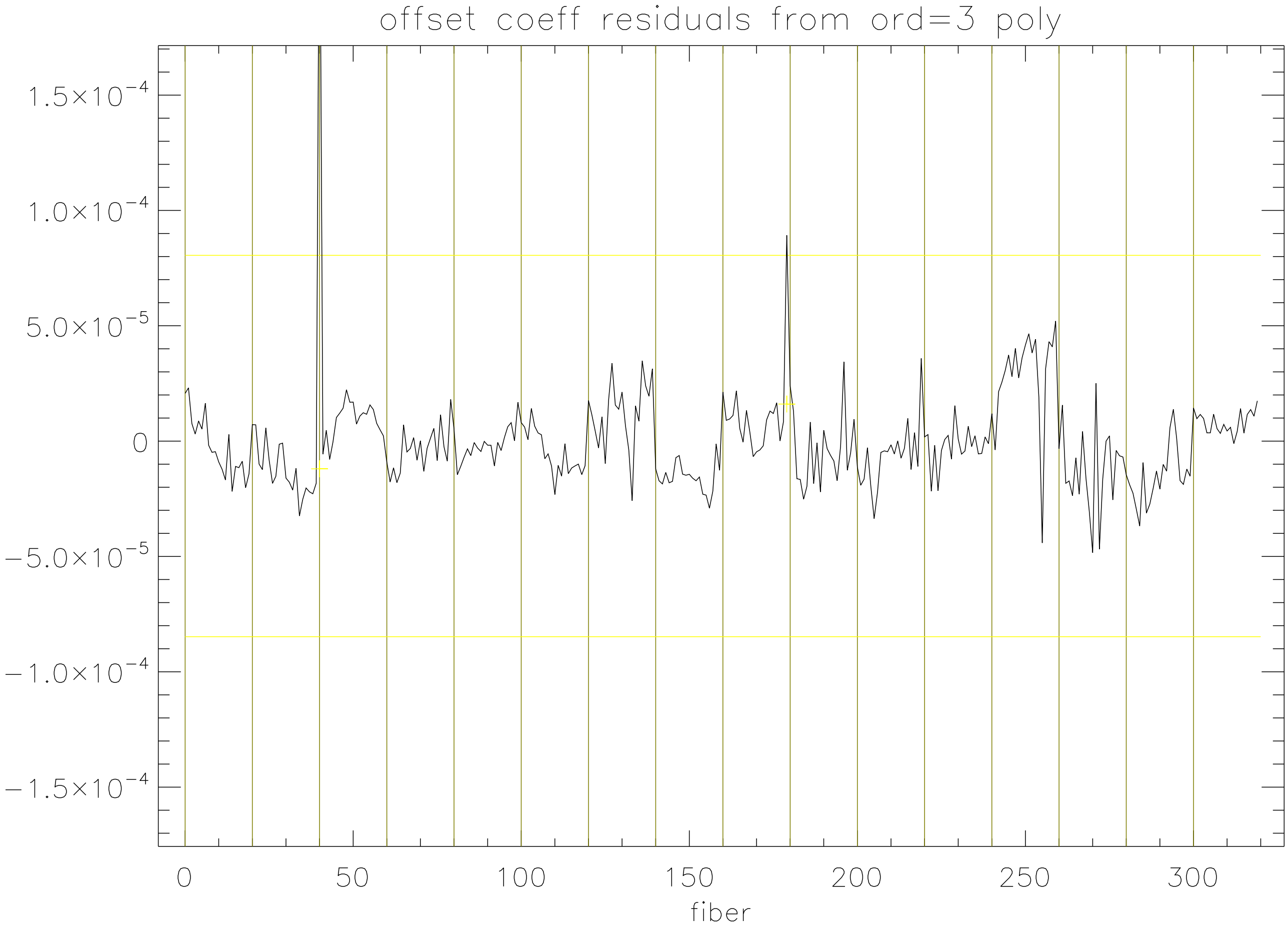
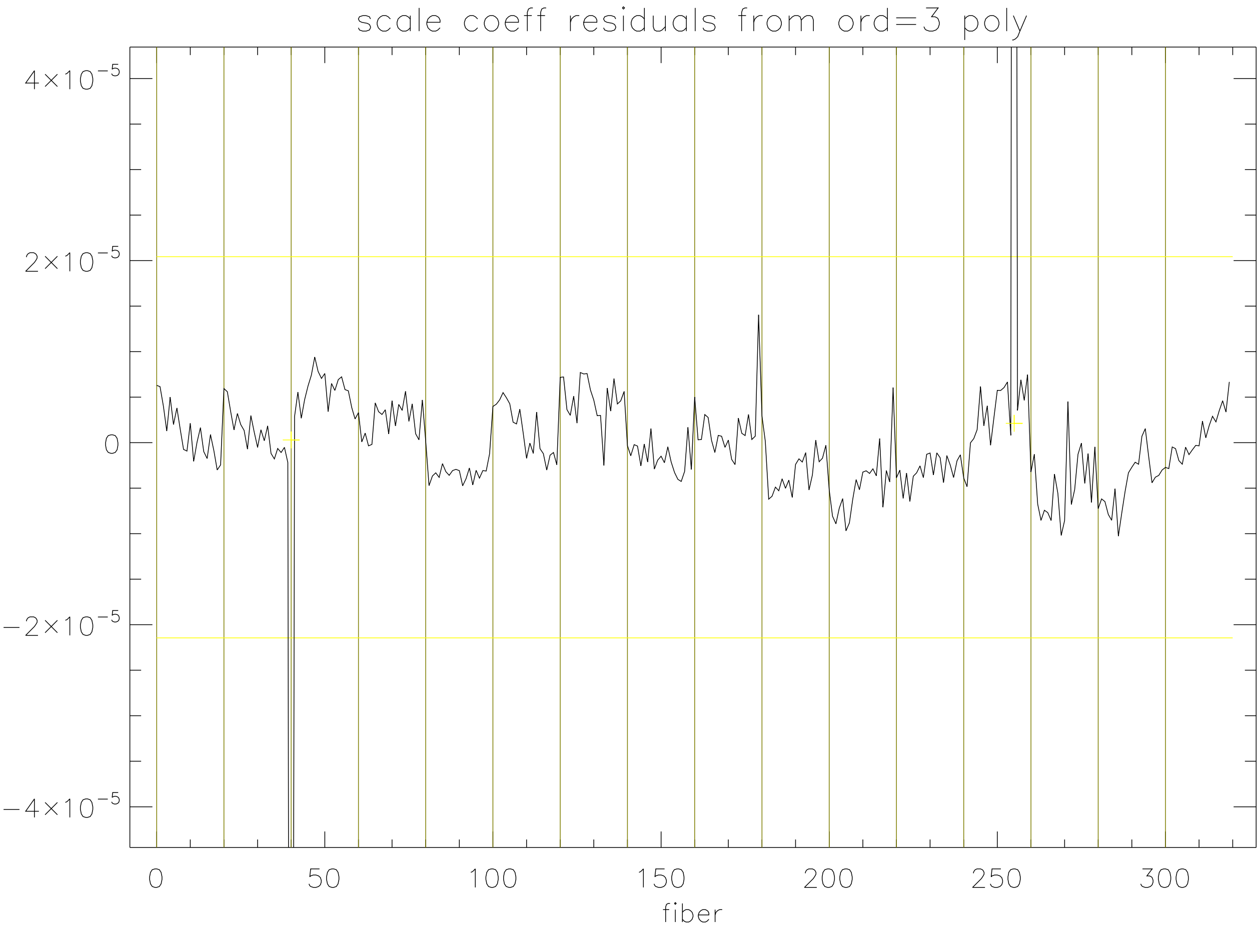
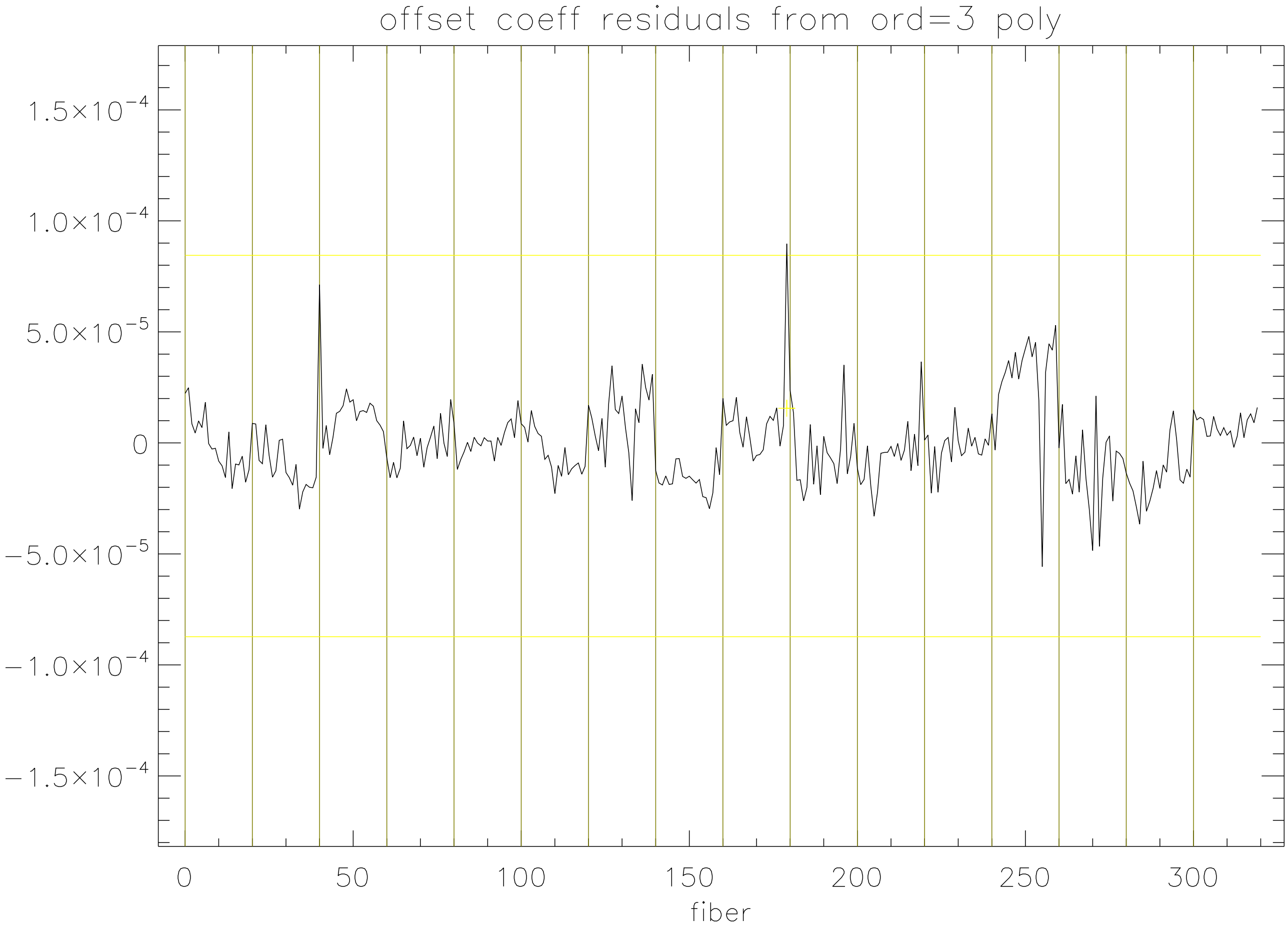
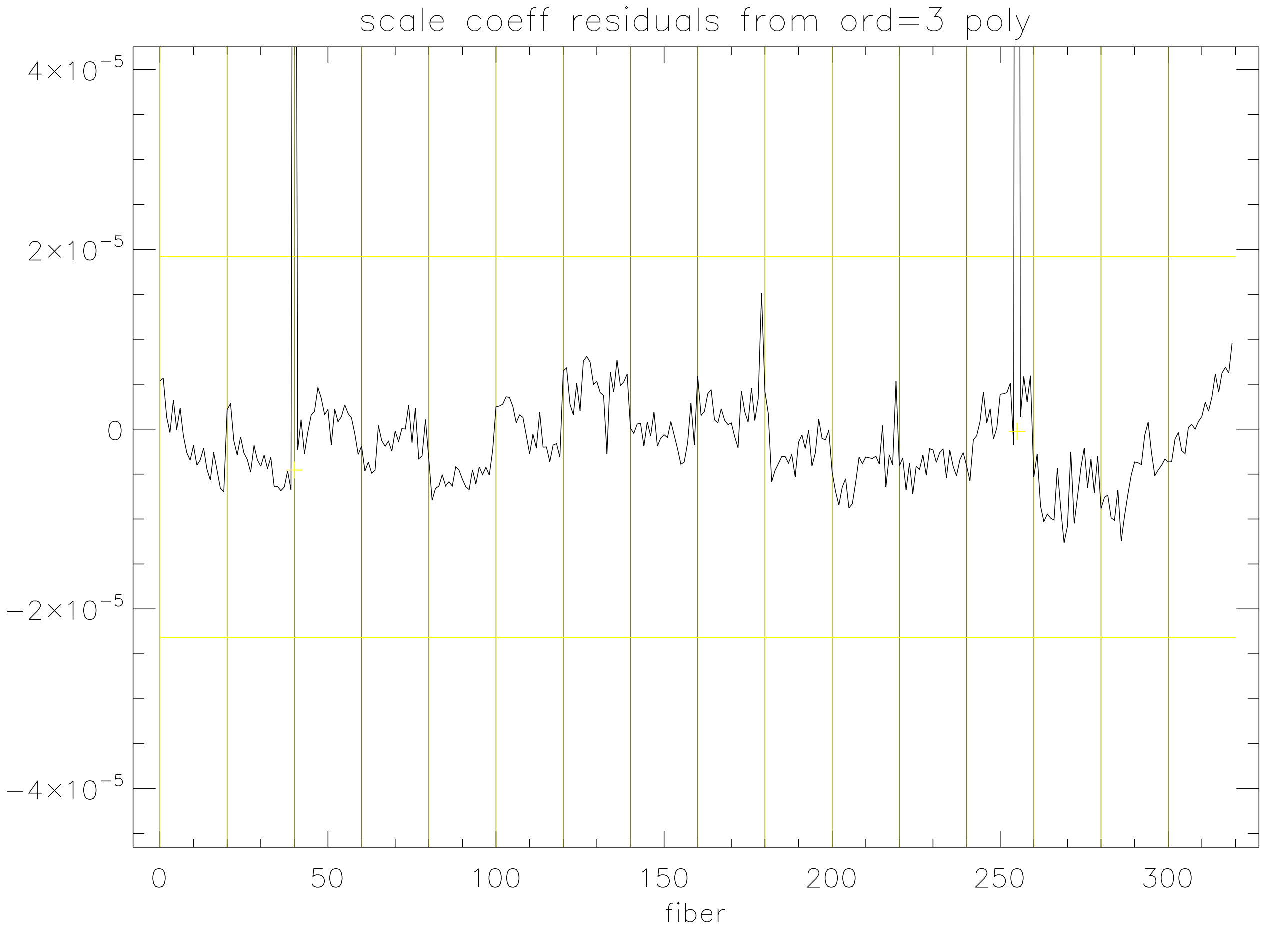
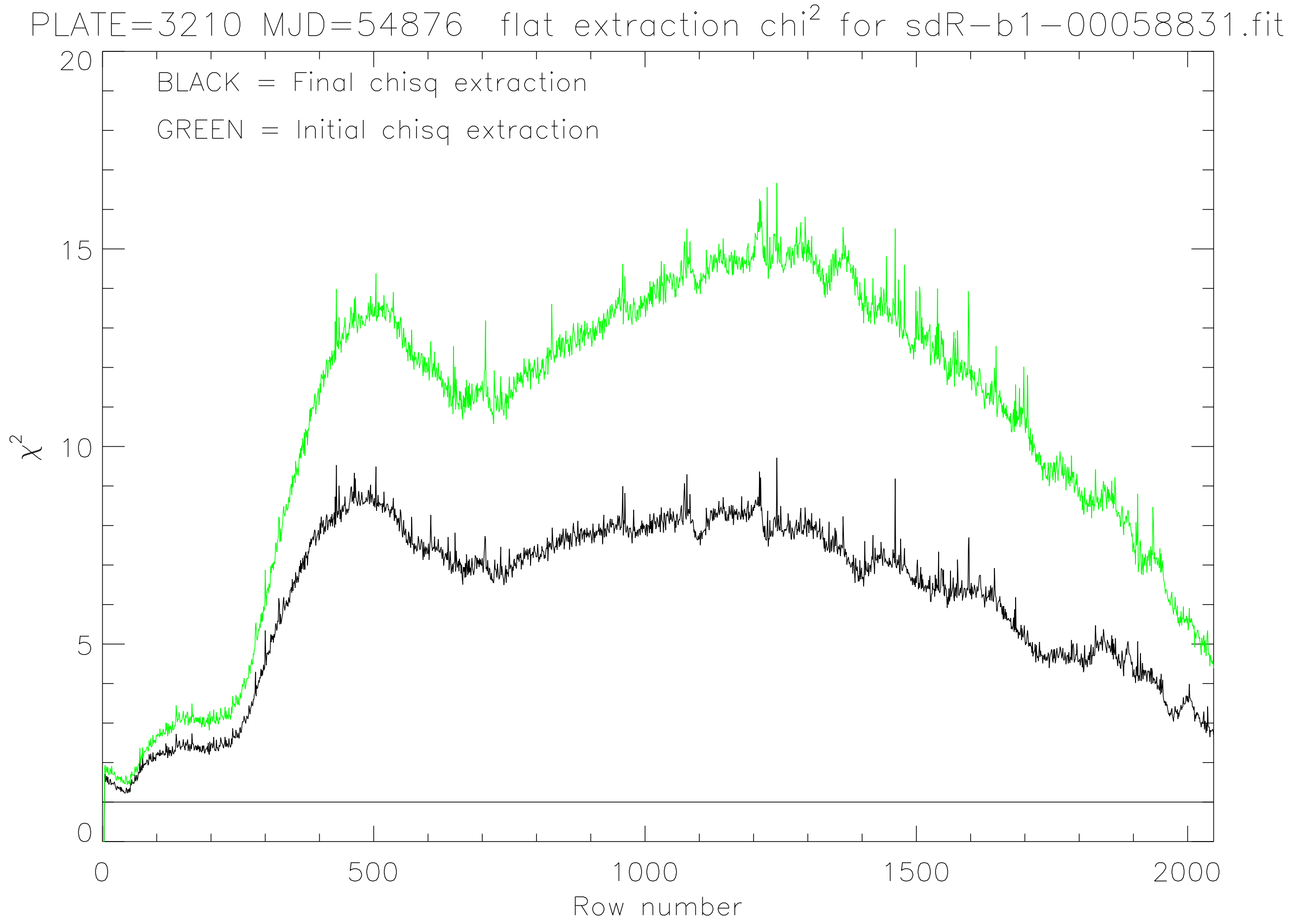
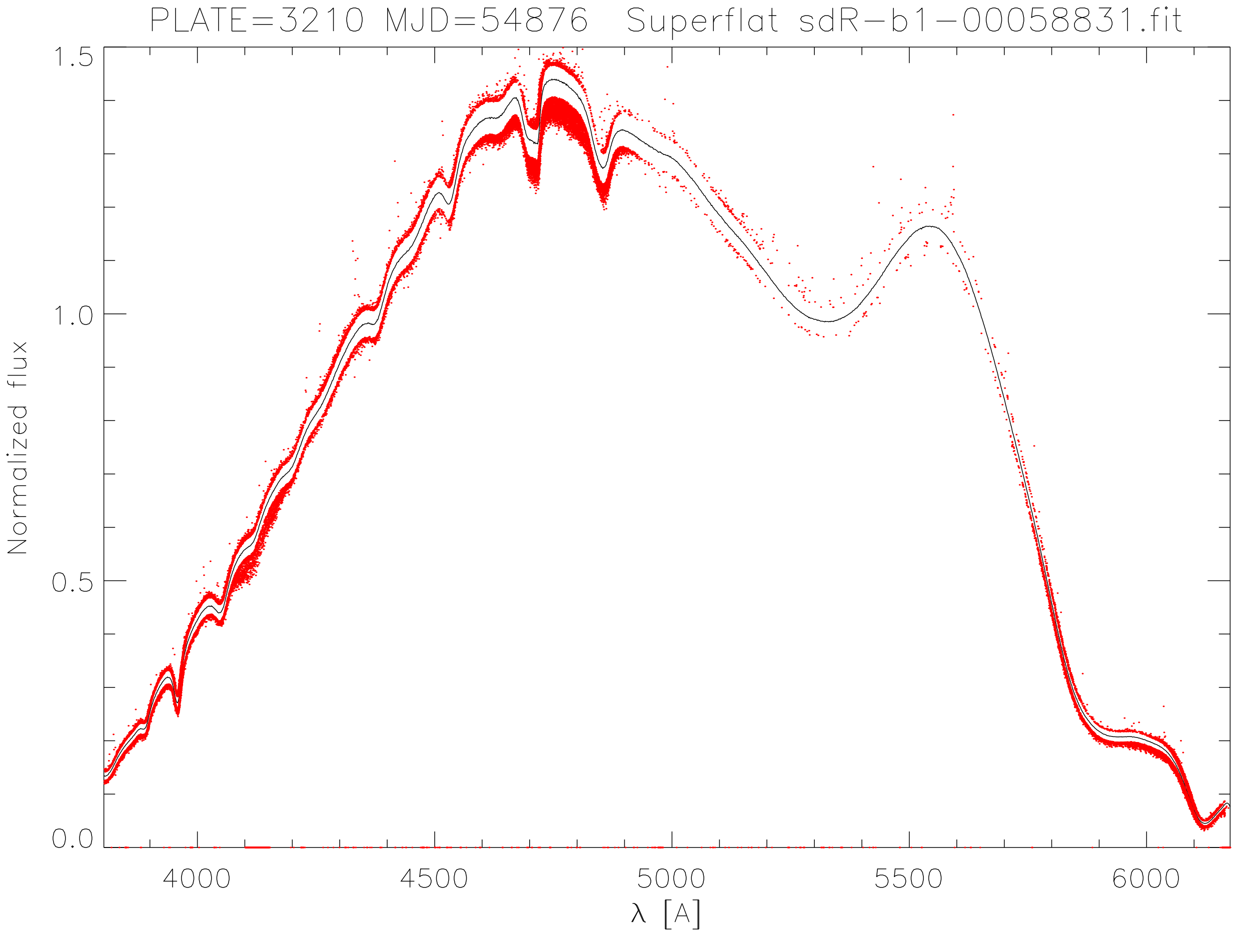

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

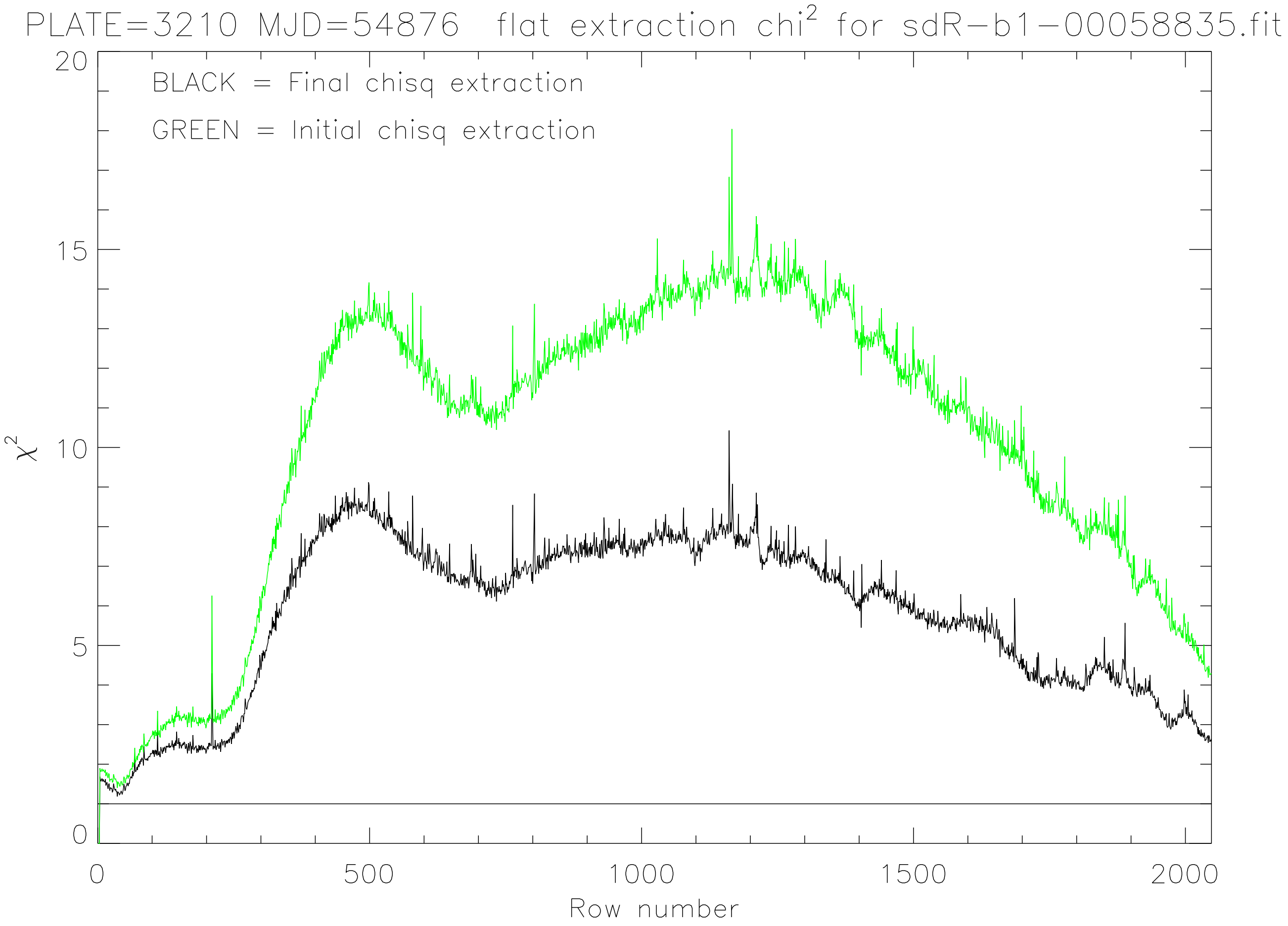

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
-2×10^{-5}
-4×10^{-5}
0
50
100
150
200
250
300
fiber


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

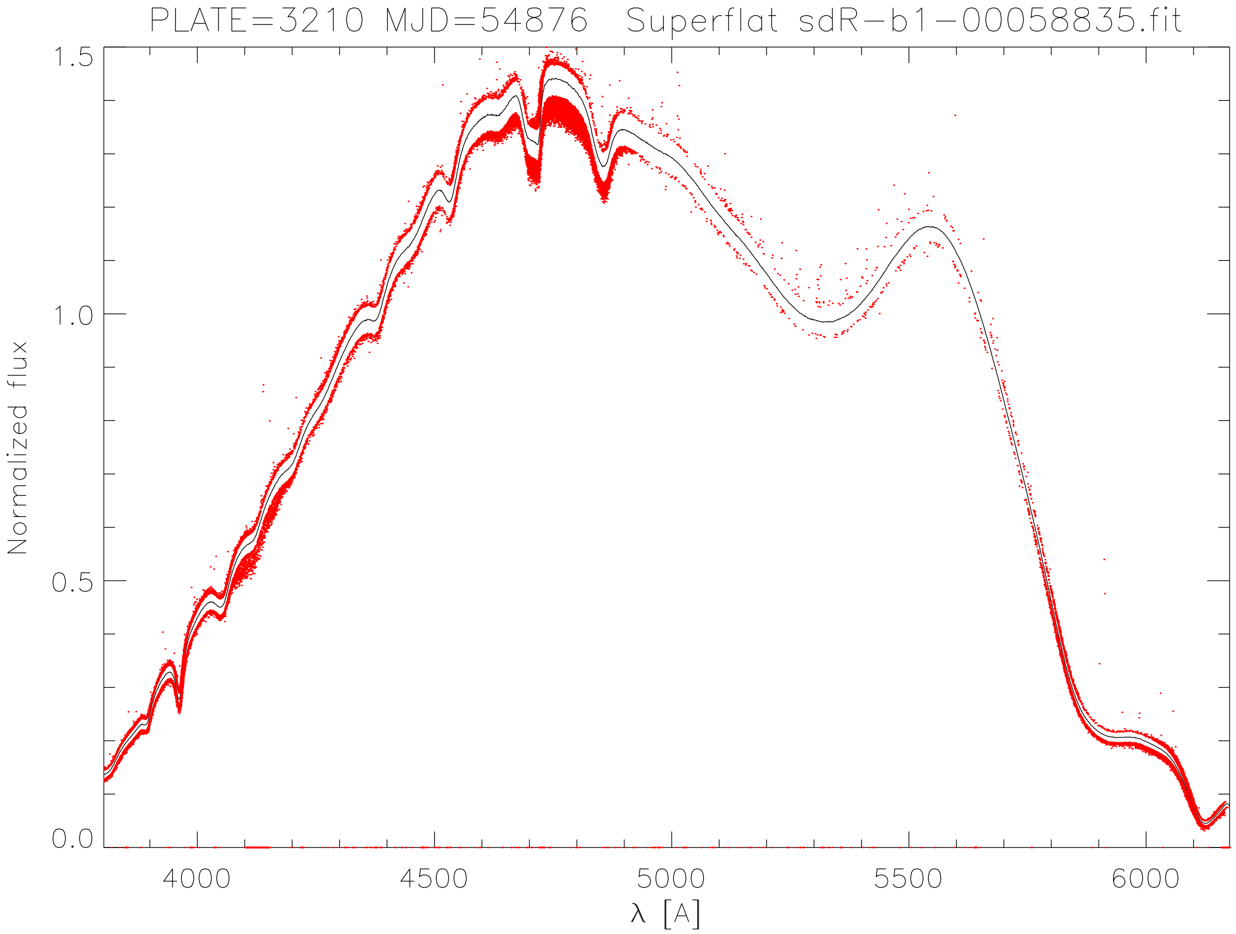

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

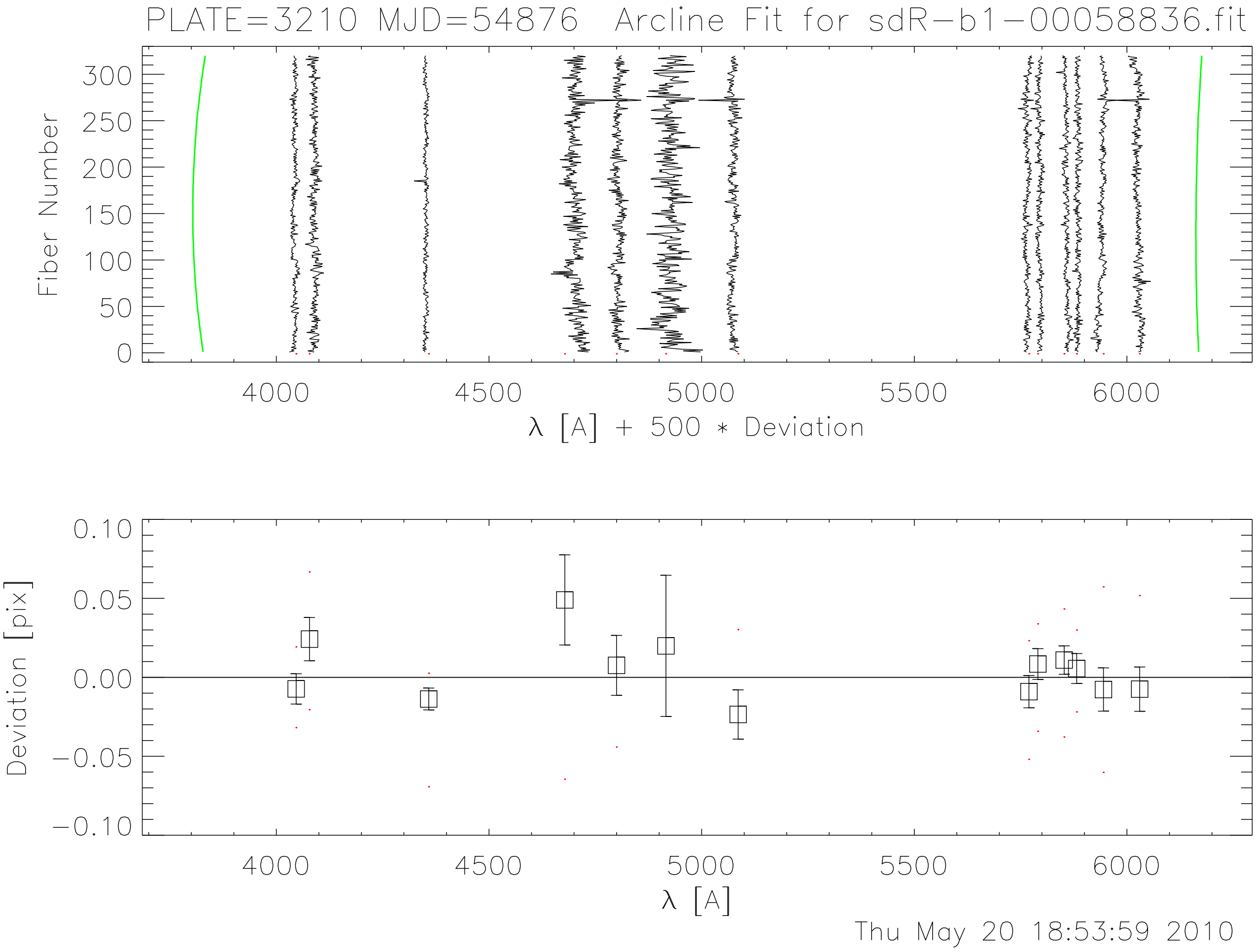
PLATE=3210 MJD=54876 flat extraction chi^2 for sdR-b1-00058831.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number


PLATE=3210 MJD=54876 Superflat sdR-b1-00058831.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

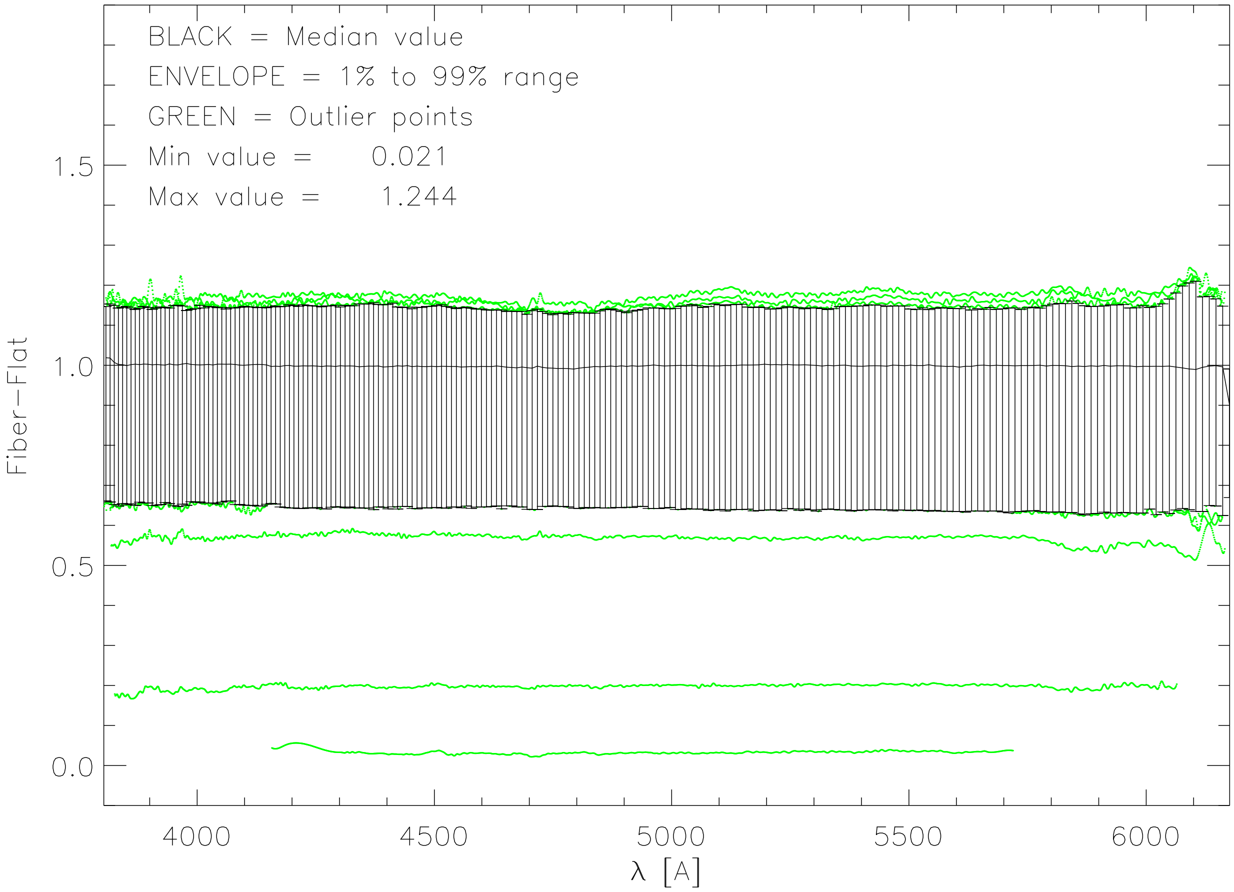


PLATE=3210 MJD=54876 flat extraction χ^2 for sdR-b1-00058835.fit


PLATE=3210 MJD=54876 Superflat sdR-b1-00058835.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000

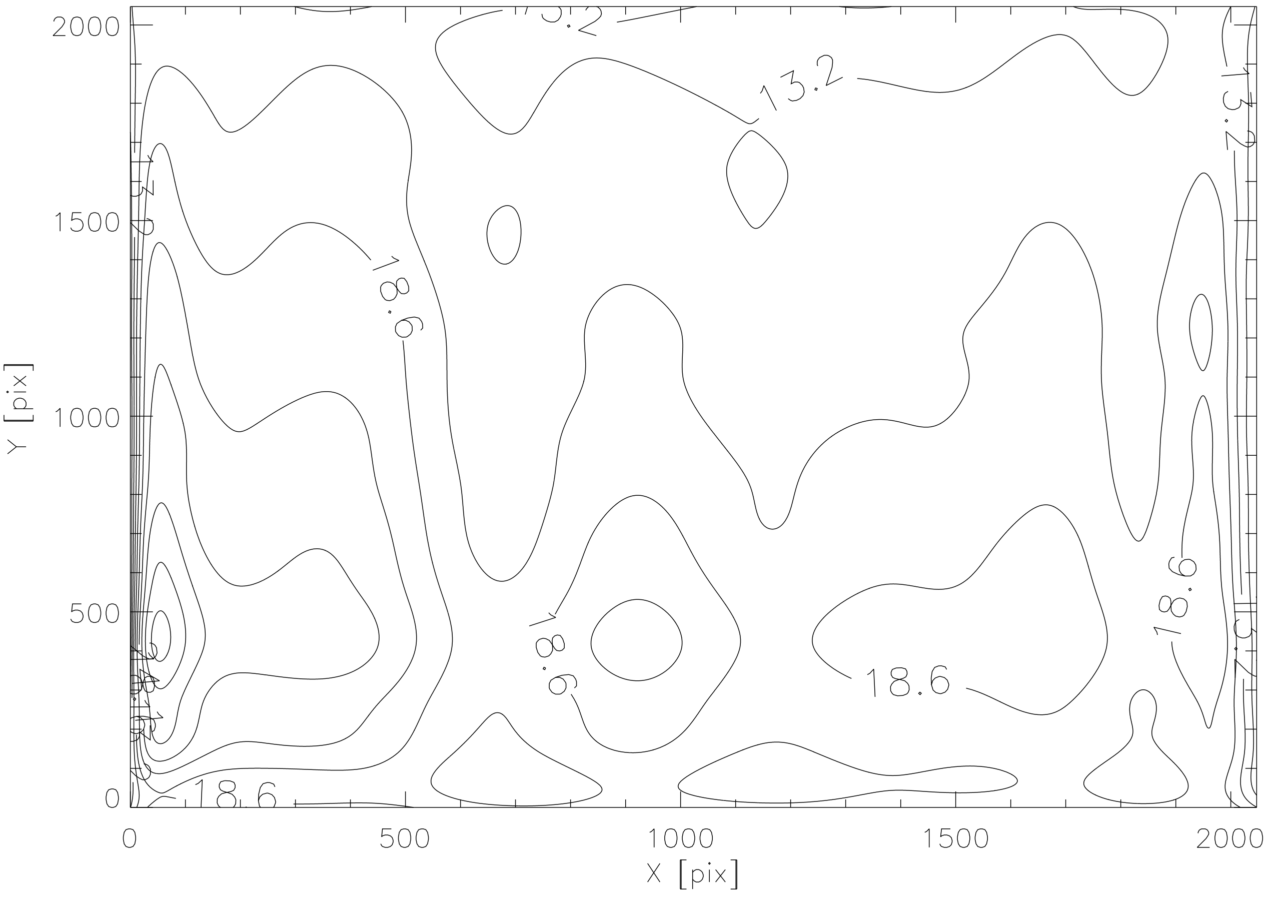

PLATE=3210 MJD=54876 Arcline Fit for sdR-b1-00058836.fit
Fiber Number
0
50
100
150
200
250
300
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Thu May 20 18:53:59 2010

PLATE=3210 MJD=54876 Fiber−Flats for sdR−b1−00058835.fit

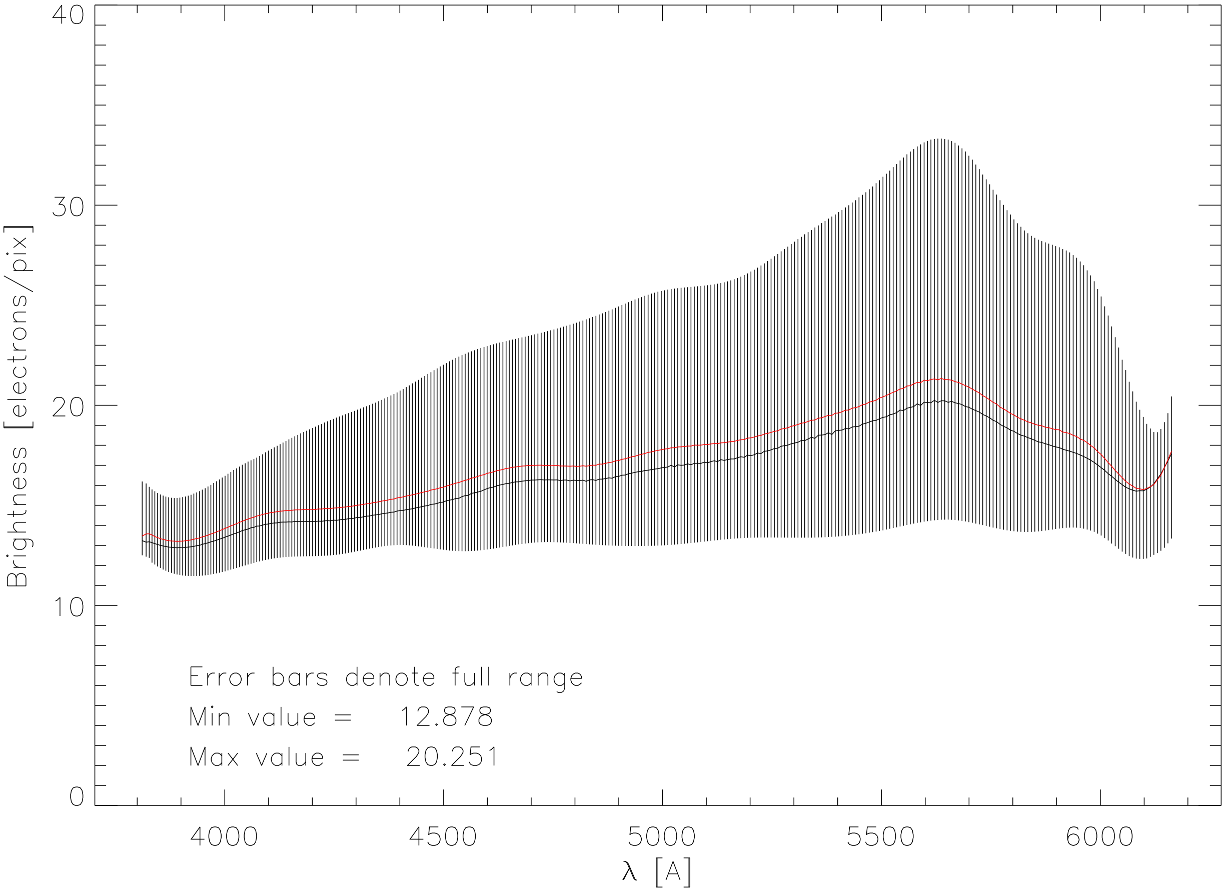


Thu May 20 18:54:07 2010

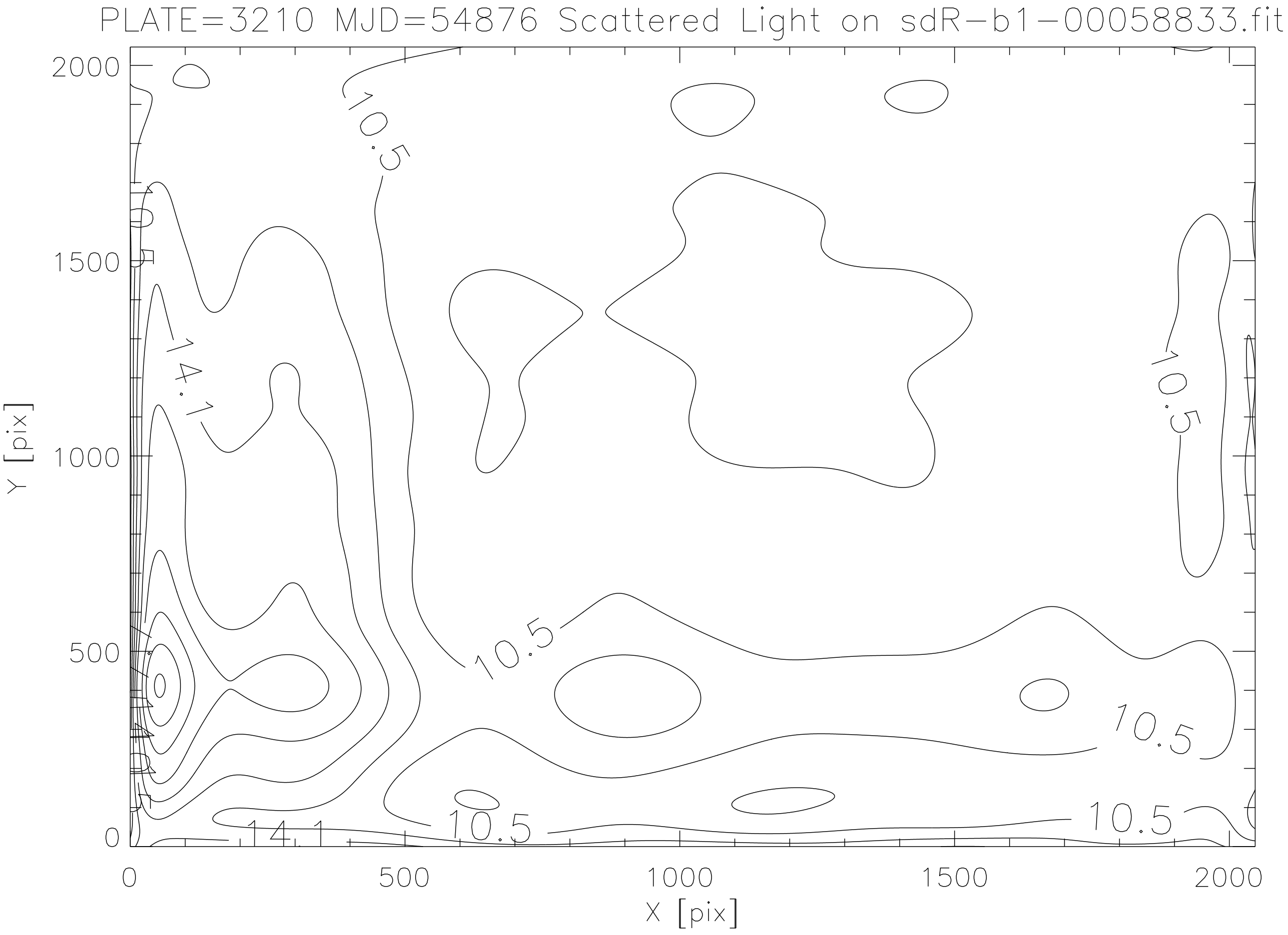
PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b1-00058833.f



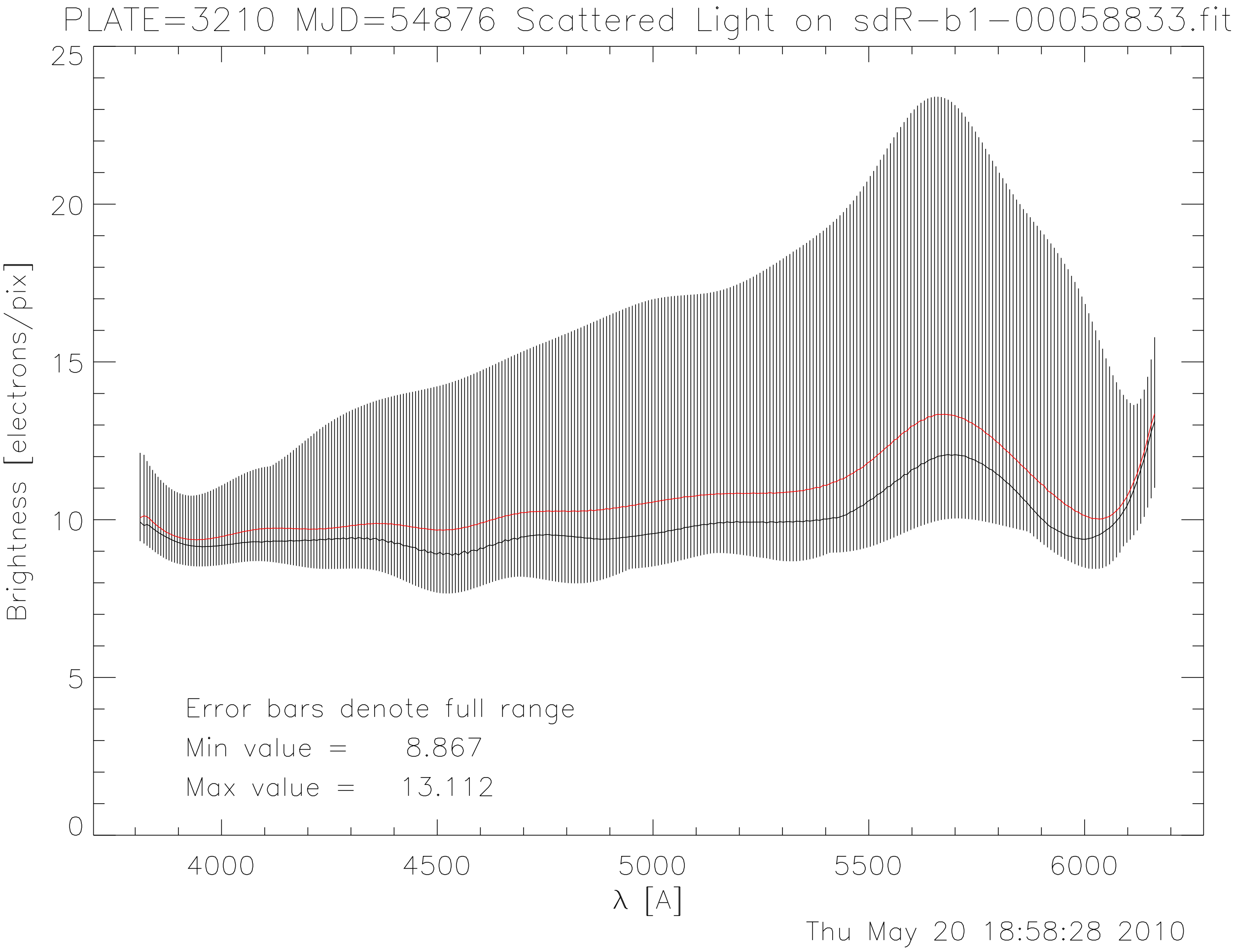
PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b1-00058833.f

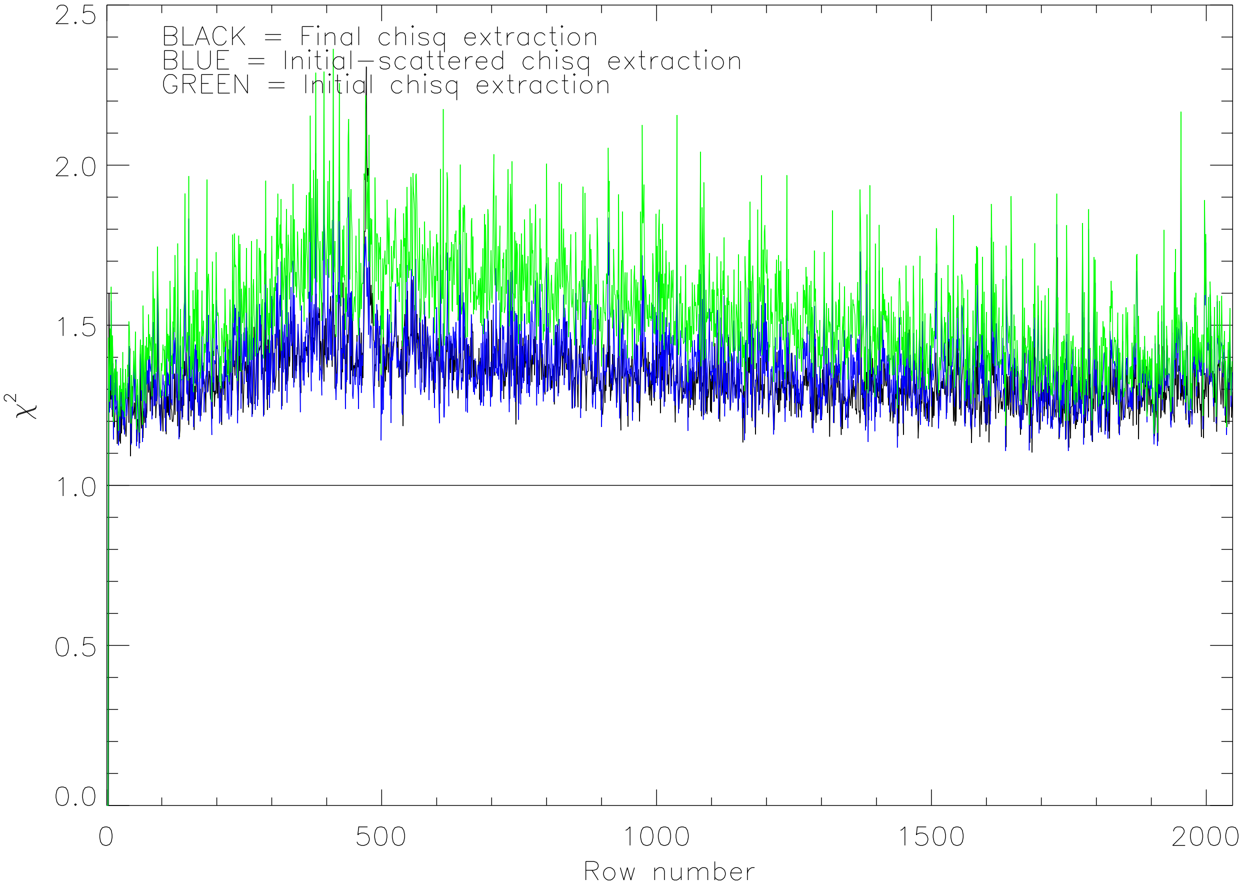


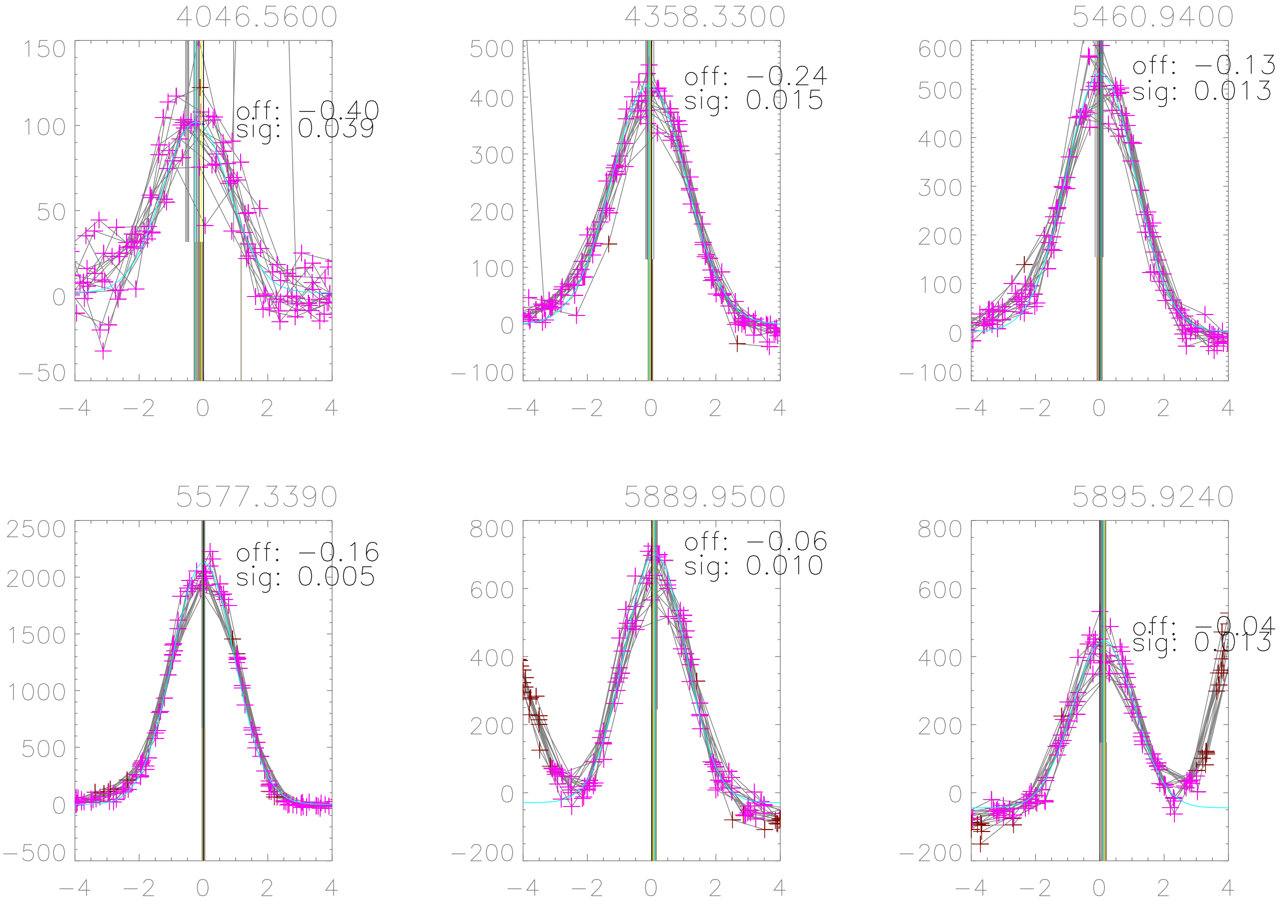
Thu May 20 18:55:12 2010

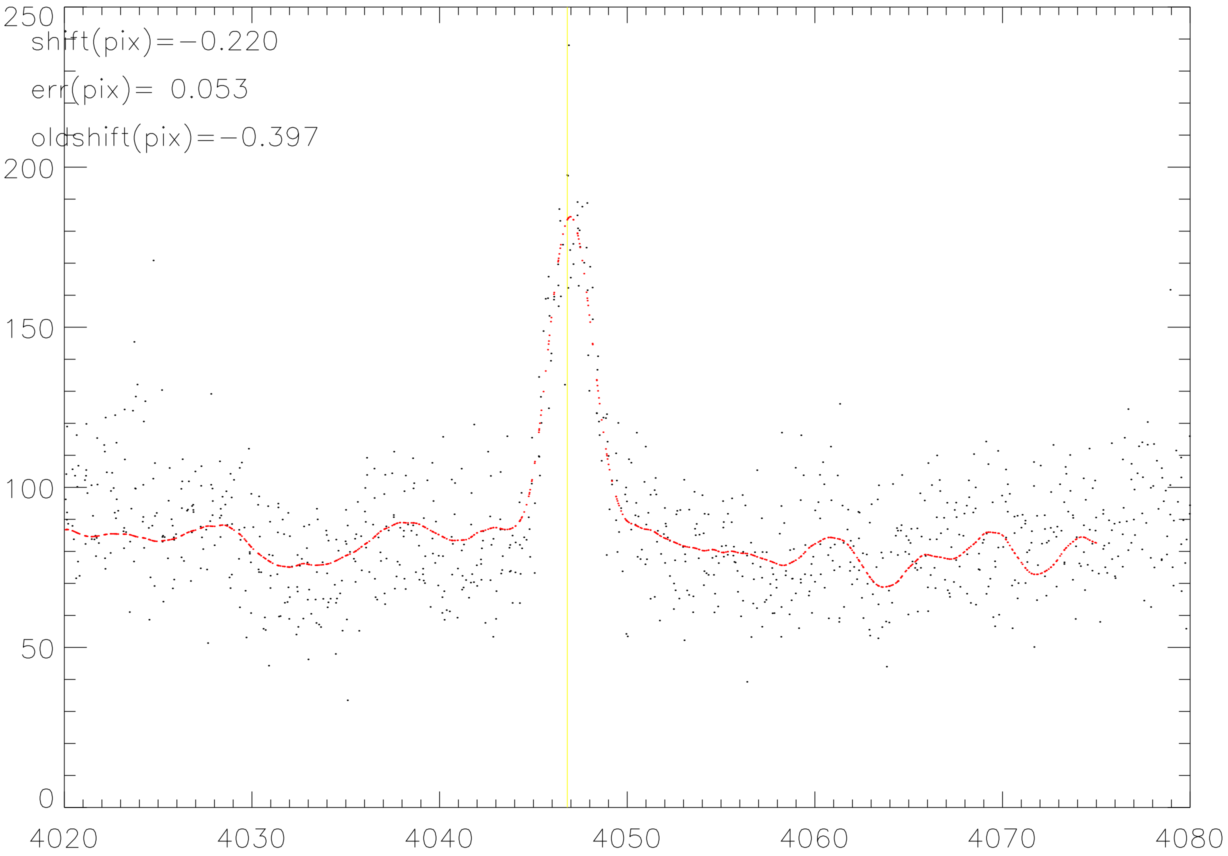


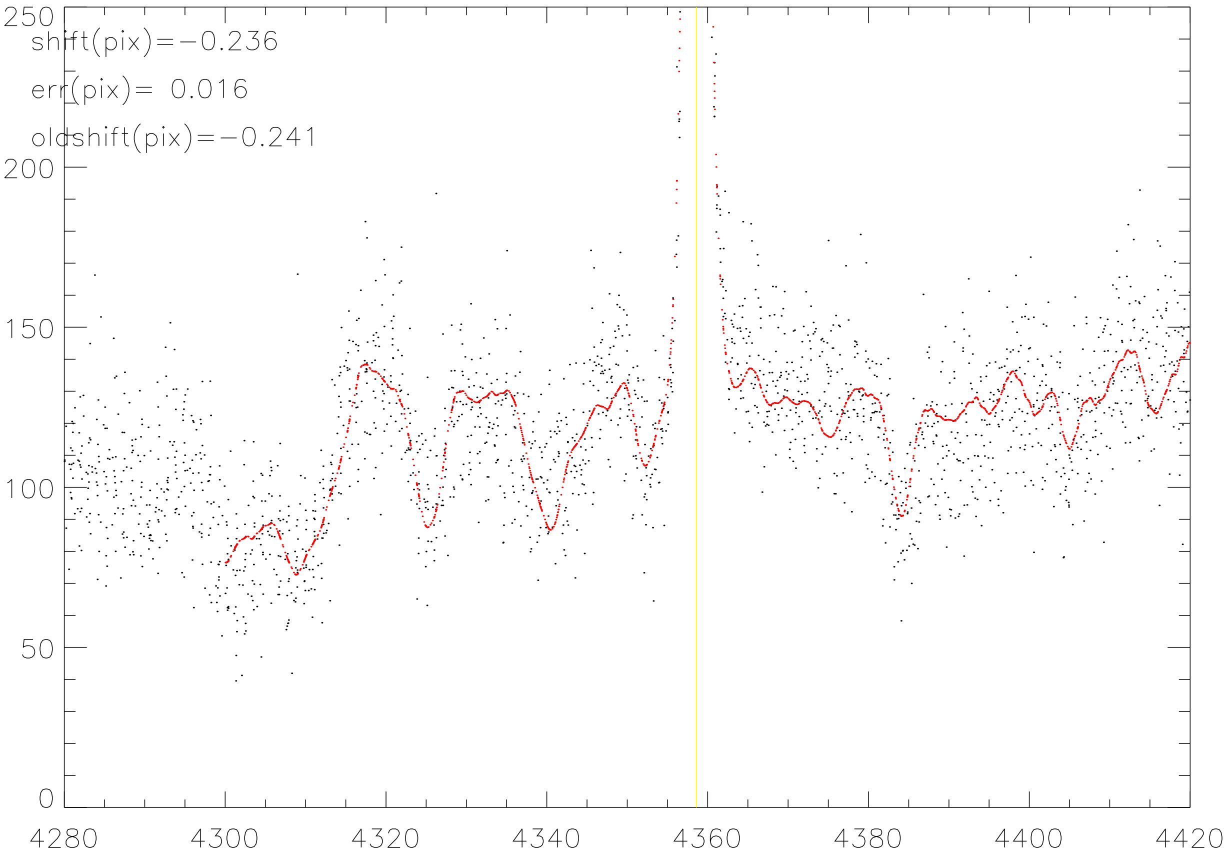
PLATE=3210 MJD=54876 Scattered Light on sdR-b1-00058833.fit

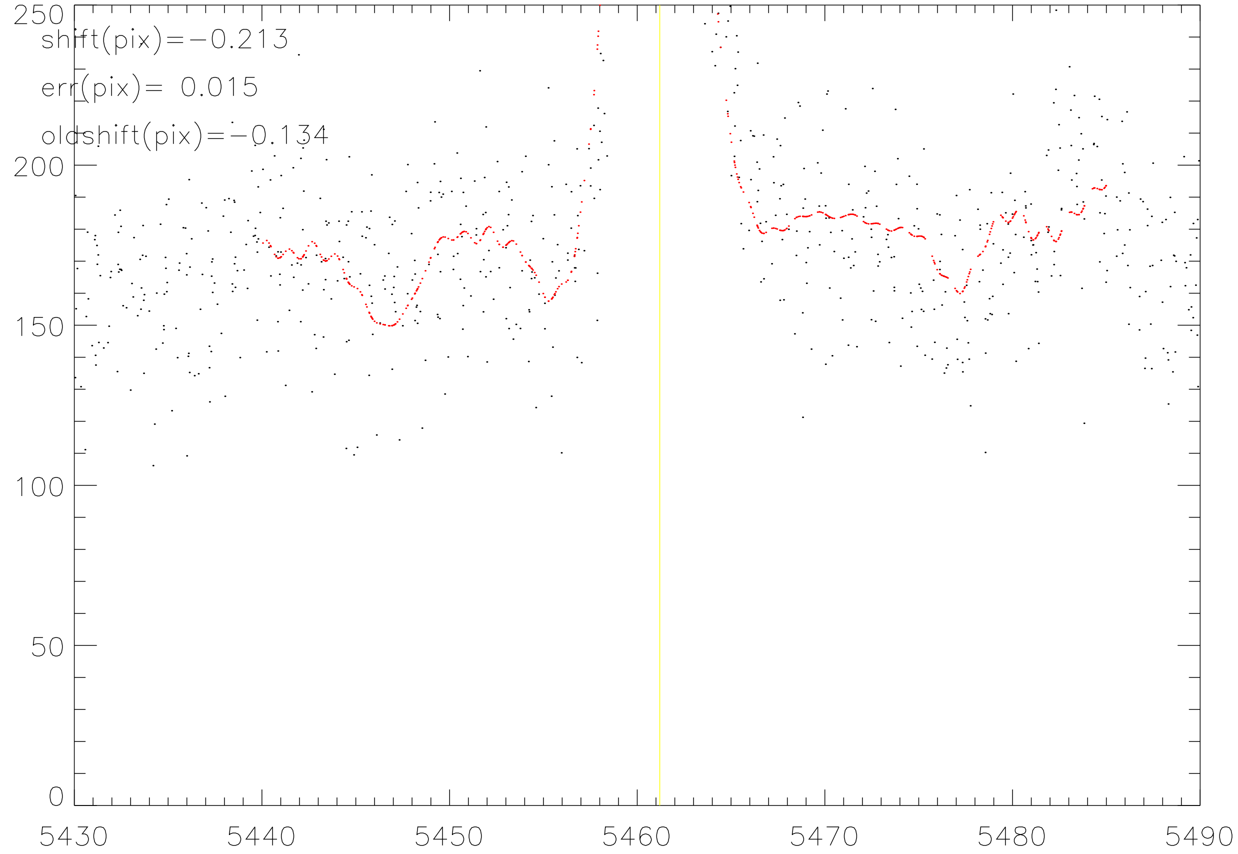

PLATE=3210 MJD=54876 Scattered Light on sdR-b1-00058833.fit
Brightness [electrons/pix]
0
5
10
15
20
25
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.867
Max value = 13.112
Thu May 20 18:58:28 2010

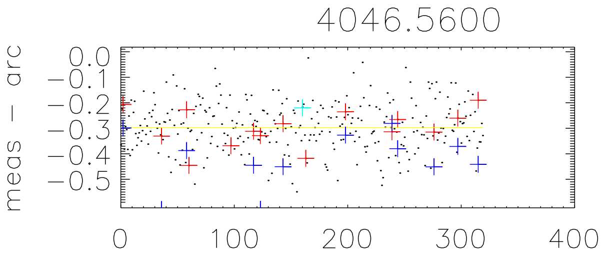

PLATE=3210 MJD=54876 Extraction chi^2 for sdR-b1-00058833.fit


4046.5600
off: −0.40
sig: 0.039
4358.3300
off: −0.24
sig: 0.015
5460.9400
off: −0.13
sig: 0.013
5577.3390
off: −0.16
sig: 0.005
5889.9500
off: −0.06
sig: 0.010
5895.9240
off: −0.04
sig: 0.013
150
100
50
0
−50
500
400
300
200
100
0
−100
600
500
400
300
200
100
0
−100
2500
2000
1500
1000
500
0
−500
800
600
400
200
0
−200
800
600
400
200
0
−200
−4
−2
0
2
4

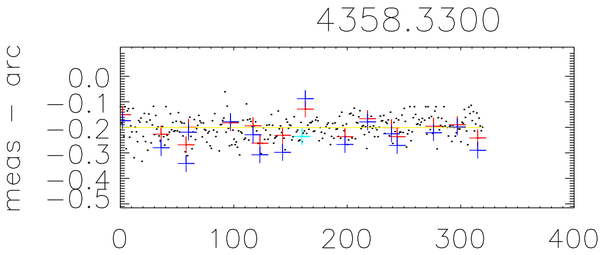

shift(pix)=−0.220
err(pix)= 0.053
oldshift(pix)=−0.397
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080


shift(pix)=−0.236
err(pix)= 0.016
oldshift(pix)=−0.241
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

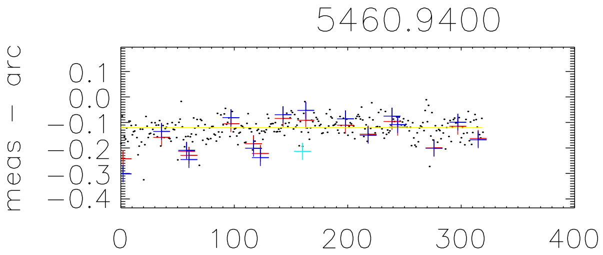

shift(pix)=−0.213
err(pix)= 0.015
oldshift(pix)=−0.134
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490



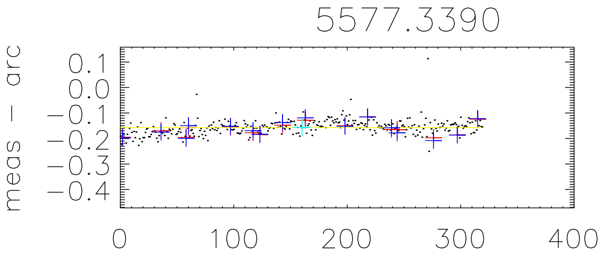
4046.5600



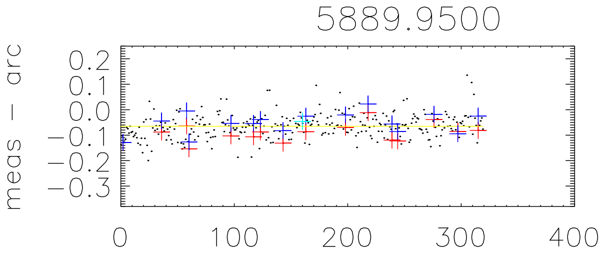
4358.3300



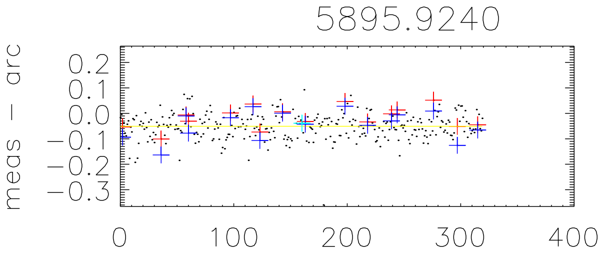
5460.9400



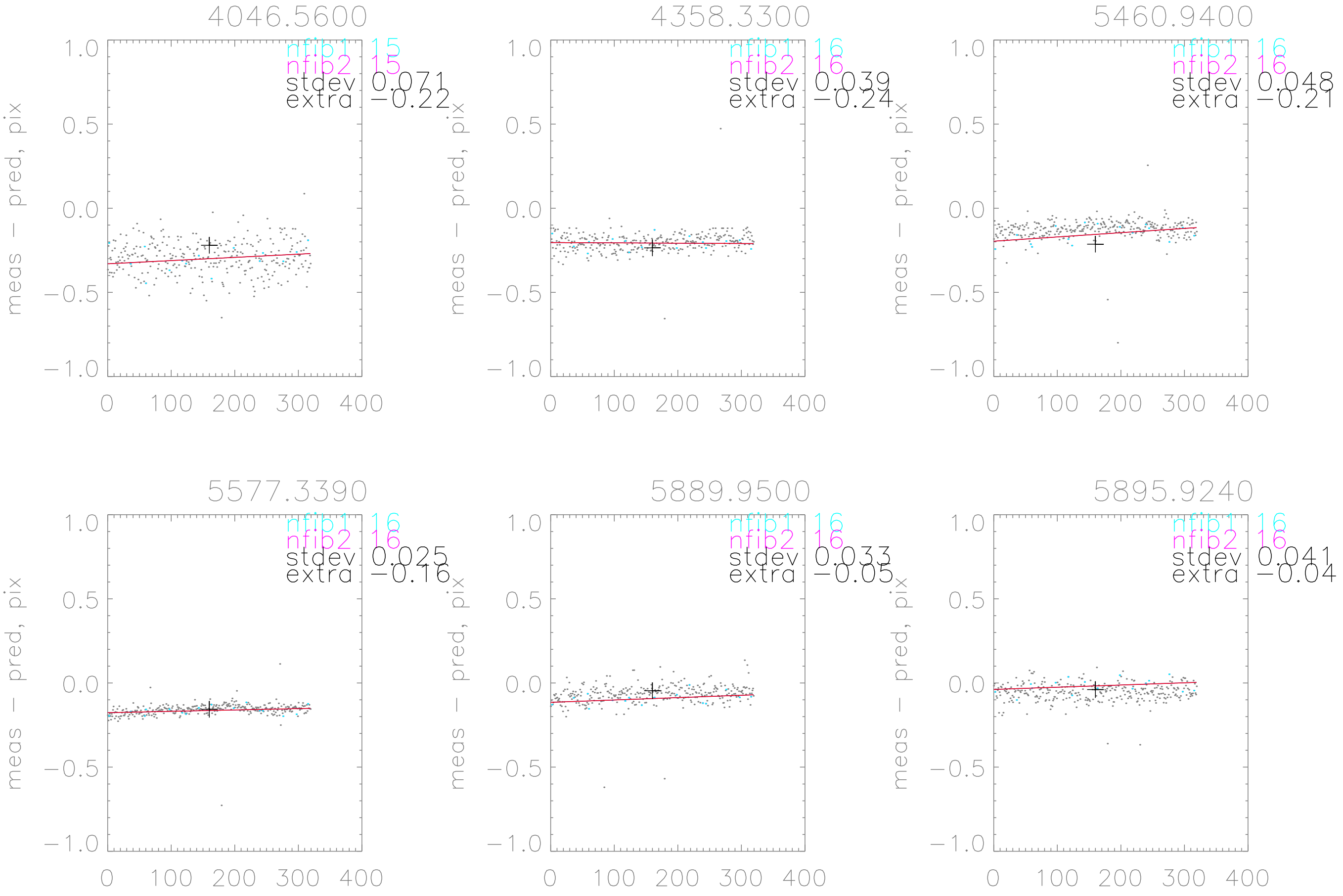
5577.3390

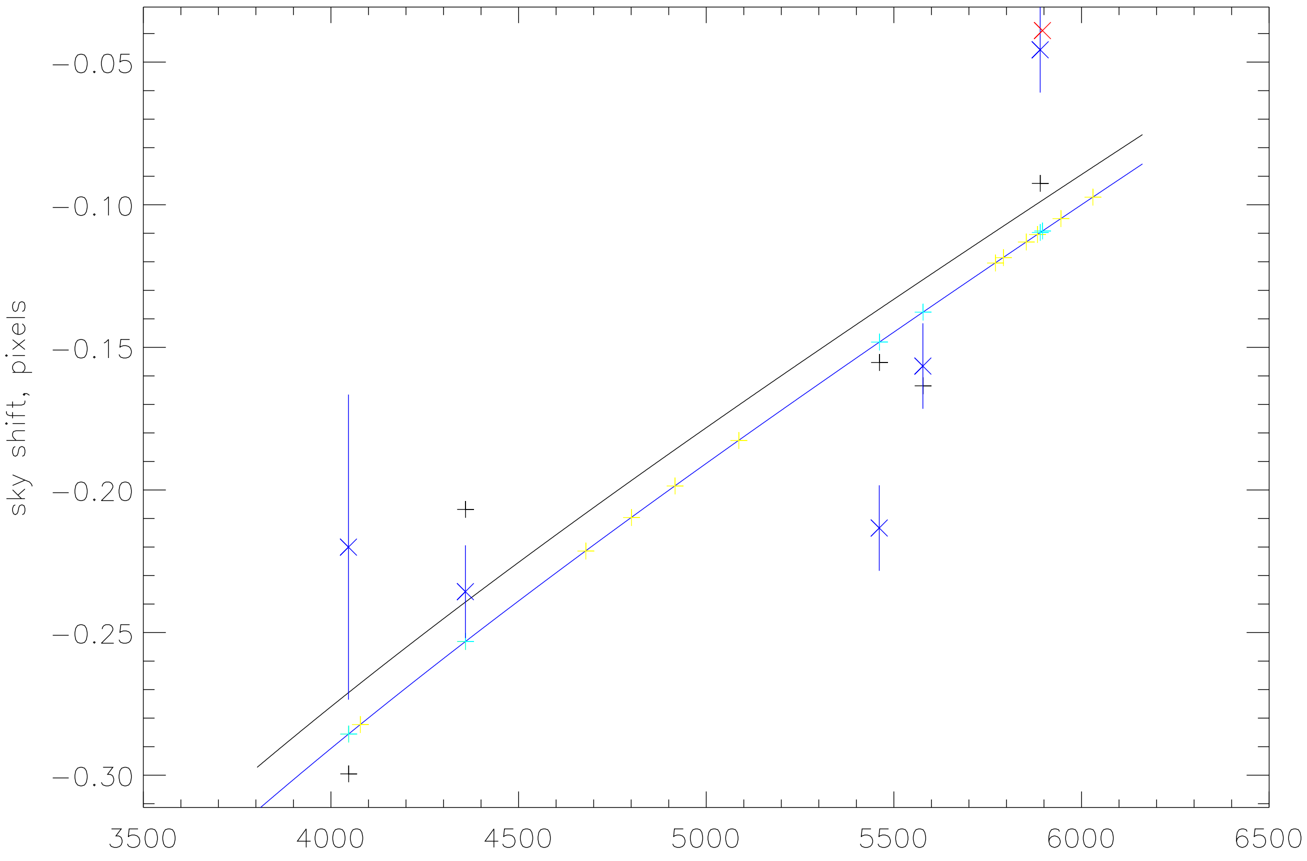


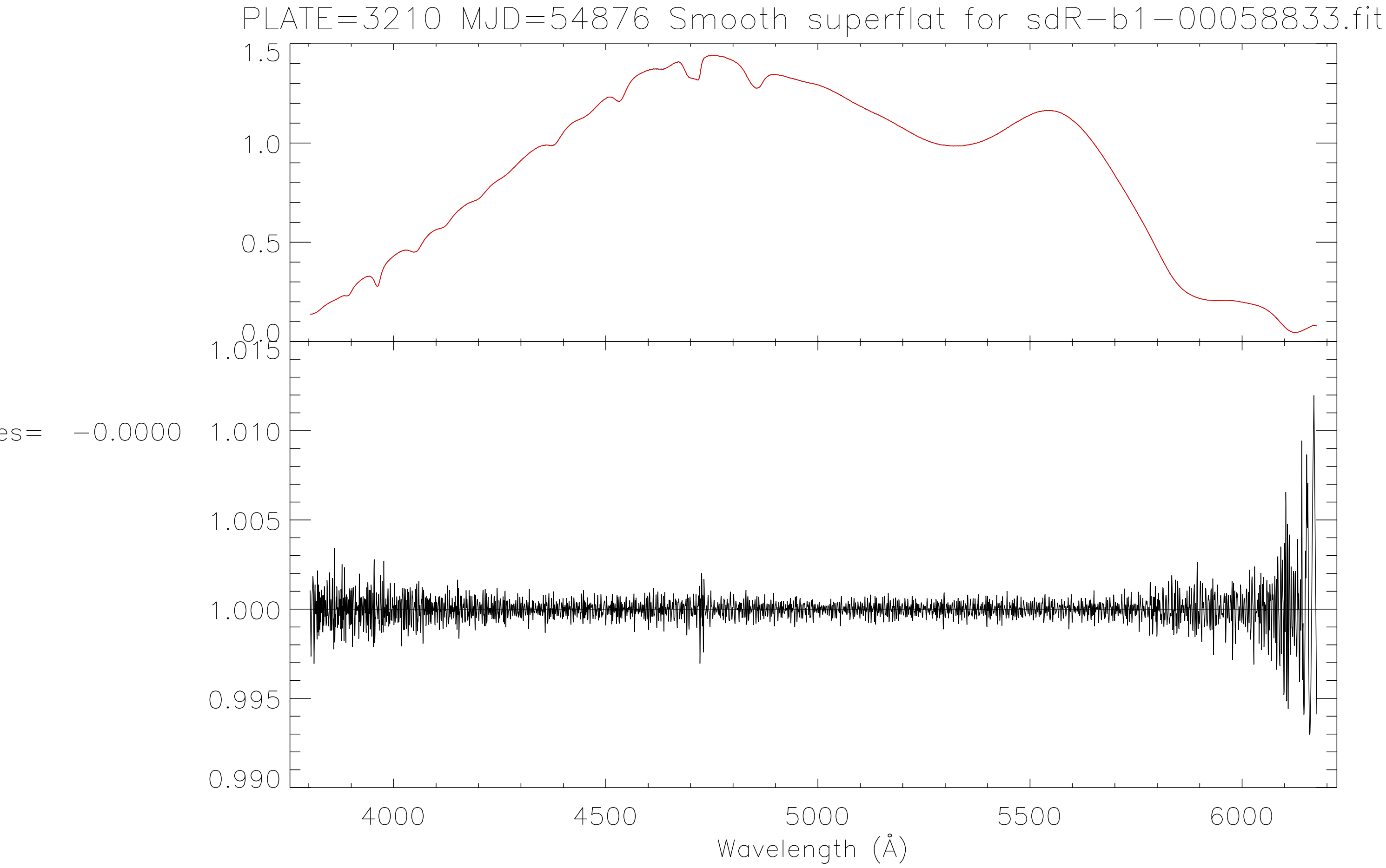
5889.9500

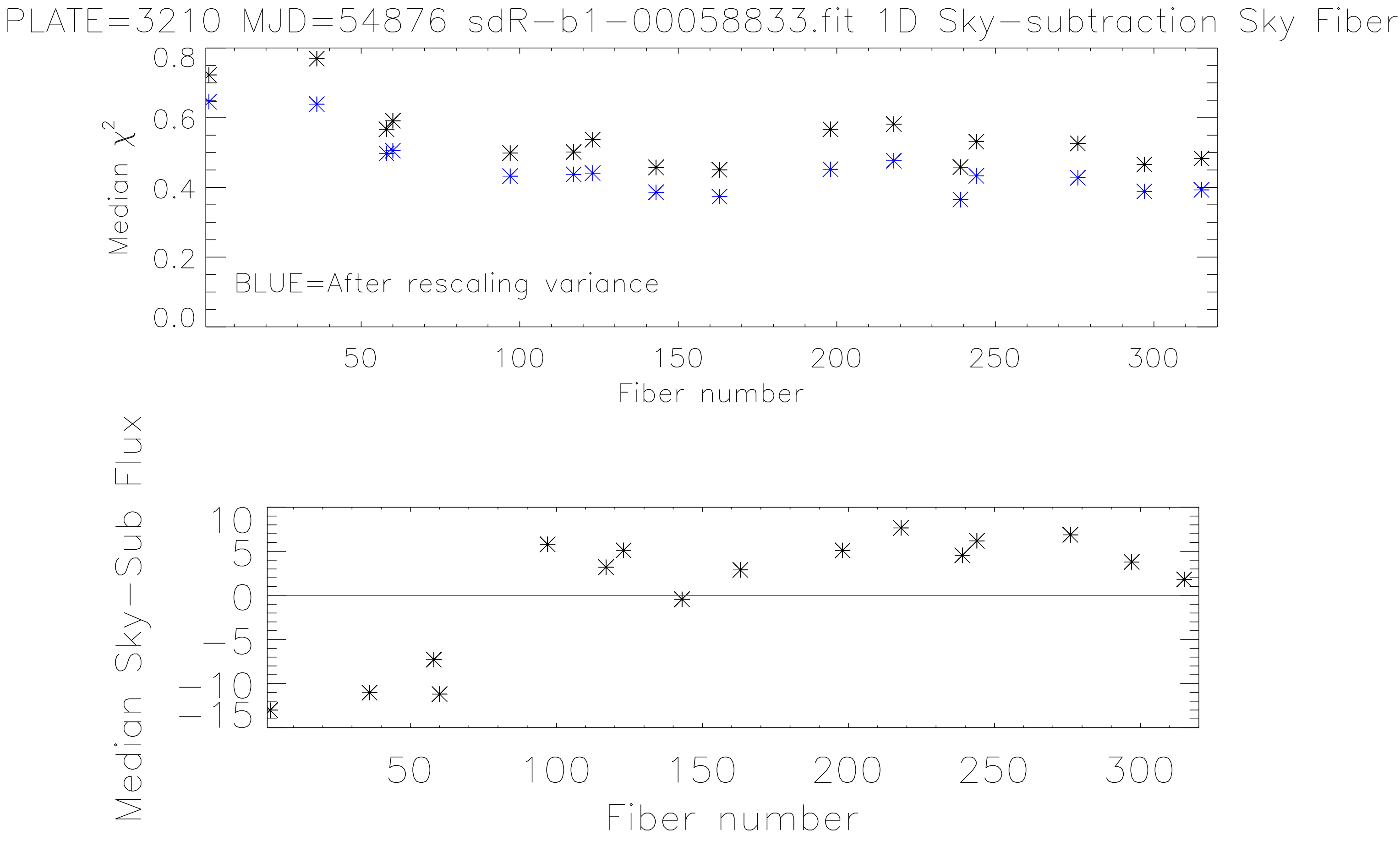


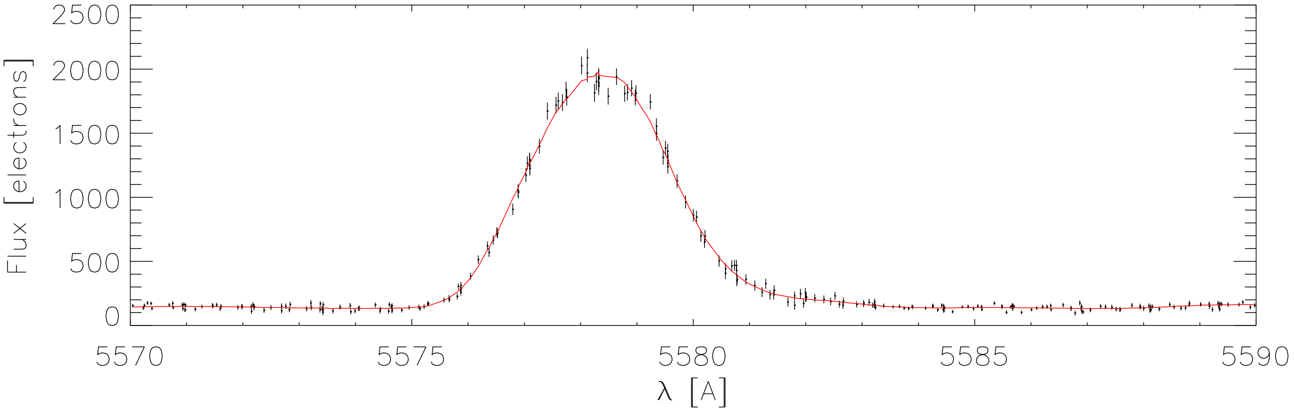
5895.9240

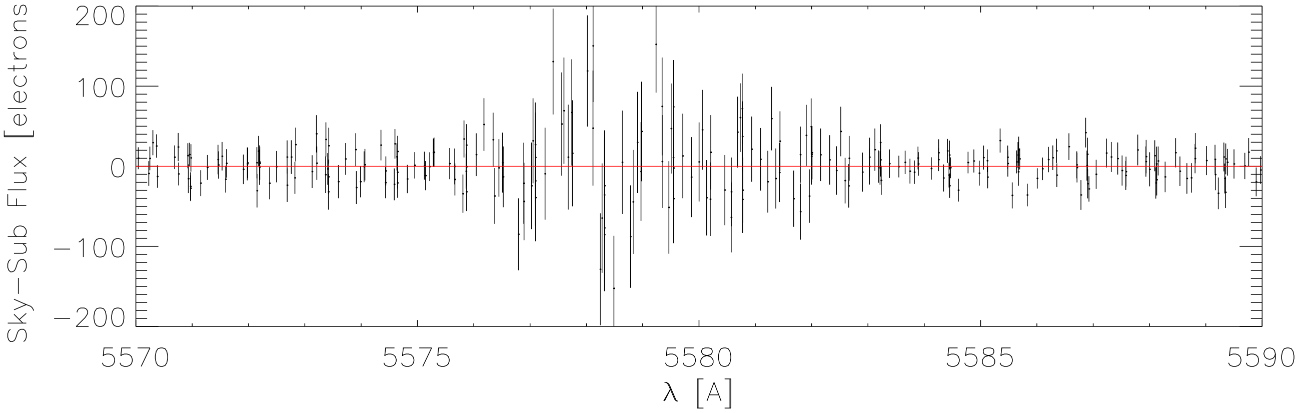

4046.5600
nfib1 15
nfib2 15
stdev 0.071
extra −0.22
4358.3300
nfib1 16
nfib2 16
stdev 0.039
extra −0.24
5460.9400
nfib1 16
nfib2 16
stdev 0.048
extra −0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.025
extra −0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra −0.05
5895.9240
nfib1 16
nfib2 16
stdev 0.041
extra −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

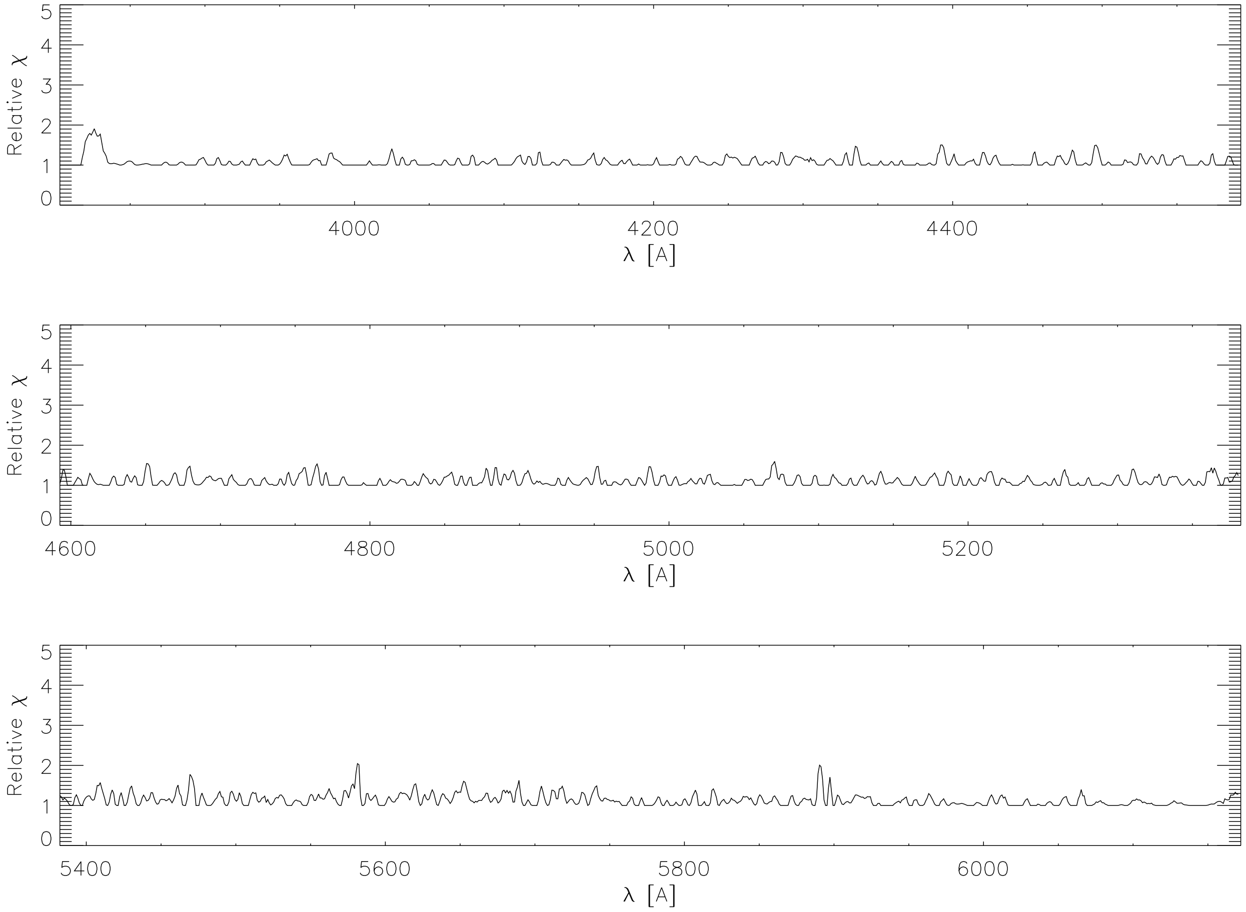

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500


PLATE=3210 MJD=54876 Smooth superflat for sdR-b1-00058833.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3210 MJD=54876 sdR-b1-00058833.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-15
-10
-5
0
5
10
50
100
150
200
250
300
Fiber number

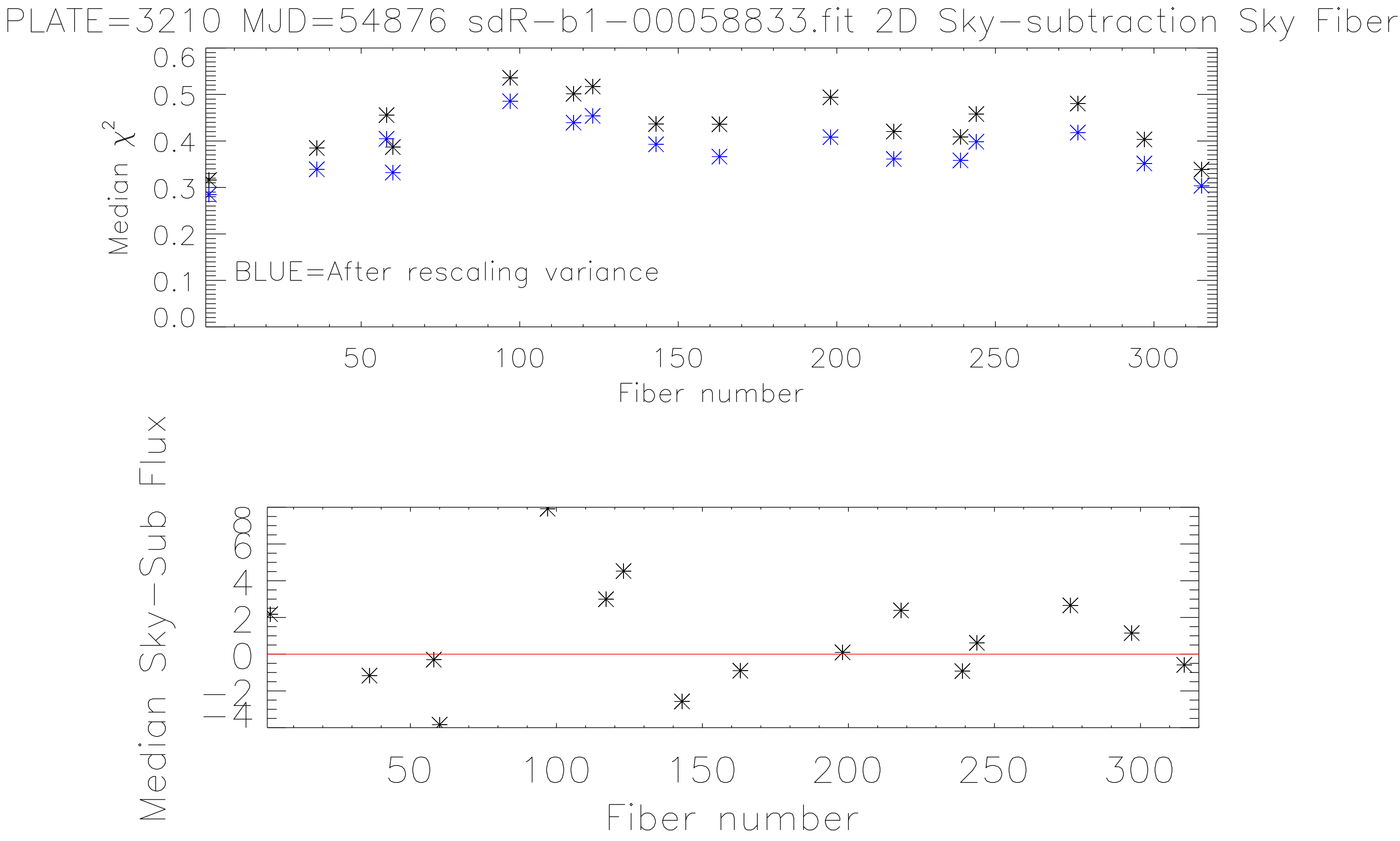

PLATE=3210 MJD=54876 sdR-b1-00058833.fit 1D Sky-subtraction Sky Fibers

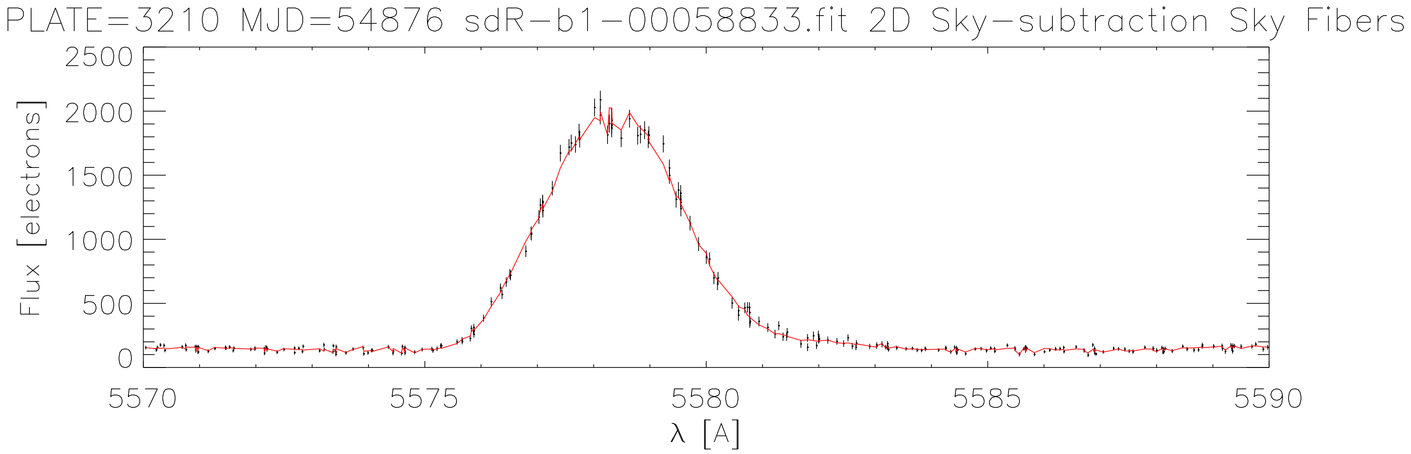

PLATE=3210 MJD=54876 sdR-b1-00058833.fit 1D Sky-subtraction Sky-subtracted Sky F



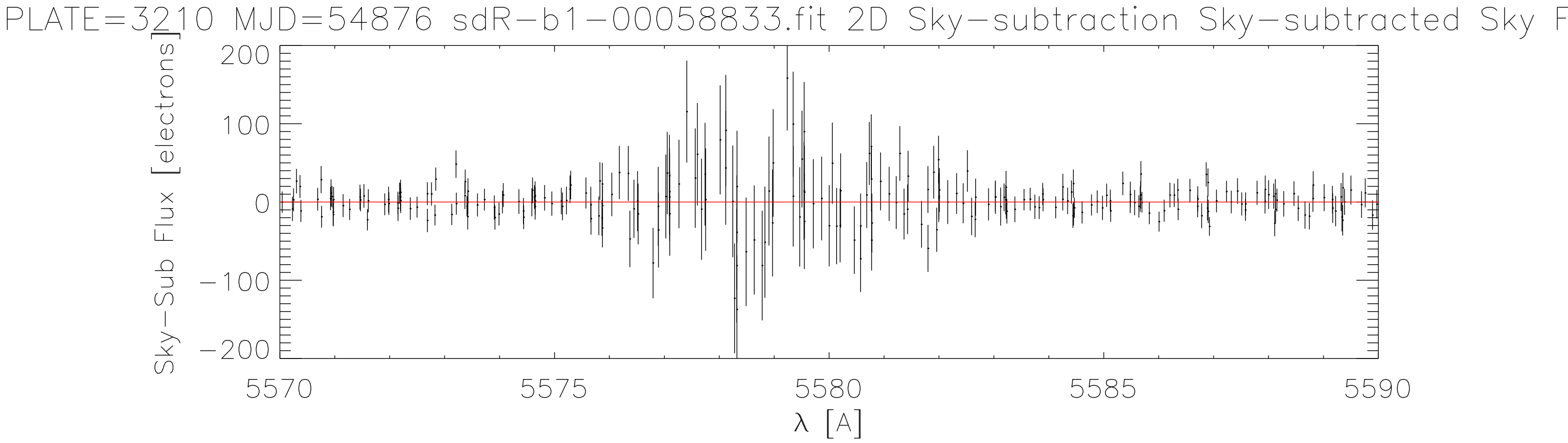
Number of sky fibers = 16

PLATE=3210 MJD=54876 sdR-b1-00058833.fit 1D Sky-subtraction Rescaled Errors


PLATE=3210 MJD=54876 sdR-b1-00058833.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
8
6
4
2
0
-2
-4
50
100
150
200
250
300
Fiber number



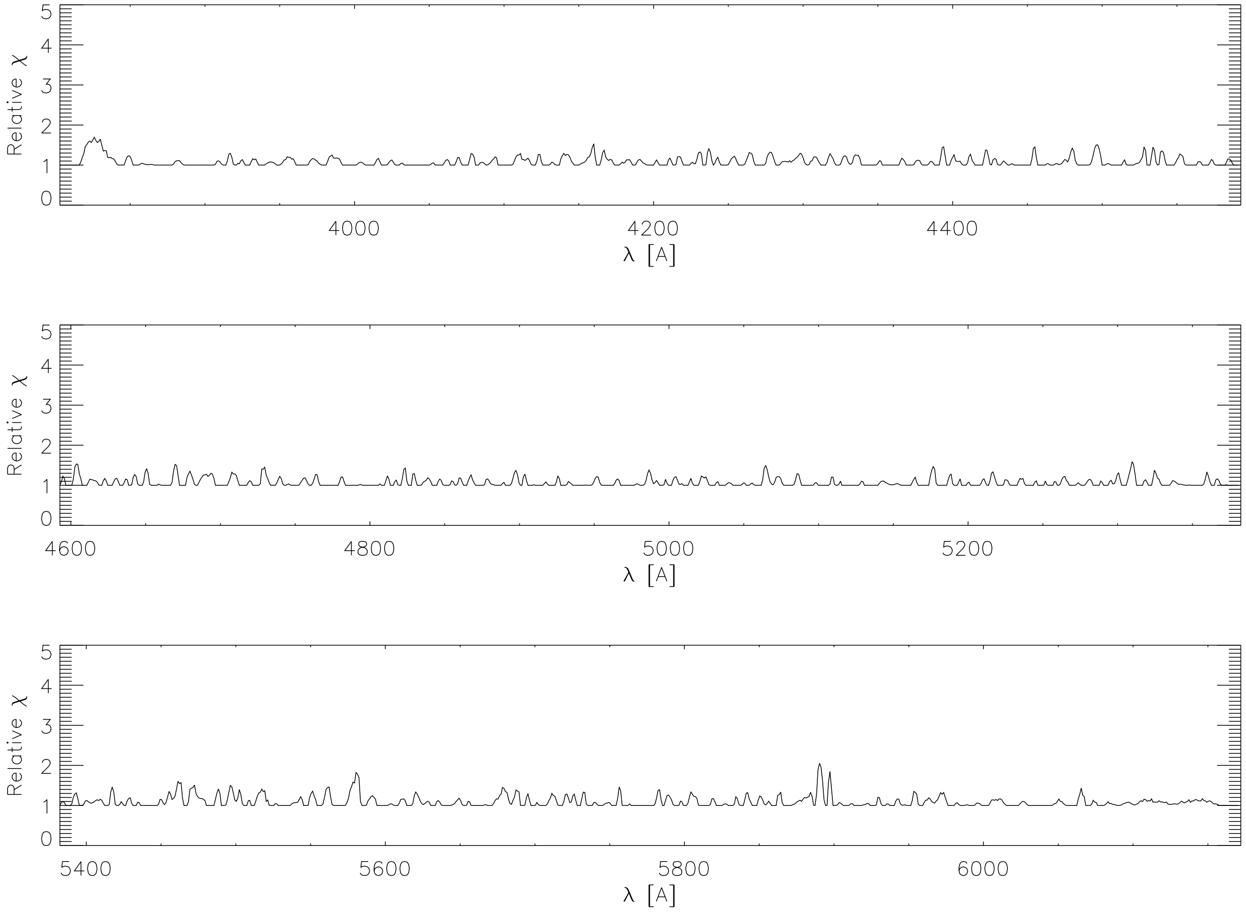
PLATE=3210 MJD=54876 sdR-b1-00058833.fit 2D Sky-subtraction Sky Fibers

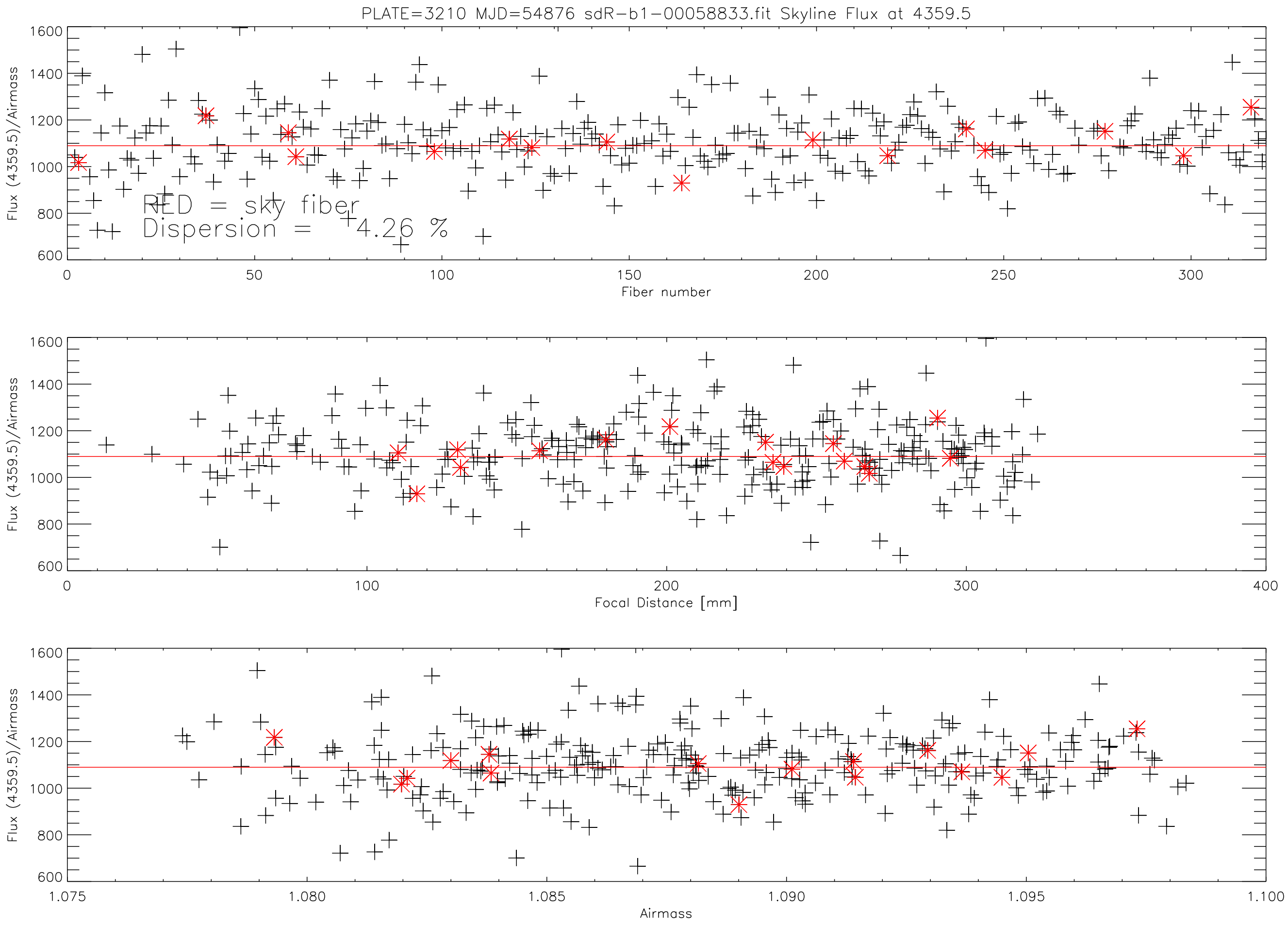


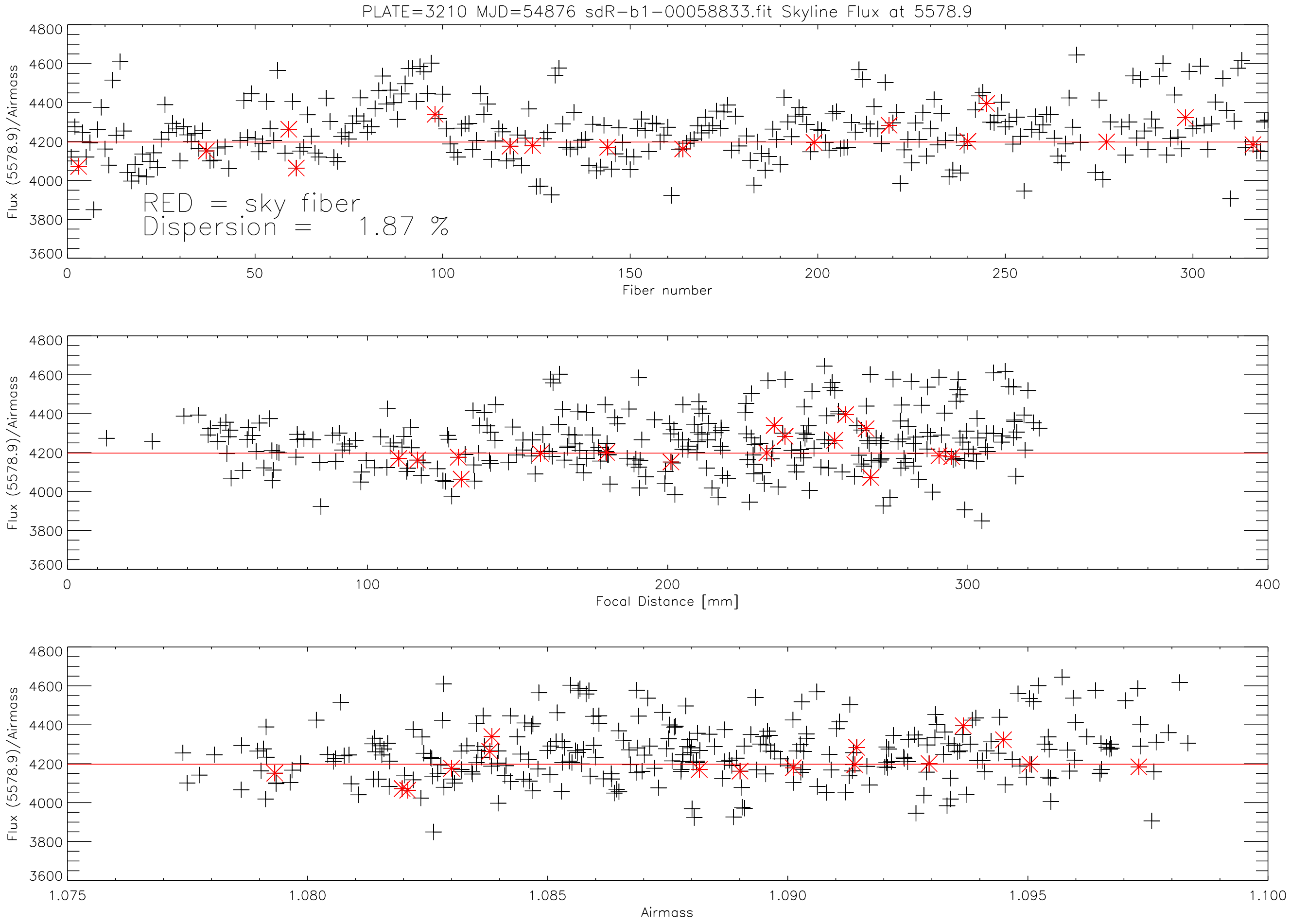
PLATE=3210 MJD=54876 sdR-b1-00058833.fit 2D Sky-subtraction Sky-subtracted Sky F

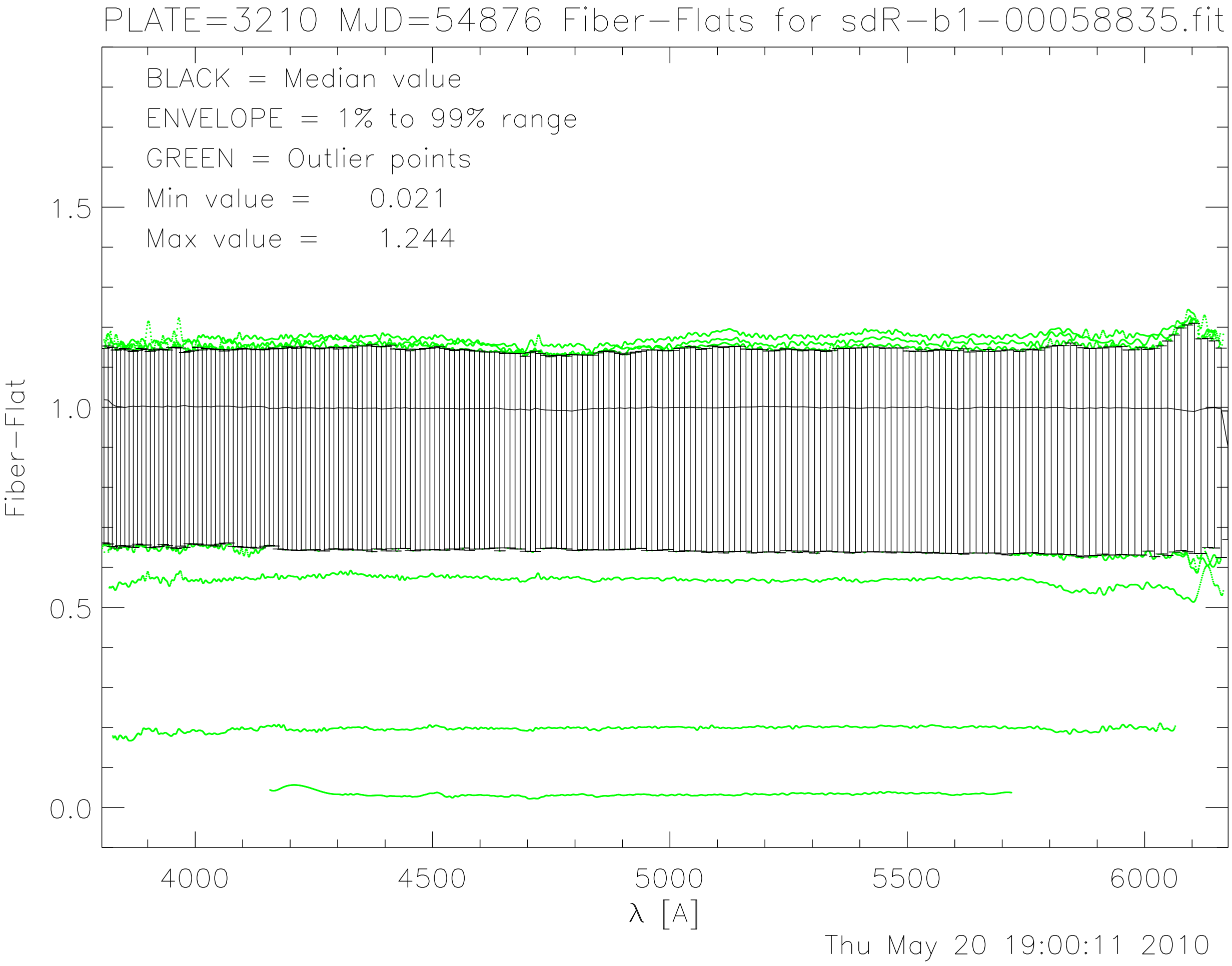
Number of sky fibers = 16

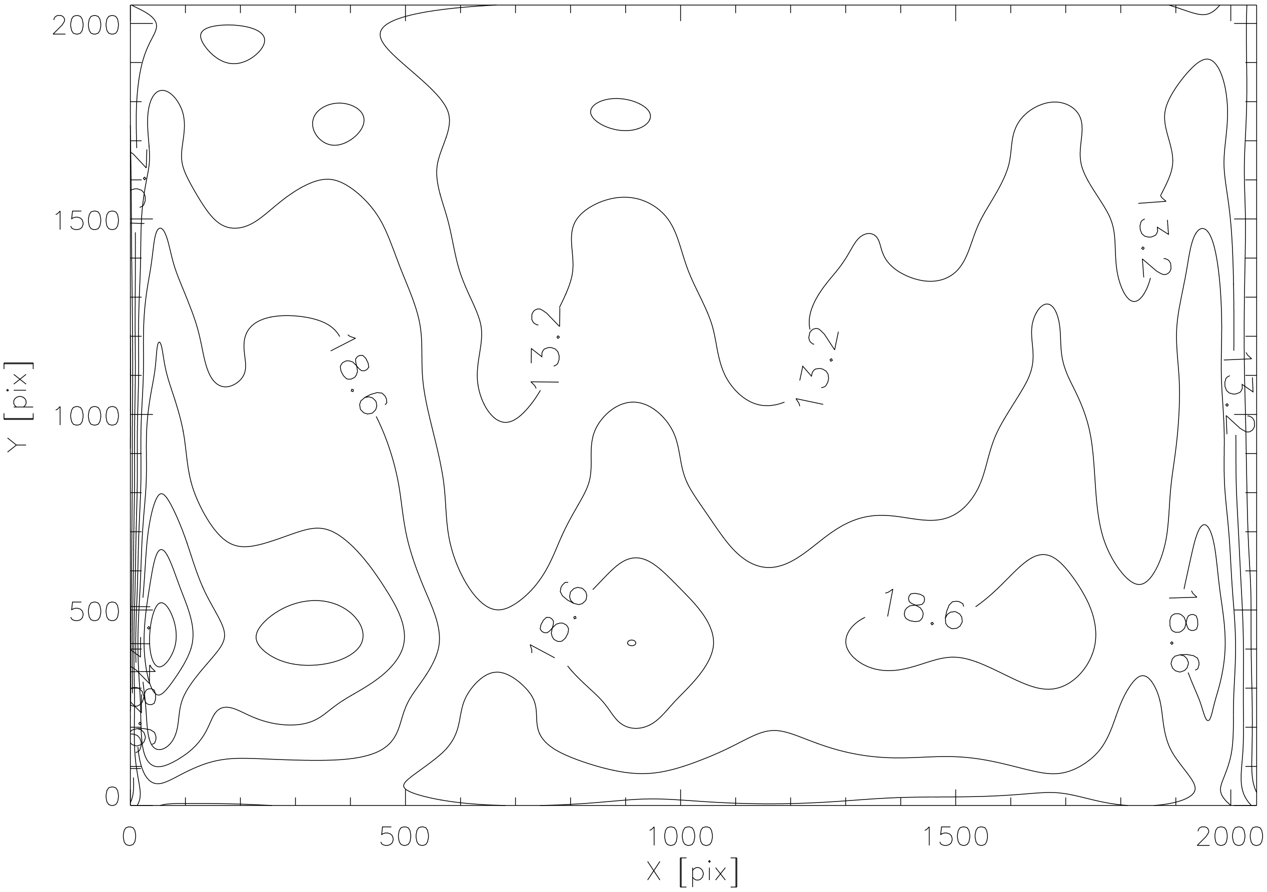
PLATE=3210 MJD=54876 sdR-b1-00058833.fit 2D Sky-subtraction Rescaled Errors



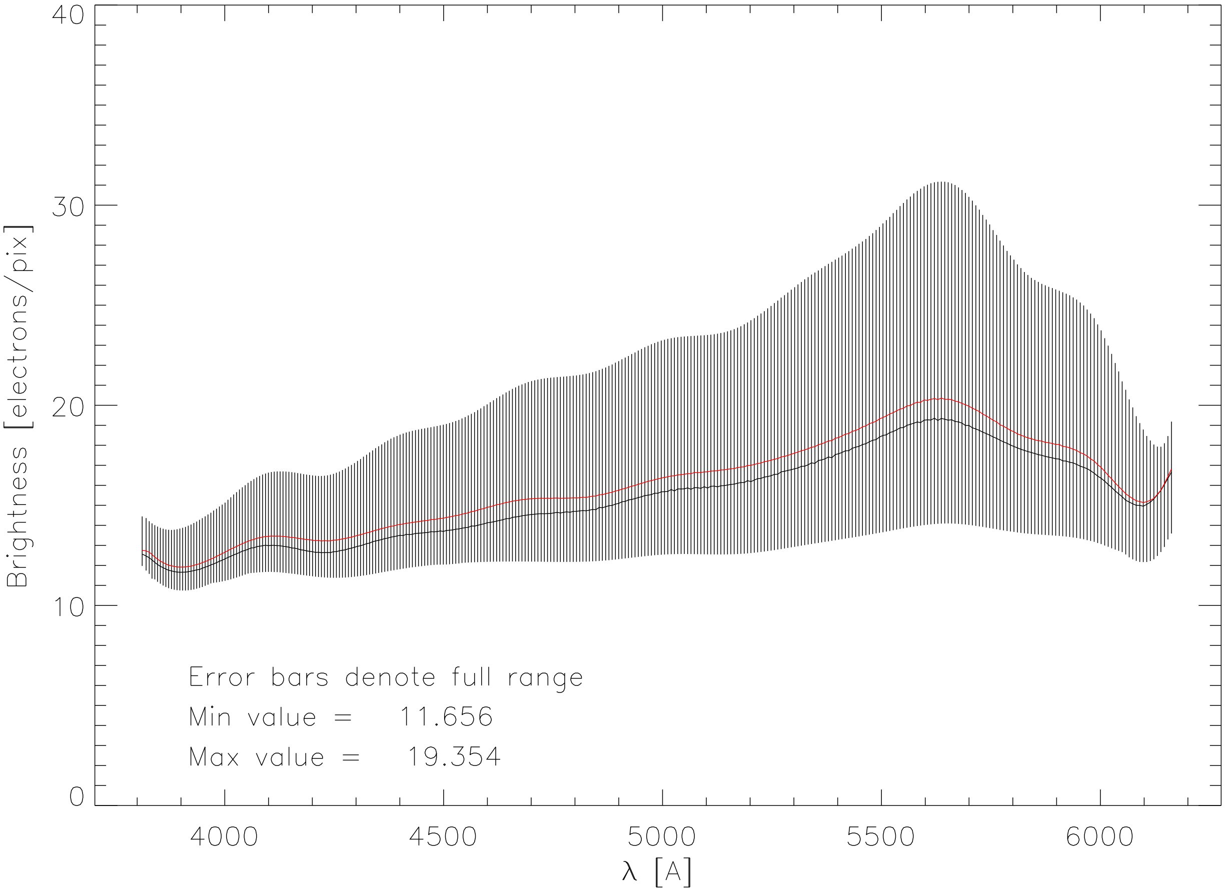

PLATE=3210 MJD=54876 sdR-b1-00058833.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 4.26 %
Flux (4359.5)/Airmass
600
800
1000
1200
1400
1600
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.075
1.080
1.085
1.090
1.095
1.100
Airmass


PLATE=3210 MJD=54876 sdR-b1-00058833.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
4800
4600
4400
4200
4000
3800
3600
RED = sky fiber
Dispersion = 1.87 %
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
1.075
1.080
1.085
1.090
1.095
1.100
Airmass


PLATE=3210 MJD=54876 Fiber-Flats for sdR-b1-00058835.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.021
Max value = 1.244
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu May 20 19:00:11 2010

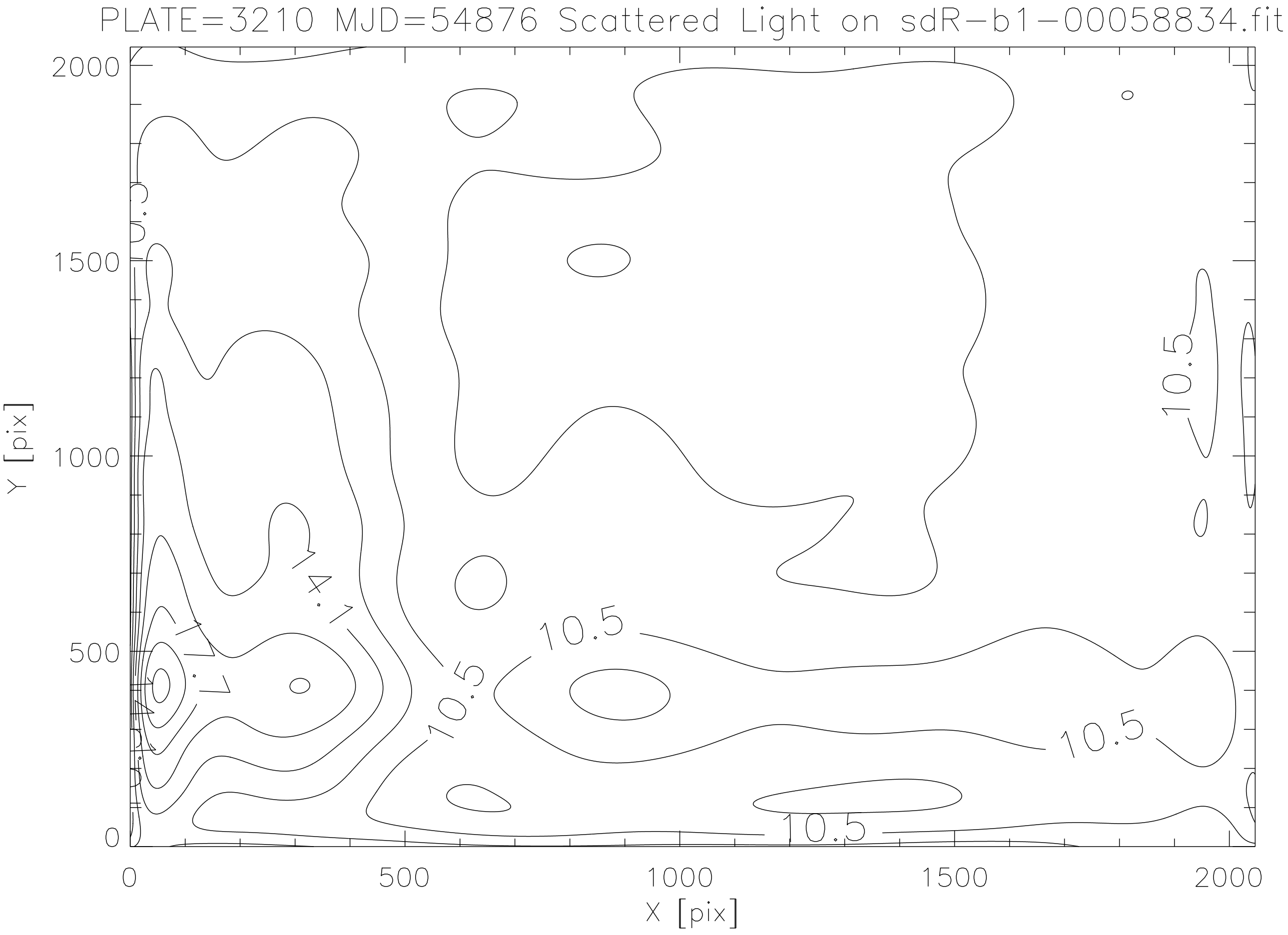

PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b1-00058834.f

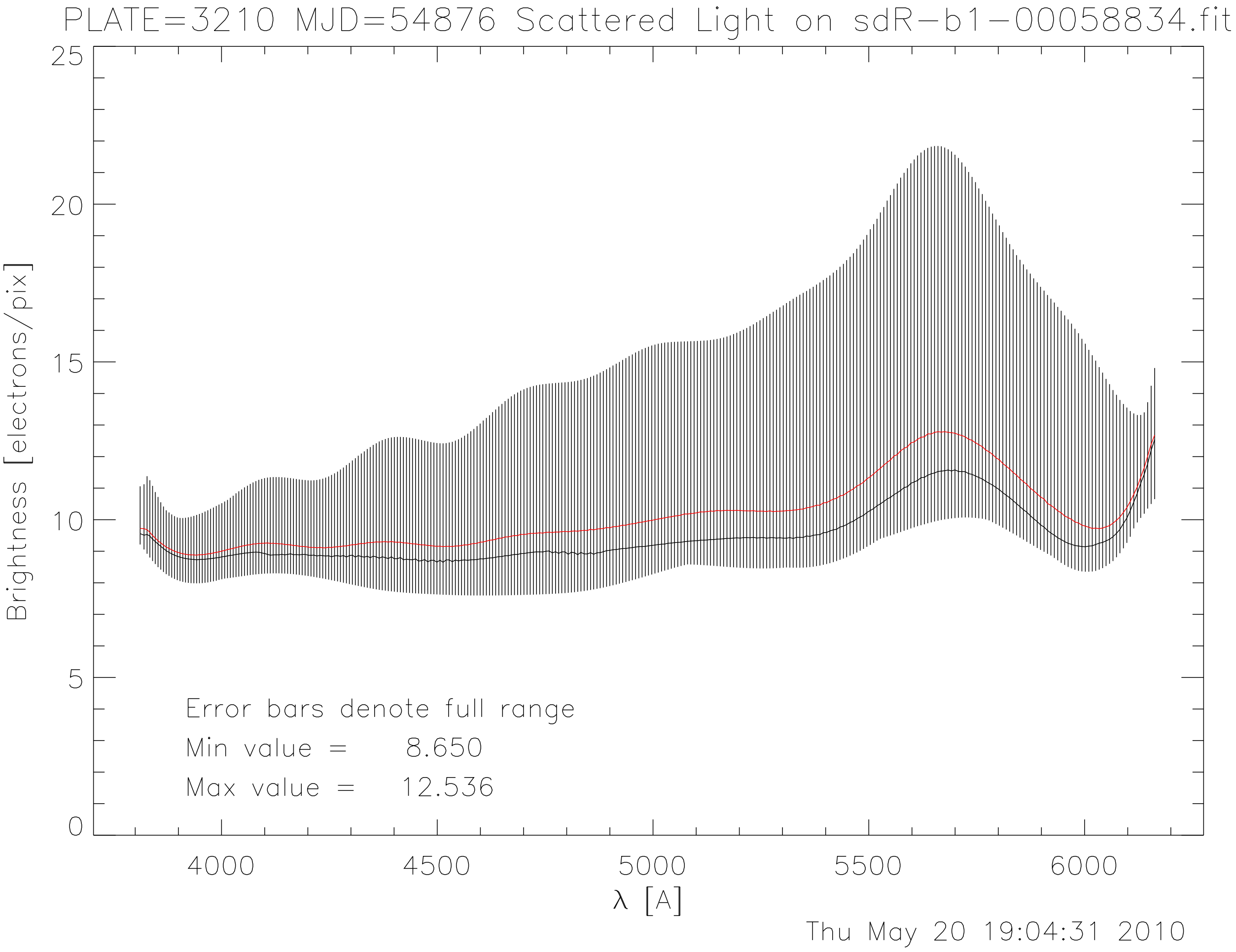
PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b1-00058834.f

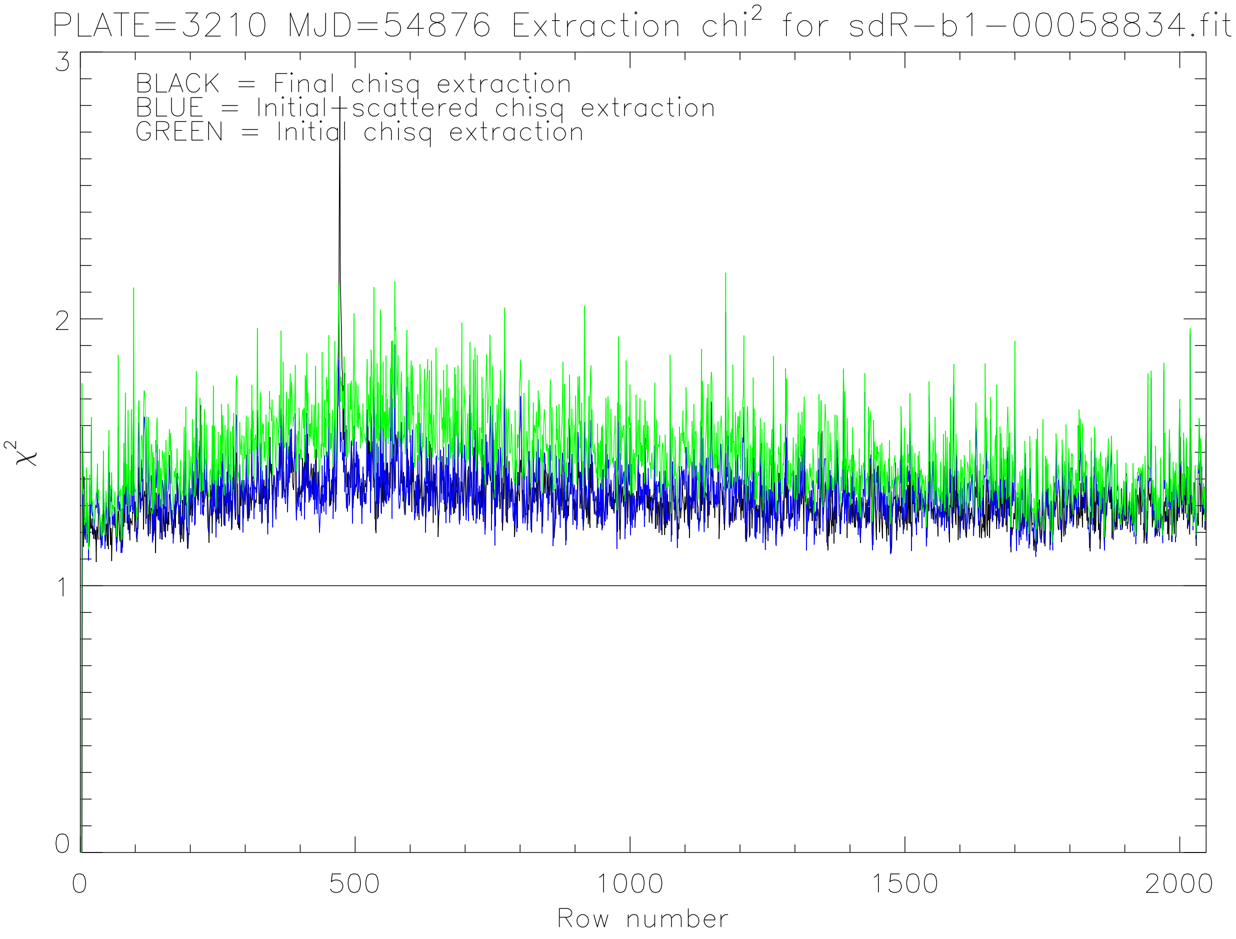


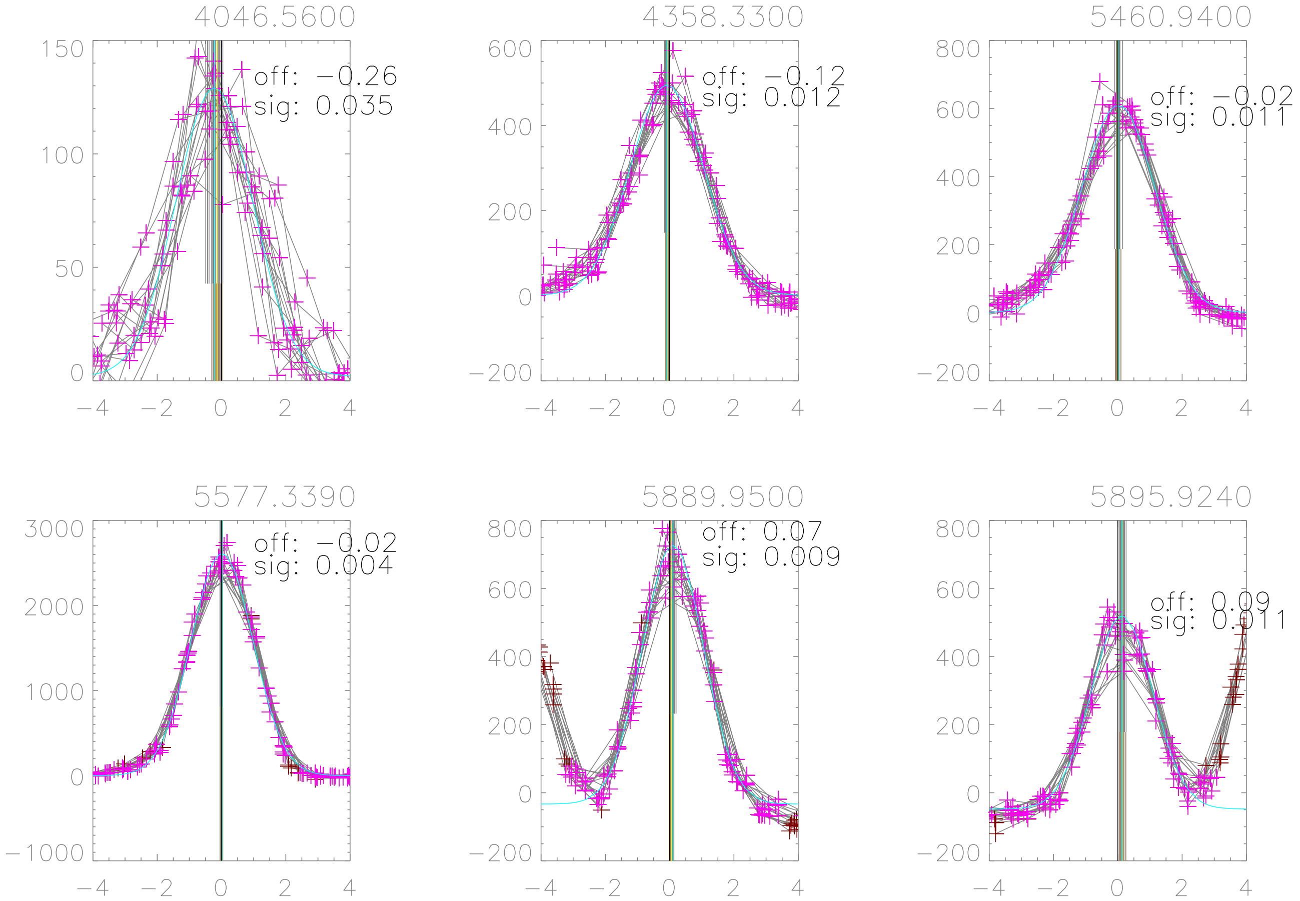
Error bars denote full range
Min value = 11.656
Max value = 19.354

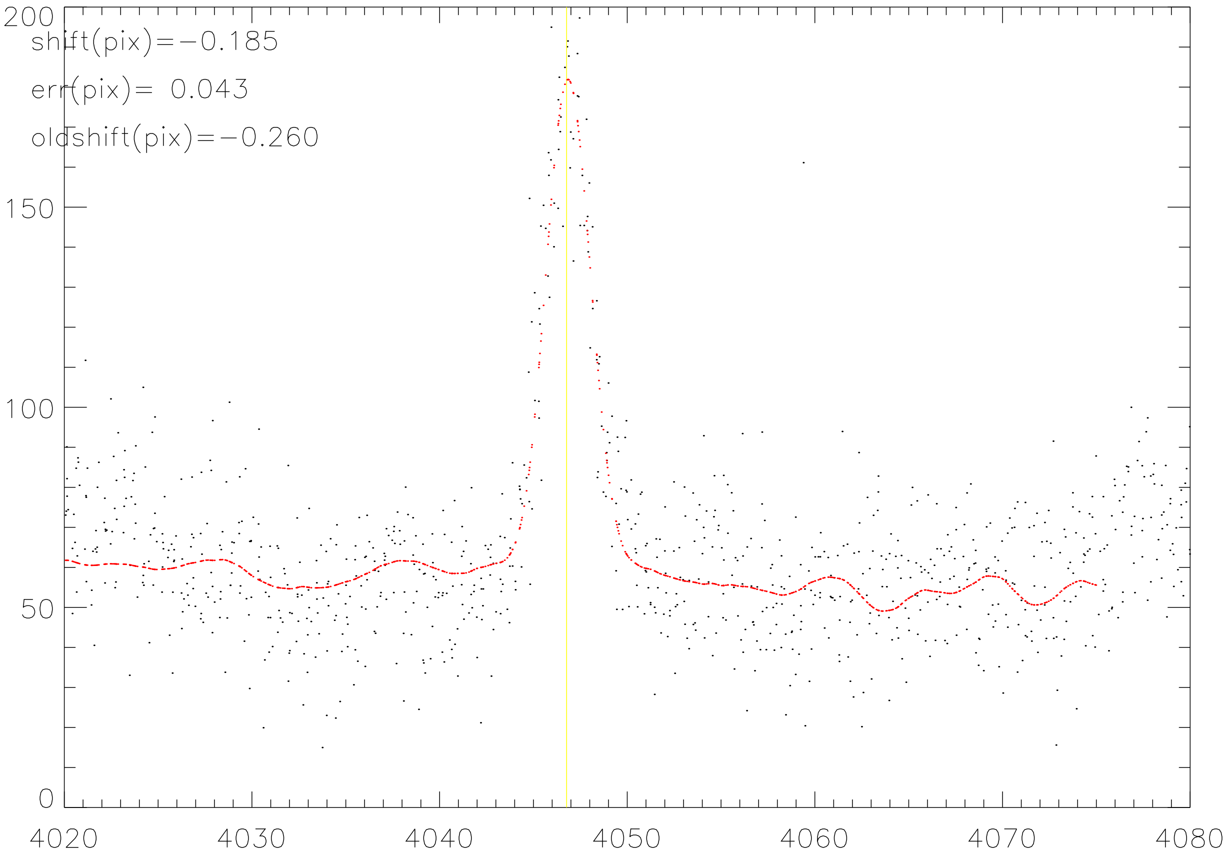
Thu May 20 19:01:17 2010

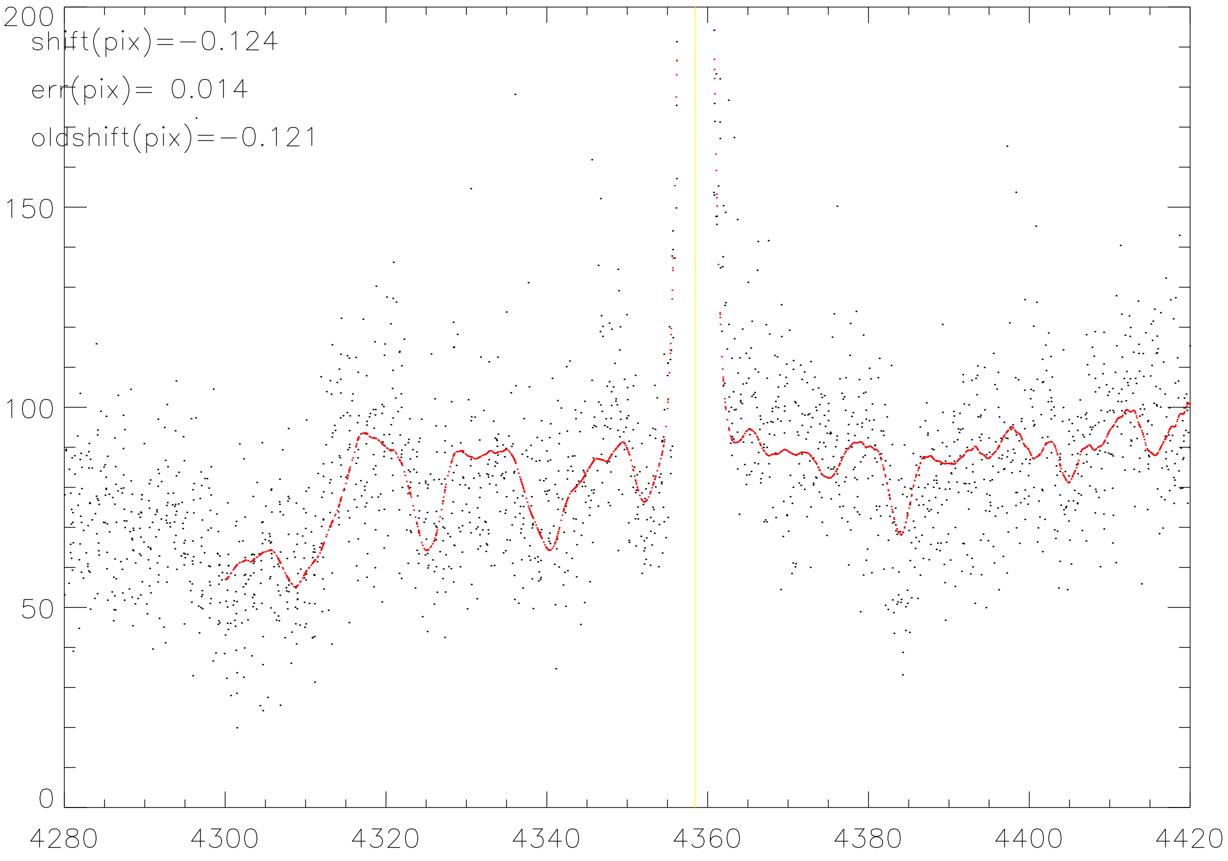

PLATE=3210 MJD=54876 Scattered Light on sdR-b1-00058834.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
10.5
10.5
10.5
10.5
10.5
10.5
14.1
17.7

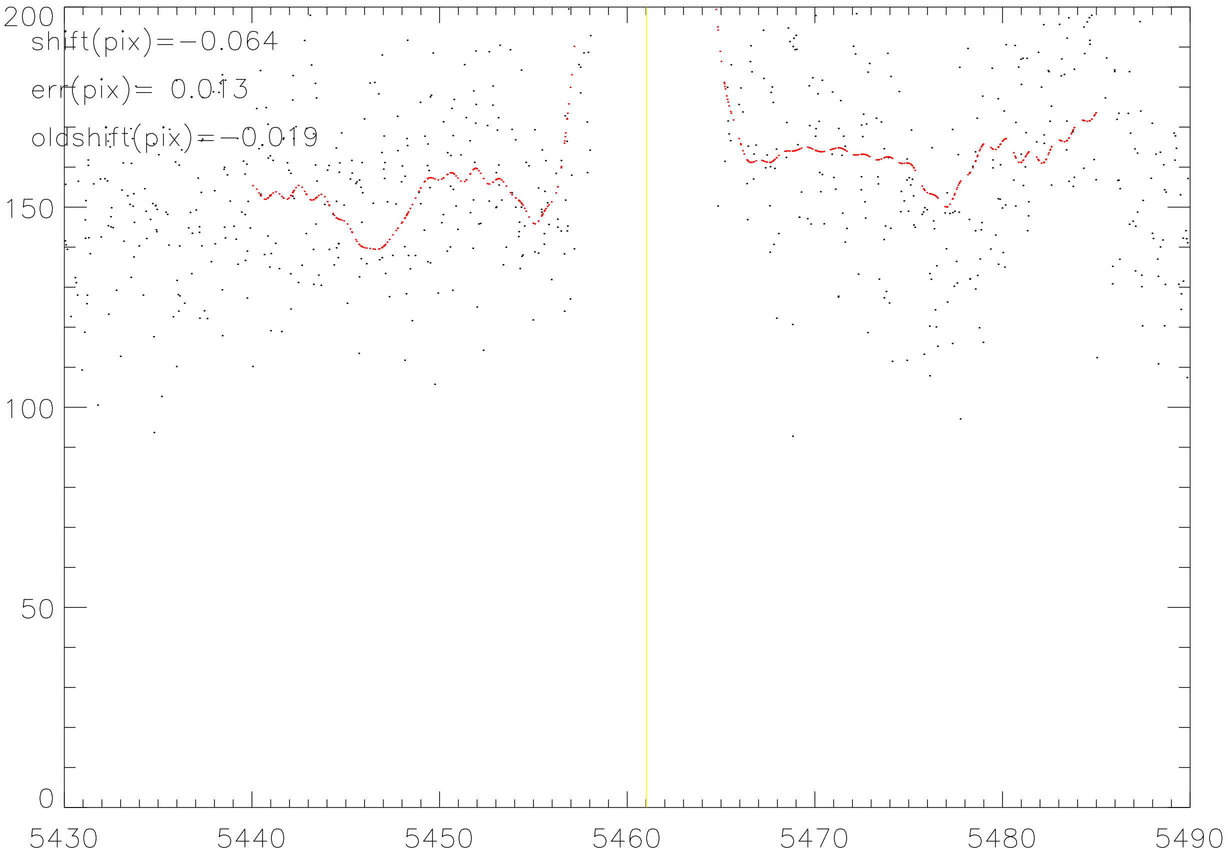

PLATE=3210 MJD=54876 Scattered Light on sdR-b1-00058834.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.650
Max value = 12.536
Thu May 20 19:04:31 2010

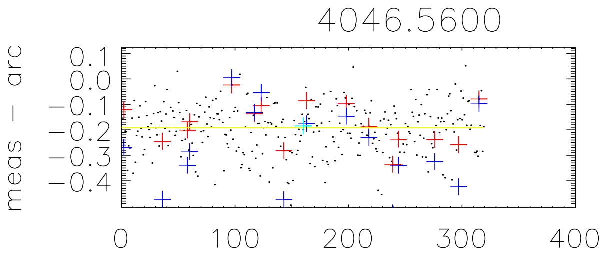

PLATE=3210 MJD=54876 Extraction chi^2 for sdR-b1-00058834.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

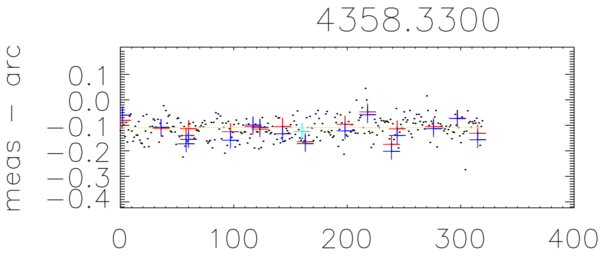

4046.5600
off: −0.26
sig: 0.035
150
100
50
0
−4
−2
0
2
4
4358.3300
off: −0.12
sig: 0.012
600
400
200
0
−200
5460.9400
off: −0.02
sig: 0.011
800
600
400
200
0
−200
5577.3390
off: −0.02
sig: 0.004
3000
2000
1000
0
−1000
5889.9500
off: 0.07
sig: 0.009
800
600
400
200
0
−200
5895.9240
off: 0.09
sig: 0.011
800
600
400
200
0
−200

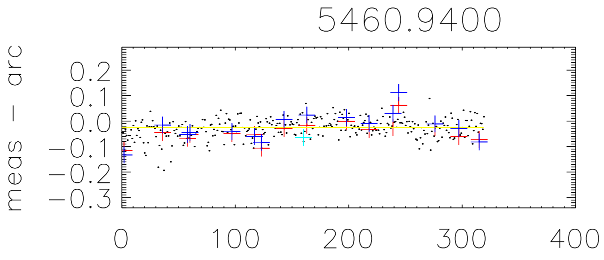

shift(pix)=−0.185
err(pix)= 0.043
oldshift(pix)=−0.260
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

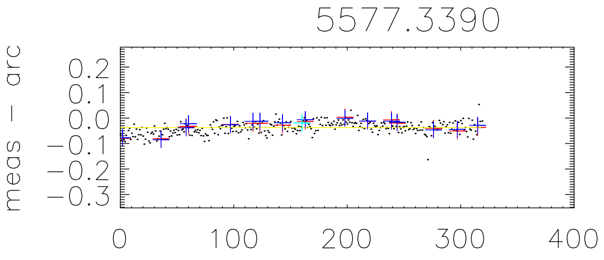

shift(pix)=−0.124
err(pix)= 0.014
oldshift(pix)=−0.121
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

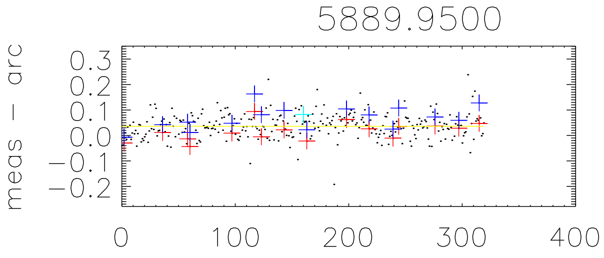

shift(pix)=−0.064
err(pix)= 0.013
oldshift(pix)=−0.019
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

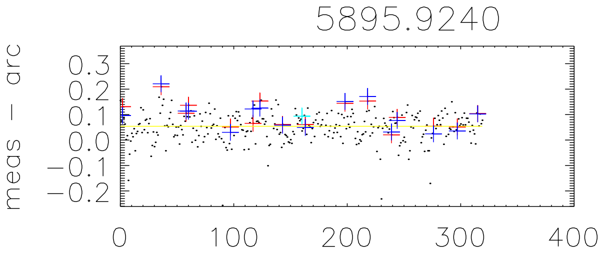

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

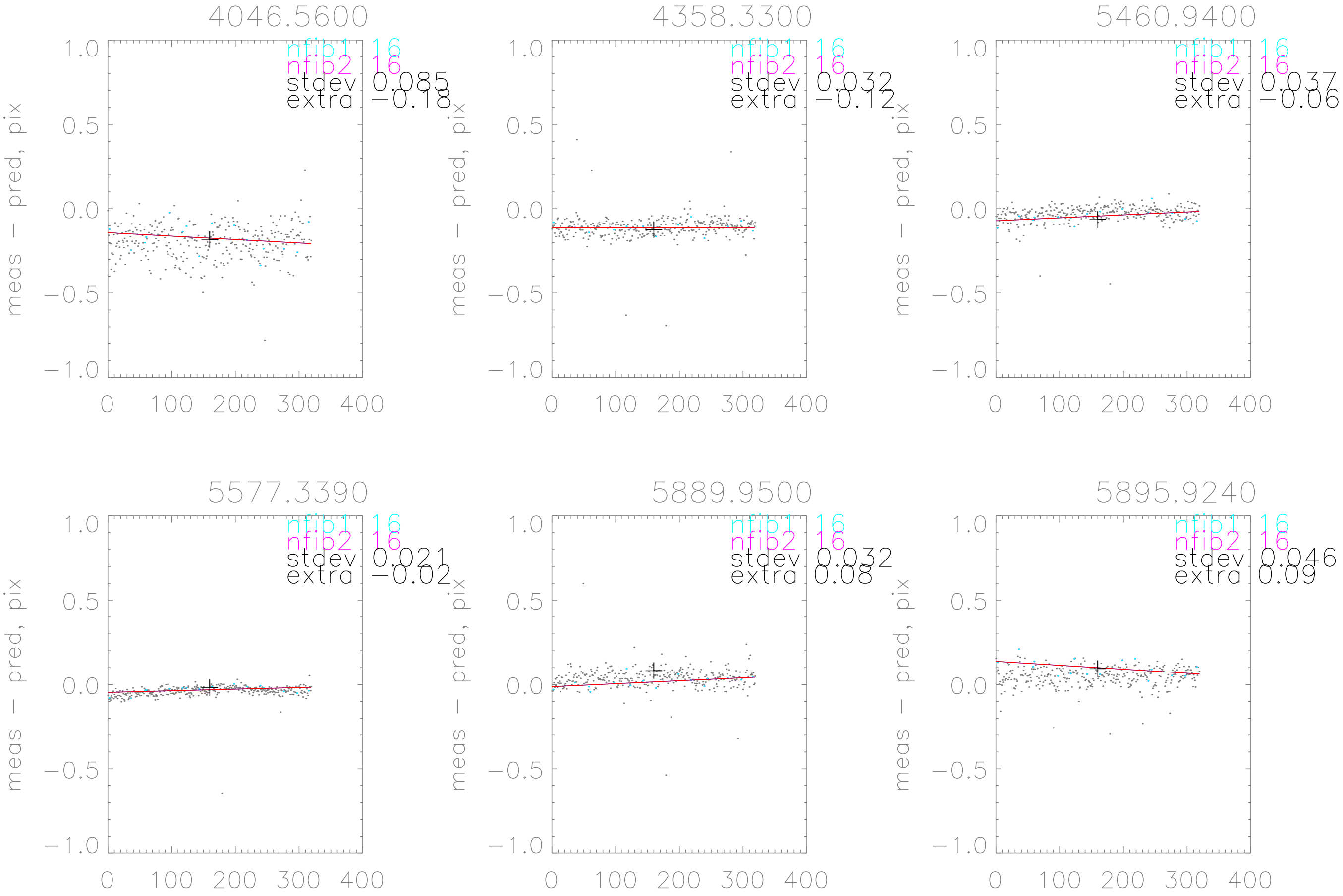

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

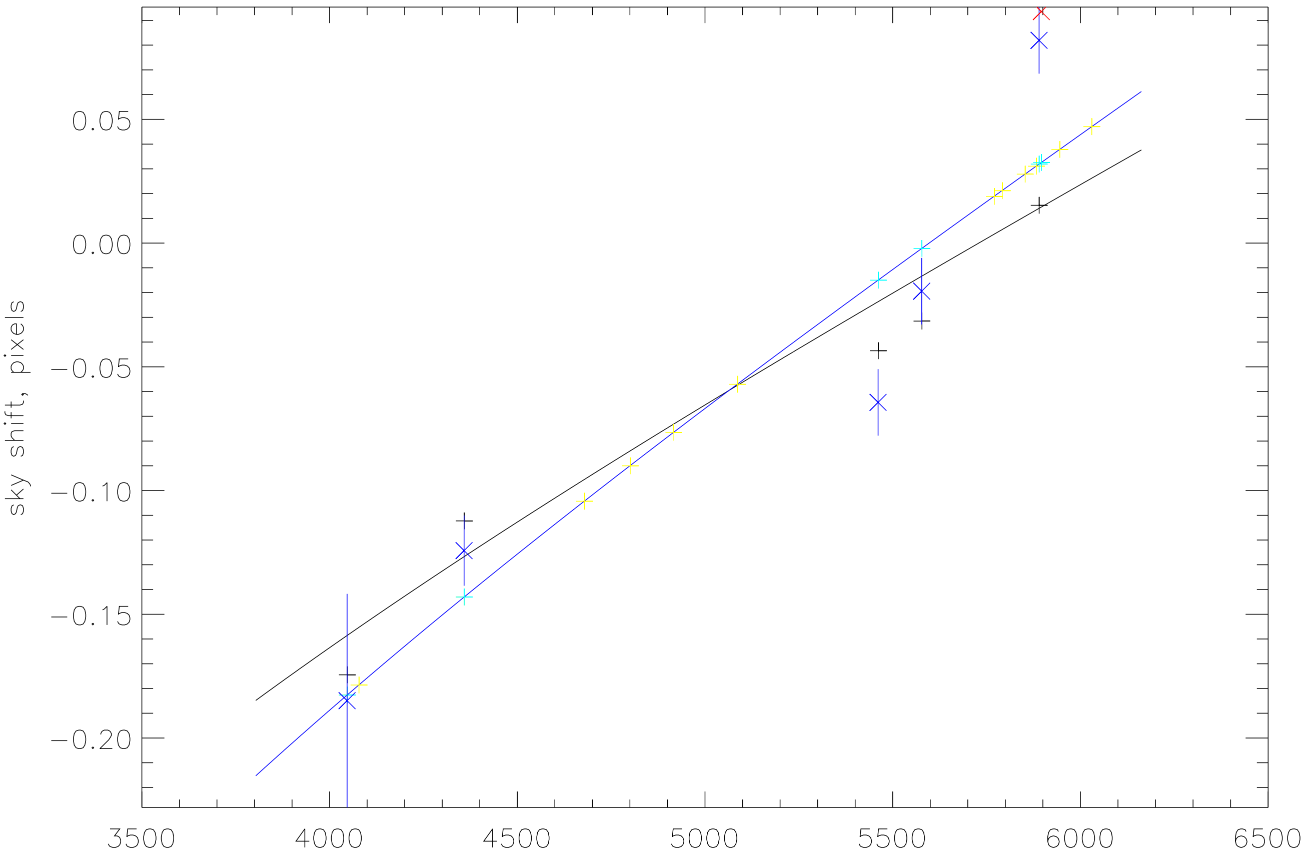

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

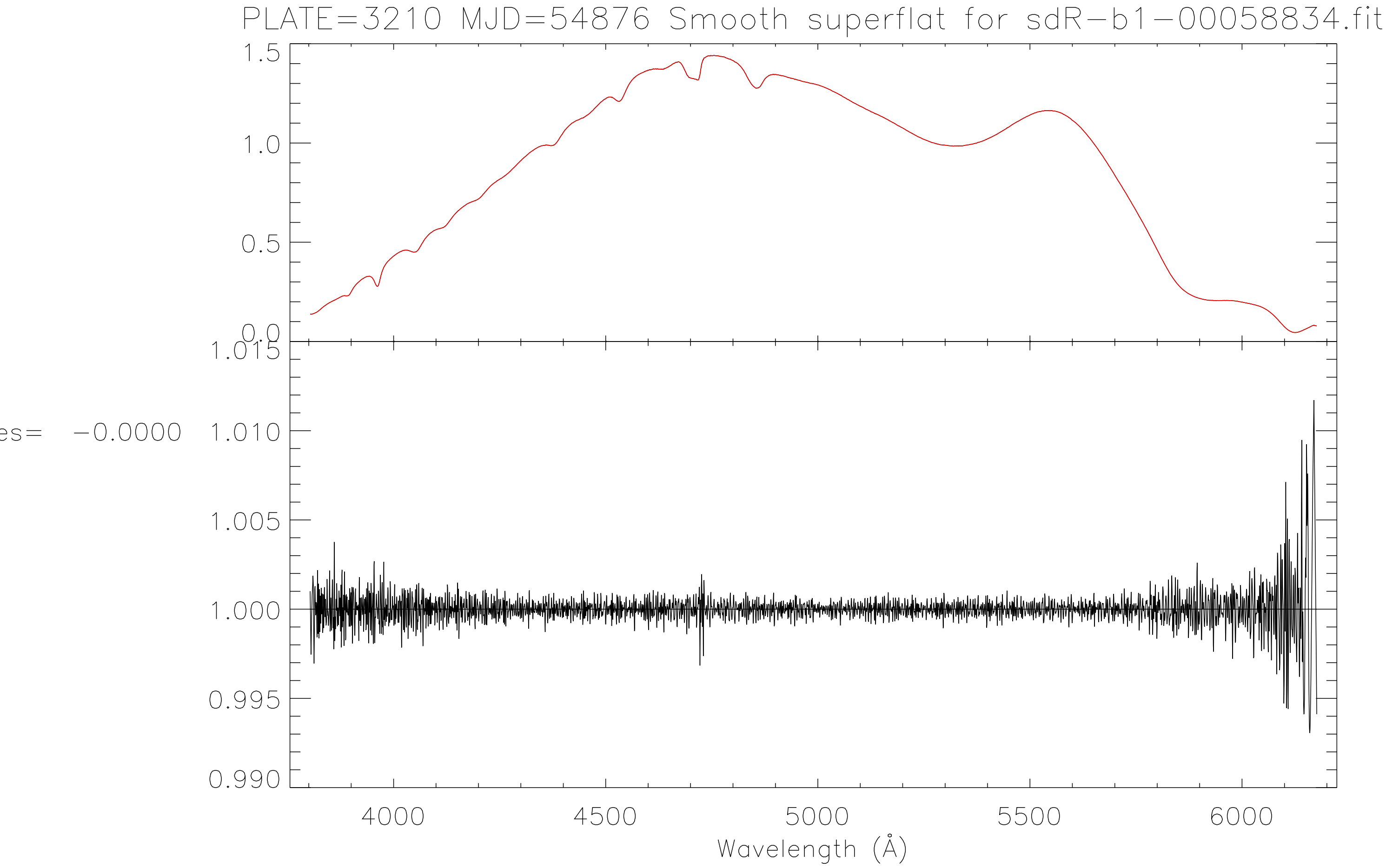

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

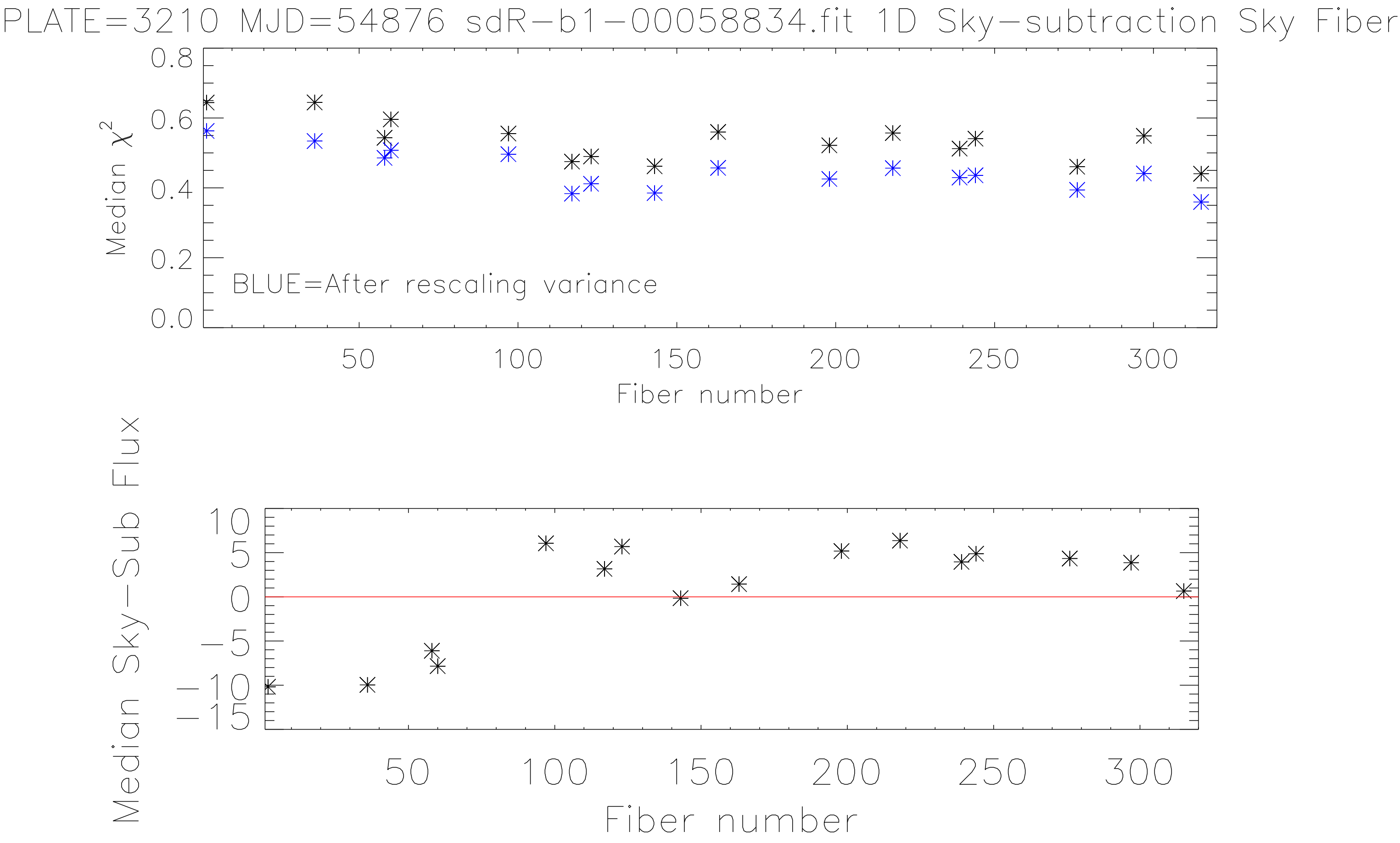

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.085
extra −0.18
4358.3300
nfib1 16
nfib2 16
stdev 0.032
extra −0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.037
extra −0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra −0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.032
extra 0.08
5895.9240
nfib1 16
nfib2 16
stdev 0.046
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

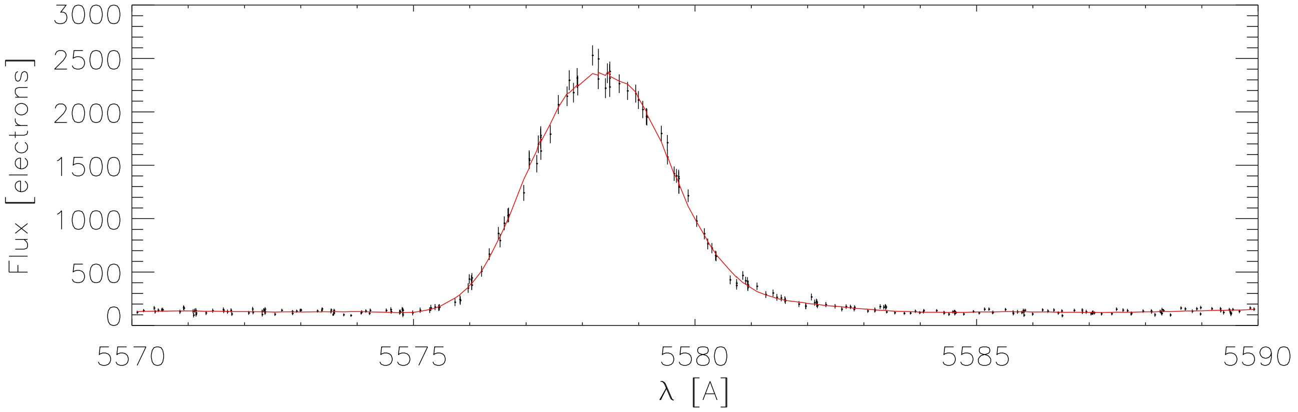

sky shift, pixels
0.05
0.00
−0.05
−0.10
−0.15
−0.20
3500
4000
4500
5000
5500
6000
6500



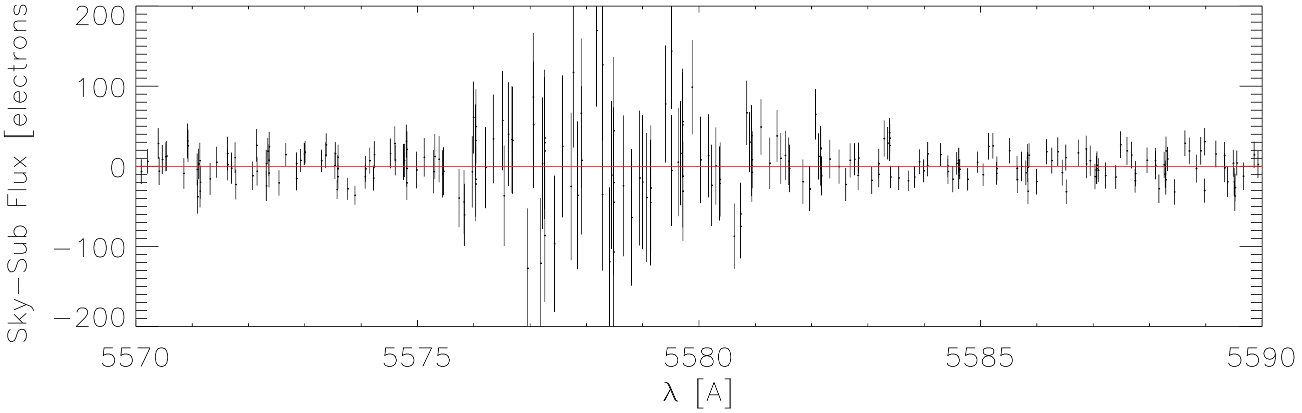
PLATE=3210 MJD=54876 Smooth superflat for sdR-b1-00058834.fit


PLATE=3210 MJD=54876 sdR-b1-00058834.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number

PLATE=3210 MJD=54876 sdR-b1-00058834.fit 1D Sky-subtraction Sky Fibers

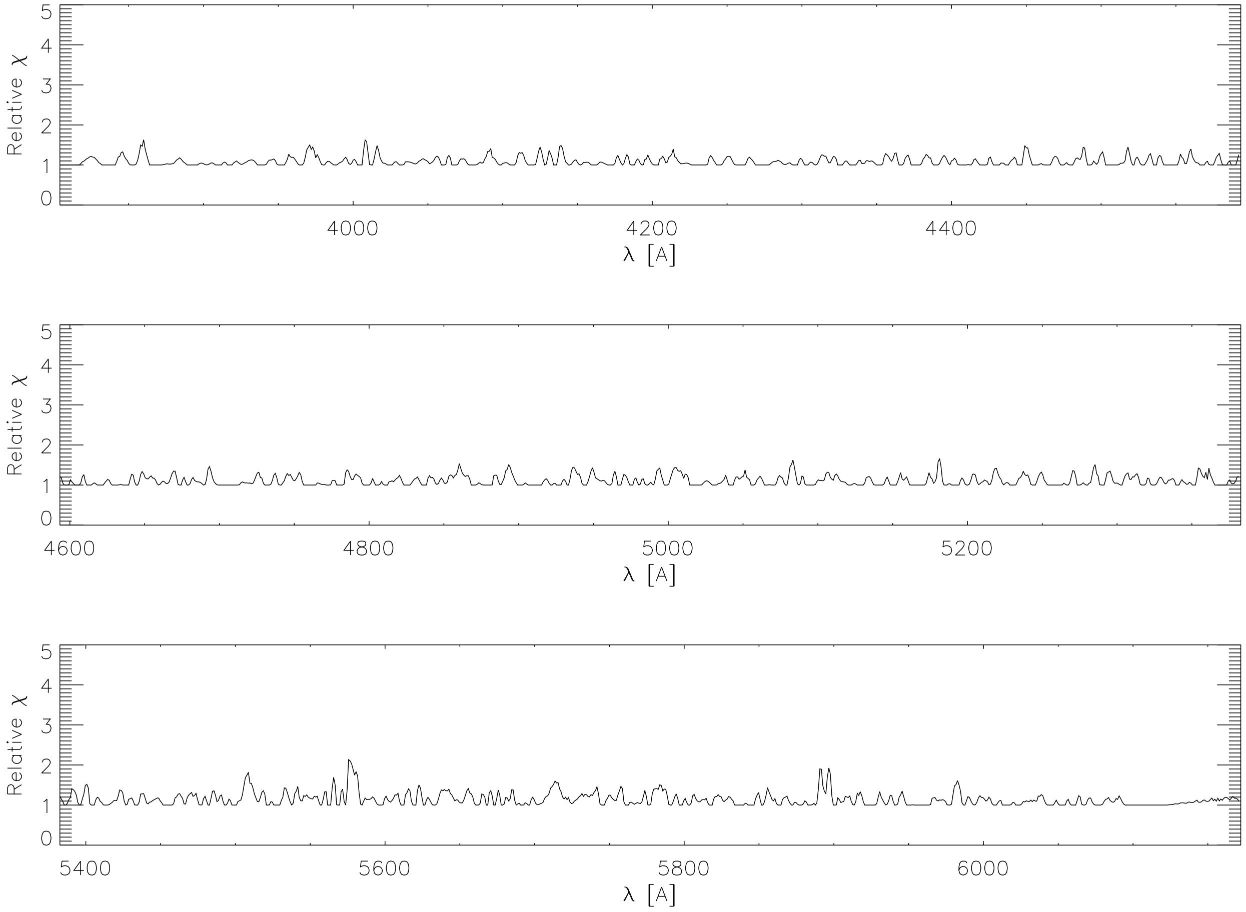


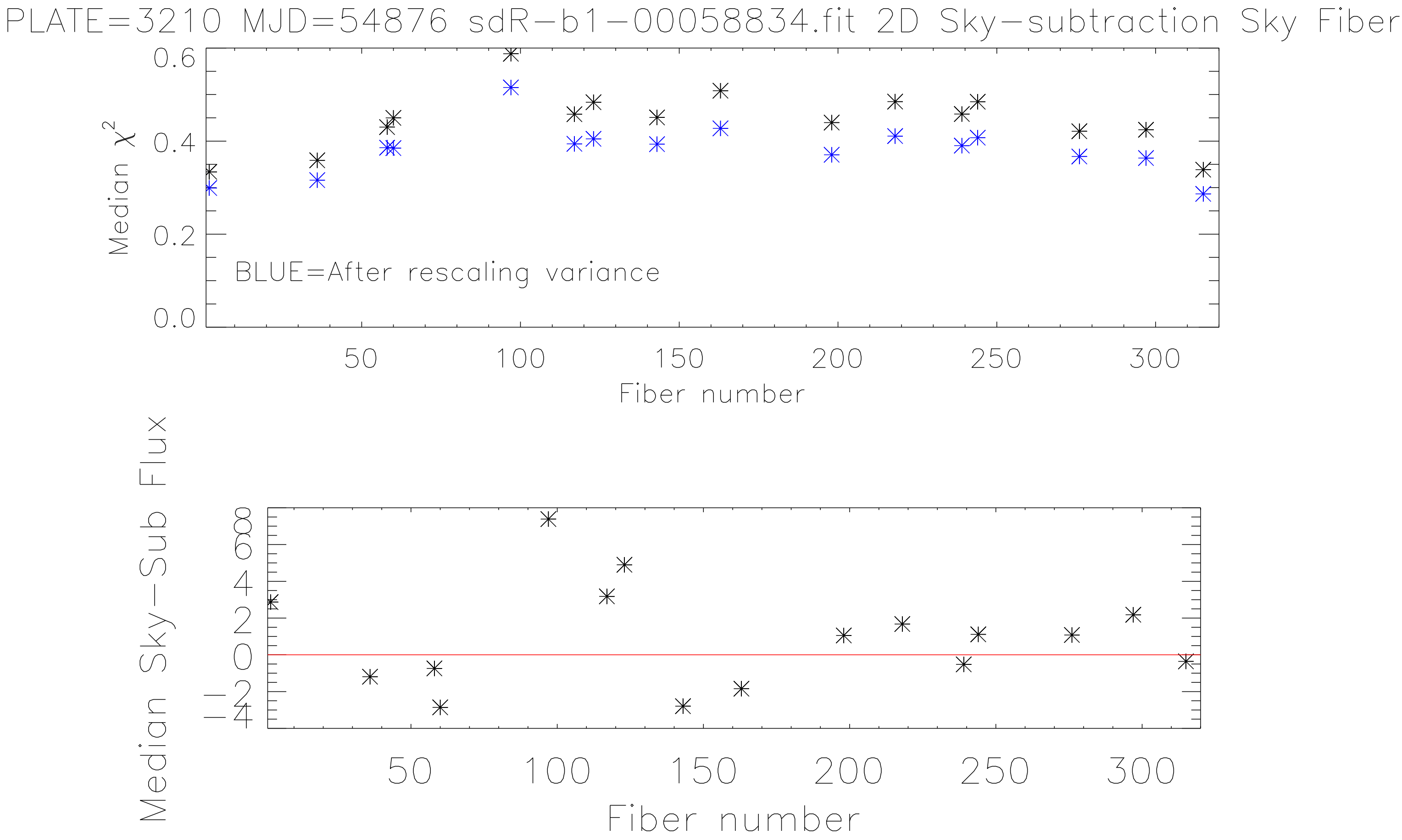
PLATE=3210 MJD=54876 sdR-b1-00058834.fit 1D Sky-subtraction Sky-subtracted Sky F

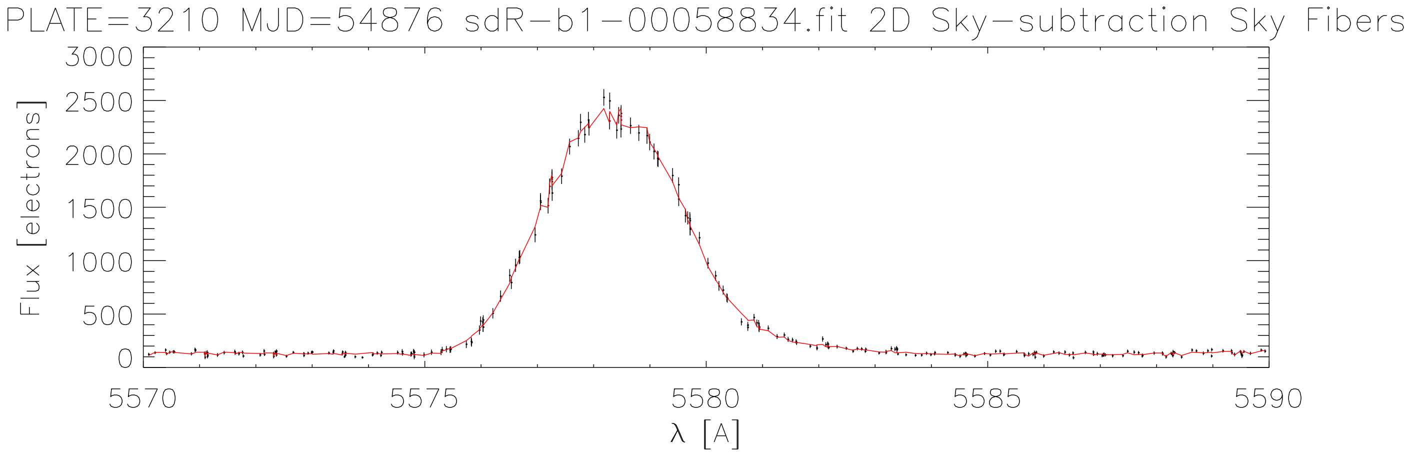


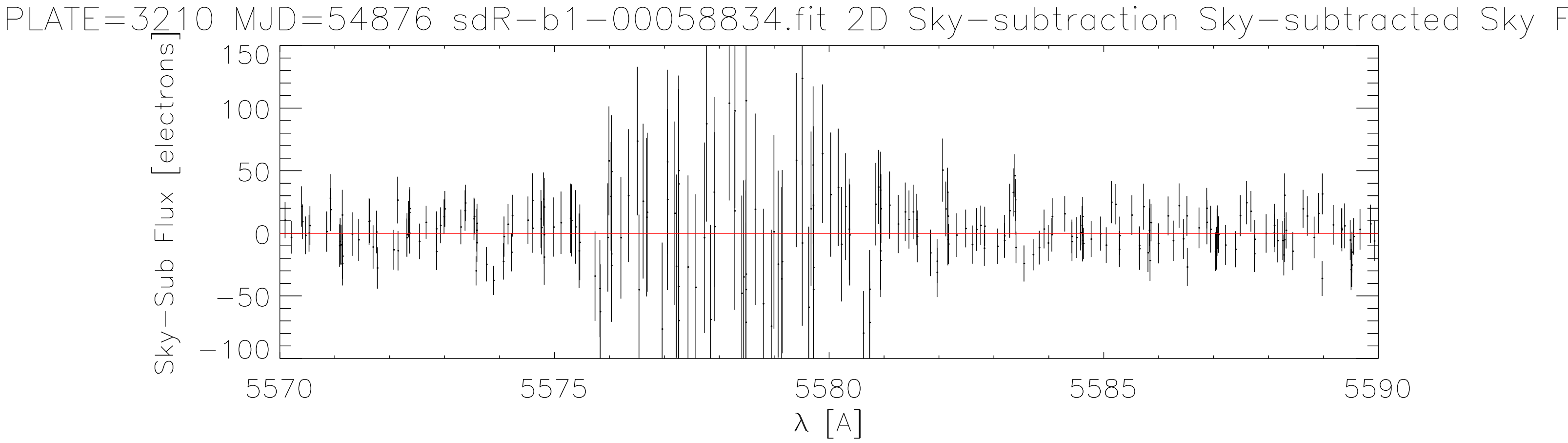
Number of sky fibers = 16

PLATE=3210 MJD=54876 sdR-b1-00058834.fit 1D Sky-subtraction Rescaled Errors



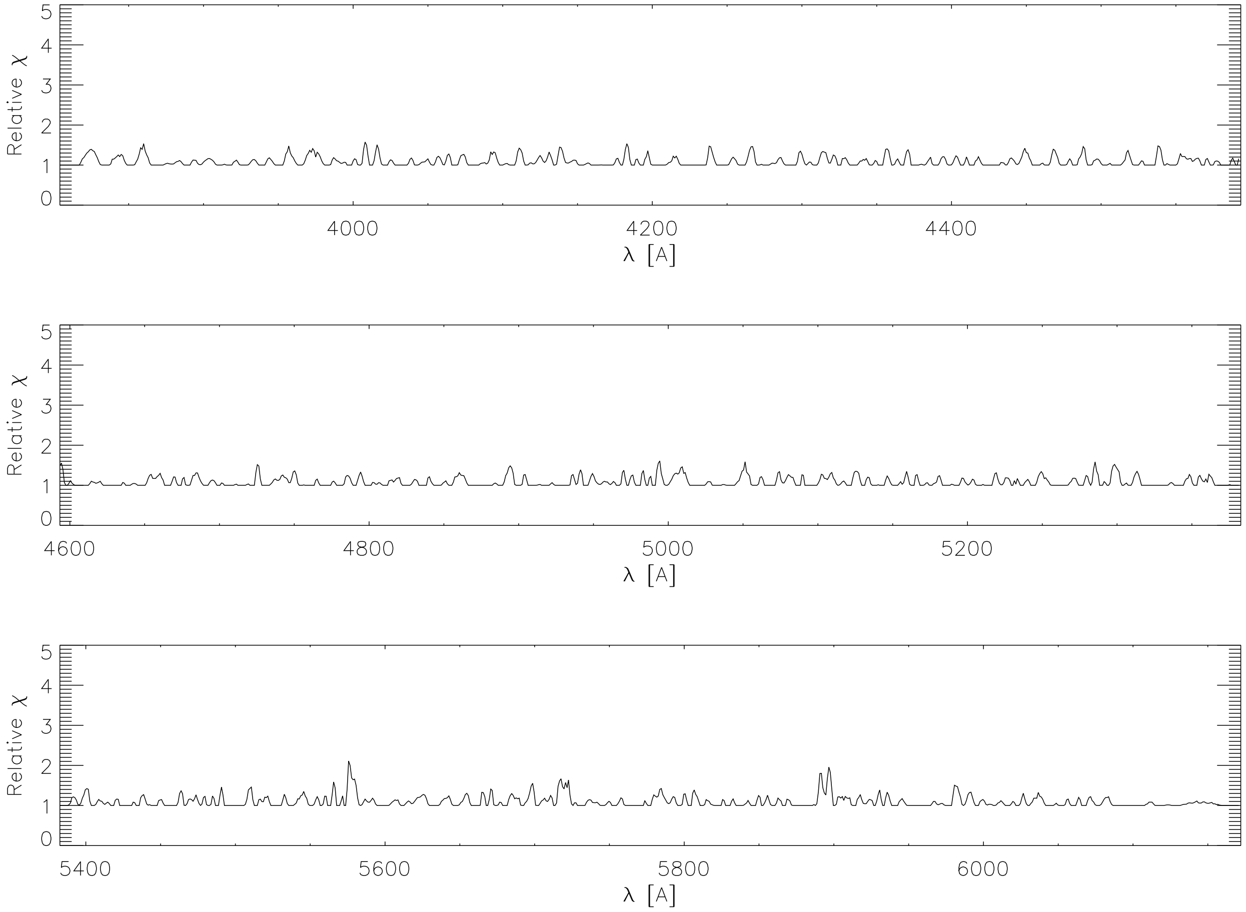

PLATE=3210 MJD=54876 sdR-b1-00058834.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
8
6
4
2
0
-2
-4
50
100
150
200
250
300
Fiber number

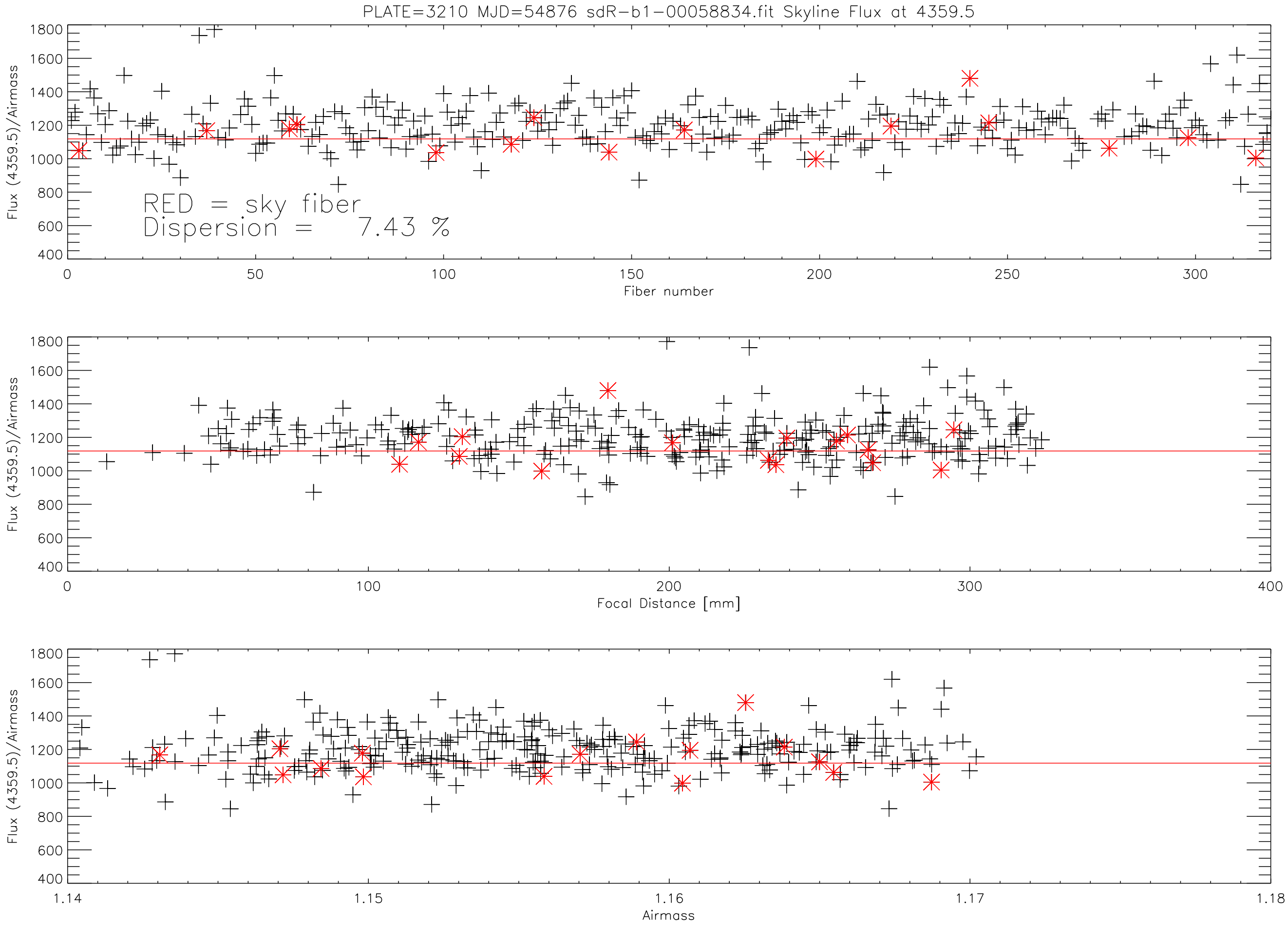

PLATE=3210 MJD=54876 sdR-b1-00058834.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

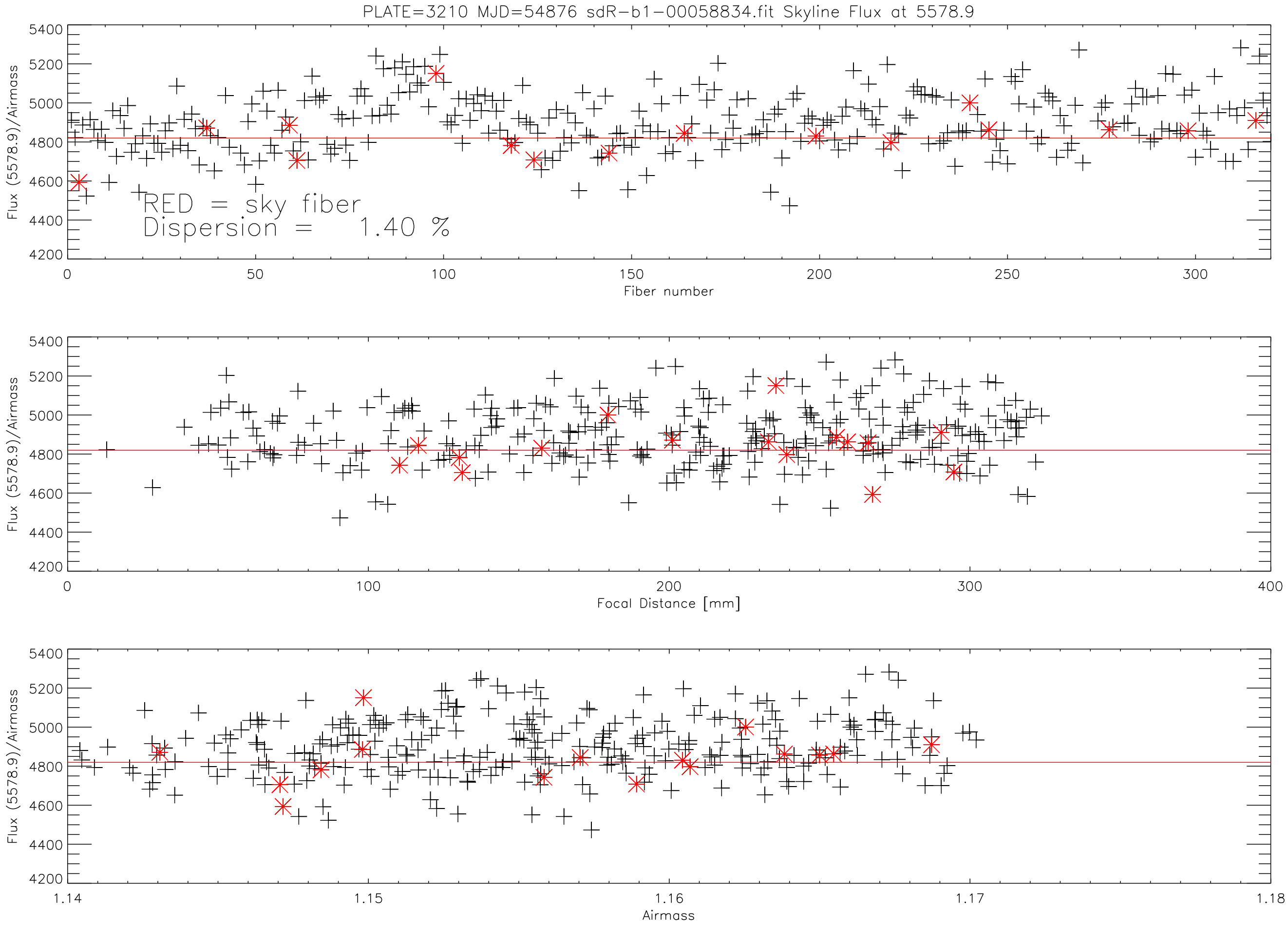

PLATE=3210 MJD=54876 sdR-b1-00058834.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

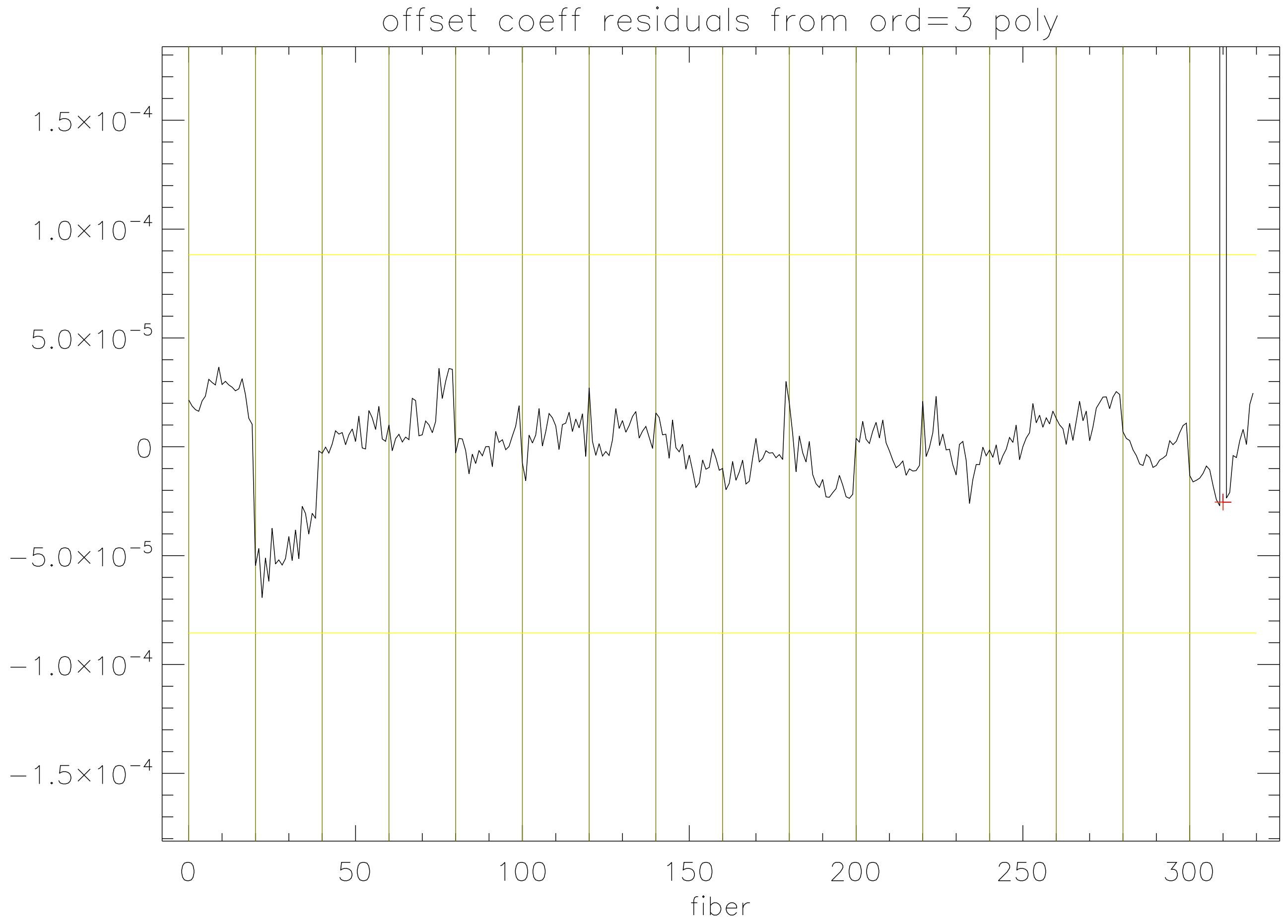
Number of sky fibers = 16

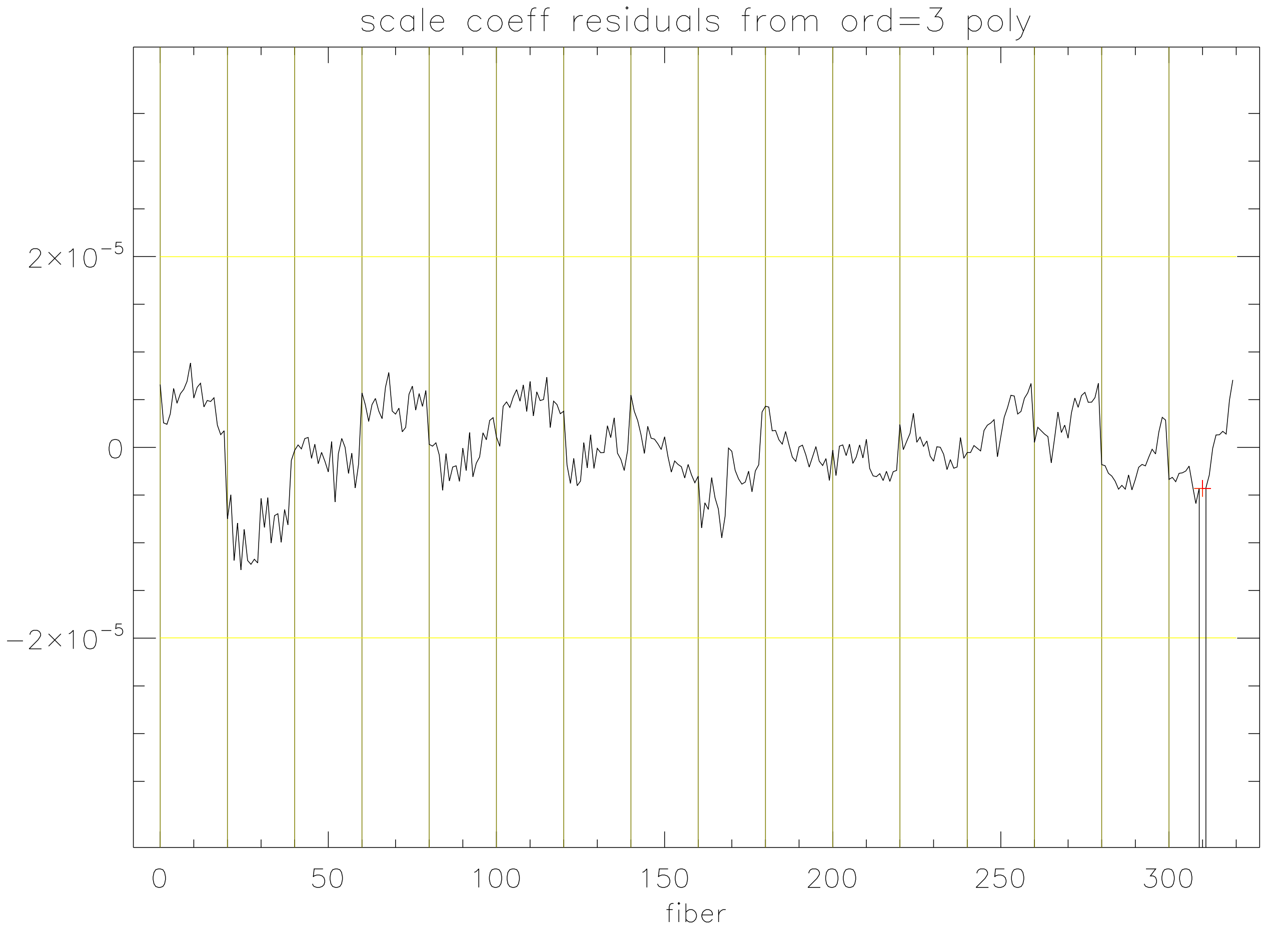
PLATE=3210 MJD=54876 sdR-b1-00058834.fit 2D Sky-subtraction Rescaled Errors

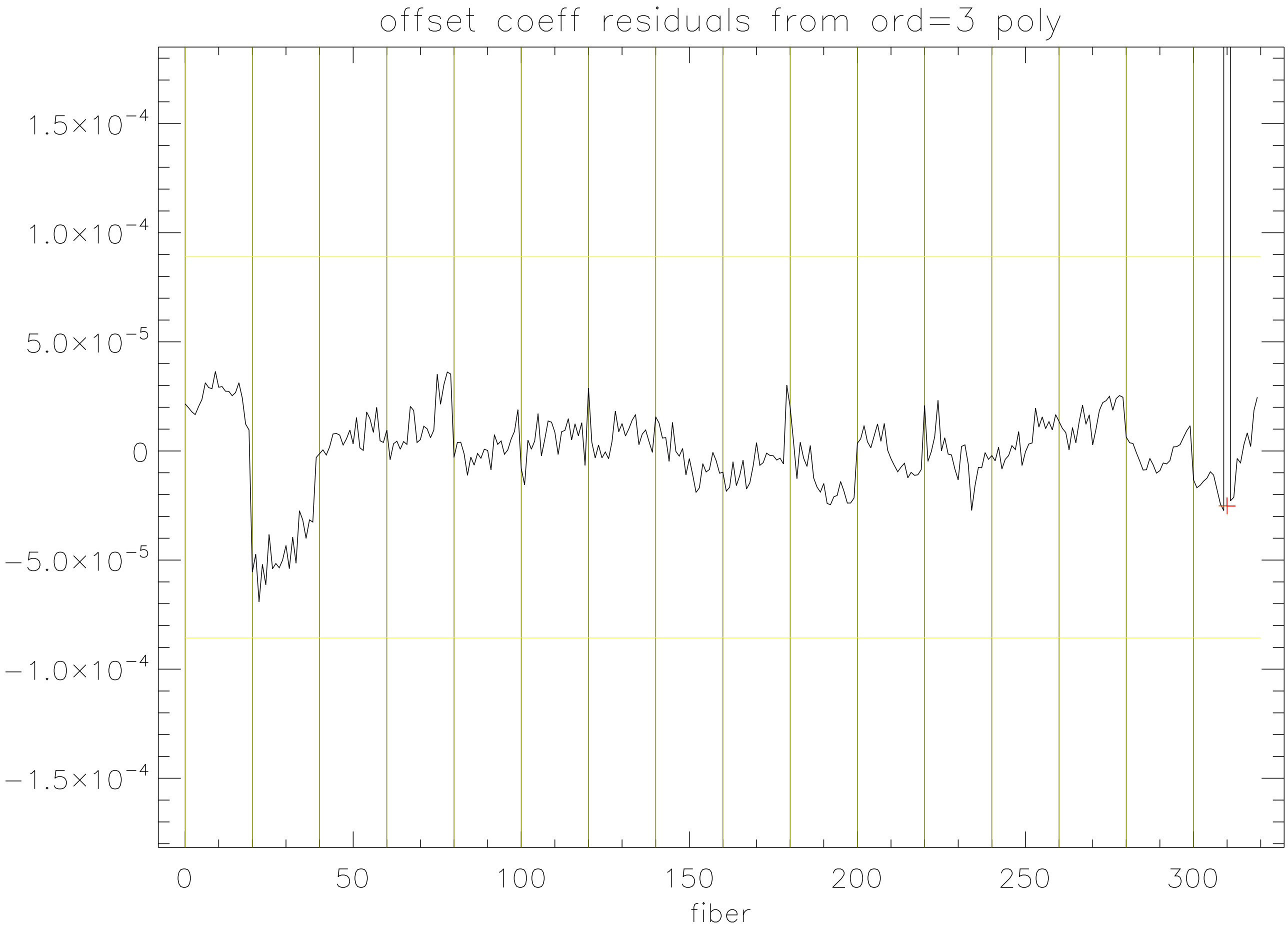


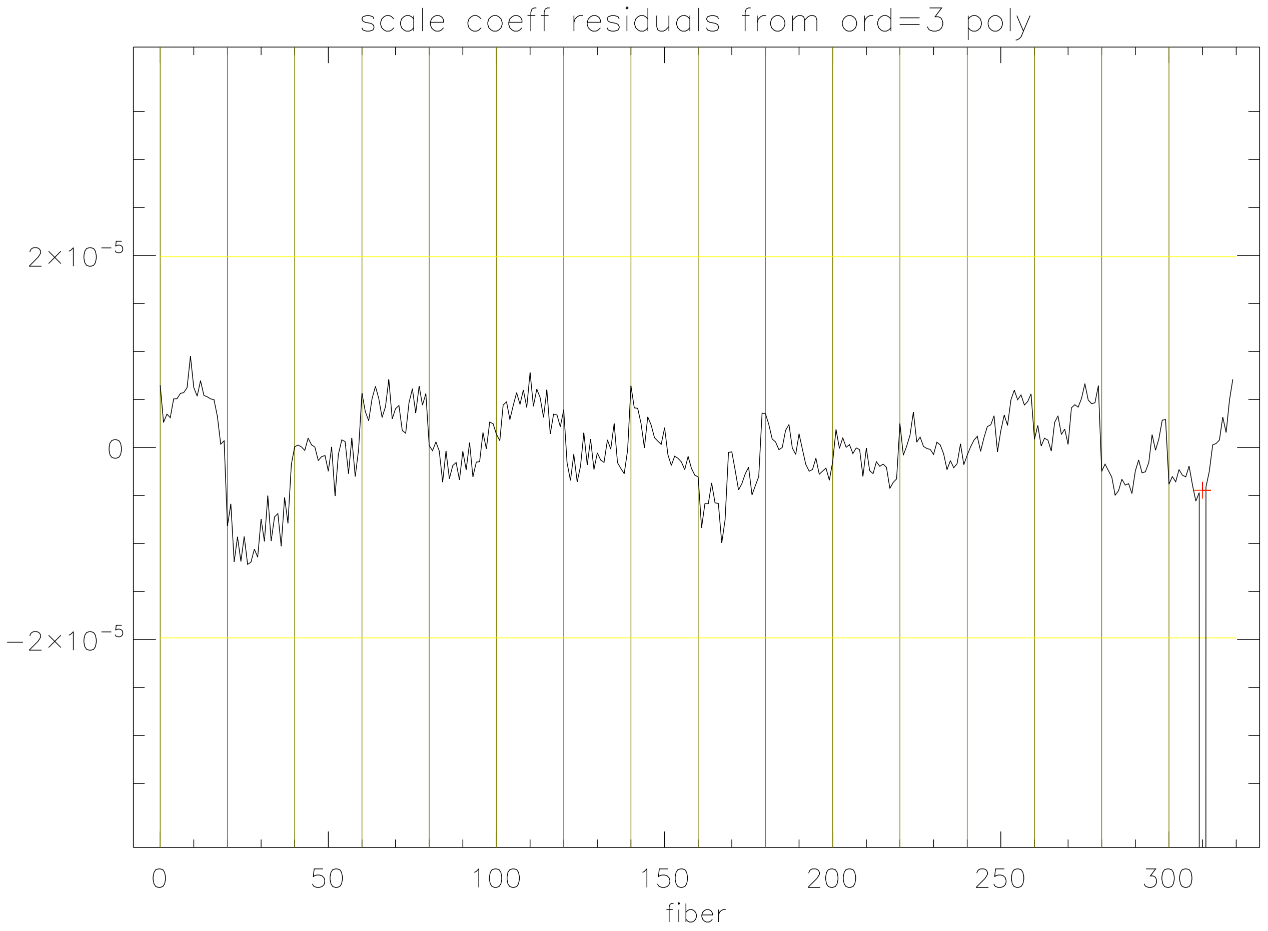

PLATE=3210 MJD=54876 sdR-b1-00058834.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
600
400
RED = sky fiber
Dispersion = 7.43 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
600
400
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
600
400
1.14
1.15
1.16
1.17
1.18
Airmass

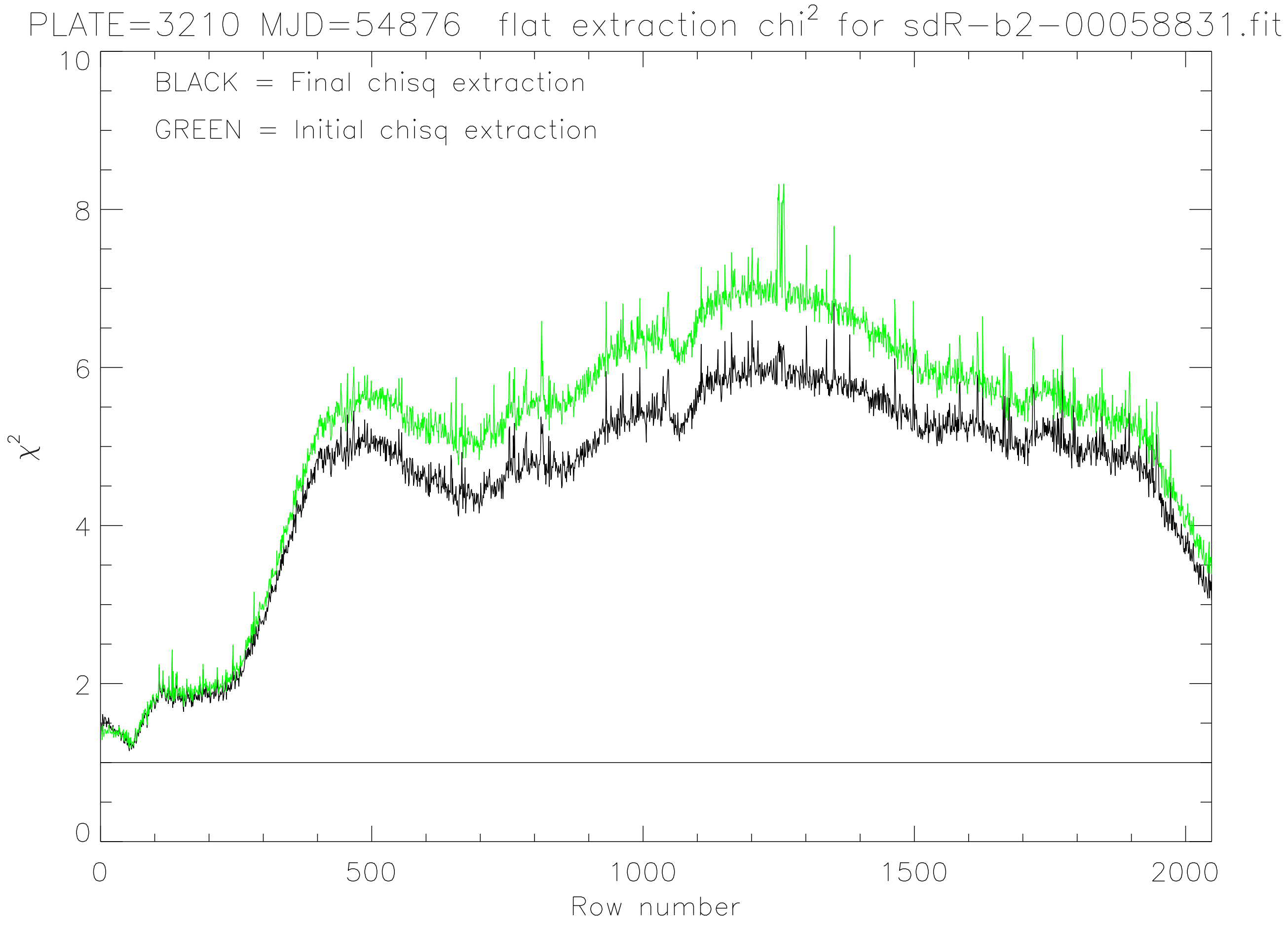

PLATE=3210 MJD=54876 sdR-b1-00058834.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
5400
5200
5000
4800
4600
4400
4200
RED = sky fiber
Dispersion = 1.40 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
5400
5200
5000
4800
4600
4400
4200
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
5400
5200
5000
4800
4600
4400
4200
1.14
1.15
1.16
1.17
1.18
Airmass

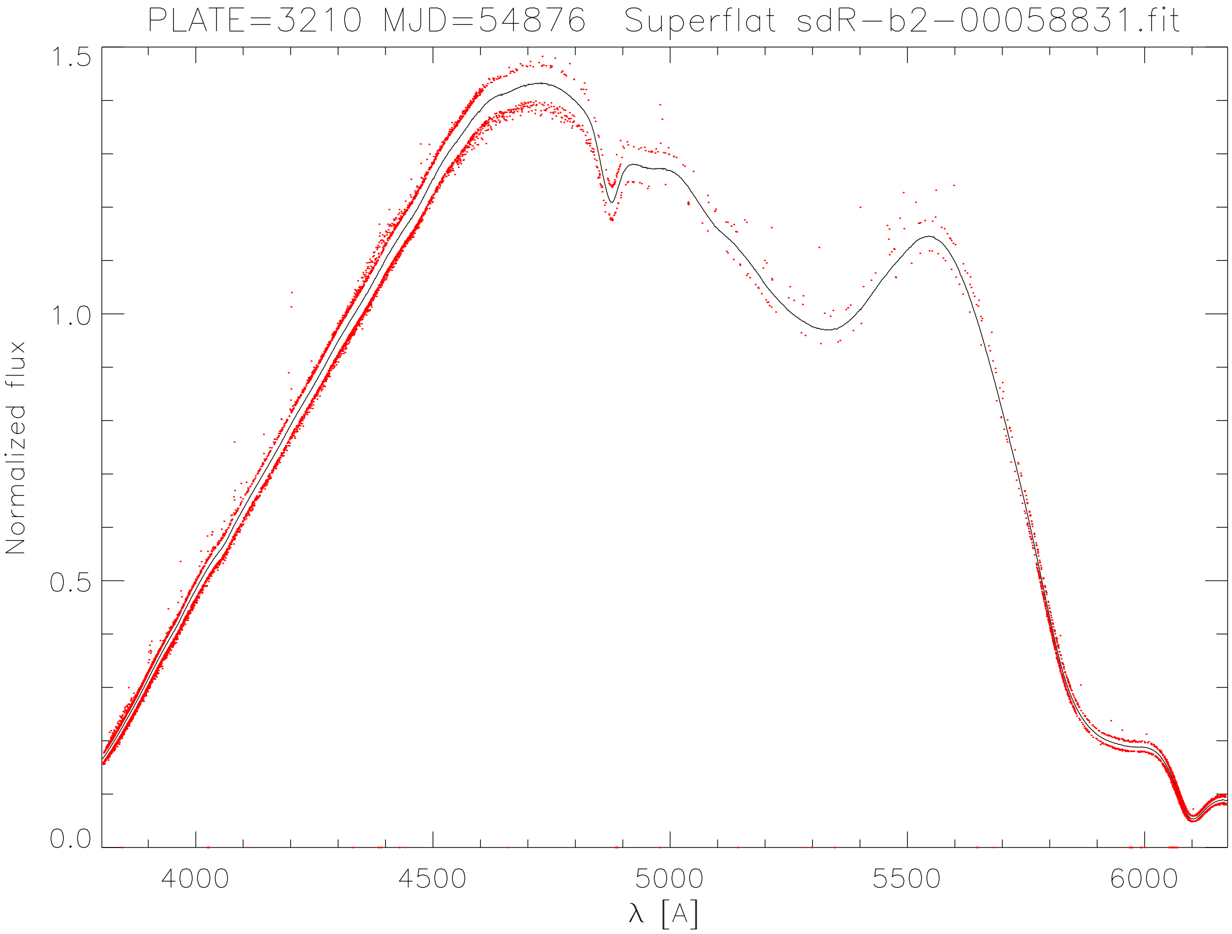

offset coeff residuals from ord=3 poly
1.5×10^{-4}
1.0×10^{-4}
5.0×10^{-5}
0
−5.0×10^{-5}
−1.0×10^{-4}
−1.5×10^{-4}
0
50
100
150
200
250
300
fiber

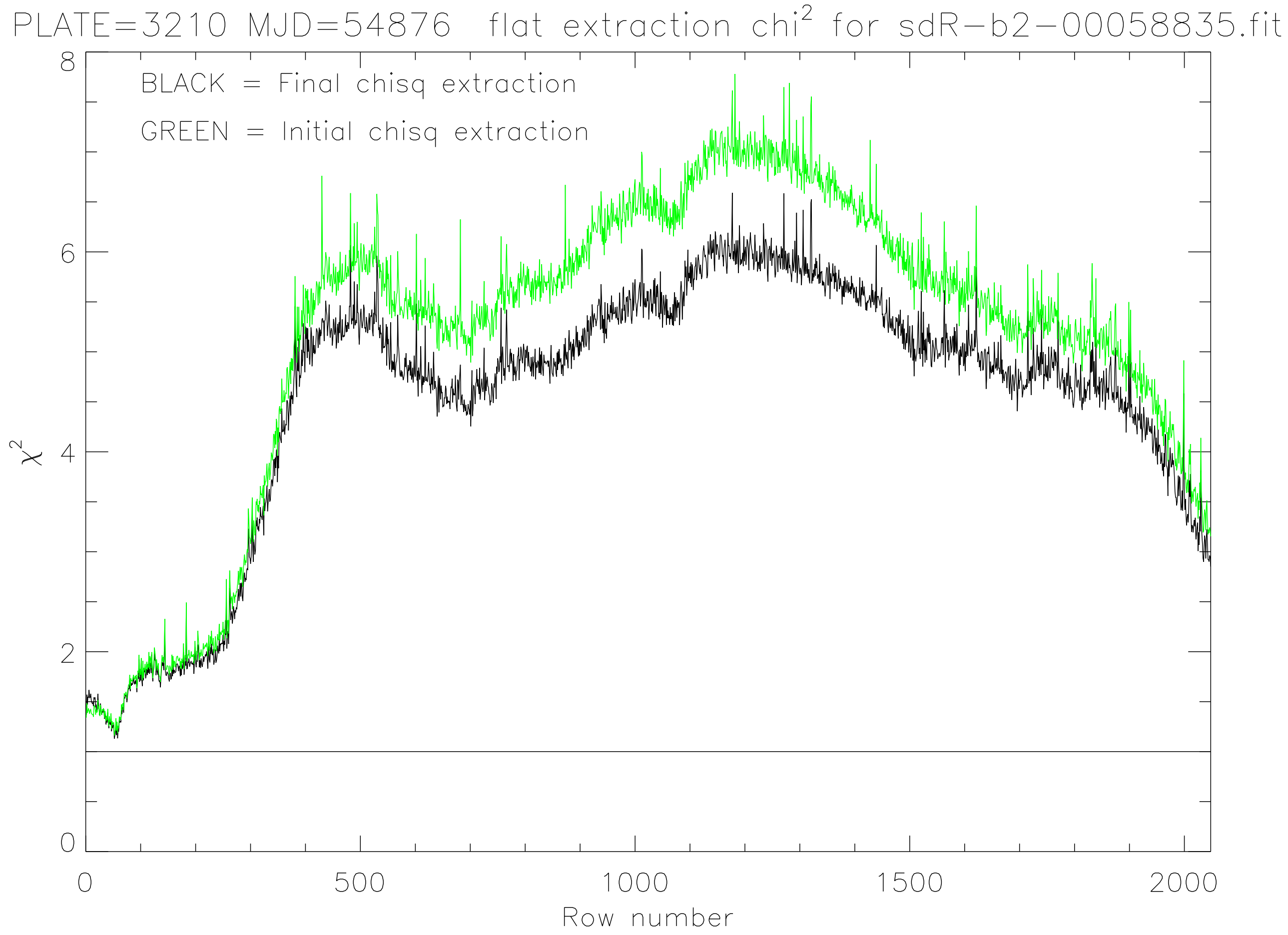

scale coeff residuals from ord=3 poly
2×10^{-5}
0
-2×10^{-5}
0
50
100
150
200
250
300
fiber

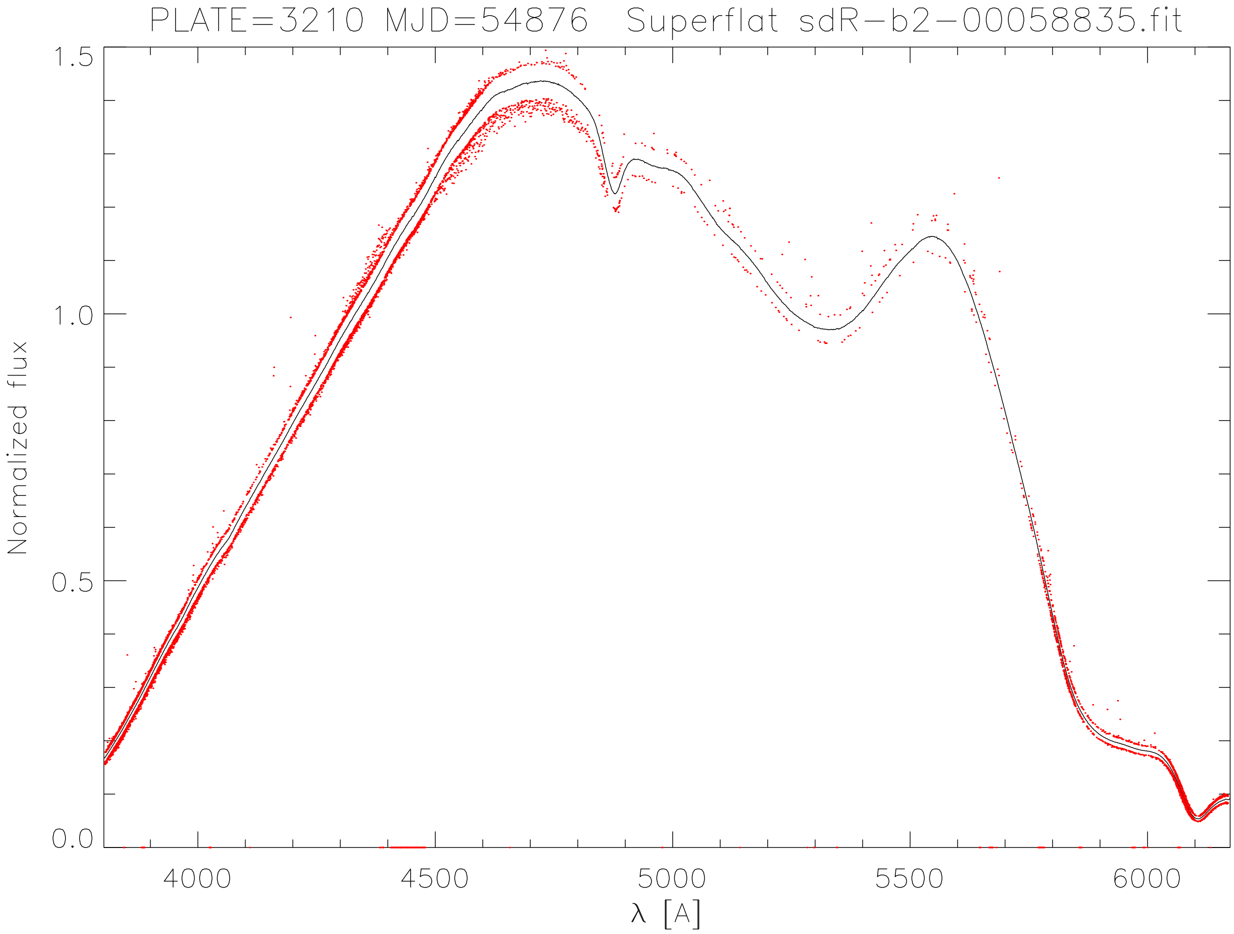

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

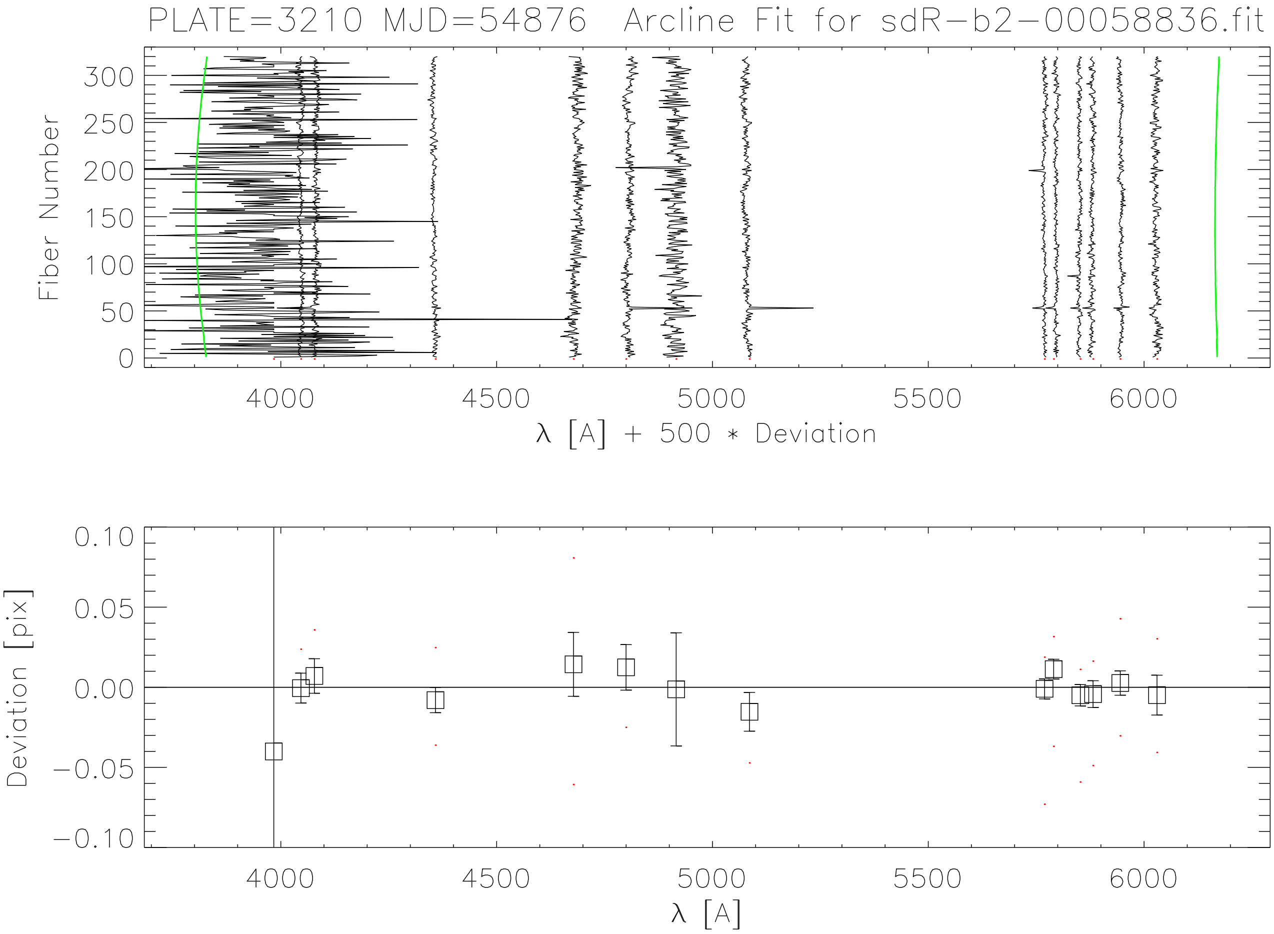

scale coeff residuals from ord=3 poly
2×10^{-5}
0
-2×10^{-5}
0
50
100
150
200
250
300
fiber


PLATE=3210 MJD=54876 flat extraction chi^2 for sdR-b2-00058831.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number


PLATE=3210 MJD=54876 Superflat sdR-b2-00058831.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

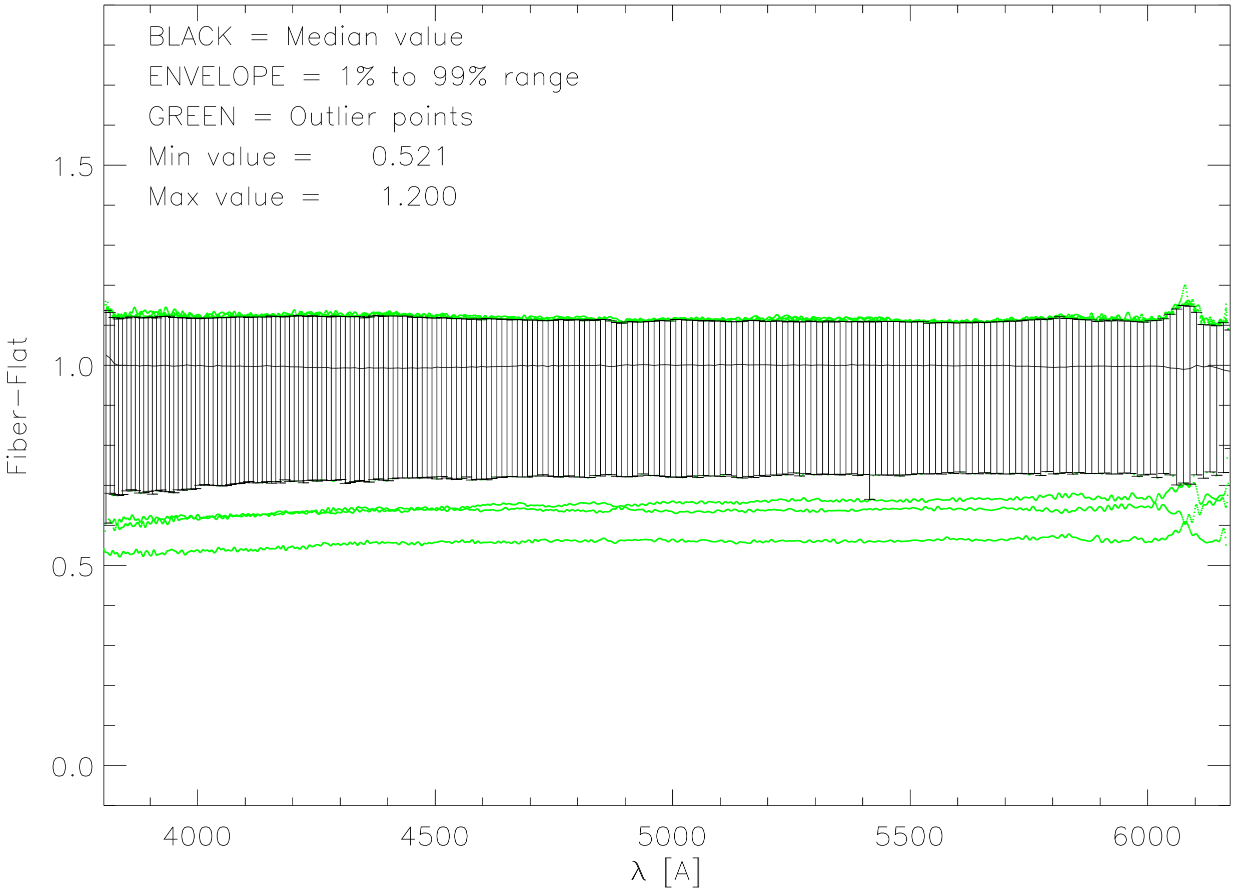

PLATE=3210 MJD=54876 flat extraction chi^2 for sdR-b2-00058835.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number


PLATE=3210 MJD=54876 Superflat sdR-b2-00058835.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

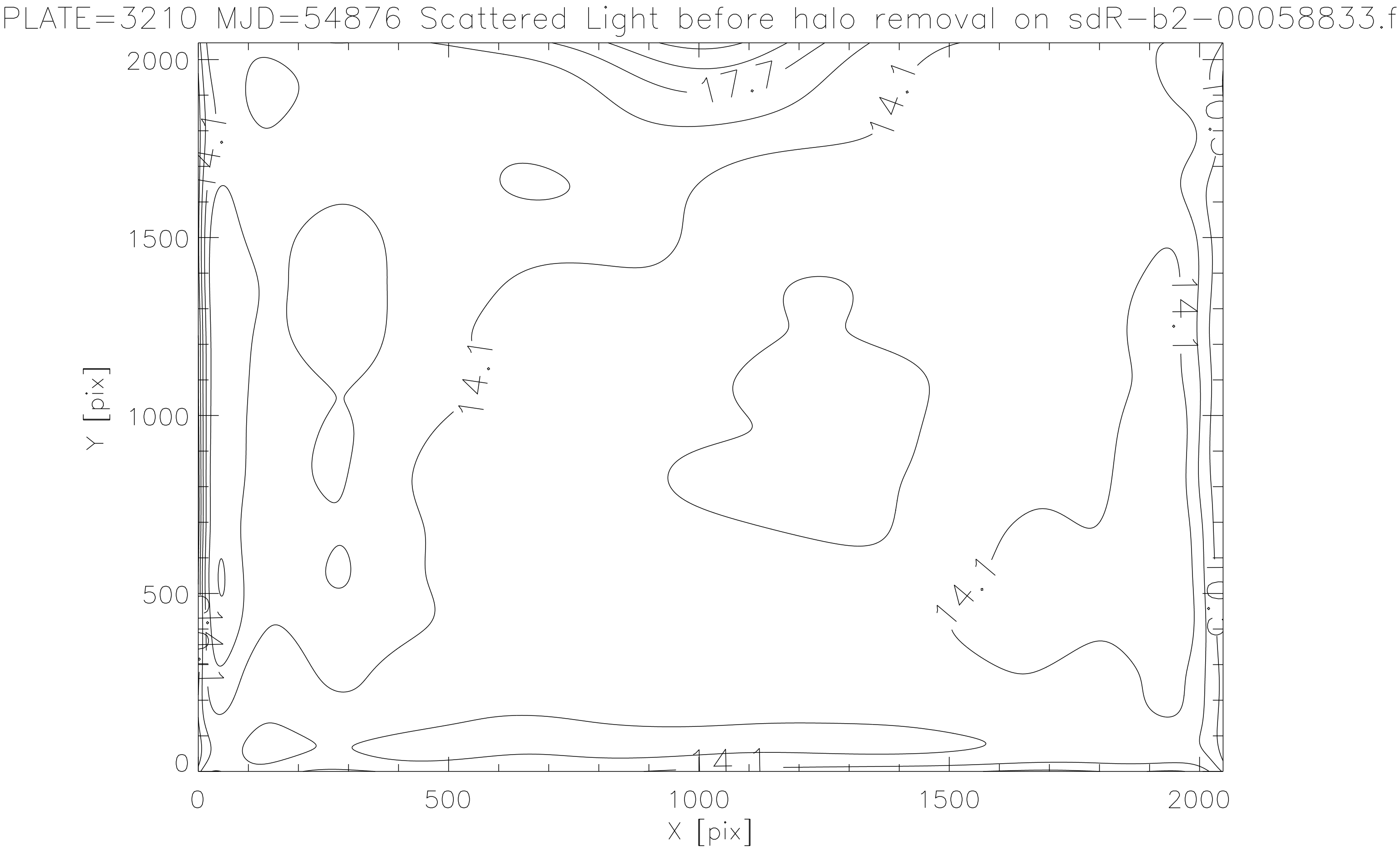

PLATE=3210 MJD=54876 Arcline Fit for sdR-b2-00058836.fit

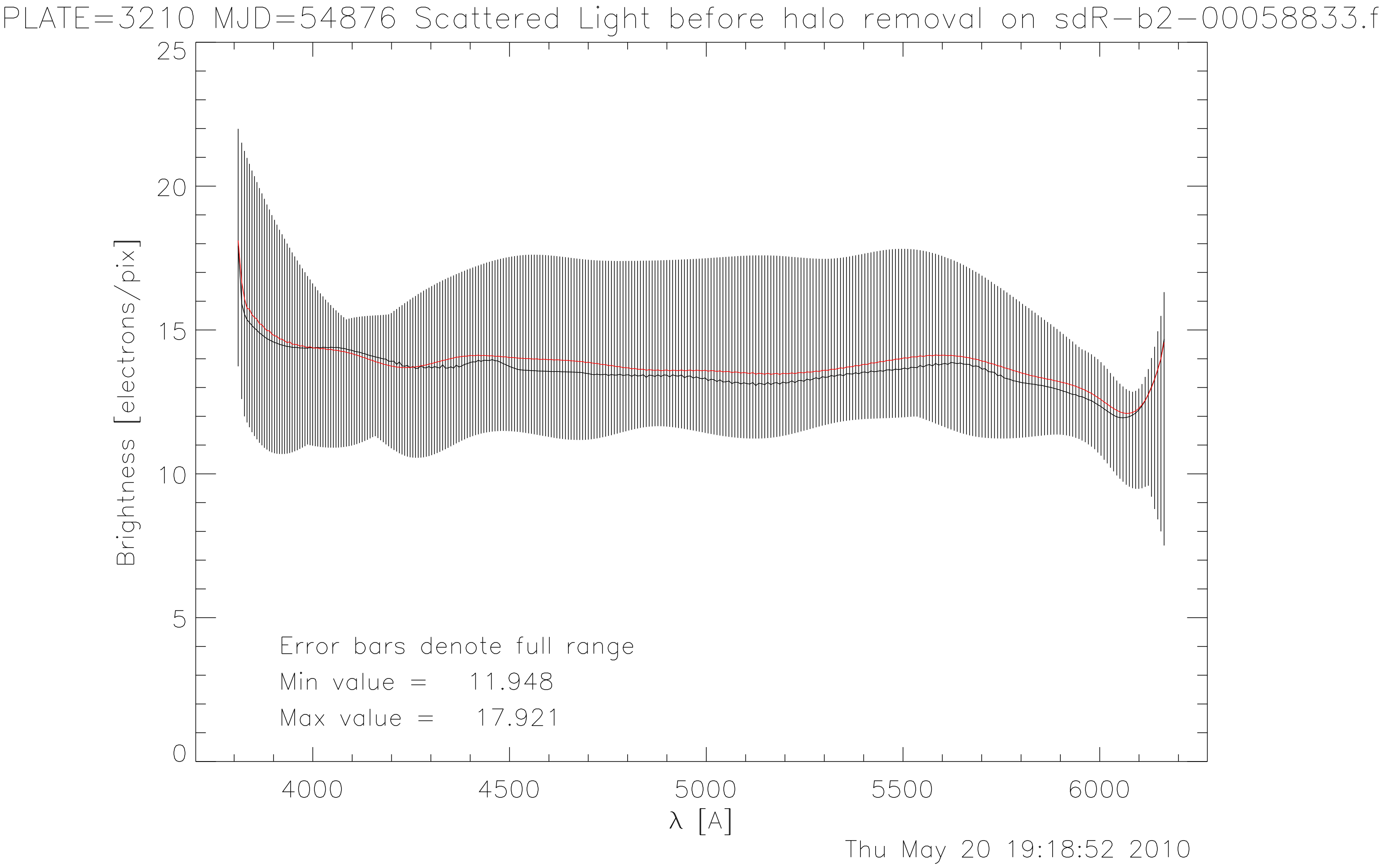
Thu May 20 19:17:43 2010

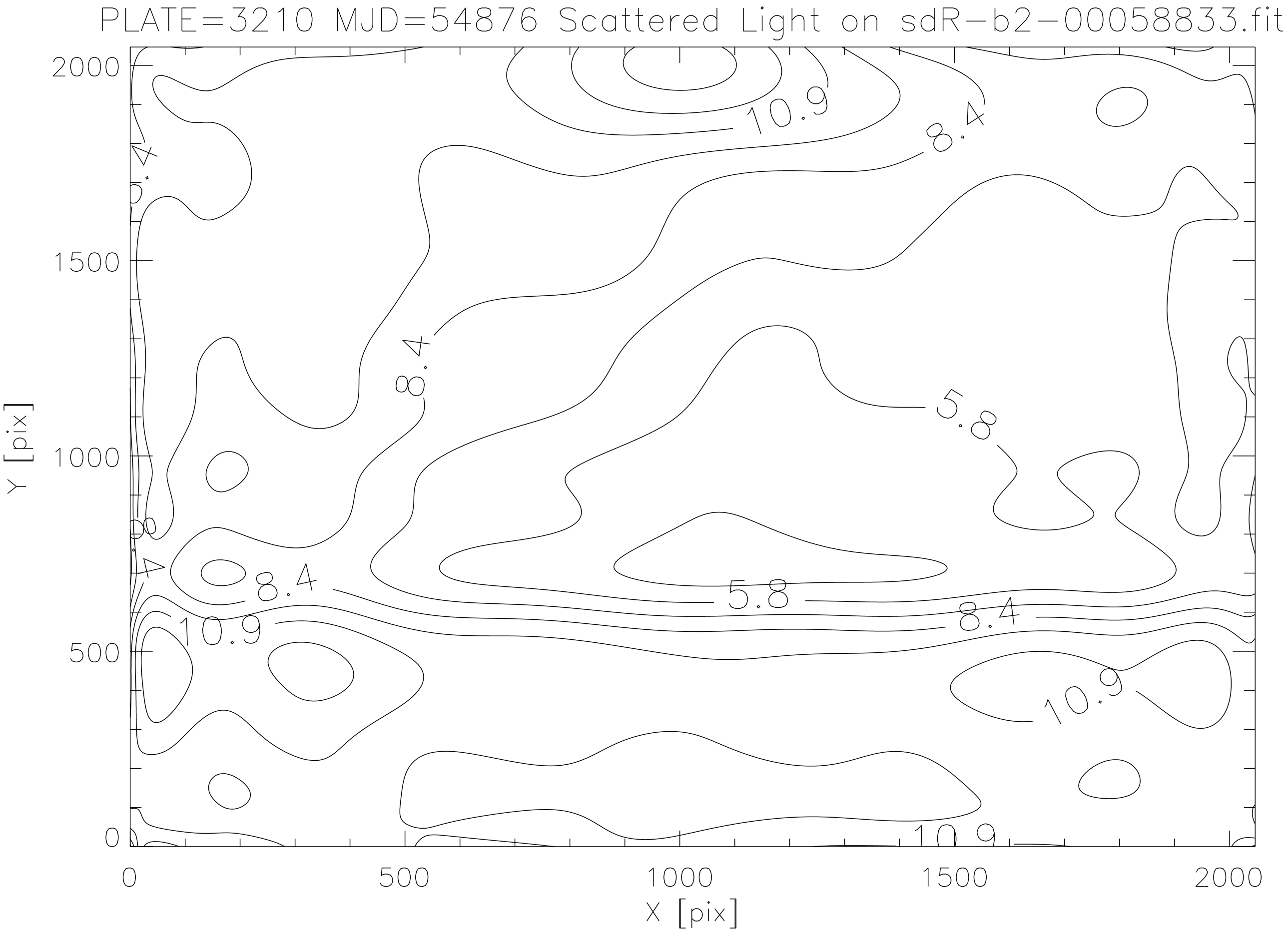
PLATE=3210 MJD=54876 Fiber–Flats for sdR–b2–00058835.fit

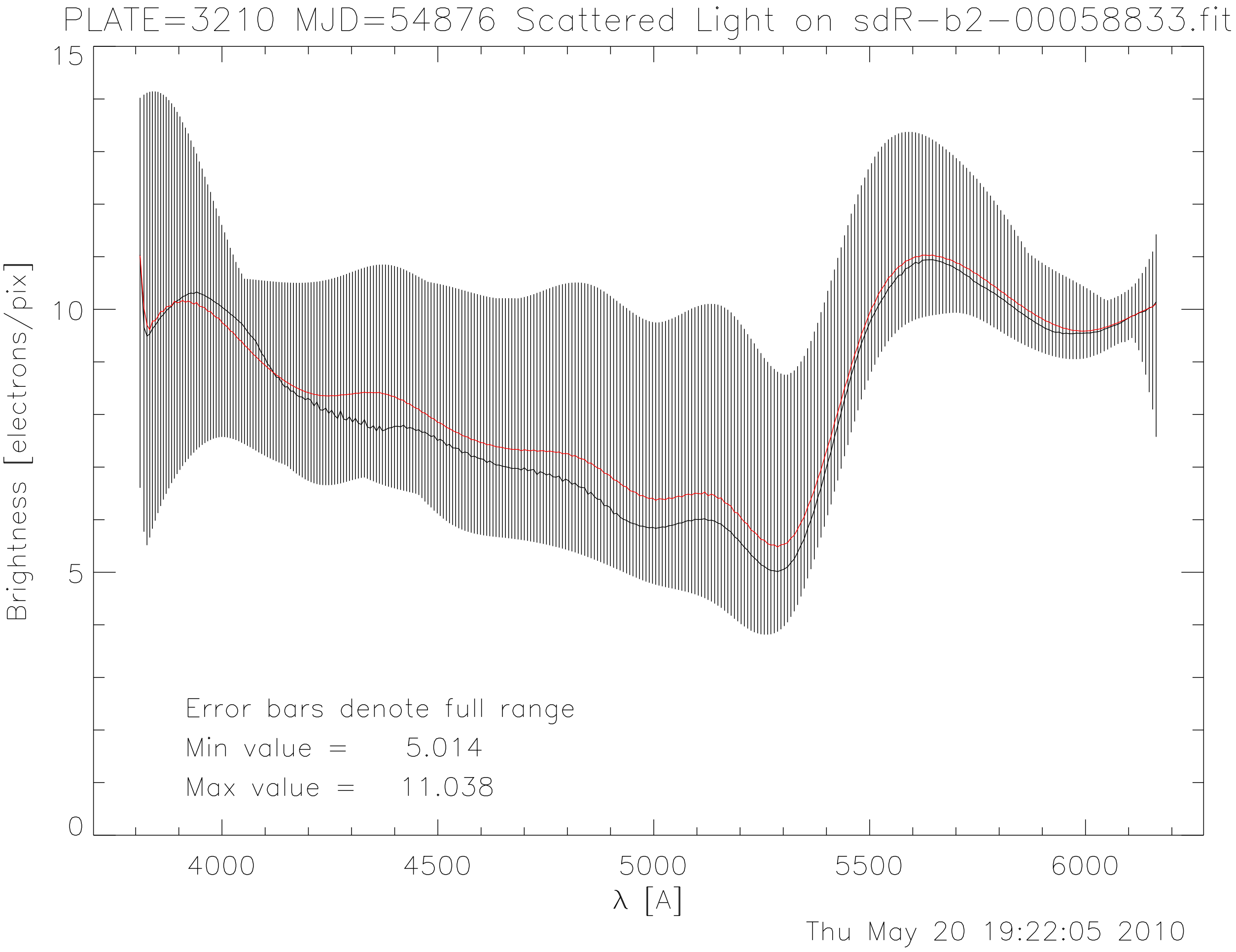


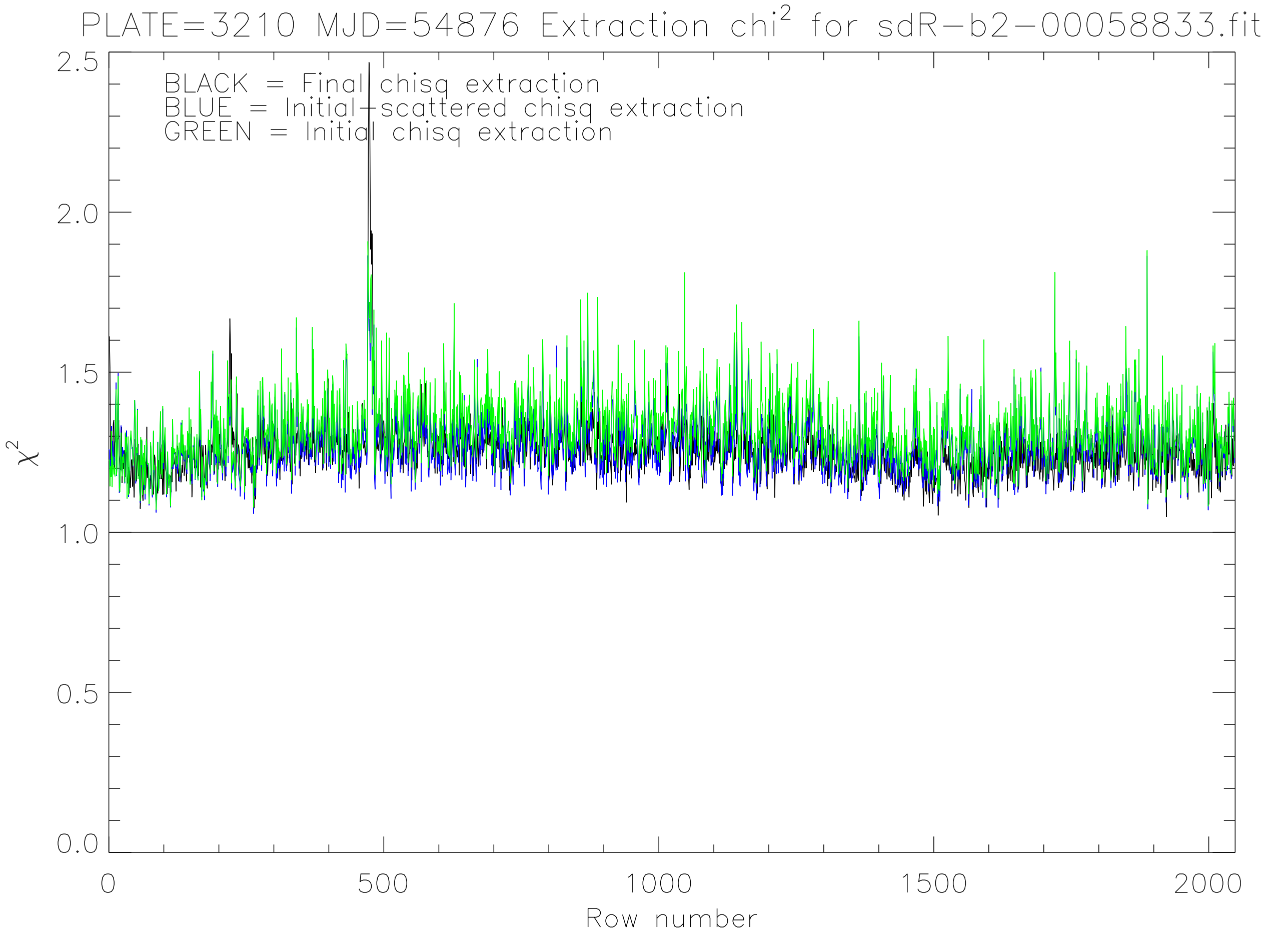
Thu May 20 19:17:52 2010

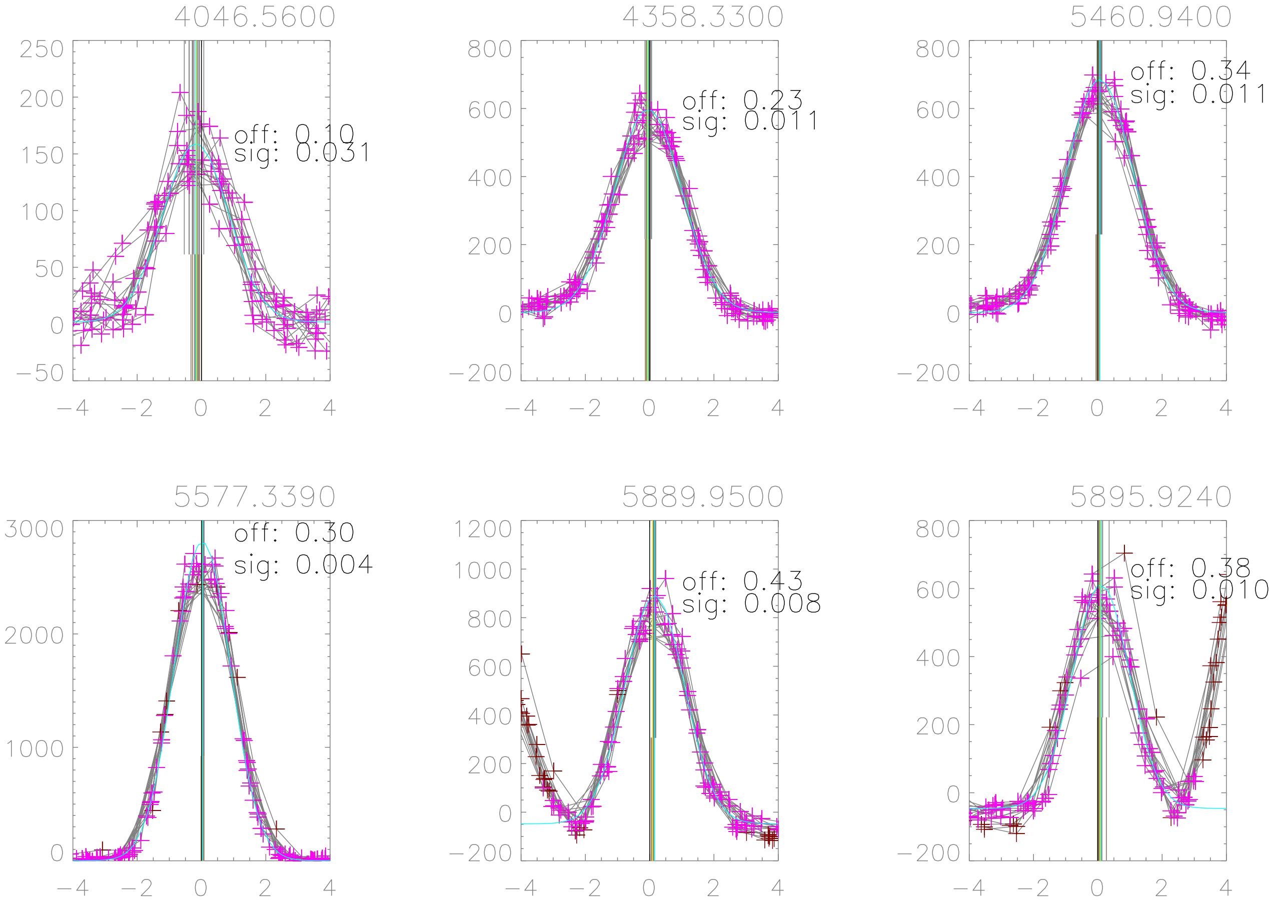

PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b2-00058833.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
17.7
14.1
14.1
14.1
14.1
14.1
14.1
14.1
10.5
10.5

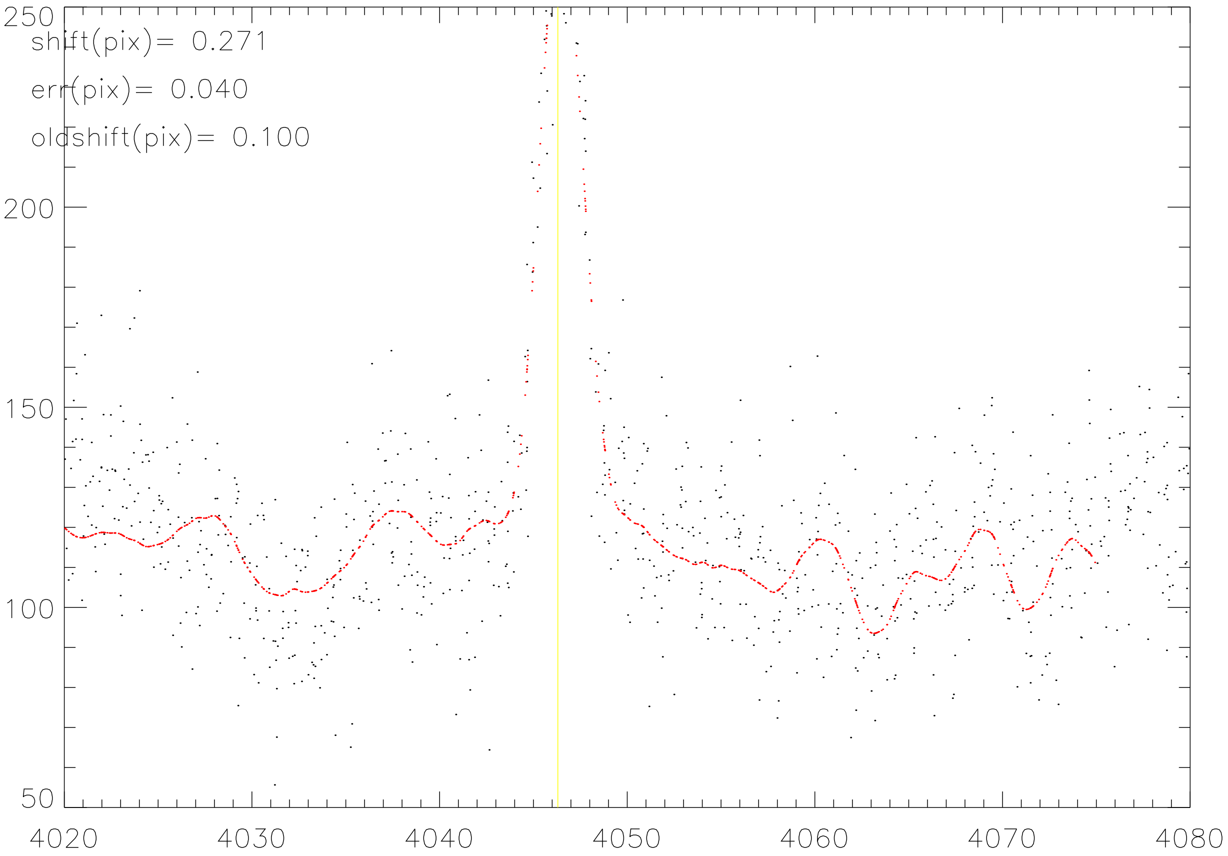

PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b2-00058833.f
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 11.948
Max value = 17.921
Thu May 20 19:18:52 2010

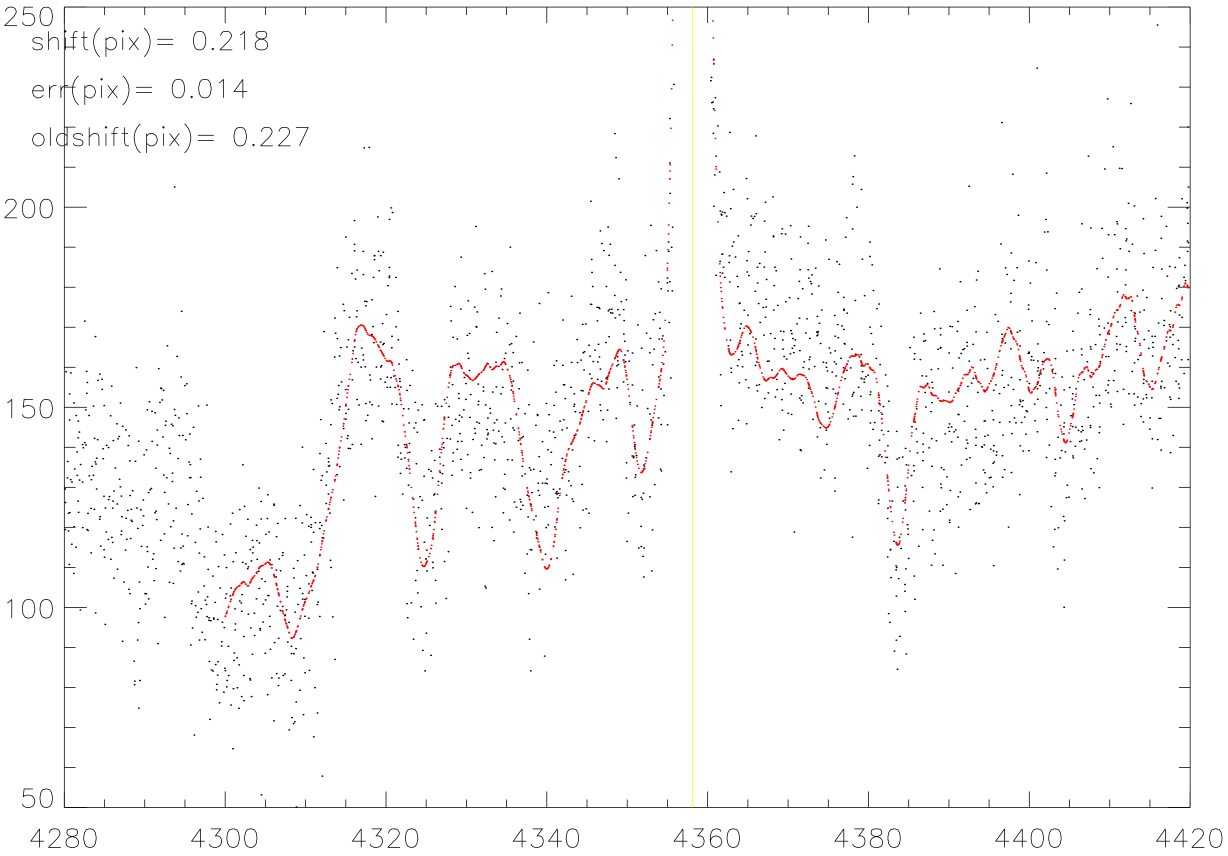

PLATE=3210 MJD=54876 Scattered Light on sdR-b2-00058833.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
10.9
8.4
8.4
5.8
8.4
5.8
10.9
8.4
10.9
10.9

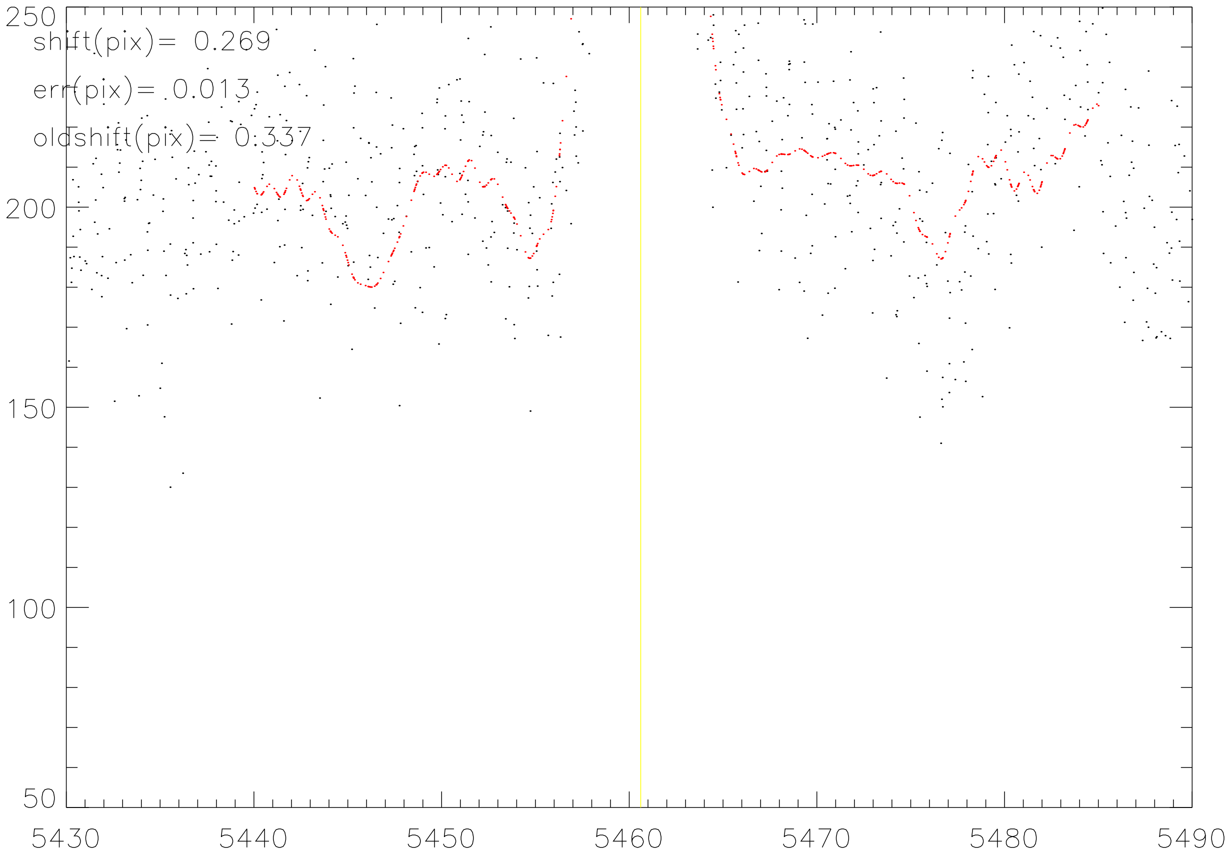

PLATE=3210 MJD=54876 Scattered Light on sdR-b2-00058833.fit
Brightness [electrons/pix]
0
5
10
15
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.014
Max value = 11.038
Thu May 20 19:22:05 2010

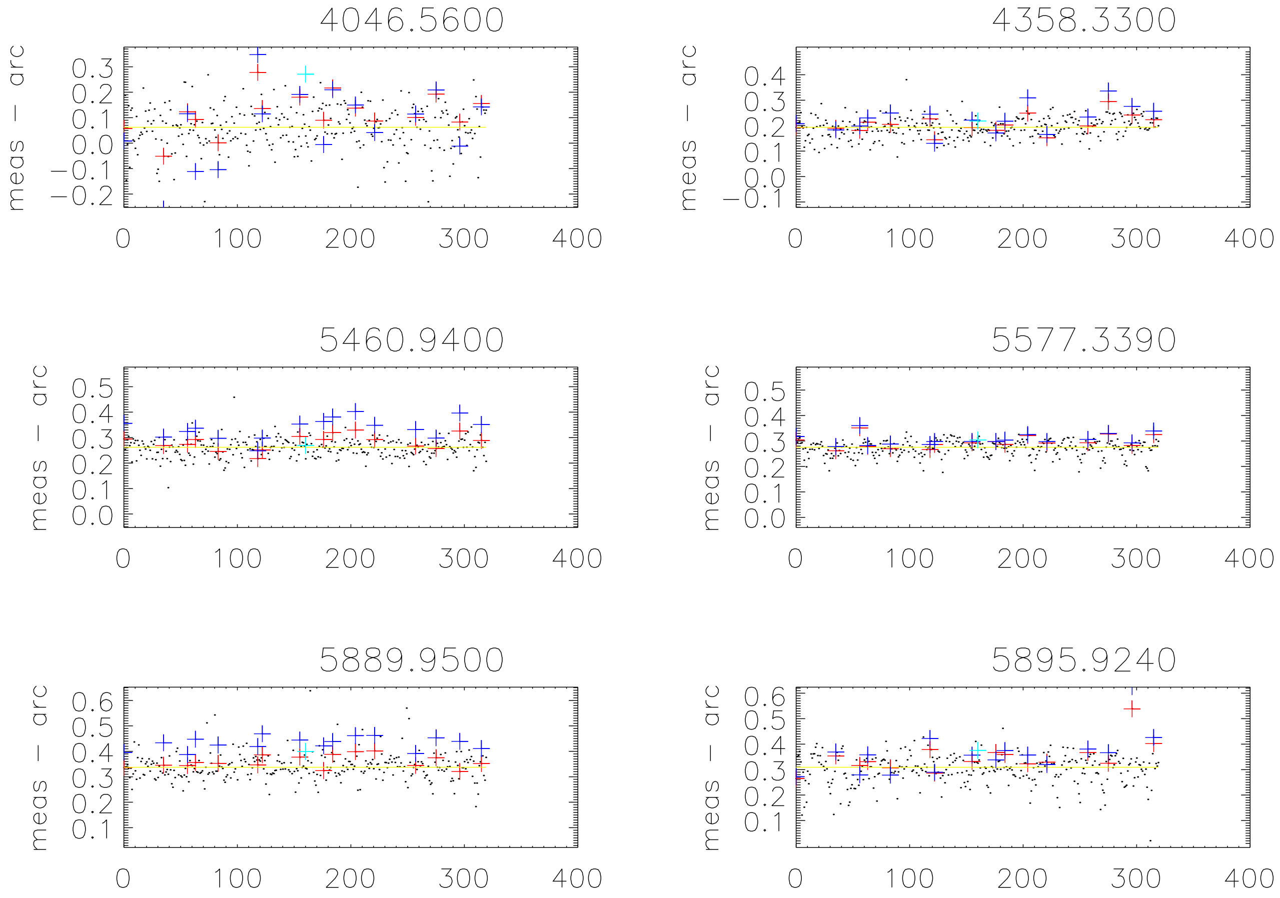

PLATE=3210 MJD=54876 Extraction chi^2 for sdR-b2-00058833.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

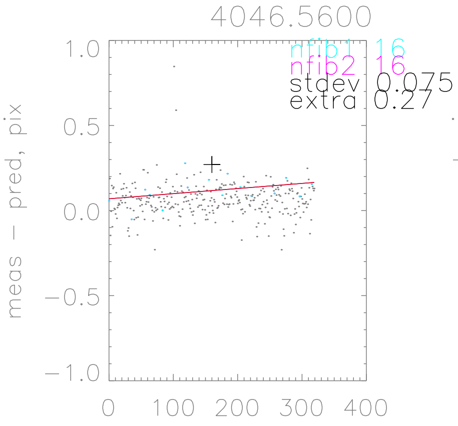

4046.5600
off: 0.10
sig: 0.031
250
200
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: 0.23
sig: 0.011
800
600
400
200
0
−200
−4
−2
0
2
4
5460.9400
off: 0.34
sig: 0.011
800
600
400
200
0
−200
−4
−2
0
2
4
5577.3390
off: 0.30
sig: 0.004
3000
2000
1000
0
−4
−2
0
2
4
5889.9500
off: 0.43
sig: 0.008
1200
1000
800
600
400
200
0
−200
−4
−2
0
2
4
5895.9240
off: 0.38
sig: 0.010
800
600
400
200
0
−200
−4
−2
0
2
4

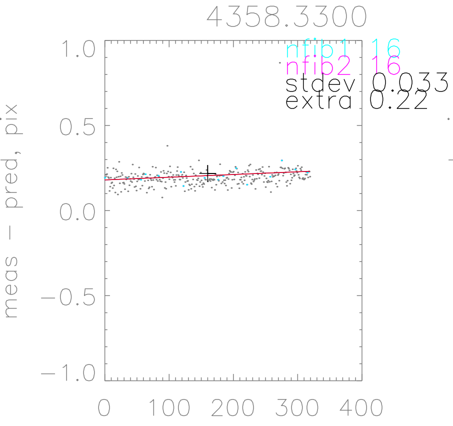

shift(pix)= 0.271
err(pix)= 0.040
oldshift(pix)= 0.100
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

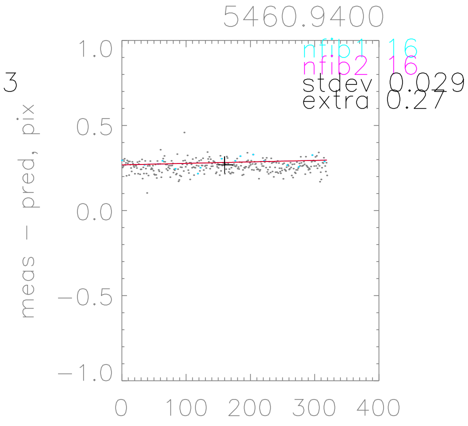

shift(pix)= 0.218
err(pix)= 0.014
oldshift(pix)= 0.227
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

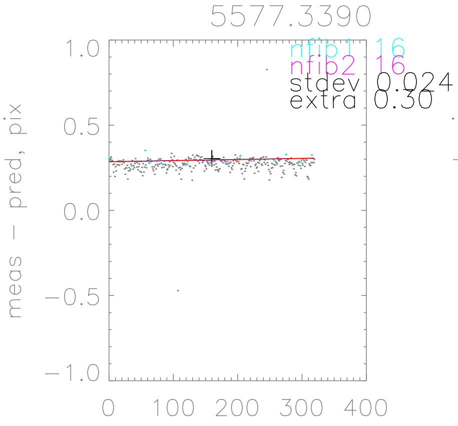

shift(pix)= 0.269
err(pix)= 0.013
oldshift(pix)= 0.337
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

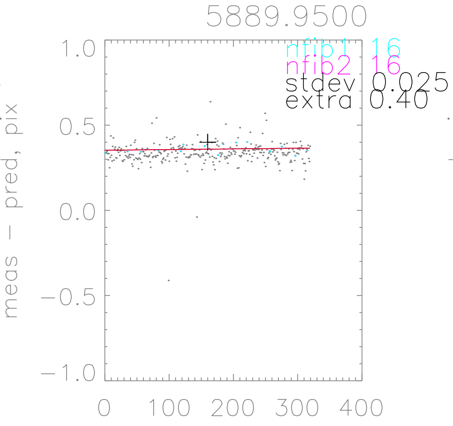

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
−0.2
−0.1
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

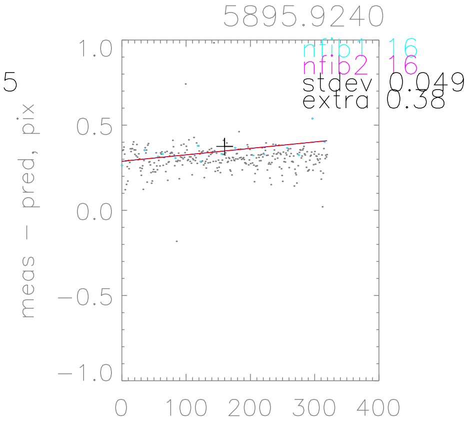

4046.5600
nfib1 16
nfib2 16
stdev 0.075
extra 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

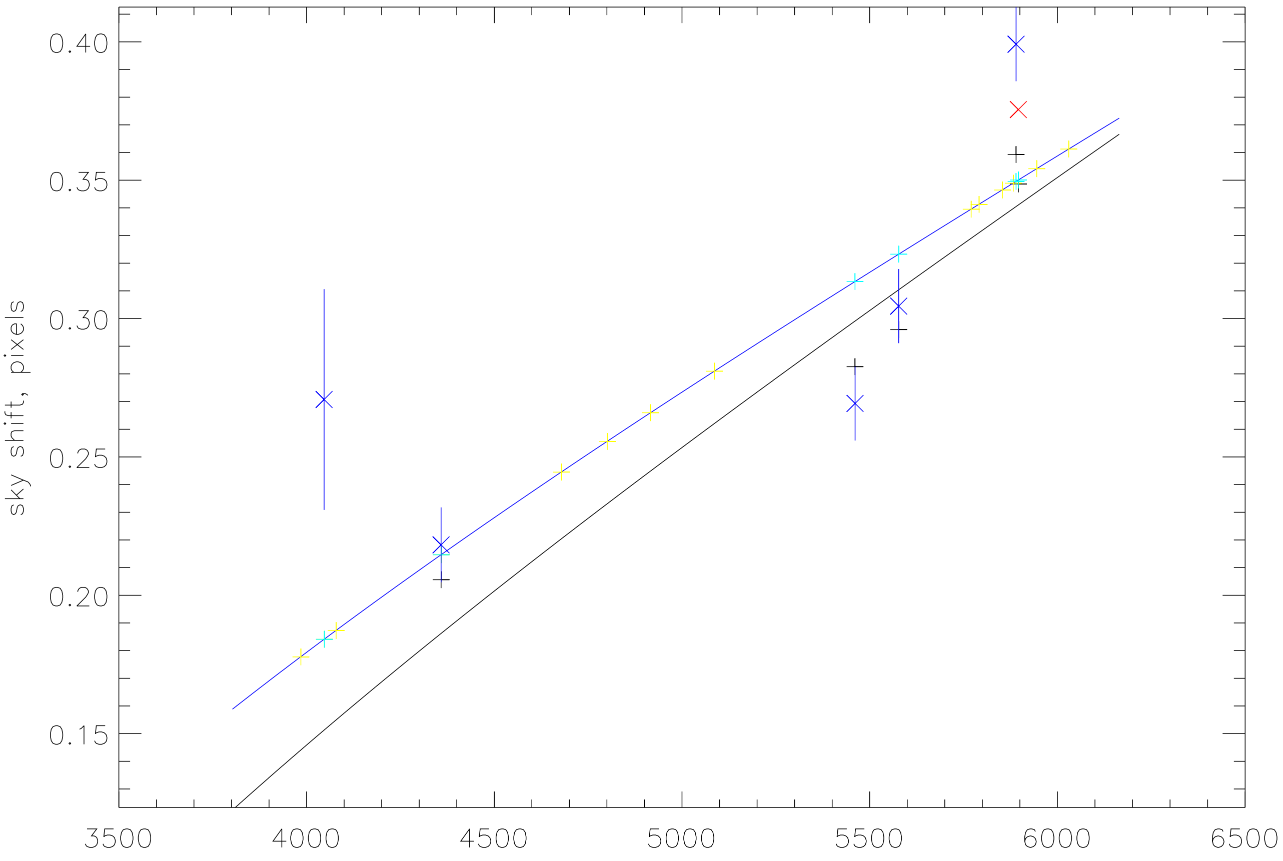

4358.3300
nfib1 16
nfib2 16
stdev 0.033
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

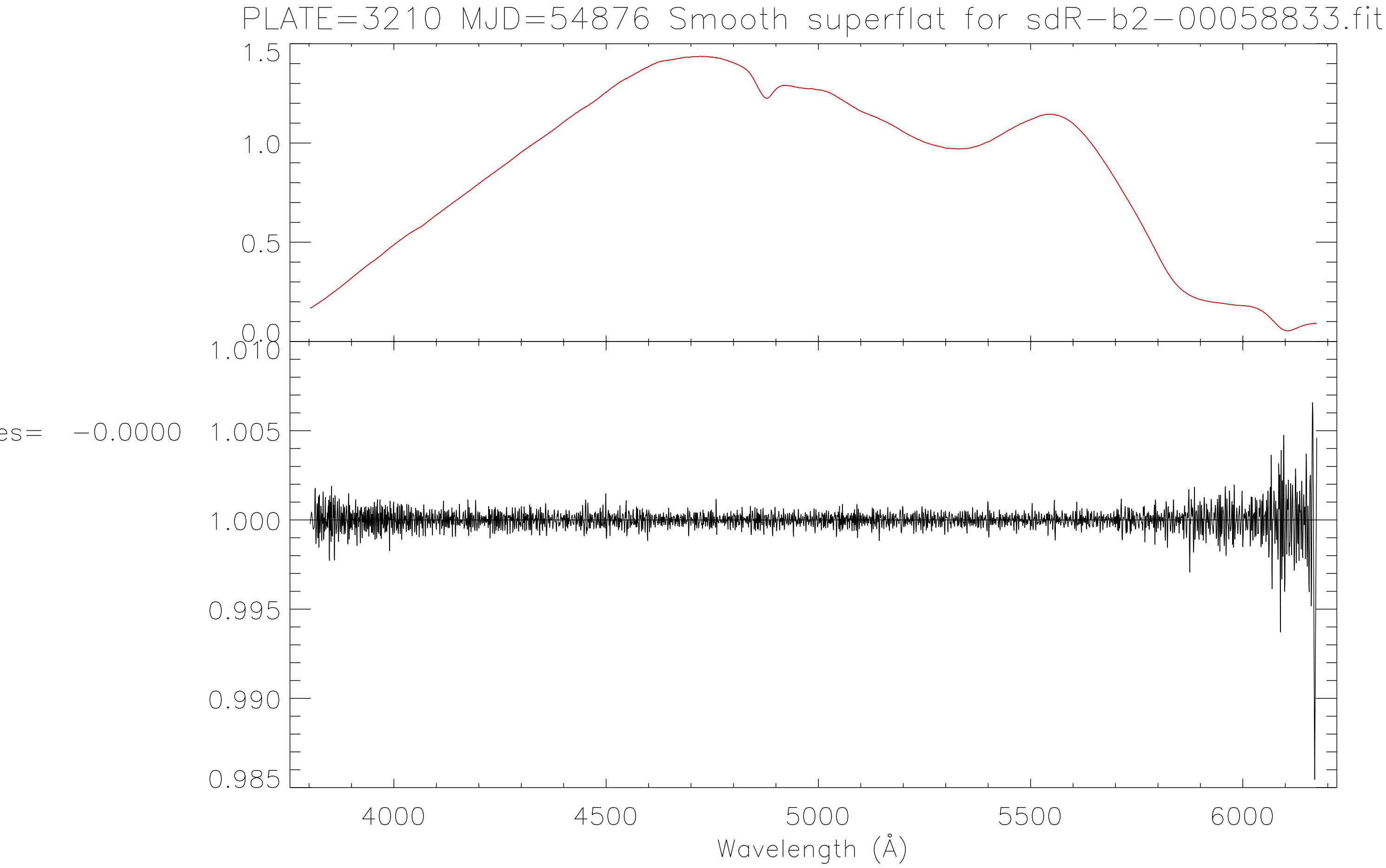

5460.9400
nfib1 16
nfib2 16
stdev 0.029
extra 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

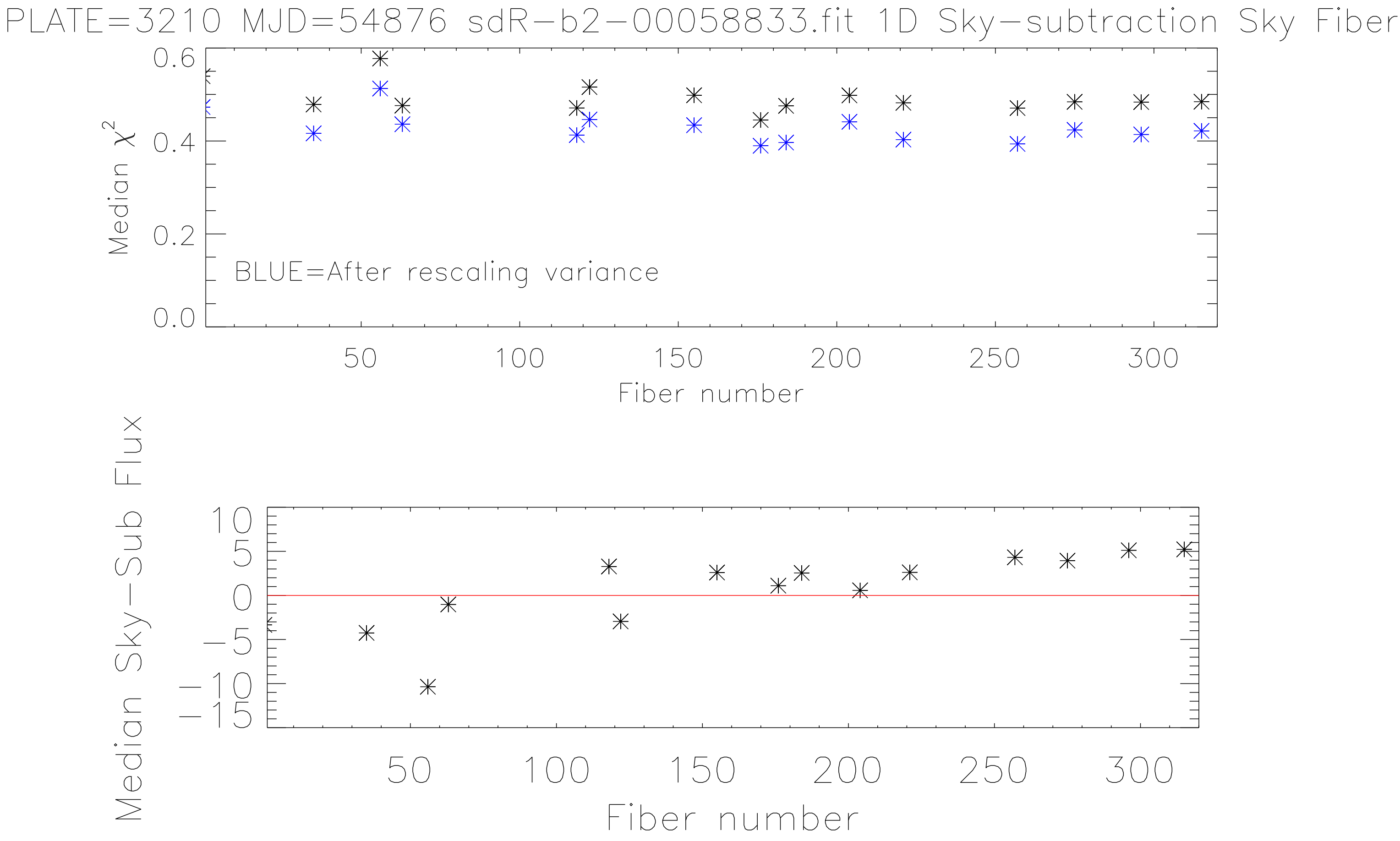

5577.3390
nfib1 16
nfib2 16
stdev 0.024
extra 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

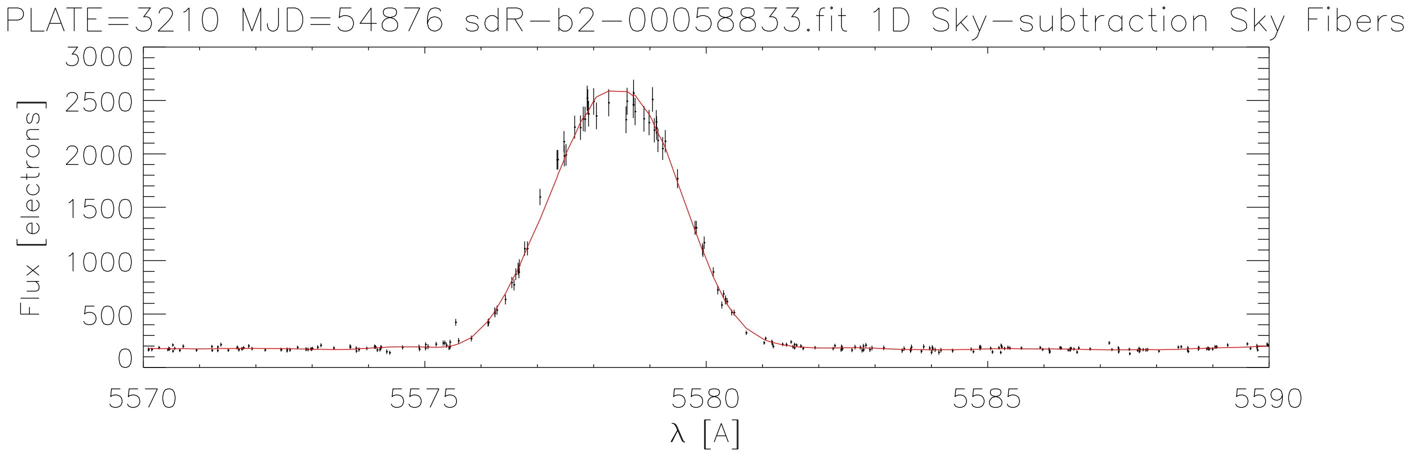

5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra 0.40
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

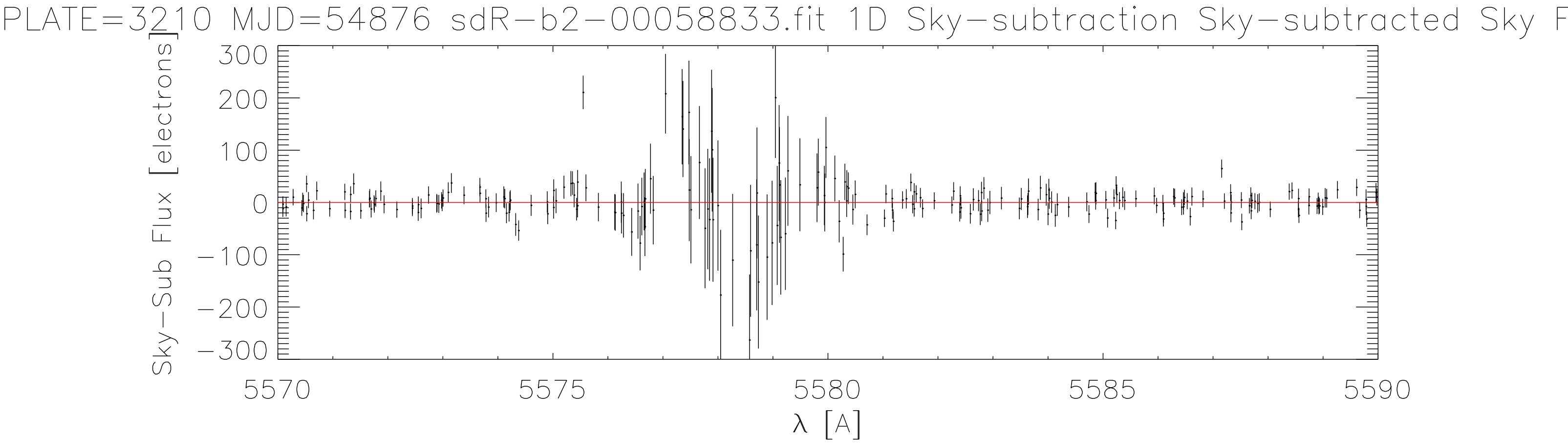

5895.9240
nfib1 16
nfib2 16
stdev 0.049
extra 0.38
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.40
0.35
0.30
0.25
0.20
0.15
3500
4000
4500
5000
5500
6000
6500


PLATE=3210 MJD=54876 Smooth superflat for sdR-b2-00058833.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es=   -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

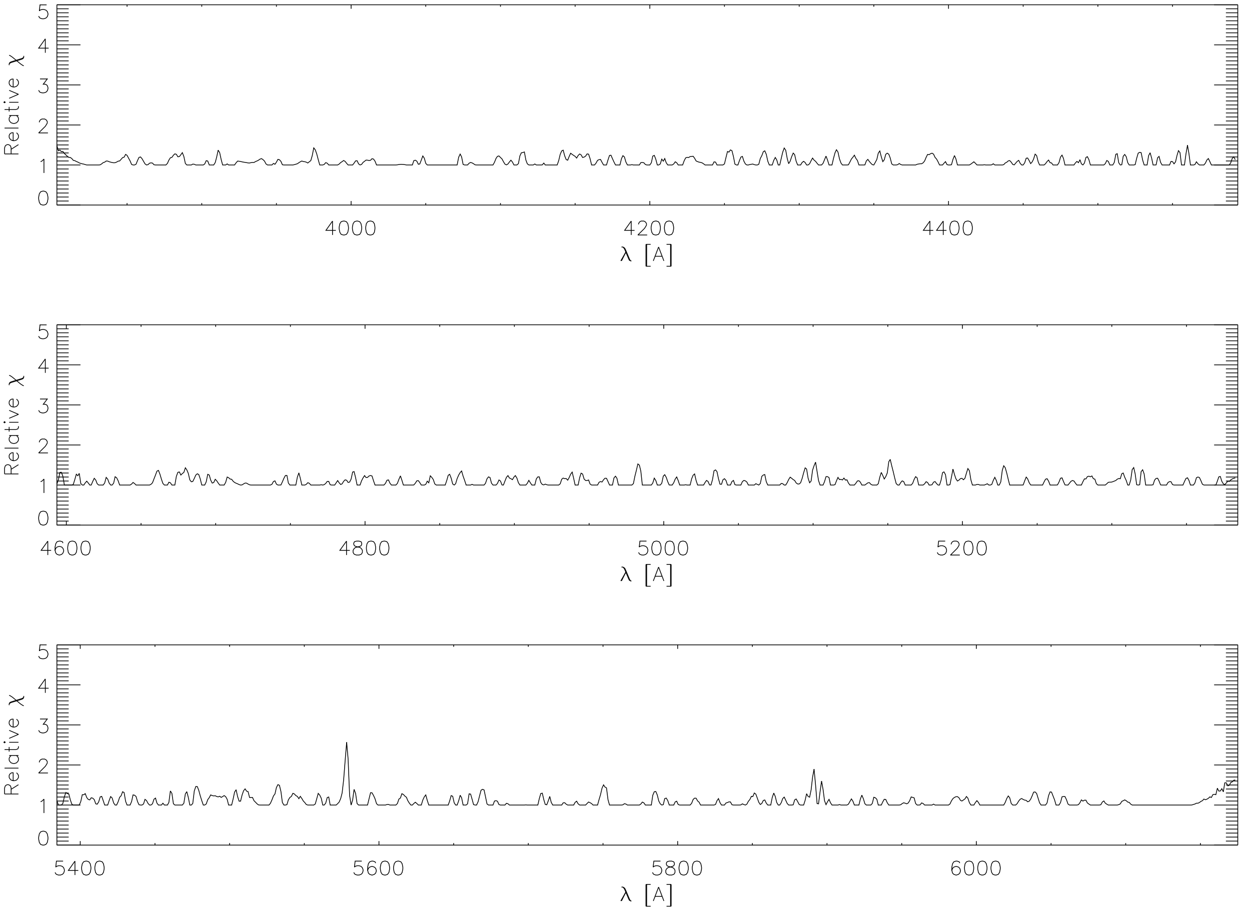

PLATE=3210 MJD=54876 sdR-b2-00058833.fit 1D Sky-subtraction Sky Fiber
Median χ²
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−15
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number


PLATE=3210 MJD=54876 sdR-b2-00058833.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

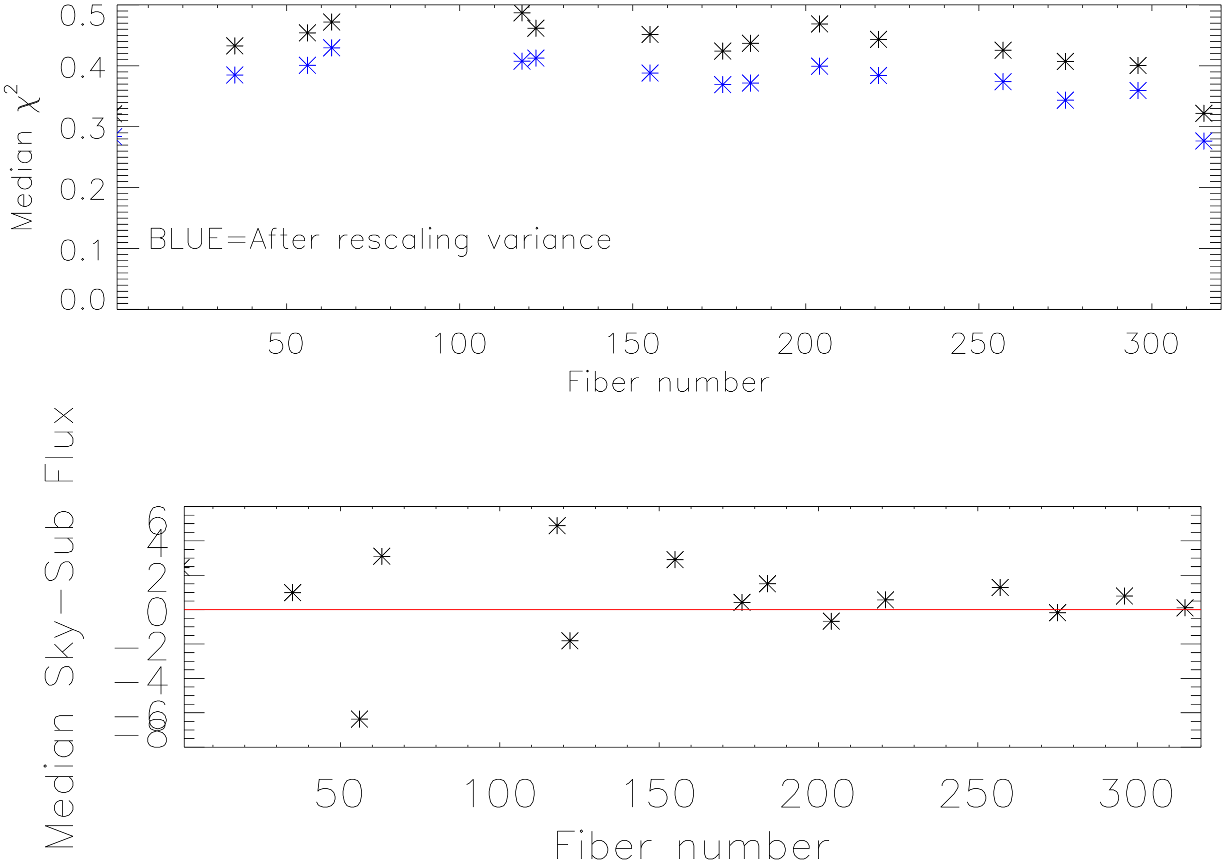

PLATE=3210 MJD=54876 sdR-b2-00058833.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

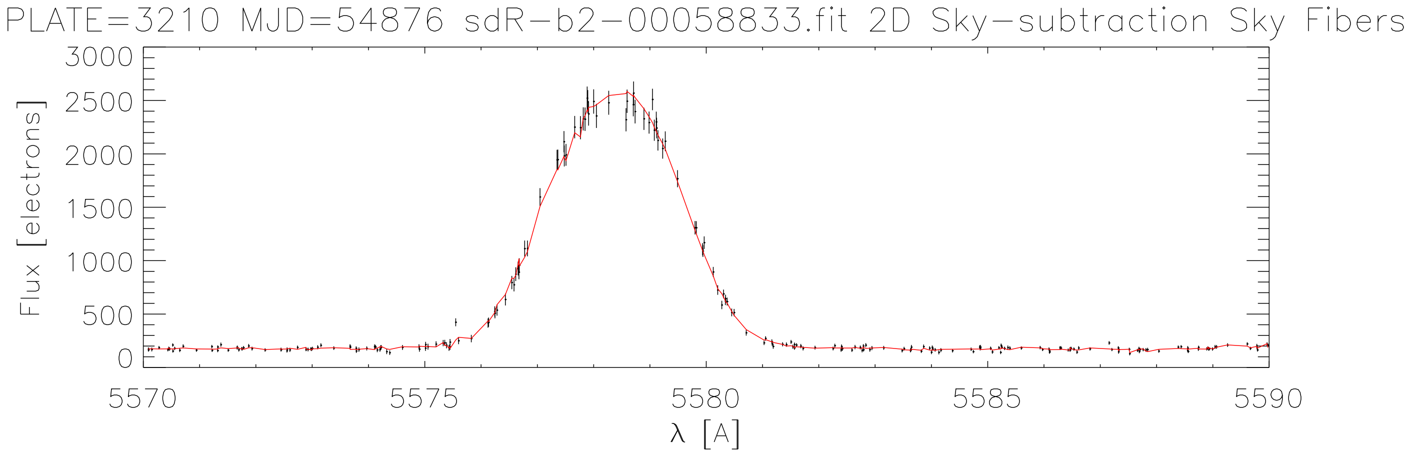
Number of sky fibers = 15

PLATE=3210 MJD=54876 sdR-b2-00058833.fit 1D Sky-subtraction Rescaled Errors

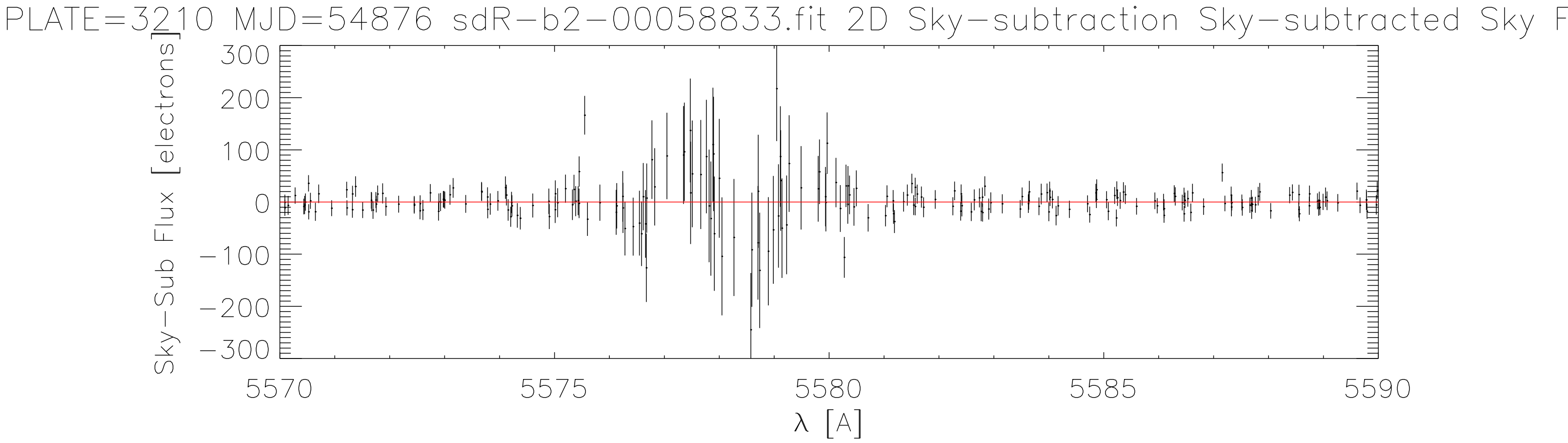


PLATE=3210 MJD=54876 sdR-b2-00058833.fit 2D Sky-subtraction Sky Fiber





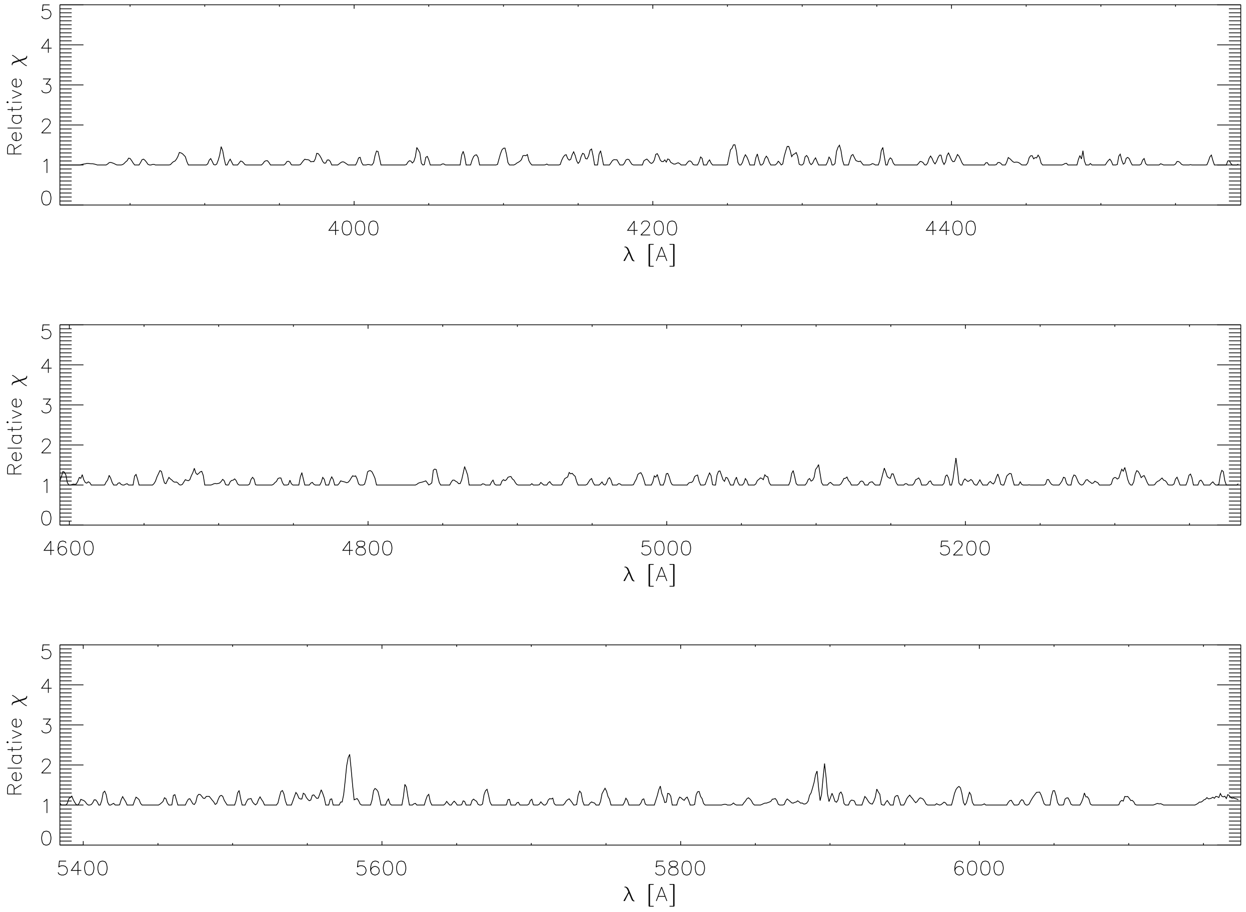
PLATE=3210 MJD=54876 sdR-b2-00058833.fit 2D Sky-subtraction Sky Fibers

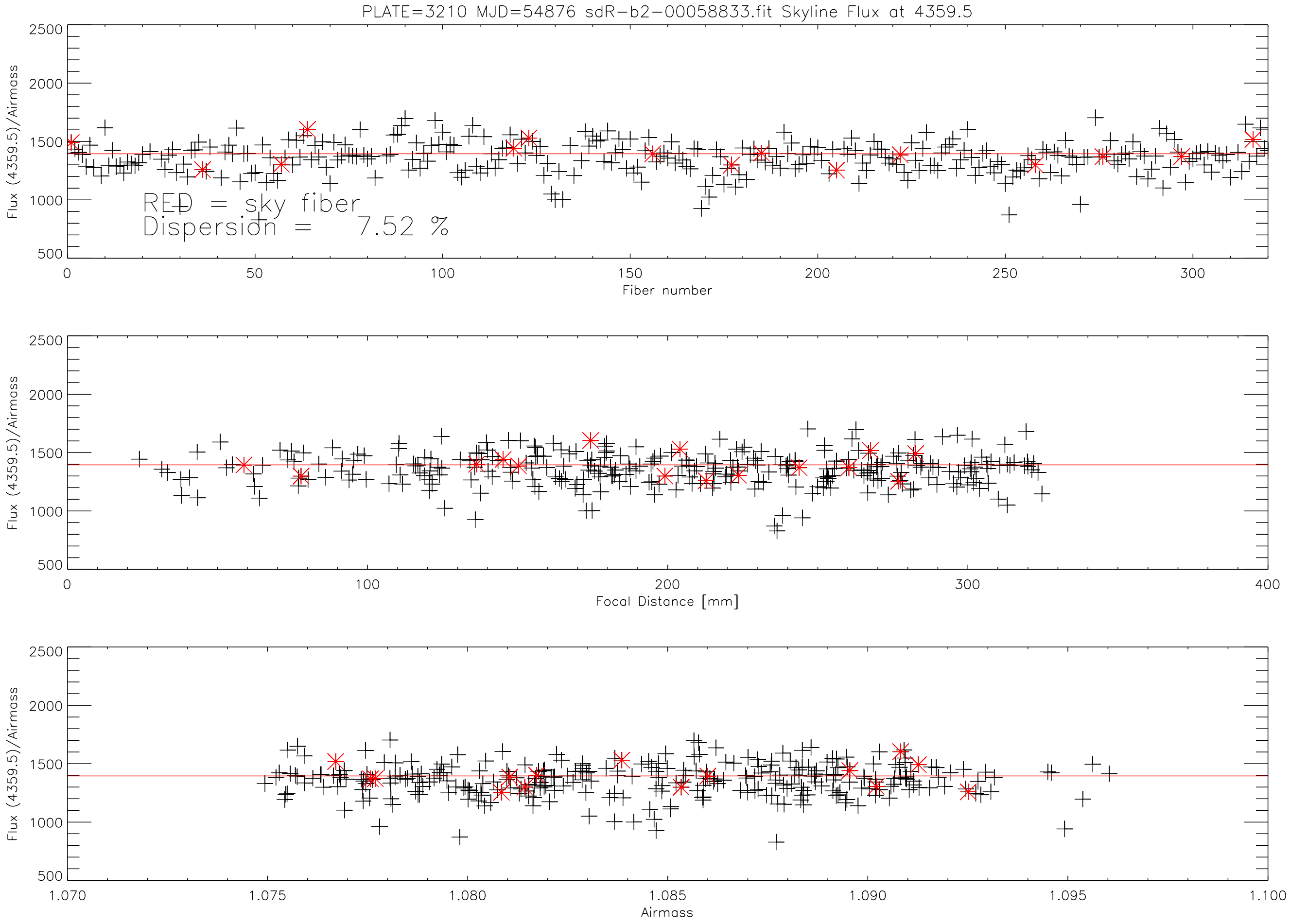


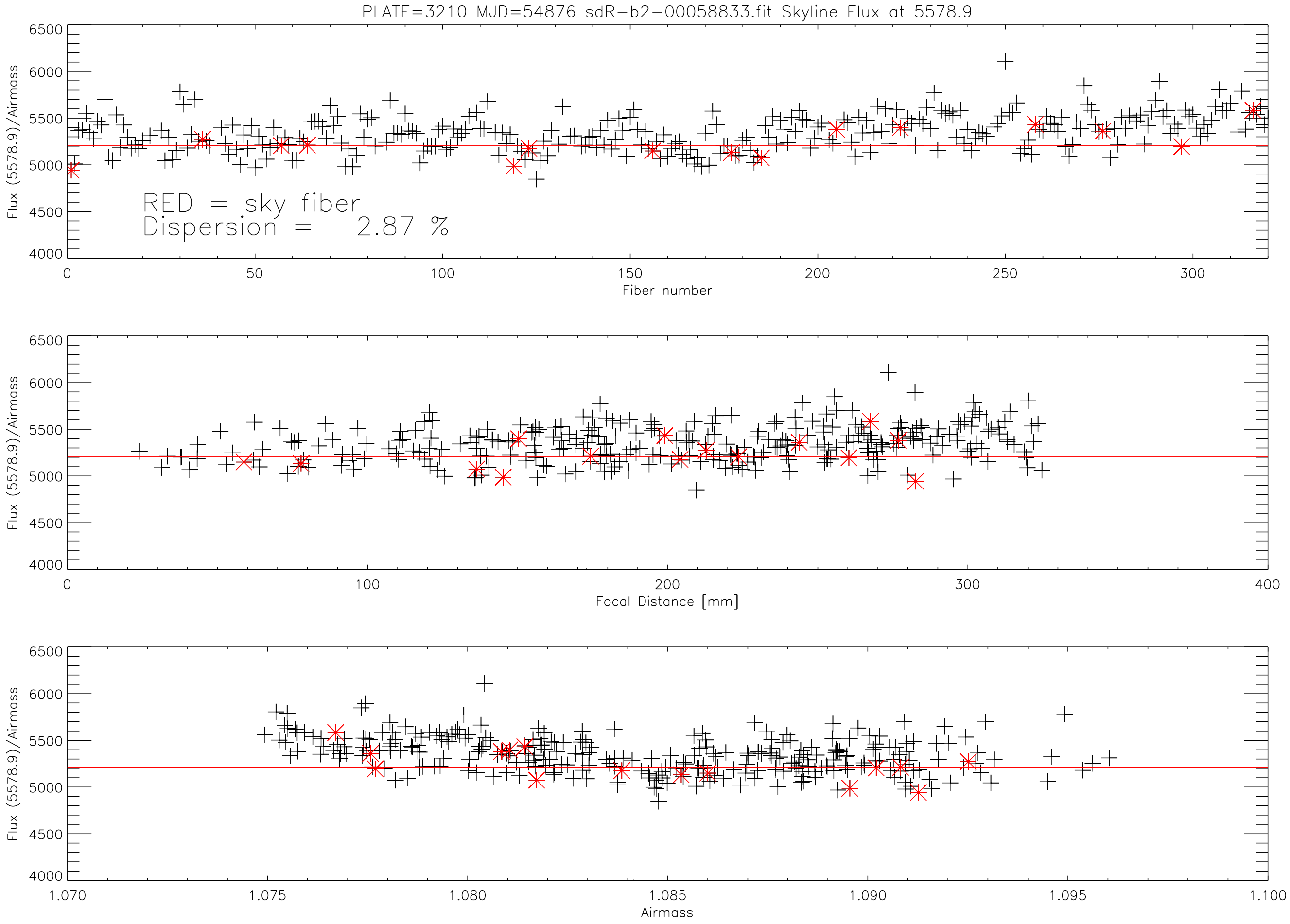
PLATE=3210 MJD=54876 sdR-b2-00058833.fit 2D Sky-subtraction Sky-subtracted Sky F

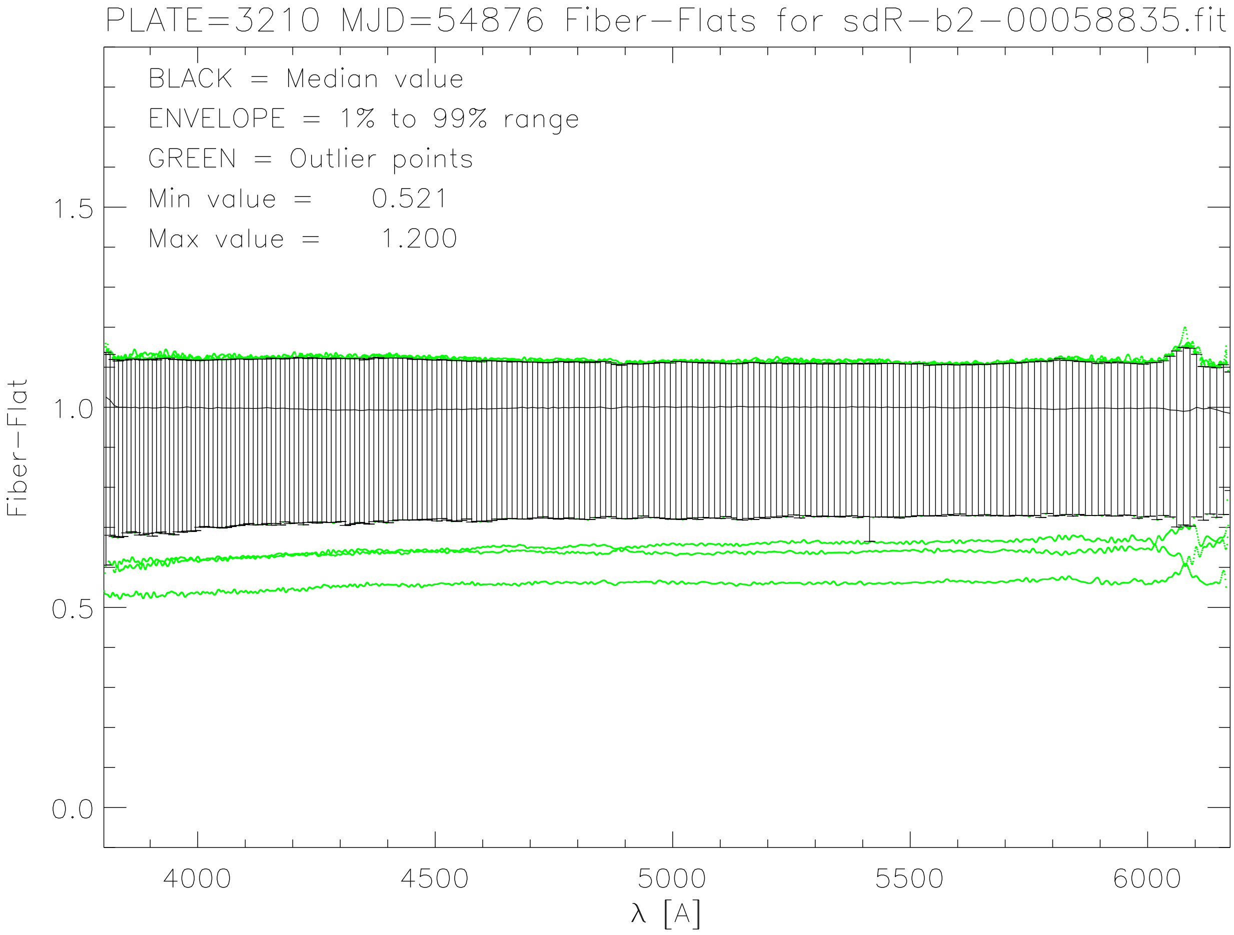
Number of sky fibers = 15

PLATE=3210 MJD=54876 sdR-b2-00058833.fit 2D Sky-subtraction Rescaled Errors

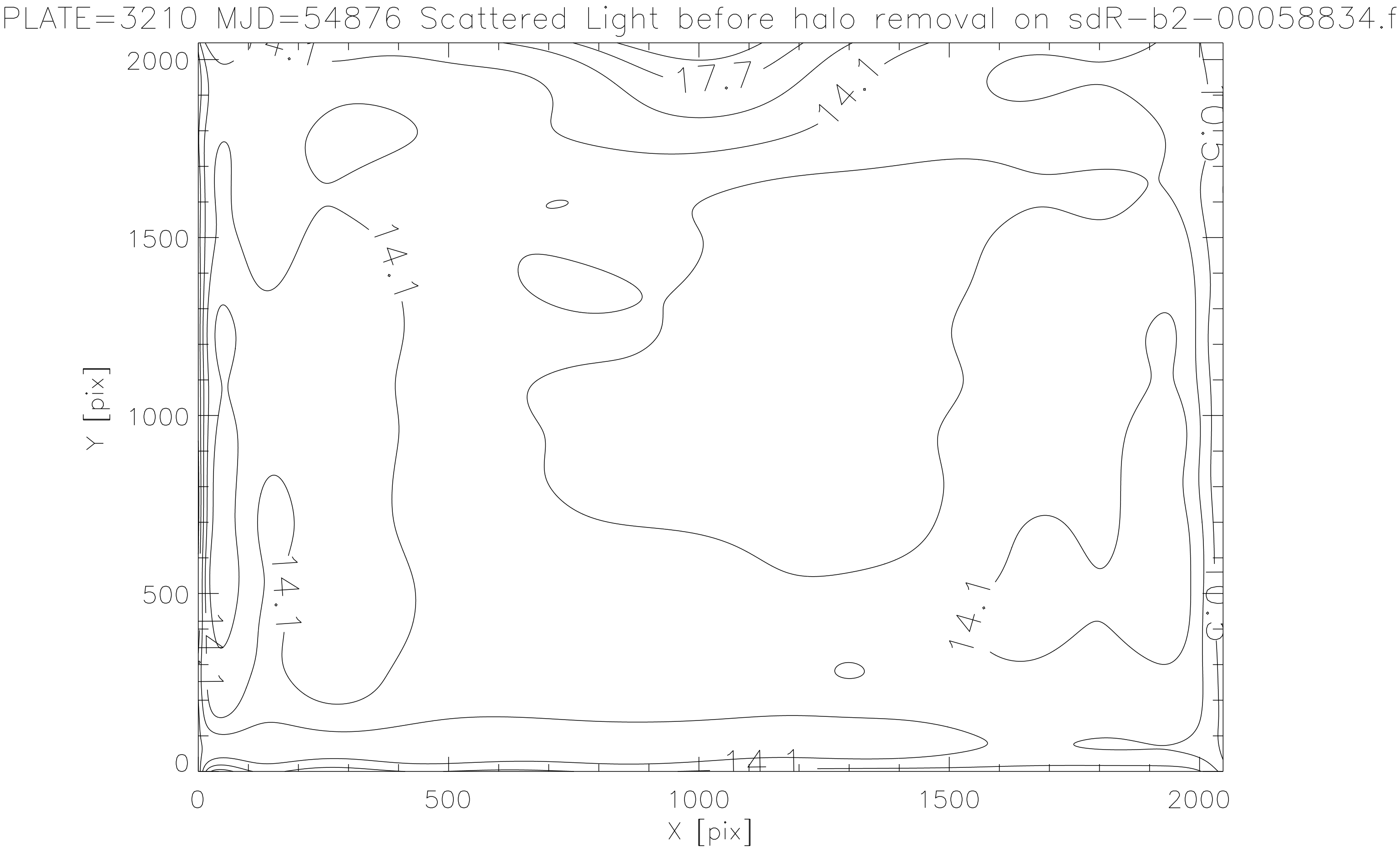


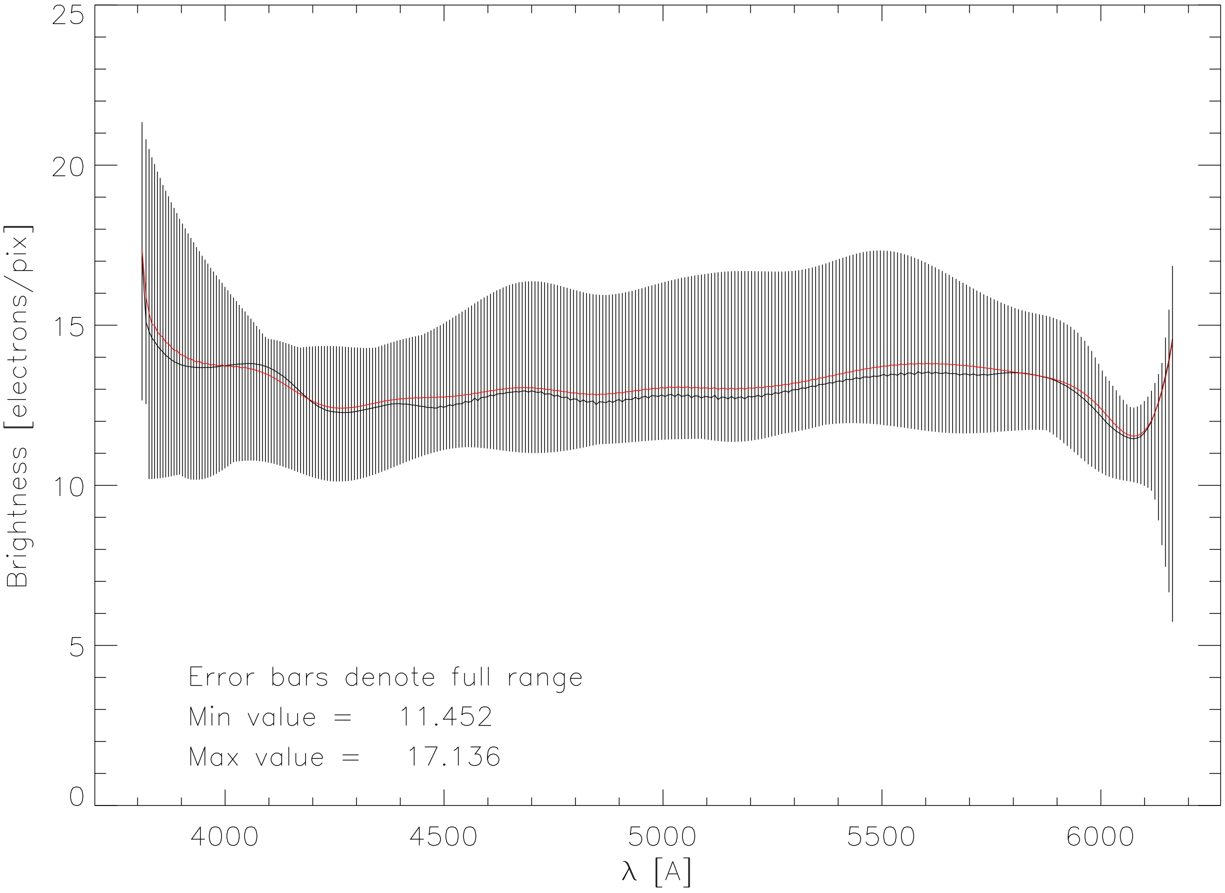

PLATE=3210 MJD=54876 sdR-b2-00058833.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
RED = sky fiber
Dispersion = 7.52 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
1.070
1.075
1.080
1.085
1.090
1.095
1.100
Airmass


PLATE=3210 MJD=54876 sdR-b2-00058833.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
6500
6000
5500
5000
4500
4000
RED = sky fiber
Dispersion = 2.87 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
6500
6000
5500
5000
4500
4000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
6500
6000
5500
5000
4500
4000
1.070
1.075
1.080
1.085
1.090
1.095
1.100
Airmass



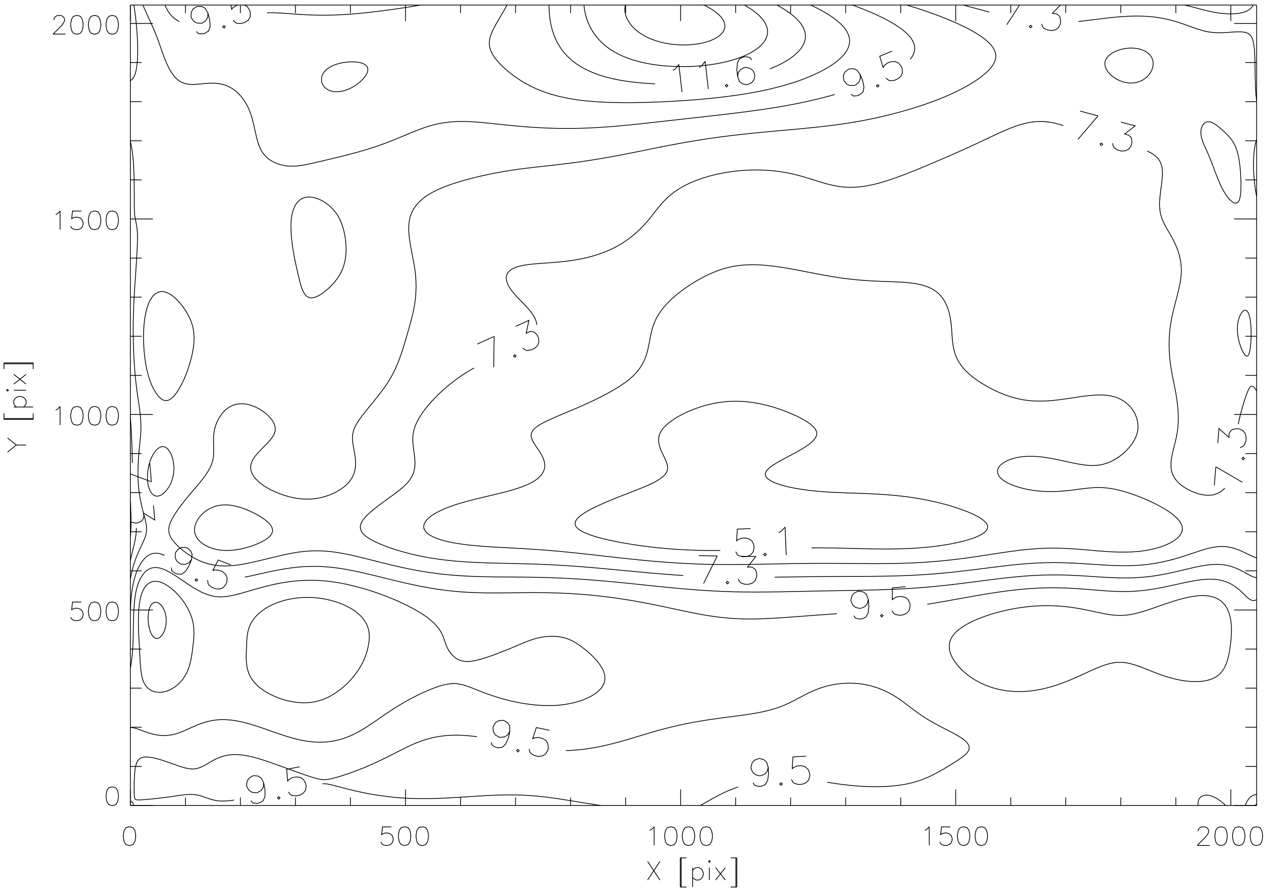
Thu May 20 19:23:45 2010


PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b2-00058834.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
14.1
17.7
14.1
14.1
14.1
14.1
14.1
14.1
10.5
10.5
14.7

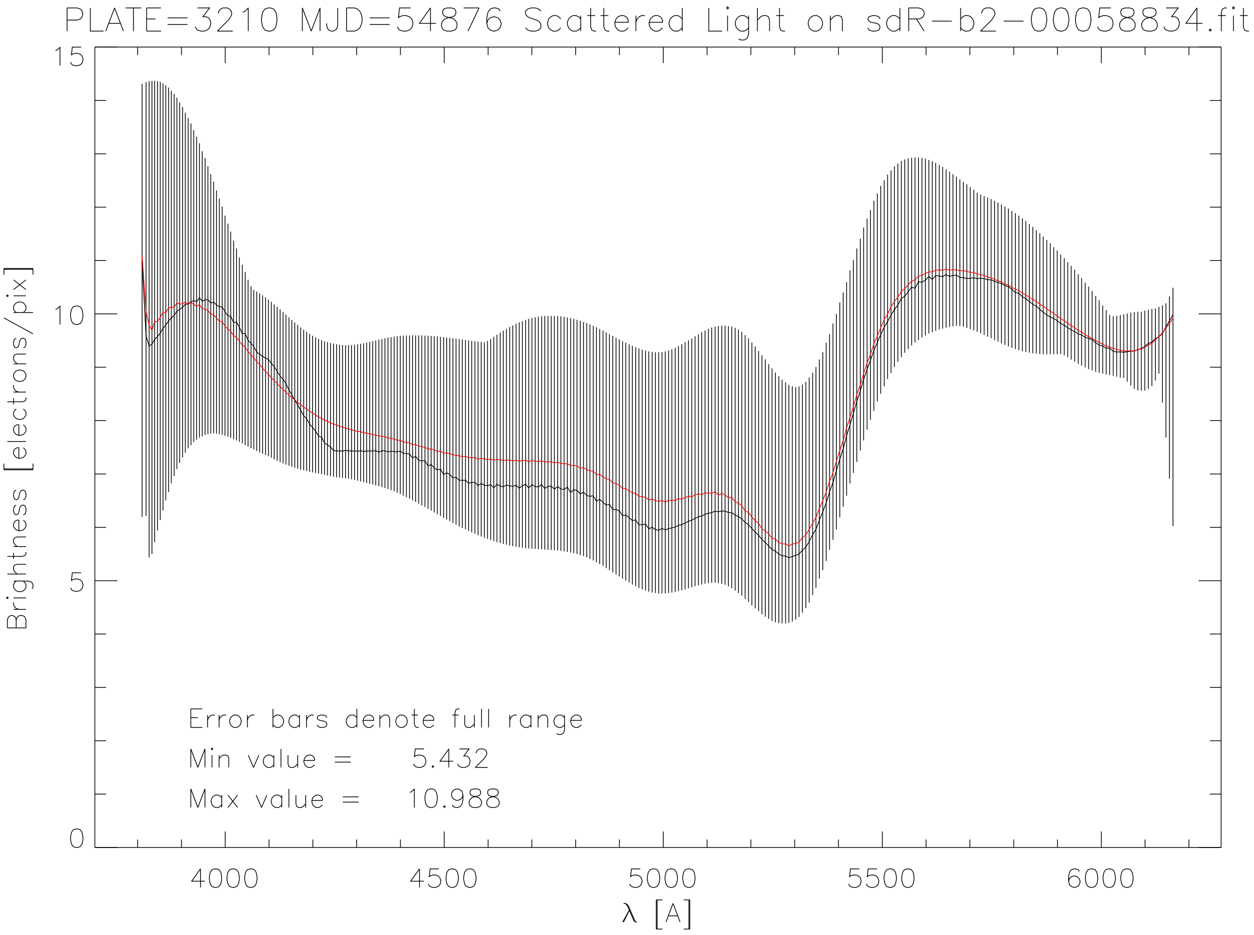


PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-b2-00058834.f

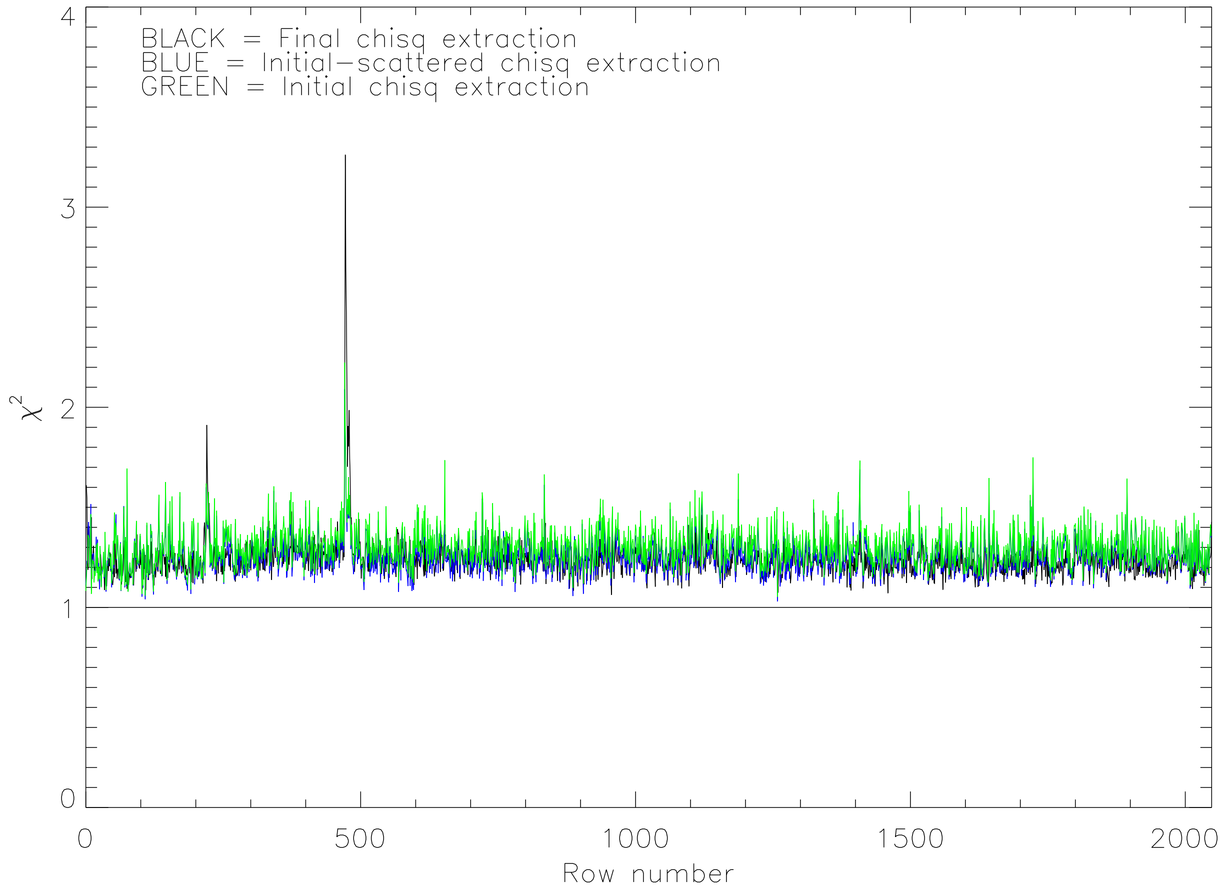
Thu May 20 19:24:42 2010



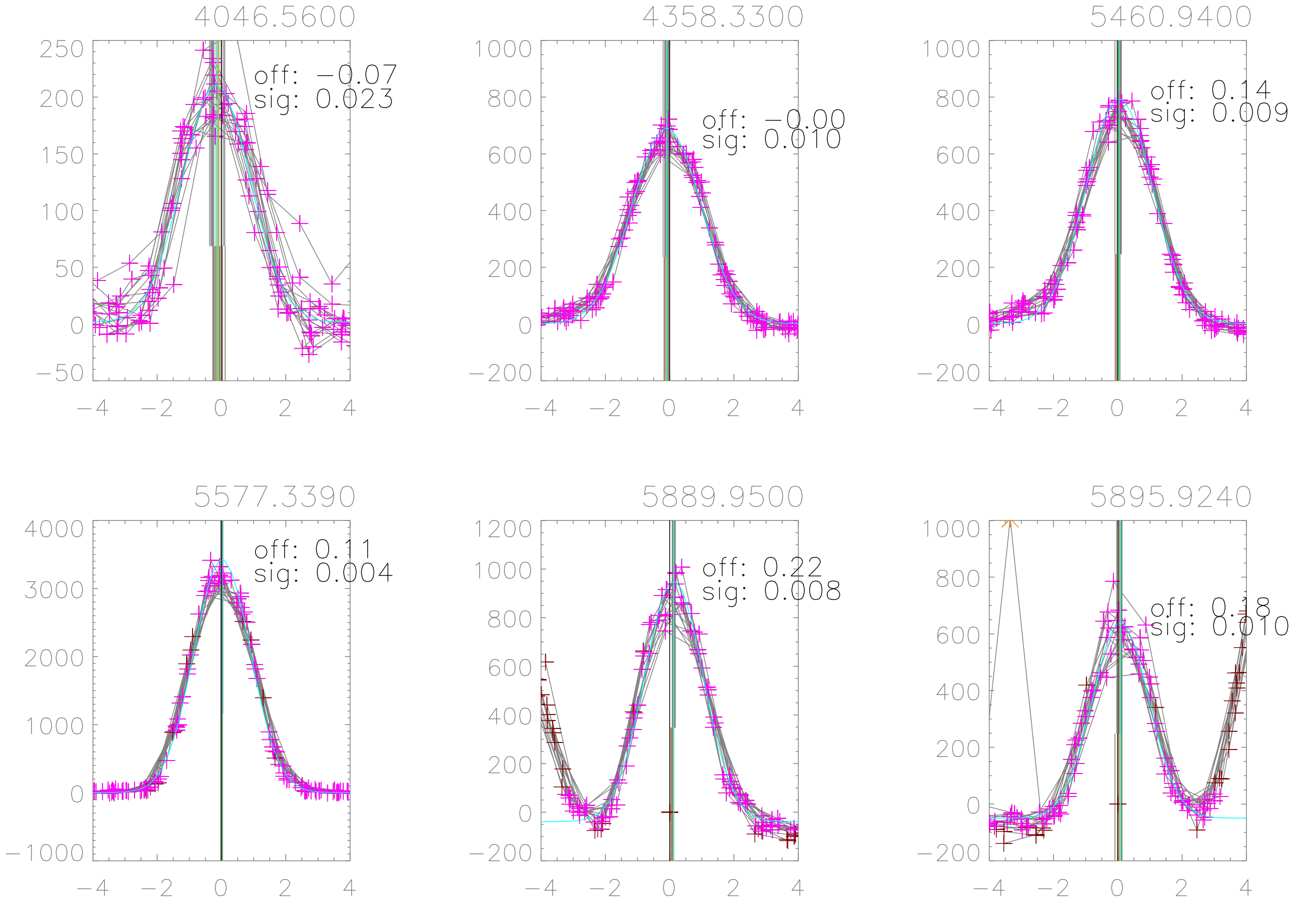
PLATE=3210 MJD=54876 Scattered Light on sdR-b2-00058834.fit

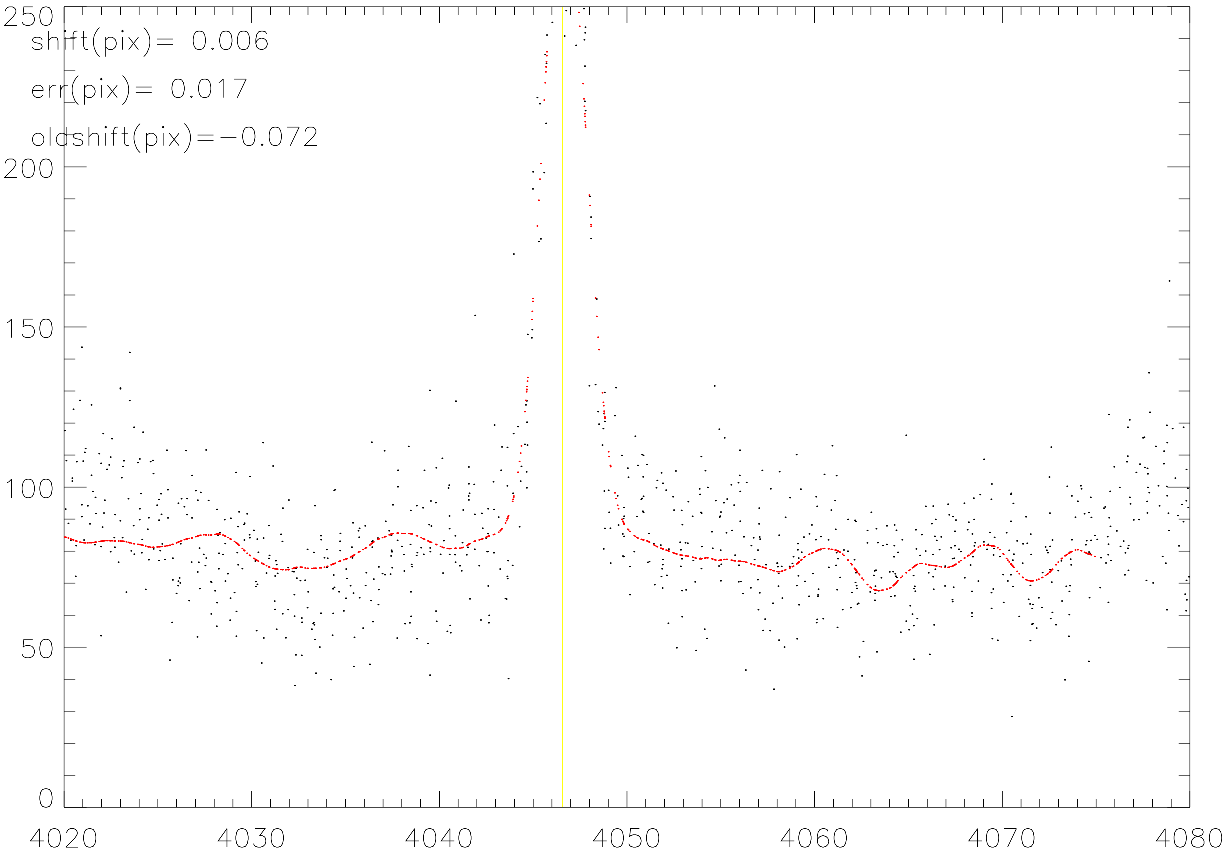

PLATE=3210 MJD=54876 Scattered Light on sdR-b2-00058834.fit

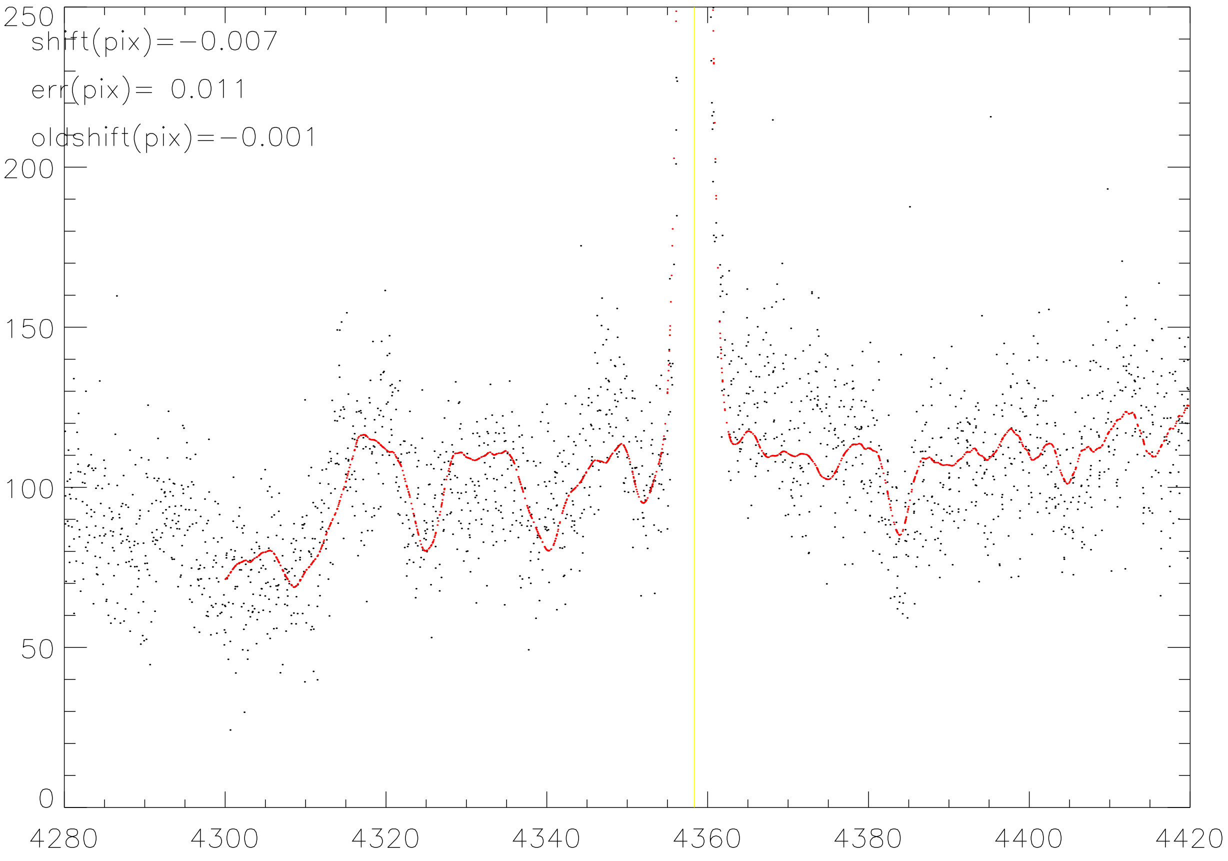
Thu May 20 19:27:51 2010

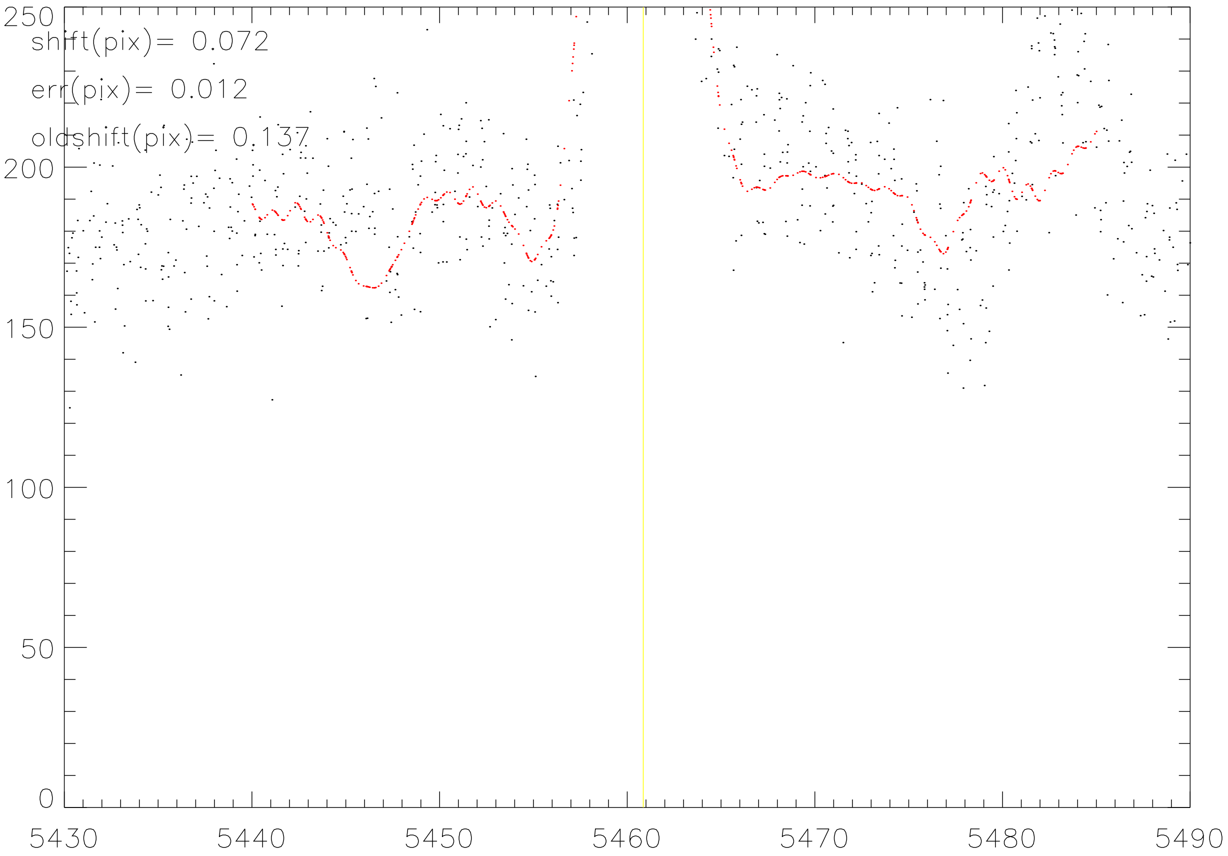


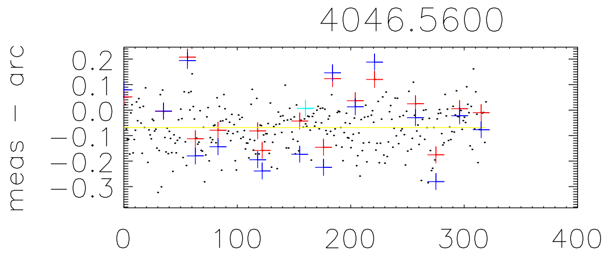
PLATE=3210 MJD=54876 Extraction chi^2 for sdR-b2-00058834.fit

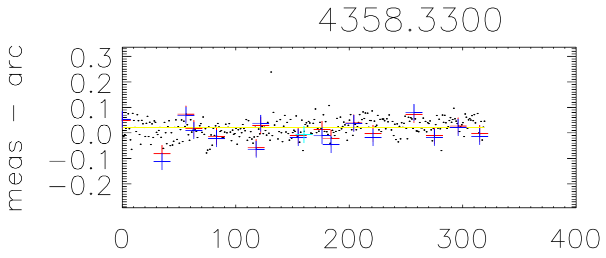

4046.5600
off: −0.07
sig: 0.023
4358.3300
off: −0.00
sig: 0.010
5460.9400
off: 0.14
sig: 0.009
5577.3390
off: 0.11
sig: 0.004
5889.9500
off: 0.22
sig: 0.008
5895.9240
off: 0.18
sig: 0.010
250
200
150
100
50
0
−50
1000
800
600
400
200
0
−200
4000
3000
2000
1000
0
−1000
1200
−4
−2
0
2
4

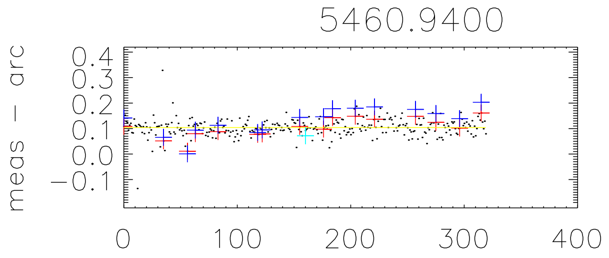

shift(pix)= 0.006
err(pix)= 0.017
oldshift(pix)=−0.072
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

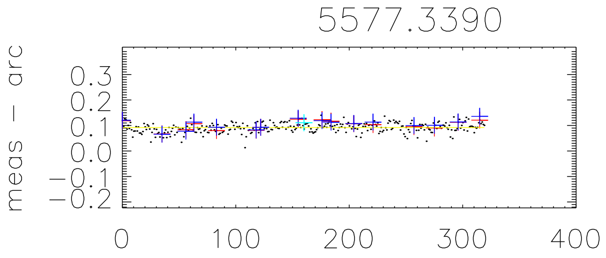

shift(pix)=−0.007
err(pix)= 0.011
oldshift(pix)=−0.001
0
50
100
150
200
250
4280
4300
4320
4340
4360
4380
4400
4420

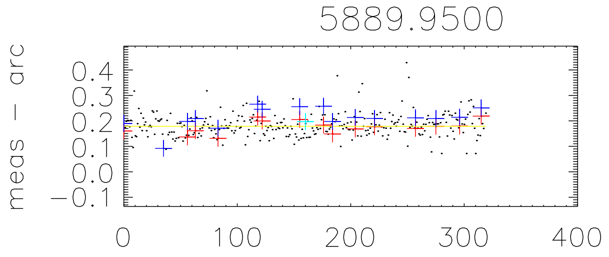

shift(pix)= 0.072
err(pix)= 0.012
oldshift(pix)= 0.137
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

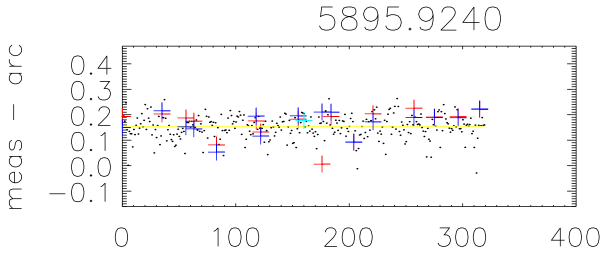

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

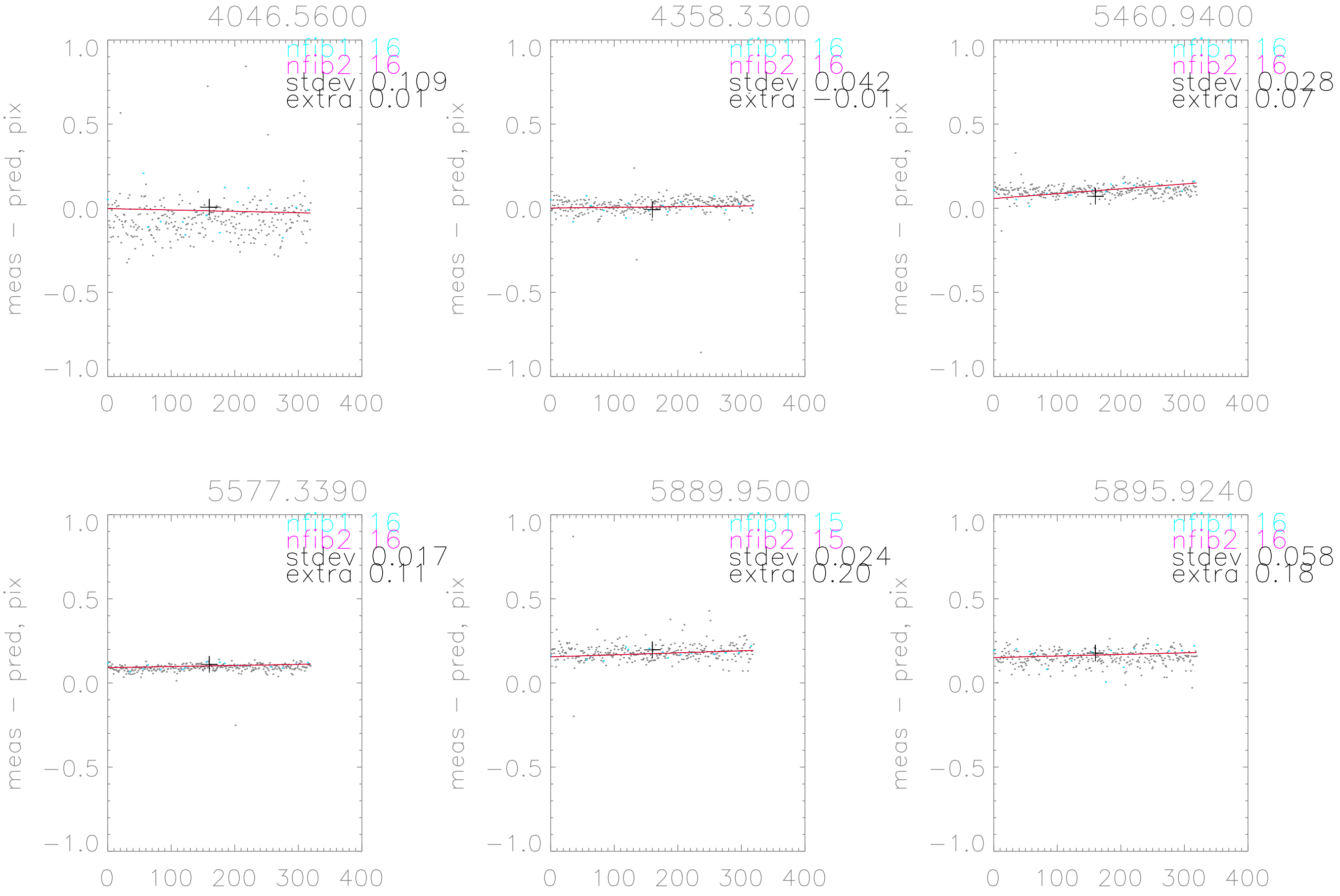

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

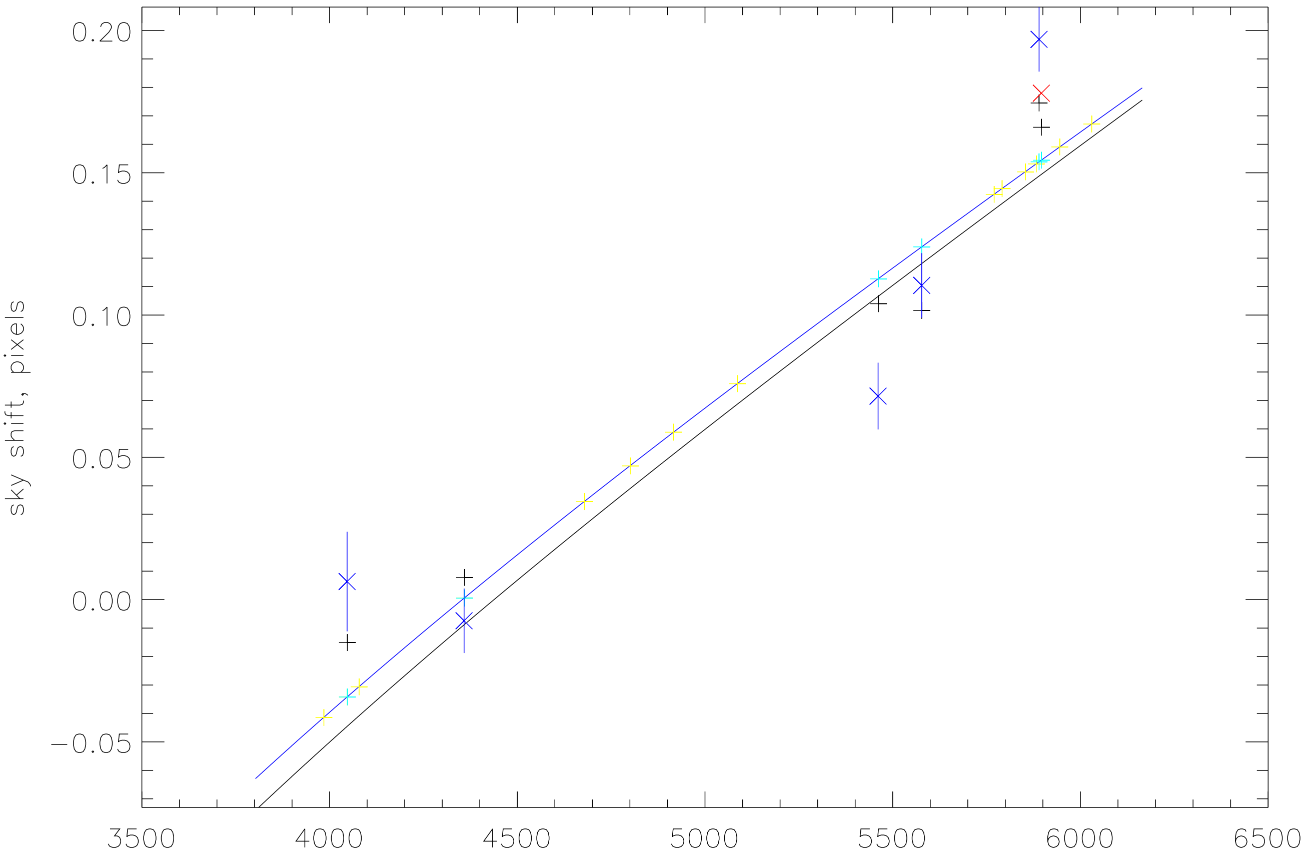

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

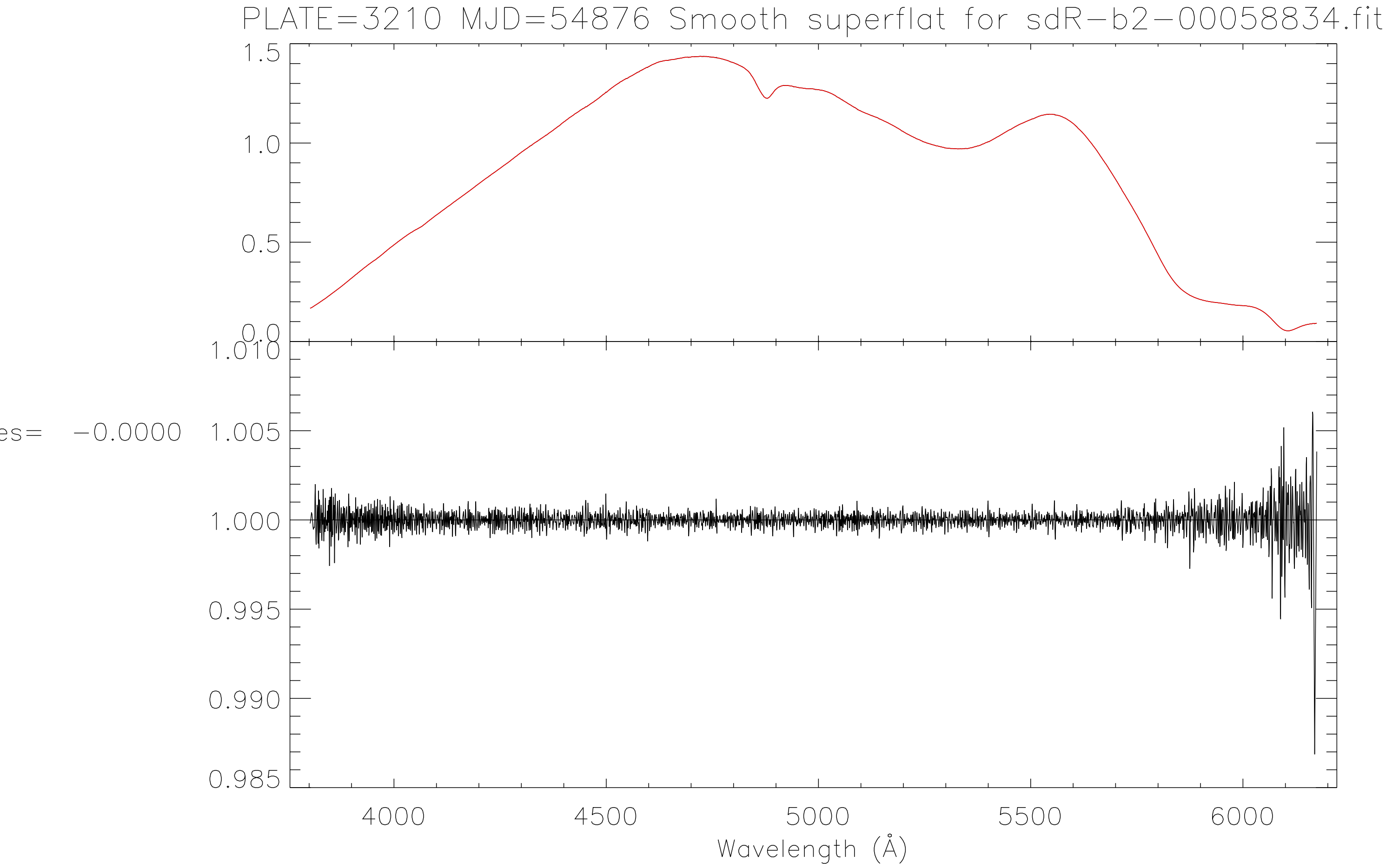

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

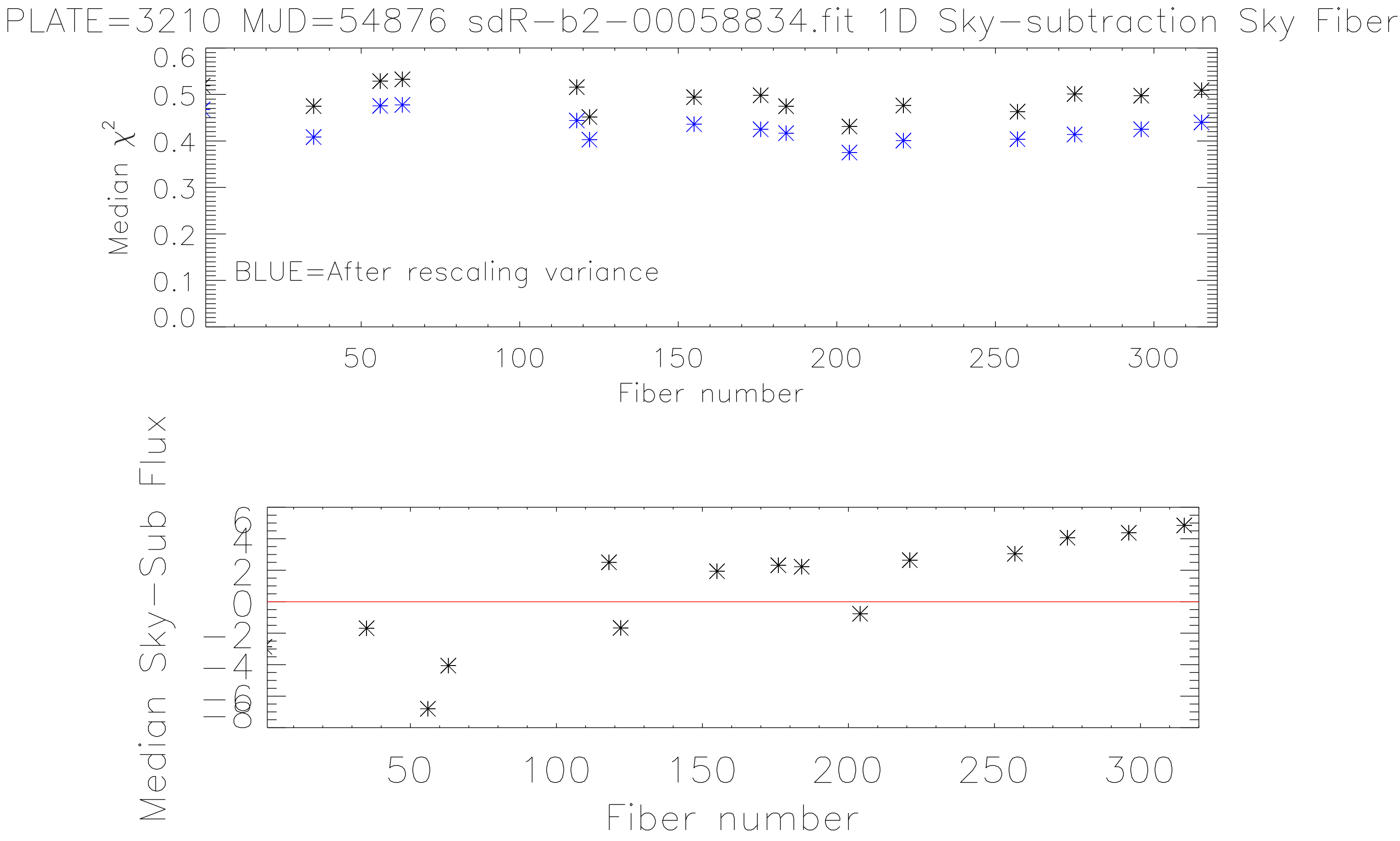

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

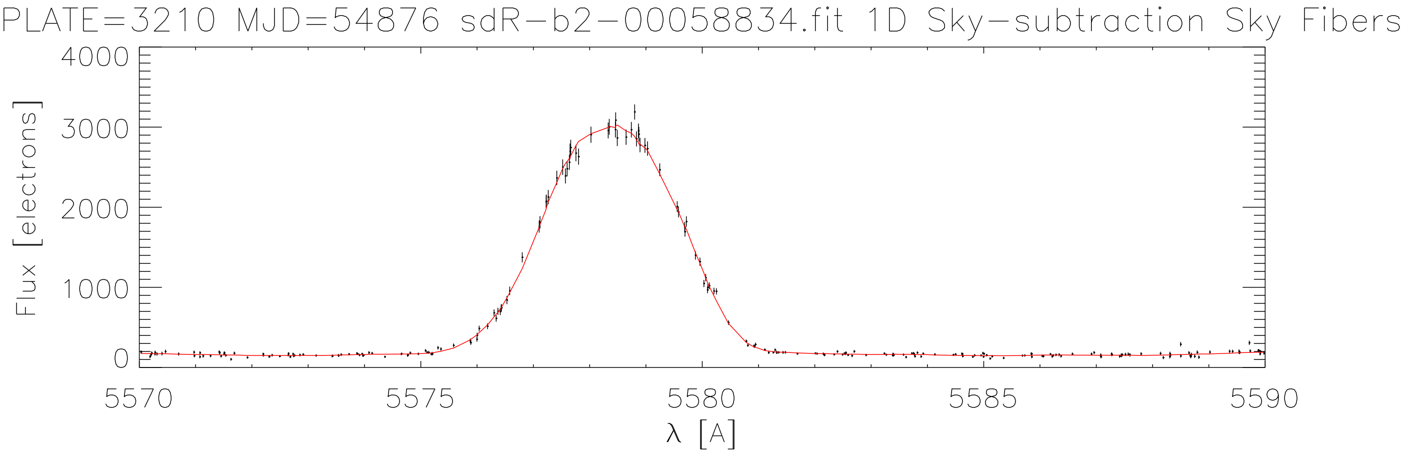

4046.5600
nfib1 16
nfib2 16
stdev 0.109
extra 0.01
4358.3300
nfib1 16
nfib2 16
stdev 0.042
extra −0.01
5460.9400
nfib1 16
nfib2 16
stdev 0.028
extra 0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.11
5889.9500
nfib1 15
nfib2 15
stdev 0.024
extra 0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.058
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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

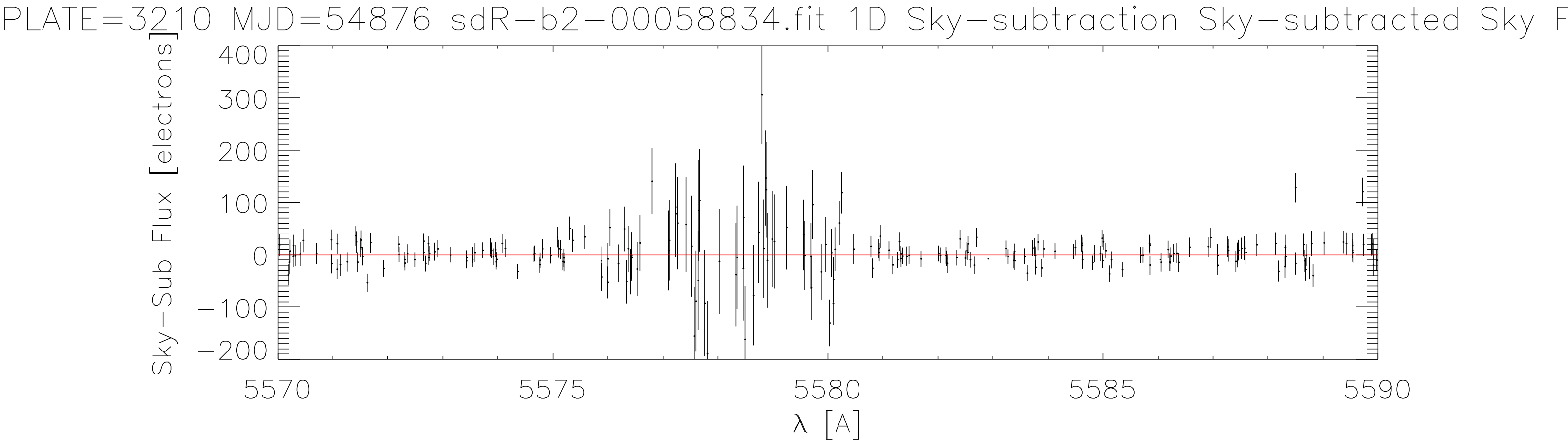

PLATE=3210 MJD=54876 Smooth superflat for sdR-b2-00058834.fit



PLATE=3210 MJD=54876 sdR-b2-00058834.fit 1D Sky-subtraction Sky Fiber



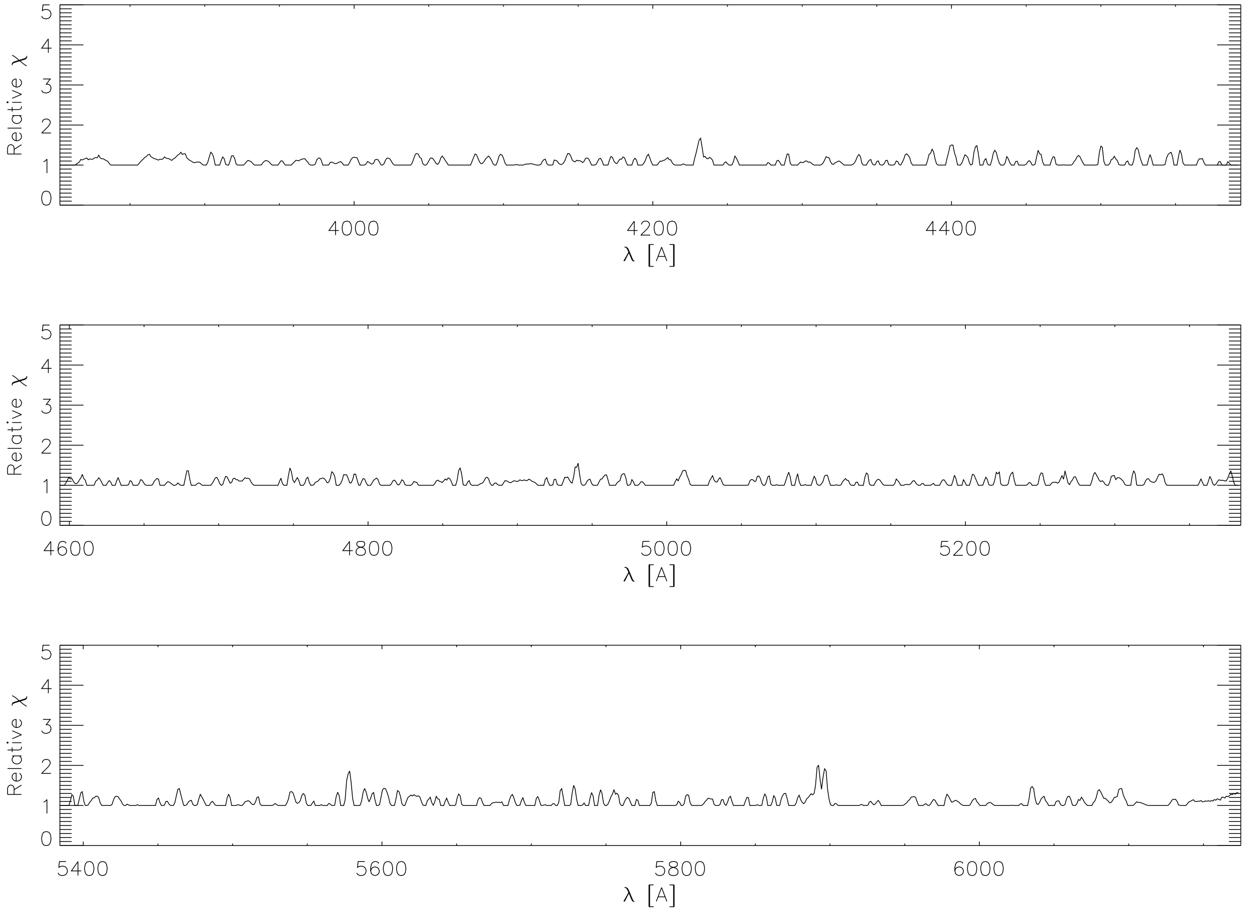
PLATE=3210 MJD=54876 sdR-b2-00058834.fit 1D Sky-subtraction Sky Fibers

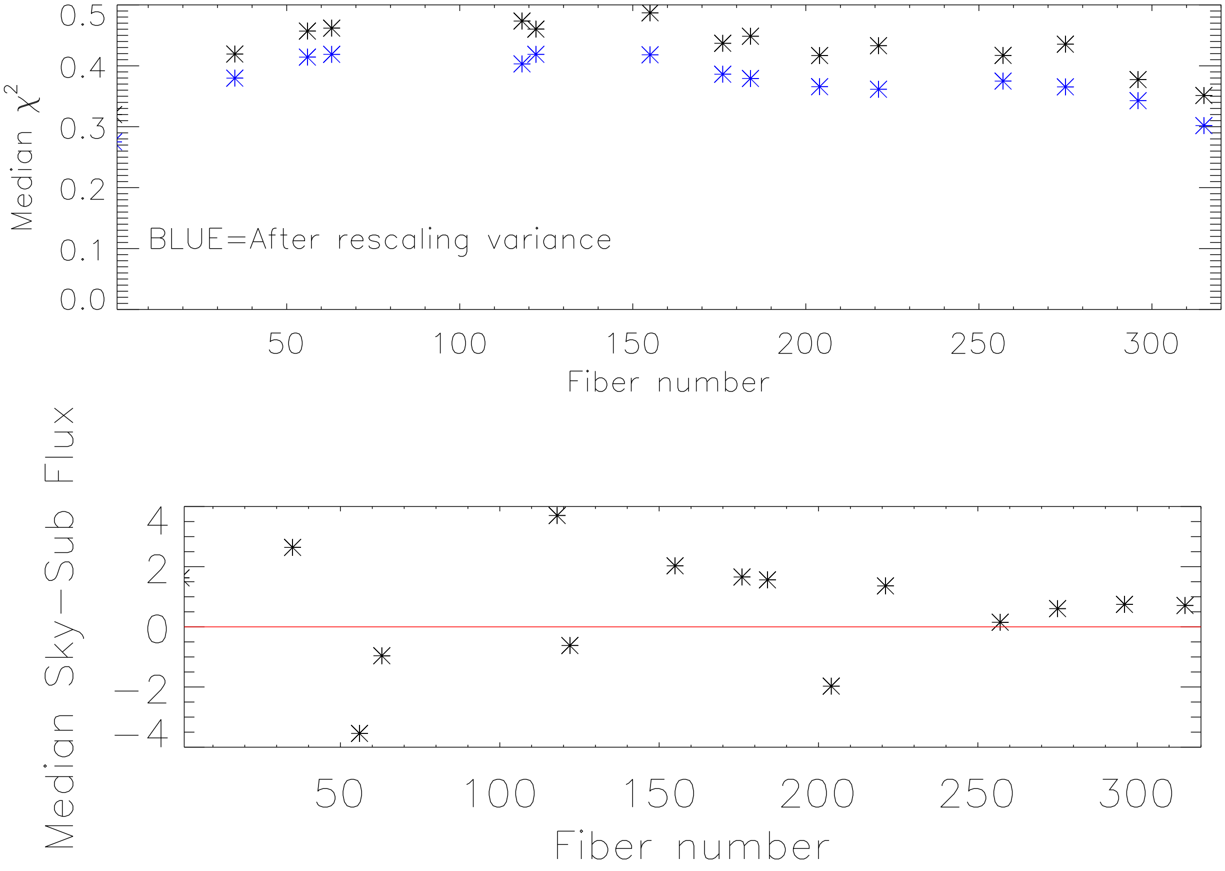


PLATE=3210 MJD=54876 sdR-b2-00058834.fit 1D Sky-subtraction Sky-subtracted Sky F

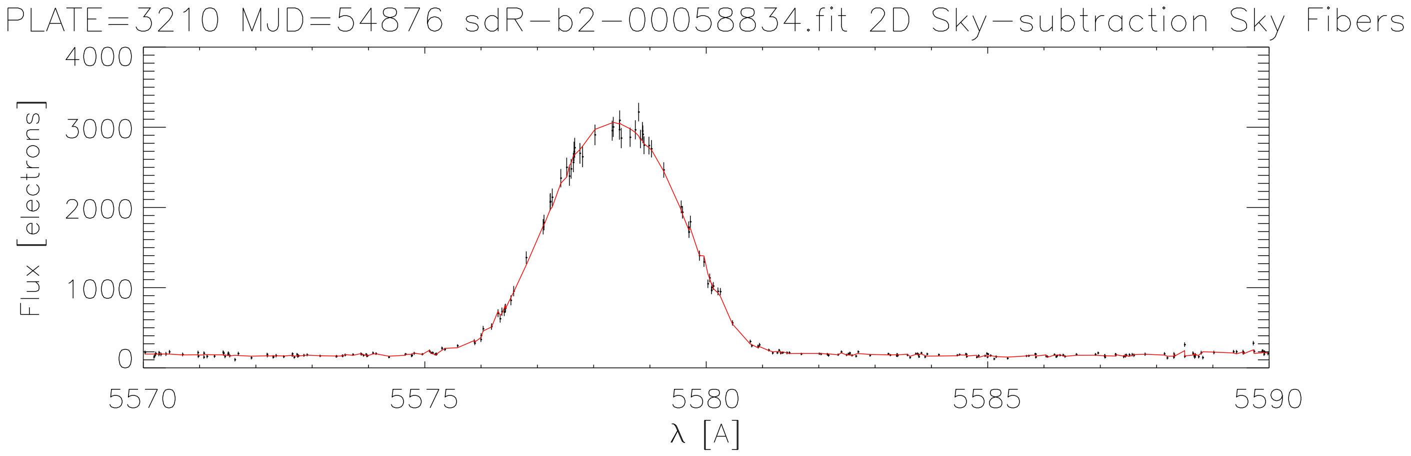
Number of sky fibers = 15

PLATE=3210 MJD=54876 sdR-b2-00058834.fit 1D Sky-subtraction Rescaled Errors

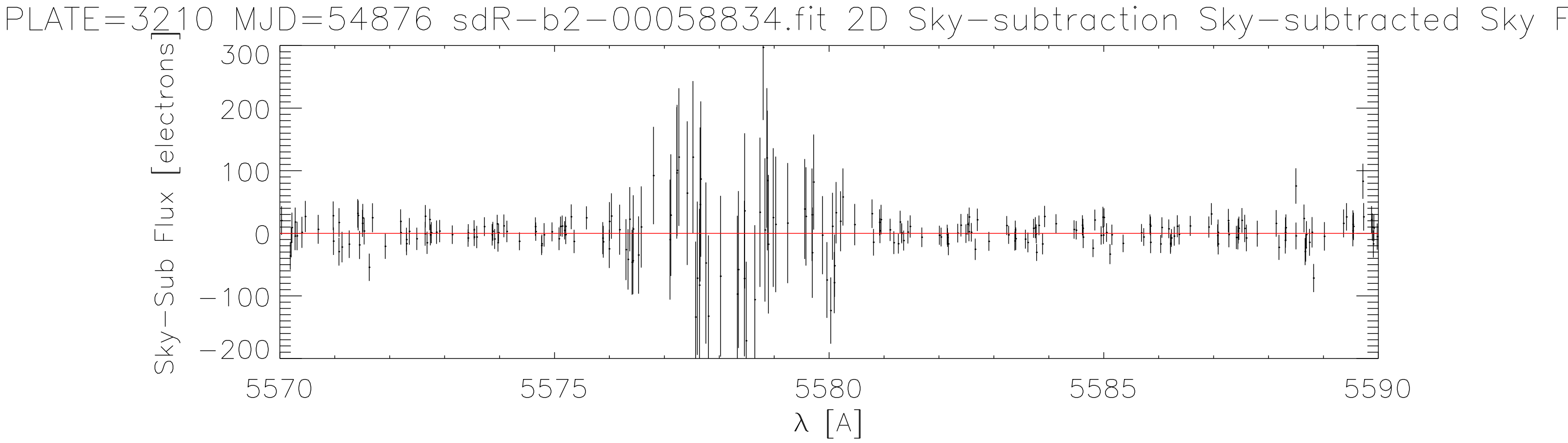




PLATE=3210 MJD=54876 sdR-b2-00058834.fit 2D Sky-subtraction Sky Fiber



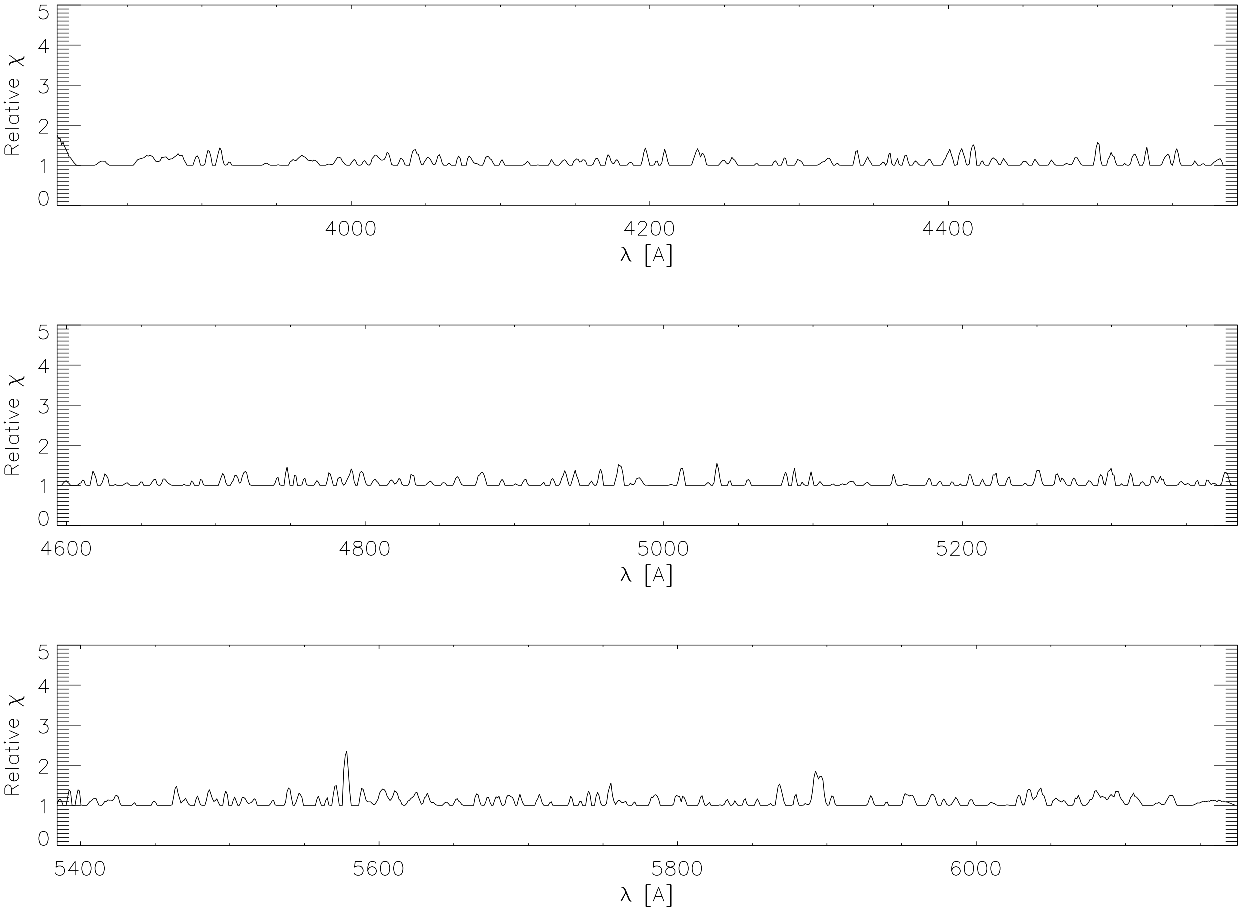
PLATE=3210 MJD=54876 sdR-b2-00058834.fit 2D Sky-subtraction Sky Fibers



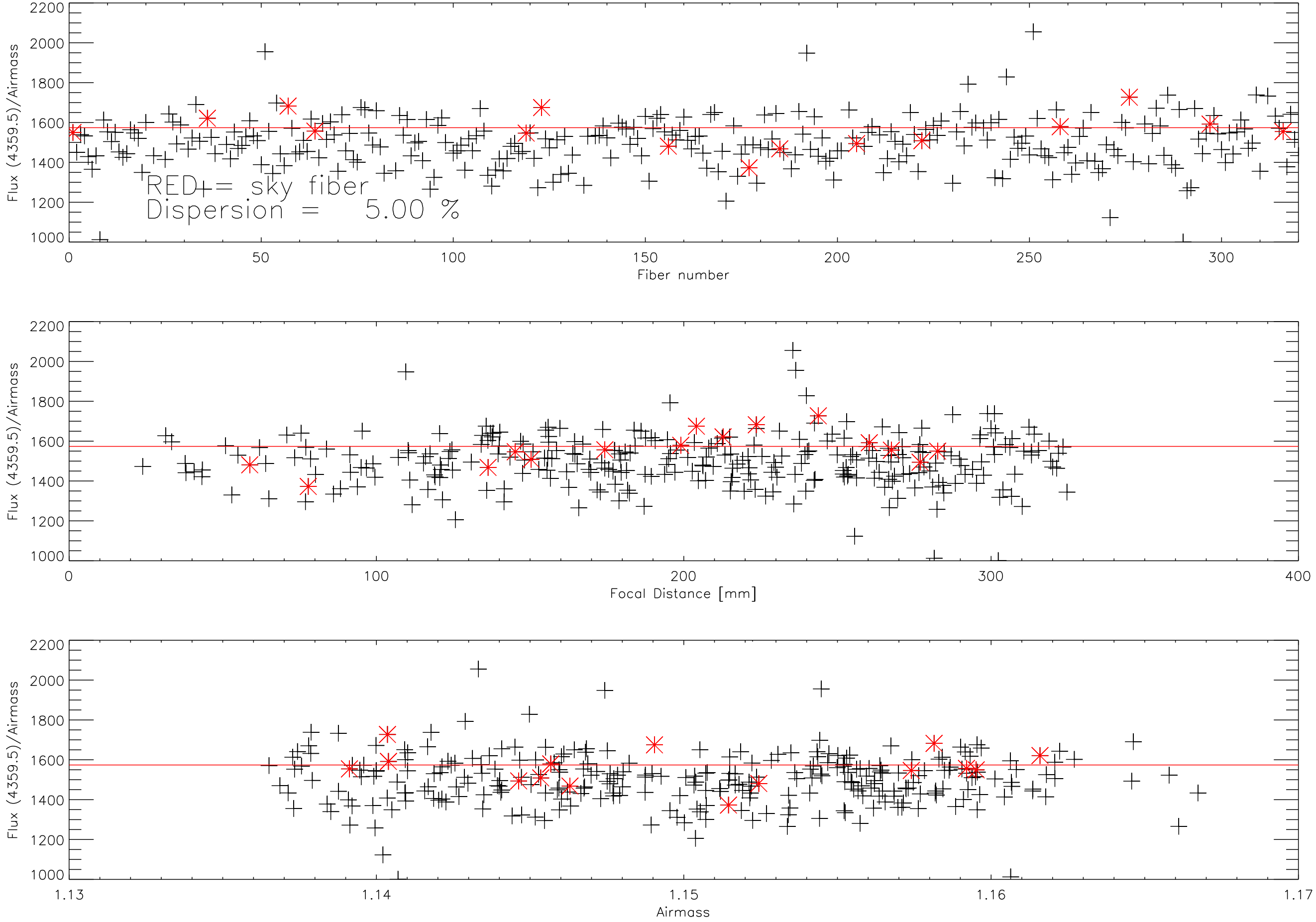
PLATE=3210 MJD=54876 sdR-b2-00058834.fit 2D Sky-subtraction Sky-subtracted Sky F

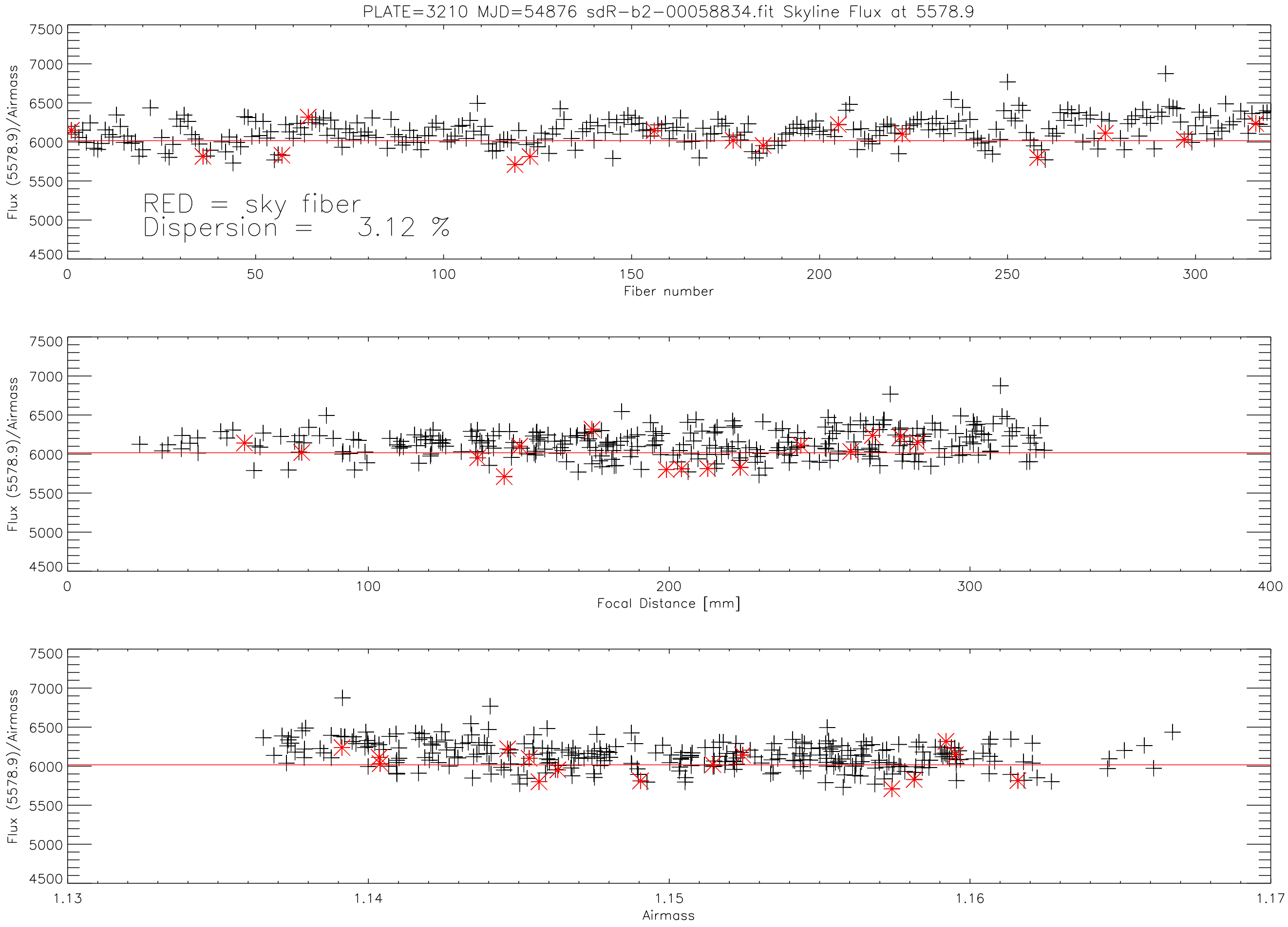
Number of sky fibers = 15

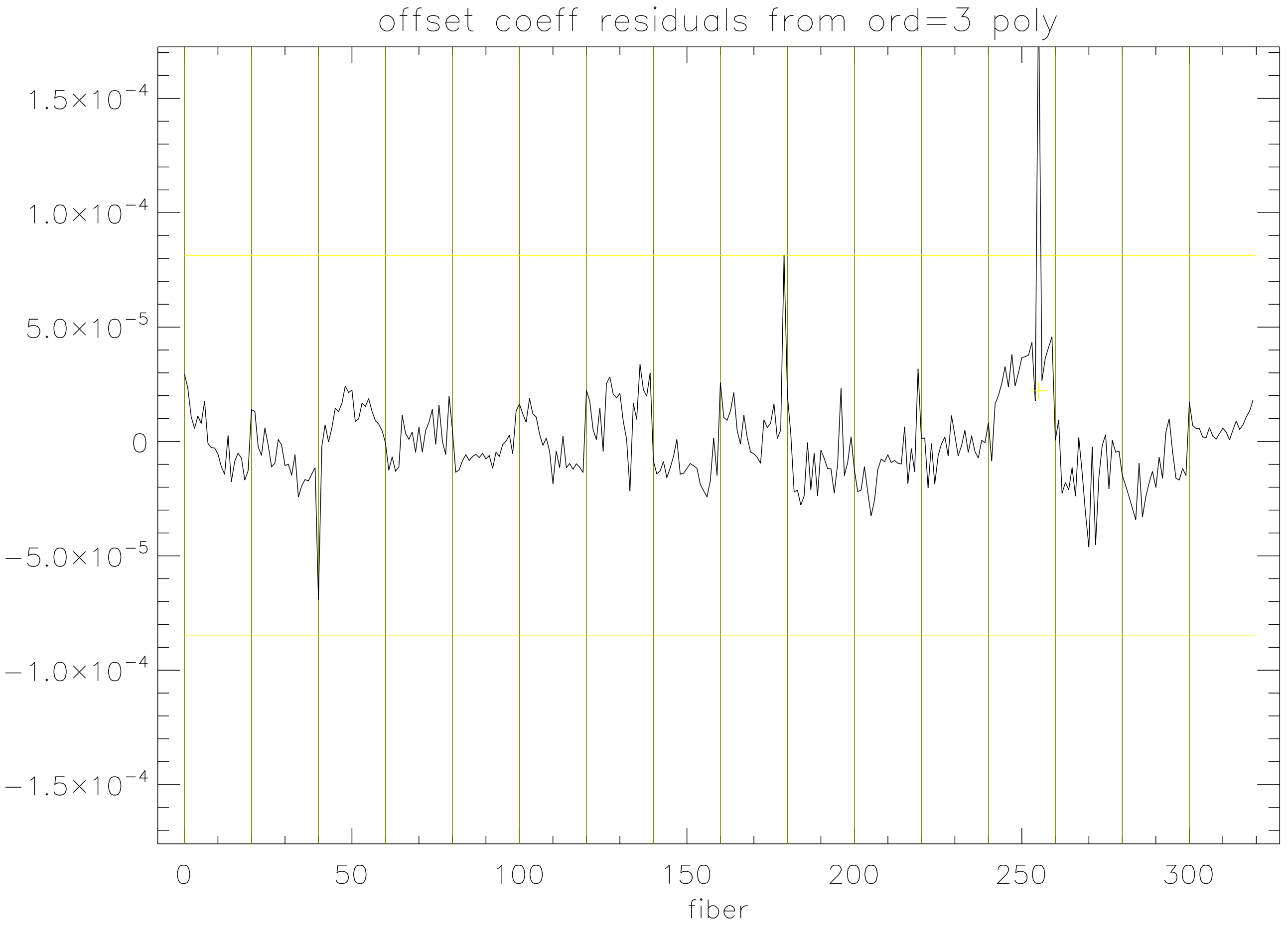
PLATE=3210 MJD=54876 sdR-b2-00058834.fit 2D Sky-subtraction Rescaled Errors

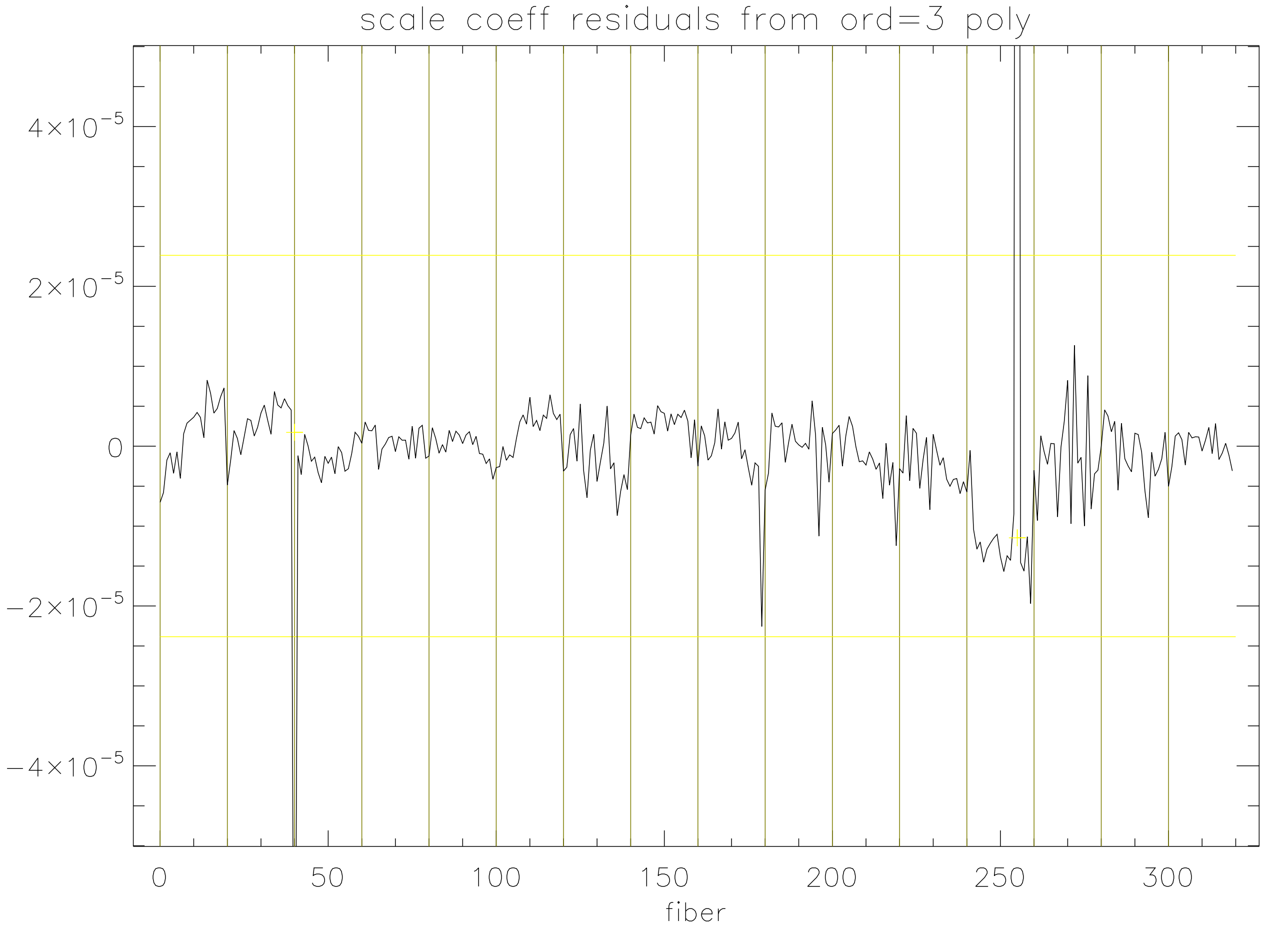


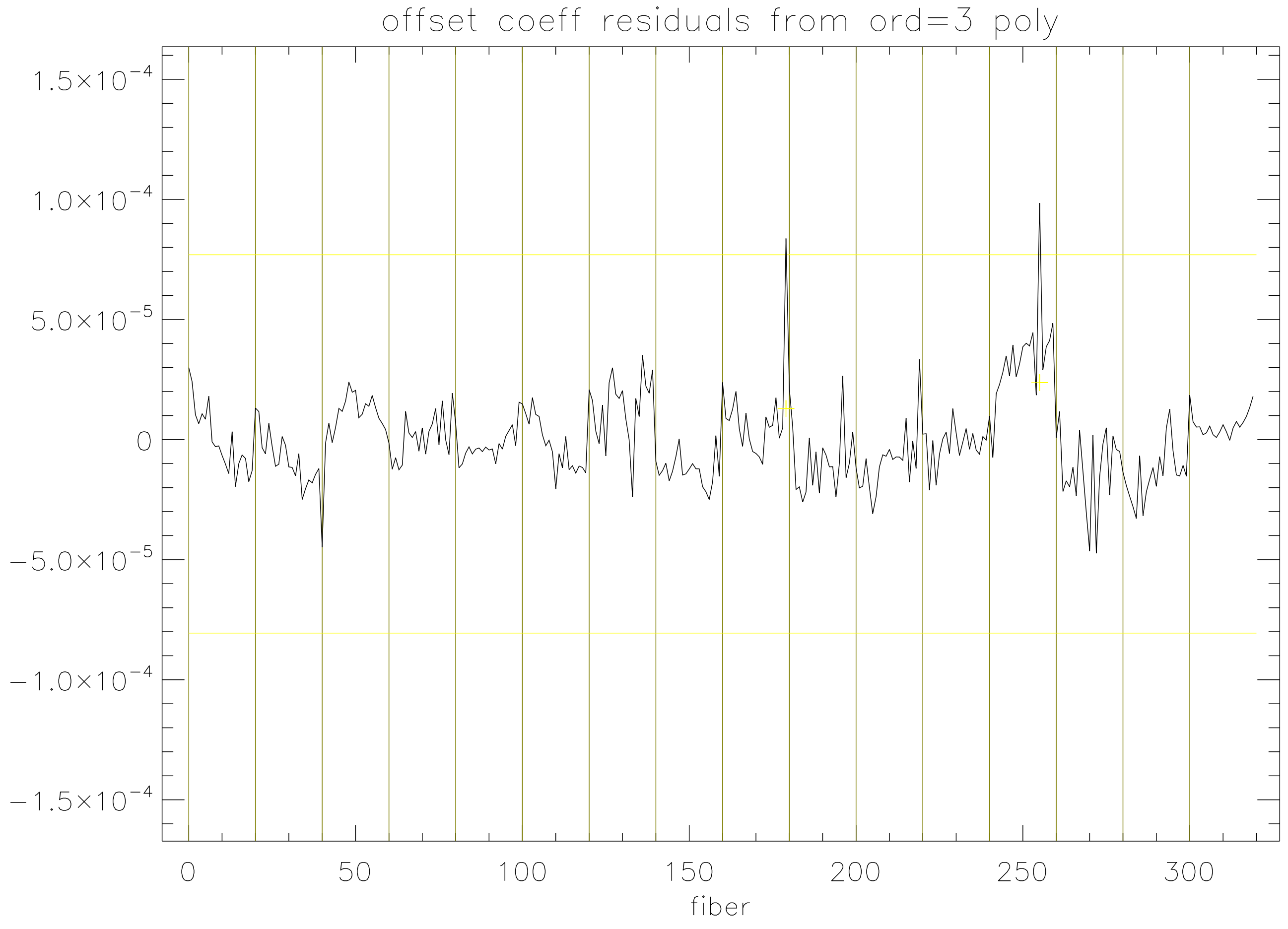
PLATE=3210 MJD=54876 sdR-b2-00058834.fit Skyline Flux at 4359.5

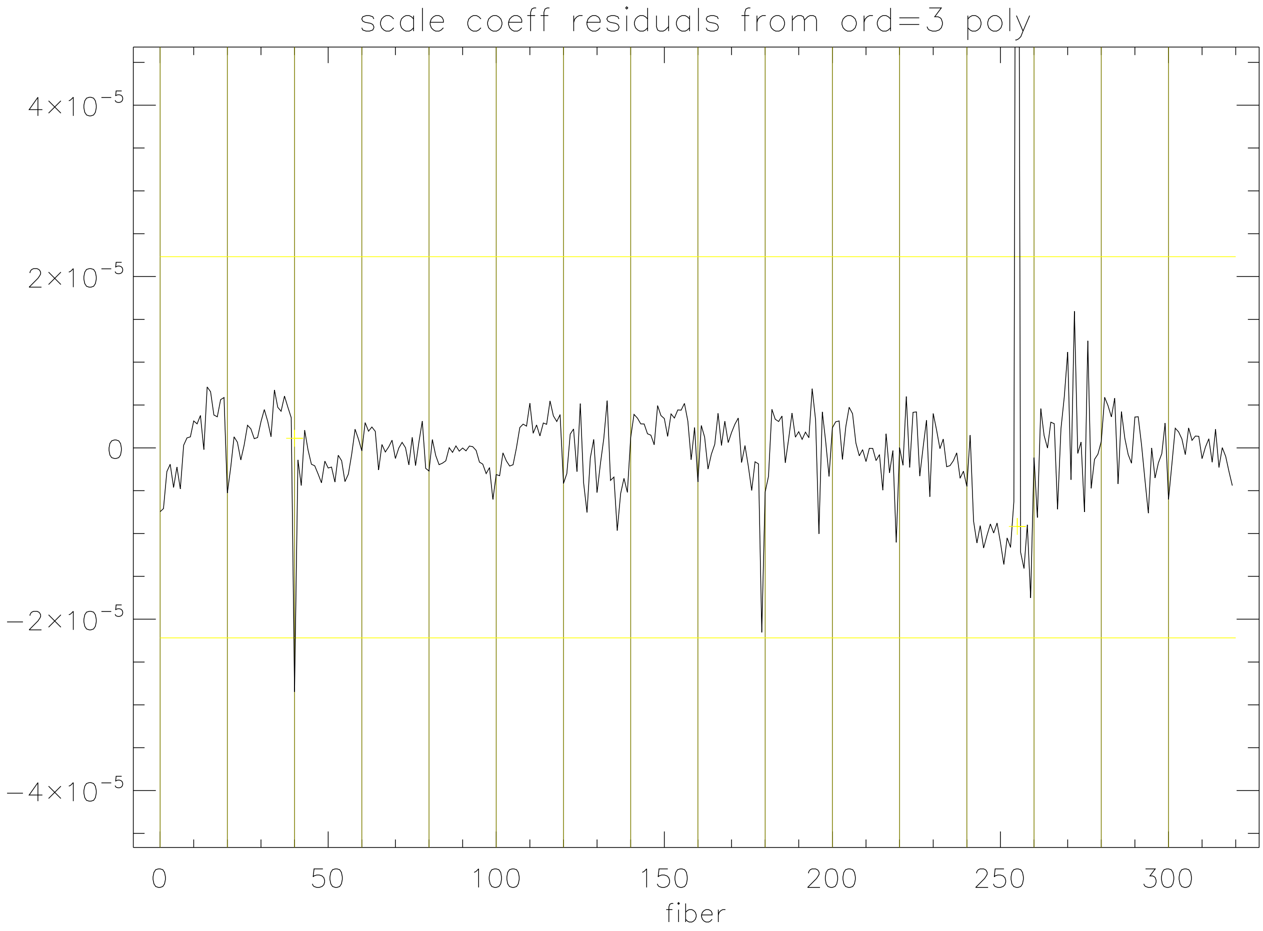


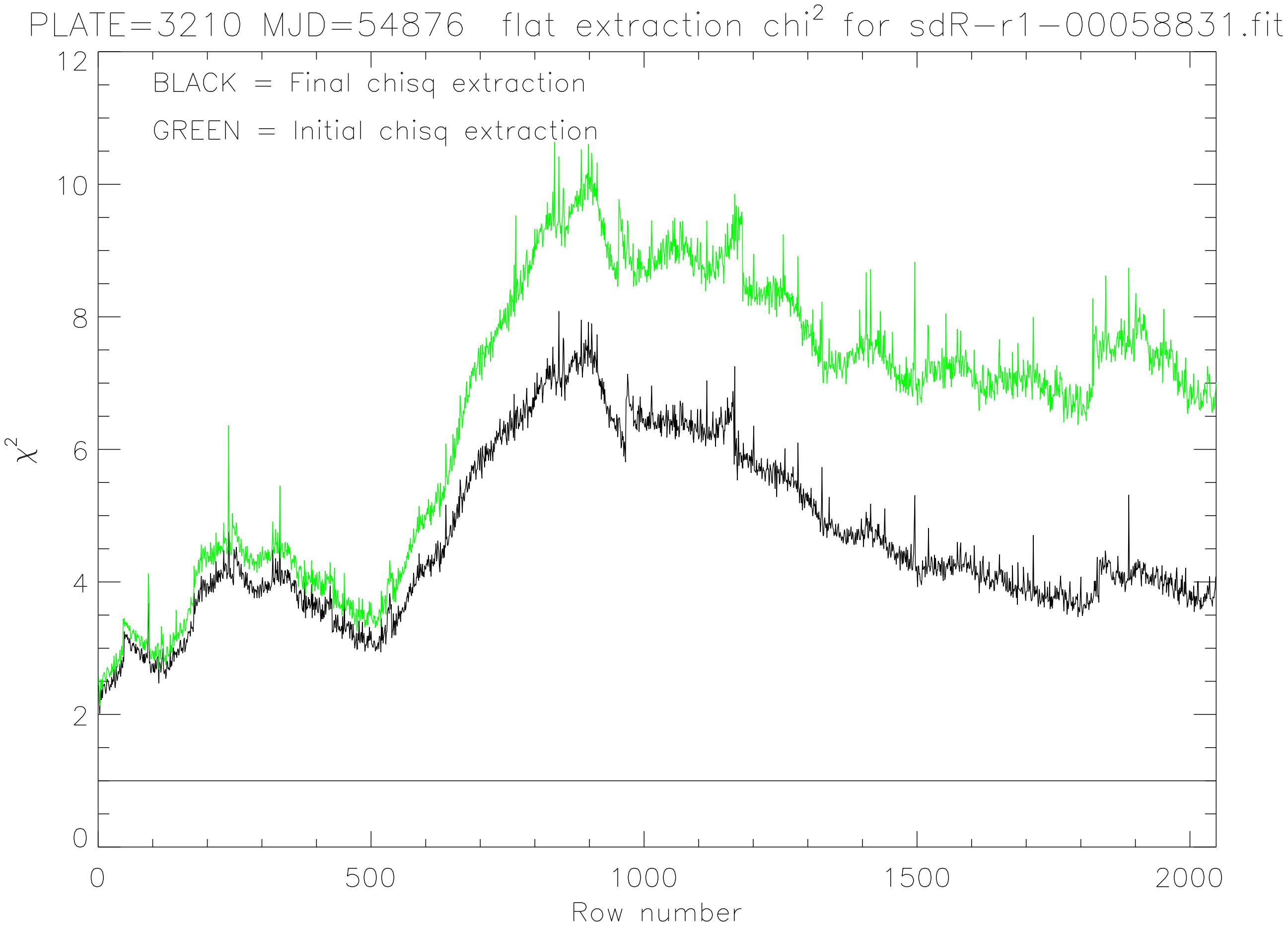

PLATE=3210 MJD=54876 sdR-b2-00058834.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
7500
7000
6500
6000
5500
5000
4500
RED = sky fiber
Dispersion = 3.12 %
0
50
100
150
200
250
300
Fiber number
Focal Distance [mm]
400
1.13
1.14
1.15
1.16
1.17
Airmass

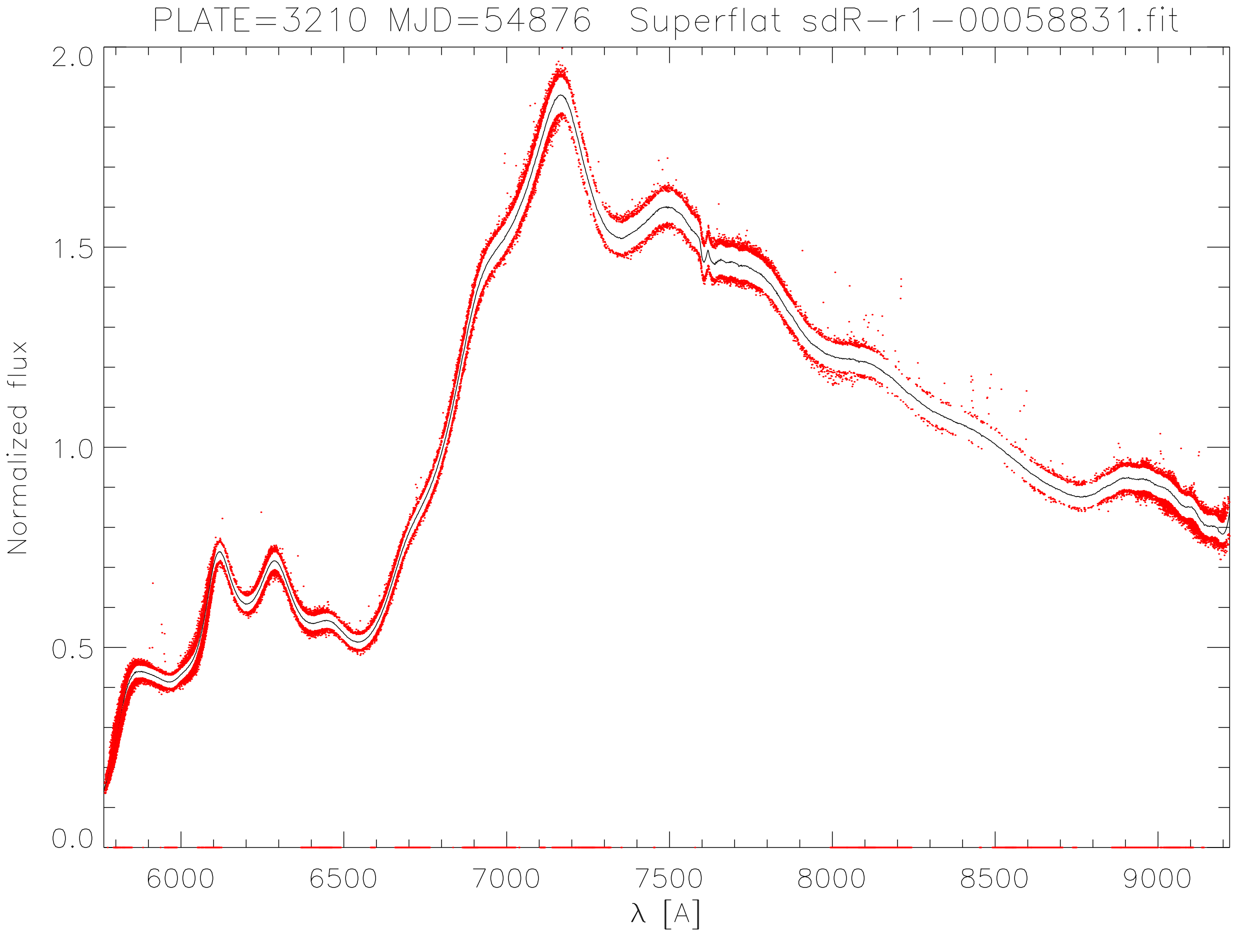

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

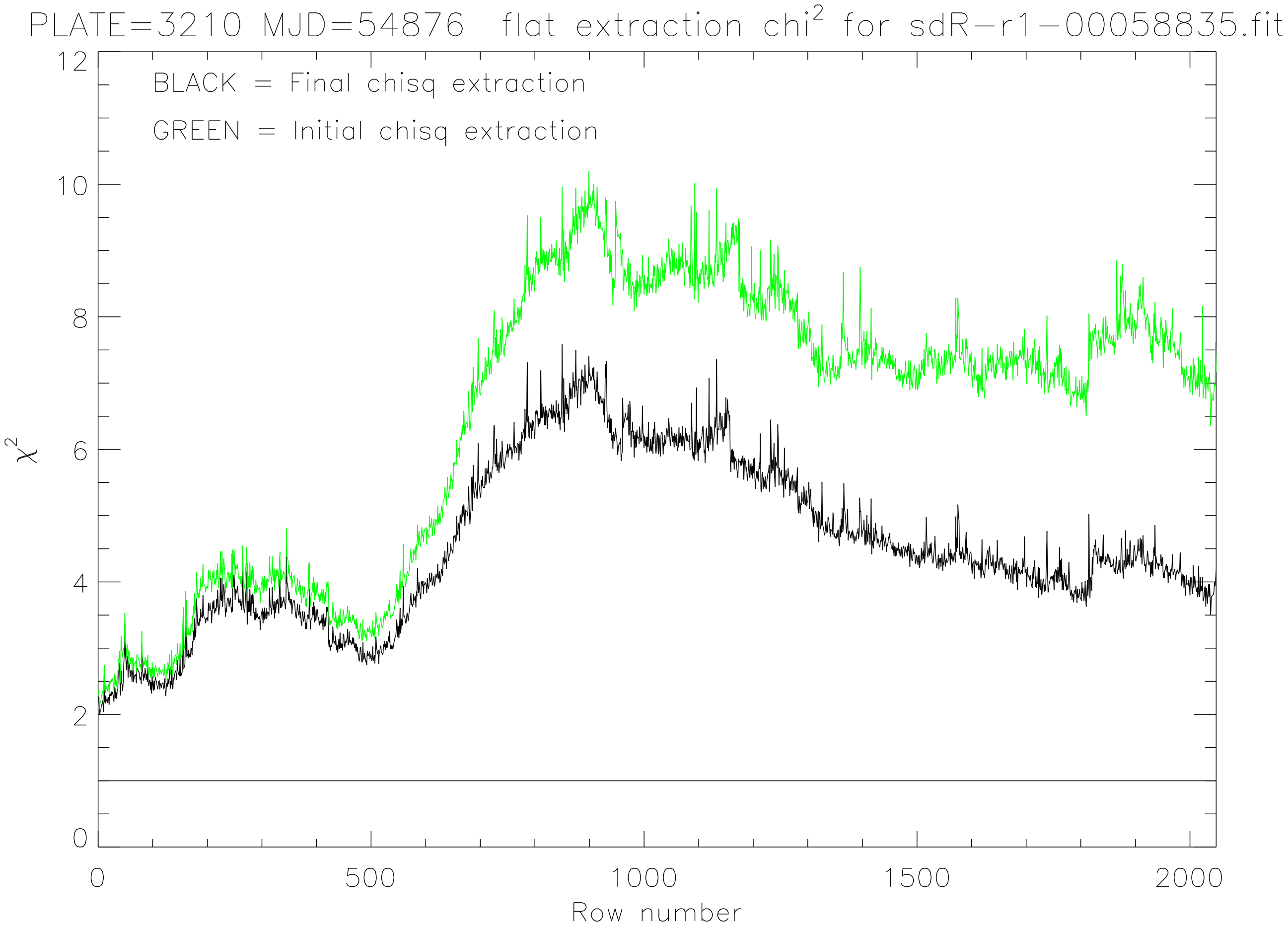

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
−2×10^{-5}
−4×10^{-5}
0
50
100
150
200
250
300
fiber


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

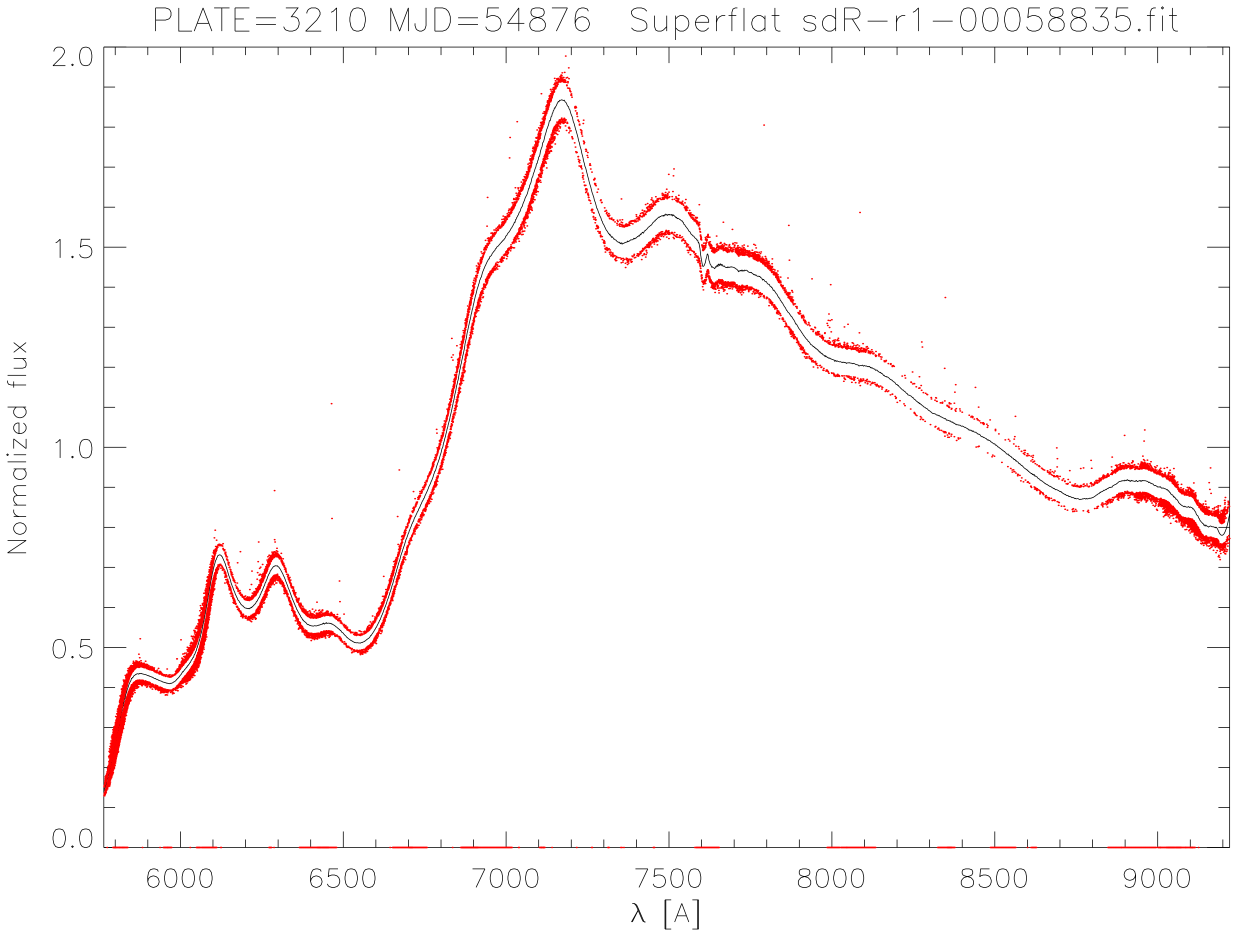

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

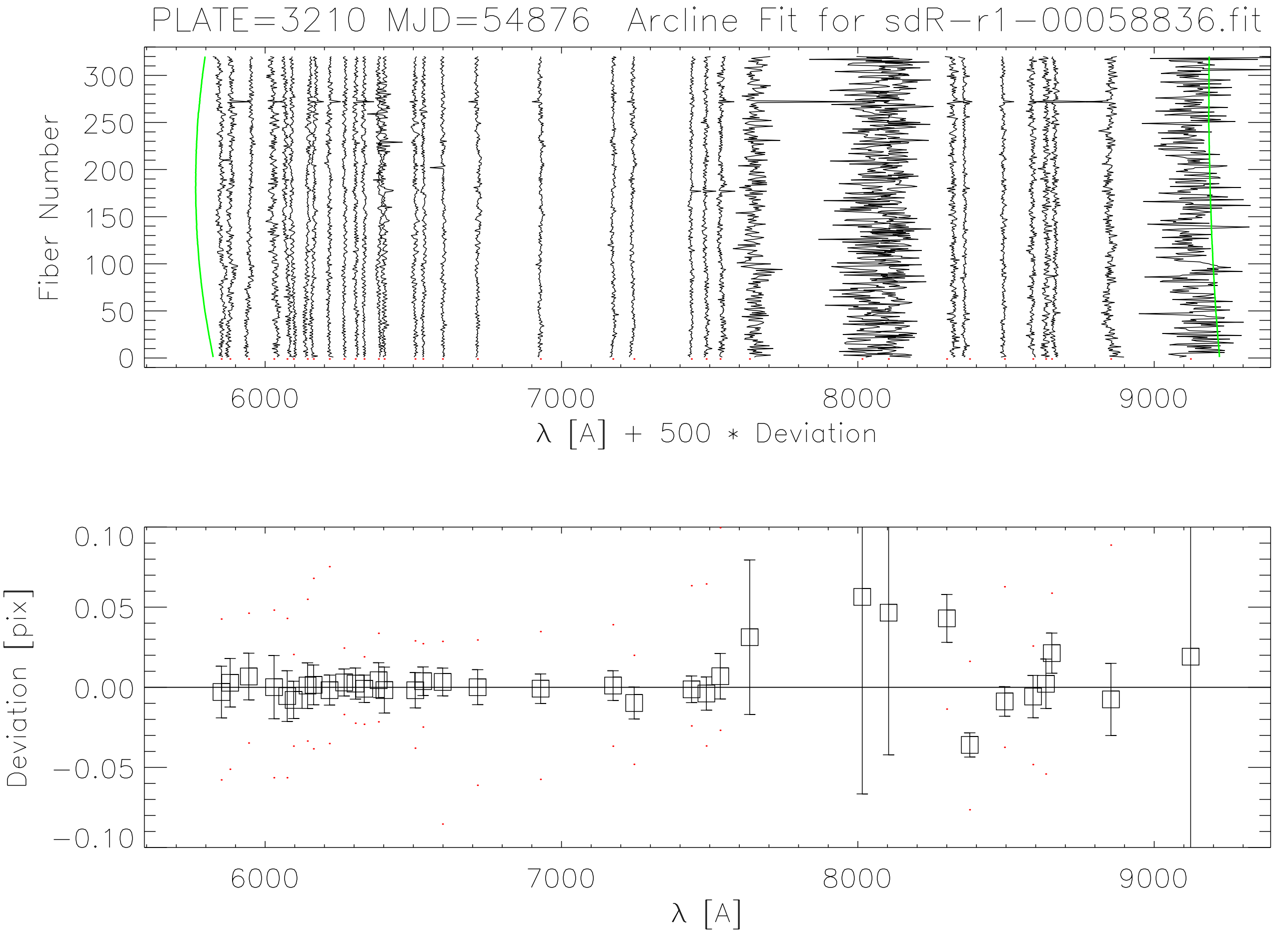

PLATE=3210 MJD=54876 flat extraction chi^2 for sdR-r1-00058831.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number


PLATE=3210 MJD=54876 Superflat sdR-r1-00058831.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

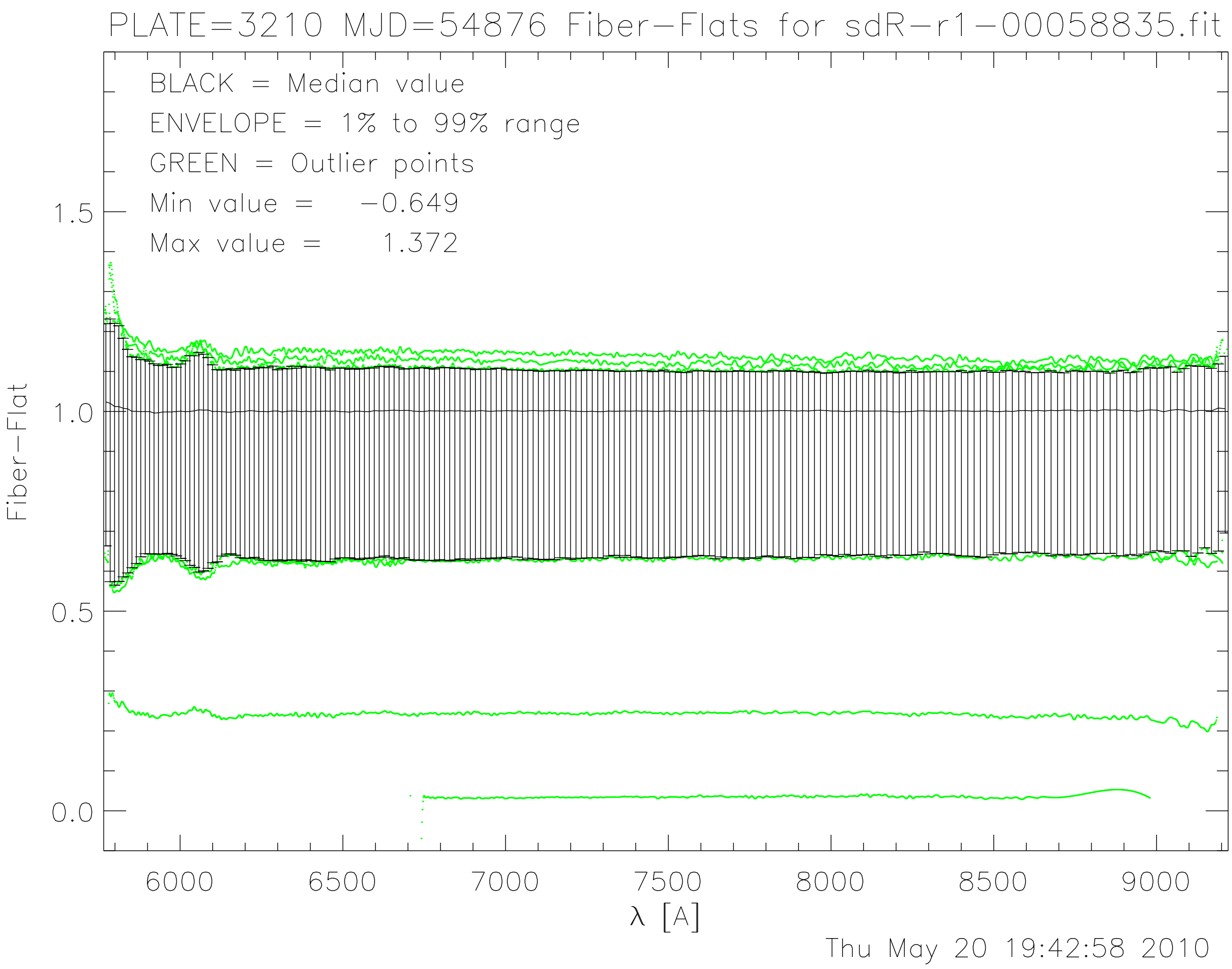


PLATE=3210 MJD=54876 flat extraction chi^2 for sdR-r1-00058835.fit

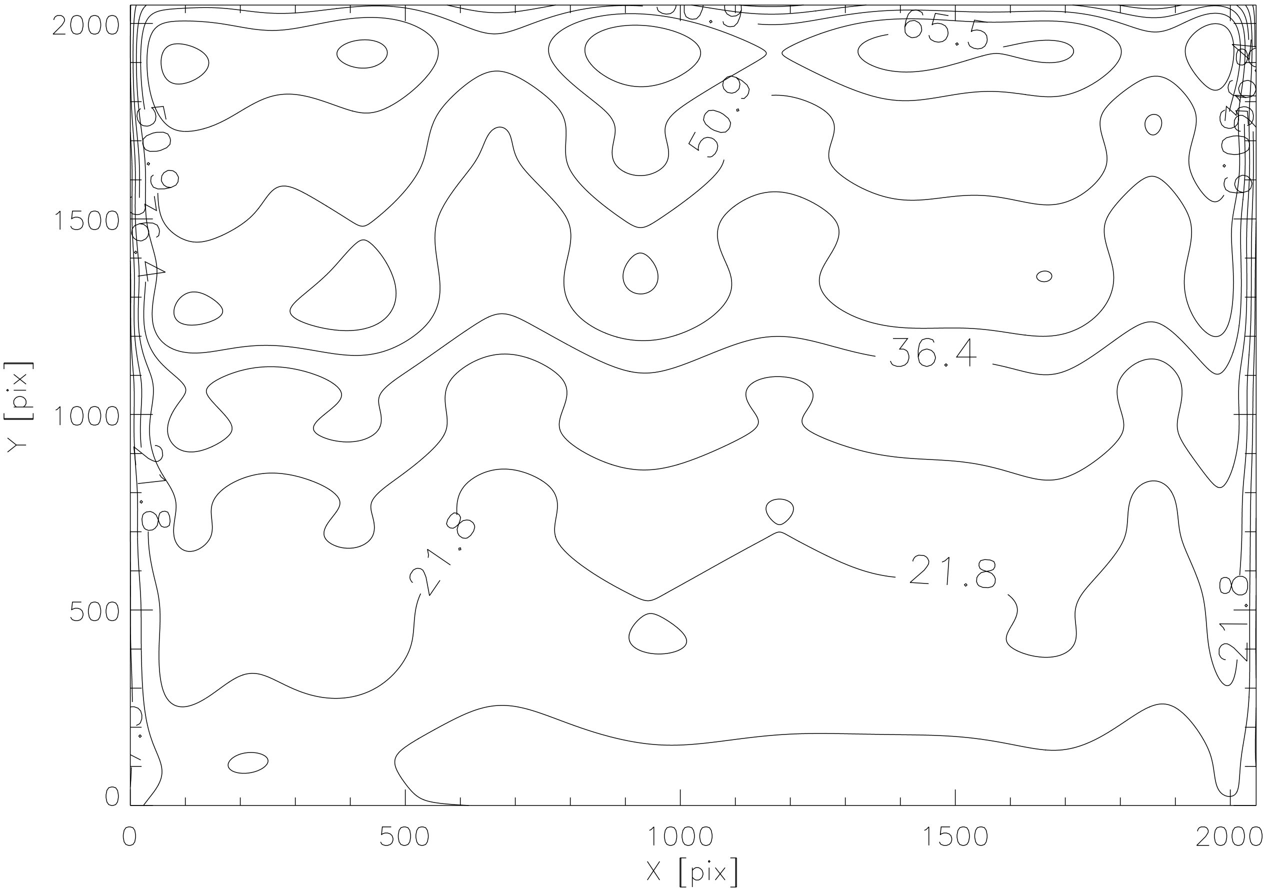

PLATE=3210 MJD=54876 Superflat sdR-r1-00058835.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

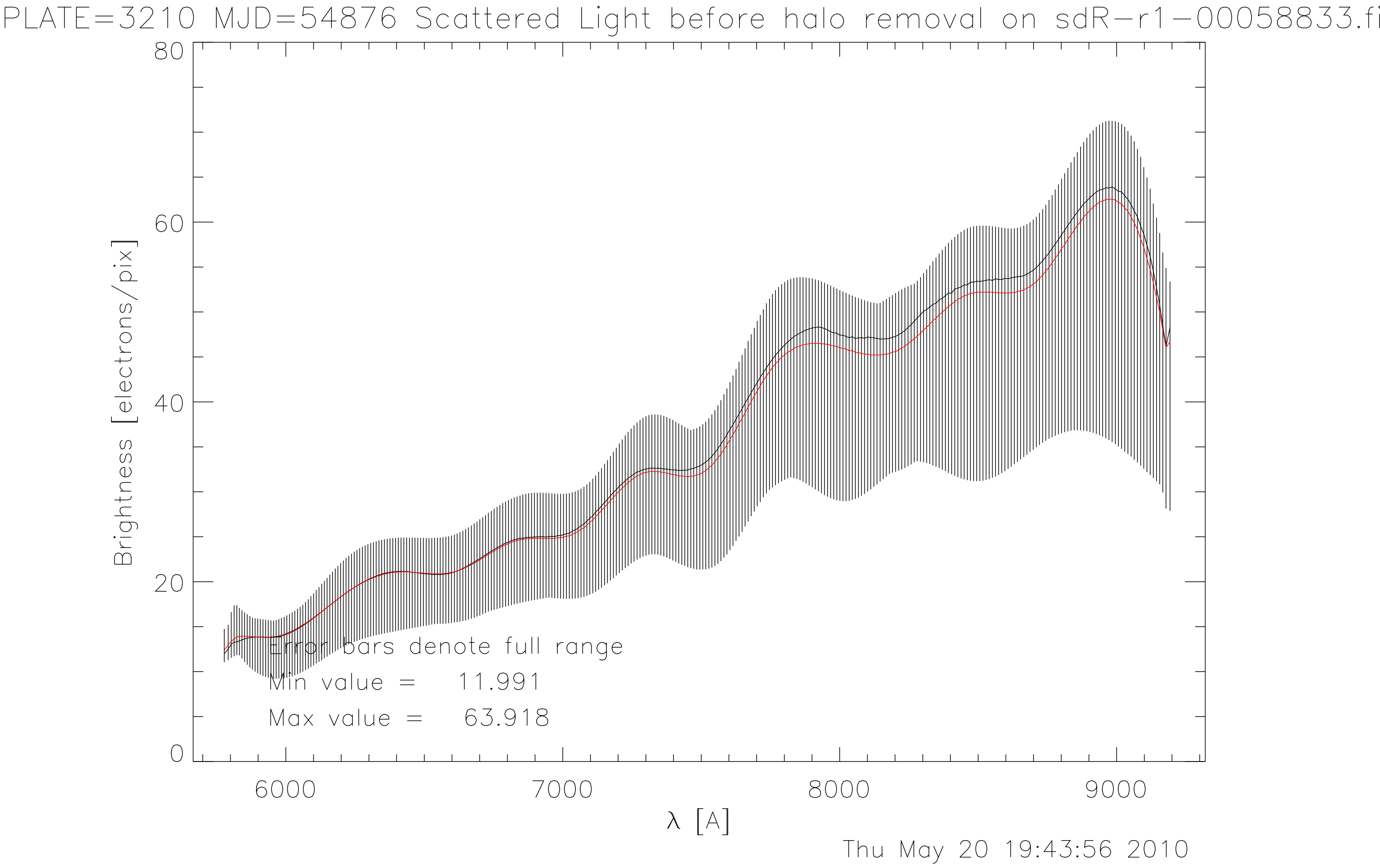


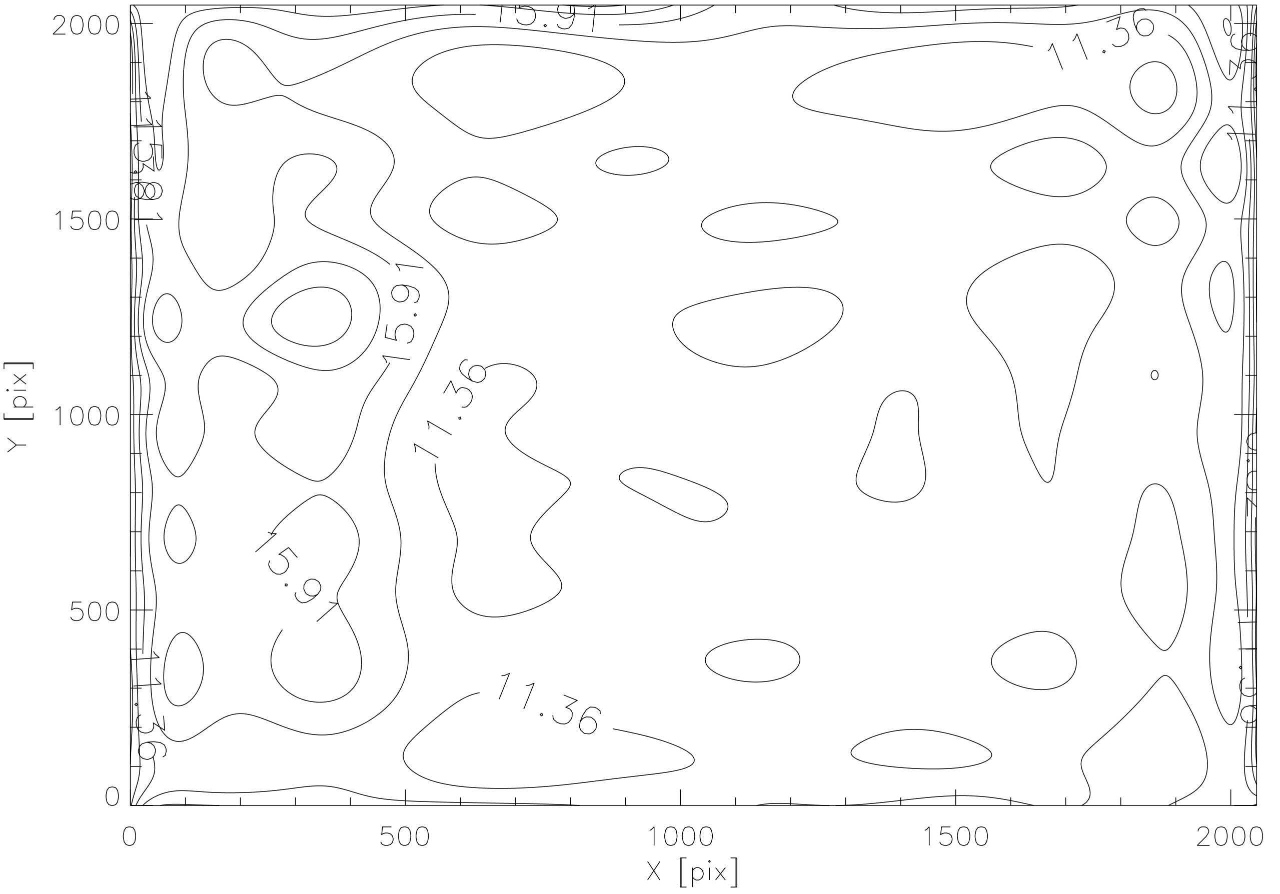
Thu May 20 19:42:50 2010

PLATE=3210 MJD=54876 Fiber−Flats for sdR−r1−00058835.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = −0.649
Max value = 1.372
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu May 20 19:42:58 2010

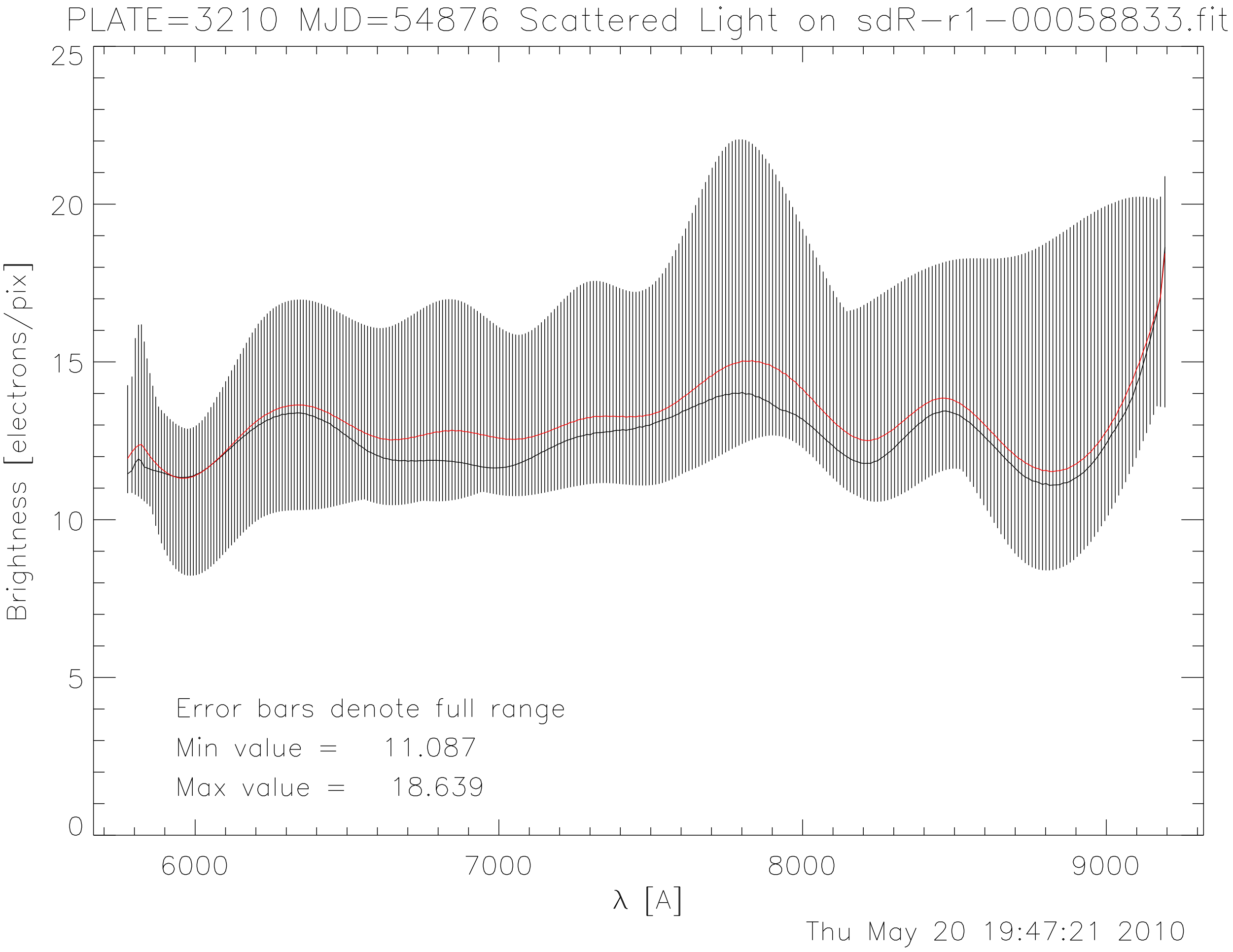
PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r1-00058833.fi




PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r1-00058833.fi
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.991
Max value = 63.918
Thu May 20 19:43:56 2010

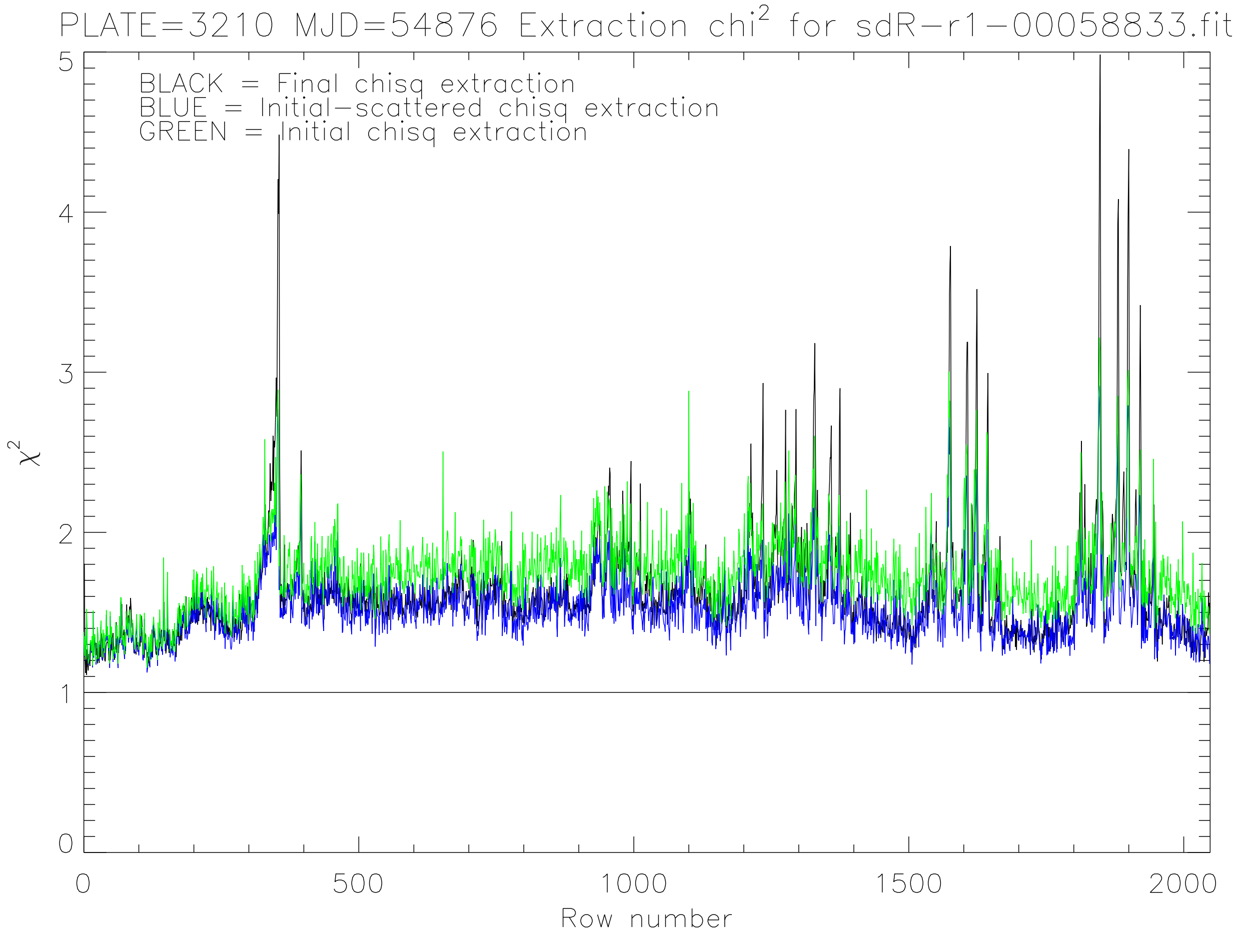


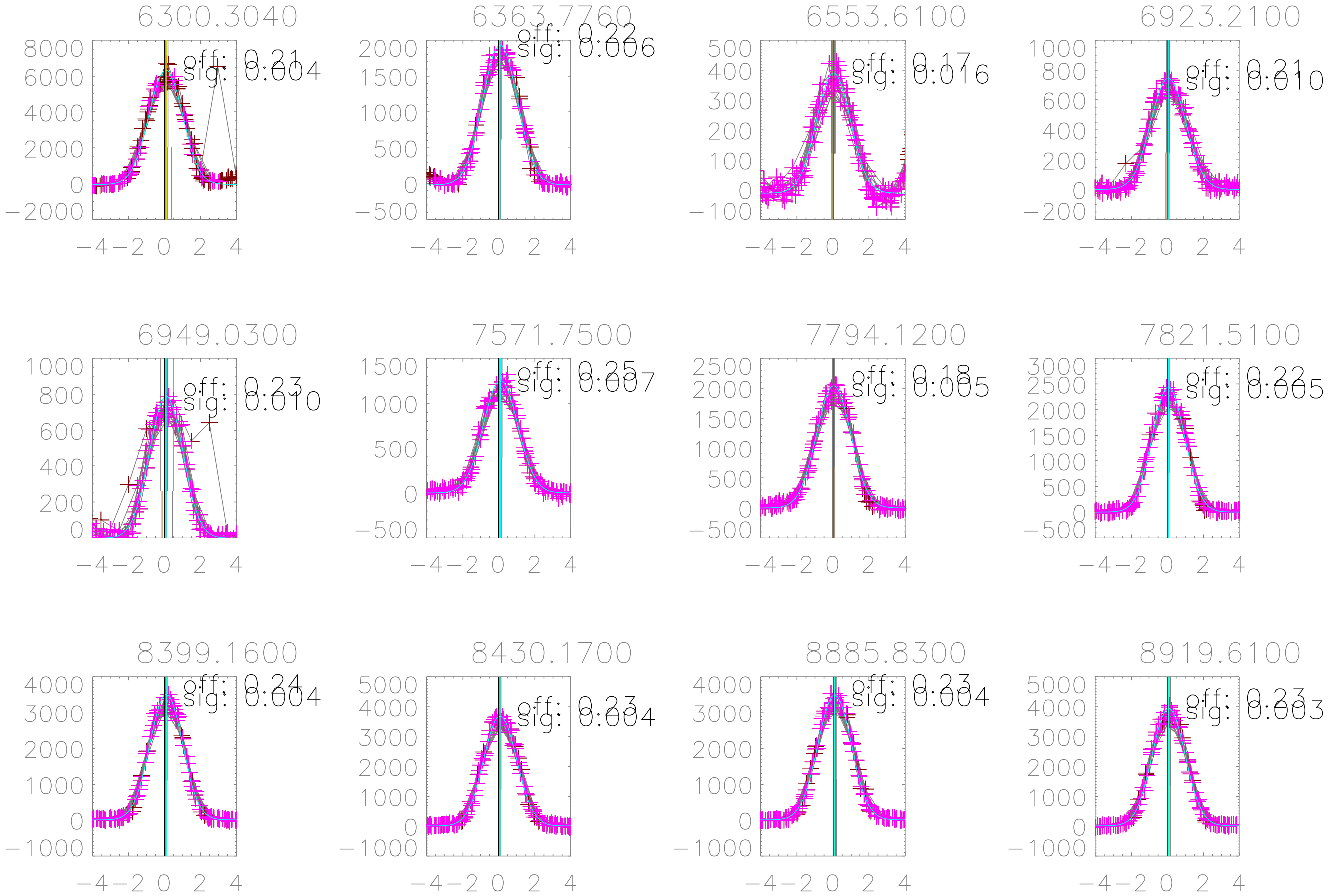
PLATE=3210 MJD=54876 Scattered Light on sdR-r1-00058833.fit

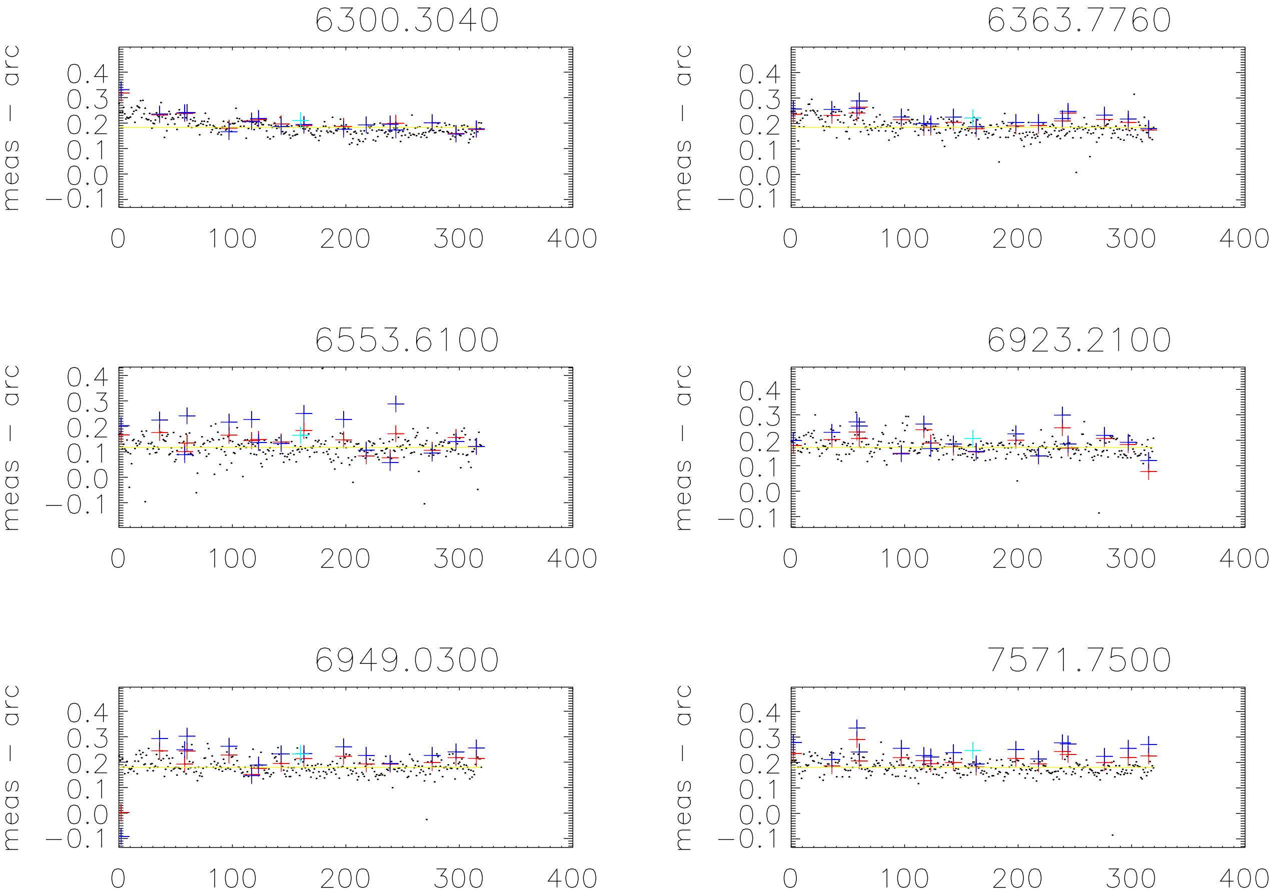


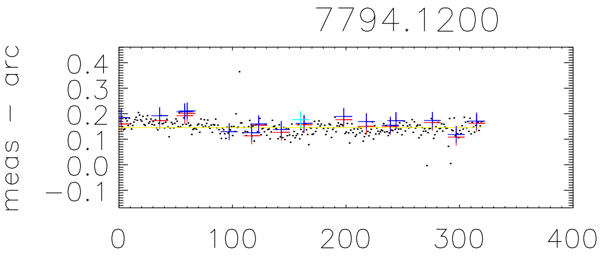
PLATE=3210 MJD=54876 Scattered Light on sdR-r1-00058833.fit

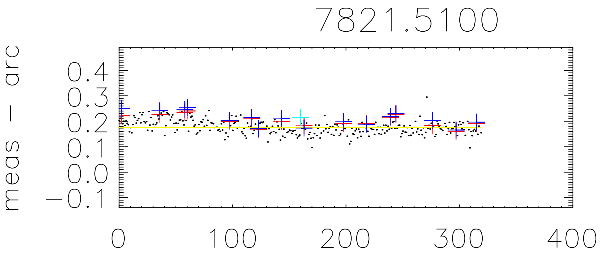
Thu May 20 19:47:21 2010

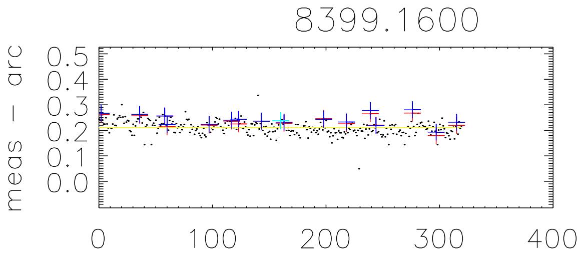

PLATE=3210 MJD=54876 Extraction chi^2 for sdR-r1-00058833.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

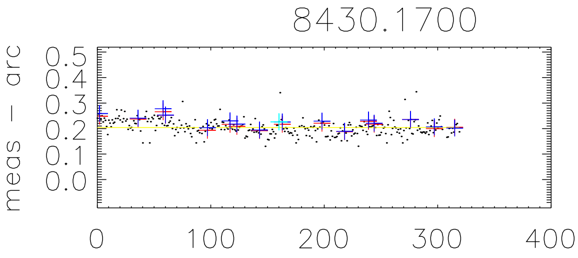

6300.3040
off: 0.21
sig: 0.004
8000
6000
4000
2000
0
−2000
6363.7760
off: 0.22
sig: 0.006
2000
1500
1000
500
0
−500
6553.6100
off: 0.17
sig: 0.016
500
400
300
200
100
0
−100
6923.2100
off: 0.21
sig: 0.010
1000
800
600
400
200
0
−200
6949.0300
off: 0.23
sig: 0.010
1000
800
600
400
200
0
7571.7500
off: 0.25
sig: 0.007
1500
1000
500
0
−500
7794.1200
off: 0.18
sig: 0.005
2500
2000
1500
1000
500
0
−500
7821.5100
off: 0.22
sig: 0.005
3000
2500
2000
1500
1000
500
0
−500
8399.1600
off: 0.24
sig: 0.004
4000
3000
2000
1000
0
−1000
8430.1700
off: 0.23
sig: 0.004
5000
4000
3000
2000
1000
0
−1000
8885.8300
off: 0.23
sig: 0.004
4000
3000
2000
1000
0
−1000
8919.6100
off: 0.23
sig: 0.003
5000
4000
3000
2000
1000
0
−1000
−4 −2 0 2 4

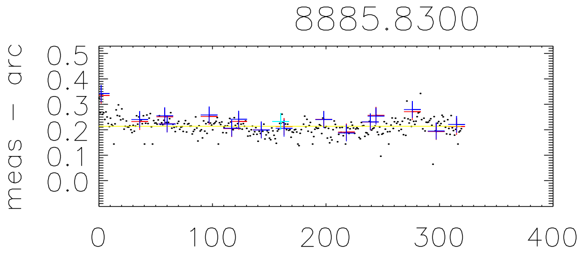

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

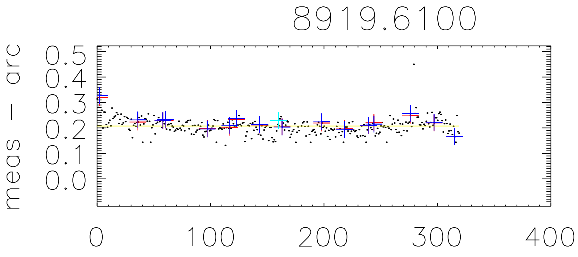

7794.1200

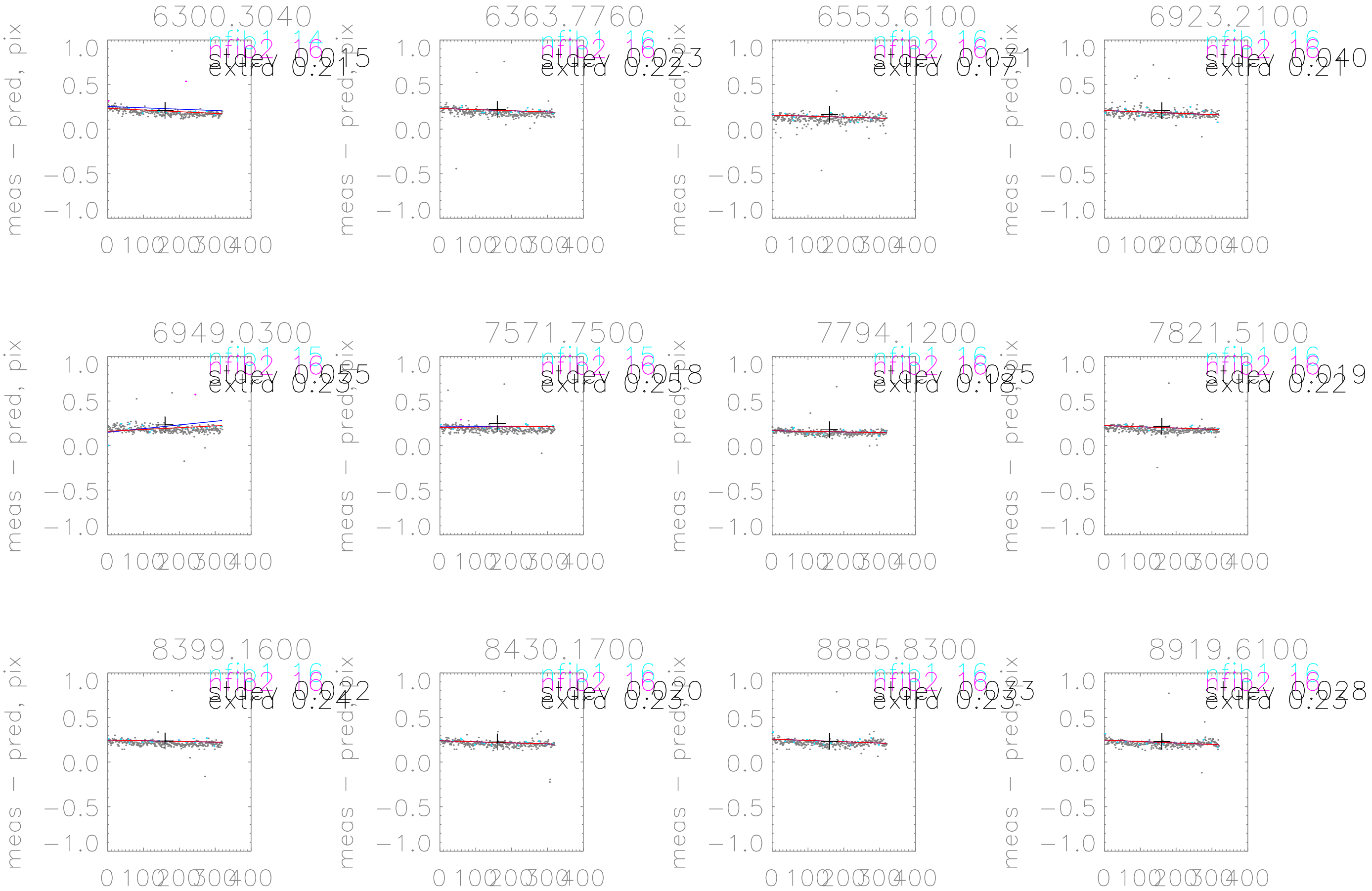

7821.5100

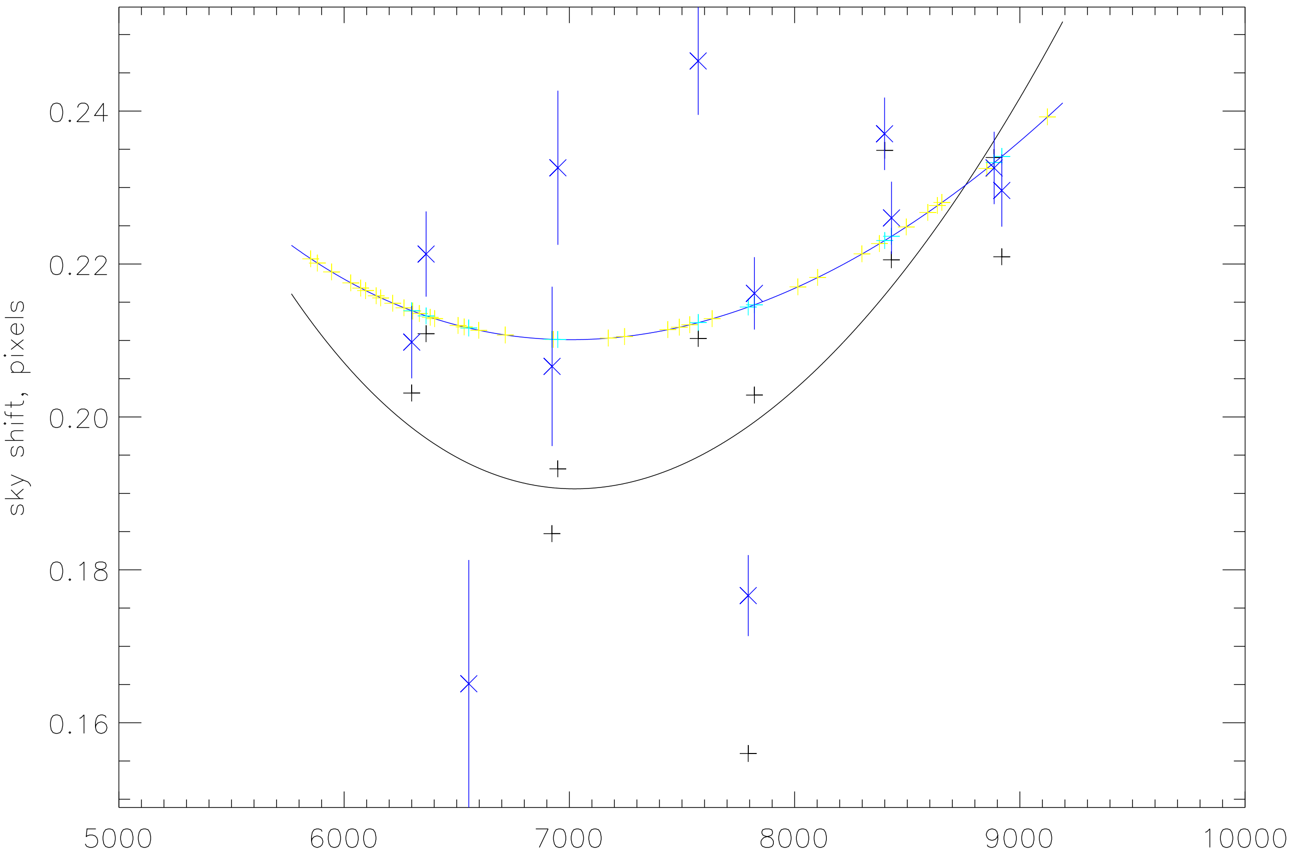

8399.1600

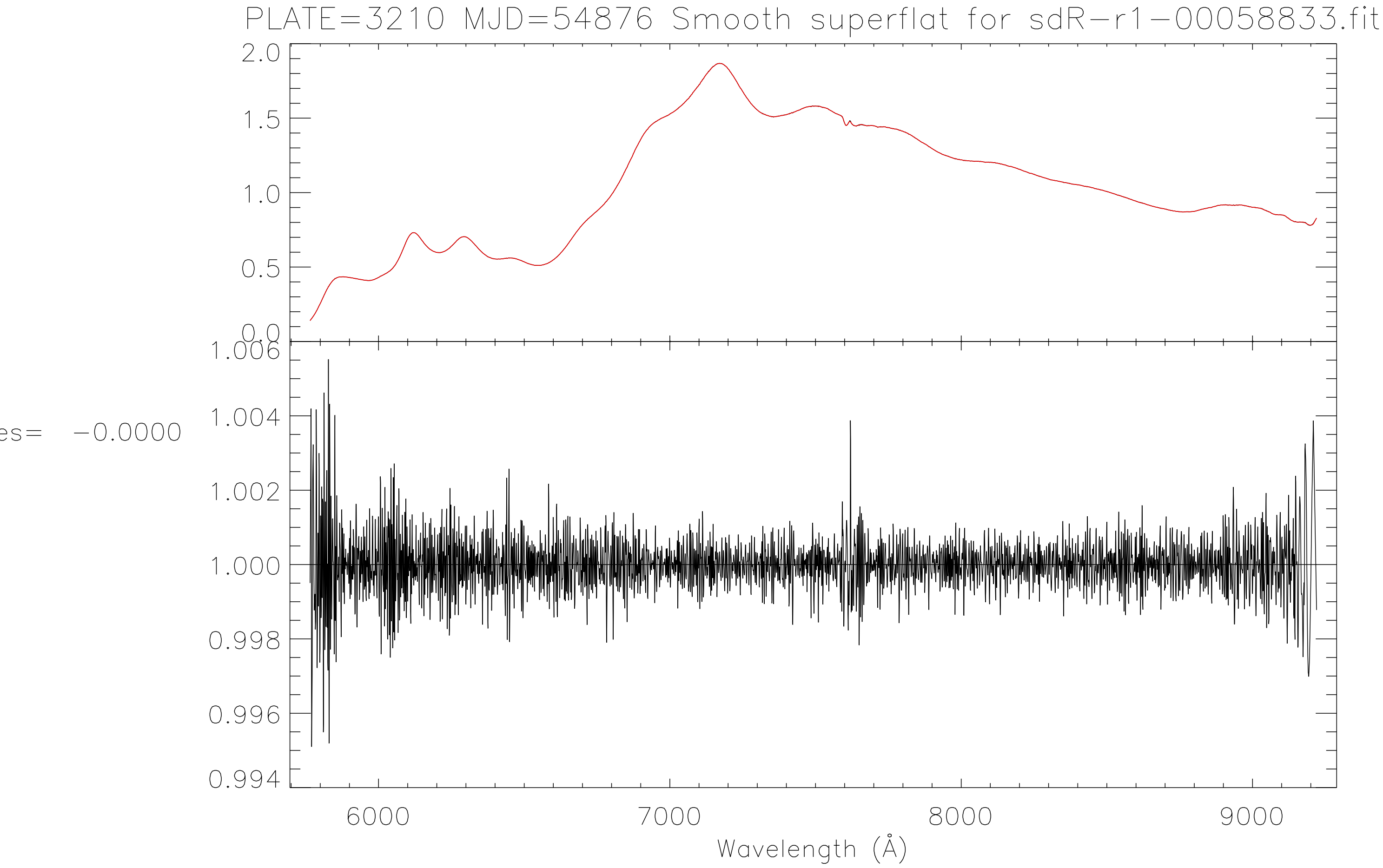

8430.1700

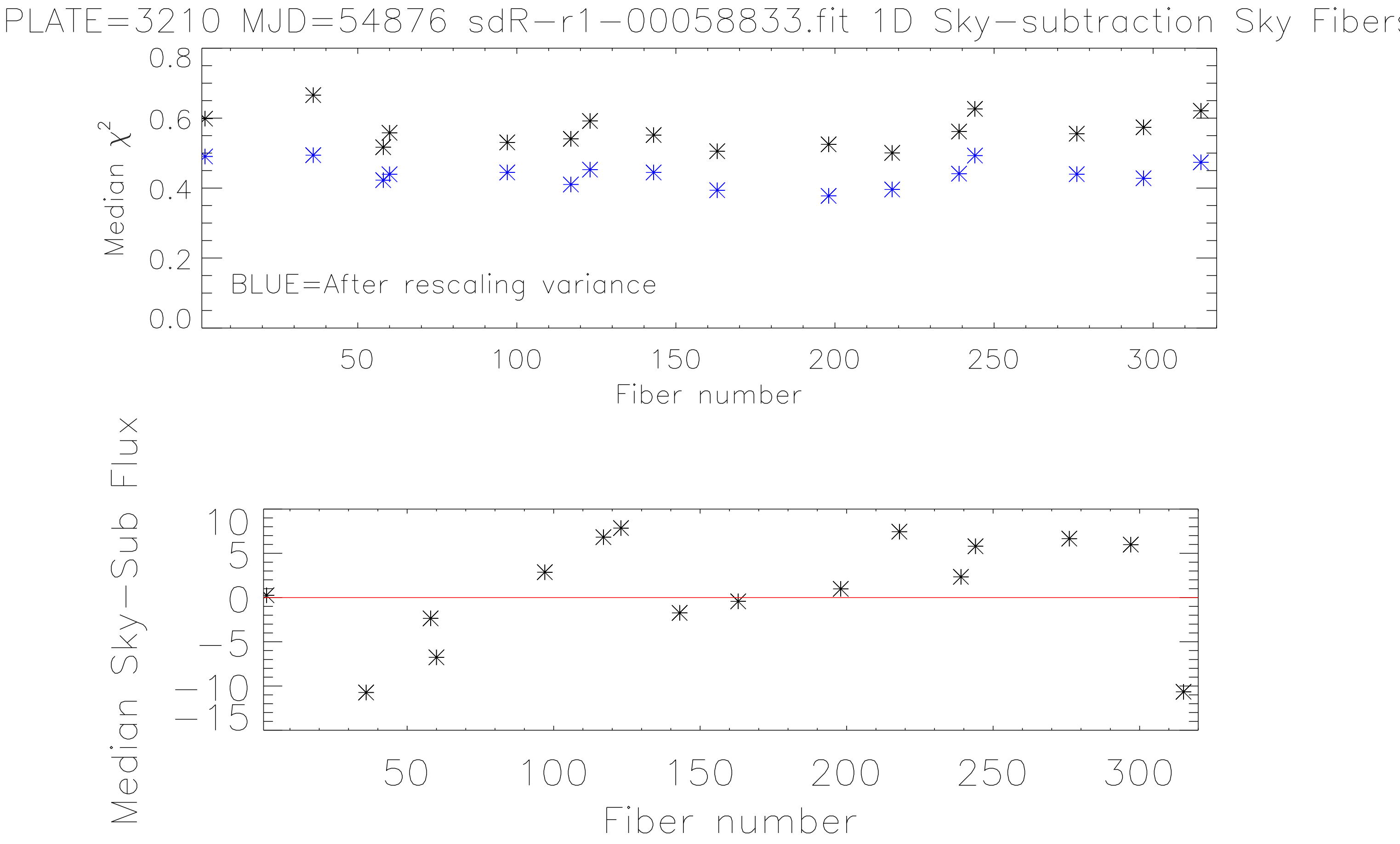

8885.8300

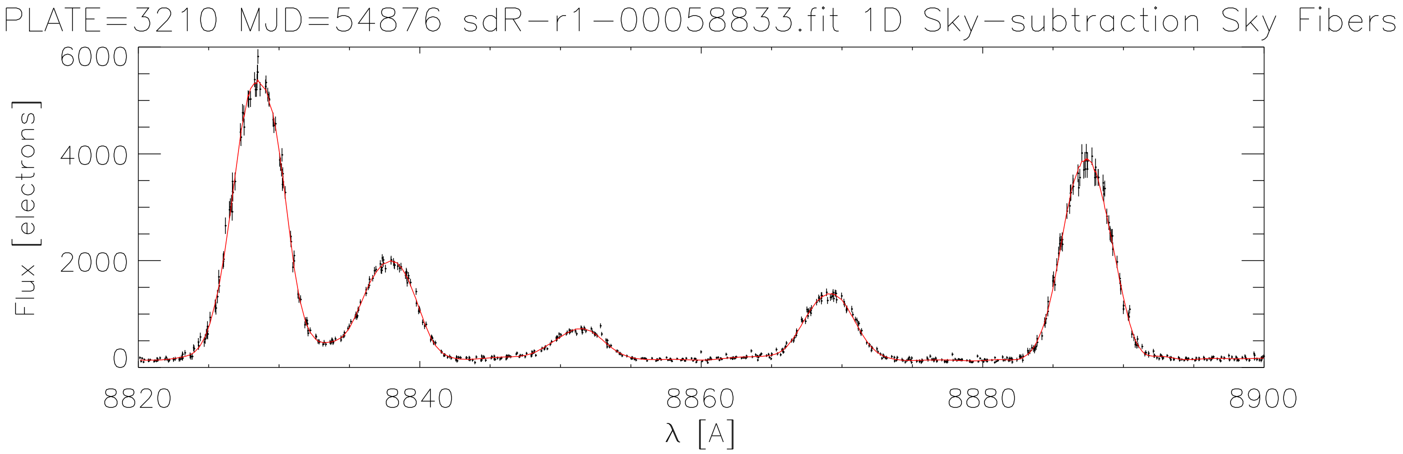

8919.6100

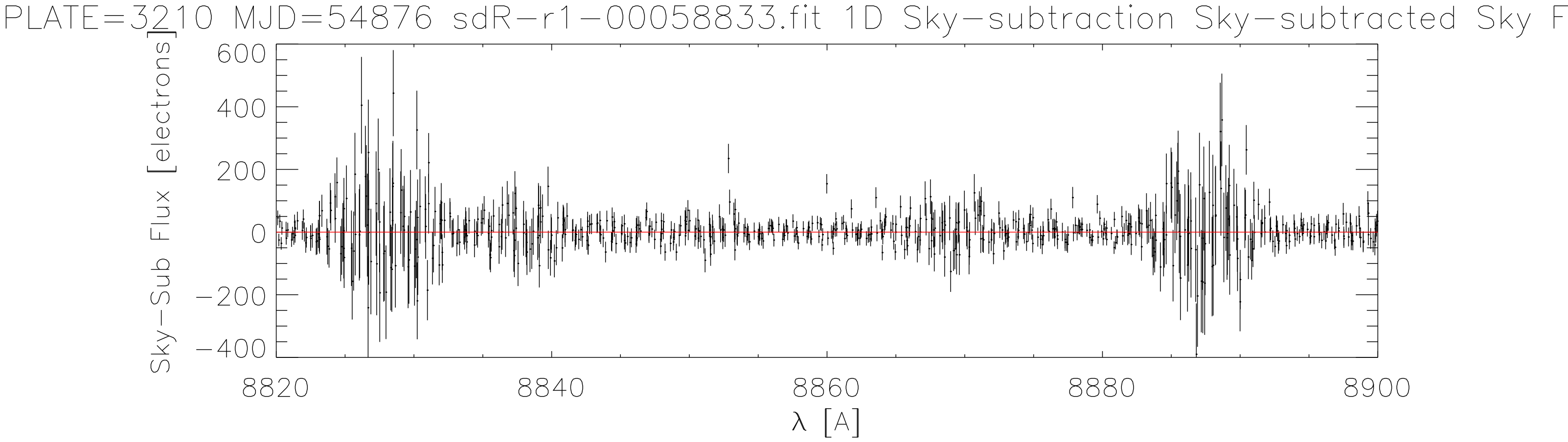

6300.3040
nfib1 14
nfib2 16
stdev 0.015
extrd 0.21
6363.7760
nfib1 16
nfib2 16
stdev 0.023
extrd 0.22
6553.6100
nfib1 16
nfib2 16
stdev 0.031
extrd 0.17
6923.2100
nfib1 16
nfib2 16
stdev 0.040
extrd 0.21
6949.0300
nfib1 15
nfib2 16
stdev 0.055
extrd 0.23
7571.7500
nfib1 15
nfib2 16
stdev 0.018
extrd 0.25
7794.1200
nfib1 16
nfib2 16
stdev 0.025
extrd 0.18
7821.5100
nfib1 16
nfib2 16
stdev 0.019
extrd 0.22
8399.1600
nfib1 16
nfib2 16
stdev 0.022
extrd 0.24
8430.1700
nfib1 16
nfib2 16
stdev 0.020
extrd 0.23
8885.8300
nfib1 16
nfib2 16
stdev 0.033
extrd 0.23
8919.6100
nfib1 16
nfib2 16
stdev 0.028
extrd 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

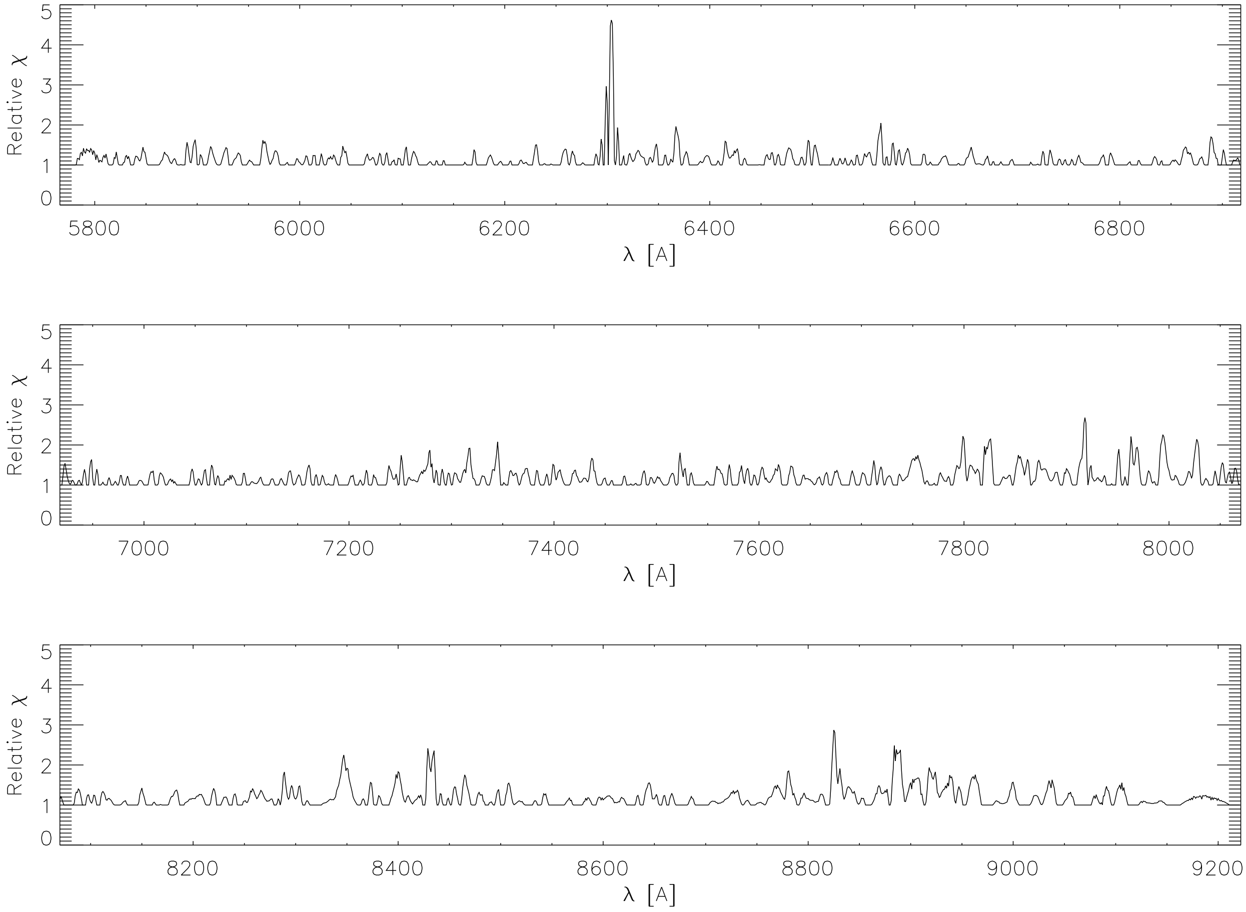

sky shift, pixels
0.24
0.22
0.20
0.18
0.16
5000
6000
7000
8000
9000
10000


PLATE=3210 MJD=54876 Smooth superflat for sdR-r1-00058833.fit
2.0
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
6000
7000
8000
9000
Wavelength (Å)


PLATE=3210 MJD=54876 sdR-r1-00058833.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number

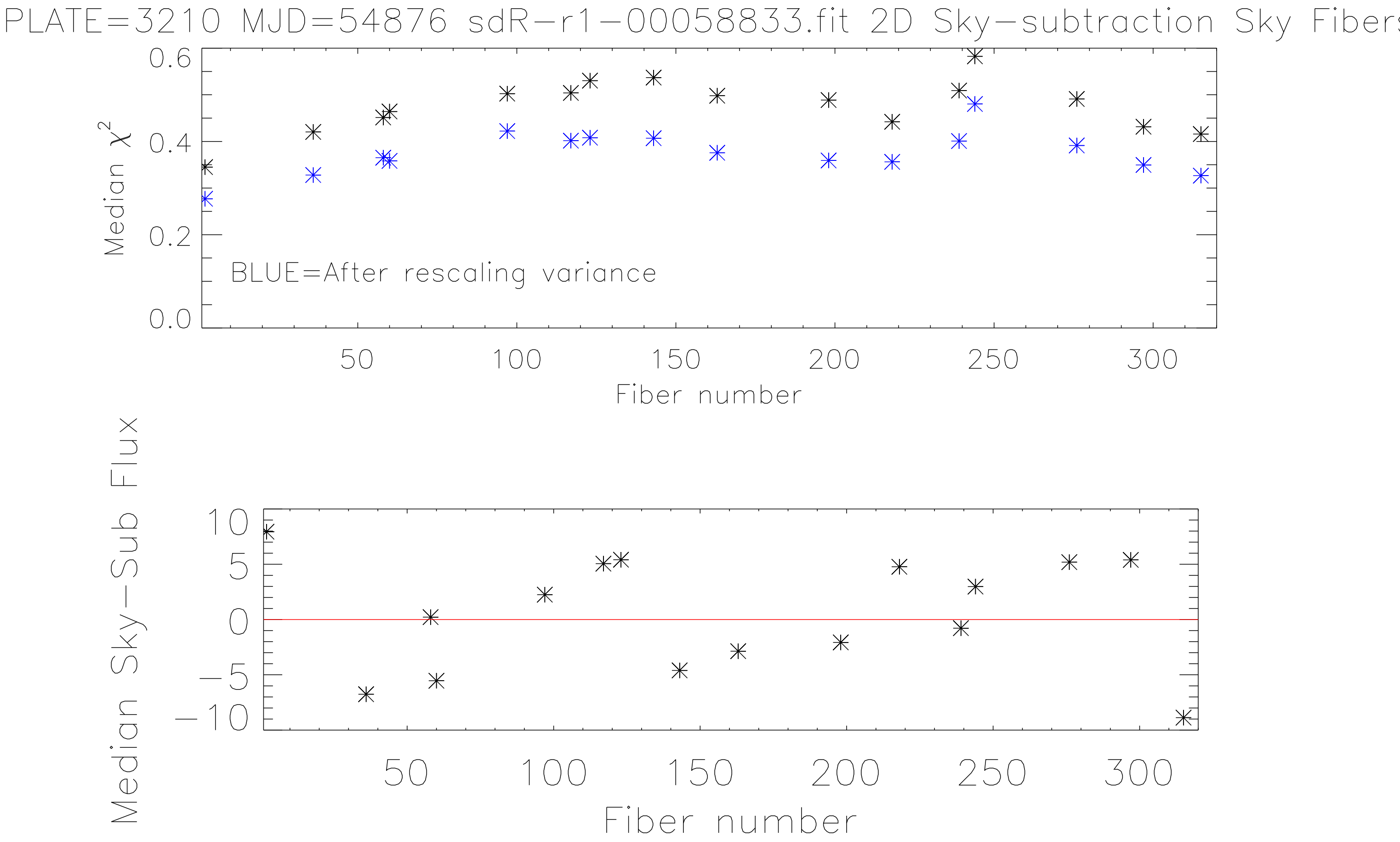

PLATE=3210 MJD=54876 sdR-r1-00058833.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

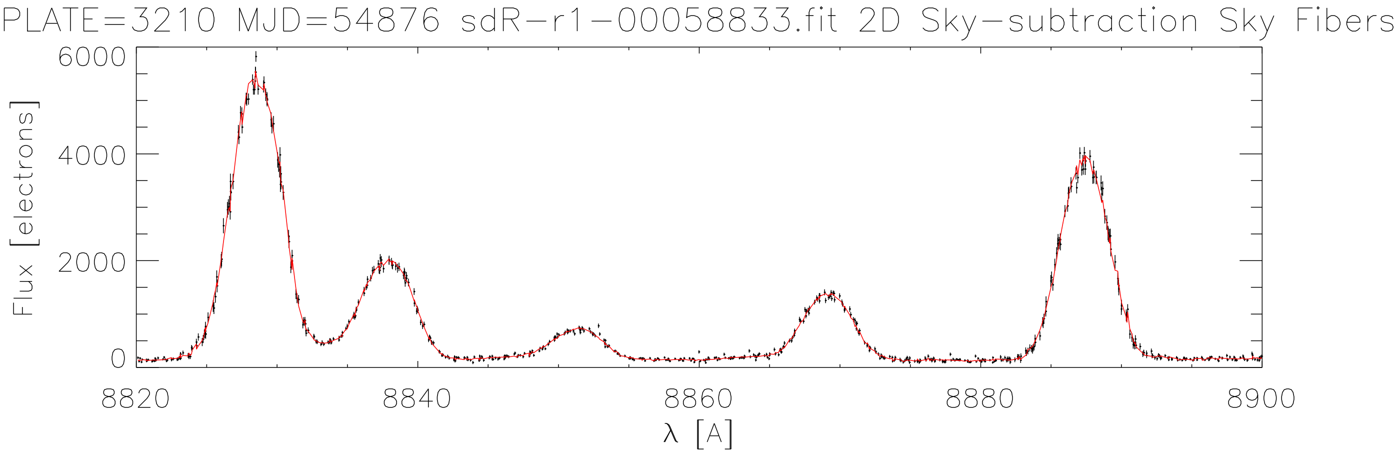

PLATE=3210 MJD=54876 sdR-r1-00058833.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]



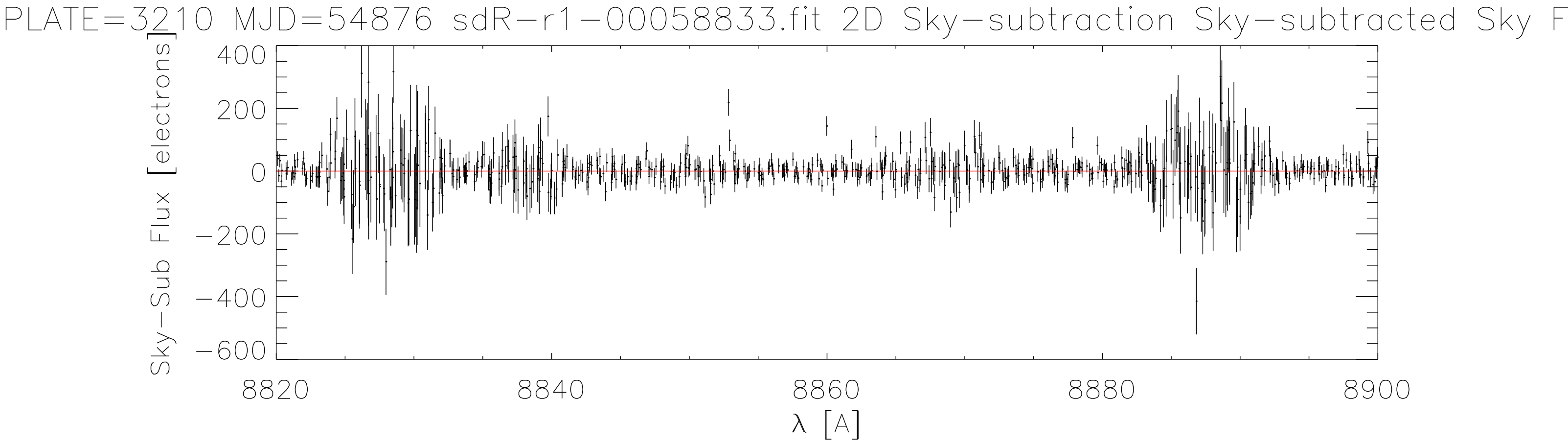
Number of sky fibers = 16

PLATE=3210 MJD=54876 sdR-r1-00058833.fit 1D Sky-subtraction Rescaled Errors

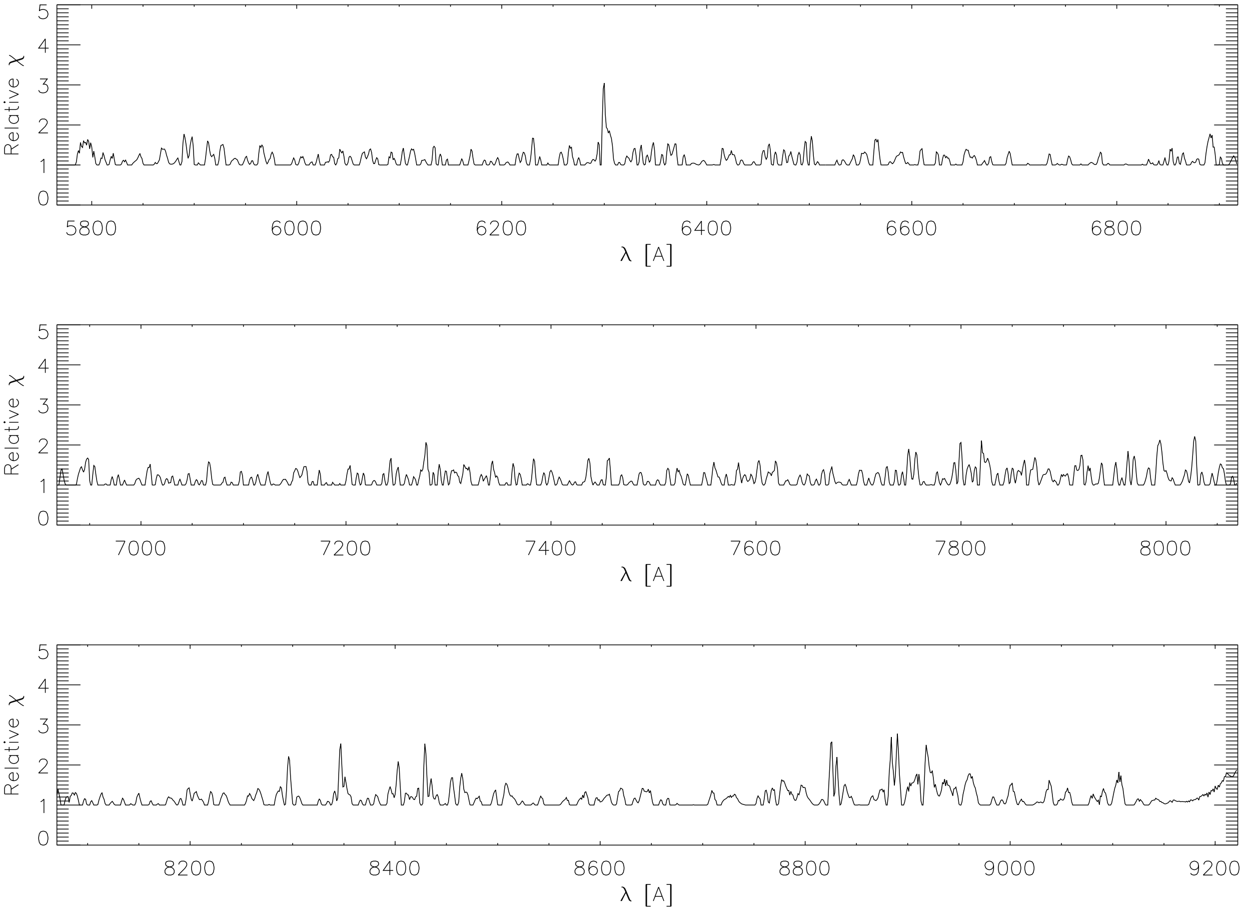

PLATE=3210 MJD=54876 sdR-r1-00058833.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number



PLATE=3210 MJD=54876 sdR-r1-00058833.fit 2D Sky-subtraction Sky Fibers

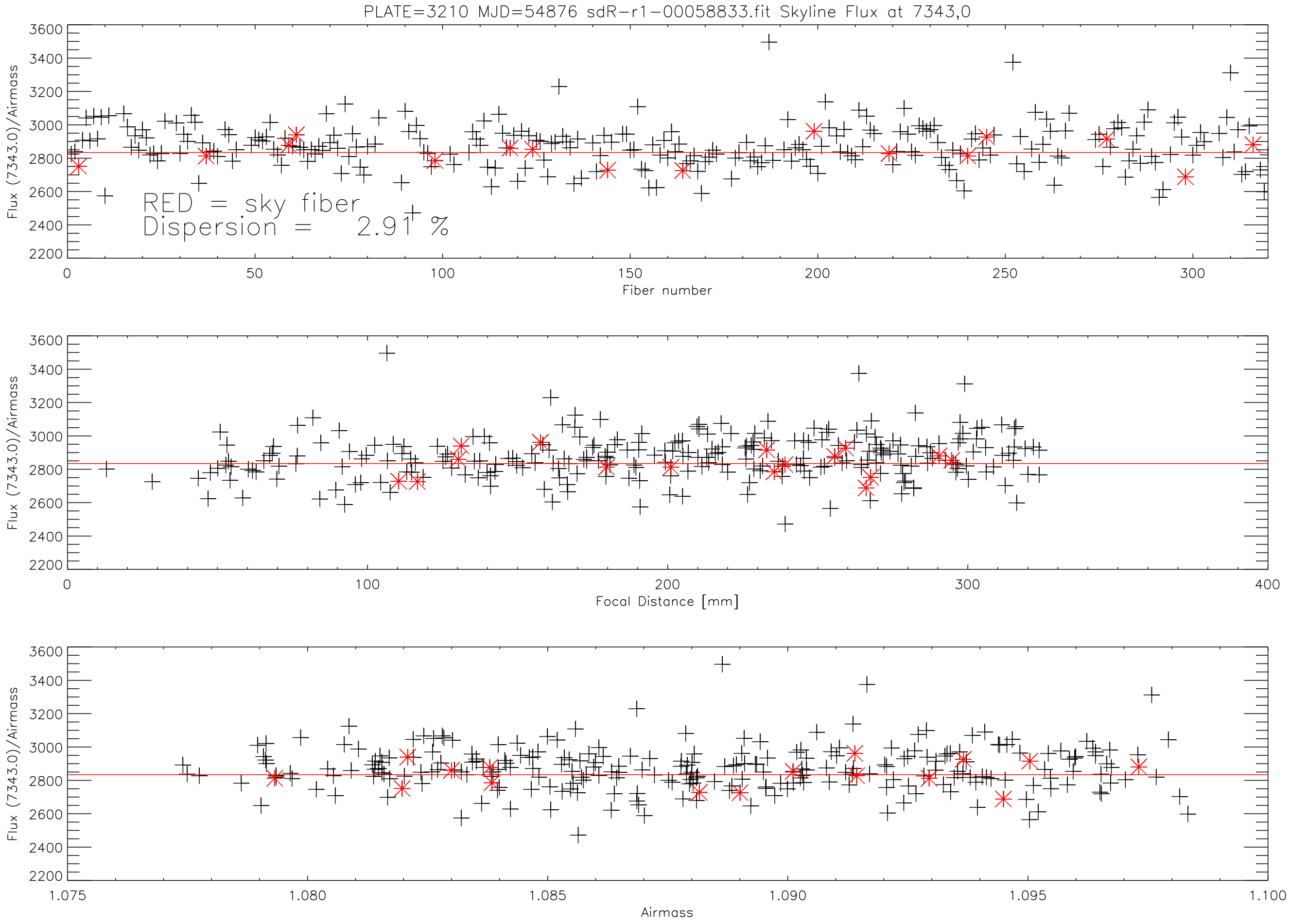


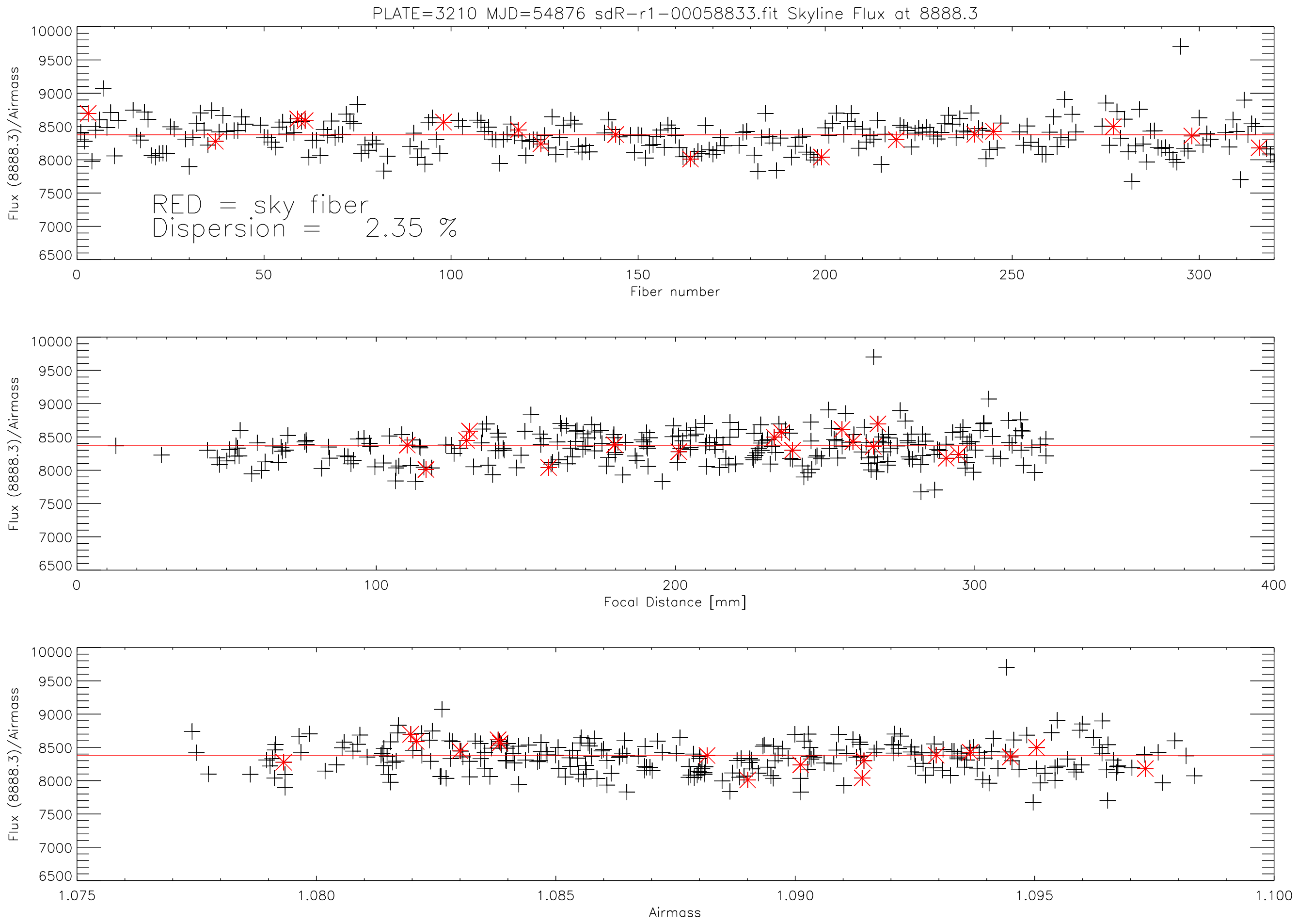
PLATE=3210 MJD=54876 sdR-r1-00058833.fit 2D Sky-subtraction Sky-subtracted Sky F

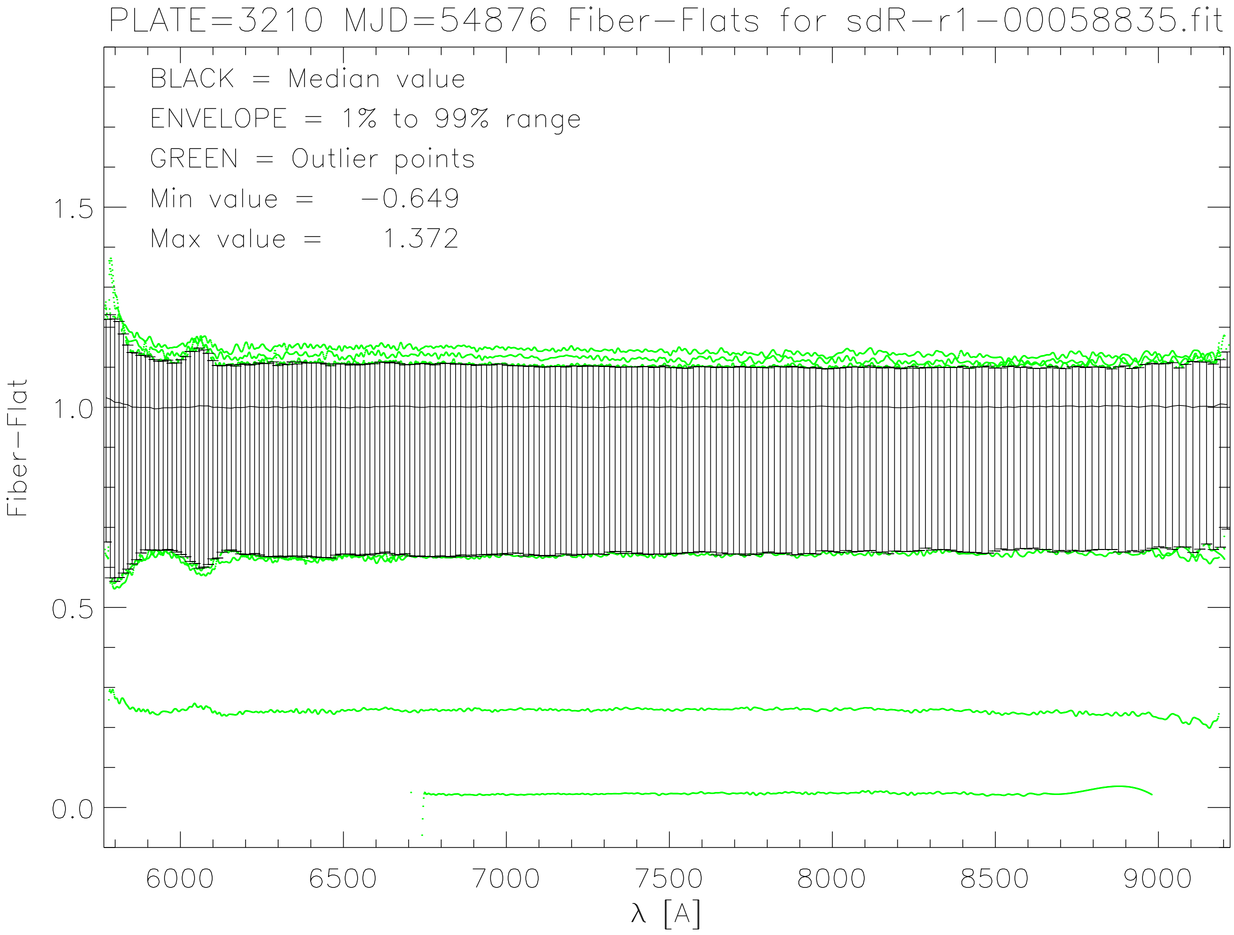


Number of sky fibers = 16

PLATE=3210 MJD=54876 sdR-r1-00058833.fit 2D Sky-subtraction Rescaled Errors

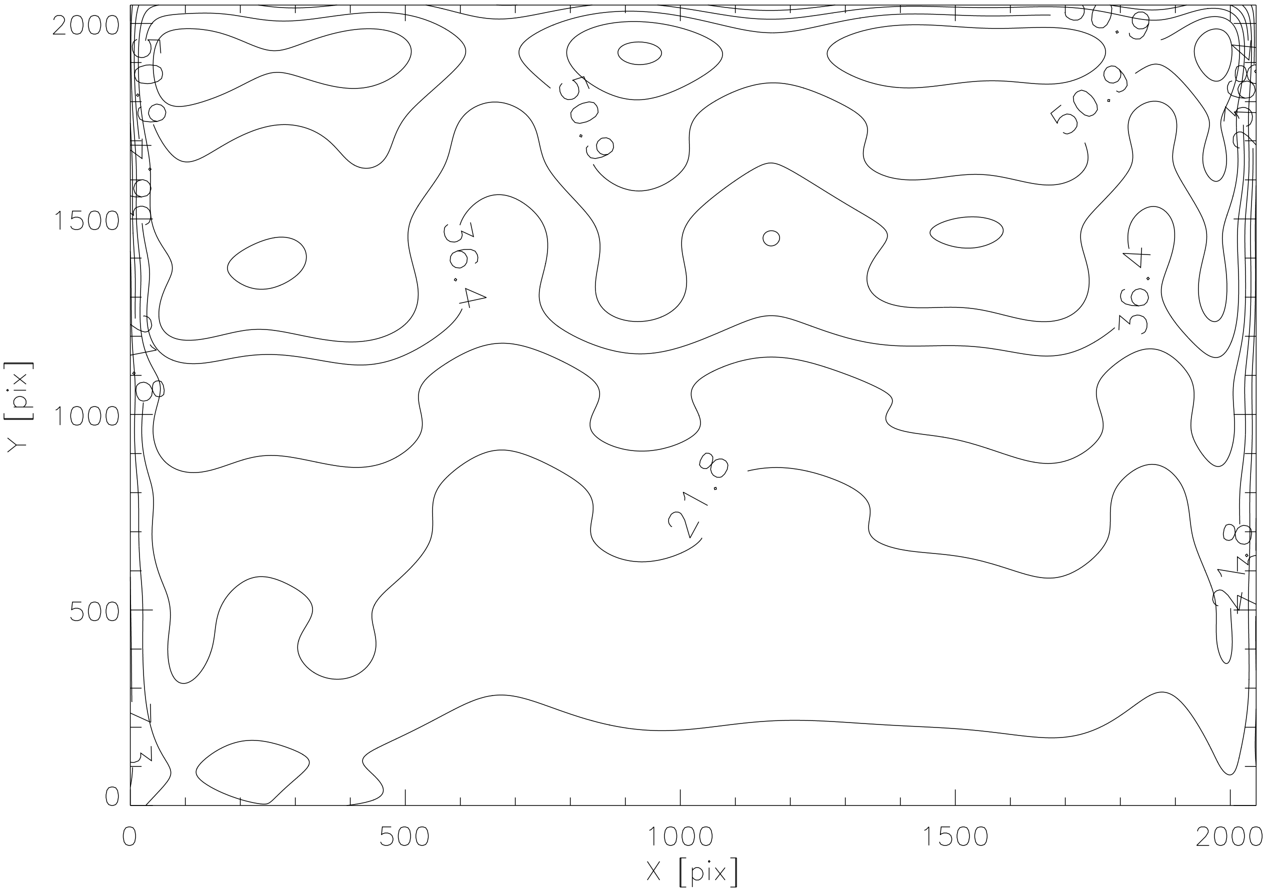

PLATE=3210 MJD=54876 sdR-r1-00058833.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
2400
2200
RED = sky fiber
Dispersion = 2.91 %
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.075
1.080
1.085
1.090
1.095
1.100
Airmass


PLATE=3210 MJD=54876 sdR-r1-00058833.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 2.35 %
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
7500
7000
6500
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
1.075
1.080
1.085
1.090
1.095
1.100
Airmass

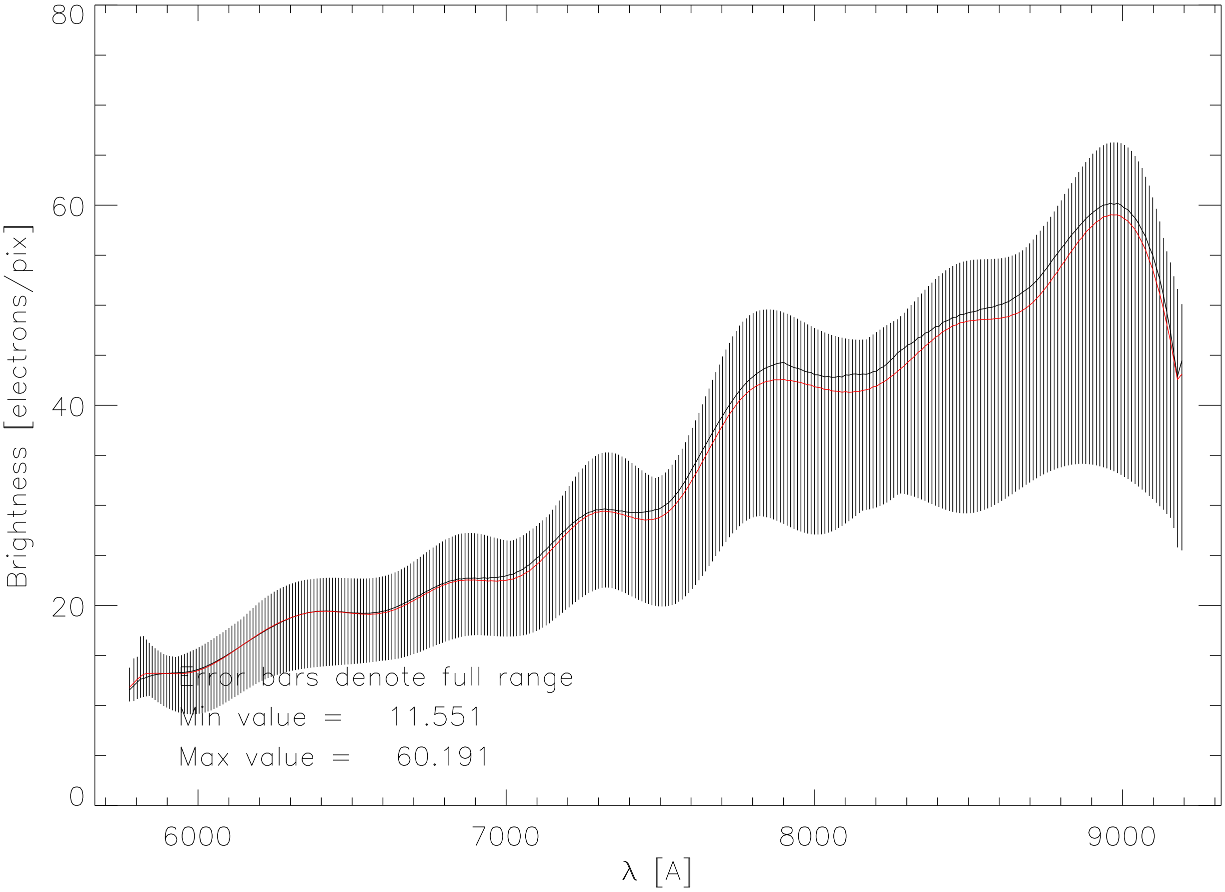


Thu May 20 19:48:59 2010

PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r1-00058834.fi

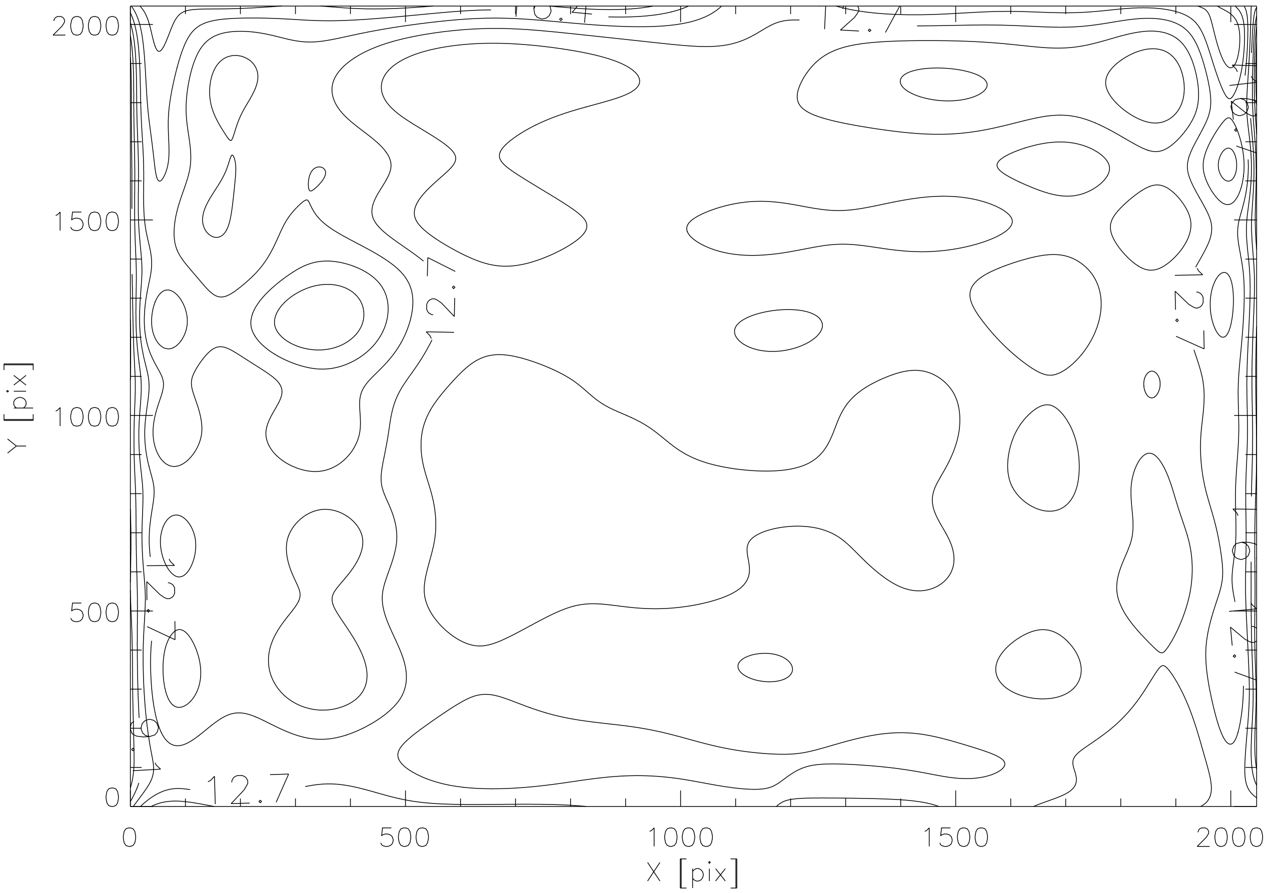


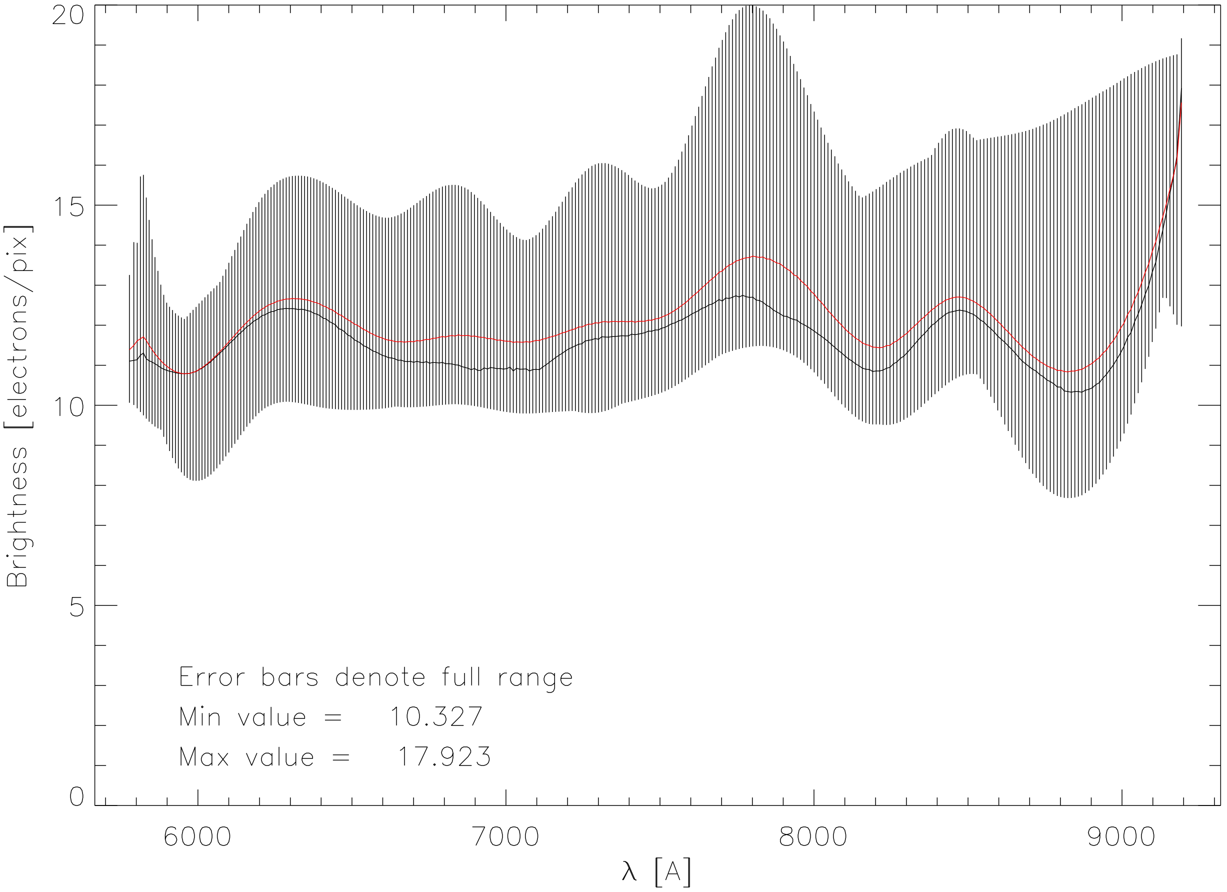
PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r1-00058834.fi



Thu May 20 19:49:56 2010

PLATE=3210 MJD=54876 Scattered Light on sdR-r1-00058834.fit





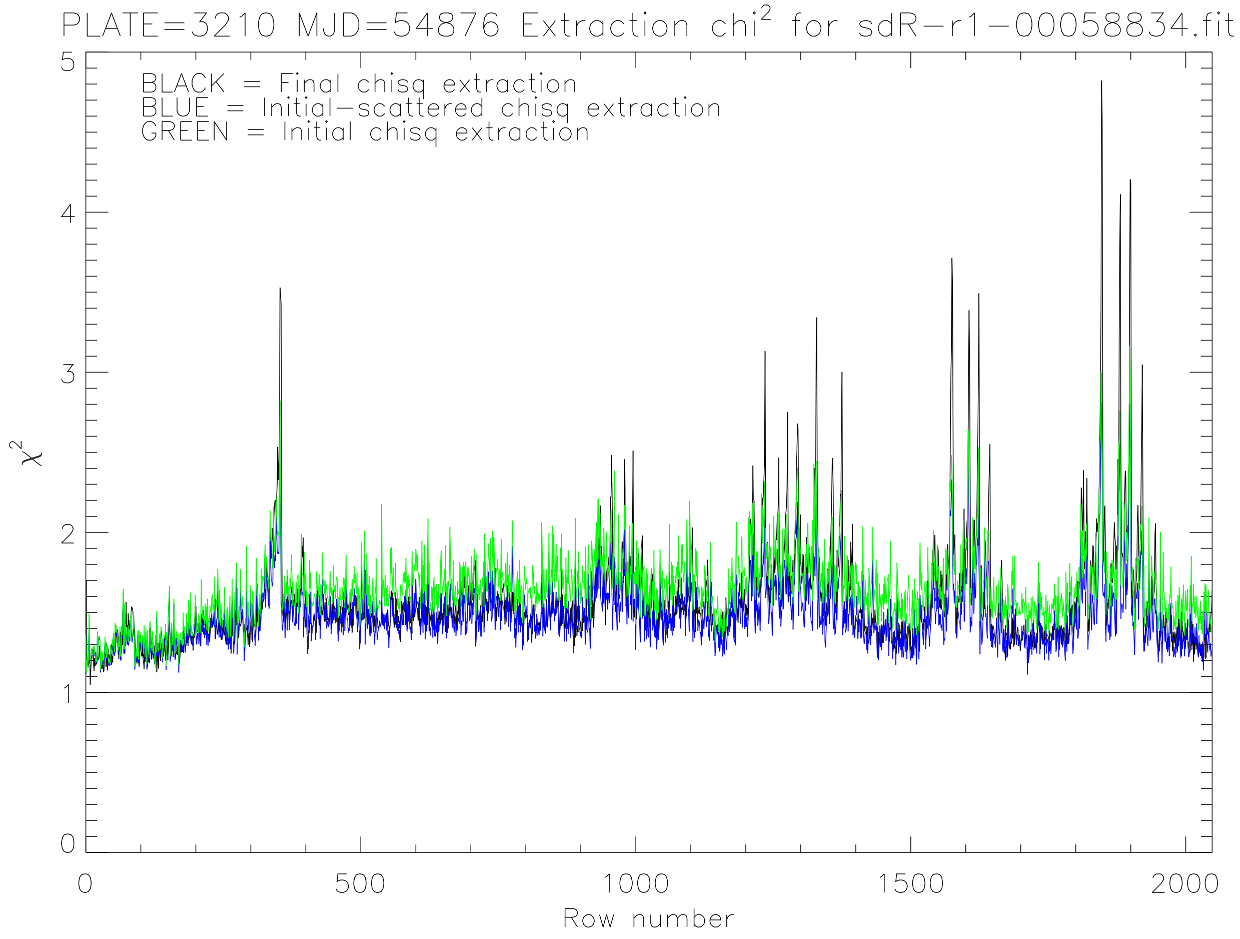
PLATE=3210 MJD=54876 Scattered Light on sdR-r1-00058834.fit

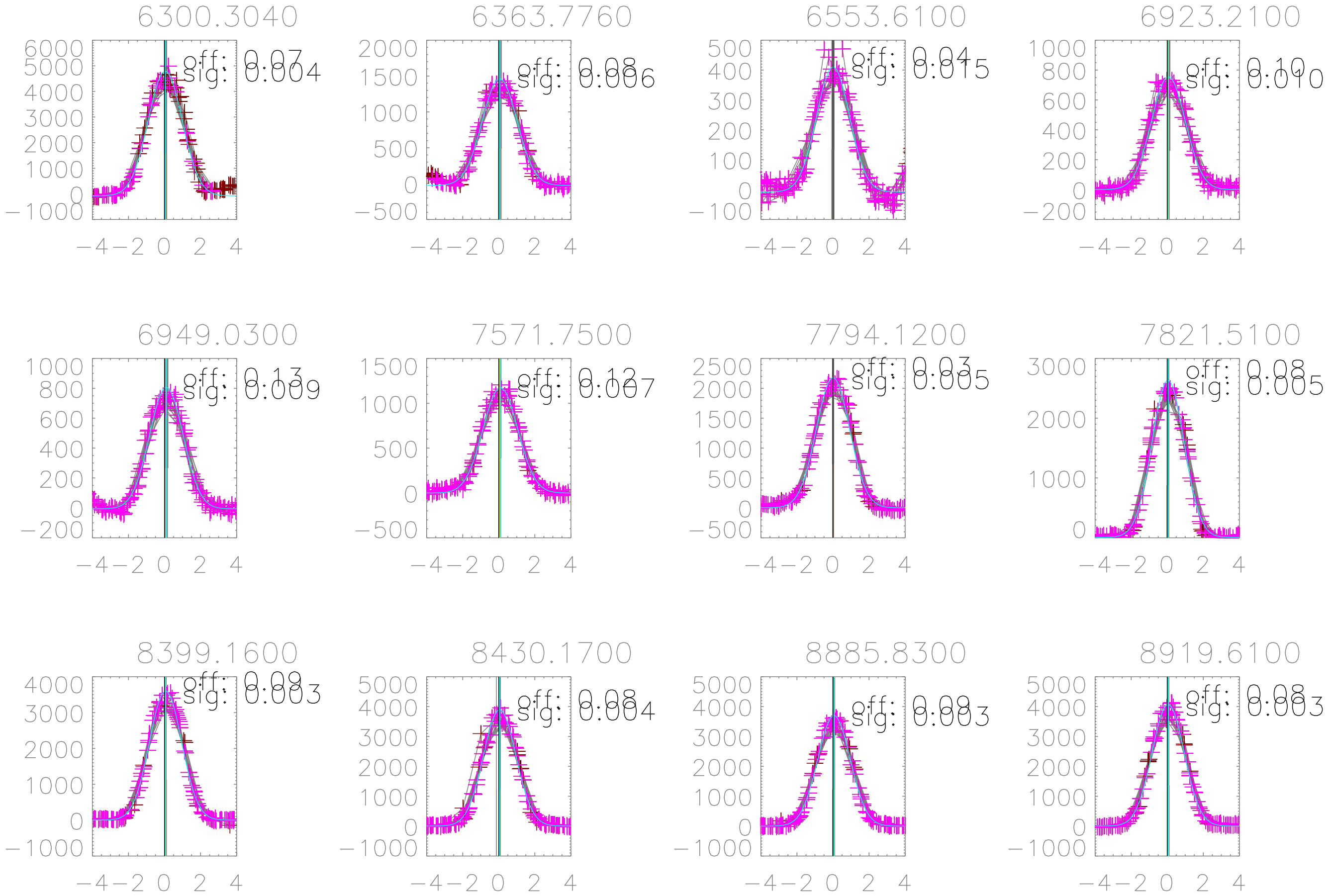
Error bars denote full range

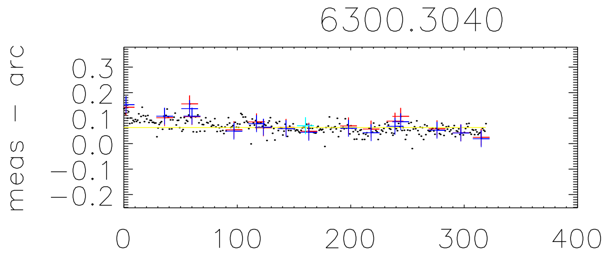
Min value = 10.327

Max value = 17.923

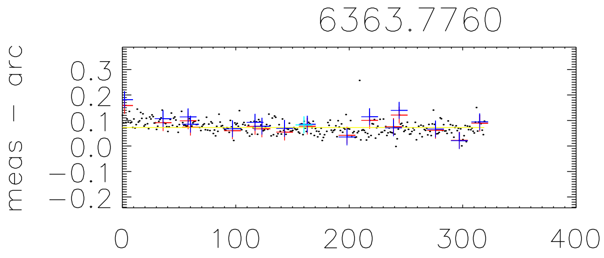
Thu May 20 19:53:19 2010


PLATE=3210 MJD=54876 Extraction chi^2 for sdR-r1-00058834.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

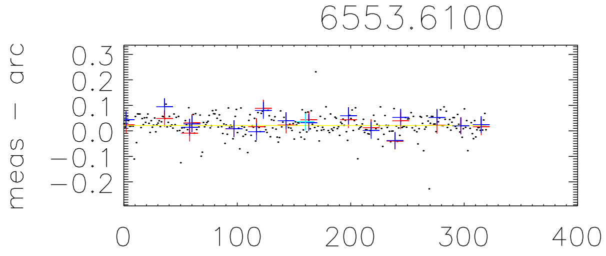

6300.3040
off: 0.07
sig: 0.004
6363.7760
off: 0.08
sig: 0.006
6553.6100
off: 0.04
sig: 0.015
6923.2100
off: 0.10
sig: 0.010
6949.0300
off: 0.13
sig: 0.009
7571.7500
off: 0.12
sig: 0.007
7794.1200
off: 0.03
sig: 0.005
7821.5100
off: 0.08
sig: 0.005
8399.1600
off: 0.09
sig: 0.003
8430.1700
off: 0.08
sig: 0.004
8885.8300
off: 0.09
sig: 0.003
8919.6100
off: 0.08
sig: 0.003
−4 −2 0 2 4



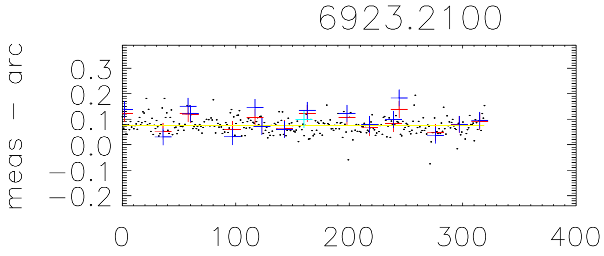
6300.3040



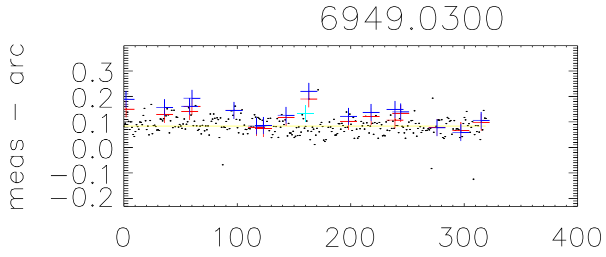
6363.7760



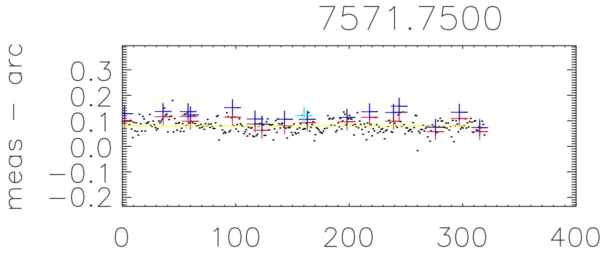
6553.6100



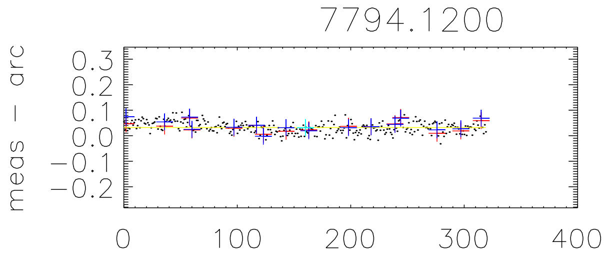
6923.2100

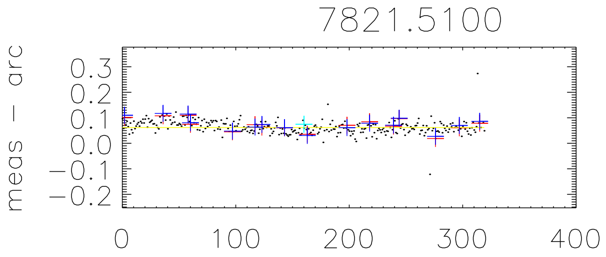


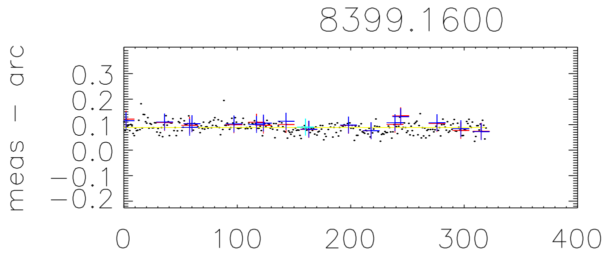
6949.0300

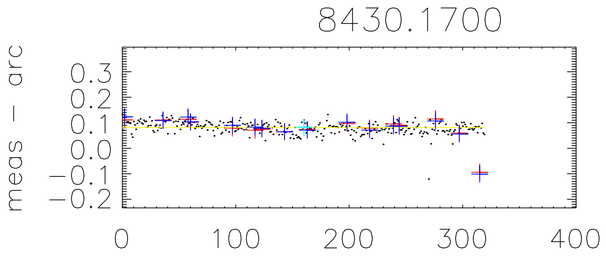


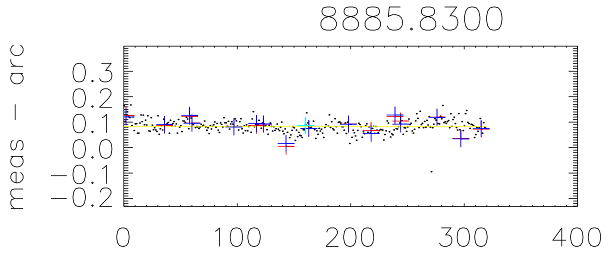
7571.7500

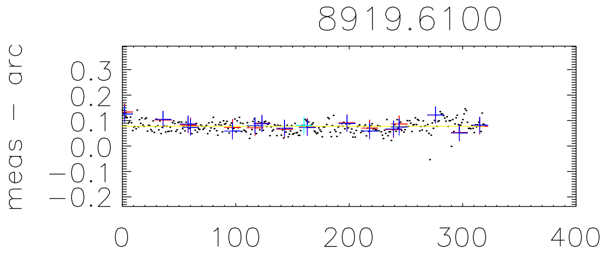

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

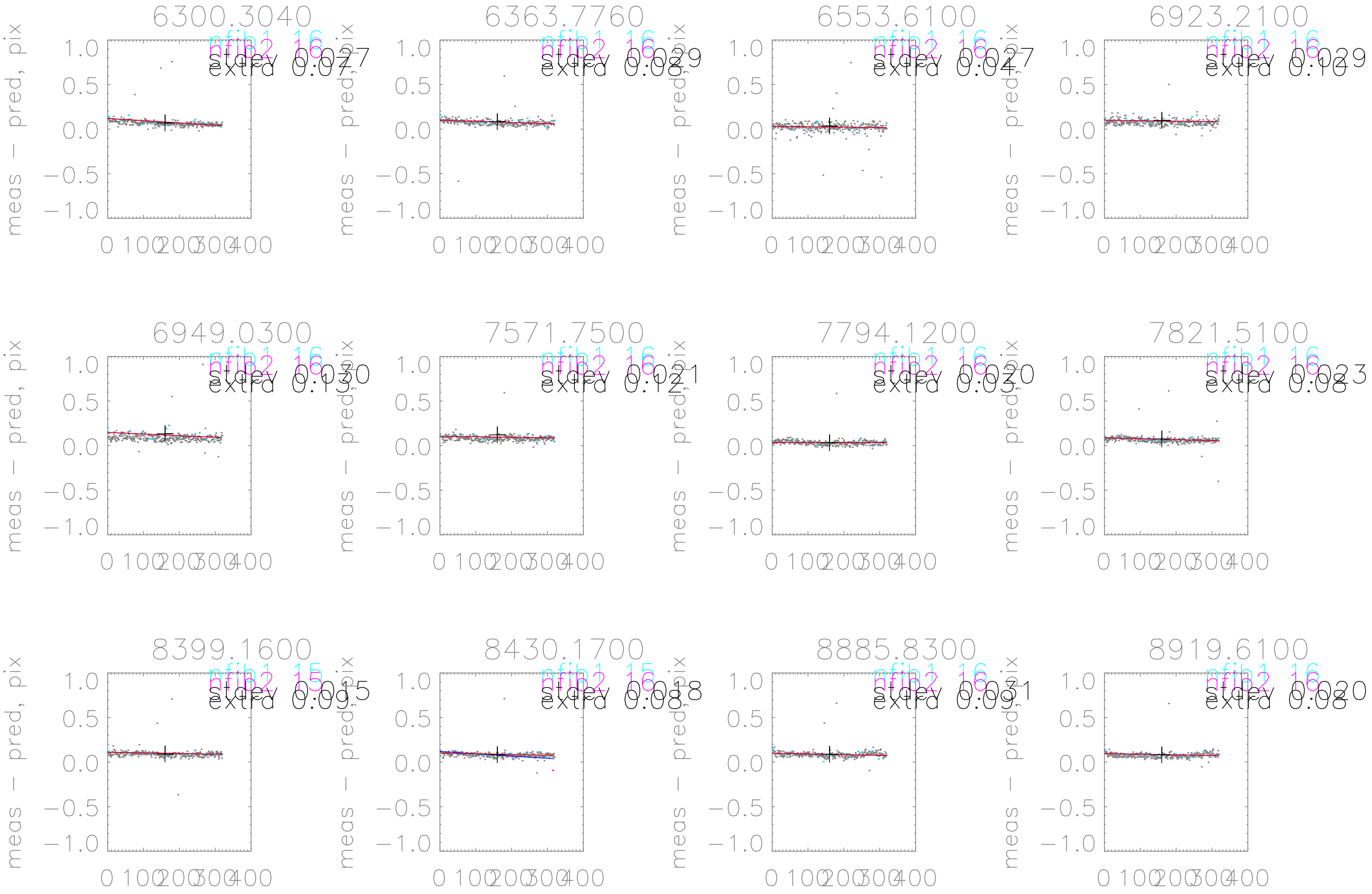

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

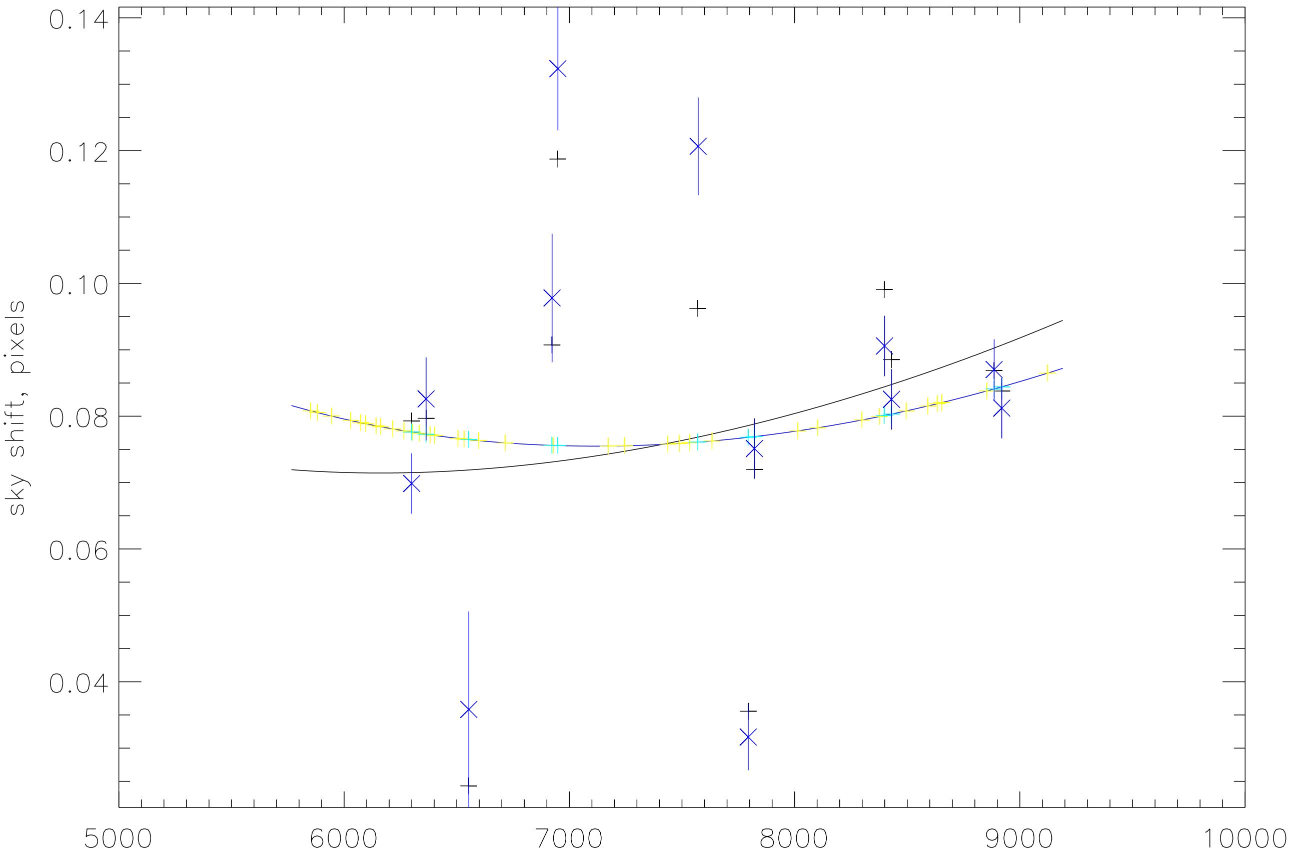

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

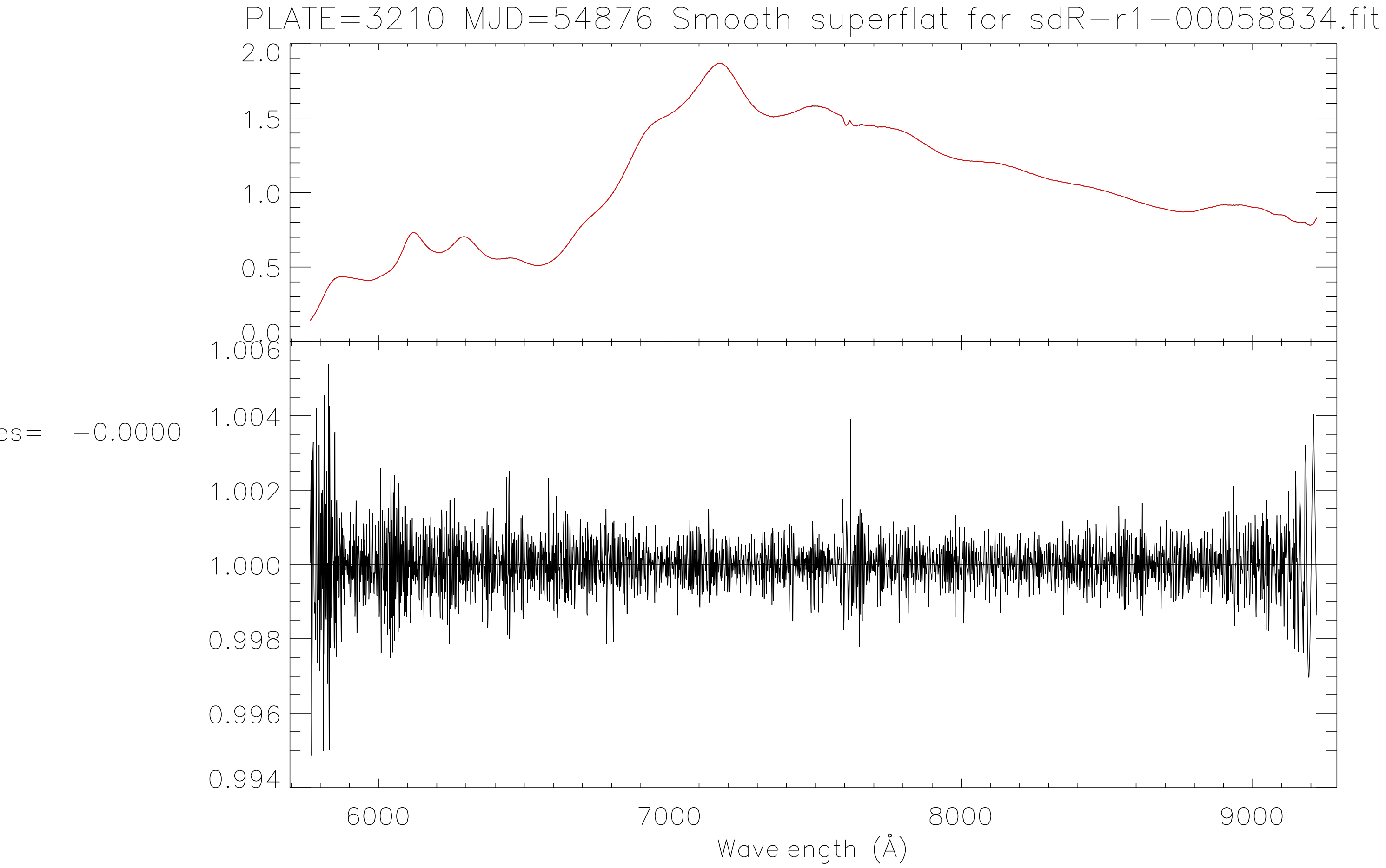

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

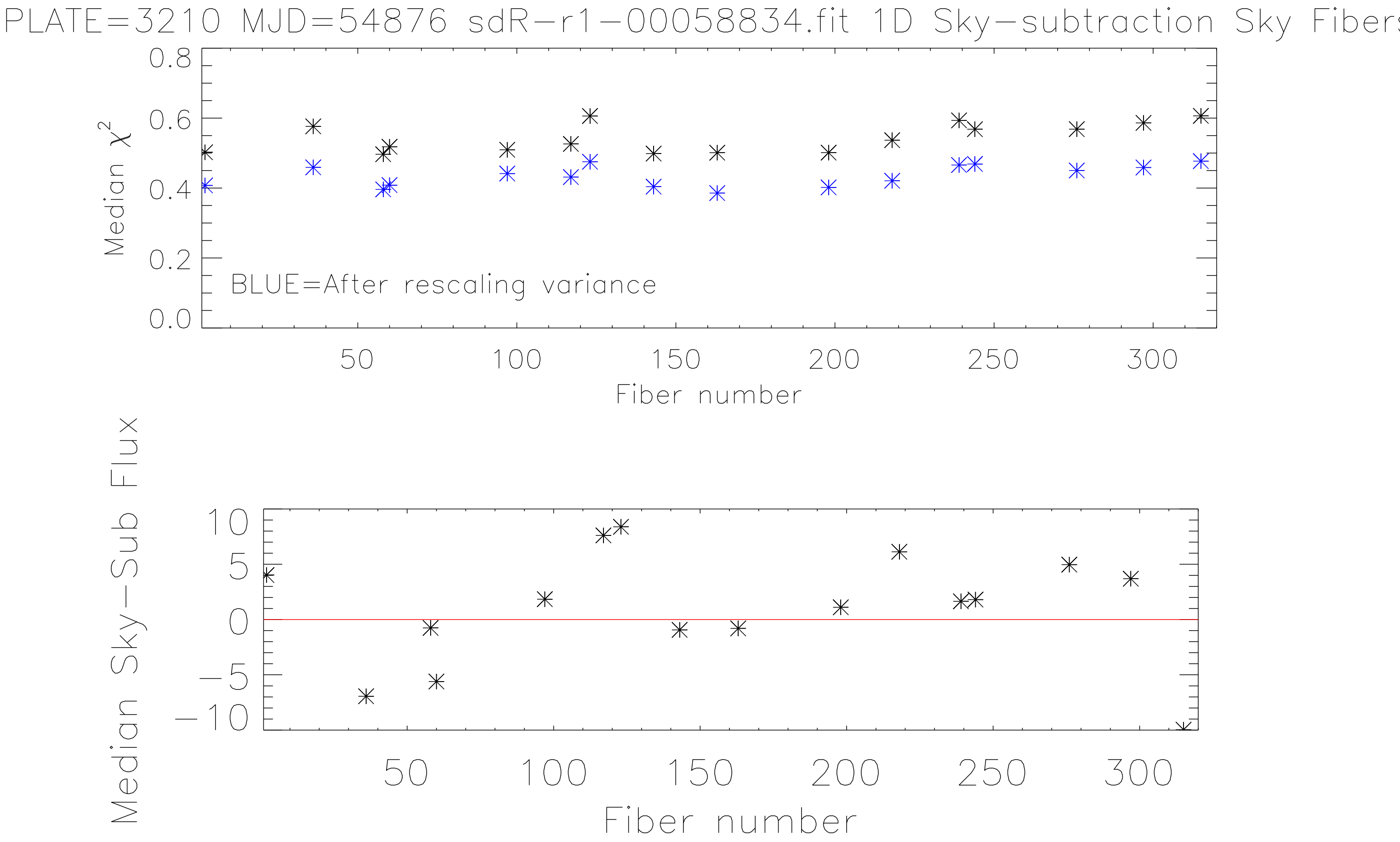

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

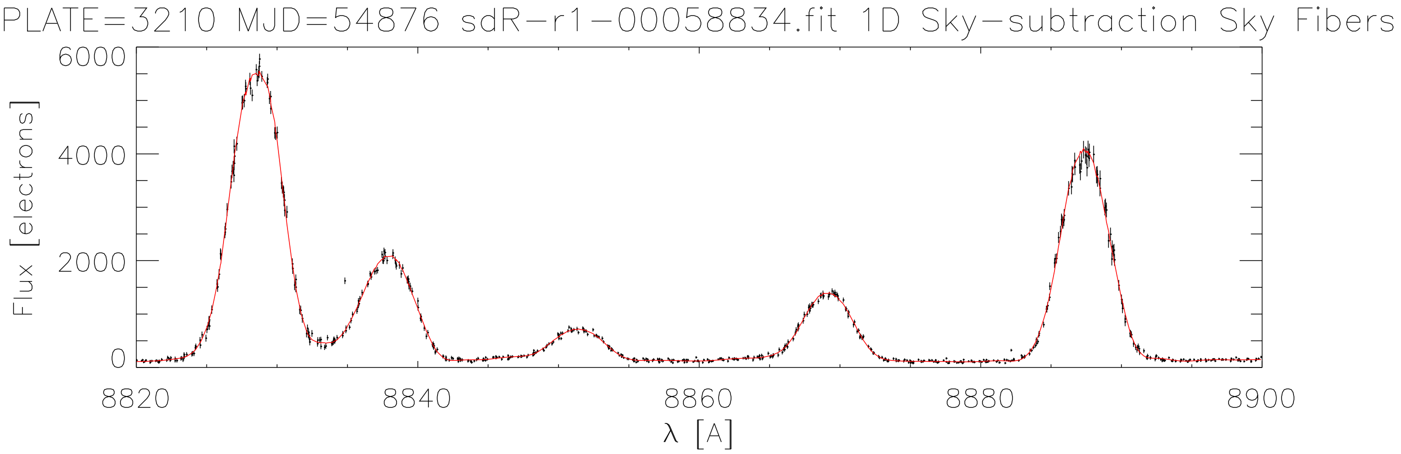

6300.3040
nfib1 16
nfib2 16
stdev 0.027
extra 0.07
6363.7760
nfib1 16
nfib2 16
stdev 0.029
extra 0.08
6553.6100
nfib1 16
nfib2 16
stdev 0.027
extra 0.04
6923.2100
nfib1 16
nfib2 16
stdev 0.029
extra 0.10
6949.0300
nfib1 16
nfib2 16
stdev 0.030
extra 0.13
7571.7500
nfib1 16
nfib2 16
stdev 0.021
extra 0.12
7794.1200
nfib1 16
nfib2 16
stdev 0.020
extra 0.03
7821.5100
nfib1 16
nfib2 16
stdev 0.023
extra 0.08
8399.1600
nfib1 15
nfib2 15
stdev 0.015
extra 0.09
8430.1700
nfib1 15
nfib2 15
stdev 0.018
extra 0.08
8885.8300
nfib1 16
nfib2 16
stdev 0.031
extra 0.09
8919.6100
nfib1 16
nfib2 16
stdev 0.020
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

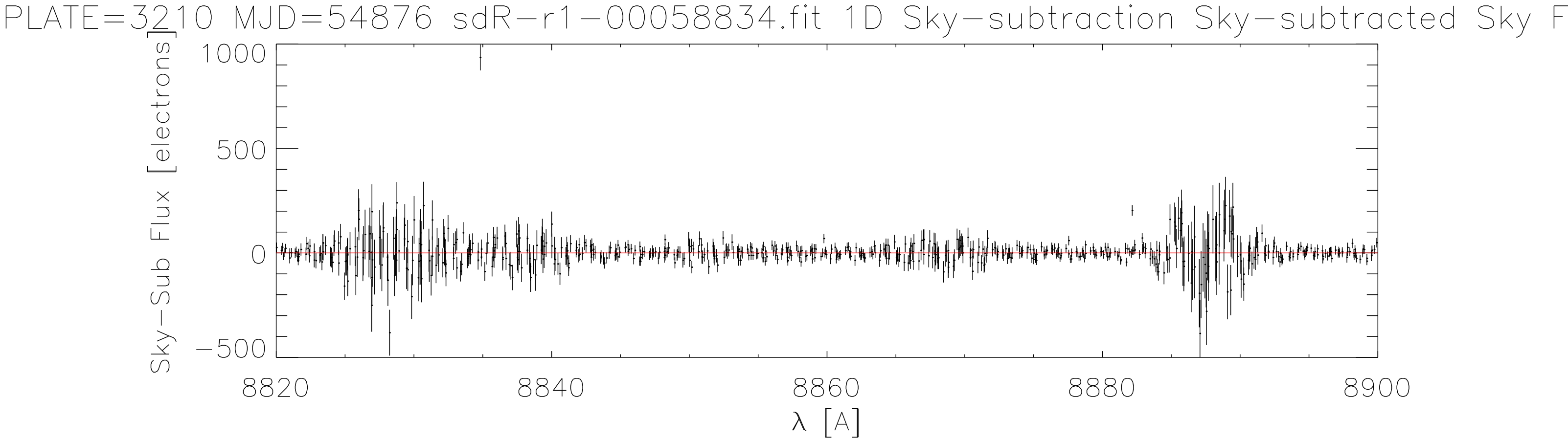

sky shift, pixels
0.14
0.12
0.10
0.08
0.06
0.04
5000
6000
7000
8000
9000
10000

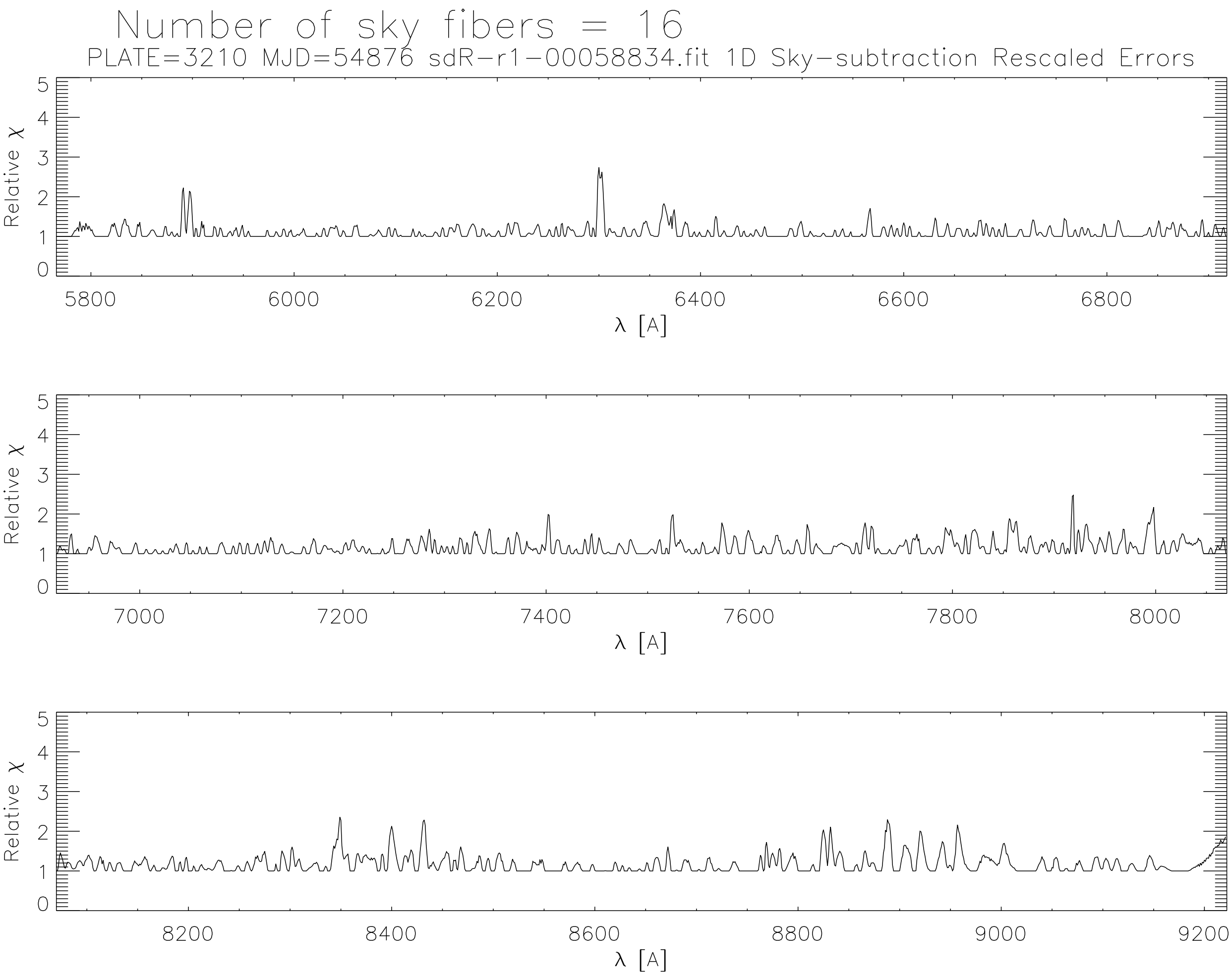


PLATE=3210 MJD=54876 Smooth superflat for sdR-r1-00058834.fit

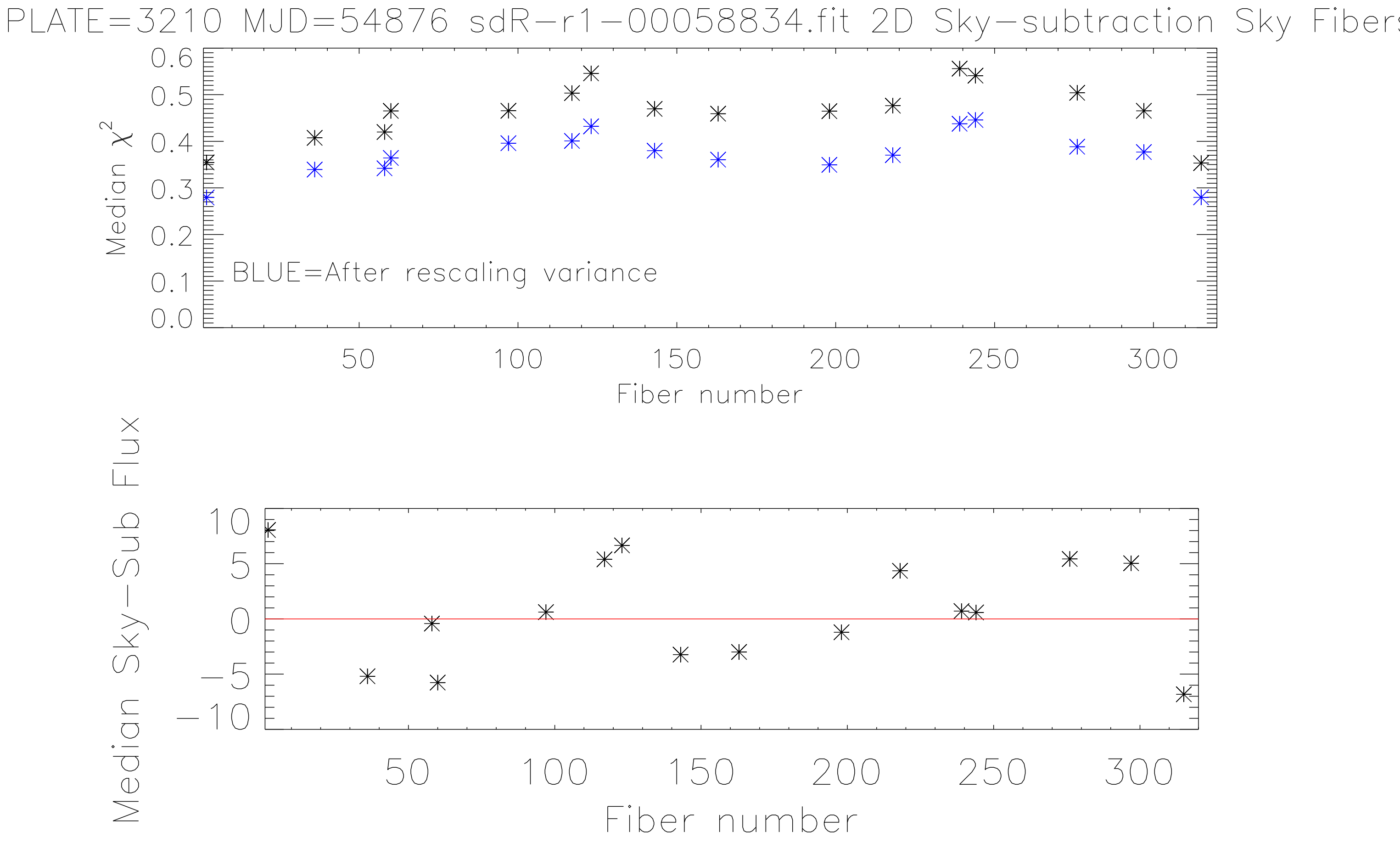

PLATE=3210 MJD=54876 sdR-r1-00058834.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number


PLATE=3210 MJD=54876 sdR-r1-00058834.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

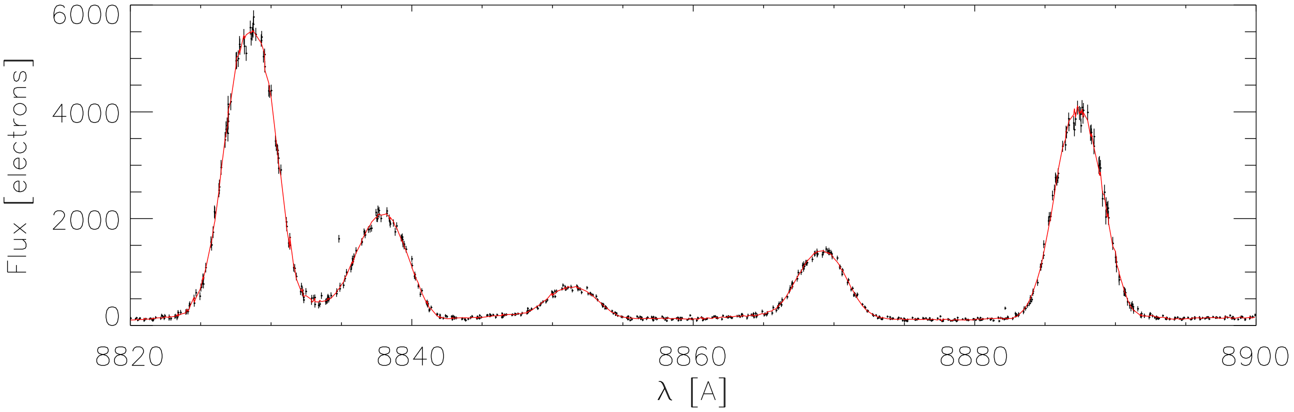

PLATE=3210 MJD=54876 sdR-r1-00058834.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16

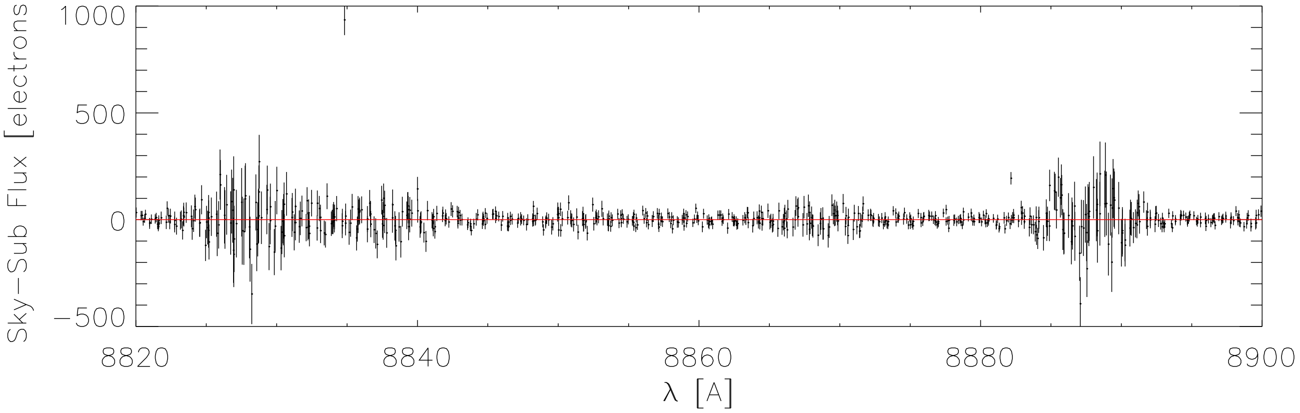
PLATE=3210 MJD=54876 sdR-r1-00058834.fit 1D Sky-subtraction Rescaled Errors


PLATE=3210 MJD=54876 sdR-r1-00058834.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

PLATE=3210 MJD=54876 sdR-r1-00058834.fit 2D Sky-subtraction Sky Fibers

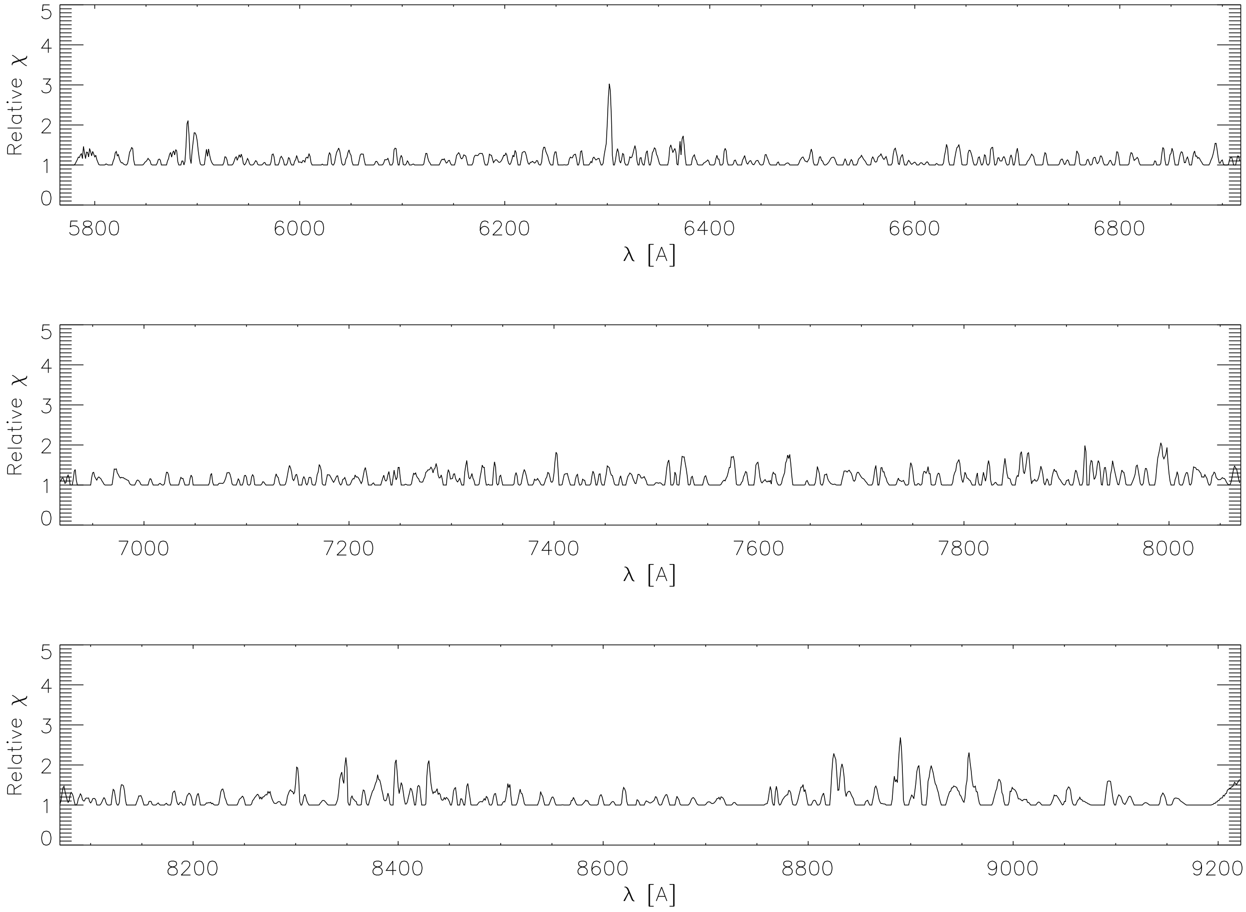


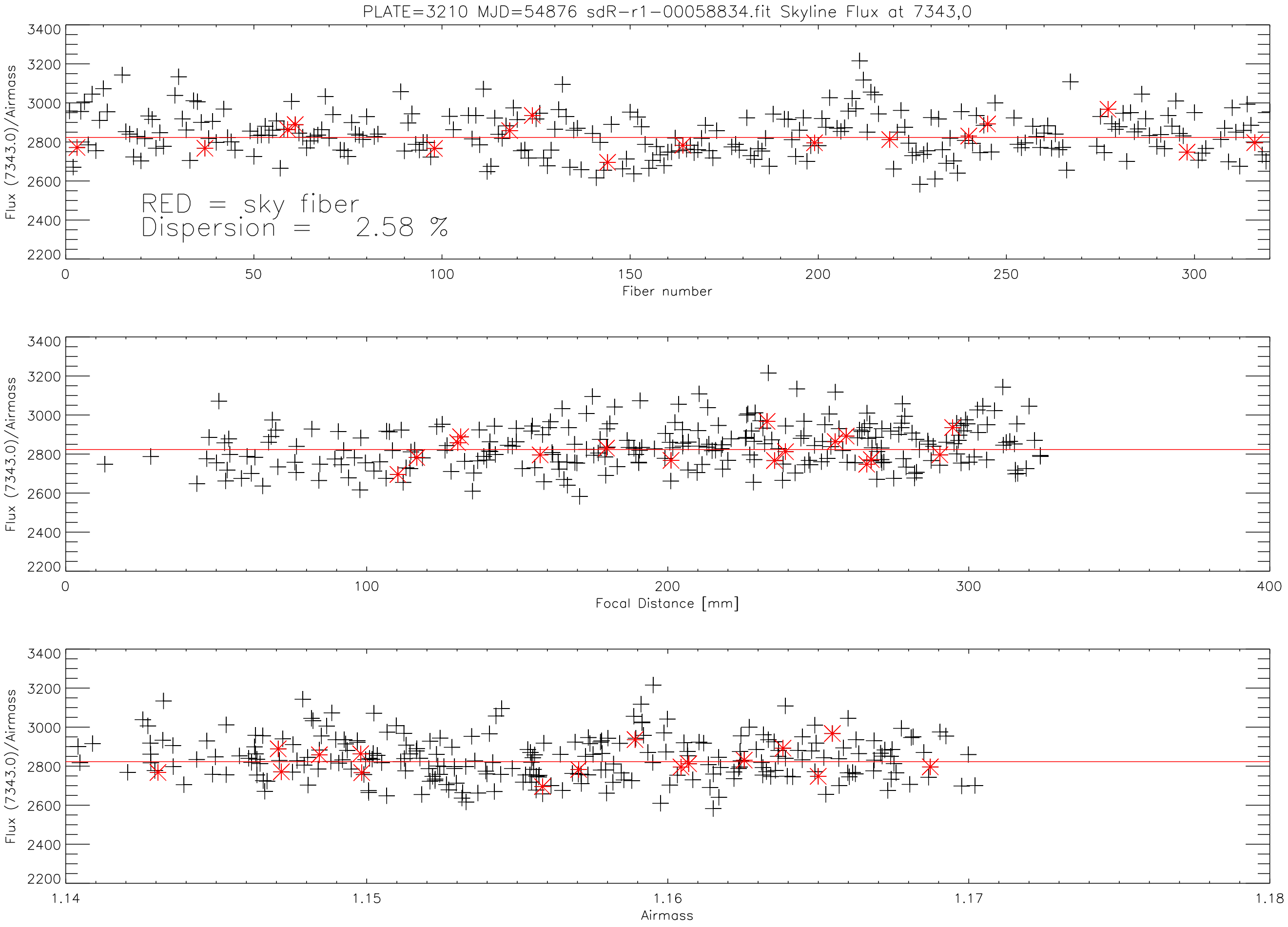
PLATE=3210 MJD=54876 sdR-r1-00058834.fit 2D Sky-subtraction Sky-subtracted Sky F

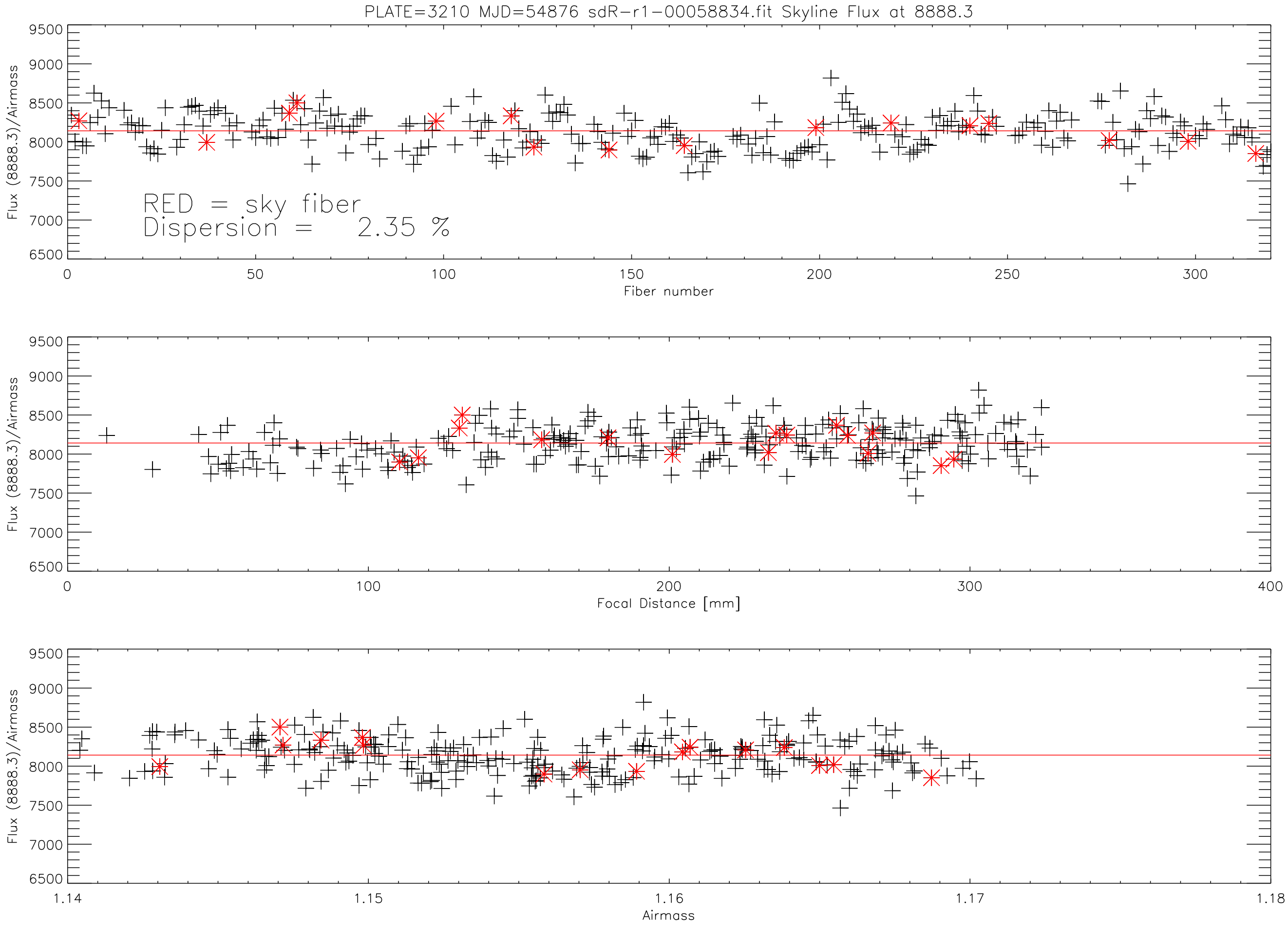


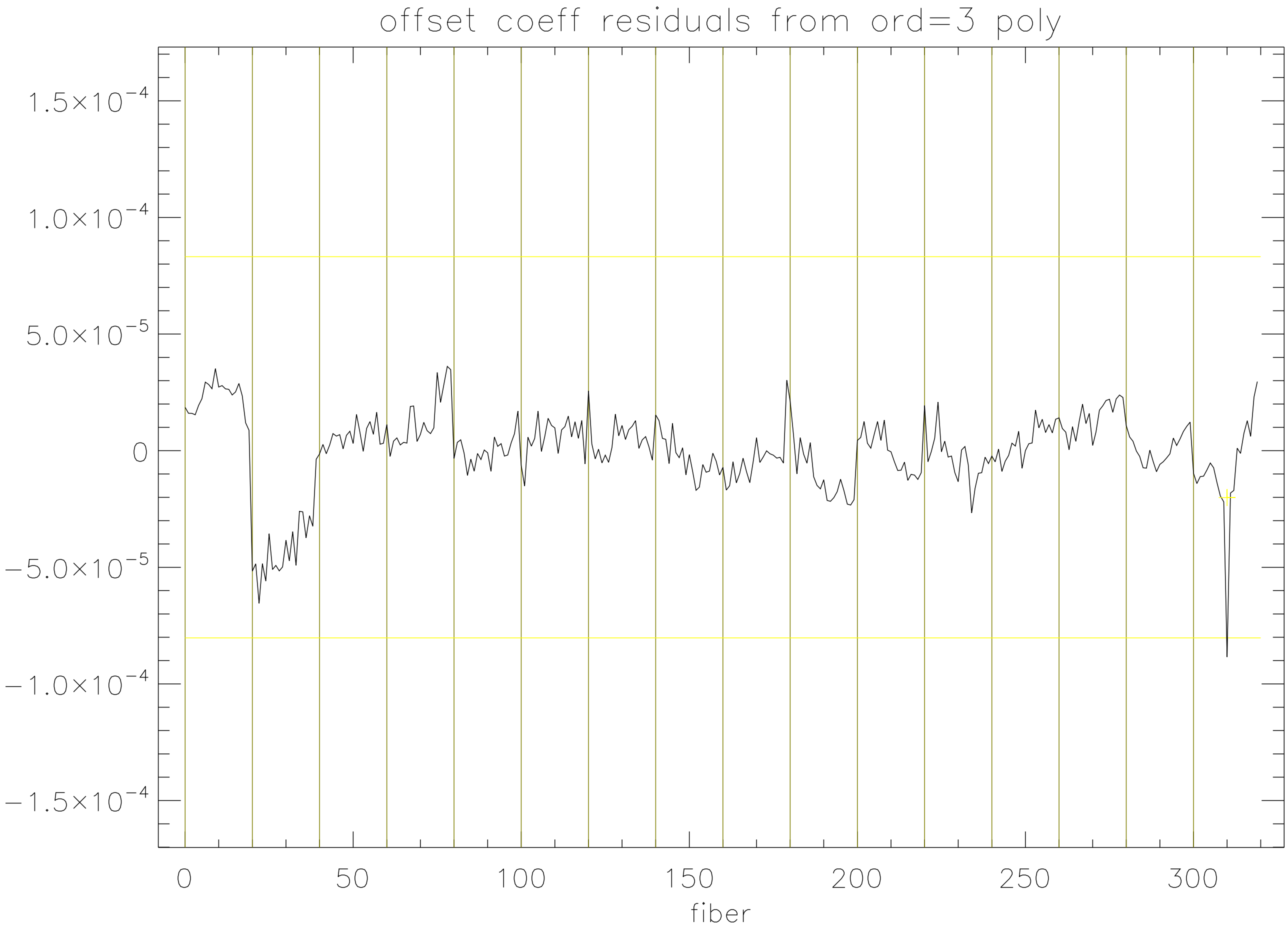
Number of sky fibers = 16

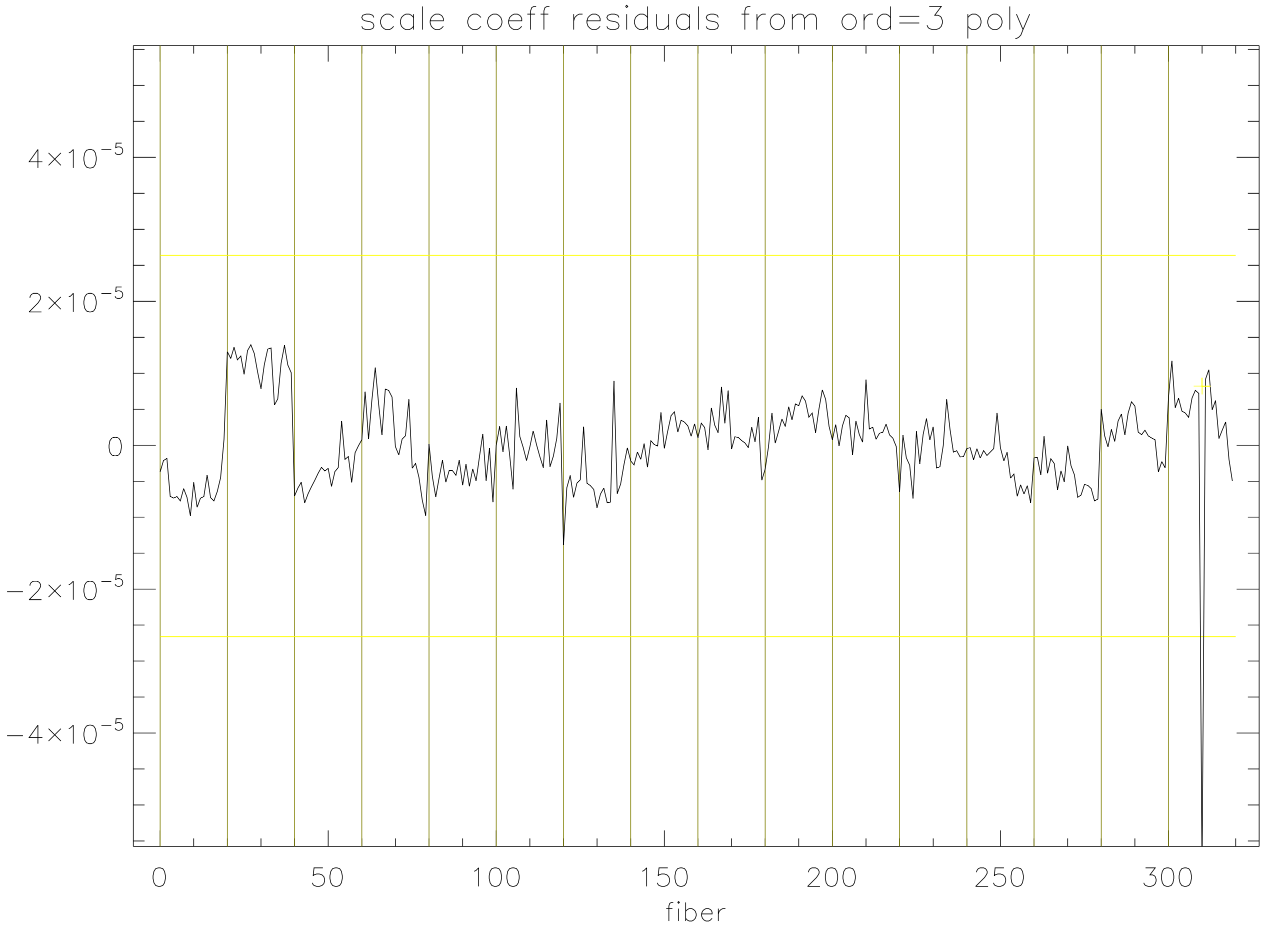
PLATE=3210 MJD=54876 sdR-r1-00058834.fit 2D Sky-subtraction Rescaled Errors

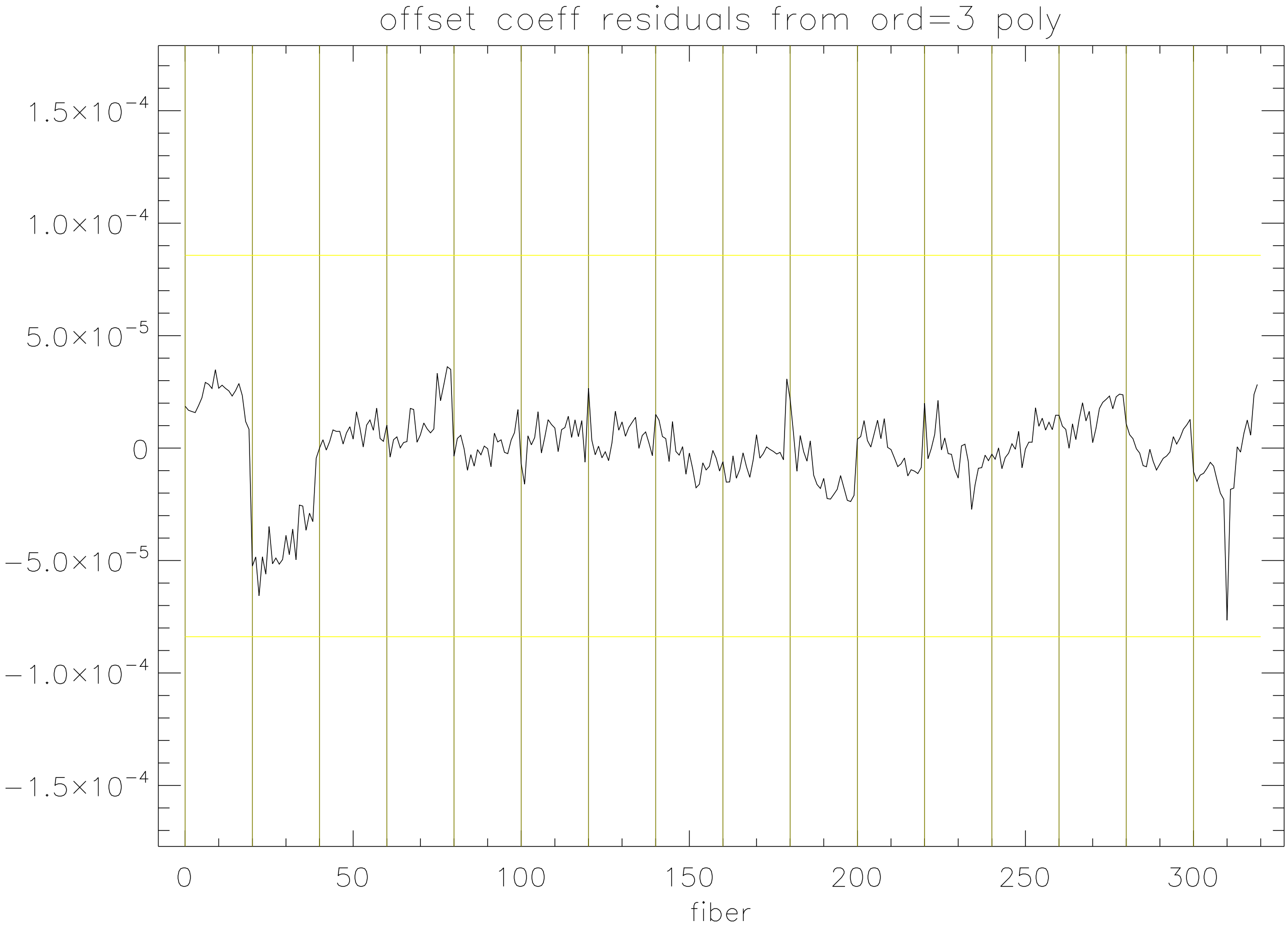


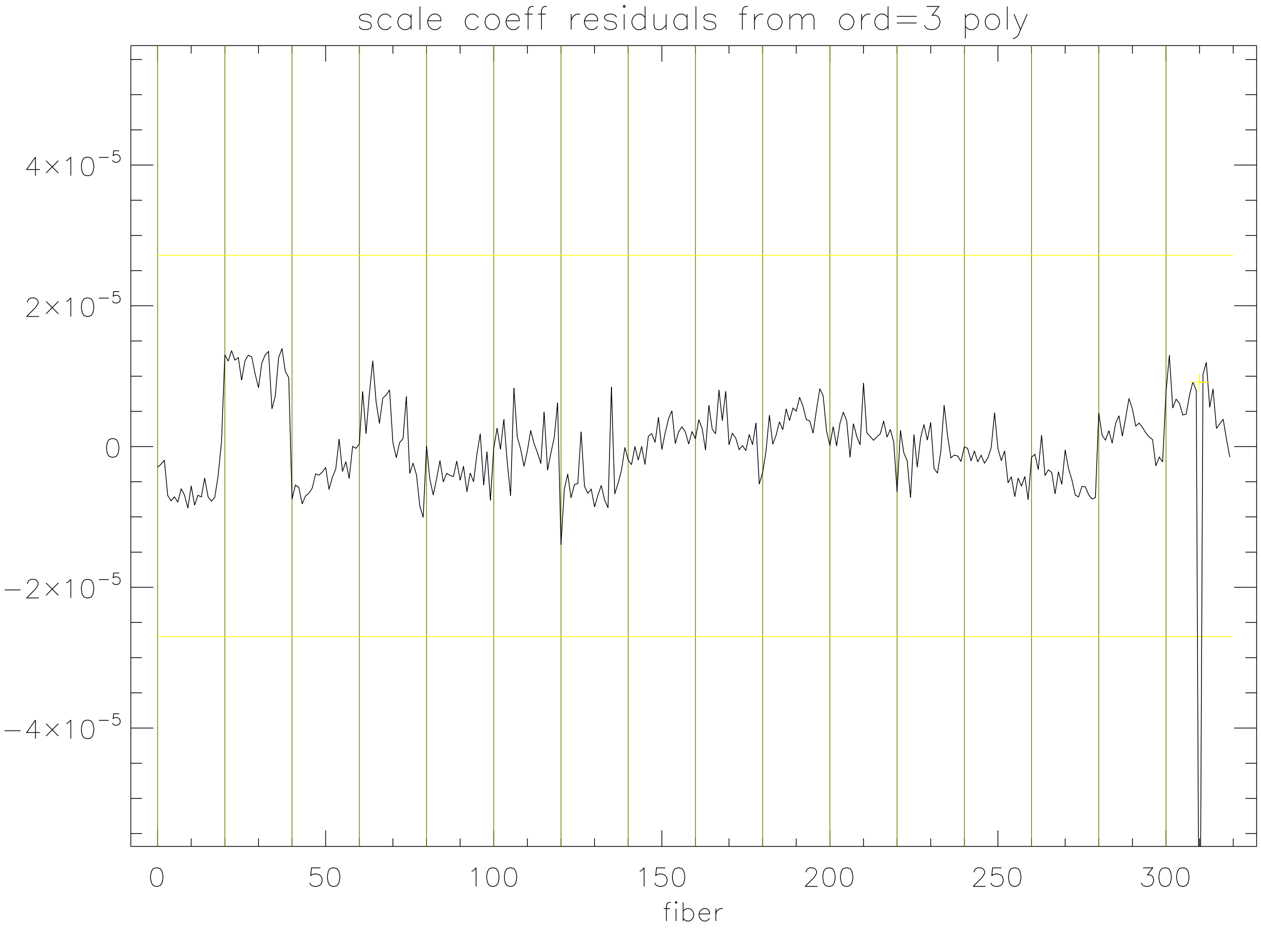

PLATE=3210 MJD=54876 sdR-r1-00058834.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.58 %
Flux (7343.0)/Airmass
3400
3200
3000
2800
2600
2400
2200
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.14
1.15
1.16
1.17
1.18
Airmass

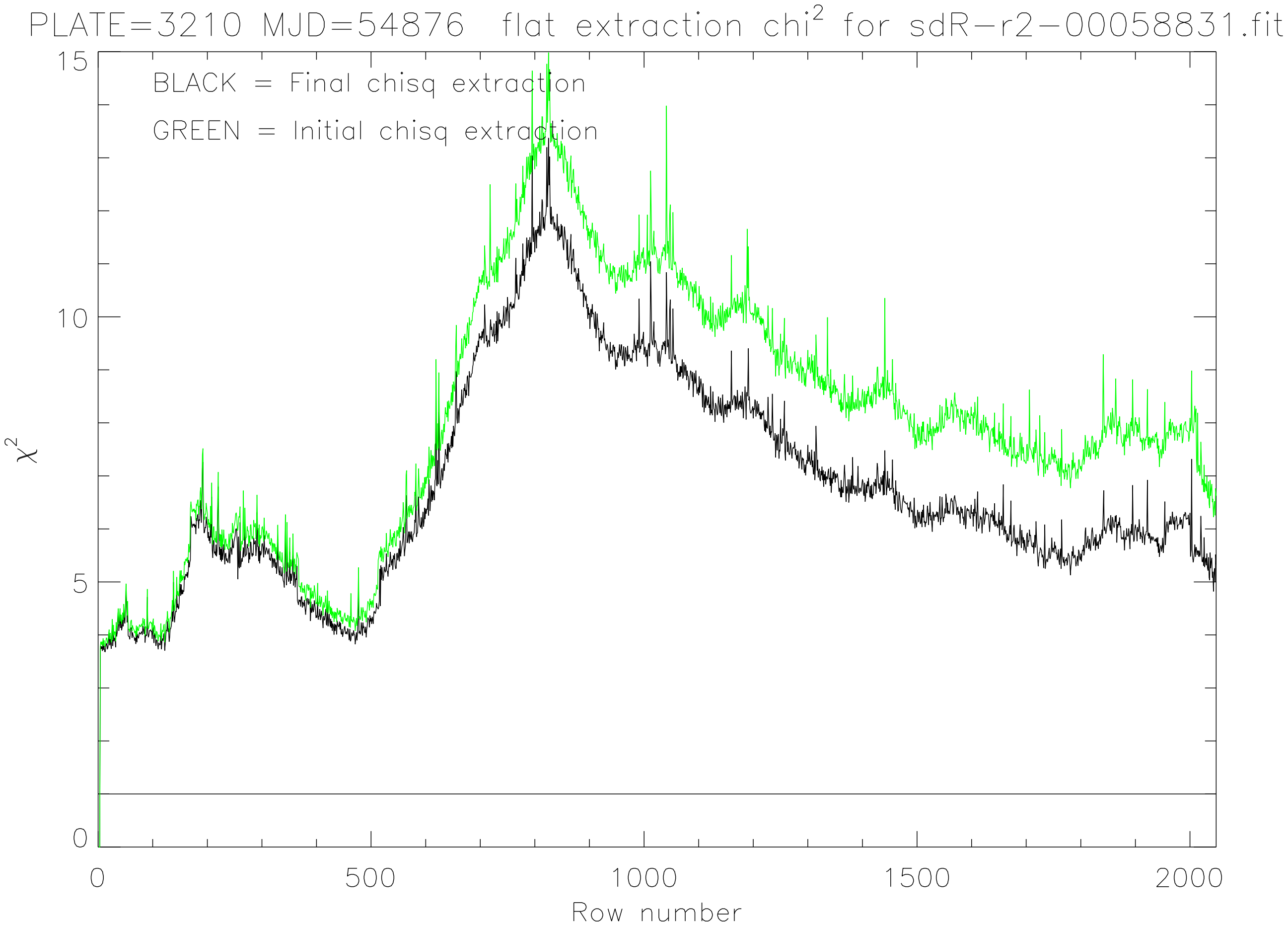

PLATE=3210 MJD=54876 sdR-r1-00058834.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
9500
9000
8500
8000
7500
7000
6500
RED = sky fiber
Dispersion = 2.35 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
9500
9000
8500
8000
7500
7000
6500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
9500
9000
8500
8000
7500
7000
6500
1.14
1.15
1.16
1.17
1.18
Airmass

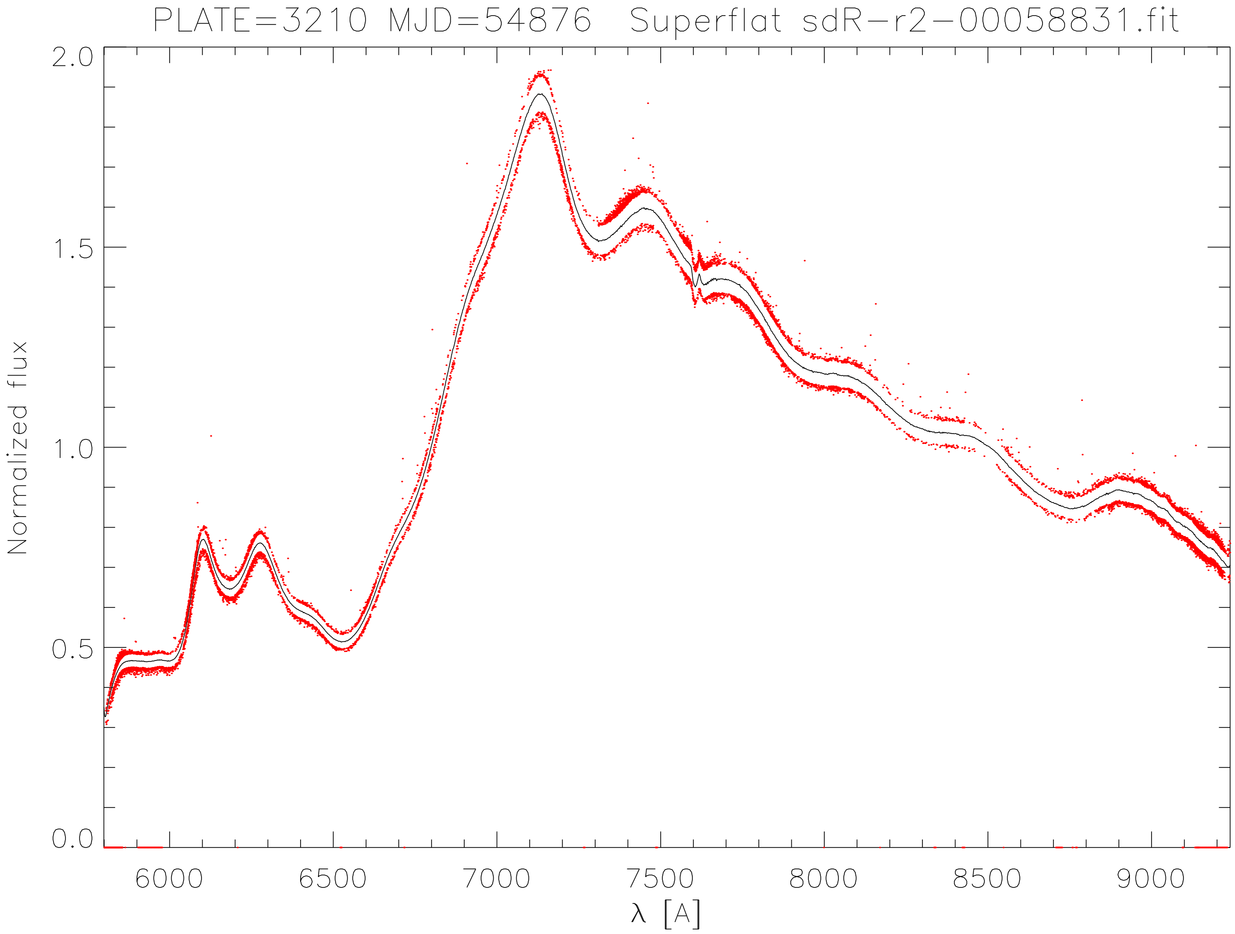

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

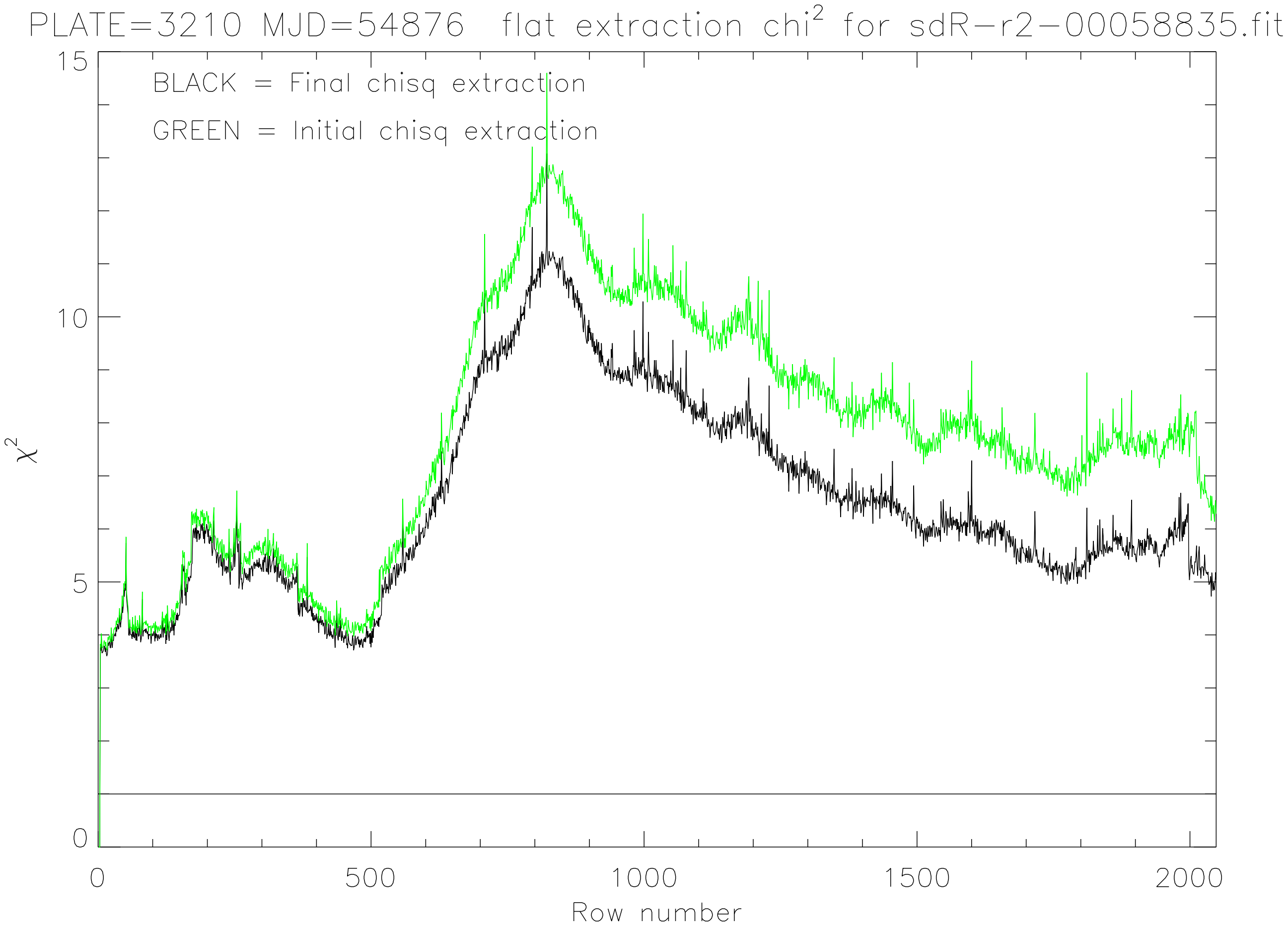

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
-2×10^{-5}
-4×10^{-5}
0
50
100
150
200
250
300
fiber


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

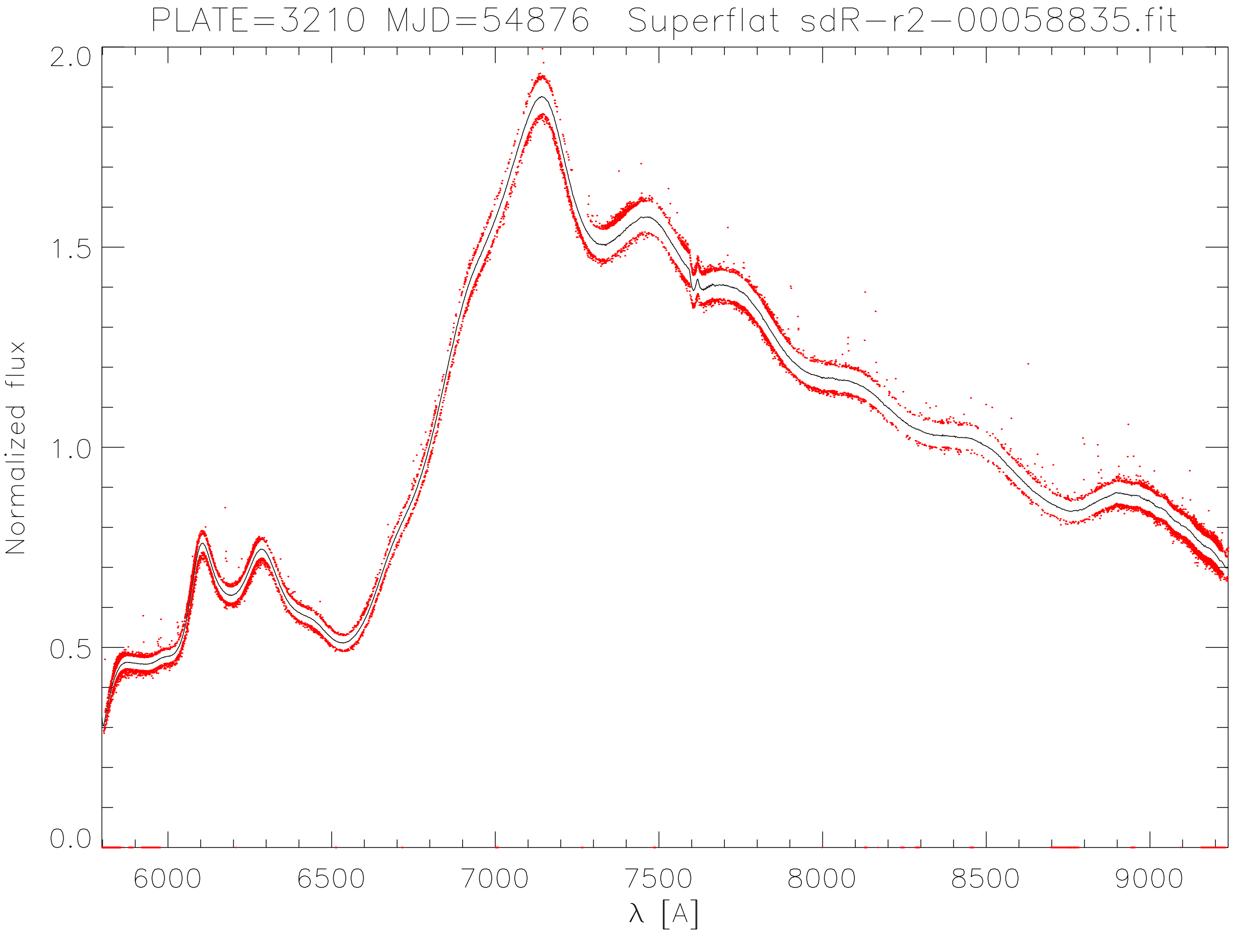

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
−2×10^{-5}
−4×10^{-5}
0
50
100
150
200
250
300
fiber

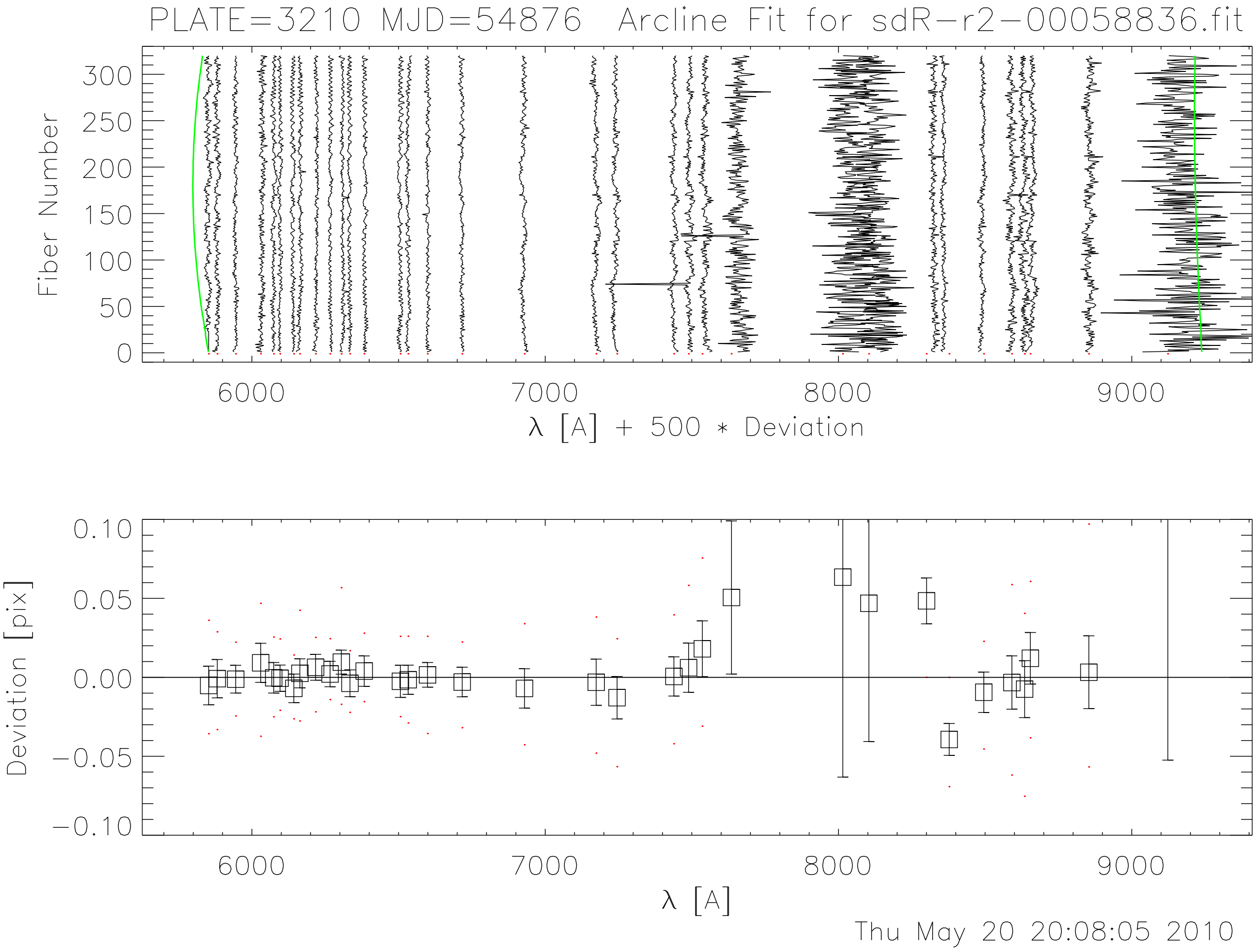

PLATE=3210 MJD=54876 flat extraction chi^2 for sdR-r2-00058831.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

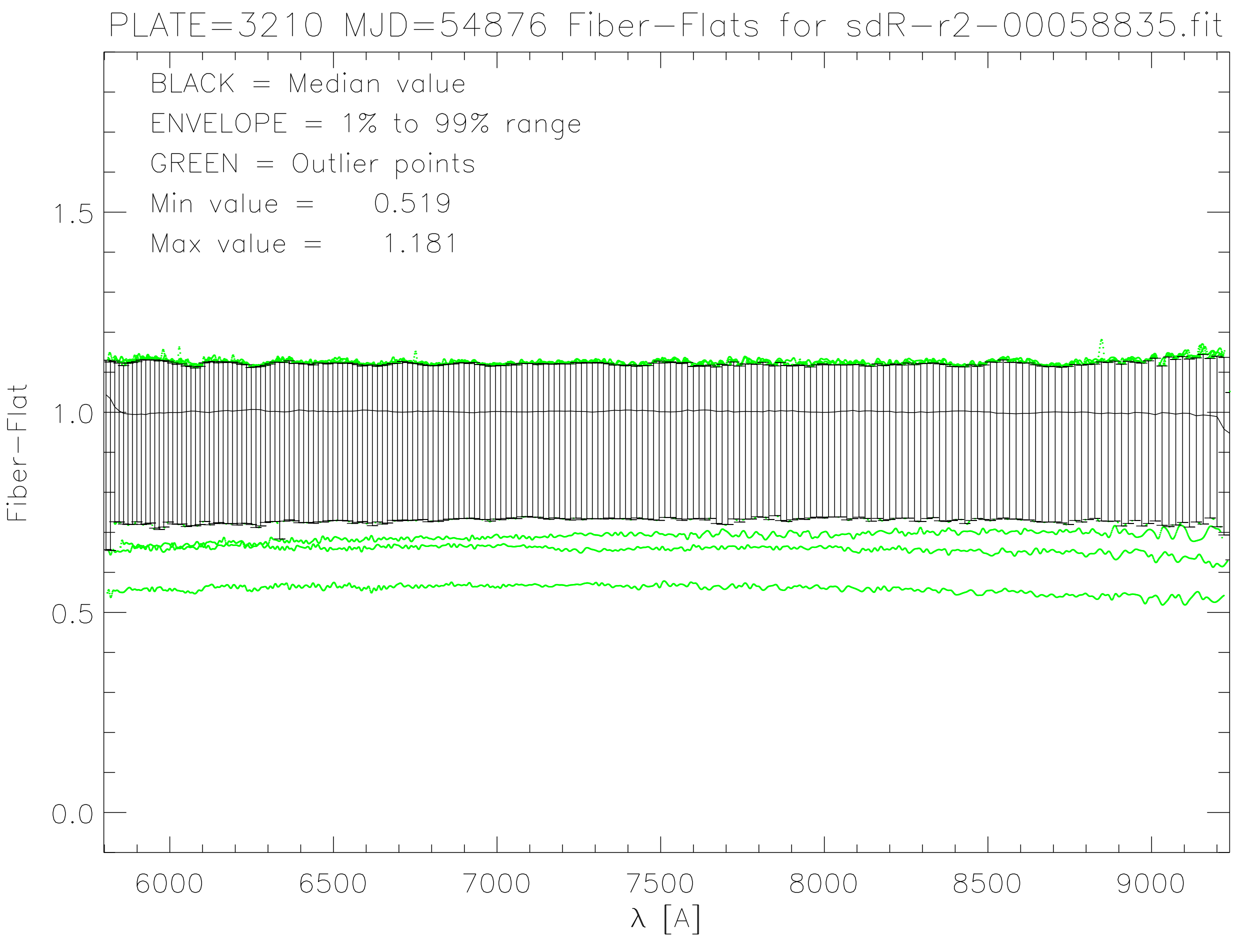

PLATE=3210 MJD=54876 Superflat sdR-r2-00058831.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]



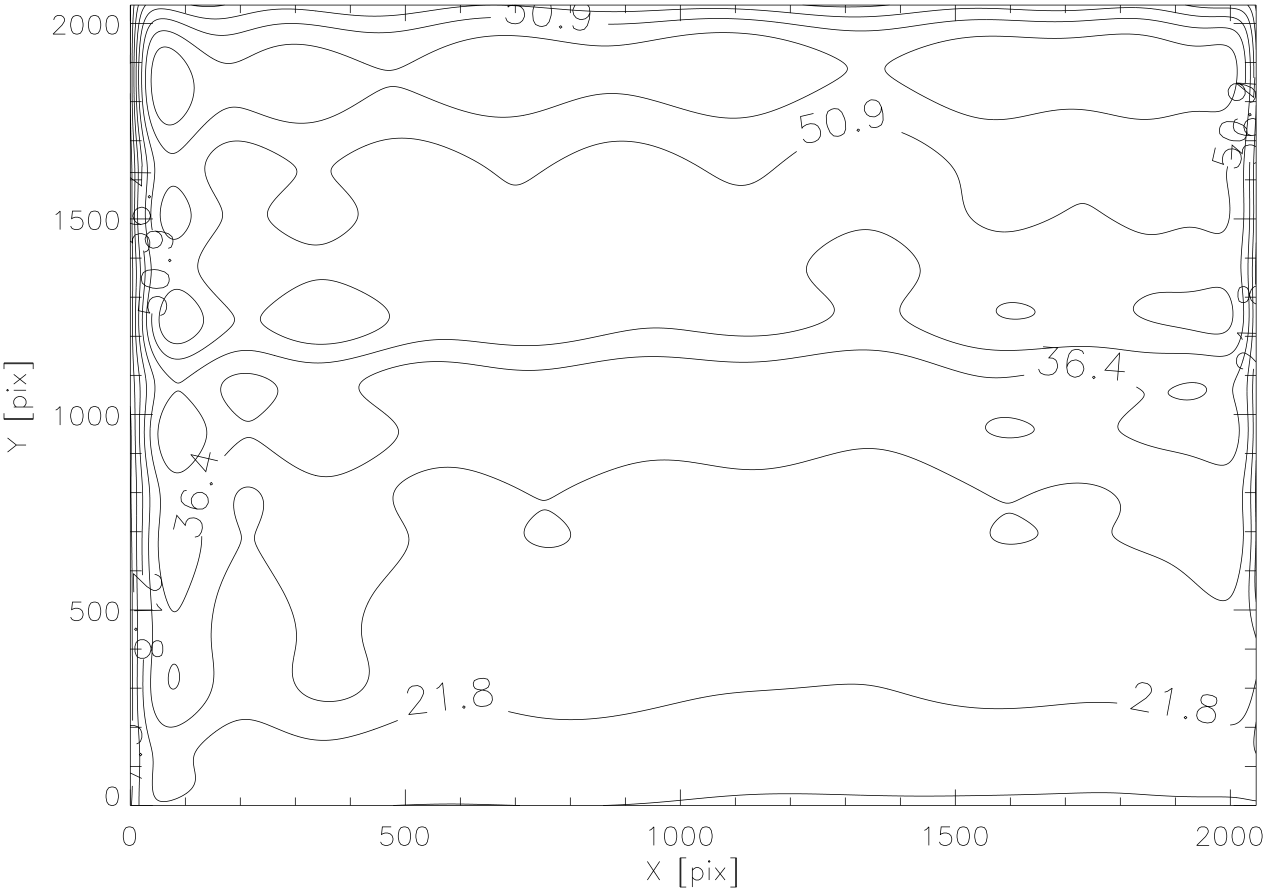
PLATE=3210 MJD=54876 flat extraction chi^2 for sdR-r2-00058835.fit

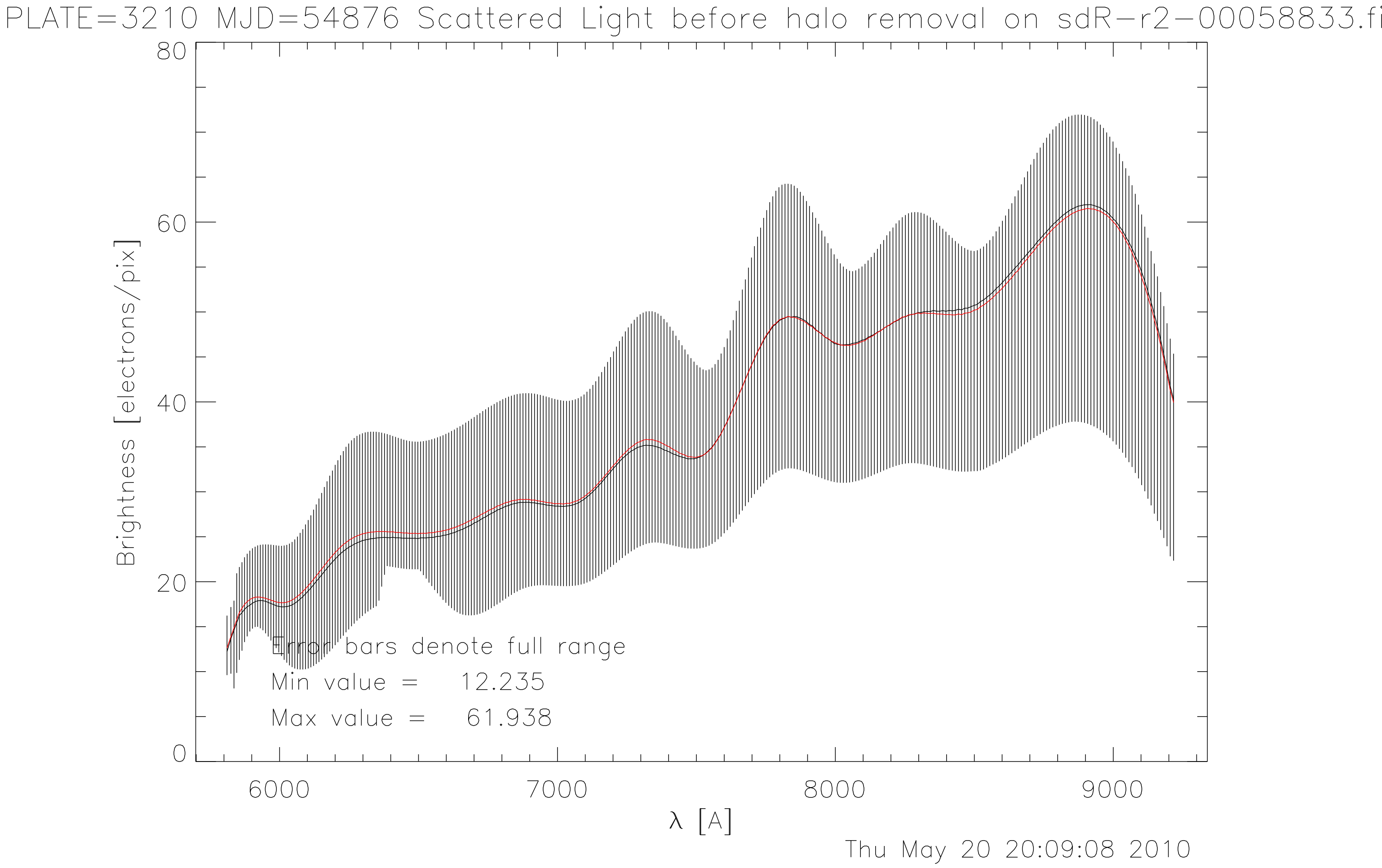

PLATE=3210 MJD=54876 Superflat sdR-r2-00058835.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=3210 MJD=54876 Arcline Fit for sdR-r2-00058836.fit
Fiber Number
0
50
100
150
200
250
300
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Thu May 20 20:08:05 2010

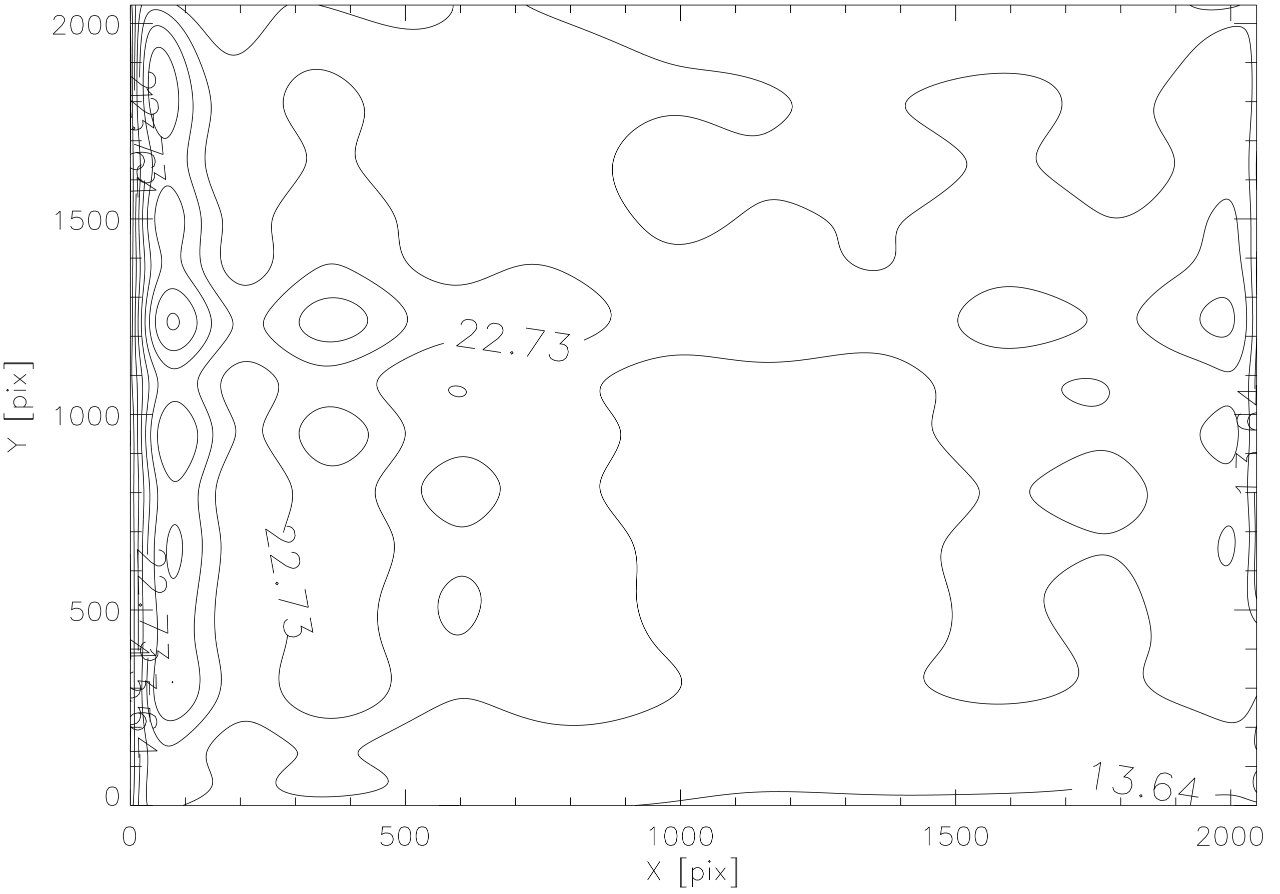


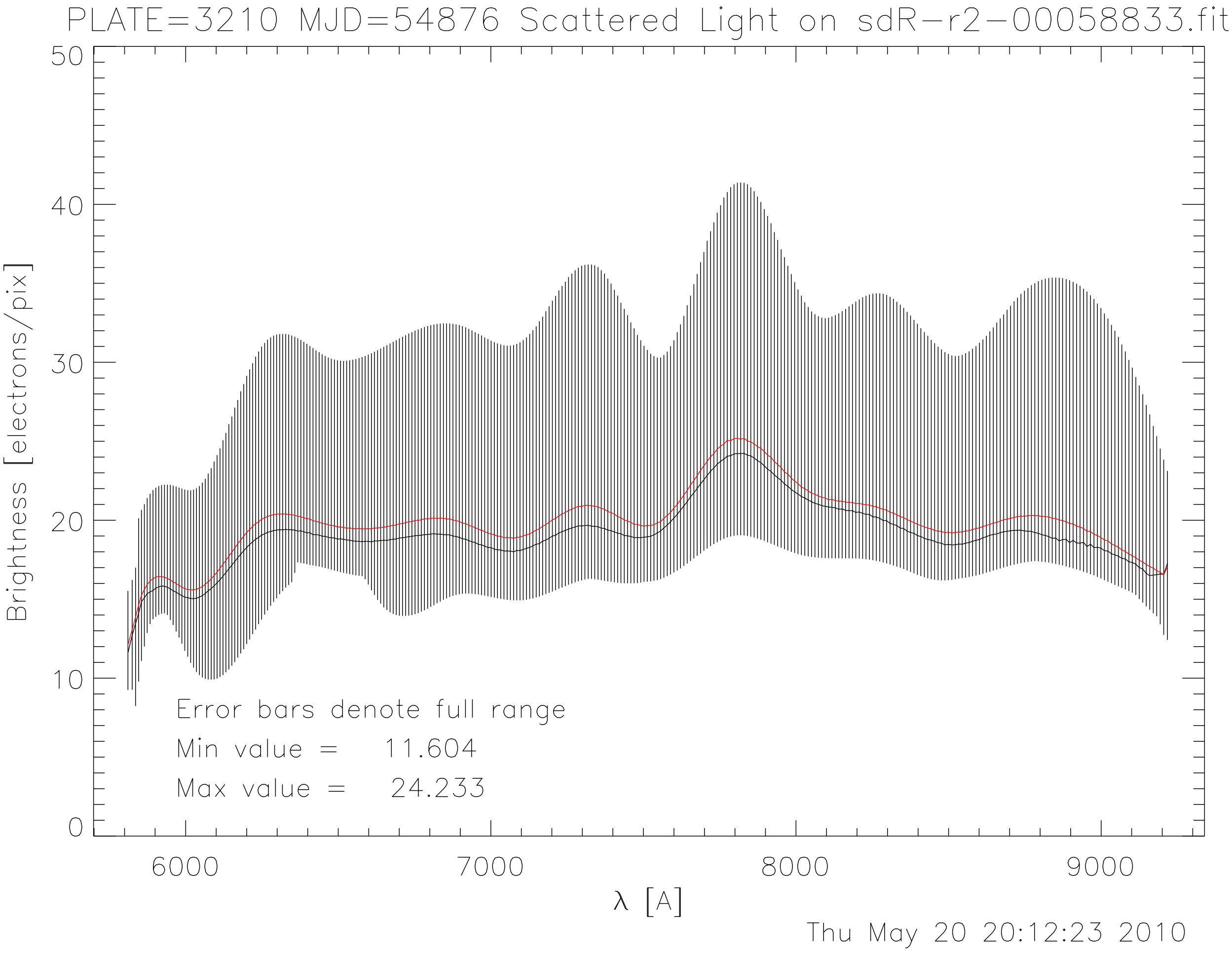
Thu May 20 20:08:13 2010

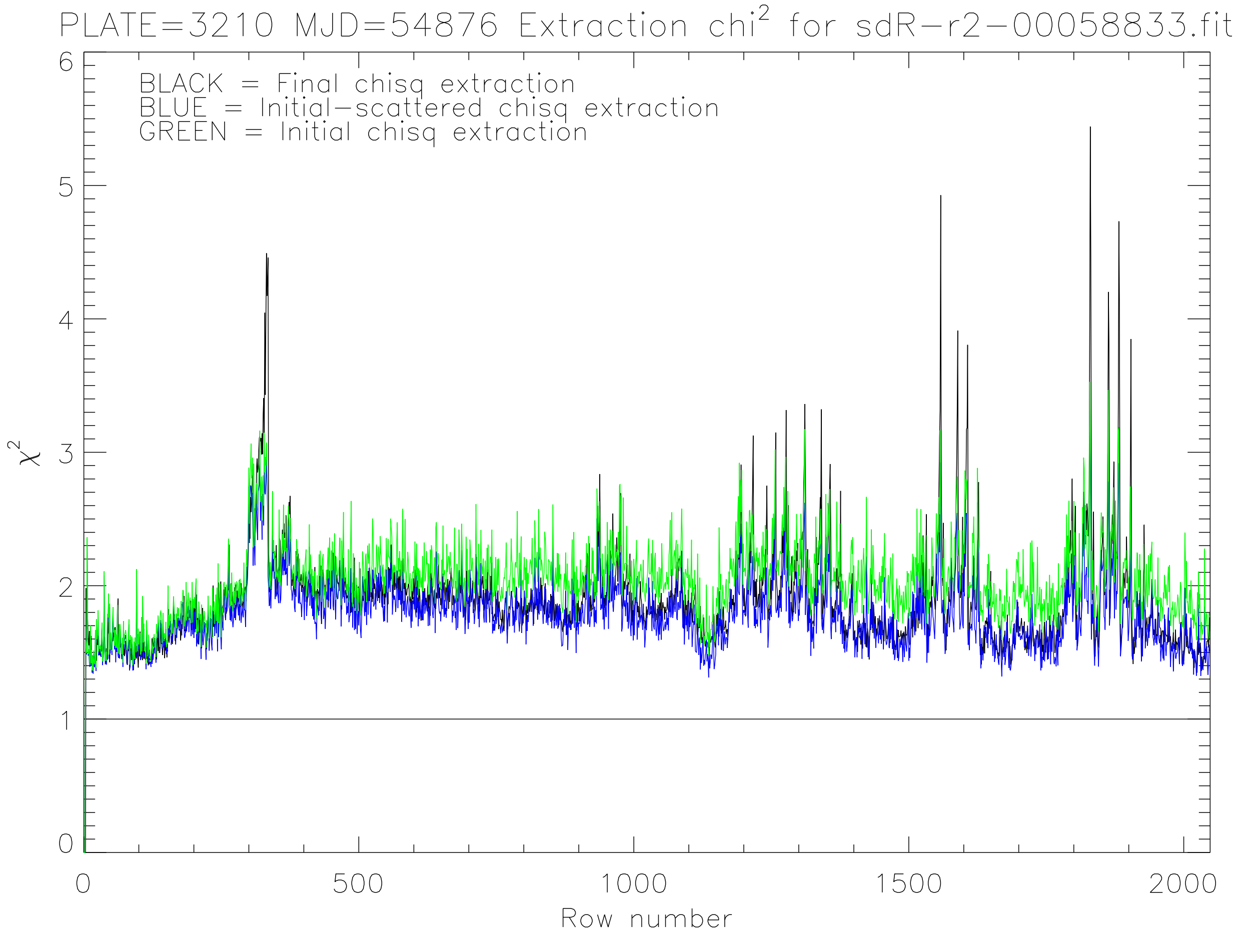

PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r2-00058833.fi


PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r2-00058833.fi
Brightness [electrons/pix]
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.235
Max value = 61.938
Thu May 20 20:09:08 2010

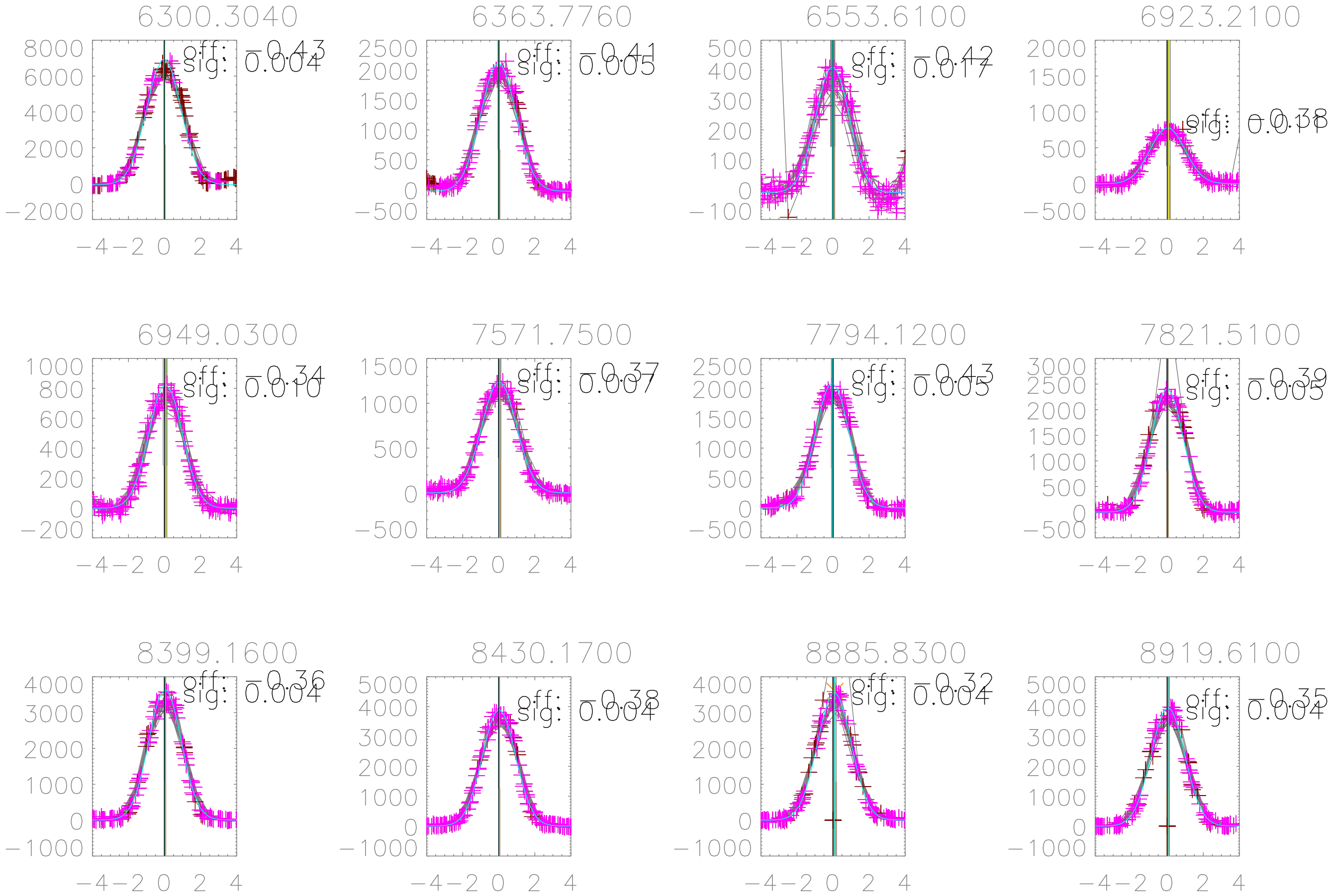
PLATE=3210 MJD=54876 Scattered Light on sdR-r2-00058833.fit

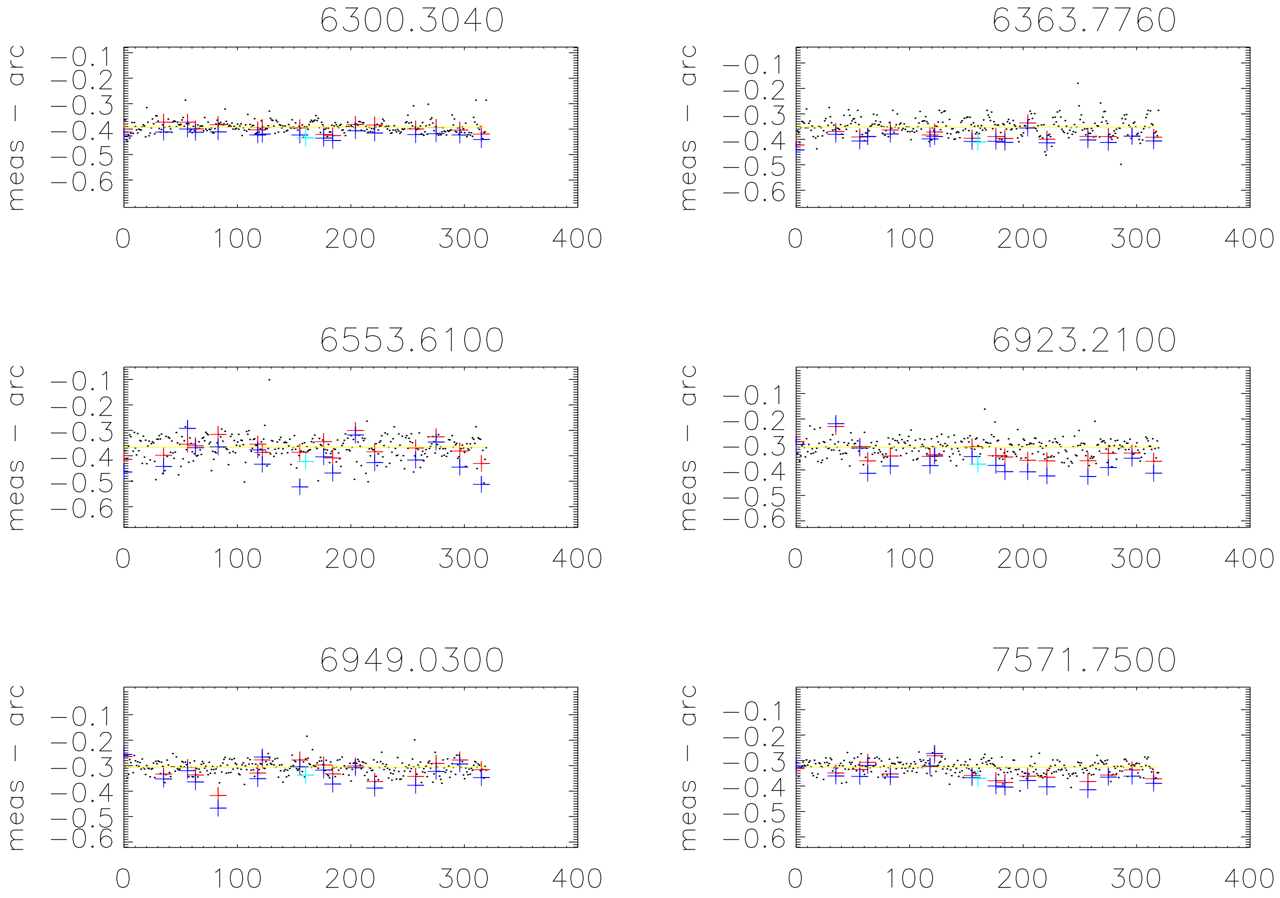


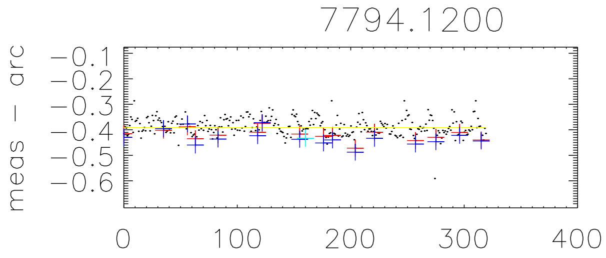

PLATE=3210 MJD=54876 Scattered Light on sdR-r2-00058833.fit
Brightness [electrons/pix]
λ [A]
0
10
20
30
40
50
6000
7000
8000
9000
Error bars denote full range
Min value = 11.604
Max value = 24.233
Thu May 20 20:12:23 2010



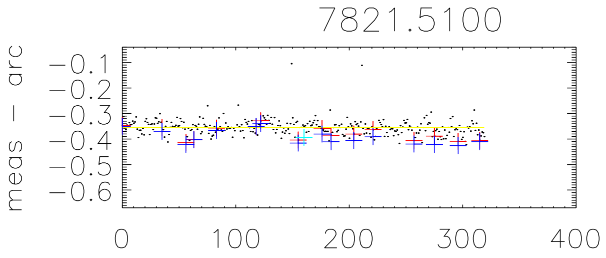
PLATE=3210 MJD=54876 Extraction chi^2 for sdR-r2-00058833.fit


6300.3040
off: −0.43
sig: 0.004
6363.7760
off: −0.41
sig: 0.005
6553.6100
off: −0.42
sig: 0.017
6923.2100
off: −0.38
sig: 0.011
6949.0300
off: −0.34
sig: 0.010
7571.7500
off: −0.37
sig: 0.007
7794.1200
off: −0.43
sig: 0.005
7821.5100
off: −0.39
sig: 0.005
8399.1600
off: −0.36
sig: 0.004
8430.1700
off: −0.38
sig: 0.004
8885.8300
off: −0.32
sig: 0.004
8919.6100
off: −0.35
sig: 0.004
−4 −2 0 2 4

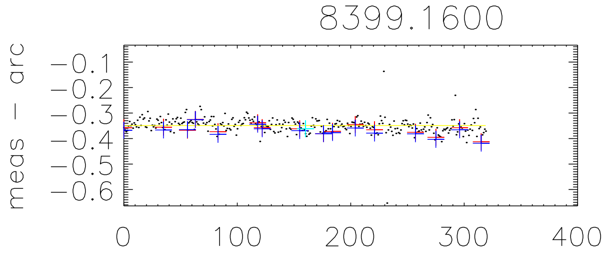

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400



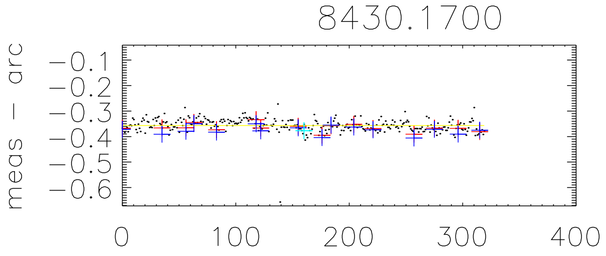
7794.1200



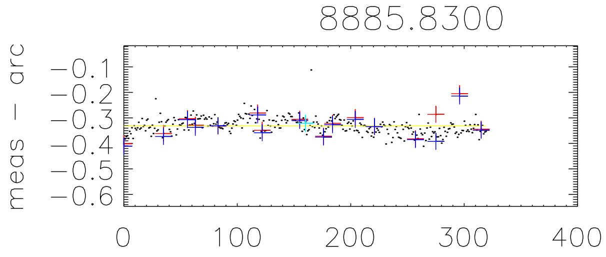
7821.5100



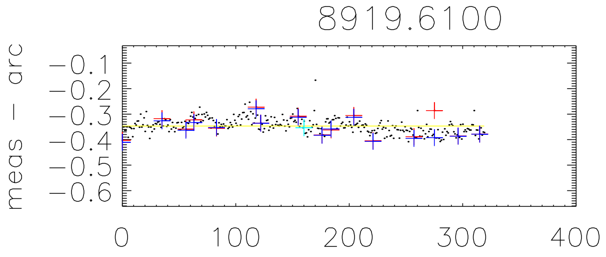
8399.1600



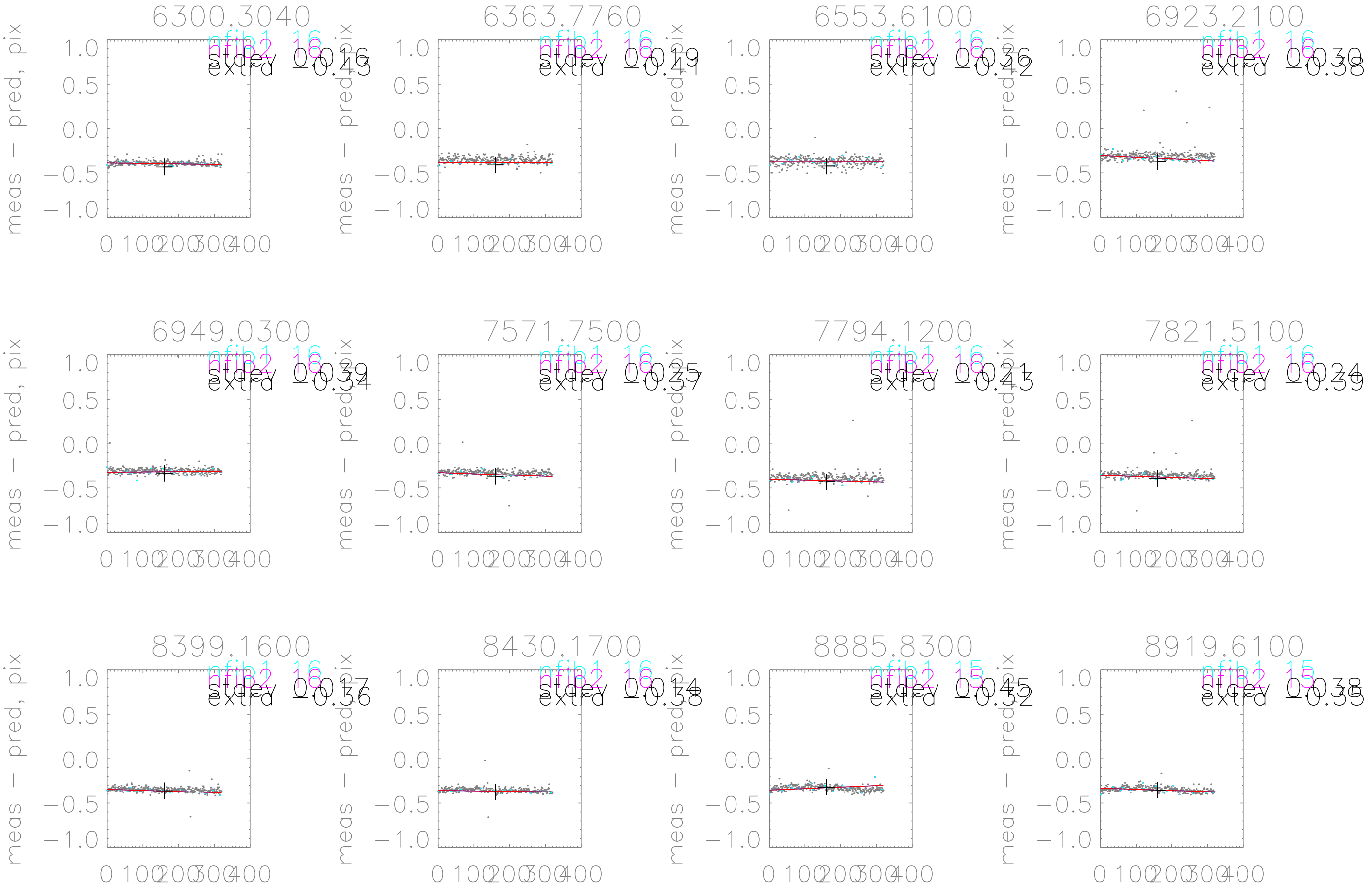
8430.1700

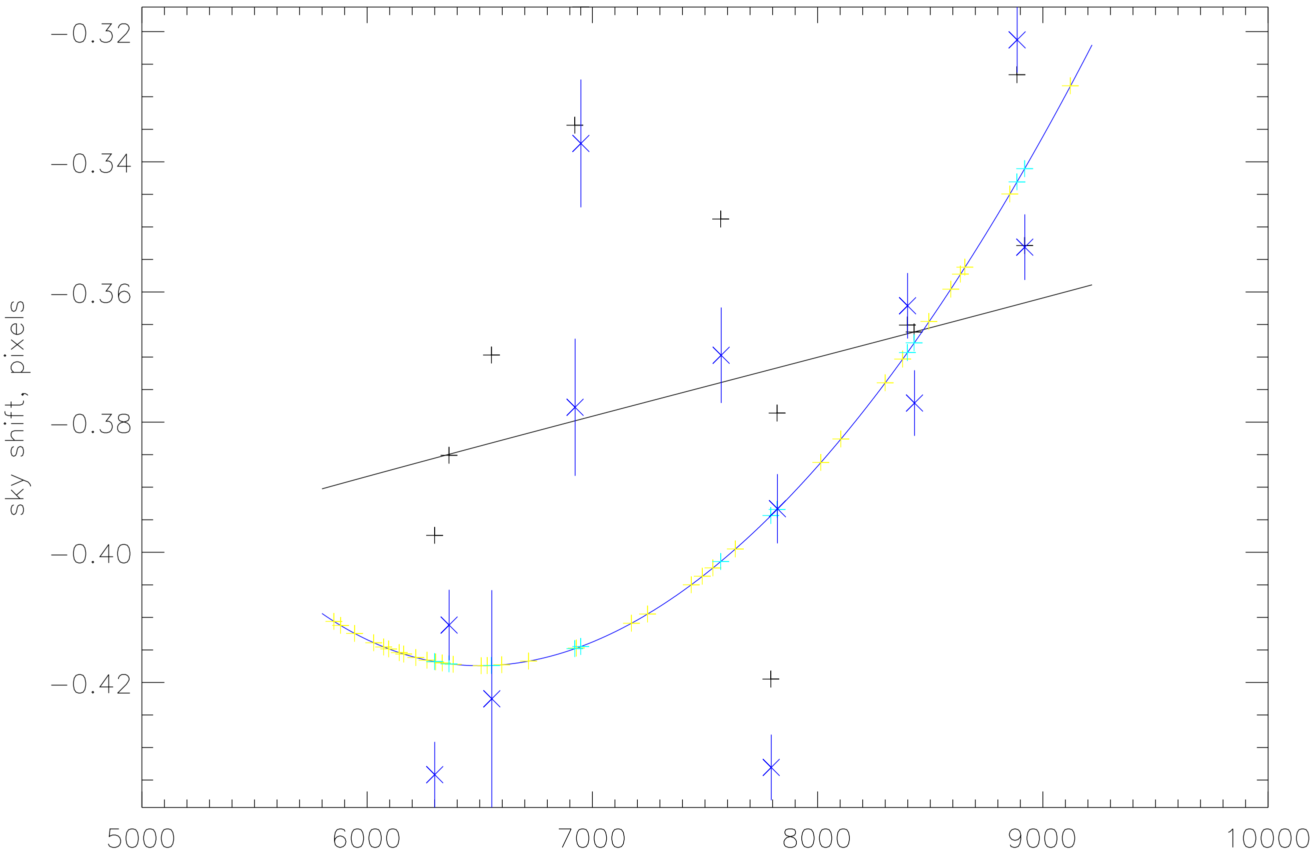


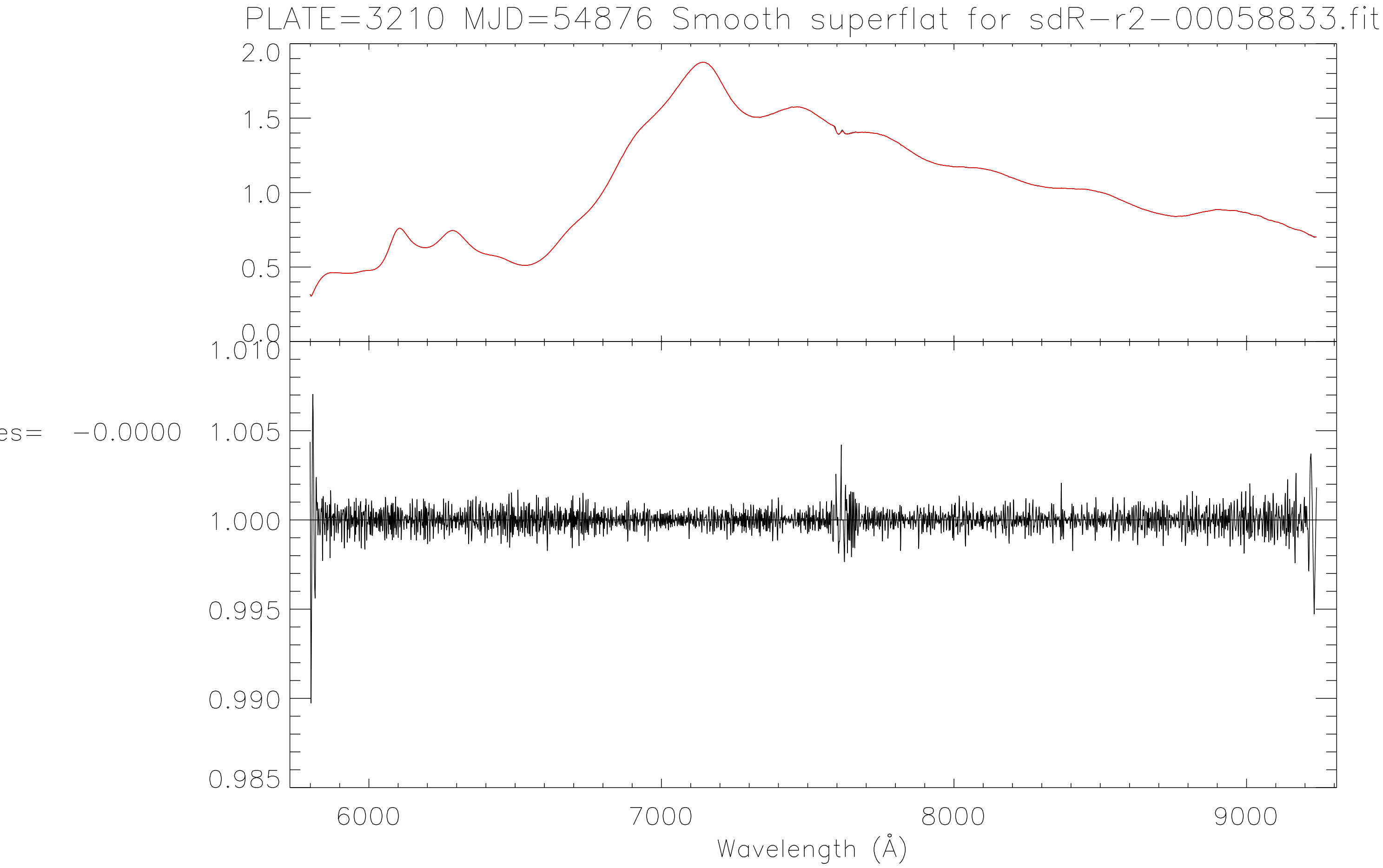
8885.8300

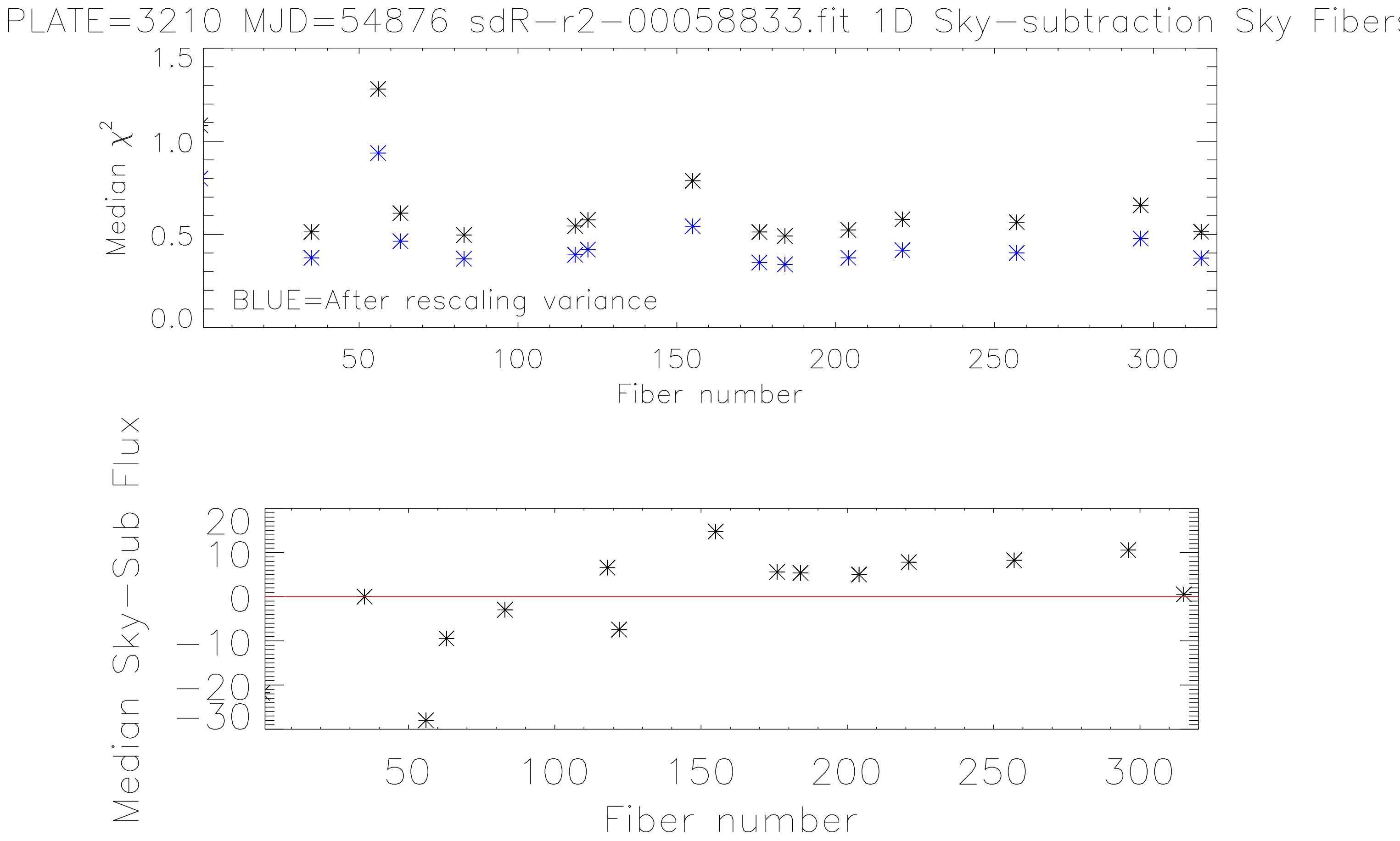


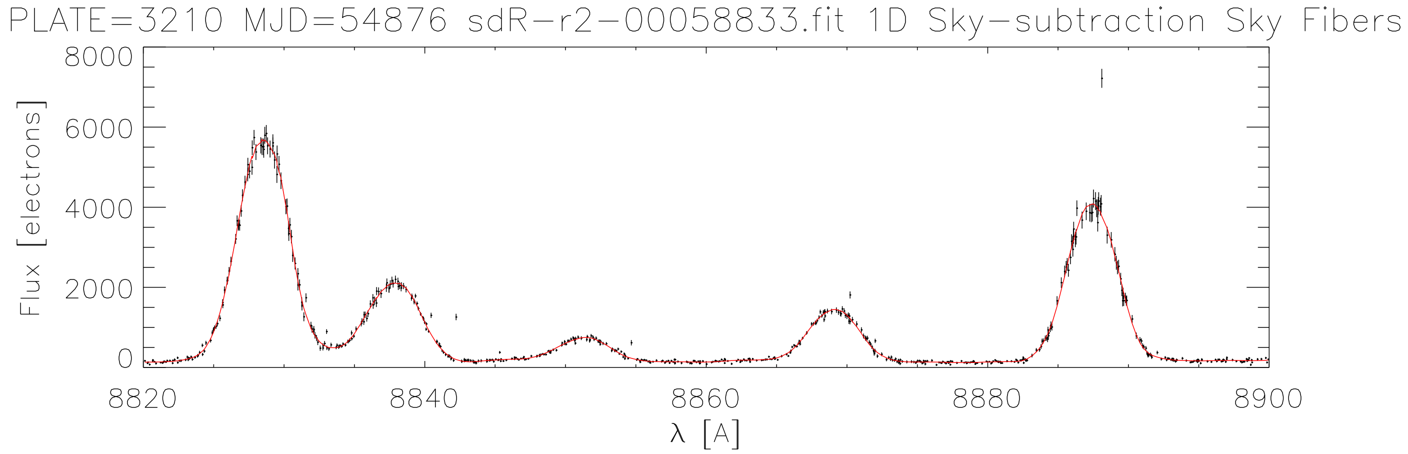
8919.6100

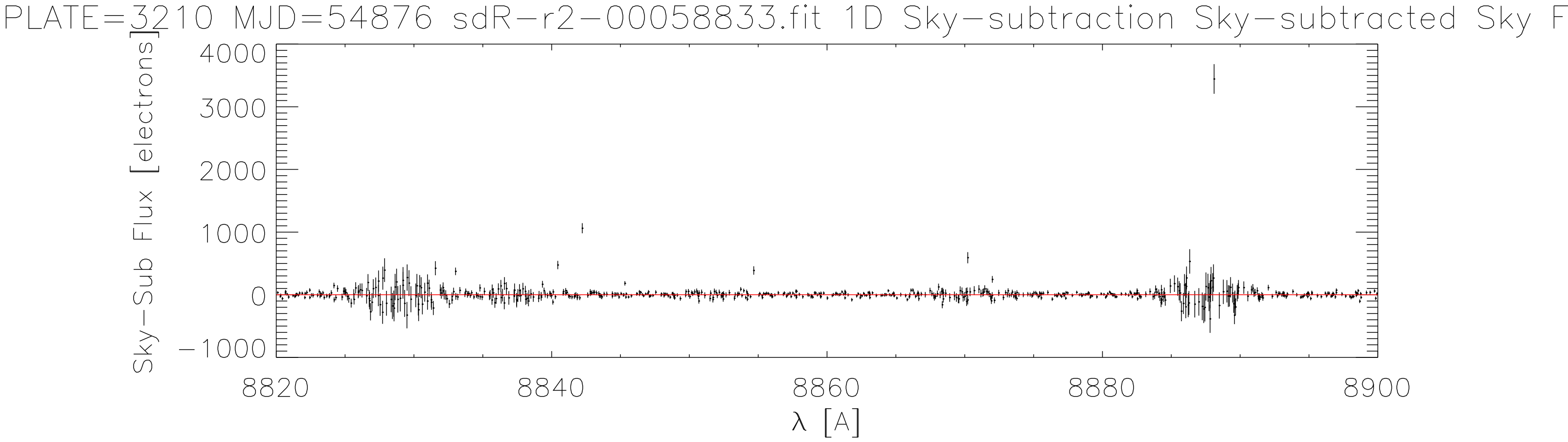

6300.3040
nfib1 16
nfib2 16
stdev 0.016
extrd −0.43
6363.7760
nfib1 16
nfib2 16
stdev 0.019
extrd −0.41
6553.6100
nfib1 16
nfib2 16
stdev 0.036
extrd −0.42
6923.2100
nfib1 16
nfib2 16
stdev 0.030
extrd −0.38
6949.0300
nfib1 16
nfib2 16
stdev 0.039
extrd −0.34
7571.7500
nfib1 16
nfib2 16
stdev 0.025
extrd −0.37
7794.1200
nfib1 16
nfib2 16
stdev 0.021
extrd −0.43
7821.5100
nfib1 16
nfib2 16
stdev 0.024
extrd −0.39
8399.1600
nfib1 16
nfib2 16
stdev 0.017
extrd −0.36
8430.1700
nfib1 16
nfib2 16
stdev 0.014
extrd −0.38
8885.8300
nfib1 15
nfib2 15
stdev 0.045
extrd −0.32
8919.6100
nfib1 15
nfib2 15
stdev 0.038
extrd −0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

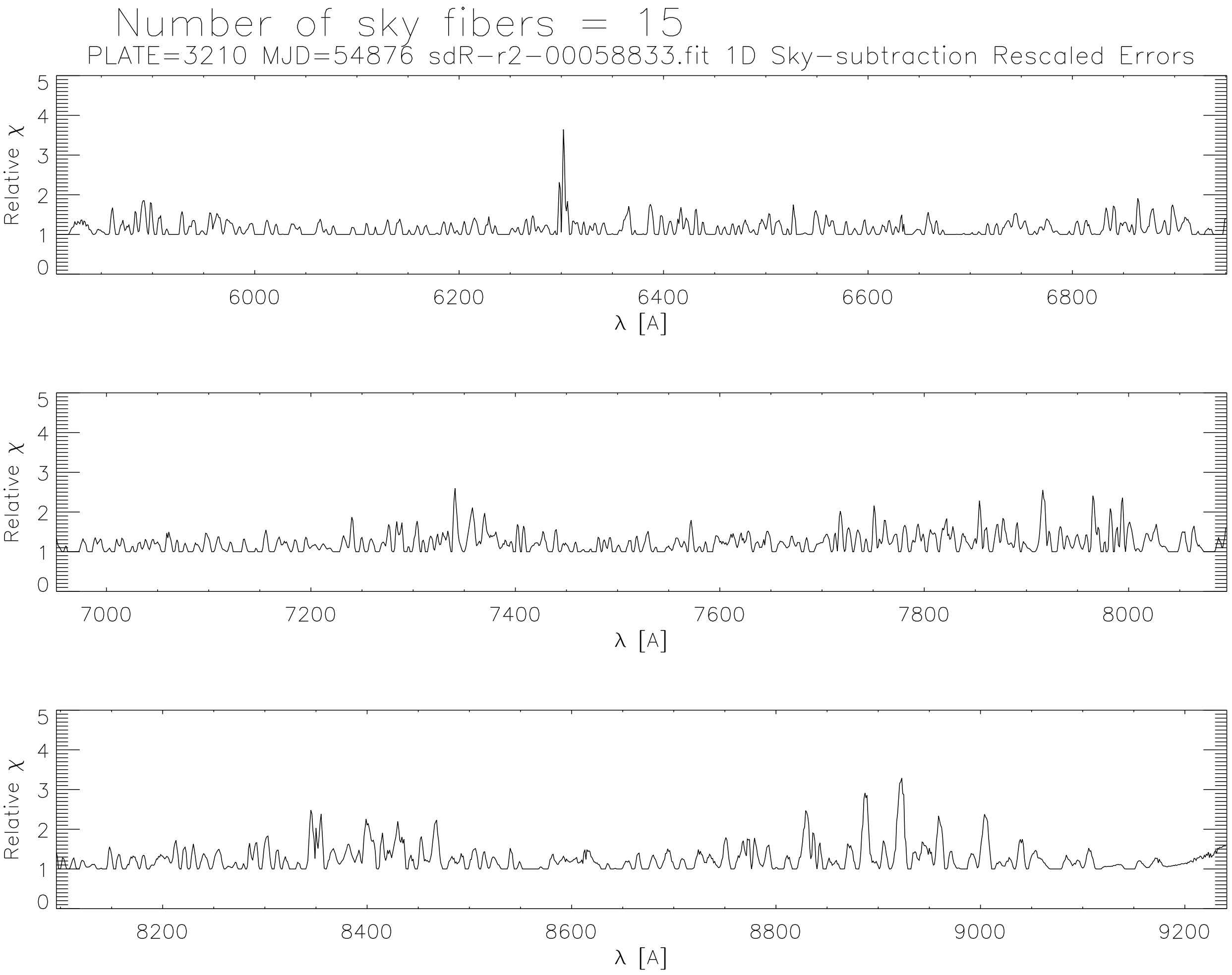

sky shift, pixels
−0.32
−0.34
−0.36
−0.38
−0.40
−0.42
5000
6000
7000
8000
9000
10000

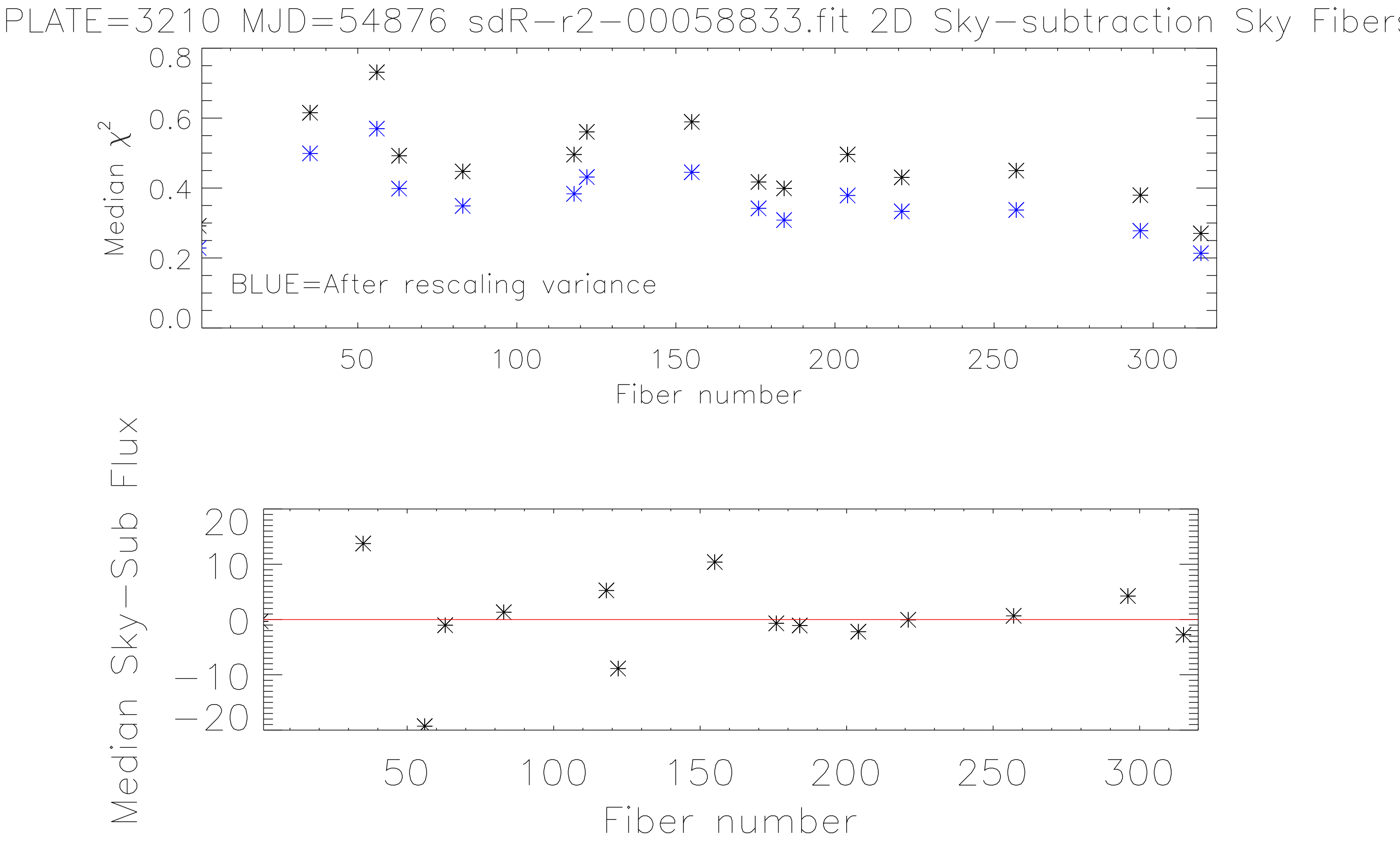

PLATE=3210 MJD=54876 Smooth superflat for sdR-r2-00058833.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

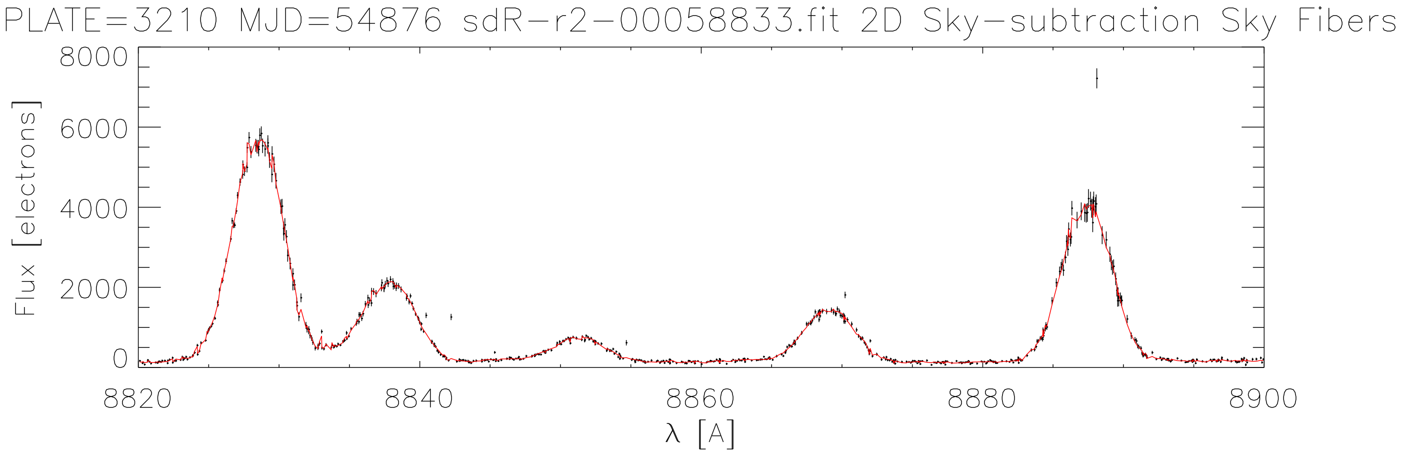

PLATE=3210 MJD=54876 sdR-r2-00058833.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
−10
−20
−30
50
100
150
200
250
300
Fiber number


PLATE=3210 MJD=54876 sdR-r2-00058833.fit 1D Sky-subtraction Sky Fibers

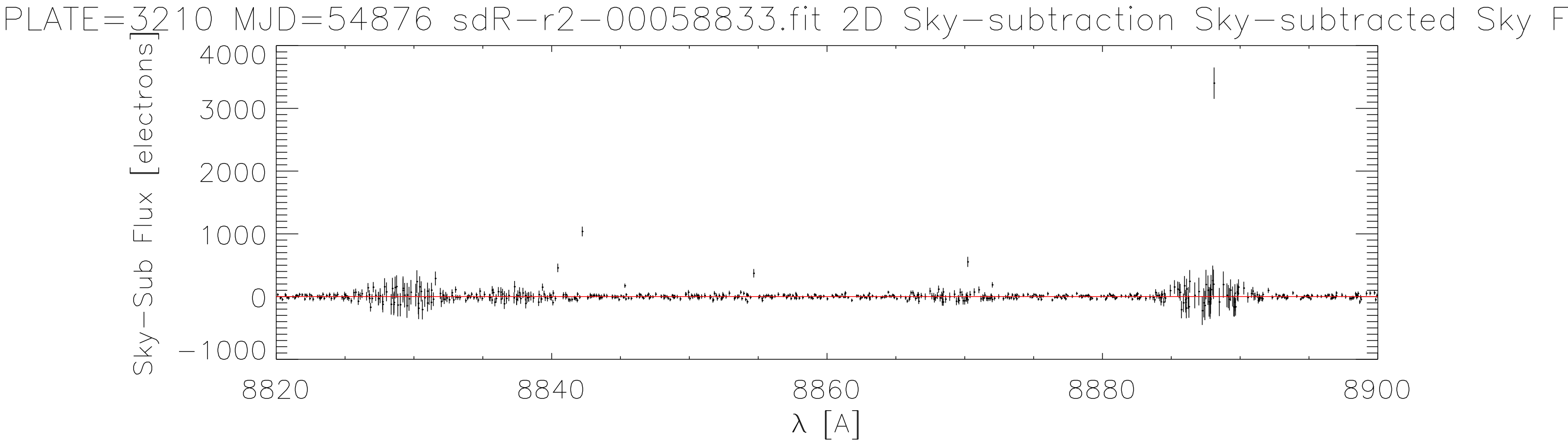

PLATE=3210 MJD=54876 sdR-r2-00058833.fit 1D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 15
PLATE=3210 MJD=54876 sdR-r2-00058833.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=54876 sdR-r2-00058833.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−20
−10
0
10
20
50
100
150
200
250
300
Fiber number



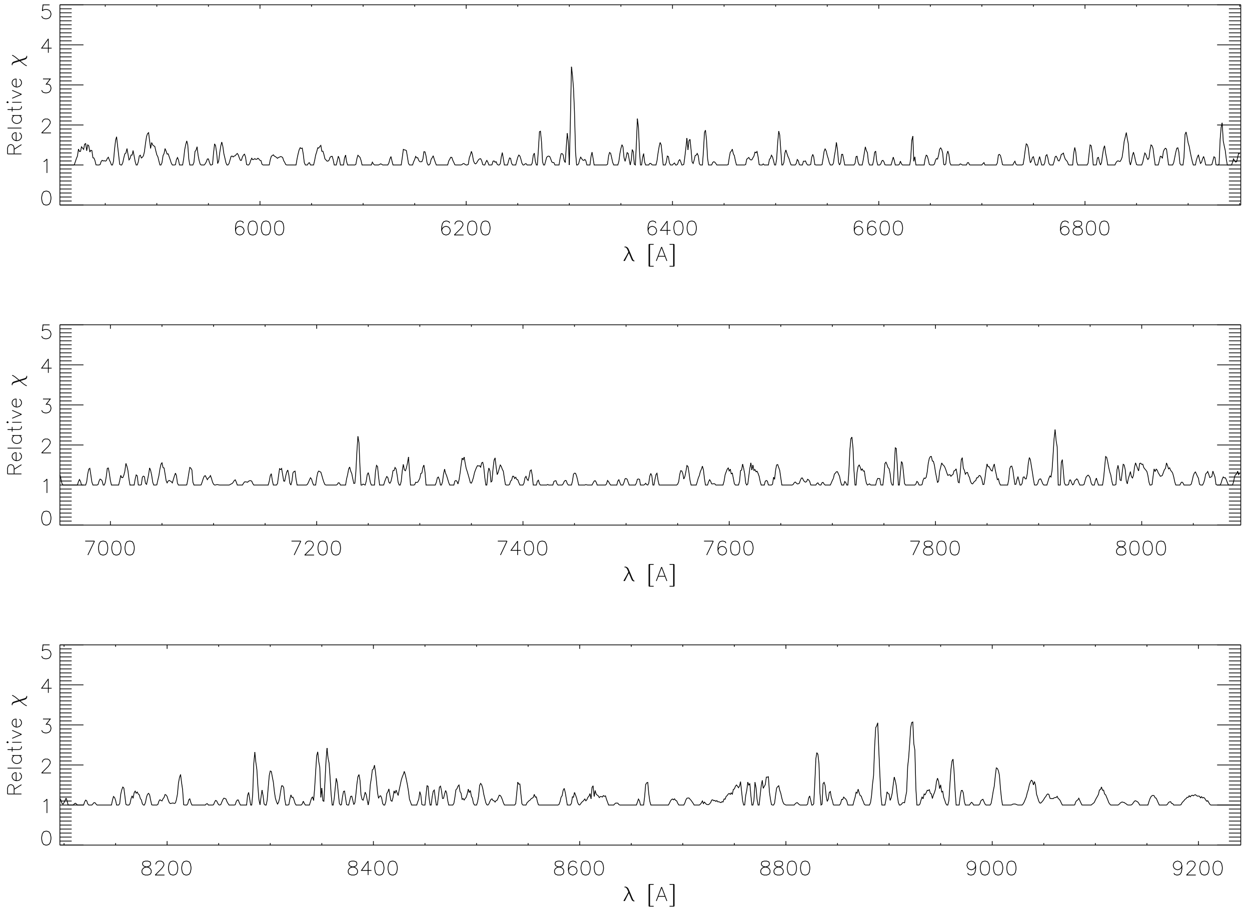
PLATE=3210 MJD=54876 sdR-r2-00058833.fit 2D Sky-subtraction Sky Fibers

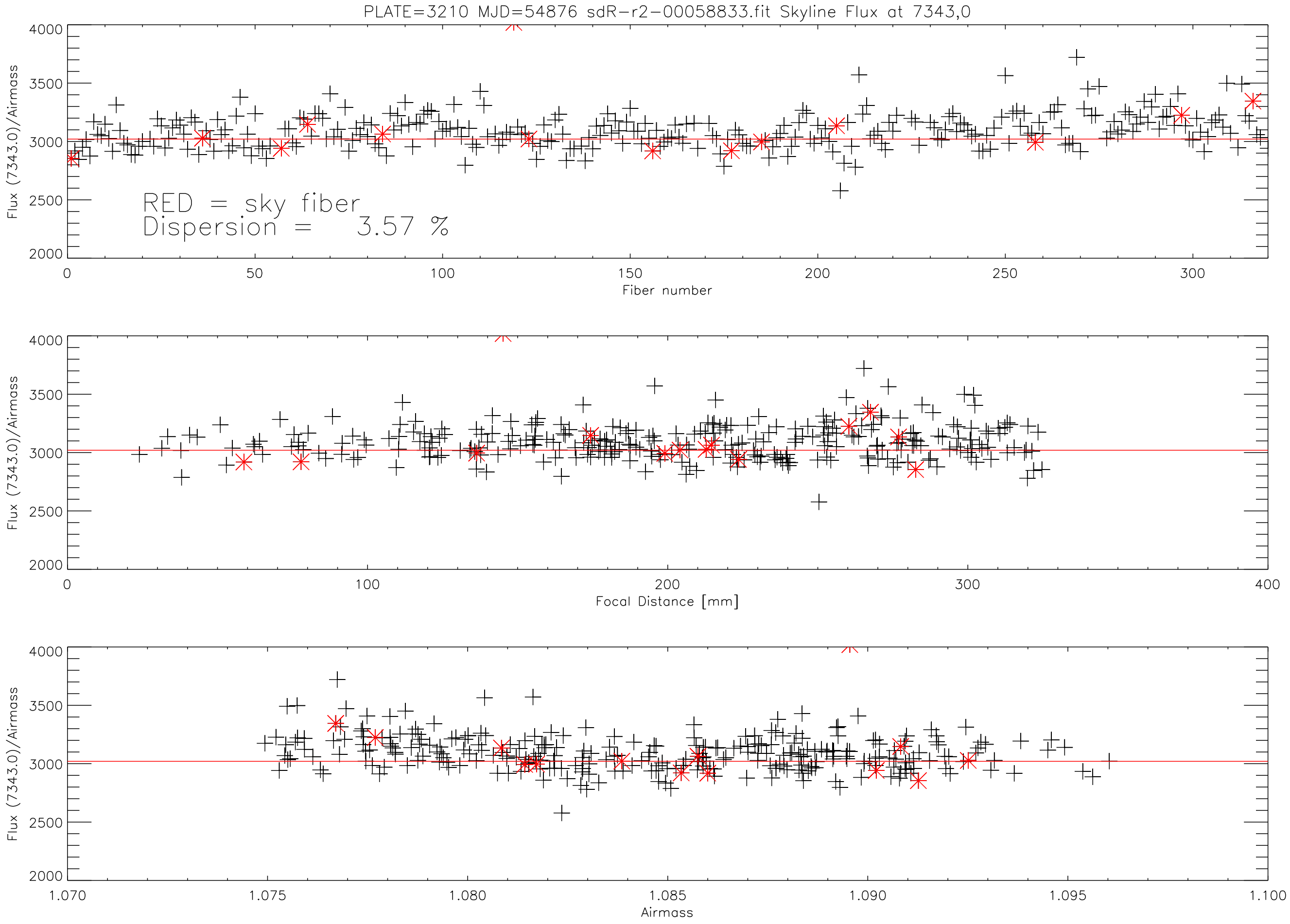


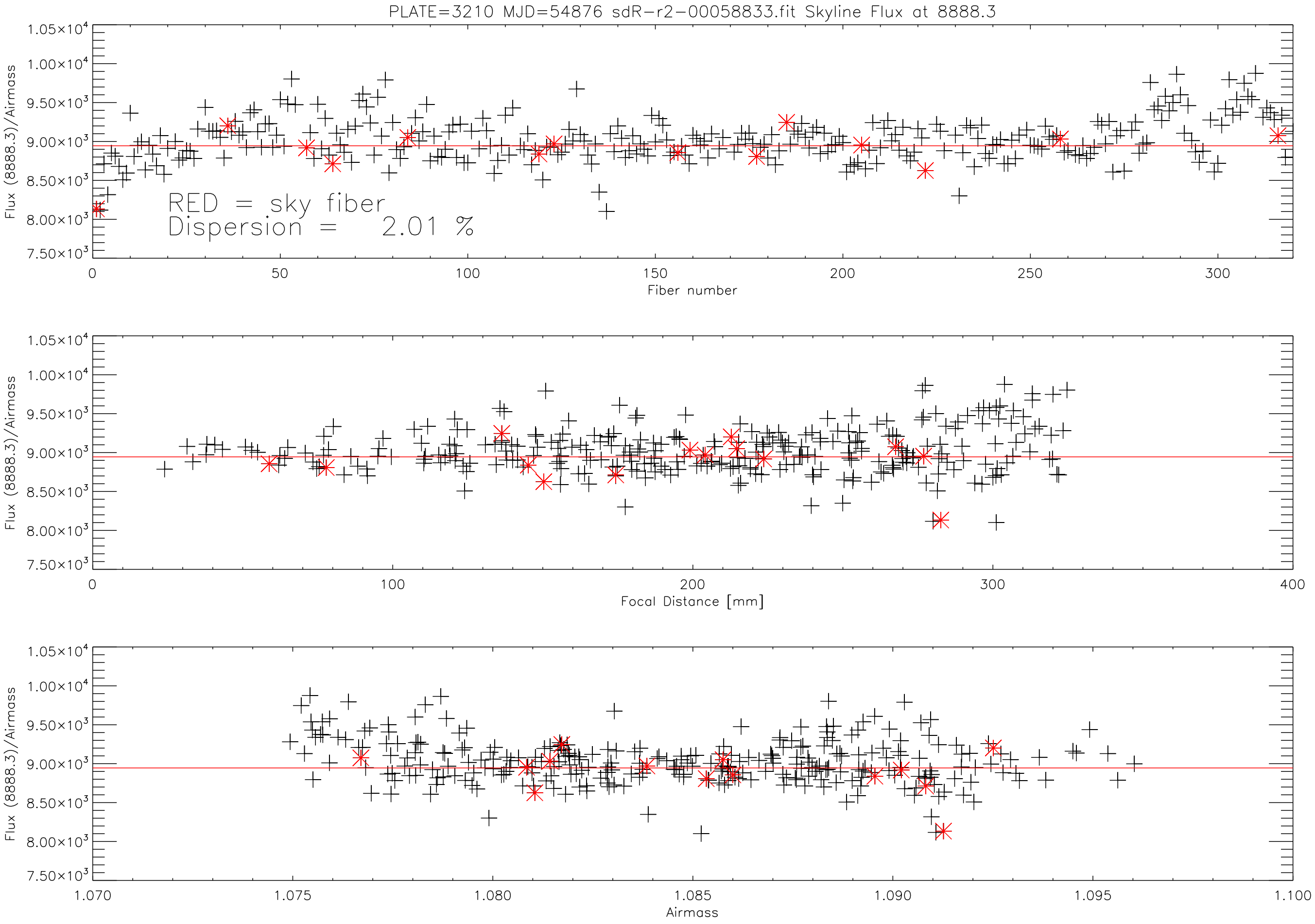
PLATE=3210 MJD=54876 sdR-r2-00058833.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 15

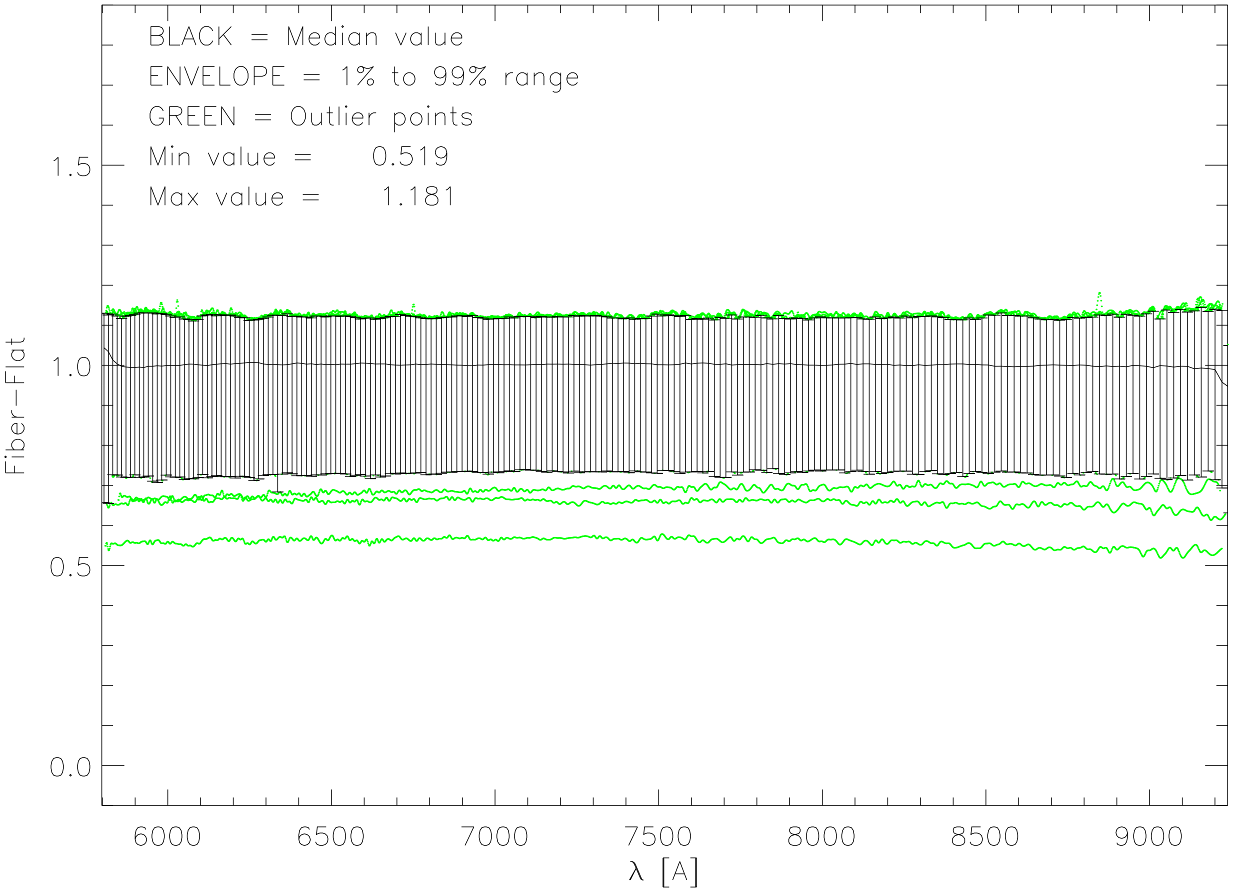
PLATE=3210 MJD=54876 sdR-r2-00058833.fit 2D Sky-subtraction Rescaled Errors



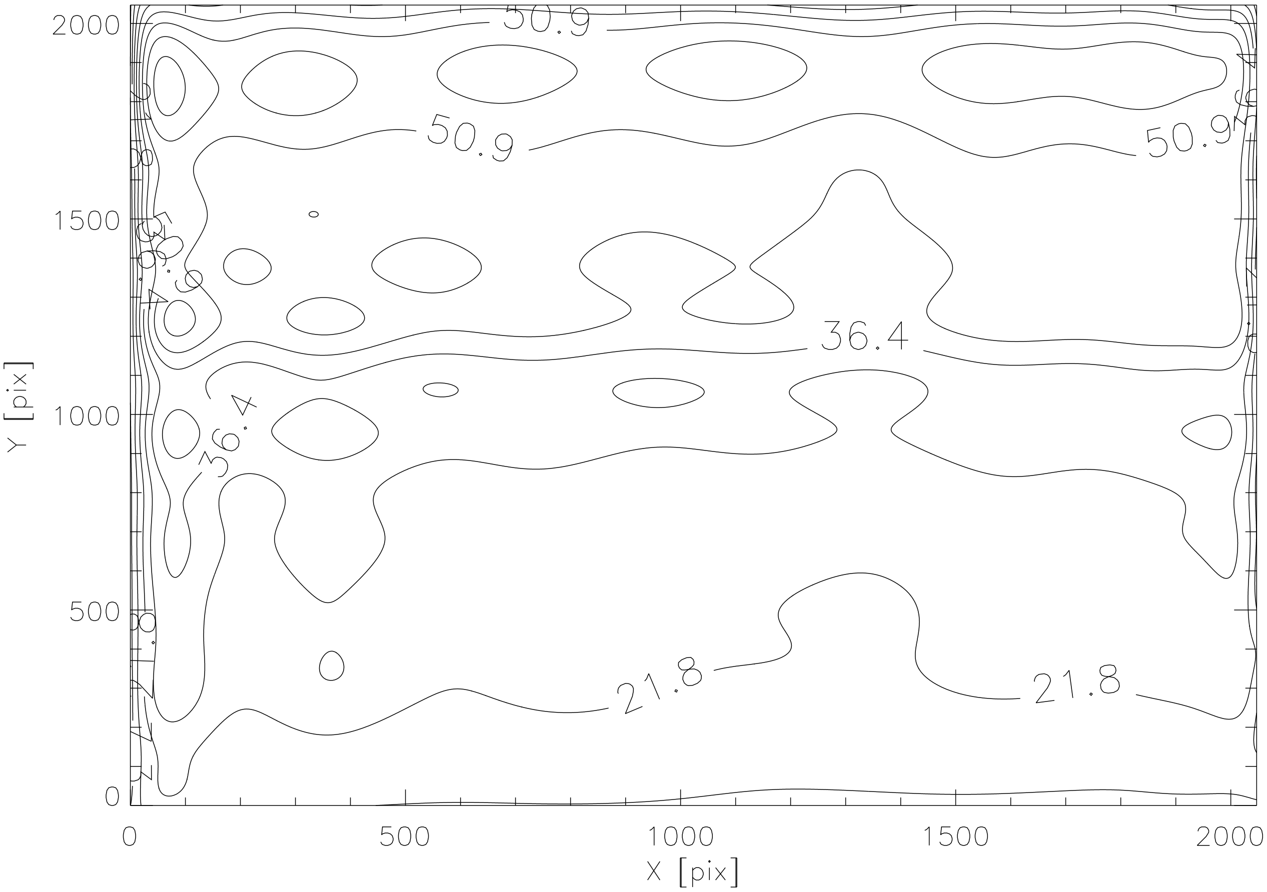

PLATE=3210 MJD=54876 sdR-r2-00058833.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 3.57 %
Flux (7343.0)/Airmass
2000
2500
3000
3500
4000
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.070
1.075
1.080
1.085
1.090
1.095
1.100
Airmass


PLATE=3210 MJD=54876 sdR-r2-00058833.fit Skyline Flux at 8888.3

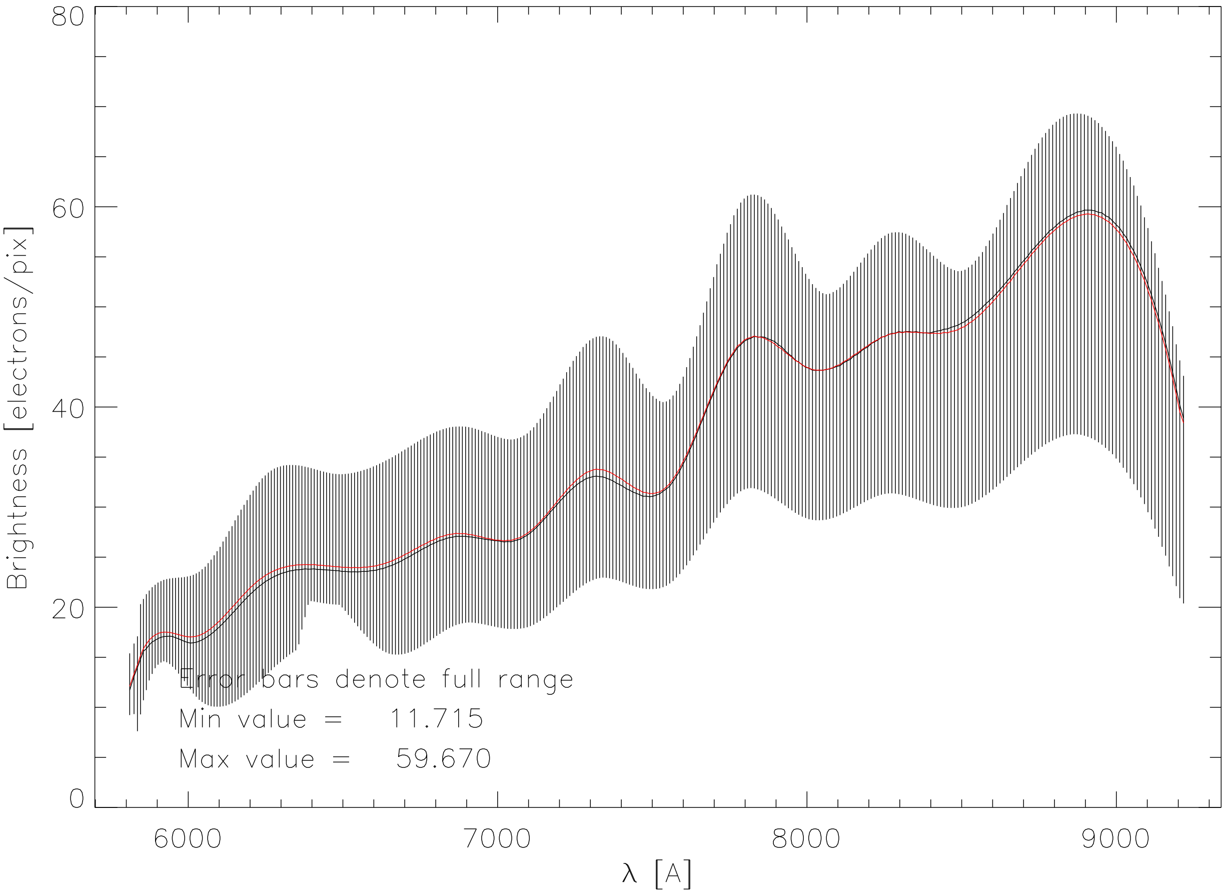
PLATE=3210 MJD=54876 Fiber-Flats for sdR-r2-00058835.fit



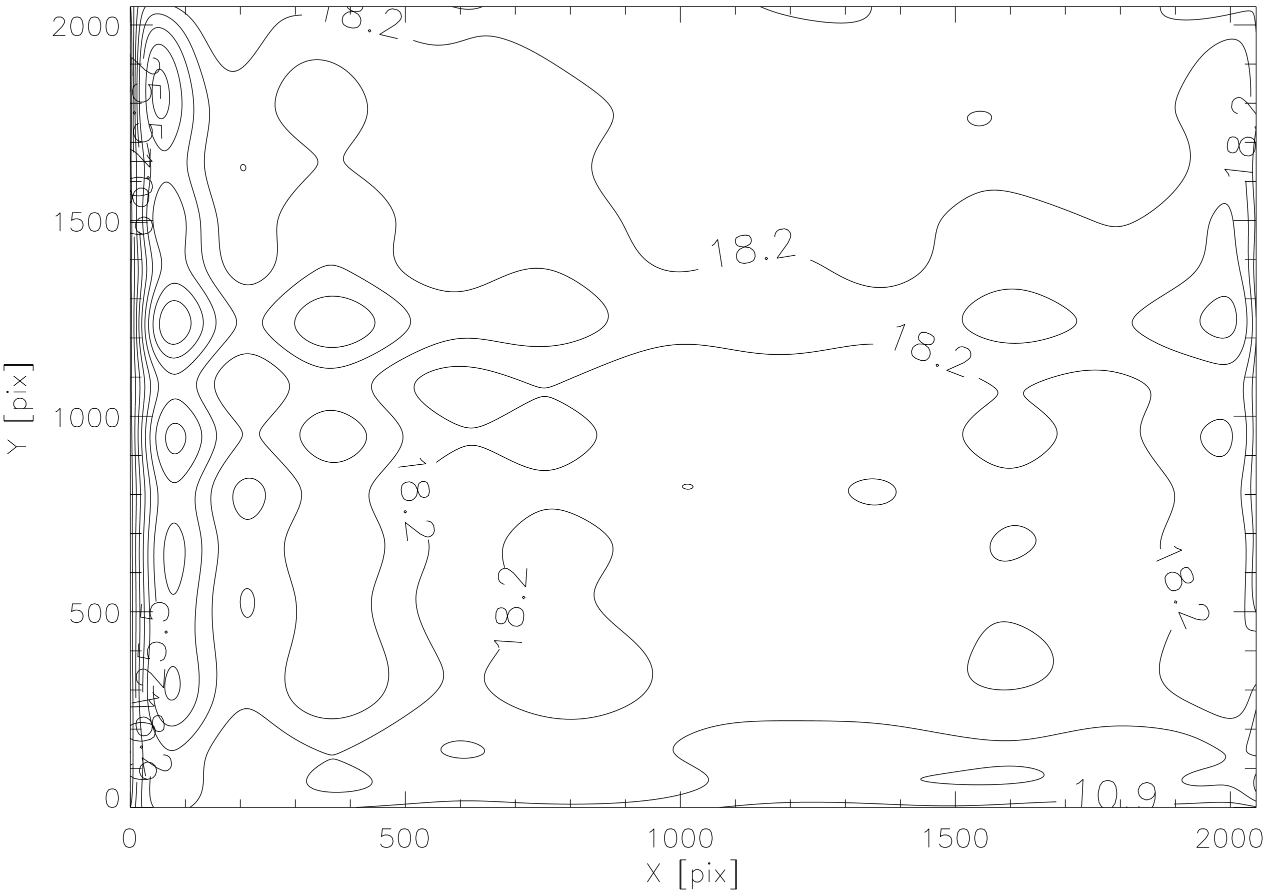
Thu May 20 20:13:59 2010


PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r2-00058834.fi

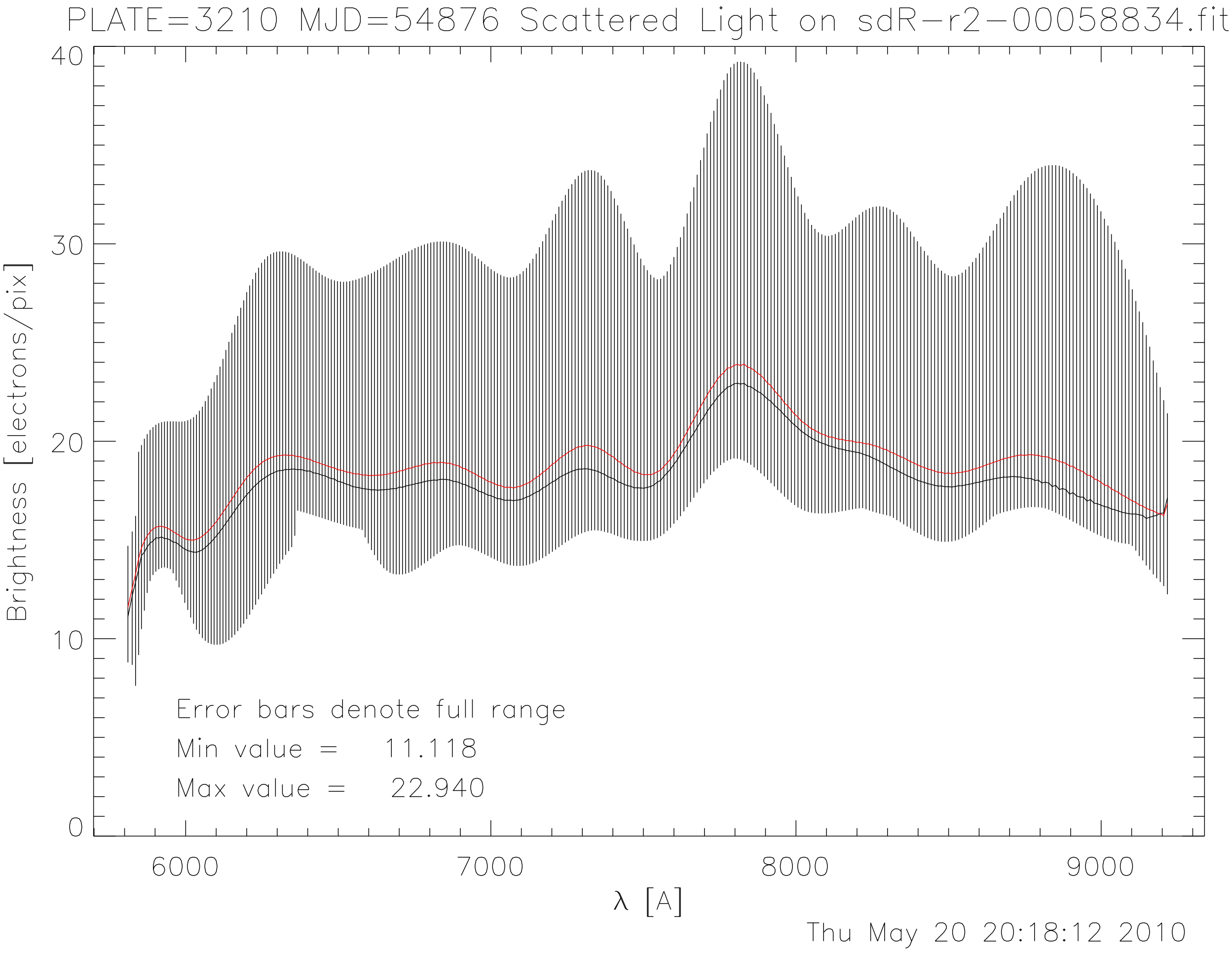
PLATE=3210 MJD=54876 Scattered Light before halo removal on sdR-r2-00058834.fi

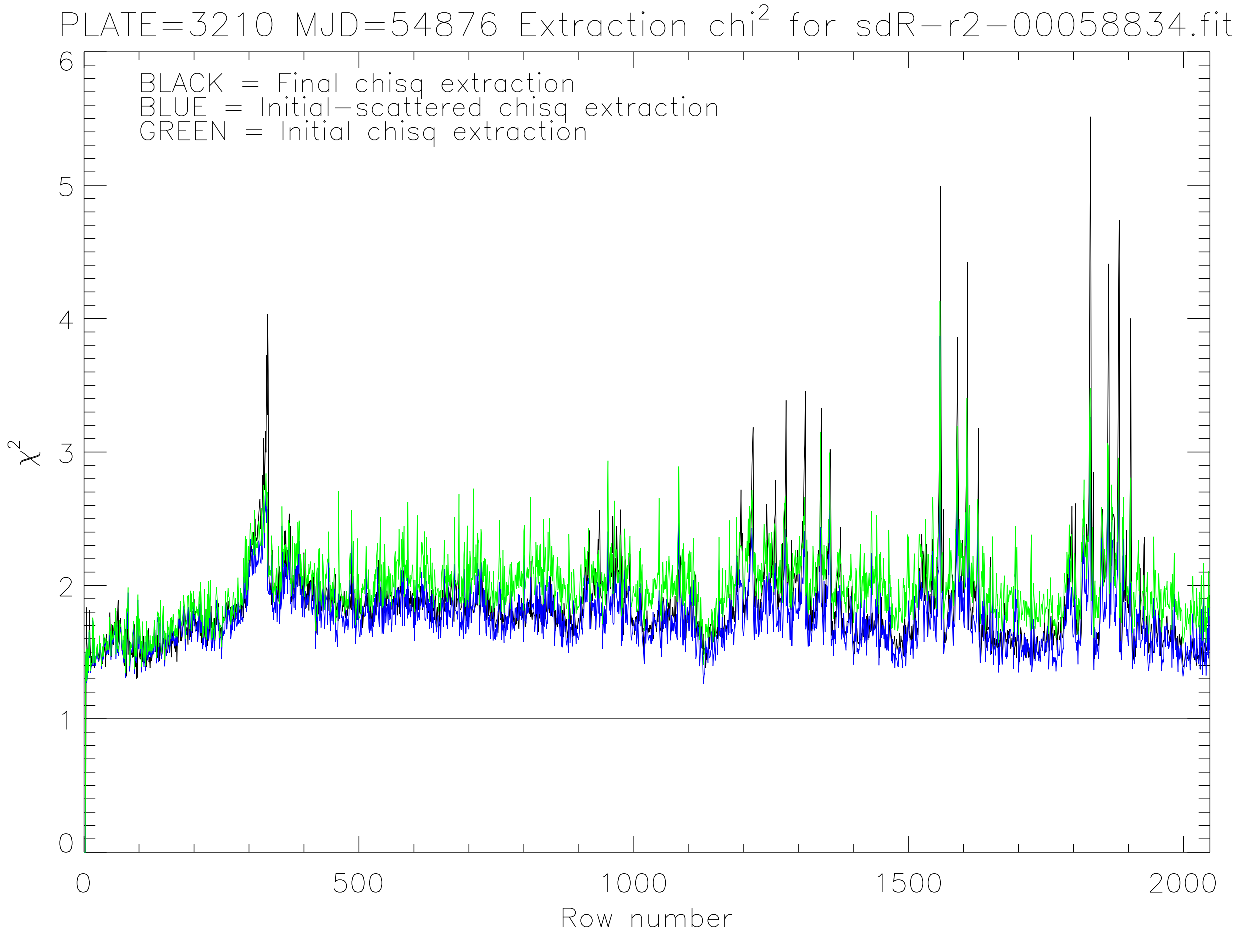


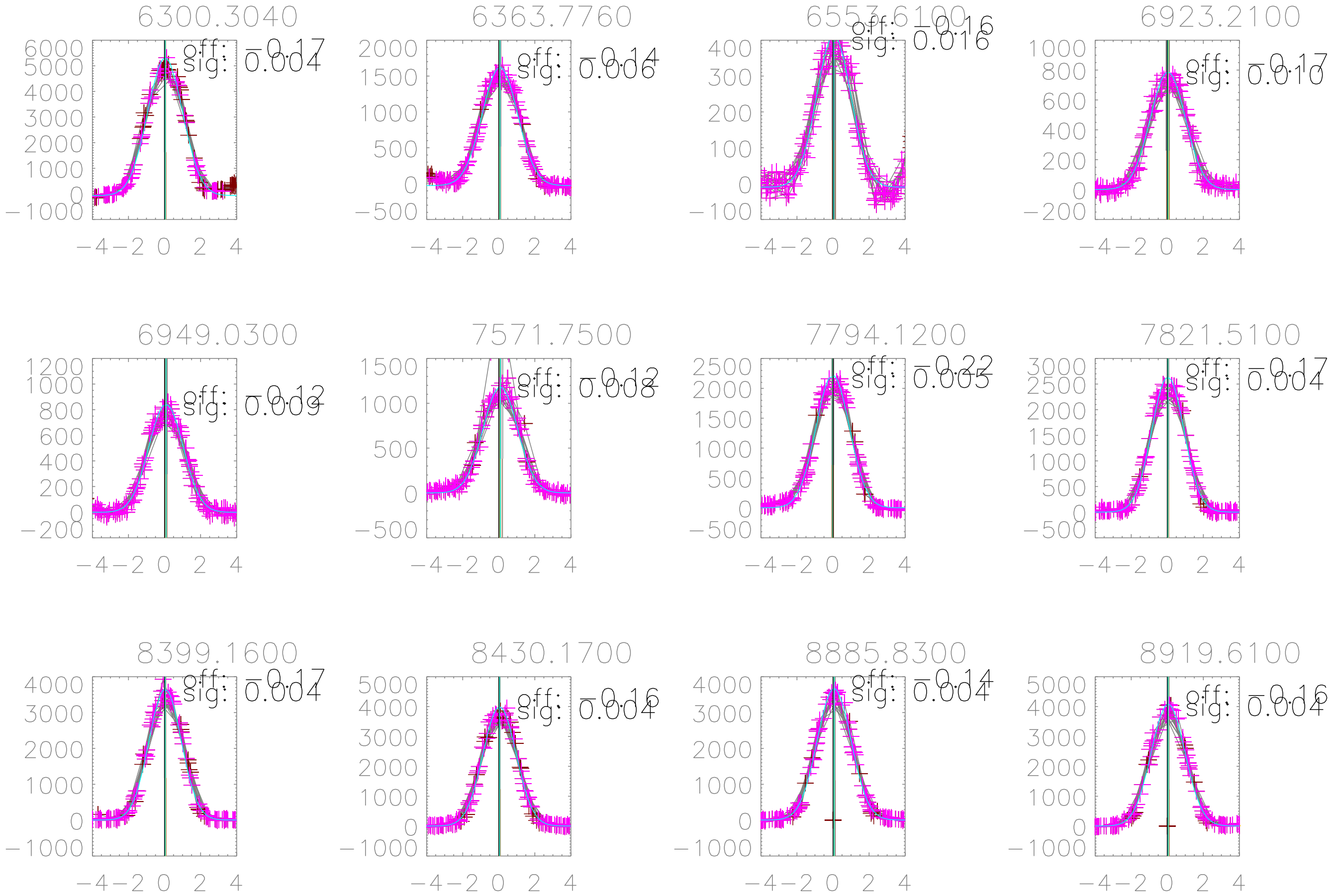
Thu May 20 20:14:58 2010

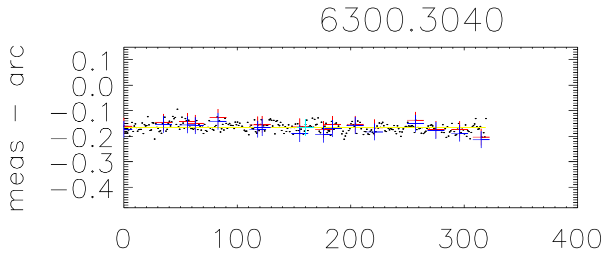


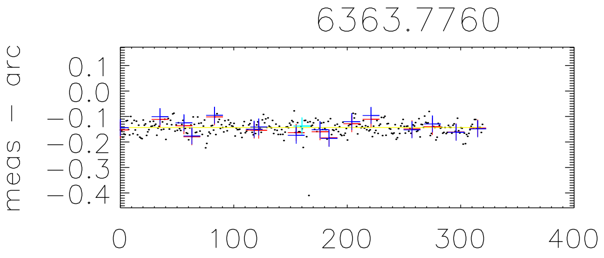
PLATE=3210 MJD=54876 Scattered Light on sdR-r2-00058834.fit

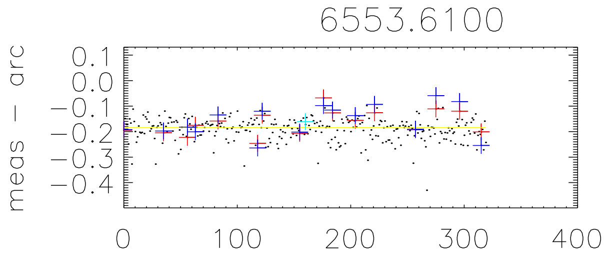

PLATE=3210 MJD=54876 Scattered Light on sdR-r2-00058834.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.118
Max value = 22.940
Thu May 20 20:18:12 2010

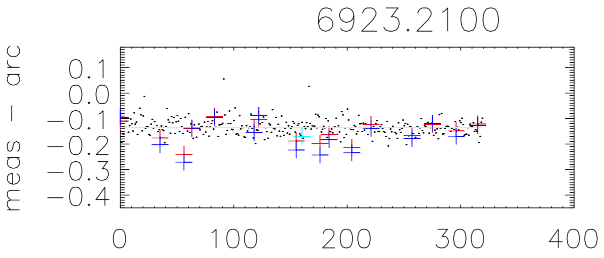

PLATE=3210 MJD=54876 Extraction chi^2 for sdR-r2-00058834.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

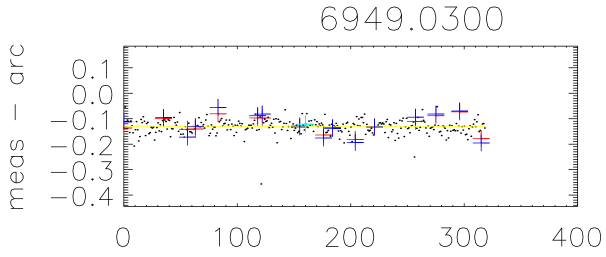

6300.3040
off: −0.17
sig: 0.004
6363.7760
off: −0.14
sig: 0.006
6553.6100
off: −0.16
sig: 0.016
6923.2100
off: −0.17
sig: 0.010
6949.0300
off: −0.12
sig: 0.009
7571.7500
off: −0.12
sig: 0.008
7794.1200
off: −0.22
sig: 0.005
7821.5100
off: −0.17
sig: 0.004
8399.1600
off: −0.17
sig: 0.004
8430.1700
off: −0.16
sig: 0.004
8885.8300
off: −0.14
sig: 0.004
8919.6100
off: −0.16
sig: 0.004
−4 −2 0 2 4

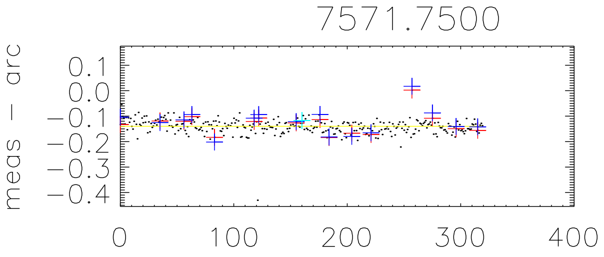

6300.3040
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

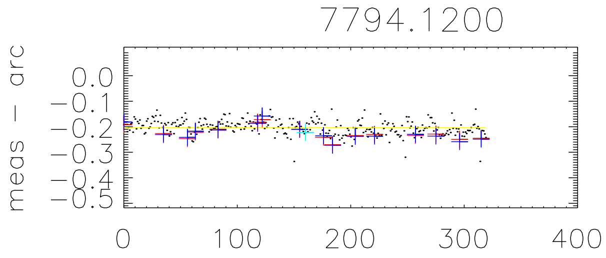

6363.7760
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

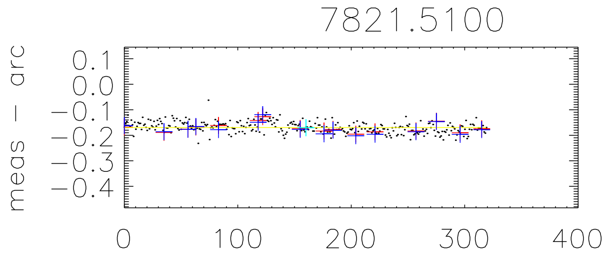

6553.6100
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

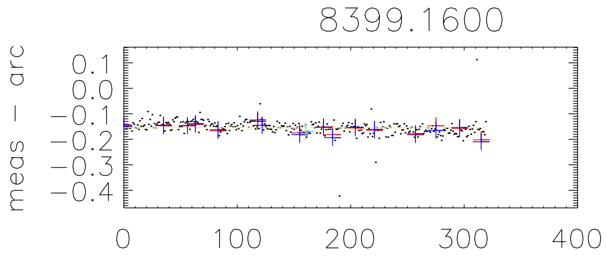

6923.2100
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

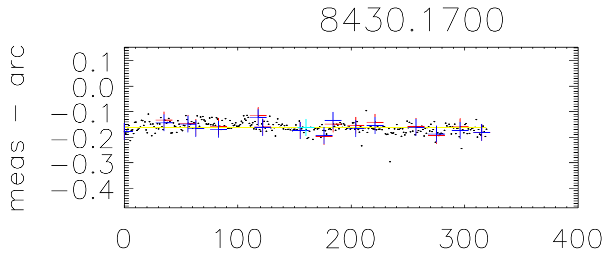

6949.0300
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

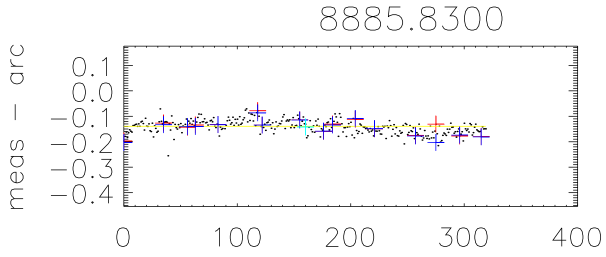

7571.7500
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

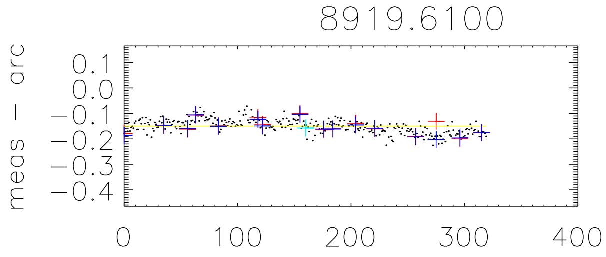

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

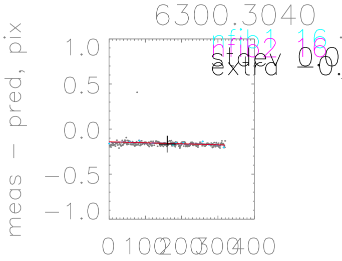

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

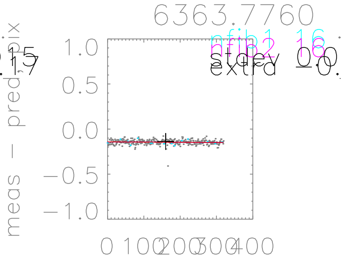

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

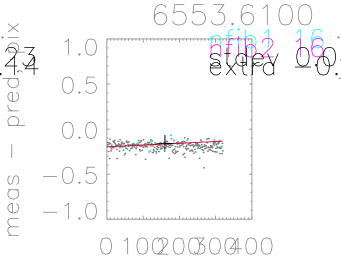

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

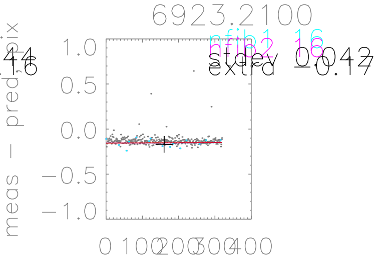

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

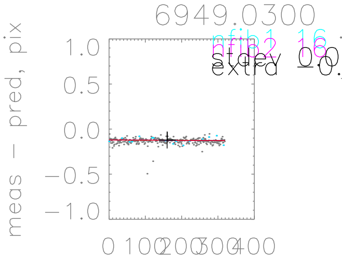

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

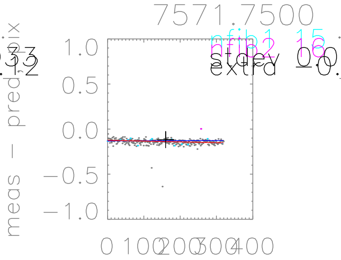

6300.3040
nfib1 16
nfib2 16
stdev 0.015
extrd −0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

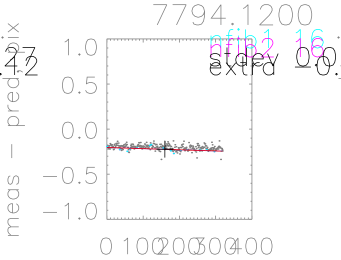

6363.7760
nfib1 16
nfib2 16
stdev 0.023
extrd −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

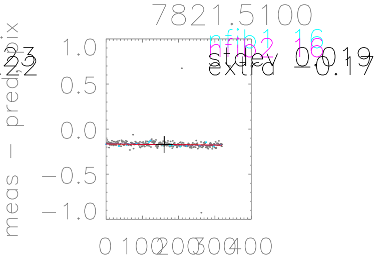

6553.6100
nfib1 16
nfib2 16
stdev 0.044
extrd −0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

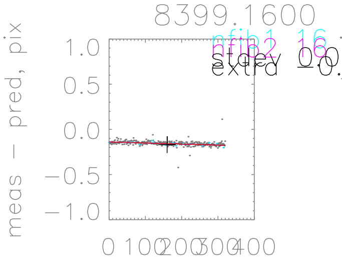

6923.2100
nfib1 16
nfib2 16
stdev 0.042
extrd −0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

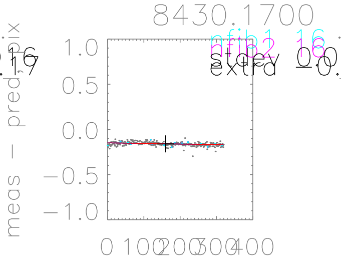

6949.0300
nfib1 16
nfib2 16
stdev 0.033
extrd −0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

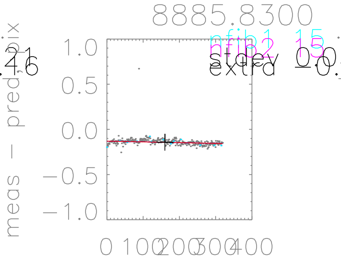

7571.7500
nfib1 15
nfib2 16
stdev 0.027
extrd −0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

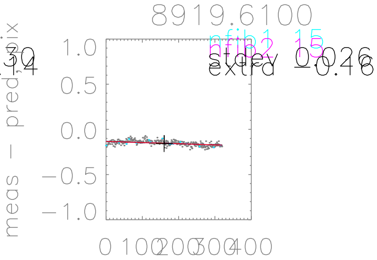

7794.1200
nfib1 16
nfib2 16
stdev 0.023
extrd −0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

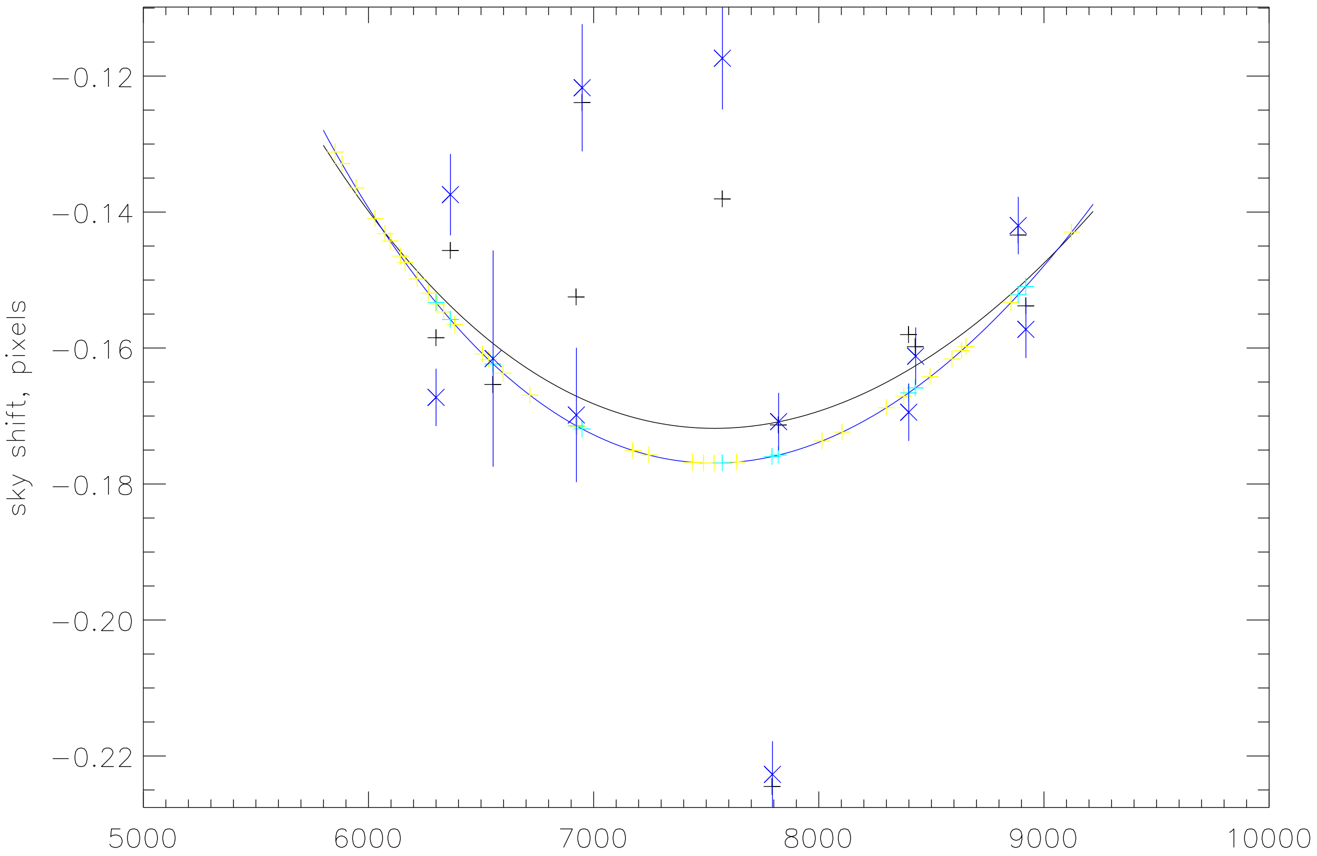

7821.5100
nfib1 16
nfib2 16
stdev 0.019
extrd −0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

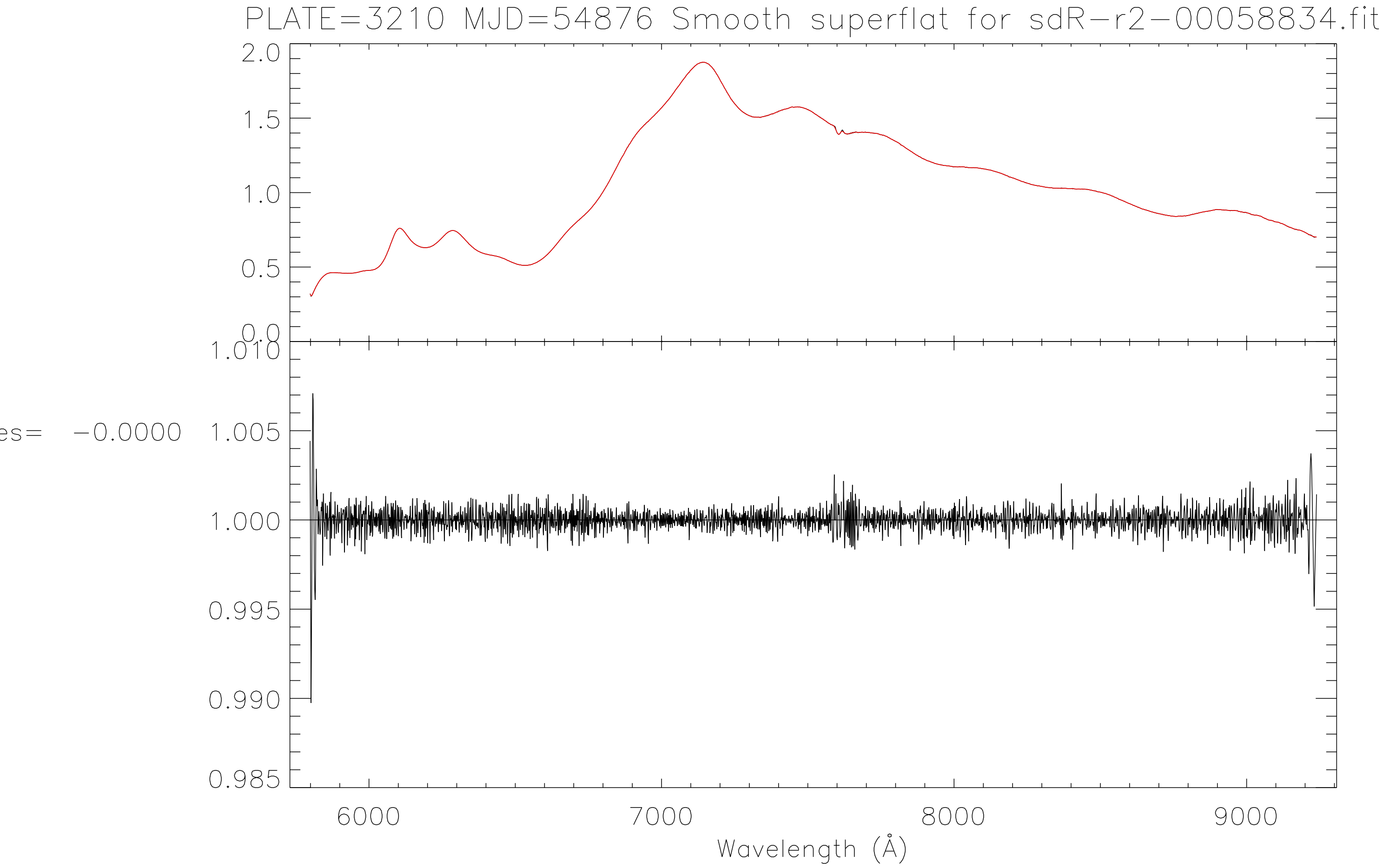

8399.1600
nfib1 16
nfib2 16
stdev 0.016
extrd −0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


8430.1700
nfib1 16
nfib2 16
stdev 0.021
extrd −0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

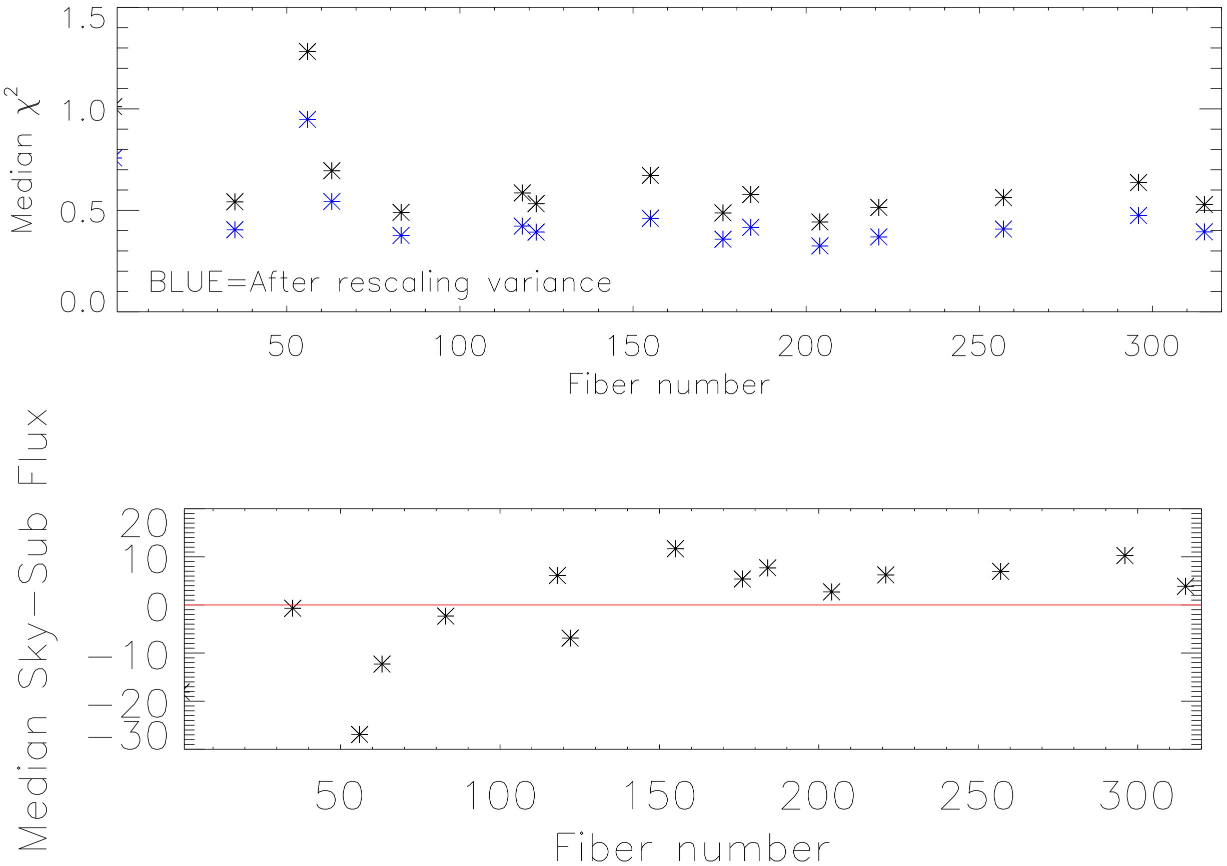

8885.8300
nfib1 15
nfib2 15
stdev 0.030
extrd −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

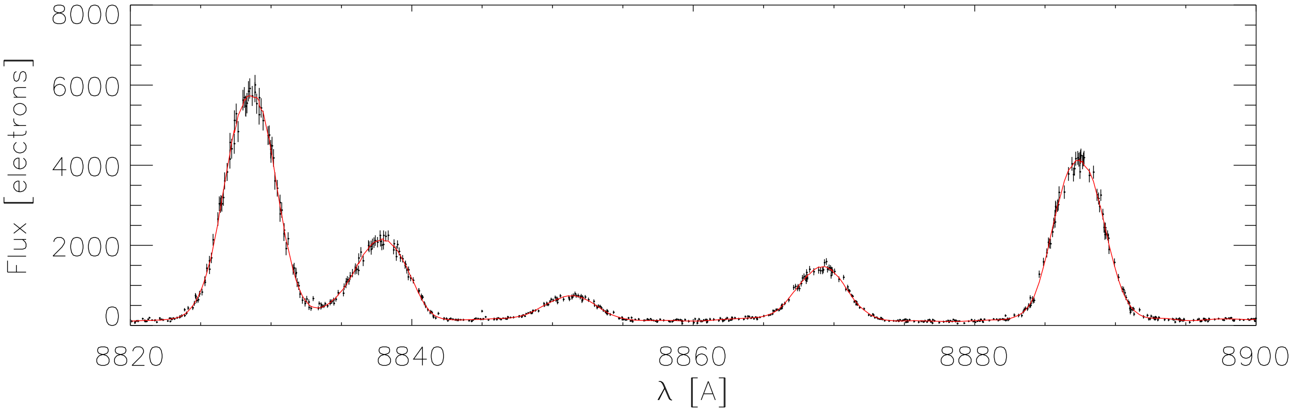

8919.6100
nfib1 15
nfib2 15
stdev 0.026
extrd −0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

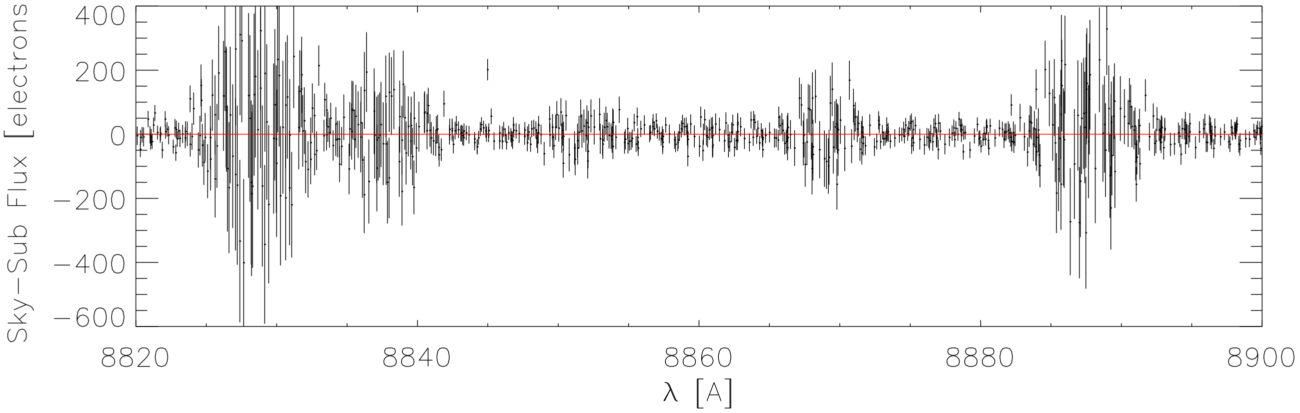

sky shift, pixels
−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
5000
6000
7000
8000
9000
10000


PLATE=3210 MJD=54876 Smooth superflat for sdR-r2-00058834.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es=   −0.0000
6000
7000
8000
9000
Wavelength (Å)

PLATE=3210 MJD=54876 sdR-r2-00058834.fit 1D Sky-subtraction Sky Fiber

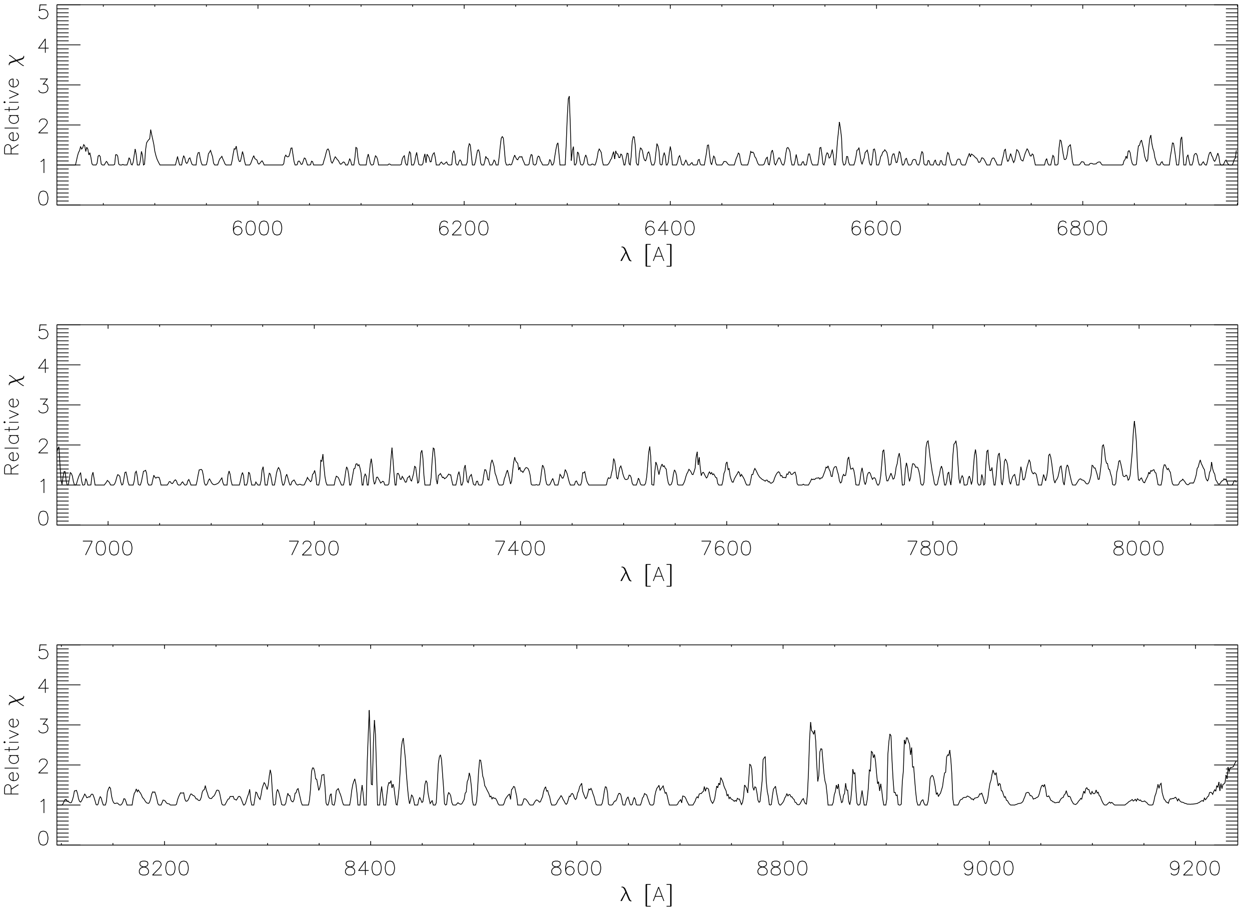


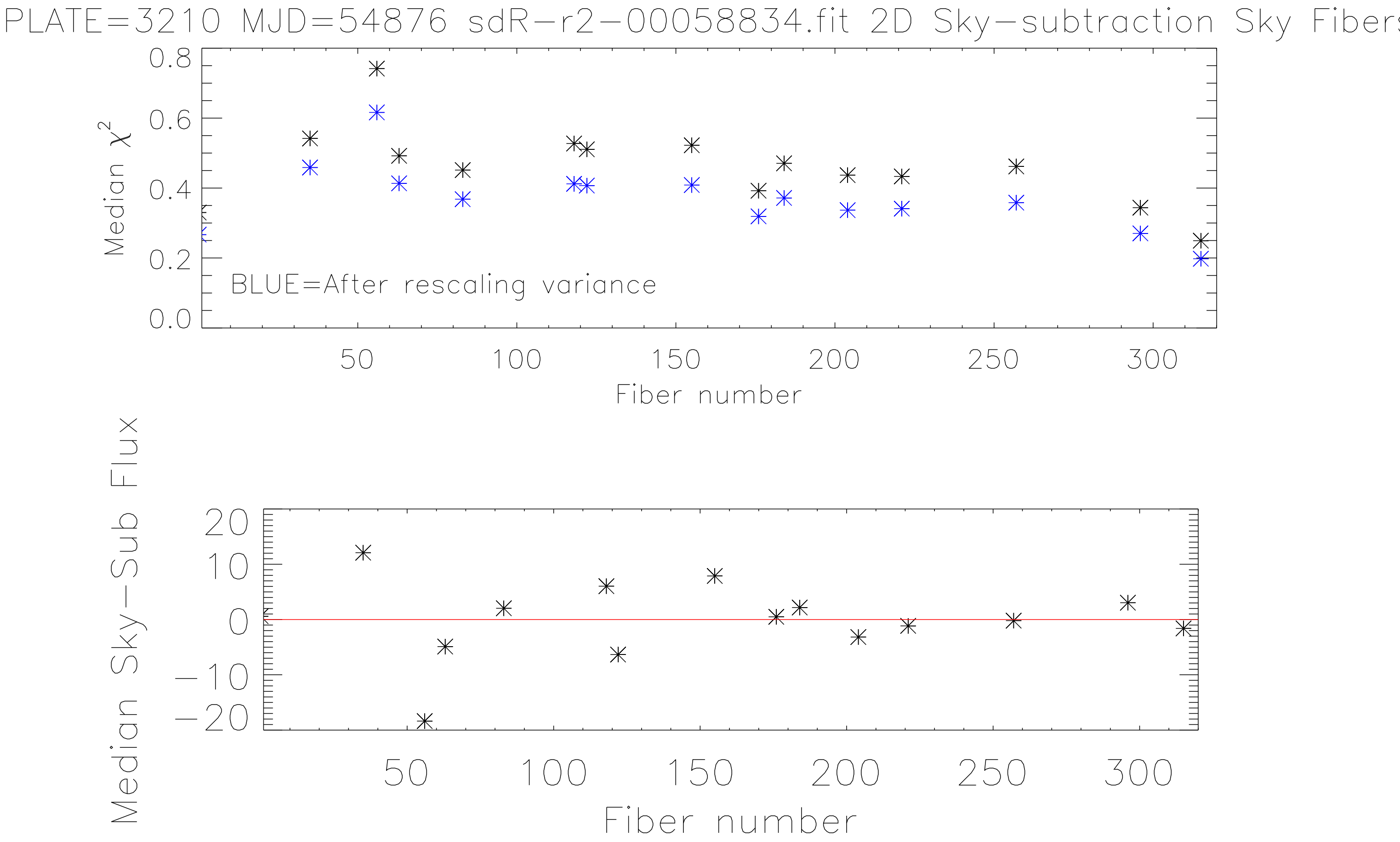

PLATE=3210 MJD=54876 sdR-r2-00058834.fit 1D Sky-subtraction Sky Fibers

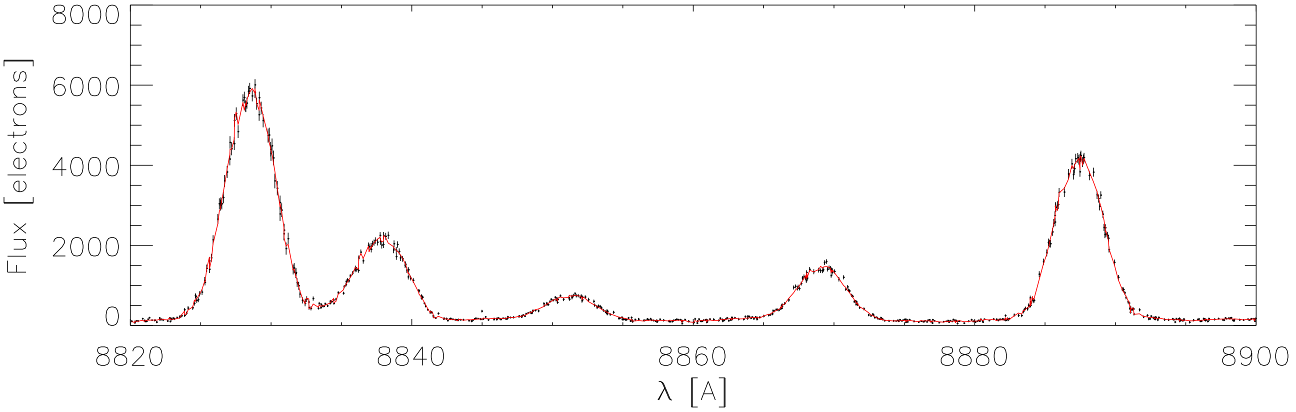

PLATE=3210 MJD=54876 sdR-r2-00058834.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 15

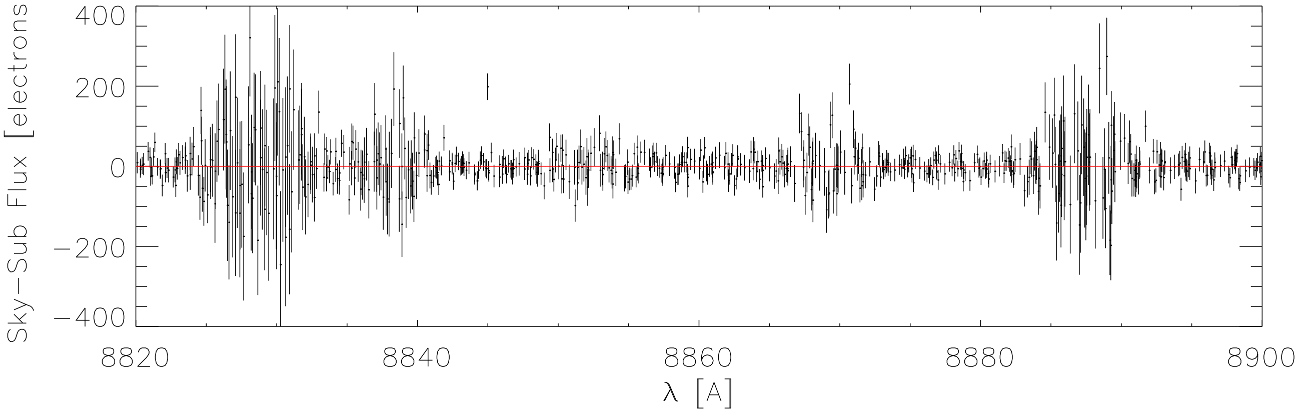
PLATE=3210 MJD=54876 sdR-r2-00058834.fit 1D Sky-subtraction Rescaled Errors




PLATE=3210 MJD=54876 sdR-r2-00058834.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-20
-10
0
10
20
50
100
150
200
250
300
Fiber number



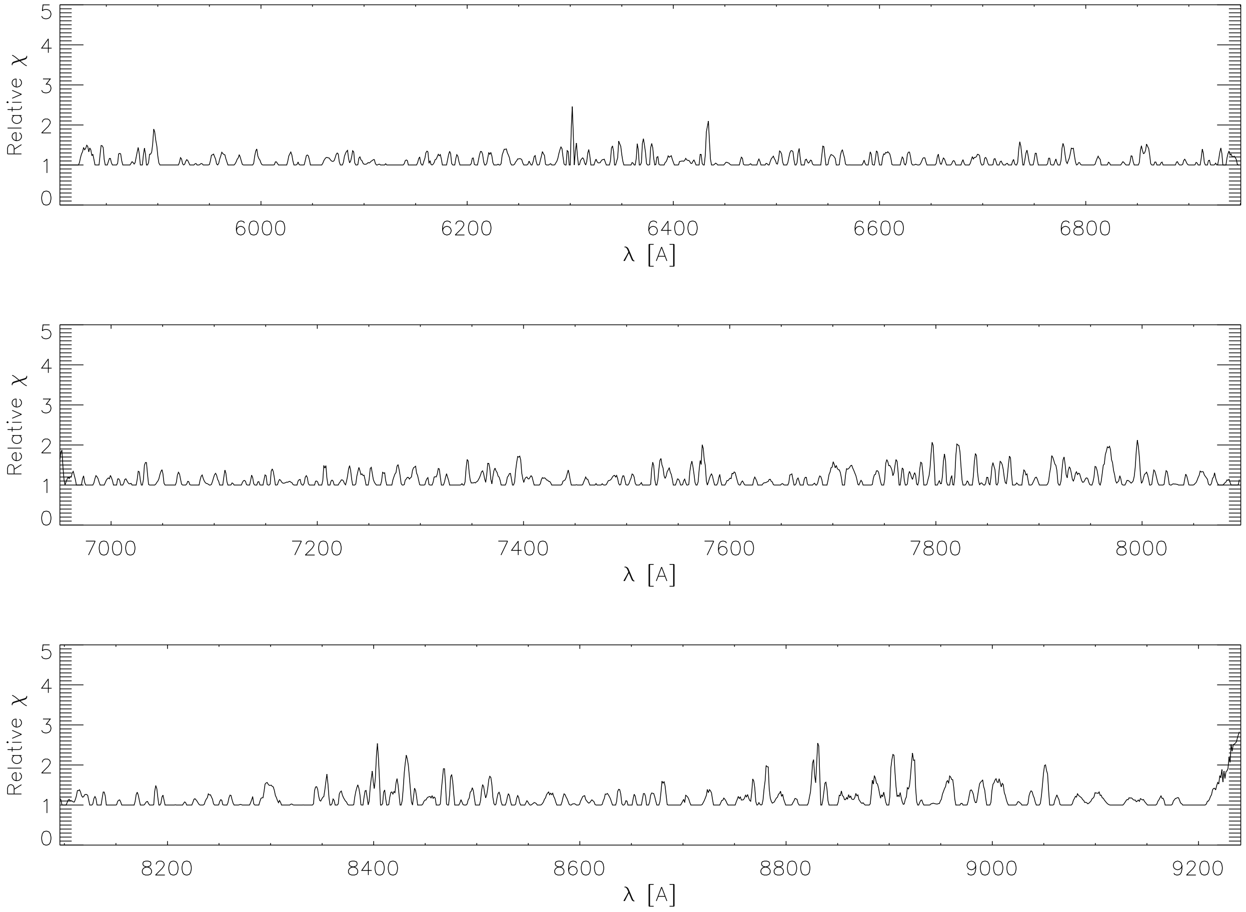
PLATE=3210 MJD=54876 sdR-r2-00058834.fit 2D Sky-subtraction Sky Fibers

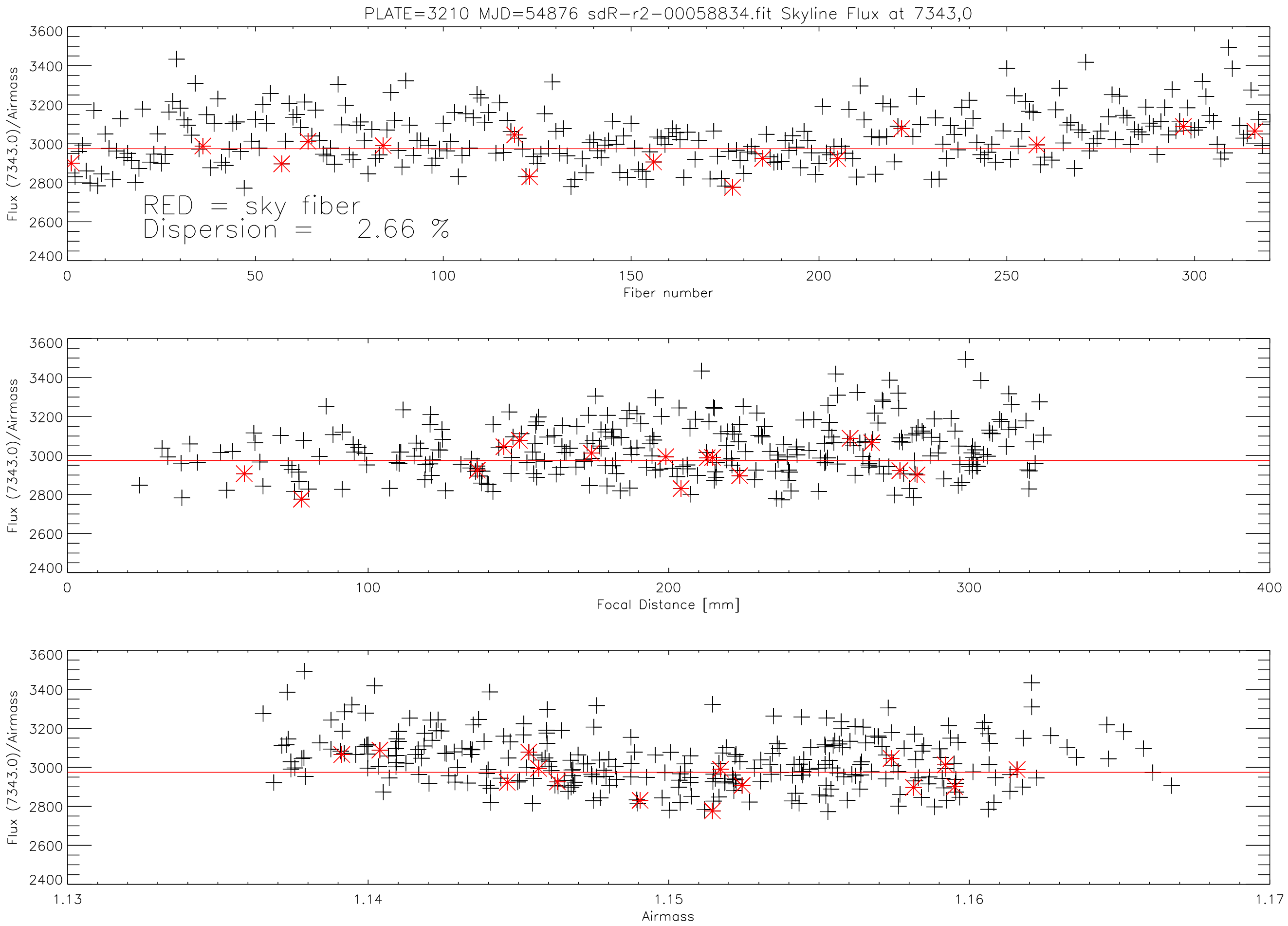


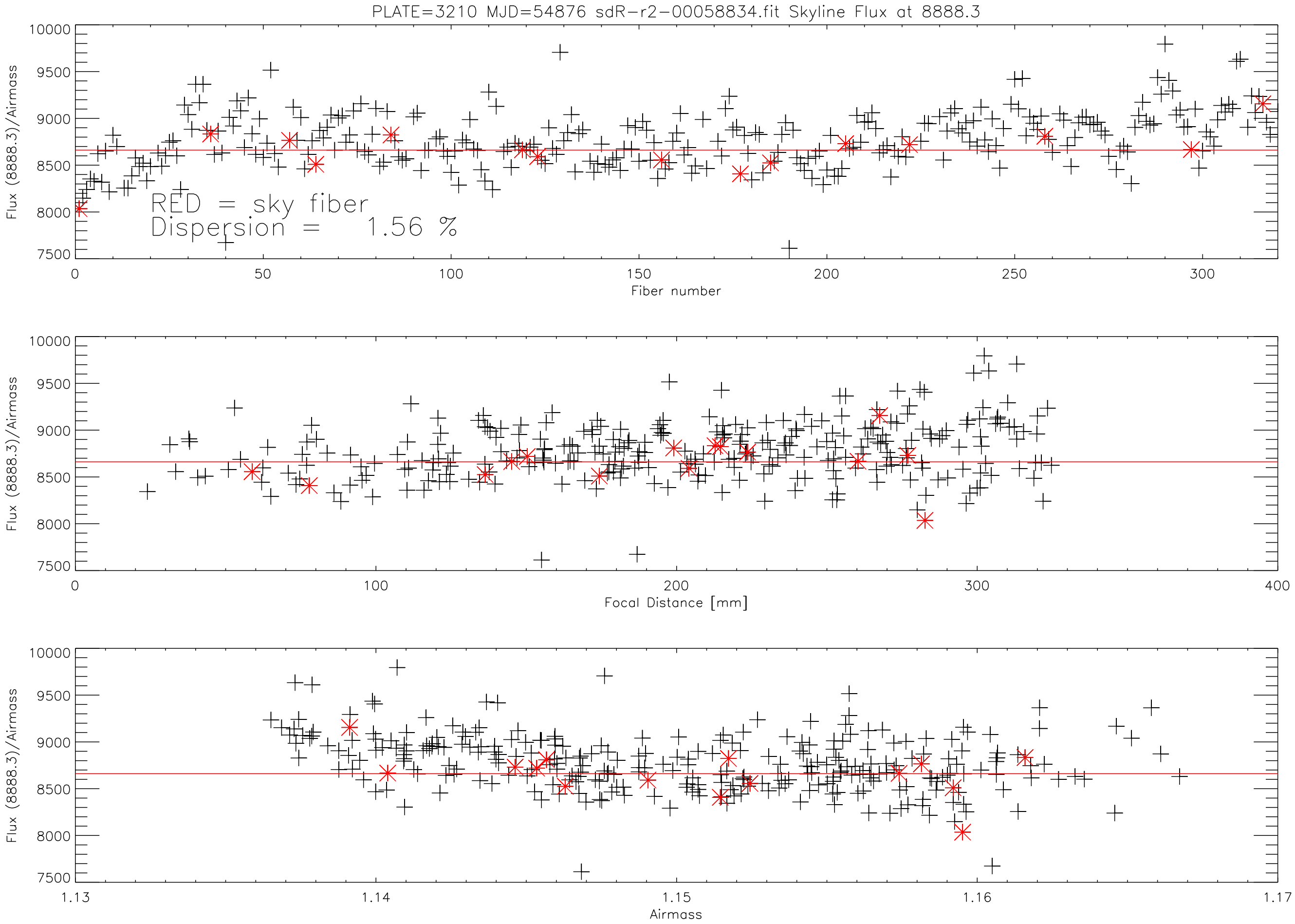
PLATE=3210 MJD=54876 sdR-r2-00058834.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 15

PLATE=3210 MJD=54876 sdR-r2-00058834.fit 2D Sky-subtraction Rescaled Errors




PLATE=3210 MJD=54876 sdR-r2-00058834.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
2400
RED = sky fiber
Dispersion = 2.66 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
2400
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
2400
1.13
1.14
1.15
1.16
1.17
Airmass


PLATE=3210 MJD=54876 sdR-r2-00058834.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
7500
RED = sky fiber
Dispersion = 1.56 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
7500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
10000
9500
9000
8500
8000
7500
1.13
1.14
1.15
1.16
1.17
Airmass