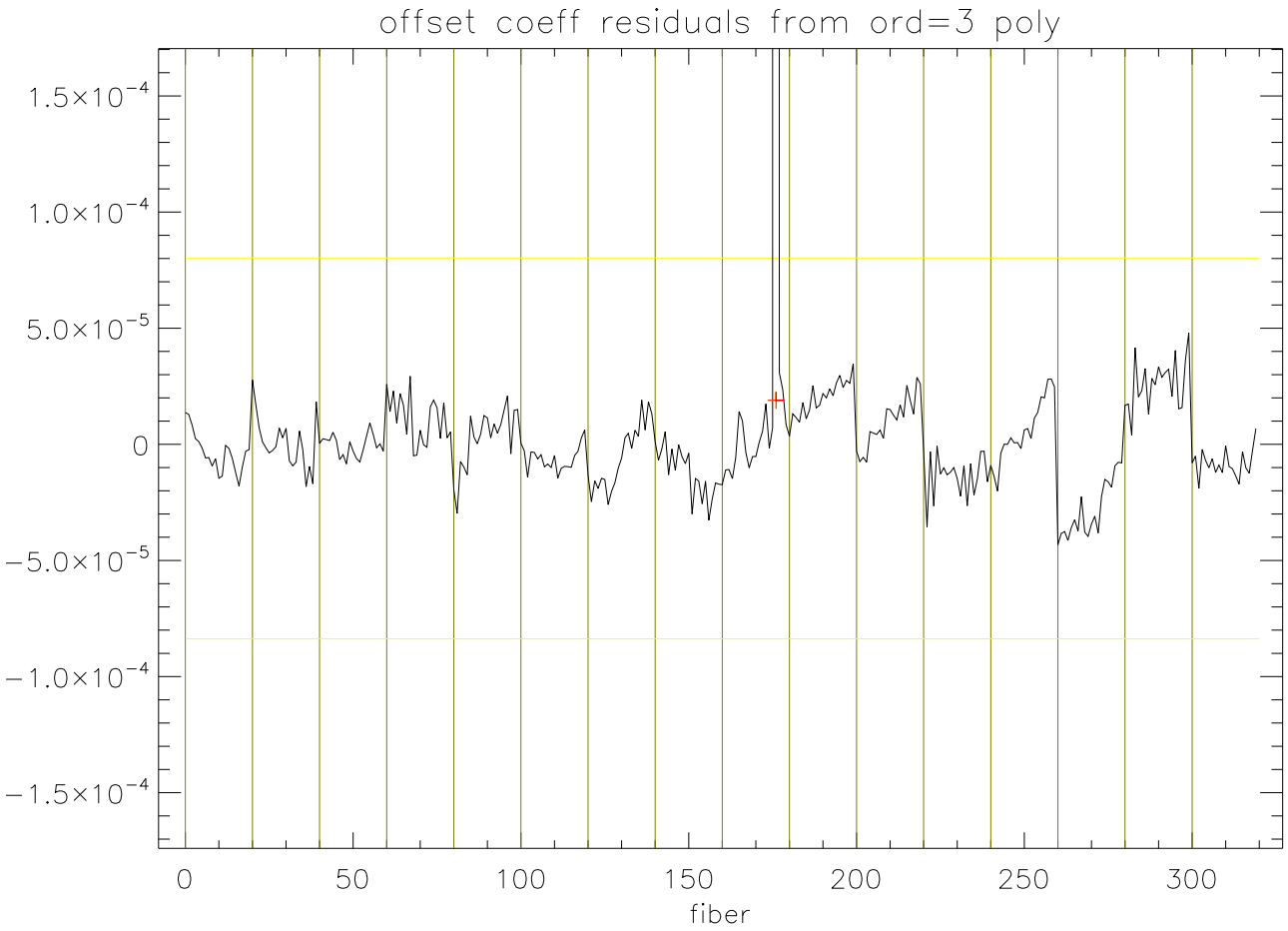
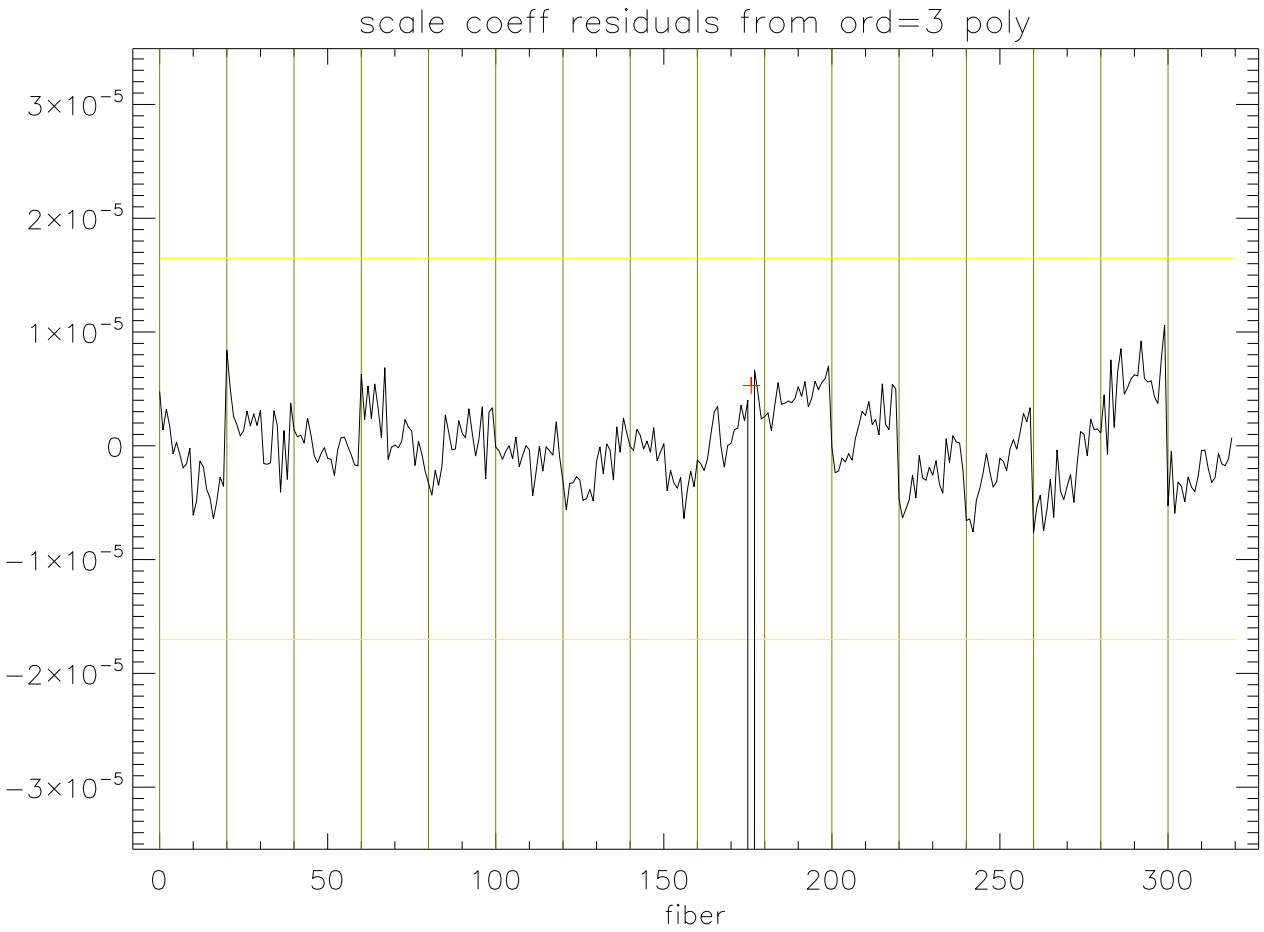
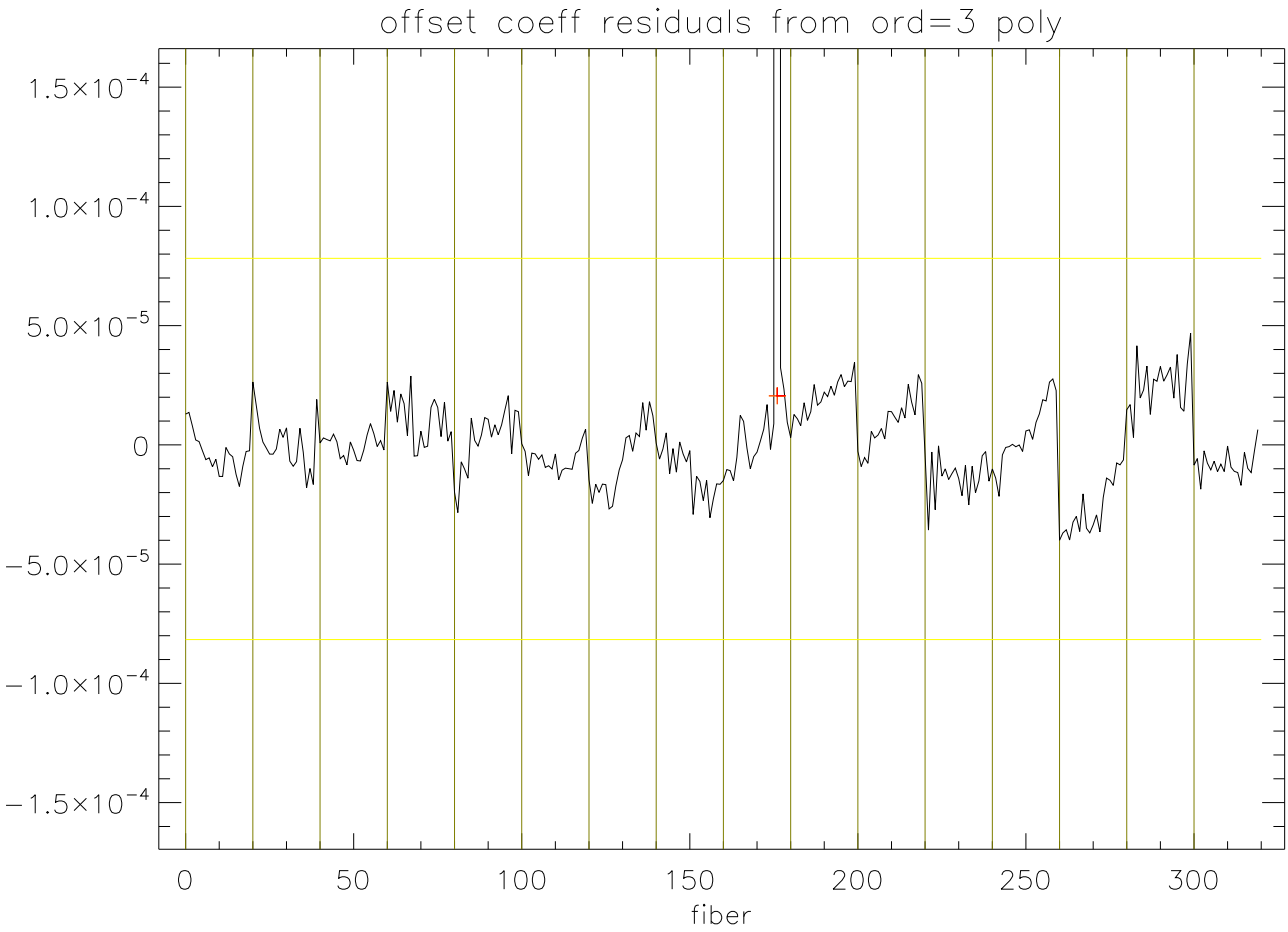
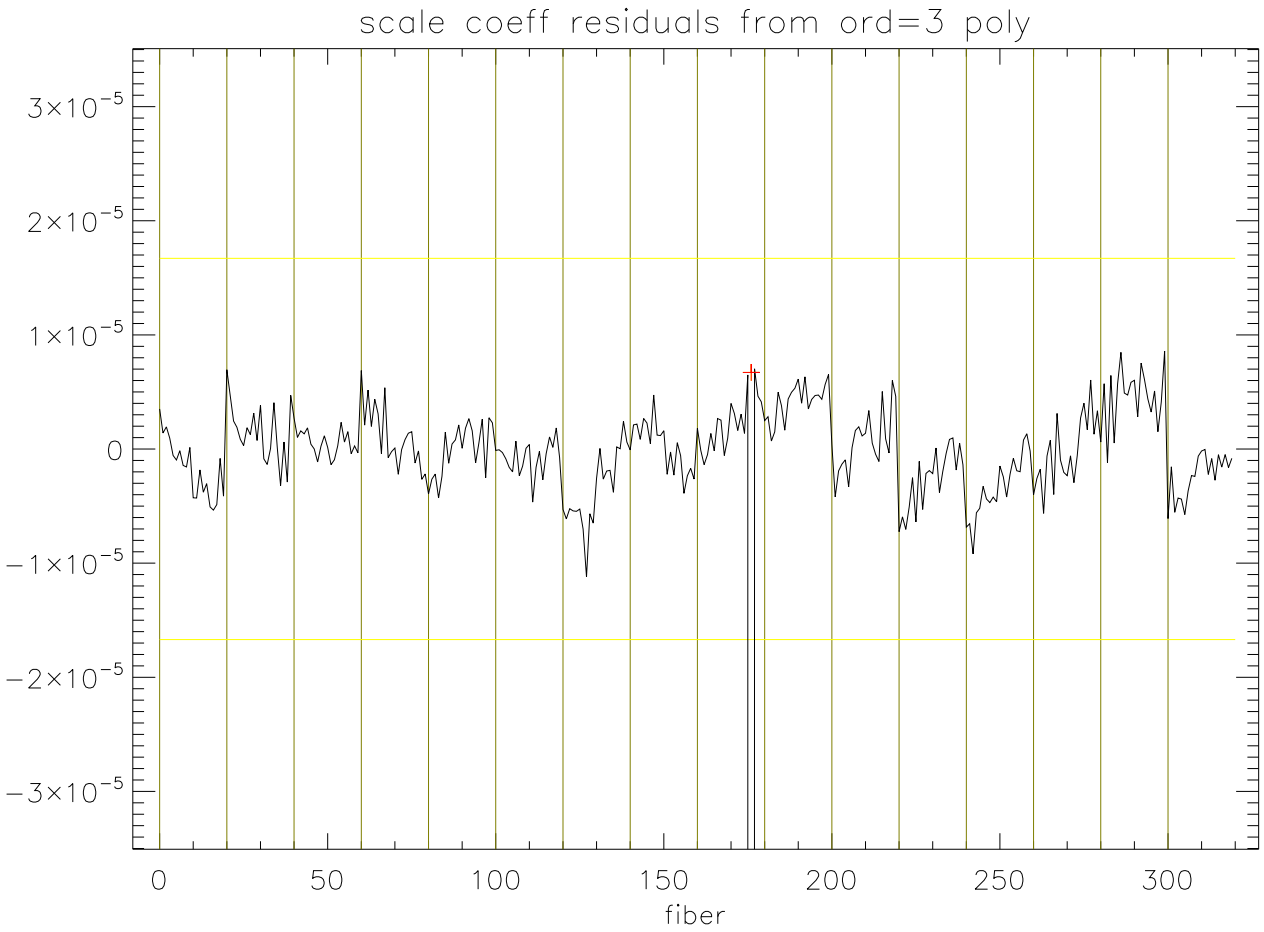
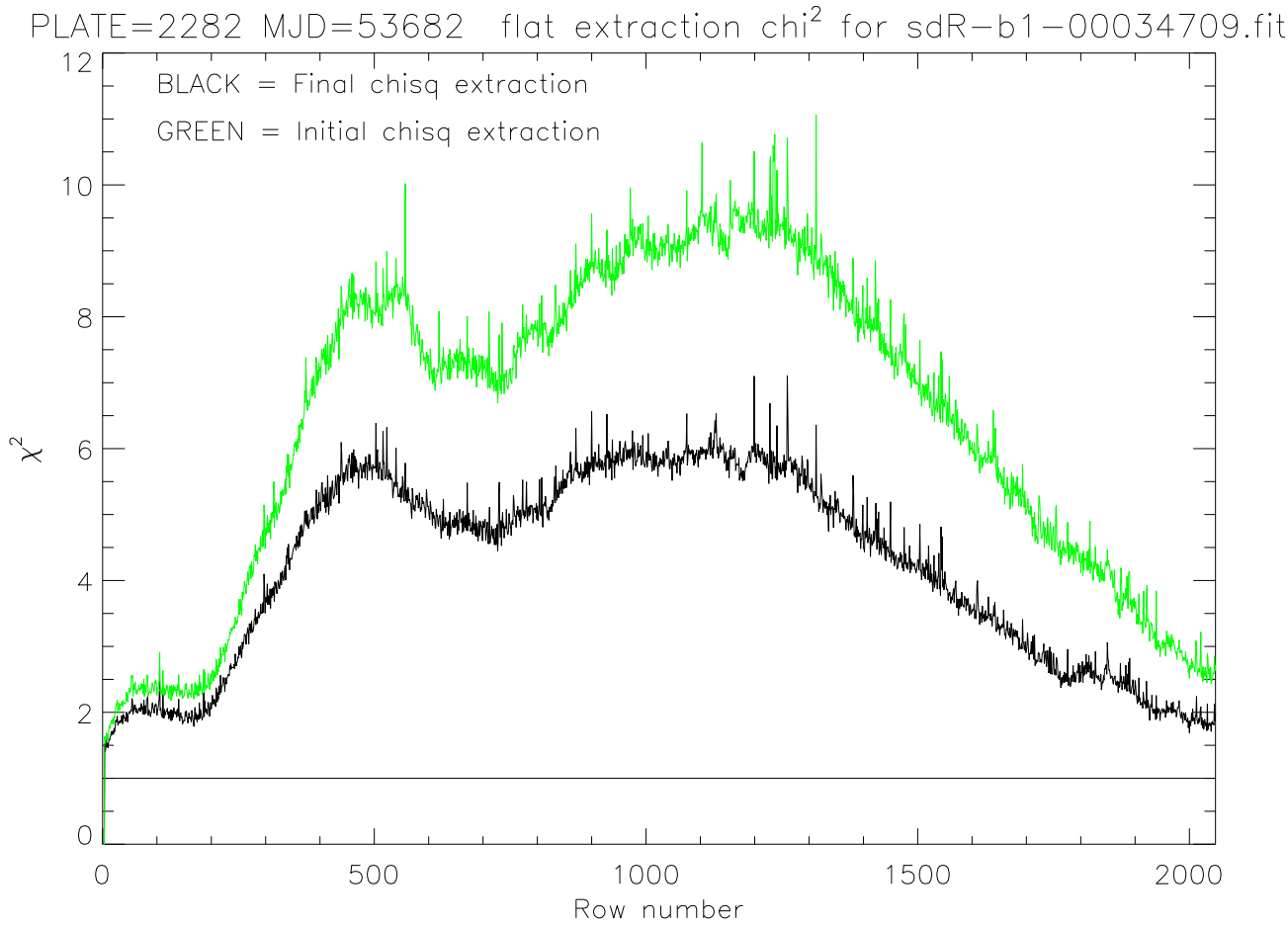
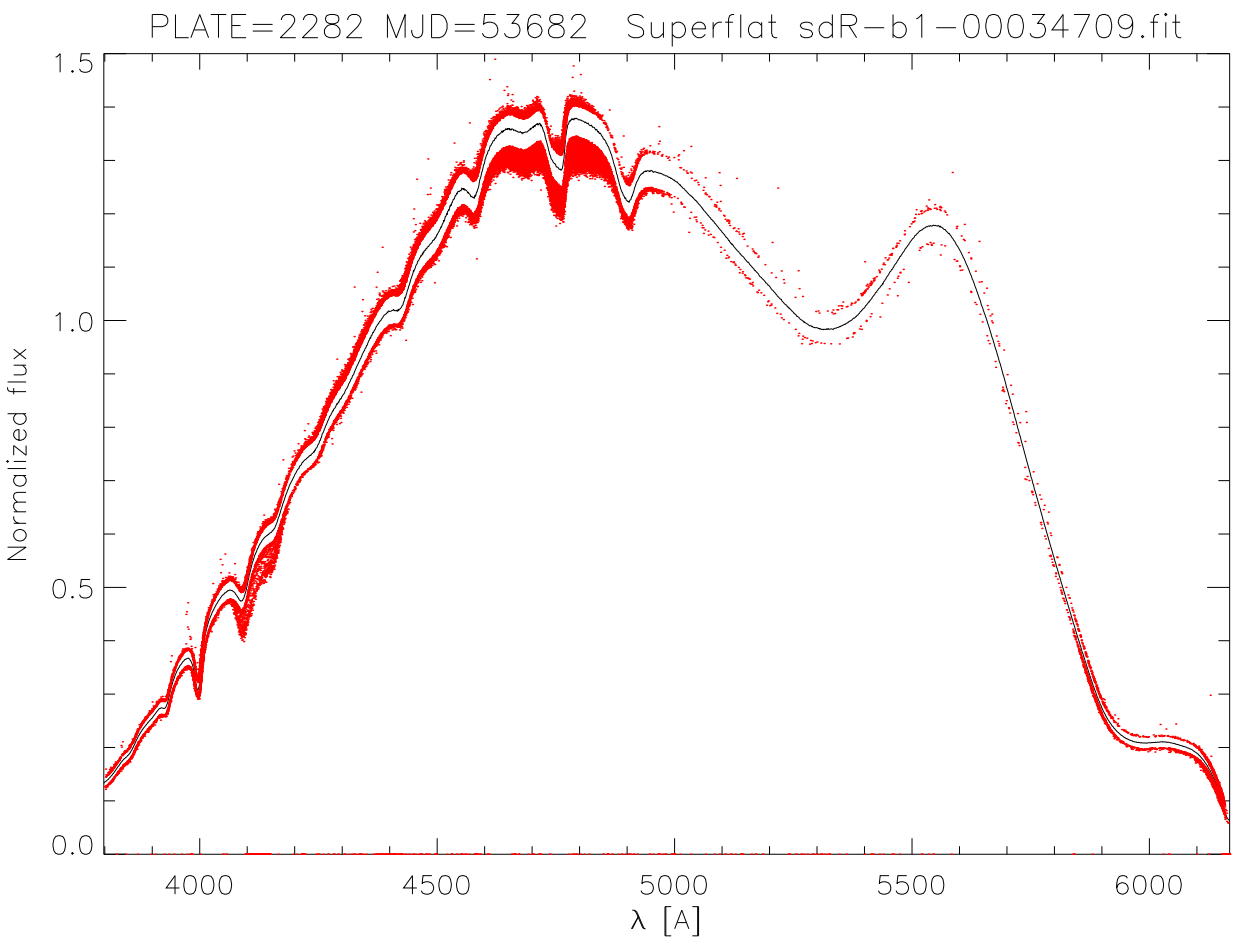

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

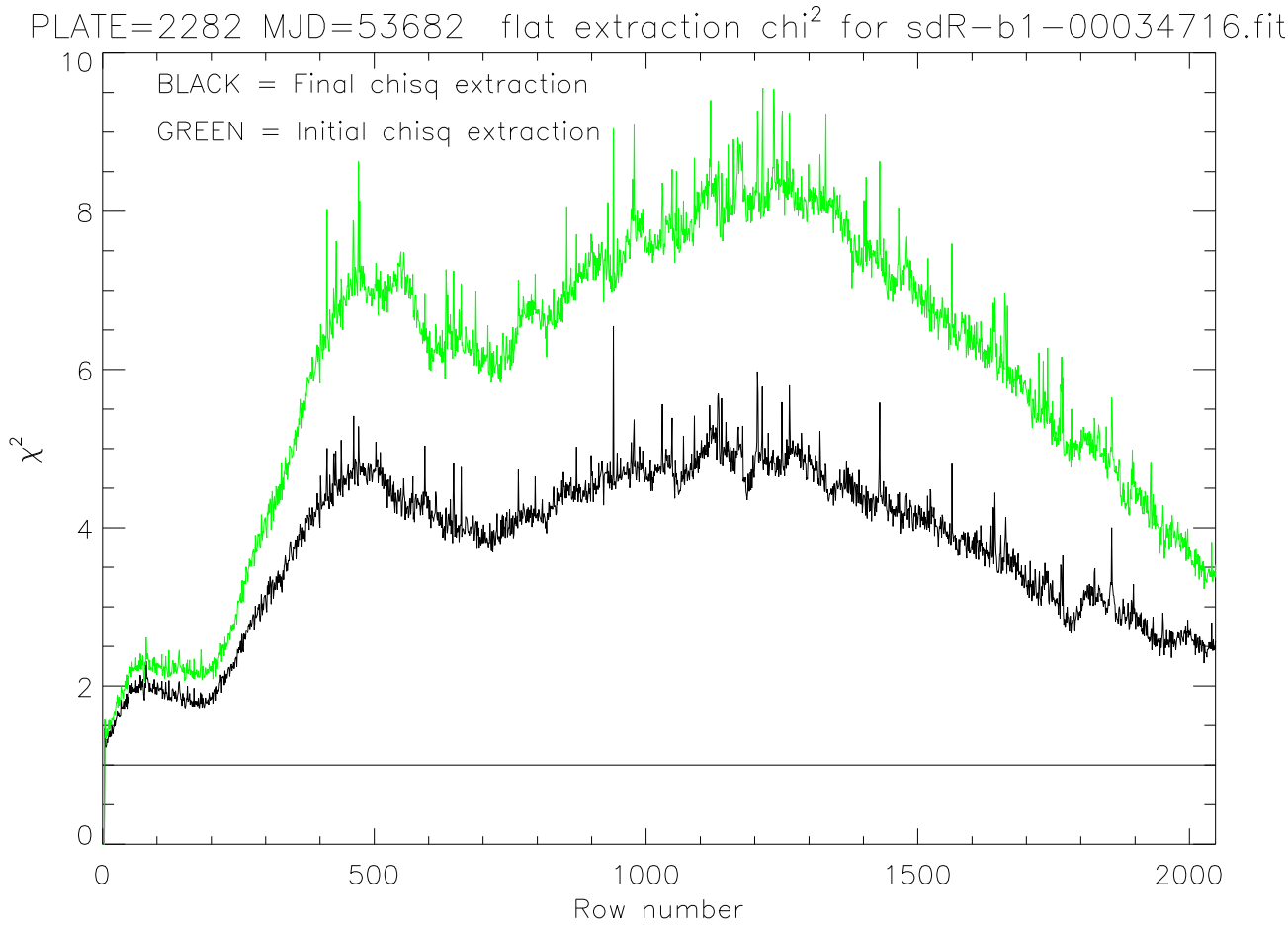

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

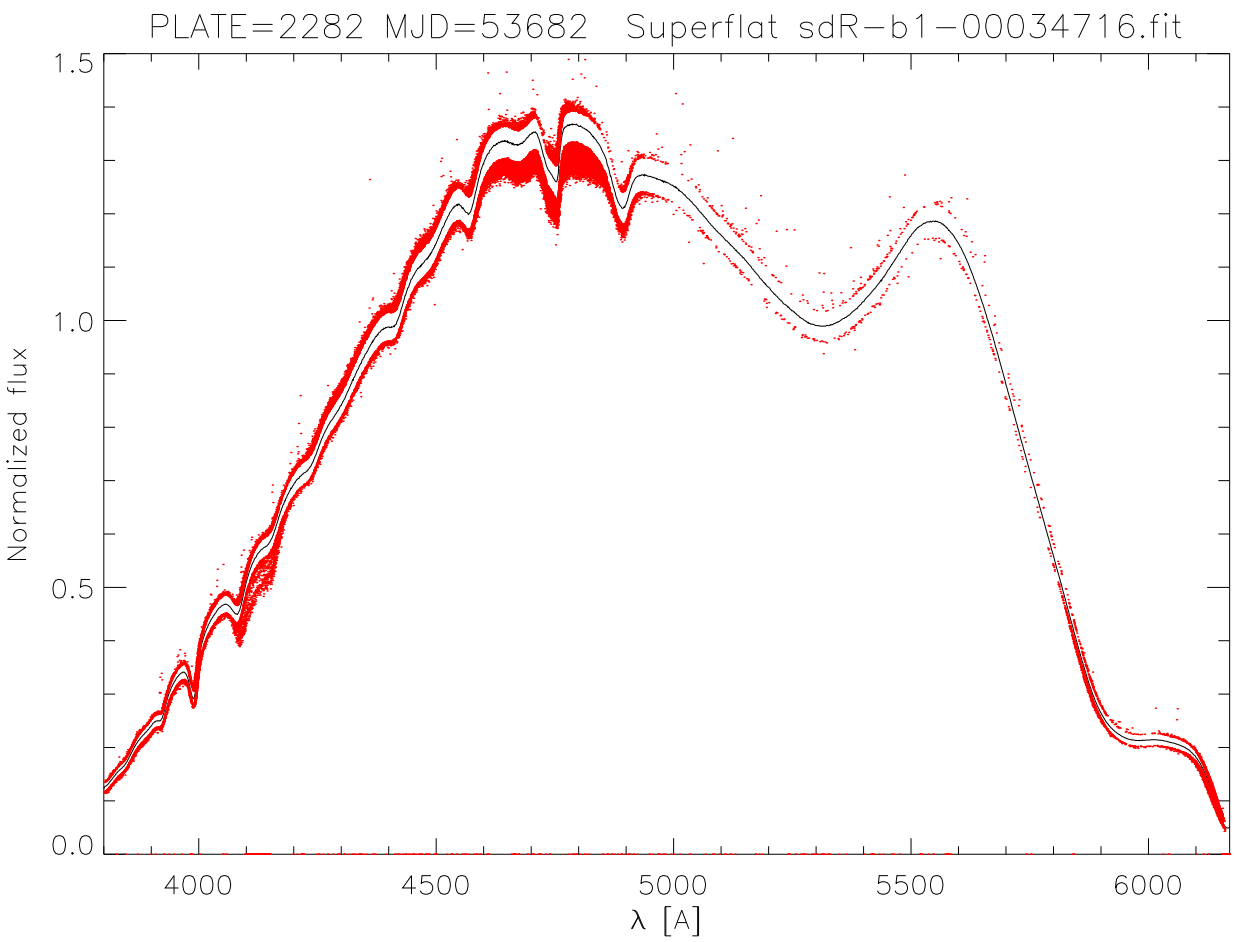

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

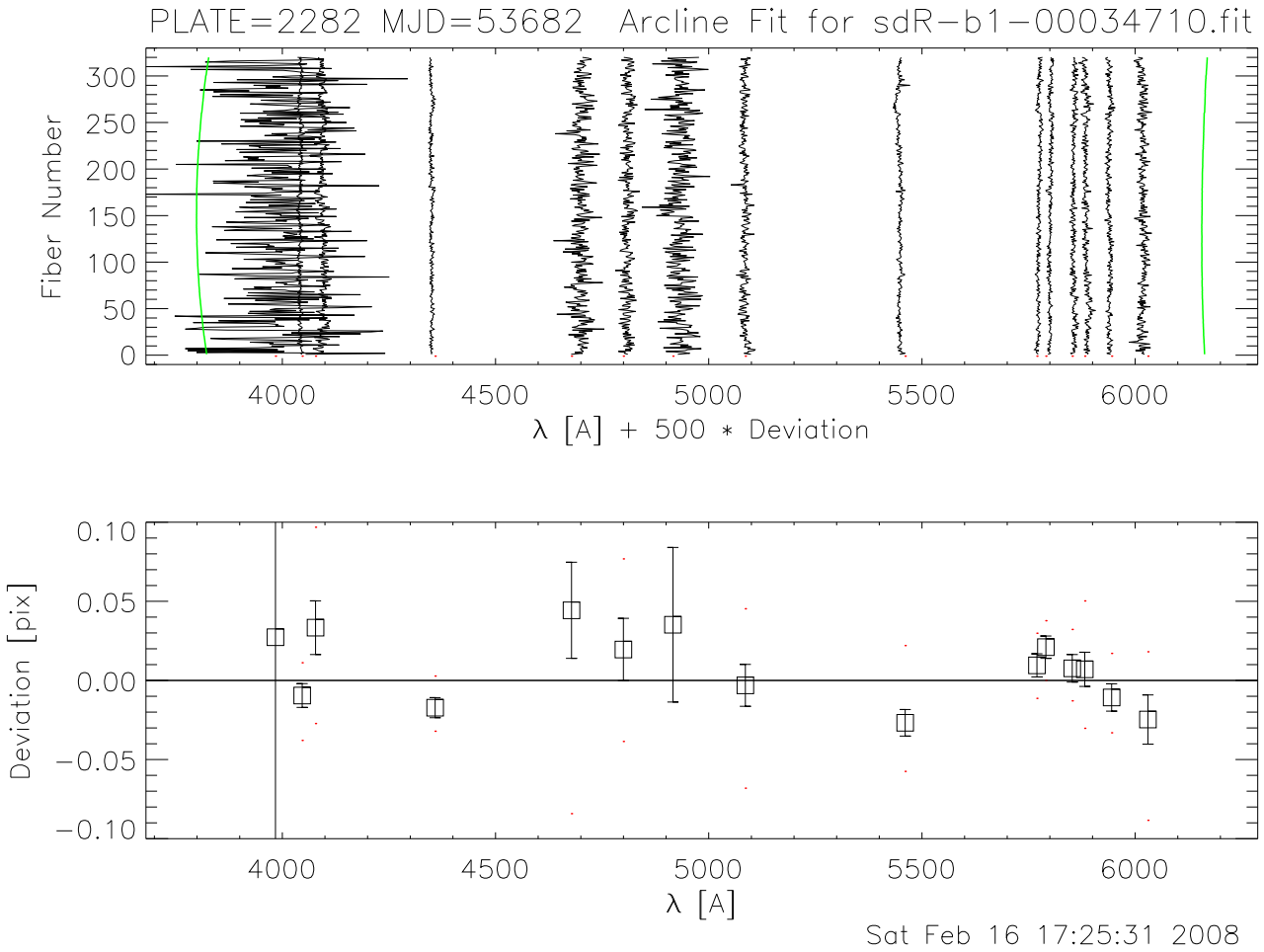

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

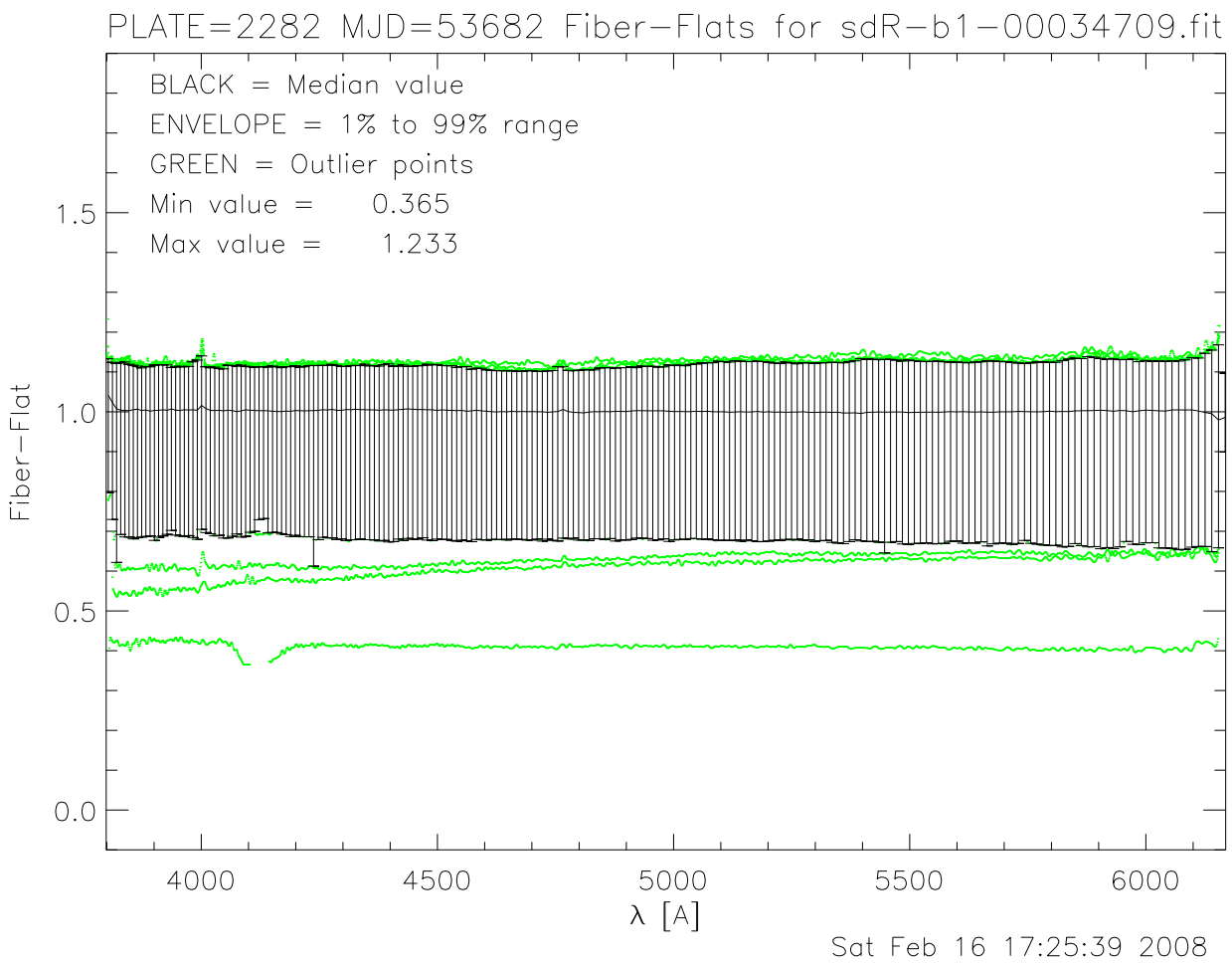

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−b1−00034709.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

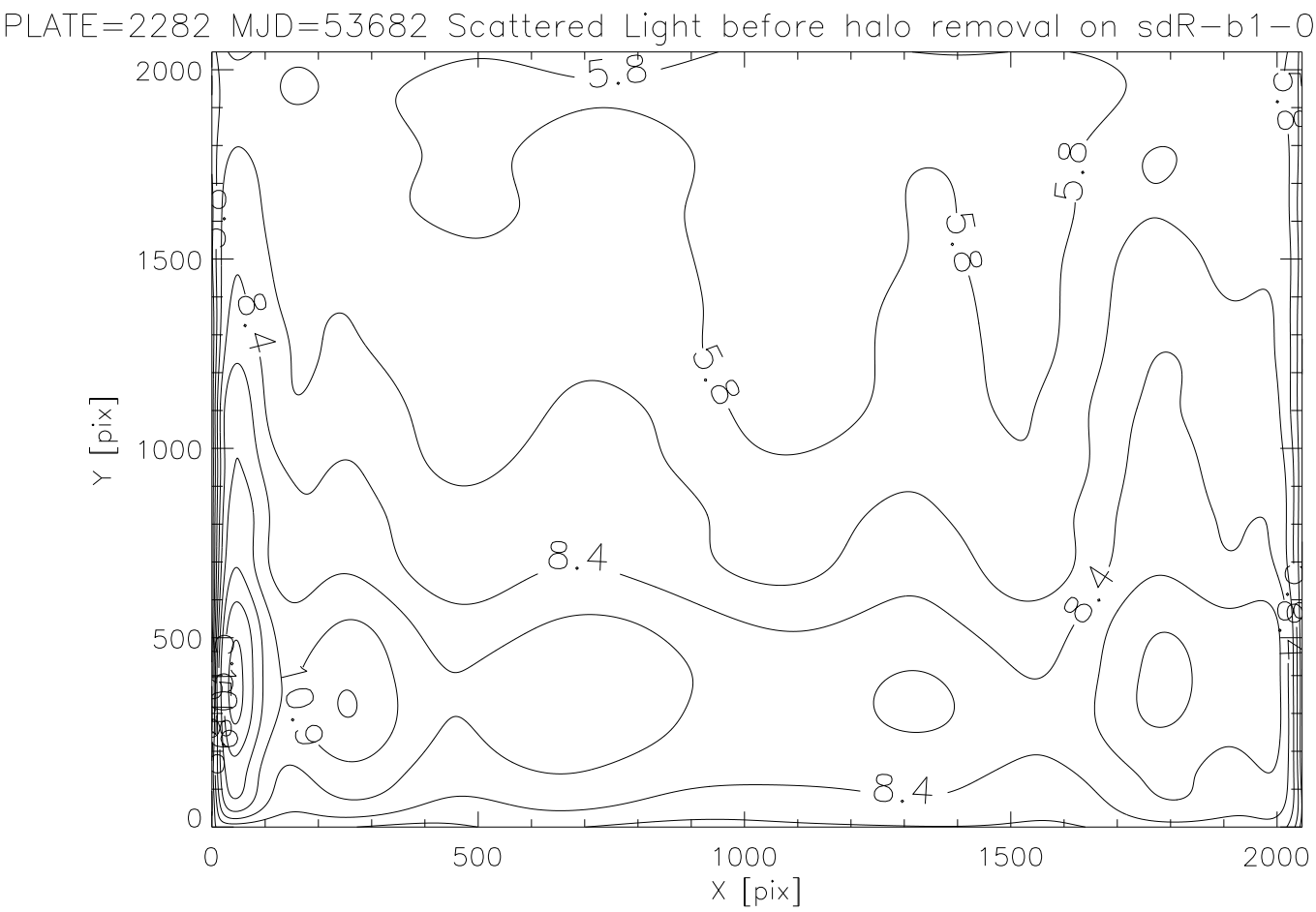

PLATE=2282 MJD=53682 Superflat sdR-b1-00034709.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

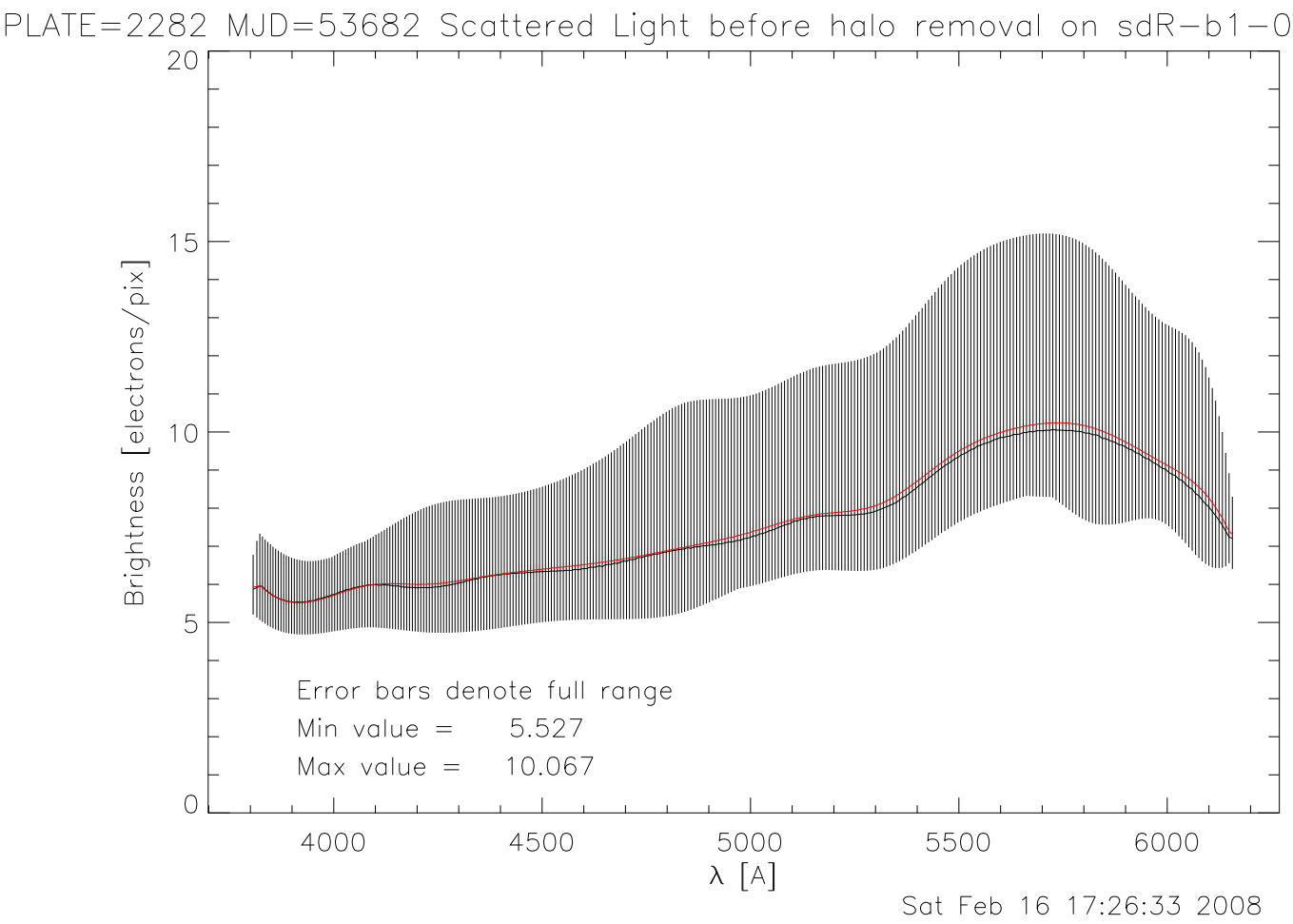

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−b1−00034716.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

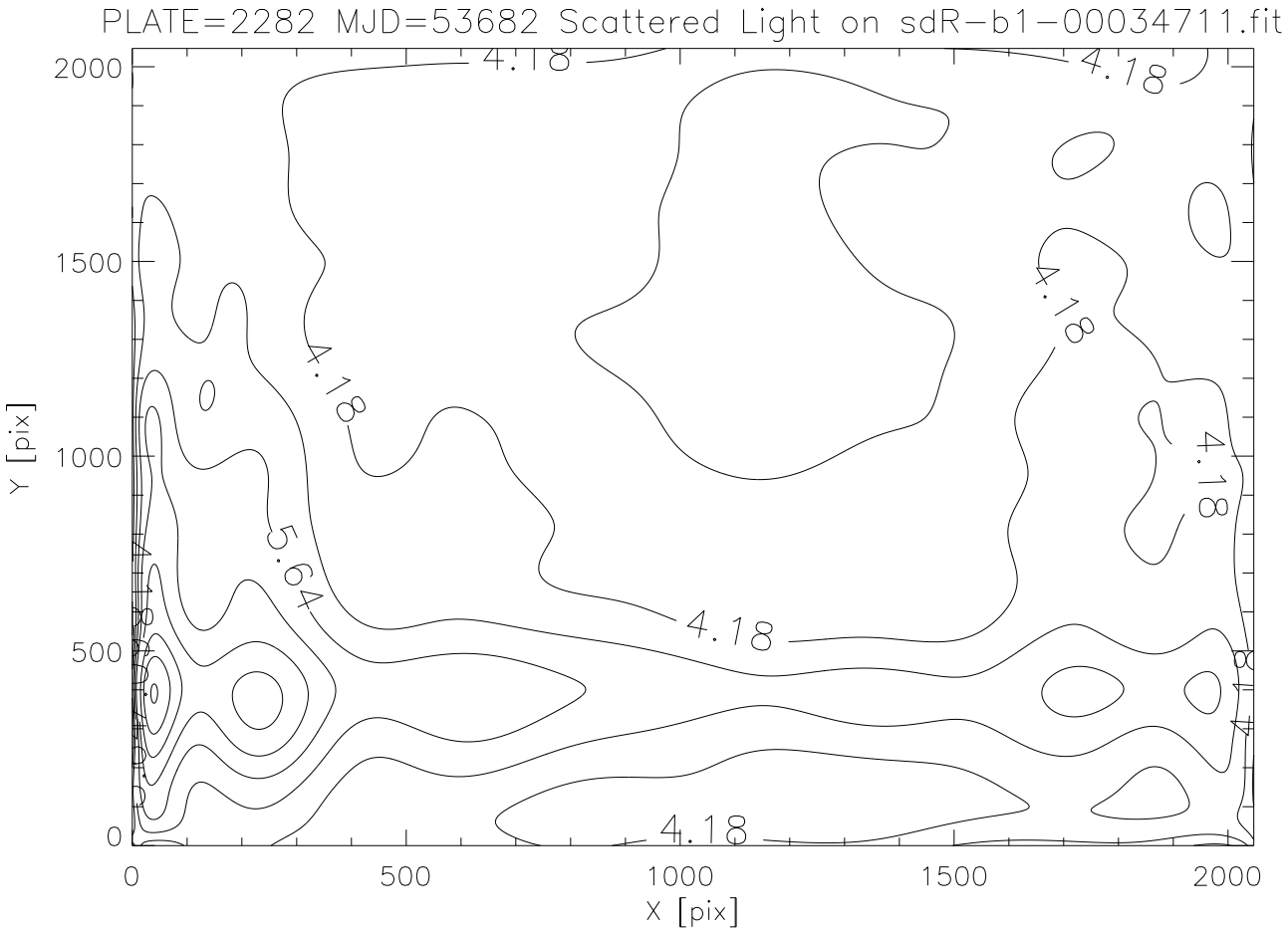

PLATE=2282 MJD=53682 Superflat sdR-b1-00034716.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

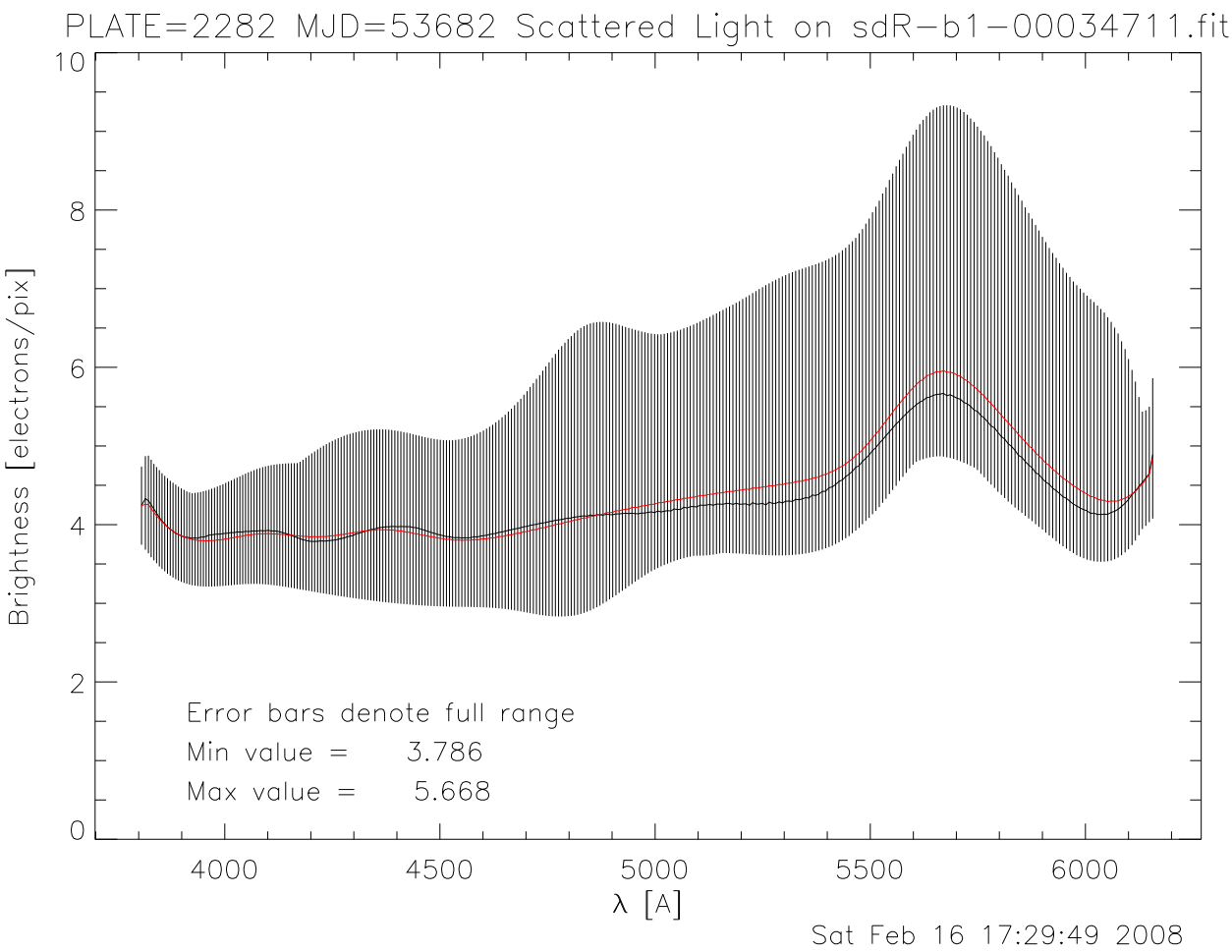

PLATE=2282 MJD=53682 Arcline Fit for sdR-b1-00034710.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 17:25:31 2008

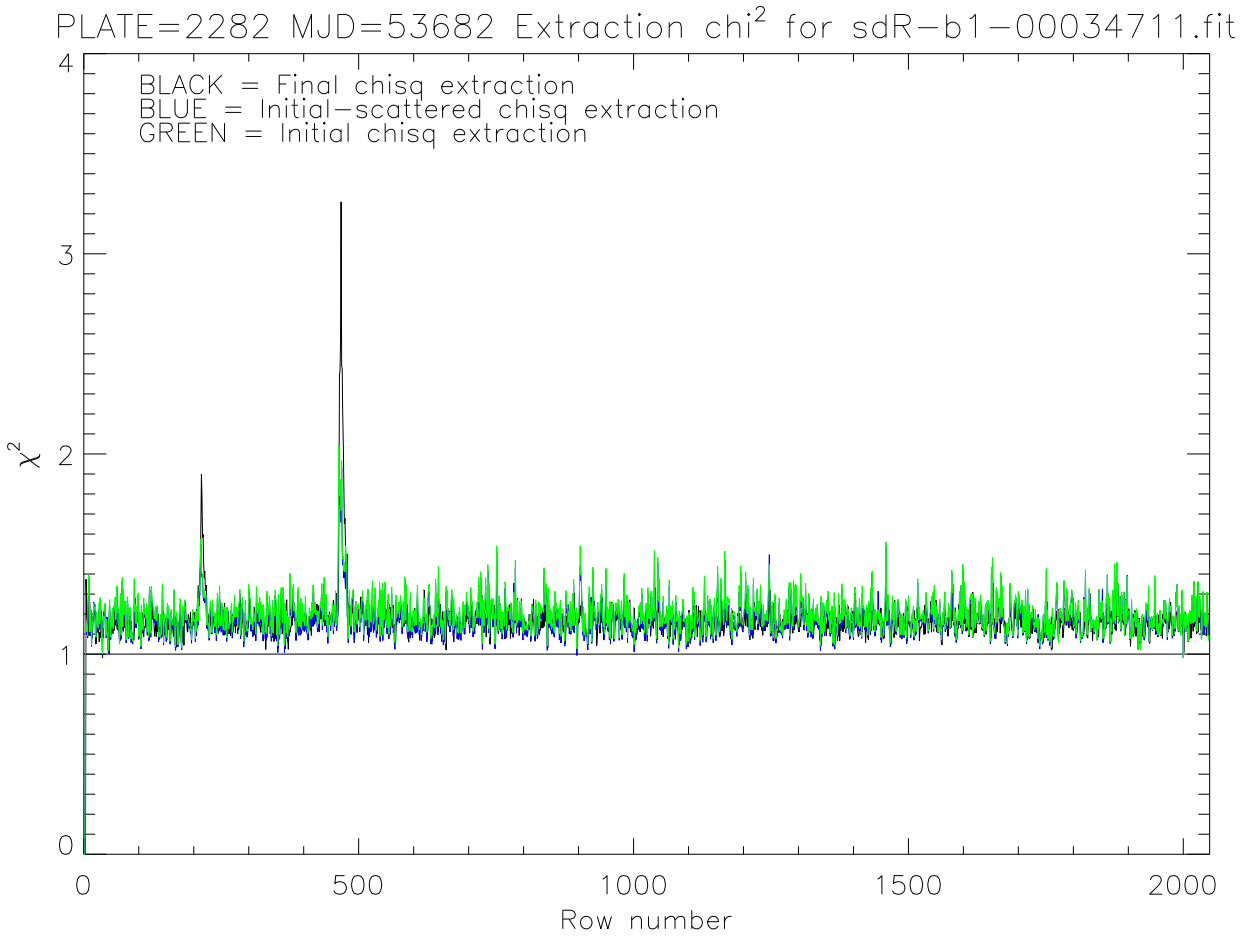

PLATE=2282 MJD=53682 Fiber-Flats for sdR-b1-00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.365
Max value = 1.233
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 17:25:39 2008

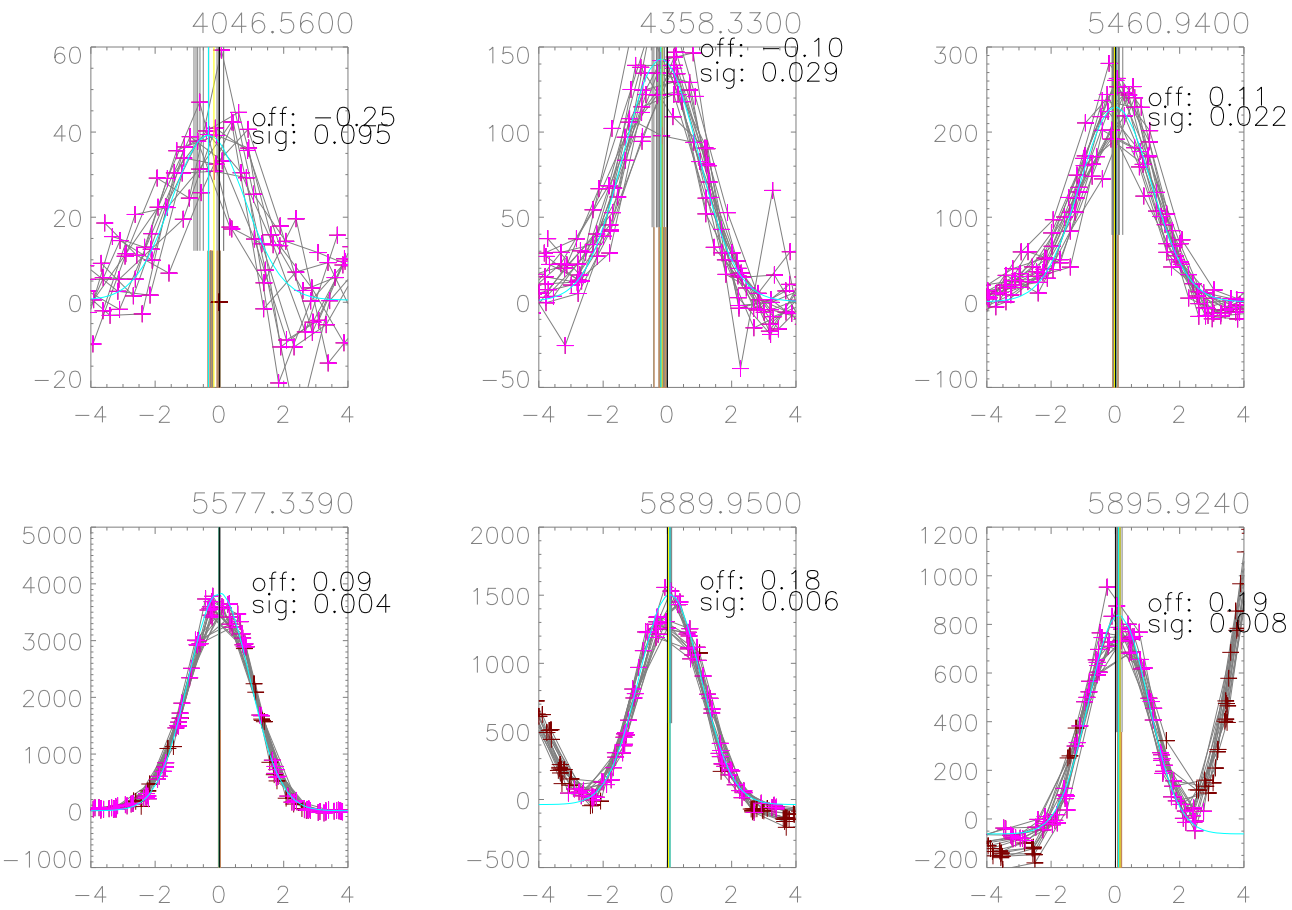

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR−b1−00034711.f
5.8
8.4
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

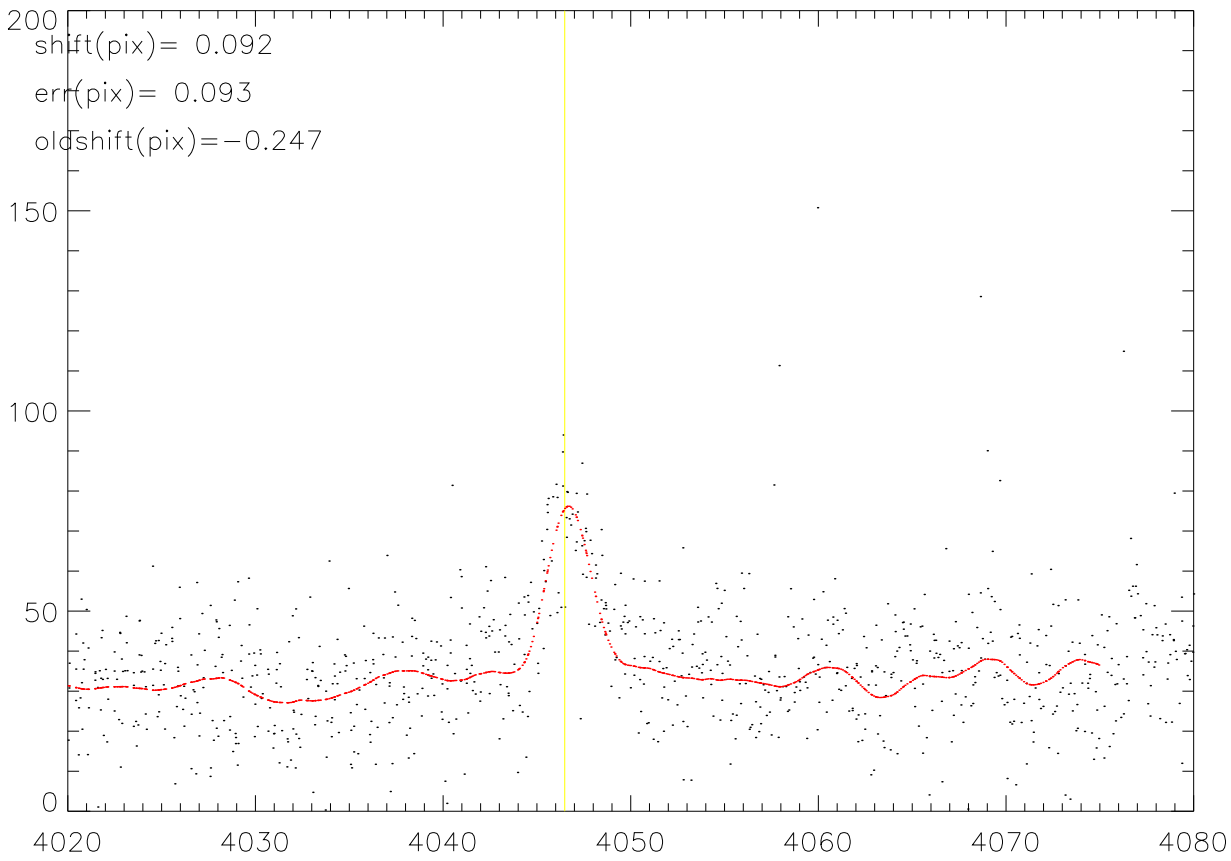

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-b1-00034711.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 5.527
Max value = 10.067
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 17:26:33 2008

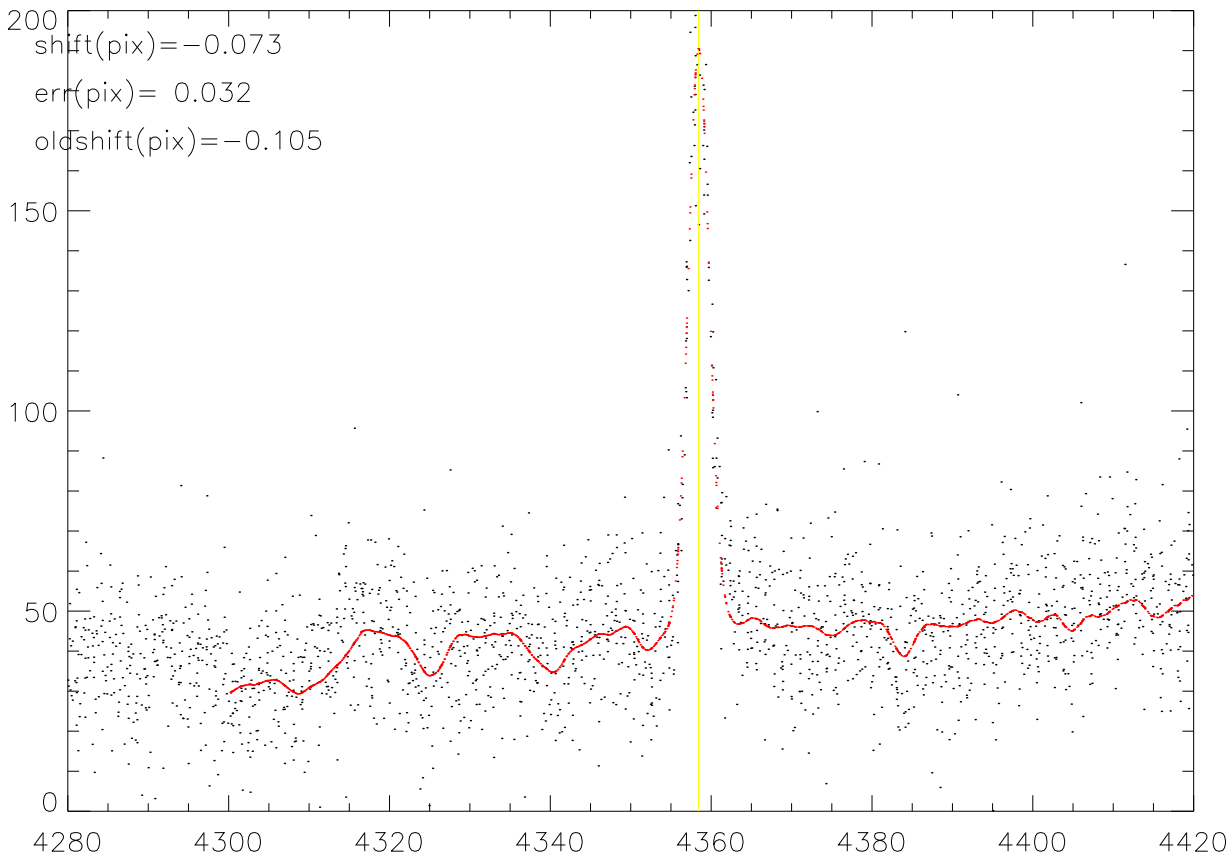

PLATE=2282 MJD=53682 Scattered Light on sdR-b1-00034711.fit
4.18
4.18
4.18
4.18
4.18
4.18
4.18
5.64
0
0
0
Y [pix]
X [pix]
2000
1500
1000
500
0
0
500
1000
1500
2000

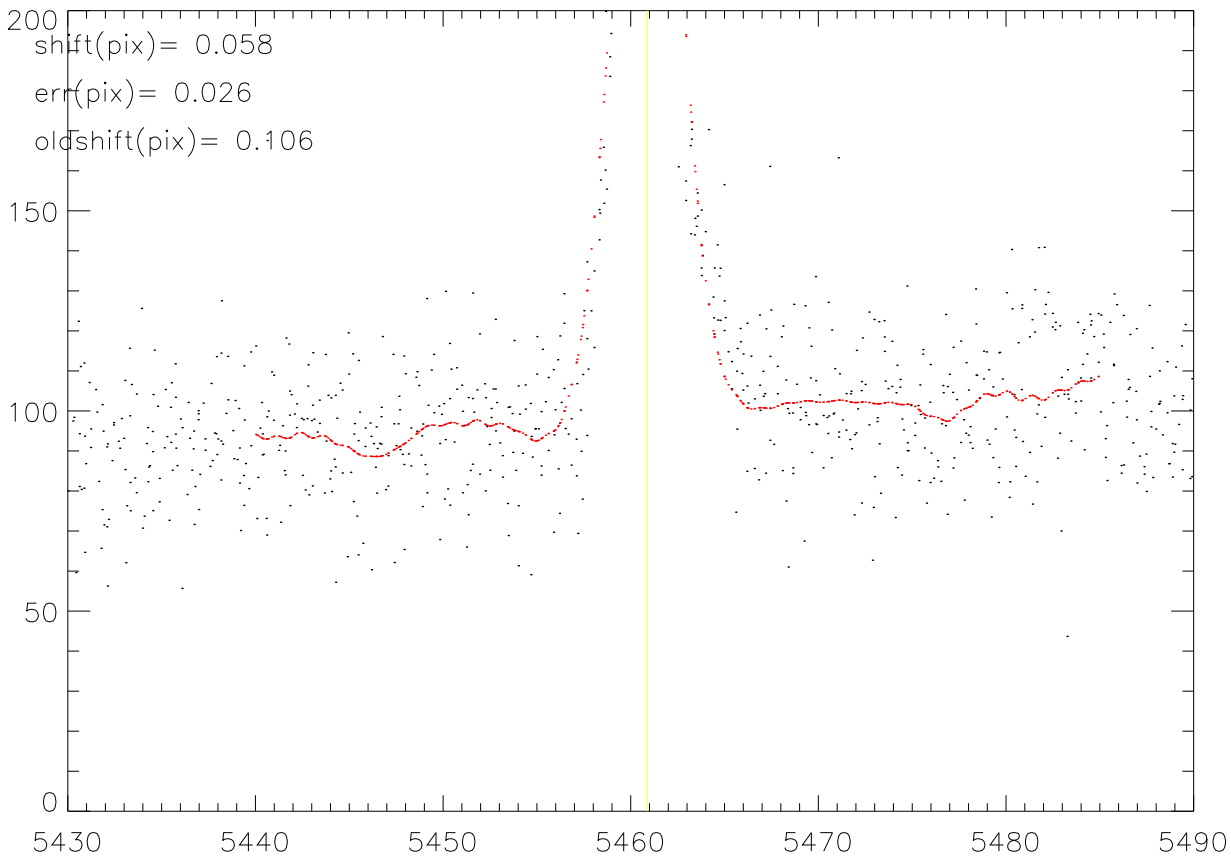

PLATE=2282 MJD=53682 Scattered Light on sdR-b1-00034711.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.786
Max value = 5.668
Sat Feb 16 17:29:49 2008

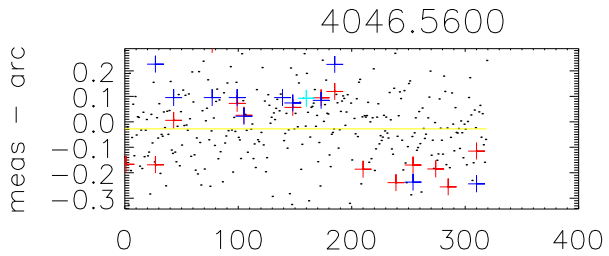

PLATE=2282 MJD=53682 Extraction chi^2 for sdR−b1−00034711.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

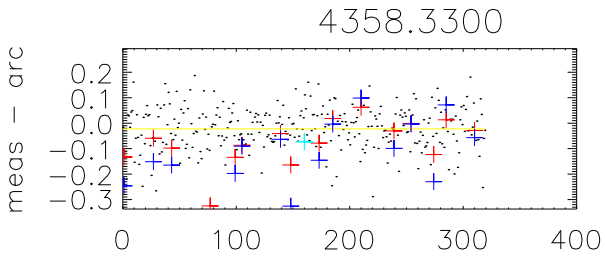

4046.5600
off: −0.25
sig: 0.095
4358.3300
off: −0.10
sig: 0.029
5460.9400
off: 0.11
sig: 0.022
5577.3390
off: 0.09
sig: 0.004
5889.9500
off: 0.18
sig: 0.006
5895.9240
off: 0.19
sig: 0.008

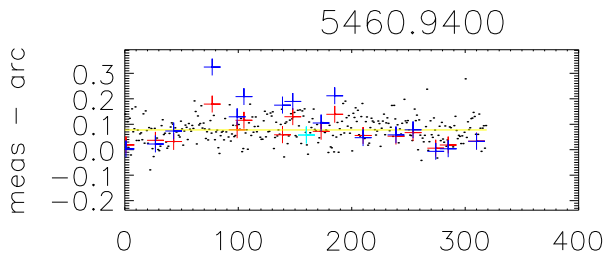

shift(pix)= 0.092
err(pix)= 0.093
oldshift(pix)=−0.247
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

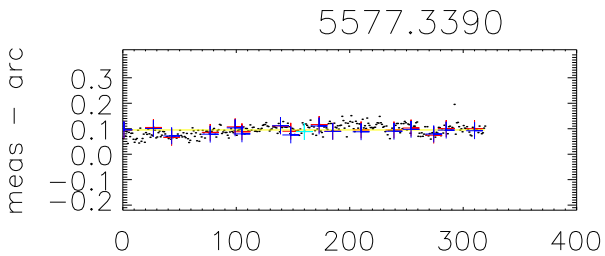

shift(pix)=−0.073
err(pix)= 0.032
oldshift(pix)=−0.105
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

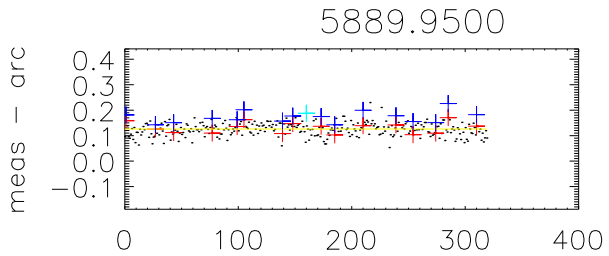

shift(pix)= 0.058
err(pix)= 0.026
oldshift(pix)= 0.106
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

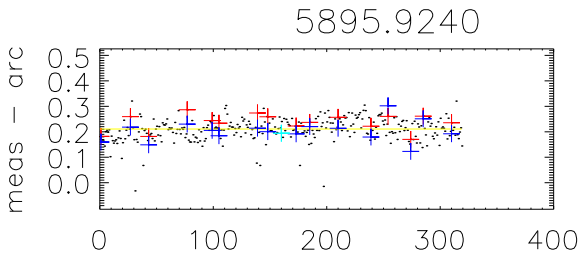

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

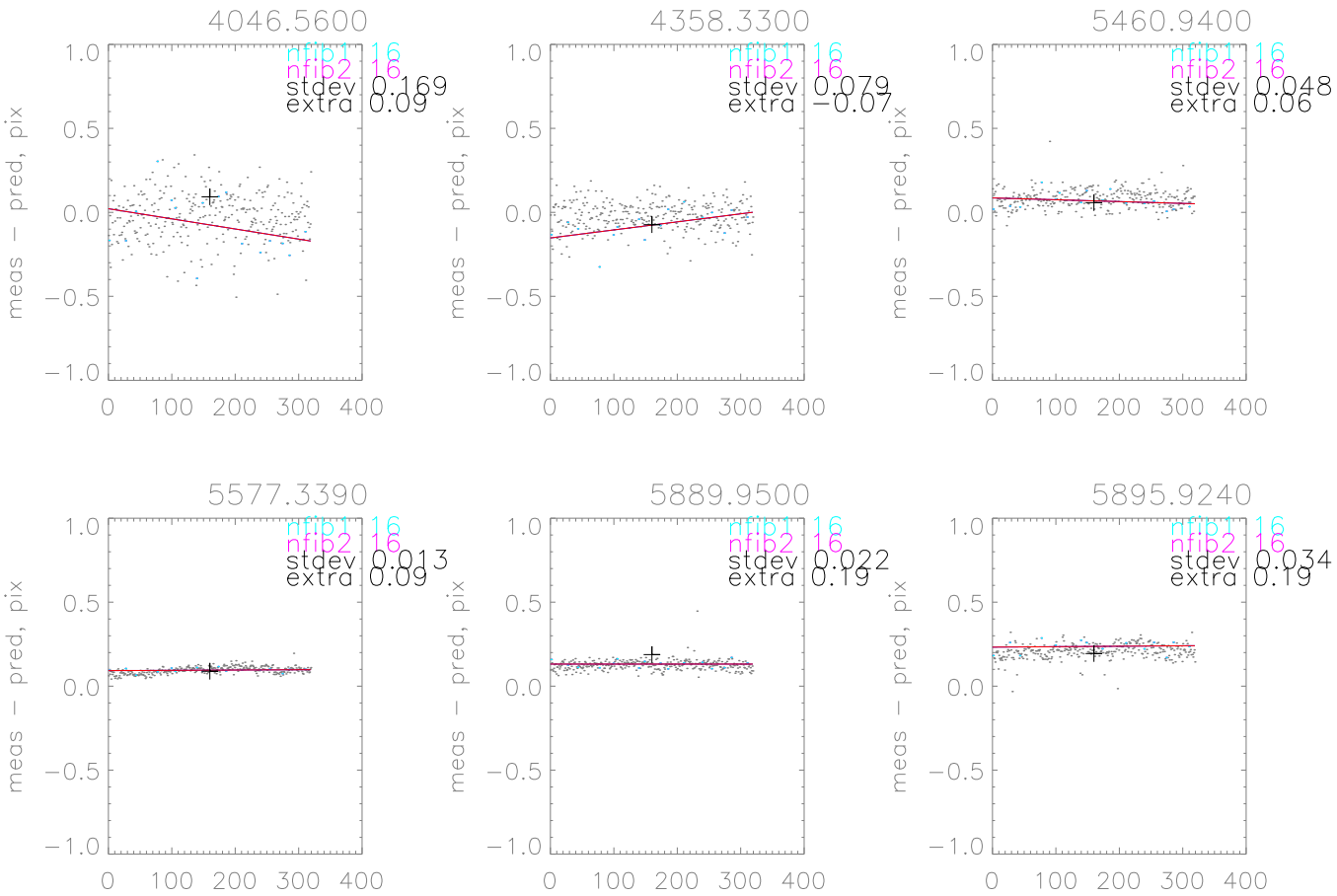

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

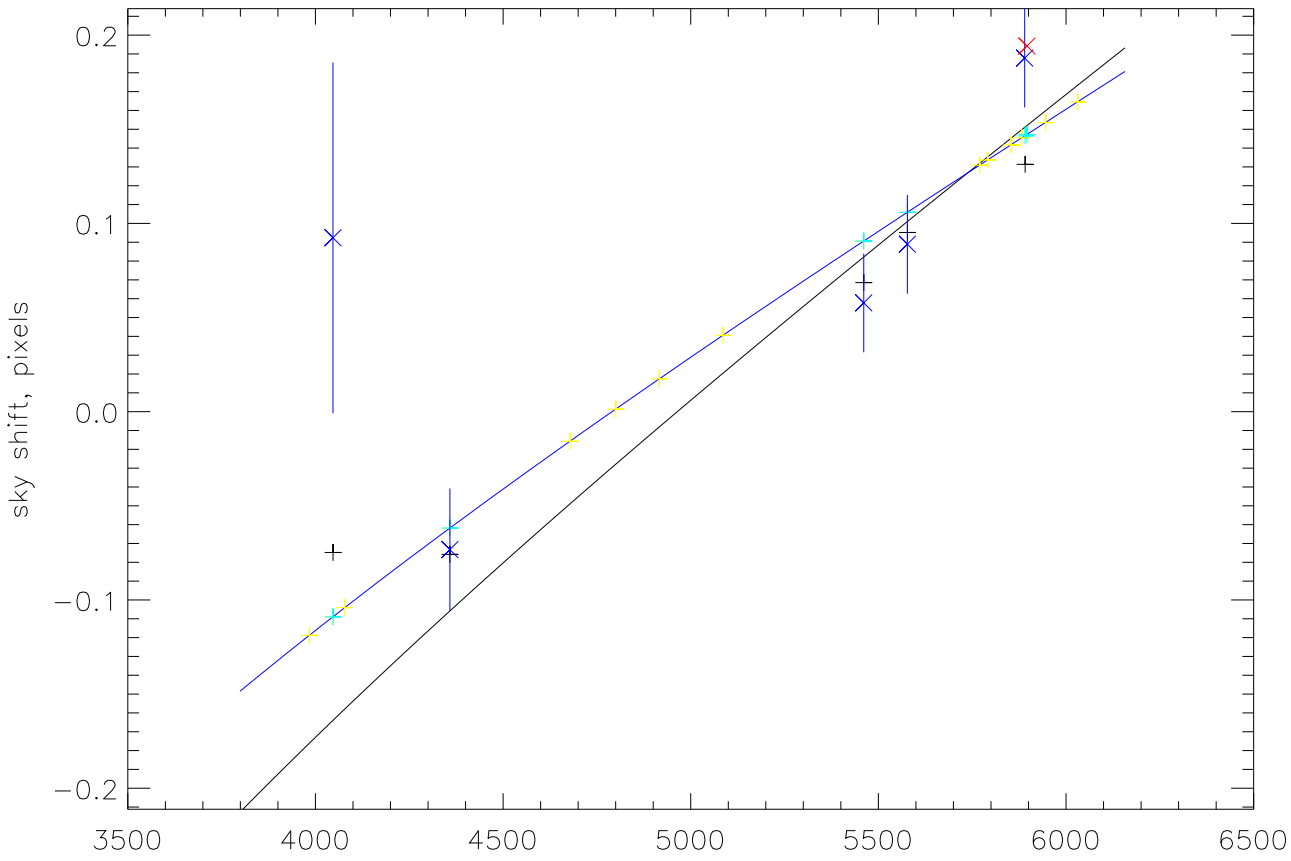

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

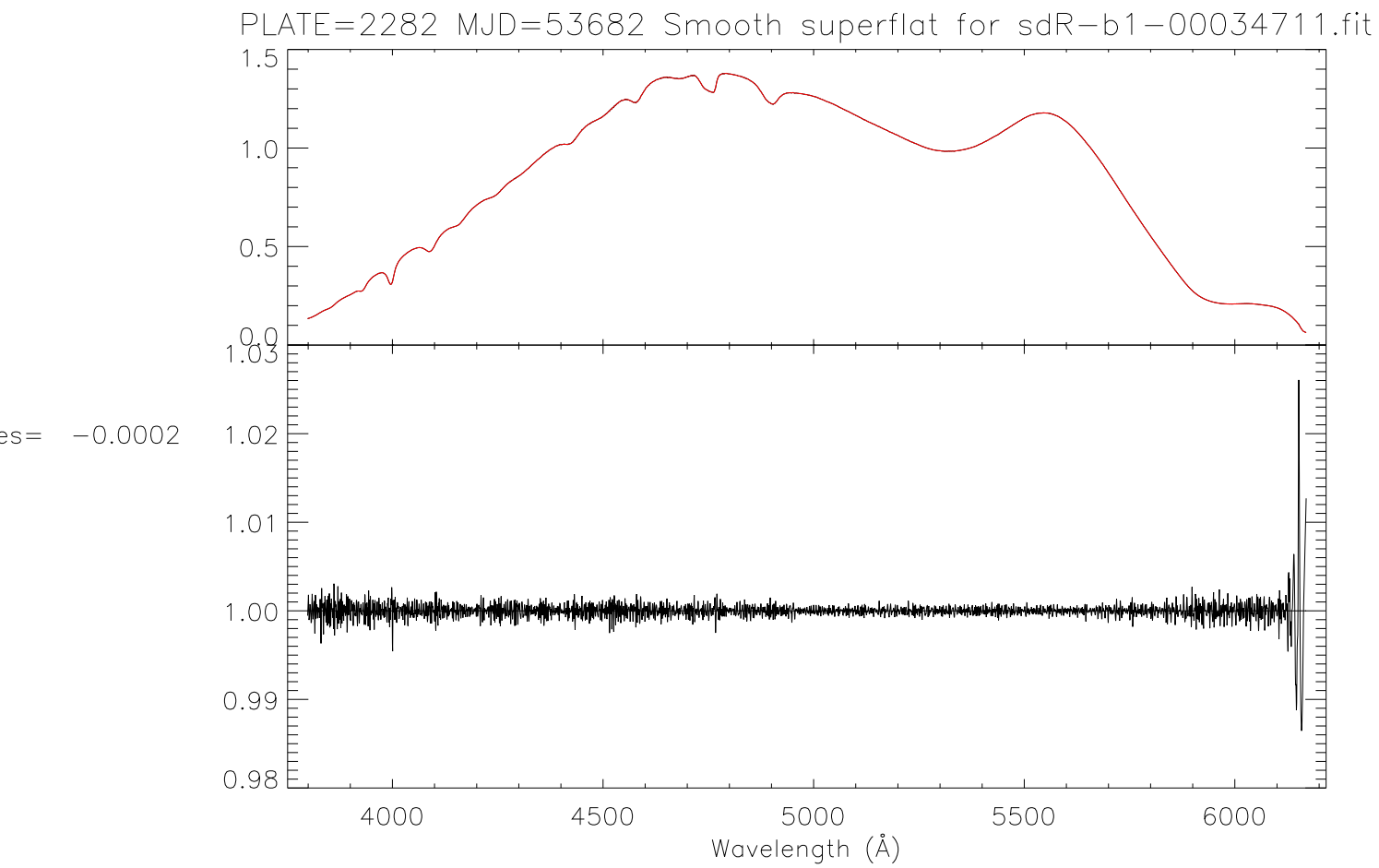

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

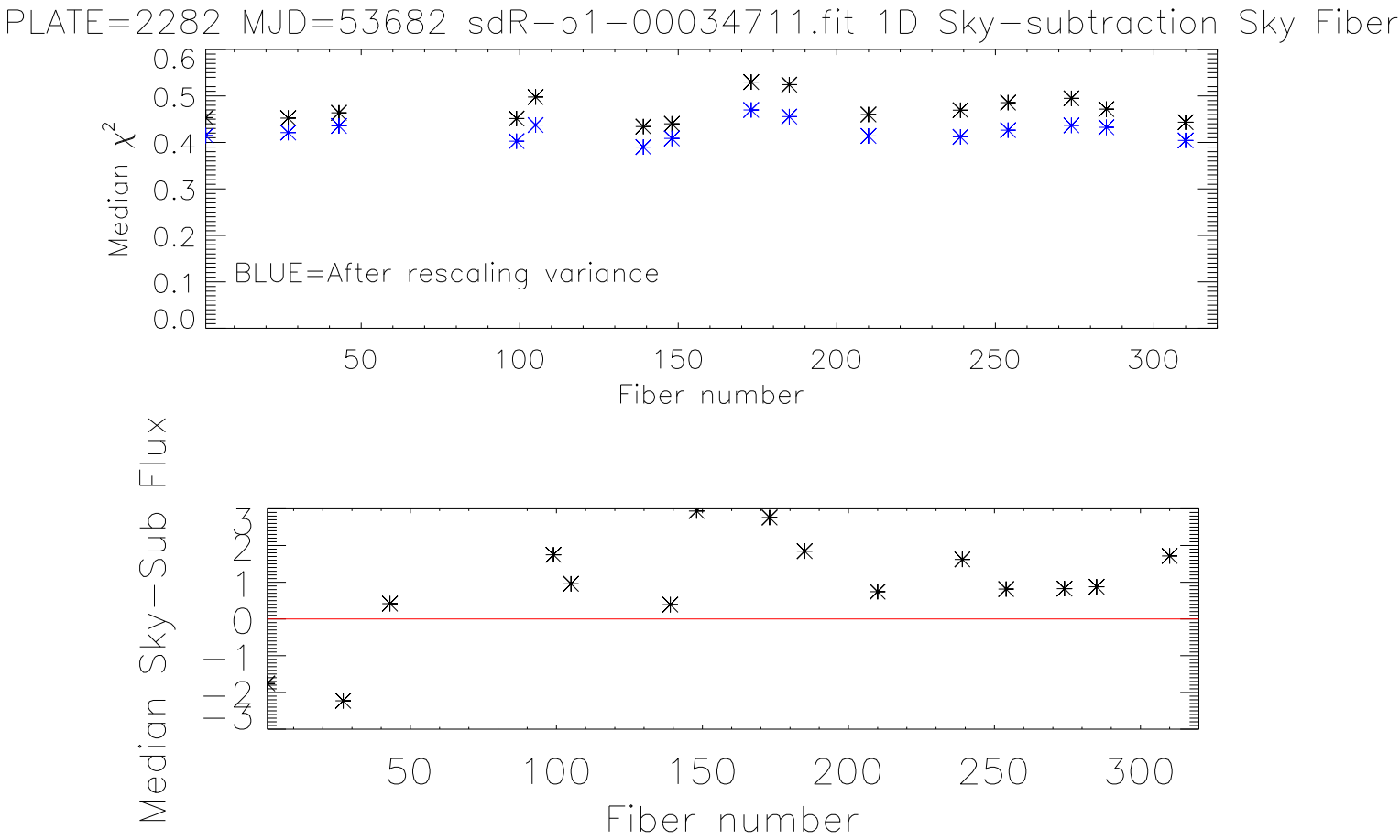

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

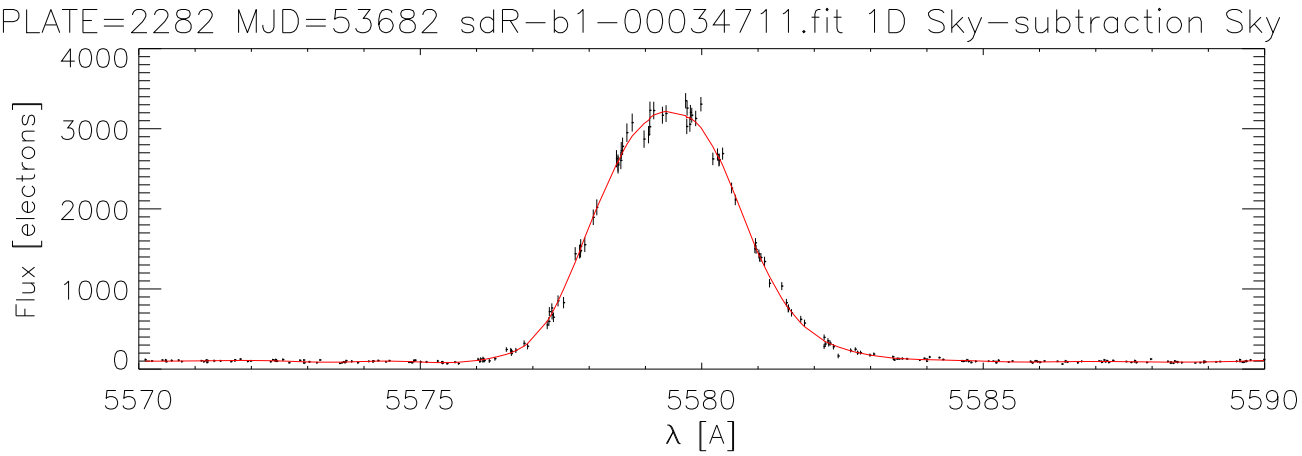

4046.5600
nfib1 16
nfib2 16
stdev 0.169
extra 0.09
4358.3300
nfib1 16
nfib2 16
stdev 0.079
extra −0.07
5460.9400
nfib1 16
nfib2 16
stdev 0.048
extra 0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra 0.09
5889.9500
nfib1 16
nfib2 16
stdev 0.022
extra 0.19
5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

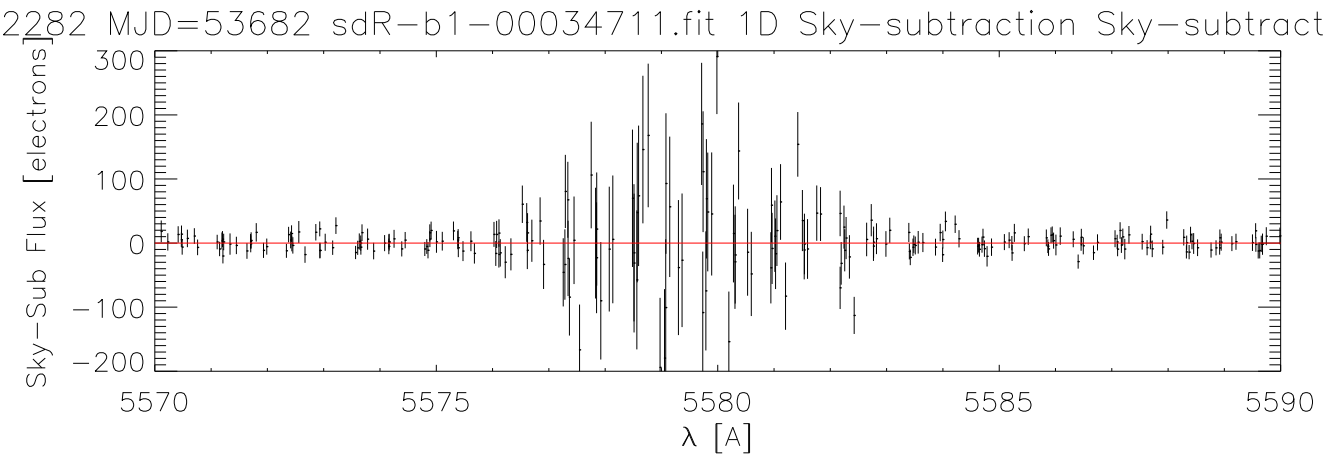

0.2
0.1
0.0
−0.1
−0.2
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

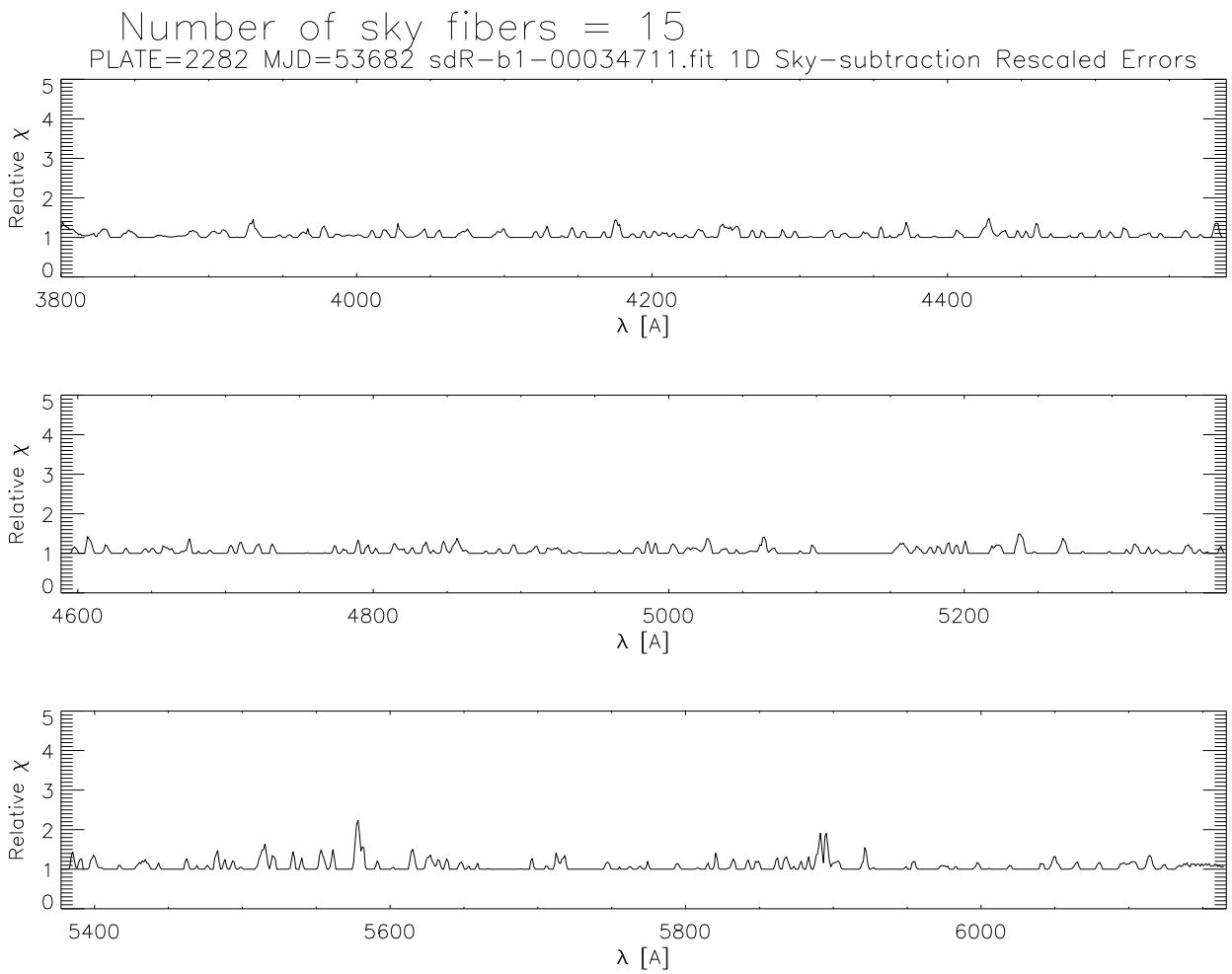

PLATE=2282 MJD=53682 Smooth superflat for sdR-b1-00034711.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

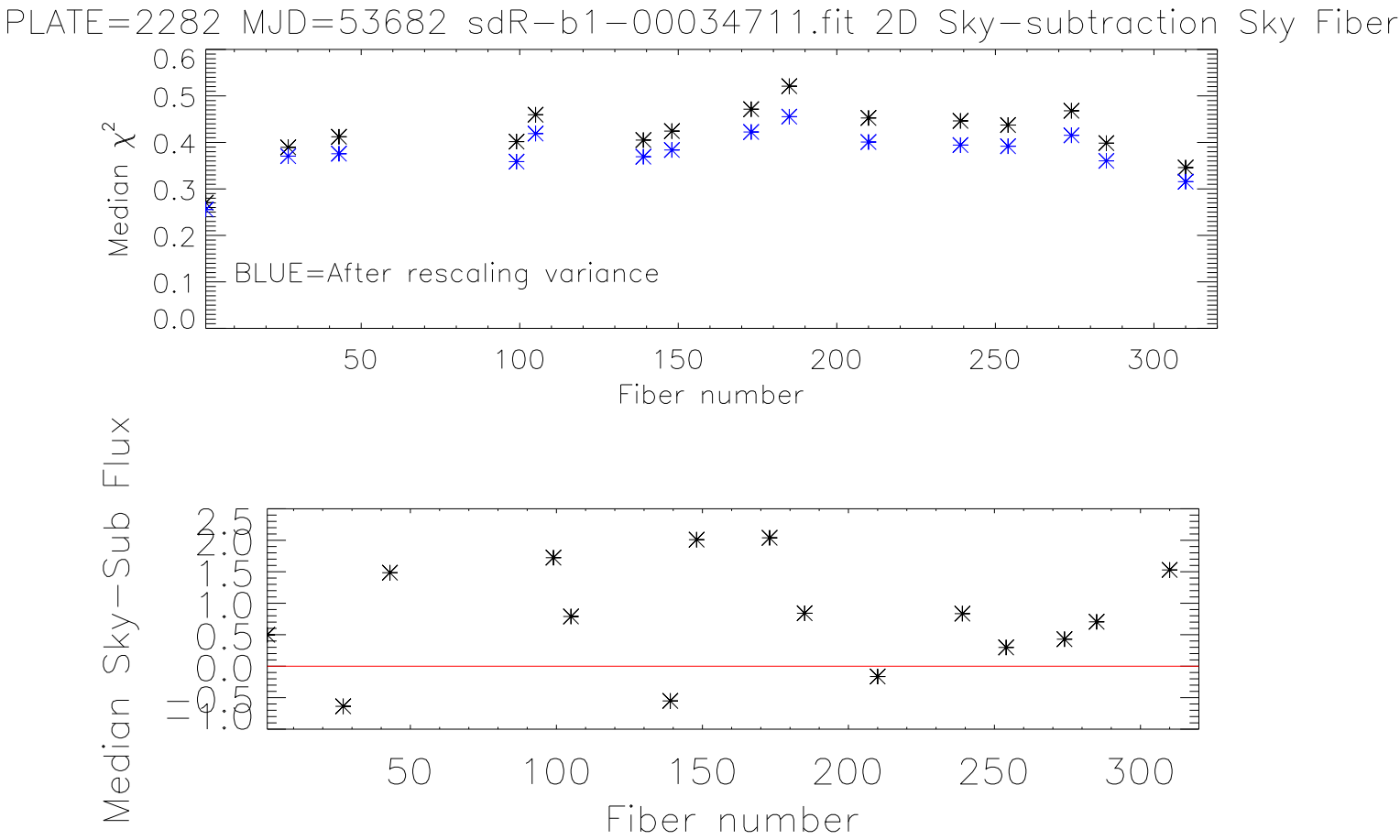
es= −0.0002

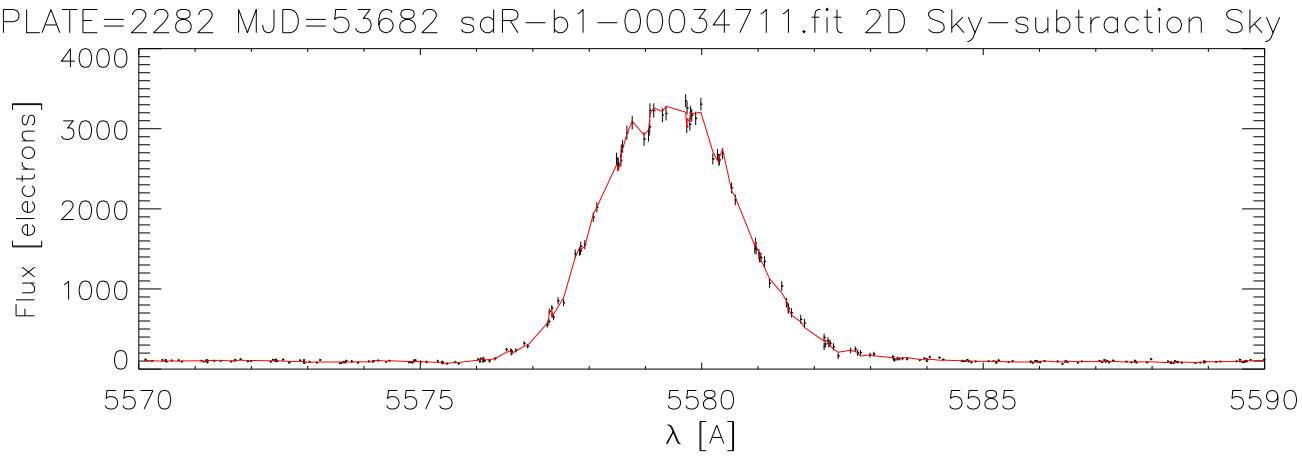

PLATE=2282 MJD=53682 sdR-b1-00034711.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

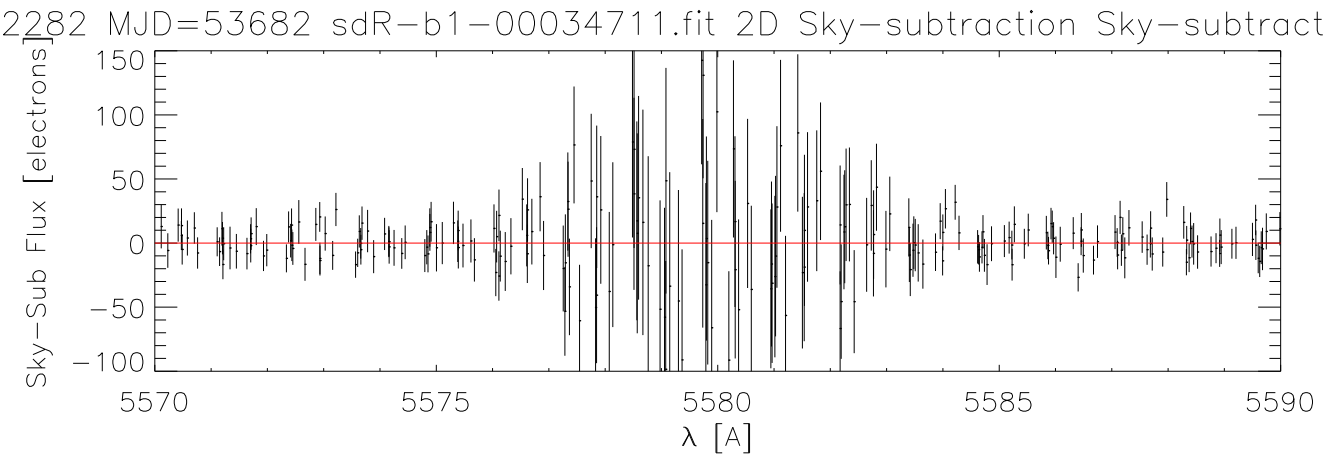

PLATE=2282 MJD=53682 sdR-b1-00034711.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

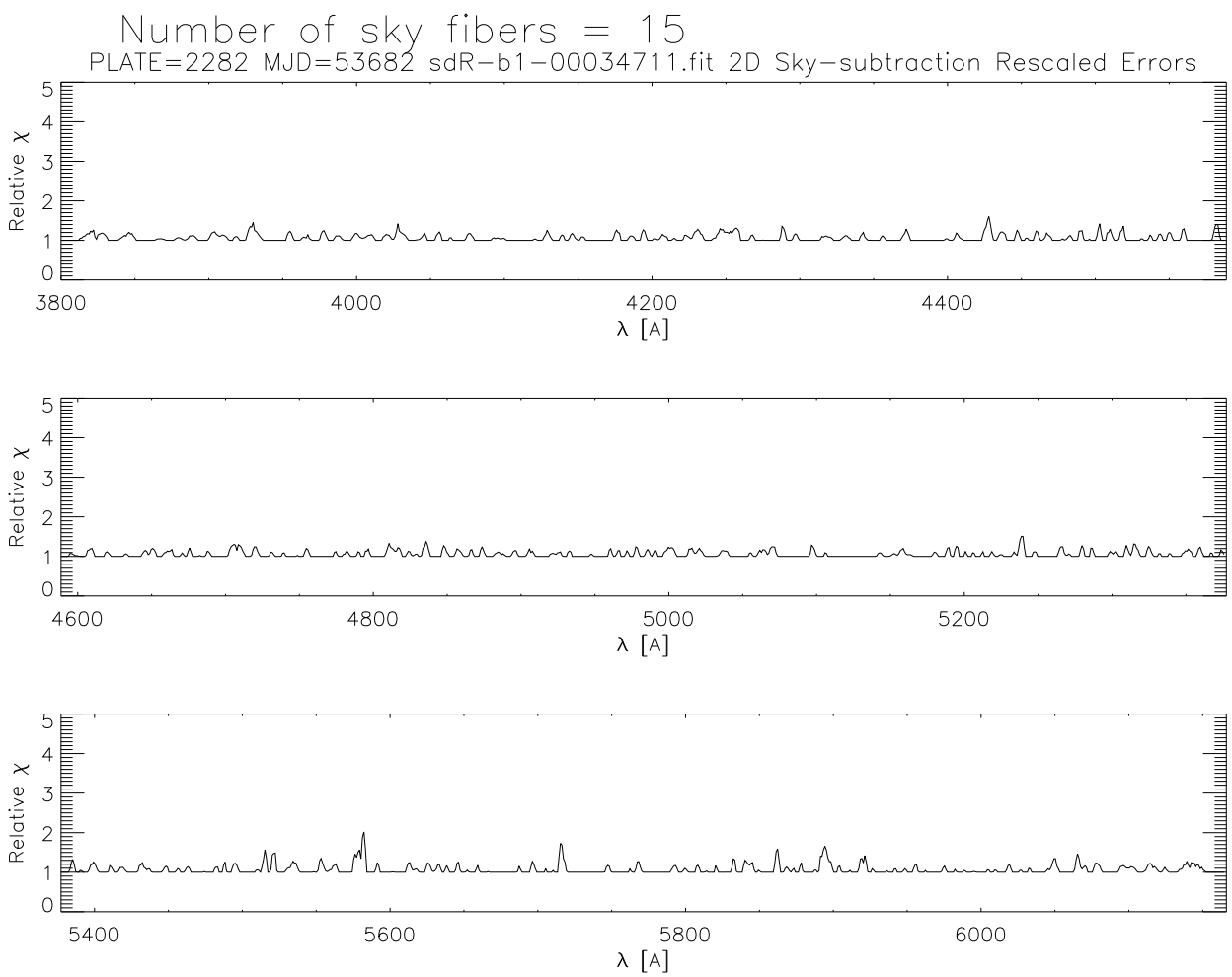

PLATE=2282 MJD=53682 sdR-b1-00034711.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

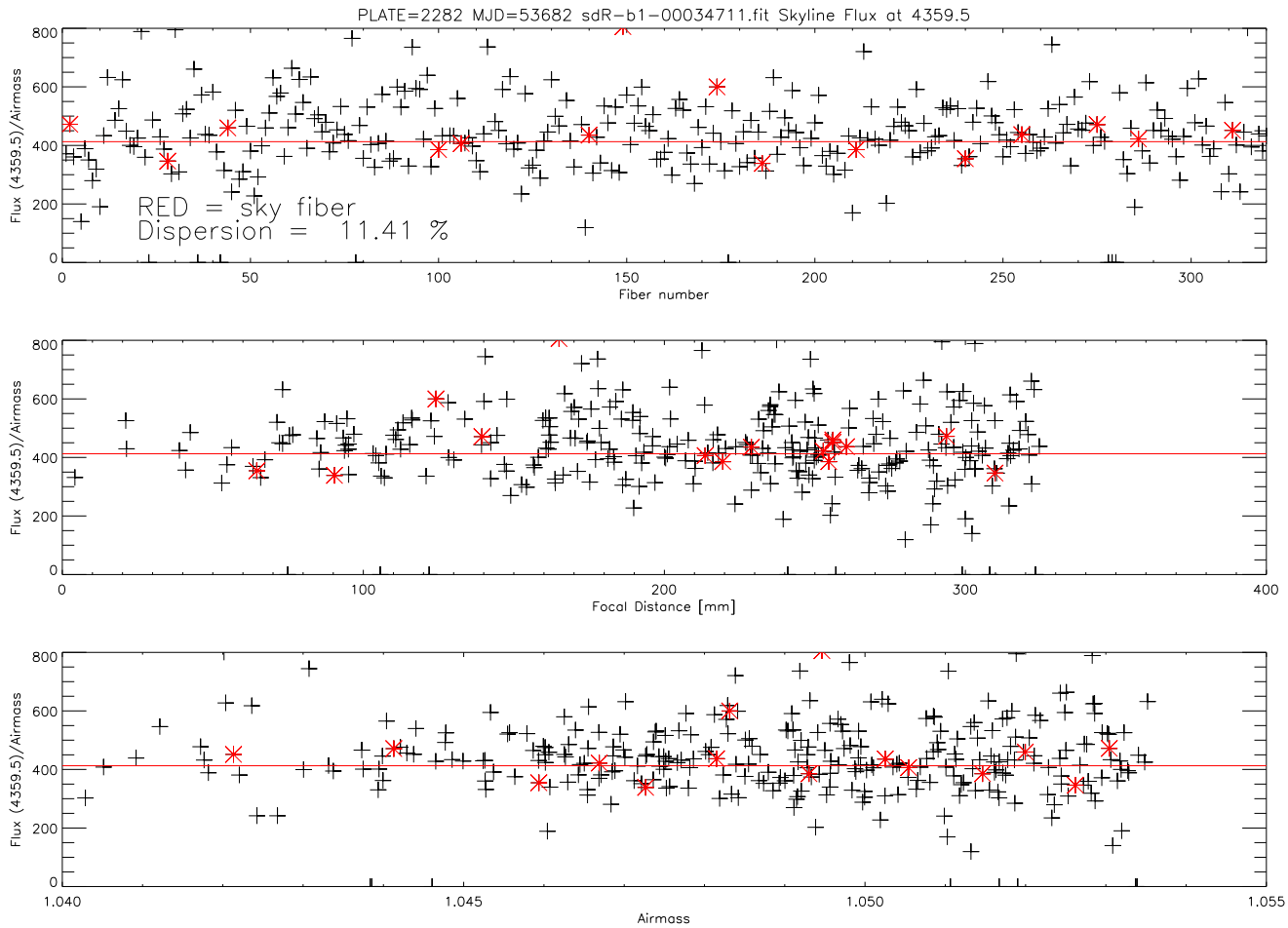

Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-b1-00034711.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

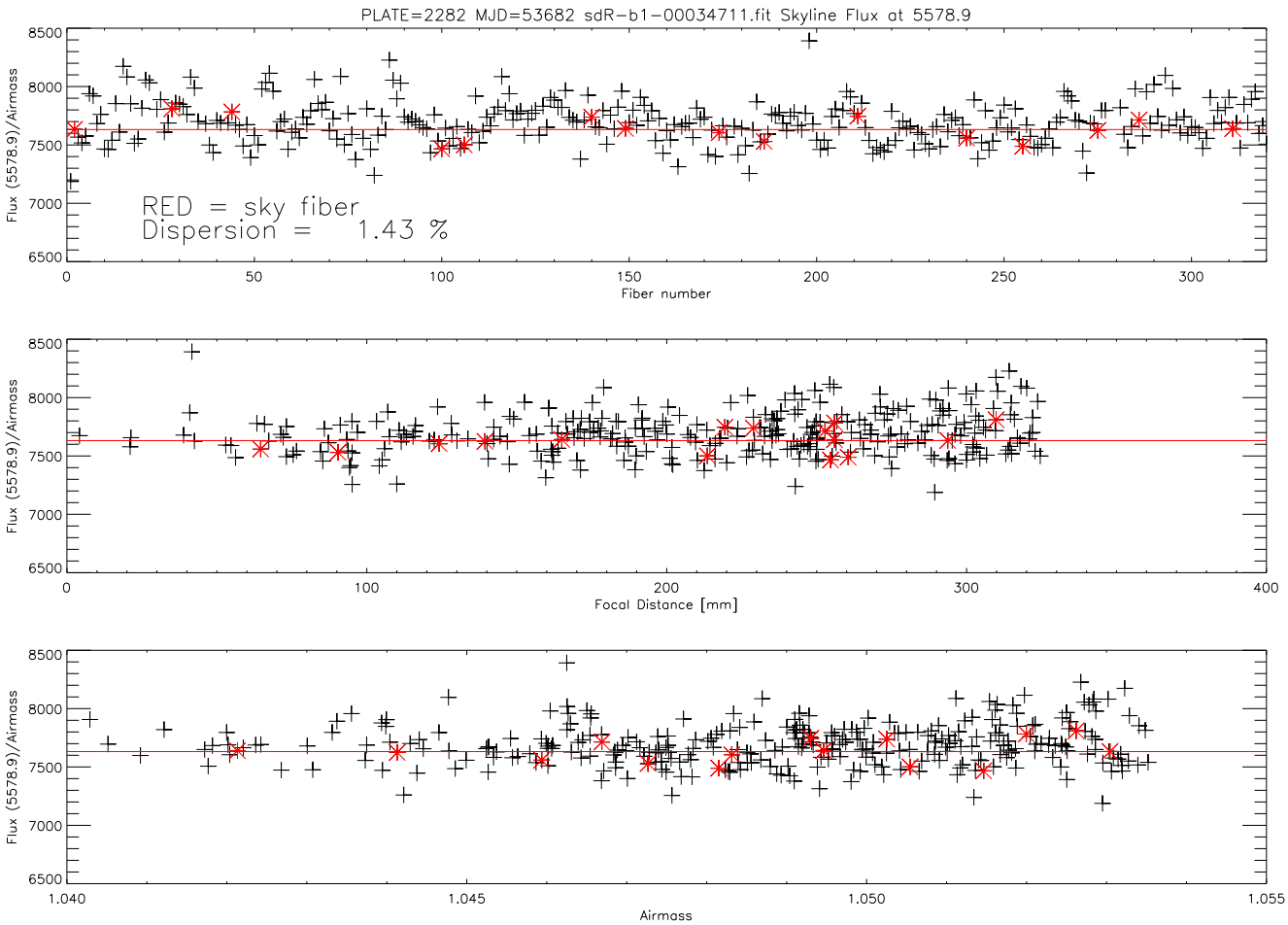

PLATE=2282 MJD=53682 sdR-b1-00034711.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

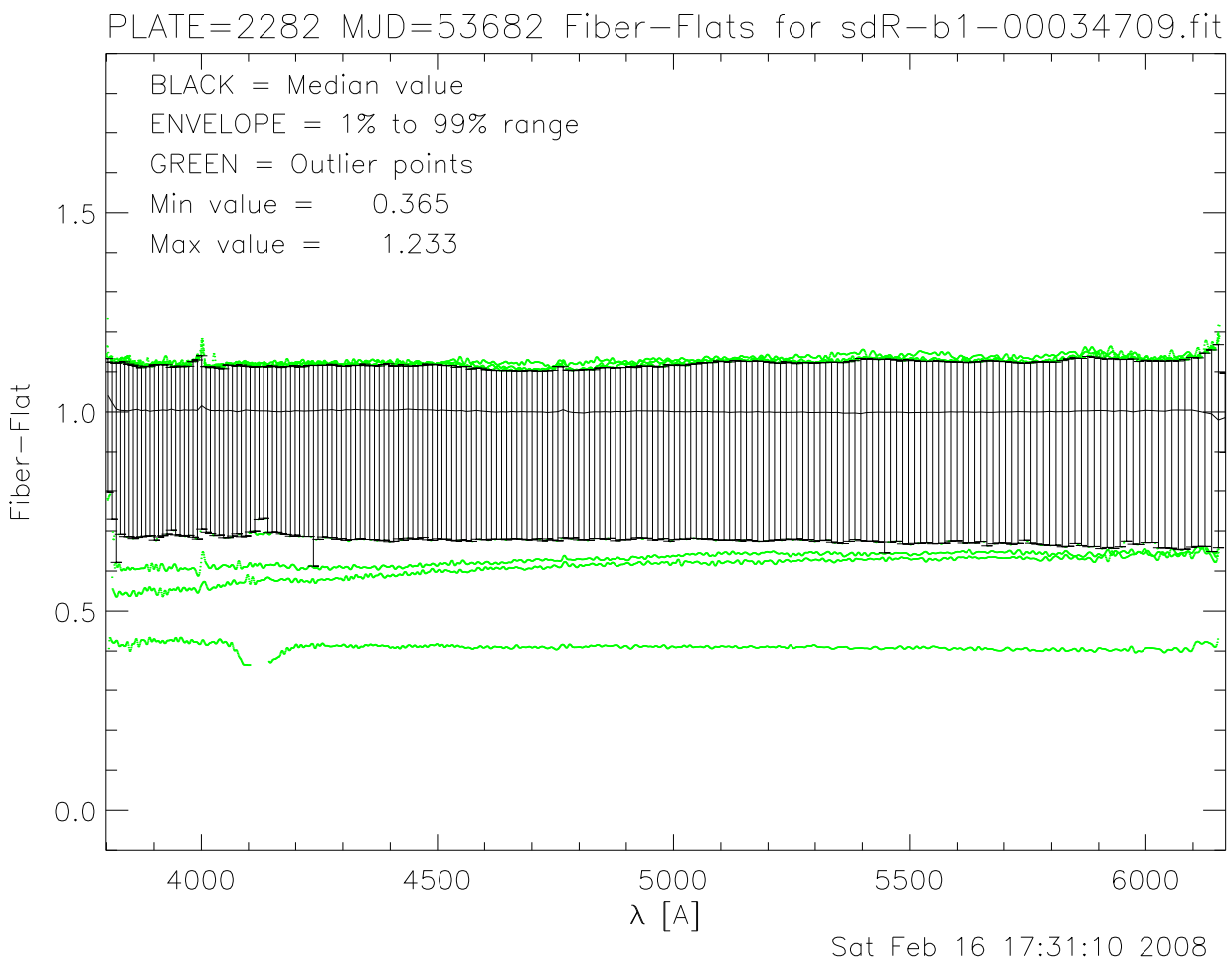

PLATE=2282 MJD=53682 sdR-b1-00034711.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

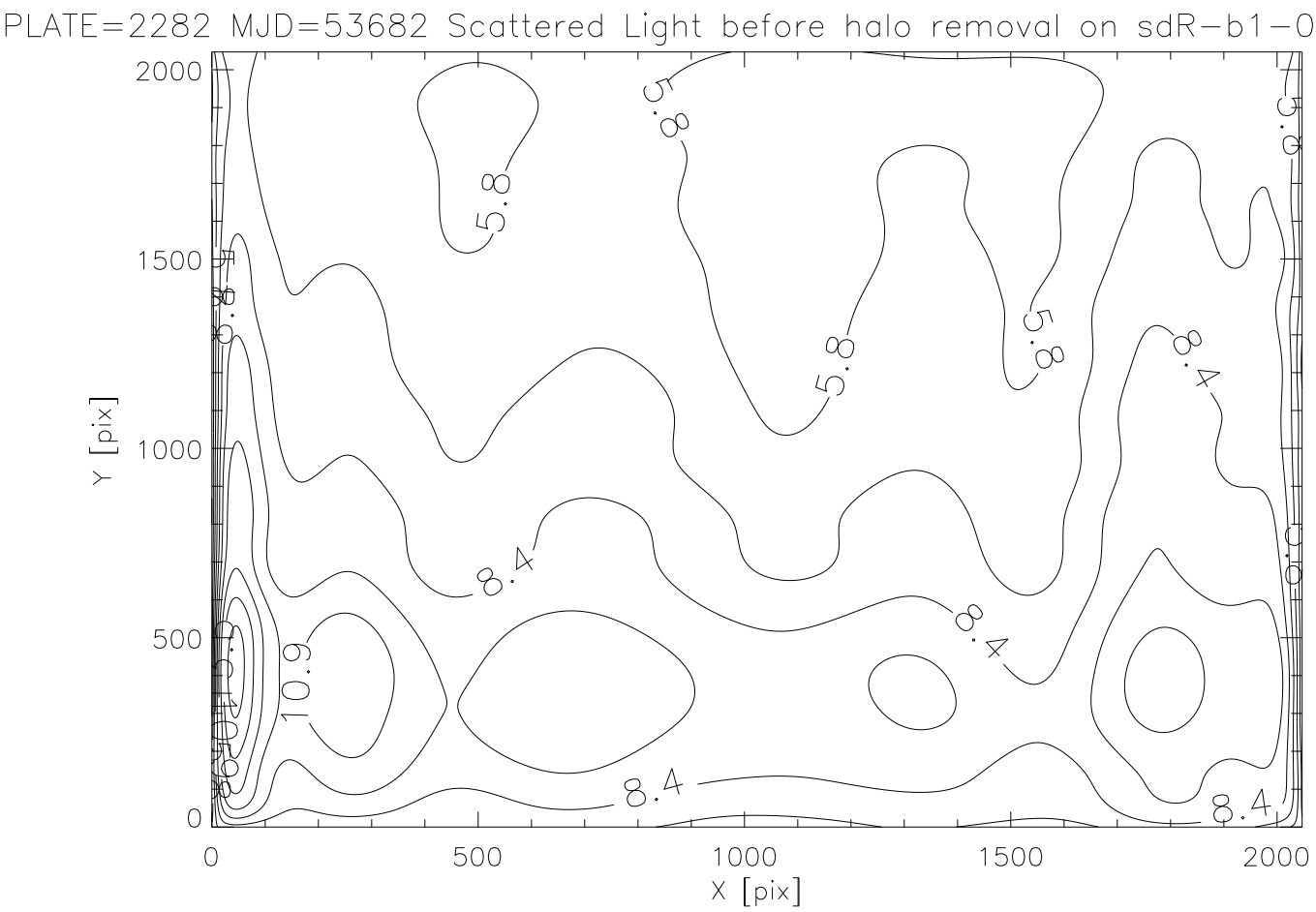

PLATE=2282 MJD=53682 sdR-b1-00034711.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

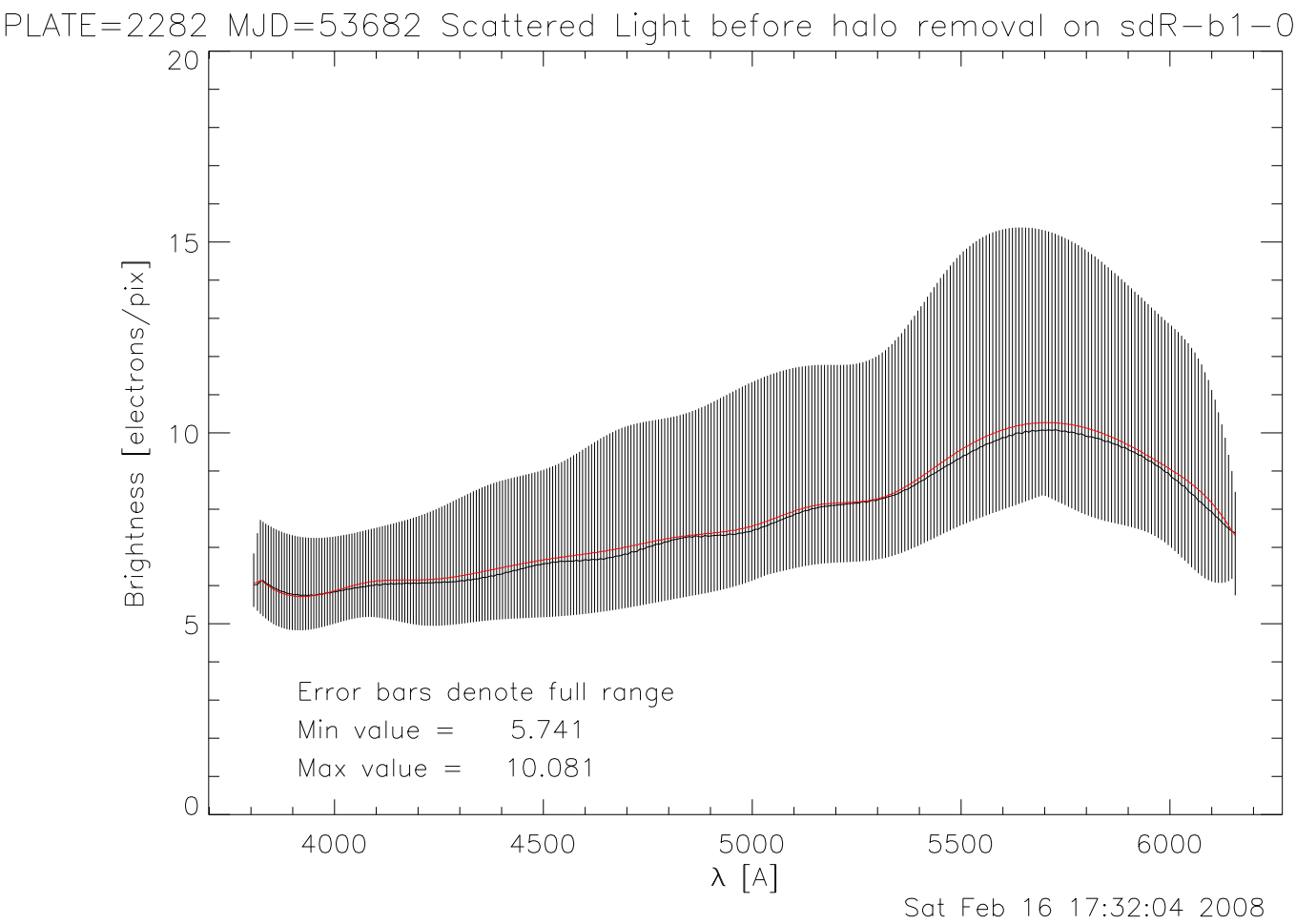

Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-b1-00034711.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

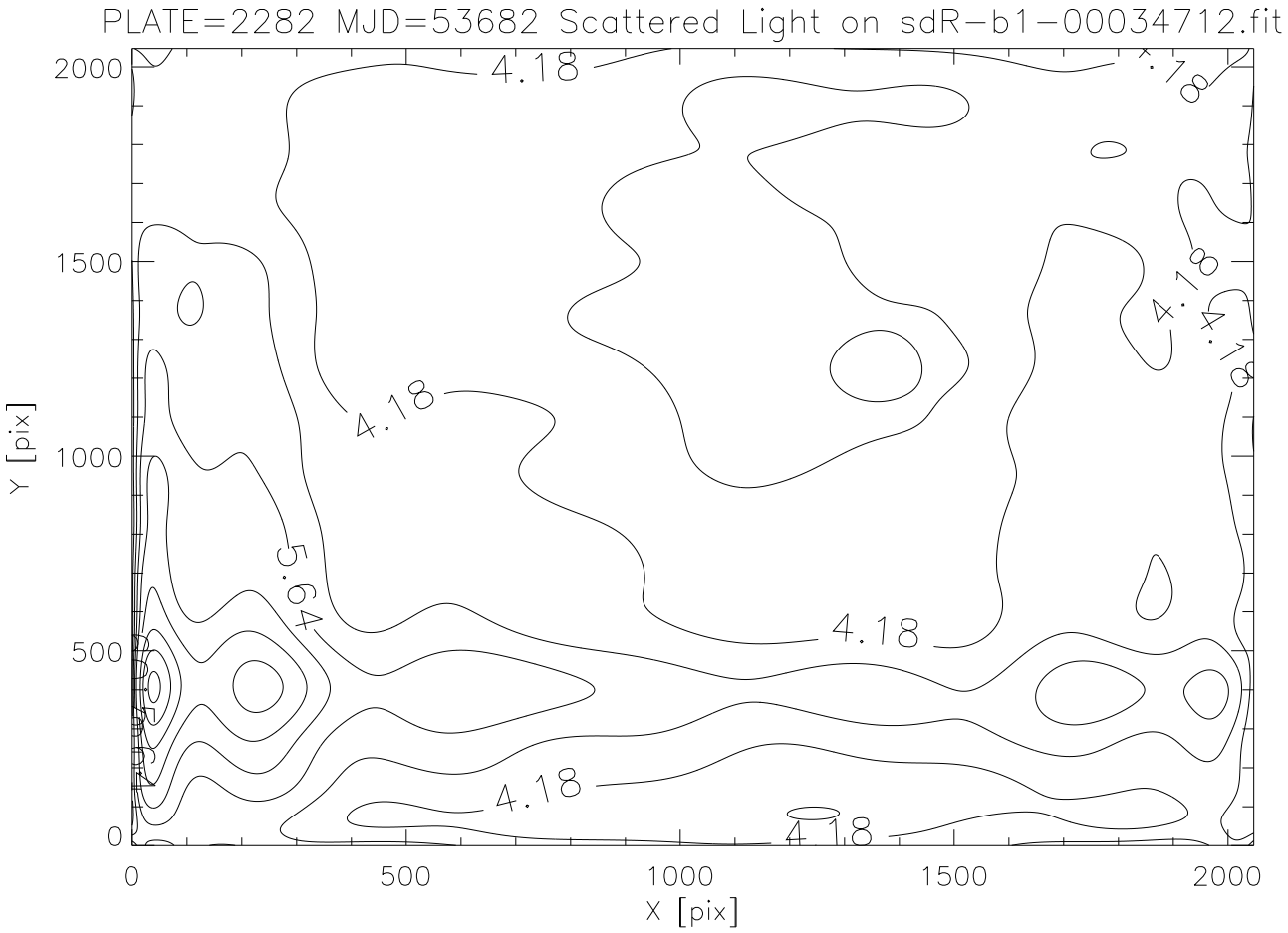

PLATE=2282 MJD=53682 sdR-b1-00034711.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.41 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

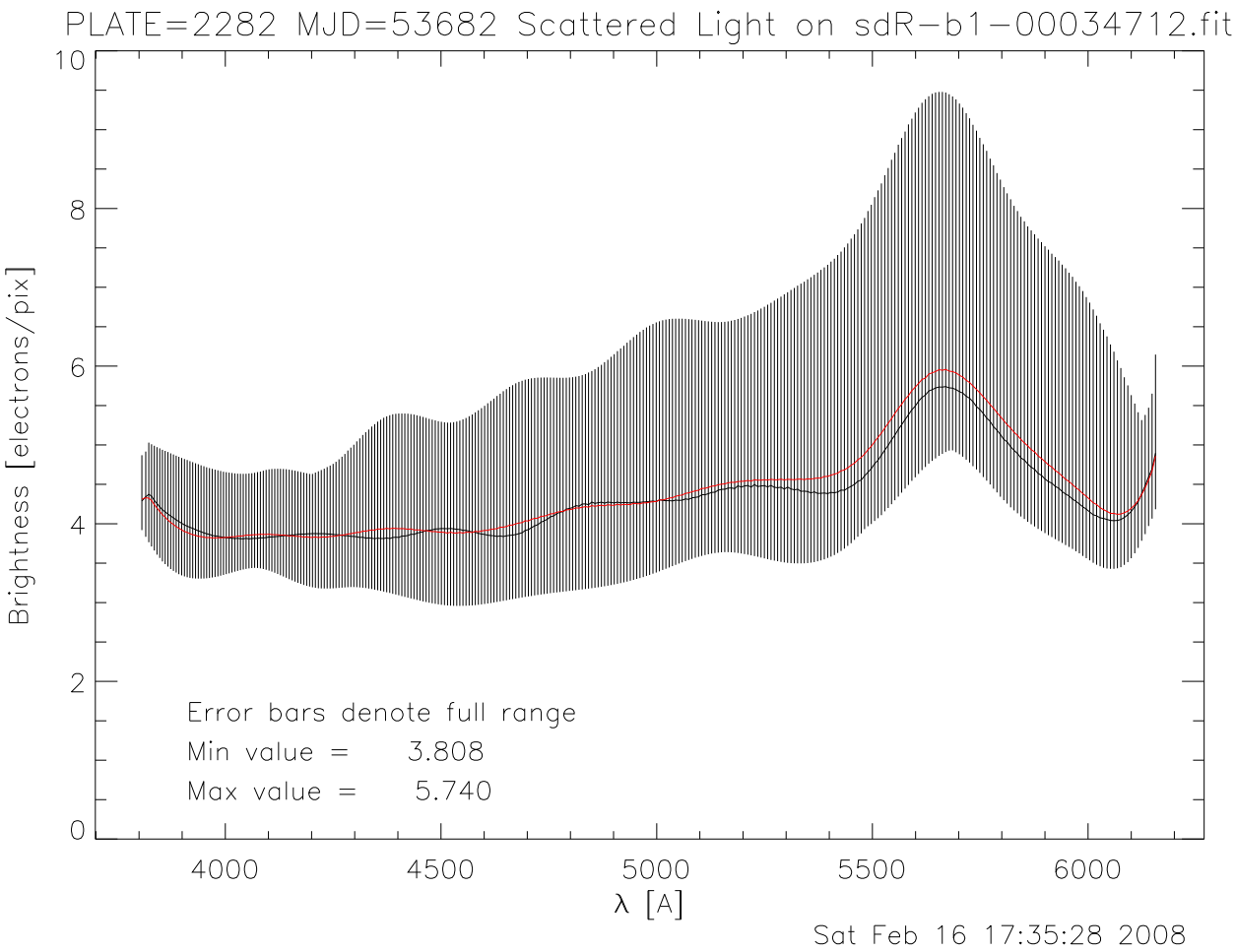

PLATE=2282 MJD=53682 sdR-b1-00034711.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.43 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

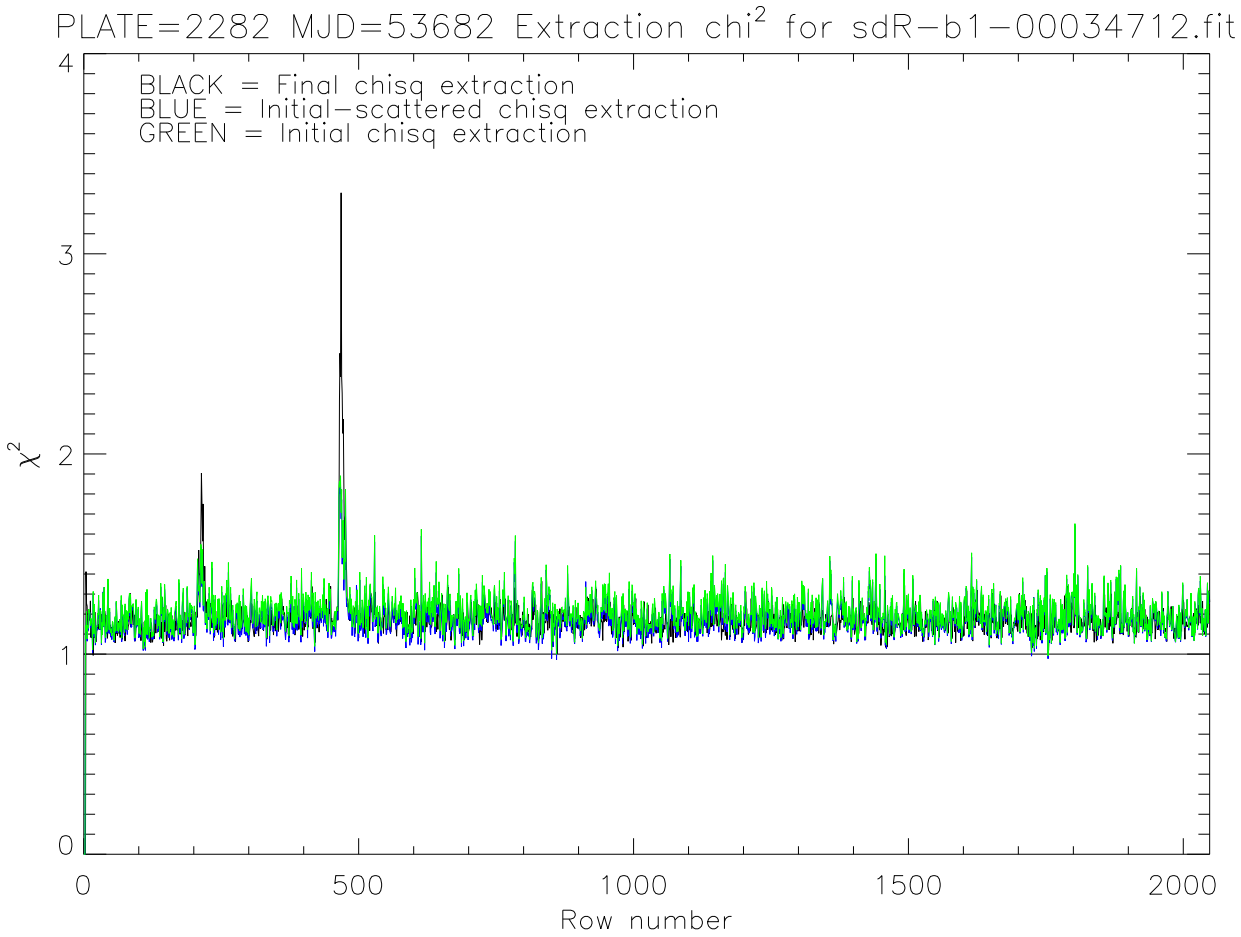

PLATE=2282 MJD=53682 Fiber-Flats for sdR-b1-00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.365
Max value = 1.233
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 17:31:10 2008

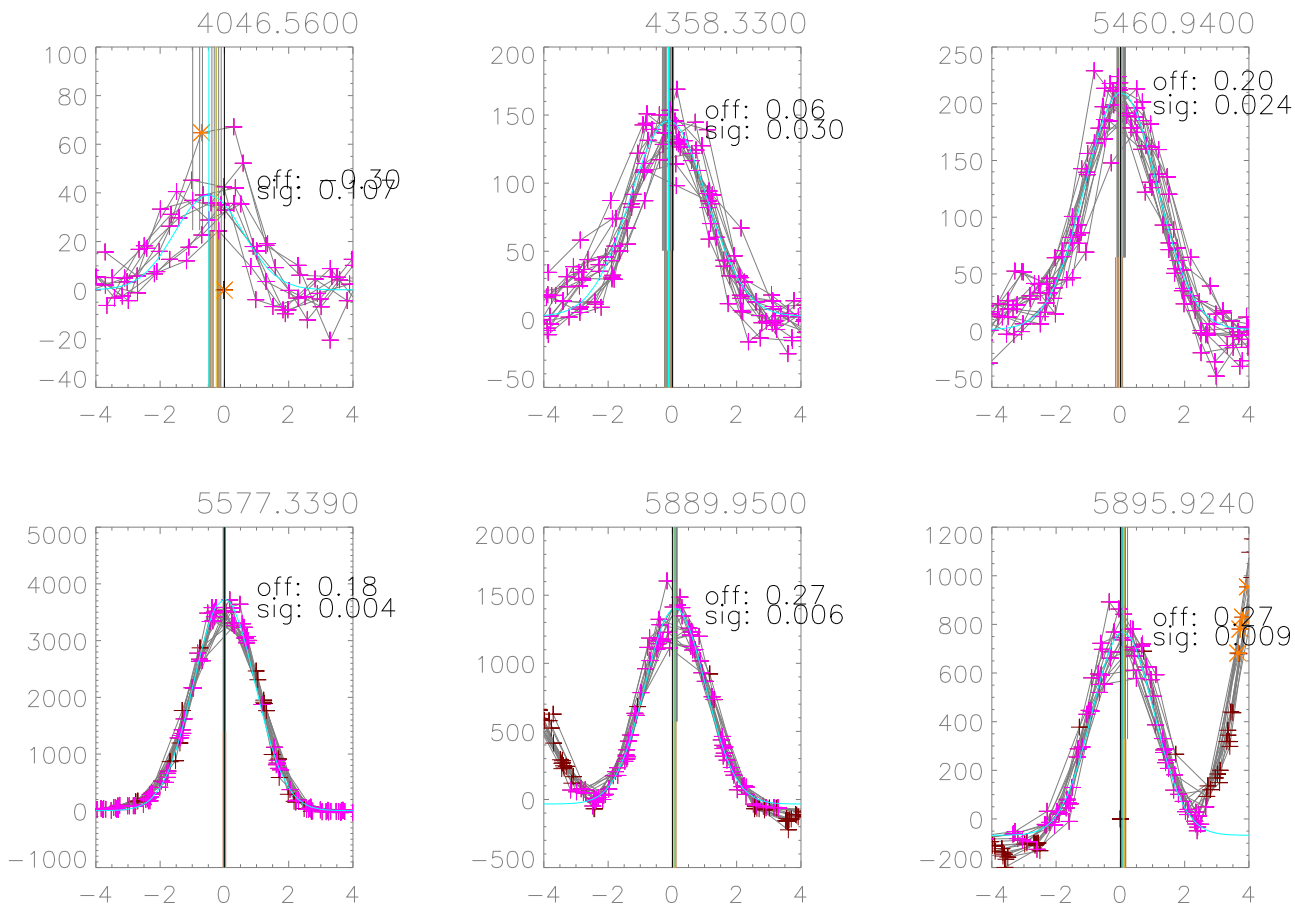

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR−b1−00034712.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.8
8.4
10.9

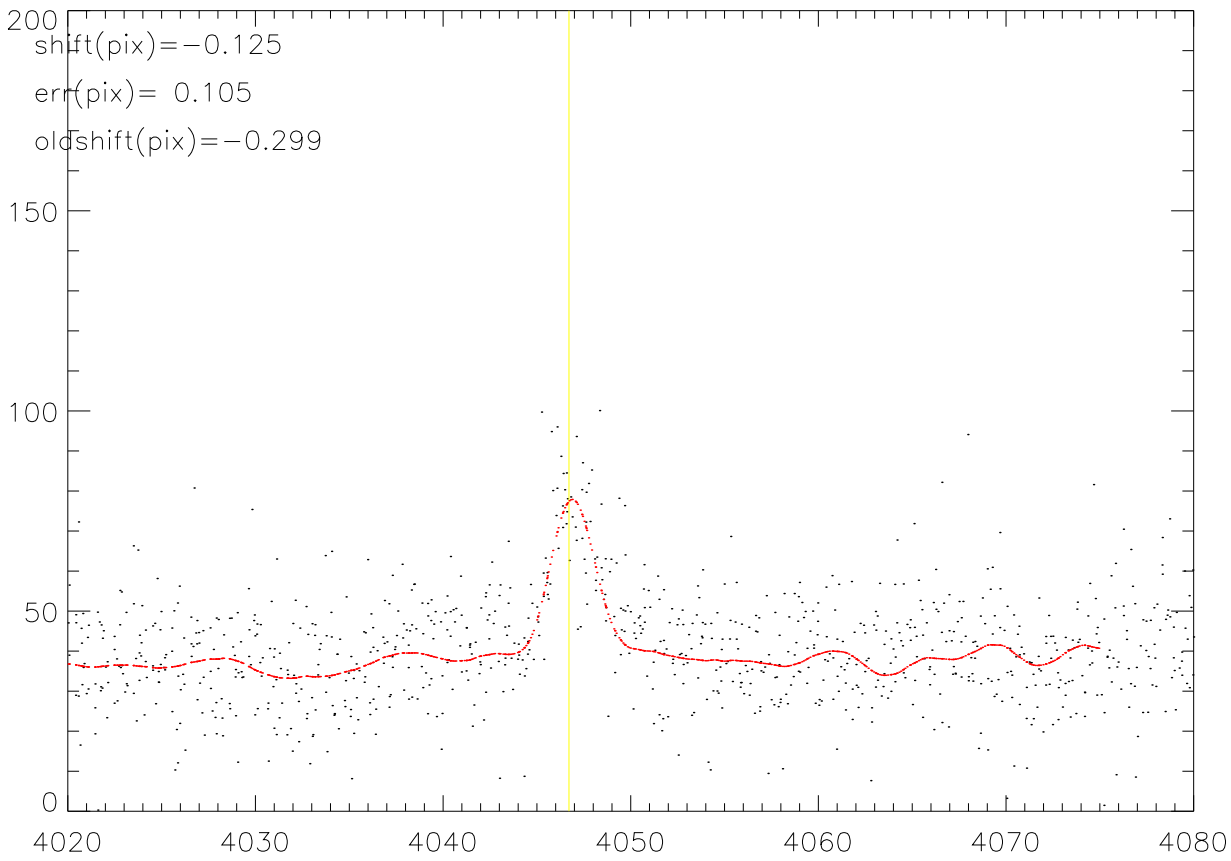

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-b1-00034712.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.741
Max value = 10.081
Sat Feb 16 17:32:04 2008

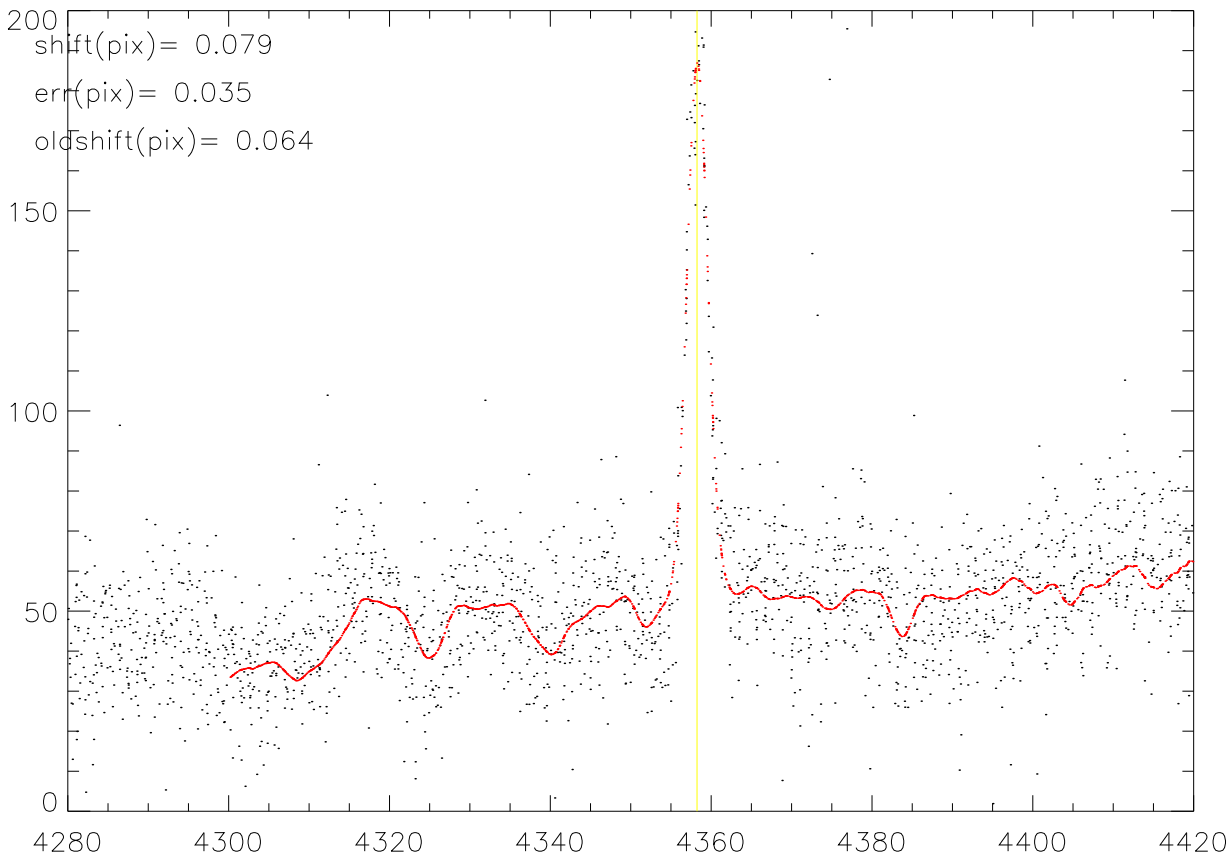

PLATE=2282 MJD=53682 Scattered Light on sdR-b1-00034712.fit
4.18
4.18
4.18
5.64
4.18
4.18
4.18
4.18
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

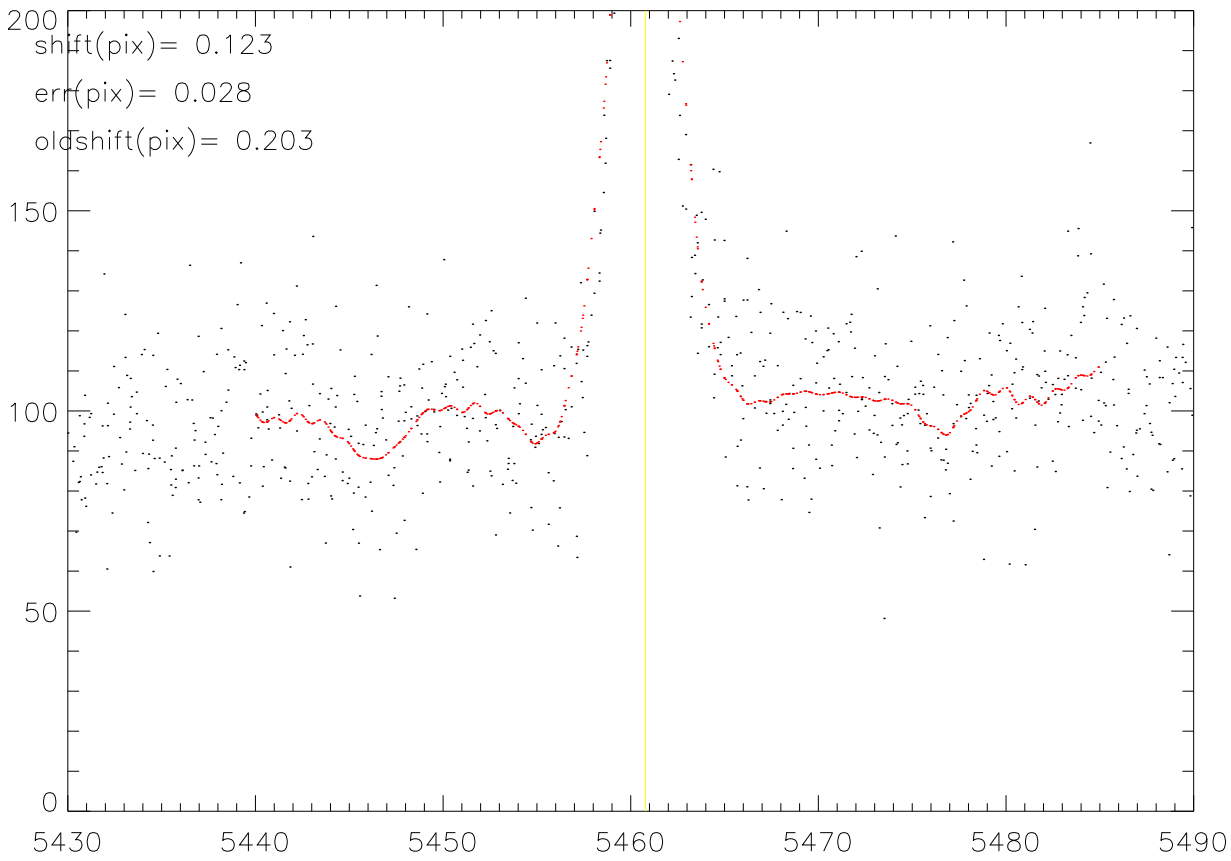

PLATE=2282 MJD=53682 Scattered Light on sdR-b1-00034712.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.808
Max value = 5.740
Sat Feb 16 17:35:28 2008

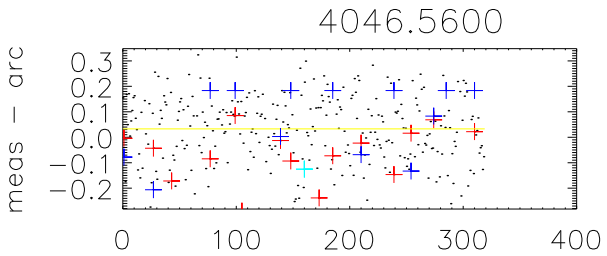

PLATE=2282 MJD=53682 Extraction chi^2 for sdR-b1-00034712.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

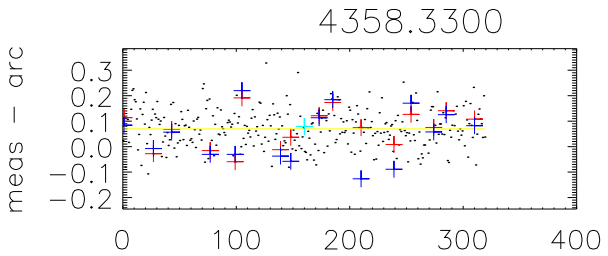

4046.5600
off: -0.30
sig: 0.107
4358.3300
off: 0.06
sig: 0.030
5460.9400
off: 0.20
sig: 0.024
5577.3390
off: 0.18
sig: 0.004
5889.9500
off: 0.27
sig: 0.006
5895.9240
off: 0.27
sig: 0.009

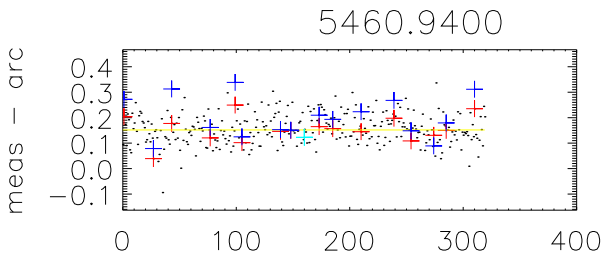

shift(pix)=−0.125
err(pix)= 0.105
oldshift(pix)=−0.299
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

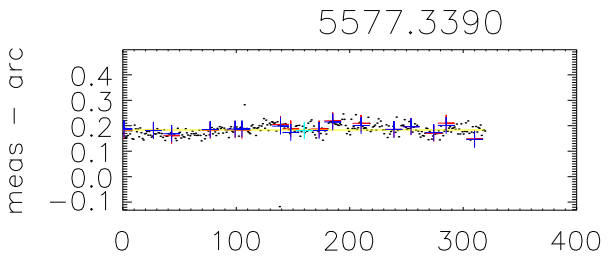

shift(pix)= 0.079
err(pix)= 0.035
oldshift(pix)= 0.064
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

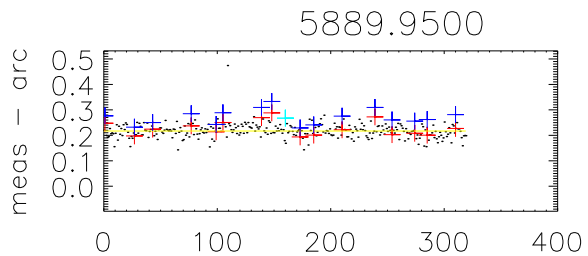

shift(pix)= 0.123
err(pix)= 0.028
oldshift(pix)= 0.203
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

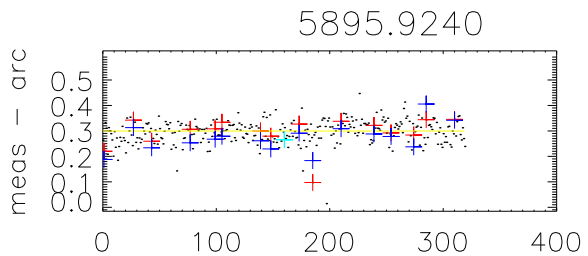

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

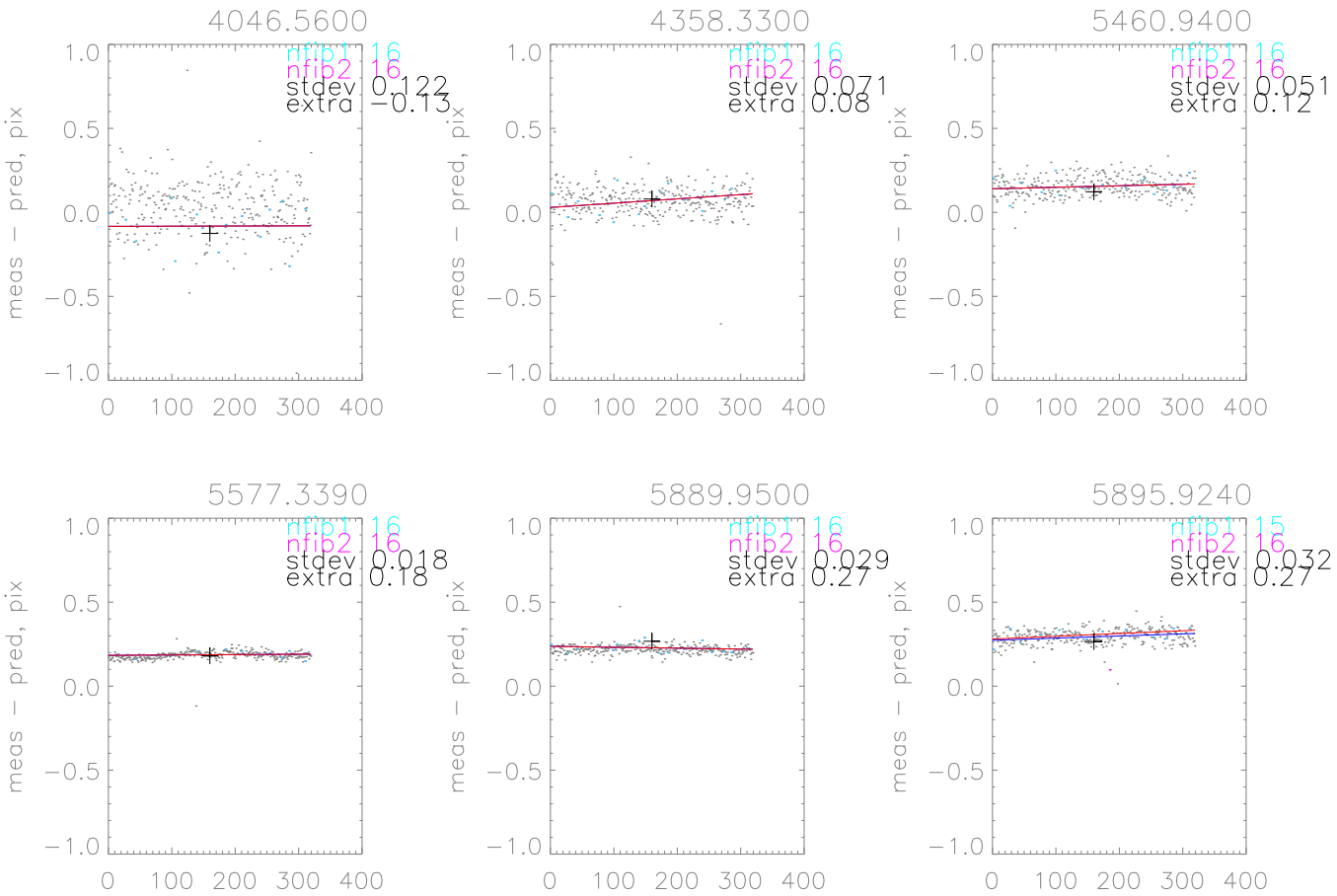

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

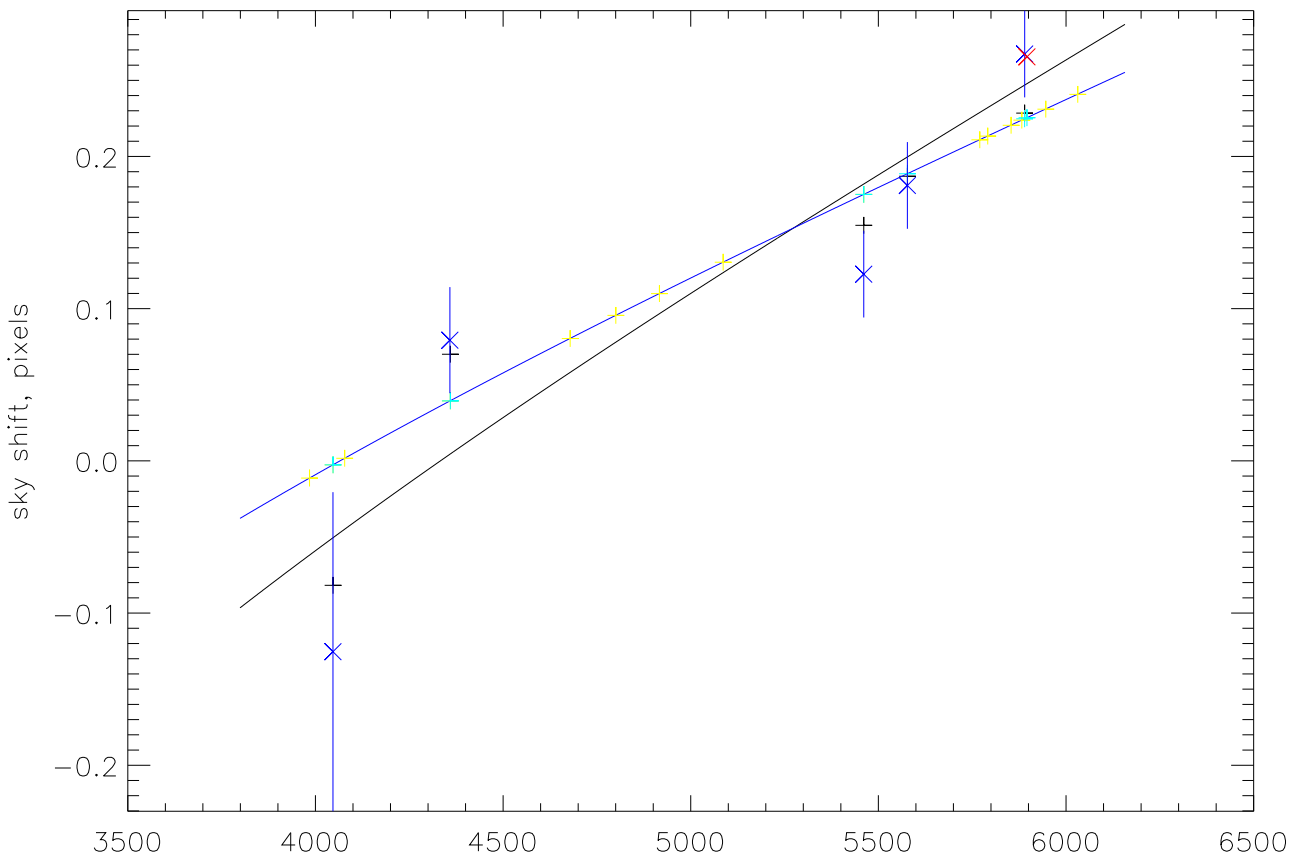

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

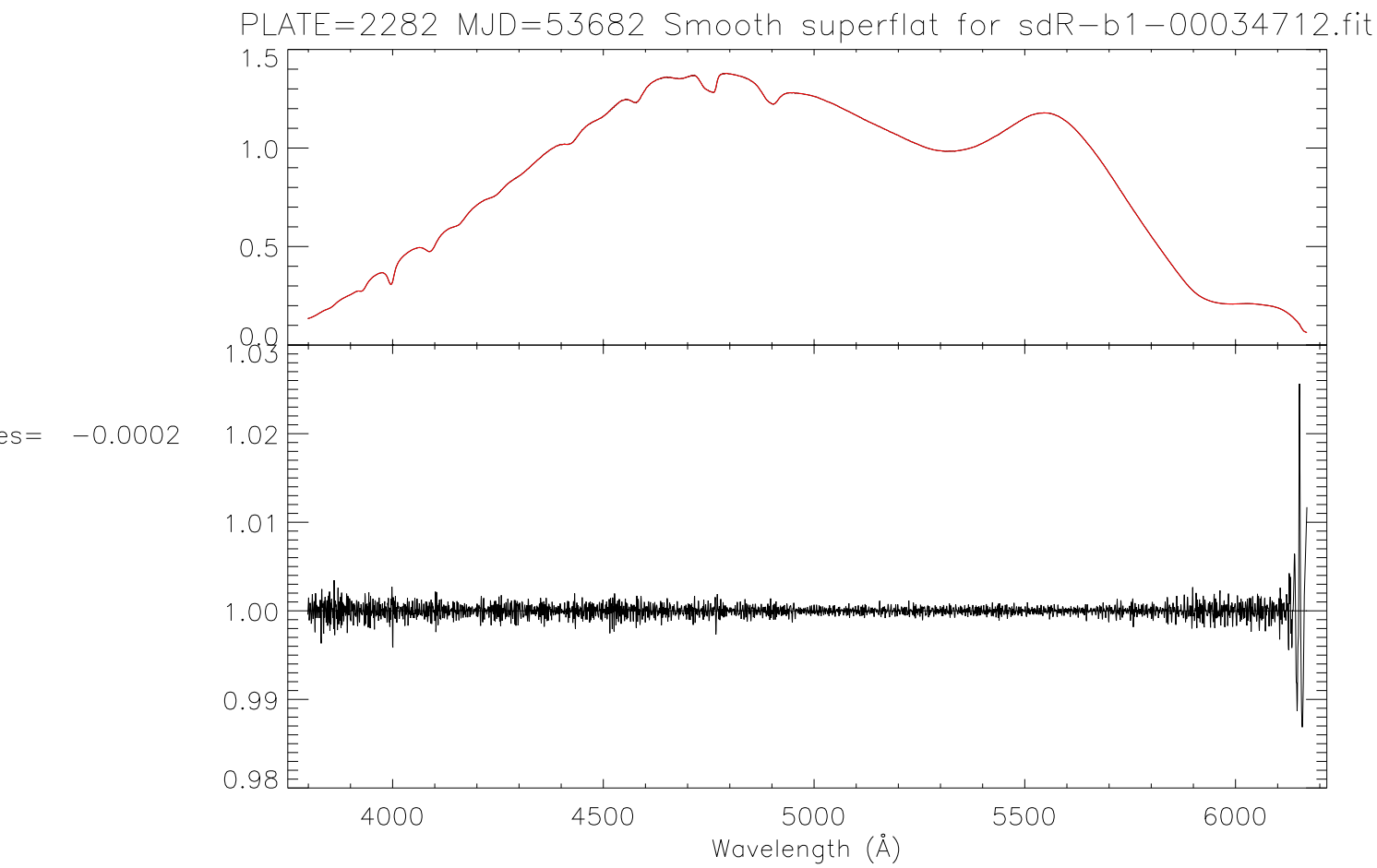

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

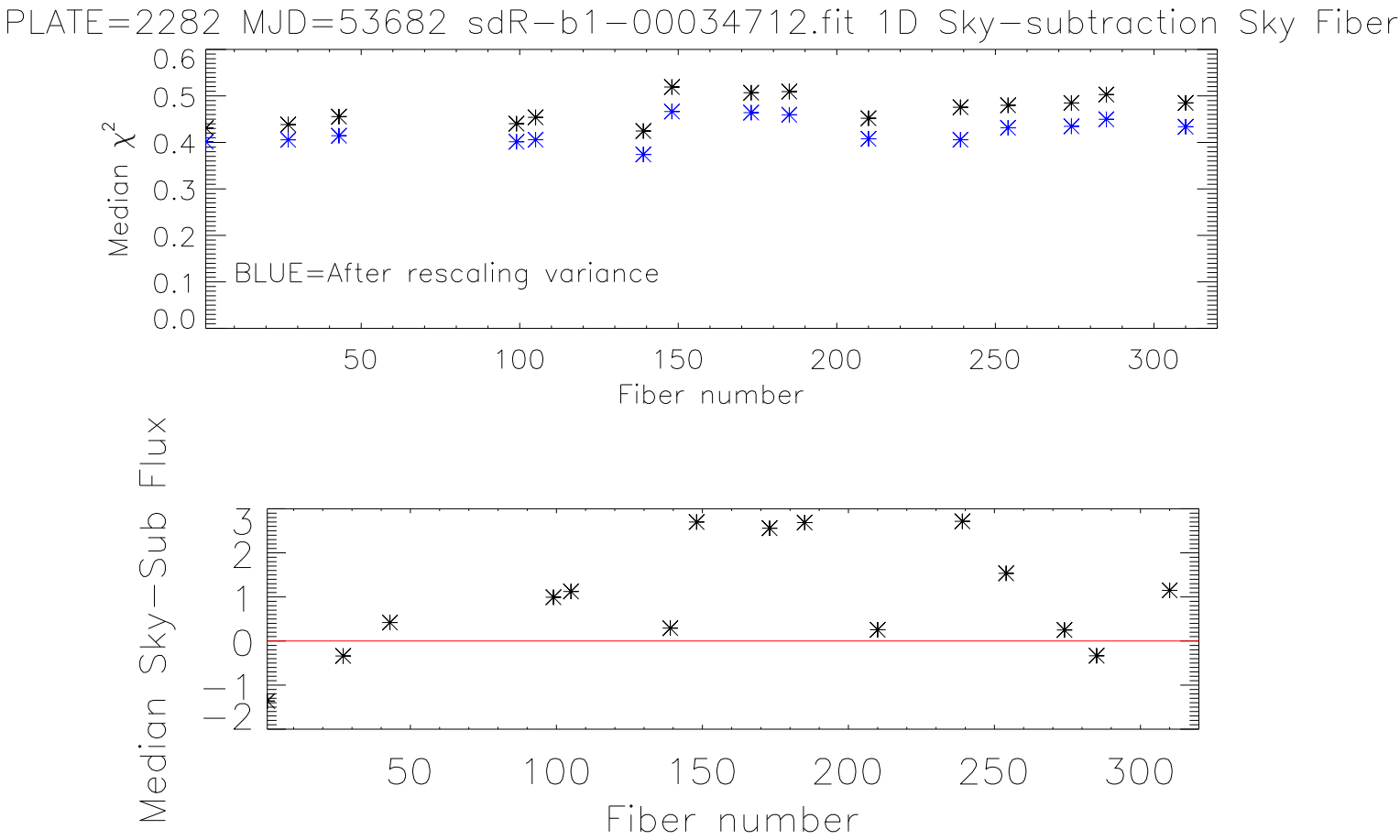

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

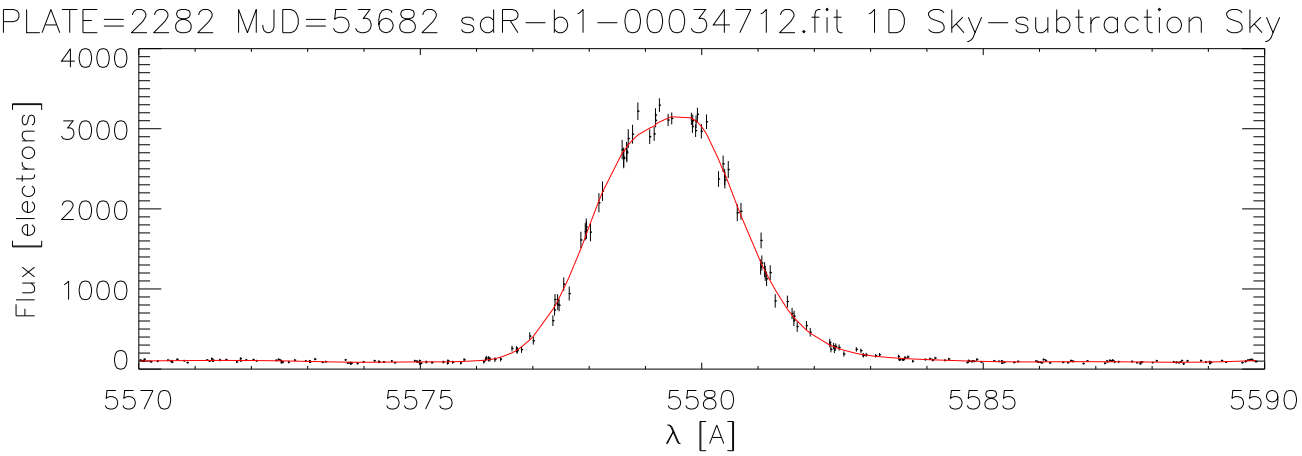

4046.5600
nfib1 16
nfib2 16
stdev 0.122
extra −0.13
4358.3300
nfib1 16
nfib2 16
stdev 0.071
extra 0.08
5460.9400
nfib1 16
nfib2 16
stdev 0.051
extra 0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra 0.18
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra 0.27
5895.9240
nfib1 15
nfib2 16
stdev 0.032
extra 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

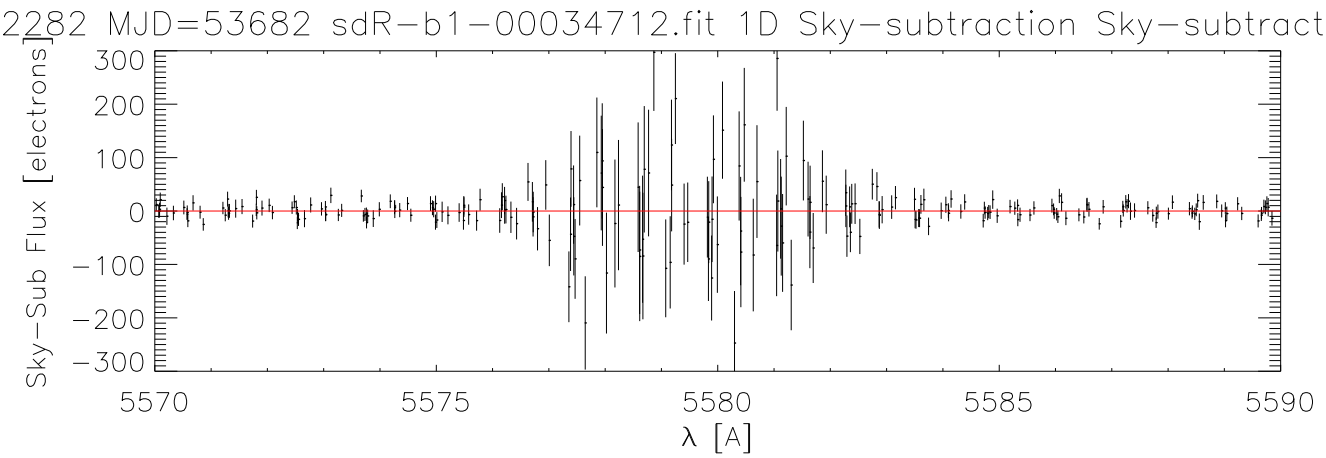

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

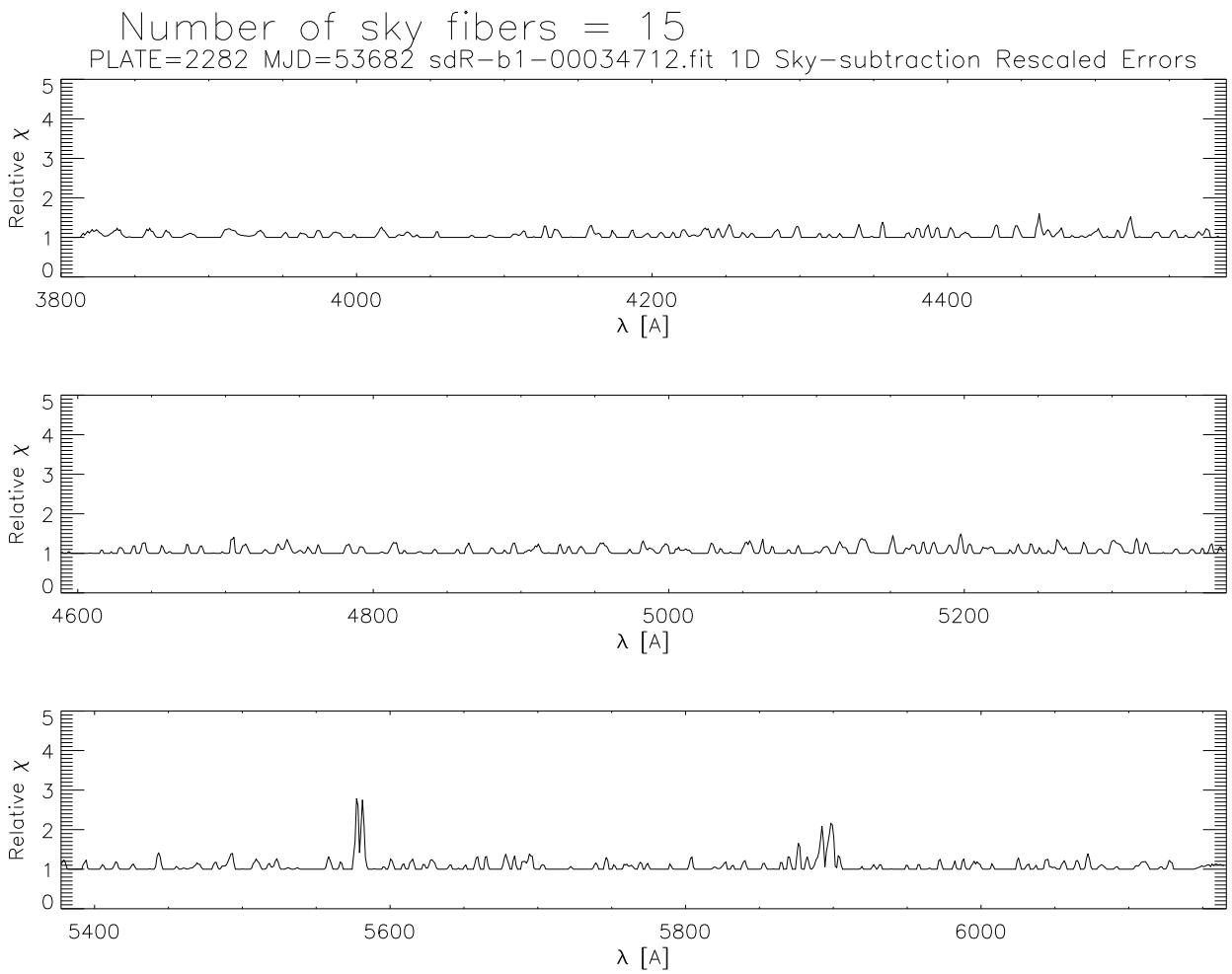

PLATE=2282 MJD=53682 Smooth superflat for sdR-b1-00034712.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

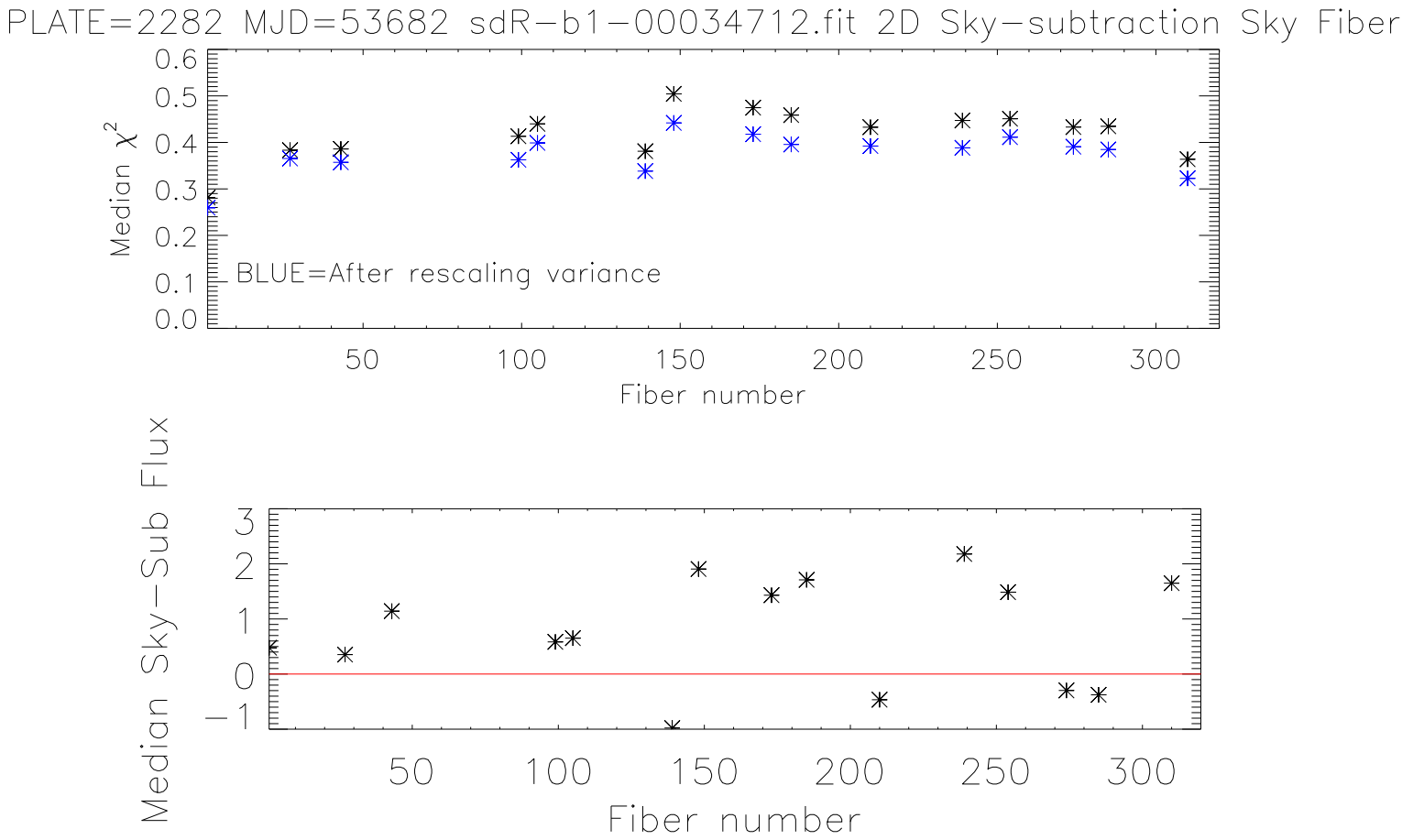
es= −0.0002

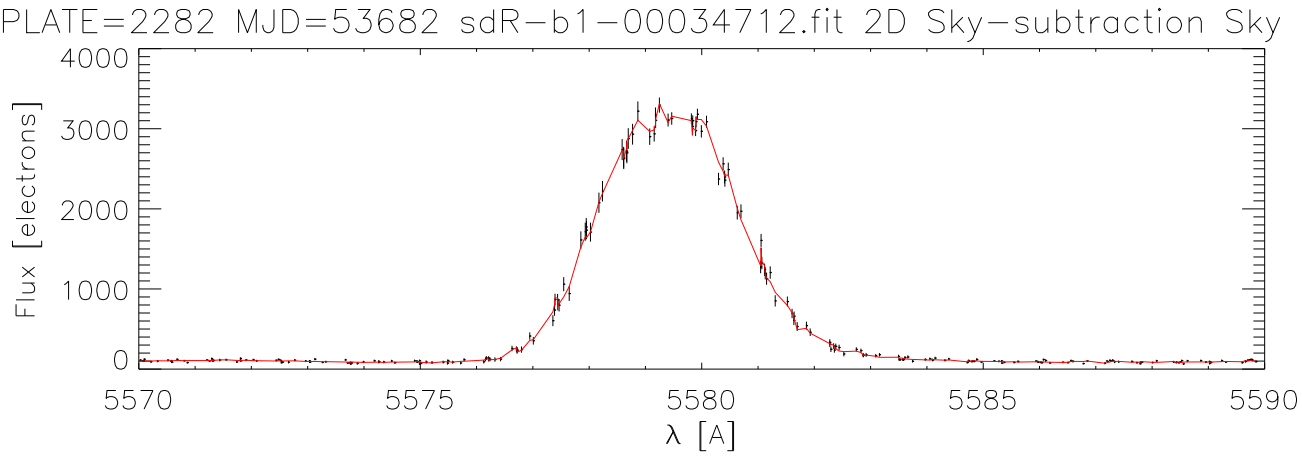

PLATE=2282 MJD=53682 sdR-b1-00034712.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−2
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

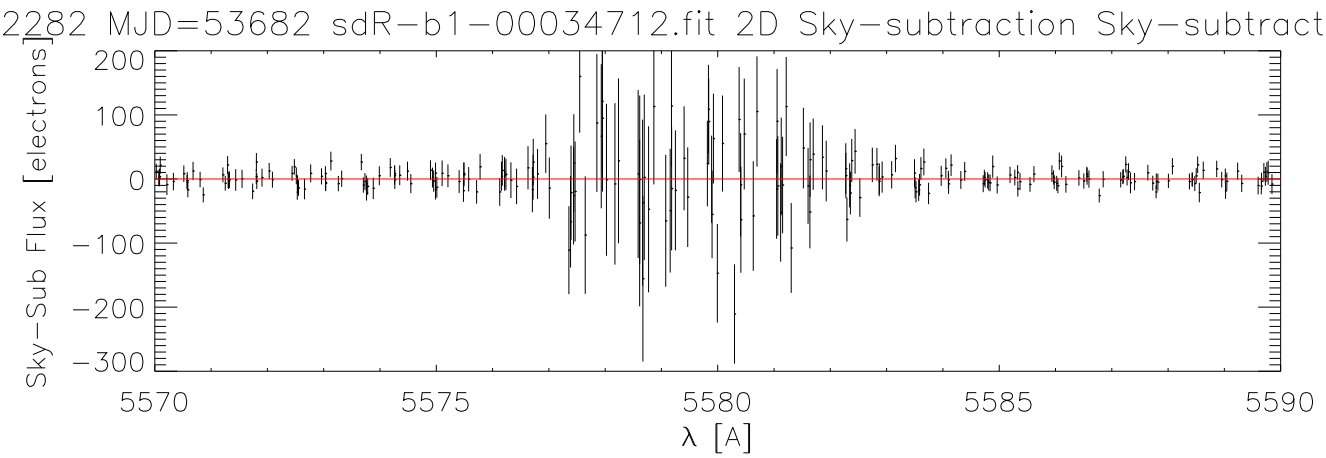

PLATE=2282 MJD=53682 sdR-b1-00034712.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

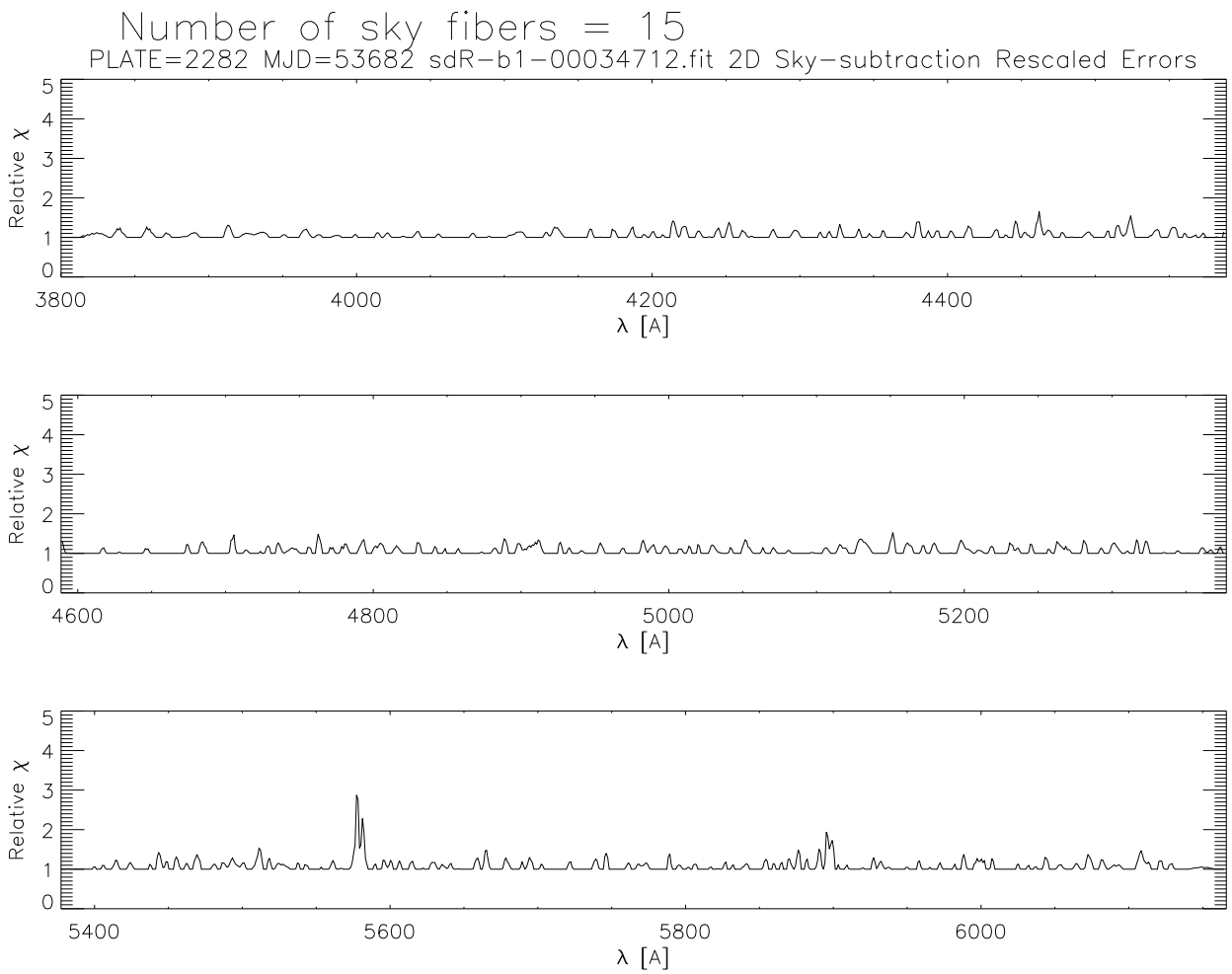

PLATE=2282 MJD=53682 sdR-b1-00034712.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

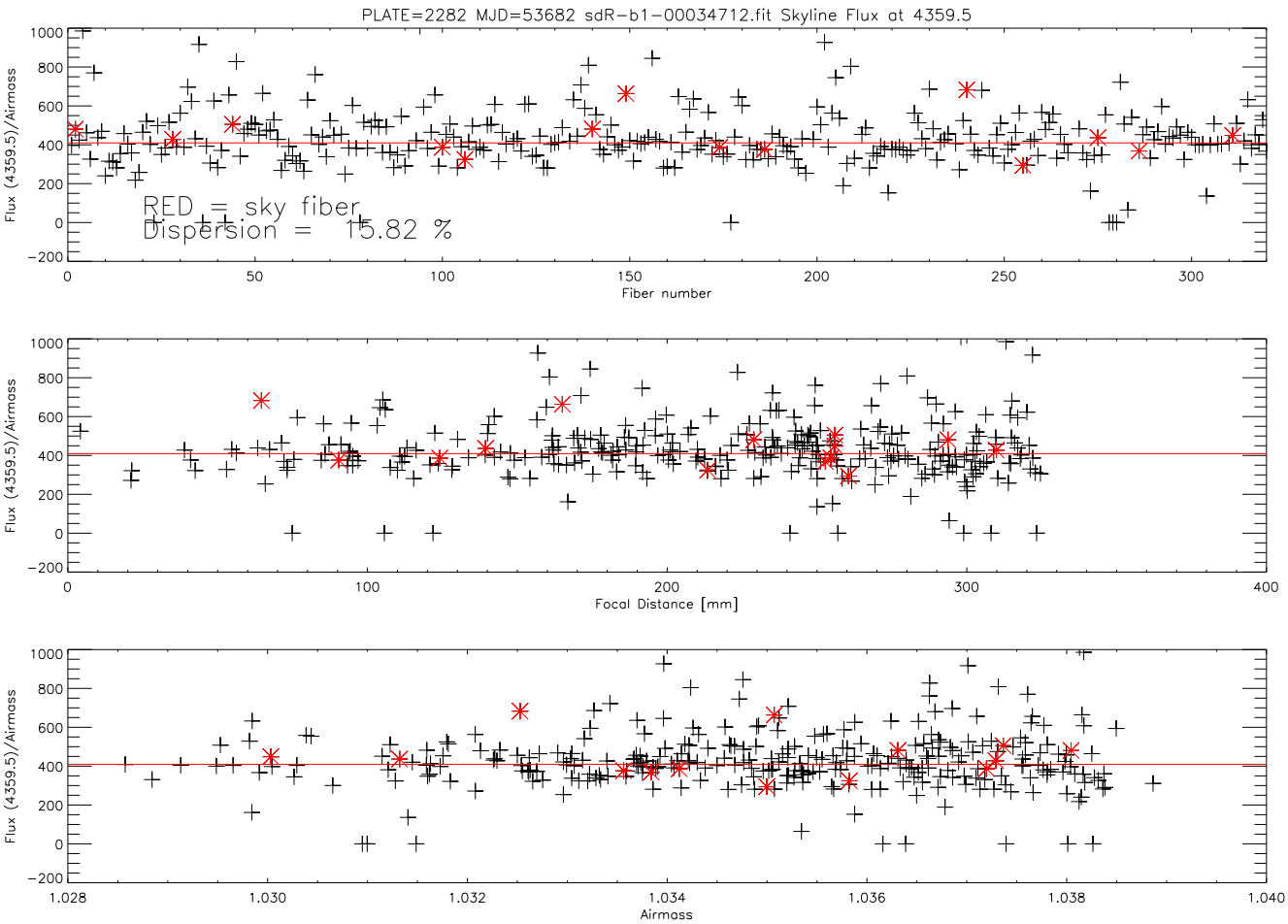

Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-b1-00034712.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

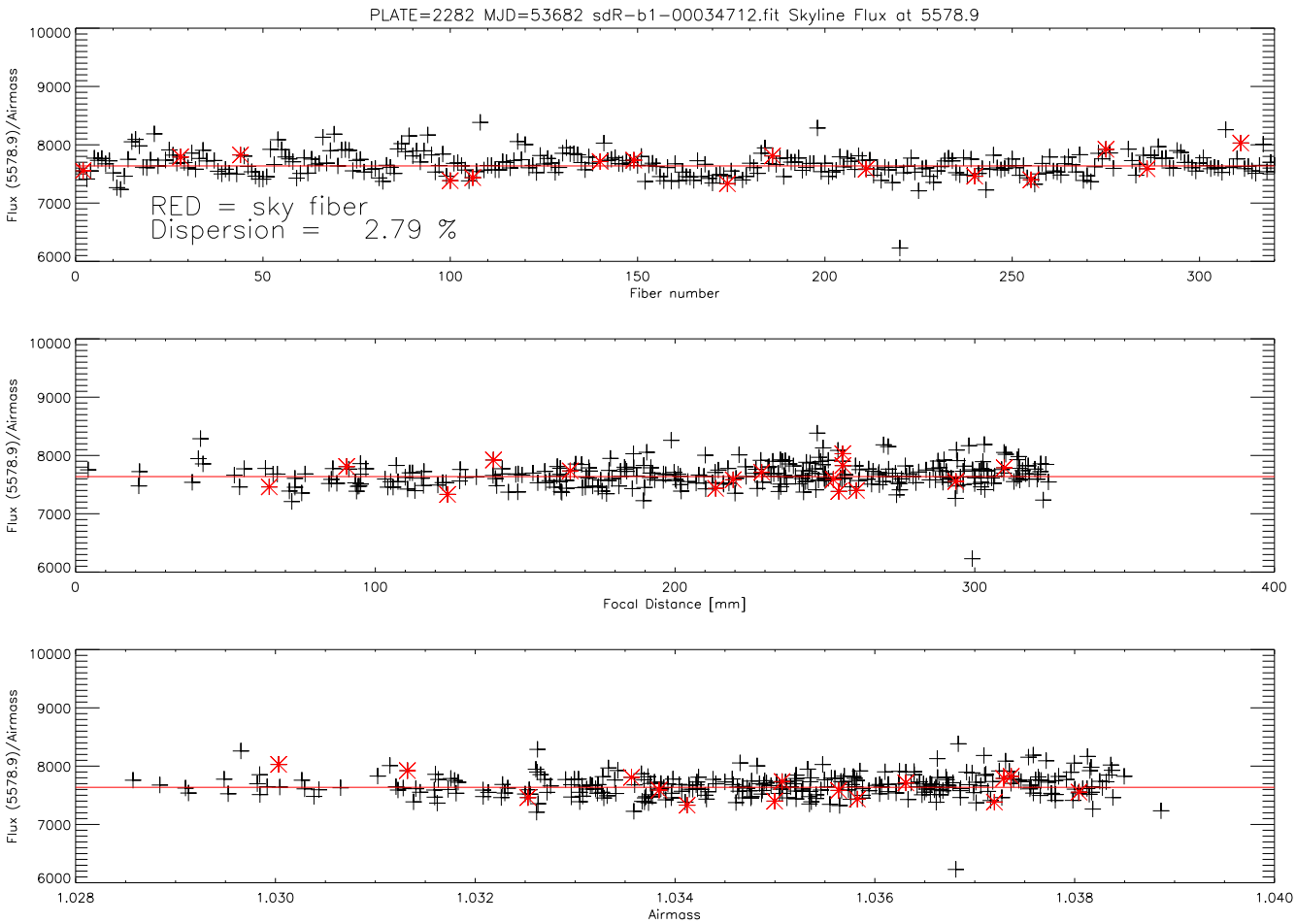

PLATE=2282 MJD=53682 sdR-b1-00034712.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

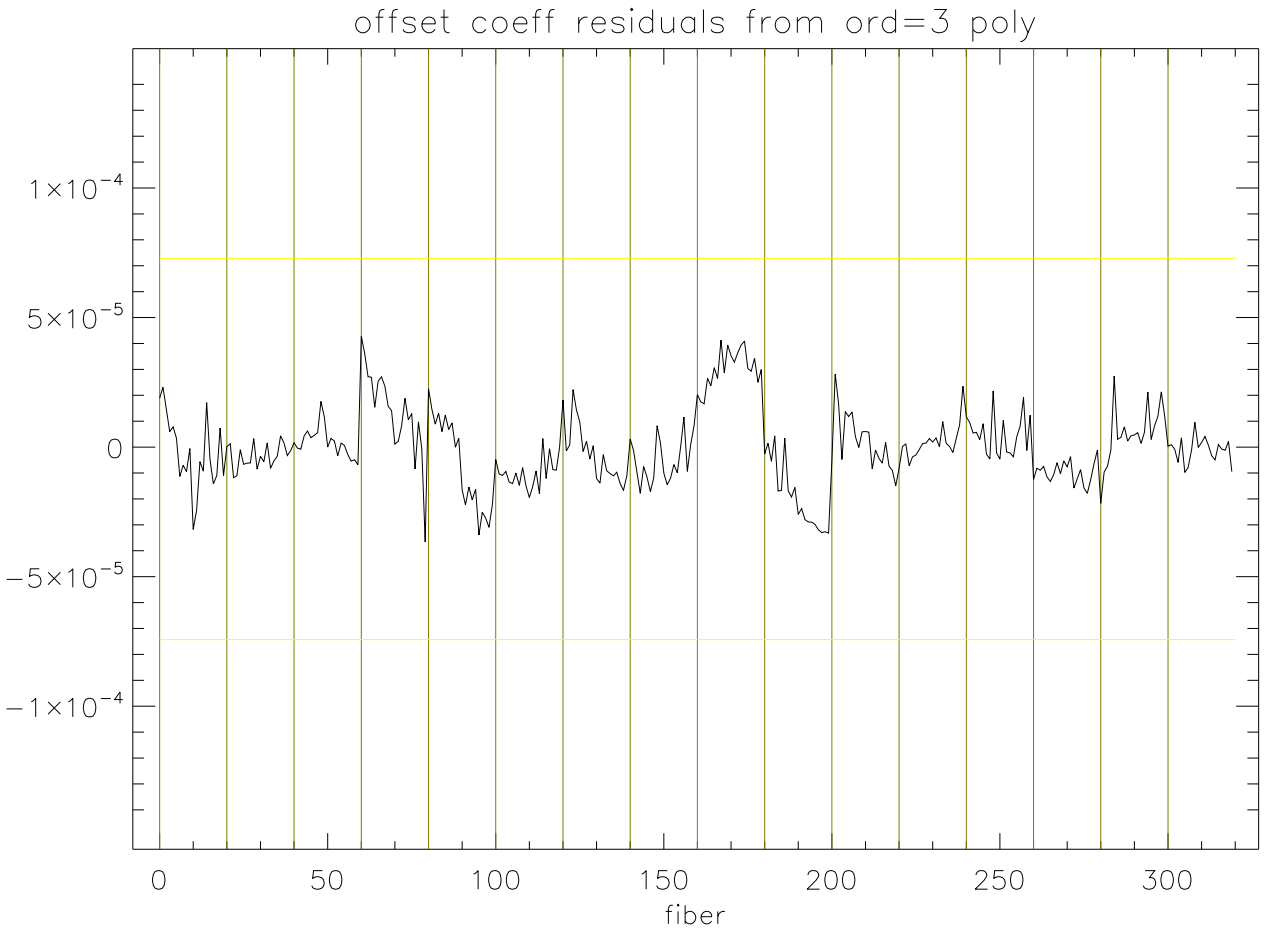

PLATE=2282 MJD=53682 sdR-b1-00034712.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

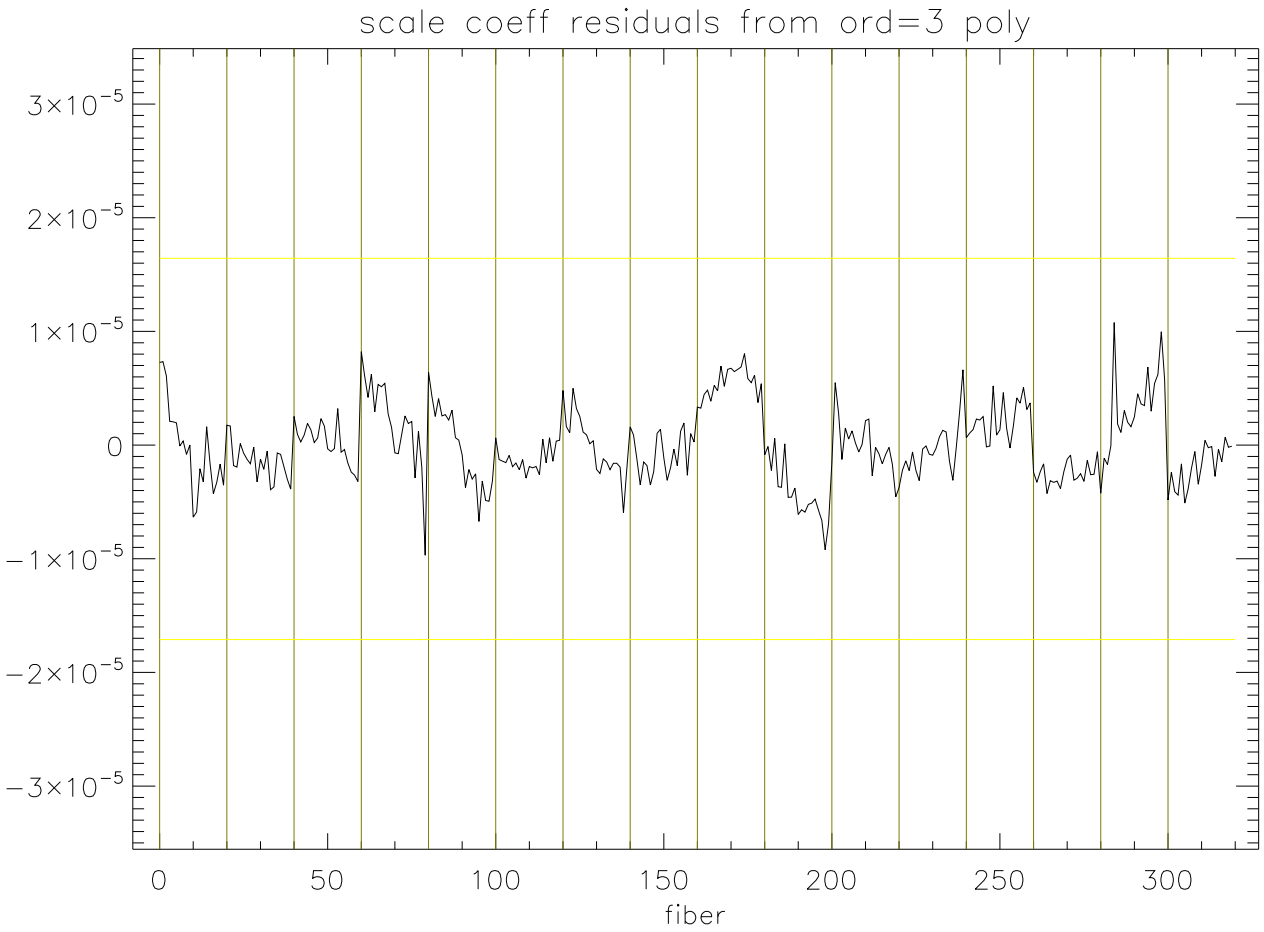

PLATE=2282 MJD=53682 sdR-b1-00034712.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

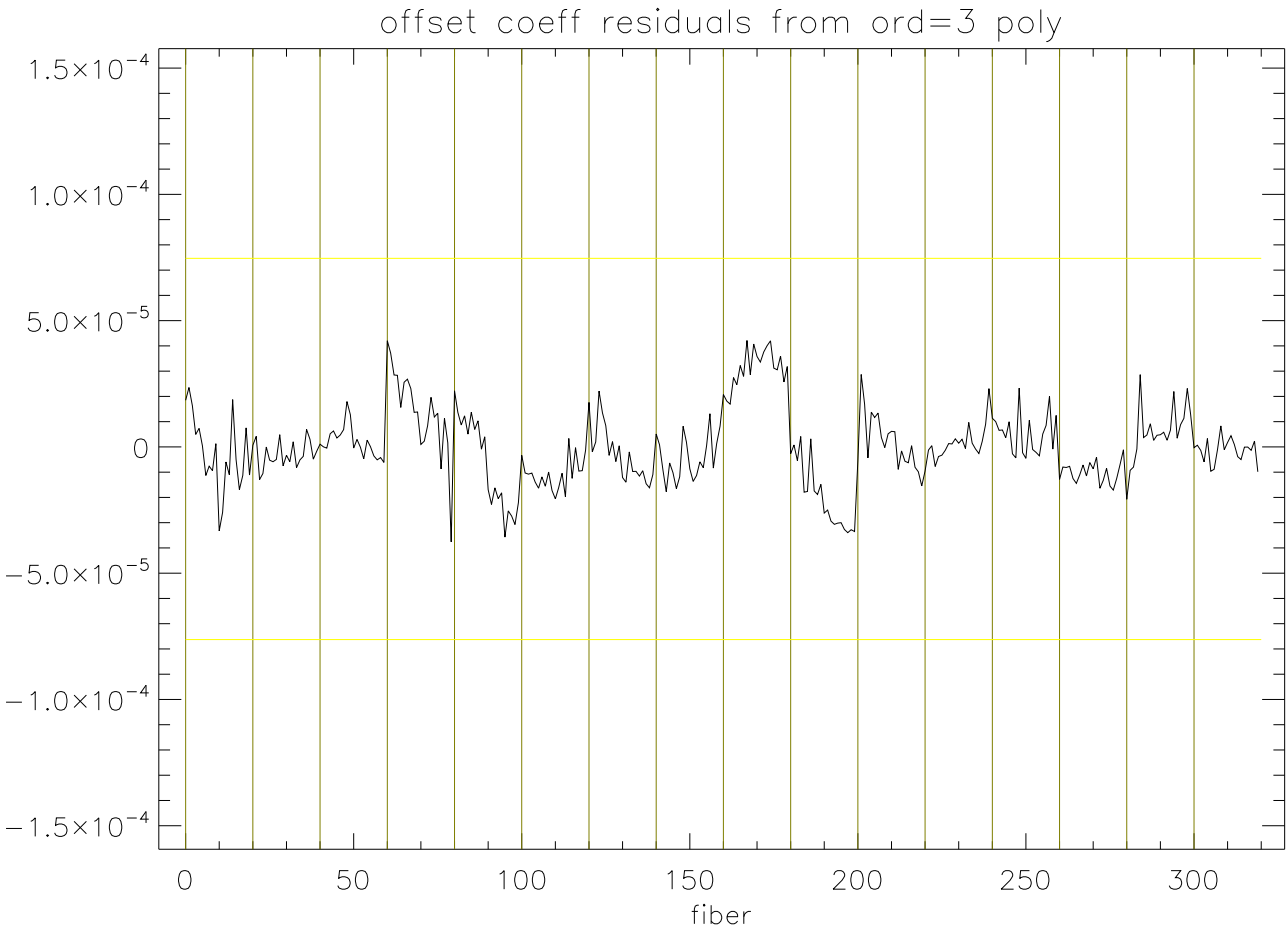

Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-b1-00034712.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

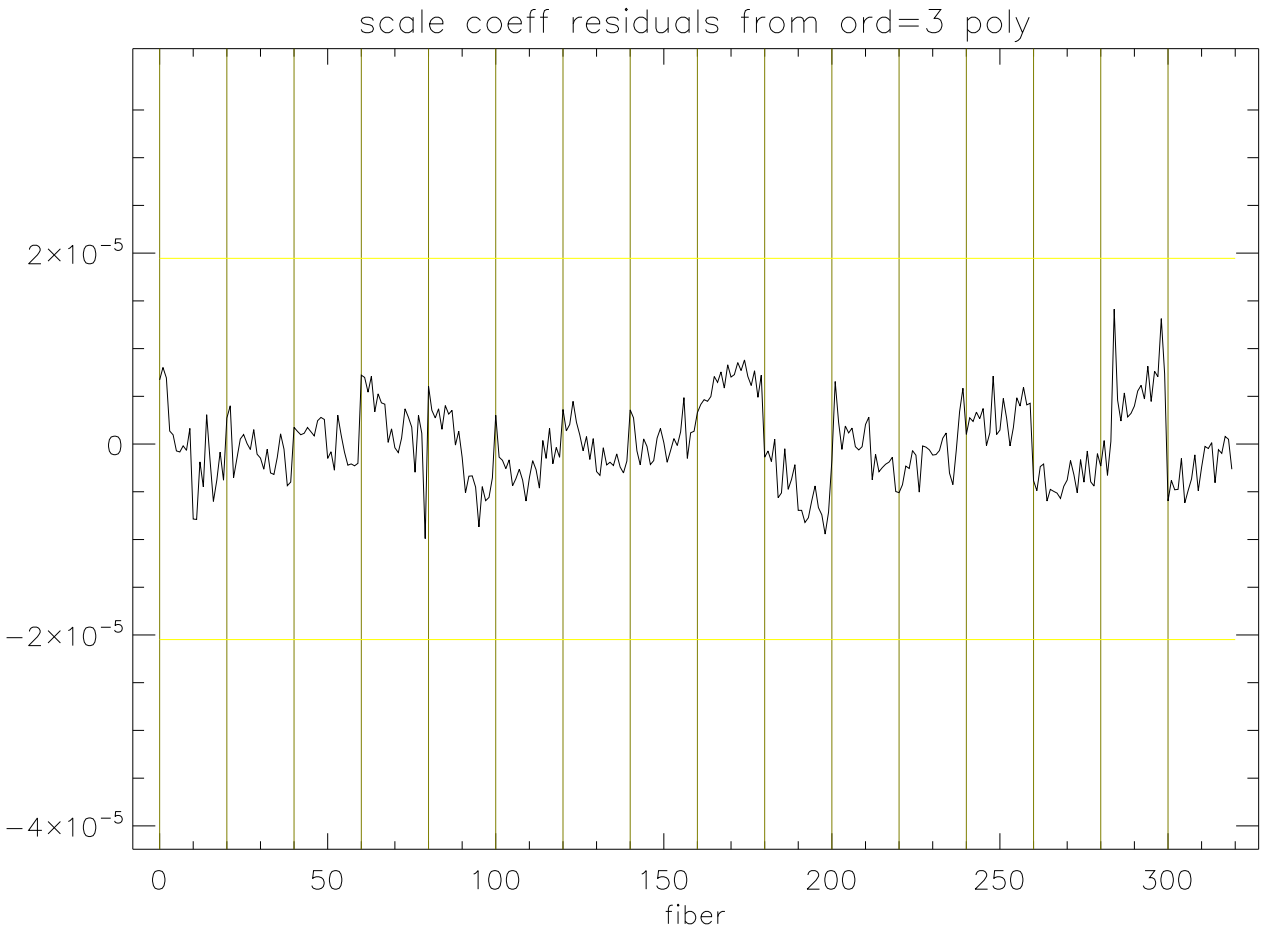

PLATE=2282 MJD=53682 sdR-b1-00034712.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 15.82 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

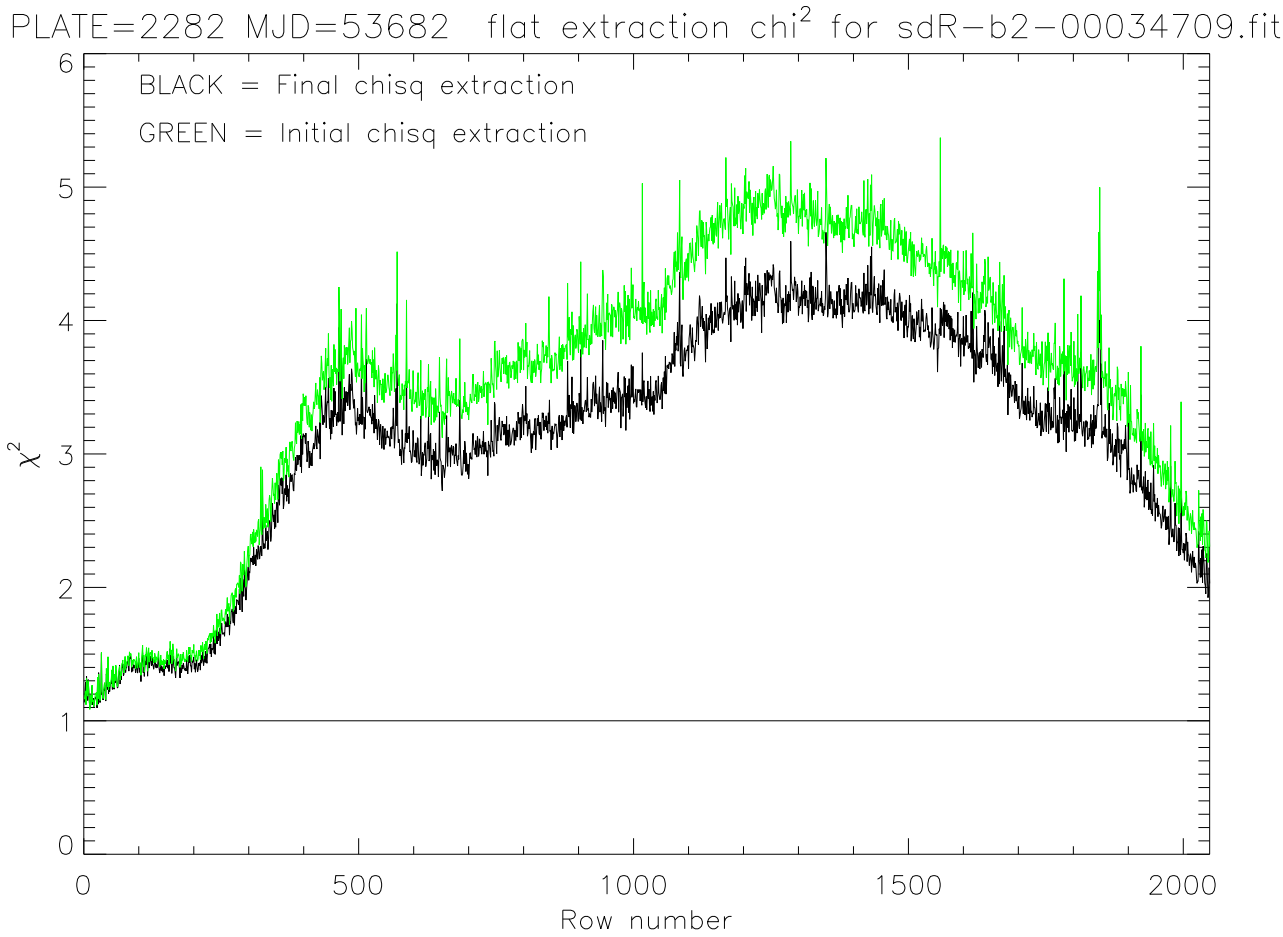

PLATE=2282 MJD=53682 sdR-b1-00034712.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.79 %
Fiber number
Focal Distance [mm]
Airmass

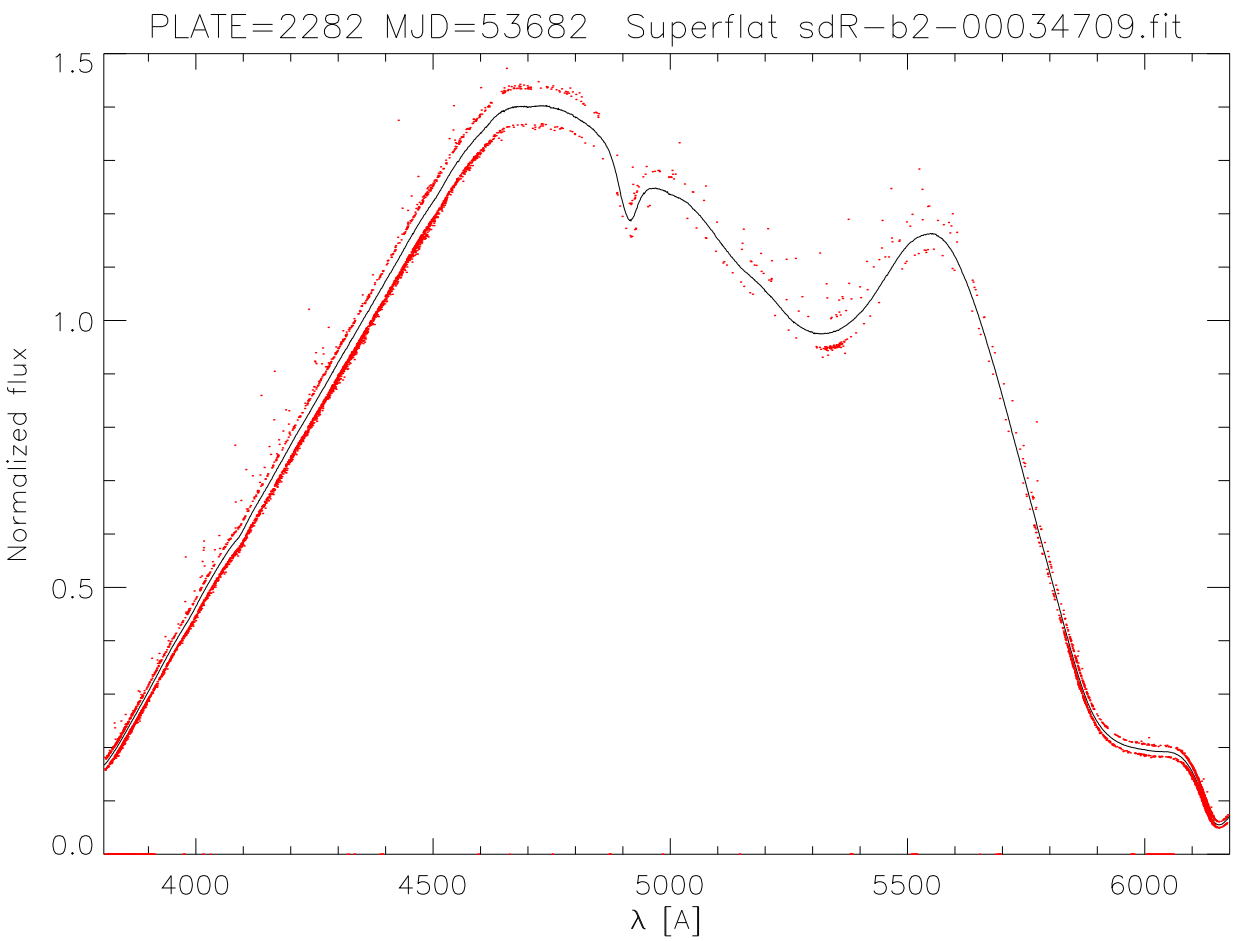

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

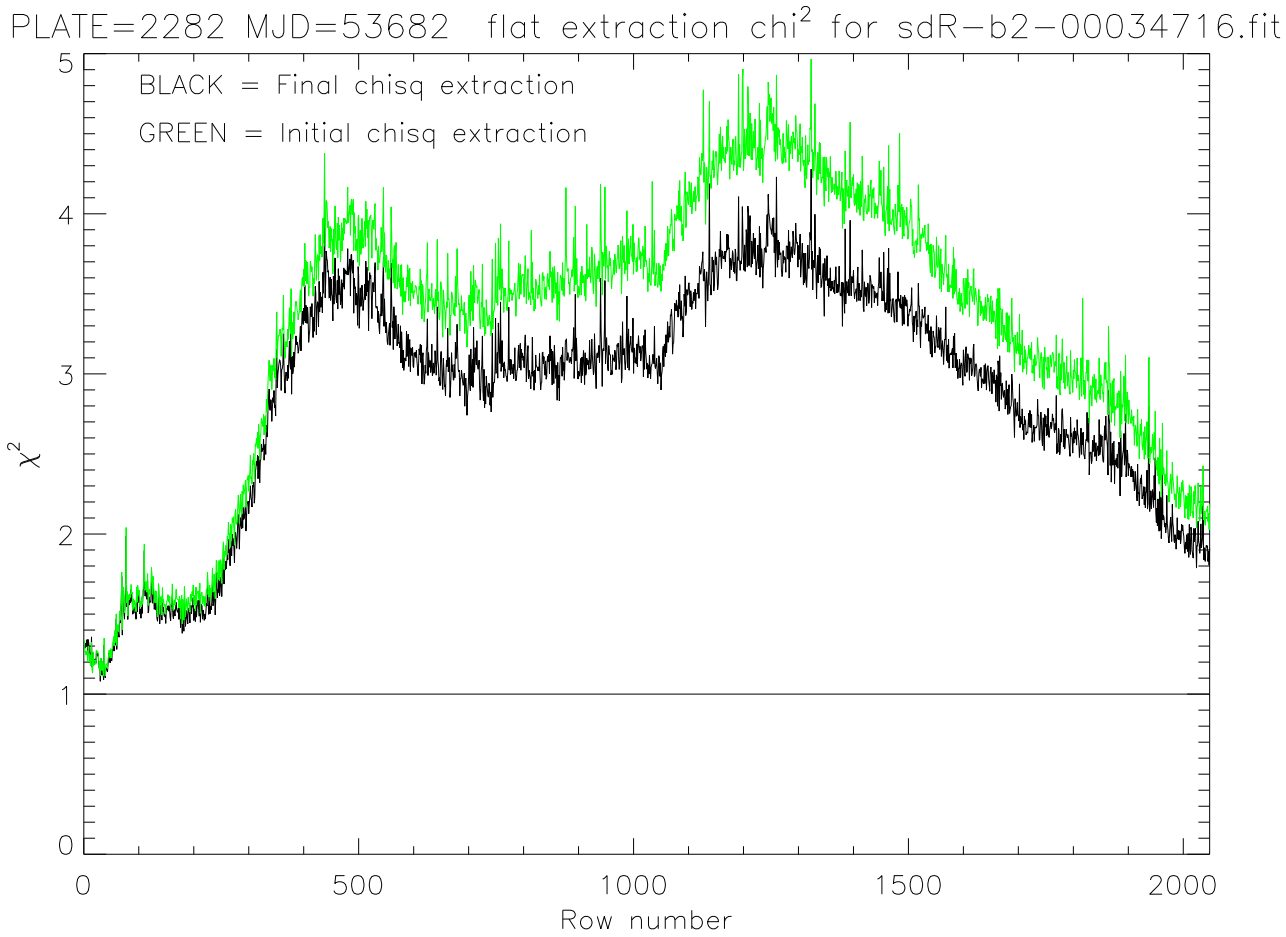

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

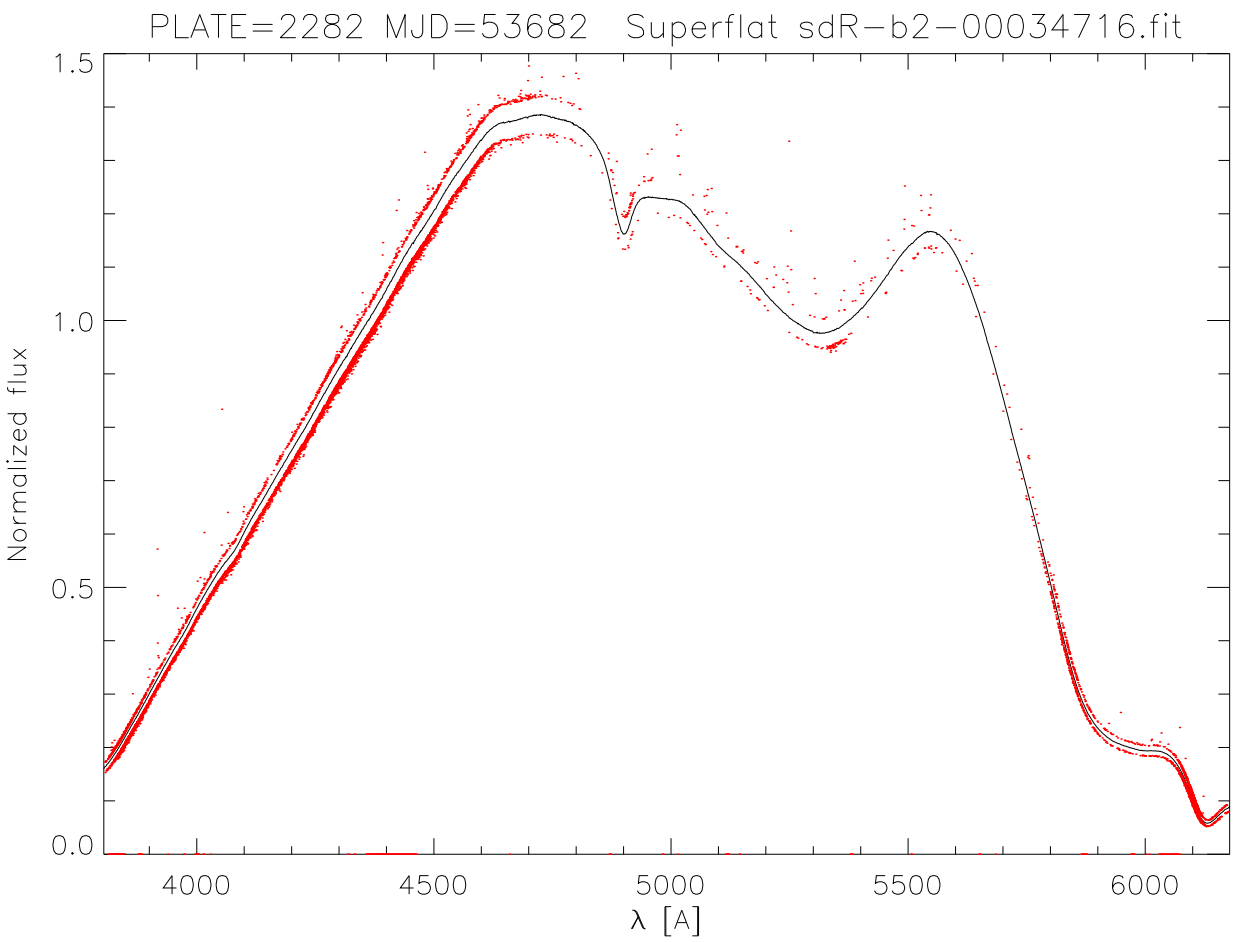

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

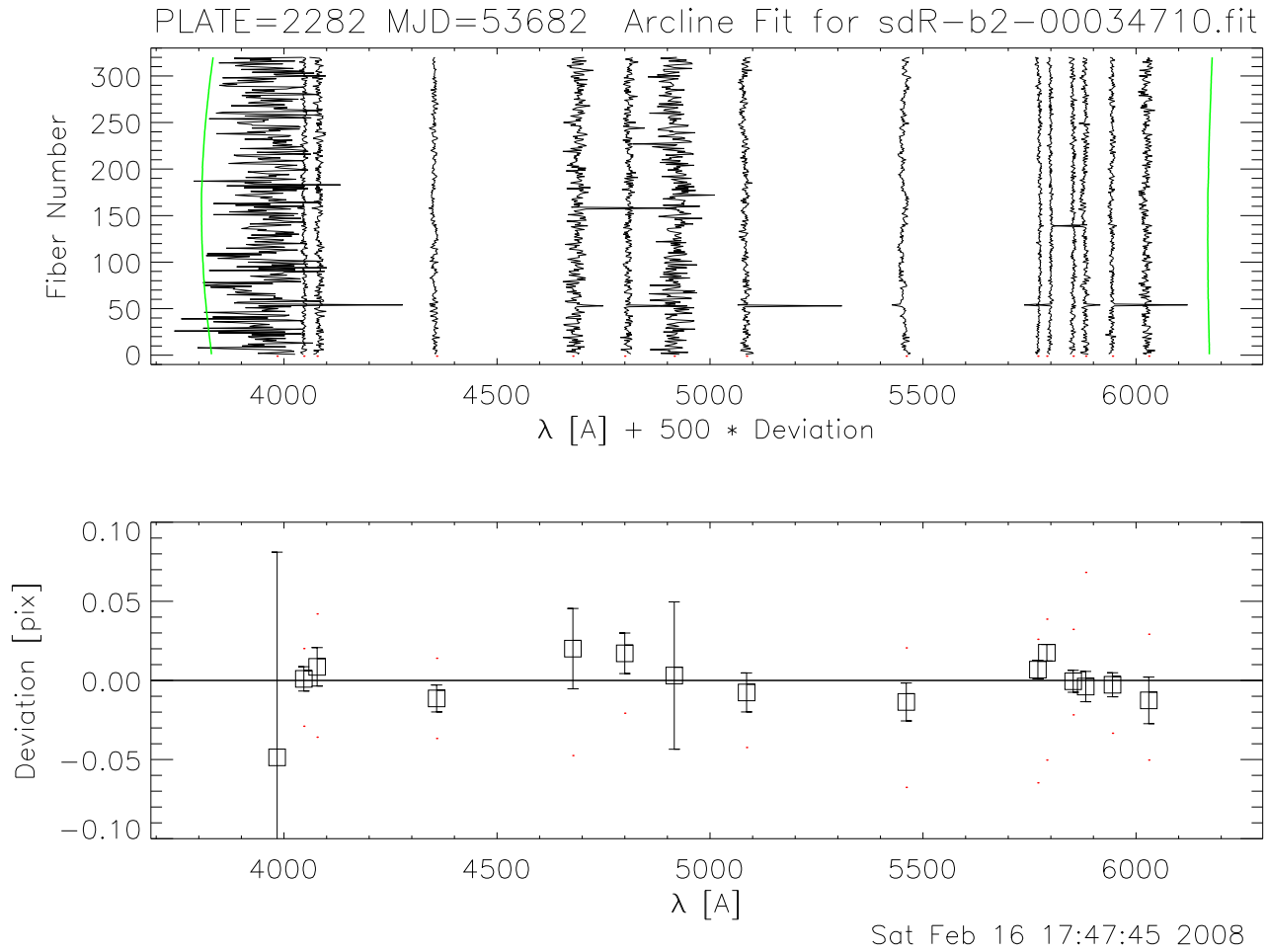

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

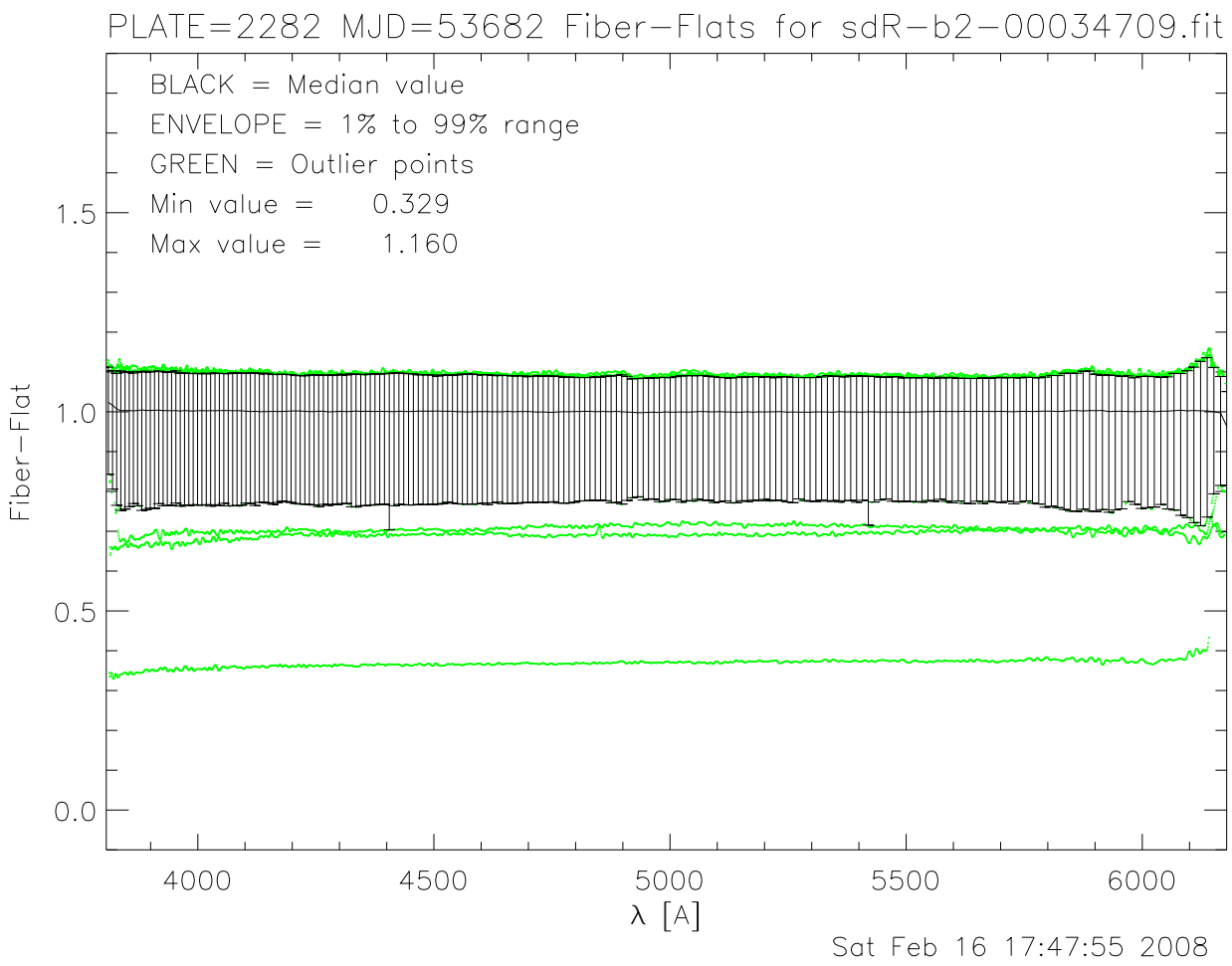

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−b2−00034709.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

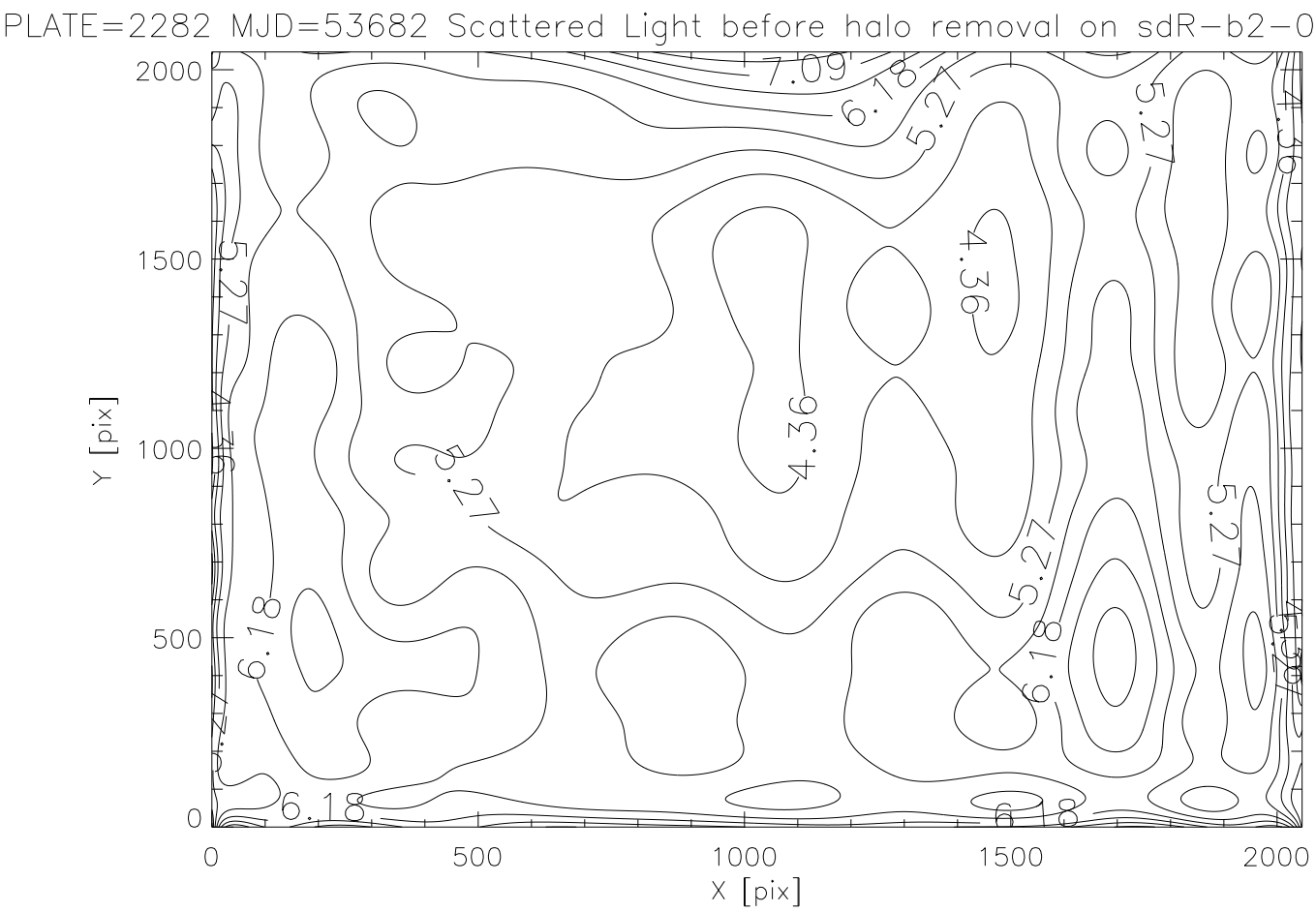

PLATE=2282 MJD=53682 Superflat sdR-b2-00034709.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

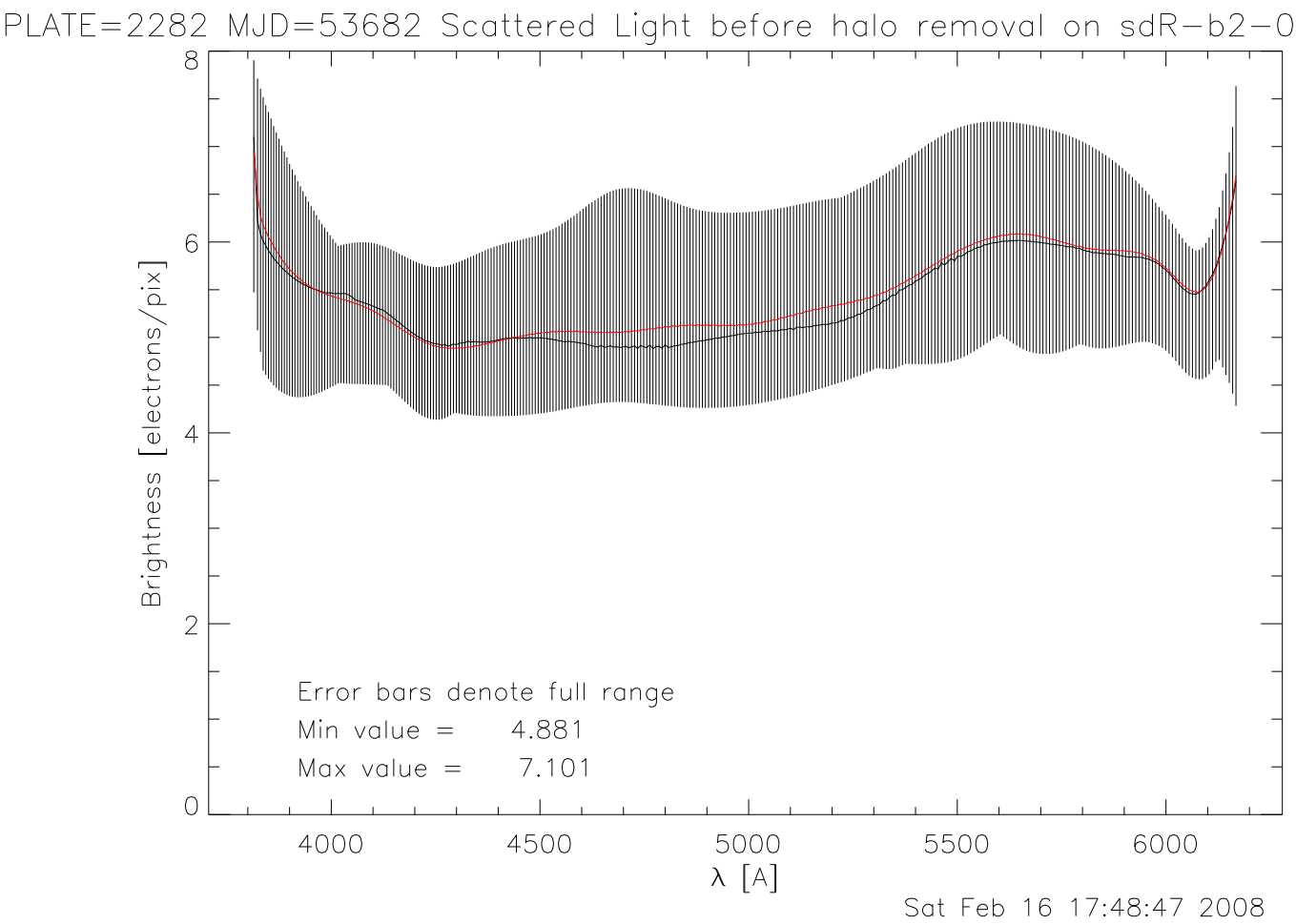

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−b2−00034716.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000

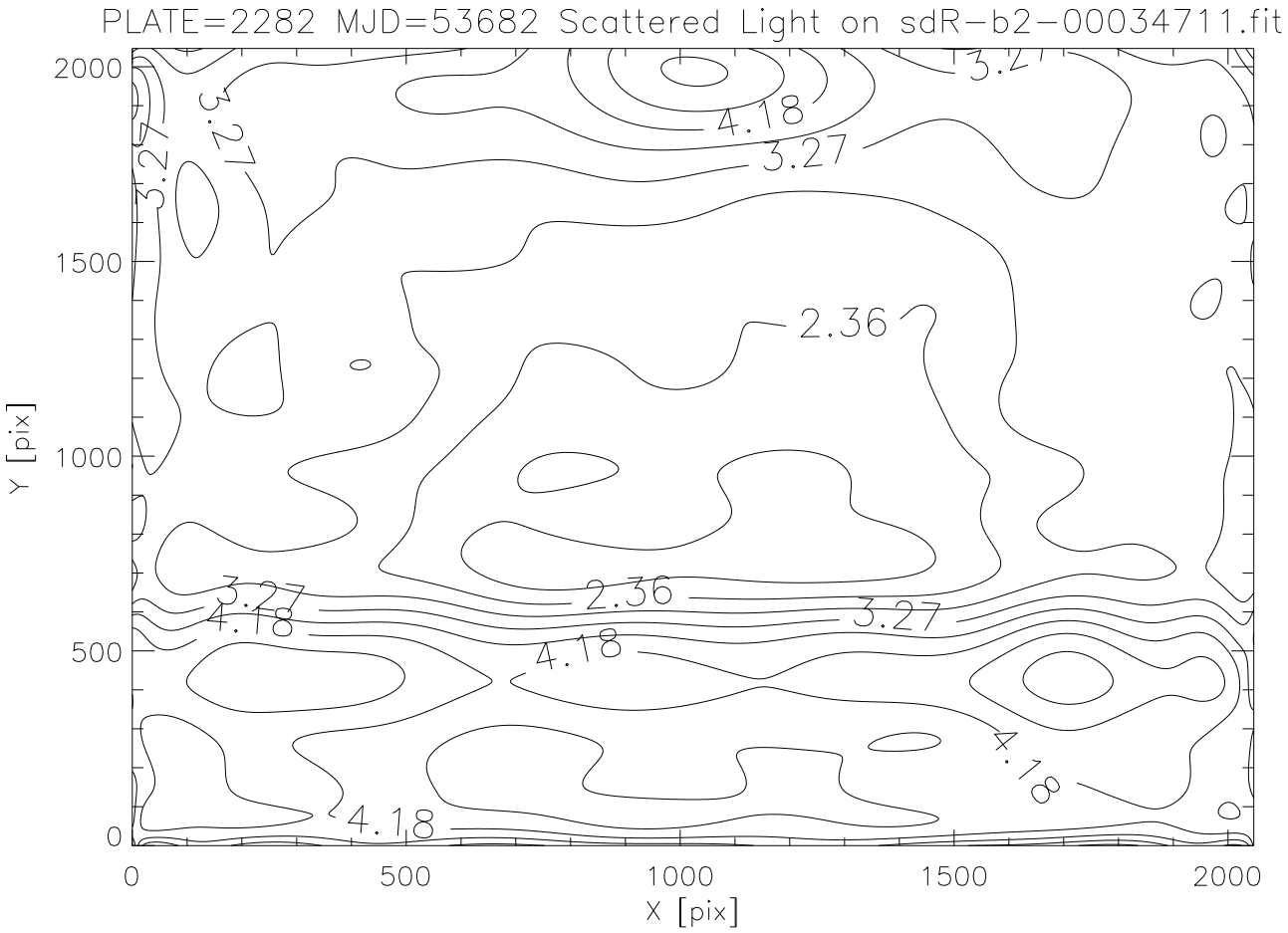

PLATE=2282 MJD=53682 Superflat sdR-b2-00034716.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

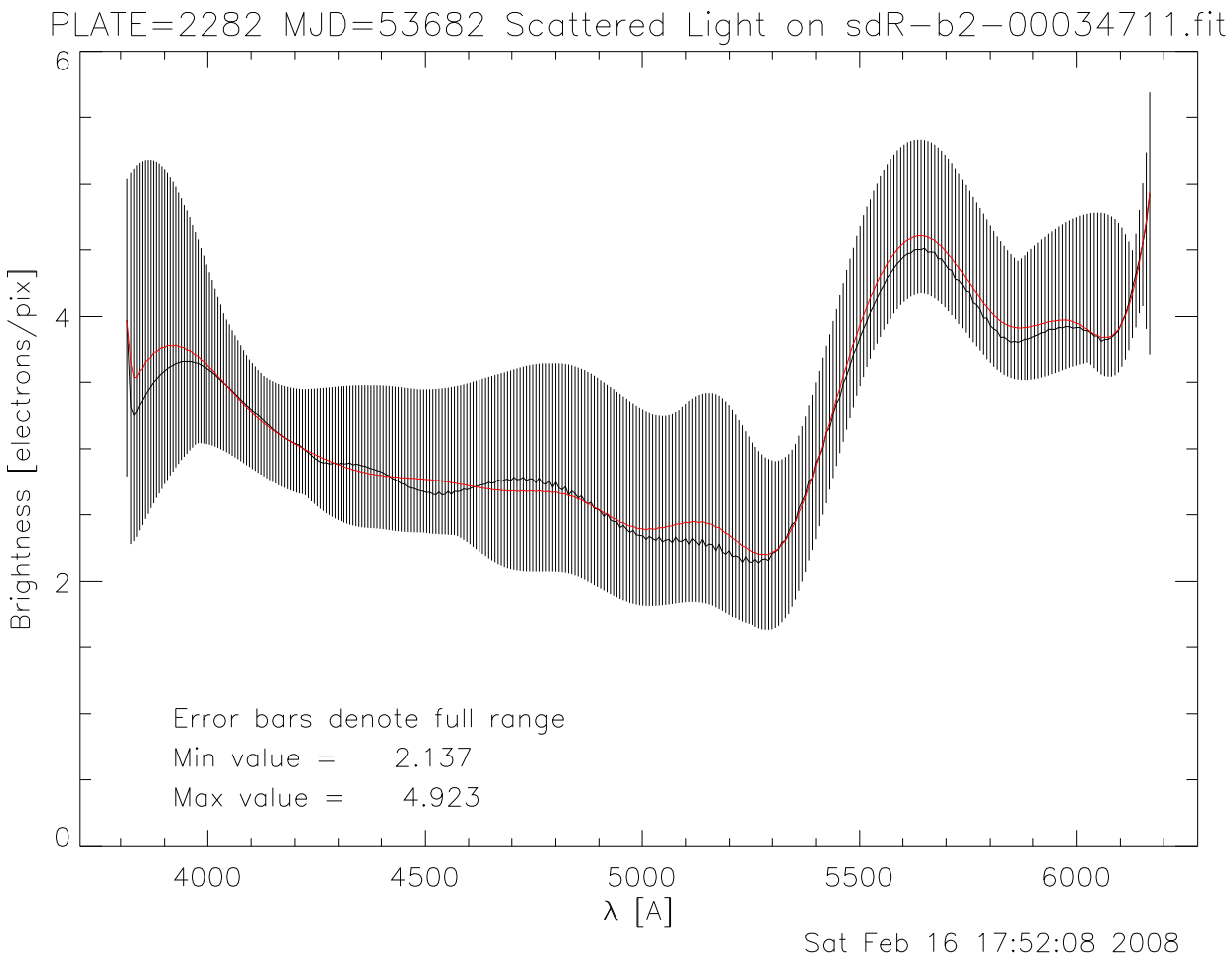

PLATE=2282 MJD=53682 Arcline Fit for sdR-b2-00034710.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 17:47:45 2008

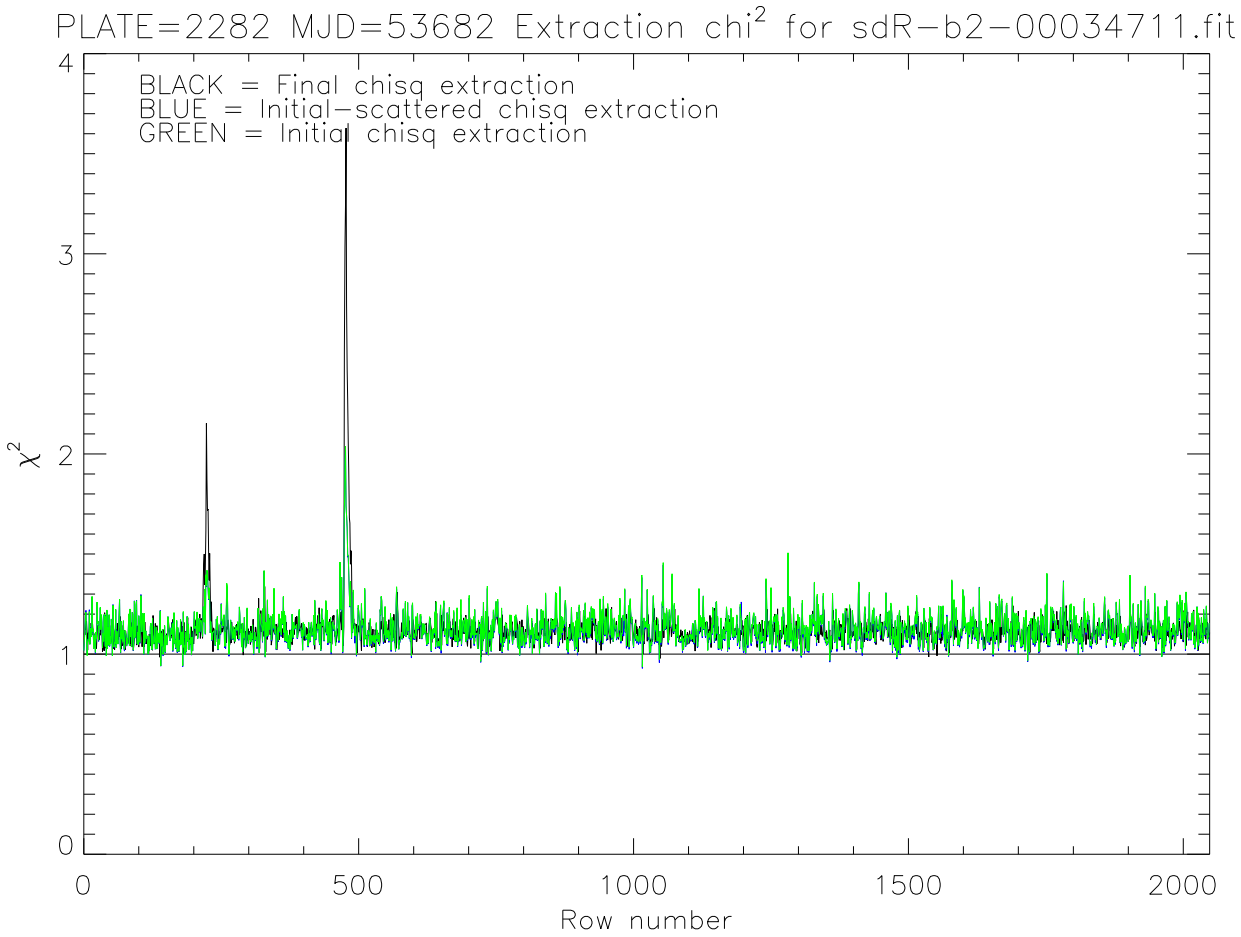

PLATE=2282 MJD=53682 Fiber−Flats for sdR−b2−00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.329
Max value = 1.160
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 17:47:55 2008

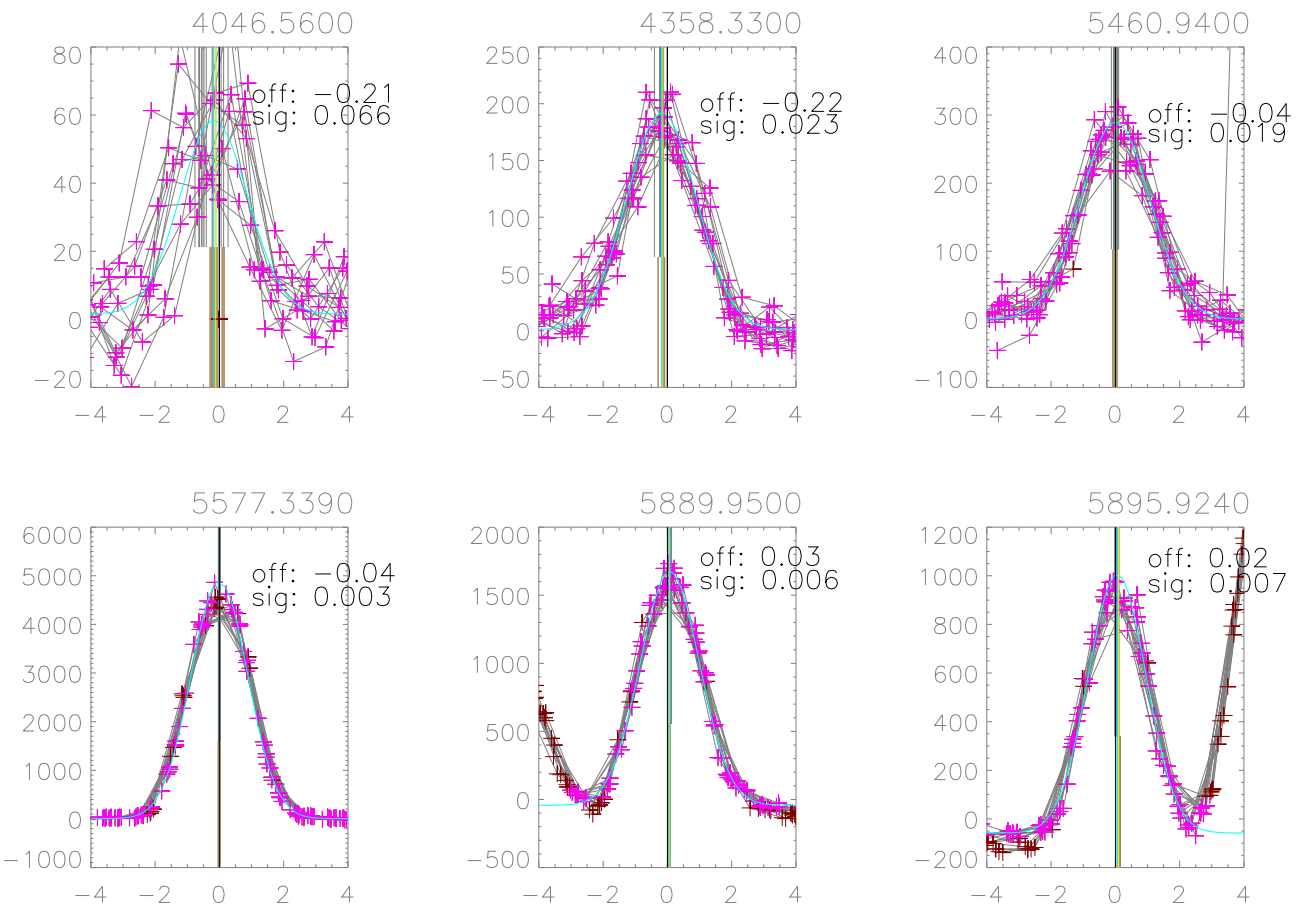

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR−b2−00034711.f
7.09
6.18
5.27
4.36
Y [pix]
X [pix]
0
500
1000
1500
2000

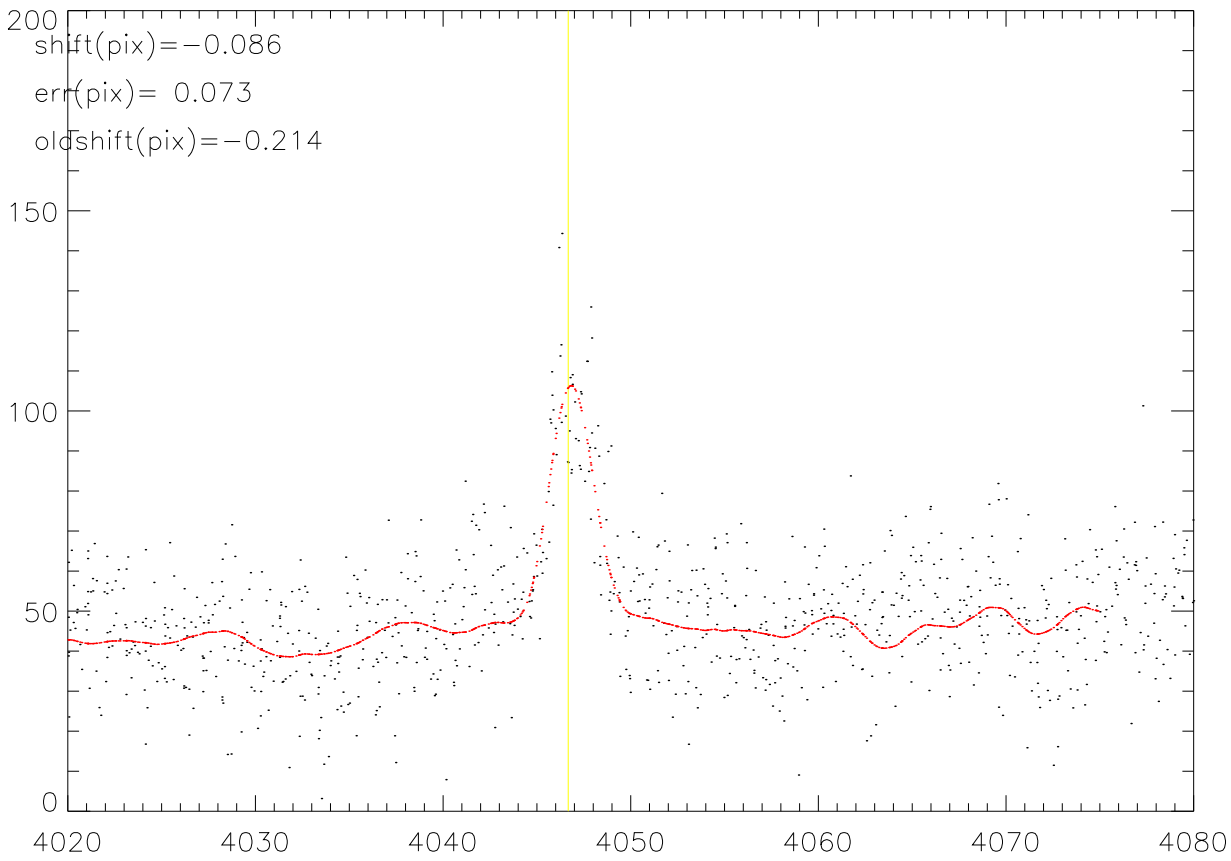

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR−b2−00034711.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.881
Max value = 7.101
Sat Feb 16 17:48:47 2008

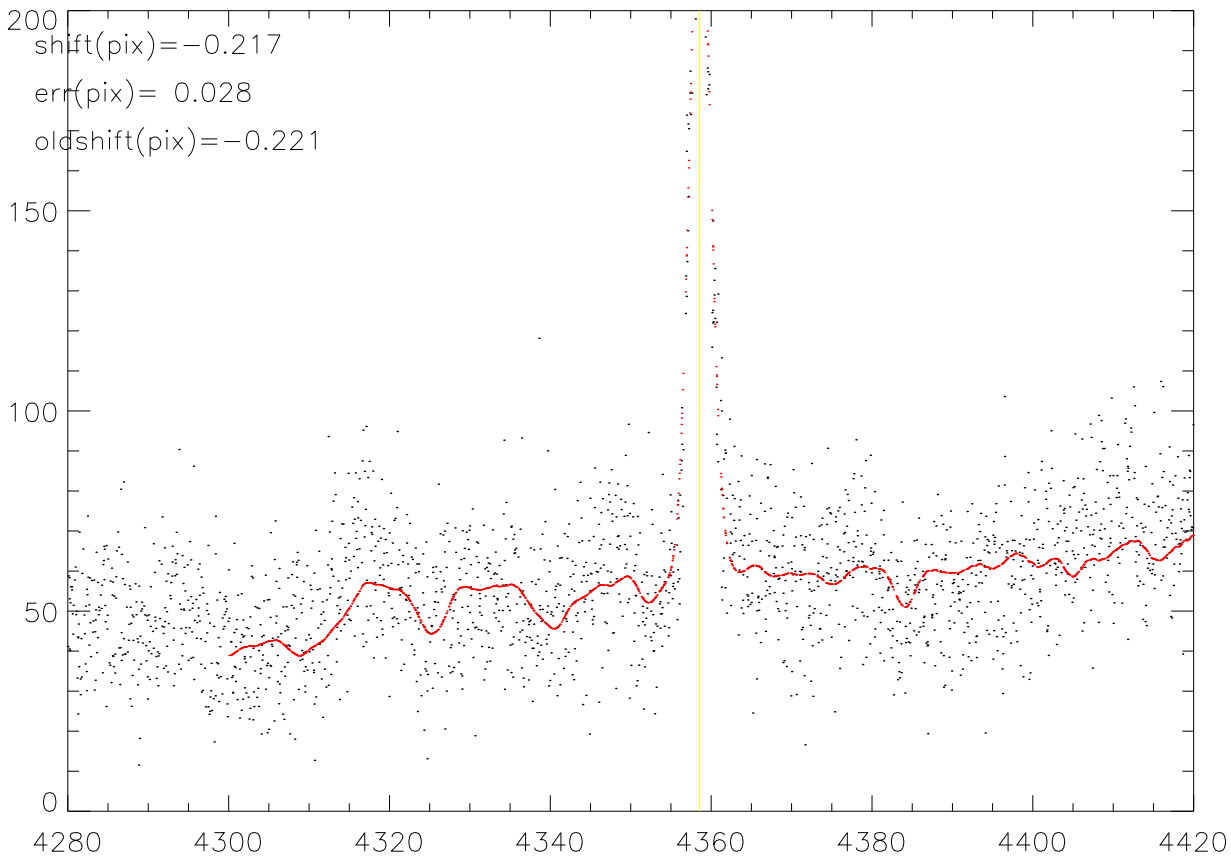

PLATE=2282 MJD=53682 Scattered Light on sdR-b2-00034711.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.18
3.27
2.36
0

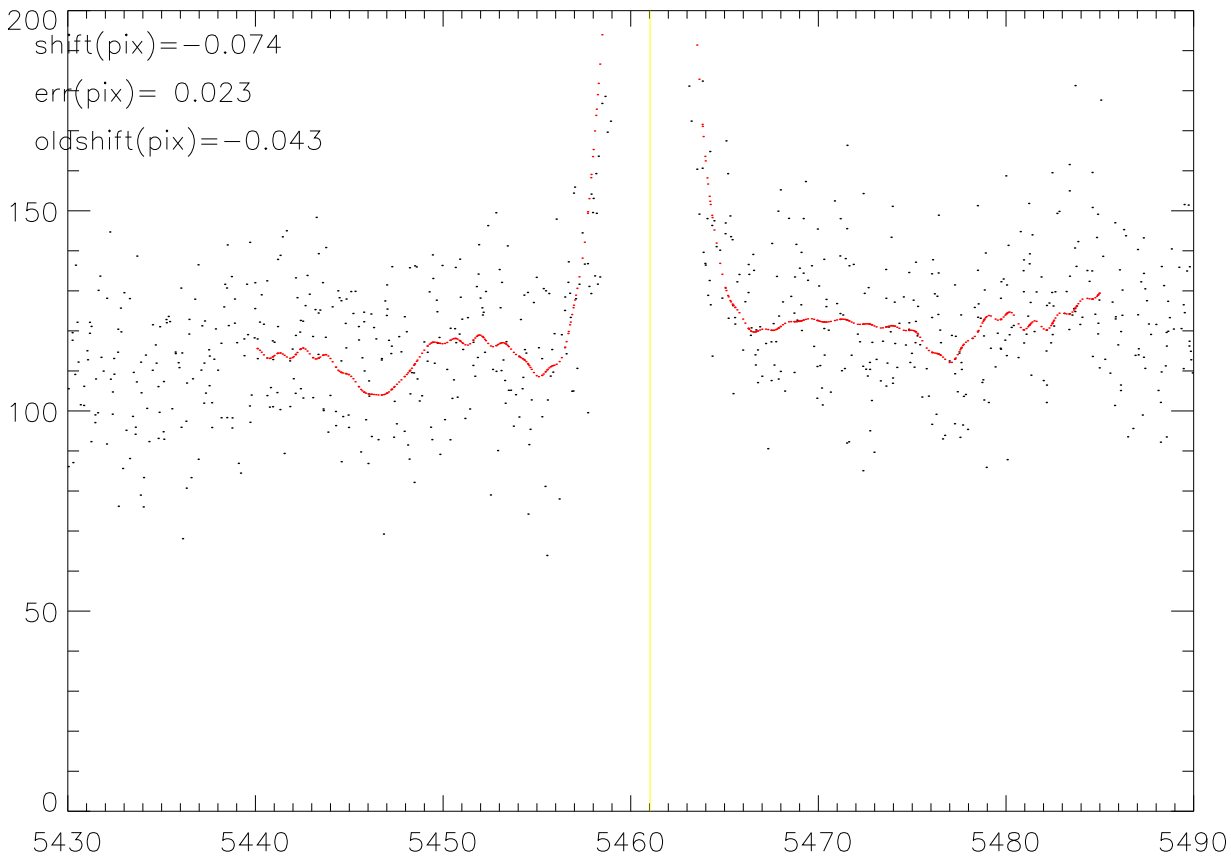

PLATE=2282 MJD=53682 Scattered Light on sdR-b2-00034711.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.137
Max value = 4.923
Sat Feb 16 17:52:08 2008

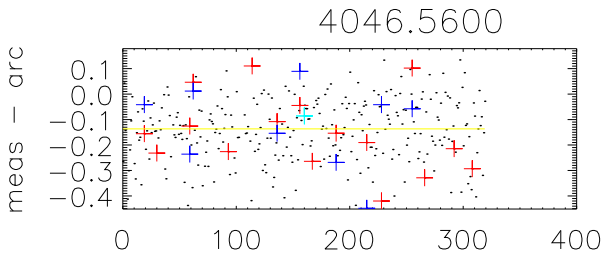

PLATE=2282 MJD=53682 Extraction chi^2 for sdR-b2-00034711.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

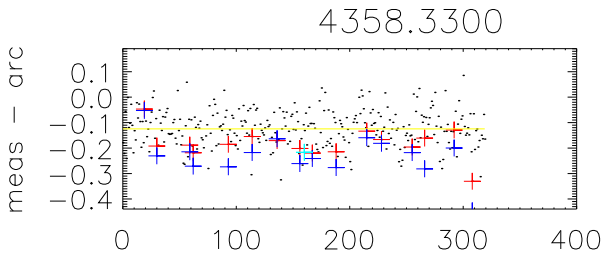

4046.5600
off: −0.21
sig: 0.066
4358.3300
off: −0.22
sig: 0.023
5460.9400
off: −0.04
sig: 0.019
5577.3390
off: −0.04
sig: 0.003
5889.9500
off: 0.03
sig: 0.006
5895.9240
off: 0.02
sig: 0.007

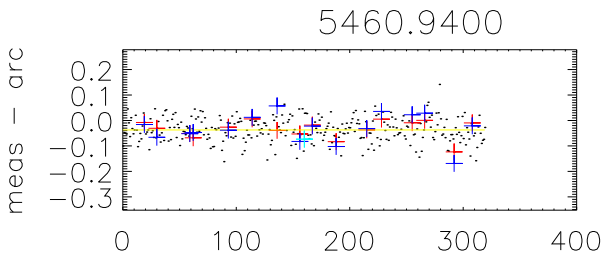

shift(pix)=−0.086
err(pix)= 0.073
oldshift(pix)=−0.214
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

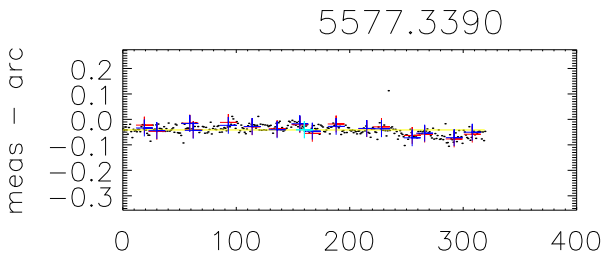

shift(pix)=−0.217
err(pix)= 0.028
oldshift(pix)=−0.221
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

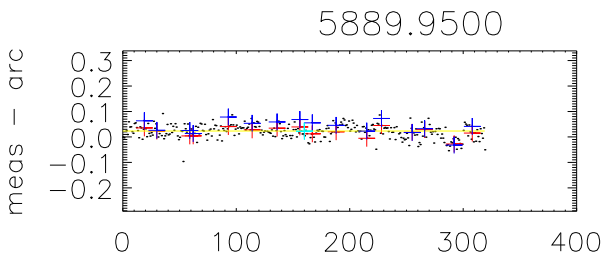

shift(pix)=−0.074
err(pix)= 0.023
oldshift(pix)=−0.043
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

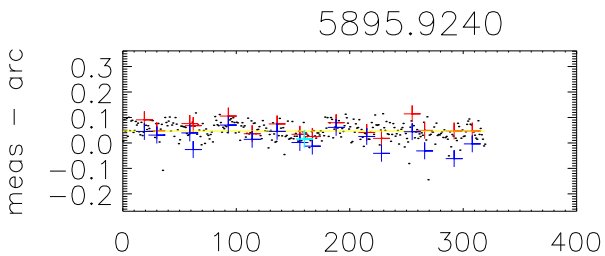

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

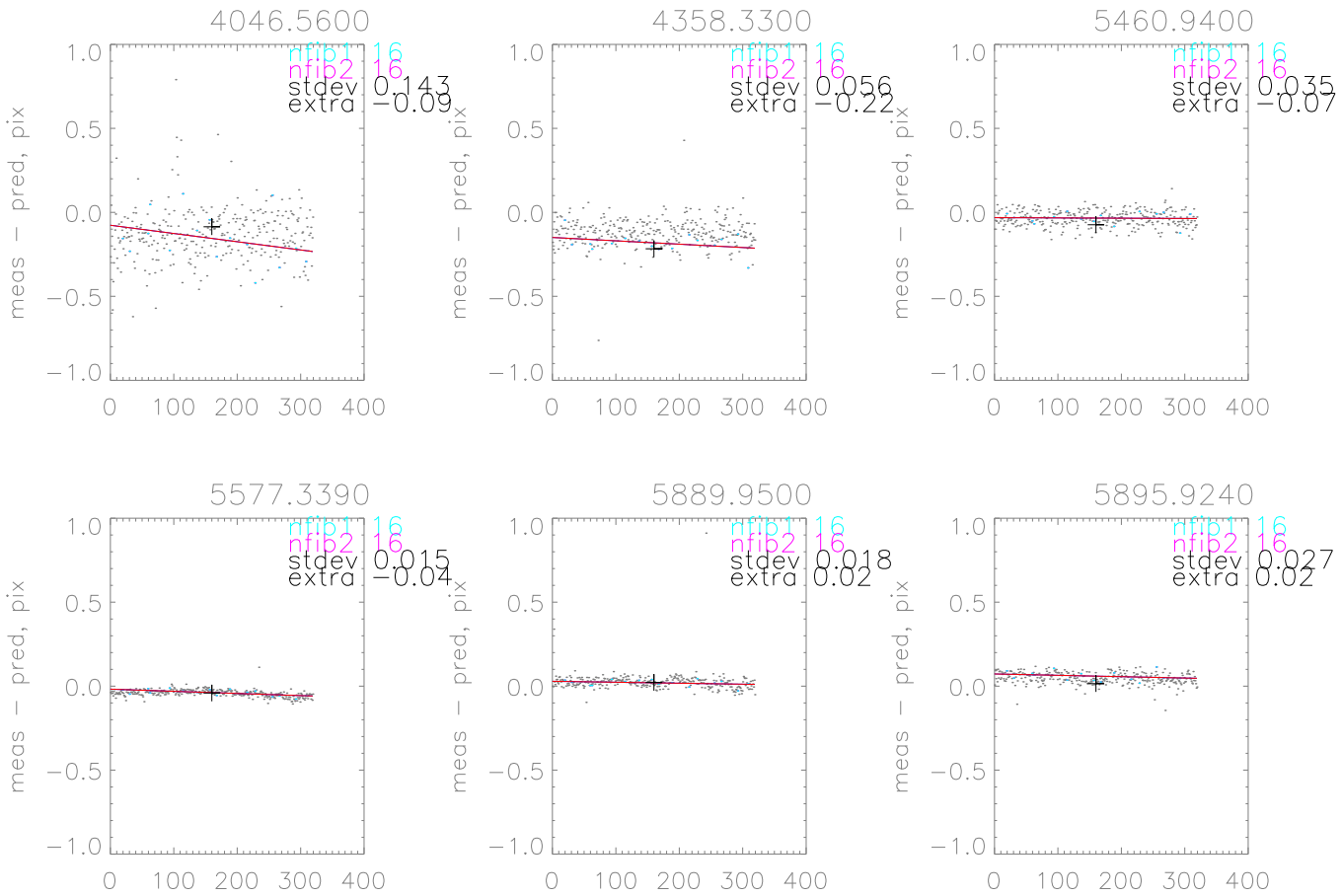

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

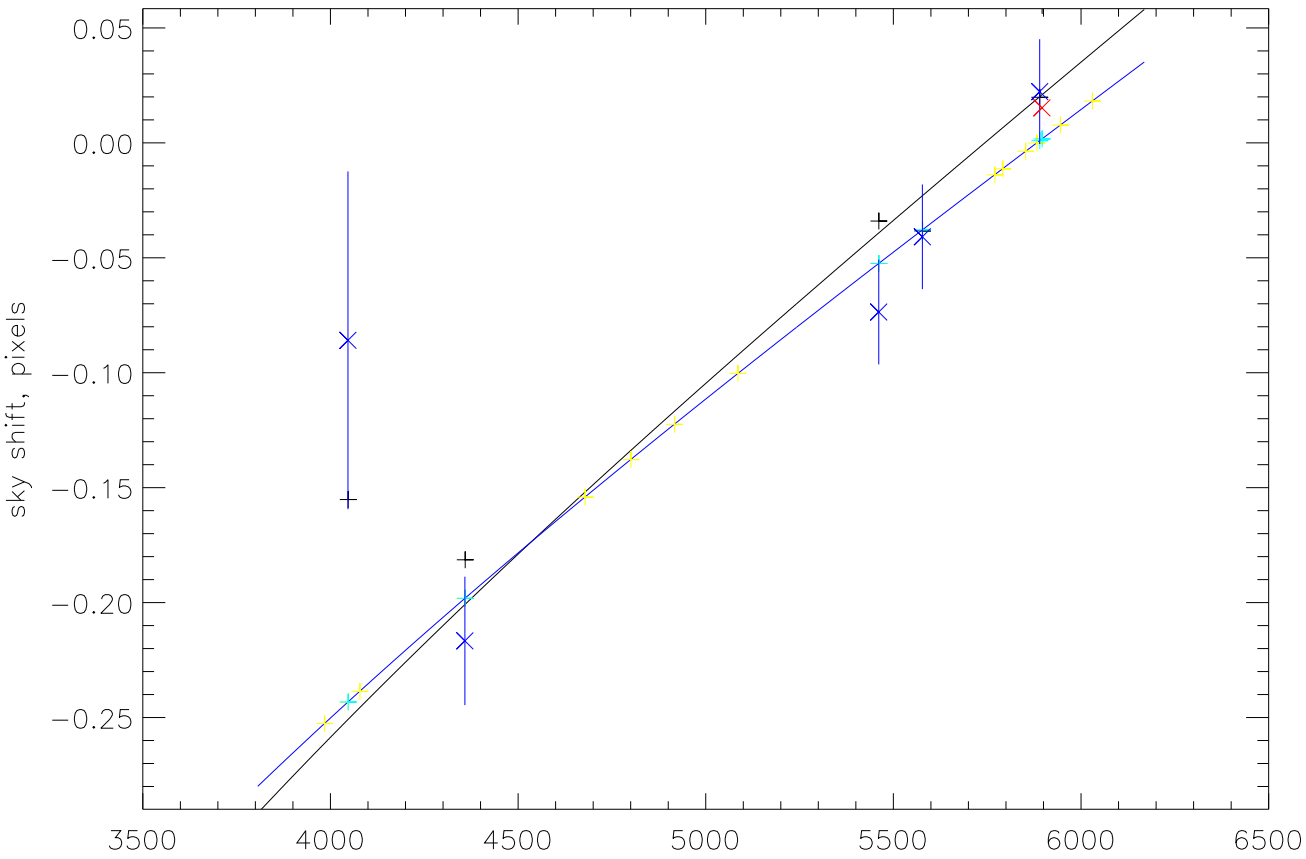

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

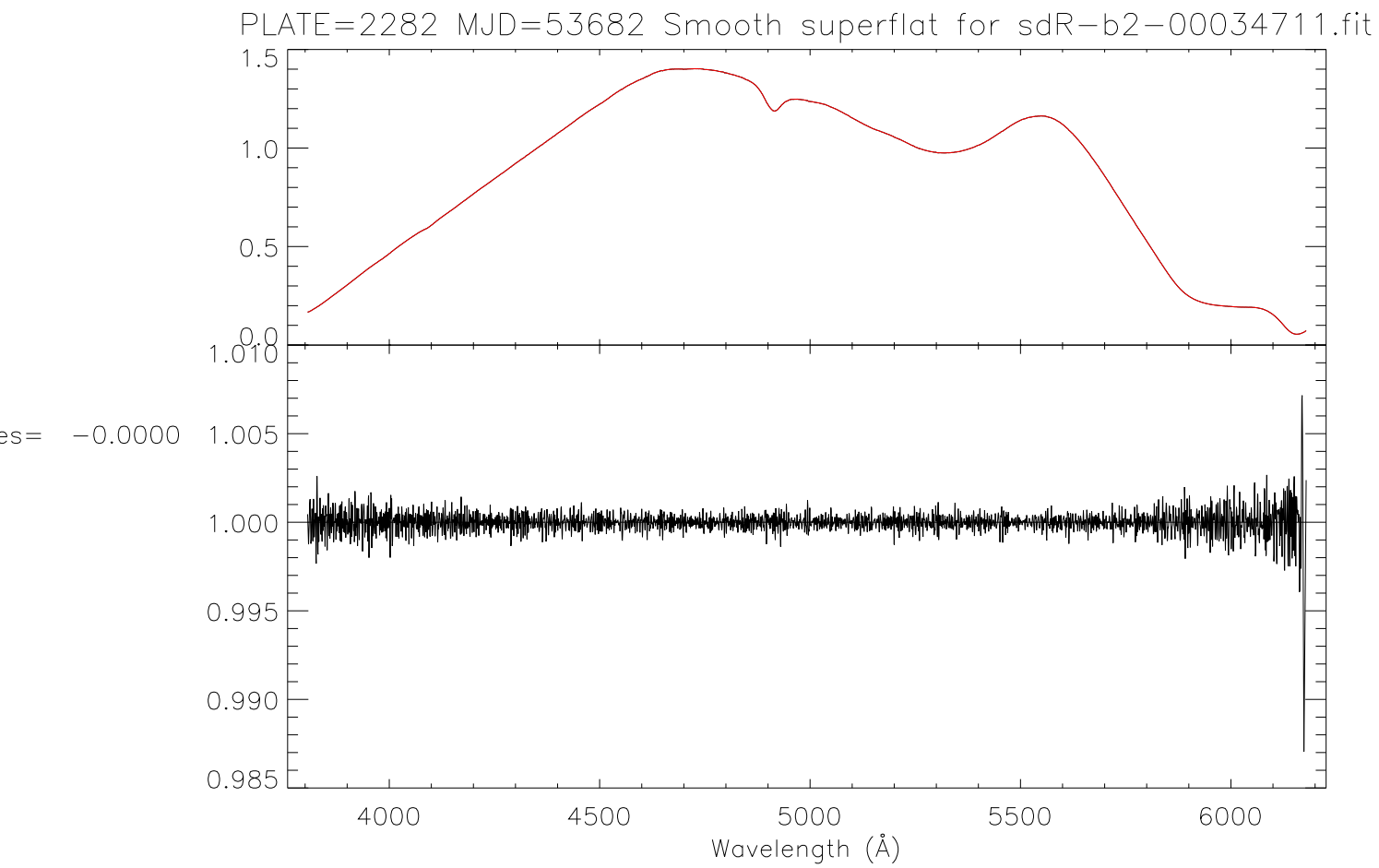

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

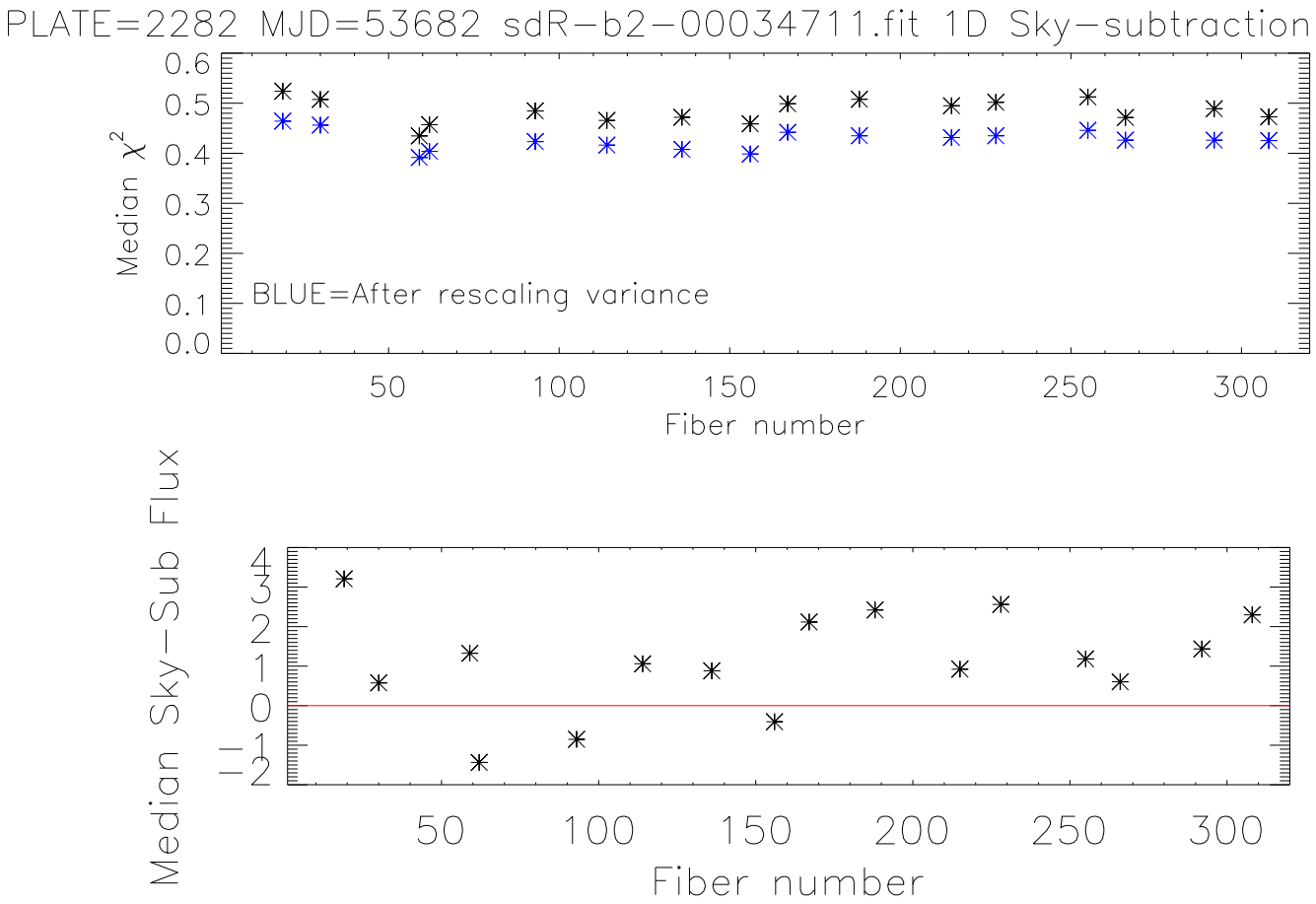

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

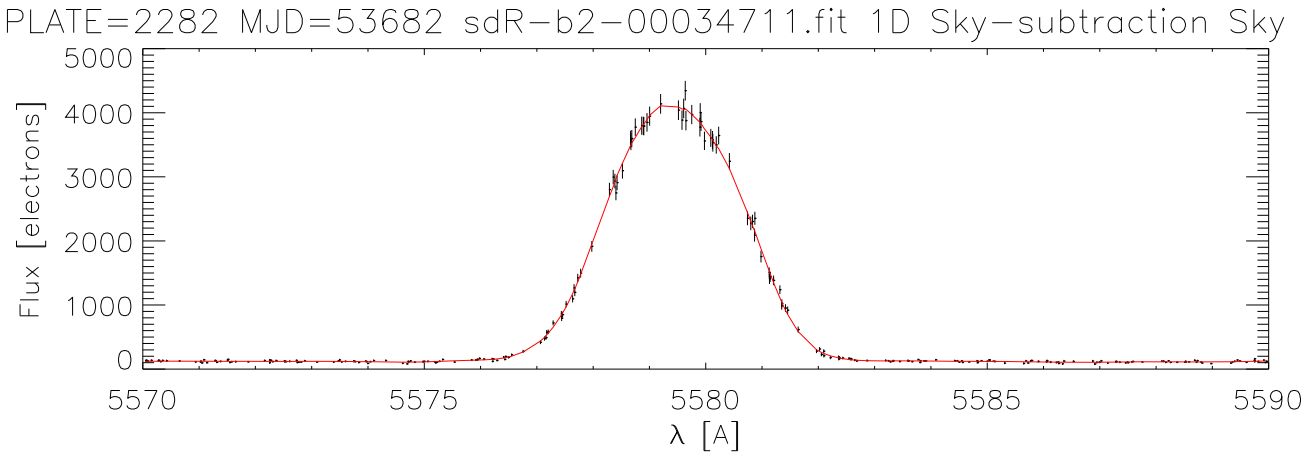

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

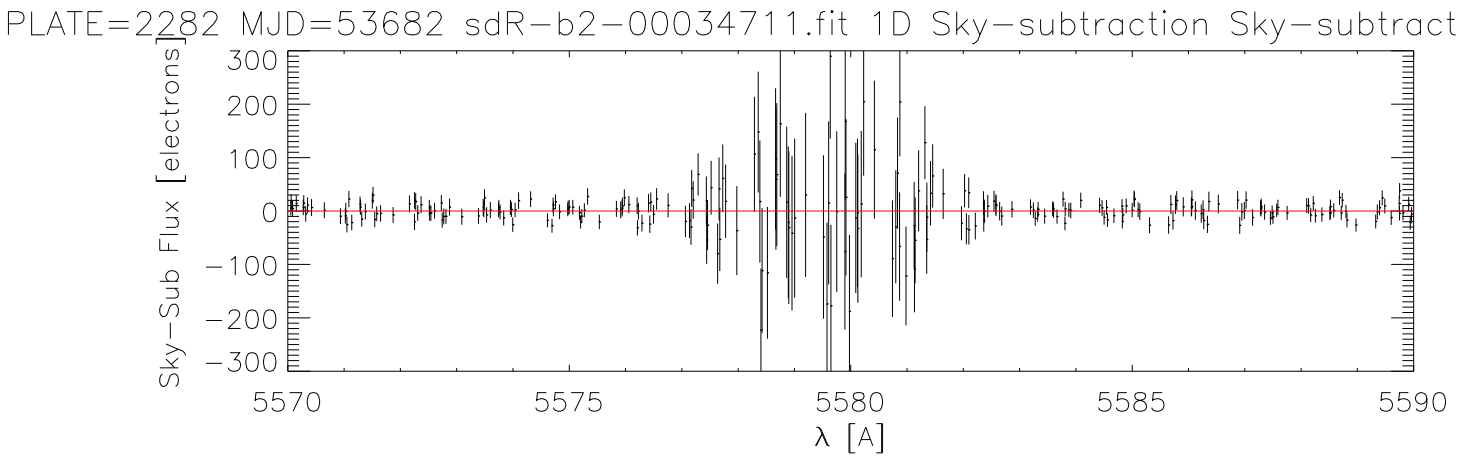

4046.5600
nfib1 16
nfib2 16
stdev 0.143
extra −0.09
4358.3300
nfib1 16
nfib2 16
stdev 0.056
extra −0.22
5460.9400
nfib1 16
nfib2 16
stdev 0.035
extra −0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.04
5889.9500
nfib1 16
nfib2 16
stdev 0.018
extra 0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.027
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

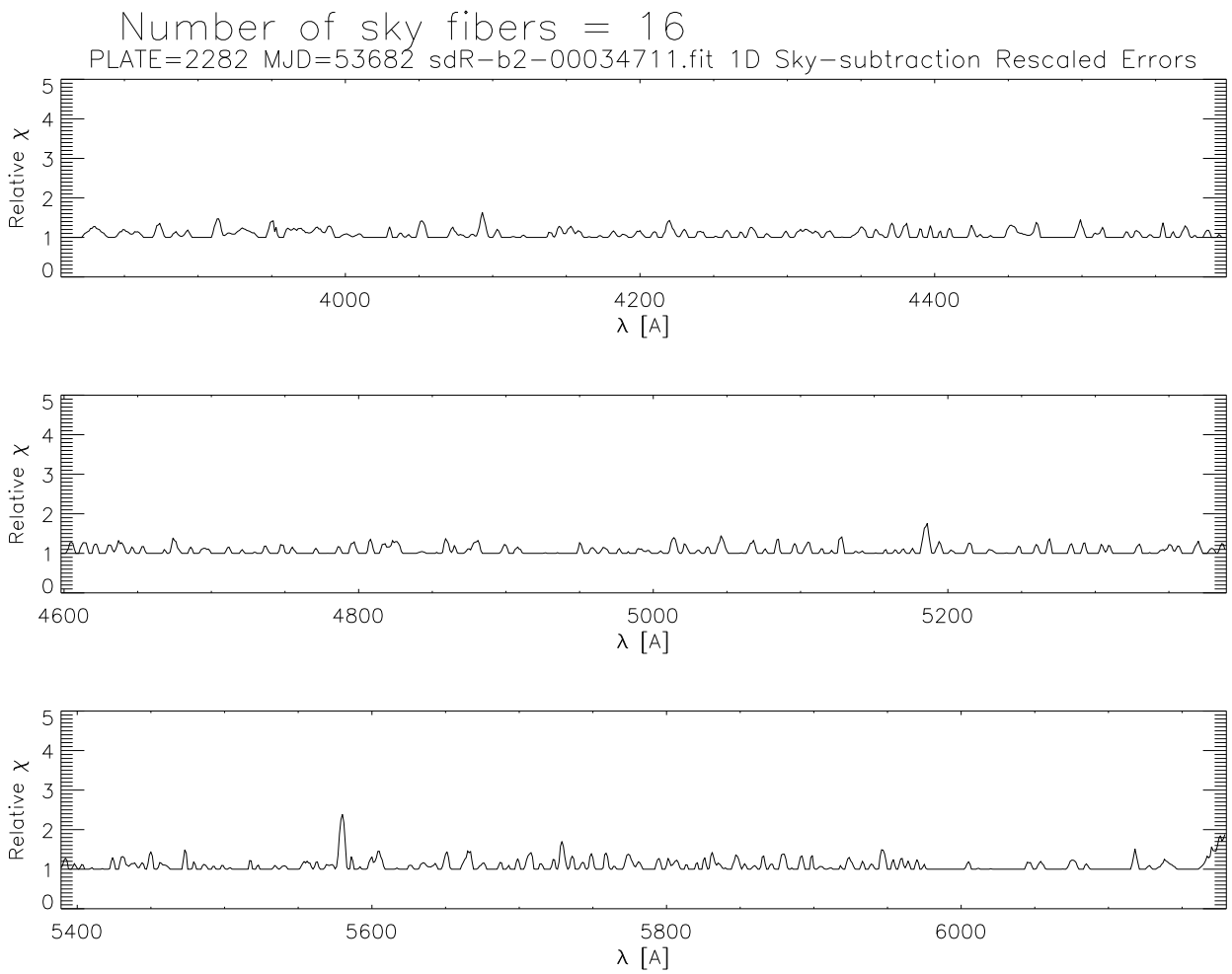

0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

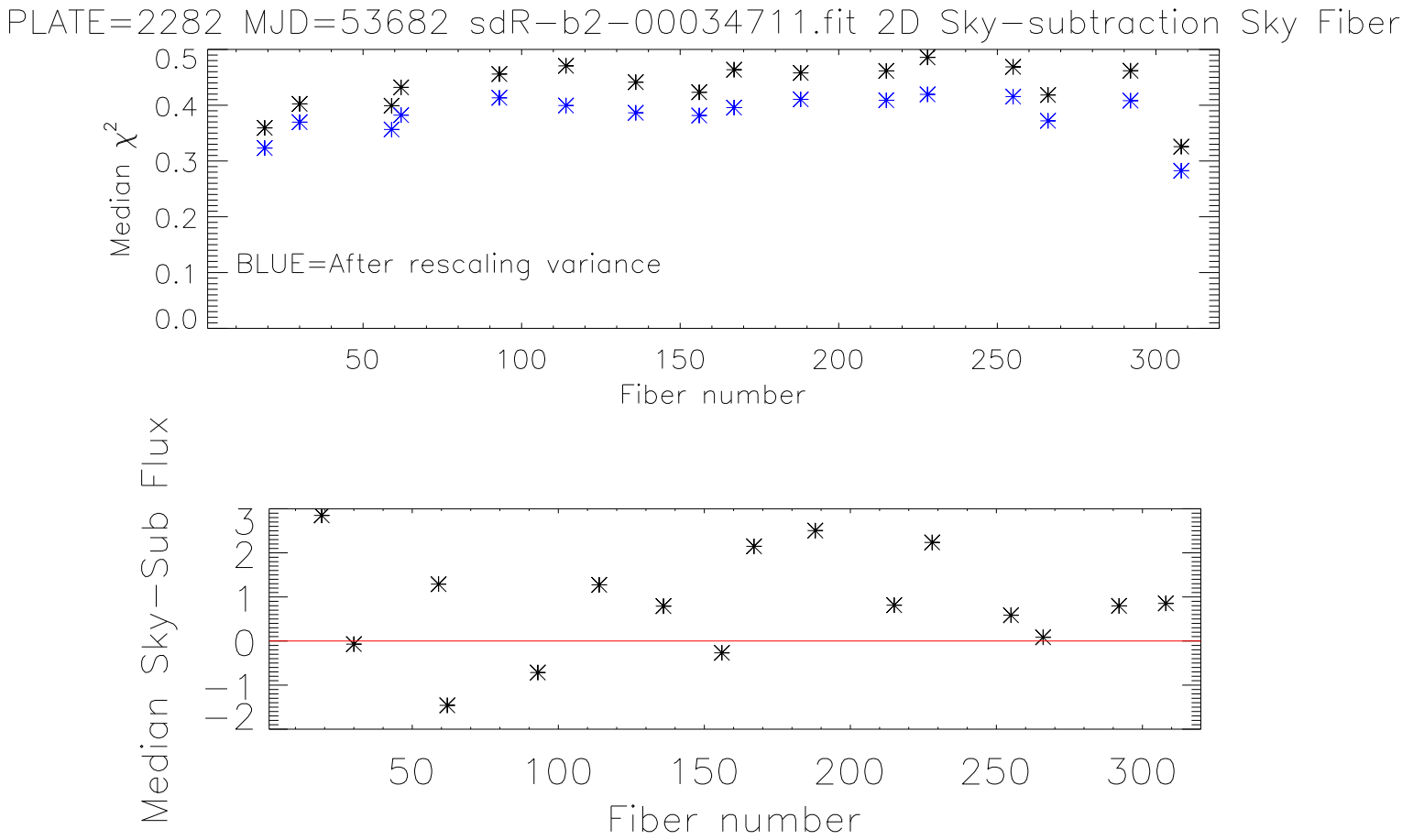

PLATE=2282 MJD=53682 Smooth superflat for sdR-b2-00034711.fit
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

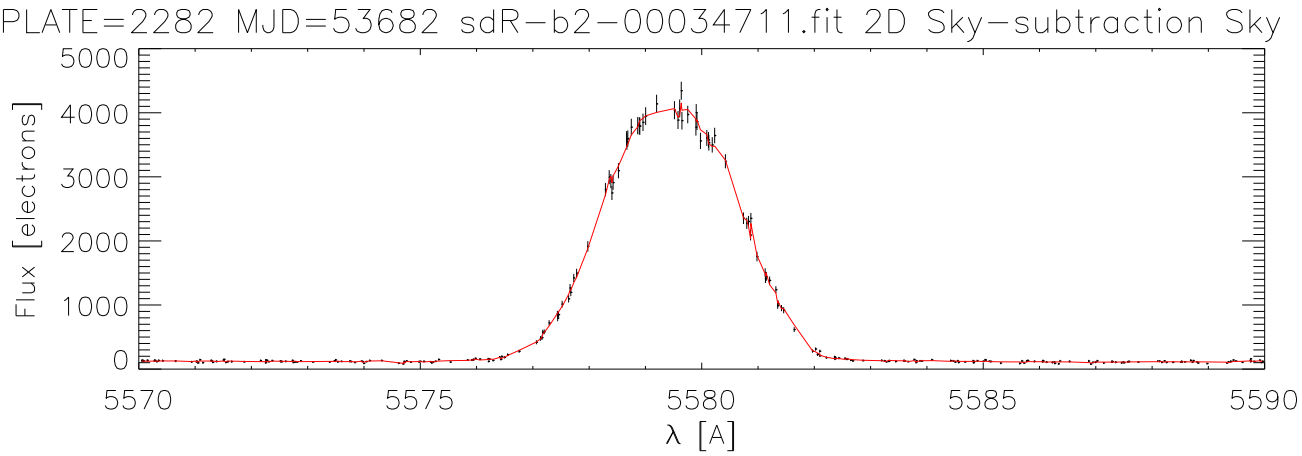

PLATE=2282 MJD=53682 sdR-b2-00034711.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

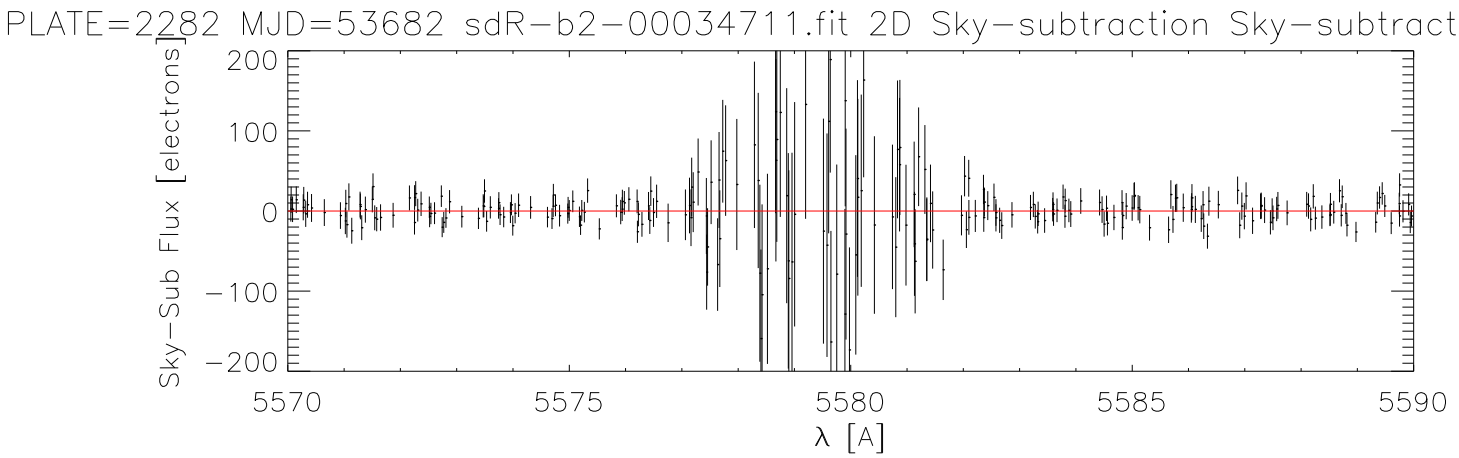

PLATE=2282 MJD=53682 sdR-b2-00034711.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

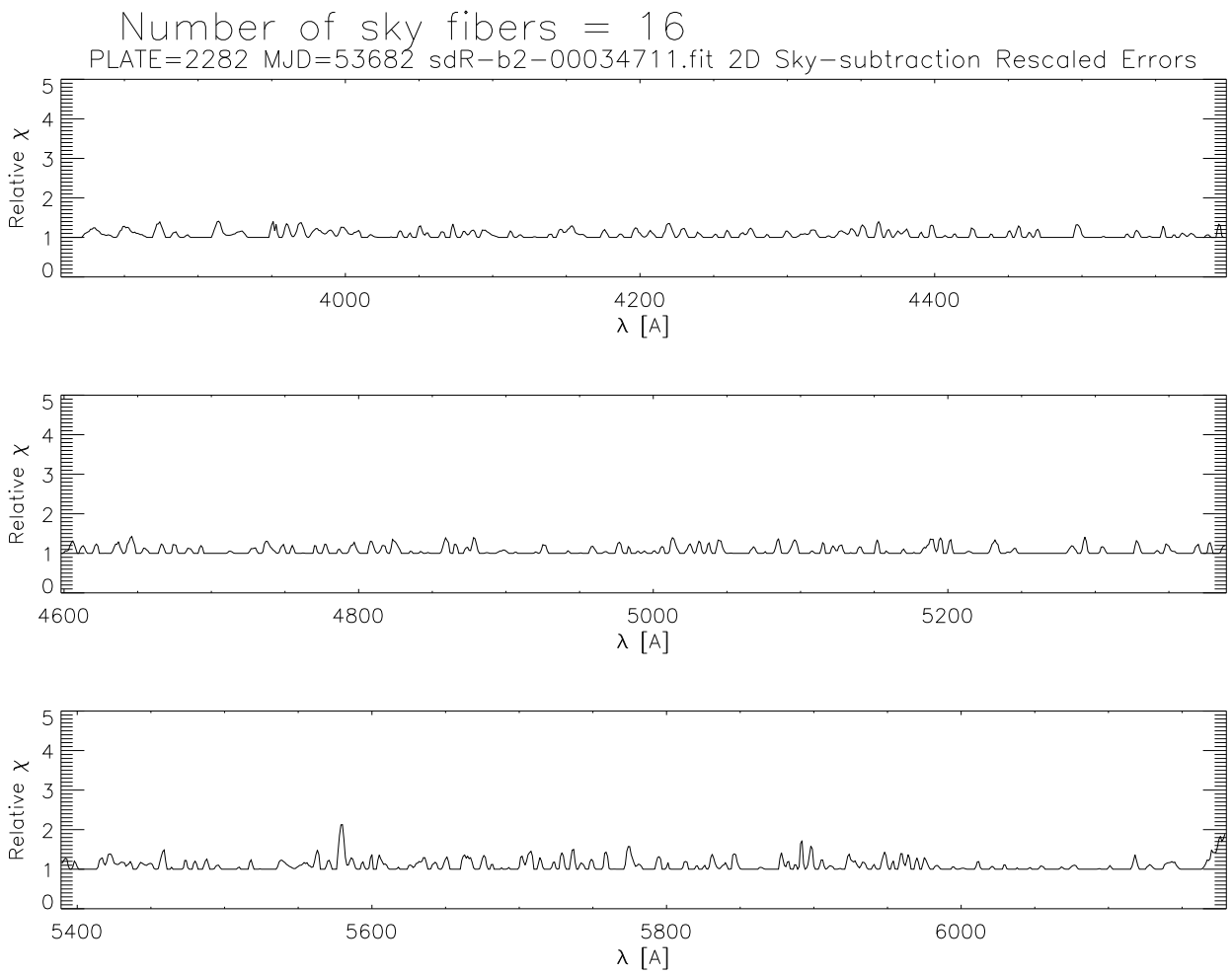

PLATE=2282 MJD=53682 sdR-b2-00034711.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

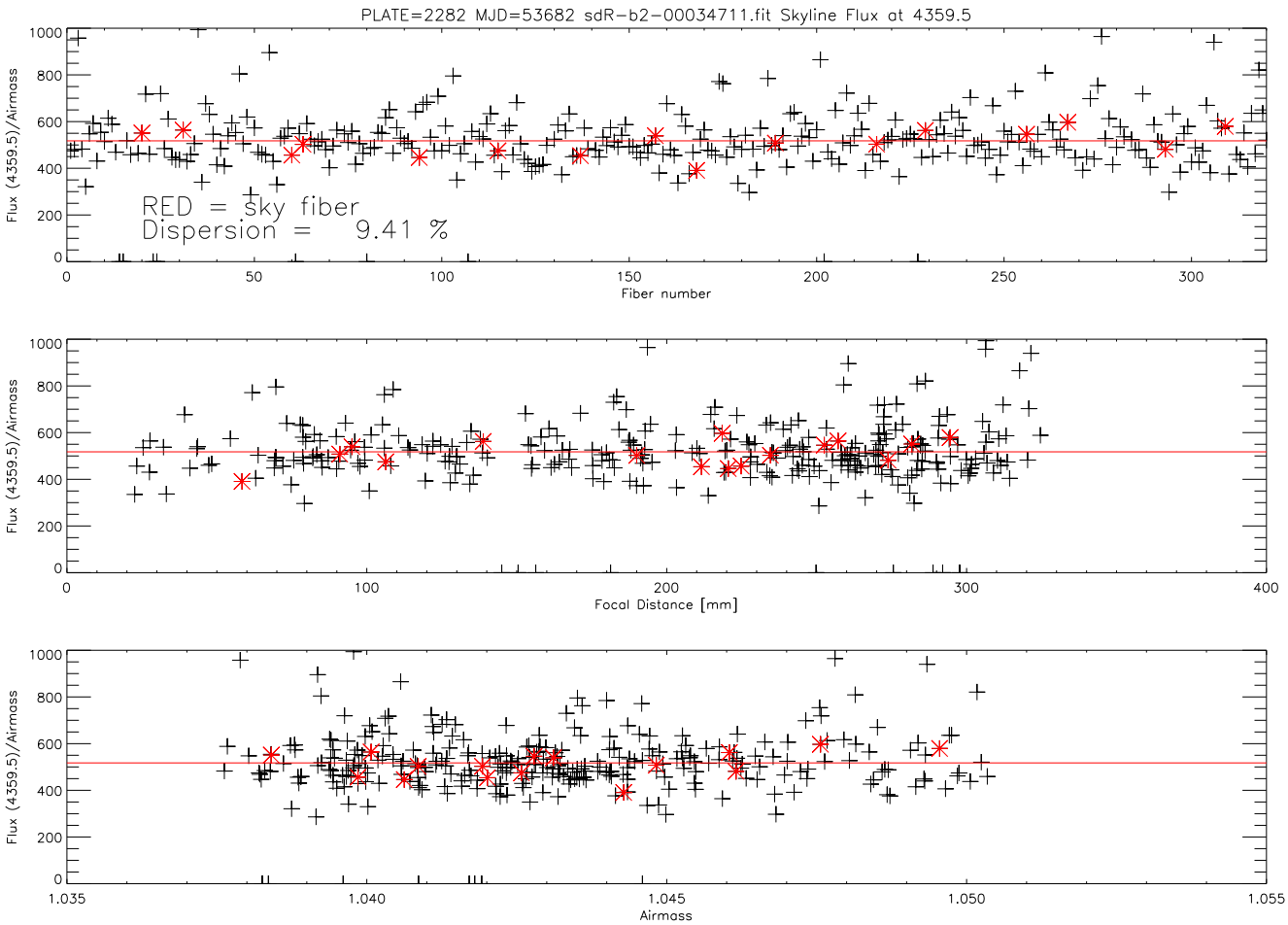

Number of sky fibers = 16
PLATE=2282 MJD=53682 sdR-b2-00034711.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

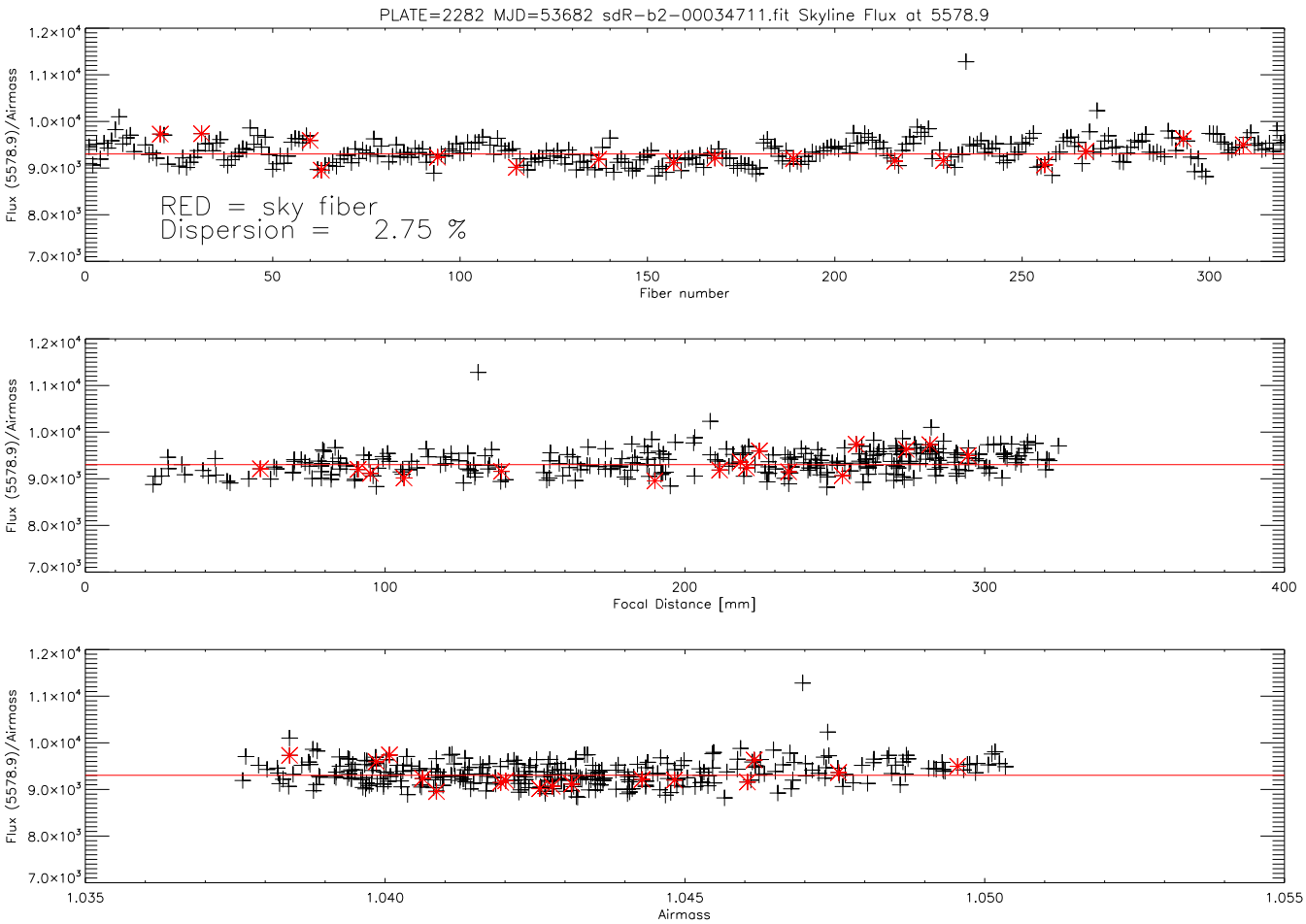

PLATE=2282 MJD=53682 sdR-b2-00034711.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

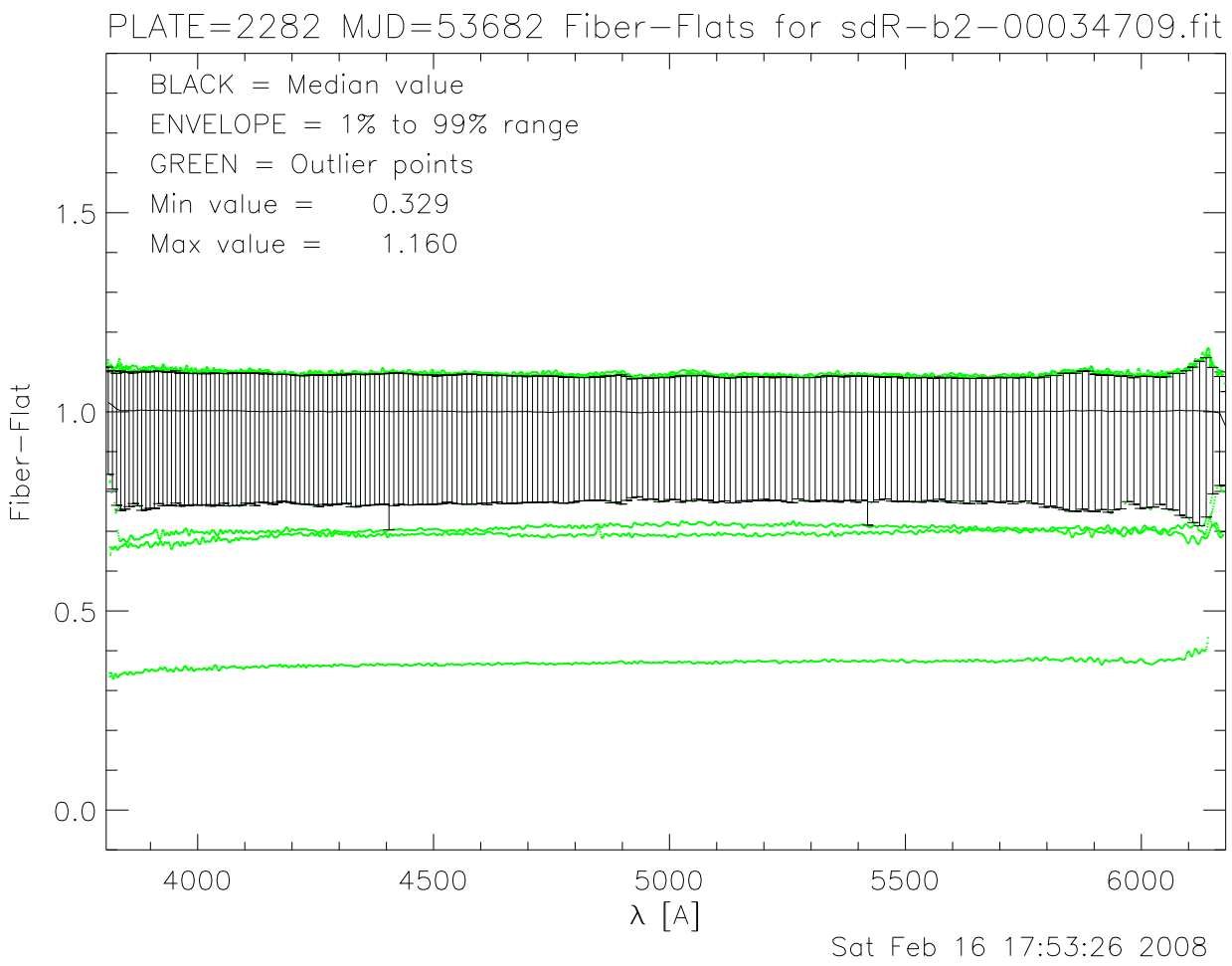

PLATE=2282 MJD=53682 sdR-b2-00034711.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

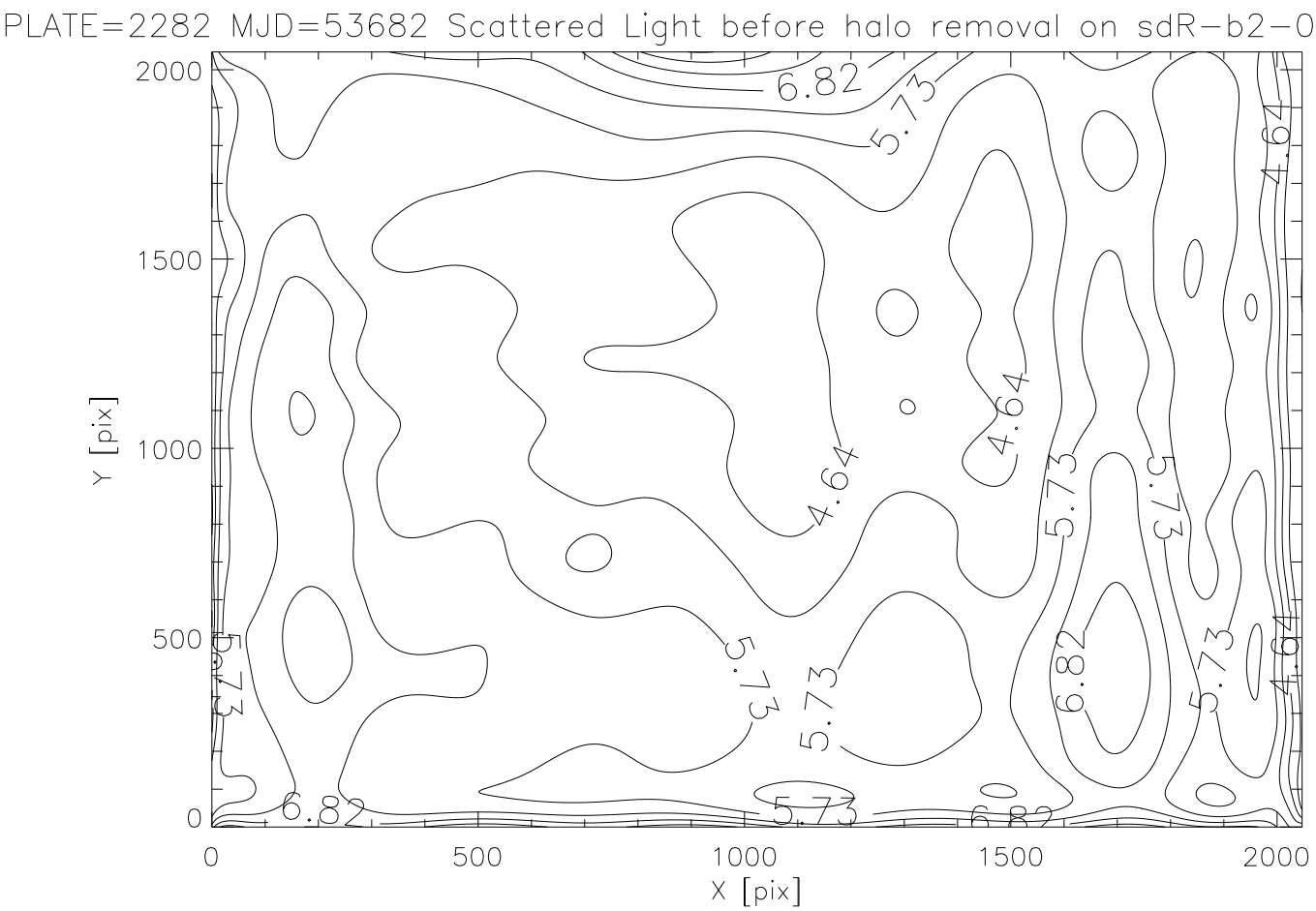

PLATE=2282 MJD=53682 sdR-b2-00034711.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

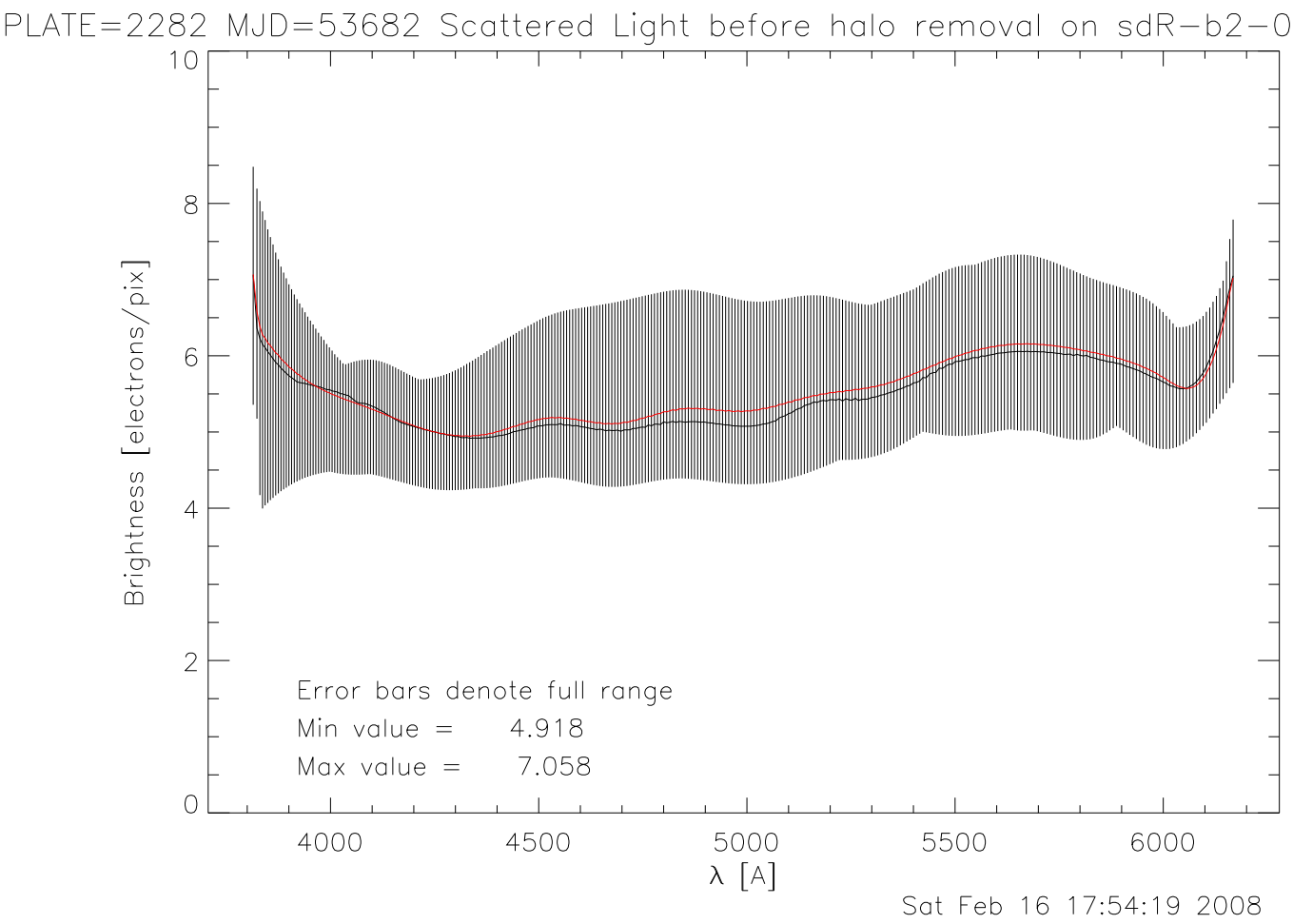

Number of sky fibers = 16
PLATE=2282 MJD=53682 sdR-b2-00034711.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

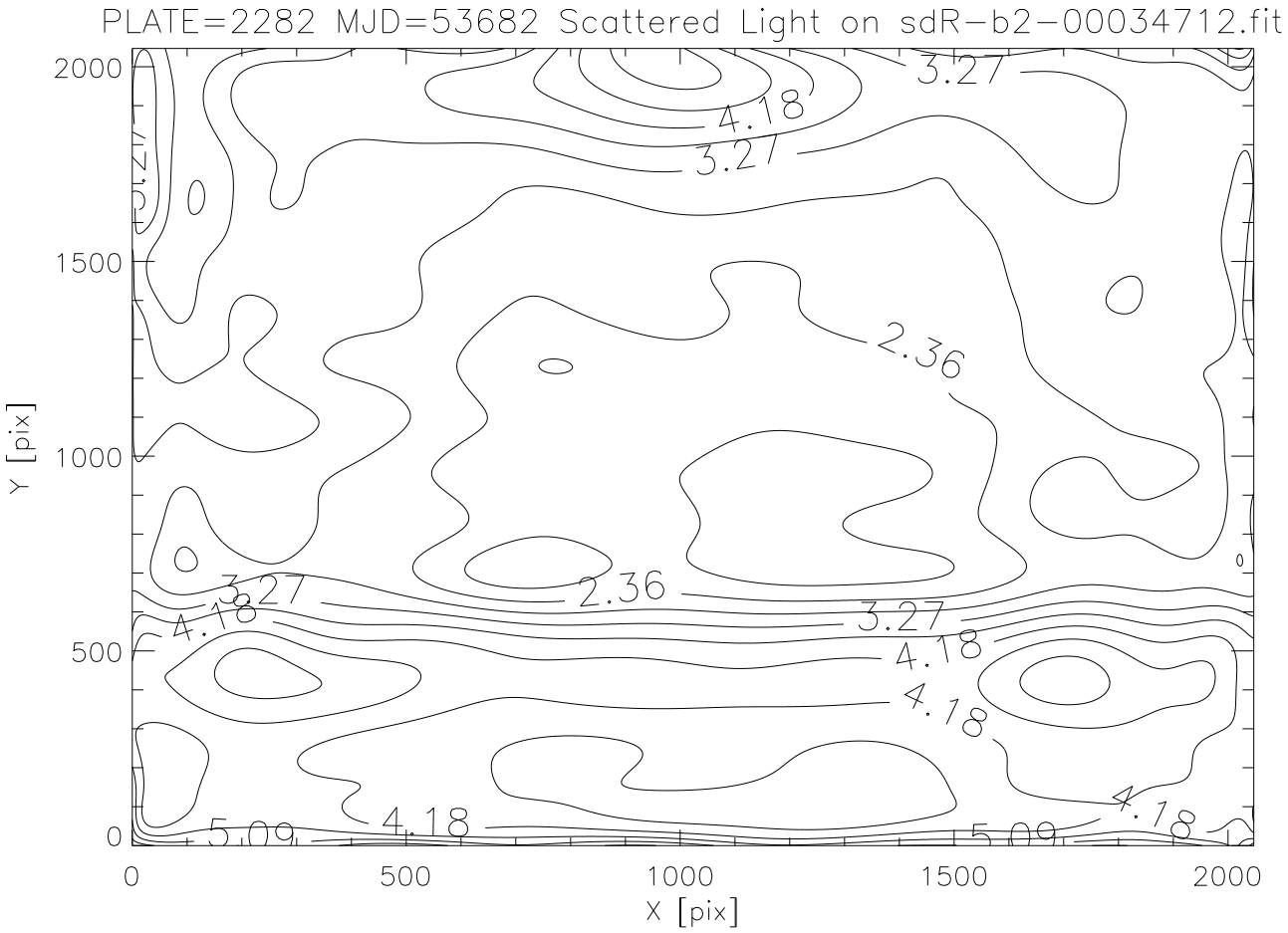

PLATE=2282 MJD=53682 sdR-b2-00034711.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.41 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

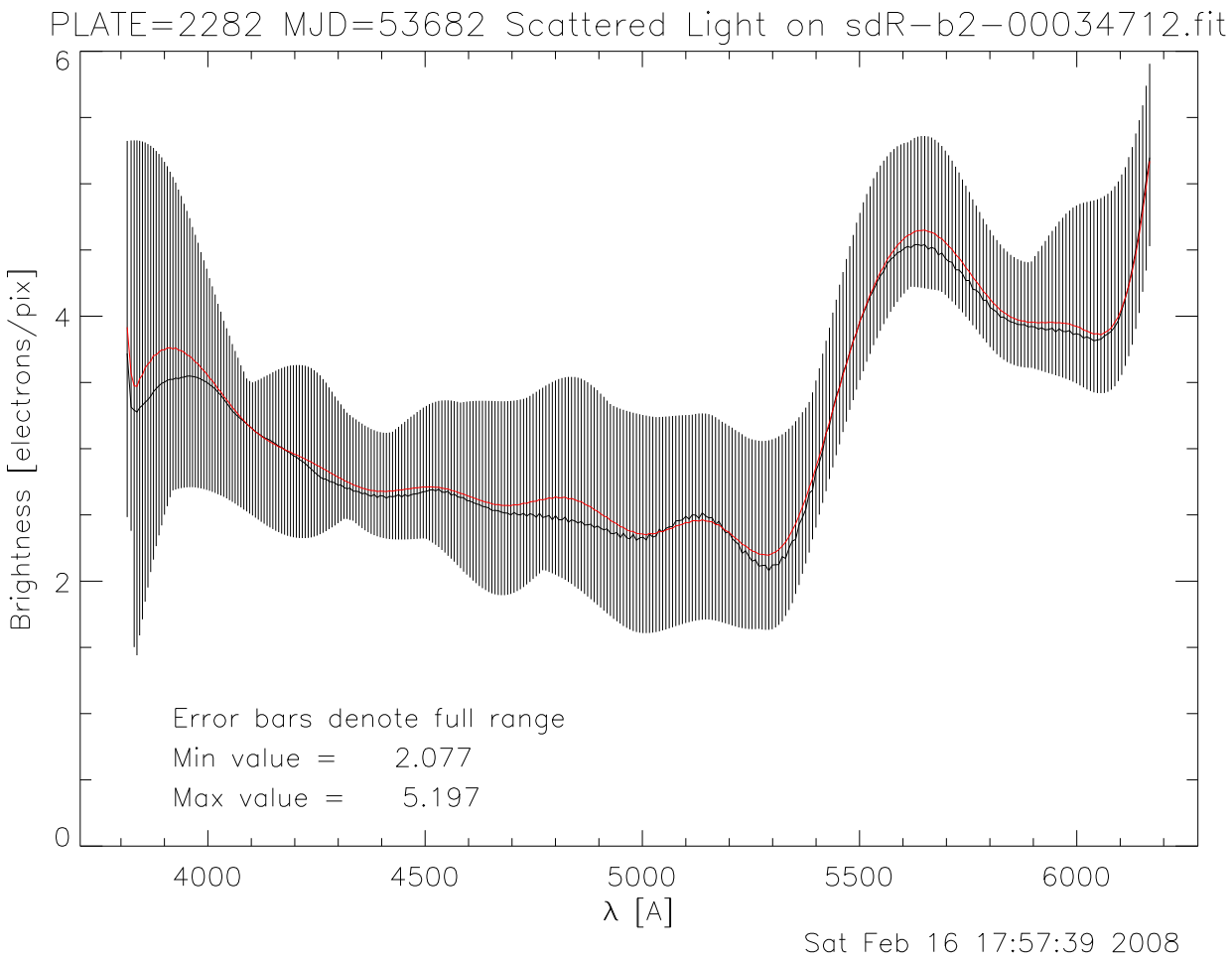

PLATE=2282 MJD=53682 sdR-b2-00034711.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.75 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=2282 MJD=53682 Fiber−Flats for sdR−b2−00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.329
Max value = 1.160
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 16 17:53:26 2008


PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-b2-00034712.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
5.73
4.64


PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-b2-00034712.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.918
Max value = 7.058
Sat Feb 16 17:54:19 2008


PLATE=2282 MJD=53682 Scattered Light on sdR-b2-00034712.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.27
4.18
2.36
5.09
0


PLATE=2282 MJD=53682 Scattered Light on sdR-b2-00034712.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.077
Max value = 5.197
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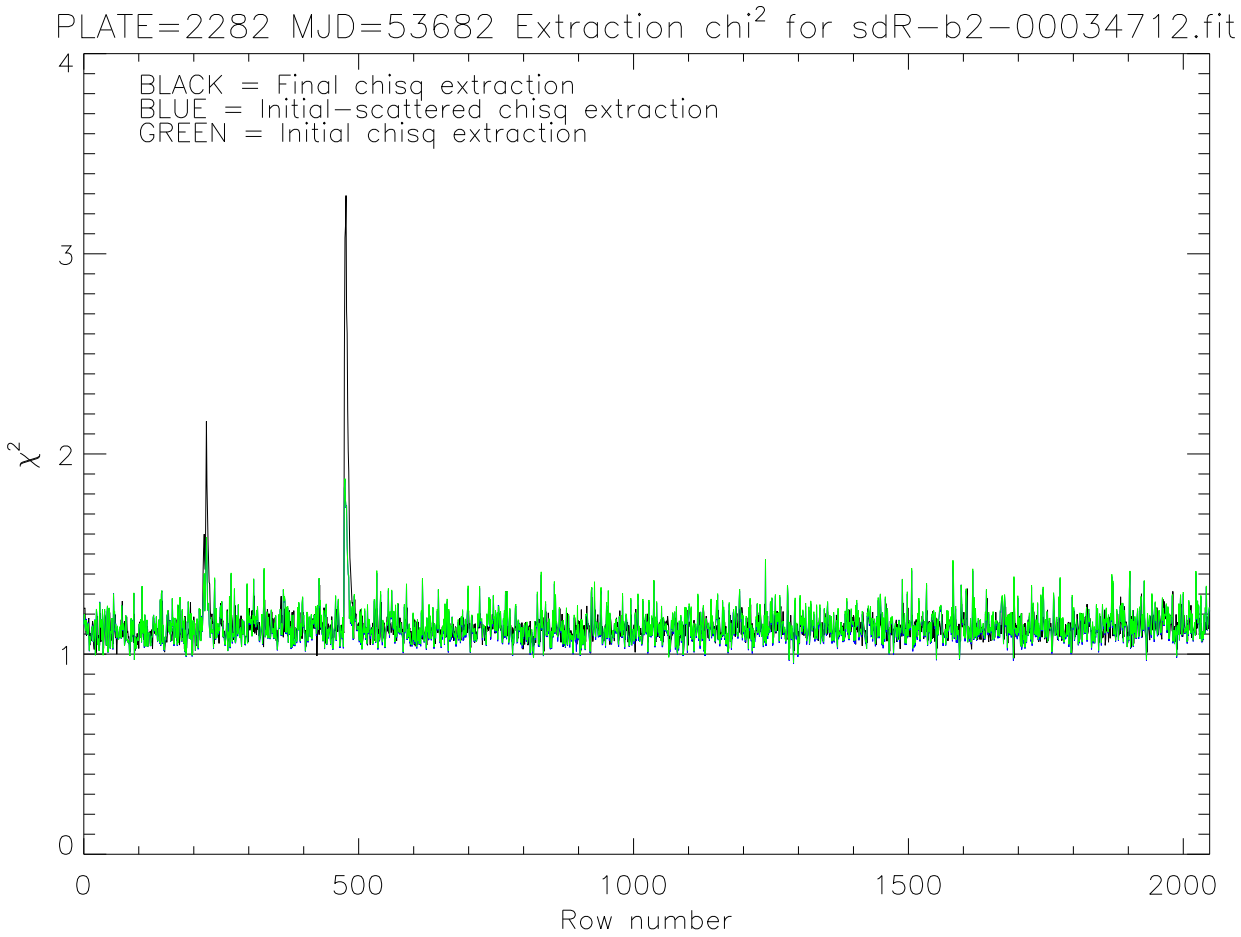
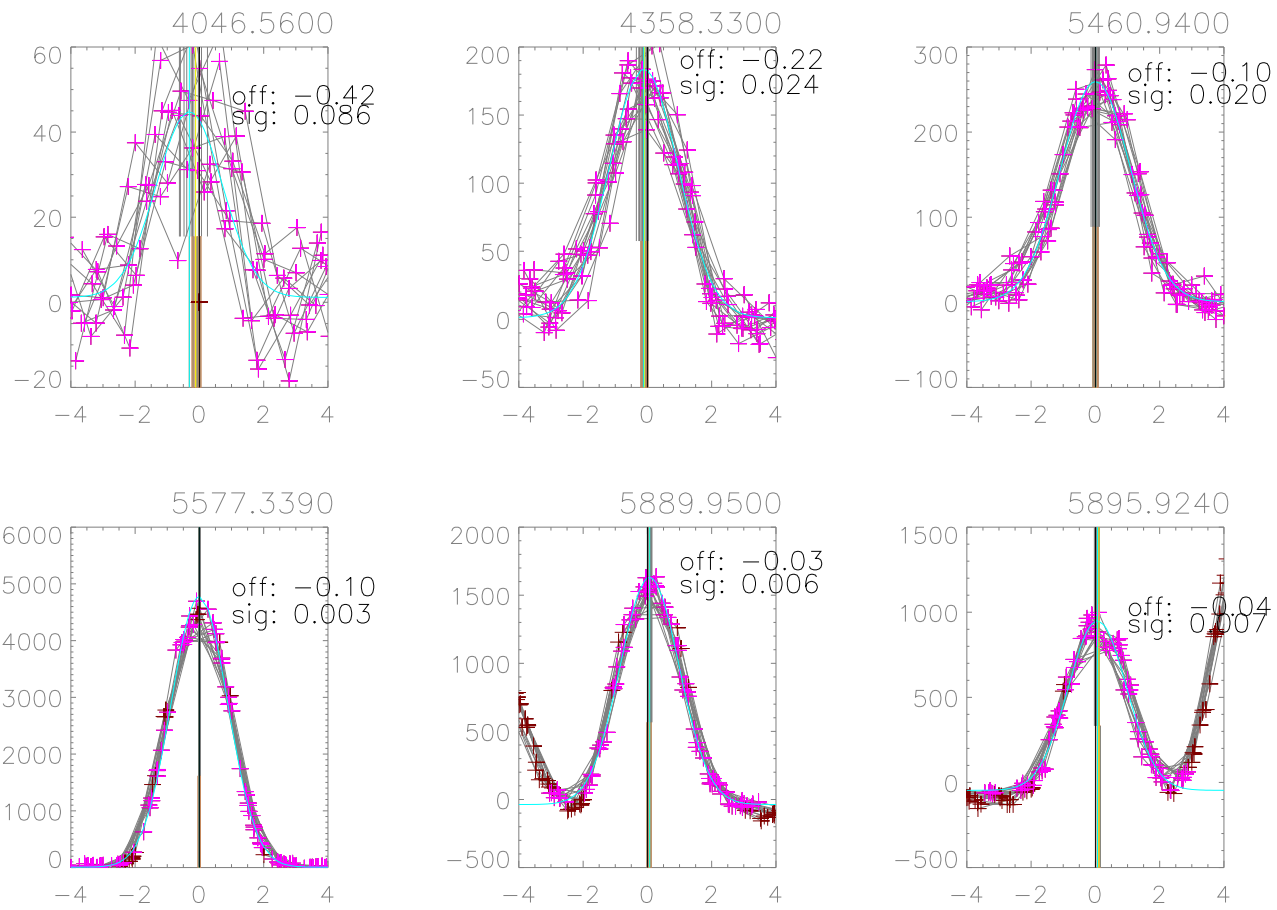
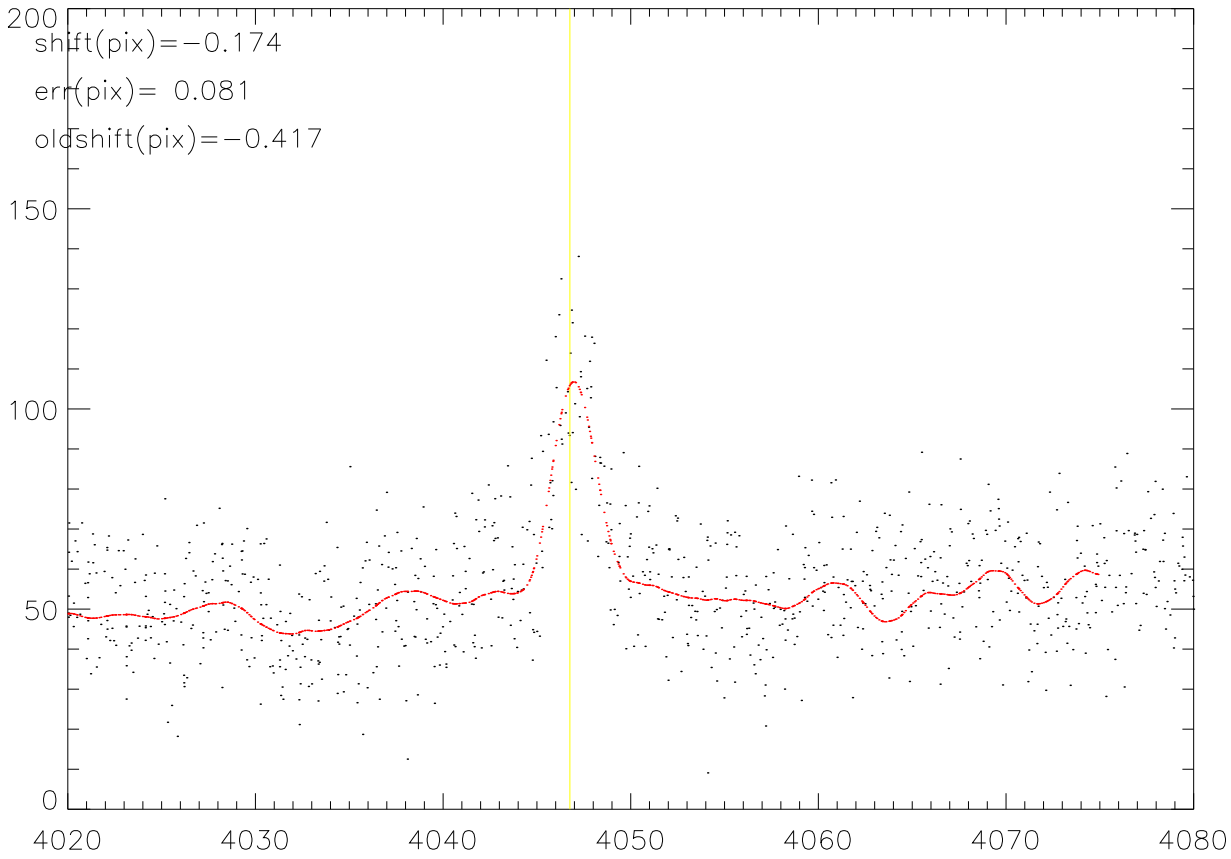
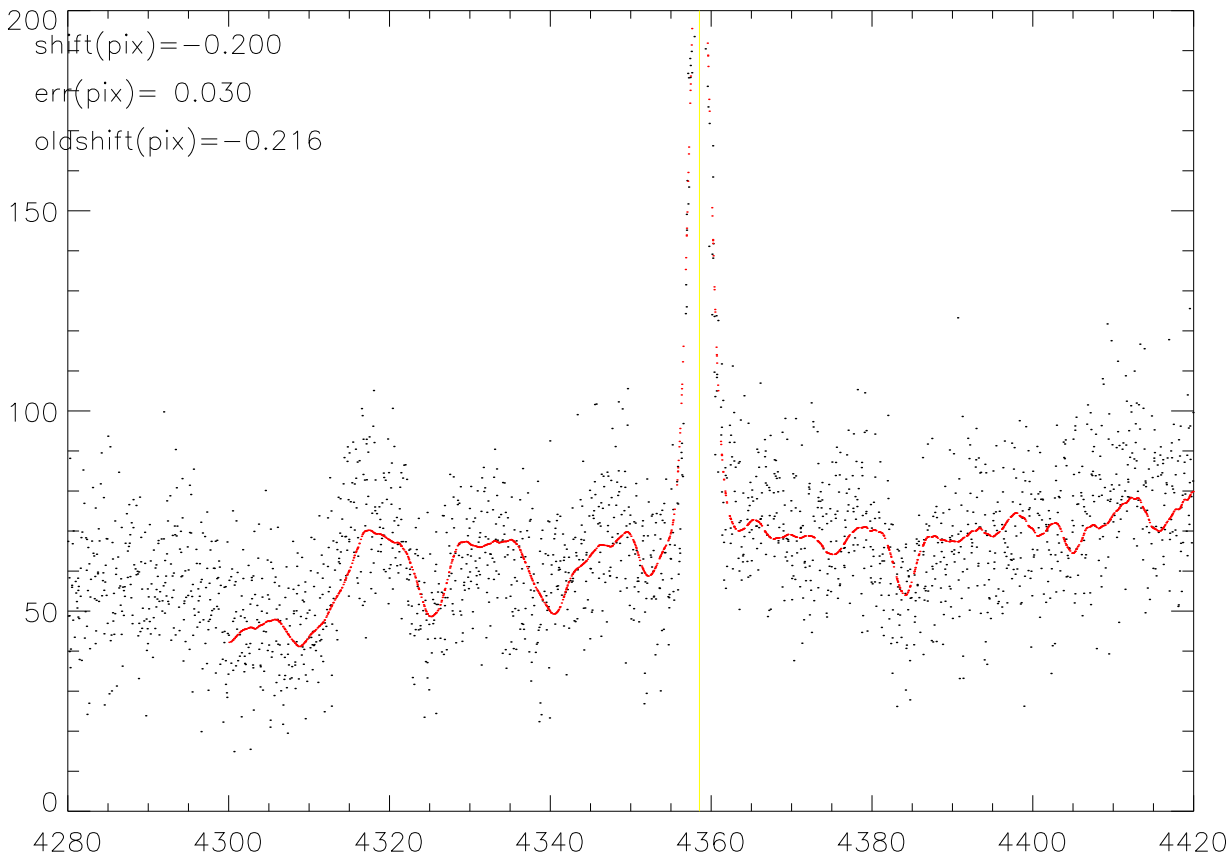
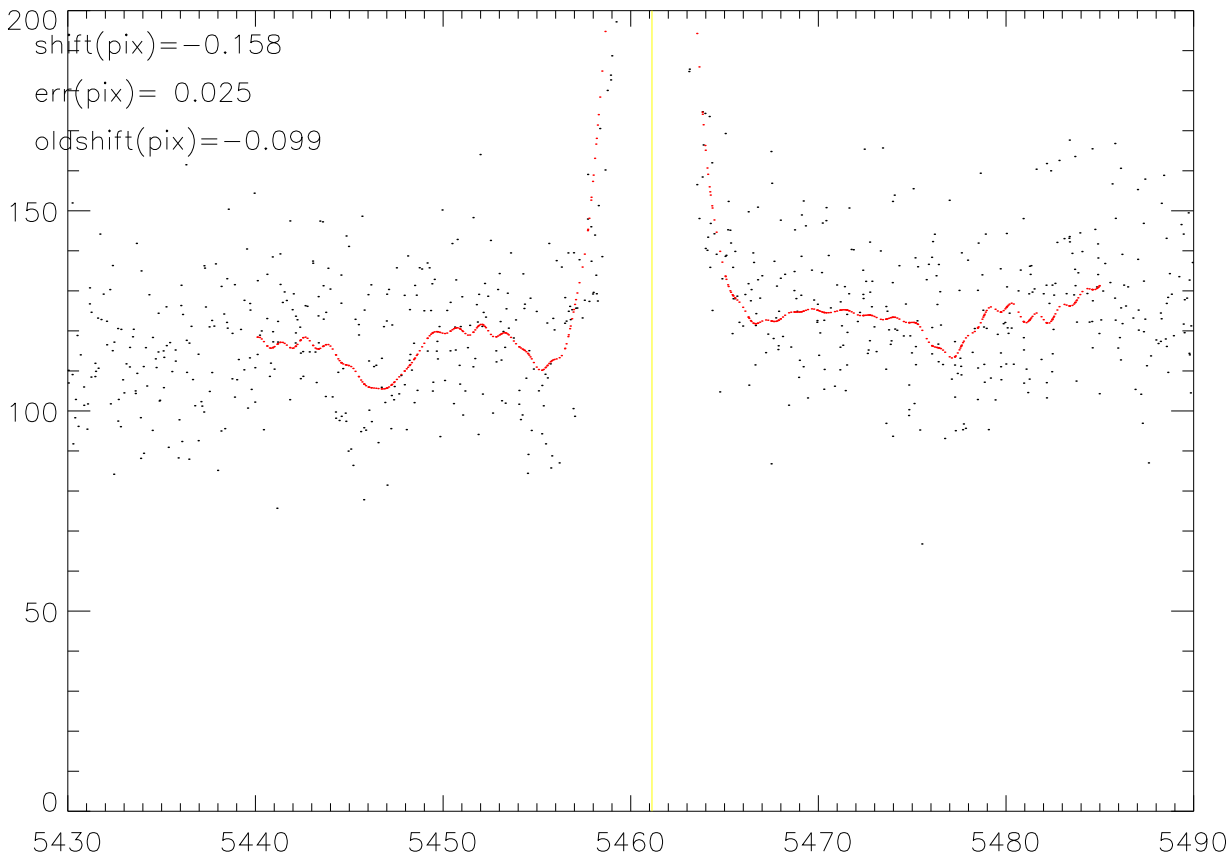
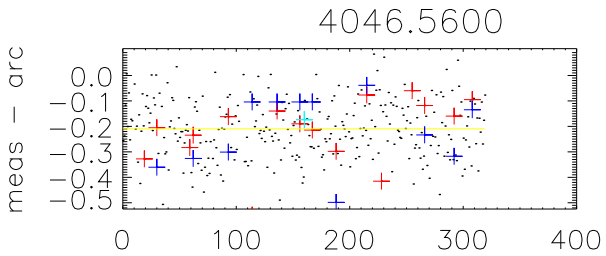

PLATE=2282 MJD=53682 Extraction chi^2 for sdR-b2-00034712.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

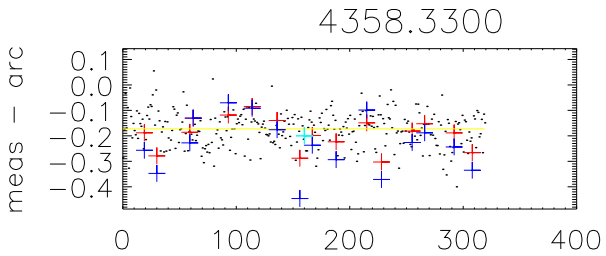

4046.5600
off: −0.42
sig: 0.086
4358.3300
off: −0.22
sig: 0.024
5460.9400
off: −0.10
sig: 0.020
5577.3390
off: −0.10
sig: 0.003
5889.9500
off: −0.03
sig: 0.006
5895.9240
off: −0.04
sig: 0.007

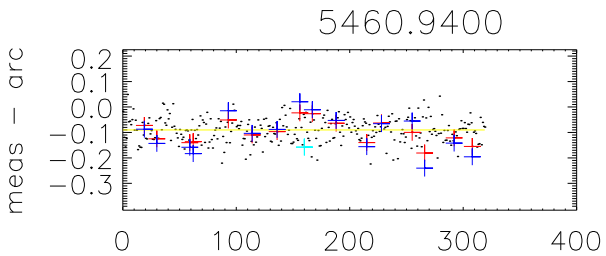

shift(pix)=−0.174
err(pix)= 0.081
oldshift(pix)=−0.417
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

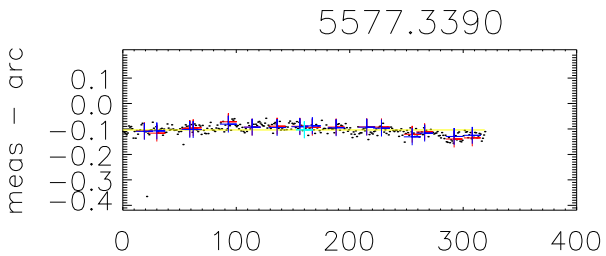

shift(pix)=−0.200
err(pix)= 0.030
oldshift(pix)=−0.216
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

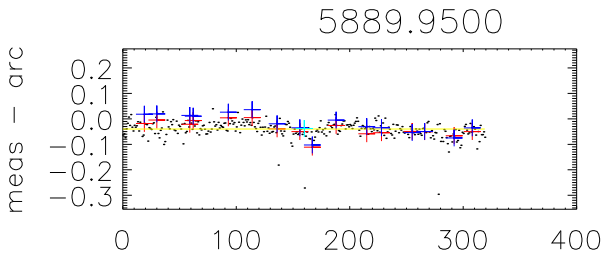

shift(pix)=−0.158
err(pix)= 0.025
oldshift(pix)=−0.099
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

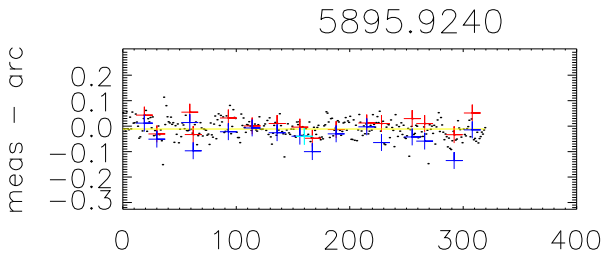

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

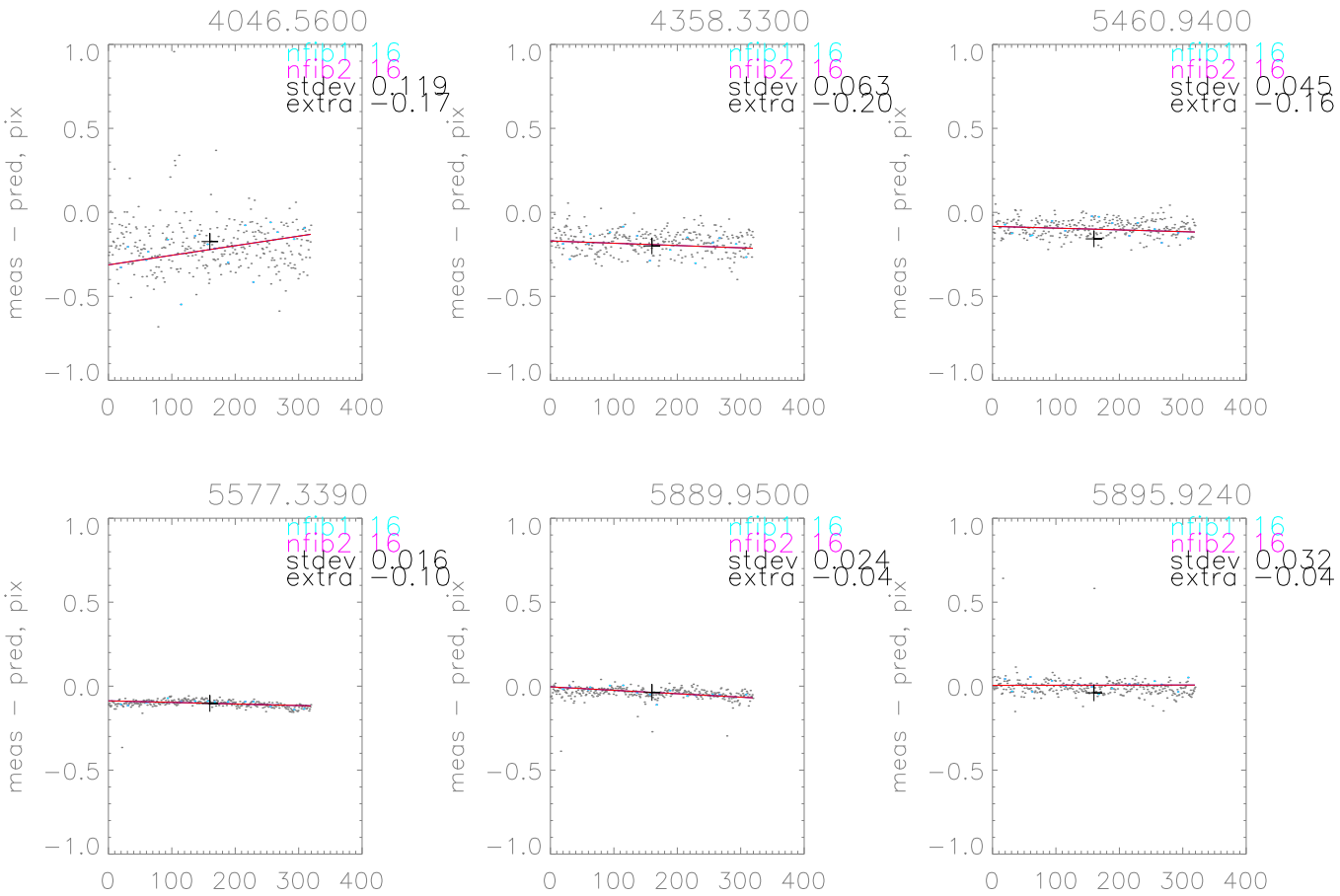

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

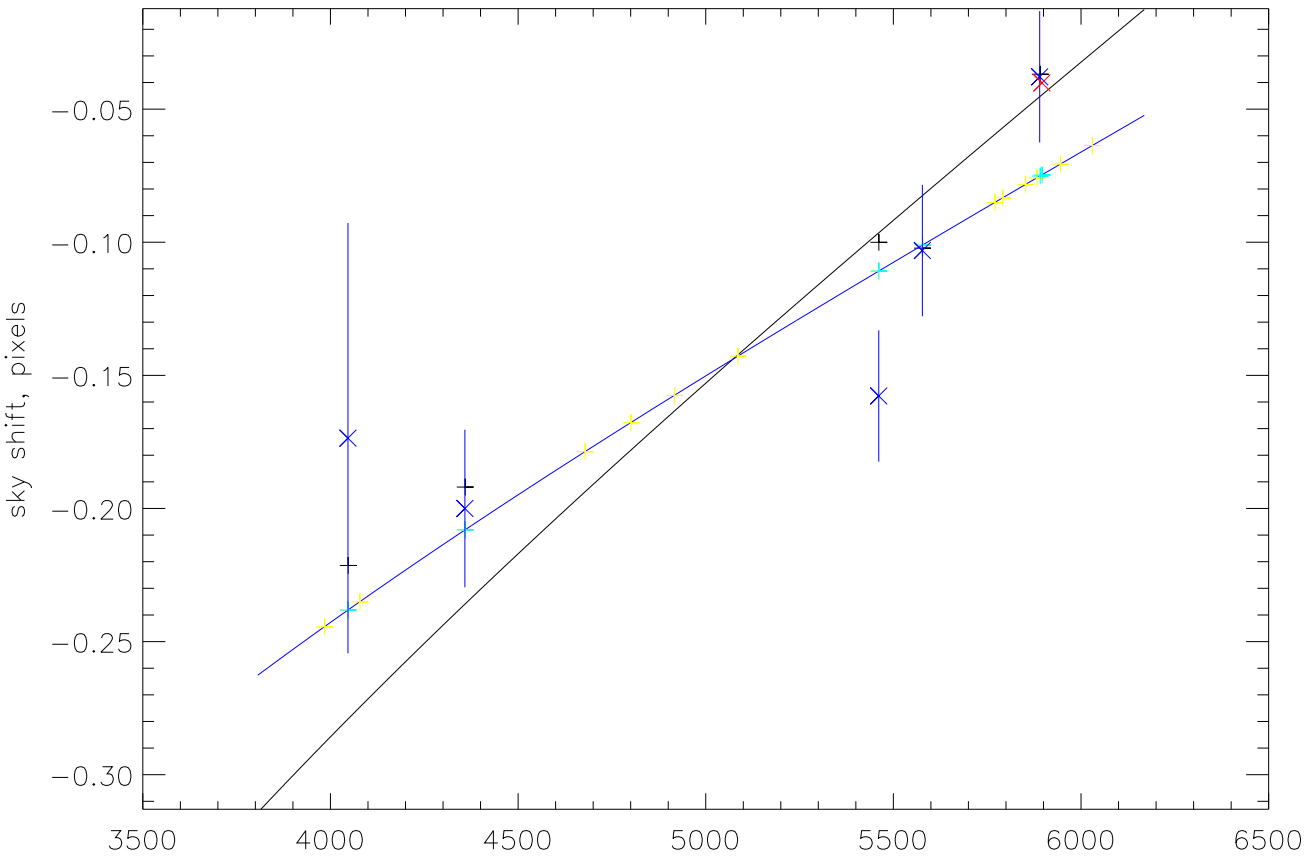

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

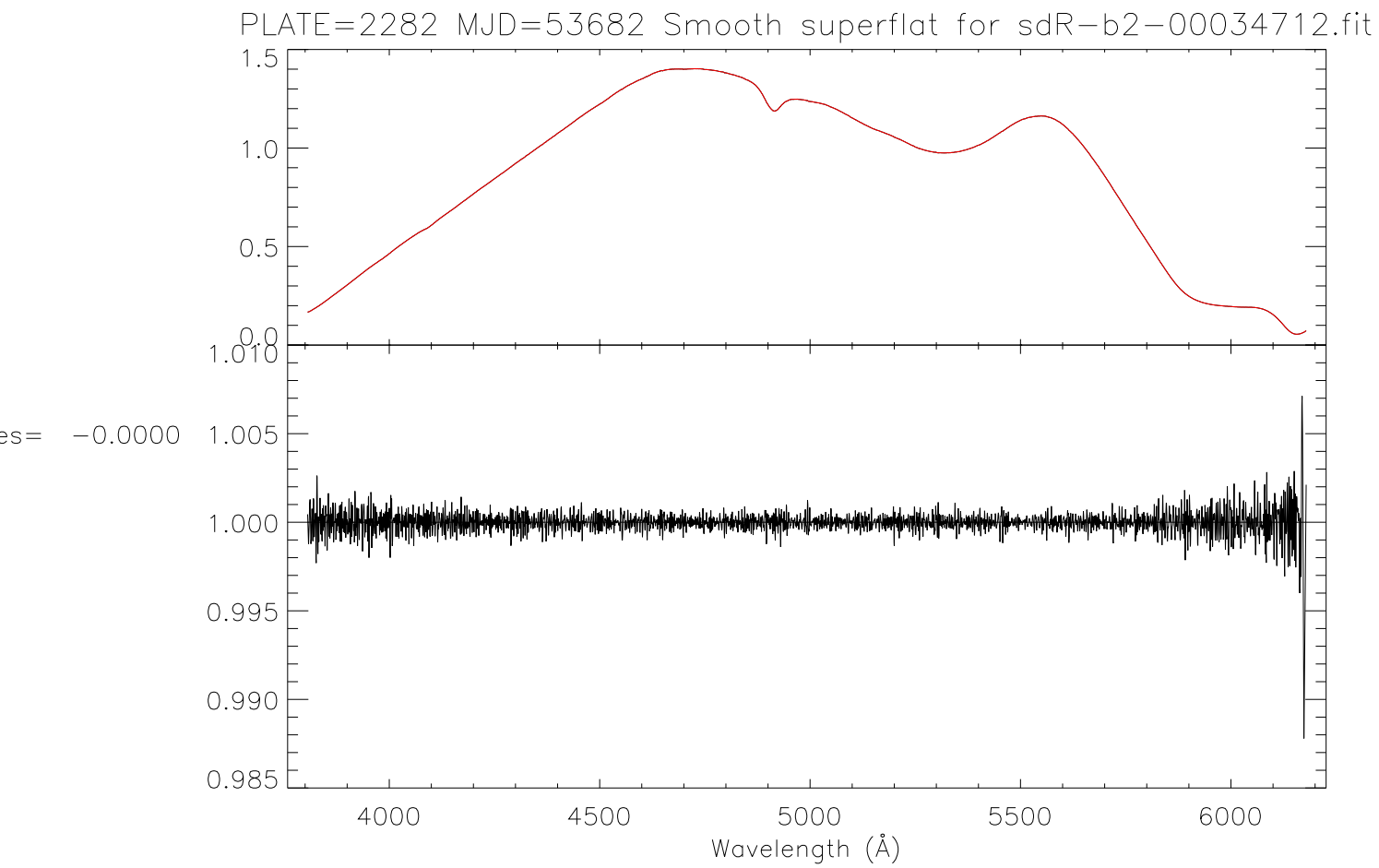

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

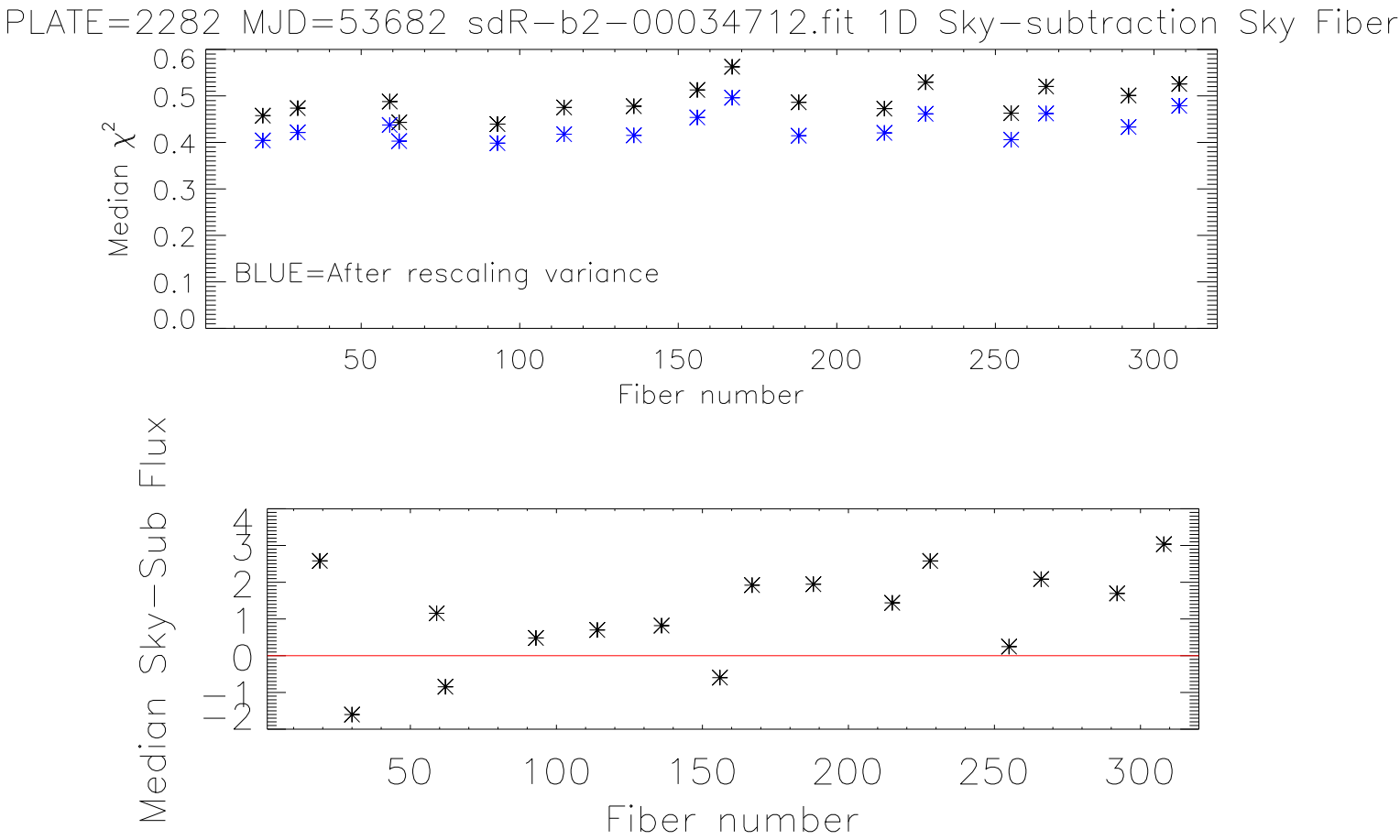

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

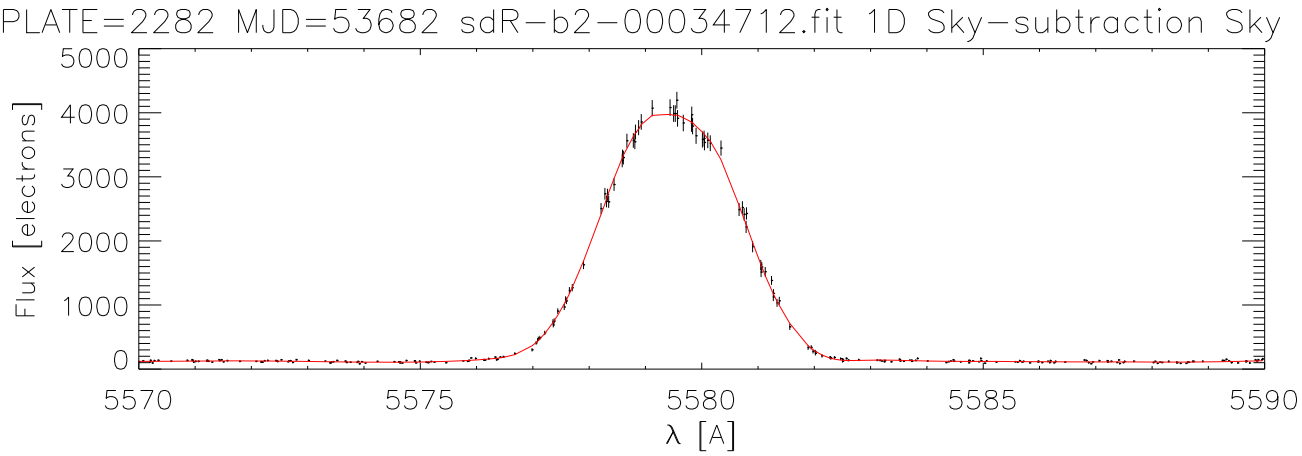

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

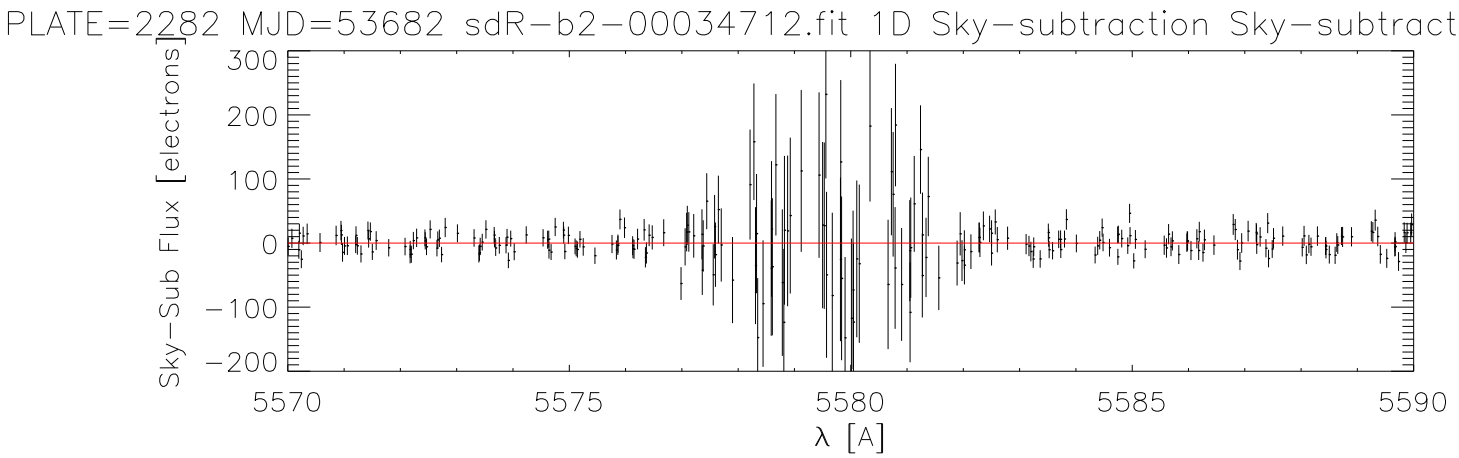

4046.5600
nfib1 16
nfib2 16
stdev 0.119
extra −0.17
4358.3300
nfib1 16
nfib2 16
stdev 0.063
extra −0.20
5460.9400
nfib1 16
nfib2 16
stdev 0.045
extra −0.16
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.10
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

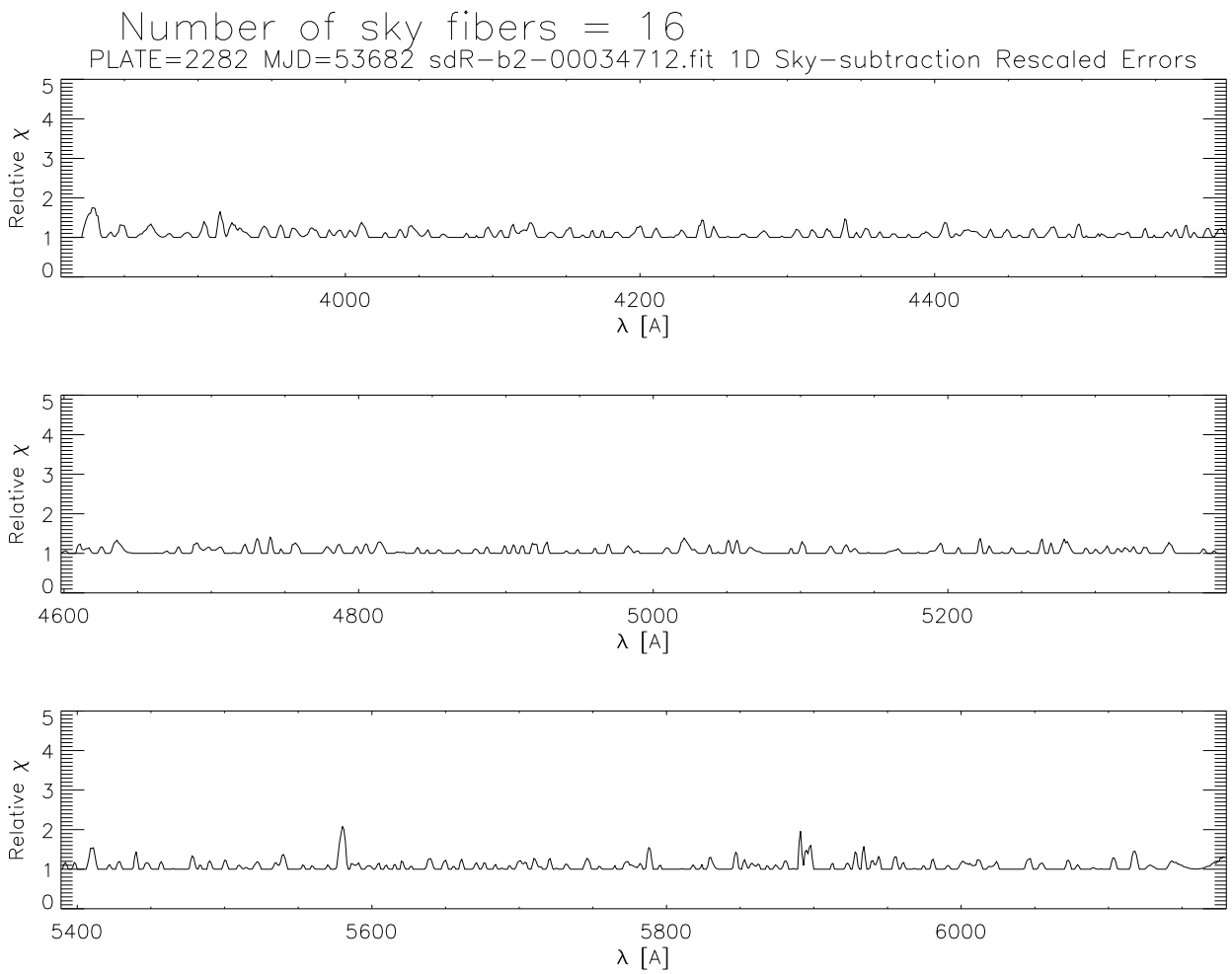

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500

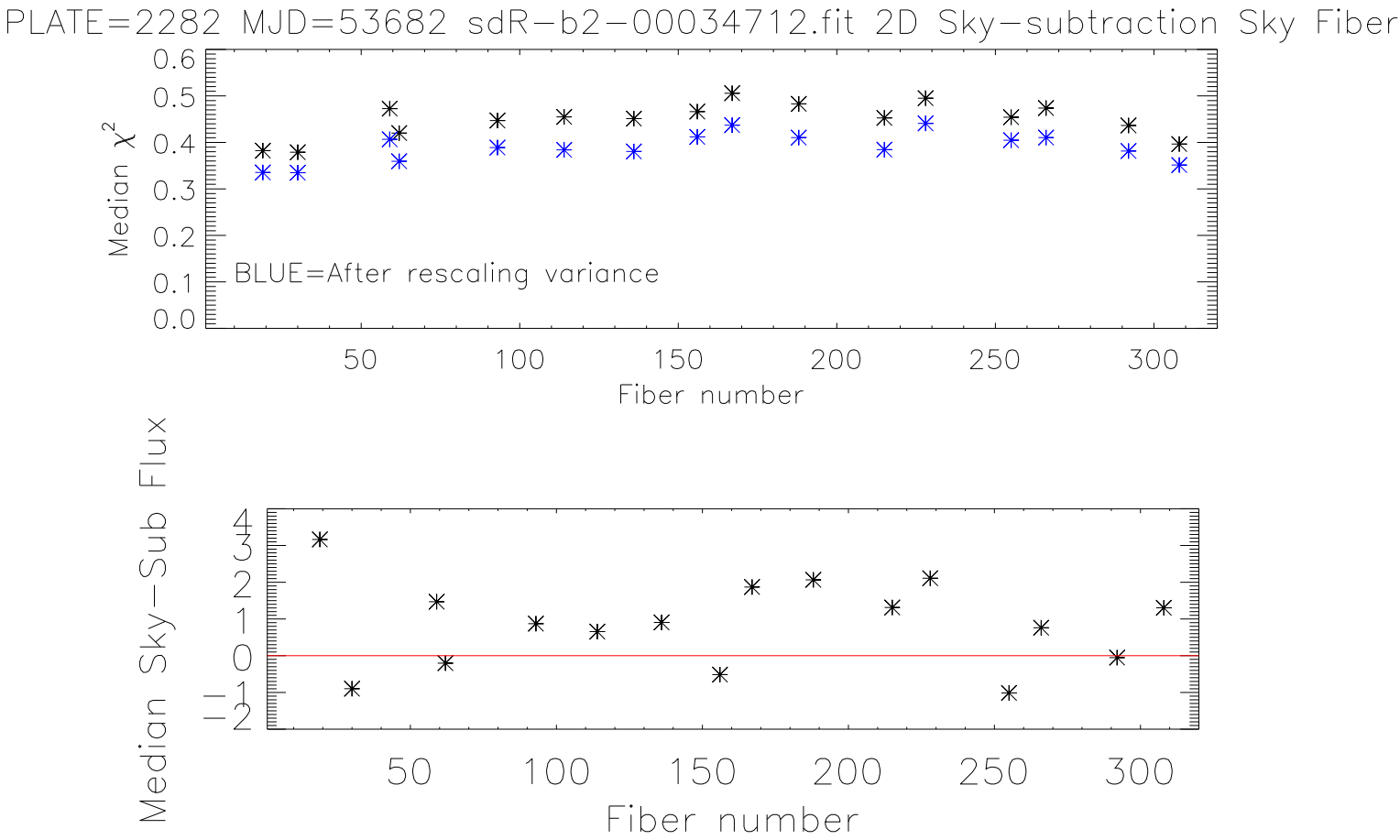

PLATE=2282 MJD=53682 Smooth superflat for sdR-b2-00034712.fit
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

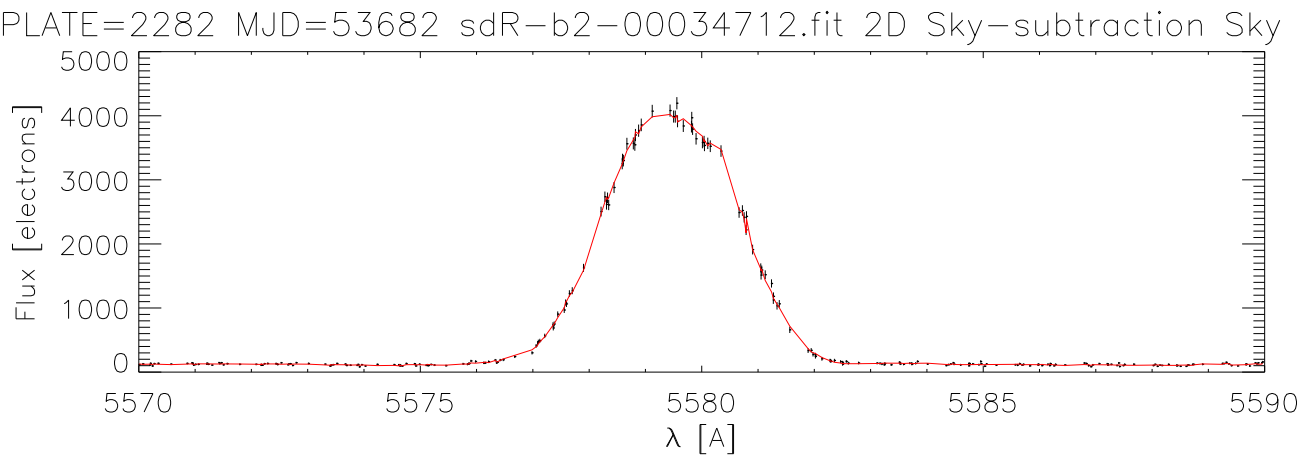

PLATE=2282 MJD=53682 sdR-b2-00034712.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

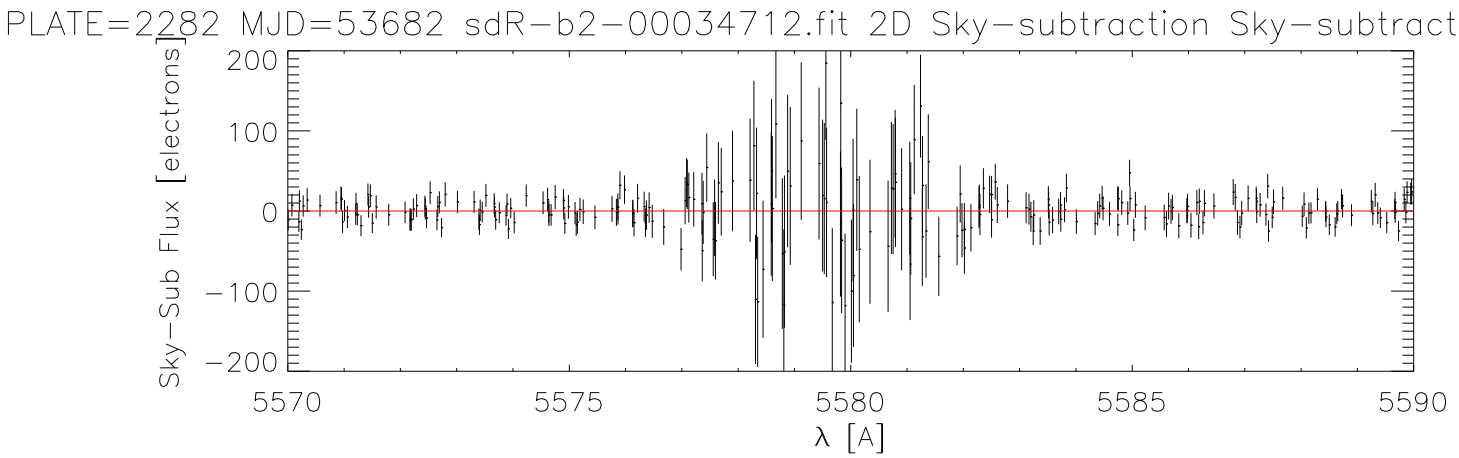

PLATE=2282 MJD=53682 sdR-b2-00034712.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

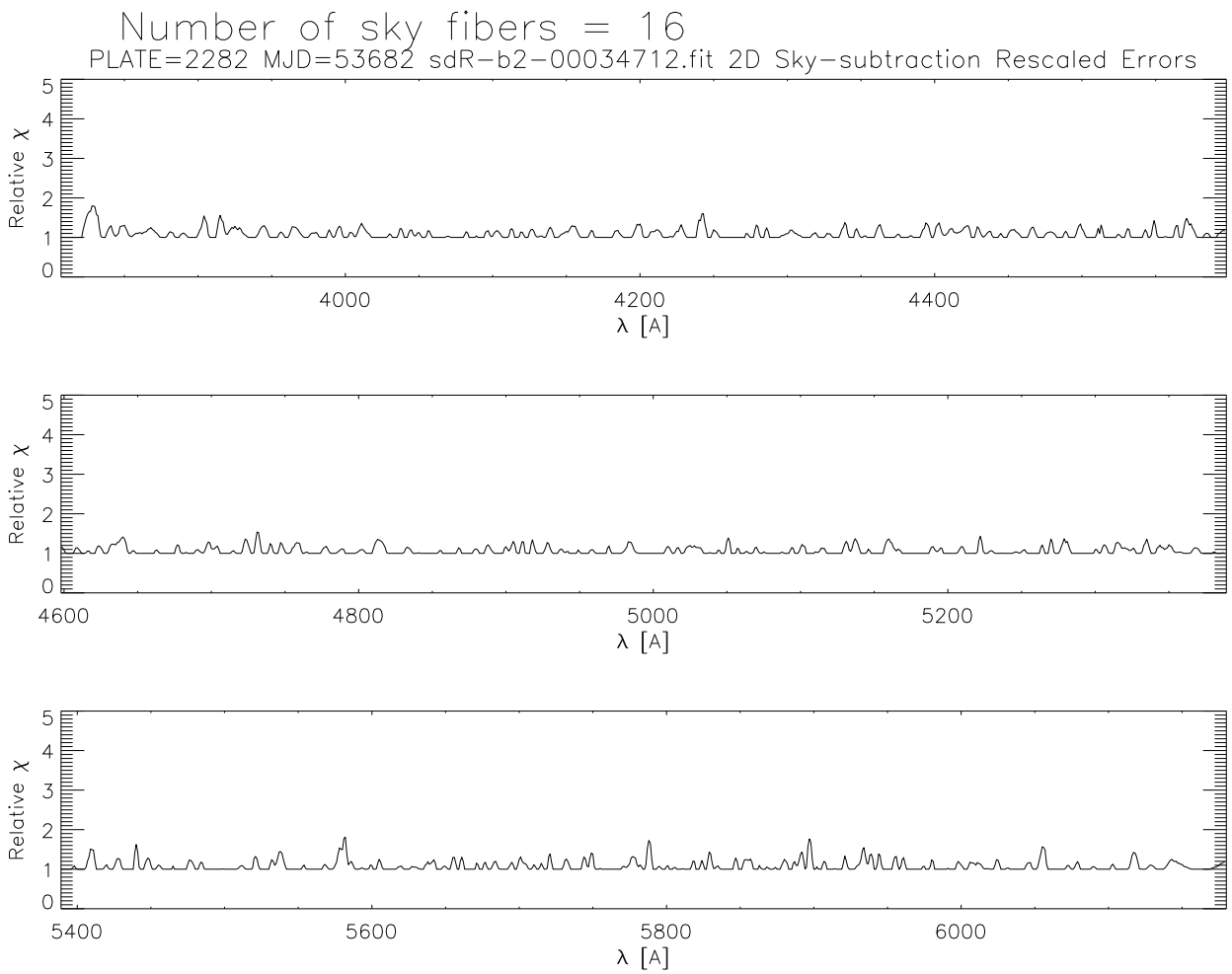

PLATE=2282 MJD=53682 sdR-b2-00034712.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

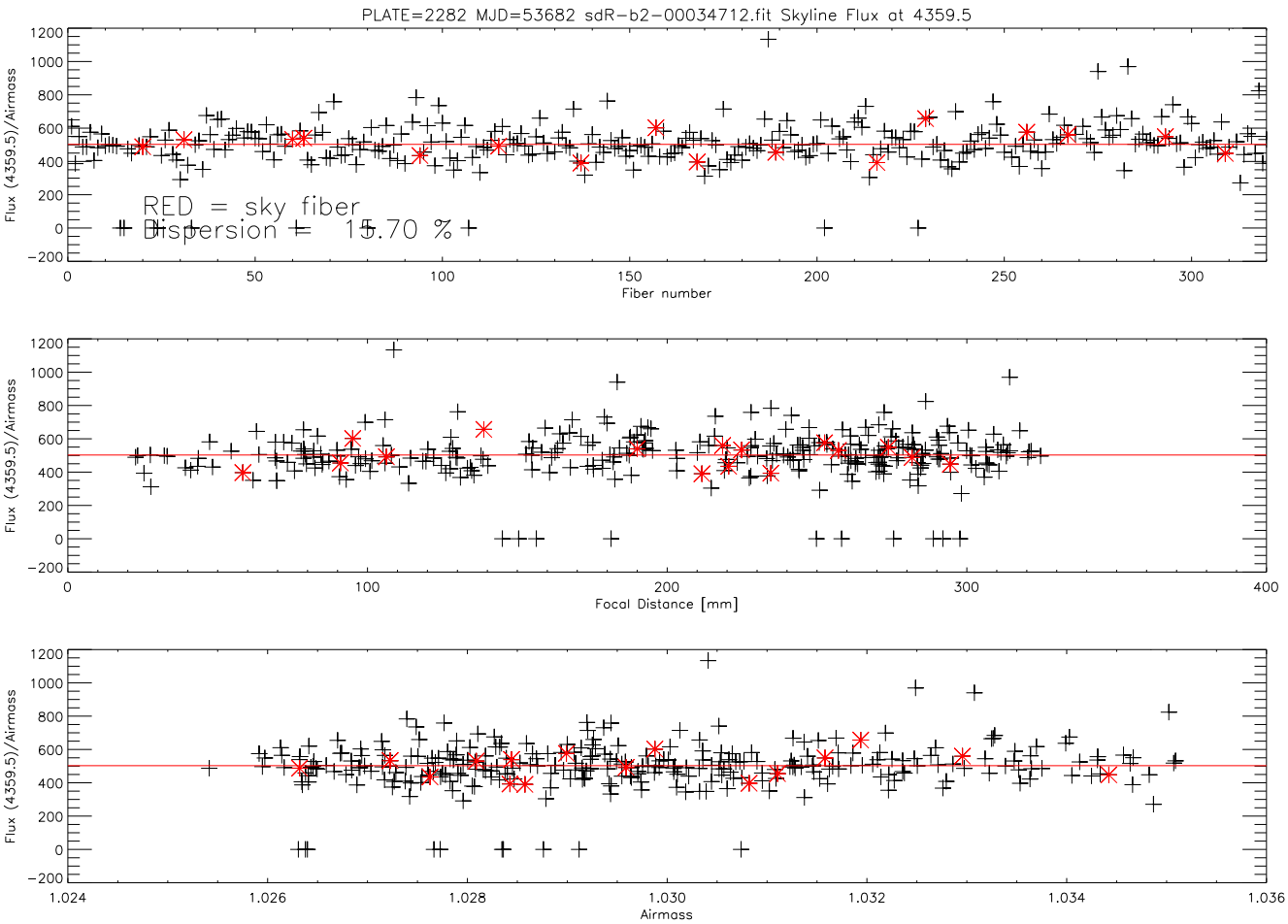

Number of sky fibers = 16
PLATE=2282 MJD=53682 sdR-b2-00034712.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

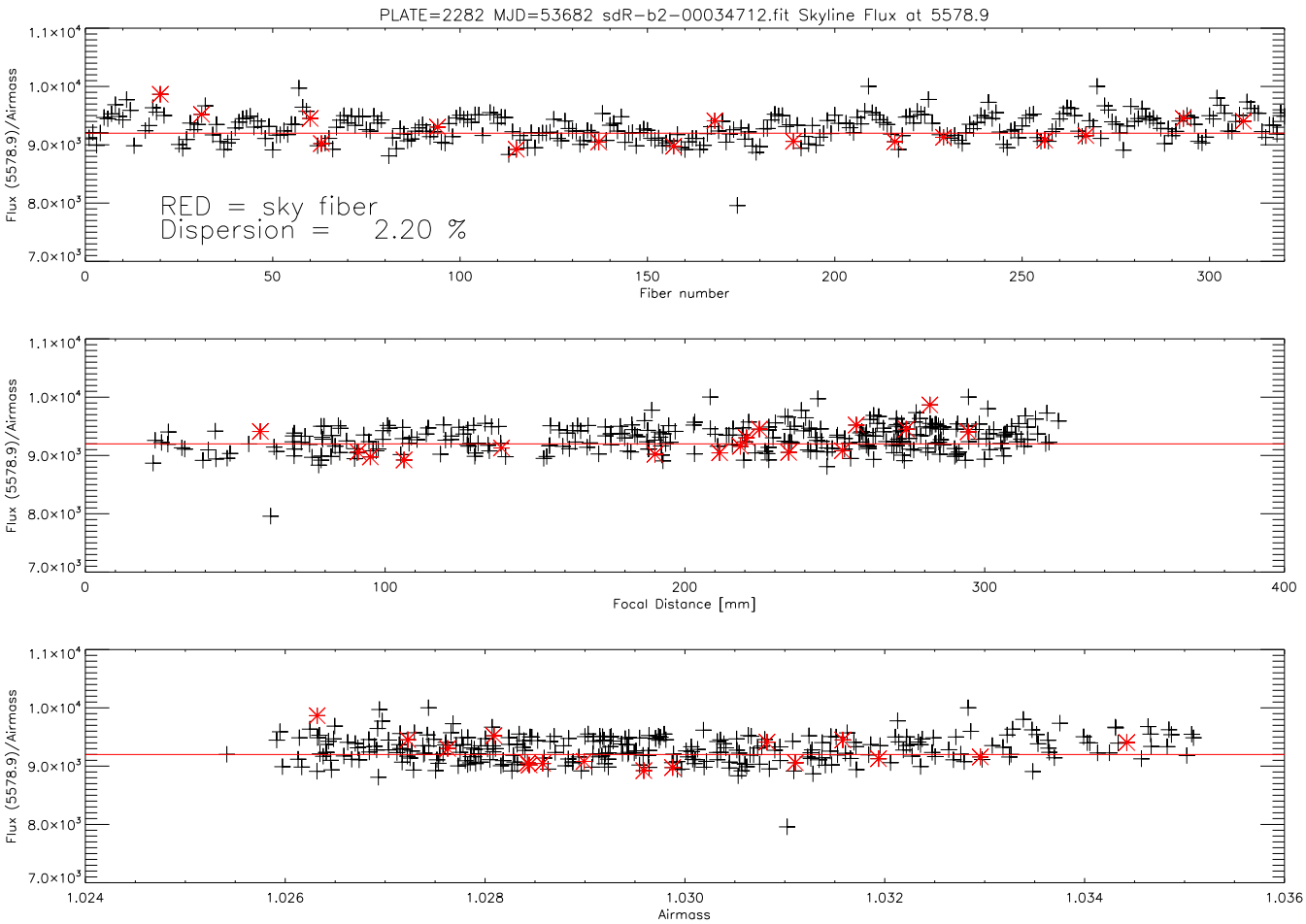

PLATE=2282 MJD=53682 sdR-b2-00034712.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

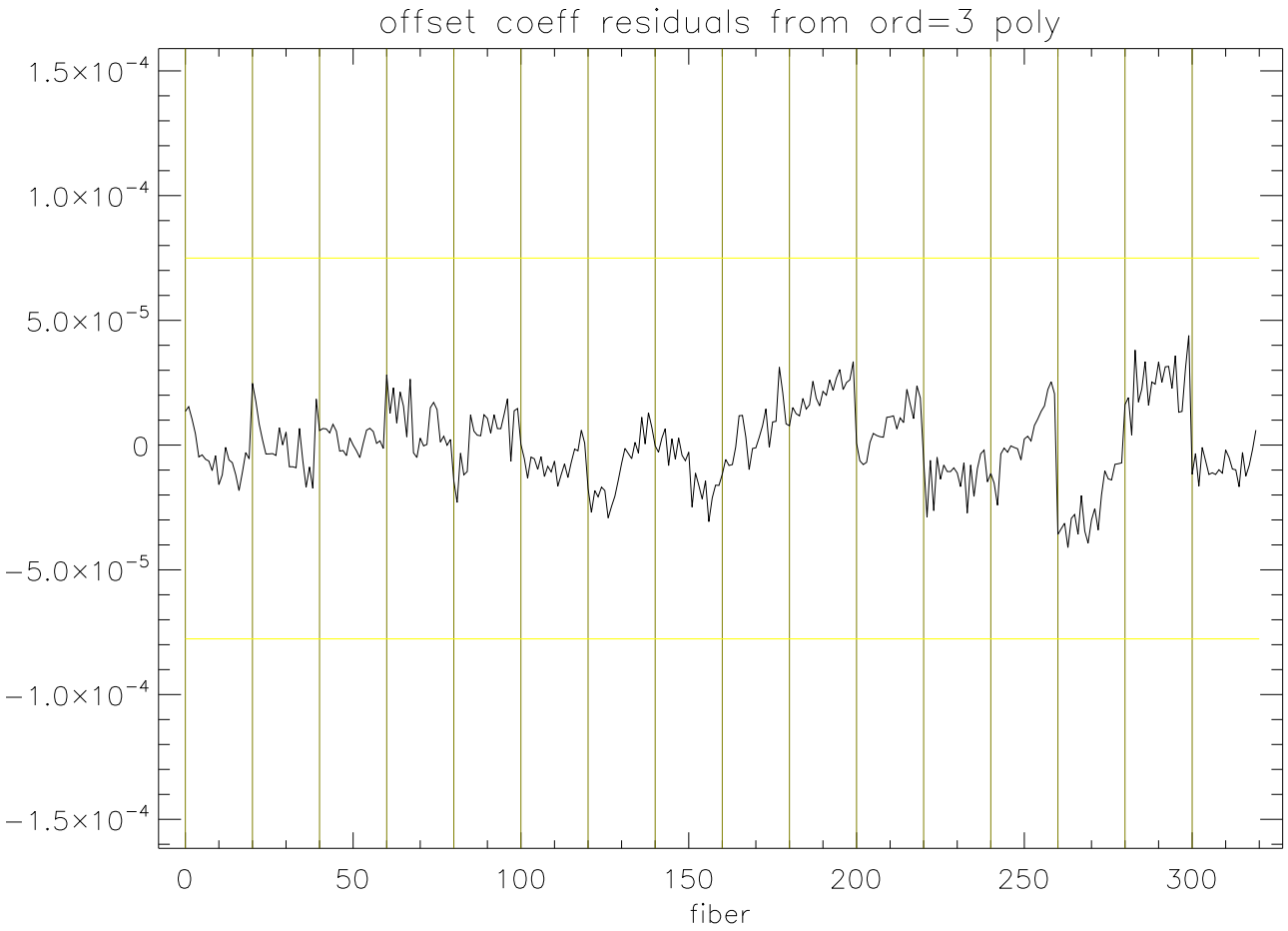

PLATE=2282 MJD=53682 sdR-b2-00034712.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

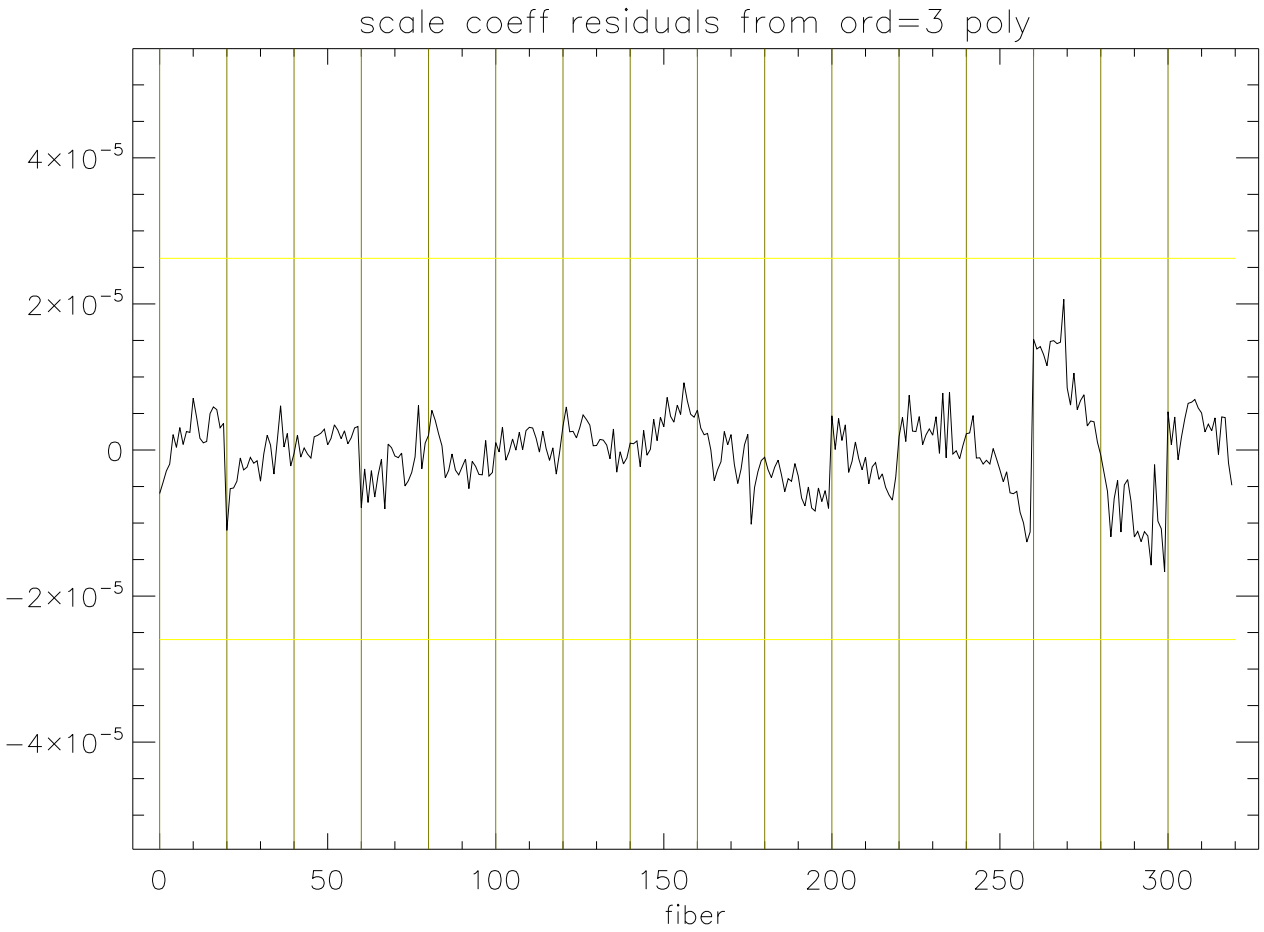

PLATE=2282 MJD=53682 sdR-b2-00034712.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

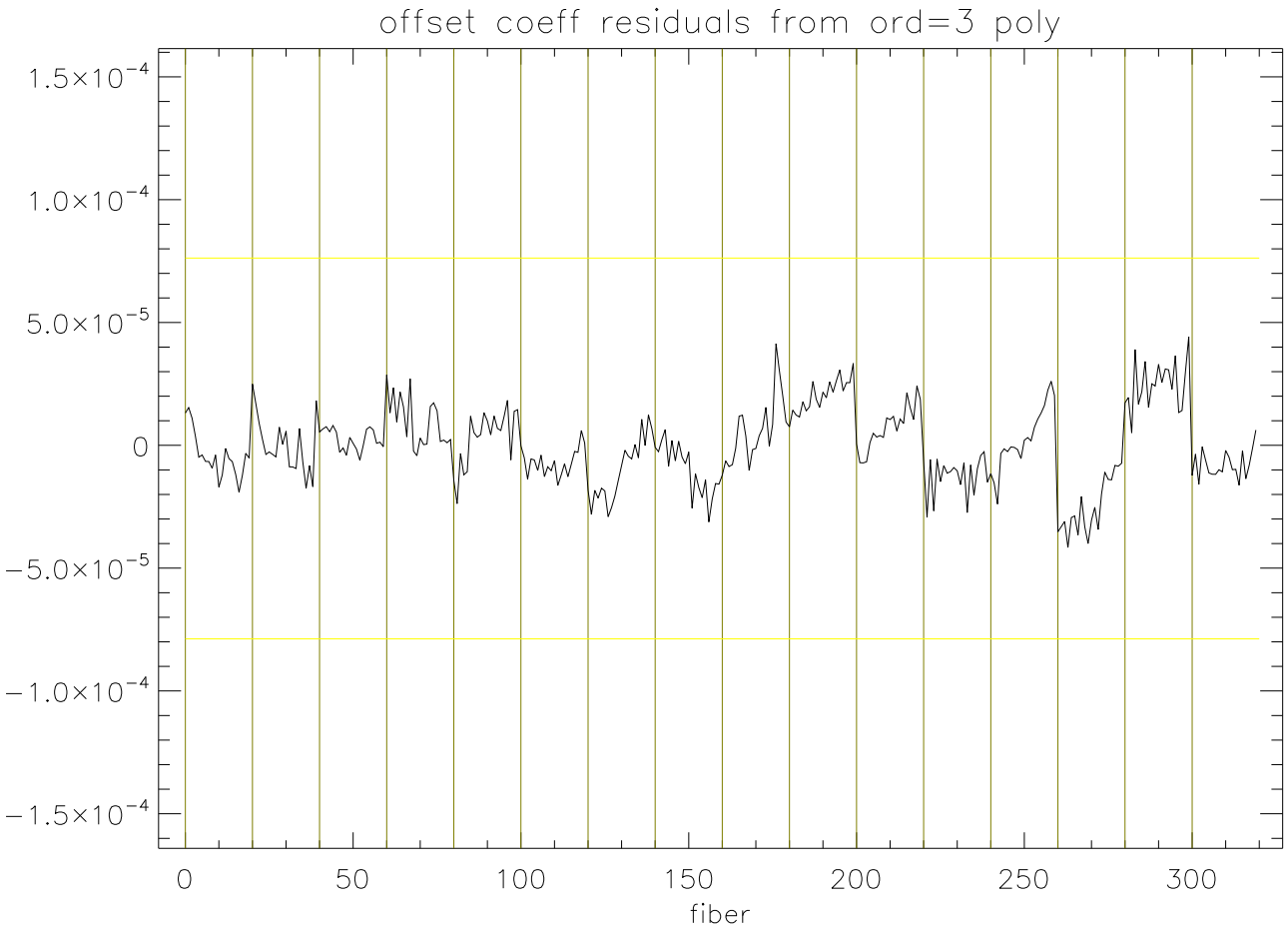

Number of sky fibers = 16
PLATE=2282 MJD=53682 sdR-b2-00034712.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

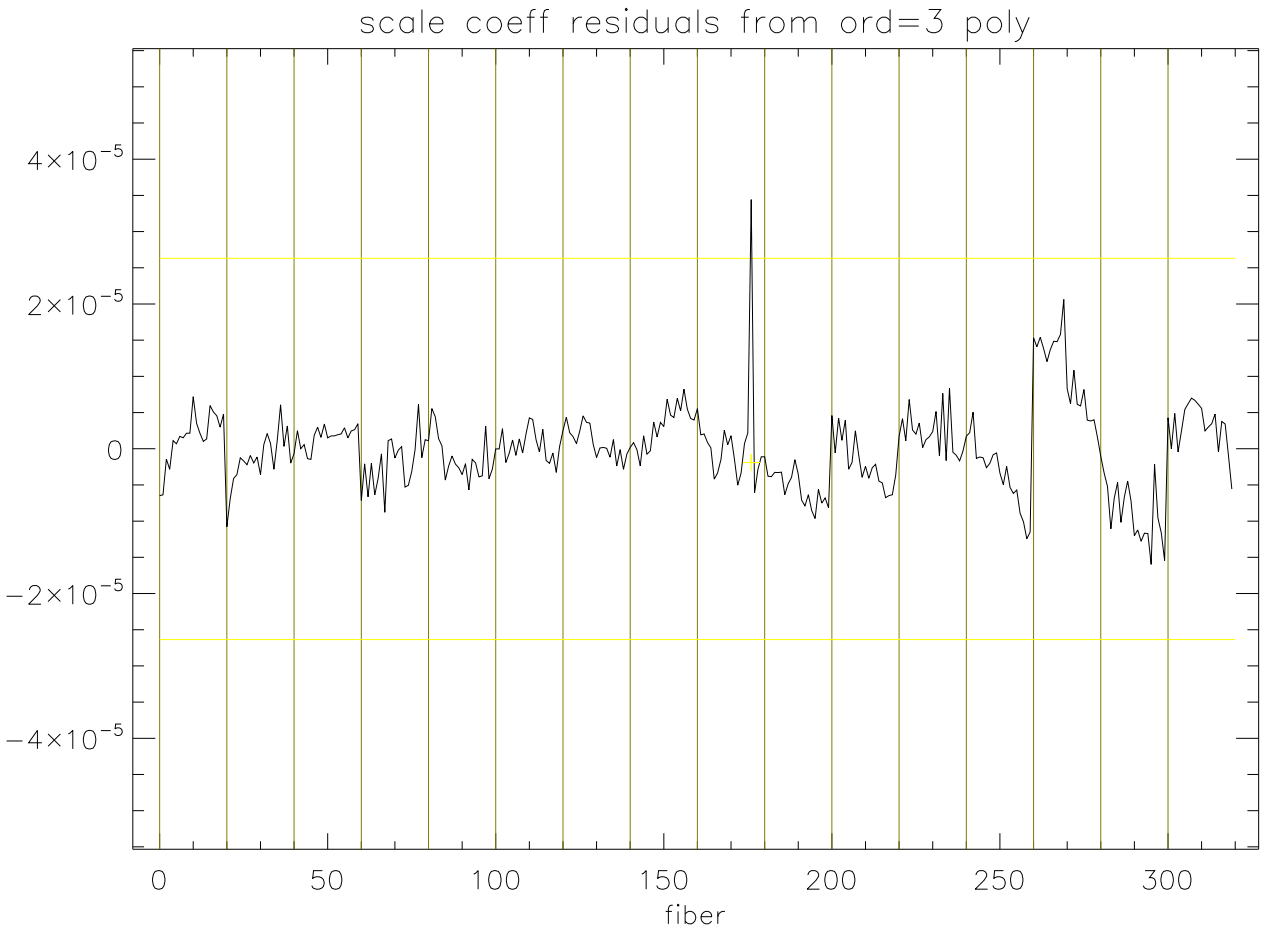

PLATE=2282 MJD=53682 sdR-b2-00034712.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 15.70 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

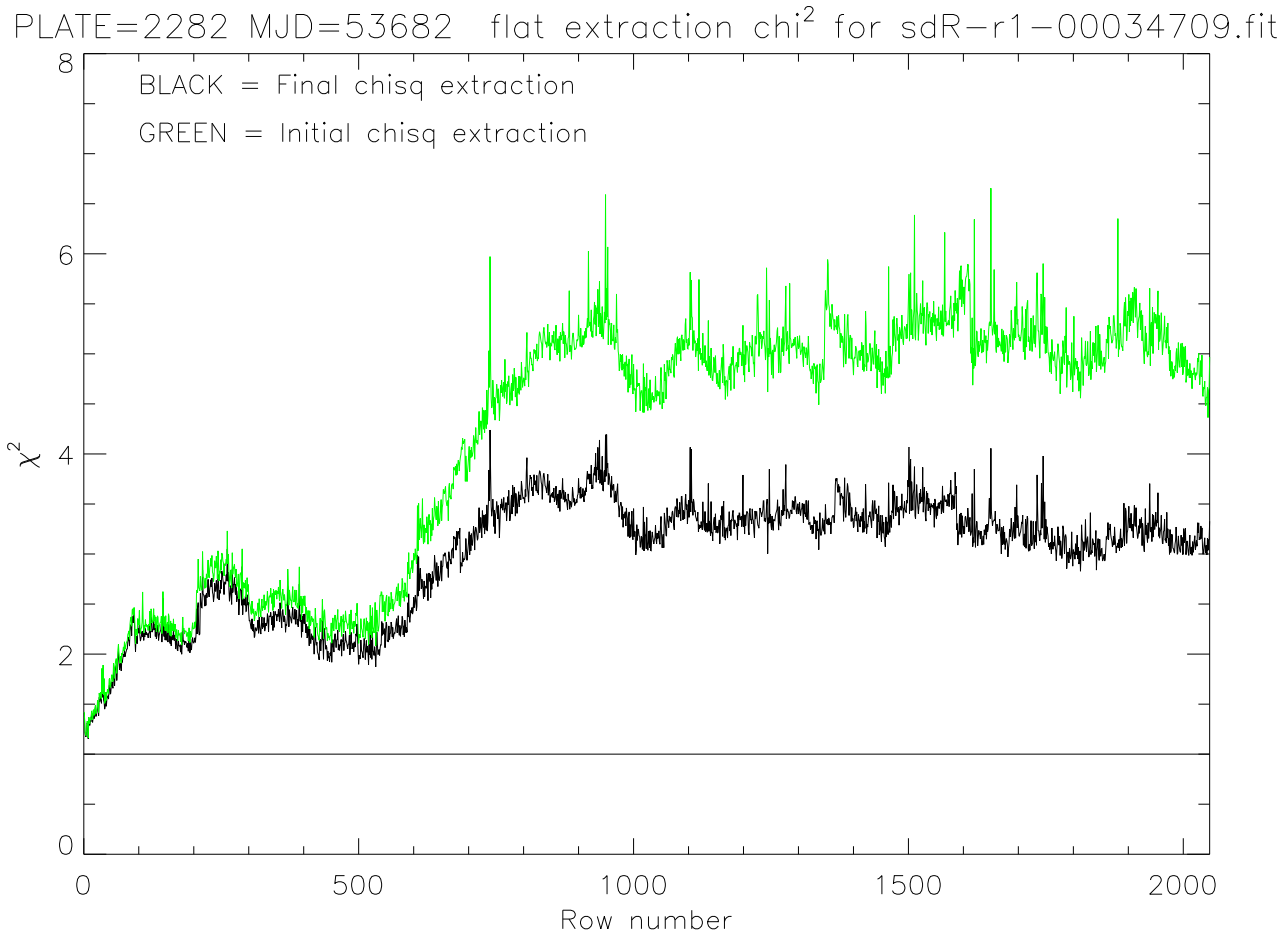

PLATE=2282 MJD=53682 sdR-b2-00034712.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.20 %
Fiber number
Focal Distance [mm]
Airmass

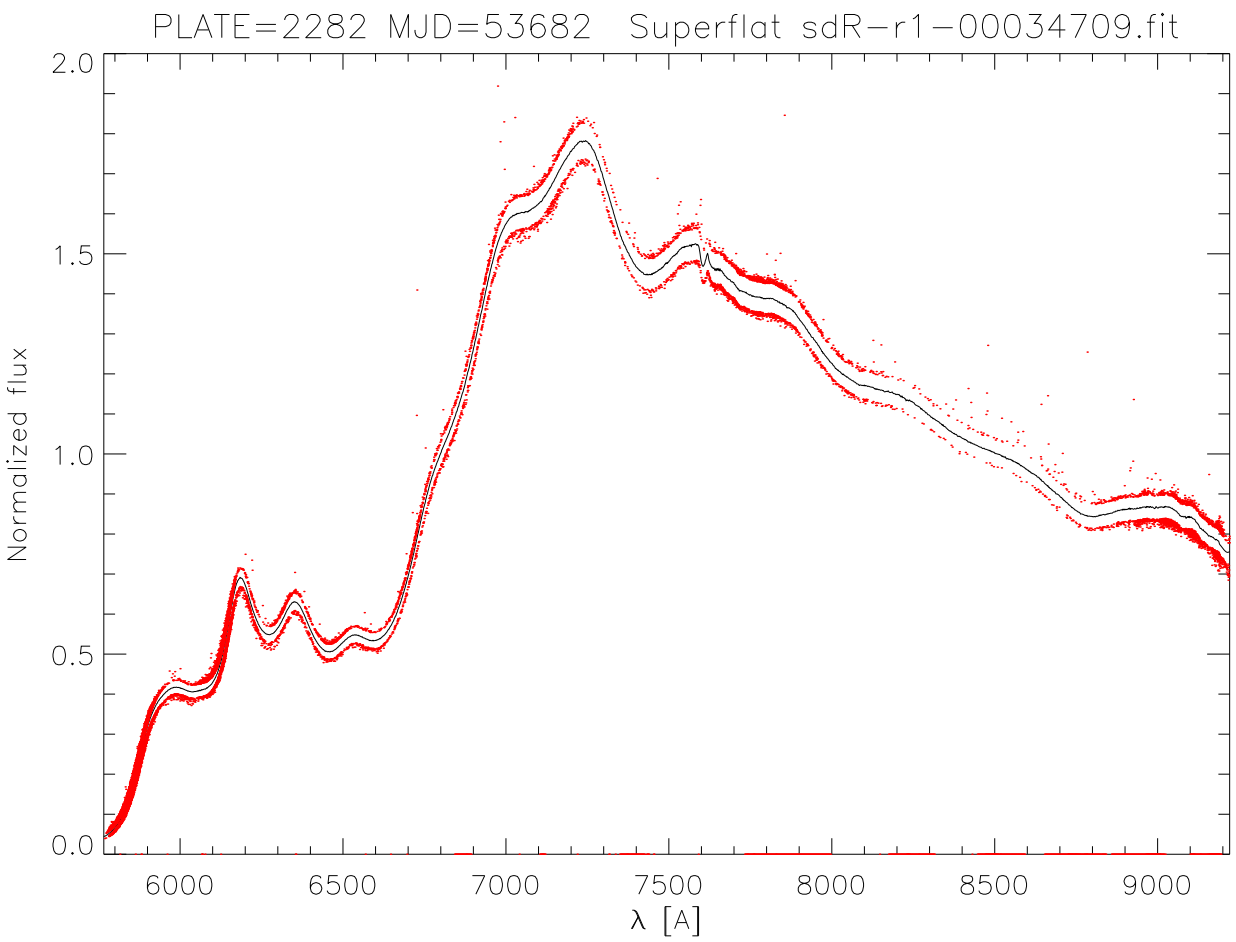

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

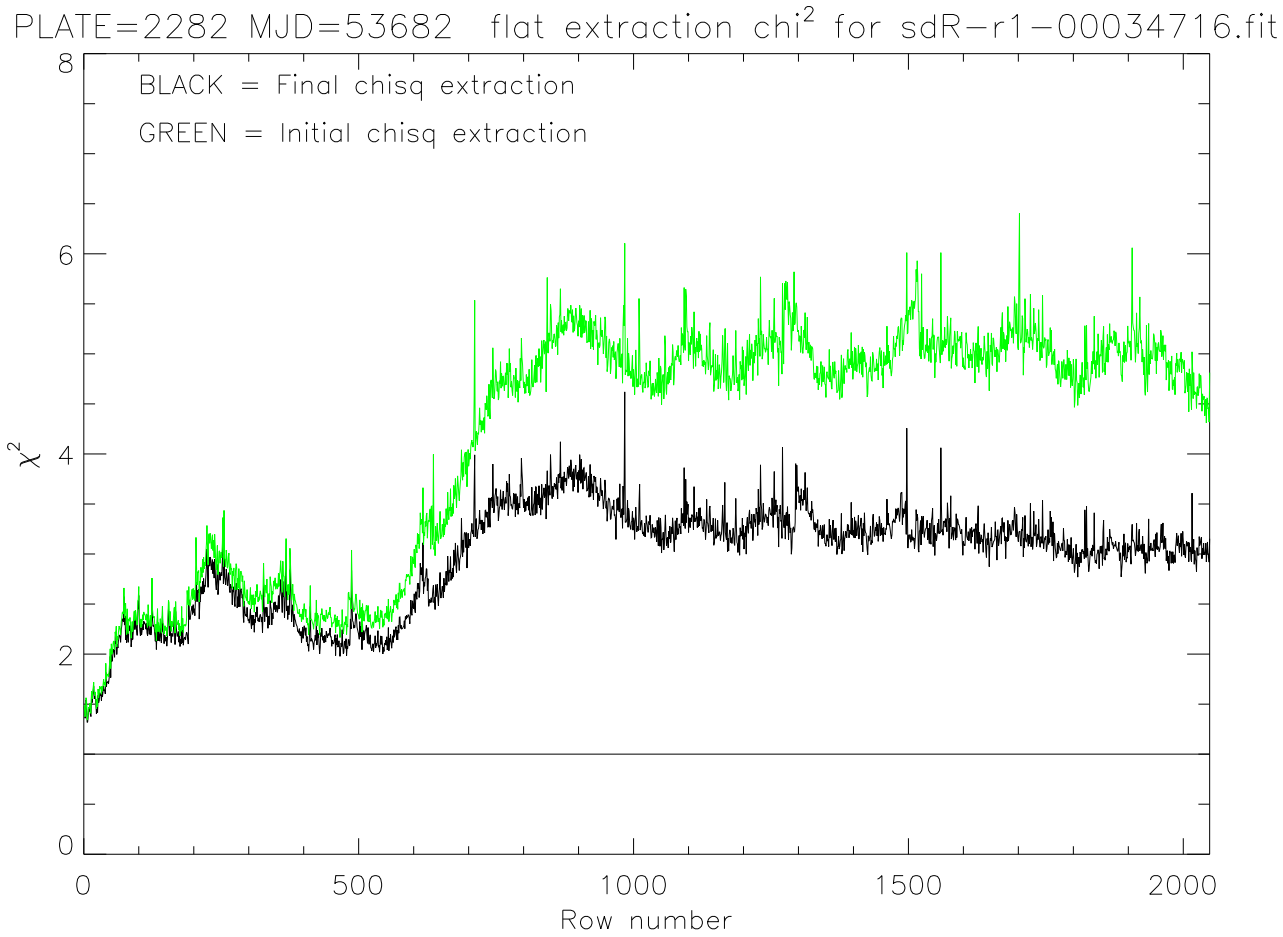

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

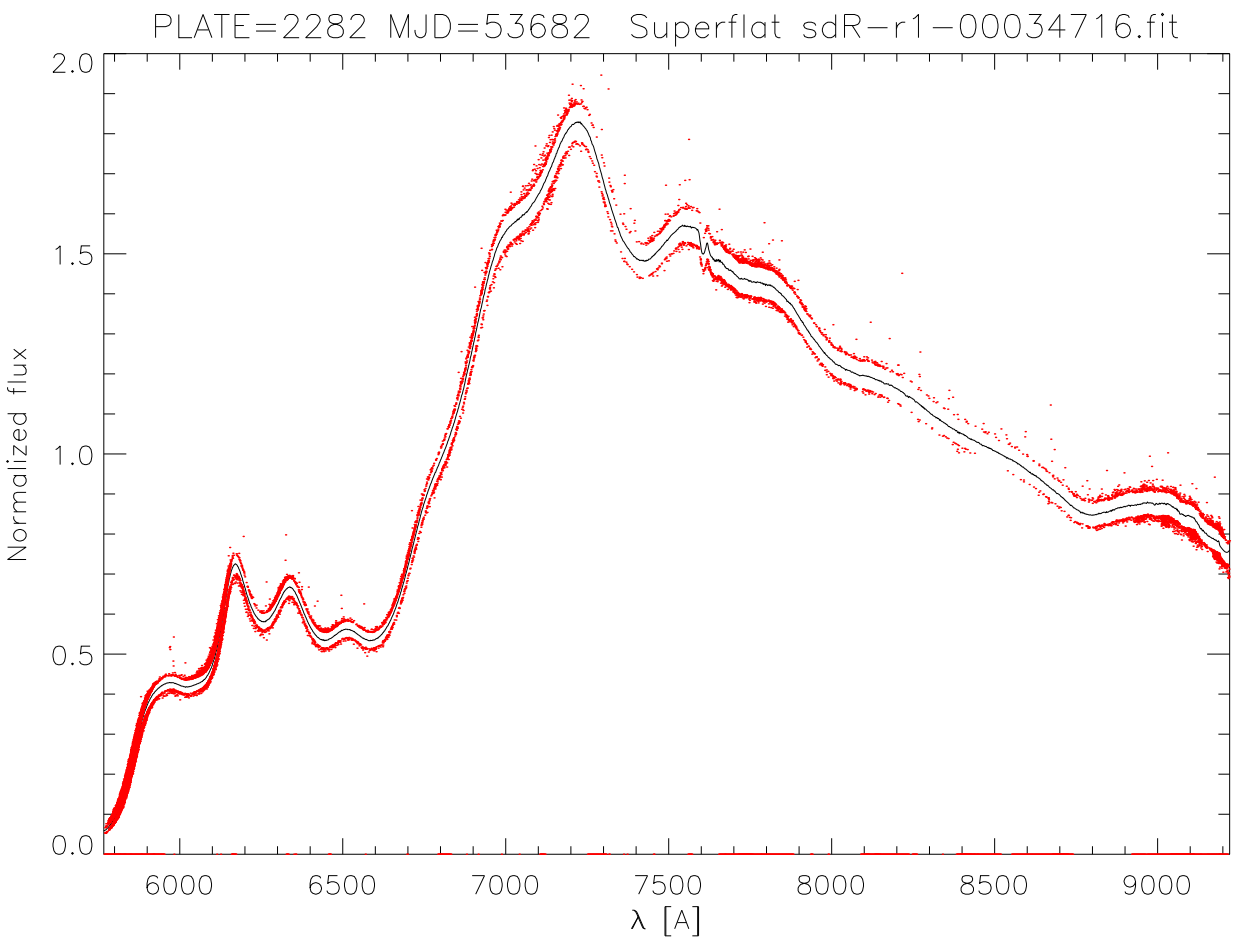

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

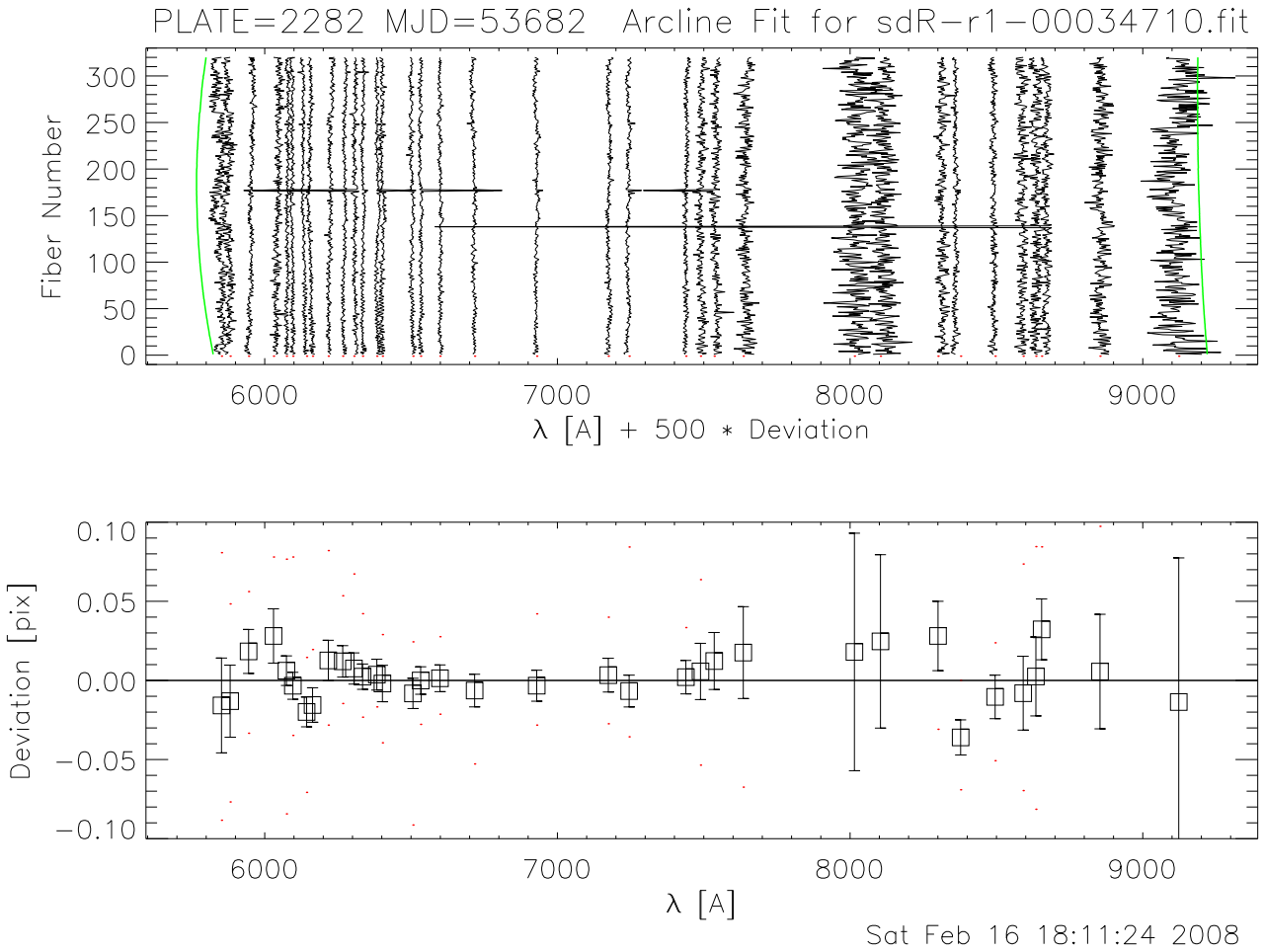

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

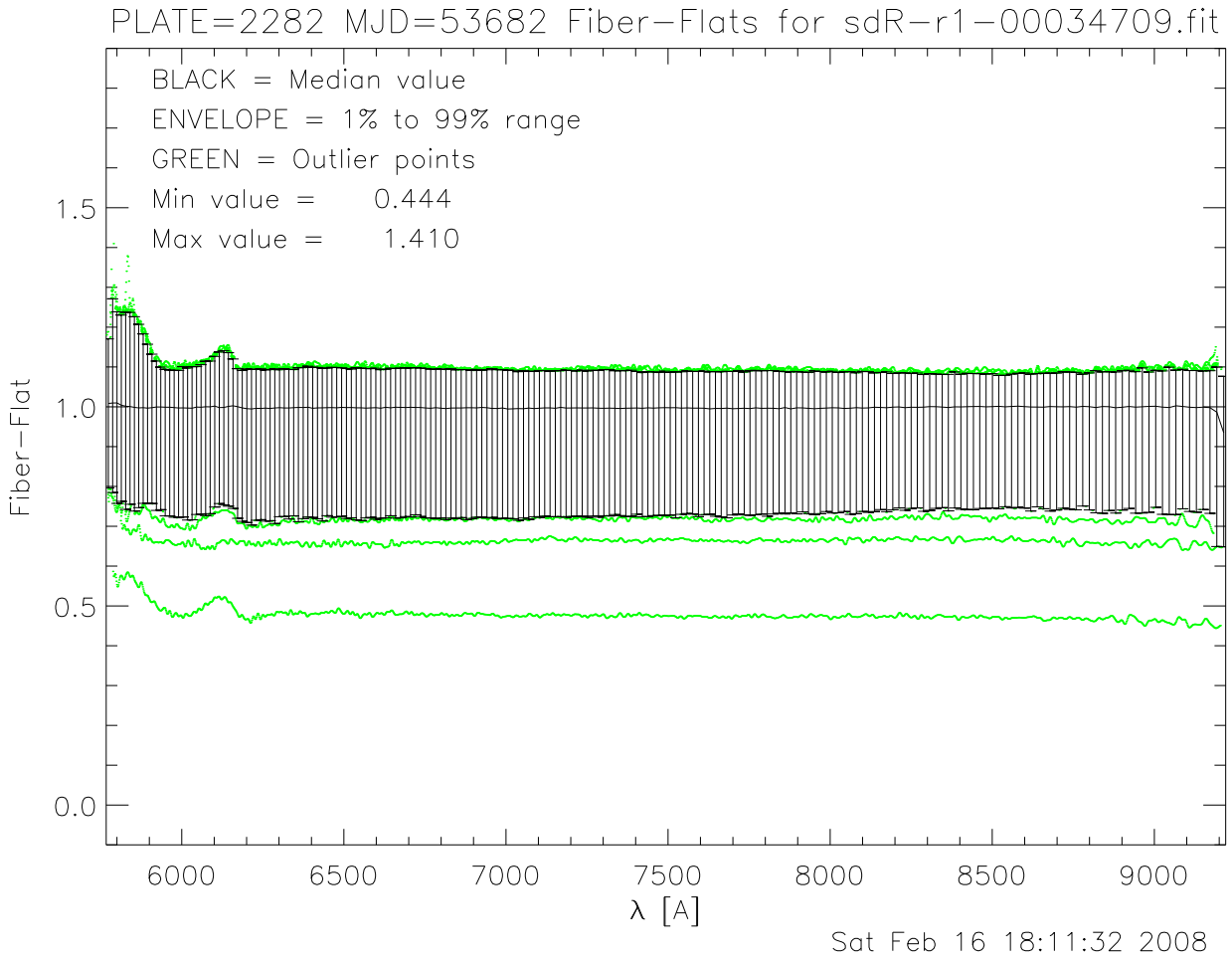

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−r1−00034709.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

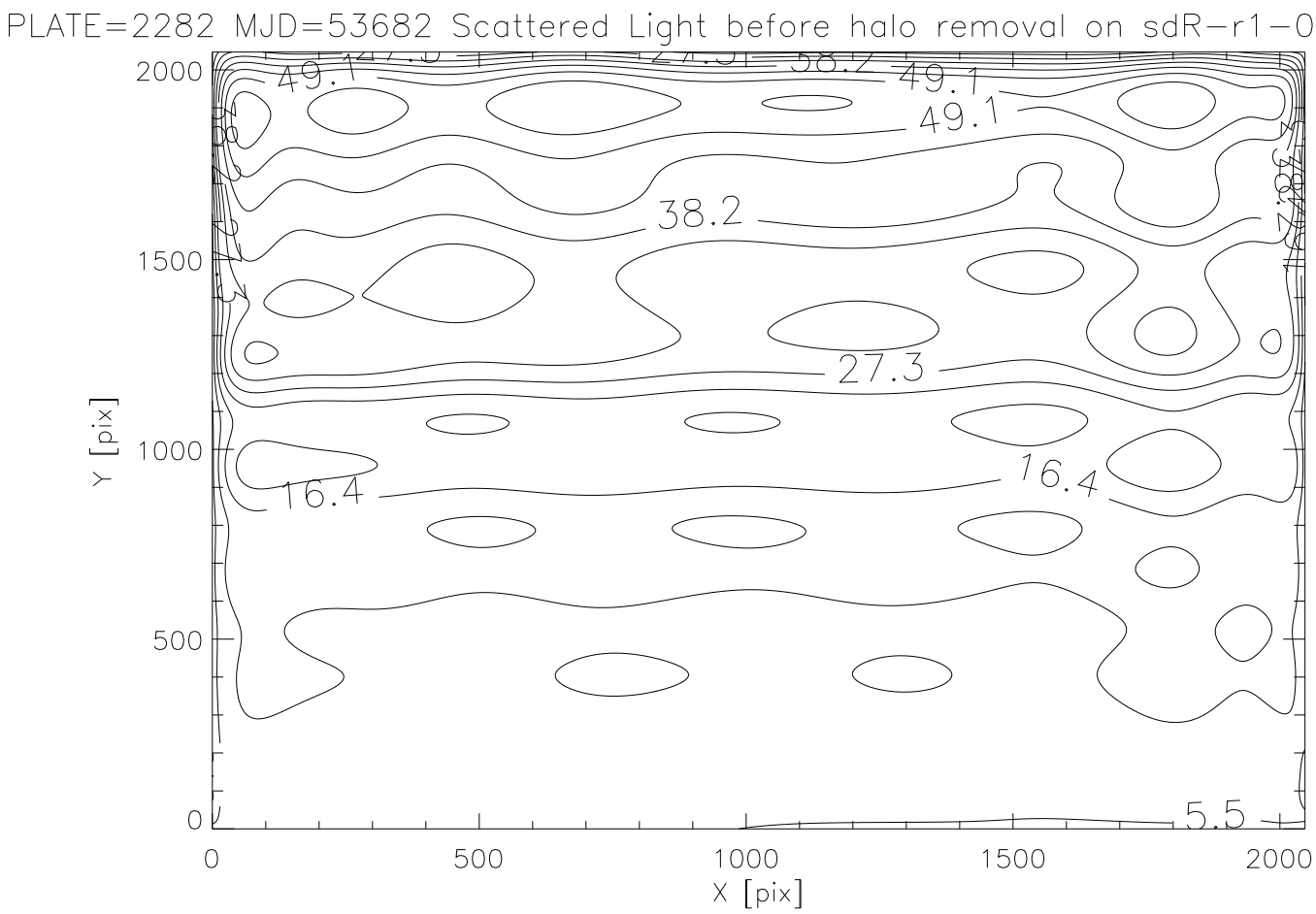

PLATE=2282 MJD=53682 Superflat sdR-r1-00034709.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

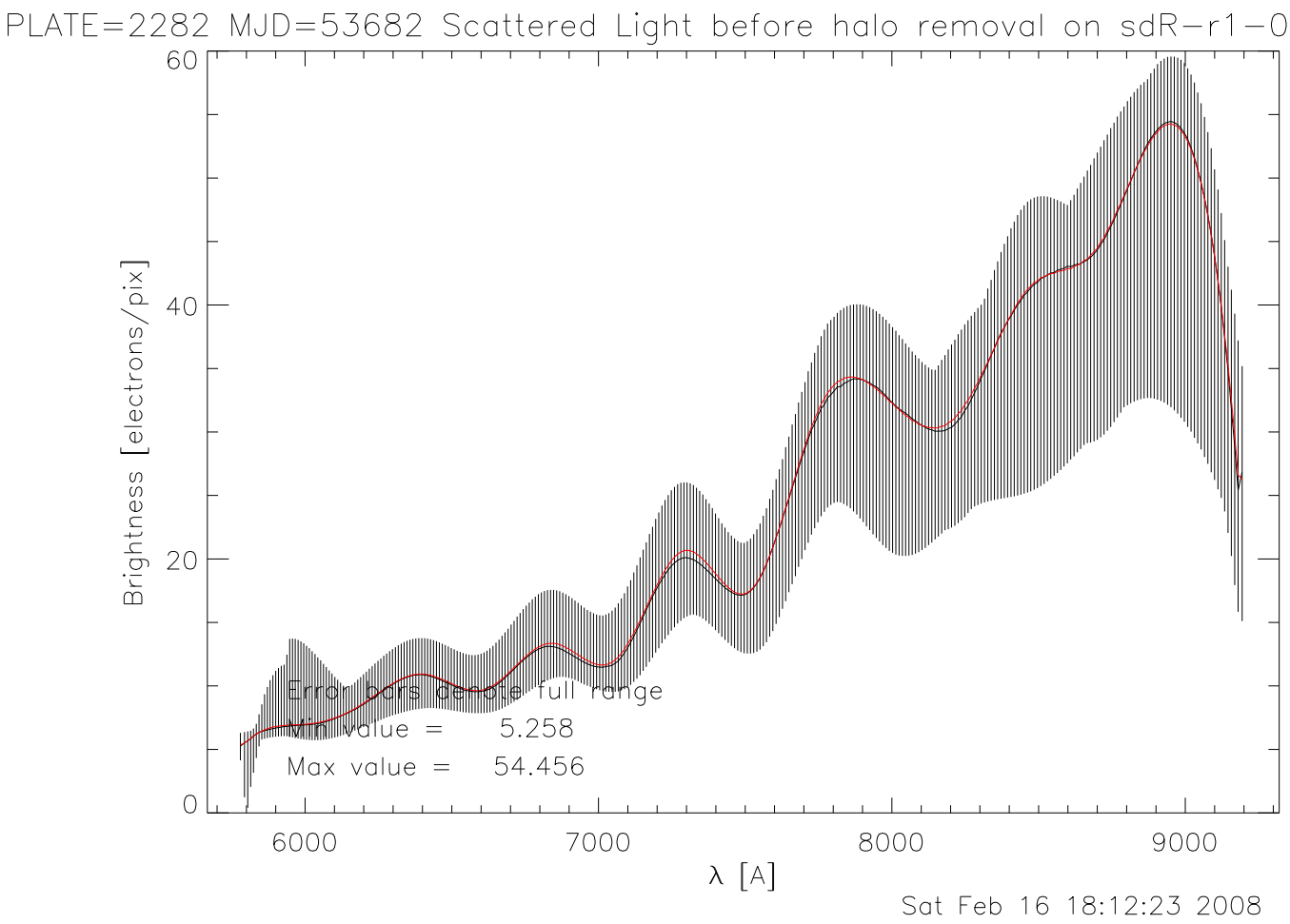

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−r1−00034716.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

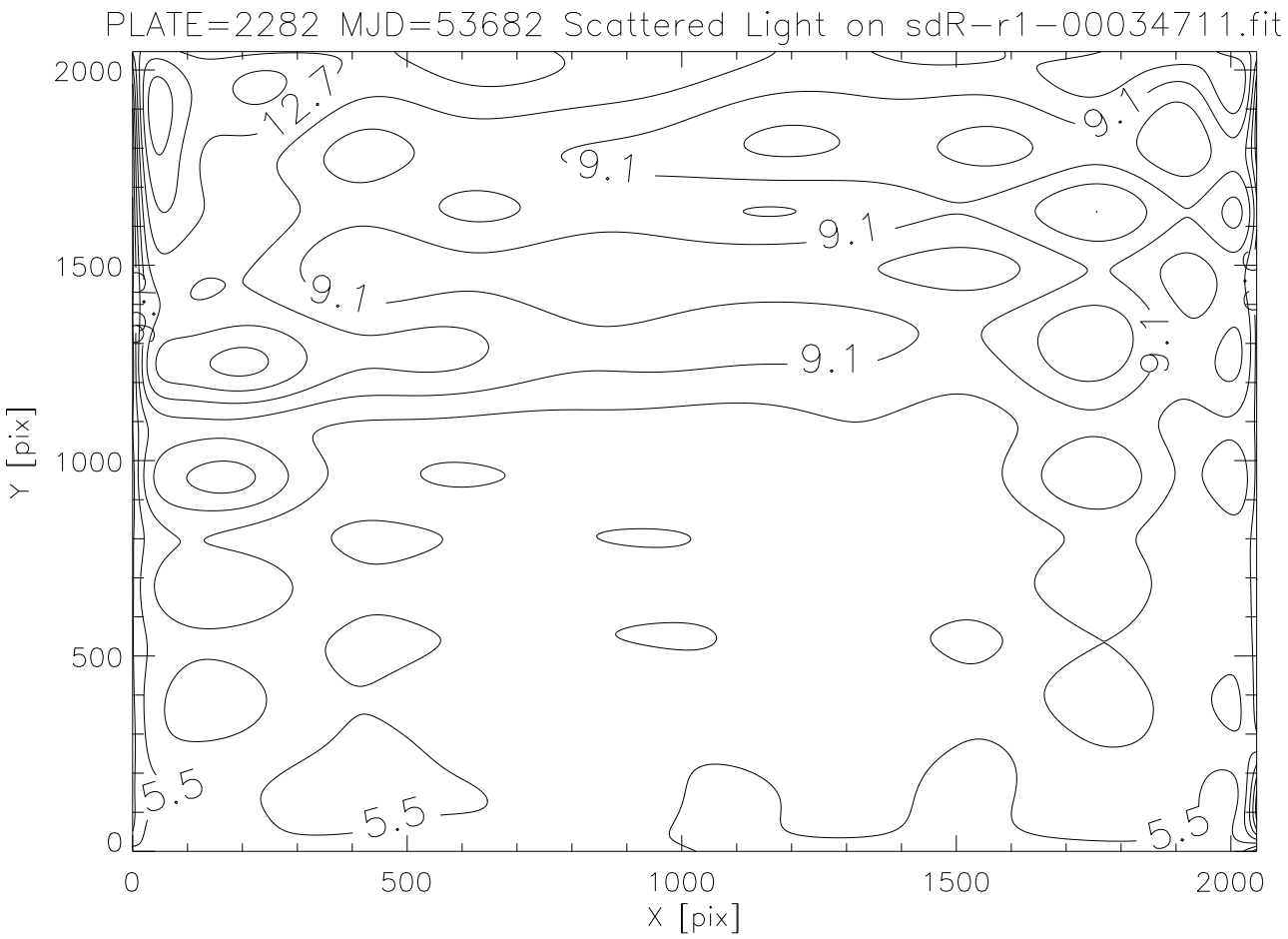

PLATE=2282 MJD=53682 Superflat sdR-r1-00034716.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

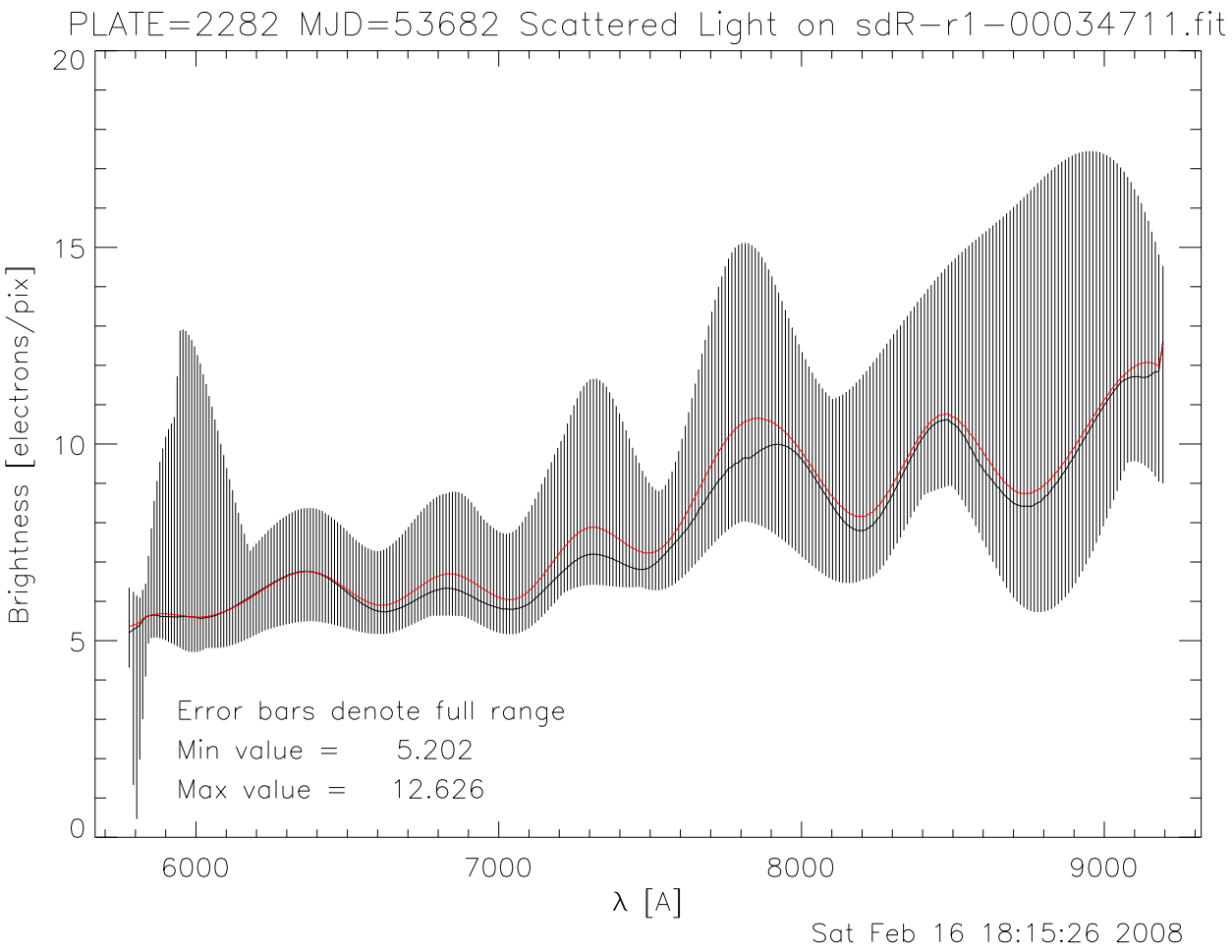

PLATE=2282 MJD=53682 Arcline Fit for sdR-r1-00034710.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 16 18:11:24 2008

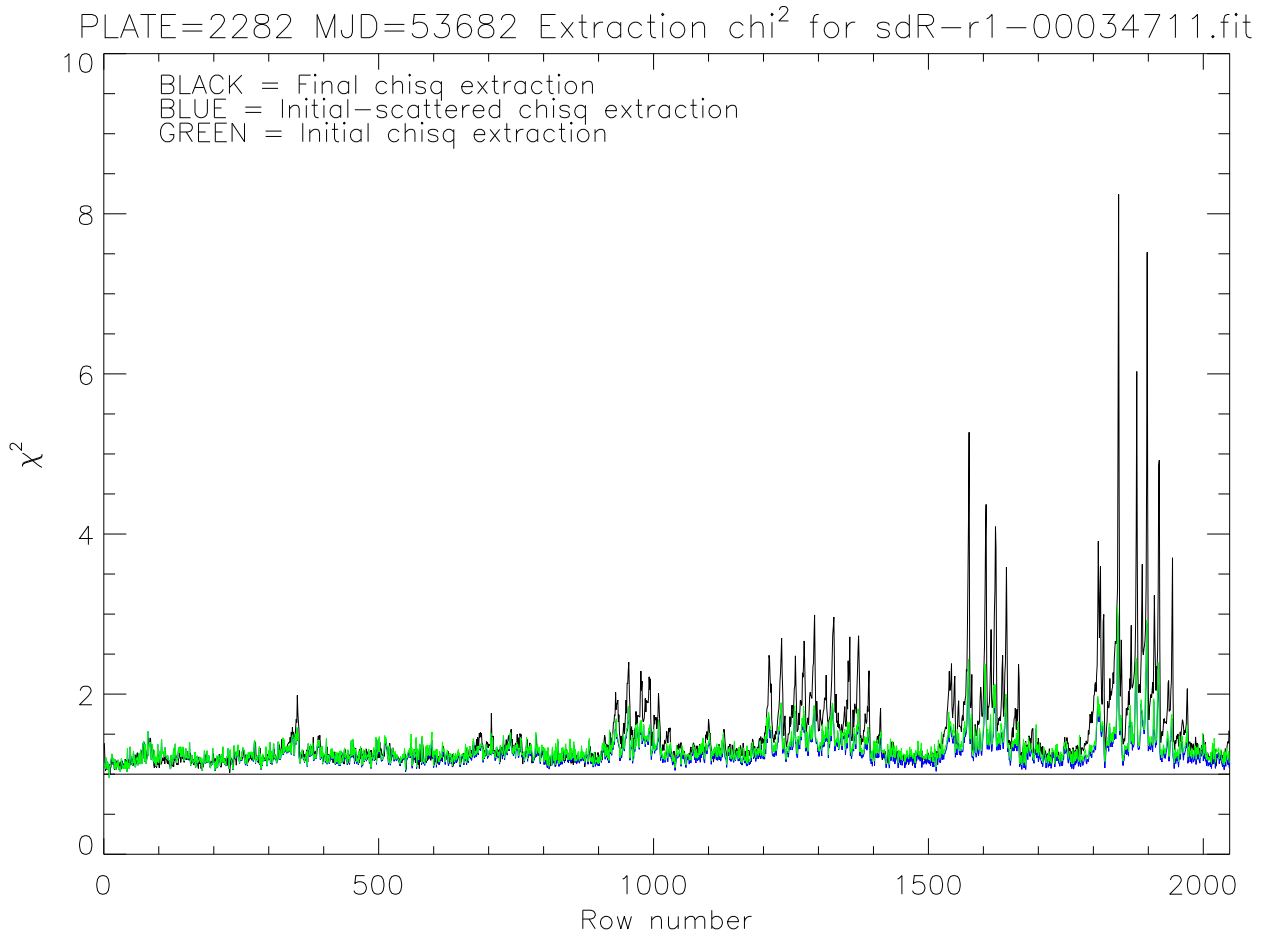

PLATE=2282 MJD=53682 Fiber−Flats for sdR−r1−00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.444
Max value = 1.410
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 18:11:32 2008

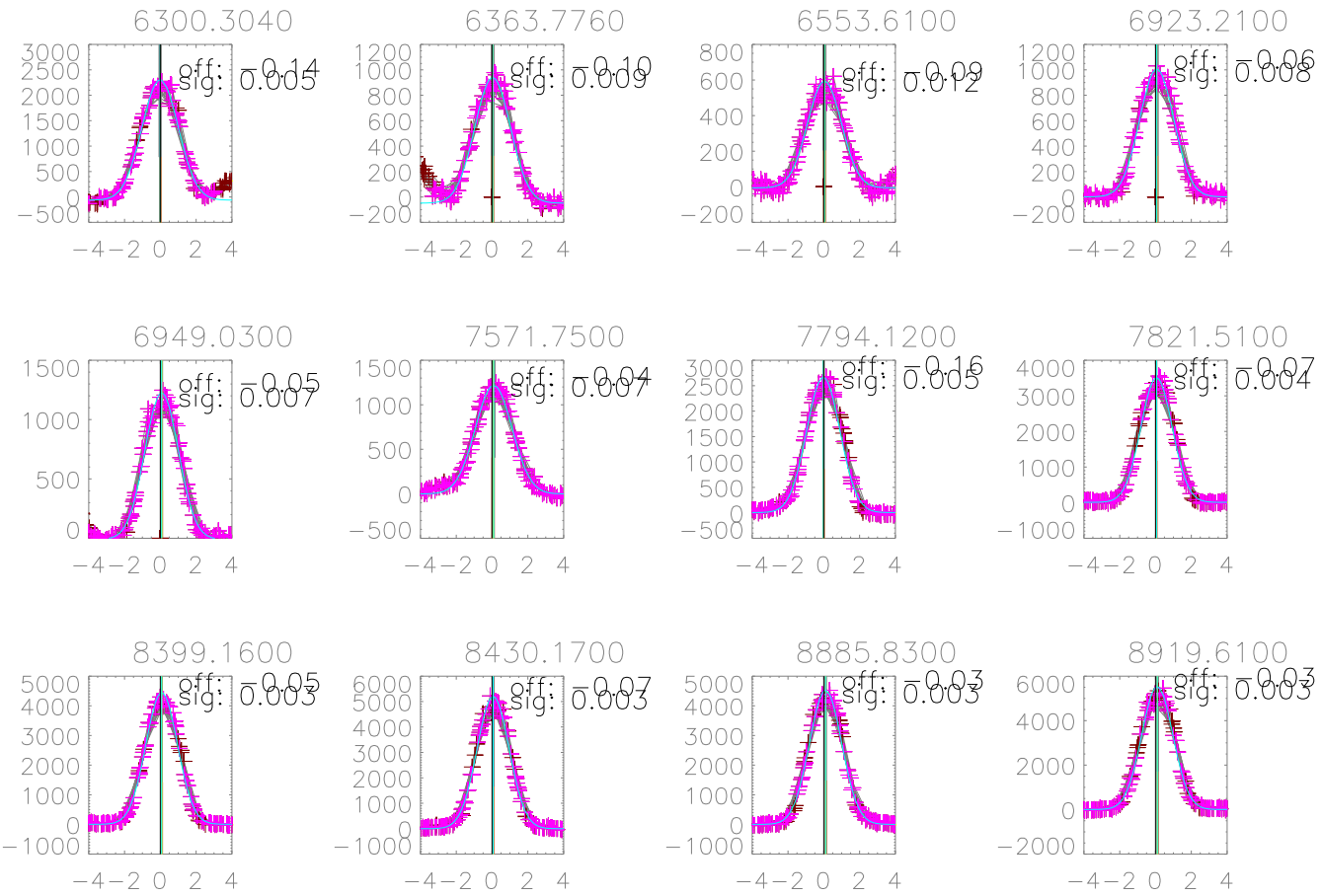

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r1-00034711.fi
49.1
49.1
49.1
38.2
27.3
16.4
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

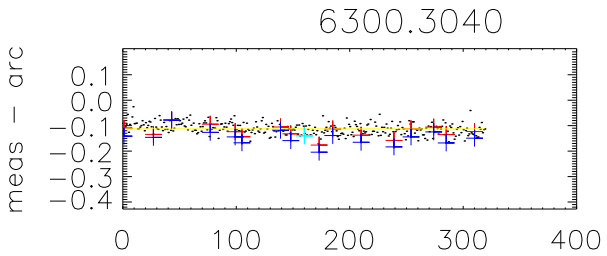

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r1-00034711.fi
60
40
20
0
Brightness [electrons/pix]
Error bars denote full range
Min value = 5.258
Max value = 54.456
6000
7000
8000
9000
λ [A]
Sat Feb 16 18:12:23 2008

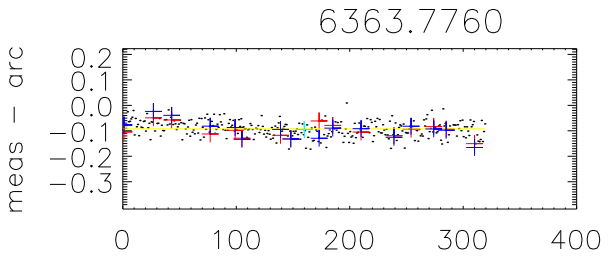

PLATE=2282 MJD=53682 Scattered Light on sdR-r1-00034711.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.7
9.1
9.1
9.1
9.1
9.1
9.1
5.5
5.5
5.5

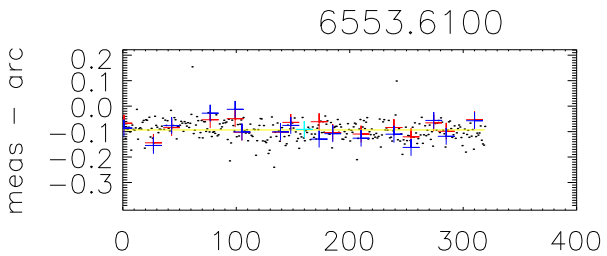

PLATE=2282 MJD=53682 Scattered Light on sdR-r1-00034711.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.202
Max value = 12.626
Sat Feb 16 18:15:26 2008

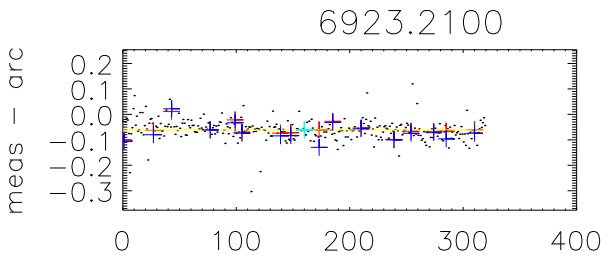

PLATE=2282 MJD=53682 Extraction chi^2 for sdR−r1−00034711.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

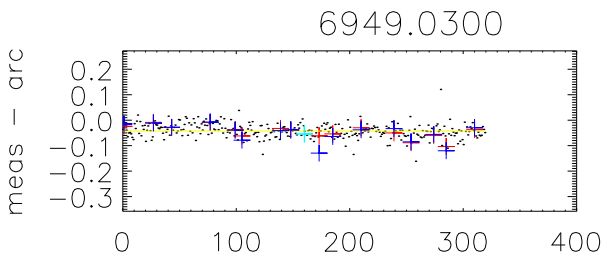

6300.3040
off: −0.14
sig: 0.005
6363.7760
off: −0.10
sig: 0.009
6553.6100
off: −0.09
sig: 0.012
6923.2100
off: −0.06
sig: 0.008
6949.0300
off: −0.05
sig: 0.007
7571.7500
off: −0.04
sig: 0.007
7794.1200
off: −0.16
sig: 0.005
7821.5100
off: −0.07
sig: 0.004
8399.1600
off: −0.05
sig: 0.003
8430.1700
off: −0.07
sig: 0.003
8885.8300
off: −0.03
sig: 0.003
8919.6100
off: −0.03
sig: 0.003

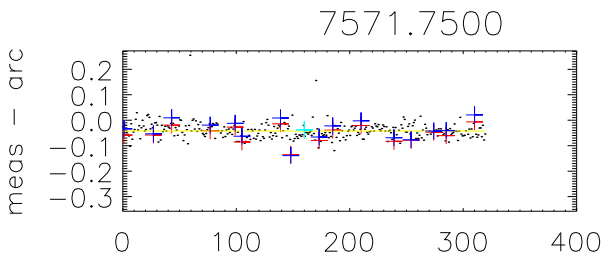

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

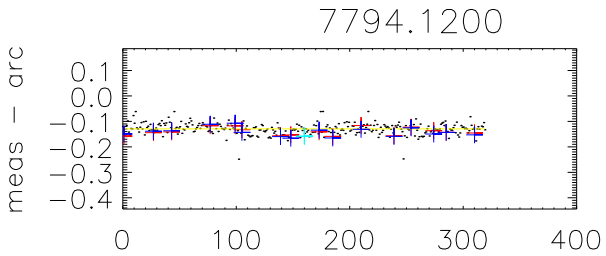

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

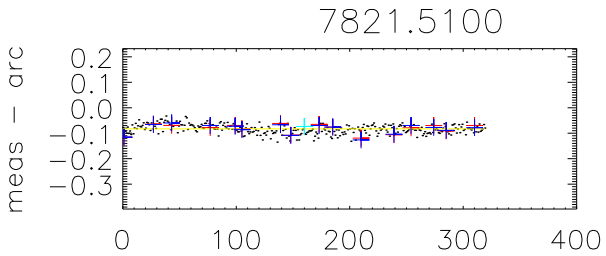

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

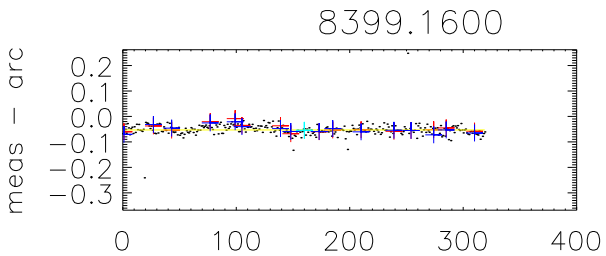

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

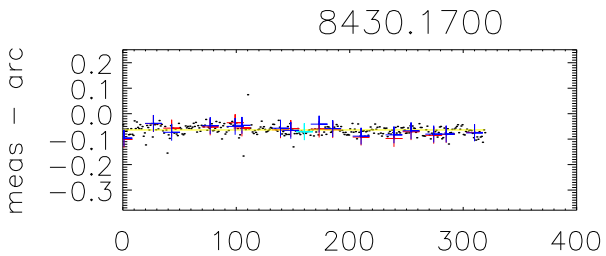

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

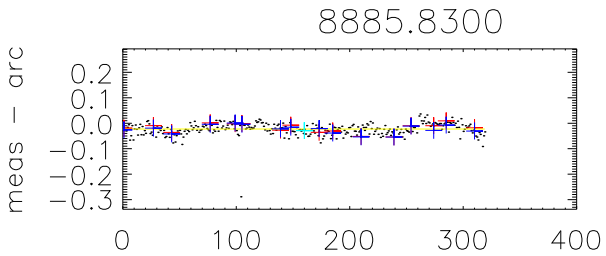

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

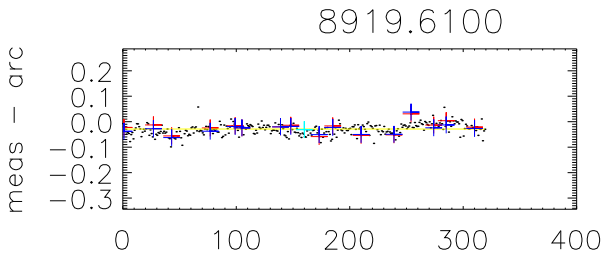

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

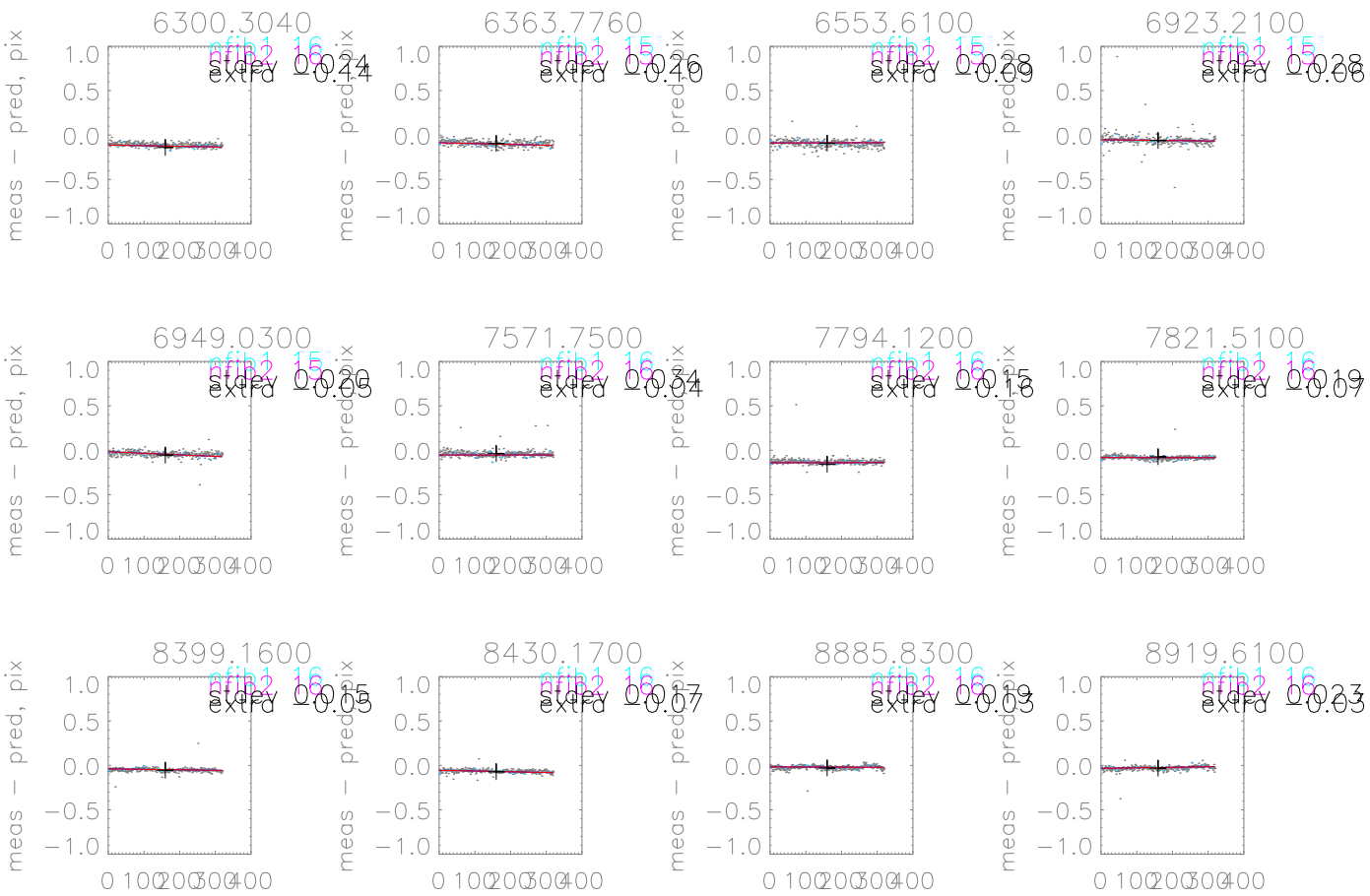

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

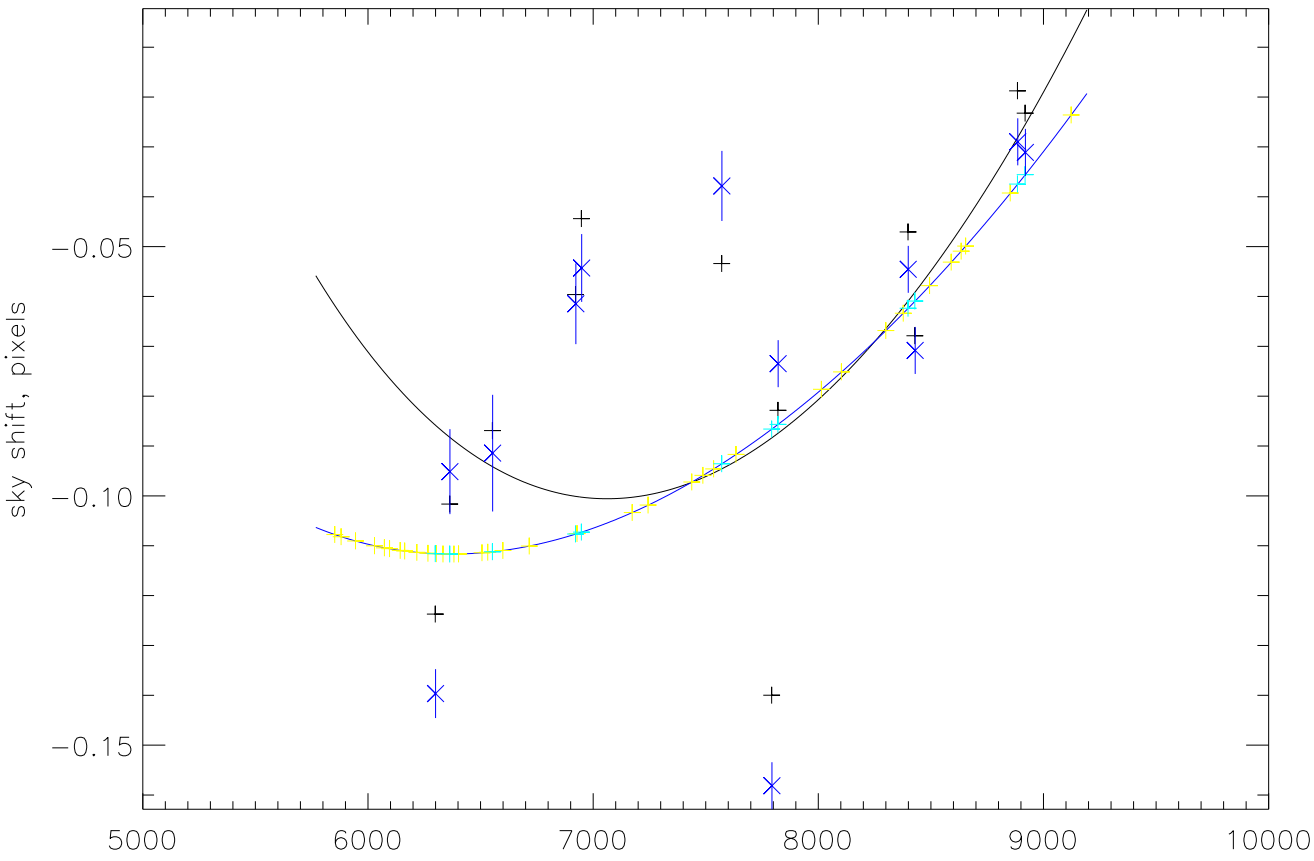

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

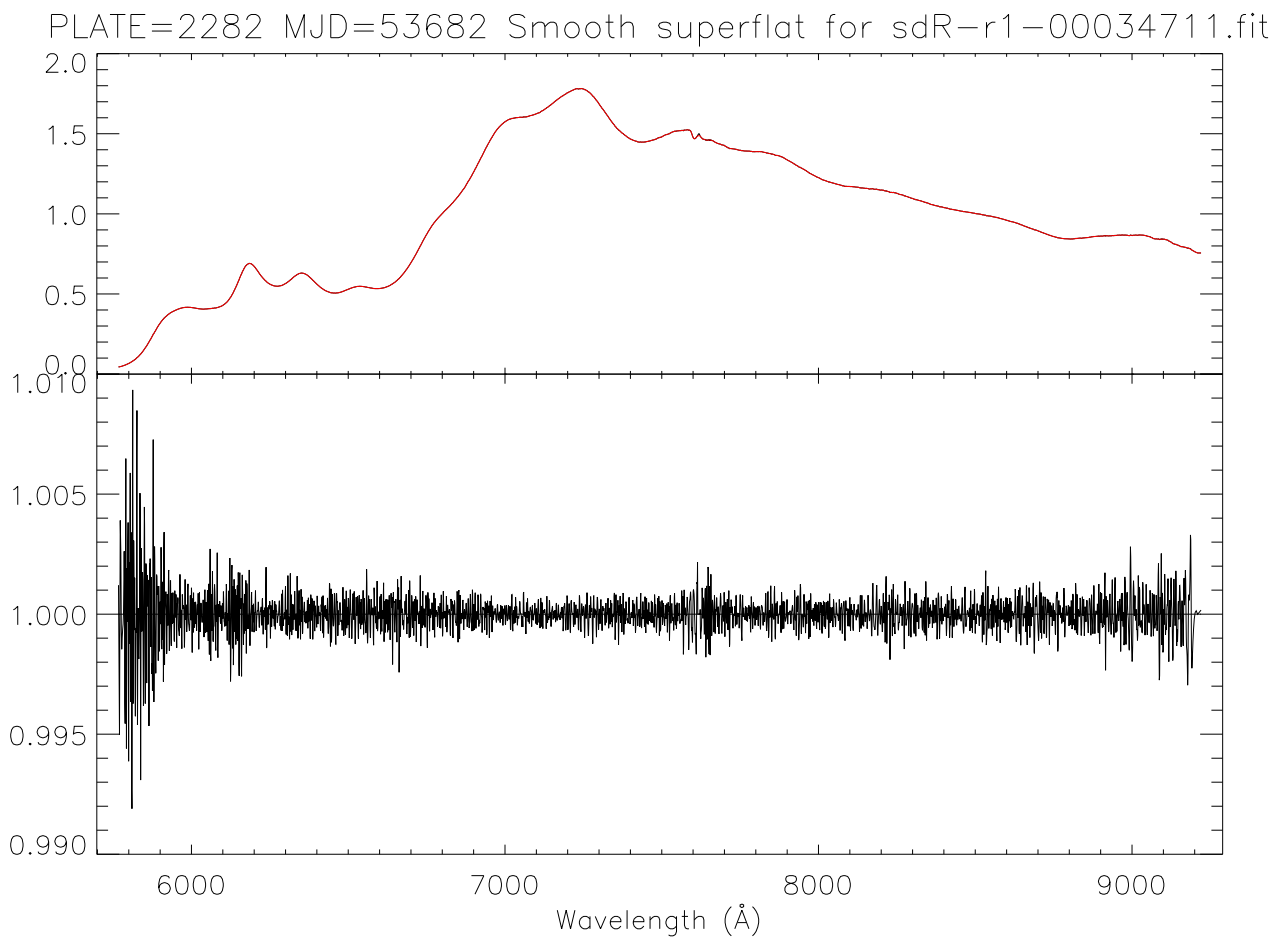

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

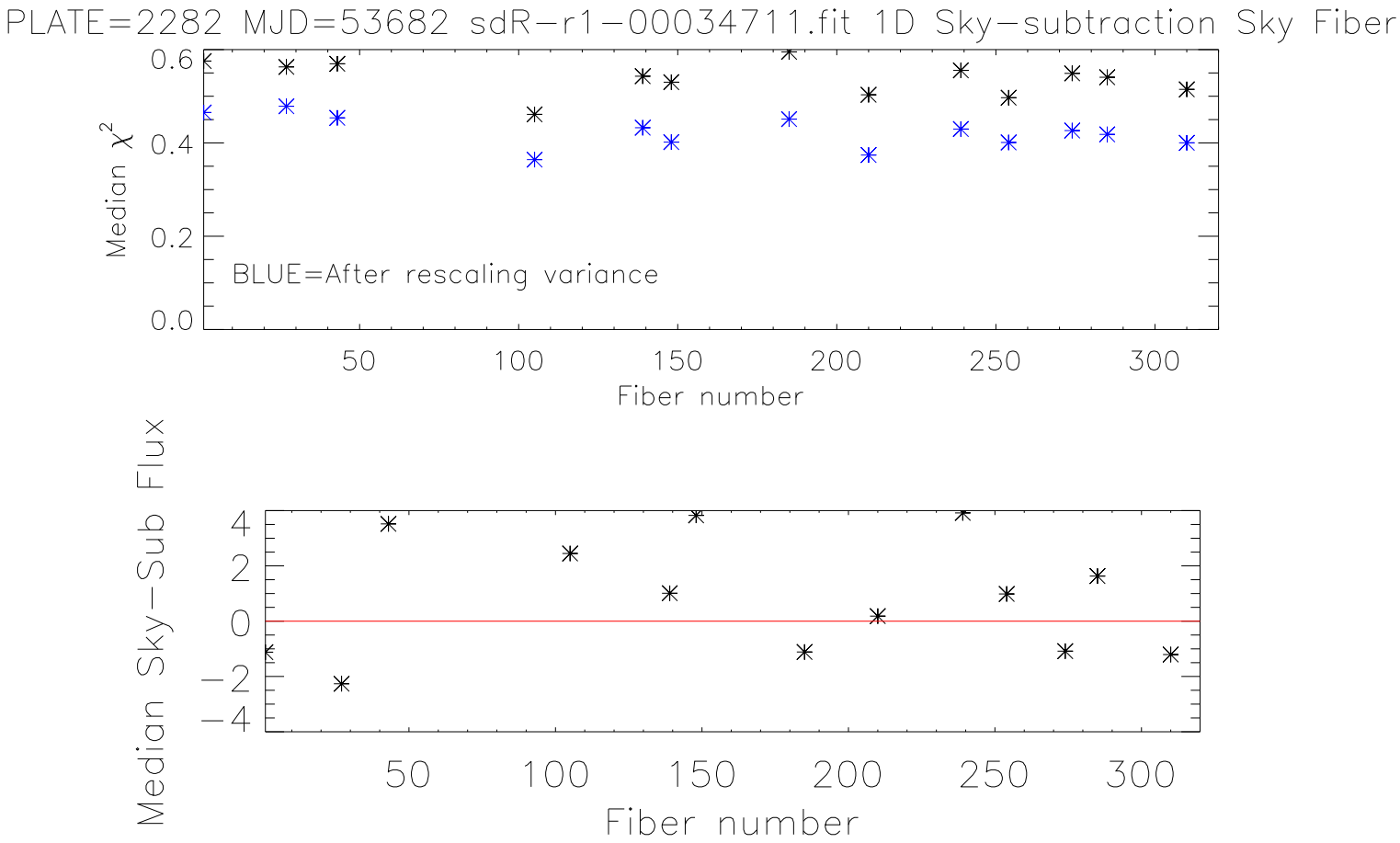

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

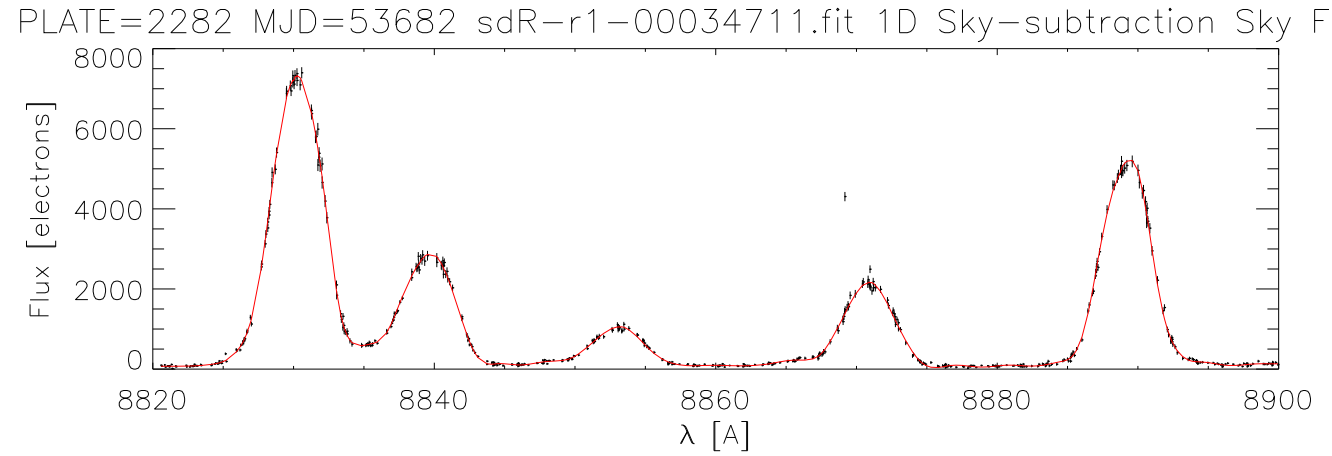

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhs2 15
mfhs2 16
stdev 0.044
extrd 0.044
stdev 0.046
extrd 0.046
stdev 0.029
extrd 0.029
stdev 0.028
extrd 0.028
stdev 0.020
extrd 0.020
stdev 0.034
extrd 0.034
stdev 0.015
extrd 0.018
stdev 0.019
extrd 0.017
stdev 0.015
extrd 0.015
stdev 0.017
extrd 0.017
stdev 0.019
extrd 0.019
stdev 0.023
extrd 0.023

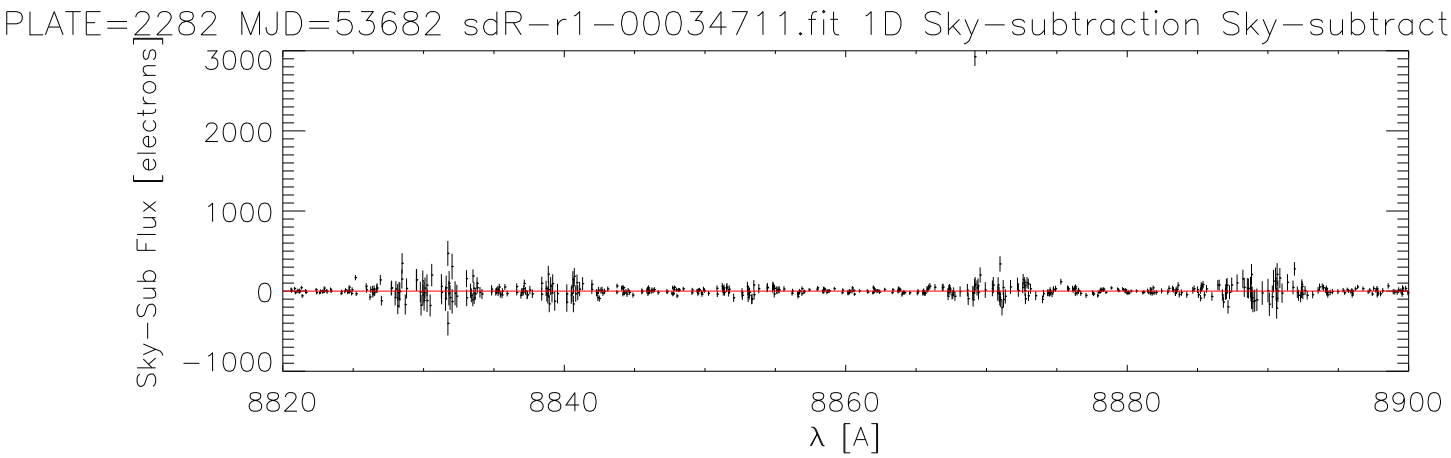

sky shift, pixels
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000

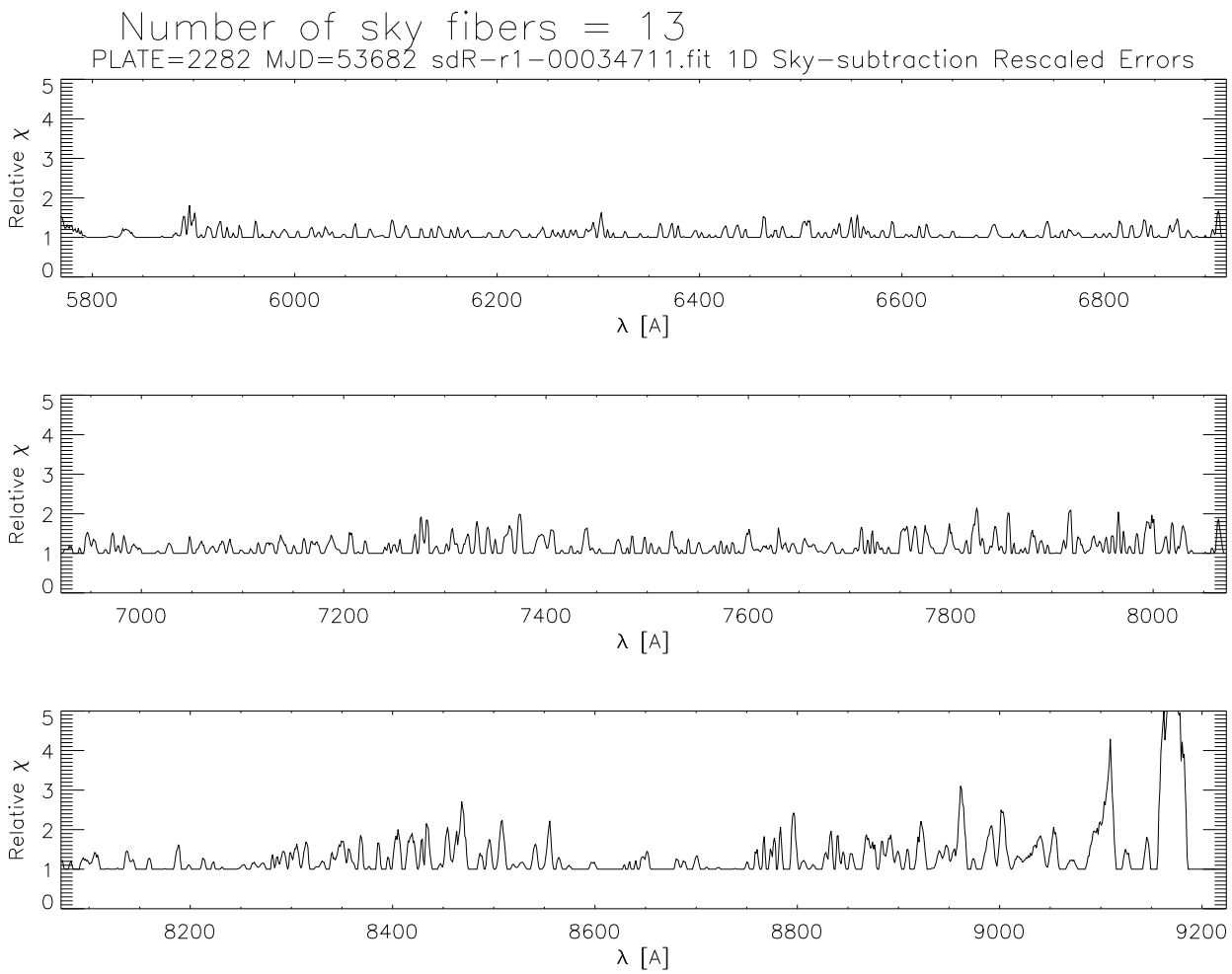
es= 0.0000

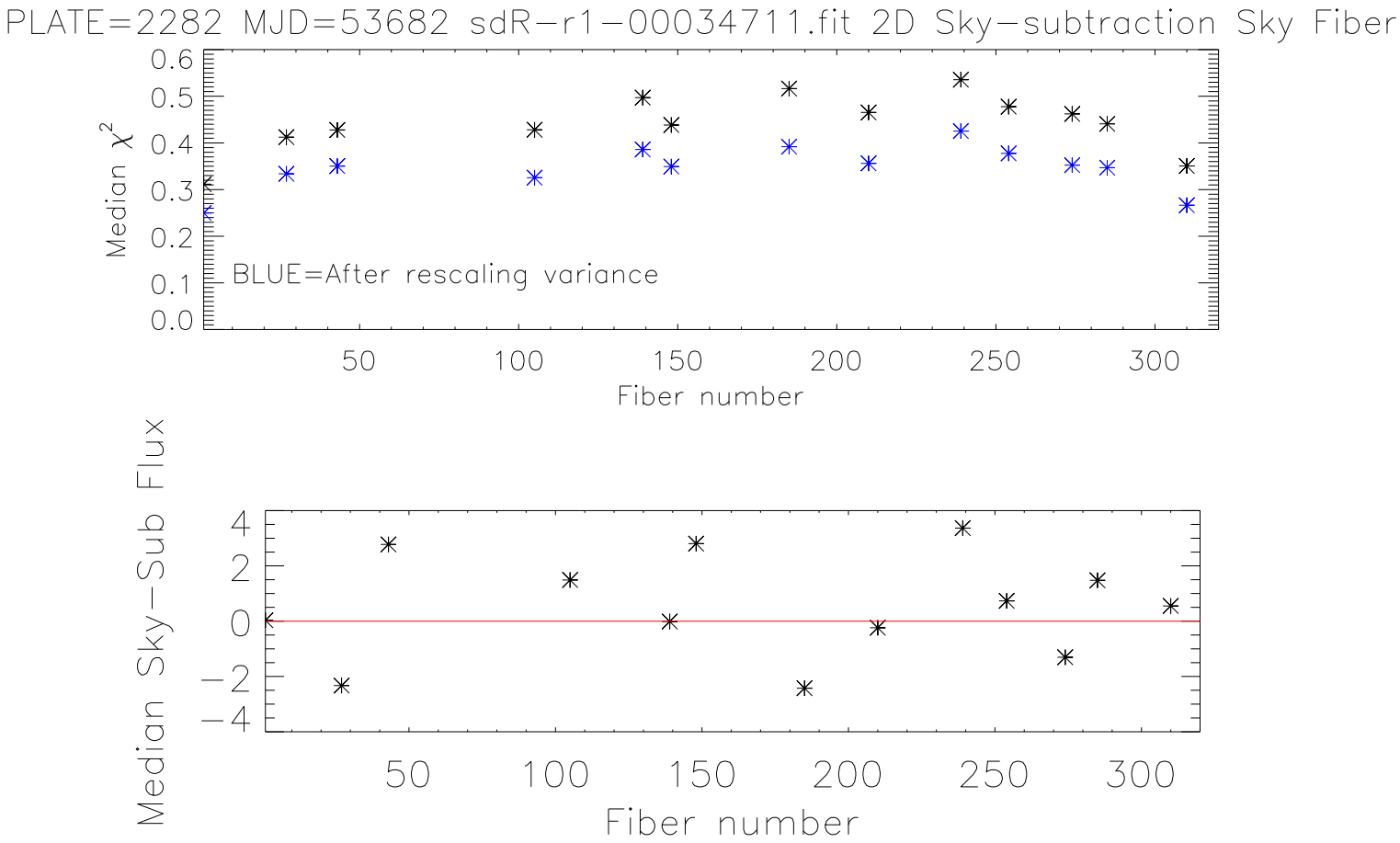

PLATE=2282 MJD=53682 Smooth superflat for sdR-r1-00034711.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

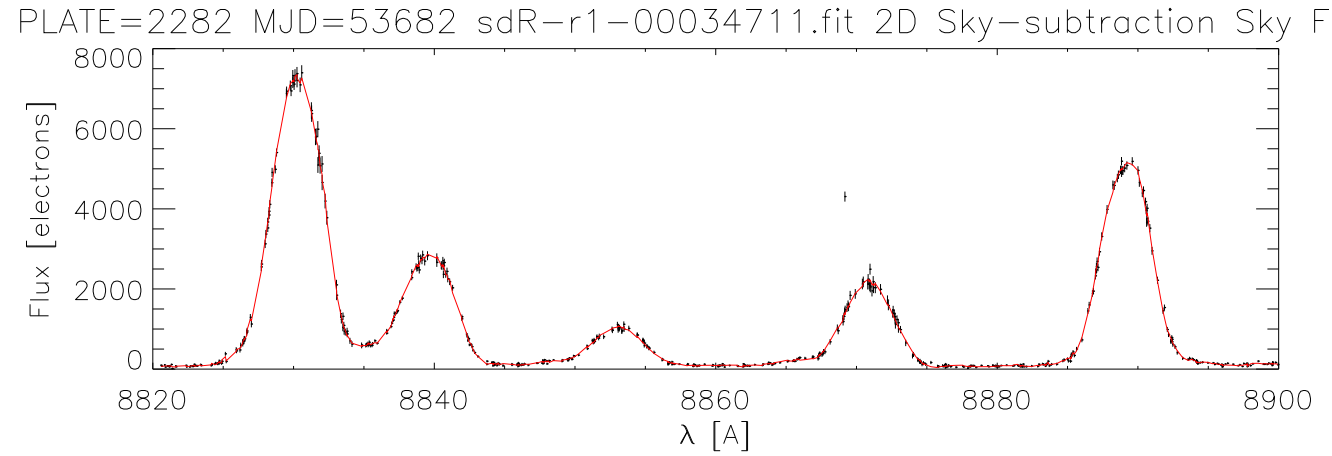

PLATE=2282 MJD=53682 sdR-r1-00034711.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

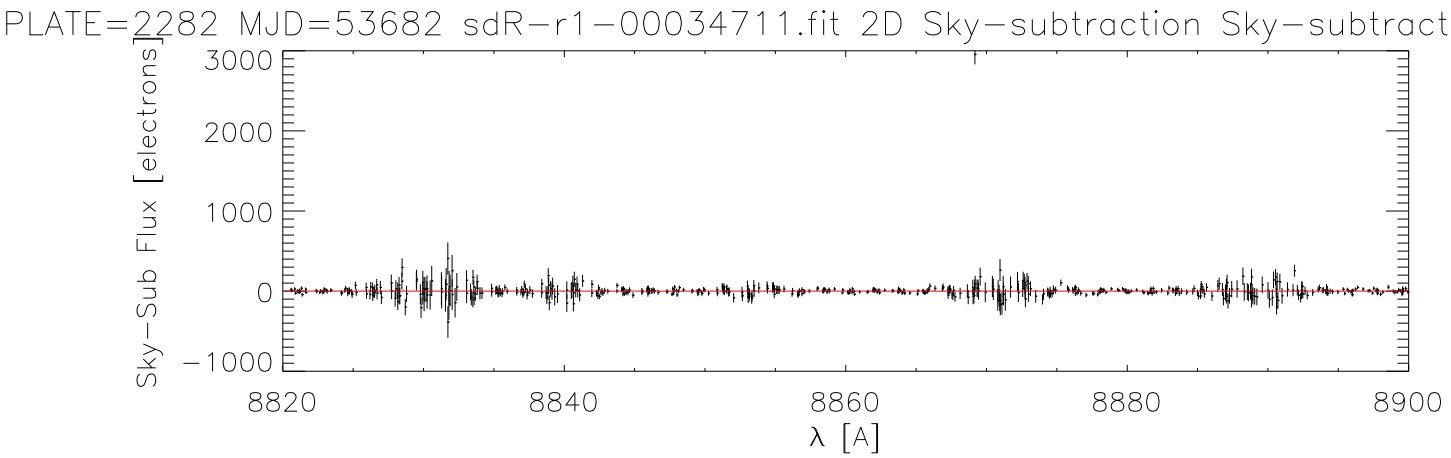

PLATE=2282 MJD=53682 sdR-r1-00034711.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

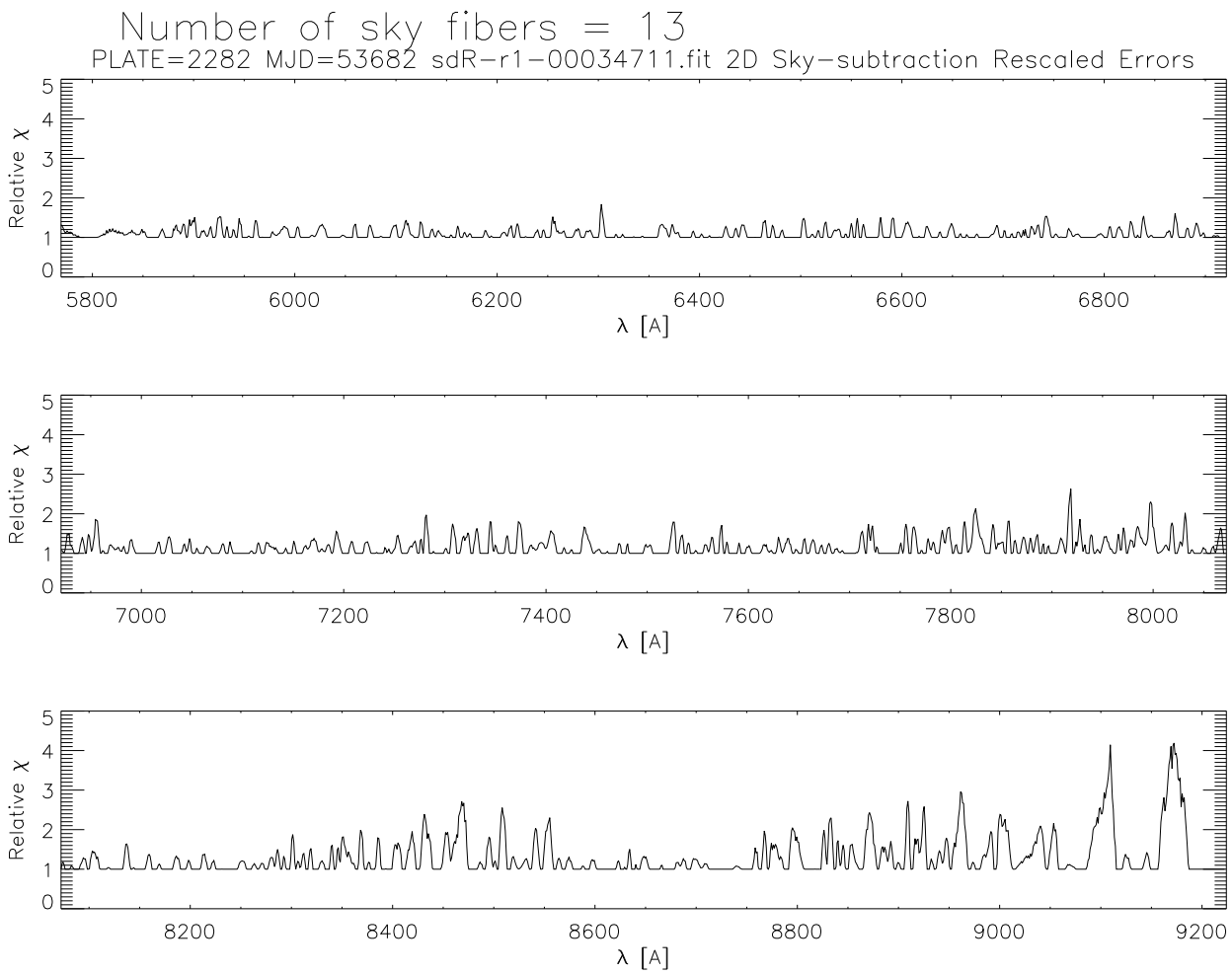

PLATE=2282 MJD=53682 sdR-r1-00034711.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

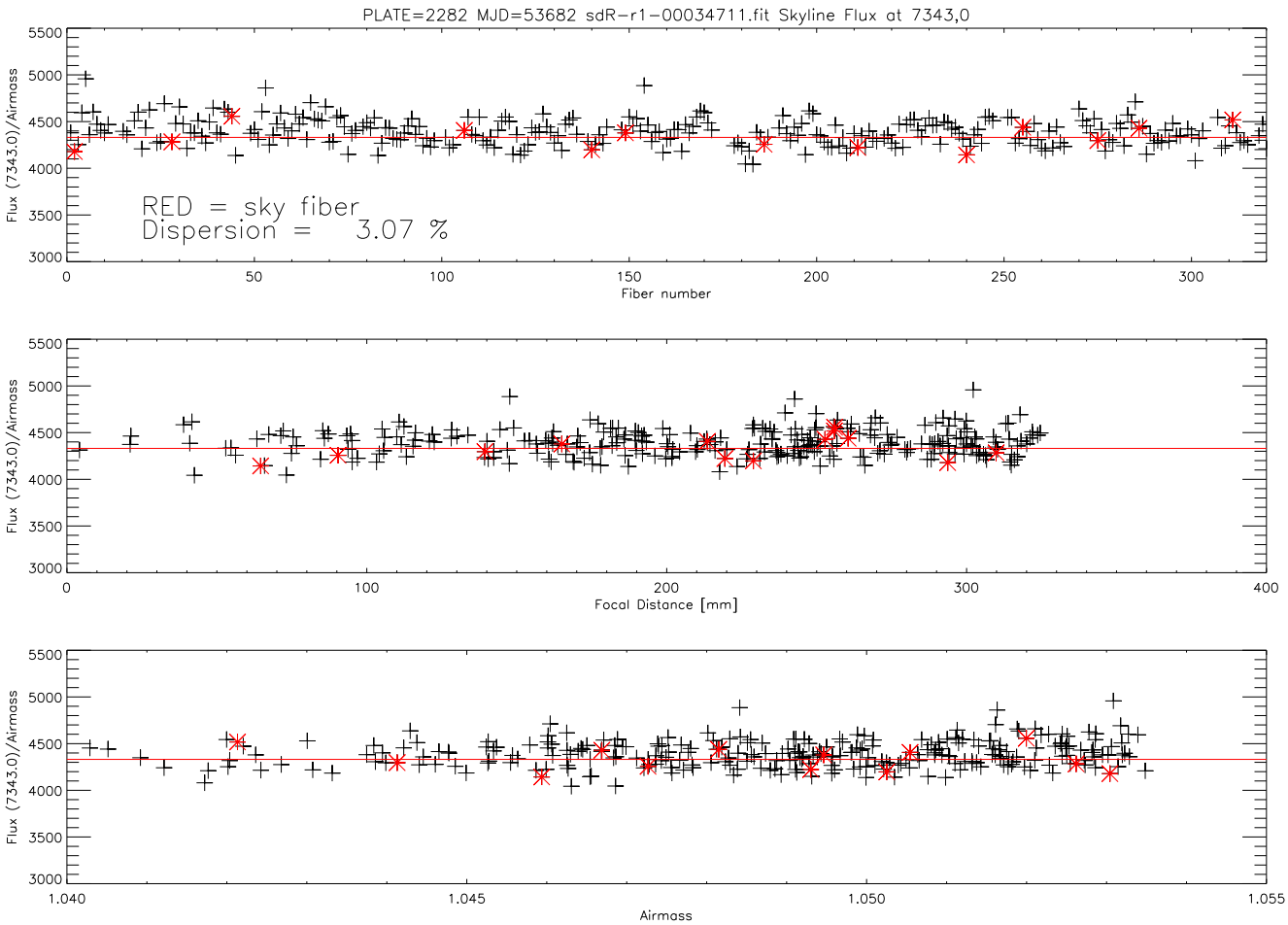

Number of sky fibers = 13
PLATE=2282 MJD=53682 sdR-r1-00034711.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

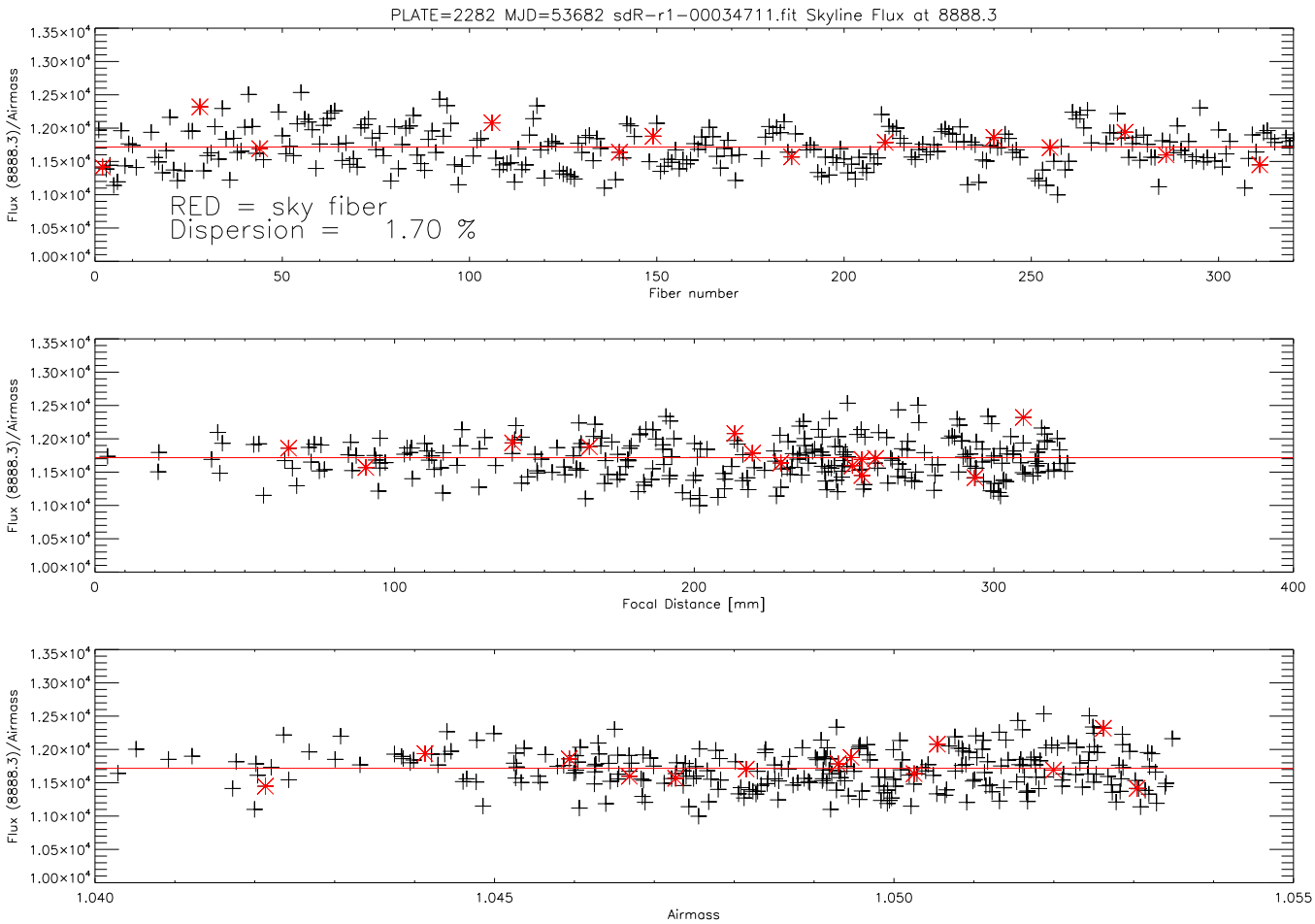

PLATE=2282 MJD=53682 sdR-r1-00034711.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

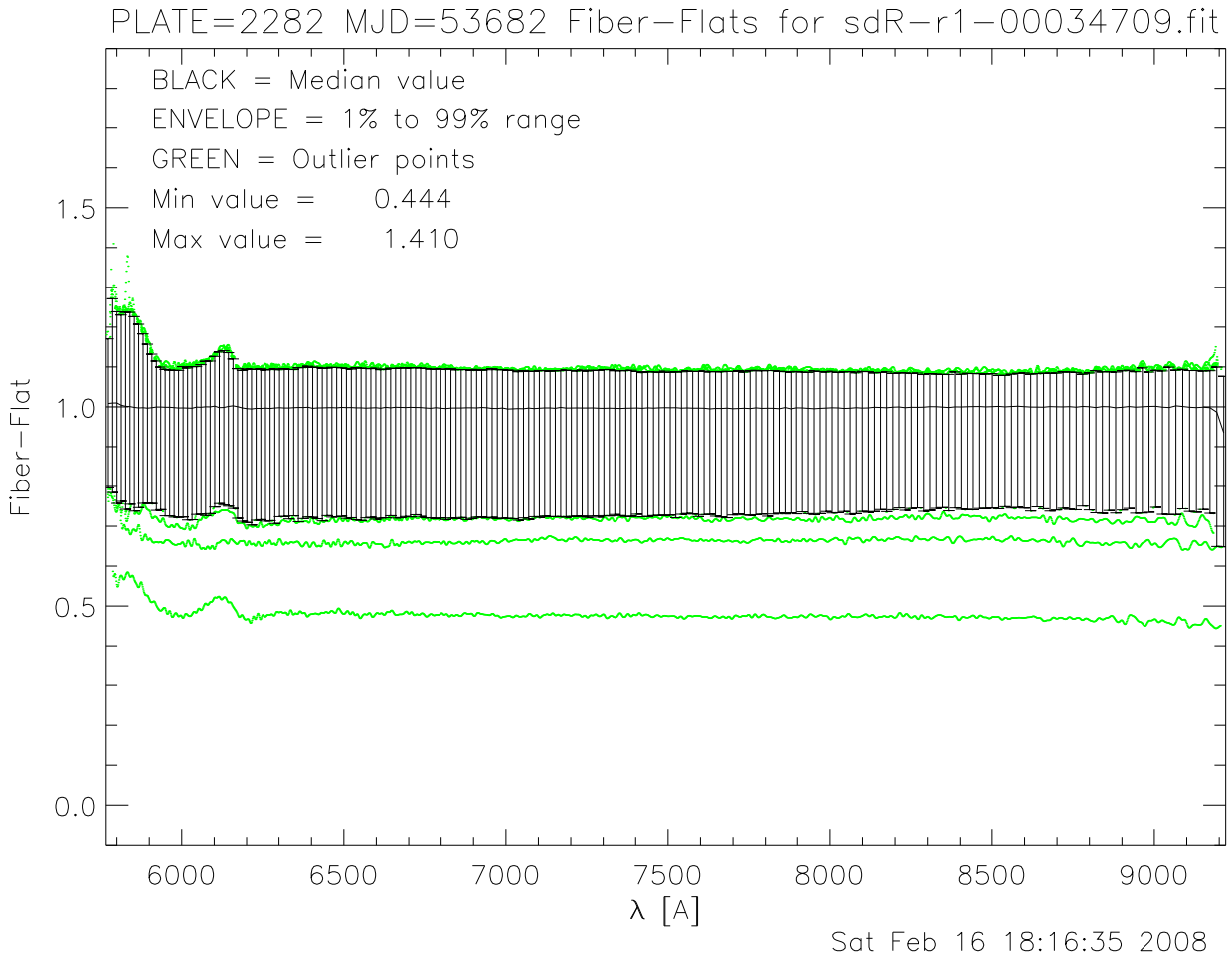

PLATE=2282 MJD=53682 sdR-r1-00034711.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

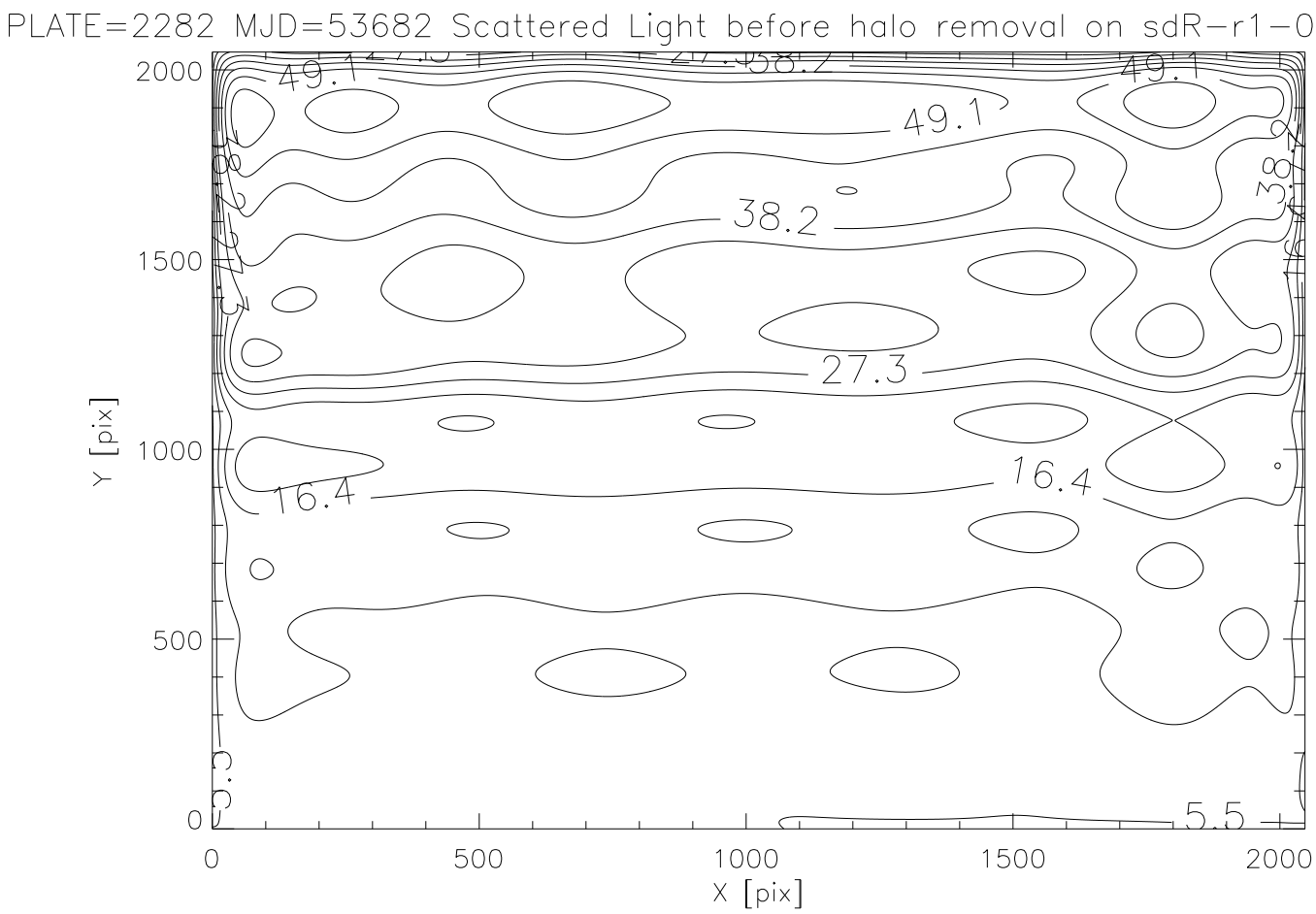

PLATE=2282 MJD=53682 sdR-r1-00034711.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

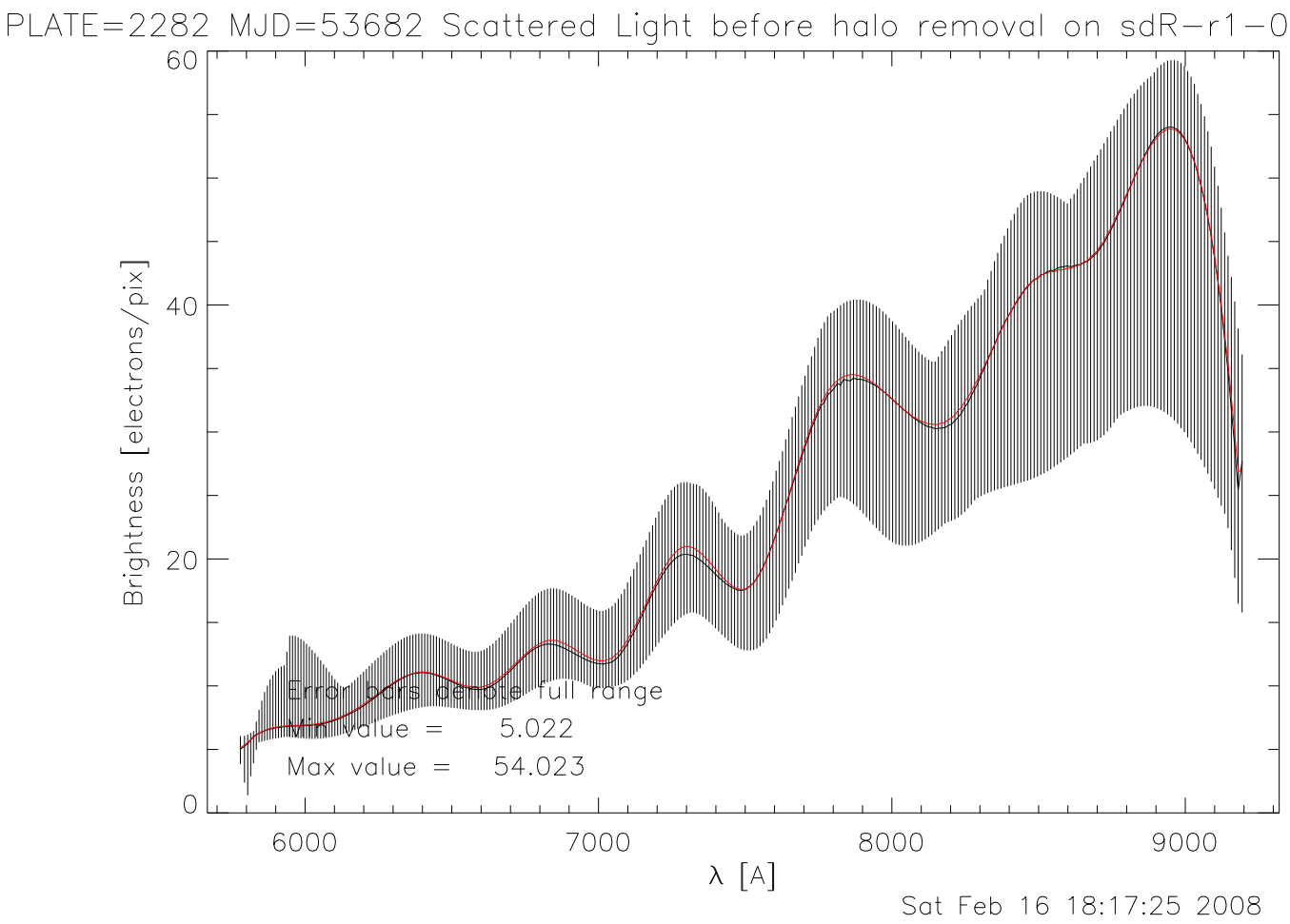

Number of sky fibers = 13
PLATE=2282 MJD=53682 sdR-r1-00034711.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

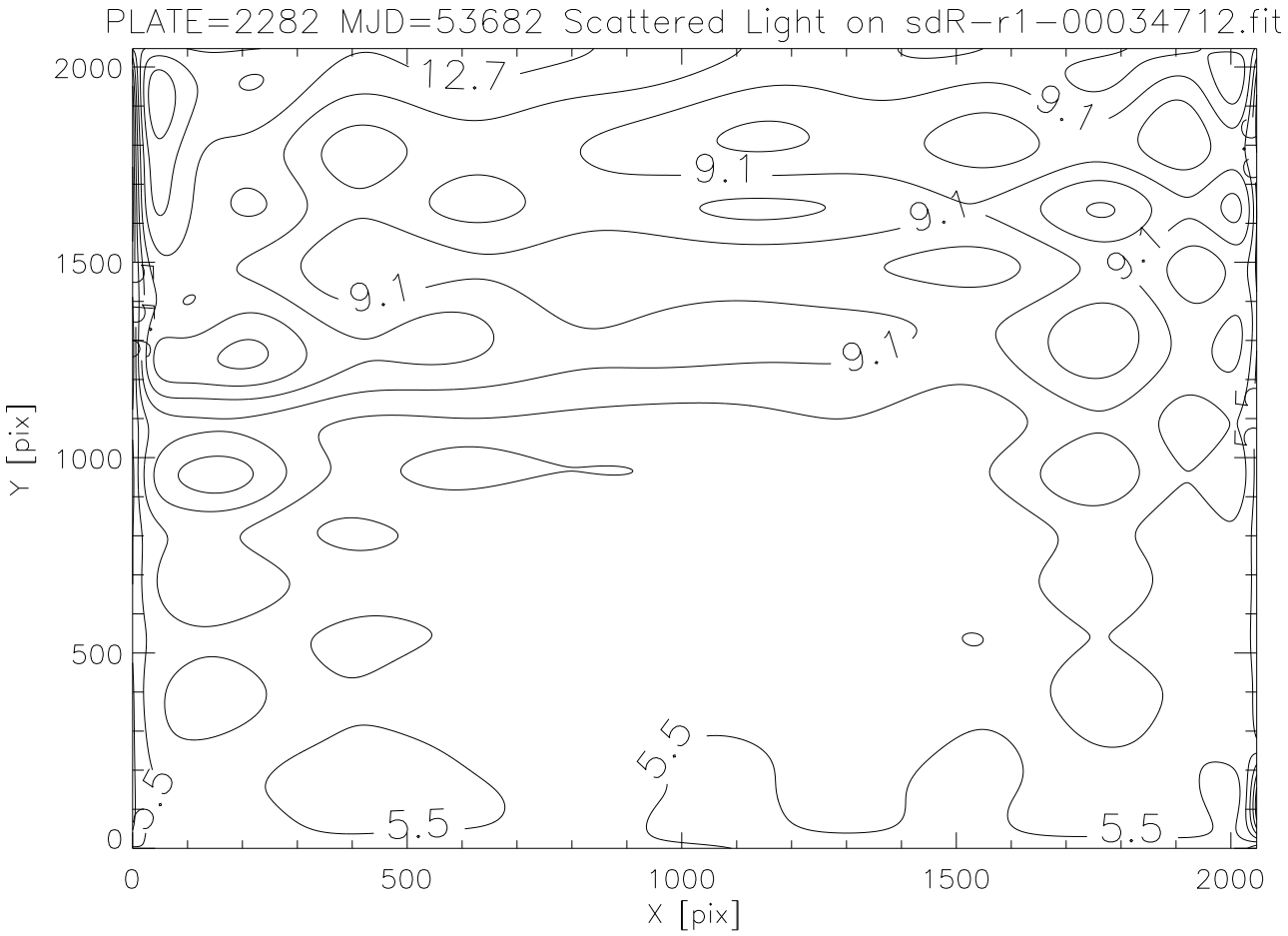

PLATE=2282 MJD=53682 sdR-r1-00034711.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.07 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

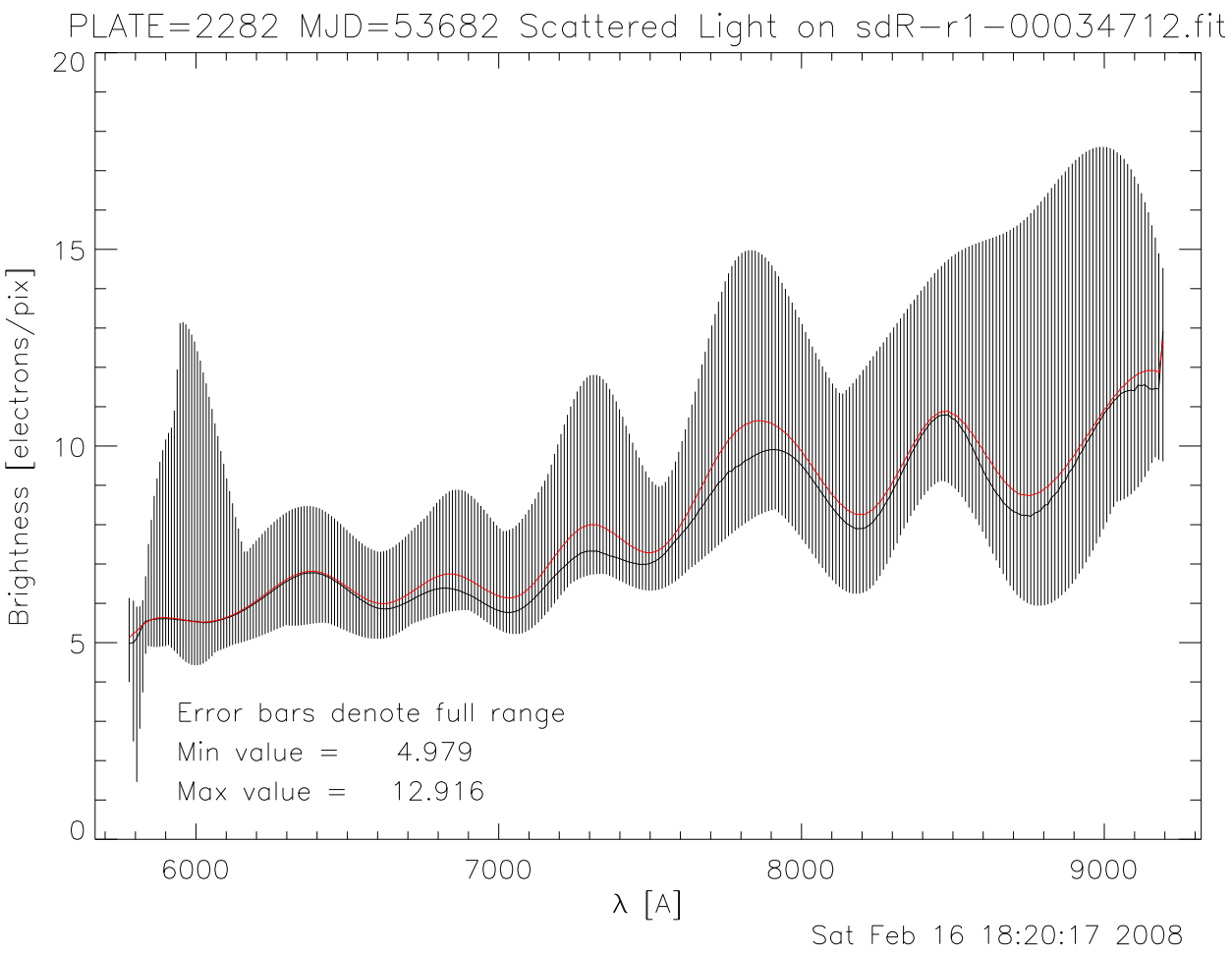

PLATE=2282 MJD=53682 sdR-r1-00034711.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.70 %
Fiber number
Focal Distance [mm]
Airmass

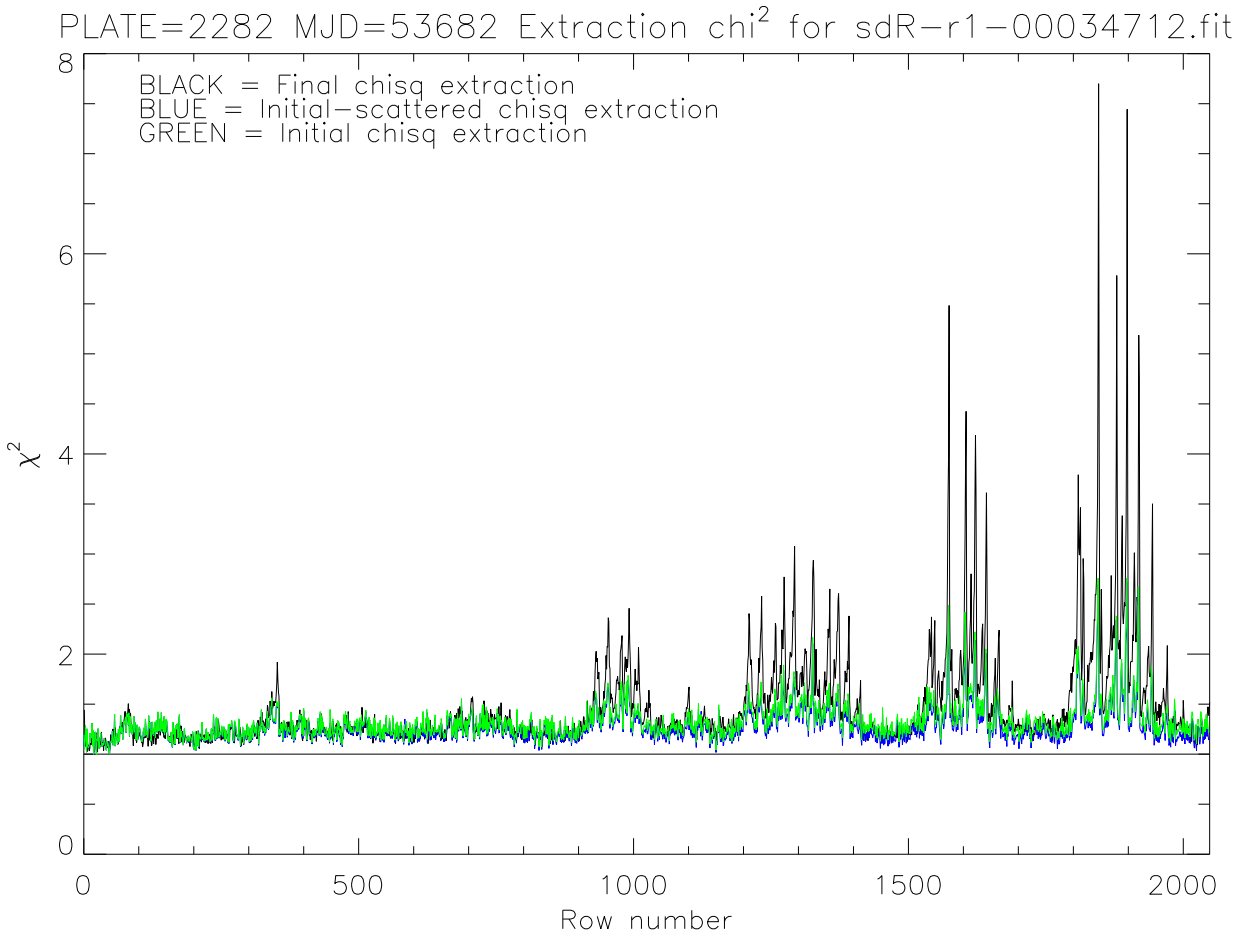

PLATE=2282 MJD=53682 Fiber-Flats for sdR-r1-00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.444
Max value = 1.410
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 18:16:35 2008

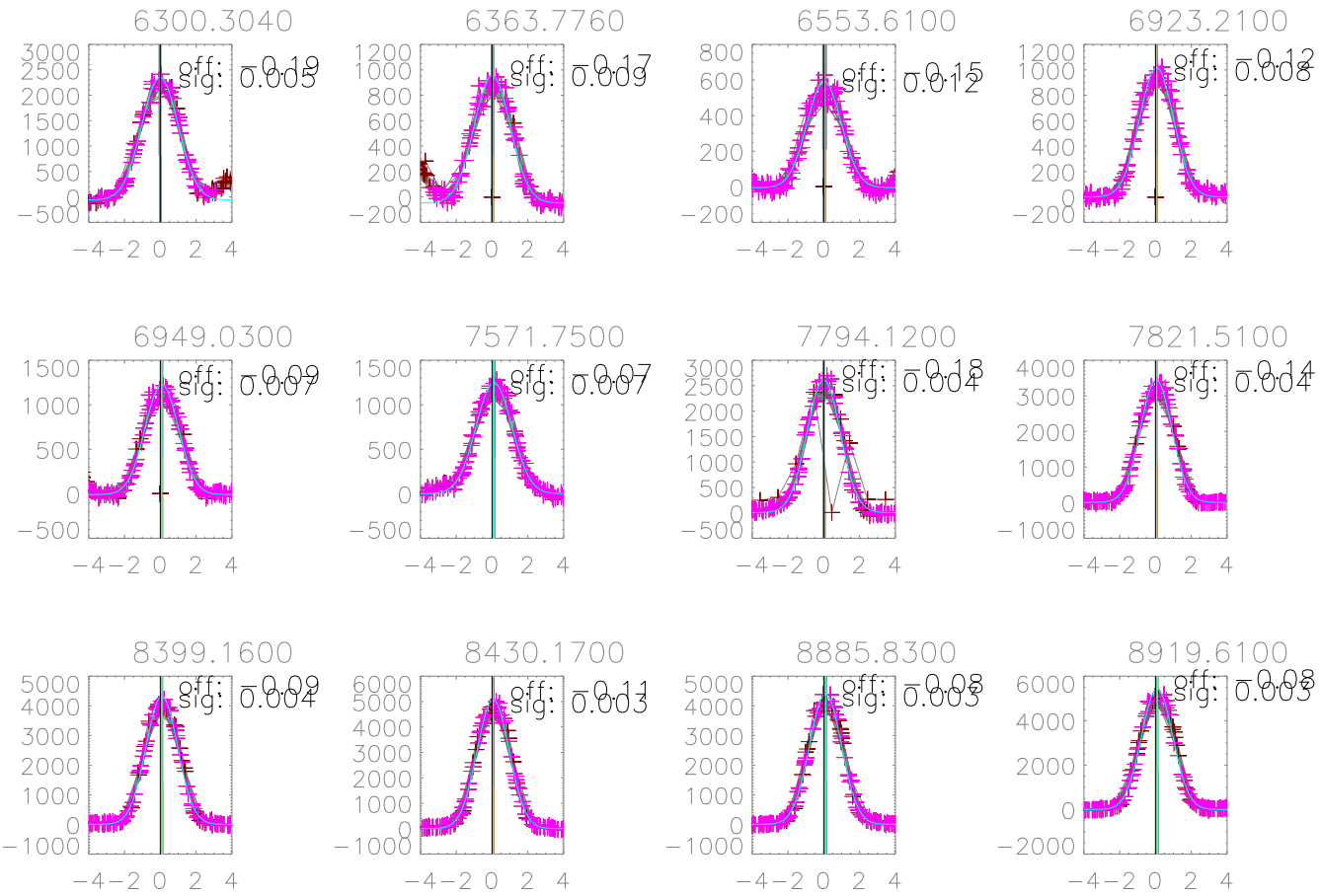

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r1-00034712.fi
49.1
49.1
49.1
38.2
38.2
27.3
27.3
16.4
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

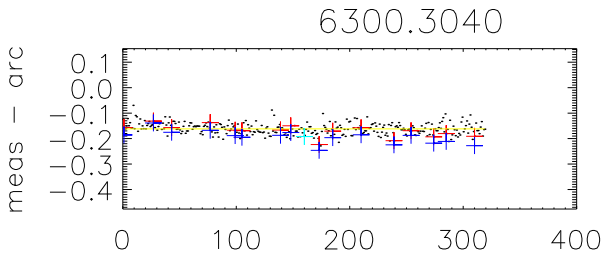

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r1-00034712.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.022
Max value = 54.023
Sat Feb 16 18:17:25 2008

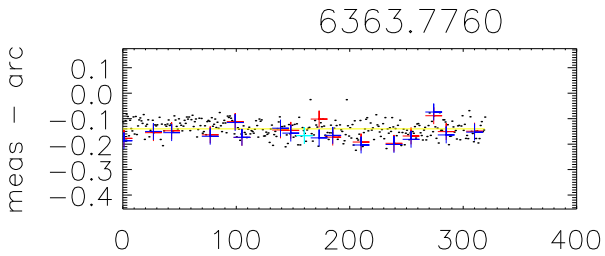

PLATE=2282 MJD=53682 Scattered Light on sdR-r1-00034712.fit
12.7
9.1
9.1
9.1
9.1
9.1
5.5
5.5
5.5
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

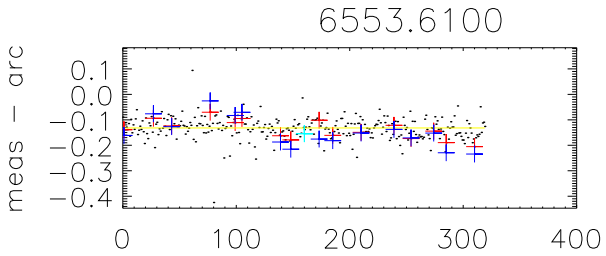

PLATE=2282 MJD=53682 Scattered Light on sdR-r1-00034712.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.979
Max value = 12.916
Sat Feb 16 18:20:17 2008

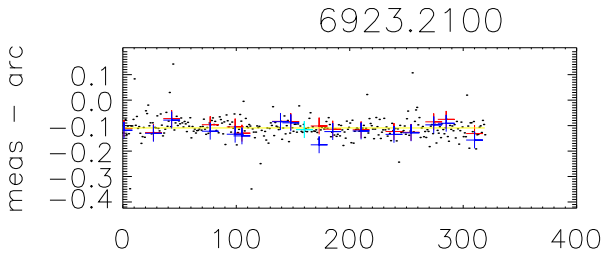

PLATE=2282 MJD=53682 Extraction chi^2 for sdR−r1−00034712.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

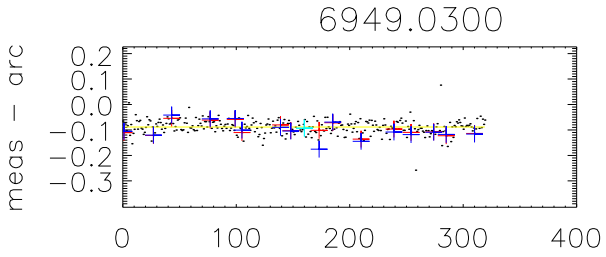

6300.3040
off: −0.19
sig: 0.005
6363.7760
off: −0.17
sig: 0.009
6553.6100
off: −0.15
sig: 0.012
6923.2100
off: −0.12
sig: 0.008
6949.0300
off: −0.09
sig: 0.007
7571.7500
off: −0.07
sig: 0.007
7794.1200
off: −0.18
sig: 0.004
7821.5100
off: −0.14
sig: 0.004
8399.1600
off: −0.09
sig: 0.004
8430.1700
off: −0.11
sig: 0.003
8885.8300
off: −0.08
sig: 0.003
8919.6100
off: −0.08
sig: 0.003

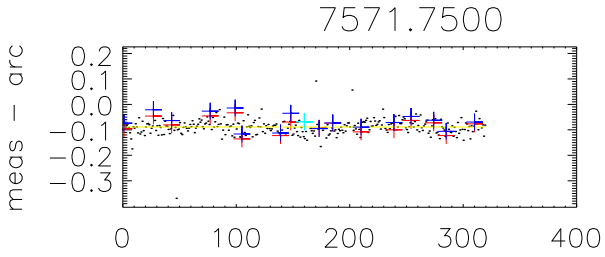

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

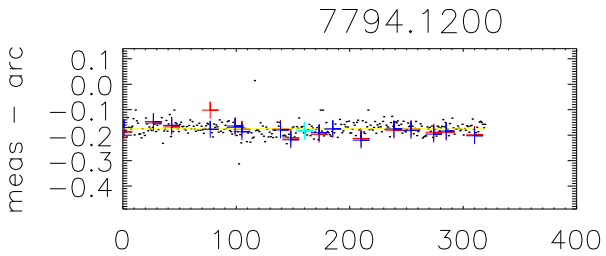

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

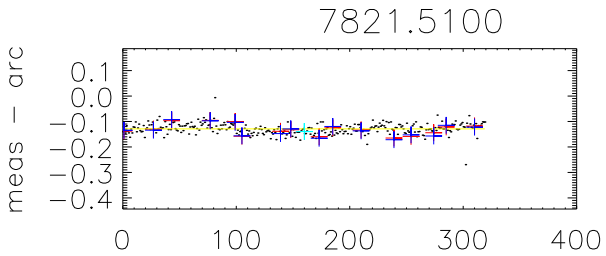

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

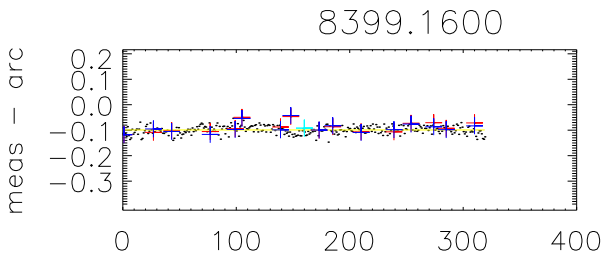

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

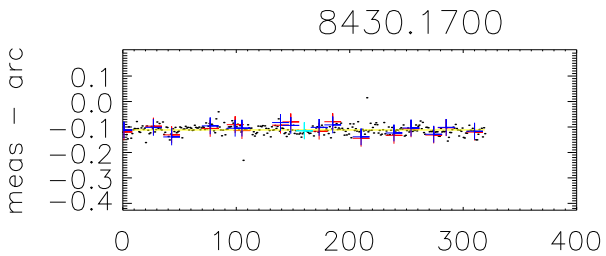

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

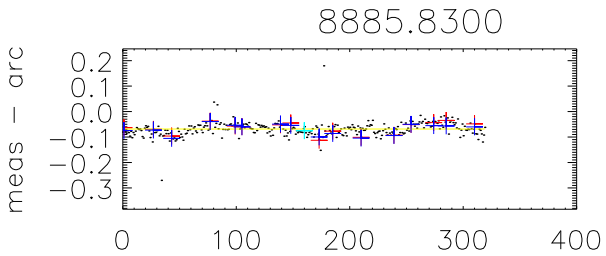

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

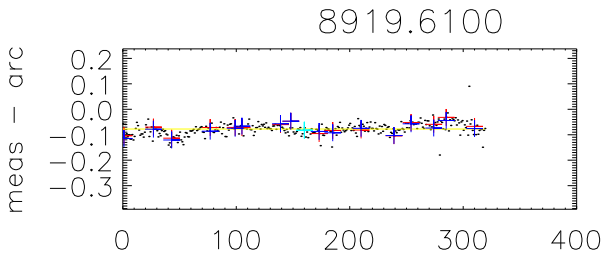

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

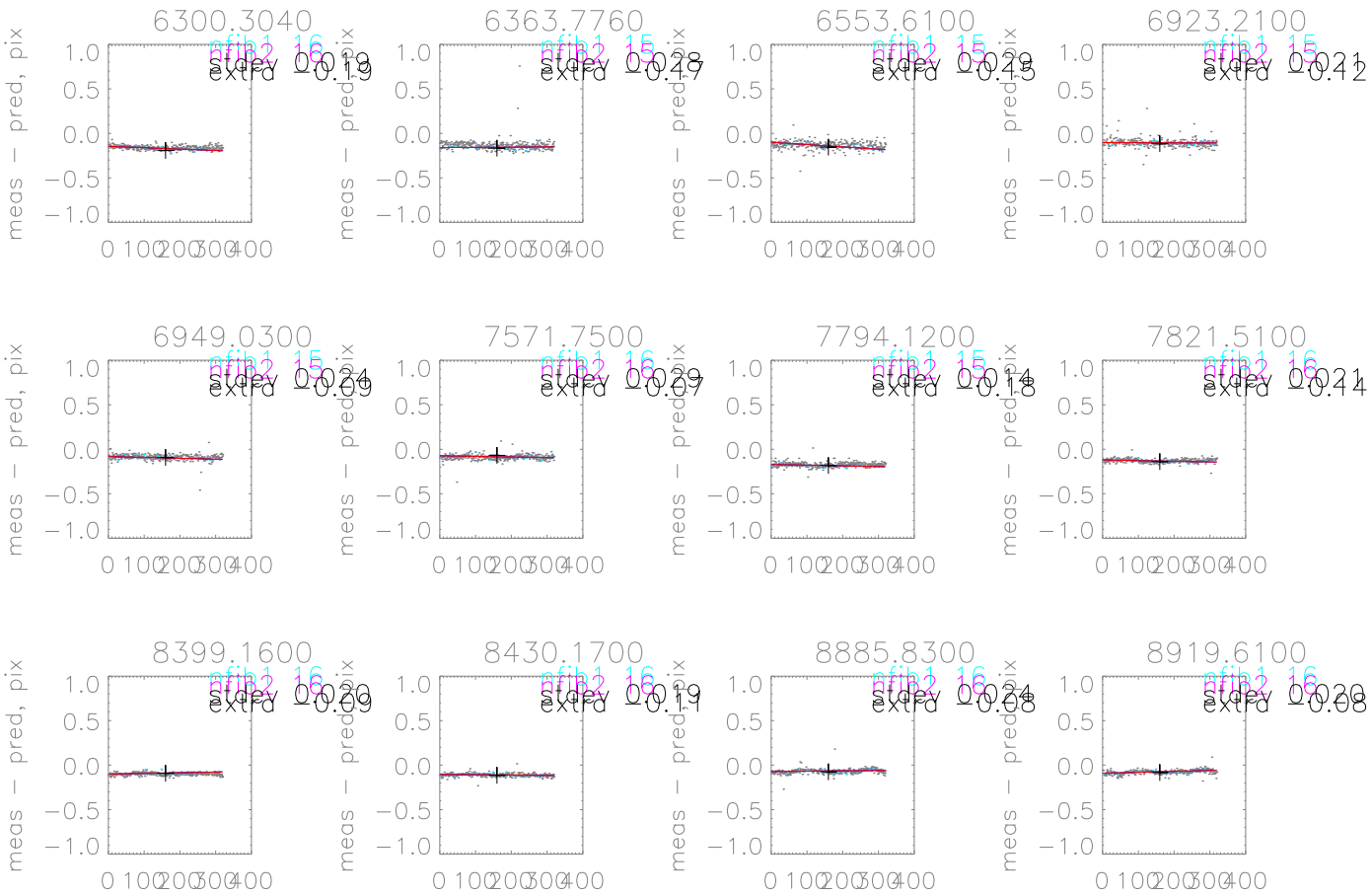

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

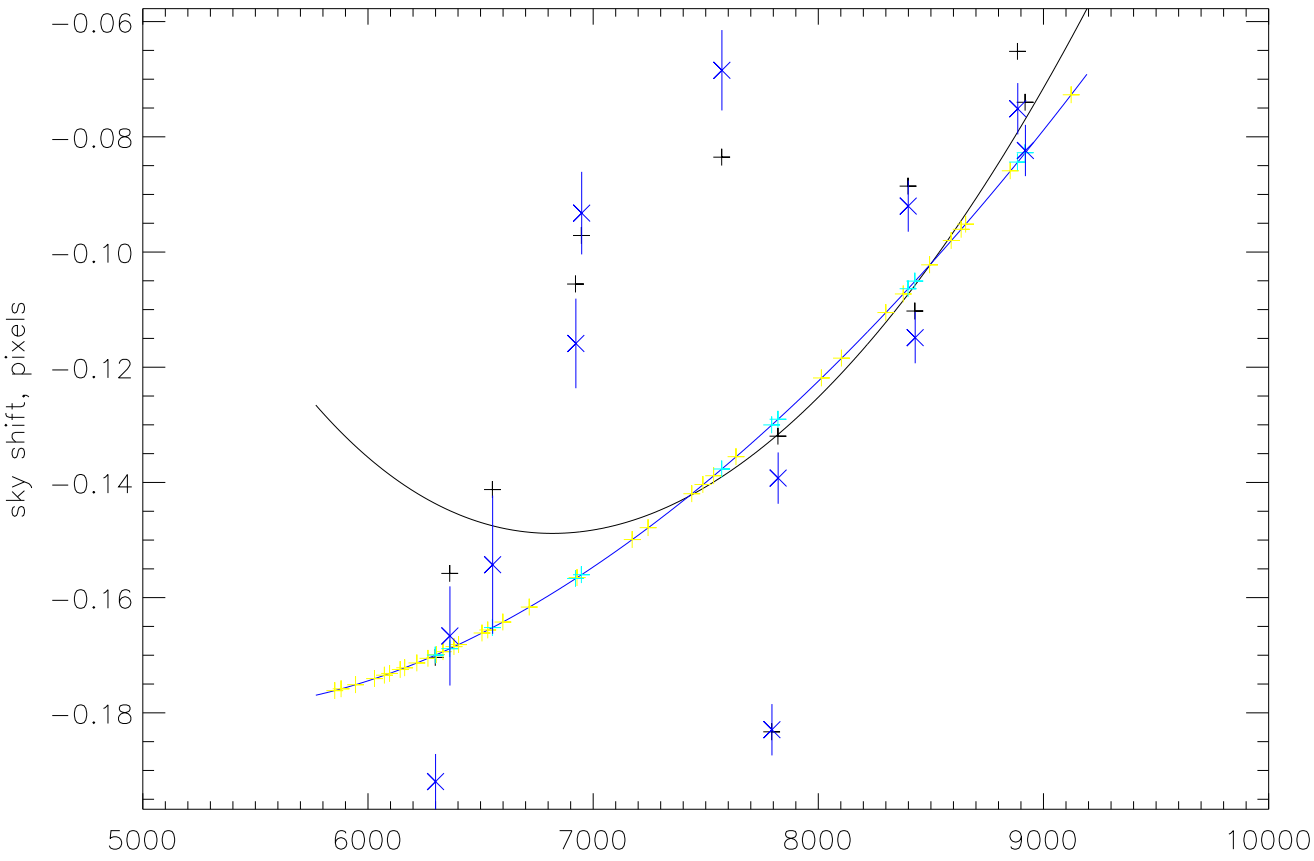

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

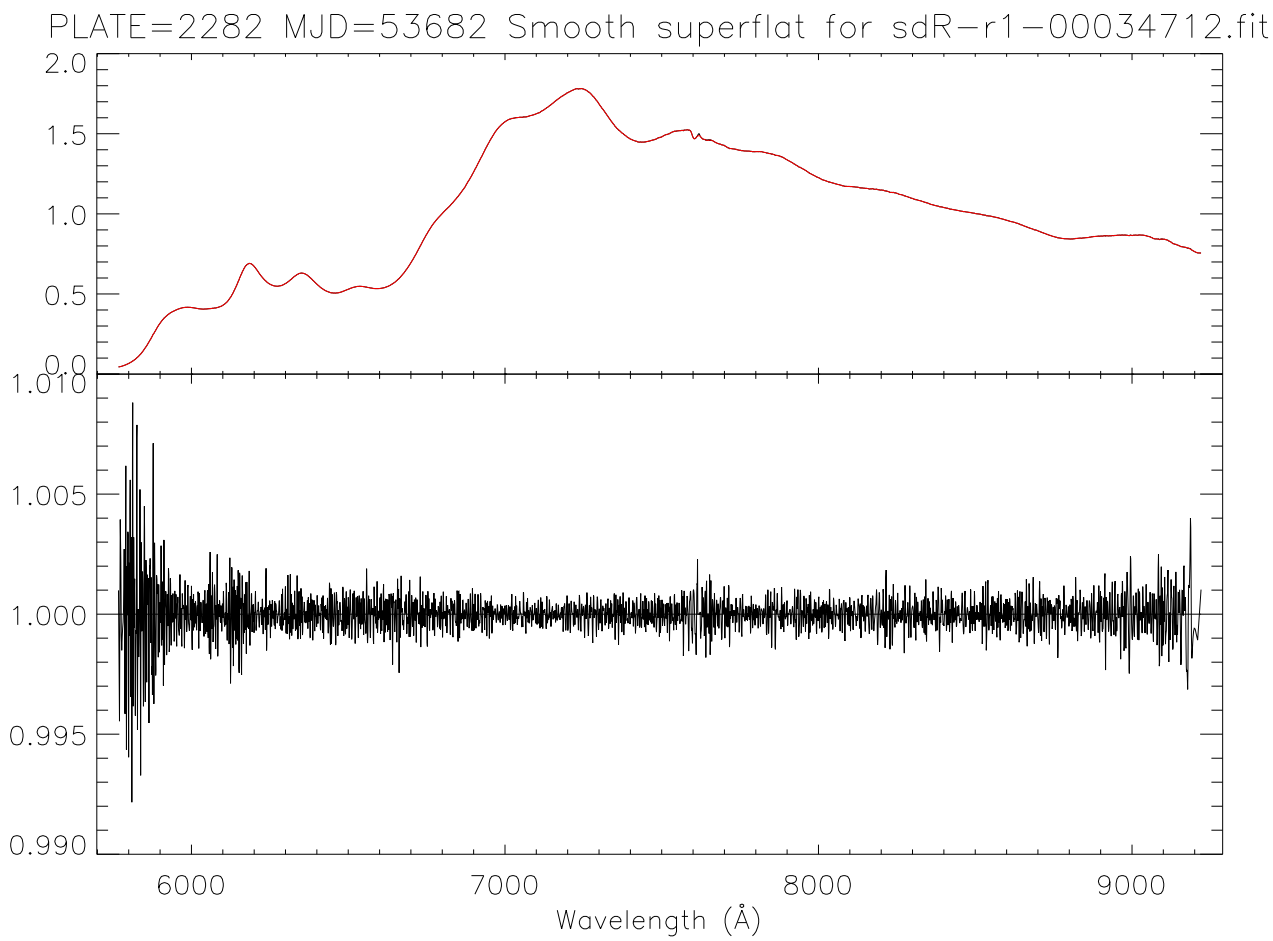

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

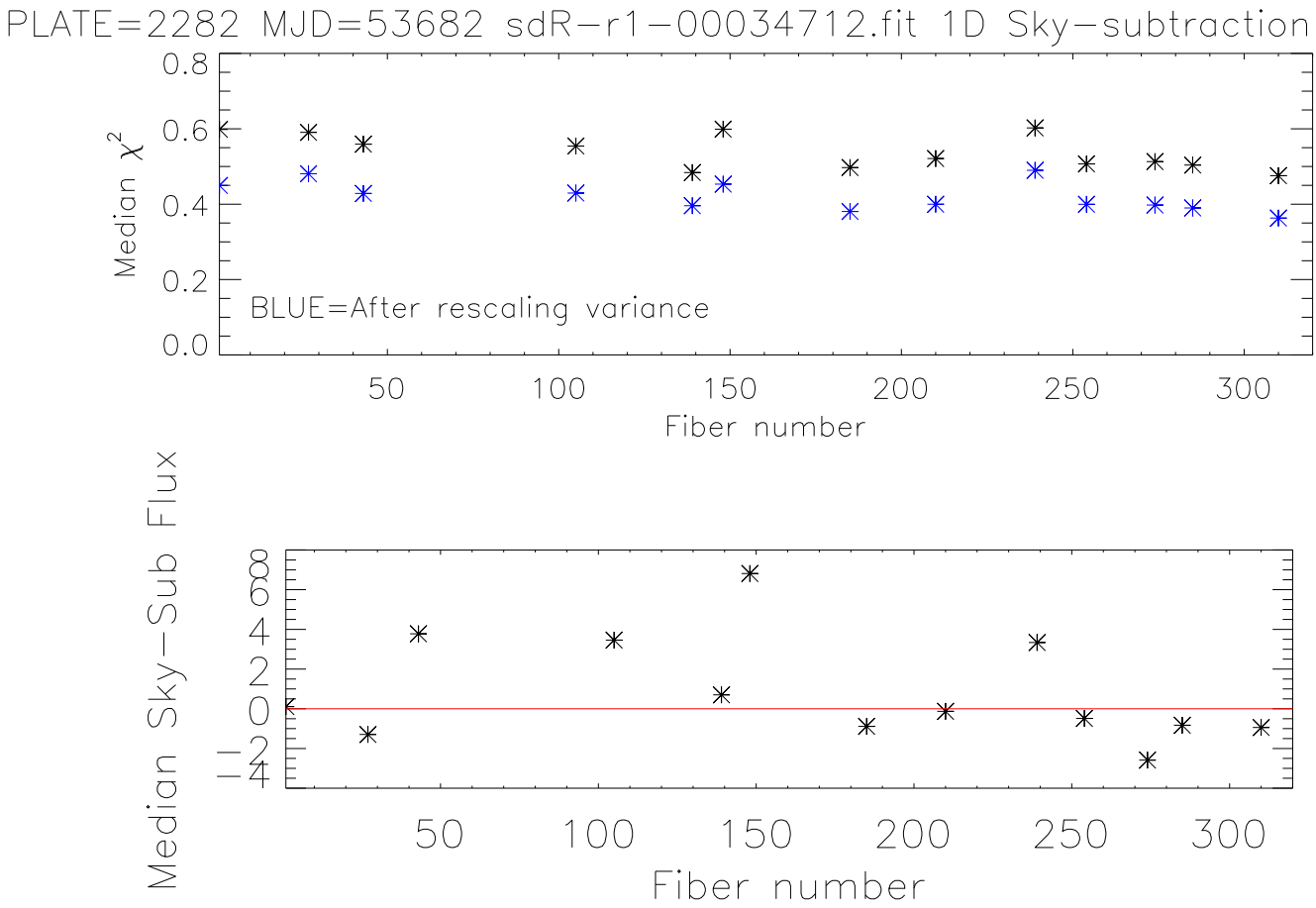

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

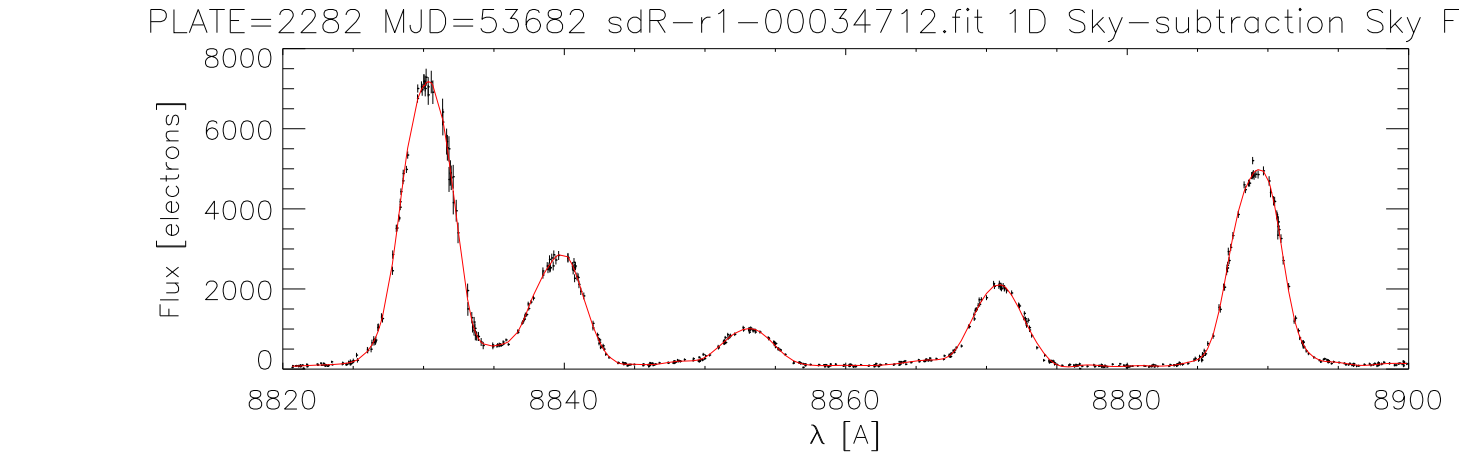

6300.3040
stdev 0.019
extra −0.19
6363.7760
stdev 0.028
extra −0.47
6553.6100
stdev 0.029
extra −0.45
6923.2100
stdev 0.021
extra −0.42
6949.0300
stdev 0.024
extra −0.09
7571.7500
stdev 0.029
extra −0.07
7794.1200
stdev 0.014
extra −0.18
7821.5100
stdev 0.021
extra −0.44
8399.1600
stdev 0.020
extra −0.09
8430.1700
stdev 0.019
extra −0.11
8885.8300
stdev 0.024
extra −0.08
8919.6100
stdev 0.020
extra −0.08
meas − pred, pix
mfhd2 15
mfhd2 16

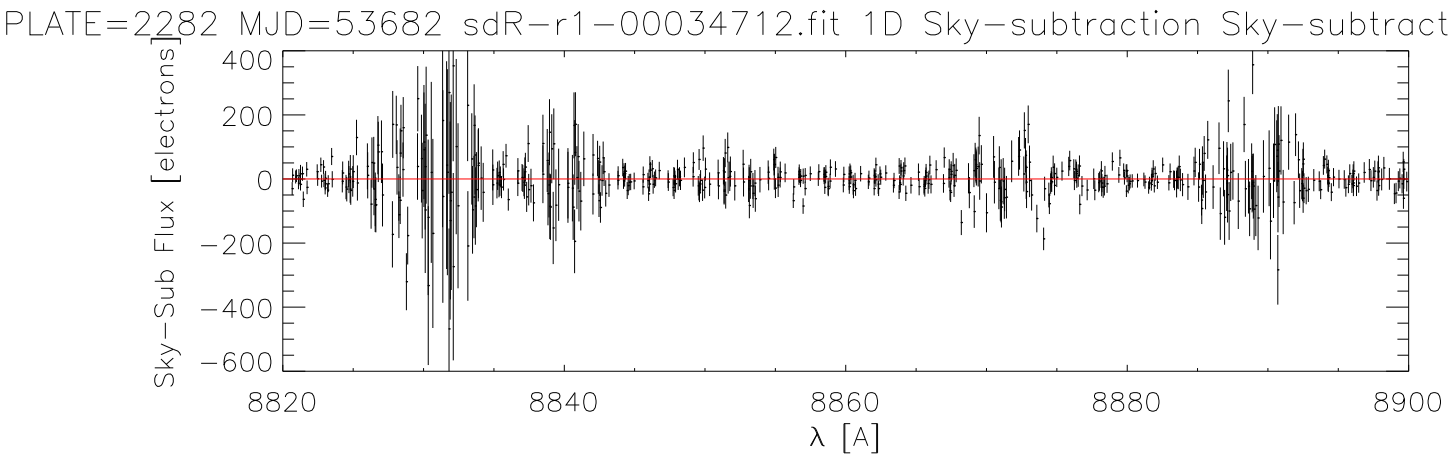

−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
sky shift, pixels
5000
6000
7000
8000
9000
10000

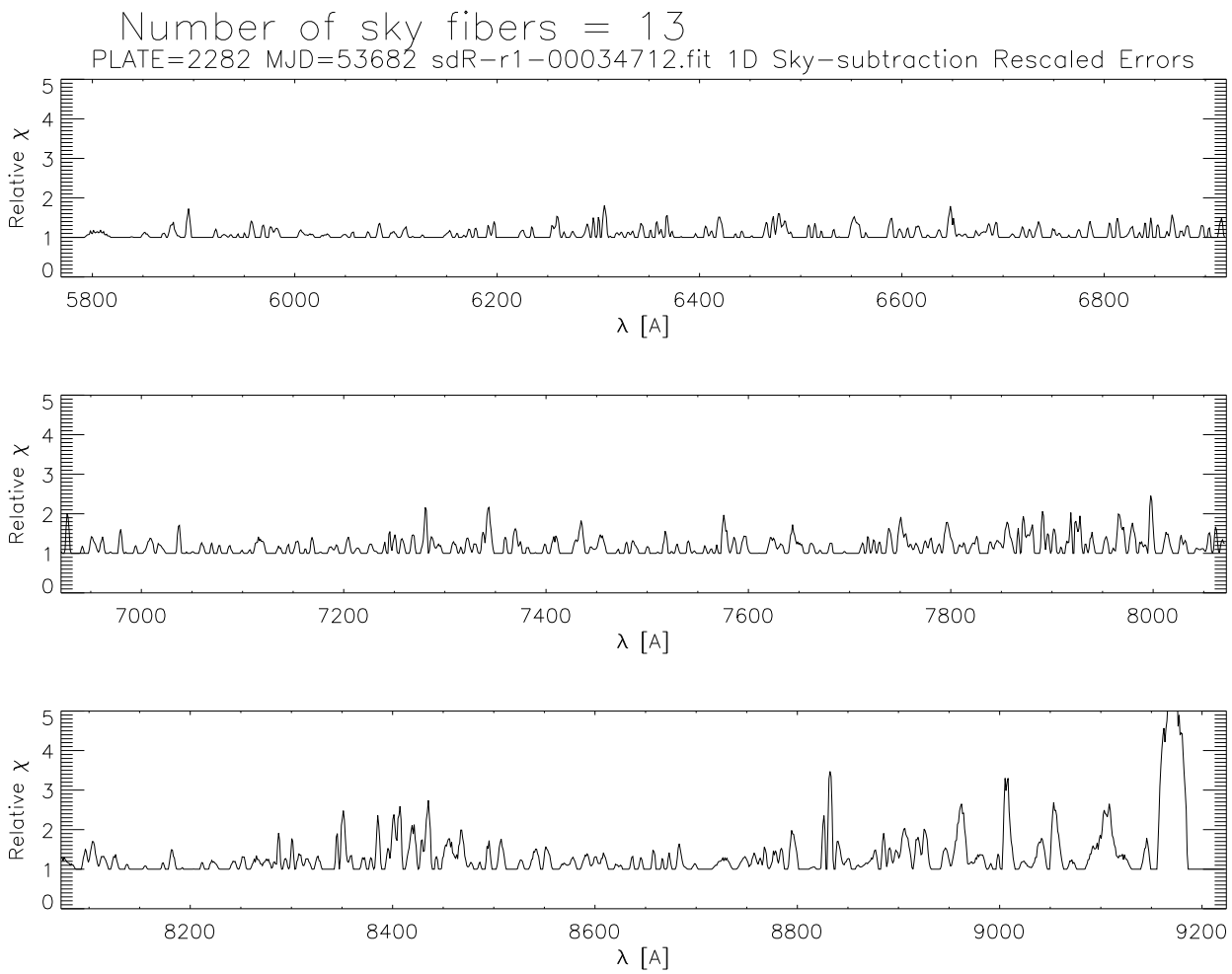
es= 0.0000

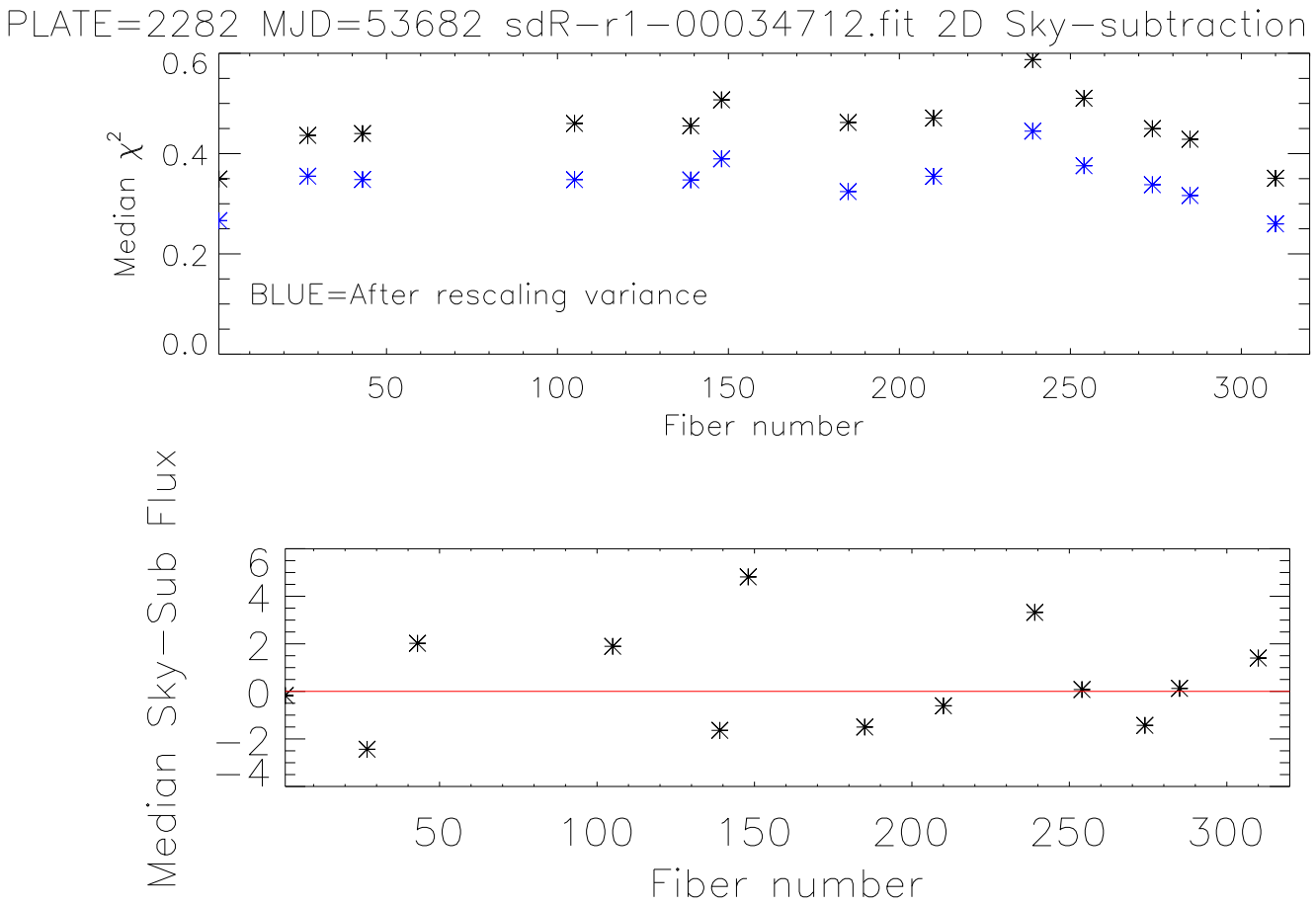

PLATE=2282 MJD=53682 Smooth superflat for sdR-r1-00034712.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

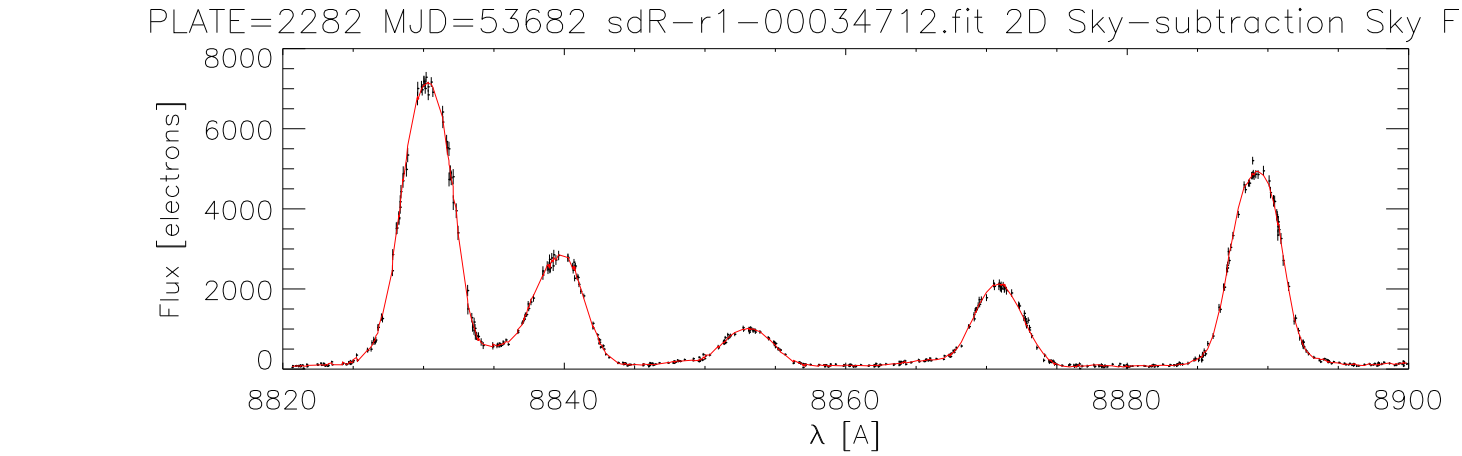

PLATE=2282 MJD=53682 sdR-r1-00034712.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

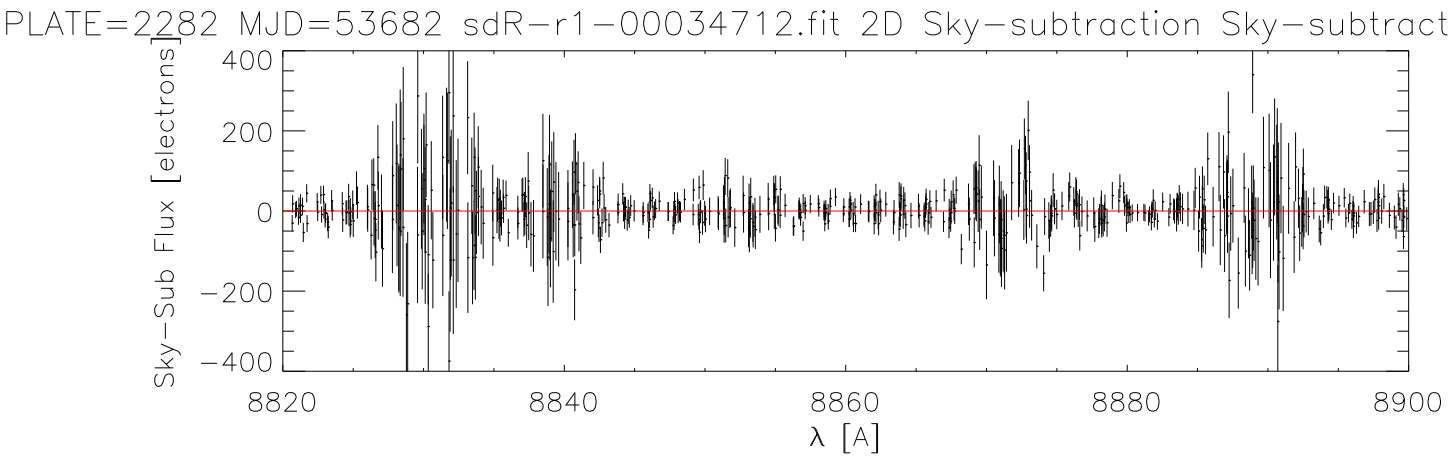

PLATE=2282 MJD=53682 sdR-r1-00034712.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

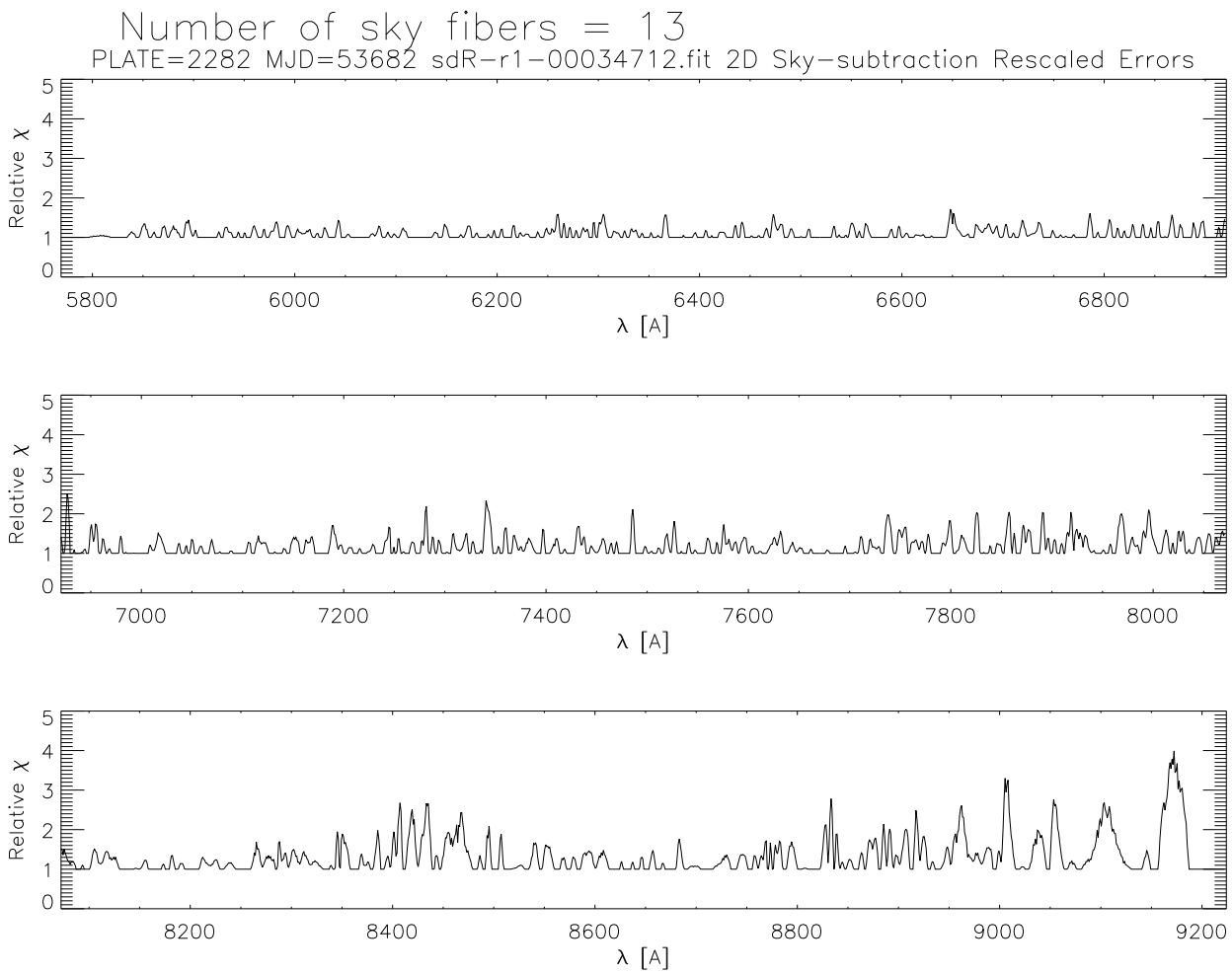

PLATE=2282 MJD=53682 sdR-r1-00034712.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

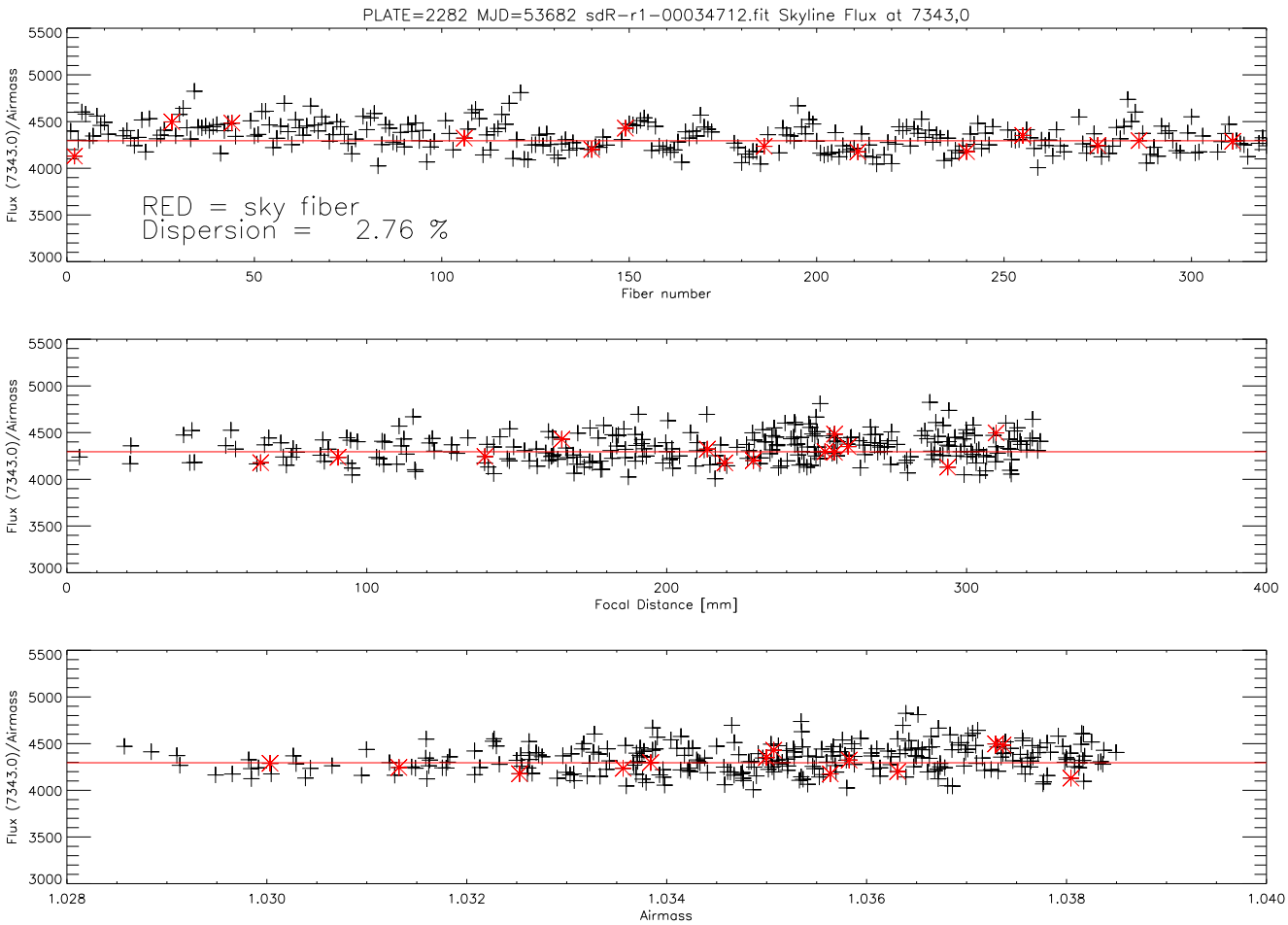

Number of sky fibers = 13
PLATE=2282 MJD=53682 sdR-r1-00034712.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

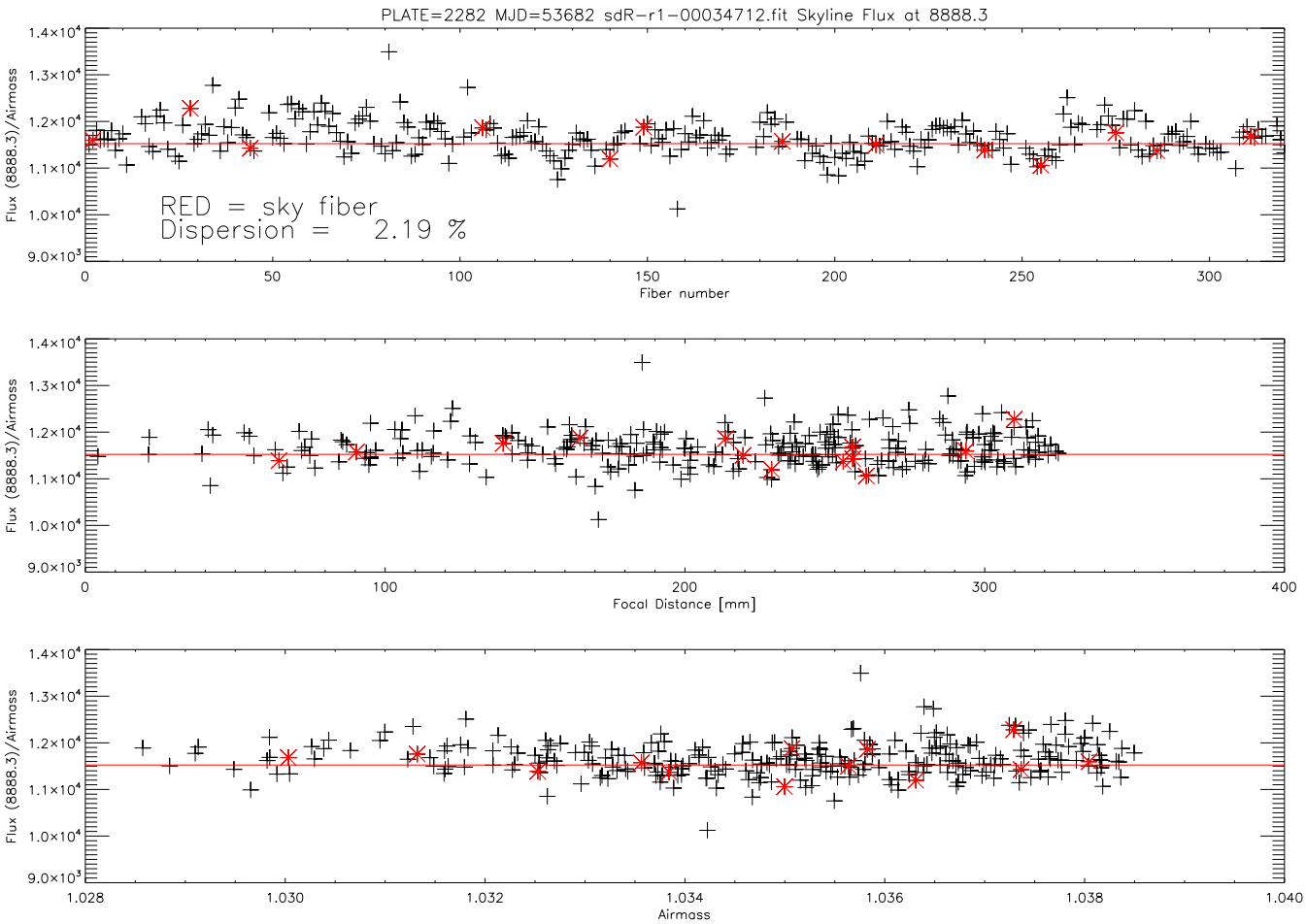

PLATE=2282 MJD=53682 sdR-r1-00034712.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

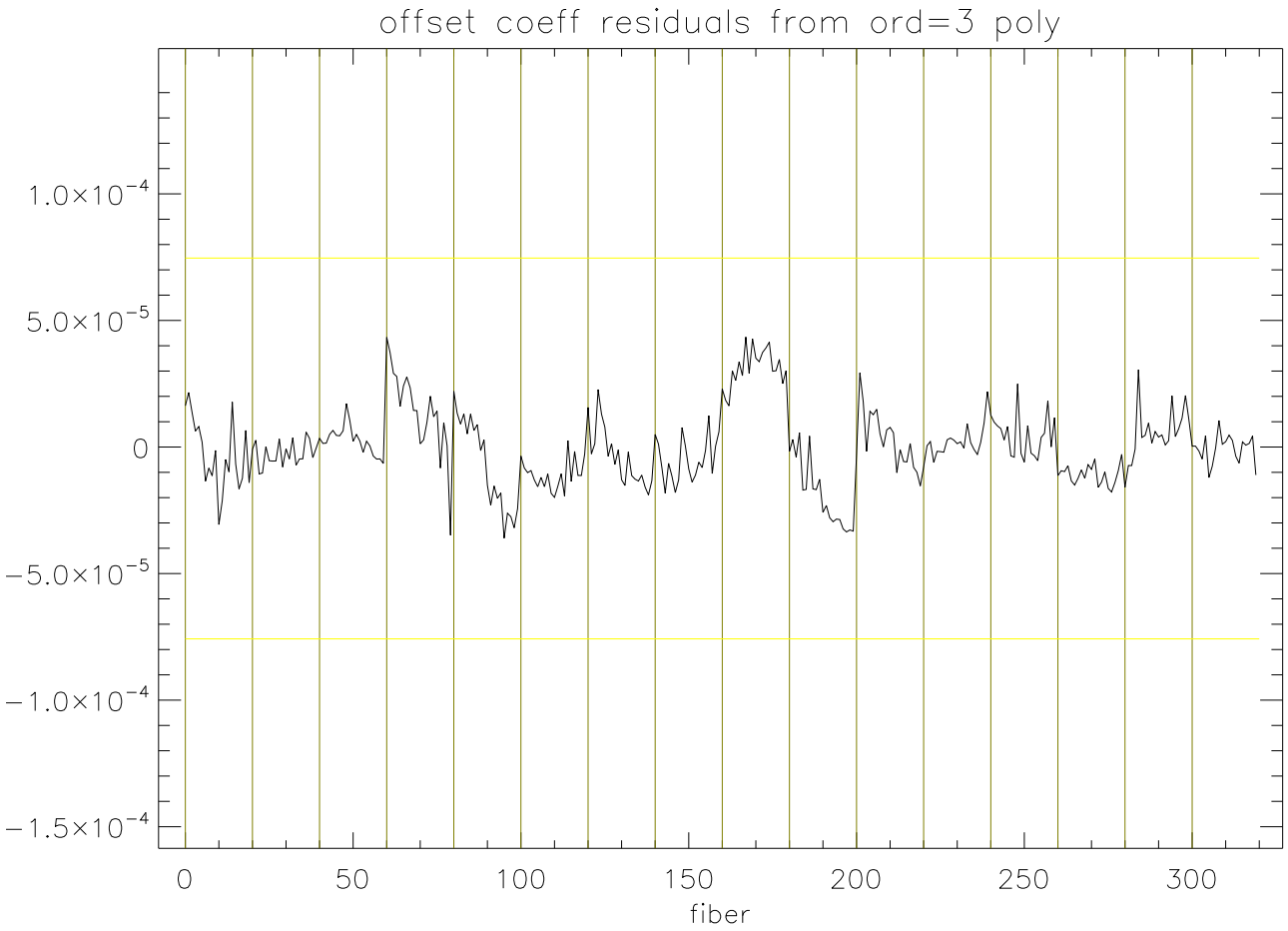

PLATE=2282 MJD=53682 sdR-r1-00034712.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

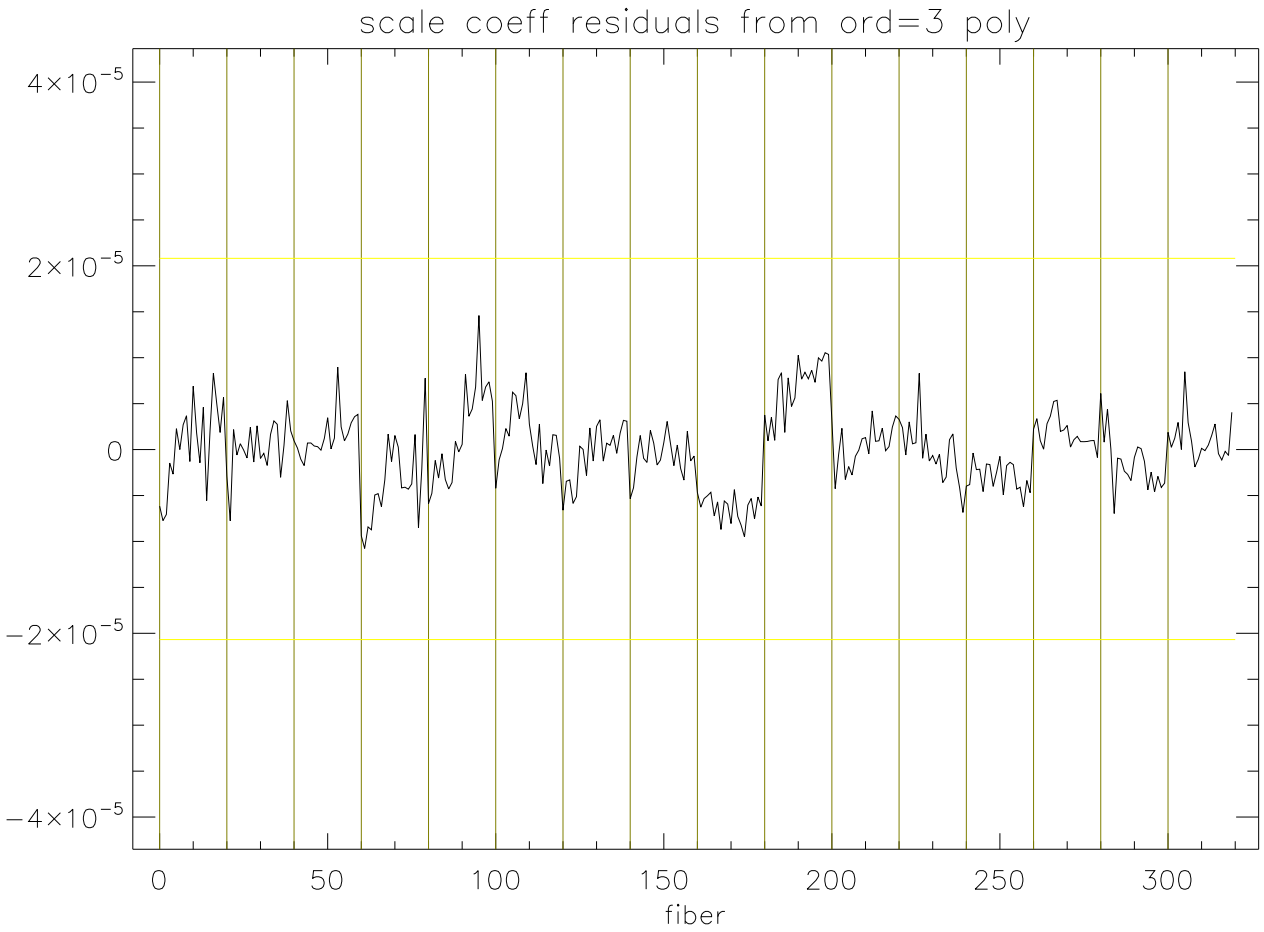

PLATE=2282 MJD=53682 sdR-r1-00034712.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

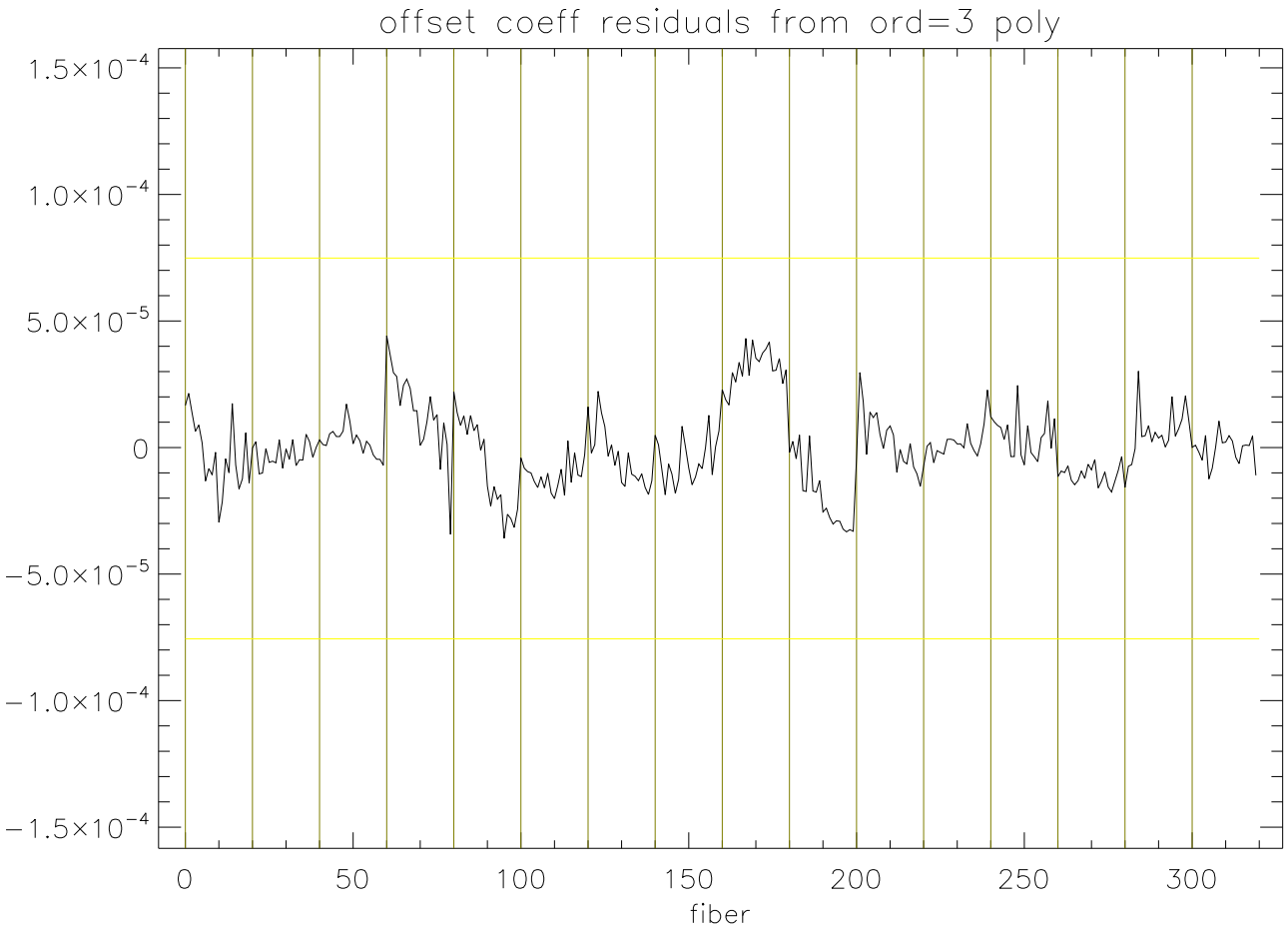

Number of sky fibers = 13
PLATE=2282 MJD=53682 sdR-r1-00034712.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

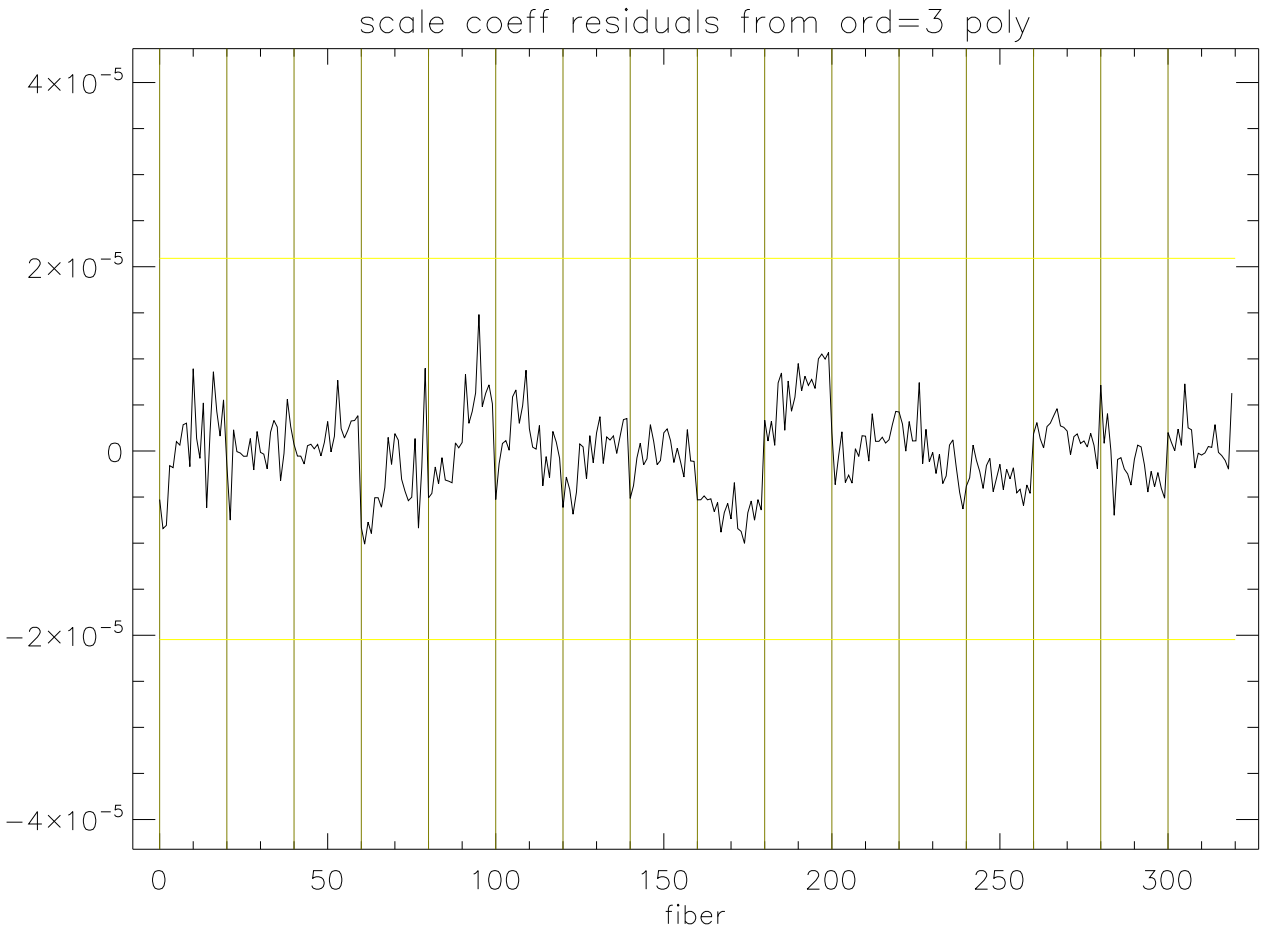

PLATE=2282 MJD=53682 sdR-r1-00034712.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.76 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

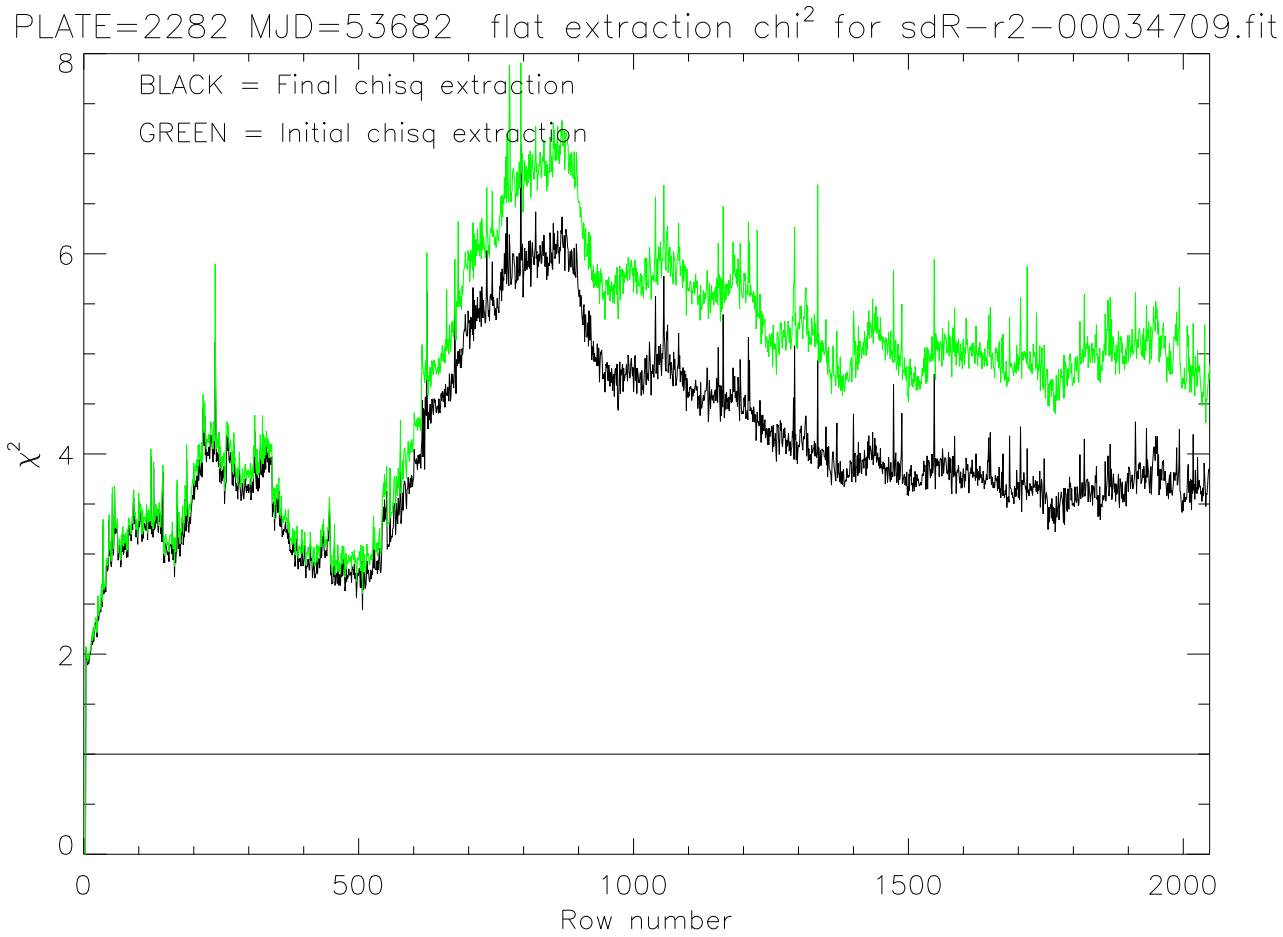

PLATE=2282 MJD=53682 sdR-r1-00034712.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.19 %
Fiber number
Focal Distance [mm]
Airmass

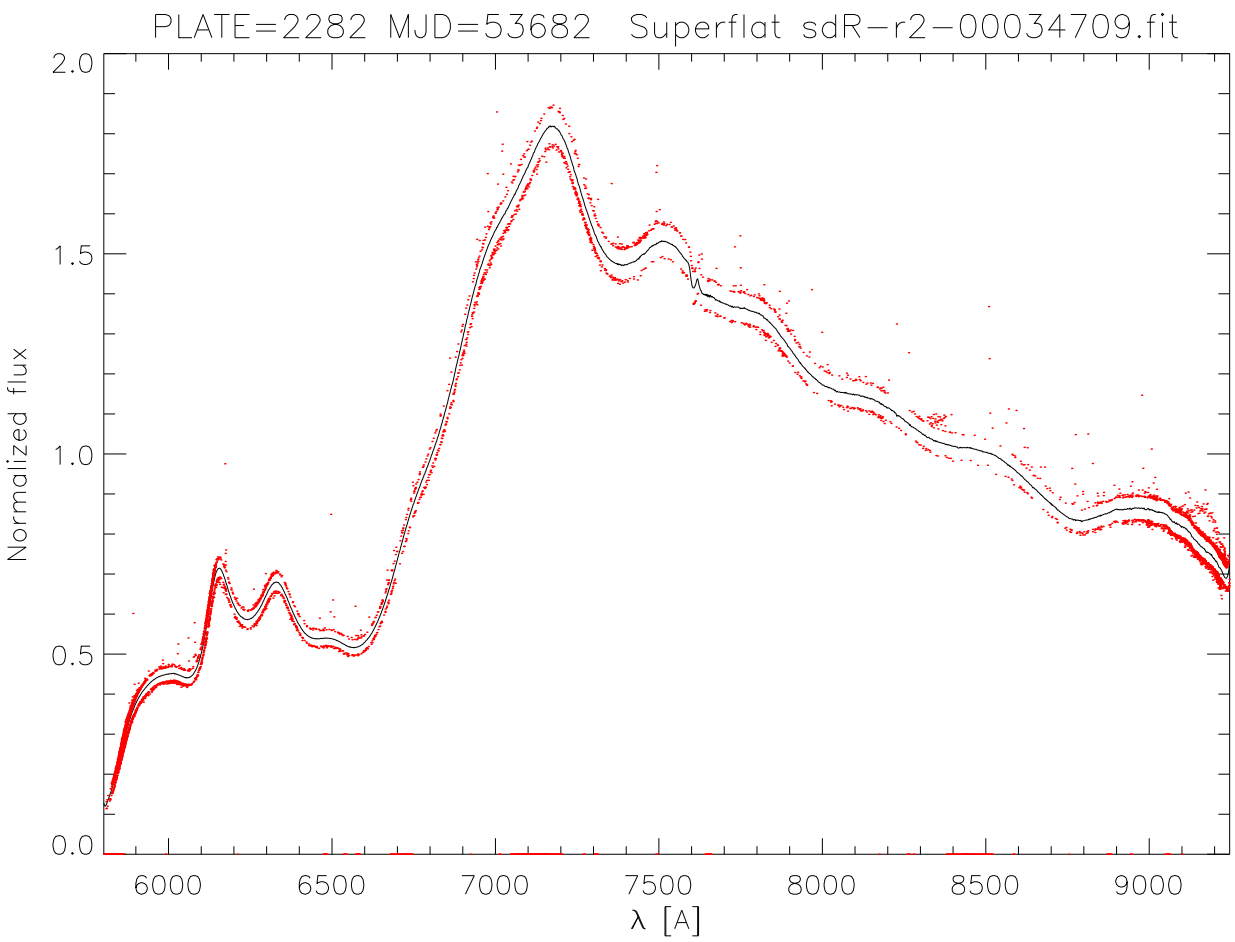

offset coeff residuals from ord=3 poly
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

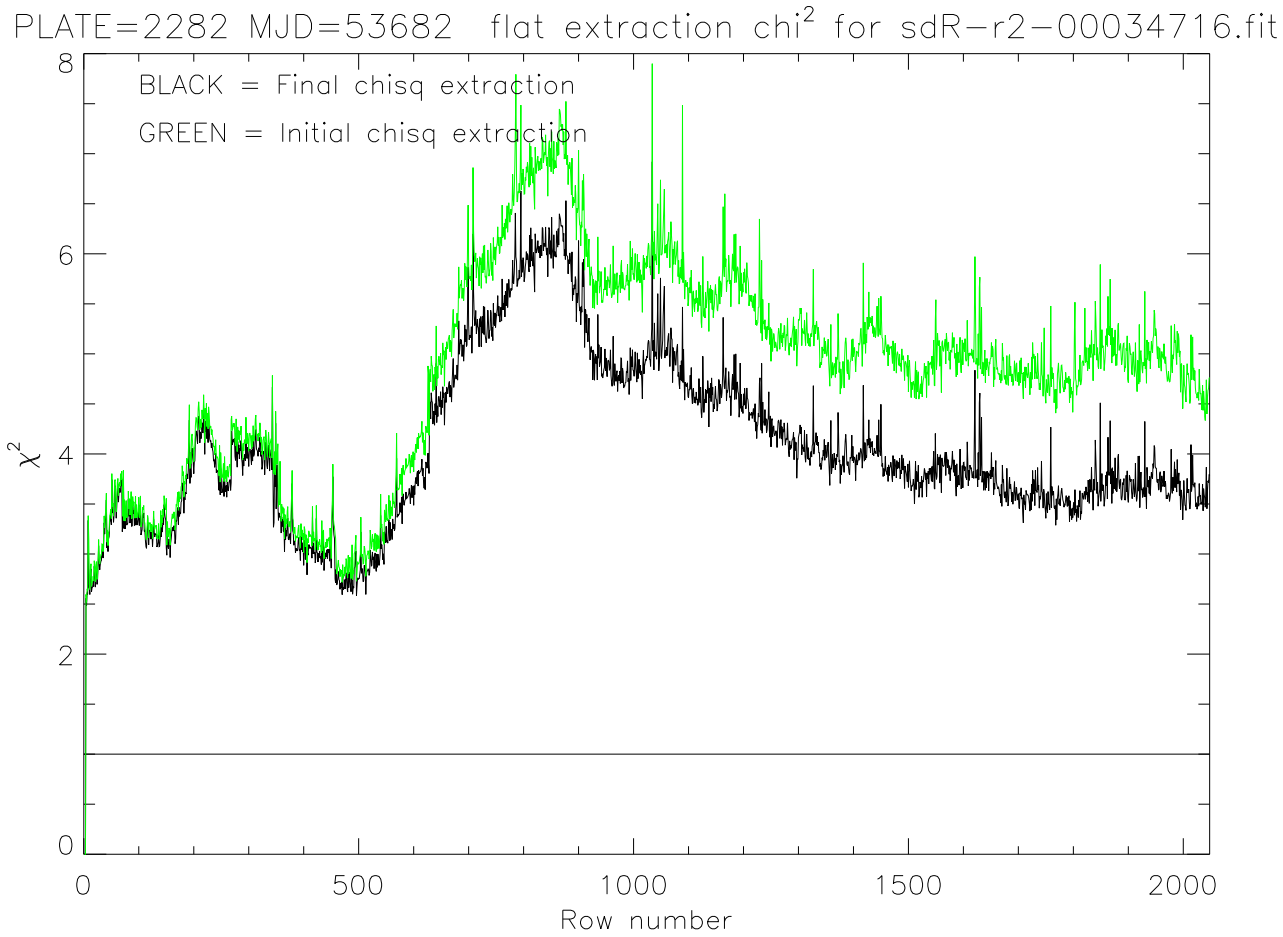

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

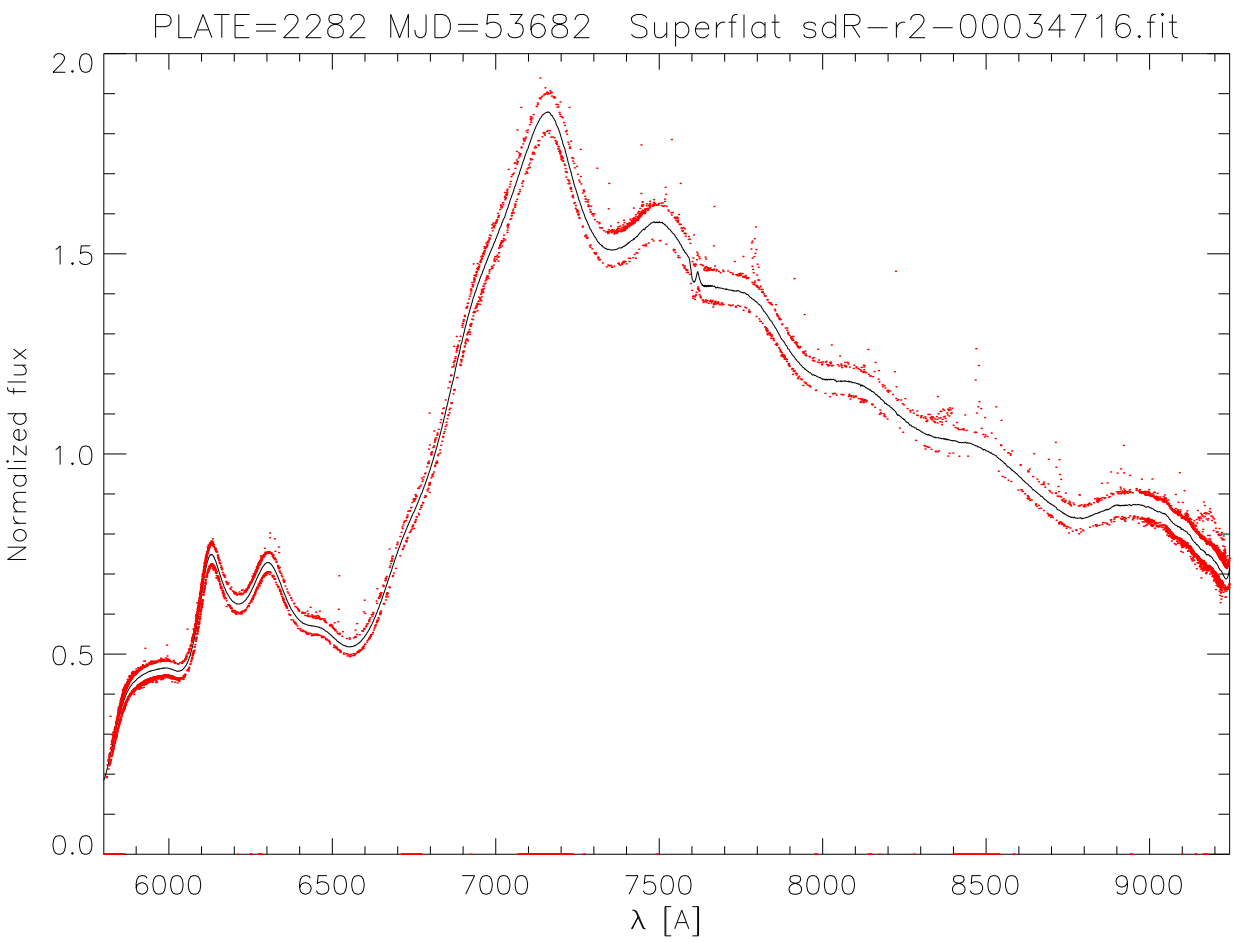

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

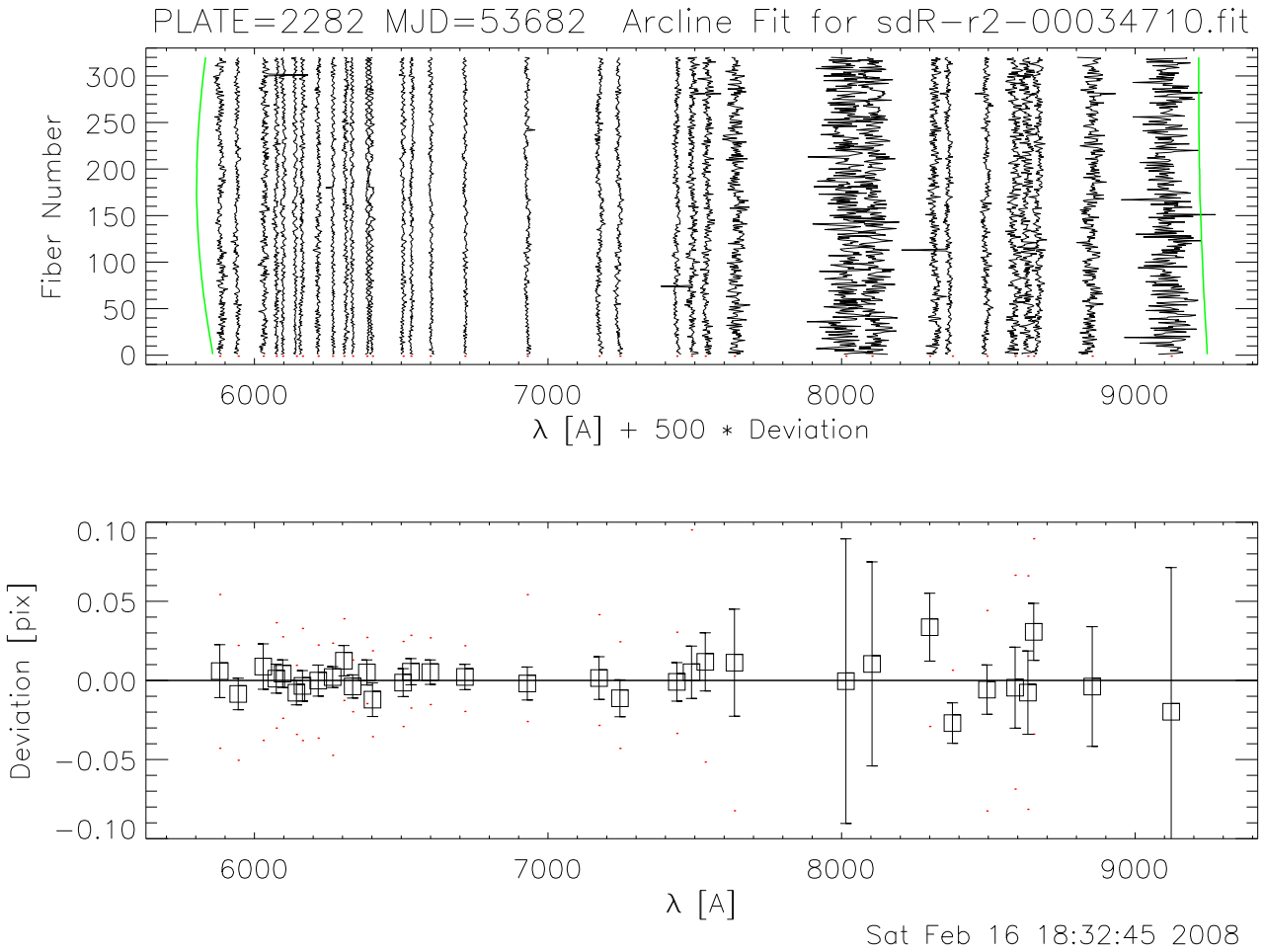

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

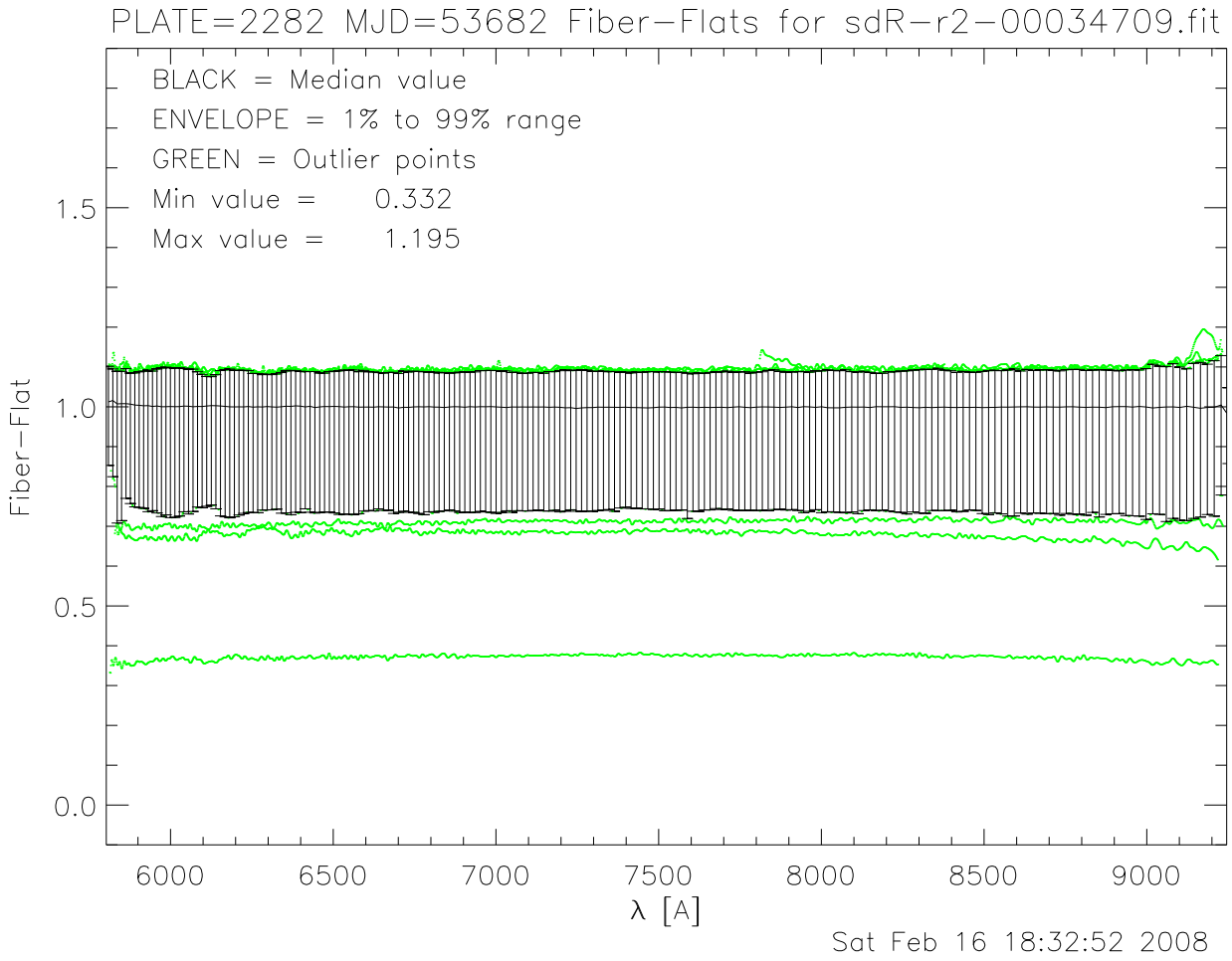

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−r2−00034709.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

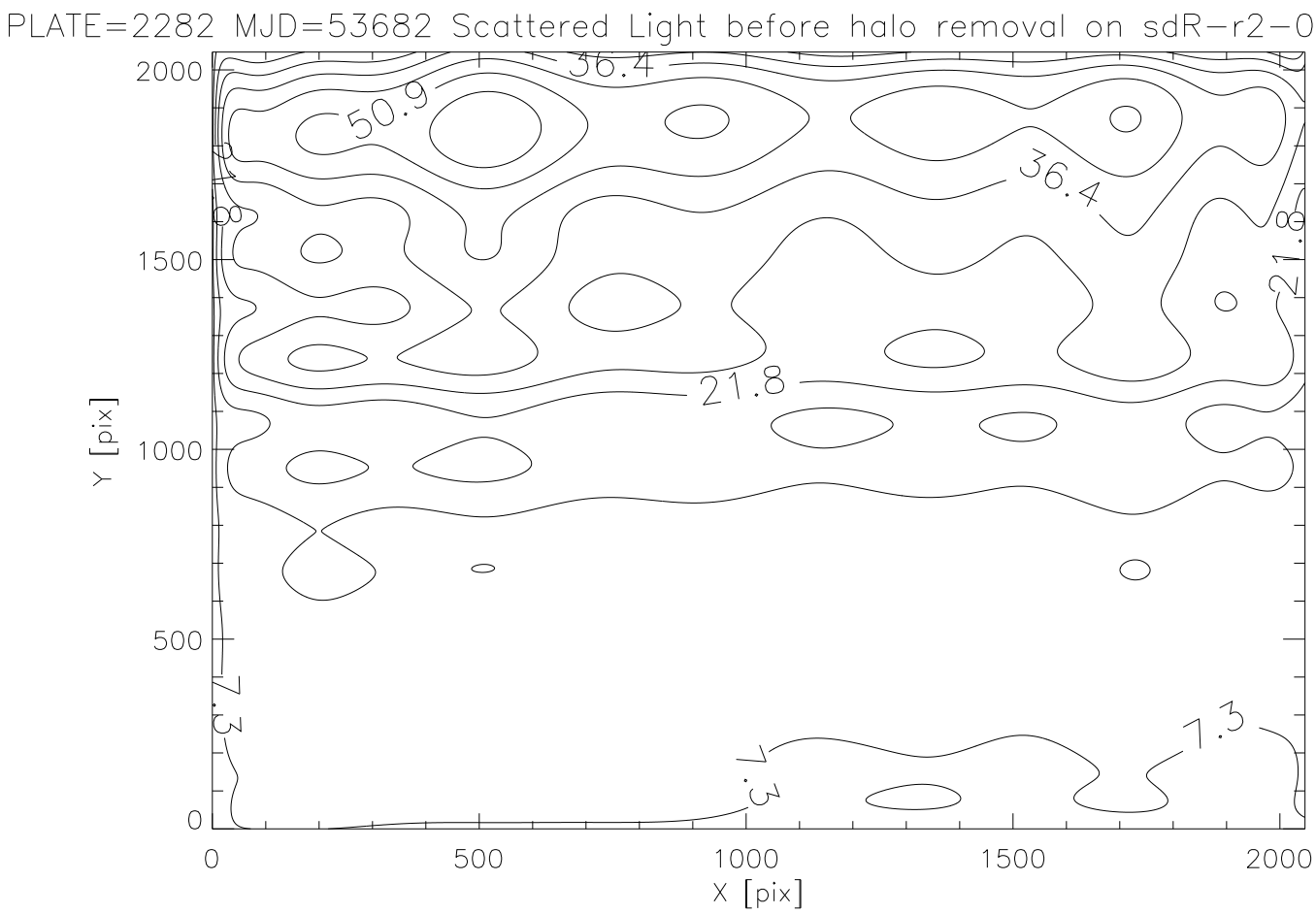

PLATE=2282 MJD=53682 Superflat sdR-r2-00034709.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

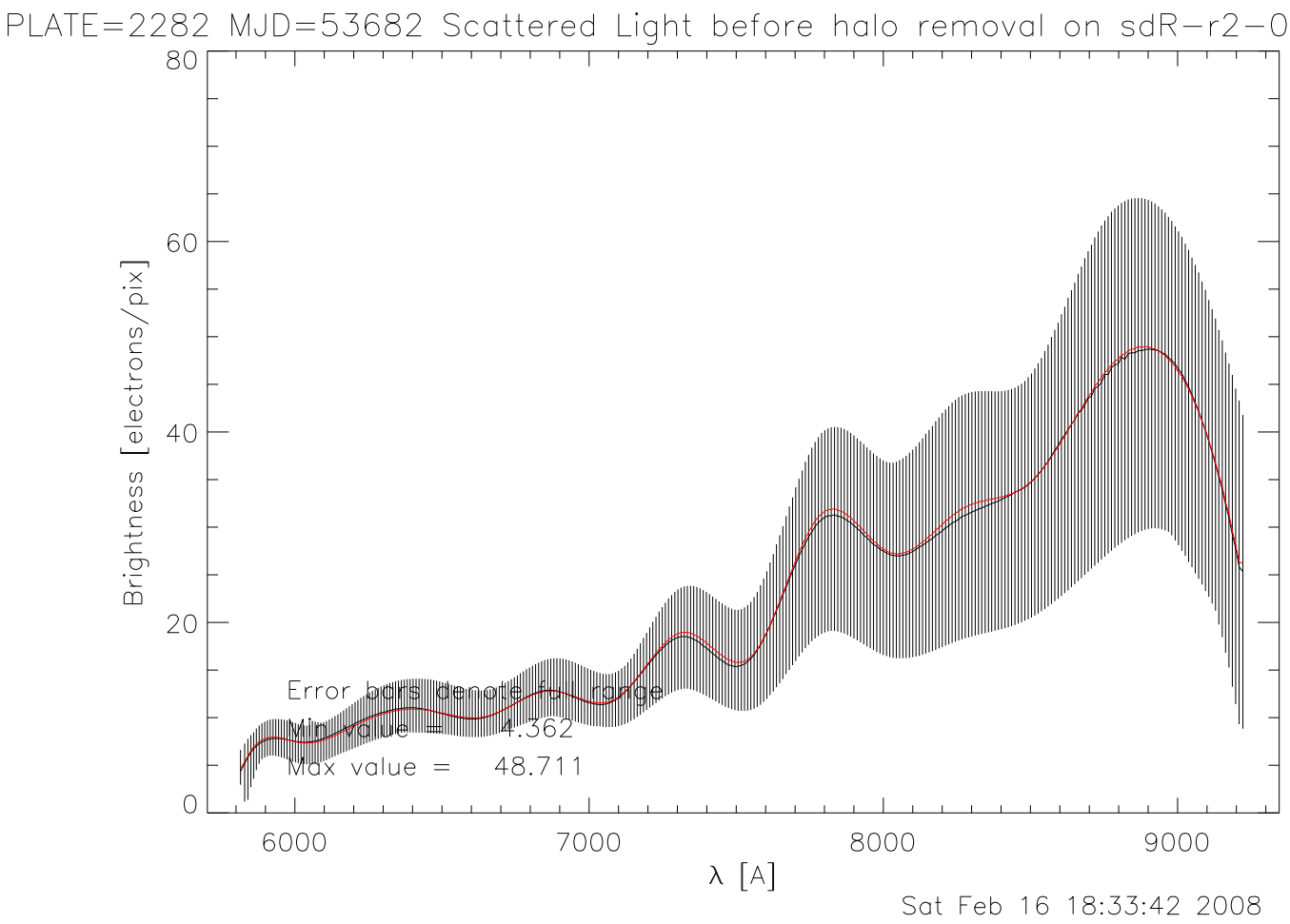

PLATE=2282 MJD=53682 flat extraction chi^2 for sdR−r2−00034716.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

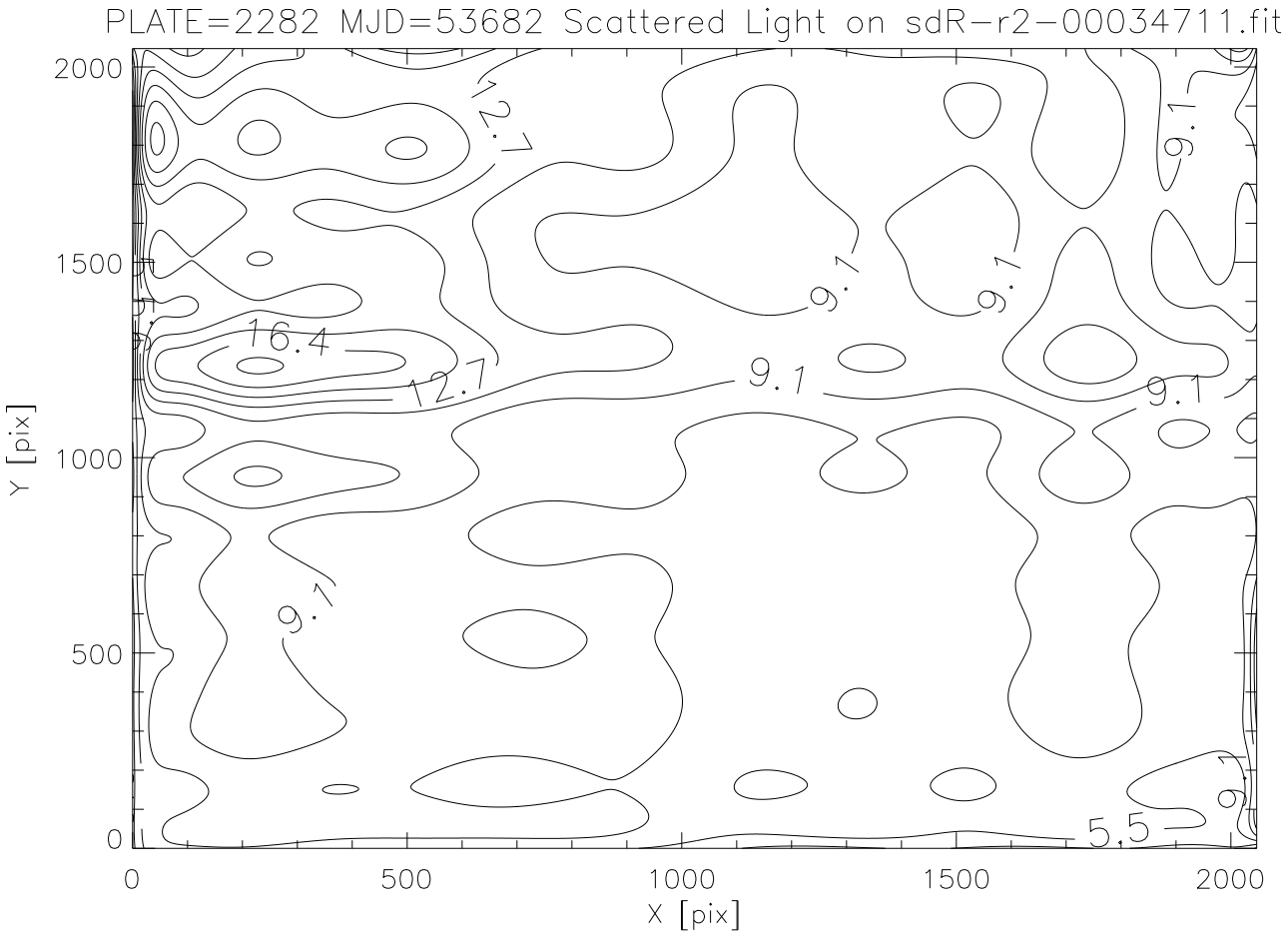

PLATE=2282 MJD=53682 Superflat sdR-r2-00034716.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

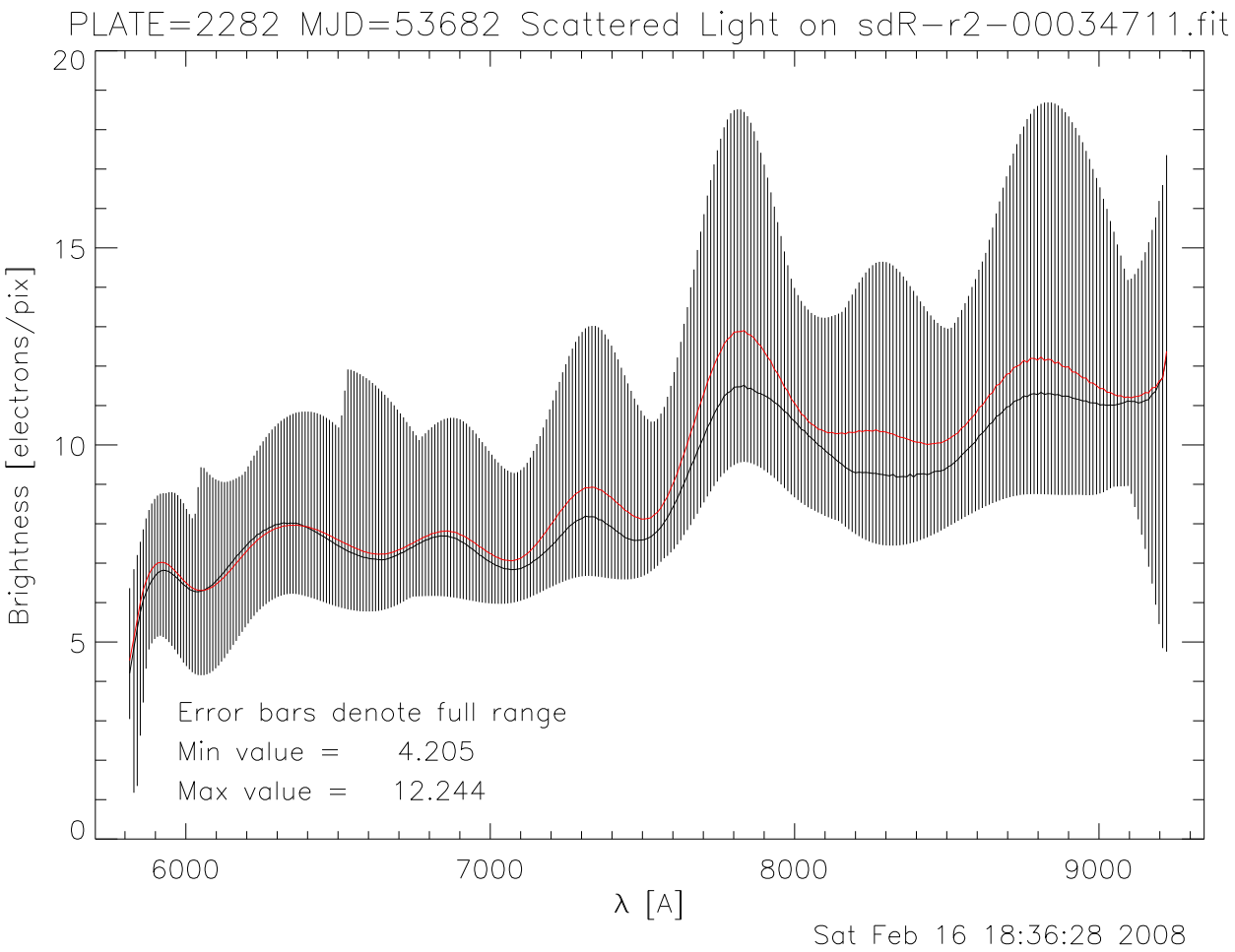

PLATE=2282 MJD=53682 Arcline Fit for sdR-r2-00034710.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sat Feb 16 18:32:45 2008

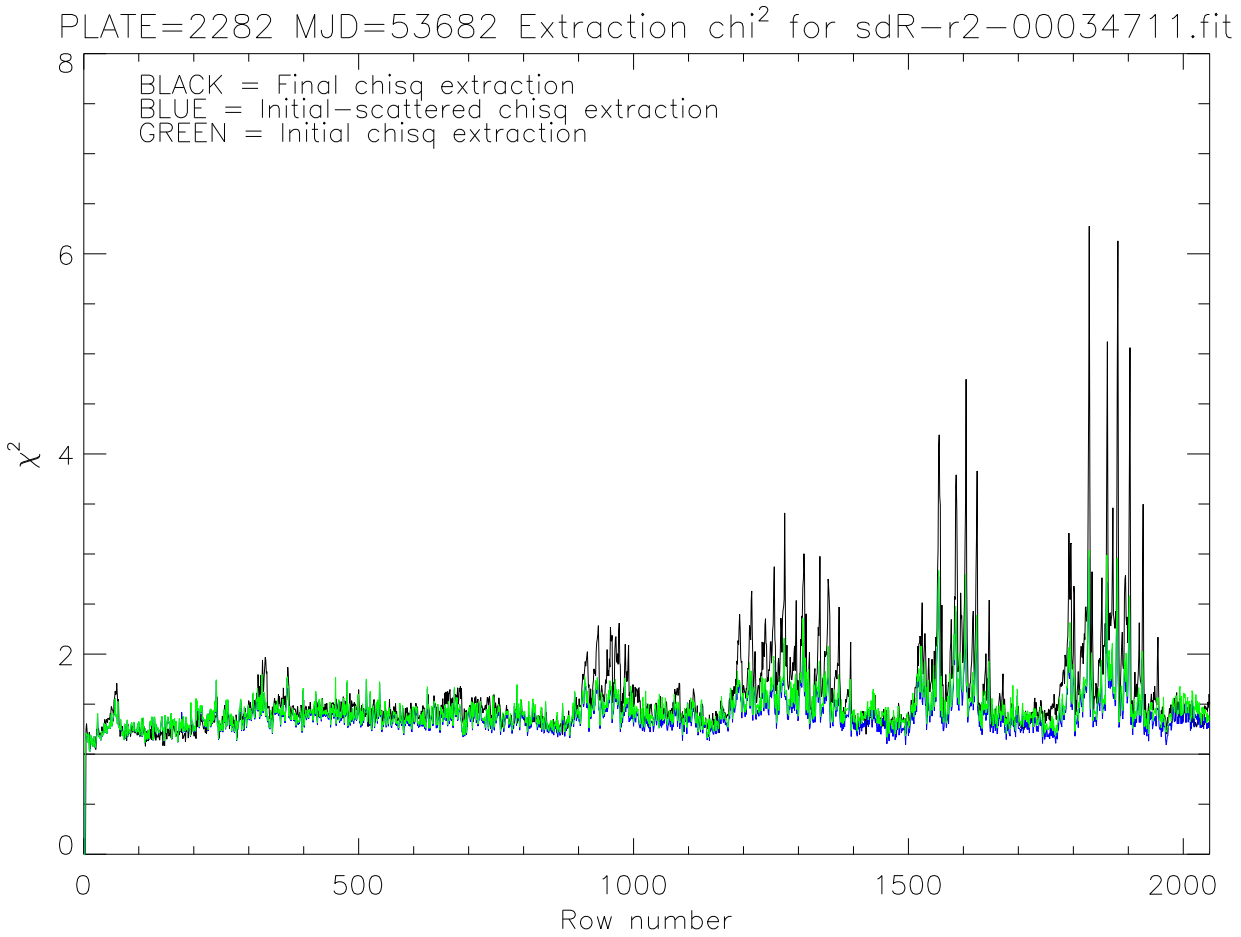

PLATE=2282 MJD=53682 Fiber−Flats for sdR−r2−00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.332
Max value = 1.195
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 18:32:52 2008

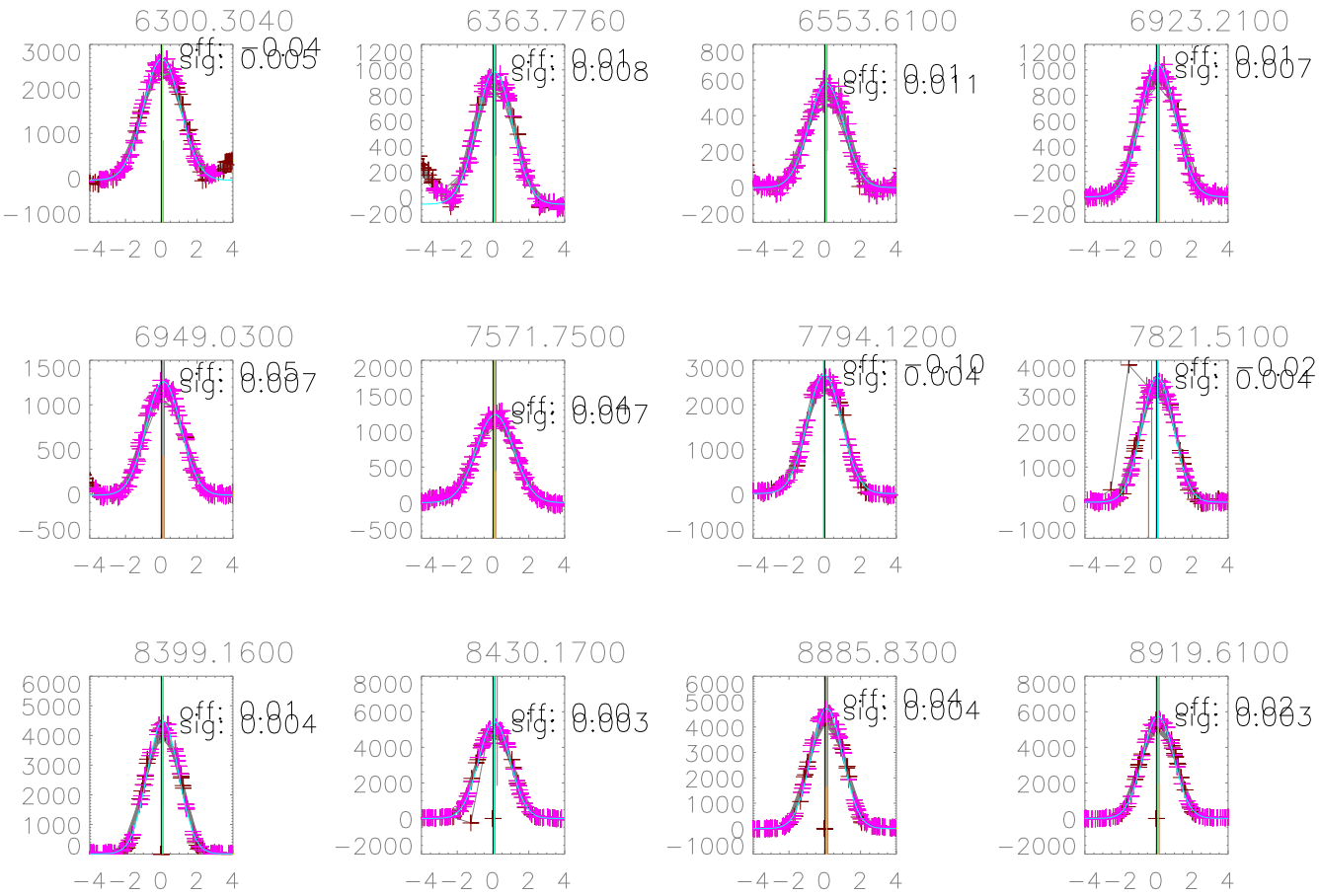

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r2-00034711.fi
36.4
50.9
36.4
21.8
7.3
7.3
7.3
0
500
1000
1500
2000
Y [pix]
X [pix]

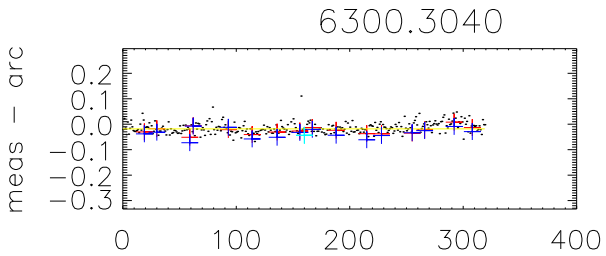

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r2-00034711.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.362
Max value = 48.711
Sat Feb 16 18:33:42 2008

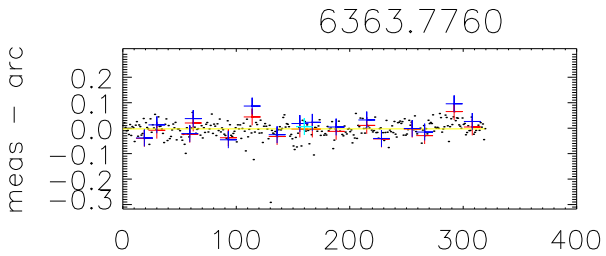

PLATE=2282 MJD=53682 Scattered Light on sdR-r2-00034711.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
12.7
9.1
5.5

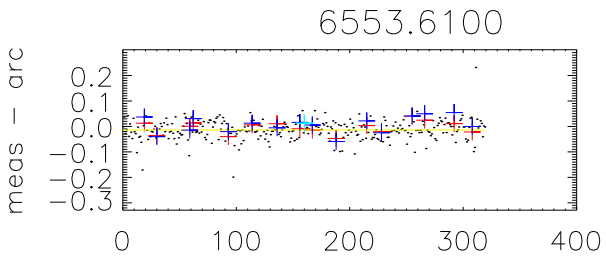

PLATE=2282 MJD=53682 Scattered Light on sdR-r2-00034711.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.205
Max value = 12.244
Sat Feb 16 18:36:28 2008

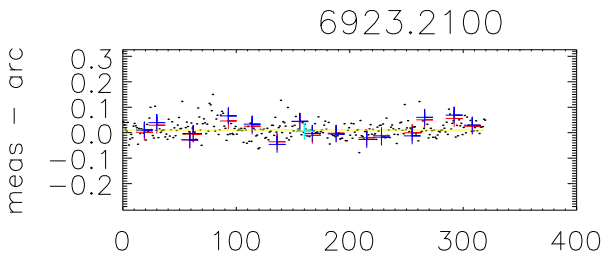

PLATE=2282 MJD=53682 Extraction chi^2 for sdR−r2−00034711.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

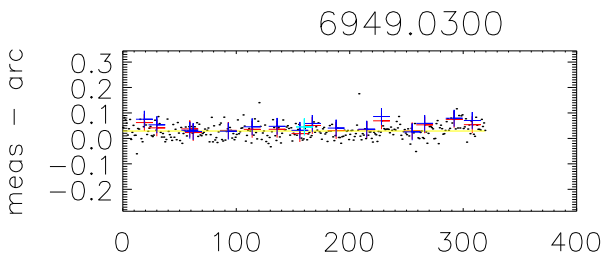

6300.3040
off: −0.04
sig: 0.005
6363.7760
off: 0.01
sig: 0.008
6553.6100
off: 0.01
sig: 0.011
6923.2100
off: 0.01
sig: 0.007
6949.0300
off: 0.05
sig: 0.007
7571.7500
off: 0.04
sig: 0.007
7794.1200
off: −0.10
sig: 0.004
7821.5100
off: −0.02
sig: 0.004
8399.1600
off: 0.01
sig: 0.004
8430.1700
off: 0.00
sig: 0.003
8885.8300
off: 0.04
sig: 0.004
8919.6100
off: 0.02
sig: 0.003

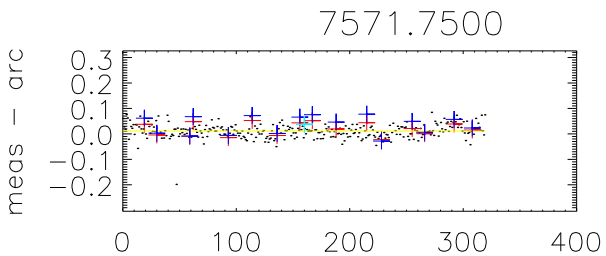

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

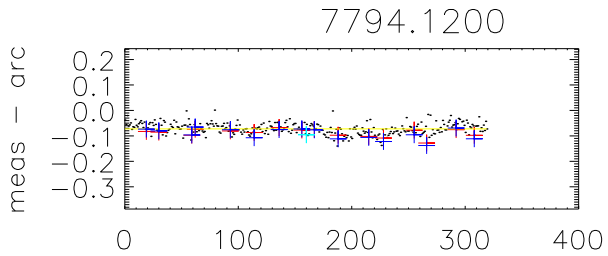

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

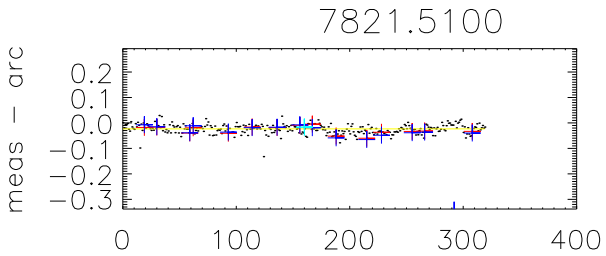

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

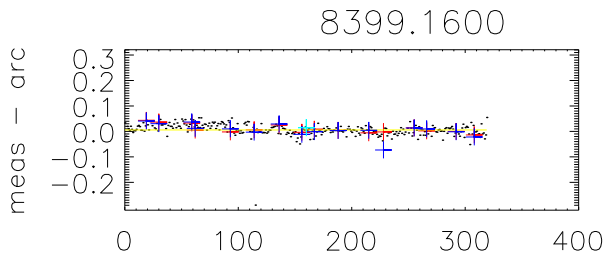

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

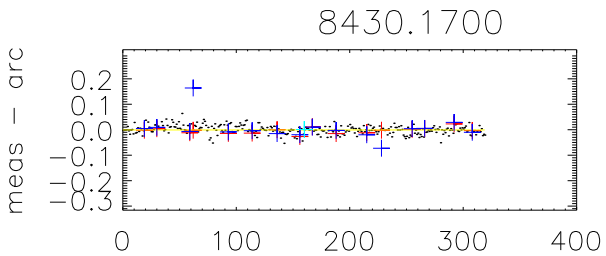

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

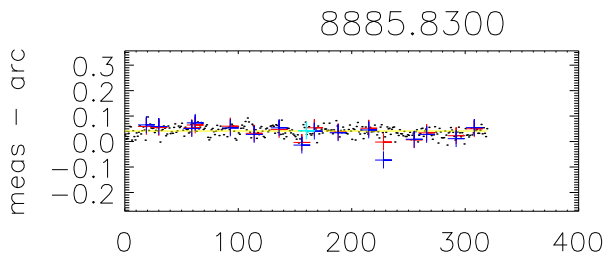

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

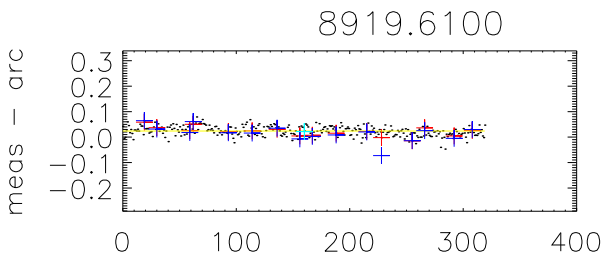

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

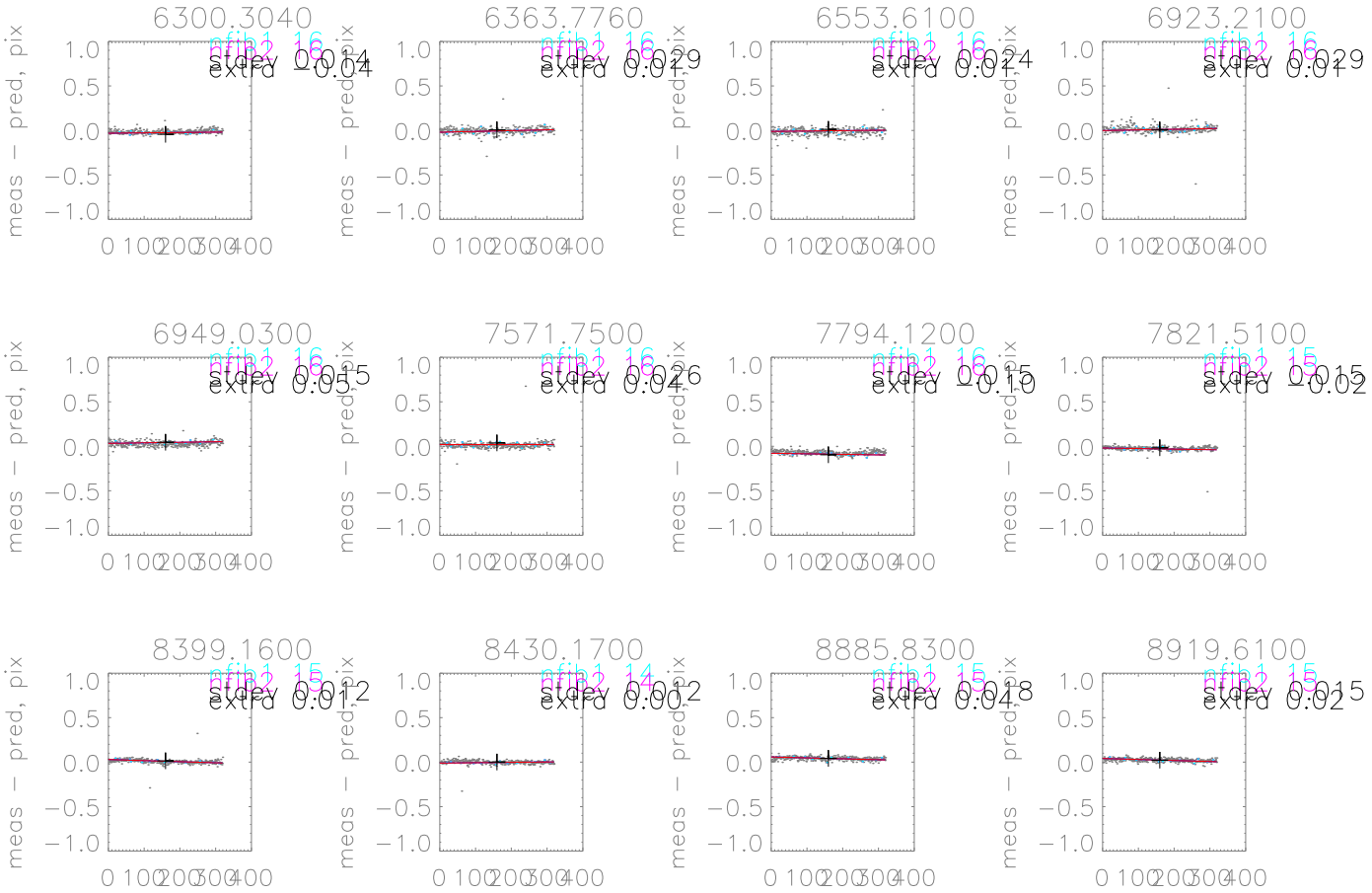

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

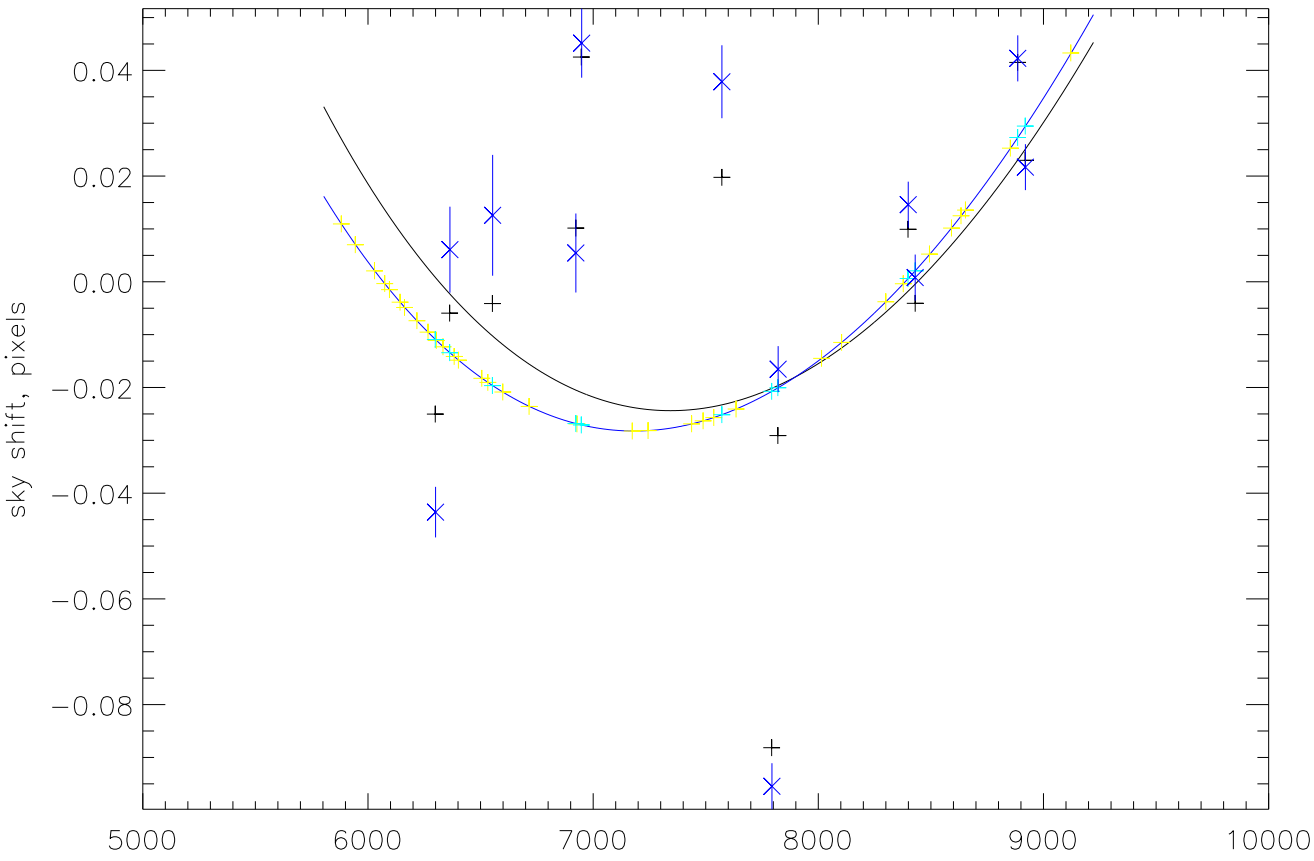

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

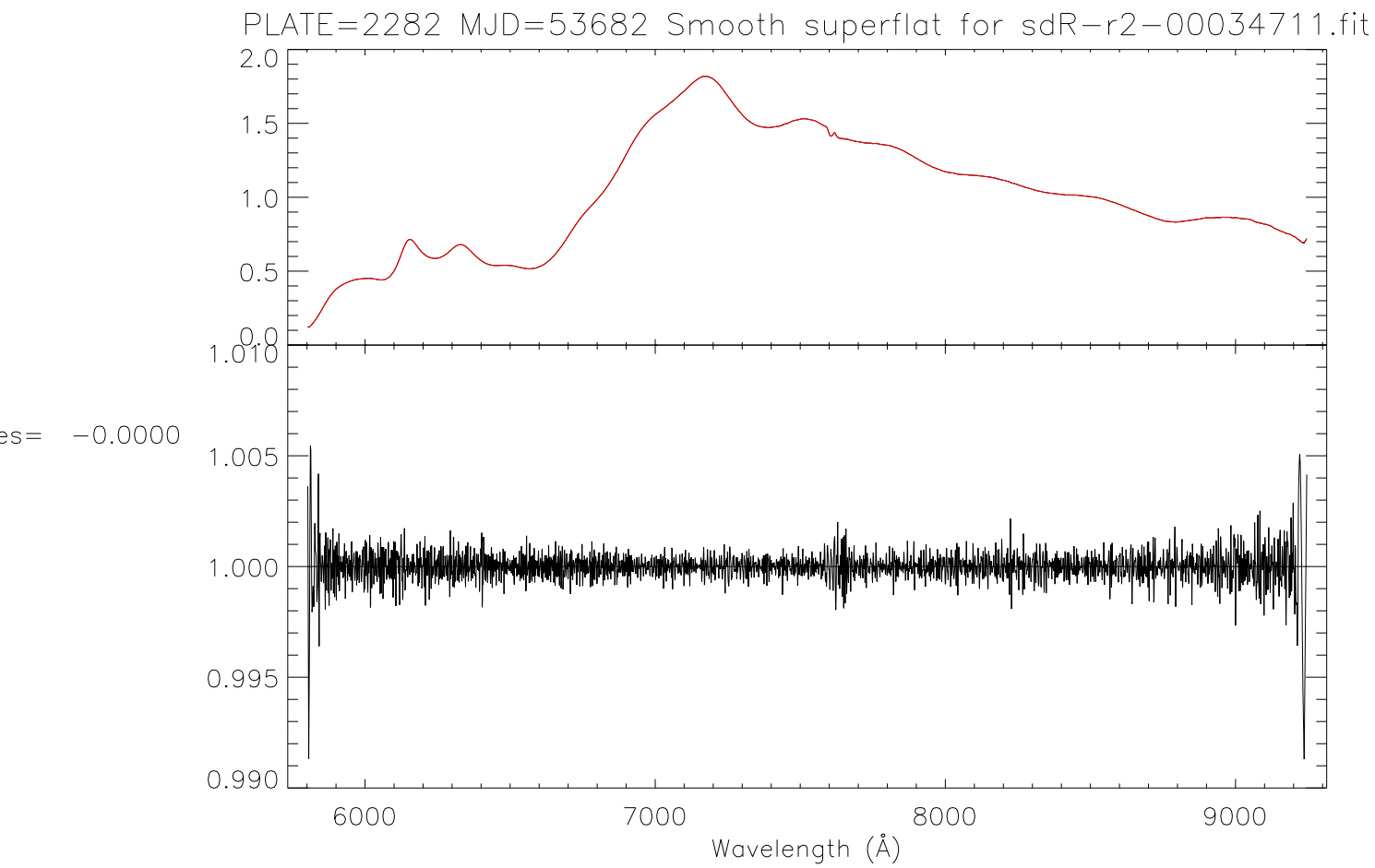

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

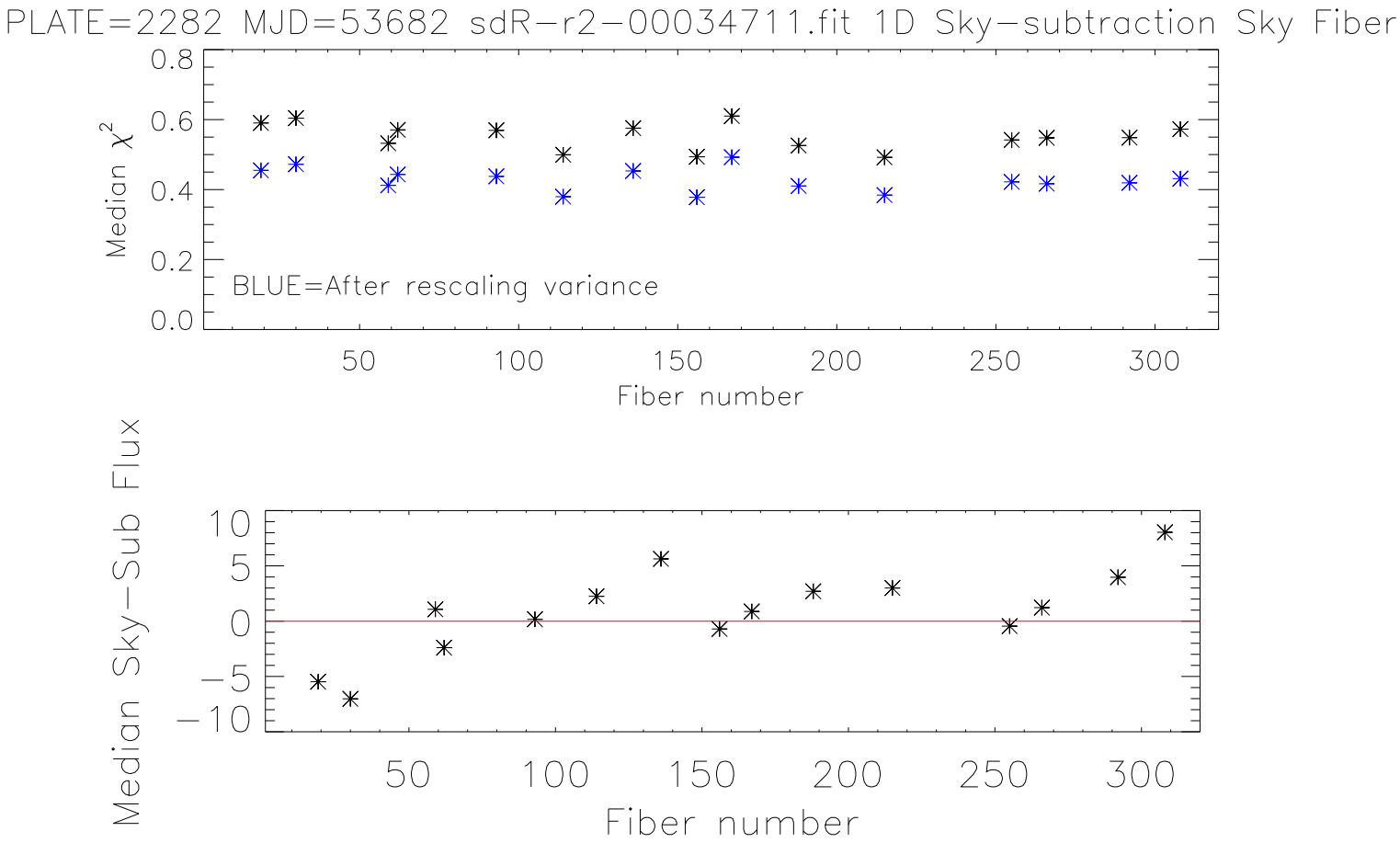

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

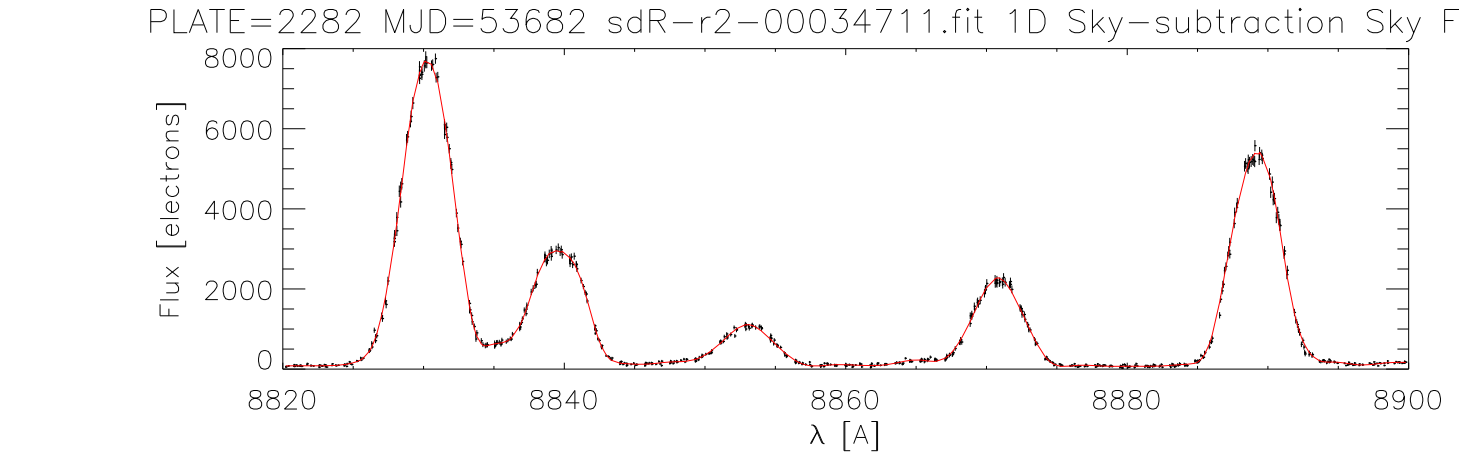

6300.3040
mfhi1 16
mflo1 16
stdev 0.014
extra −0.04
6363.7760
mfhi1 16
mflo1 16
stdev 0.029
extra 0.01
6553.6100
mfhi1 16
mflo1 16
stdev 0.024
extra 0.01
6923.2100
mfhi1 16
mflo1 16
stdev 0.029
extra 0.01
6949.0300
mfhi1 16
mflo1 16
stdev 0.045
extra 0.05
7571.7500
mfhi1 16
mflo1 16
stdev 0.026
extra 0.04
7794.1200
mfhi1 16
mflo1 16
stdev 0.015
extra −0.10
7821.5100
mfhi1 15
mflo1 15
stdev 0.015
extra −0.02
8399.1600
mfhi1 15
mflo1 15
stdev 0.012
extra 0.01
8430.1700
mfhi1 14
mflo1 14
stdev 0.002
extra 0.00
8885.8300
mfhi1 15
mflo1 15
stdev 0.018
extra 0.04
8919.6100
mfhi1 15
mflo1 15
stdev 0.015
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

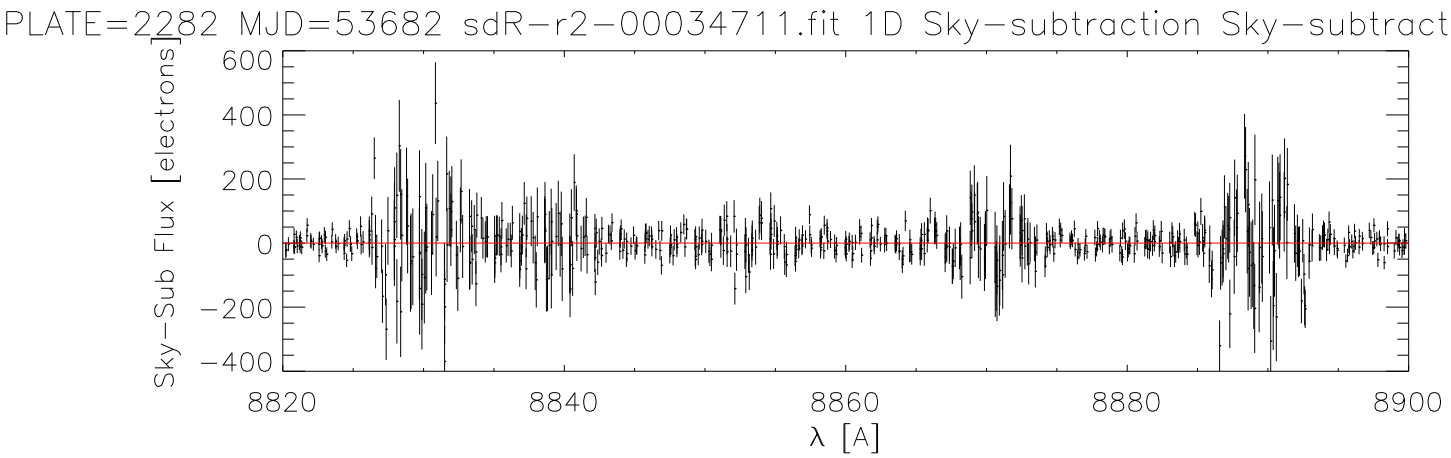

0.04
0.02
0.00
−0.02
−0.04
−0.06
−0.08
sky shift, pixels
5000
6000
7000
8000
9000
10000

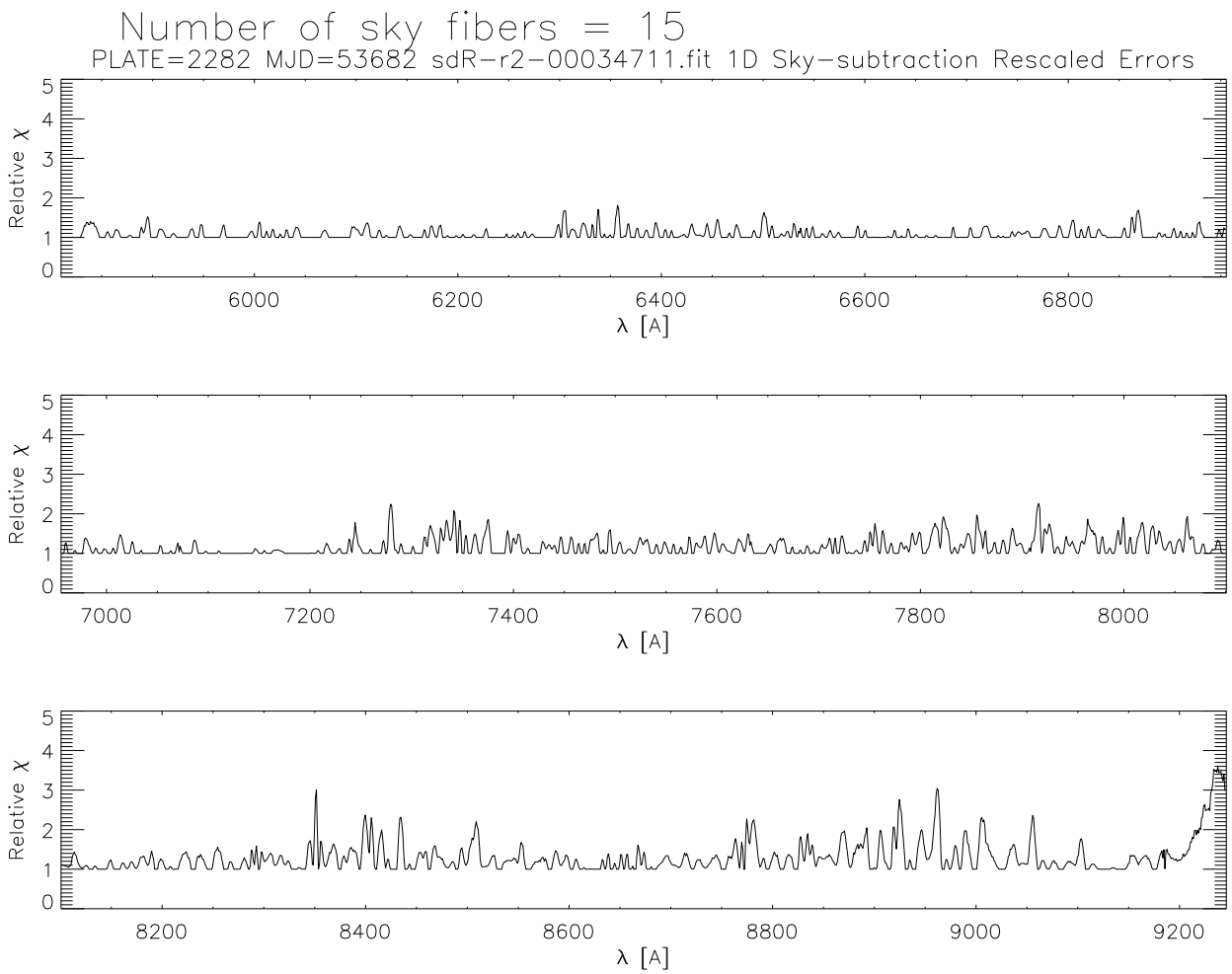

PLATE=2282 MJD=53682 Smooth superflat for sdR-r2-00034711.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

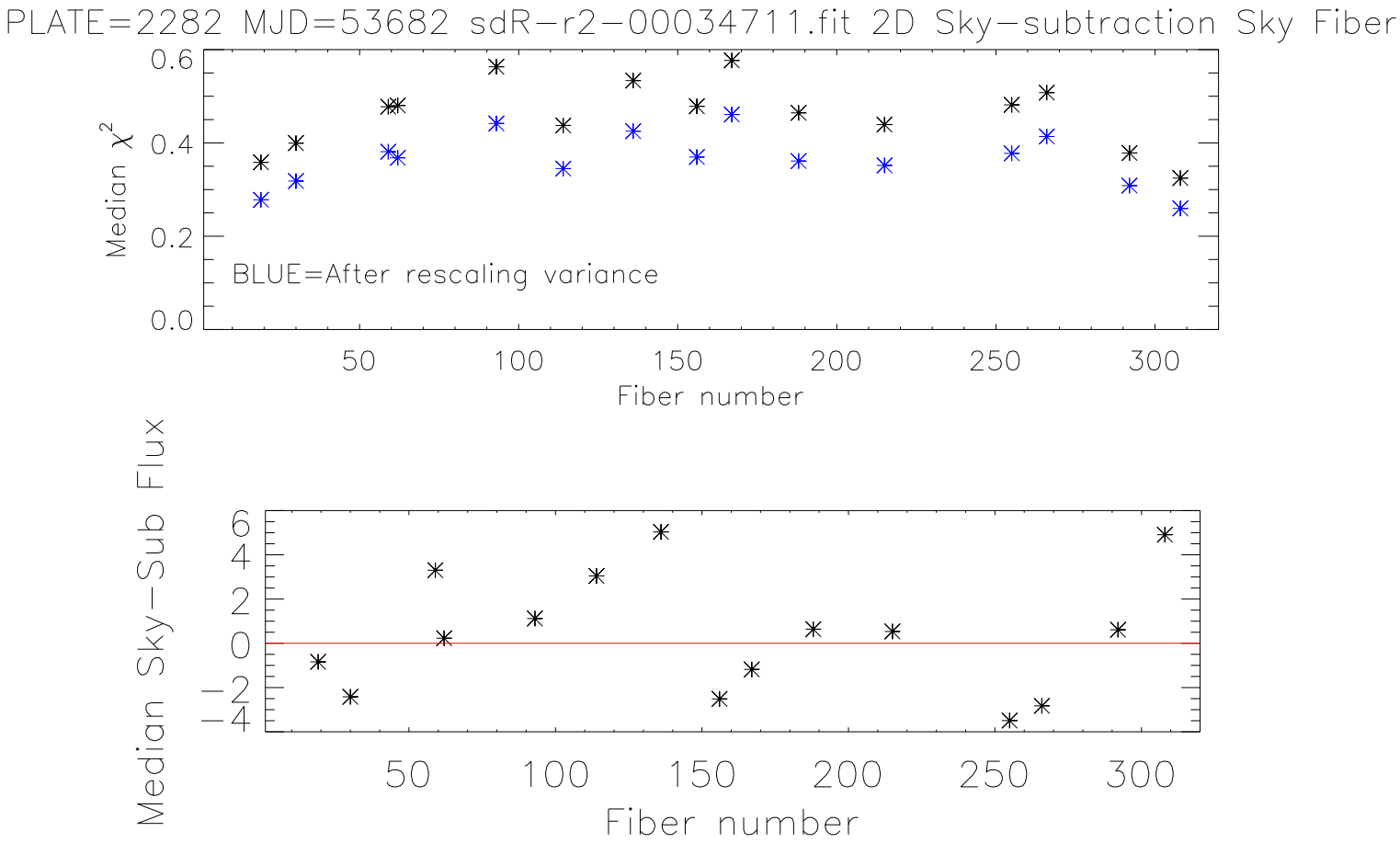
es= −0.0000

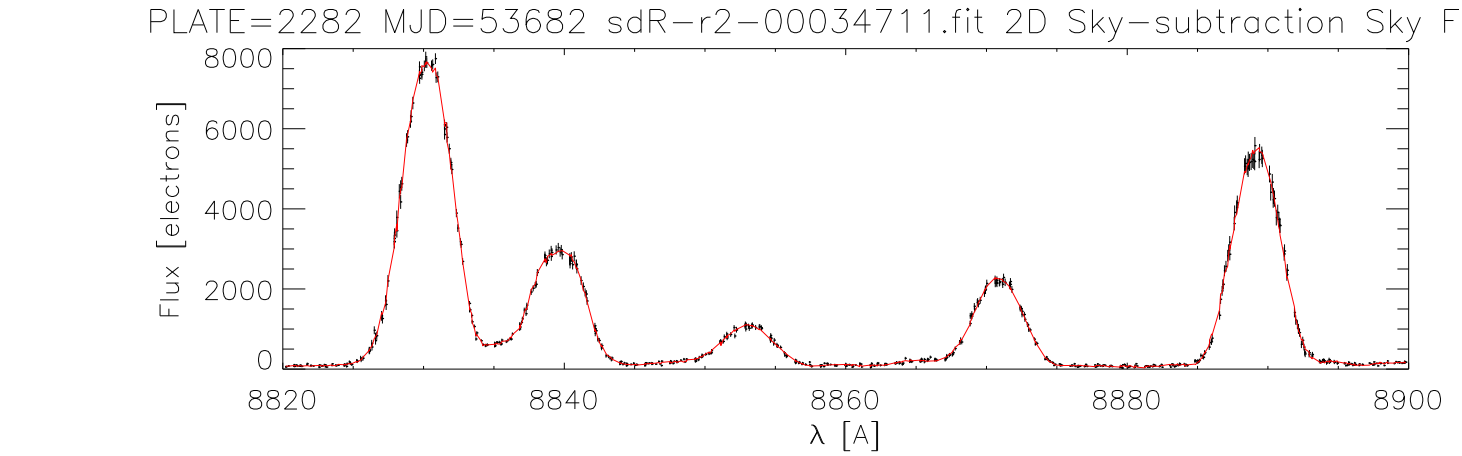

PLATE=2282 MJD=53682 sdR-r2-00034711.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

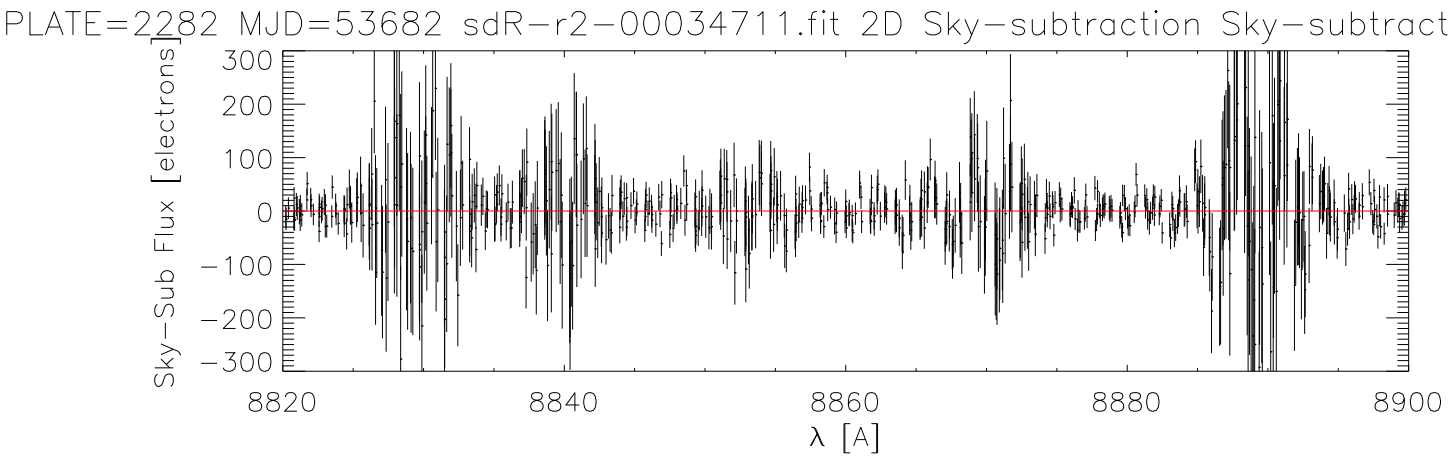

PLATE=2282 MJD=53682 sdR-r2-00034711.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

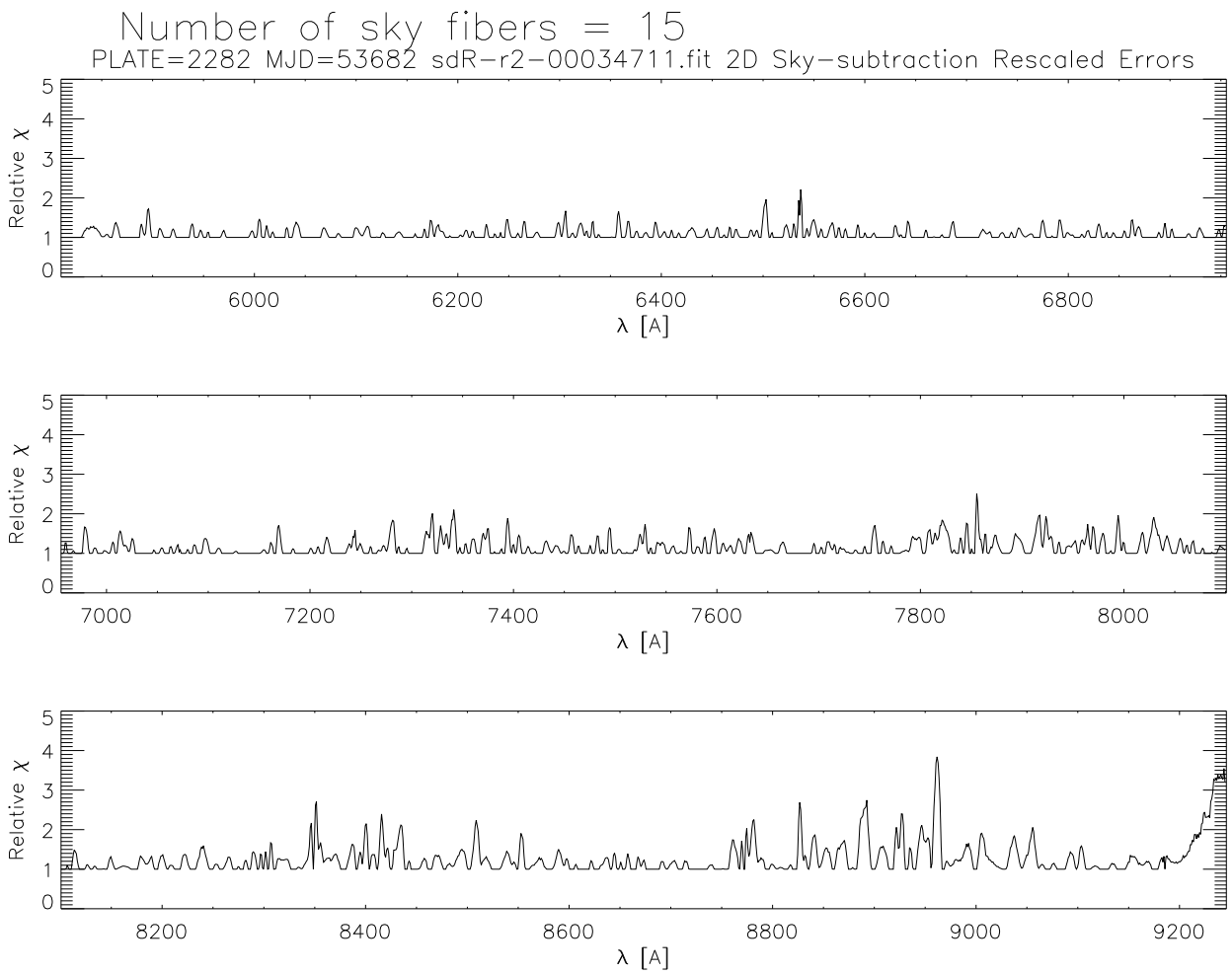

PLATE=2282 MJD=53682 sdR-r2-00034711.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

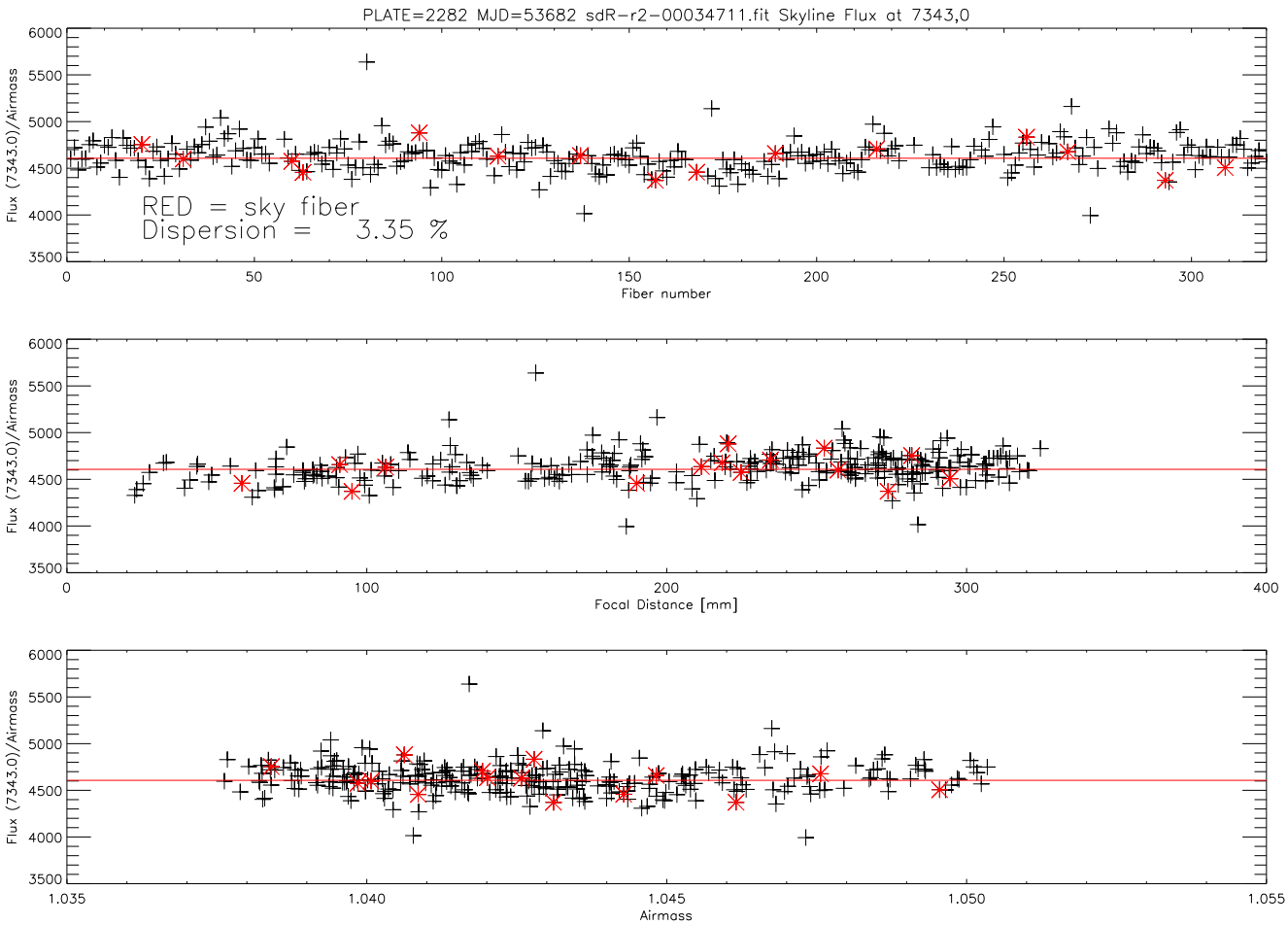

Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-r2-00034711.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

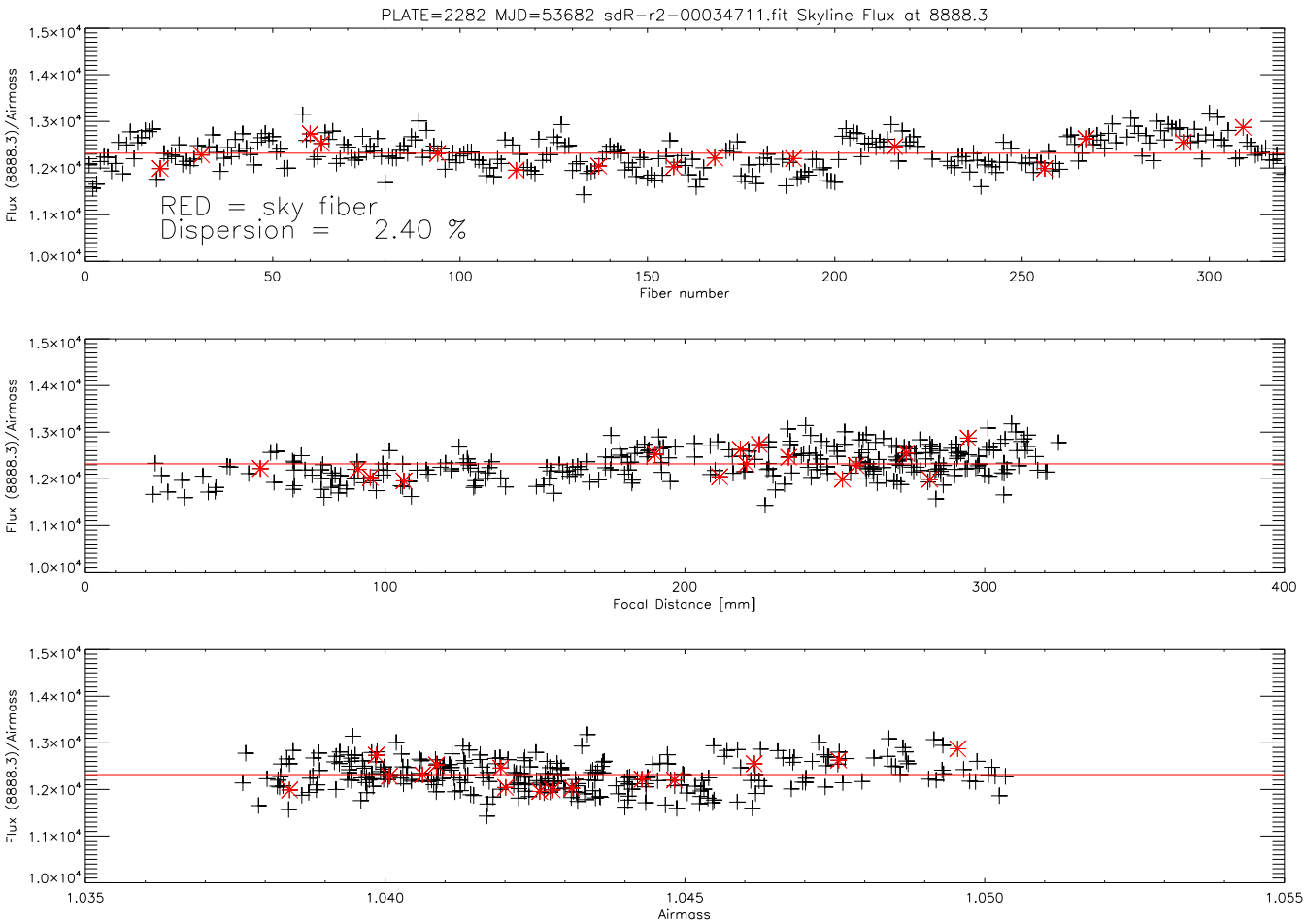

PLATE=2282 MJD=53682 sdR-r2-00034711.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

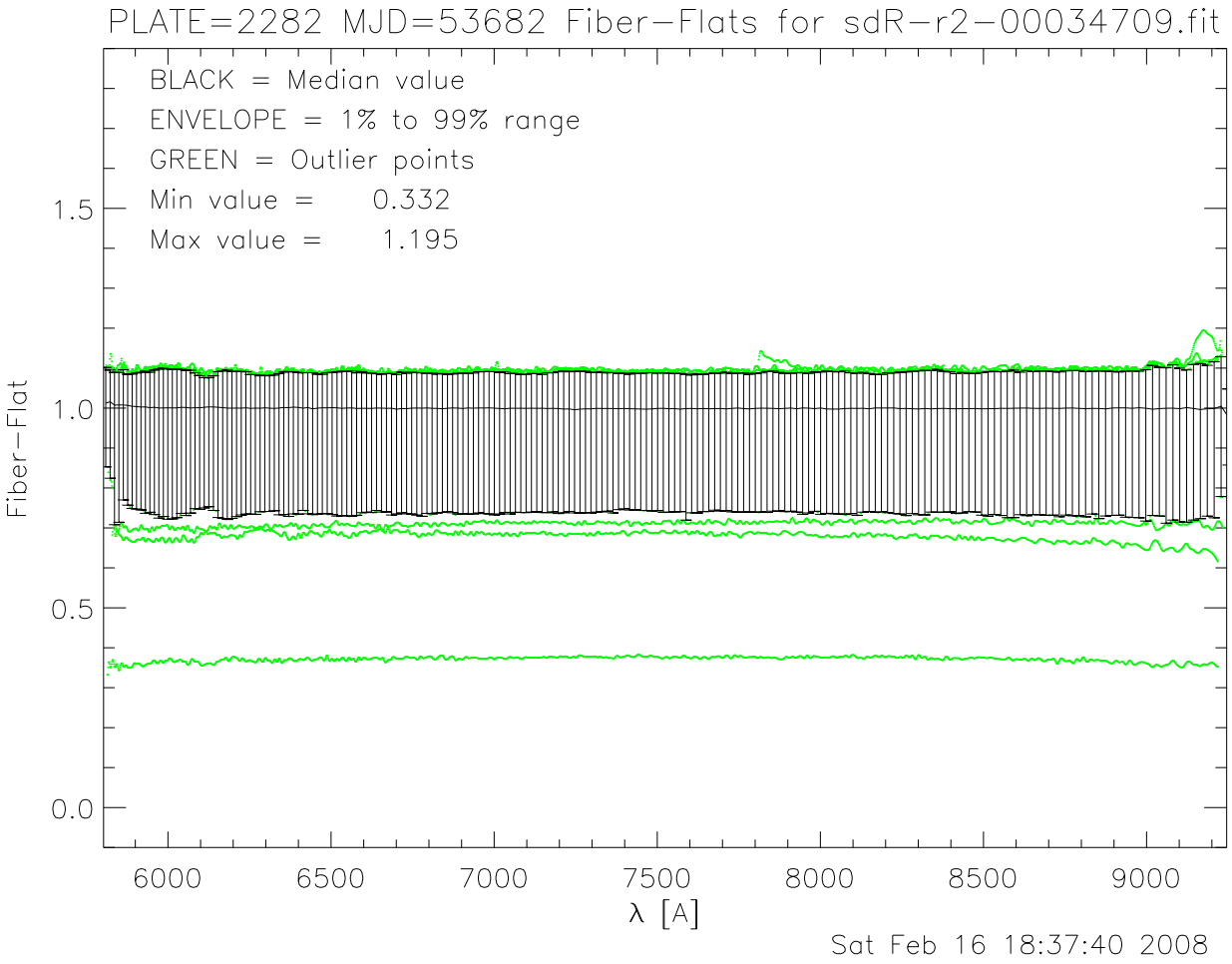

PLATE=2282 MJD=53682 sdR-r2-00034711.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

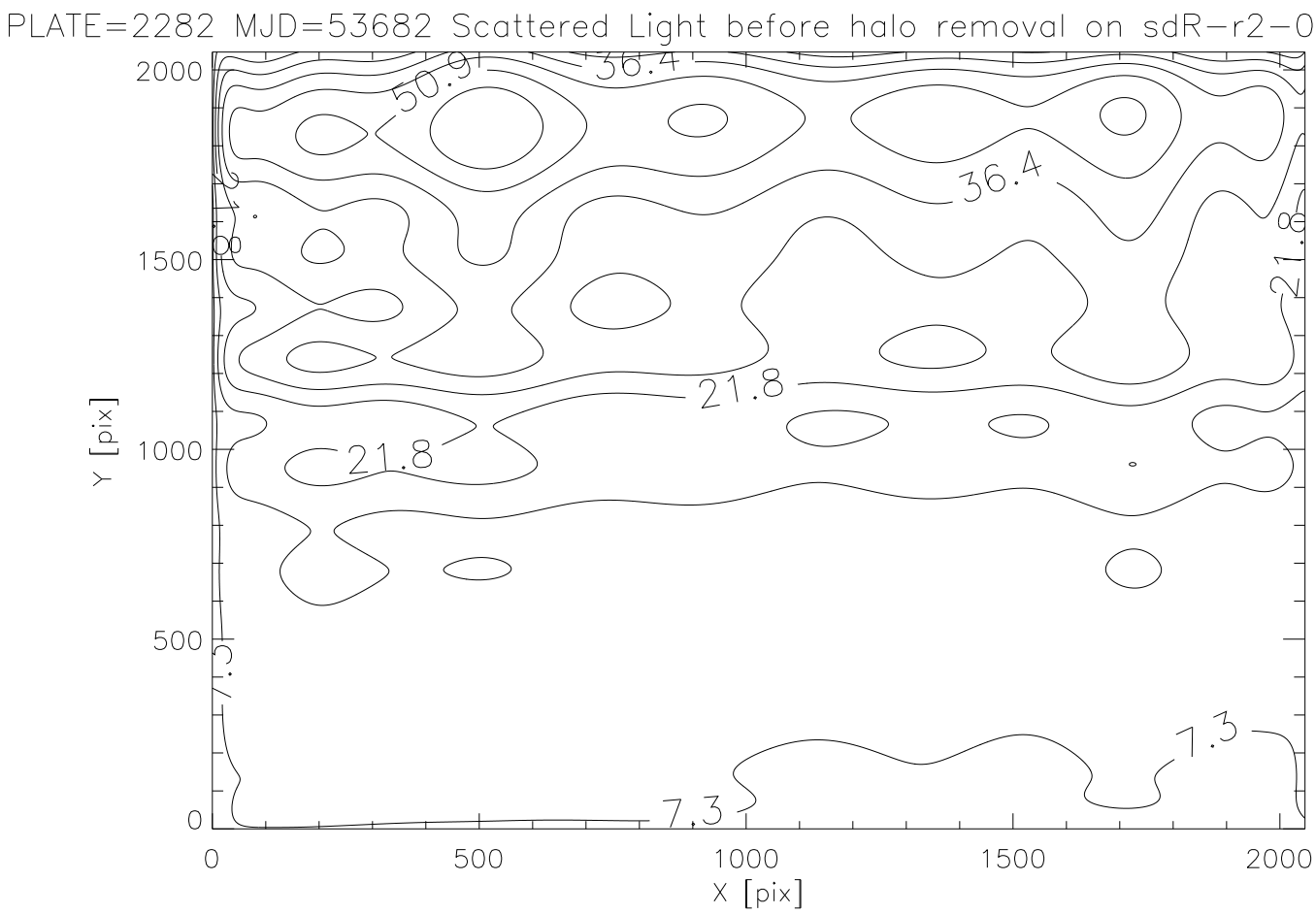

PLATE=2282 MJD=53682 sdR-r2-00034711.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

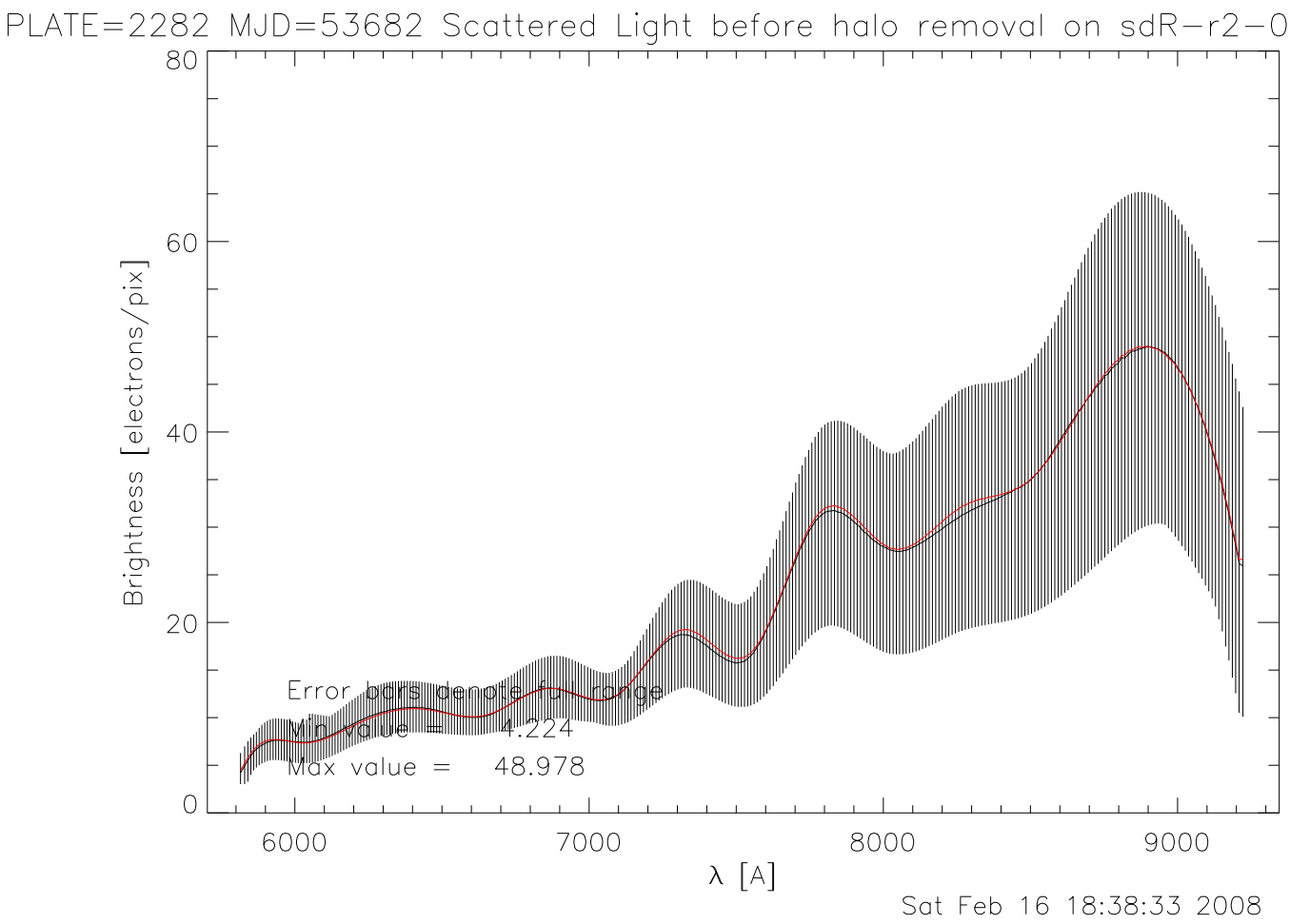

Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-r2-00034711.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

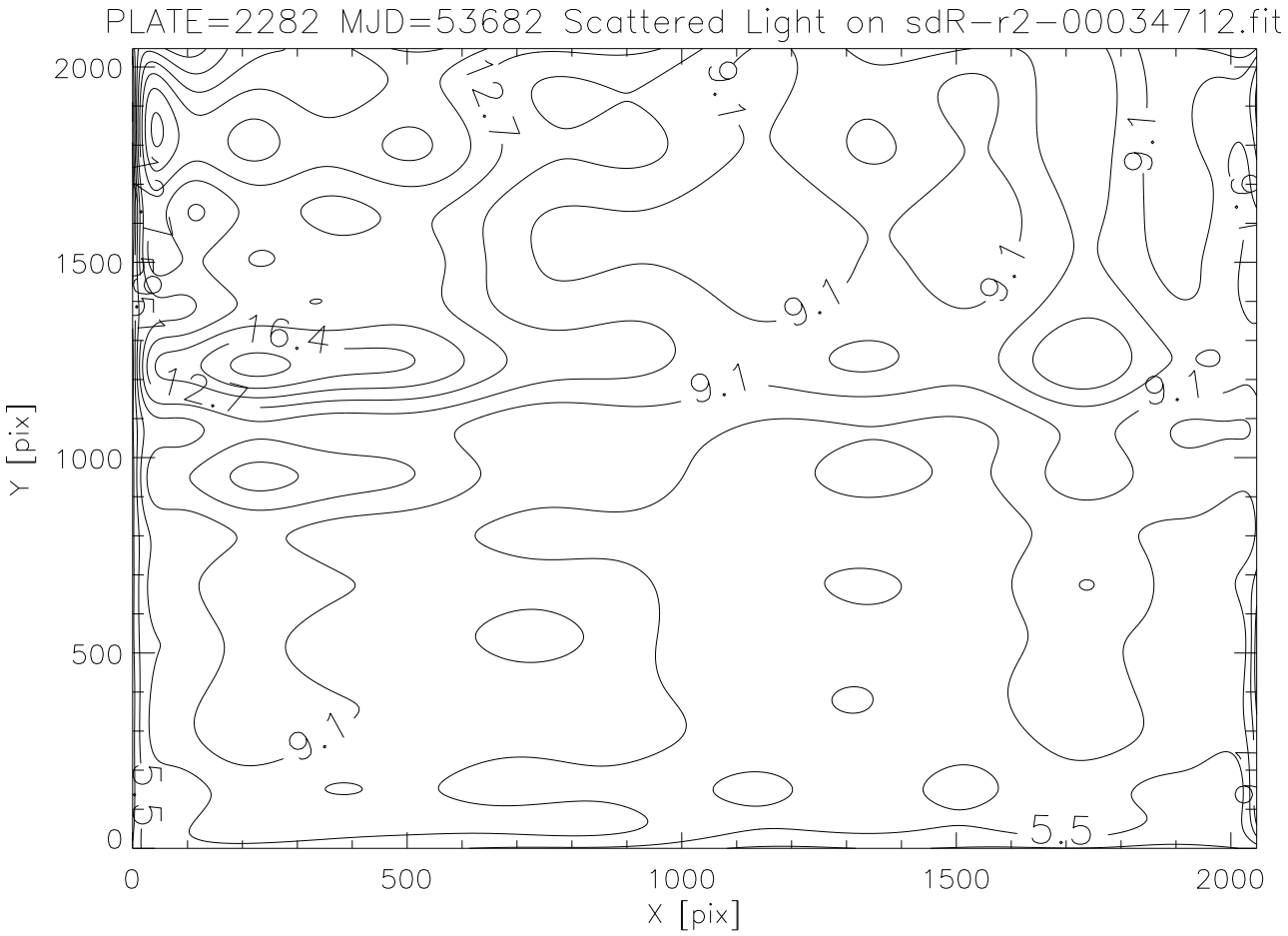

PLATE=2282 MJD=53682 sdR-r2-00034711.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.35 %
Fiber number
Focal Distance [mm]
Airmass

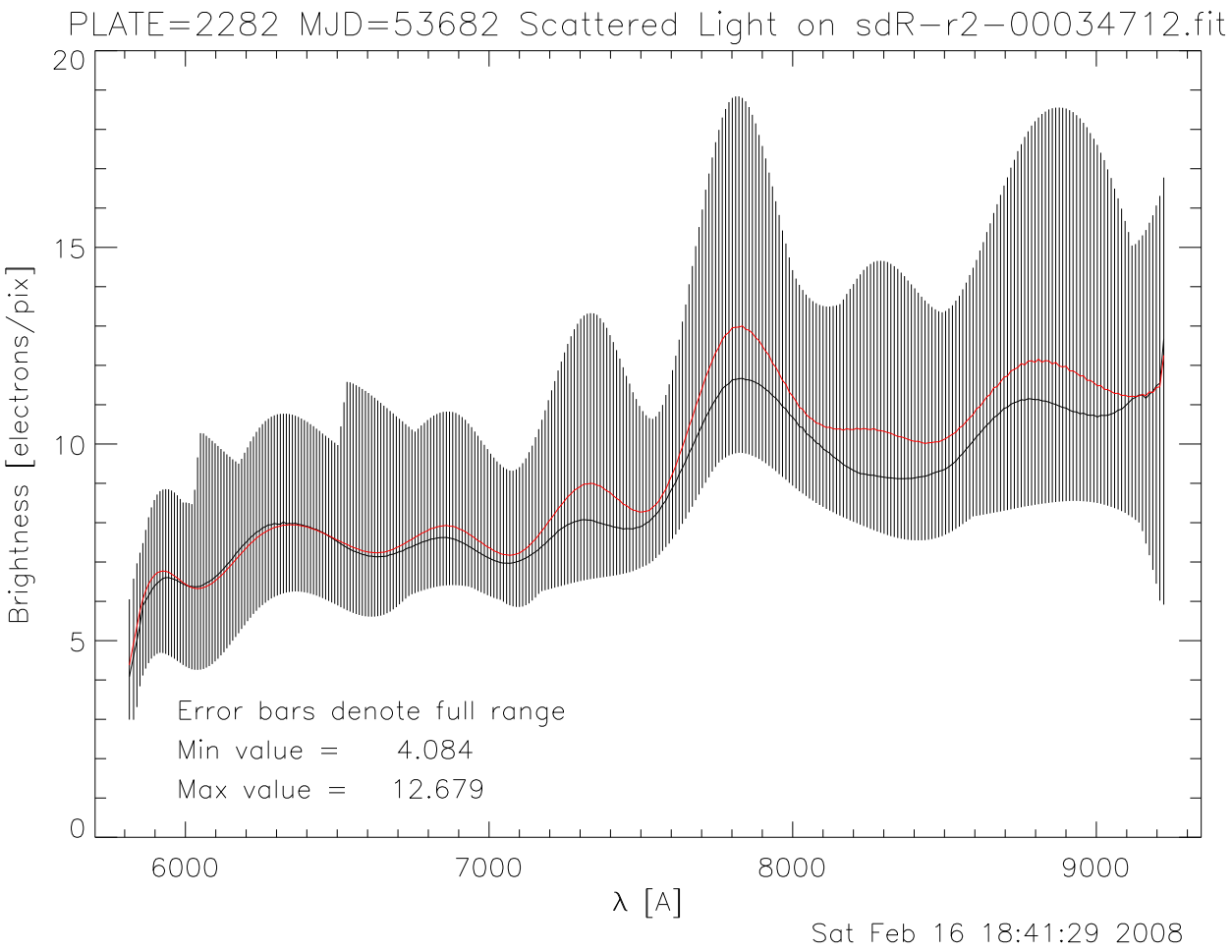

PLATE=2282 MJD=53682 sdR-r2-00034711.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.40 %
Fiber number
Focal Distance [mm]
Airmass

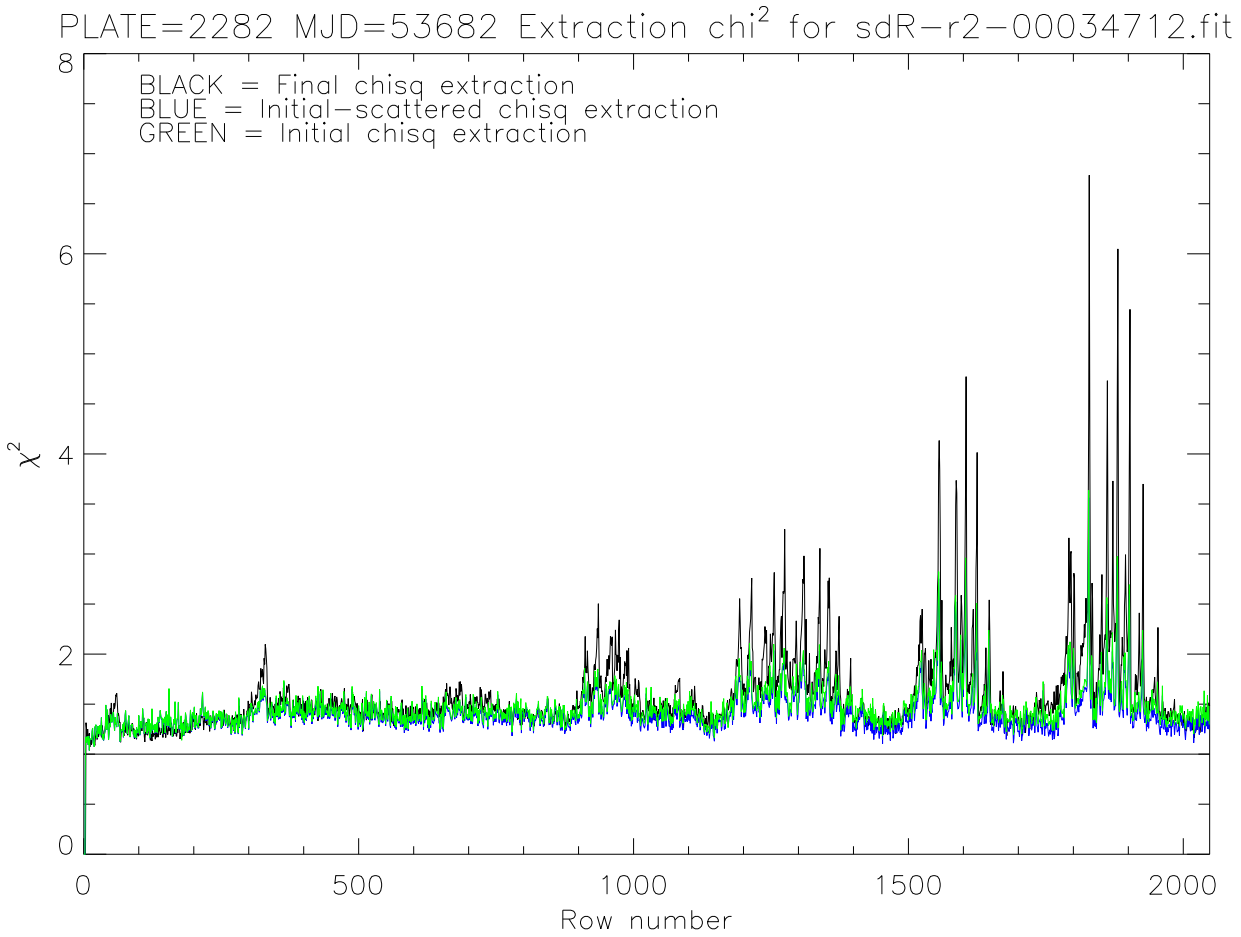

PLATE=2282 MJD=53682 Fiber−Flats for sdR−r2−00034709.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.332
Max value = 1.195
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sat Feb 16 18:37:40 2008

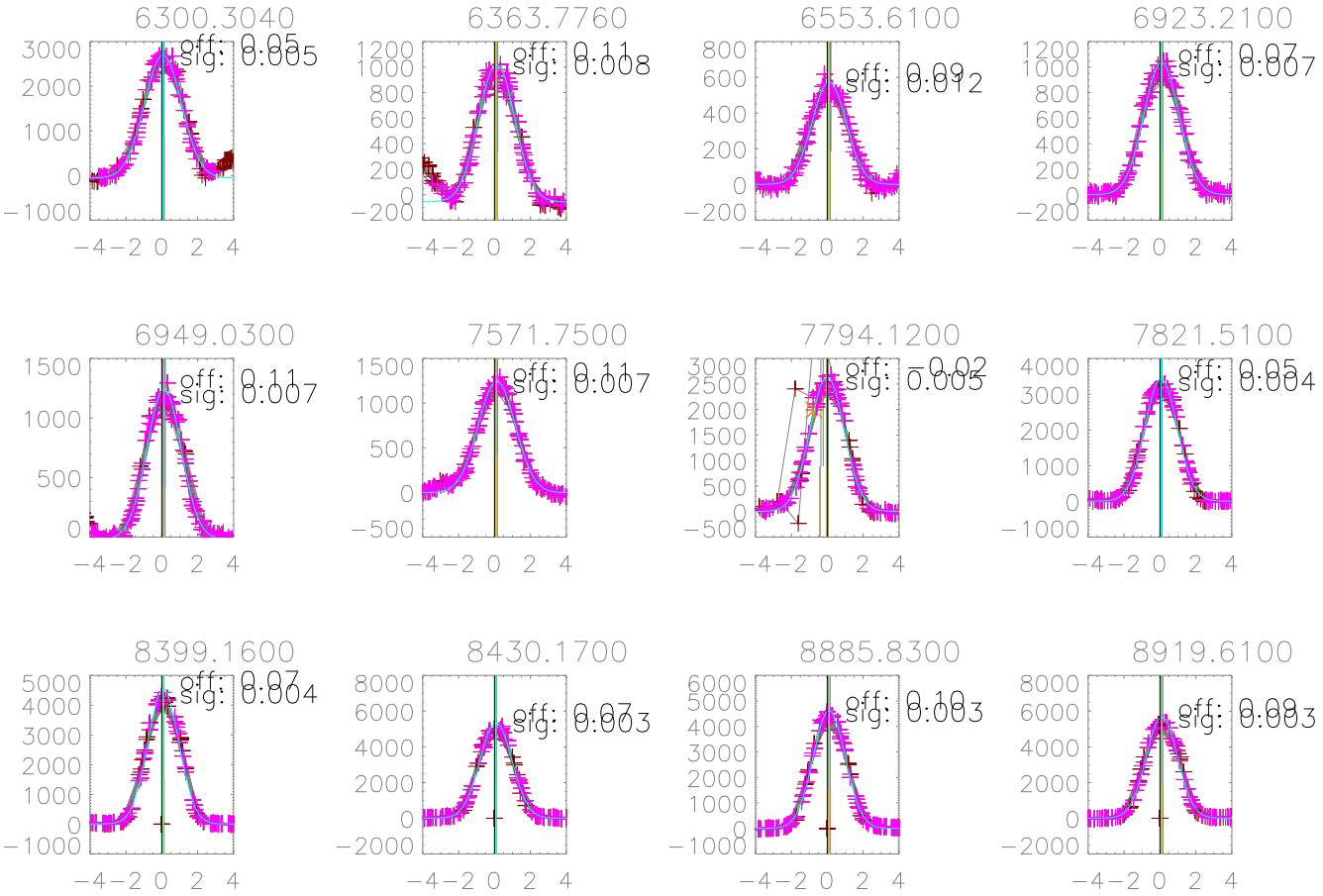

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r2-00034712.fi
50.9
36.4
36.4
21.8
21.8
7.3
7.3
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

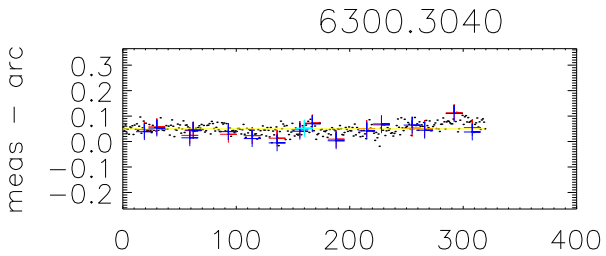

PLATE=2282 MJD=53682 Scattered Light before halo removal on sdR-r2-00034712.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 5% range
Min value = 4.224
Max value = 48.978
Sat Feb 16 18:38:33 2008

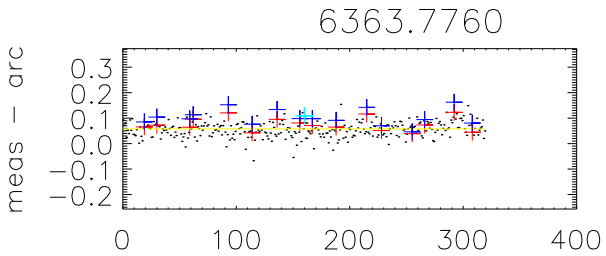

PLATE=2282 MJD=53682 Scattered Light on sdR-r2-00034712.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
12.7
9.1
5.5

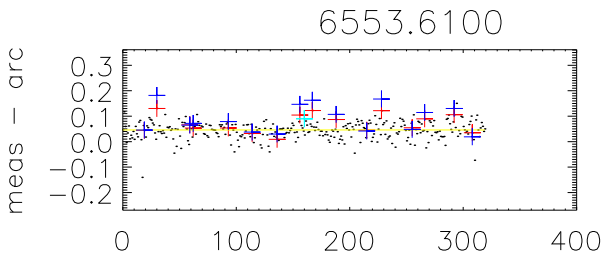

PLATE=2282 MJD=53682 Scattered Light on sdR-r2-00034712.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.084
Max value = 12.679
Sat Feb 16 18:41:29 2008

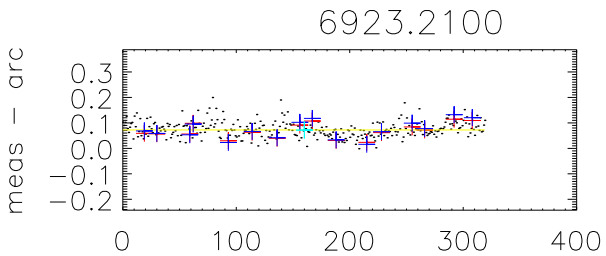

PLATE=2282 MJD=53682 Extraction chi^2 for sdR-r2-00034712.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

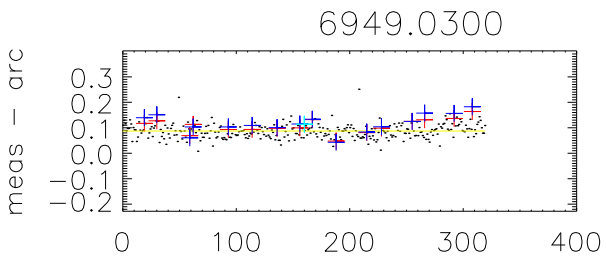

6300.3040
off: 0.05
sig: 0.005
6363.7760
off: 0.11
sig: 0.008
6553.6100
off: 0.09
sig: 0.012
6923.2100
off: 0.07
sig: 0.007
6949.0300
off: 0.11
sig: 0.007
7571.7500
off: 0.11
sig: 0.007
7794.1200
off: −0.02
sig: 0.005
7821.5100
off: 0.05
sig: 0.004
8399.1600
off: 0.07
sig: 0.004
8430.1700
off: 0.07
sig: 0.003
8885.8300
off: 0.10
sig: 0.003
8919.6100
off: 0.08
sig: 0.003

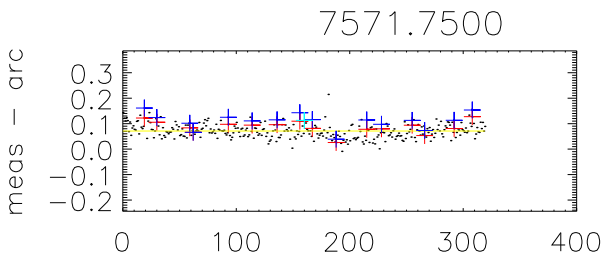

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

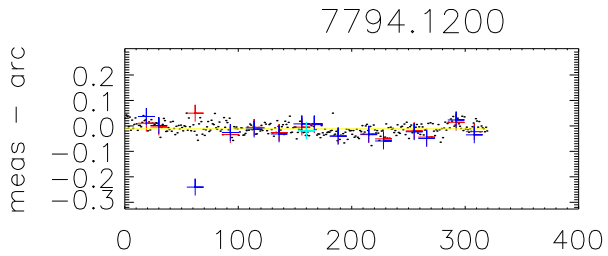

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

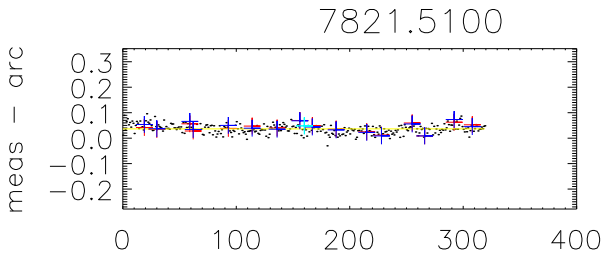

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

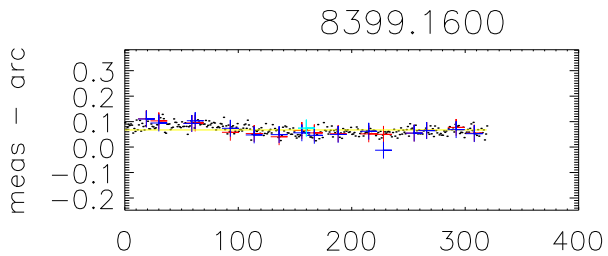

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

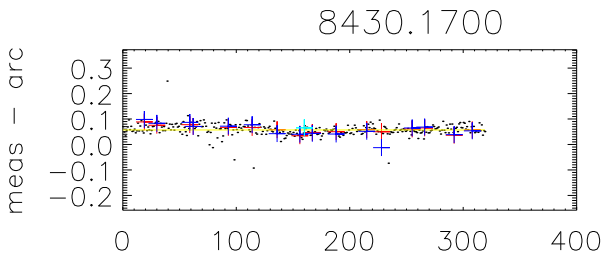

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

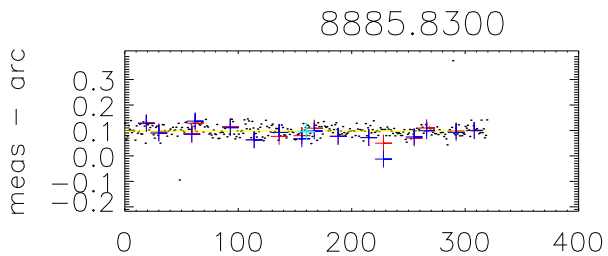

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

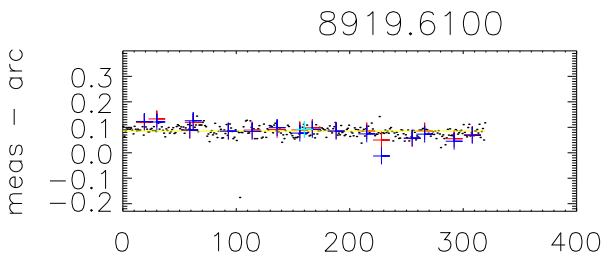

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

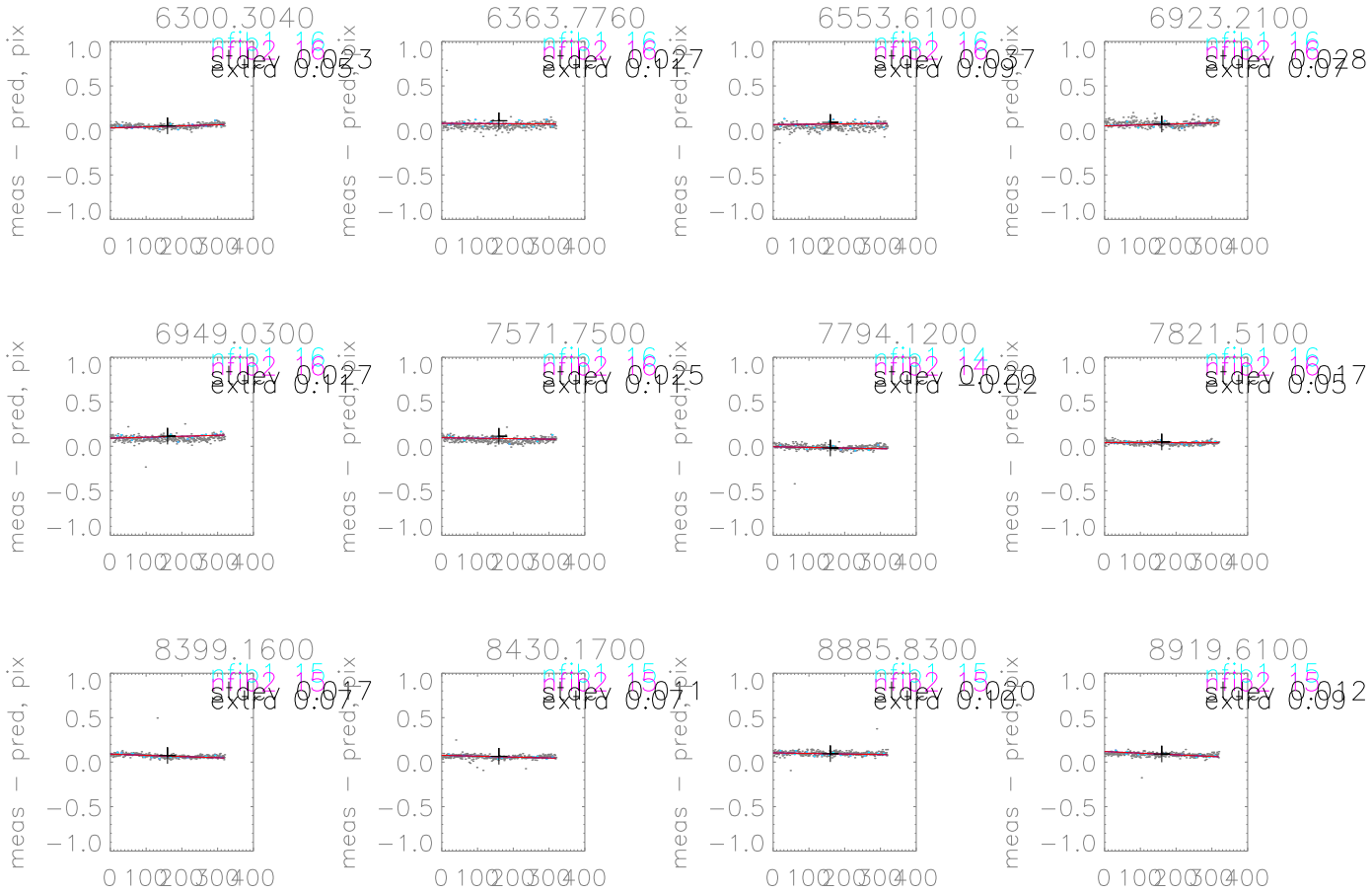

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

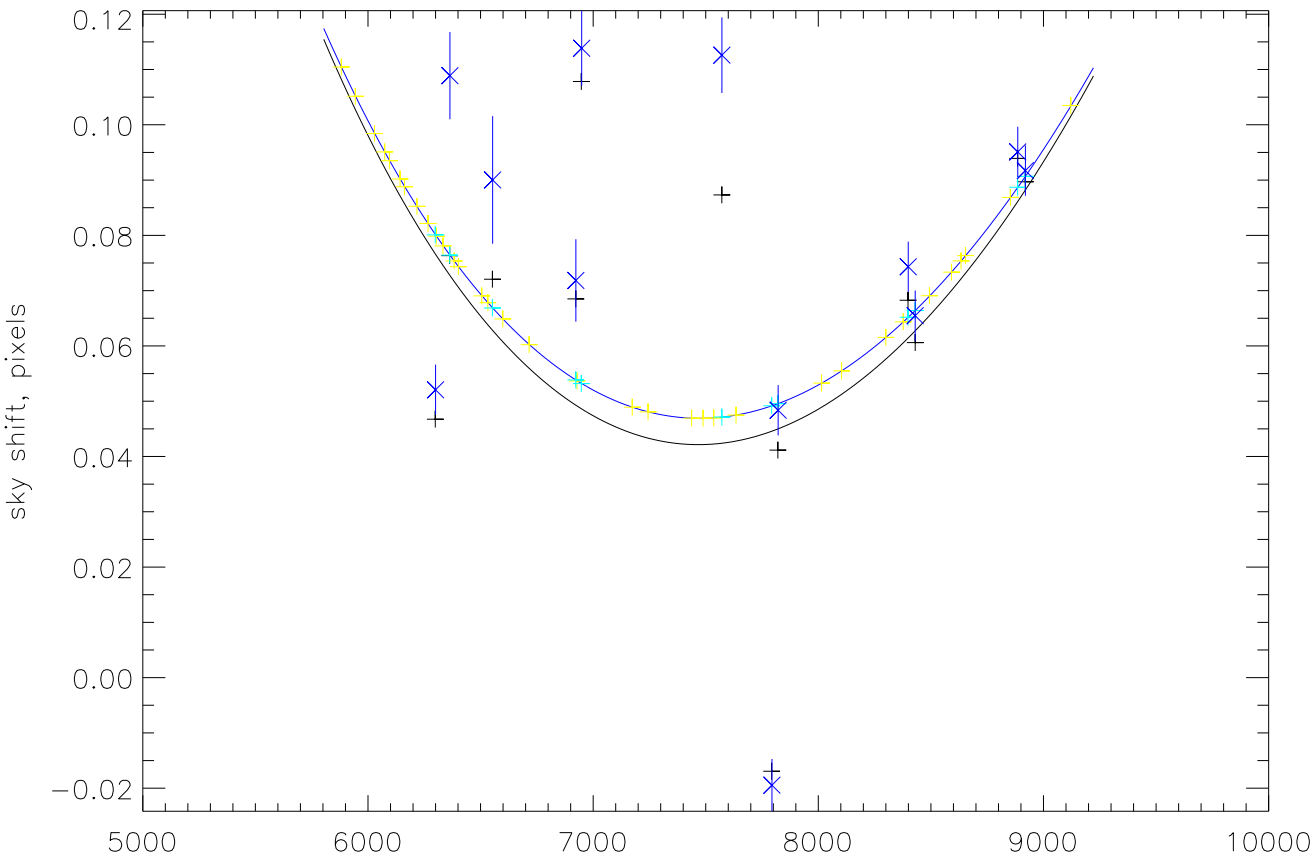

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

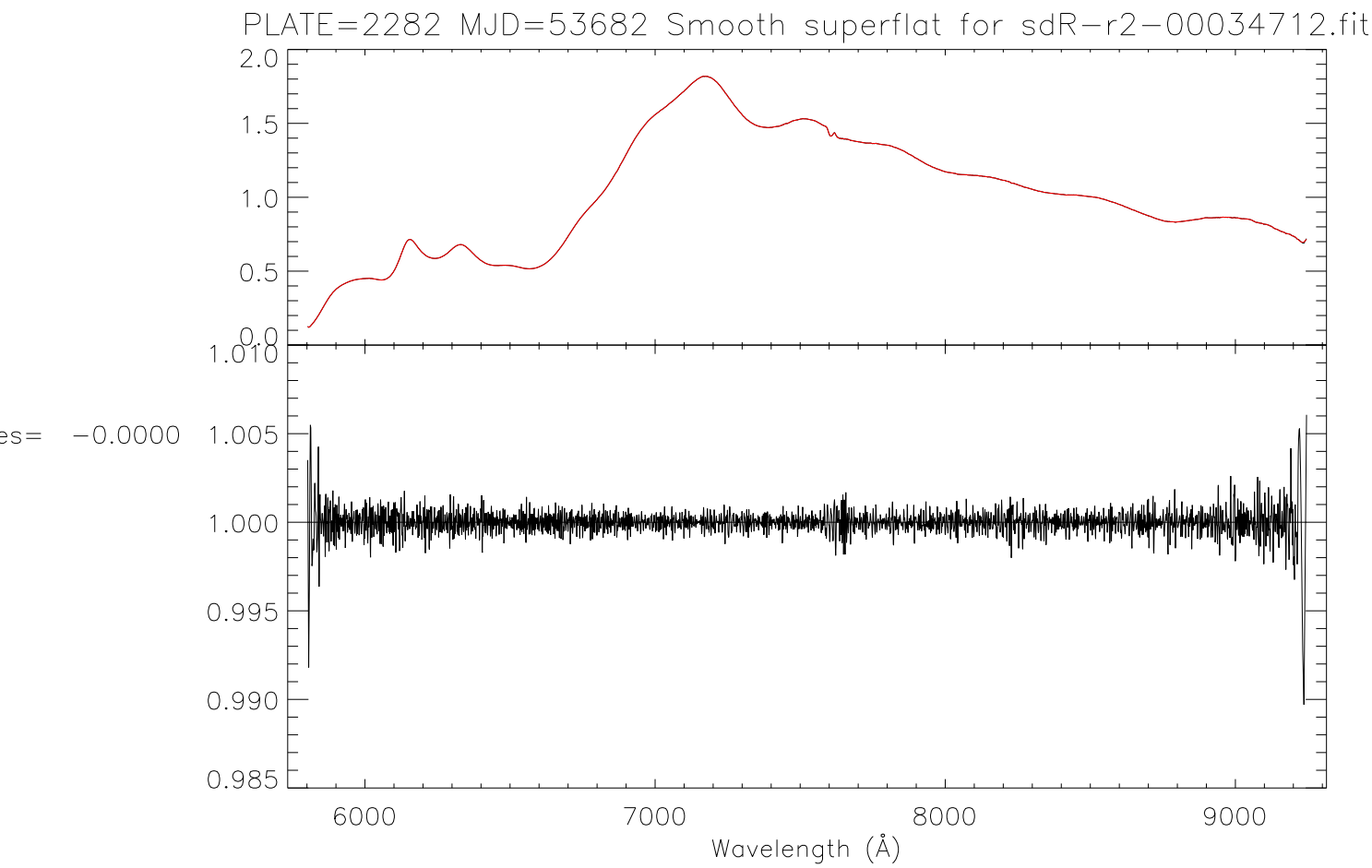

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

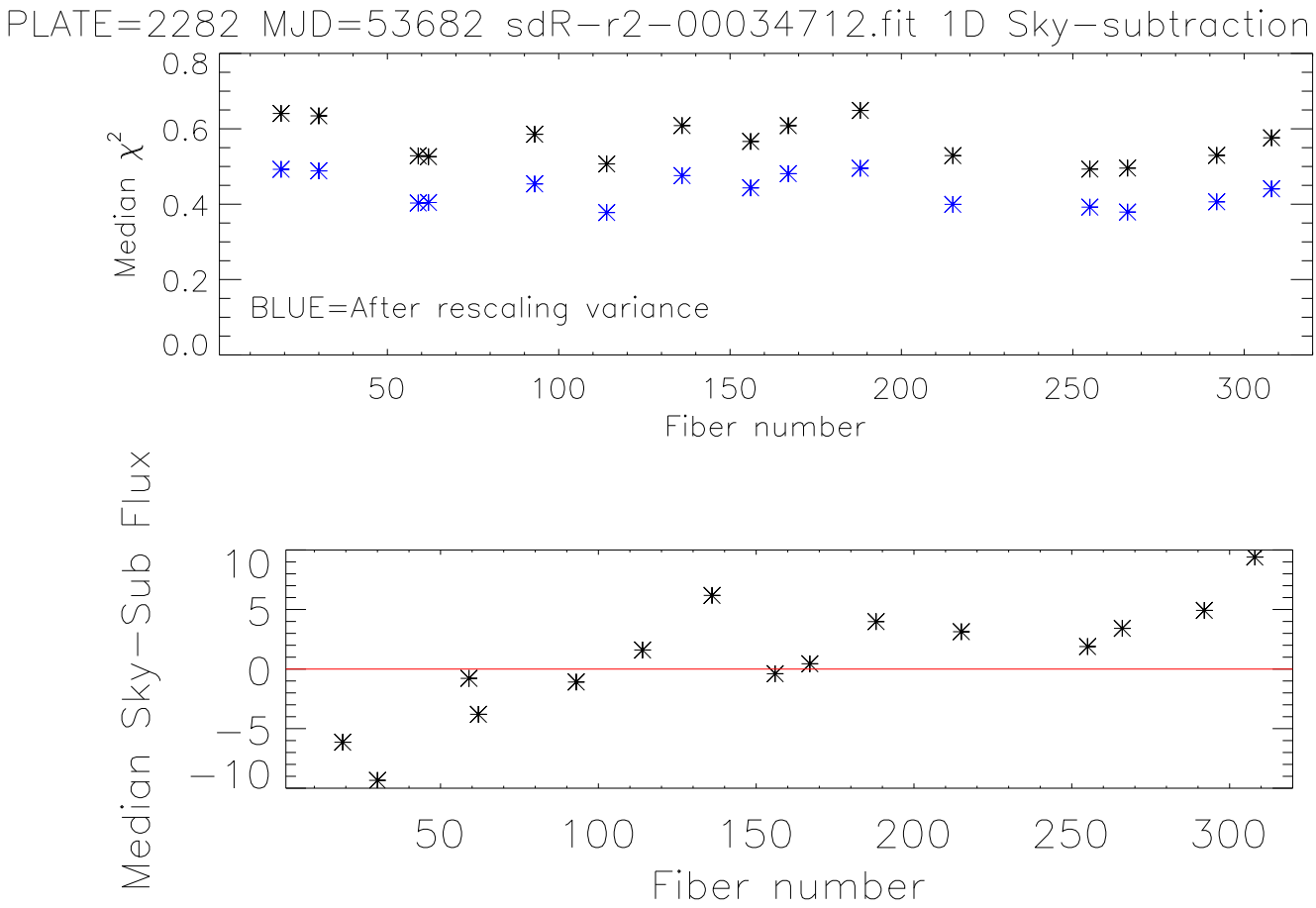

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

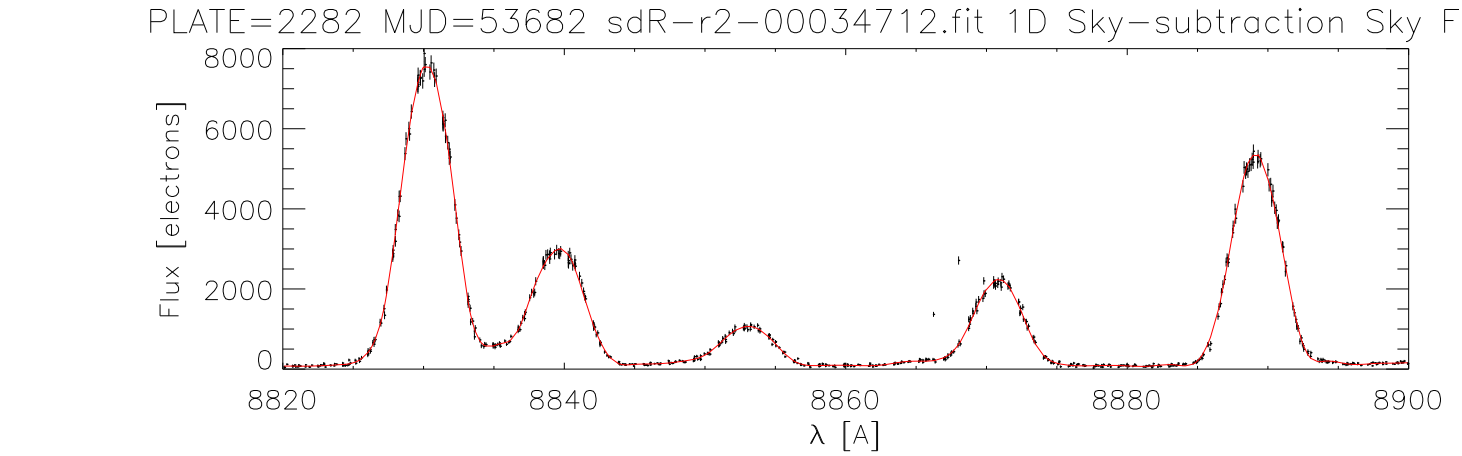

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

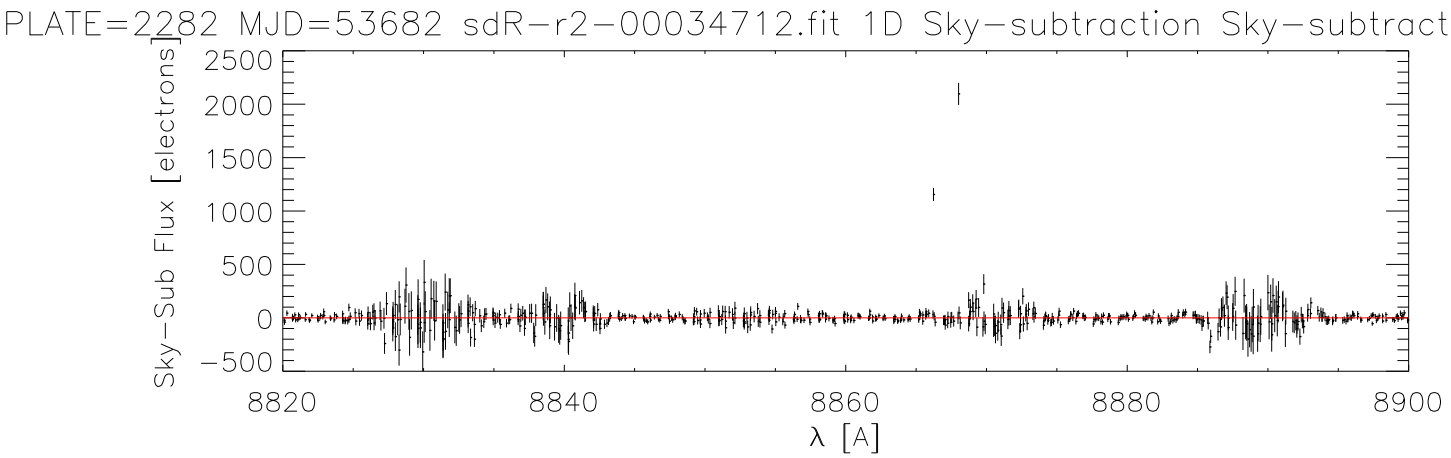

6300.3040
mfib1 16
mfib2 16
stdev 0.023
extra 0.053
6363.7760
mfib1 16
mfib2 16
stdev 0.027
extra 0.112
6553.6100
mfib1 16
mfib2 16
stdev 0.037
extra 0.099
6923.2100
mfib1 16
mfib2 16
stdev 0.028
extra 0.07
6949.0300
mfib1 16
mfib2 16
stdev 0.027
extra 0.112
7571.7500
mfib1 16
mfib2 16
stdev 0.025
extra 0.112
7794.1200
mfib1 14
mfib2 16
stdev 0.030
extra −0.02
7821.5100
mfib1 16
mfib2 16
stdev 0.017
extra 0.05
8399.1600
mfib1 15
mfib2 15
stdev 0.017
extra 0.07
8430.1700
mfib1 15
mfib2 15
stdev 0.011
extra 0.07
8885.8300
mfib1 15
mfib2 15
stdev 0.030
extra 0.12
8919.6100
mfib1 15
mfib2 15
stdev 0.012
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

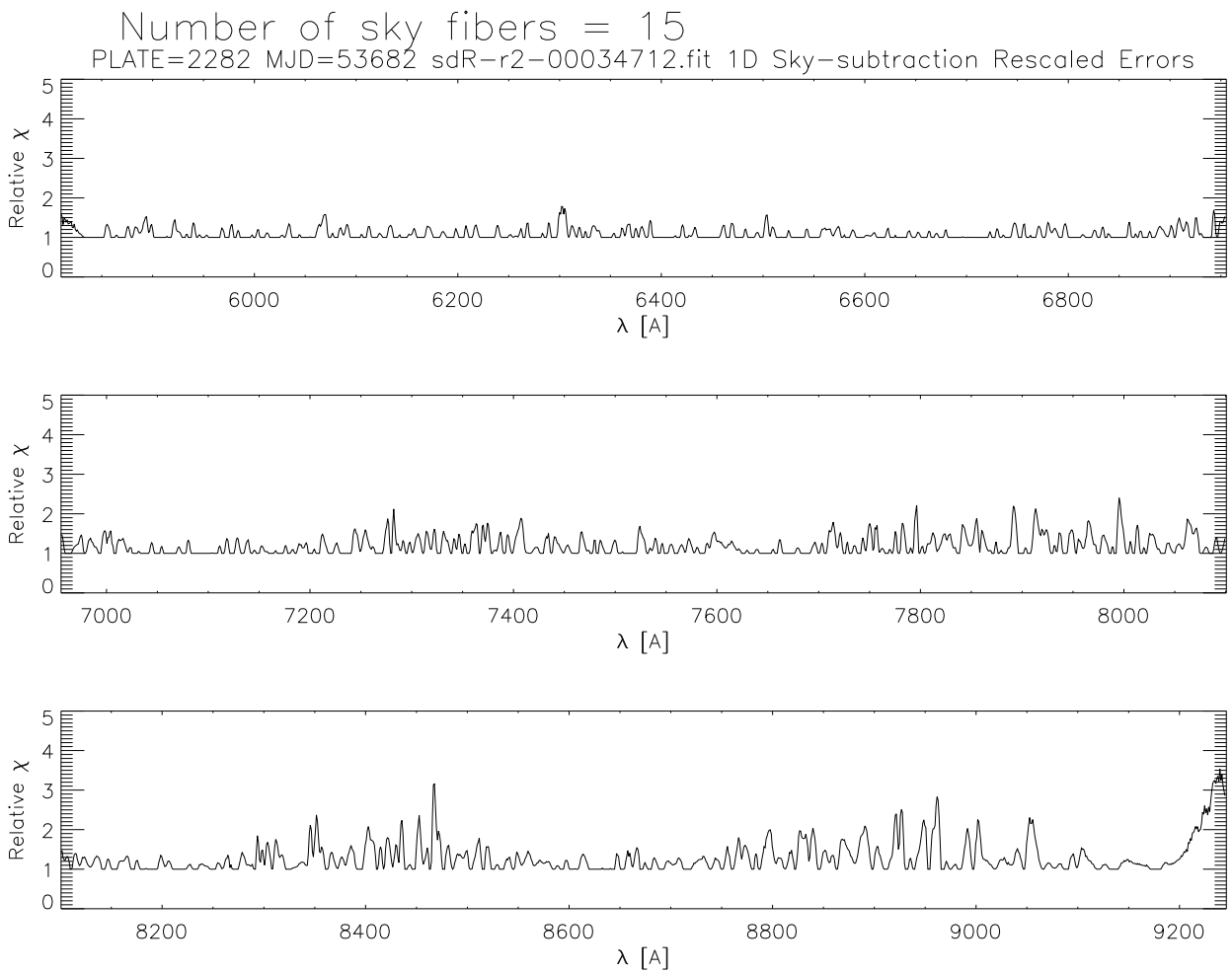

0.12
0.10
0.08
0.06
0.04
0.02
0.00
−0.02
sky shift, pixels
5000
6000
7000
8000
9000
10000

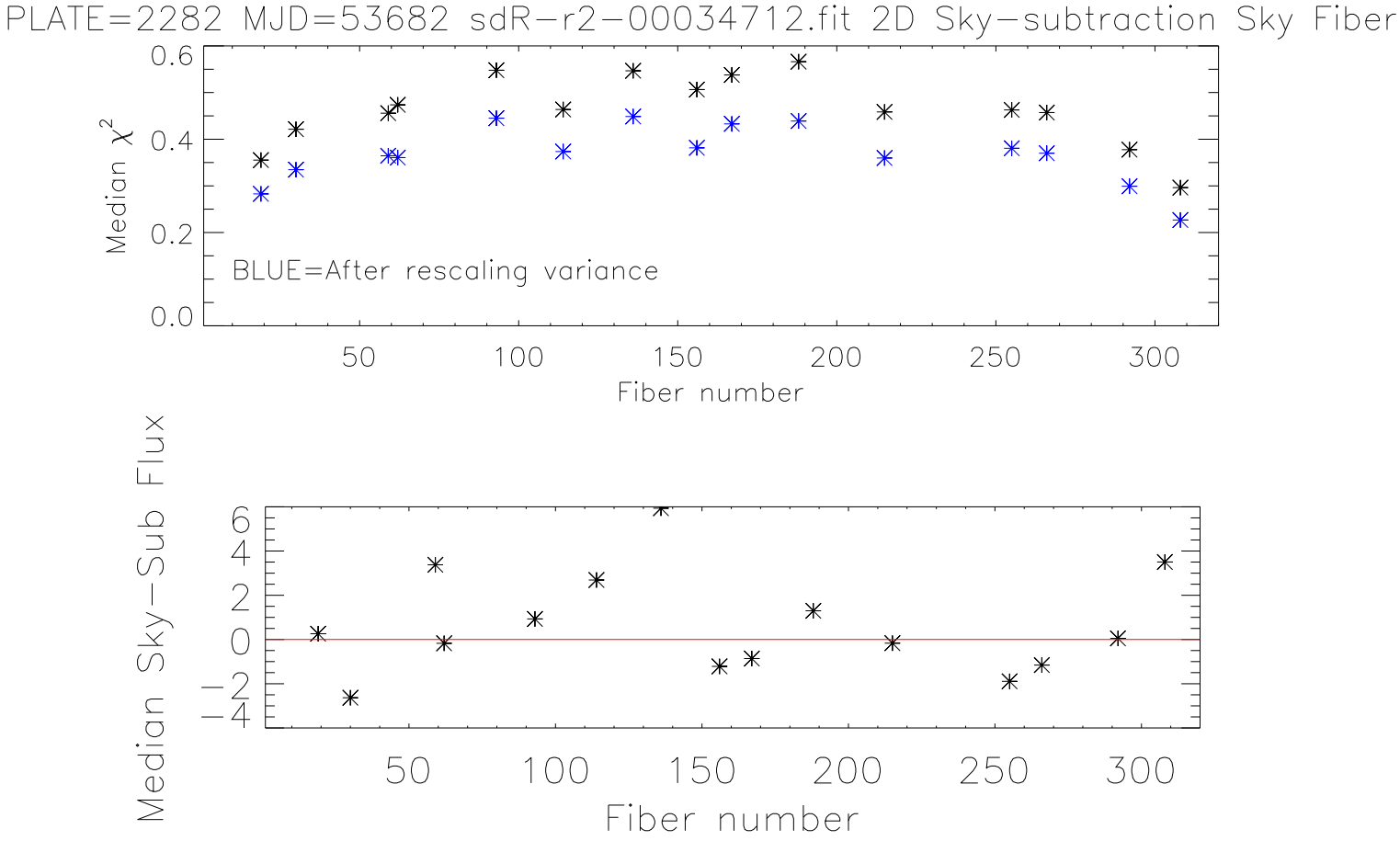

PLATE=2282 MJD=53682 Smooth superflat for sdR-r2-00034712.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

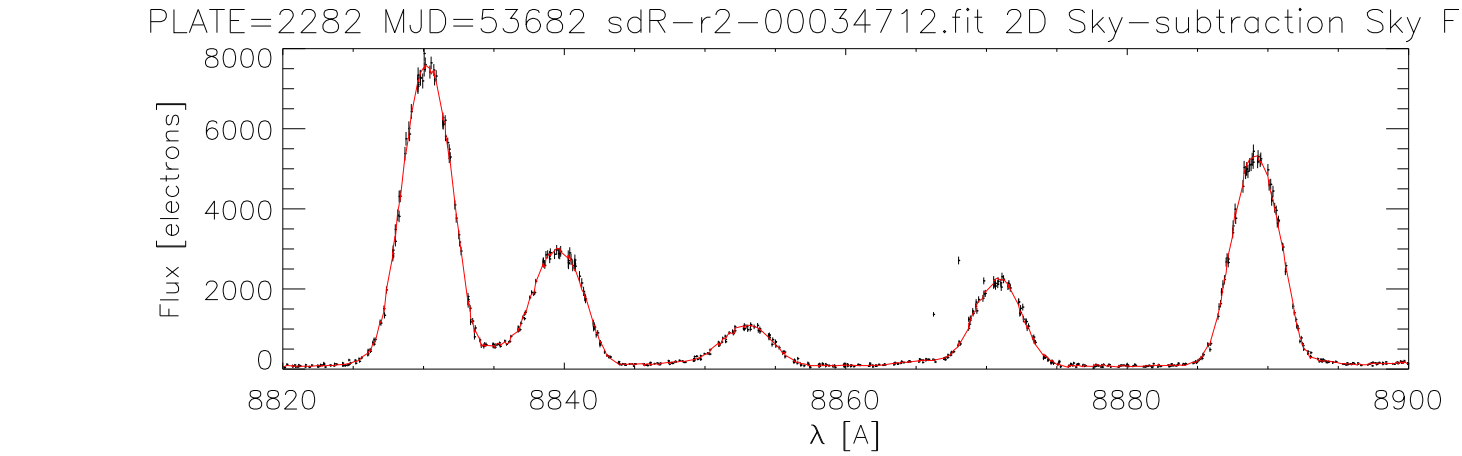

PLATE=2282 MJD=53682 sdR-r2-00034712.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

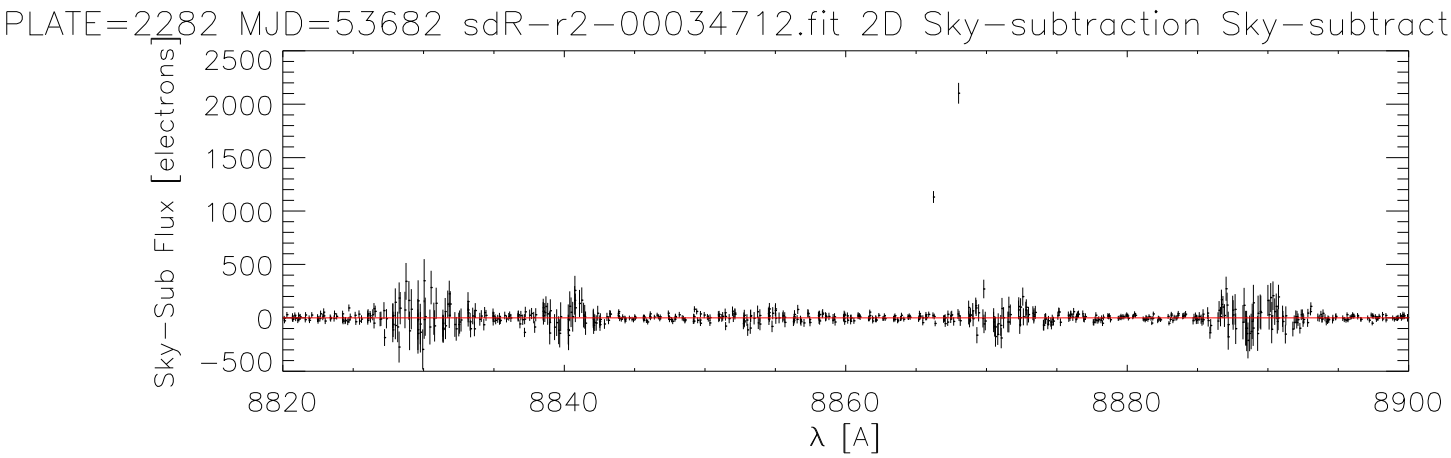

PLATE=2282 MJD=53682 sdR-r2-00034712.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

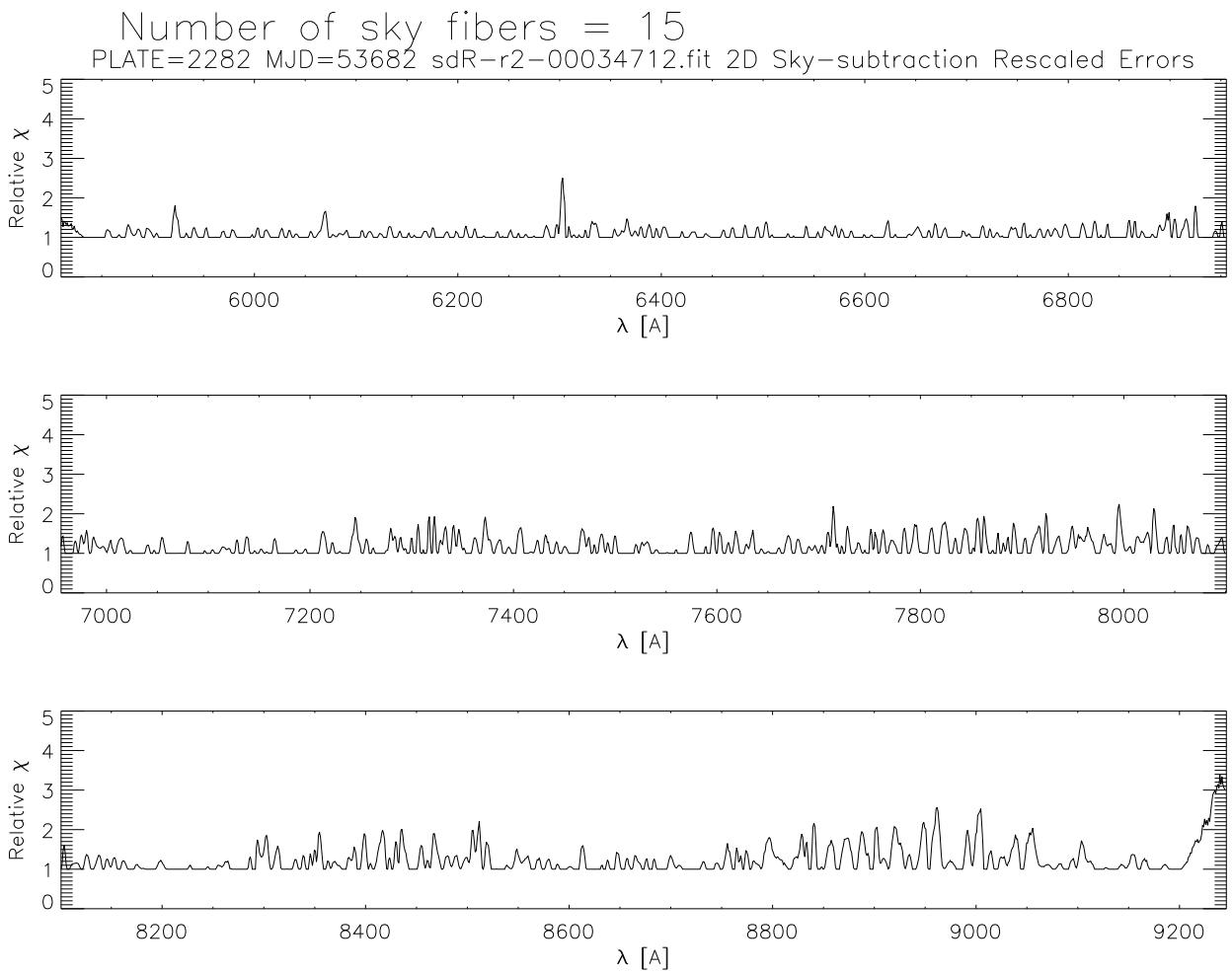

PLATE=2282 MJD=53682 sdR-r2-00034712.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

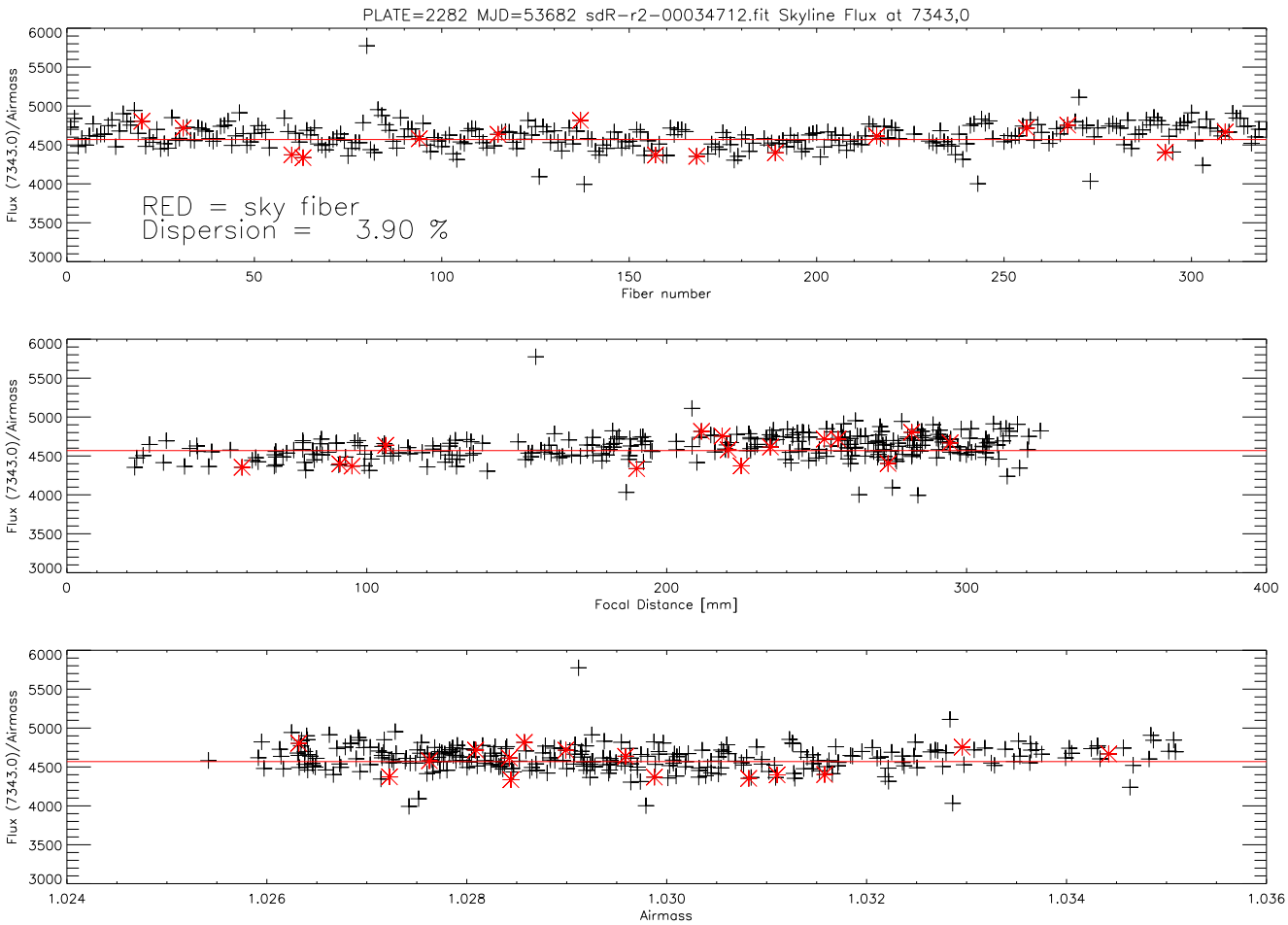

Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-r2-00034712.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

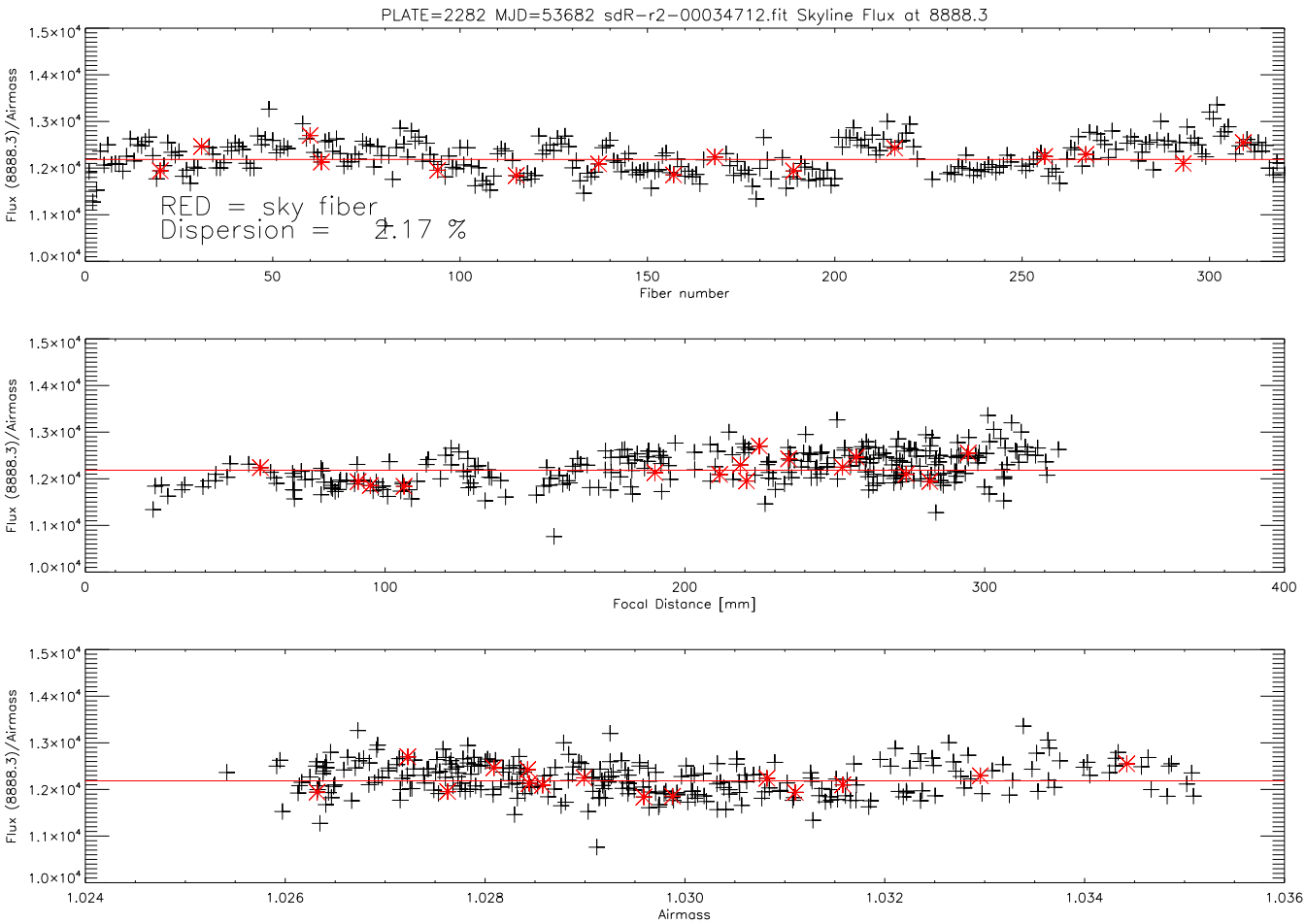

PLATE=2282 MJD=53682 sdR-r2-00034712.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number


PLATE=2282 MJD=53682 sdR-r2-00034712.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2282 MJD=53682 sdR-r2-00034712.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=2282 MJD=53682 sdR-r2-00034712.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=2282 MJD=53682 sdR-r2-00034712.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.90 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=2282 MJD=53682 sdR-r2-00034712.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.17 %
Fiber number
Focal Distance [mm]
Airmass