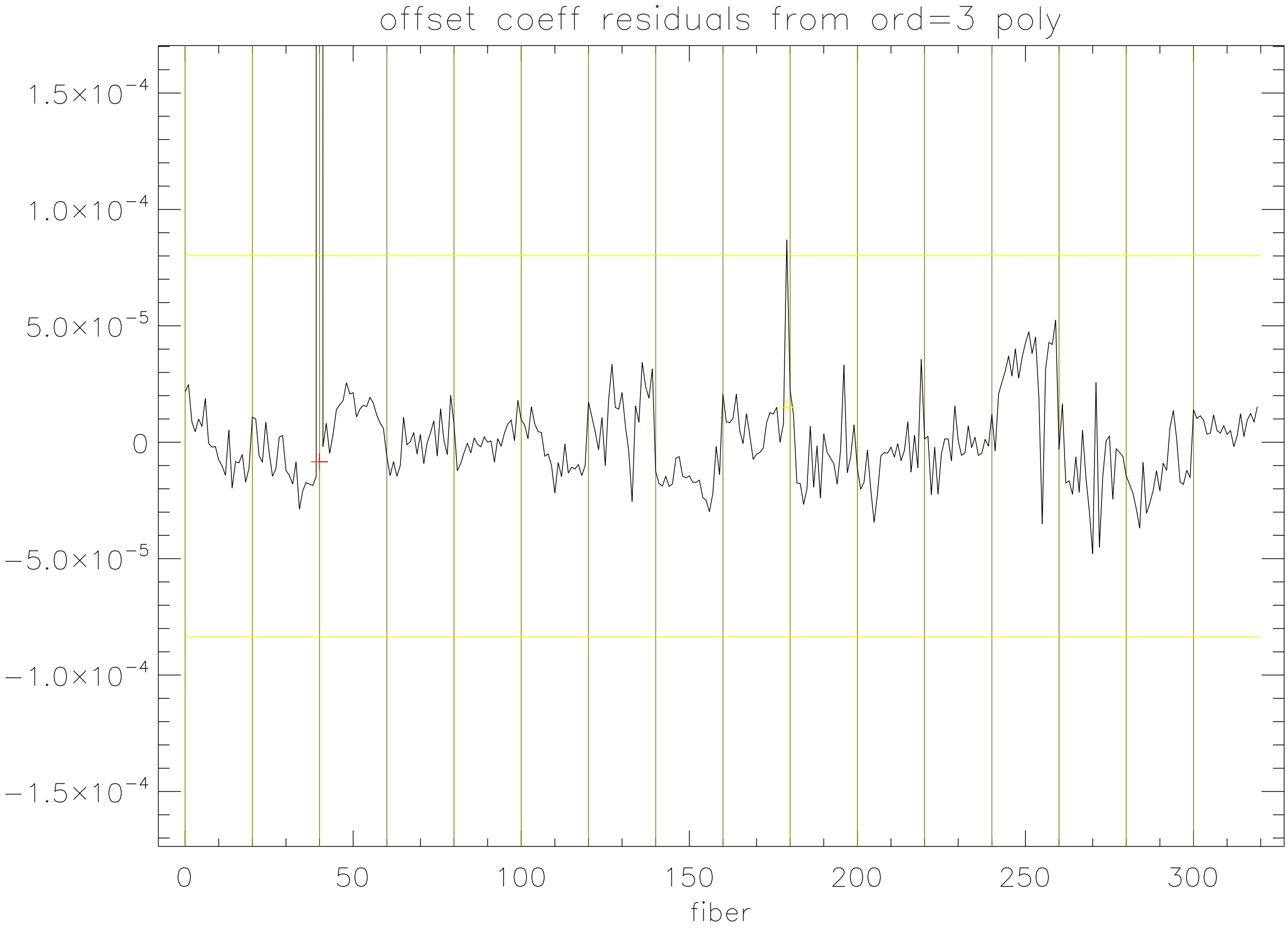
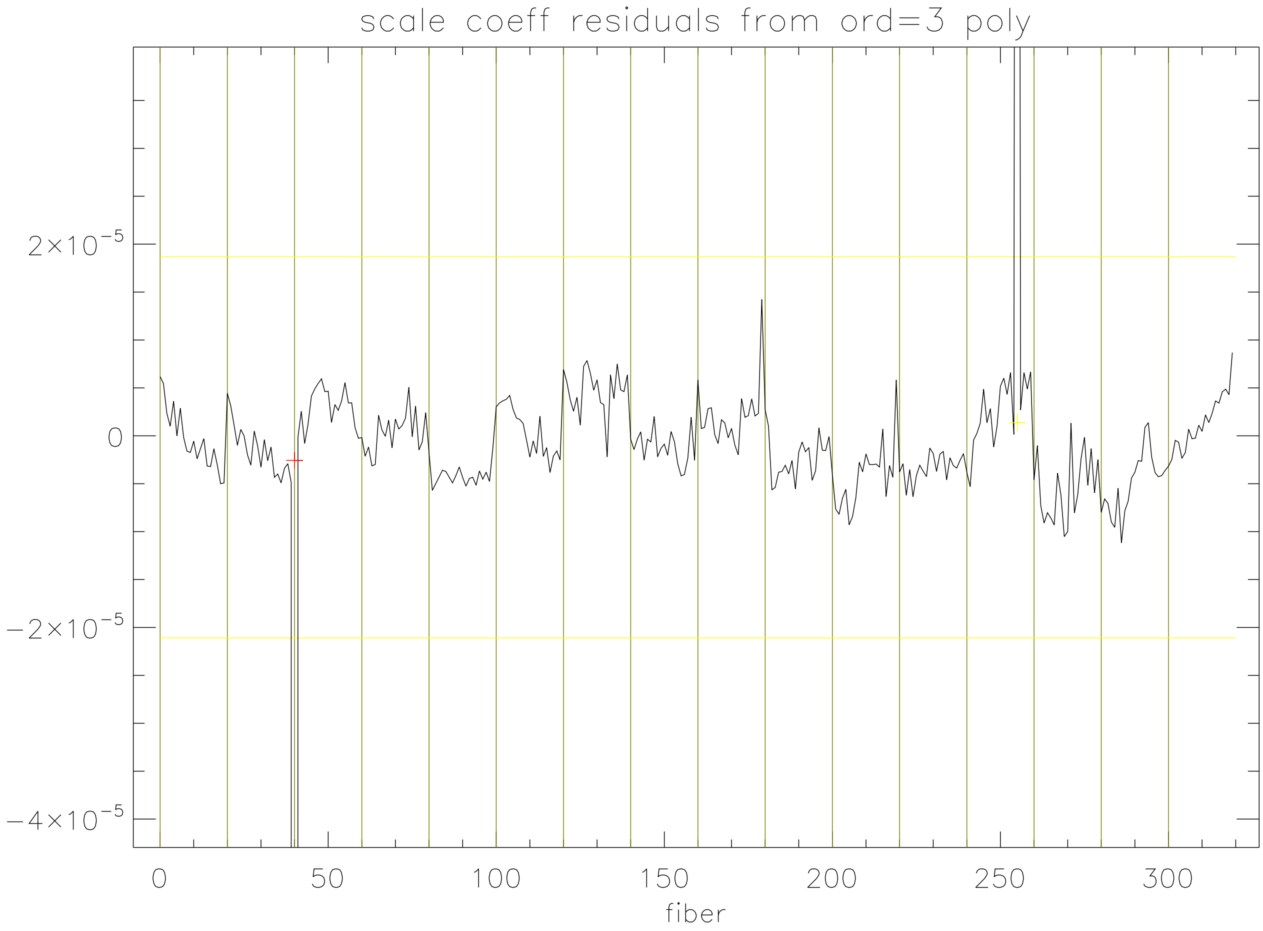
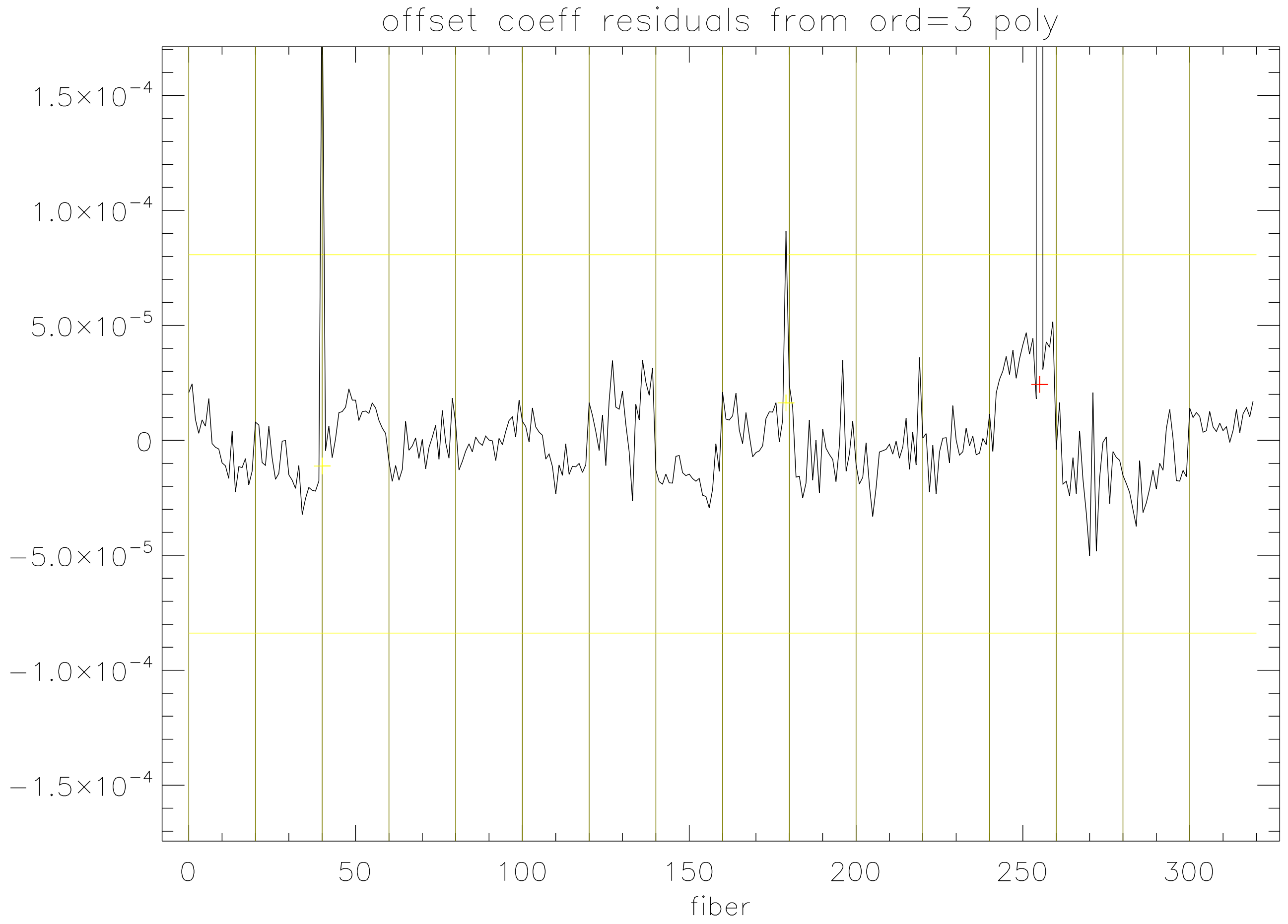
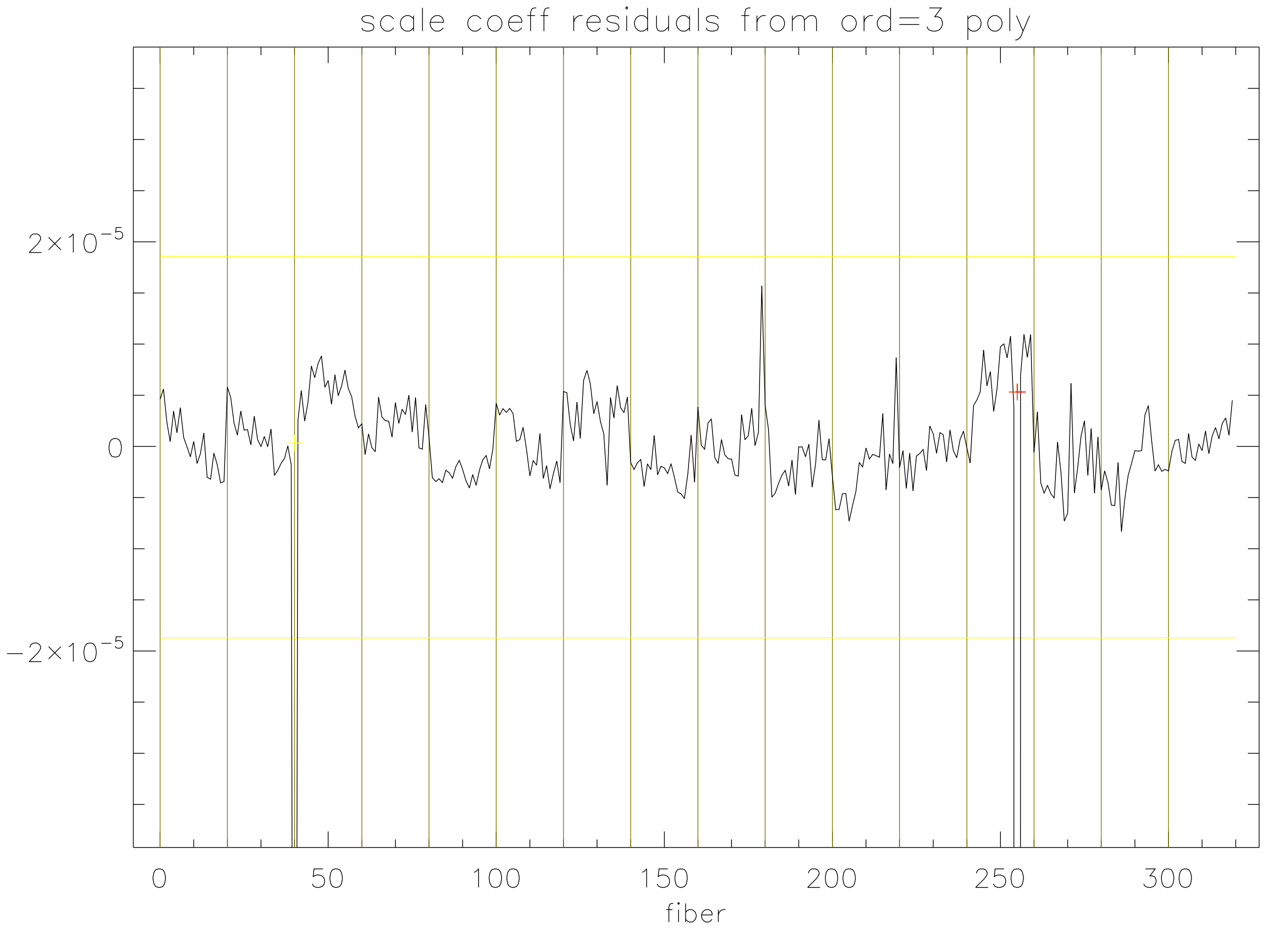
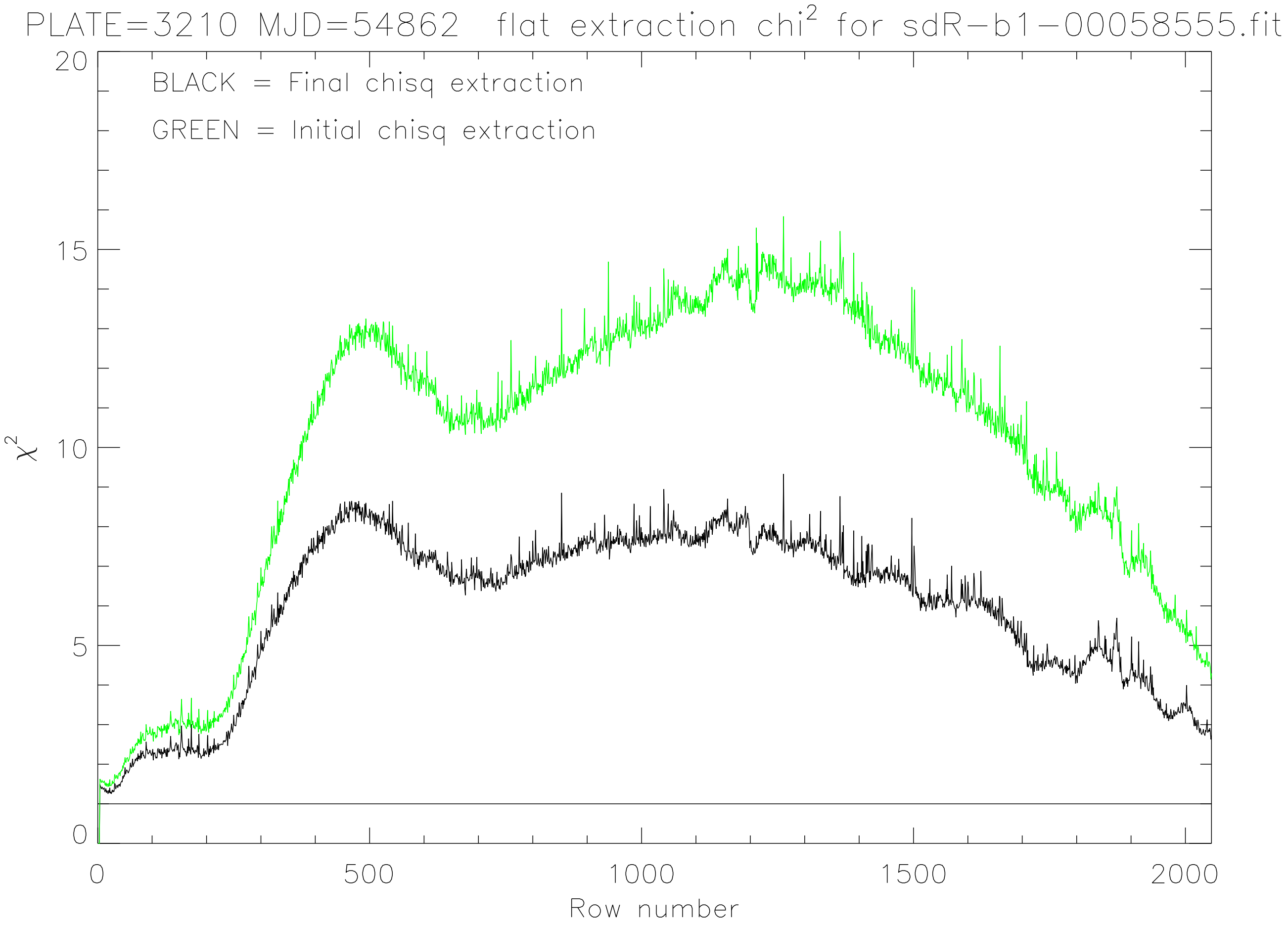
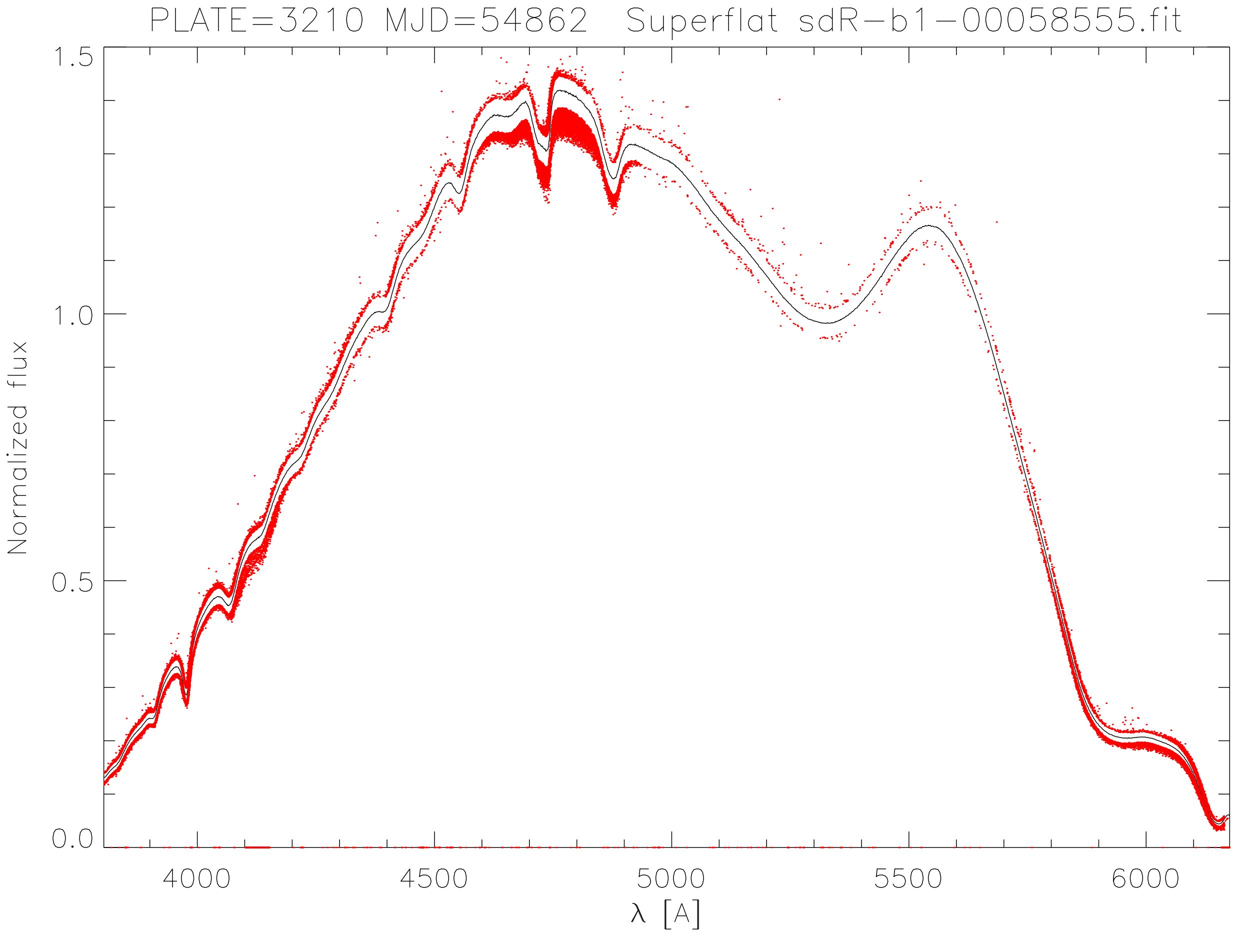

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

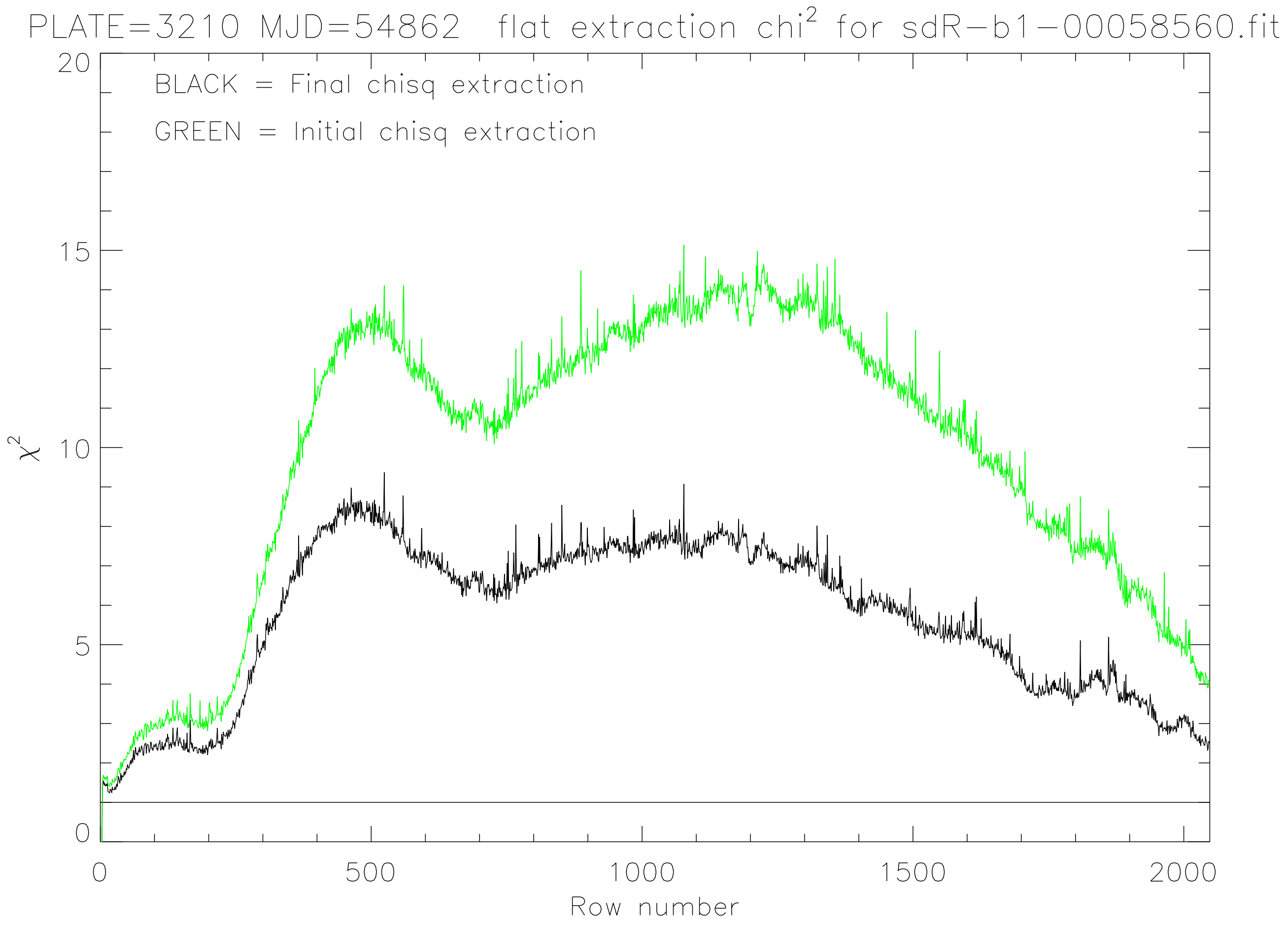

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

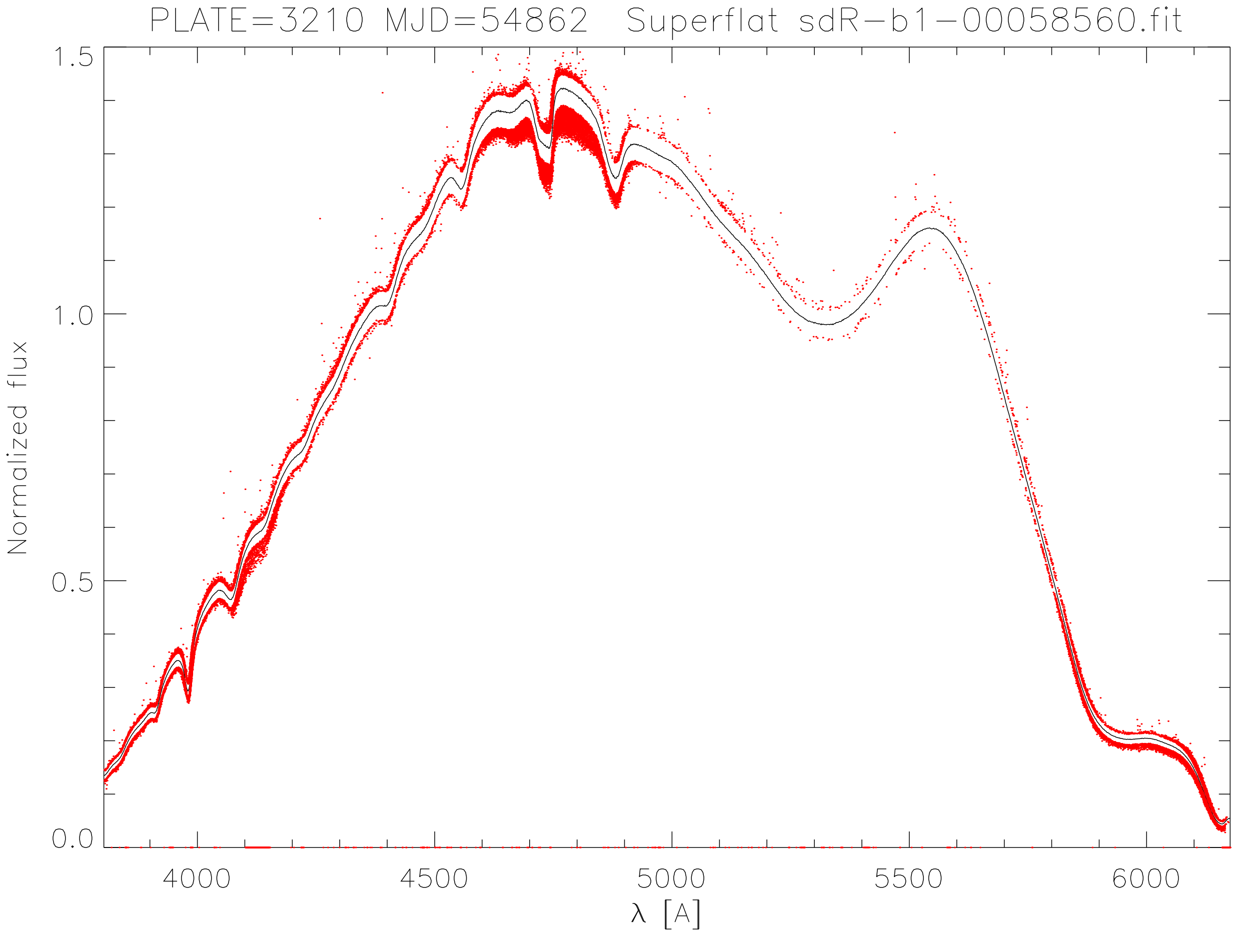

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

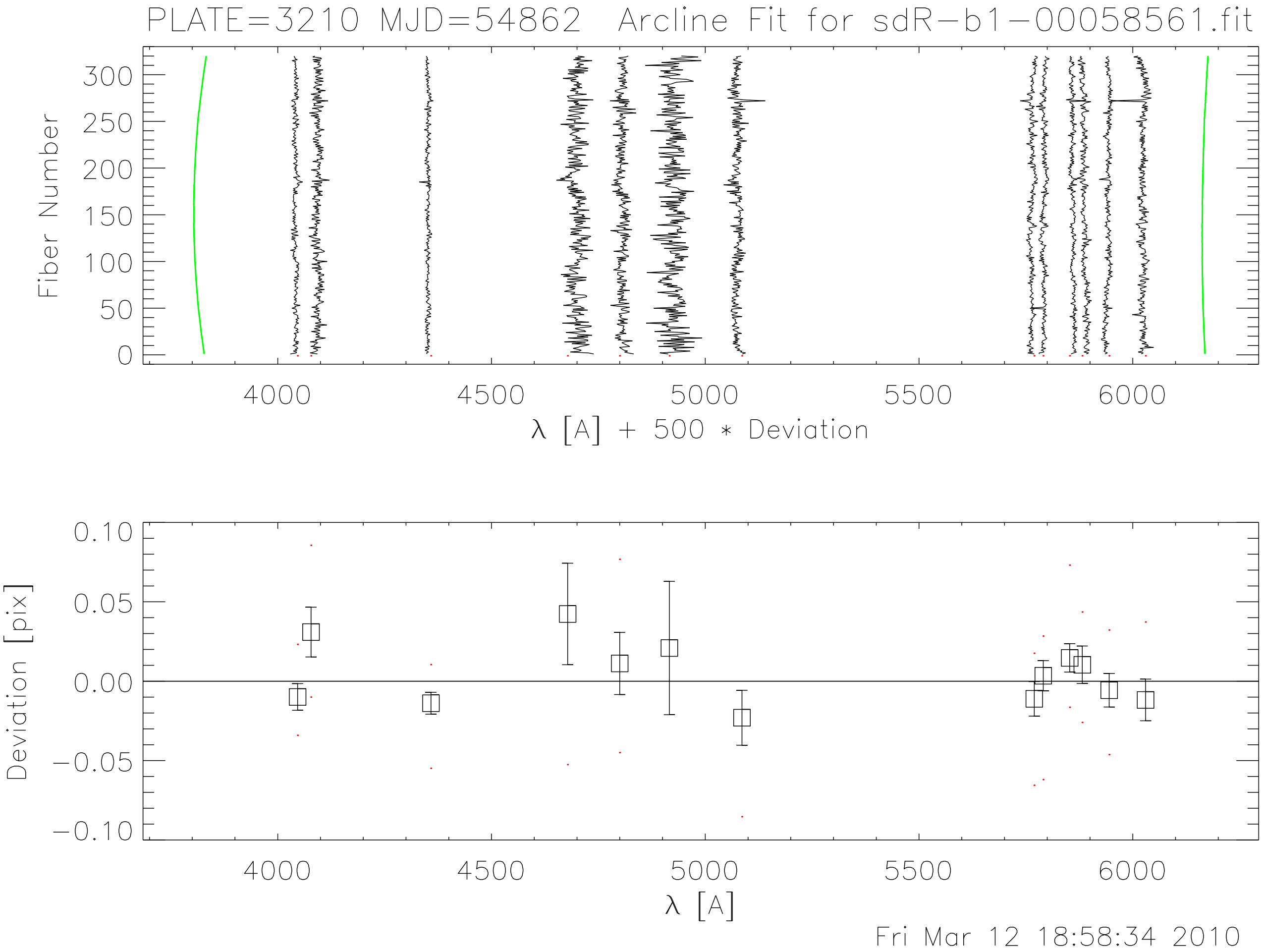

scale coeff residuals from ord=3 poly
$2\times10^{-5}$
0
$-2\times10^{-5}$
0
50
100
150
200
250
300
fiber

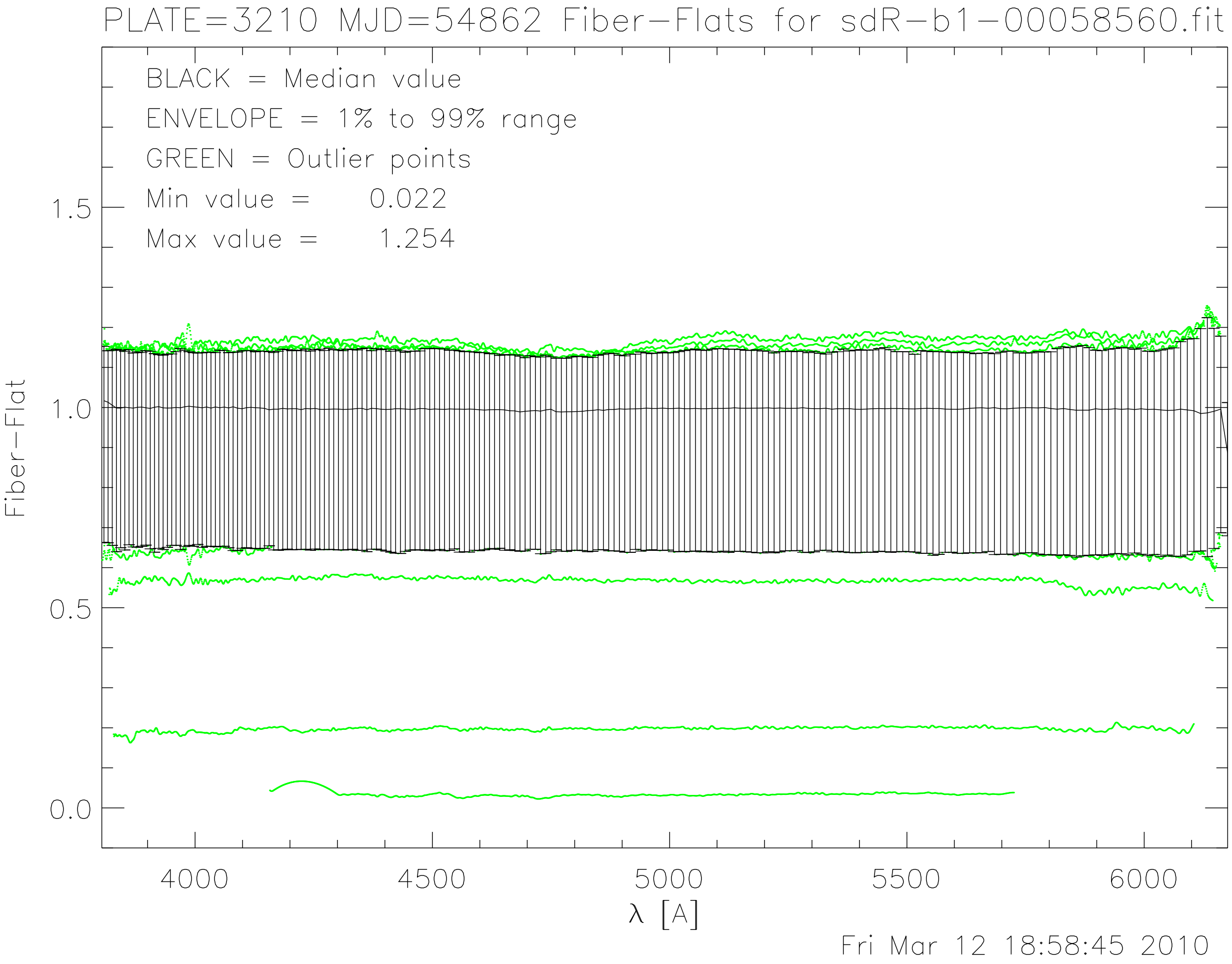

PLATE=3210 MJD=54862 flat extraction chi$^2$ for sdR-b1-00058555.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
5
10
15
20
0
500
1000
1500
2000
Row number


PLATE=3210 MJD=54862 Superflat sdR-b1-00058555.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

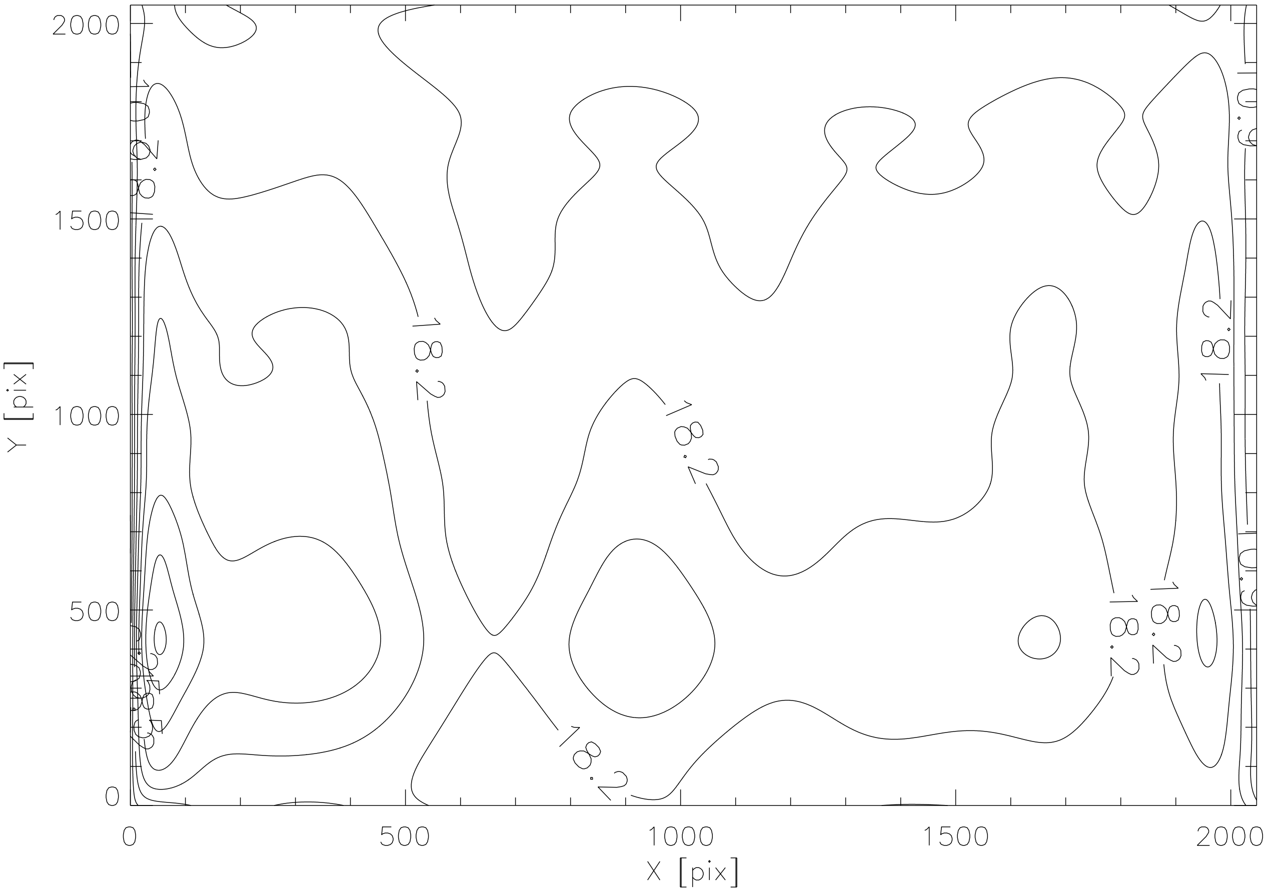

PLATE=3210 MJD=54862 flat extraction chi$^2$ for sdR-b1-00058560.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
5
10
15
20
Row number
0
500
1000
1500
2000


PLATE=3210 MJD=54862 Superflat sdR-b1-00058560.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

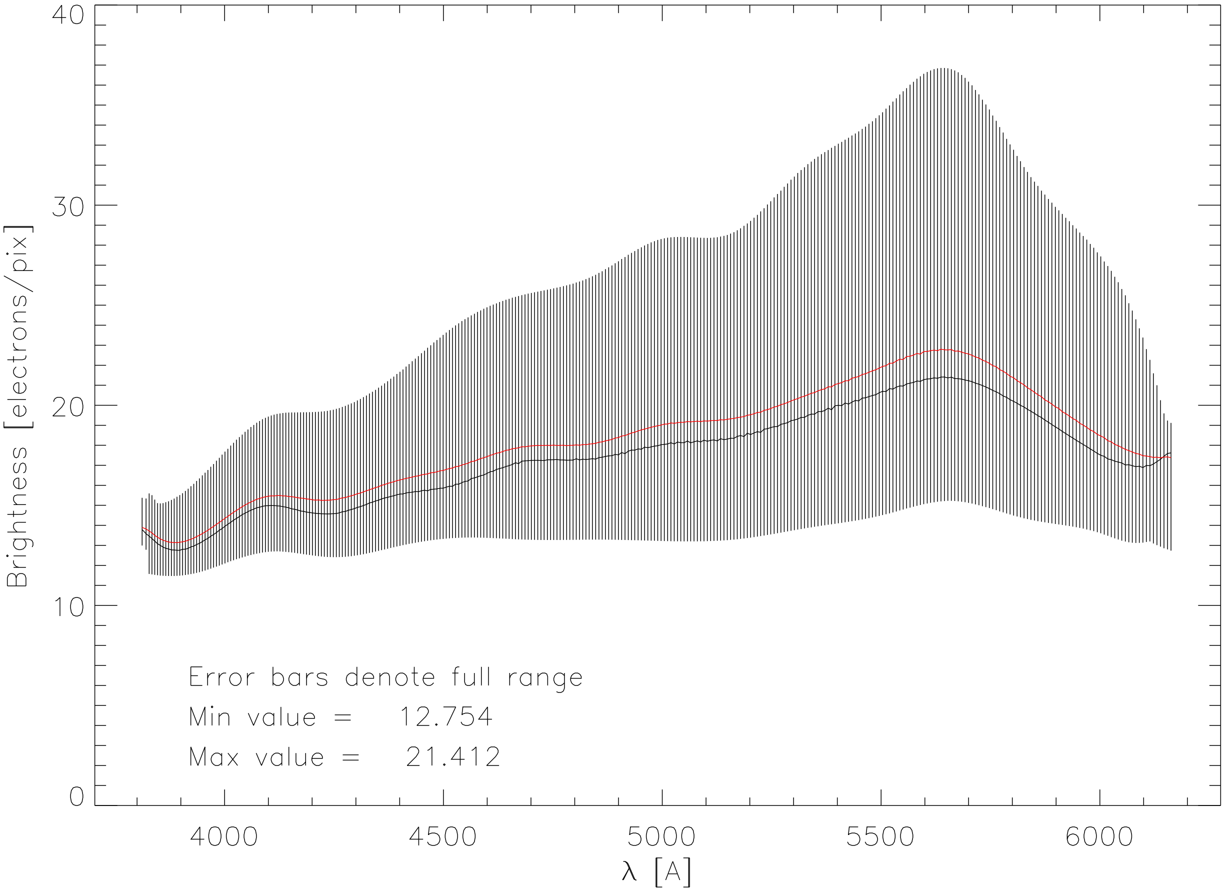

PLATE=3210 MJD=54862 Arcline Fit for sdR-b1-00058561.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 18:58:34 2010

PLATE=3210 MJD=54862 Fiber−Flats for sdR−b1−00058560.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.022
Max value = 1.254
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 18:58:45 2010

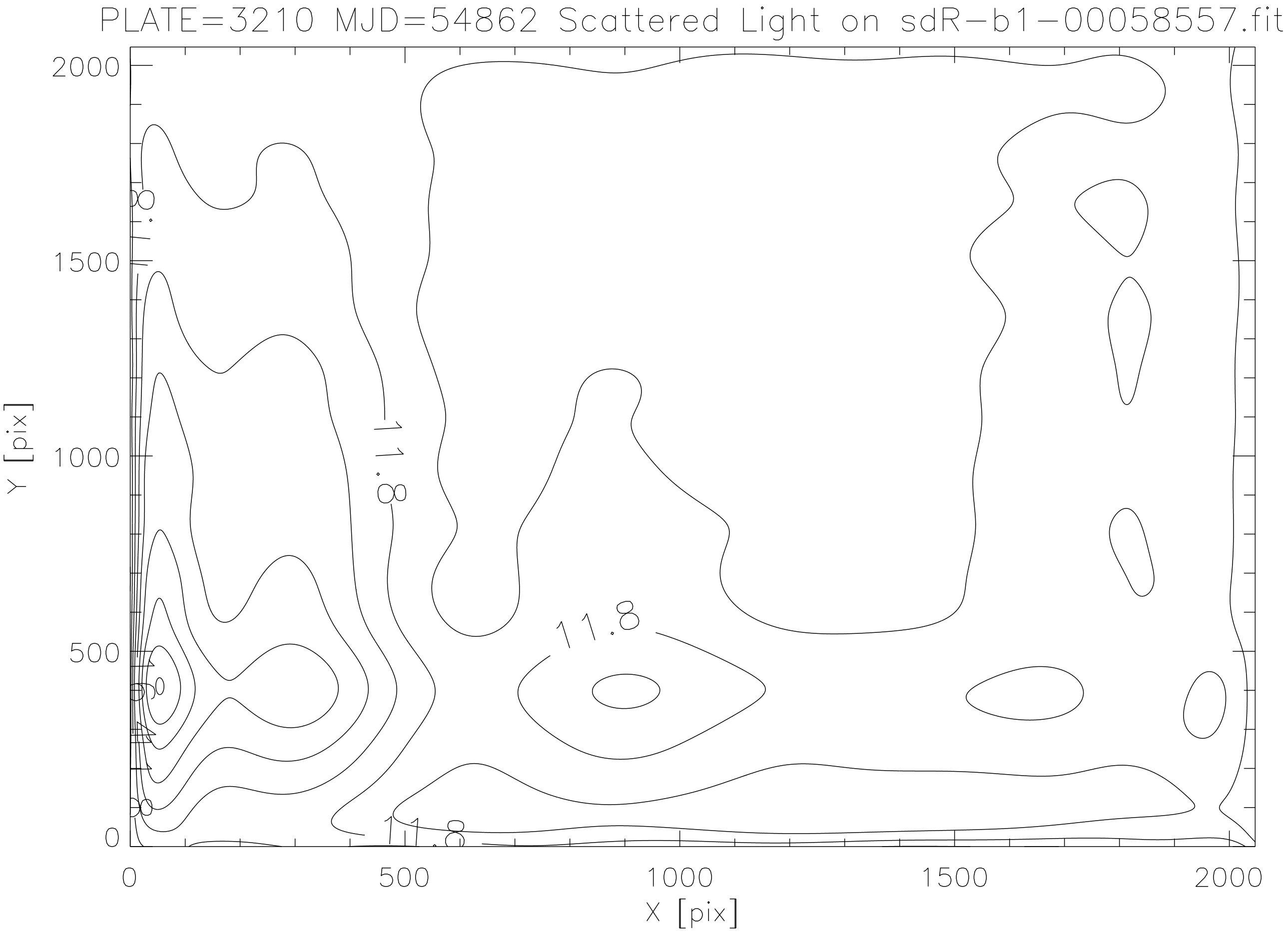
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b1-00058557.f

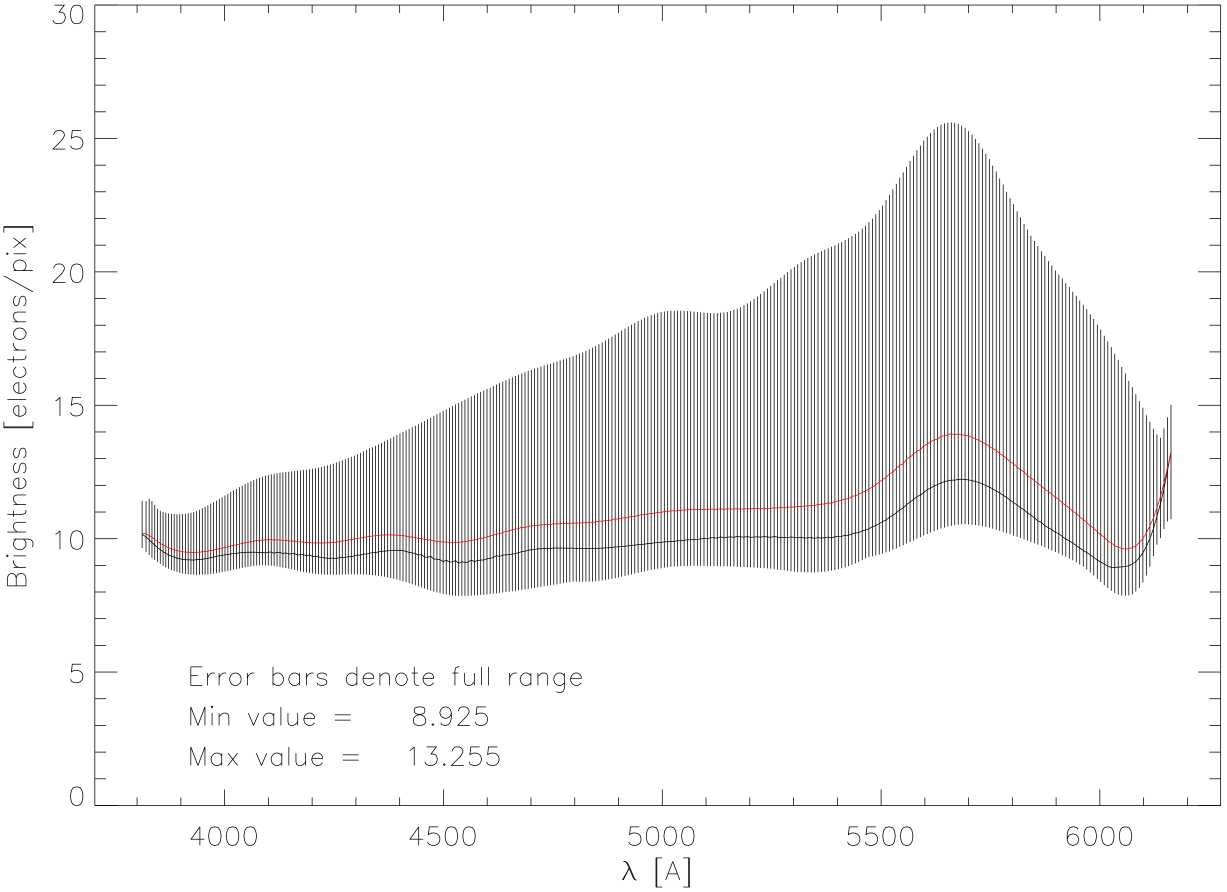


PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b1-00058557.f



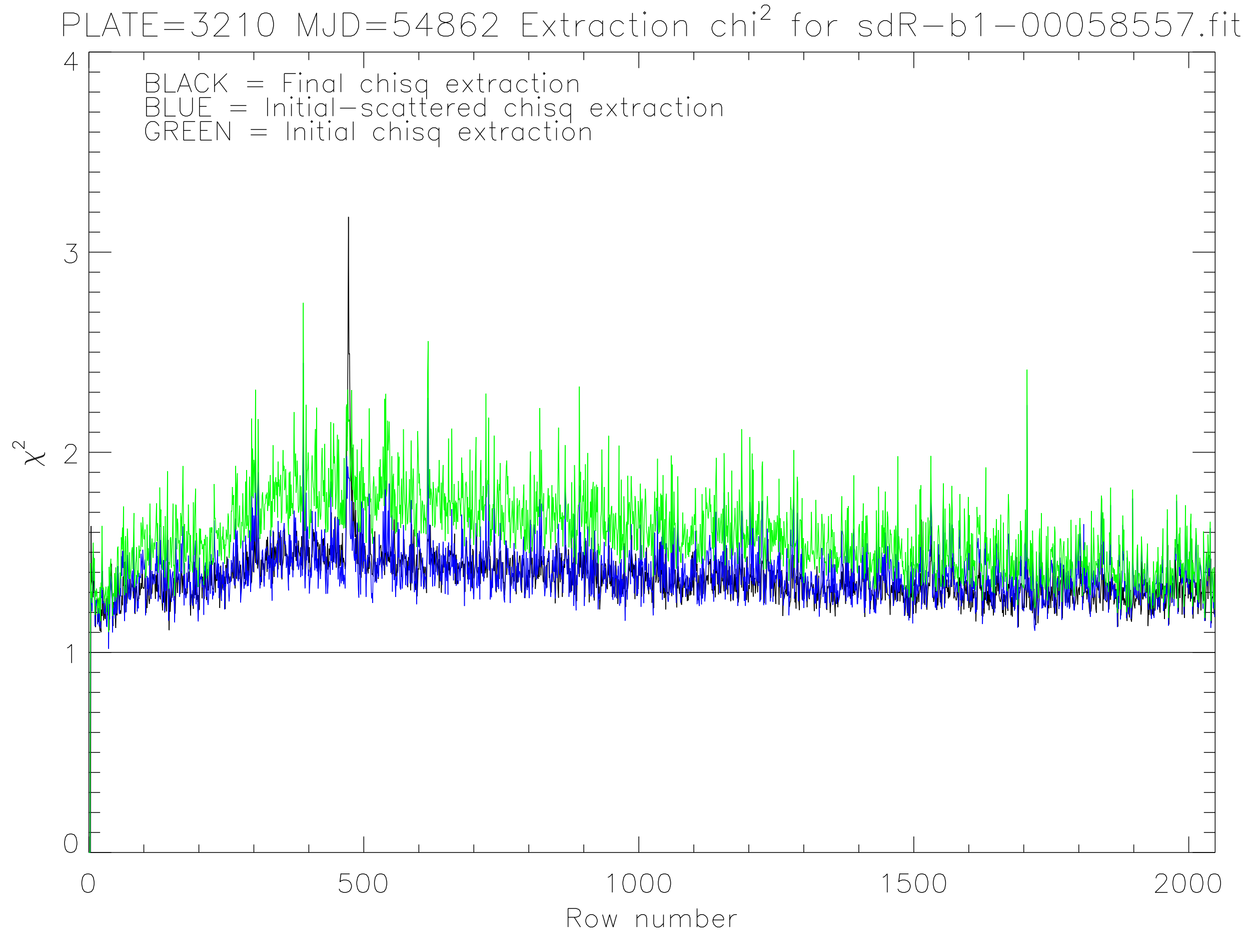
Fri Mar 12 18:59:51 2010

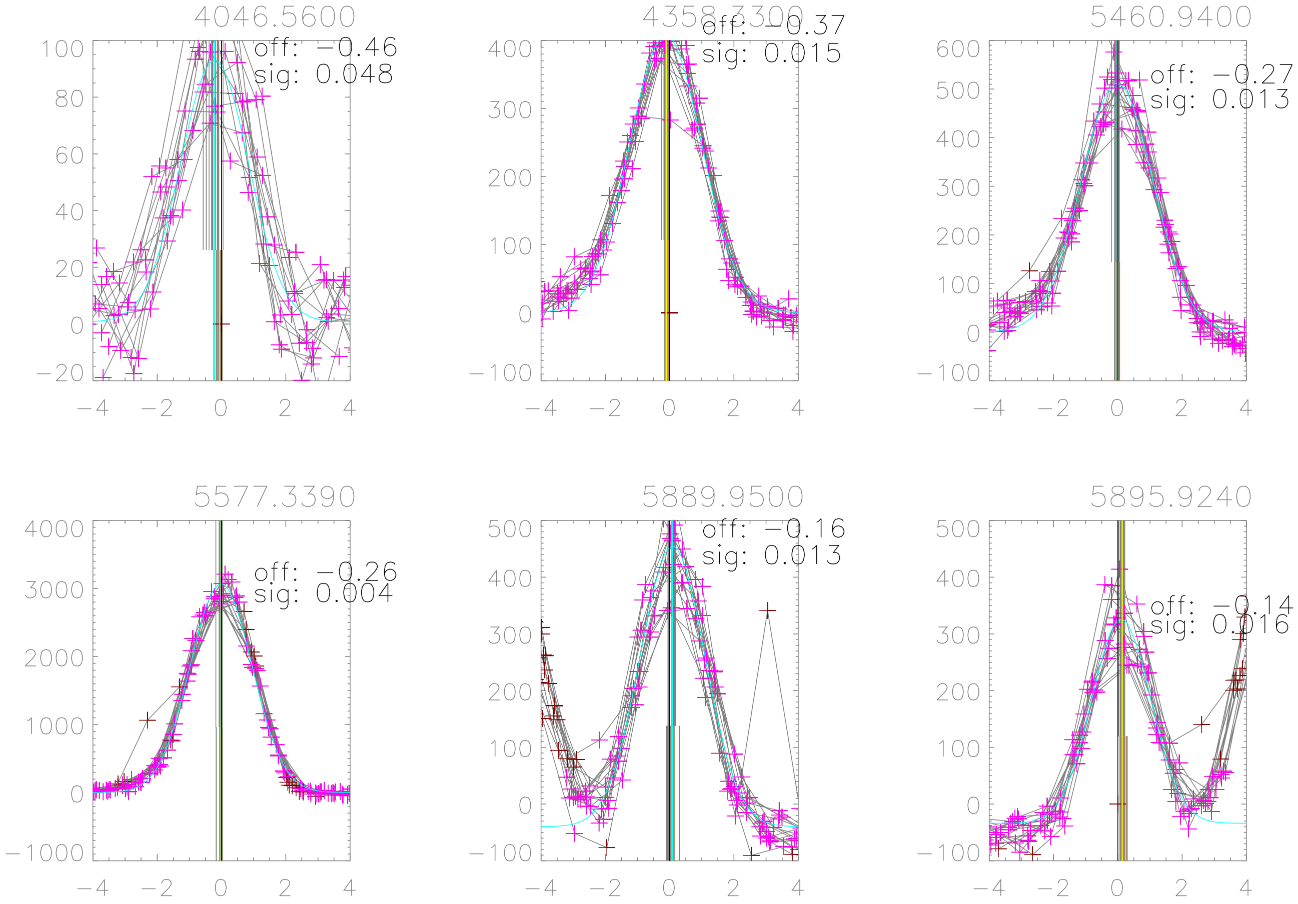

PLATE=3210 MJD=54862 Scattered Light on sdR-b1-00058557.fit

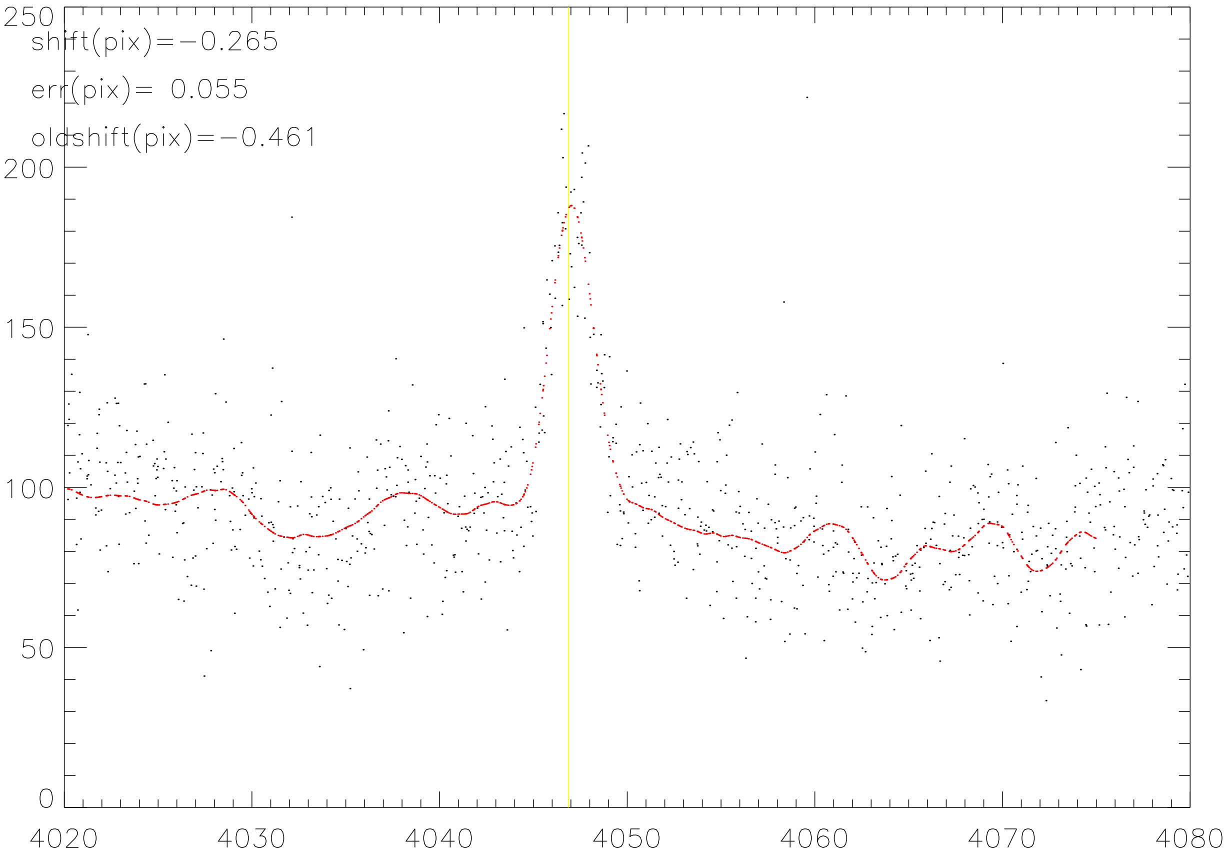


PLATE=3210 MJD=54862 Scattered Light on sdR-b1-00058557.fit

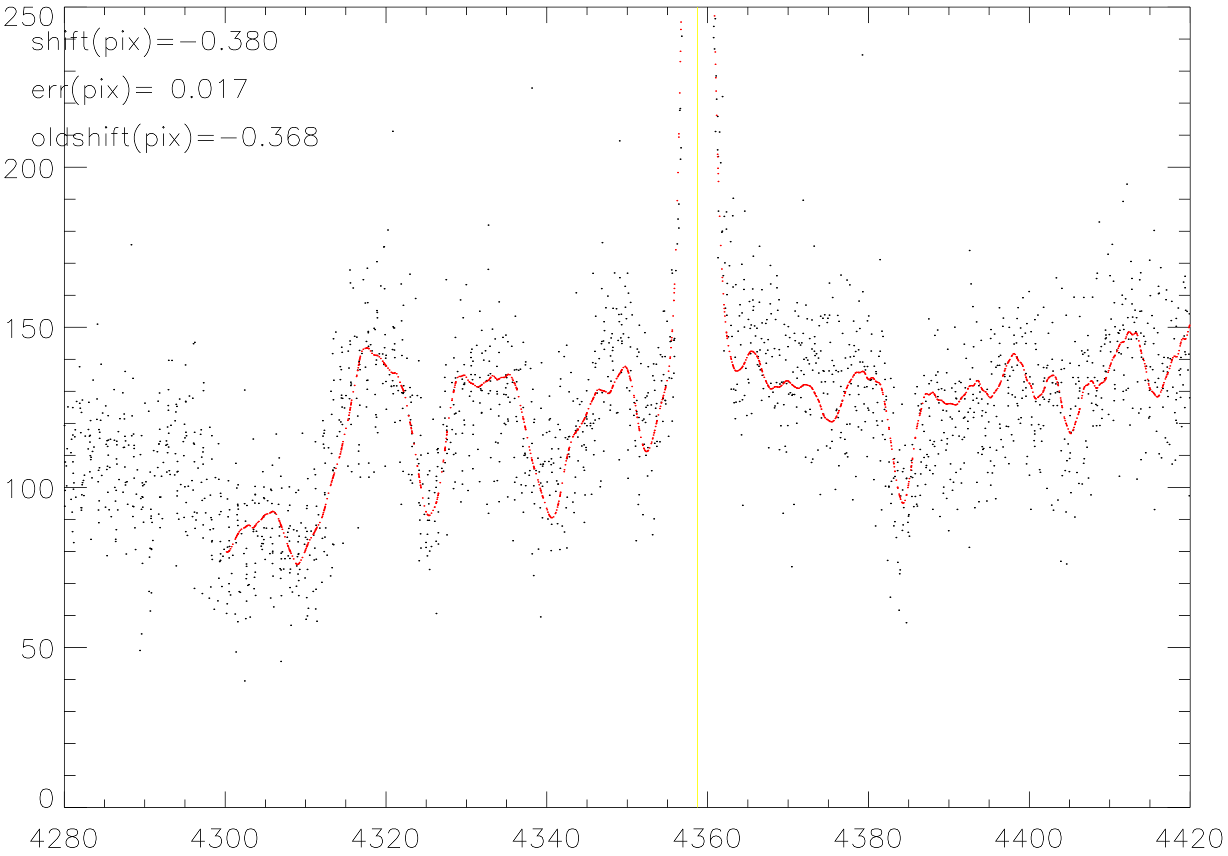
Fri Mar 12 19:03:28 2010

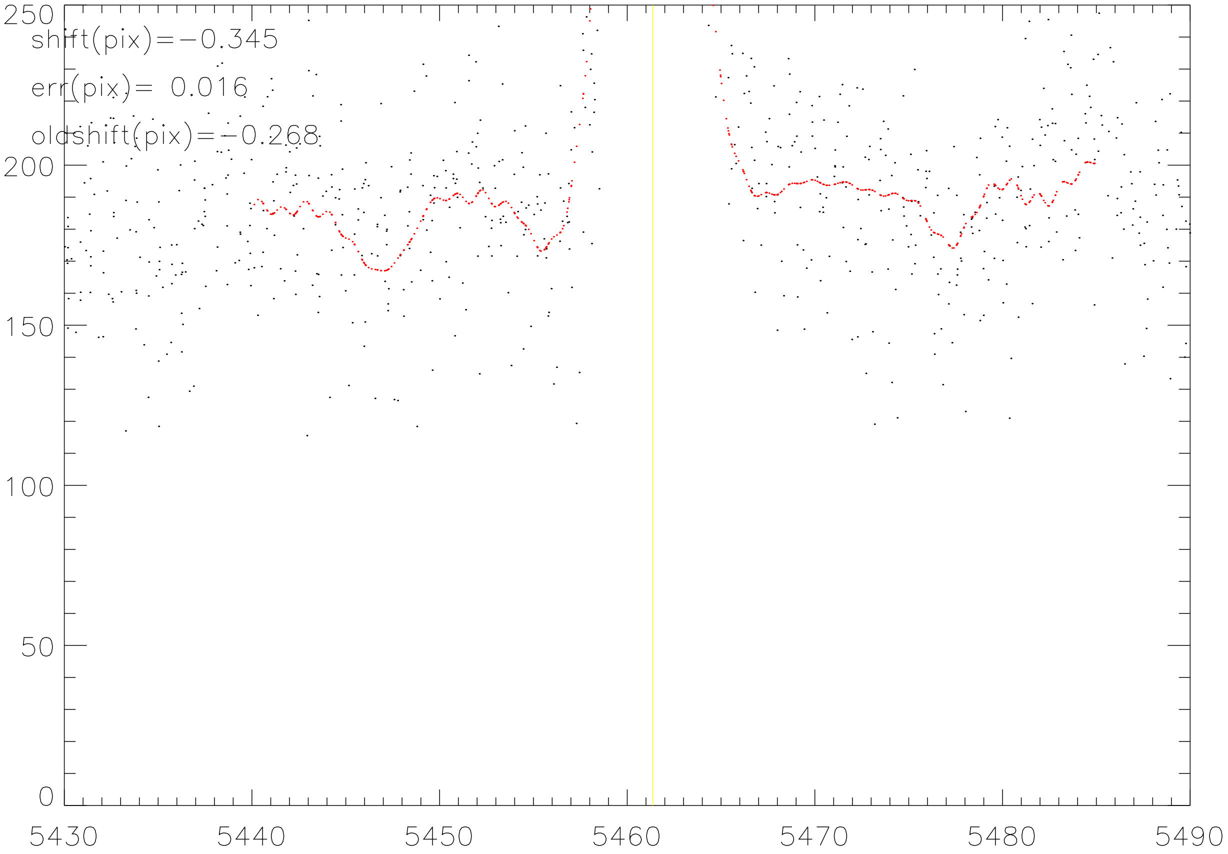

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-b1-00058557.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
0
500
1000
1500
2000
Row number

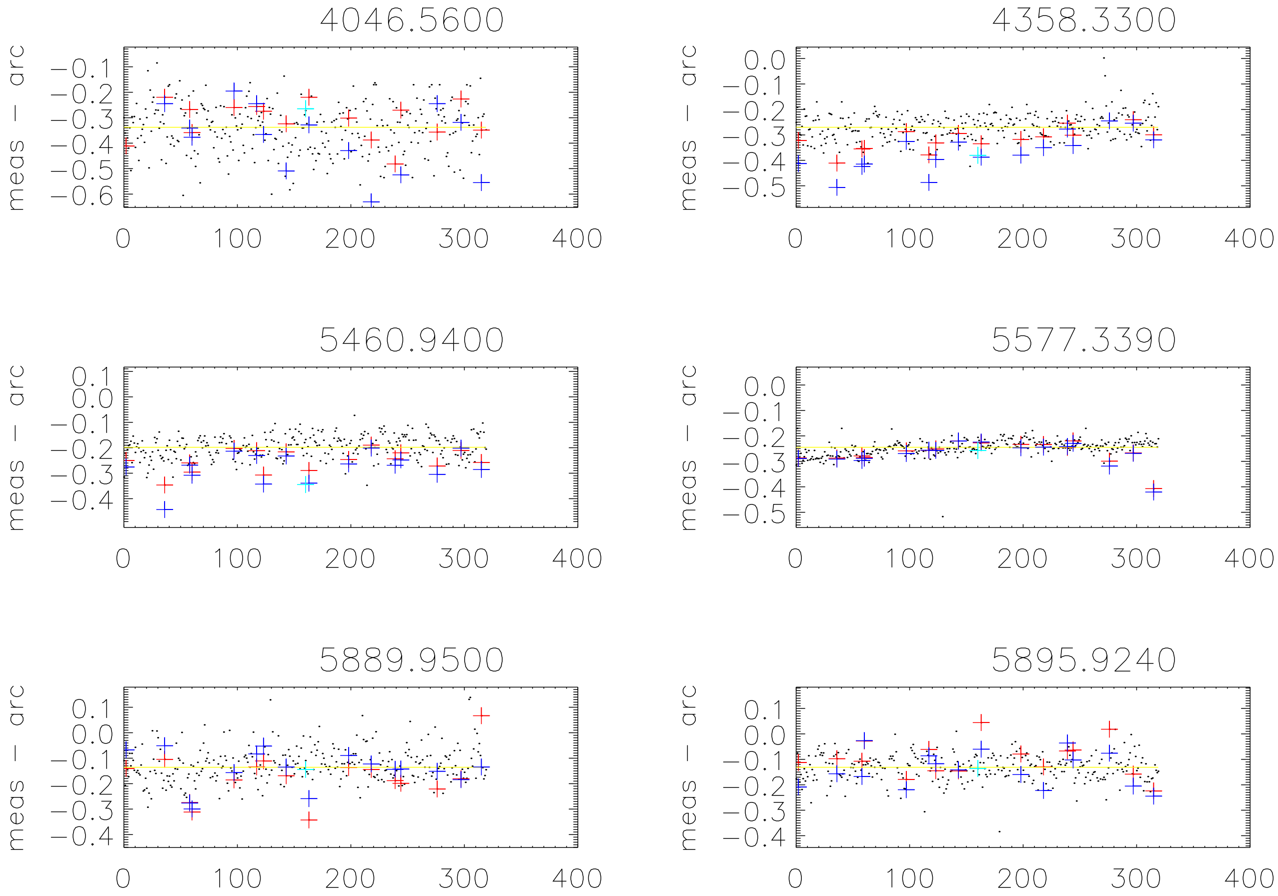

4046.5600
off: −0.46
sig: 0.048
100
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.37
sig: 0.015
400
300
200
100
0
−100
5460.9400
off: −0.27
sig: 0.013
600
500
400
300
200
100
0
−100
5577.3390
off: −0.26
sig: 0.004
4000
3000
2000
1000
0
−1000
5889.9500
off: −0.16
sig: 0.013
500
400
300
200
100
0
−100
5895.9240
off: −0.14
sig: 0.016
500
400
300
200
100
0
−100

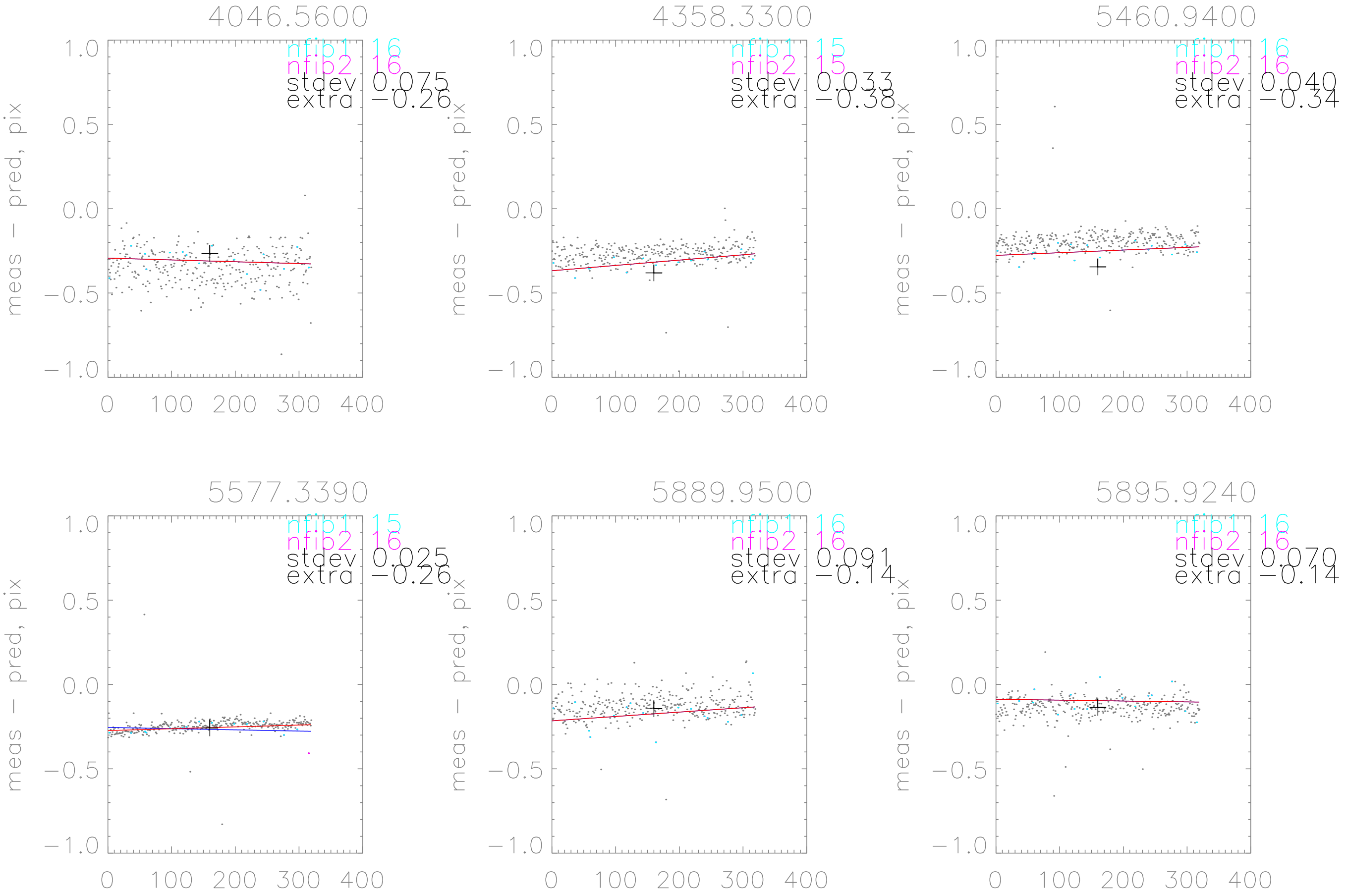


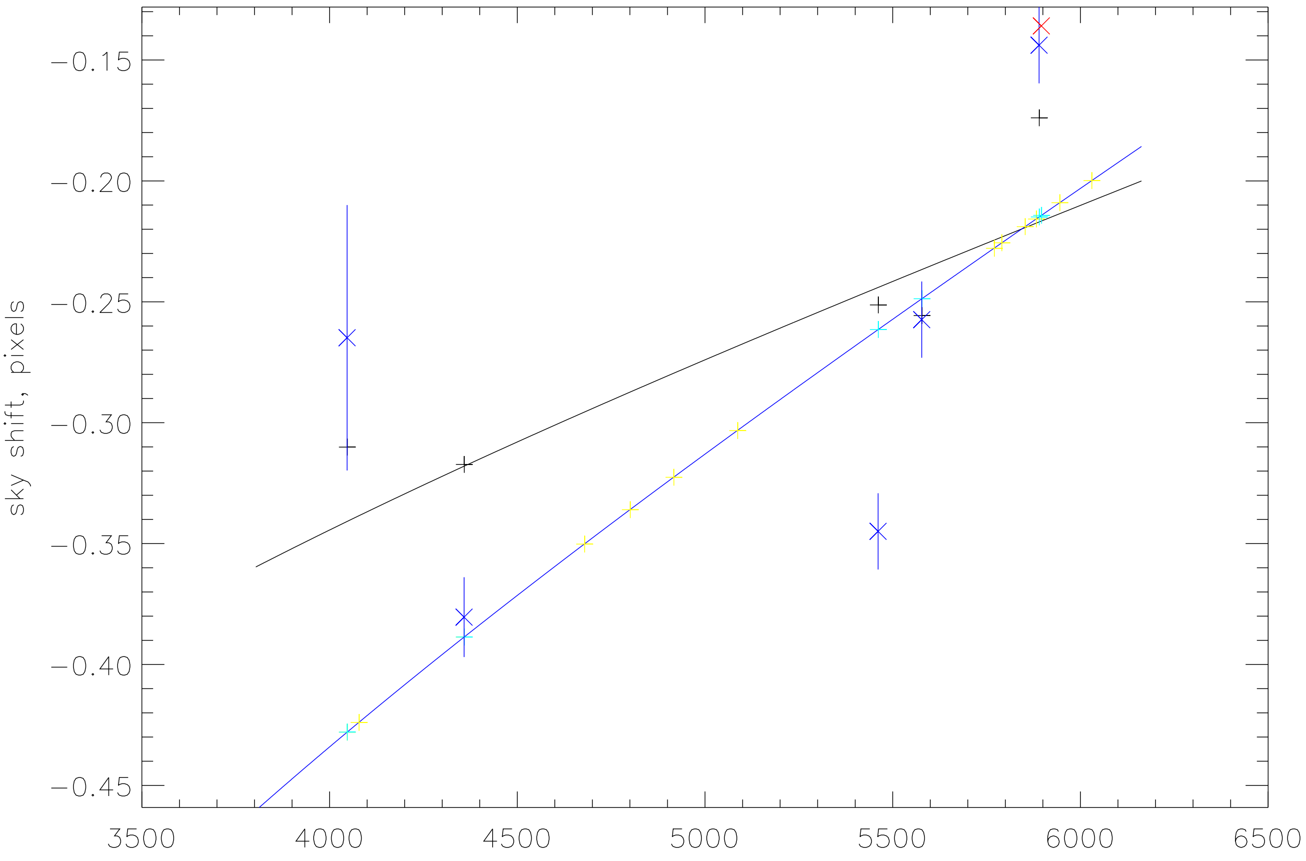
shift(pix)=−0.265
err(pix)= 0.055
oldshift(pix)=−0.461
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

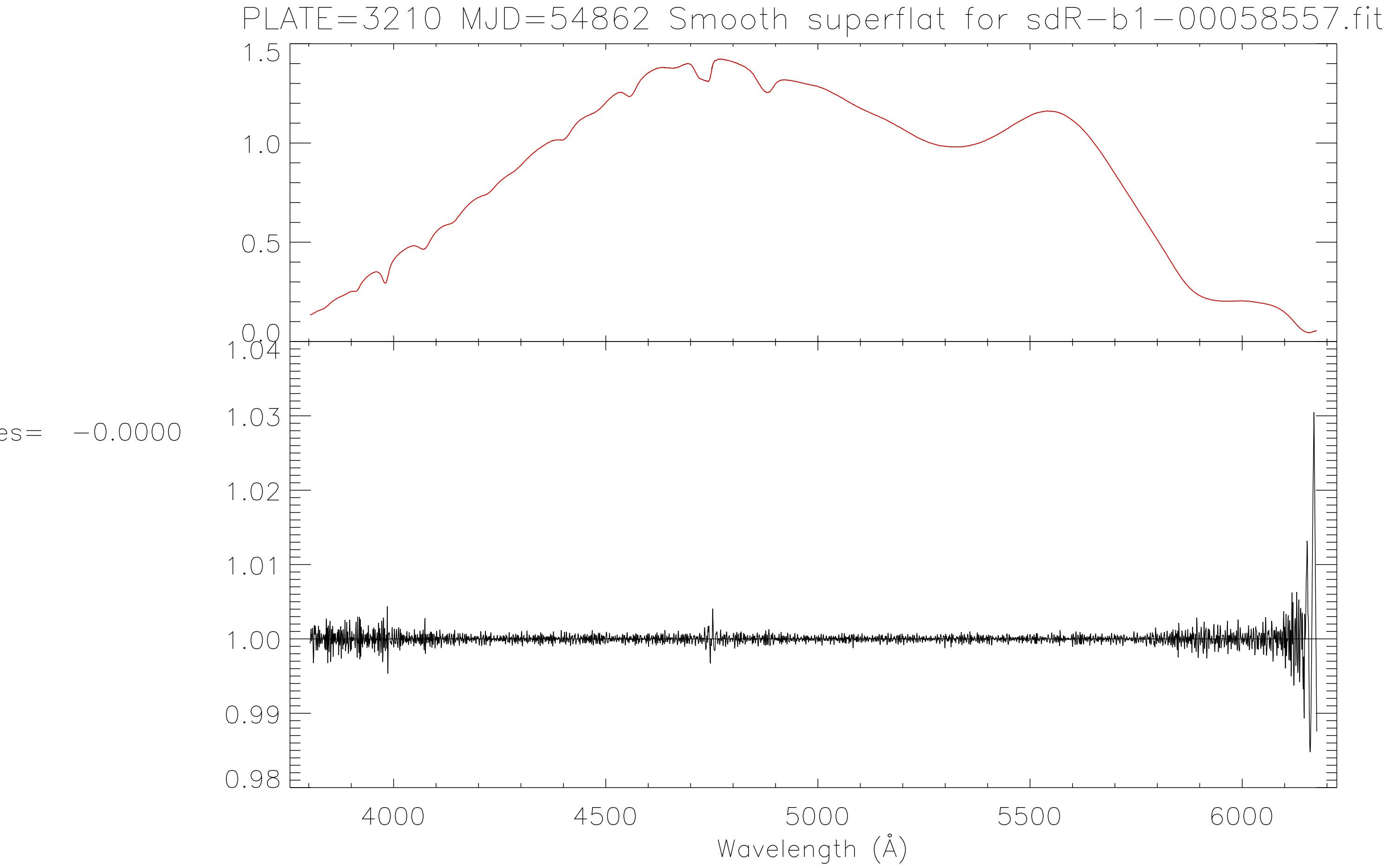

shift(pix)=−0.380
err(pix)= 0.017
oldshift(pix)=−0.368
0
50
100
150
200
250
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)=−0.345
err(pix)= 0.016
oldshift(pix)=−0.268
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

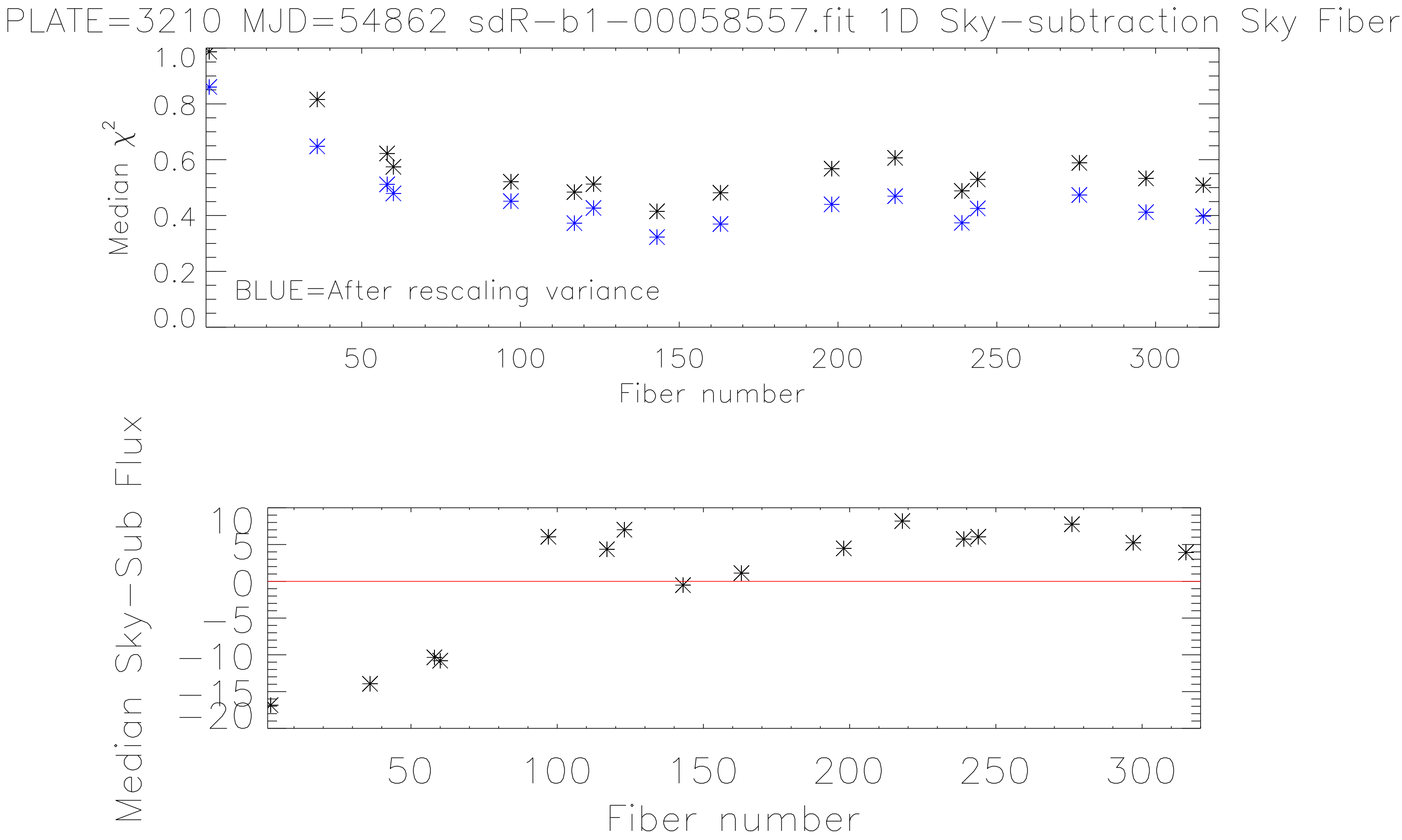

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0.0
0.1
0
100
200
300
400

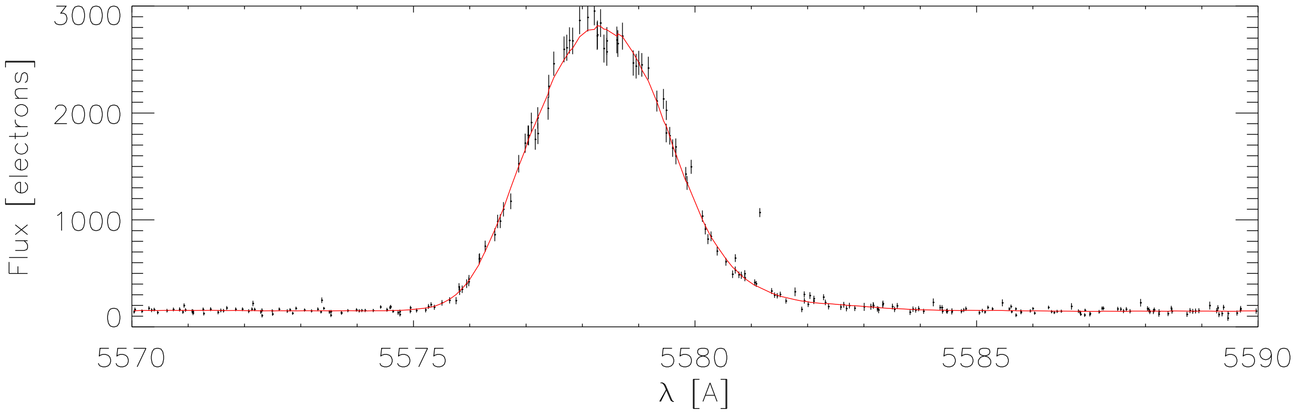

4046.5600
nfib1 16
nfib2 16
stdev 0.075
extra −0.26
4358.3300
nfib1 15
nfib2 15
stdev 0.033
extra −0.38
5460.9400
nfib1 16
nfib2 16
stdev 0.040
extra −0.34
5577.3390
nfib1 15
nfib2 16
stdev 0.025
extra −0.26
5889.9500
nfib1 16
nfib2 16
stdev 0.091
extra −0.14
5895.9240
nfib1 16
nfib2 16
stdev 0.070
extra −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
−0.20
−0.25
−0.30
−0.35
−0.40
−0.45
3500
4000
4500
5000
5500
6000
6500

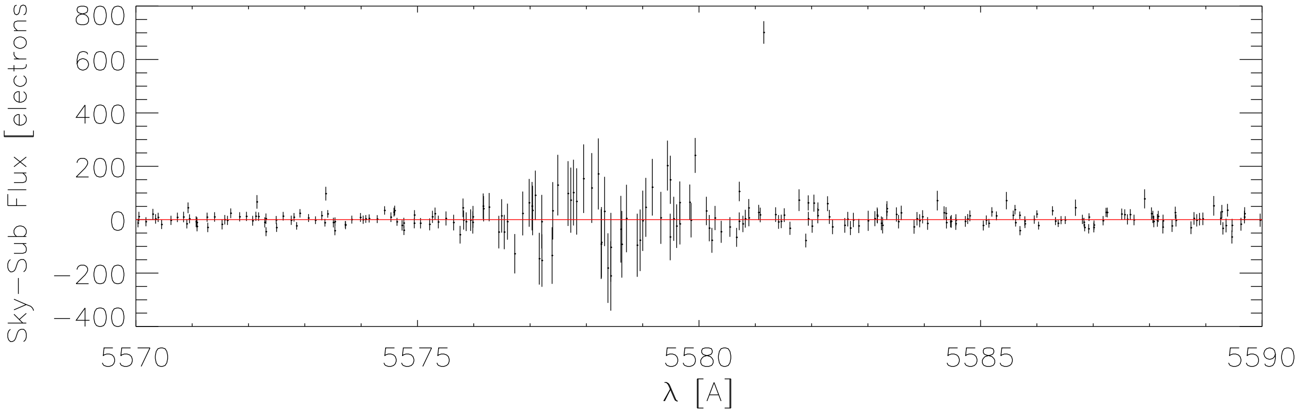


PLATE=3210 MJD=54862 Smooth superflat for sdR-b1-00058557.fit

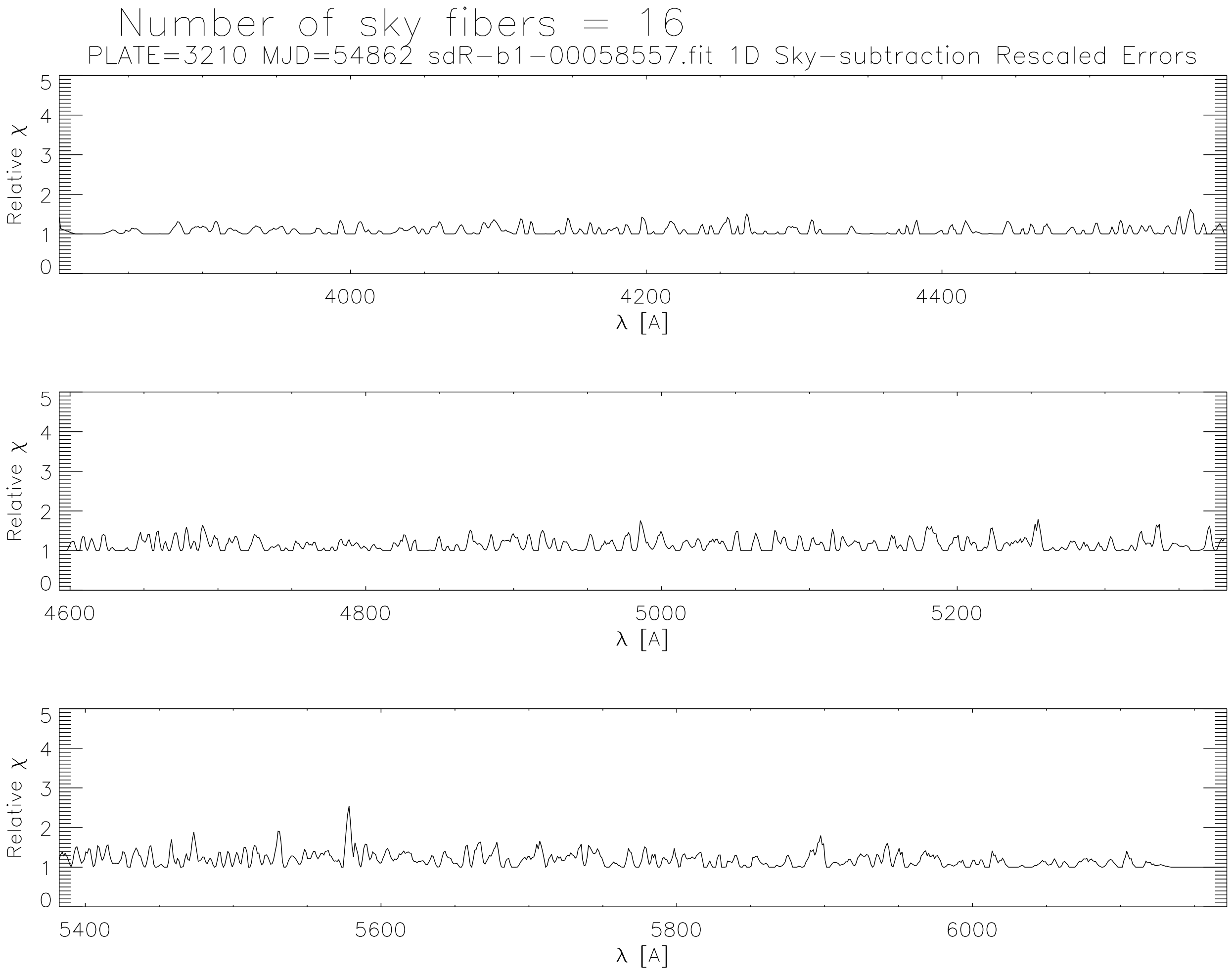

PLATE=3210 MJD=54862 sdR-b1-00058557.fit 1D Sky-subtraction Sky Fiber
Median $\chi^2$
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

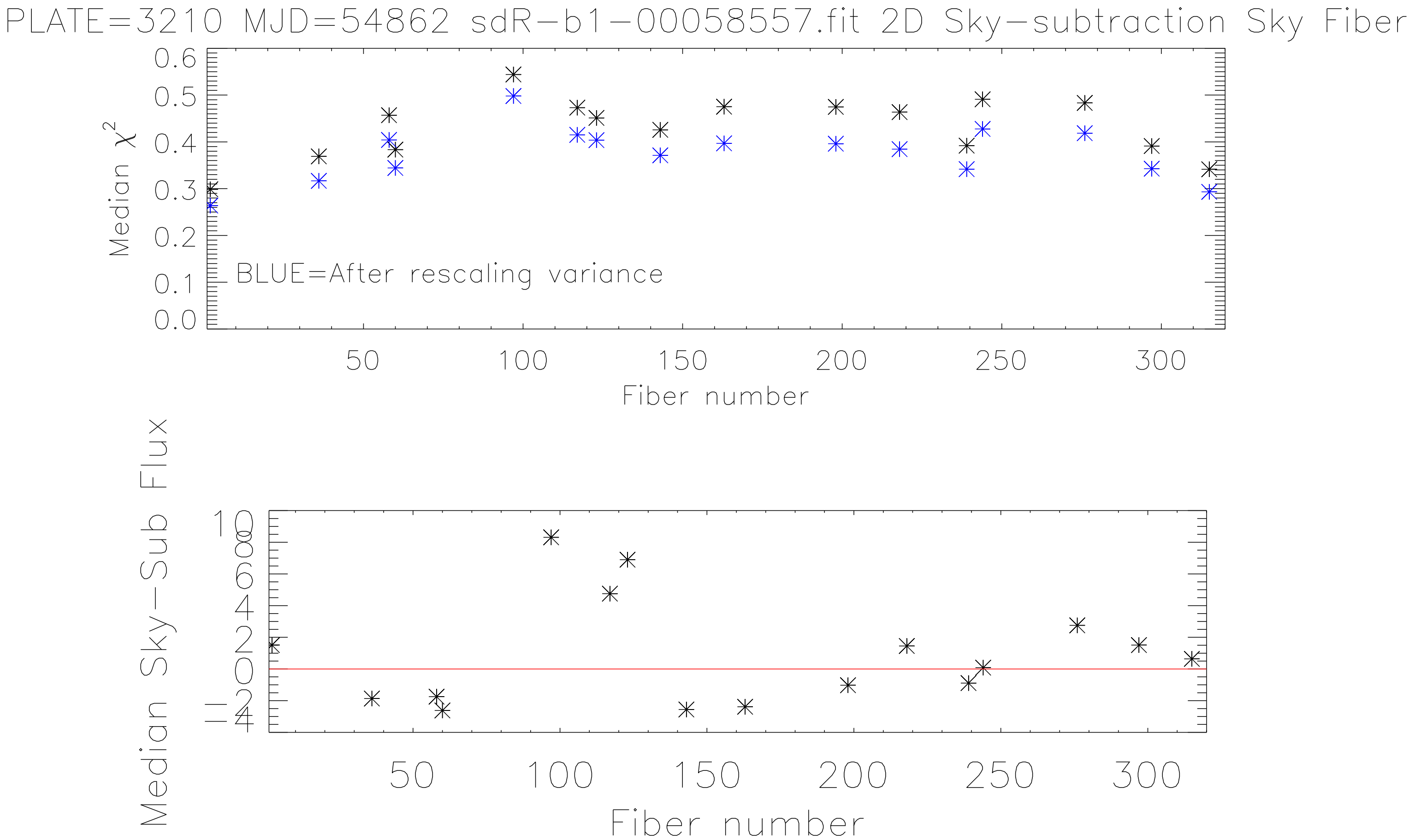


PLATE=3210 MJD=54862 sdR-b1-00058557.fit 1D Sky-subtraction Sky Fibers

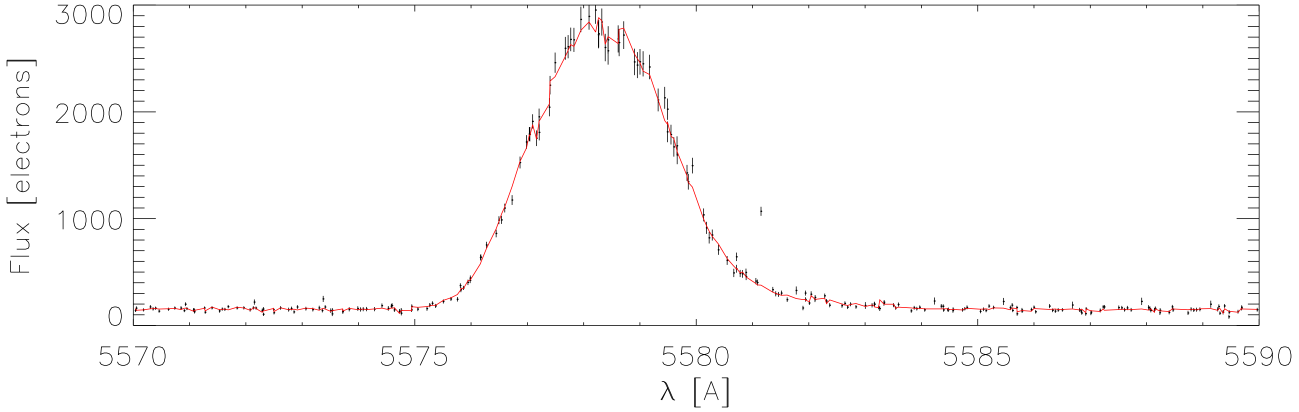


PLATE=3210 MJD=54862 sdR-b1-00058557.fit 1D Sky-subtraction Sky-subtracted Sky F

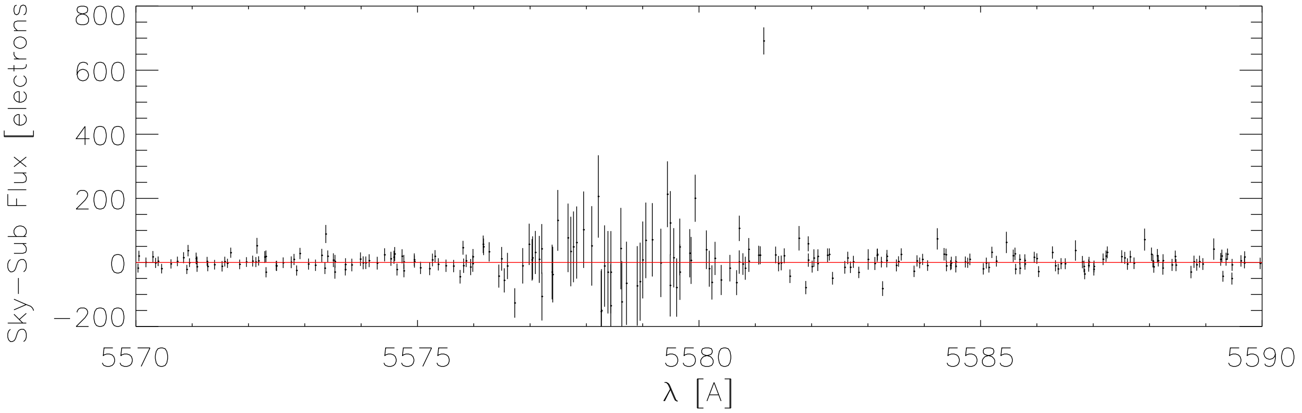

Number of sky fibers = 16
PLATE=3210 MJD=54862 sdR-b1-00058557.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

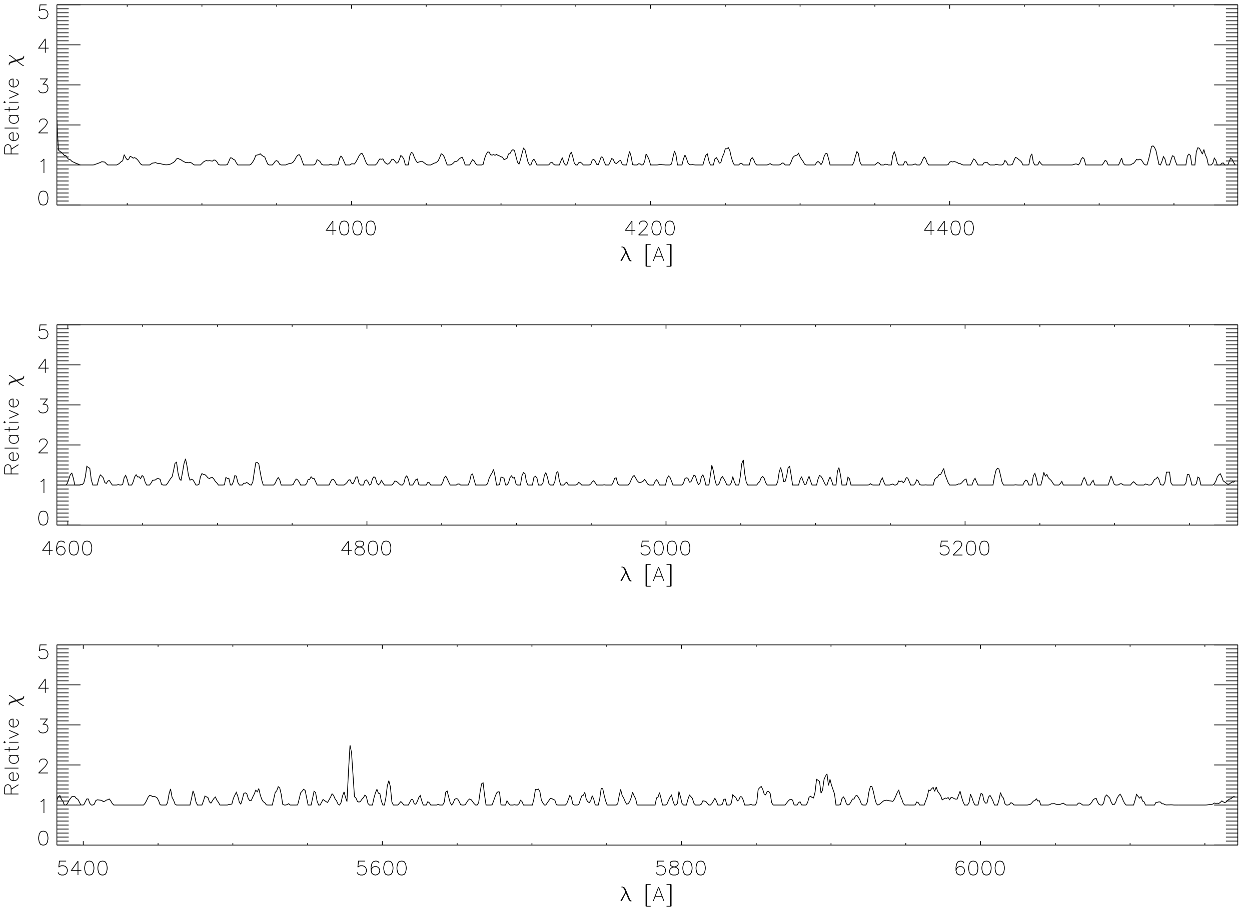

PLATE=3210 MJD=54862 sdR-b1-00058557.fit 2D Sky-subtraction Sky Fiber
Median $\chi^2$
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
8
6
4
2
0
-2
-4
50
100
150
200
250
300
Fiber number

PLATE=3210 MJD=54862 sdR-b1-00058557.fit 2D Sky-subtraction Sky Fibers



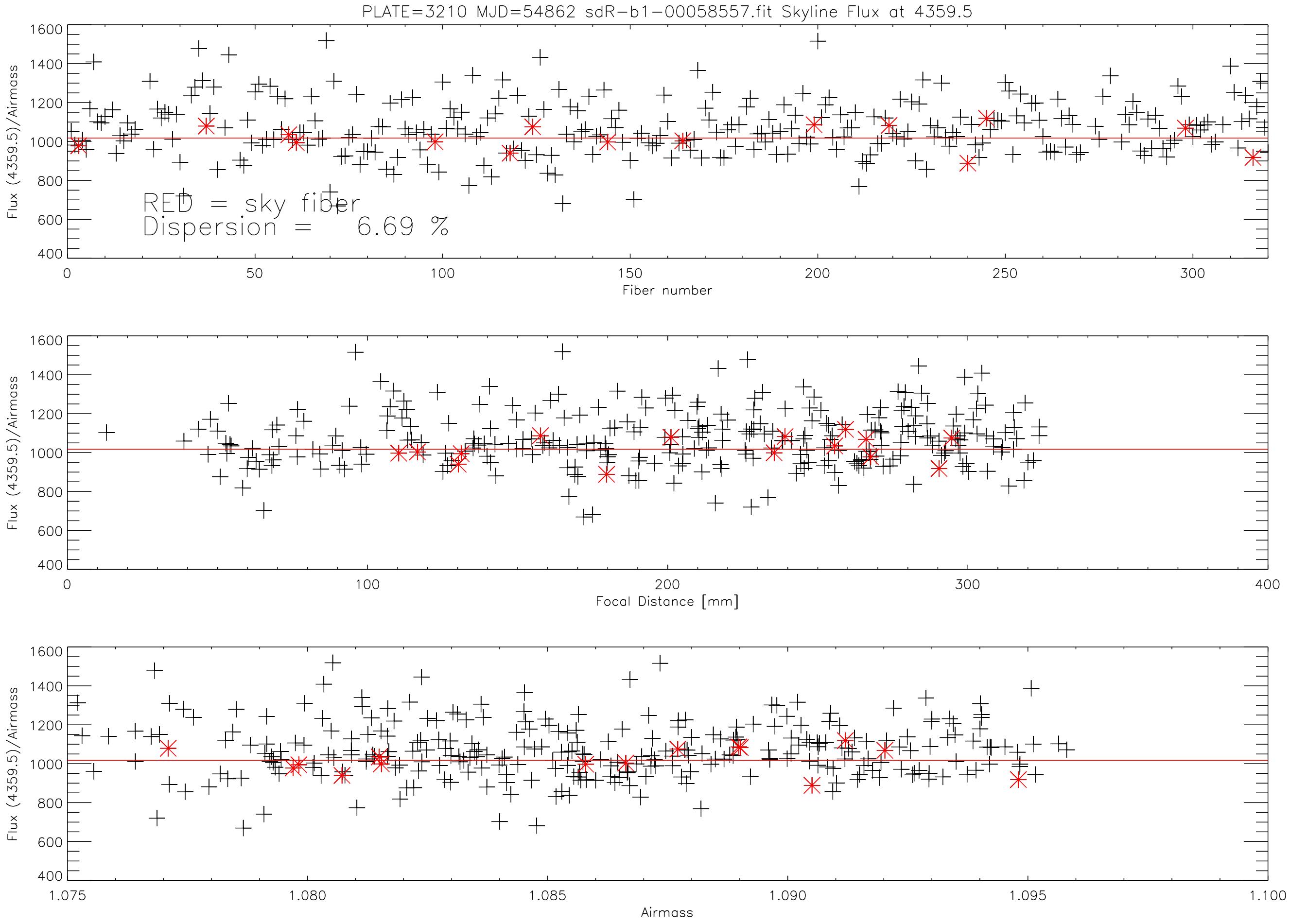
PLATE=3210 MJD=54862 sdR-b1-00058557.fit 2D Sky-subtraction Sky-subtracted Sky F



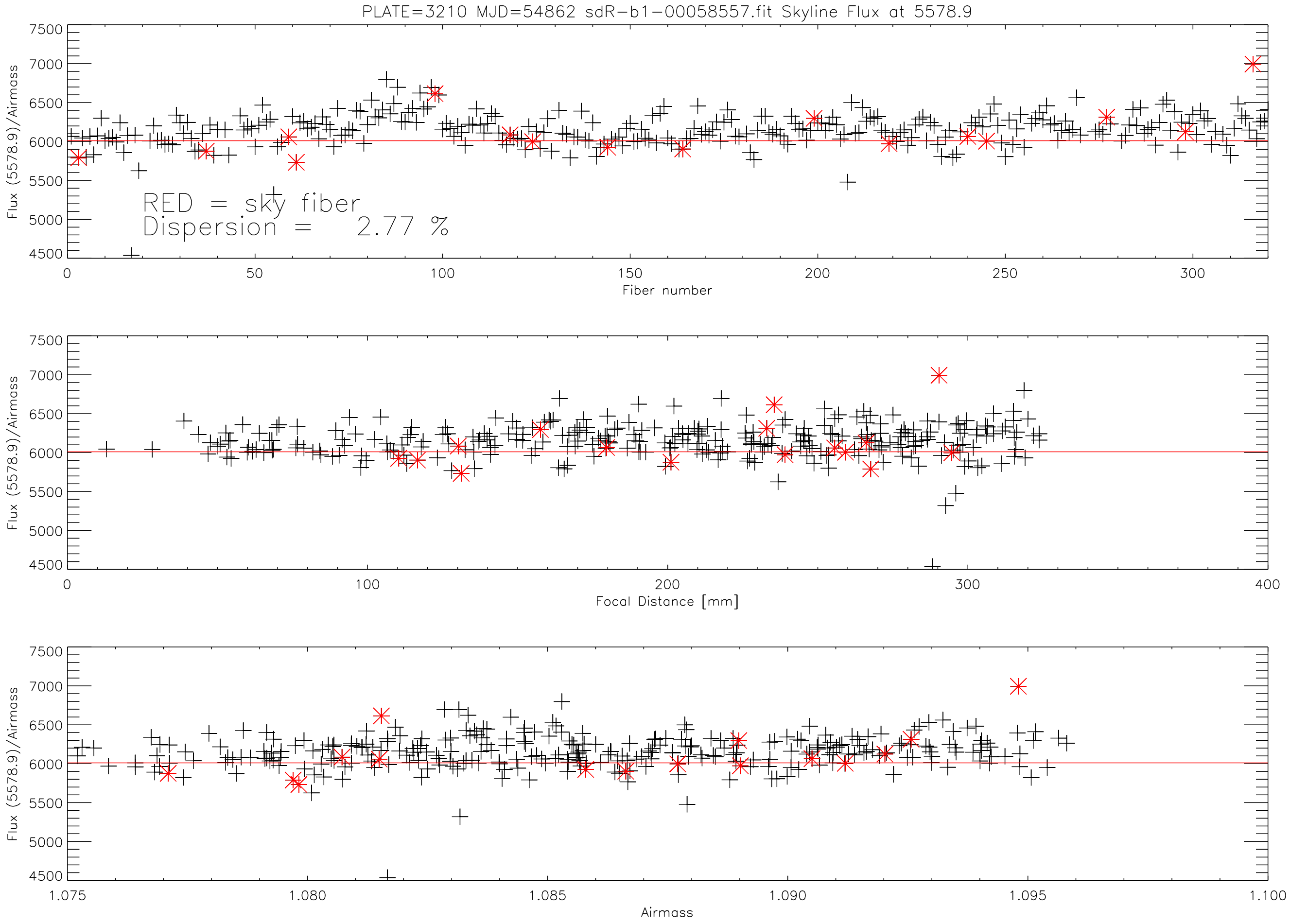


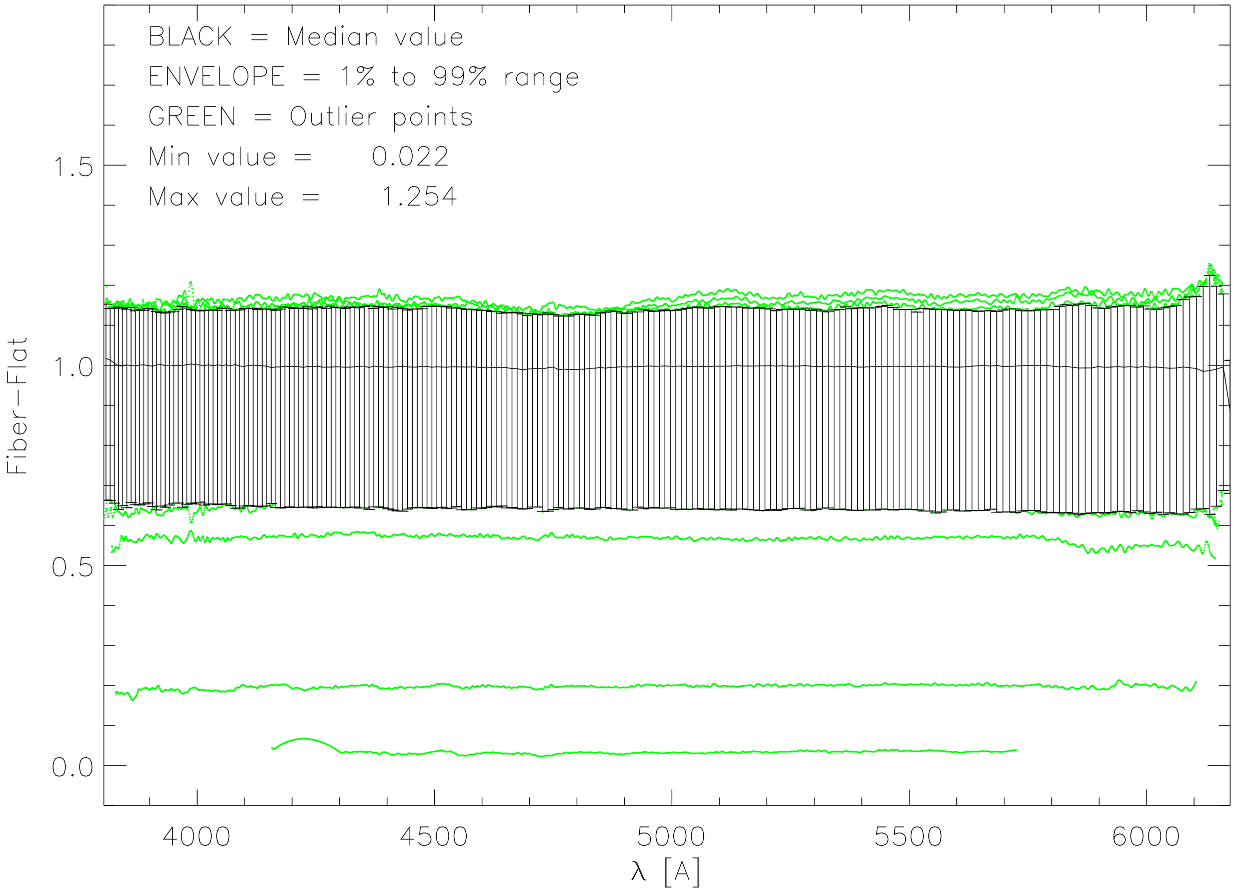
Number of sky fibers = 16

PLATE=3210 MJD=54862 sdR-b1-00058557.fit 2D Sky-subtraction Rescaled Errors



PLATE=3210 MJD=54862 sdR-b1-00058557.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
RED = sky fiber
Dispersion = 6.69 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
1.075
1.080
1.085
1.090
1.095
1.100
Airmass

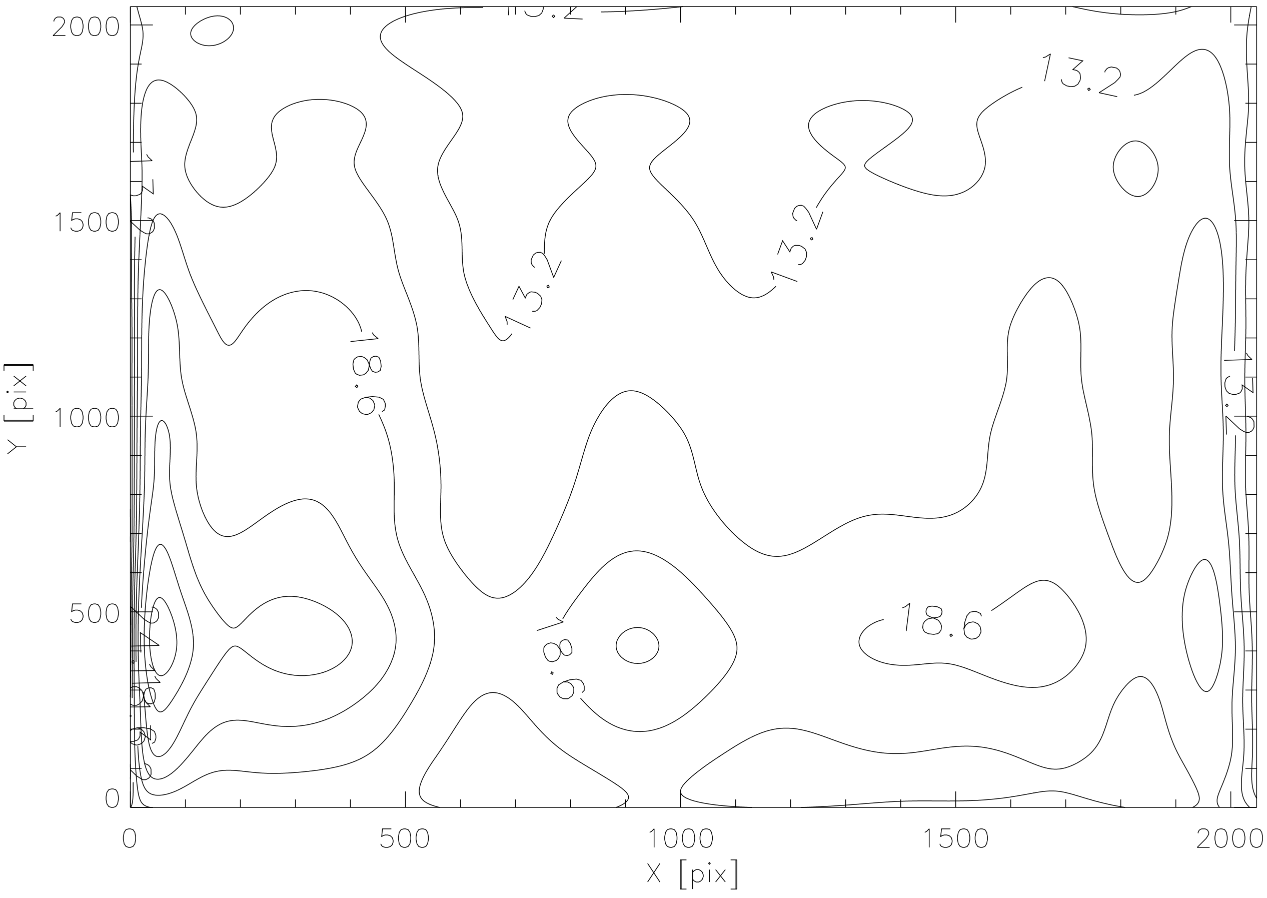

PLATE=3210 MJD=54862 sdR-b1-00058557.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
7500
7000
6500
6000
5500
5000
4500
RED = sky fiber
Dispersion = 2.77 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
7500
7000
6500
6000
5500
5000
4500
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
7500
7000
6500
6000
5500
5000
4500
1.075
1.080
1.085
1.090
1.095
1.100
Airmass

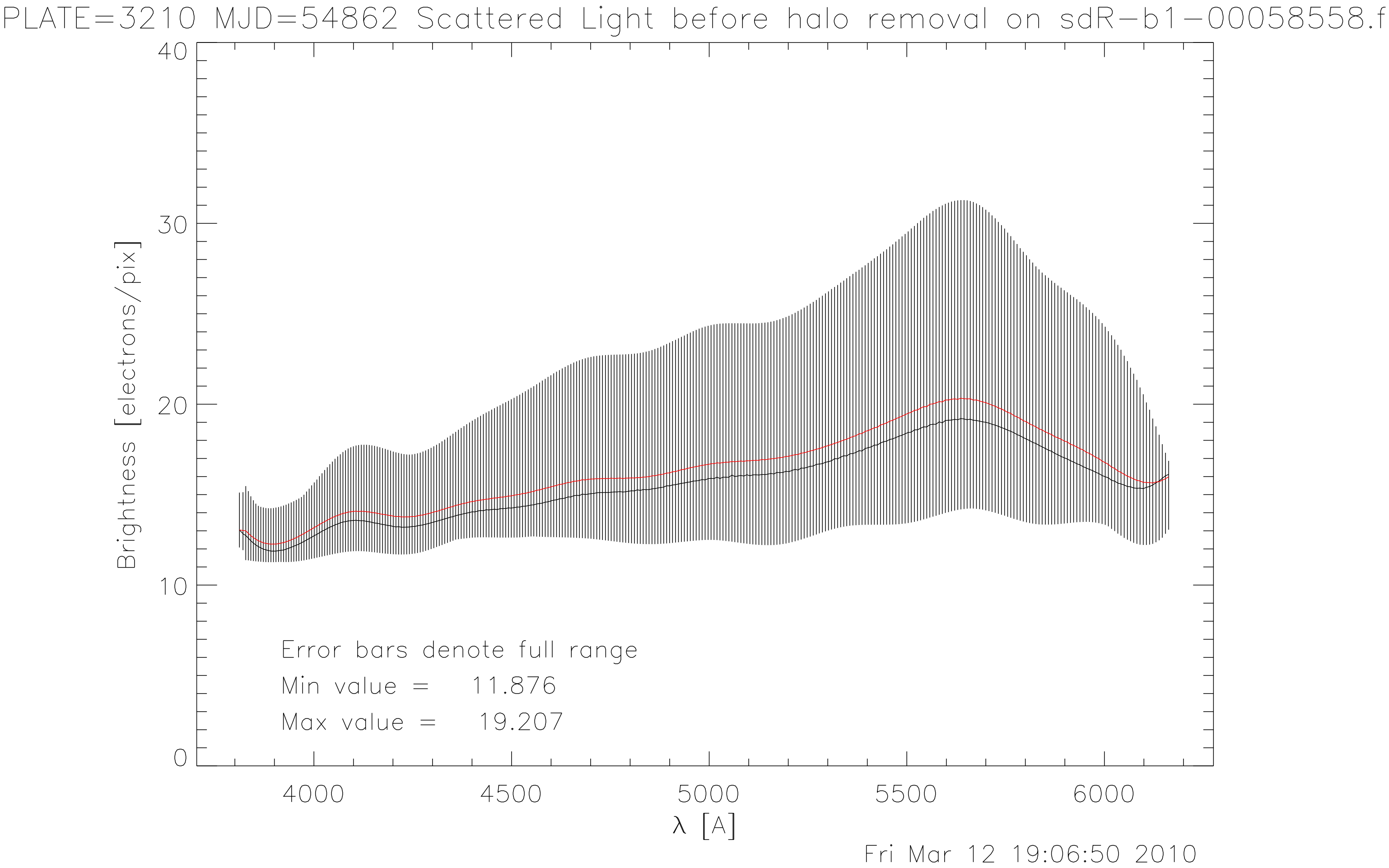


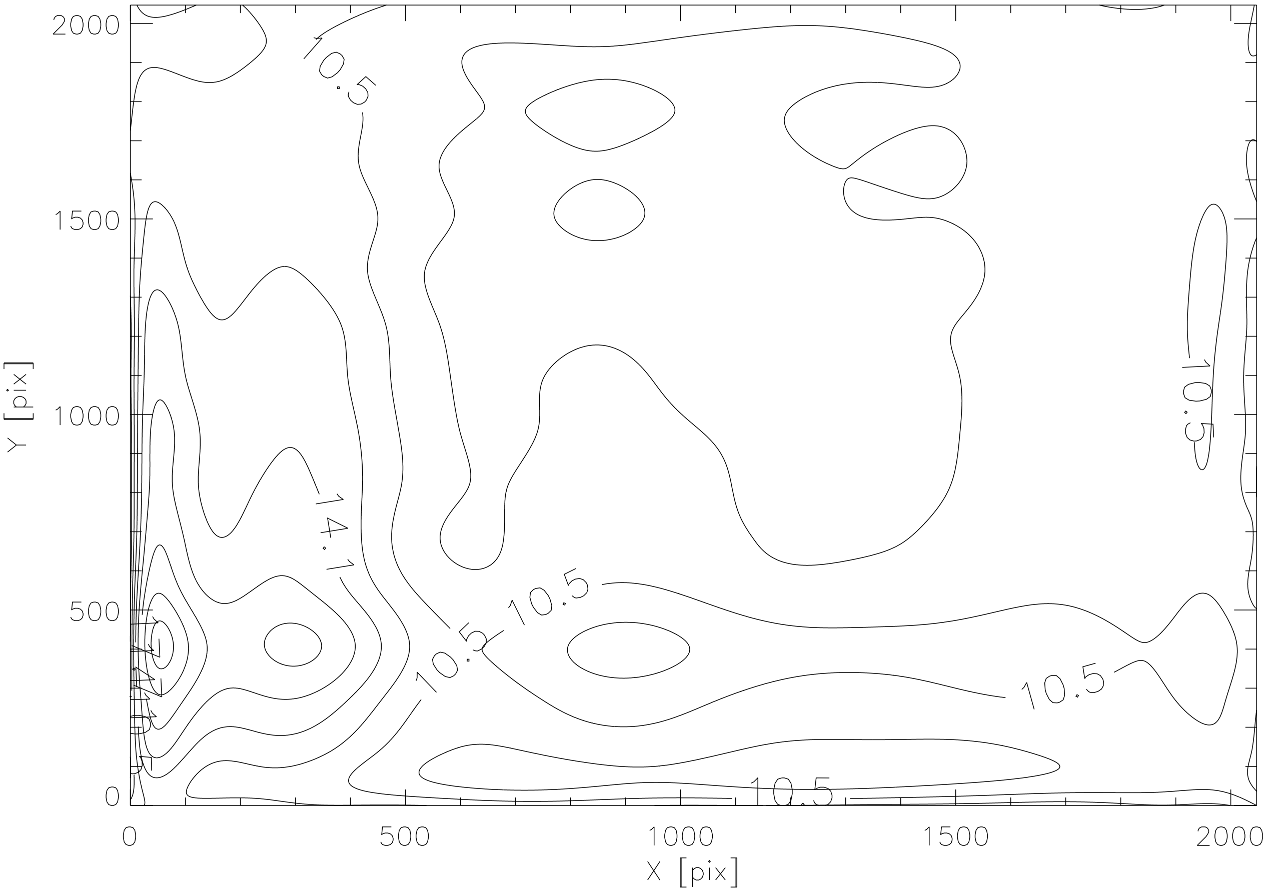
PLATE=3210 MJD=54862 Fiber-Flats for sdR-b1-00058560.fit

Fri Mar 12 19:05:26 2010

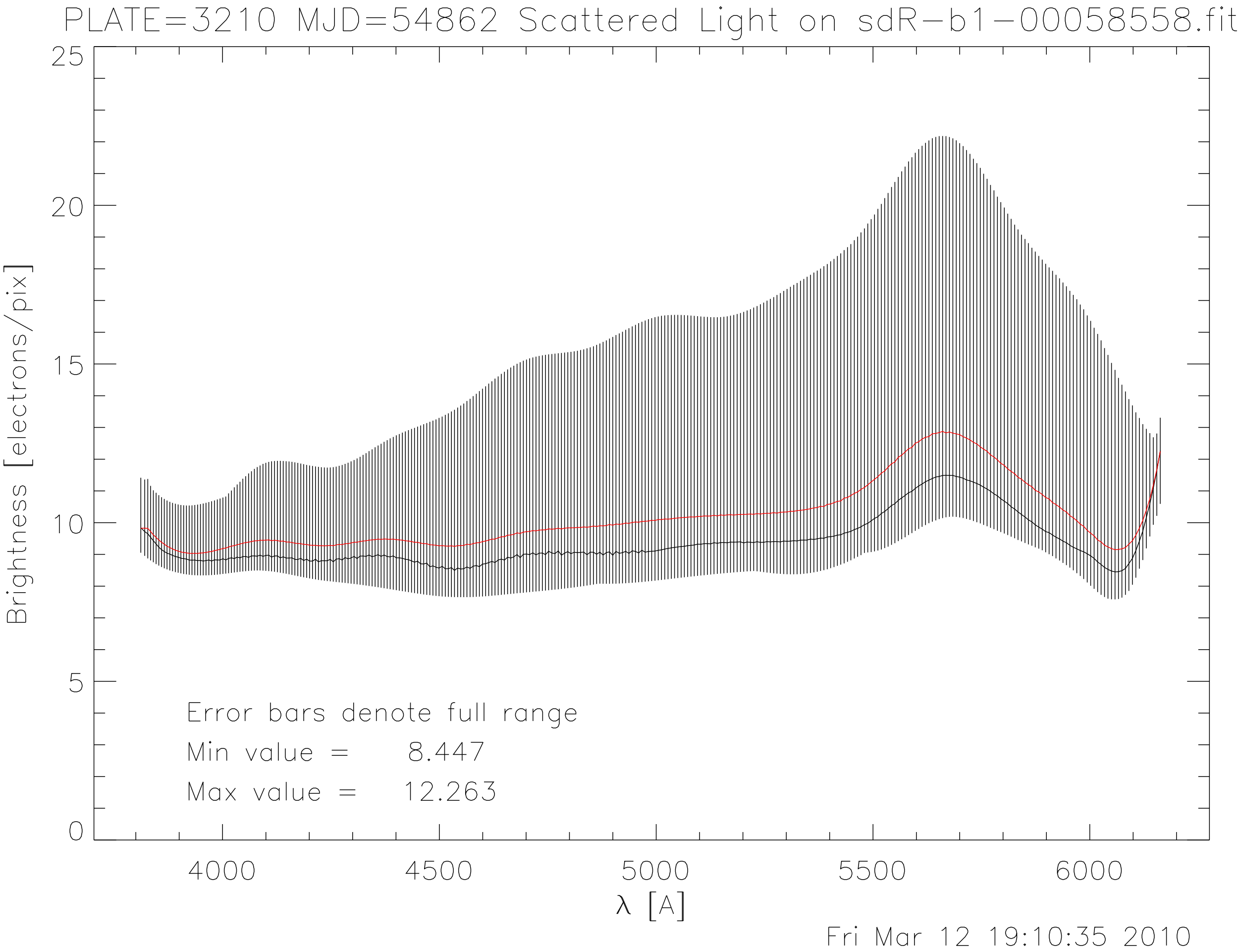
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b1-00058558.f




PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b1-00058558.f
Brightness [electrons/pix]
0
10
20
30
40
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 11.876
Max value = 19.207
Fri Mar 12 19:06:50 2010



PLATE=3210 MJD=54862 Scattered Light on sdR-b1-00058558.fit



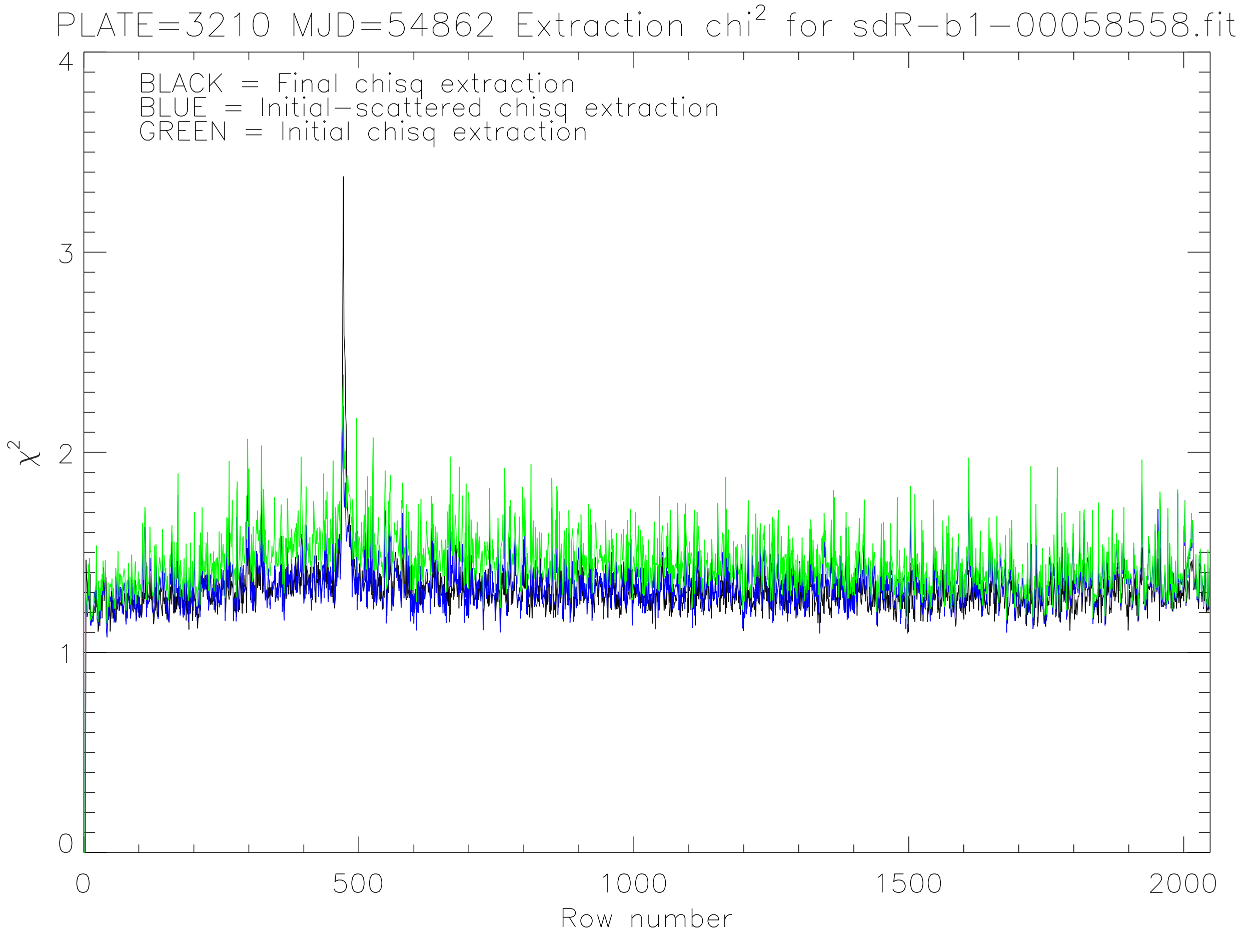
PLATE=3210 MJD=54862 Scattered Light on sdR-b1-00058558.fit

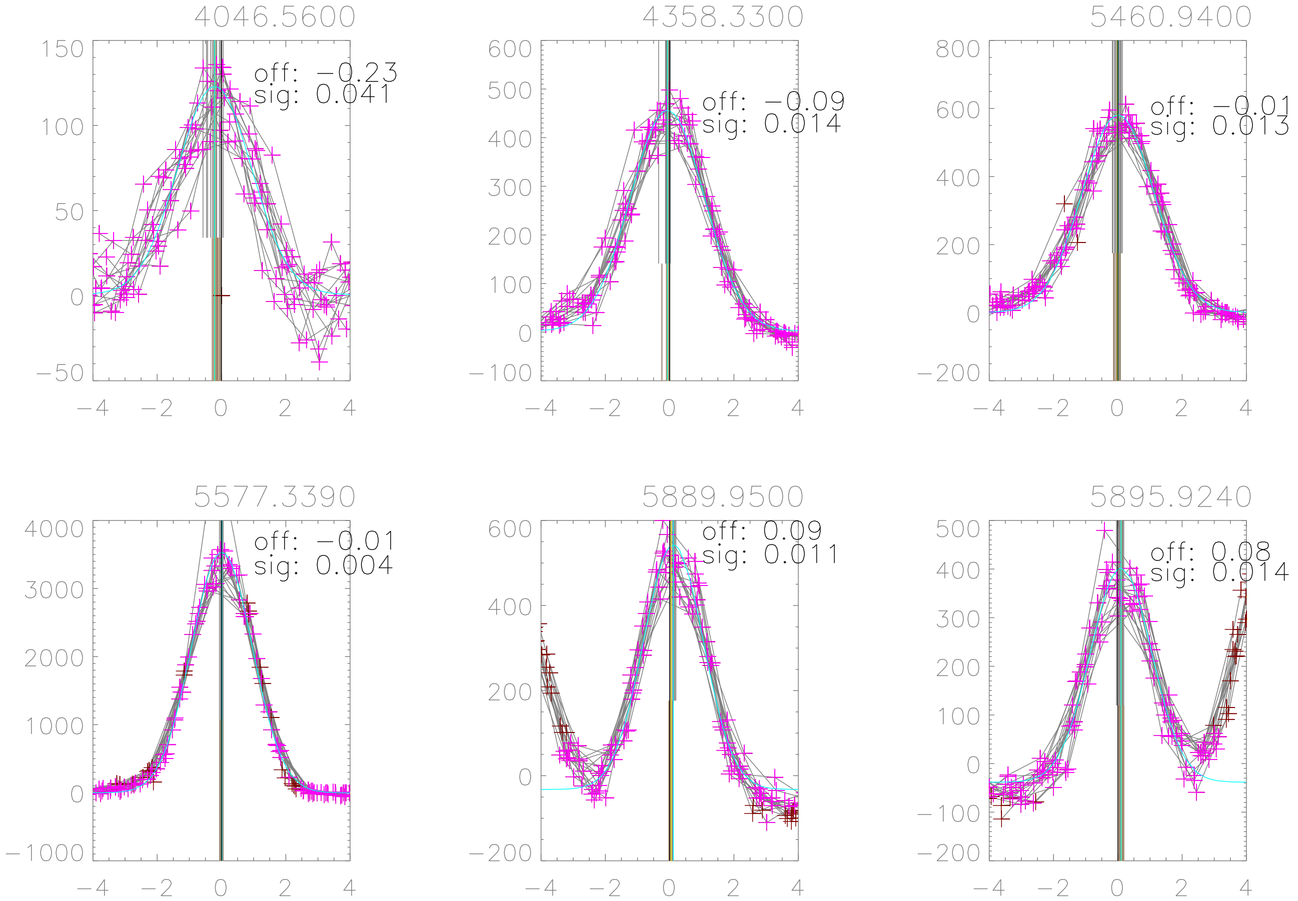
Error bars denote full range

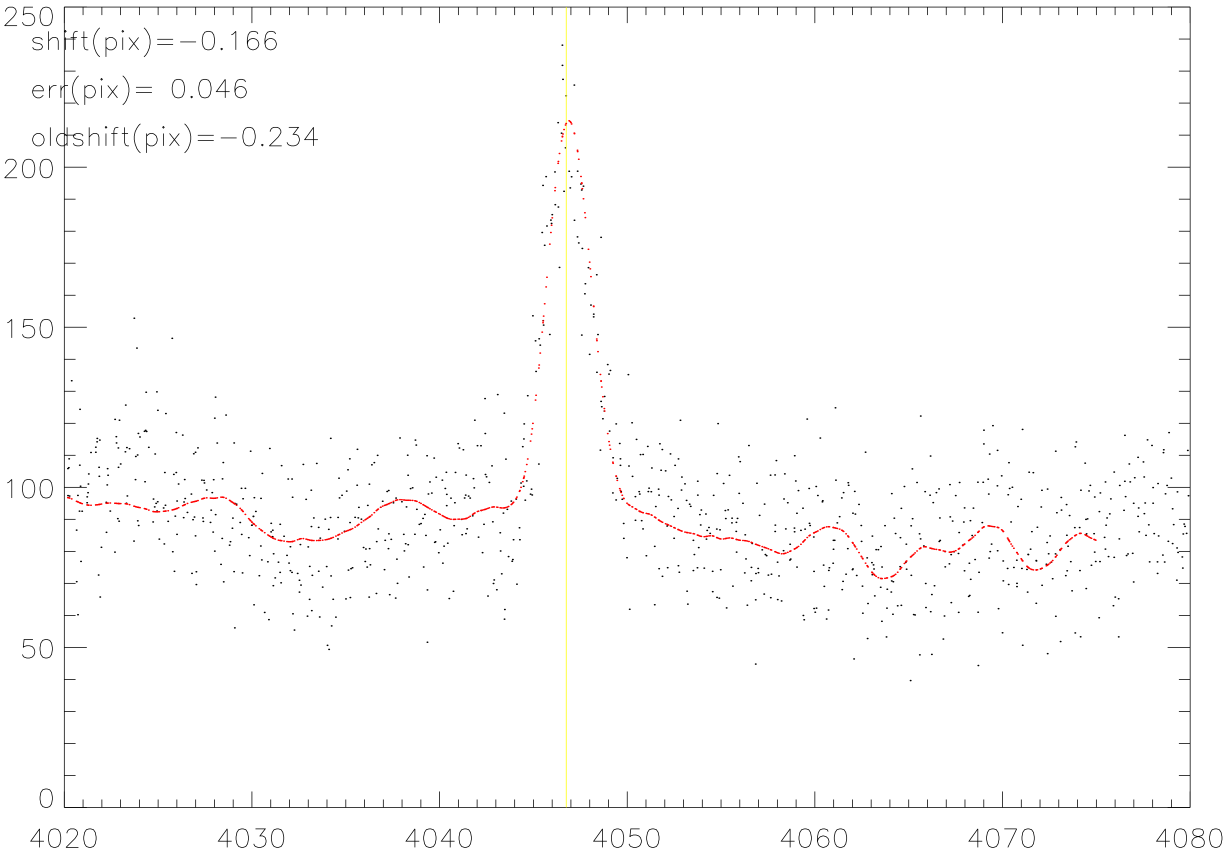
Min value = 8.447

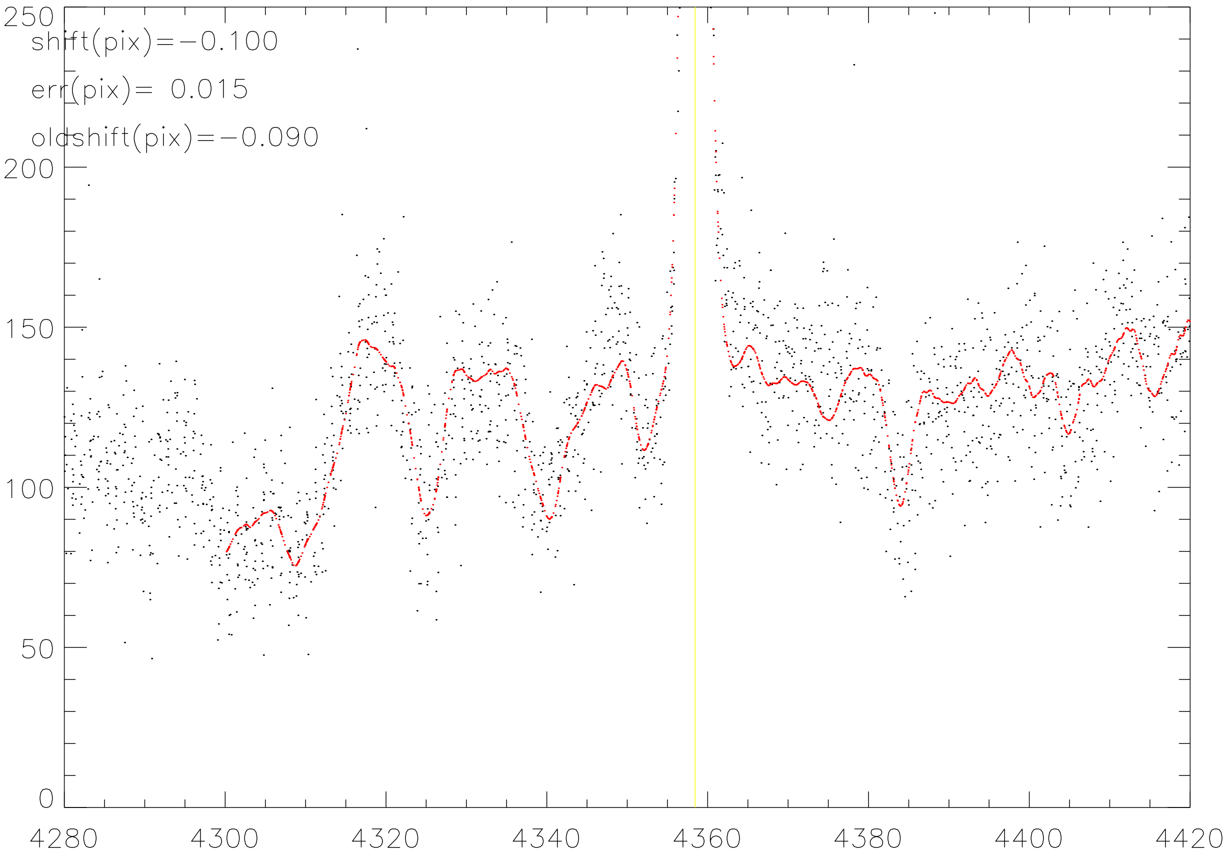
Max value = 12.263

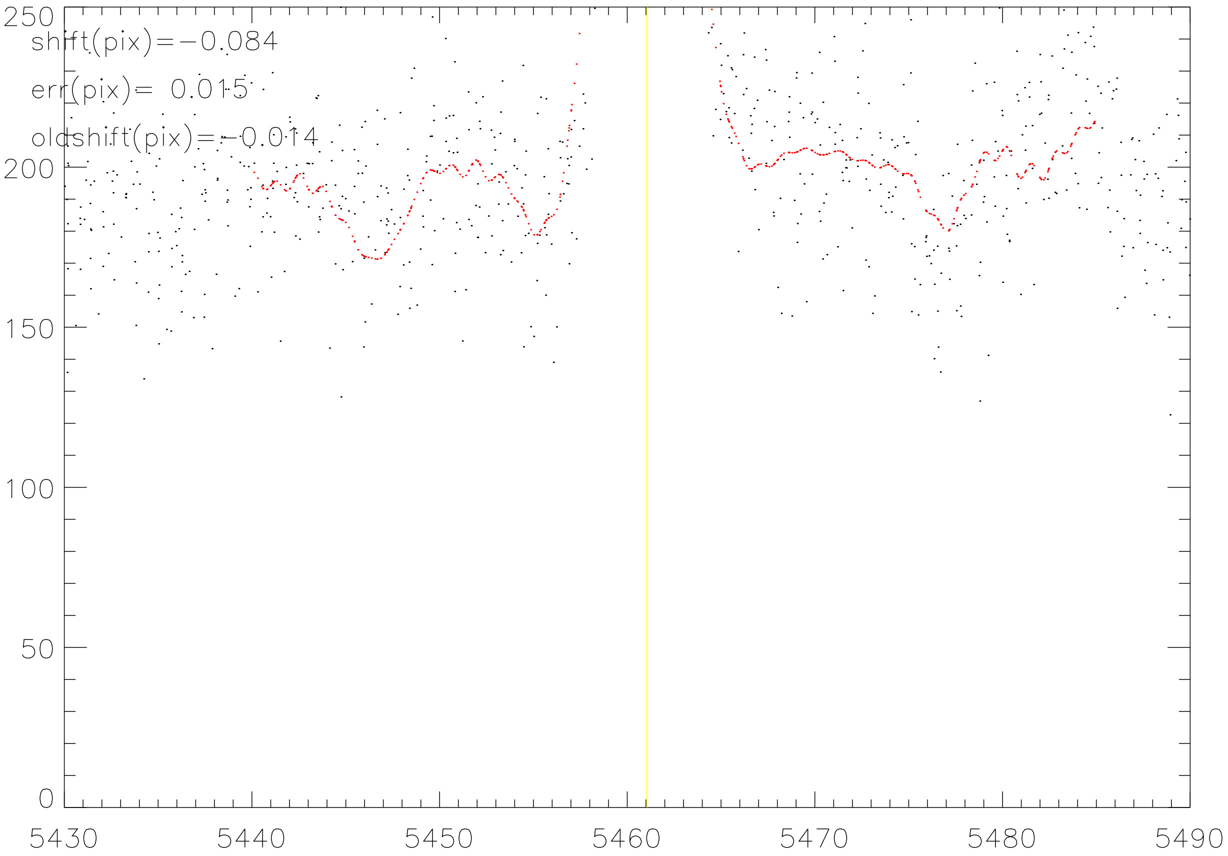
Fri Mar 12 19:10:35 2010

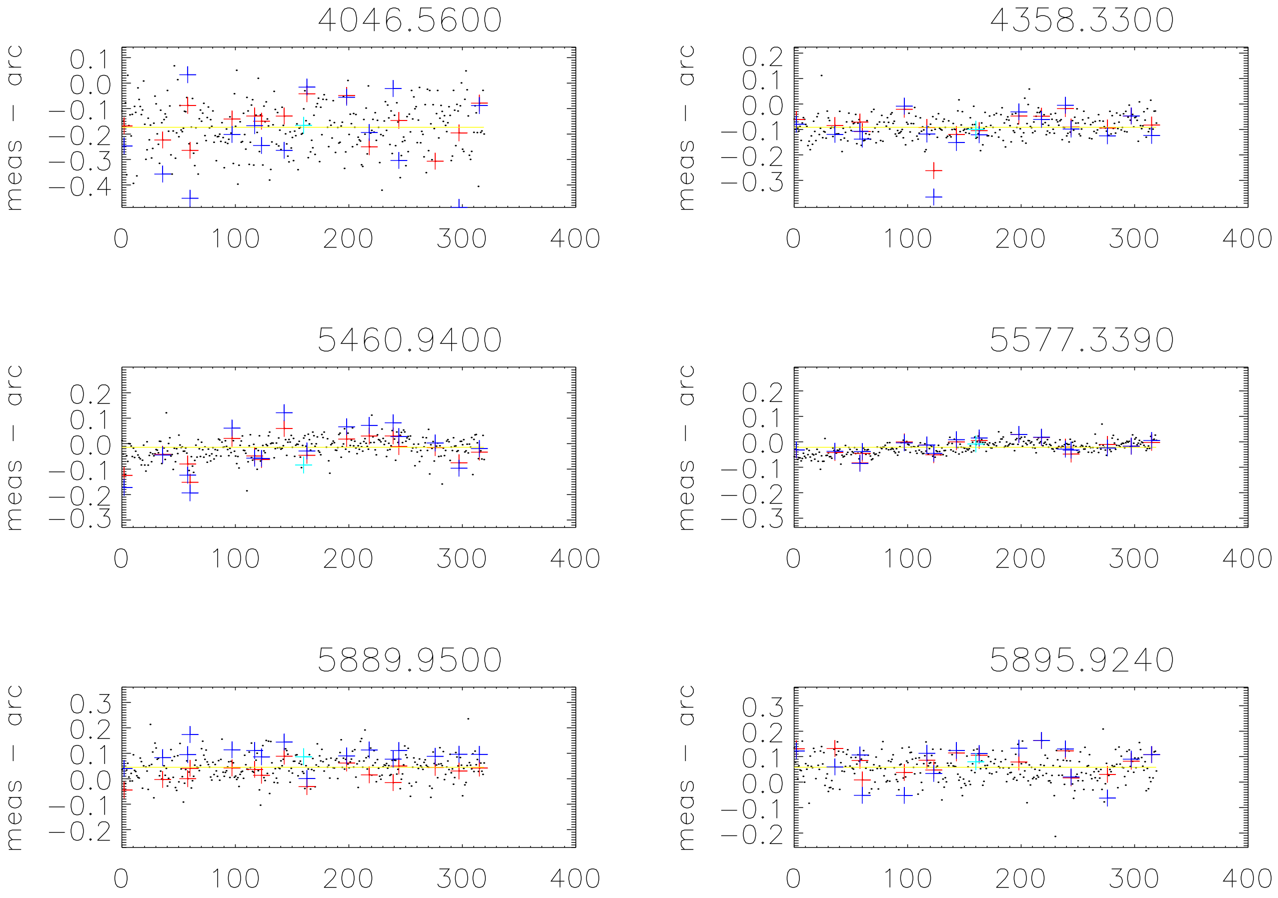

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-b1-00058558.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
0
500
1000
1500
2000
Row number

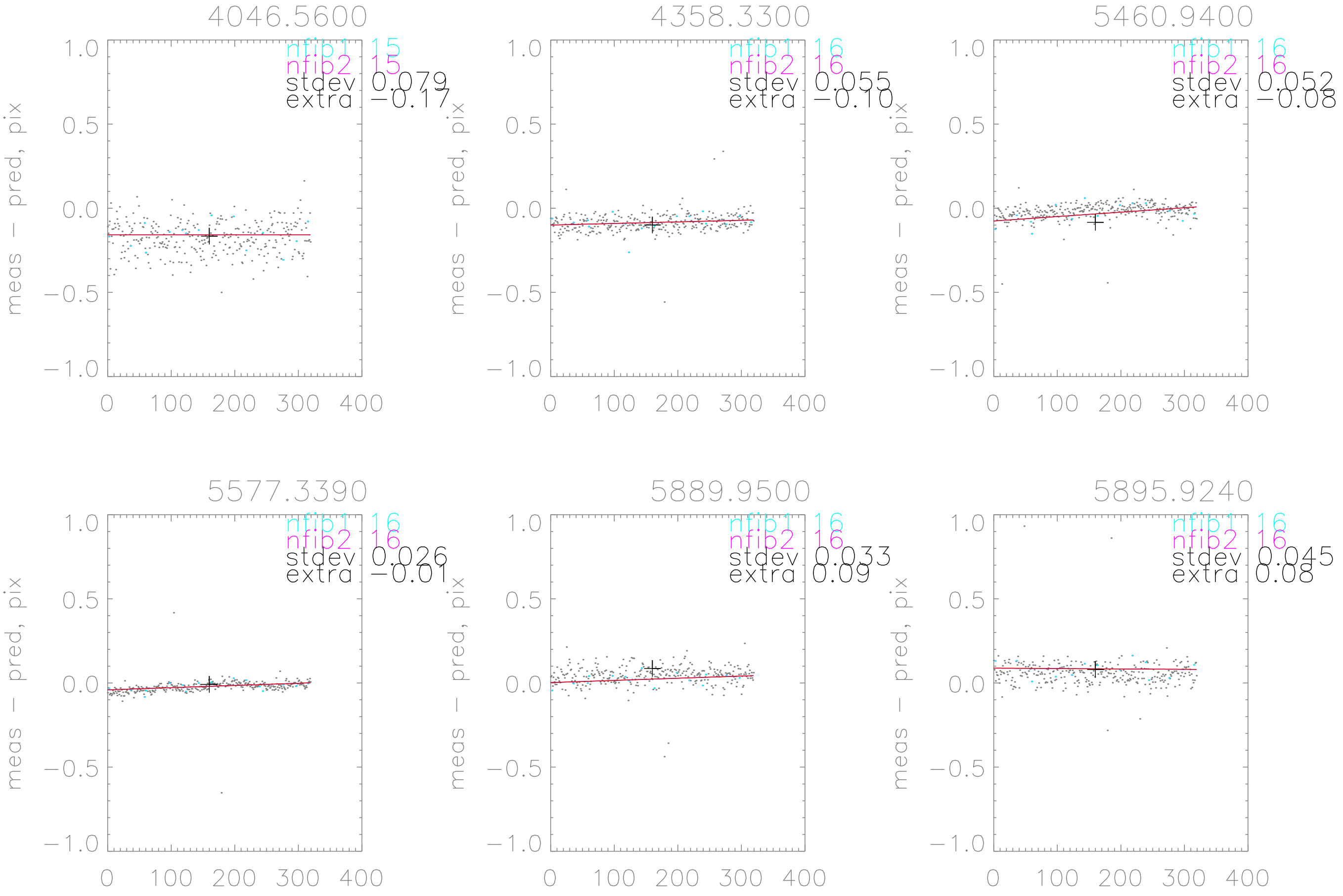

4046.5600
off: −0.23
sig: 0.041
150
100
50
0
−50
4358.3300
off: −0.09
sig: 0.014
600
500
400
300
200
100
0
−100
5460.9400
off: −0.01
sig: 0.013
800
600
400
200
0
−200
5577.3390
off: −0.01
sig: 0.004
4000
3000
2000
1000
0
−1000
5889.9500
off: 0.09
sig: 0.011
600
400
200
0
−200
5895.9240
off: 0.08
sig: 0.014
500
400
300
200
100
0
−100
−200
−4
−2
0
2
4

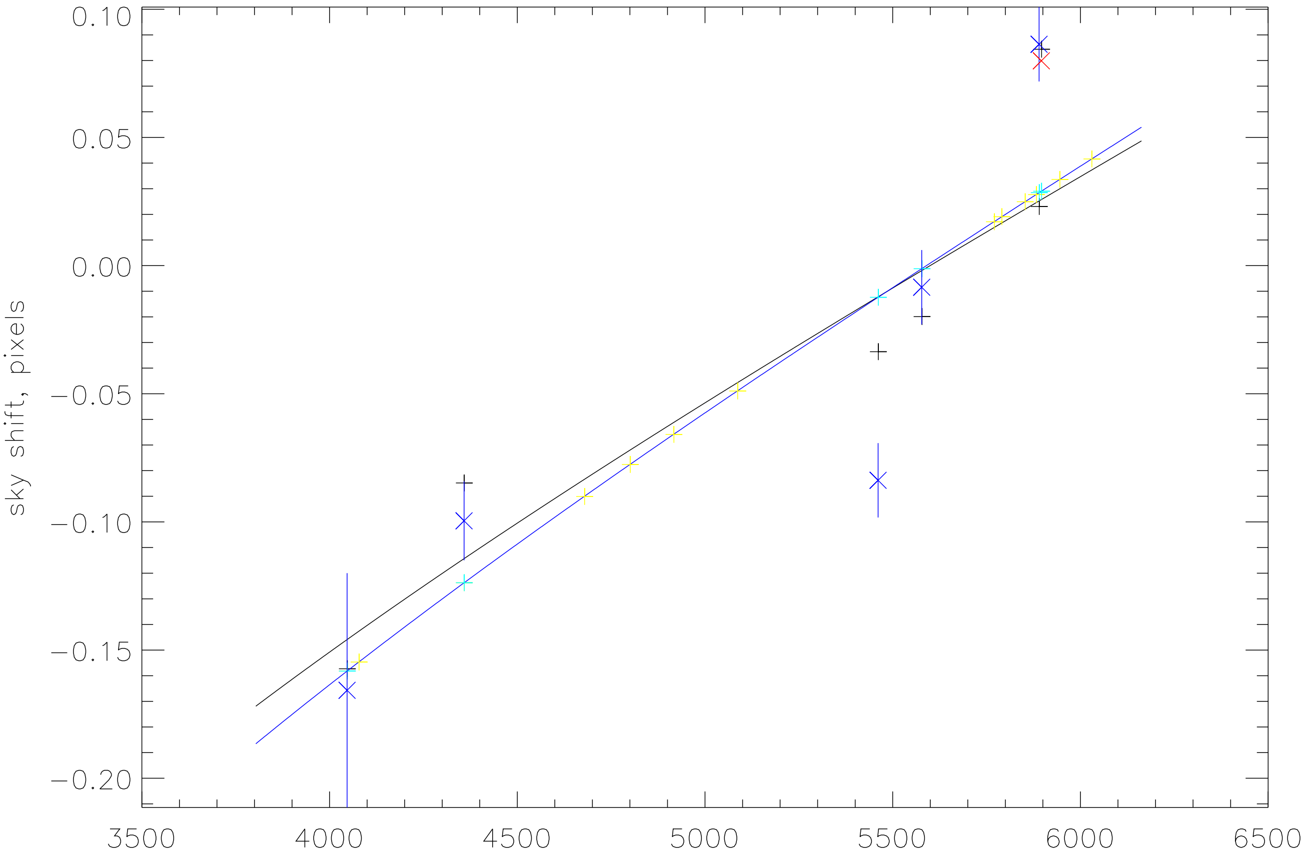

shift(pix)=−0.166
err(pix)= 0.046
oldshift(pix)=−0.234
0
50
100
150
200
250
4020
4030
4040
4050
4060
4070
4080

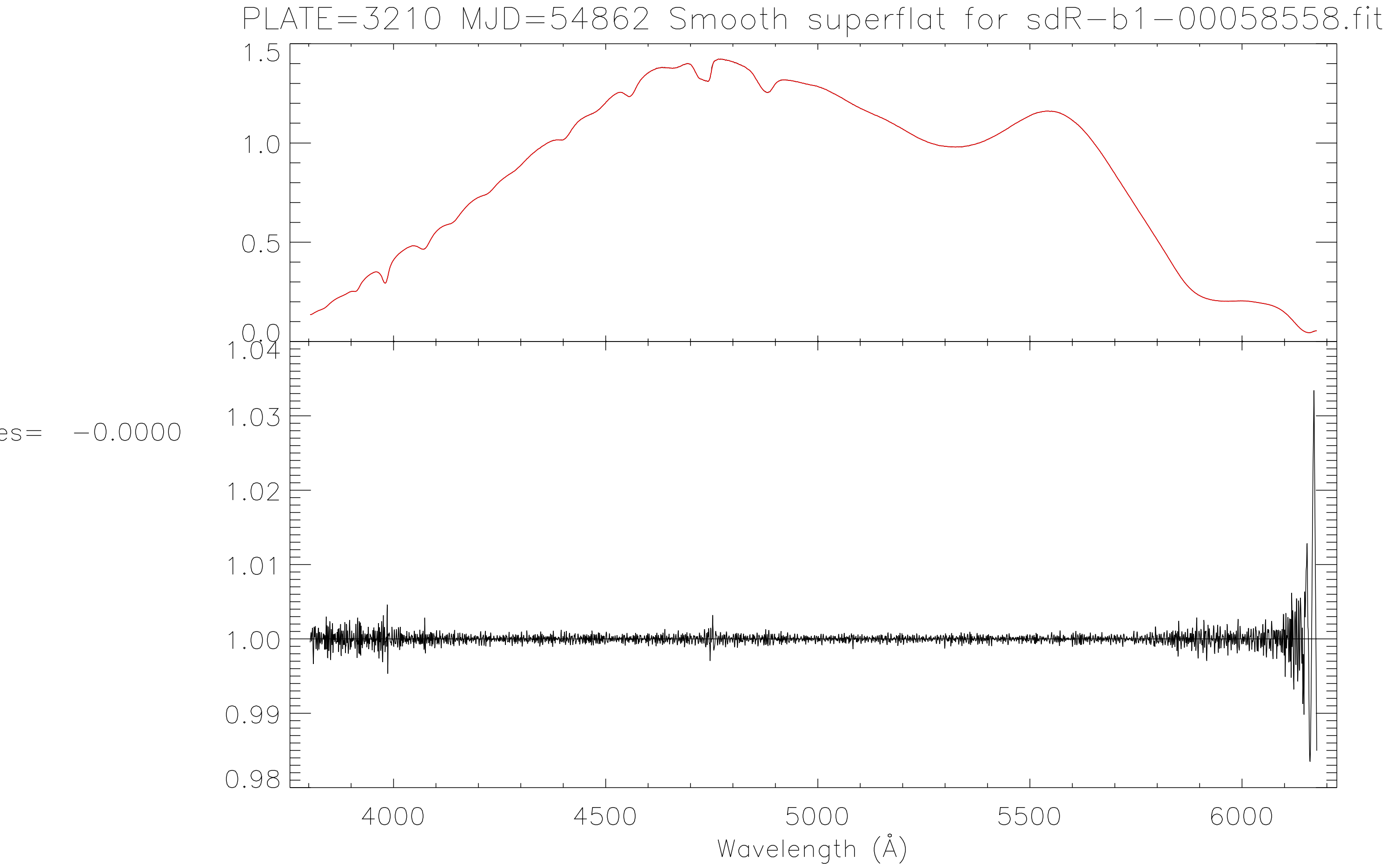

shift(pix)=−0.100
err(pix)= 0.015
oldshift(pix)=−0.090
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)=−0.084
err(pix)= 0.015
oldshift(pix)=−0.014
0
50
100
150
200
250
5430
5440
5450
5460
5470
5480
5490

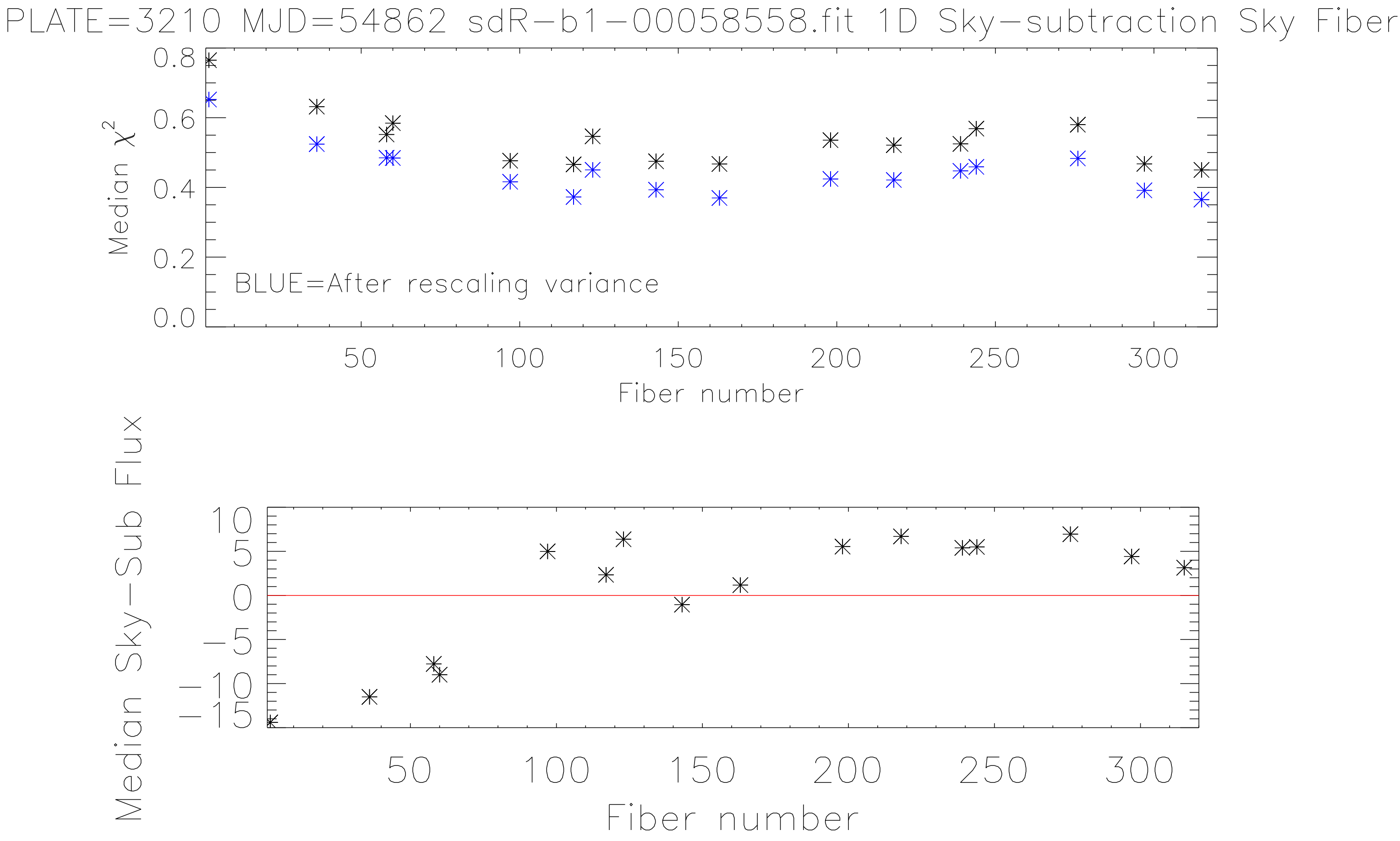

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0.2
0.3
0
100
200
300
400

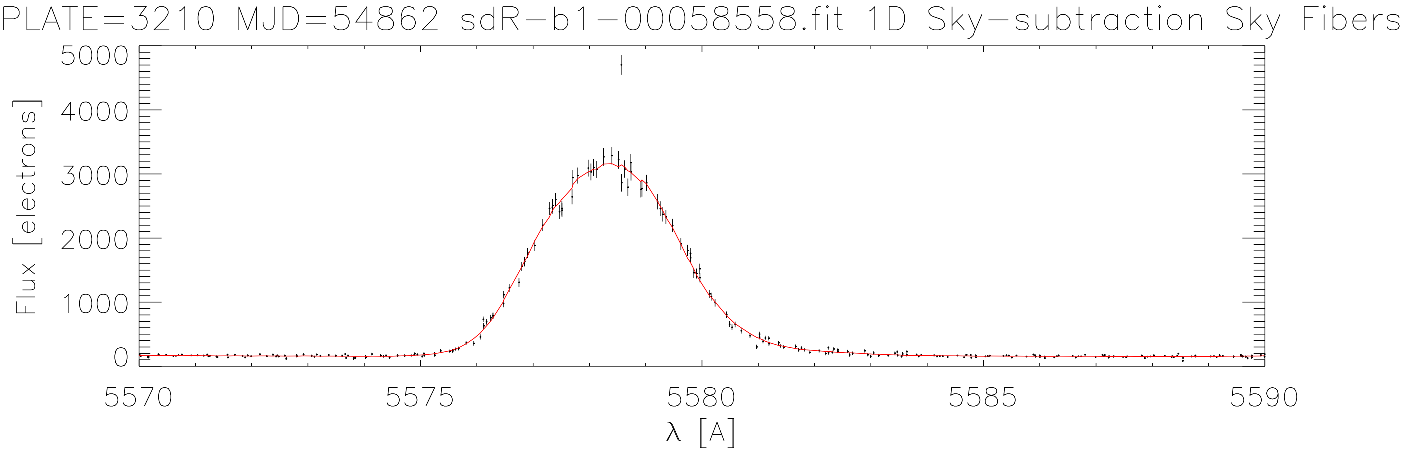

4046.5600
nfib1 15
nfib2 15
stdev 0.079
extra −0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.055
extra −0.10
5460.9400
nfib1 16
nfib2 16
stdev 0.052
extra −0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.026
extra −0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.045
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

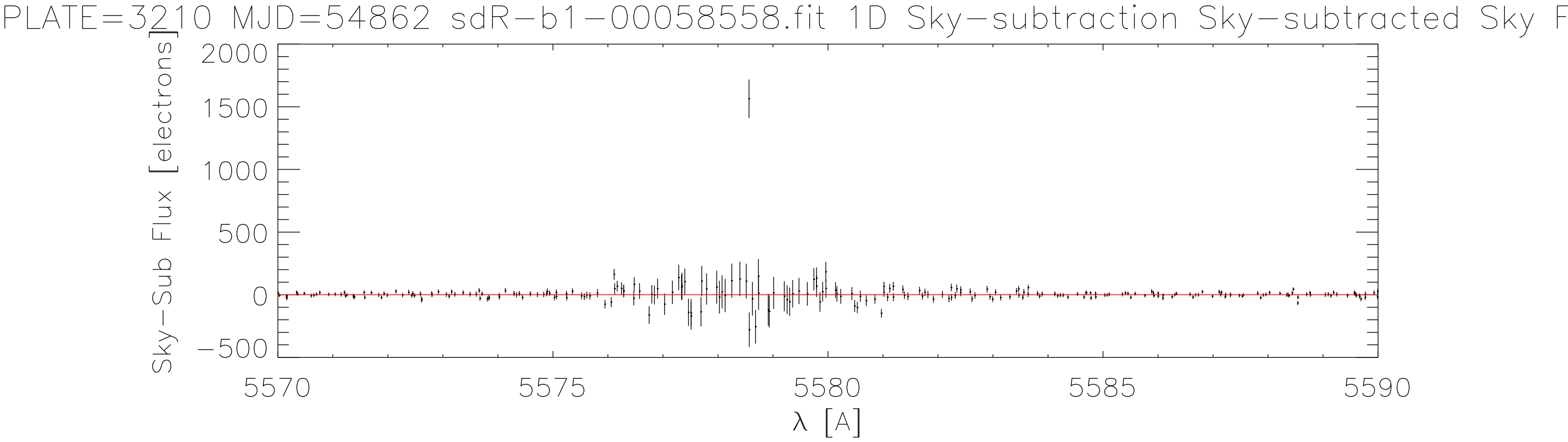

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
3500
4000
4500
5000
5500
6000
6500

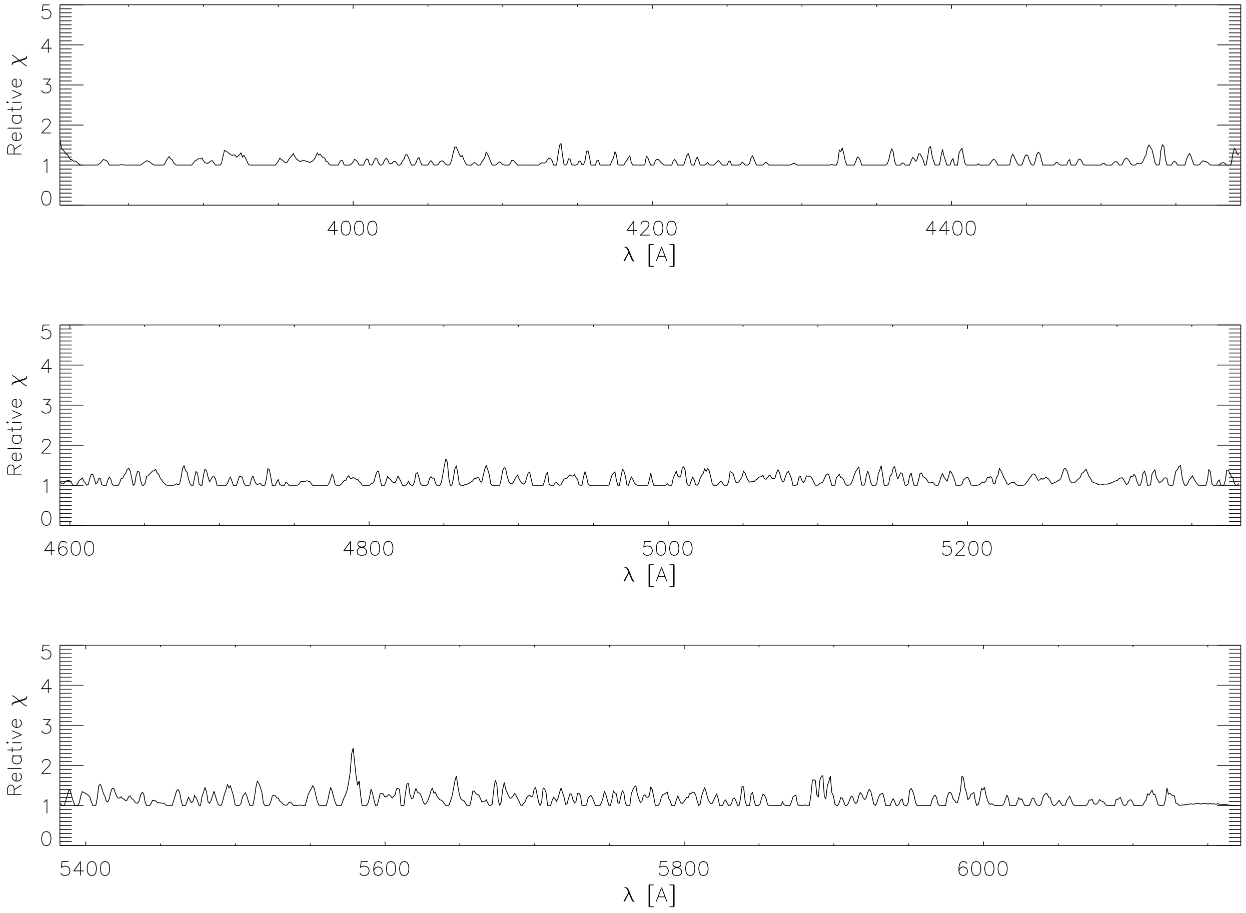


PLATE=3210 MJD=54862 Smooth superflat for sdR-b1-00058558.fit


PLATE=3210 MJD=54862 sdR-b1-00058558.fit 1D Sky-subtraction Sky Fiber
Median $\chi^2$
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

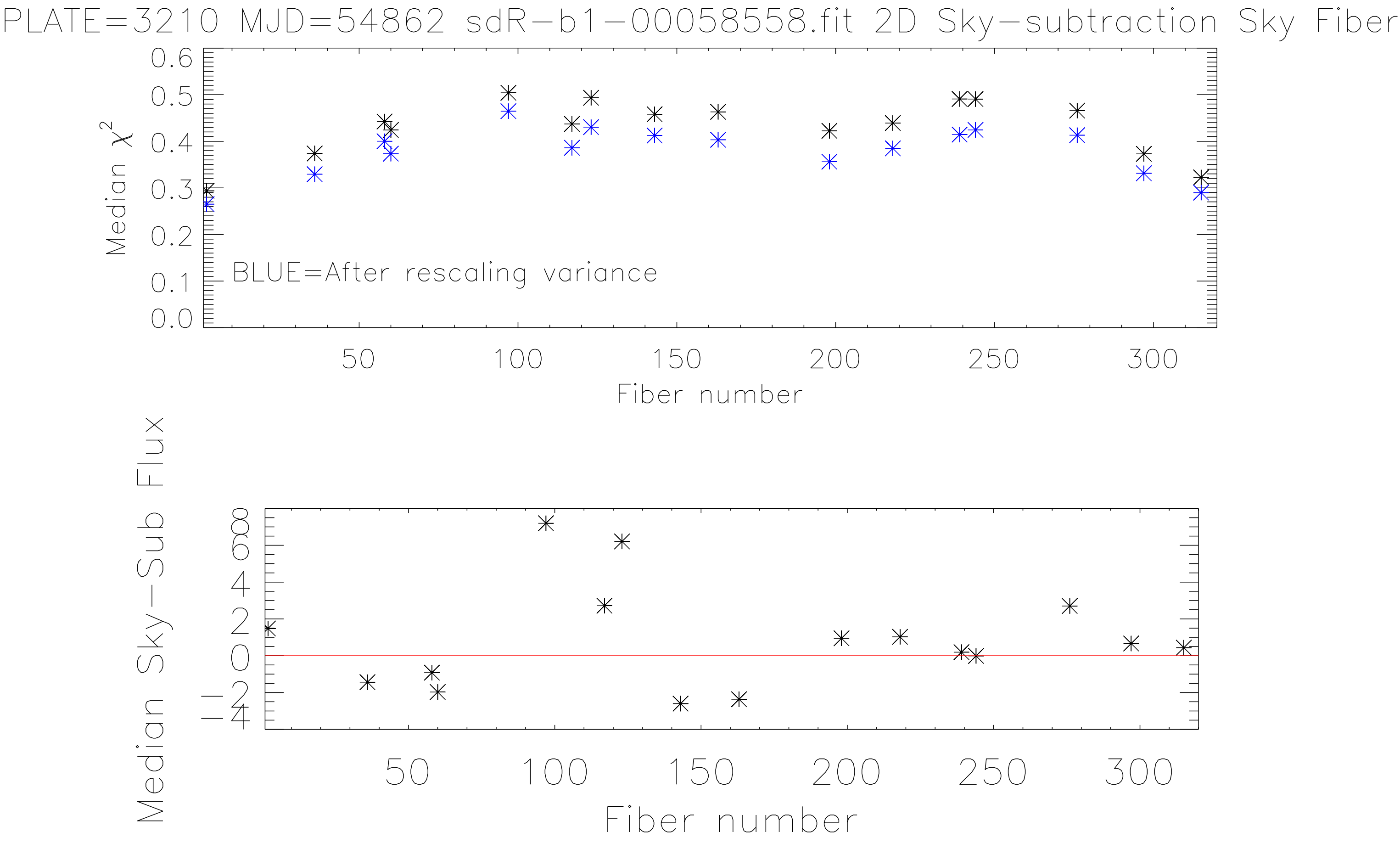

PLATE=3210 MJD=54862 sdR-b1-00058558.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=3210 MJD=54862 sdR-b1-00058558.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

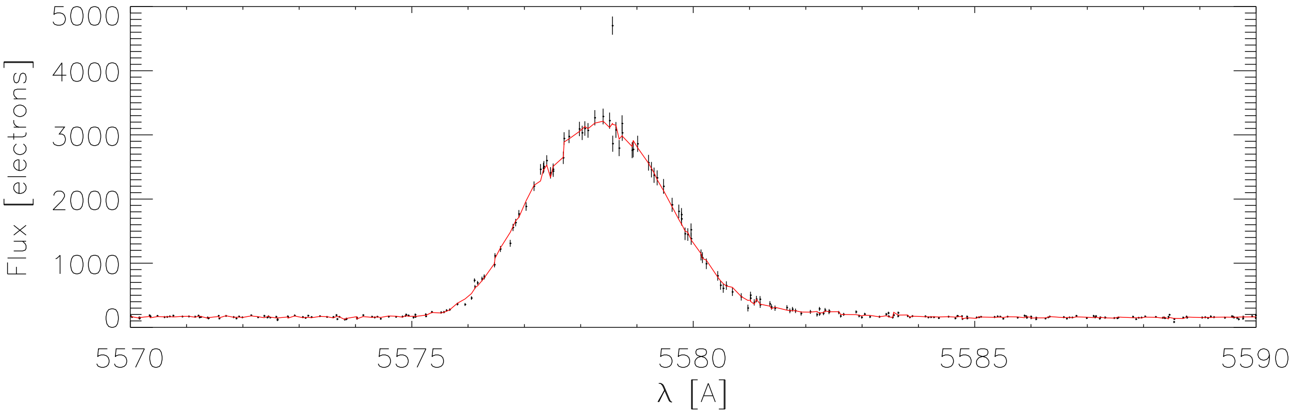


Number of sky fibers = 16

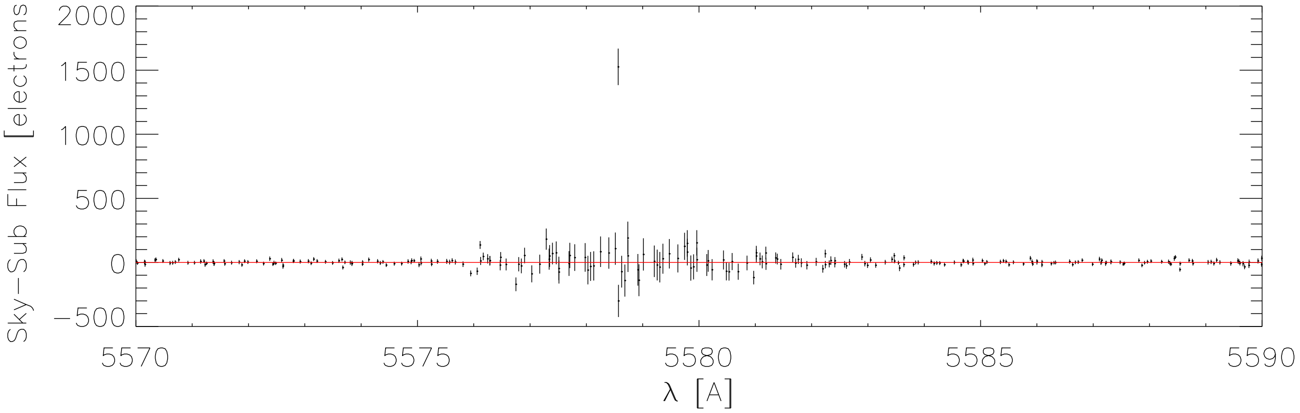
PLATE=3210 MJD=54862 sdR-b1-00058558.fit 1D Sky-subtraction Rescaled Errors

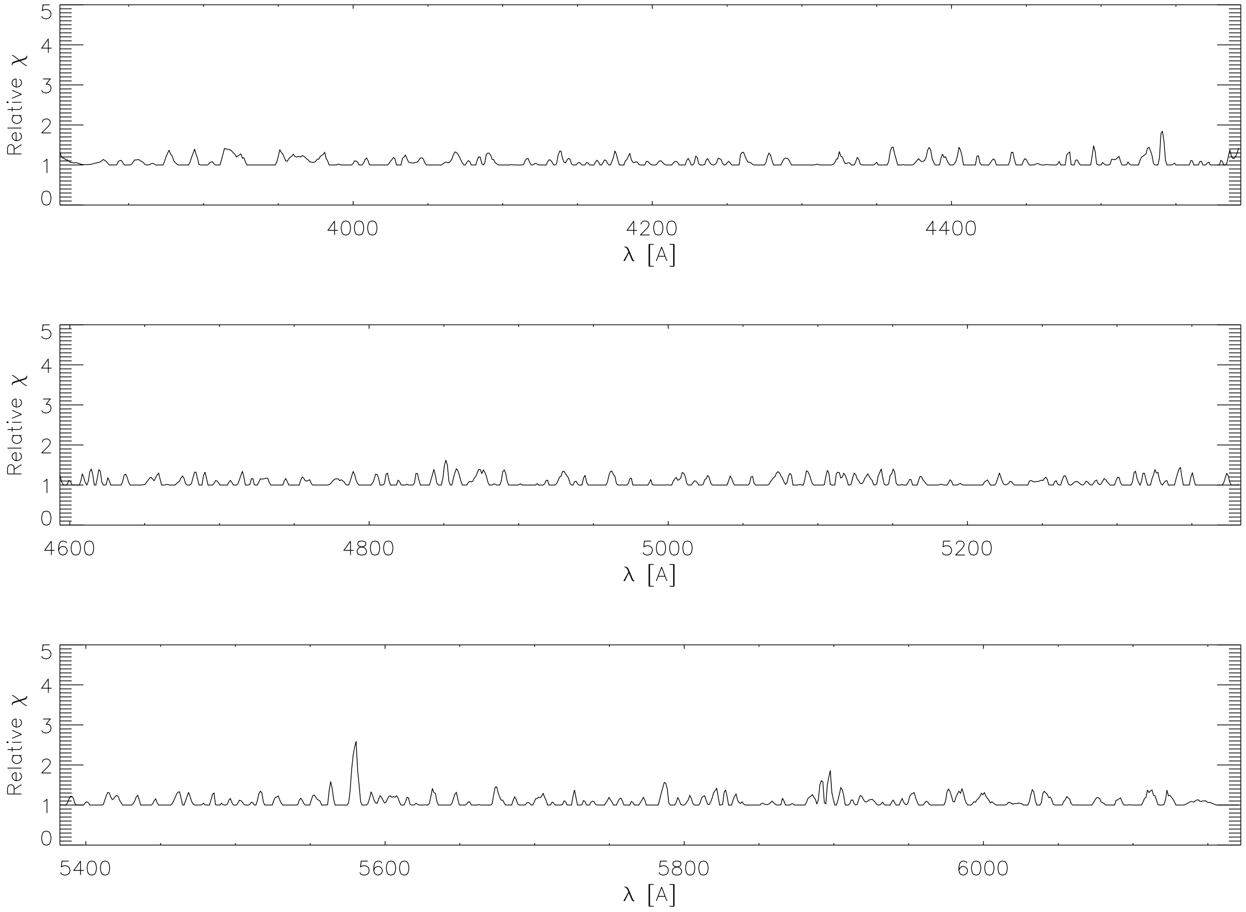

PLATE=3210 MJD=54862 sdR-b1-00058558.fit 2D Sky-subtraction Sky Fiber
Median $\chi^2$
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

PLATE=3210 MJD=54862 sdR-b1-00058558.fit 2D Sky-subtraction Sky Fibers



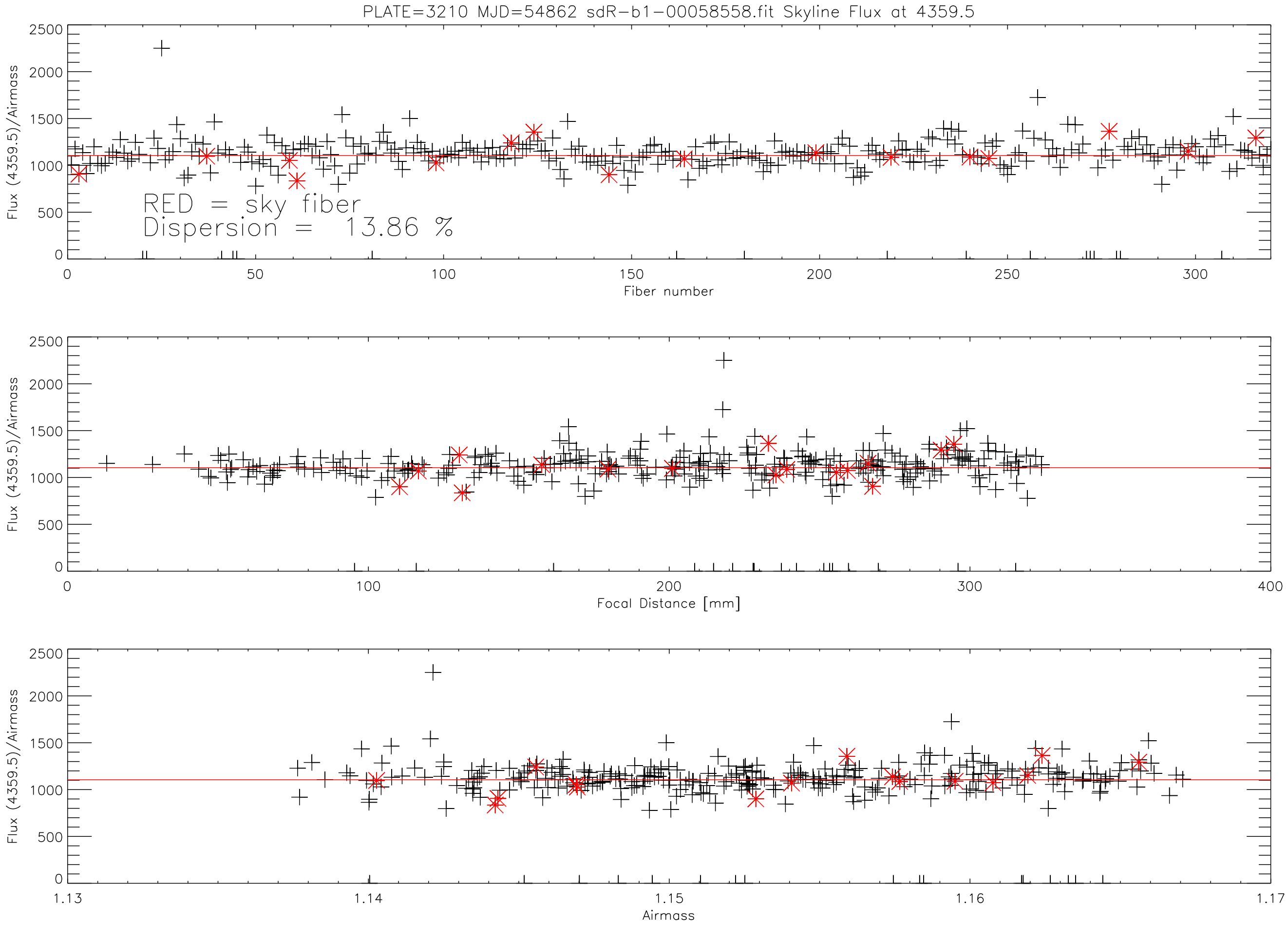
PLATE=3210 MJD=54862 sdR-b1-00058558.fit 2D Sky-subtraction Sky-subtracted Sky F

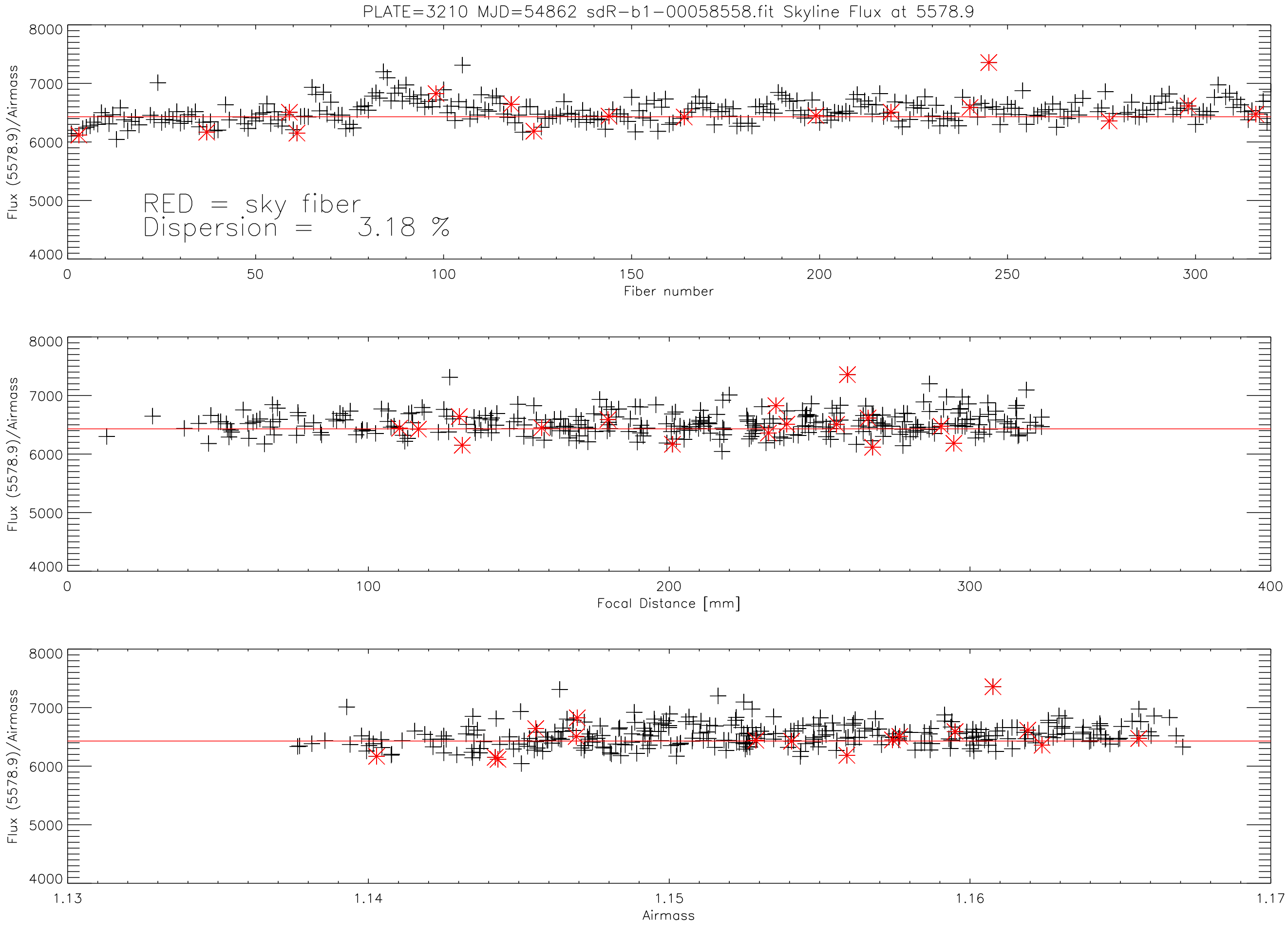


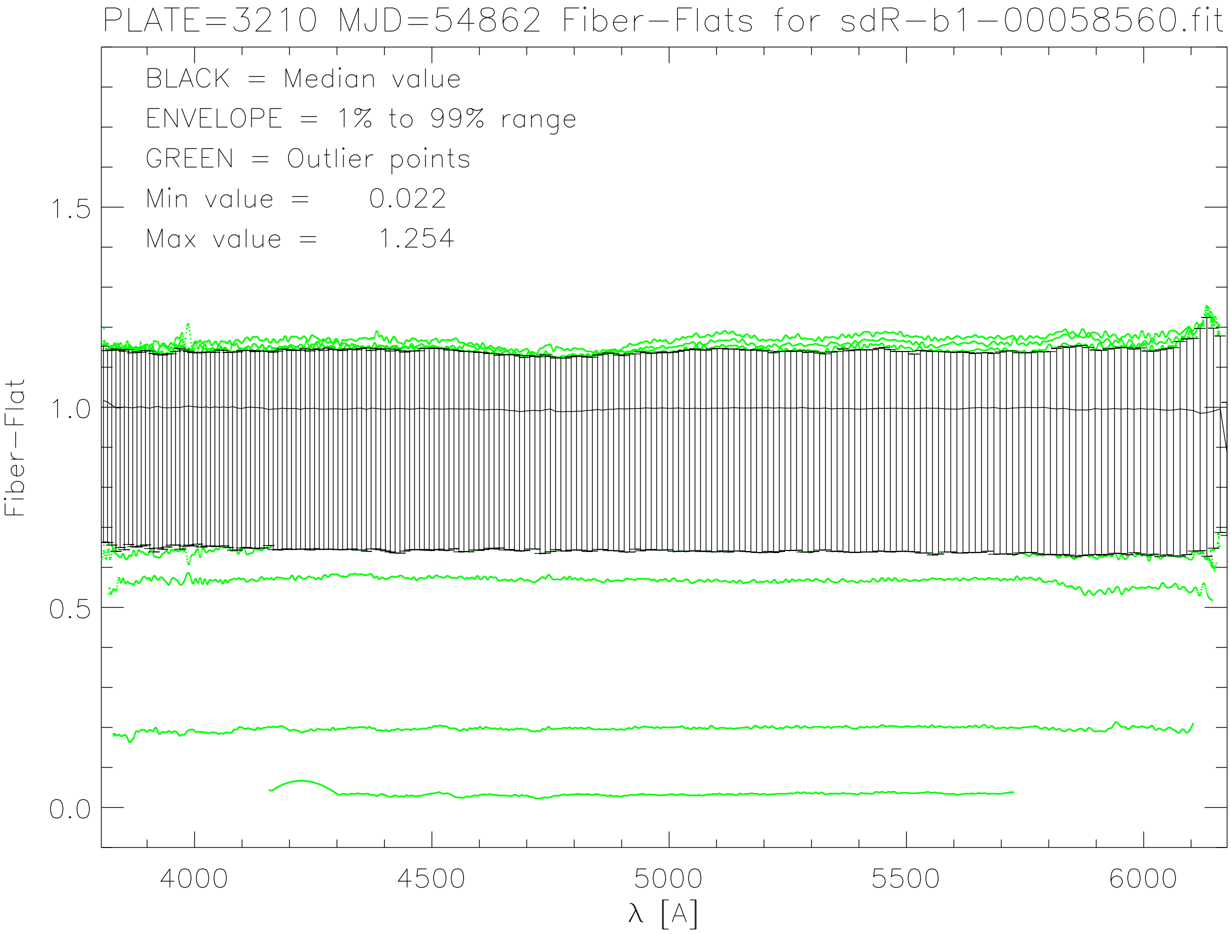


Number of sky fibers = 16

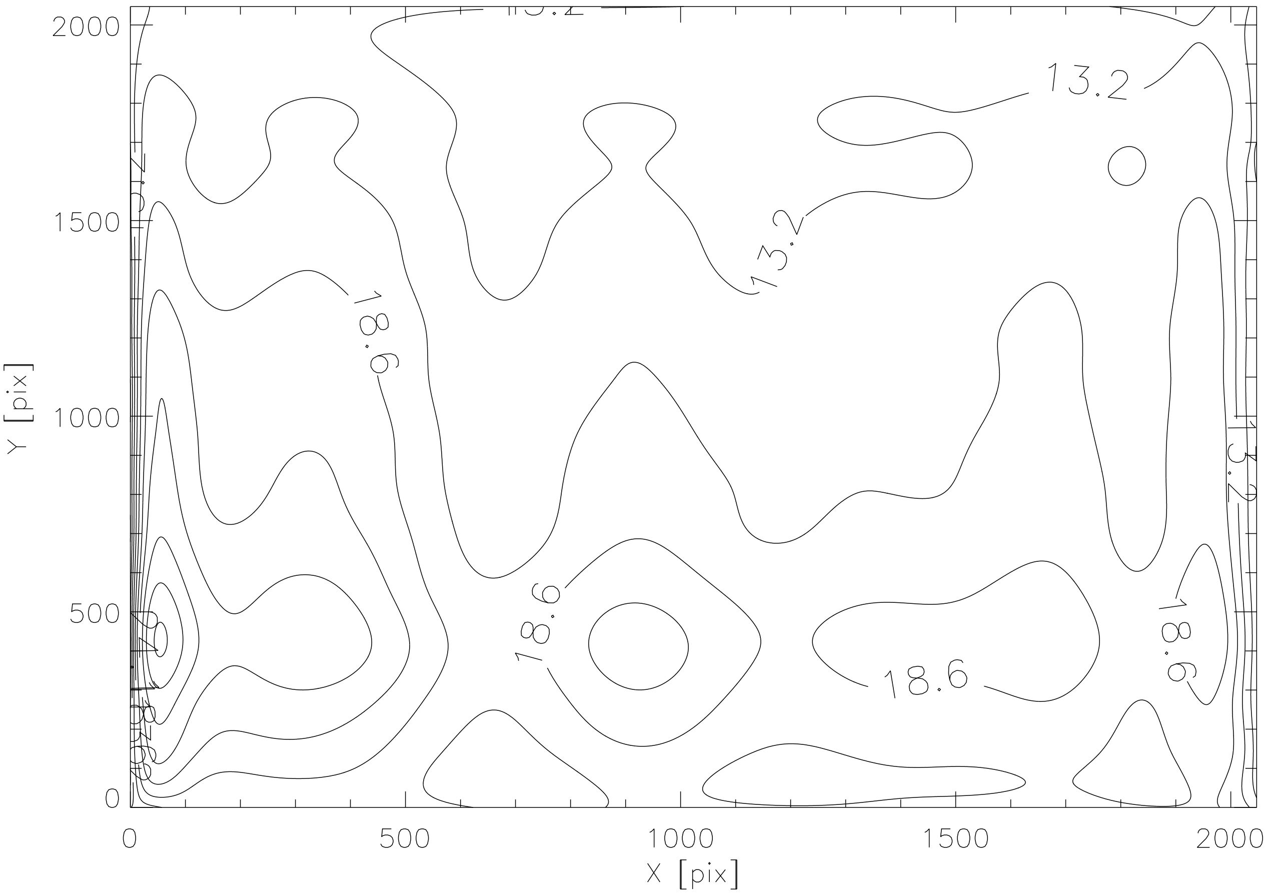
PLATE=3210 MJD=54862 sdR-b1-00058558.fit 2D Sky-subtraction Rescaled Errors


PLATE=3210 MJD=54862 sdR-b1-00058558.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
0
RED = sky fiber
Dispersion = 13.86 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
0
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
0
1.13
1.14
1.15
1.16
1.17
Airmass


PLATE=3210 MJD=54862 sdR-b1-00058558.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
8000
7000
6000
5000
4000
RED = sky fiber
Dispersion = 3.18 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
8000
7000
6000
5000
4000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
8000
7000
6000
5000
4000
1.13
1.14
1.15
1.16
1.17
Airmass

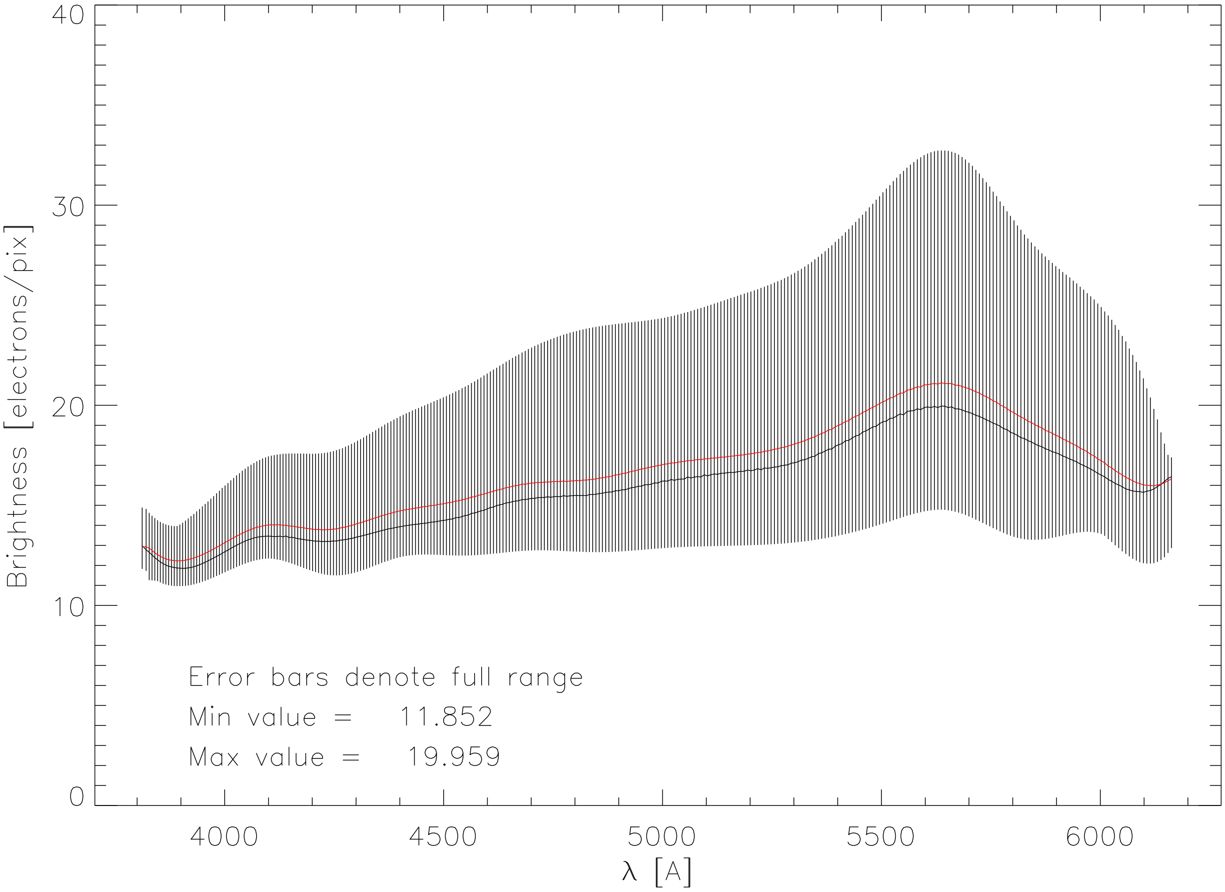


Fri Mar 12 19:12:44 2010

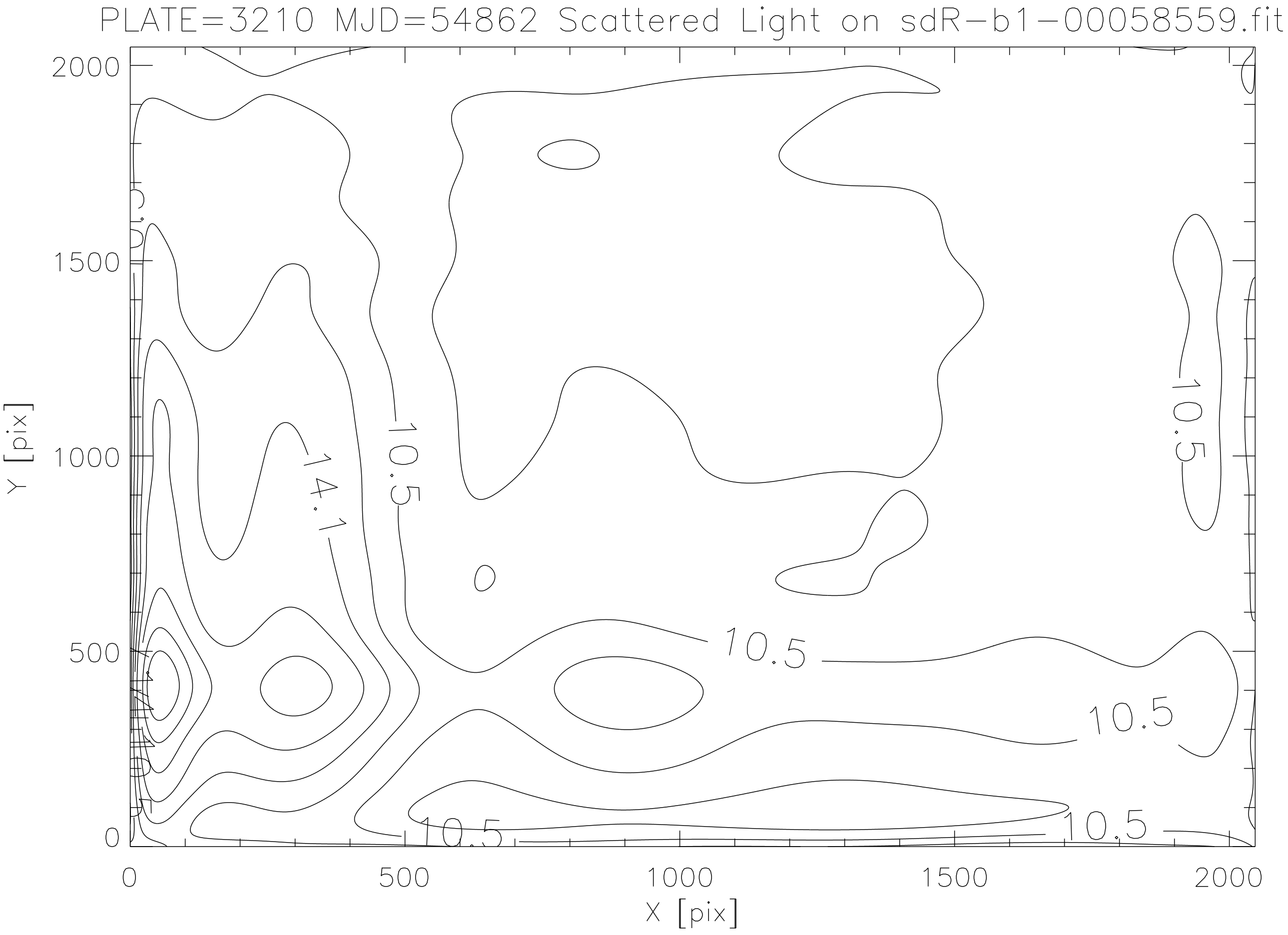


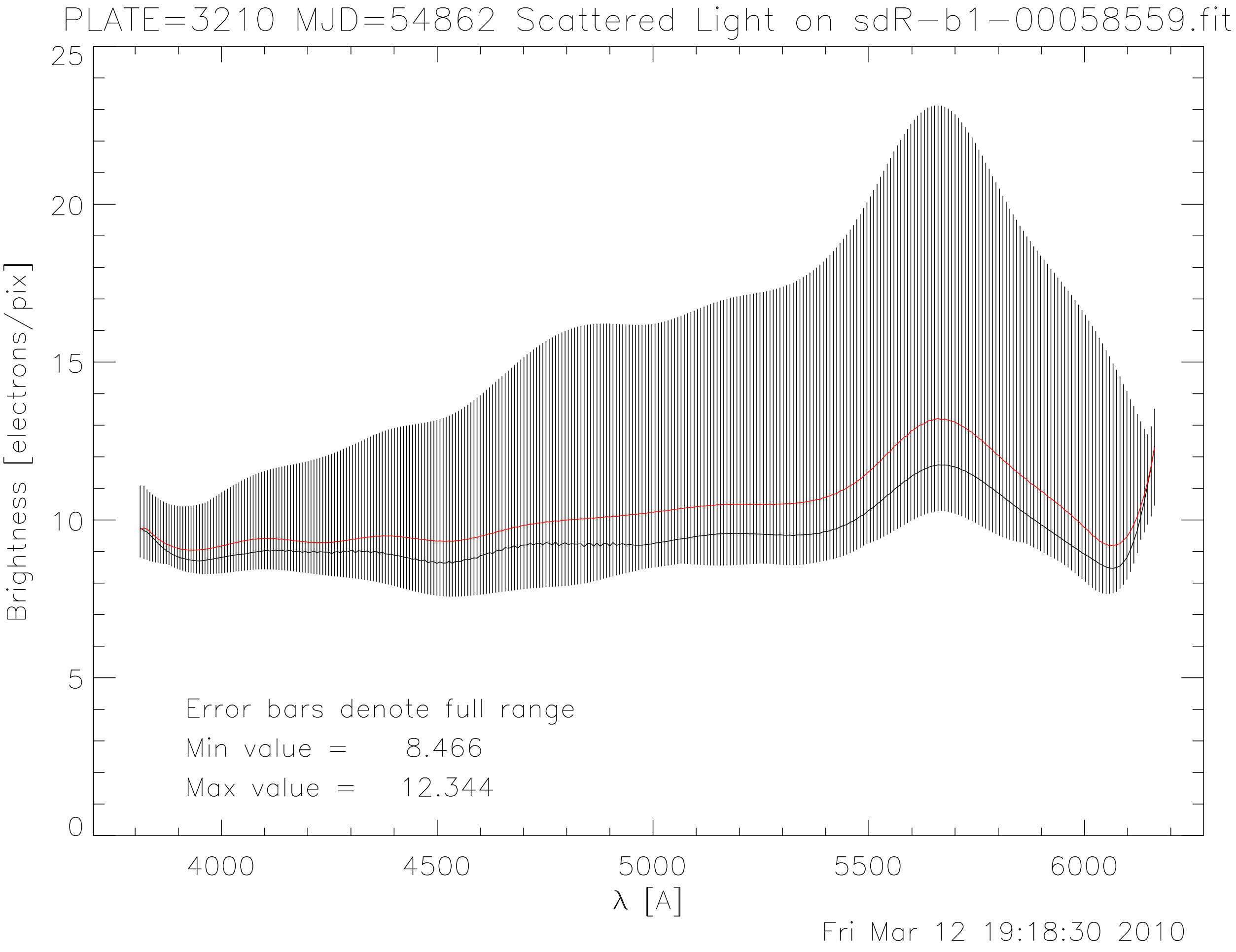
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b1-00058559.f

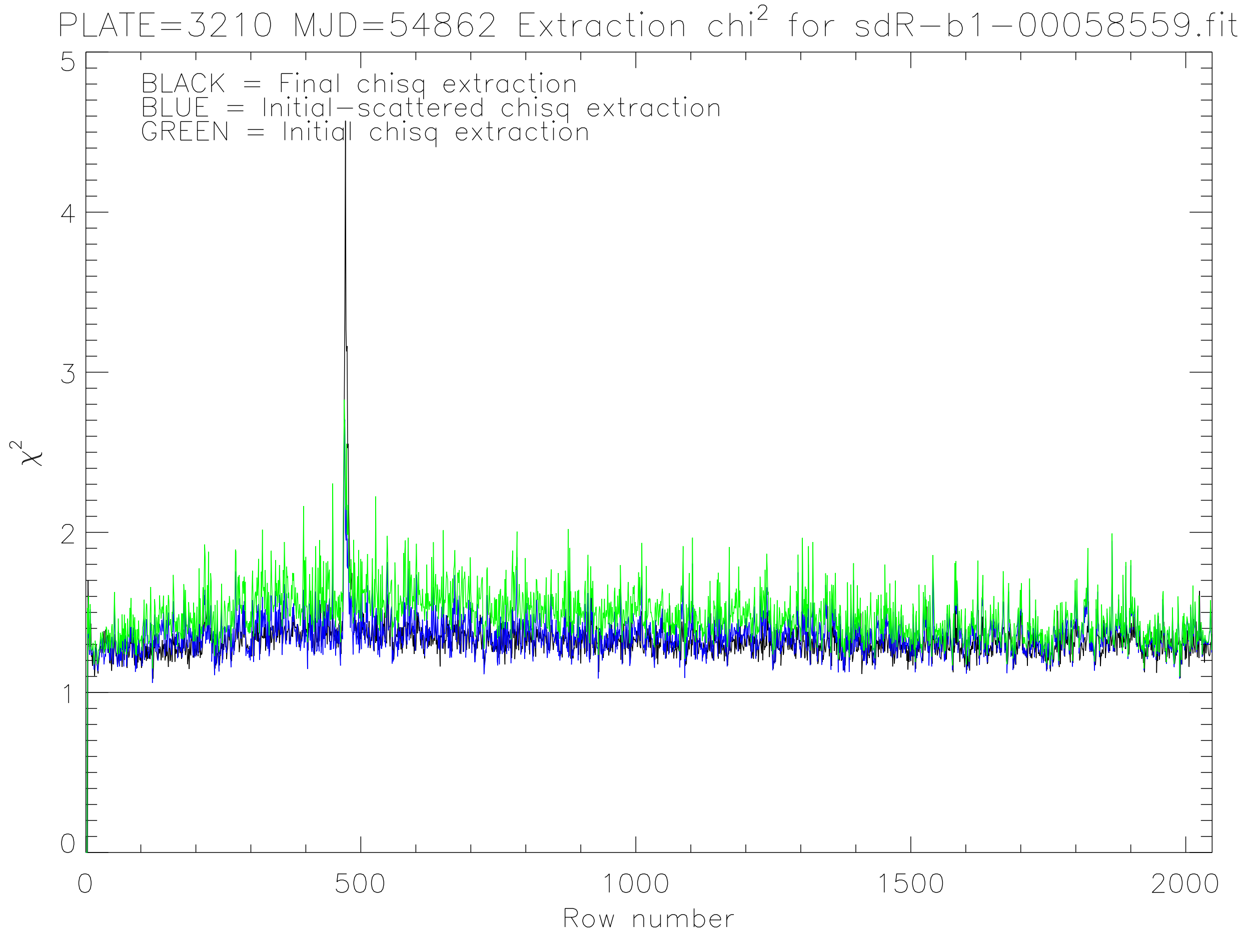
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b1-00058559.f

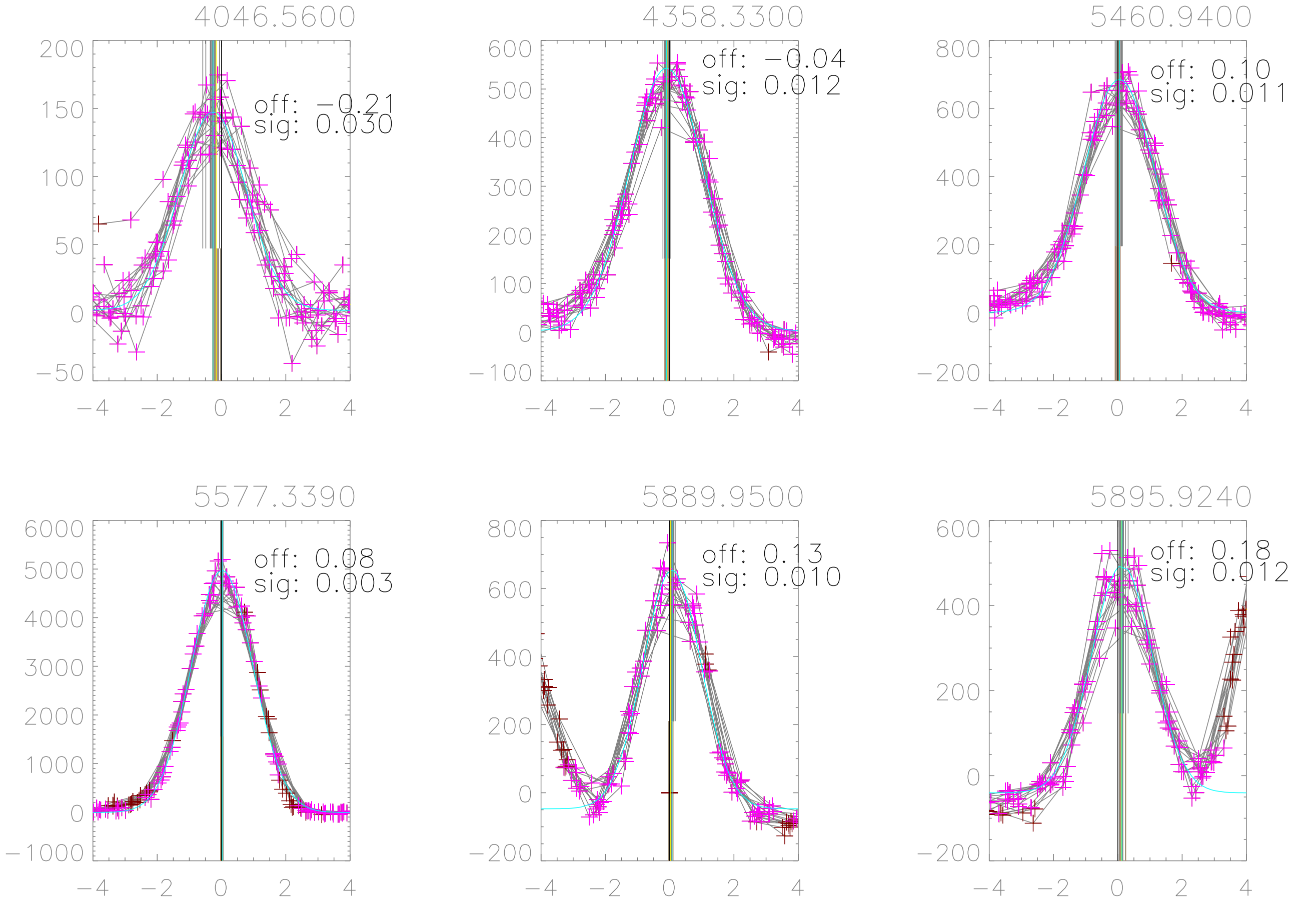


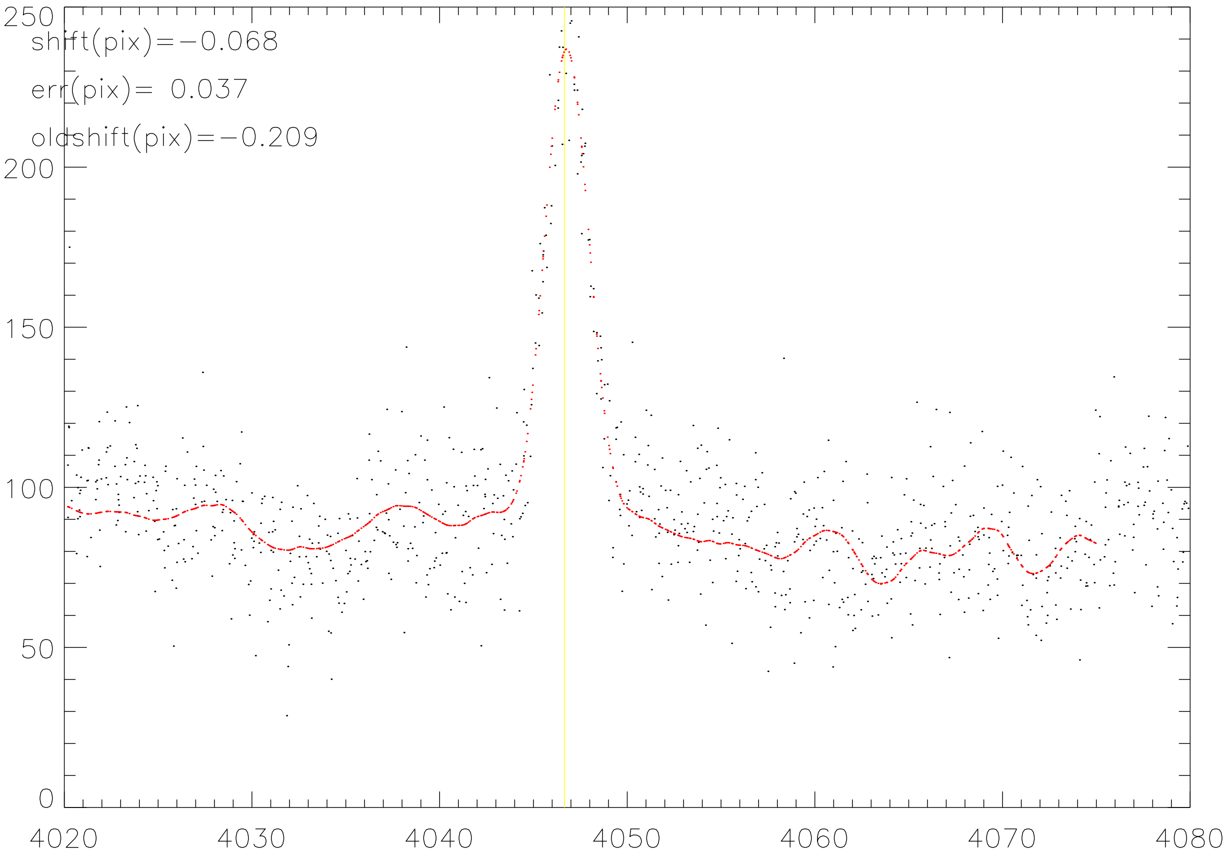
Fri Mar 12 19:14:08 2010

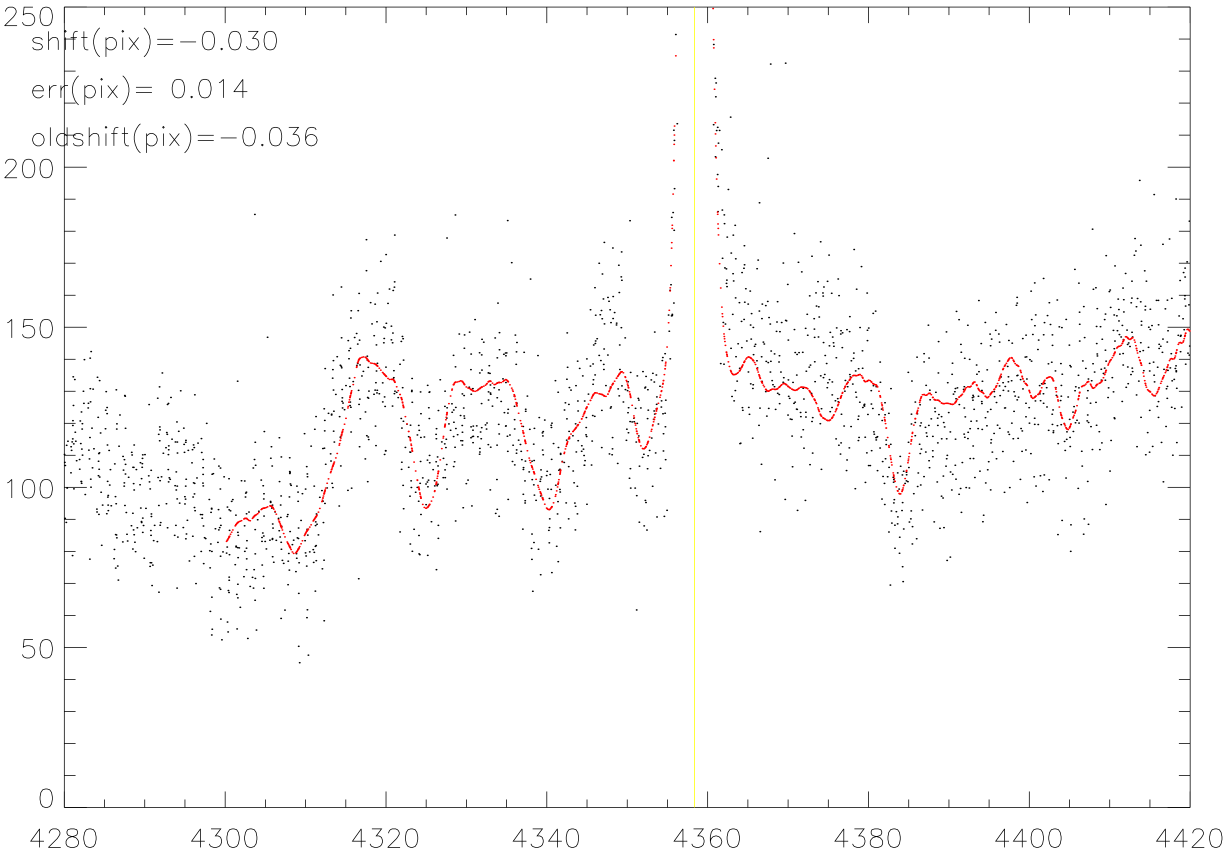

PLATE=3210 MJD=54862 Scattered Light on sdR-b1-00058559.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
10.5
14.1
0
10.5
10.5
10.5
10.5
10.5

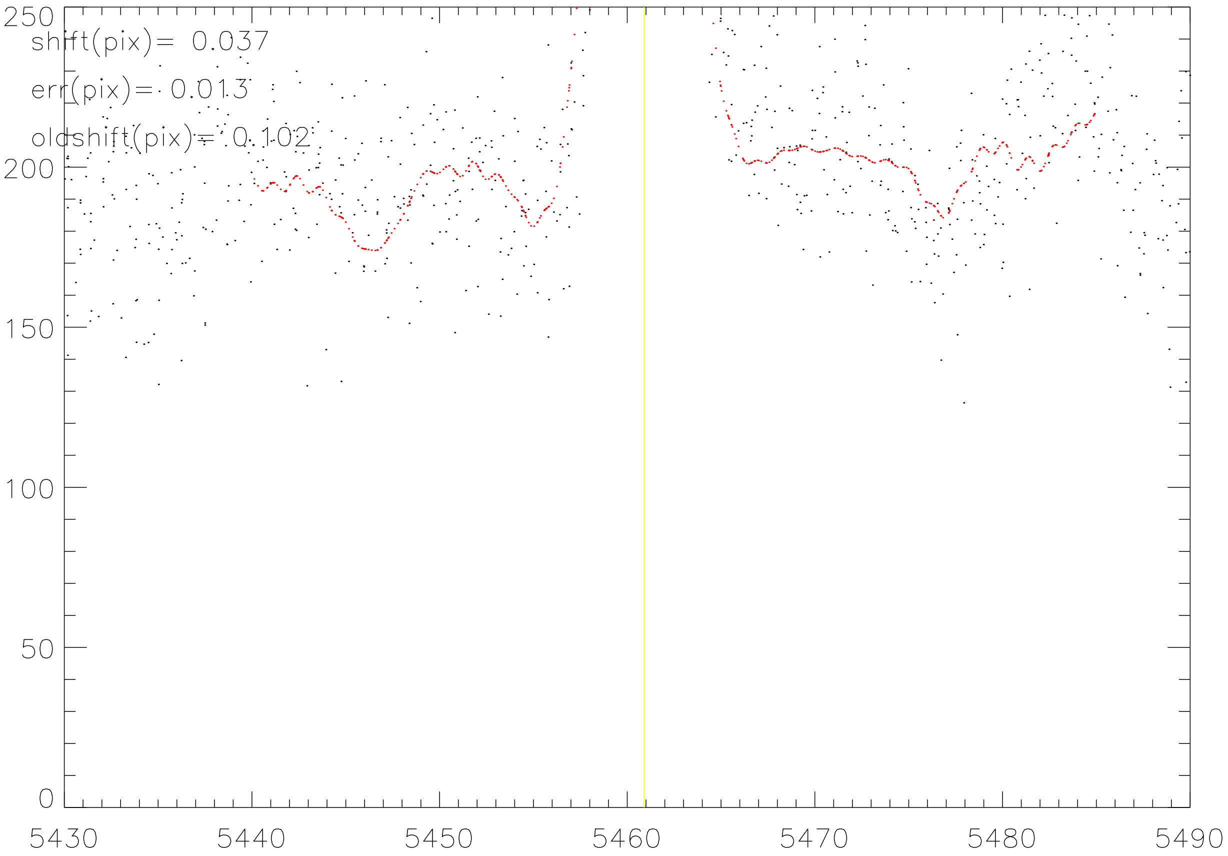

PLATE=3210 MJD=54862 Scattered Light on sdR-b1-00058559.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.466
Max value = 12.344
Fri Mar 12 19:18:30 2010

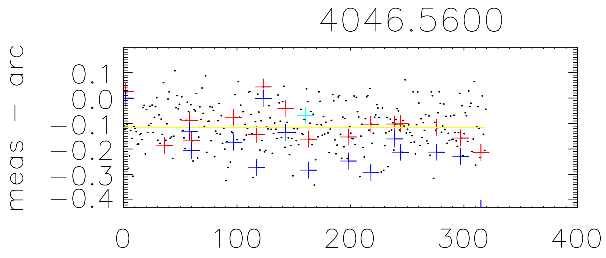

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-b1-00058559.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

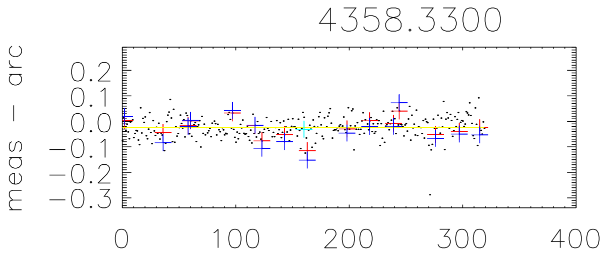

4046.5600
off: −0.21
sig: 0.030
200
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.04
sig: 0.012
600
500
400
300
200
100
0
−100
5460.9400
off: 0.10
sig: 0.011
800
600
400
200
0
−200
5577.3390
off: 0.08
sig: 0.003
6000
5000
4000
3000
2000
1000
0
−1000
5889.9500
off: 0.13
sig: 0.010
800
600
400
200
0
−200
5895.9240
off: 0.18
sig: 0.012
600
400
200
0
−200

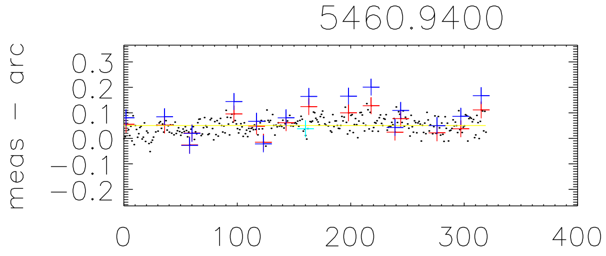

shift(pix)=−0.068
err(pix)= 0.037
oldshift(pix)=−0.209
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

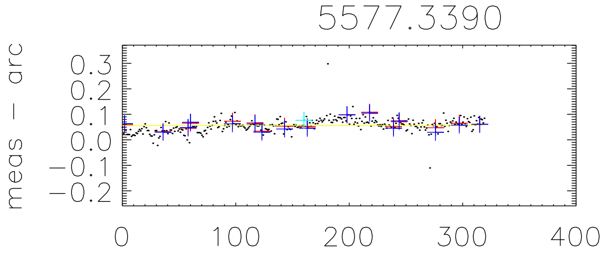

shift(pix)=−0.030
err(pix)= 0.014
oldshift(pix)=−0.036
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

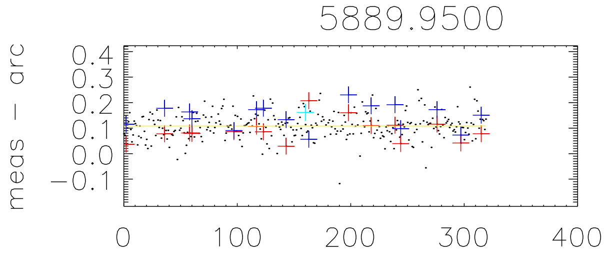

shift(pix)= 0.037
err(pix)= 0.013
oldshift(pix)= 0.102
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

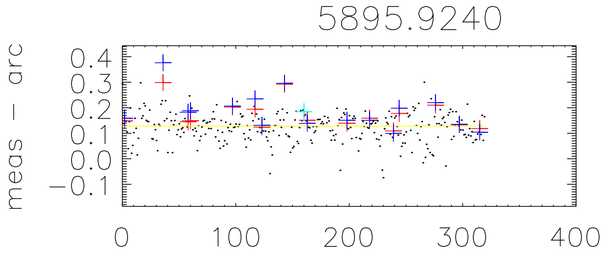

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

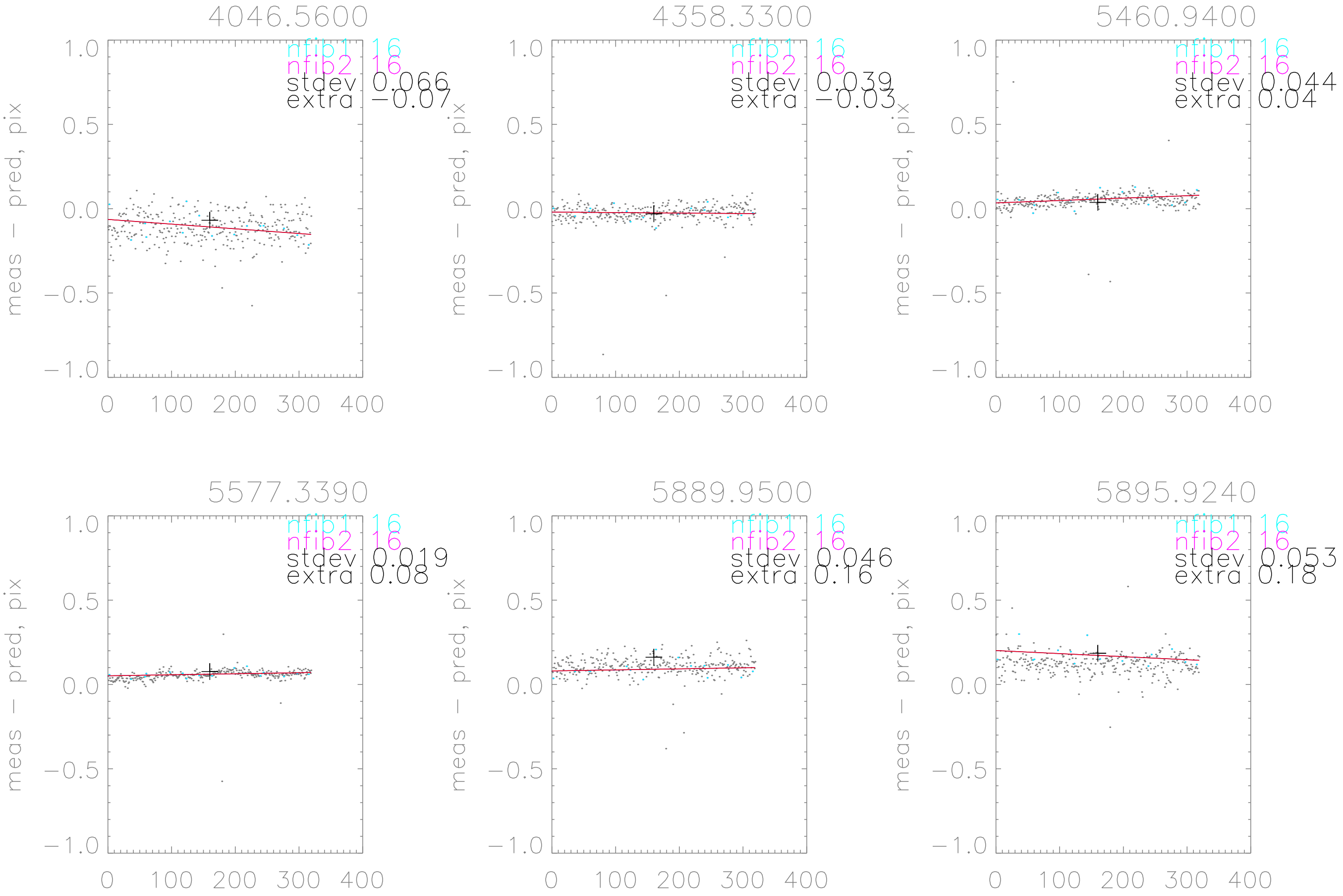

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

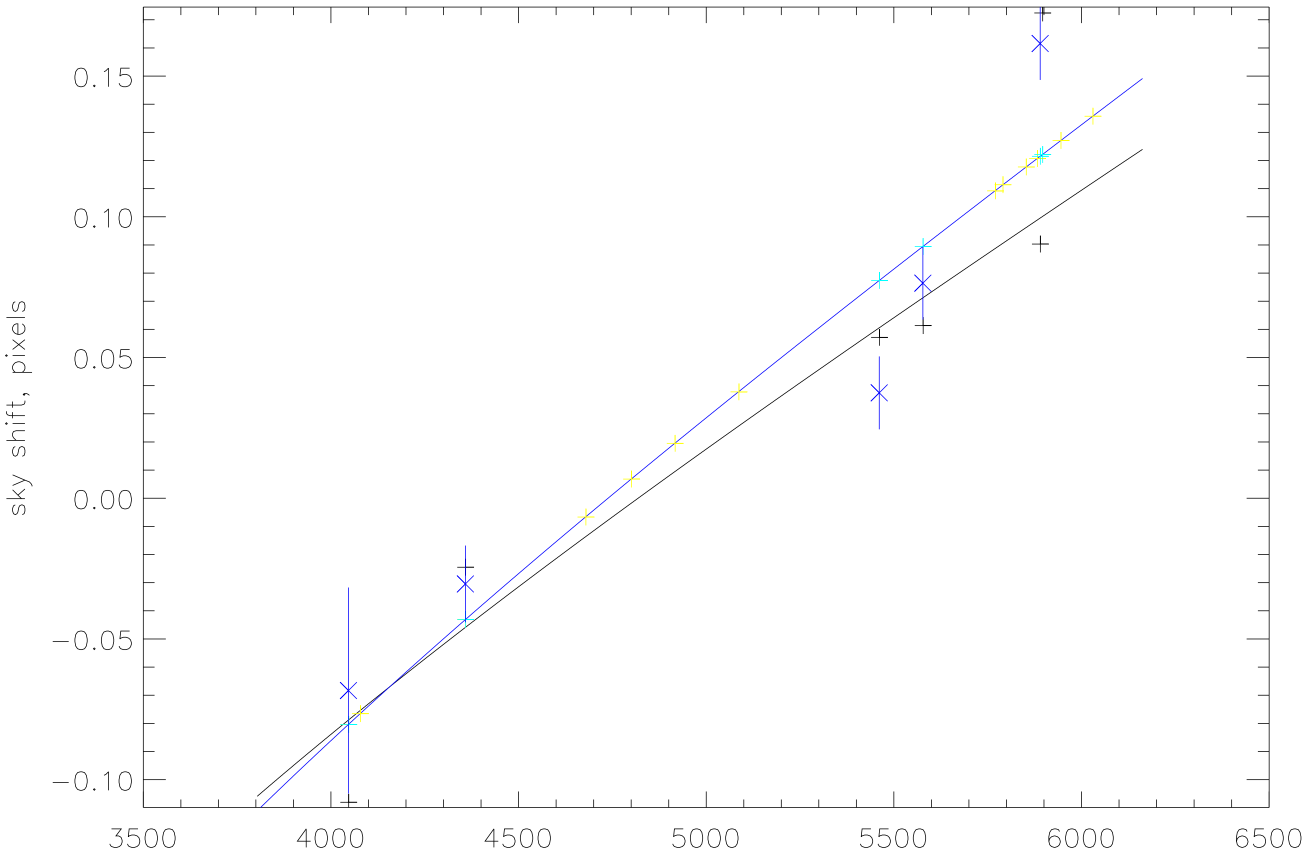

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

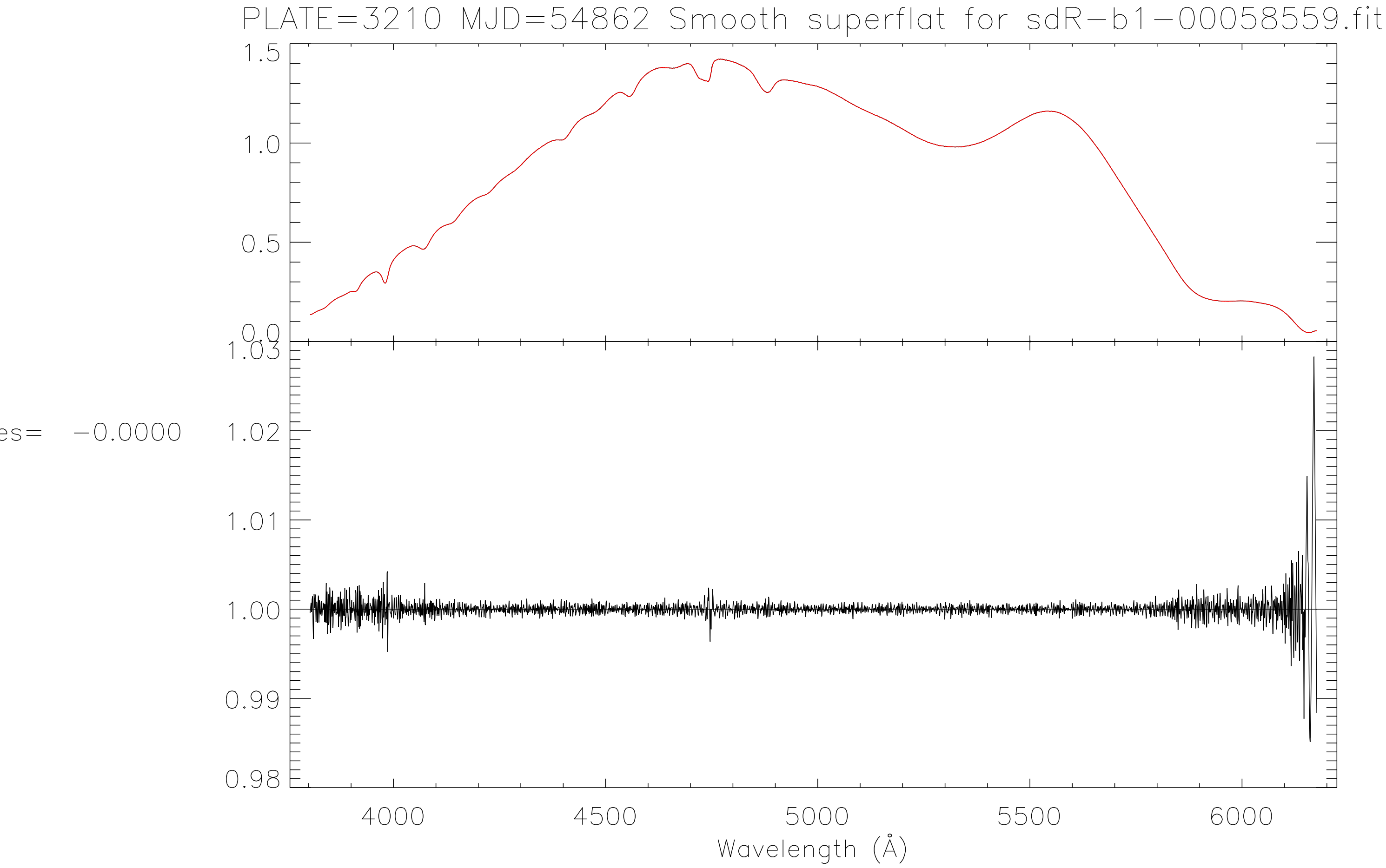

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

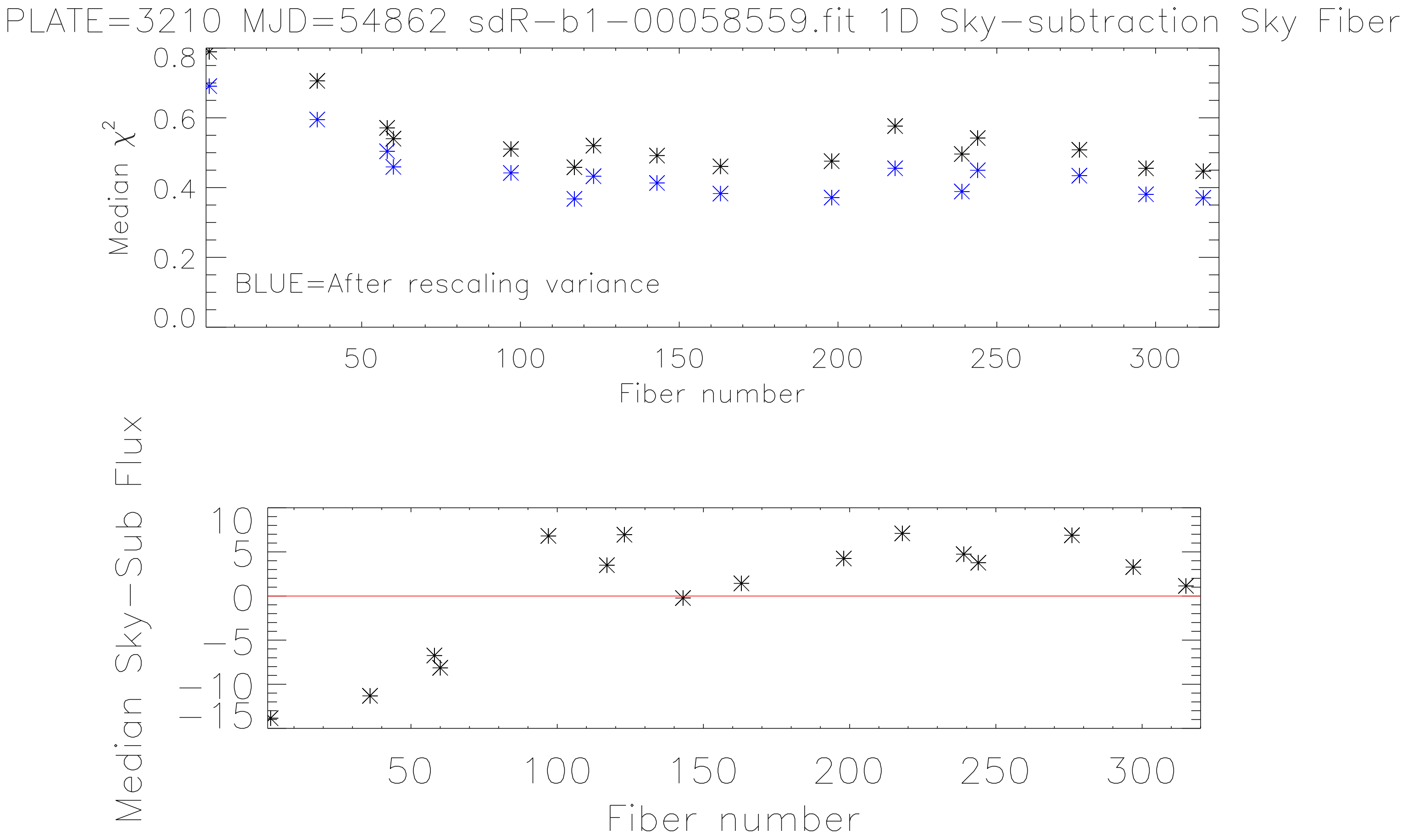

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

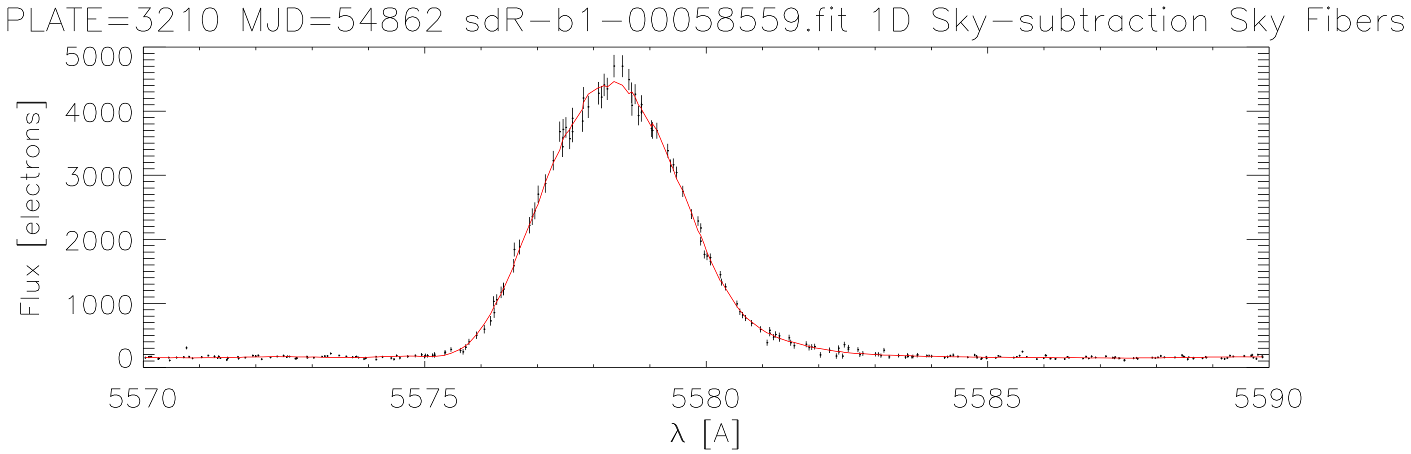

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.066
extra −0.07
4358.3300
nfib1 16
nfib2 16
stdev 0.039
extra −0.03
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.019
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.046
extra 0.16
5895.9240
nfib1 16
nfib2 16
stdev 0.053
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

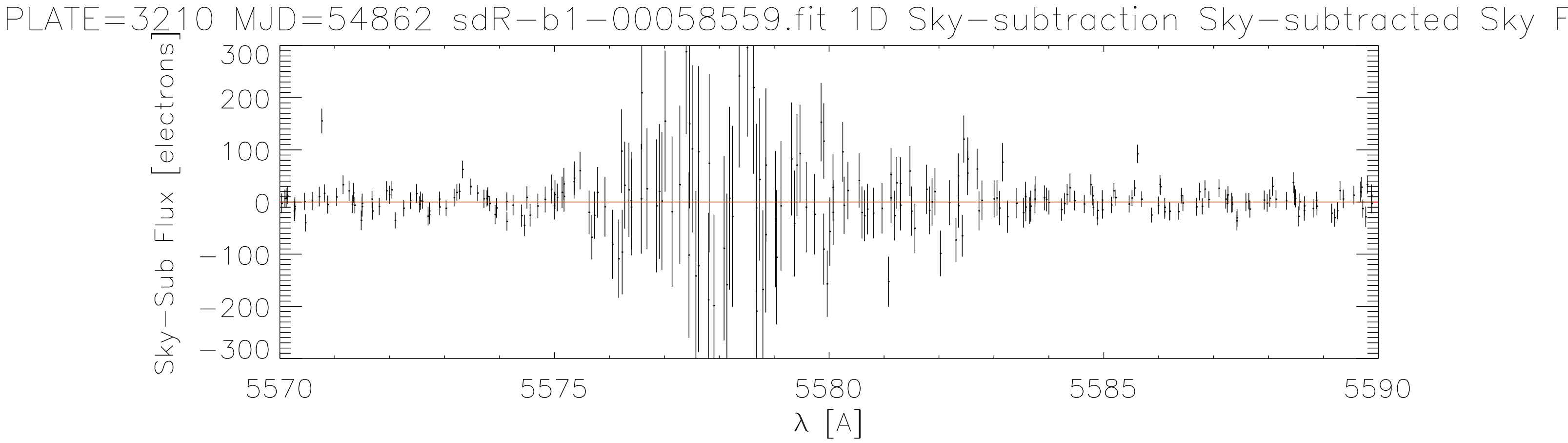

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500


PLATE=3210 MJD=54862 Smooth superflat for sdR-b1-00058559.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

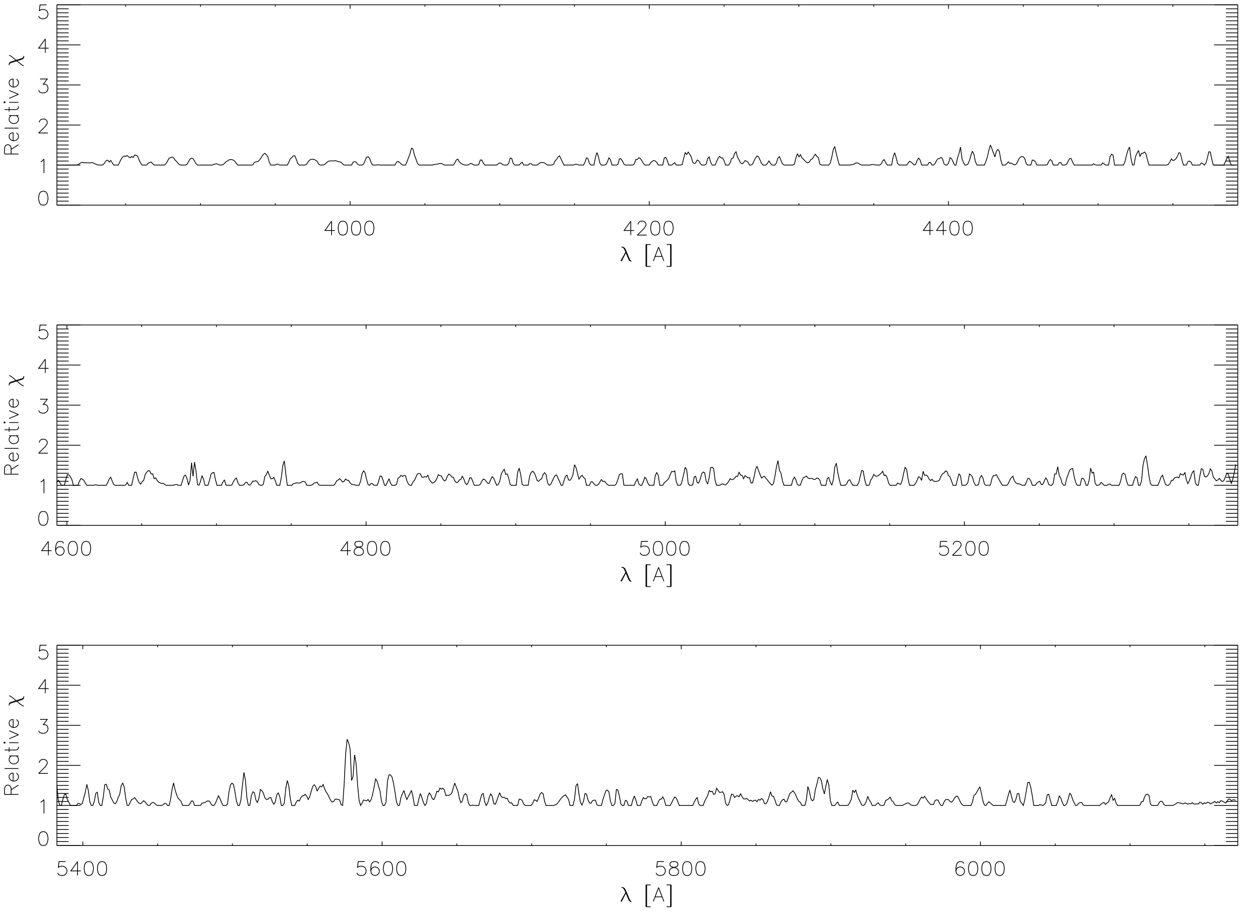

PLATE=3210 MJD=54862 sdR-b1-00058559.fit 1D Sky-subtraction Sky Fiber
Median $\chi^2$
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
50
100
150
200
250
300
Fiber number



PLATE=3210 MJD=54862 sdR-b1-00058559.fit 1D Sky-subtraction Sky Fibers

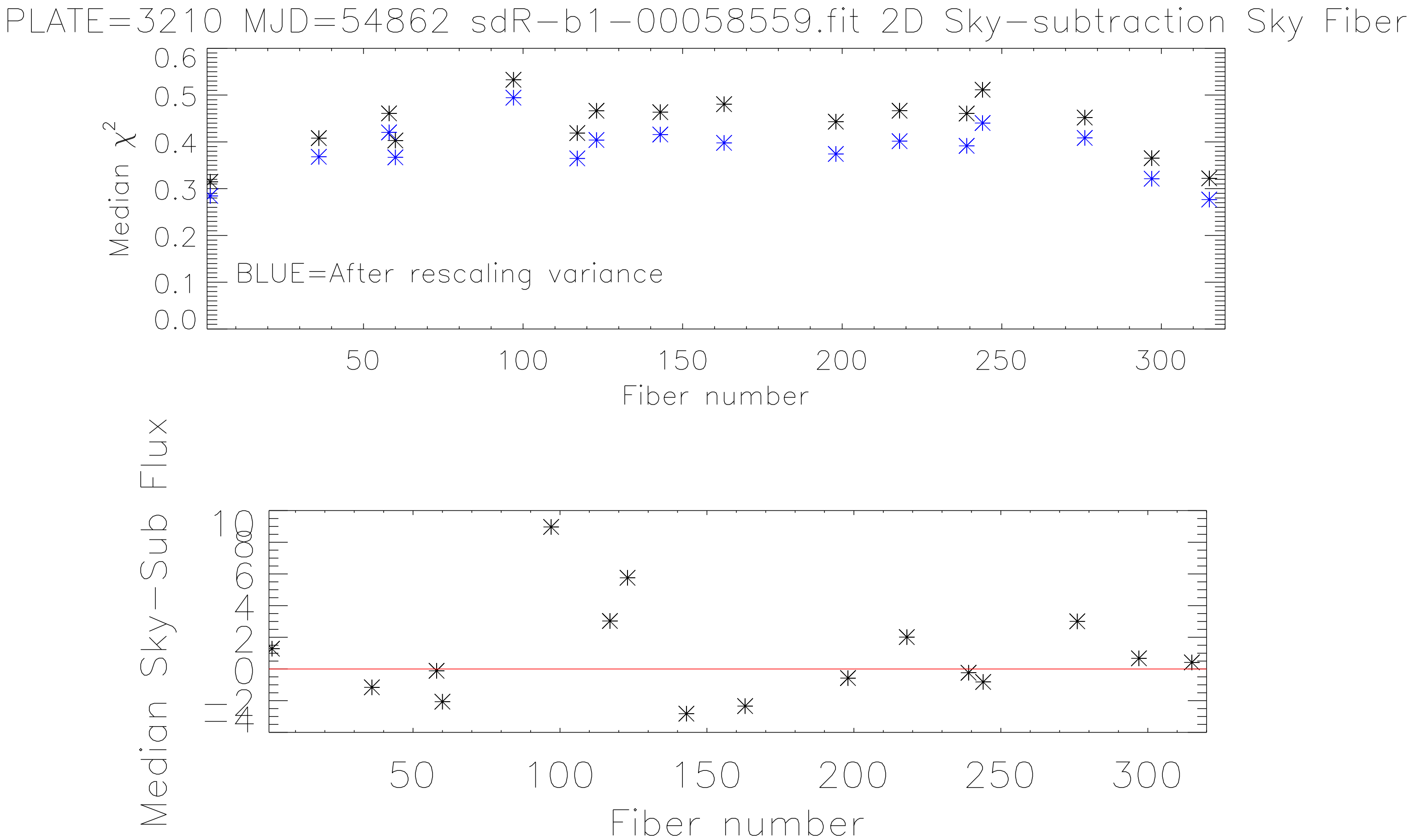


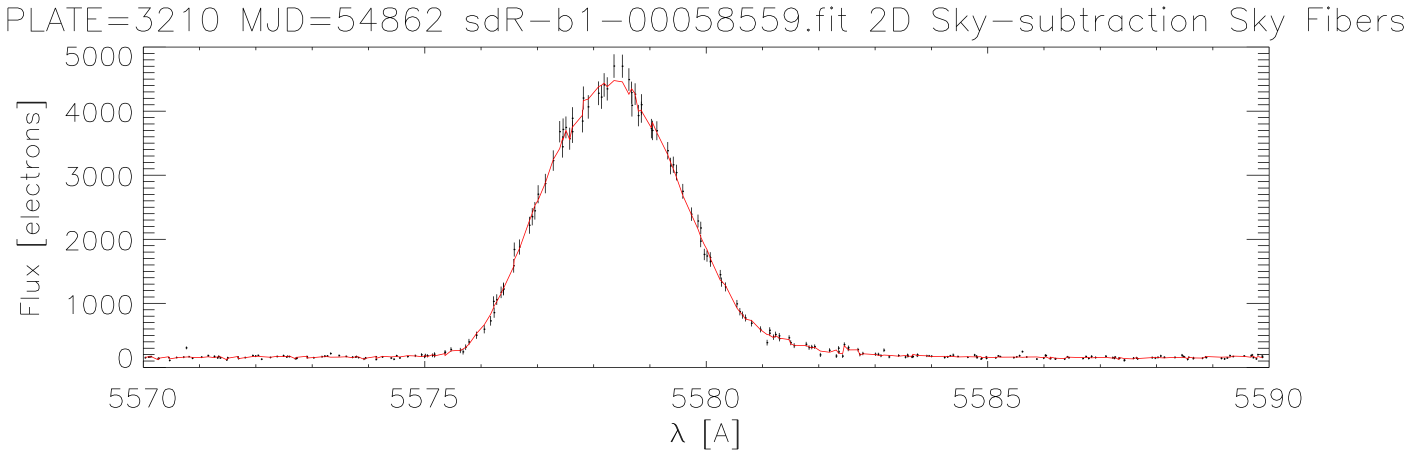
PLATE=3210 MJD=54862 sdR-b1-00058559.fit 1D Sky-subtraction Sky-subtracted Sky F

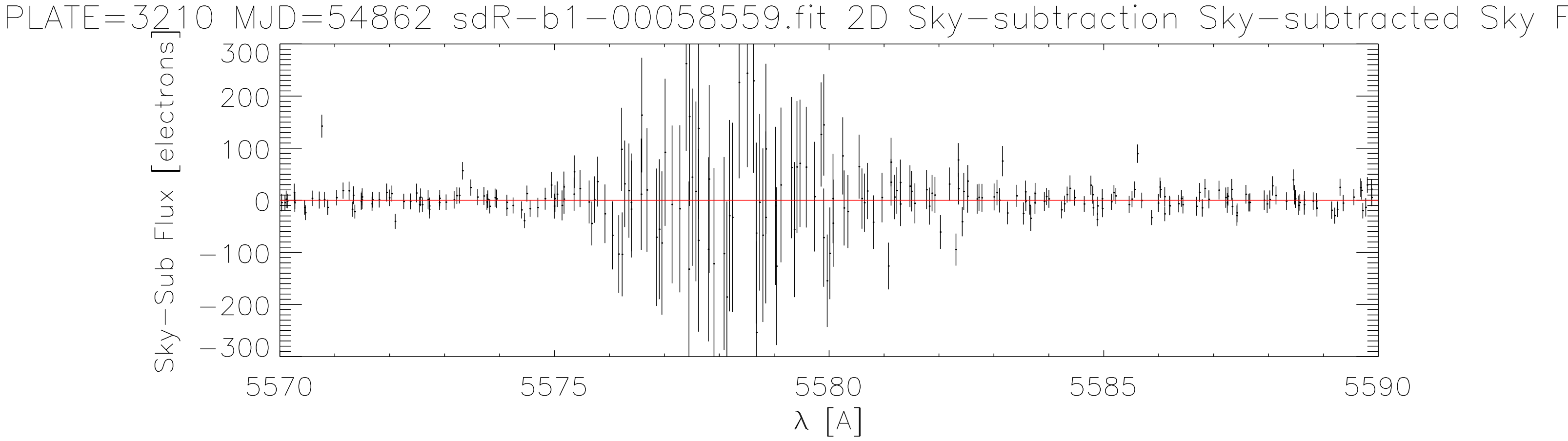


Number of sky fibers = 16

PLATE=3210 MJD=54862 sdR-b1-00058559.fit 1D Sky-subtraction Rescaled Errors

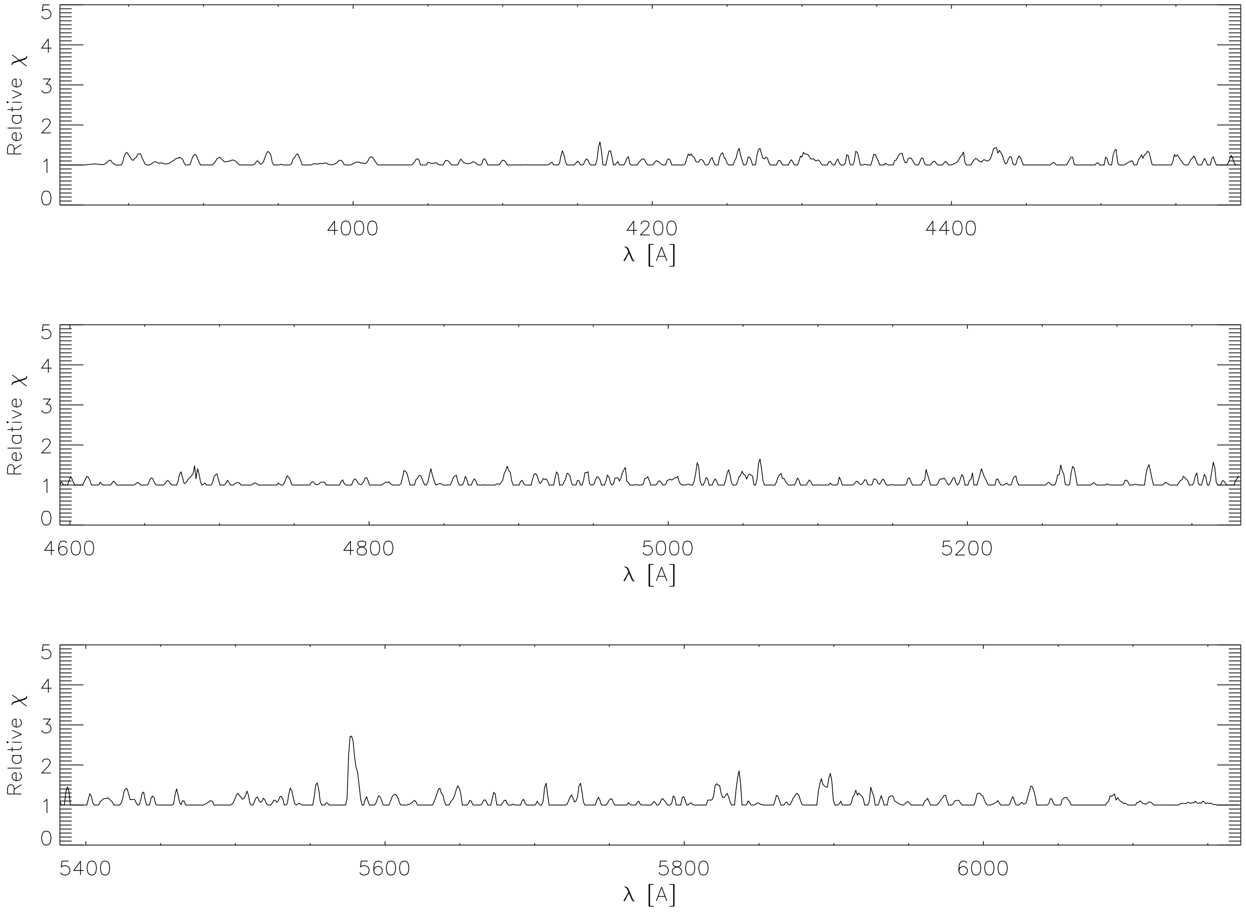

PLATE=3210 MJD=54862 sdR-b1-00058559.fit 2D Sky-subtraction Sky Fiber
Median $\chi^2$
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
10
50
100
150
200
250
300
Fiber number

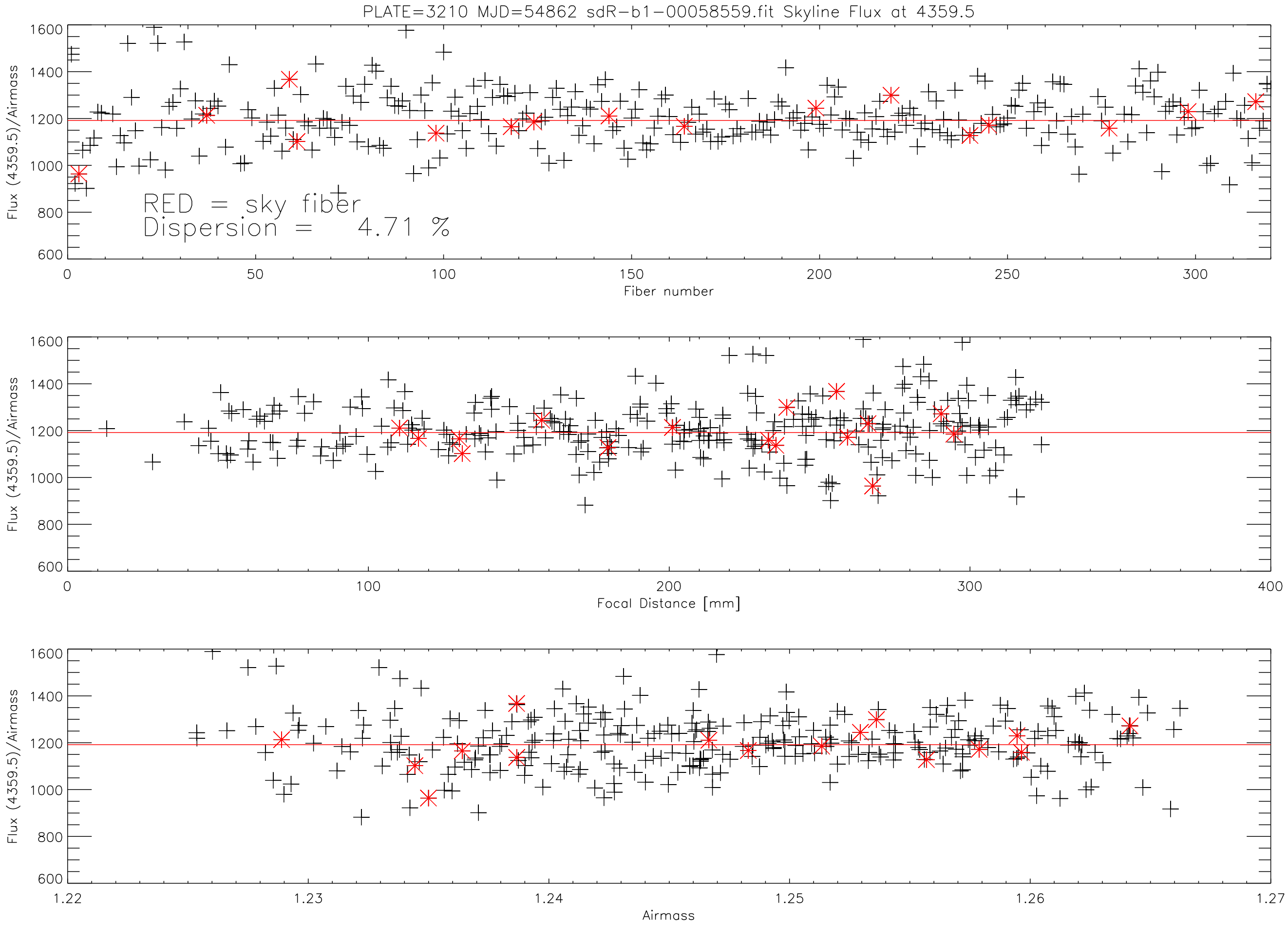

PLATE=3210 MJD=54862 sdR-b1-00058559.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

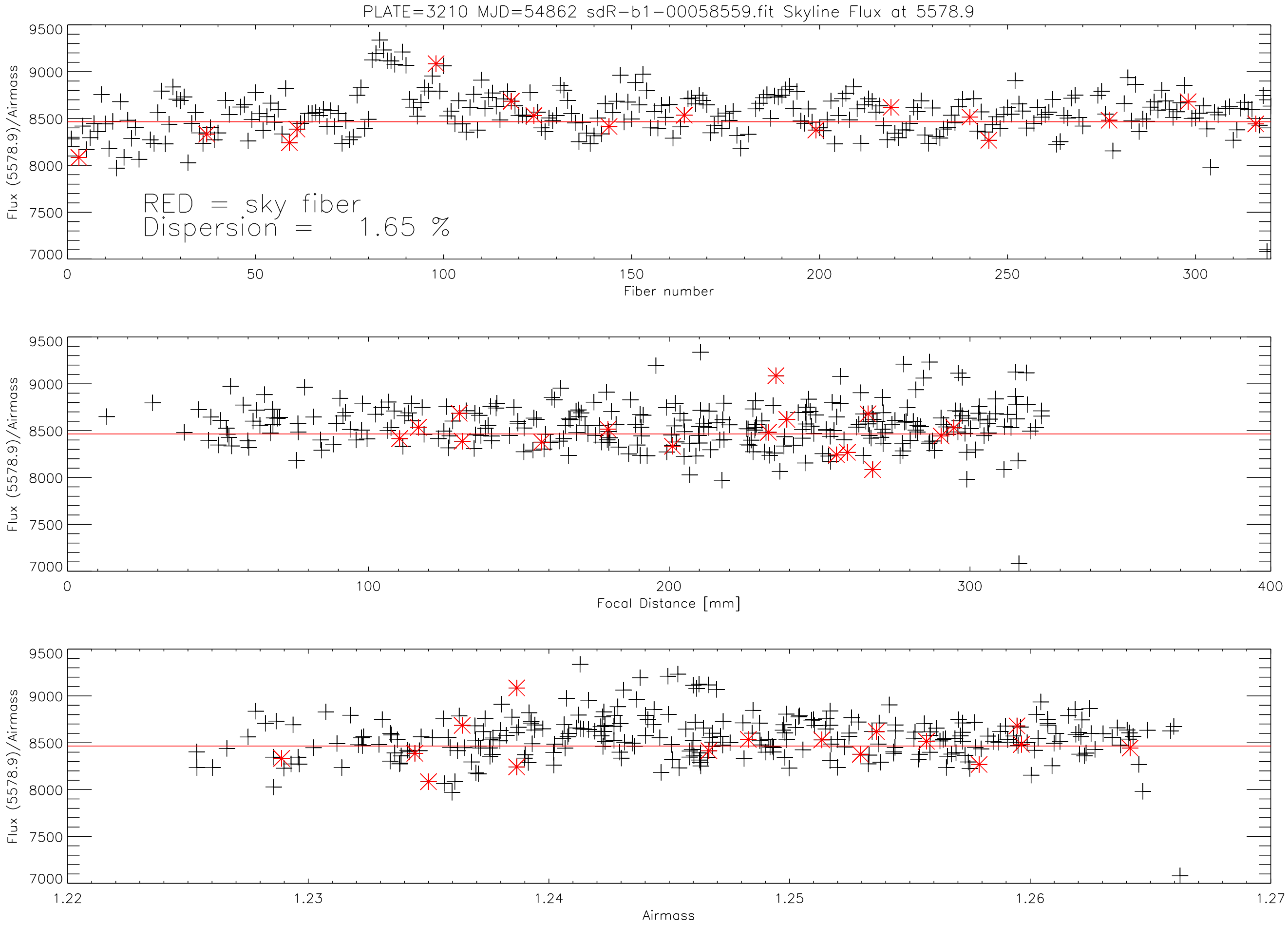

PLATE=3210 MJD=54862 sdR-b1-00058559.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

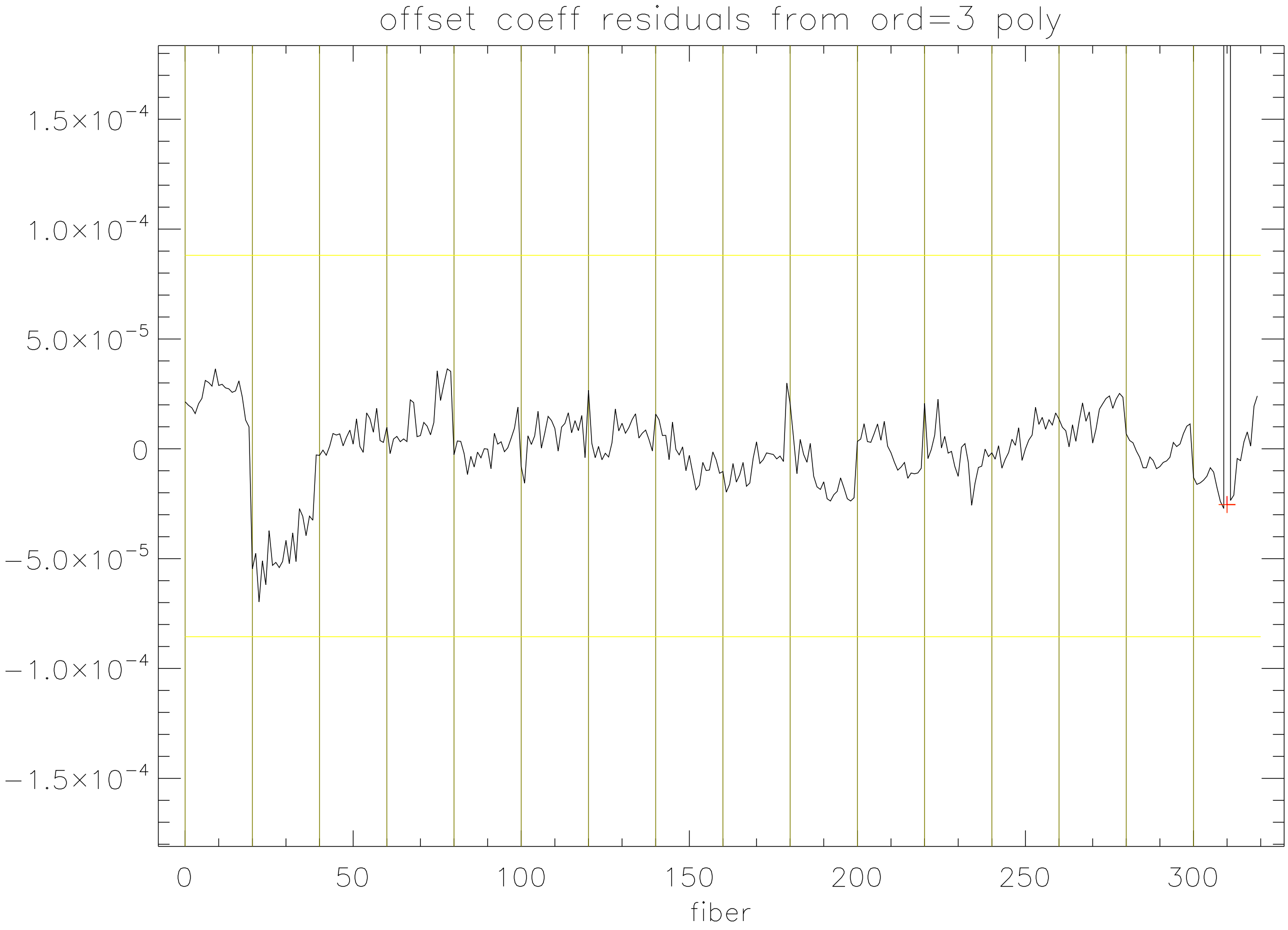
Number of sky fibers = 16

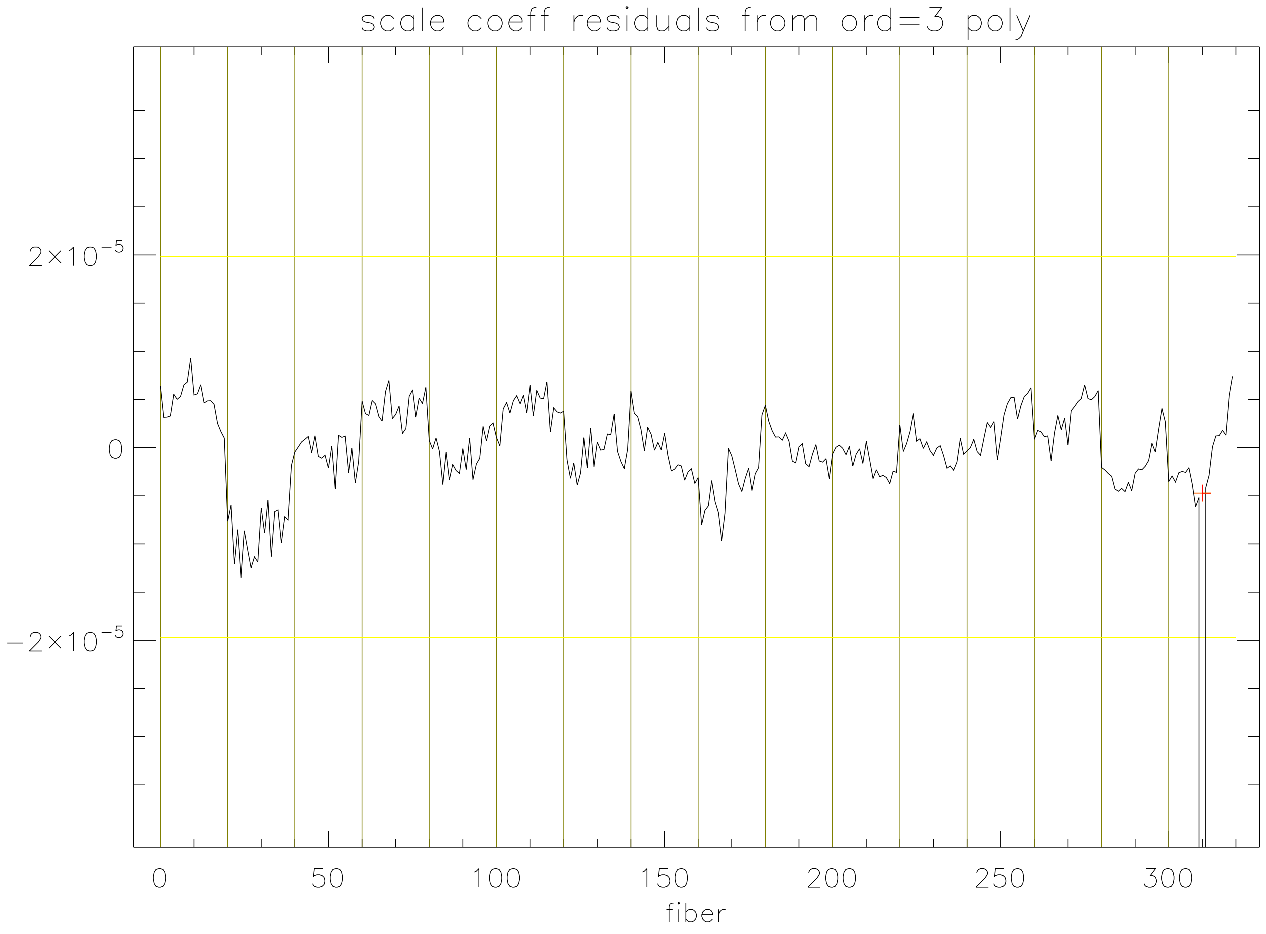
PLATE=3210 MJD=54862 sdR-b1-00058559.fit 2D Sky-subtraction Rescaled Errors

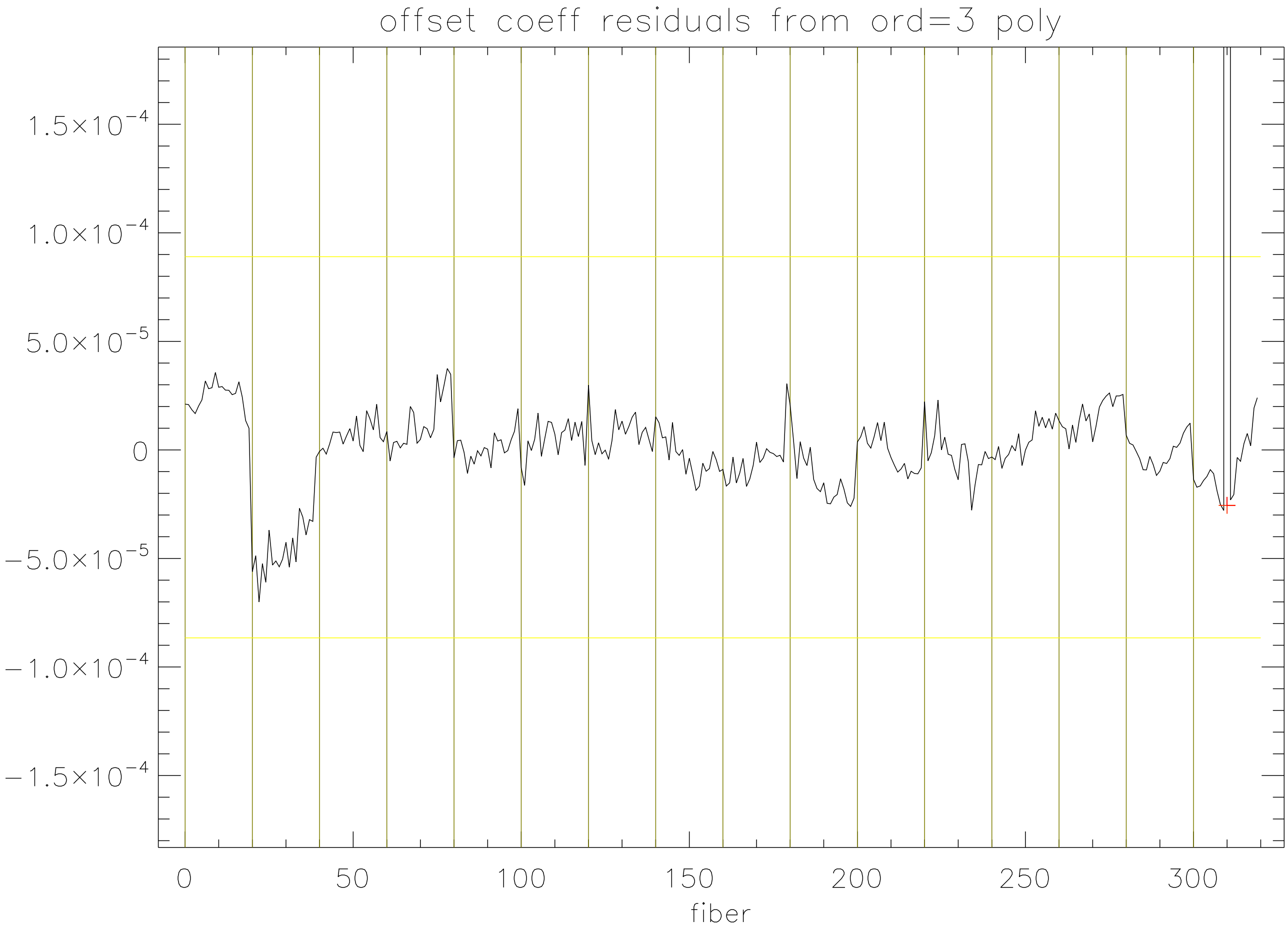


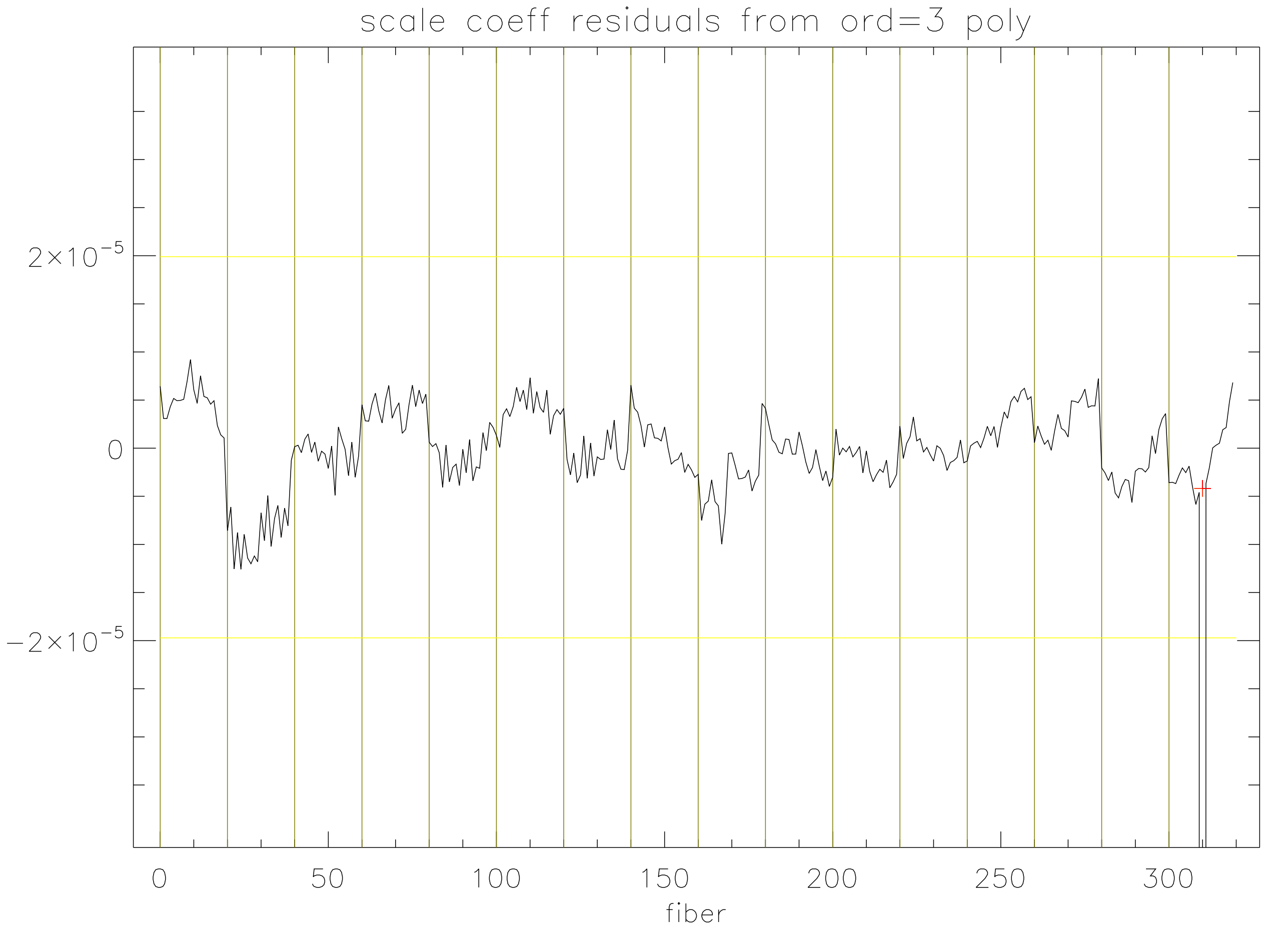

PLATE=3210 MJD=54862 sdR-b1-00058559.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
RED = sky fiber
Dispersion = 4.71 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
1.22
1.23
1.24
1.25
1.26
1.27
Airmass

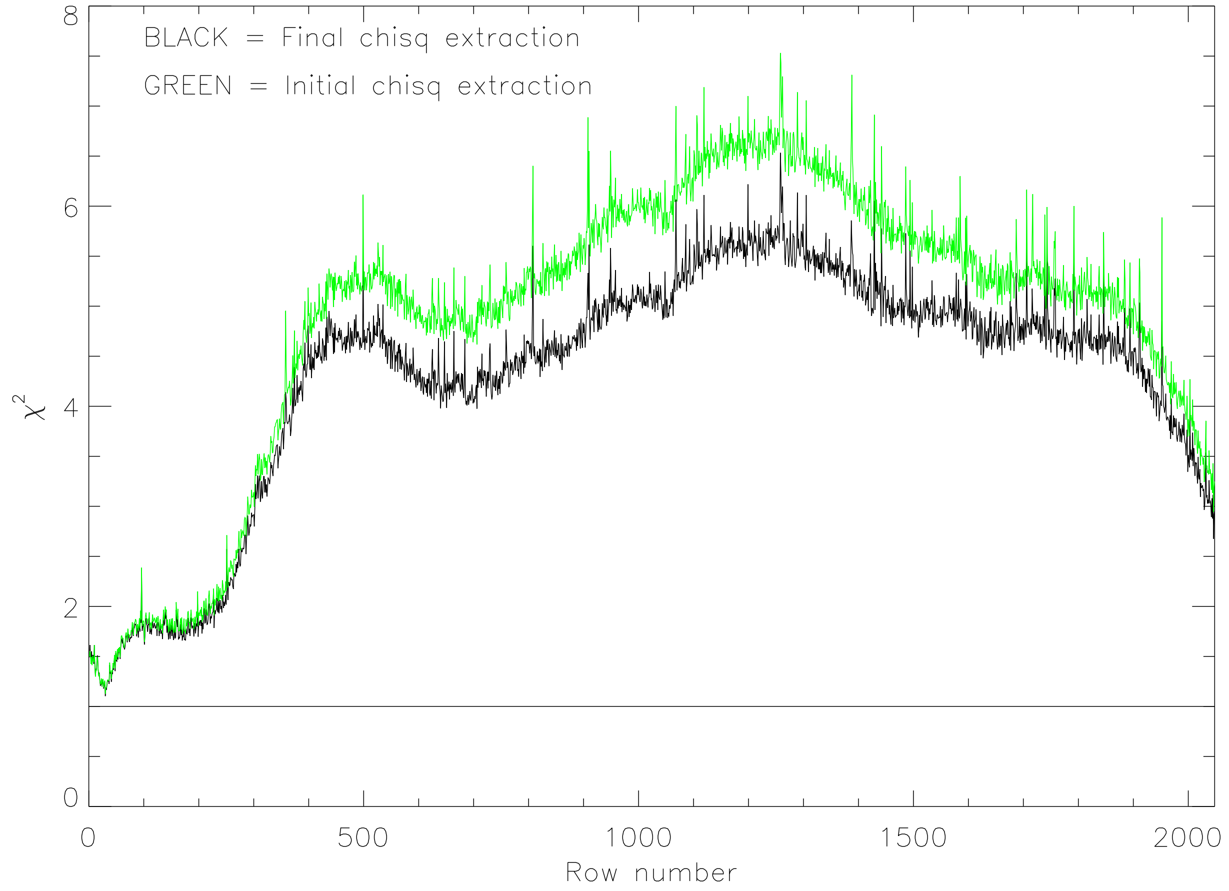

PLATE=3210 MJD=54862 sdR-b1-00058559.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.65 %
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.22
1.23
1.24
1.25
1.26
1.27
Airmass


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

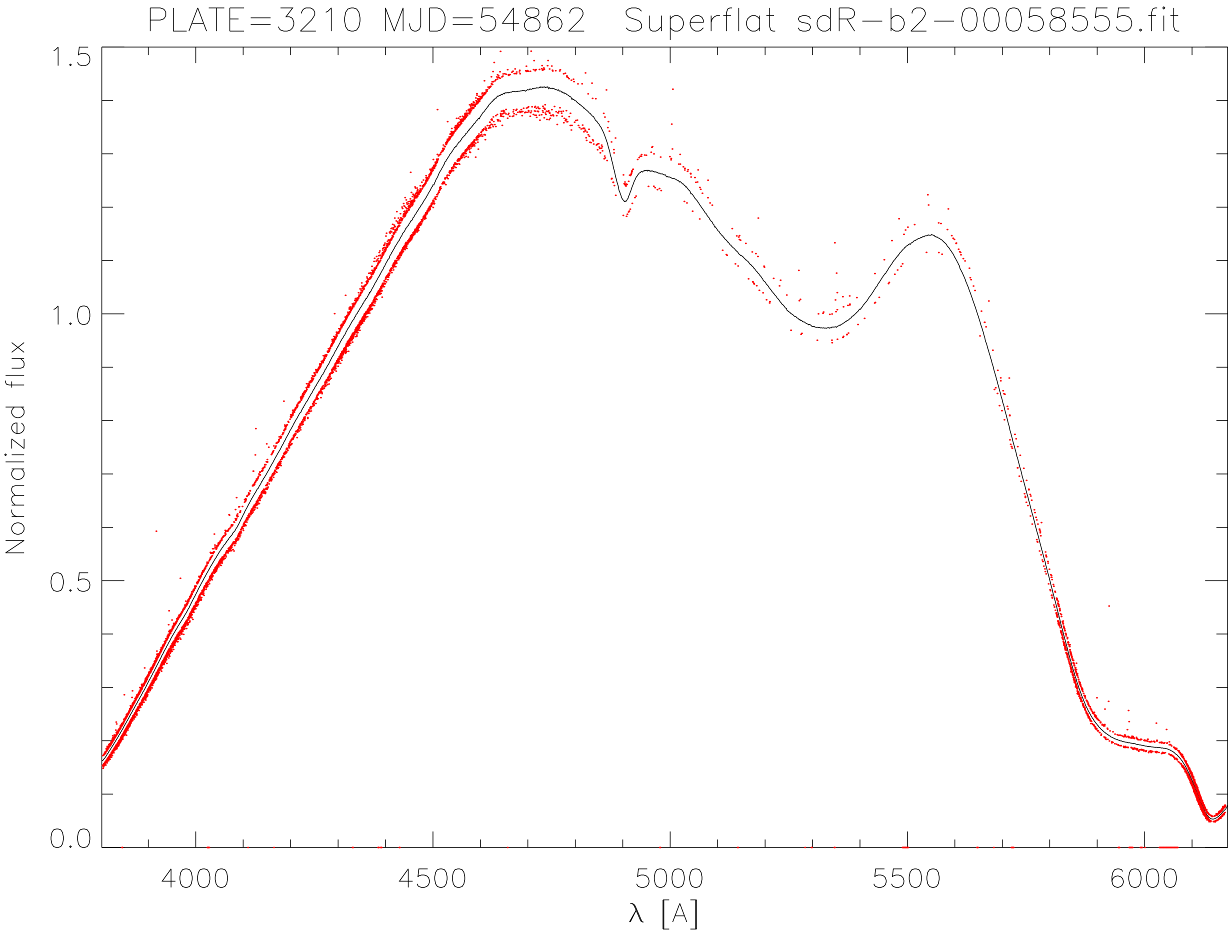

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

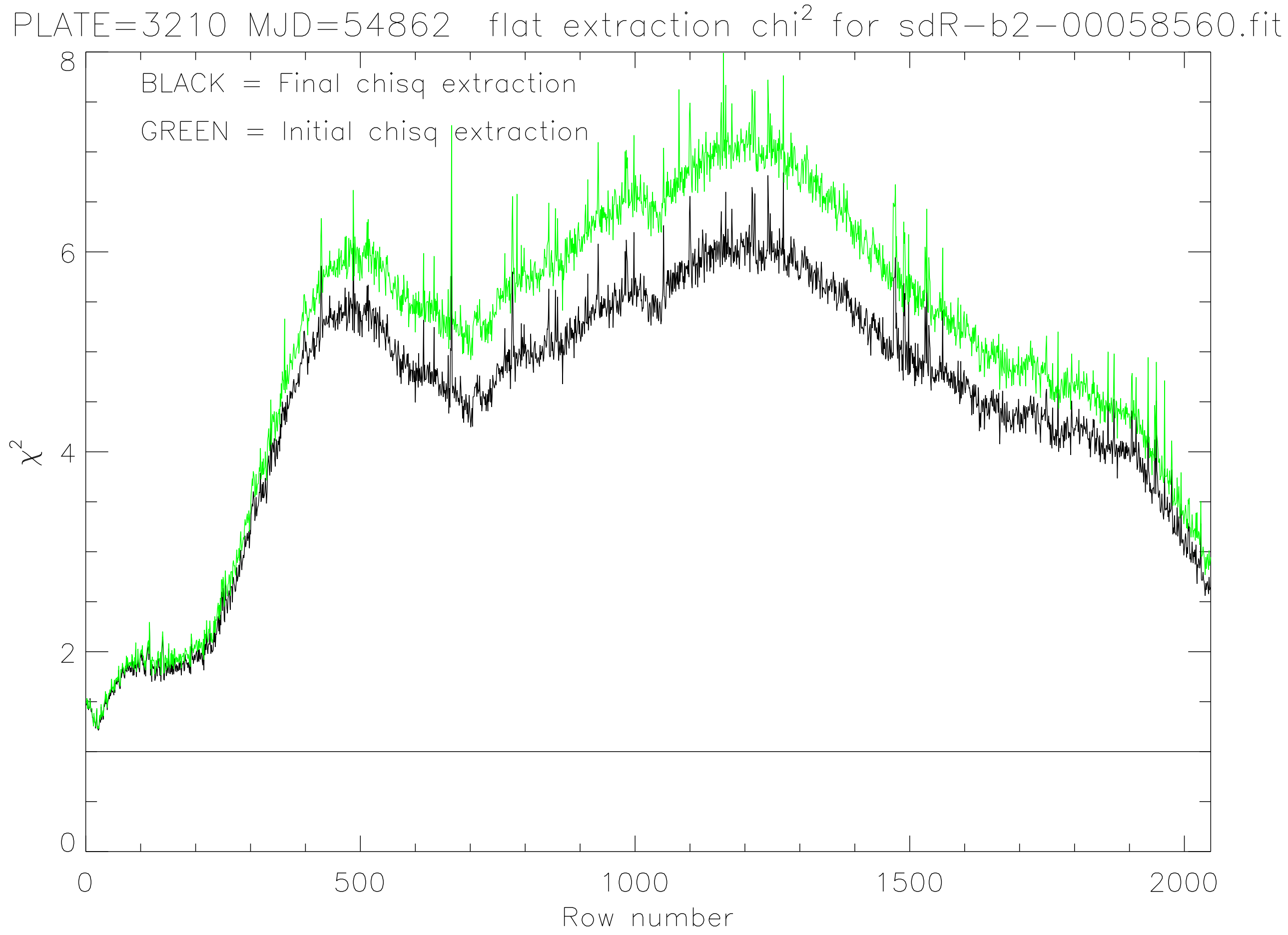

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

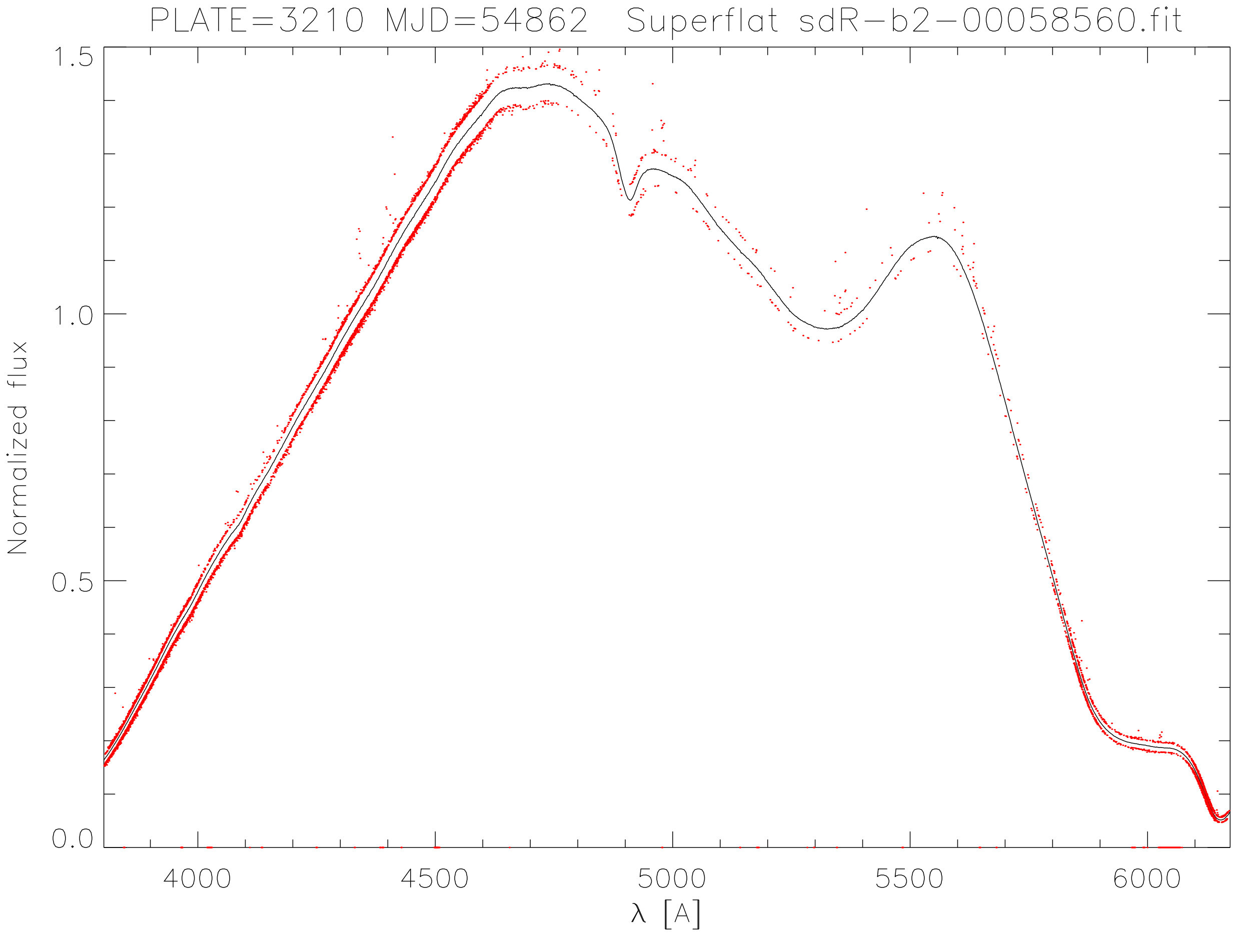

scale coeff residuals from ord=3 poly
$2\times10^{-5}$
0
$-2\times10^{-5}$
0
50
100
150
200
250
300
fiber

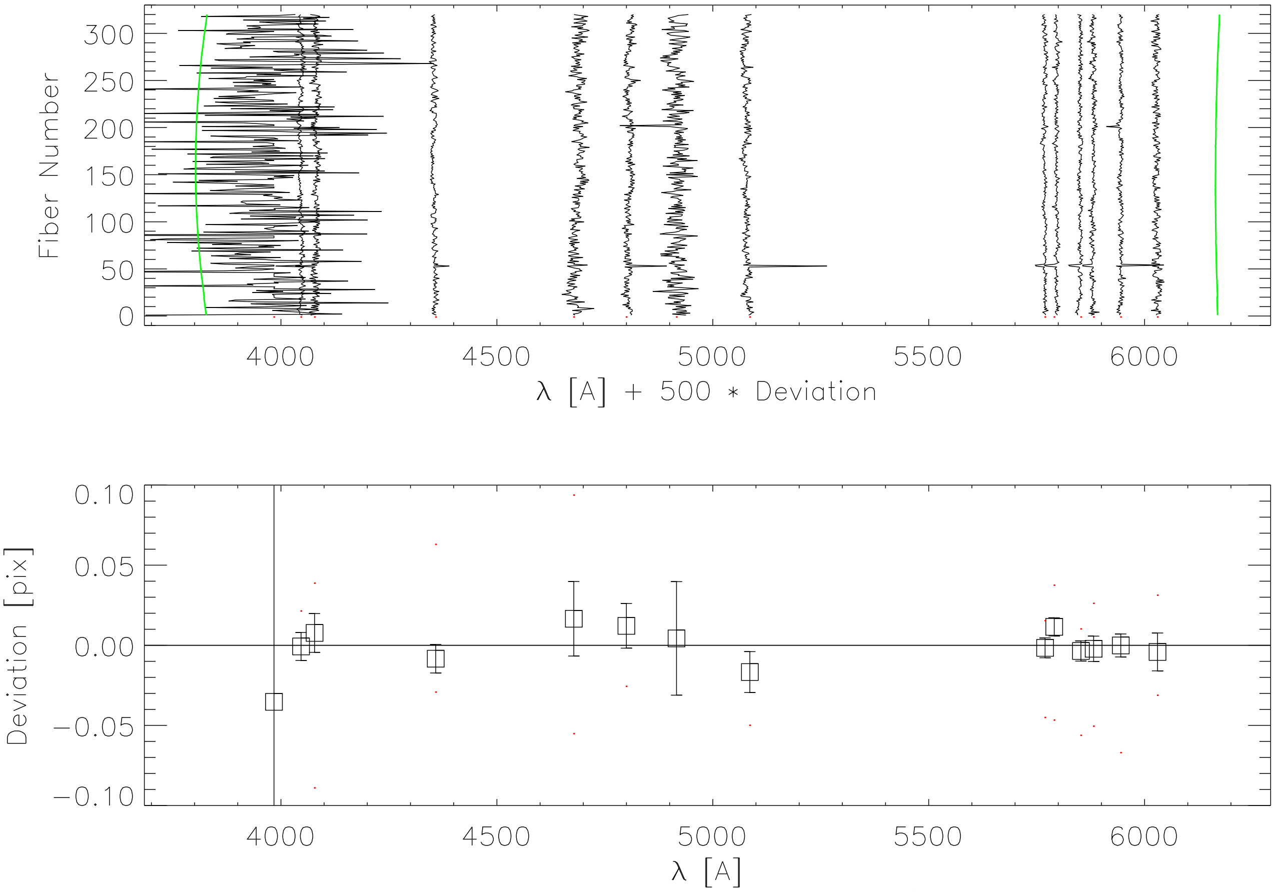


PLATE=3210 MJD=54862 flat extraction chi$^2$ for sdR-b2-00058555.fit


PLATE=3210 MJD=54862 Superflat sdR-b2-00058555.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

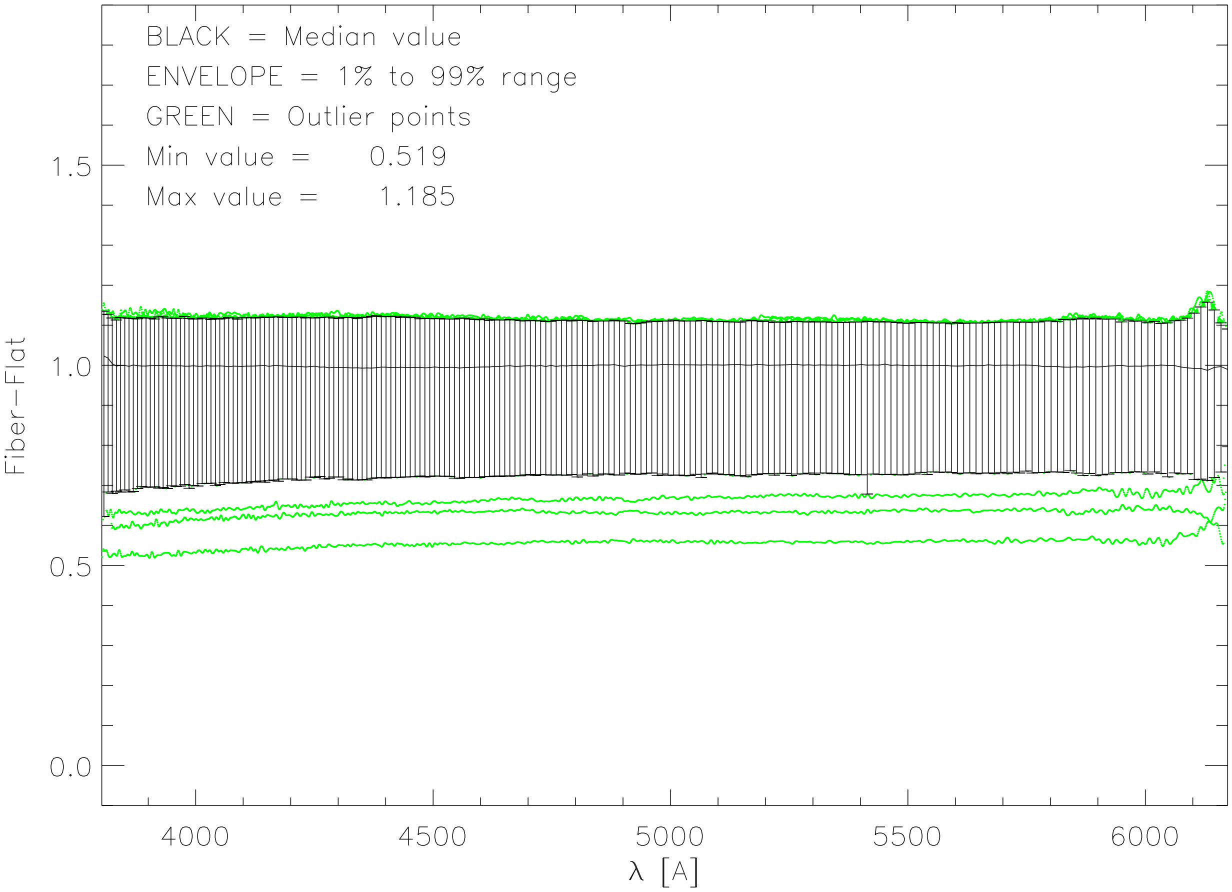

PLATE=3210 MJD=54862 flat extraction chi$^2$ for sdR-b2-00058560.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
2
4
6
8
0
500
1000
1500
2000
Row number


PLATE=3210 MJD=54862 Superflat sdR-b2-00058560.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

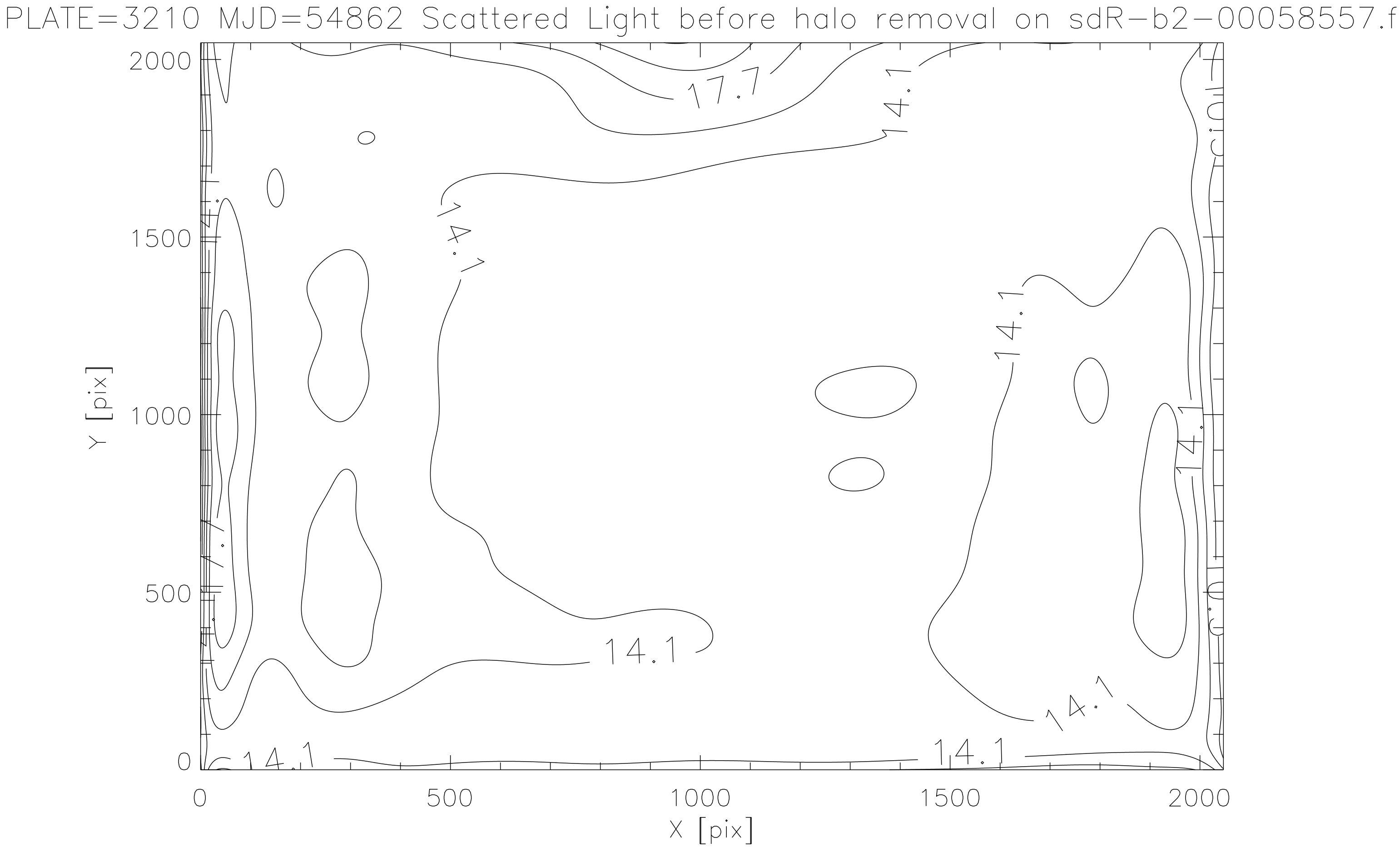

PLATE=3210 MJD=54862  Arcline Fit for sdR-b2-00058561.fit

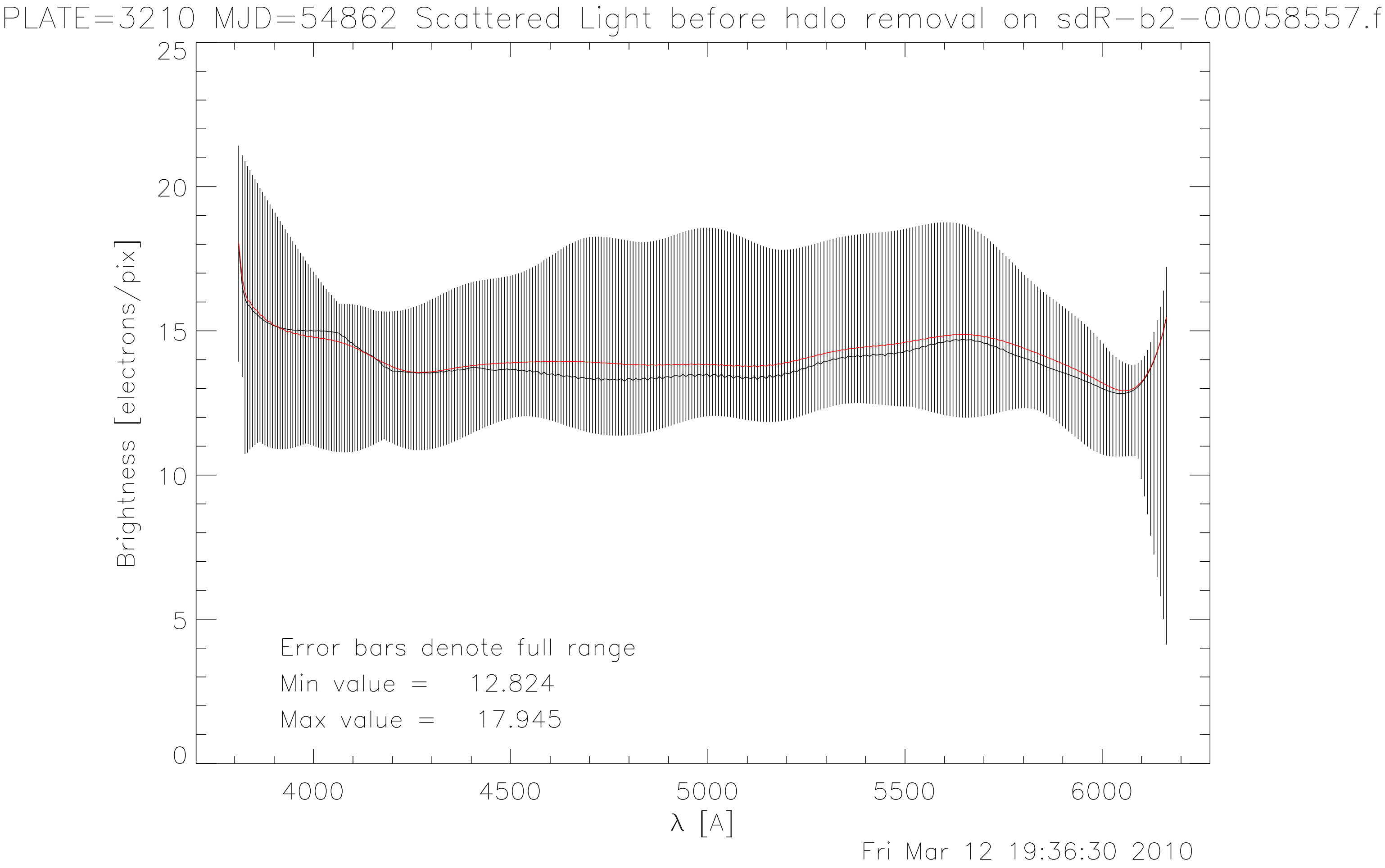
Fri Mar 12 19:35:16 2010

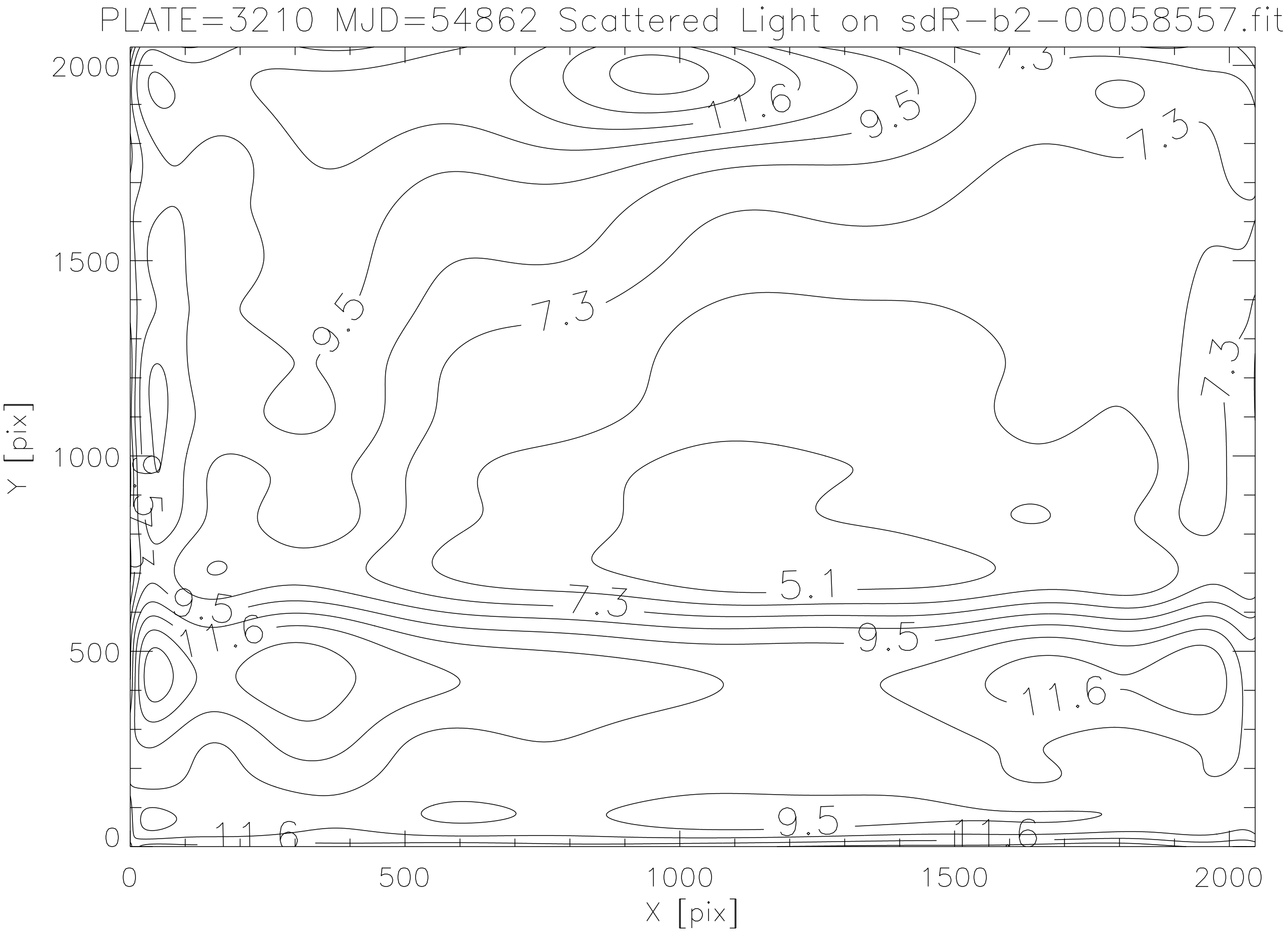
PLATE=3210 MJD=54862 Fiber-Flats for sdR-b2-00058560.fit

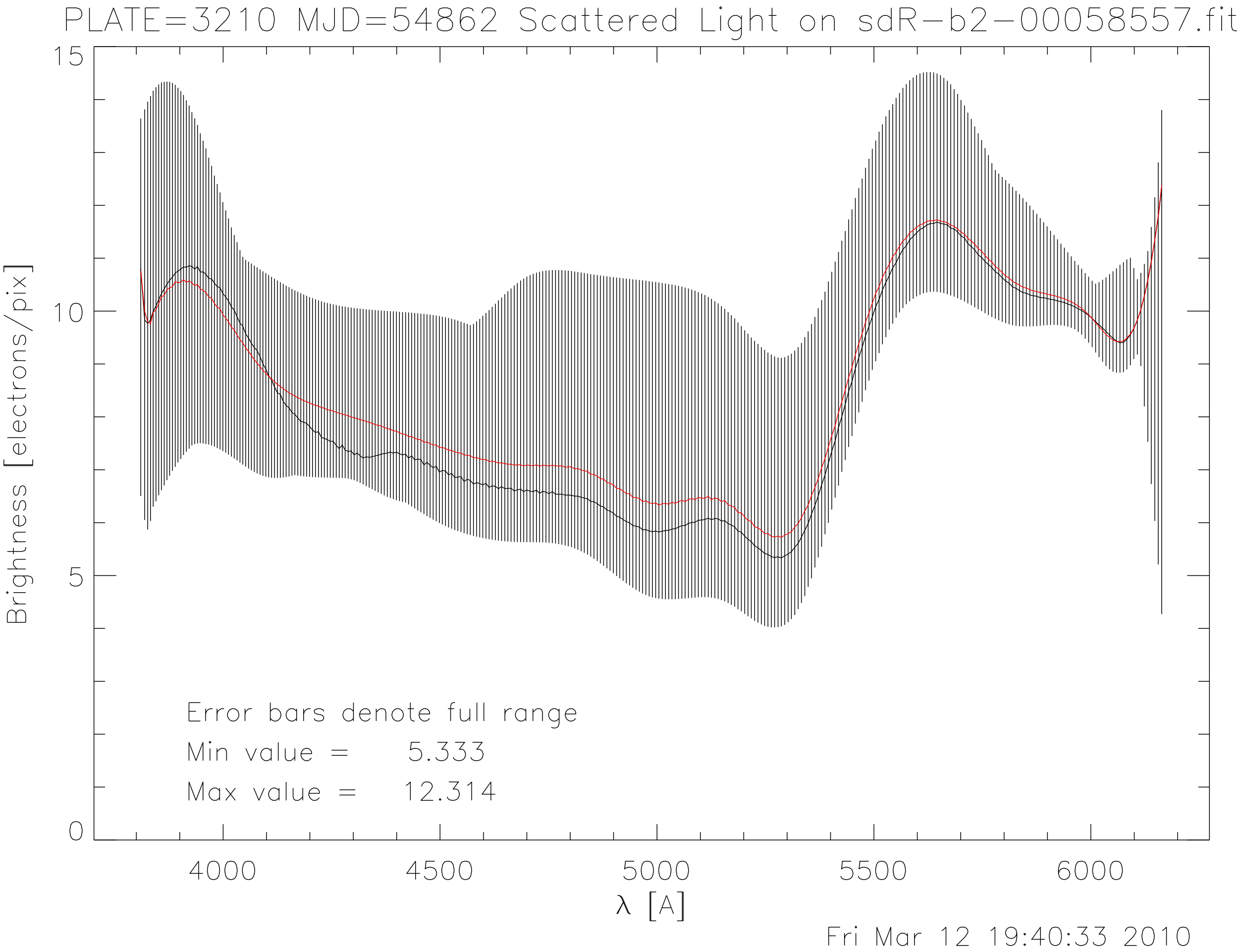


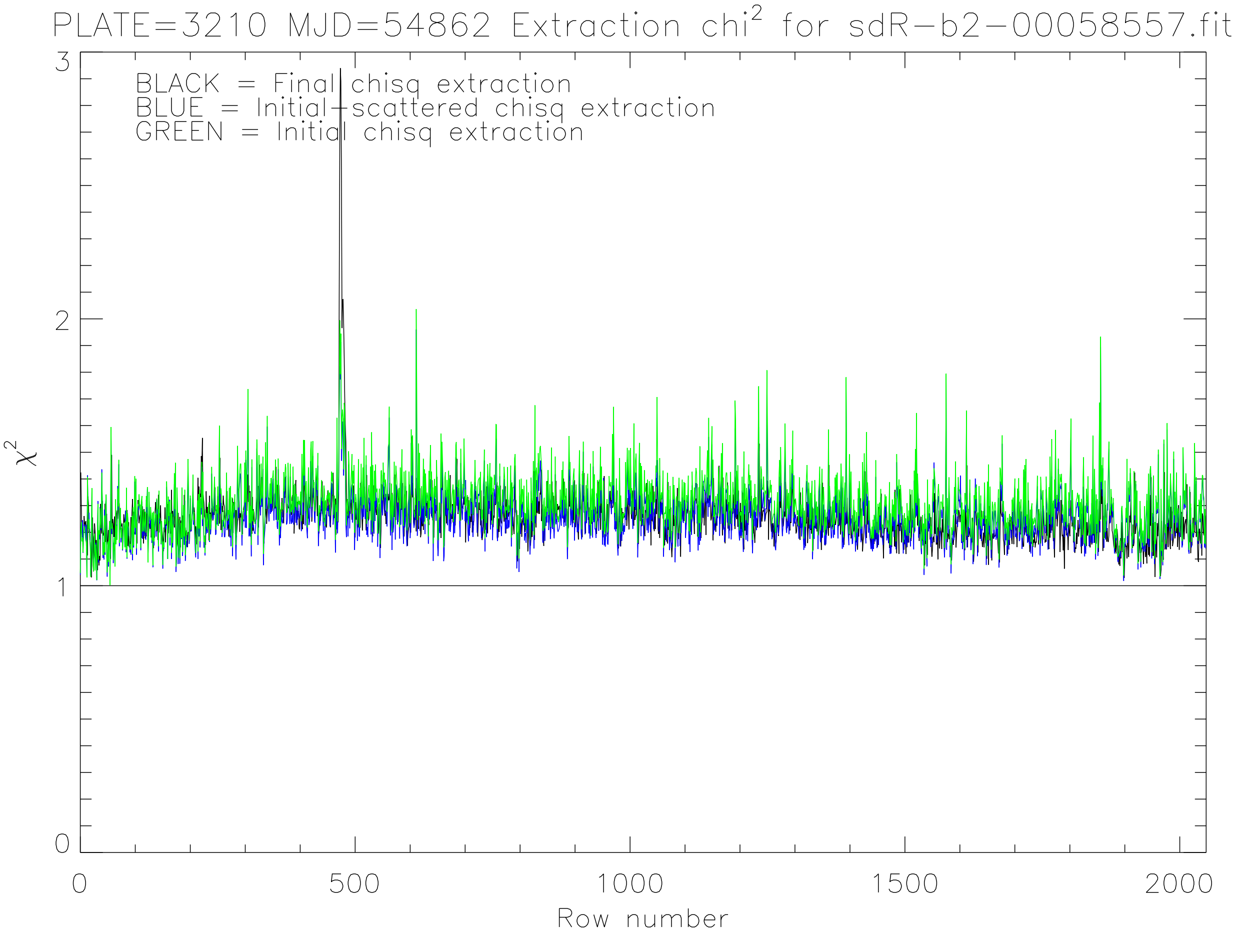
Fri Mar 12 19:35:26 2010

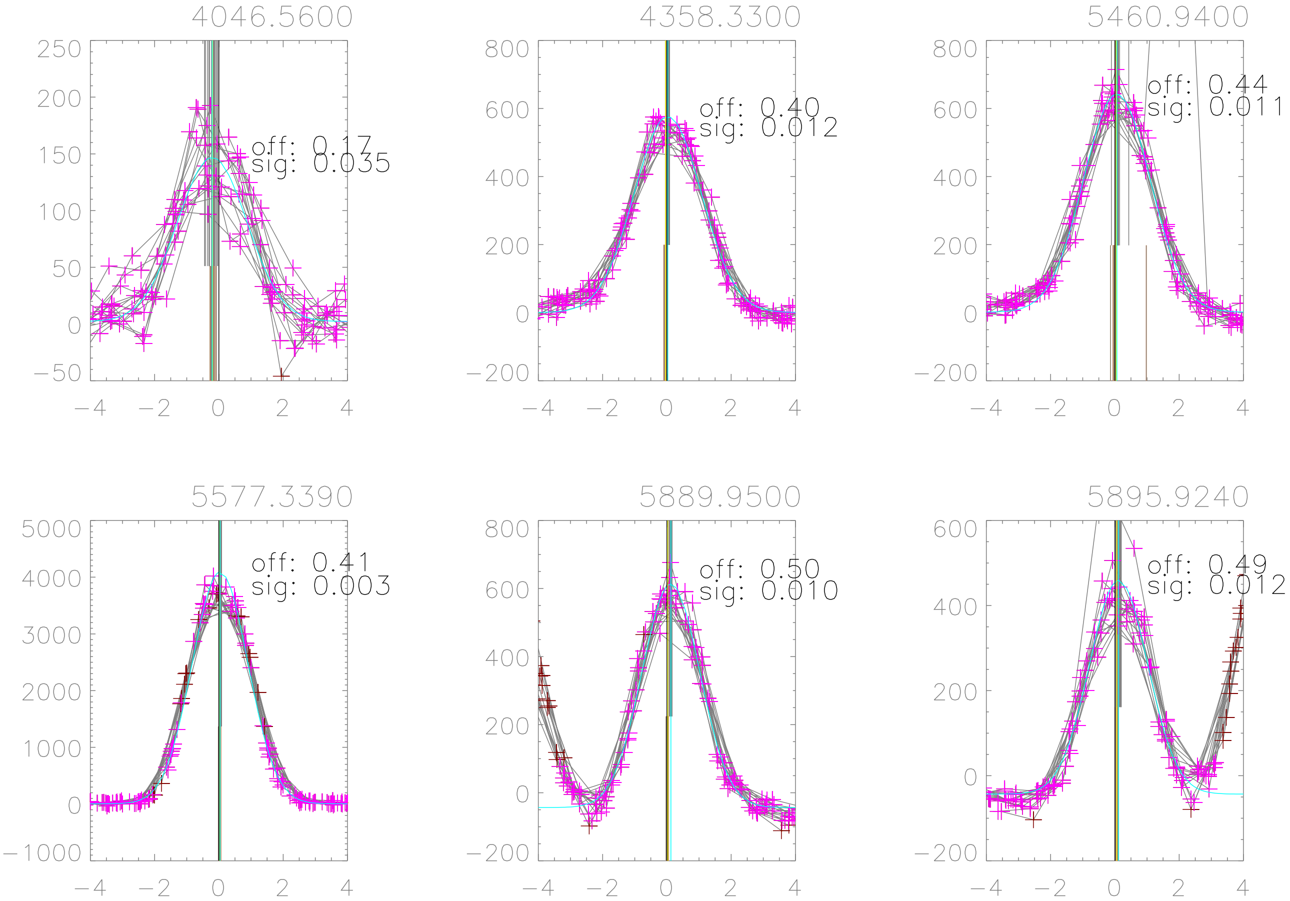

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b2-00058557.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
17.7
14.1
14.1
14.1
14.1
14.1
14.1
14.1
14.1
14.1
10.5
10.5
17.7
17.7

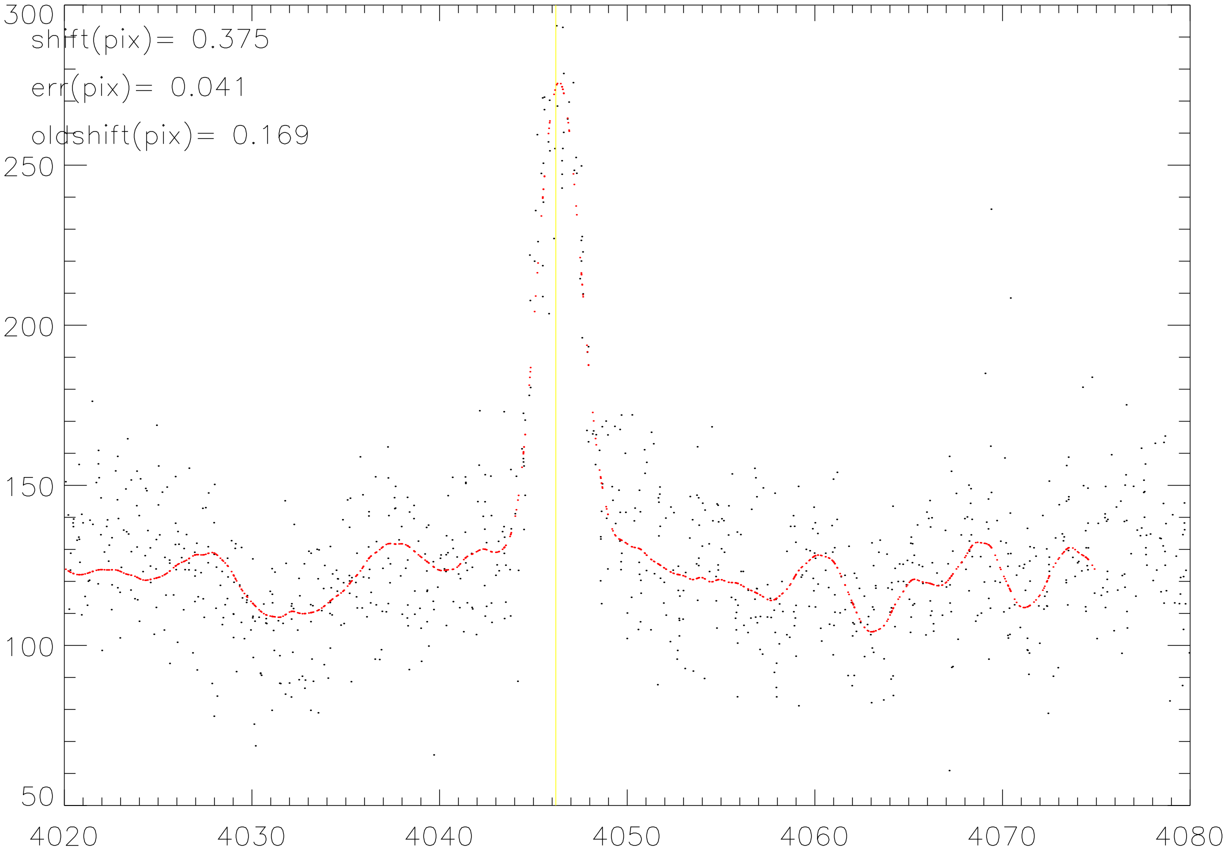

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b2-00058557.f
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 12.824
Max value = 17.945
Fri Mar 12 19:36:30 2010

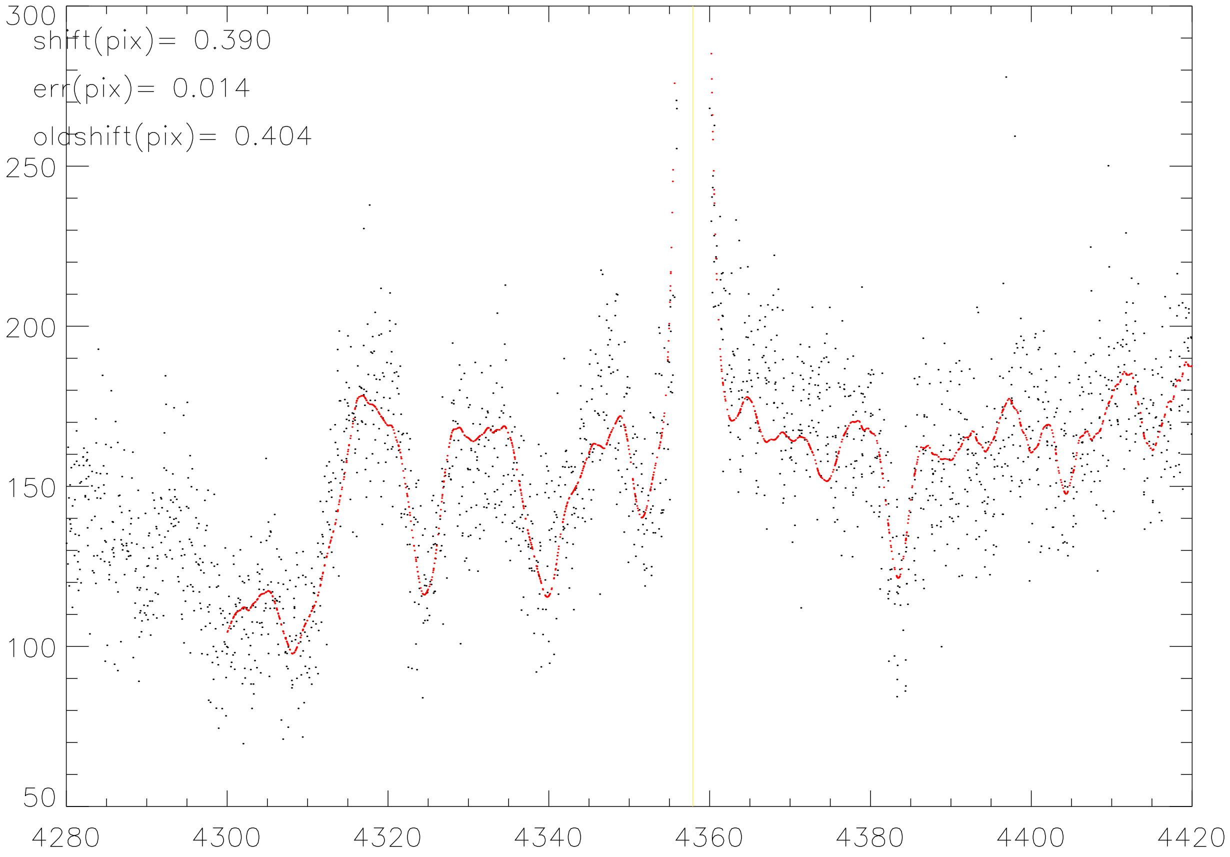

PLATE=3210 MJD=54862 Scattered Light on sdR-b2-00058557.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
11.6
9.5
7.3
7.3
9.5
7.3
7.3
5.1
7.3
9.5
11.6
9.5
11.6
11.6
9.5
11.6

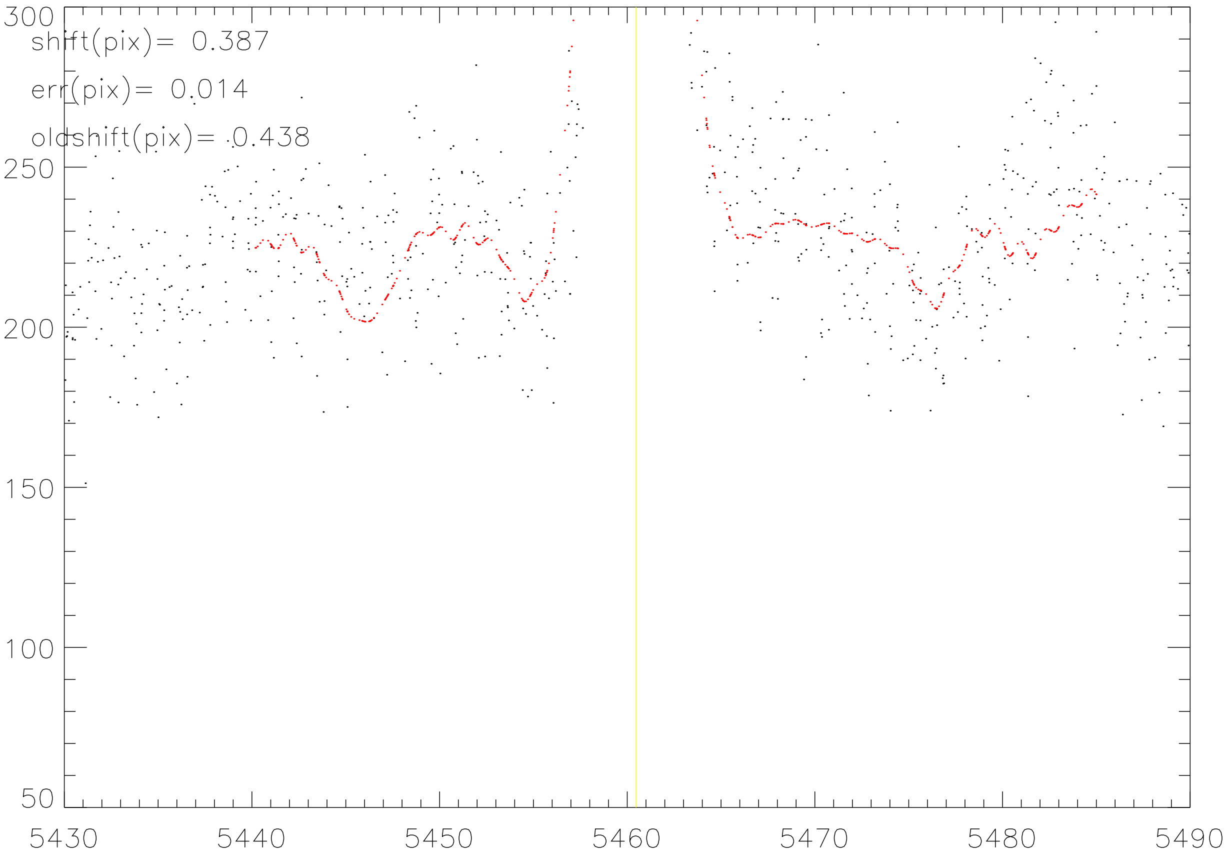

PLATE=3210 MJD=54862 Scattered Light on sdR-b2-00058557.fit
Brightness [electrons/pix]
0
5
10
15
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value =    5.333
Max value =   12.314
Fri Mar 12 19:40:33 2010

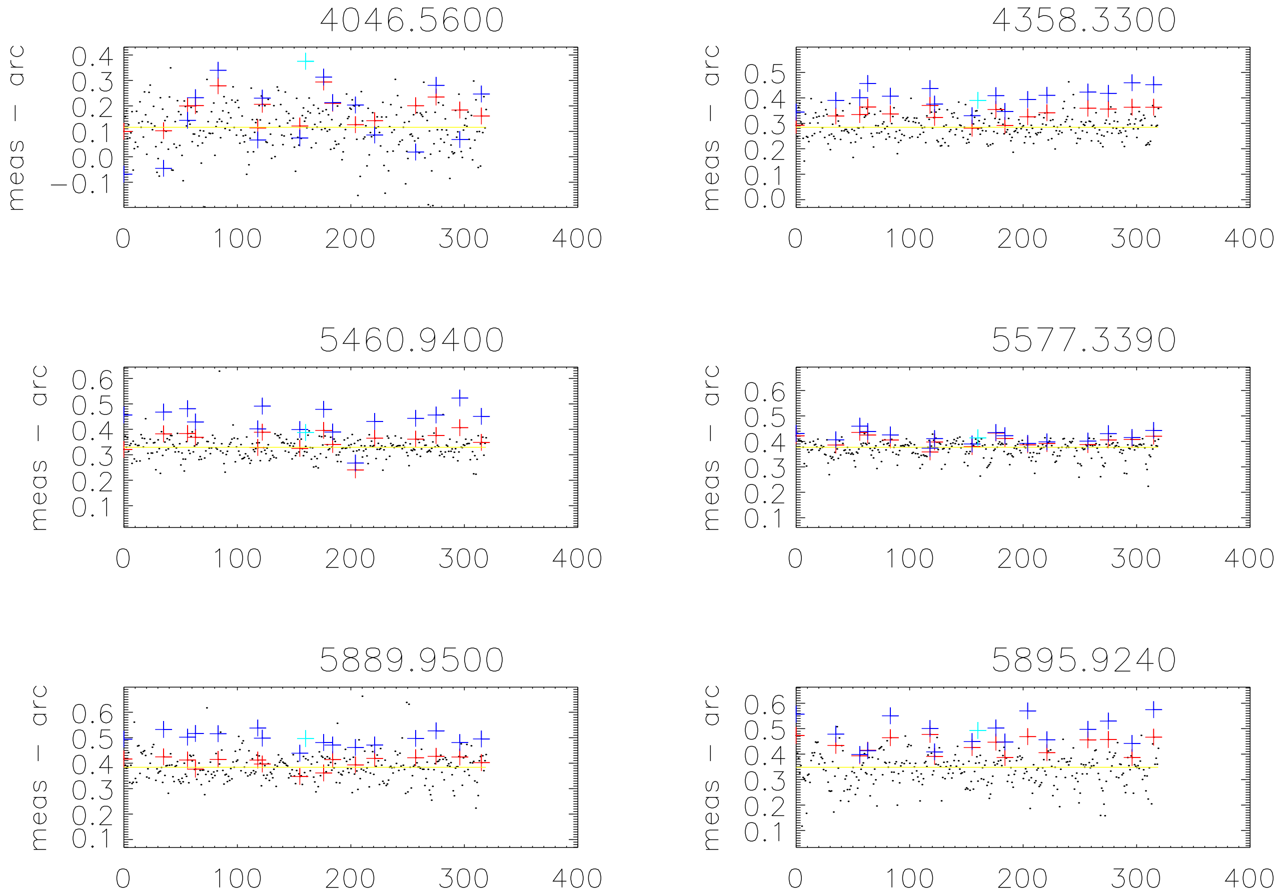

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-b2-00058557.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
0
500
1000
1500
2000
Row number

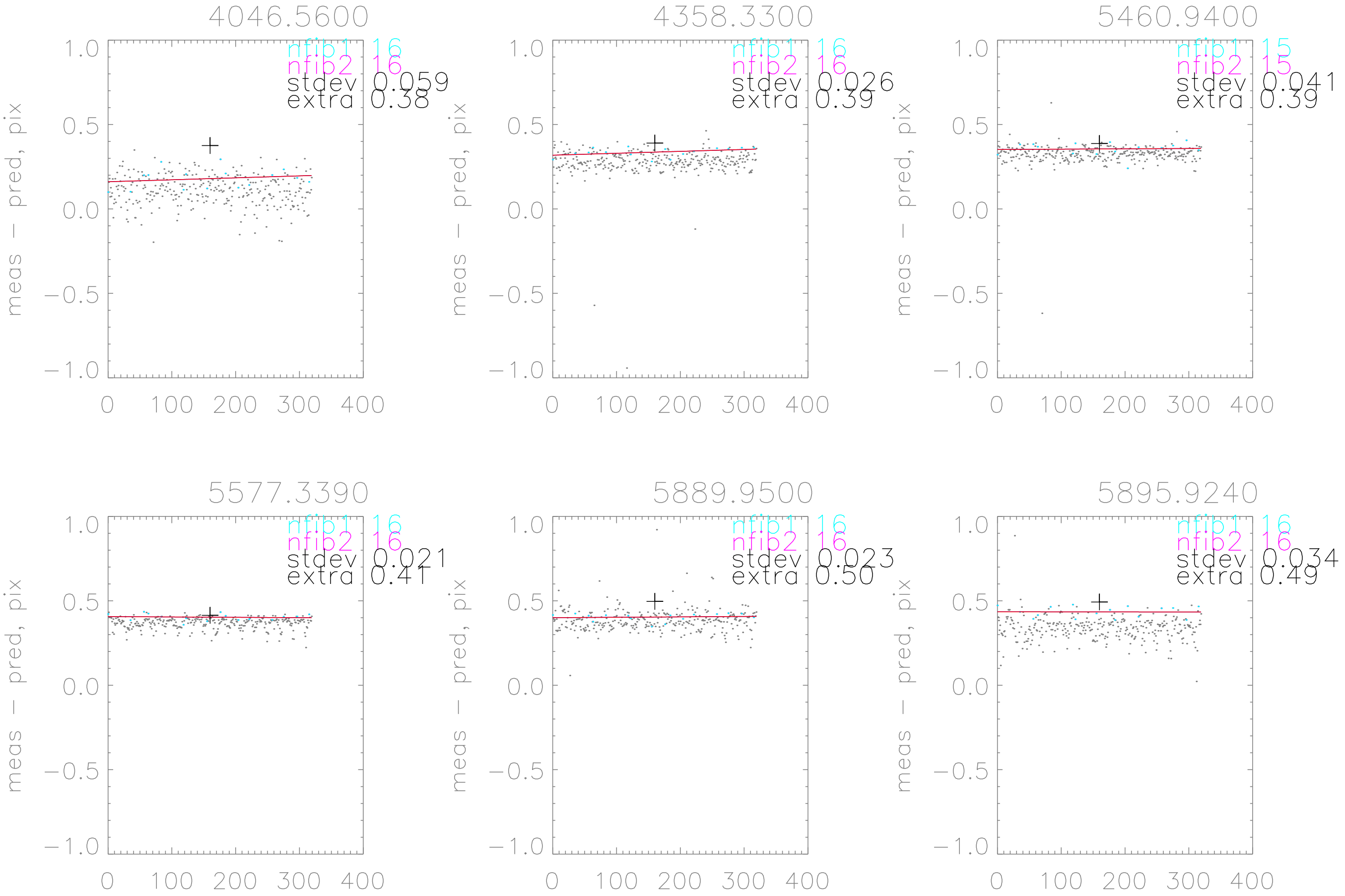

4046.5600
off: 0.17
sig: 0.035
250
200
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: 0.40
sig: 0.012
800
600
400
200
0
−200
5460.9400
off: 0.44
sig: 0.011
5577.3390
off: 0.41
sig: 0.003
5000
4000
3000
2000
1000
0
−1000
5889.9500
off: 0.50
sig: 0.010
5895.9240
off: 0.49
sig: 0.012
600
400
200
0
−200

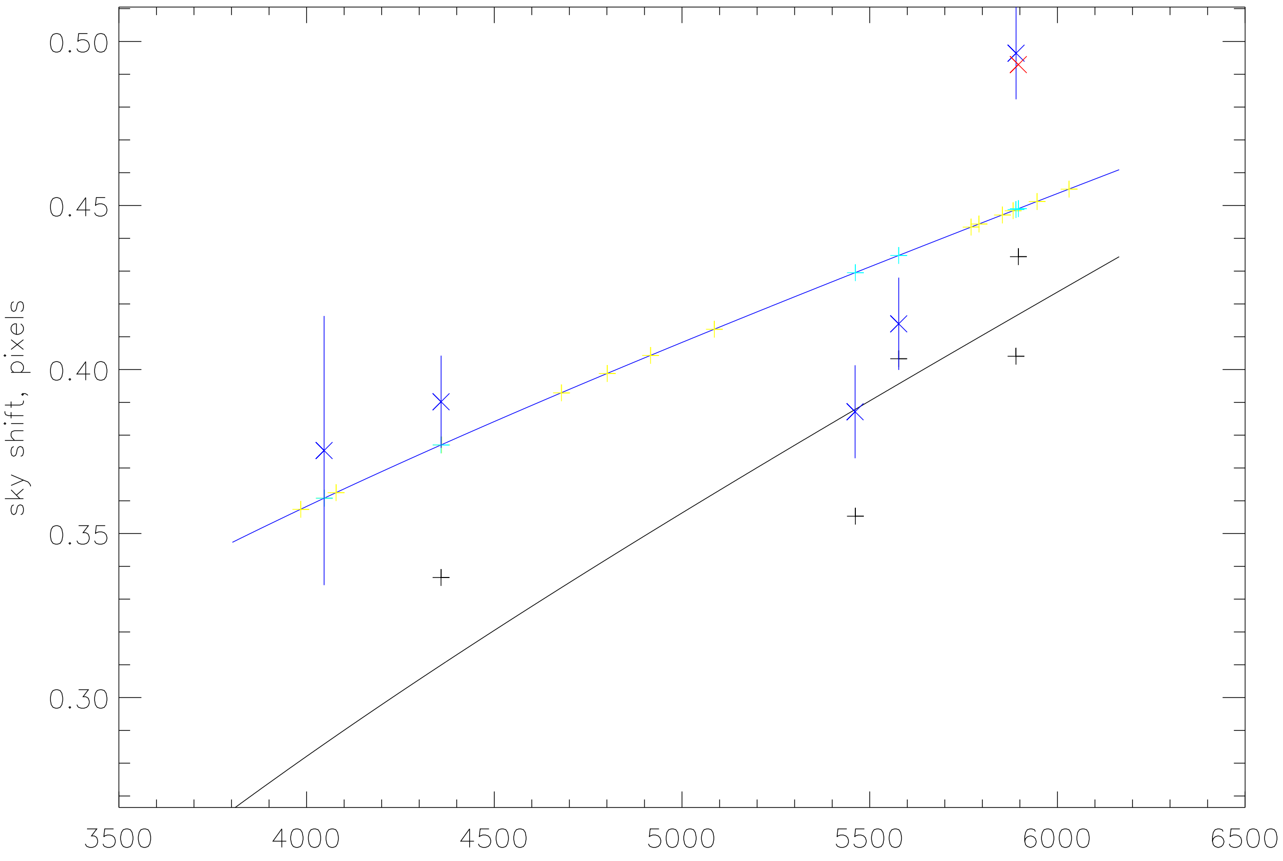

shift(pix)= 0.375
err(pix)= 0.041
oldshift(pix)= 0.169
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

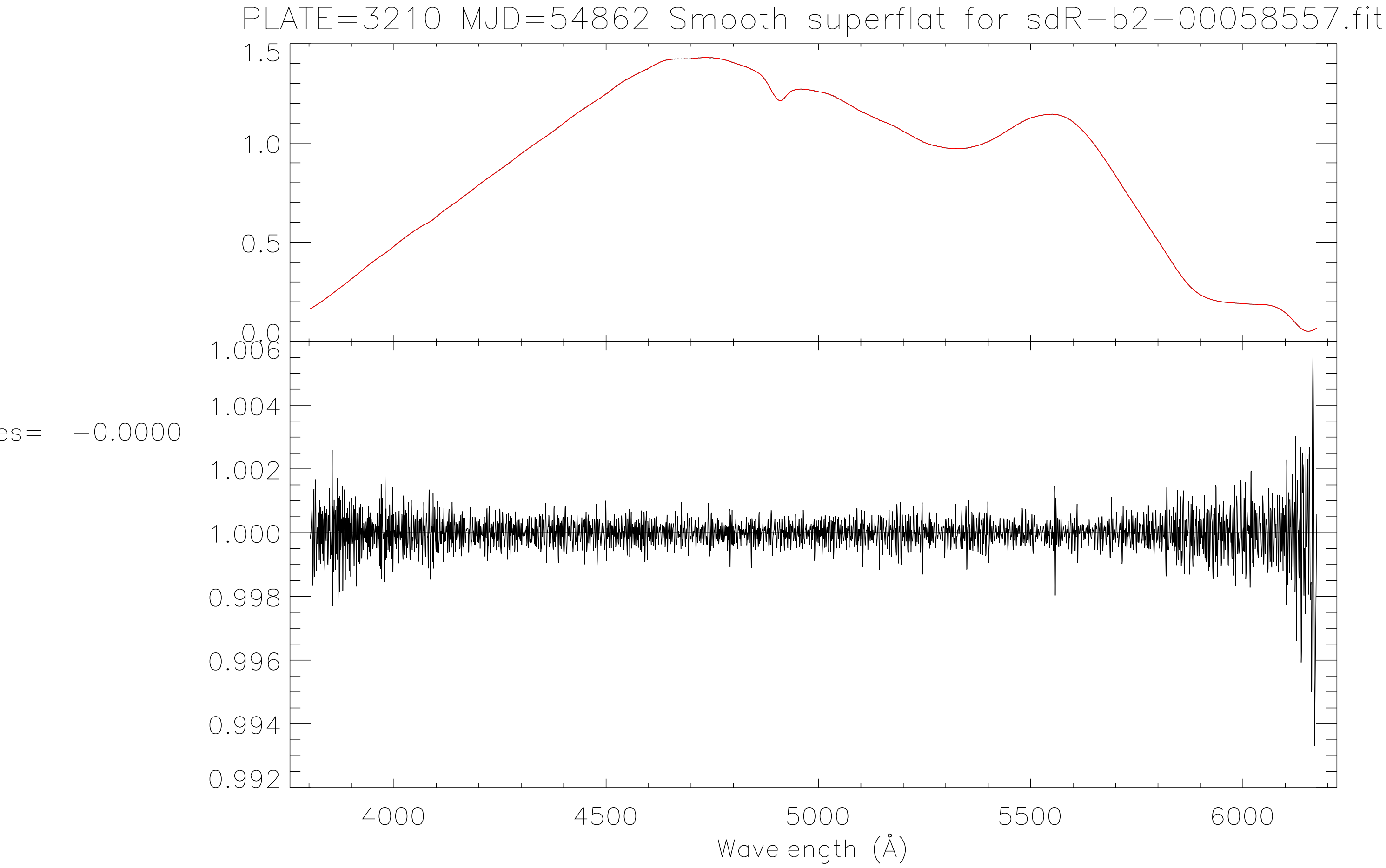

shift(pix)= 0.390
err(pix)= 0.014
oldshift(pix)= 0.404
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

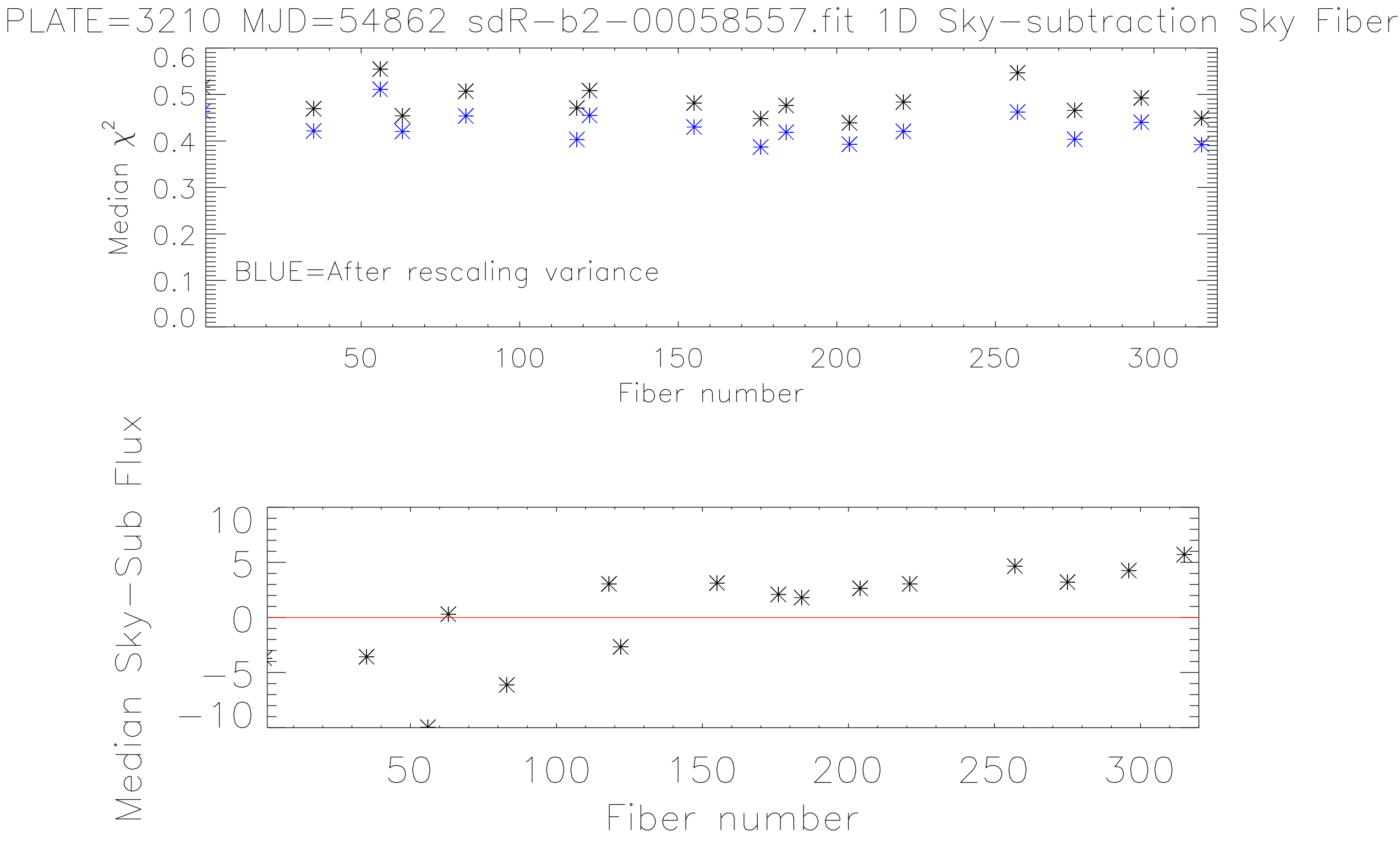

shift(pix)= 0.387
err(pix)= 0.014
oldshift(pix)= 0.438
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

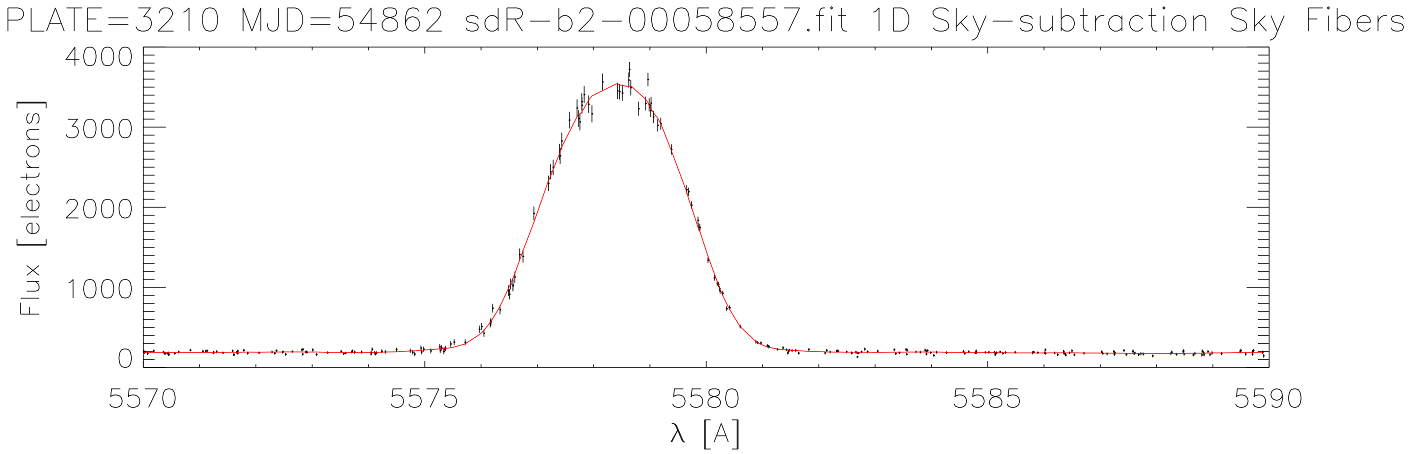

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0.5
0.6
0
100
200
300
400

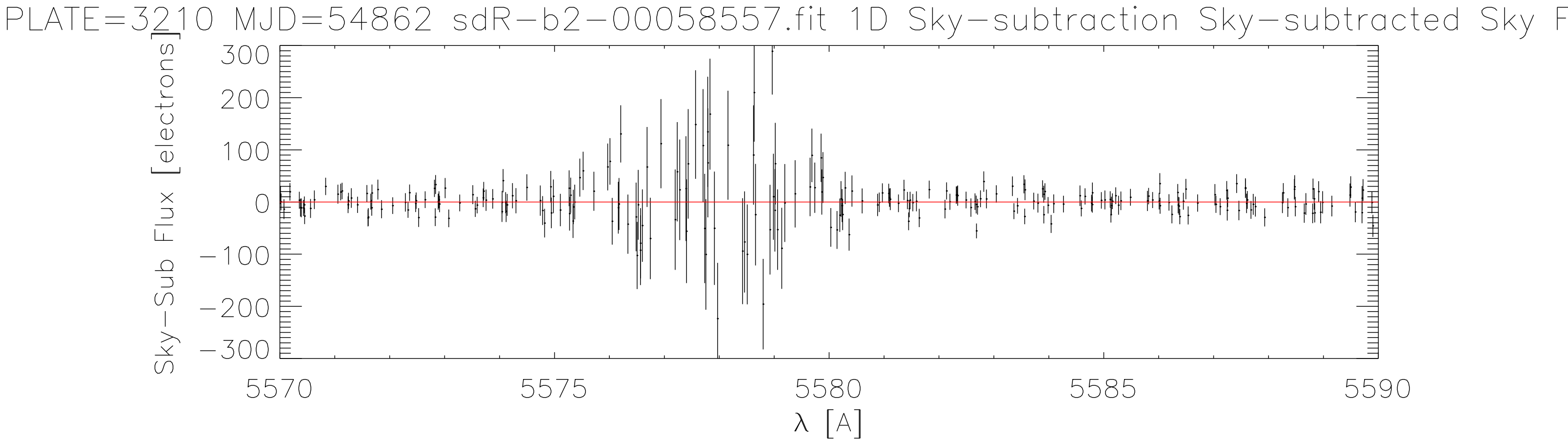

4046.5600
nfib1 16
nfib2 16
stdev 0.059
extra 0.38
4358.3300
nfib1 16
nfib2 16
stdev 0.026
extra 0.39
5460.9400
nfib1 15
nfib2 15
stdev 0.041
extra 0.39
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.41
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.50
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra 0.49
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
0.30
3500
4000
4500
5000
5500
6000
6500


PLATE=3210 MJD=54862 Smooth superflat for sdR-b2-00058557.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

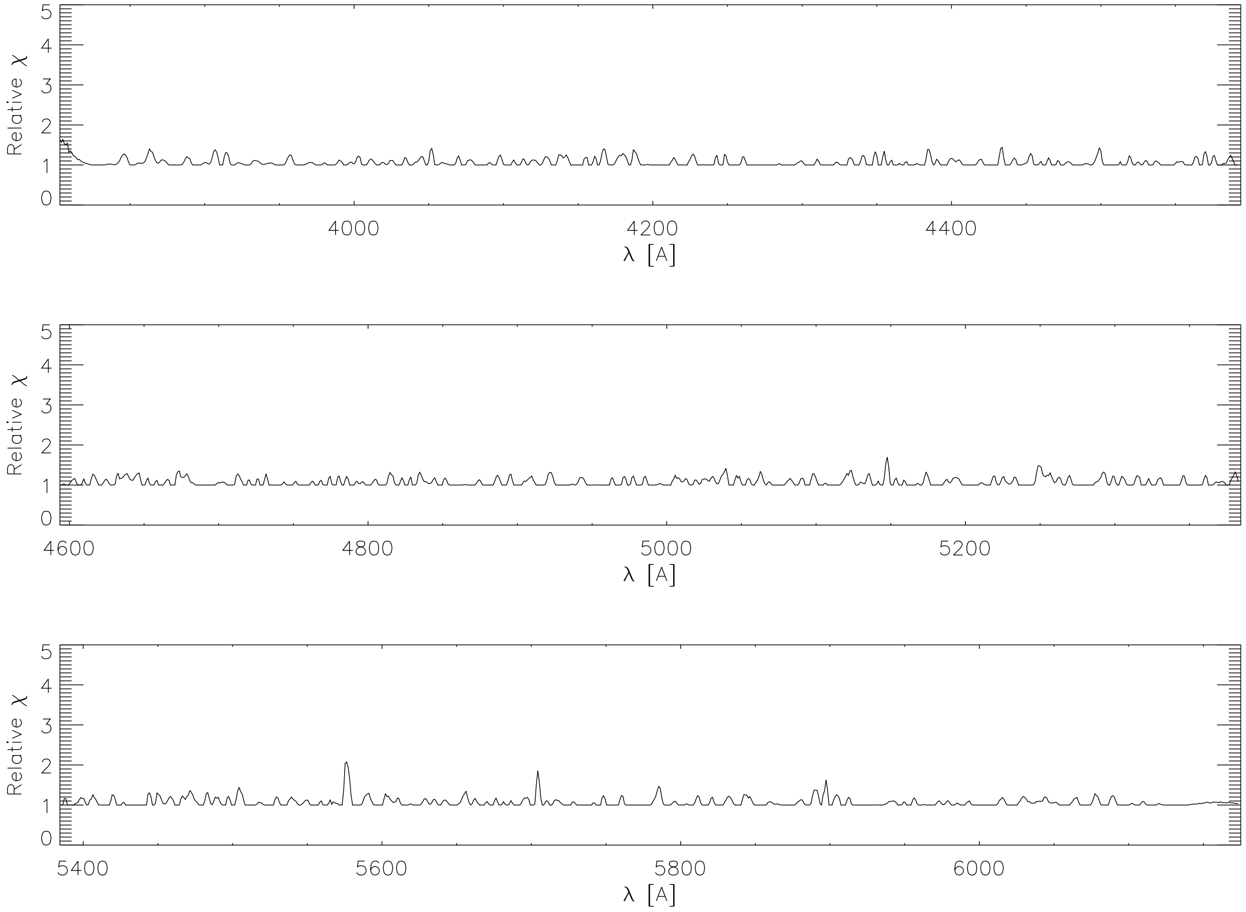

PLATE=3210 MJD=54862 sdR-b2-00058557.fit 1D Sky-subtraction Sky Fiber
Median $\chi^2$
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

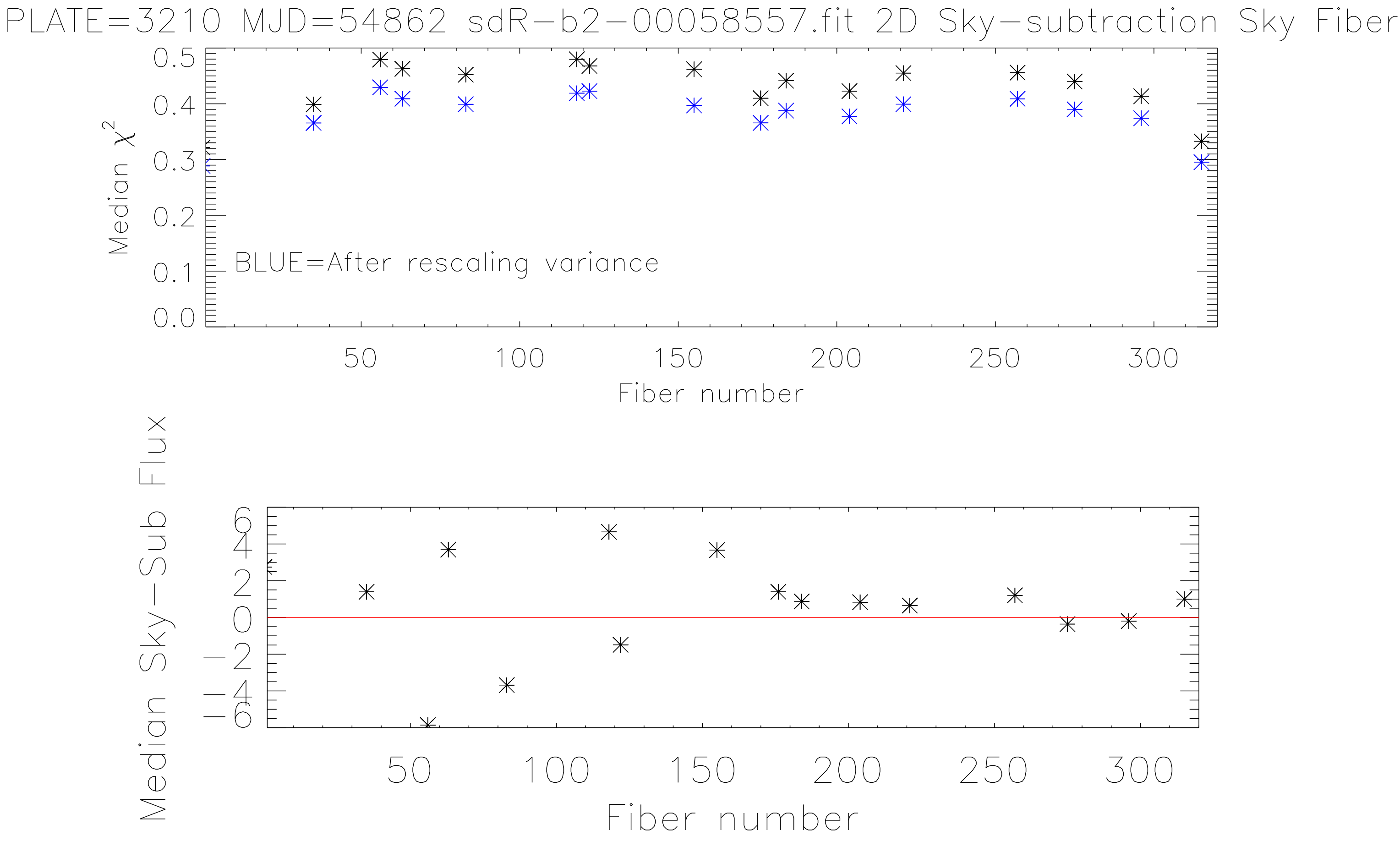

PLATE=3210 MJD=54862 sdR-b2-00058557.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

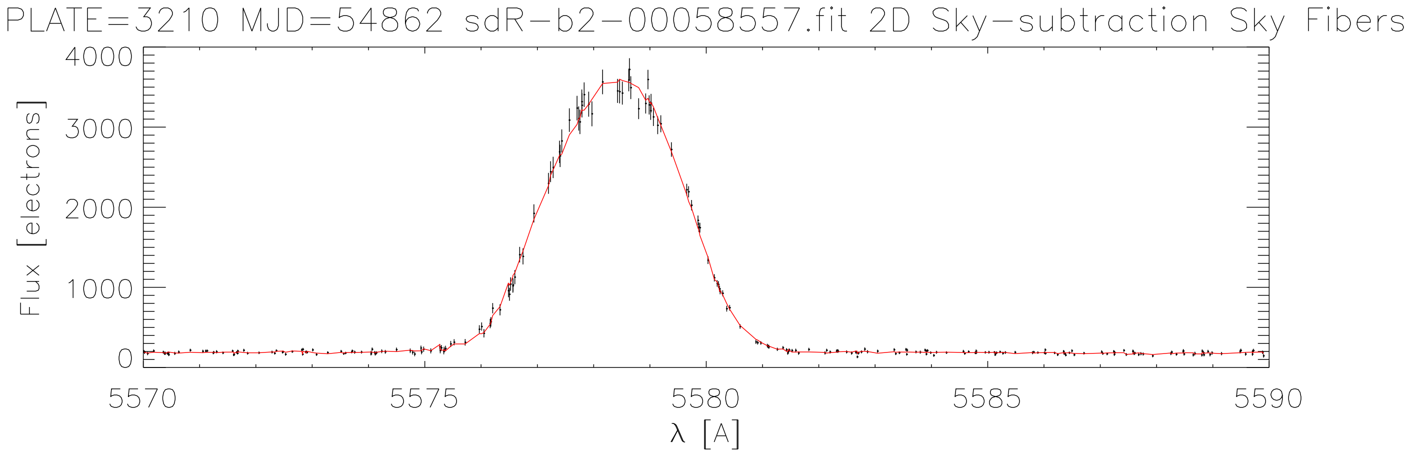

PLATE=3210 MJD=54862 sdR-b2-00058557.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

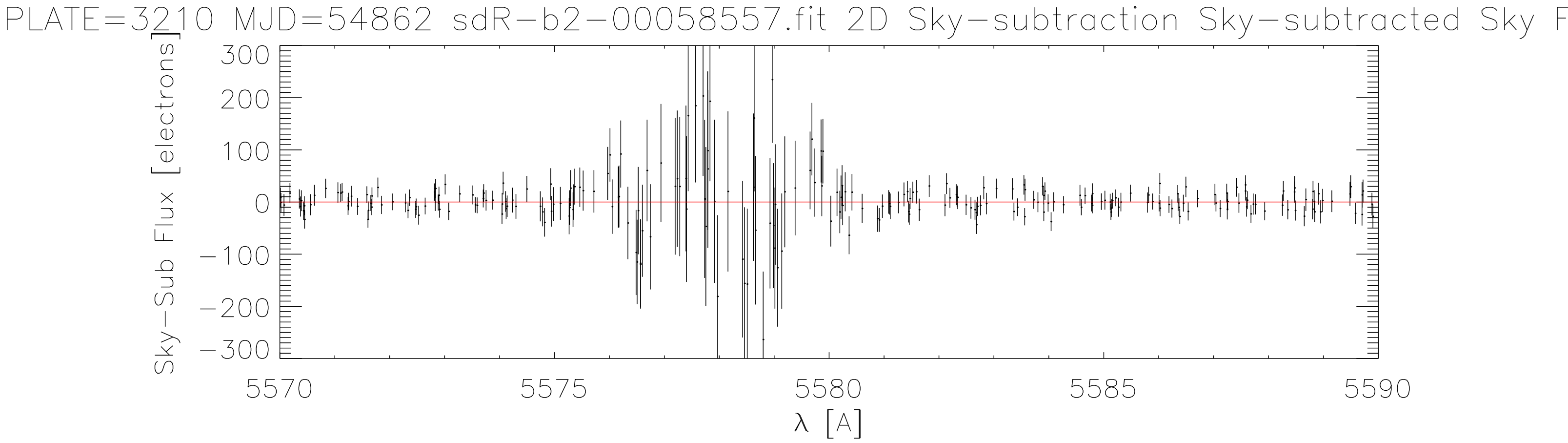
Number of sky fibers = 16

PLATE=3210 MJD=54862 sdR-b2-00058557.fit 1D Sky-subtraction Rescaled Errors



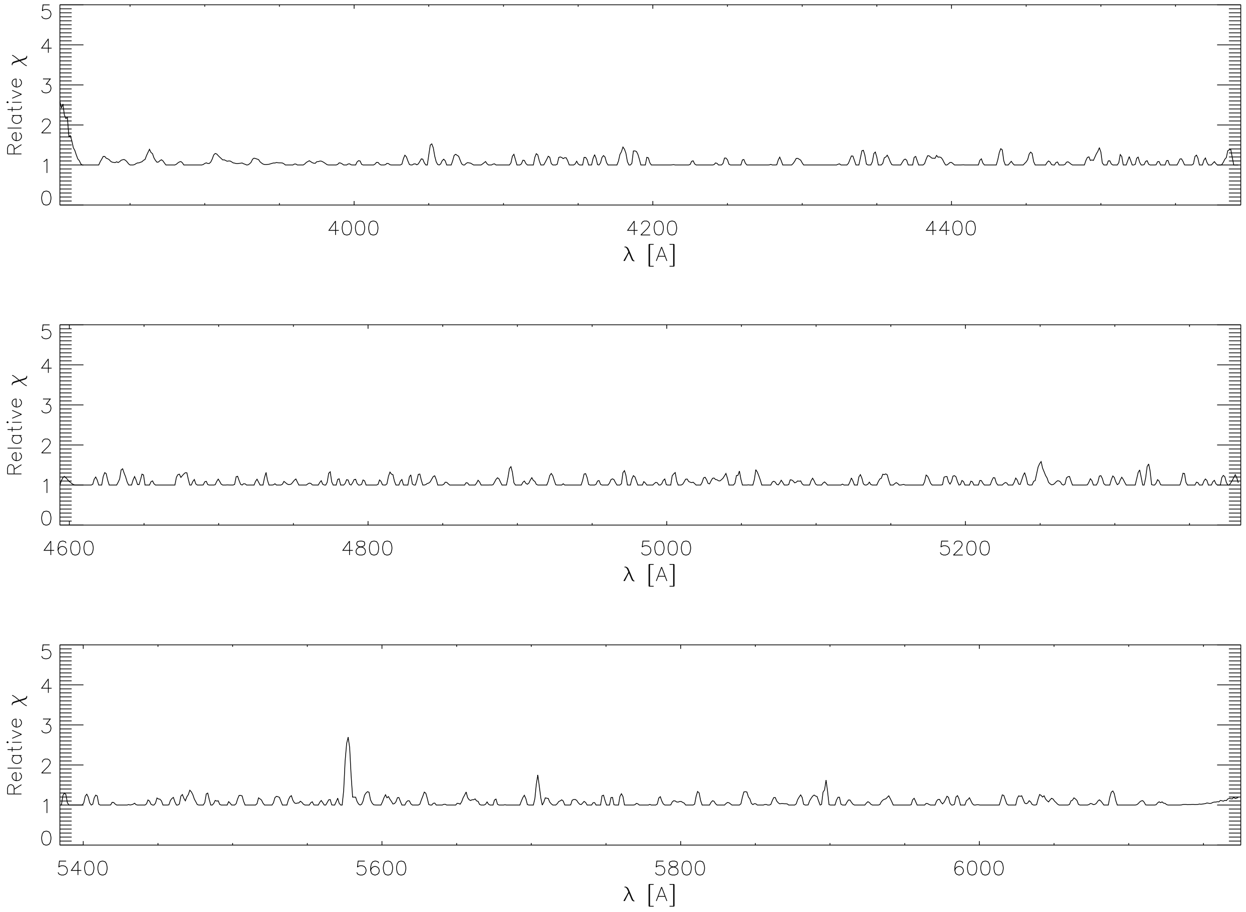

PLATE=3210 MJD=54862 sdR-b2-00058557.fit 2D Sky-subtraction Sky Fiber
Median χ²
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−6
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

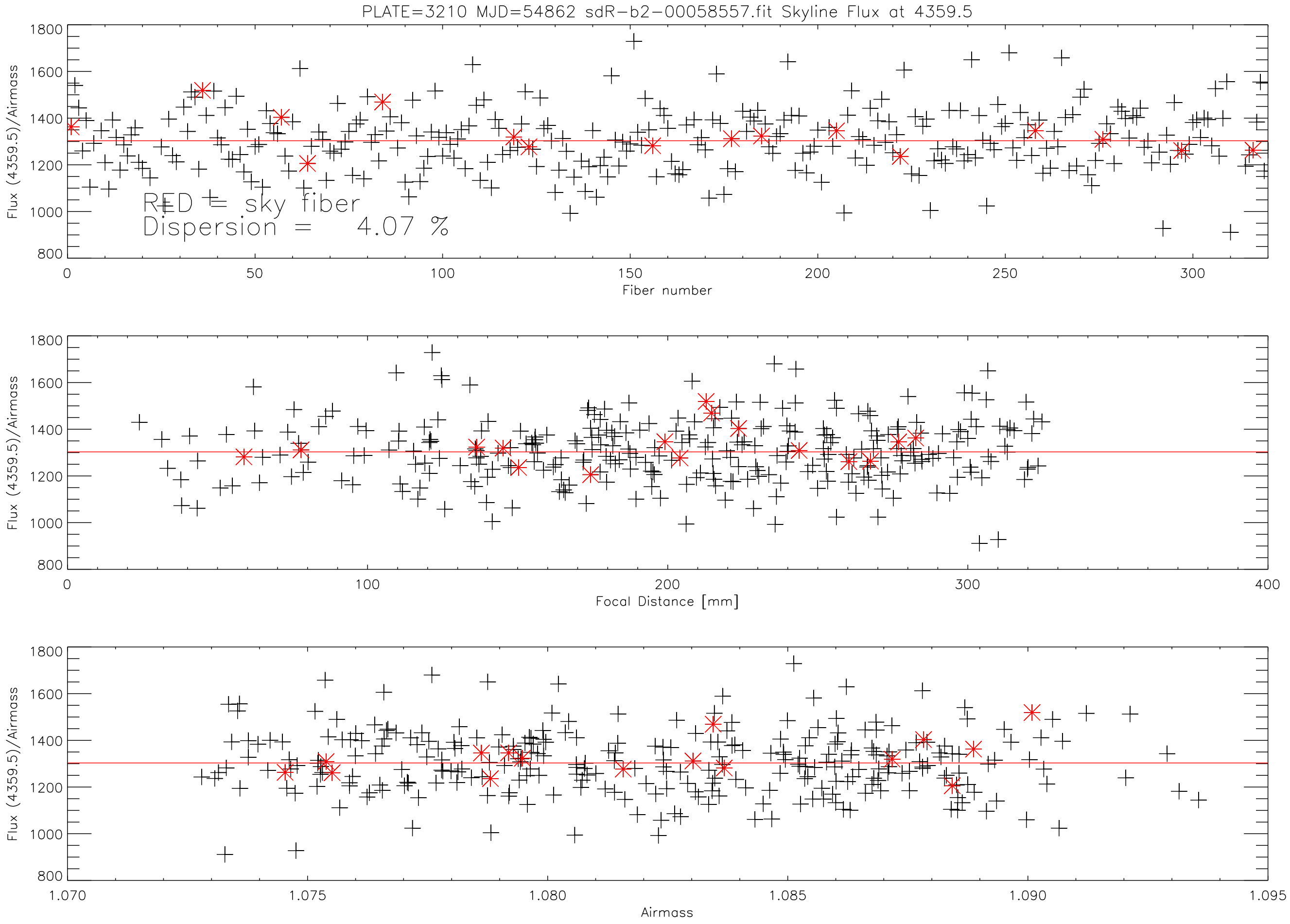

PLATE=3210 MJD=54862 sdR-b2-00058557.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=3210 MJD=54862 sdR-b2-00058557.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

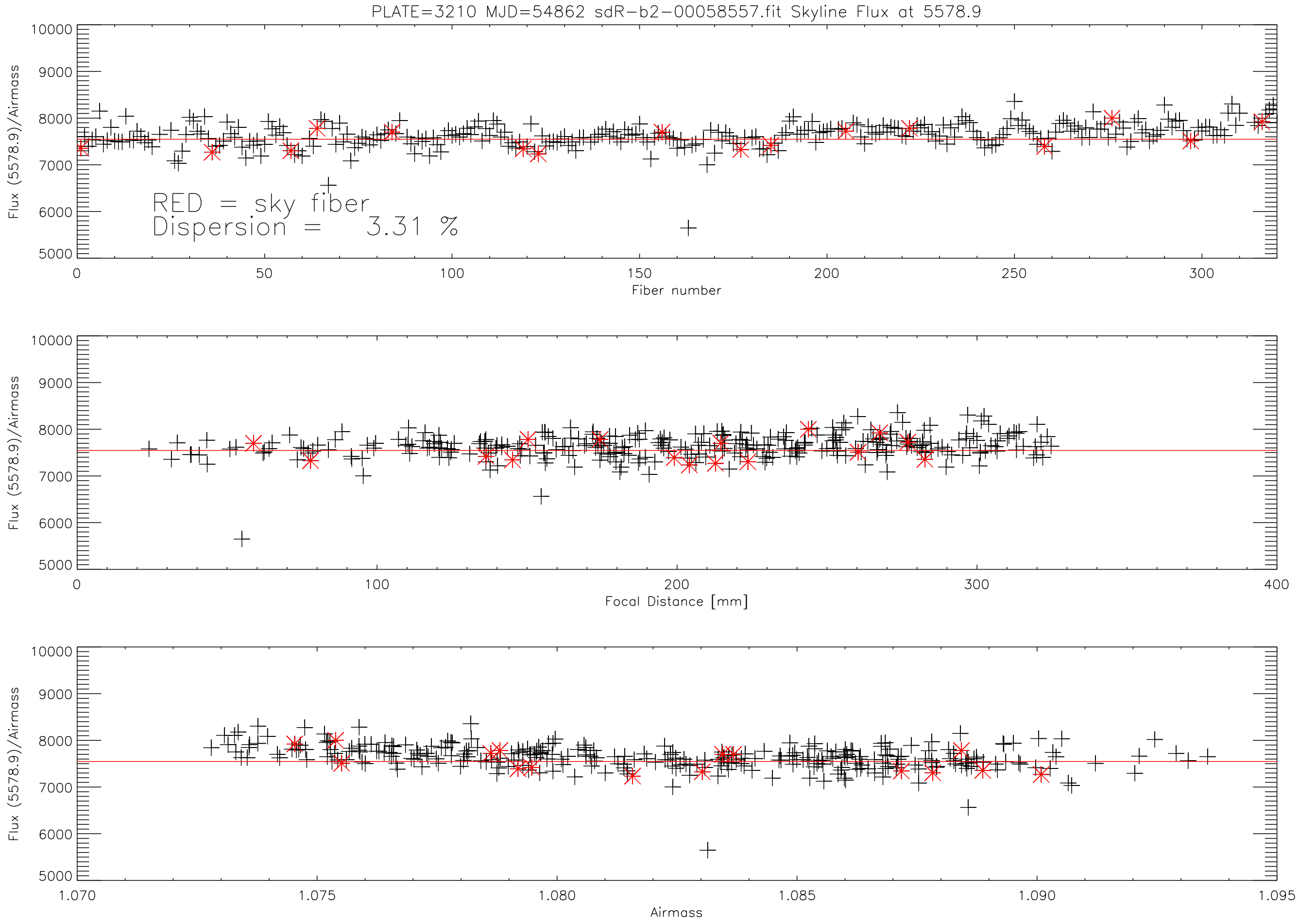
Number of sky fibers = 16

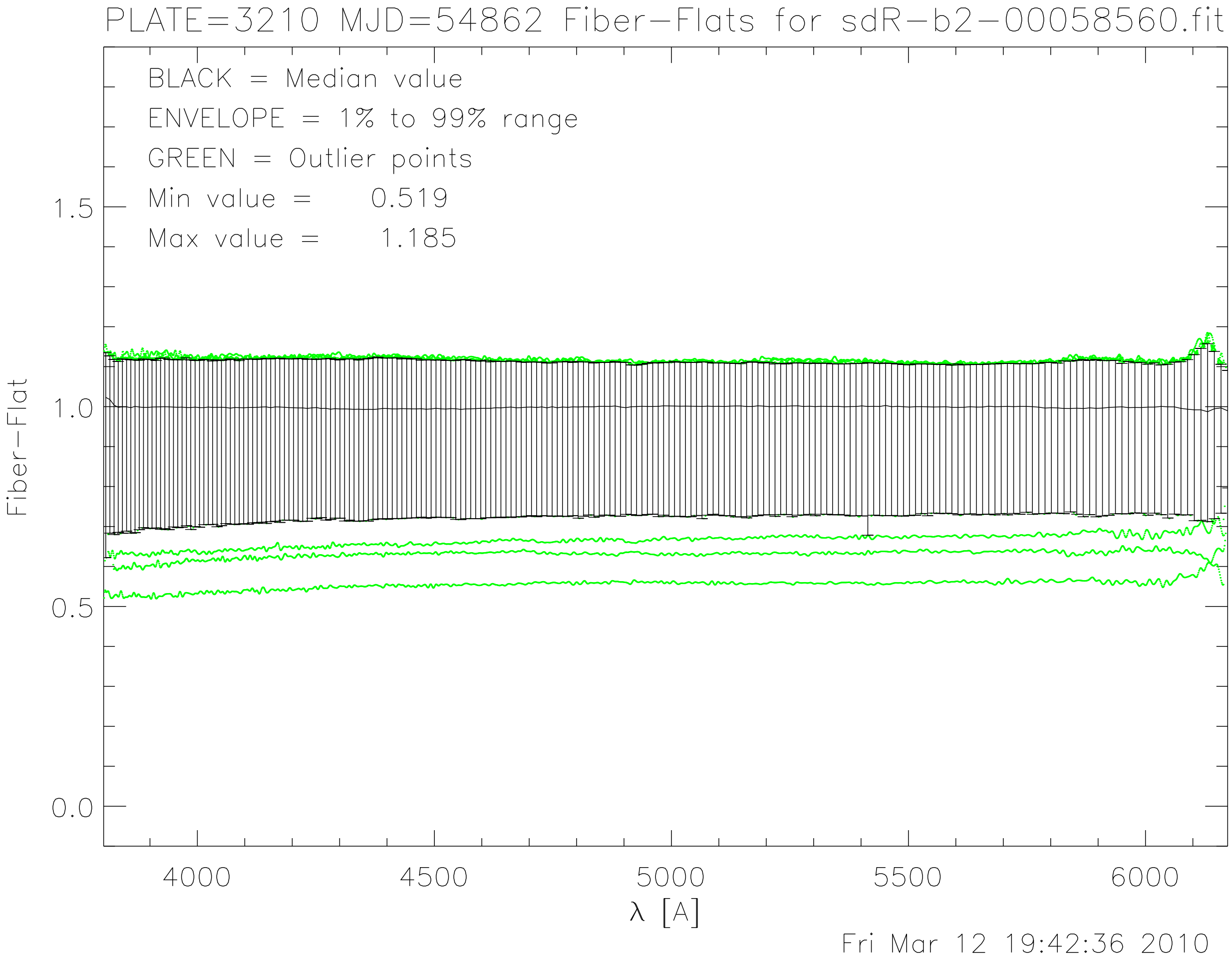
PLATE=3210 MJD=54862 sdR-b2-00058557.fit 2D Sky-subtraction Rescaled Errors

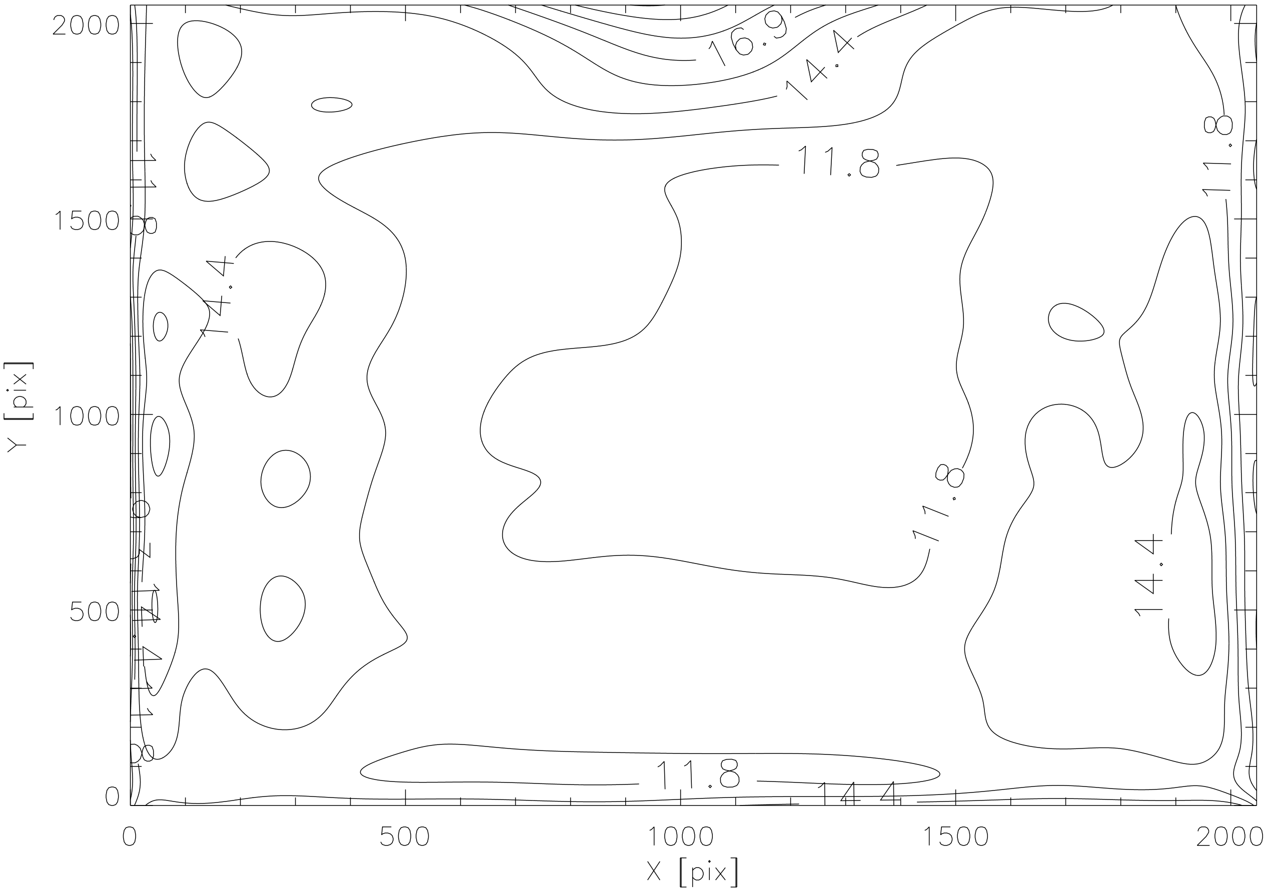


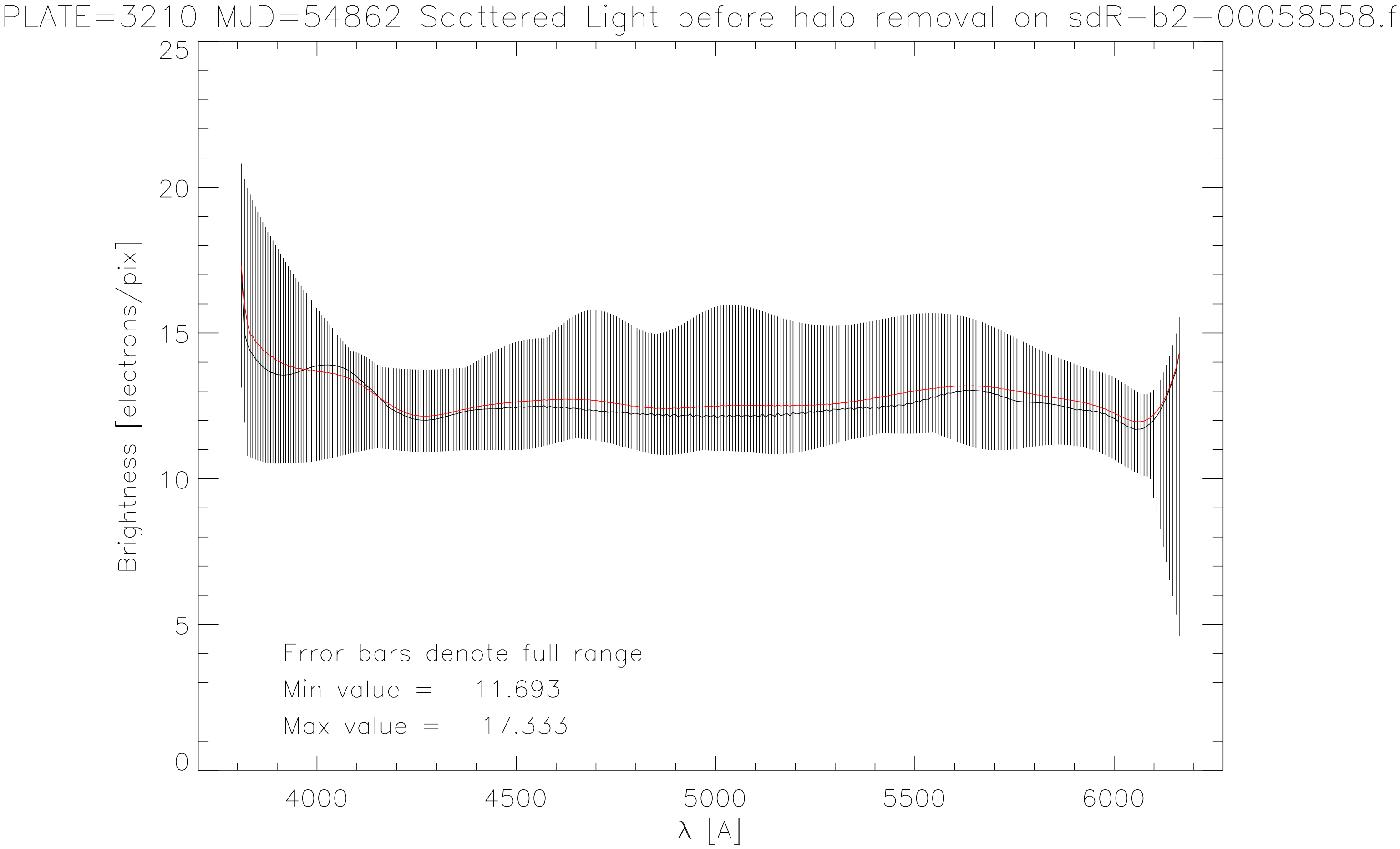


PLATE=3210 MJD=54862 sdR-b2-00058557.fit Skyline Flux at 4359.5


PLATE=3210 MJD=54862 sdR-b2-00058557.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 3.31 %
Flux (5578.9)/Airmass
10000
9000
8000
7000
6000
5000
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
10000
9000
8000
7000
6000
5000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
10000
9000
8000
7000
6000
5000
1.070
1.075
1.080
1.085
1.090
1.095
Airmass

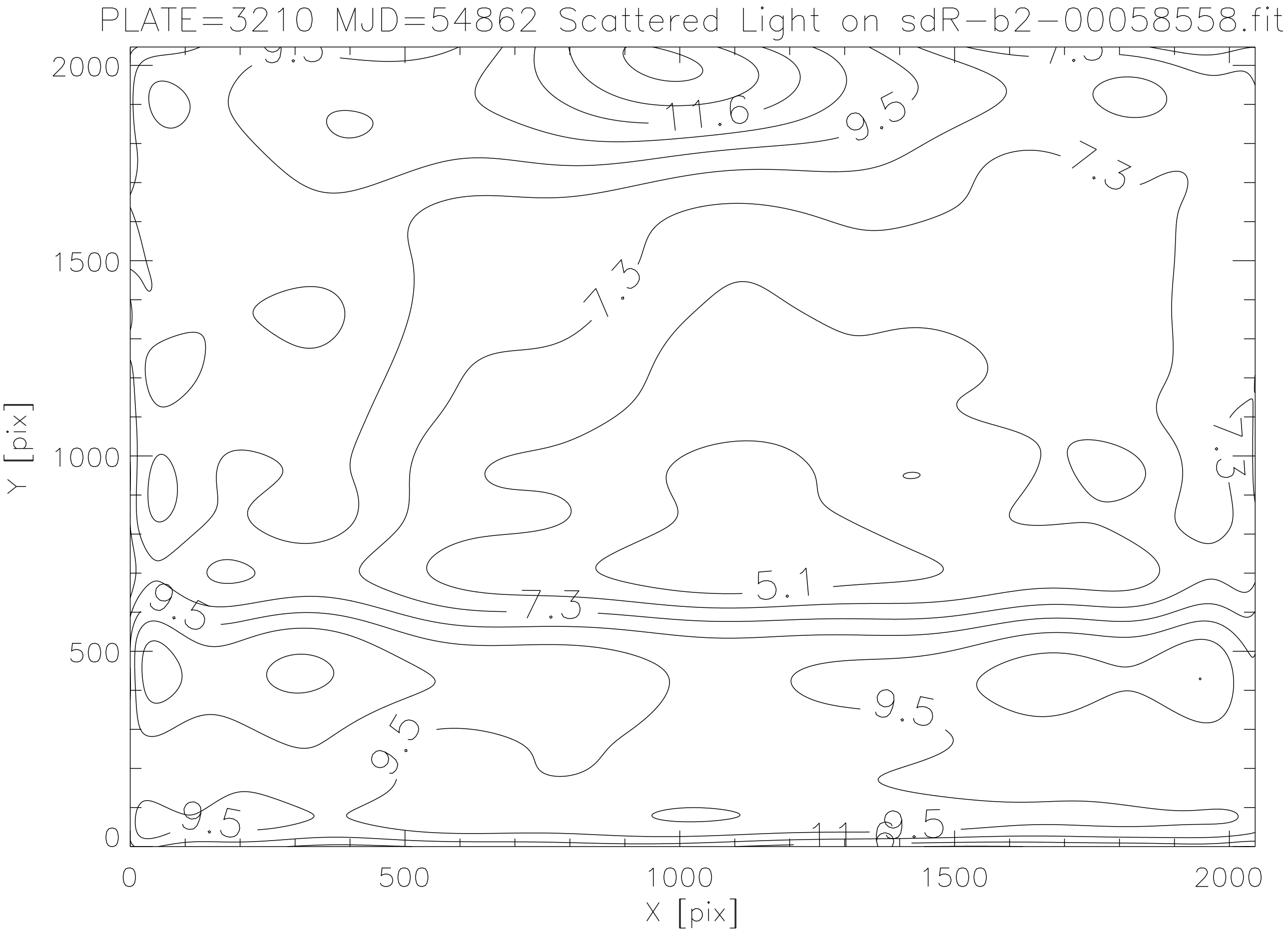

PLATE=3210 MJD=54862 Fiber-Flats for sdR-b2-00058560.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.519
Max value = 1.185
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 12 19:42:36 2010


PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b2-00058558.f

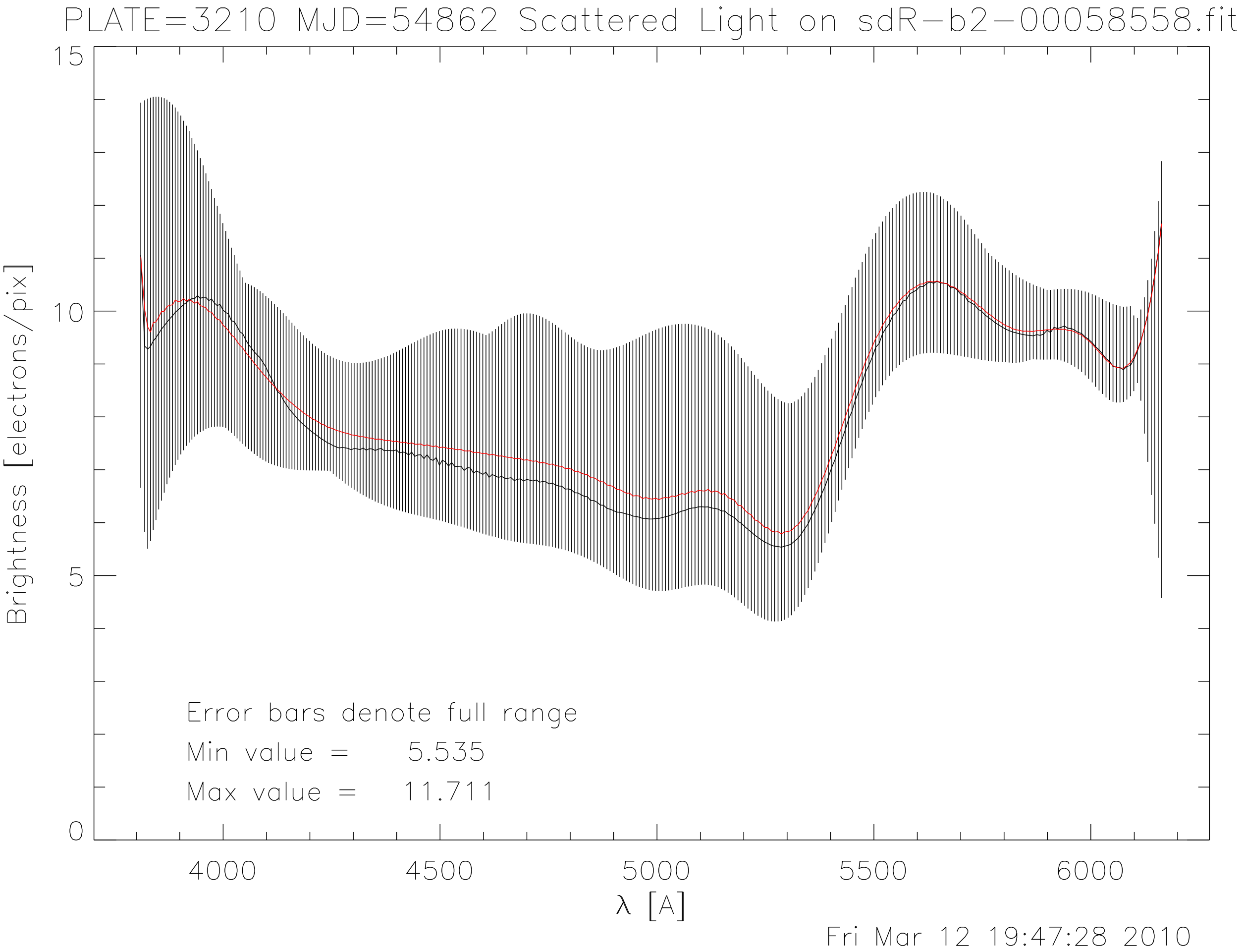


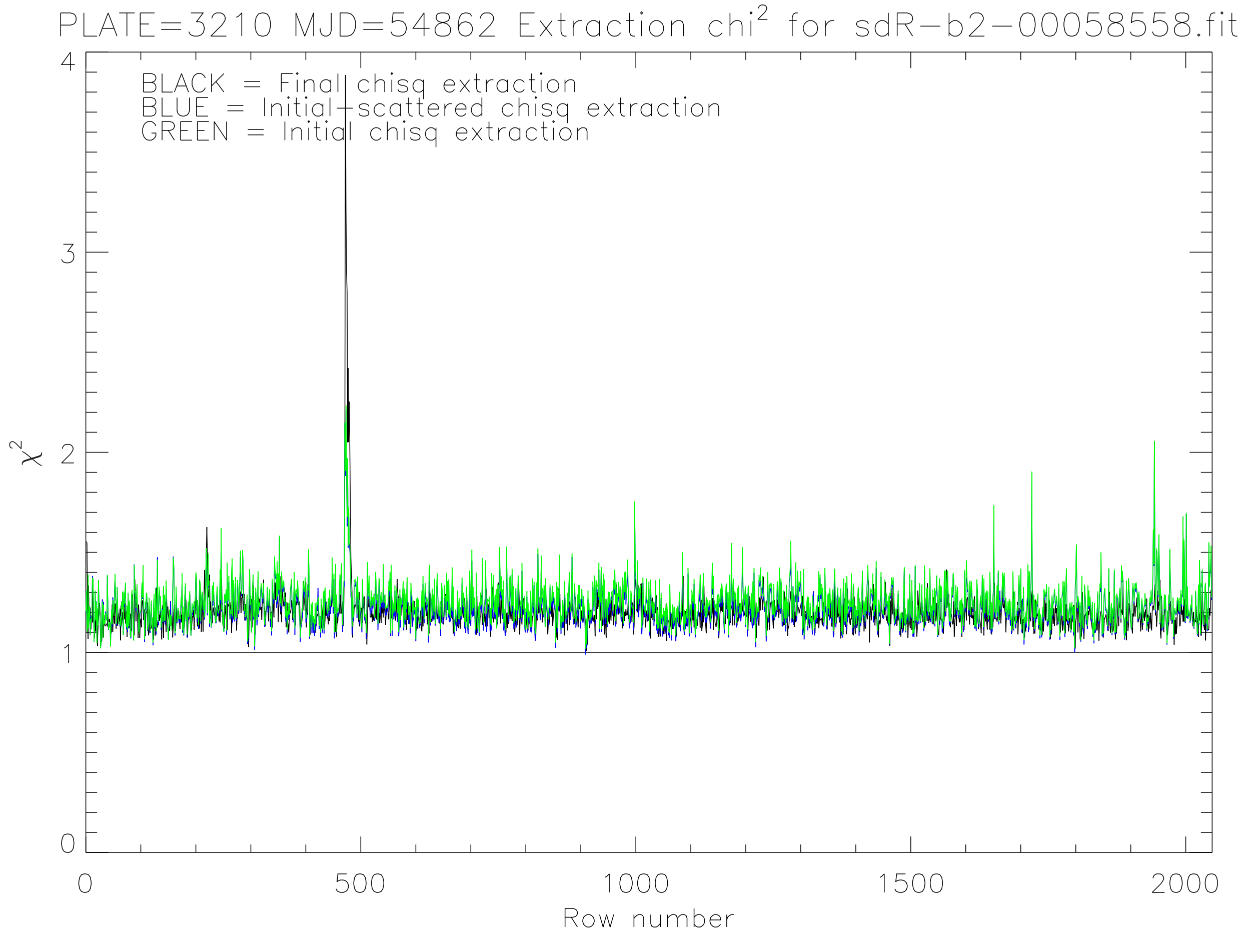
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b2-00058558.f

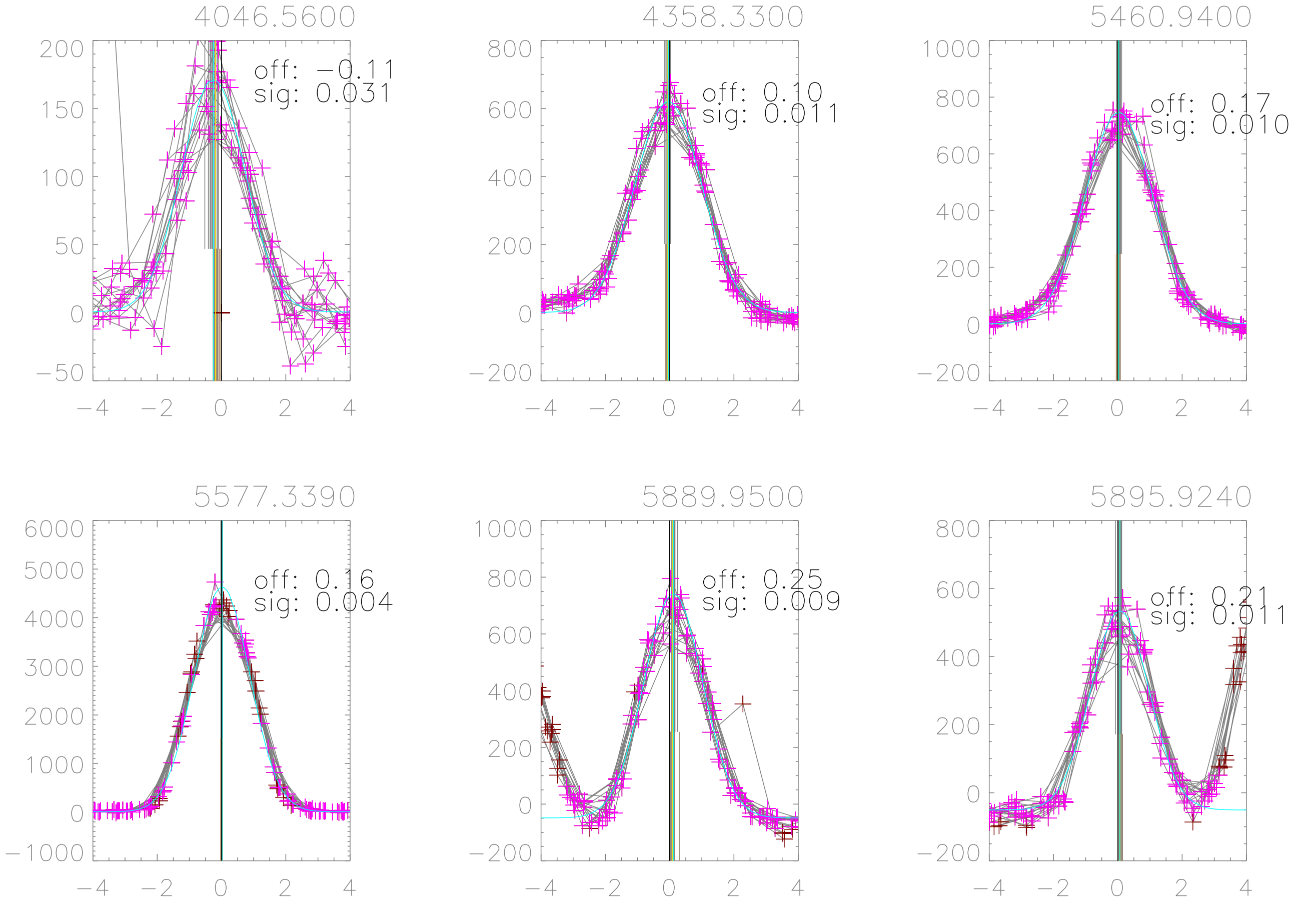
Fri Mar 12 19:43:41 2010

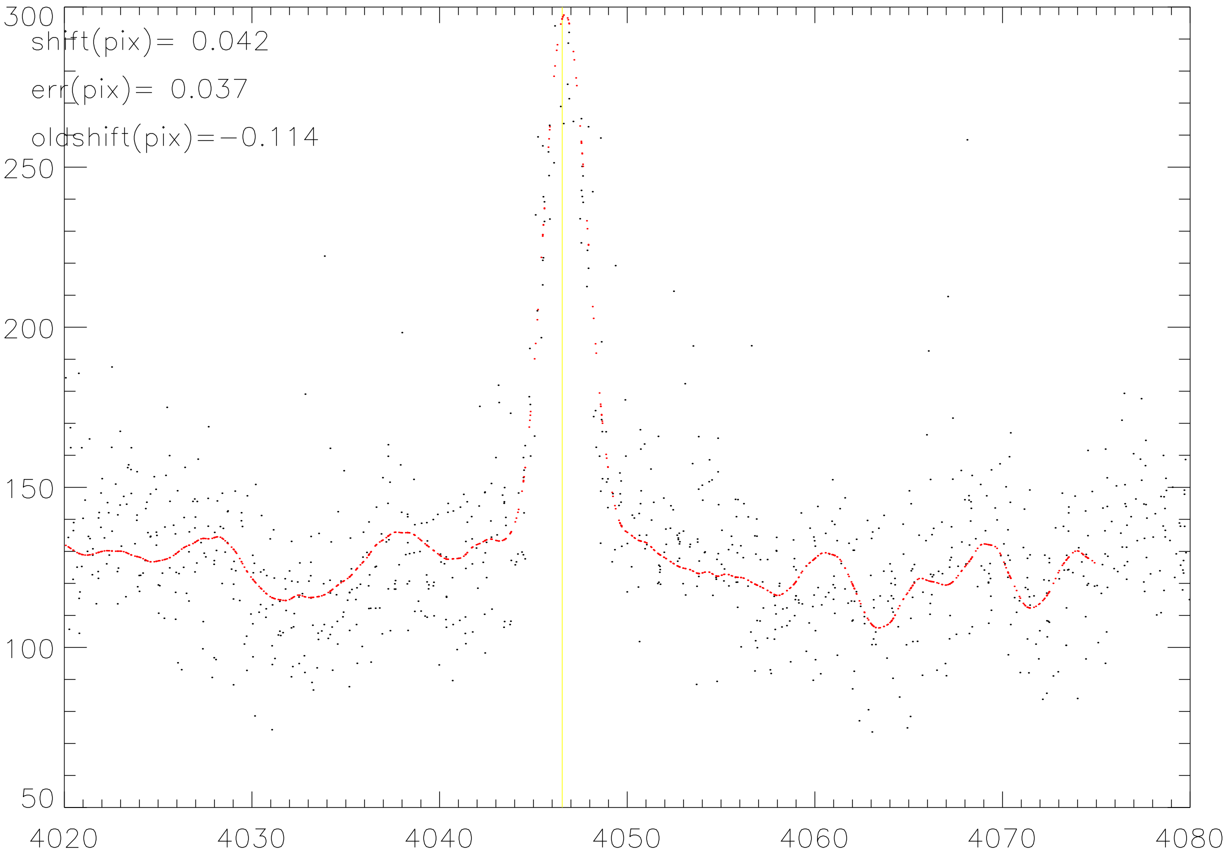


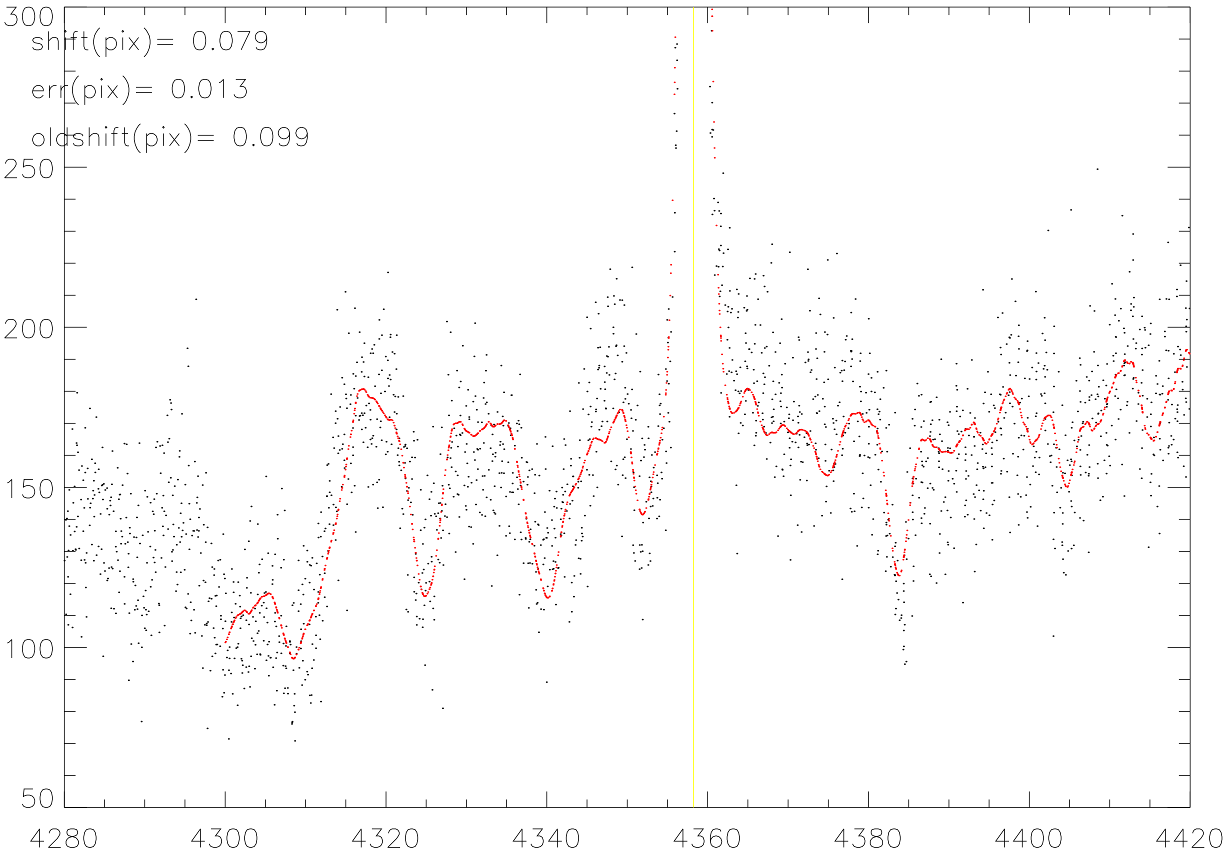
PLATE=3210 MJD=54862 Scattered Light on sdR-b2-00058558.fit

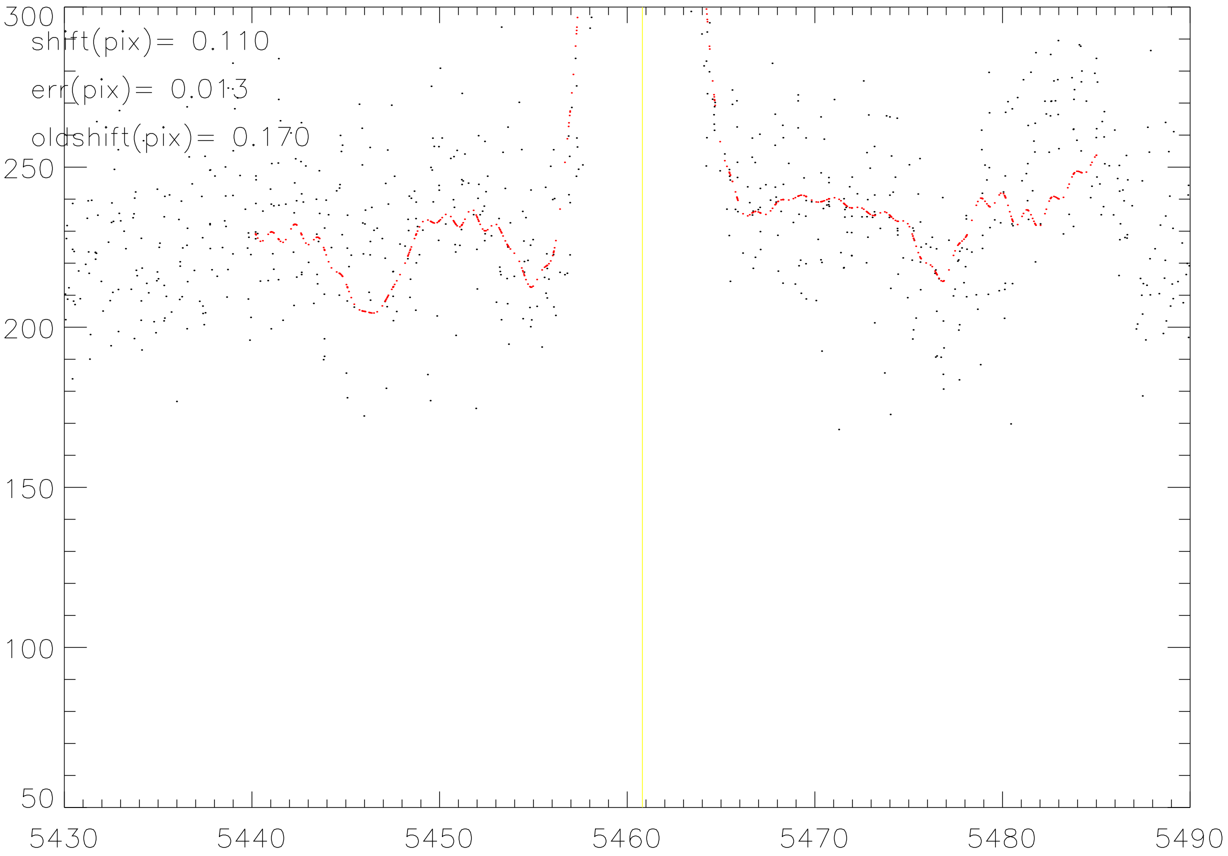

PLATE=3210 MJD=54862 Scattered Light on sdR-b2-00058558.fit
Brightness [electrons/pix]
λ [A]
0
5
10
15
4000
4500
5000
5500
6000
Error bars denote full range
Min value = 5.535
Max value = 11.711
Fri Mar 12 19:47:28 2010

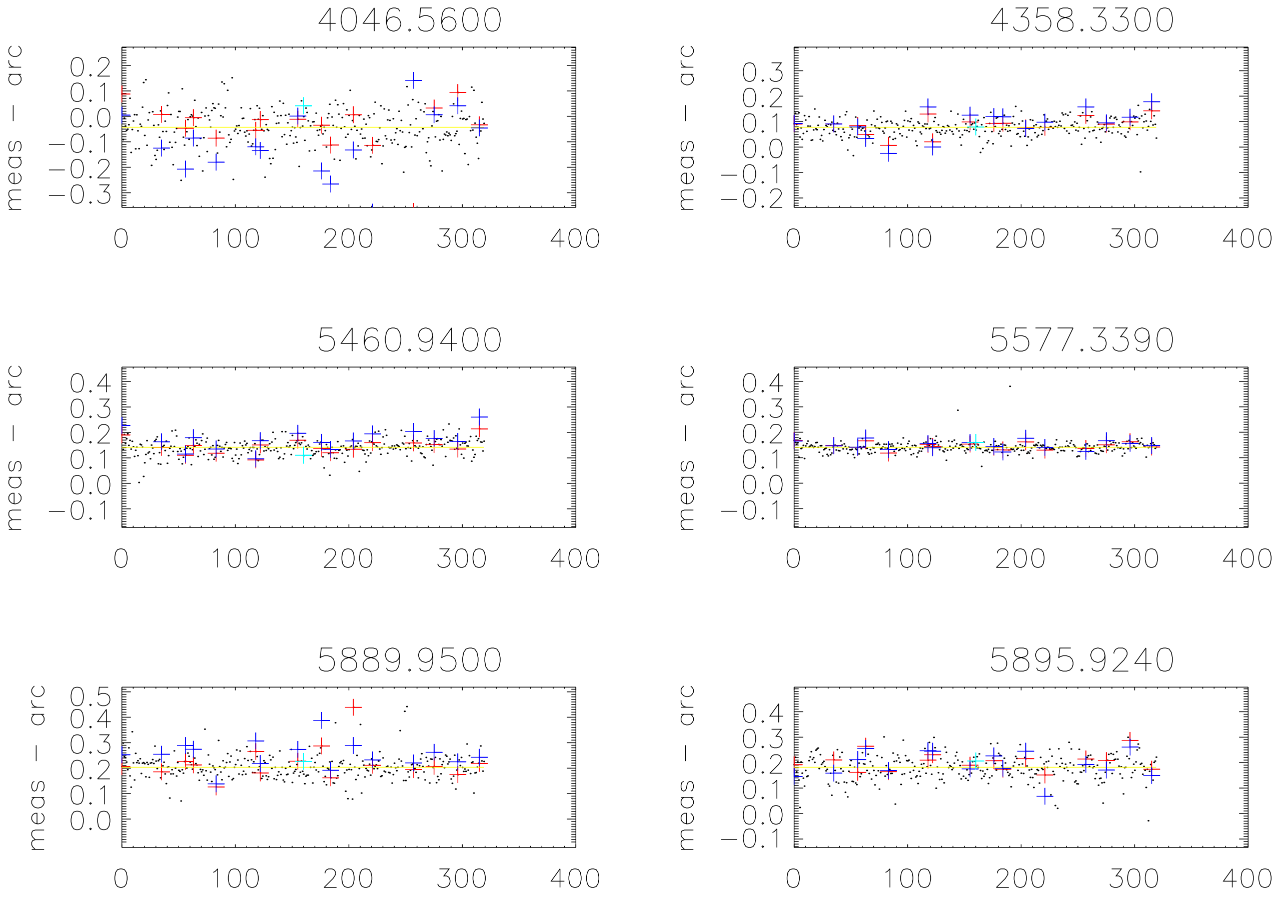

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-b2-00058558.fit

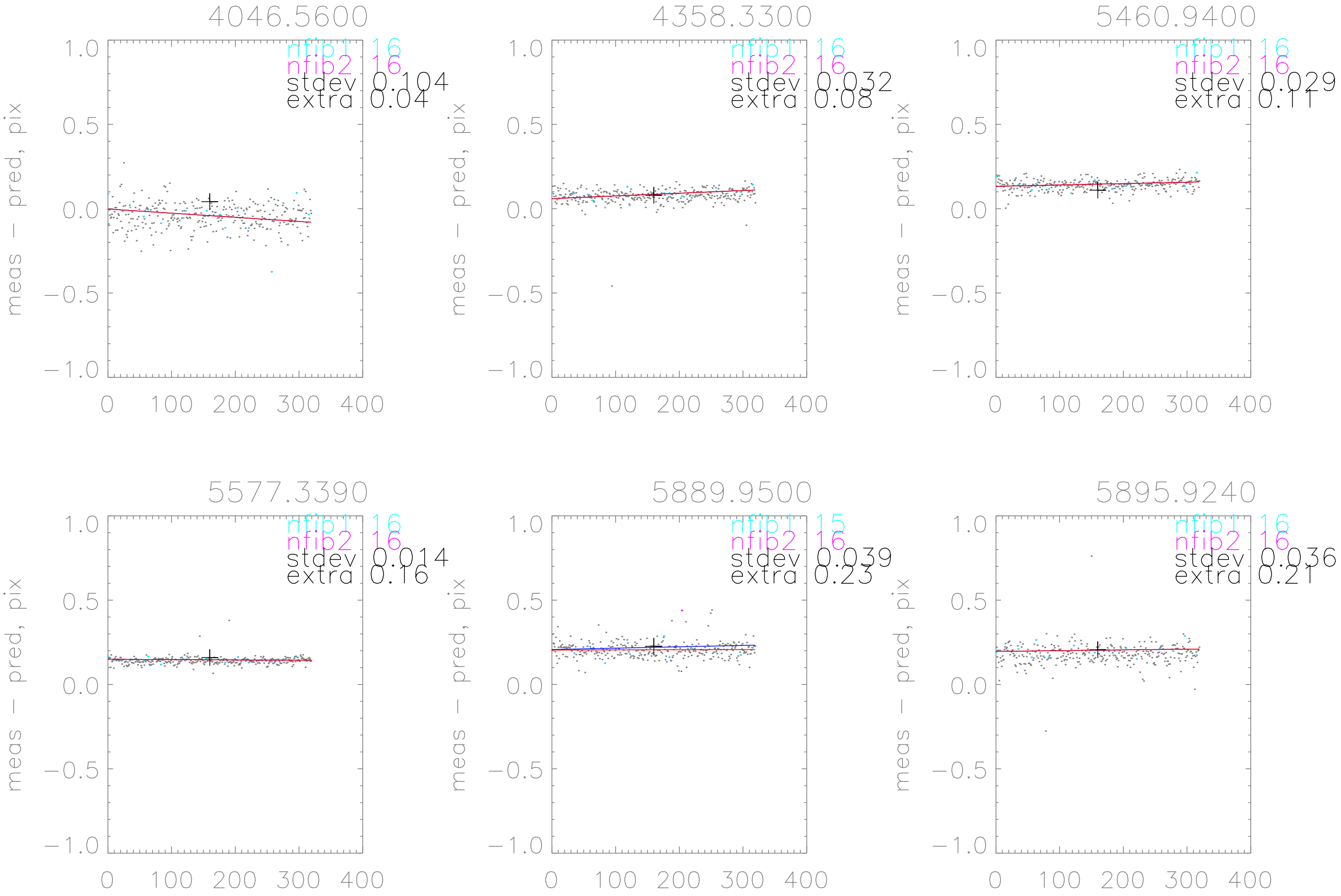

4046.5600
off: −0.11
sig: 0.031
4358.3300
off: 0.10
sig: 0.011
5460.9400
off: 0.17
sig: 0.010
5577.3390
off: 0.16
sig: 0.004
5889.9500
off: 0.25
sig: 0.009
5895.9240
off: 0.21
sig: 0.011

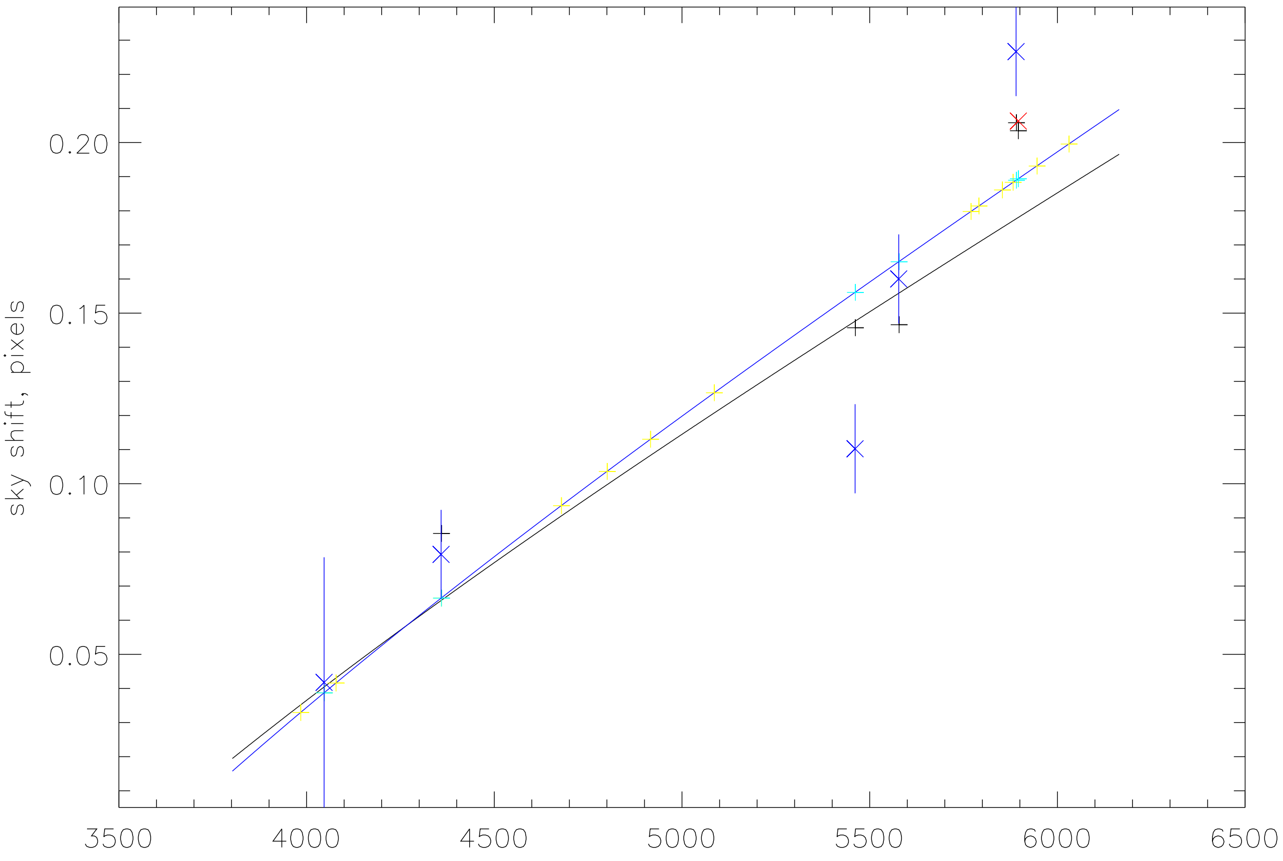

shift(pix)= 0.042
err(pix)= 0.037
oldshift(pix)=−0.114
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

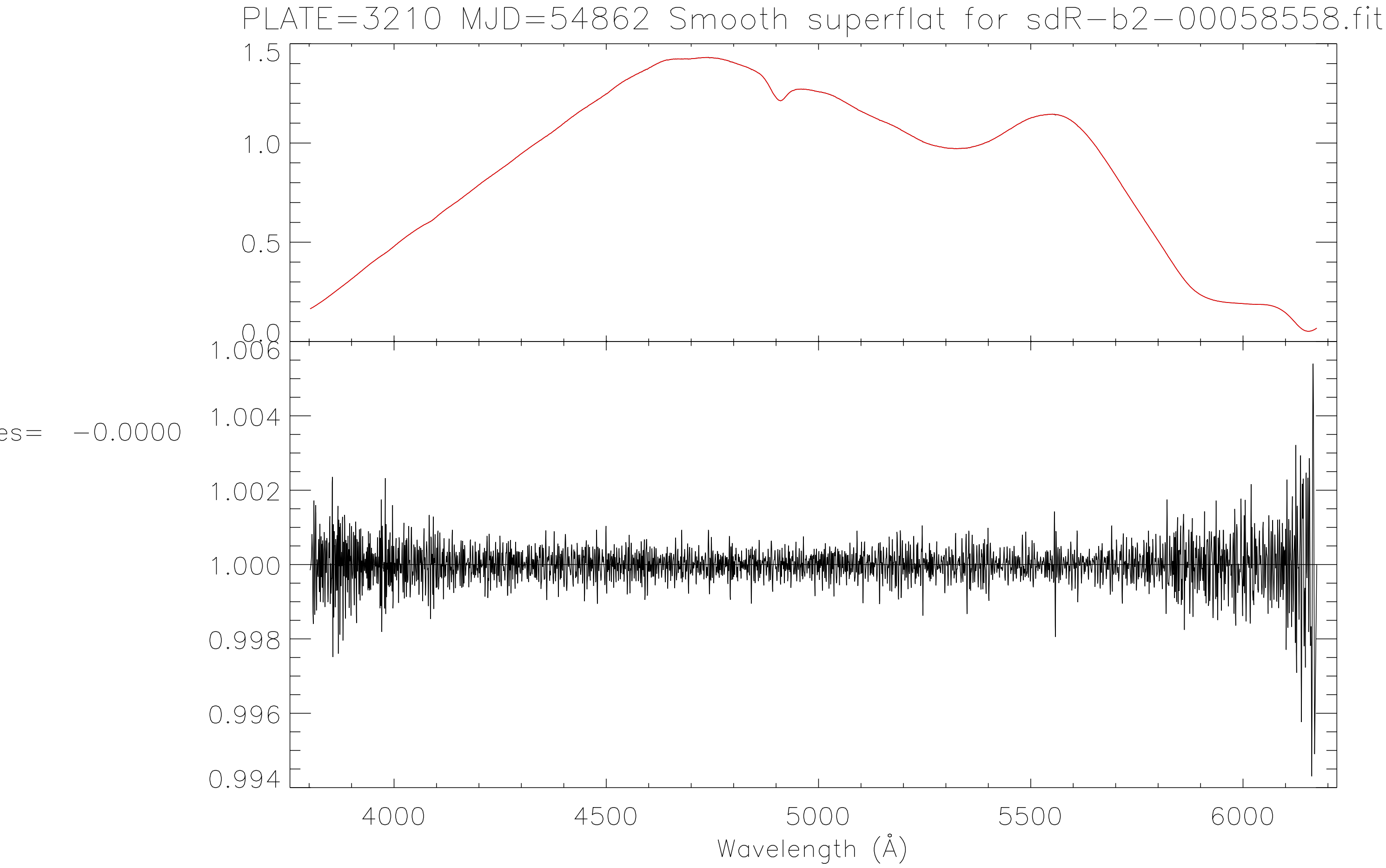

shift(pix)= 0.079
err(pix)= 0.013
oldshift(pix)= 0.099
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

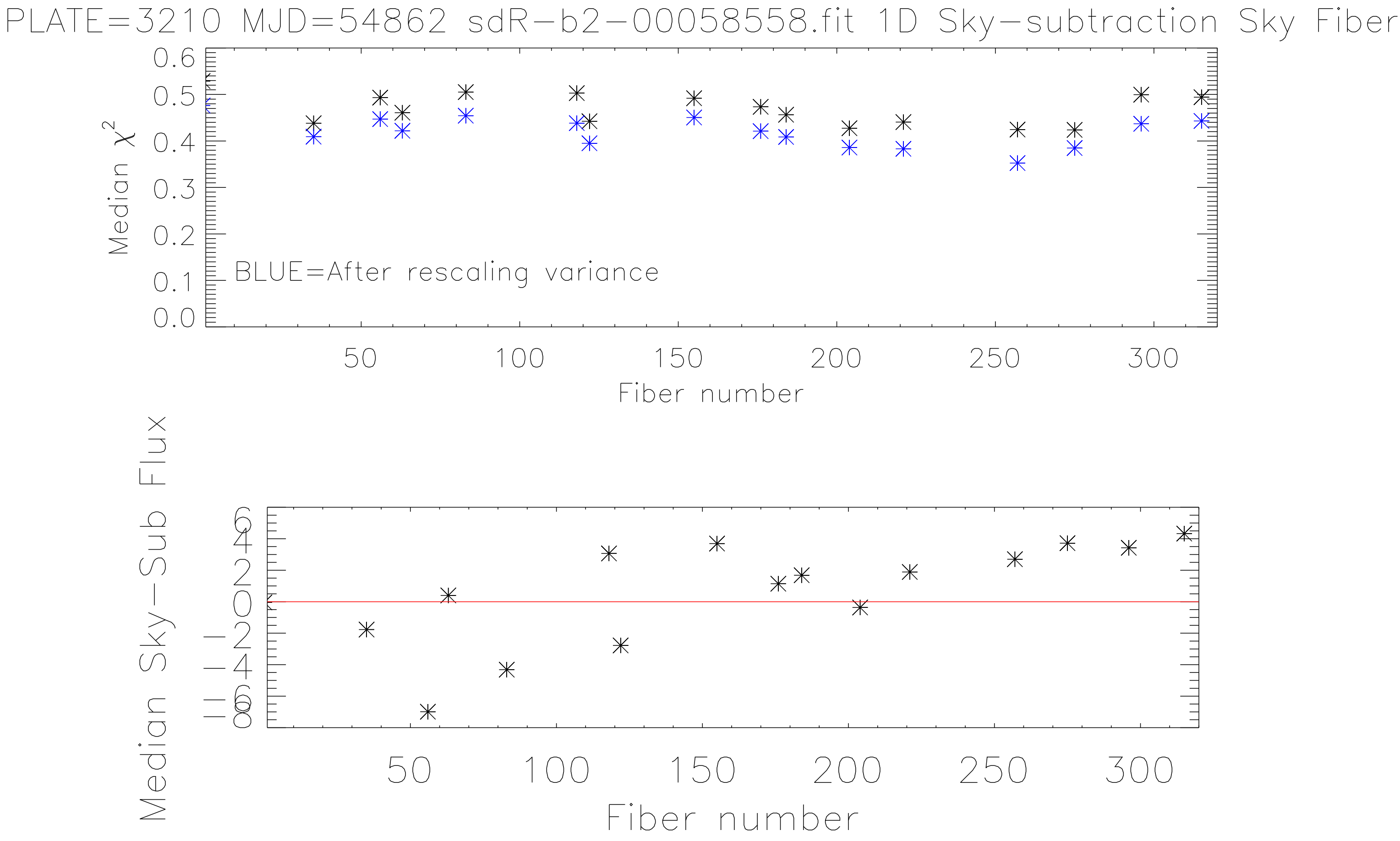

shift(pix)= 0.110
err(pix)= 0.013
oldshift(pix)= 0.170
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

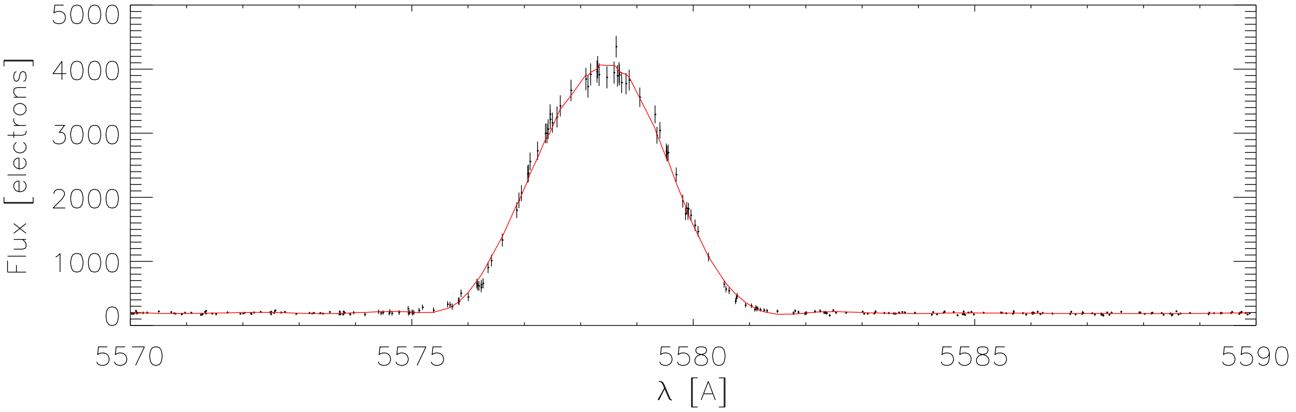

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400
4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400
5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400
5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400
5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0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


4046.5600
nfib1 16
nfib2 16
stdev 0.104
extra 0.04
4358.3300
nfib1 16
nfib2 16
stdev 0.032
extra 0.08
5460.9400
nfib1 16
nfib2 16
stdev 0.029
extra 0.11
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.16
5889.9500
nfib1 15
nfib2 16
stdev 0.039
extra 0.23
5895.9240
nfib1 16
nfib2 16
stdev 0.036
extra 0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

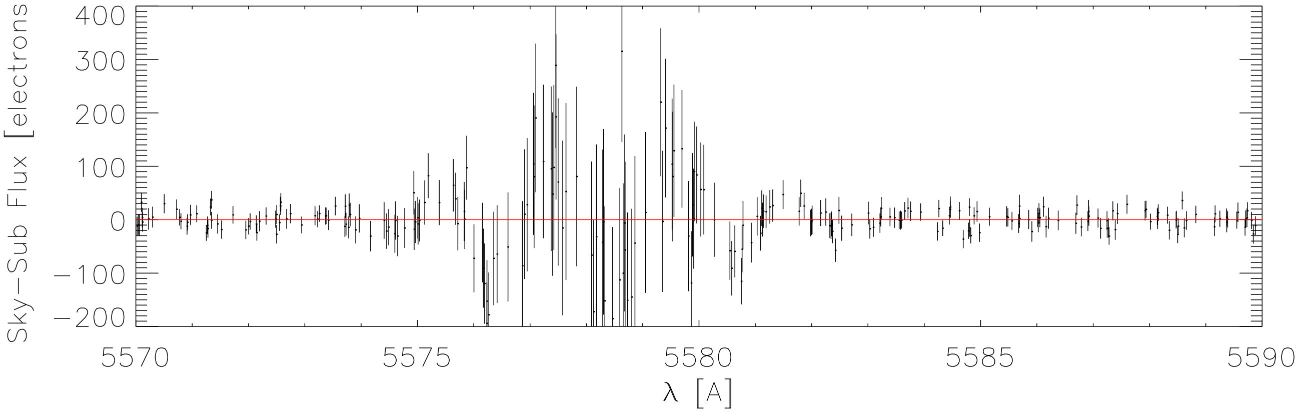

sky shift, pixels
0.05
0.10
0.15
0.20
3500
4000
4500
5000
5500
6000
6500


PLATE=3210 MJD=54862 Smooth superflat for sdR-b2-00058558.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3210 MJD=54862 sdR-b2-00058558.fit 1D Sky-subtraction Sky Fiber
Median $\chi^2$
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
−8
−6
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number



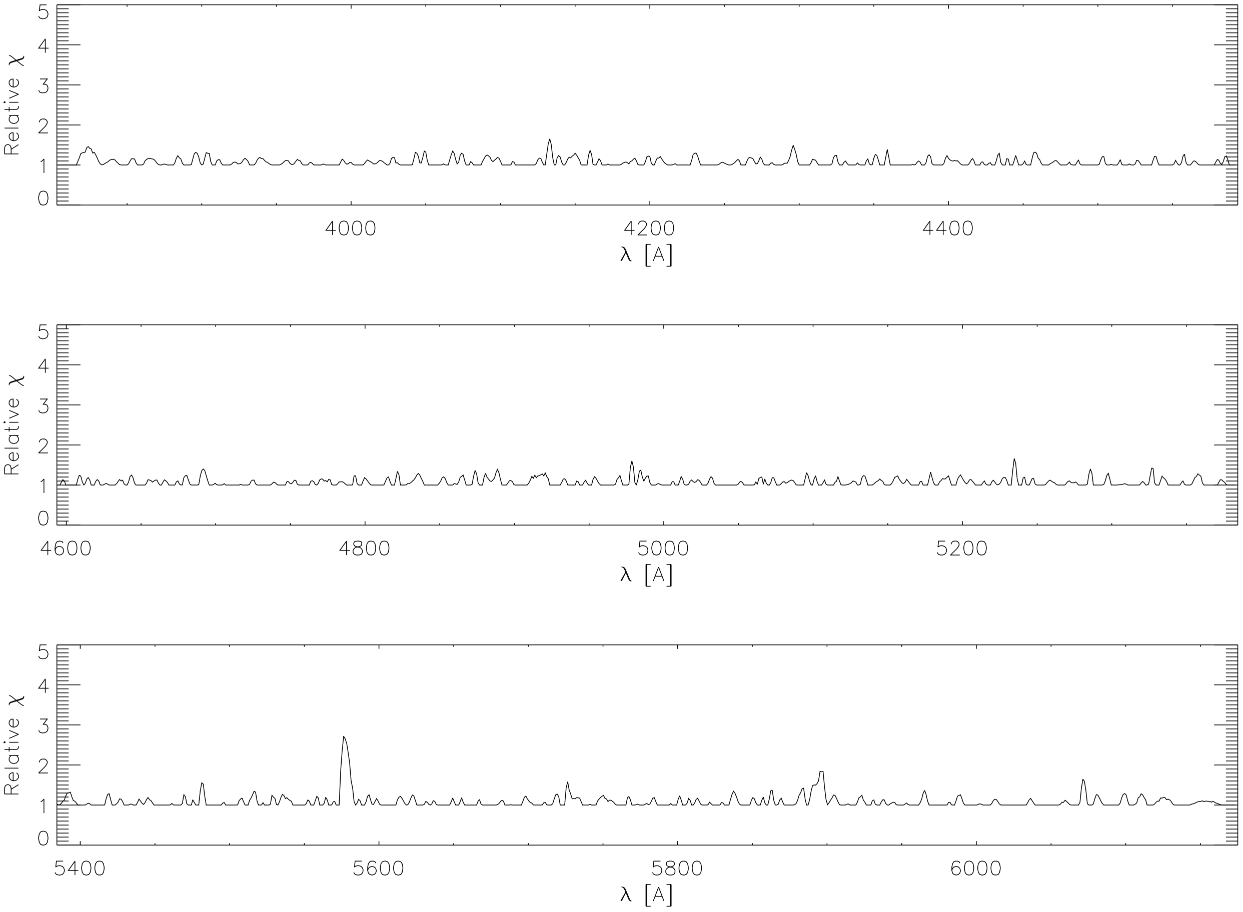
PLATE=3210 MJD=54862 sdR-b2-00058558.fit 1D Sky-subtraction Sky Fibers

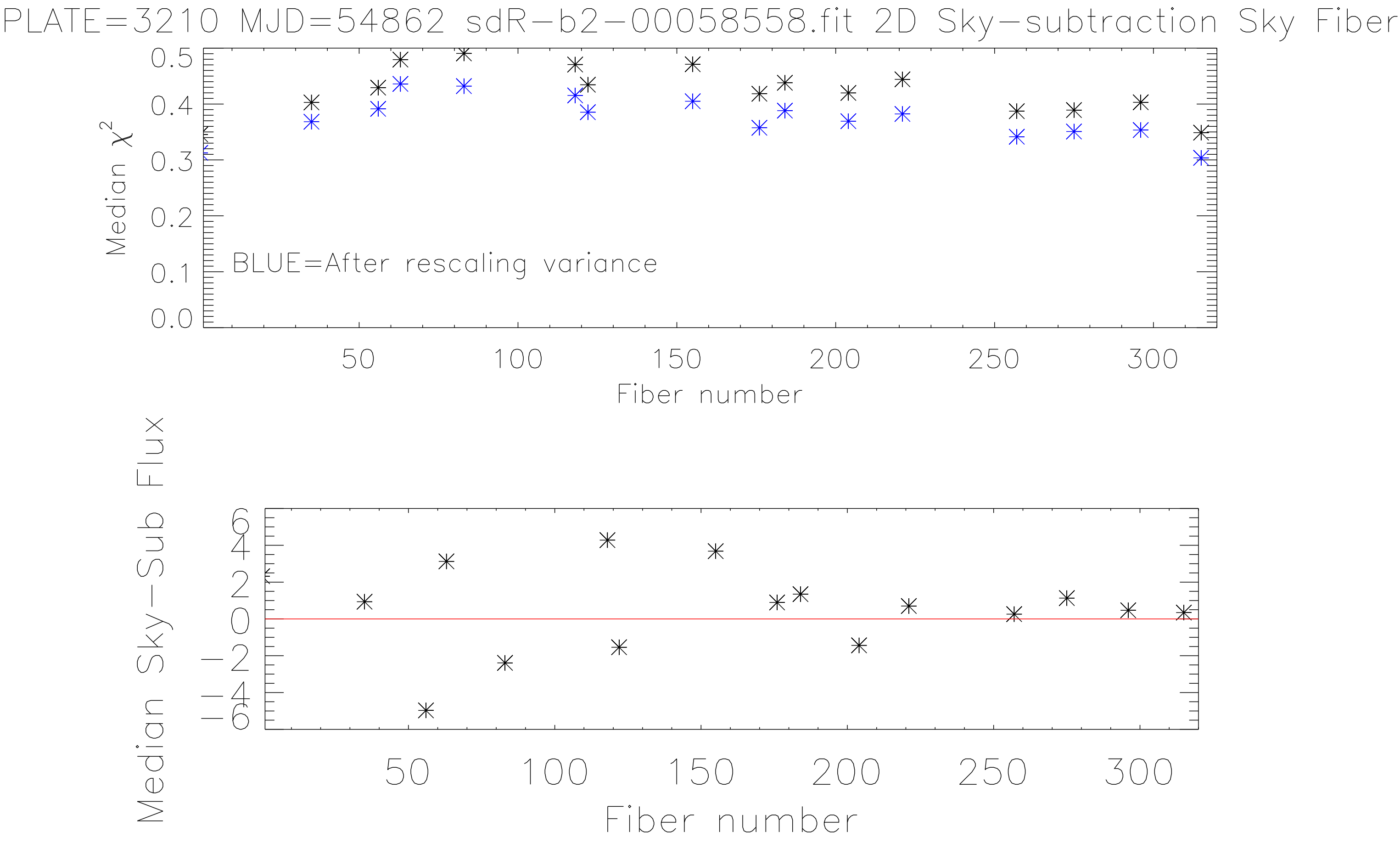


PLATE=3210 MJD=54862 sdR-b2-00058558.fit 1D Sky-subtraction Sky-subtracted Sky F

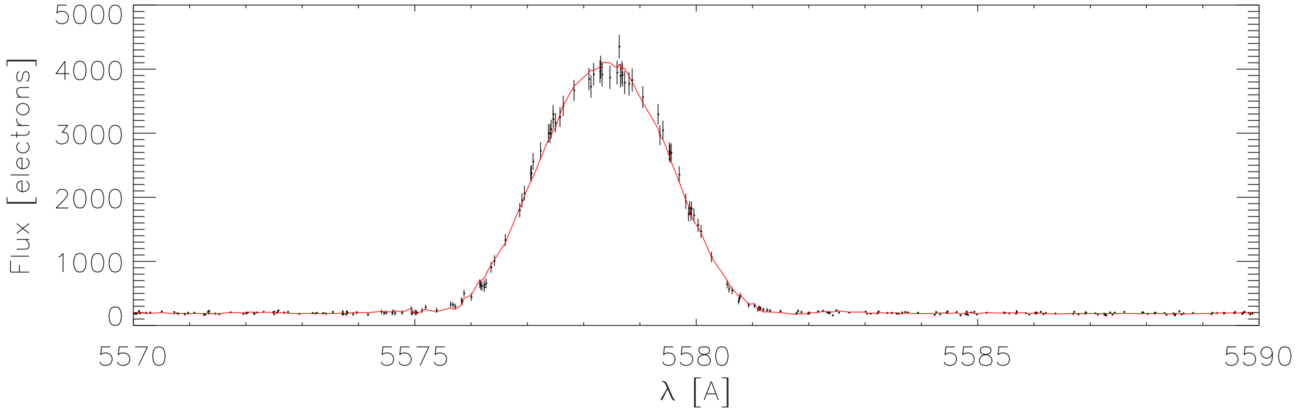
Number of sky fibers = 16

PLATE=3210 MJD=54862 sdR-b2-00058558.fit 1D Sky-subtraction Rescaled Errors

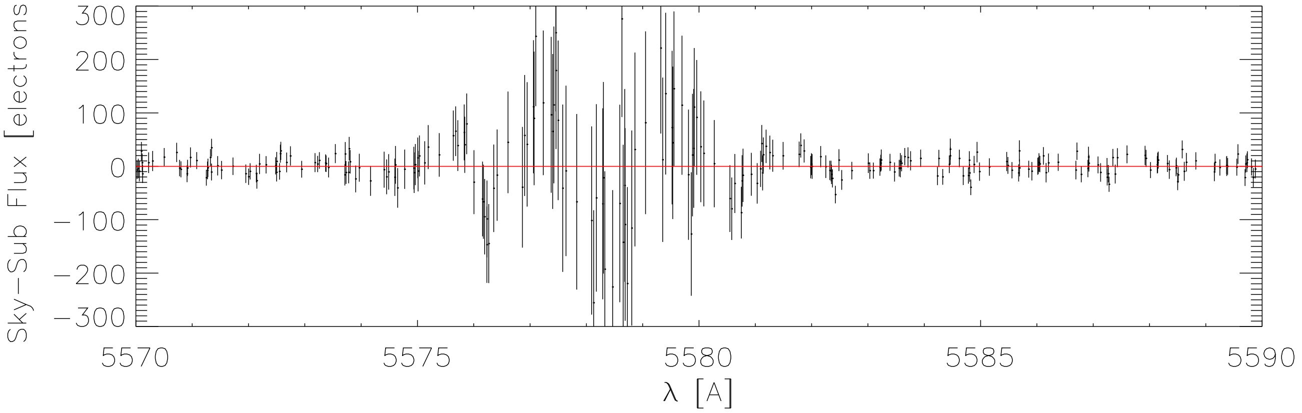




PLATE=3210 MJD=54862 sdR-b2-00058558.fit 2D Sky-subtraction Sky Fiber



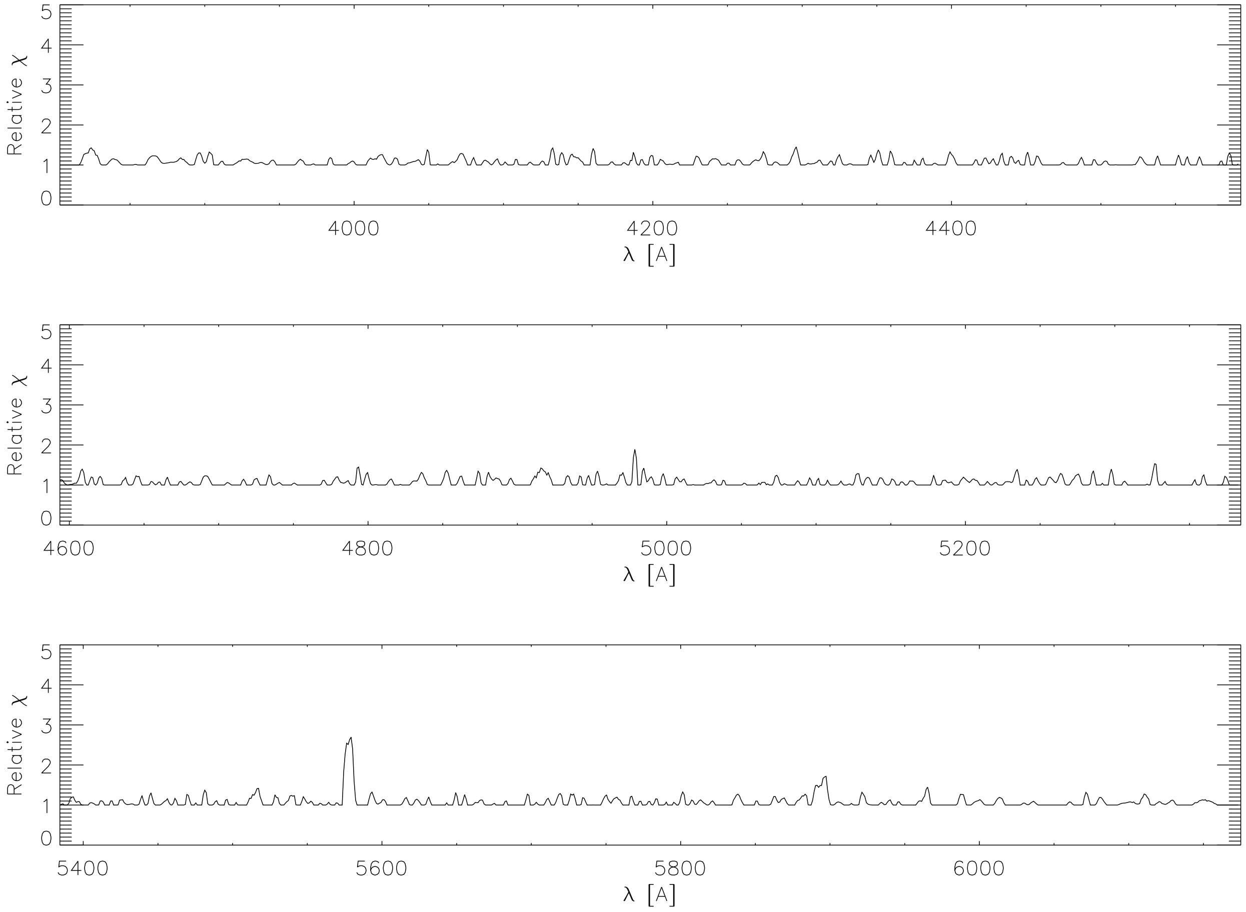
PLATE=3210 MJD=54862 sdR-b2-00058558.fit 2D Sky-subtraction Sky Fibers

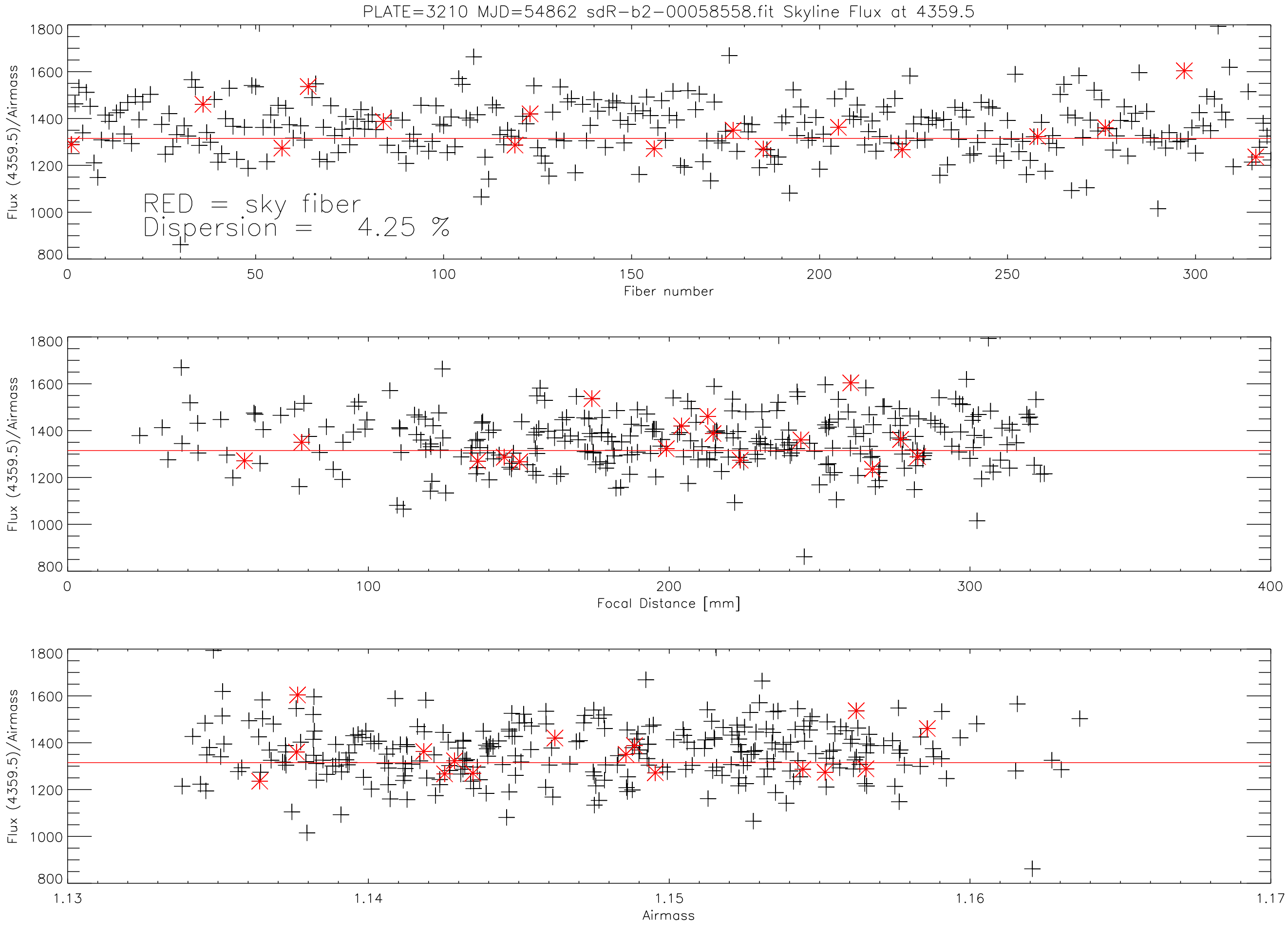


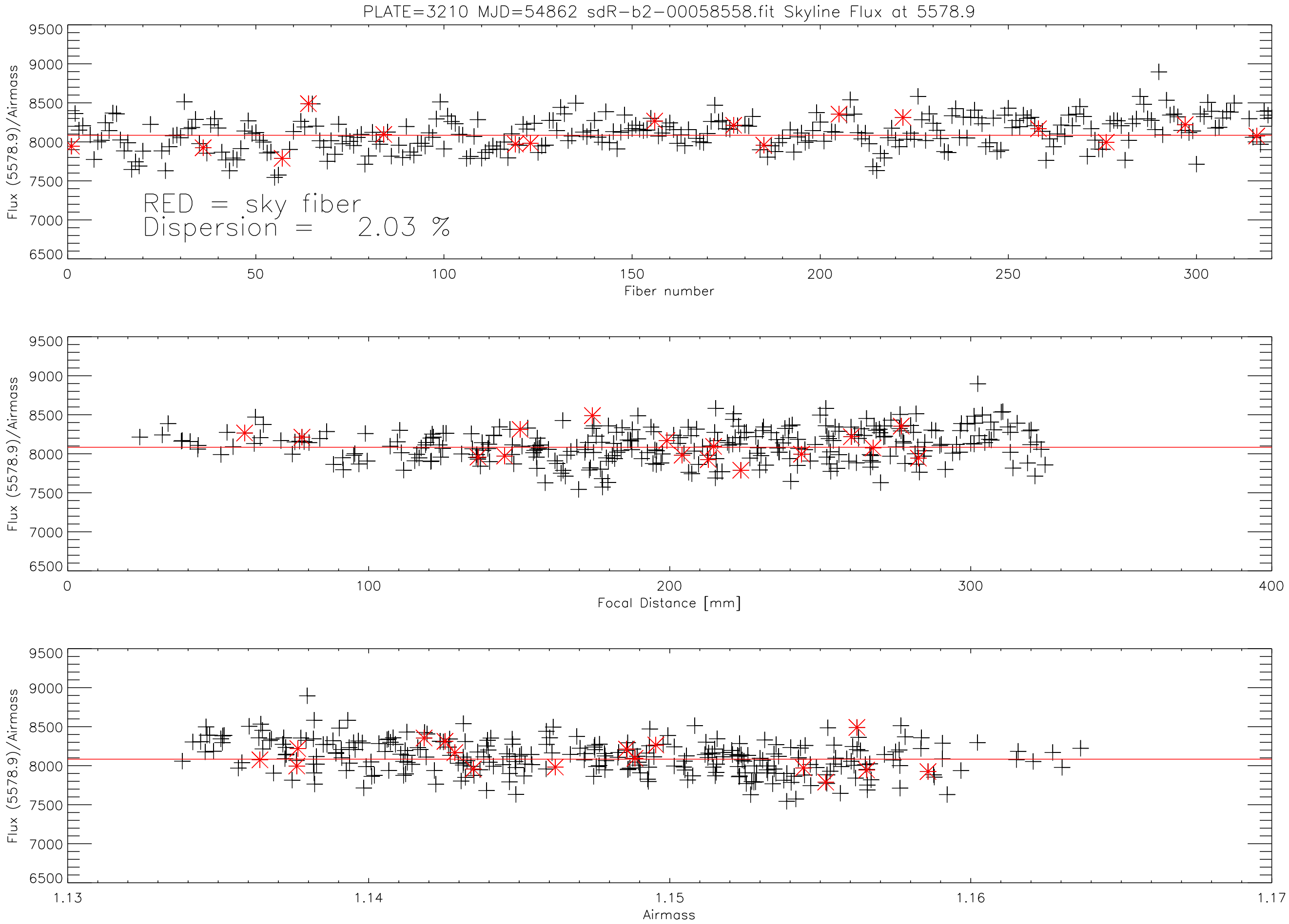
PLATE=3210 MJD=54862 sdR-b2-00058558.fit 2D Sky-subtraction Sky-subtracted Sky F

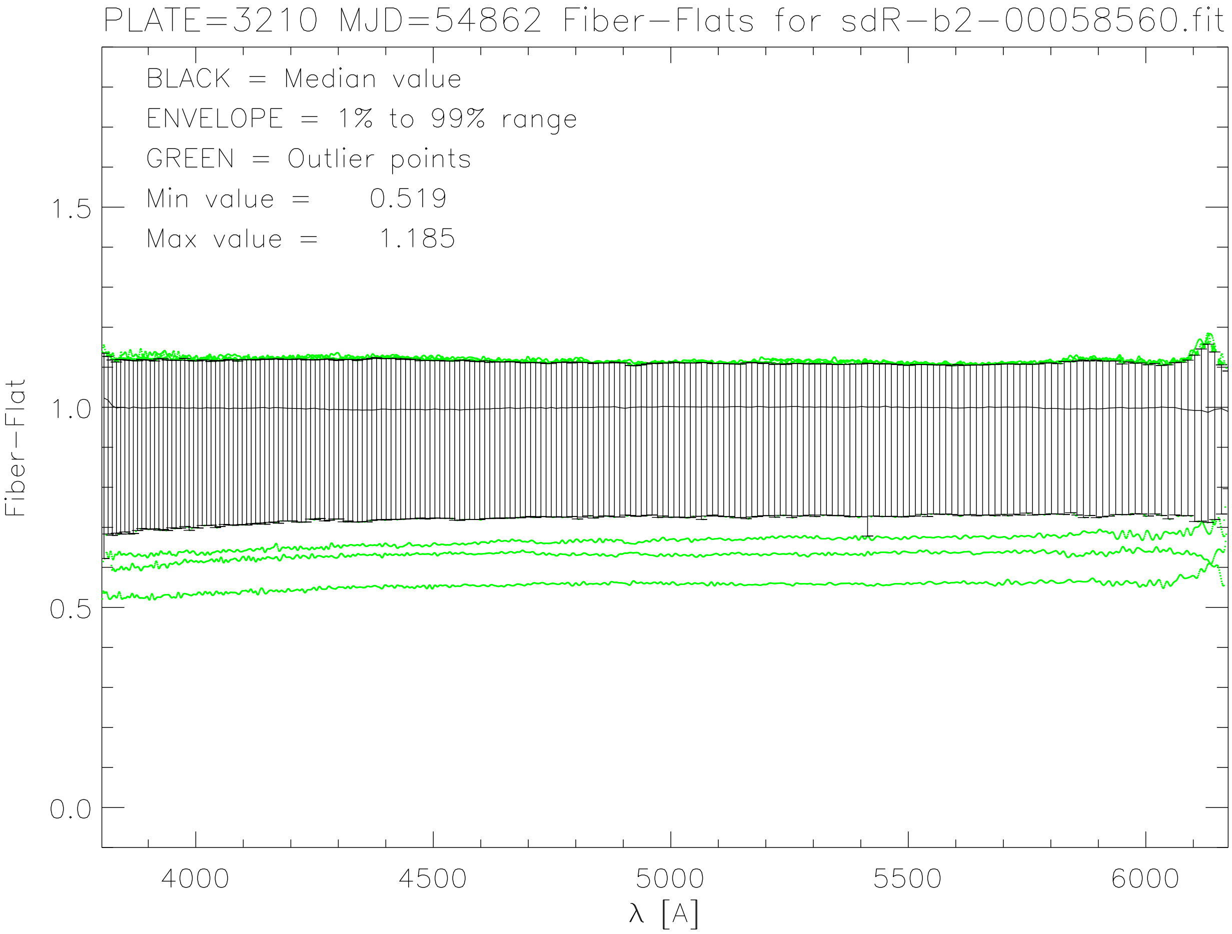
Number of sky fibers = 16

PLATE=3210 MJD=54862 sdR-b2-00058558.fit 2D Sky-subtraction Rescaled Errors

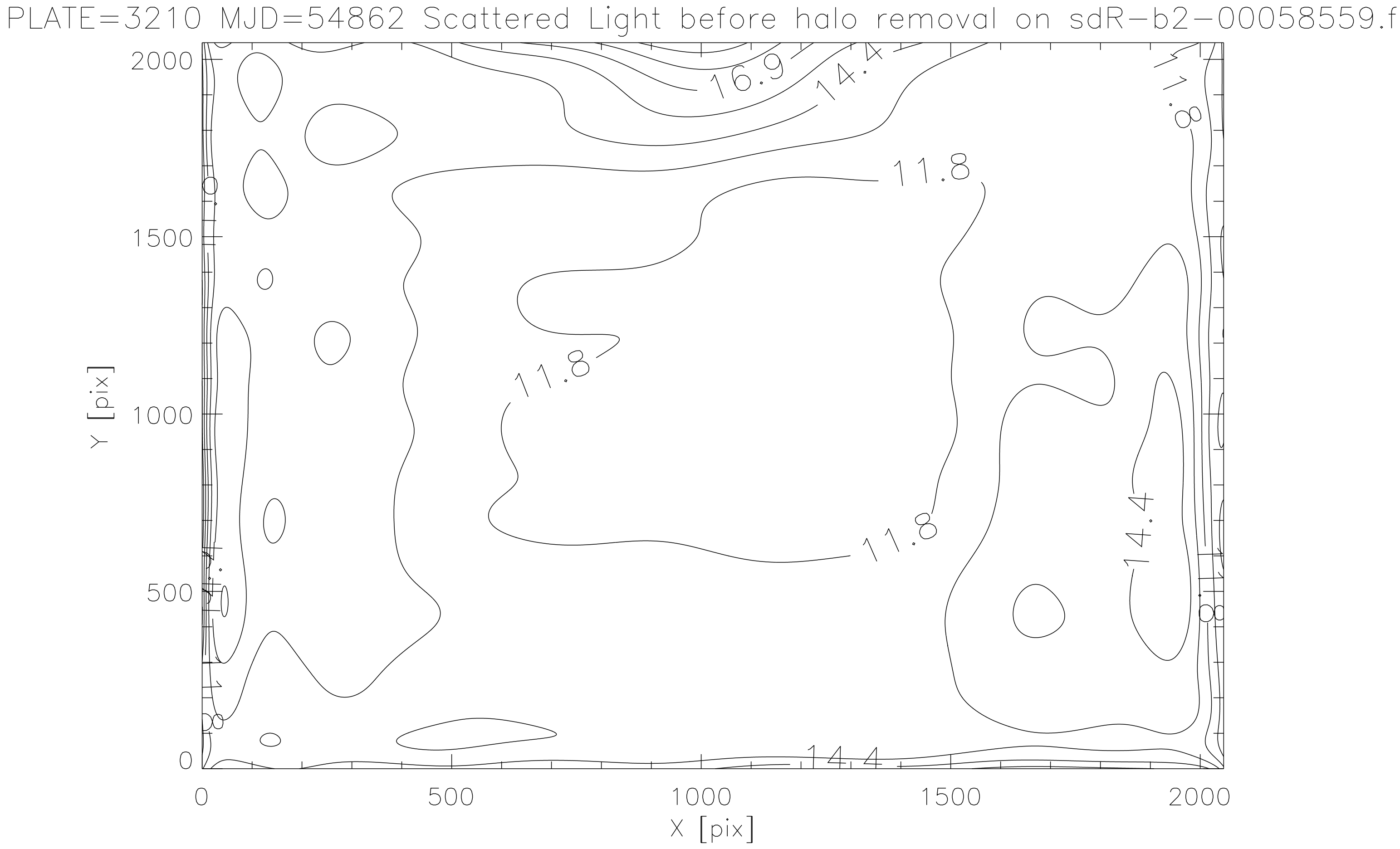


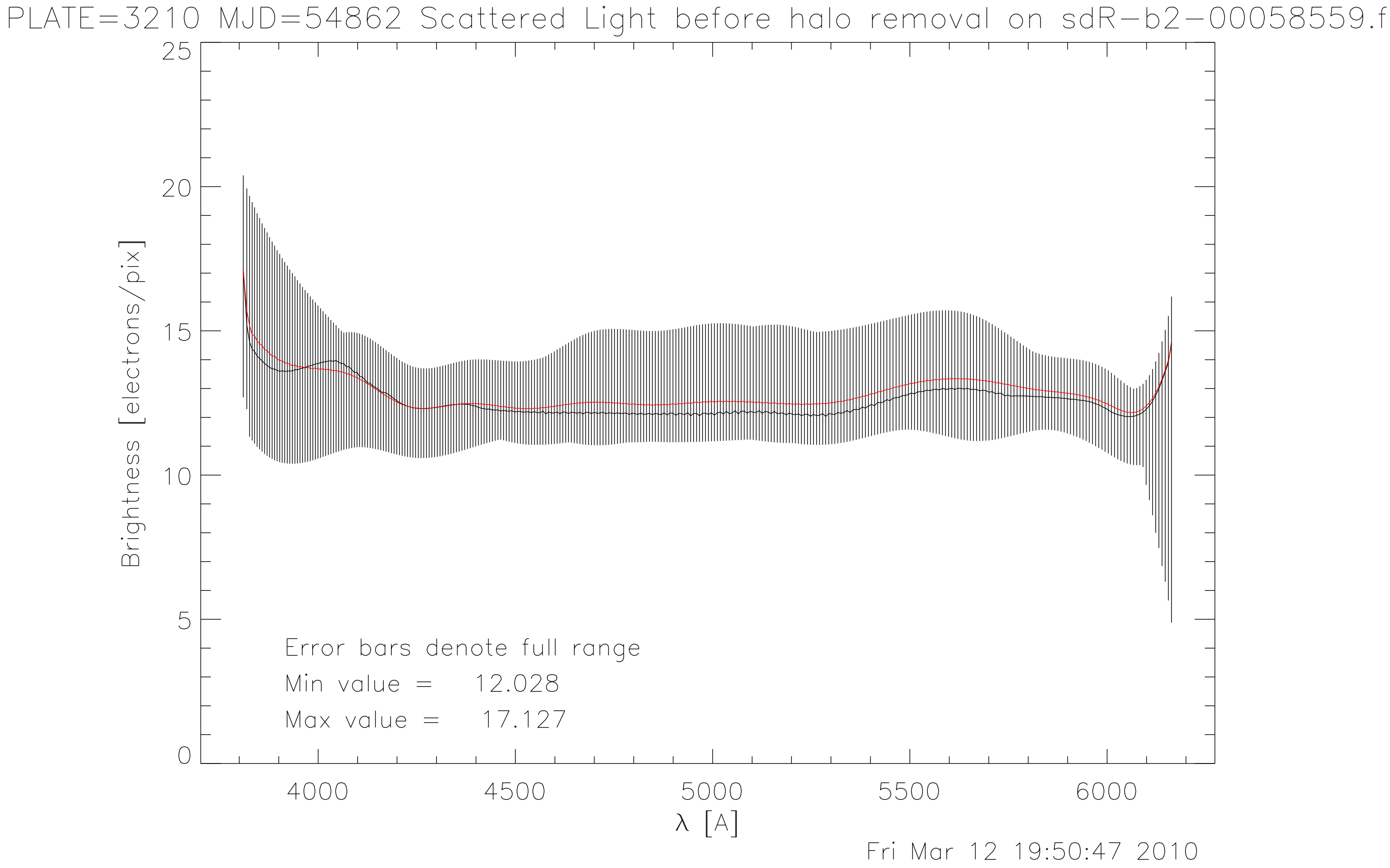

PLATE=3210 MJD=54862 sdR-b2-00058558.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
RED = sky fiber
Dispersion = 4.25 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.13
1.14
1.15
1.16
1.17
Airmass

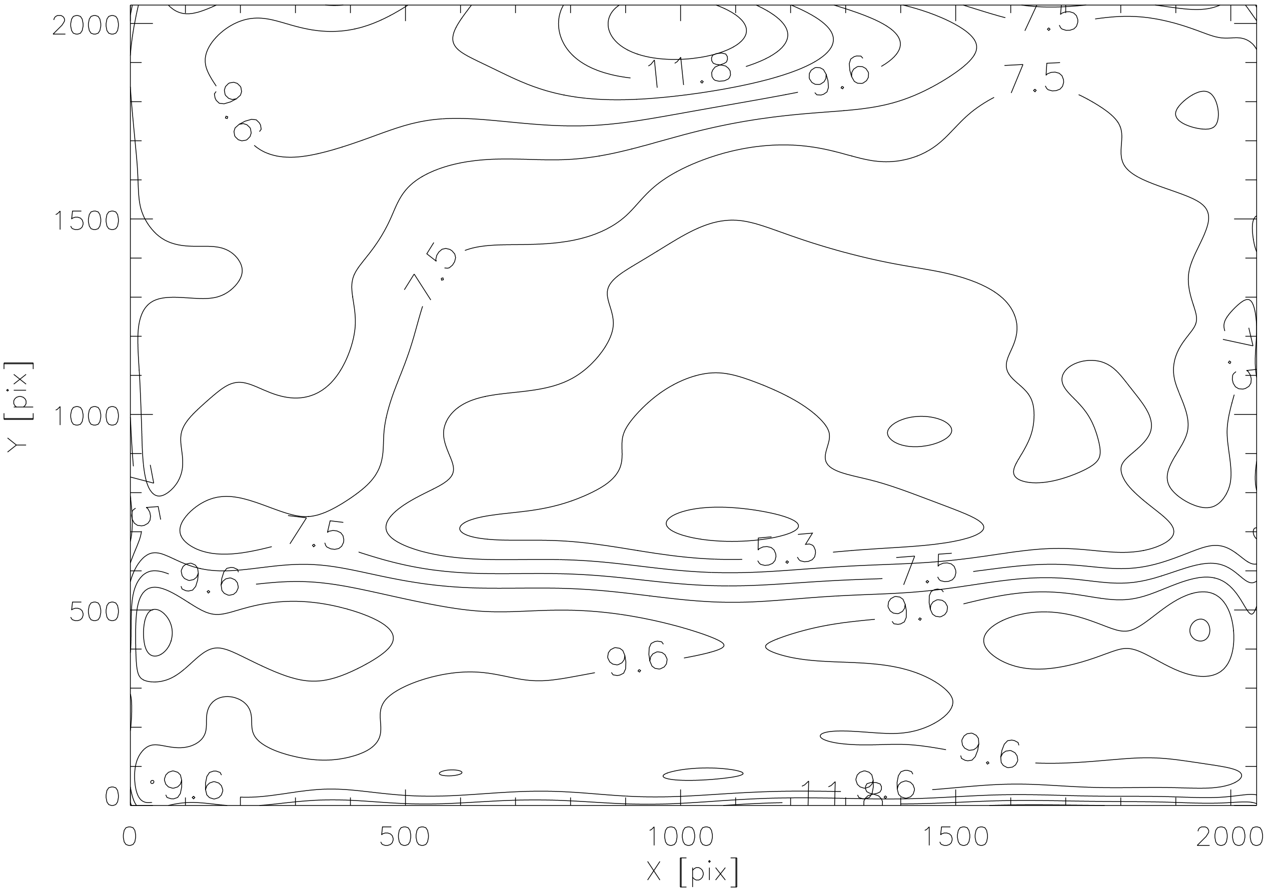

PLATE=3210 MJD=54862 sdR-b2-00058558.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 2.03 %
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
6500
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
6500
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
6500
1.13
1.14
1.15
1.16
1.17
Airmass



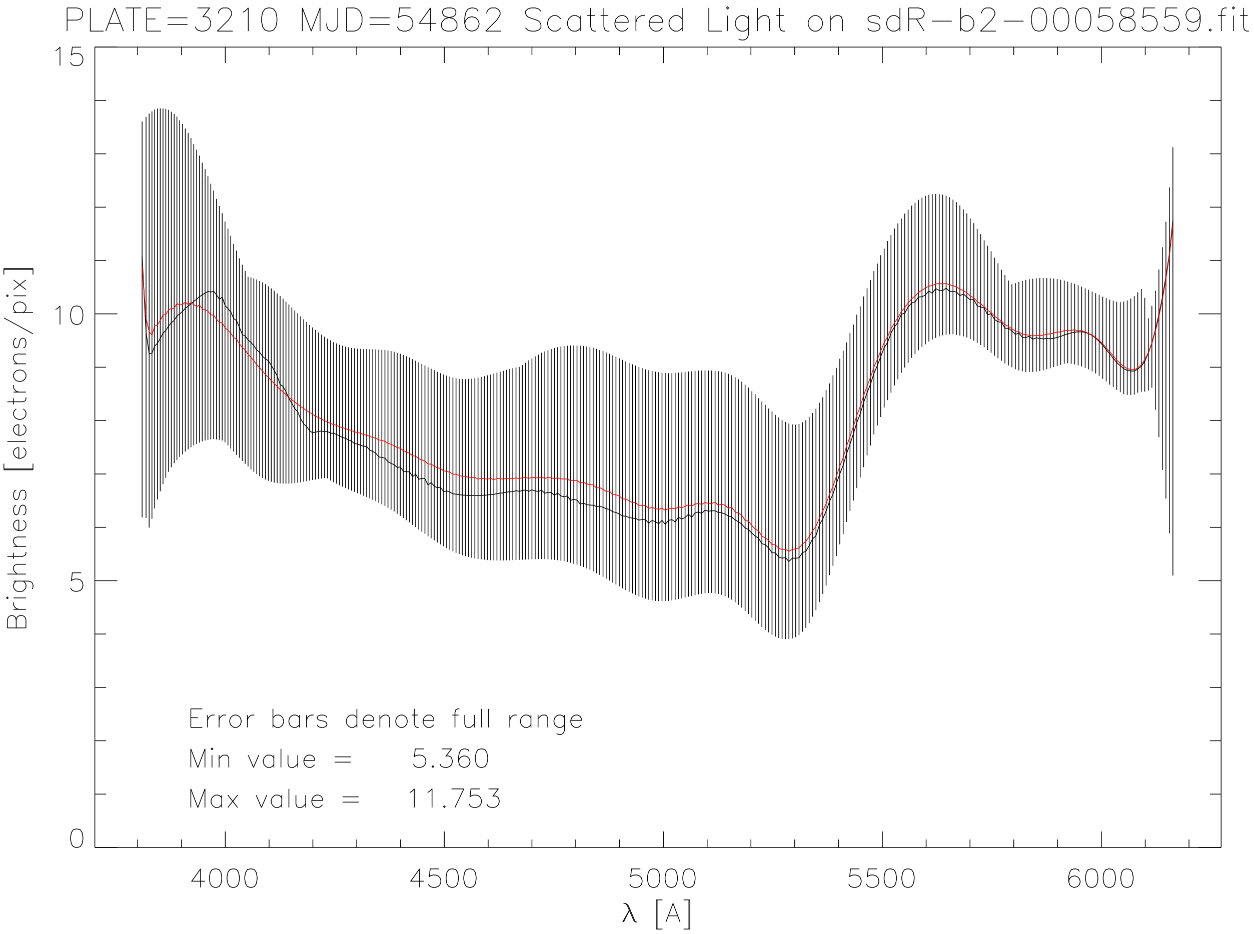
Fri Mar 12 19:49:25 2010


PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b2-00058559.f


PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-b2-00058559.f
Brightness [electrons/pix]
0
5
10
15
20
25
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 12.028
Max value = 17.127
Fri Mar 12 19:50:47 2010



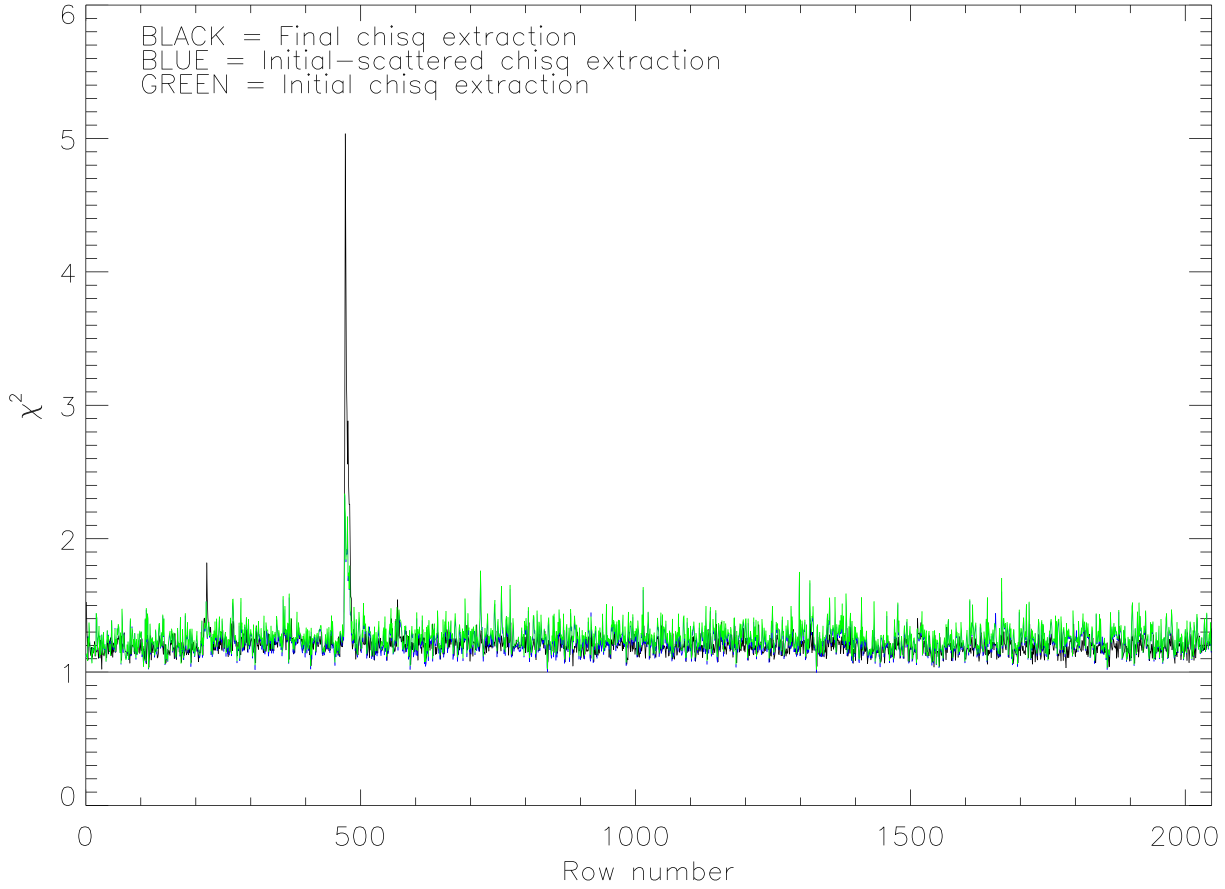
PLATE=3210 MJD=54862 Scattered Light on sdR-b2-00058559.fit

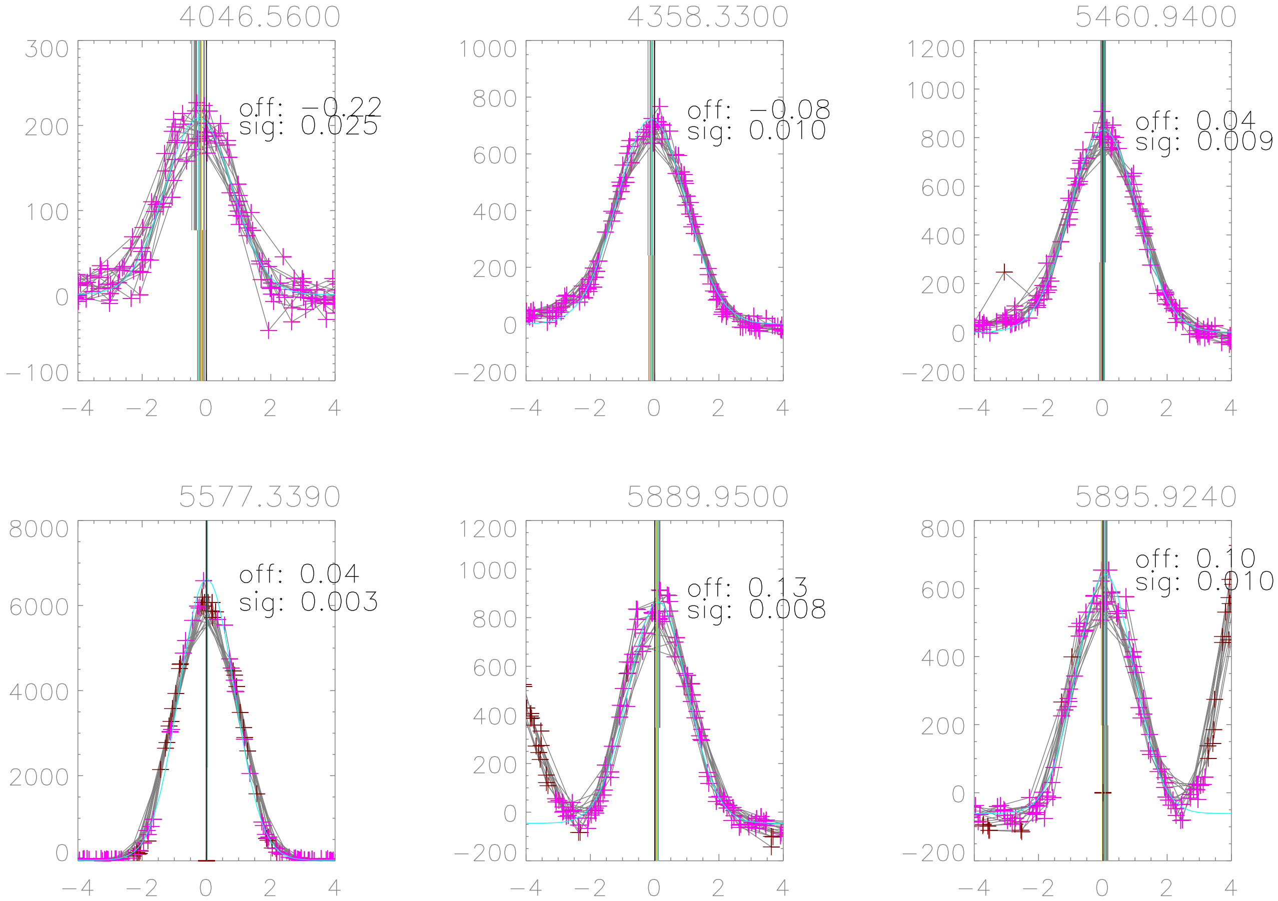


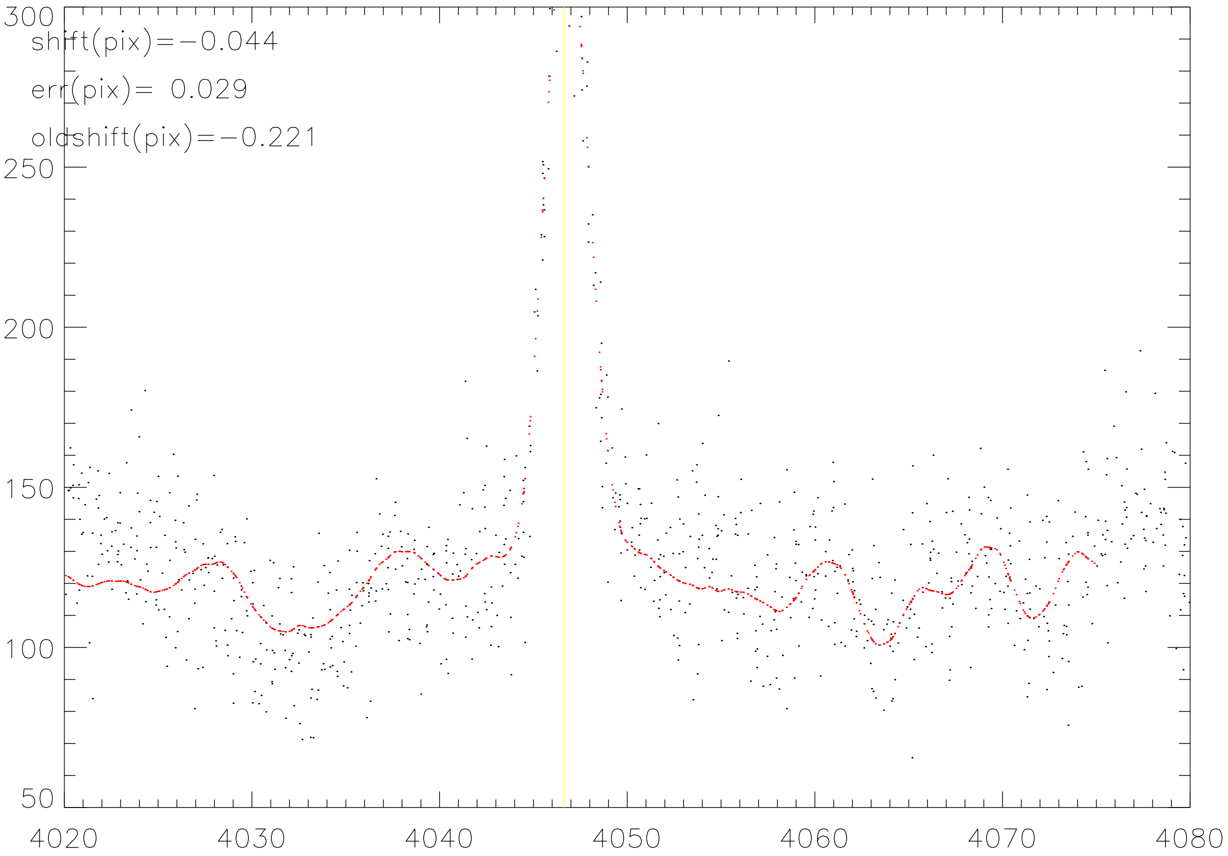
PLATE=3210 MJD=54862 Scattered Light on sdR-b2-00058559.fit

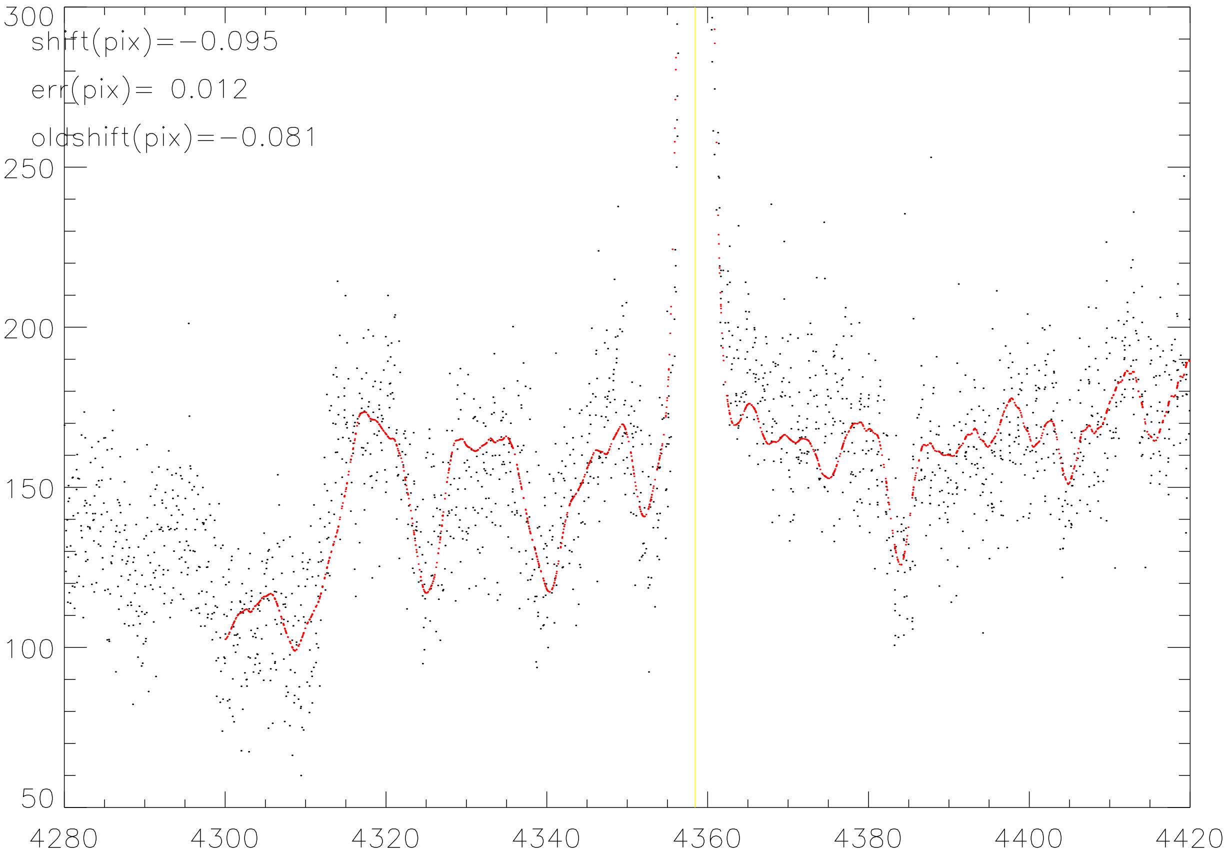
Fri Mar 12 19:54:52 2010

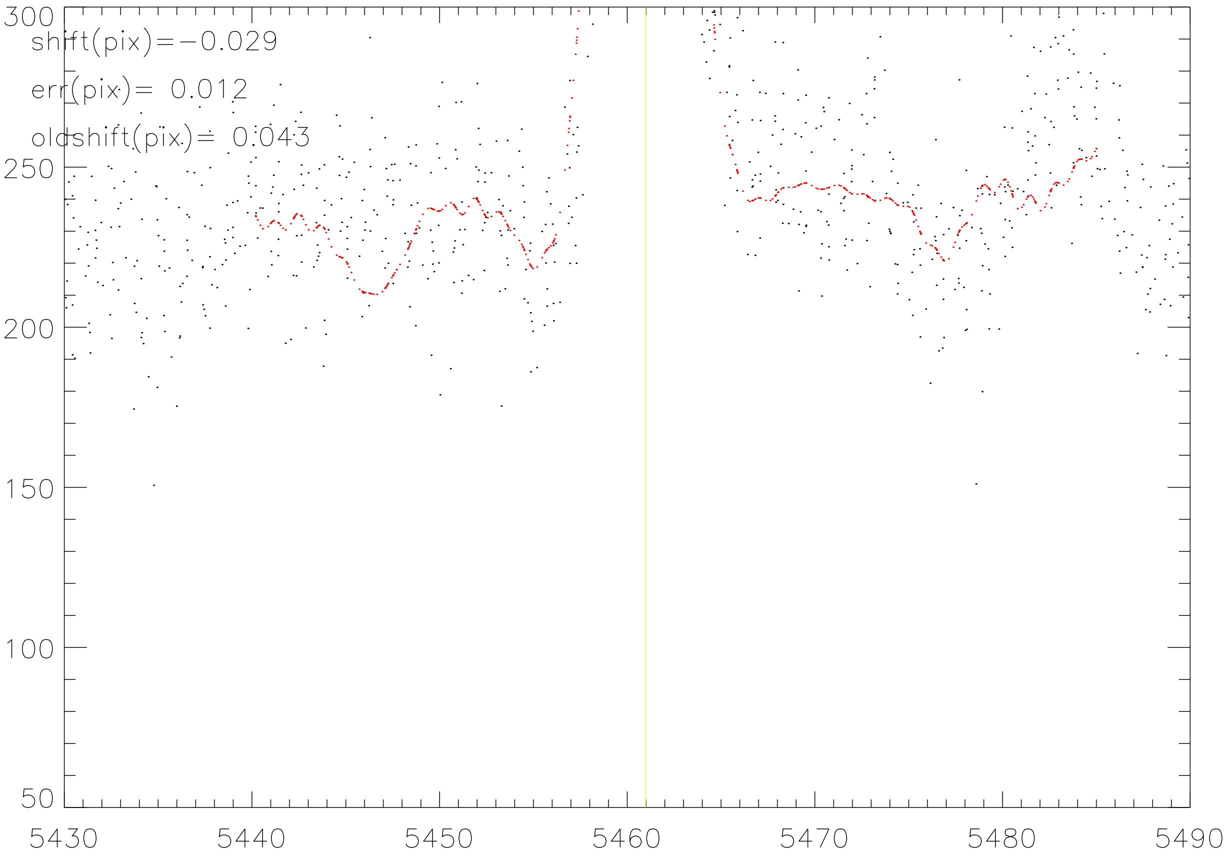
PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-b2-00058559.fit

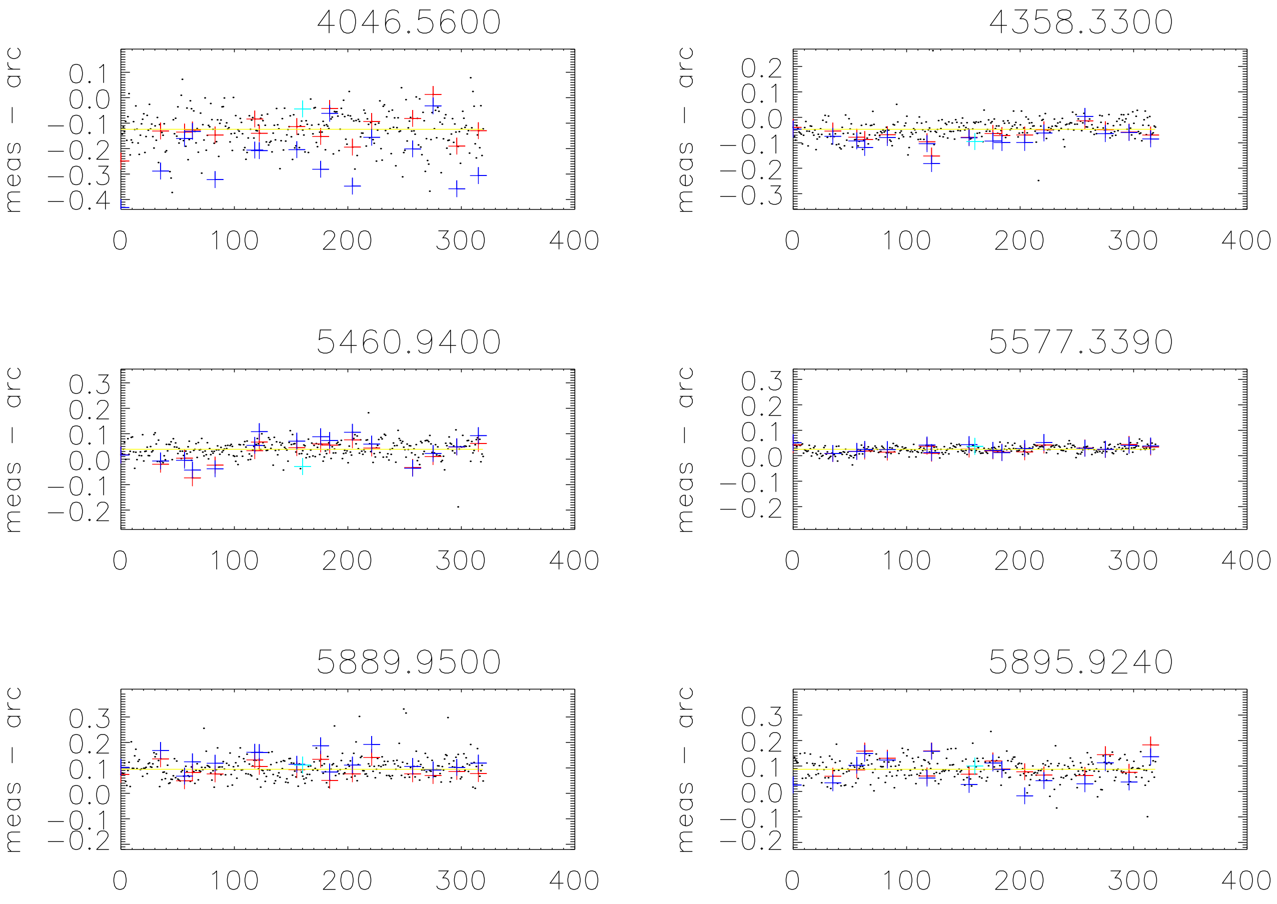


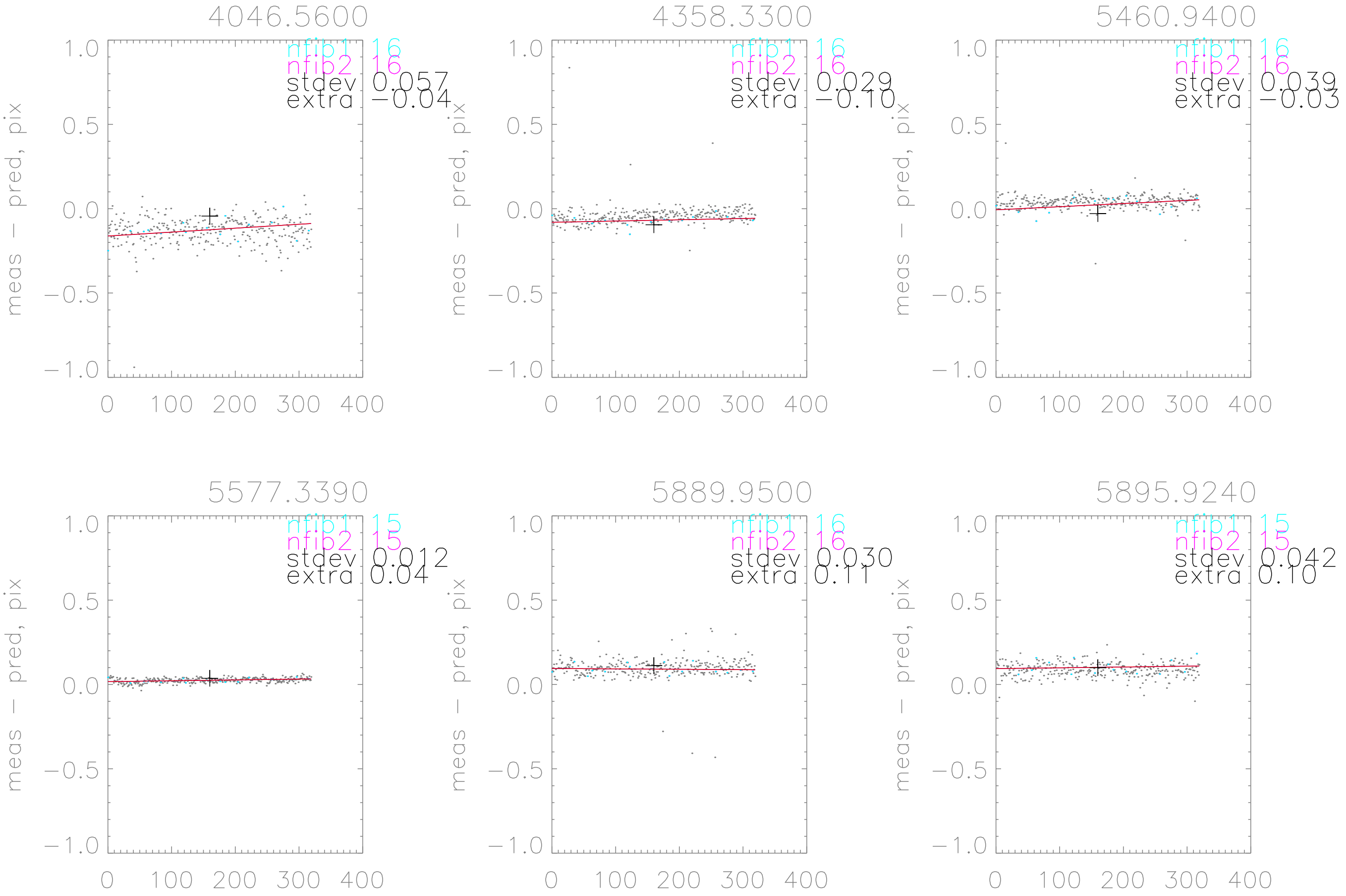

4046.5600
off: −0.22
sig: 0.025
4358.3300
off: −0.08
sig: 0.010
5460.9400
off: 0.04
sig: 0.009
5577.3390
off: 0.04
sig: 0.003
5889.9500
off: 0.13
sig: 0.008
5895.9240
off: 0.10
sig: 0.010
−4
−2
0
2
4
−100
0
100
200
300
−200
0
200
400
600
800
1000
1200
0
2000
4000
6000
8000

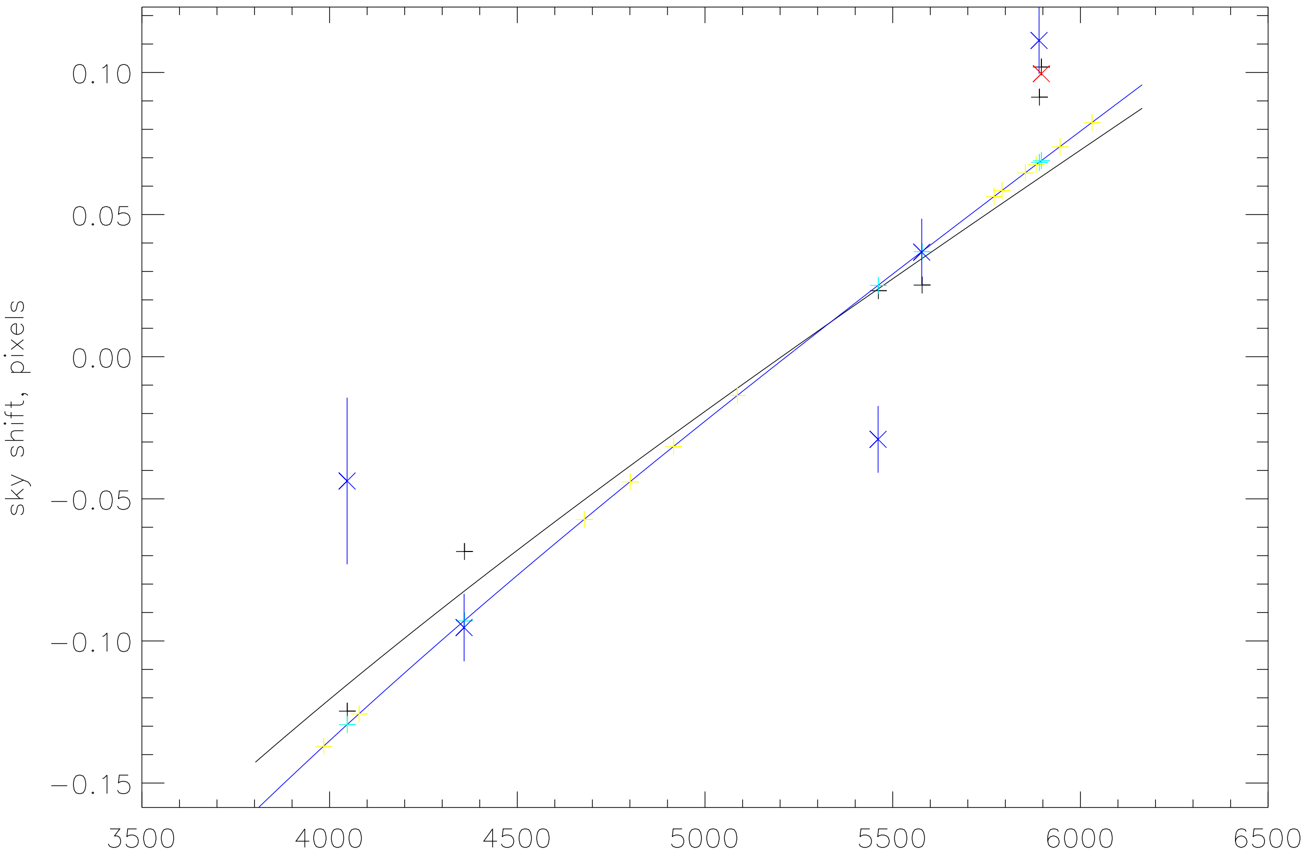

shift(pix)=−0.044
err(pix)= 0.029
oldshift(pix)=−0.221
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

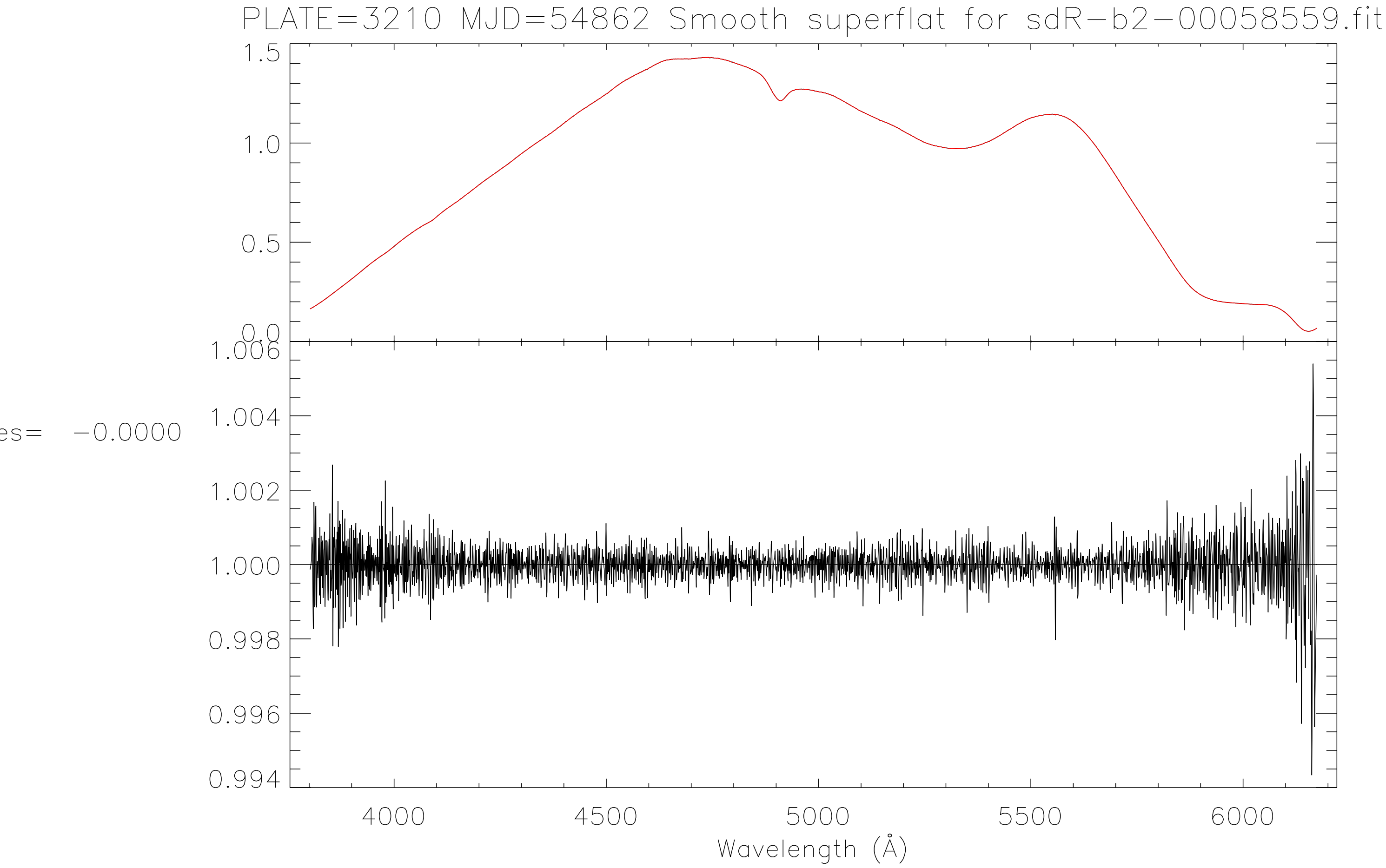

shift(pix)=−0.095
err(pix)= 0.012
oldshift(pix)=−0.081
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)=−0.029
err(pix)= 0.012
oldshift(pix)= 0.043
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

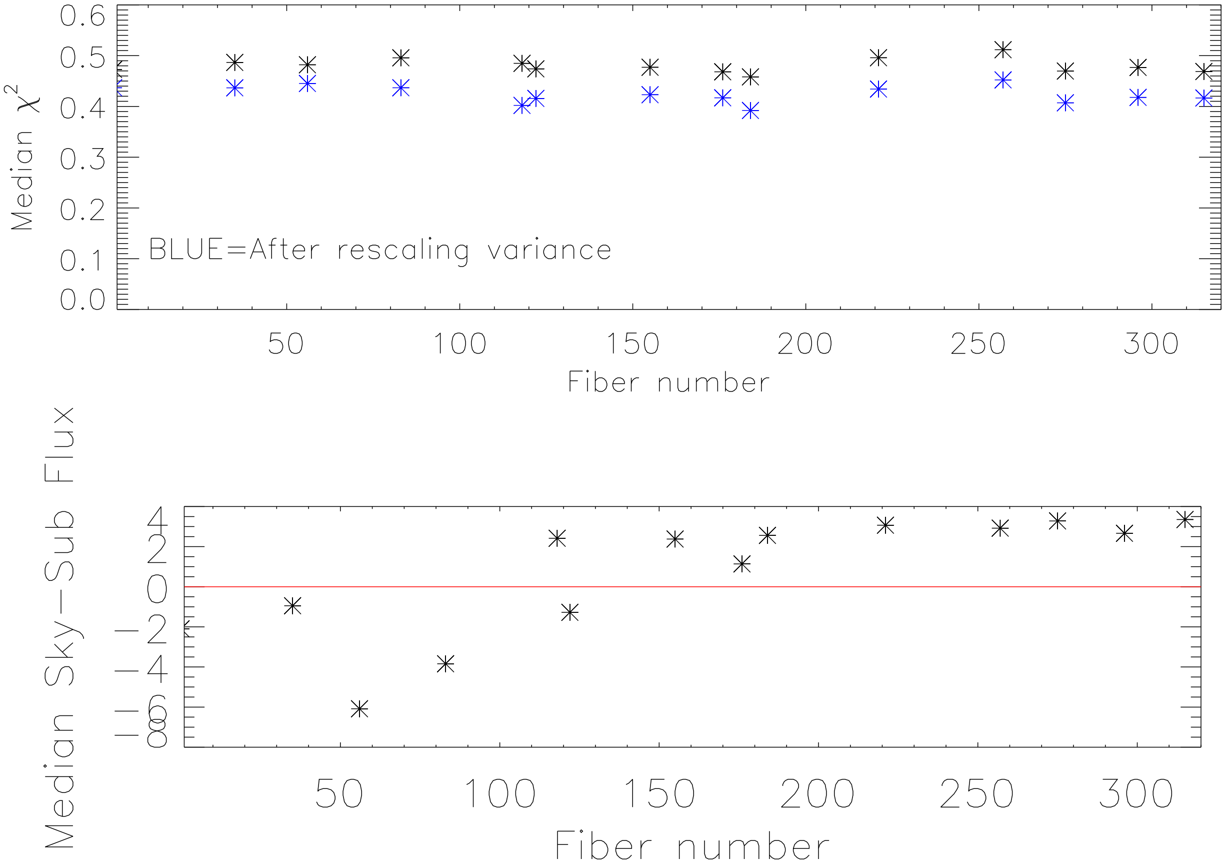

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400

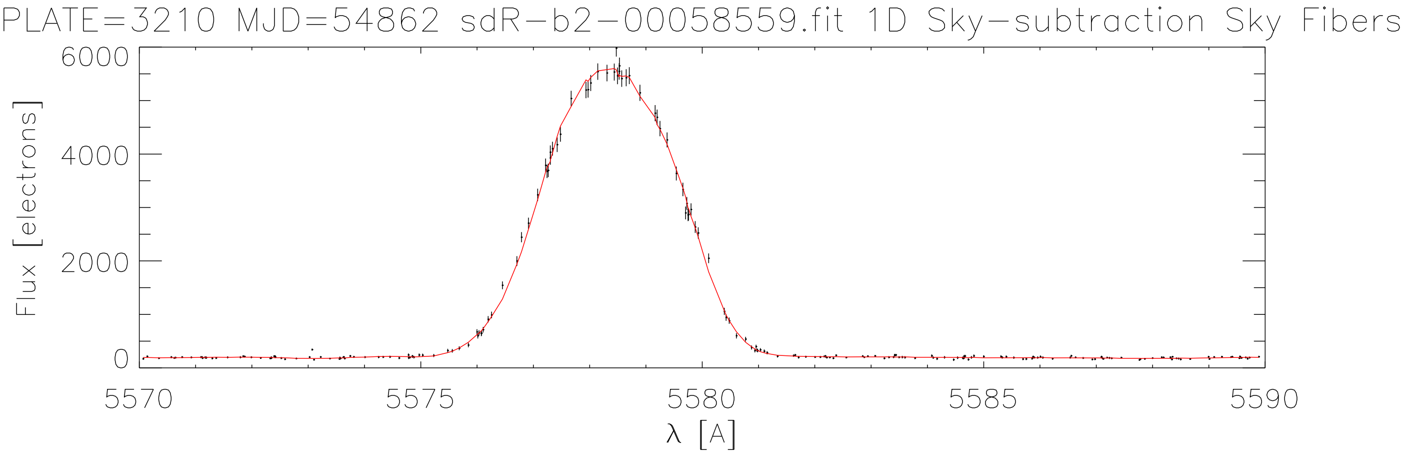

4046.5600
nfib1 16
nfib2 16
stdev 0.057
extra −0.04
4358.3300
nfib1 16
nfib2 16
stdev 0.029
extra −0.10
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.03
5577.3390
nfib1 15
nfib2 15
stdev 0.012
extra 0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra 0.11
5895.9240
nfib1 15
nfib2 15
stdev 0.042
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

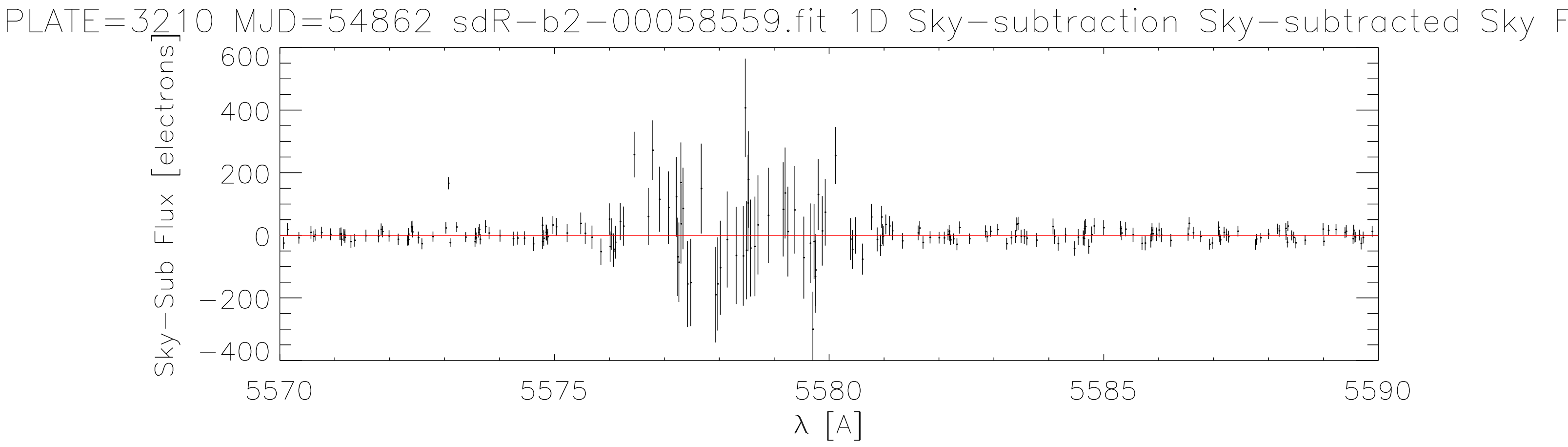

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500


PLATE=3210 MJD=54862 Smooth superflat for sdR-b2-00058559.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

PLATE=3210 MJD=54862 sdR-b2-00058559.fit 1D Sky-subtraction Sky Fiber

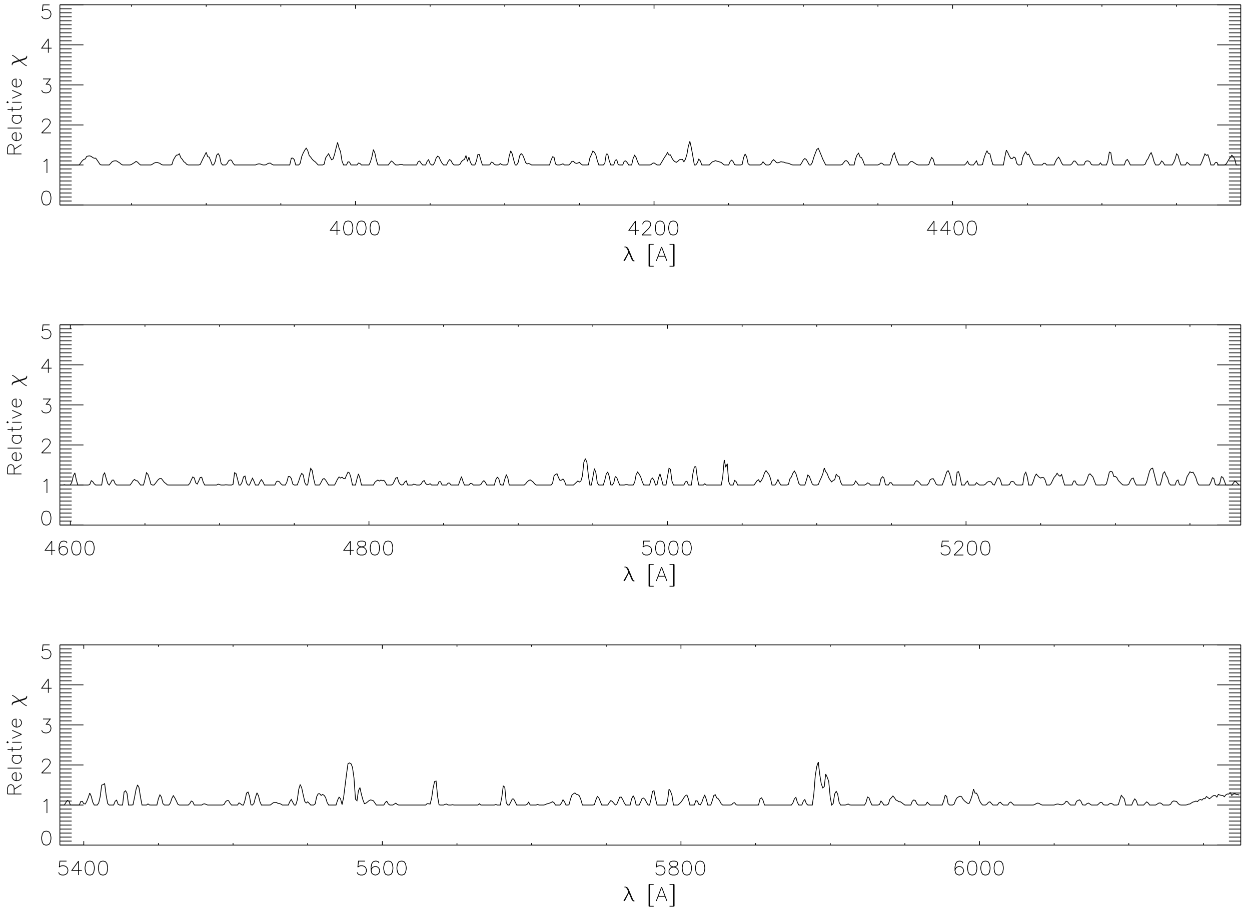


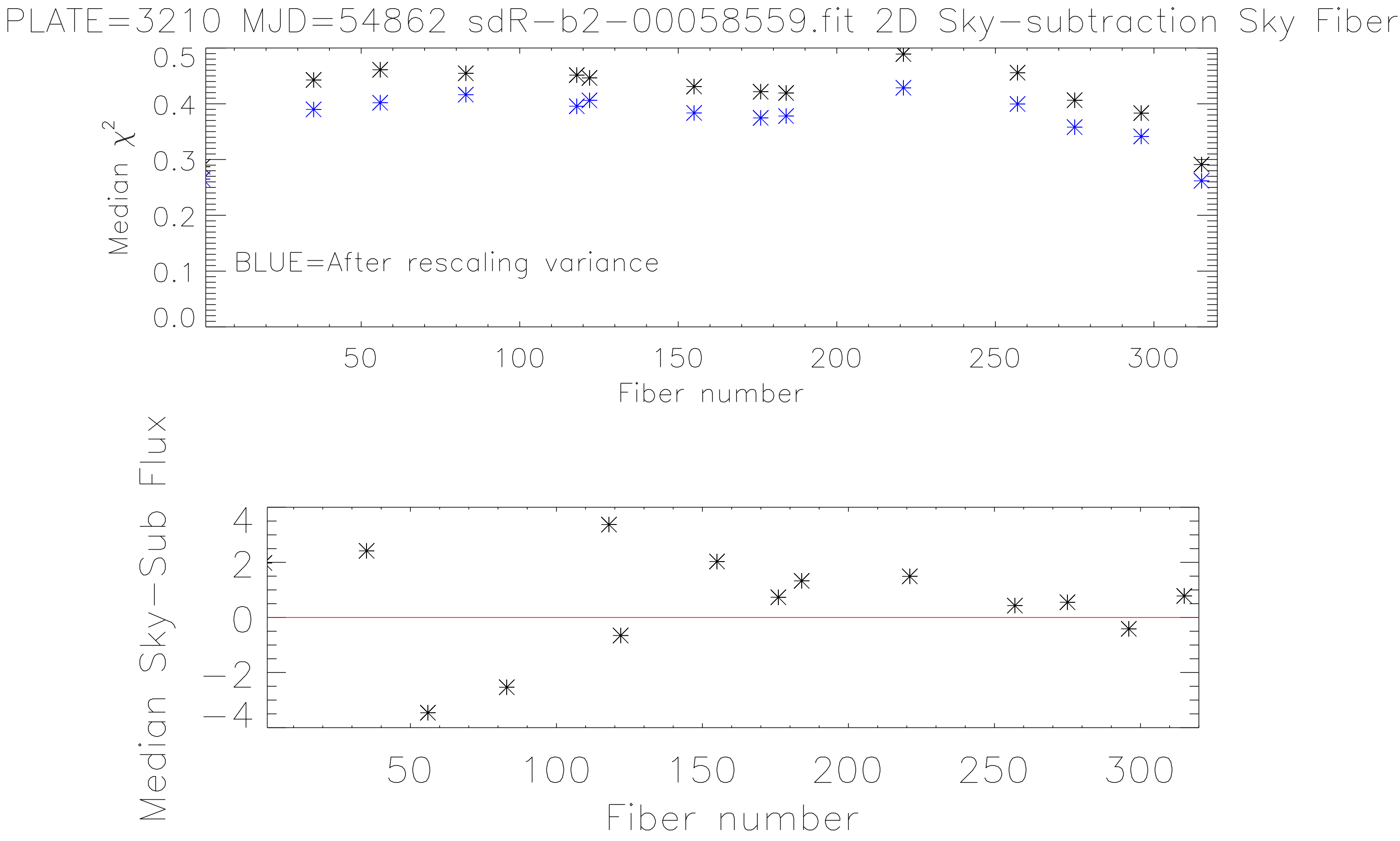

PLATE=3210 MJD=54862 sdR-b2-00058559.fit 1D Sky-subtraction Sky Fibers

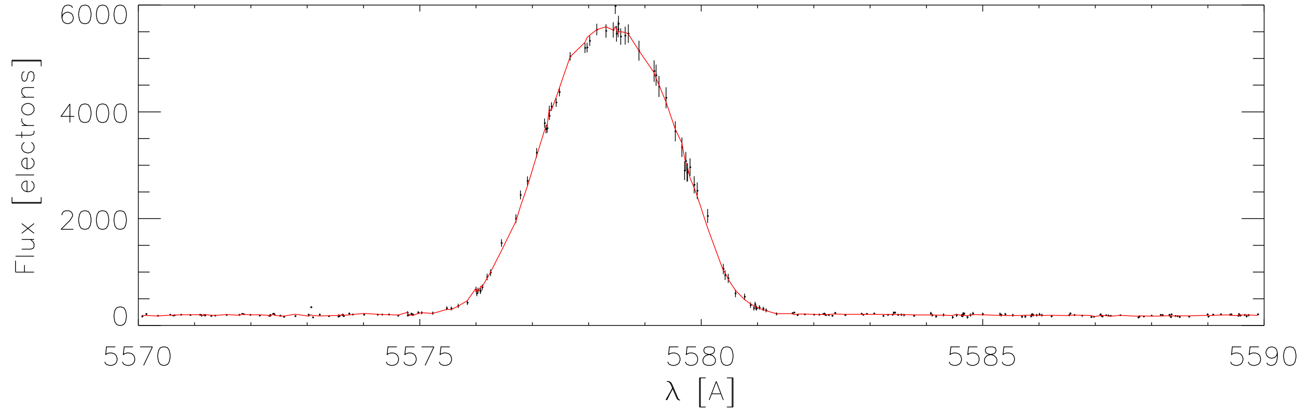

PLATE=3210 MJD=54862 sdR-b2-00058559.fit 1D Sky-subtraction Sky-subtracted Sky F

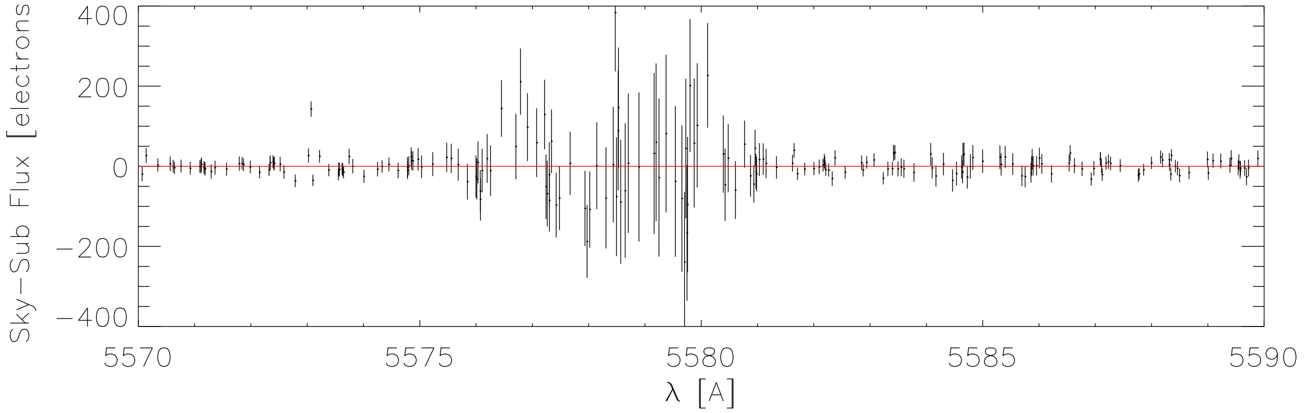
Number of sky fibers = 14

PLATE=3210 MJD=54862 sdR-b2-00058559.fit 1D Sky-subtraction Rescaled Errors



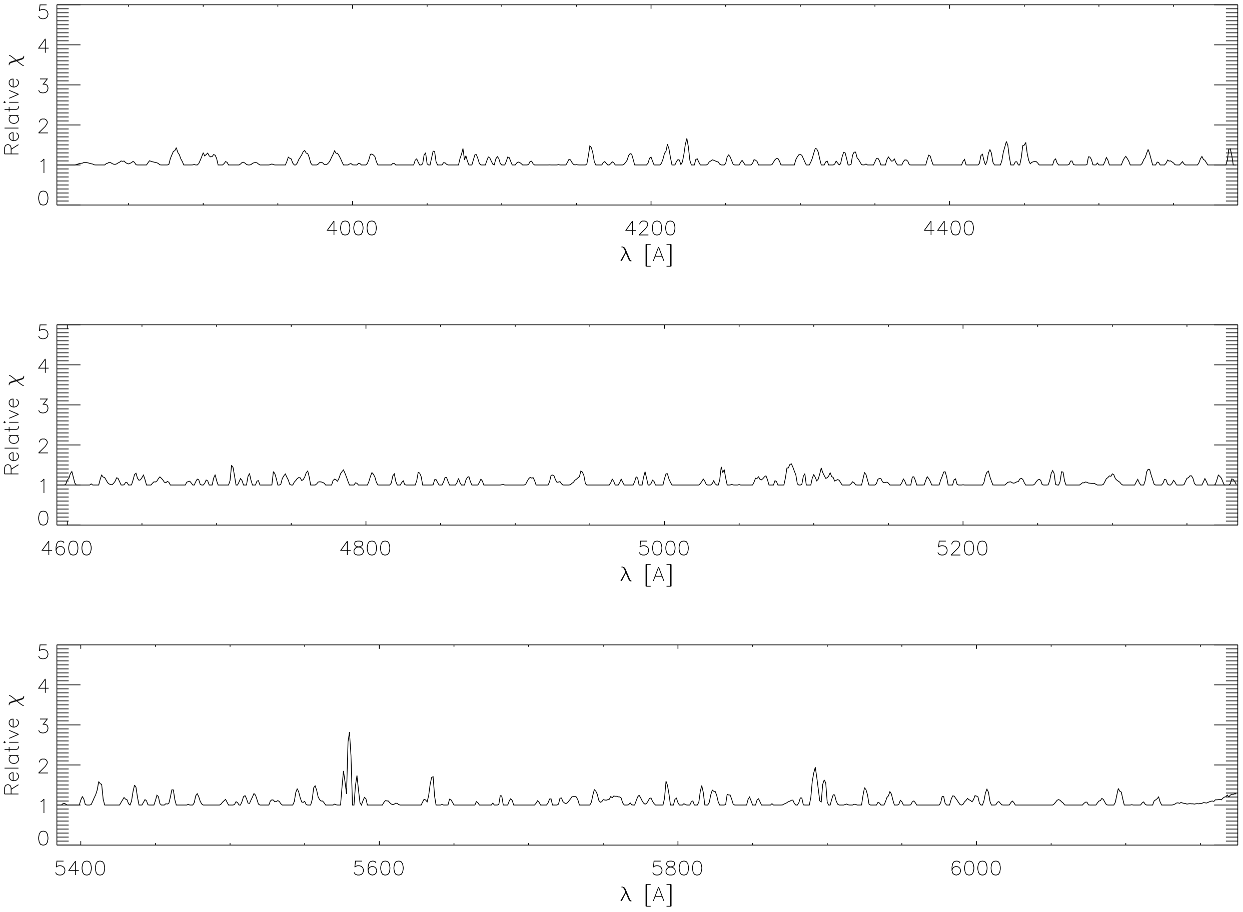

PLATE=3210 MJD=54862 sdR-b2-00058559.fit 2D Sky-subtraction Sky Fiber
Median $\chi^2$
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number

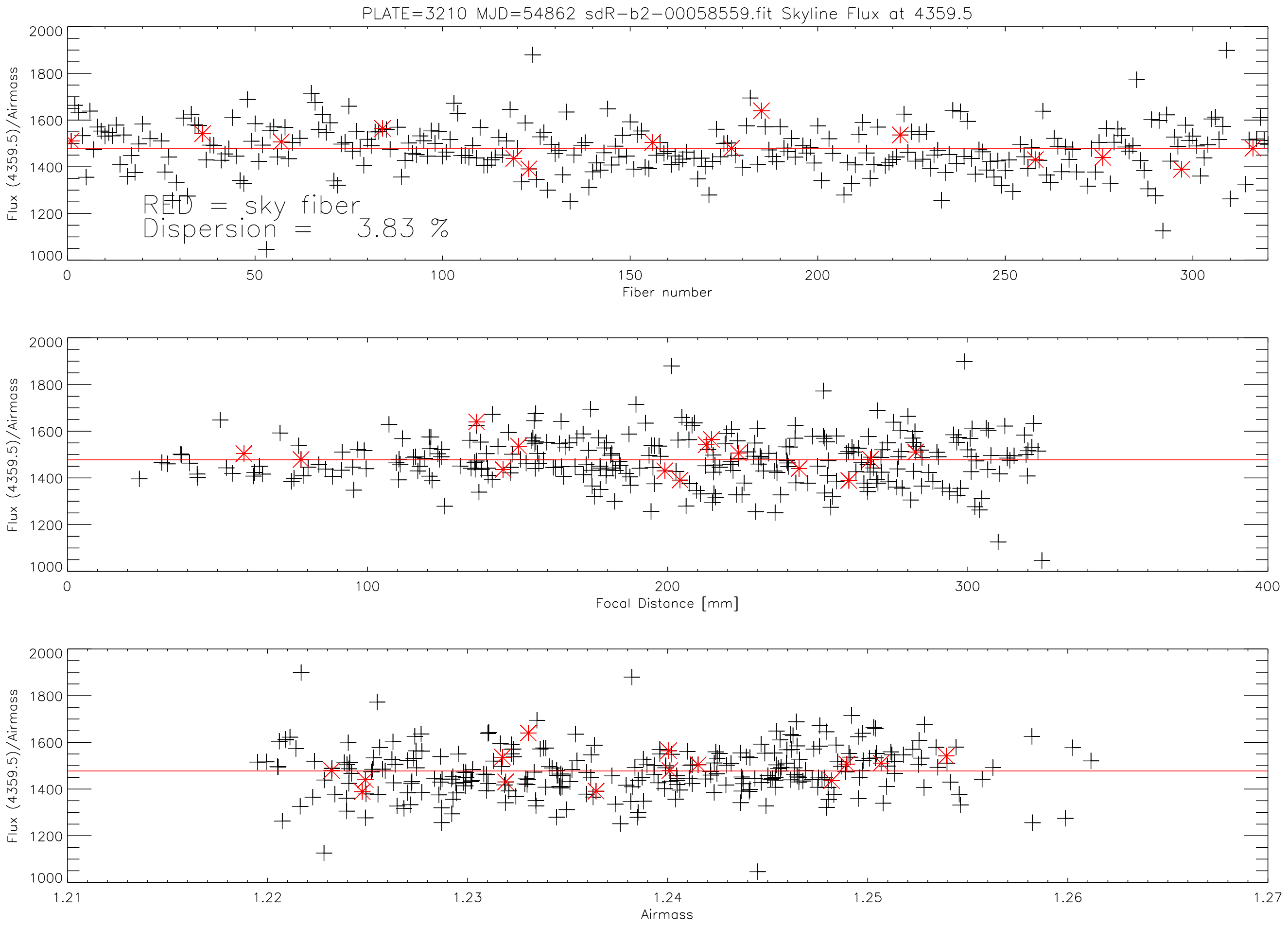

PLATE=3210 MJD=54862 sdR-b2-00058559.fit 2D Sky-subtraction Sky Fibers

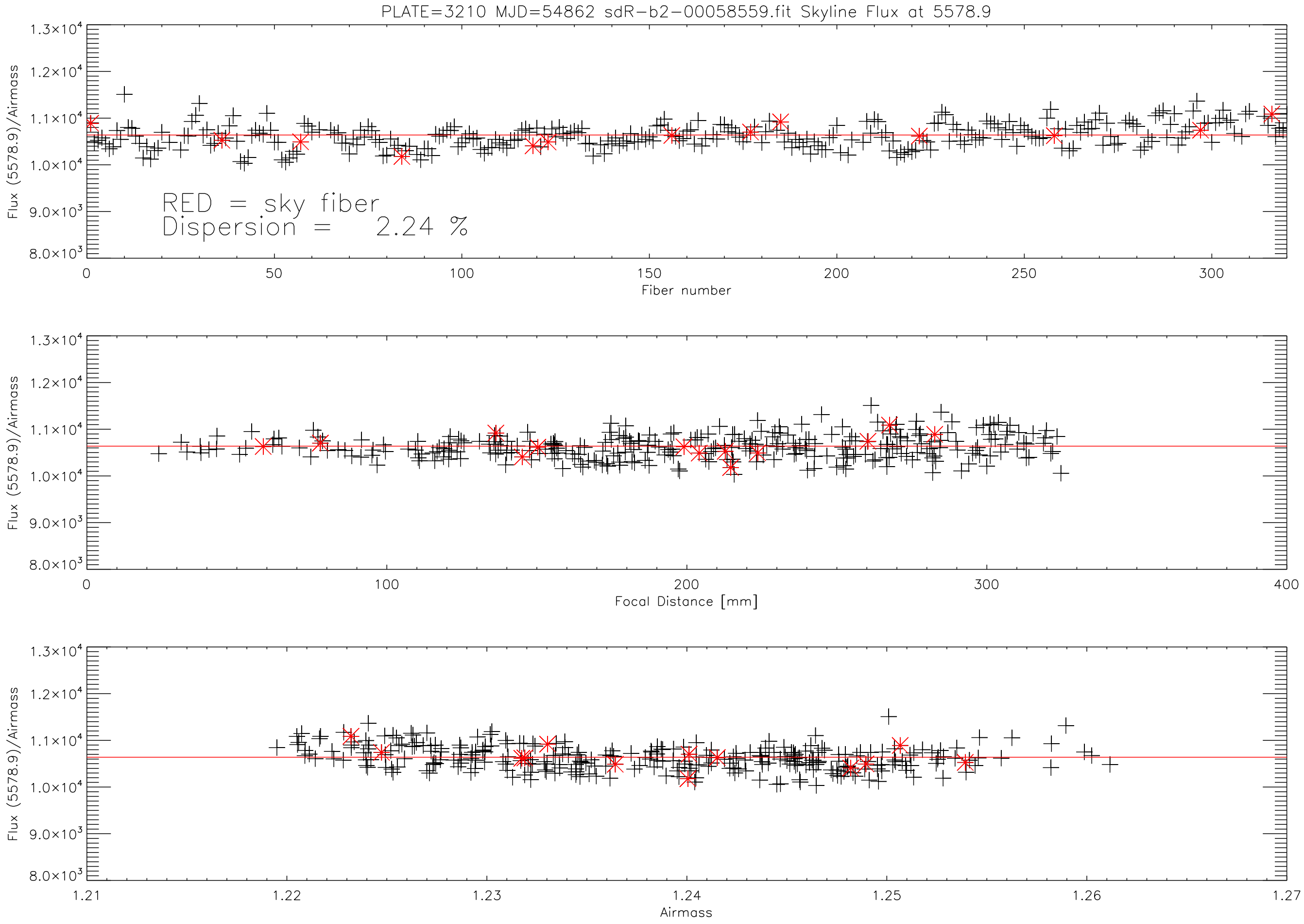

PLATE=3210 MJD=54862 sdR-b2-00058559.fit 2D Sky-subtraction Sky-subtracted Sky F

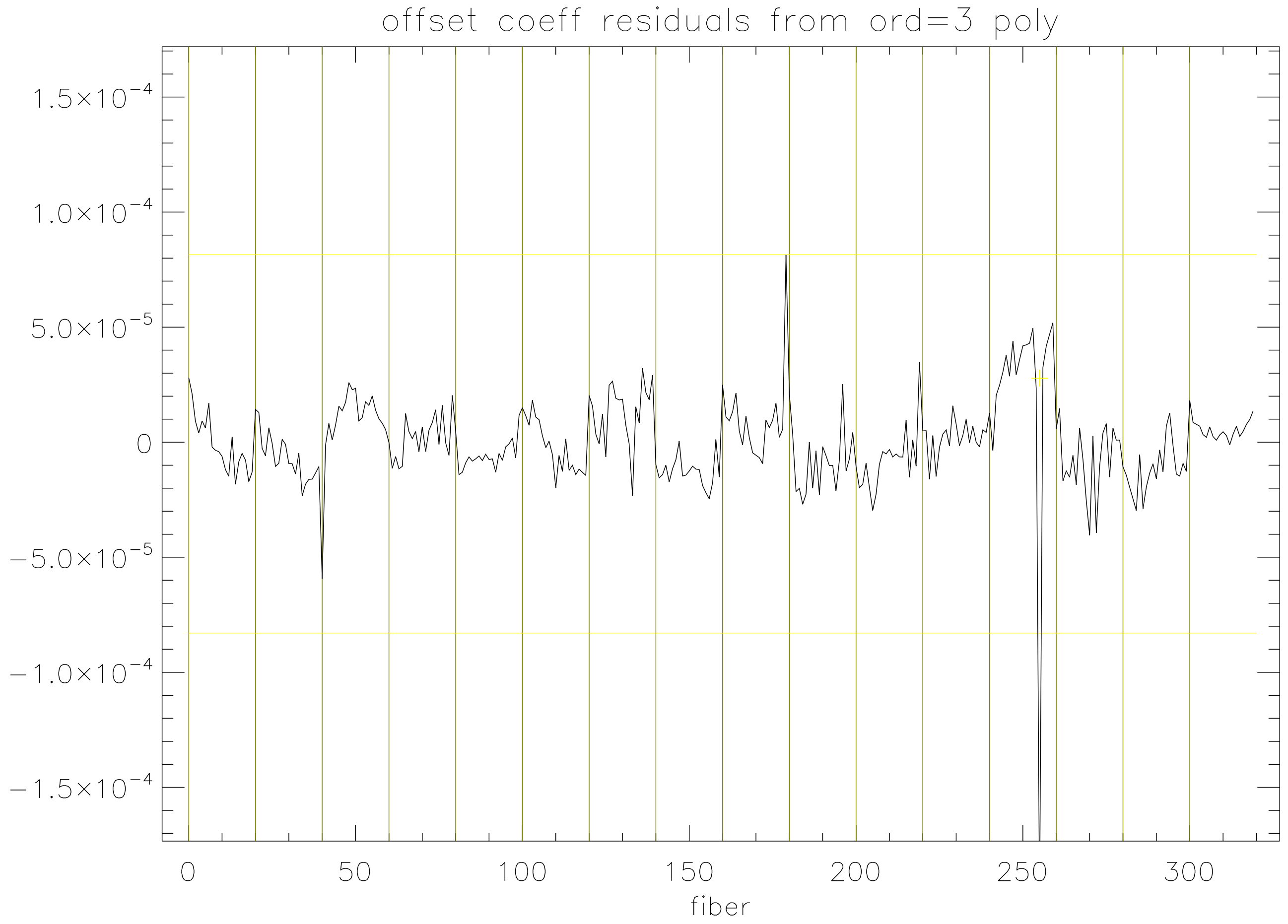
Number of sky fibers = 14

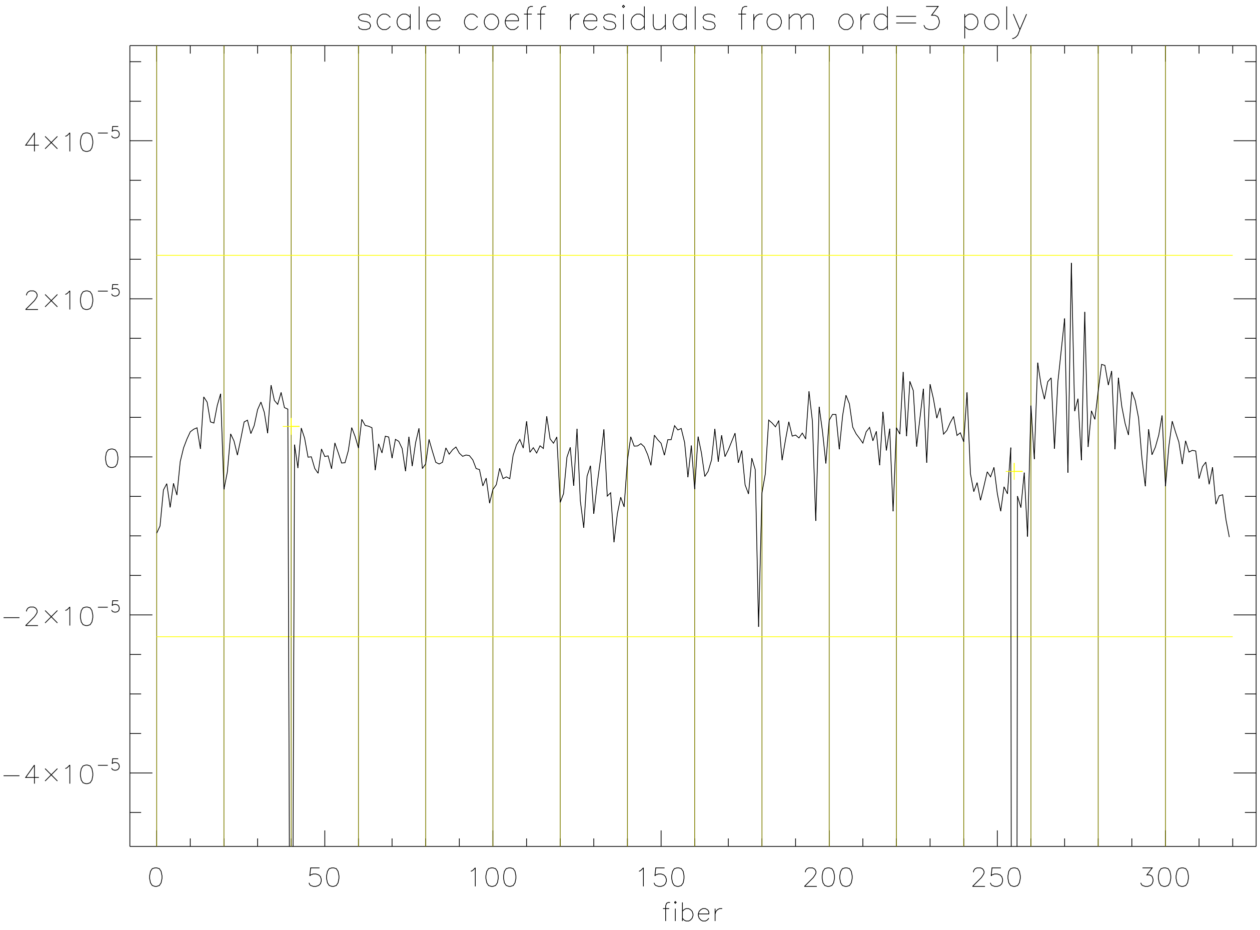
PLATE=3210 MJD=54862 sdR-b2-00058559.fit 2D Sky-subtraction Rescaled Errors

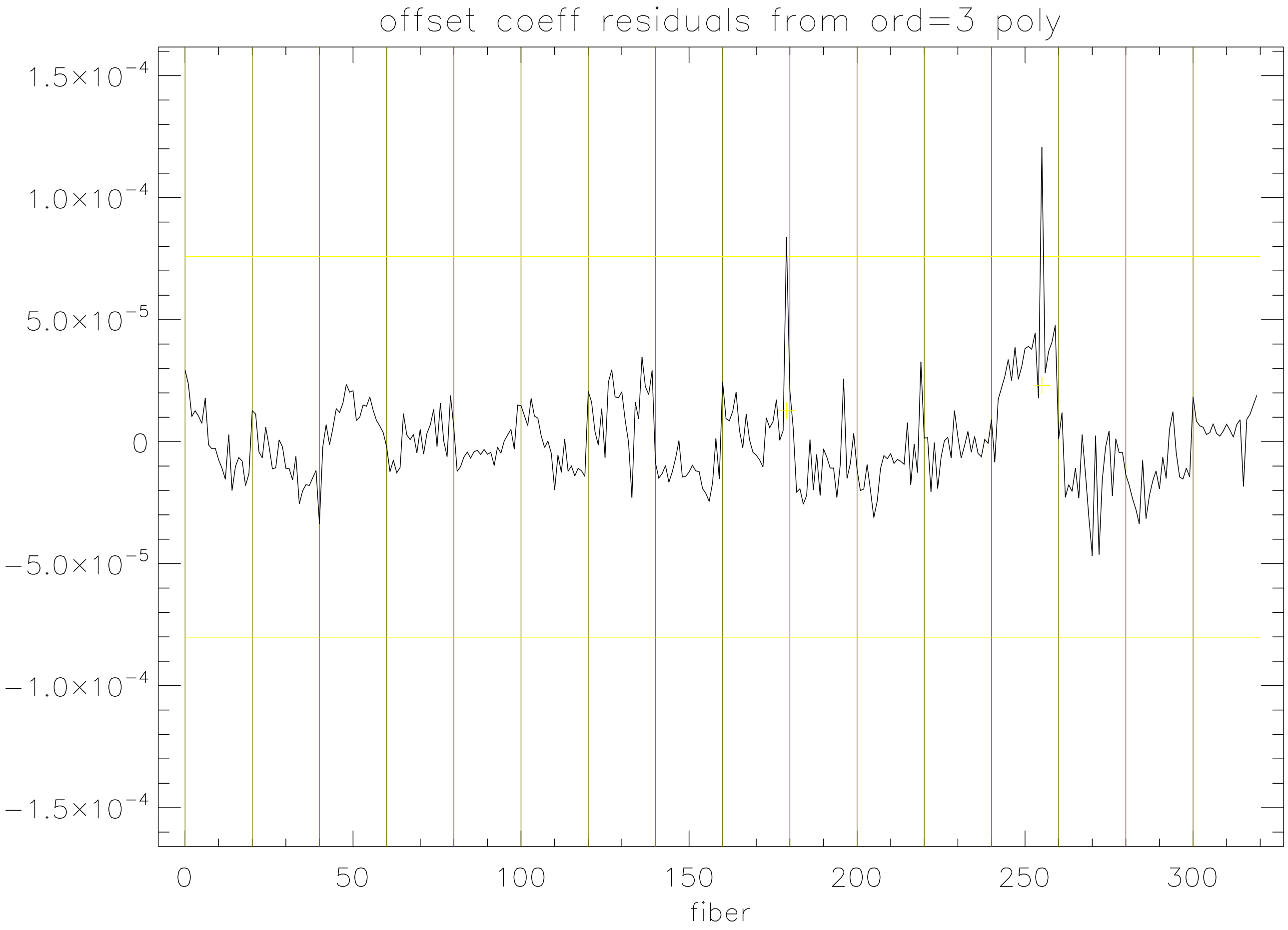


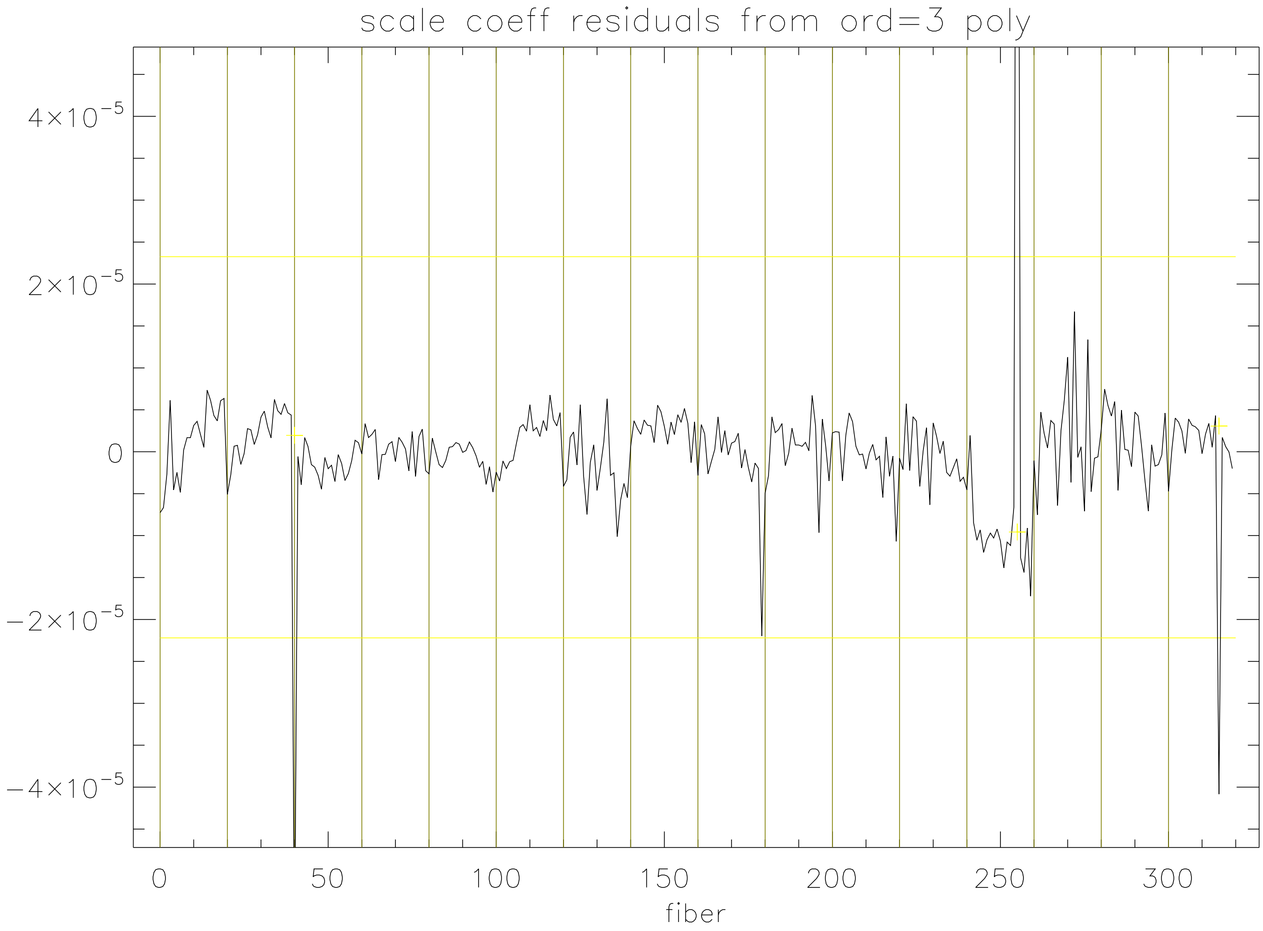

PLATE=3210 MJD=54862 sdR-b2-00058559.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2000
1800
1600
1400
1200
1000
RED = sky fiber
Dispersion = 3.83 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2000
1800
1600
1400
1200
1000
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2000
1800
1600
1400
1200
1000
1.21
1.22
1.23
1.24
1.25
1.26
1.27
Airmass

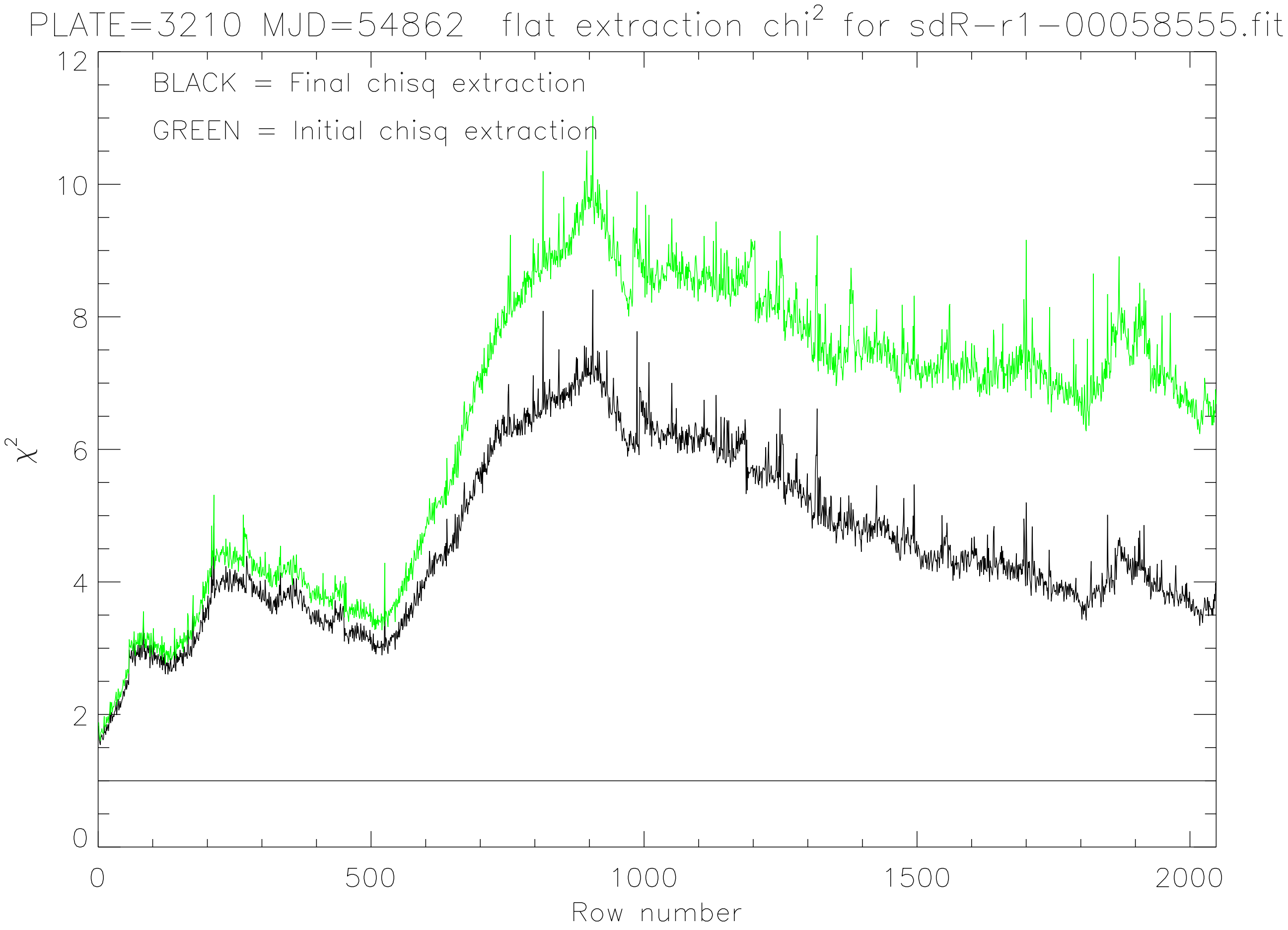

PLATE=3210 MJD=54862 sdR-b2-00058559.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
RED = sky fiber
Dispersion = 2.24 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
1.21
1.22
1.23
1.24
1.25
1.26
1.27
Airmass

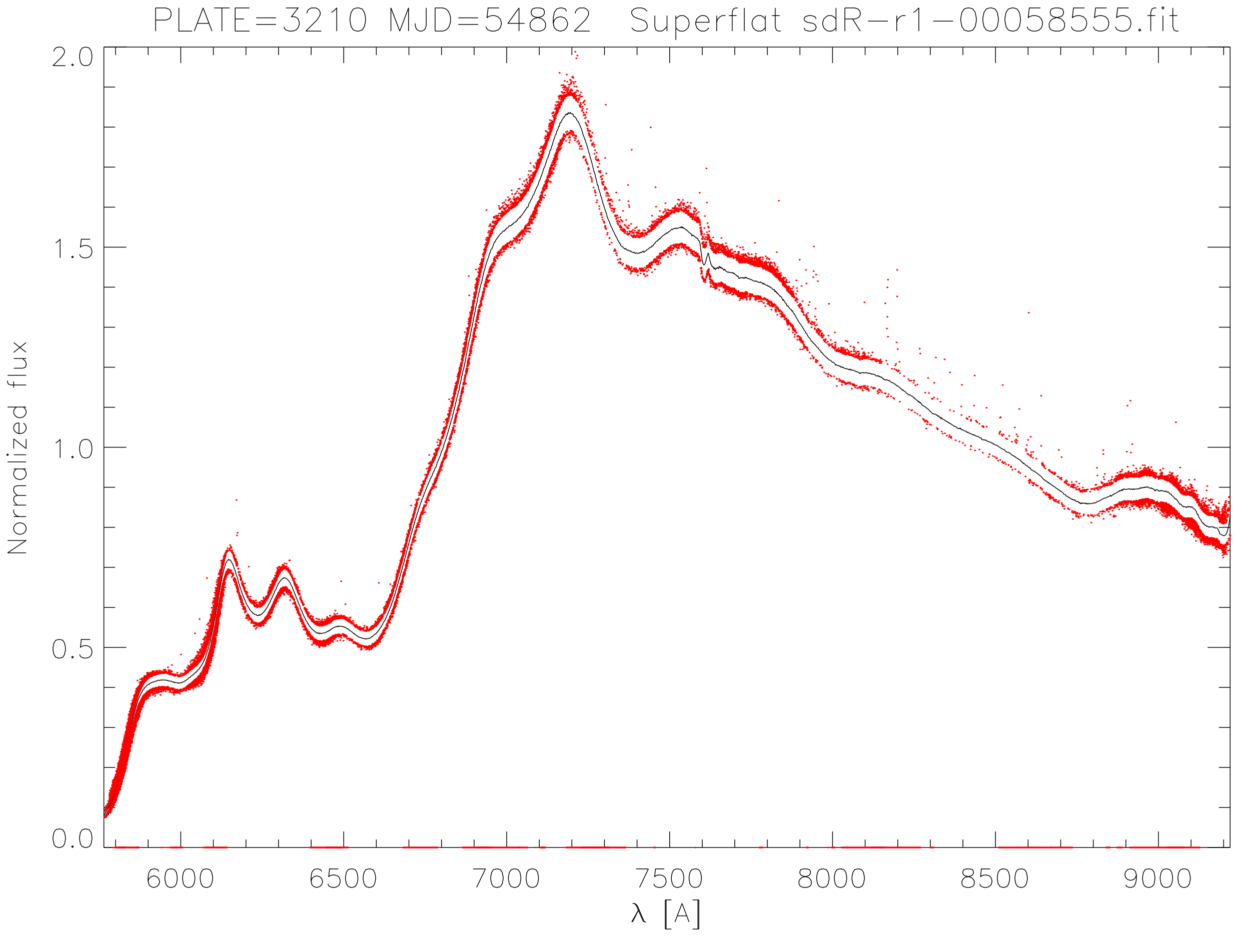

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

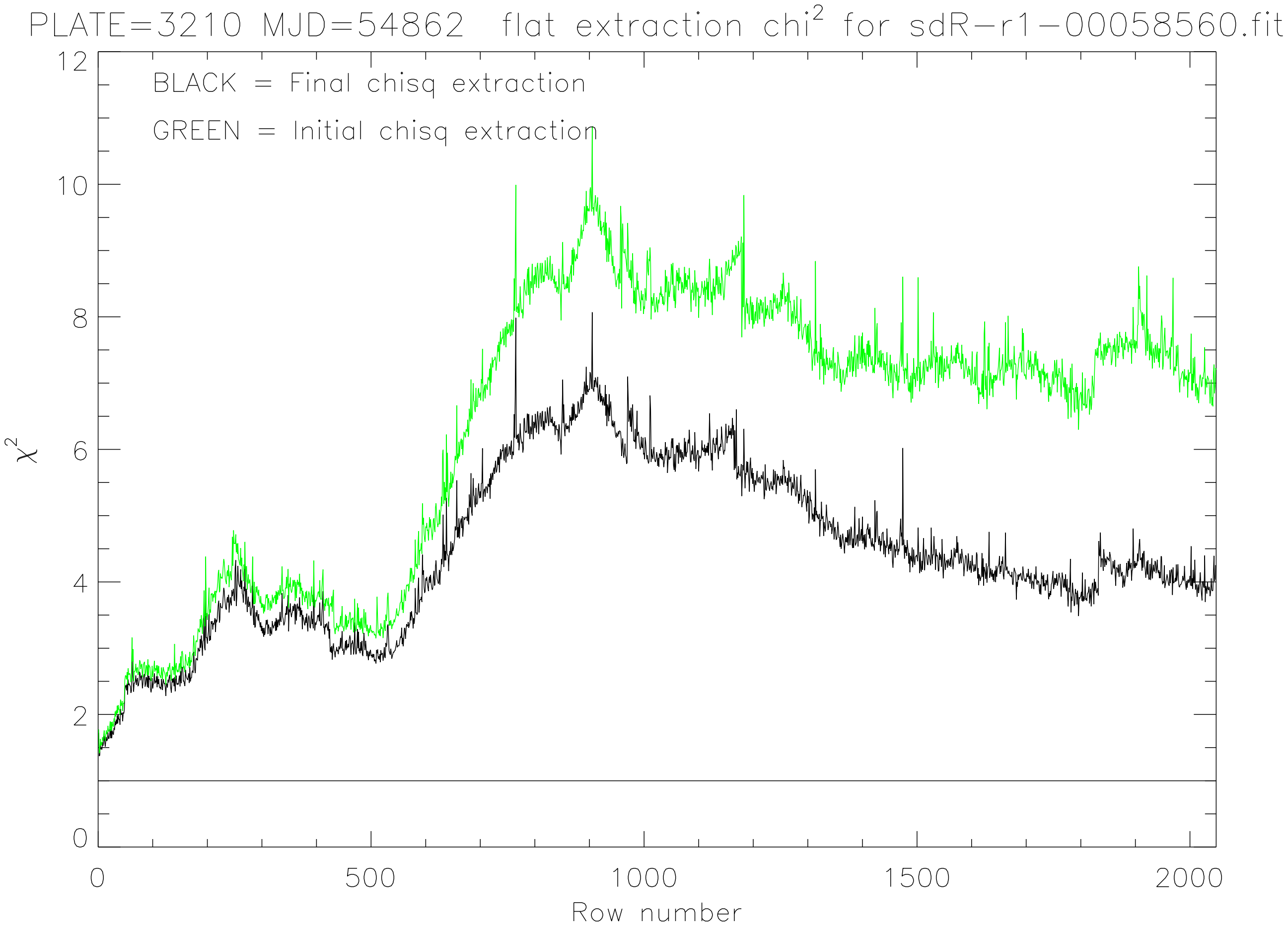

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber


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

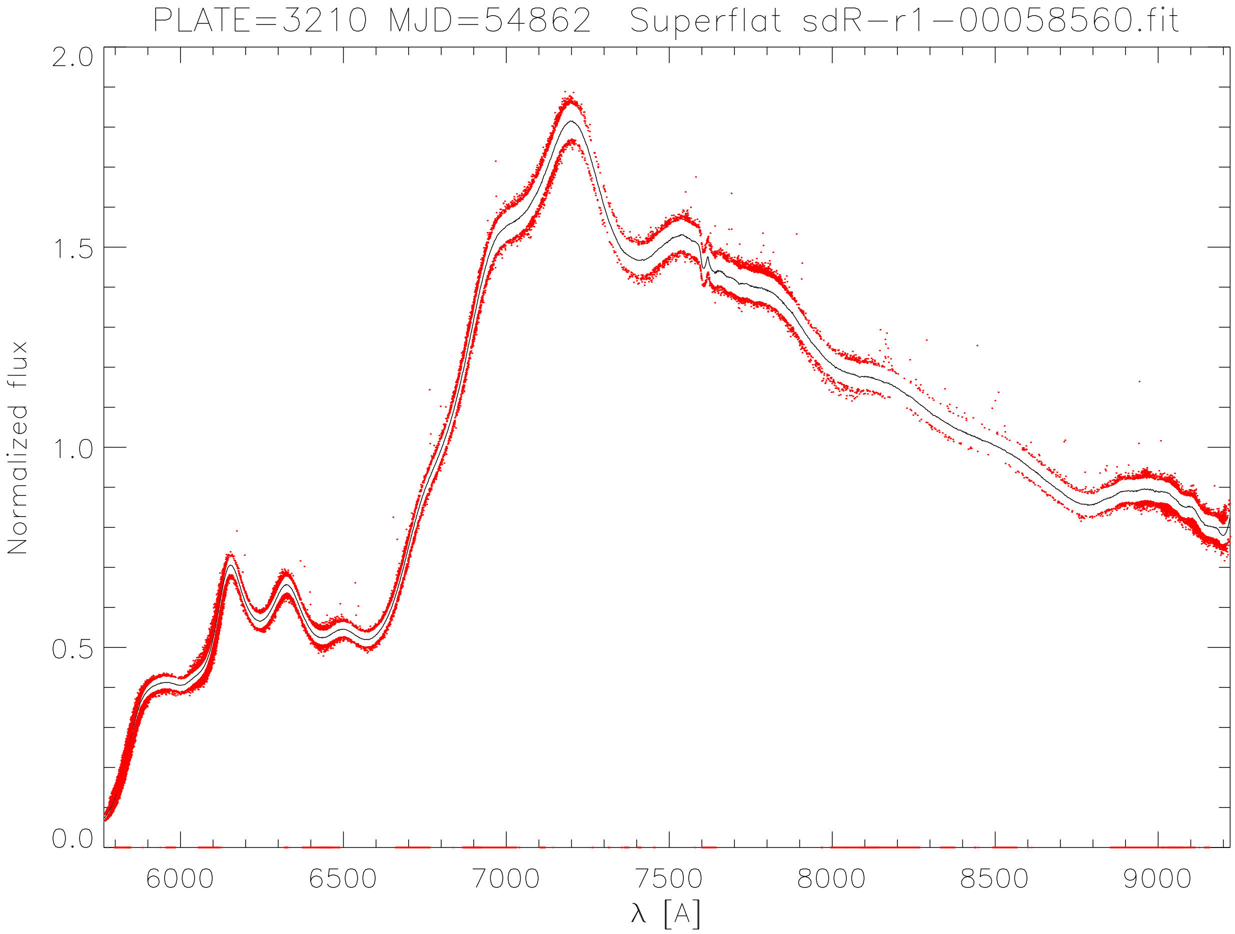

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

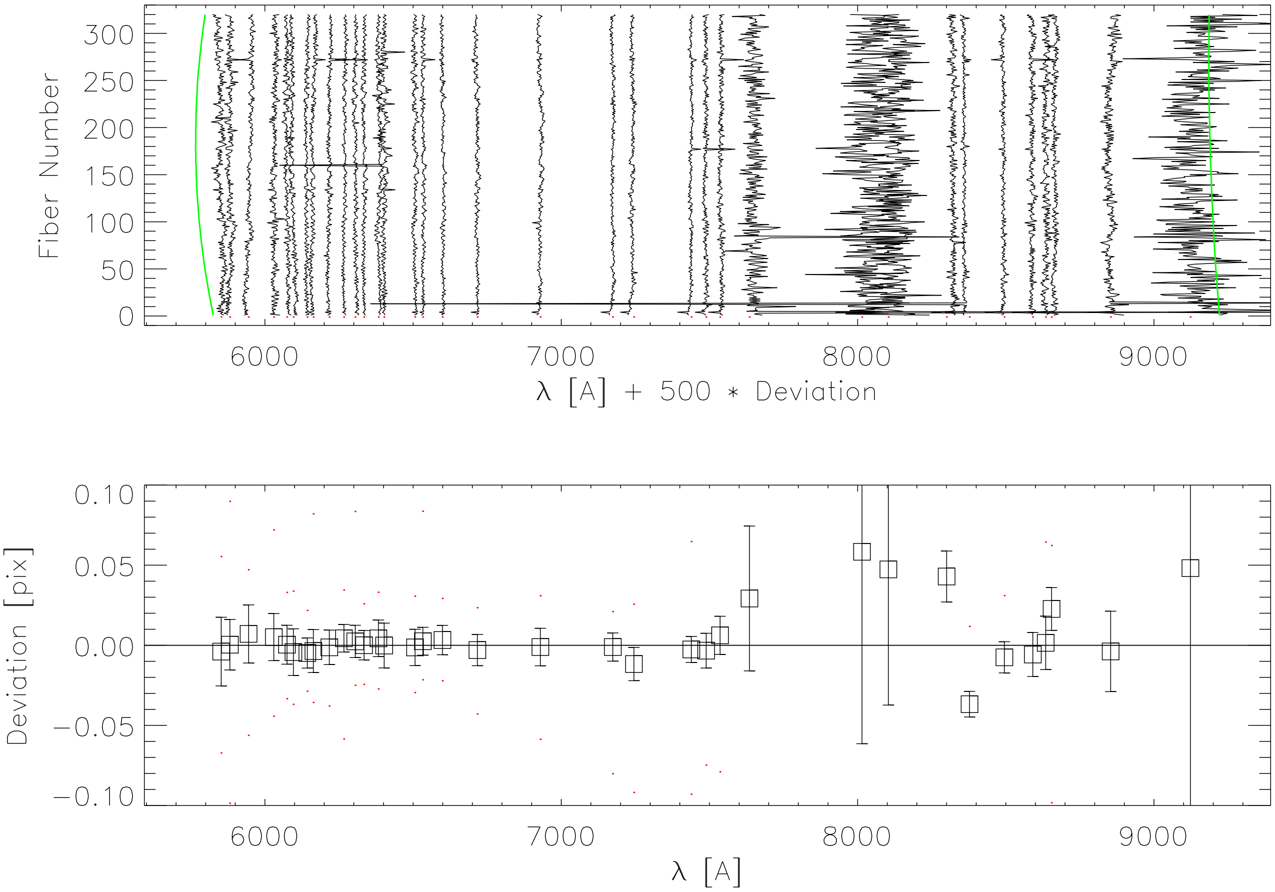

PLATE=3210 MJD=54862 flat extraction chi$^2$ for sdR-r1-00058555.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number


PLATE=3210 MJD=54862 Superflat sdR-r1-00058555.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]



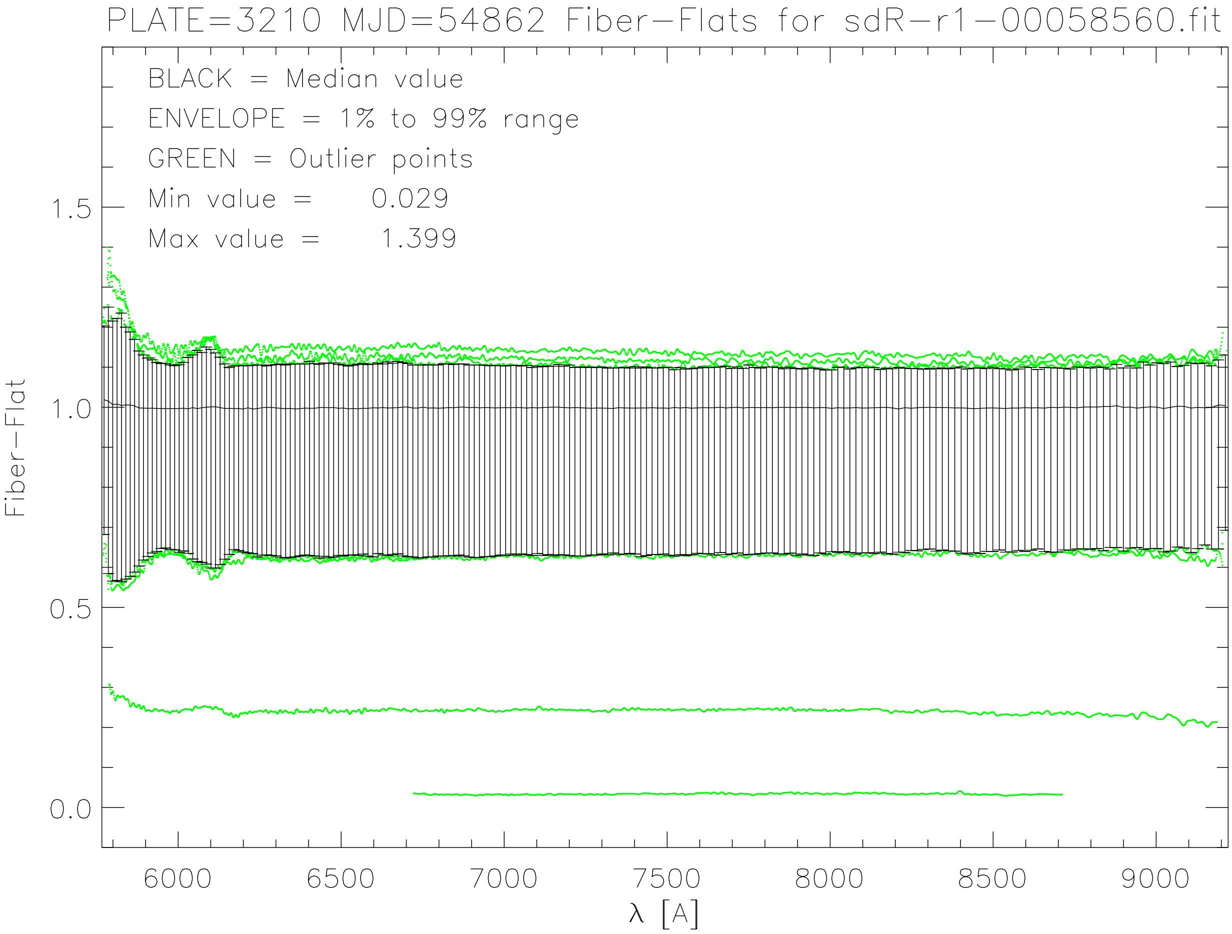
PLATE=3210 MJD=54862  flat extraction $\mathrm{chi}^2$ for sdR-r1-00058560.fit


PLATE=3210 MJD=54862 Superflat sdR-r1-00058560.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]



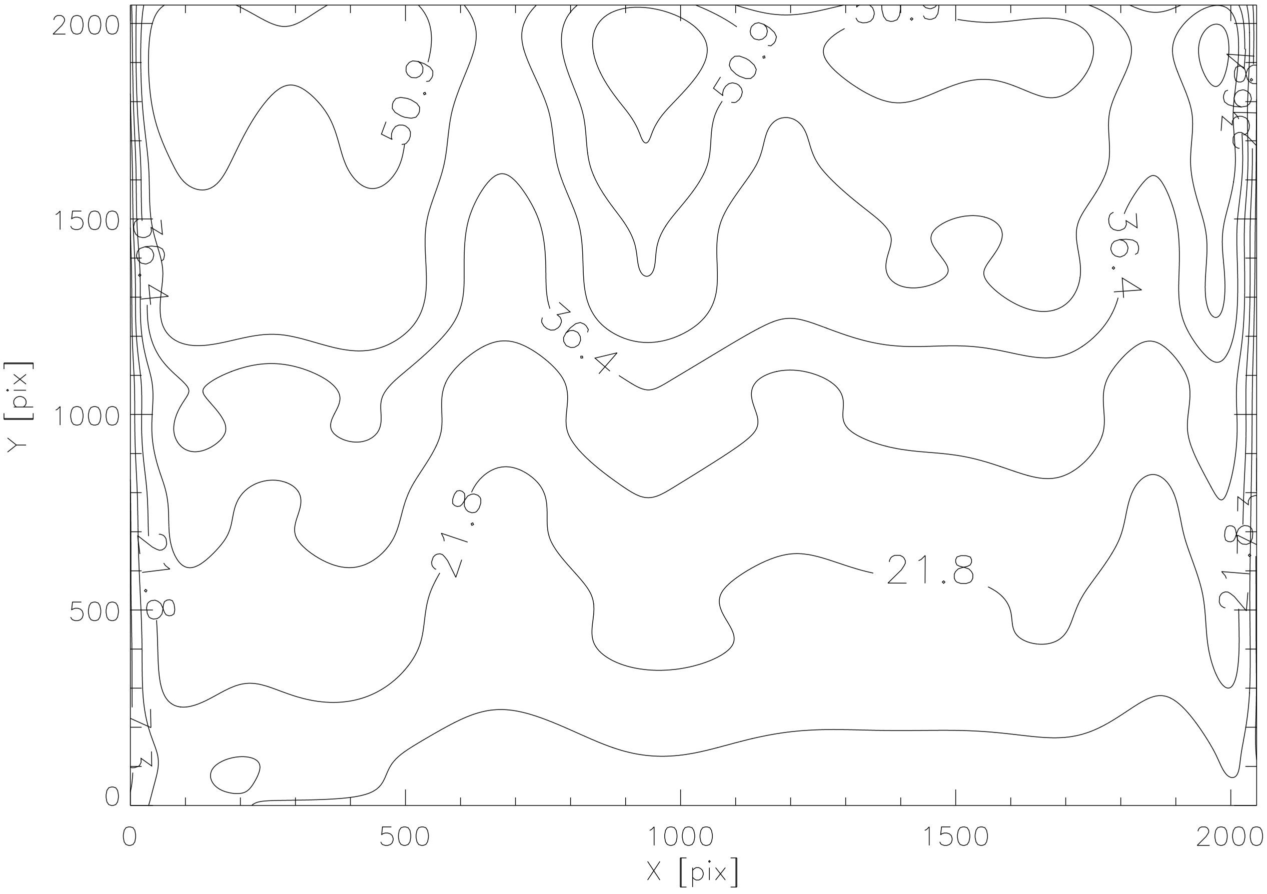
PLATE=3210 MJD=54862 Arcline Fit for sdR-r1-00058561.fit

Fri Mar 12 20:12:54 2010

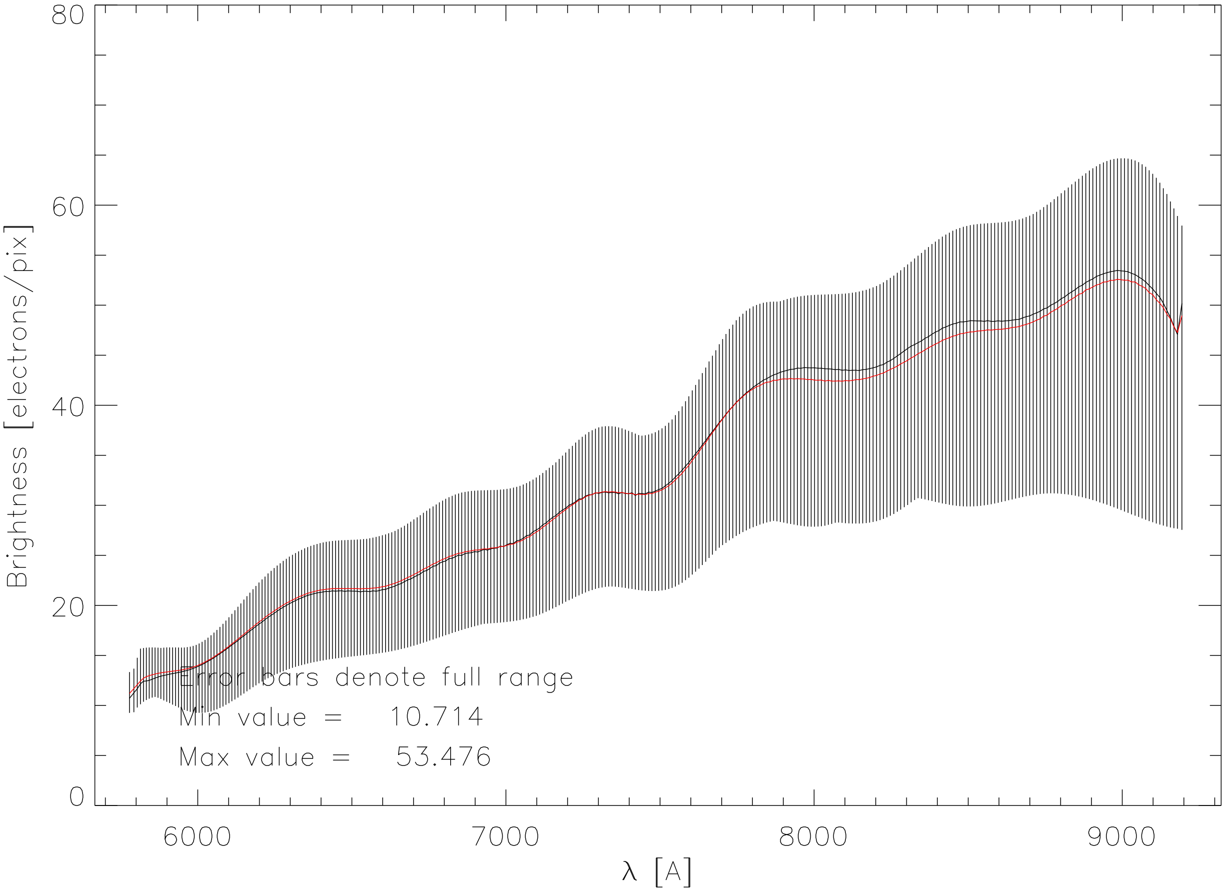


Fri Mar 12 20:13:06 2010

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r1-00058557.fi



PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r1-00058557.fi

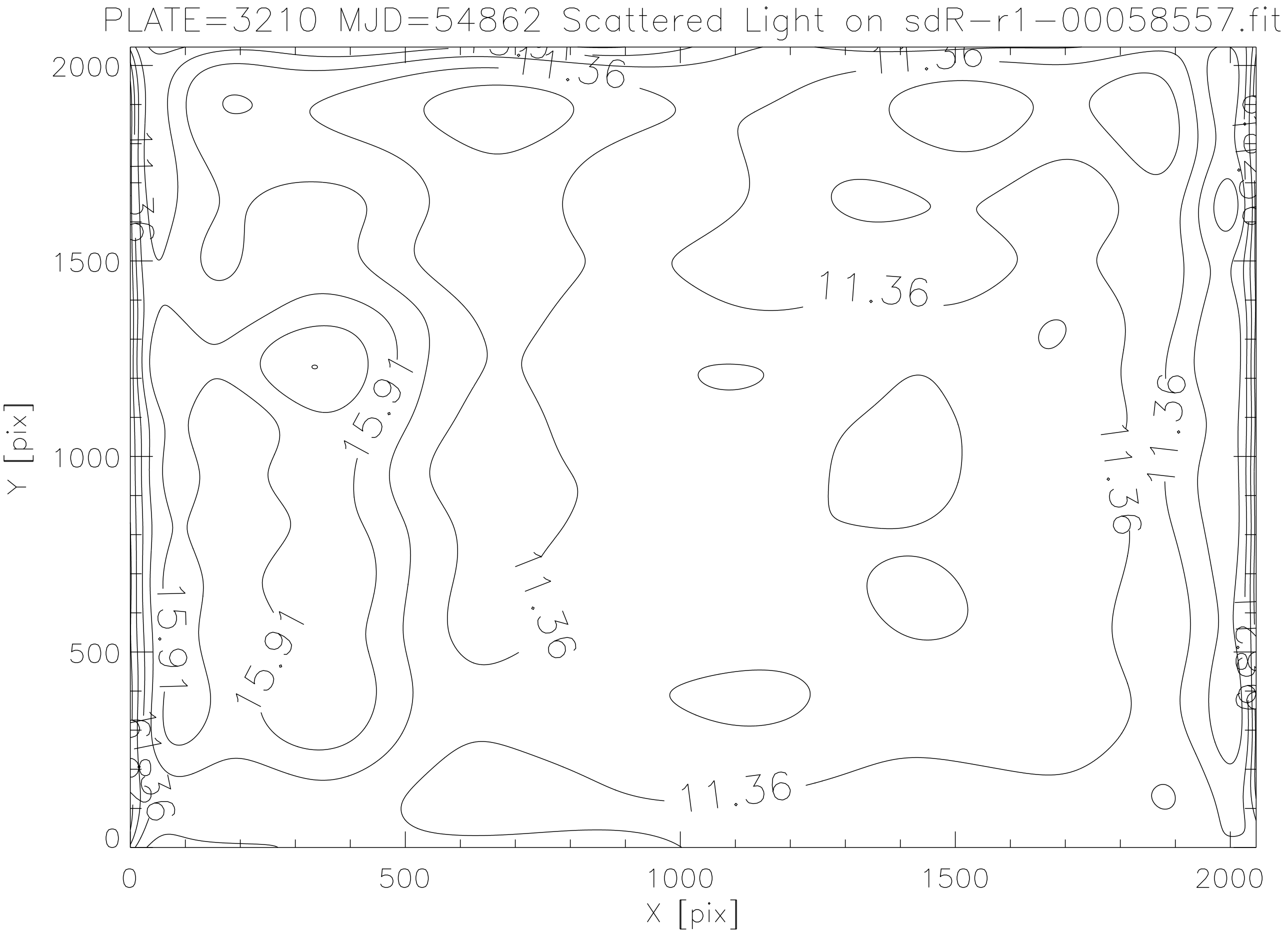


Error bars denote full range

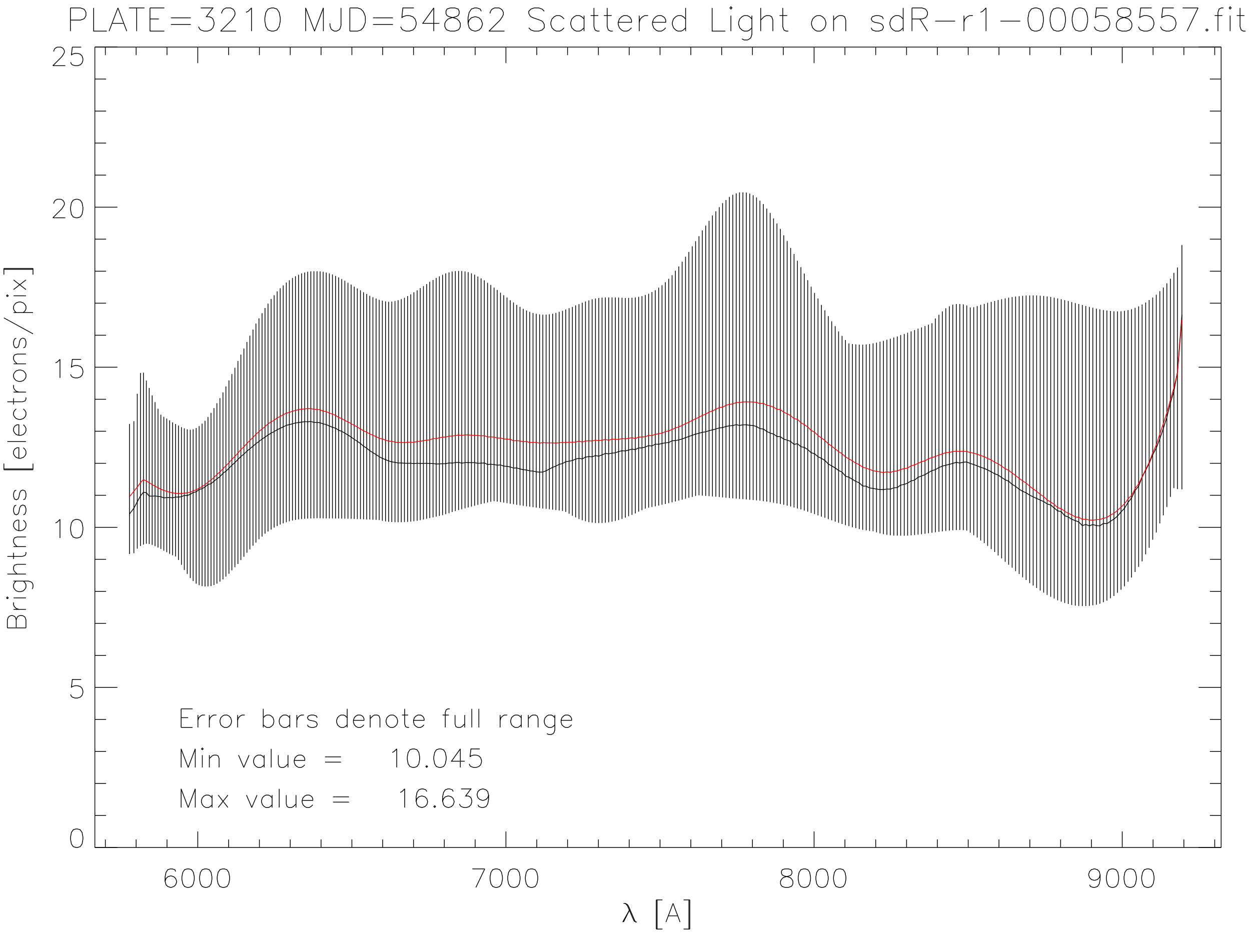
Min value = 10.714

Max value = 53.476

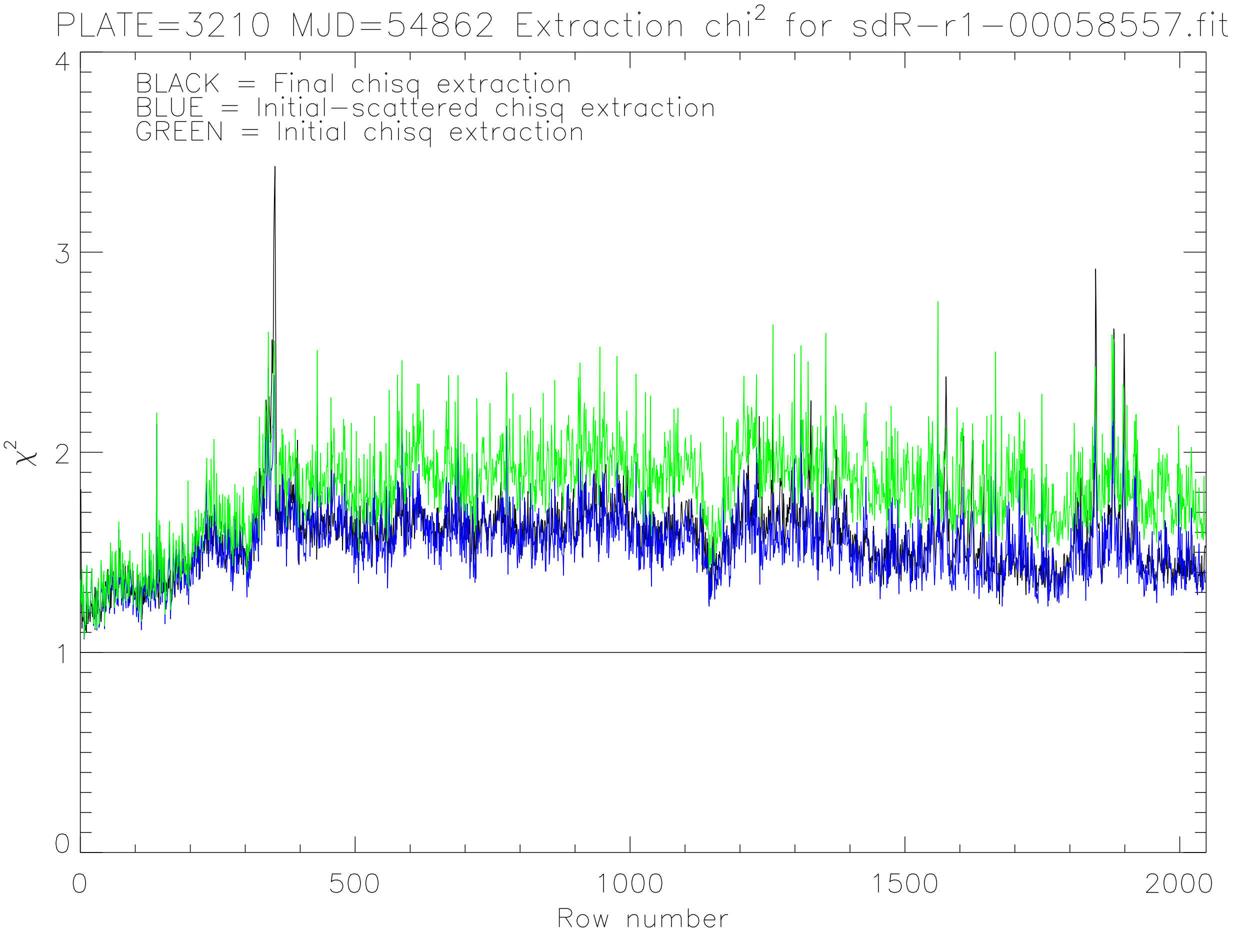
Fri Mar 12 20:14:13 2010

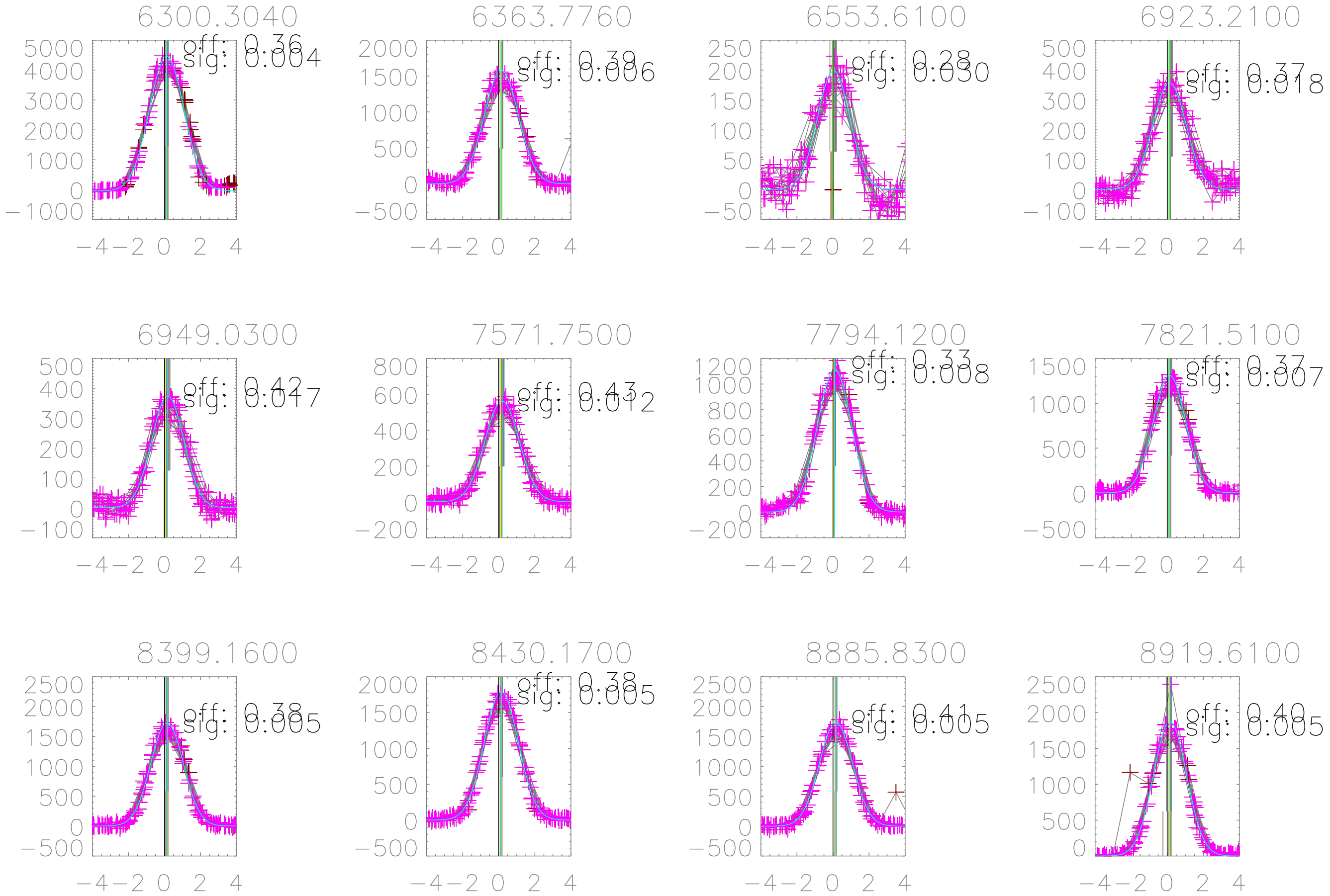


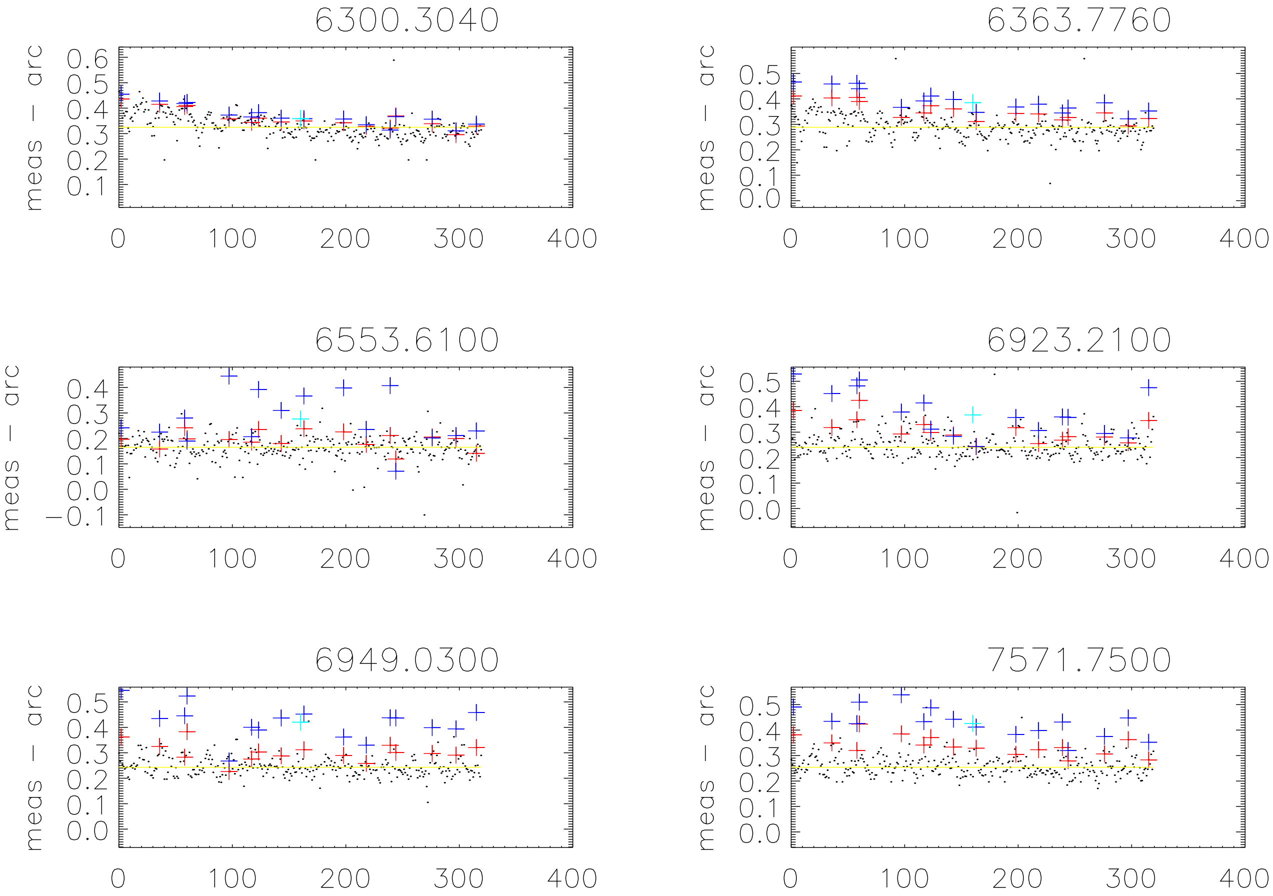
PLATE=3210 MJD=54862 Scattered Light on sdR-r1-00058557.fit

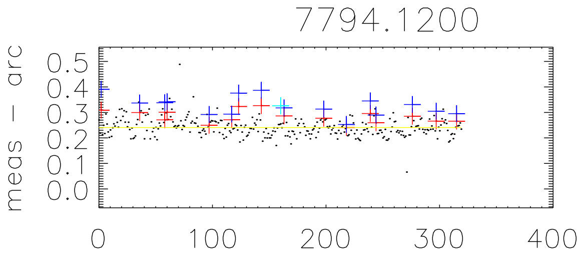


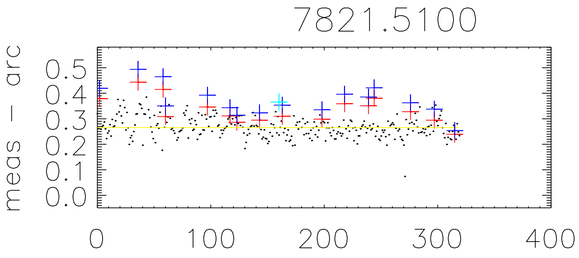
Fri Mar 12 20:18:15 2010

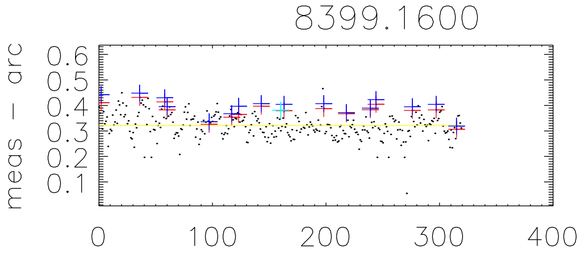

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-r1-00058557.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
0
500
1000
1500
2000
Row number

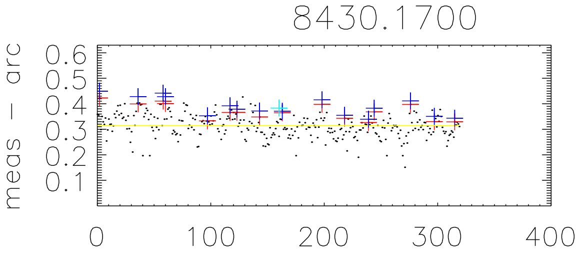

6300.3040
off: 0.36
sig: 0.004
6363.7760
off: 0.39
sig: 0.006
6553.6100
off: 0.28
sig: 0.030
6923.2100
off: 0.37
sig: 0.018
6949.0300
off: 0.42
sig: 0.017
7571.7500
off: 0.43
sig: 0.012
7794.1200
off: 0.33
sig: 0.008
7821.5100
off: 0.37
sig: 0.007
8399.1600
off: 0.38
sig: 0.005
8430.1700
off: 0.38
sig: 0.005
8885.8300
off: 0.41
sig: 0.005
8919.6100
off: 0.40
sig: 0.005
−4 −2 0 2 4

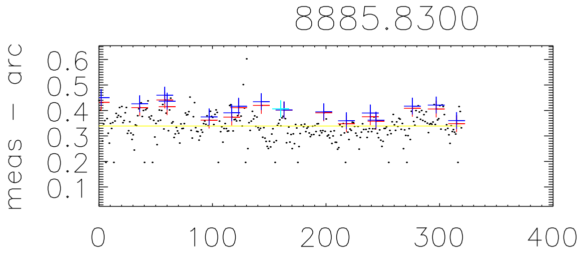

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0
100
200
300
400

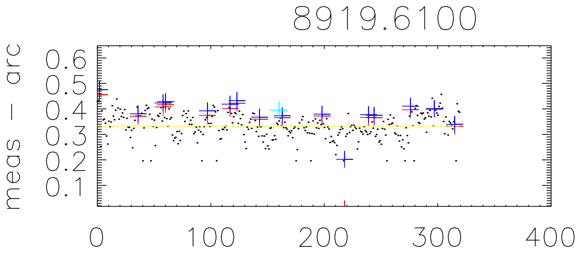

7794.1200

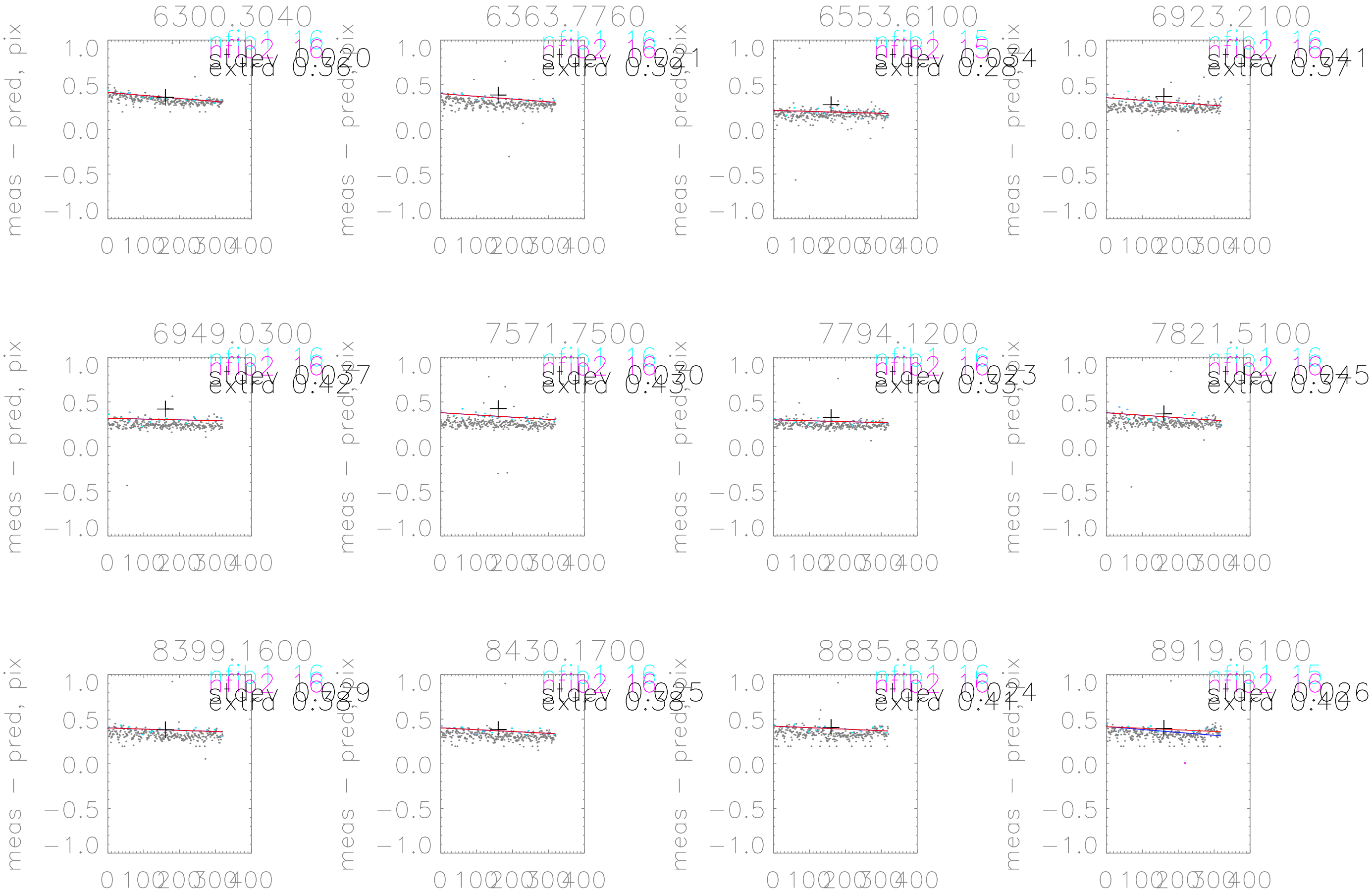

7821.5100

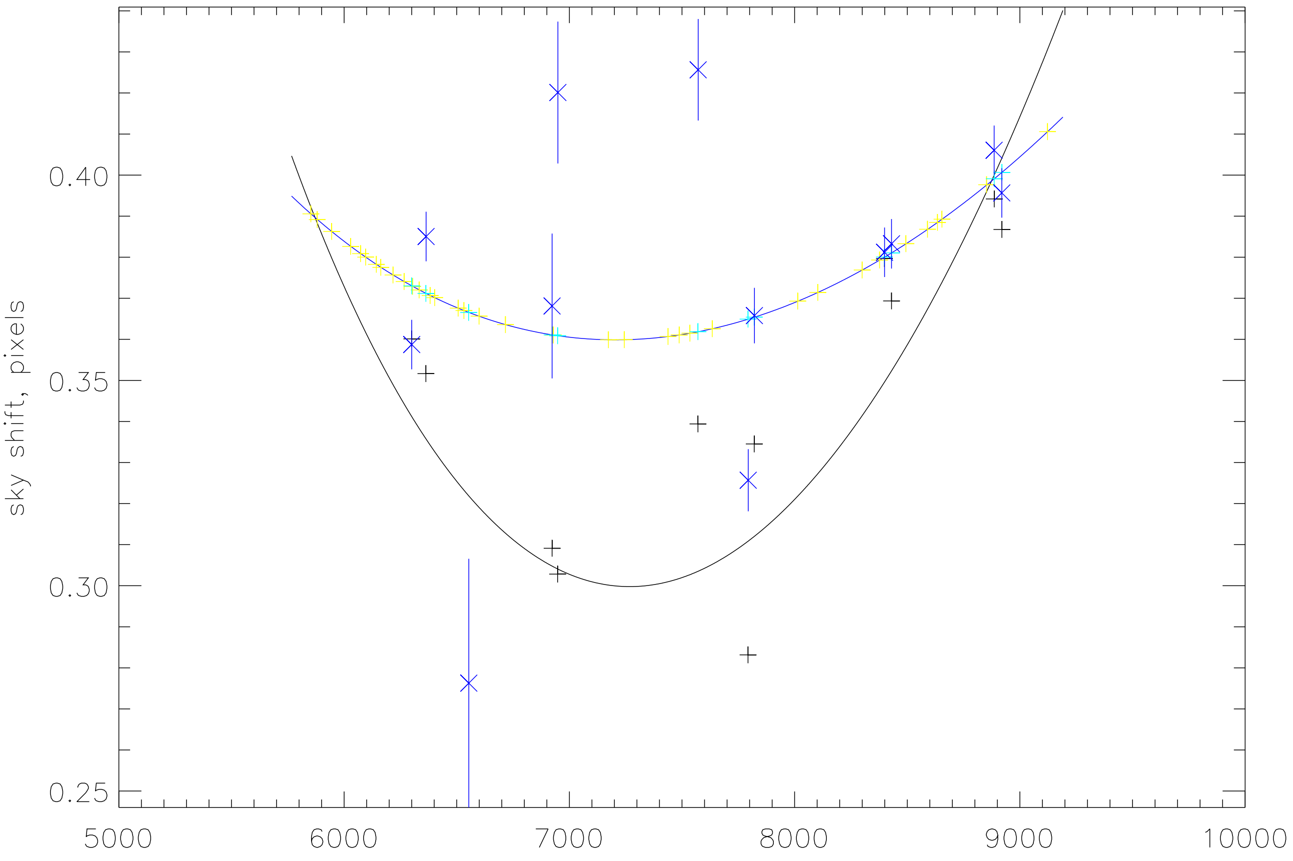

8399.1600

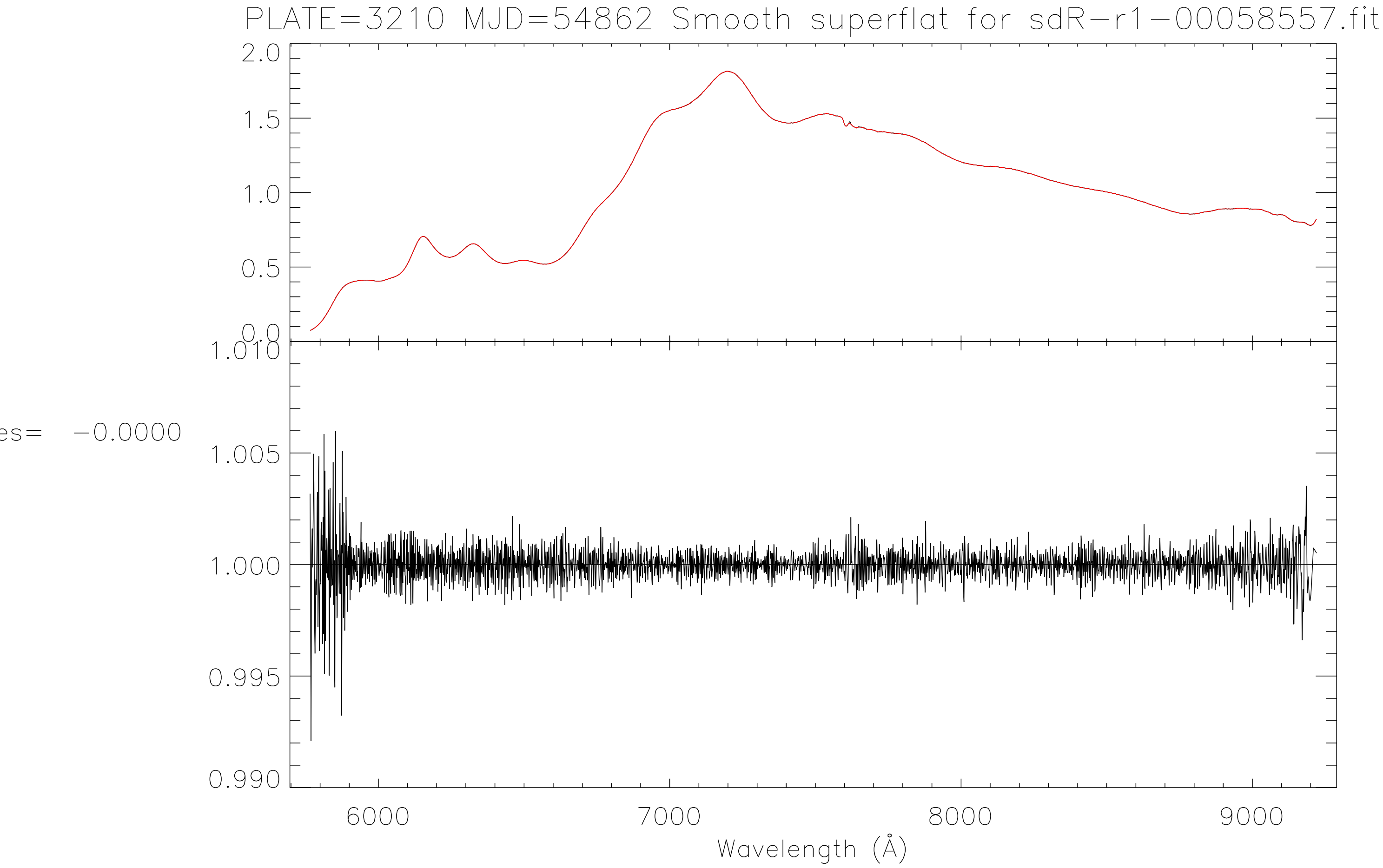

8430.1700


8885.8300

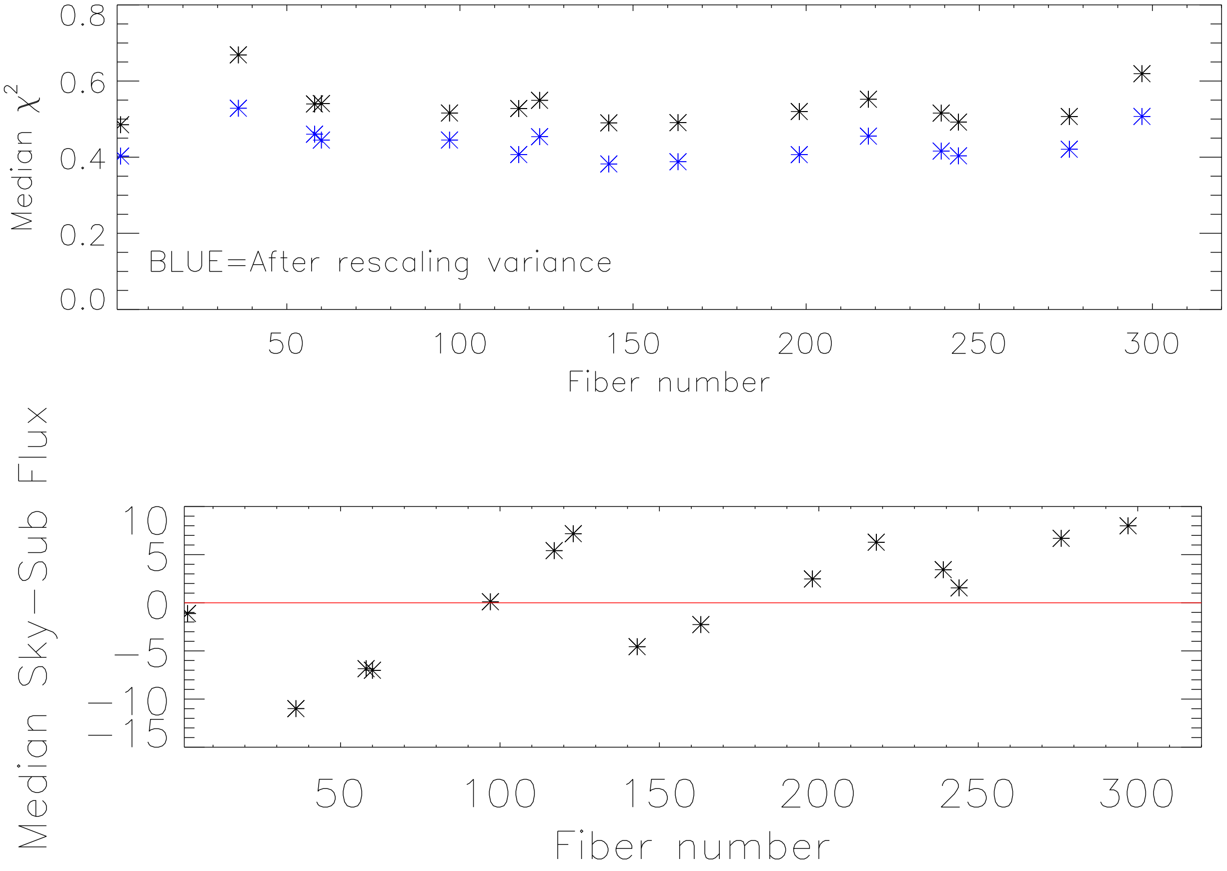

8919.6100

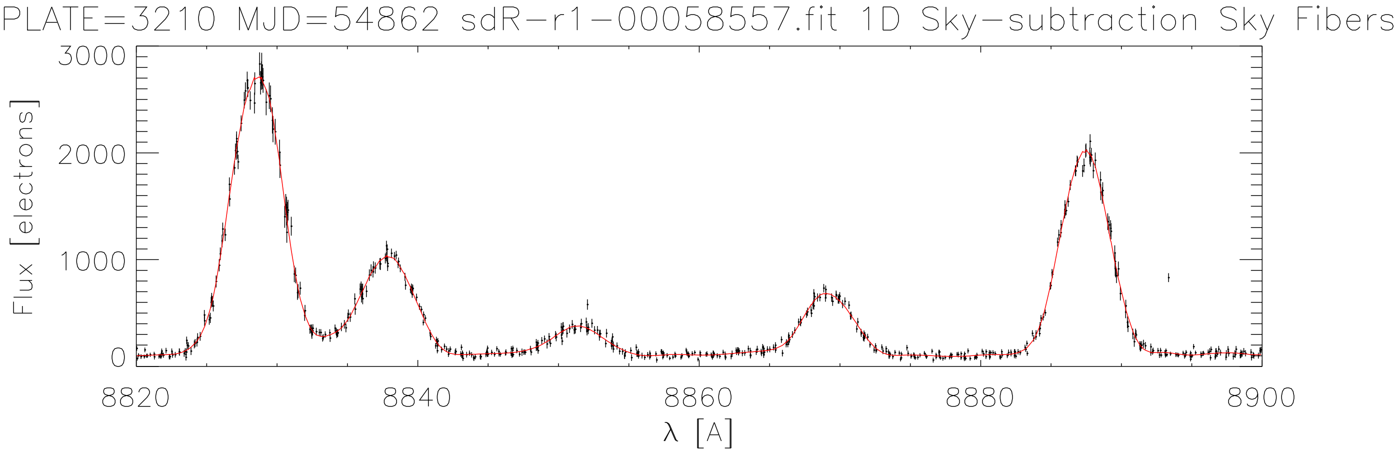

6300.3040
nfib1 16
nfib2 16
stdev 0.020
extrd 0.36
6363.7760
nfib1 16
nfib2 16
stdev 0.021
extrd 0.39
6553.6100
nfib1 15
nfib2 15
stdev 0.034
extrd 0.28
6923.2100
nfib1 16
nfib2 16
stdev 0.041
extrd 0.37
6949.0300
nfib1 16
nfib2 16
stdev 0.037
extrd 0.42
7571.7500
nfib1 16
nfib2 16
stdev 0.030
extrd 0.43
7794.1200
nfib1 16
nfib2 16
stdev 0.023
extrd 0.33
7821.5100
nfib1 16
nfib2 16
stdev 0.045
extrd 0.37
8399.1600
nfib1 16
nfib2 16
stdev 0.029
extrd 0.38
8430.1700
nfib1 16
nfib2 16
stdev 0.025
extrd 0.38
8885.8300
nfib1 16
nfib2 16
stdev 0.024
extrd 0.41
8919.6100
nfib1 15
nfib2 16
stdev 0.026
extrd 0.40
meas – pred, pix
1.0
0.5
0.0
–0.5
–1.0
0 100 200 300 400


sky shift, pixels
0.40
0.35
0.30
0.25
5000
6000
7000
8000
9000
10000

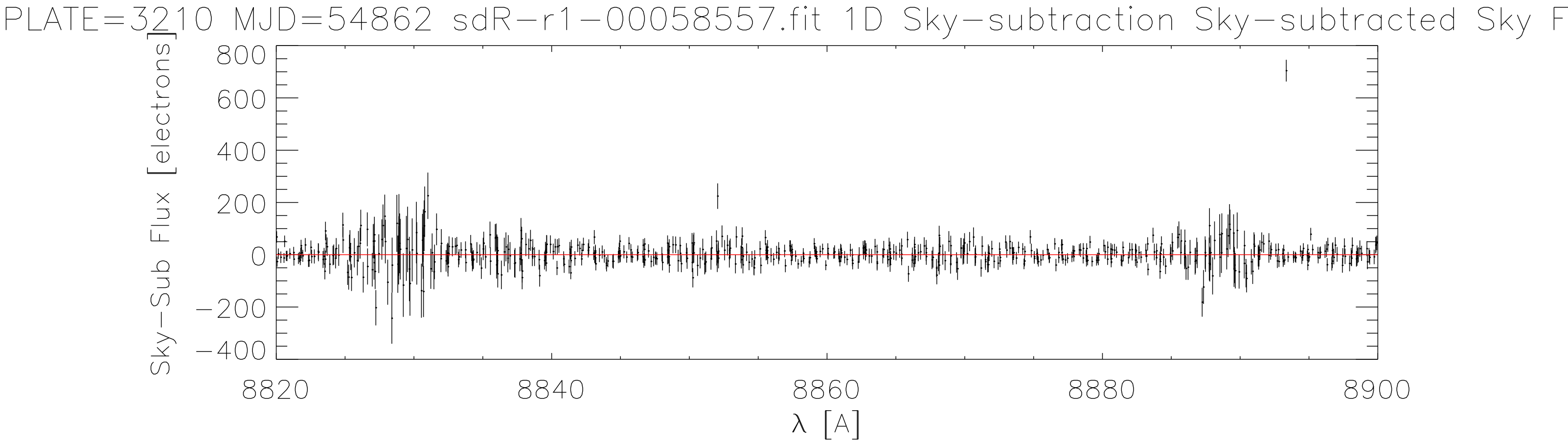

PLATE=3210 MJD=54862 Smooth superflat for sdR-r1-00058557.fit
2.0
1.5
1.0
0.5
0.0
1.010
es= −0.0000
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

PLATE=3210 MJD=54862 sdR-r1-00058557.fit 1D Sky-subtraction Sky Fiber

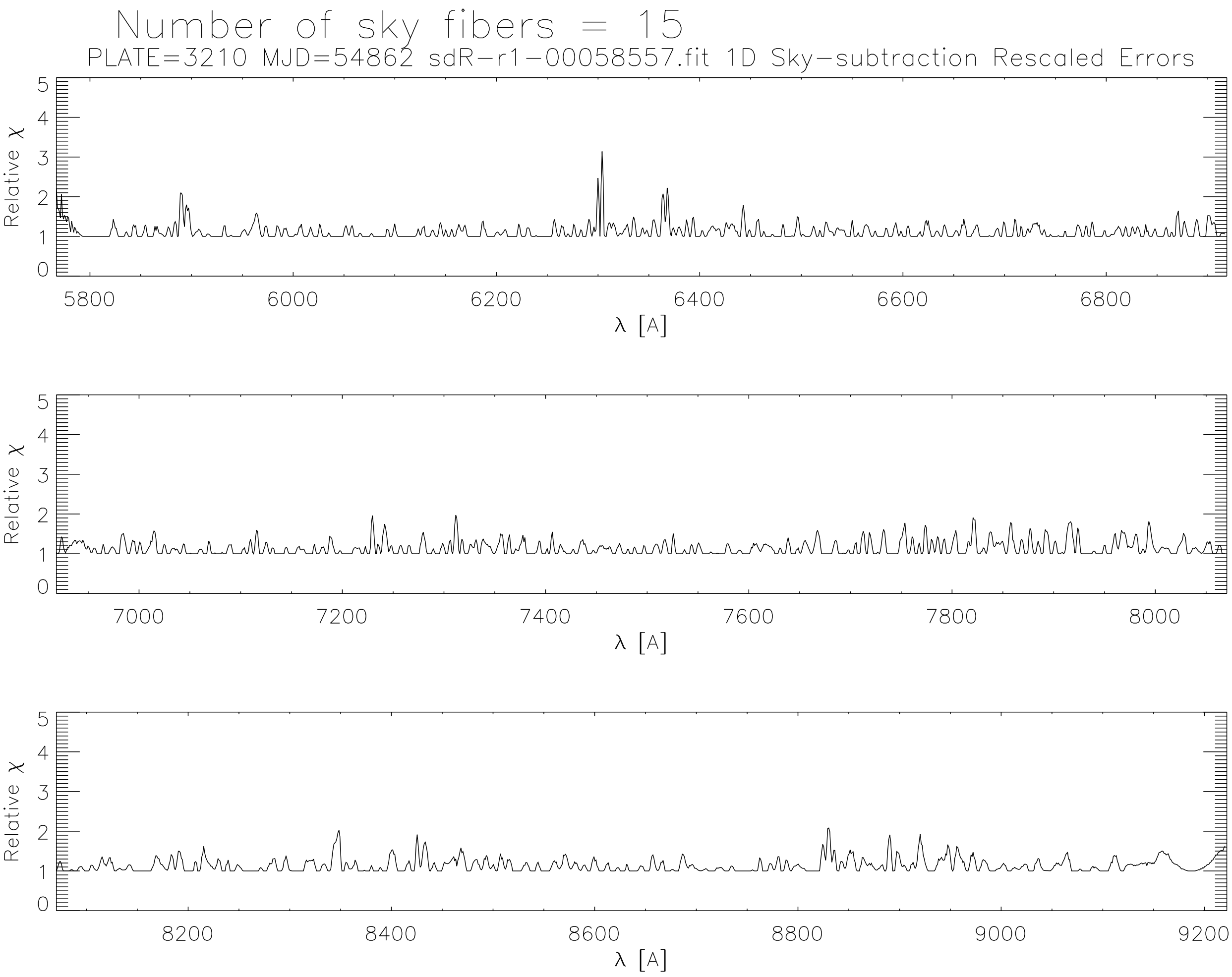




PLATE=3210 MJD=54862 sdR-r1-00058557.fit 1D Sky-subtraction Sky Fibers

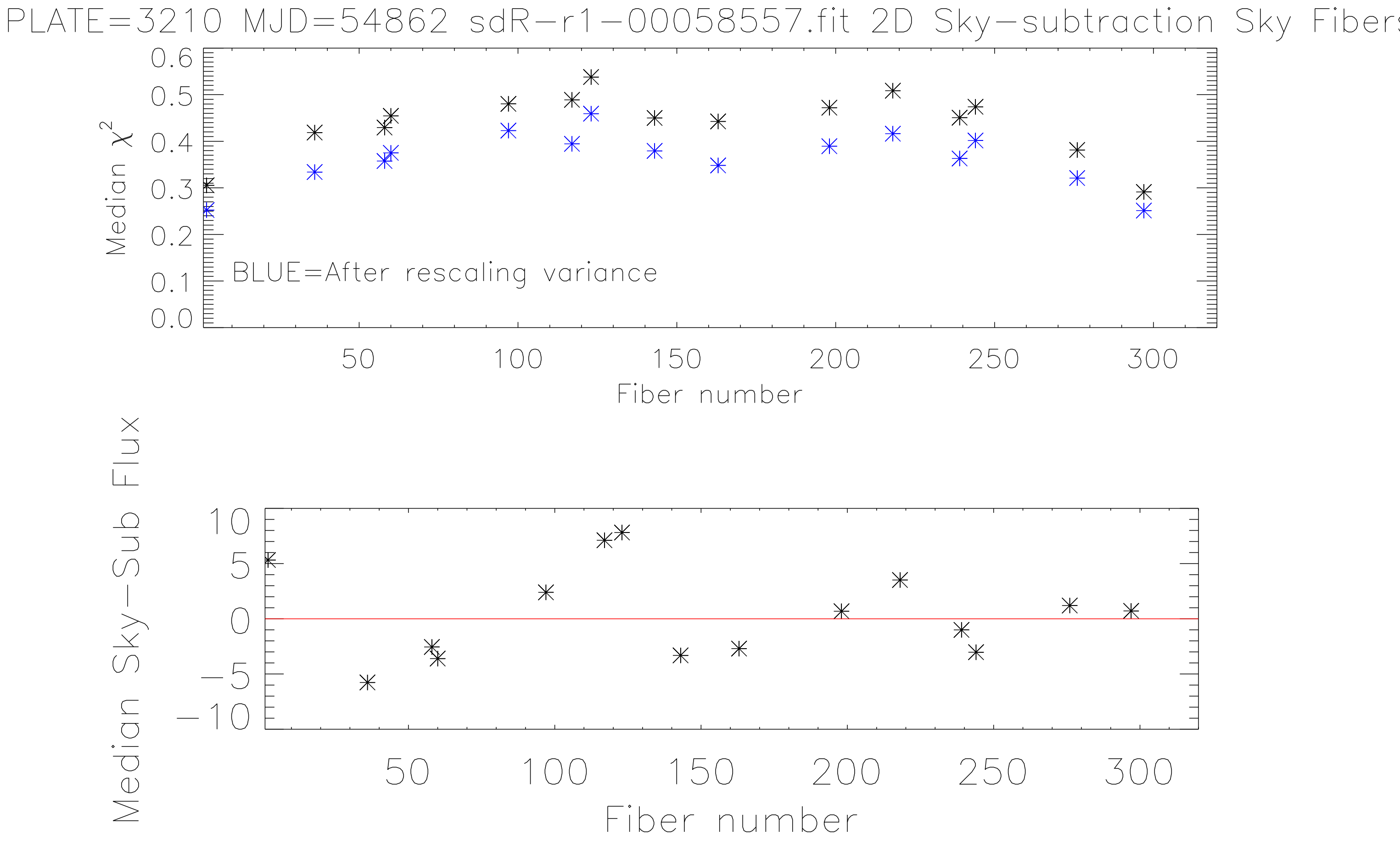


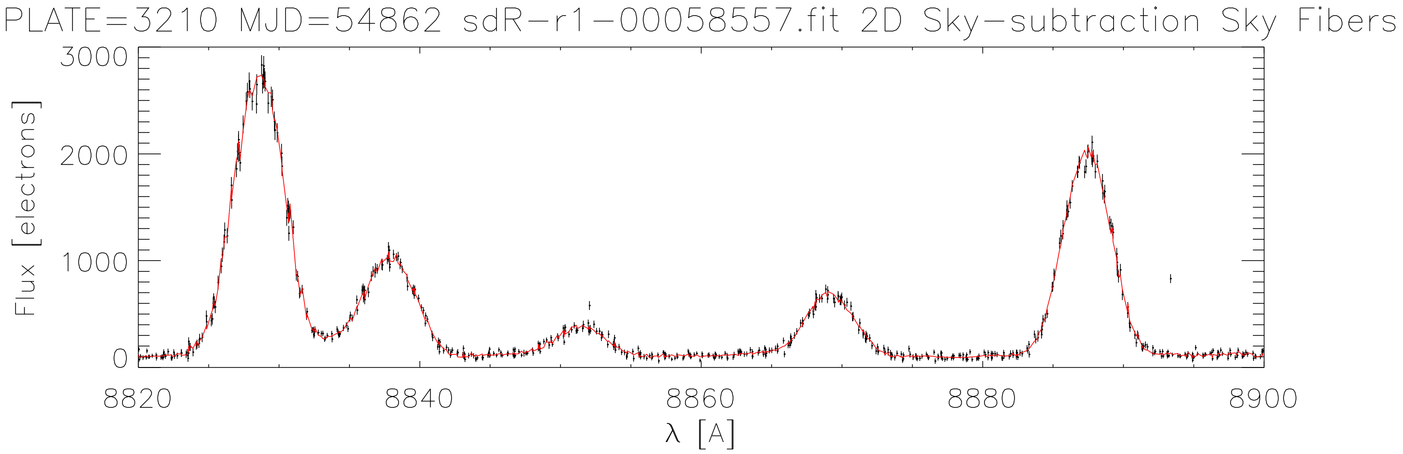
PLATE=3210 MJD=54862 sdR-r1-00058557.fit 1D Sky-subtraction Sky-subtracted Sky F

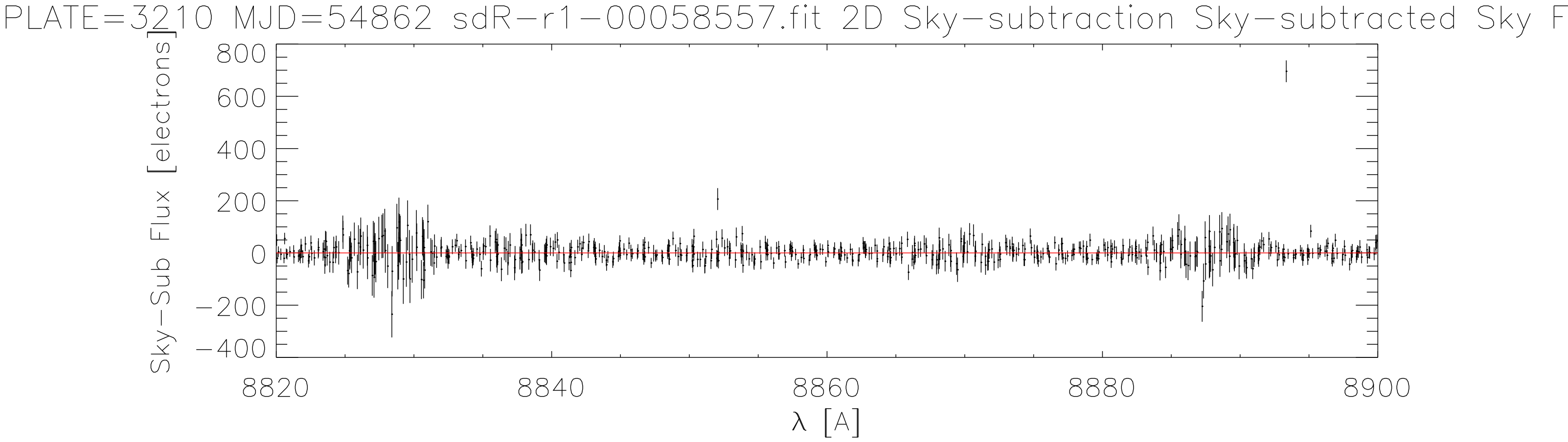


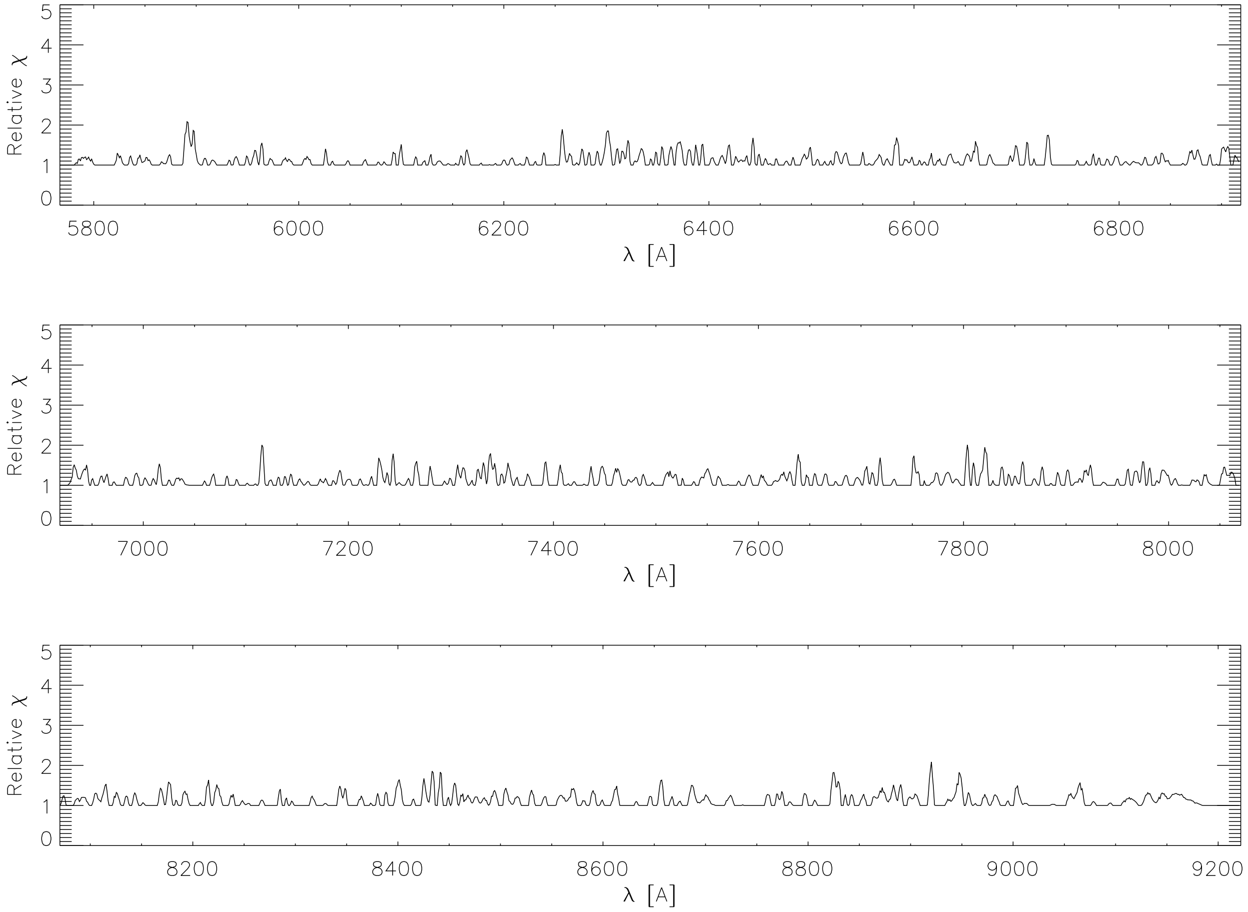
Number of sky fibers = 15

PLATE=3210 MJD=54862 sdR-r1-00058557.fit 1D Sky-subtraction Rescaled Errors


PLATE=3210 MJD=54862 sdR-r1-00058557.fit 2D Sky-subtraction Sky Fiber
Median $\chi^2$
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
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number

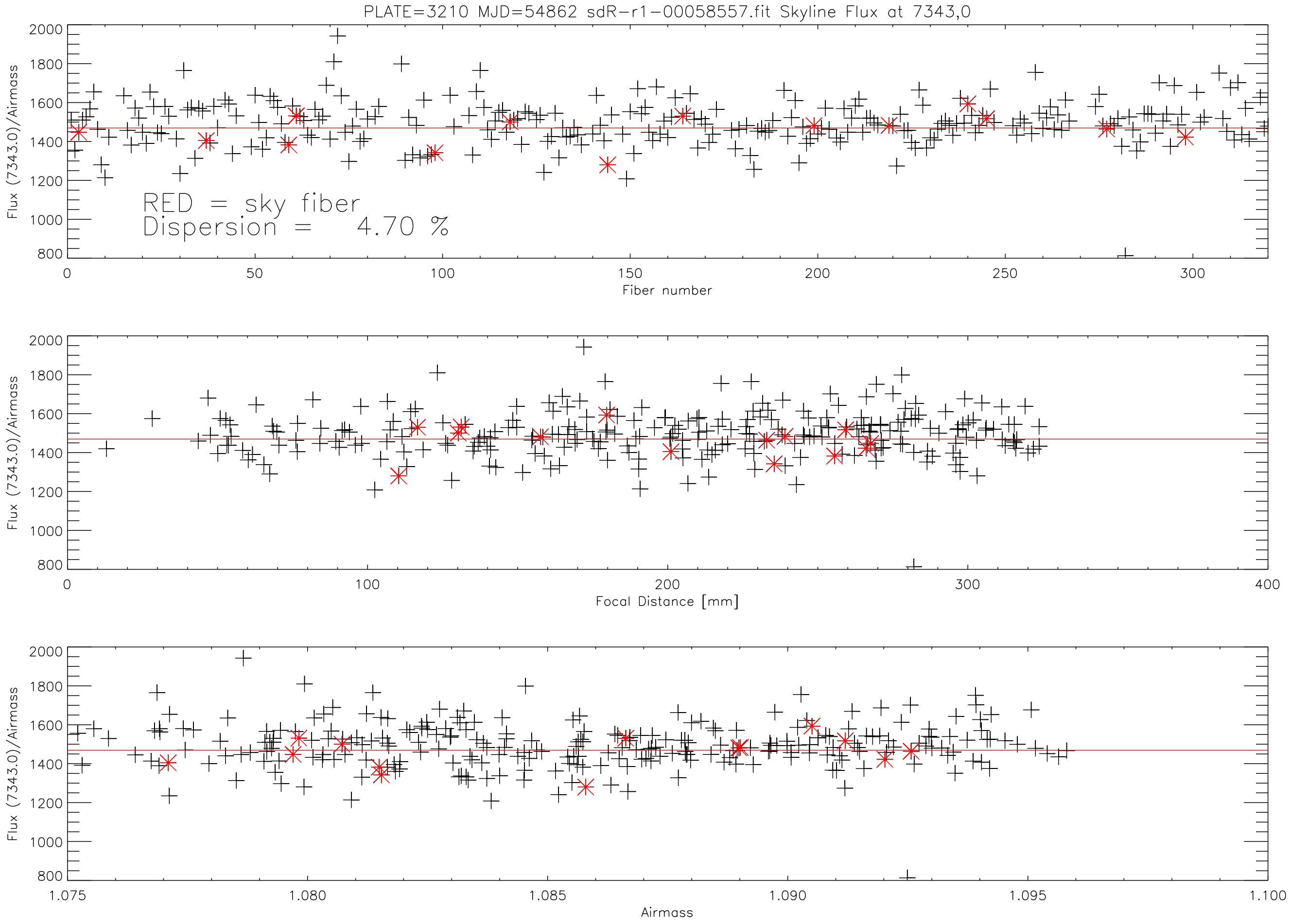

PLATE=3210 MJD=54862 sdR-r1-00058557.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

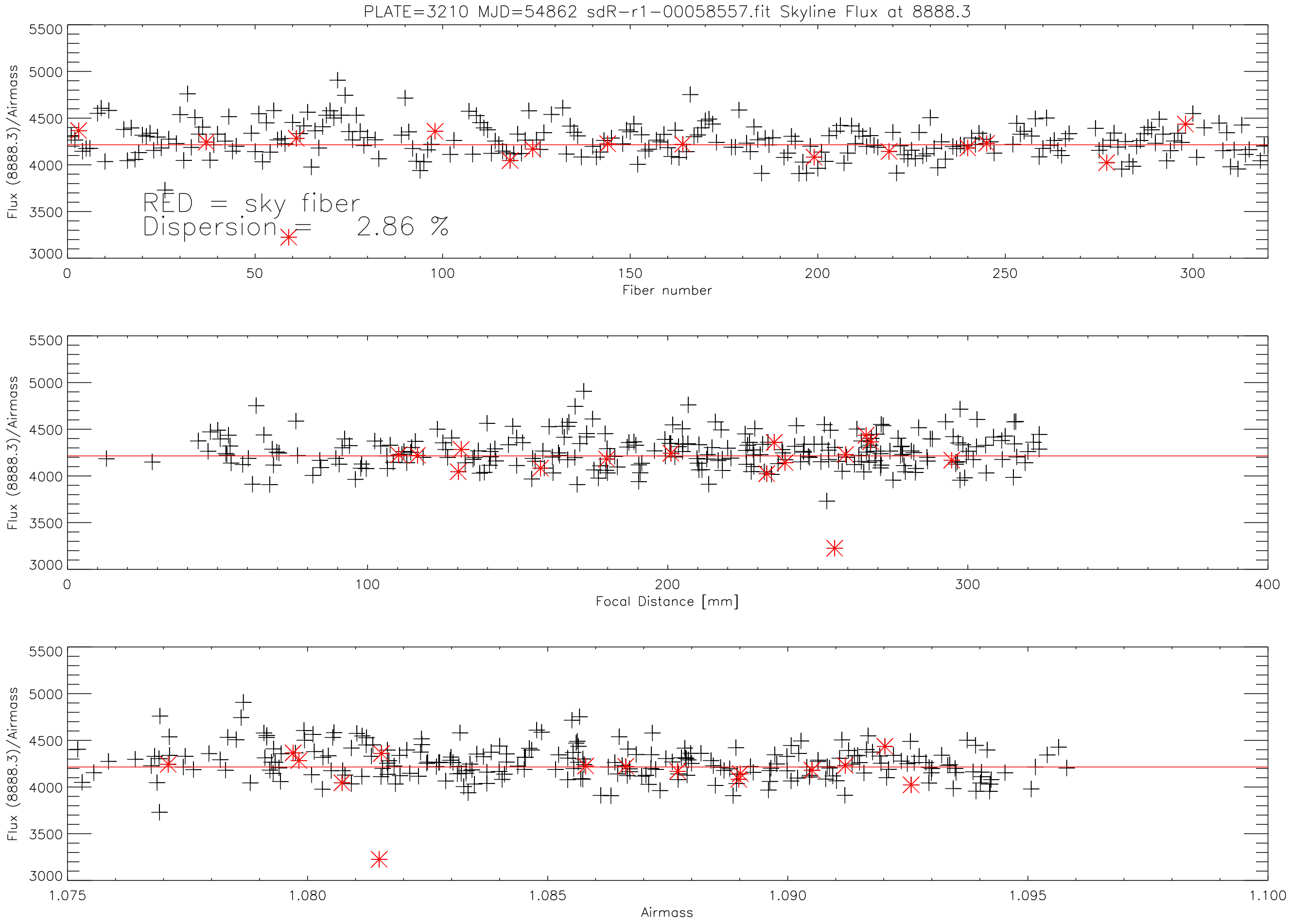

PLATE=3210 MJD=54862 sdR-r1-00058557.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

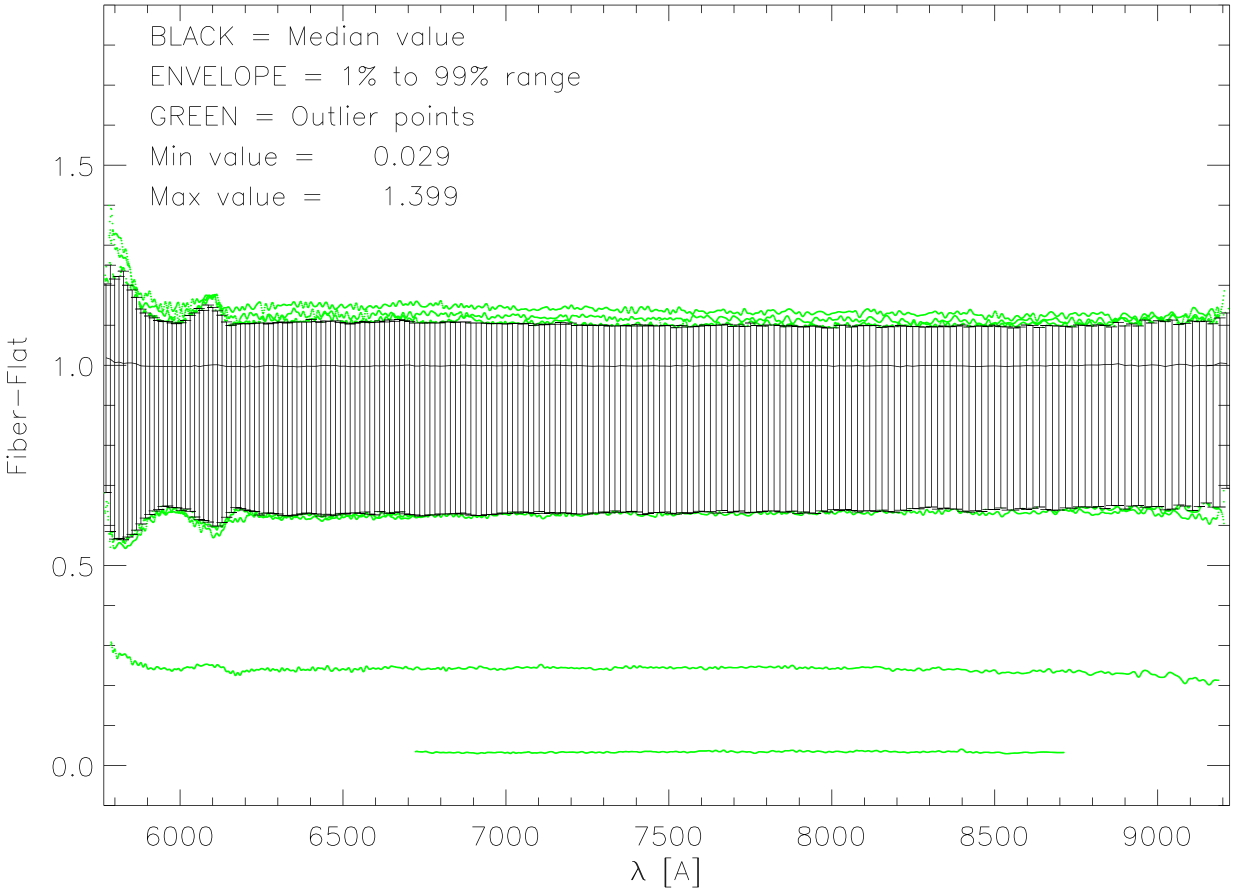


Number of sky fibers = 15

PLATE=3210 MJD=54862 sdR-r1-00058557.fit 2D Sky-subtraction Rescaled Errors

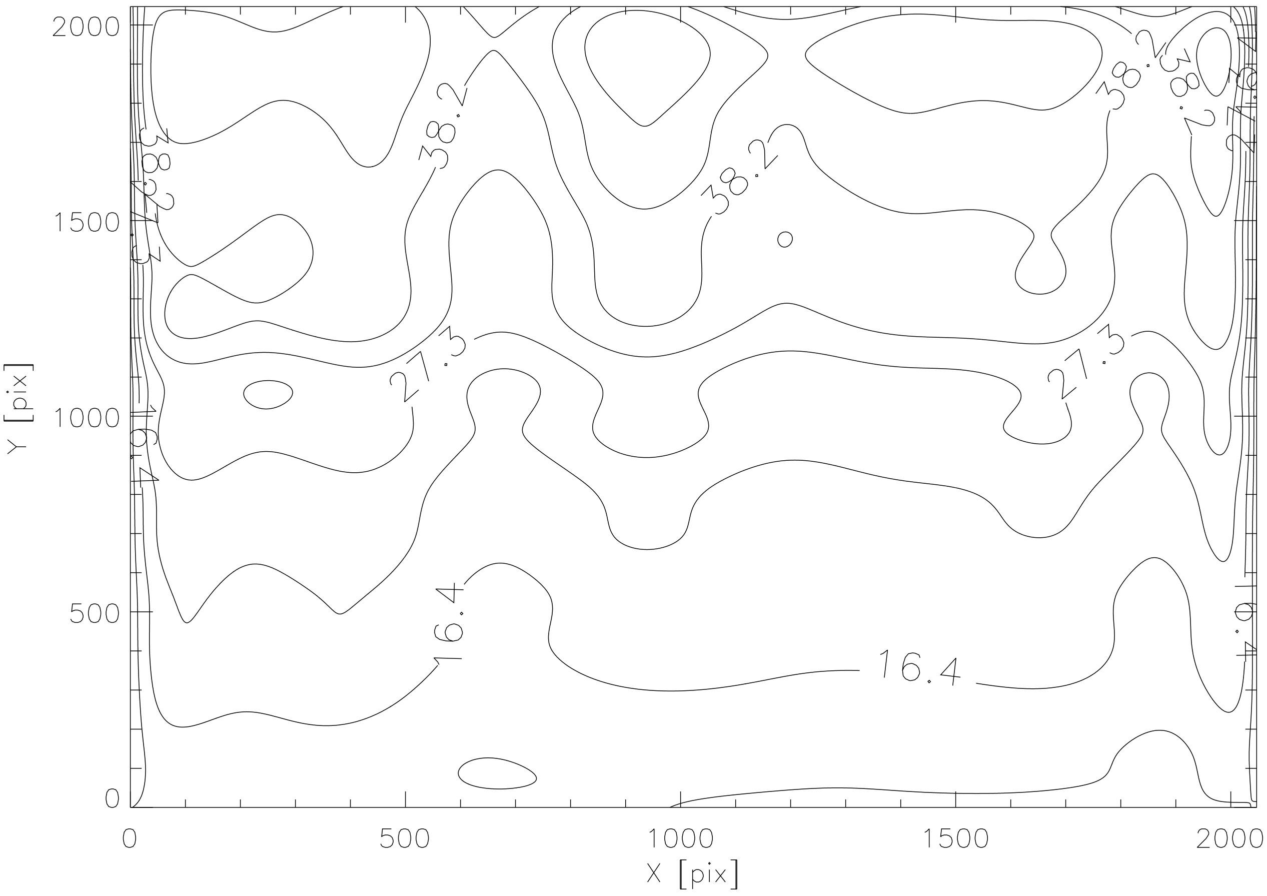

PLATE=3210 MJD=54862 sdR-r1-00058557.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 4.70 %
Flux (7343.0)/Airmass
2000
1800
1600
1400
1200
1000
800
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2000
1800
1600
1400
1200
1000
800
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2000
1800
1600
1400
1200
1000
800
1.075
1.080
1.085
1.090
1.095
1.100
Airmass


PLATE=3210 MJD=54862 sdR-r1-00058557.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
3000
RED = sky fiber
Dispersion = 2.86 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
3000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
3000
1.075
1.080
1.085
1.090
1.095
1.100
Airmass

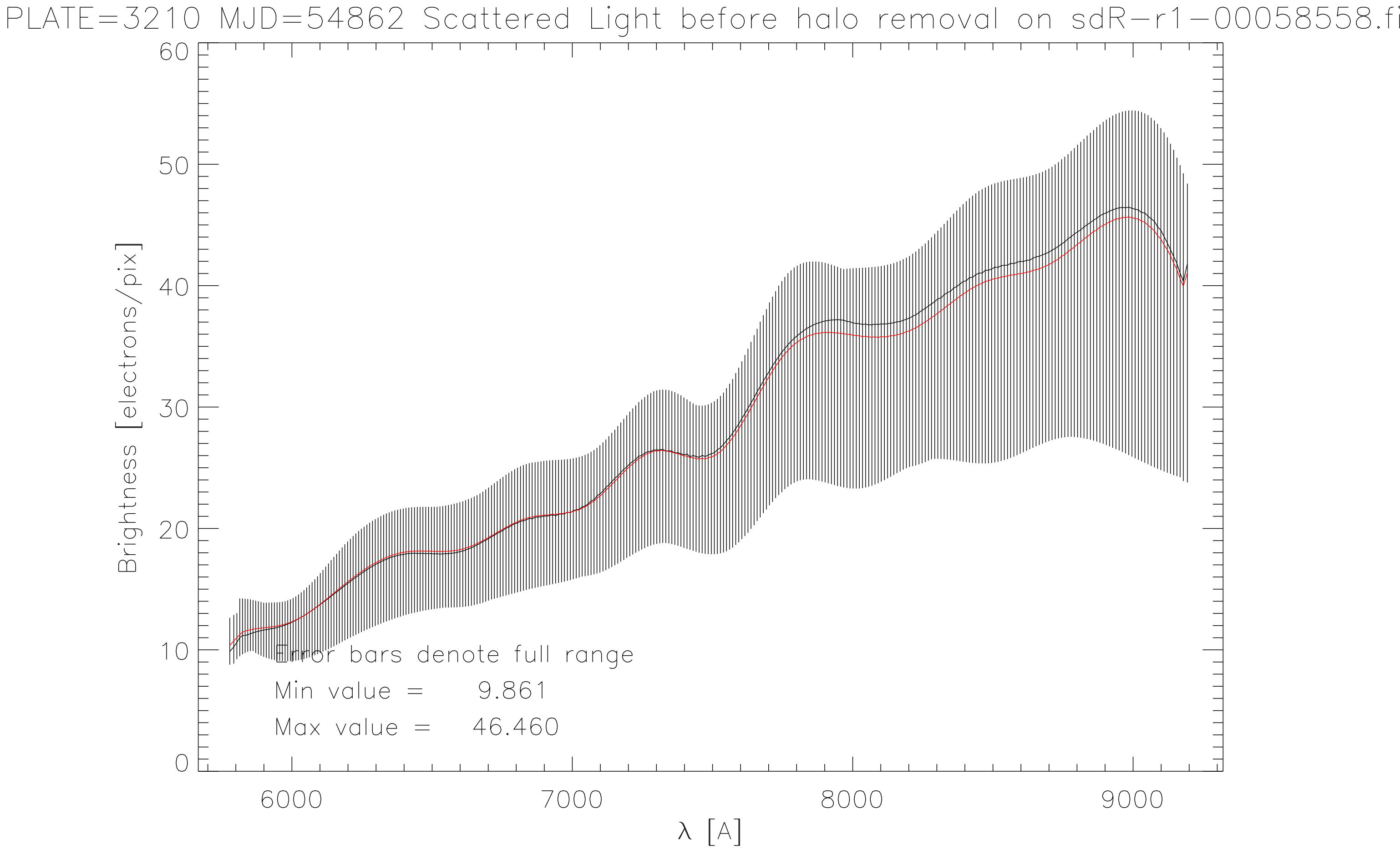


PLATE=3210 MJD=54862 Fiber−Flats for sdR−r1−00058560.fit

Fri Mar 12 20:20:08 2010

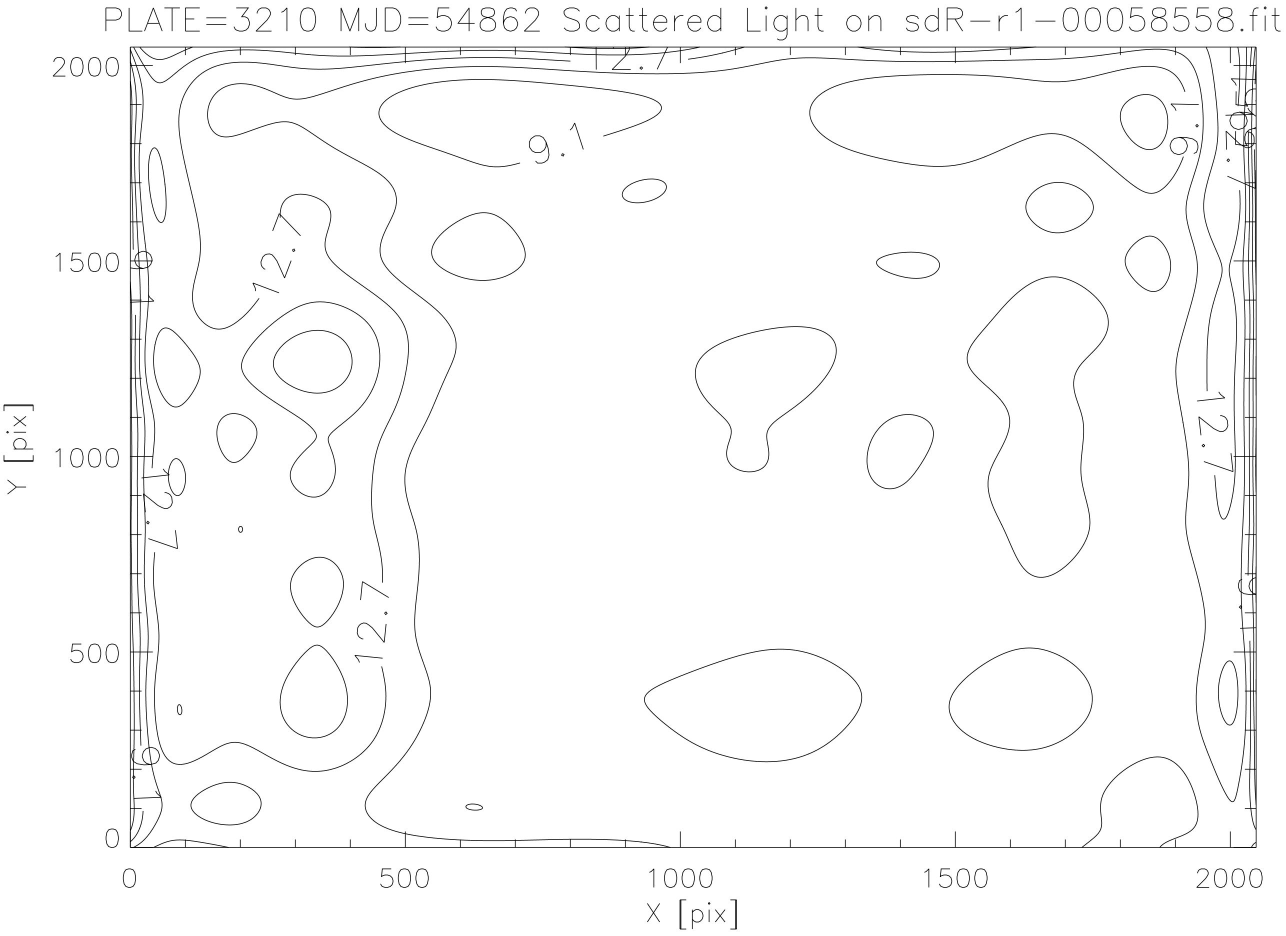


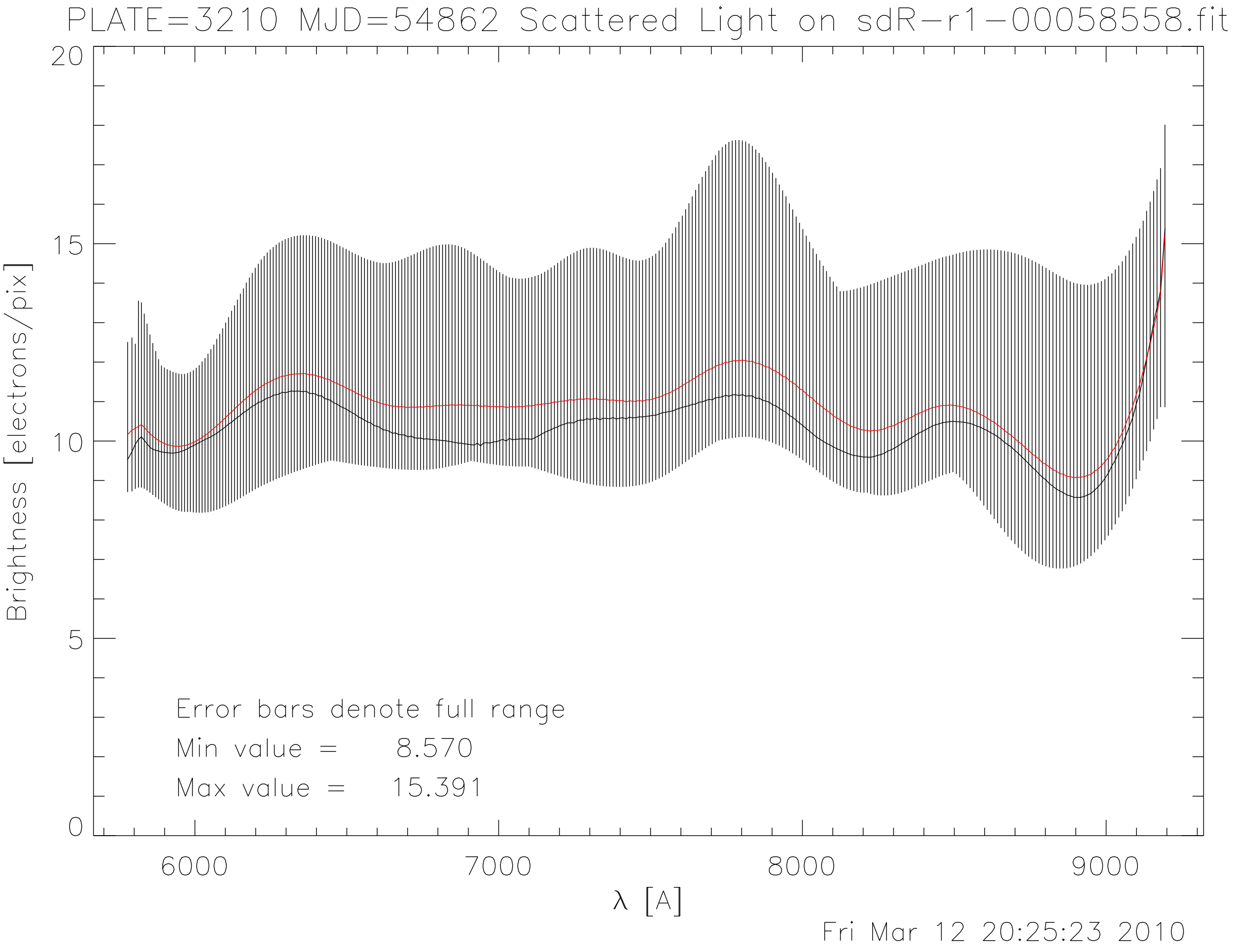
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r1-00058558.fi

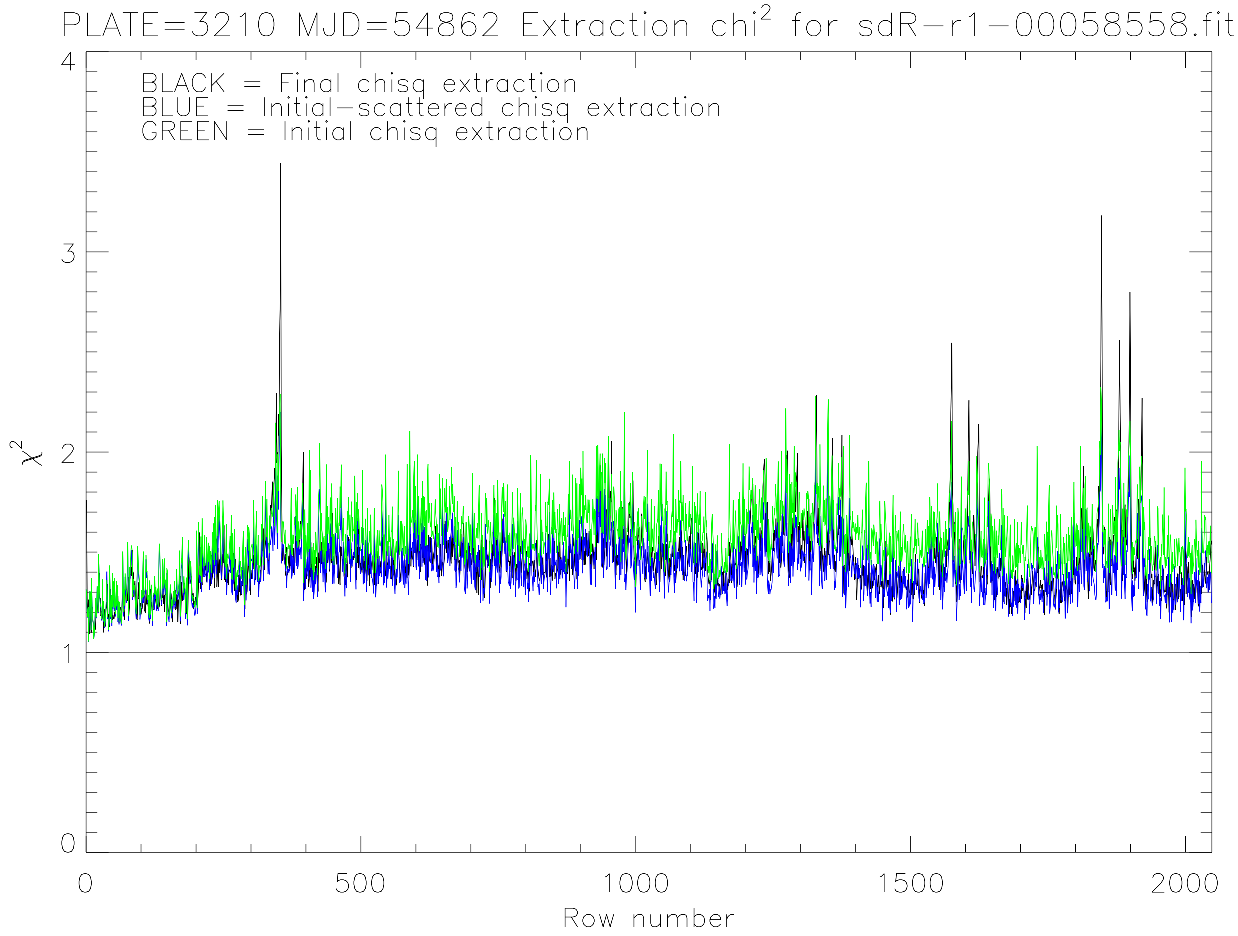


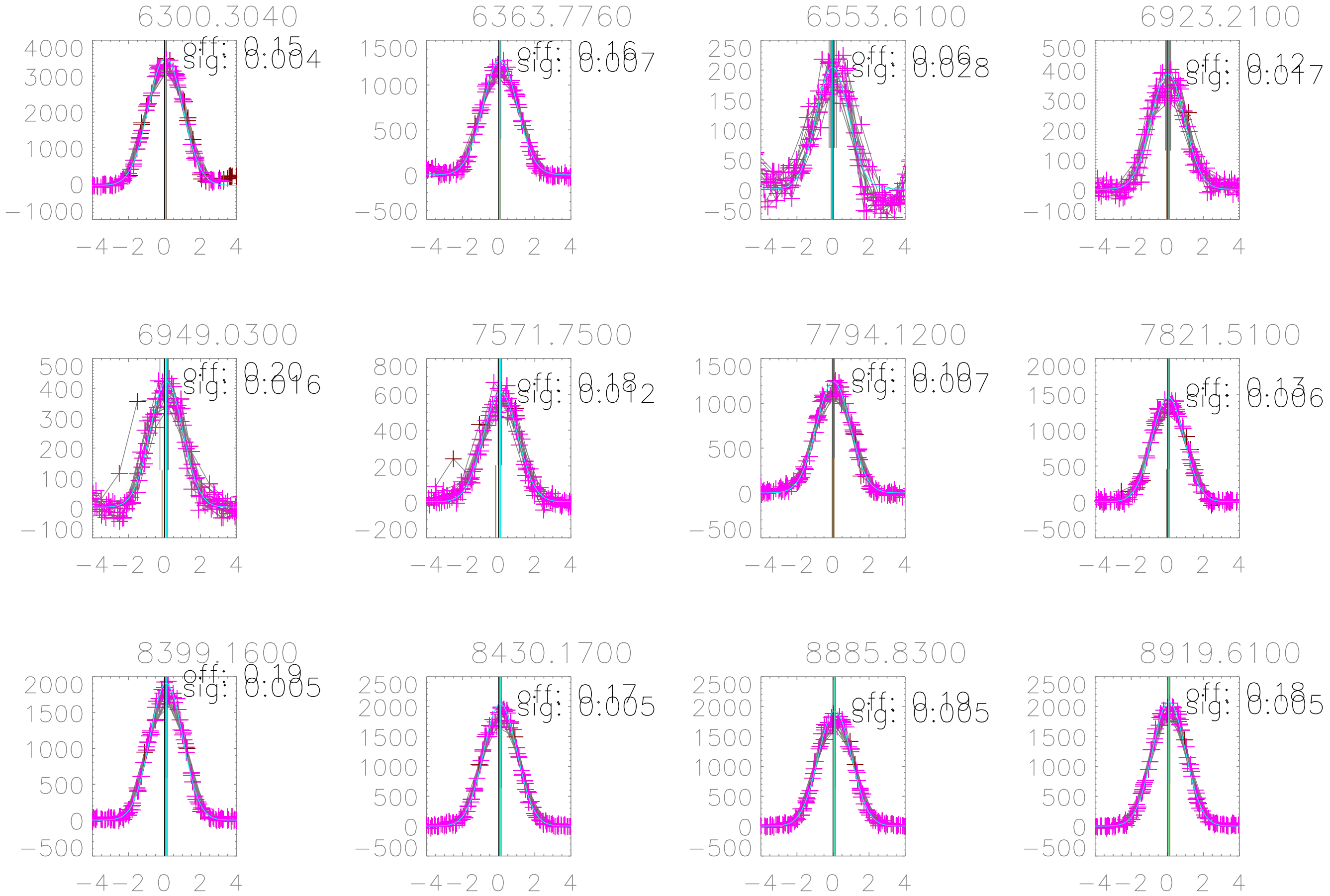
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r1-00058558.fi

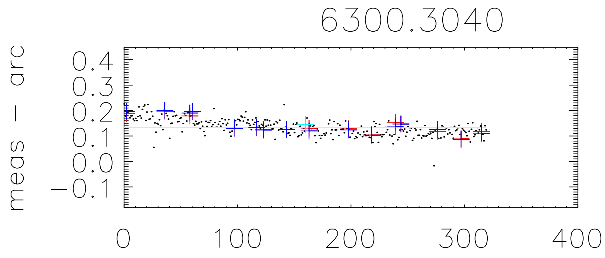
Fri Mar 12 20:21:20 2010

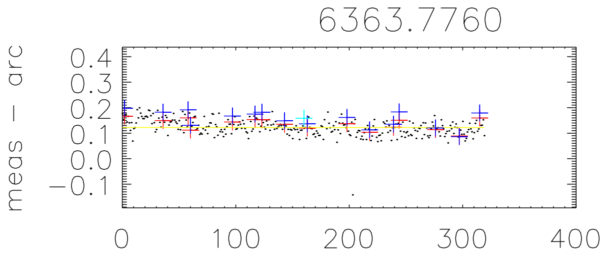

PLATE=3210 MJD=54862 Scattered Light on sdR-r1-00058558.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
12.7

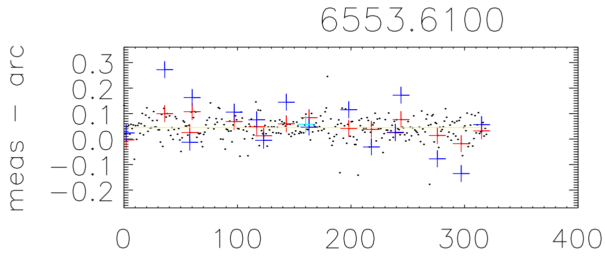

PLATE=3210 MJD=54862 Scattered Light on sdR-r1-00058558.fit
Brightness [electrons/pix]
λ [A]
0
5
10
15
20
6000
7000
8000
9000
Error bars denote full range
Min value = 8.570
Max value = 15.391
Fri Mar 12 20:25:23 2010

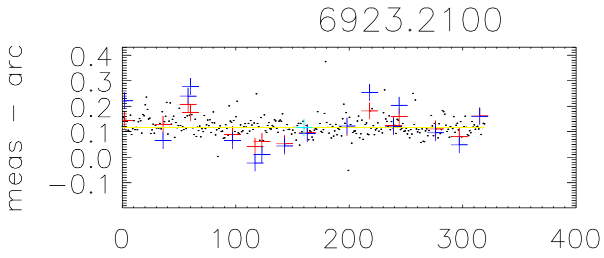

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-r1-00058558.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
0
500
1000
1500
2000
Row number

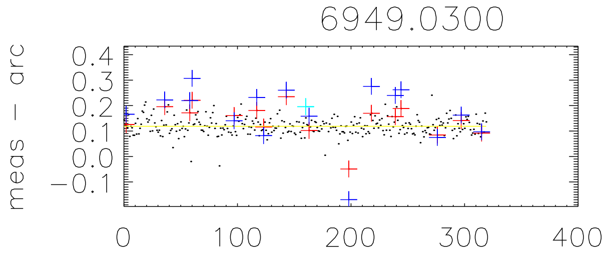

6300.3040
off: 0.15
sig: 0.004
6363.7760
off: 0.16
sig: 0.007
6553.6100
off: 0.06
sig: 0.028
6923.2100
off: 0.12
sig: 0.017
6949.0300
off: 0.20
sig: 0.016
7571.7500
off: 0.18
sig: 0.012
7794.1200
off: 0.10
sig: 0.007
7821.5100
off: 0.13
sig: 0.006
8399.1600
off: 0.19
sig: 0.005
8430.1700
off: 0.17
sig: 0.005
8885.8300
off: 0.18
sig: 0.005
8919.6100
off: 0.18
sig: 0.005
−4 −2 0 2 4

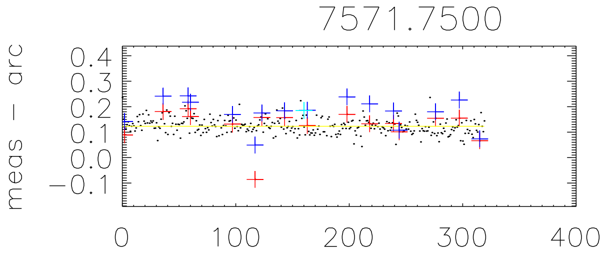

6300.3040

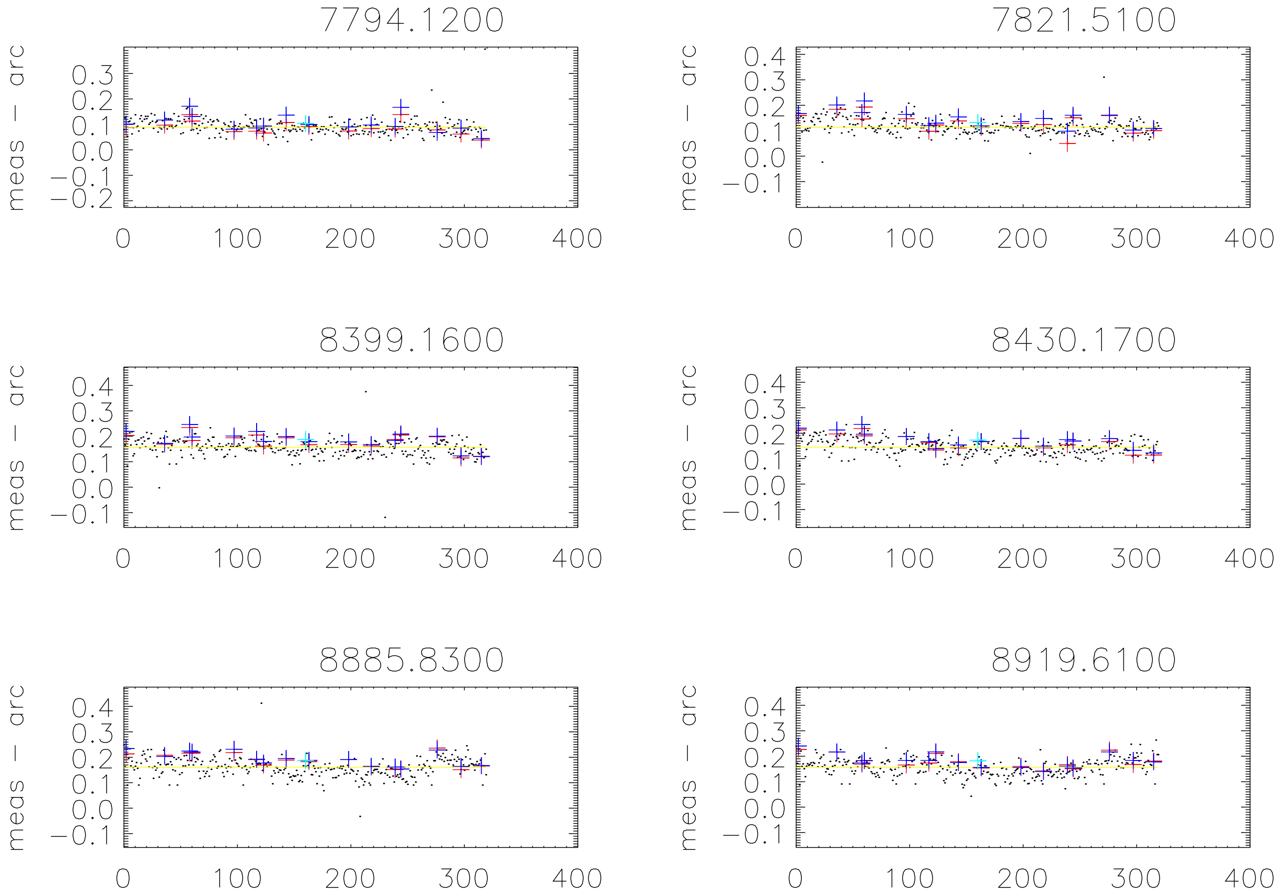

6363.7760

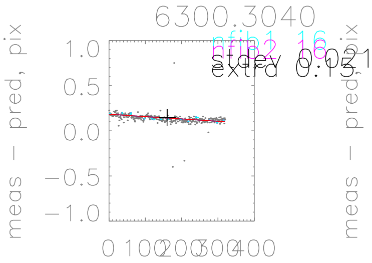

6553.6100

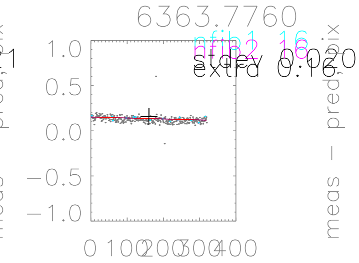

6923.2100

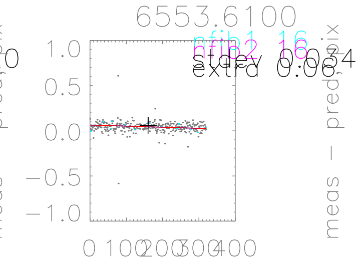

6949.0300

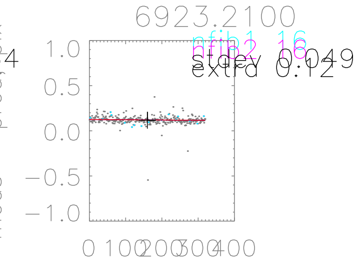

7571.7500

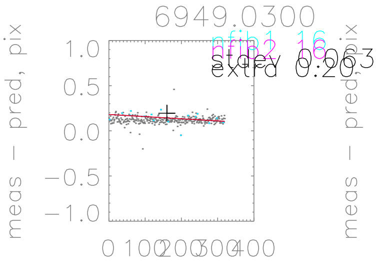

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

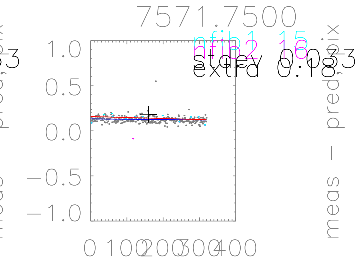

6300.3040
nfib1 16
nfib2 16
stdev 0.021
extrd 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

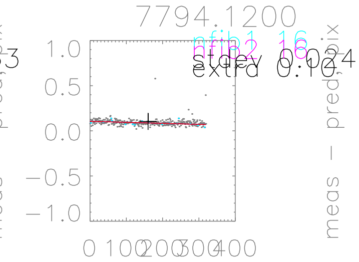

6363.7760
nfib1 16
nfib2 16
stdev 0.020
extrd 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

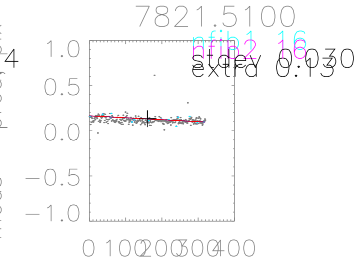

6553.6100
nfib1 16
nfib2 16
stdev 0.034
extrd 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

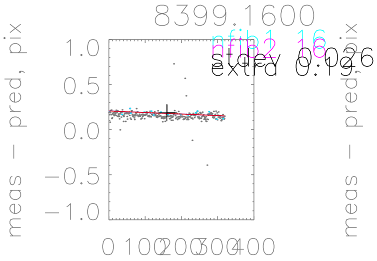

6923.2100
nfib1 16
nfib2 16
stdev 0.049
extrd 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

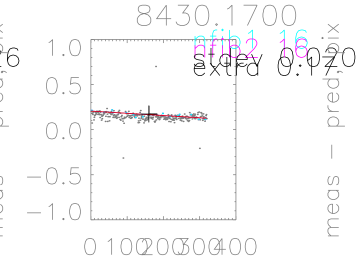

6949.0300
nfib1 16
nfib2 16
stdev 0.063
extrd 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

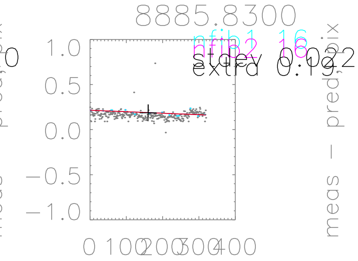

7571.7500
nfib1 15
nfib2 16
stdev 0.033
extrd 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

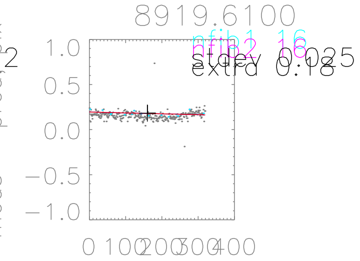

7794.1200
nfib1 16
nfib2 16
stdev 0.024
extrd 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

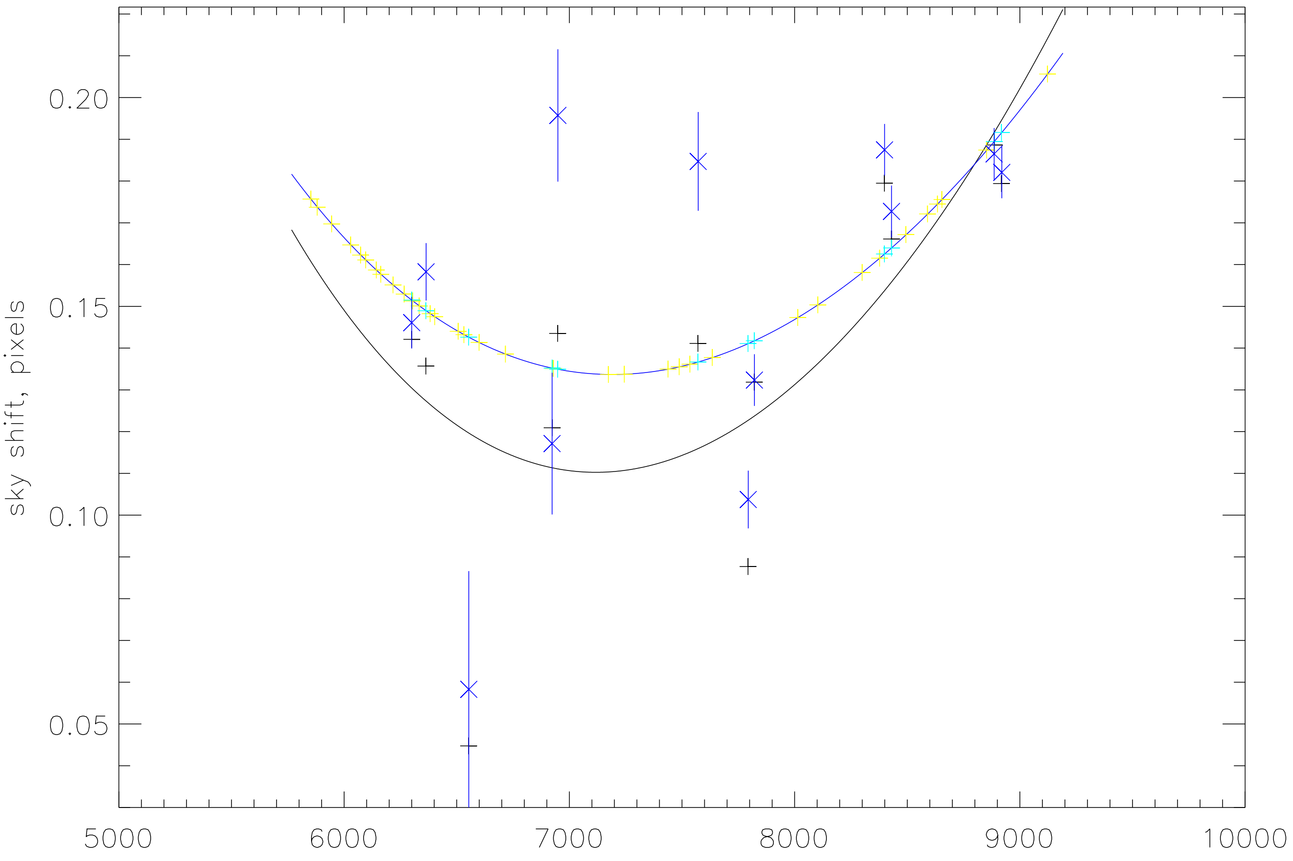

7821.5100
nfib1 16
nfib2 16
stdev 0.030
extrd 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

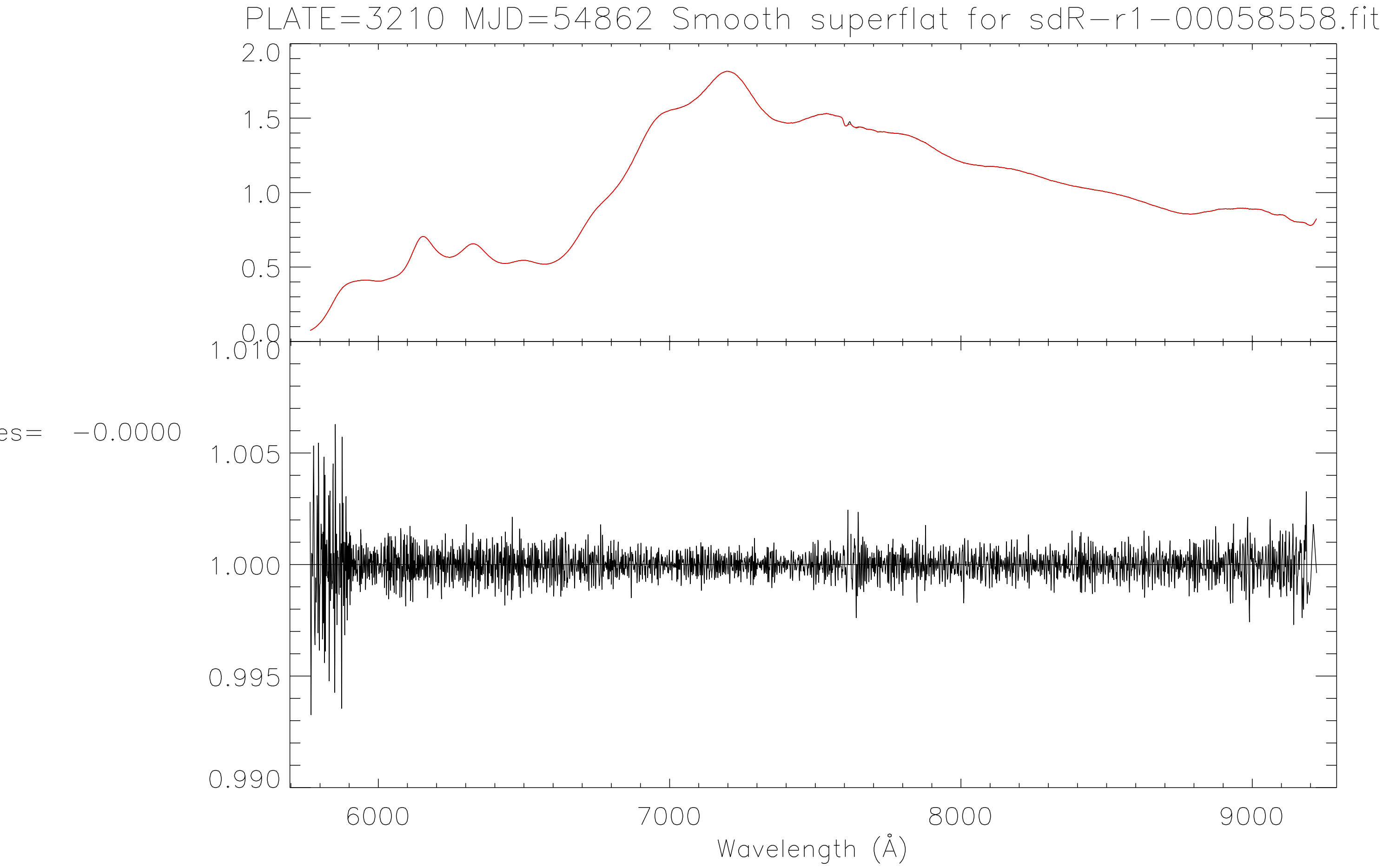

8399.1600
nfib1 16
nfib2 16
stdev 0.026
extrd 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

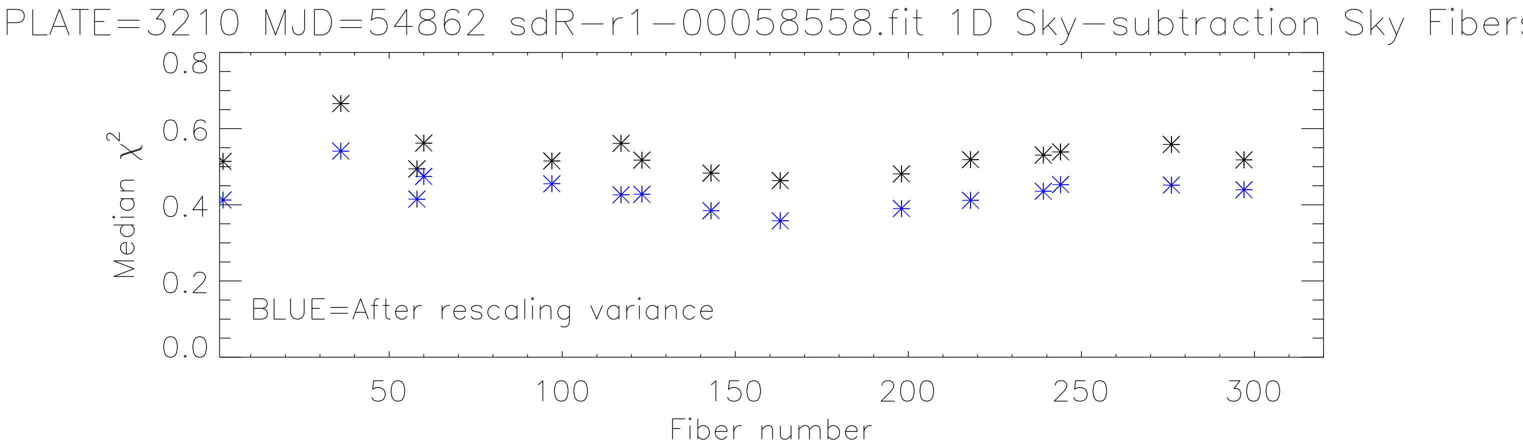

8430.1700
nfib1 16
nfib2 16
stdev 0.020
extrd 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

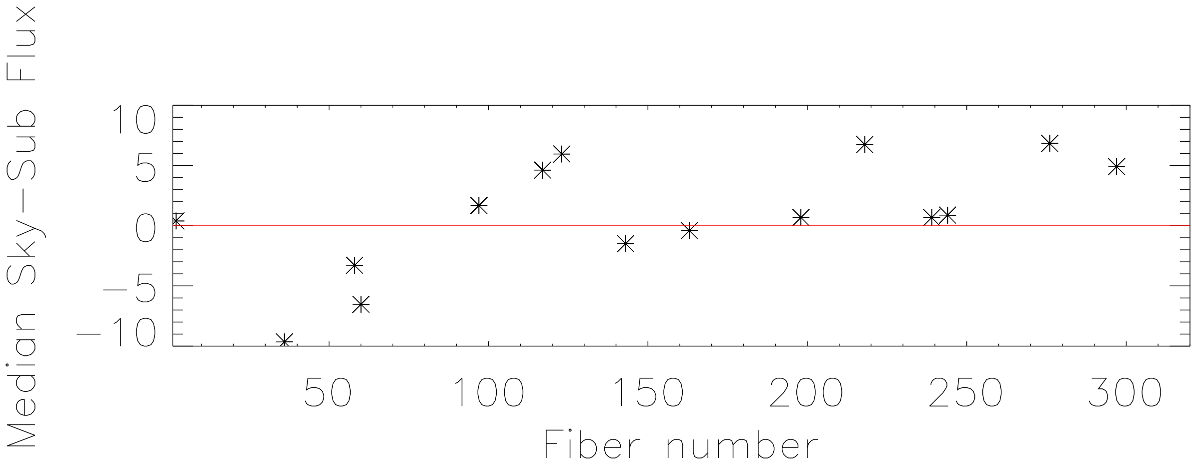

8885.8300
nfib1 16
nfib2 16
stdev 0.022
extrd 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

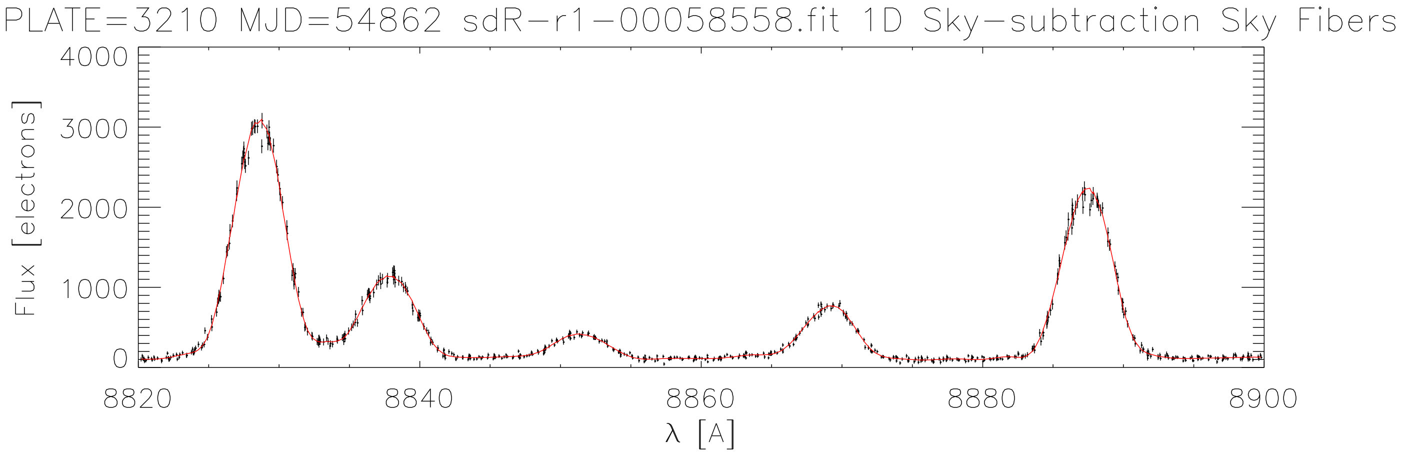

8919.6100
nfib1 16
nfib2 16
stdev 0.025
extrd 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


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

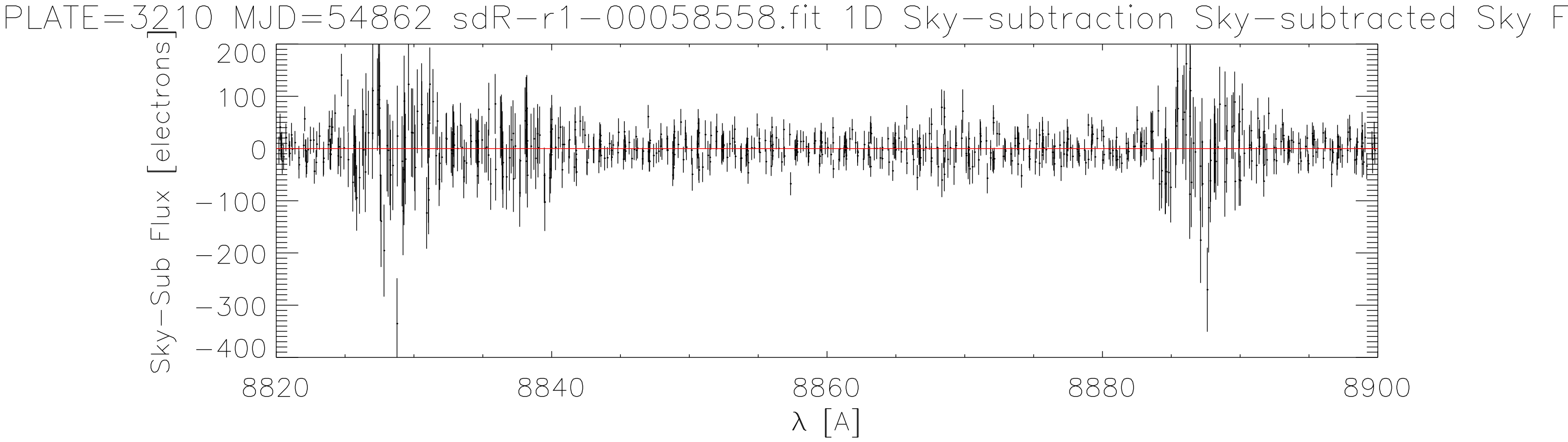

PLATE=3210 MJD=54862 Smooth superflat for sdR-r1-00058558.fit


PLATE=3210 MJD=54862 sdR-r1-00058558.fit 1D Sky-subtraction Sky Fiber
Median $\chi^2$
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



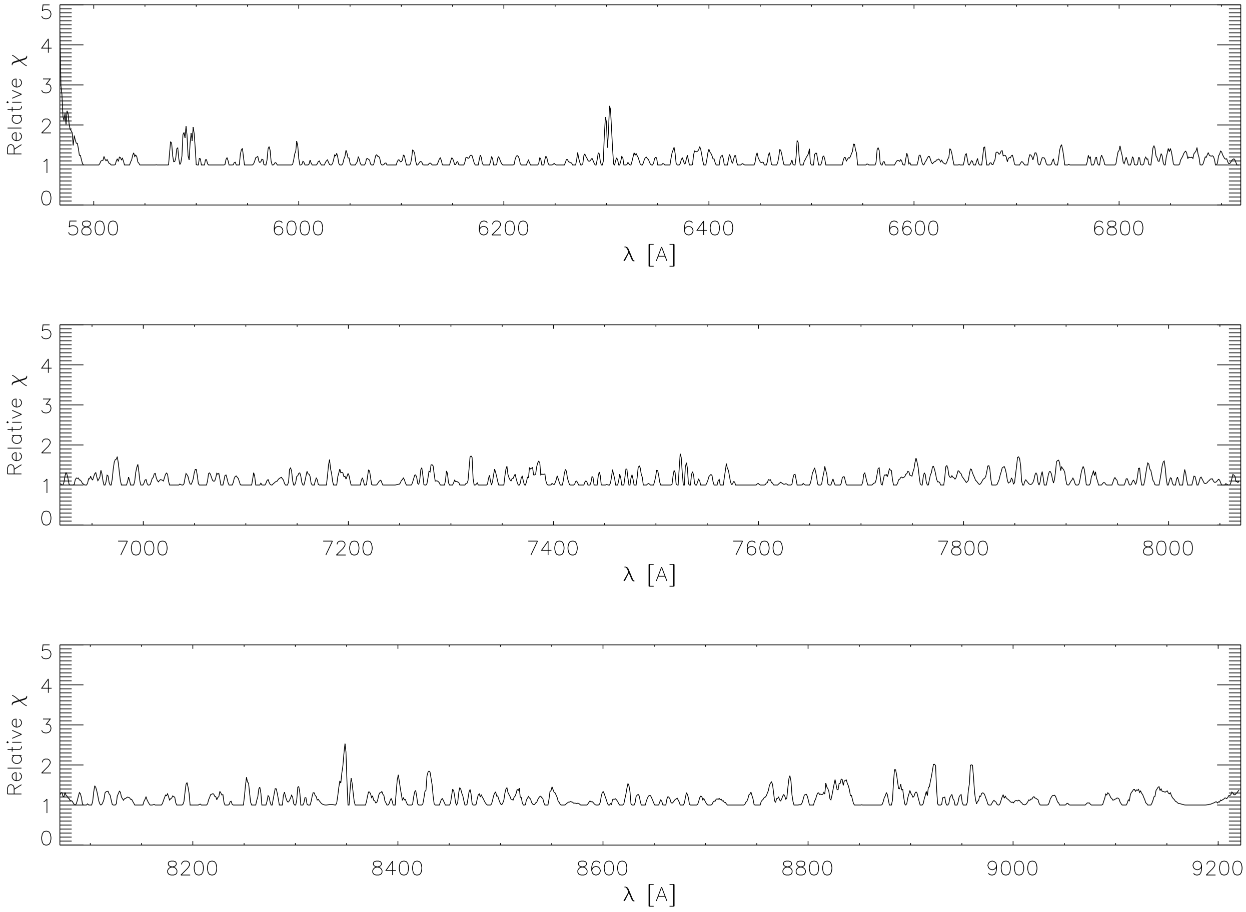
PLATE=3210 MJD=54862 sdR-r1-00058558.fit 1D Sky-subtraction Sky Fibers

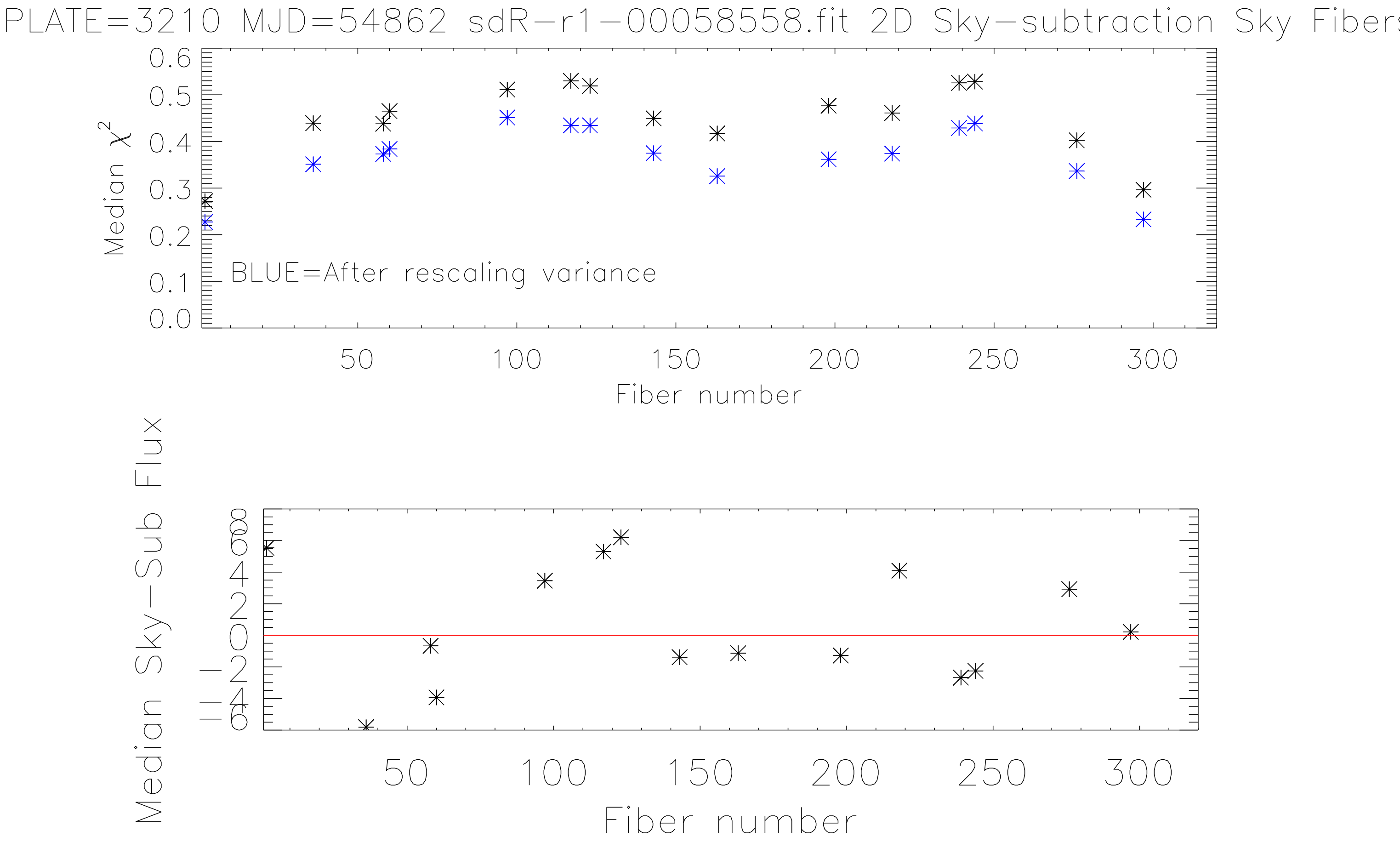


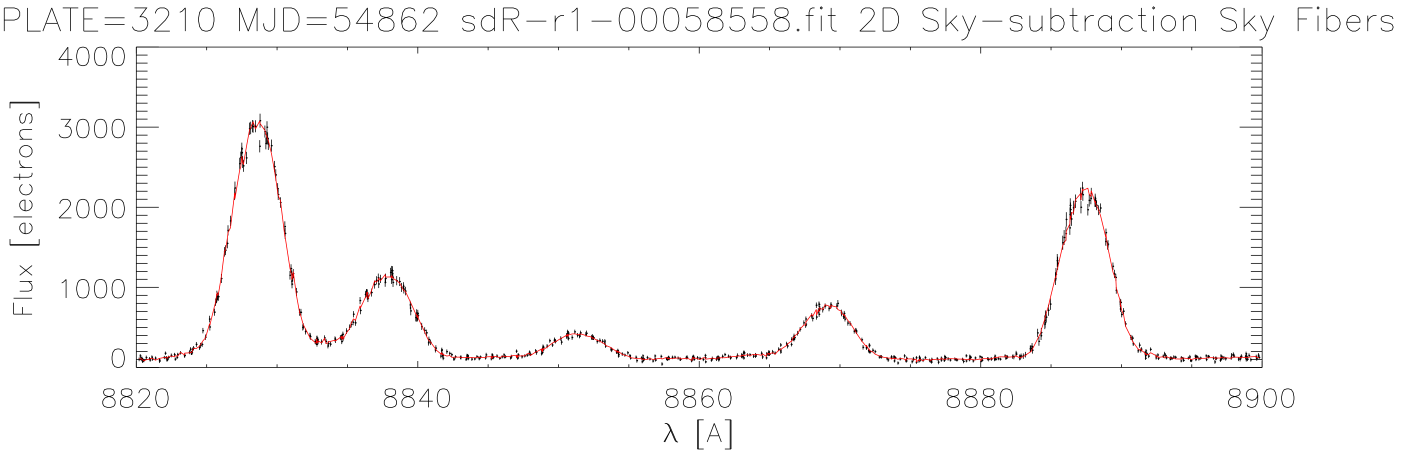
PLATE=3210 MJD=54862 sdR-r1-00058558.fit 1D Sky-subtraction Sky-subtracted Sky F

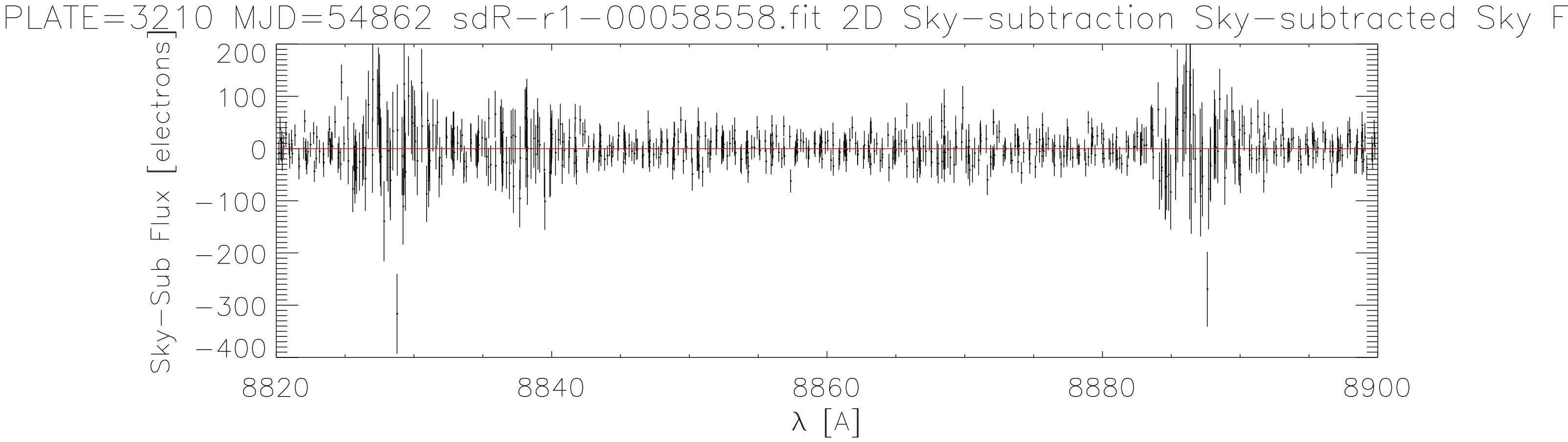
Number of sky fibers = 15

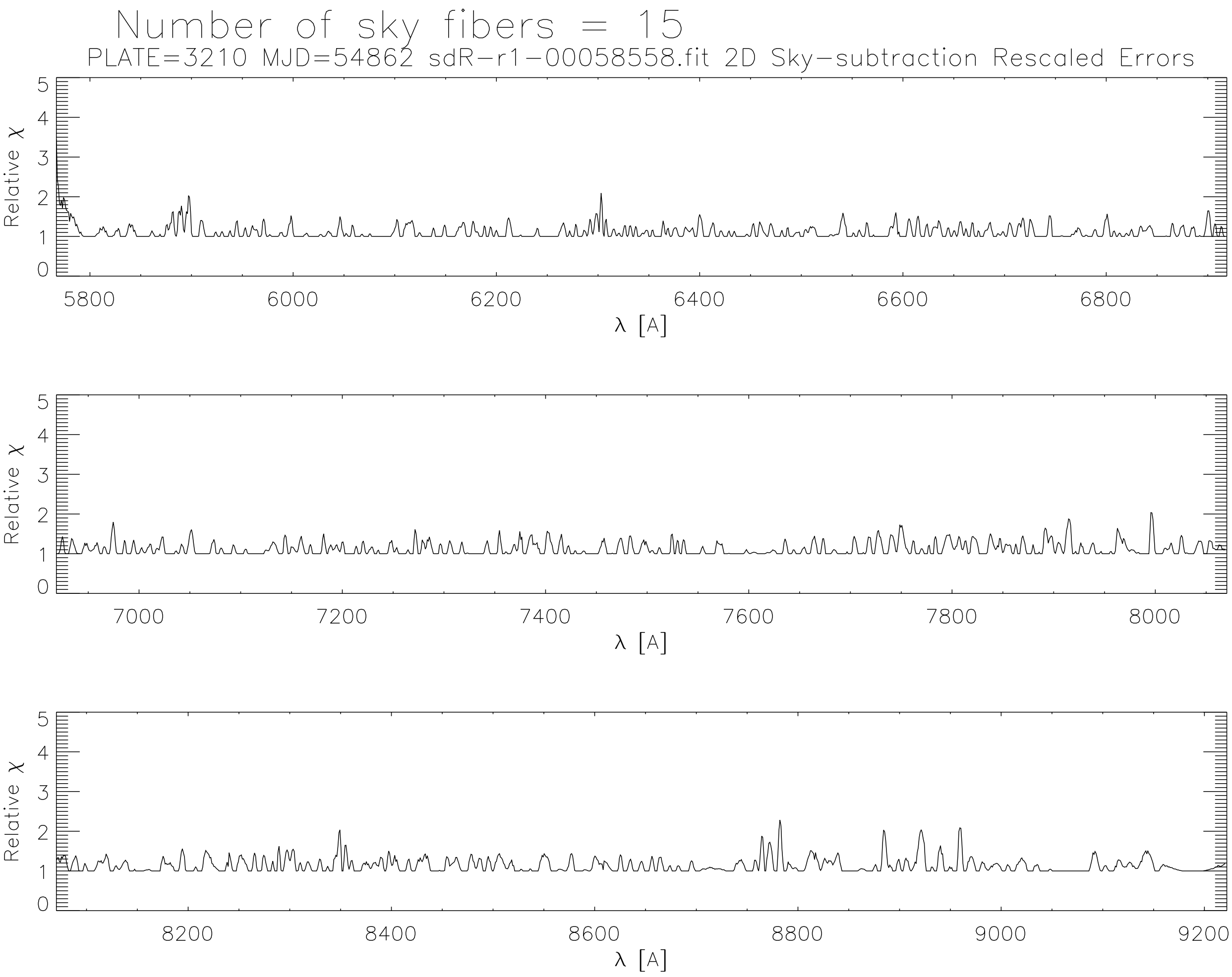
PLATE=3210 MJD=54862 sdR-r1-00058558.fit 1D Sky-subtraction Rescaled Errors



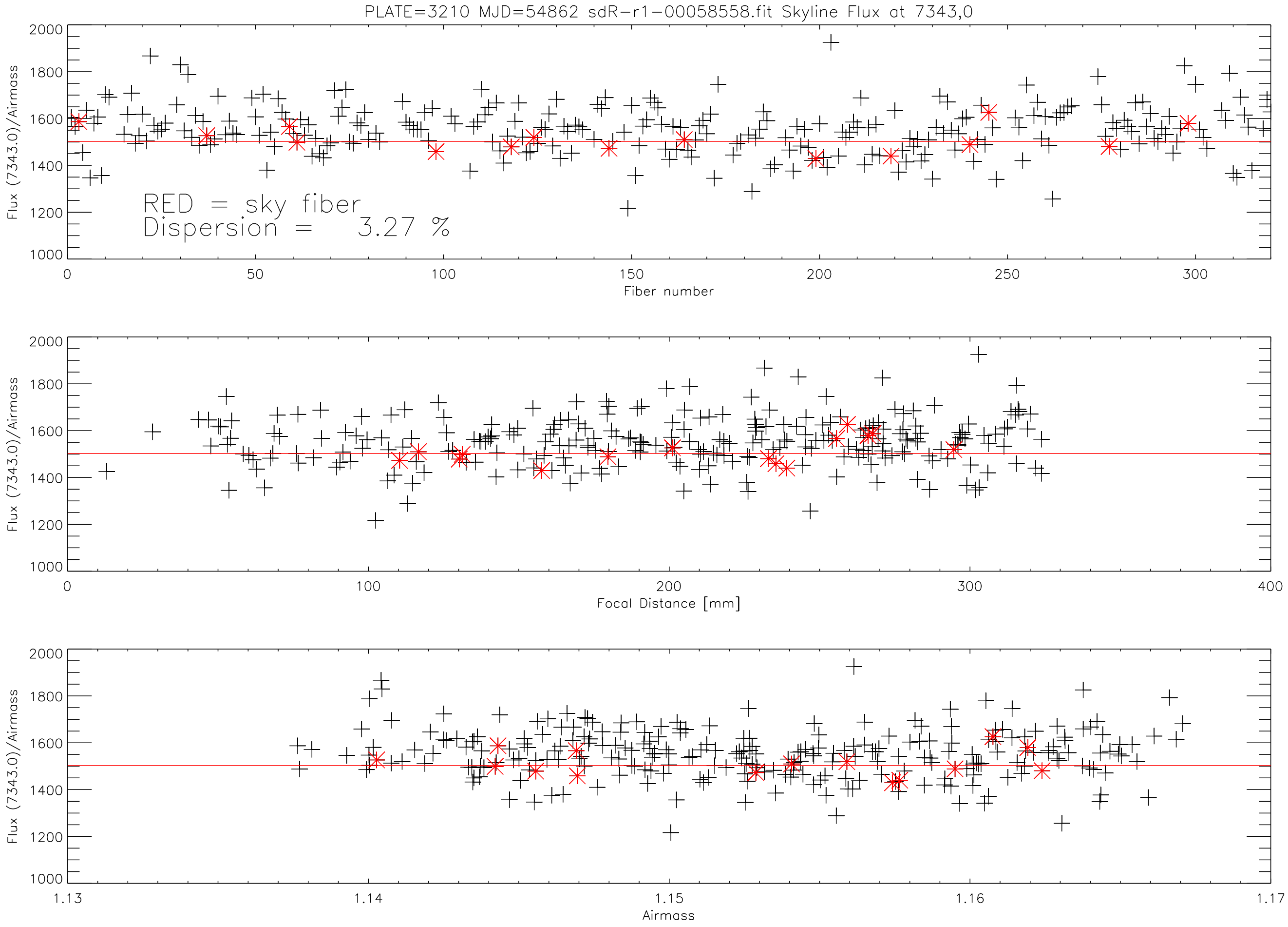

PLATE=3210 MJD=54862 sdR-r1-00058558.fit 2D Sky-subtraction Sky Fiber
Median $\chi^2$
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

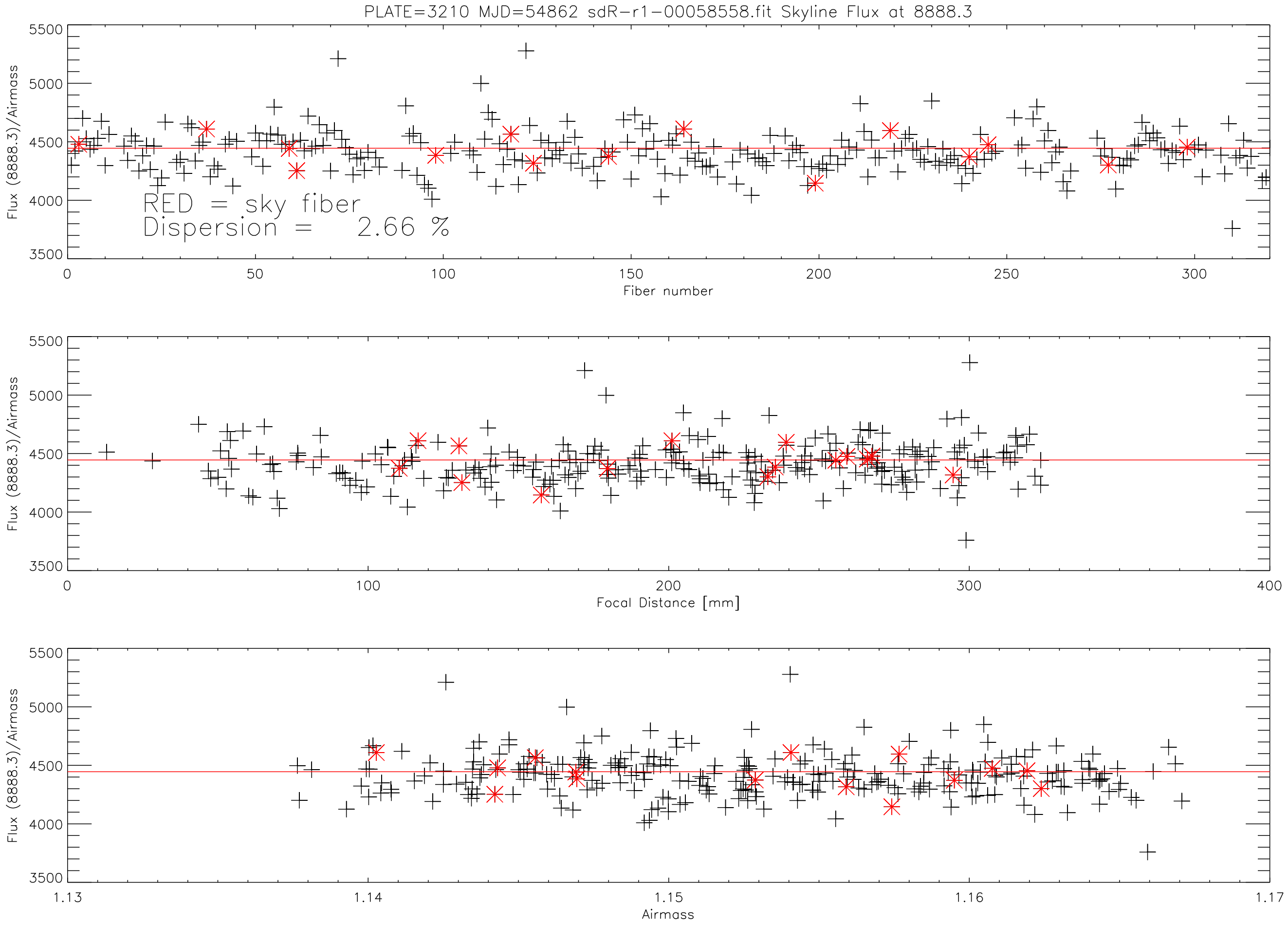

PLATE=3210 MJD=54862 sdR-r1-00058558.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

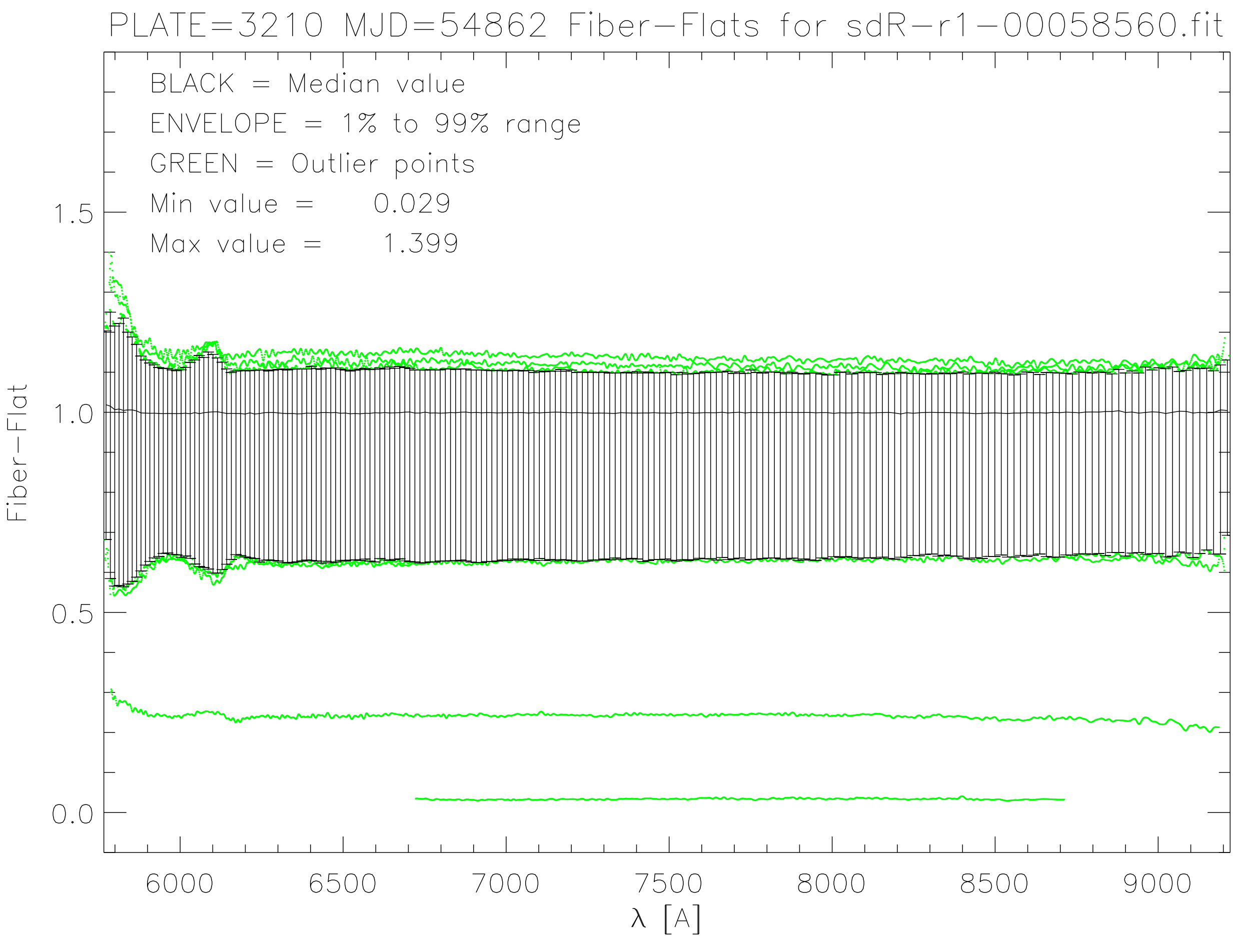

PLATE=3210 MJD=54862 sdR-r1-00058558.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
−300
−400
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15

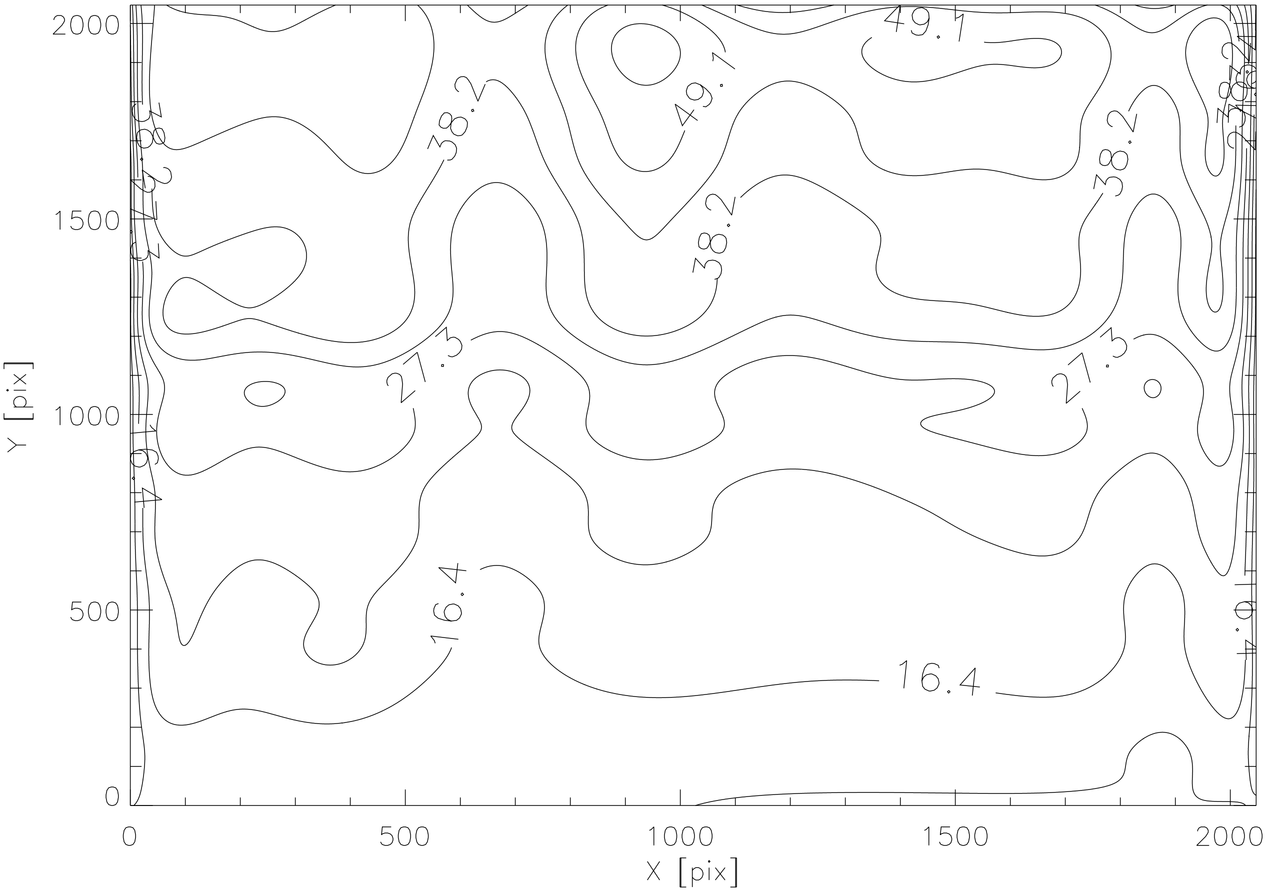
PLATE=3210 MJD=54862 sdR-r1-00058558.fit 2D Sky-subtraction Rescaled Errors


PLATE=3210 MJD=54862 sdR-r1-00058558.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2000
1800
1600
1400
1200
1000
RED = sky fiber
Dispersion = 3.27 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2000
1800
1600
1400
1200
1000
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2000
1800
1600
1400
1200
1000
1.13
1.14
1.15
1.16
1.17
Airmass

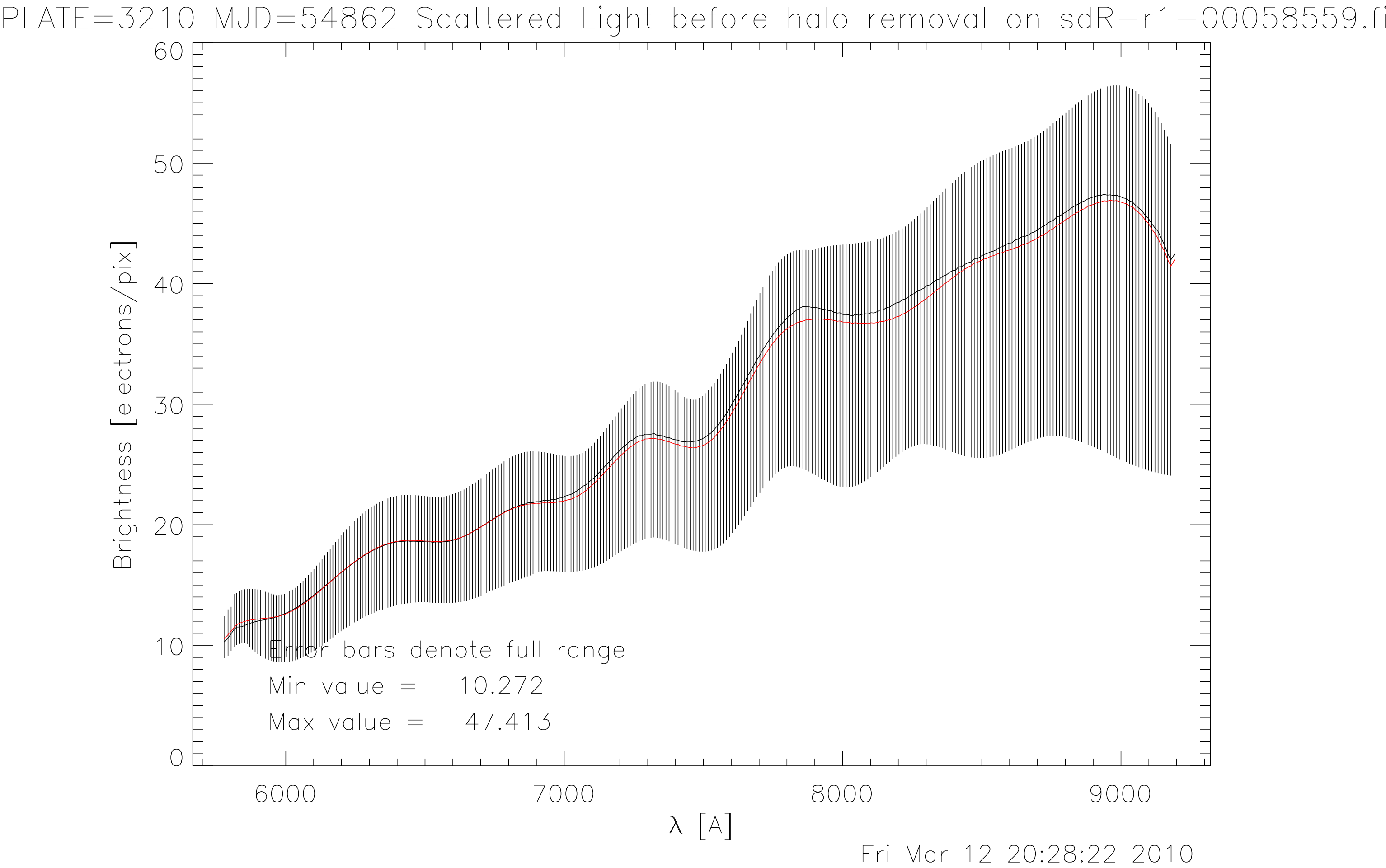

PLATE=3210 MJD=54862 sdR-r1-00058558.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
RED = sky fiber
Dispersion = 2.66 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
1.13
1.14
1.15
1.16
1.17
Airmass

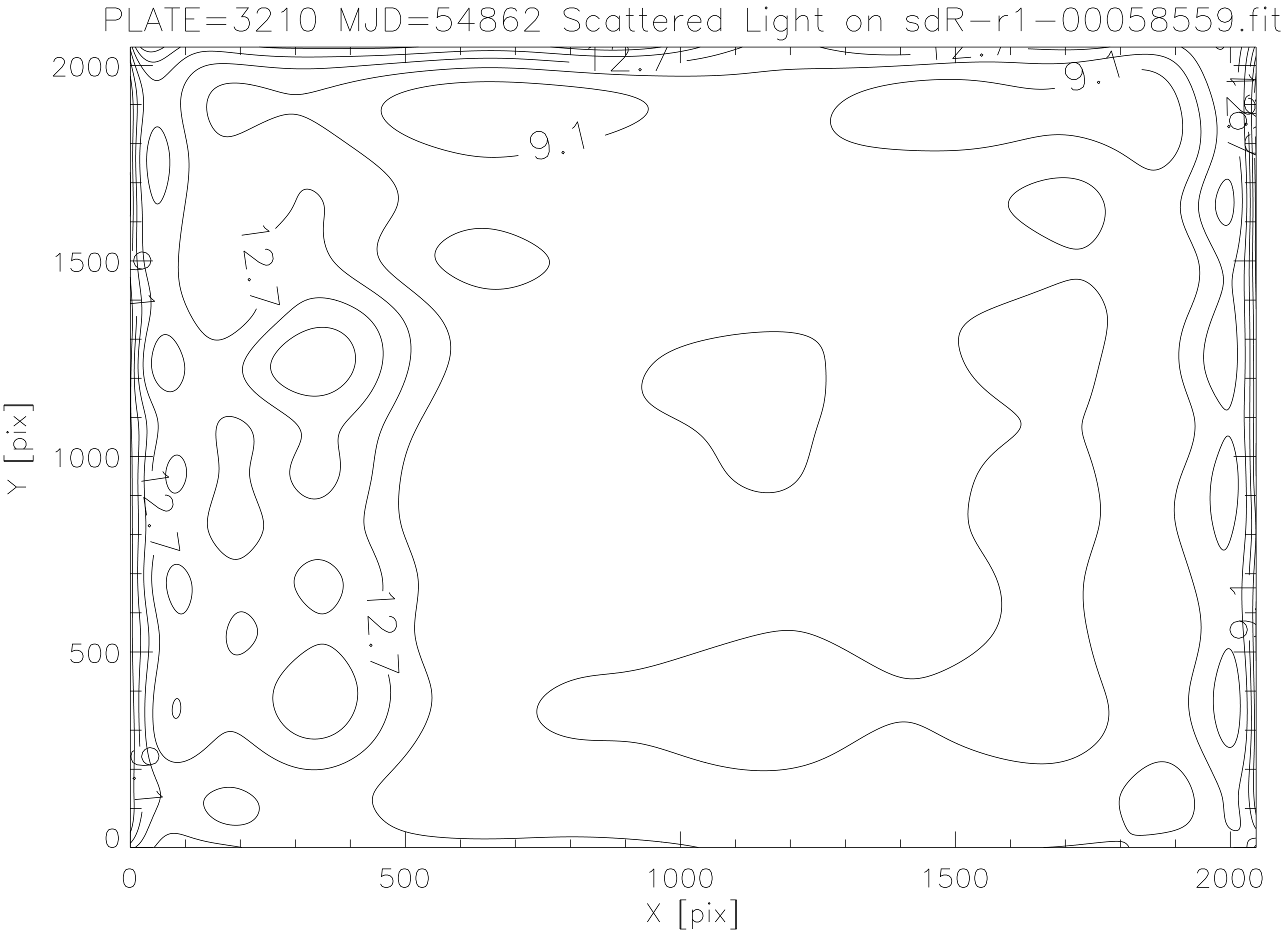


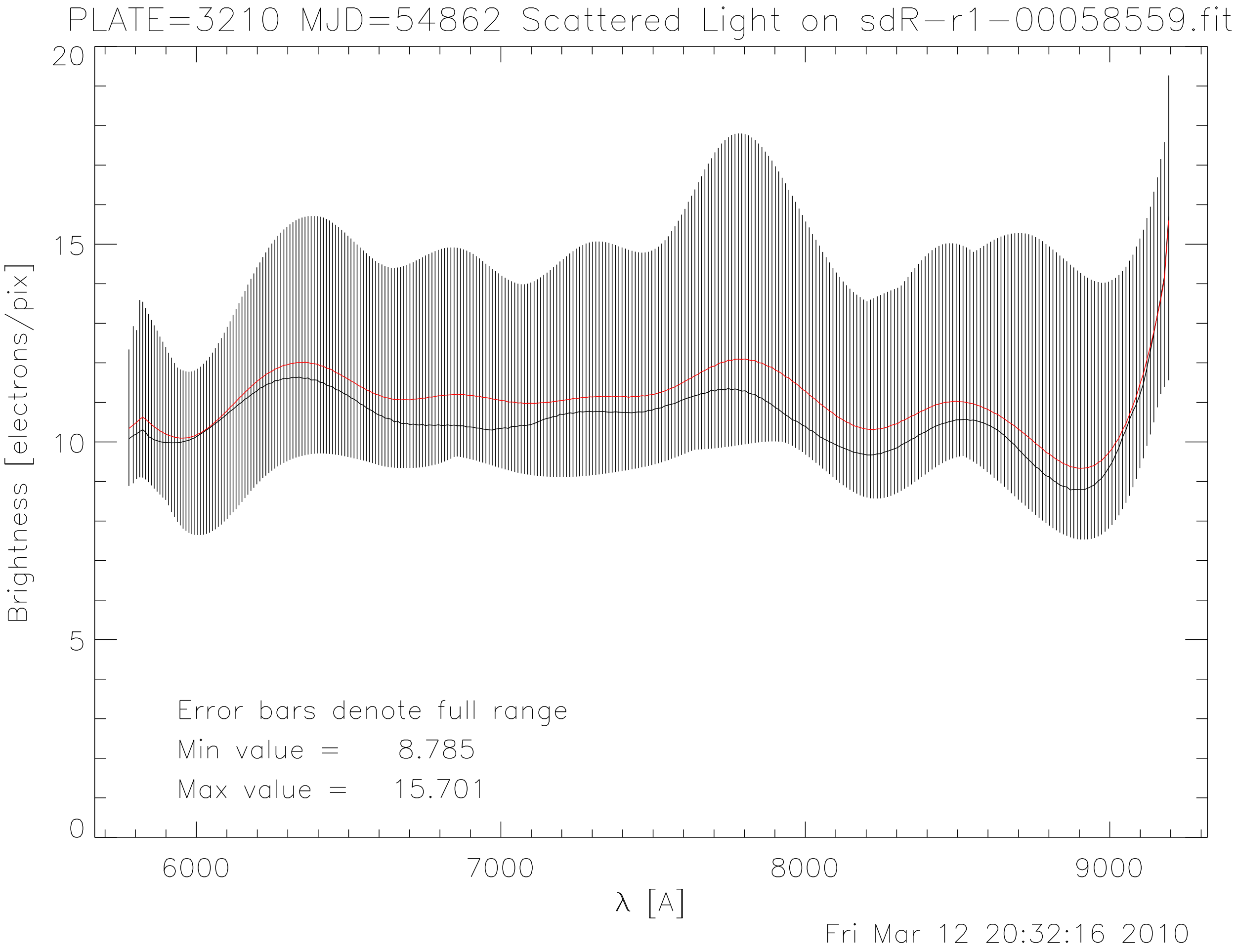
Fri Mar 12 20:27:11 2010



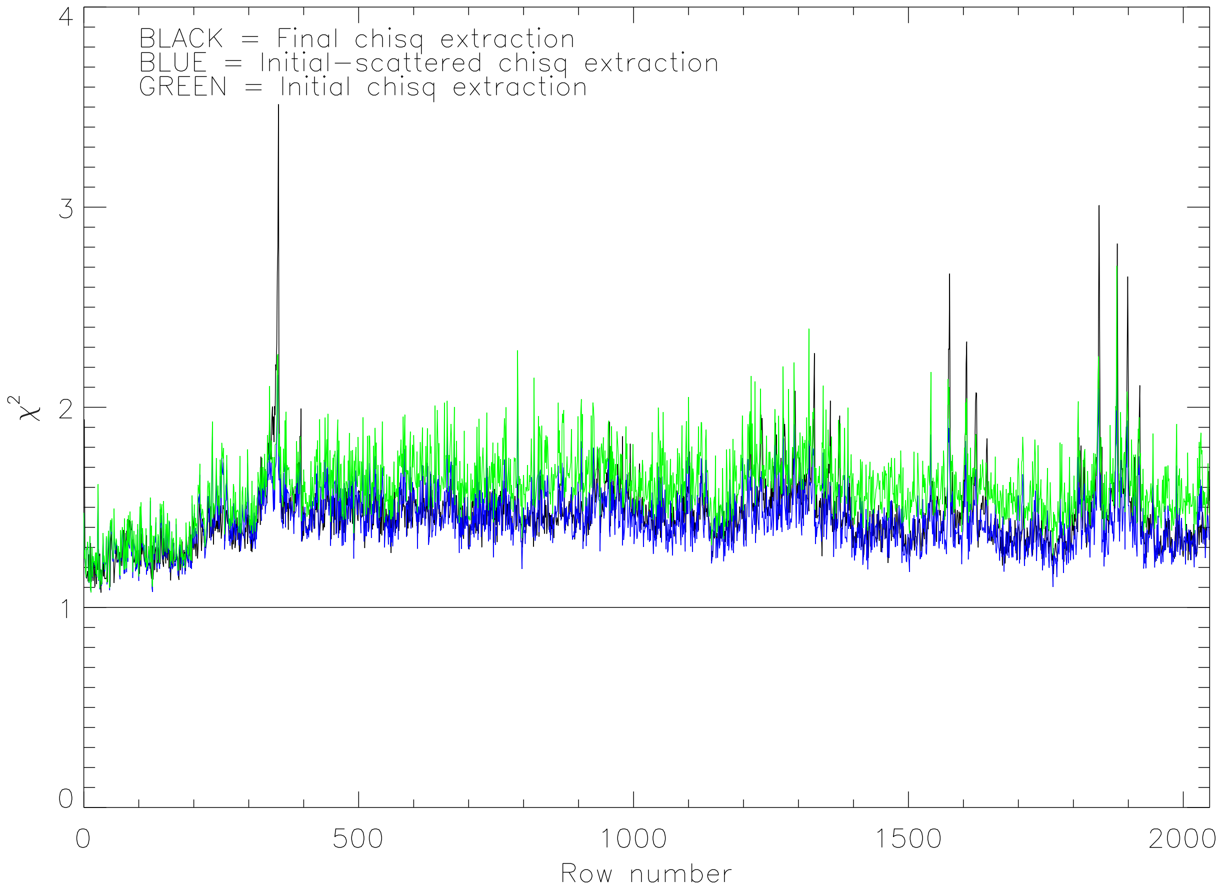
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r1-00058559.fi

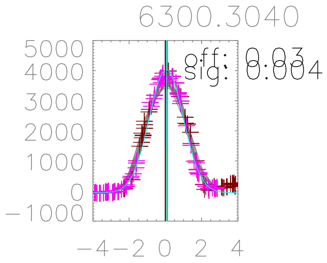

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r1-00058559.fi
Brightness [electrons/pix]
0
10
20
30
40
50
60
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 10.272
Max value = 47.413
Fri Mar 12 20:28:22 2010

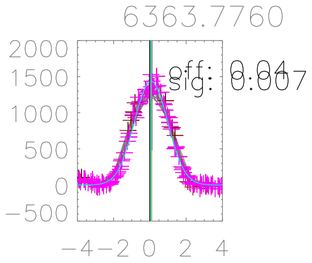

PLATE=3210 MJD=54862 Scattered Light on sdR-r1-00058559.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
12.7
9.1

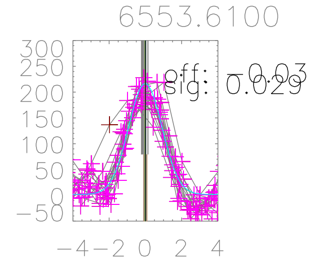

PLATE=3210 MJD=54862 Scattered Light on sdR-r1-00058559.fit
Brightness [electrons/pix]
0
5
10
15
20
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.785
Max value = 15.701
Fri Mar 12 20:32:16 2010

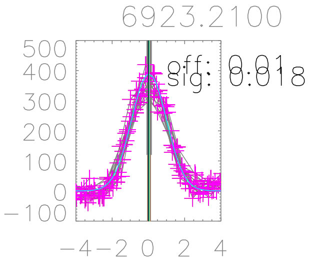
PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-r1-00058559.fit

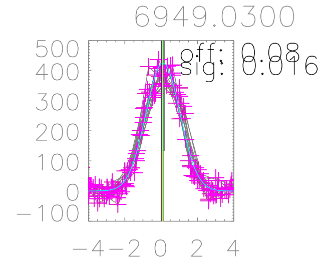


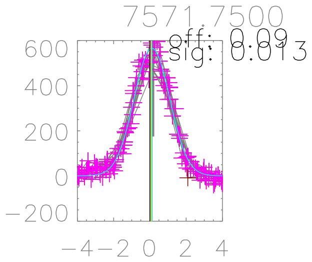

6300.3040
off: 0.03
sig: 0.004
5000
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4

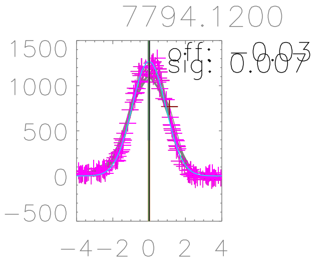

6363.7760
off: 0.04
sig: 0.007
2000
1500
1000
500
0
−500
−4 −2 0 2 4

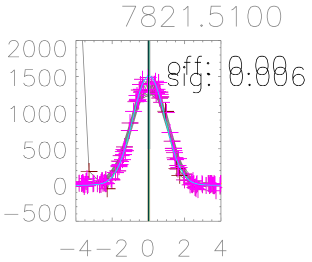

6553.6100
off: −0.03
sig: 0.029
300
250
200
150
100
50
0
−50
−4 −2 0 2 4

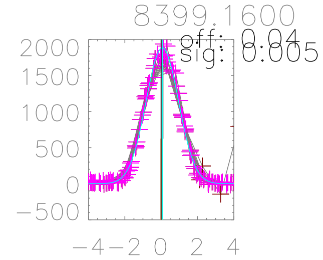

6923.2100
off: 0.01
sig: 0.018
500
400
300
200
100
0
−100
−4 −2 0 2 4

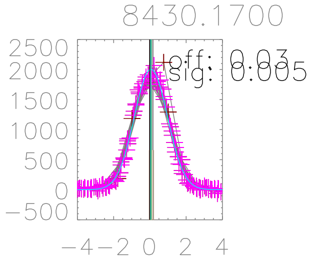

6949.0300
off: 0.08
sig: 0.016
500
400
300
200
100
0
−100
−4 −2 0 2 4

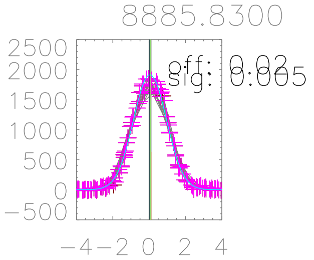

7571.7500
off: 0.09
sig: 0.013
600
400
200
0
−200
−4 −2 0 2 4

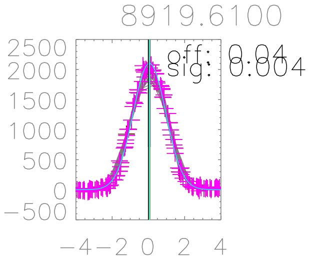

7794.1200
off: −0.03
sig: 0.007
1500
1000
500
0
−500
−4 −2 0 2 4

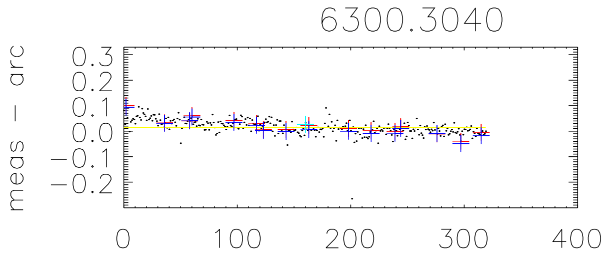

7821.5100
off: 0.00
sig: 0.006
2000
1500
1000
500
0
−500
−4 −2 0 2 4

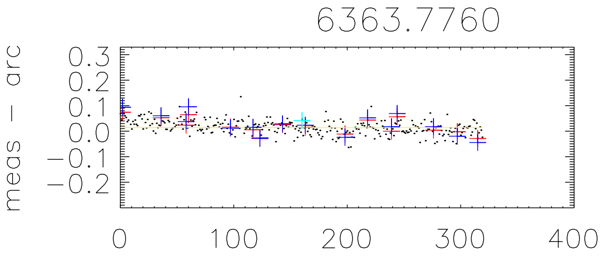

8399.1600
off: 0.04
sig: 0.005
2000
1500
1000
500
0
−500
−4 −2 0 2 4

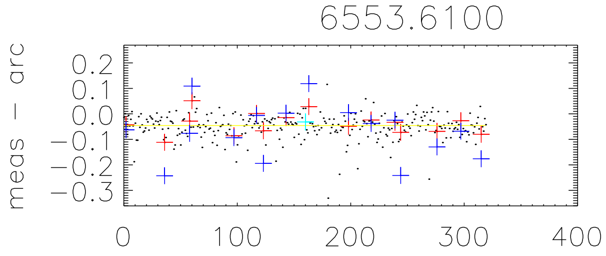

8430.1700
off: 0.03
sig: 0.005
2500
2000
1500
1000
500
0
−500
−4 −2 0 2 4

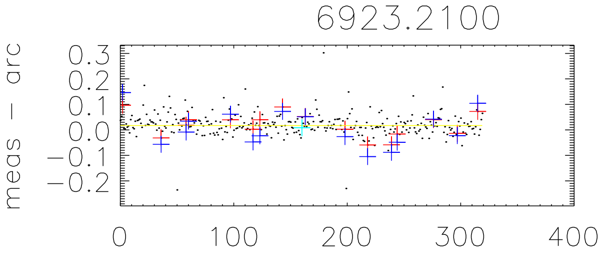

8885.8300
off: 0.02
sig: 0.005
2500
2000
1500
1000
500
0
−500
−4 −2 0 2 4

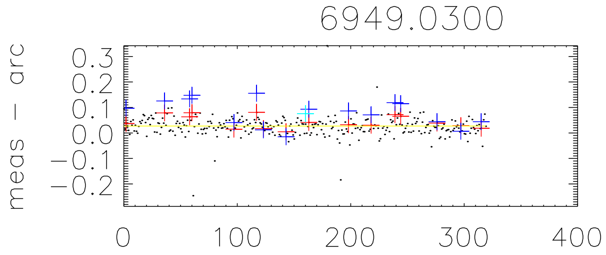

8919.6100
off: 0.04
sig: 0.004
2500
2000
1500
1000
500
0
−500
−4 −2 0 2 4

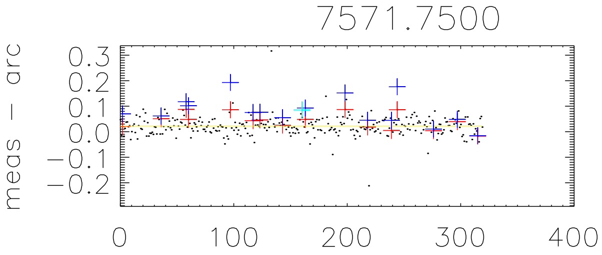

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

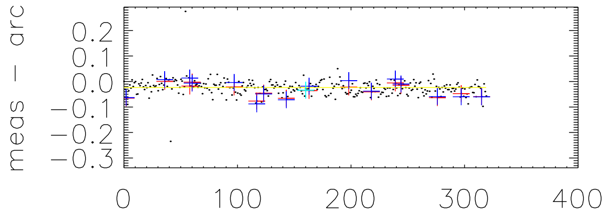

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

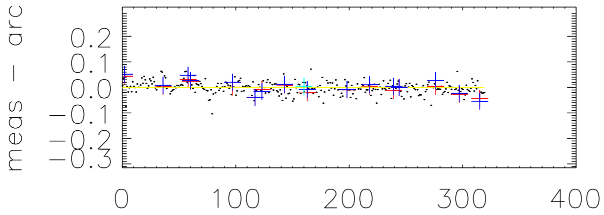

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

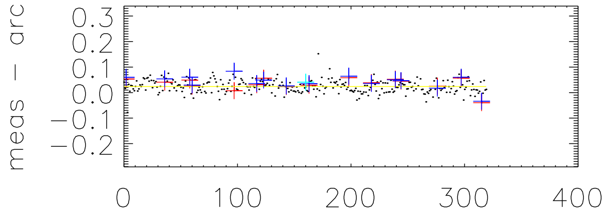

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

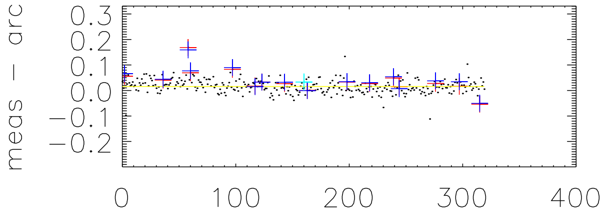

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

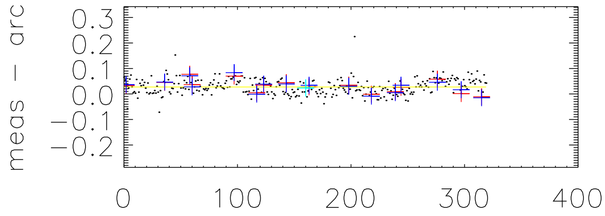

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

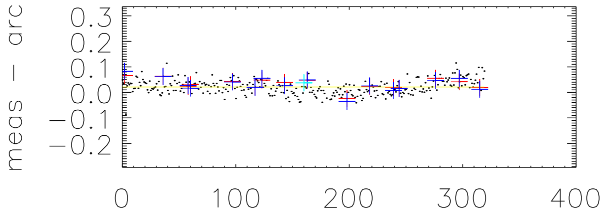

7794.1200

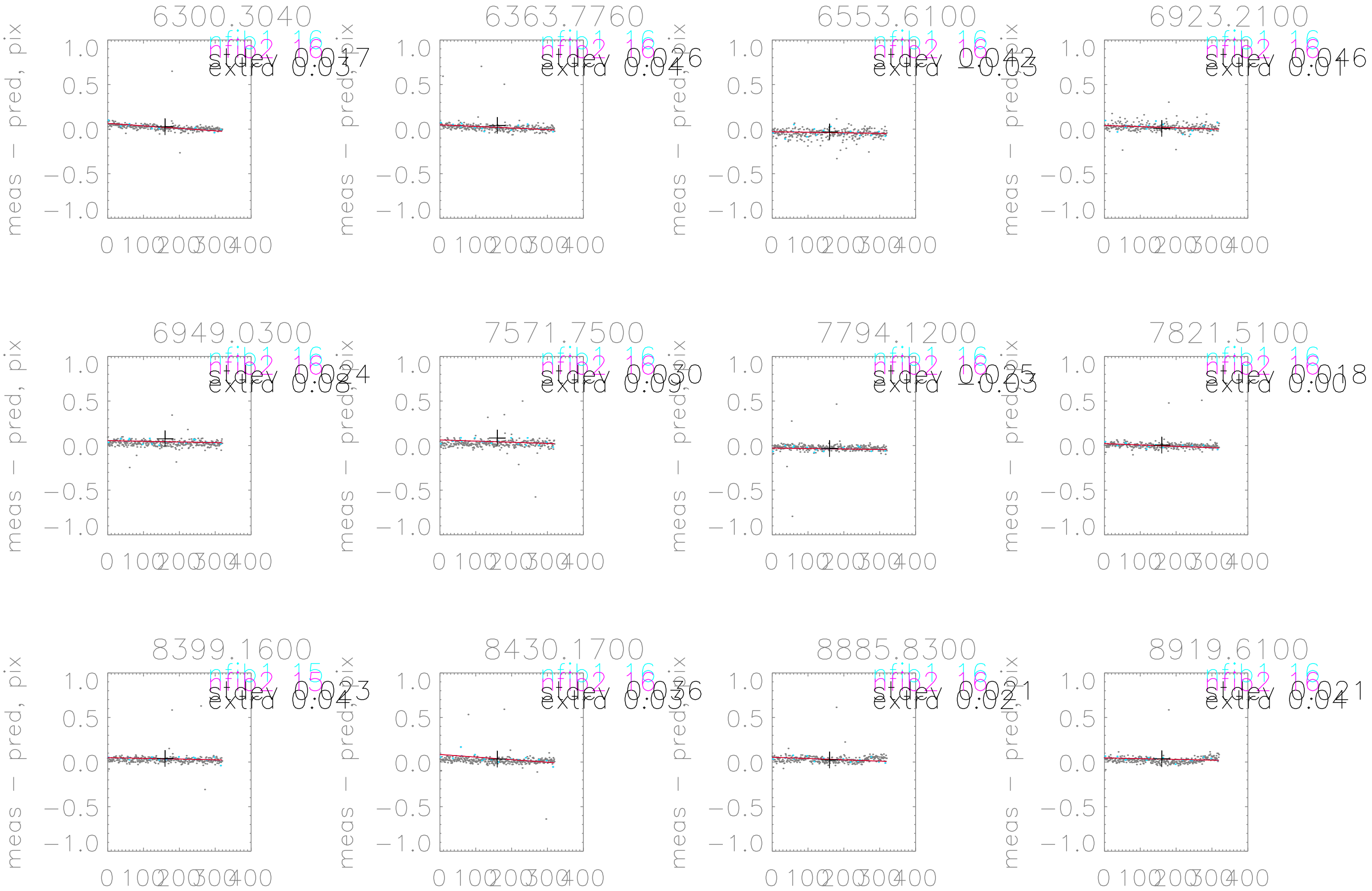

7821.5100

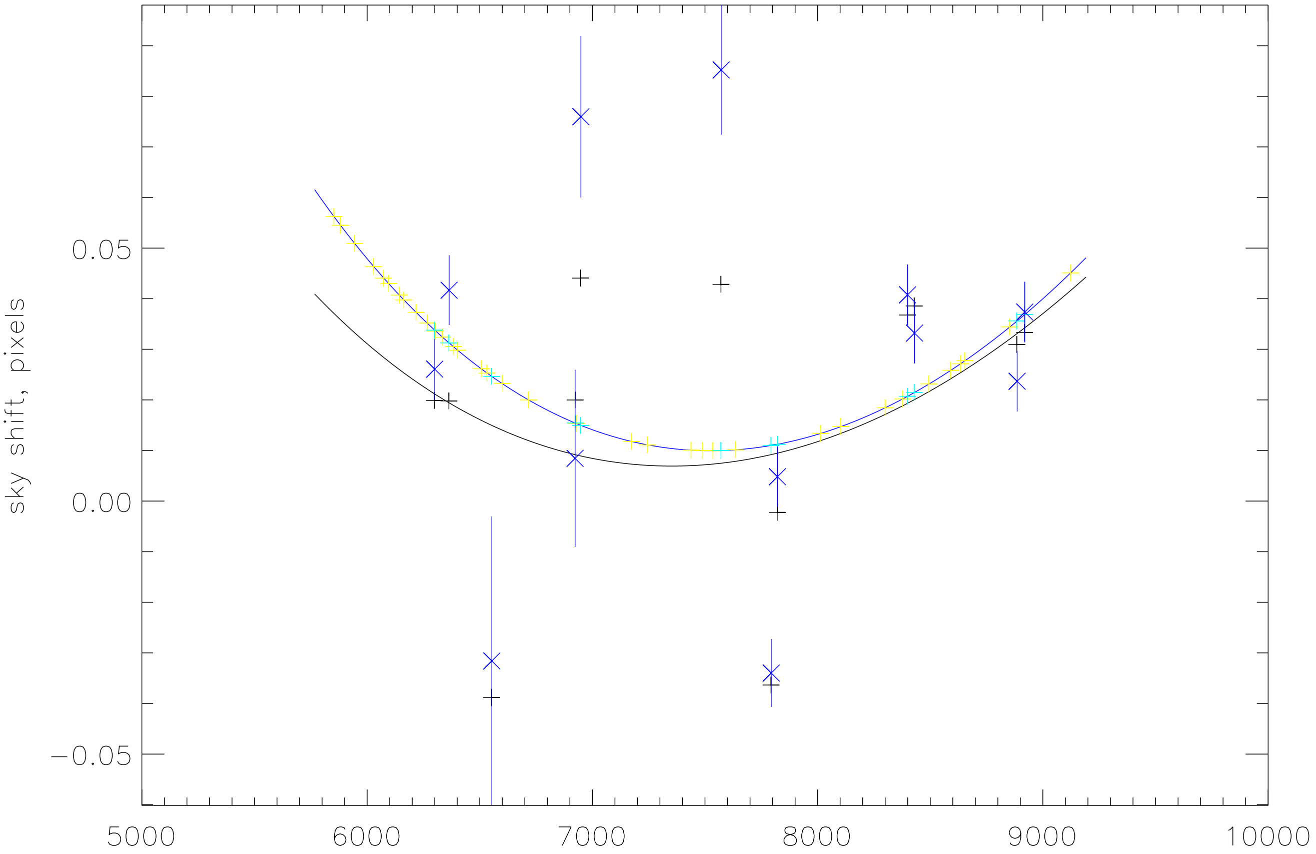

8399.1600

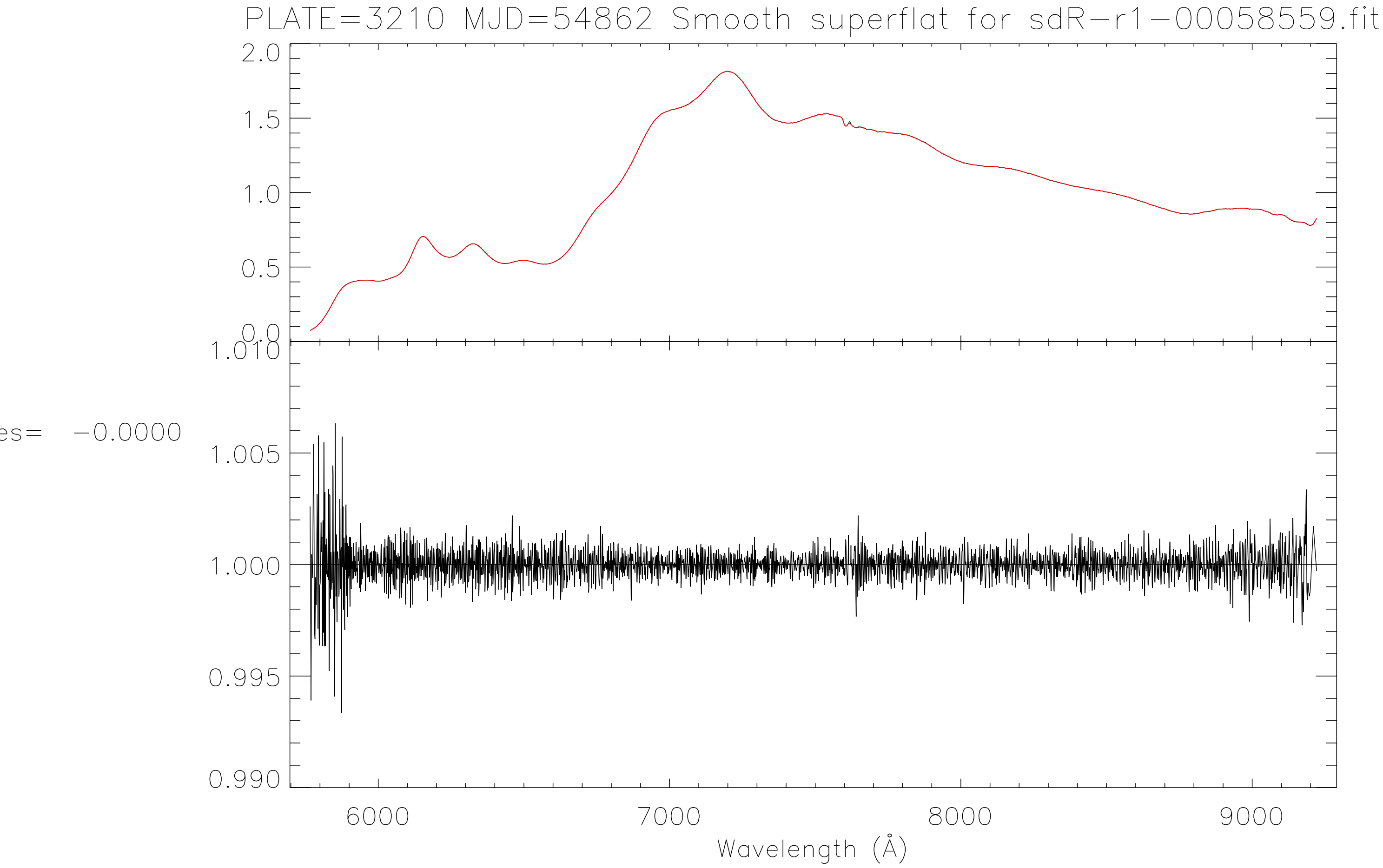

8430.1700

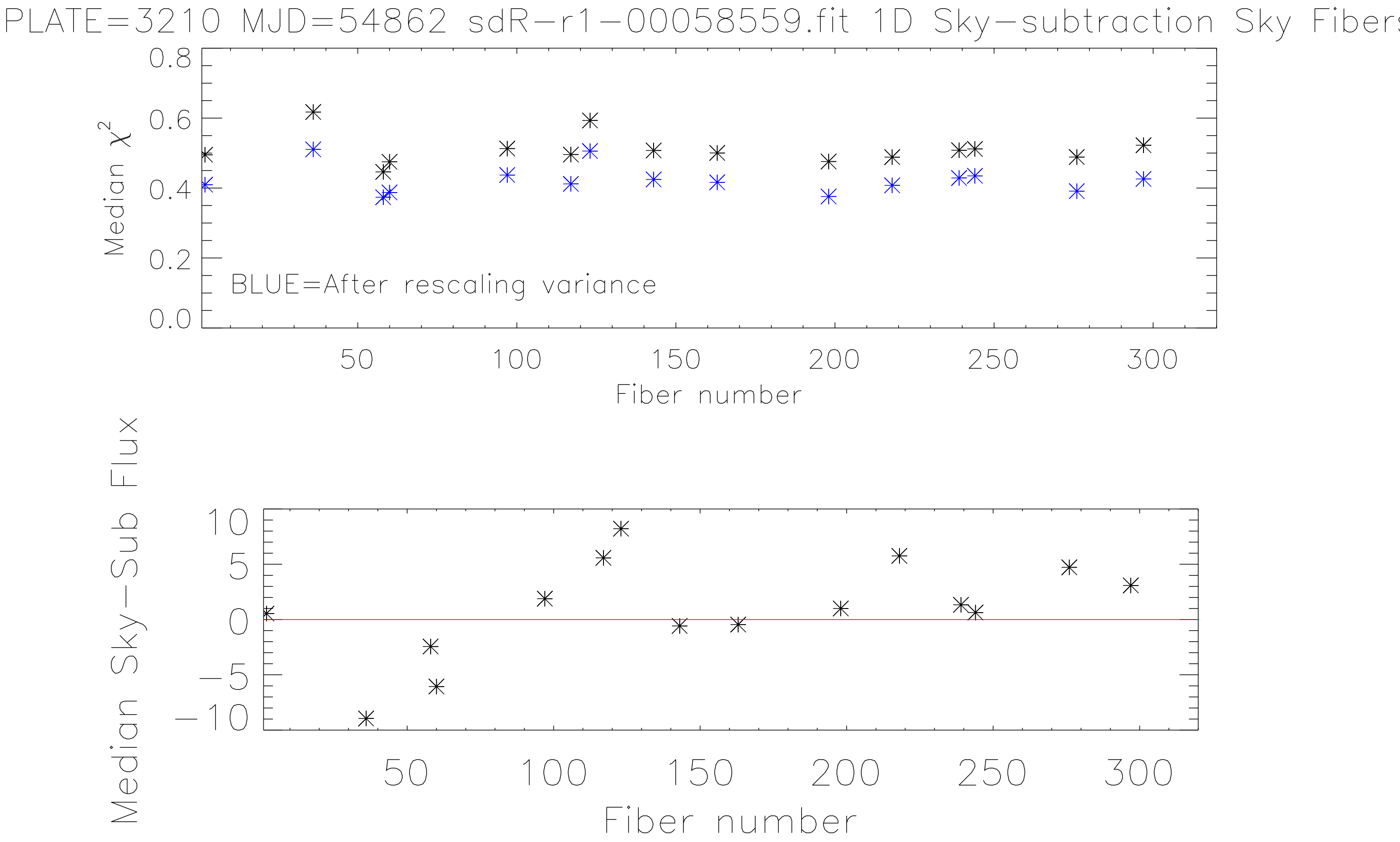

8885.8300

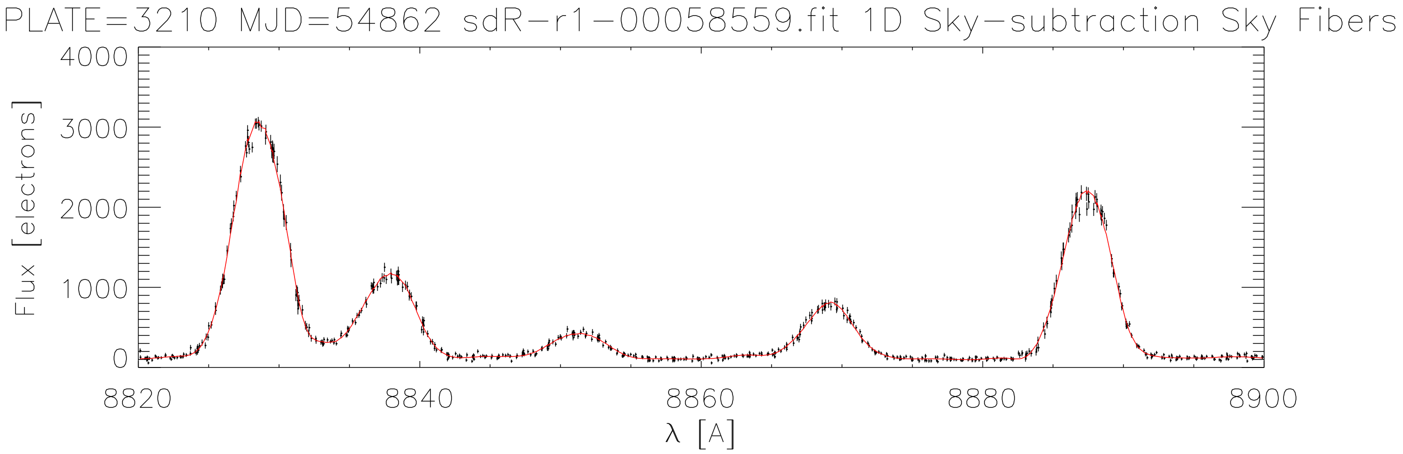

8919.6100

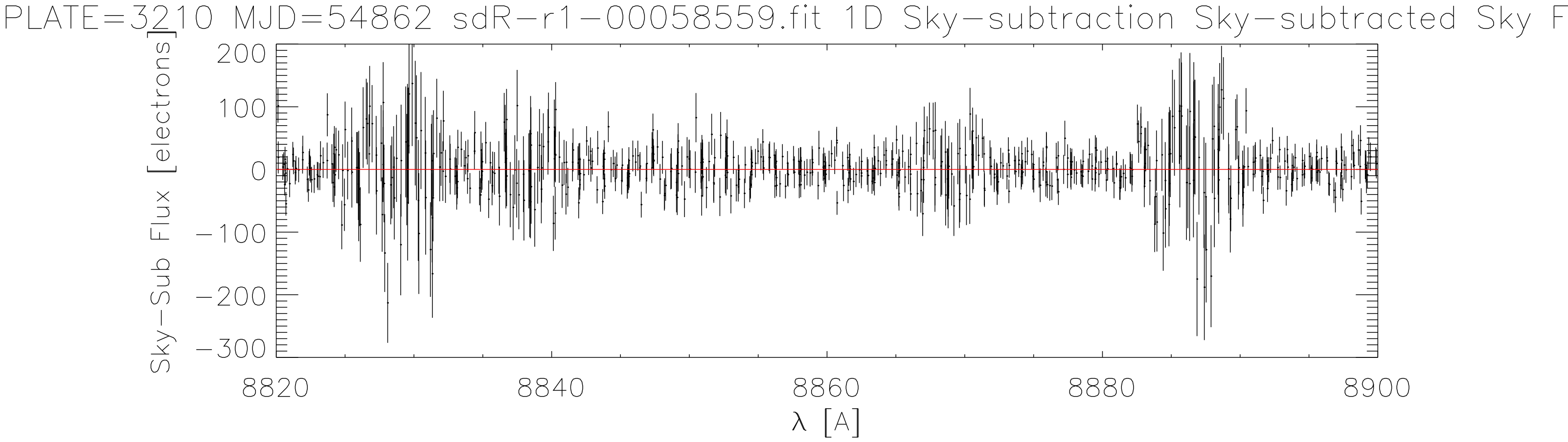

6300.3040
nfib1 16
nfib2 16
stdev 0.017
extrd 0.03
6363.7760
nfib1 16
nfib2 16
stdev 0.026
extrd 0.04
6553.6100
nfib1 16
nfib2 16
stdev 0.042
extrd −0.05
6923.2100
nfib1 16
nfib2 16
stdev 0.046
extrd 0.01
6949.0300
nfib1 16
nfib2 16
stdev 0.024
extrd 0.08
7571.7500
nfib1 16
nfib2 16
stdev 0.030
extrd 0.09
7794.1200
nfib1 16
nfib2 16
stdev 0.025
extrd −0.05
7821.5100
nfib1 16
nfib2 16
stdev 0.018
extrd 0.00
8399.1600
nfib1 15
nfib2 15
stdev 0.023
extrd 0.04
8430.1700
nfib1 16
nfib2 16
stdev 0.036
extrd 0.03
8885.8300
nfib1 16
nfib2 16
stdev 0.021
extrd 0.02
8919.6100
nfib1 16
nfib2 16
stdev 0.021
extrd 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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


PLATE=3210 MJD=54862 Smooth superflat for sdR-r1-00058559.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)

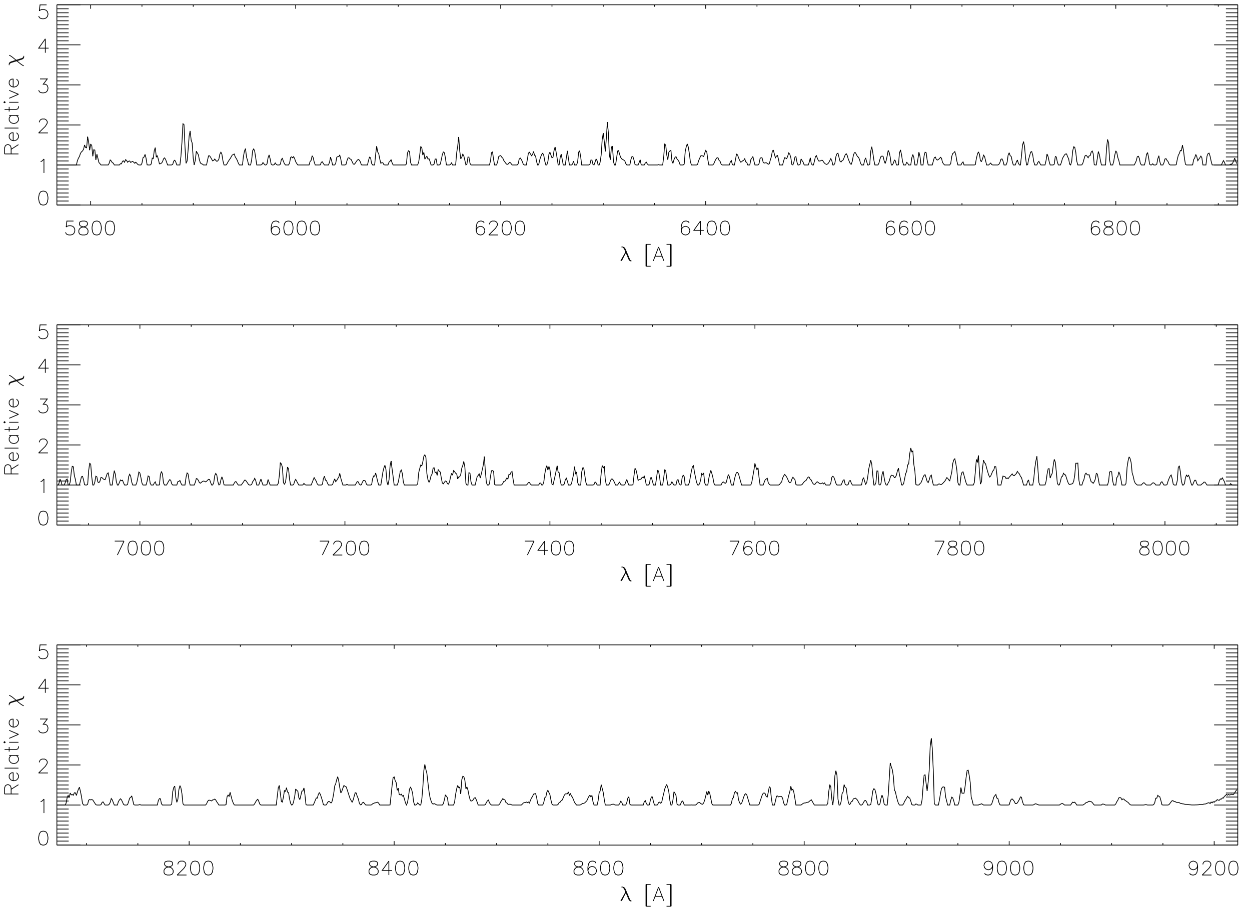

PLATE=3210 MJD=54862 sdR-r1-00058559.fit 1D Sky-subtraction Sky Fibers
Median $\chi^2$
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number

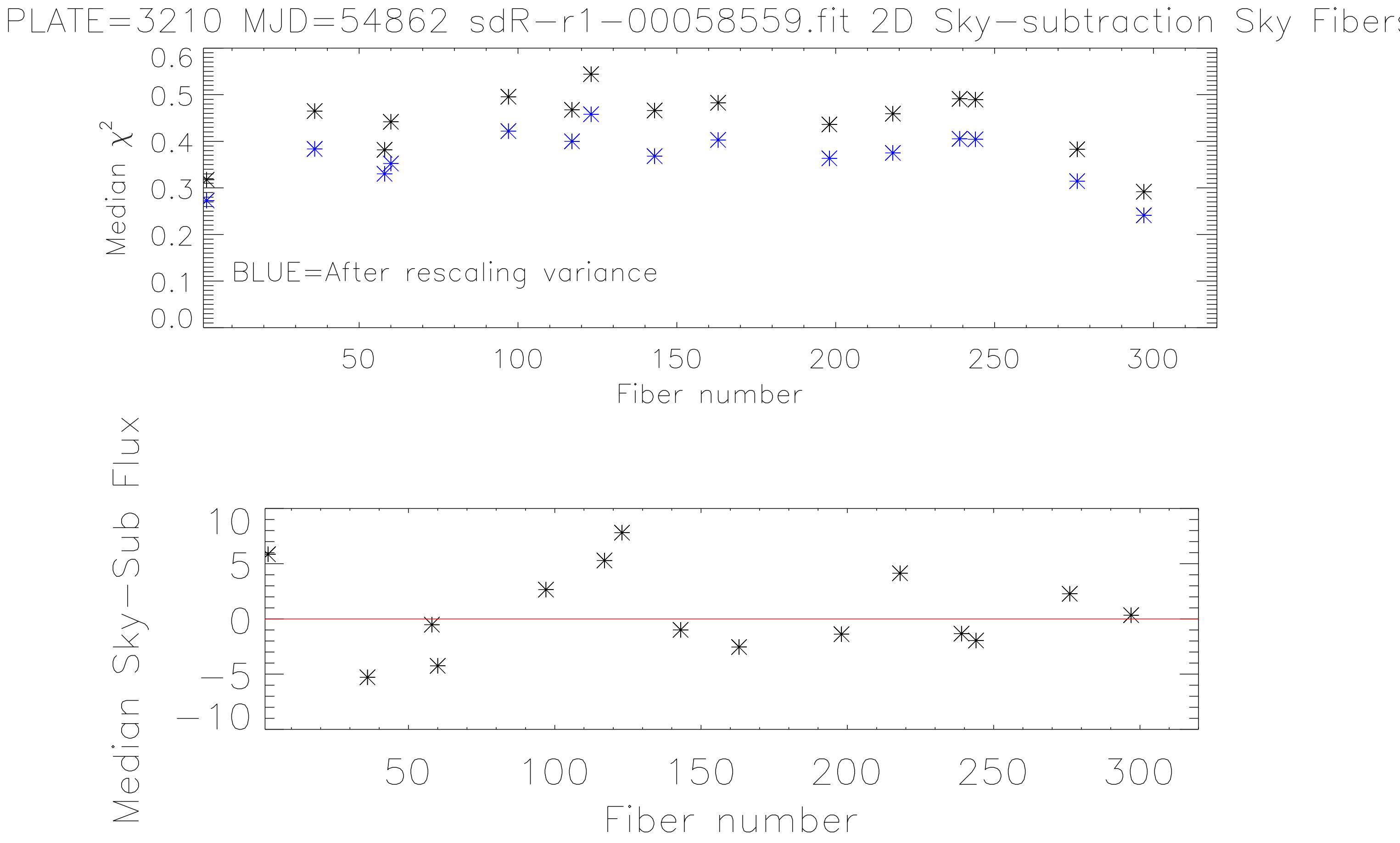

PLATE=3210 MJD=54862 sdR-r1-00058559.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

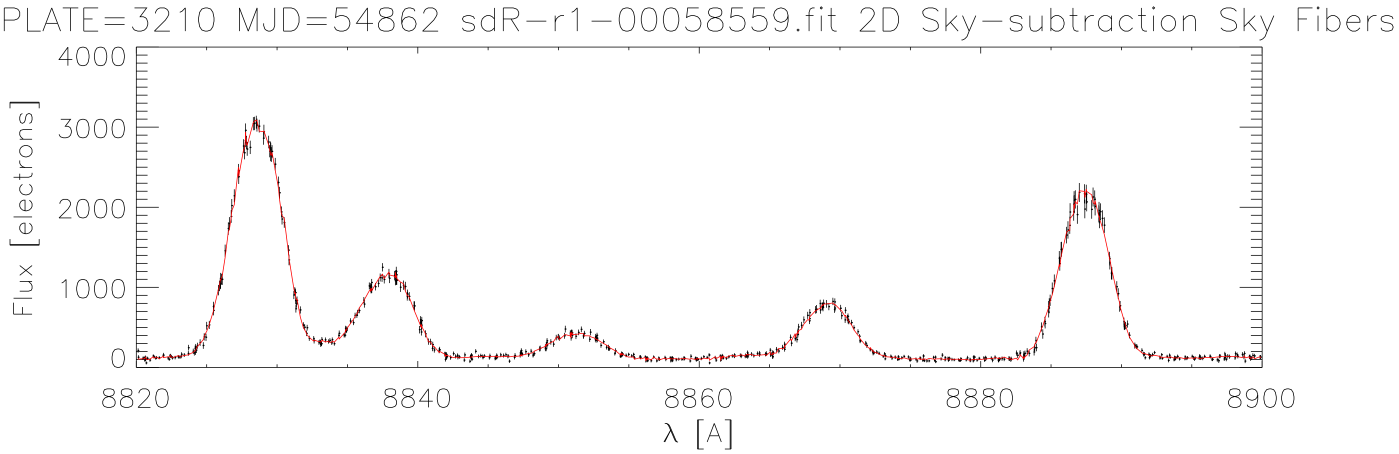

PLATE=3210 MJD=54862 sdR-r1-00058559.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 15

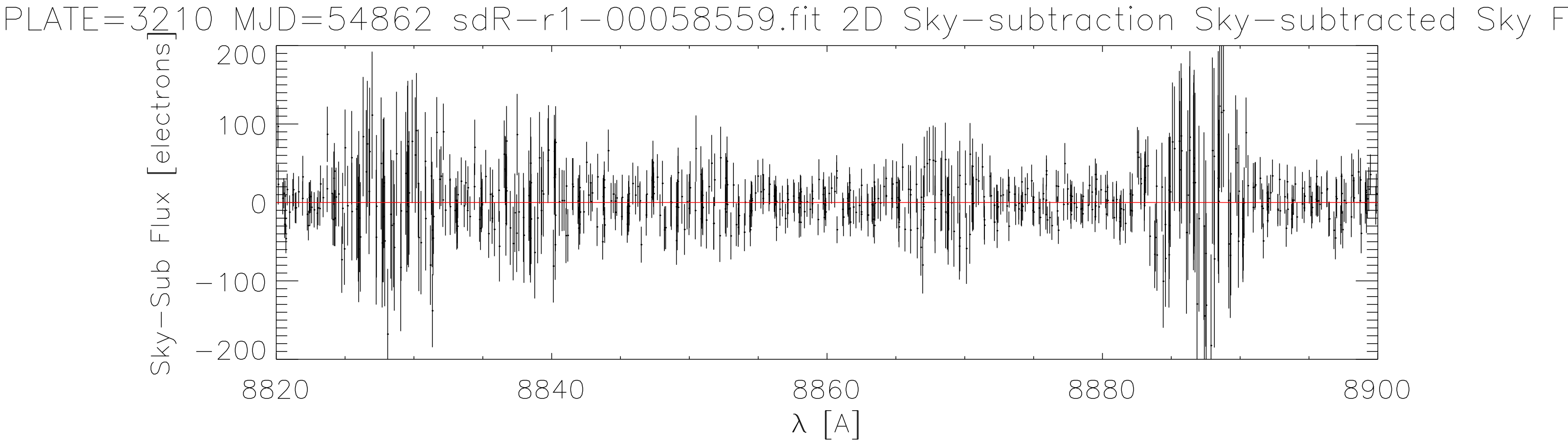
PLATE=3210 MJD=54862 sdR-r1-00058559.fit 1D Sky-subtraction Rescaled Errors




PLATE=3210 MJD=54862 sdR-r1-00058559.fit 2D Sky-subtraction Sky Fibers
Median $\chi^2$
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
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number



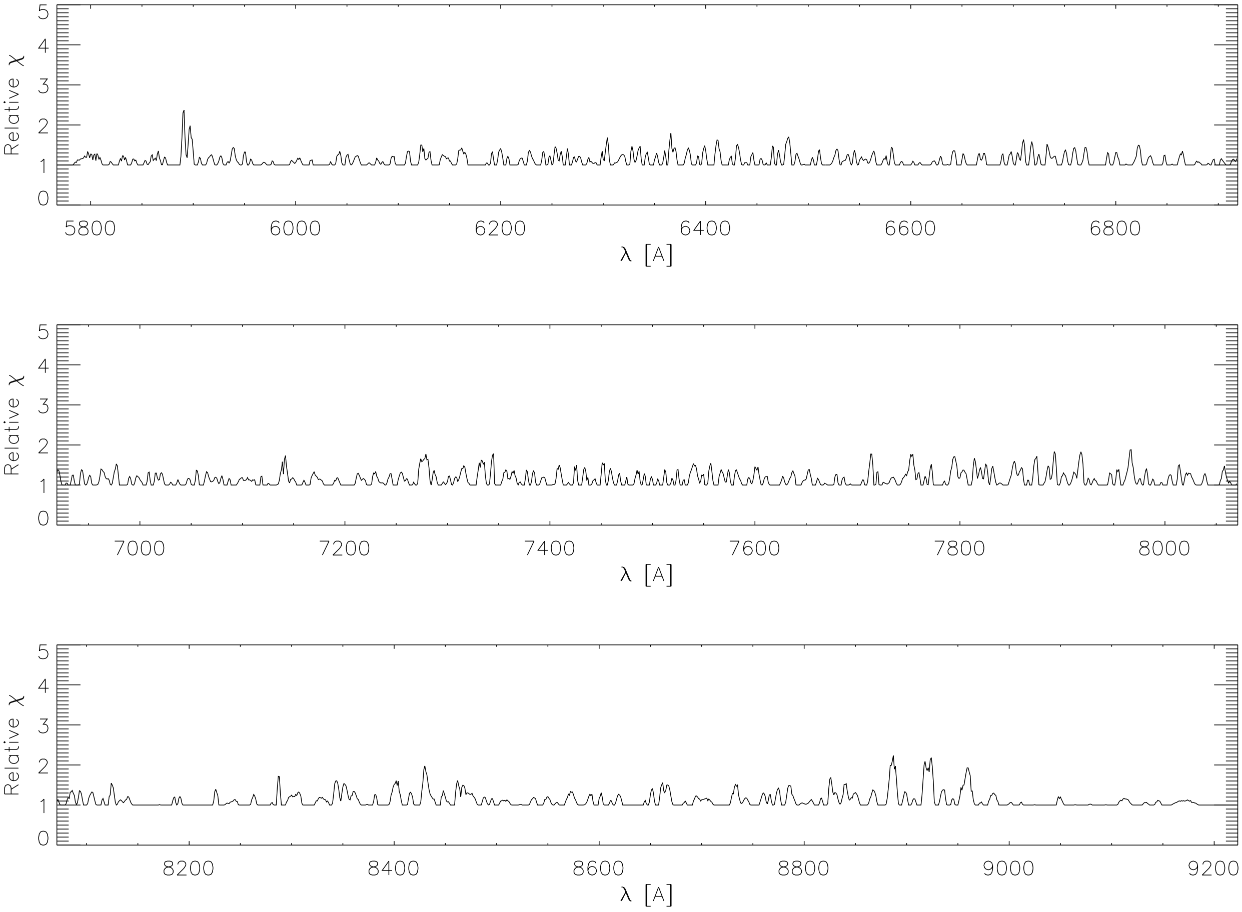
PLATE=3210 MJD=54862 sdR-r1-00058559.fit 2D Sky-subtraction Sky Fibers

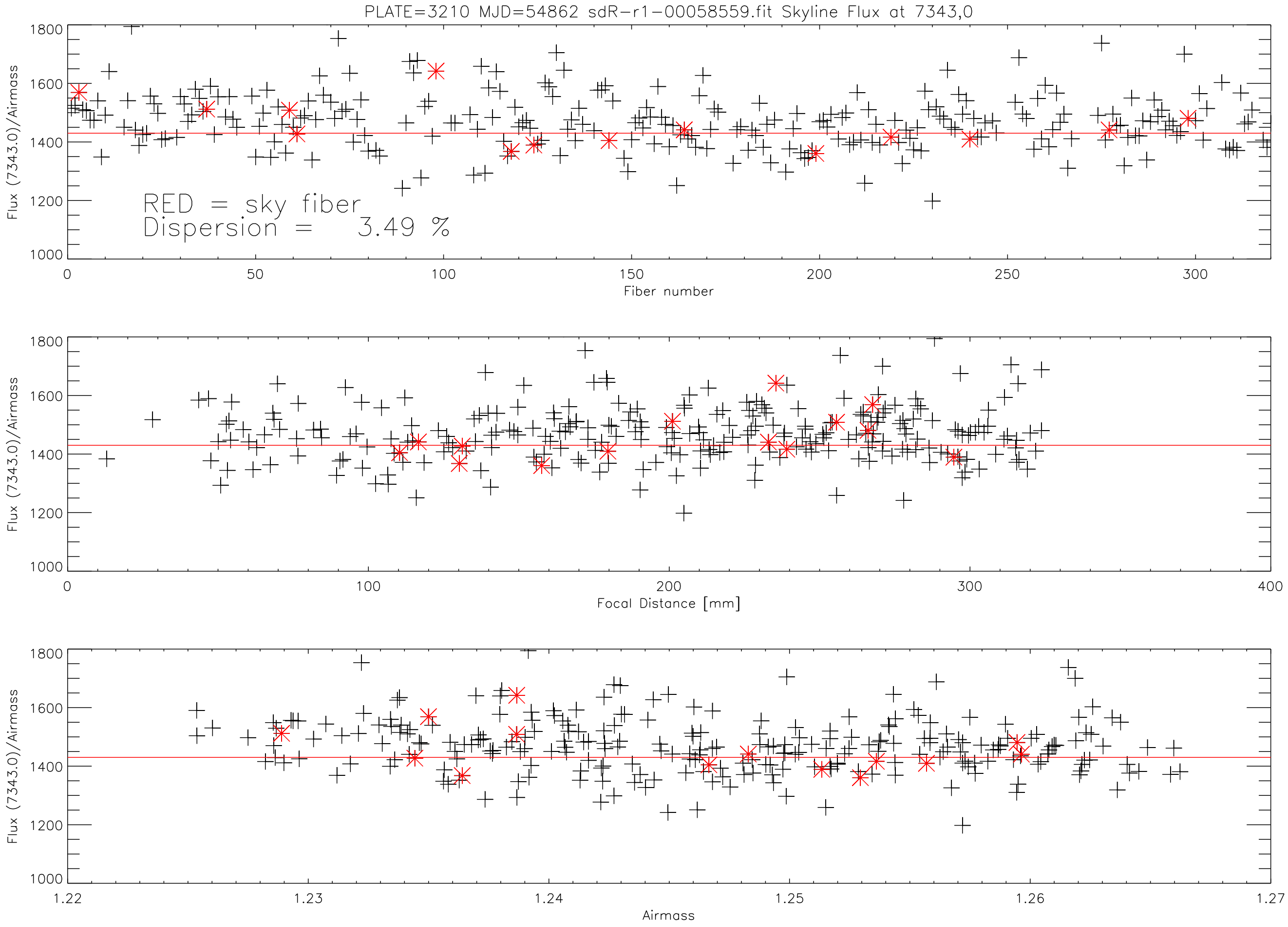


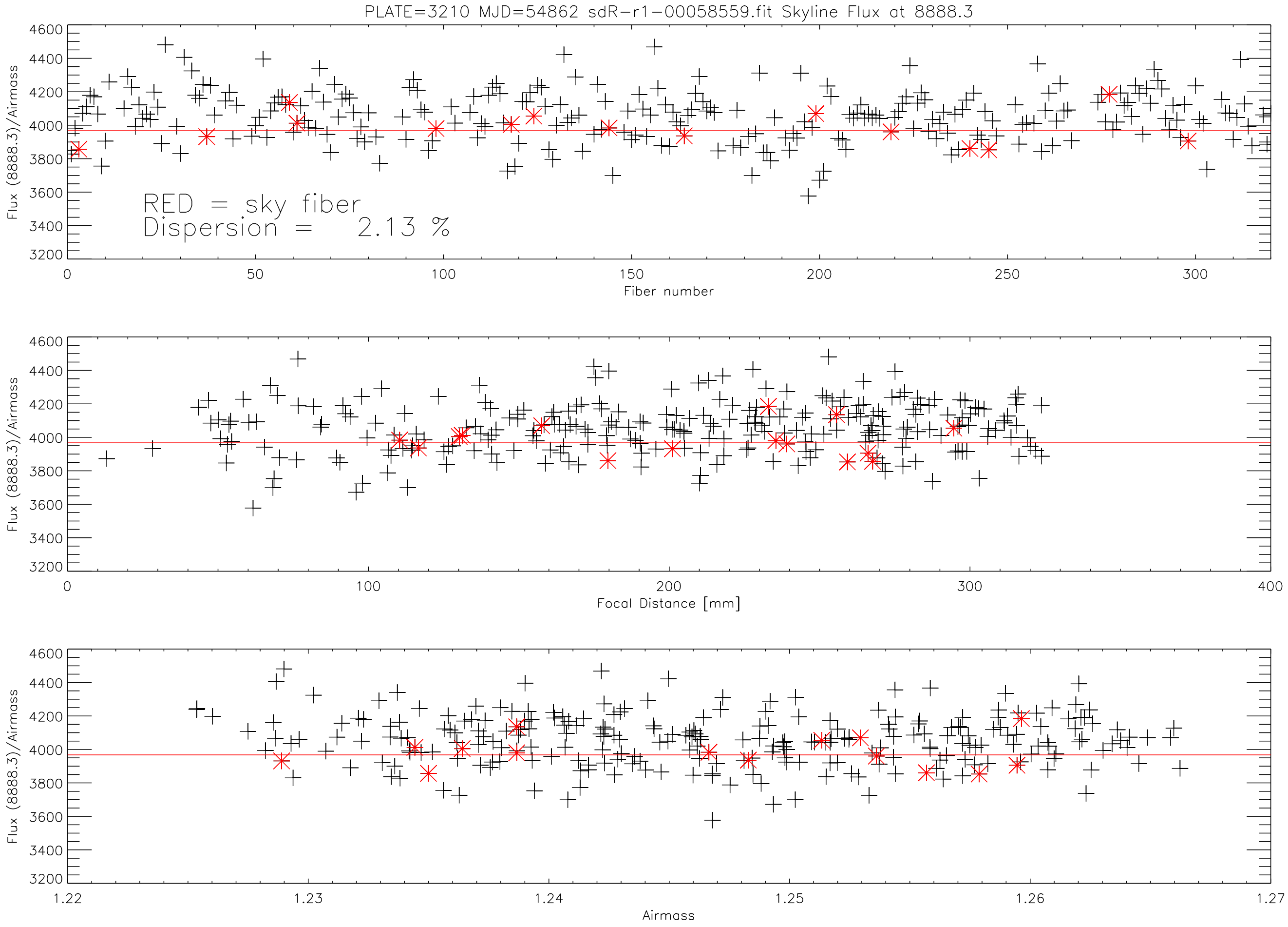
PLATE=3210 MJD=54862 sdR-r1-00058559.fit 2D Sky-subtraction Sky-subtracted Sky F

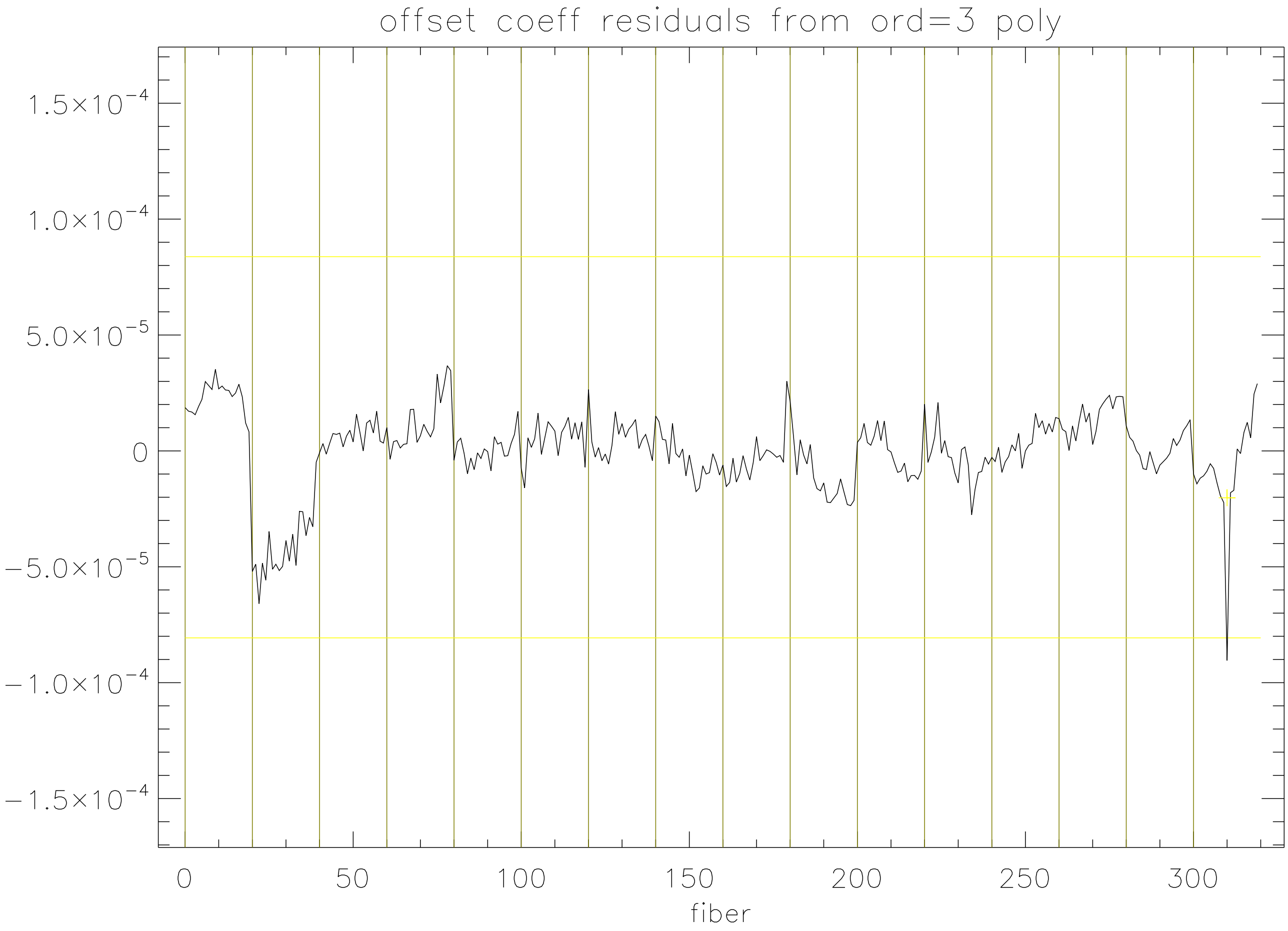
Number of sky fibers = 15

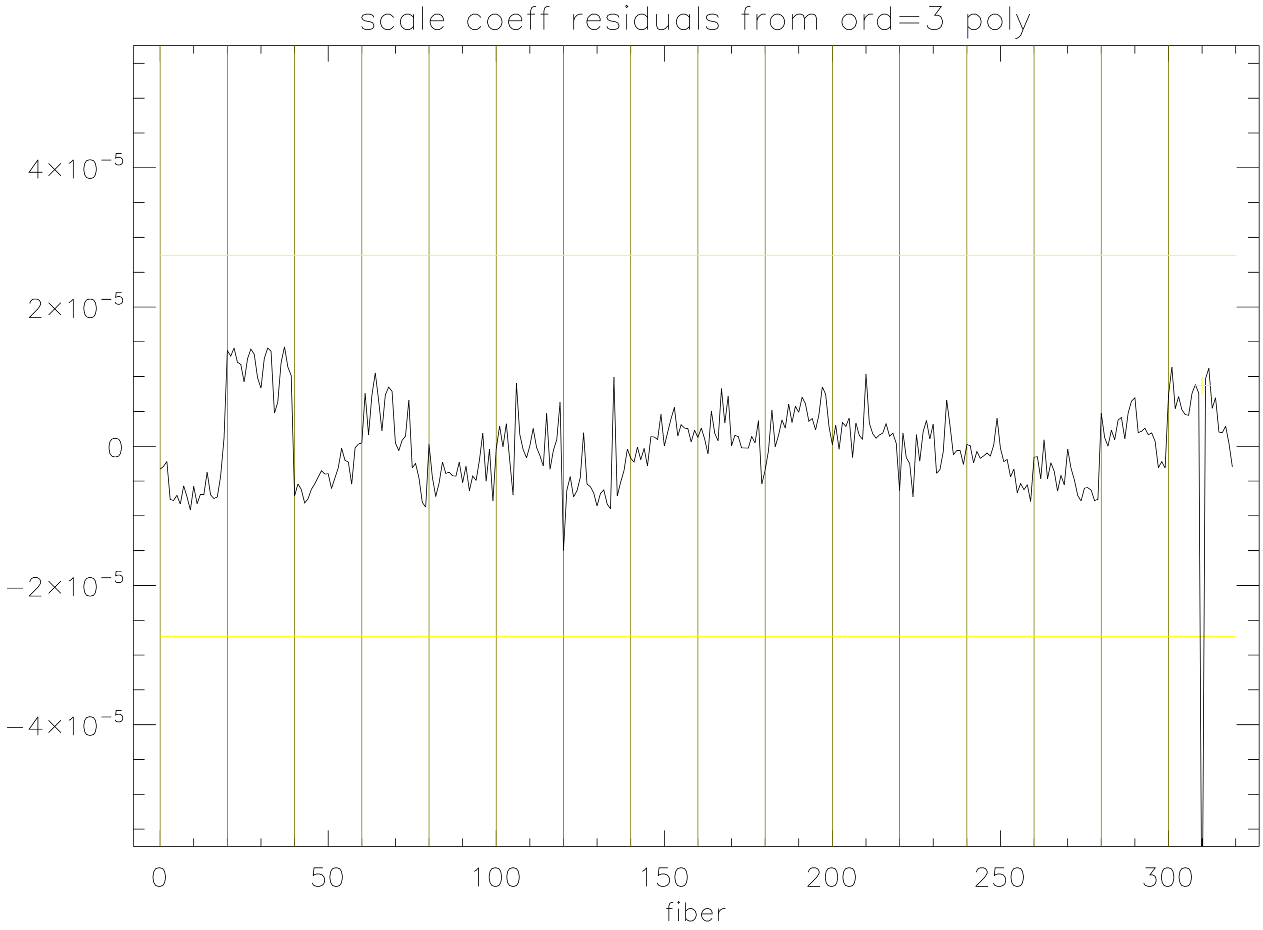
PLATE=3210 MJD=54862 sdR-r1-00058559.fit 2D Sky-subtraction Rescaled Errors

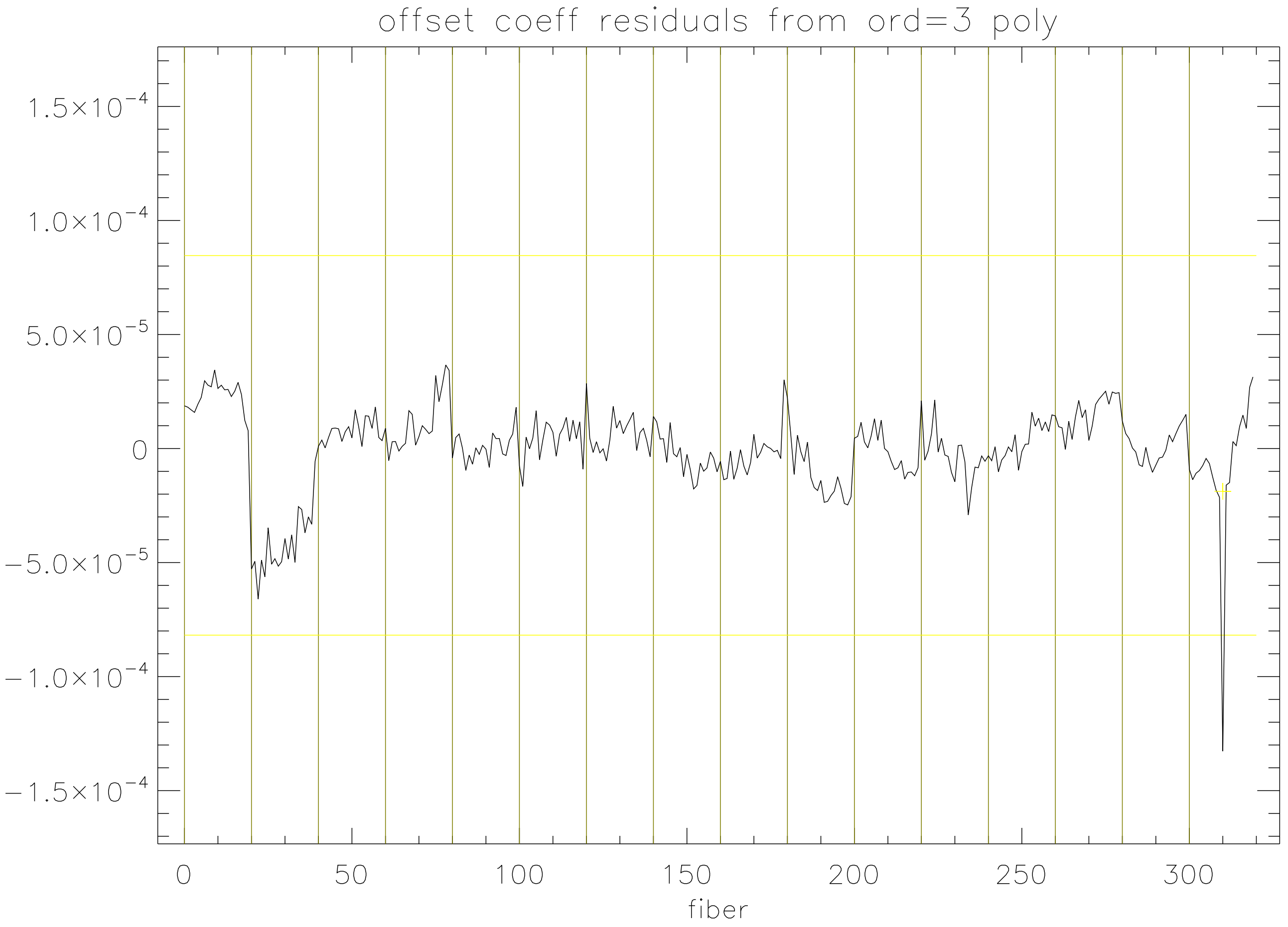


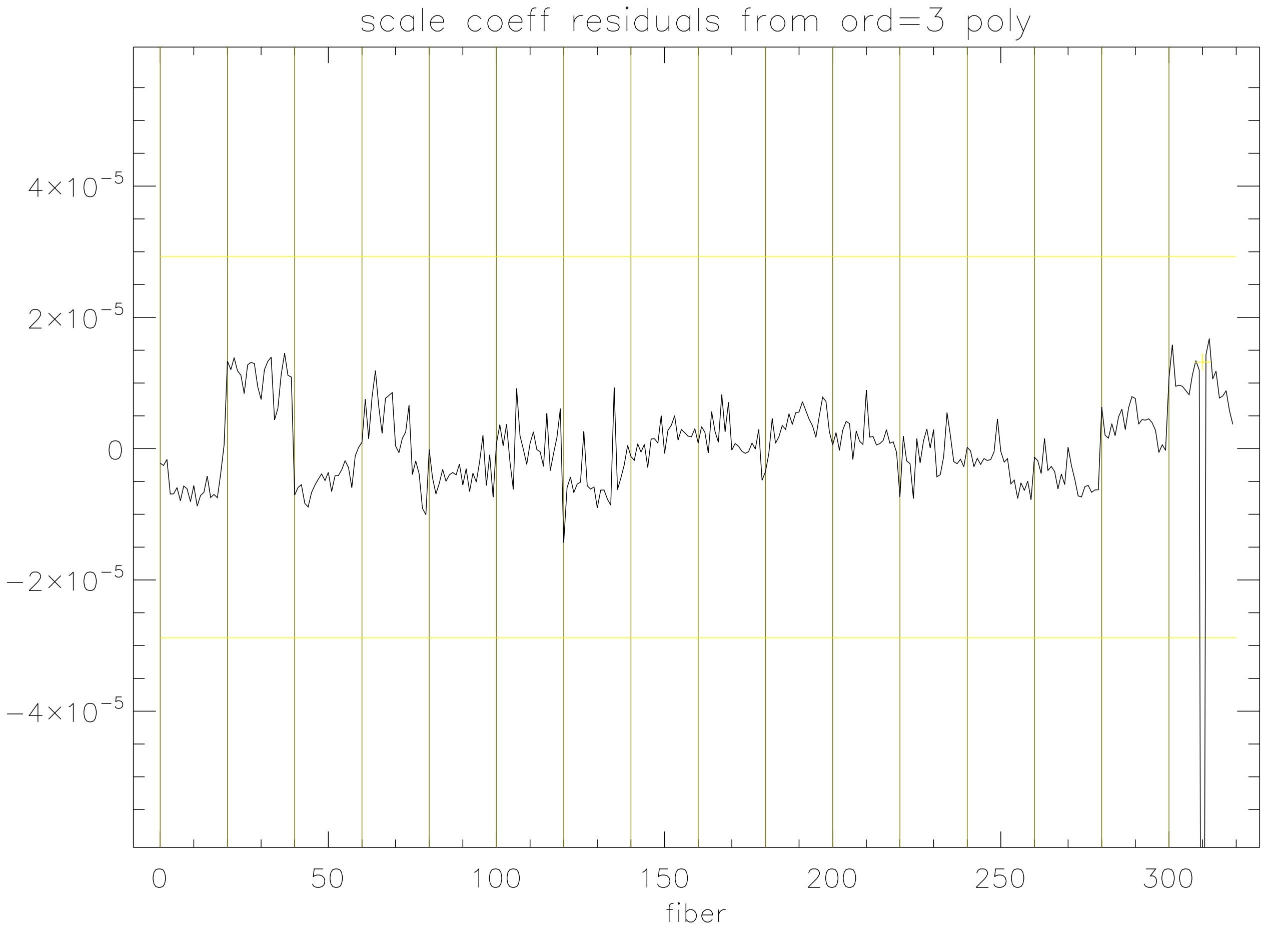

PLATE=3210 MJD=54862 sdR-r1-00058559.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1800
1600
1400
1200
1000
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 3.49 %
Flux (7343.0)/Airmass
1800
1600
1400
1200
1000
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1800
1600
1400
1200
1000
1.22
1.23
1.24
1.25
1.26
1.27
Airmass

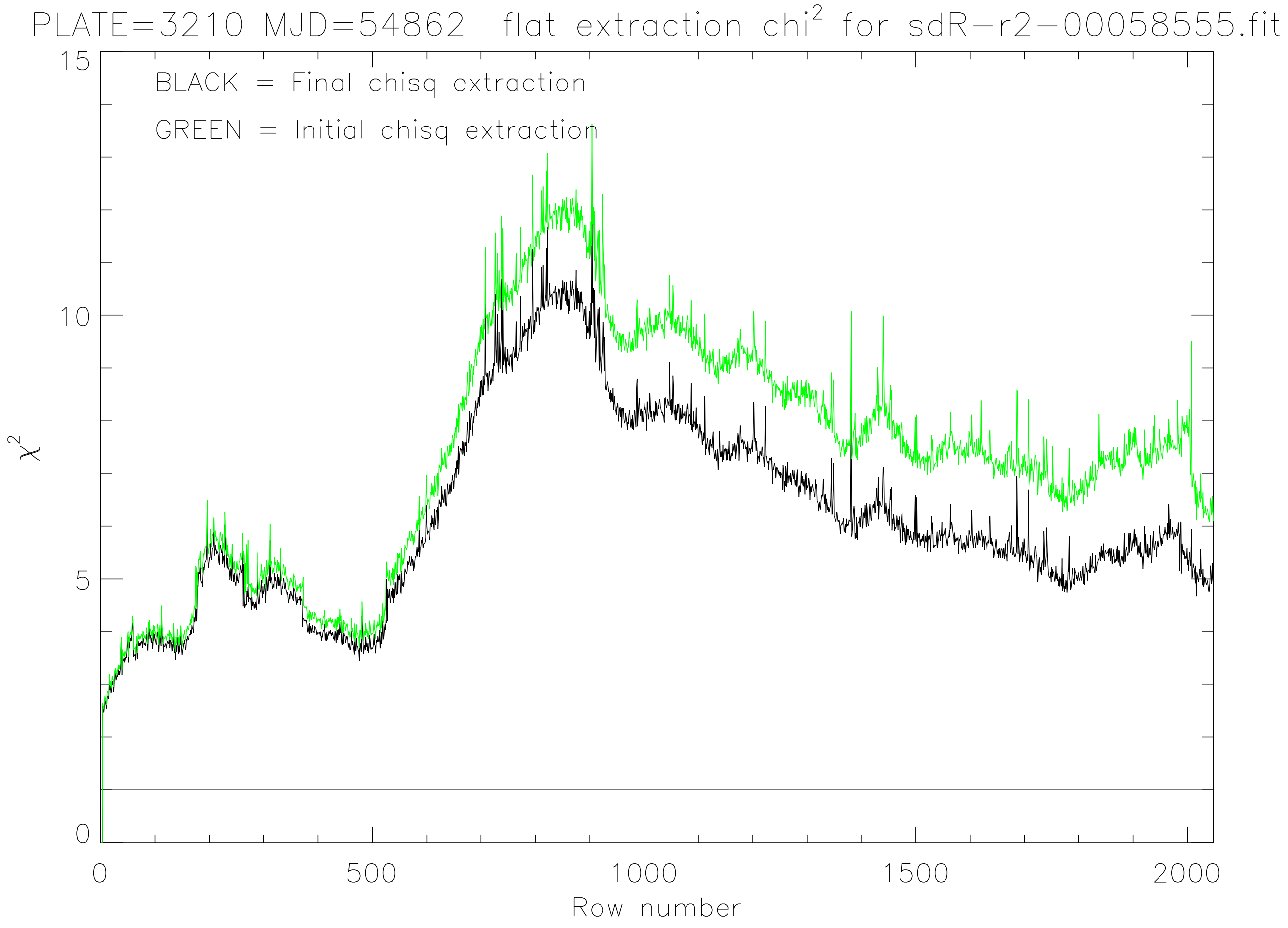

PLATE=3210 MJD=54862 sdR−r1−00058559.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 2.13 %
Flux (8888.3)/Airmass
4600
4400
4200
4000
3800
3600
3400
3200
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.22
1.23
1.24
1.25
1.26
1.27
Airmass


offset coeff residuals from ord=3 poly
$1.5\times10^{-4}$
$1.0\times10^{-4}$
$5.0\times10^{-5}$
0
$-5.0\times10^{-5}$
$-1.0\times10^{-4}$
$-1.5\times10^{-4}$
0
50
100
150
200
250
300
fiber

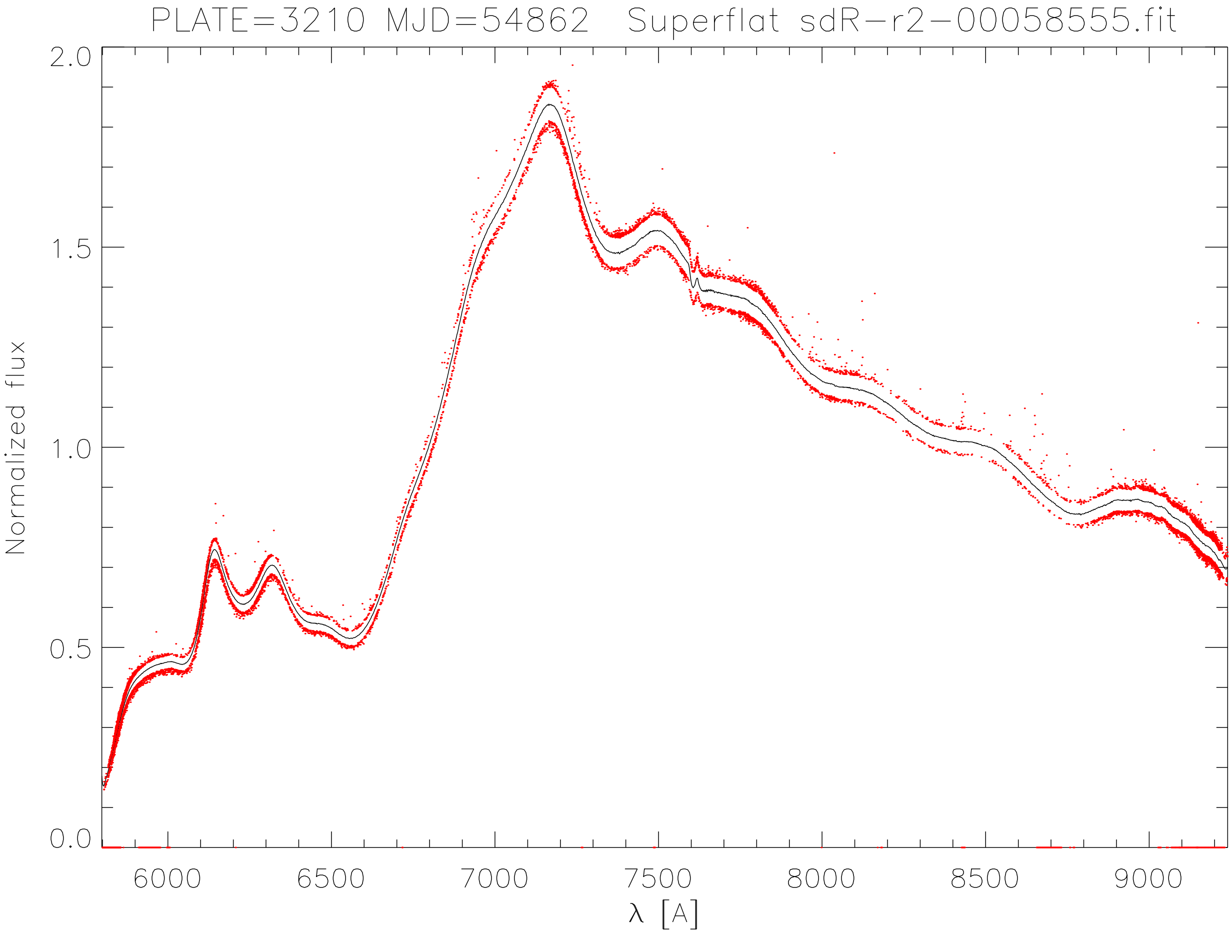

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber


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

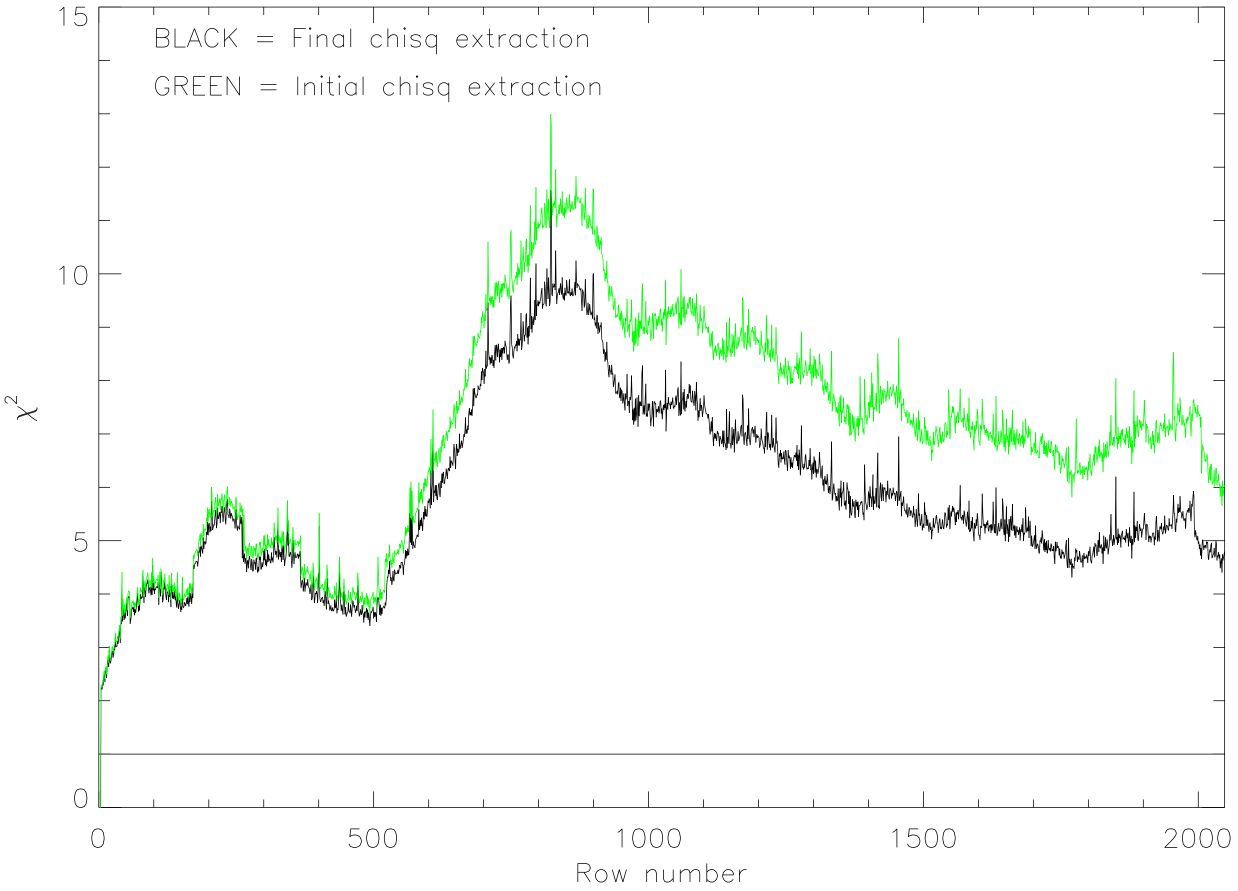

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

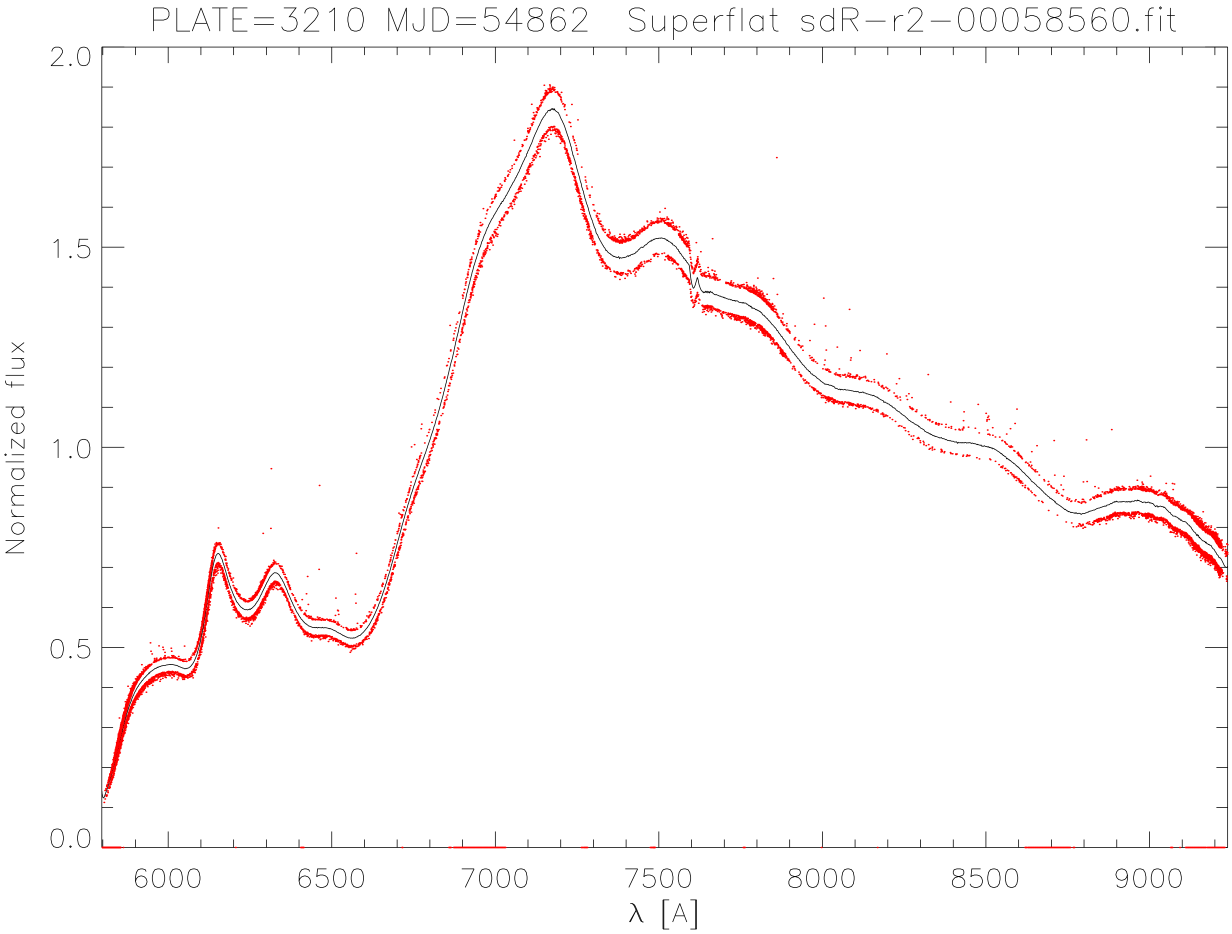


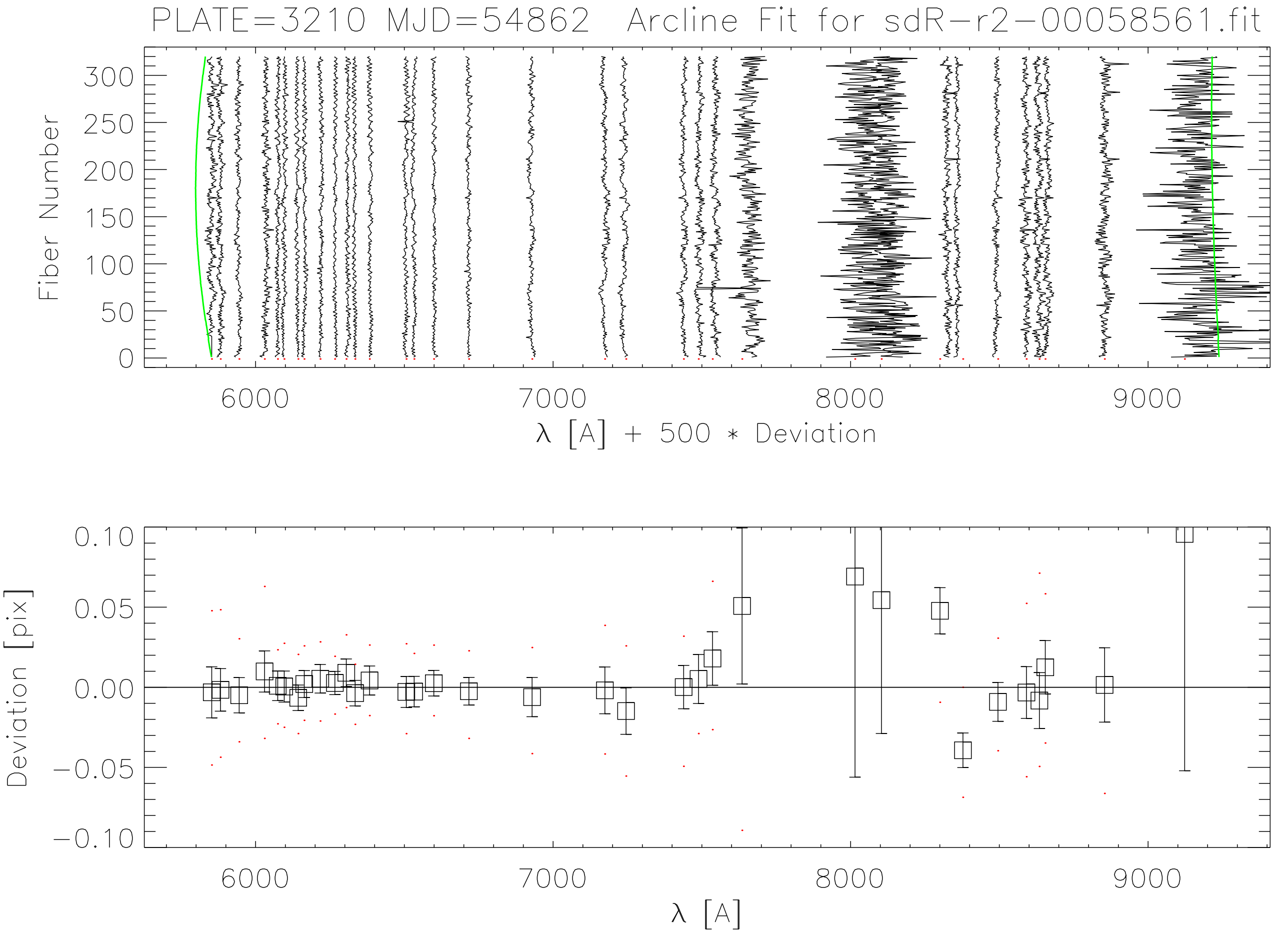
PLATE=3210 MJD=54862 flat extraction chi$^2$ for sdR-r2-00058555.fit


PLATE=3210 MJD=54862 Superflat sdR-r2-00058555.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

PLATE=3210 MJD=54862 flat extraction $\chi^2$ for sdR-r2-00058560.fit

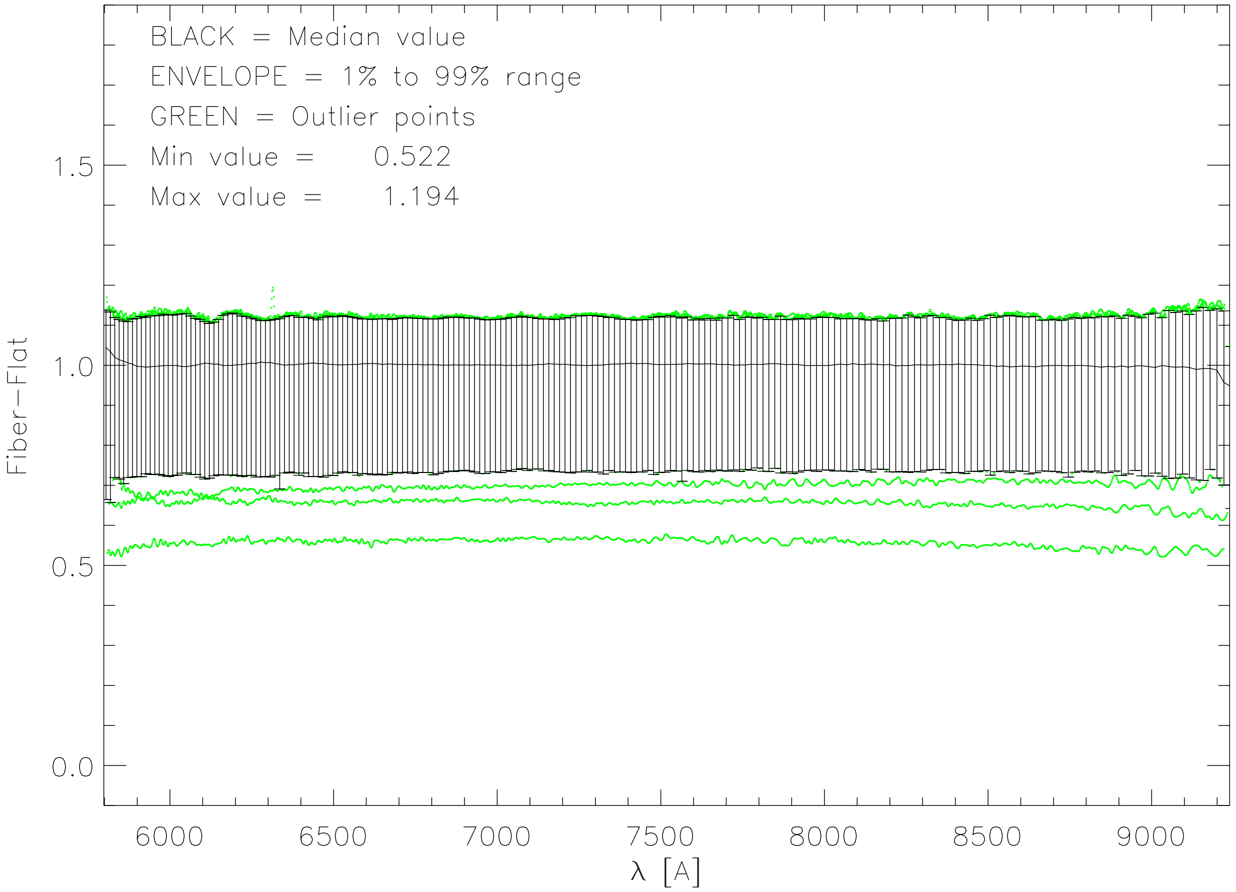



PLATE=3210 MJD=54862 Superflat sdR-r2-00058560.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

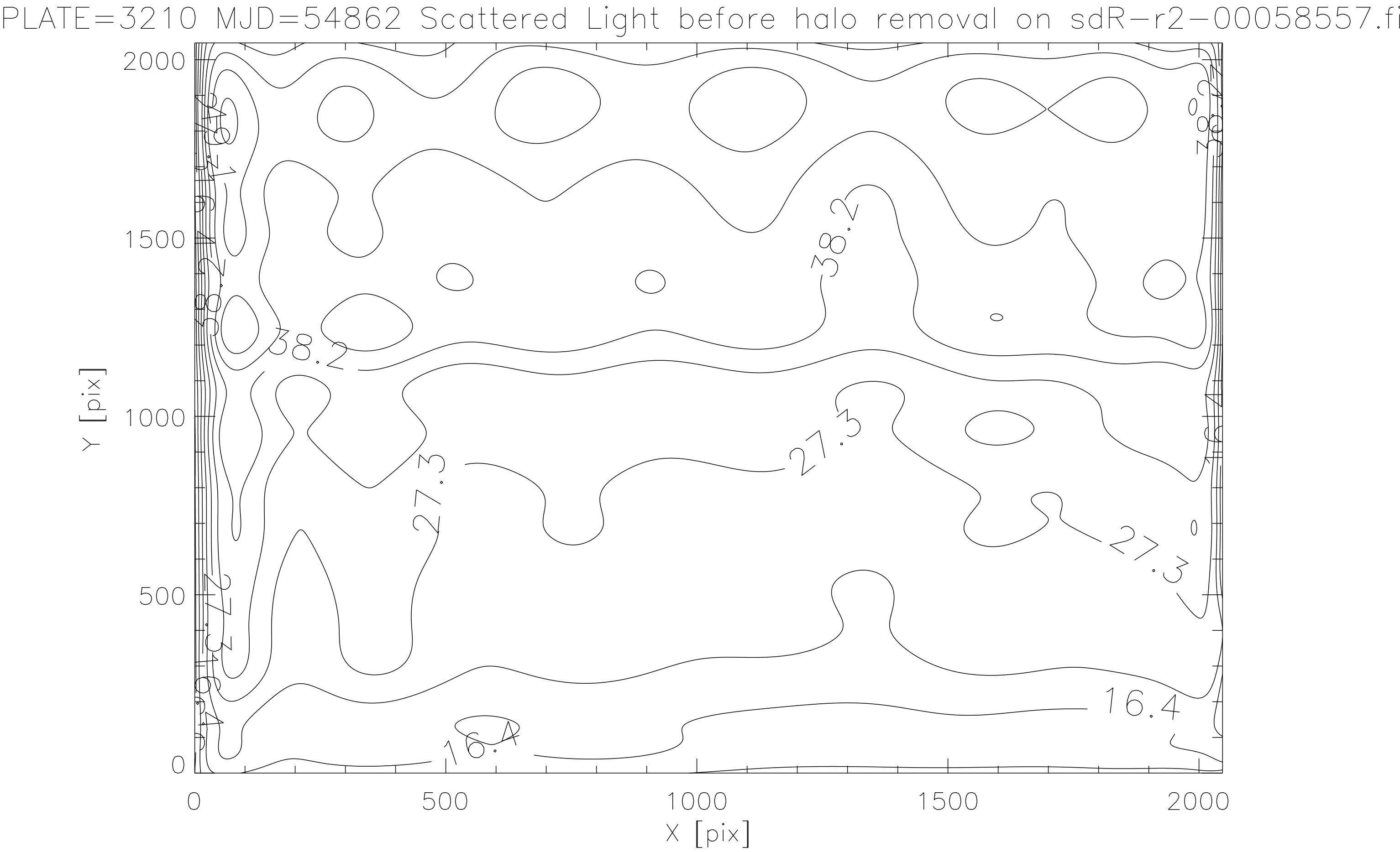


Fri Mar 12 20:49:34 2010

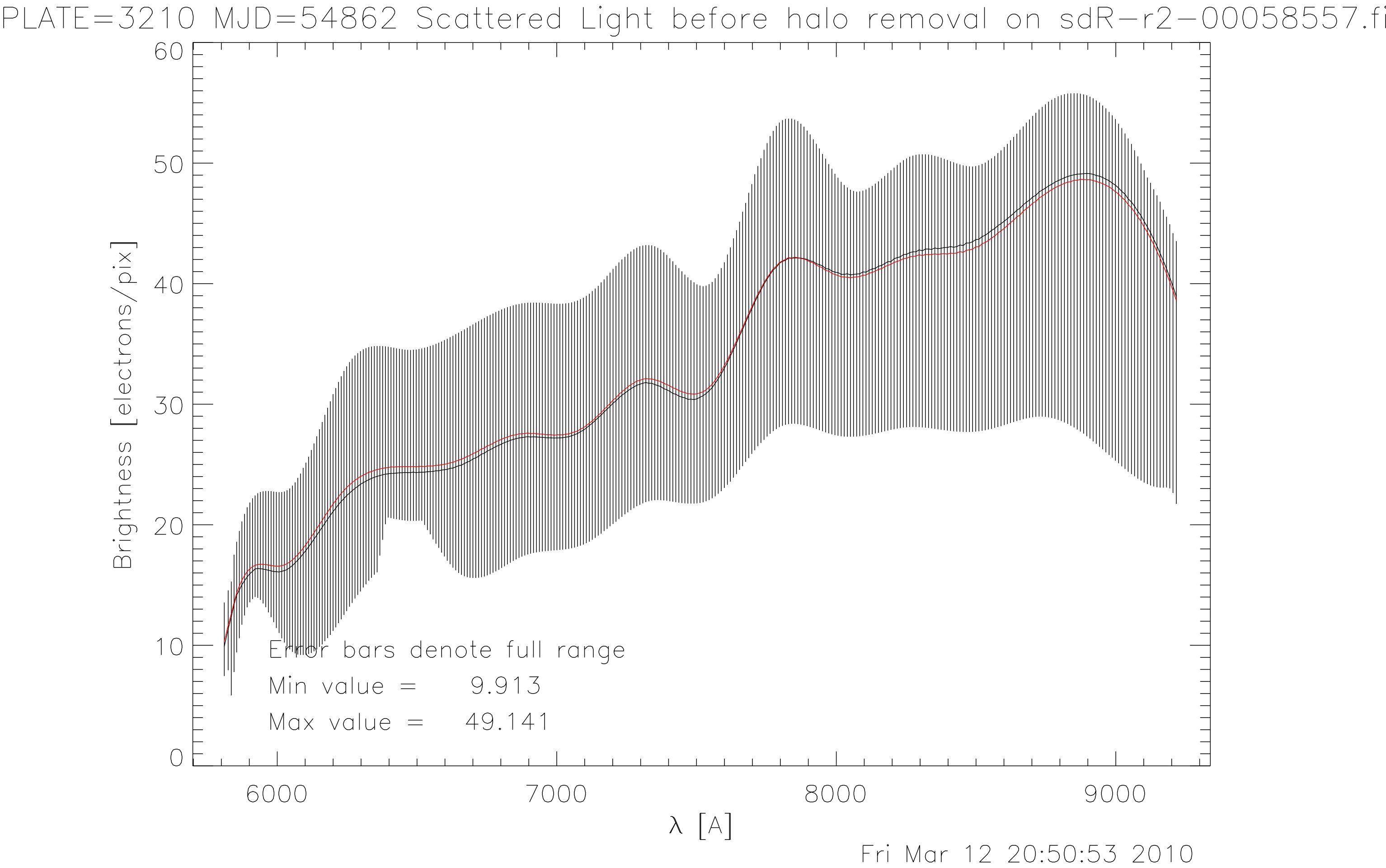
PLATE=3210 MJD=54862 Fiber-Flats for sdR-r2-00058560.fit

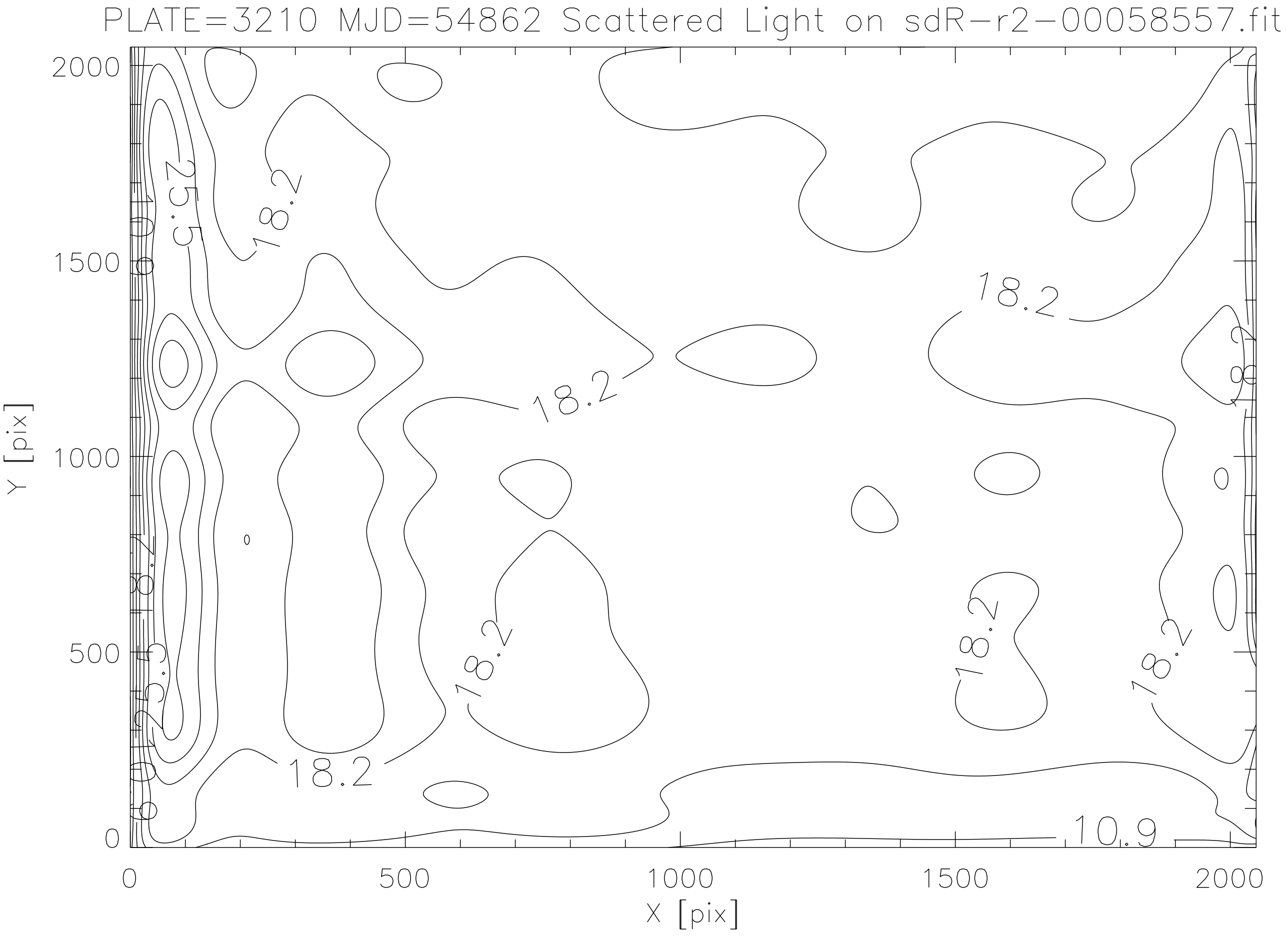


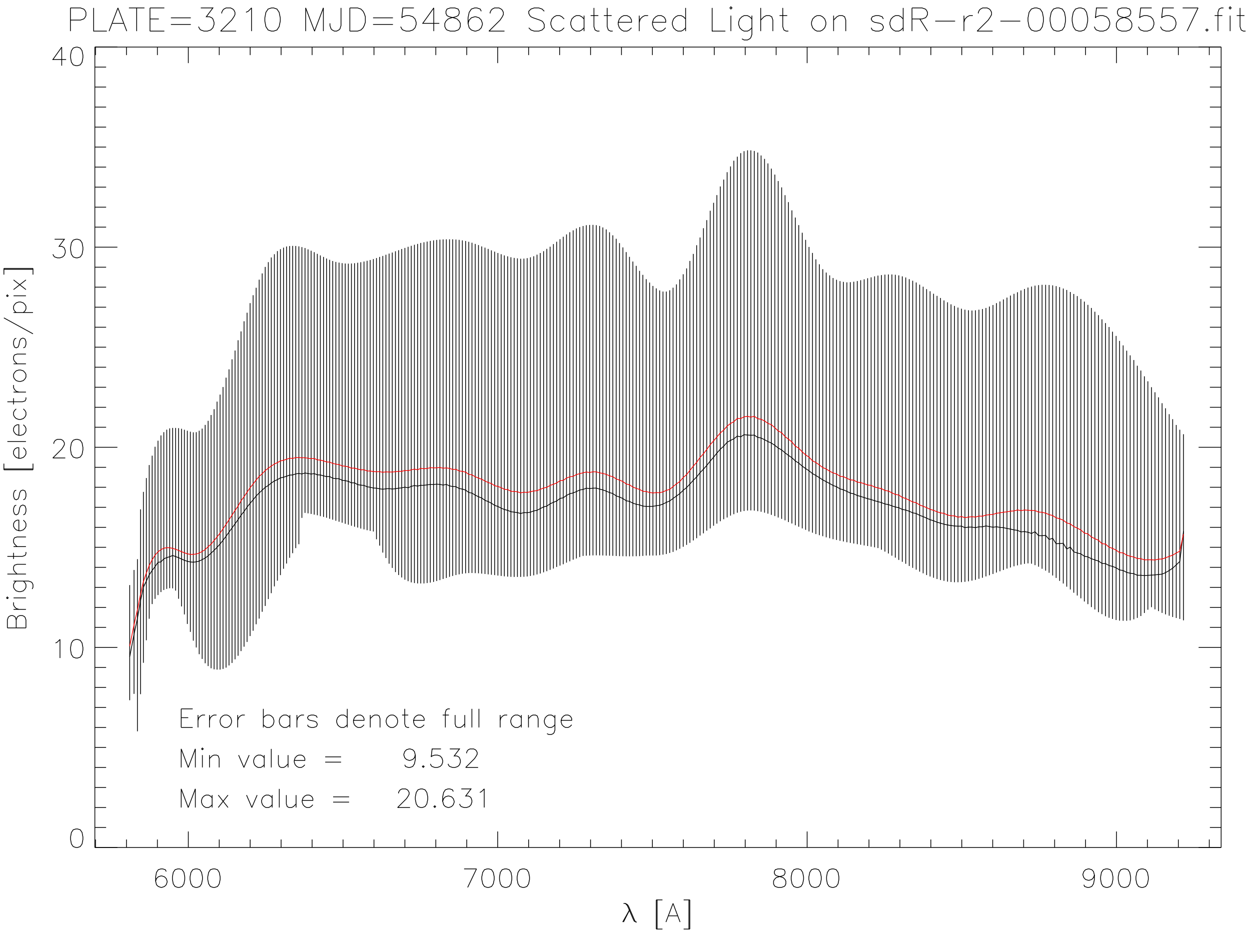
Fri Mar 12 20:49:45 2010



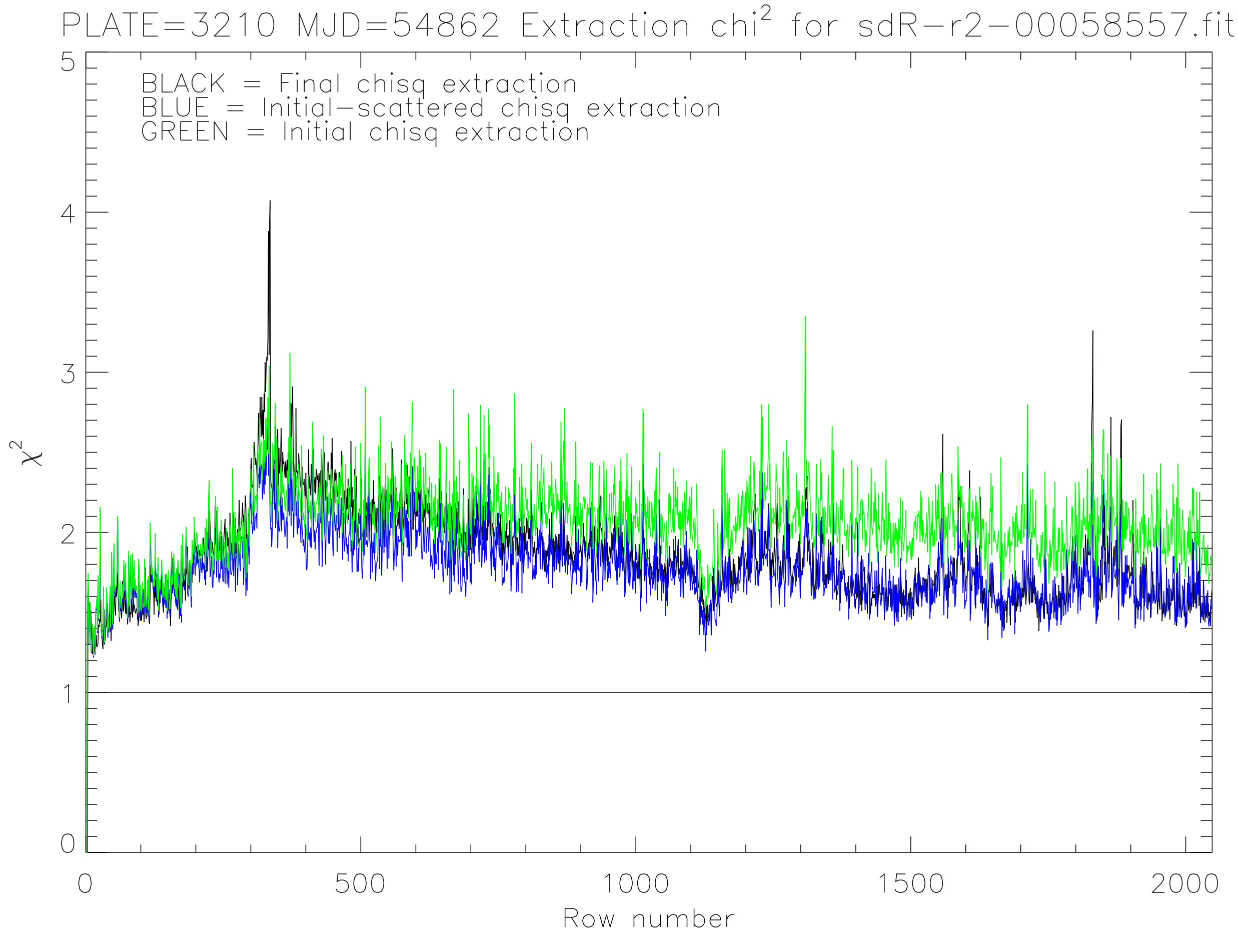
PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r2-00058557.fi

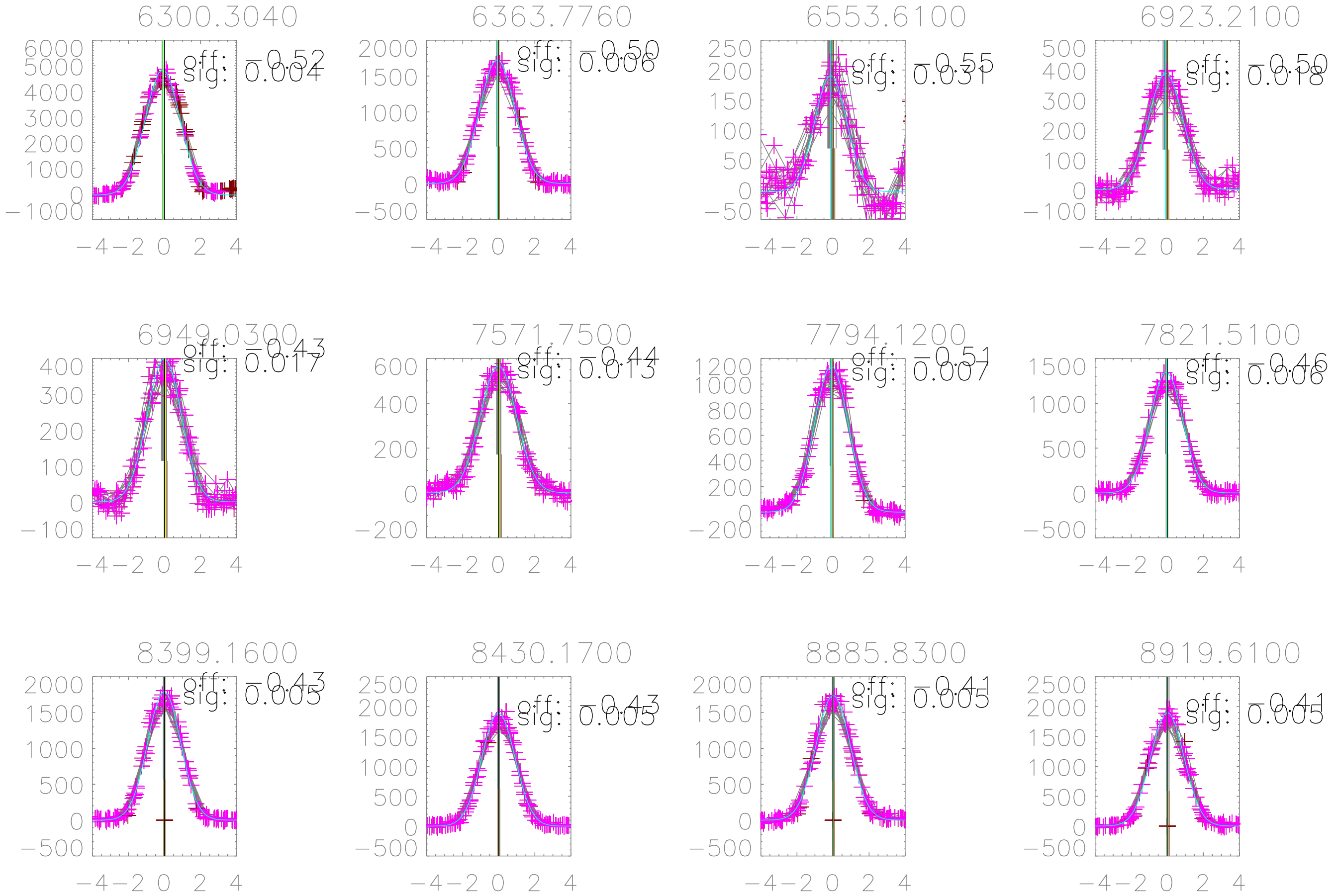

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r2-00058557.fi

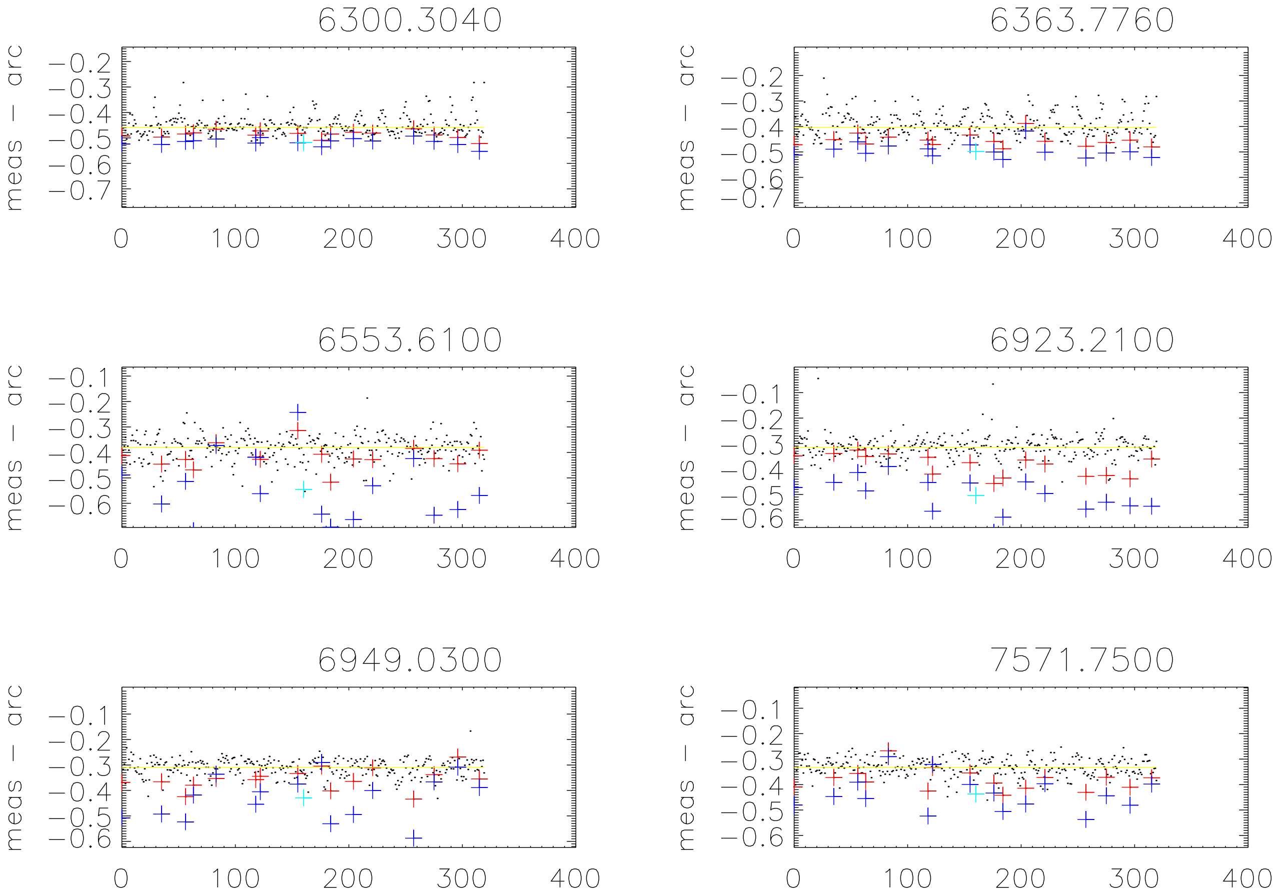
PLATE=3210 MJD=54862 Scattered Light on sdR-r2-00058557.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
18.2
25.5
10.9

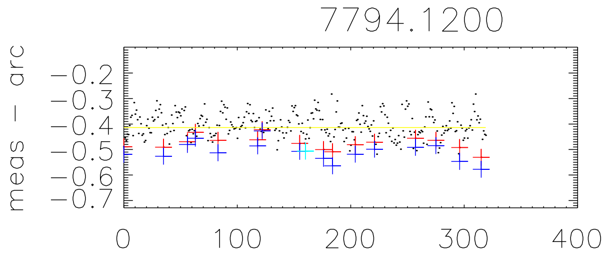


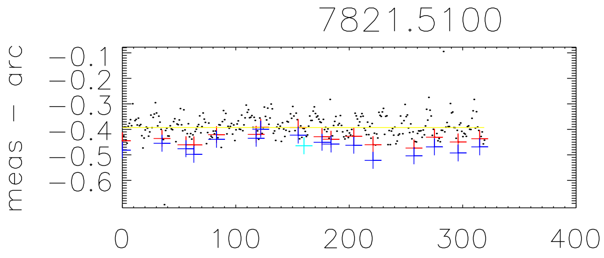
Fri Mar 12 20:54:37 2010

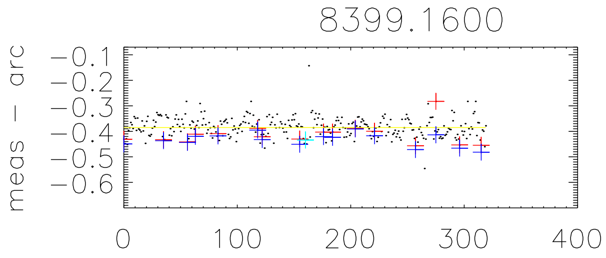

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-r2-00058557.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

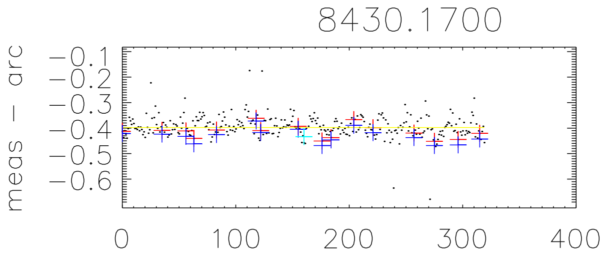

6300.3040
off: −0.52
sig: 0.004
6000
5000
4000
3000
2000
1000
0
−1000
6363.7760
off: −0.50
sig: 0.006
2000
1500
1000
500
0
−500
6553.6100
off: −0.55
sig: 0.031
250
200
150
100
50
0
−50
6923.2100
off: −0.50
sig: 0.018
500
400
300
200
100
0
−100
6949.0300
off: −0.43
sig: 0.017
400
300
200
100
0
−100
7571.7500
off: −0.44
sig: 0.013
600
400
200
0
−200
7794.1200
off: −0.51
sig: 0.007
1200
1000
800
600
400
200
0
−200
7821.5100
off: −0.46
sig: 0.006
1500
1000
500
0
−500
8399.1600
off: −0.43
sig: 0.005
2000
1500
1000
500
0
−500
8430.1700
off: −0.43
sig: 0.005
2500
2000
1500
1000
500
0
−500
8885.8300
off: −0.41
sig: 0.005
2000
1500
1000
500
0
−500
8919.6100
off: −0.41
sig: 0.005
2500
2000
1500
1000
500
0
−500
−4 −2 0 2 4

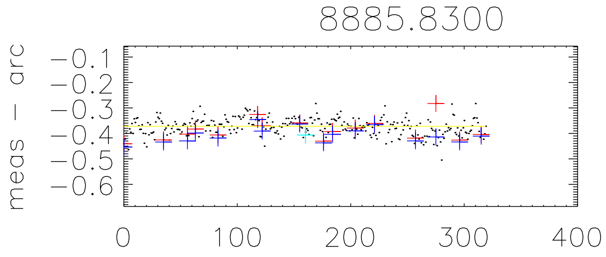

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

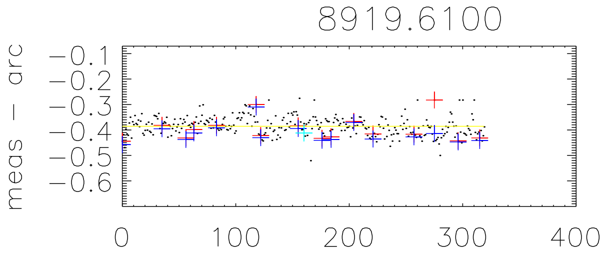

7794.1200

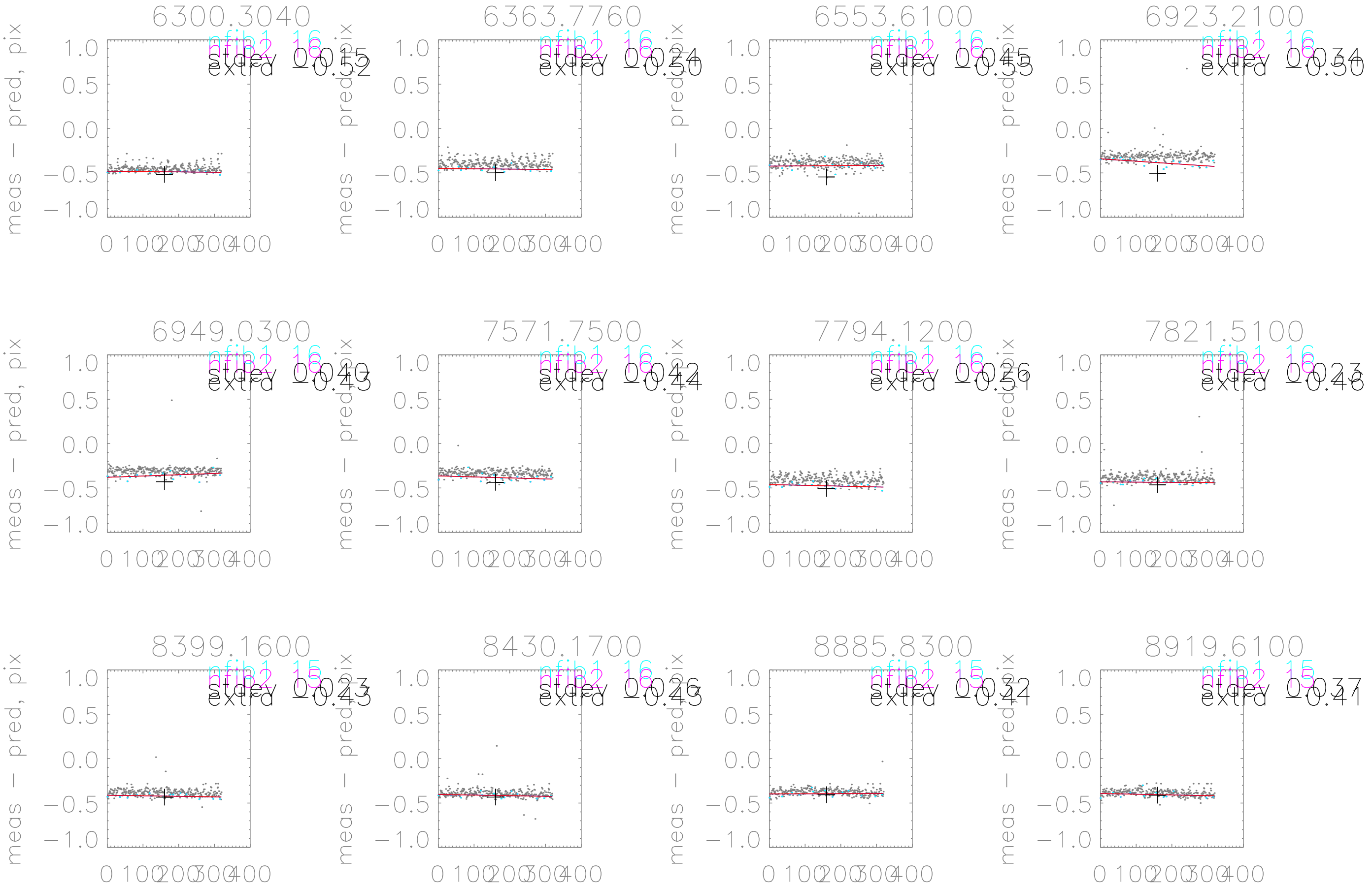

7821.5100

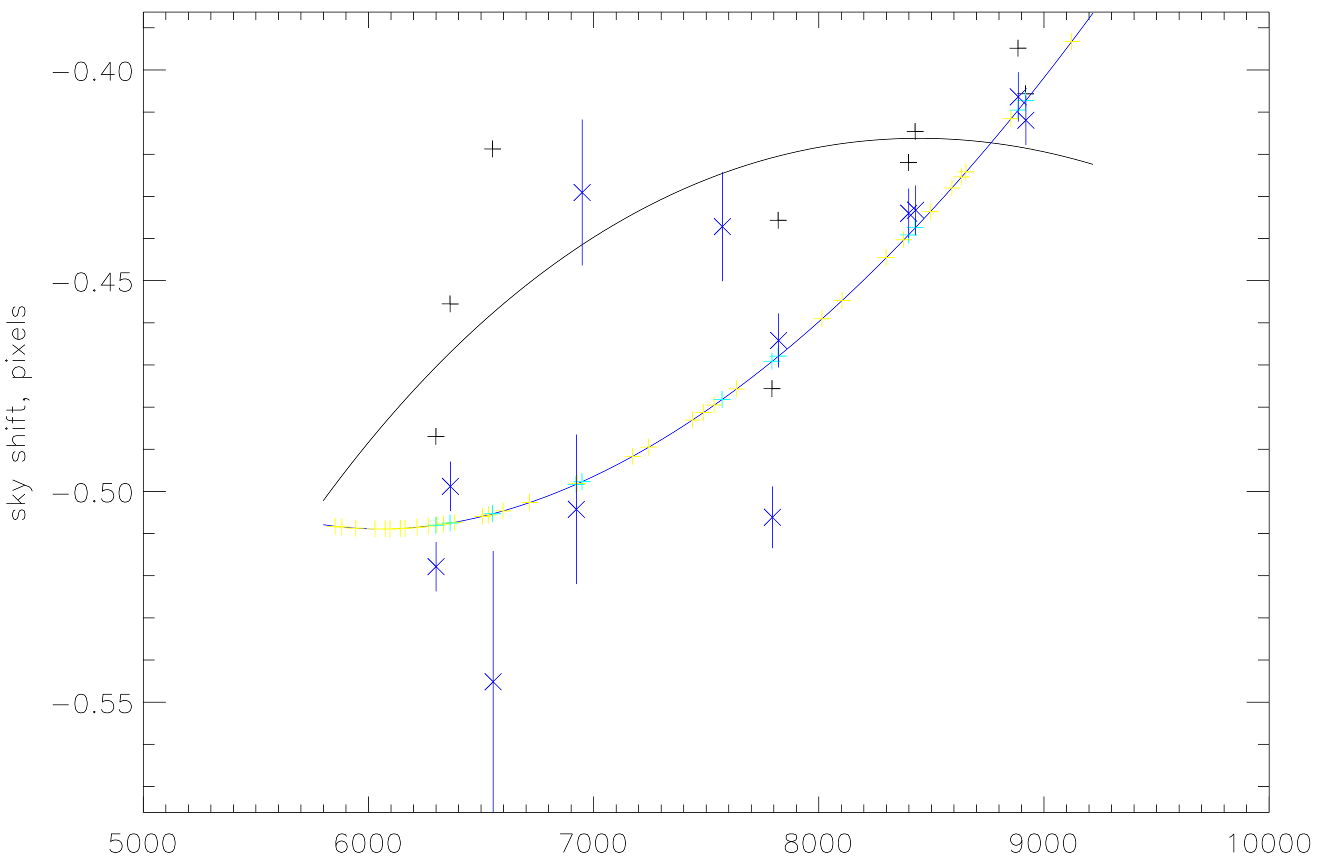

8399.1600

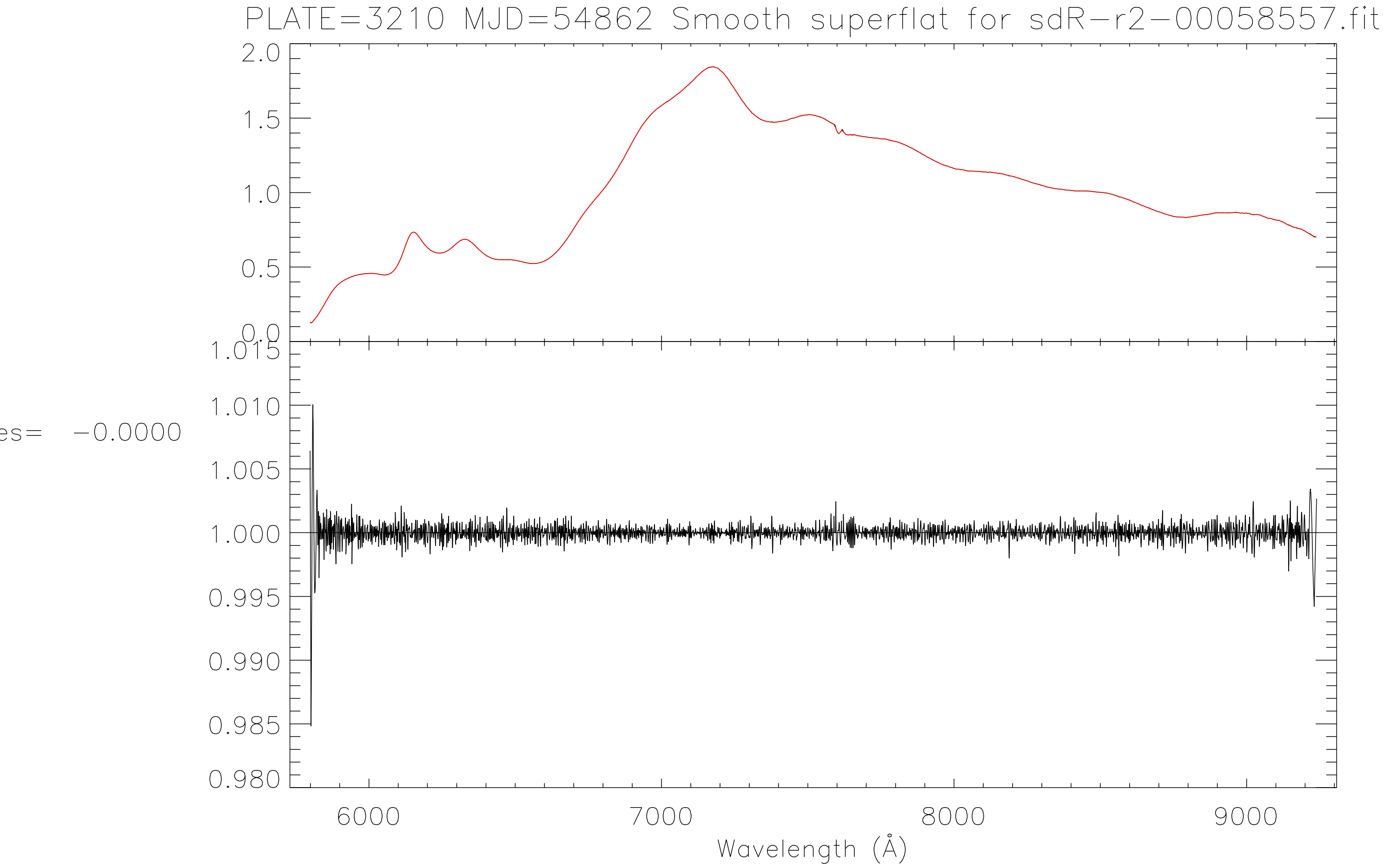

8430.1700

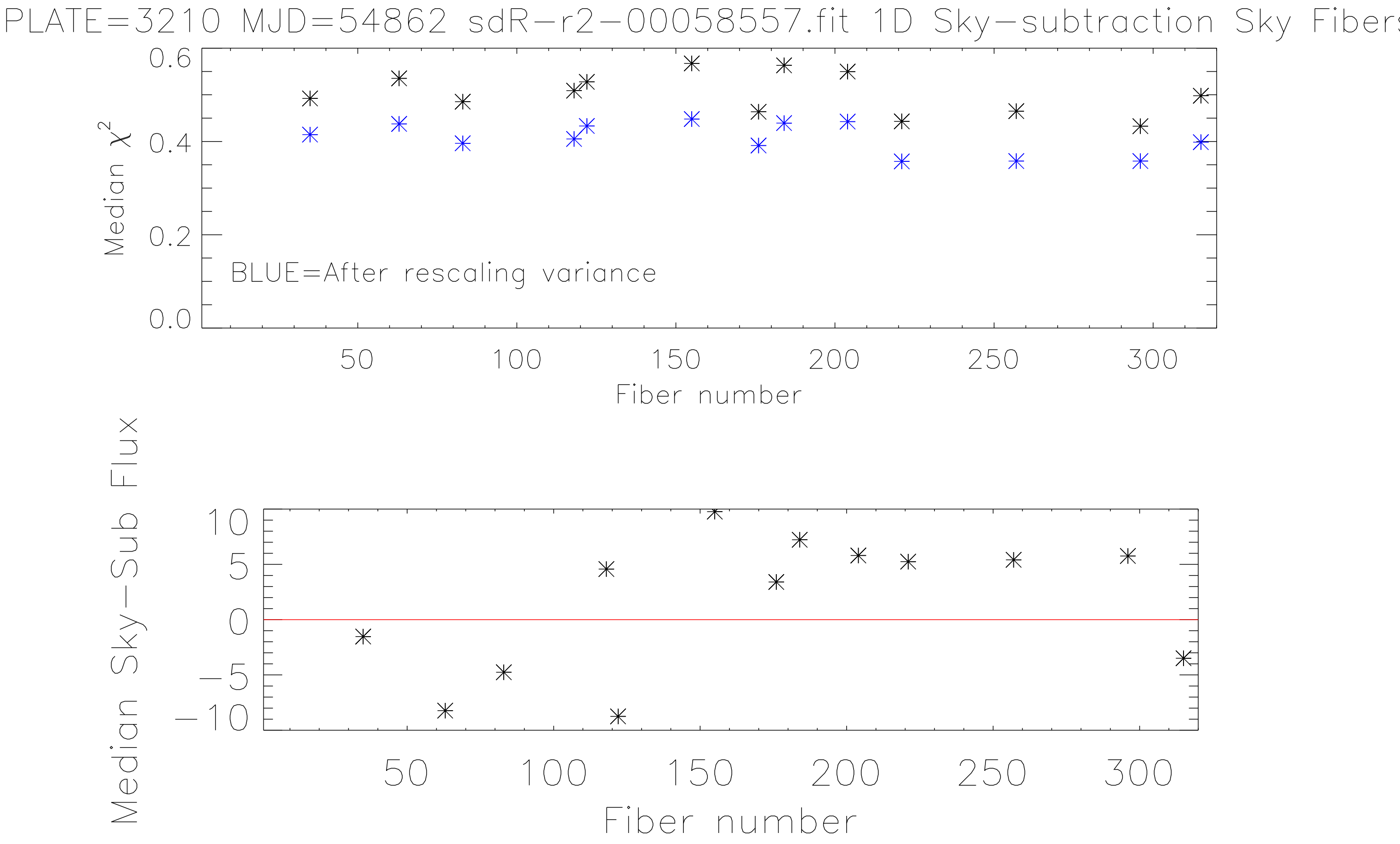

8885.8300

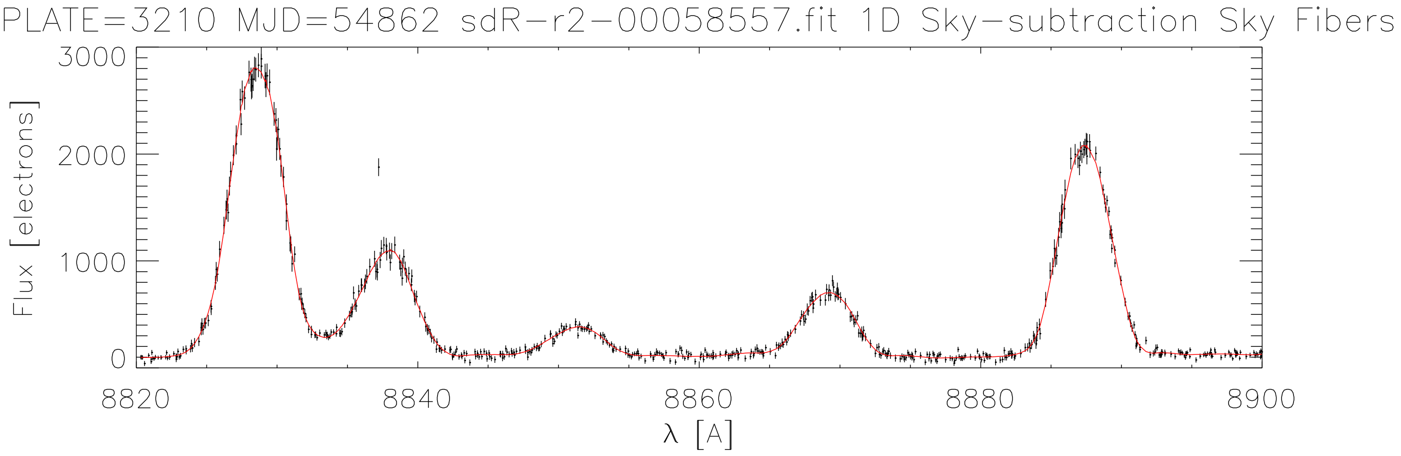

8919.6100

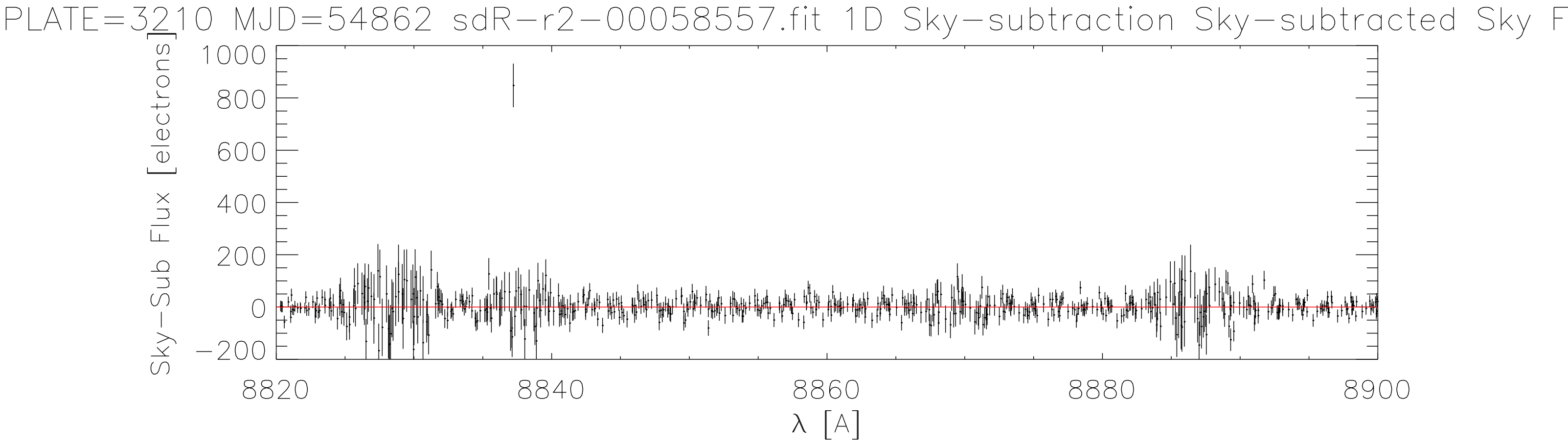

6300.3040
nfib1 16
nfib2 16
stdev 0.015
extrd −0.52
6363.7760
nfib1 16
nfib2 16
stdev 0.024
extrd −0.50
6553.6100
nfib1 16
nfib2 16
stdev 0.045
extrd −0.55
6923.2100
nfib1 16
nfib2 16
stdev 0.034
extrd −0.50
6949.0300
nfib1 16
nfib2 16
stdev 0.040
extrd −0.43
7571.7500
nfib1 16
nfib2 16
stdev 0.042
extrd −0.44
7794.1200
nfib1 16
nfib2 16
stdev 0.026
extrd −0.51
7821.5100
nfib1 16
nfib2 16
stdev 0.023
extrd −0.46
8399.1600
nfib1 15
nfib2 15
stdev 0.023
extrd −0.43
8430.1700
nfib1 16
nfib2 16
stdev 0.026
extrd −0.43
8885.8300
nfib1 15
nfib2 15
stdev 0.022
extrd −0.41
8919.6100
nfib1 15
nfib2 15
stdev 0.037
extrd −0.41
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

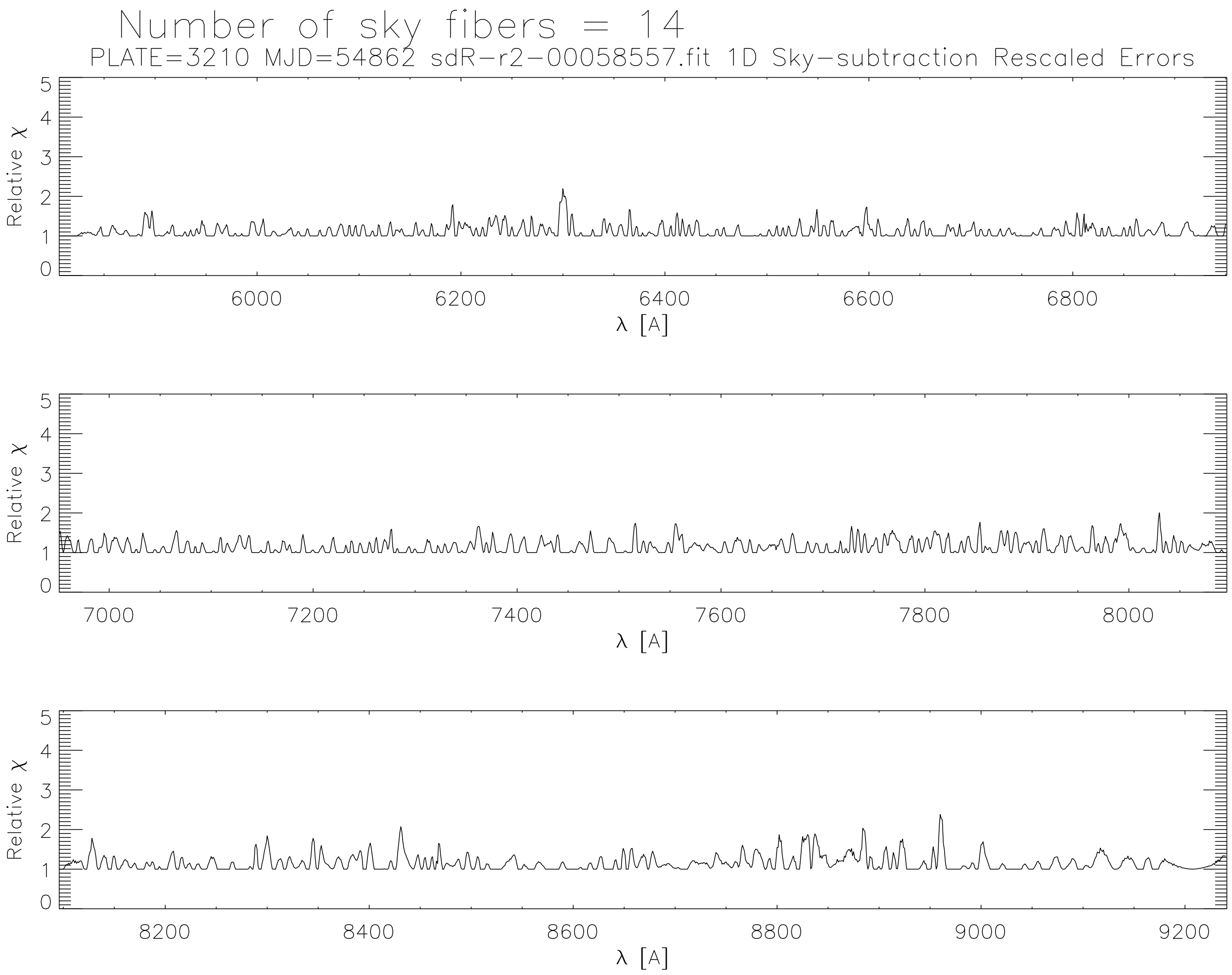

sky shift, pixels
−0.40
−0.45
−0.50
−0.55
5000
6000
7000
8000
9000
10000

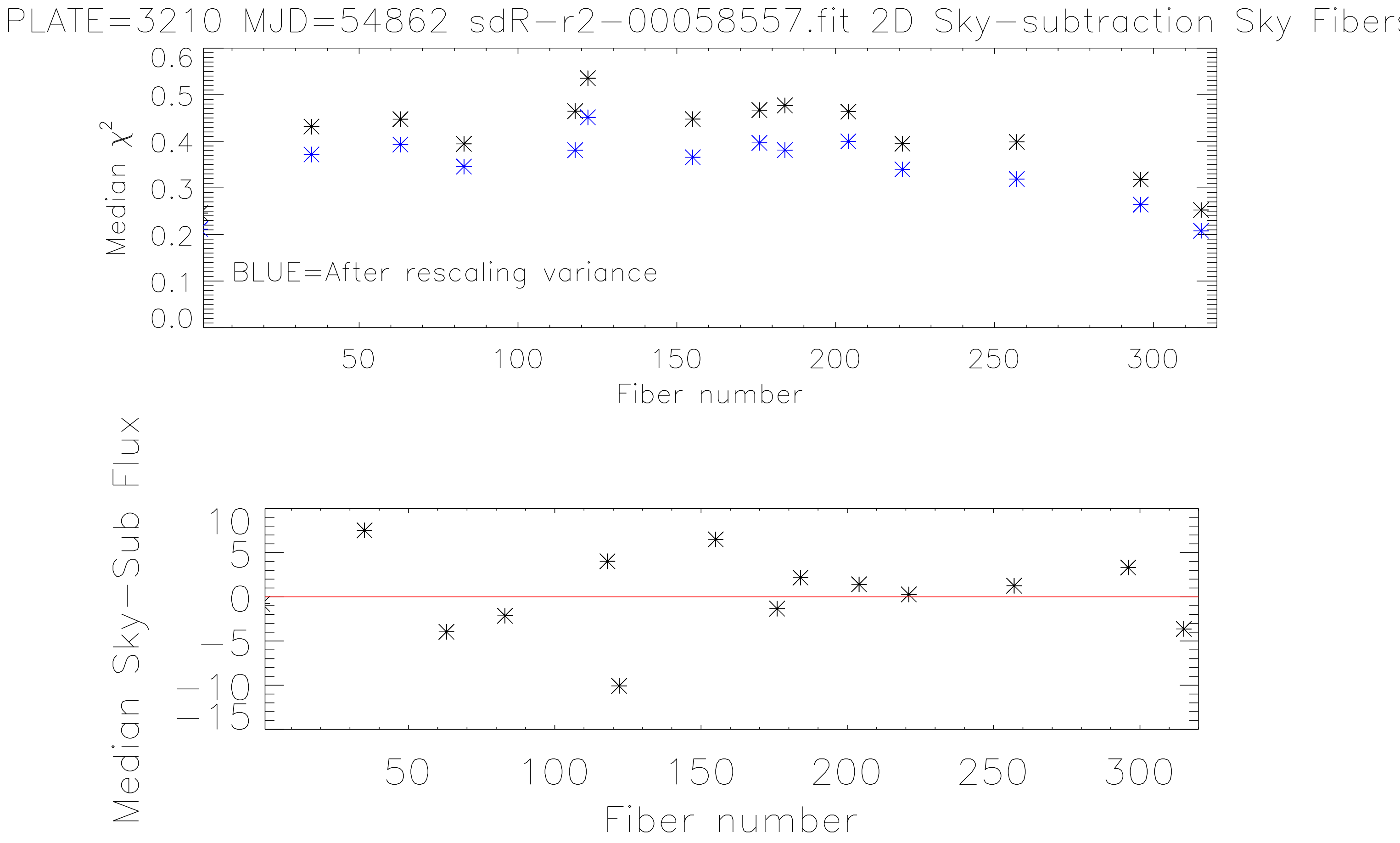

PLATE=3210 MJD=54862 Smooth superflat for sdR-r2-00058557.fit


PLATE=3210 MJD=54862 sdR-r2-00058557.fit 1D Sky-subtraction Sky Fiber
Median $\chi^2$
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
50
100
150
200
250
300
Fiber number

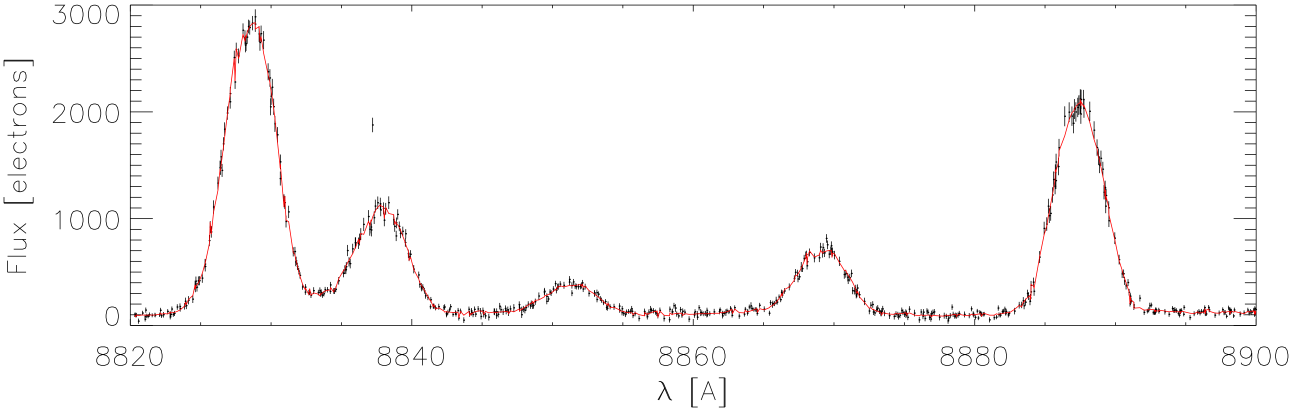

PLATE=3210 MJD=54862 sdR-r2-00058557.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=3210 MJD=54862 sdR-r2-00058557.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

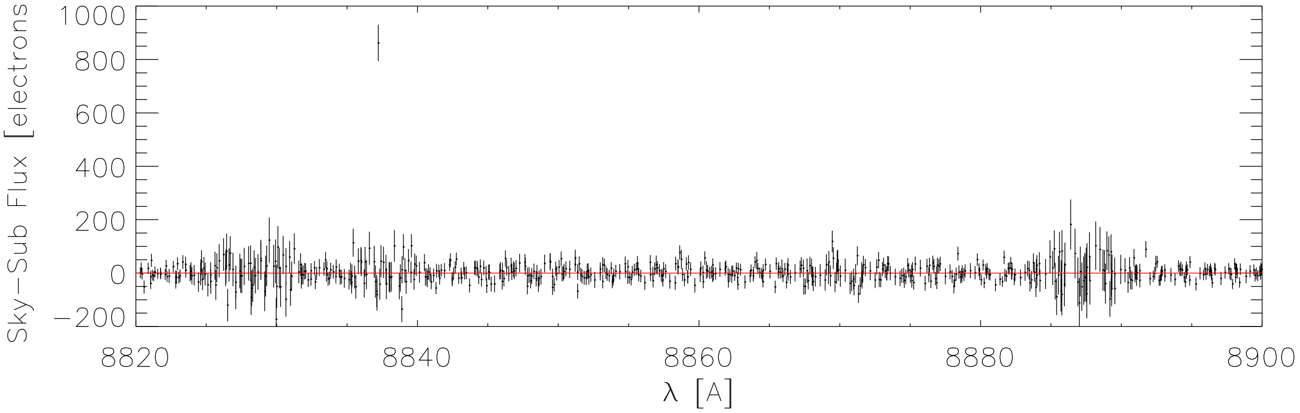

Number of sky fibers = 14
PLATE=3210 MJD=54862 sdR-r2-00058557.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]


PLATE=3210 MJD=54862 sdR-r2-00058557.fit 2D Sky-subtraction Sky Fibers
Median $\chi^2$
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
−15
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number

PLATE=3210 MJD=54862 sdR-r2-00058557.fit 2D Sky-subtraction Sky Fibers

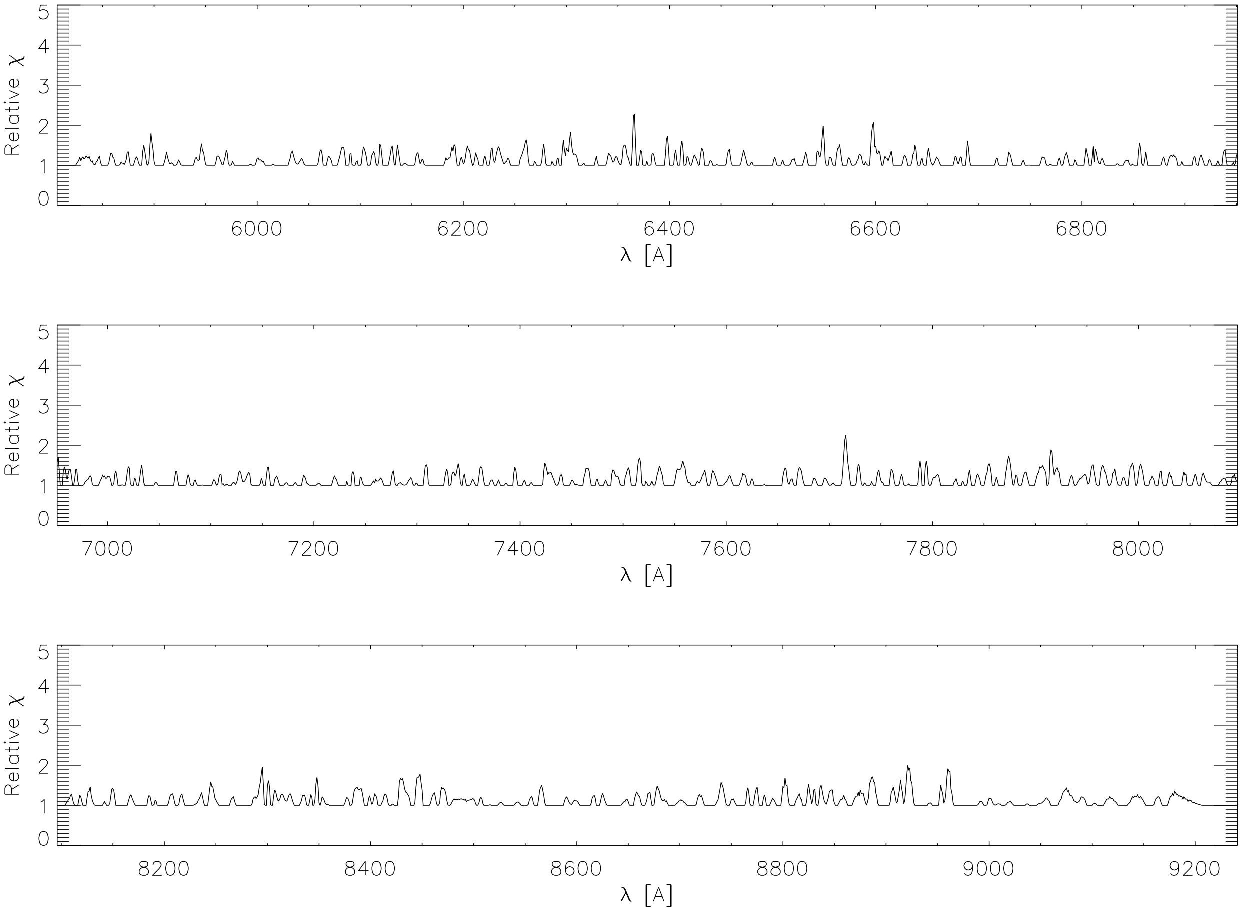


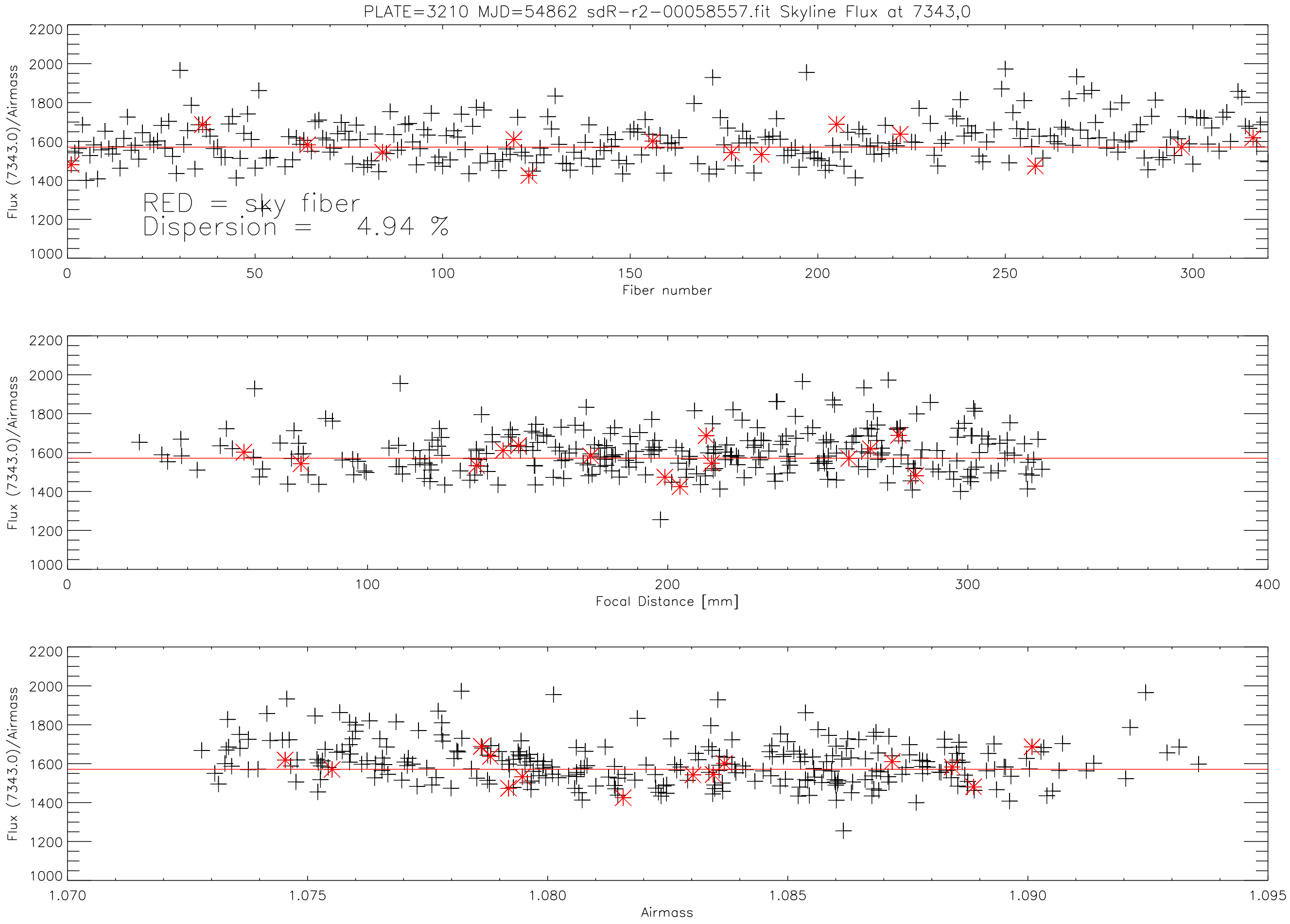
PLATE=3210 MJD=54862 sdR-r2-00058557.fit 2D Sky-subtraction Sky-subtracted Sky F

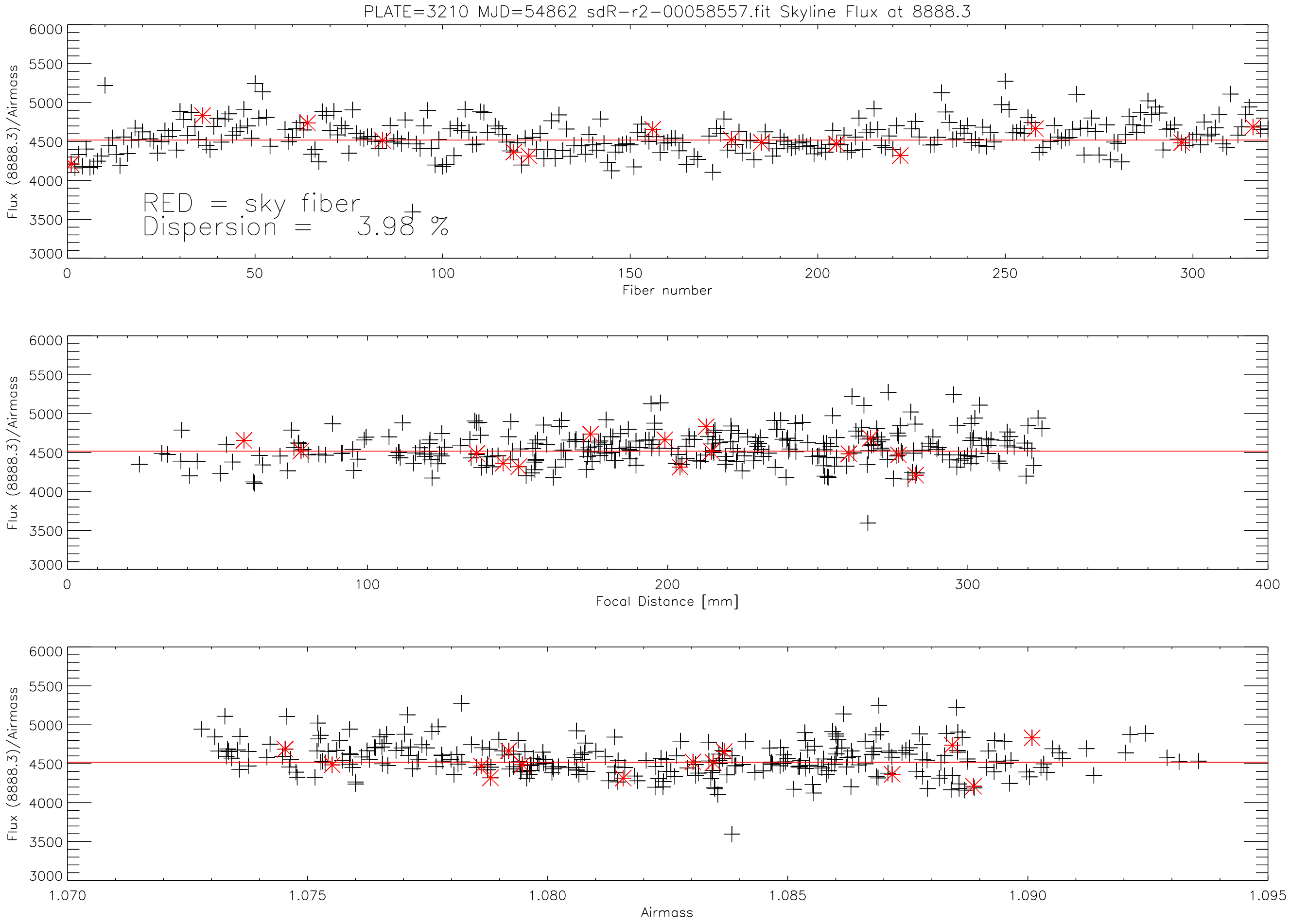


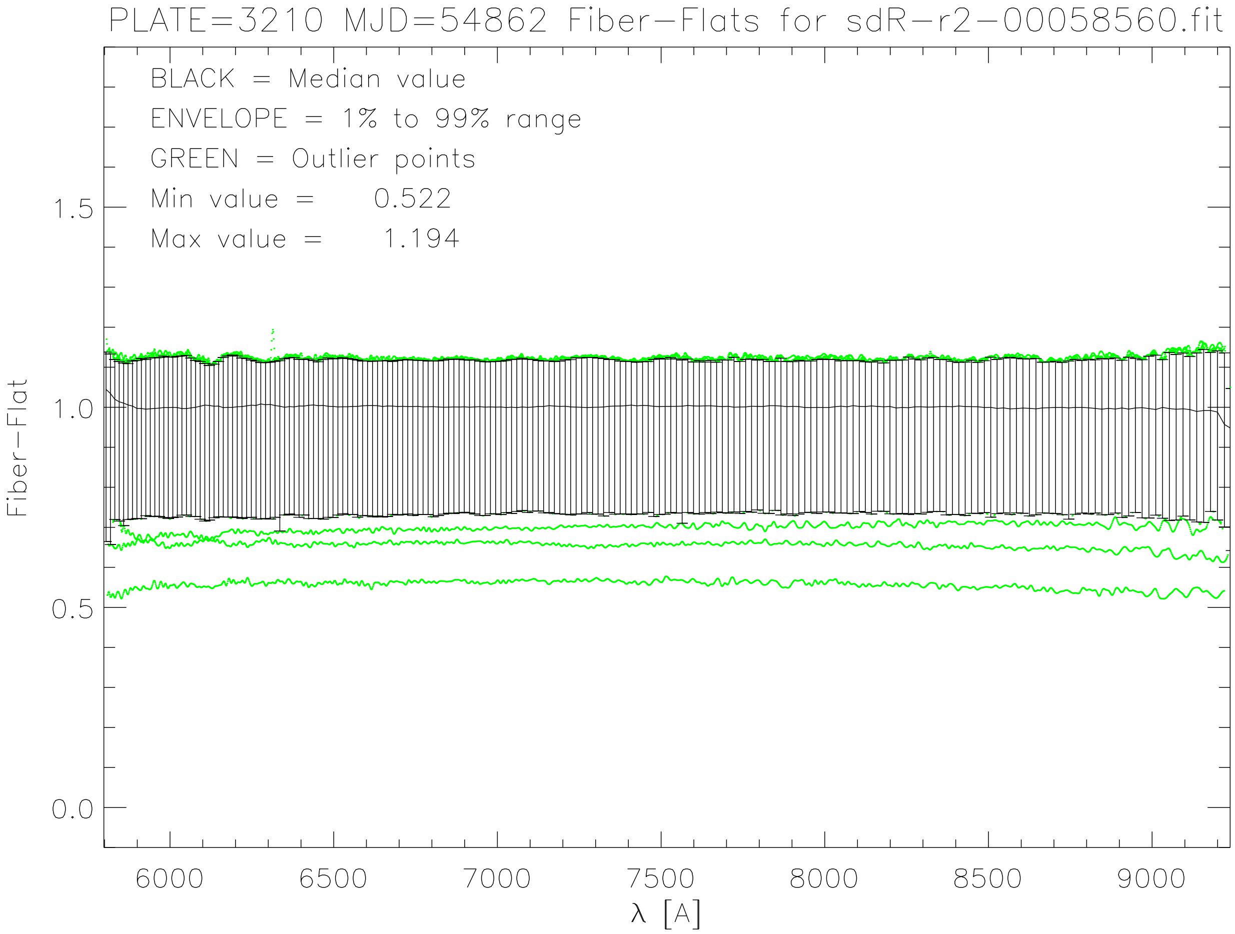
Number of sky fibers = 14

PLATE=3210 MJD=54862 sdR-r2-00058557.fit 2D Sky-subtraction Rescaled Errors

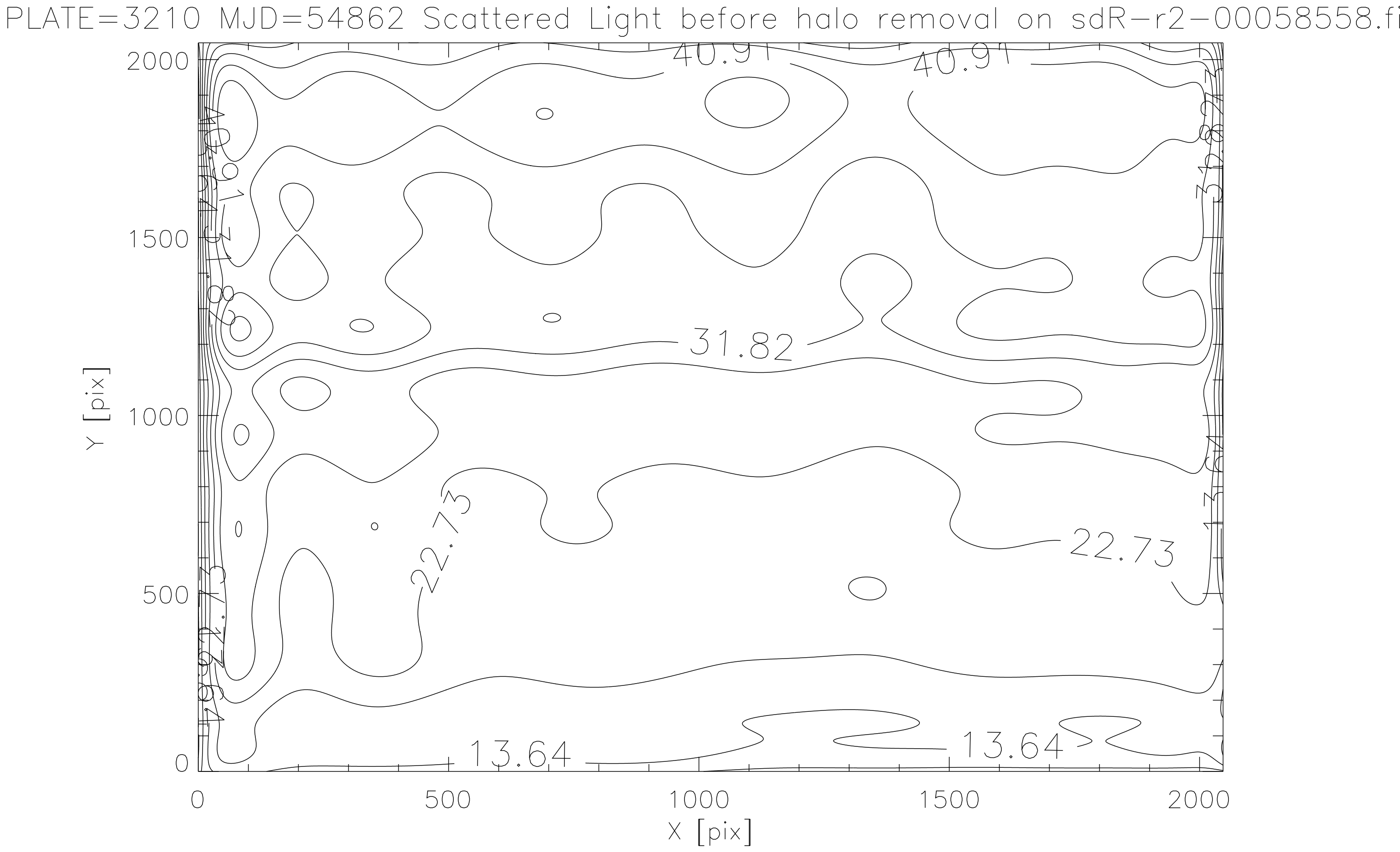



PLATE=3210 MJD=54862 sdR-r2-00058557.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2200
2000
1800
1600
1400
1200
1000
RED = sky fiber
Dispersion = 4.94 %
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.070
1.075
1.080
1.085
1.090
1.095
Airmass

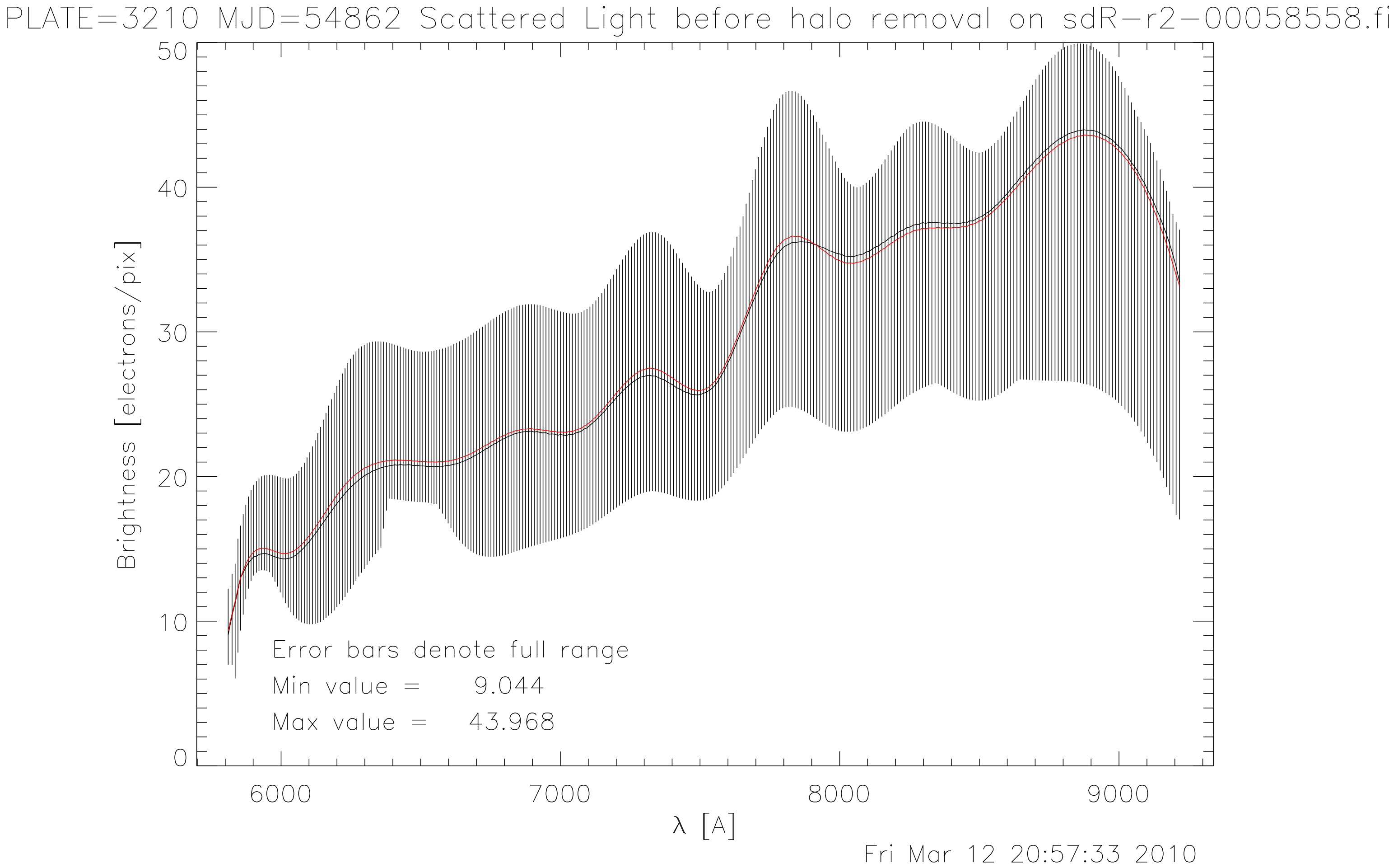

PLATE=3210 MJD=54862 sdR−r2−00058557.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
3500
3000
RED = sky fiber
Dispersion = 3.98 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.070
1.075
1.080
1.085
1.090
1.095
Airmass

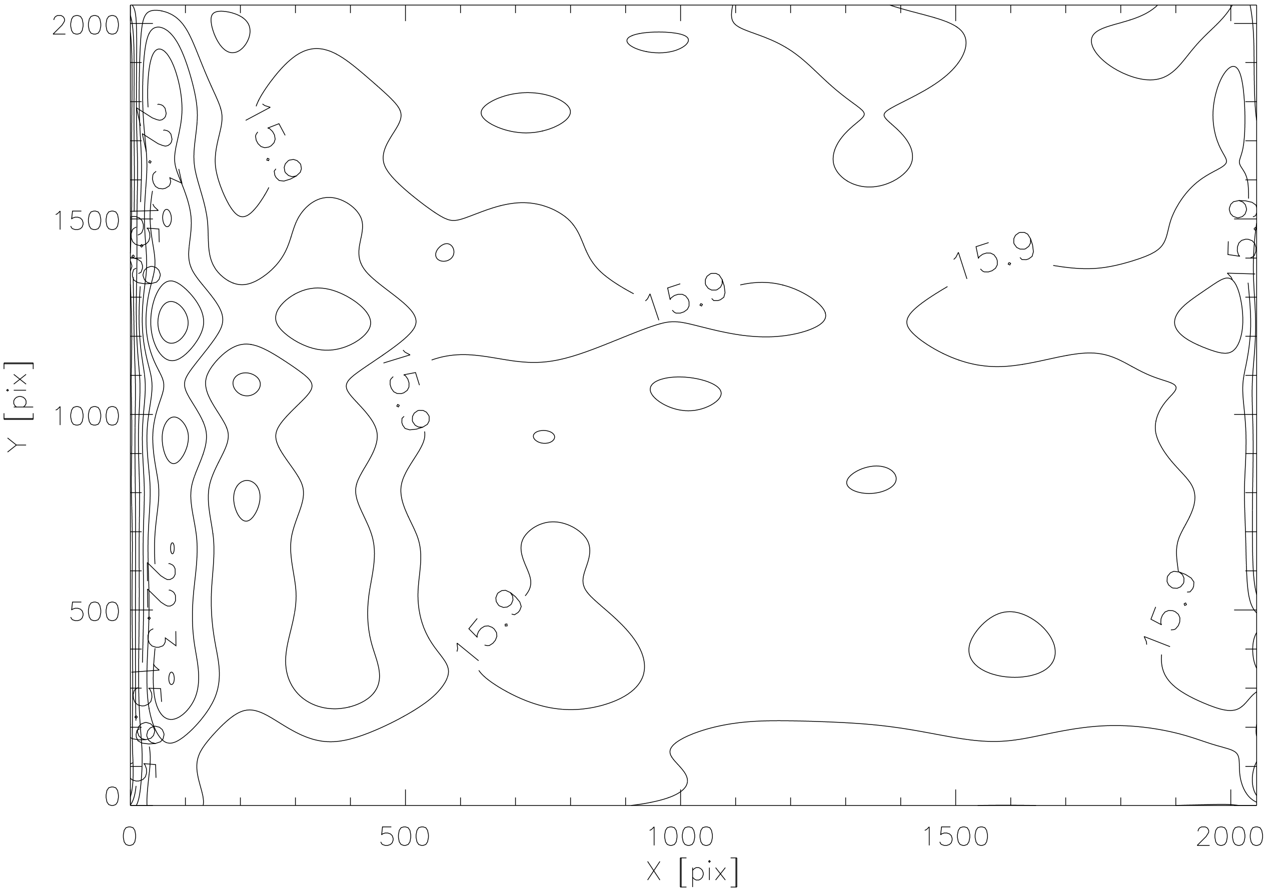

PLATE=3210 MJD=54862 Fiber-Flats for sdR-r2-00058560.fit

Fri Mar 12 20:56:25 2010

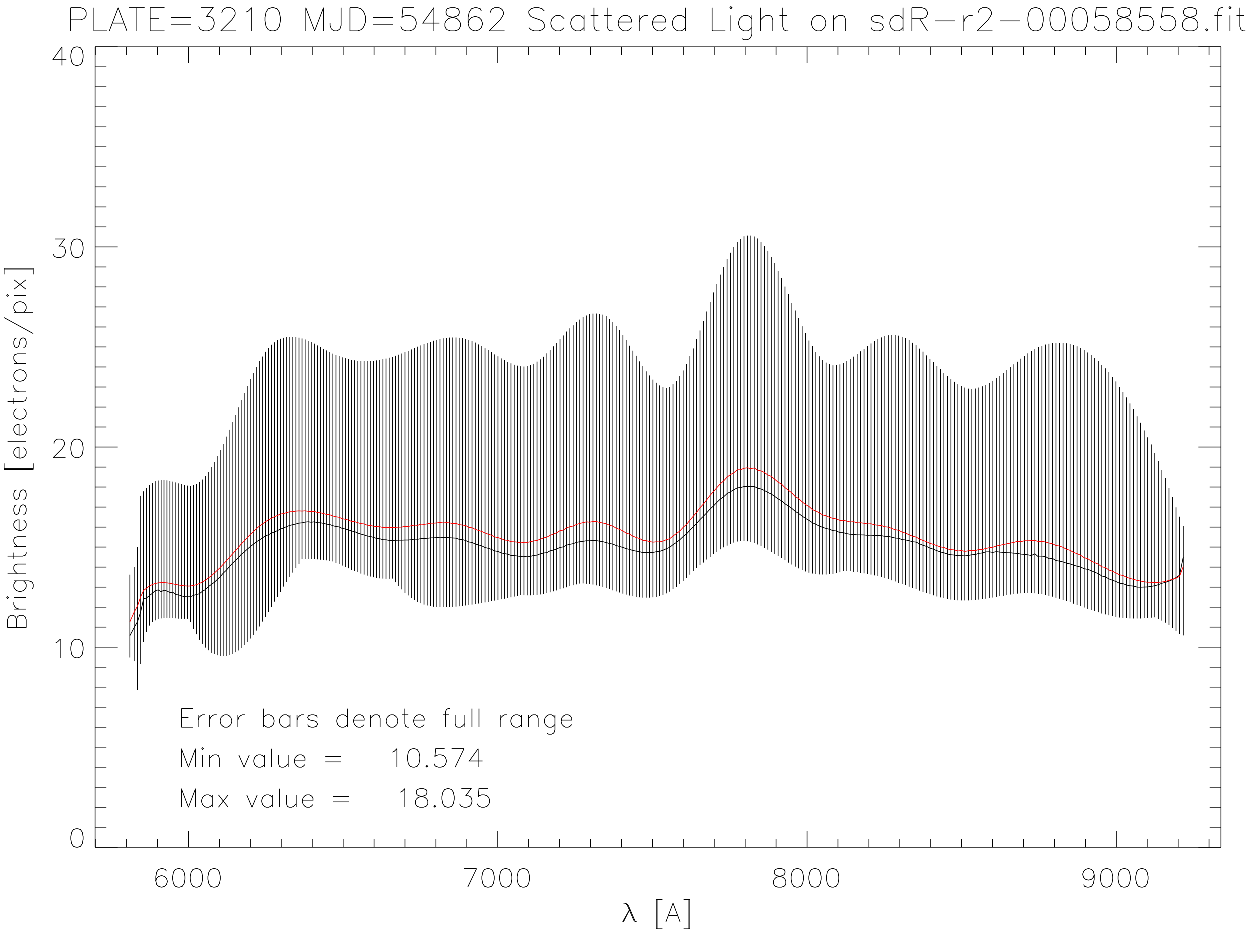


PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r2-00058558.fi

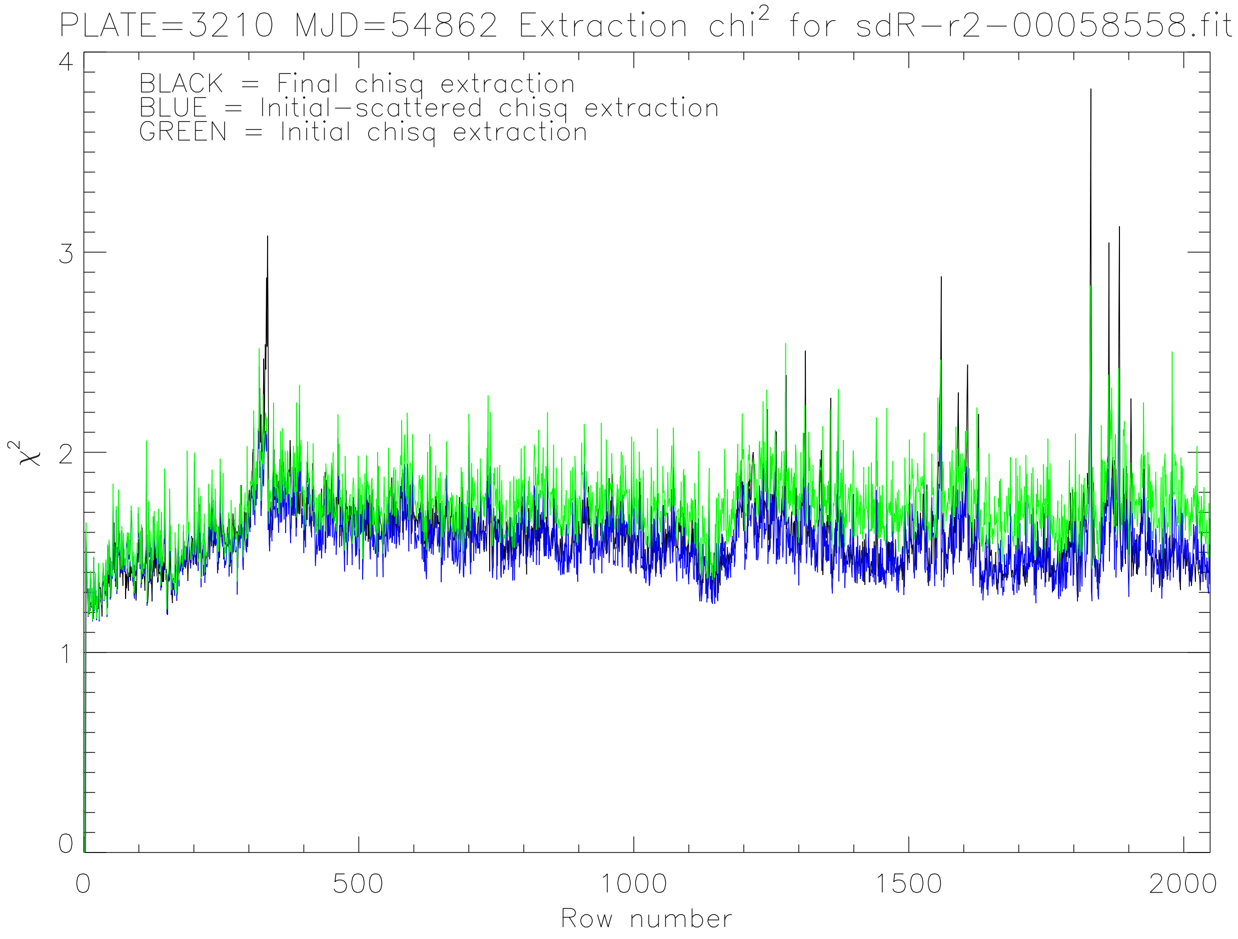

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r2-00058558.fi
Brightness [electrons/pix]
0
10
20
30
40
50
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.044
Max value = 43.968
Fri Mar 12 20:57:33 2010

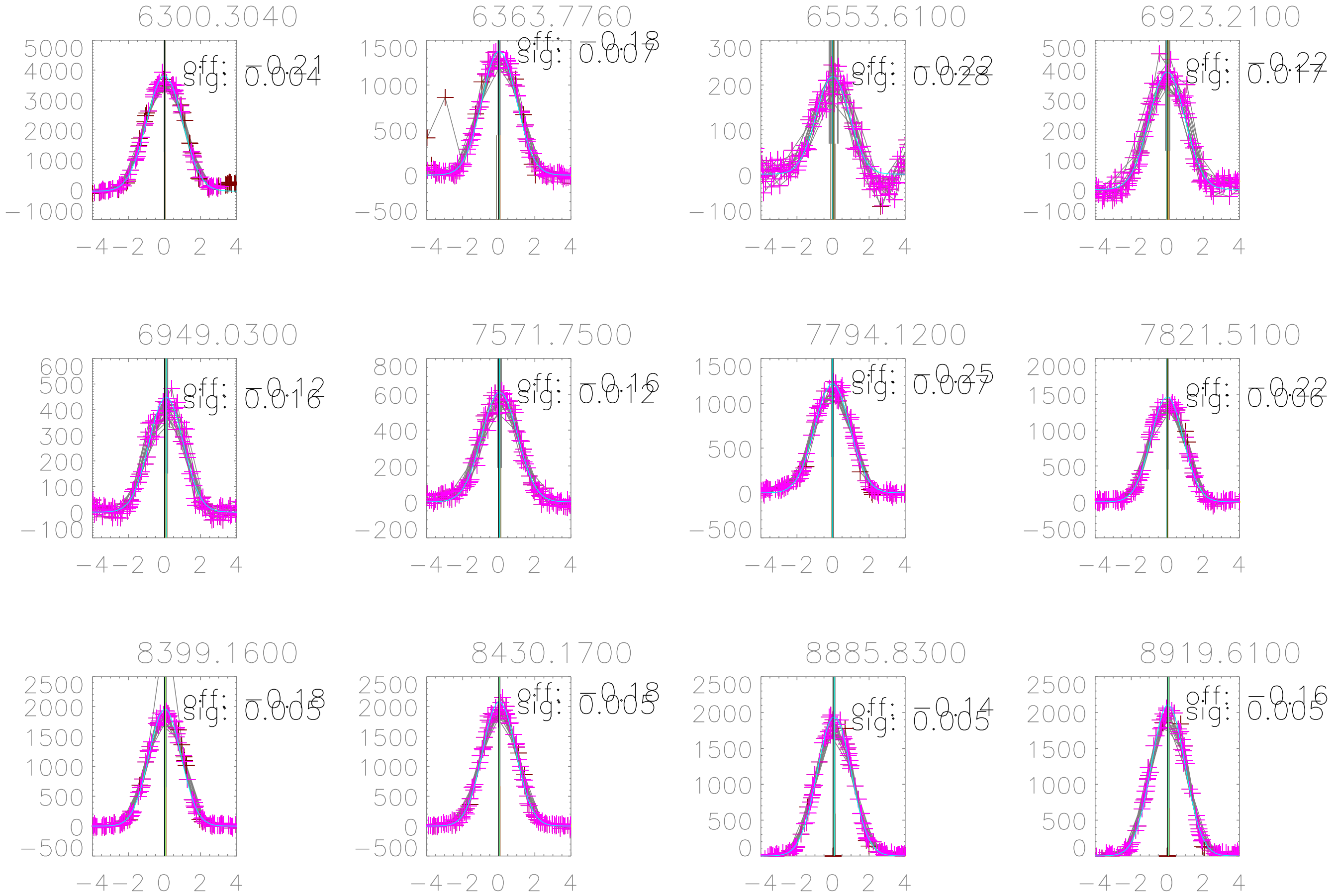


PLATE=3210 MJD=54862 Scattered Light on sdR-r2-00058558.fit

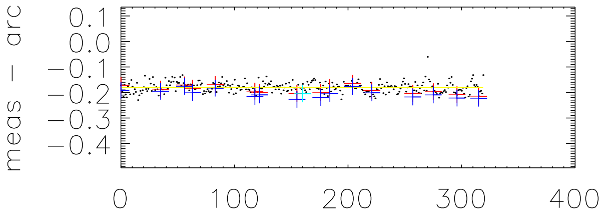


Fri Mar 12 21:01:37 2010

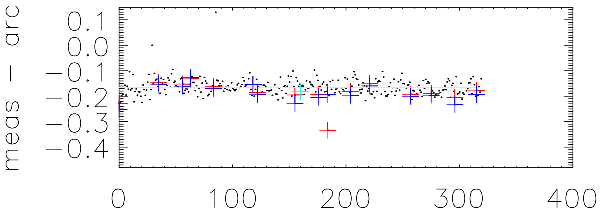

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-r2-00058558.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
0
500
1000
1500
2000
Row number


6300.3040
off: −0.21
sig: 0.004
5000
4000
3000
2000
1000
0
−1000
6363.7760
off: −0.18
sig: 0.007
1500
1000
500
0
−500
6553.6100
off: −0.22
sig: 0.028
300
200
100
0
−100
6923.2100
off: −0.22
sig: 0.017
500
400
300
200
100
0
−100
6949.0300
off: −0.12
sig: 0.016
600
500
400
300
200
100
0
−100
7571.7500
off: −0.16
sig: 0.012
800
600
400
200
0
−200
7794.1200
off: −0.25
sig: 0.007
1500
1000
500
0
−500
7821.5100
off: −0.22
sig: 0.006
2000
1500
1000
500
0
−500
8399.1600
off: −0.18
sig: 0.005
2500
2000
1500
1000
500
0
−500
8430.1700
off: −0.18
sig: 0.005
2500
2000
1500
1000
500
0
−500
8885.8300
off: −0.14
sig: 0.005
2500
2000
1500
1000
500
0
8919.6100
off: −0.16
sig: 0.005
2500
2000
1500
1000
500
0
−4 −2 0 2 4

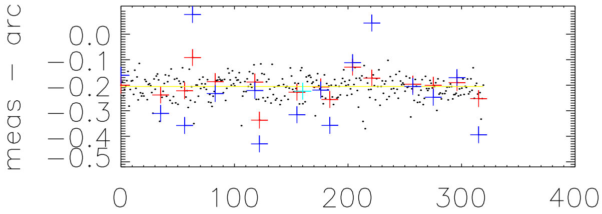
6300.3040



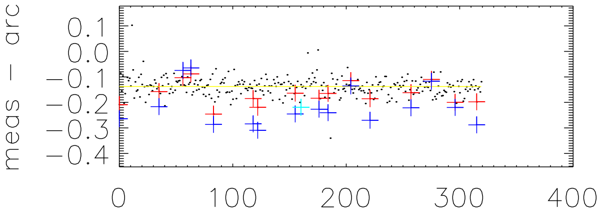
6363.7760



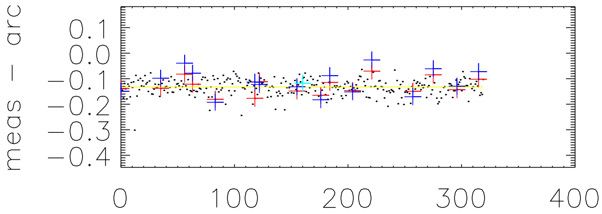
6553.6100



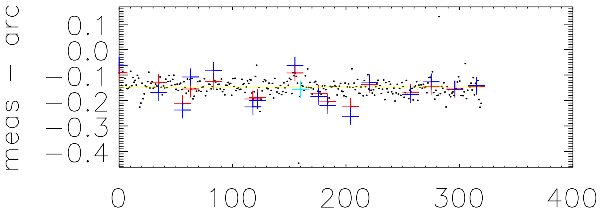
6923.2100

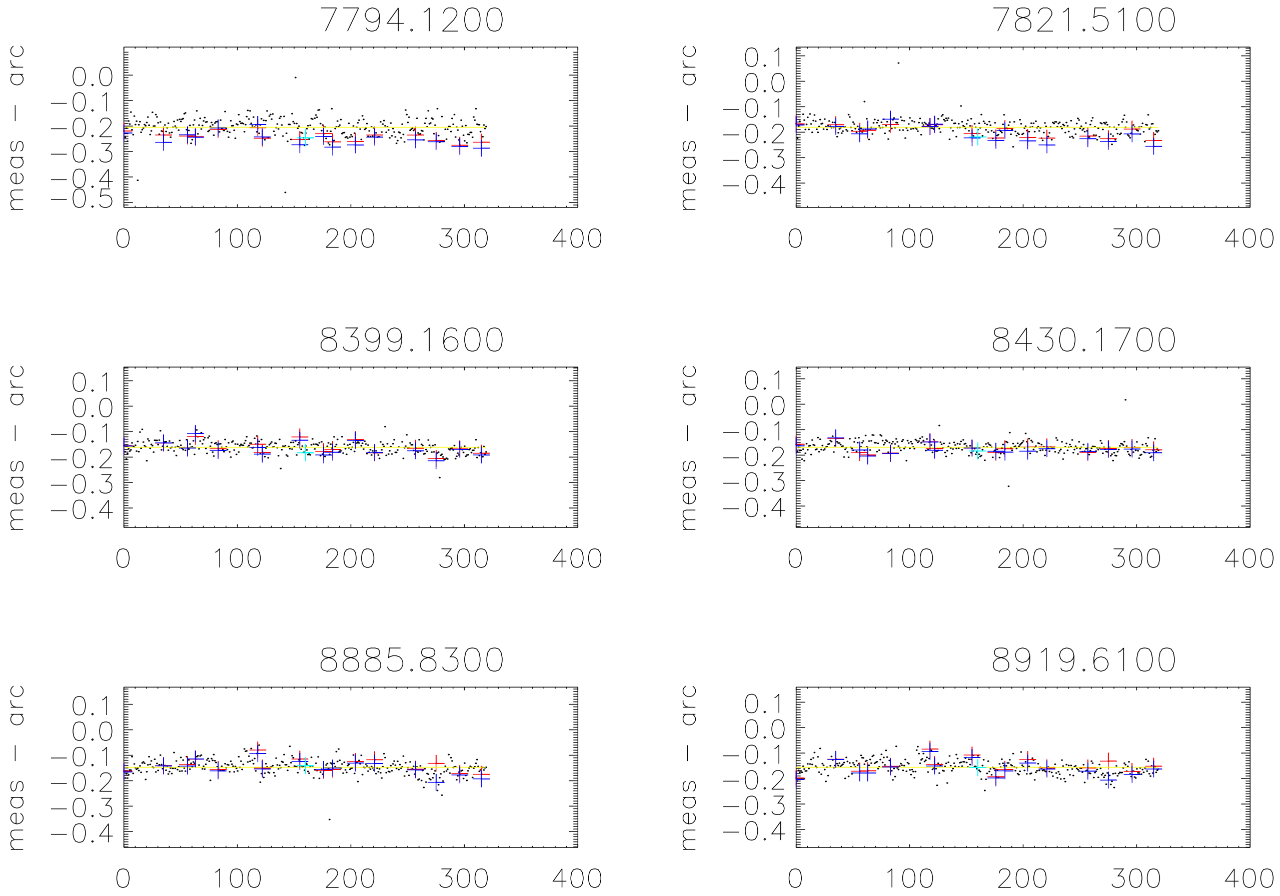


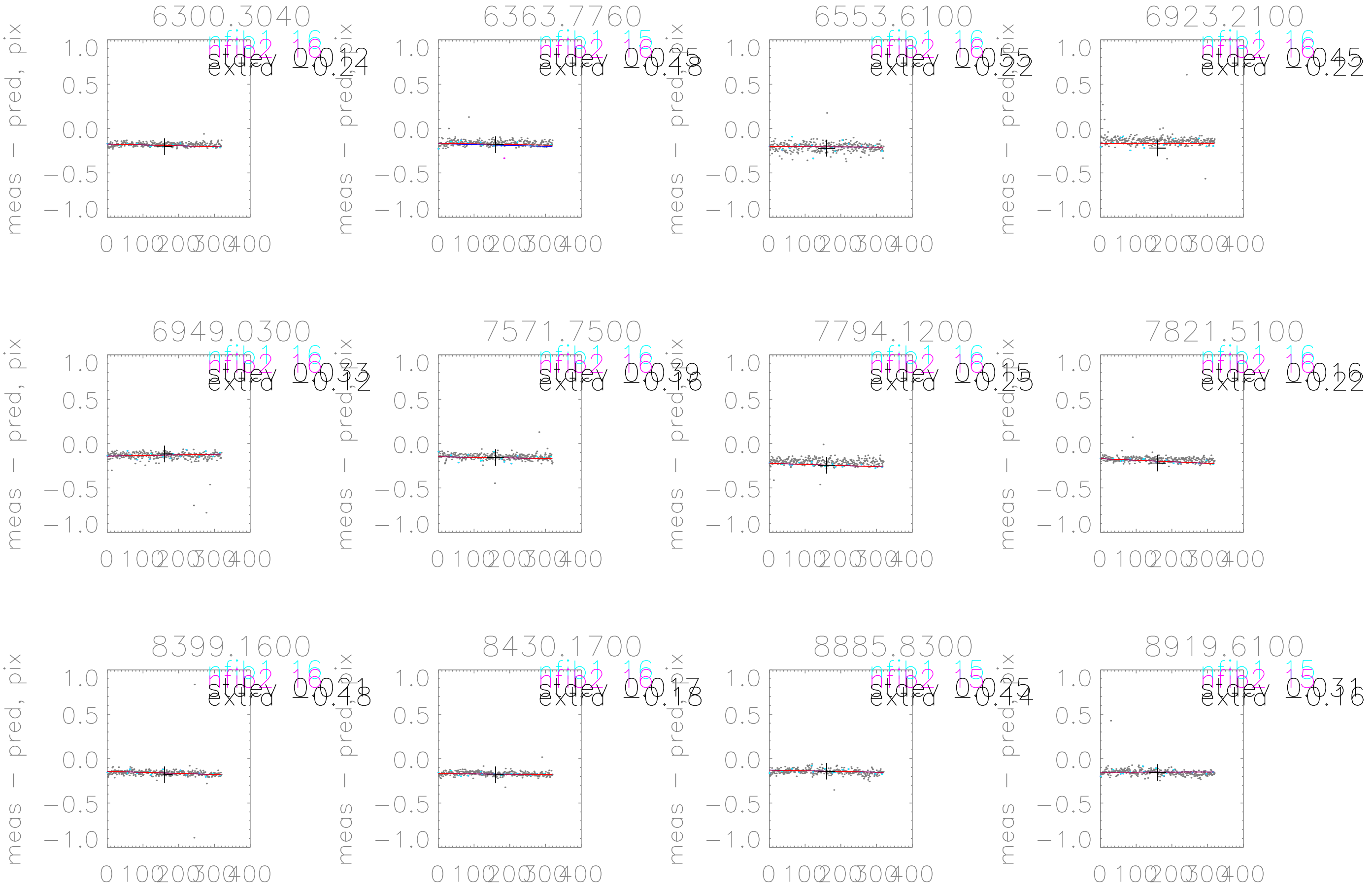
6949.0300

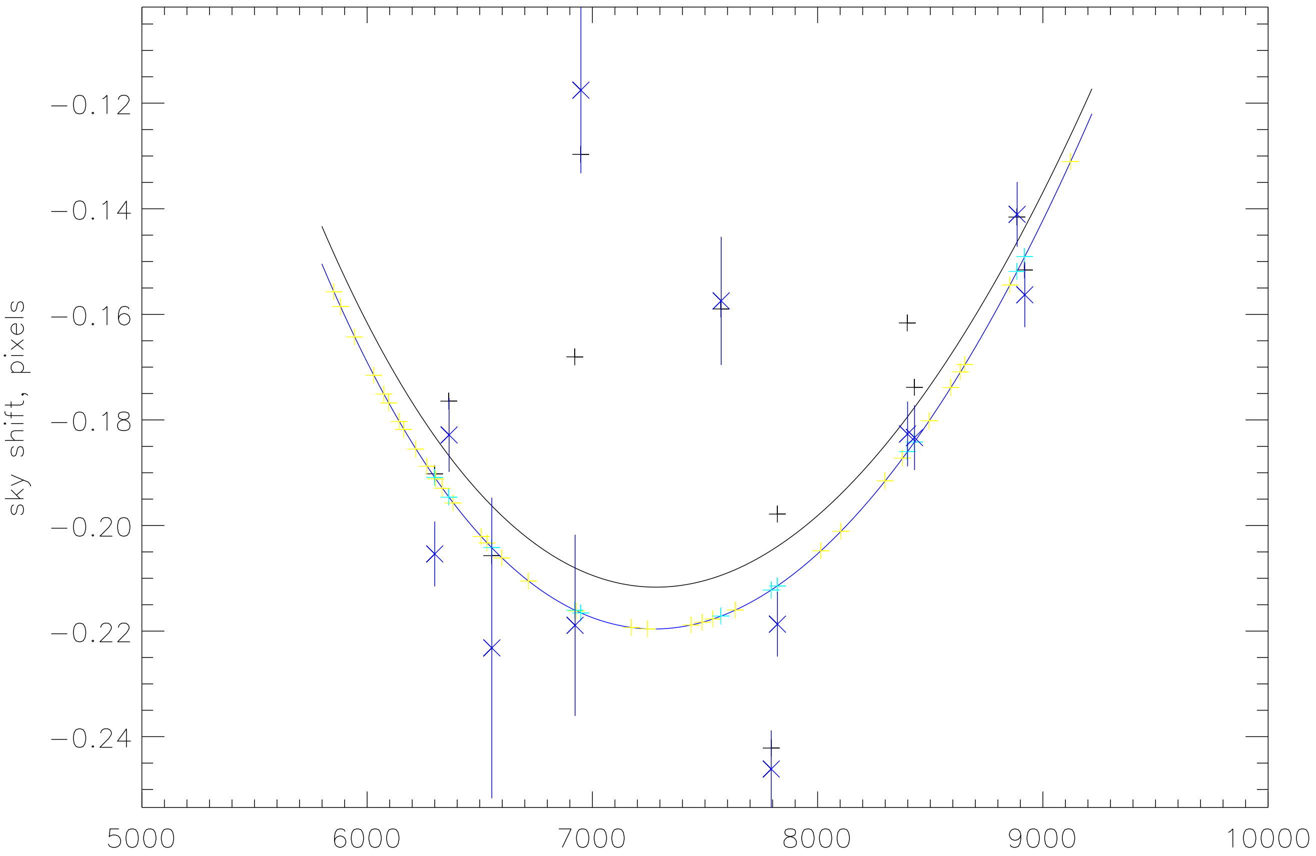


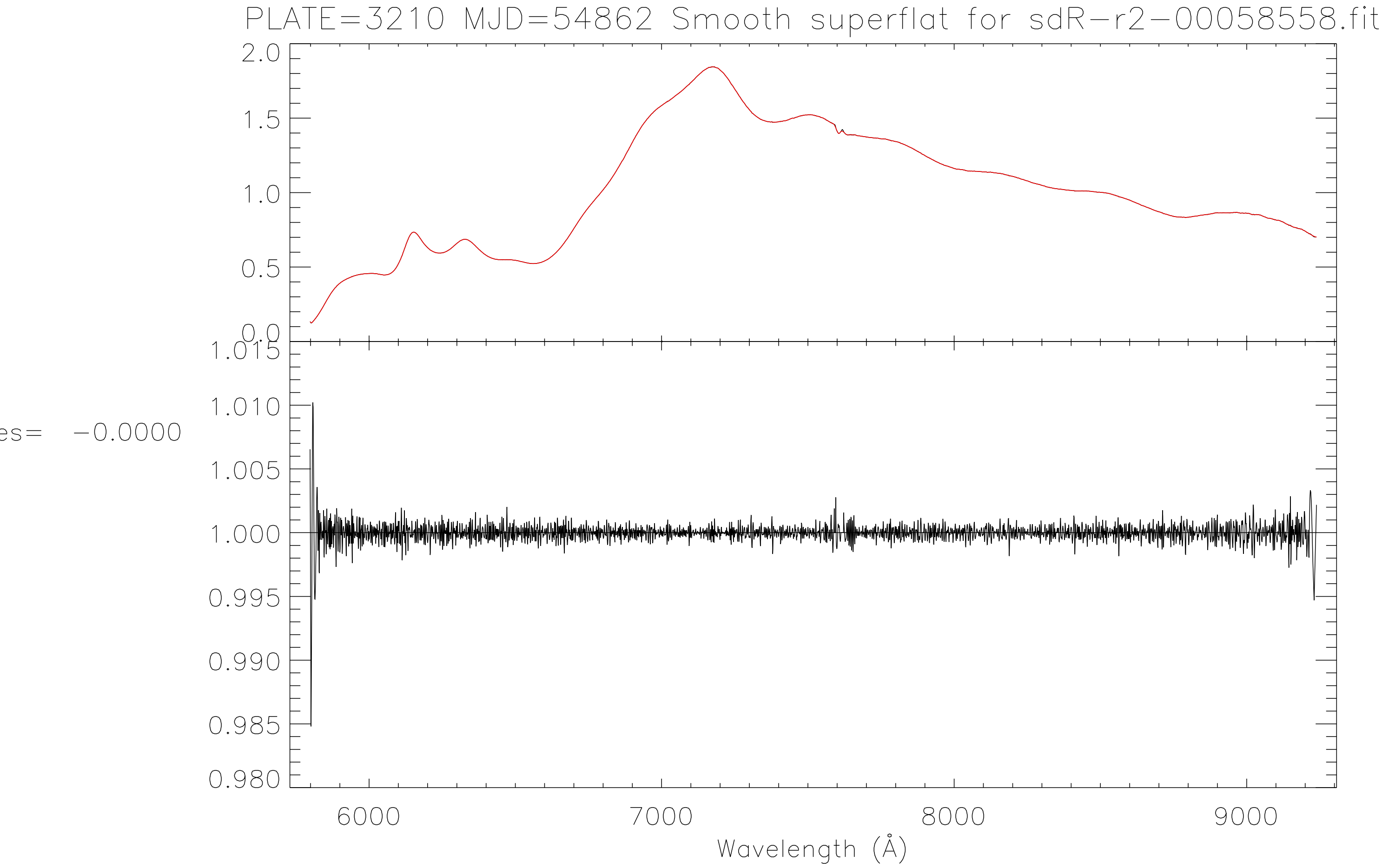
7571.7500

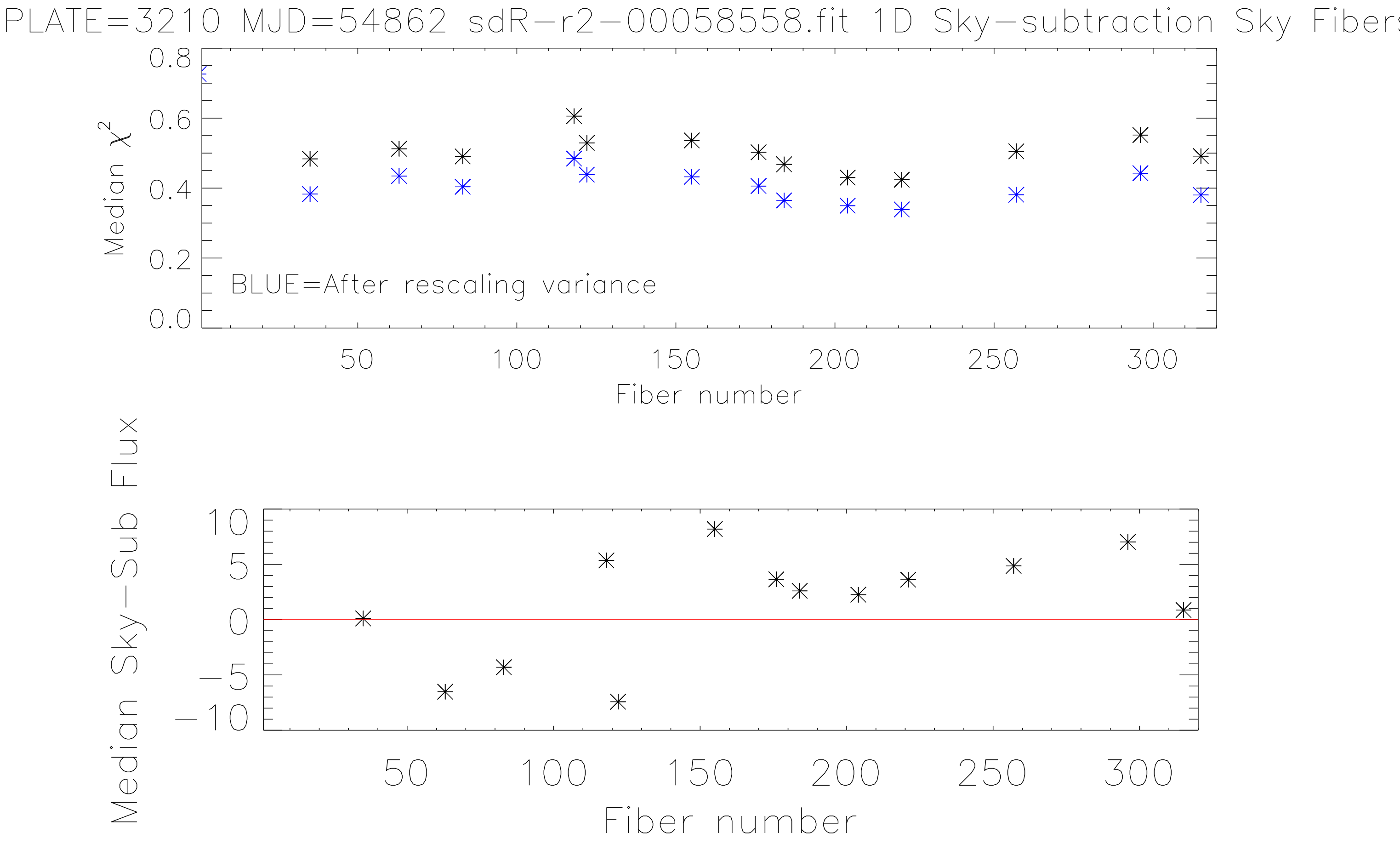



7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


6300.3040
nfib1 16
nfib2 16
stdev 0.012
extrd −0.24
6363.7760
nfib1 15
nfib2 16
stdev 0.025
extrd −0.18
6553.6100
nfib1 16
nfib2 16
stdev 0.055
extrd −0.22
6923.2100
nfib1 16
nfib2 16
stdev 0.045
extrd −0.22
6949.0300
nfib1 16
nfib2 16
stdev 0.033
extrd −0.12
7571.7500
nfib1 16
nfib2 16
stdev 0.039
extrd −0.16
7794.1200
nfib1 16
nfib2 16
stdev 0.015
extrd −0.25
7821.5100
nfib1 16
nfib2 16
stdev 0.016
extrd −0.22
8399.1600
nfib1 16
nfib2 16
stdev 0.021
extrd −0.18
8430.1700
nfib1 16
nfib2 16
stdev 0.017
extrd −0.18
8885.8300
nfib1 15
nfib2 15
stdev 0.025
extrd −0.14
8919.6100
nfib1 15
nfib2 15
stdev 0.031
extrd −0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

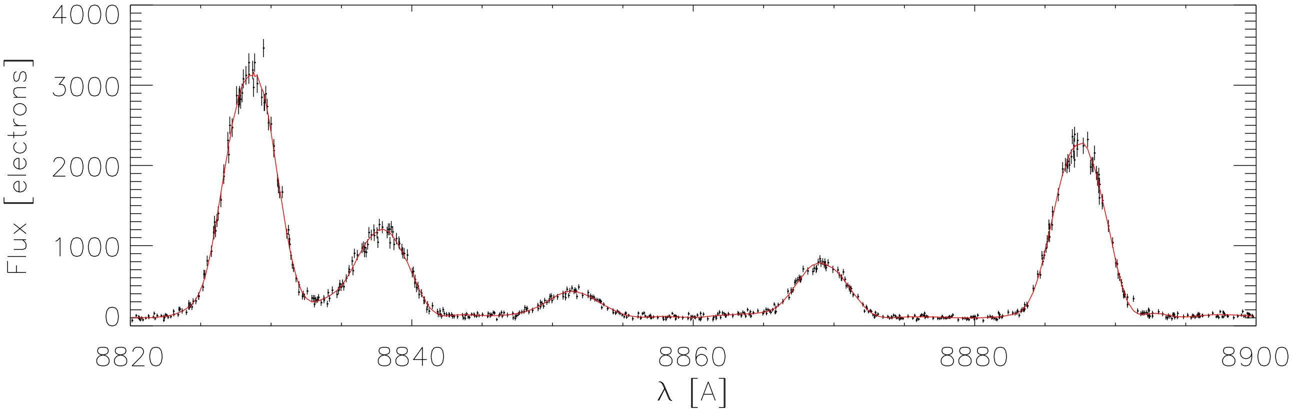

sky shift, pixels
−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
−0.24
5000
6000
7000
8000
9000
10000


PLATE=3210 MJD=54862 Smooth superflat for sdR-r2-00058558.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
0.980
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

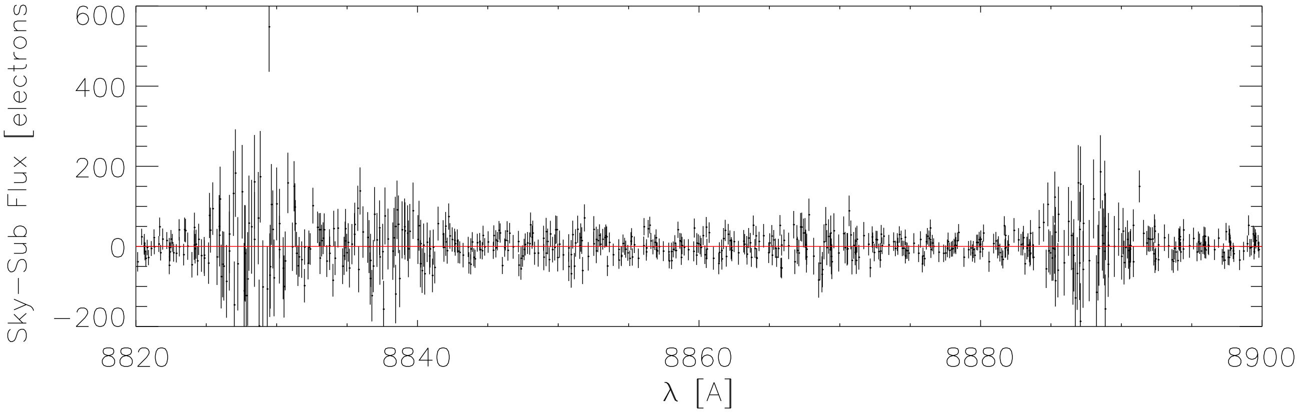


PLATE=3210 MJD=54862 sdR-r2-00058558.fit 1D Sky-subtraction Sky Fiber

PLATE=3210 MJD=54862 sdR-r2-00058558.fit 1D Sky-subtraction Sky Fibers

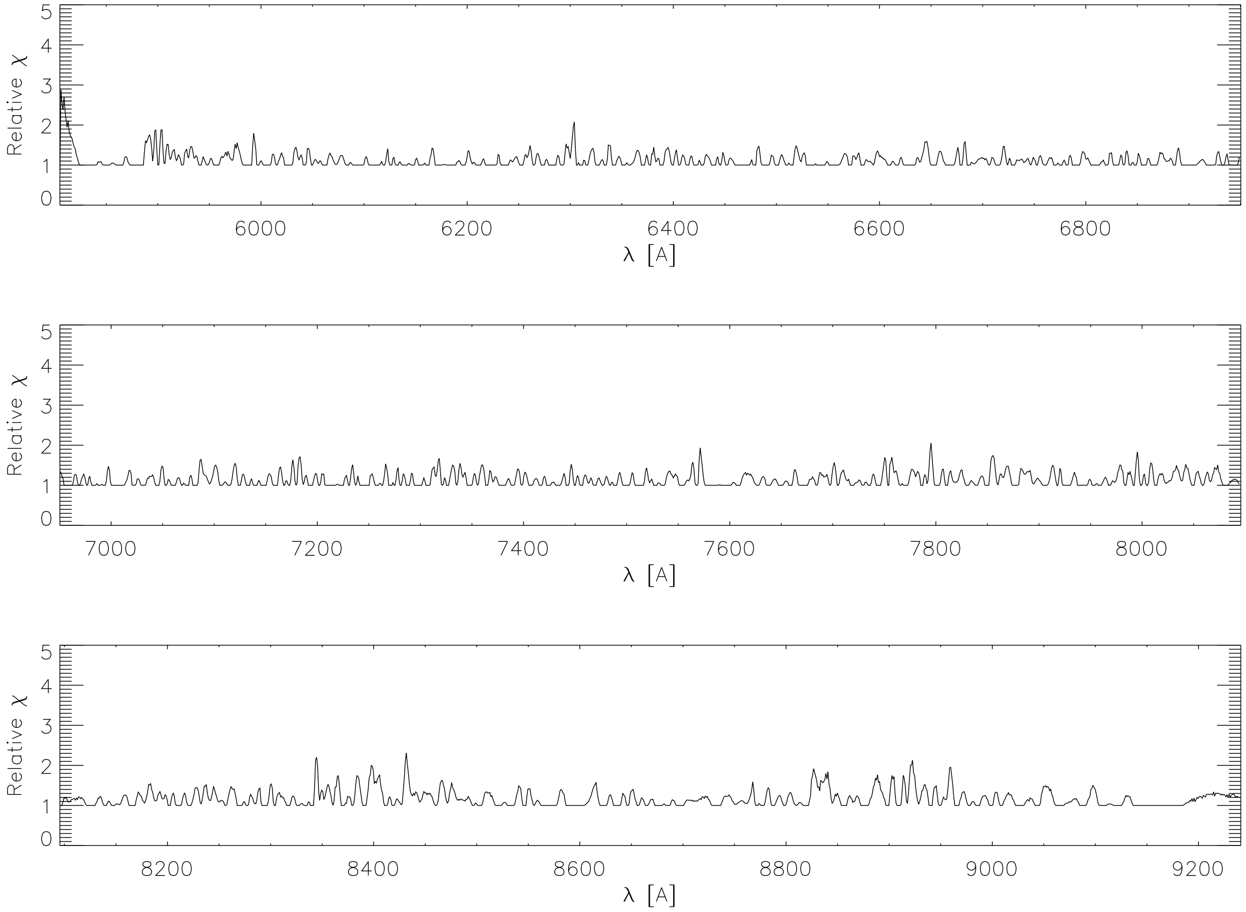


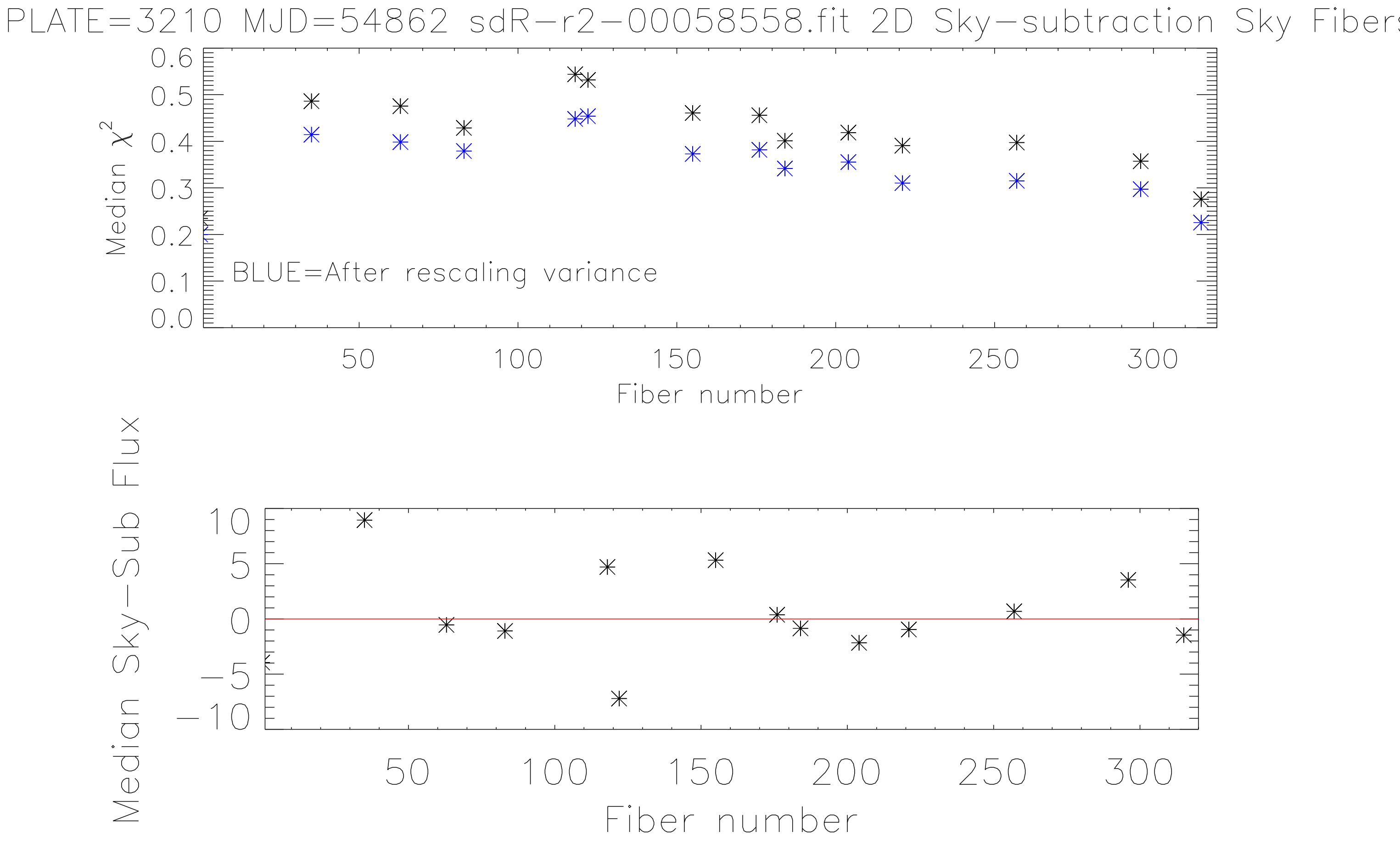
PLATE=3210 MJD=54862 sdR-r2-00058558.fit 1D Sky-subtraction Sky-subtracted Sky F

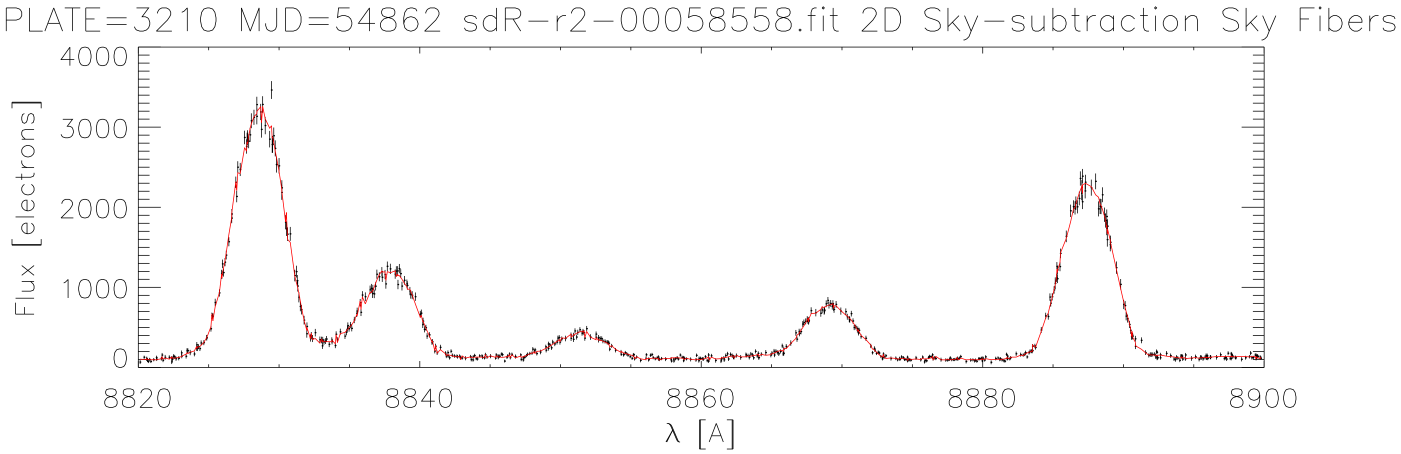


Number of sky fibers = 14

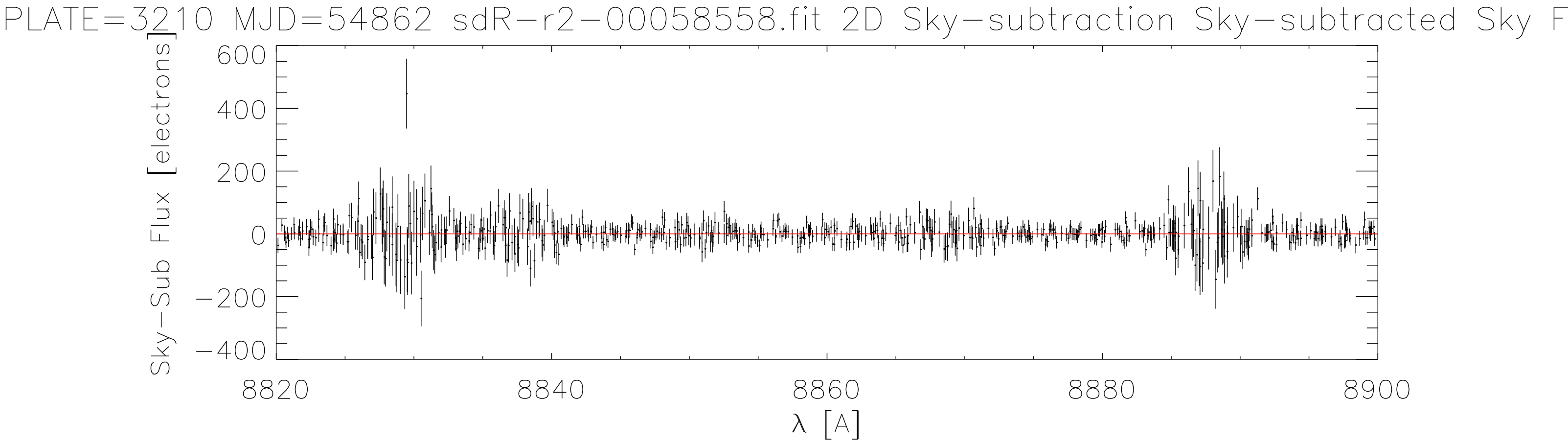
PLATE=3210 MJD=54862 sdR-r2-00058558.fit 1D Sky-subtraction Rescaled Errors




PLATE=3210 MJD=54862 sdR-r2-00058558.fit 2D Sky-subtraction Sky Fibers
Median $\chi^2$
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
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number



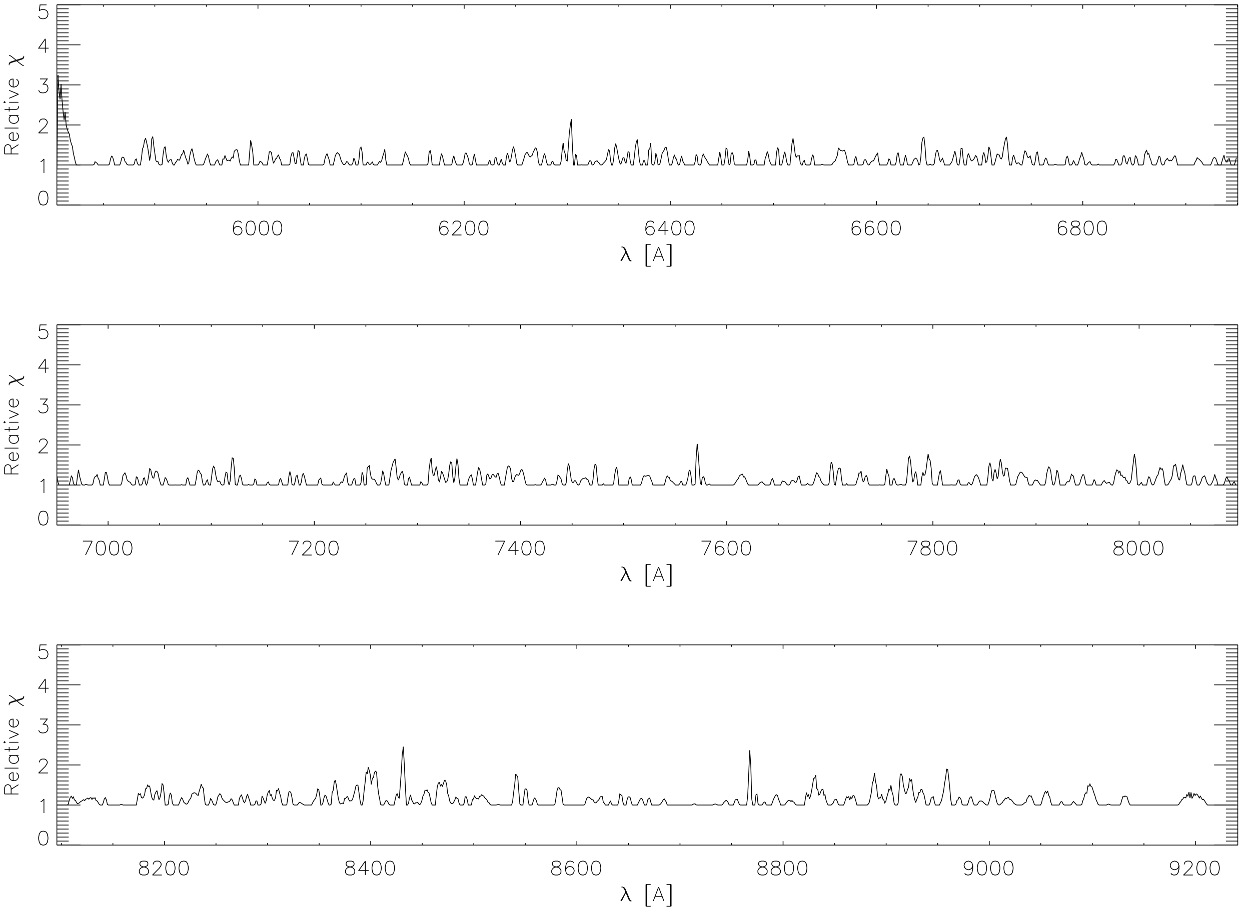
PLATE=3210 MJD=54862 sdR-r2-00058558.fit 2D Sky-subtraction Sky Fibers

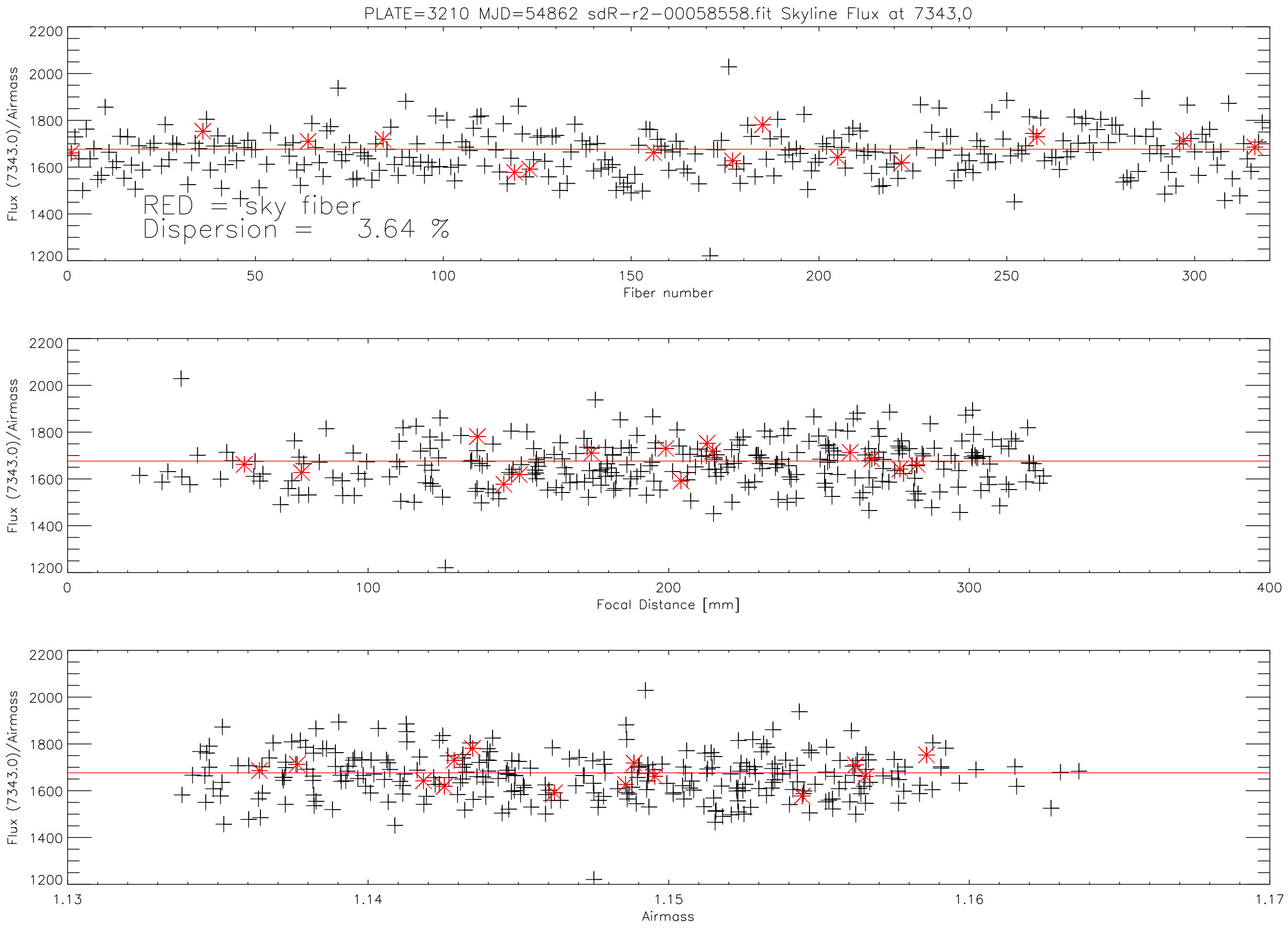


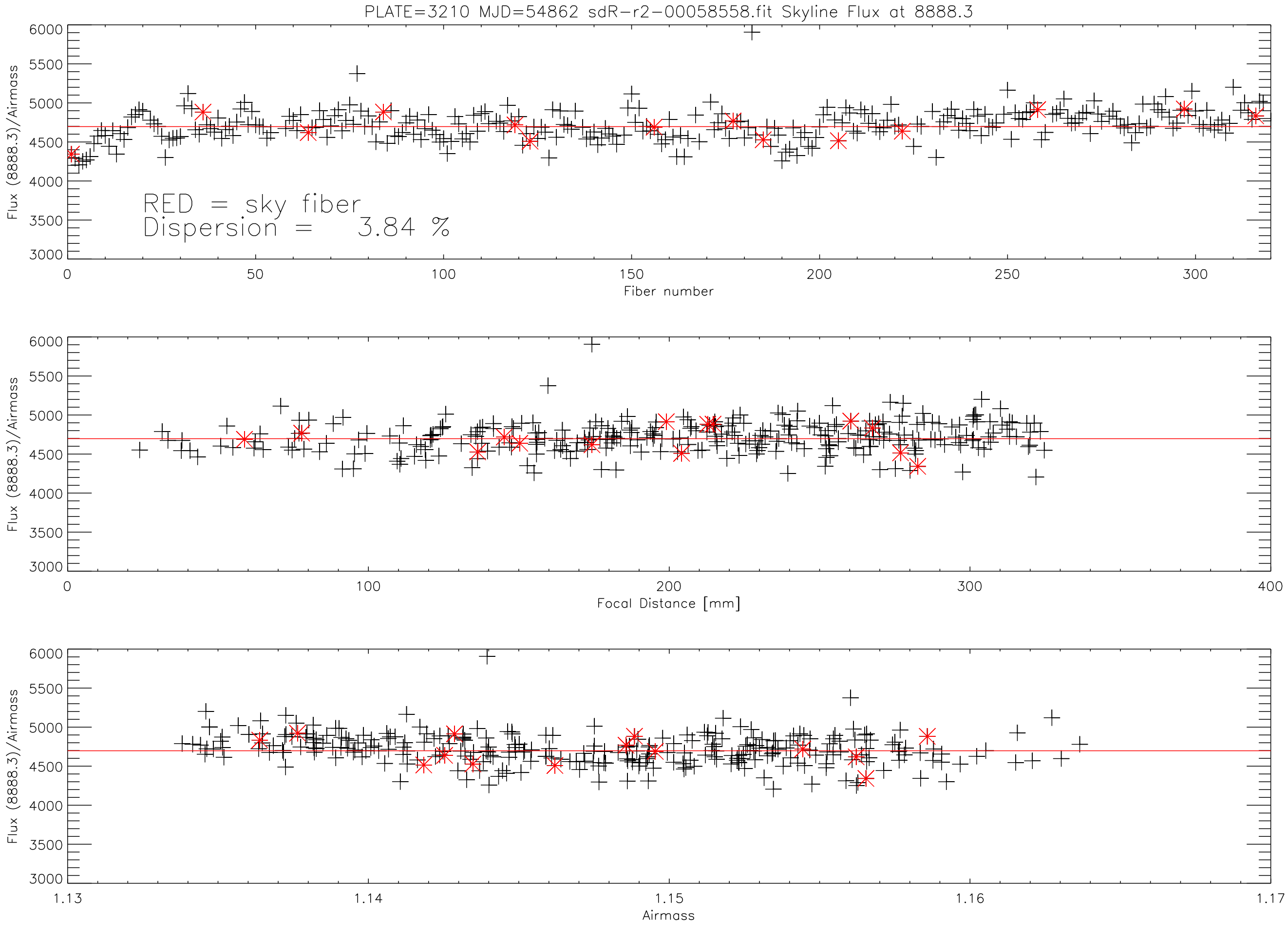
PLATE=3210 MJD=54862 sdR-r2-00058558.fit 2D Sky-subtraction Sky-subtracted Sky F

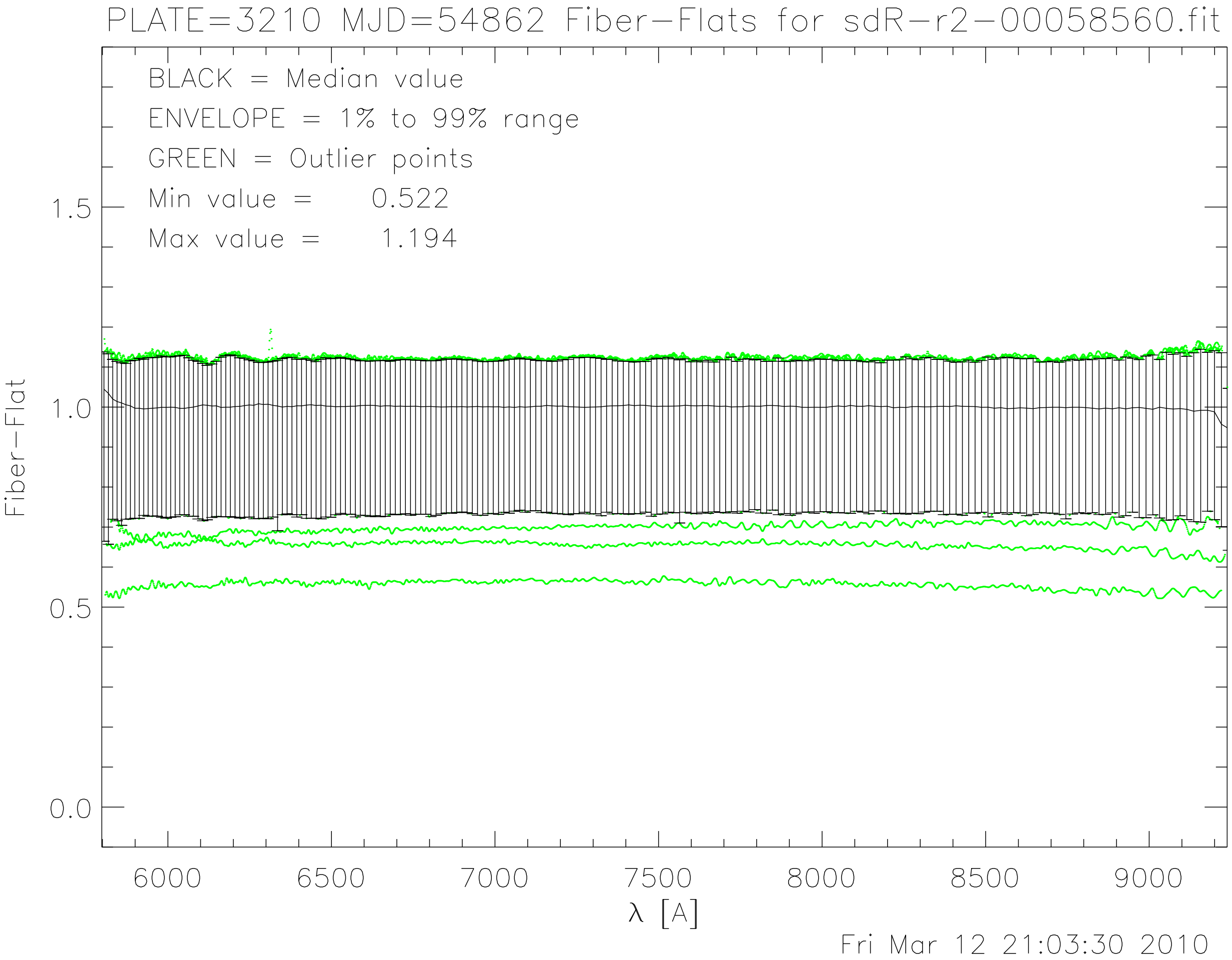
Number of sky fibers = 14

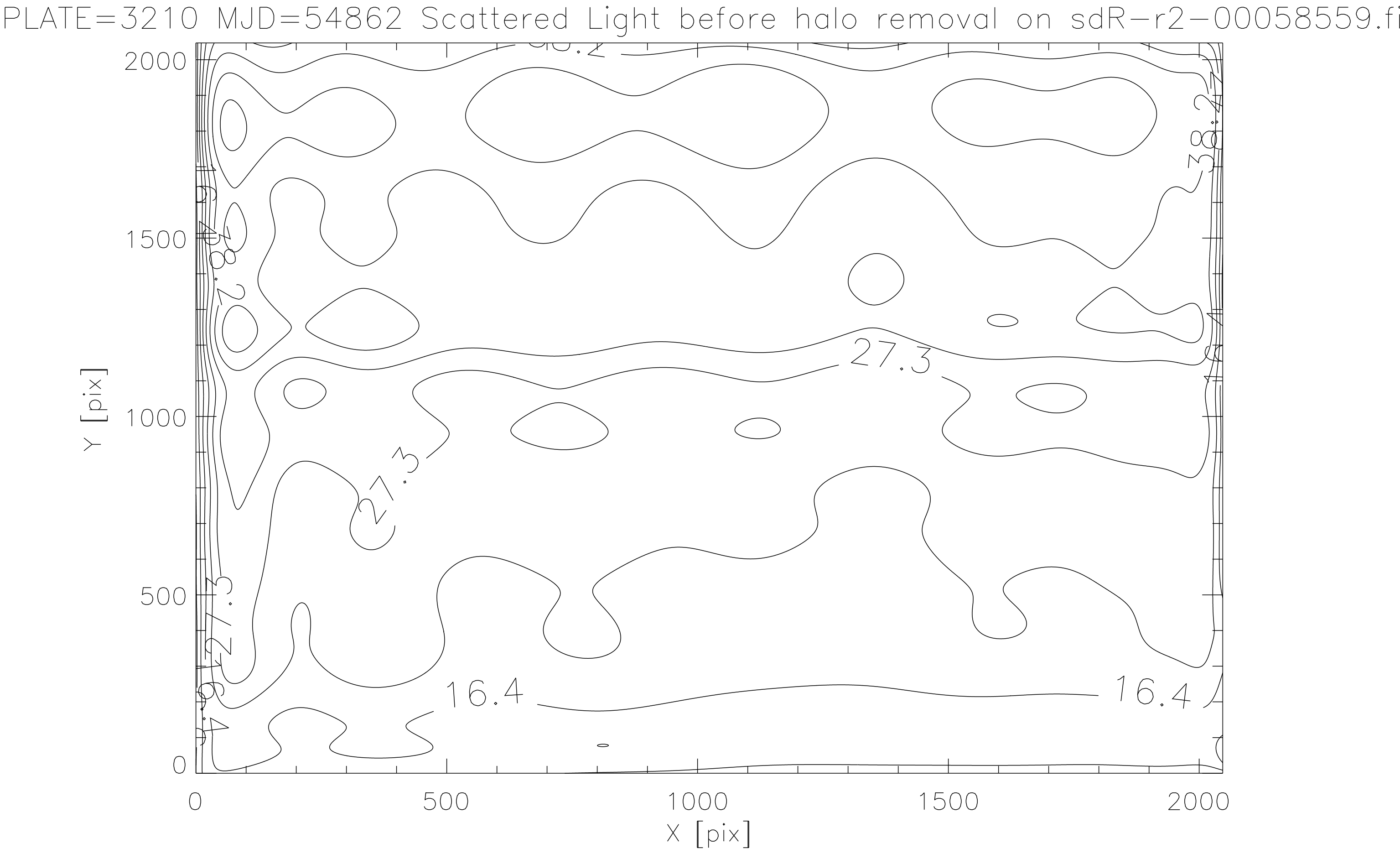
PLATE=3210 MJD=54862 sdR-r2-00058558.fit 2D Sky-subtraction Rescaled Errors

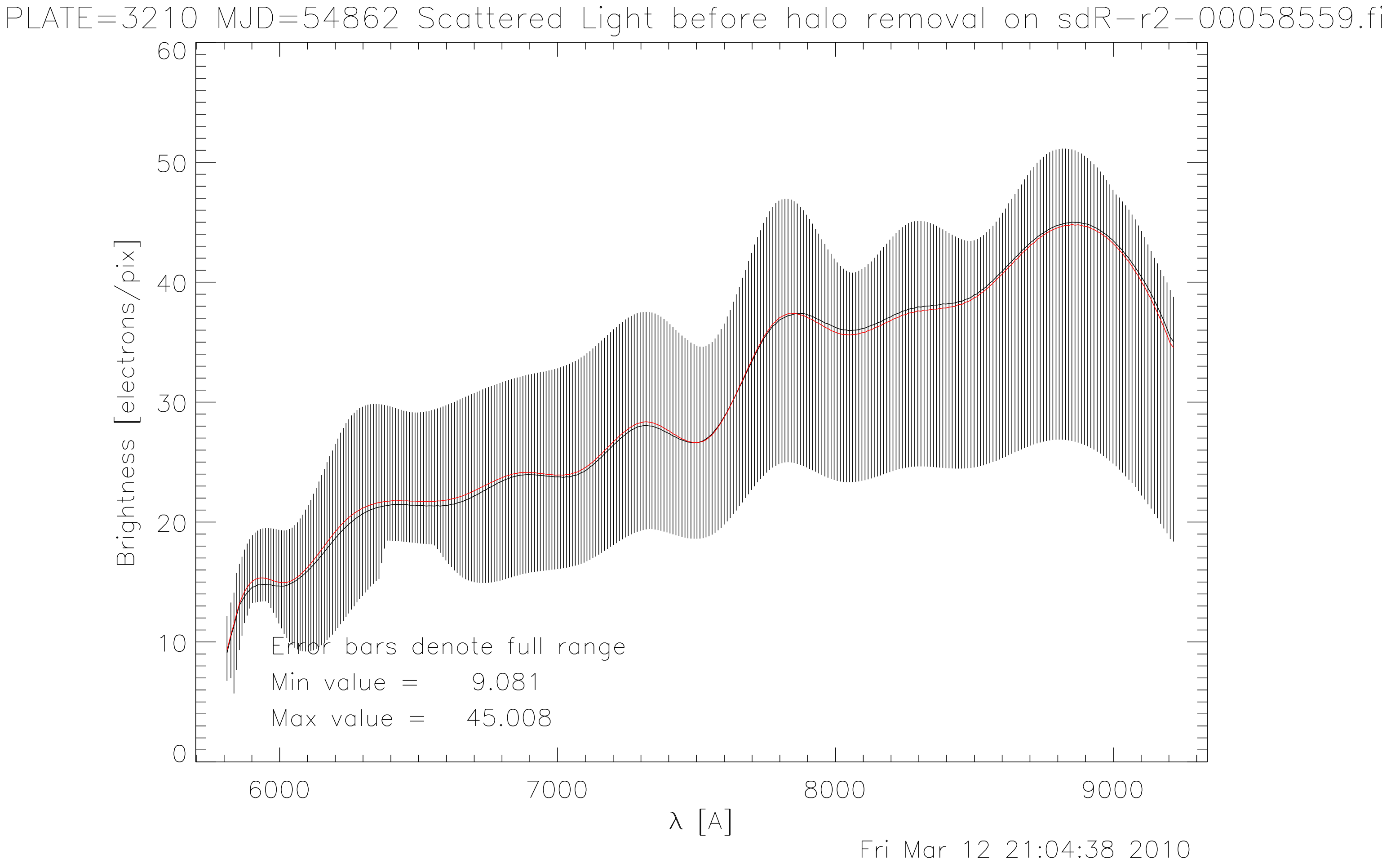


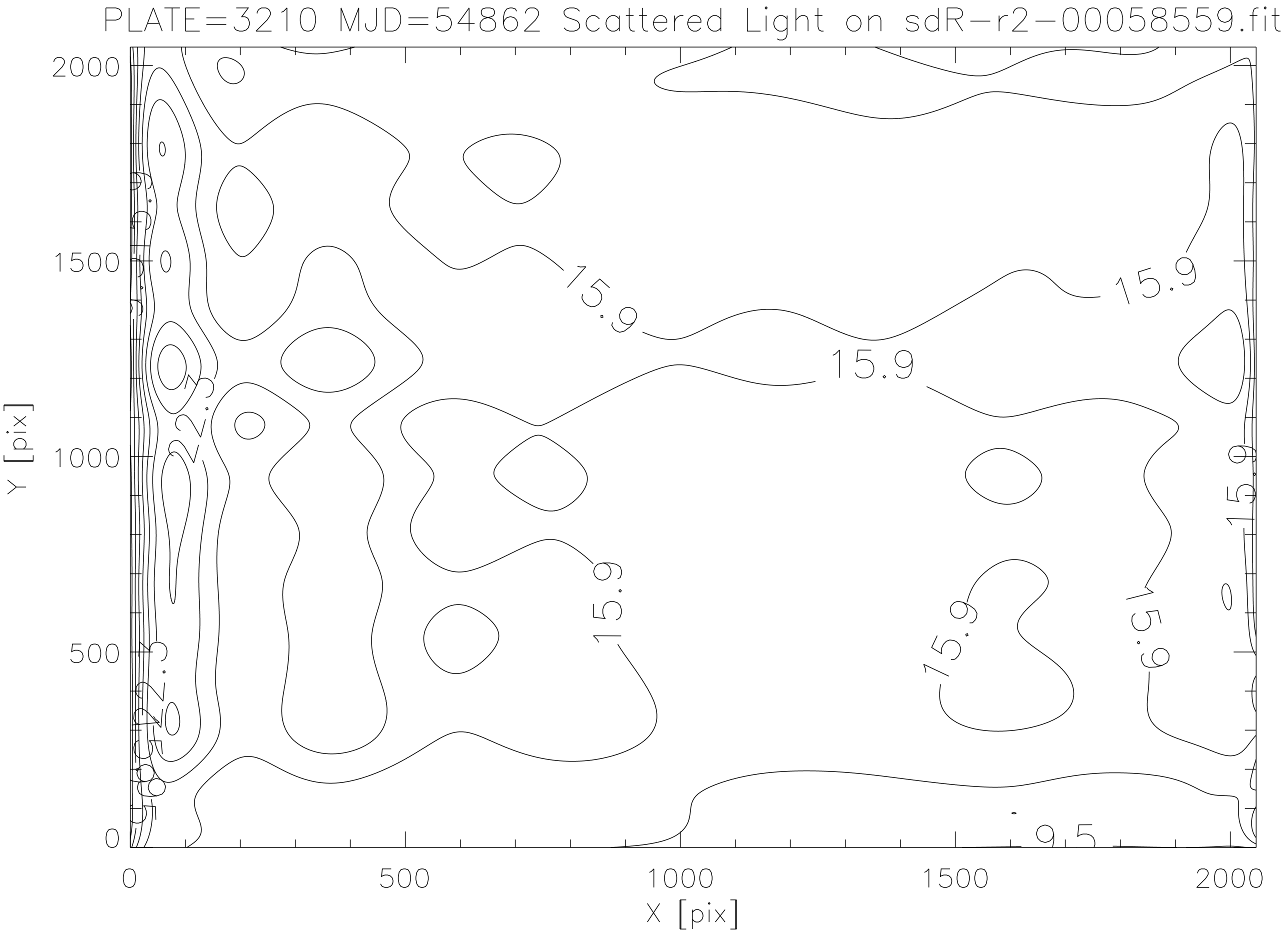

PLATE=3210 MJD=54862 sdR-r2-00058558.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2200
2000
1800
1600
1400
1200
RED = sky fiber
Dispersion = 3.64 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2200
2000
1800
1600
1400
1200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2200
2000
1800
1600
1400
1200
1.13
1.14
1.15
1.16
1.17
Airmass

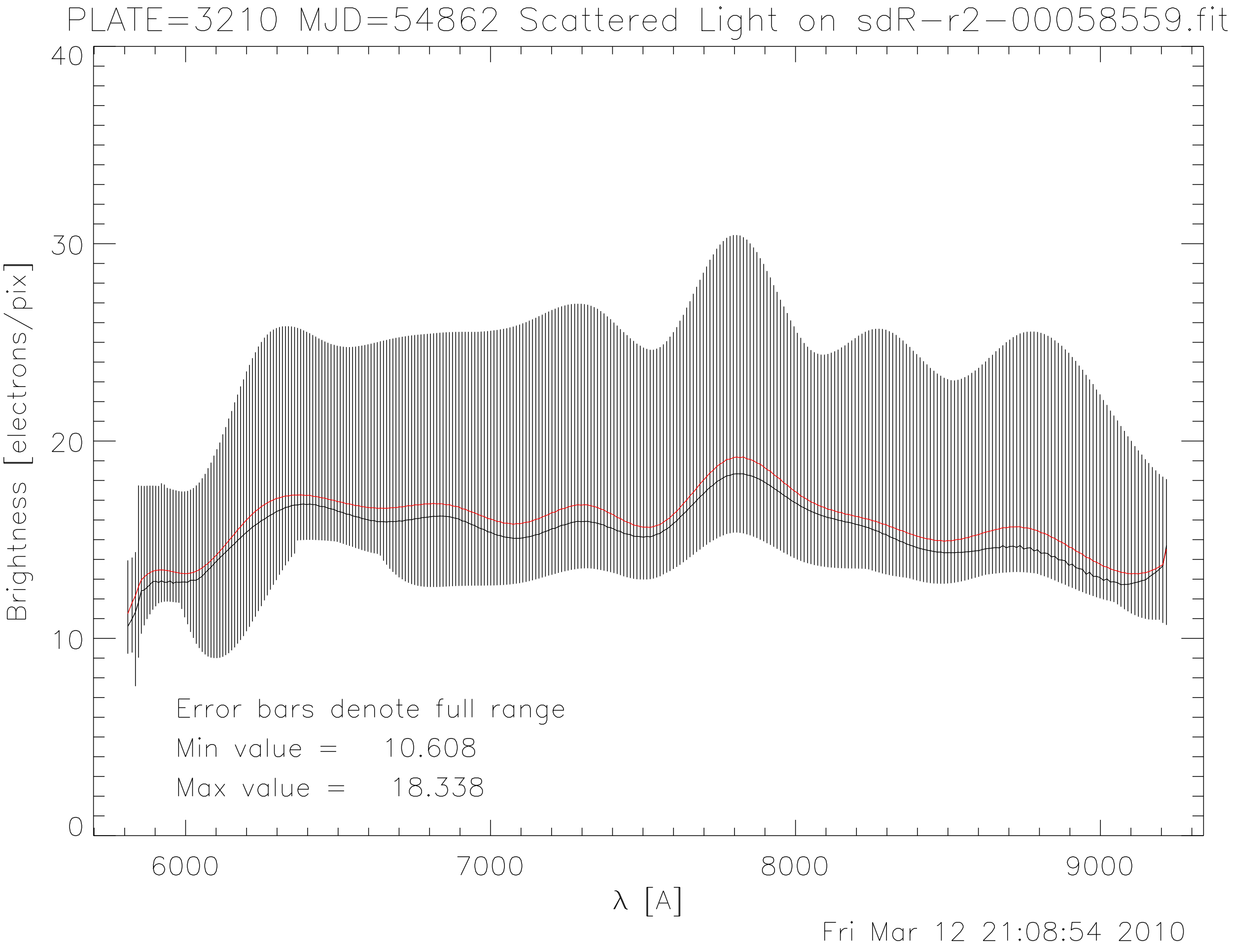

PLATE=3210 MJD=54862 sdR-r2-00058558.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
3500
3000
RED = sky fiber
Dispersion = 3.84 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
3500
3000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
3500
3000
1.13
1.14
1.15
1.16
1.17
Airmass

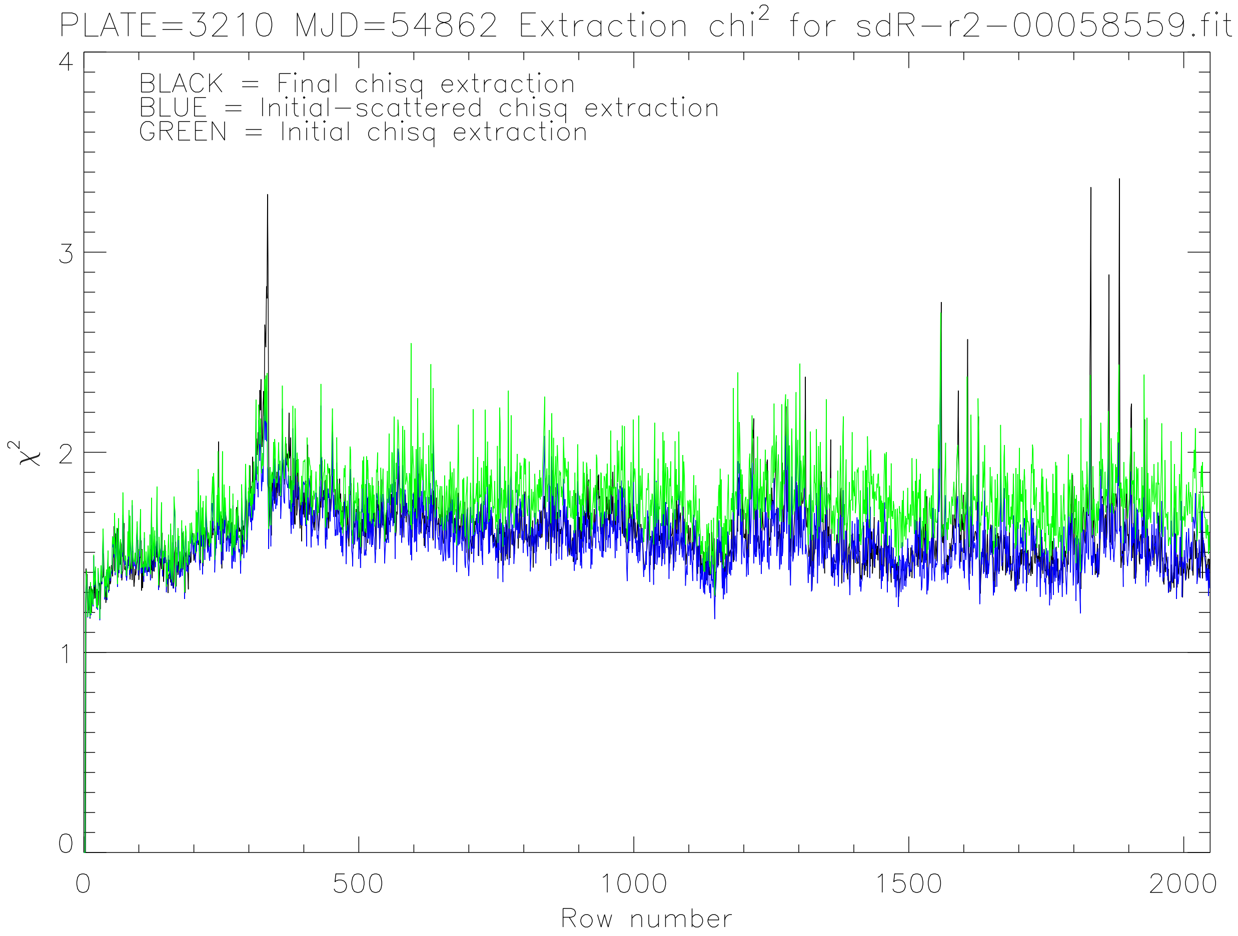

PLATE=3210 MJD=54862 Fiber−Flats for sdR−r2−00058560.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.522
Max value = 1.194
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 12 21:03:30 2010

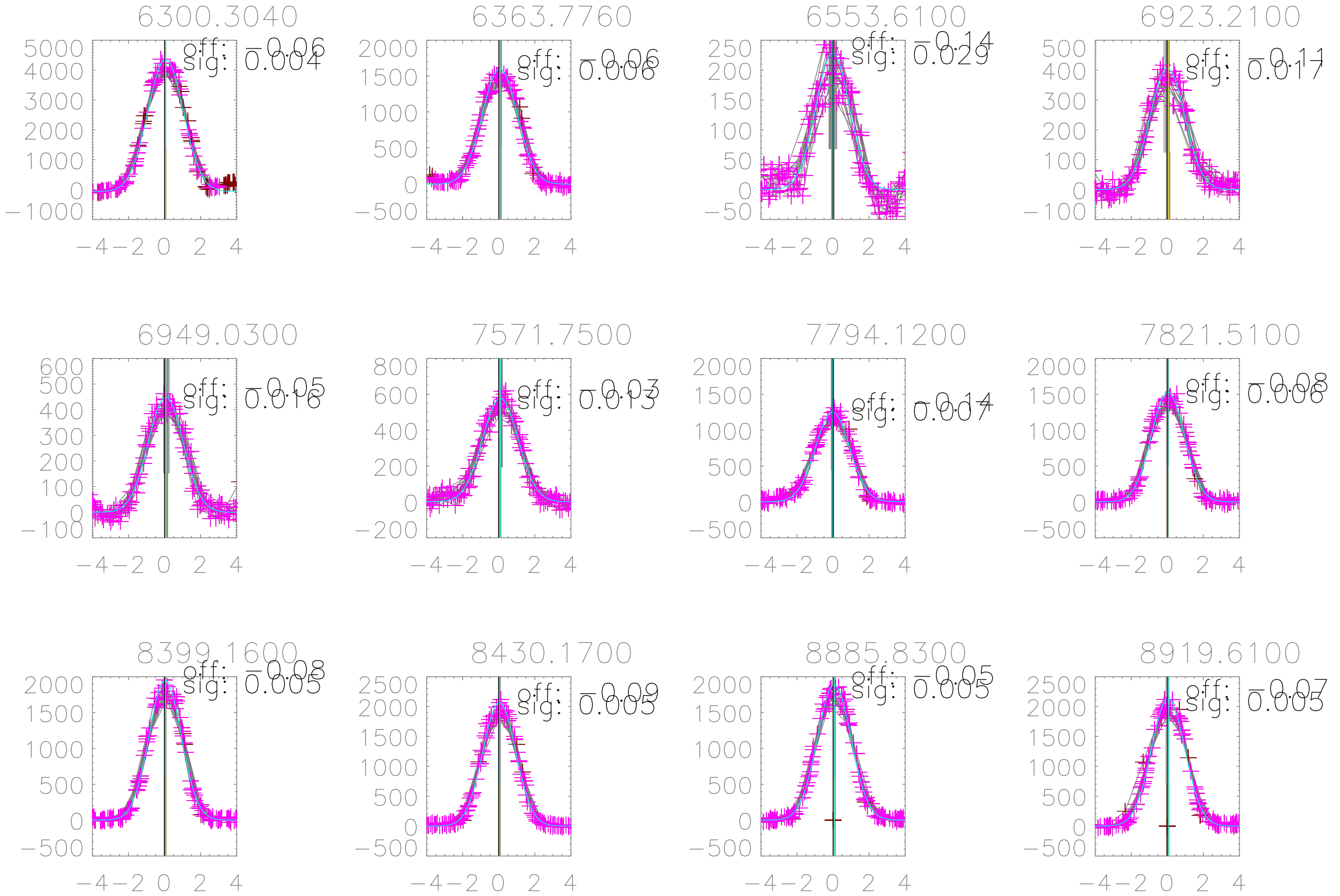

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r2-00058559.fi

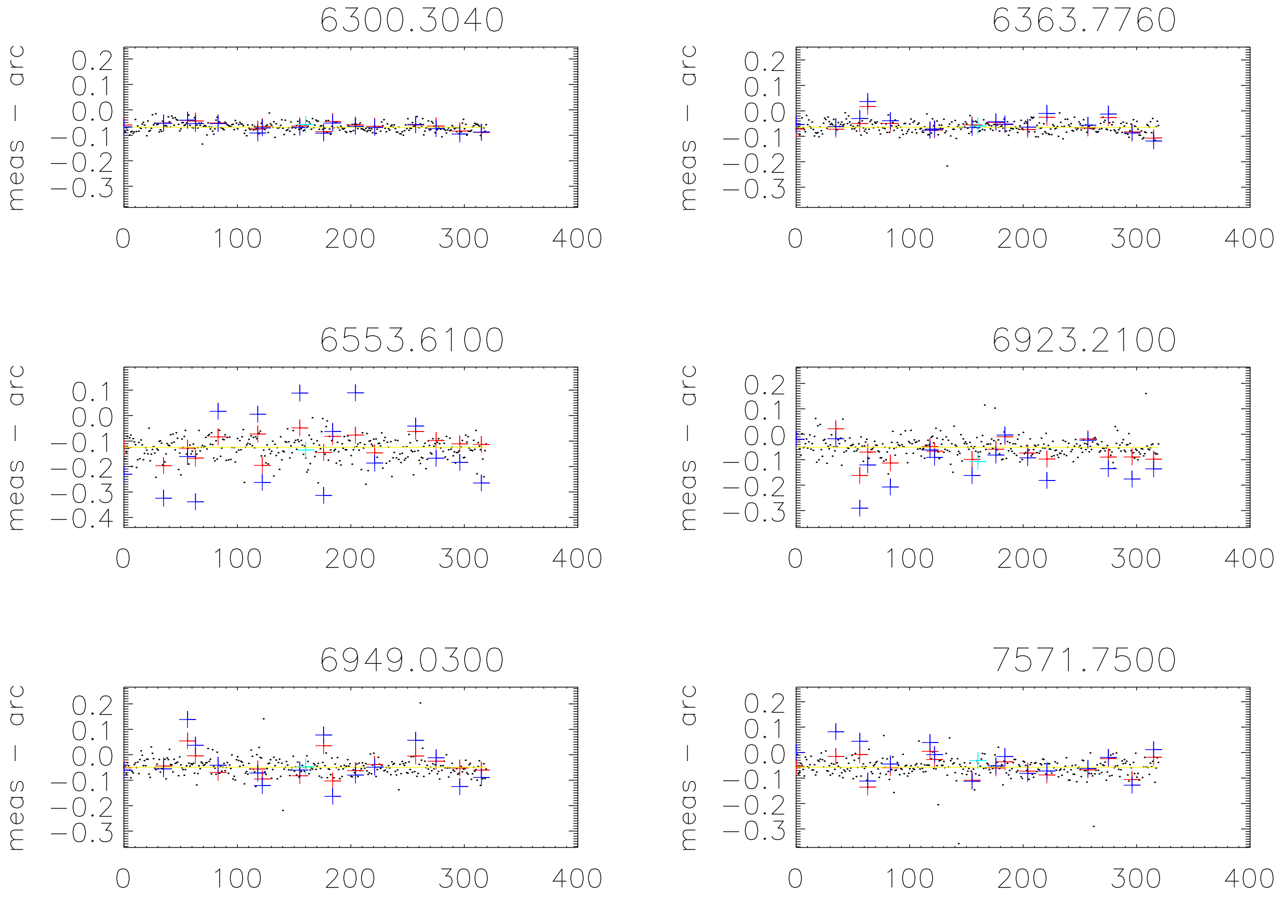

PLATE=3210 MJD=54862 Scattered Light before halo removal on sdR-r2-00058559.fi
Brightness [electrons/pix]
0
10
20
30
40
50
60
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.081
Max value = 45.008
Fri Mar 12 21:04:38 2010

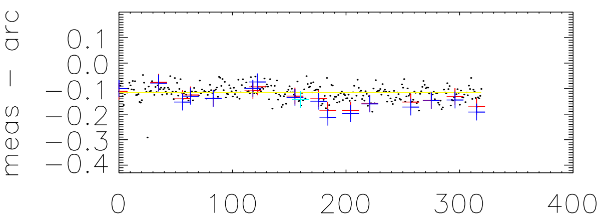

PLATE=3210 MJD=54862 Scattered Light on sdR-r2-00058559.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
15.9
15.9
15.9
15.9
15.9
15.9
15.9
15.9
22.3
22.5
9.5


PLATE=3210 MJD=54862 Scattered Light on sdR-r2-00058559.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =    10.608
Max value =    18.338
Fri Mar 12 21:08:54 2010

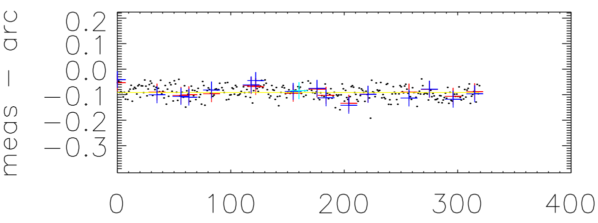

PLATE=3210 MJD=54862 Extraction chi$^2$ for sdR-r2-00058559.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
$\chi^2$
0
1
2
3
4
0
500
1000
1500
2000
Row number


6300.3040
off: −0.06
sig: 0.004
6363.7760
off: −0.06
sig: 0.006
6553.6100
off: −0.14
sig: 0.029
6923.2100
off: −0.11
sig: 0.017
6949.0300
off: −0.05
sig: 0.016
7571.7500
off: −0.03
sig: 0.013
7794.1200
off: −0.14
sig: 0.007
7821.5100
off: −0.08
sig: 0.006
8399.1600
off: −0.08
sig: 0.005
8430.1700
off: −0.09
sig: 0.005
8885.8300
off: −0.05
sig: 0.005
8919.6100
off: −0.07
sig: 0.005
−4 −2 0 2 4

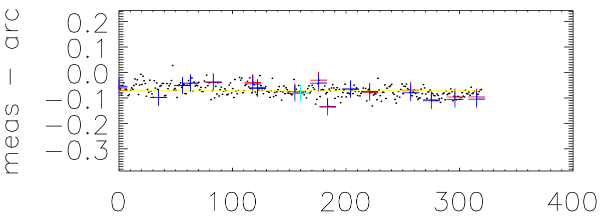

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas - arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400



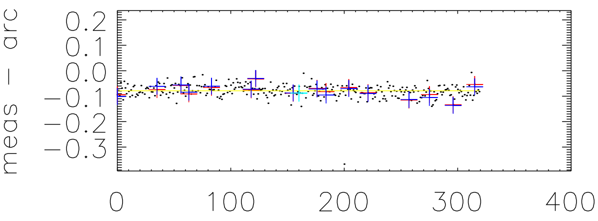
7794.1200



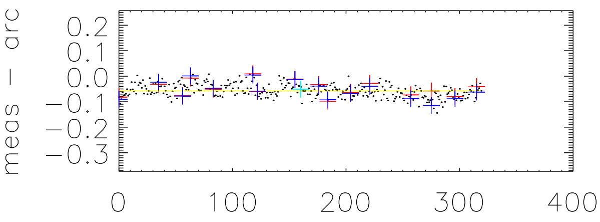
7821.5100



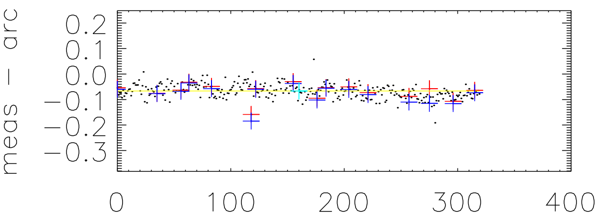
8399.1600



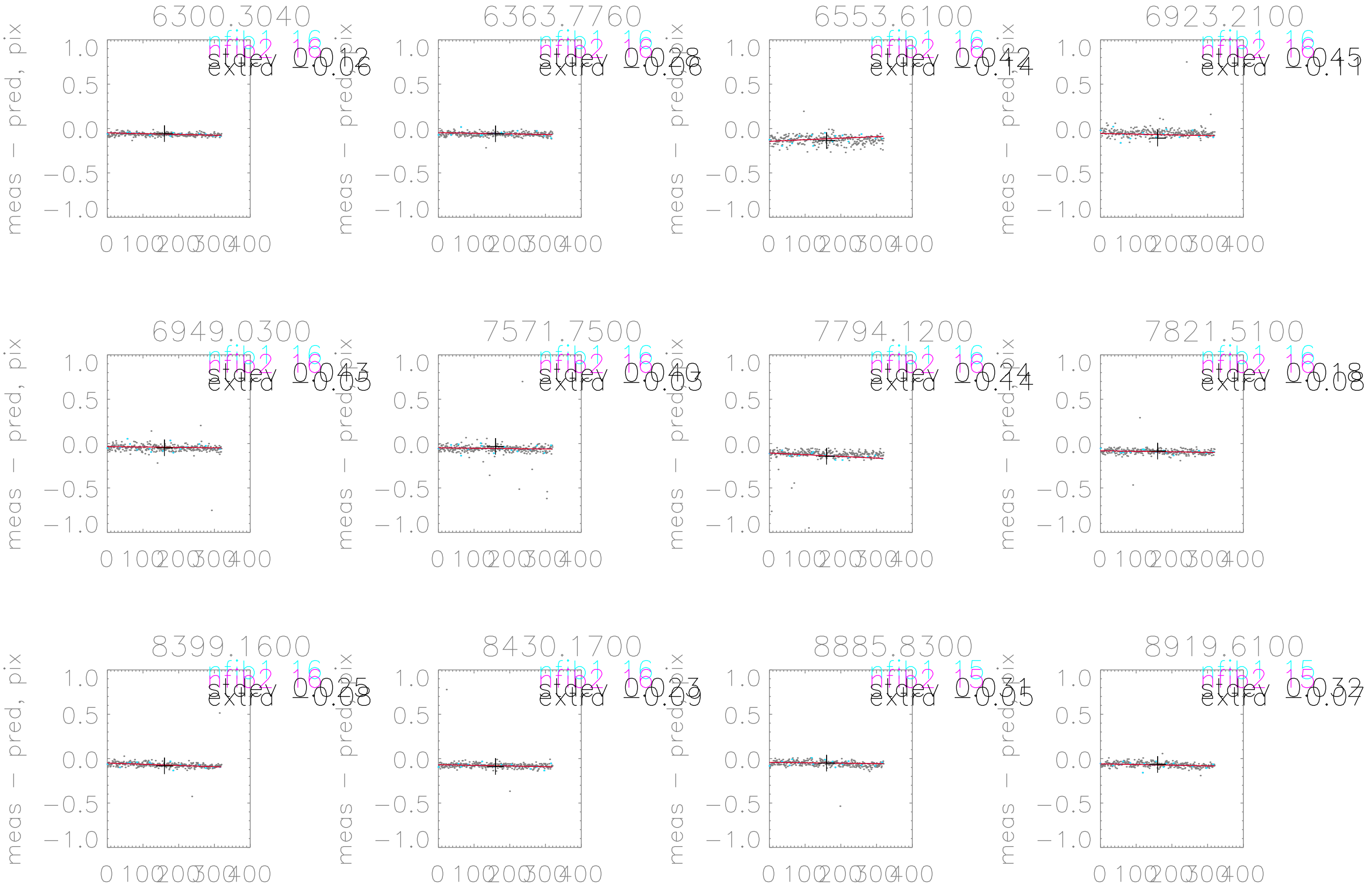
8430.1700

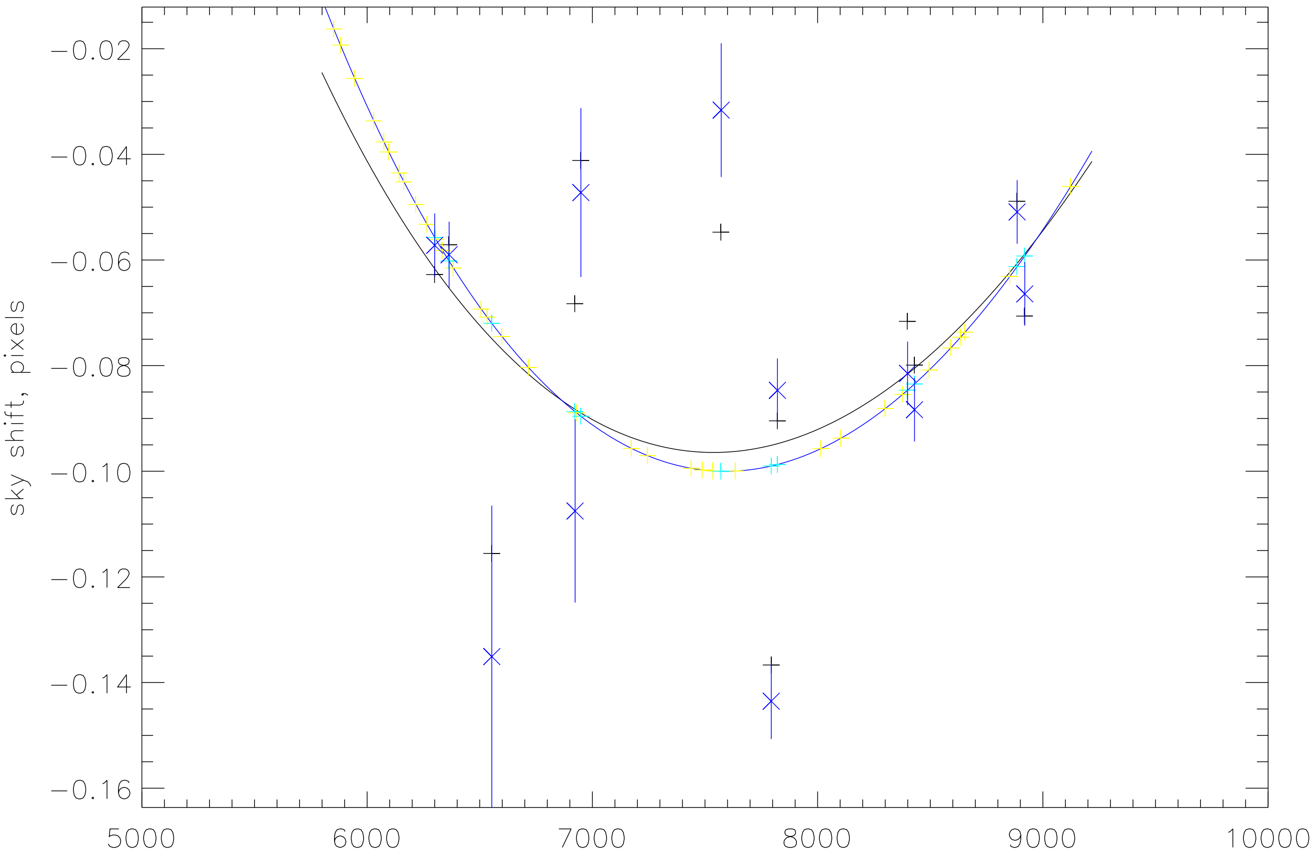


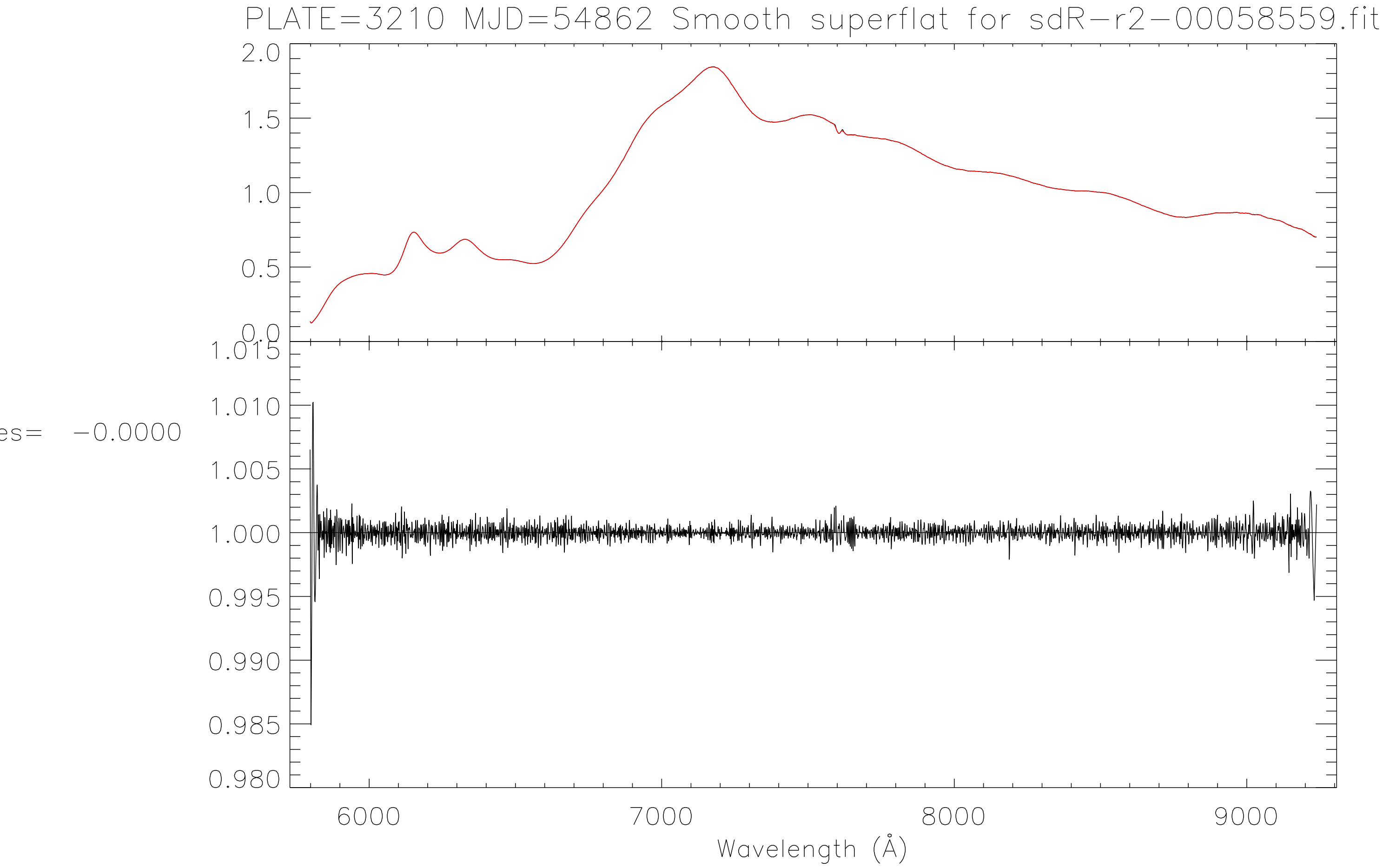
8885.8300

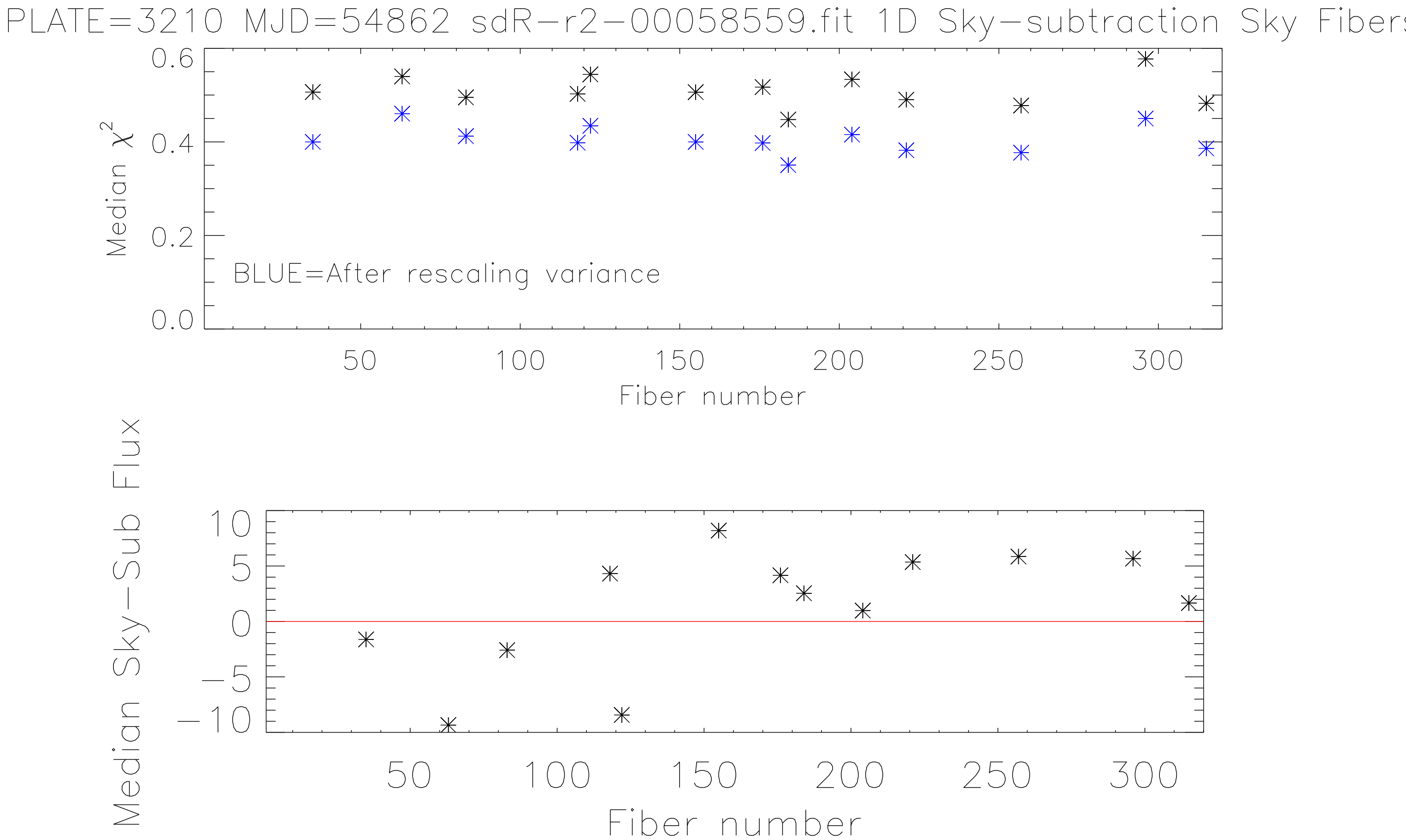


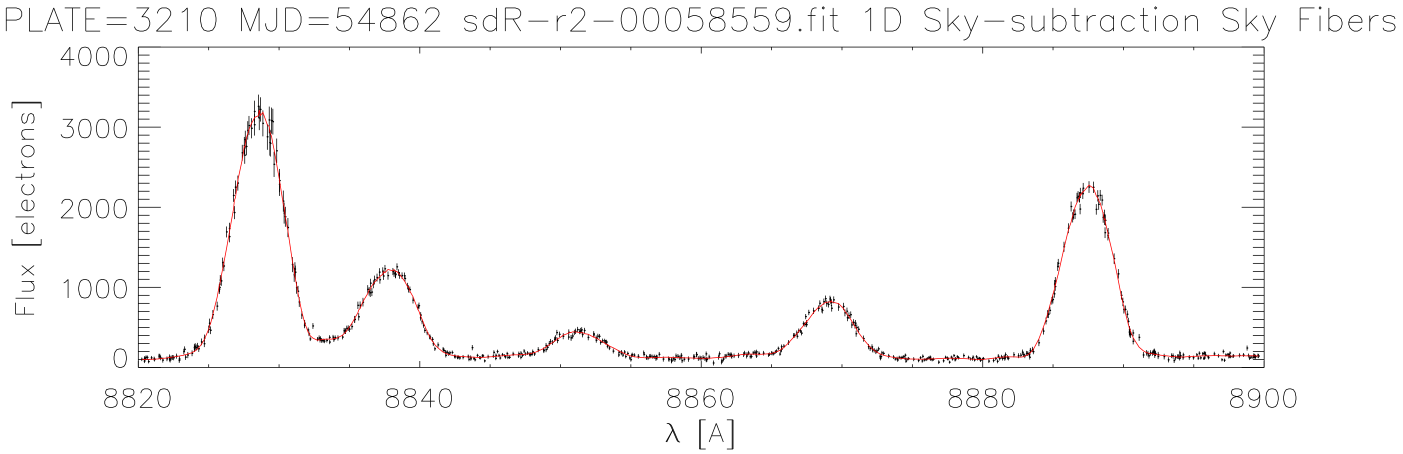
8919.6100

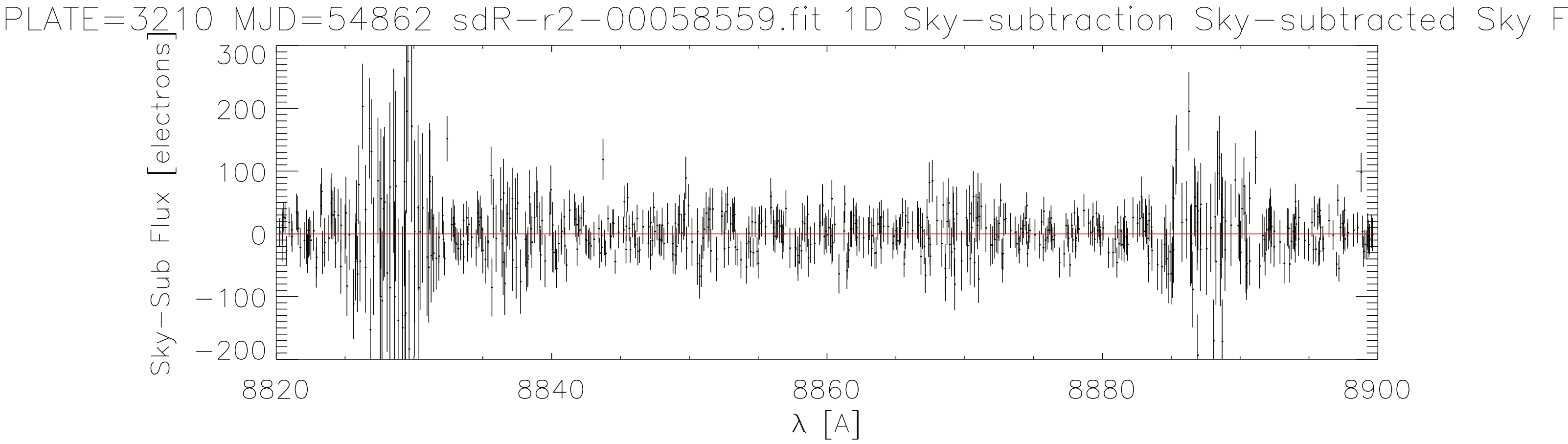

6300.3040
nfib1 16
nfib2 16
stdev 0.012
extrd −0.06
6363.7760
nfib1 16
nfib2 16
stdev 0.028
extrd −0.06
6553.6100
nfib1 16
nfib2 16
stdev 0.042
extrd −0.14
6923.2100
nfib1 16
nfib2 16
stdev 0.045
extrd −0.11
6949.0300
nfib1 16
nfib2 16
stdev 0.043
extrd −0.05
7571.7500
nfib1 16
nfib2 16
stdev 0.040
extrd −0.03
7794.1200
nfib1 16
nfib2 16
stdev 0.024
extrd −0.14
7821.5100
nfib1 16
nfib2 16
stdev 0.018
extrd −0.08
8399.1600
nfib1 16
nfib2 16
stdev 0.025
extrd −0.08
8430.1700
nfib1 16
nfib2 16
stdev 0.023
extrd −0.09
8885.8300
nfib1 15
nfib2 15
stdev 0.031
extrd −0.05
8919.6100
nfib1 15
nfib2 15
stdev 0.032
extrd −0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
5000
6000
7000
8000
9000
10000


PLATE=3210 MJD=54862 Smooth superflat for sdR-r2-00058559.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
0.980
es=   −0.0000
6000
7000
8000
9000
Wavelength (Å)

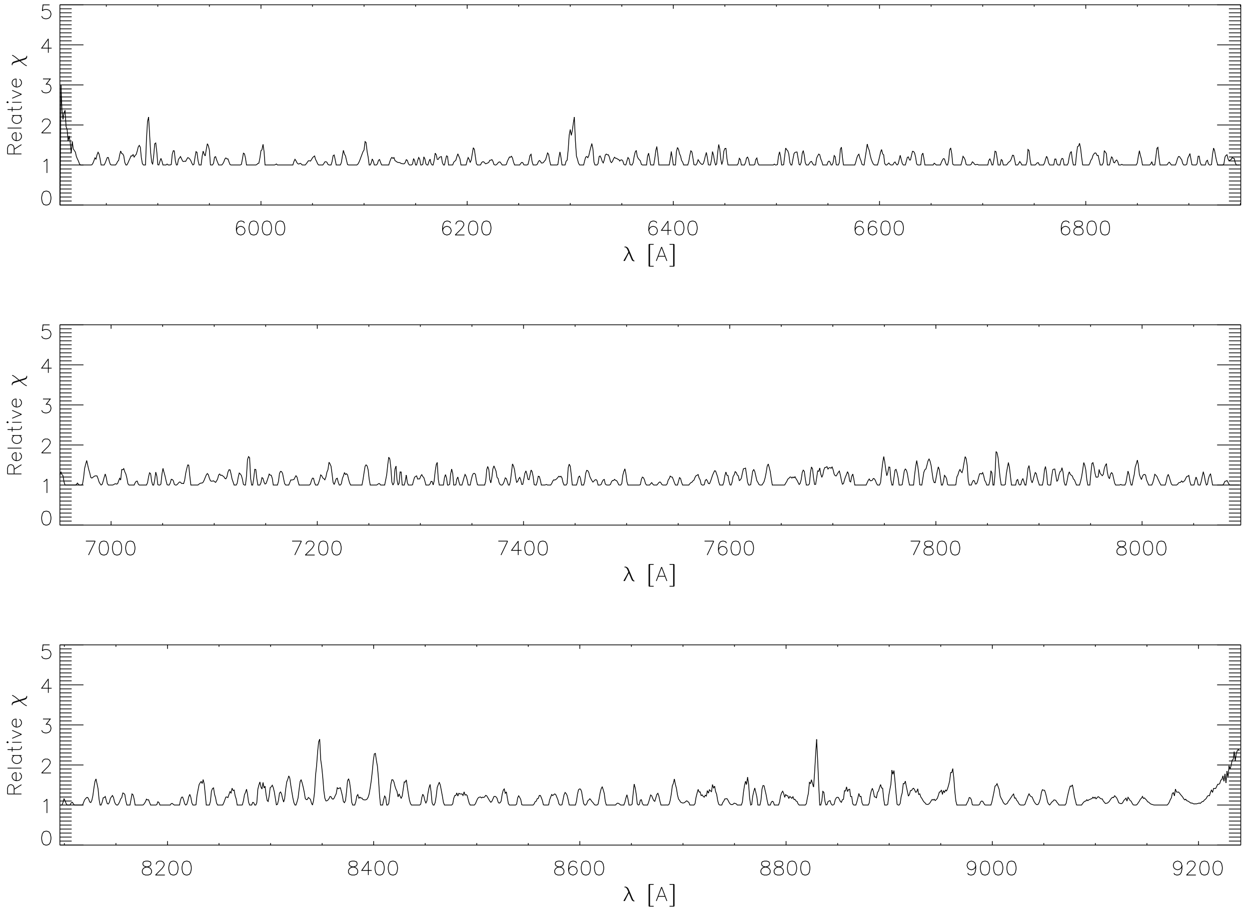

PLATE=3210 MJD=54862 sdR-r2-00058559.fit 1D Sky-subtraction Sky Fibers
Median $\chi^2$
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number


PLATE=3210 MJD=54862 sdR-r2-00058559.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

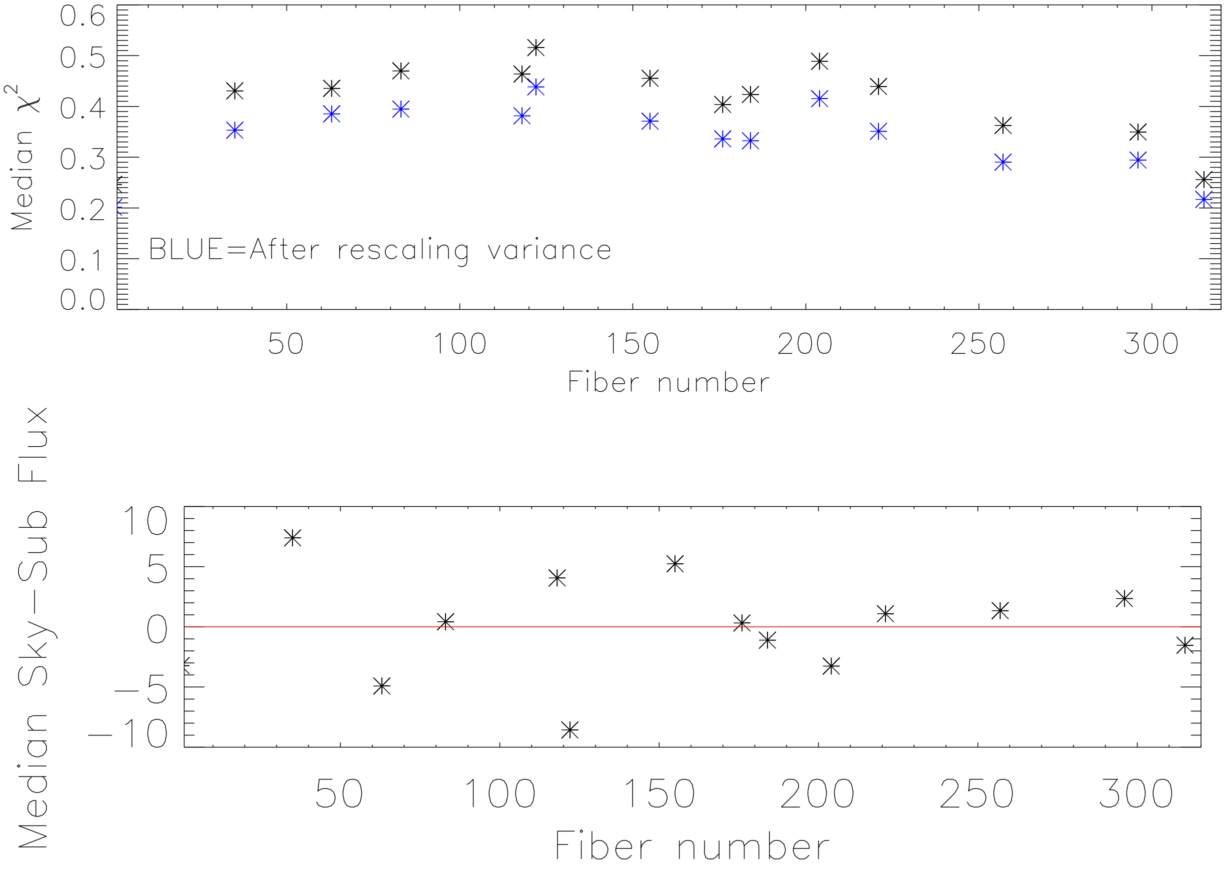

PLATE=3210 MJD=54862 sdR-r2-00058559.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

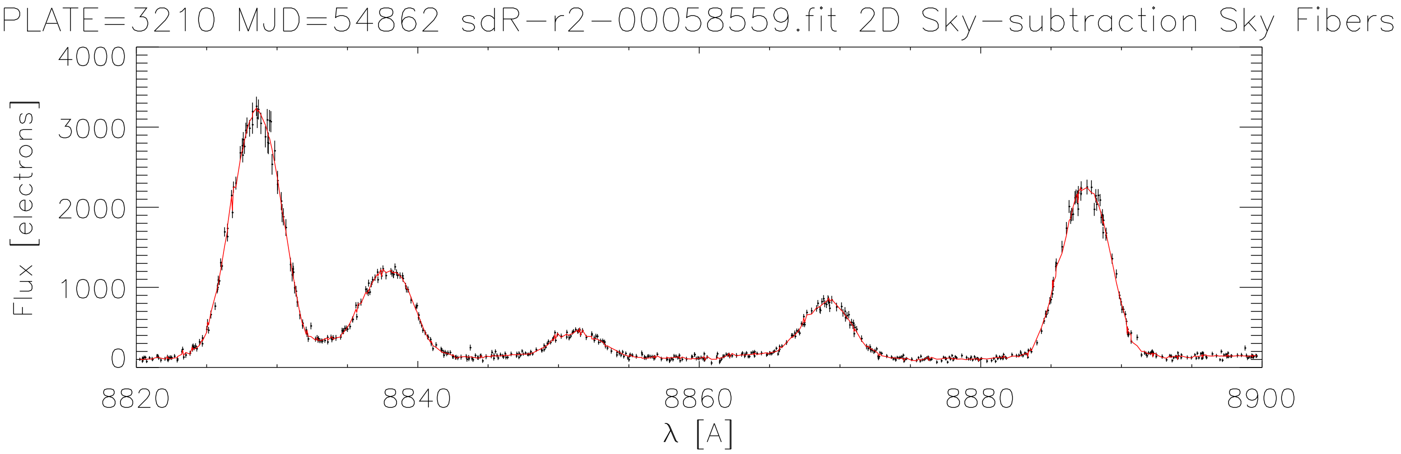
Number of sky fibers = 14

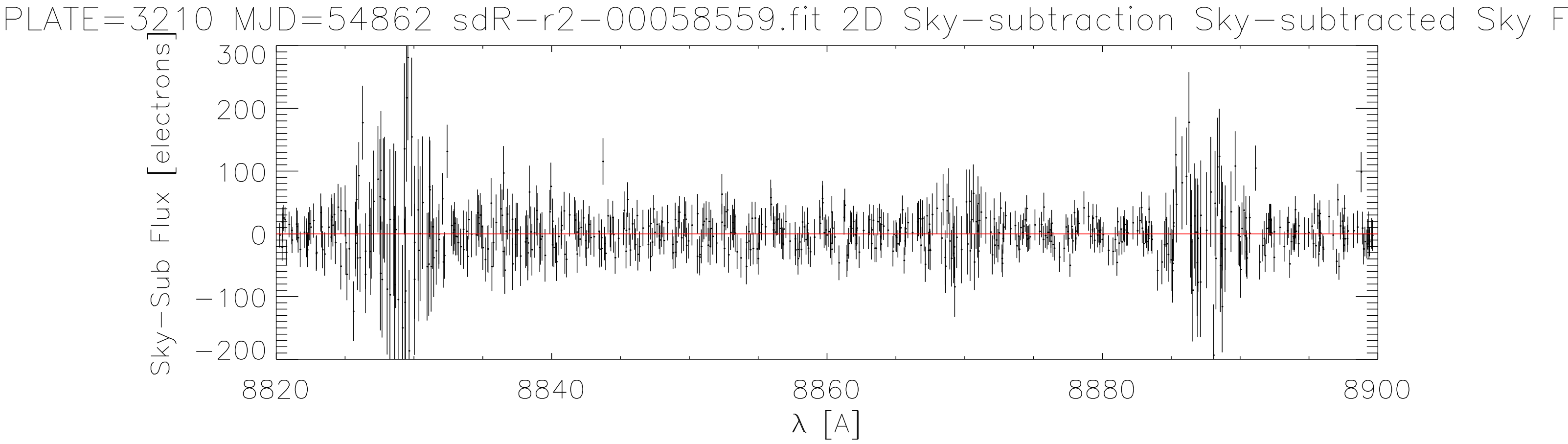
PLATE=3210 MJD=54862 sdR-r2-00058559.fit 1D Sky-subtraction Rescaled Errors

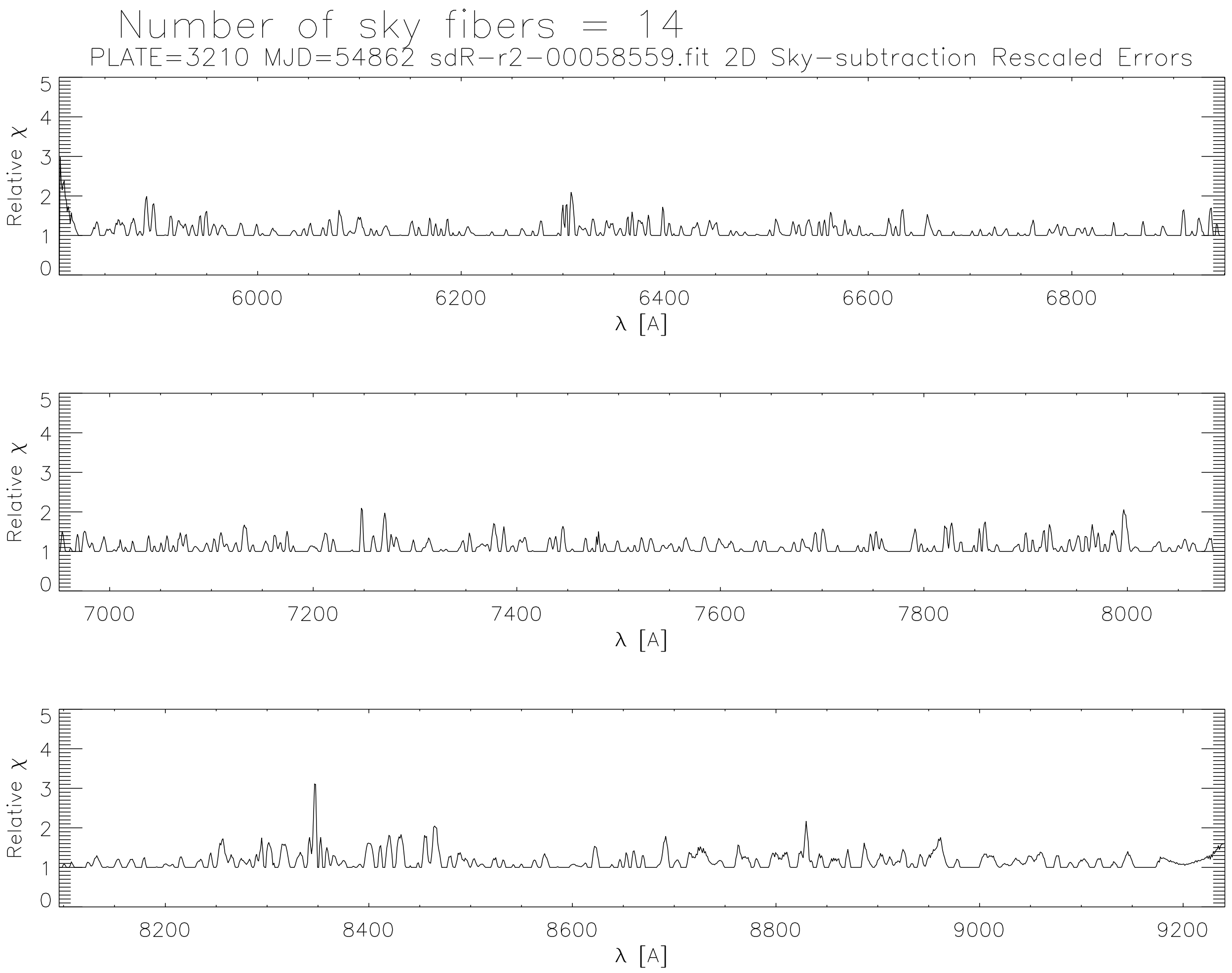


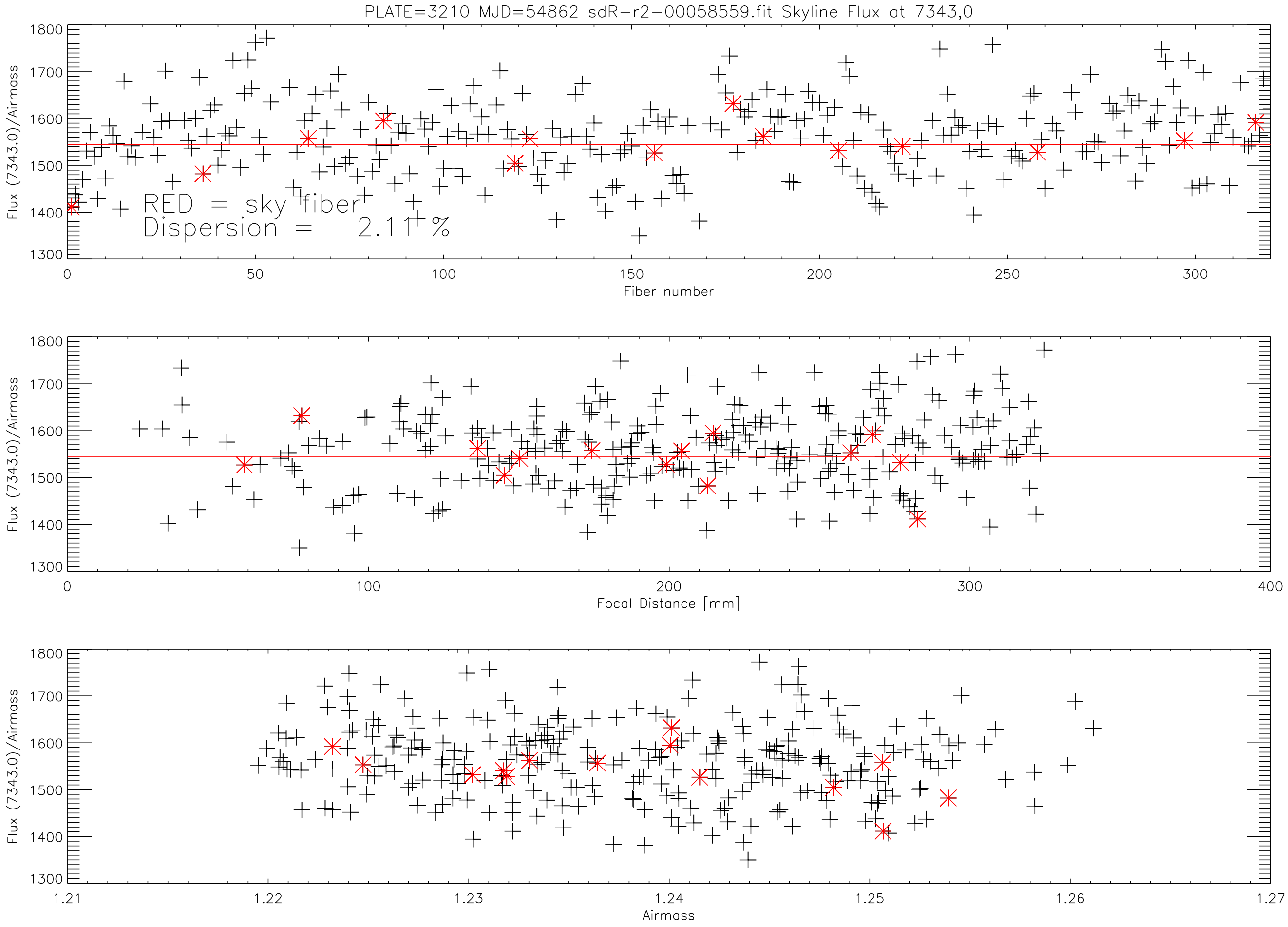
PLATE=3210 MJD=54862 sdR-r2-00058559.fit 2D Sky-subtraction Sky Fiber

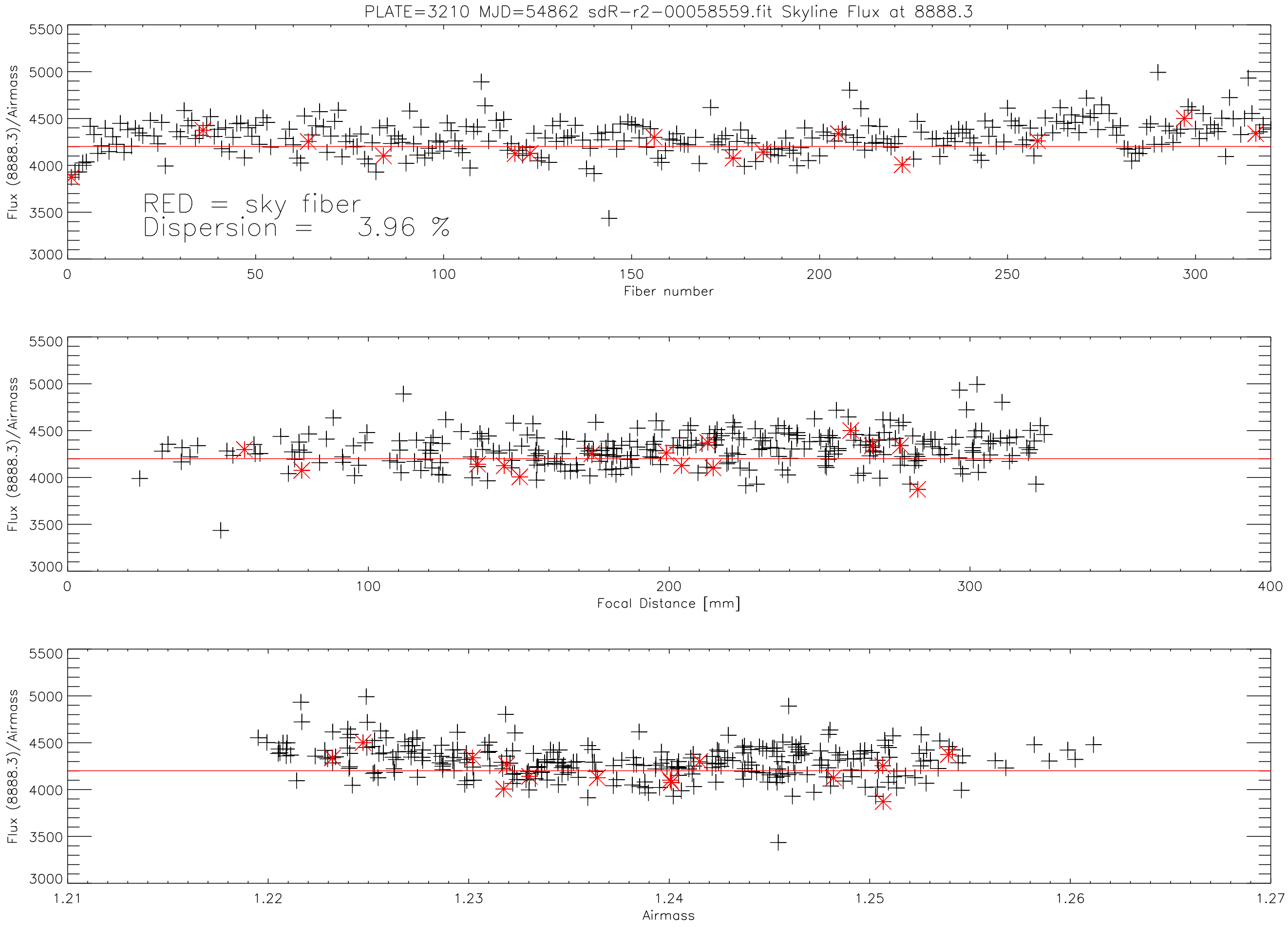



PLATE=3210 MJD=54862 sdR-r2-00058559.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=3210 MJD=54862 sdR-r2-00058559.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=3210 MJD=54862 sdR-r2-00058559.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
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=3210 MJD=54862 sdR-r2-00058559.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1300
1400
1500
1600
1700
1800
RED = sky fiber
Dispersion = 2.11 %
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.21
1.22
1.23
1.24
1.25
1.26
1.27
Airmass


PLATE=3210 MJD=54862 sdR-r2-00058559.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
3000
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 3.96 %
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
3000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
5500
5000
4500
4000
3500
3000
1.21
1.22
1.23
1.24
1.25
1.26
1.27
Airmass