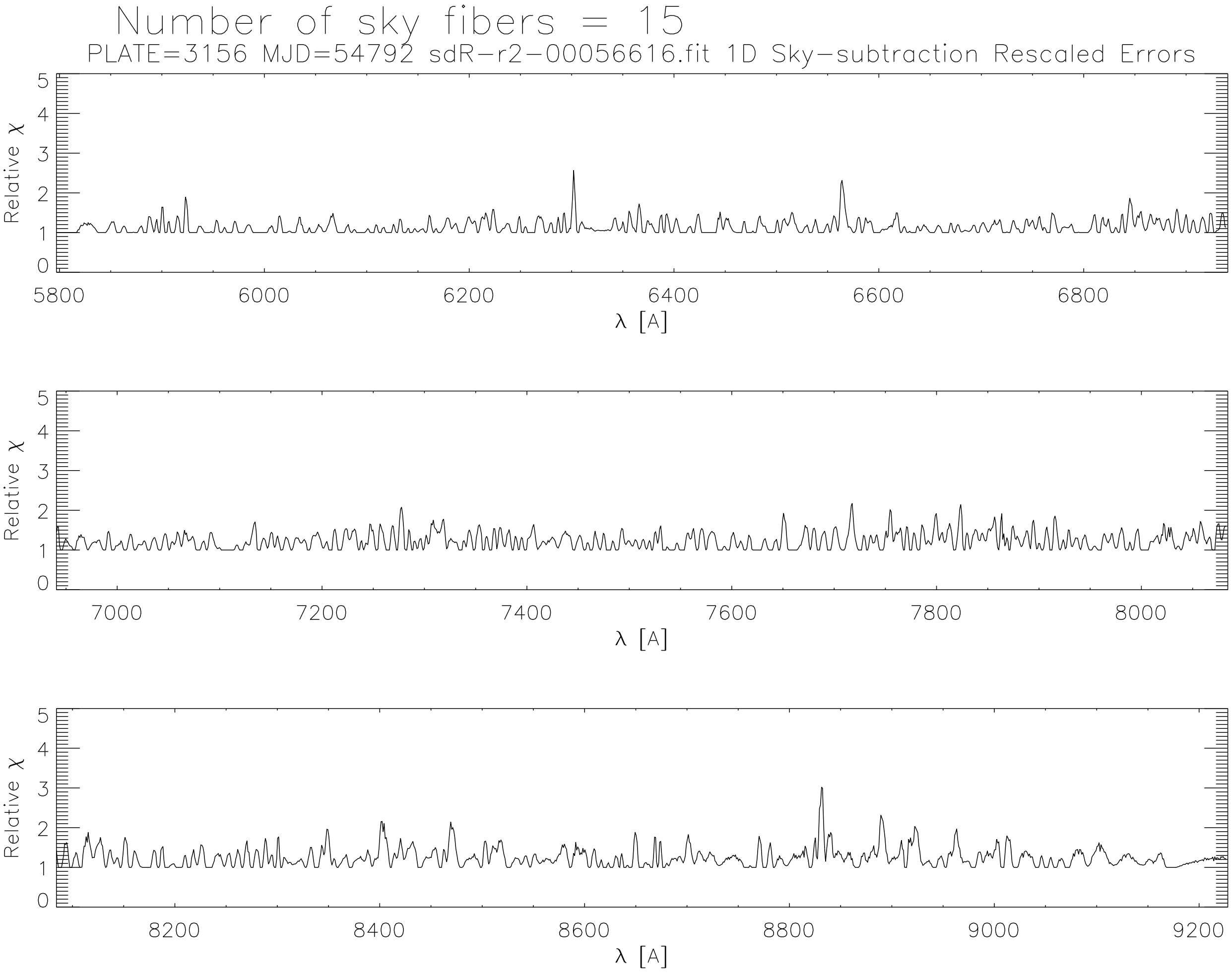

sky shift, pixels
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
5000
6000
7000
8000
9000
10000

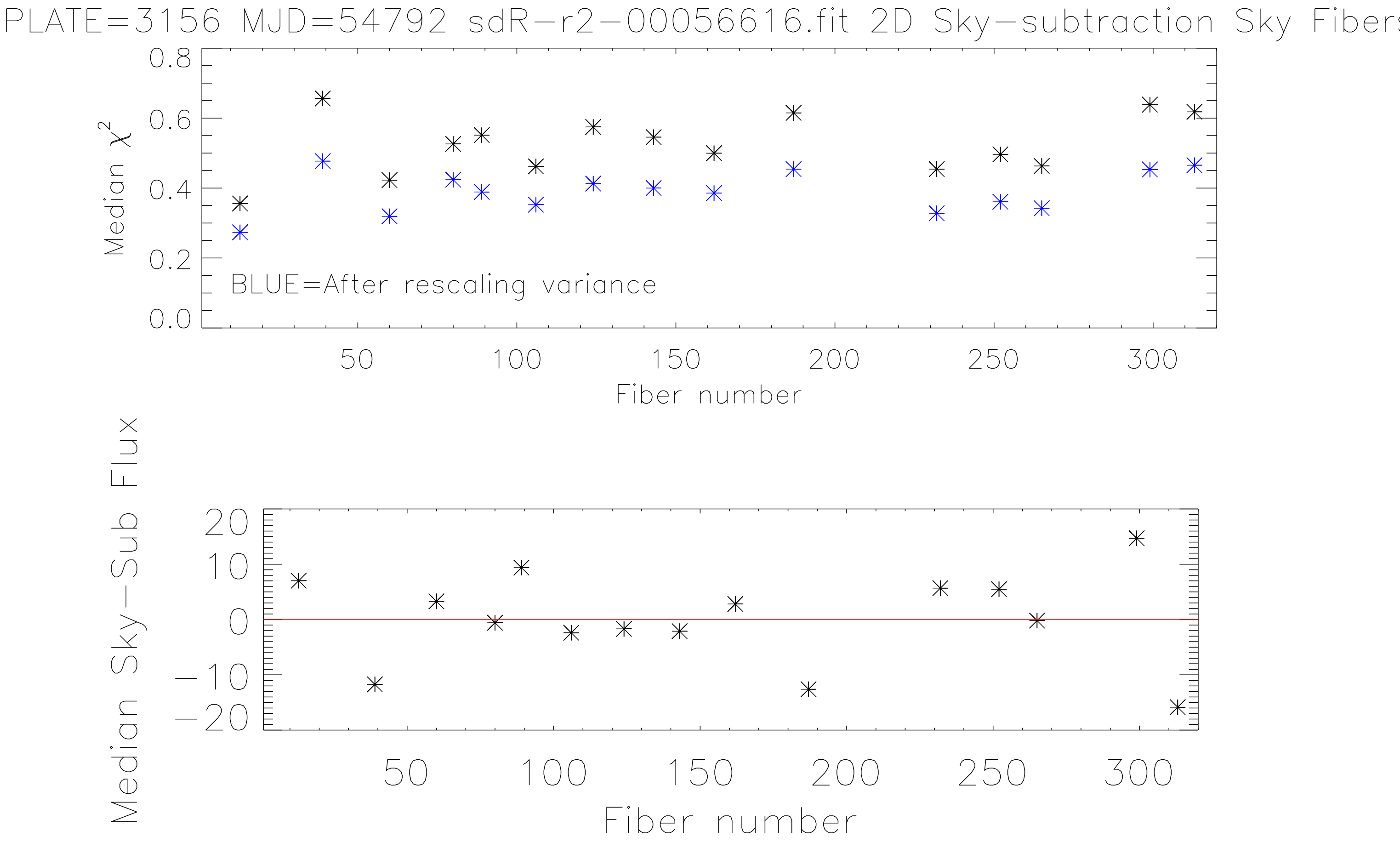

PLATE=3156 MJD=54792 Smooth superflat for sdR-r2-00056616.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

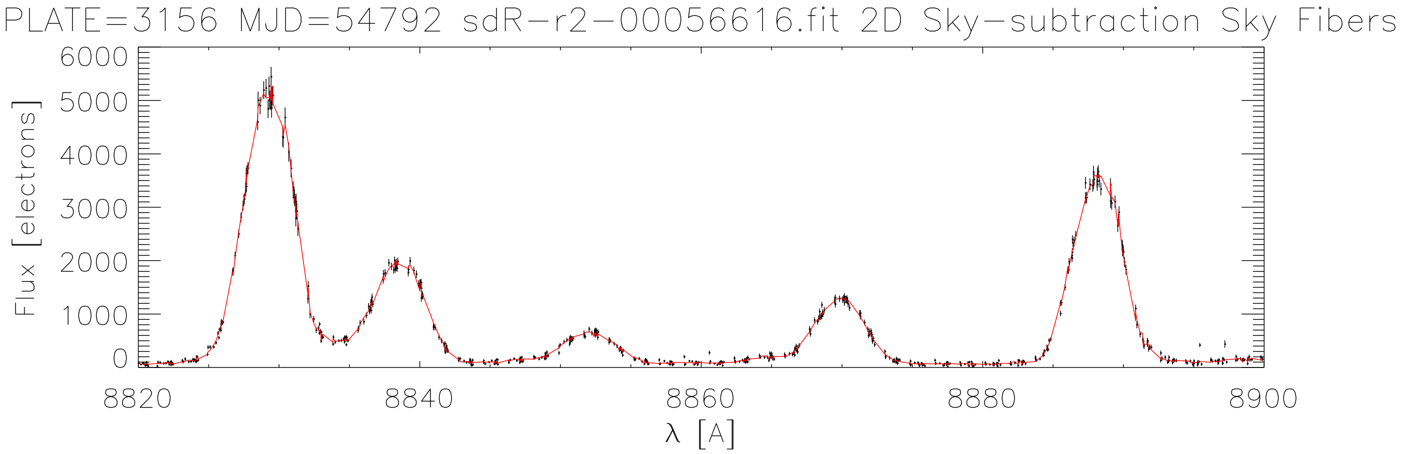

PLATE=3156 MJD=54792 sdR-r2-00056616.fit 1D Sky-subtraction Sky Fiber

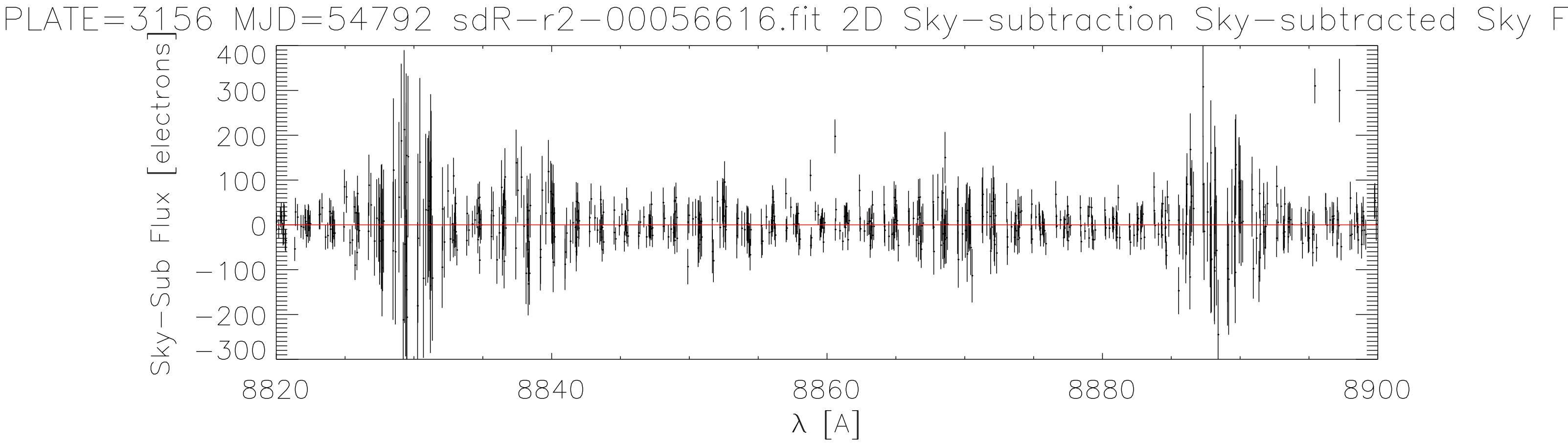

PLATE=3156 MJD=54792 sdR-r2-00056616.fit 1D Sky-subtraction Sky Fibers


PLATE=3156 MJD=54792 sdR-r2-00056616.fit 1D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 15
PLATE=3156 MJD=54792 sdR-r2-00056616.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]

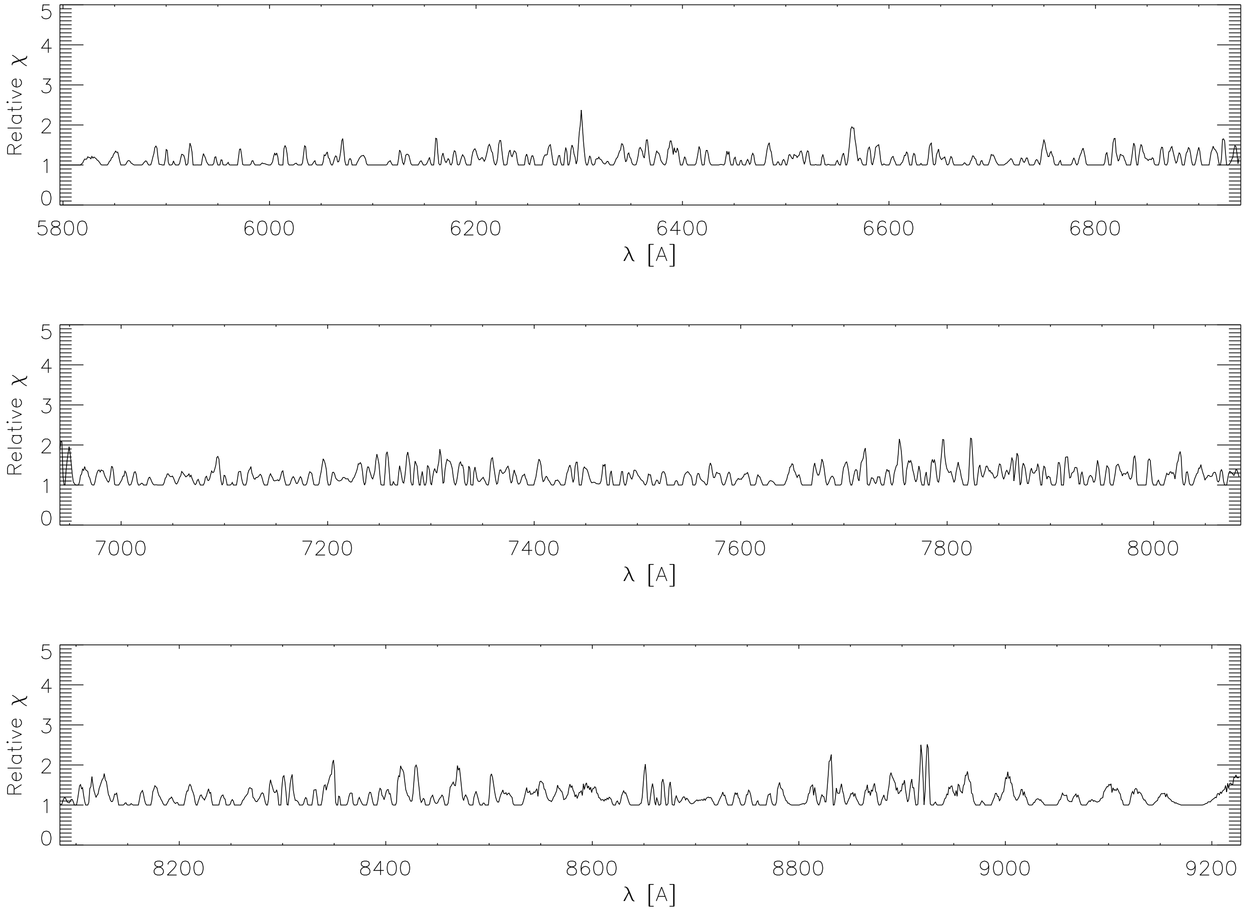

PLATE=3156 MJD=54792 sdR-r2-00056616.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−20
−10
0
10
20
50
100
150
200
250
300
Fiber number

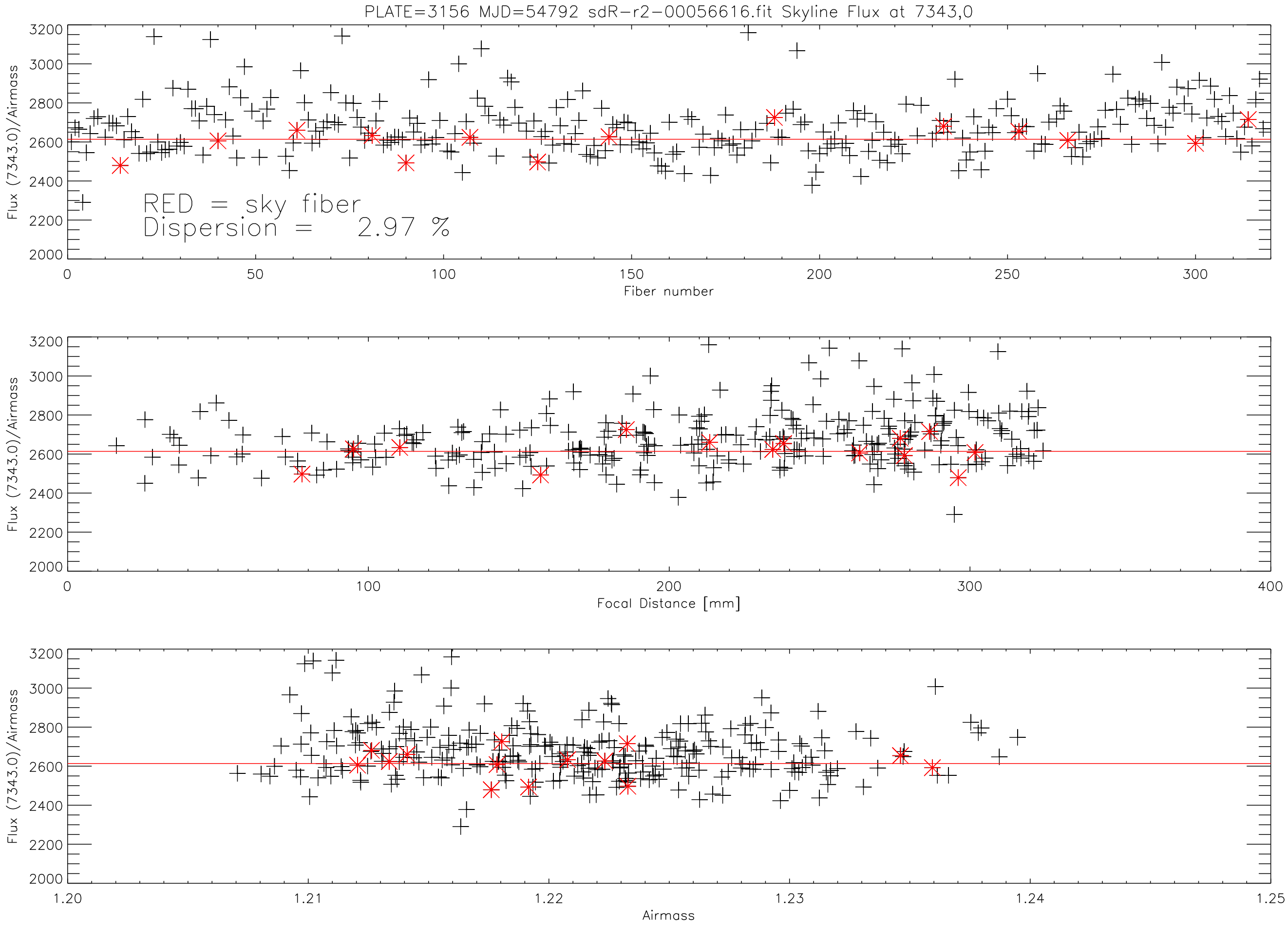

PLATE=3156 MJD=54792 sdR-r2-00056616.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

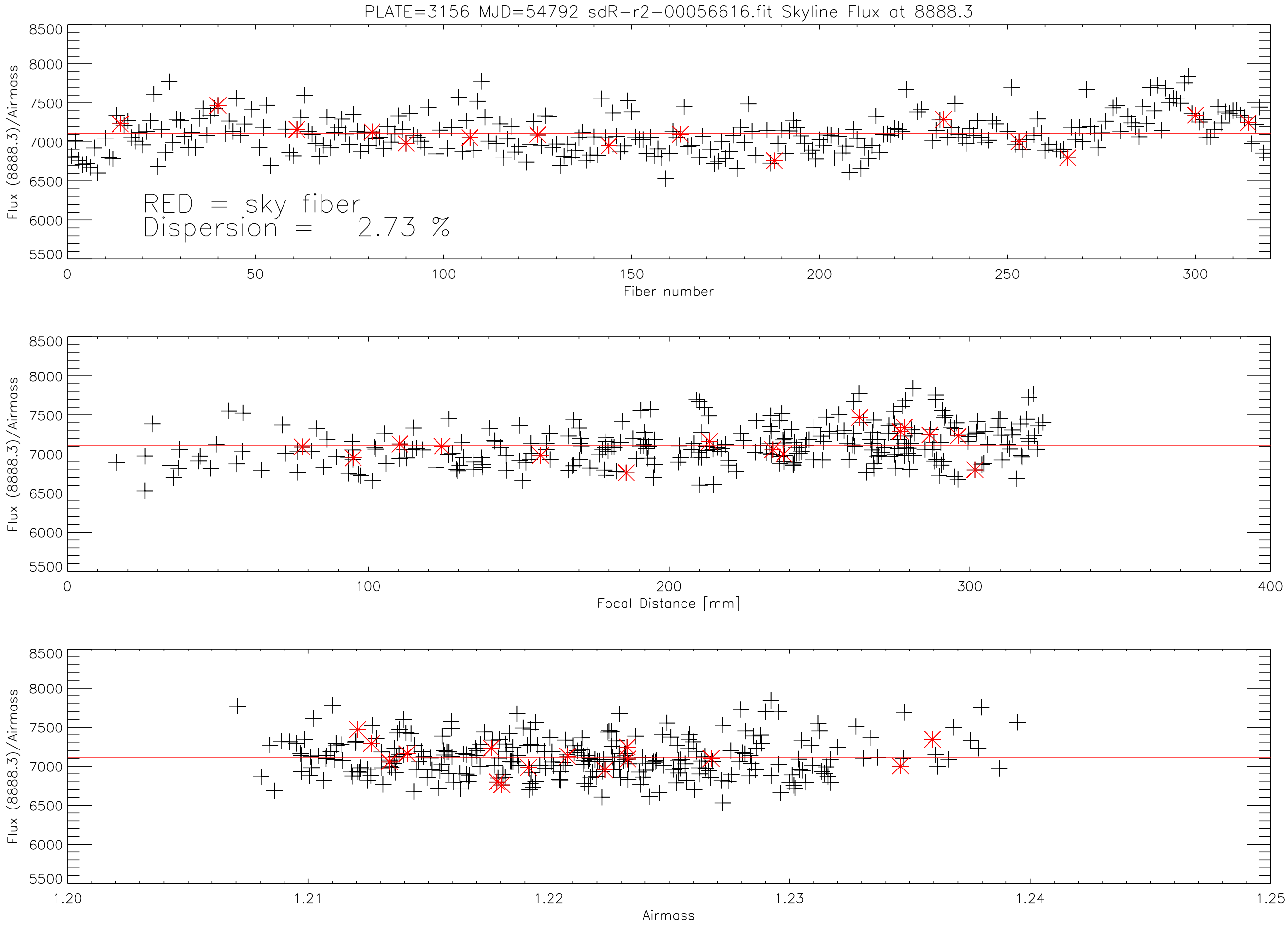

PLATE=3156 MJD=54792 sdR-r2-00056616.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 15

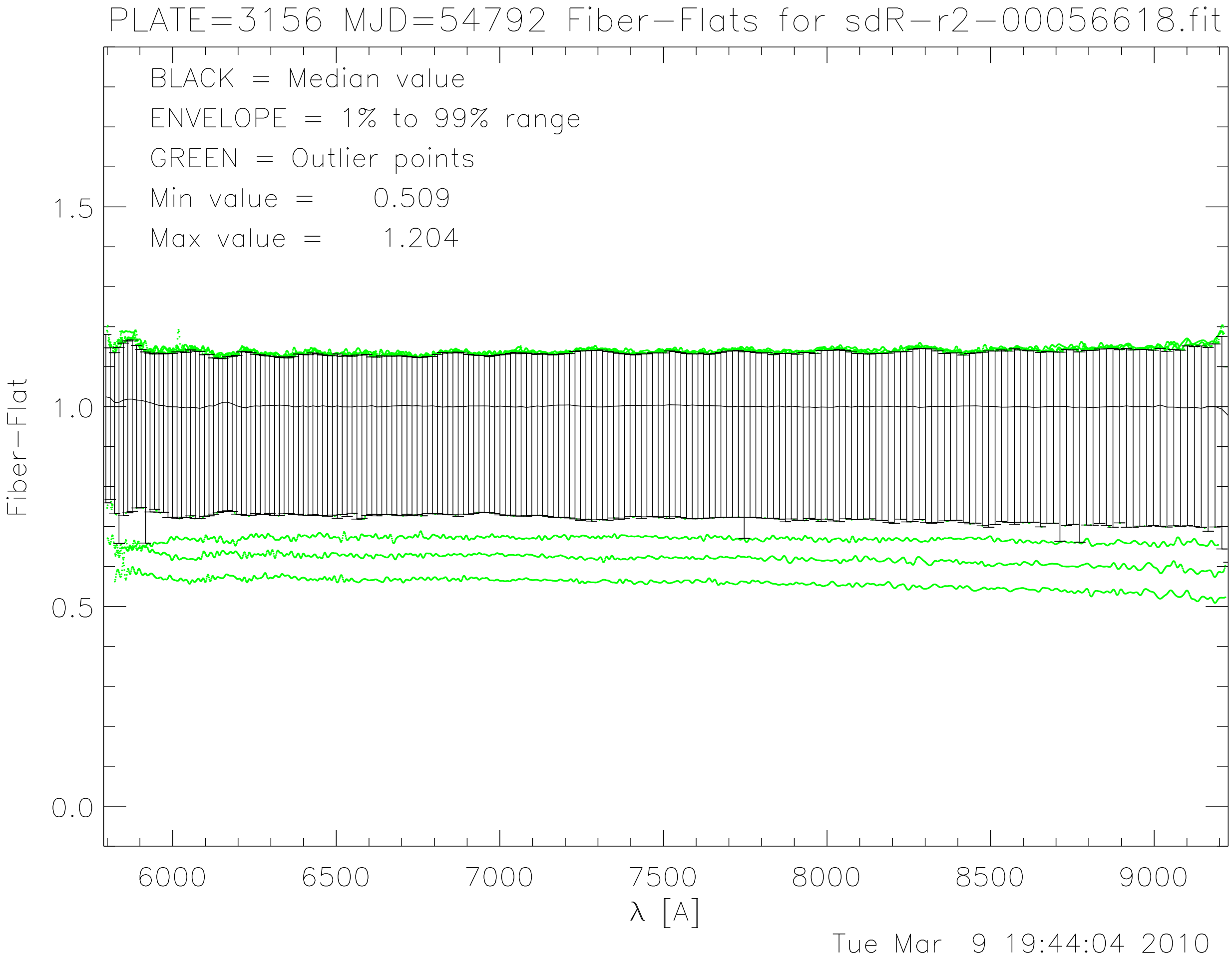
PLATE=3156 MJD=54792 sdR-r2-00056616.fit 2D Sky-subtraction Rescaled Errors

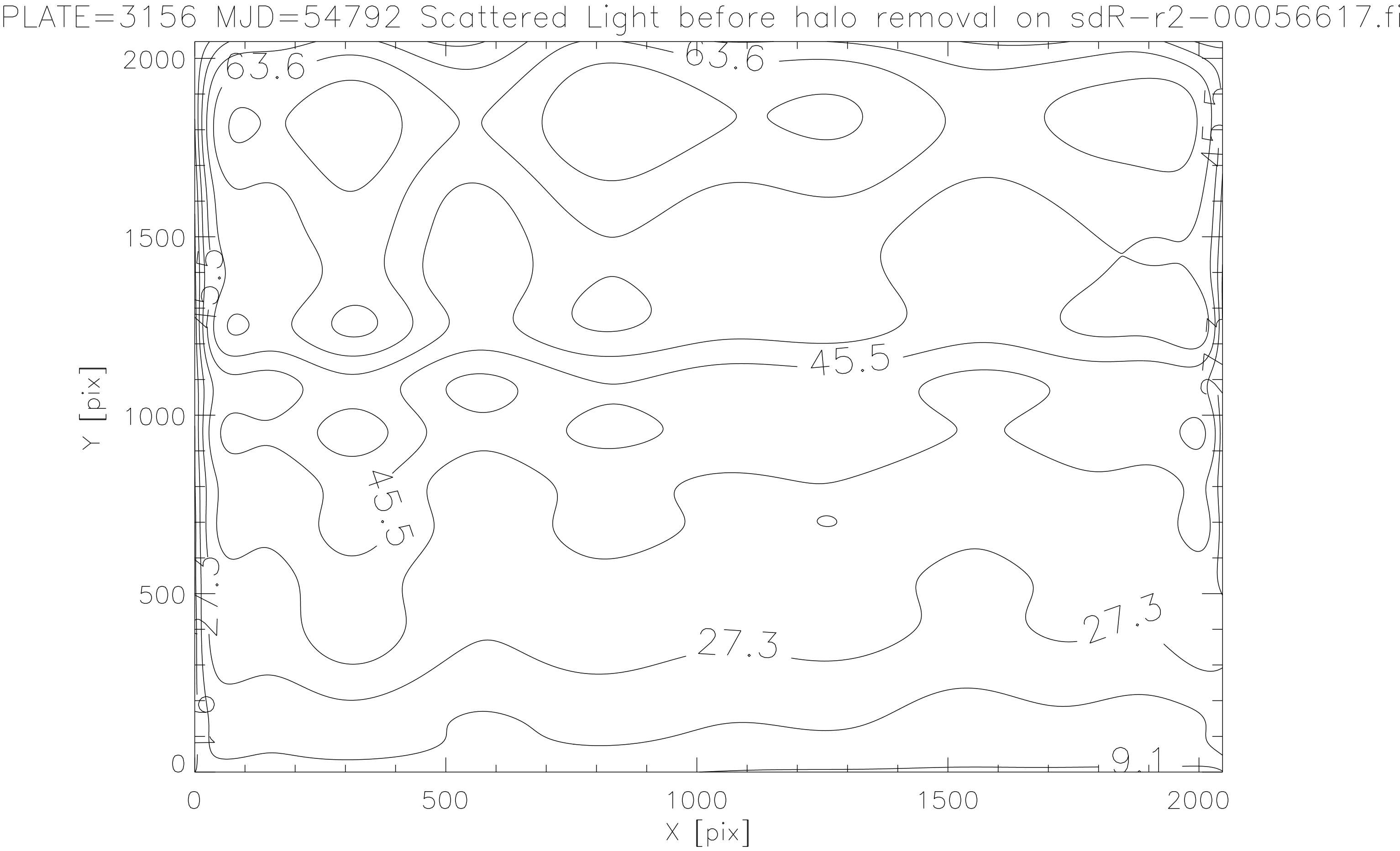



PLATE=3156 MJD=54792 sdR-r2-00056616.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.97 %
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
2000
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.20
1.21
1.22
1.23
1.24
1.25
Airmass

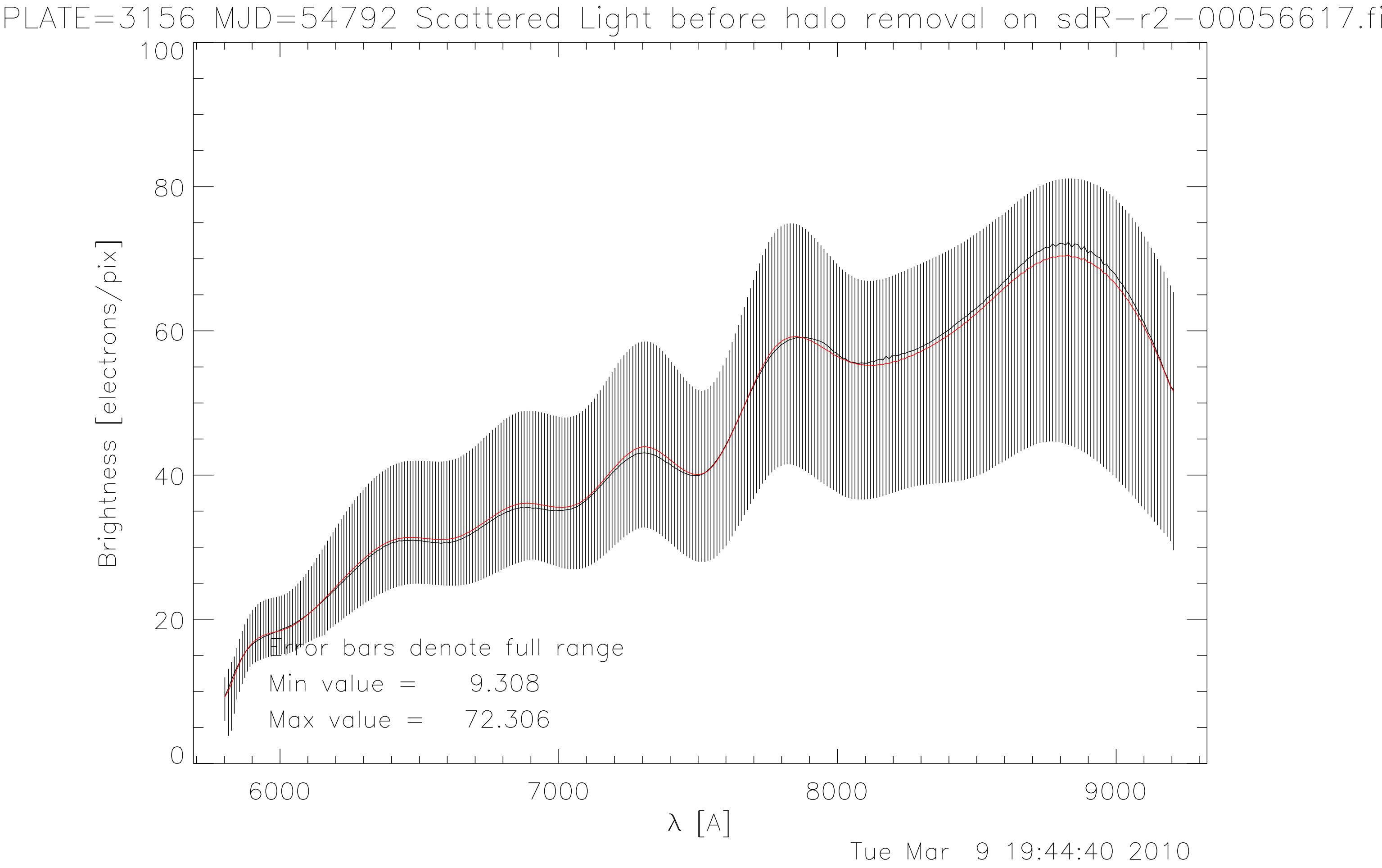


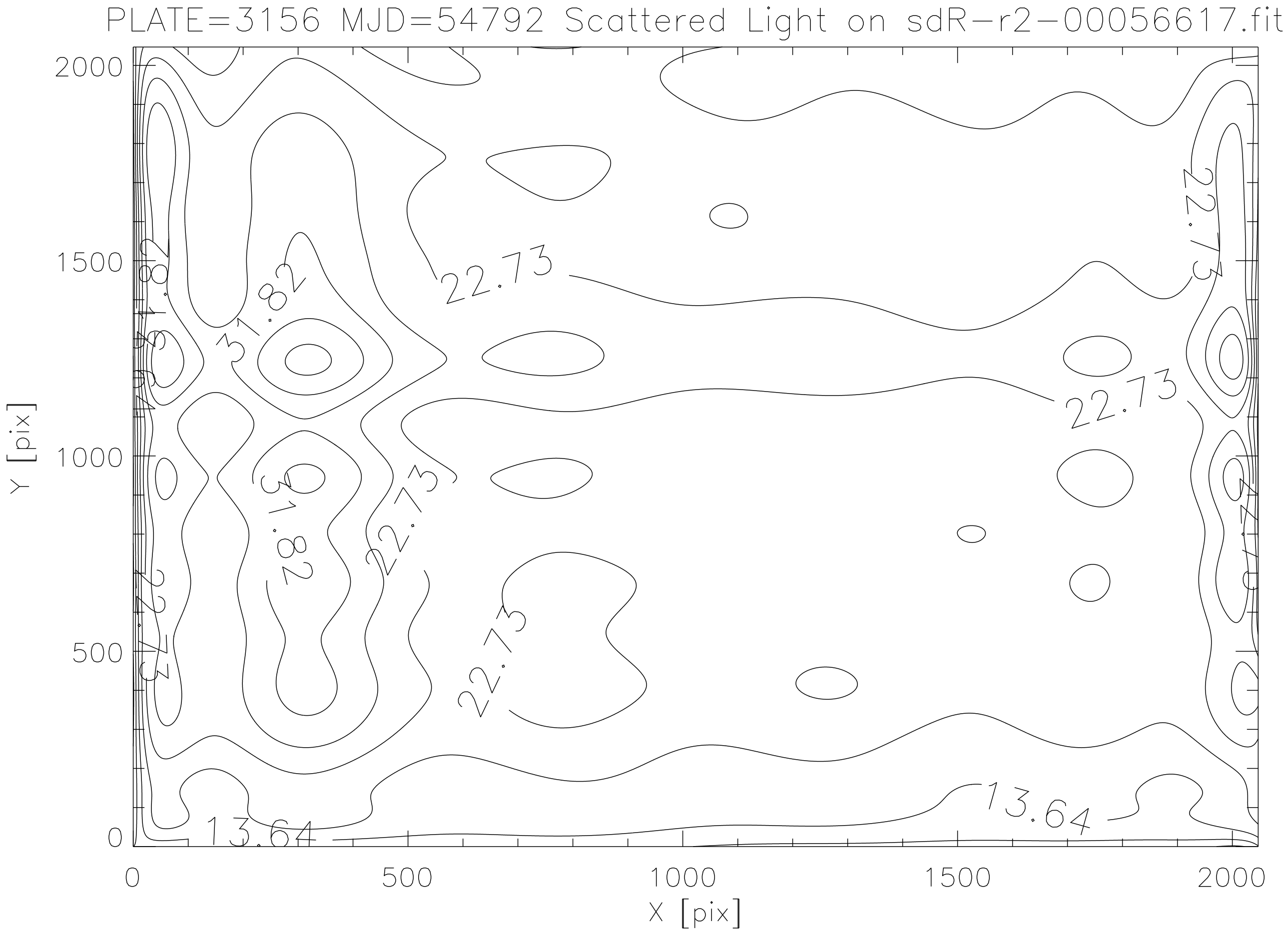
PLATE=3156 MJD=54792 sdR-r2-00056616.fit Skyline Flux at 8888.3

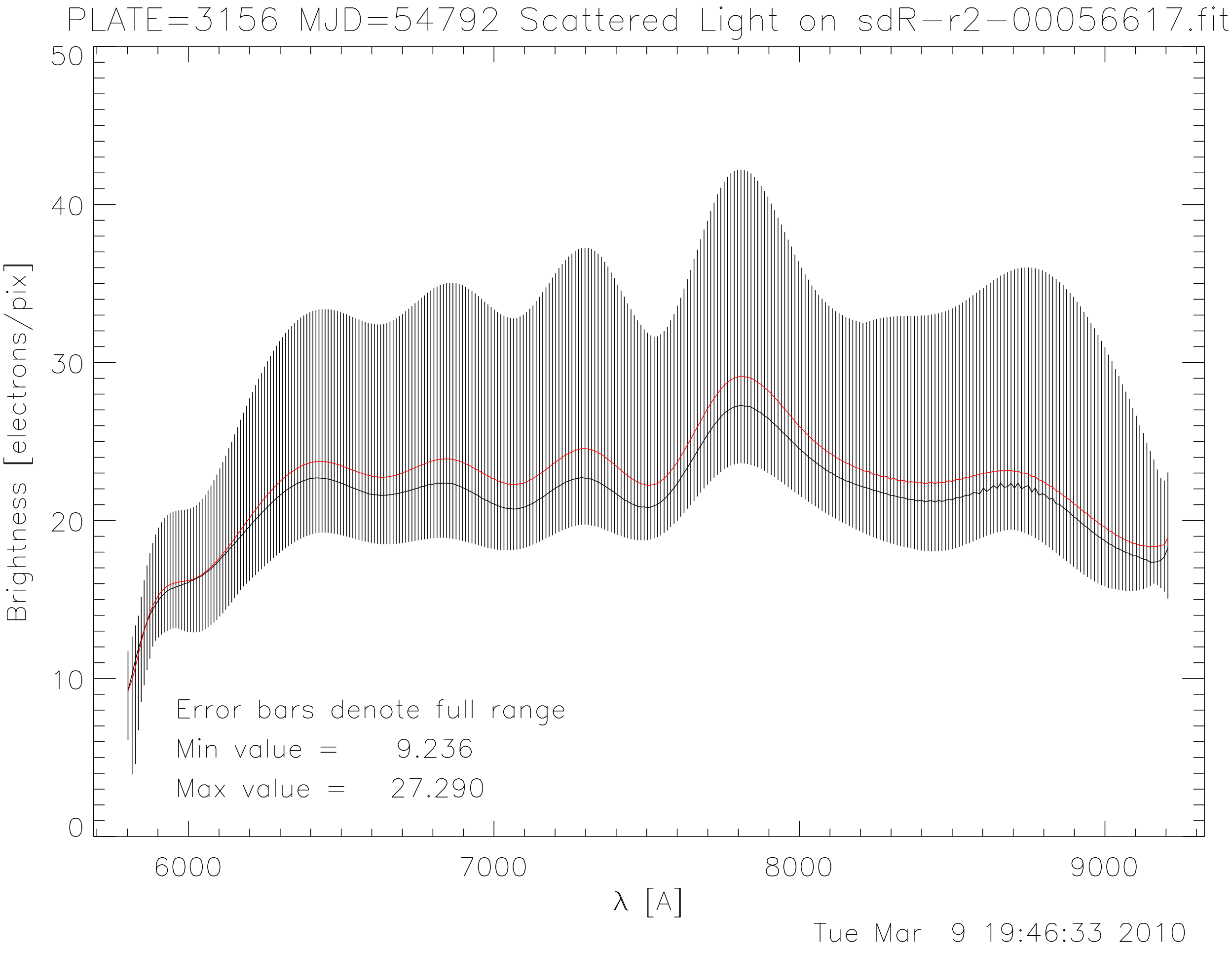

PLATE=3156 MJD=54792 Fiber-Flats for sdR-r2-00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.509
Max value = 1.204
Fiber-Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 9 19:44:04 2010

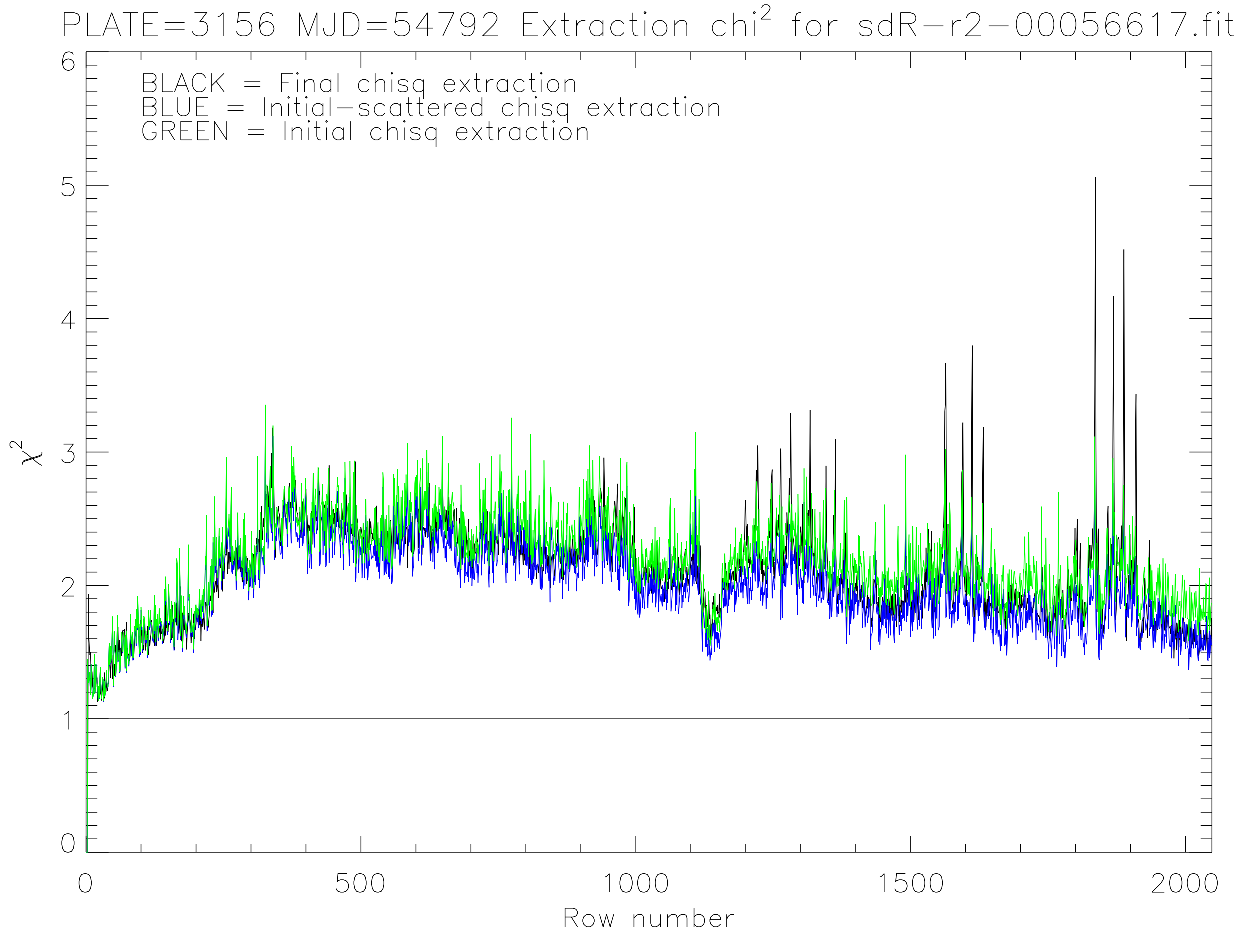


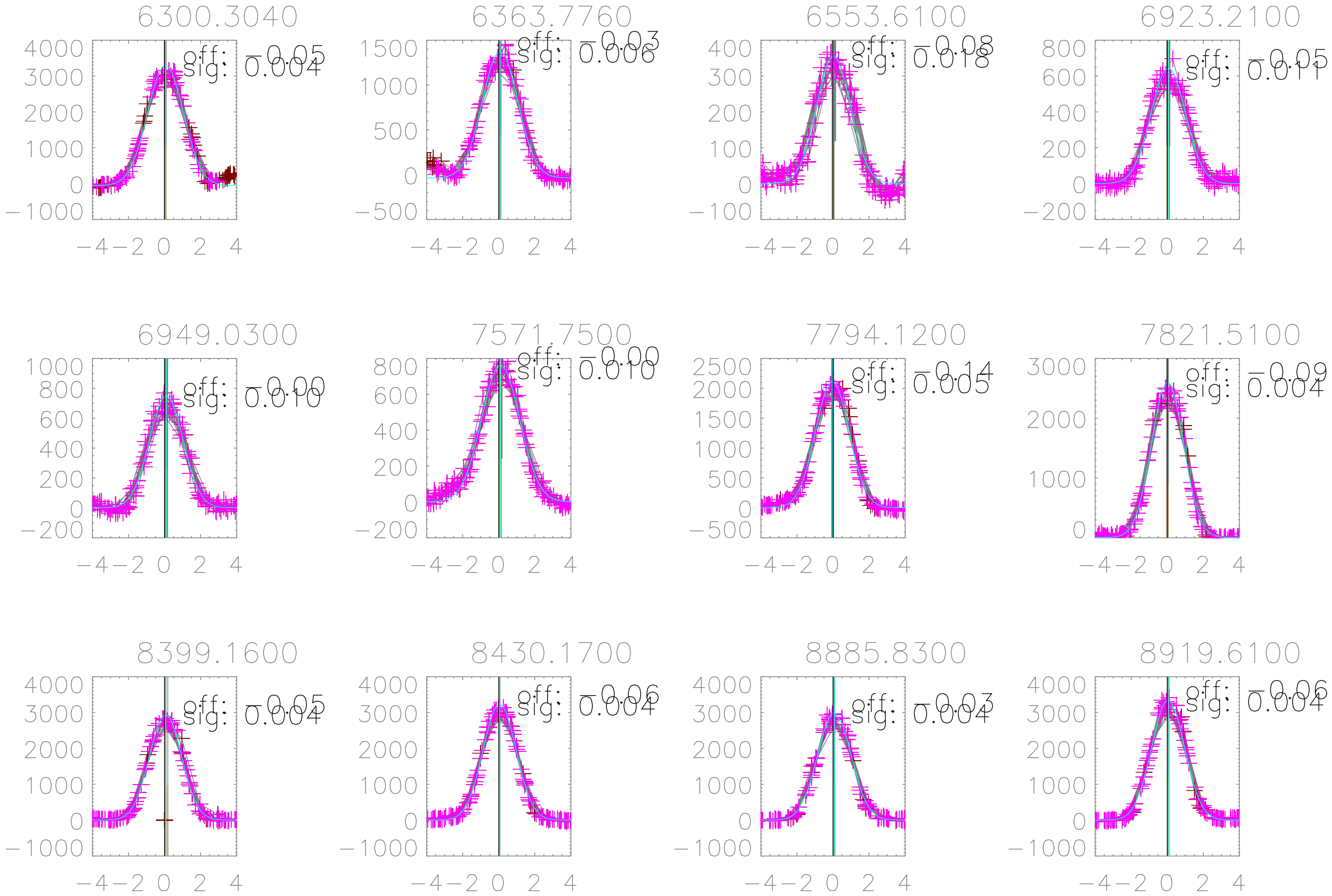
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056617.fi

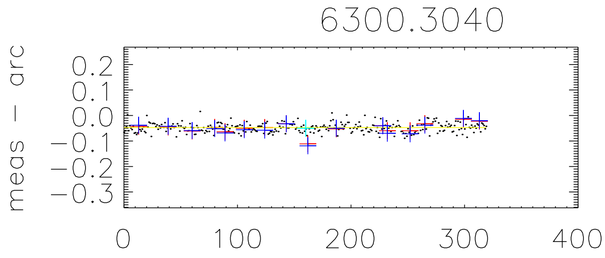

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056617.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.308
Max value = 72.306
Tue Mar 9 19:44:40 2010

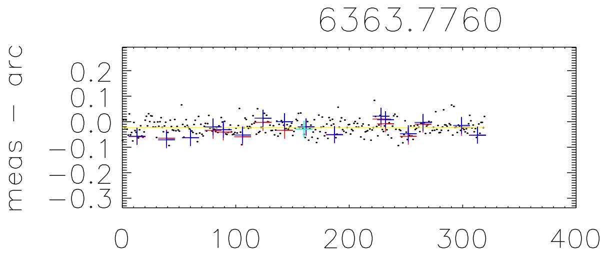

PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056617.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
22.73
31.82
13.64

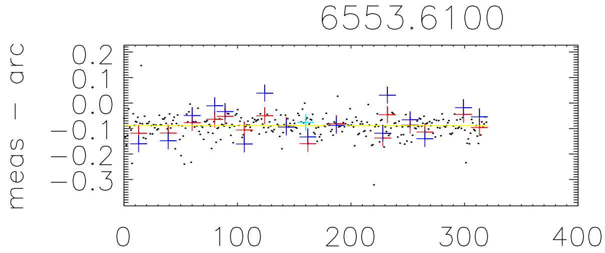

PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056617.fit
Brightness [electrons/pix]
0
10
20
30
40
50
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.236
Max value = 27.290
Tue Mar 9 19:46:33 2010

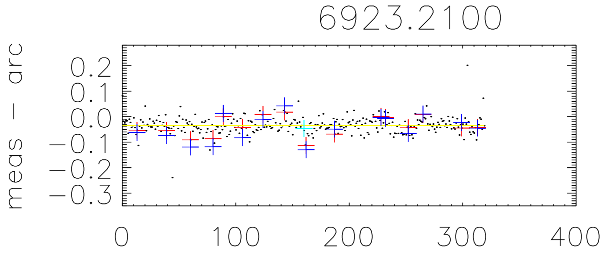

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r2-00056617.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

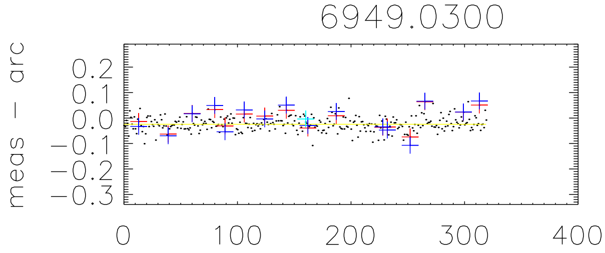

6300.3040
off: −0.05
sig: 0.004
6363.7760
off: −0.03
sig: 0.006
6553.6100
off: −0.08
sig: 0.018
6923.2100
off: −0.05
sig: 0.011
6949.0300
off: −0.00
sig: 0.010
7571.7500
off: −0.00
sig: 0.010
7794.1200
off: −0.14
sig: 0.005
7821.5100
off: −0.09
sig: 0.004
8399.1600
off: −0.05
sig: 0.004
8430.1700
off: −0.06
sig: 0.004
8885.8300
off: −0.03
sig: 0.004
8919.6100
off: −0.06
sig: 0.004
−4 −2 0 2 4

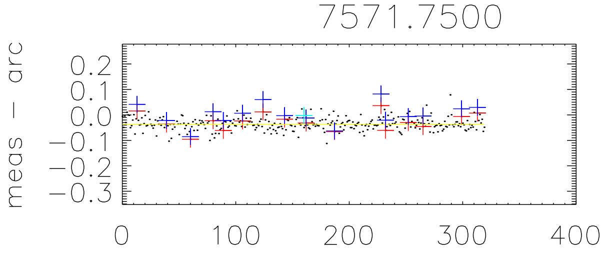

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

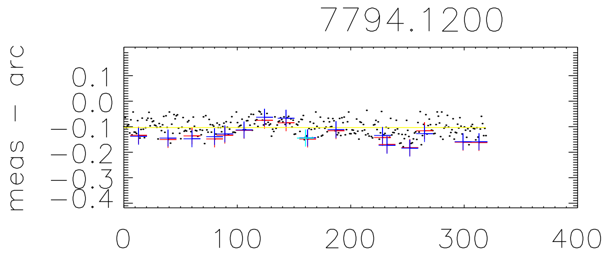

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

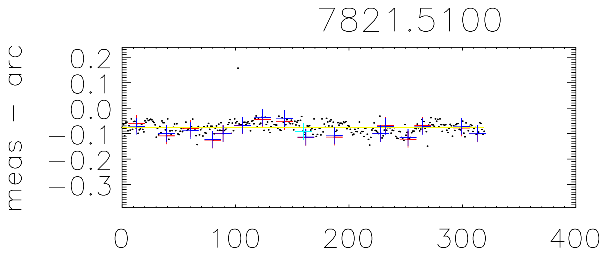

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

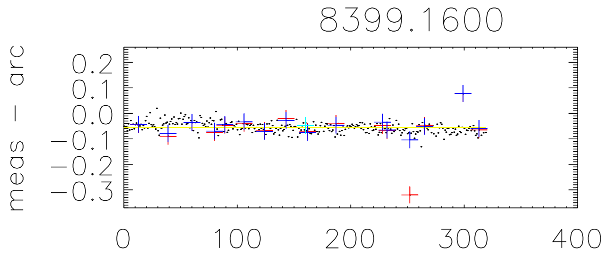

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

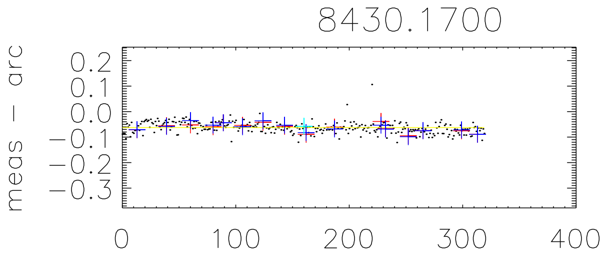

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

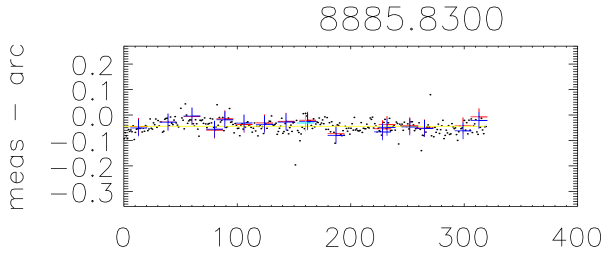

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

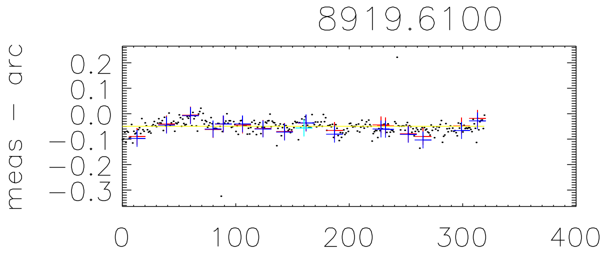

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

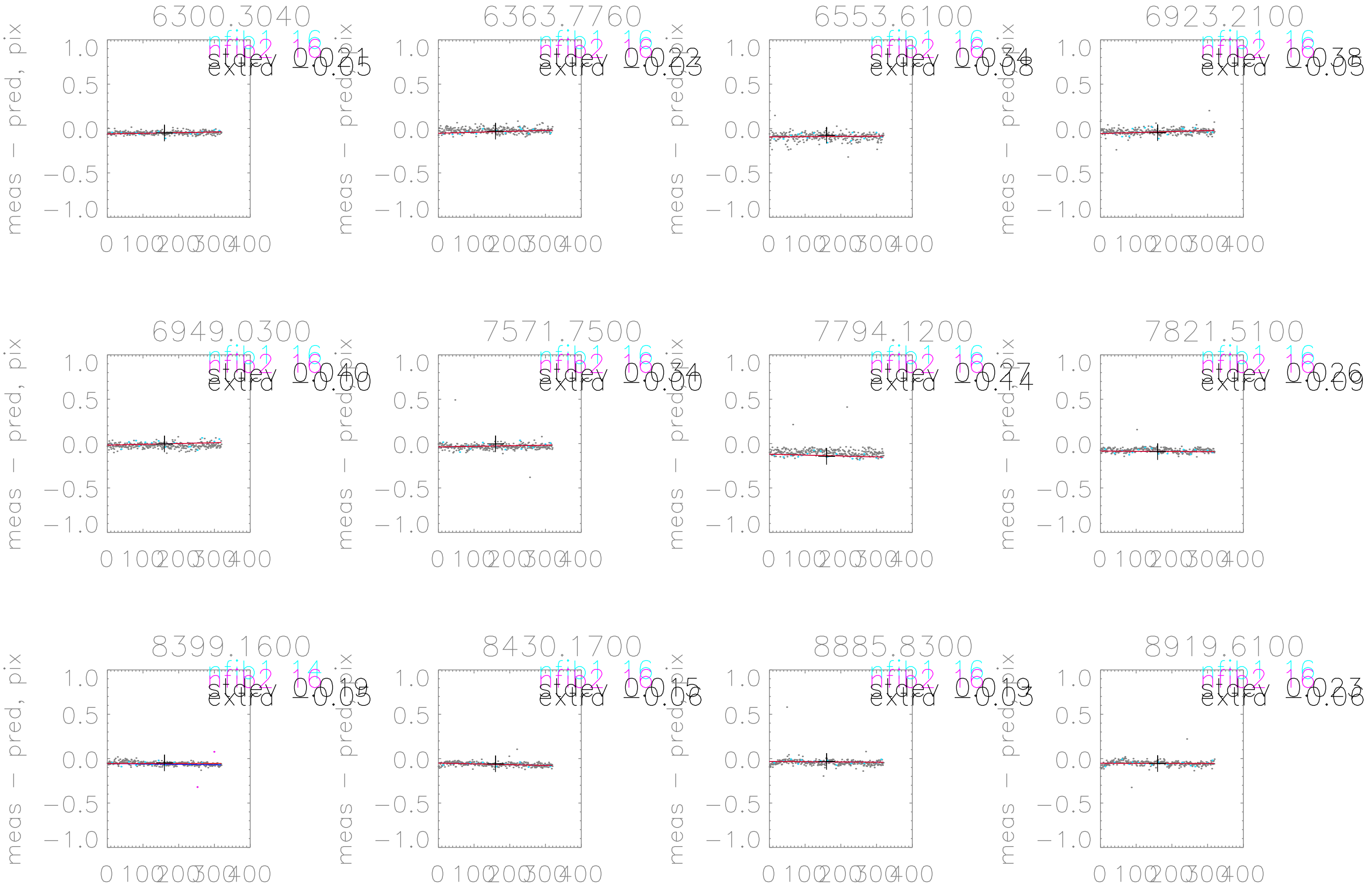

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

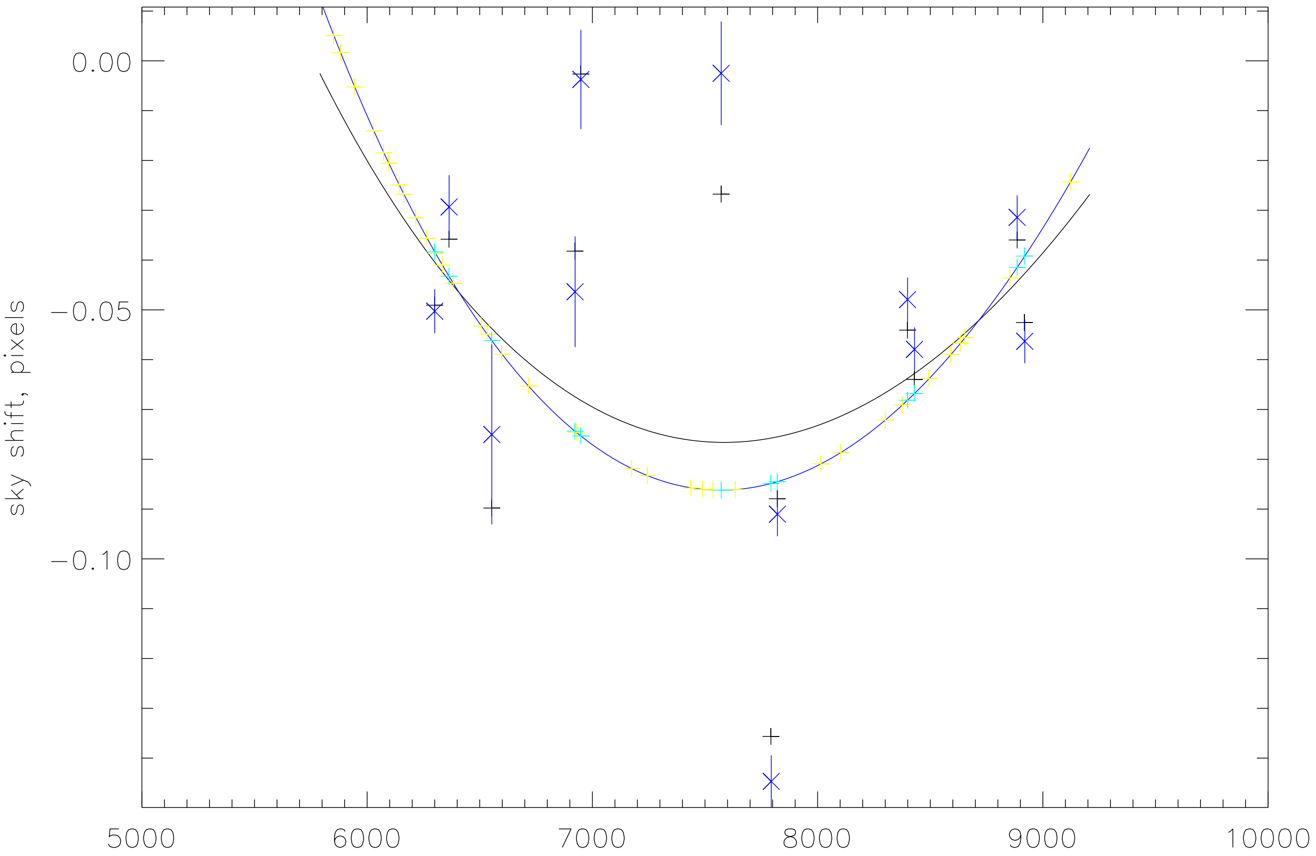

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

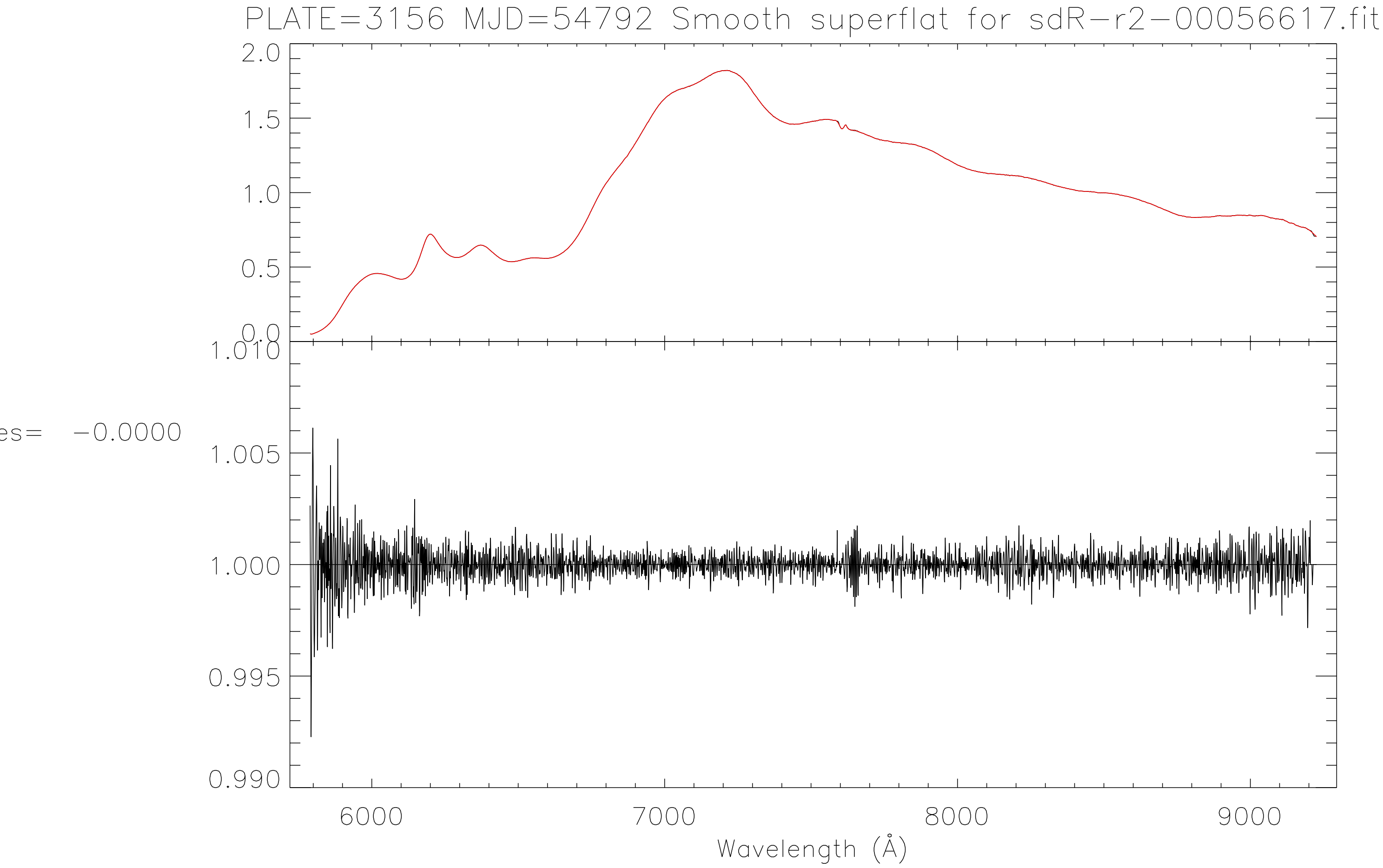

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

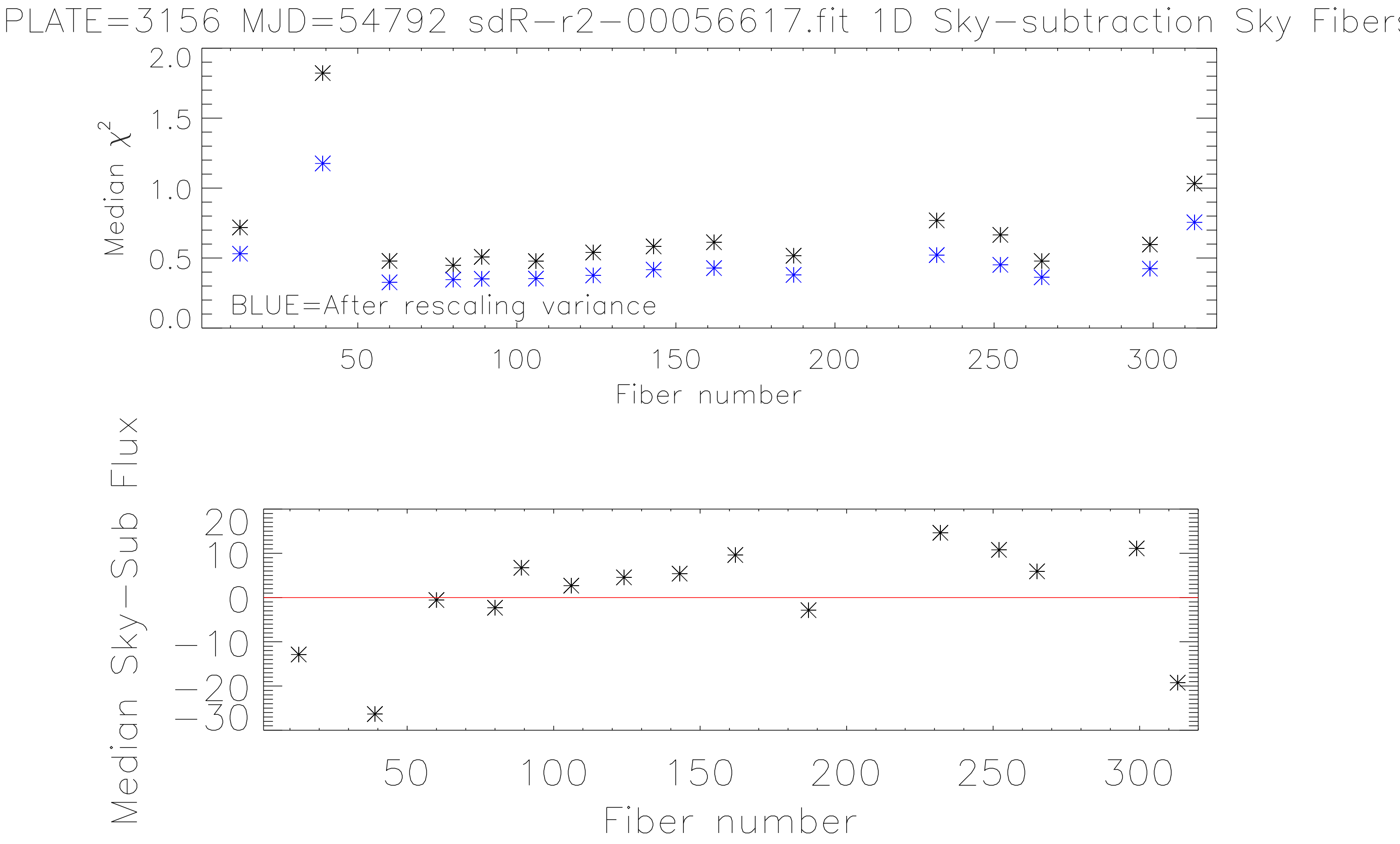

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

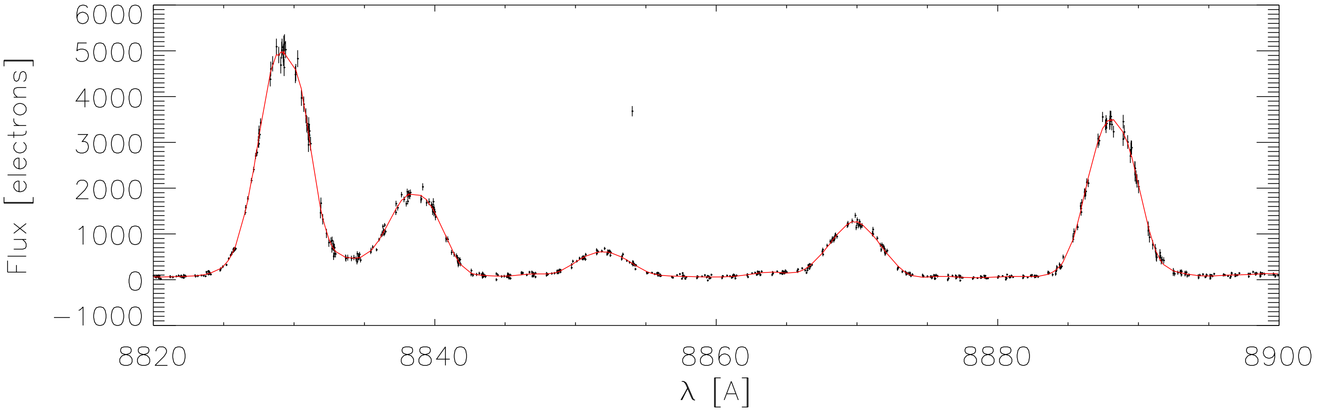

6300.3040
nfib1 16
nfib2 16
stdev 0.021
extrd −0.05
6363.7760
nfib1 16
nfib2 16
stdev 0.022
extrd −0.03
6553.6100
nfib1 16
nfib2 16
stdev 0.034
extrd −0.08
6923.2100
nfib1 16
nfib2 16
stdev 0.038
extrd −0.05
6949.0300
nfib1 16
nfib2 16
stdev 0.040
extrd −0.00
7571.7500
nfib1 16
nfib2 16
stdev 0.034
extrd −0.00
7794.1200
nfib1 16
nfib2 16
stdev 0.027
extrd −0.14
7821.5100
nfib1 16
nfib2 16
stdev 0.026
extrd −0.09
8399.1600
nfib1 14
nfib2 16
stdev 0.019
extrd −0.05
8430.1700
nfib1 16
nfib2 16
stdev 0.015
extrd −0.06
8885.8300
nfib1 16
nfib2 16
stdev 0.019
extrd −0.03
8919.6100
nfib1 16
nfib2 16
stdev 0.023
extrd −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000

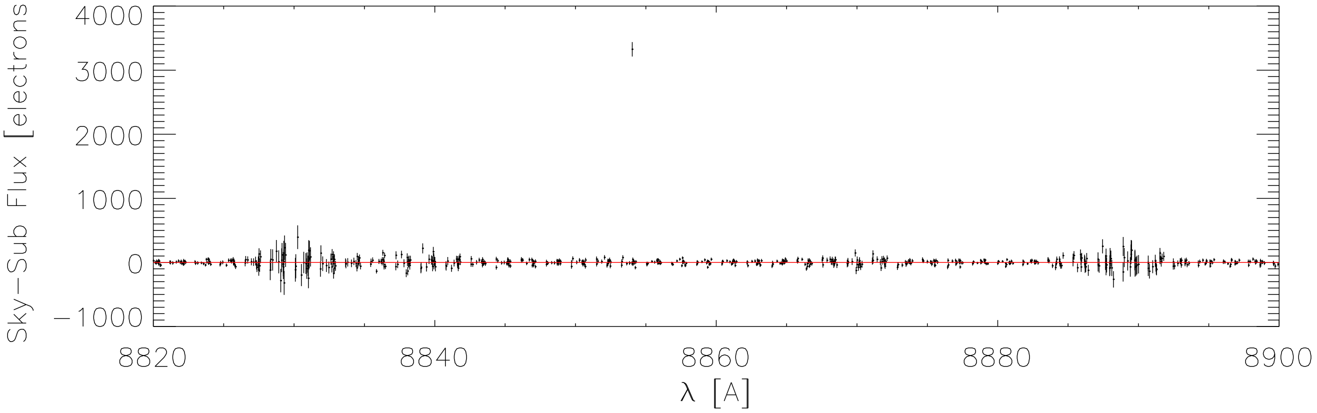

PLATE=3156 MJD=54792 Smooth superflat for sdR-r2-00056617.fit
2.0
1.5
1.0
0.5
0.0
1.010
es= −0.0000
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

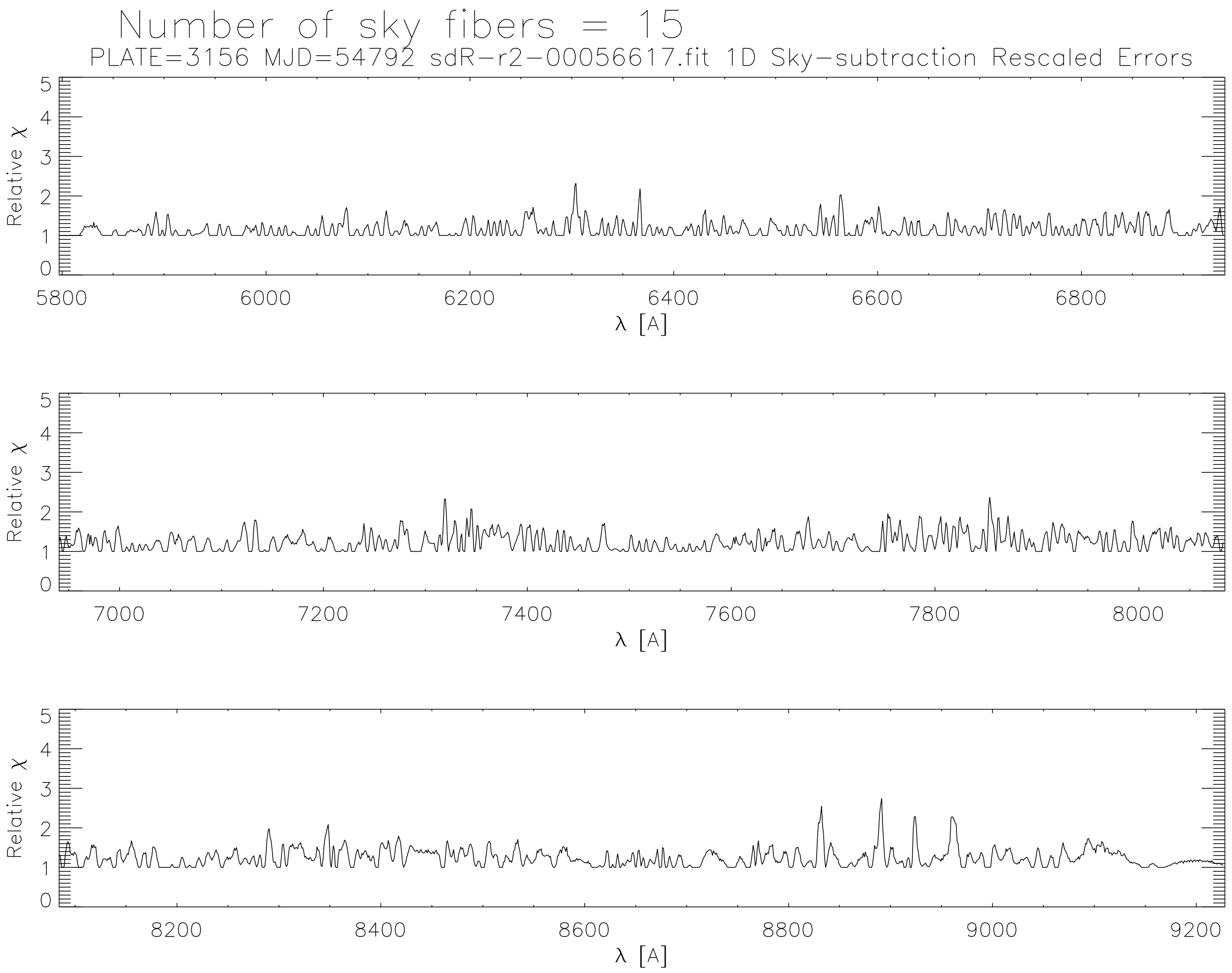

PLATE=3156 MJD=54792 sdR-r2-00056617.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

PLATE=3156 MJD=54792 sdR-r2-00056617.fit 1D Sky-subtraction Sky Fibers

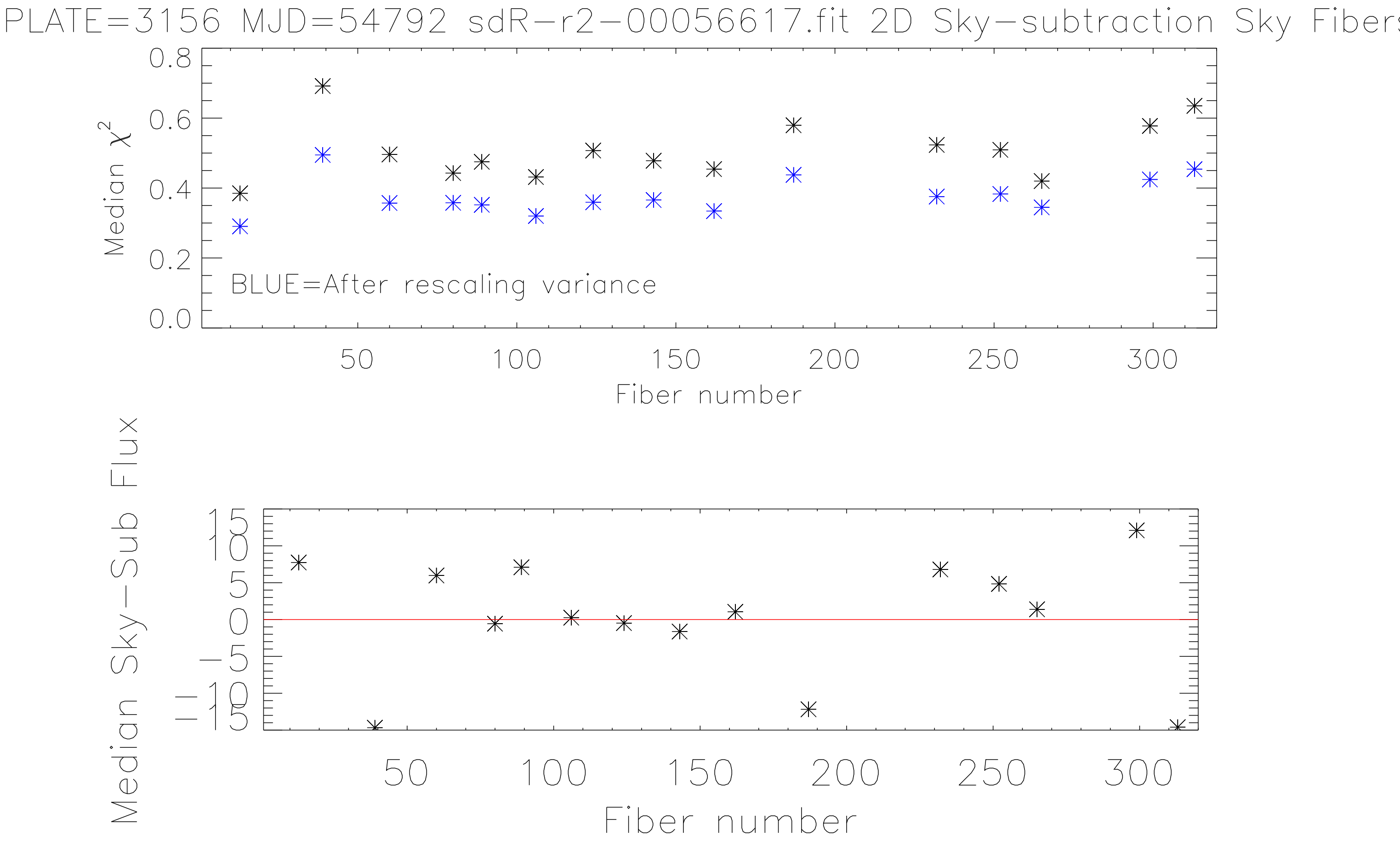


PLATE=3156 MJD=54792 sdR-r2-00056617.fit 1D Sky-subtraction Sky-subtracted Sky F

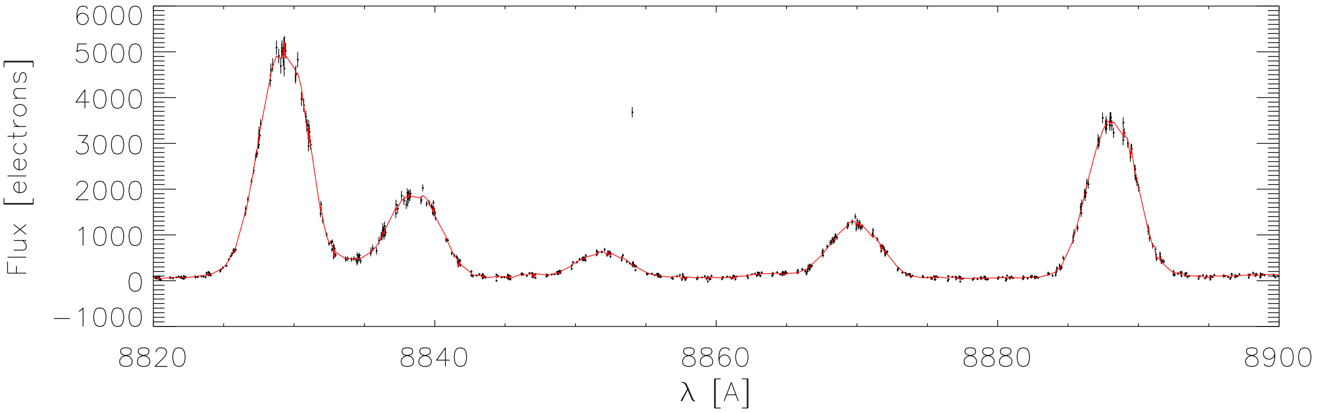



Number of sky fibers = 15

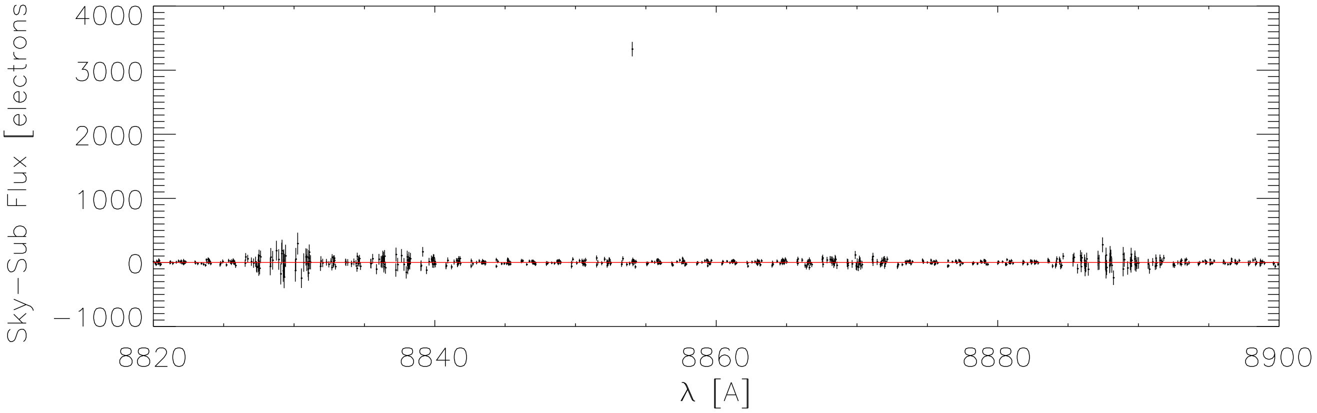
PLATE=3156 MJD=54792 sdR-r2-00056617.fit 1D Sky-subtraction Rescaled Errors


PLATE=3156 MJD=54792 sdR-r2-00056617.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
15
50
100
150
200
250
300
Fiber number

PLATE=3156 MJD=54792 sdR-r2-00056617.fit 2D Sky-subtraction Sky Fibers

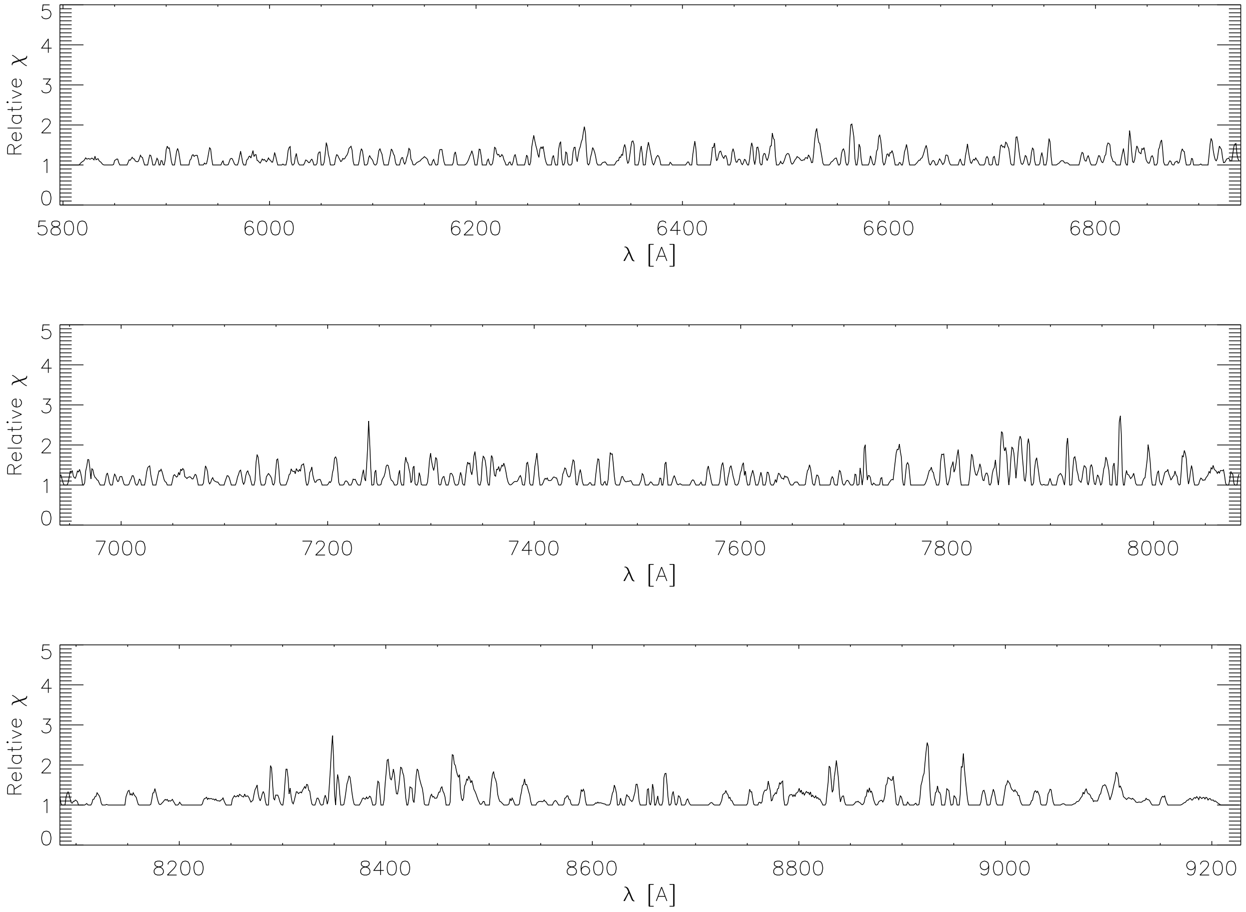


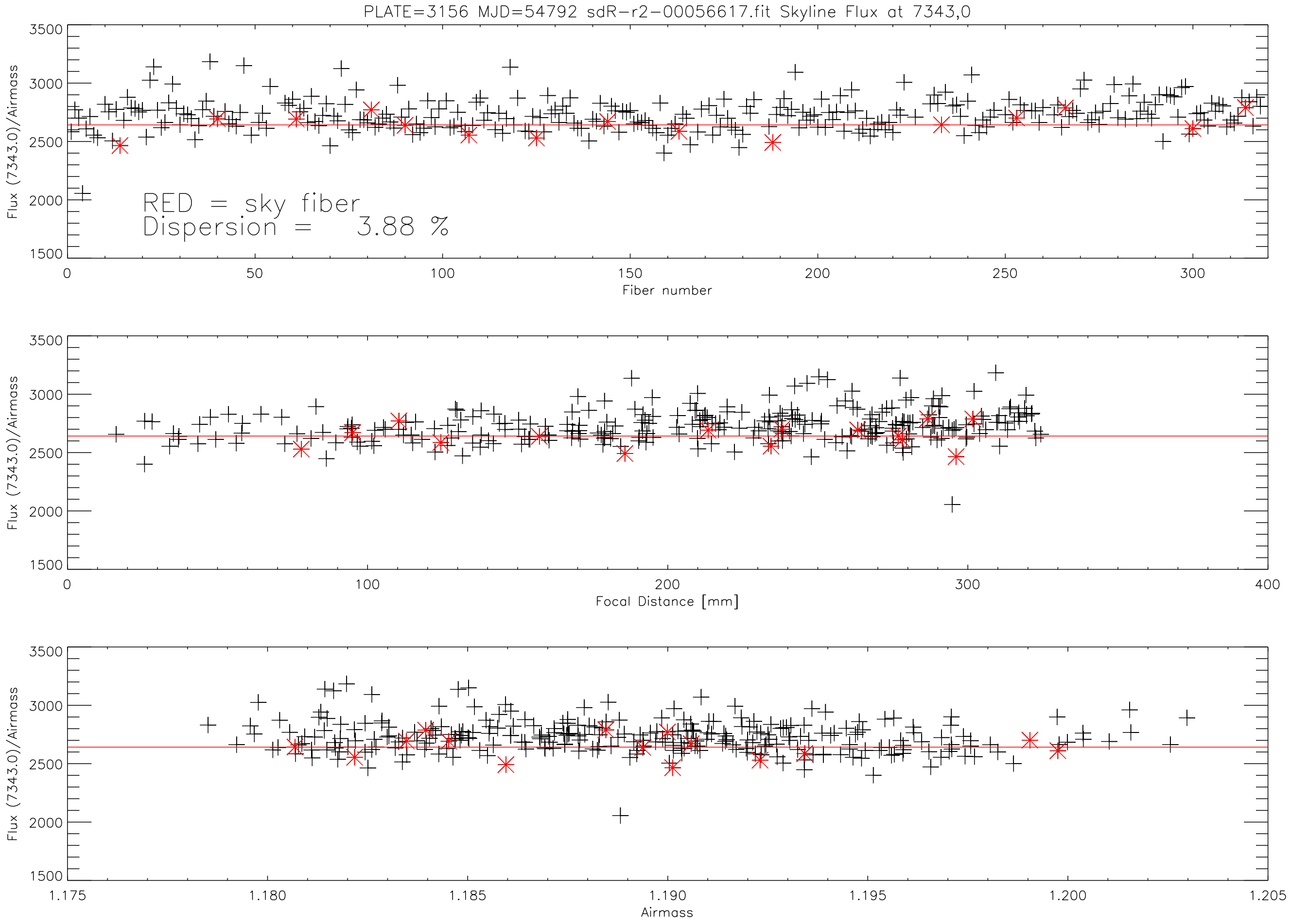
PLATE=3156 MJD=54792 sdR-r2-00056617.fit 2D Sky-subtraction Sky-subtracted Sky F

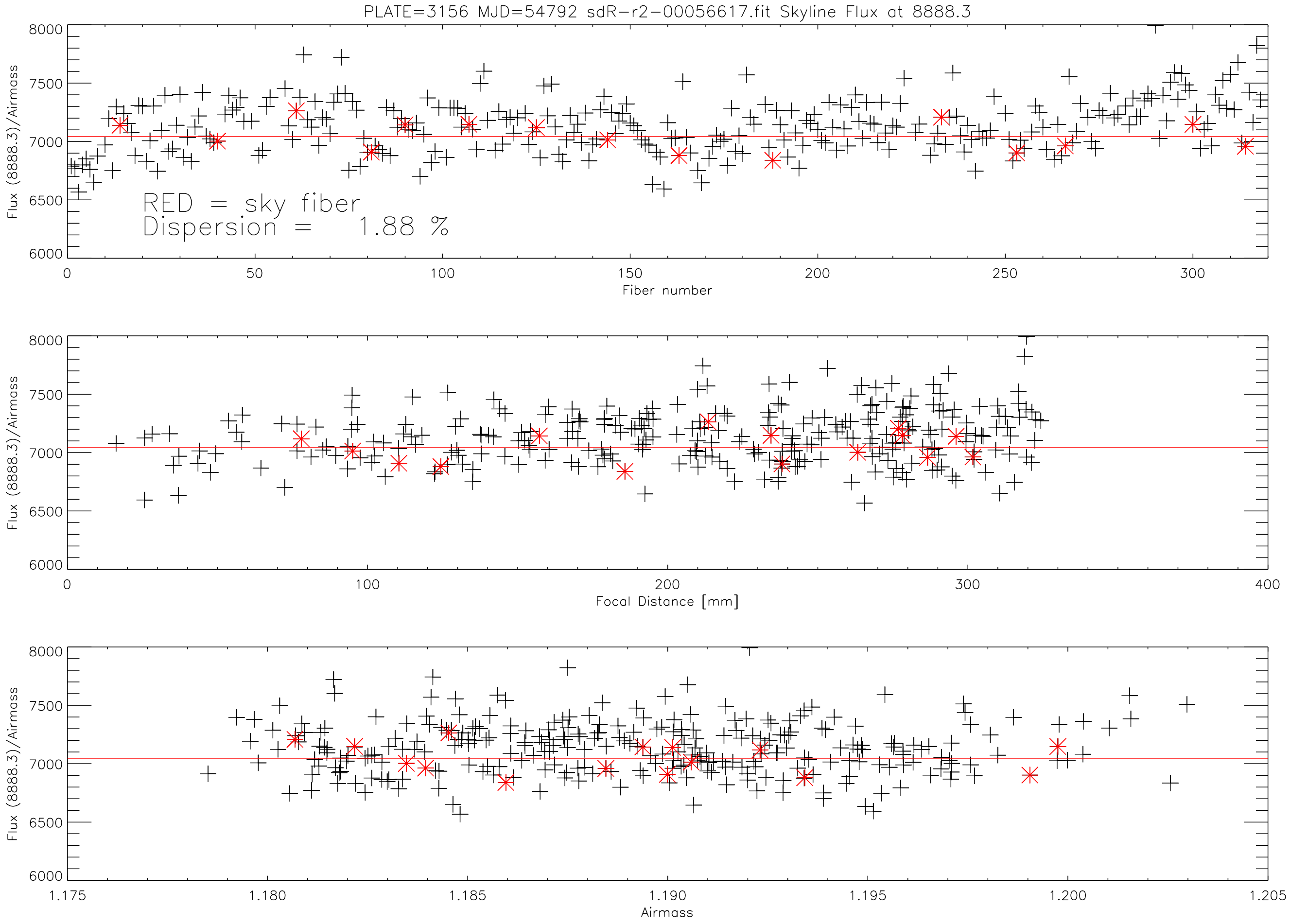


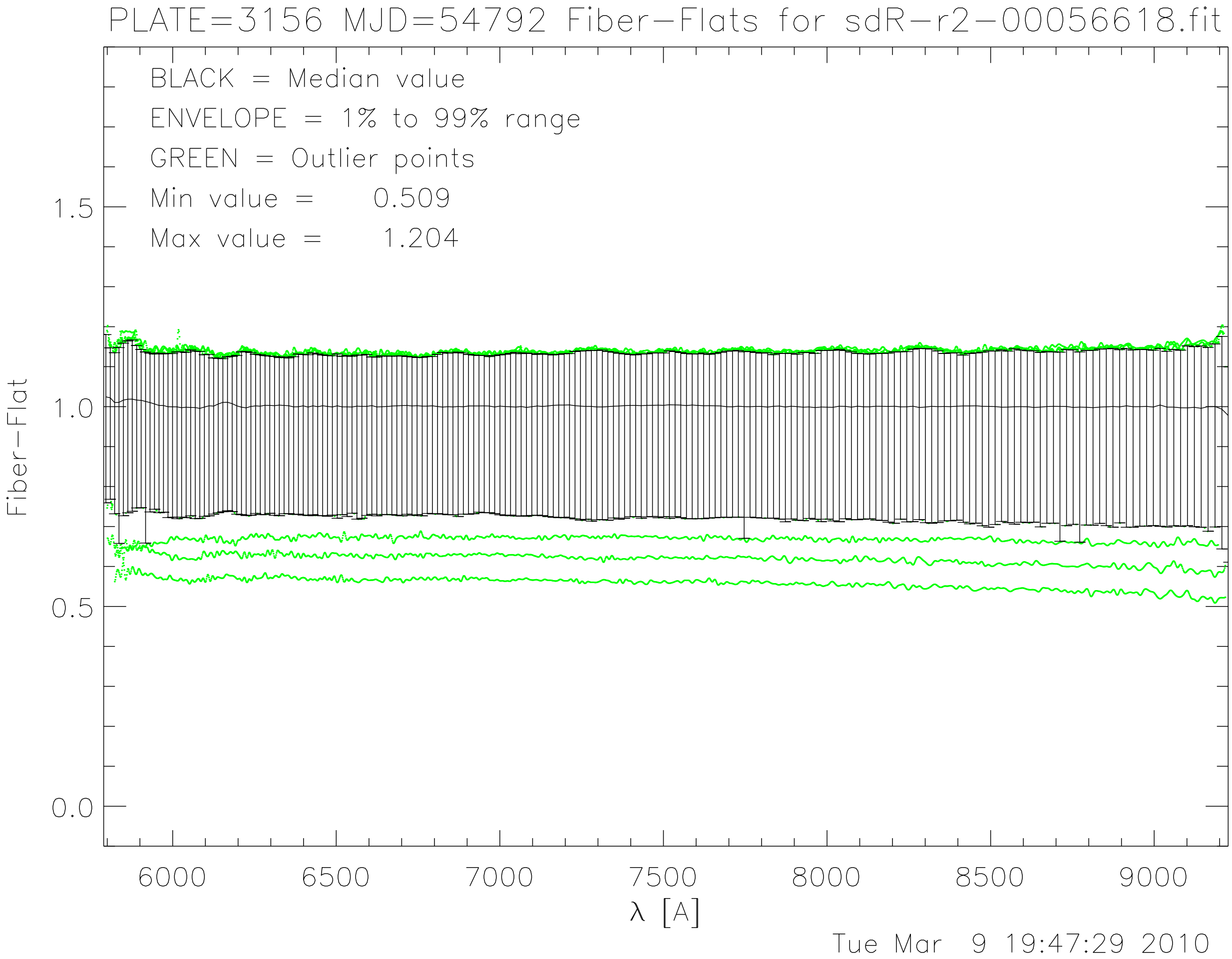
Number of sky fibers = 15

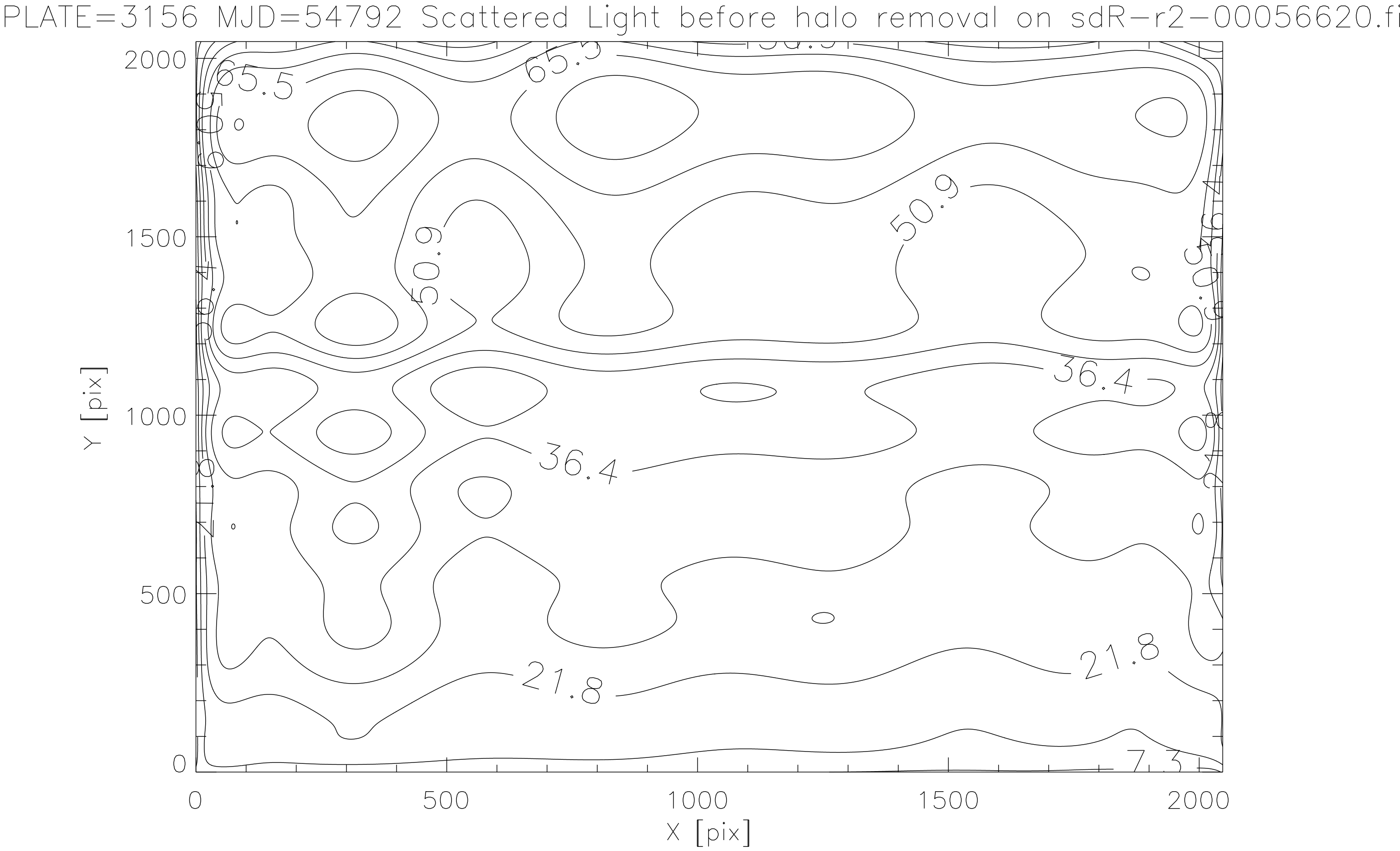
PLATE=3156 MJD=54792 sdR-r2-00056617.fit 2D Sky-subtraction Rescaled Errors

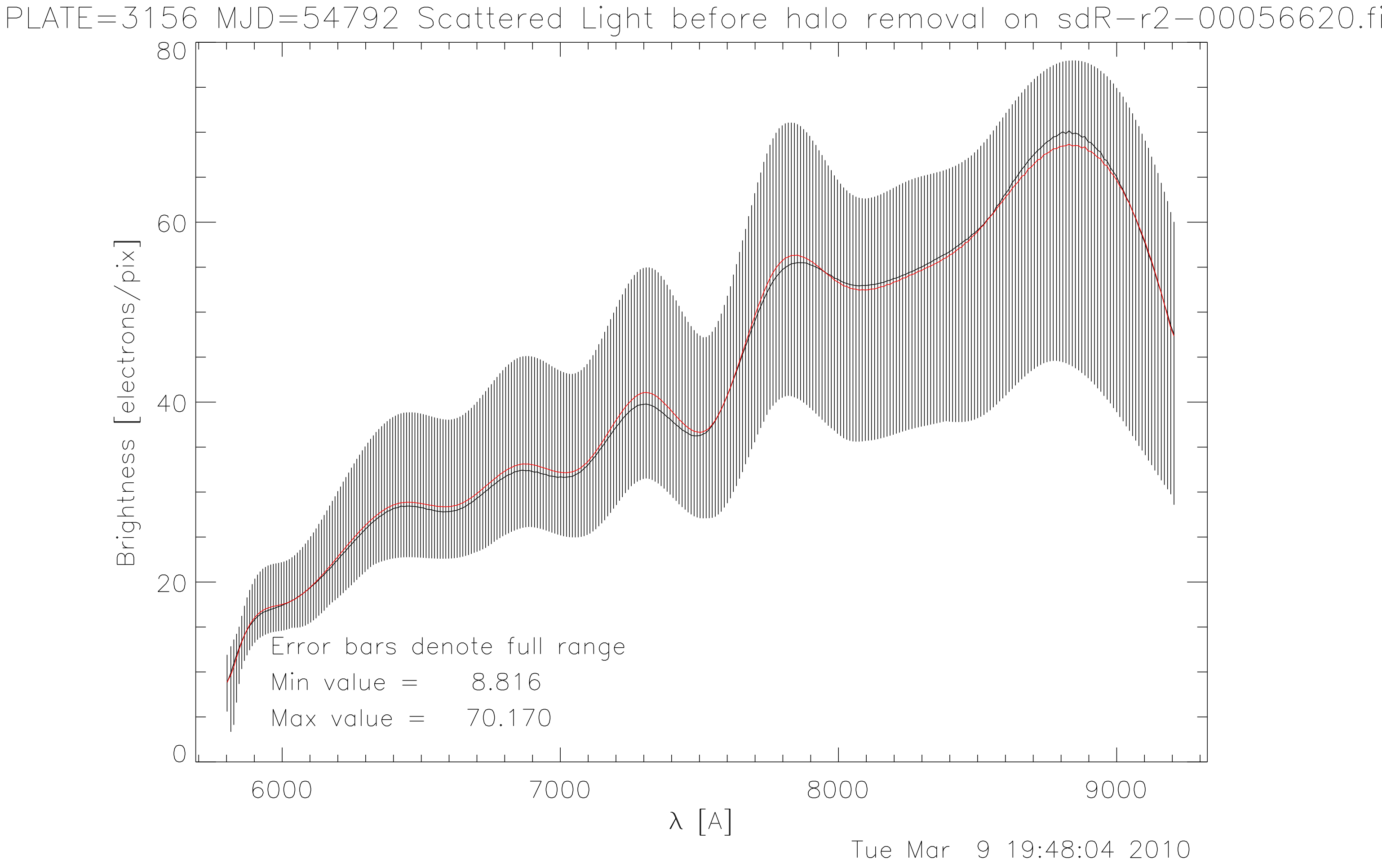


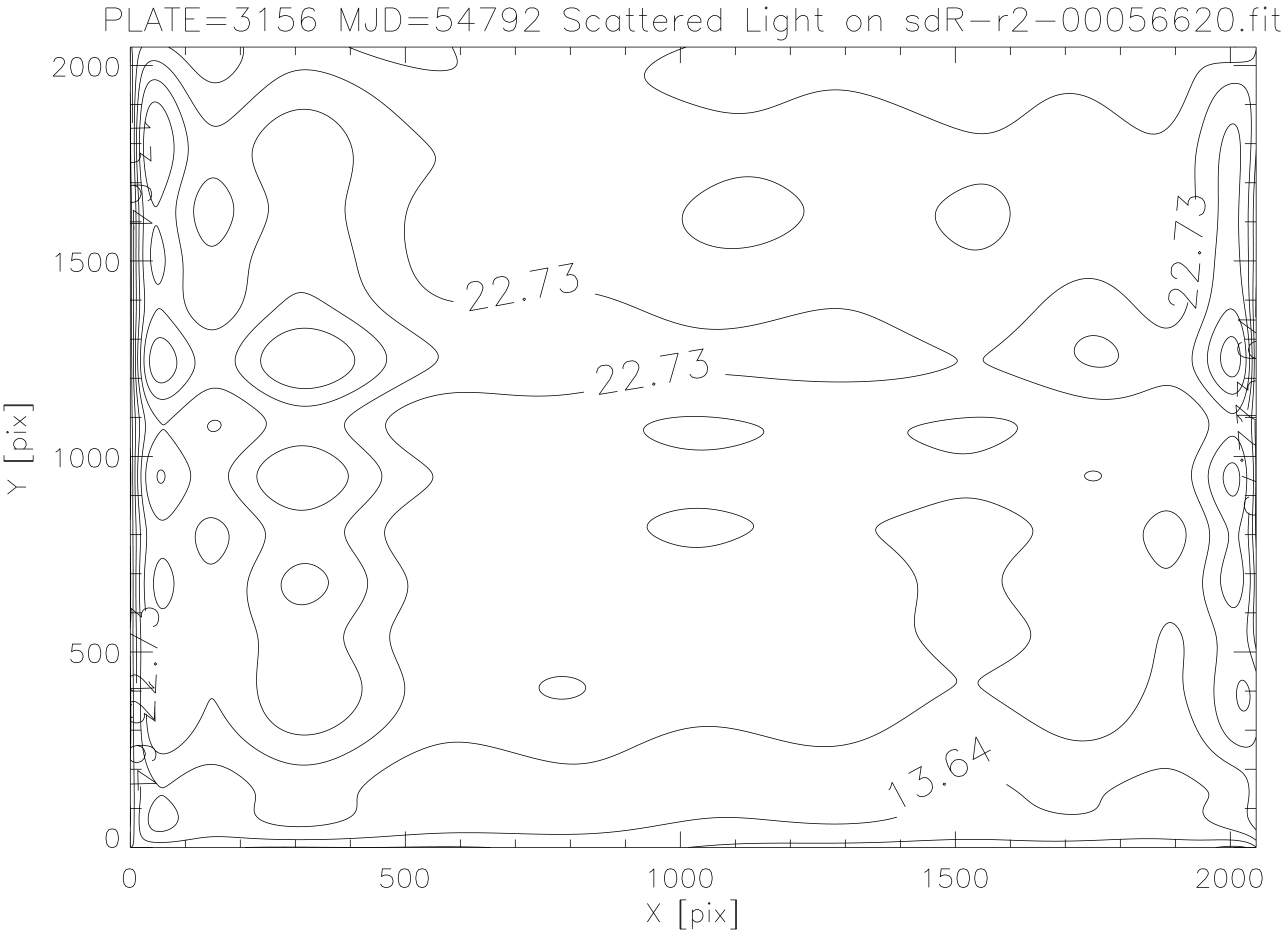

PLATE=3156 MJD=54792 sdR-r2-00056617.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3500
3000
2500
2000
1500
RED = sky fiber
Dispersion = 3.88 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3500
3000
2500
2000
1500
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3500
3000
2500
2000
1500
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass

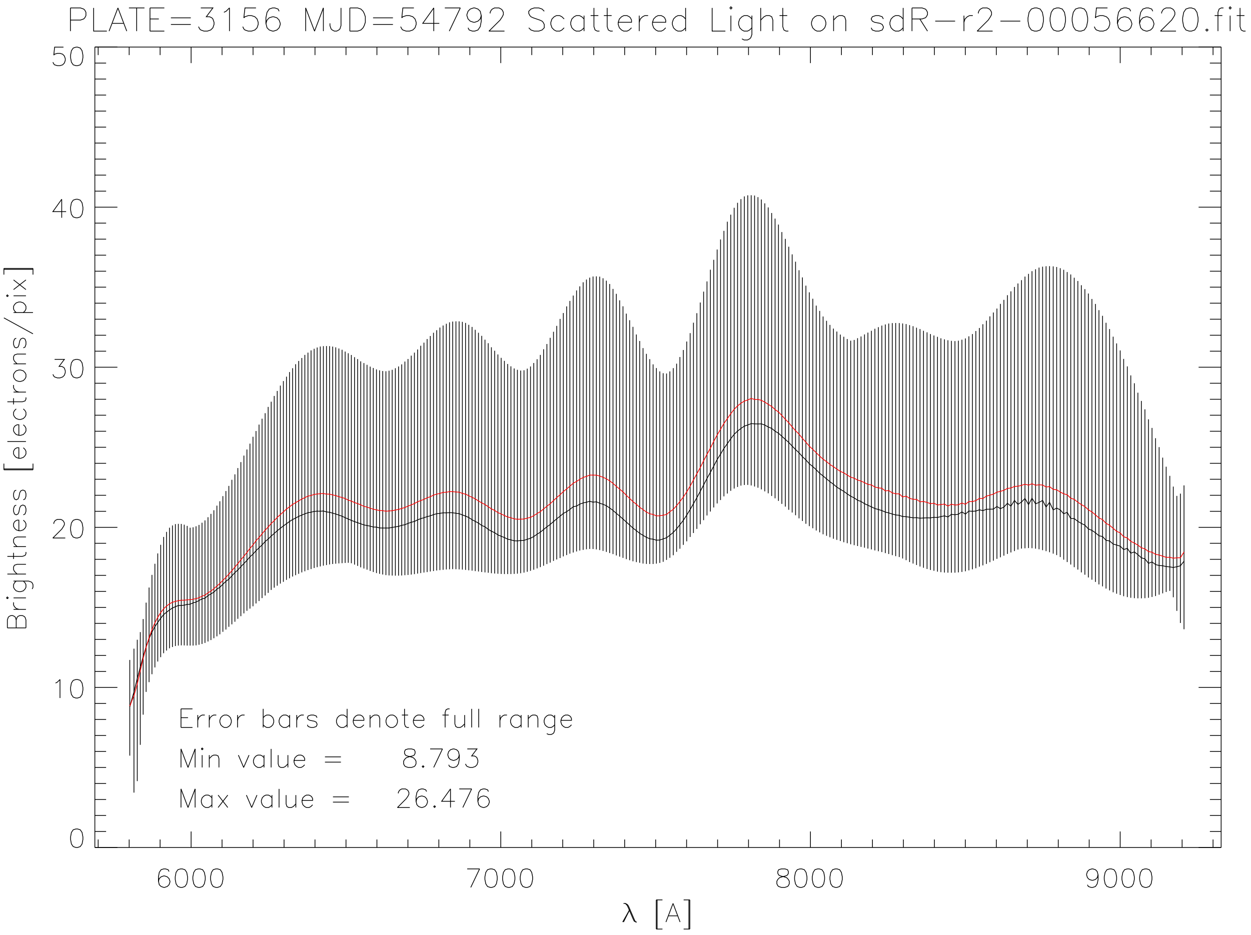

PLATE=3156 MJD=54792 sdR-r2-00056617.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
8000
7500
7000
6500
6000
RED = sky fiber
Dispersion = 1.88 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
8000
7500
7000
6500
6000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
8000
7500
7000
6500
6000
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass


PLATE=3156 MJD=54792 Fiber−Flats for sdR−r2−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.509
Max value = 1.204
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 9 19:47:29 2010


PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056620.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
65.5
65.5
50.9
50.9
36.4
36.4
21.8
21.8
7.3

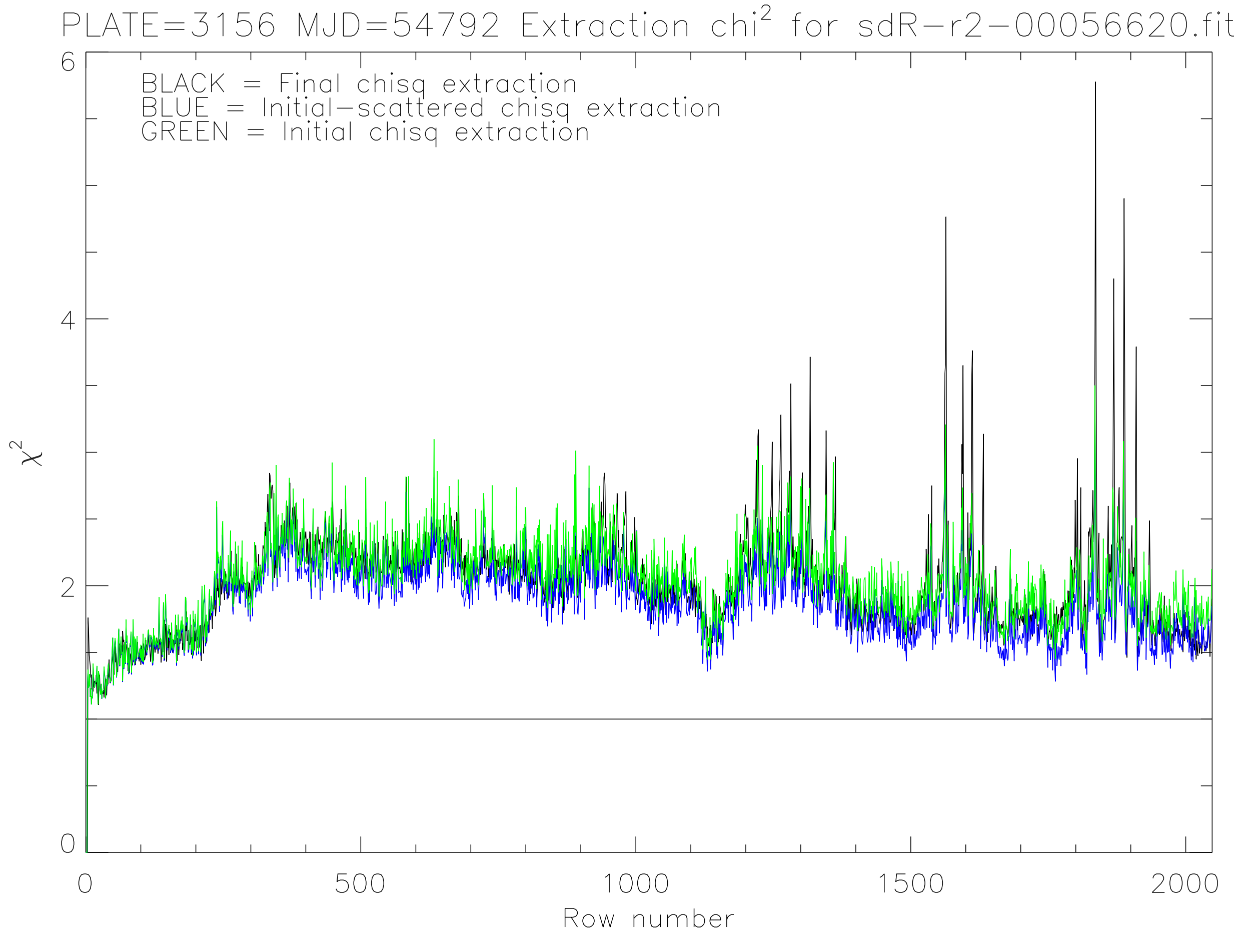

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056620.fi
Brightness [electrons/pix]
0
20
40
60
80
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.816
Max value = 70.170
Tue Mar 9 19:48:04 2010

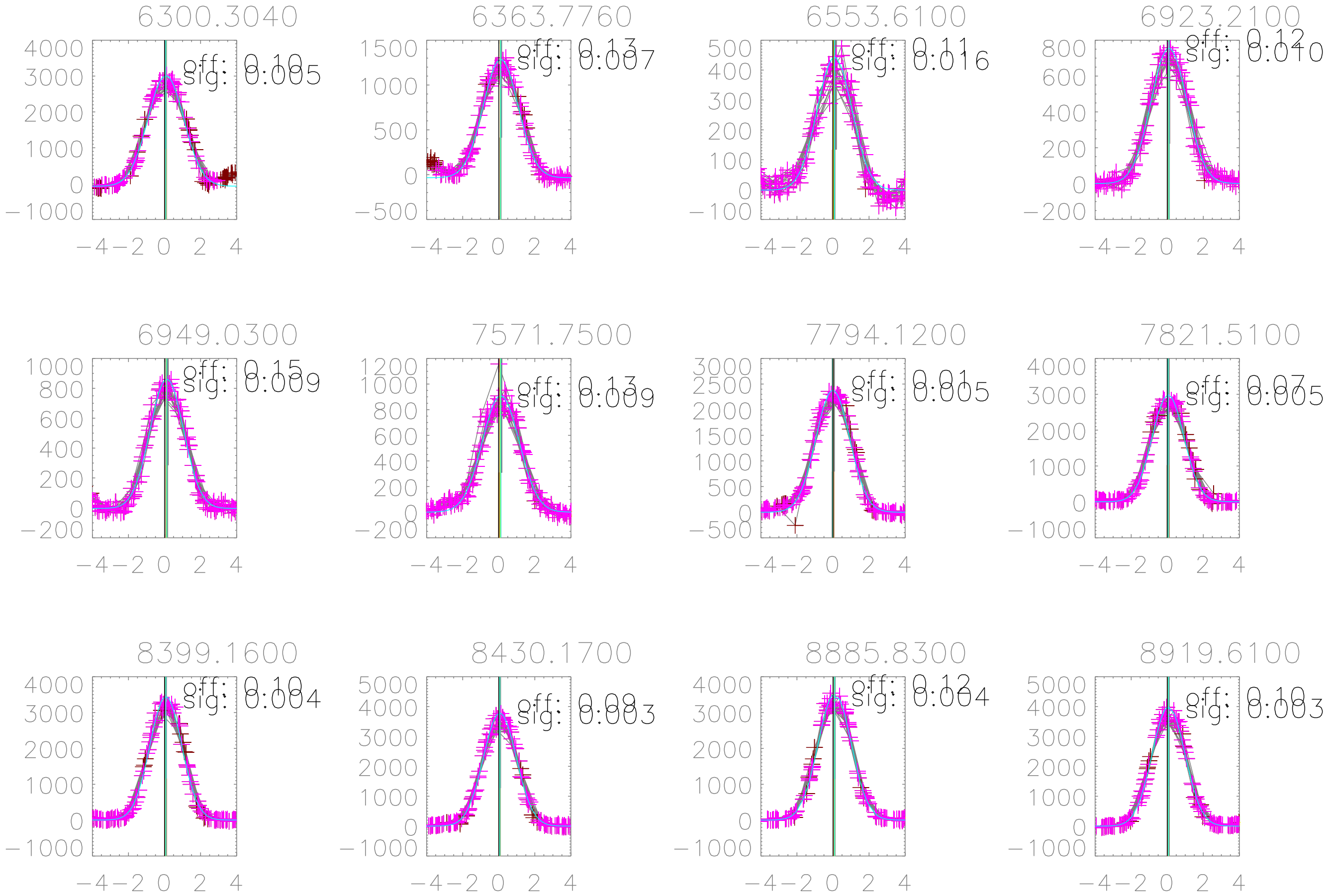

PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056620.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
22.73
22.73
22.73
13.64
13.64
22.73

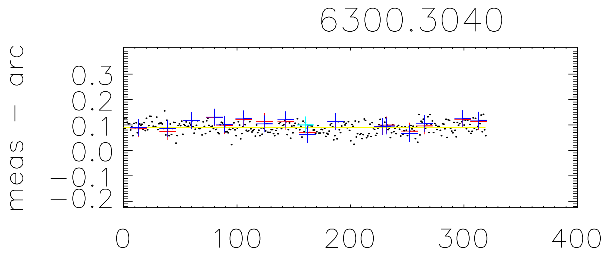


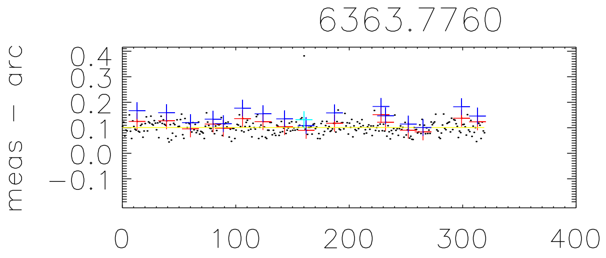
PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056620.fit

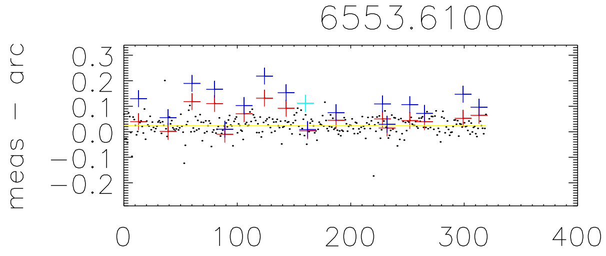
Tue Mar 9 19:50:02 2010

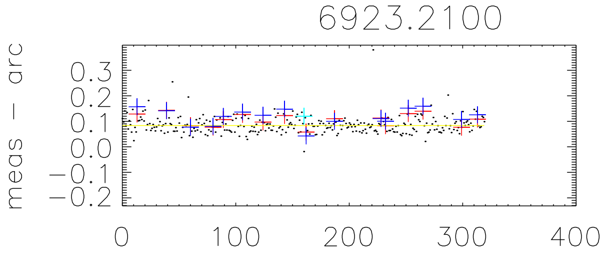

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r2-00056620.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

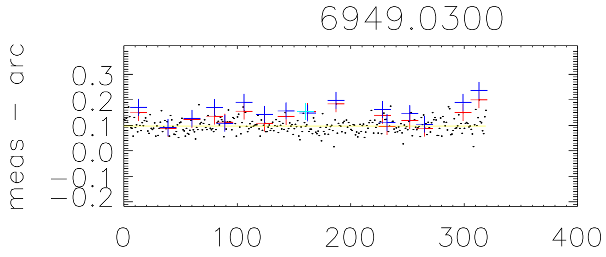

6300.3040
off: 0.10
sig: 0.005
6363.7760
off: 0.13
sig: 0.007
6553.6100
off: 0.11
sig: 0.016
6923.2100
off: 0.12
sig: 0.010
6949.0300
off: 0.15
sig: 0.009
7571.7500
off: 0.13
sig: 0.009
7794.1200
off: 0.01
sig: 0.005
7821.5100
off: 0.07
sig: 0.005
8399.1600
off: 0.10
sig: 0.004
8430.1700
off: 0.09
sig: 0.003
8885.8300
off: 0.12
sig: 0.004
8919.6100
off: 0.10
sig: 0.003
−4 −2 0 2 4

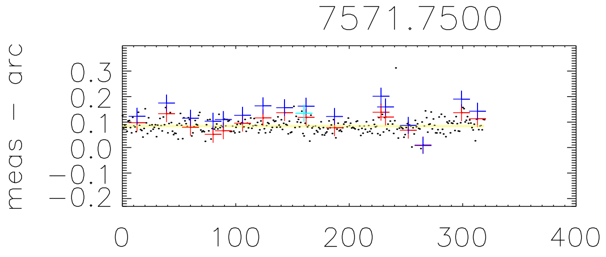

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

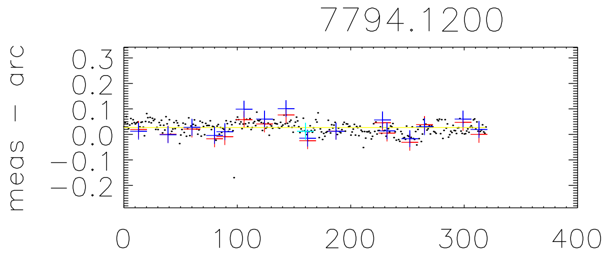

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

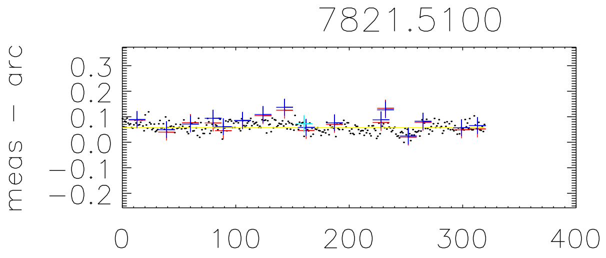

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

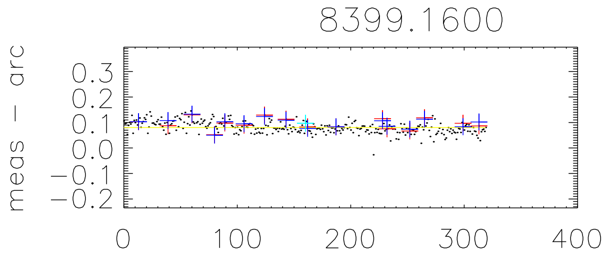

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

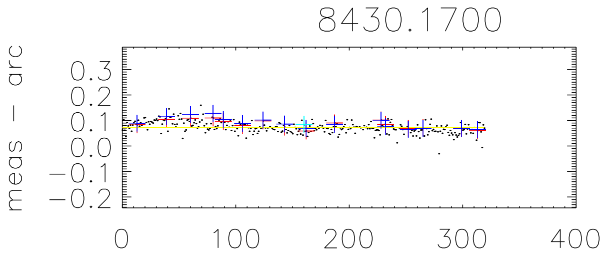

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

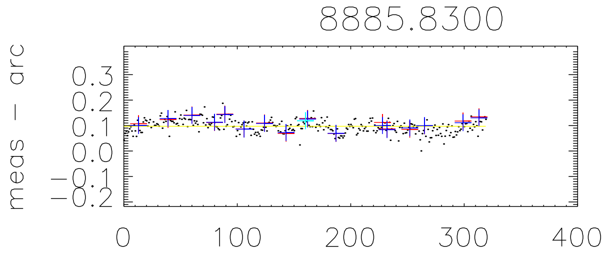

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

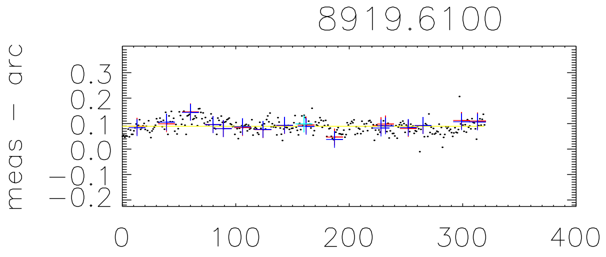

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

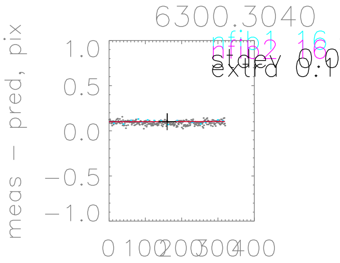

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

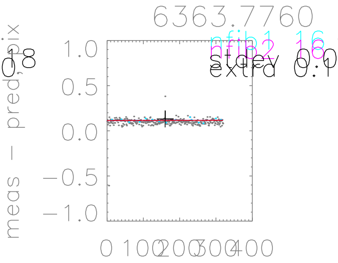

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

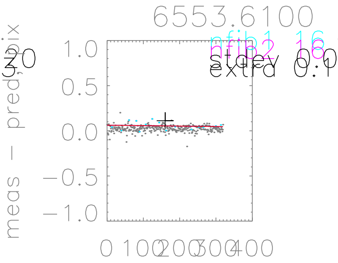

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

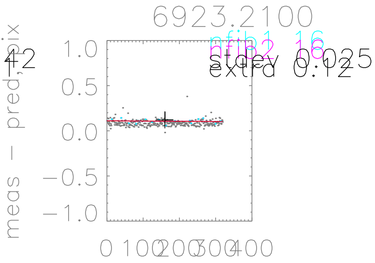

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

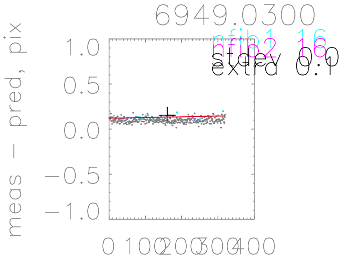

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

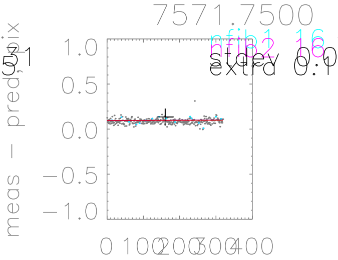

6300.3040
nfib1 16
nfib2 16
stdev 0.018
extrd 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

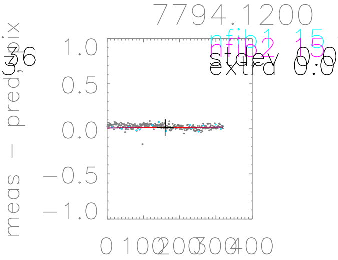

6363.7760
nfib1 16
nfib2 16
stdev 0.020
extrd 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

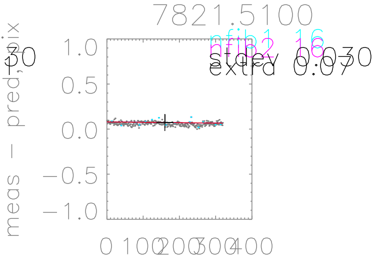

6553.6100
nfib1 16
nfib2 16
stdev 0.042
extrd 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

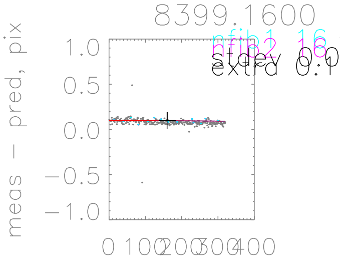

6923.2100
nfib1 16
nfib2 16
stdev 0.025
extrd 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

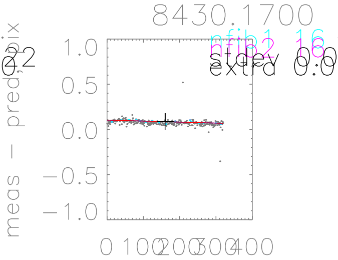

6949.0300
nfib1 16
nfib2 16
stdev 0.031
extrd 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

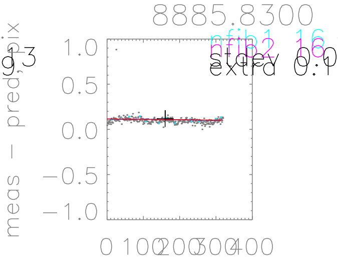

7571.7500
nfib1 16
nfib2 16
stdev 0.036
extrd 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

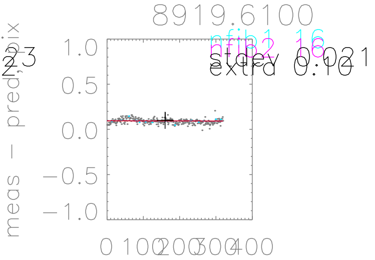

7794.1200
nfib1 15
nfib2 15
stdev 0.030
extrd 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

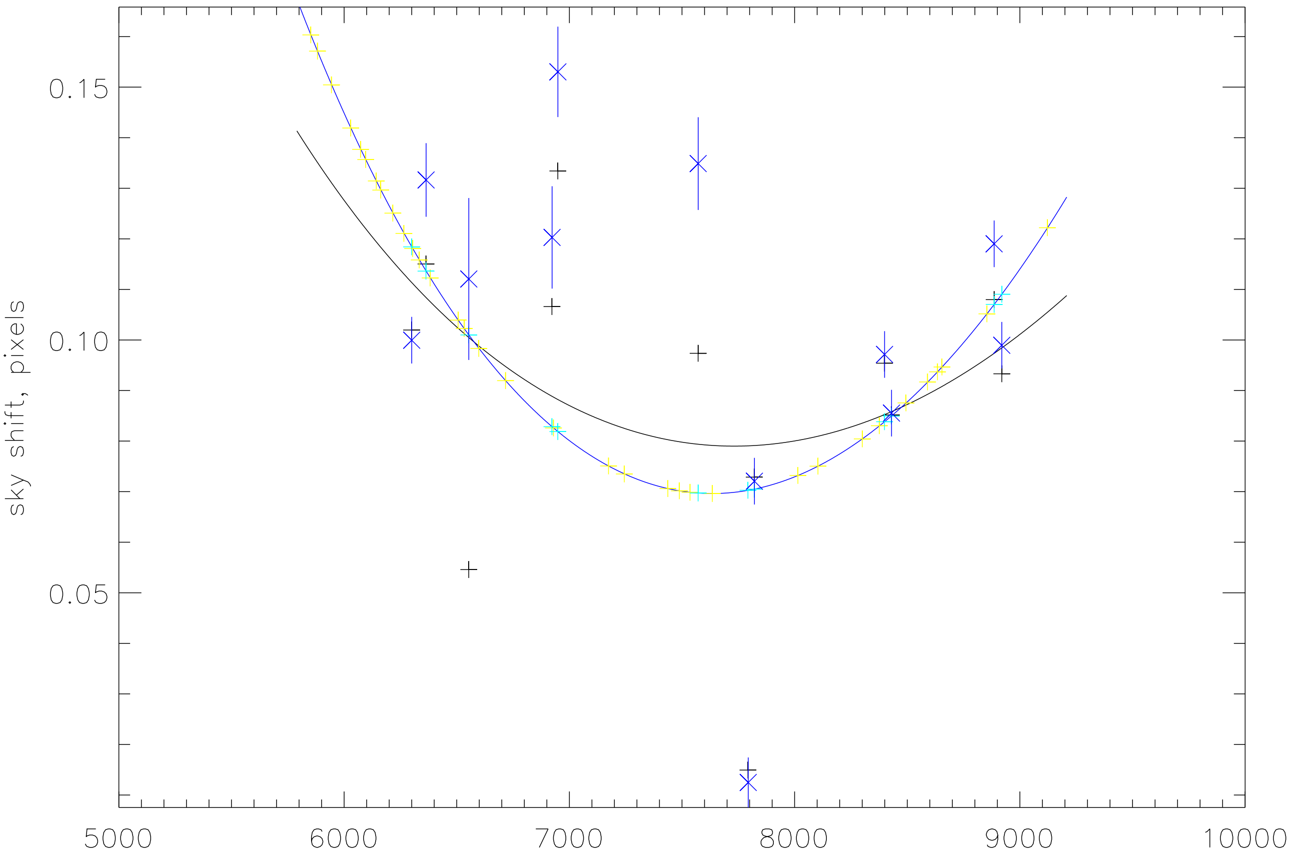

7821.5100
nfib1 16
nfib2 16
stdev 0.030
extrd 0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

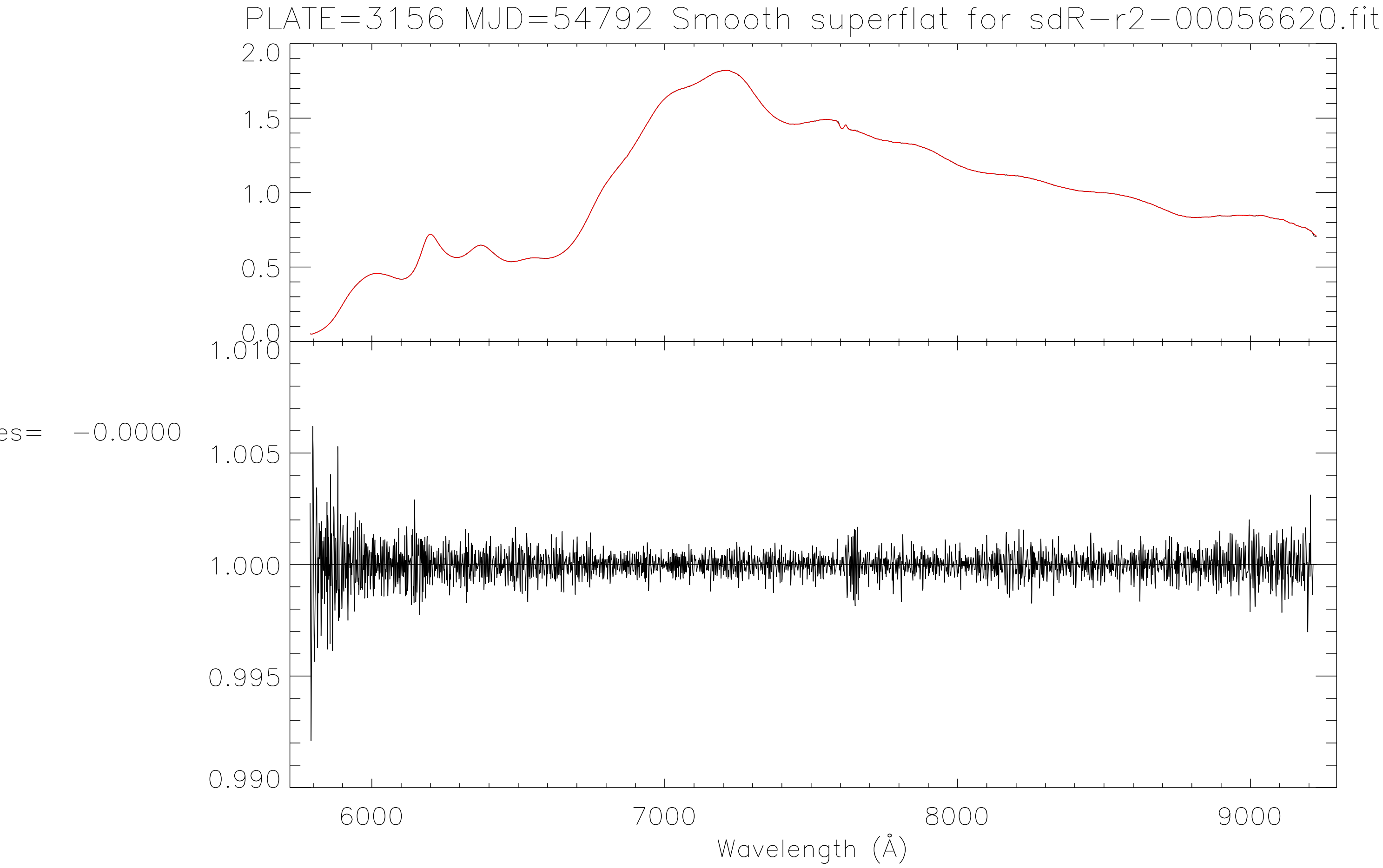

8399.1600
nfib1 16
nfib2 16
stdev 0.022
extrd 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

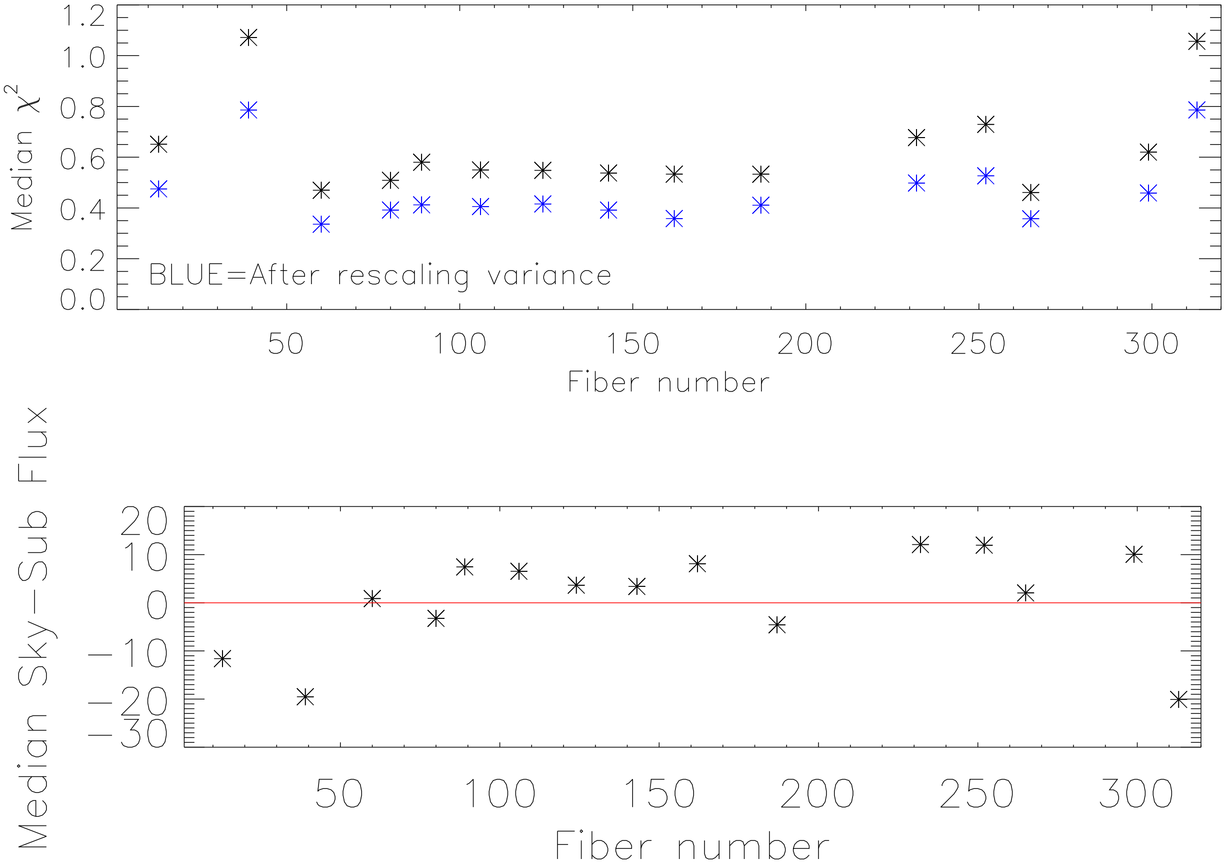

8430.1700
nfib1 16
nfib2 16
stdev 0.013
extrd 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


8885.8300
nfib1 16
nfib2 16
stdev 0.023
extrd 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

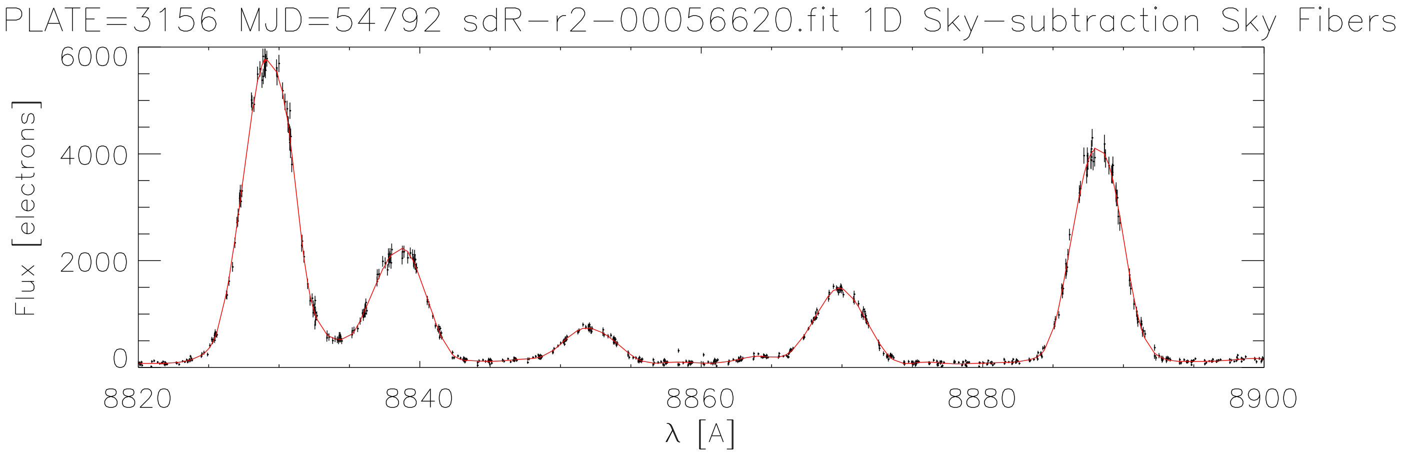

8919.6100
nfib1 16
nfib2 16
stdev 0.021
extrd 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

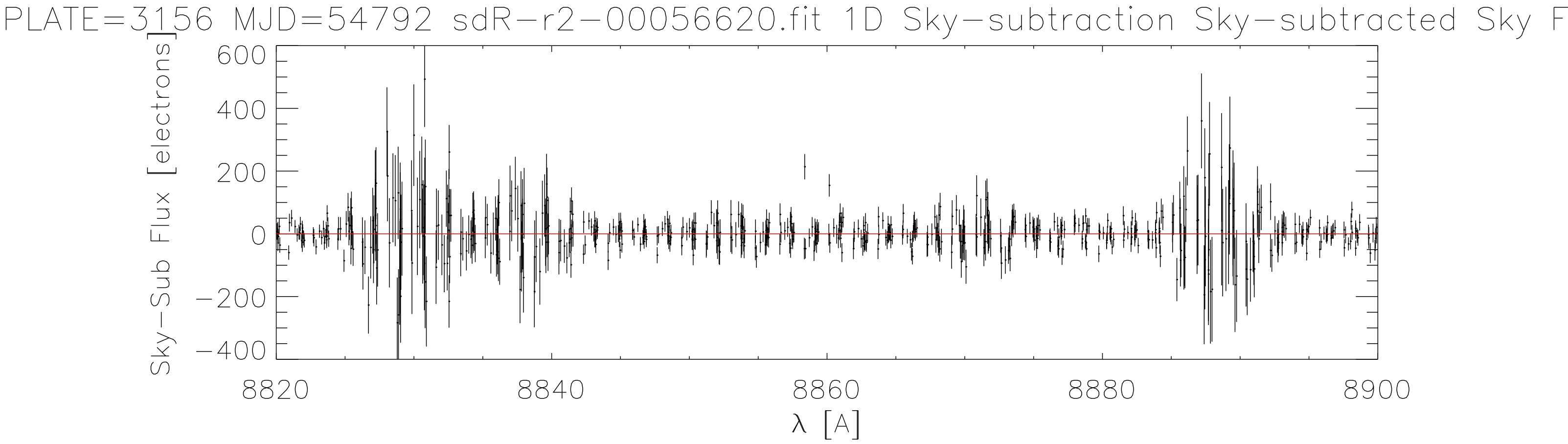

sky shift, pixels
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000

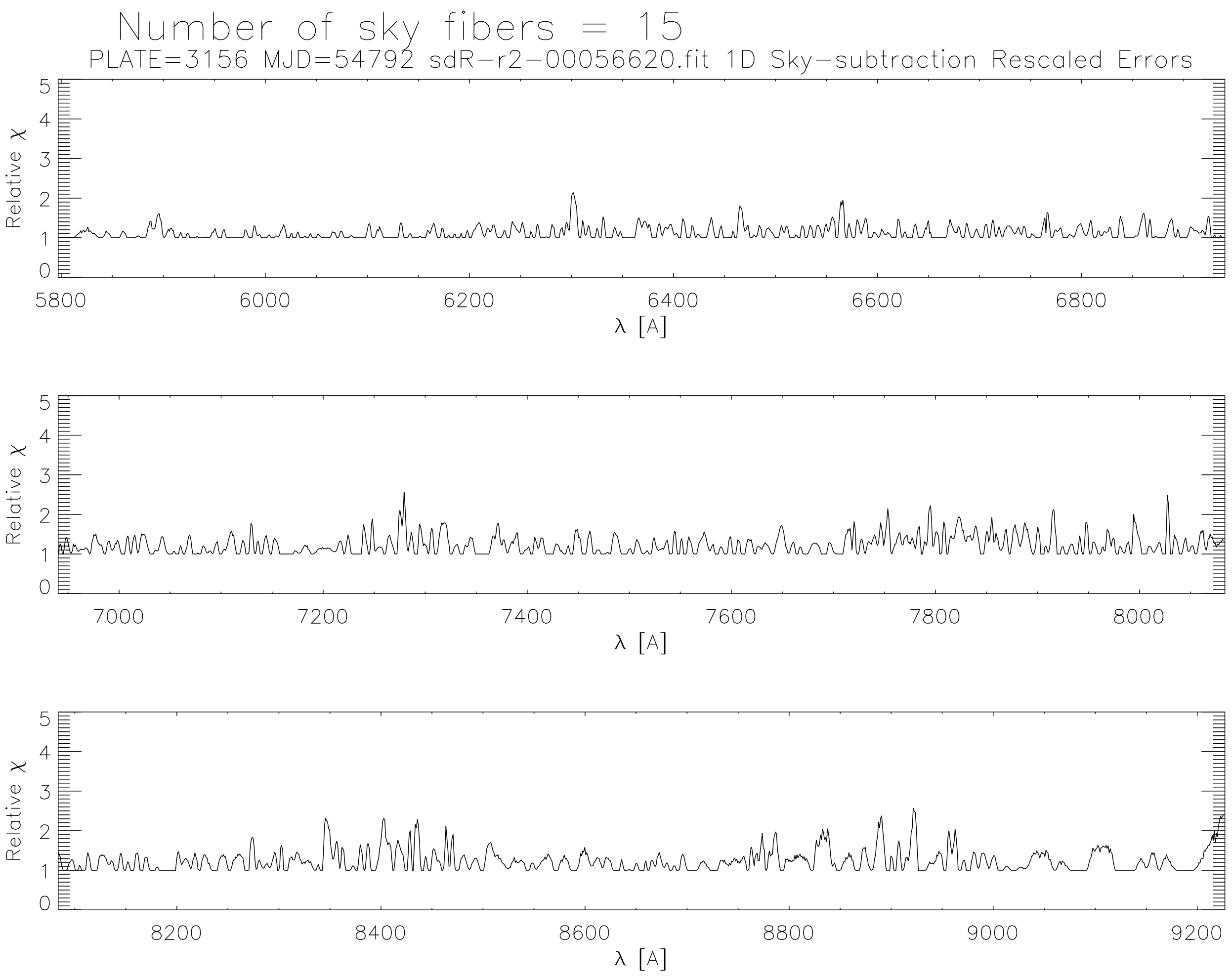

PLATE=3156 MJD=54792 Smooth superflat for sdR-r2-00056620.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

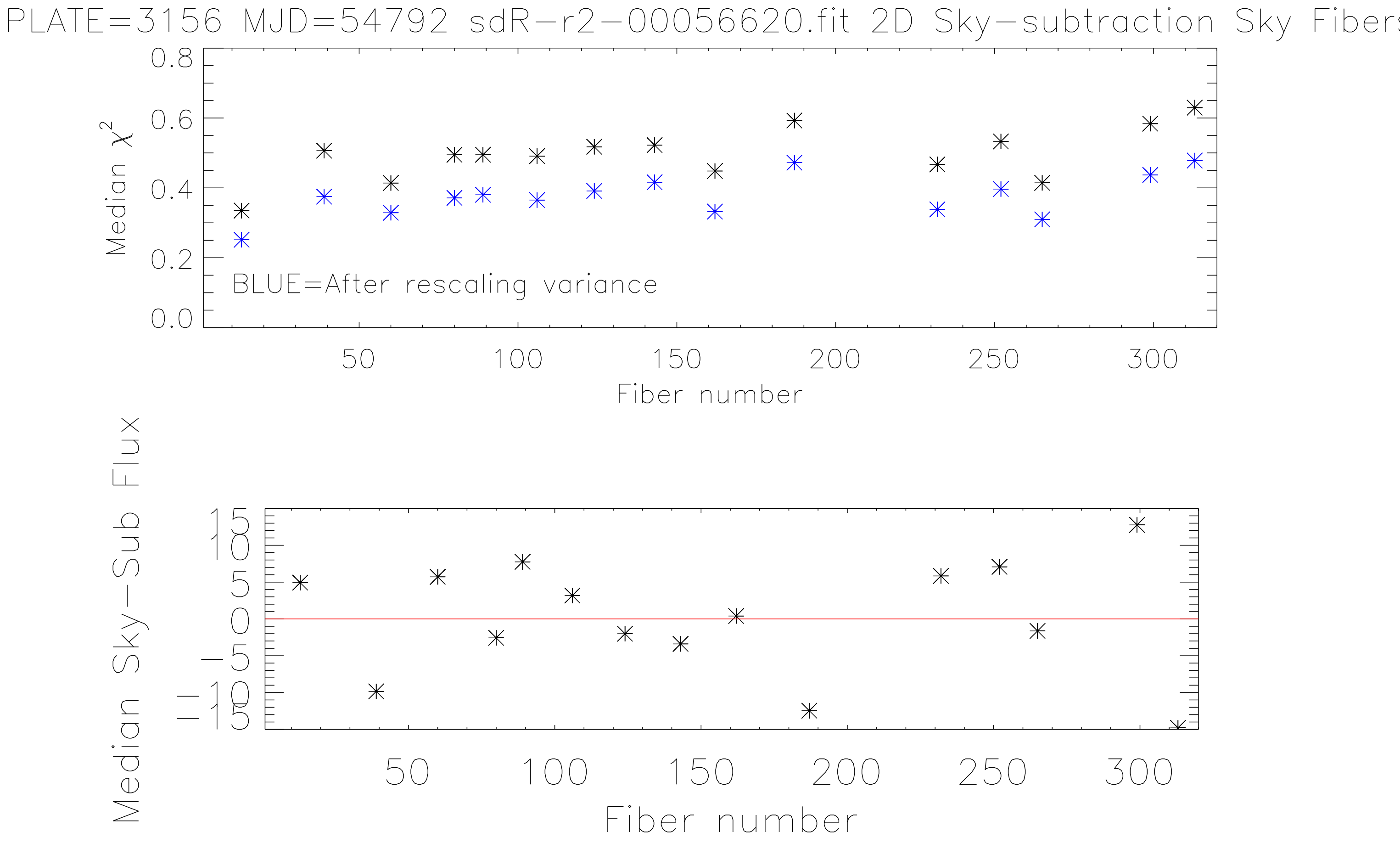


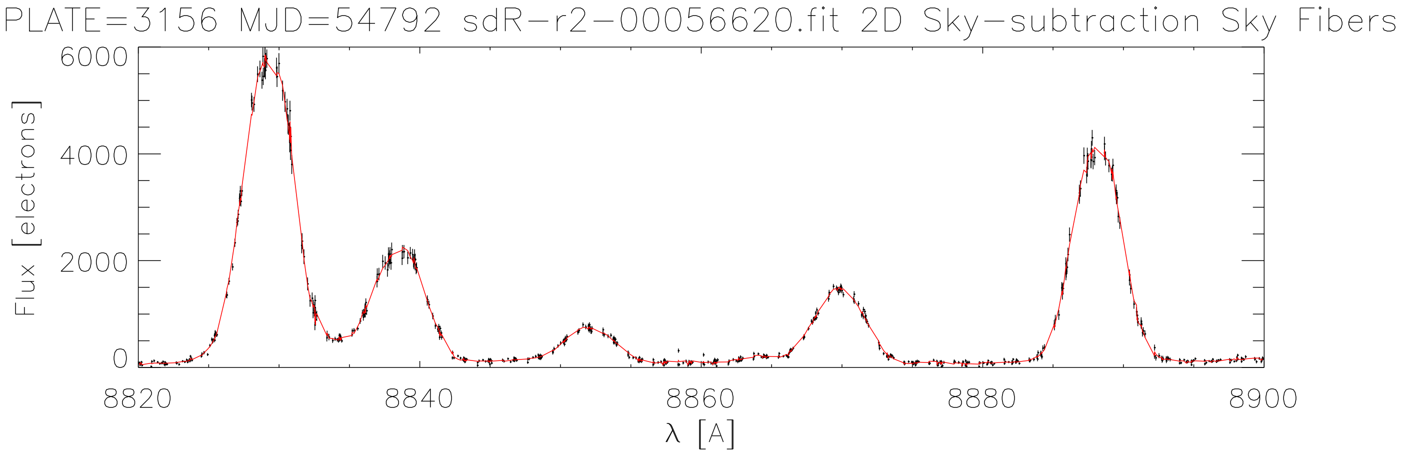
PLATE=3156 MJD=54792 sdR-r2-00056620.fit 1D Sky-subtraction Sky Fiber

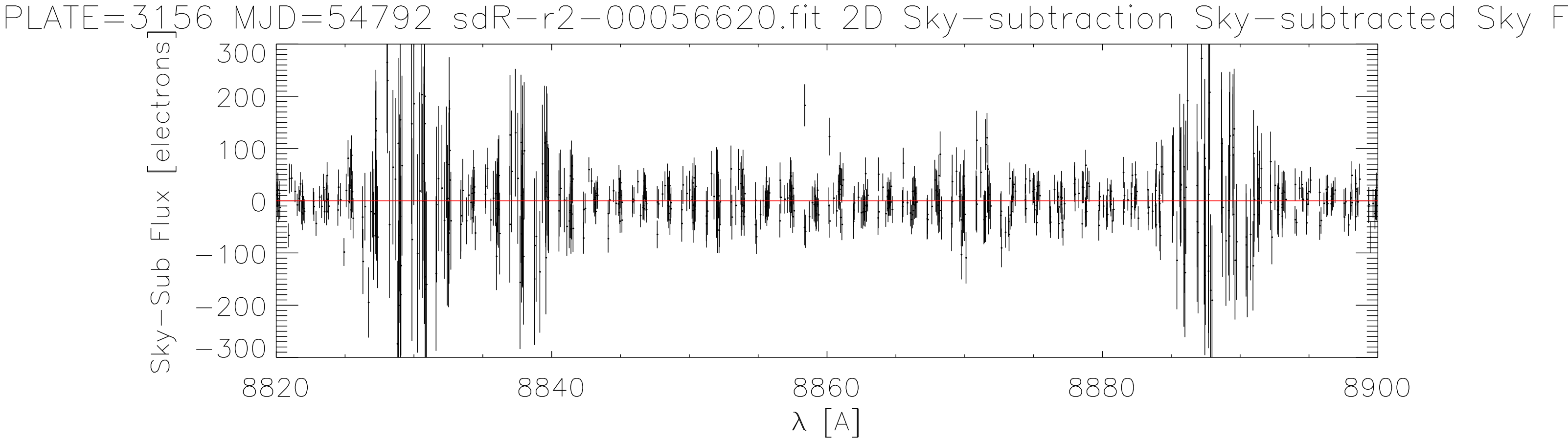

PLATE=3156 MJD=54792 sdR-r2-00056620.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

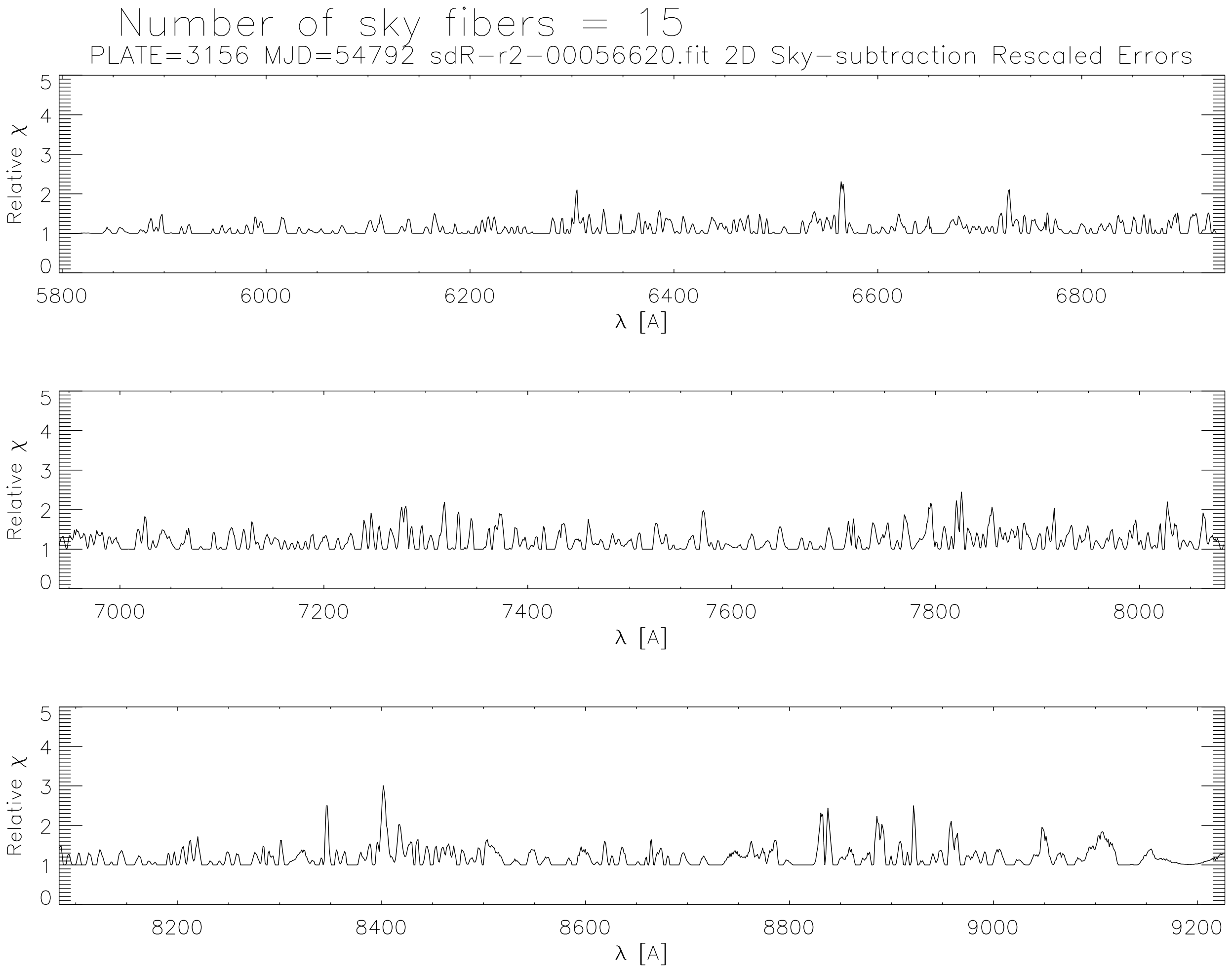

PLATE=3156 MJD=54792 sdR-r2-00056620.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

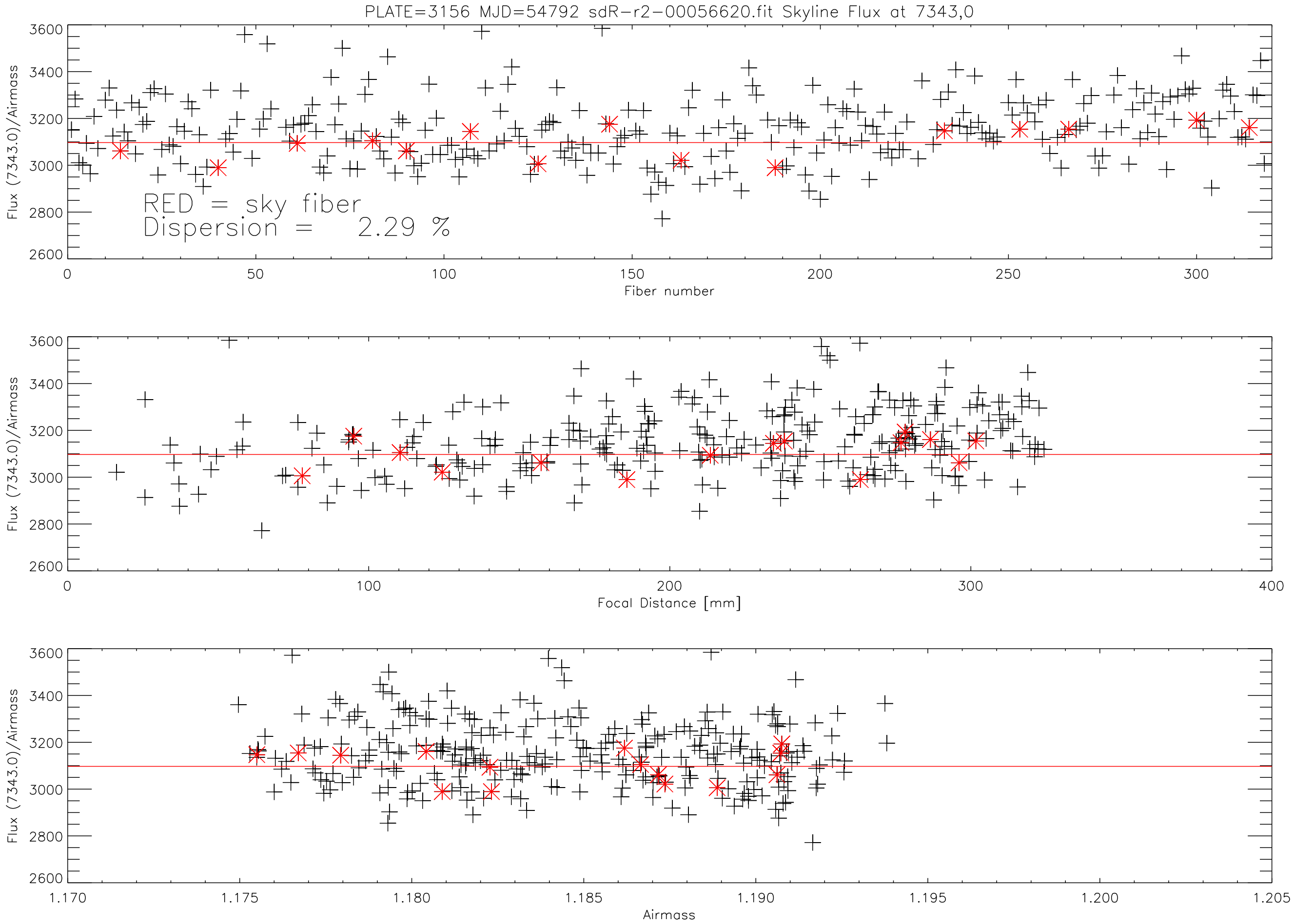

Number of sky fibers = 15
PLATE=3156 MJD=54792 sdR-r2-00056620.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
λ [A]

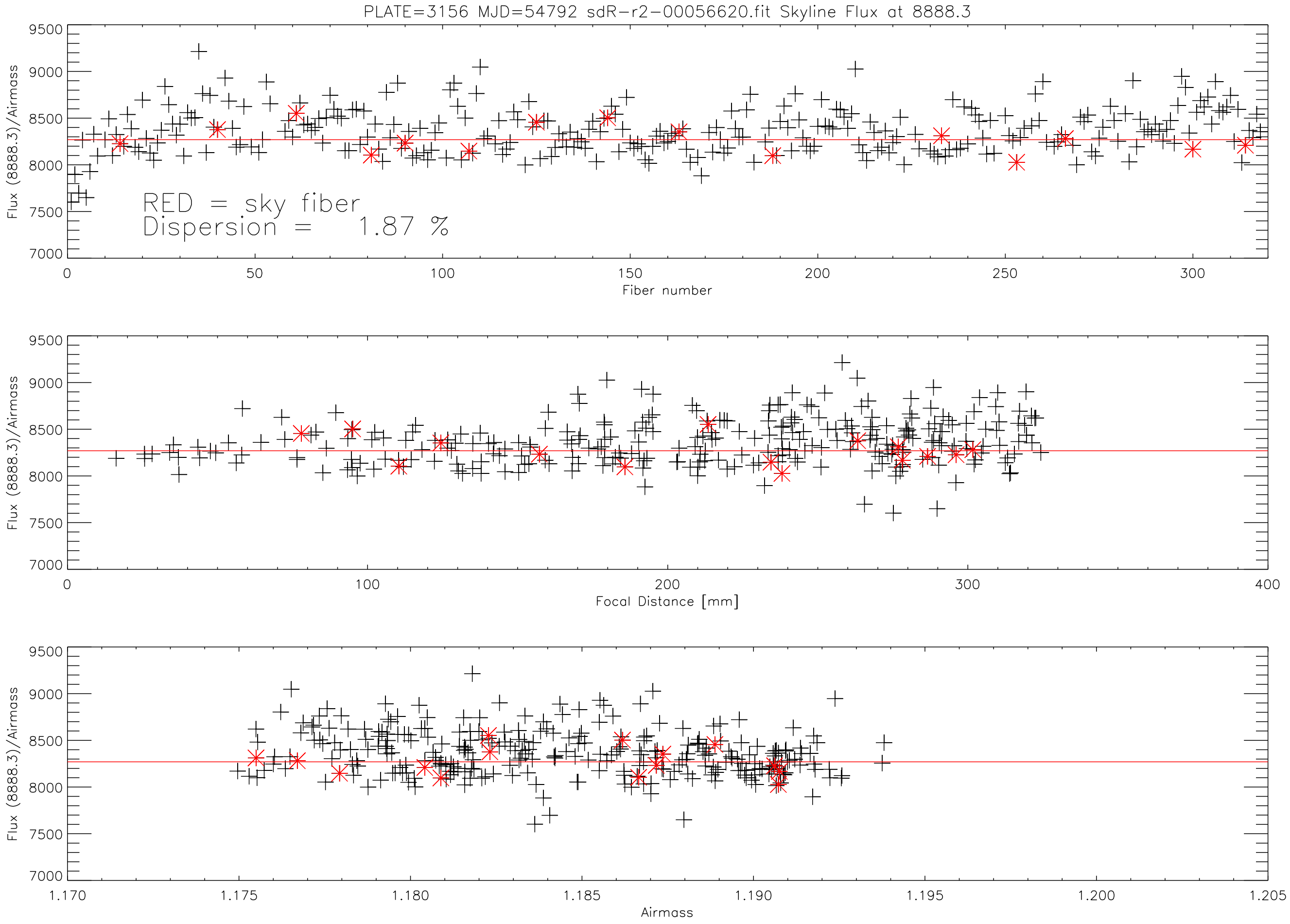

PLATE=3156 MJD=54792 sdR-r2-00056620.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
15
50
100
150
200
250
300
Fiber number


PLATE=3156 MJD=54792 sdR-r2-00056620.fit 2D Sky-subtraction Sky Fibers

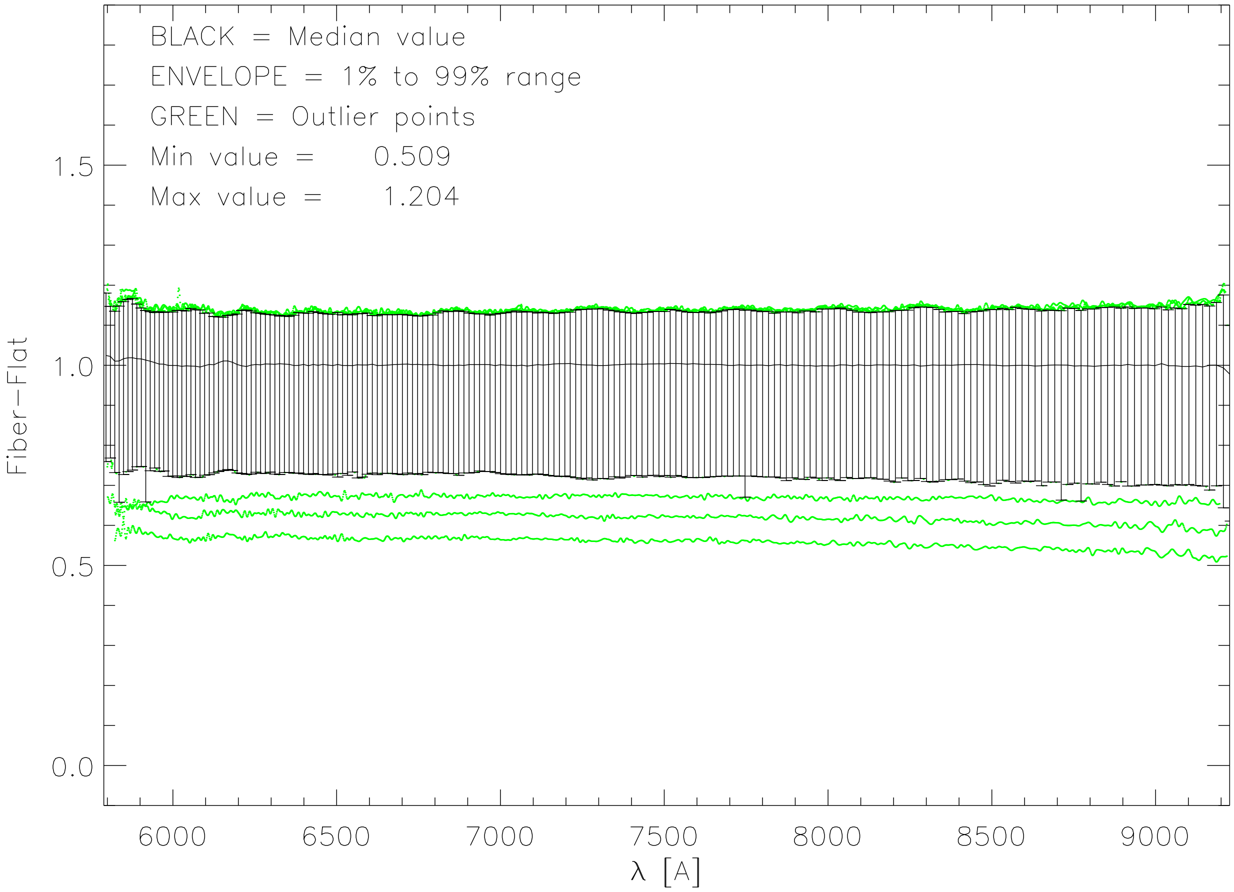

PLATE=3156 MJD=54792 sdR-r2-00056620.fit 2D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 15
PLATE=3156 MJD=54792 sdR-r2-00056620.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]

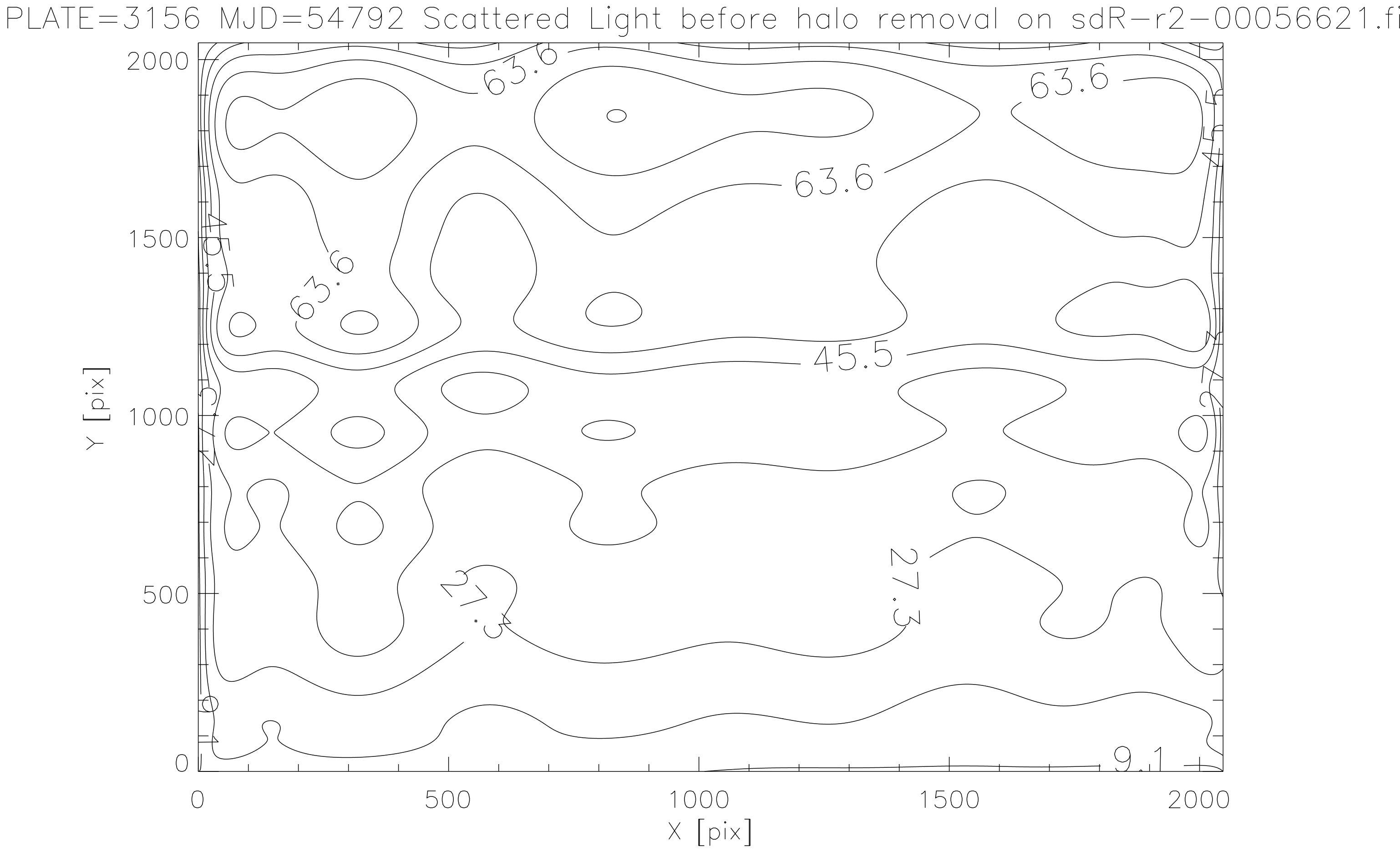

PLATE=3156 MJD=54792 sdR-r2-00056620.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.29 %
Flux (7343.0)/Airmass
Fiber number
Focal Distance [mm]
Airmass
2600
2800
3000
3200
3400
3600
0
50
100
150
200
250
300
400
1.170
1.175
1.180
1.185
1.190
1.195
1.200
1.205


PLATE=3156 MJD=54792 sdR-r2-00056620.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
9500
9000
8500
8000
7500
7000
RED = sky fiber
Dispersion = 1.87 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
9500
9000
8500
8000
7500
7000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
9500
9000
8500
8000
7500
7000
1.170
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass

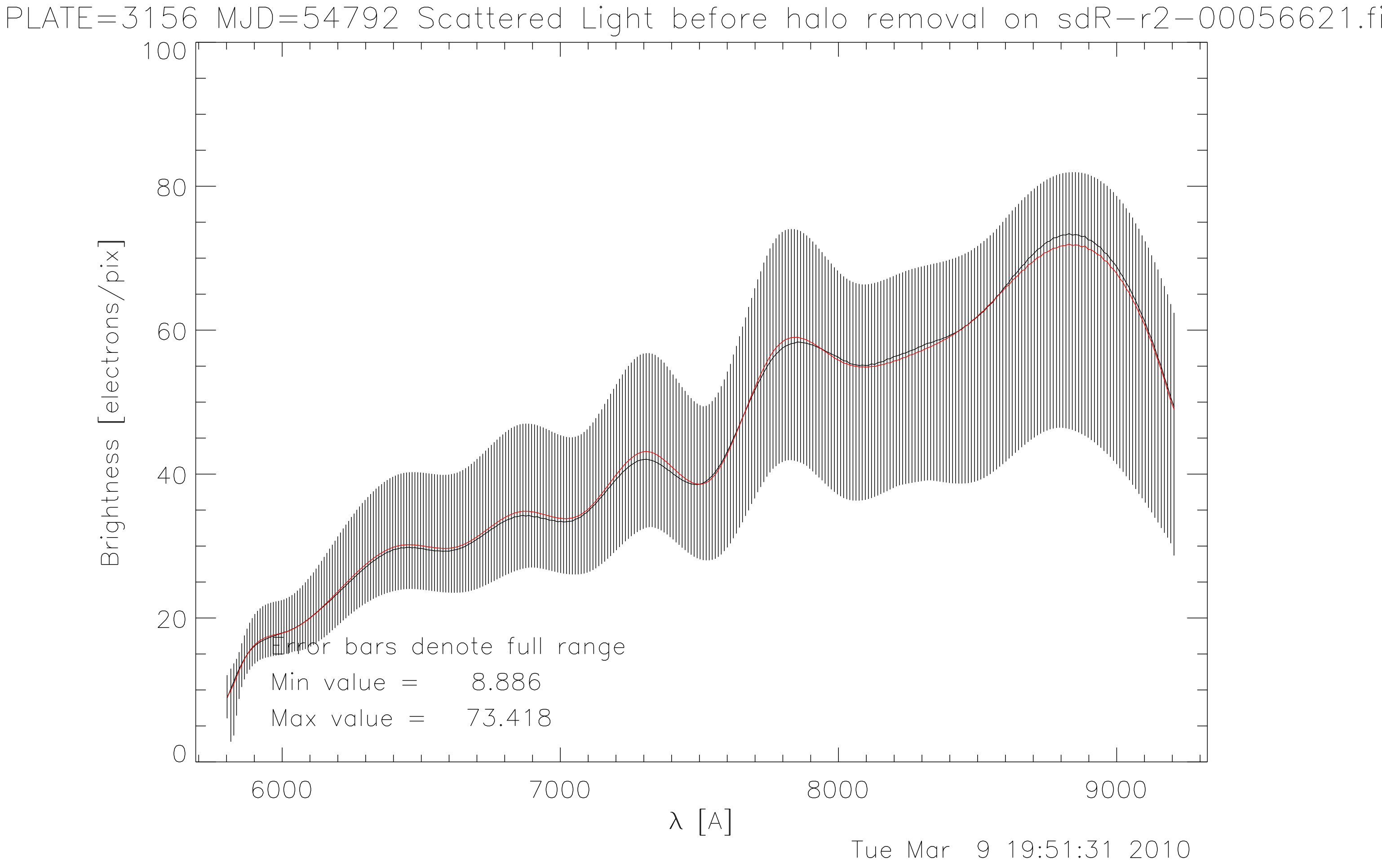
PLATE=3156 MJD=54792 Fiber-Flats for sdR-r2-00056618.fit

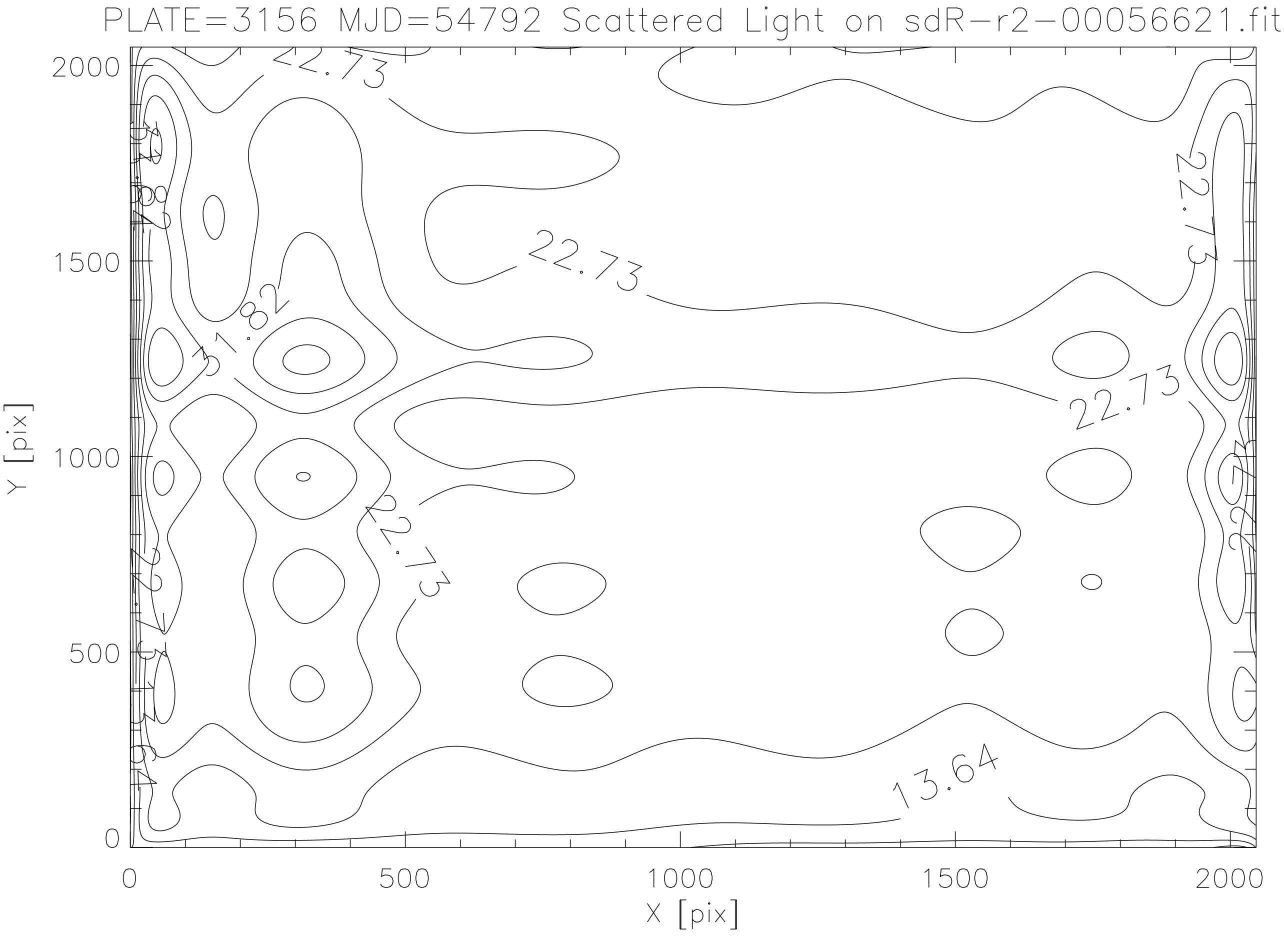


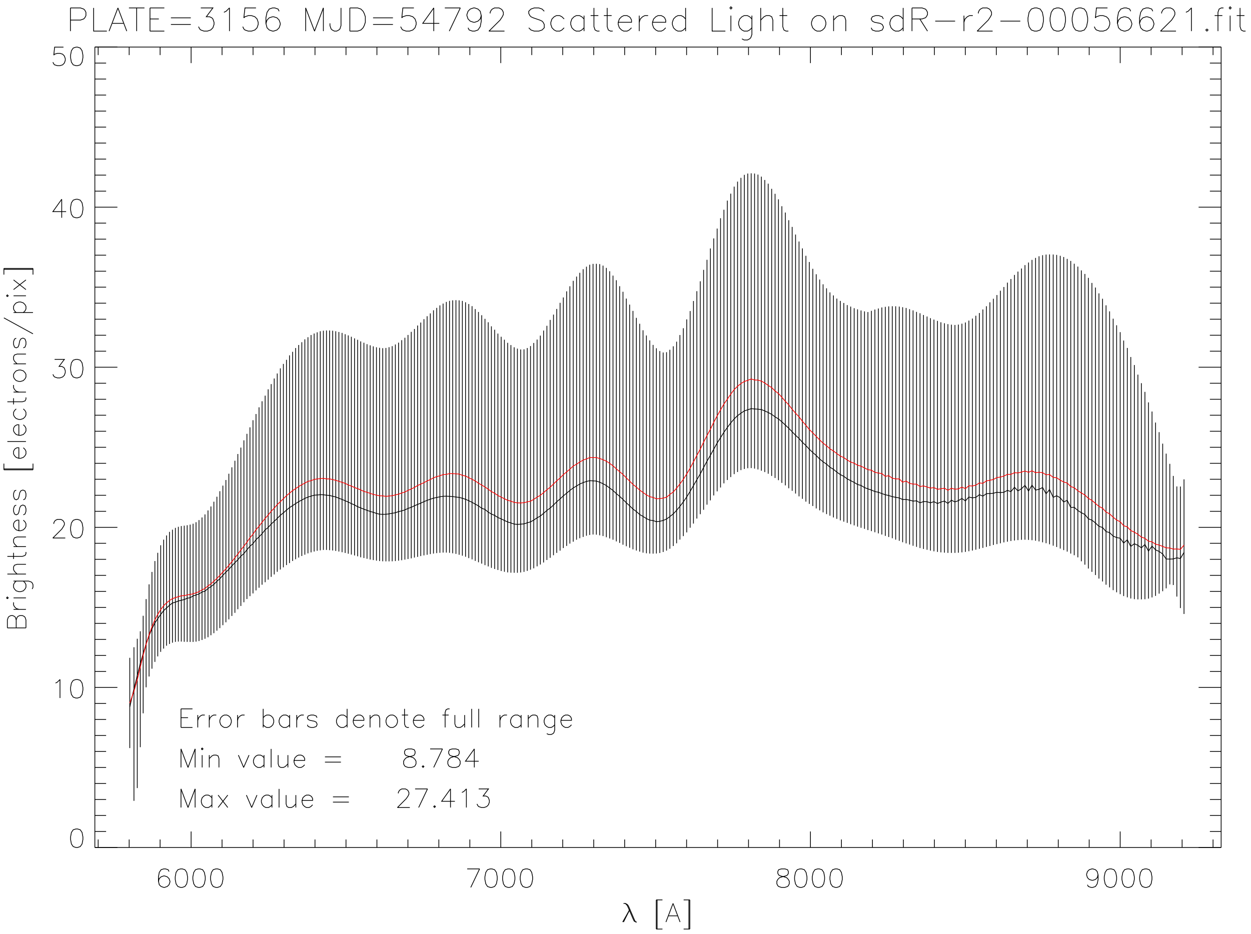
Tue Mar 9 19:50:57 2010



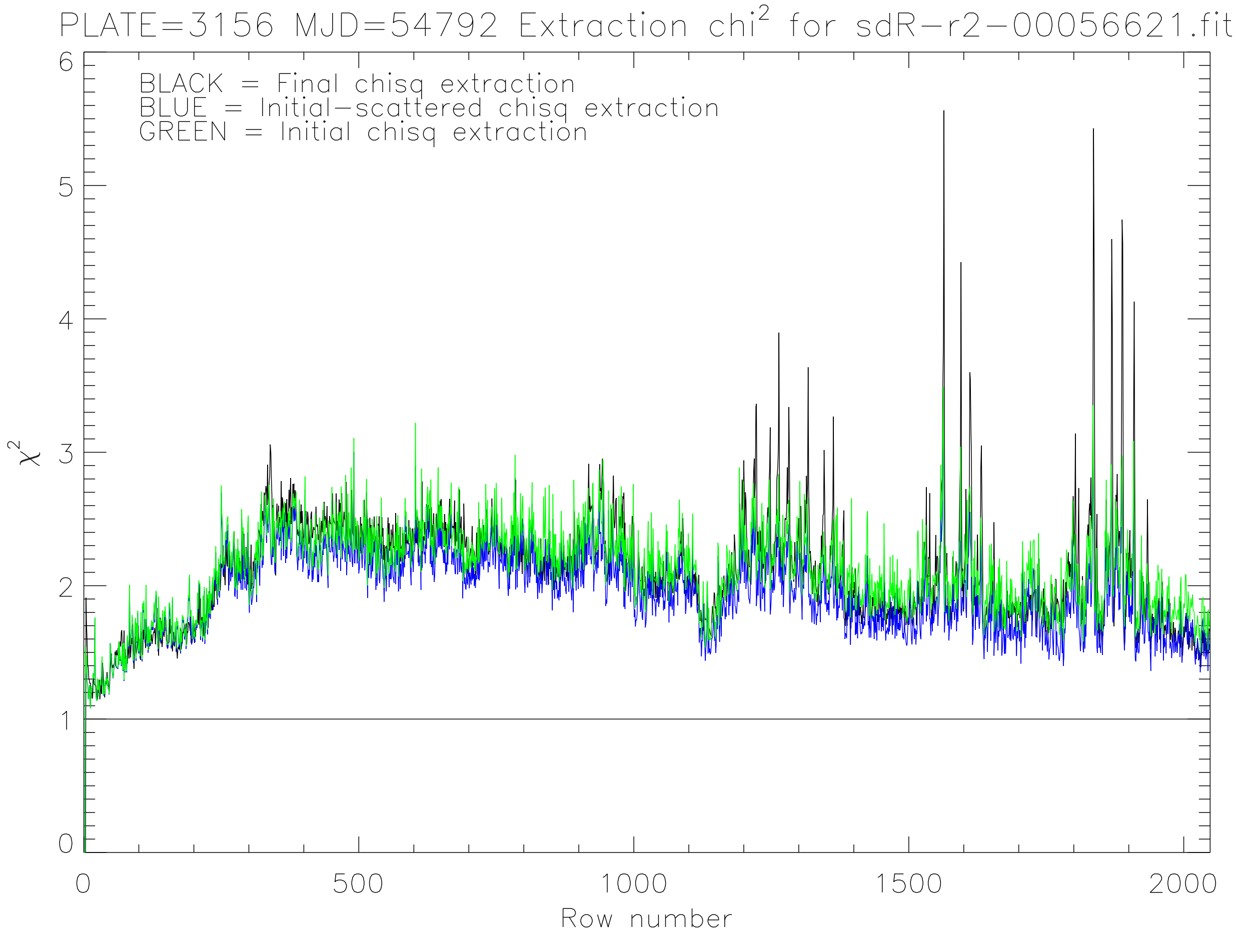
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056621.fi

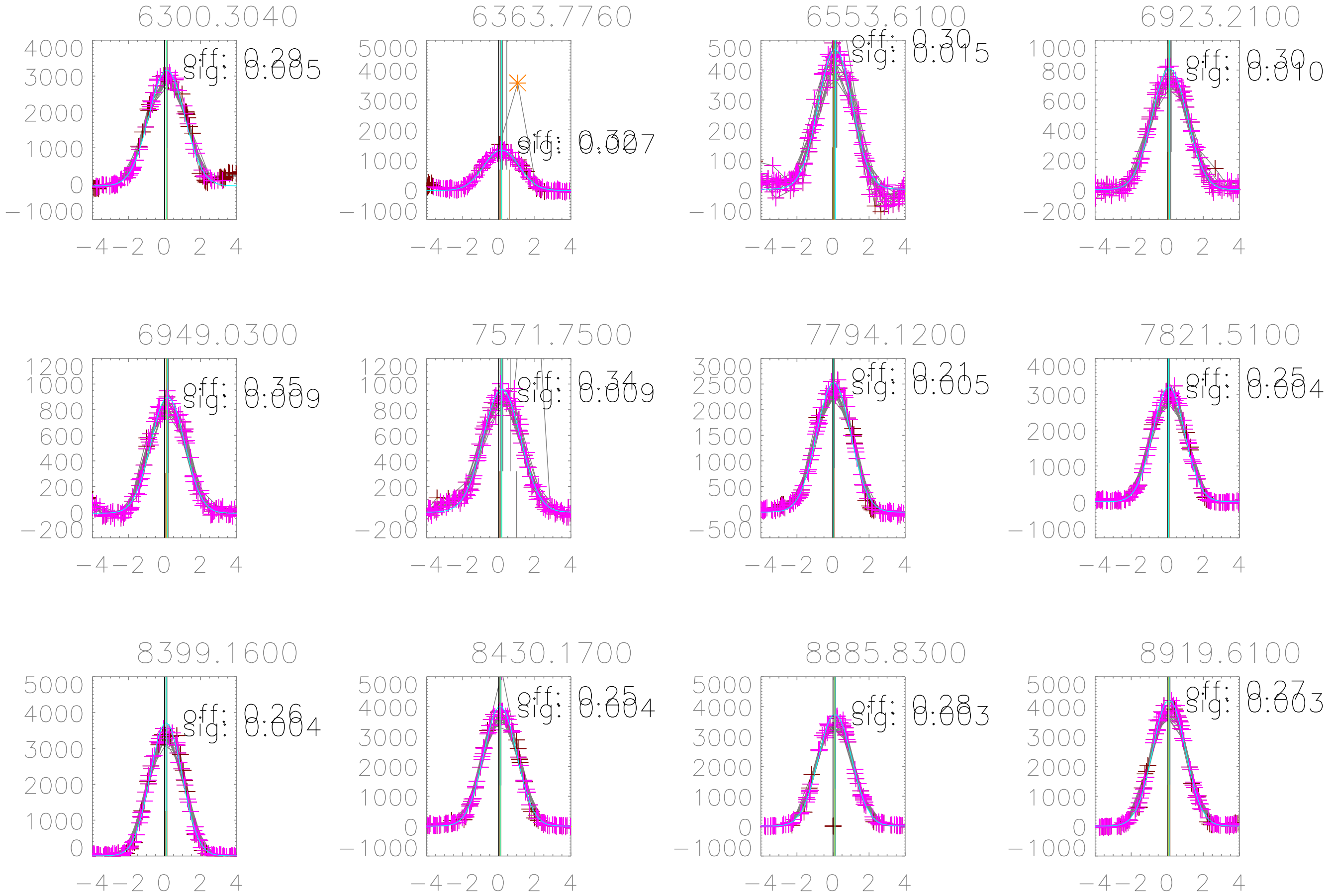

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056621.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.886
Max value = 73.418
Tue Mar 9 19:51:31 2010


PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056621.fit

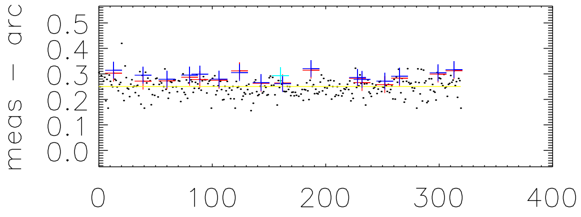


Tue Mar 9 19:53:31 2010

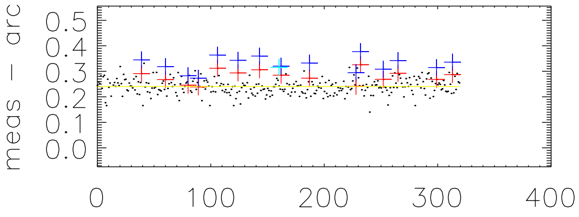

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r2-00056621.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number


6300.3040
off: 0.29
sig: 0.005
6363.7760
off: 0.32
sig: 0.027
6553.6100
off: 0.30
sig: 0.015
6923.2100
off: 0.30
sig: 0.010
6949.0300
off: 0.35
sig: 0.009
7571.7500
off: 0.34
sig: 0.009
7794.1200
off: 0.21
sig: 0.005
7821.5100
off: 0.25
sig: 0.004
8399.1600
off: 0.26
sig: 0.004
8430.1700
off: 0.25
sig: 0.004
8885.8300
off: 0.28
sig: 0.003
8919.6100
off: 0.27
sig: 0.003
−4 −2 0 2 4

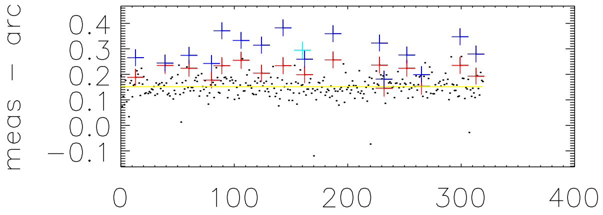
6300.3040



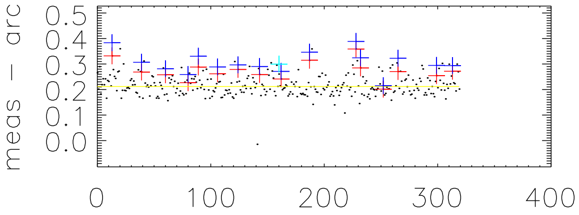
6363.7760



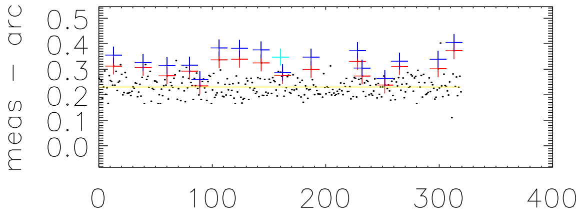
6553.6100



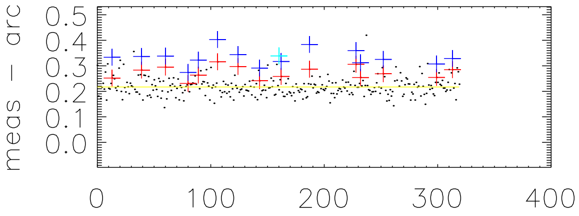
6923.2100

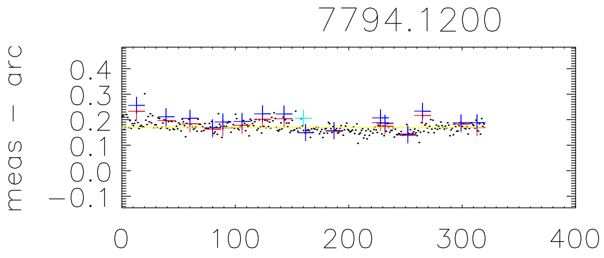


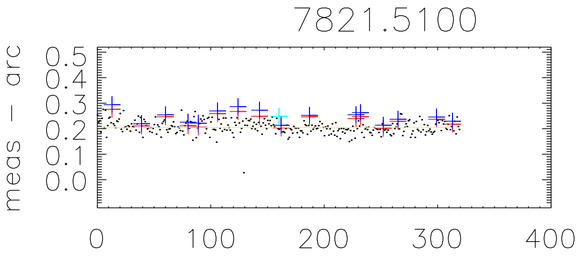
6949.0300

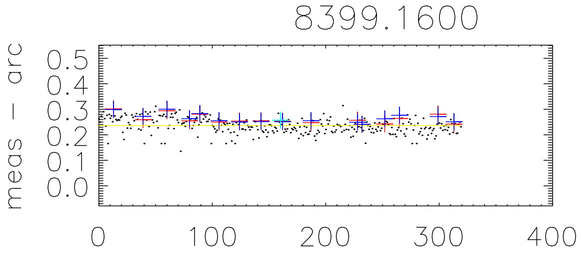


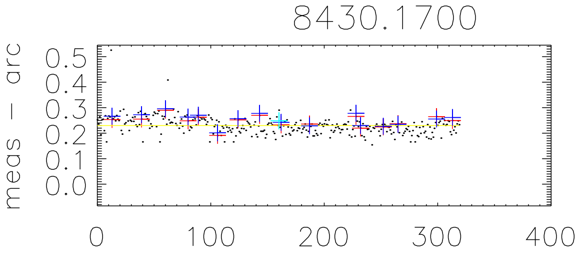
7571.7500

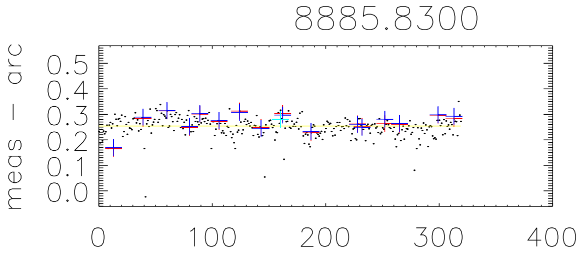


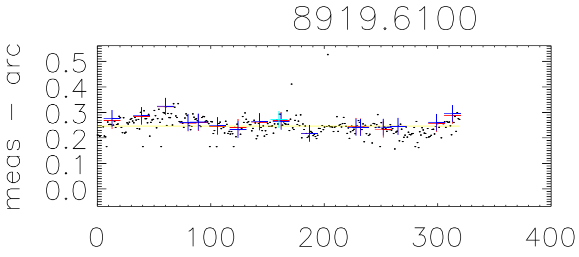

7794.1200
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

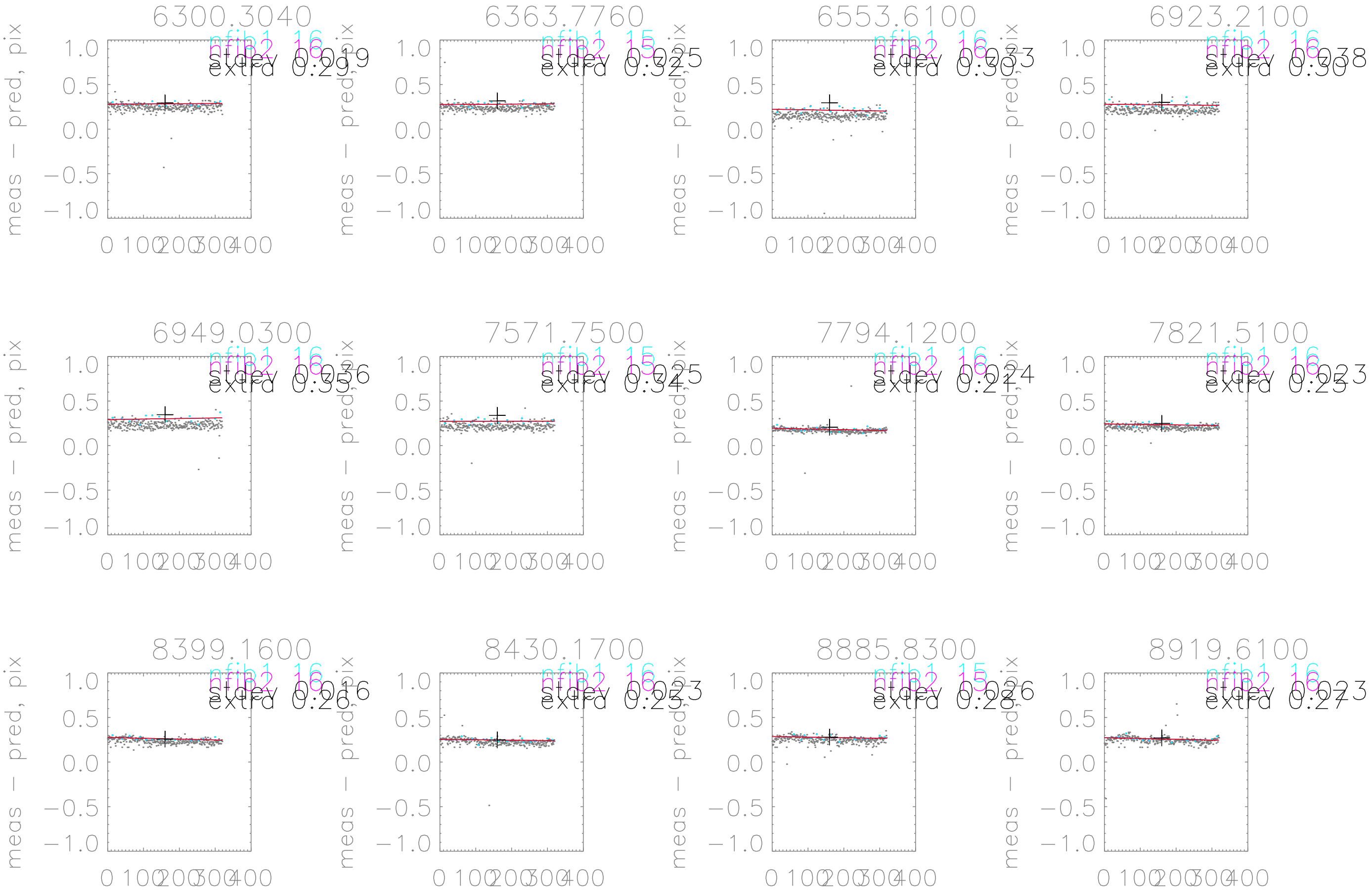

7821.5100
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

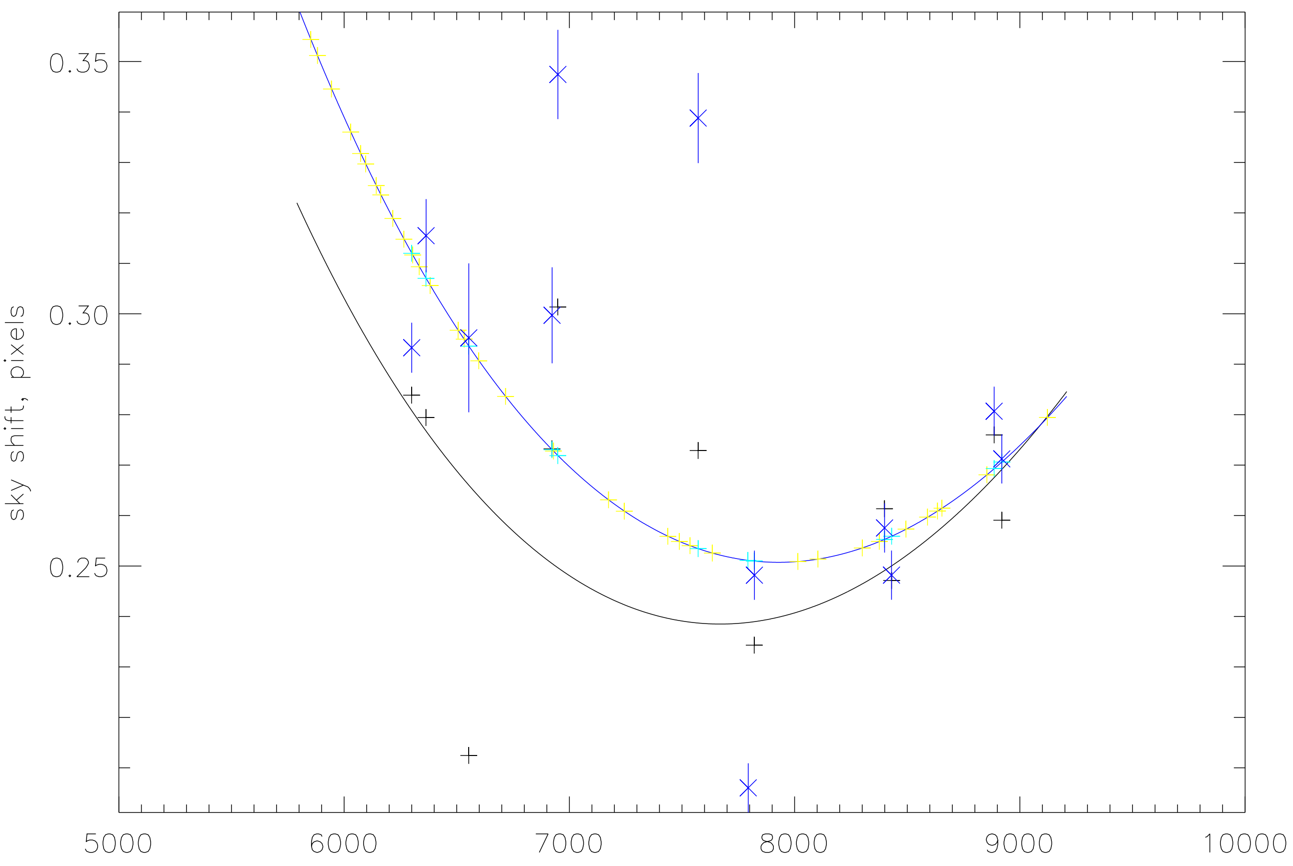

8399.1600
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


8430.1700
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

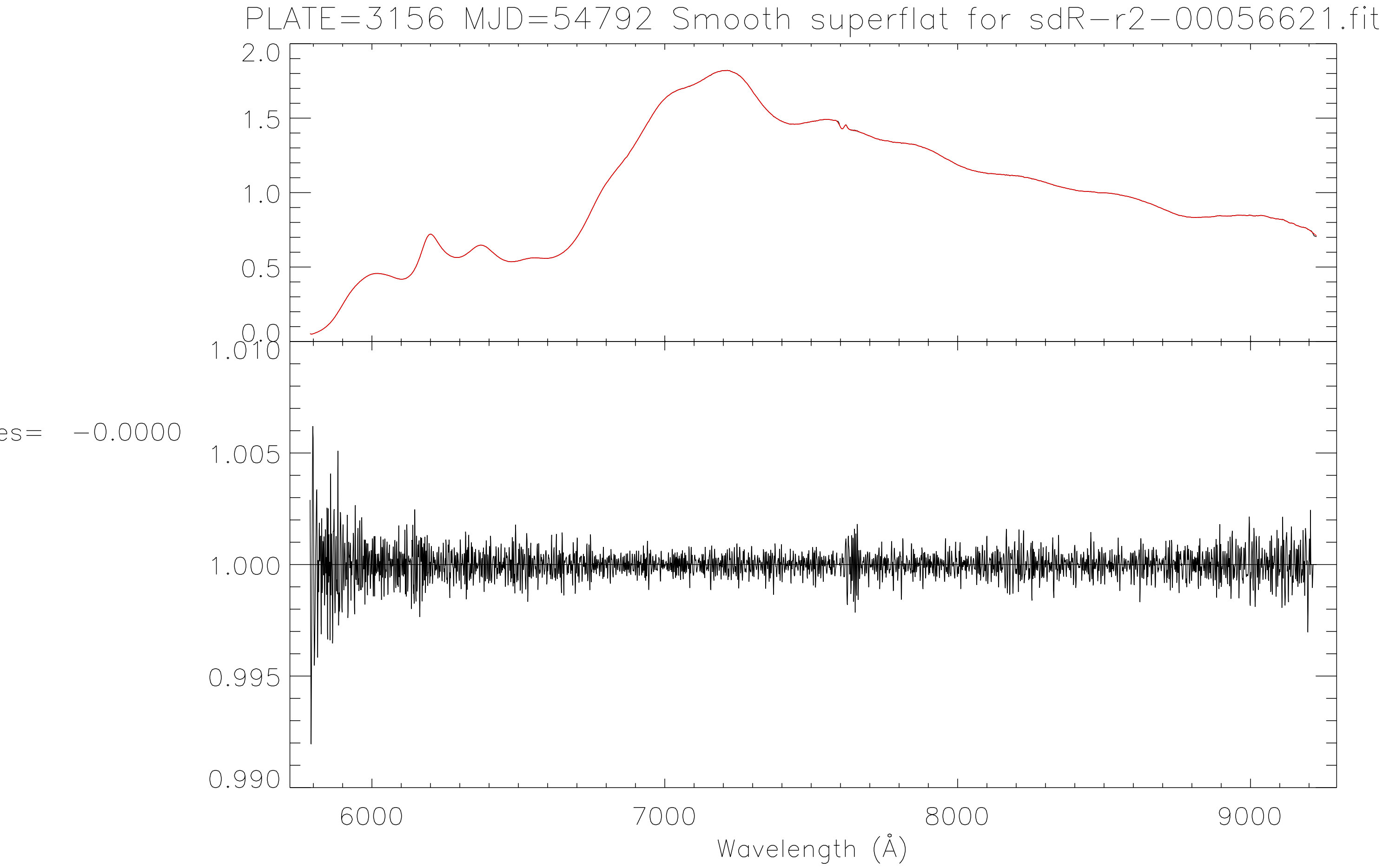

8885.8300
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

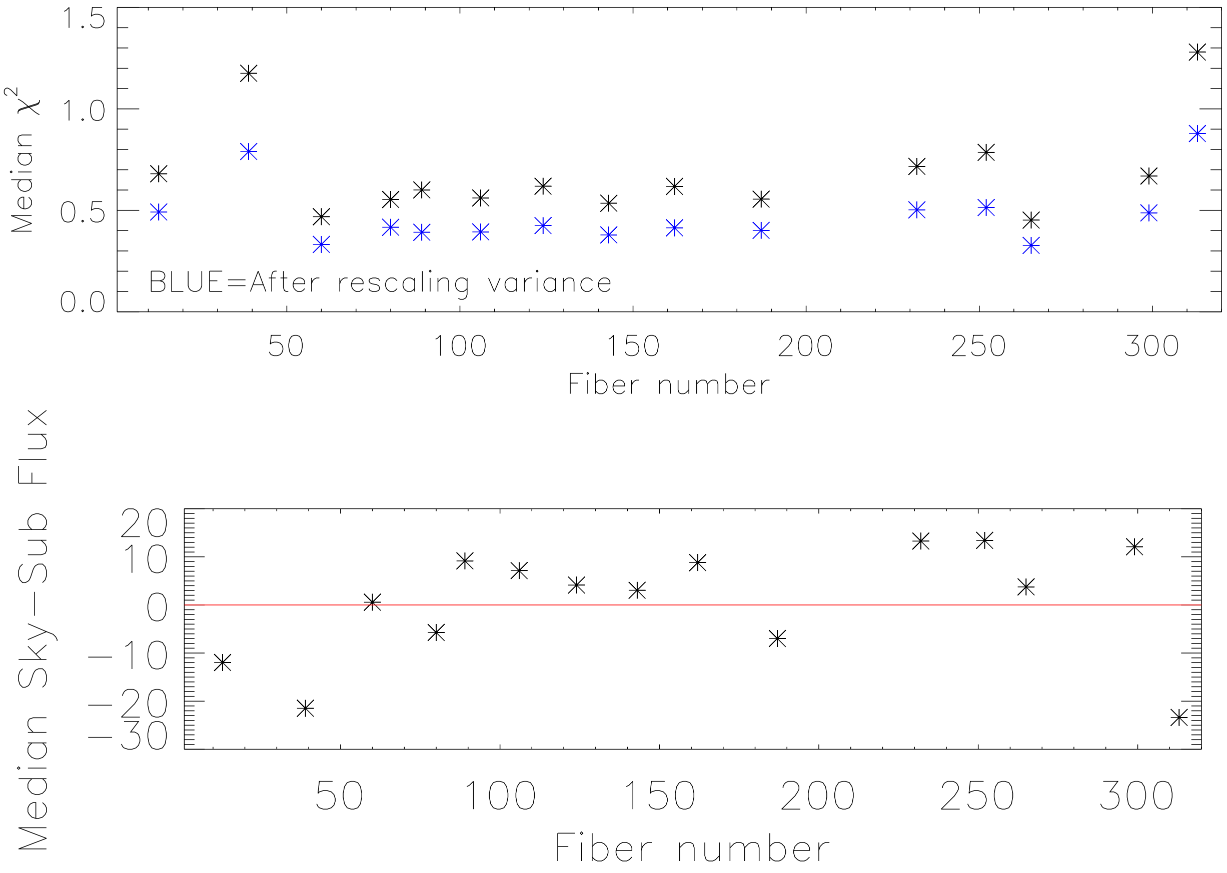

8919.6100
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


6300.3040
nfib1 16
nfib2 16
stdev 0.019
extrd 0.29
6363.7760
nfib1 15
nfib2 15
stdev 0.025
extrd 0.32
6553.6100
nfib1 16
nfib2 16
stdev 0.033
extrd 0.30
6923.2100
nfib1 16
nfib2 16
stdev 0.038
extrd 0.30
6949.0300
nfib1 16
nfib2 16
stdev 0.036
extrd 0.35
7571.7500
nfib1 15
nfib2 15
stdev 0.025
extrd 0.34
7794.1200
nfib1 16
nfib2 16
stdev 0.024
extrd 0.21
7821.5100
nfib1 16
nfib2 16
stdev 0.023
extrd 0.25
8399.1600
nfib1 16
nfib2 16
stdev 0.016
extrd 0.26
8430.1700
nfib1 16
nfib2 16
stdev 0.023
extrd 0.25
8885.8300
nfib1 15
nfib2 15
stdev 0.026
extrd 0.28
8919.6100
nfib1 16
nfib2 16
stdev 0.023
extrd 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

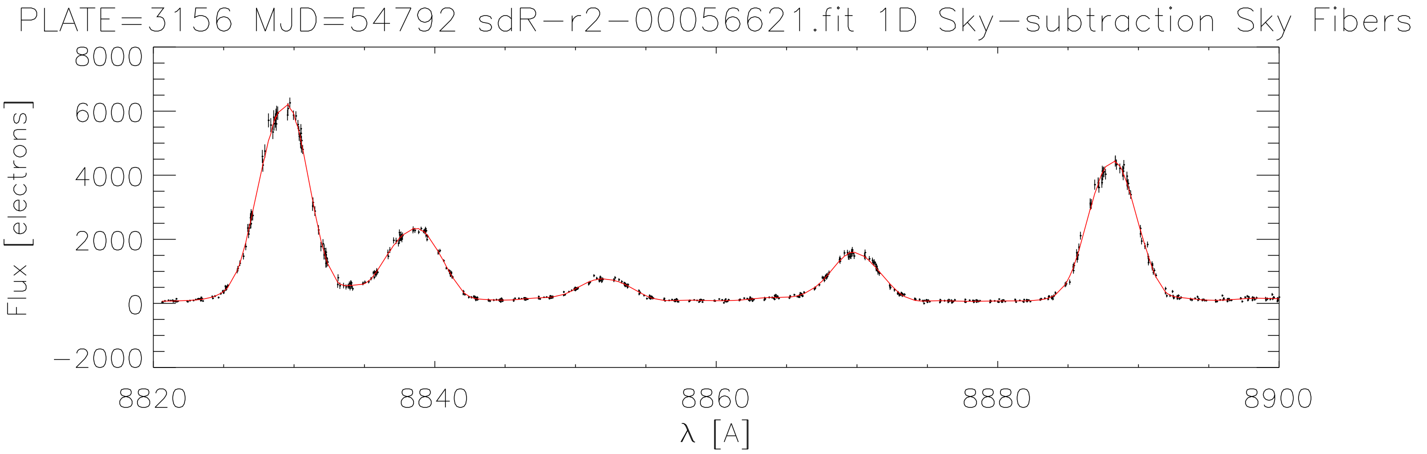


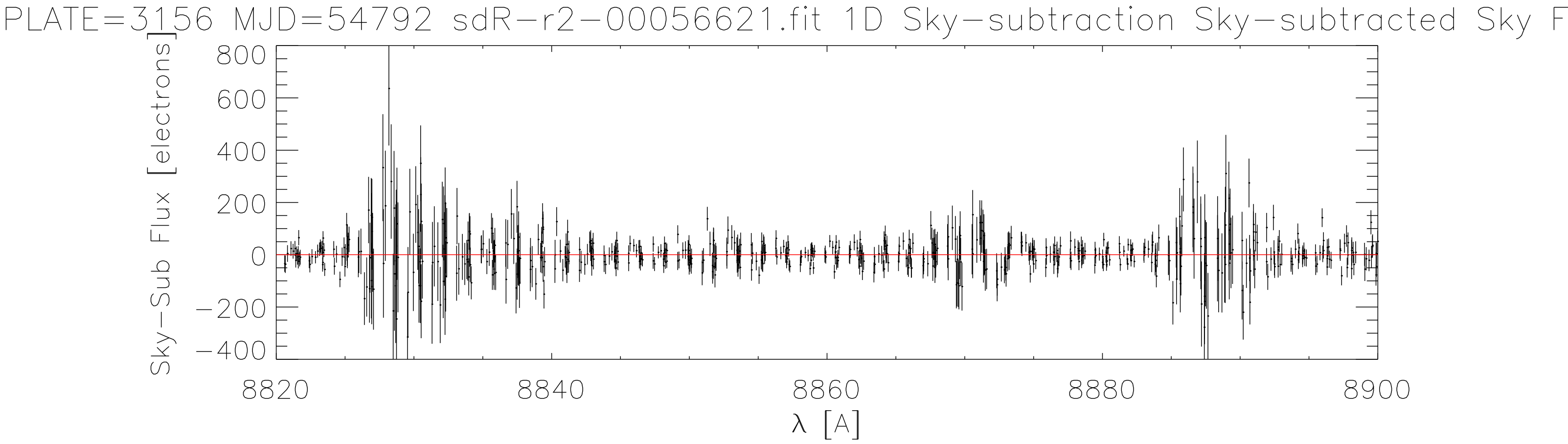
sky shift, pixels
0.35
0.30
0.25
5000
6000
7000
8000
9000
10000

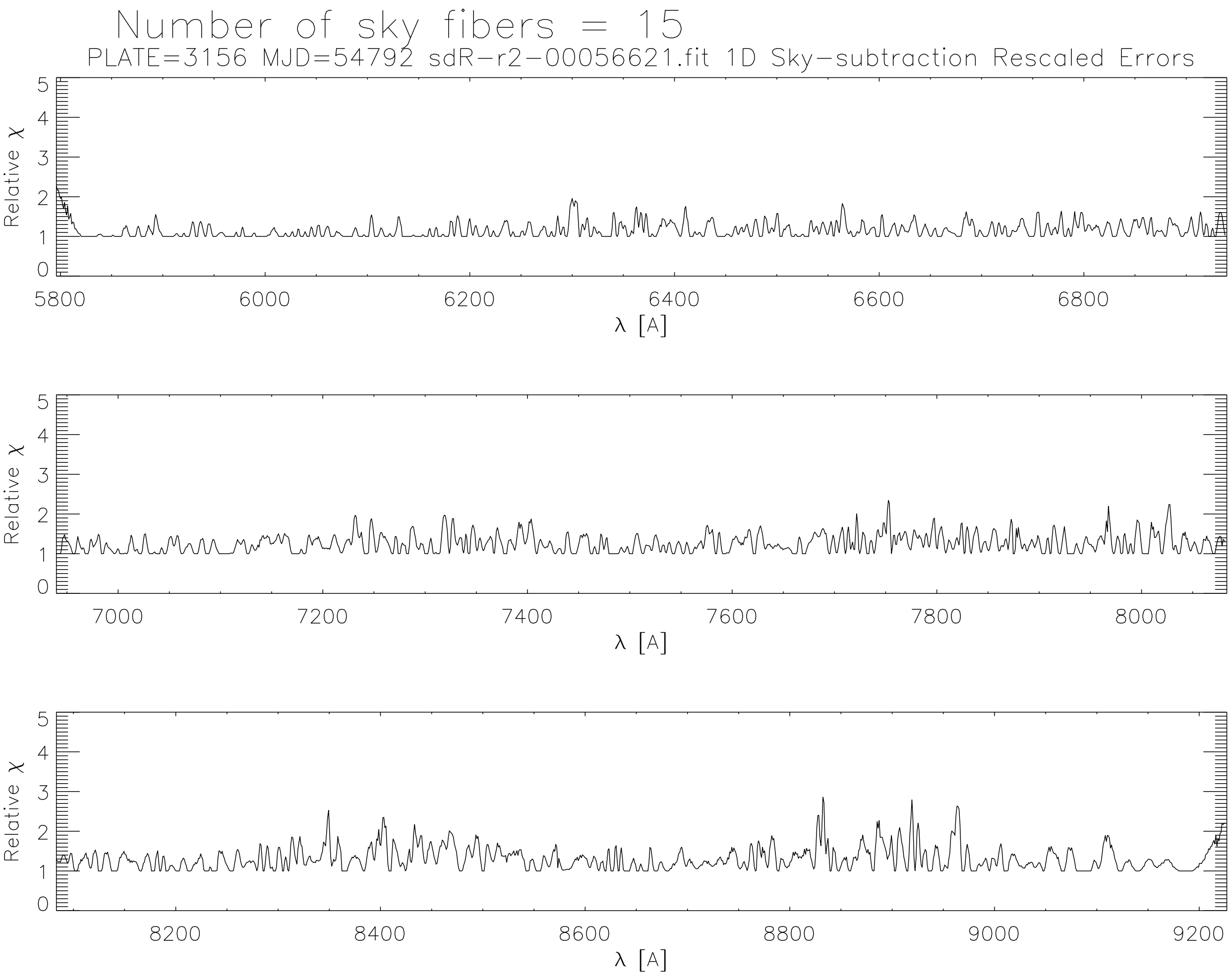

PLATE=3156 MJD=54792 Smooth superflat for sdR-r2-00056621.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)



PLATE=3156 MJD=54792 sdR-r2-00056621.fit 1D Sky-subtraction Sky Fiber

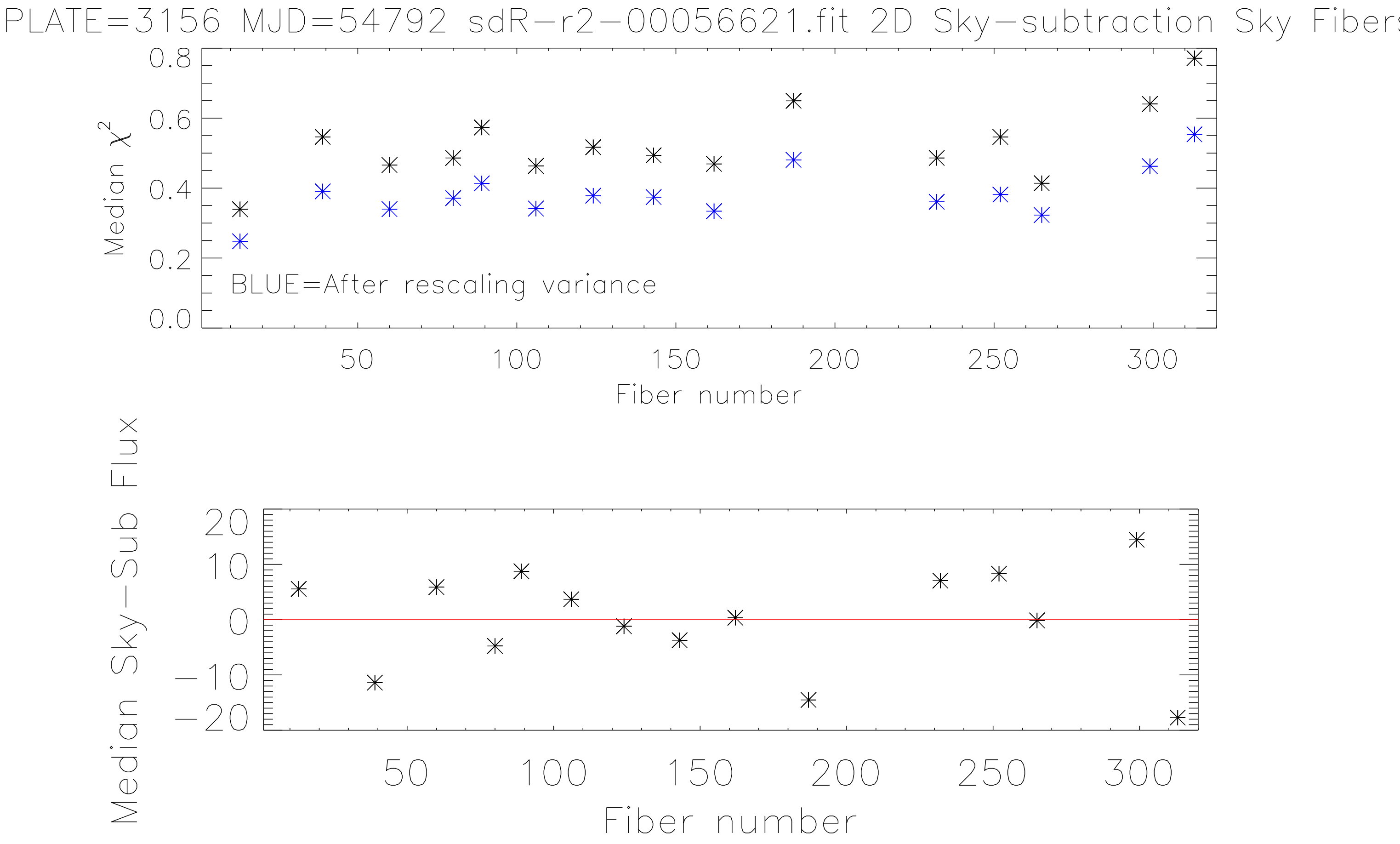

PLATE=3156 MJD=54792 sdR-r2-00056621.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

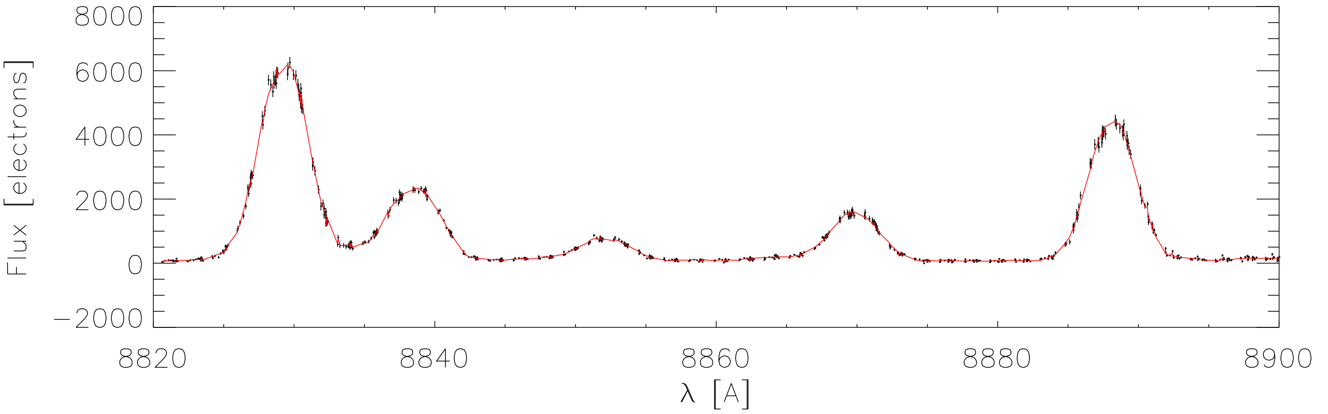

PLATE=3156 MJD=54792 sdR-r2-00056621.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]



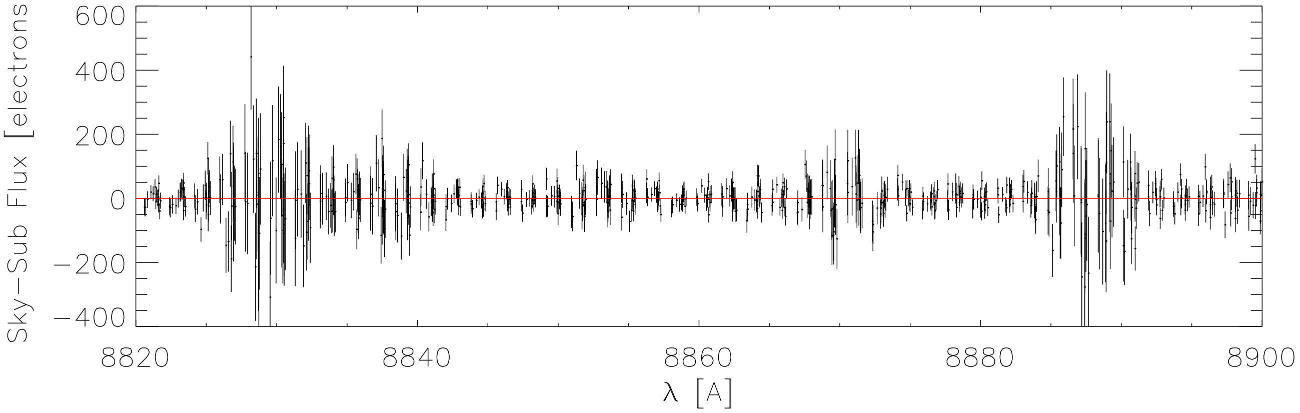
Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-r2-00056621.fit 1D Sky-subtraction Rescaled Errors

PLATE=3156 MJD=54792 sdR-r2-00056621.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−20
−10
0
10
20
50
100
150
200
250
300
Fiber number



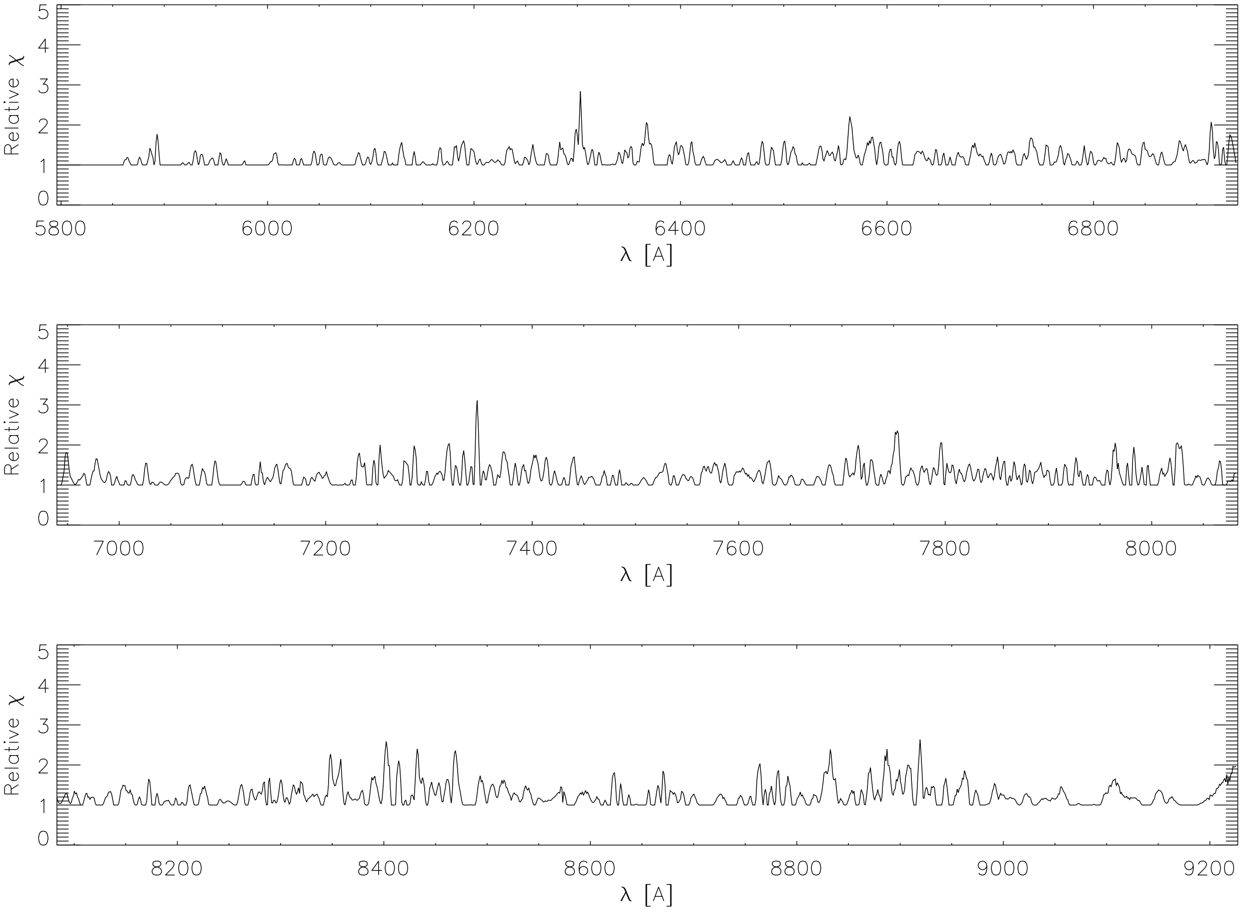
PLATE=3156 MJD=54792 sdR-r2-00056621.fit 2D Sky-subtraction Sky Fibers

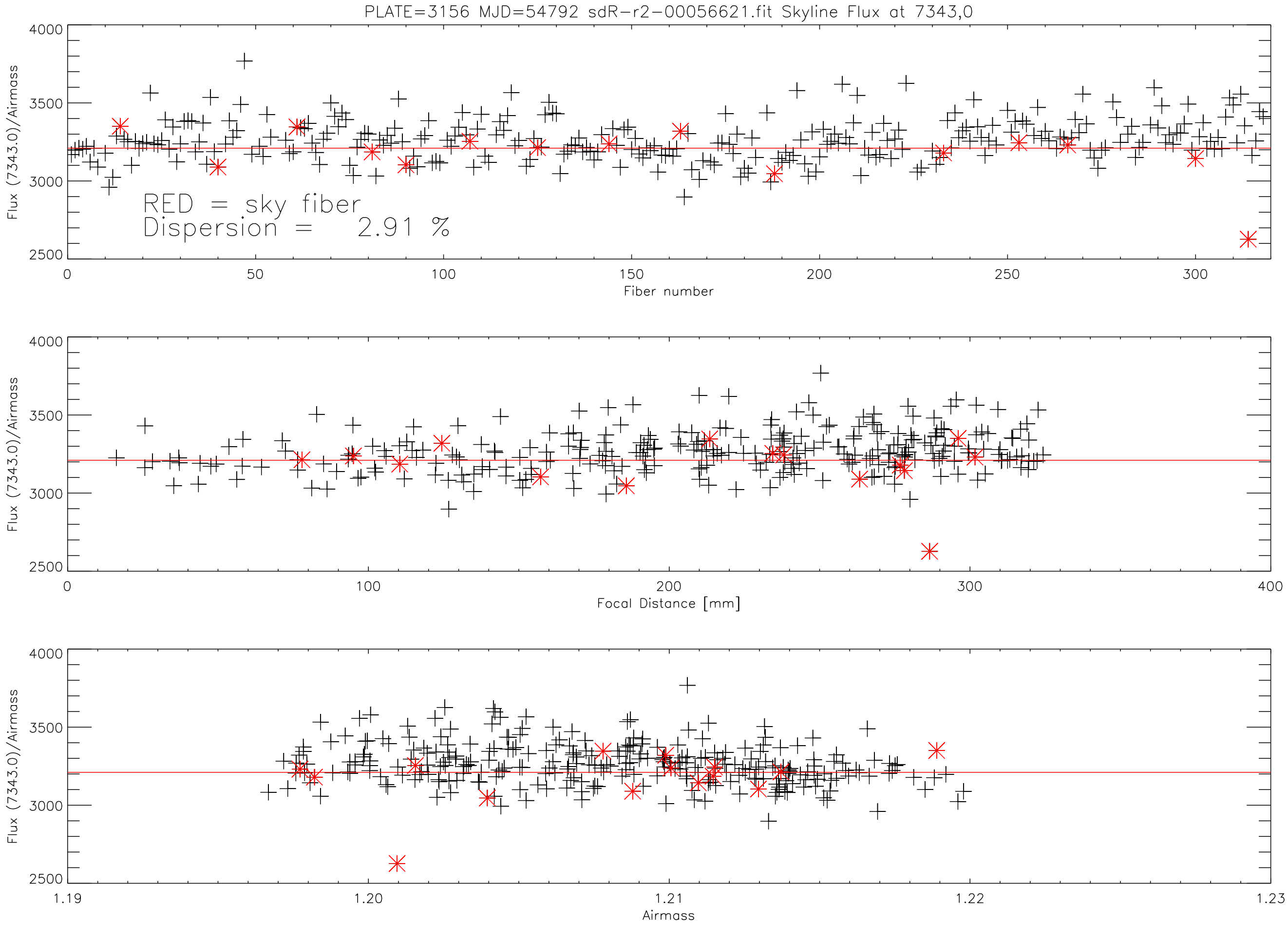


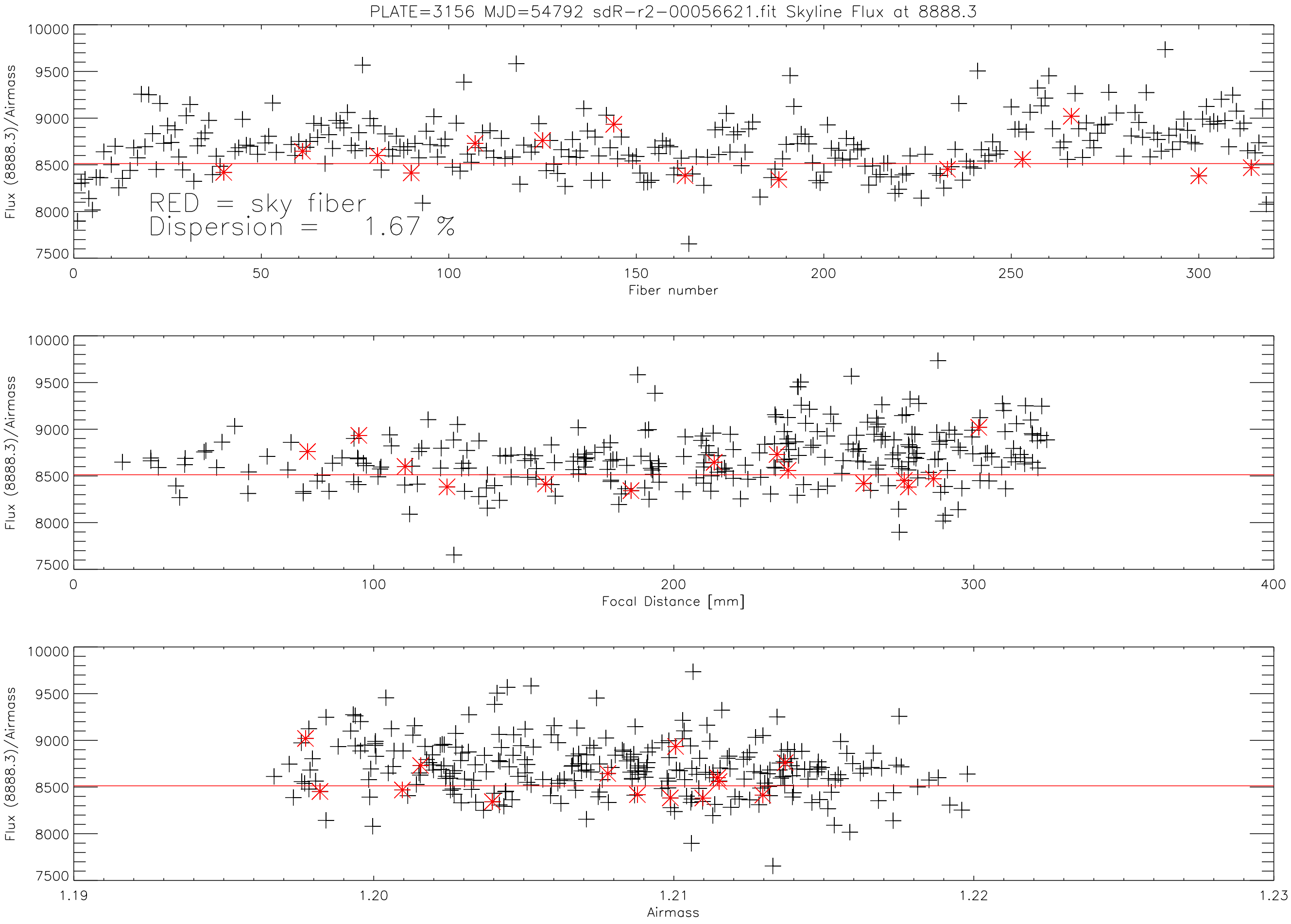
PLATE=3156 MJD=54792 sdR-r2-00056621.fit 2D Sky-subtraction Sky-subtracted Sky F

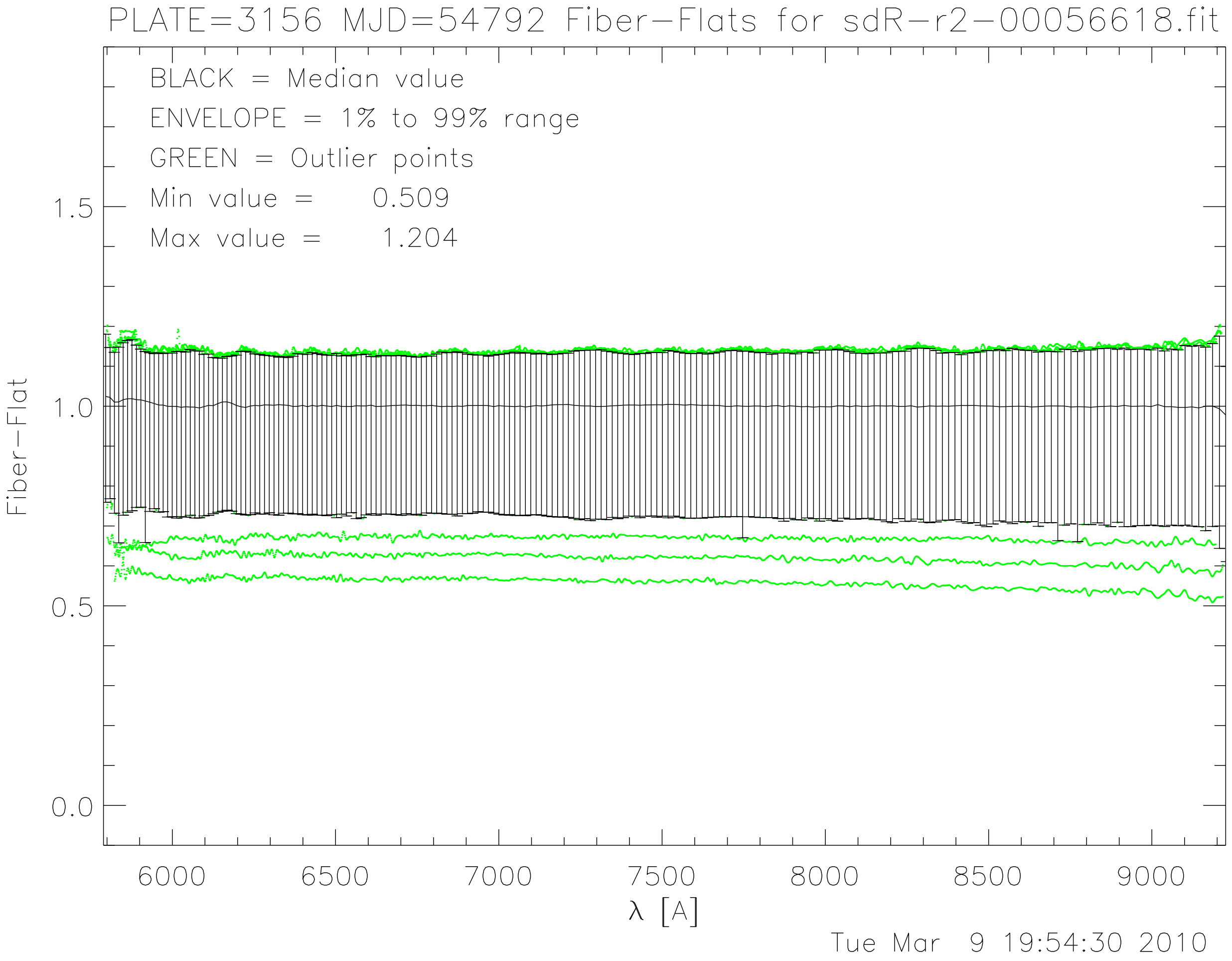
Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-r2-00056621.fit 2D Sky-subtraction Rescaled Errors

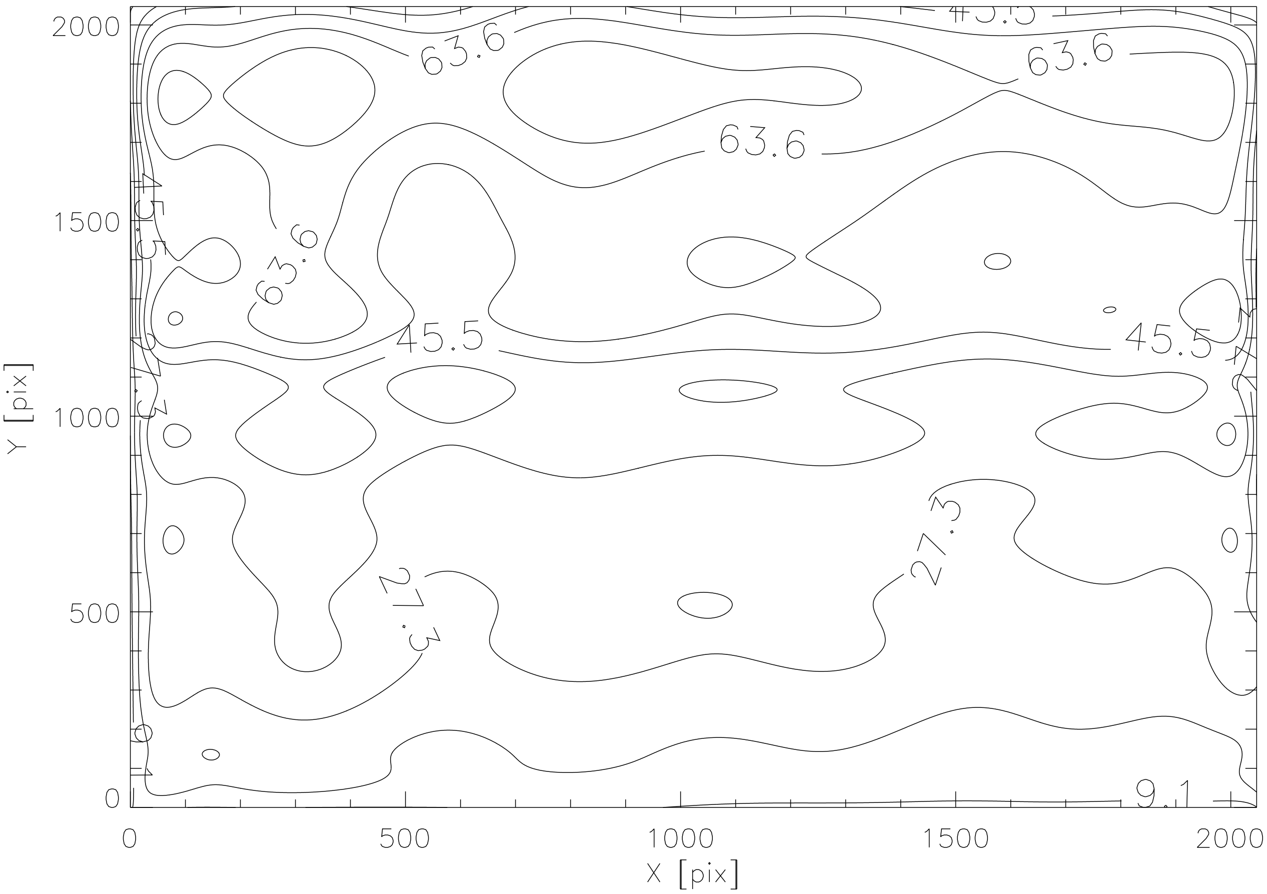


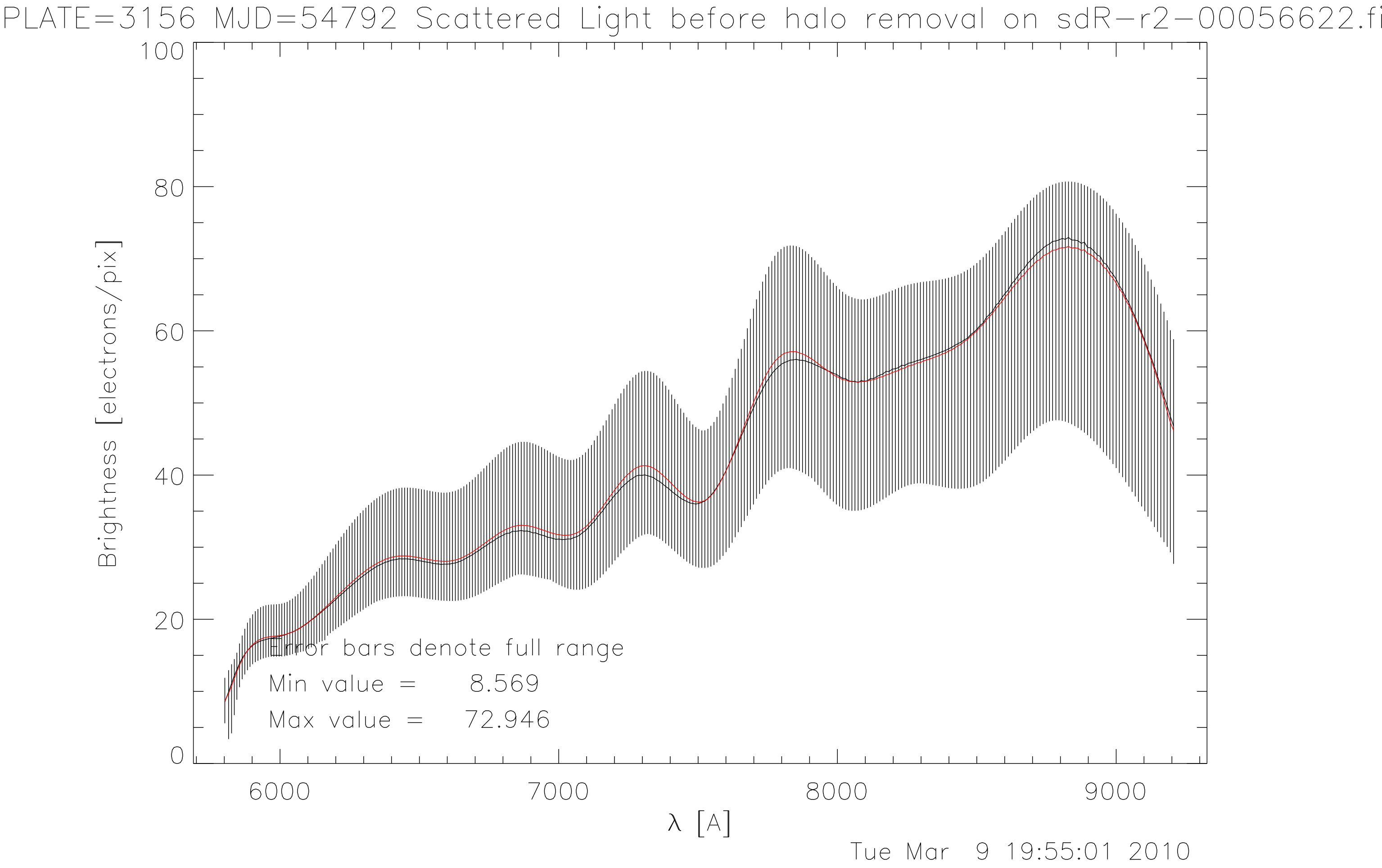

PLATE=3156 MJD=54792 sdR-r2-00056621.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
4000
3500
3000
2500
RED = sky fiber
Dispersion = 2.91 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
4000
3500
3000
2500
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
4000
3500
3000
2500
1.19
1.20
1.21
1.22
1.23
Airmass

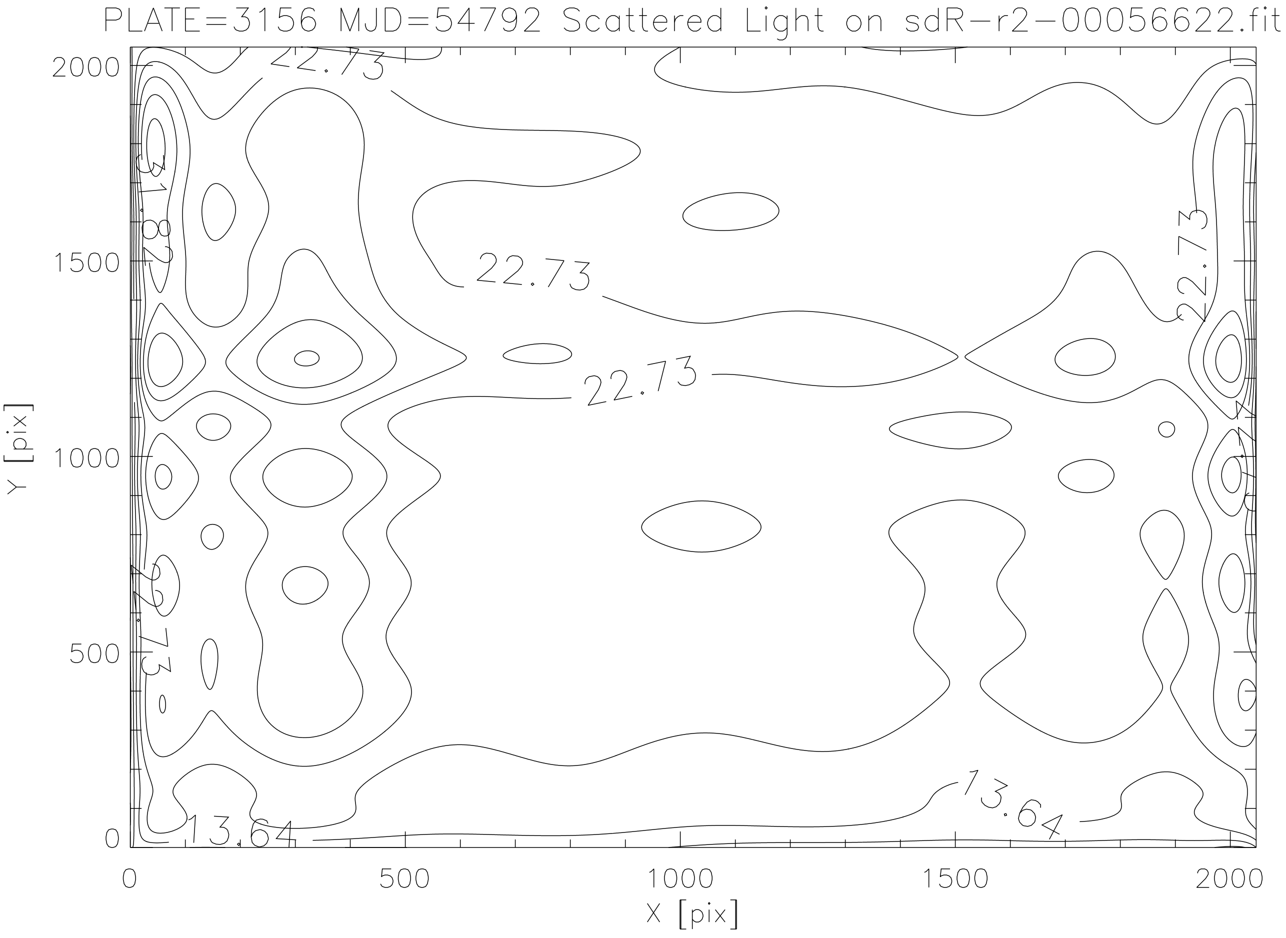

PLATE=3156 MJD=54792 sdR-r2-00056621.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 1.67 %
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
7500
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
7500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
7500
1.19
1.20
1.21
1.22
1.23
Airmass

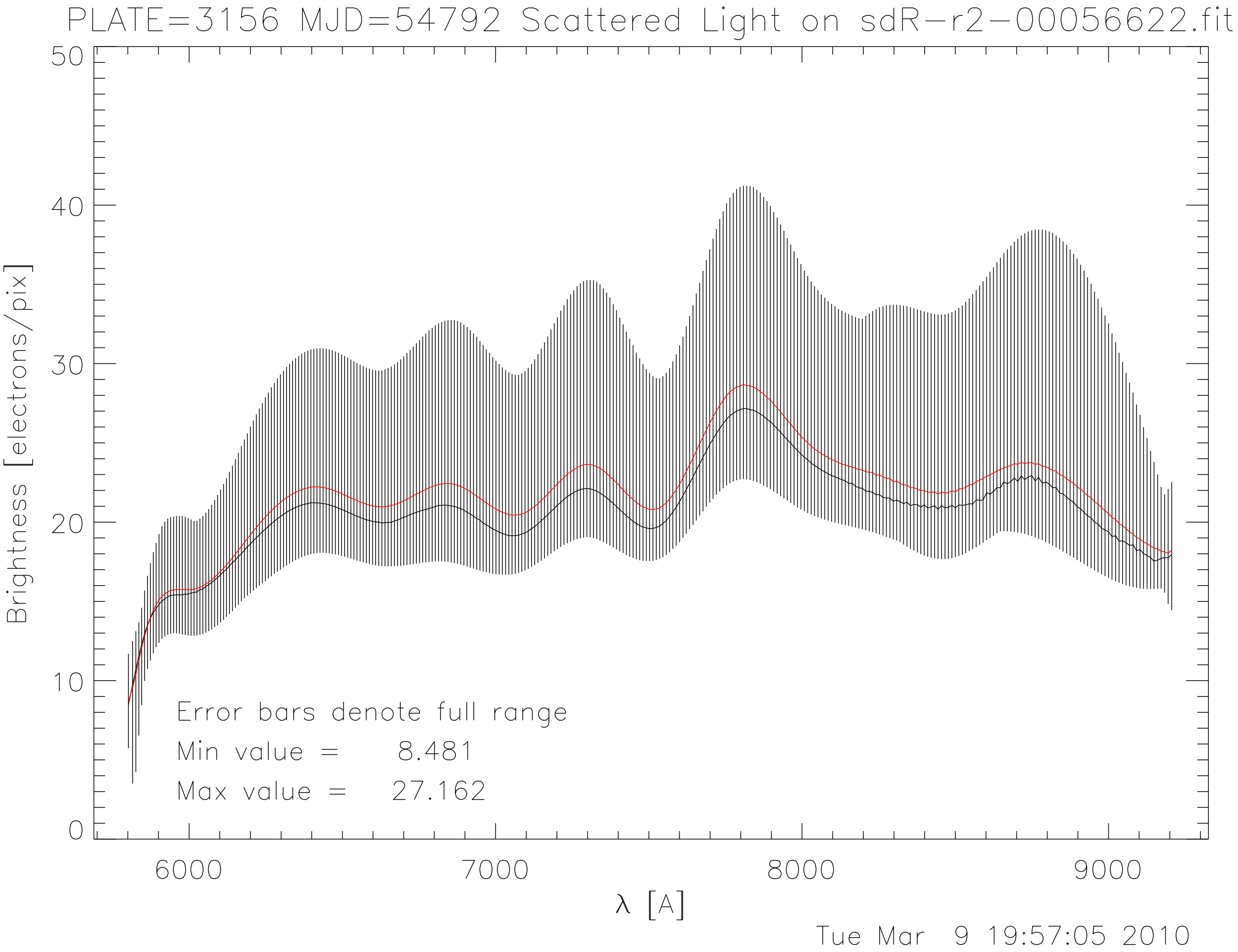

PLATE=3156 MJD=54792 Fiber−Flats for sdR−r2−00056618.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.509
Max value = 1.204
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Mar 9 19:54:30 2010

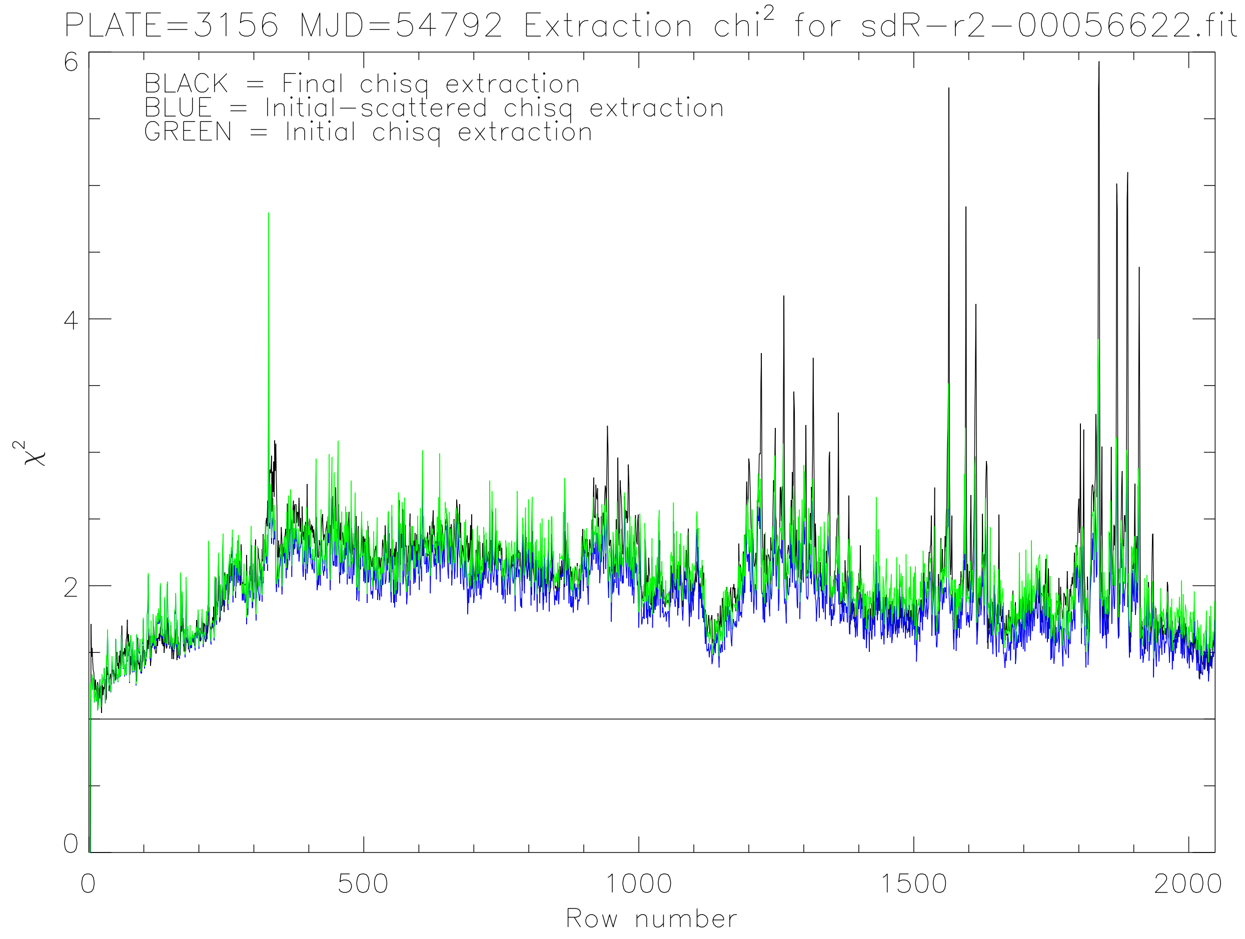
PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056622.fi

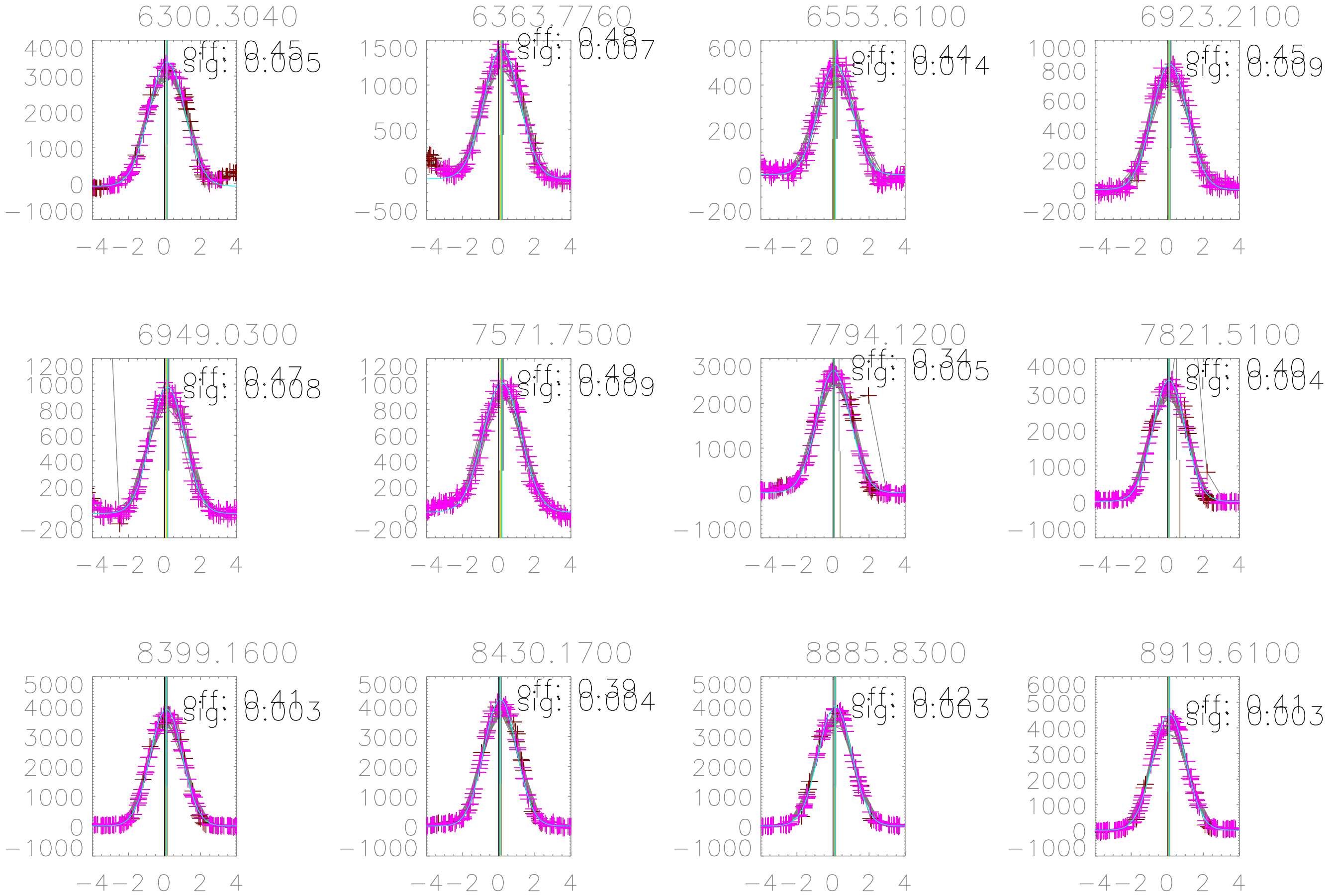


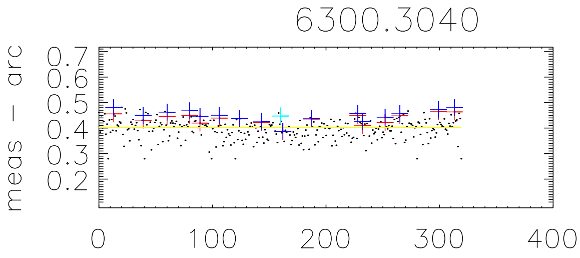

PLATE=3156 MJD=54792 Scattered Light before halo removal on sdR-r2-00056622.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   8.569
Max value =   72.946
Tue Mar 9 19:55:01 2010

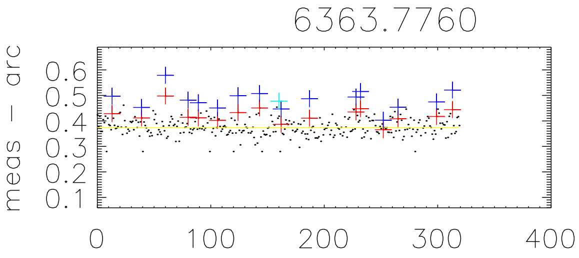

PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056622.fit

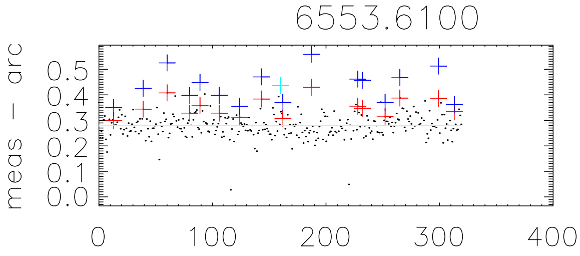

PLATE=3156 MJD=54792 Scattered Light on sdR-r2-00056622.fit
Brightness [electrons/pix]
0
10
20
30
40
50
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.481
Max value = 27.162
Tue Mar 9 19:57:05 2010

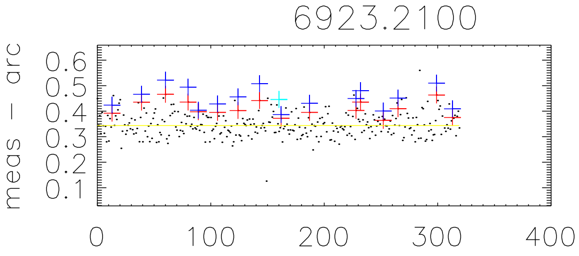

PLATE=3156 MJD=54792 Extraction chi^2 for sdR-r2-00056622.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

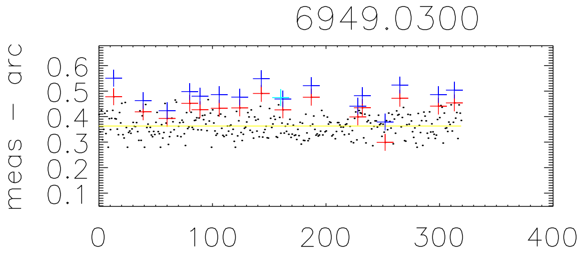

6300.3040
off: 0.45
sig: 0.005
6363.7760
off: 0.48
sig: 0.007
6553.6100
off: 0.44
sig: 0.014
6923.2100
off: 0.45
sig: 0.009
6949.0300
off: 0.47
sig: 0.008
7571.7500
off: 0.49
sig: 0.009
7794.1200
off: 0.34
sig: 0.005
7821.5100
off: 0.40
sig: 0.004
8399.1600
off: 0.41
sig: 0.003
8430.1700
off: 0.39
sig: 0.004
8885.8300
off: 0.42
sig: 0.003
8919.6100
off: 0.41
sig: 0.003
−4 −2 0 2 4

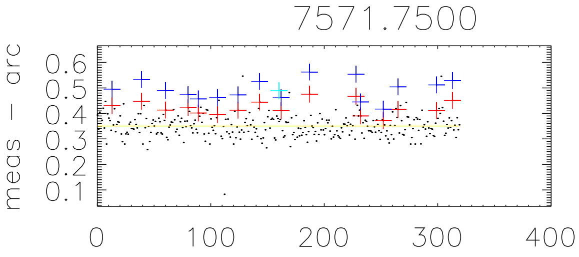

6300.3040
meas – arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

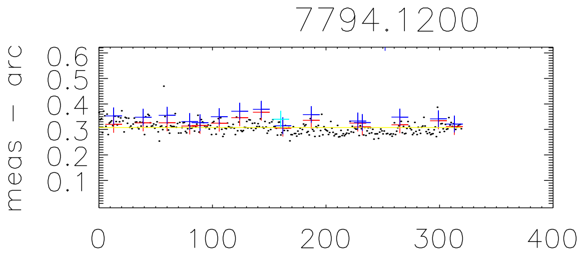

6363.7760
meas – arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

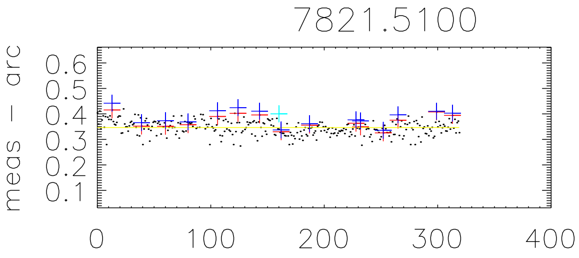

6553.6100
meas – arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

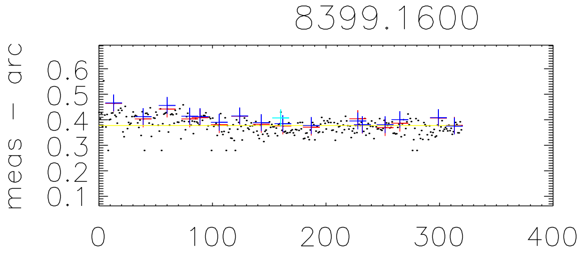

6923.2100
meas – arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

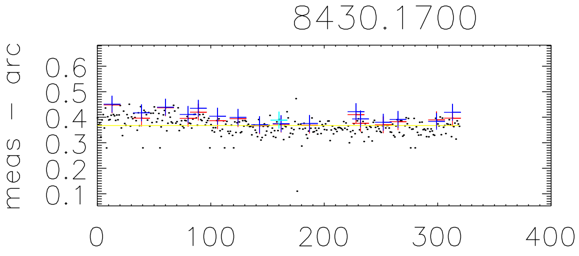

6949.0300
meas – arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

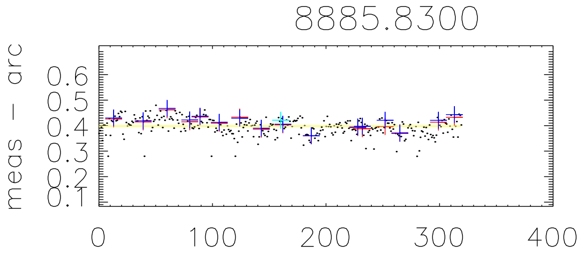

7571.7500
meas – arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

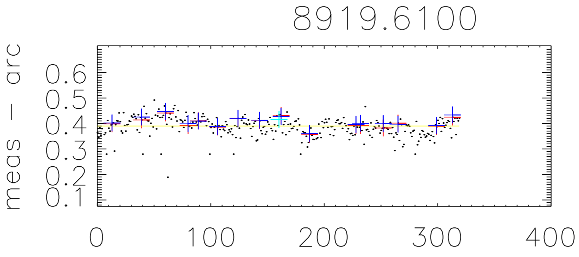

7794.1200
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

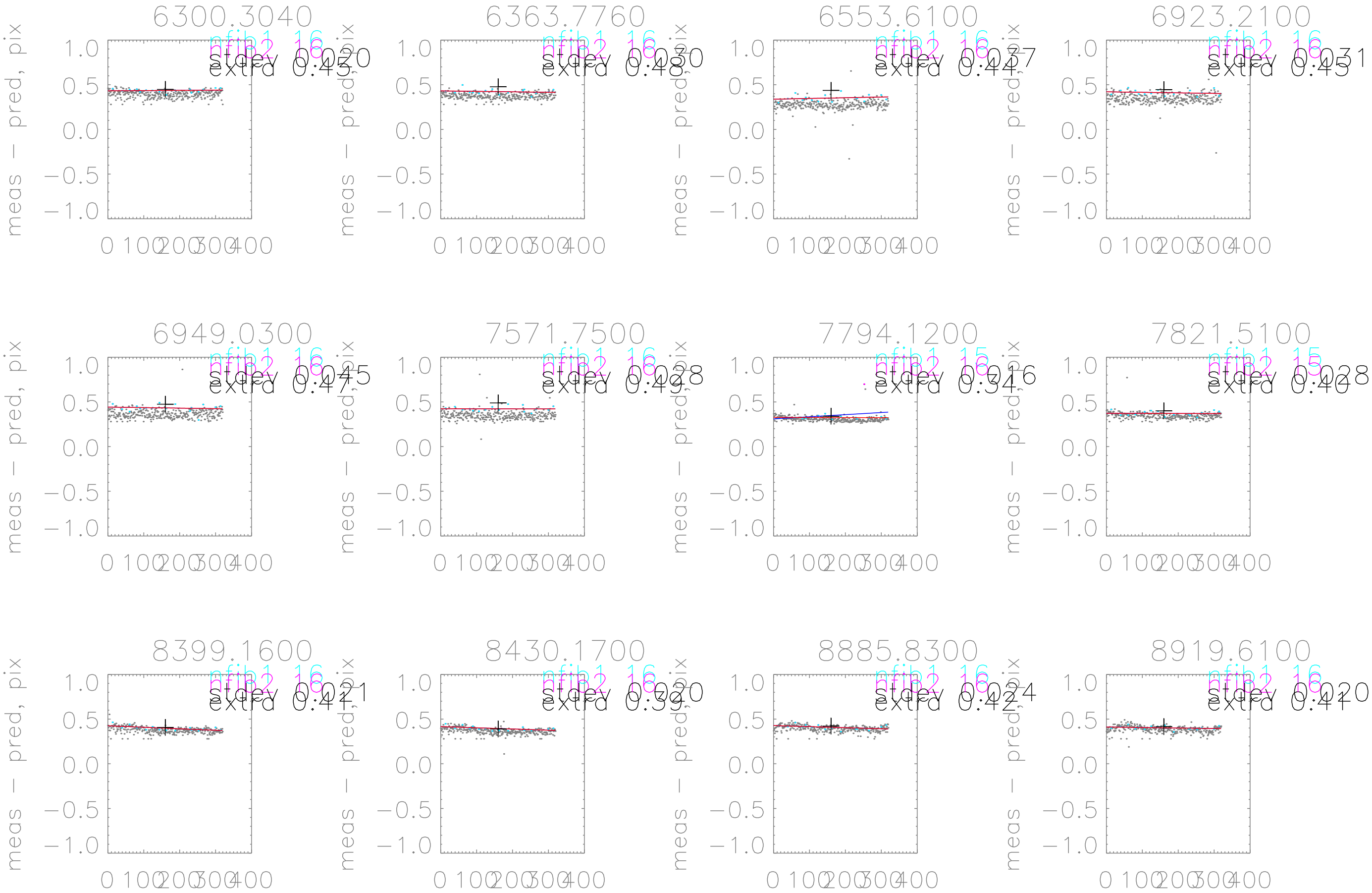

7821.5100
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

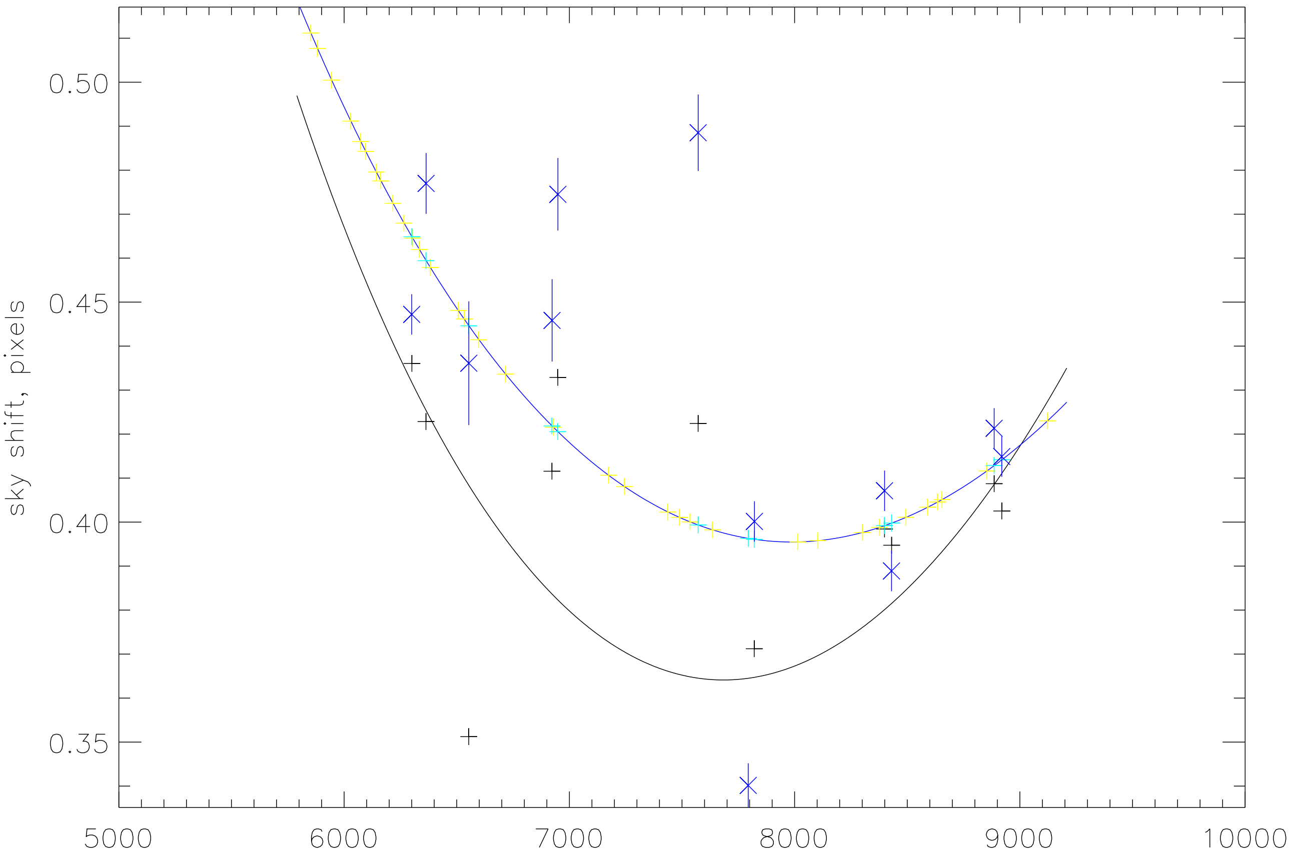

8399.1600
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

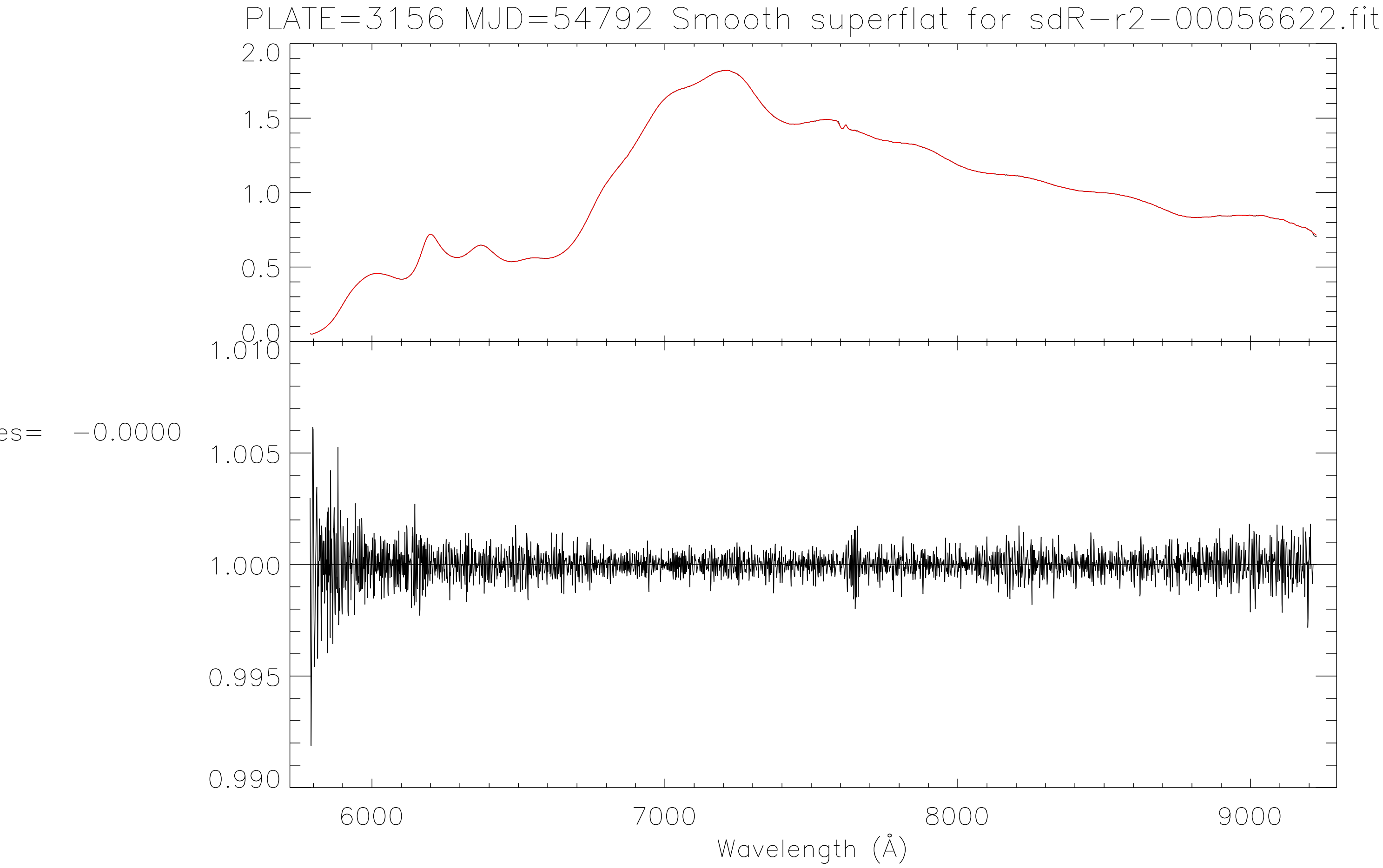

8430.1700
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

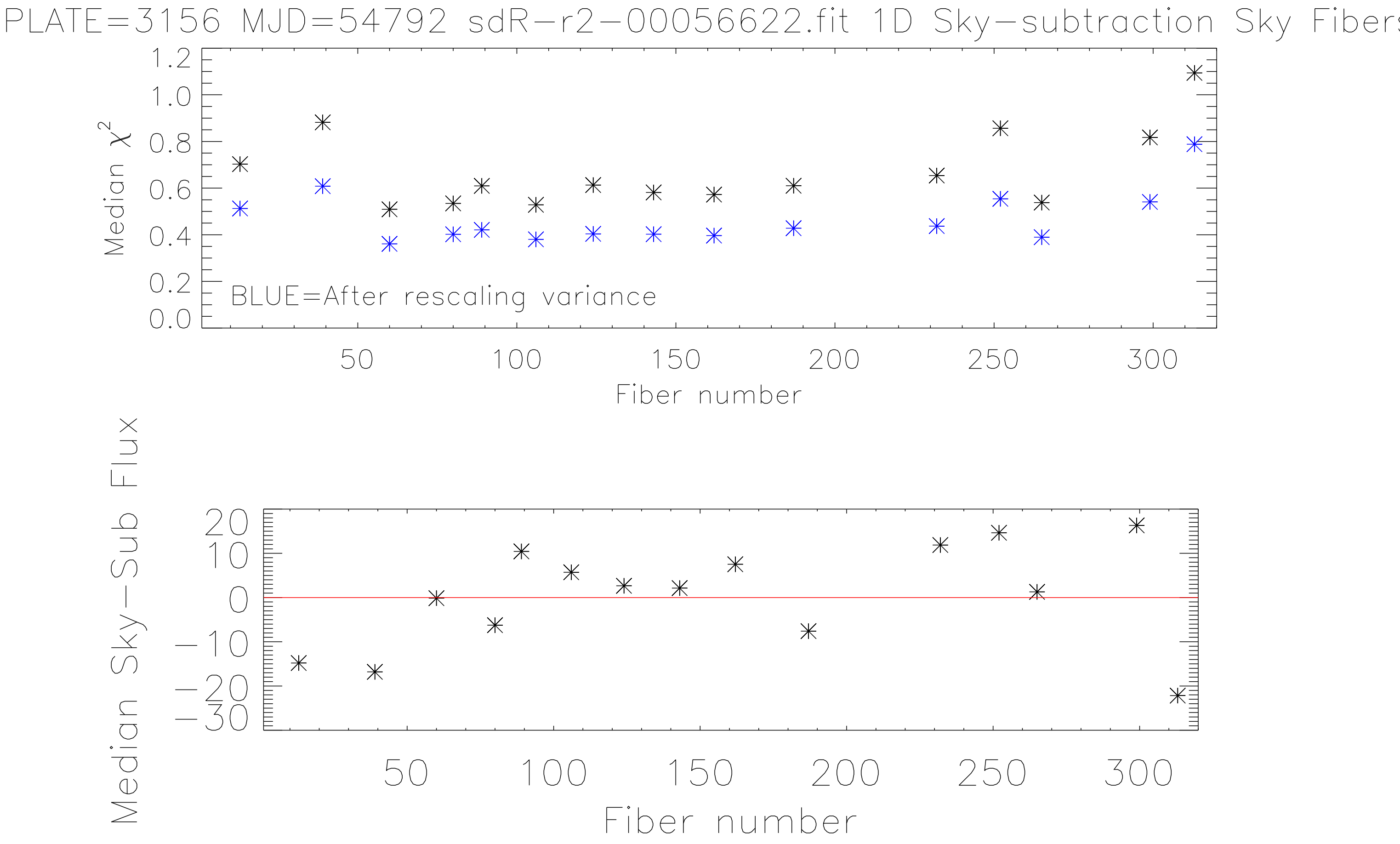

8885.8300
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


8919.6100
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

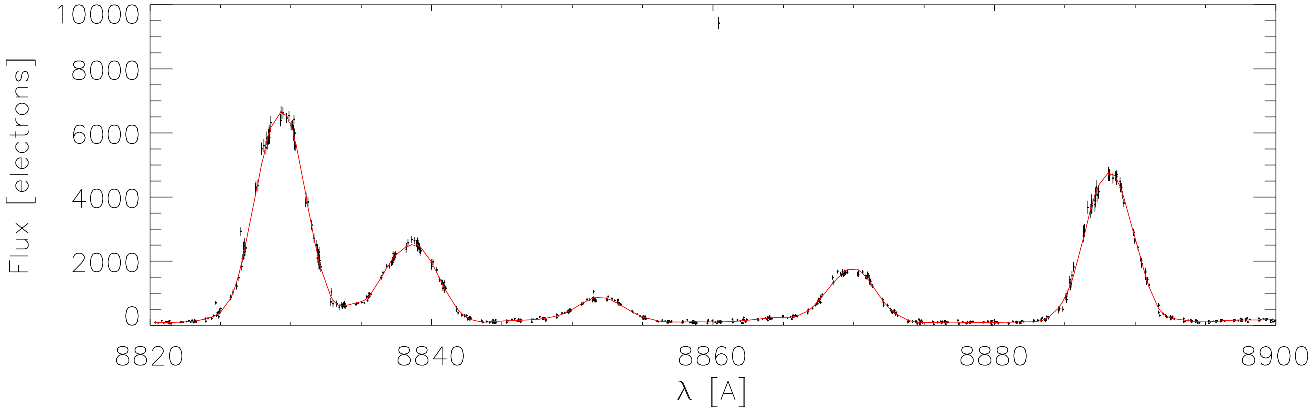

6300.3040
nfib1 16
nfib2 16
stdev 0.020
extrd 0.43
6363.7760
nfib1 16
nfib2 16
stdev 0.030
extrd 0.48
6553.6100
nfib1 16
nfib2 16
stdev 0.037
extrd 0.44
6923.2100
nfib1 16
nfib2 16
stdev 0.031
extrd 0.45
6949.0300
nfib1 16
nfib2 16
stdev 0.045
extrd 0.47
7571.7500
nfib1 16
nfib2 16
stdev 0.028
extrd 0.49
7794.1200
nfib1 15
nfib2 16
stdev 0.016
extrd 0.34
7821.5100
nfib1 15
nfib2 15
stdev 0.028
extrd 0.40
8399.1600
nfib1 16
nfib2 16
stdev 0.021
extrd 0.41
8430.1700
nfib1 16
nfib2 16
stdev 0.020
extrd 0.39
8885.8300
nfib1 16
nfib2 16
stdev 0.024
extrd 0.42
8919.6100
nfib1 16
nfib2 16
stdev 0.020
extrd 0.41
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

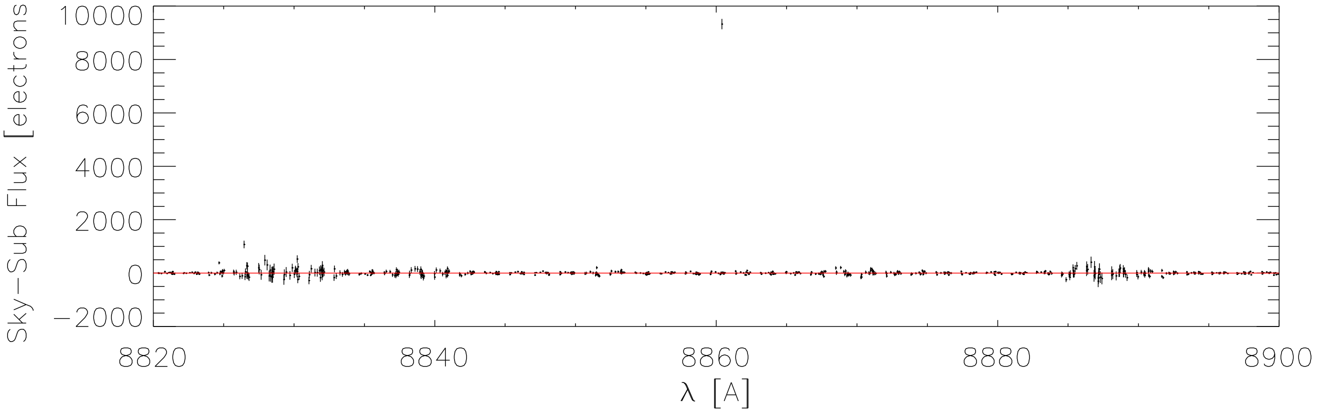

sky shift, pixels
0.50
0.45
0.40
0.35
5000
6000
7000
8000
9000
10000


PLATE=3156 MJD=54792 Smooth superflat for sdR-r2-00056622.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)



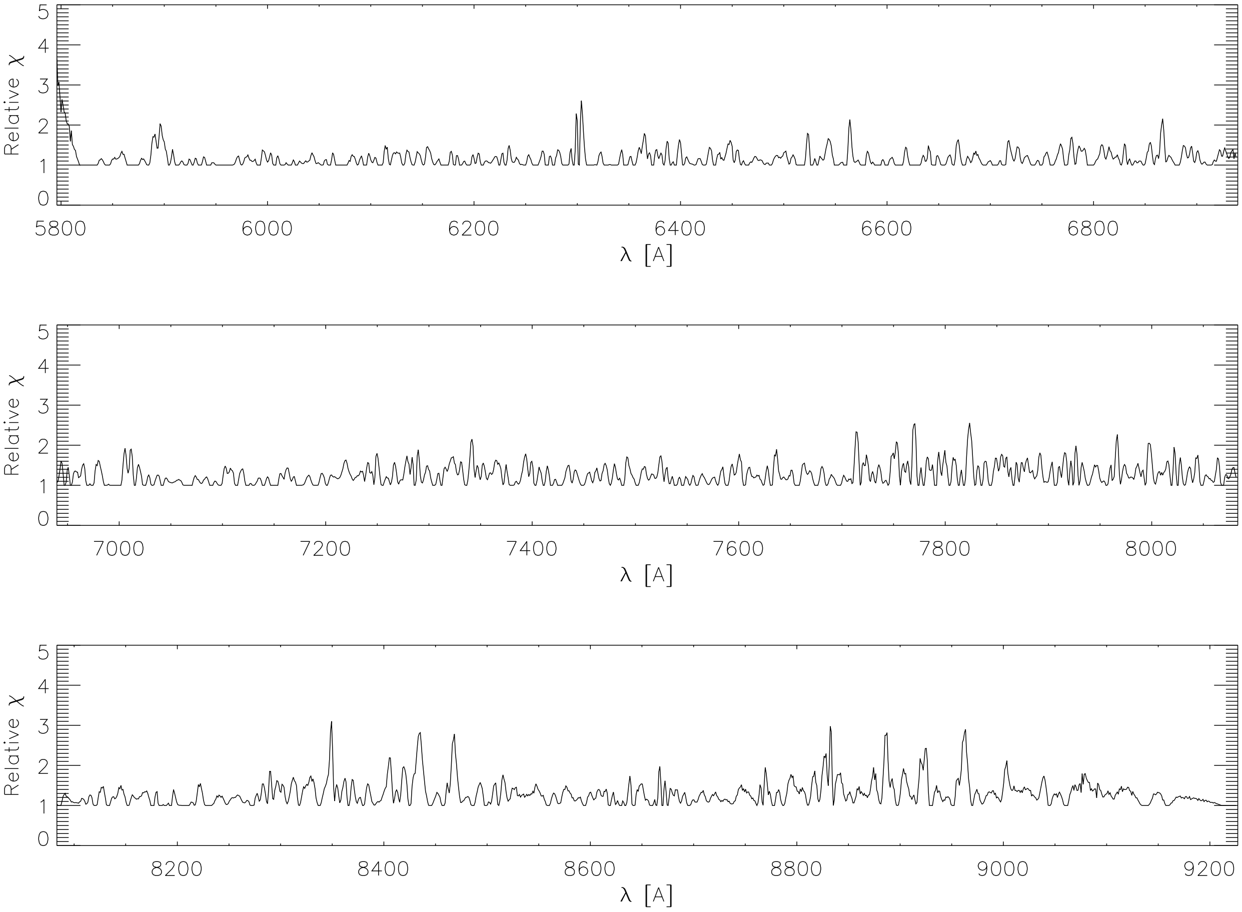
PLATE=3156 MJD=54792 sdR-r2-00056622.fit 1D Sky-subtraction Sky Fibers

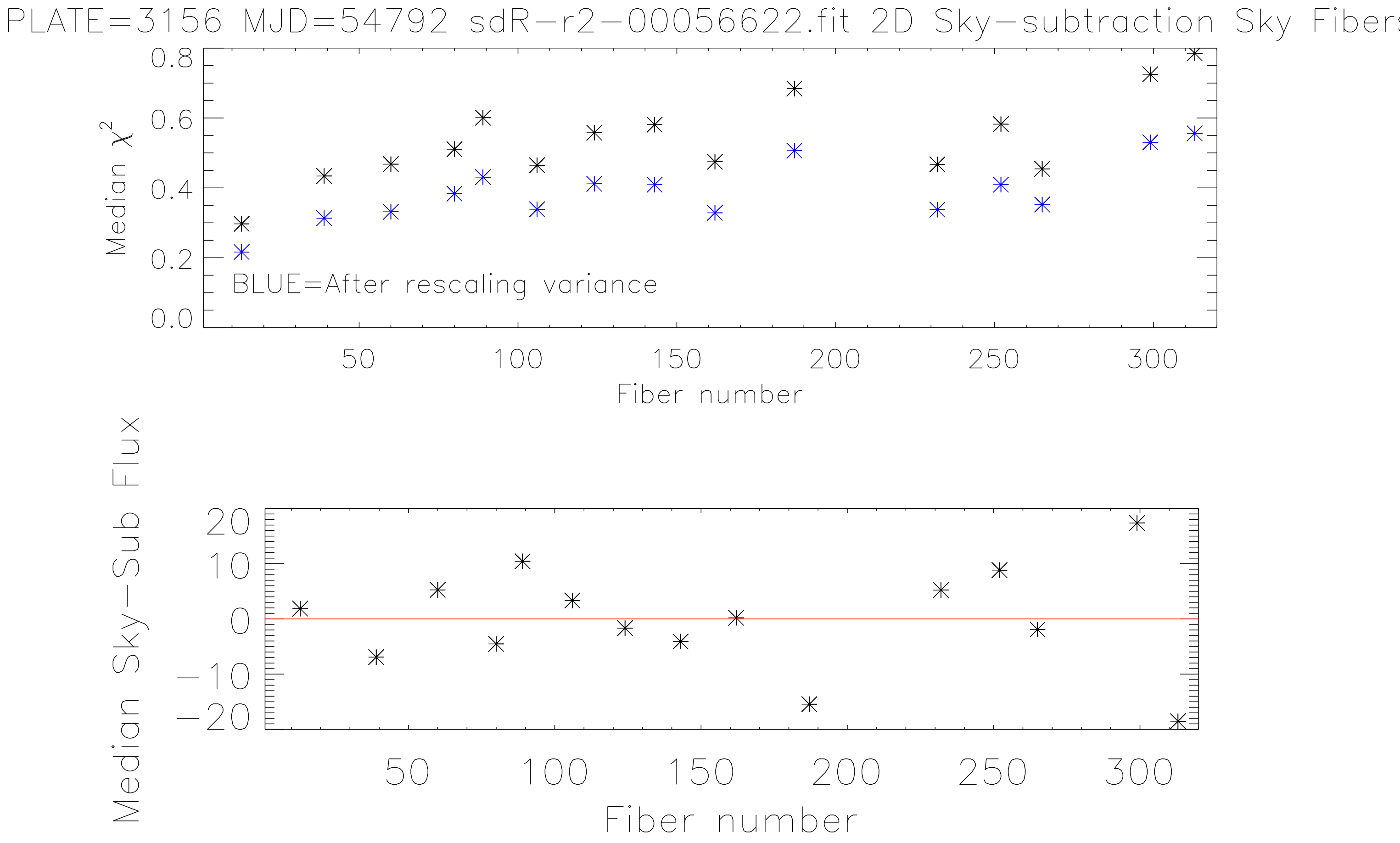

PLATE=3156 MJD=54792 sdR-r2-00056622.fit 1D Sky-subtraction Sky Fibers

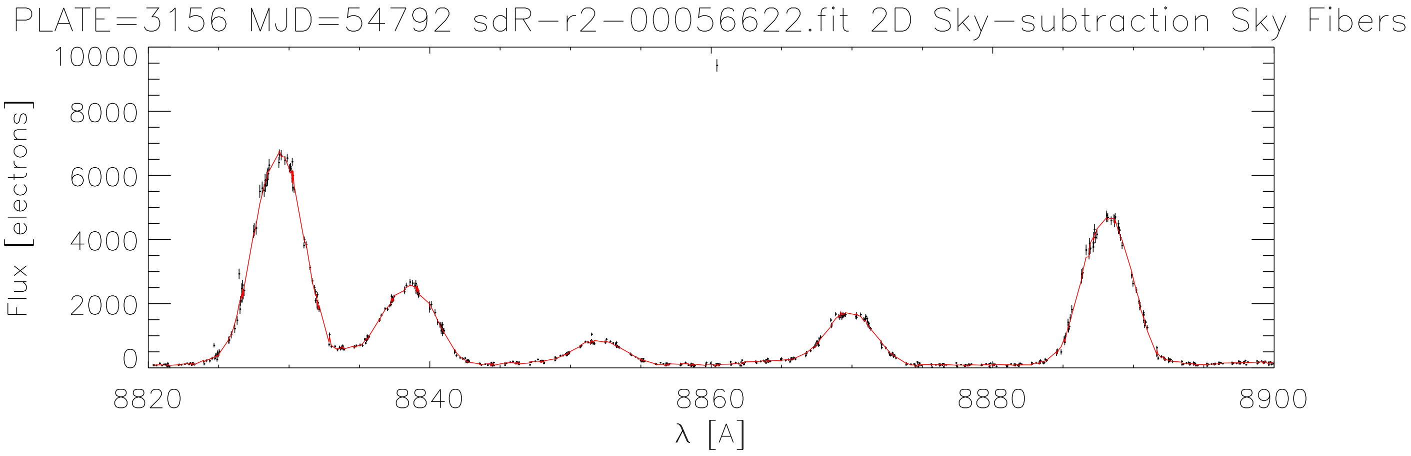

PLATE=3156 MJD=54792 sdR-r2-00056622.fit 1D Sky-subtraction Sky-subtracted Sky F

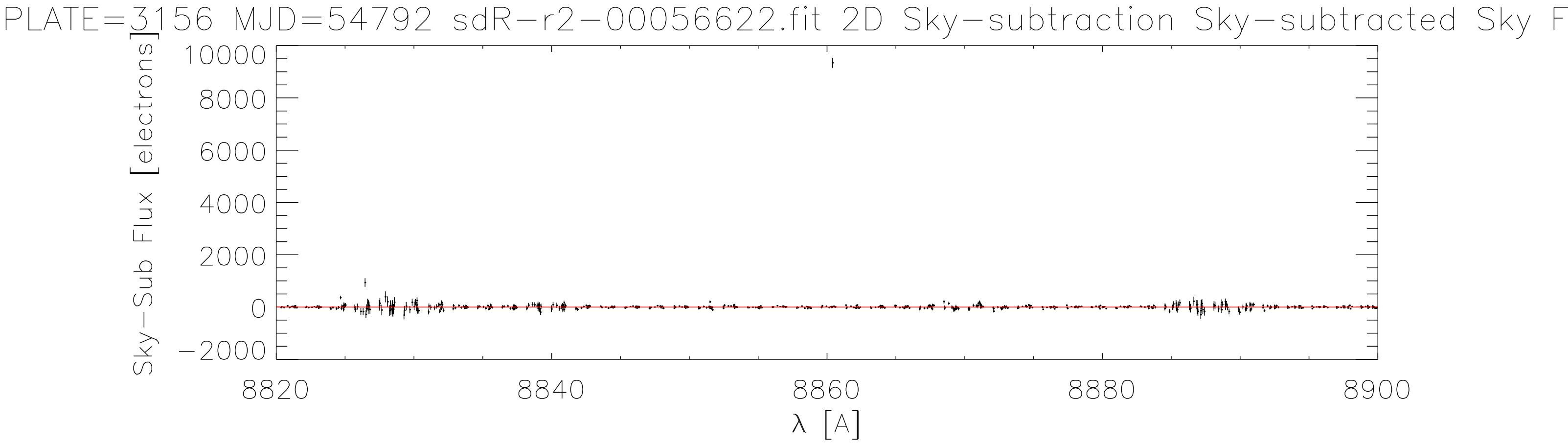
Number of sky fibers = 15

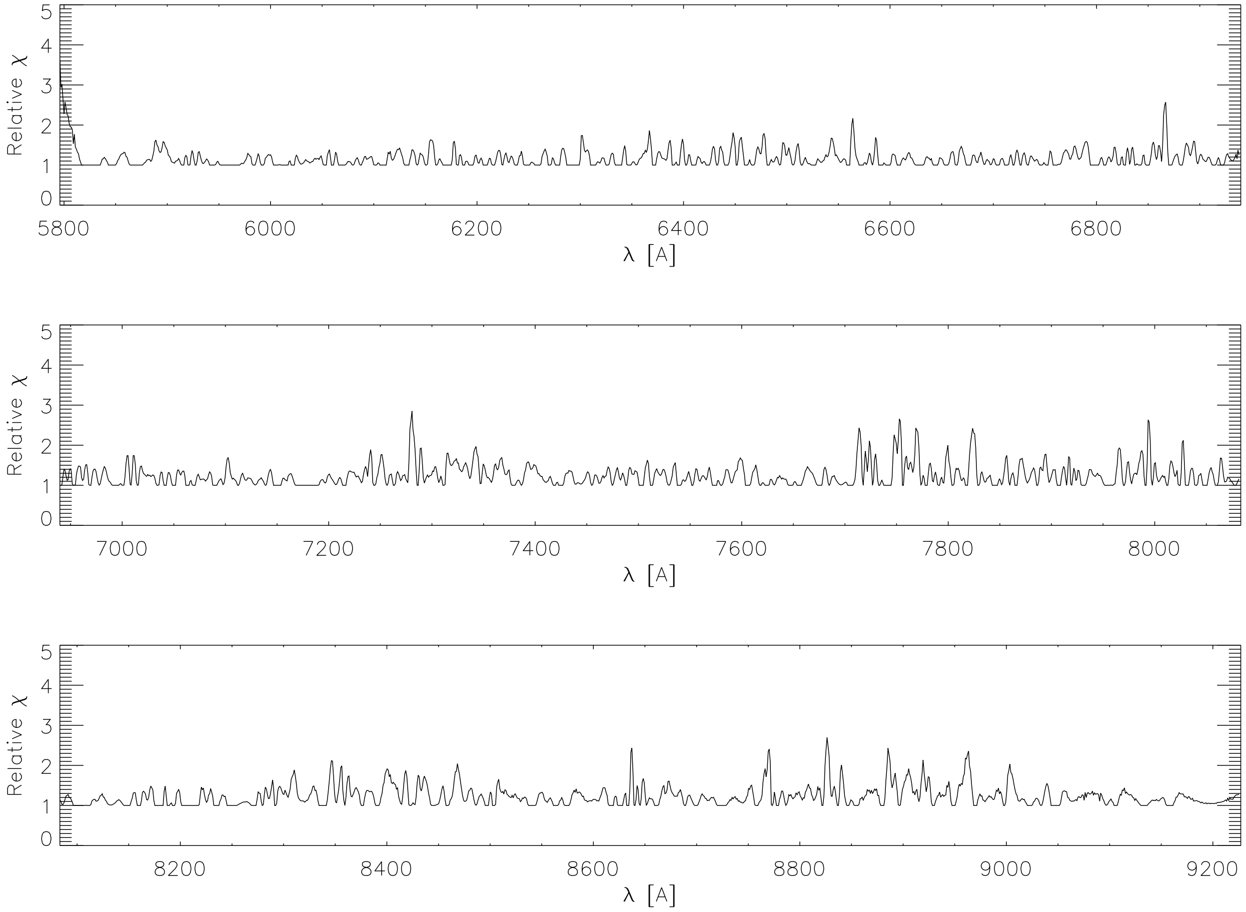
PLATE=3156 MJD=54792 sdR-r2-00056622.fit 1D Sky-subtraction Rescaled Errors




PLATE=3156 MJD=54792 sdR-r2-00056622.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−20
−10
0
10
20
50
100
150
200
250
300
Fiber number

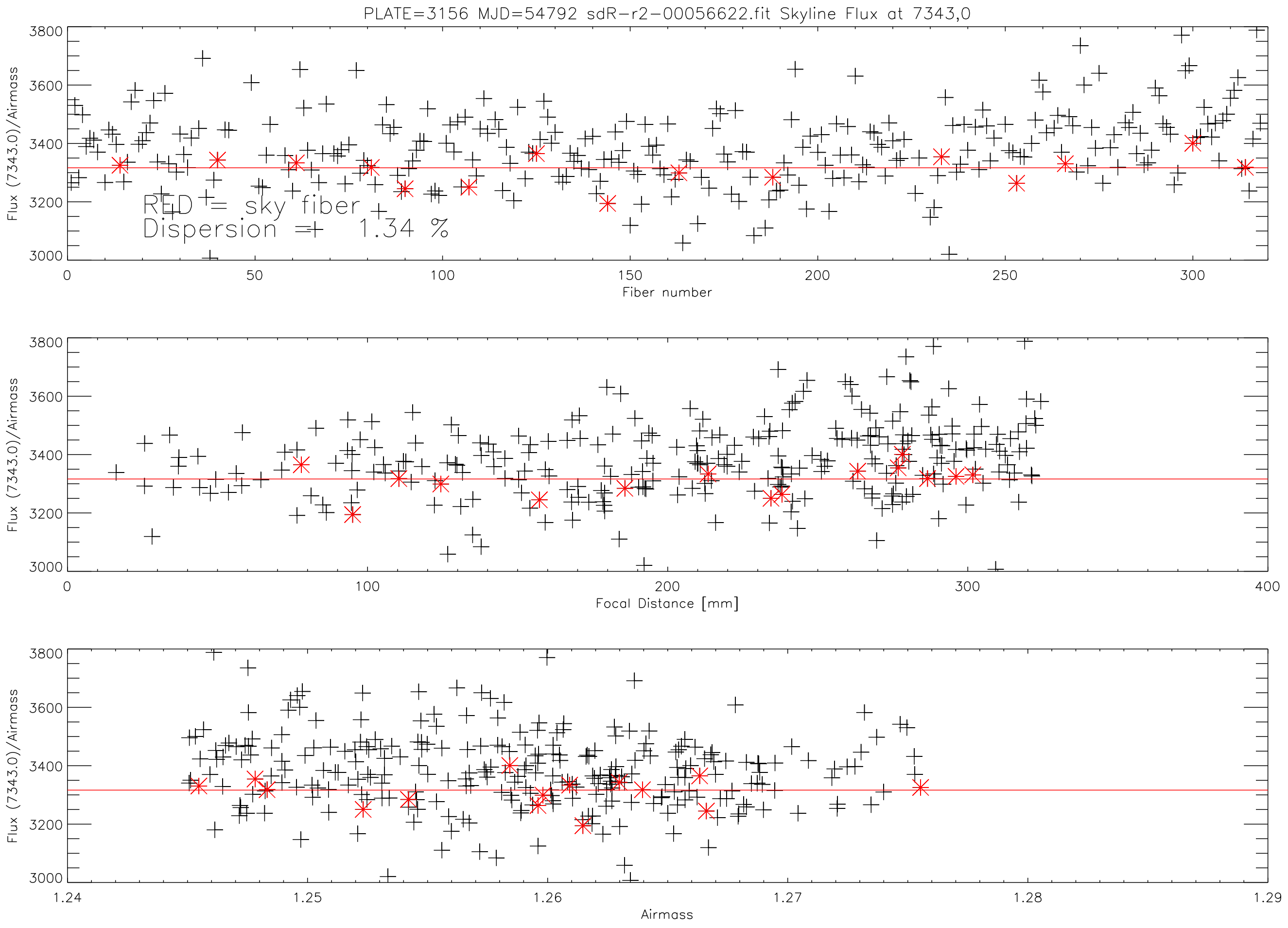

PLATE=3156 MJD=54792 sdR-r2-00056622.fit 2D Sky-subtraction Sky Fibers

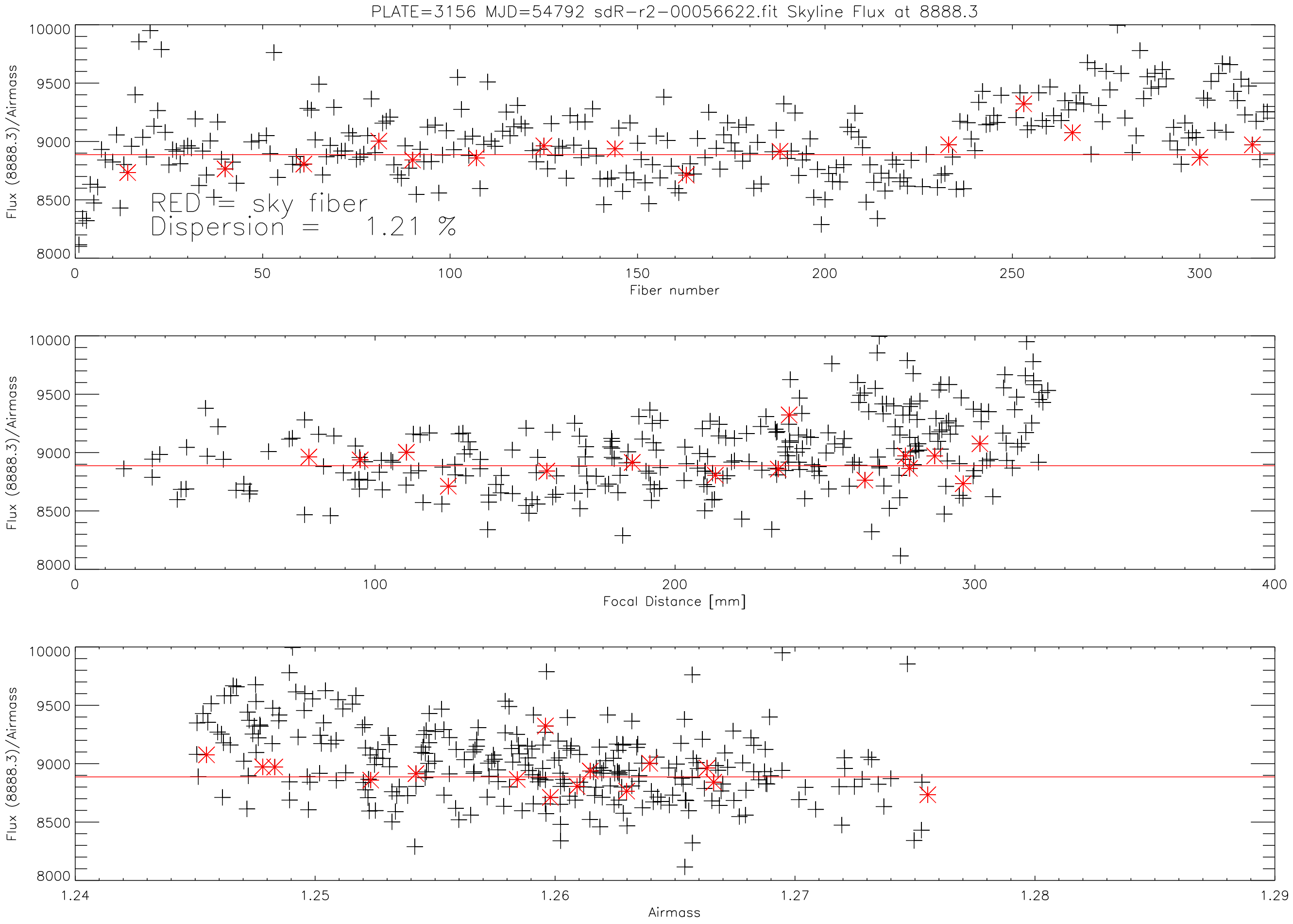

PLATE=3156 MJD=54792 sdR-r2-00056622.fit 2D Sky-subtraction Sky-subtracted Sky F



Number of sky fibers = 15

PLATE=3156 MJD=54792 sdR-r2-00056622.fit 2D Sky-subtraction Rescaled Errors


PLATE=3156 MJD=54792 sdR-r2-00056622.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3000
3200
3400
3600
3800
RED = sky fiber
Dispersion = 1.34 %
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.24
1.25
1.26
1.27
1.28
1.29
Airmass


PLATE=3156 MJD=54792 sdR-r2-00056622.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
RED = sky fiber
Dispersion = 1.21 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
1.24
1.25
1.26
1.27
1.28
1.29
Airmass