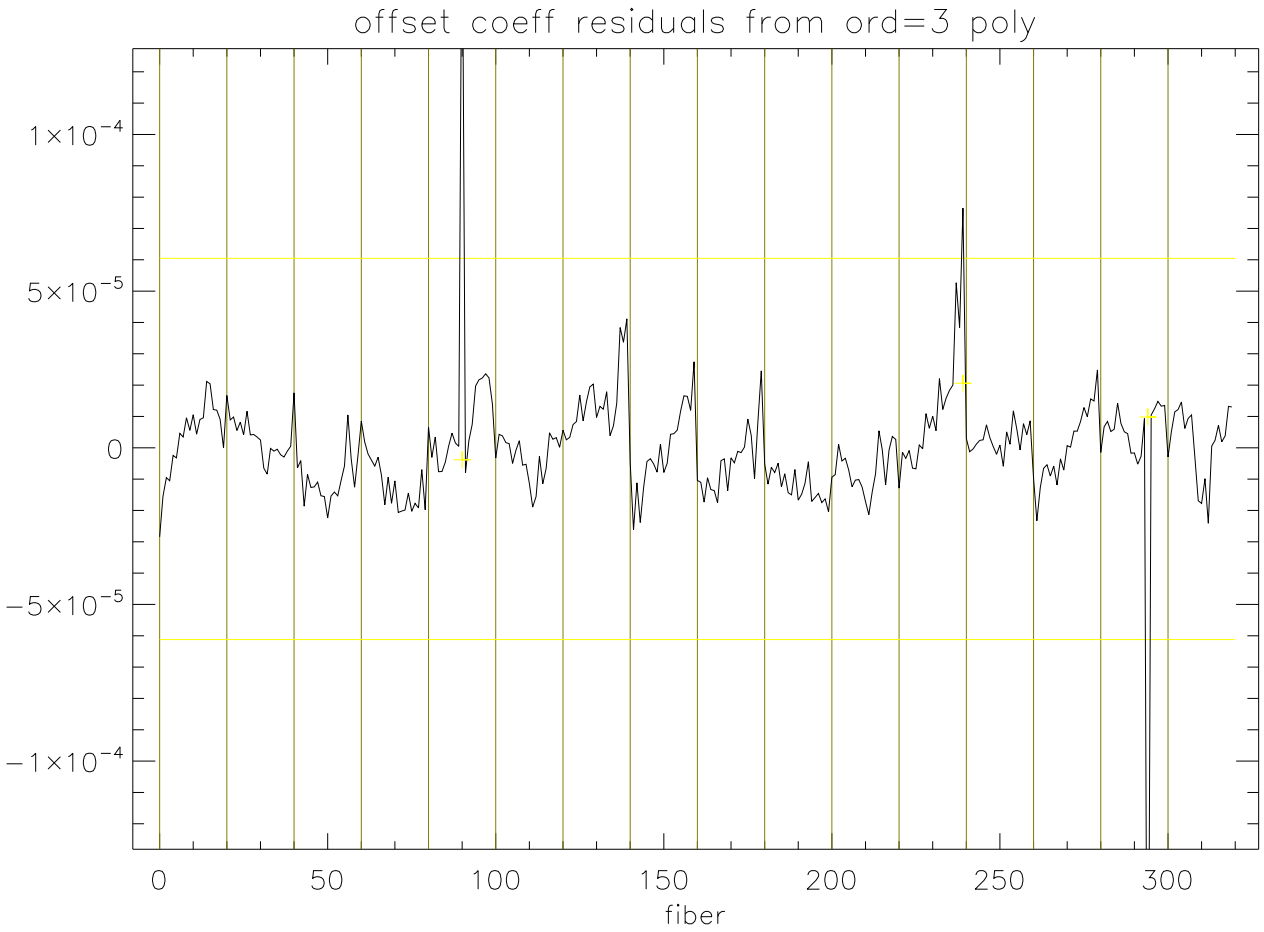
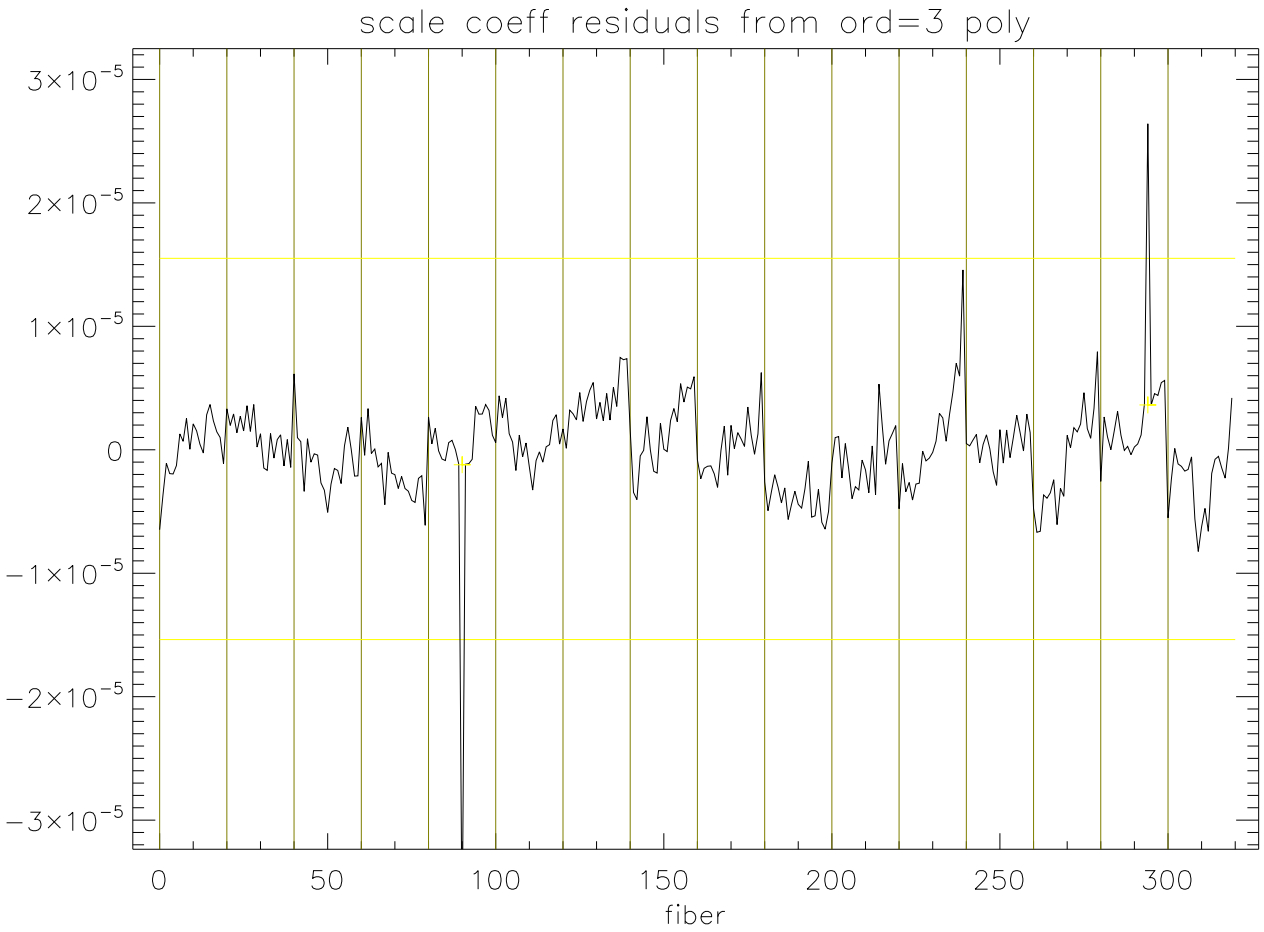
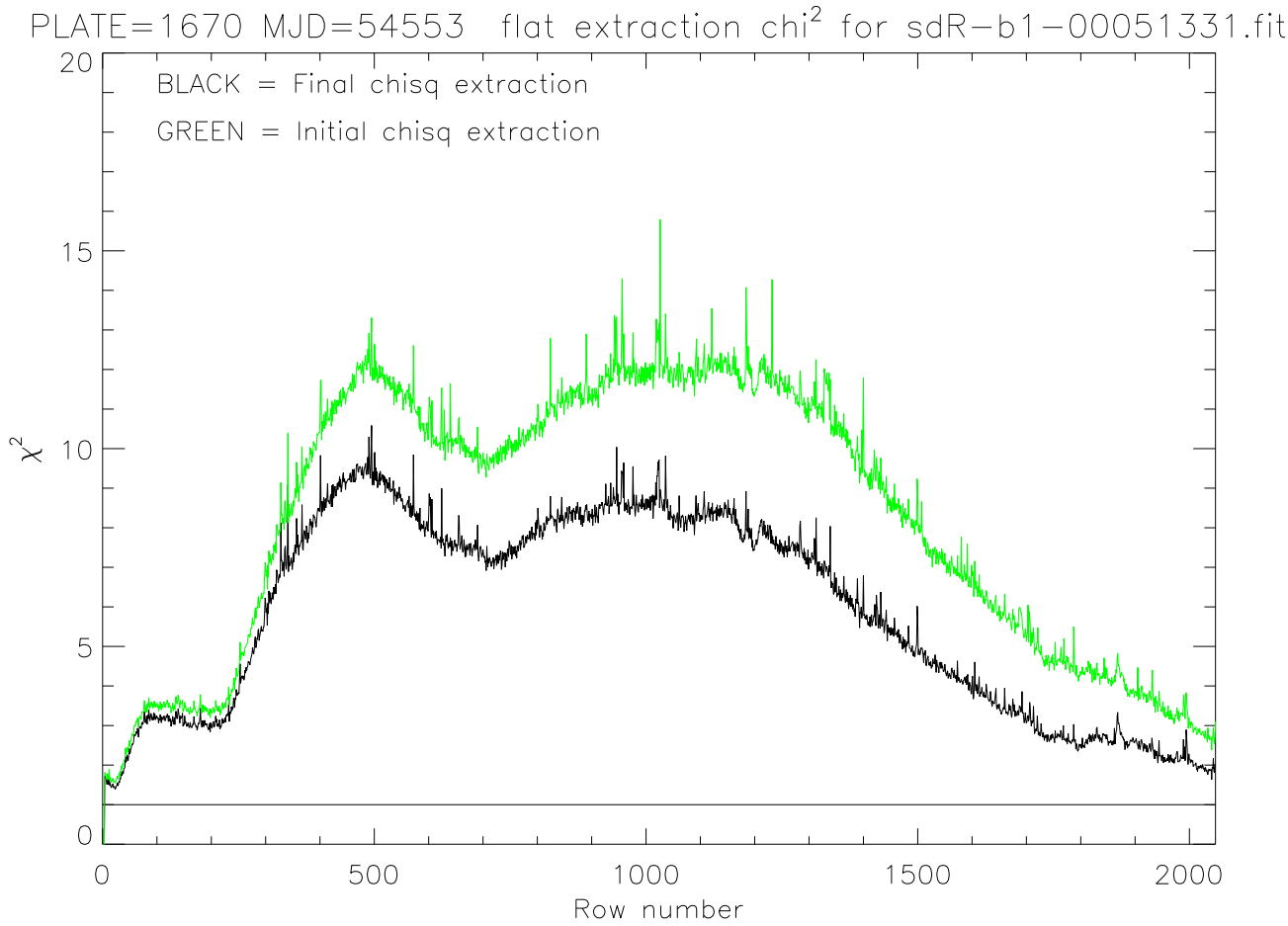
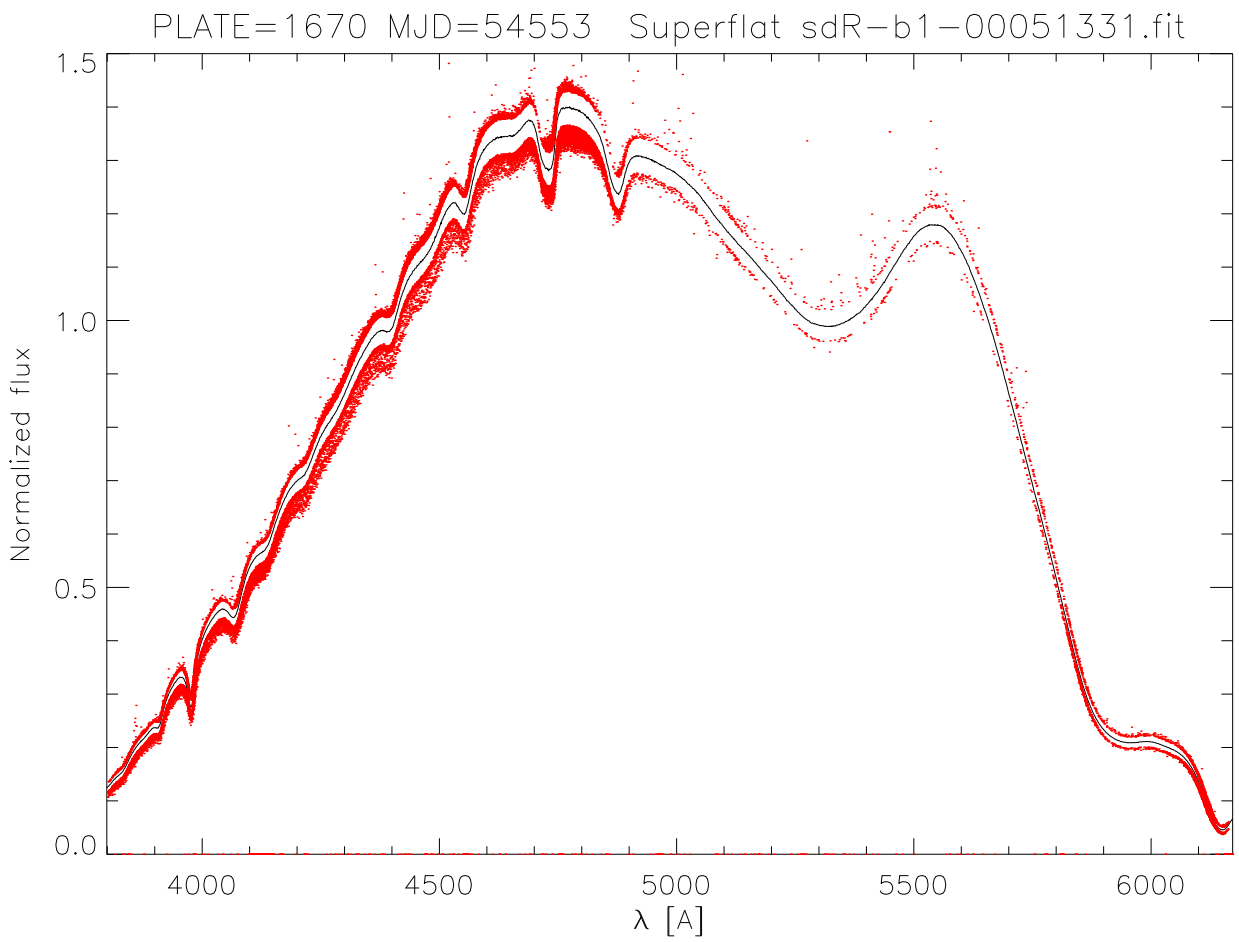
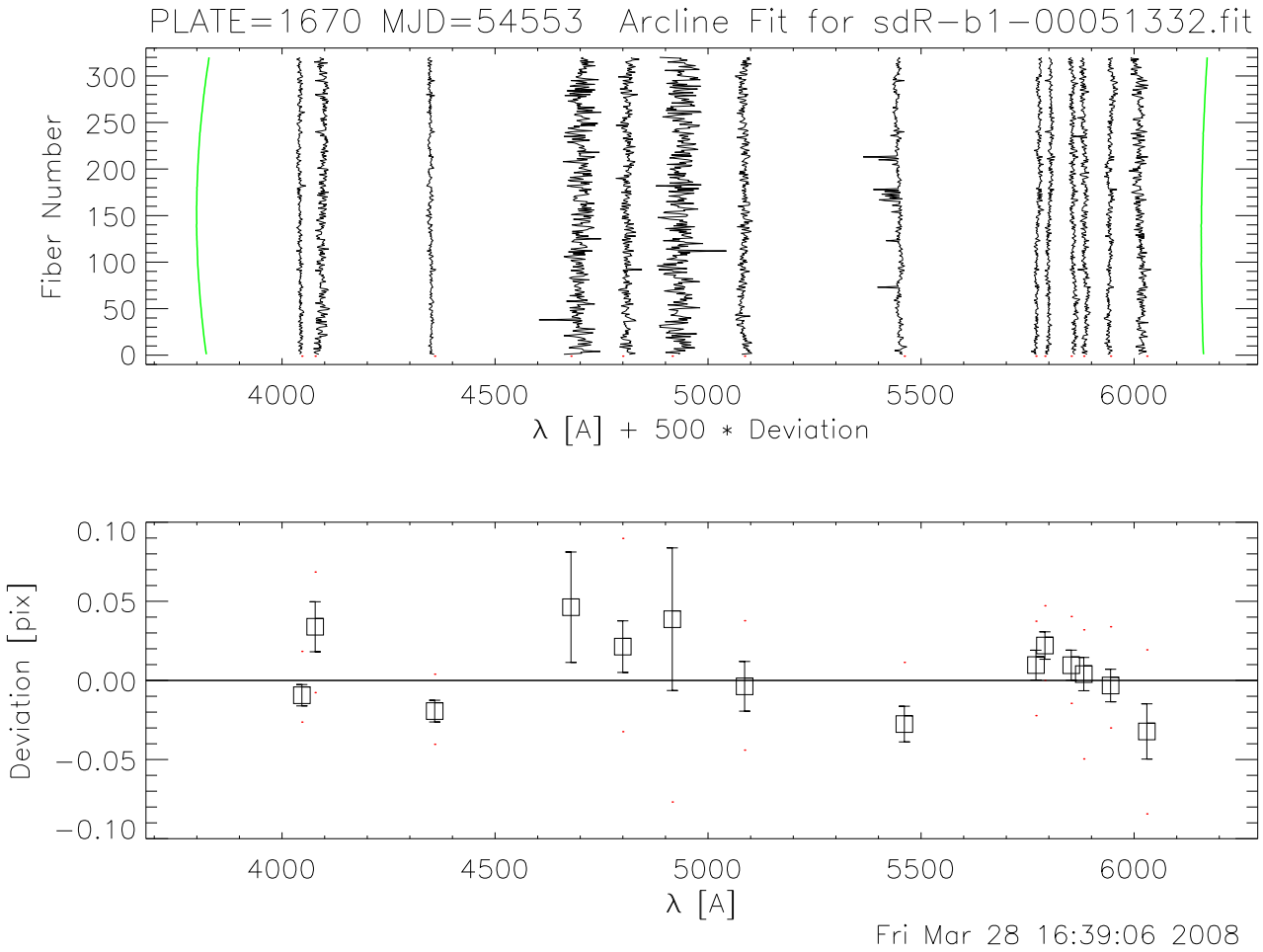
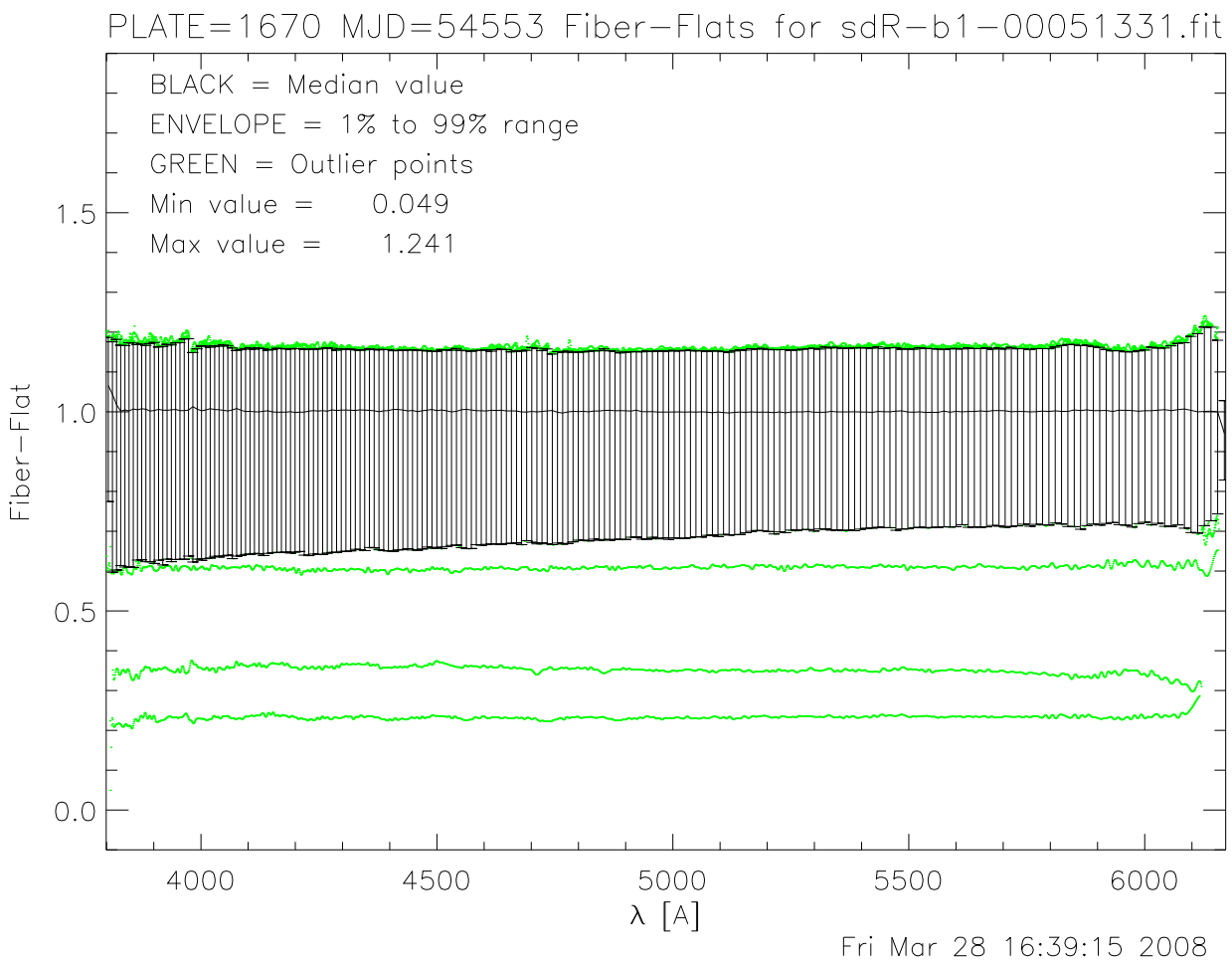

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

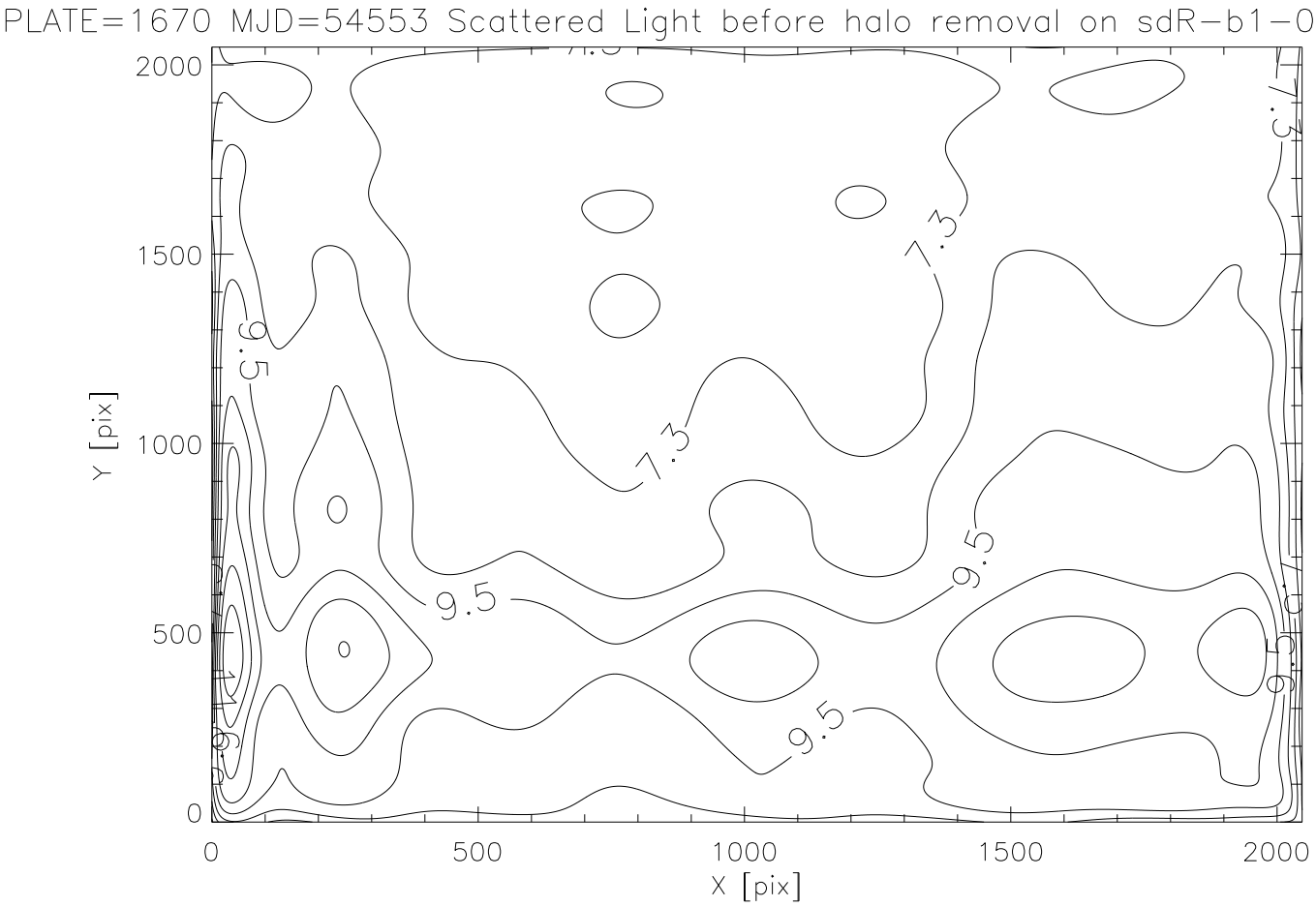

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

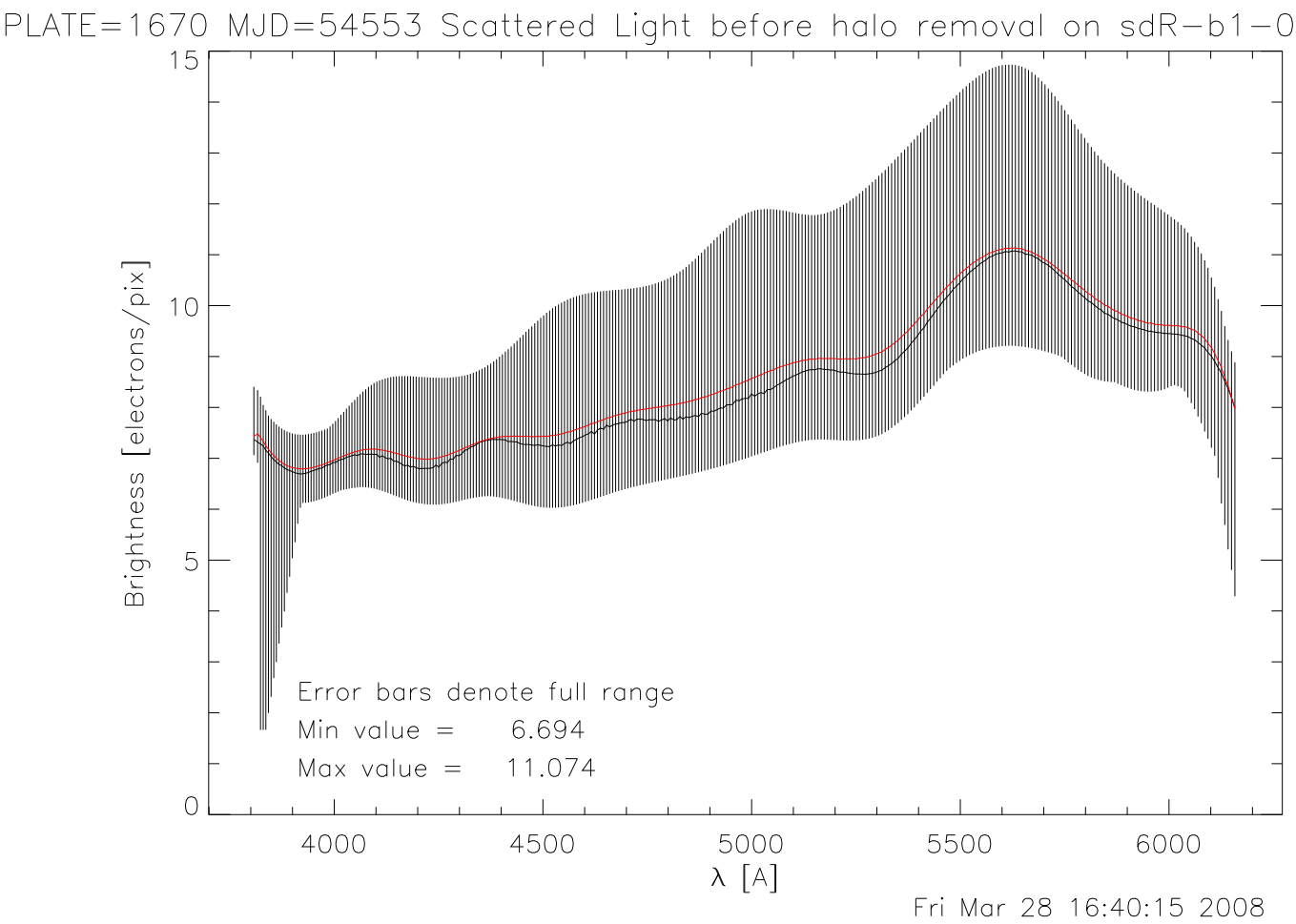

PLATE=1670 MJD=54553 flat extraction chi^2 for sdR-b1-00051331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

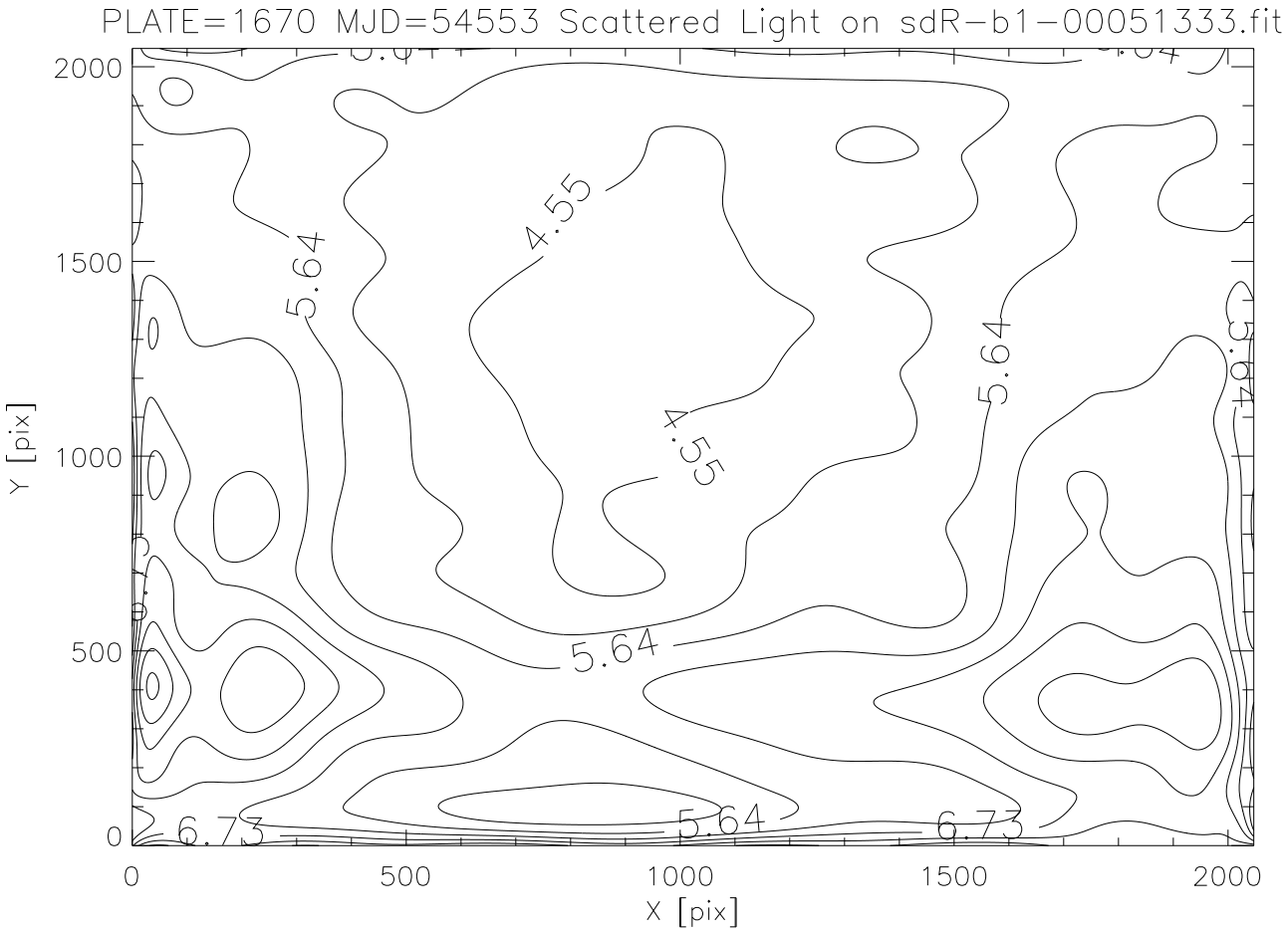

PLATE=1670 MJD=54553 Superflat sdR-b1-00051331.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

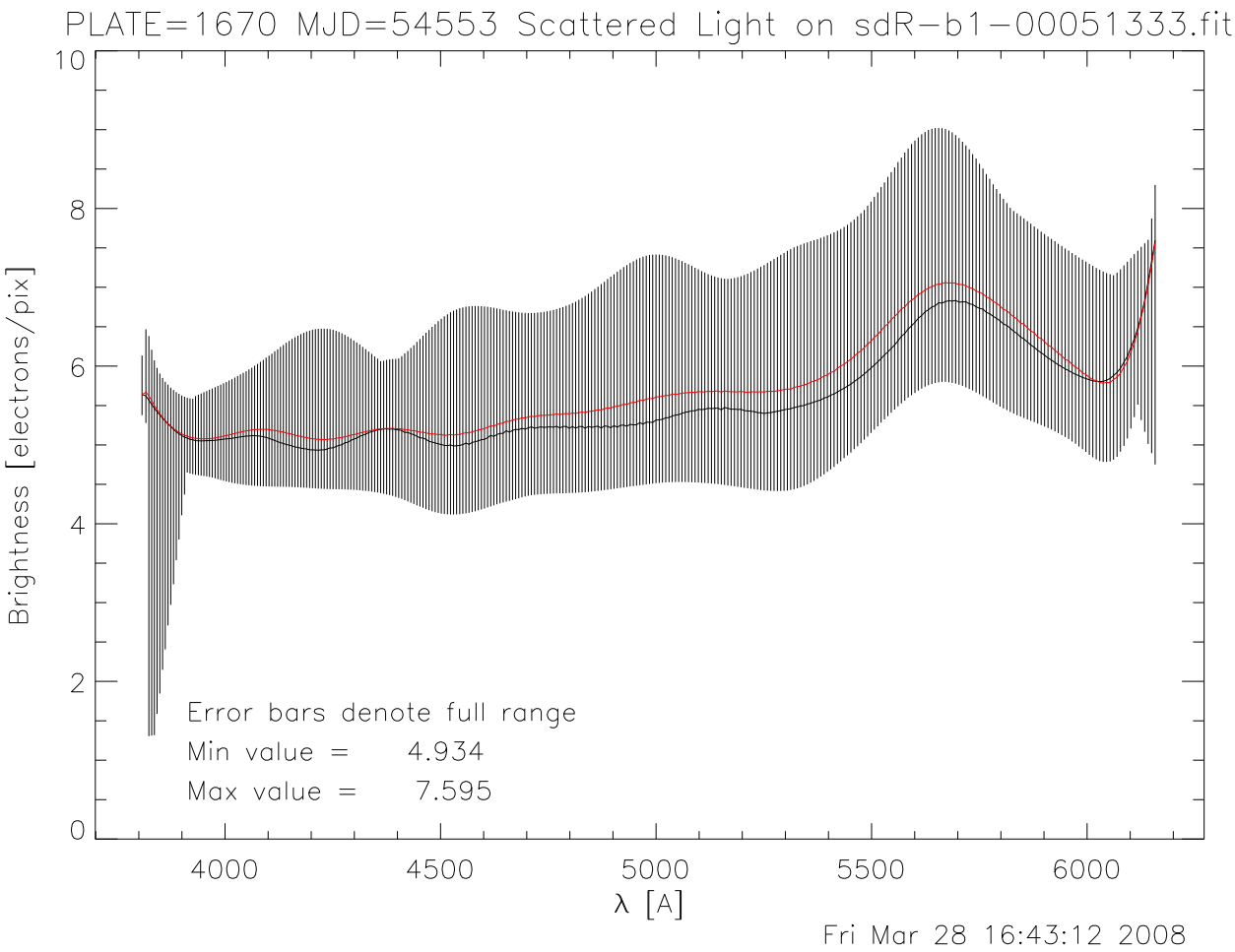

PLATE=1670 MJD=54553 Arcline Fit for sdR-b1-00051332.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:39:06 2008

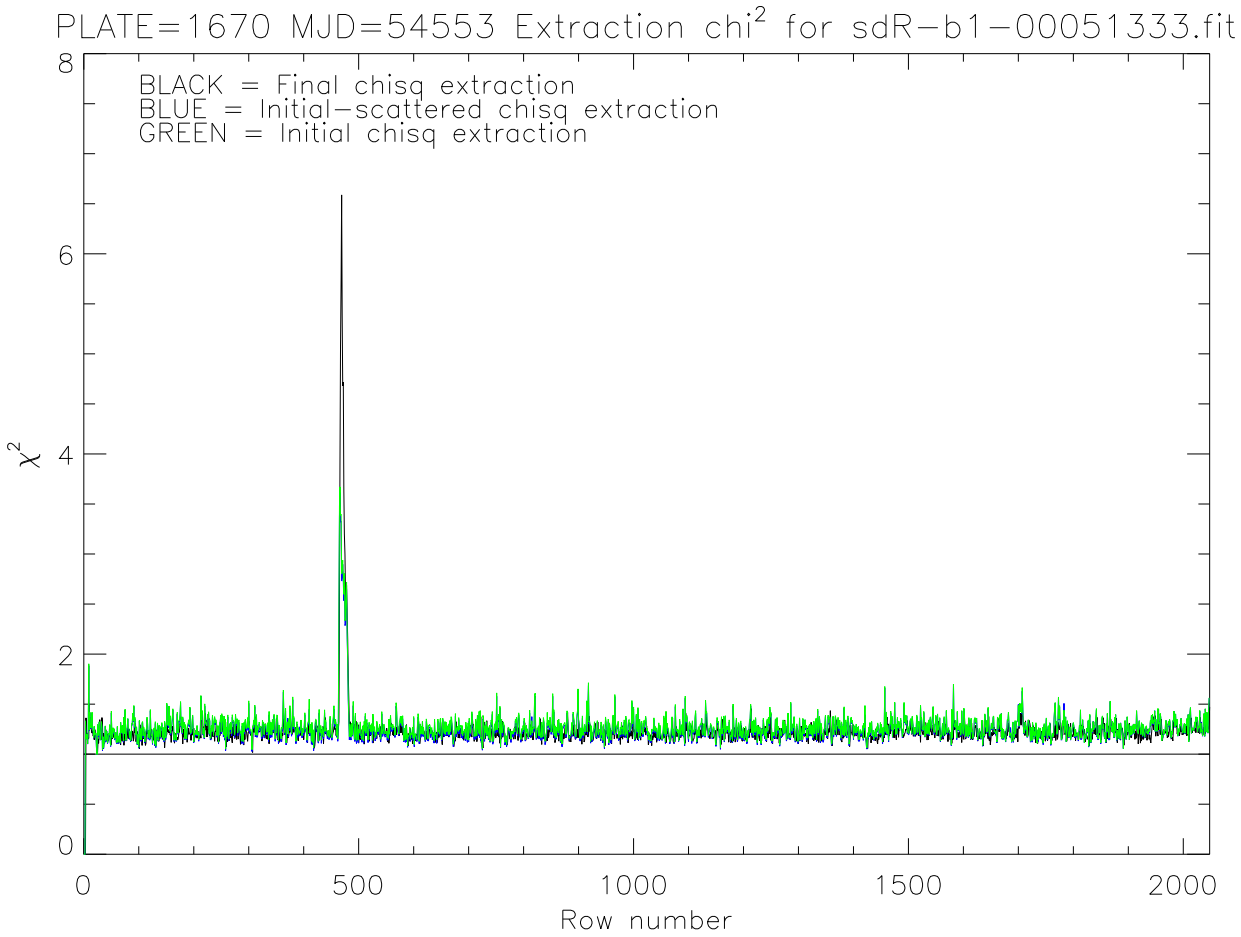

PLATE=1670 MJD=54553 Fiber−Flats for sdR−b1−00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.049
Max value = 1.241
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:39:15 2008

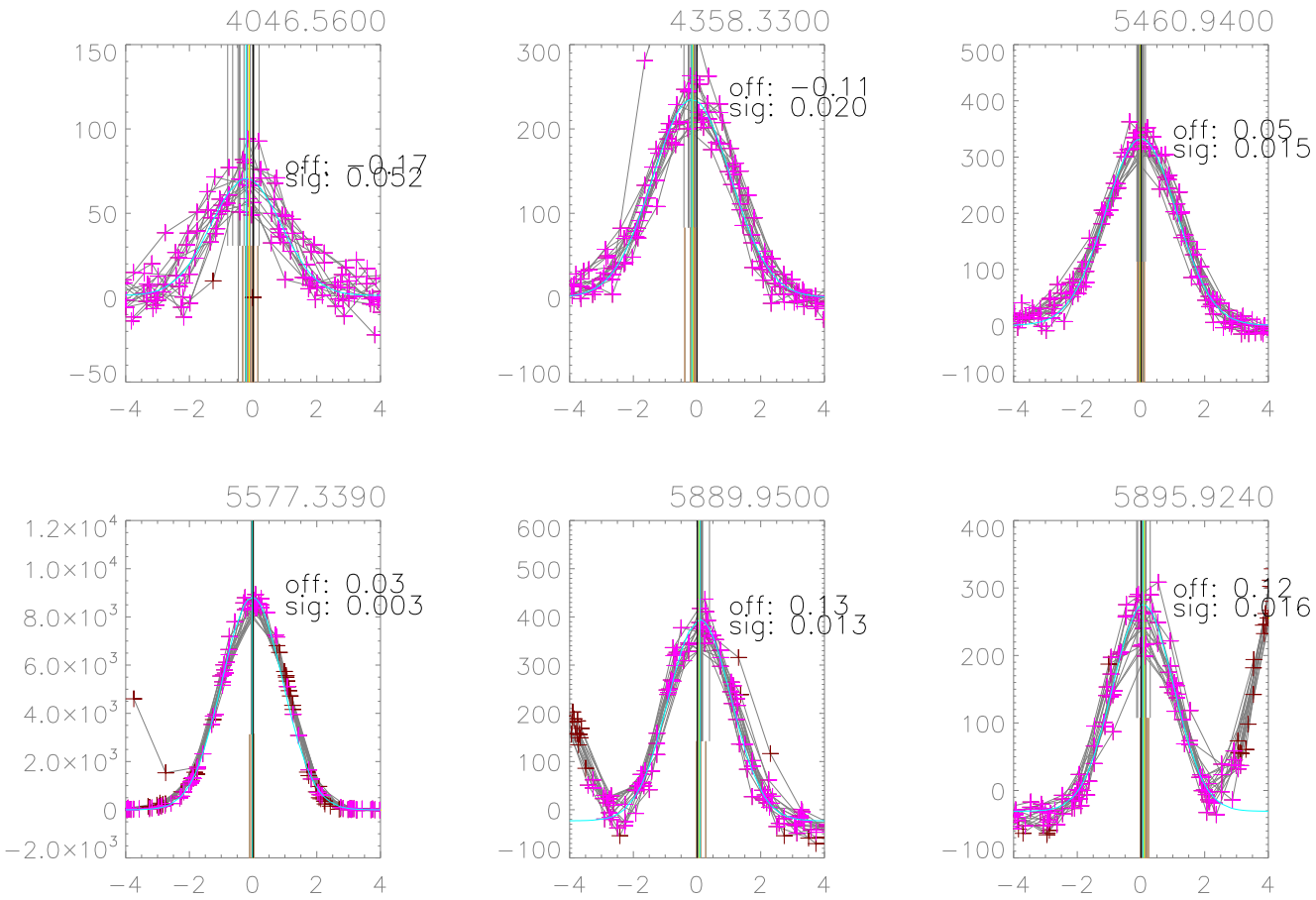

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR−b1−00051333.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.3
9.5
9.5
9.5
7.3
7.3
9.5
9.5
9.5

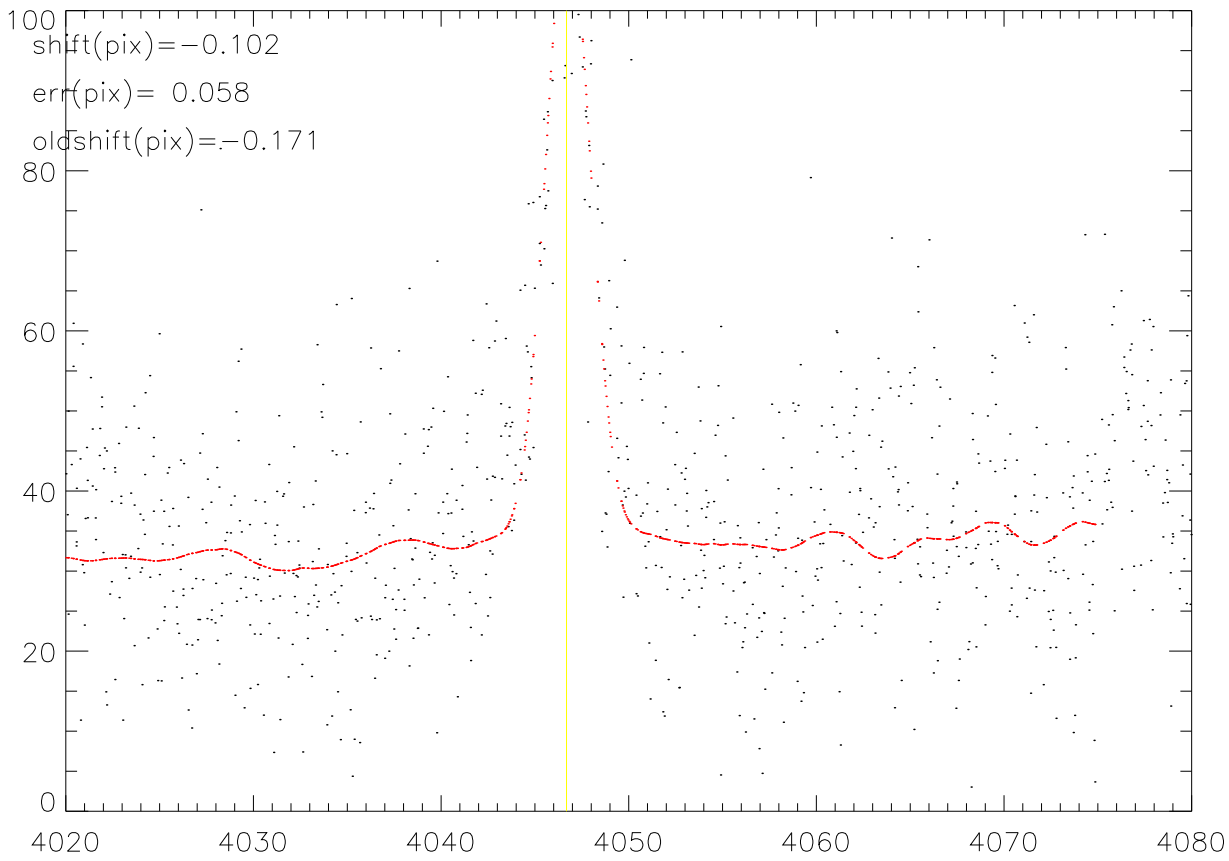

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-b1-00051333.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 6.694
Max value = 11.074
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:40:15 2008

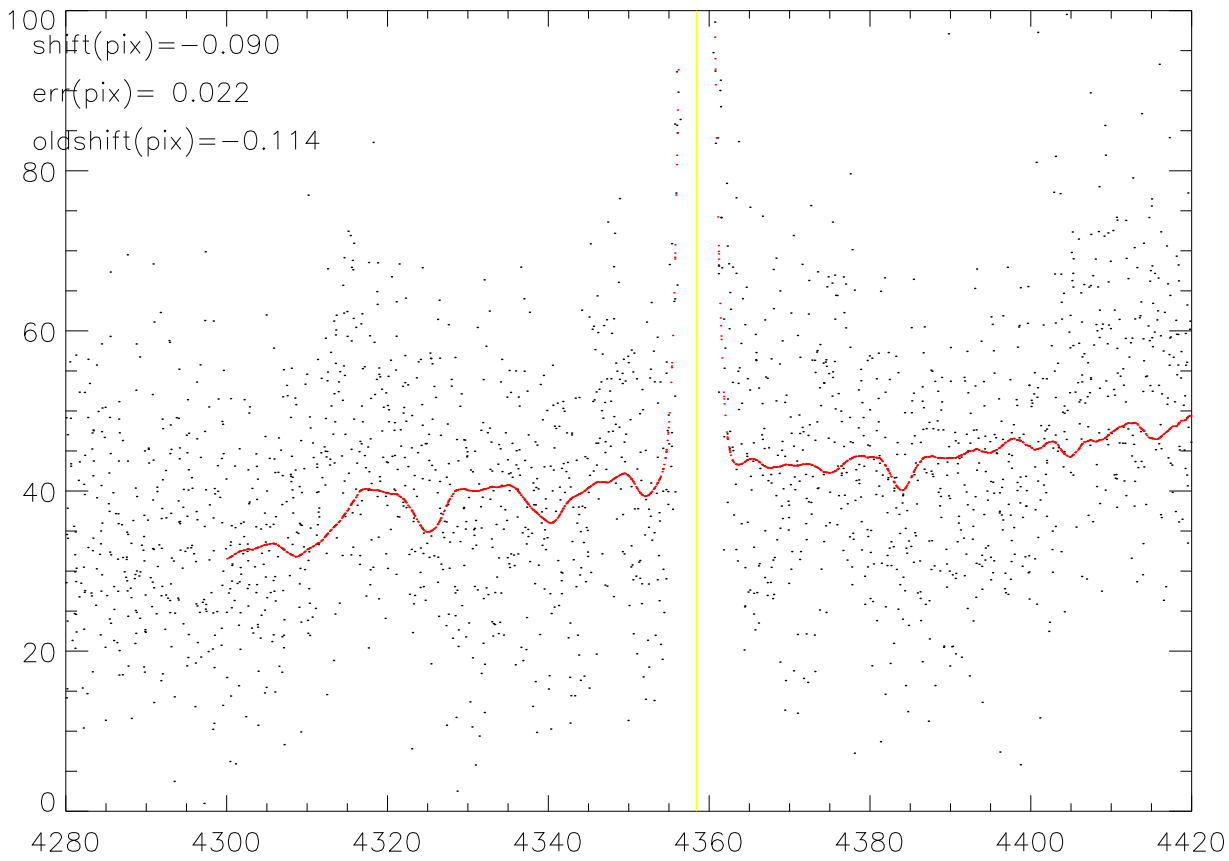

PLATE=1670 MJD=54553 Scattered Light on sdR-b1-00051333.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.55
5.64
6.73

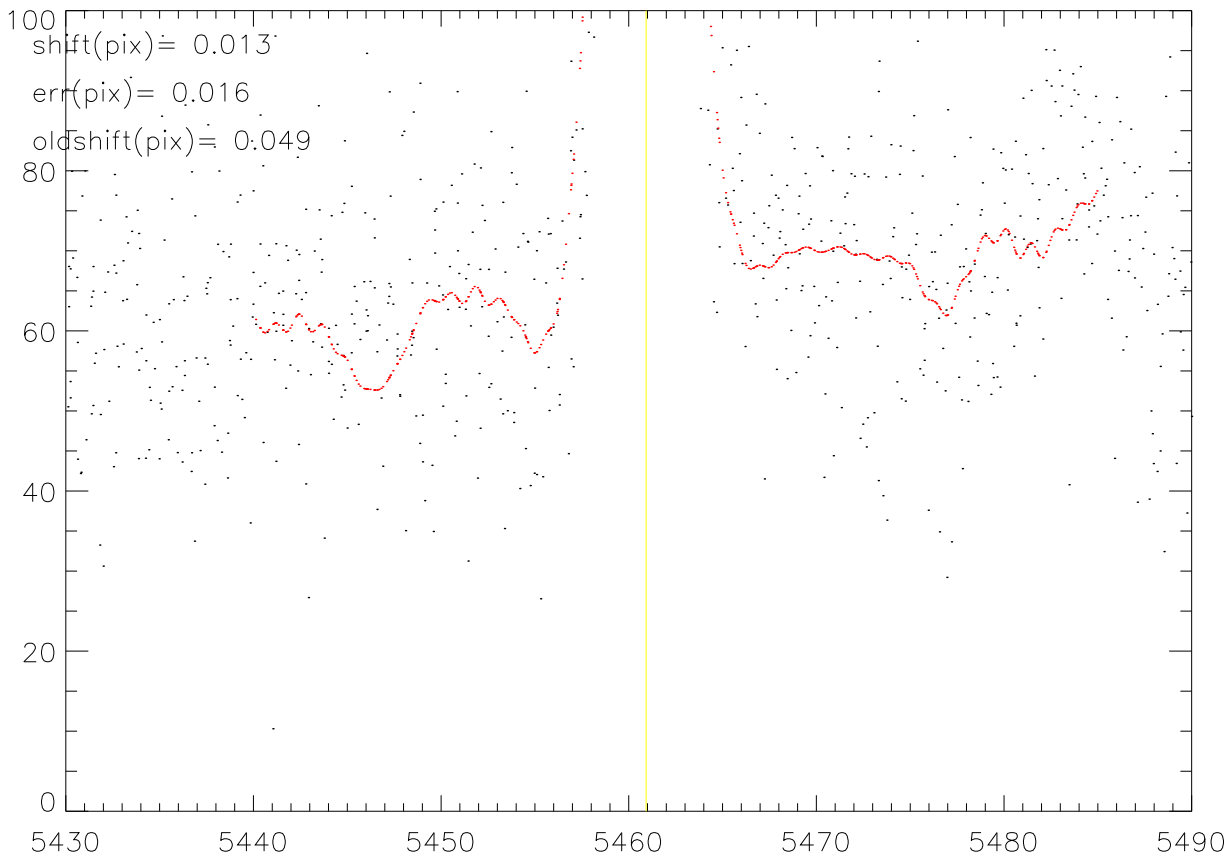

PLATE=1670 MJD=54553 Scattered Light on sdR-b1-00051333.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.934
Max value = 7.595
Fri Mar 28 16:43:12 2008

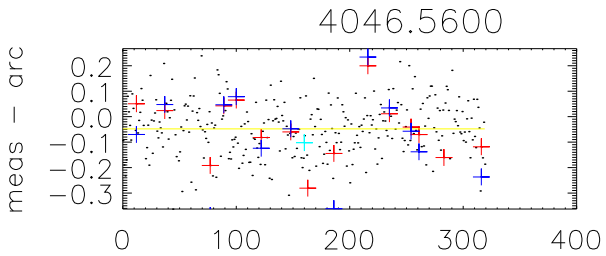

PLATE=1670 MJD=54553 Extraction chi^2 for sdR-b1-00051333.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

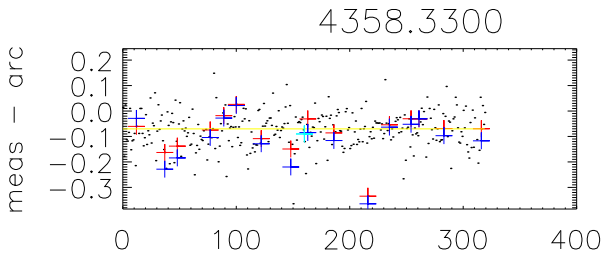

4046.5600
off: −0.17
sig: 0.052
4358.3300
off: −0.11
sig: 0.020
5460.9400
off: 0.05
sig: 0.015
5577.3390
off: 0.03
sig: 0.003
5889.9500
off: 0.13
sig: 0.013
5895.9240
off: 0.12
sig: 0.016

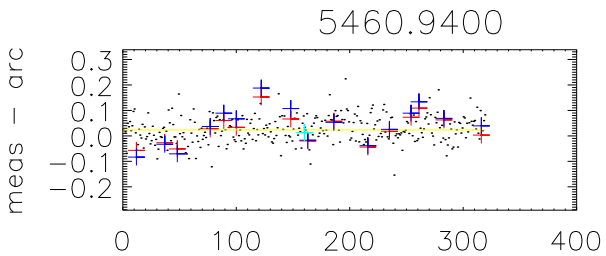

shift(pix)=−0.102
err(pix)= 0.058
oldshift(pix)=−0.171
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

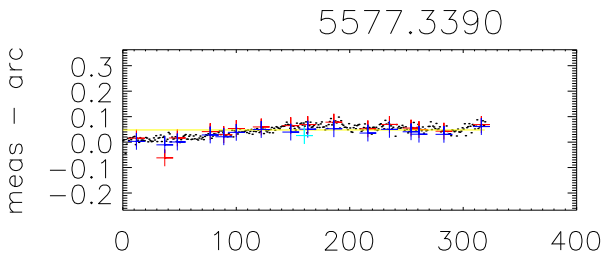

shift(pix)=−0.090
err(pix)= 0.022
oldshift(pix)=−0.114
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

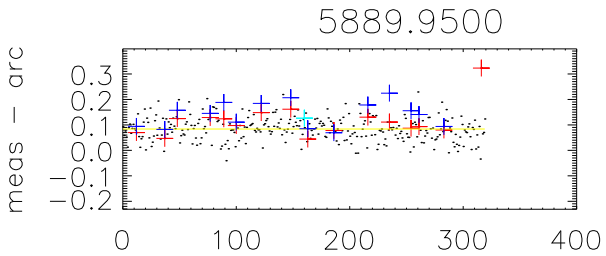

shift(pix)= 0.013
err(pix)= 0.016
oldshift(pix)= 0.049
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

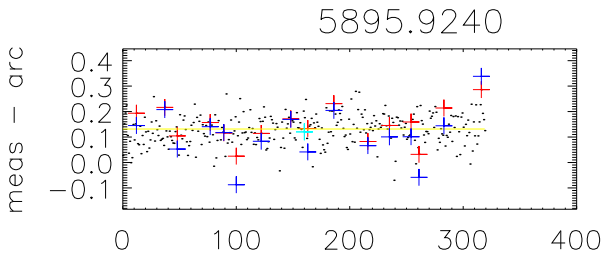

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

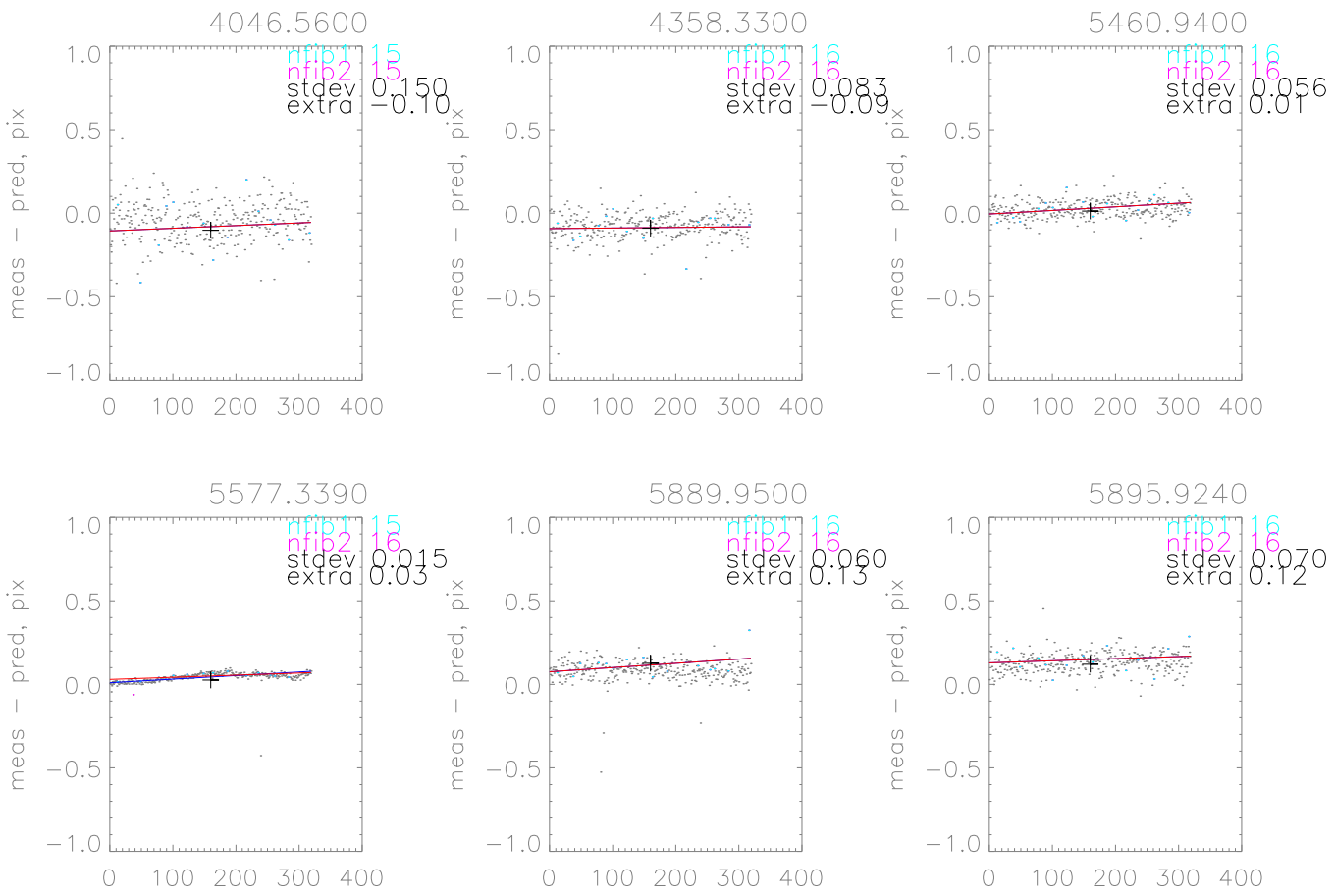

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

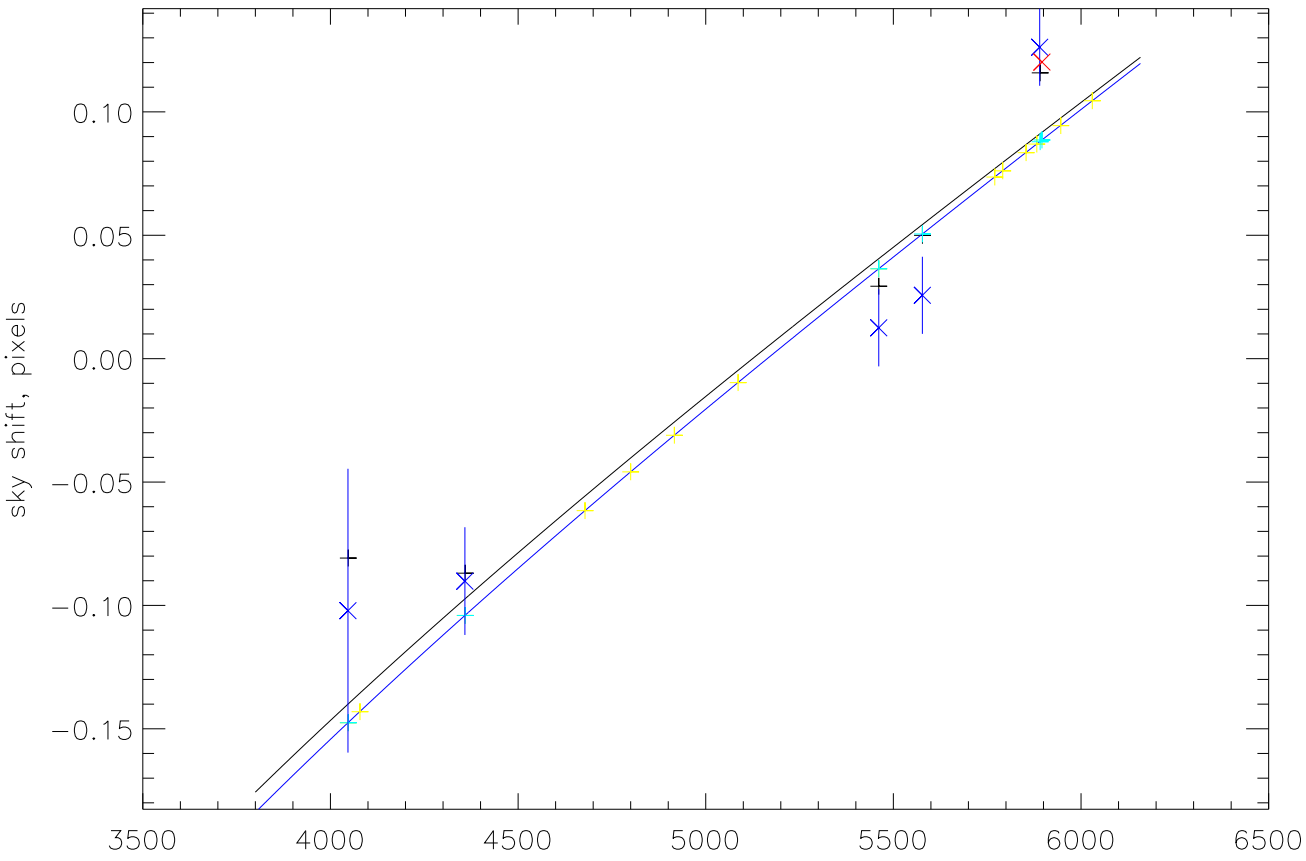

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

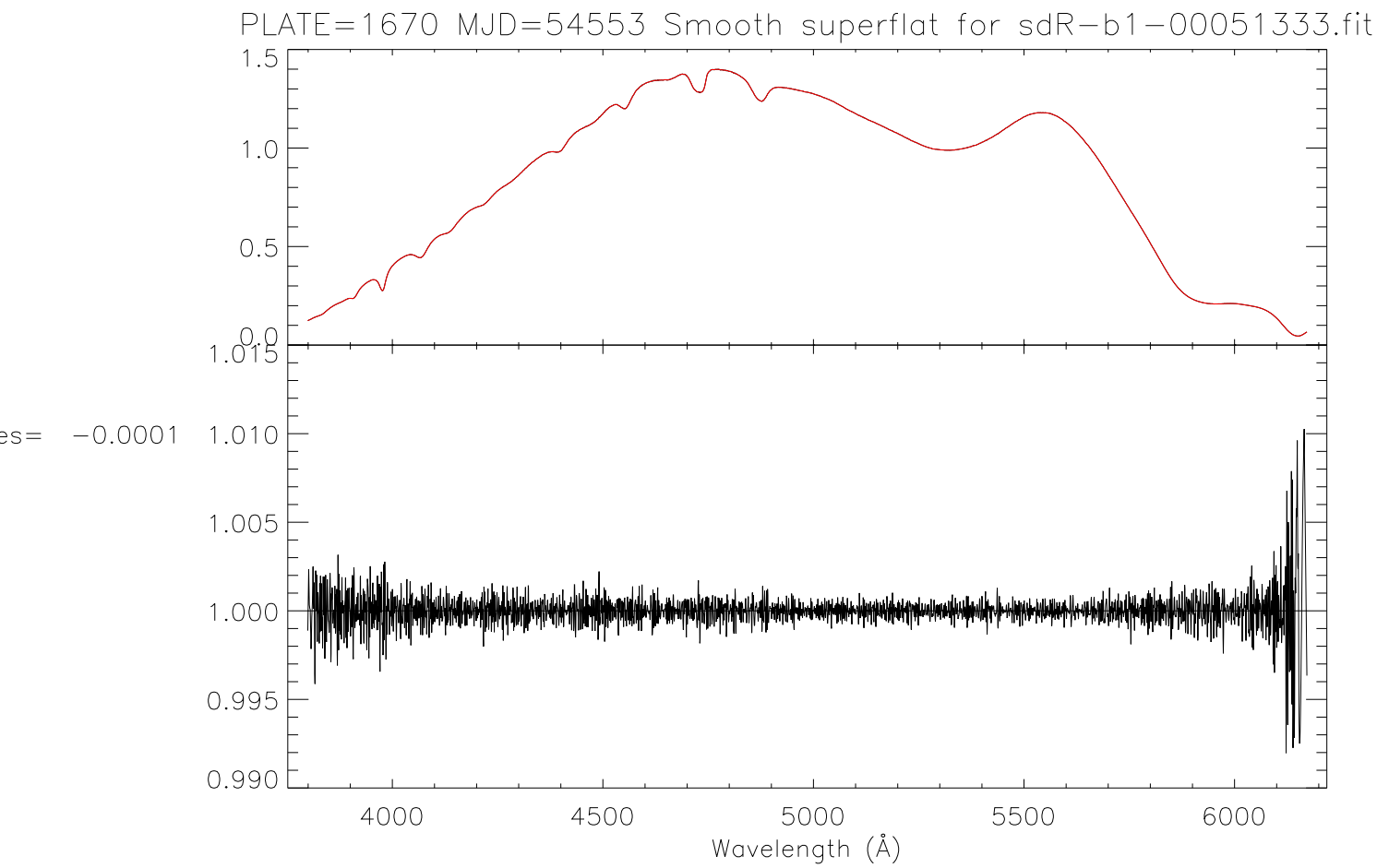

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

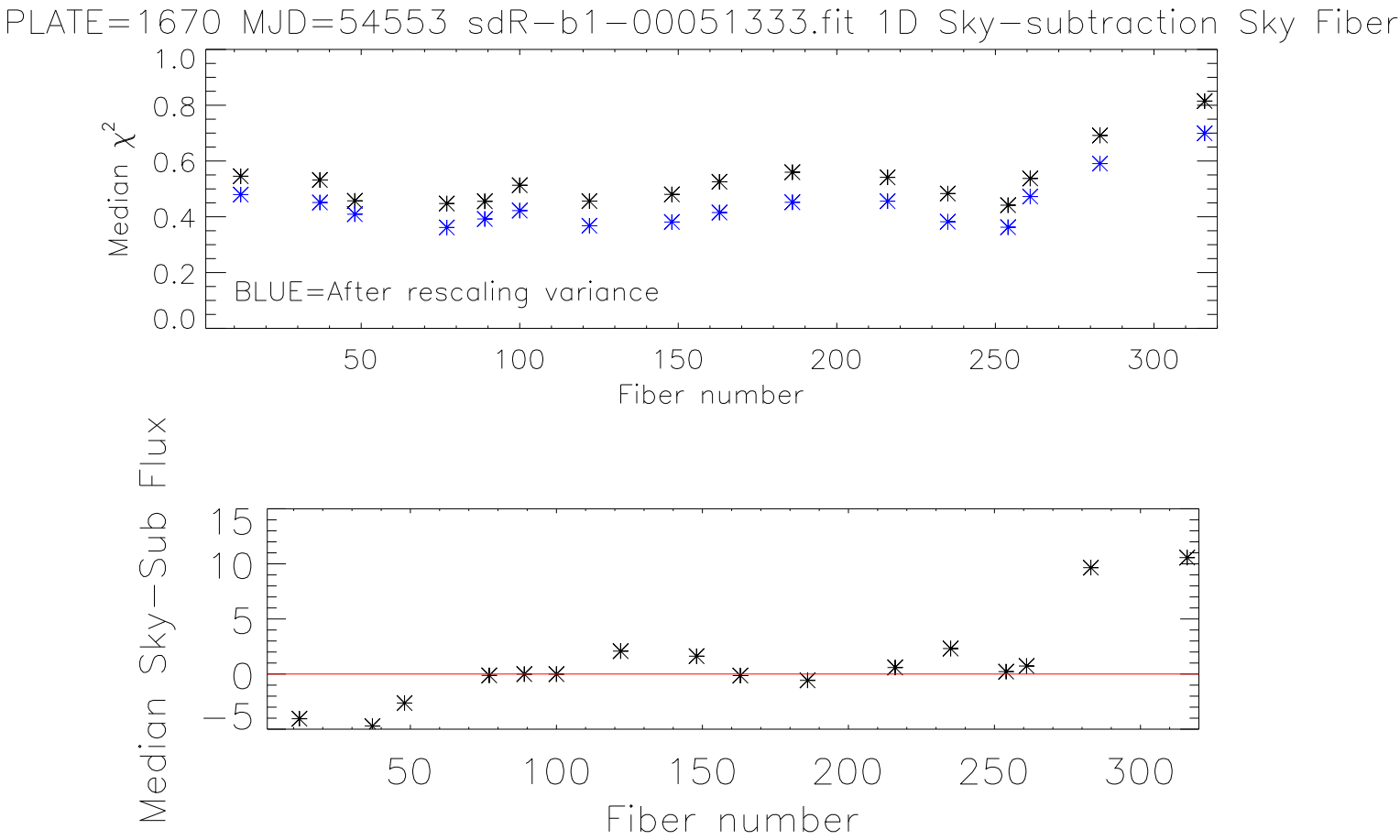

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

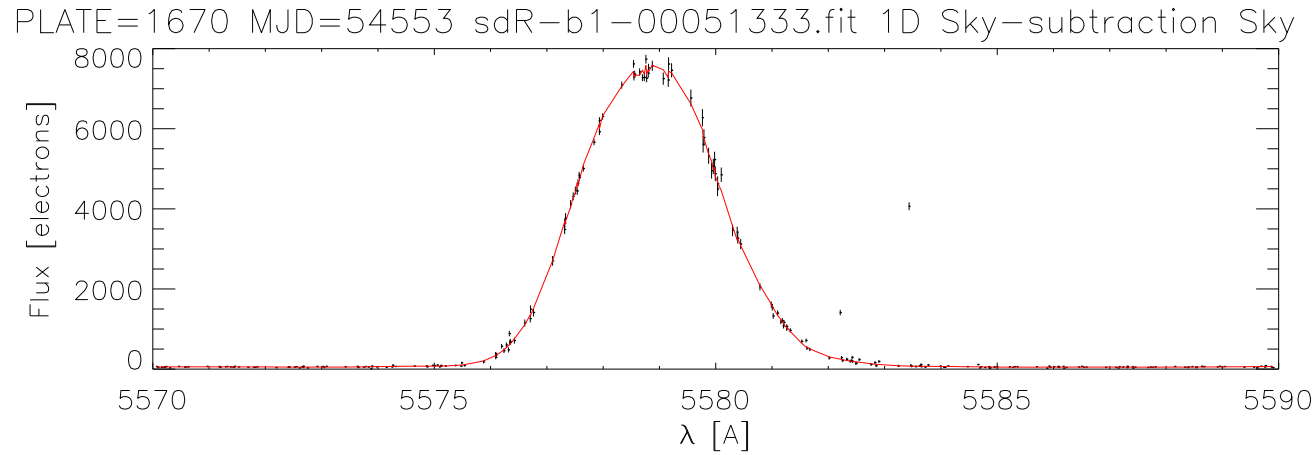

4046.5600
nfib1 15
nfib2 15
stdev 0.150
extra −0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.083
extra −0.09
5460.9400
nfib1 16
nfib2 16
stdev 0.056
extra 0.01
5577.3390
nfib1 15
nfib2 16
stdev 0.015
extra 0.03
5889.9500
nfib1 16
nfib2 16
stdev 0.060
extra 0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.070
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

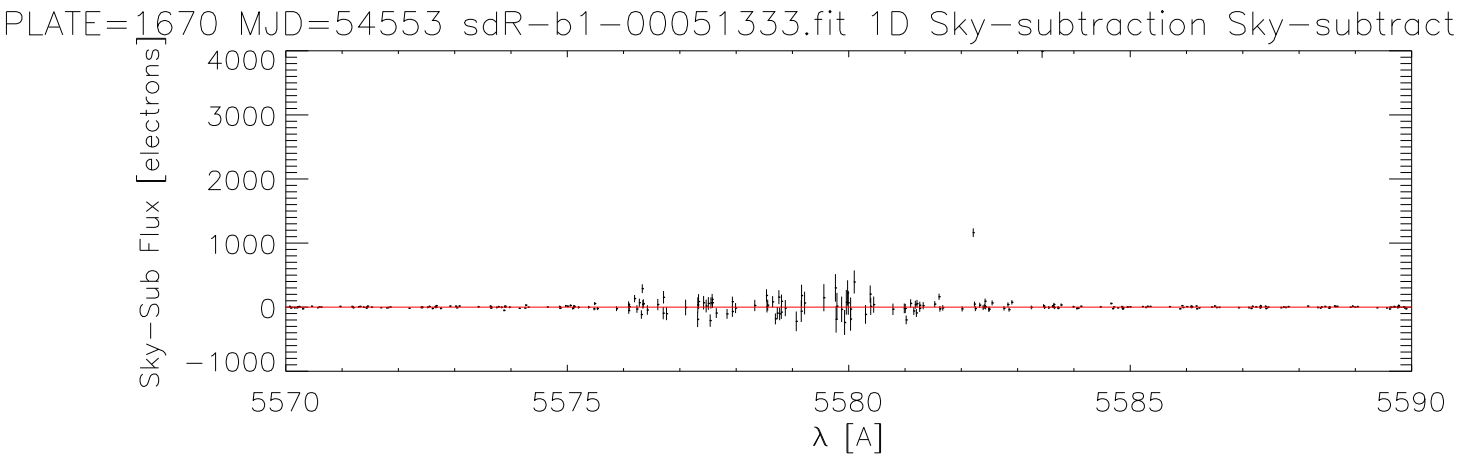

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

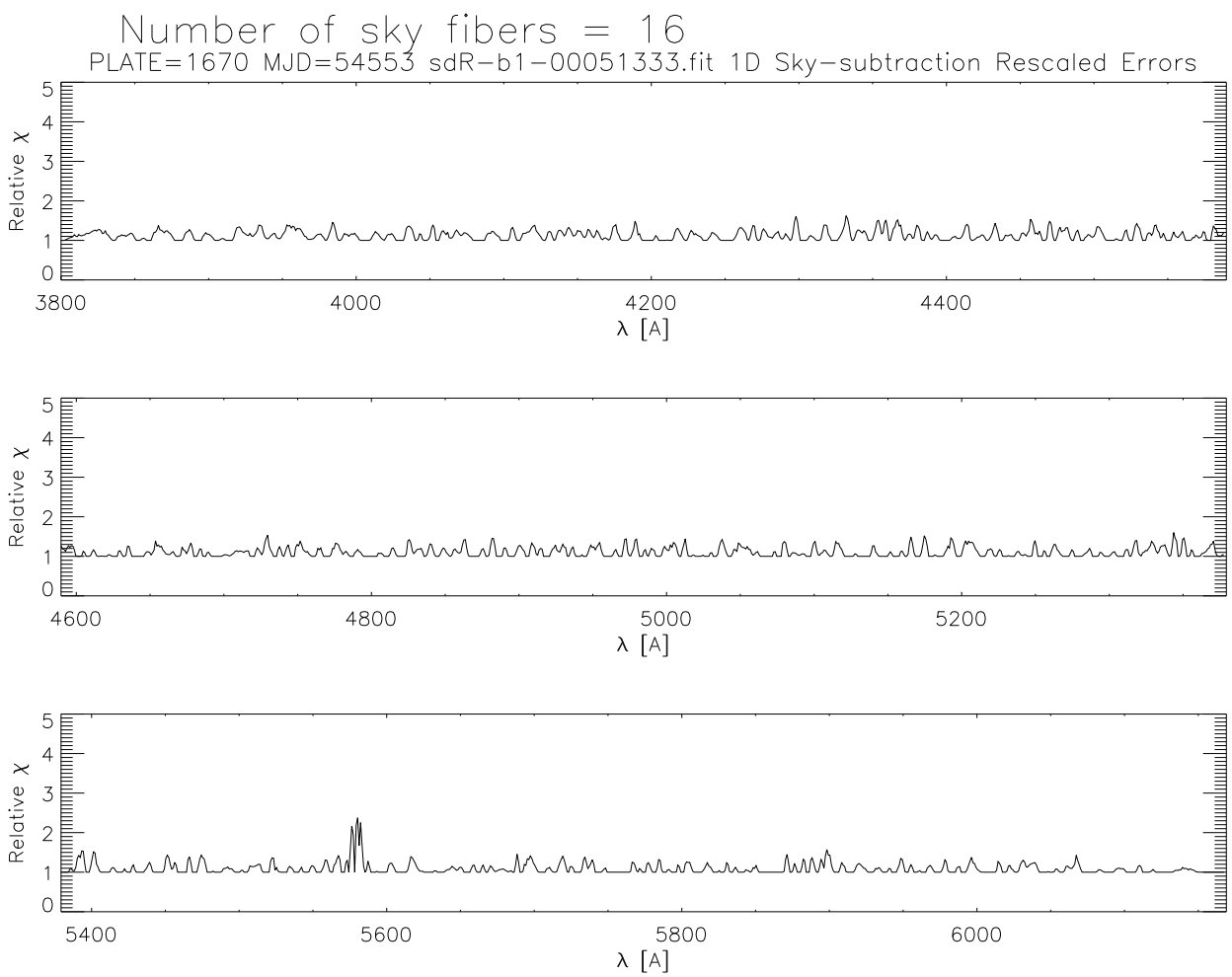

PLATE=1670 MJD=54553 Smooth superflat for sdR-b1-00051333.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

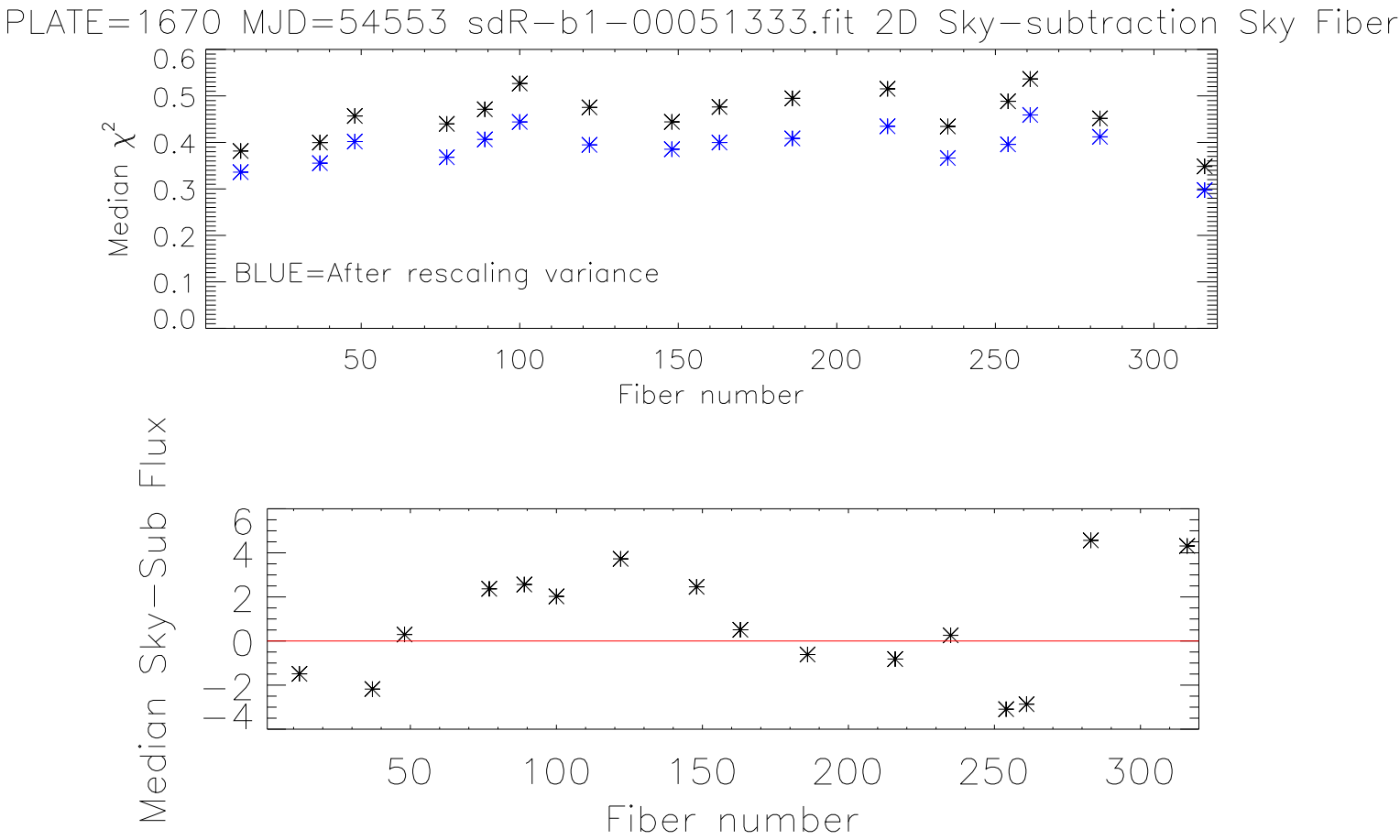
es= −0.0001

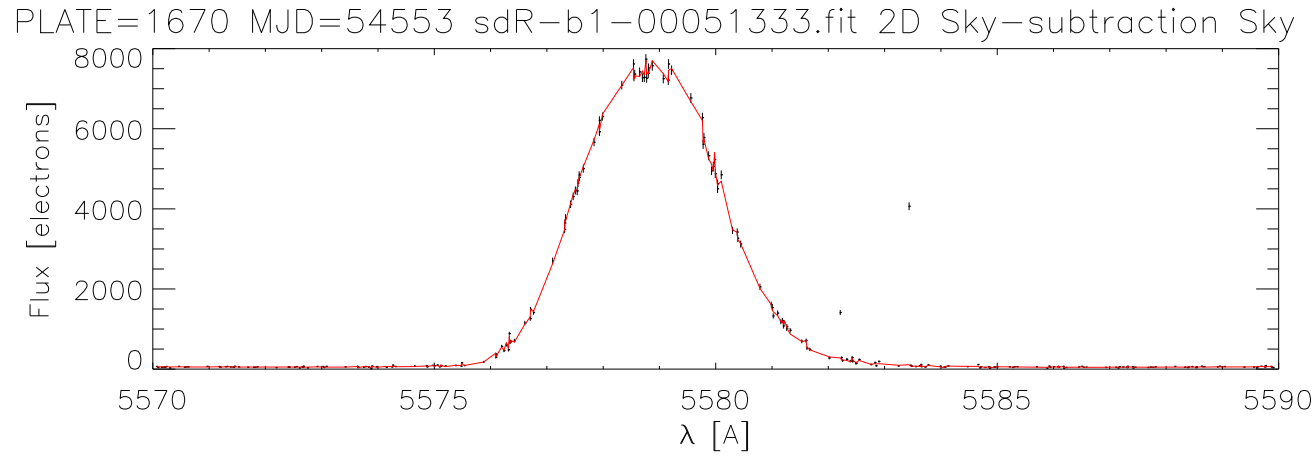

PLATE=1670 MJD=54553 sdR-b1-00051333.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

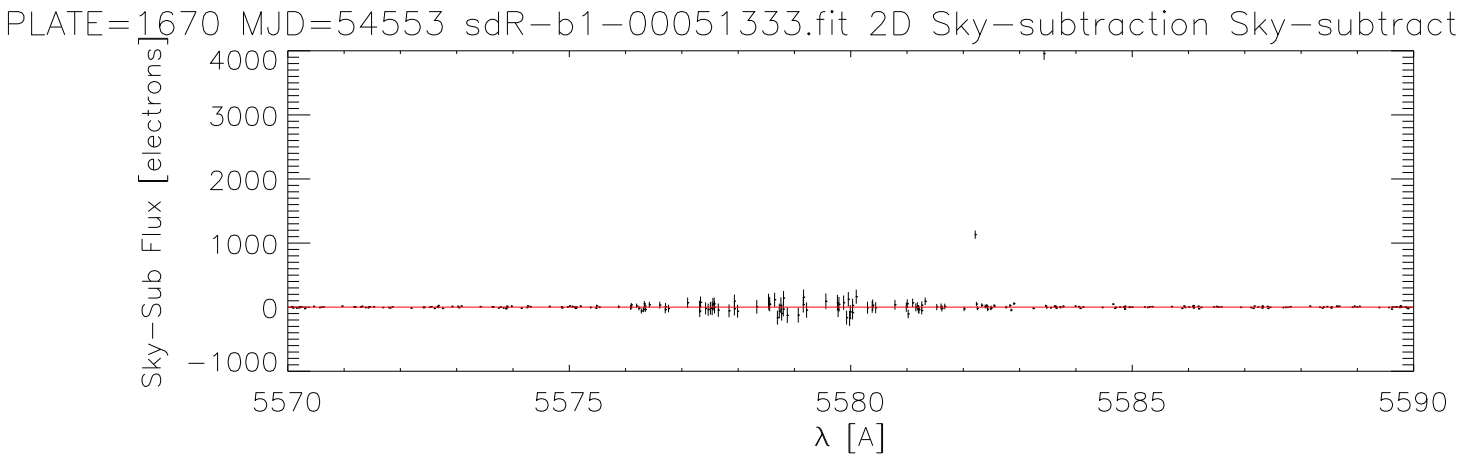

PLATE=1670 MJD=54553 sdR-b1-00051333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

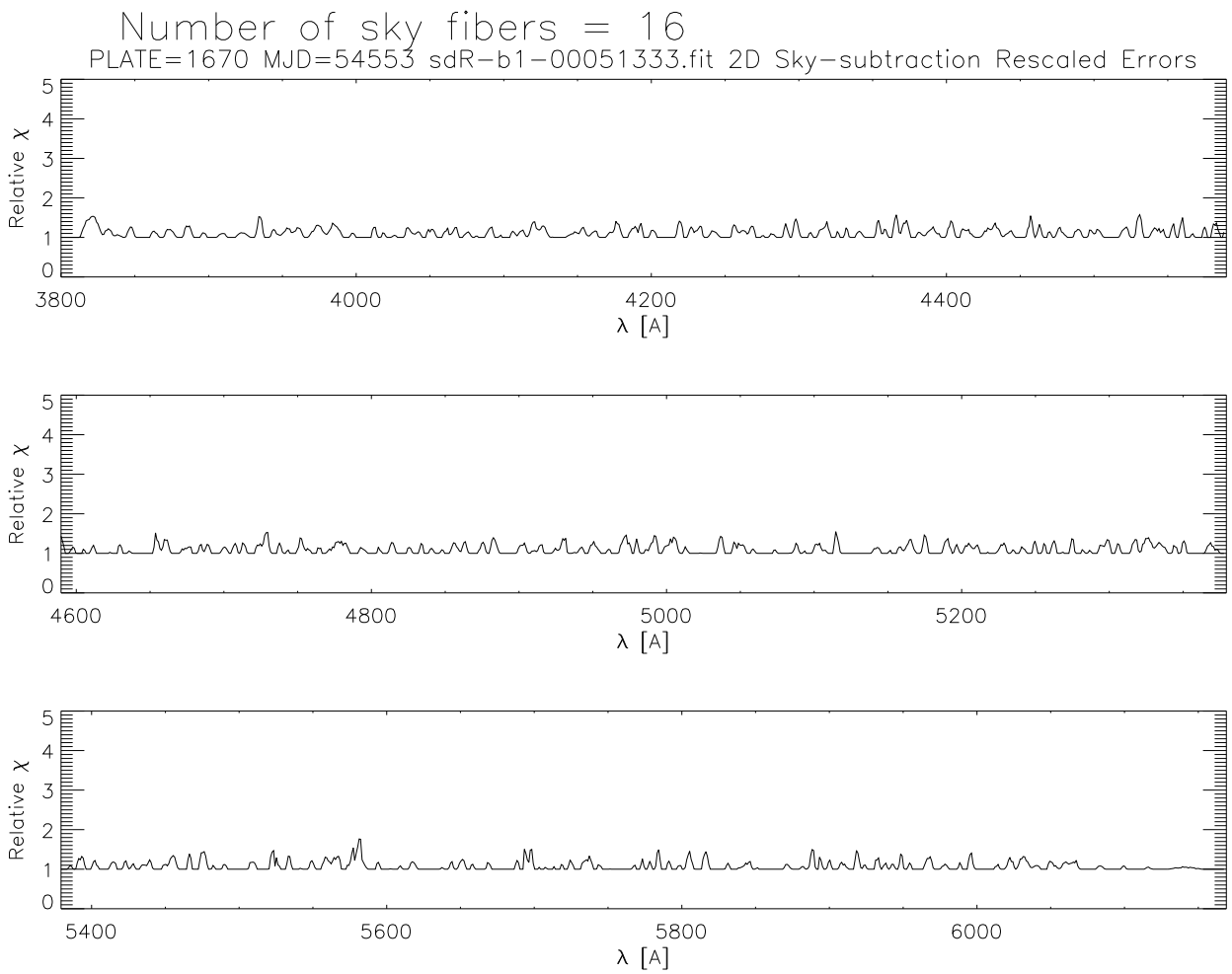

PLATE=1670 MJD=54553 sdR-b1-00051333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

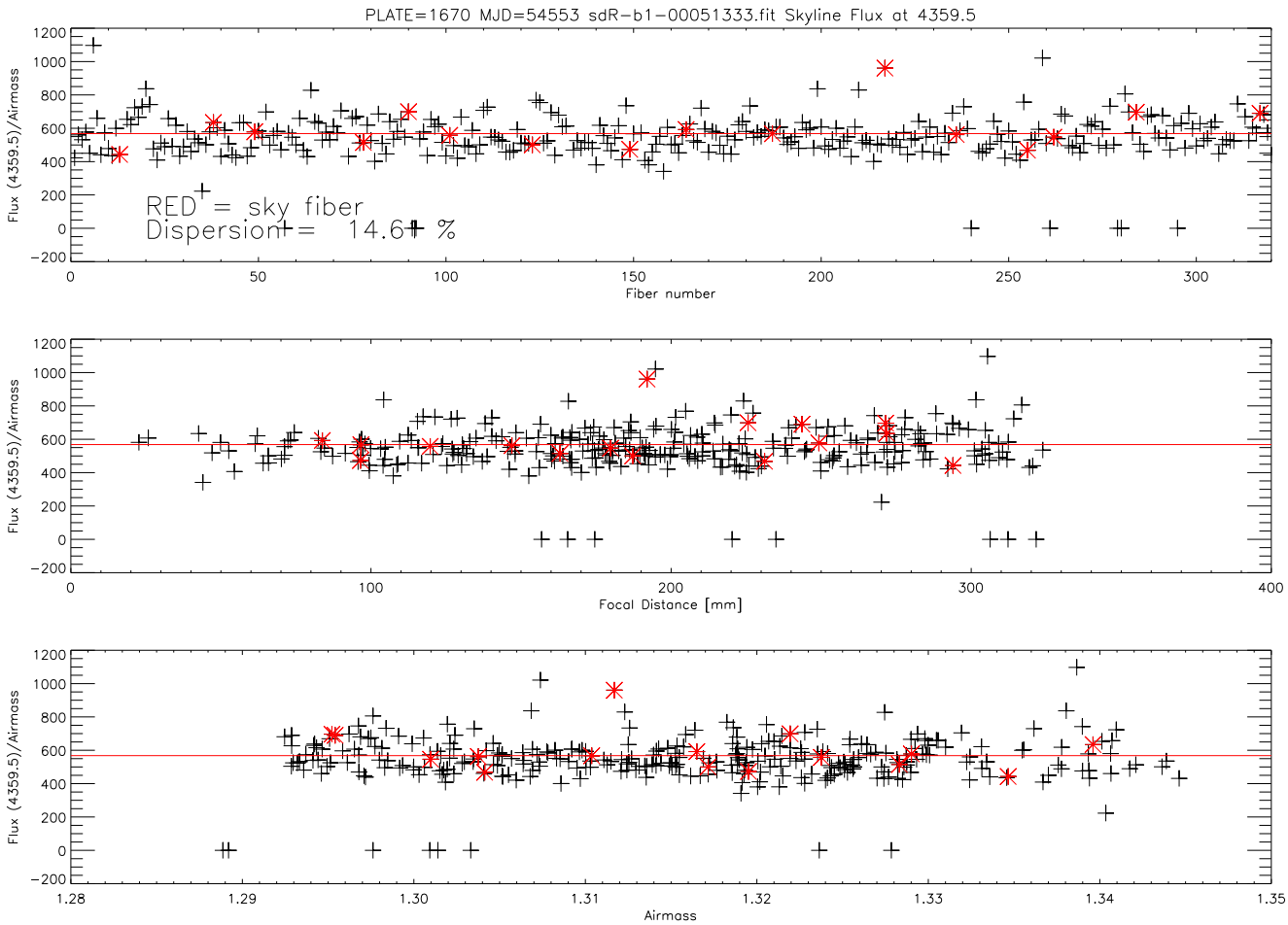

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b1-00051333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

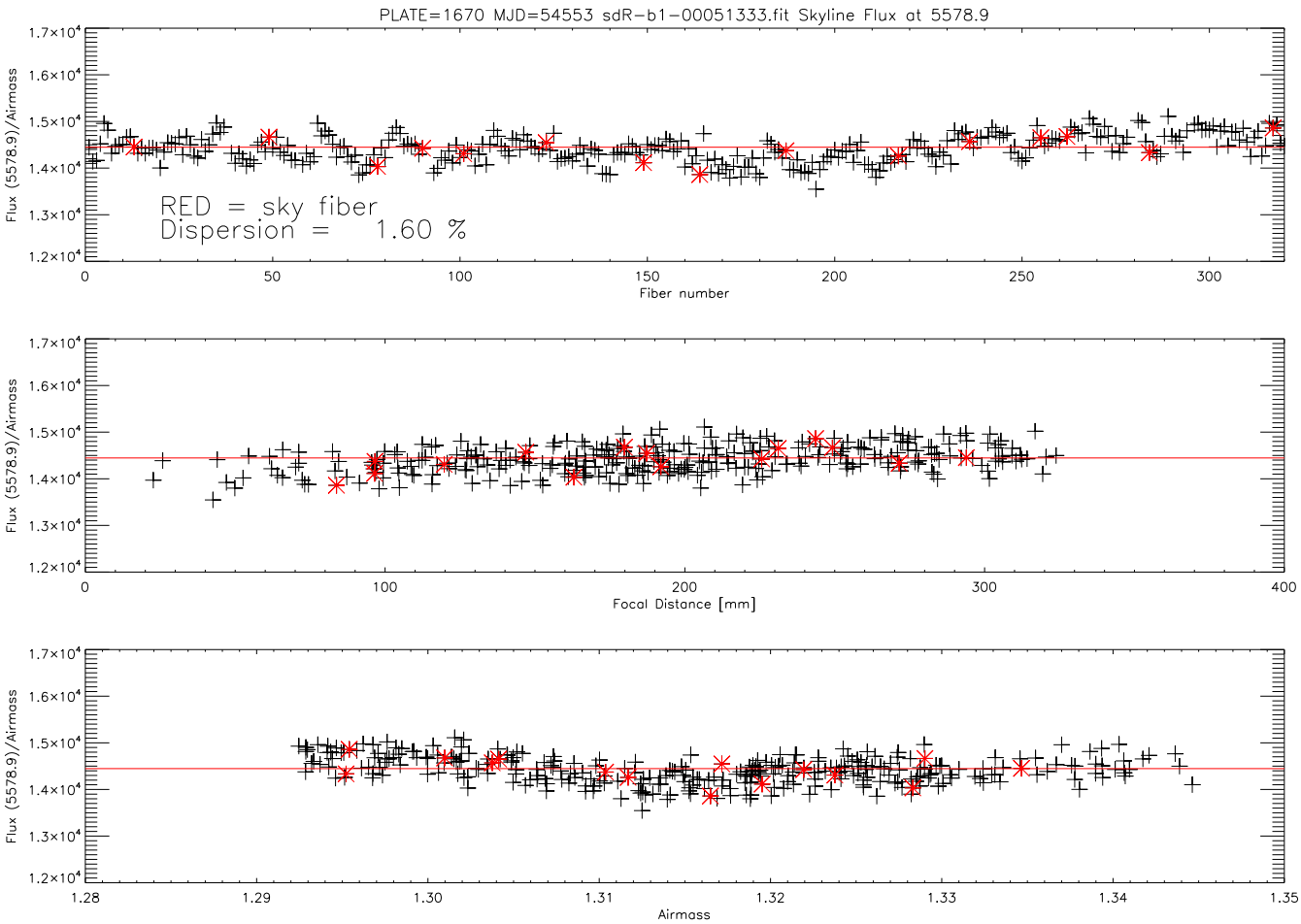

PLATE=1670 MJD=54553 sdR-b1-00051333.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

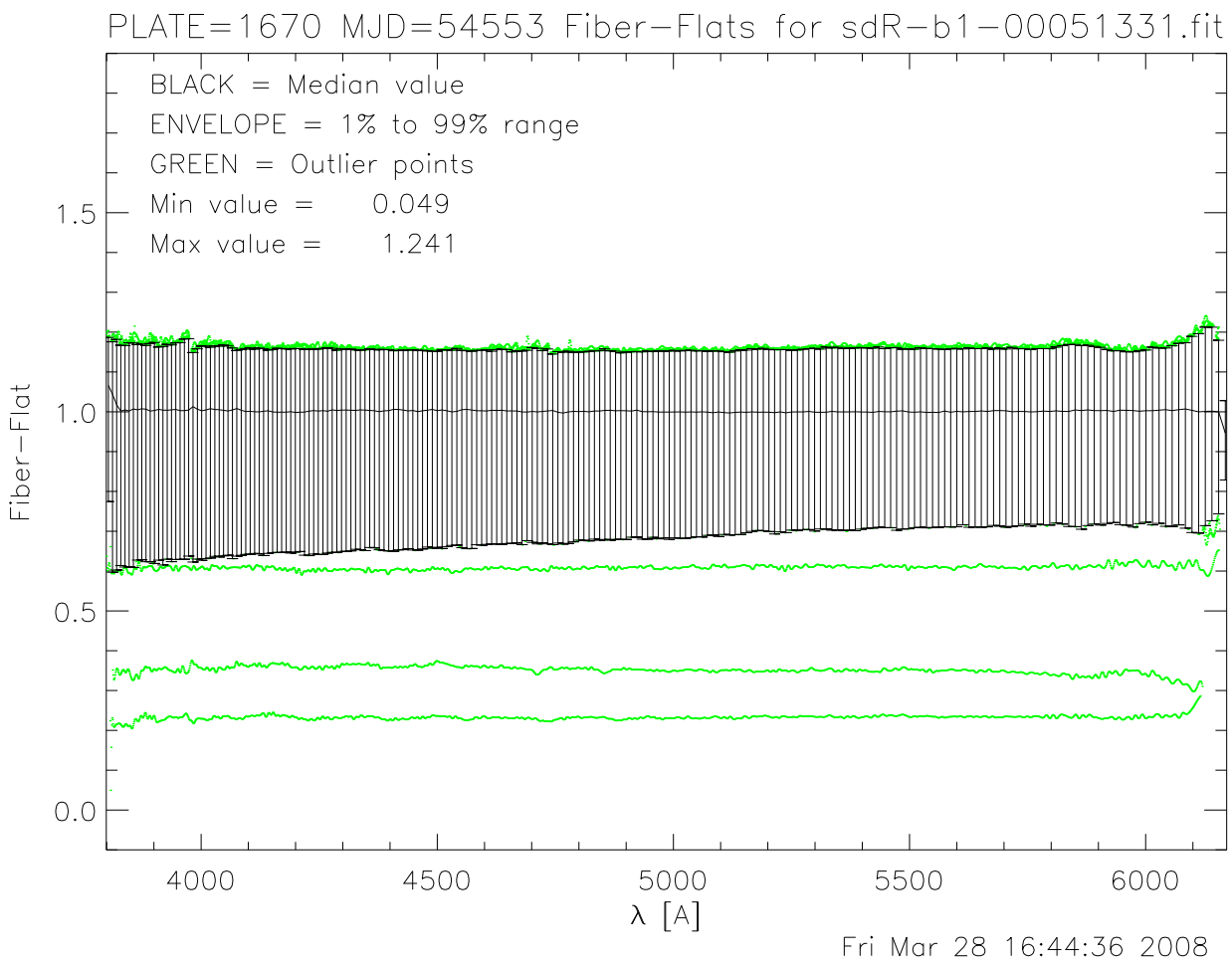

PLATE=1670 MJD=54553 sdR-b1-00051333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

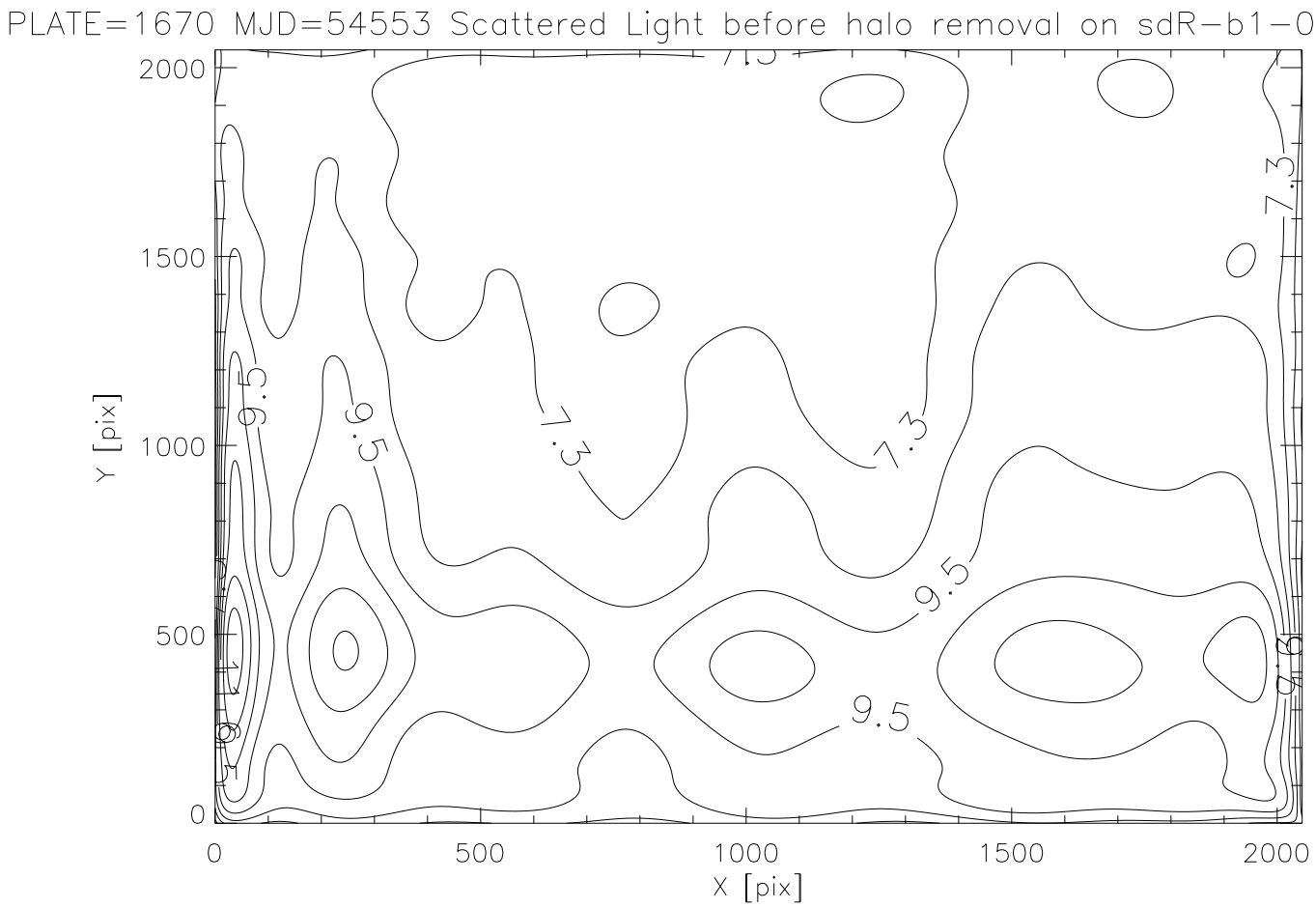

PLATE=1670 MJD=54553 sdR-b1-00051333.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

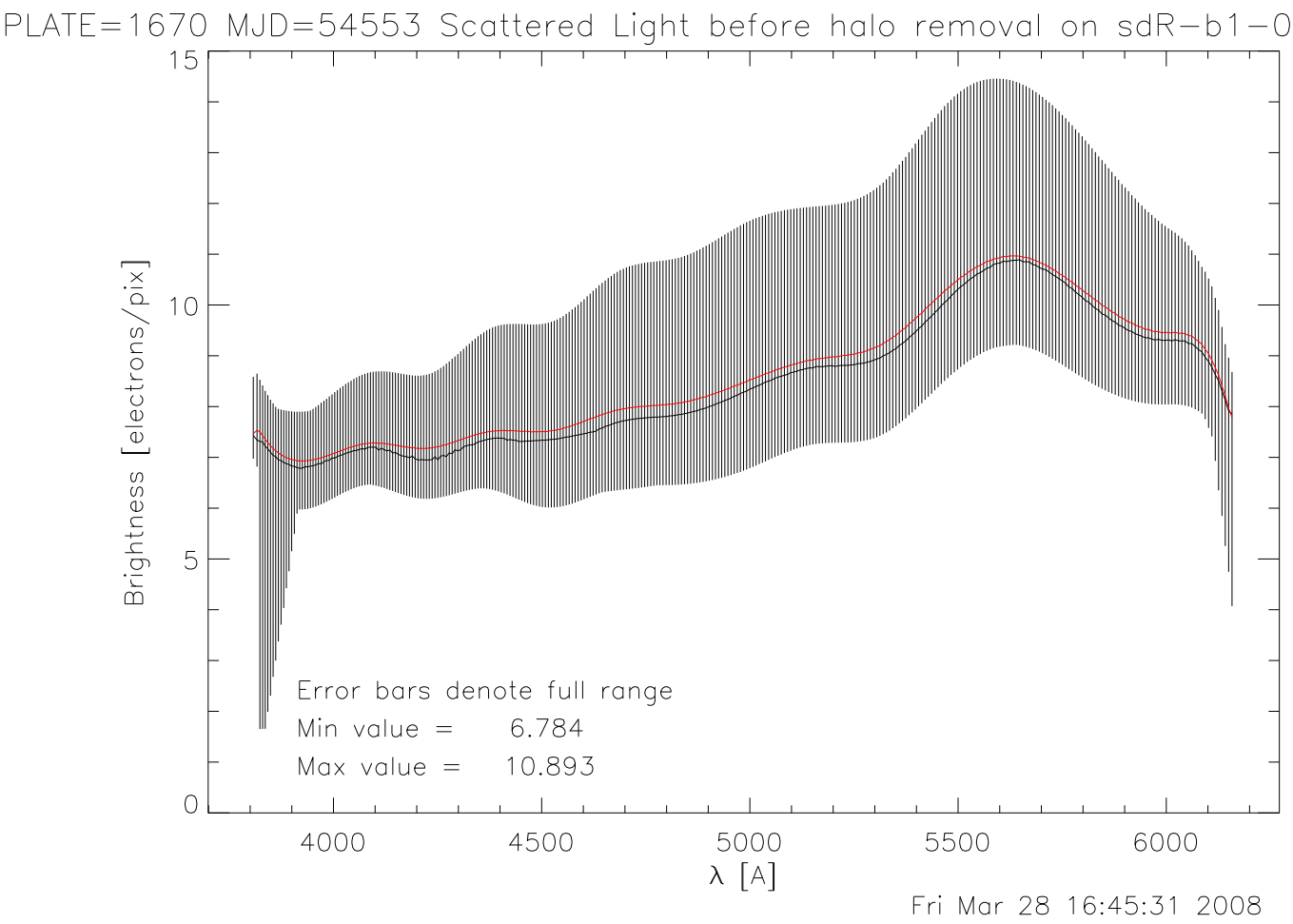

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b1-00051333.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

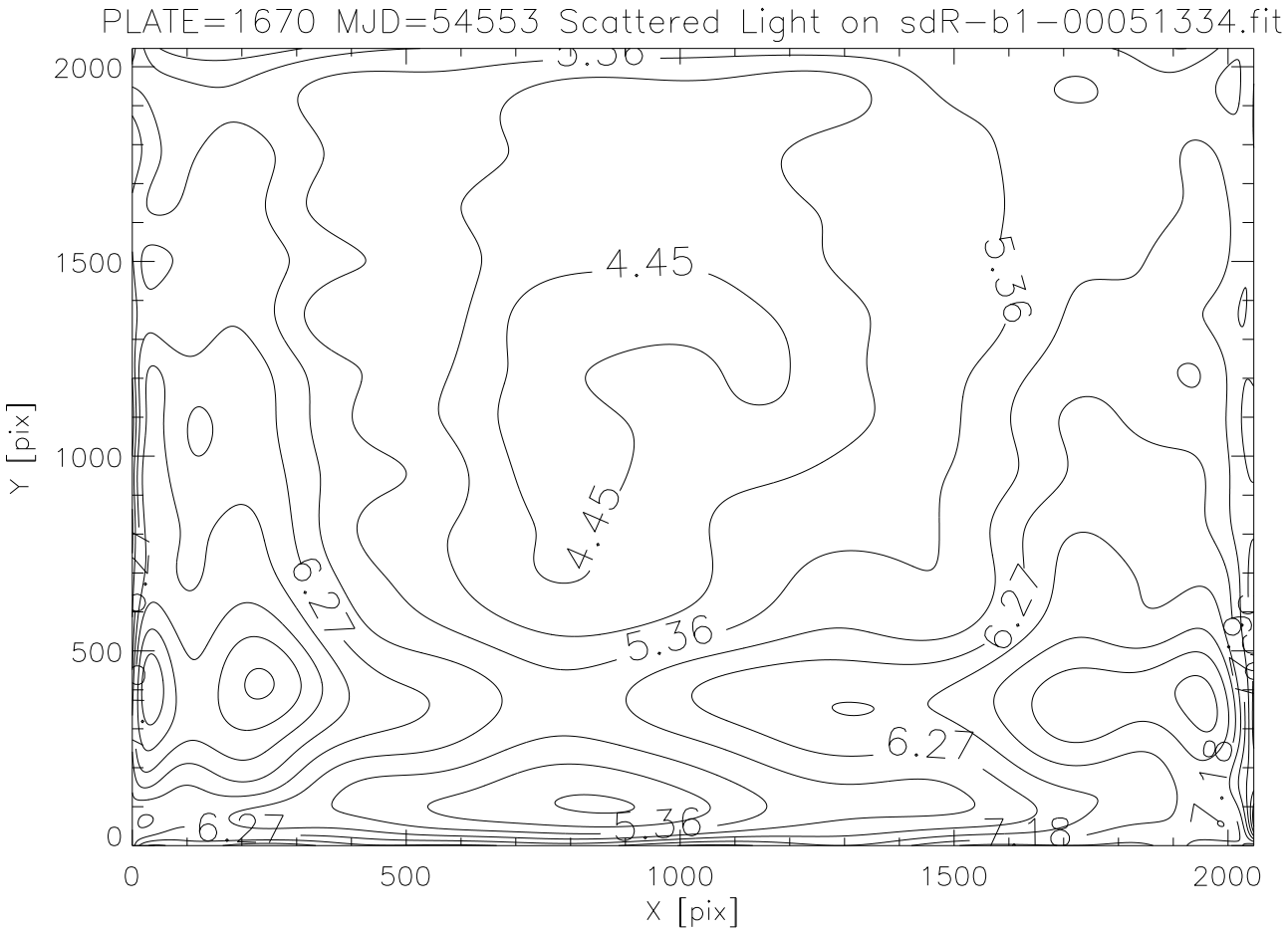

PLATE=1670 MJD=54553 sdR-b1-00051333.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 14.6 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

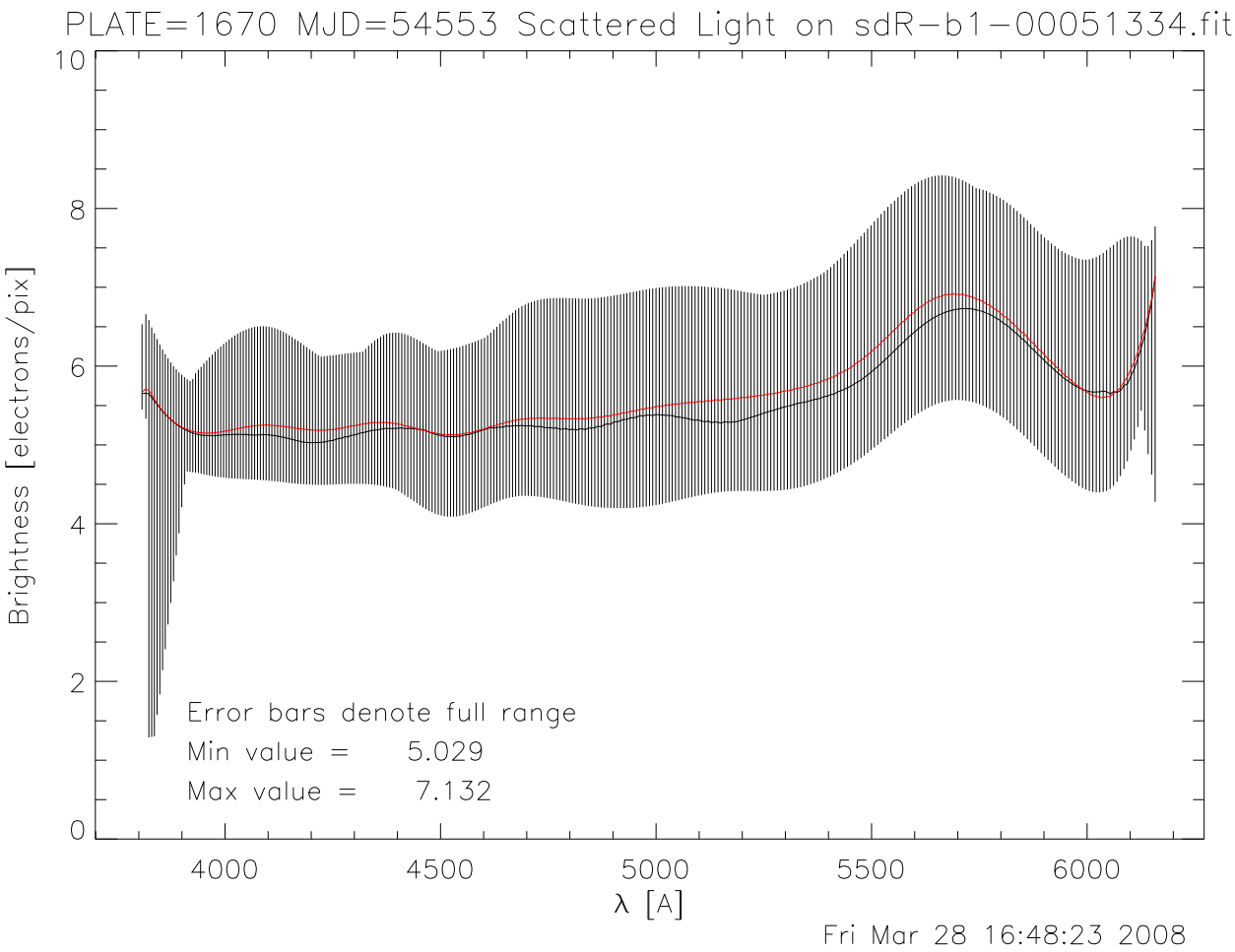

PLATE=1670 MJD=54553 sdR-b1-00051333.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.60 %
Fiber number
Focal Distance [mm]
Airmass

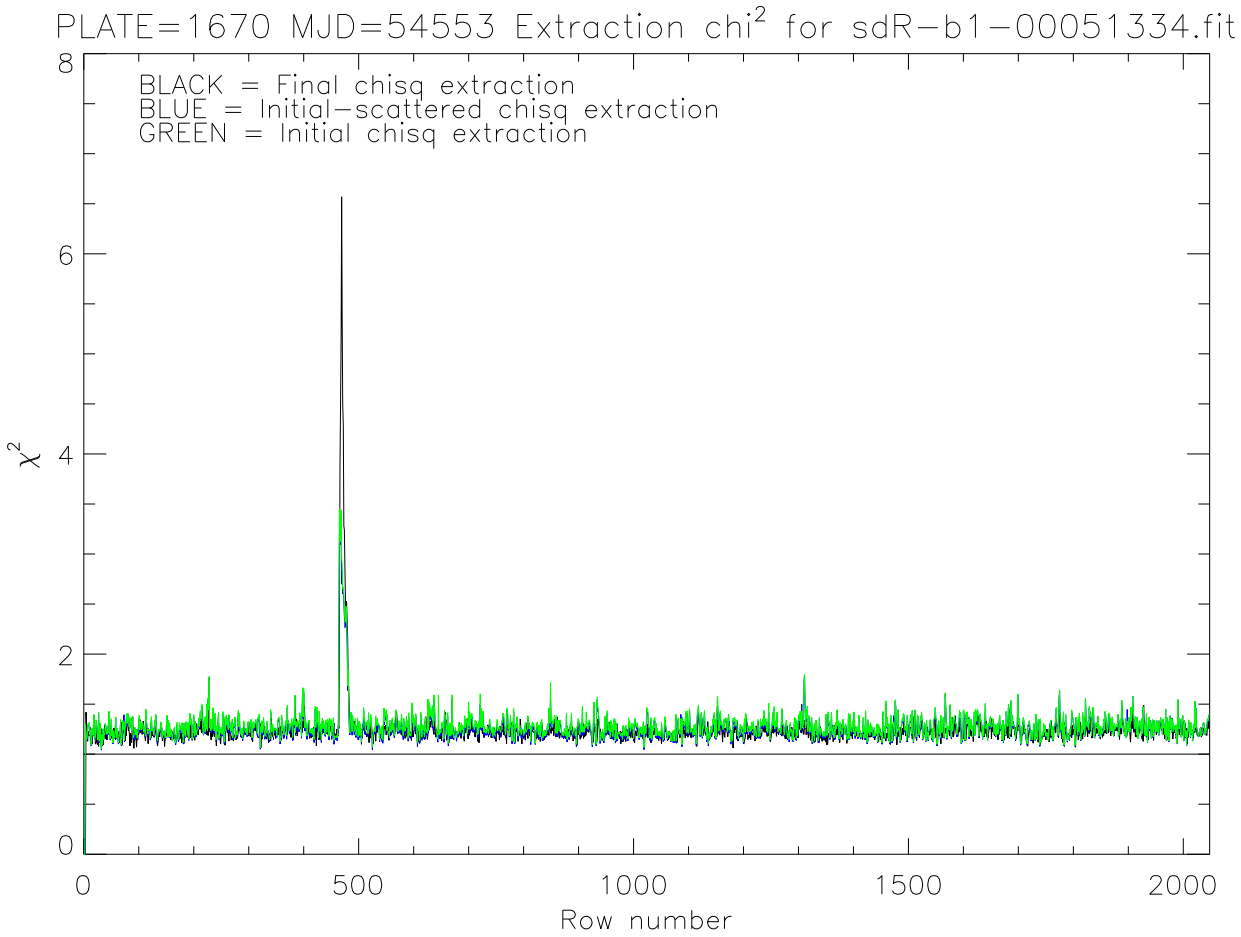

PLATE=1670 MJD=54553 Fiber−Flats for sdR−b1−00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.049
Max value = 1.241
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:44:36 2008

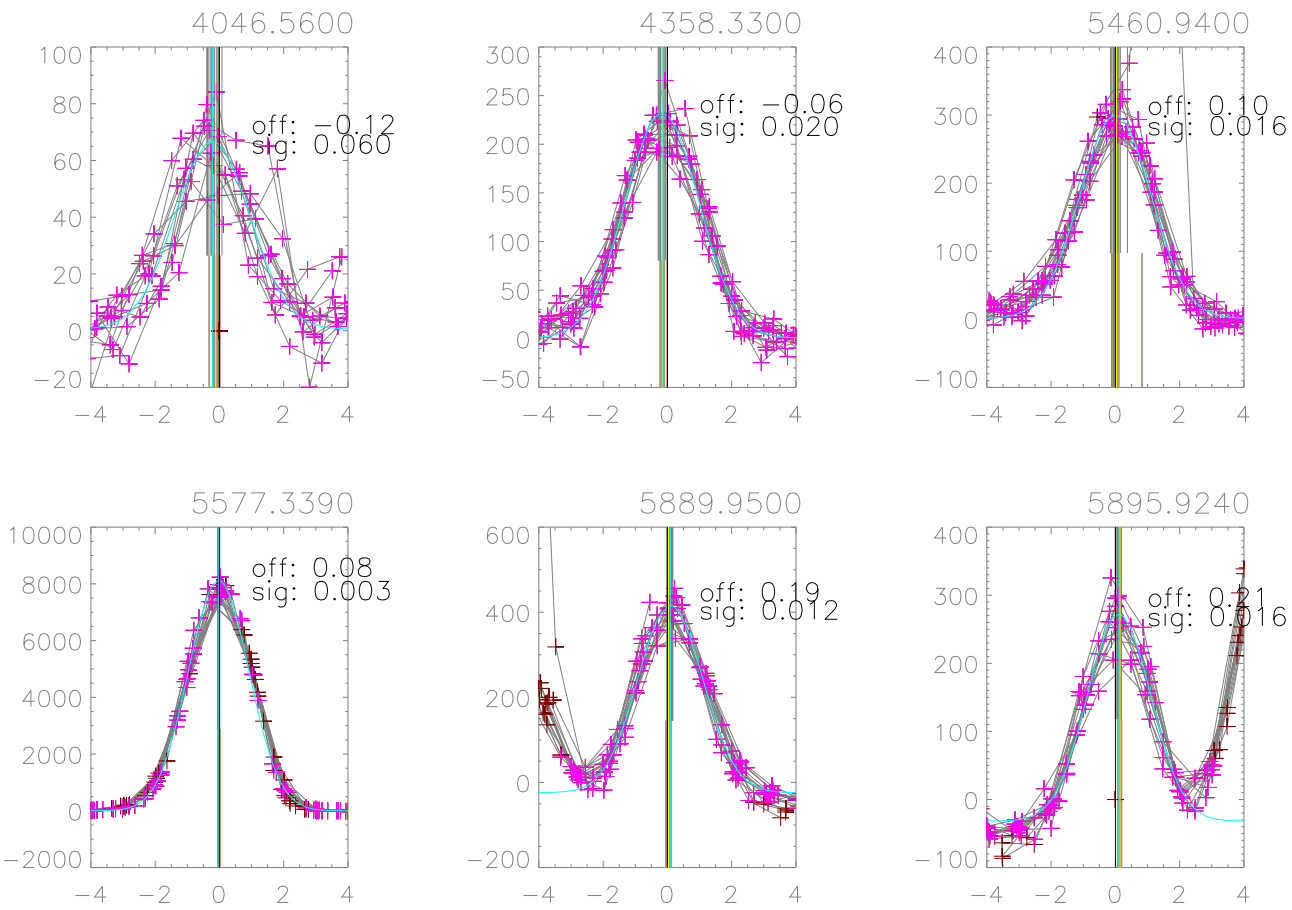

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR−b1−00051334.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.3
9.5
9.6

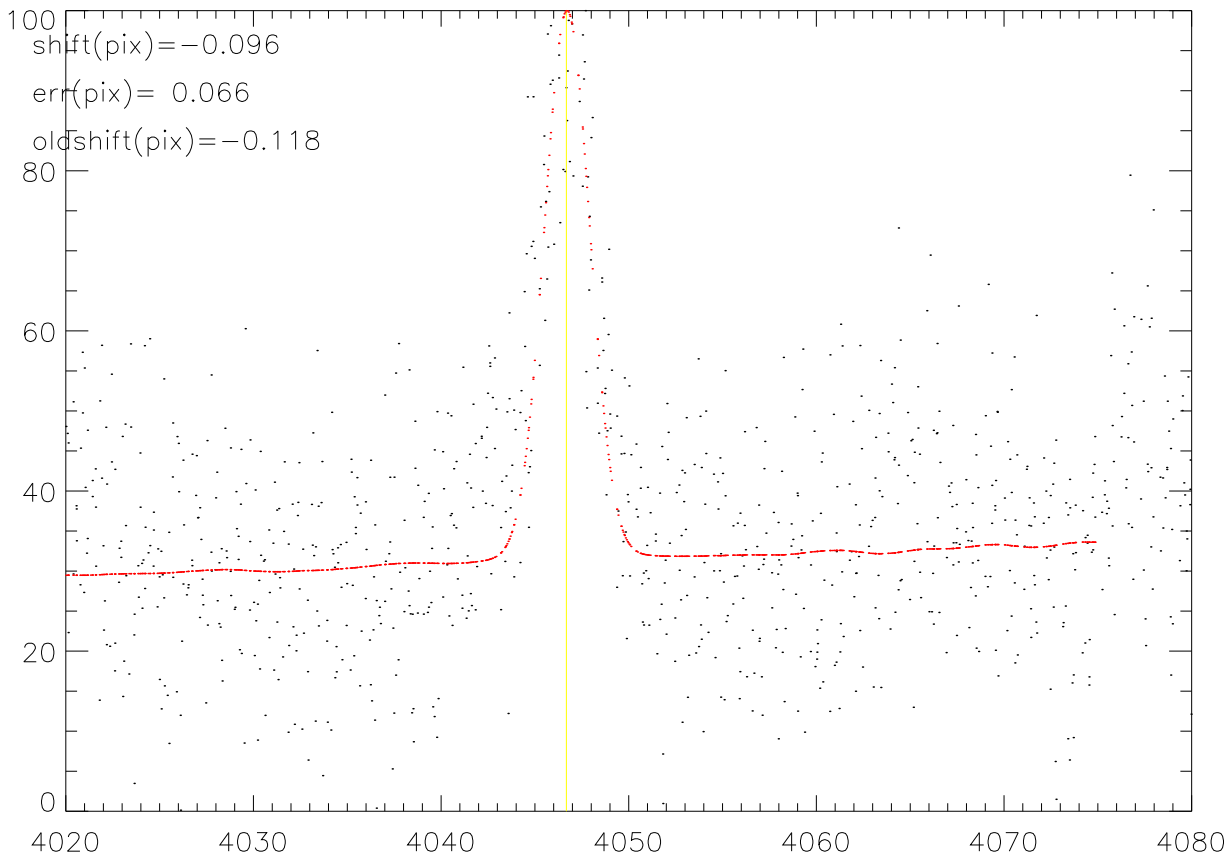

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-b1-00051334.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 6.784
Max value = 10.893
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:45:31 2008

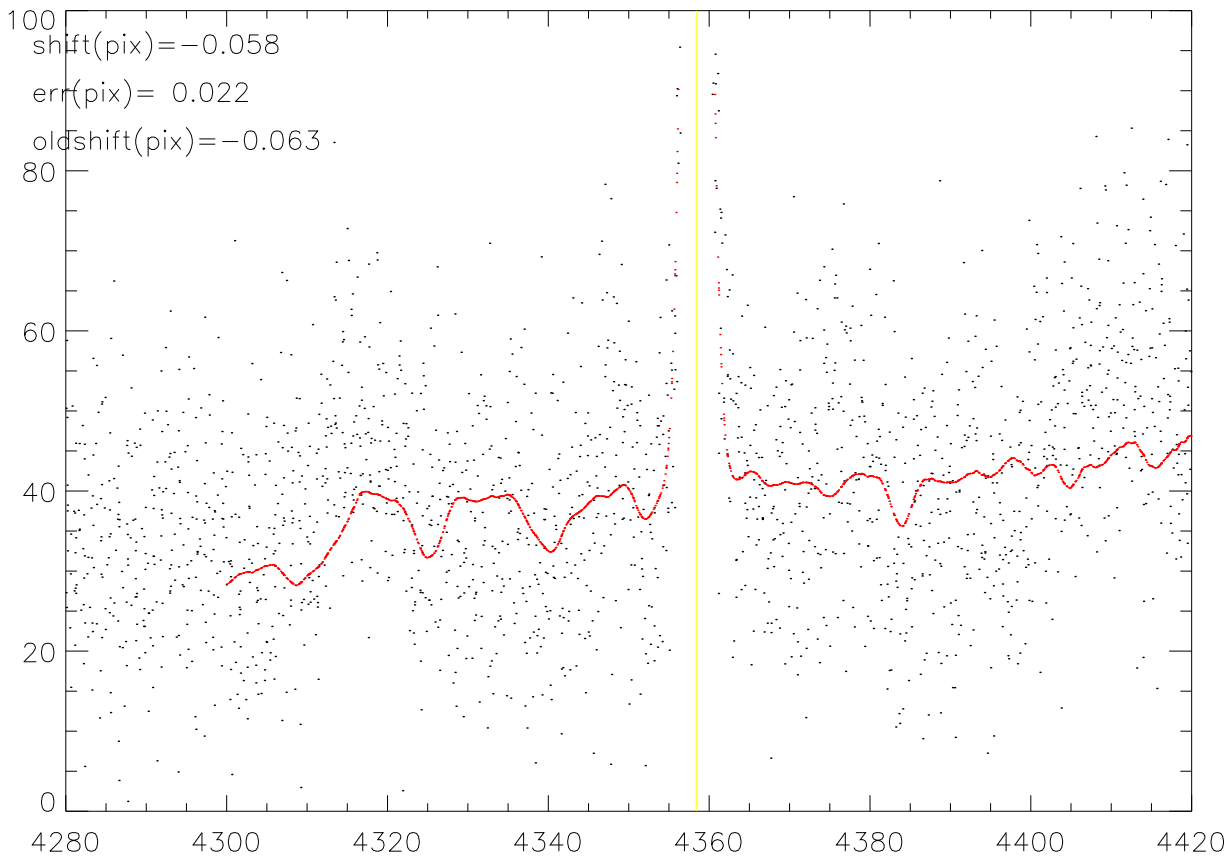

PLATE=1670 MJD=54553 Scattered Light on sdR-b1-00051334.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.45
5.36
6.27
7.18

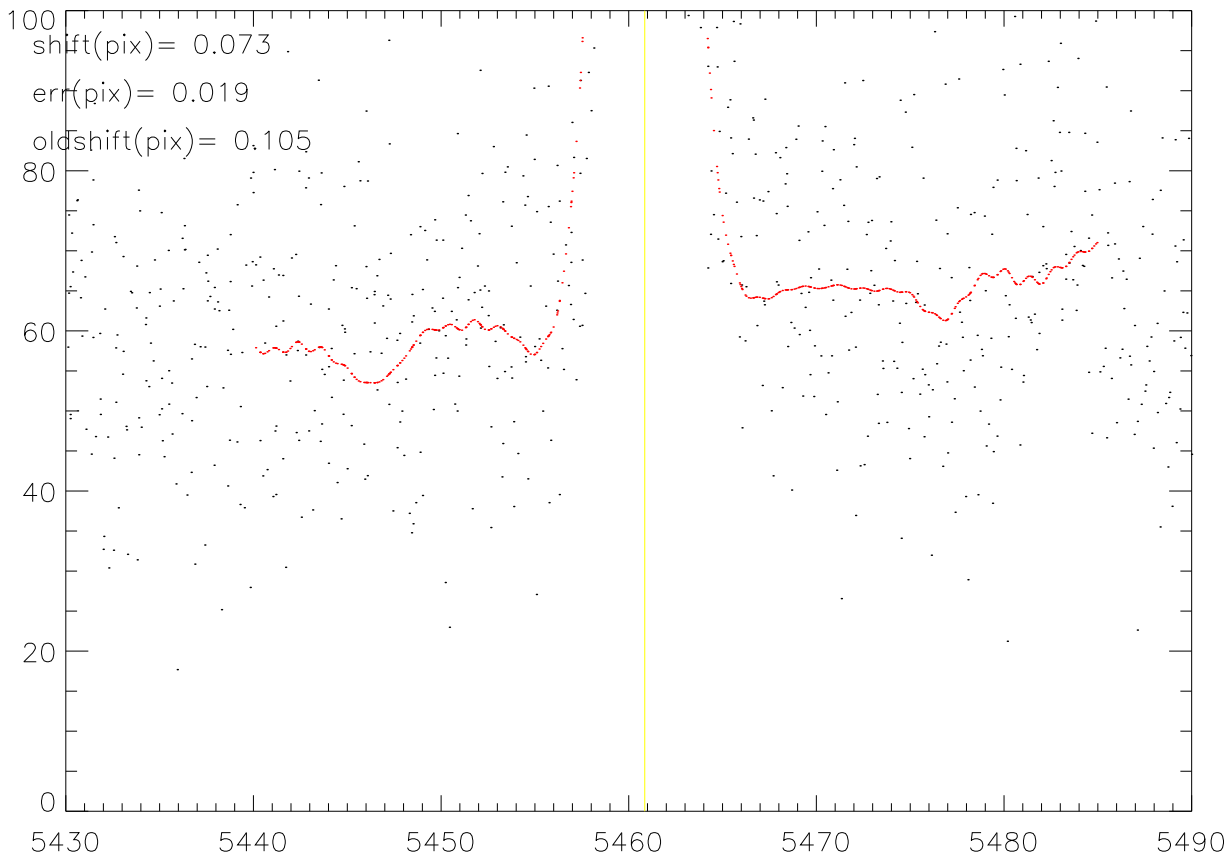

PLATE=1670 MJD=54553 Scattered Light on sdR-b1-00051334.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.029
Max value = 7.132
Fri Mar 28 16:48:23 2008

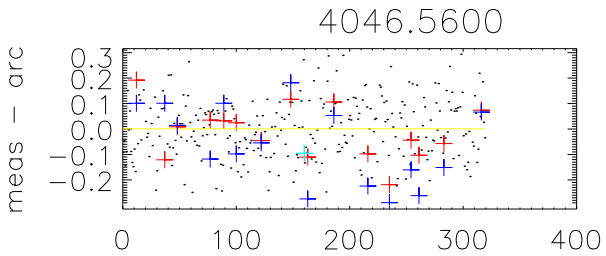

PLATE=1670 MJD=54553 Extraction chi^2 for sdR−b1−00051334.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

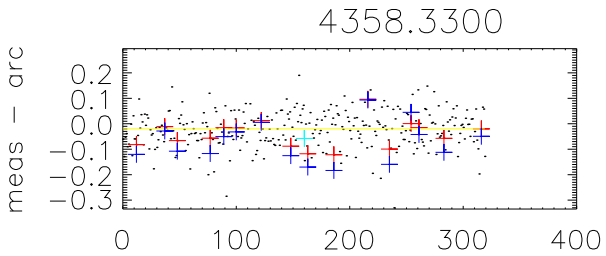

4046.5600
off: −0.12
sig: 0.060
4358.3300
off: −0.06
sig: 0.020
5460.9400
off: 0.10
sig: 0.016
5577.3390
off: 0.08
sig: 0.003
5889.9500
off: 0.19
sig: 0.012
5895.9240
off: 0.21
sig: 0.016

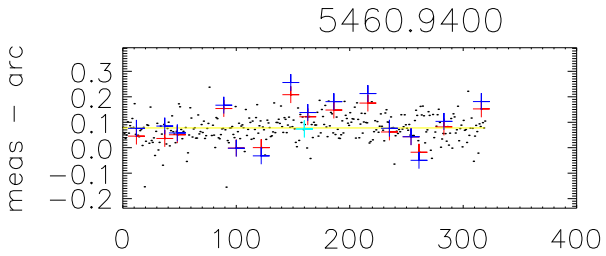

shift(pix)=−0.096
err(pix)= 0.066
oldshift(pix)=−0.118
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

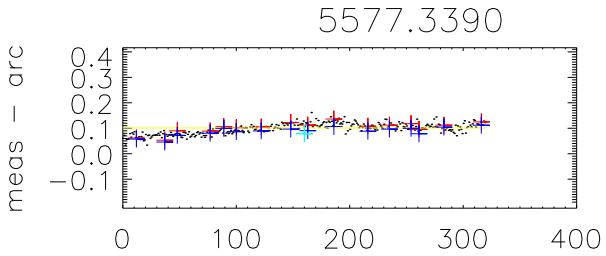

shift(pix)=−0.058
err(pix)= 0.022
oldshift(pix)=−0.063
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

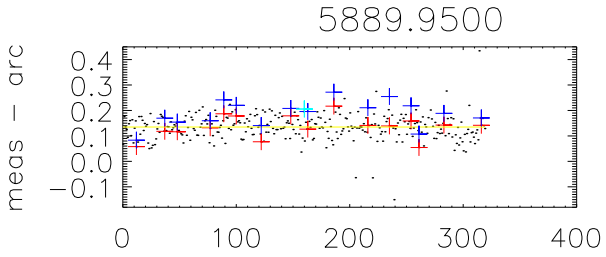

shift(pix)= 0.073
err(pix)= 0.019
oldshift(pix)= 0.105
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

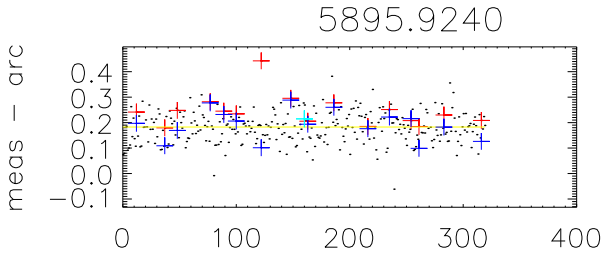

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

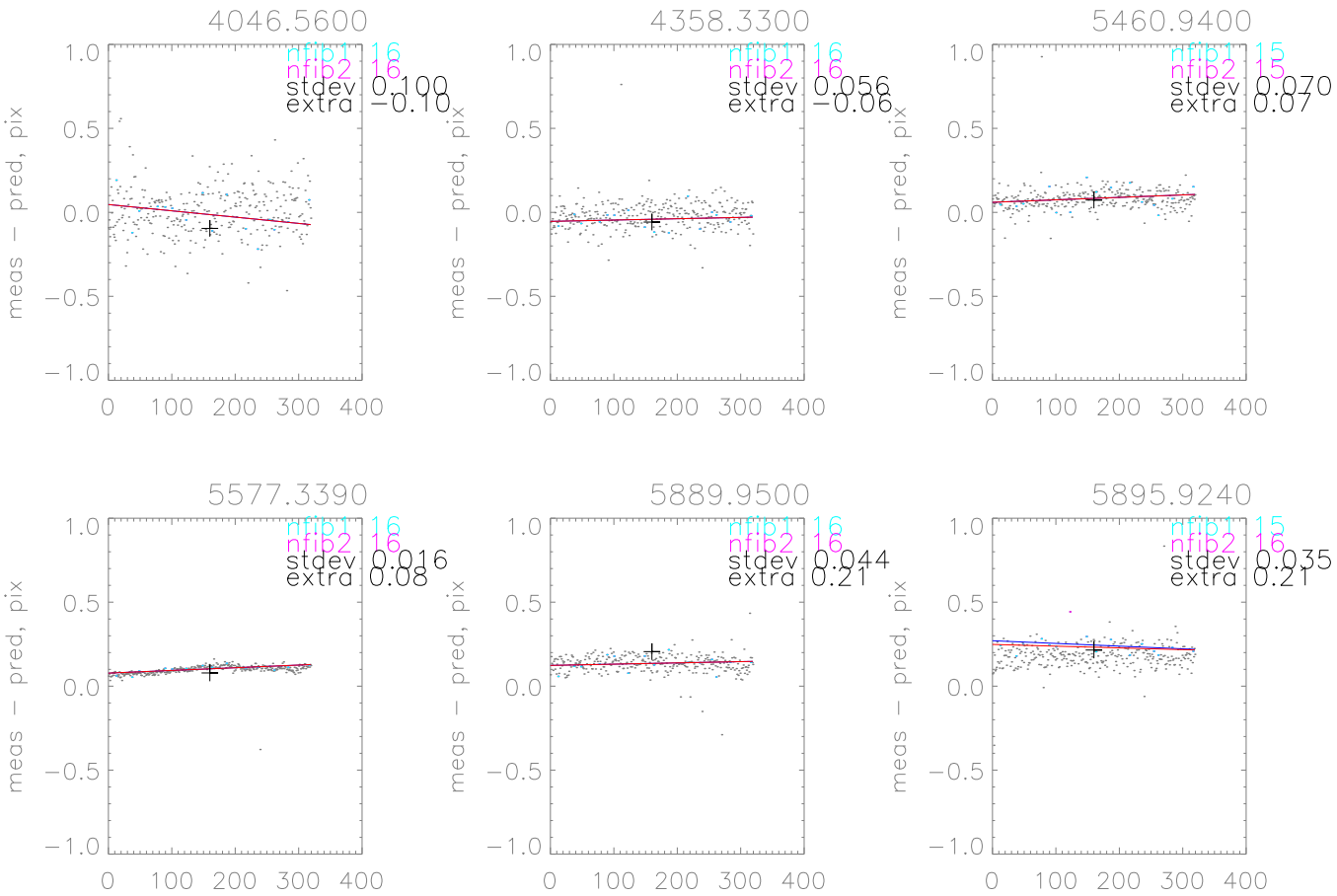

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

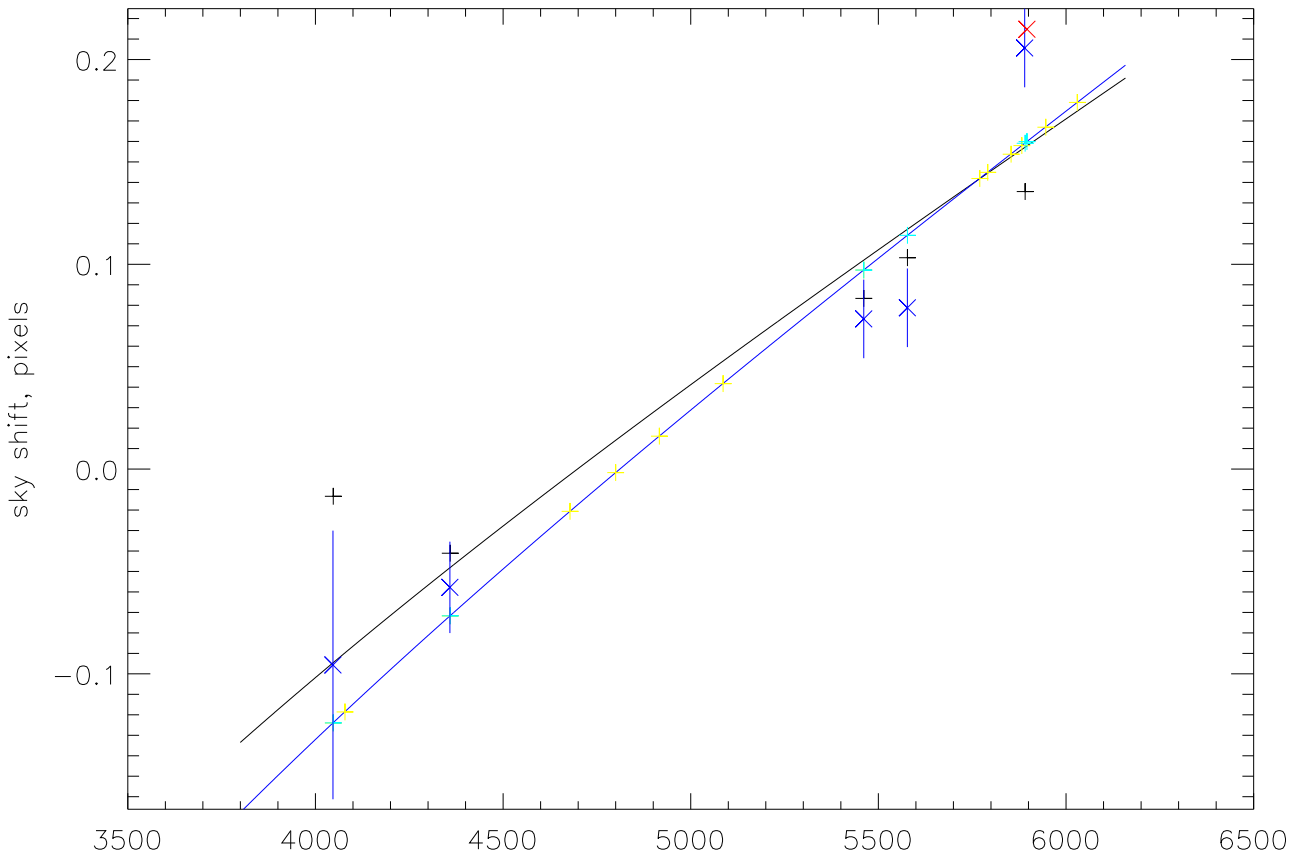

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

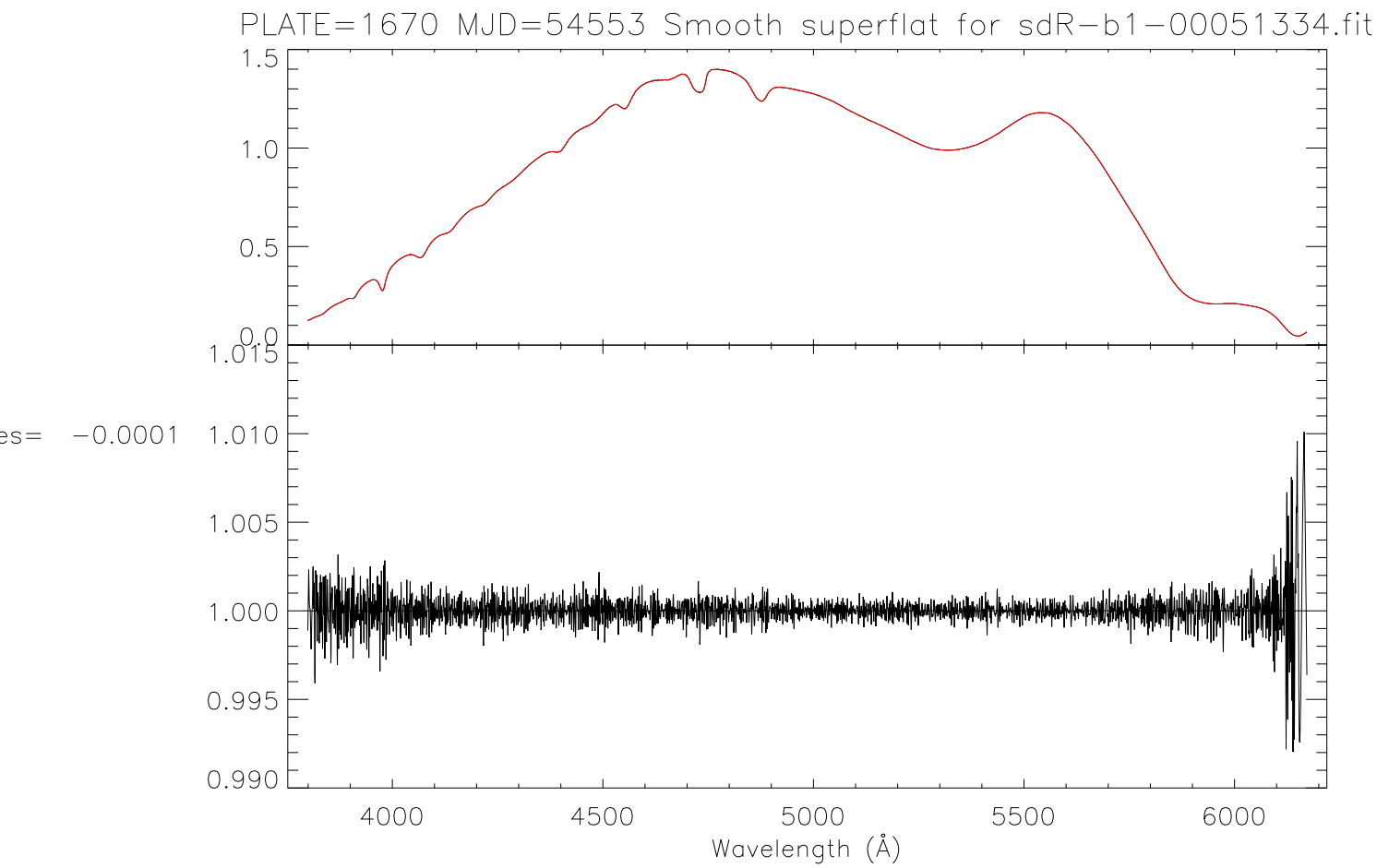

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

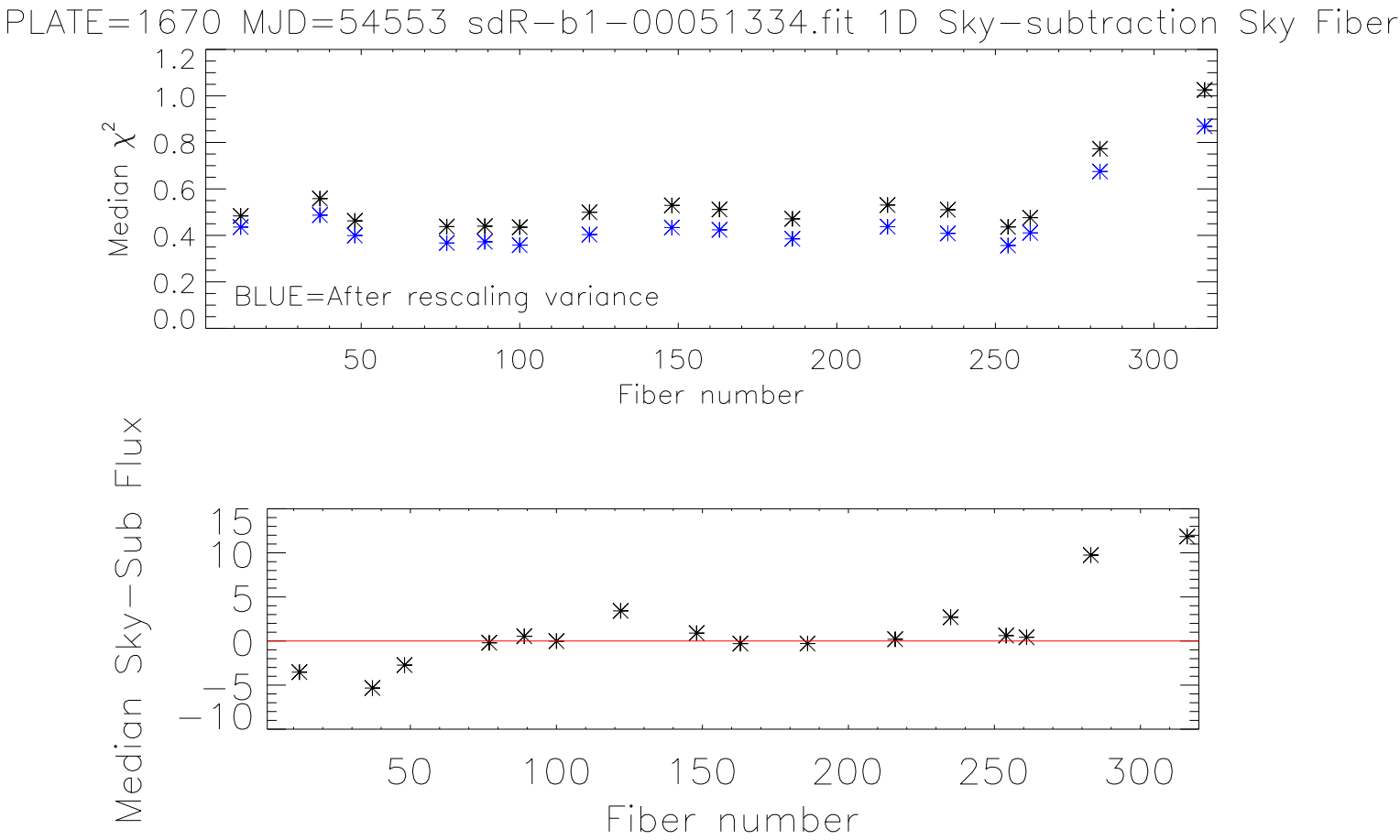

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

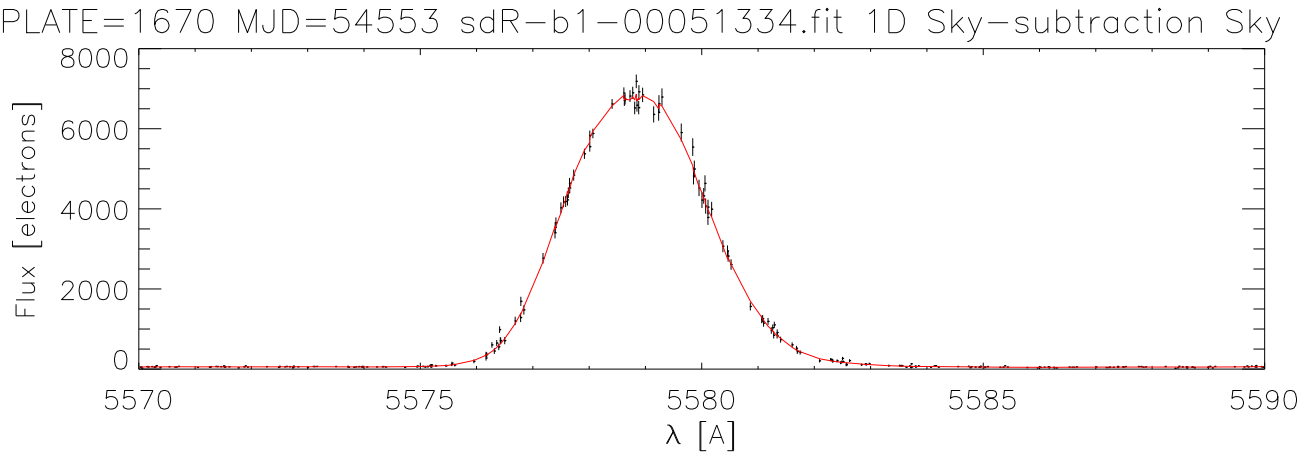

4046.5600
nfib1 16
nfib2 16
stdev 0.100
extra −0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.056
extra −0.06
5460.9400
nfib1 15
nfib2 15
stdev 0.070
extra 0.07
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.044
extra 0.21
5895.9240
nfib1 15
nfib2 16
stdev 0.035
extra 0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

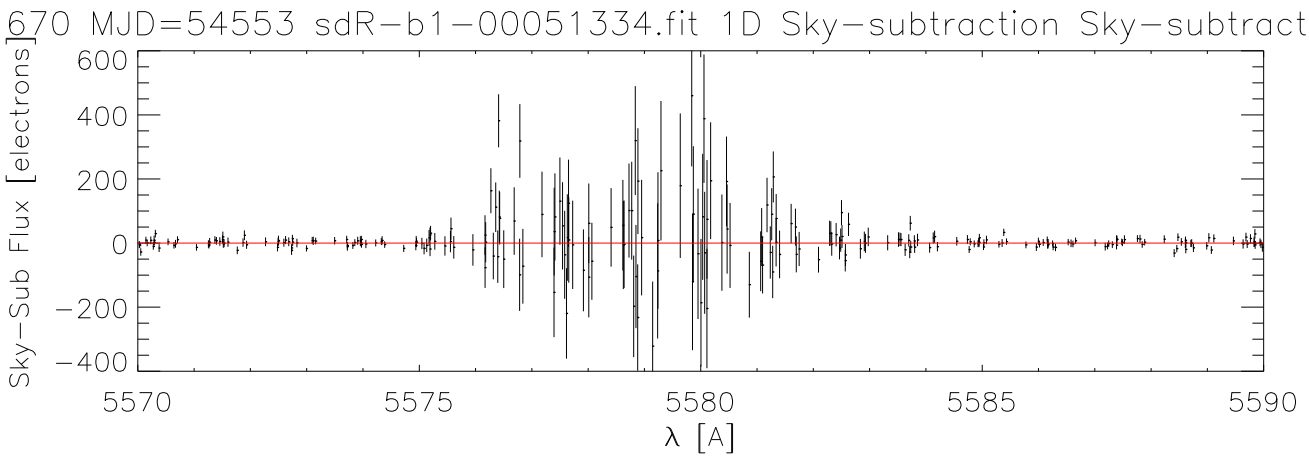

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

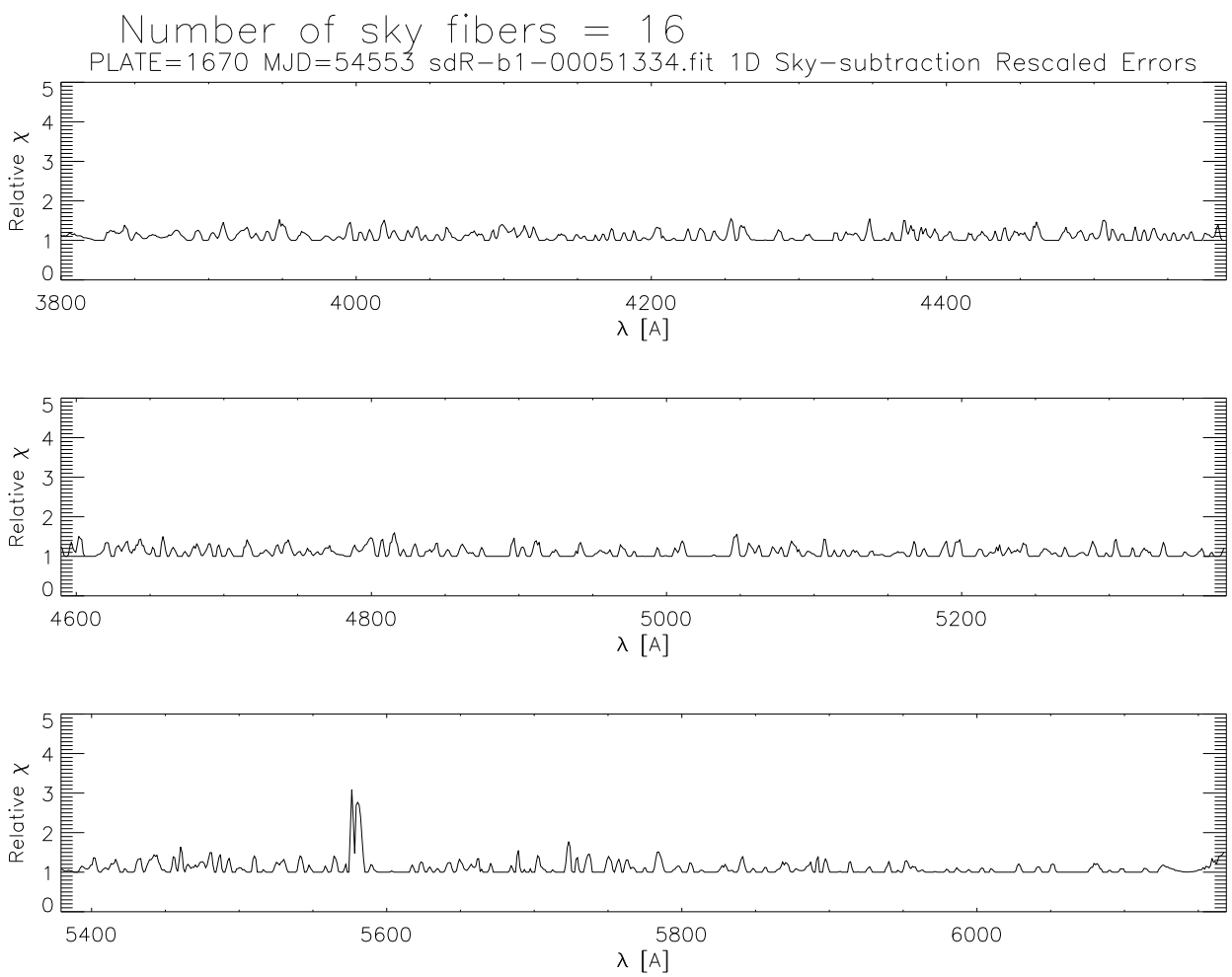

PLATE=1670 MJD=54553 Smooth superflat for sdR-b1-00051334.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

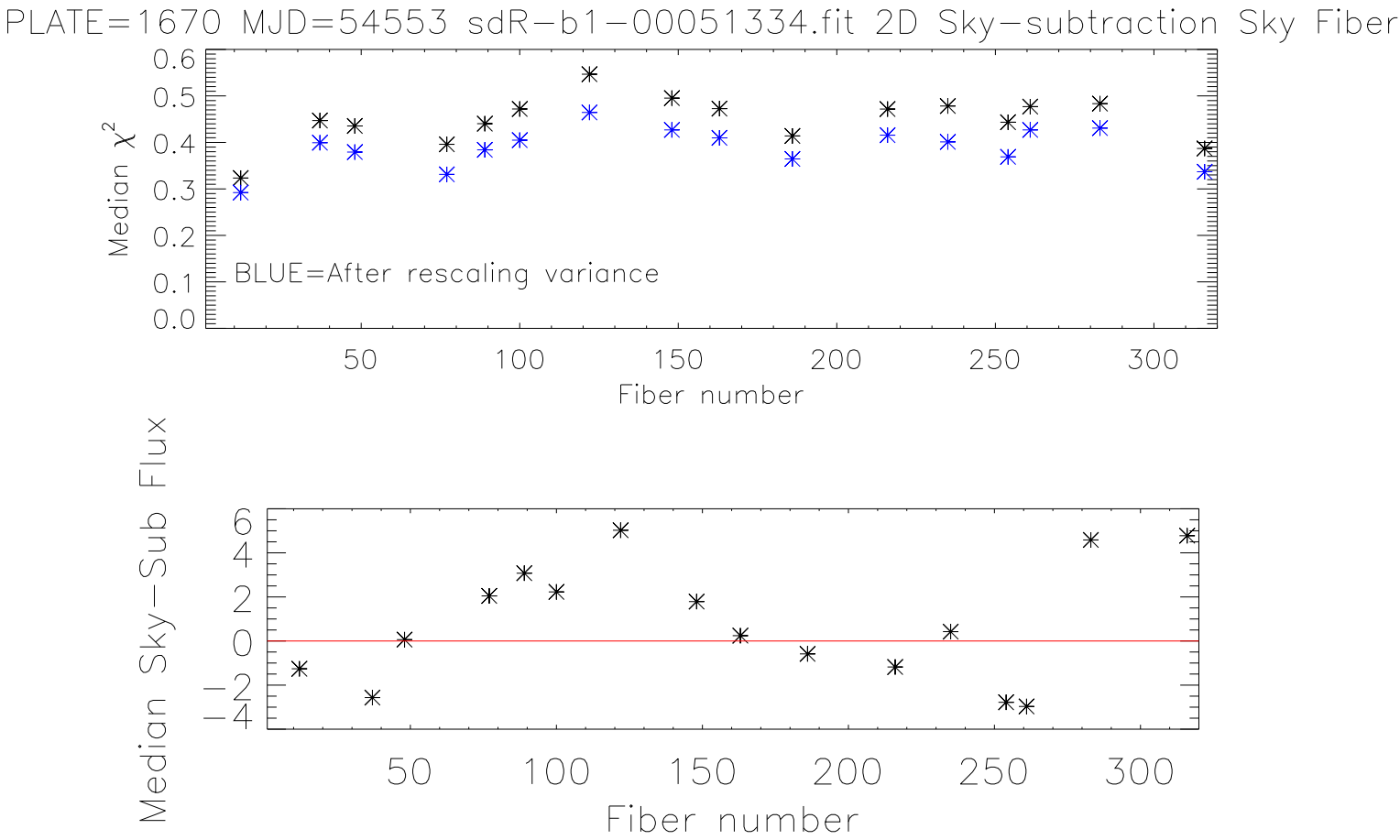
es= −0.0001

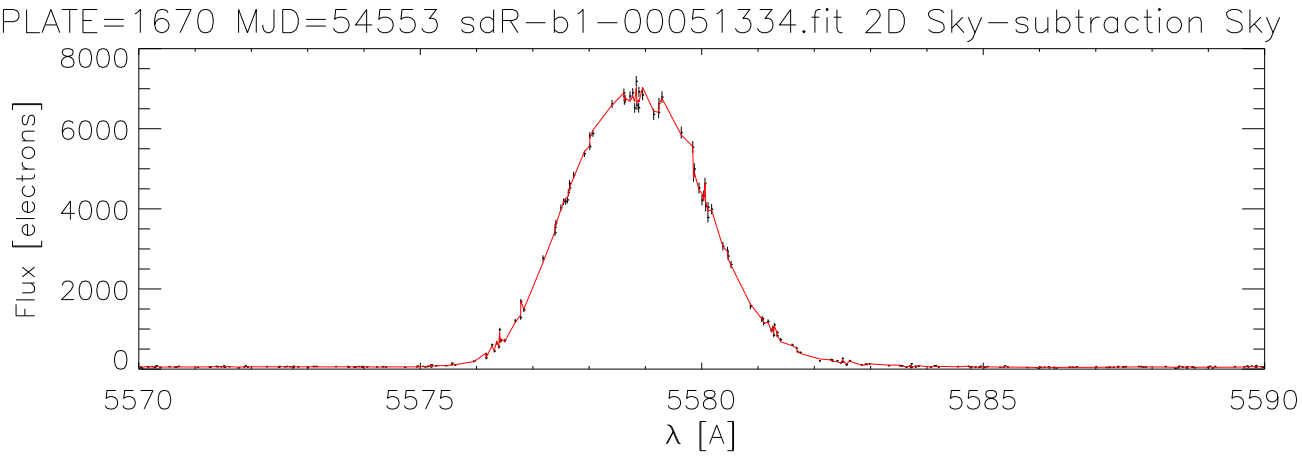

PLATE=1670 MJD=54553 sdR-b1-00051334.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

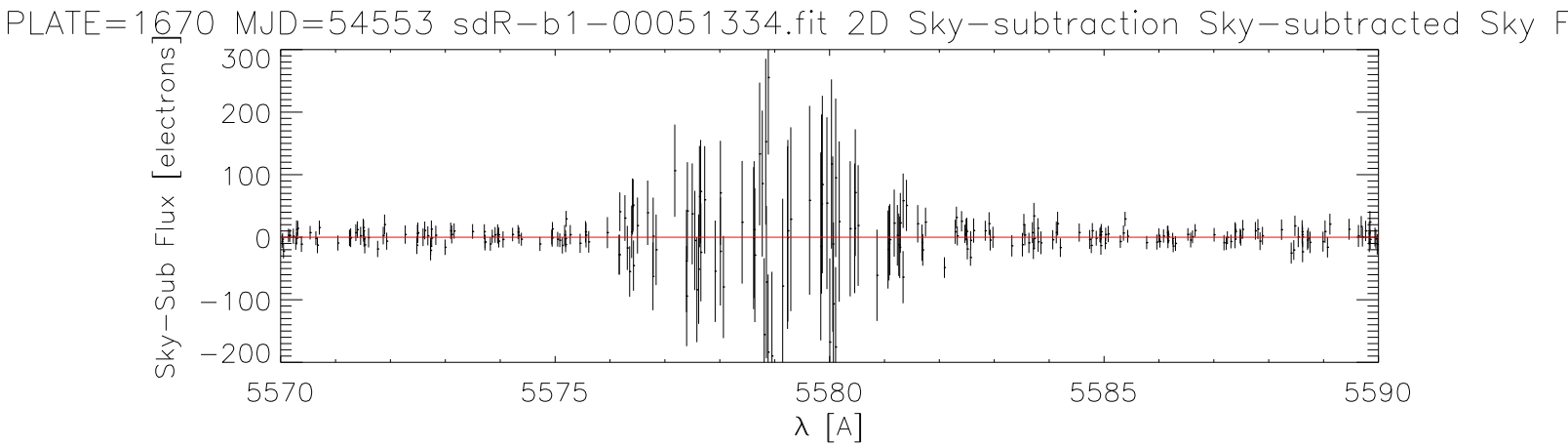

PLATE=1670 MJD=54553 sdR-b1-00051334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

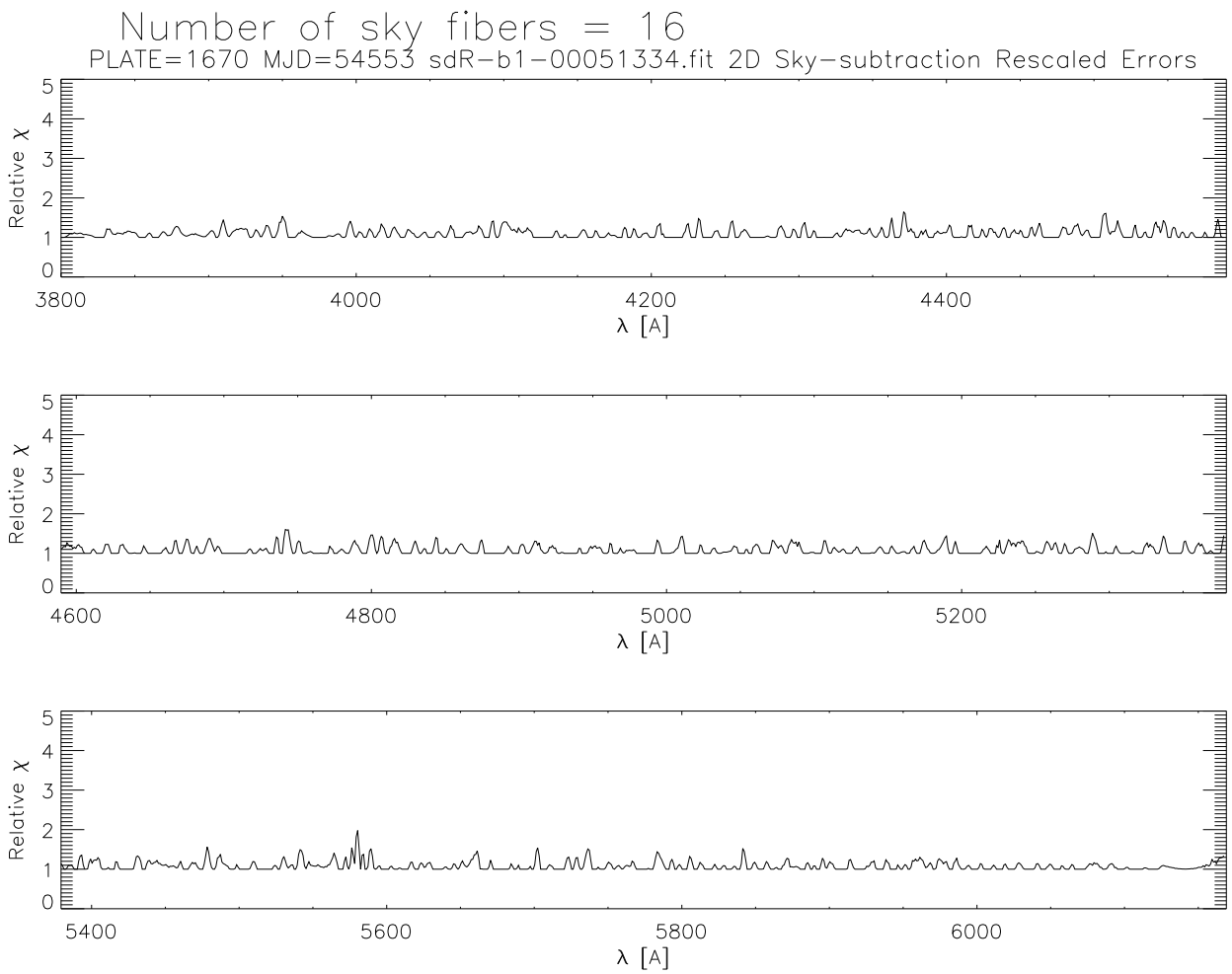

PLATE=1670 MJD=54553 sdR-b1-00051334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

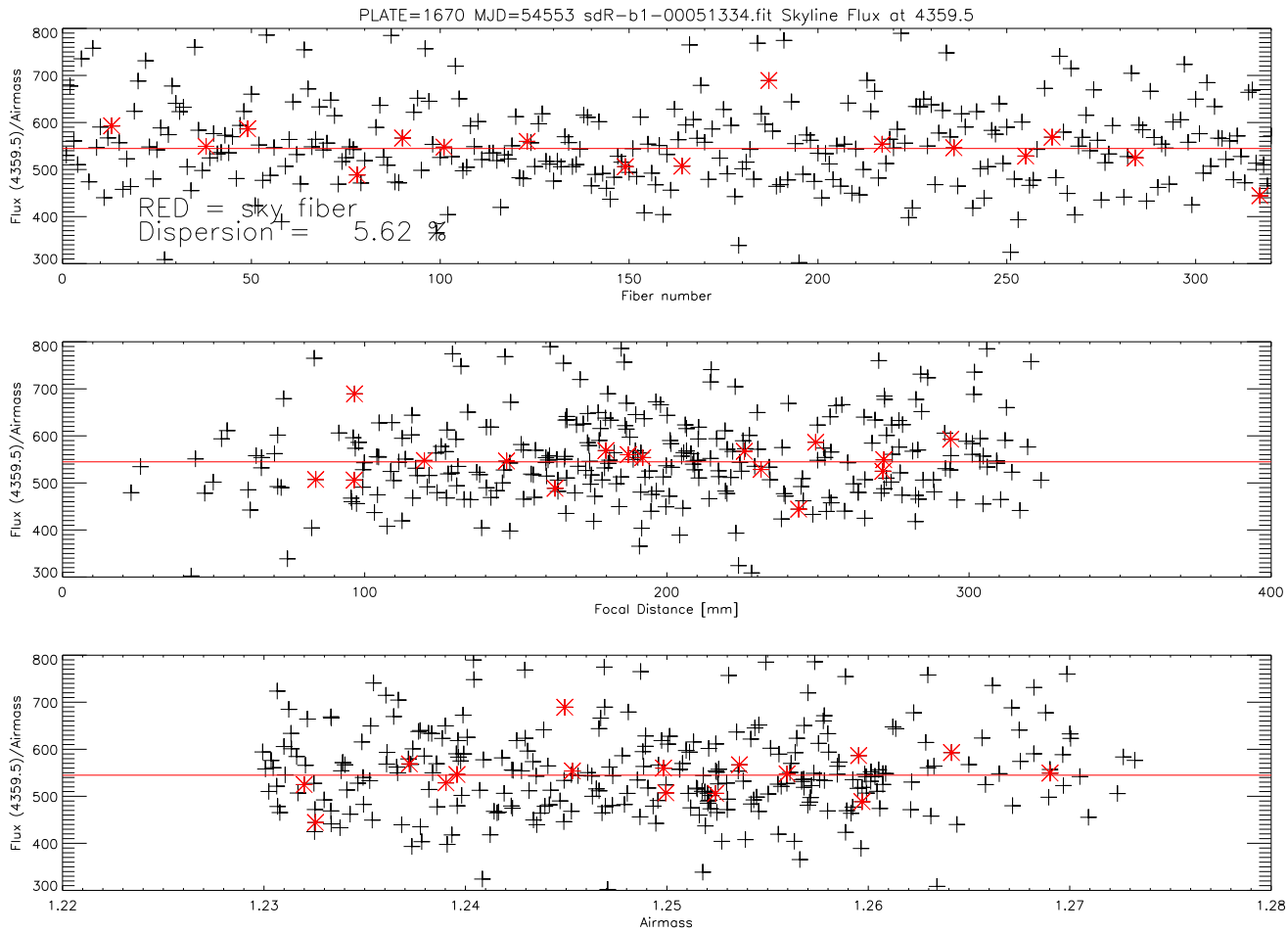

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b1-00051334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

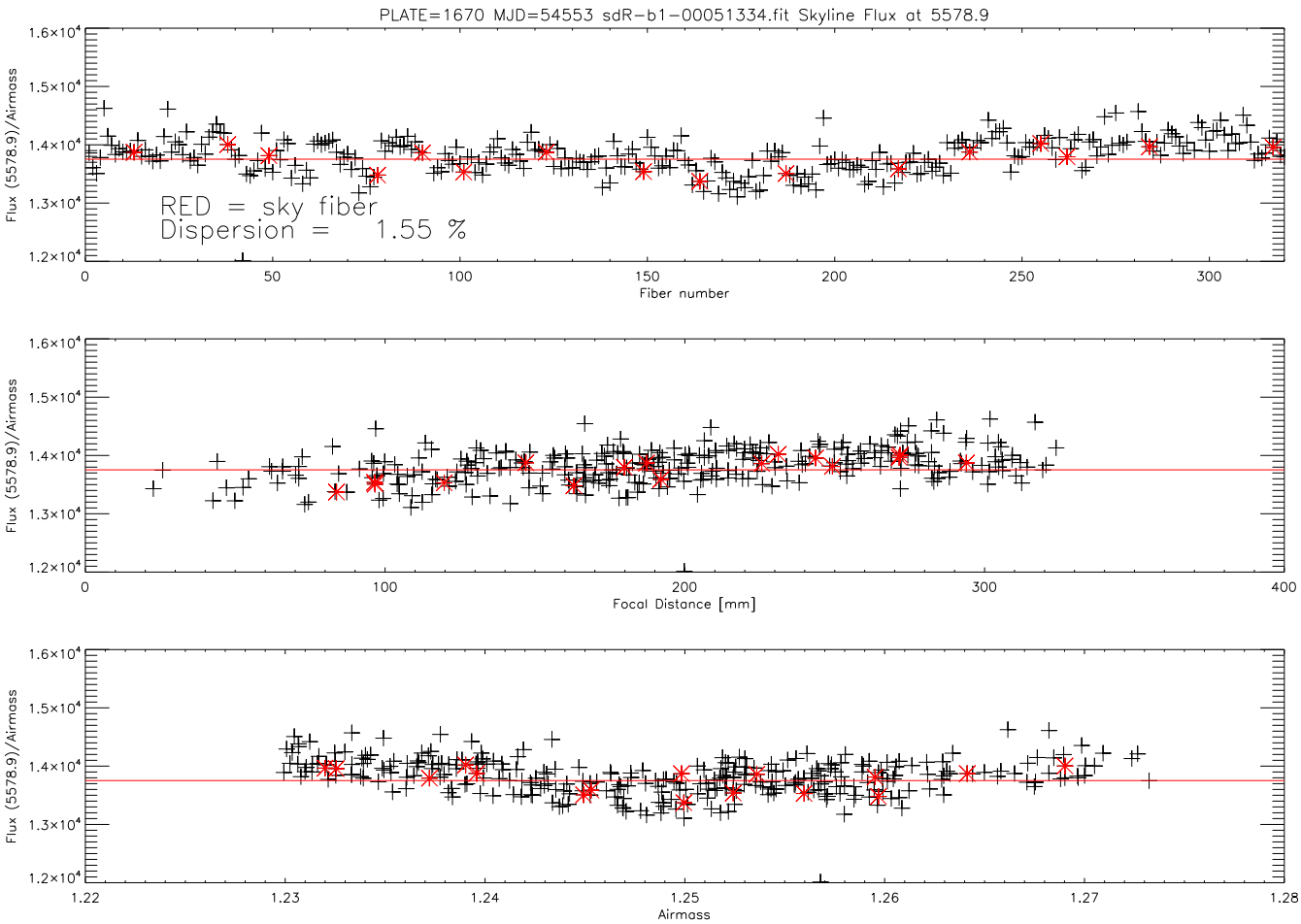

PLATE=1670 MJD=54553 sdR-b1-00051334.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

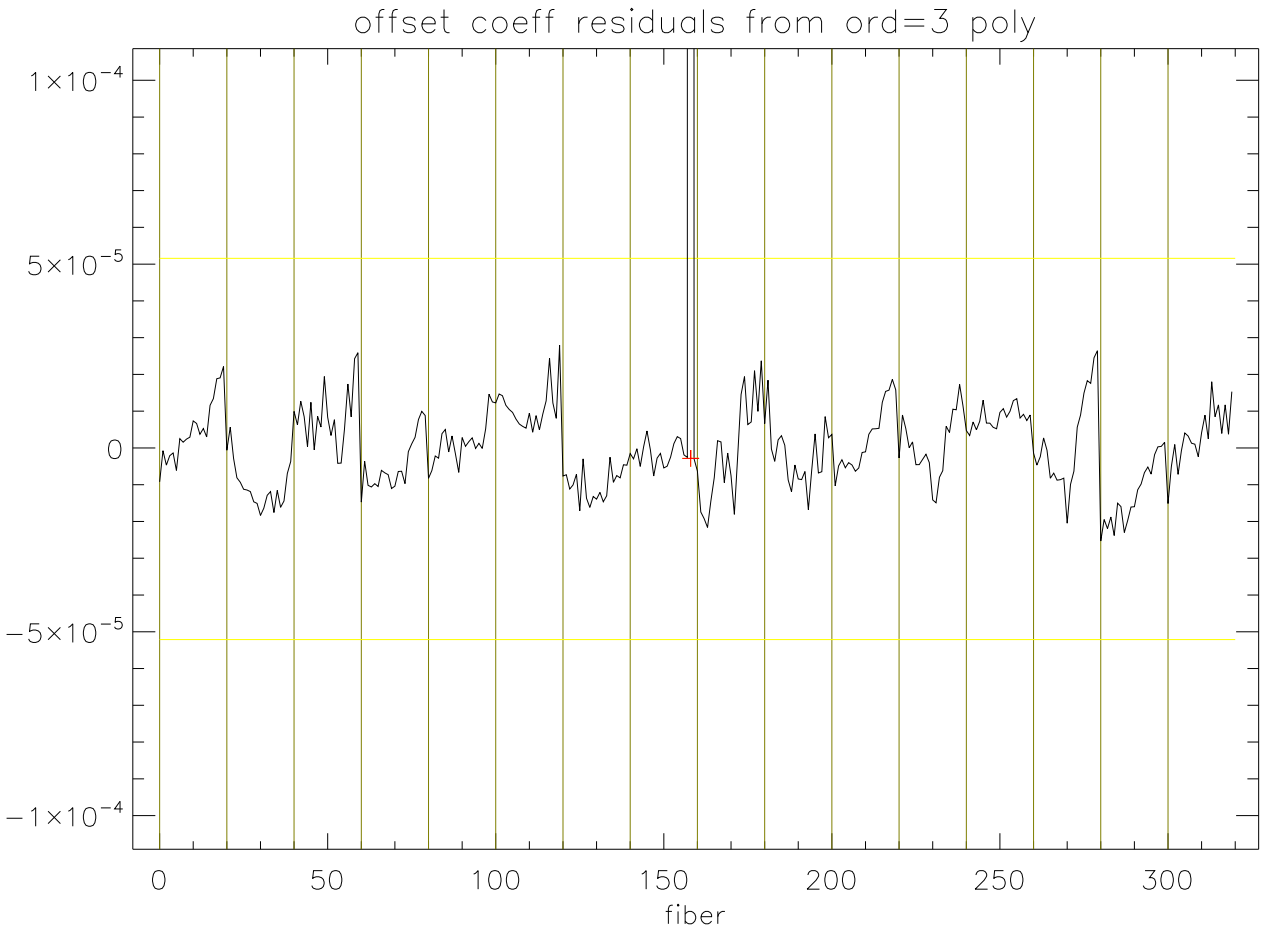

PLATE=1670 MJD=54553 sdR-b1-00051334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

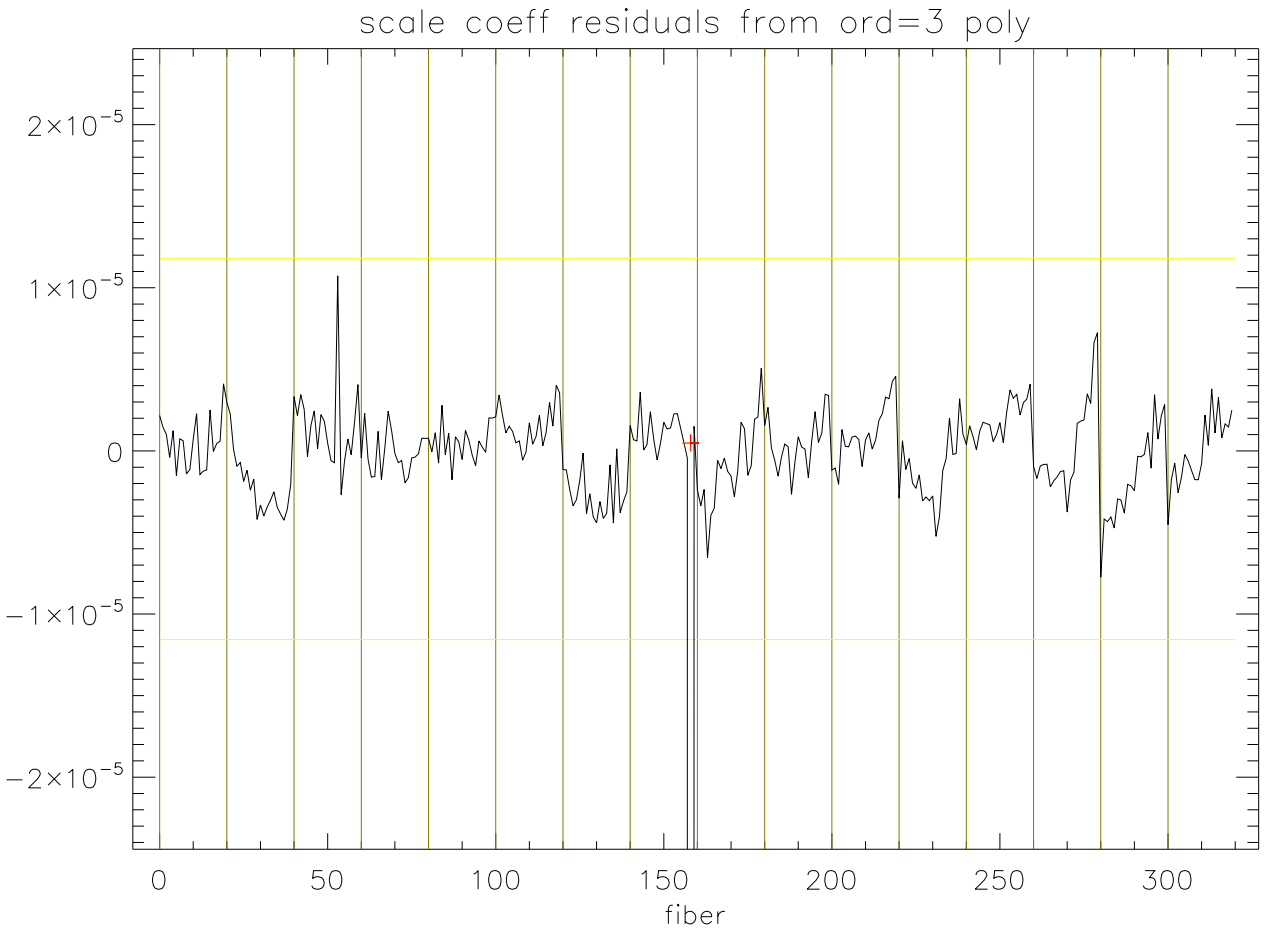

PLATE=1670 MJD=54553 sdR-b1-00051334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

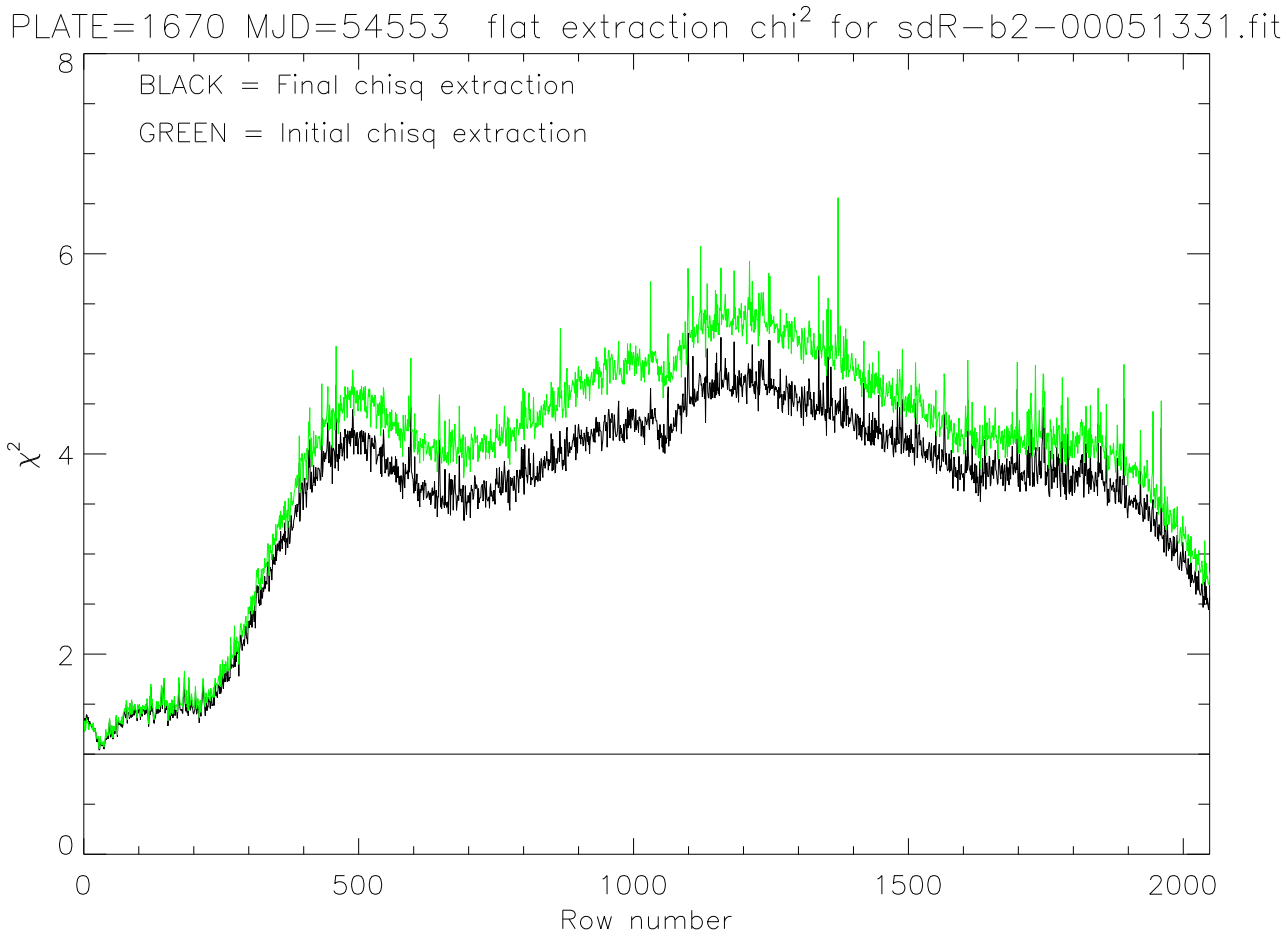

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b1-00051334.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

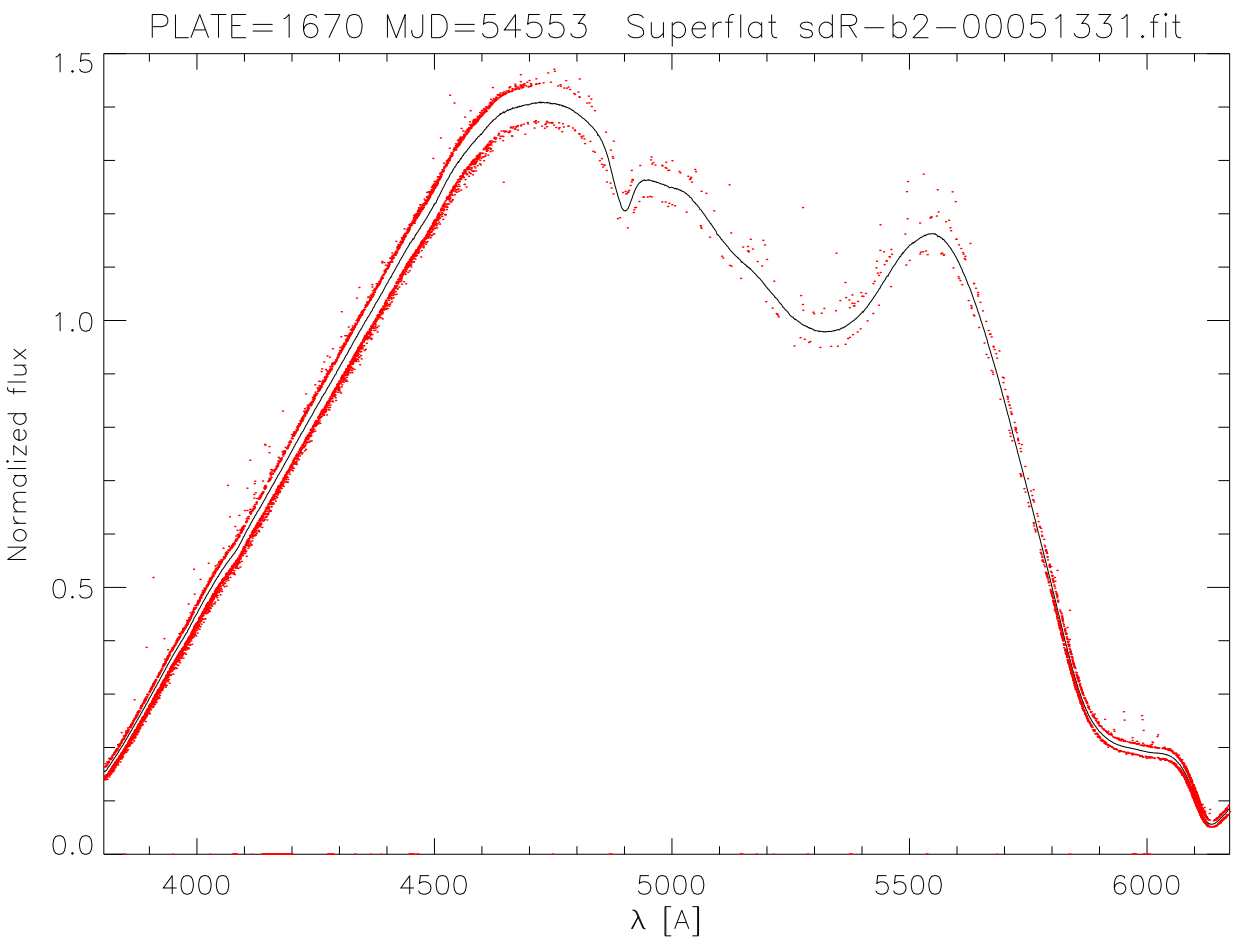

PLATE=1670 MJD=54553 sdR-b1-00051334.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.62 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

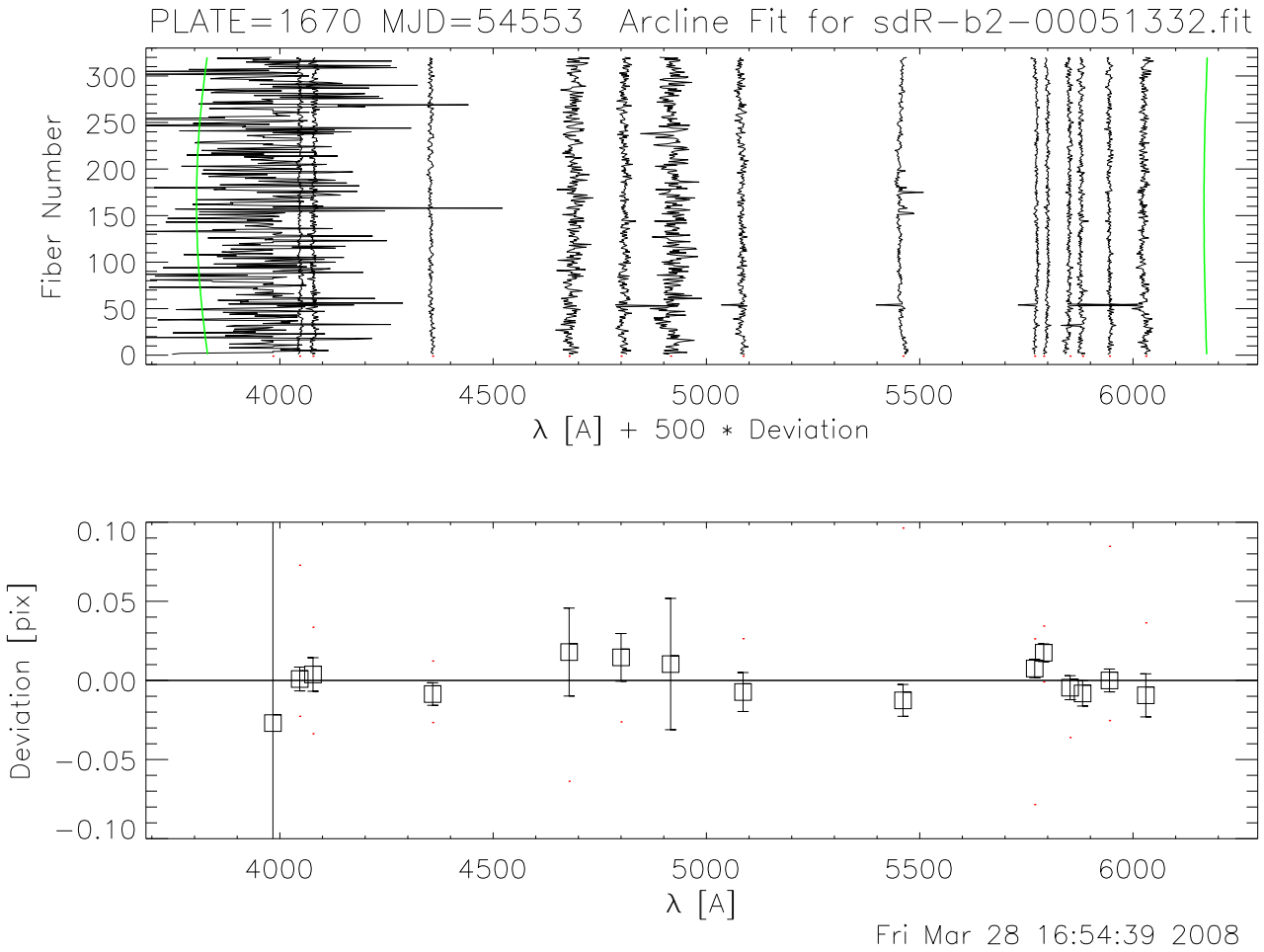

PLATE=1670 MJD=54553 sdR-b1-00051334.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.55 %
Fiber number
Focal Distance [mm]
Airmass

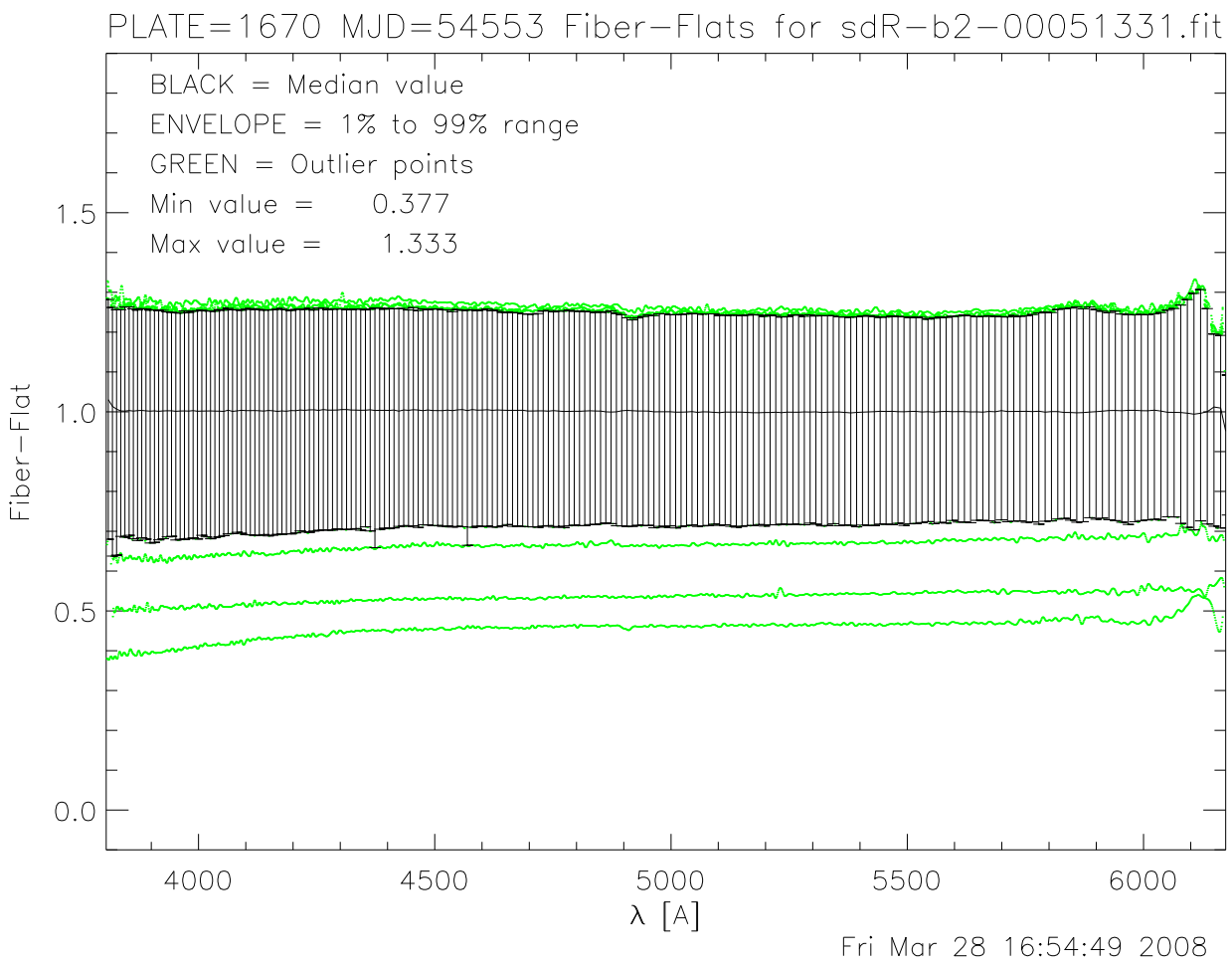

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

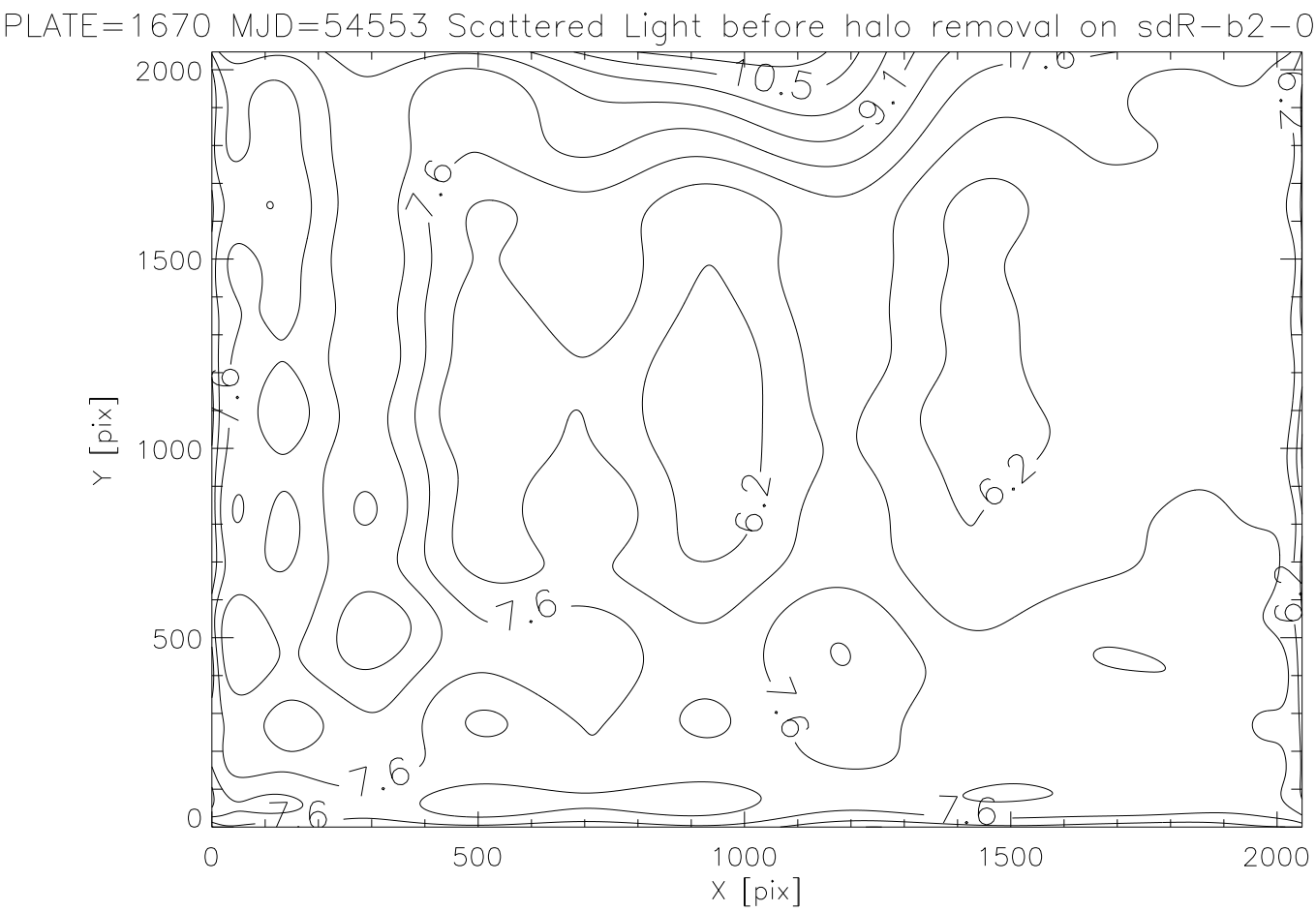

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

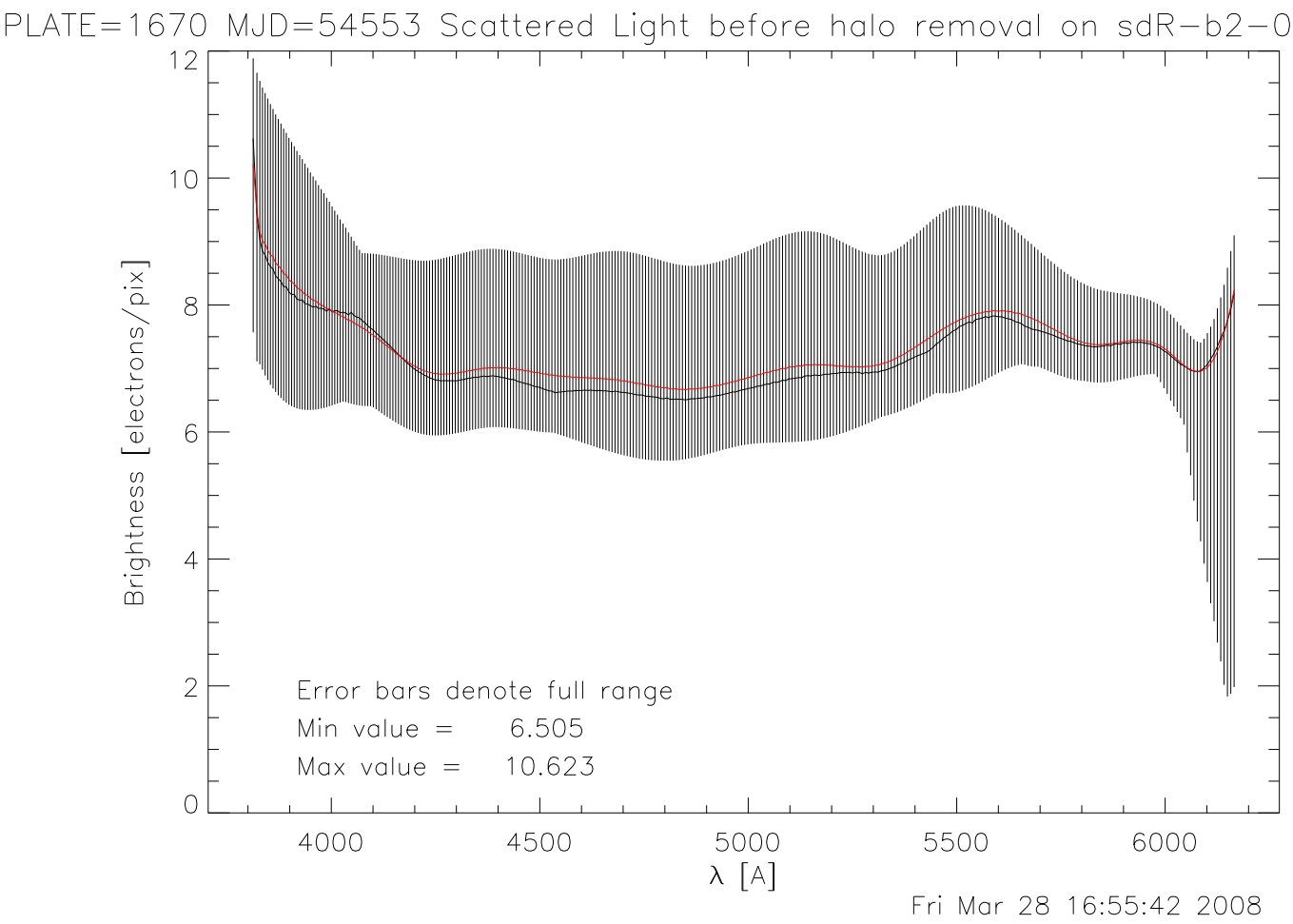

PLATE=1670 MJD=54553 flat extraction chi^2 for sdR−b2−00051331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

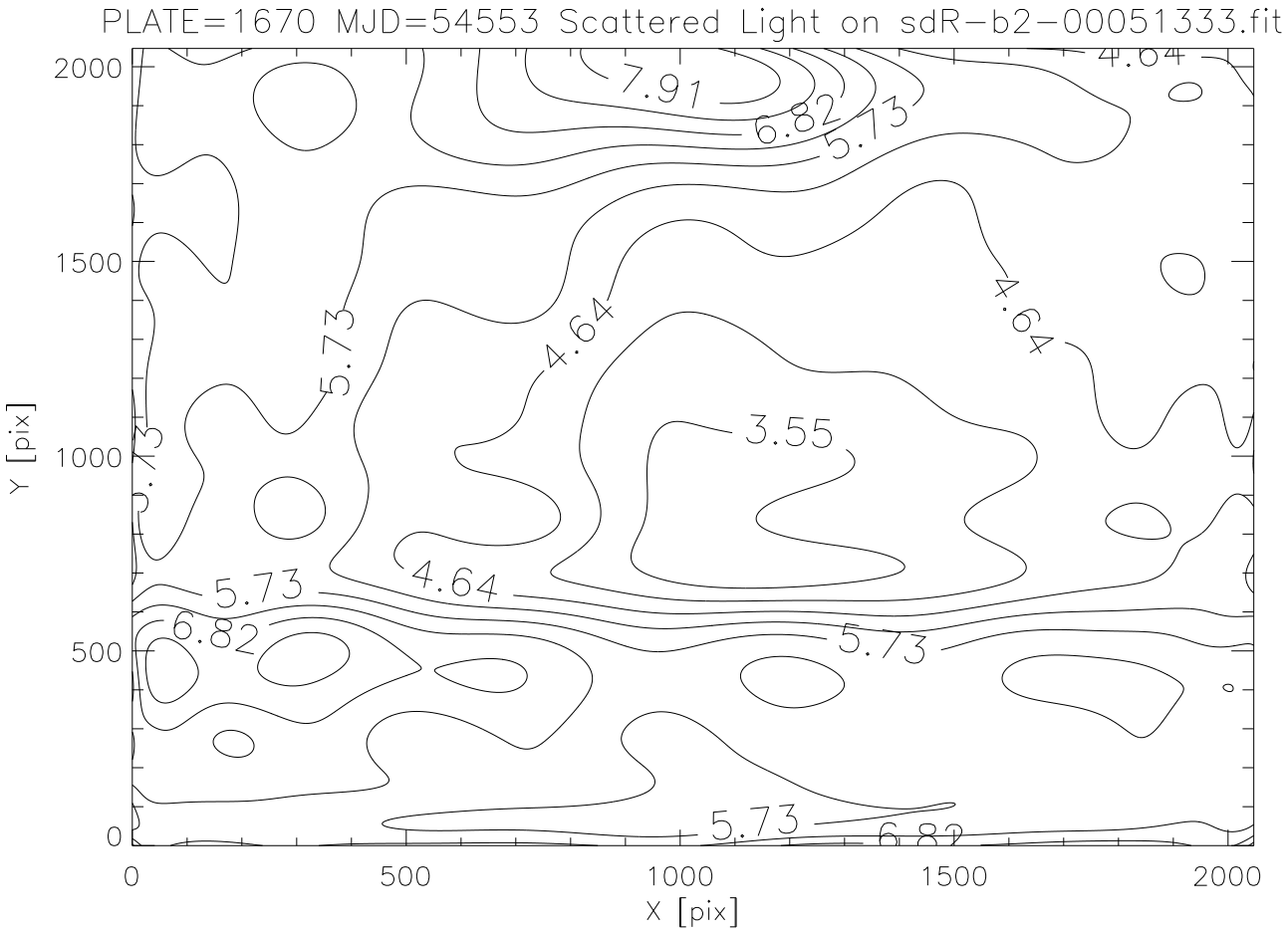

PLATE=1670 MJD=54553 Superflat sdR-b2-00051331.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

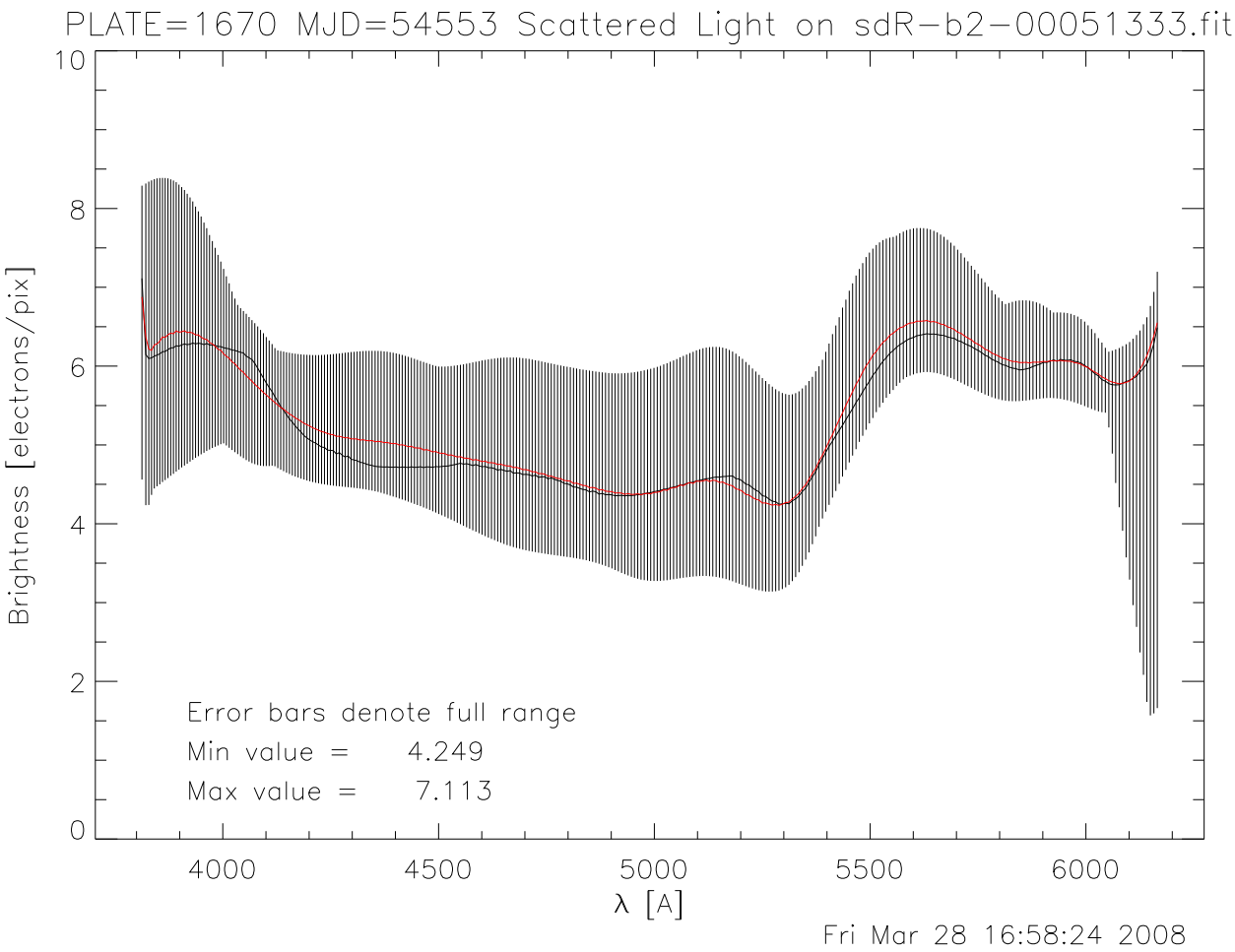

PLATE=1670 MJD=54553 Arcline Fit for sdR-b2-00051332.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:54:39 2008

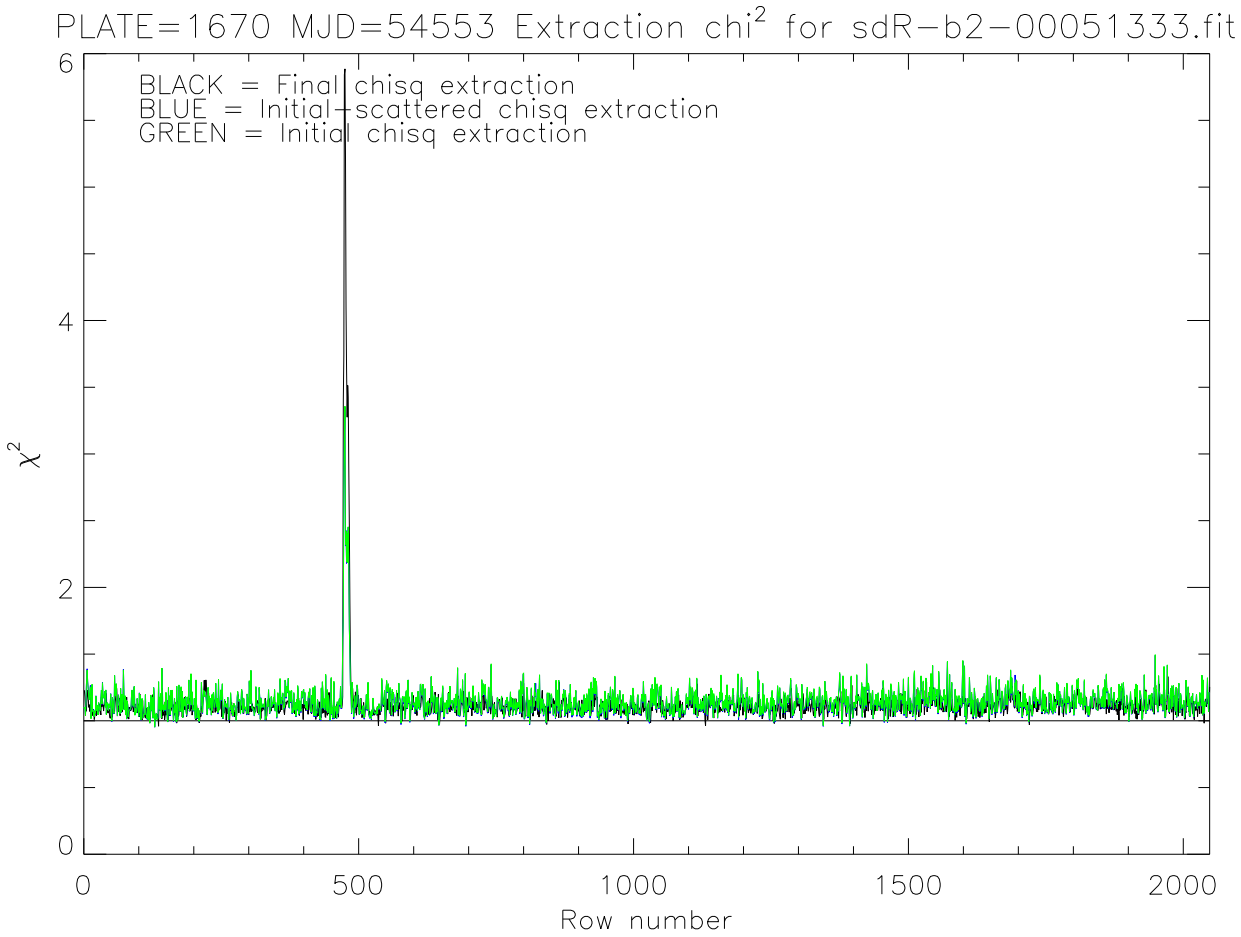

PLATE=1670 MJD=54553 Fiber-Flats for sdR-b2-00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.377
Max value = 1.333
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:54:49 2008

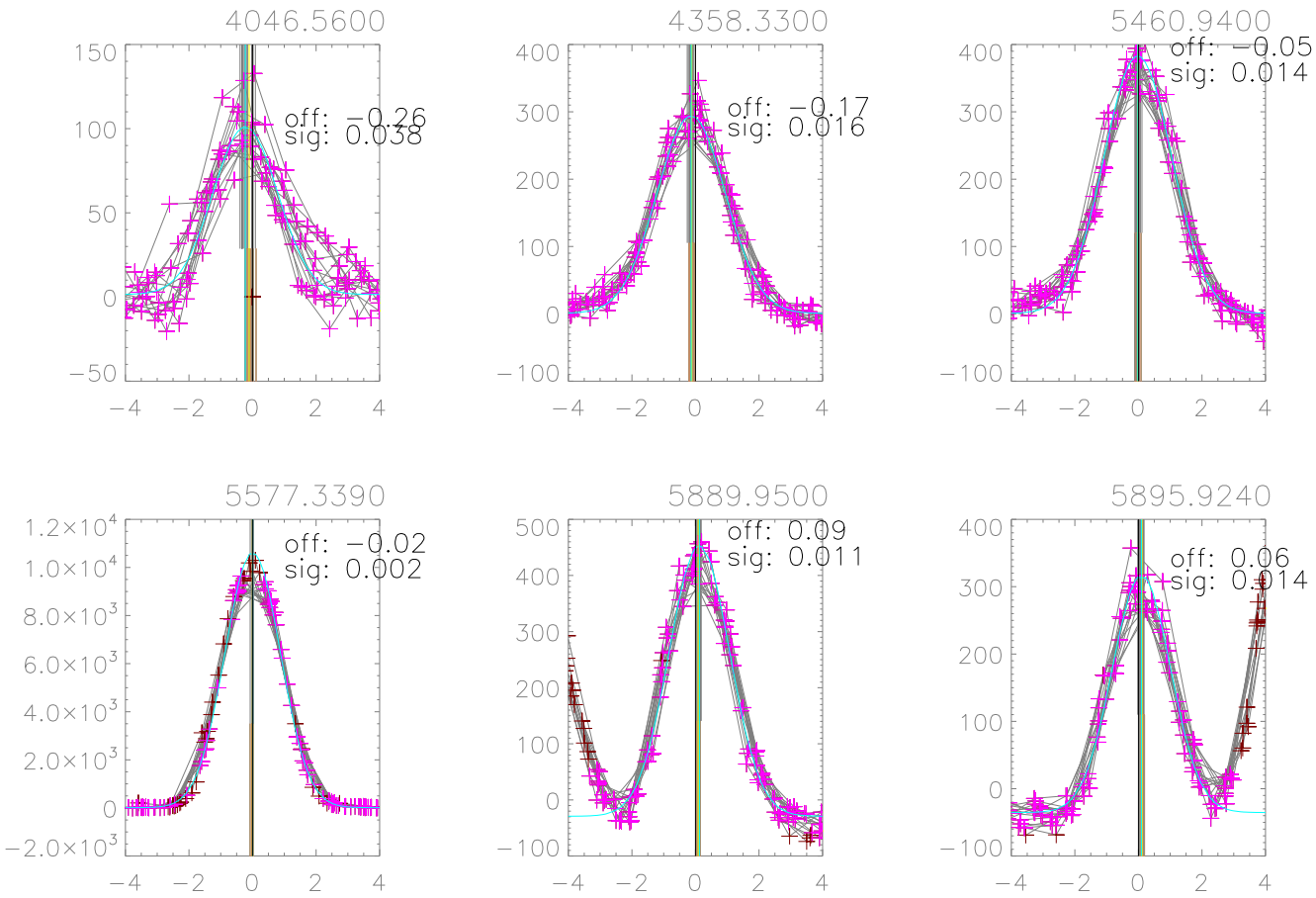

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR−b2−00051333.f
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
9.1
7.6
6.2

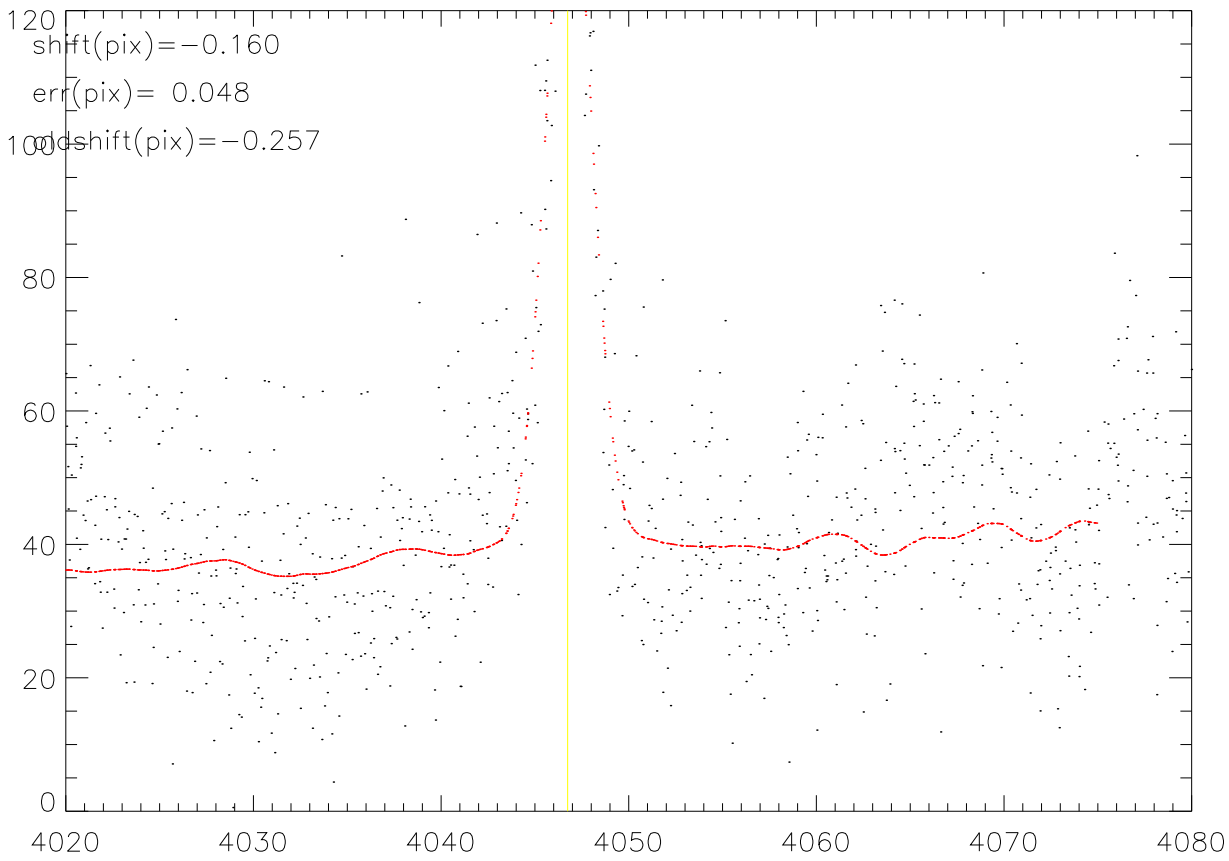

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-b2-00051333.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.505
Max value = 10.623
Fri Mar 28 16:55:42 2008

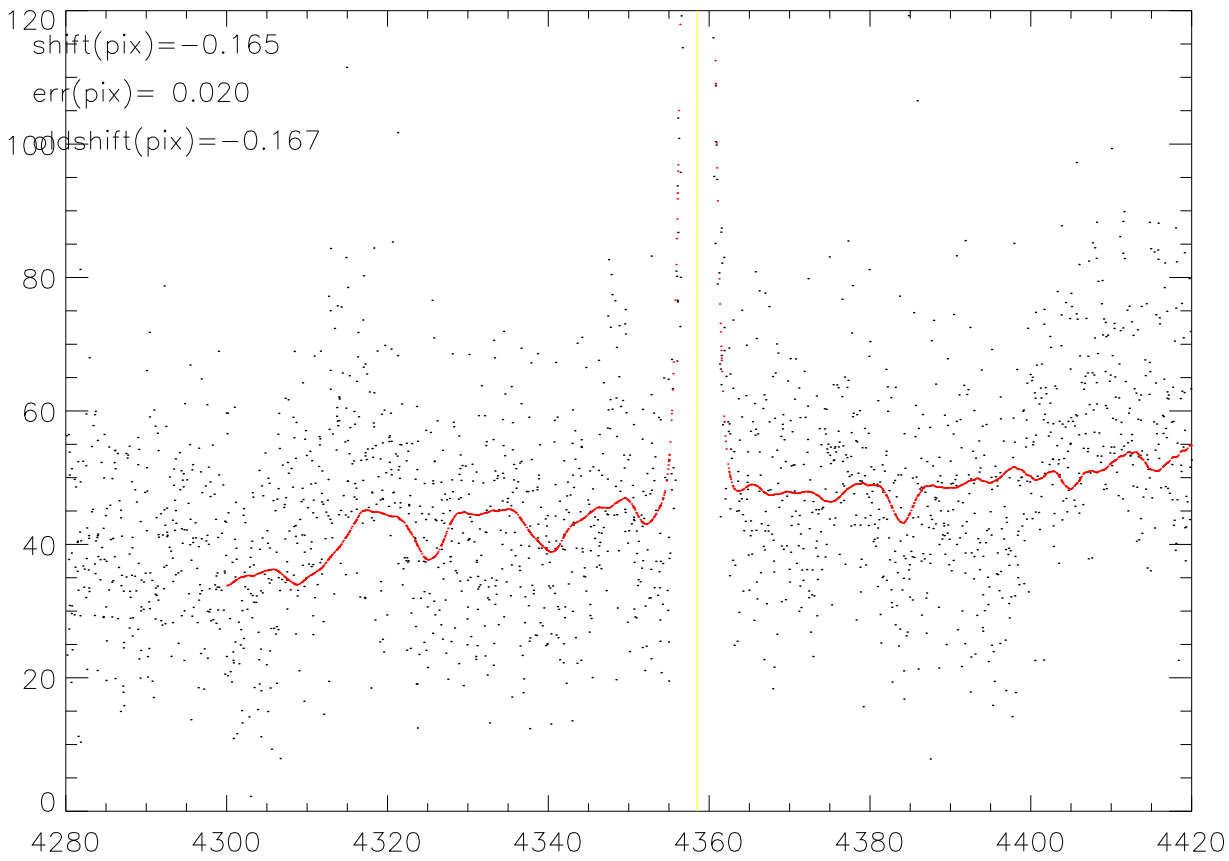

PLATE=1670 MJD=54553 Scattered Light on sdR-b2-00051333.fit
7.91
6.82
5.73
4.64
3.55
Y [pix]
X [pix]
0
500
1000
1500
2000

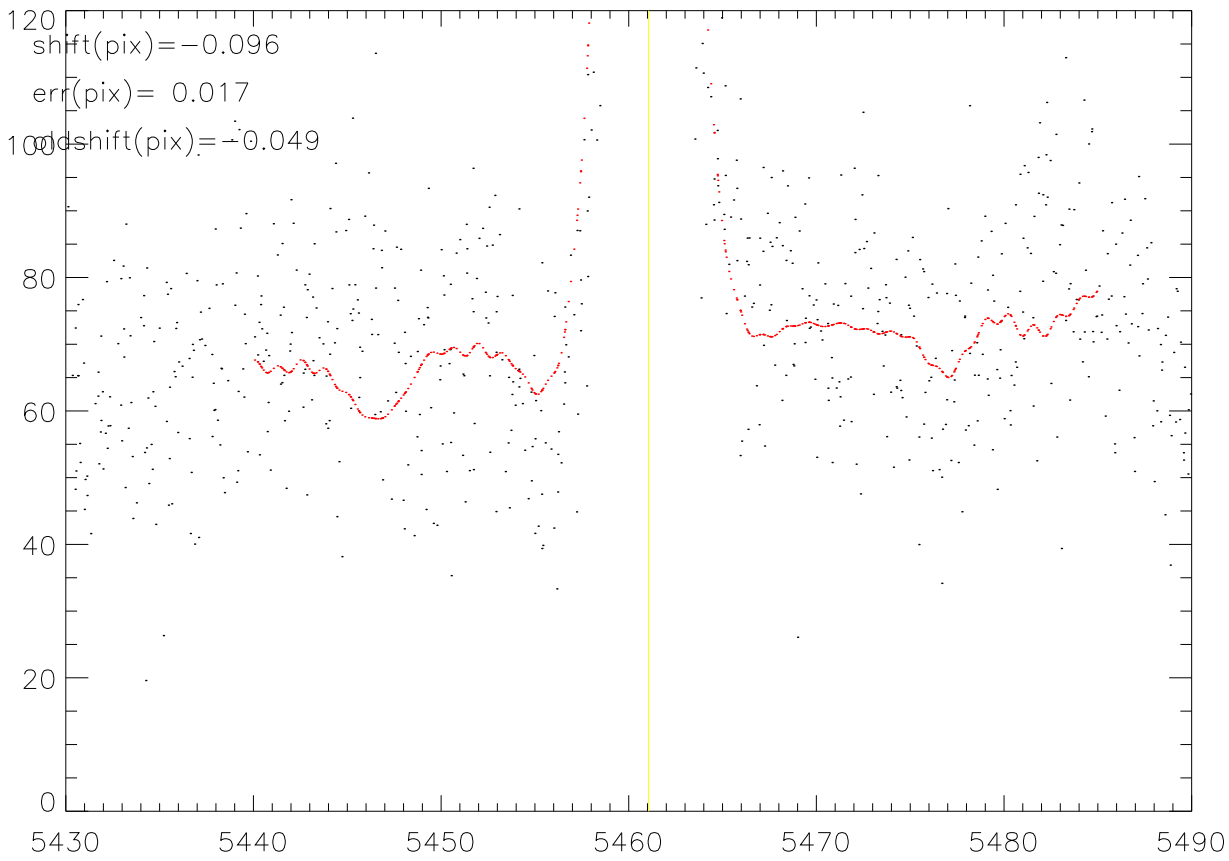

PLATE=1670 MJD=54553 Scattered Light on sdR-b2-00051333.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.249
Max value = 7.113
Fri Mar 28 16:58:24 2008

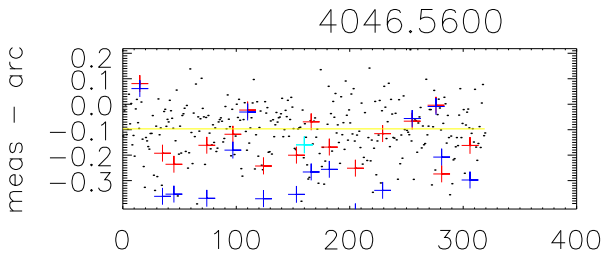

PLATE=1670 MJD=54553 Extraction chi^2 for sdR-b2-00051333.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

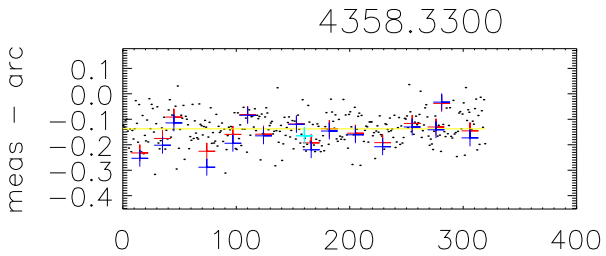

4046.5600
off: −0.26
sig: 0.038
4358.3300
off: −0.17
sig: 0.016
5460.9400
off: −0.05
sig: 0.014
5577.3390
off: −0.02
sig: 0.002
5889.9500
off: 0.09
sig: 0.011
5895.9240
off: 0.06
sig: 0.014

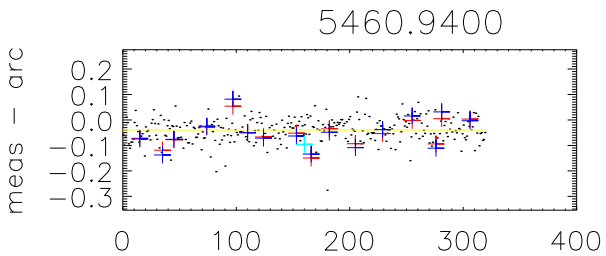

shift(pix)=−0.160
err(pix)= 0.048
oldshift(pix)=−0.257
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

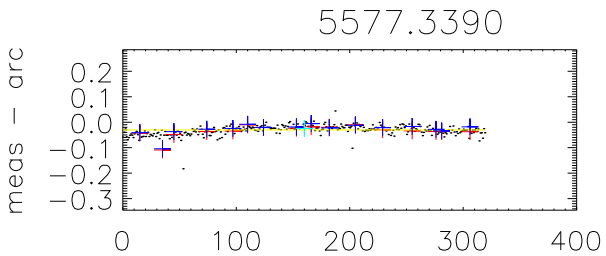

shift(pix)=−0.165
err(pix)= 0.020
oldshift(pix)=−0.167
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

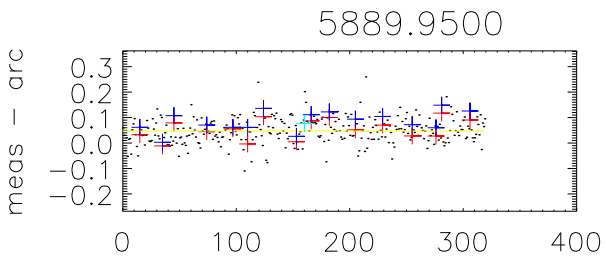

shift(pix)=−0.096
err(pix)= 0.017
oldshift(pix)=−0.049
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

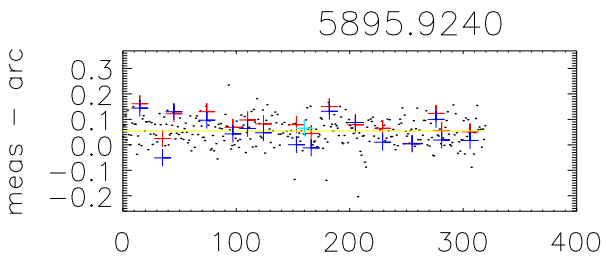

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

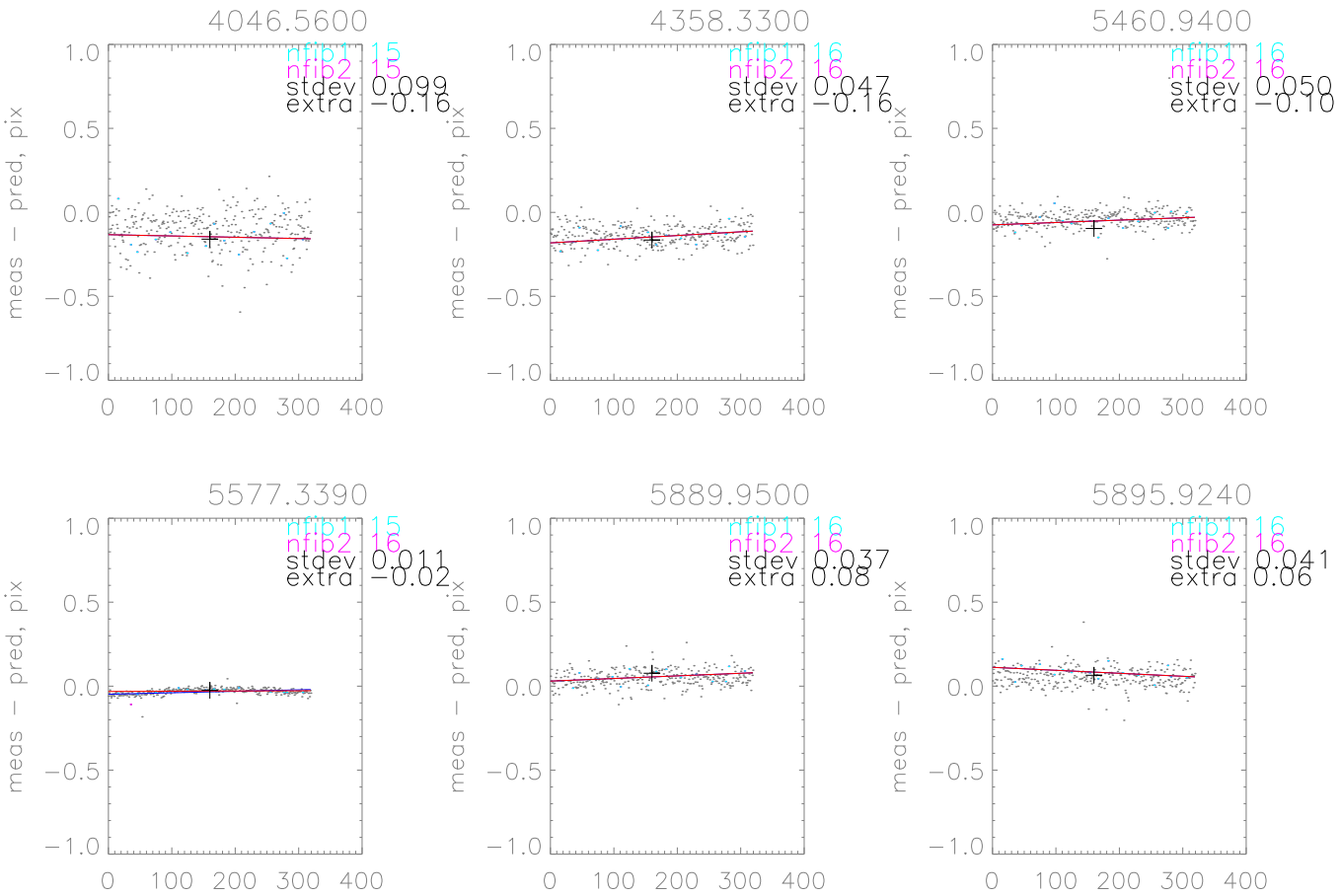

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

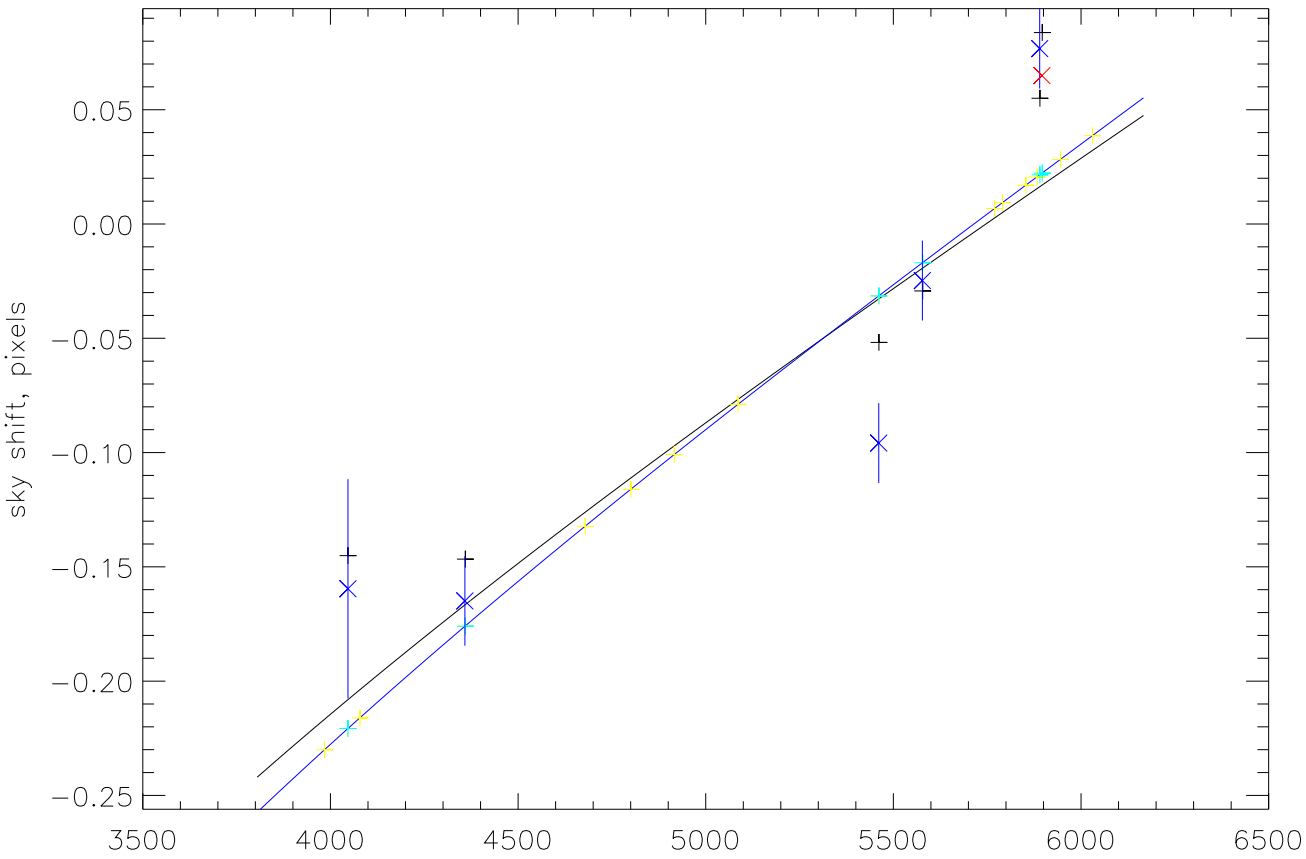

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

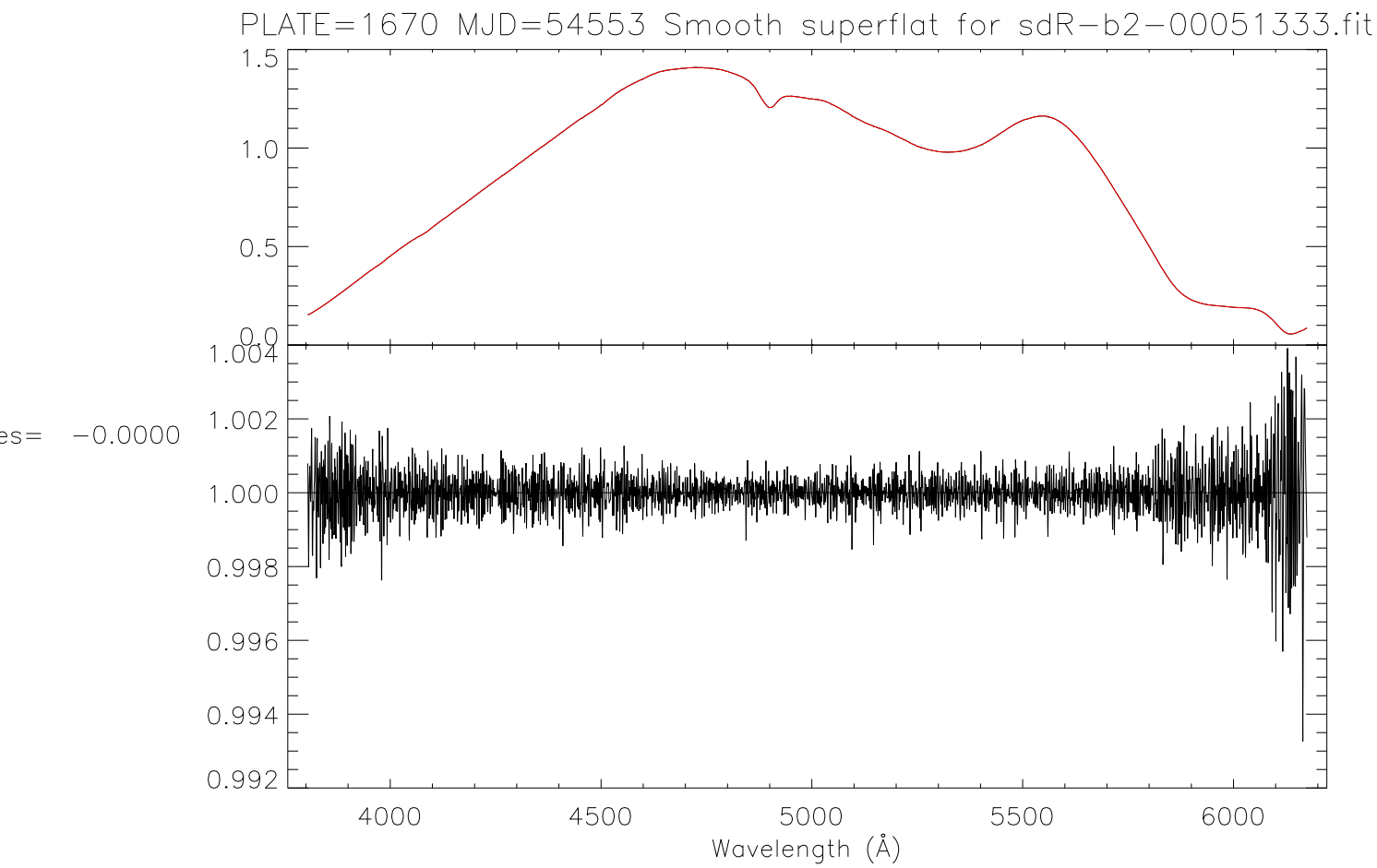

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

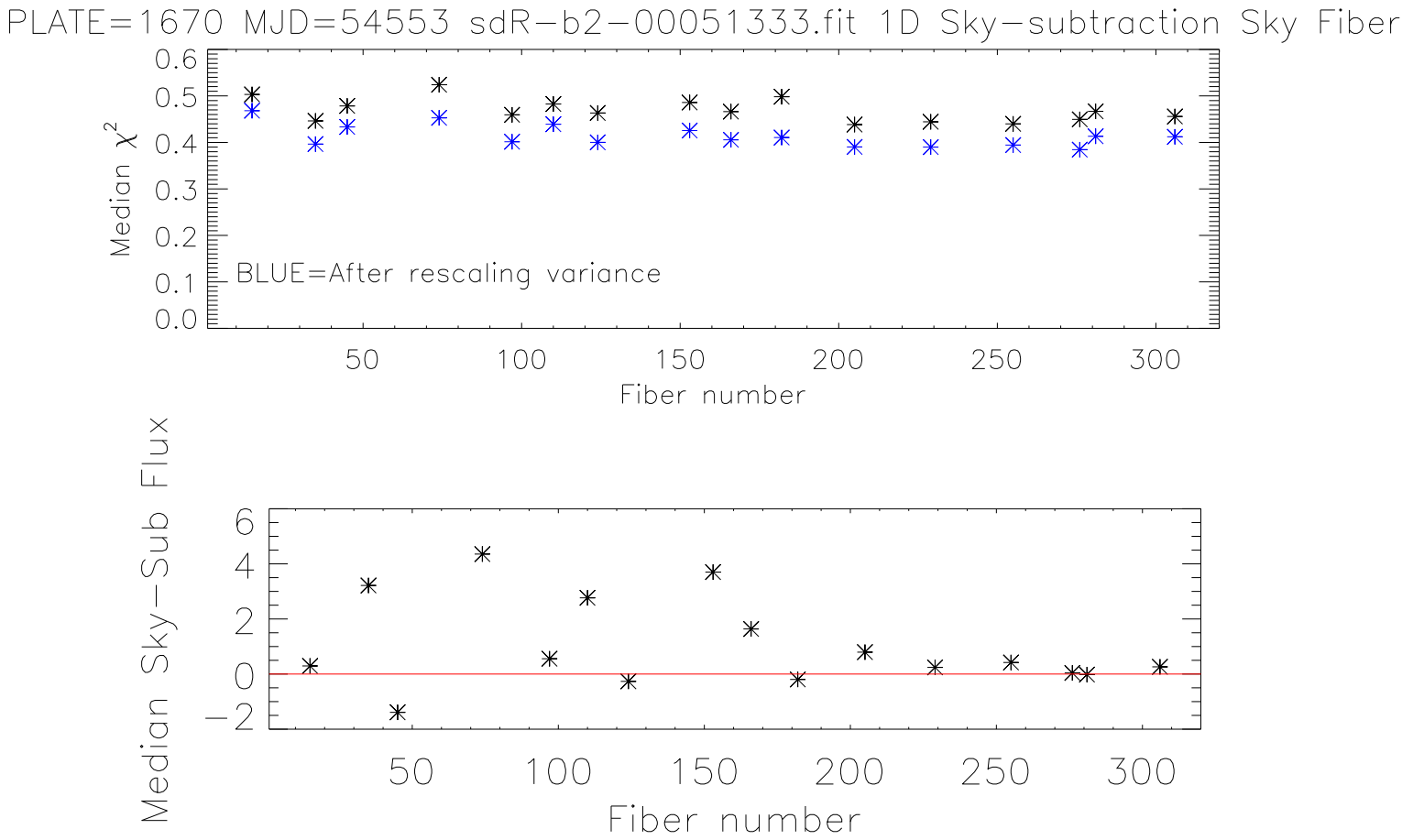

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

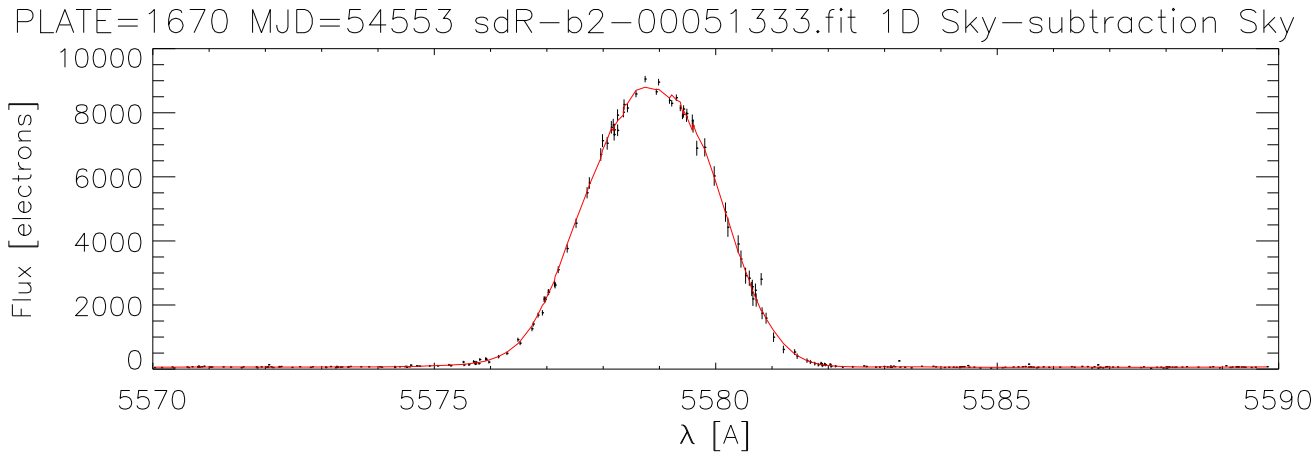

4046.5600
nfib1 15
nfib2 15
stdev 0.099
extra −0.16
4358.3300
nfib1 16
nfib2 16
stdev 0.047
extra −0.16
5460.9400
nfib1 16
nfib2 16
stdev 0.050
extra −0.10
5577.3390
nfib1 15
nfib2 16
stdev 0.011
extra −0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra 0.08
5895.9240
nfib1 16
nfib2 16
stdev 0.041
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

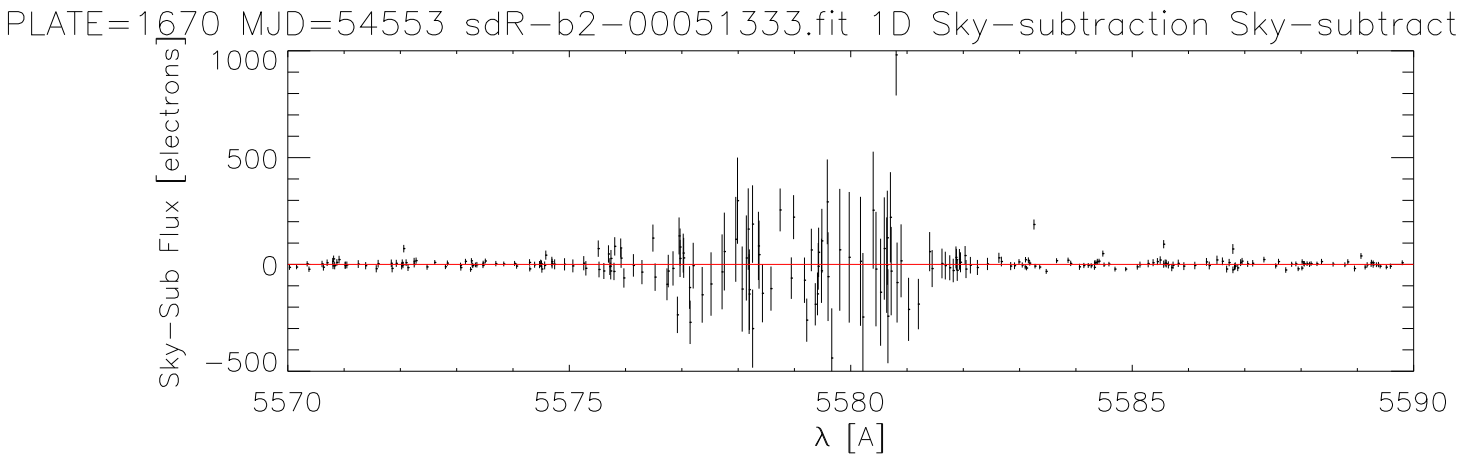

sky shift, pixels
0.05
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500

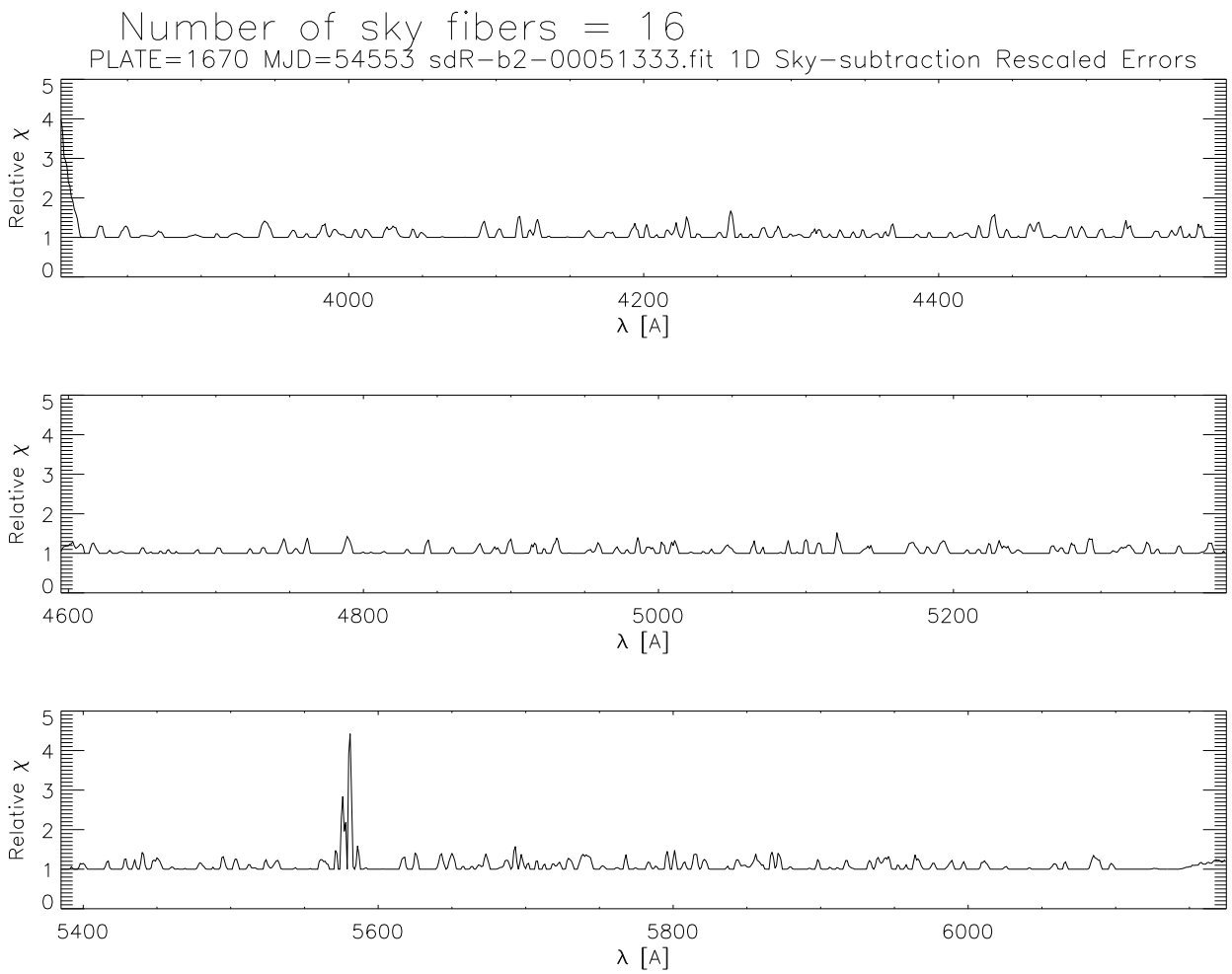

PLATE=1670 MJD=54553 Smooth superflat for sdR-b2-00051333.fit
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

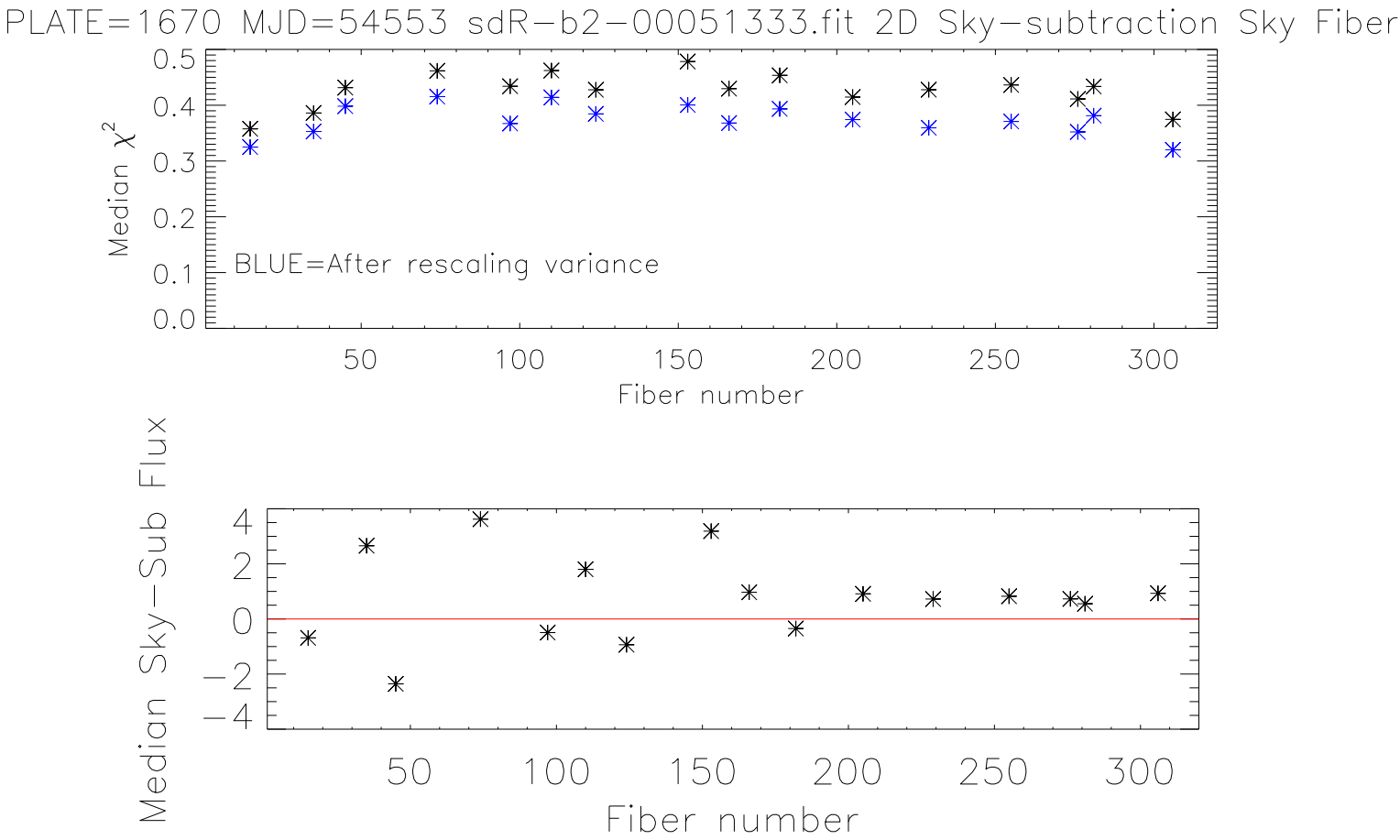
es= −0.0000

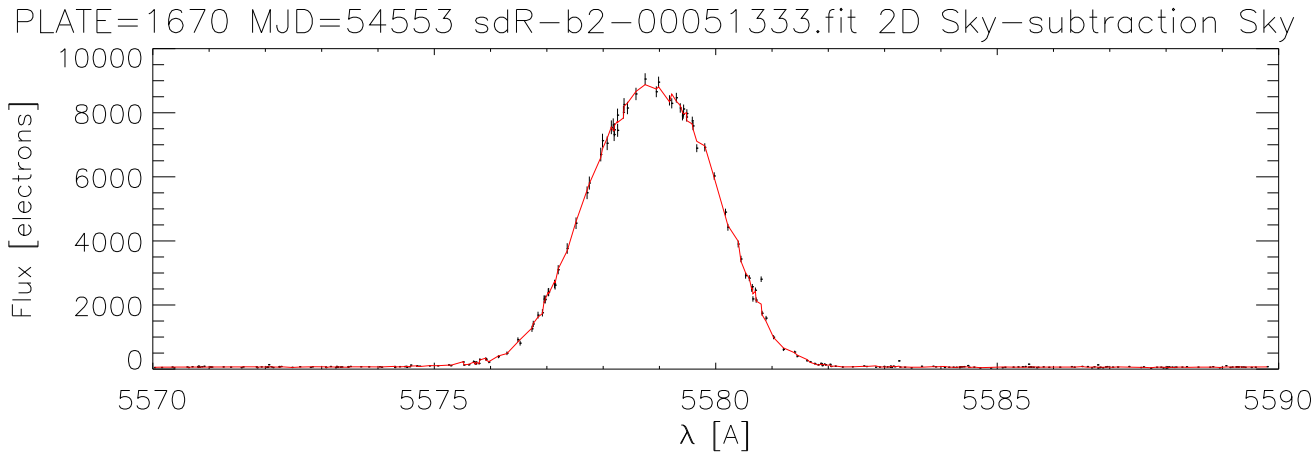

PLATE=1670 MJD=54553 sdR-b2-00051333.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

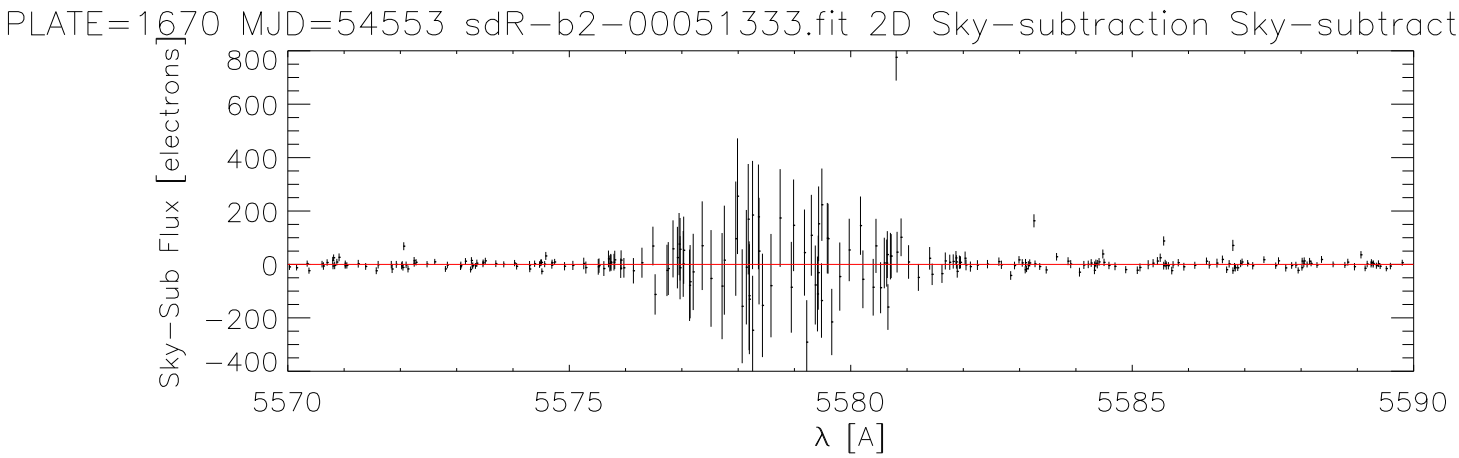

PLATE=1670 MJD=54553 sdR-b2-00051333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

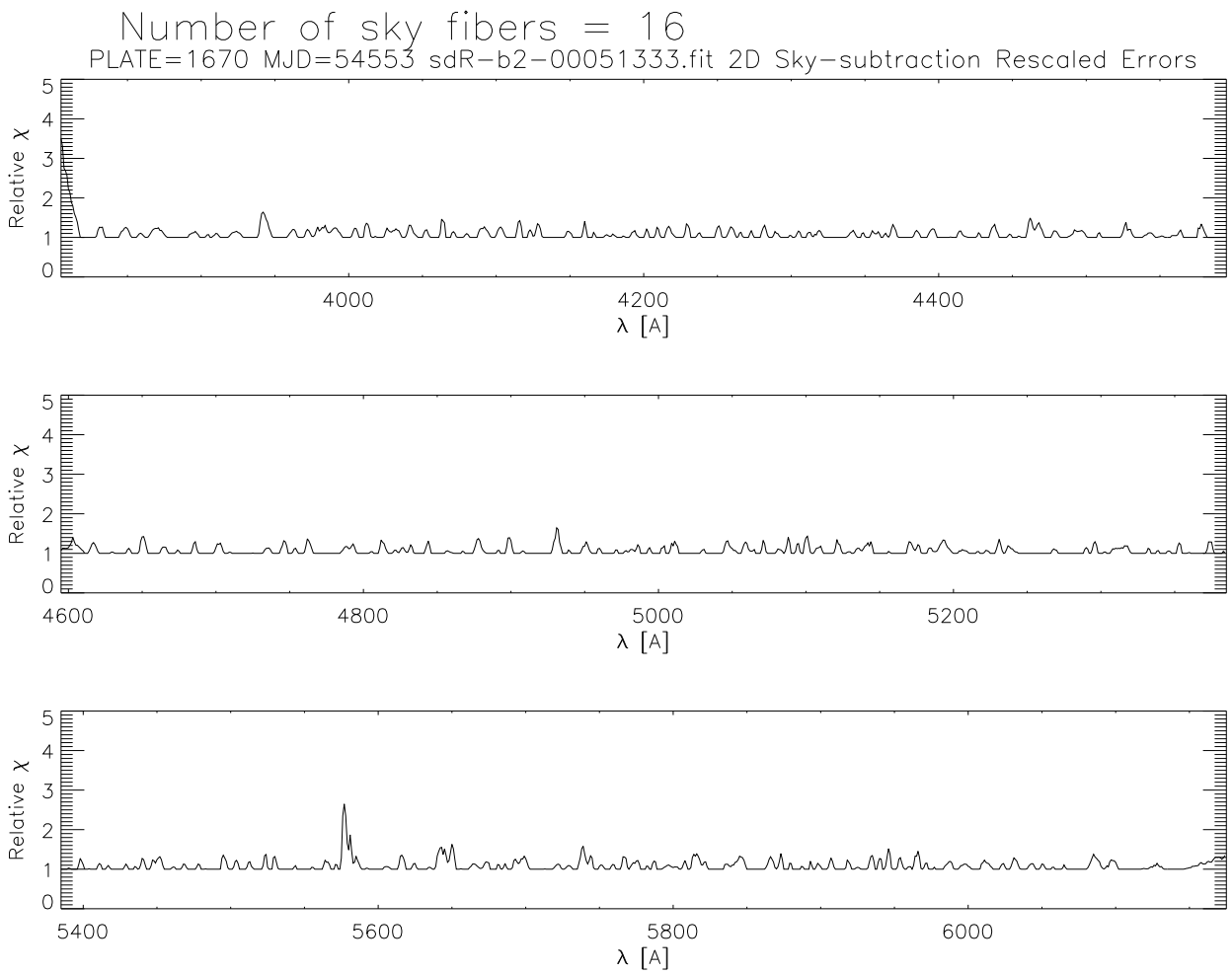

PLATE=1670 MJD=54553 sdR-b2-00051333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

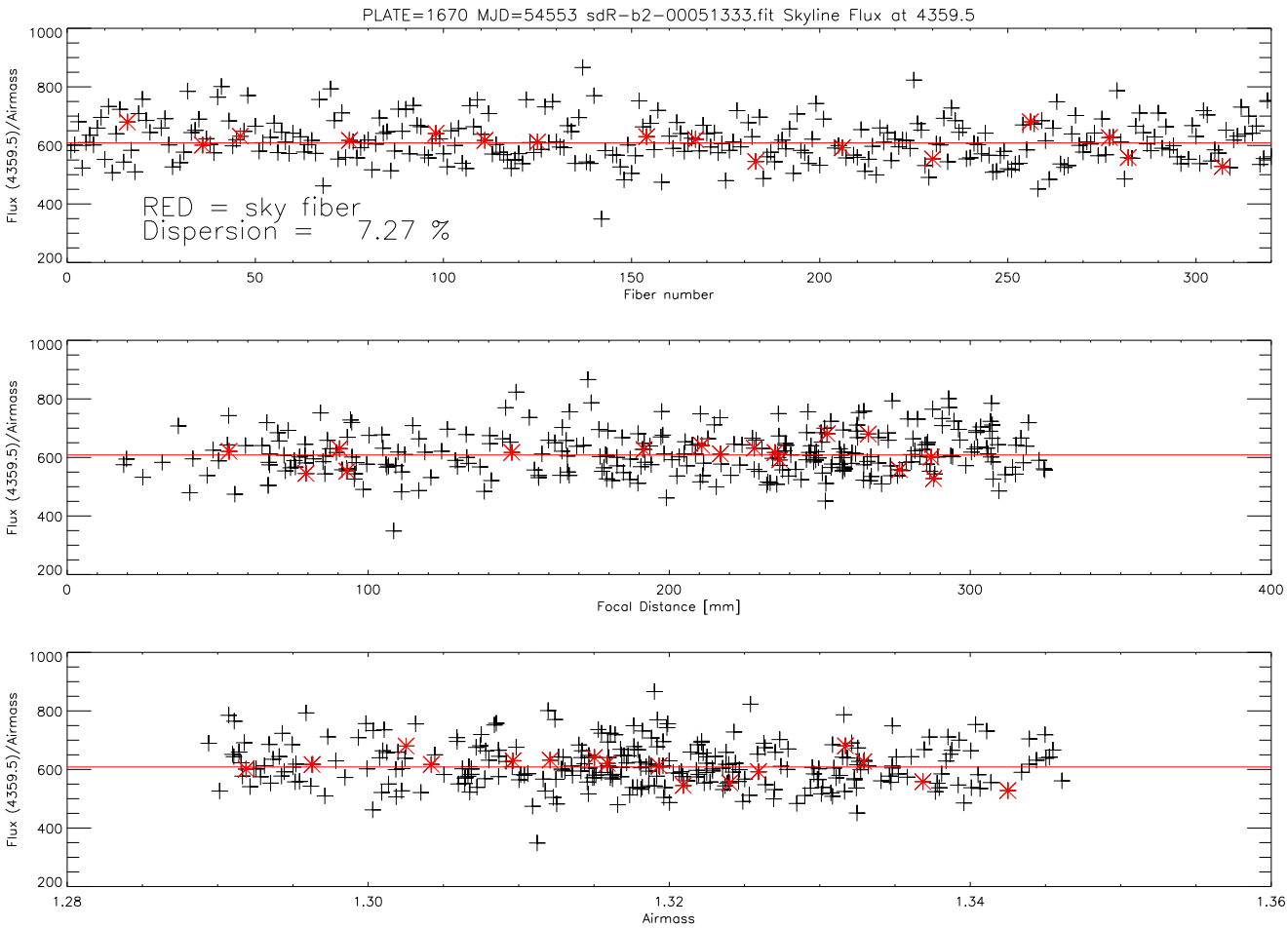

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b2-00051333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

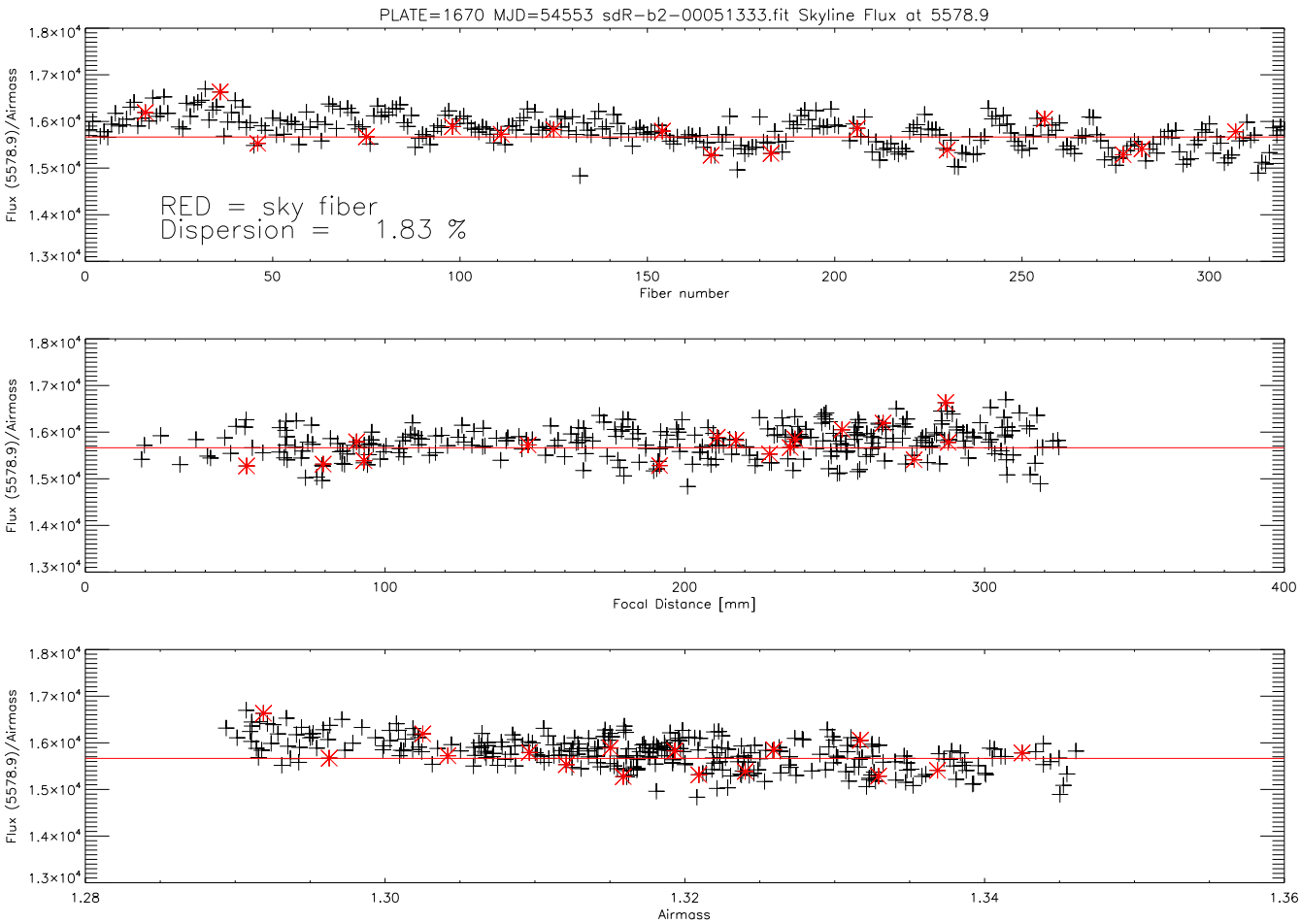

PLATE=1670 MJD=54553 sdR-b2-00051333.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

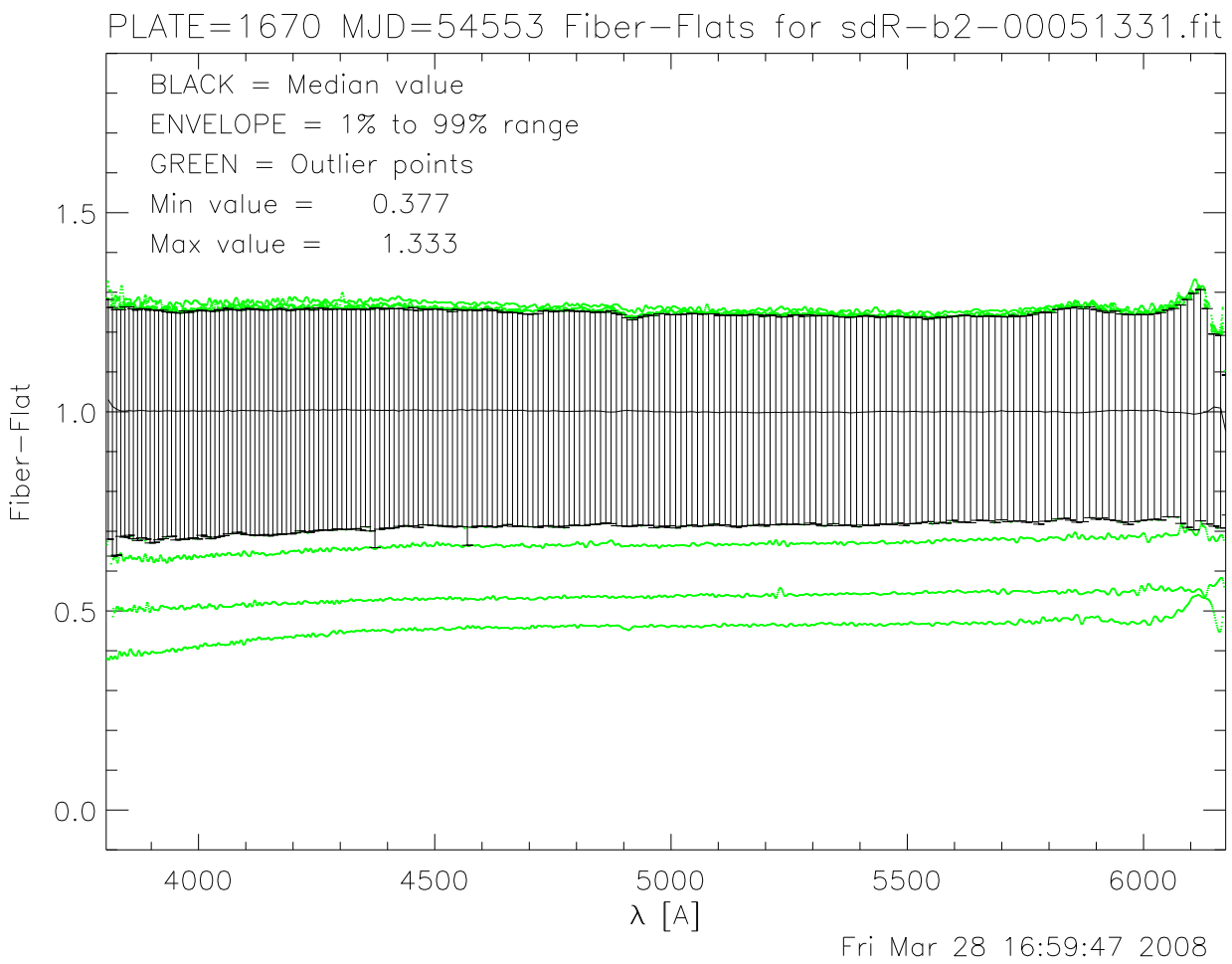

PLATE=1670 MJD=54553 sdR-b2-00051333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

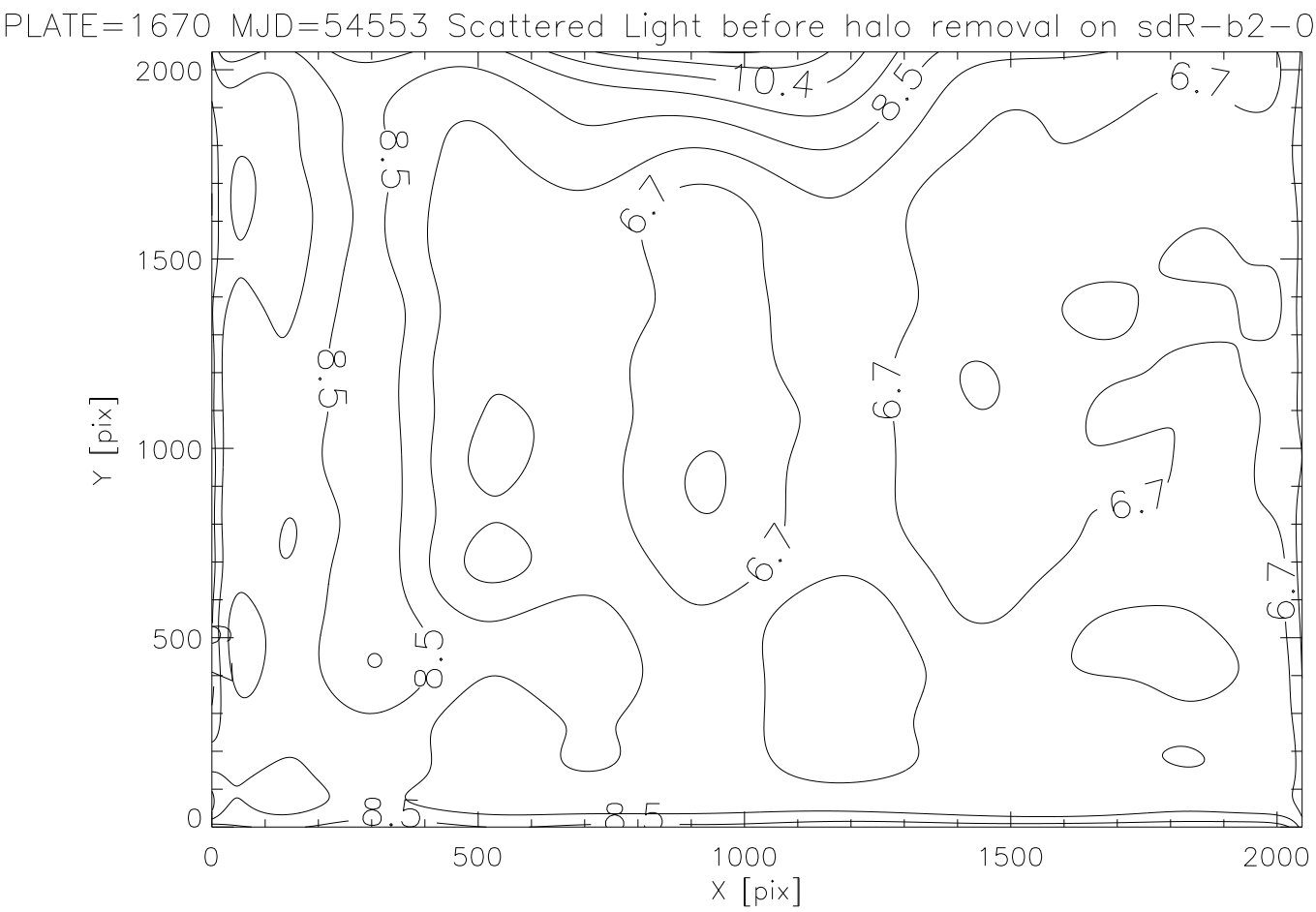

PLATE=1670 MJD=54553 sdR-b2-00051333.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

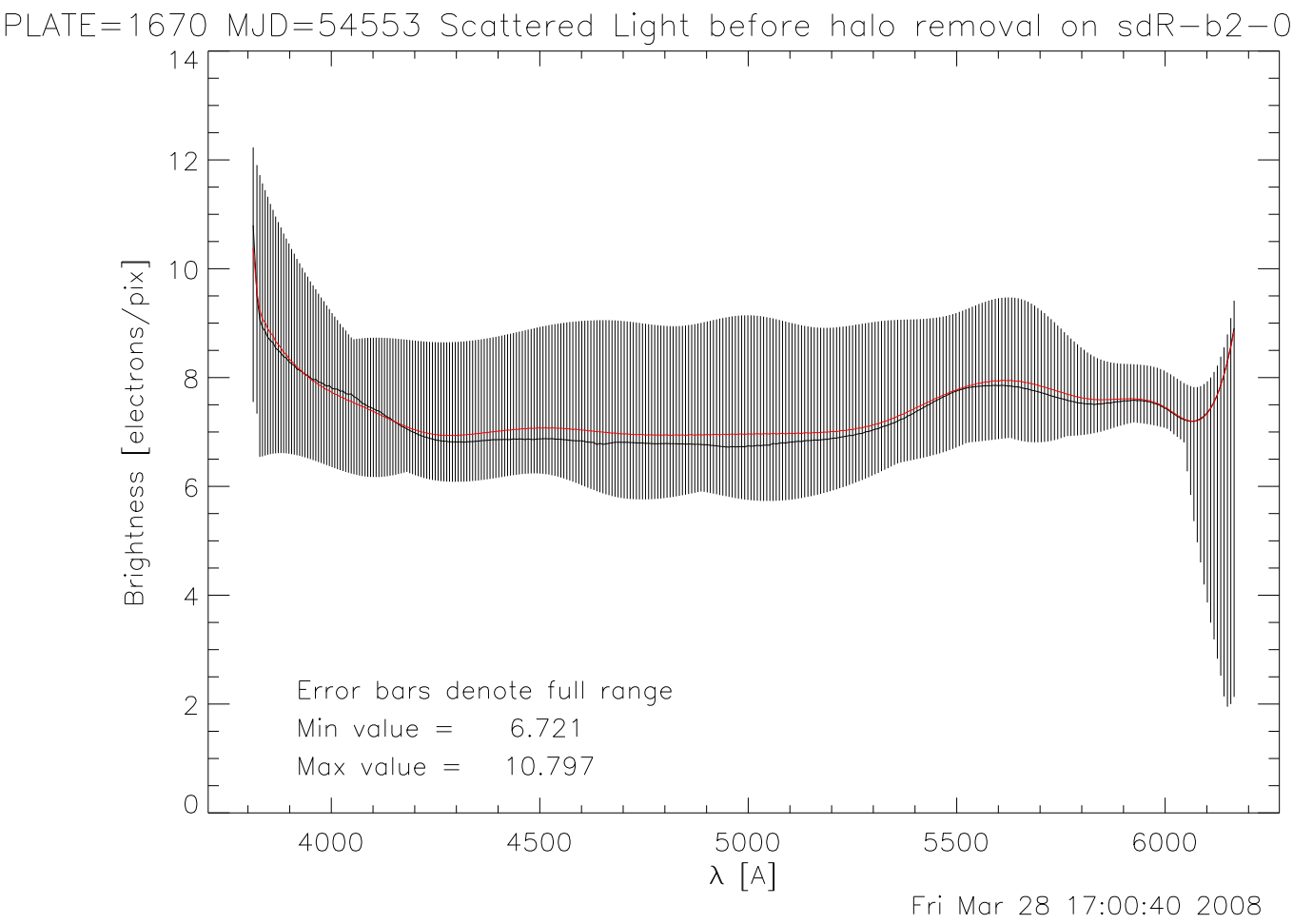

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b2-00051333.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

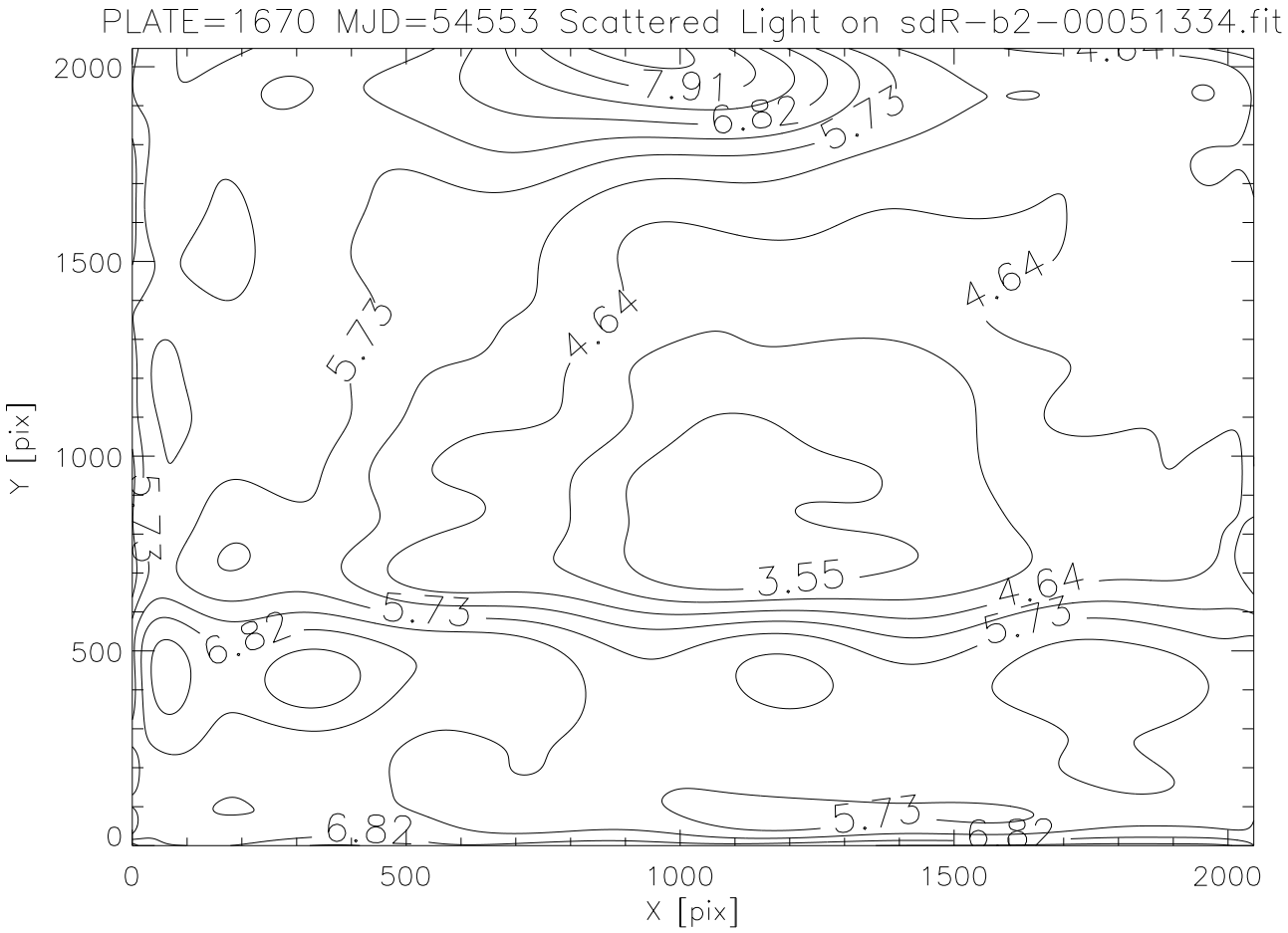

PLATE=1670 MJD=54553 sdR-b2-00051333.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.27 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

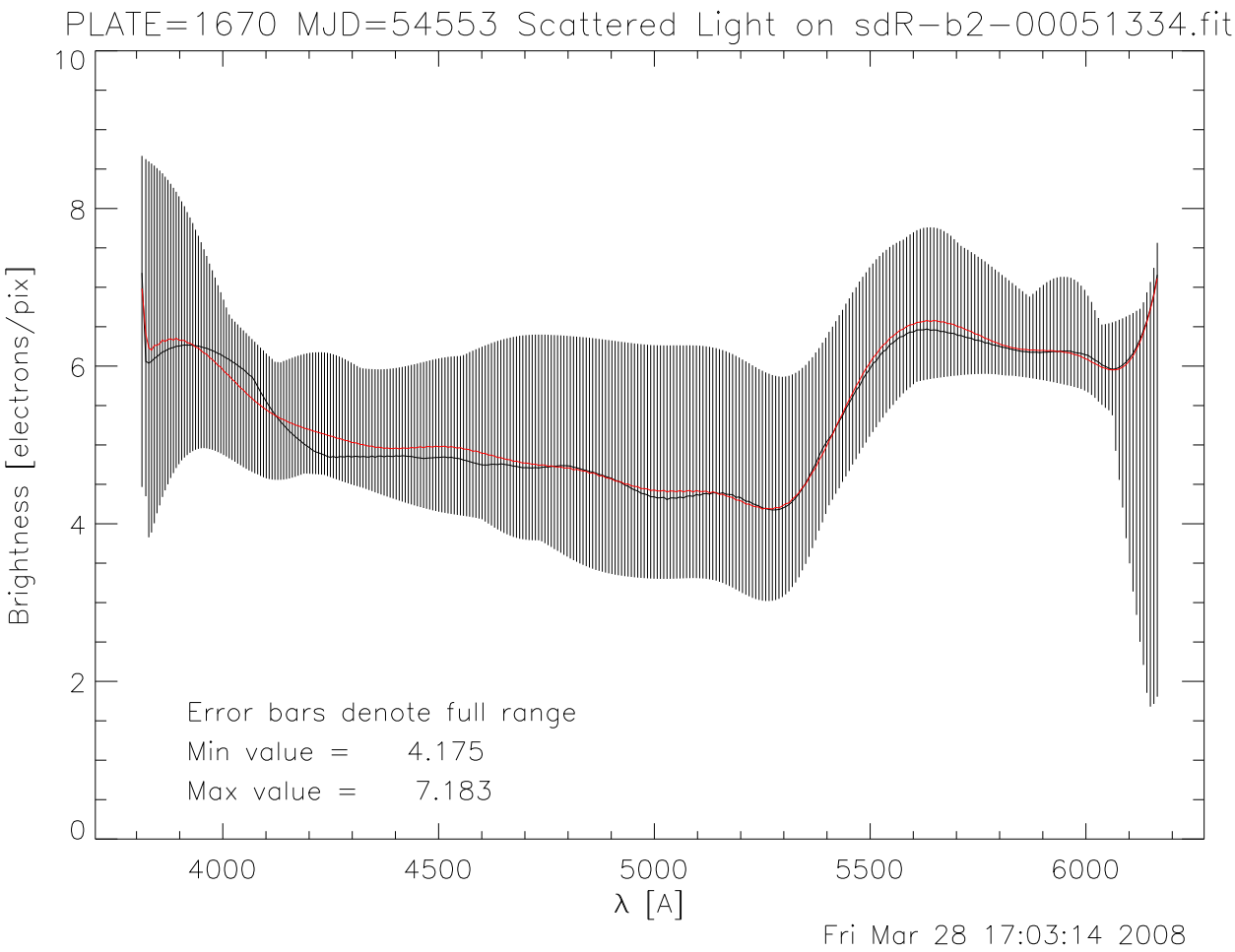

PLATE=1670 MJD=54553 sdR-b2-00051333.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
RED = sky fiber
Dispersion = 1.83 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.8×10^4
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.28
1.30
1.32
1.34
1.36
Airmass

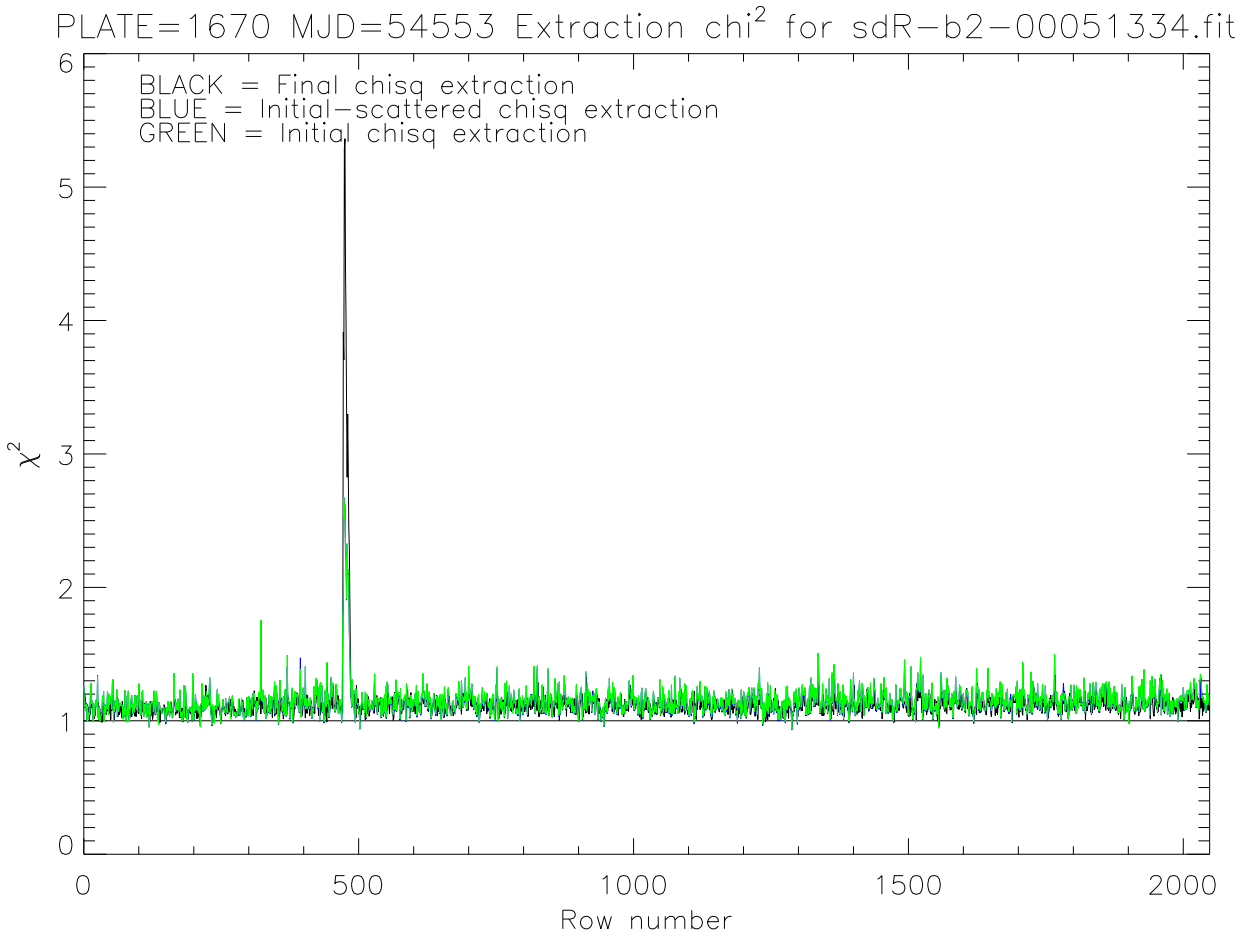

PLATE=1670 MJD=54553 Fiber-Flats for sdR-b2-00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.377
Max value = 1.333
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Fri Mar 28 16:59:47 2008

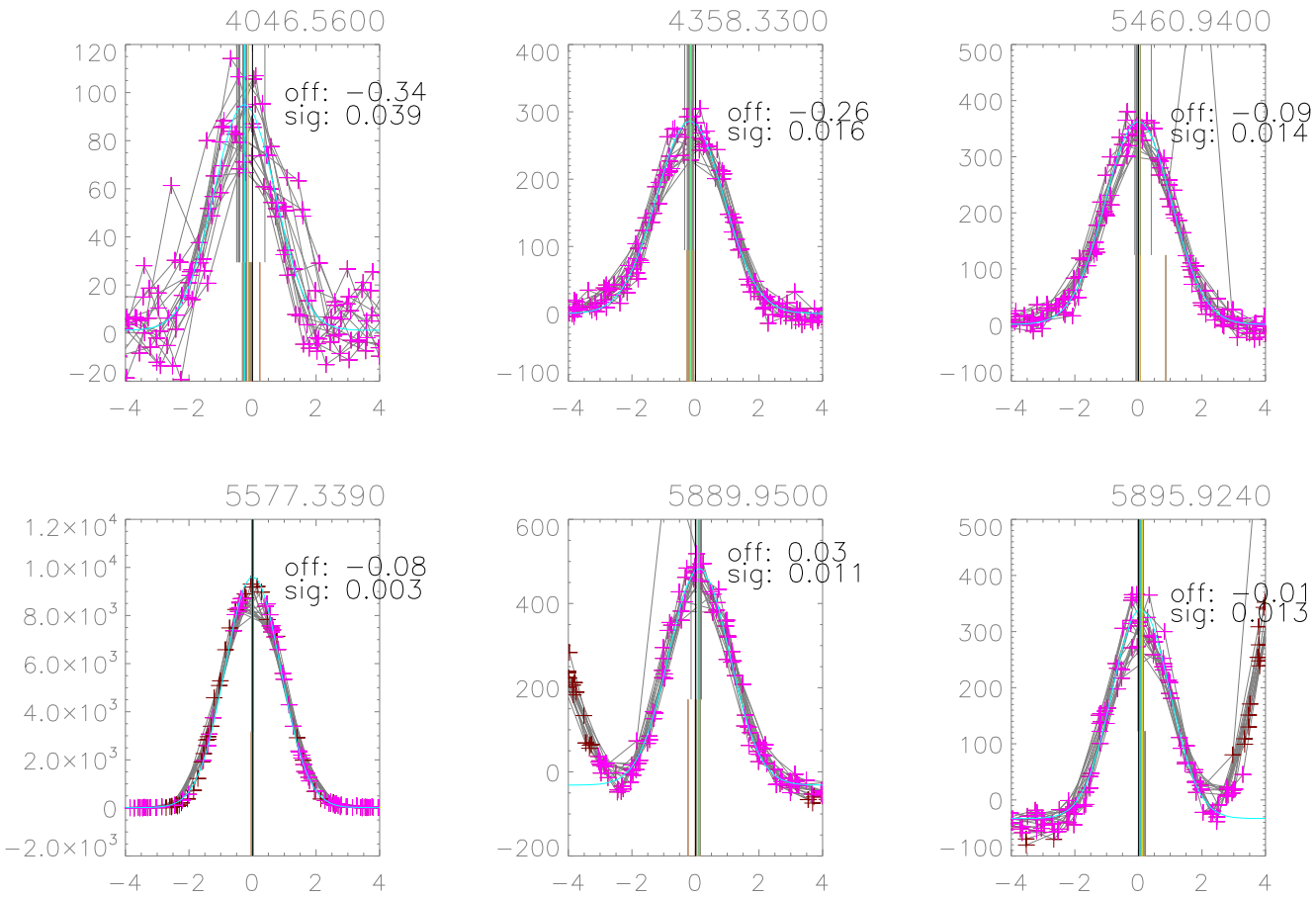

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-b2-00051334.f
10.4
8.5
6.7
5.8
6.7
5.8
6.7
6.7
6.7
6.7
8.5
8.5
8.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

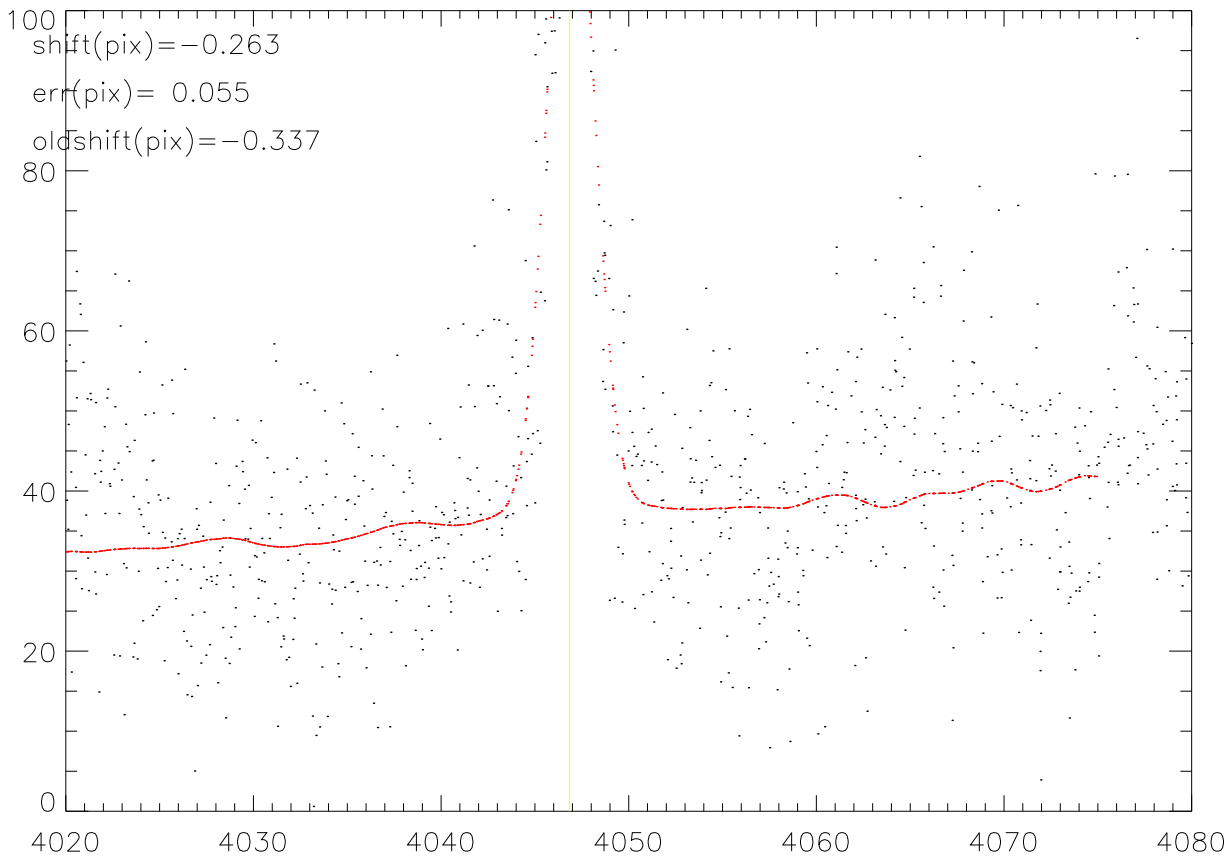

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-b2-00051334.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.721
Max value = 10.797
Fri Mar 28 17:00:40 2008

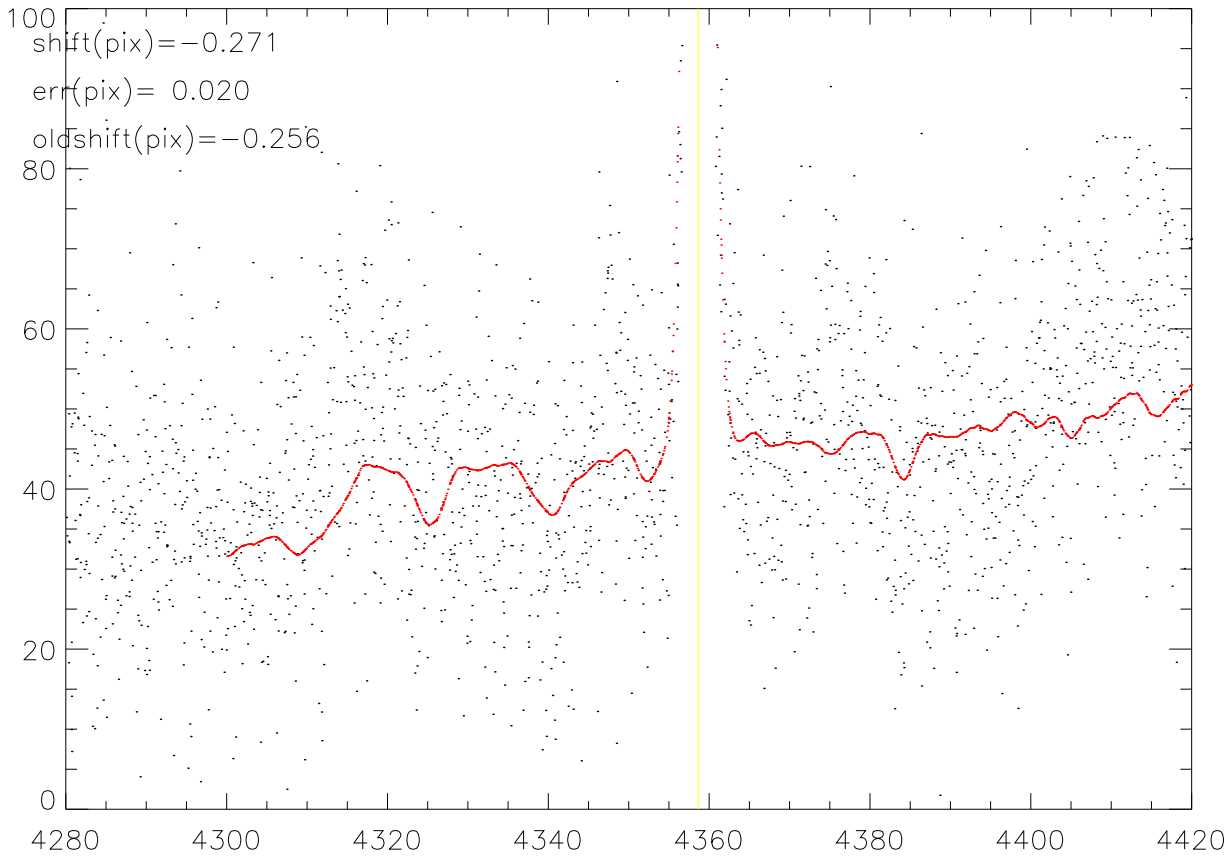

PLATE=1670 MJD=54553 Scattered Light on sdR-b2-00051334.fit
7.91
6.82
5.73
4.64
5.73
4.64
4.64
5.73
3.55
4.64
5.73
6.82
5.73
5.73
6.82
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

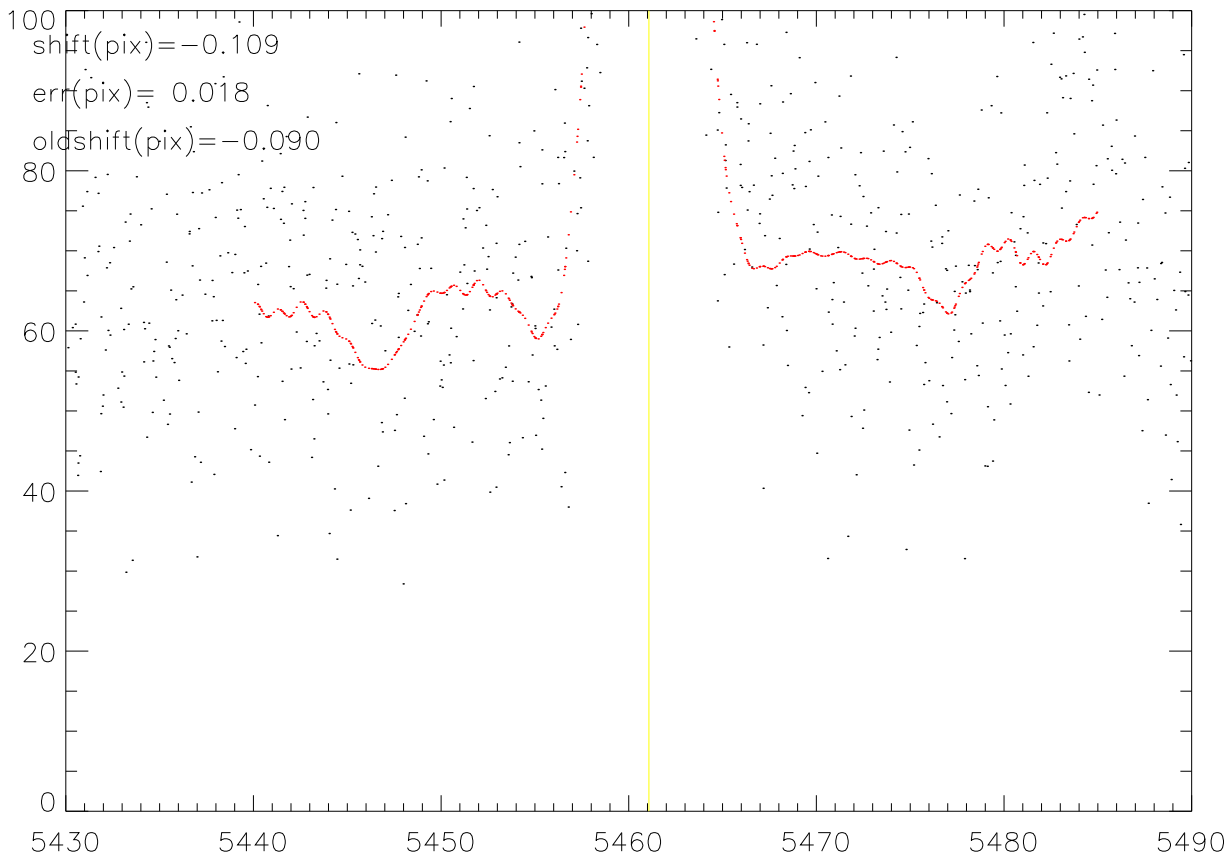

PLATE=1670 MJD=54553 Scattered Light on sdR-b2-00051334.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.175
Max value = 7.183
Fri Mar 28 17:03:14 2008

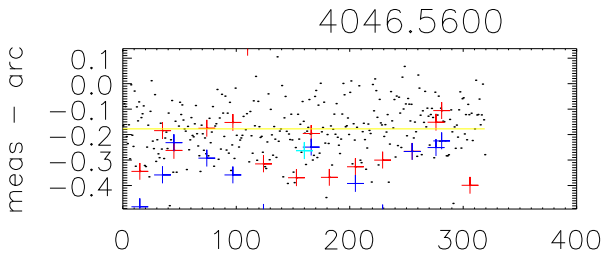

PLATE=1670 MJD=54553 Extraction chi^2 for sdR-b2-00051334.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

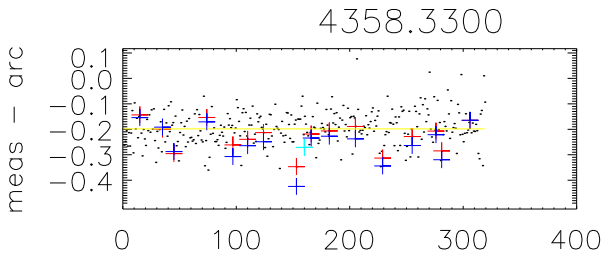

4046.5600
off: −0.34
sig: 0.039
4358.3300
off: −0.26
sig: 0.016
5460.9400
off: −0.09
sig: 0.014
5577.3390
off: −0.08
sig: 0.003
5889.9500
off: 0.03
sig: 0.011
5895.9240
off: −0.01
sig: 0.013

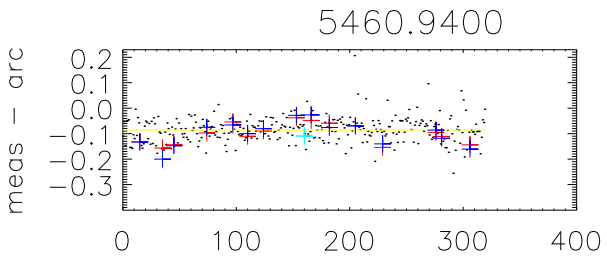

shift(pix)=−0.263
err(pix)= 0.055
oldshift(pix)=−0.337
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

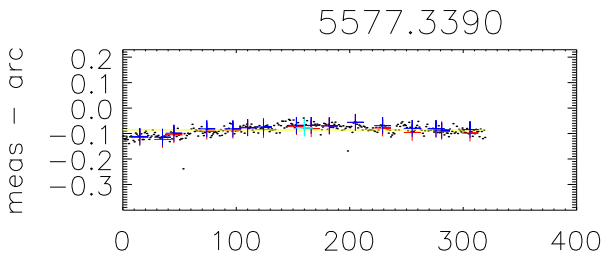

shift(pix)=−0.271
err(pix)= 0.020
oldshift(pix)=−0.256
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

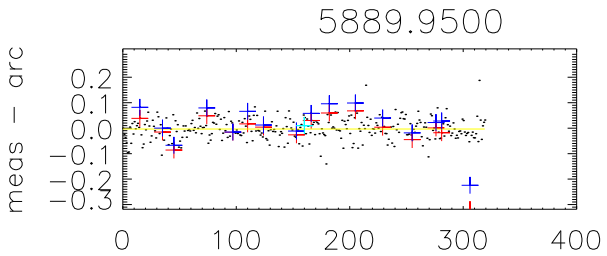

shift(pix)=−0.109
err(pix)= 0.018
oldshift(pix)=−0.090
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

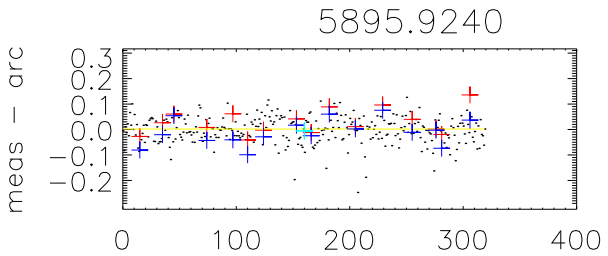

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

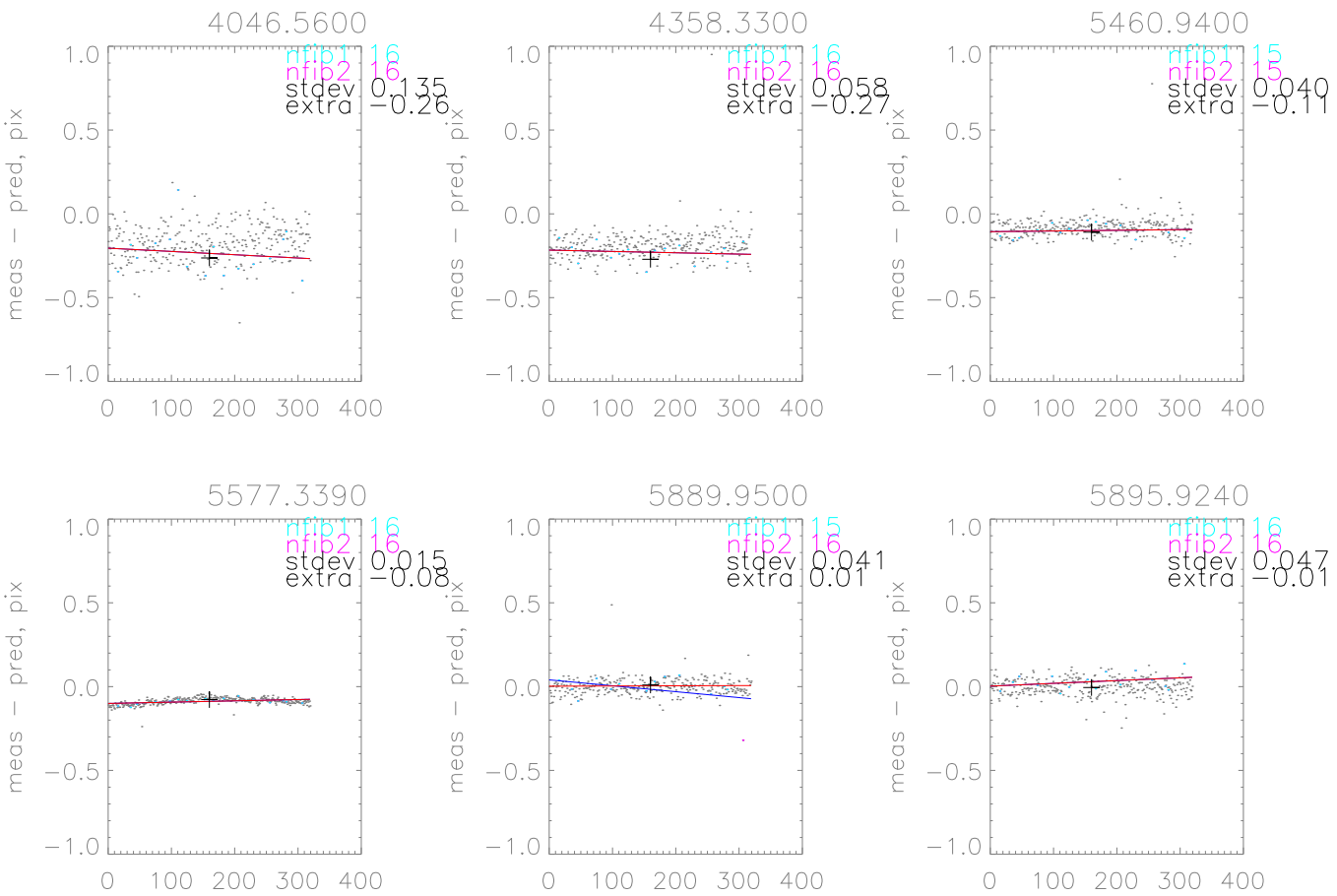

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

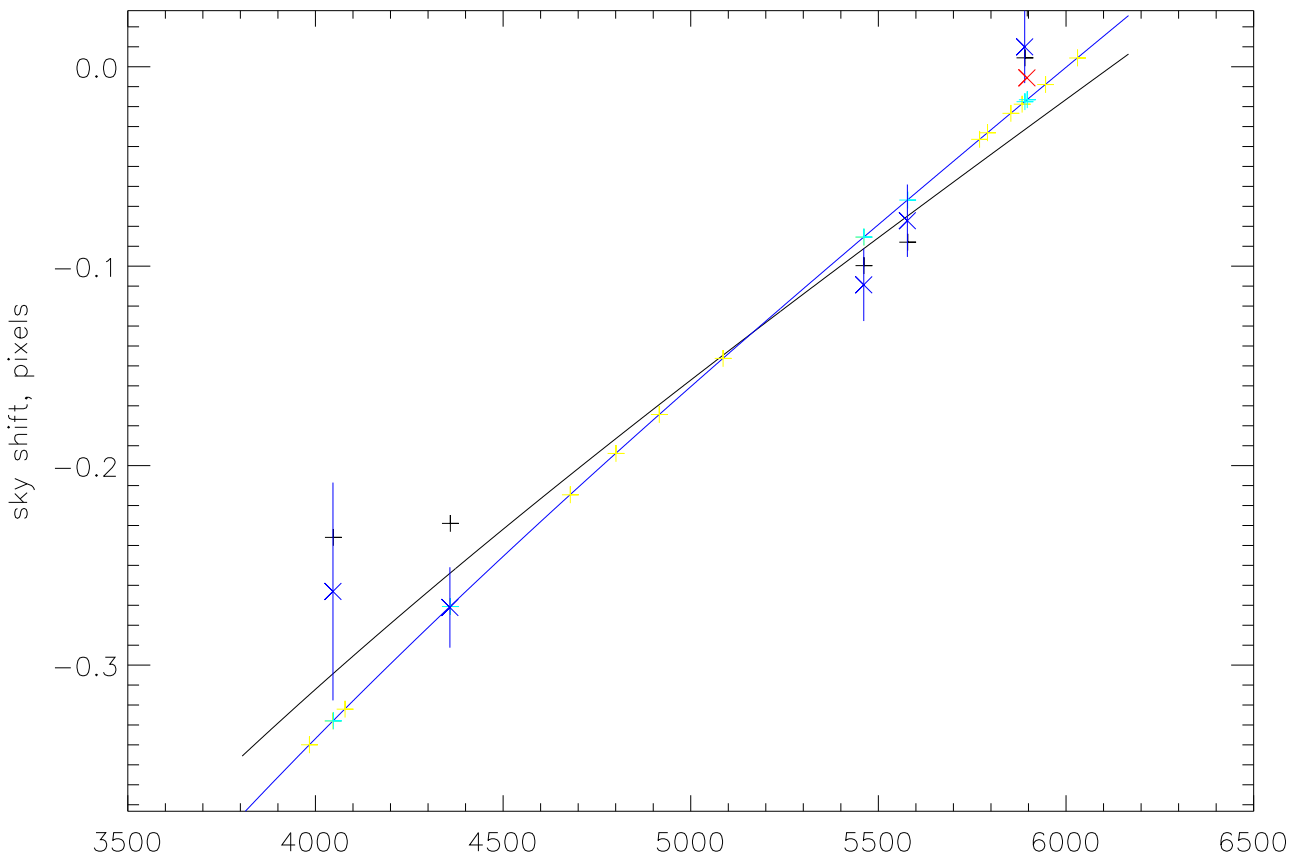

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

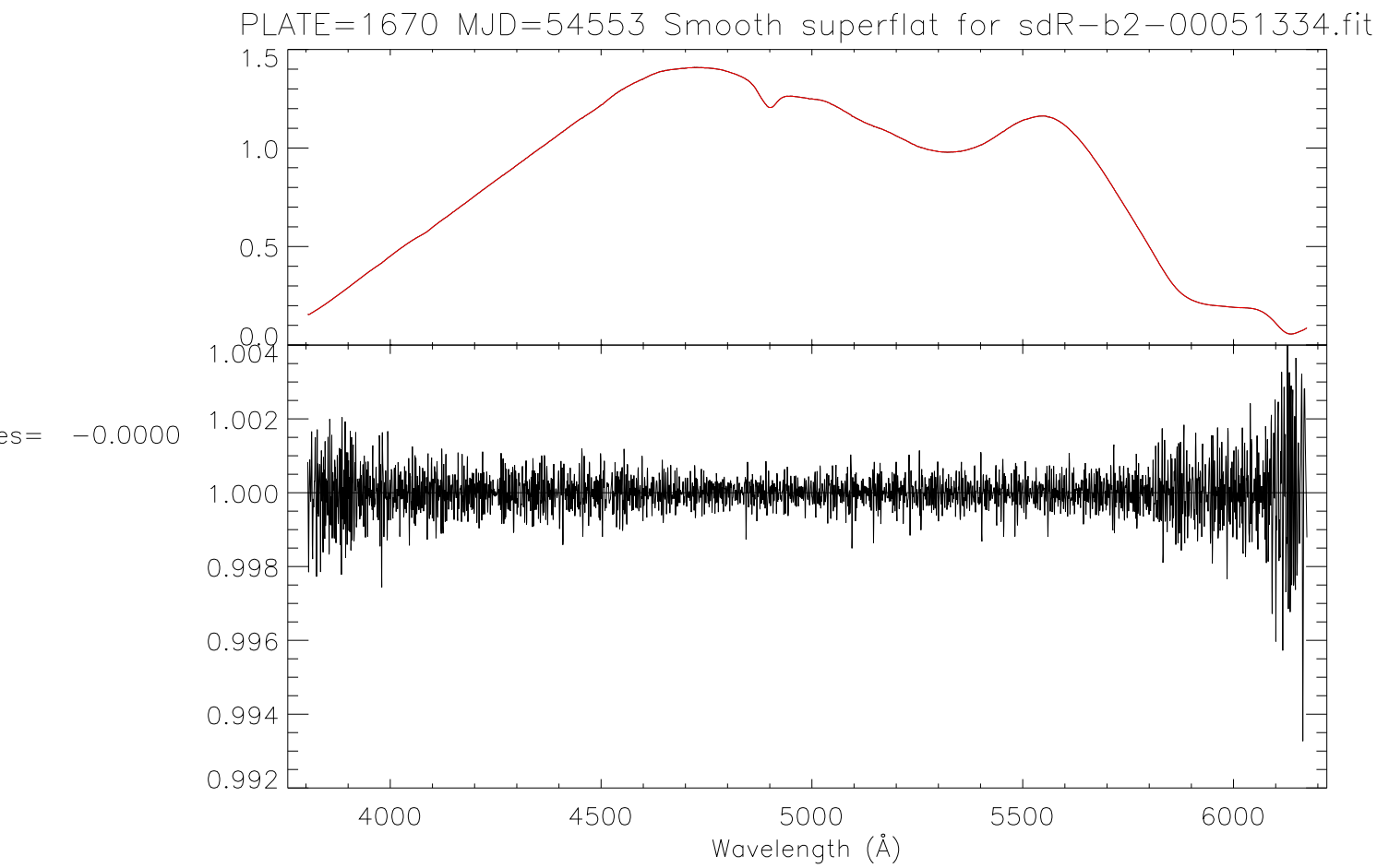

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

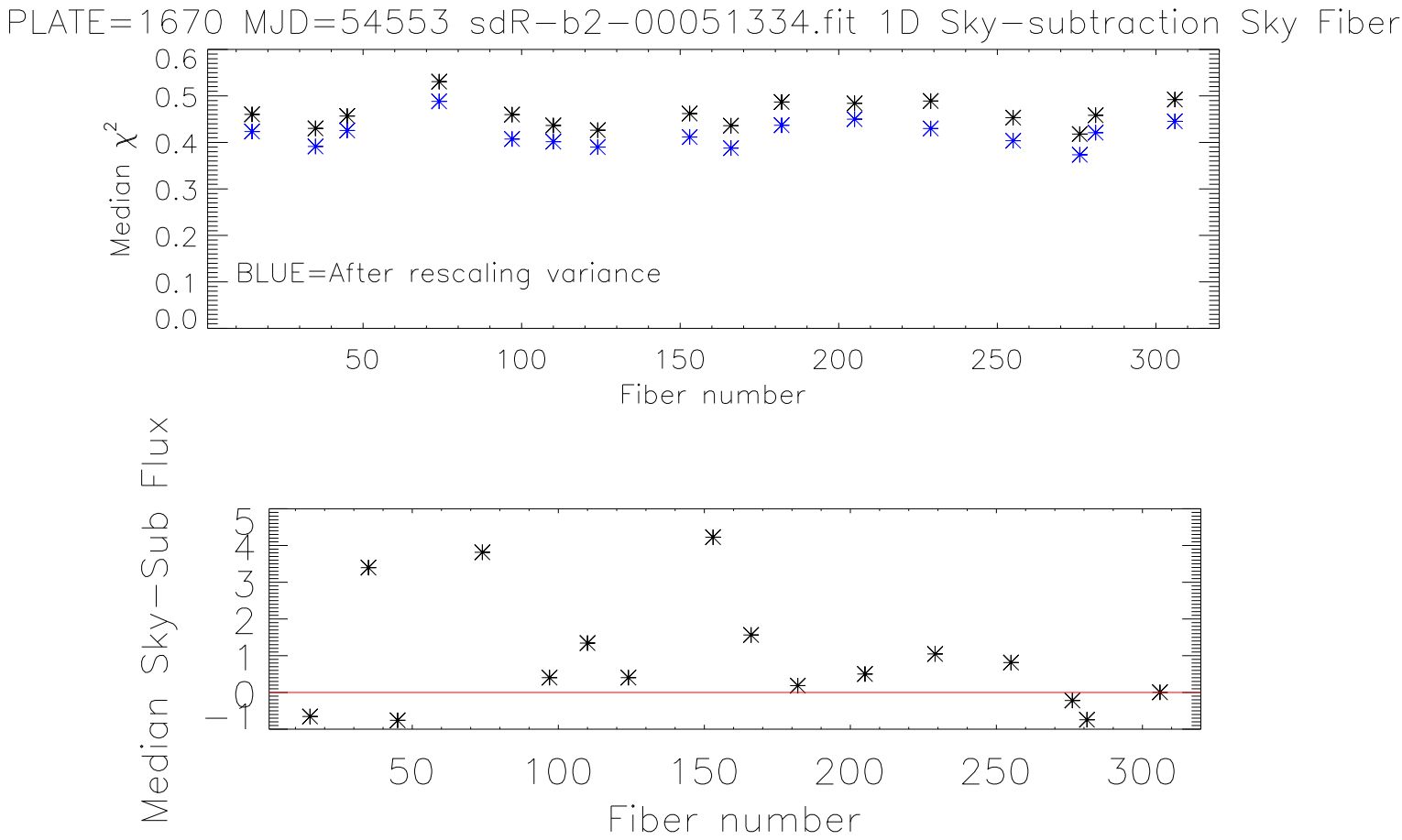

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

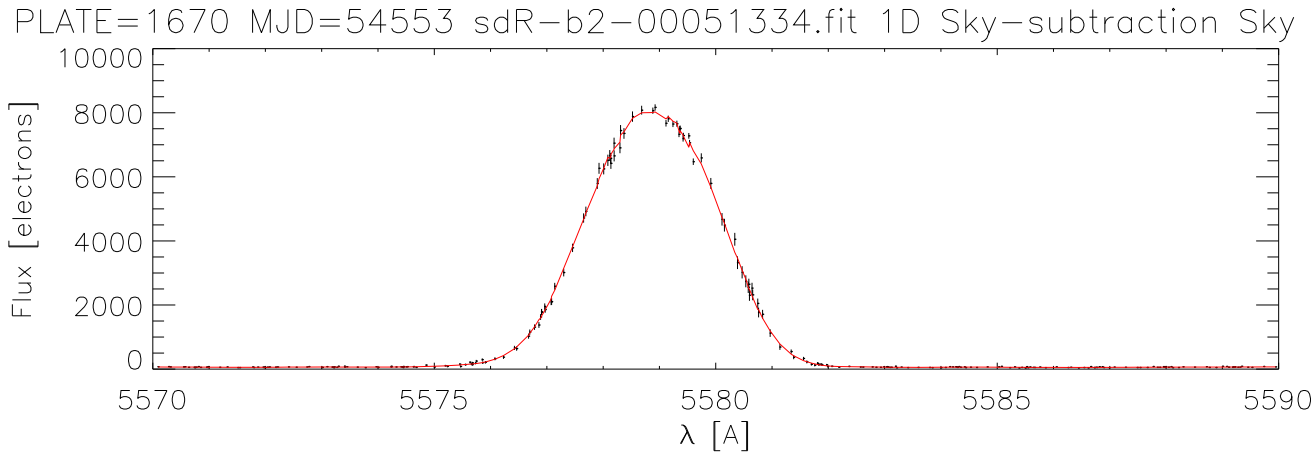

4046.5600
nfib1 16
nfib2 16
stdev 0.135
extra −0.26
4358.3300
nfib1 16
nfib2 16
stdev 0.058
extra −0.27
5460.9400
nfib1 15
nfib2 15
stdev 0.040
extra −0.11
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.08
5889.9500
nfib1 15
nfib2 16
stdev 0.041
extra 0.01
5895.9240
nfib1 16
nfib2 16
stdev 0.047
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

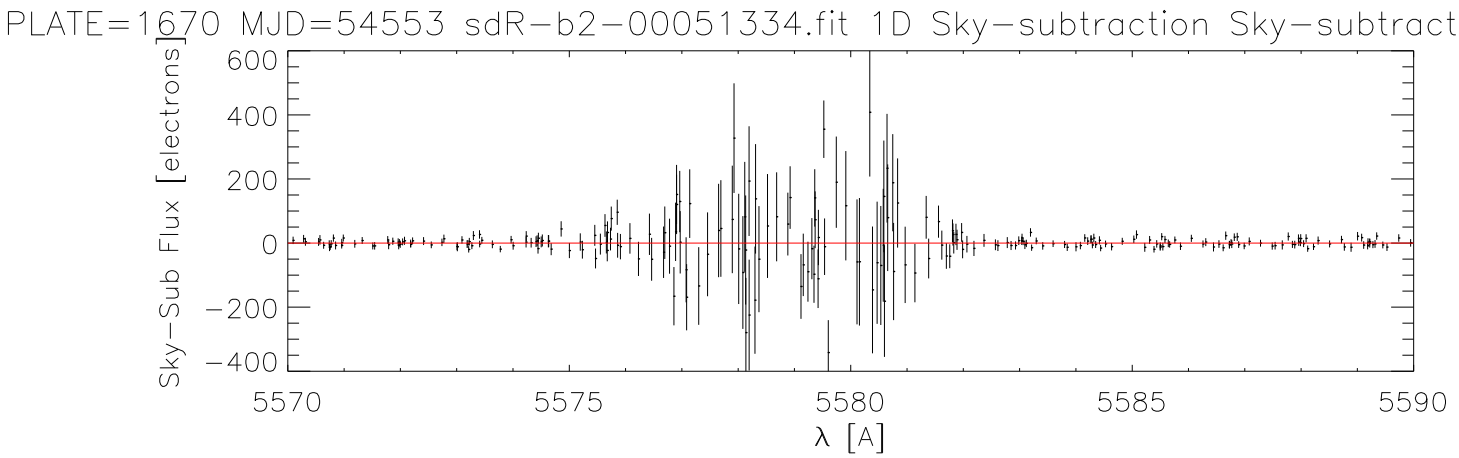

sky shift, pixels
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

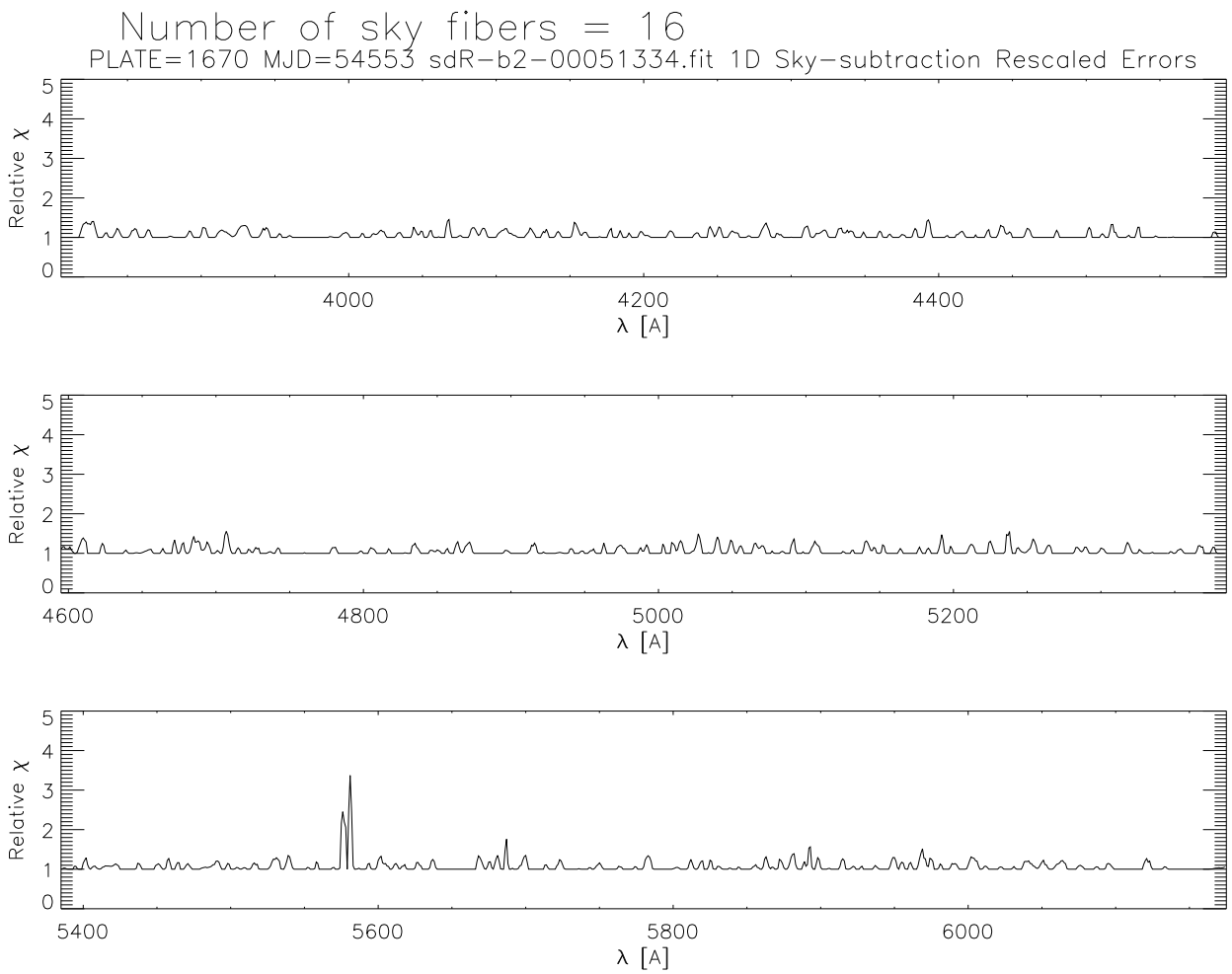

PLATE=1670 MJD=54553 Smooth superflat for sdR-b2-00051334.fit
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

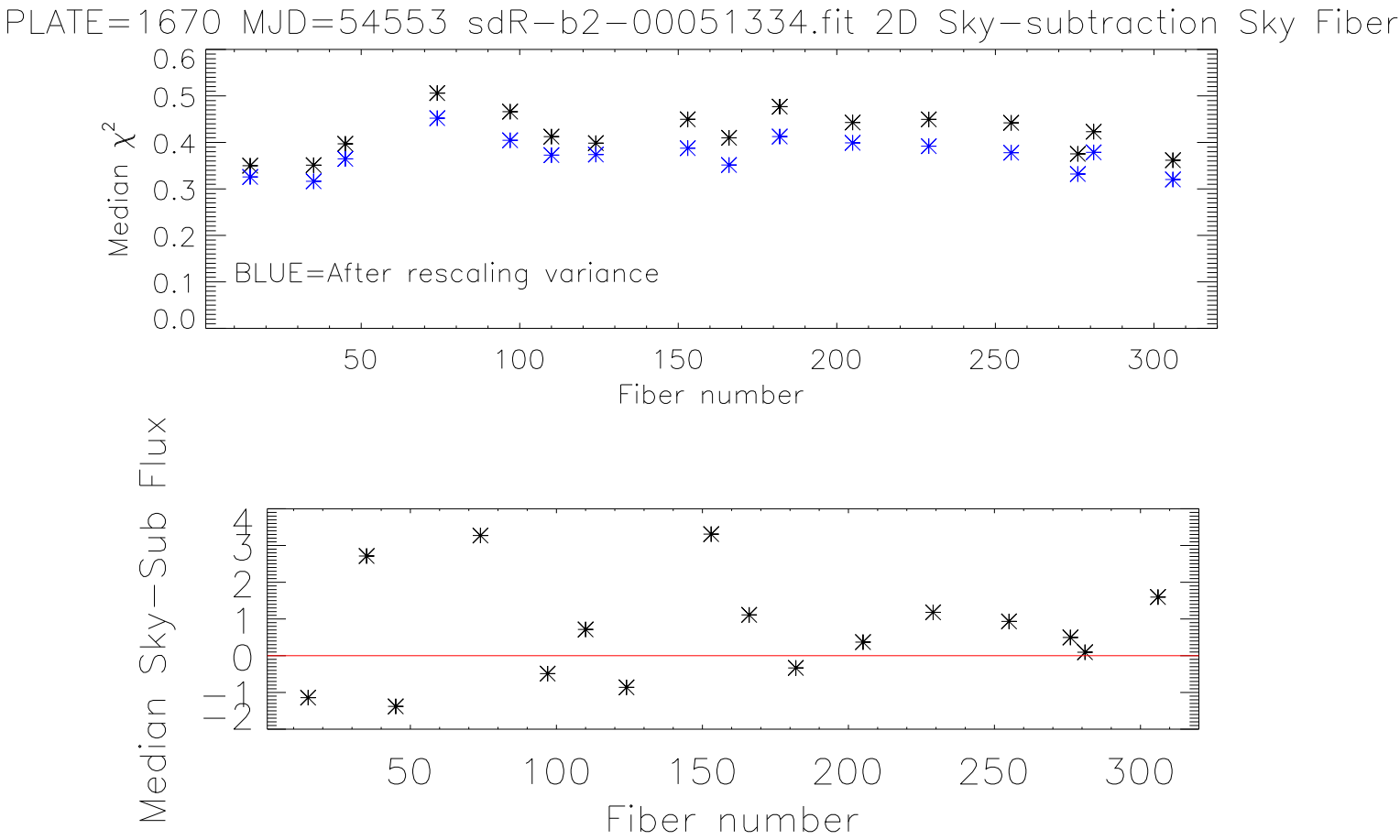
es= −0.0000

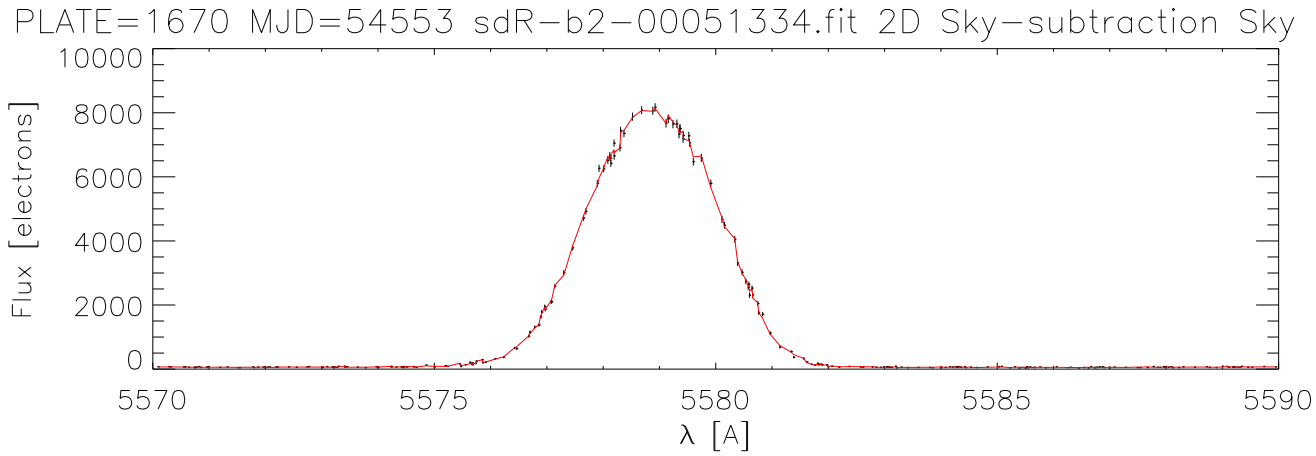

PLATE=1670 MJD=54553 sdR-b2-00051334.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

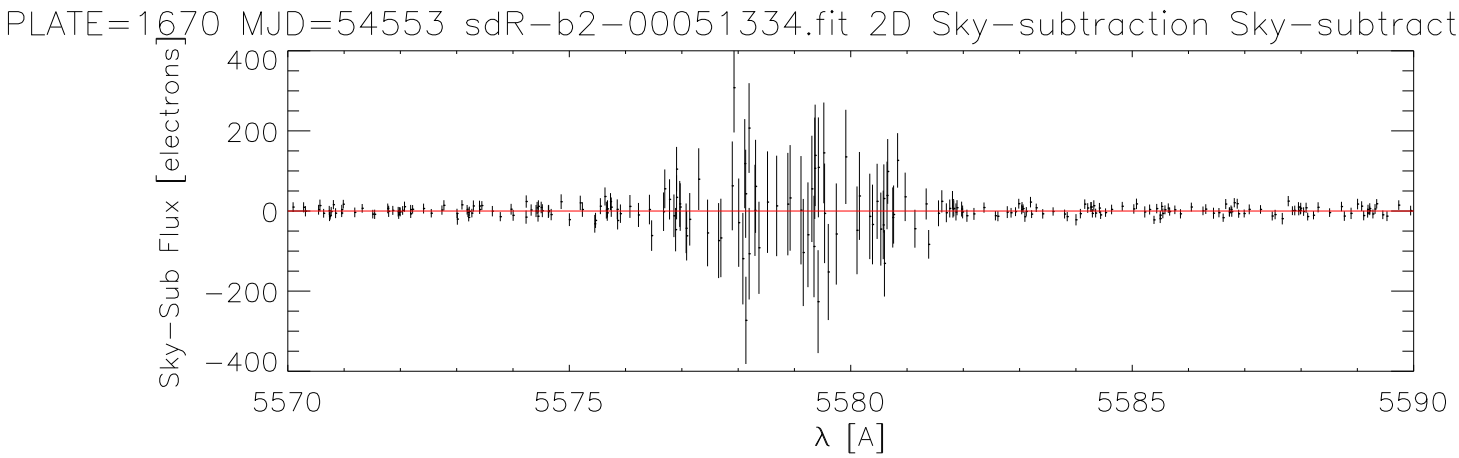

PLATE=1670 MJD=54553 sdR-b2-00051334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

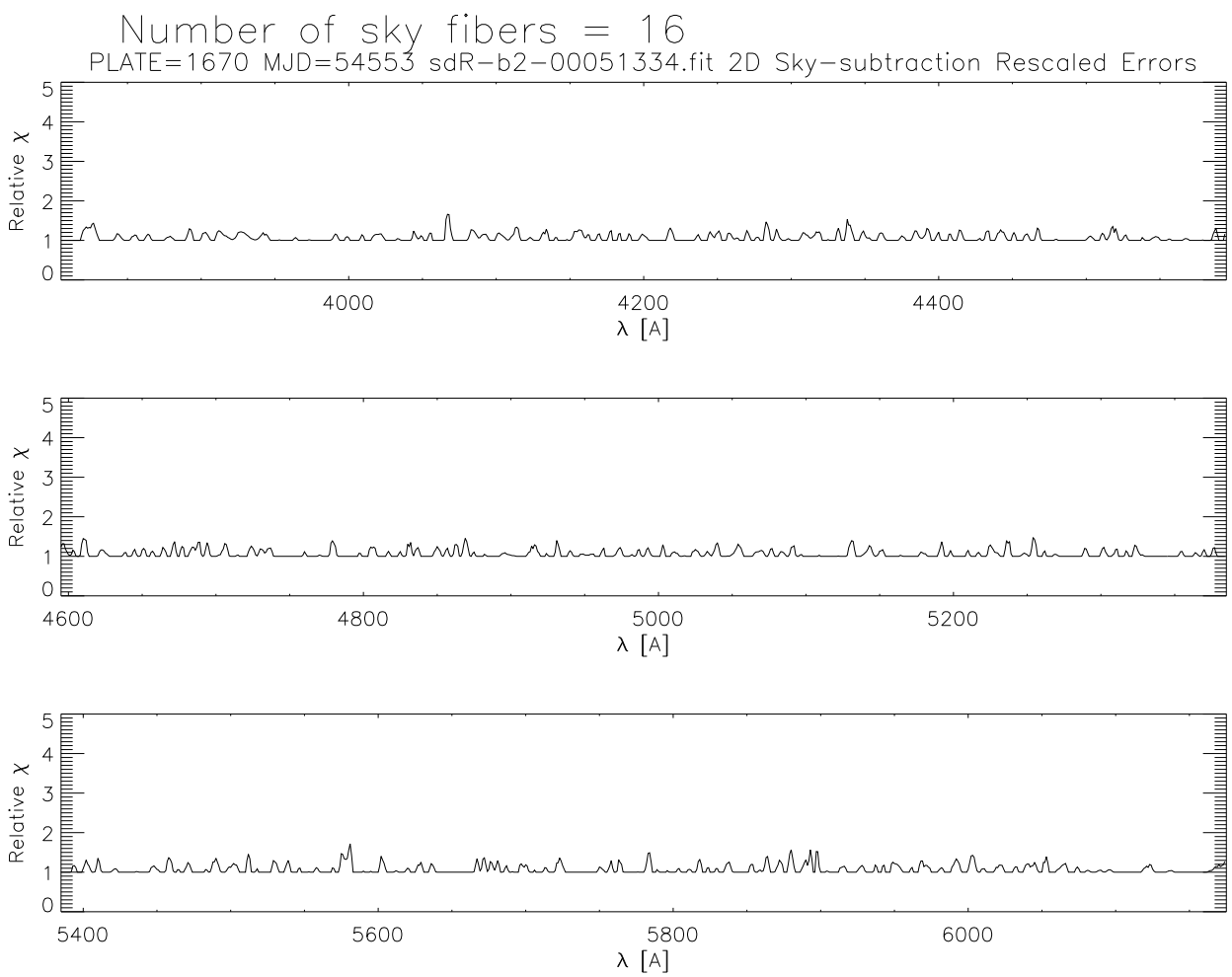

PLATE=1670 MJD=54553 sdR-b2-00051334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

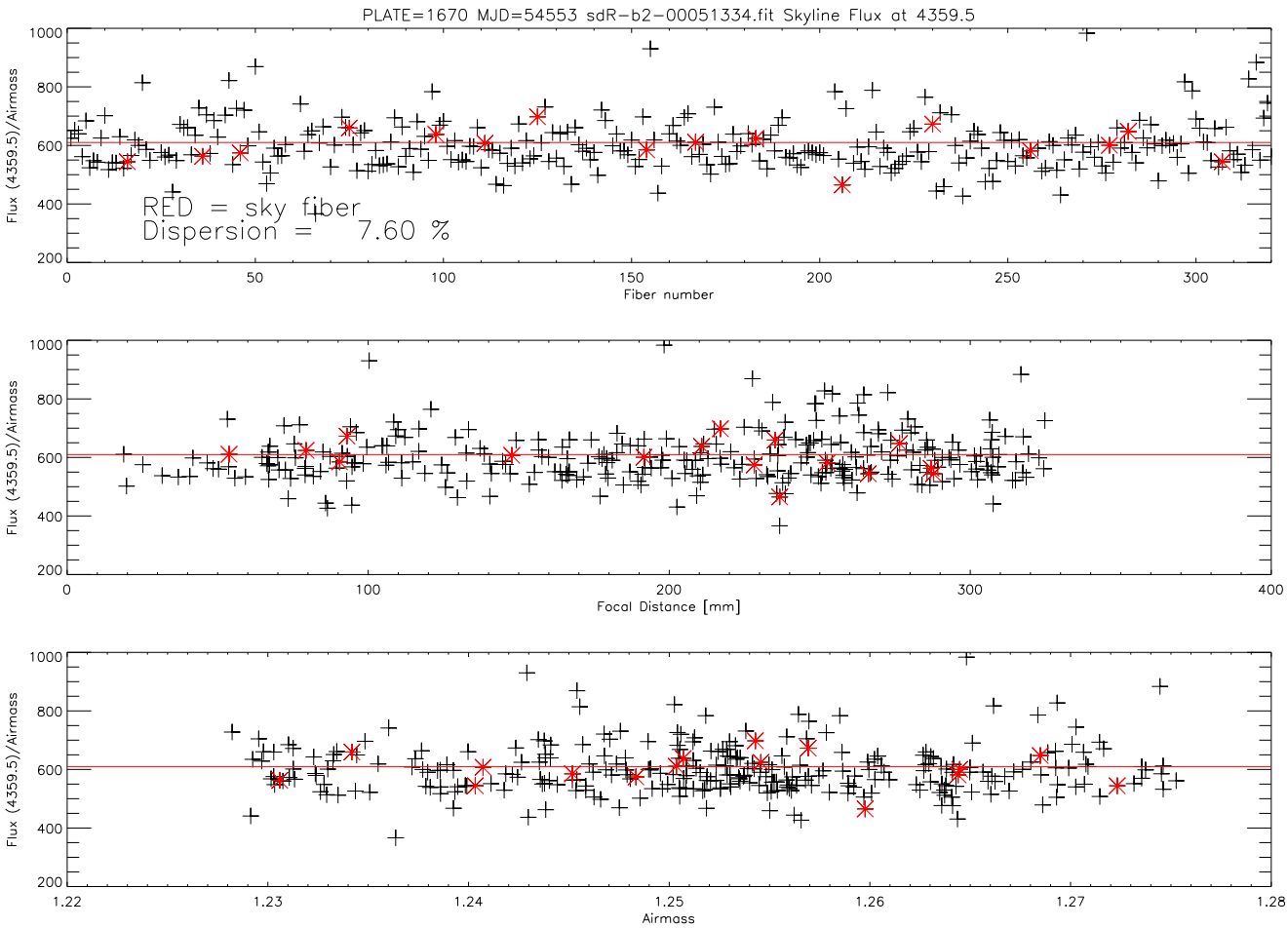

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b2-00051334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

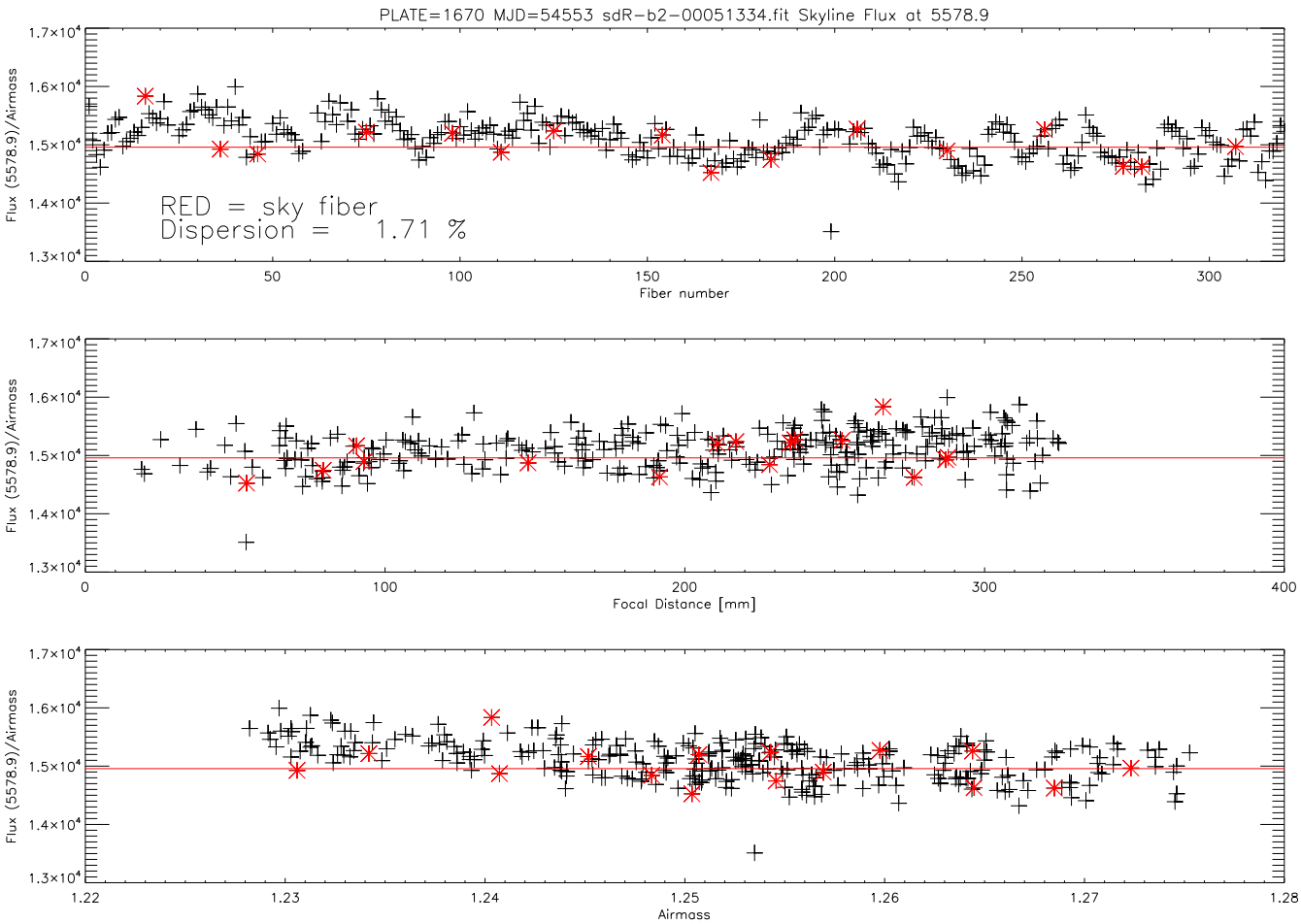

PLATE=1670 MJD=54553 sdR-b2-00051334.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

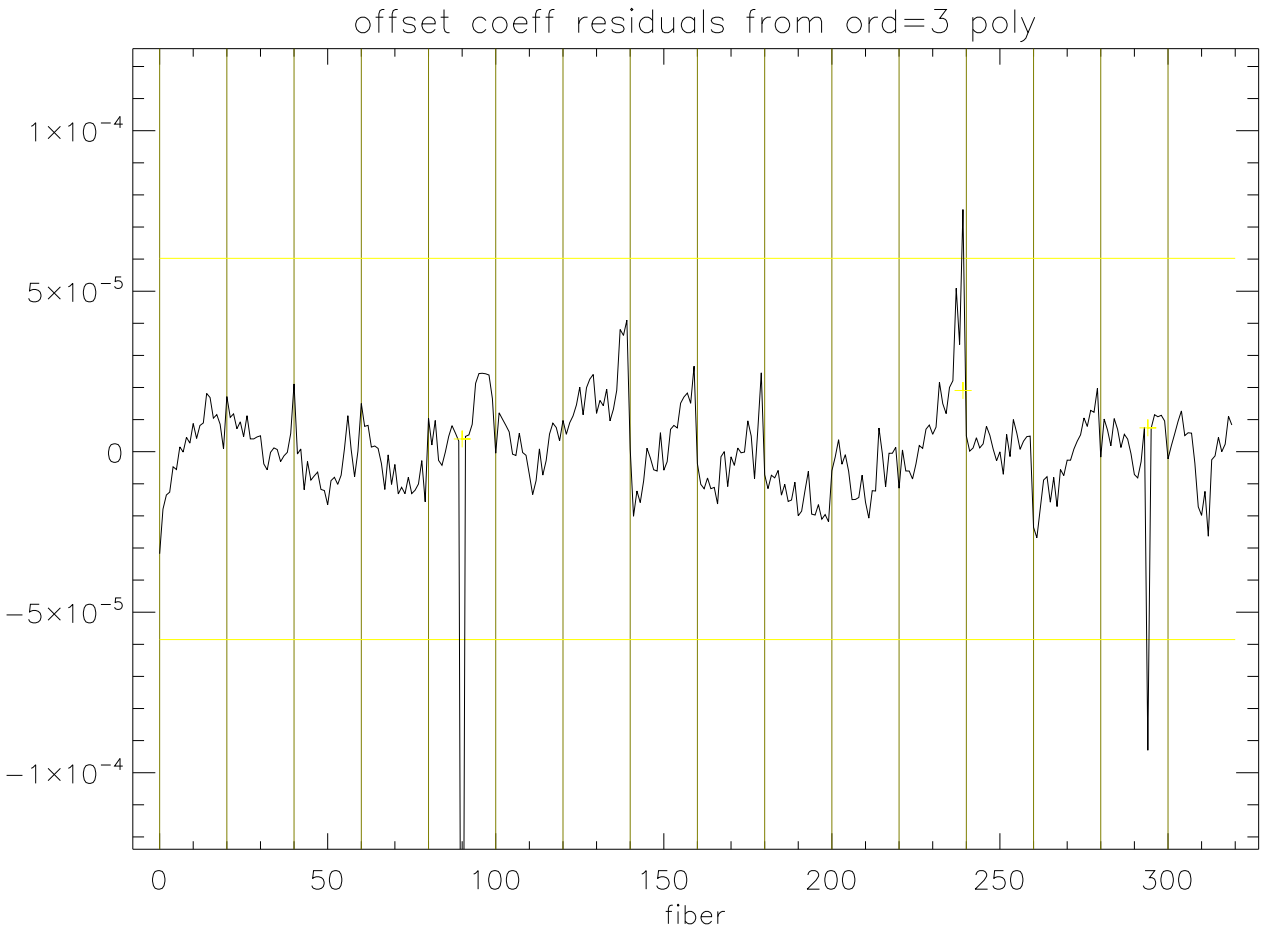

PLATE=1670 MJD=54553 sdR-b2-00051334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

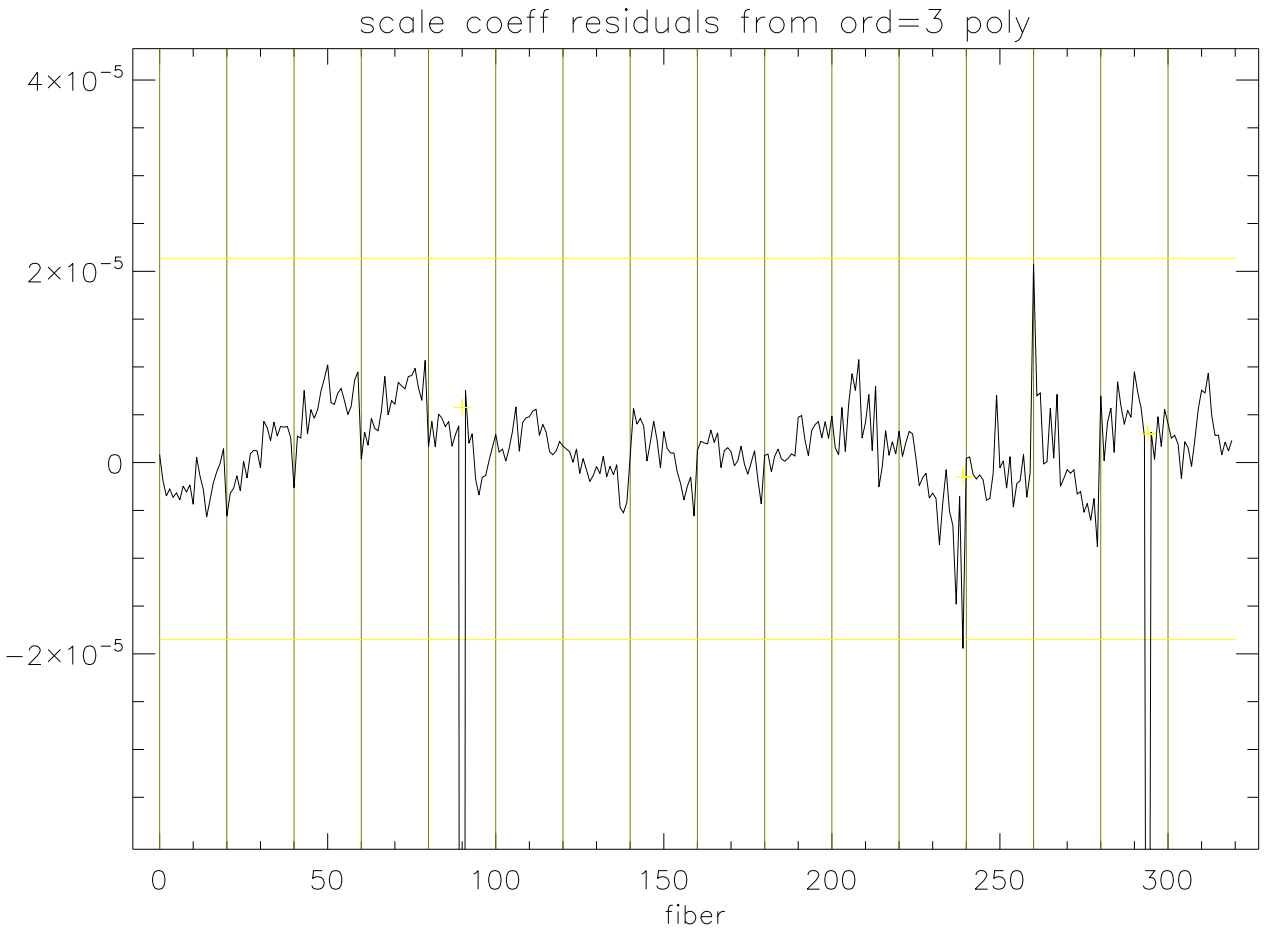

PLATE=1670 MJD=54553 sdR-b2-00051334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

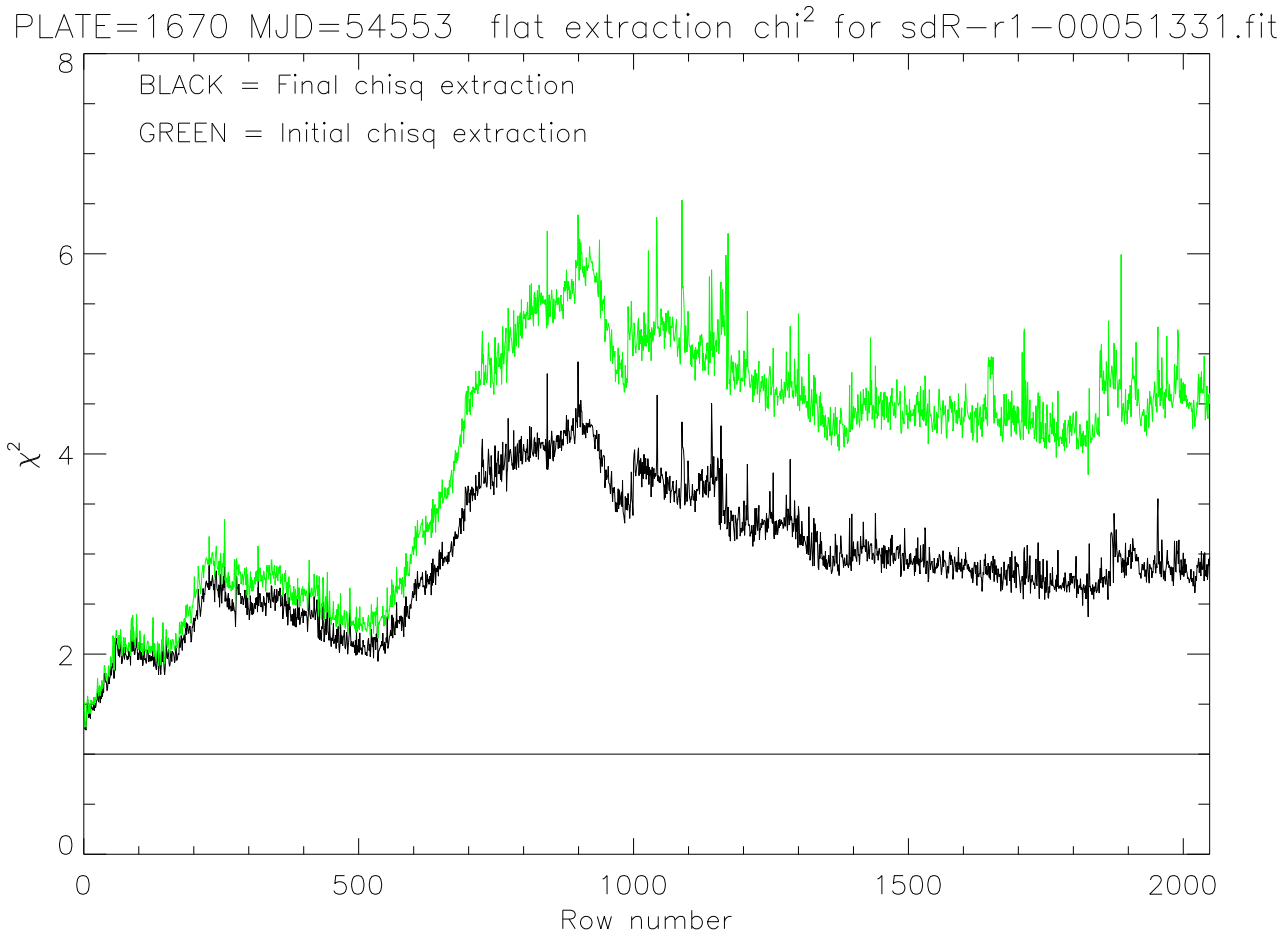

Number of sky fibers = 16
PLATE=1670 MJD=54553 sdR-b2-00051334.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

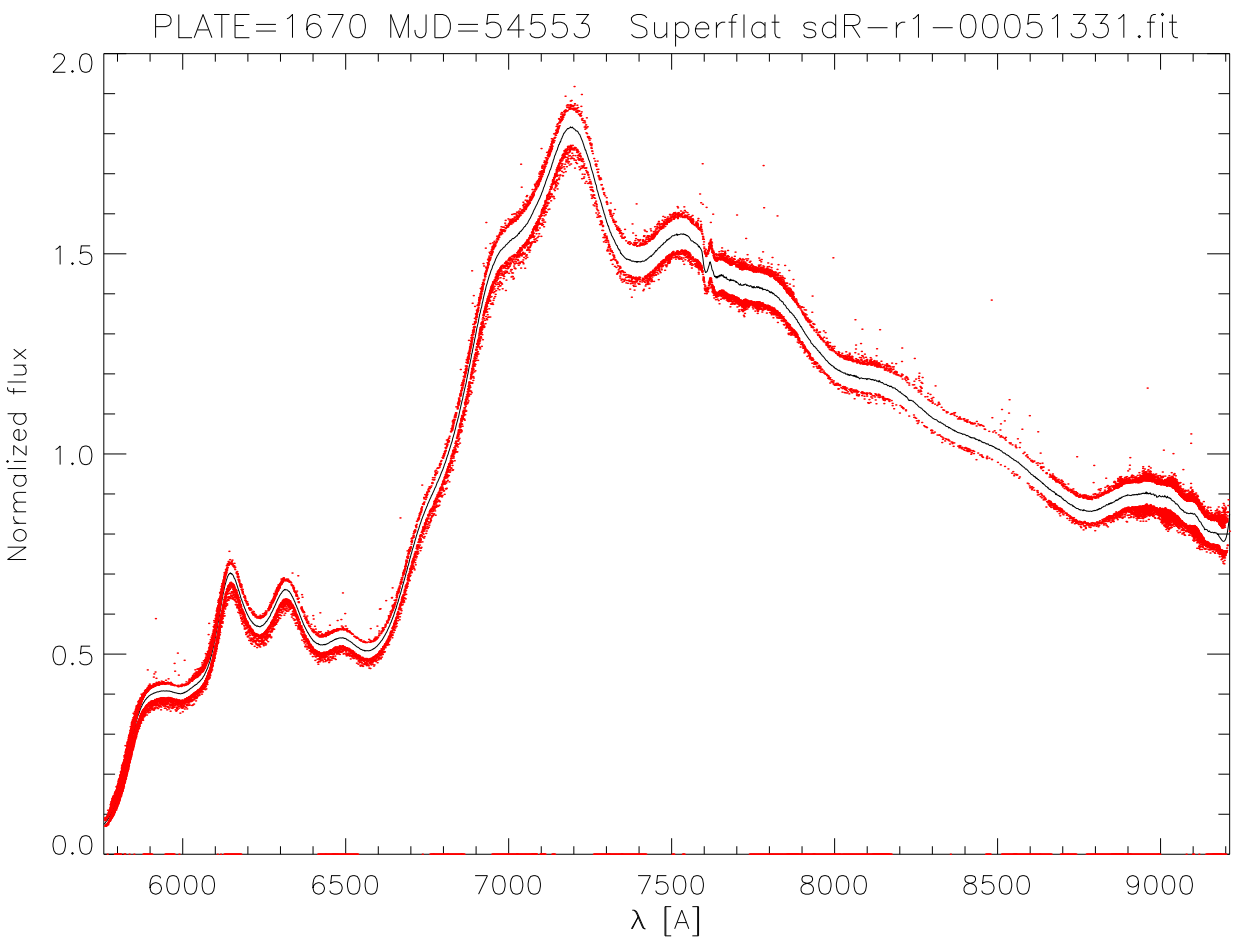

PLATE=1670 MJD=54553 sdR-b2-00051334.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 7.60 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

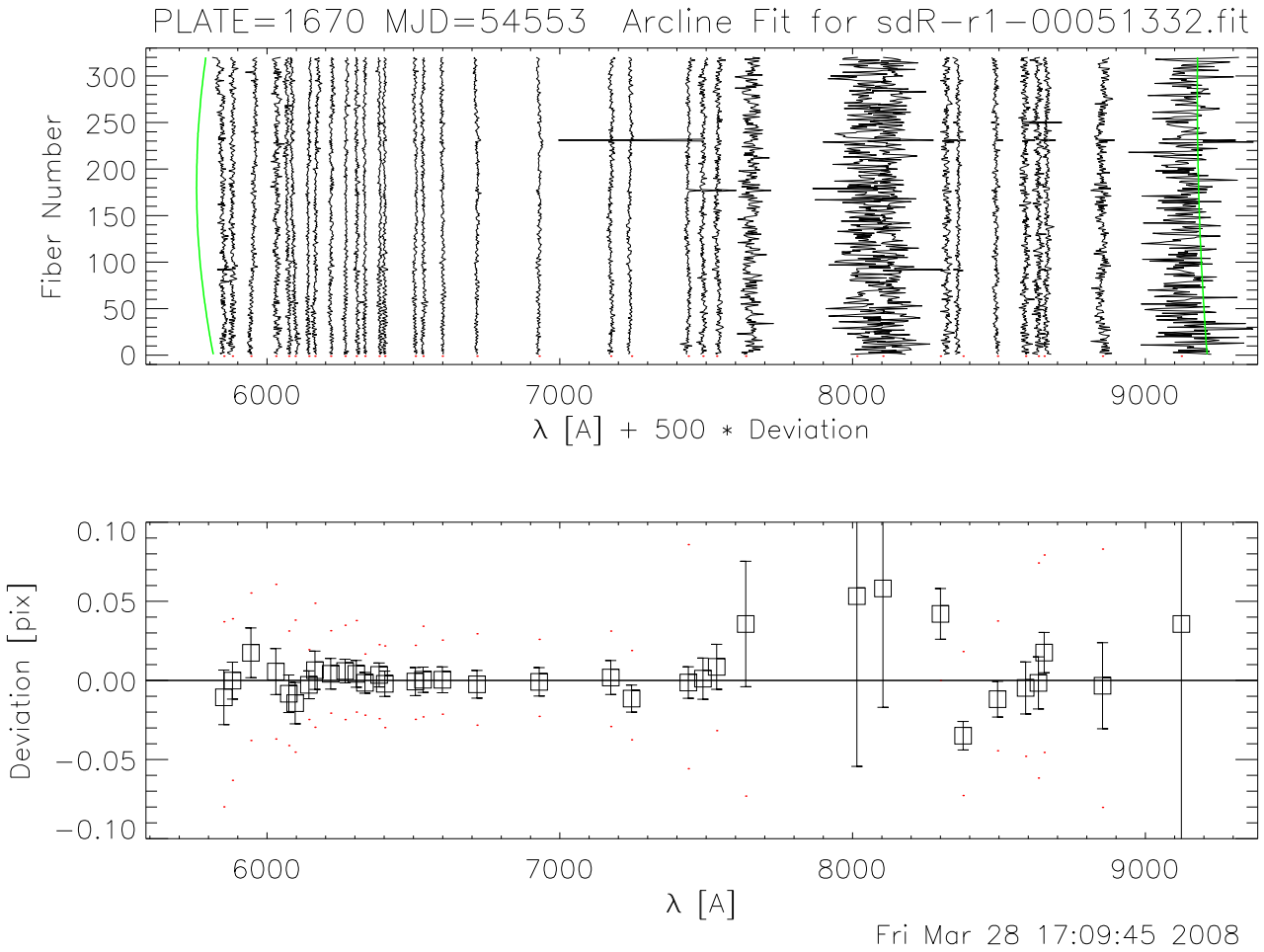

PLATE=1670 MJD=54553 sdR-b2-00051334.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
RED = sky fiber
Dispersion = 1.71 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.7×10^4
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.22
1.23
1.24
1.25
1.26
1.27
1.28
Airmass

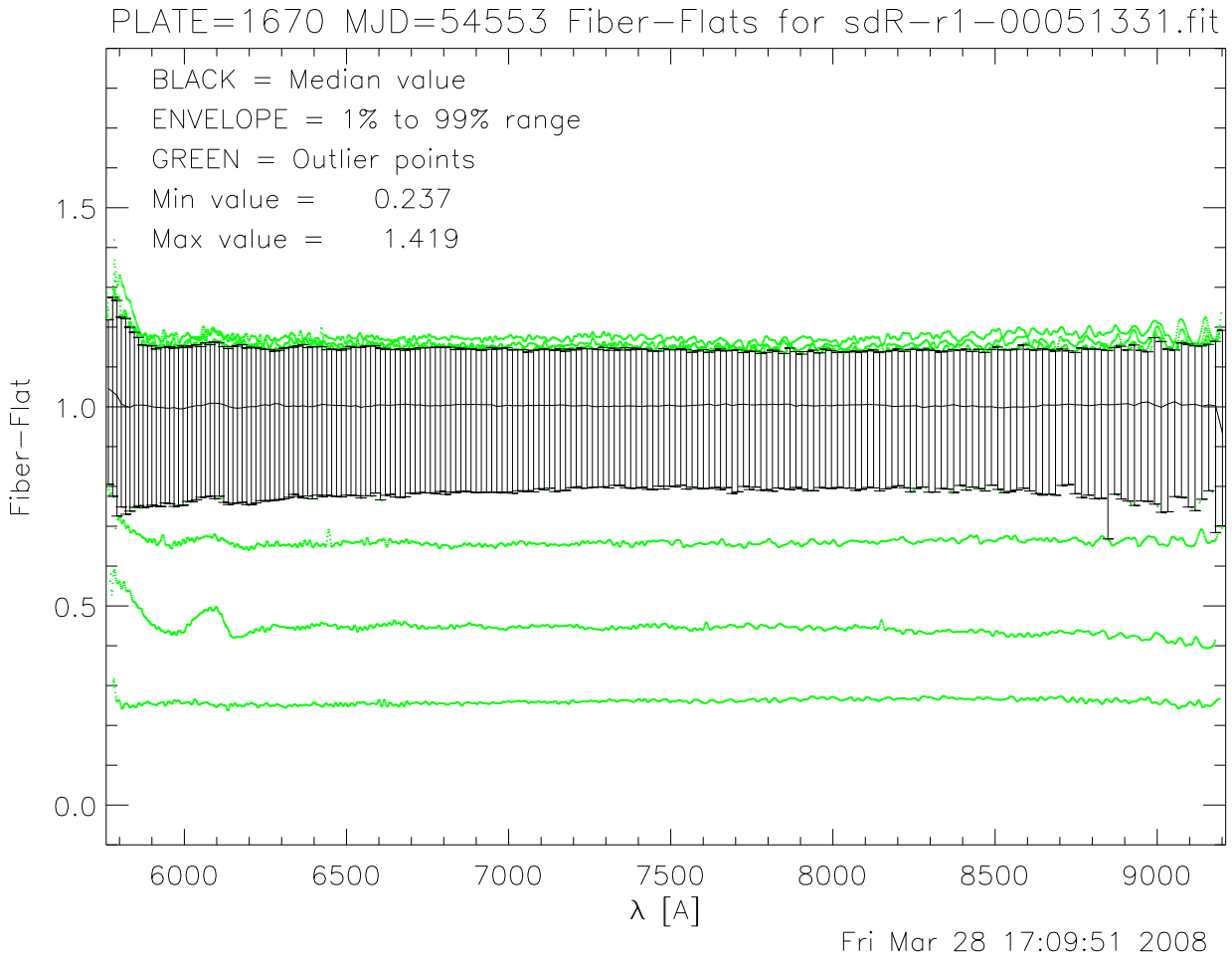

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

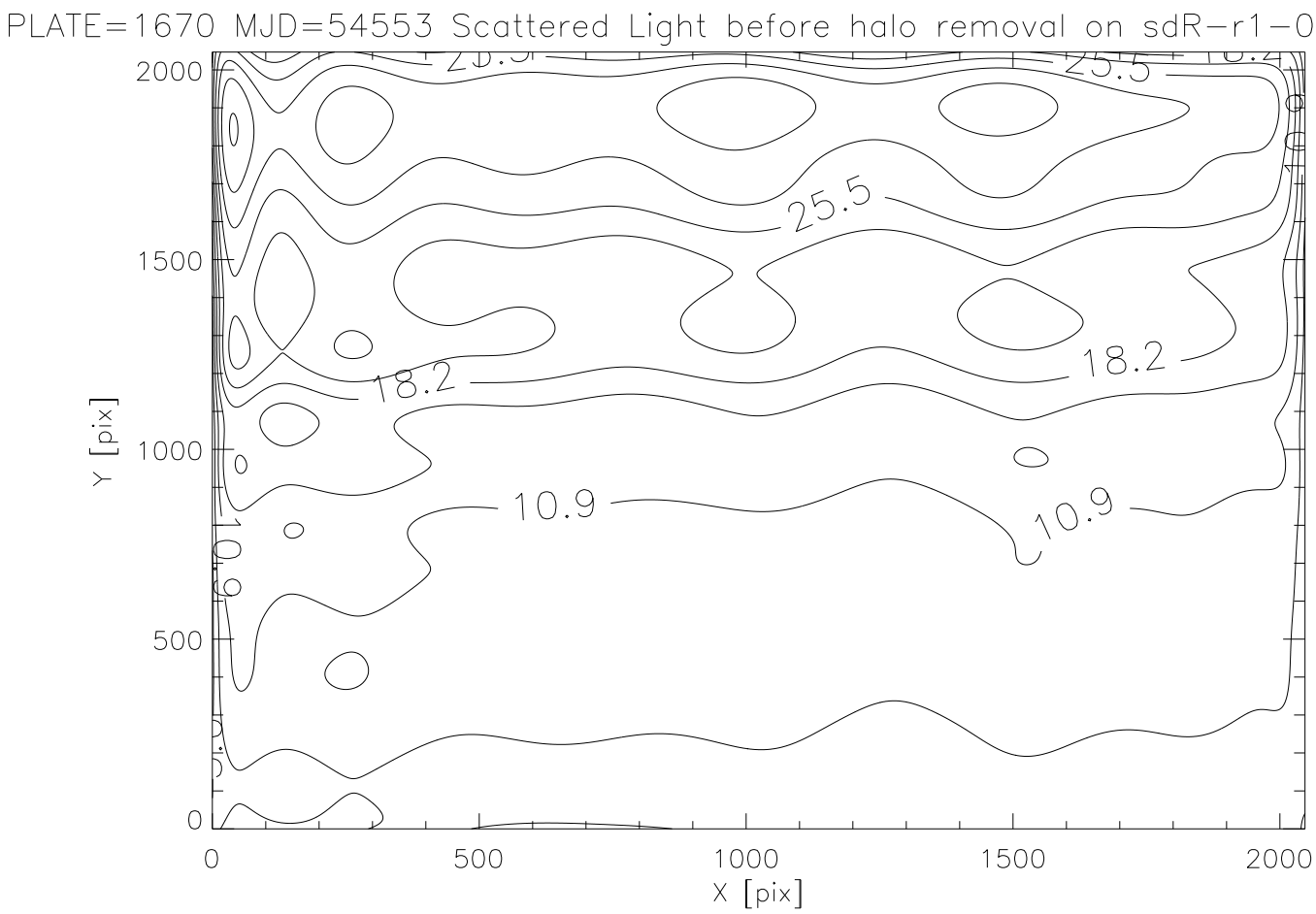

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

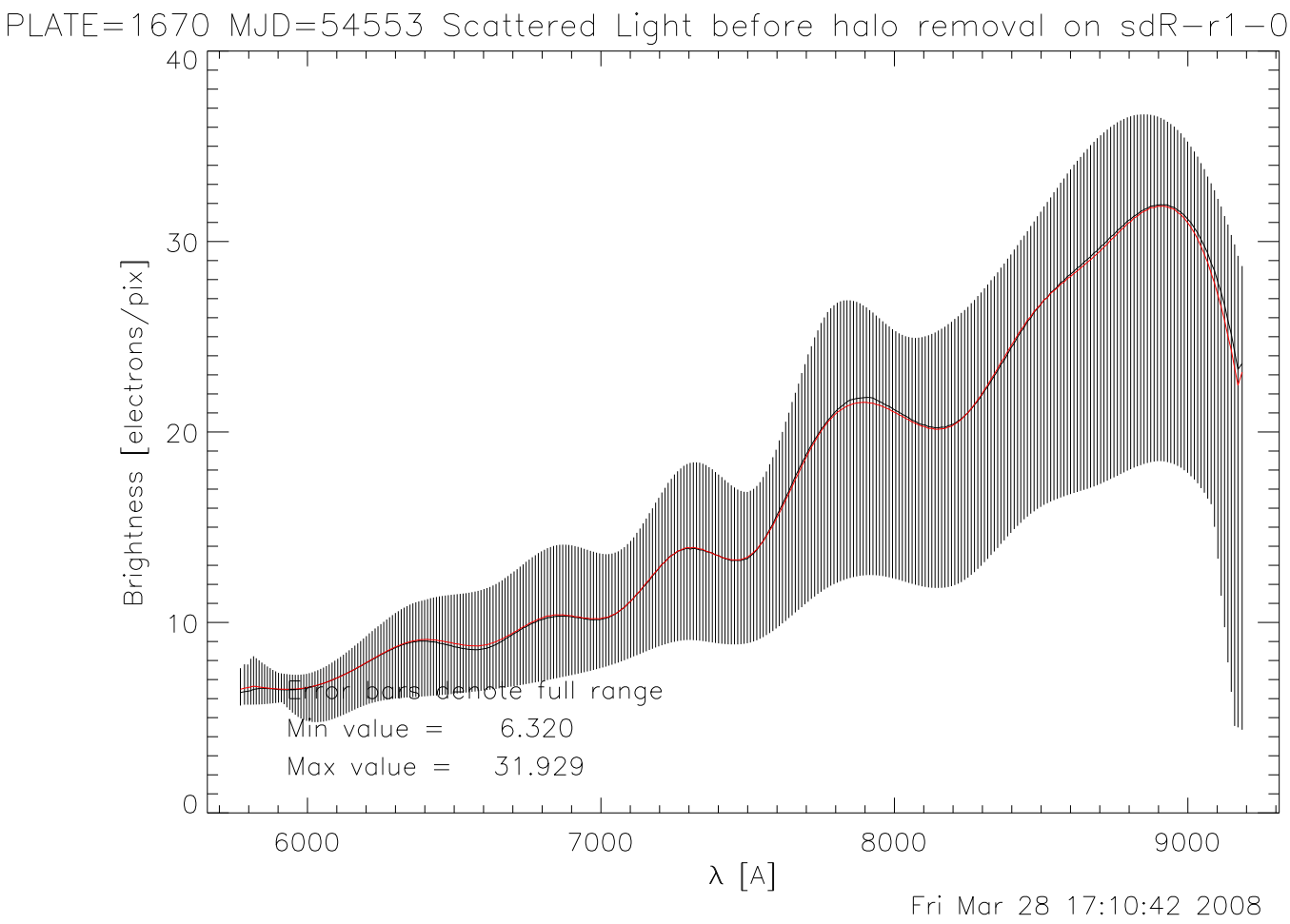

PLATE=1670 MJD=54553 flat extraction chi^2 for sdR−r1−00051331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

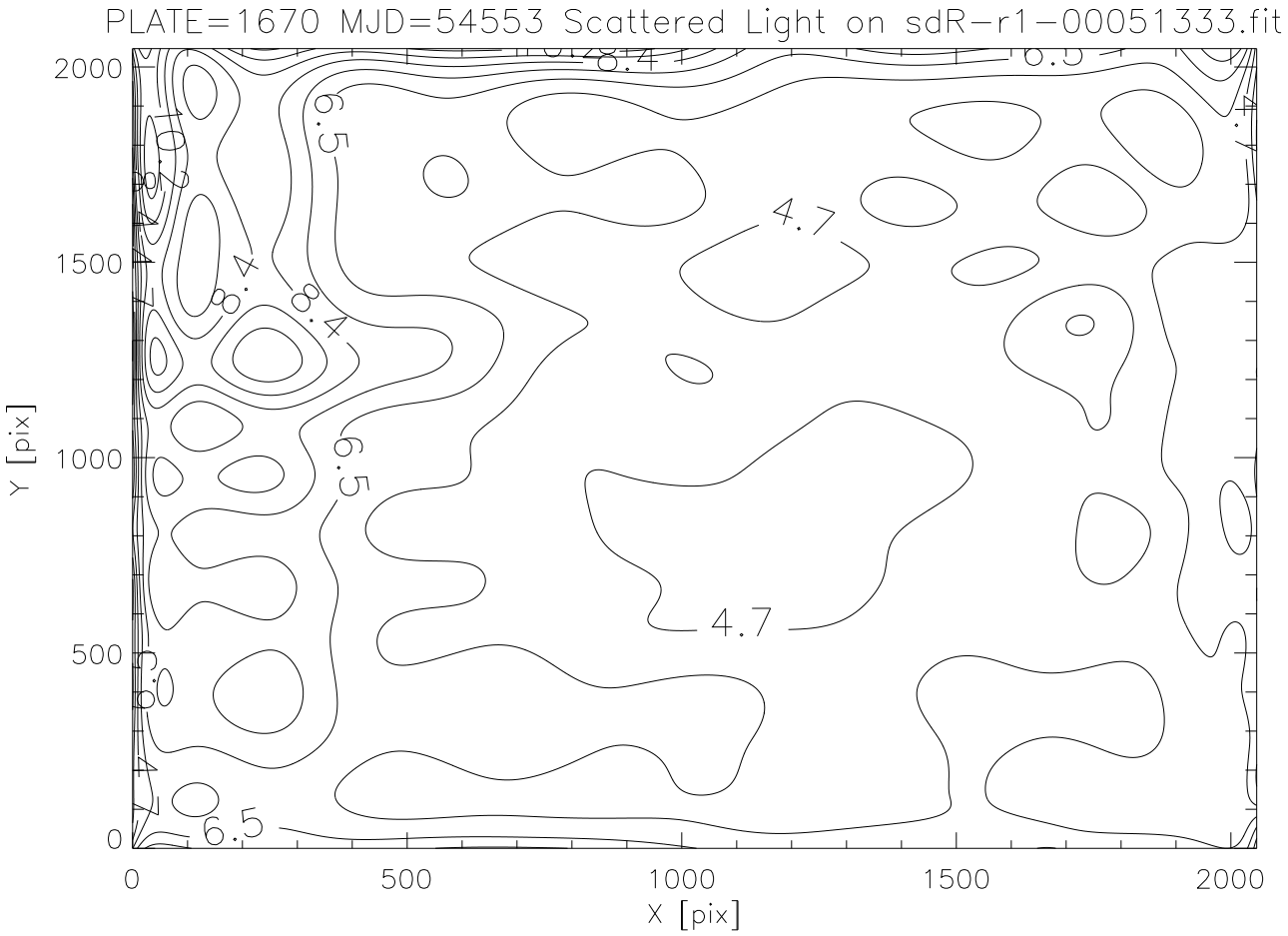

PLATE=1670 MJD=54553 Superflat sdR-r1-00051331.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

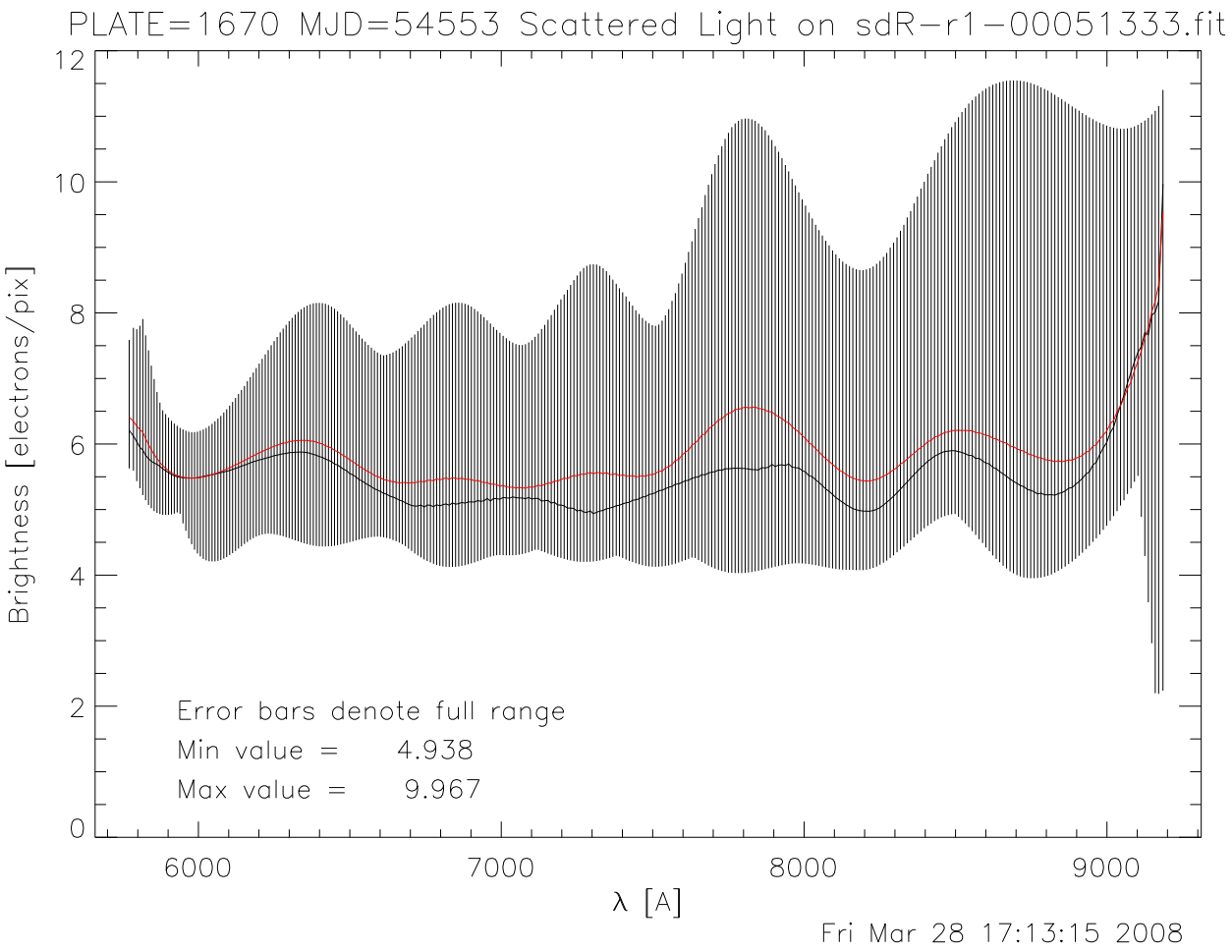

PLATE=1670 MJD=54553 Arcline Fit for sdR-r1-00051332.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Fri Mar 28 17:09:45 2008

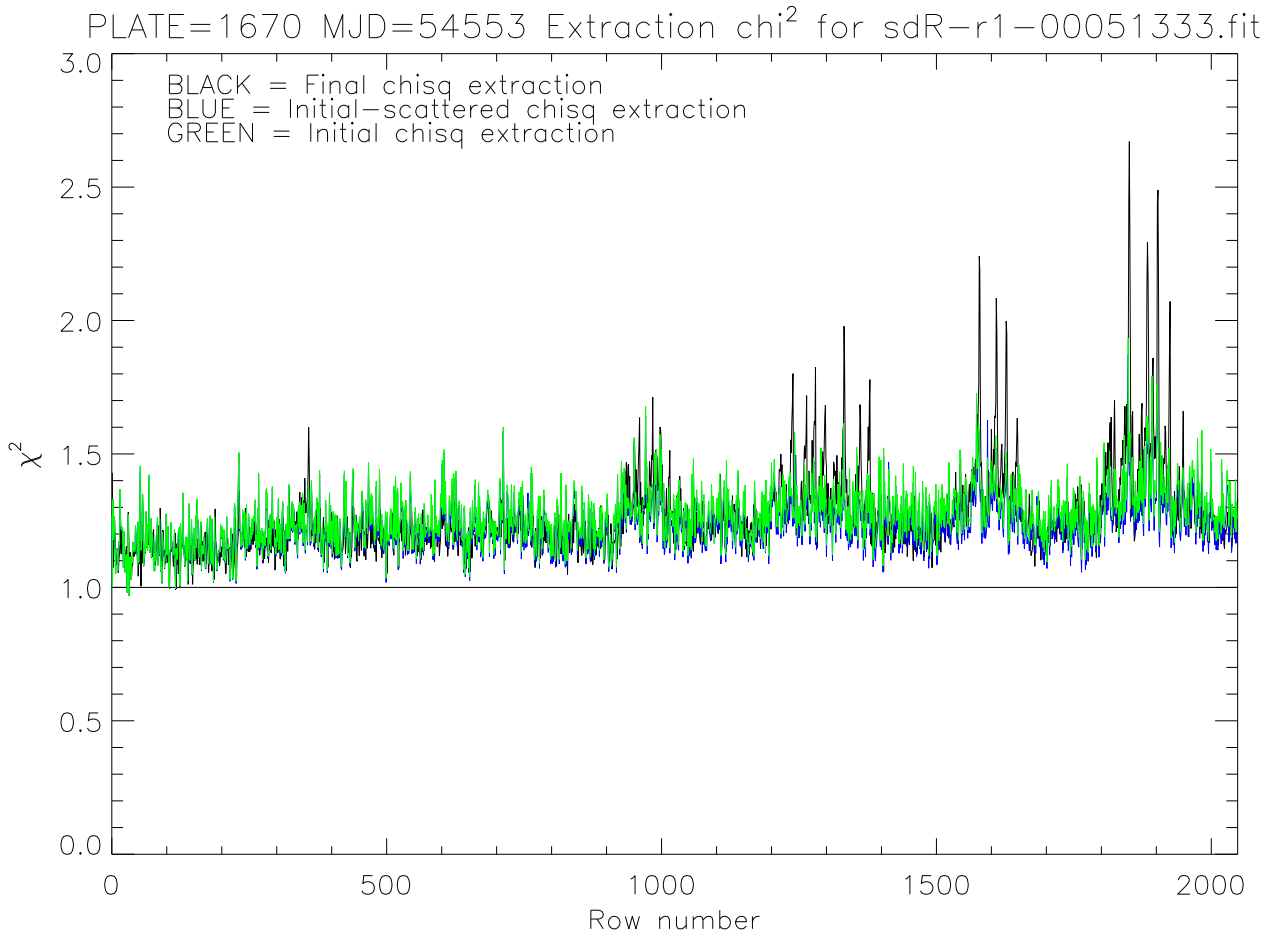

PLATE=1670 MJD=54553 Fiber−Flats for sdR−r1−00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.237
Max value = 1.419
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 28 17:09:51 2008

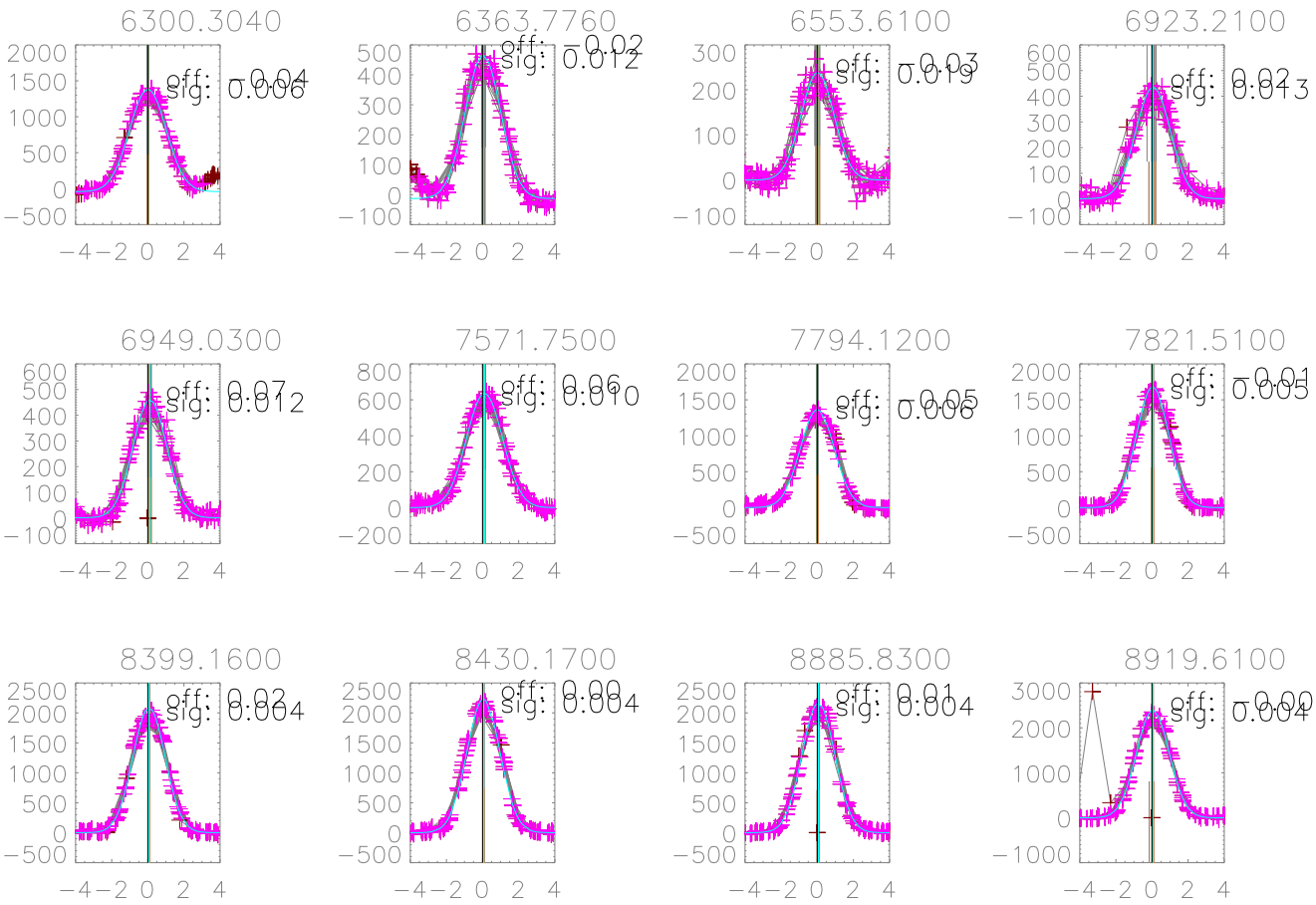

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r1-00051333.fi
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

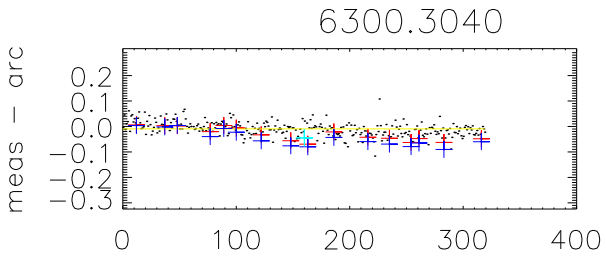

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r1-00051333.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.320
Max value = 31.929
Fri Mar 28 17:10:42 2008

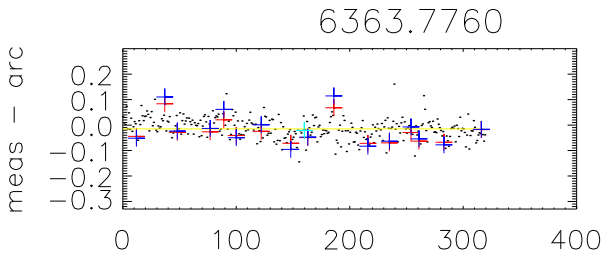

PLATE=1670 MJD=54553 Scattered Light on sdR-r1-00051333.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.7
6.5
8.4

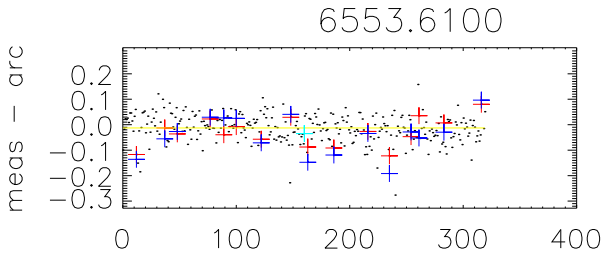

PLATE=1670 MJD=54553 Scattered Light on sdR-r1-00051333.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.938
Max value = 9.967
Fri Mar 28 17:13:15 2008

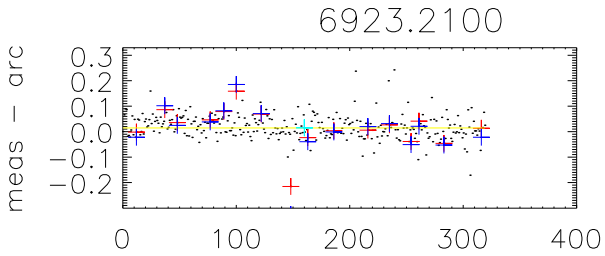

PLATE=1670 MJD=54553 Extraction chi^2 for sdR−r1−00051333.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

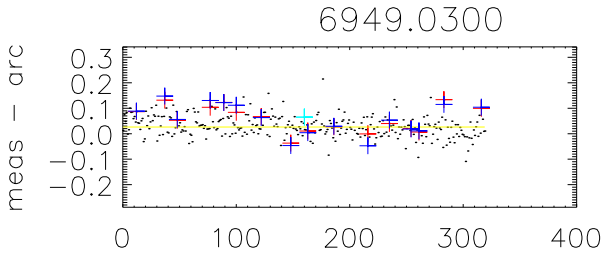

6300.3040
off: −0.04
sig: 0.006
6363.7760
off: −0.02
sig: 0.012
6553.6100
off: −0.03
sig: 0.019
6923.2100
off: 0.02
sig: 0.013
6949.0300
off: 0.07
sig: 0.012
7571.7500
off: 0.06
sig: 0.010
7794.1200
off: −0.05
sig: 0.006
7821.5100
off: −0.01
sig: 0.005
8399.1600
off: 0.02
sig: 0.004
8430.1700
off: 0.00
sig: 0.004
8885.8300
off: 0.01
sig: 0.004
8919.6100
off: −0.00
sig: 0.004

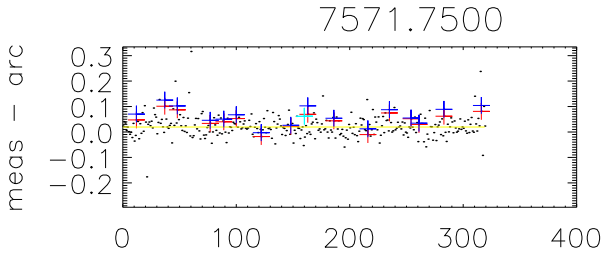

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

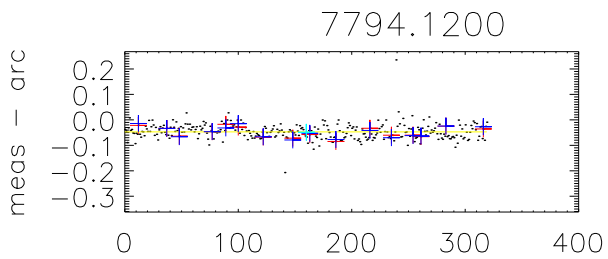

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

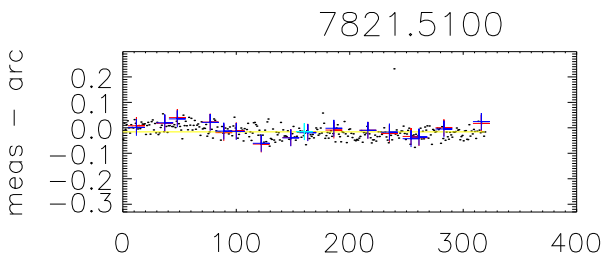

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

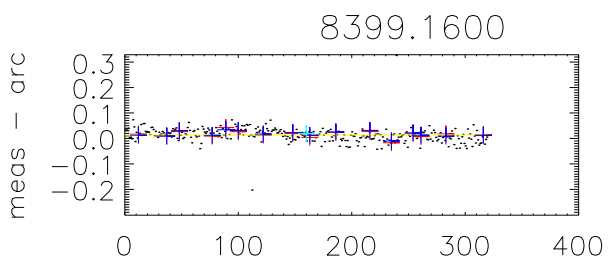

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

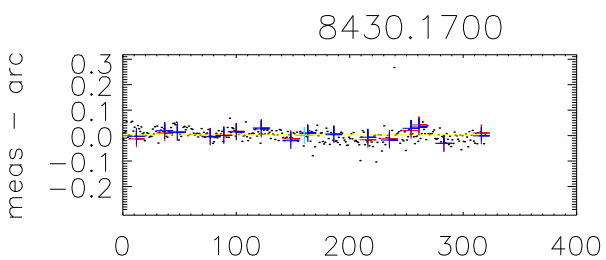

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

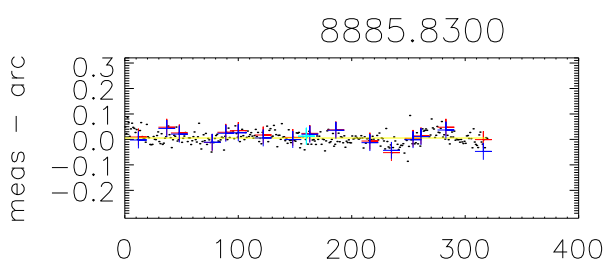

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

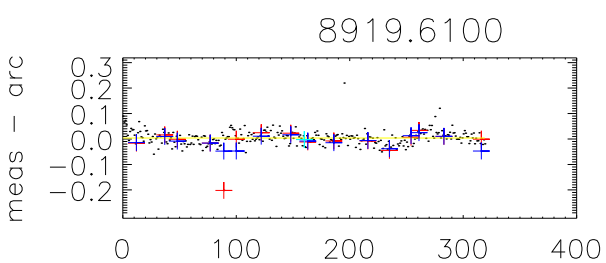

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

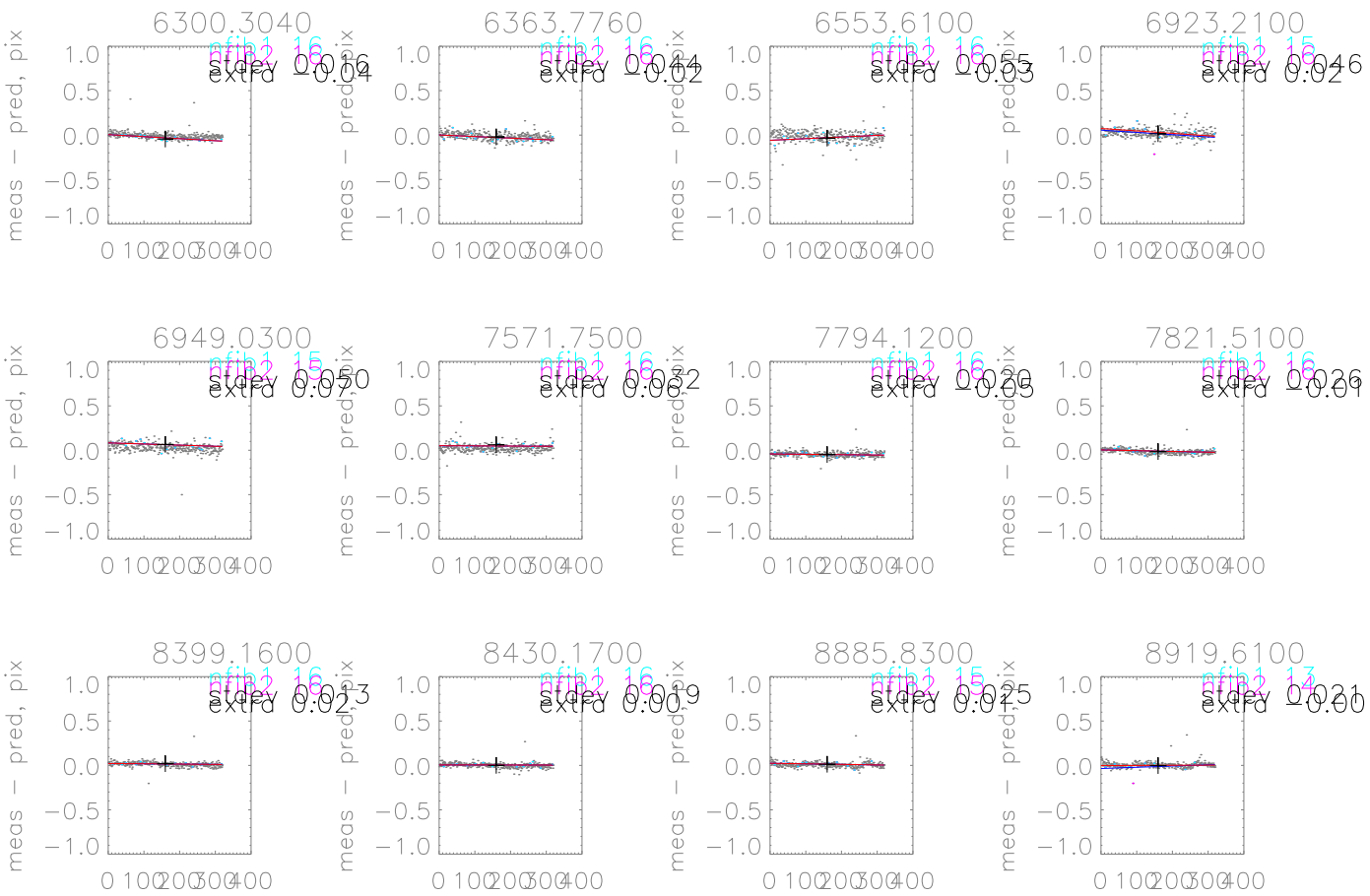

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

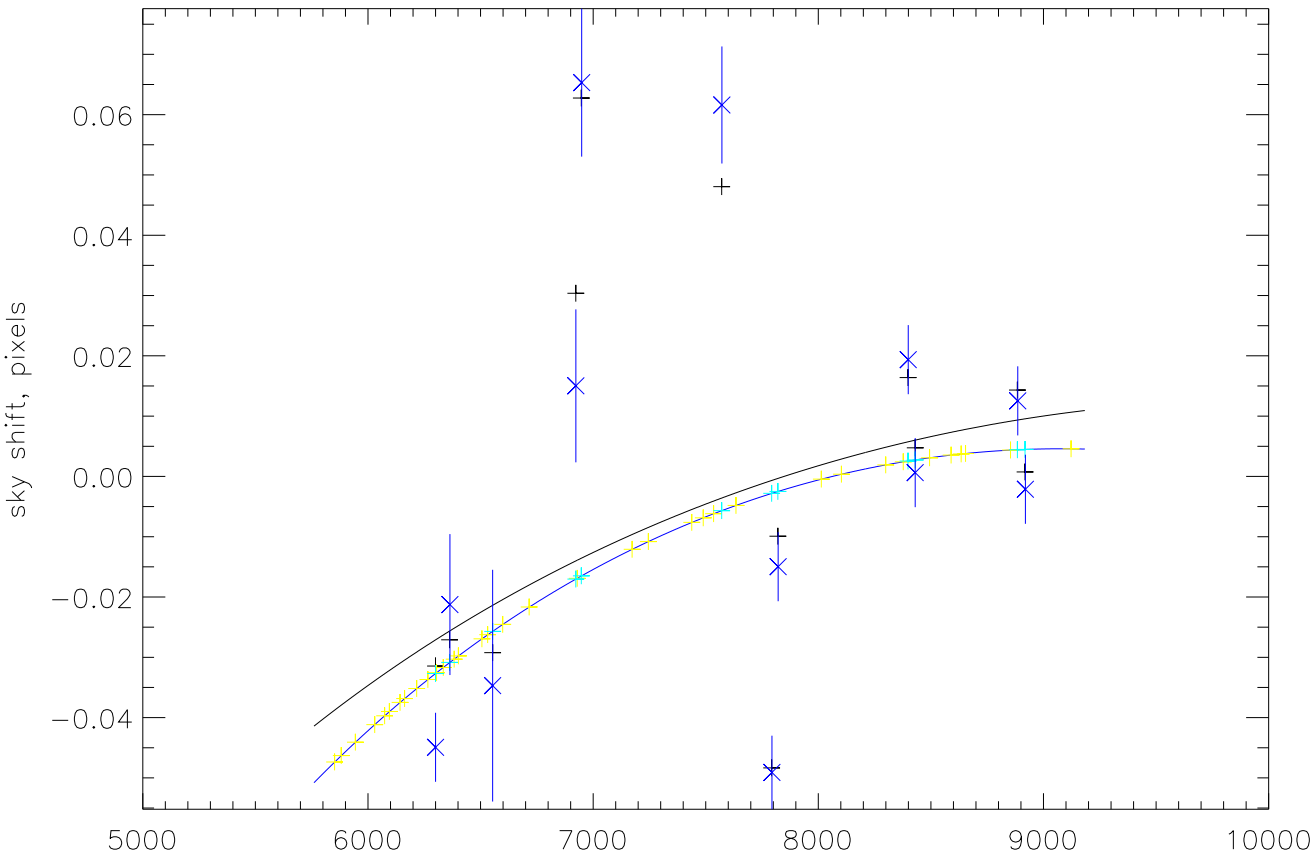

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

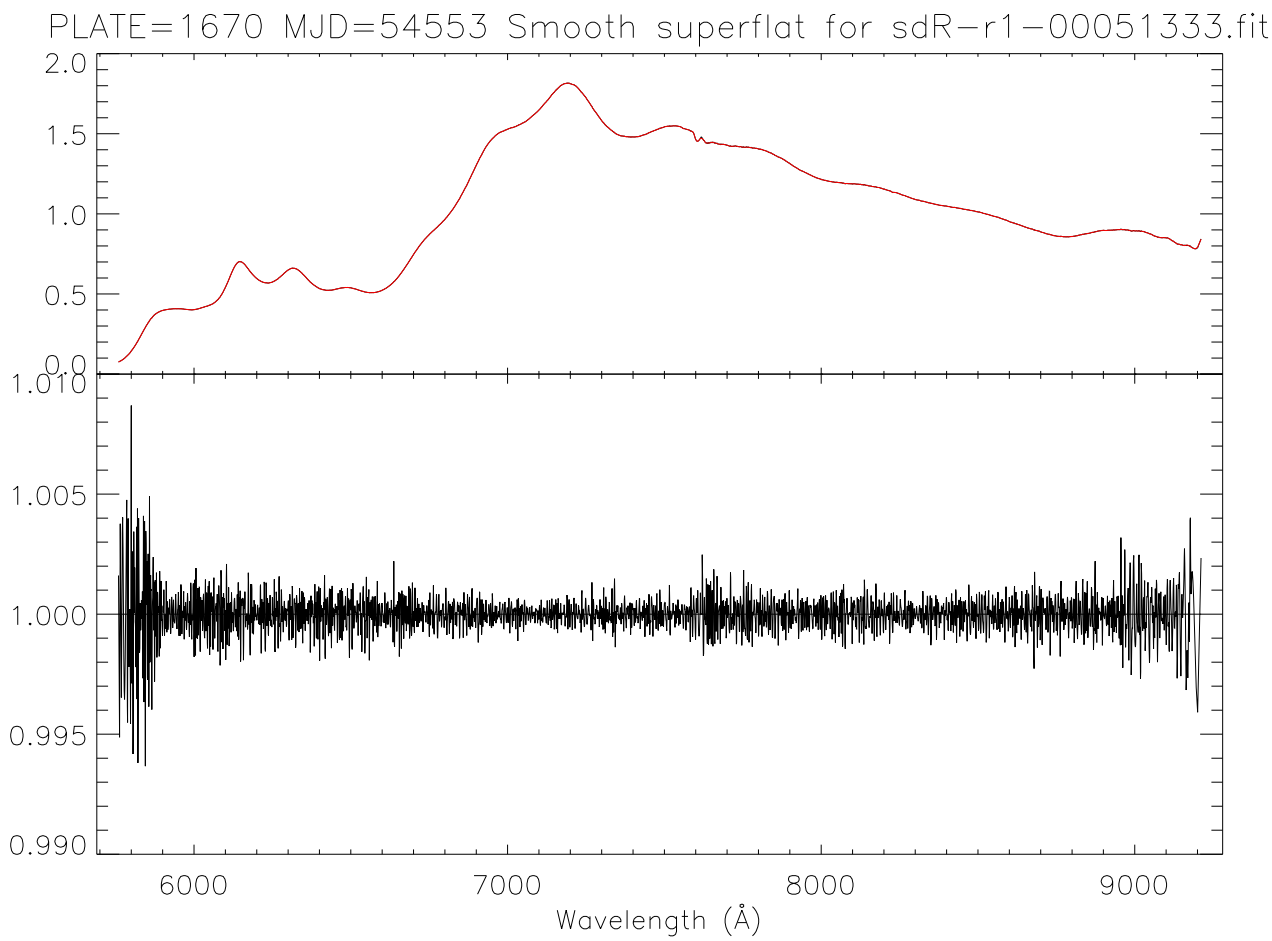

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

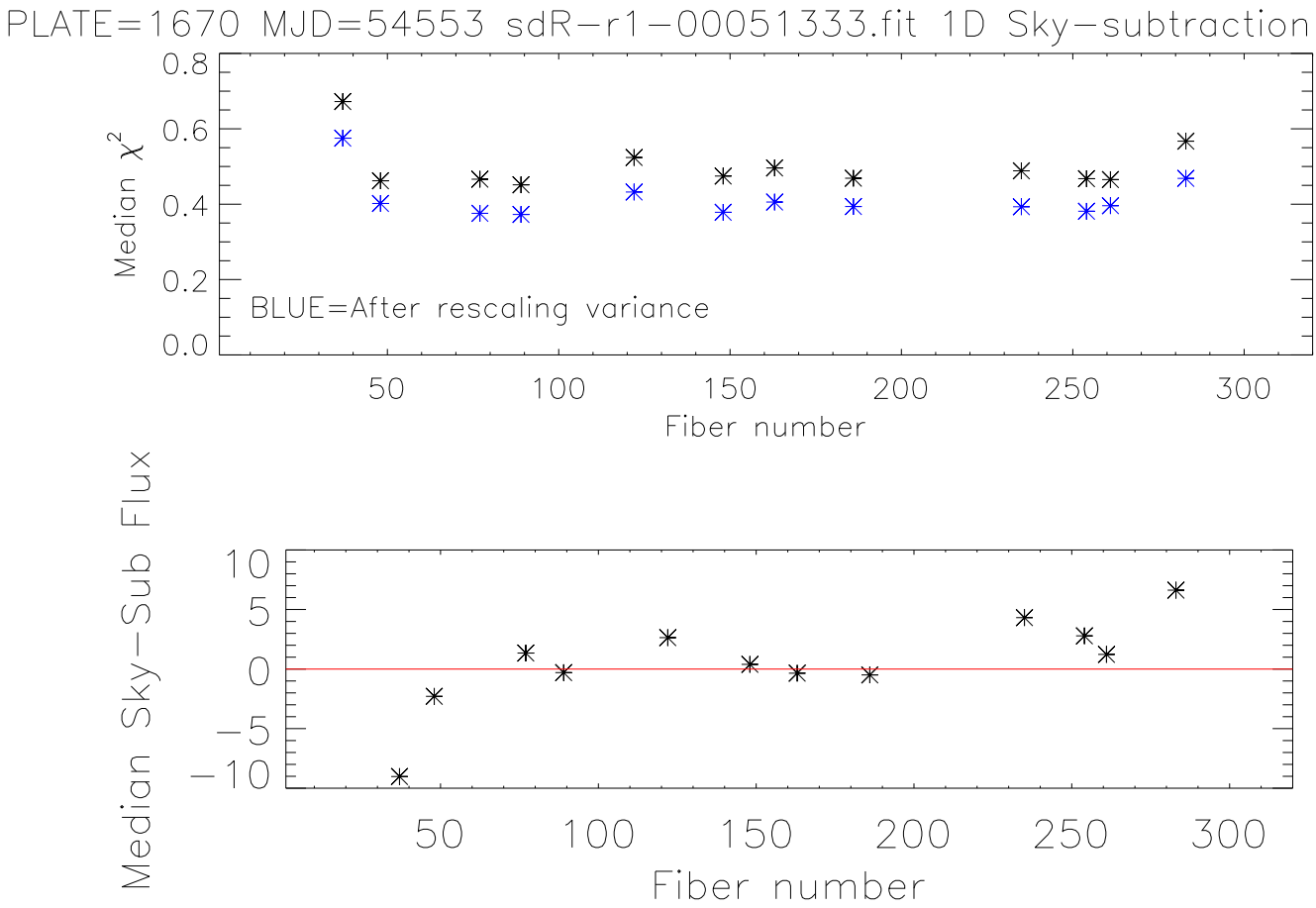

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

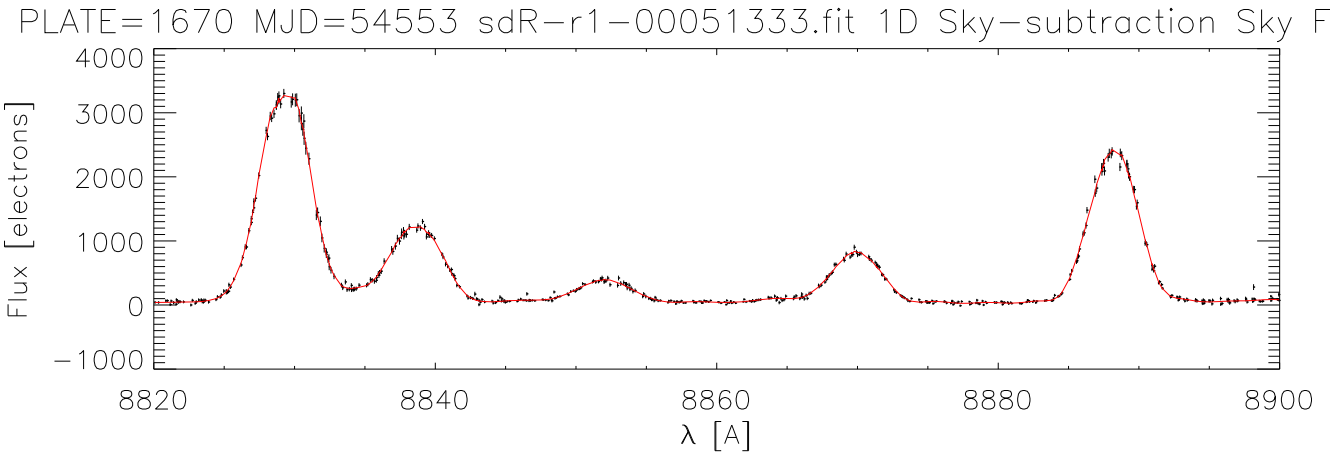

6300.3040
stdev 0.016
extra −0.04
6363.7760
stdev 0.044
extra −0.02
6553.6100
stdev 0.055
extra −0.03
6923.2100
stdev 0.046
extra 0.02
6949.0300
stdev 0.050
extra 0.07
7571.7500
stdev 0.032
extra 0.06
7794.1200
stdev 0.030
extra −0.05
7821.5100
stdev 0.026
extra −0.01
8399.1600
stdev 0.013
extra 0.02
8430.1700
stdev 0.019
extra 0.00
8885.8300
stdev 0.025
extra 0.01
8919.6100
stdev 0.021
extra −0.00
meas − pred, pix

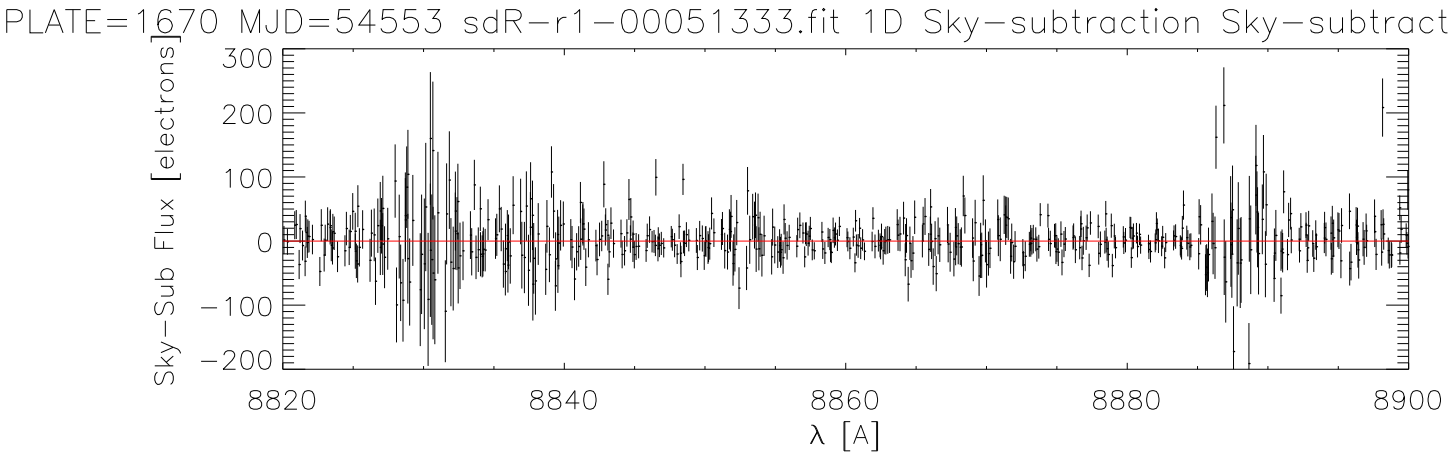

sky shift, pixels
0.06
0.04
0.02
0.00
−0.02
−0.04
5000
6000
7000
8000
9000
10000

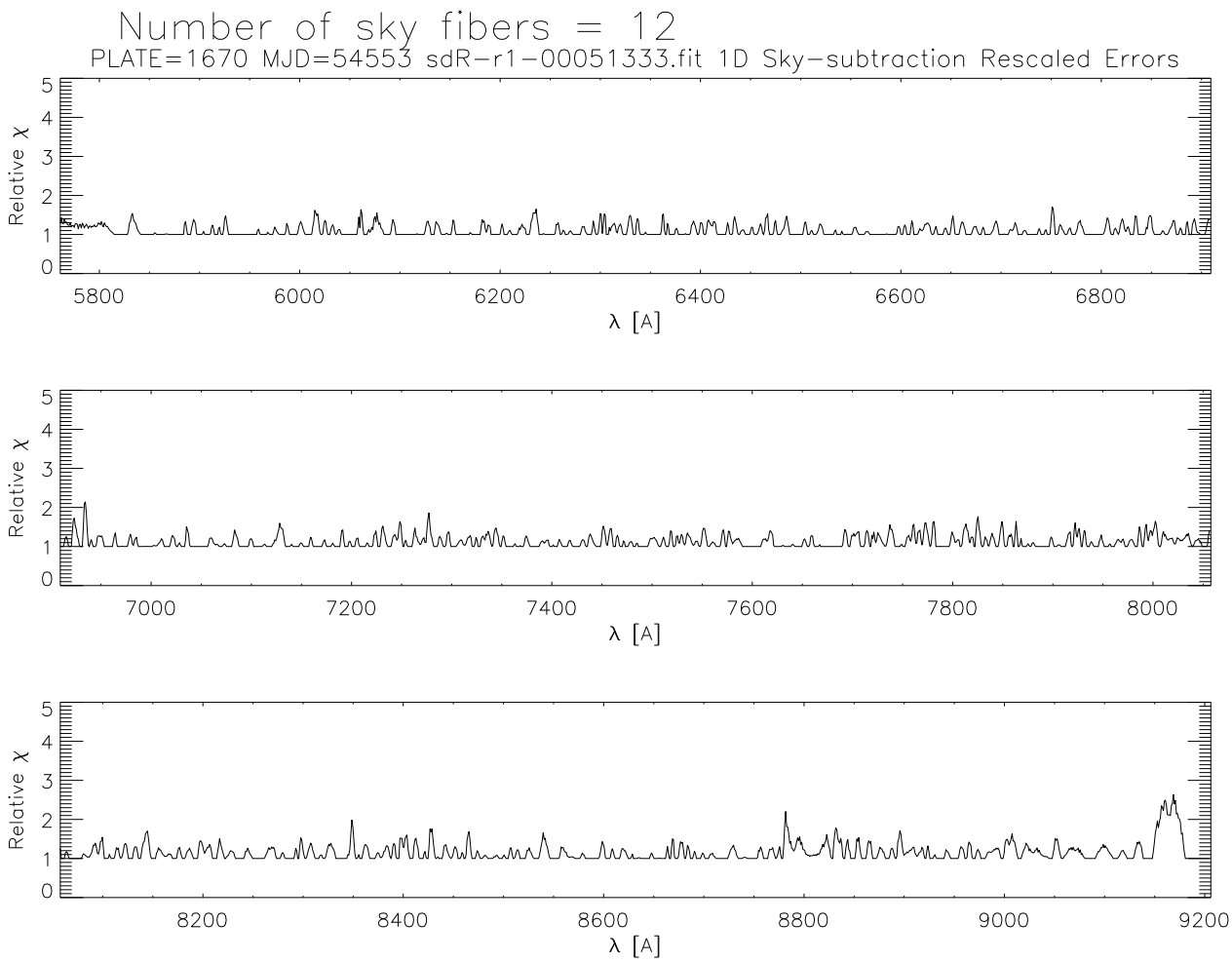
es= 0.0000

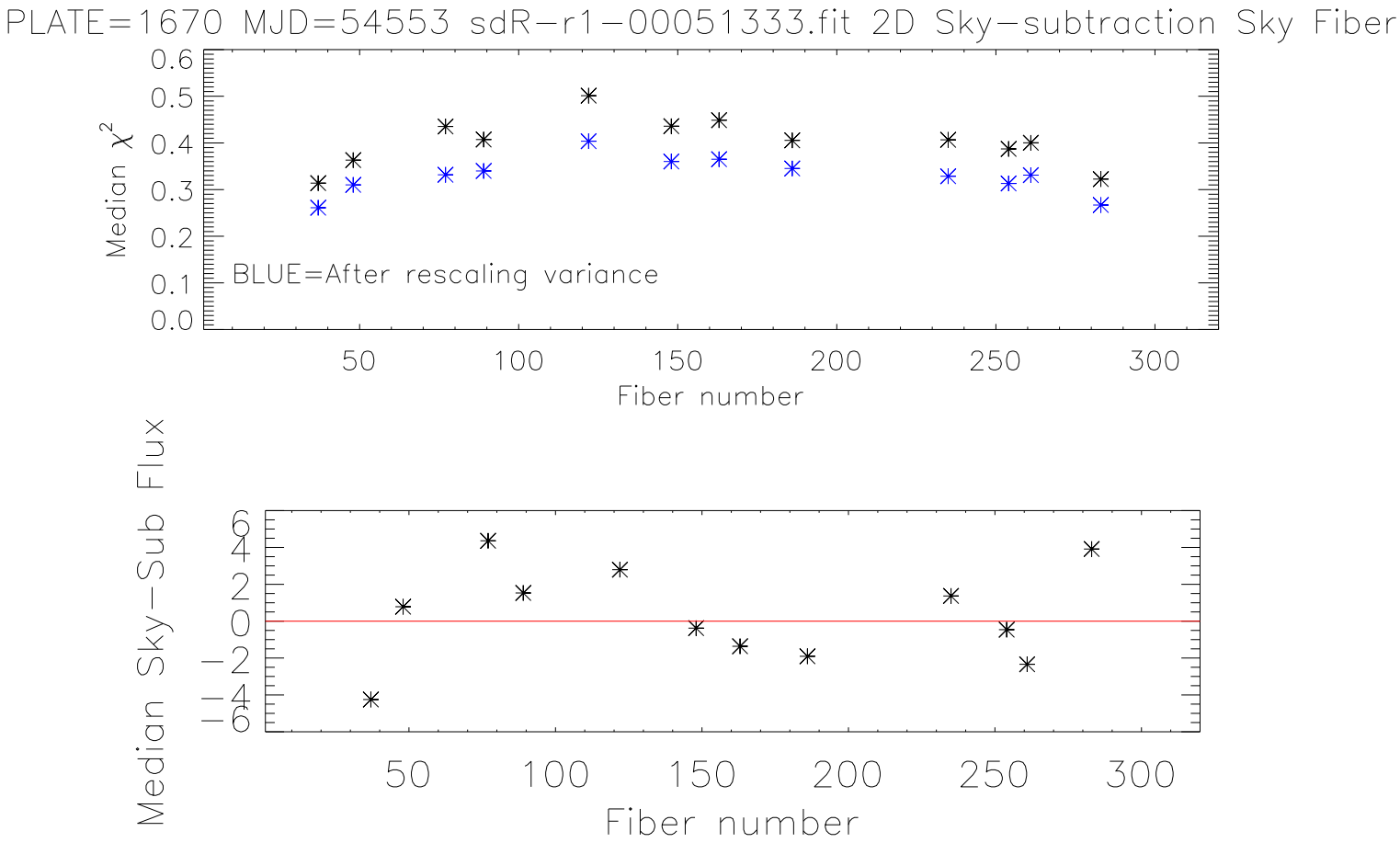

PLATE=1670 MJD=54553 Smooth superflat for sdR-r1-00051333.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

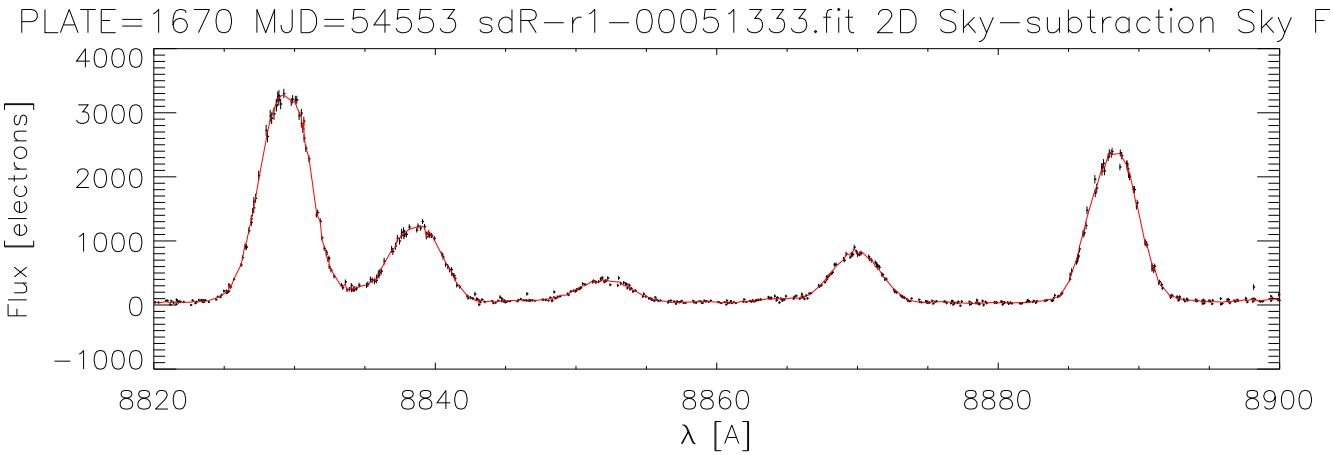

PLATE=1670 MJD=54553 sdR-r1-00051333.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

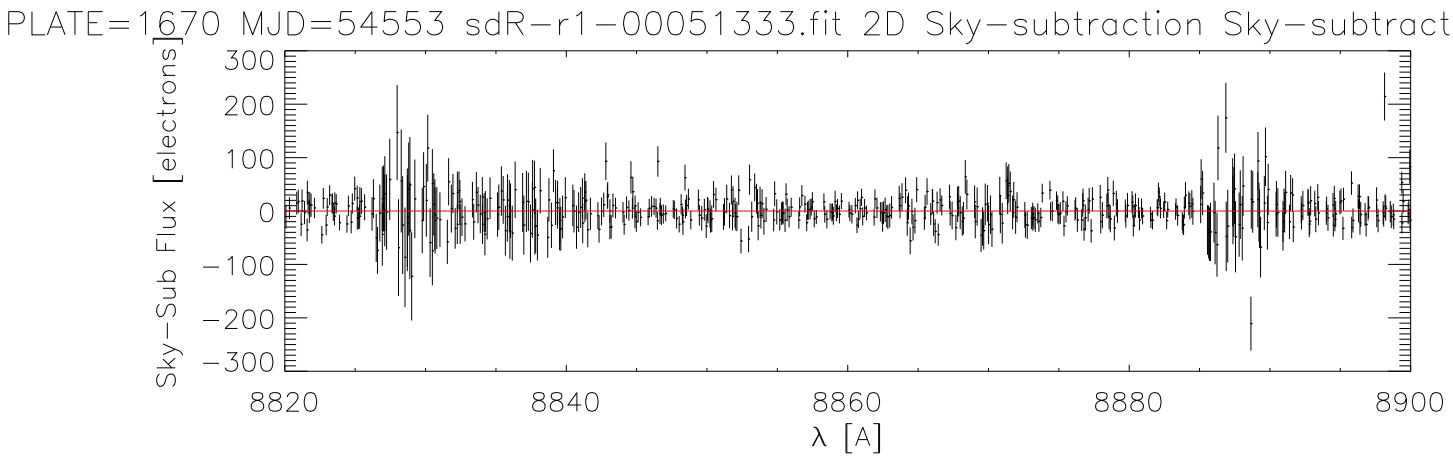

PLATE=1670 MJD=54553 sdR-r1-00051333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

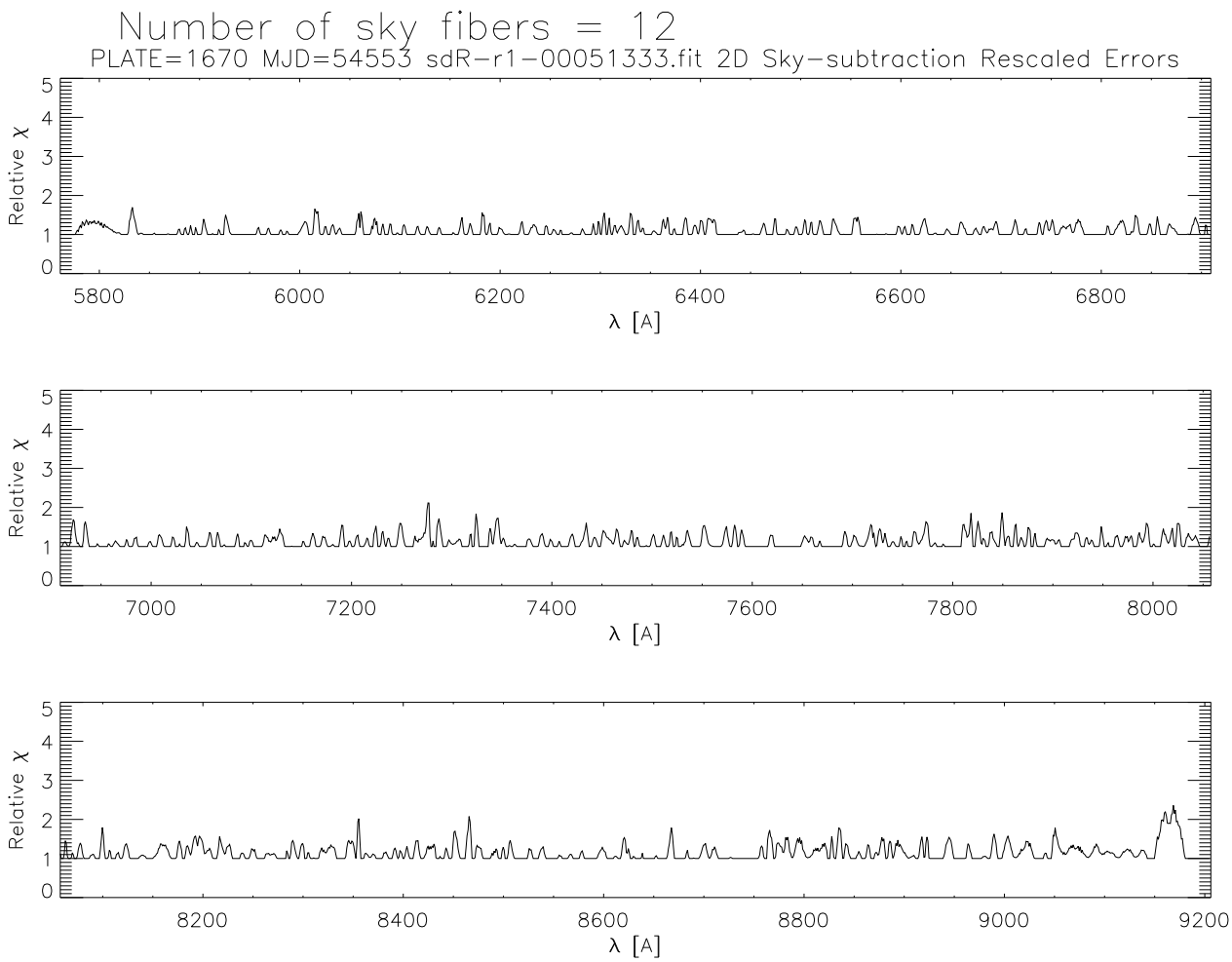

PLATE=1670 MJD=54553 sdR-r1-00051333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

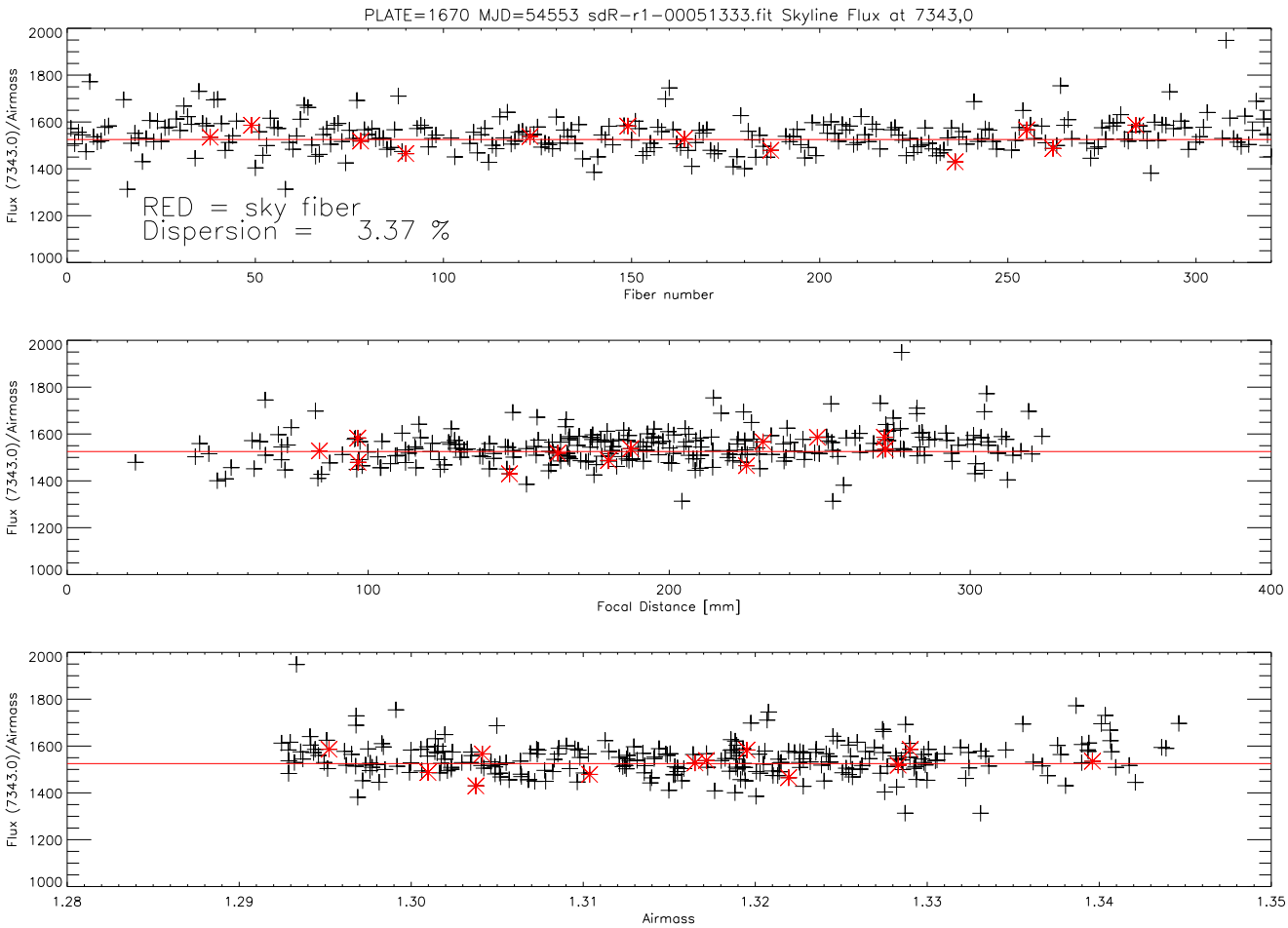

Number of sky fibers = 12
PLATE=1670 MJD=54553 sdR-r1-00051333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

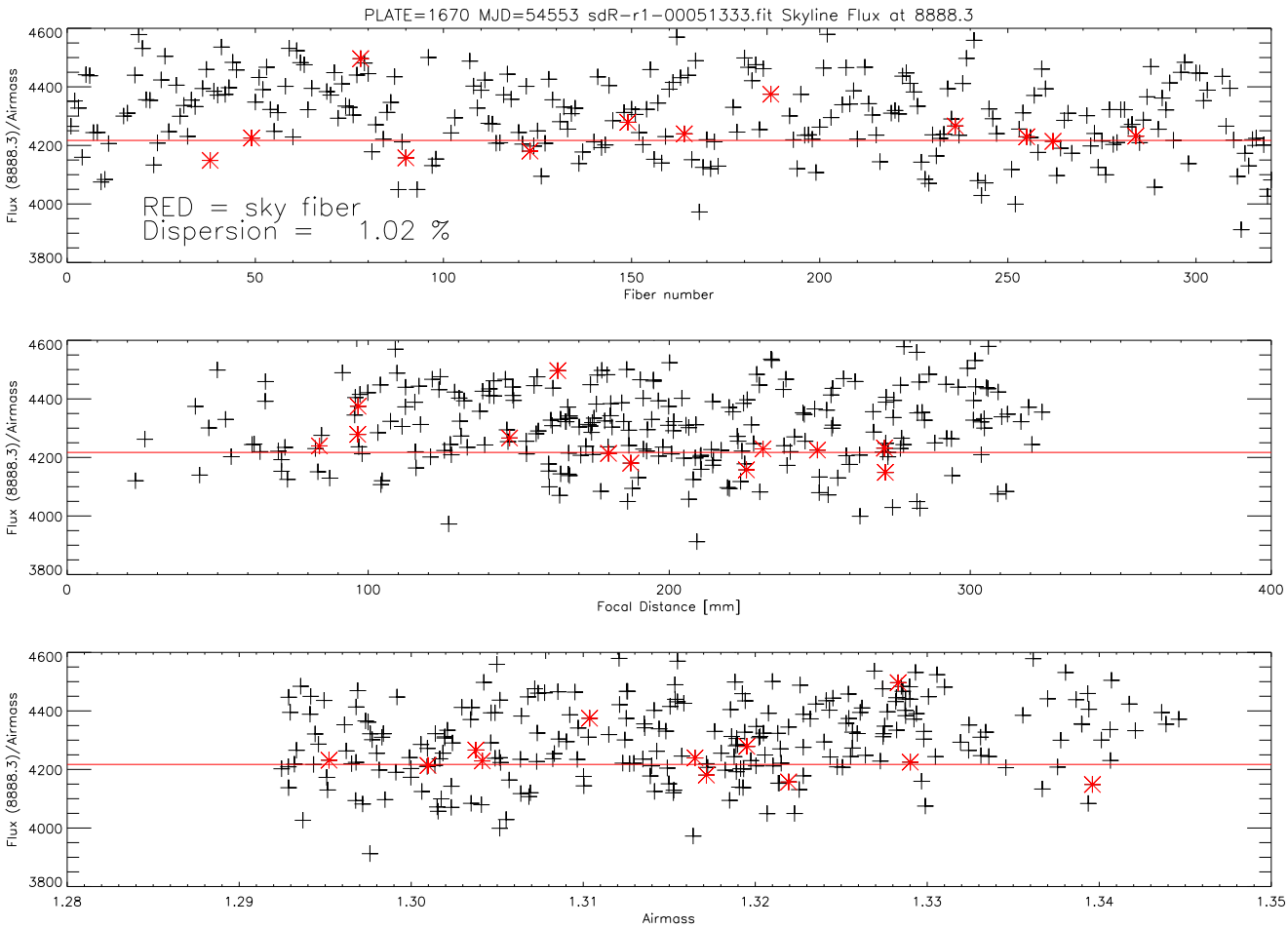

PLATE=1670 MJD=54553 sdR-r1-00051333.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

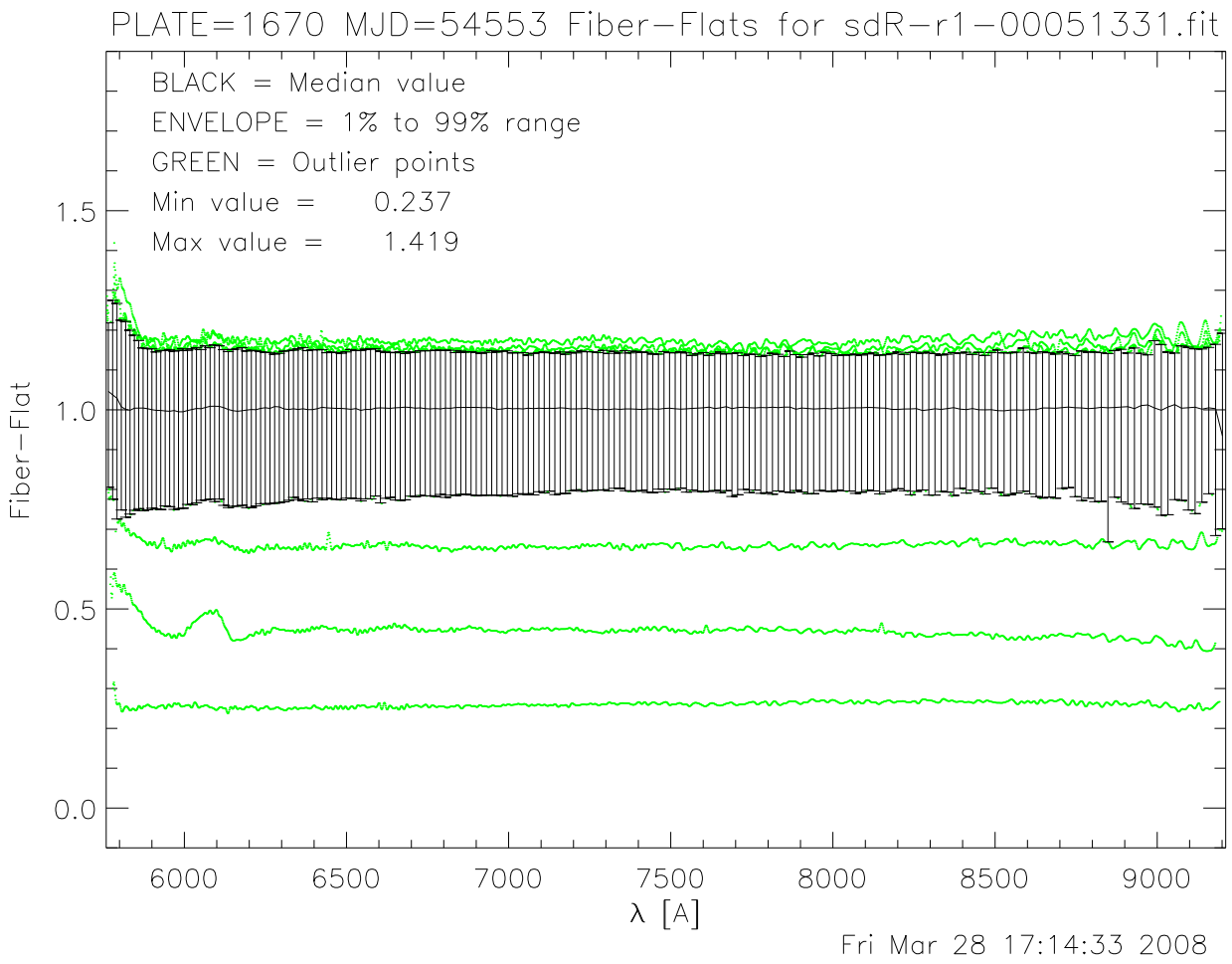

PLATE=1670 MJD=54553 sdR-r1-00051333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

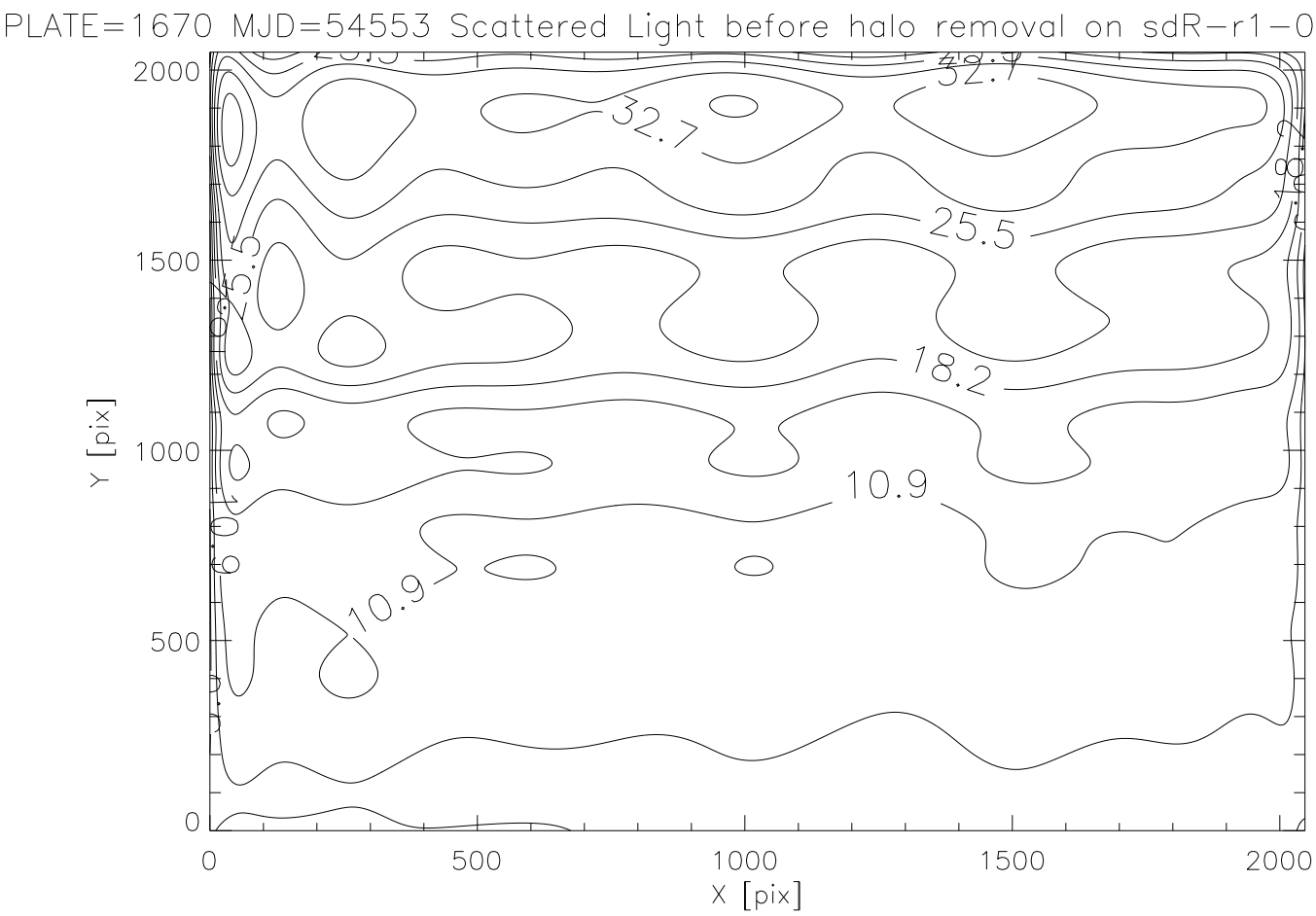

PLATE=1670 MJD=54553 sdR-r1-00051333.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

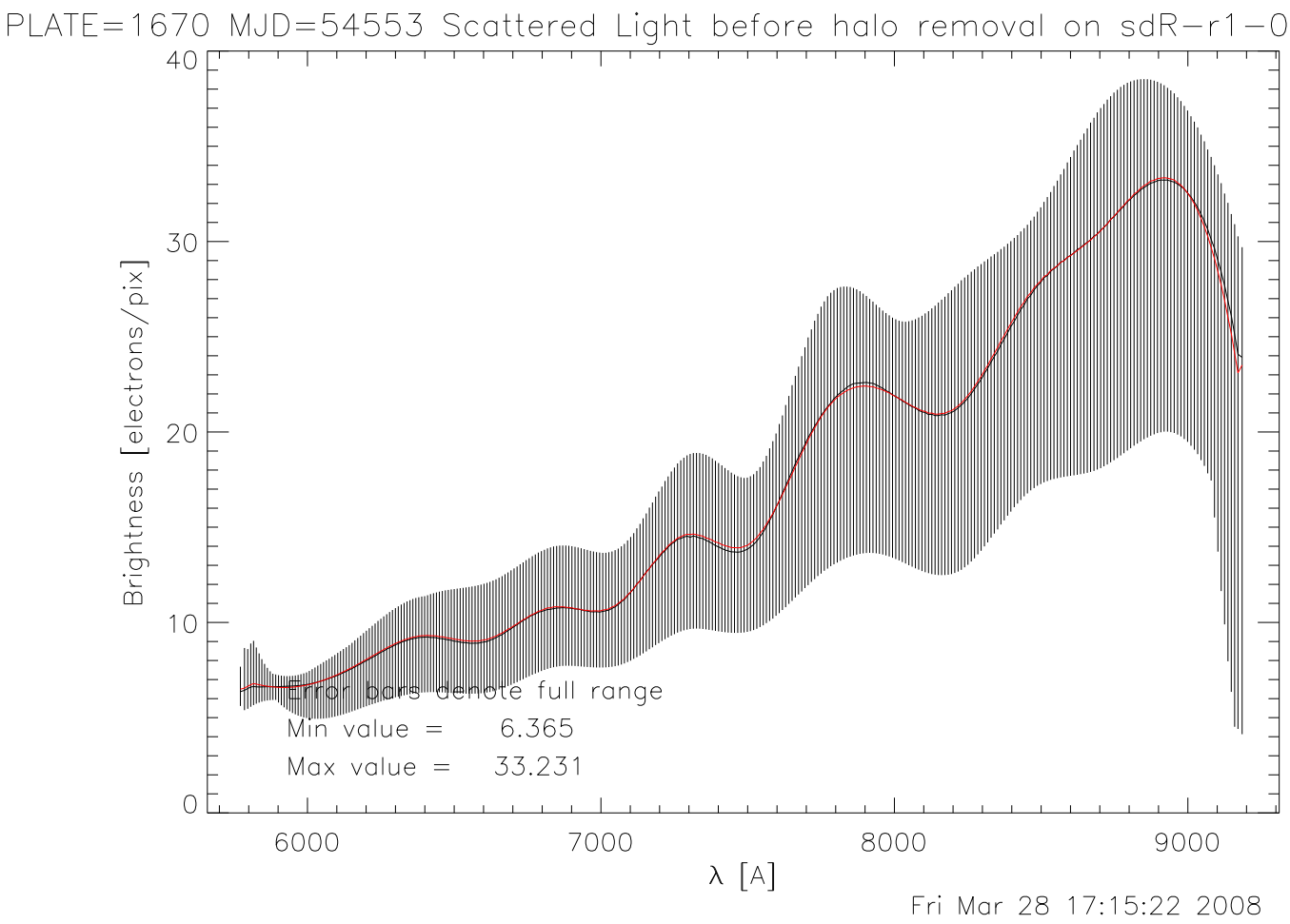

Number of sky fibers = 12
PLATE=1670 MJD=54553 sdR-r1-00051333.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

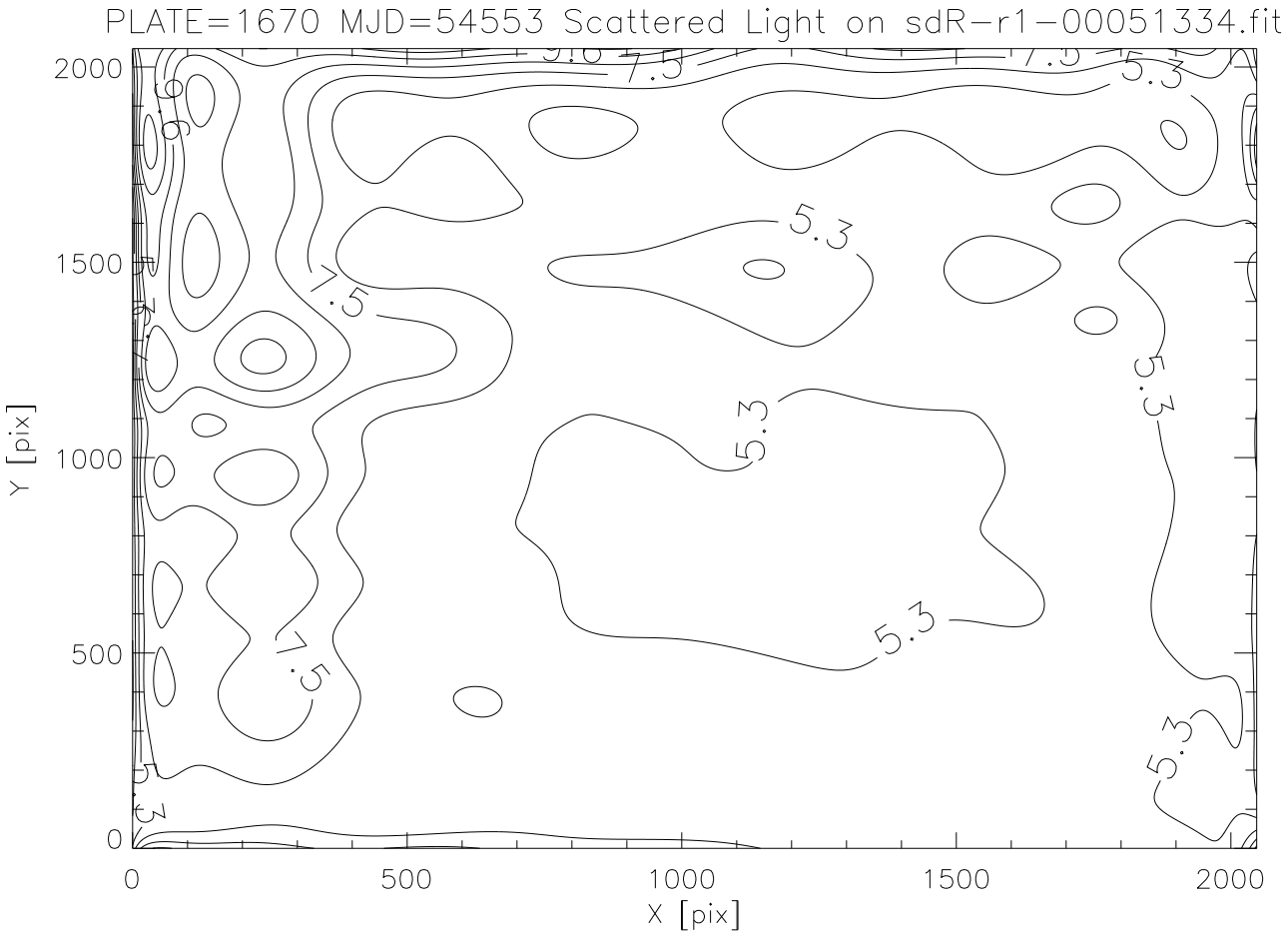

PLATE=1670 MJD=54553 sdR-r1-00051333.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.37 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

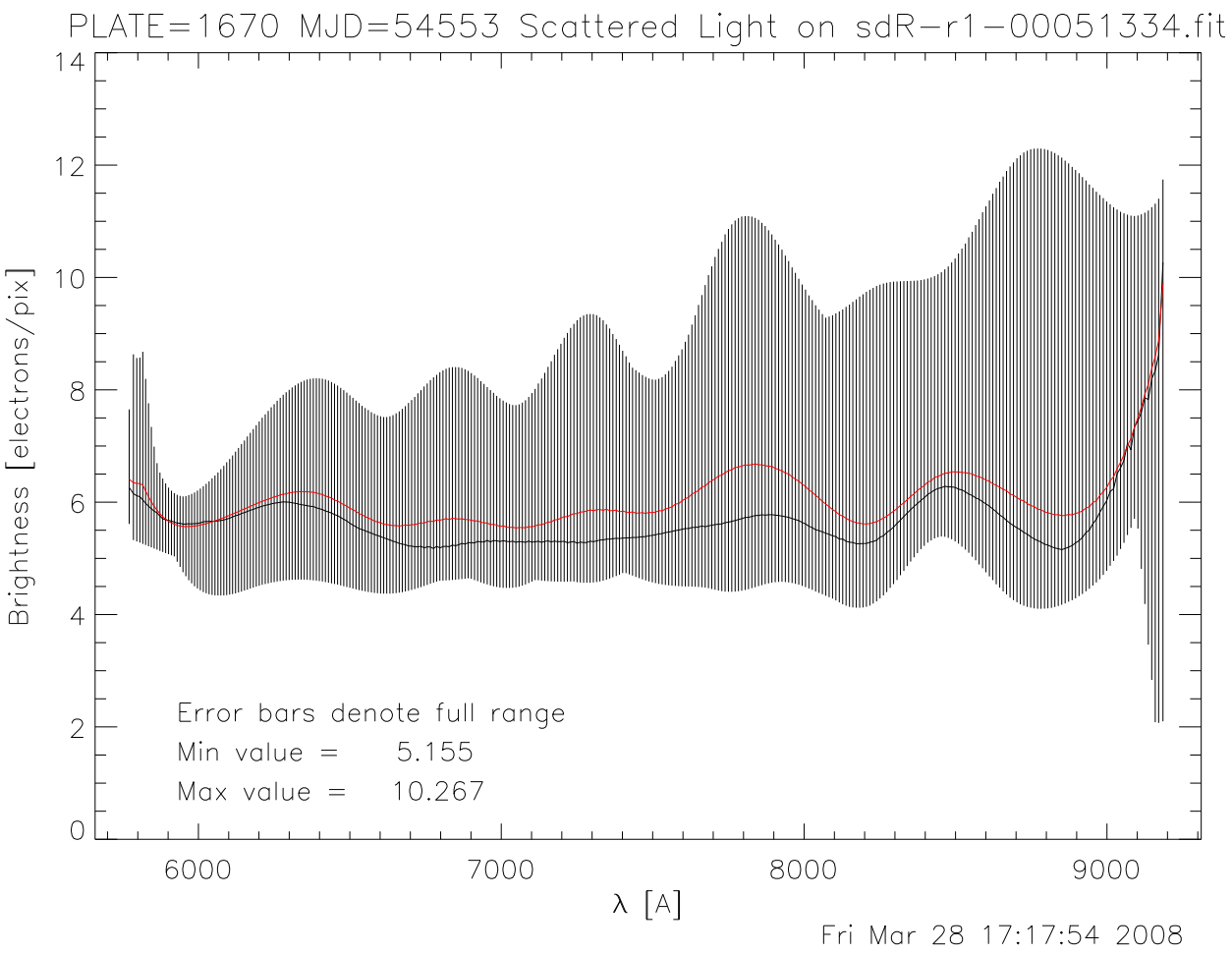

PLATE=1670 MJD=54553 sdR-r1-00051333.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.02 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

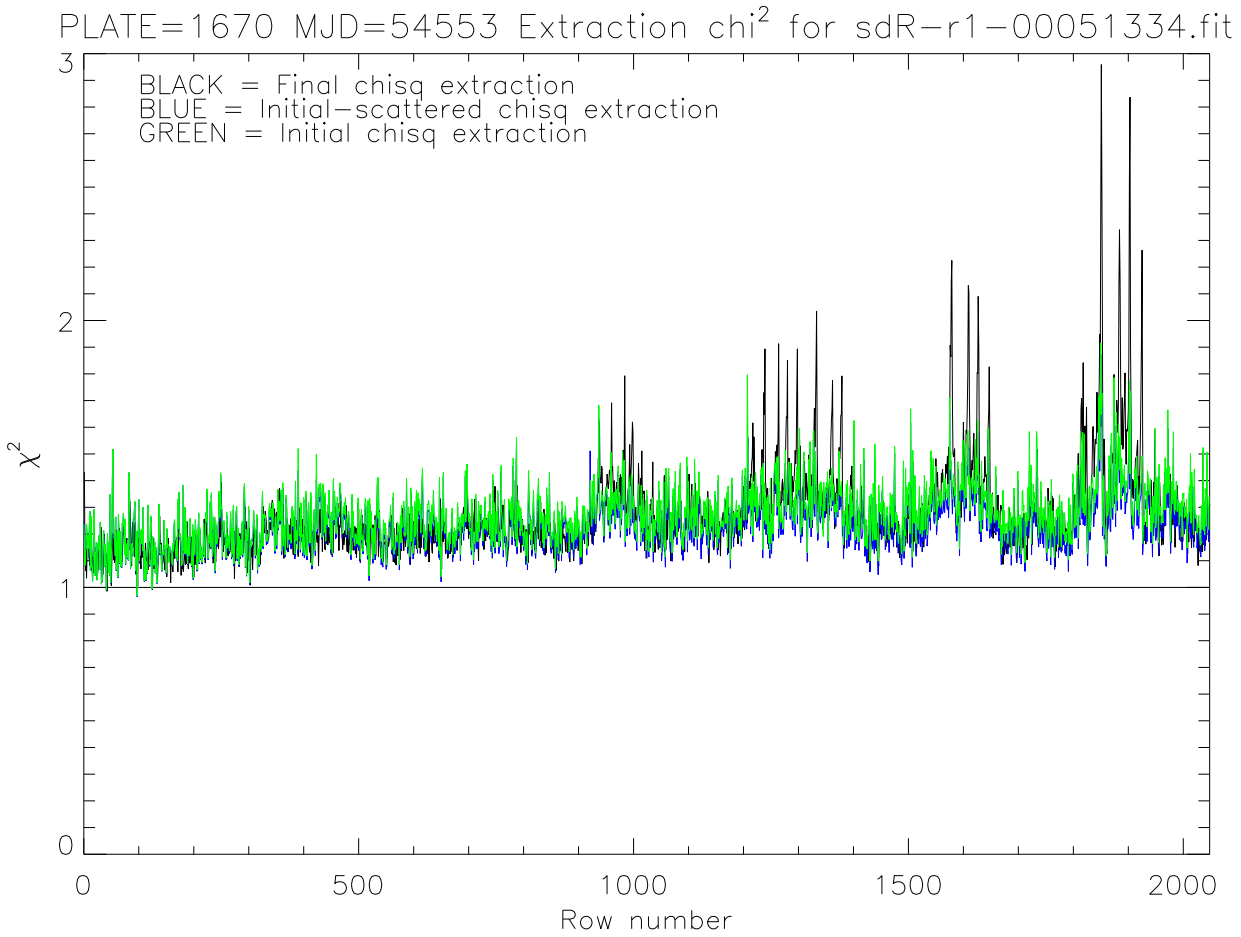

PLATE=1670 MJD=54553 Fiber−Flats for sdR−r1−00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.237
Max value = 1.419
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 28 17:14:33 2008

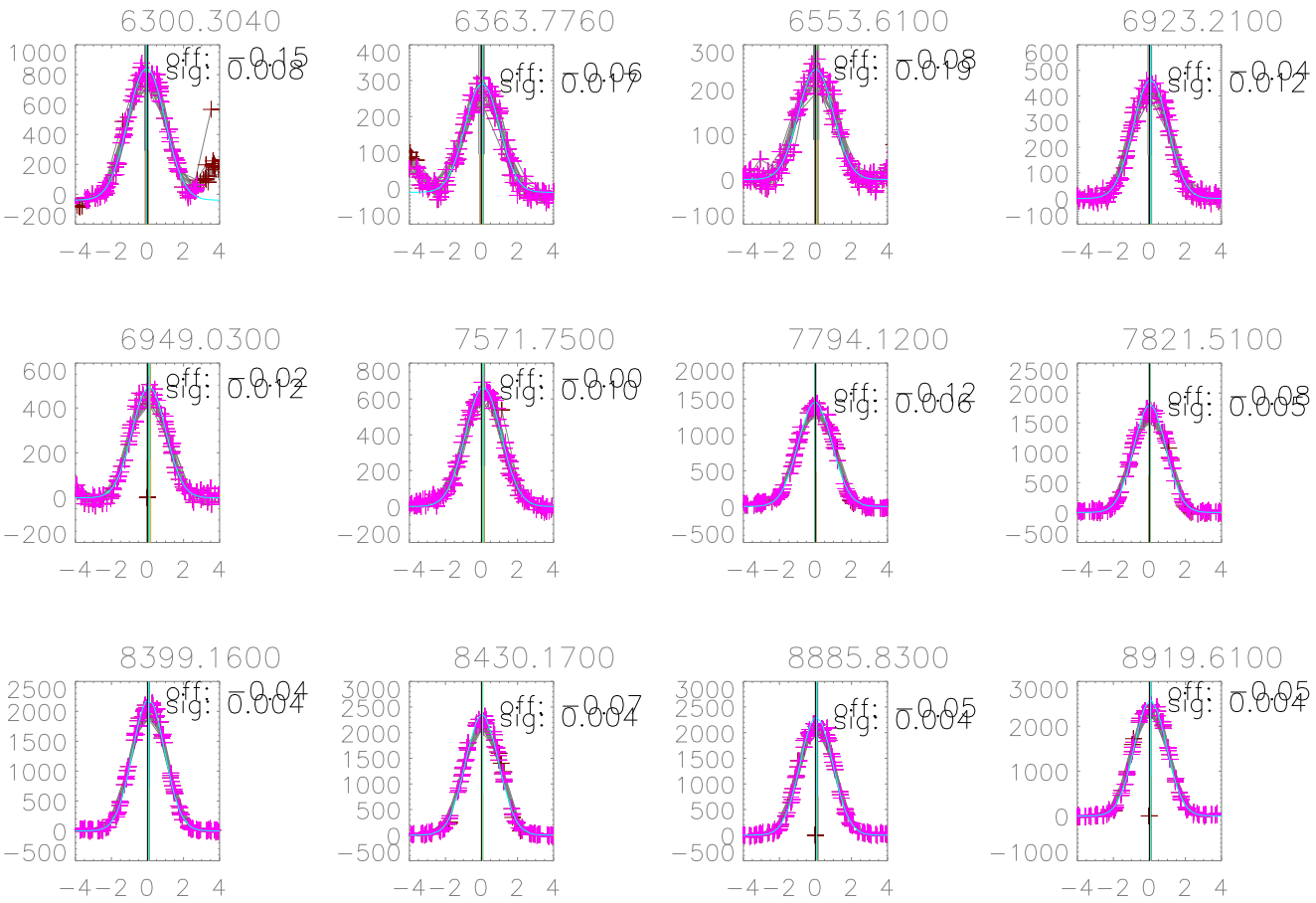

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r1-00051334.fi
32.7
32.7
25.5
25.5
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

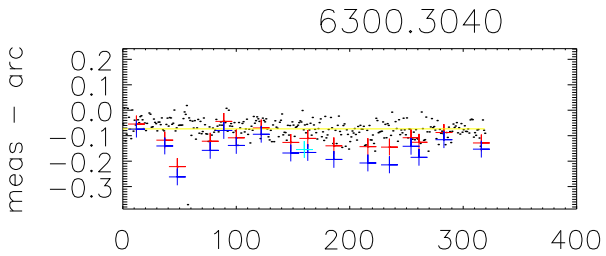

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r1-00051334.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.365
Max value = 33.231
Fri Mar 28 17:15:22 2008

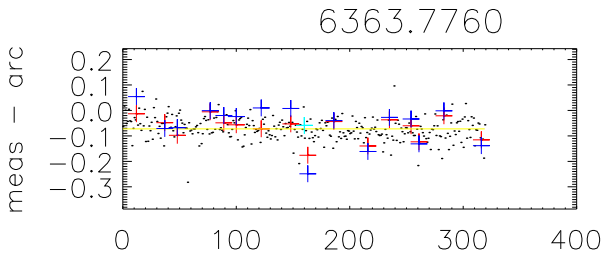

PLATE=1670 MJD=54553 Scattered Light on sdR-r1-00051334.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
5.3

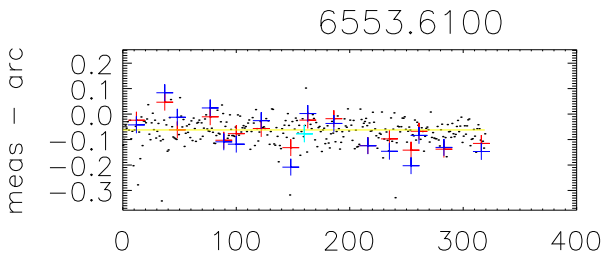

PLATE=1670 MJD=54553 Scattered Light on sdR-r1-00051334.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.155
Max value = 10.267
Fri Mar 28 17:17:54 2008

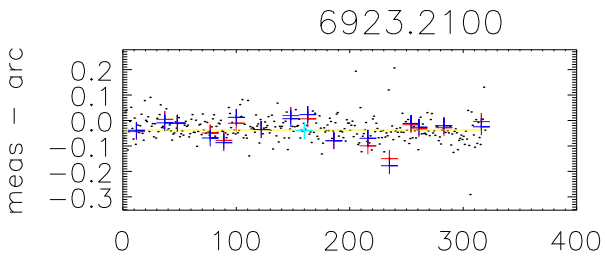

PLATE=1670 MJD=54553 Extraction chi^2 for sdR−r1−00051334.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

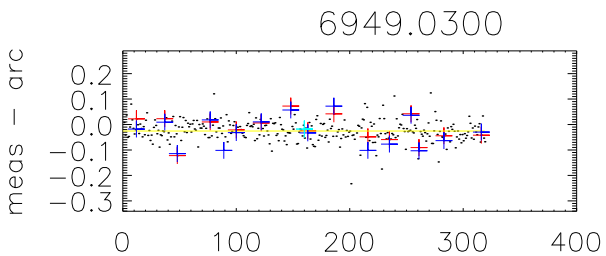

6300.3040
off: −0.15
sig: 0.008
6363.7760
off: −0.06
sig: 0.017
6553.6100
off: −0.08
sig: 0.019
6923.2100
off: −0.04
sig: 0.012
6949.0300
off: −0.02
sig: 0.012
7571.7500
off: −0.00
sig: 0.010
7794.1200
off: −0.12
sig: 0.006
7821.5100
off: −0.08
sig: 0.005
8399.1600
off: −0.04
sig: 0.004
8430.1700
off: −0.07
sig: 0.004
8885.8300
off: −0.05
sig: 0.004
8919.6100
off: −0.05
sig: 0.004

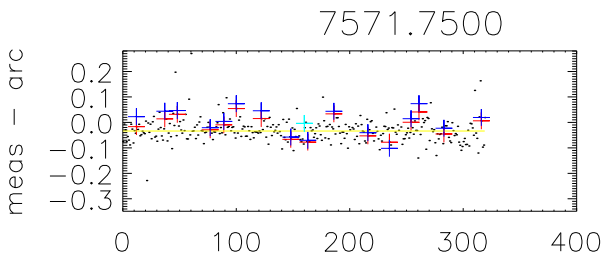

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

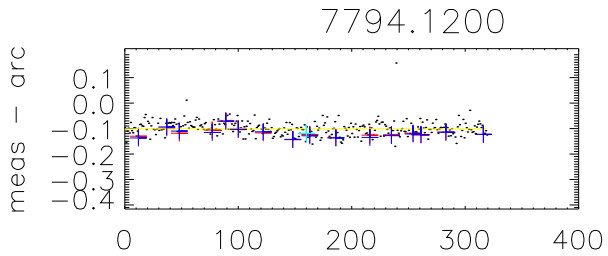

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

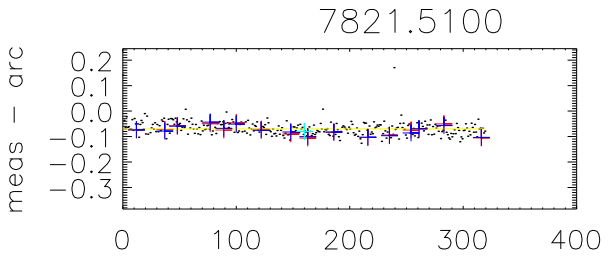

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

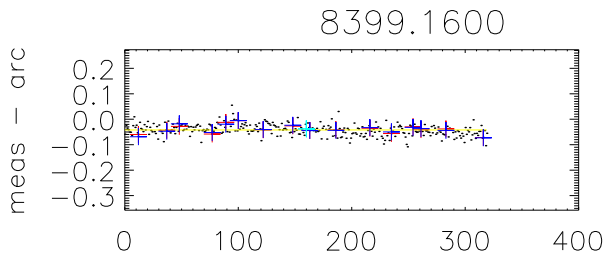

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

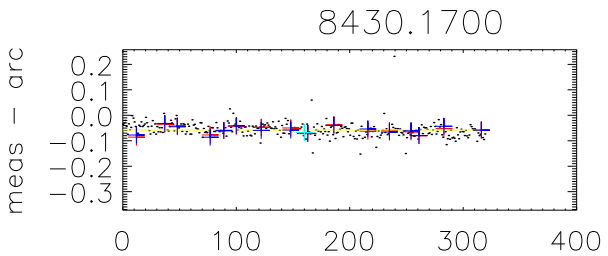

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

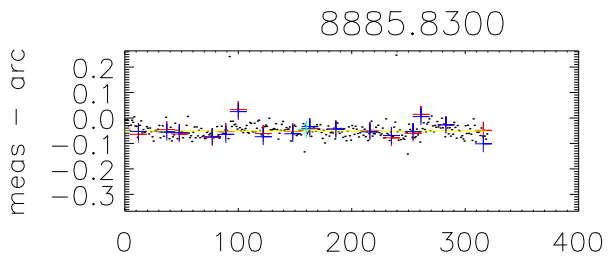

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

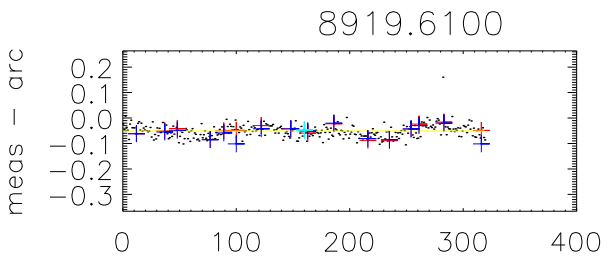

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

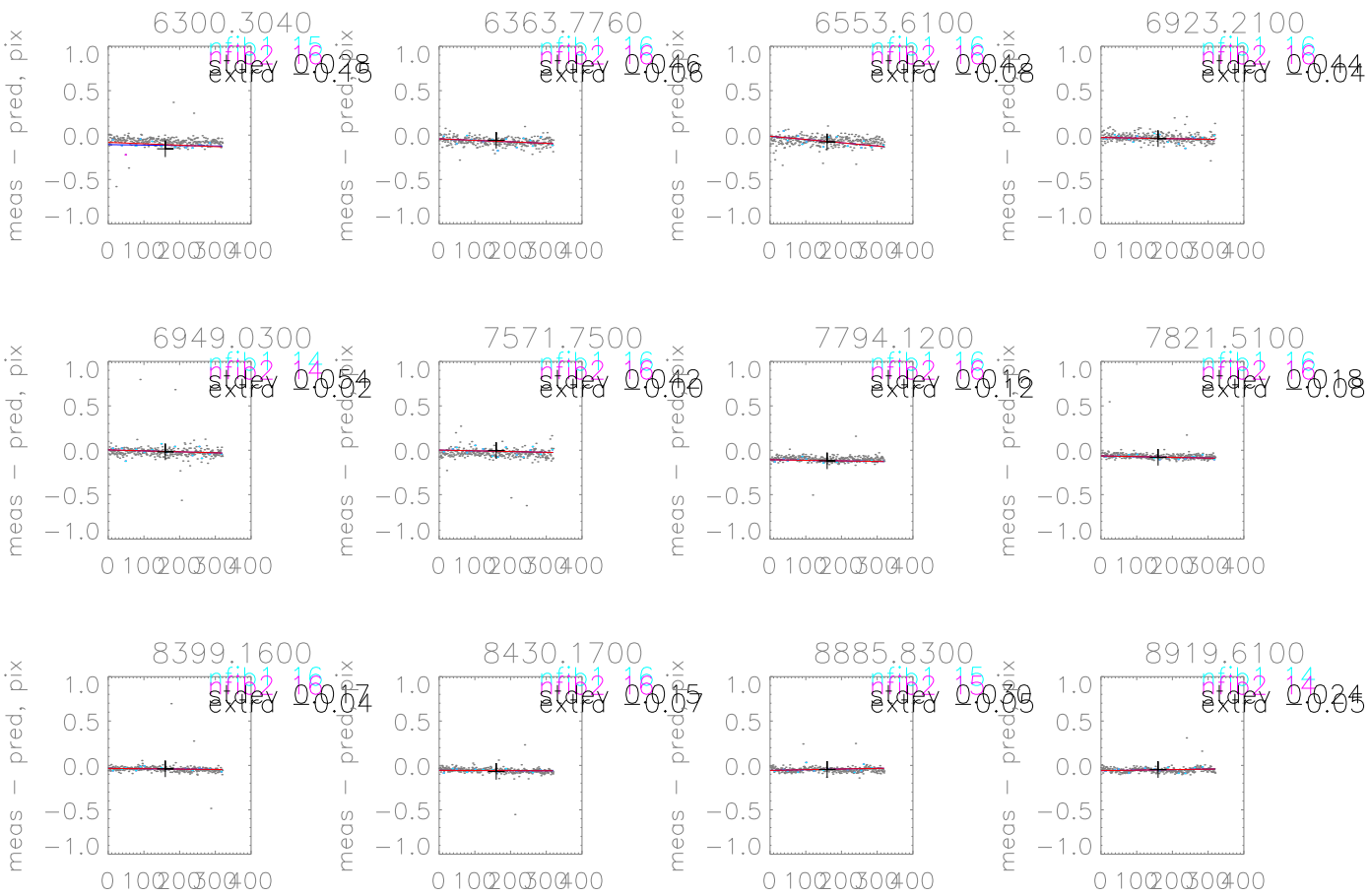

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

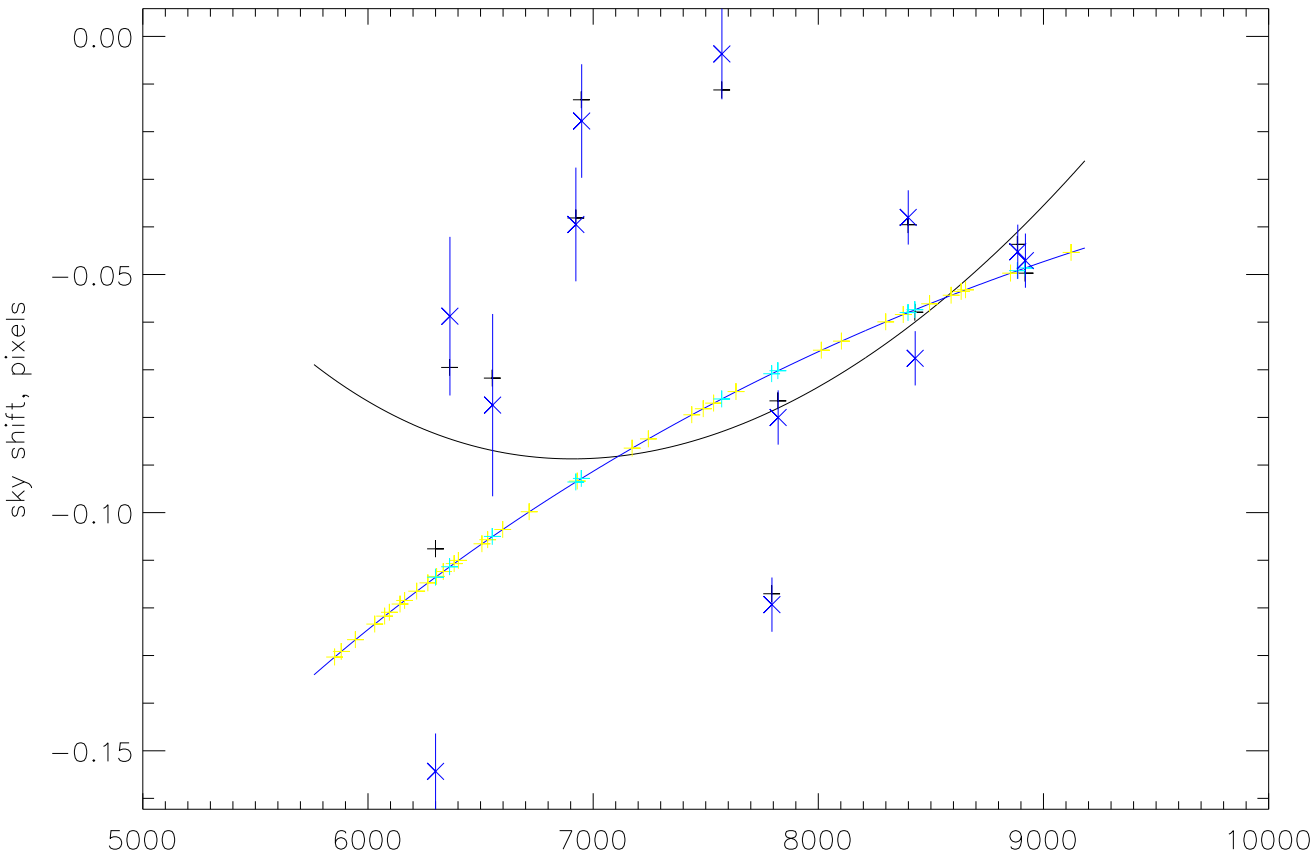

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

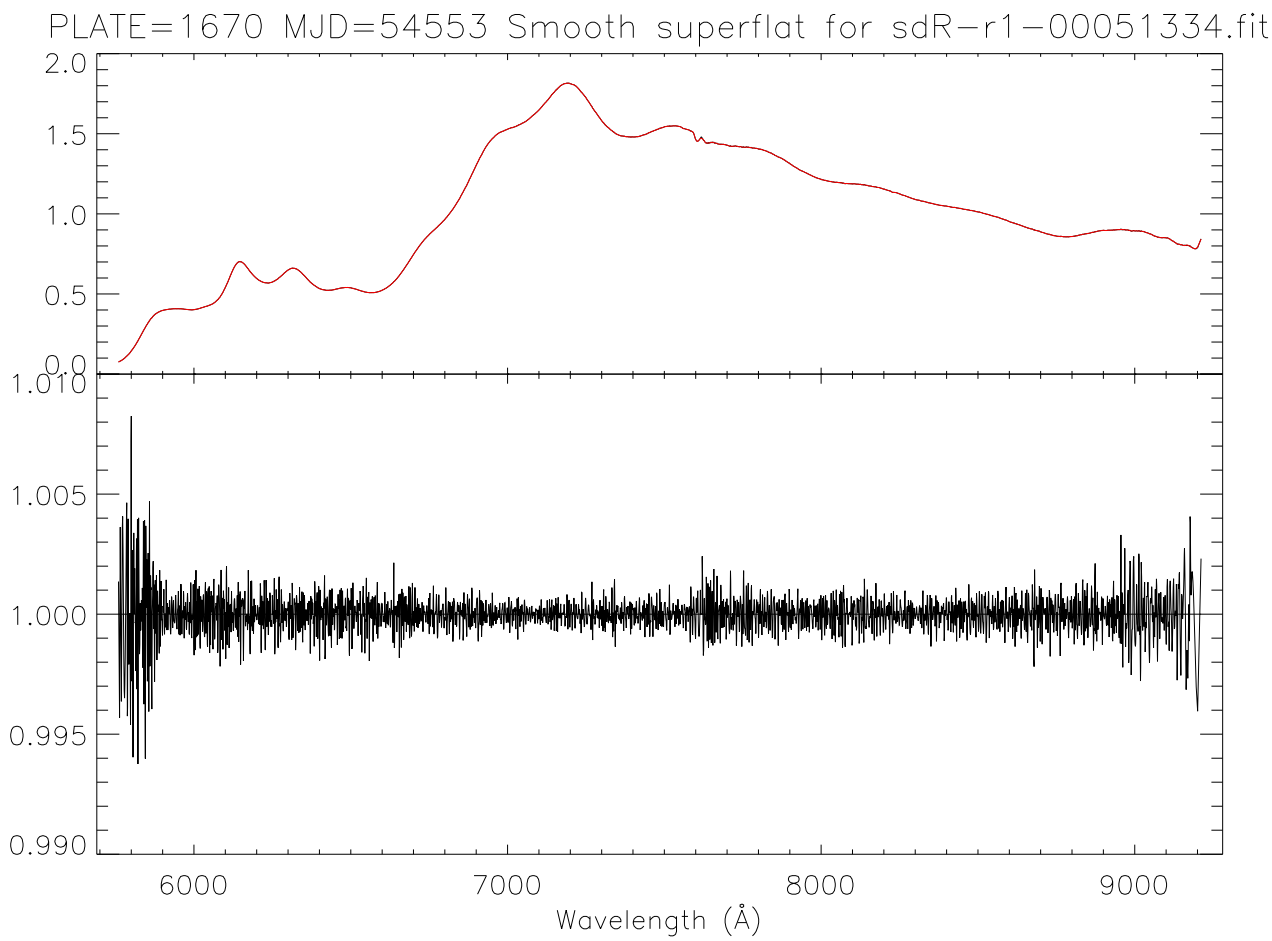

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

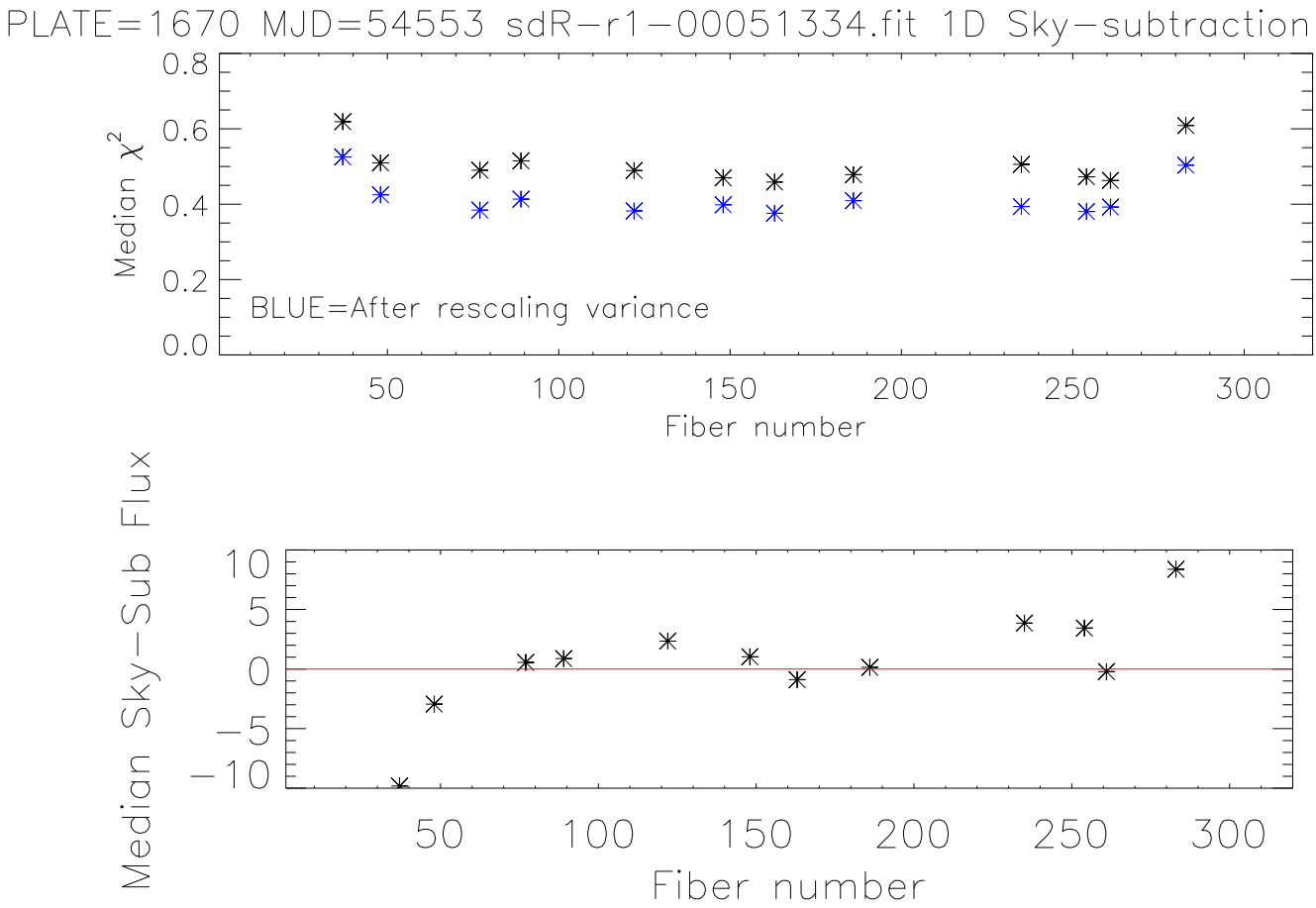

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

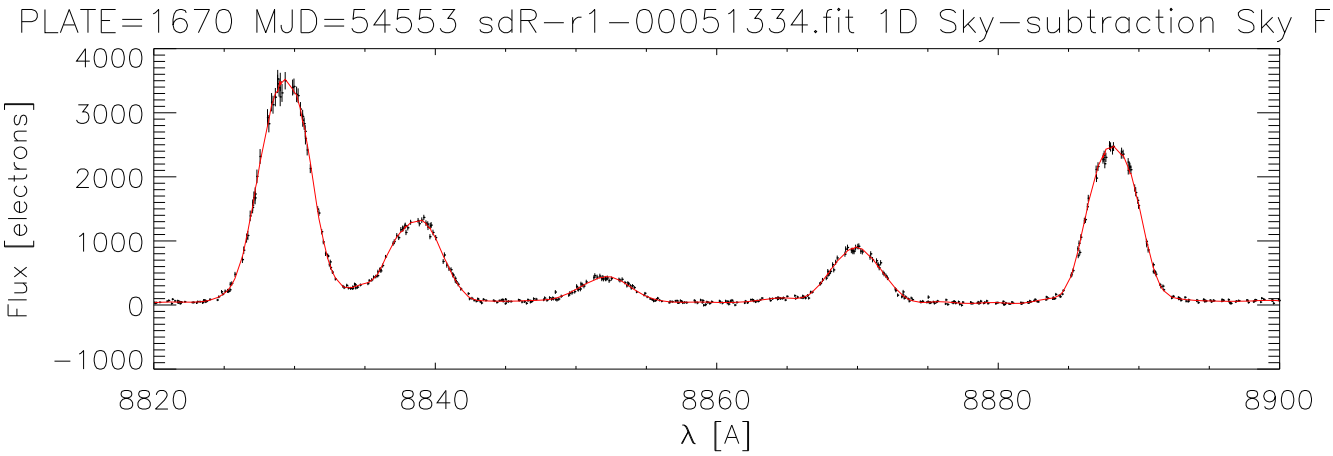

6300.3040
mfib1 15
mfib2 15
stdev 0.028
extra 0.03
6363.7760
mfib1 16
mfib2 16
stdev 0.046
extra 0.06
6553.6100
mfib1 16
mfib2 16
stdev 0.042
extra 0.08
6923.2100
mfib1 16
mfib2 16
stdev 0.044
extra 0.04
6949.0300
mfib1 14
mfib2 14
stdev 0.054
extra 0.02
7571.7500
mfib1 16
mfib2 16
stdev 0.042
extra 0.06
7794.1200
mfib1 16
mfib2 16
stdev 0.016
extra 0.12
7821.5100
mfib1 16
mfib2 16
stdev 0.018
extra 0.08
8399.1600
mfib1 16
mfib2 16
stdev 0.017
extra 0.04
8430.1700
mfib1 16
mfib2 16
stdev 0.015
extra 0.07
8885.8300
mfib1 15
mfib2 15
stdev 0.030
extra 0.05
8919.6100
mfib1 14
mfib2 14
stdev 0.024
extra 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

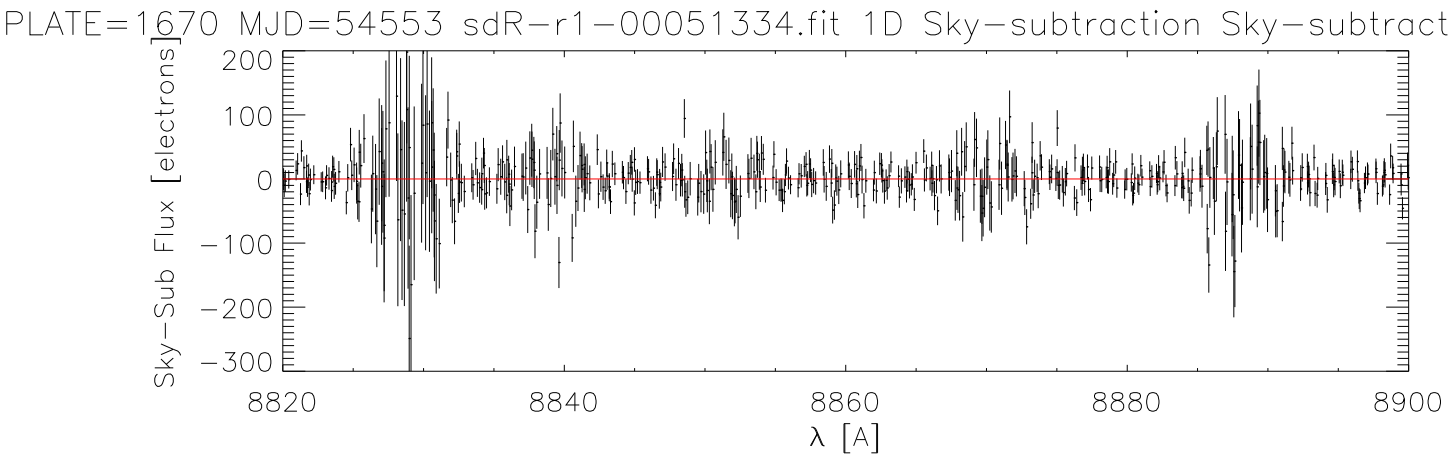

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

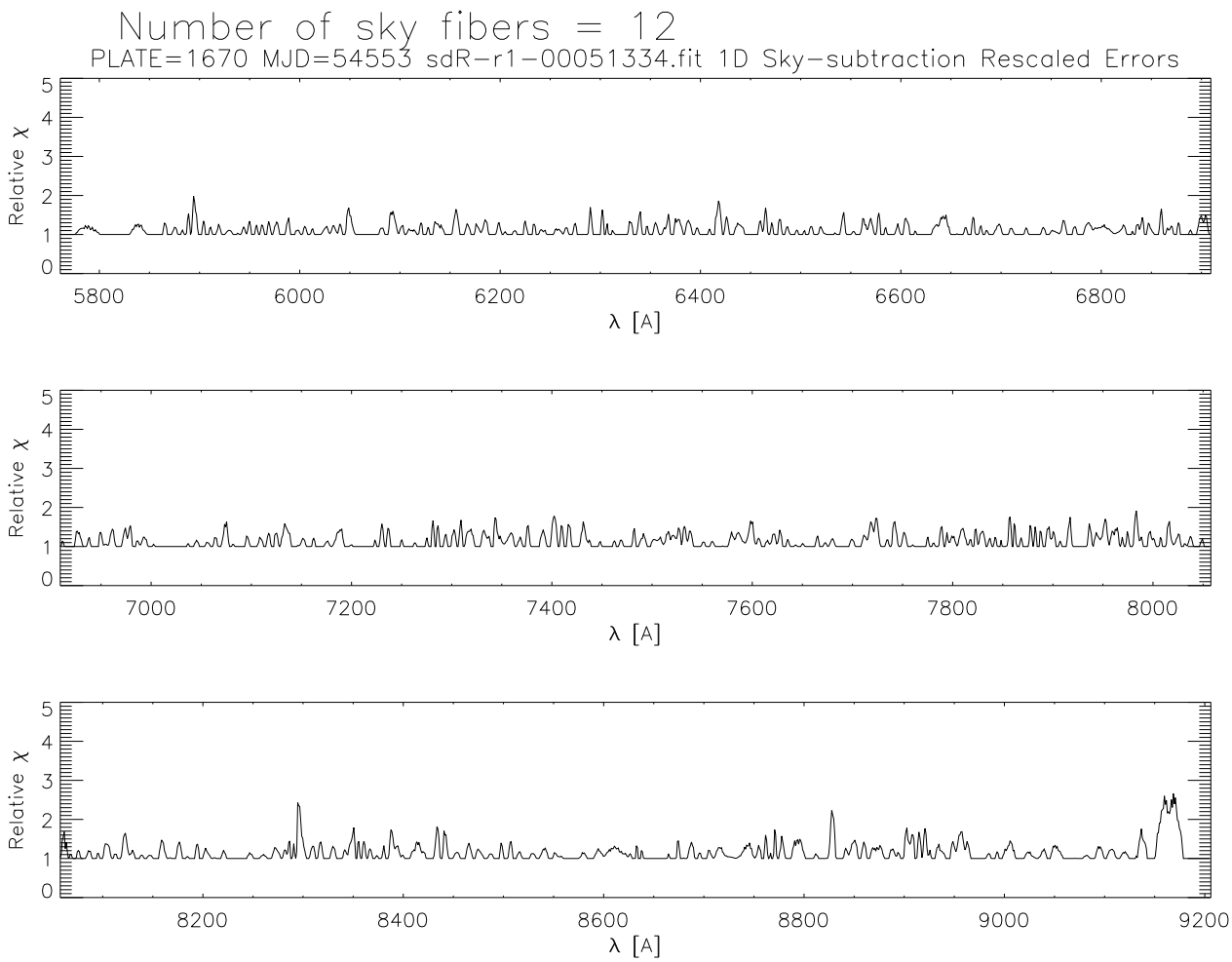
es= 0.0000

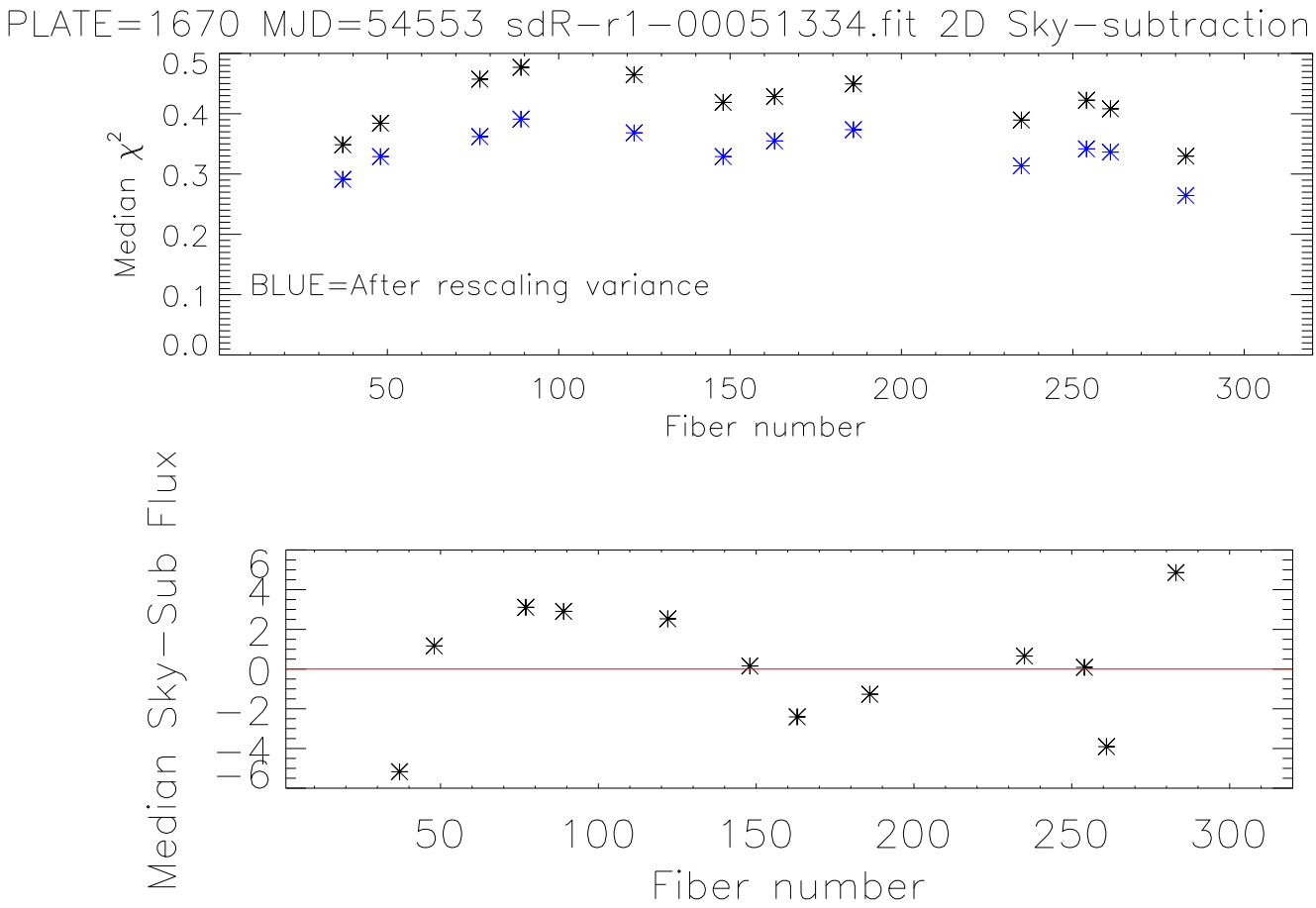

PLATE=1670 MJD=54553 Smooth superflat for sdR-r1-00051334.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

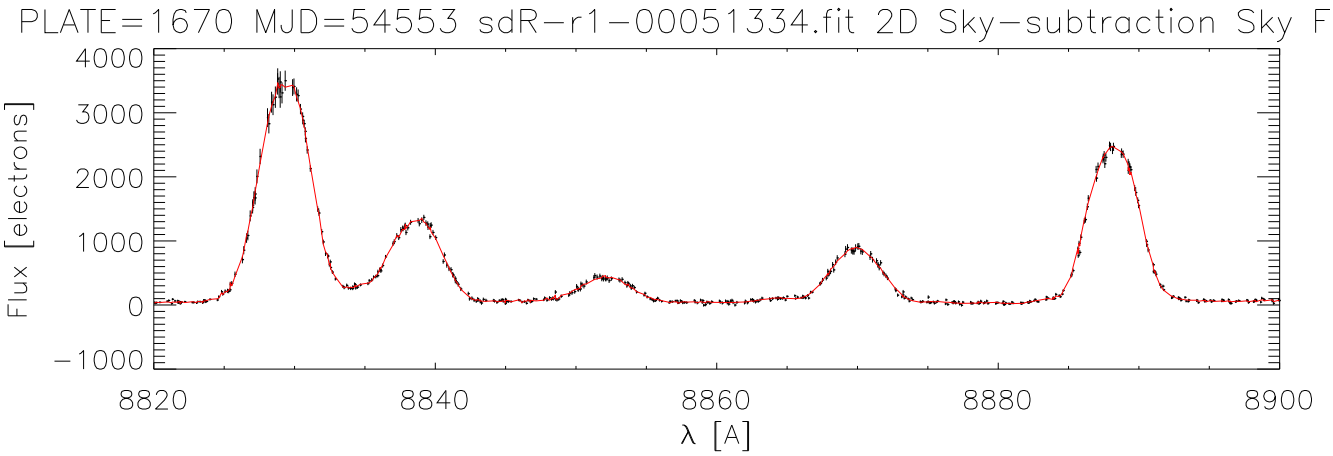

PLATE=1670 MJD=54553 sdR-r1-00051334.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

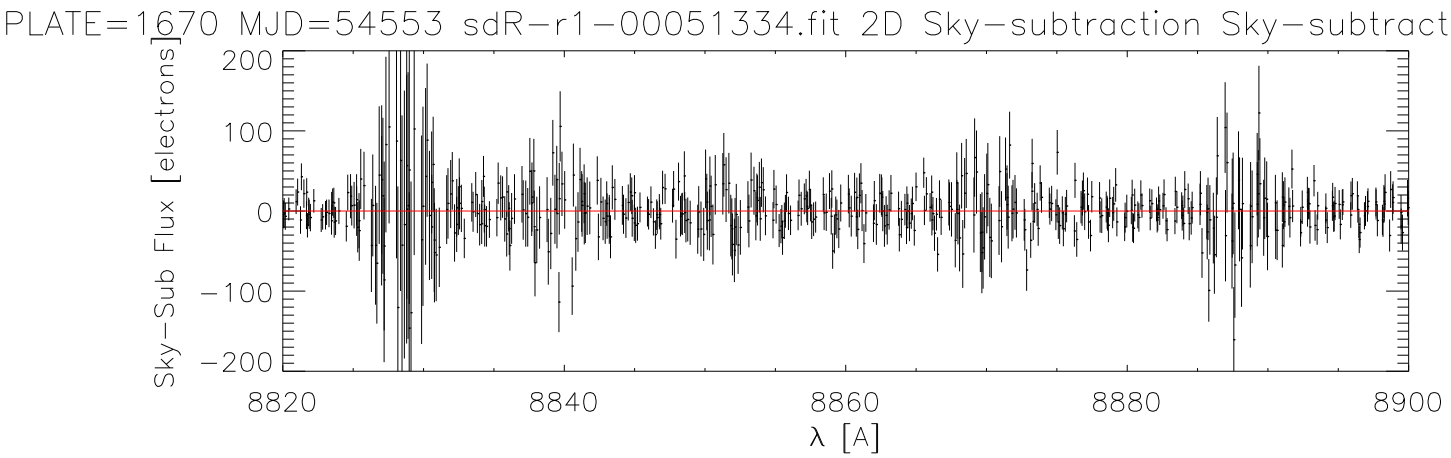

PLATE=1670 MJD=54553 sdR-r1-00051334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

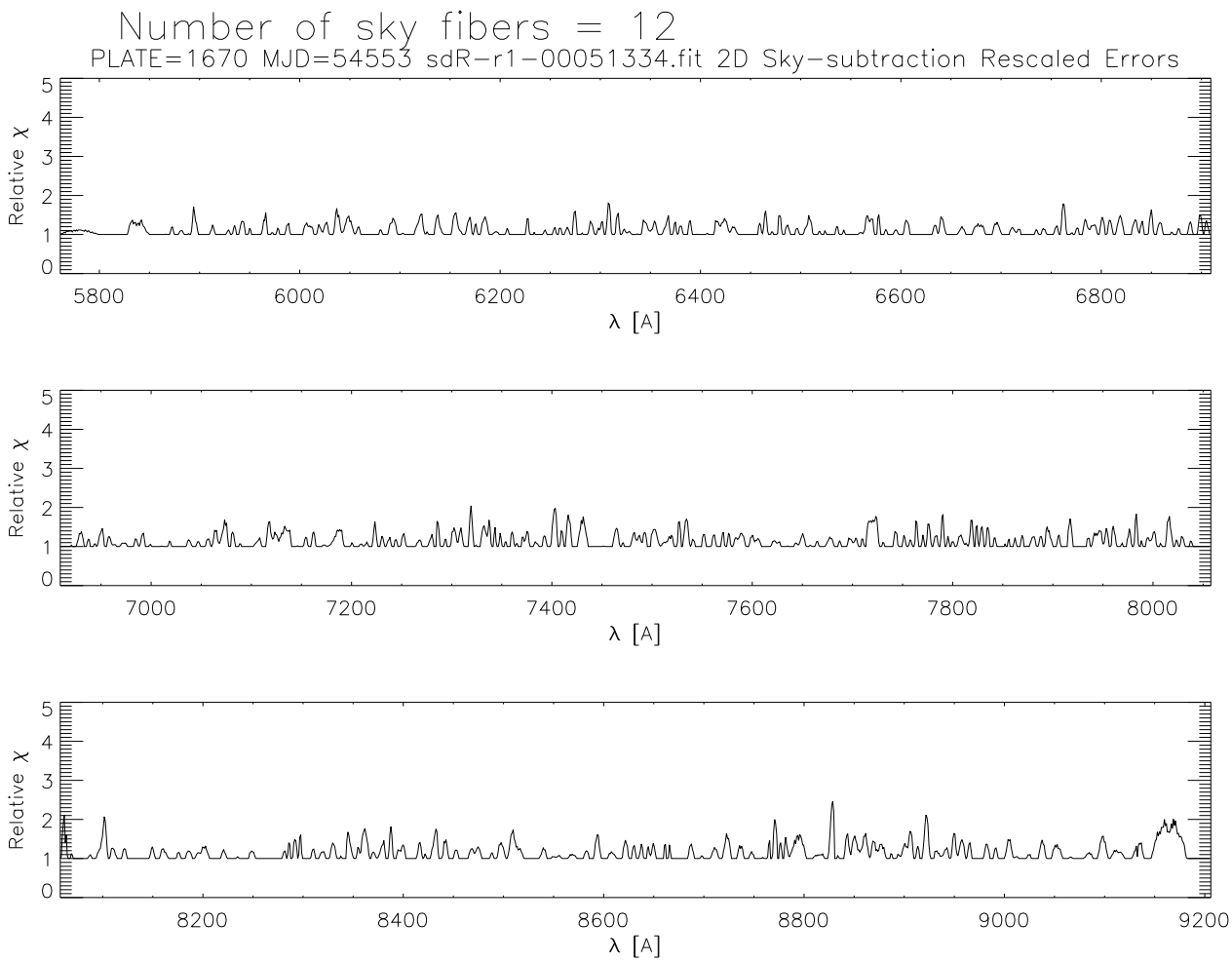

PLATE=1670 MJD=54553 sdR-r1-00051334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

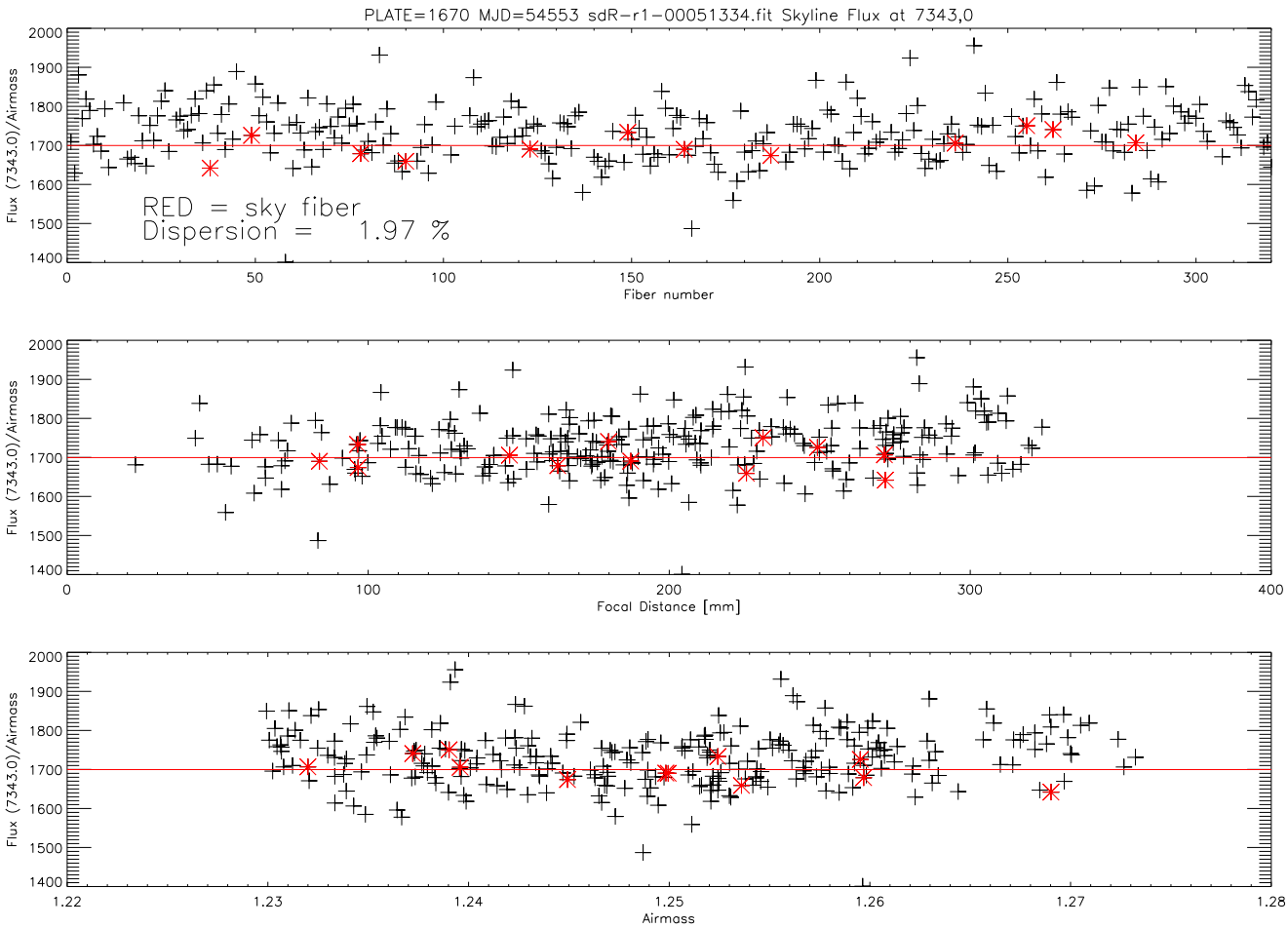

Number of sky fibers = 12
PLATE=1670 MJD=54553 sdR-r1-00051334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

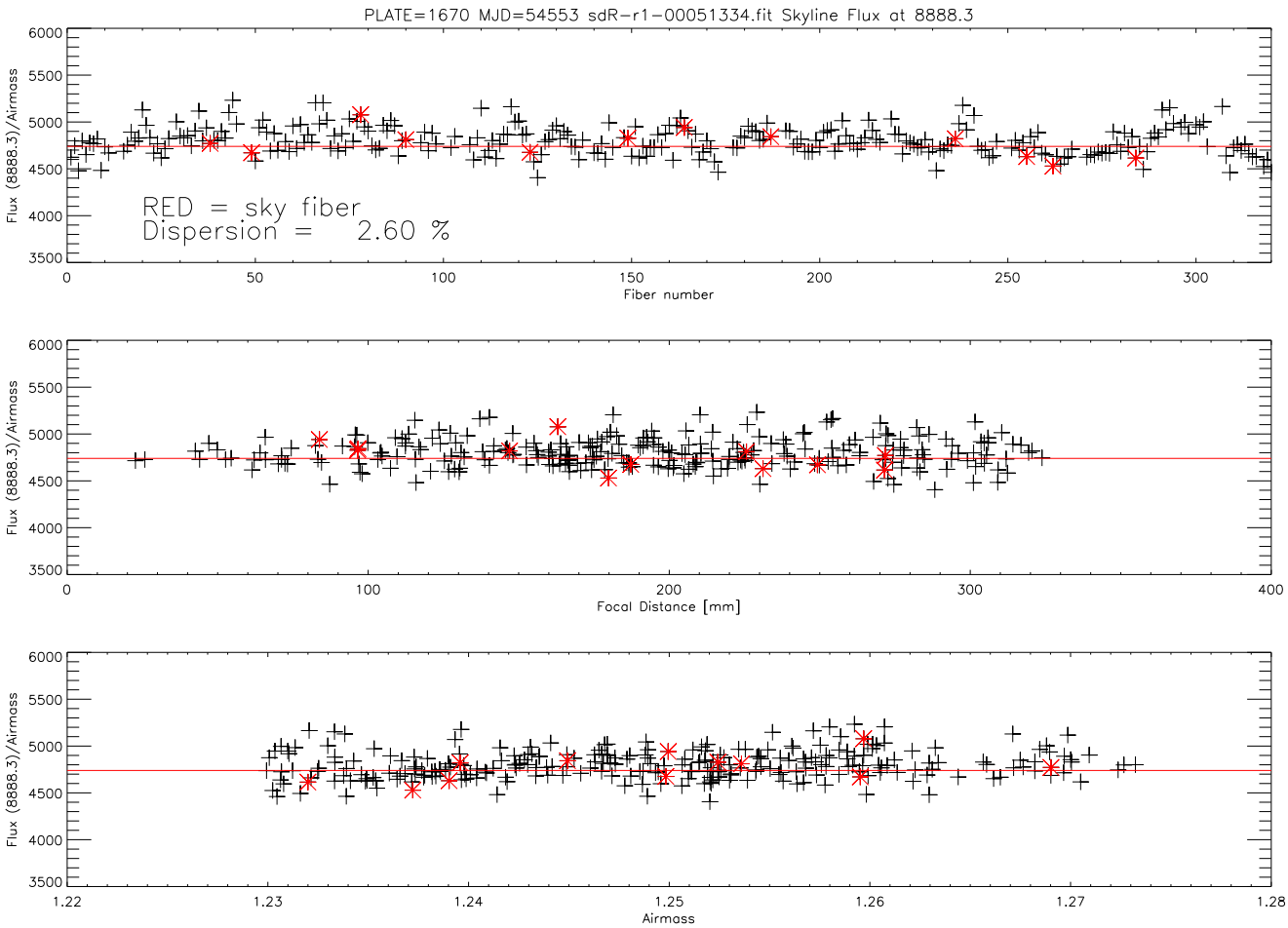

PLATE=1670 MJD=54553 sdR-r1-00051334.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

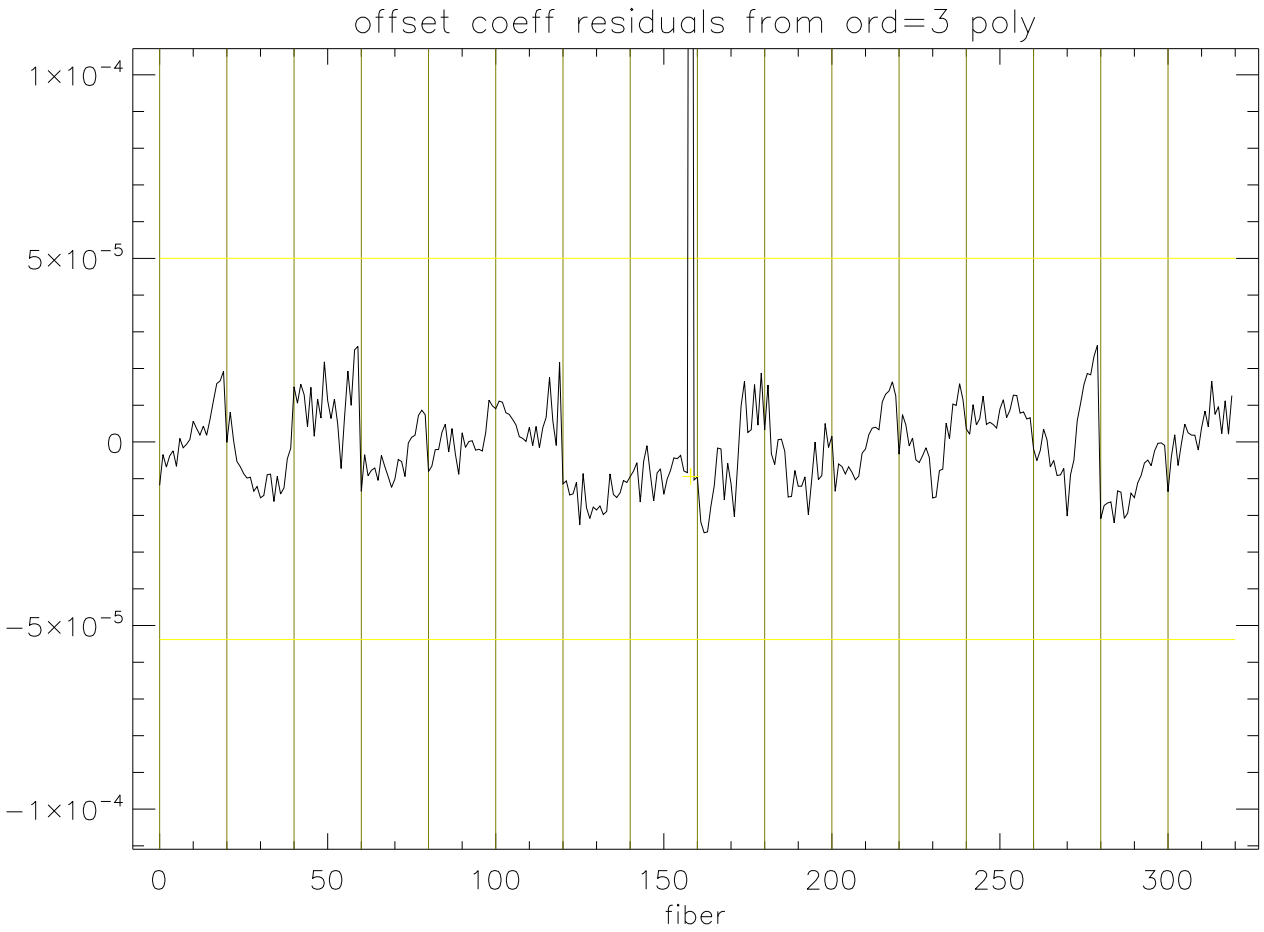

PLATE=1670 MJD=54553 sdR-r1-00051334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

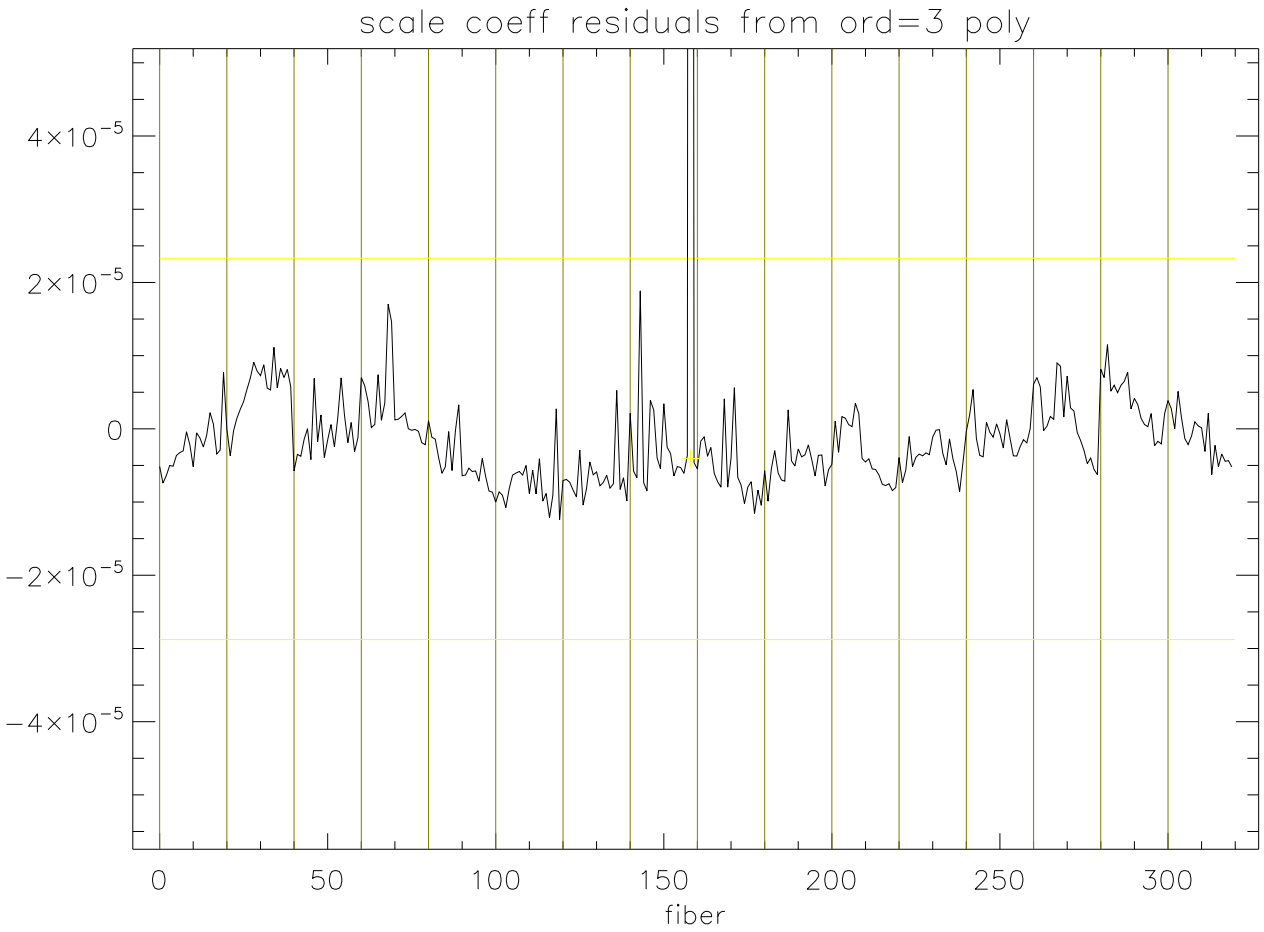

PLATE=1670 MJD=54553 sdR-r1-00051334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

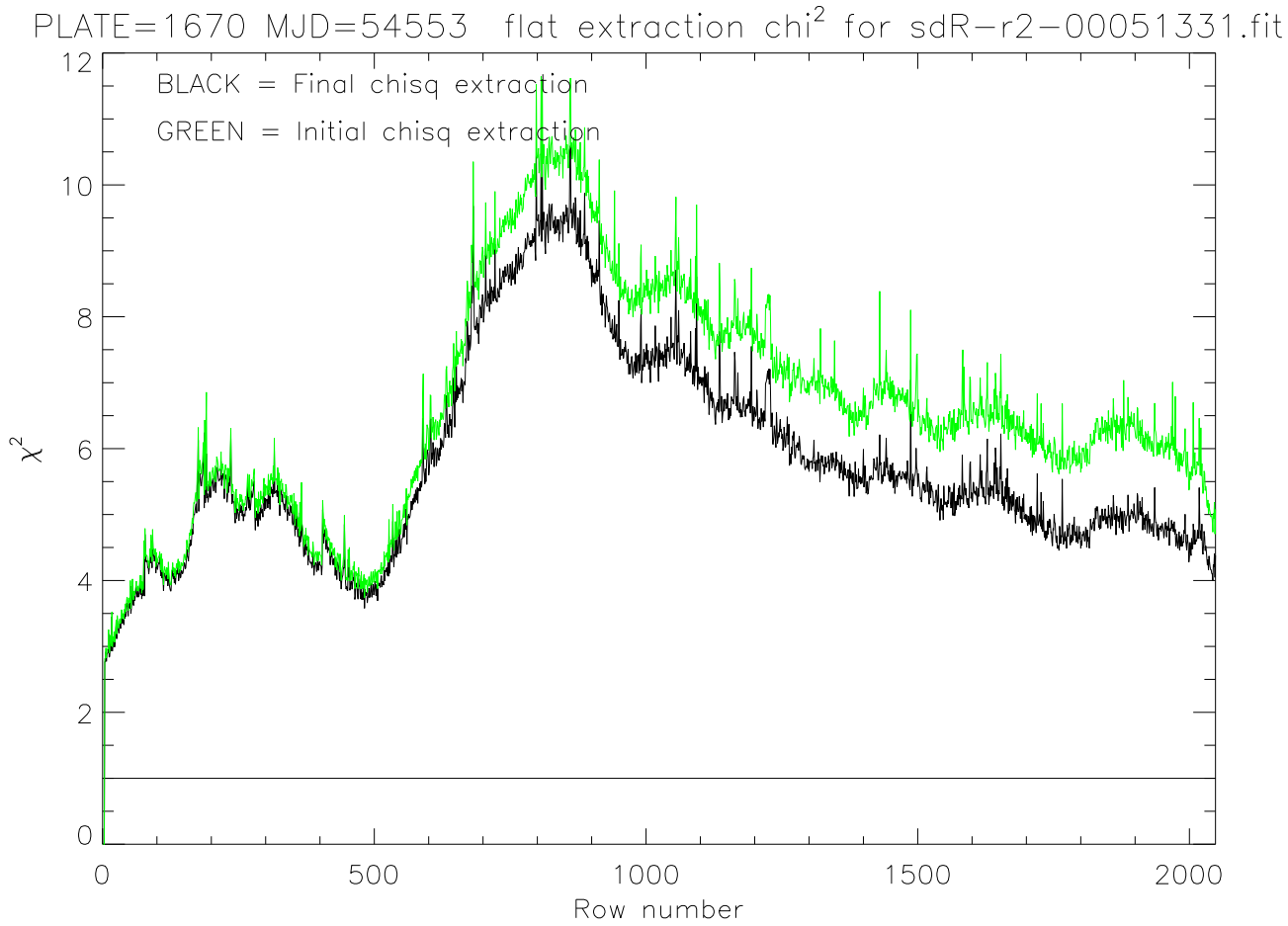

Number of sky fibers = 12
PLATE=1670 MJD=54553 sdR-r1-00051334.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

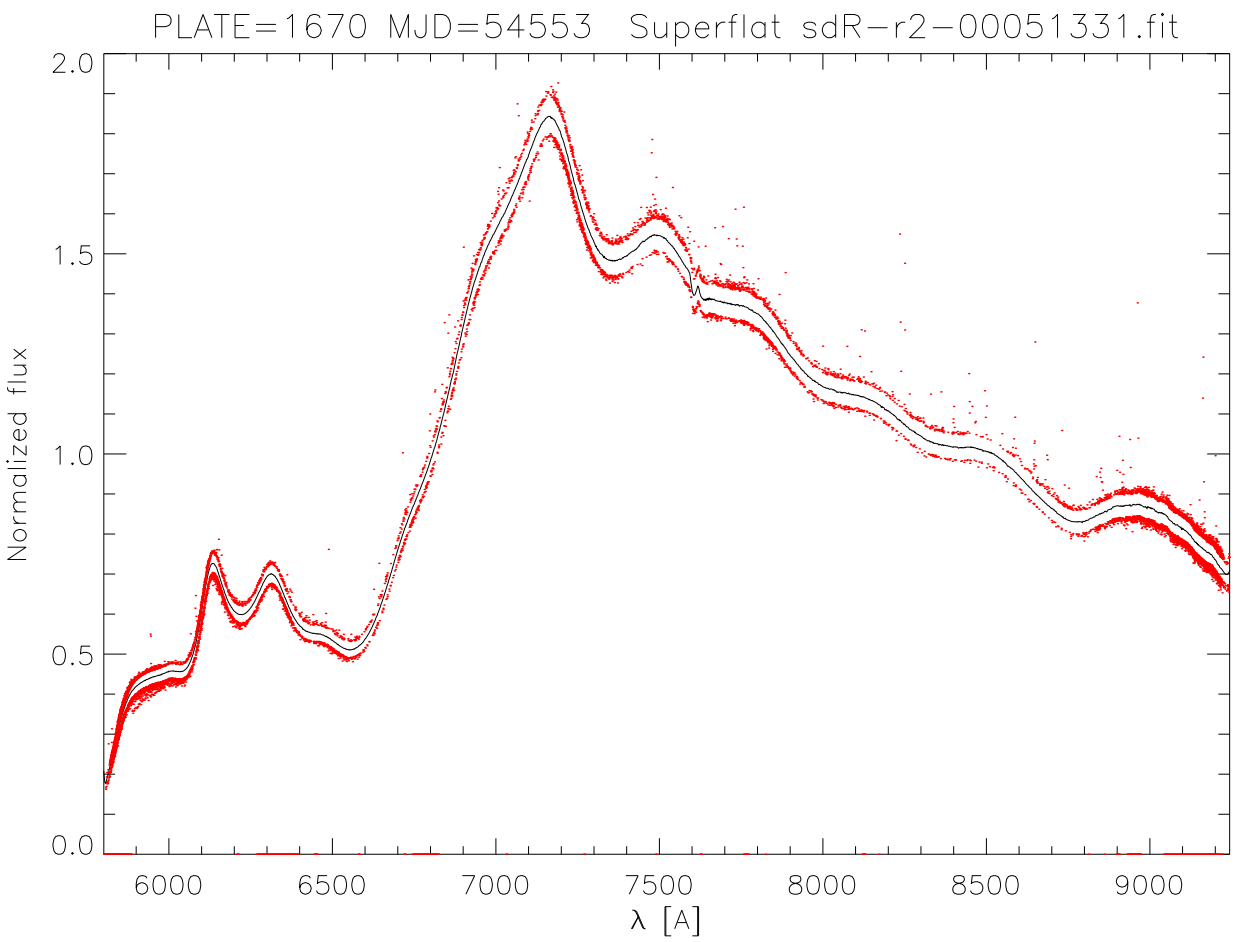

PLATE=1670 MJD=54553 sdR-r1-00051334.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.97 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

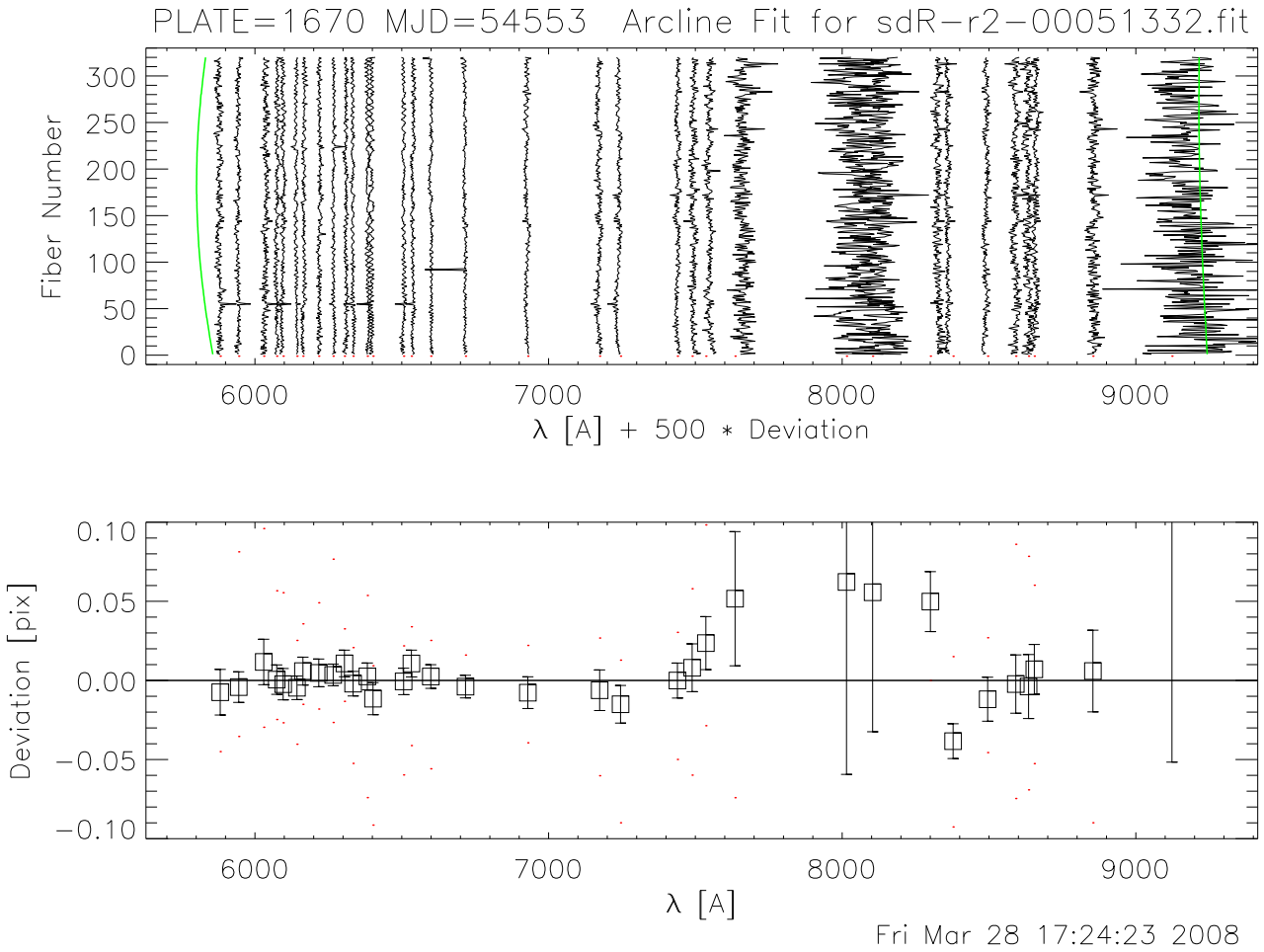

PLATE=1670 MJD=54553 sdR-r1-00051334.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.60 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

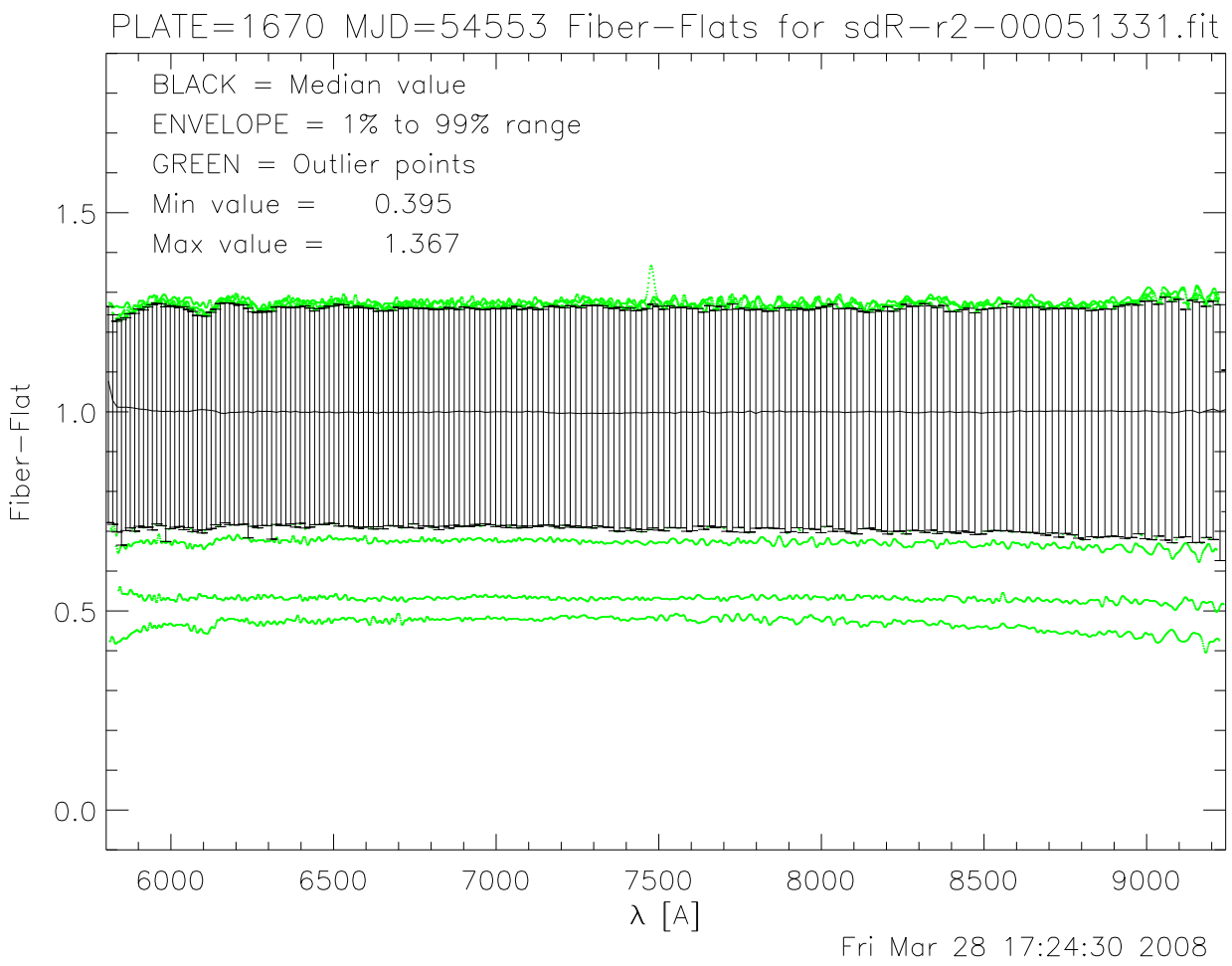

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

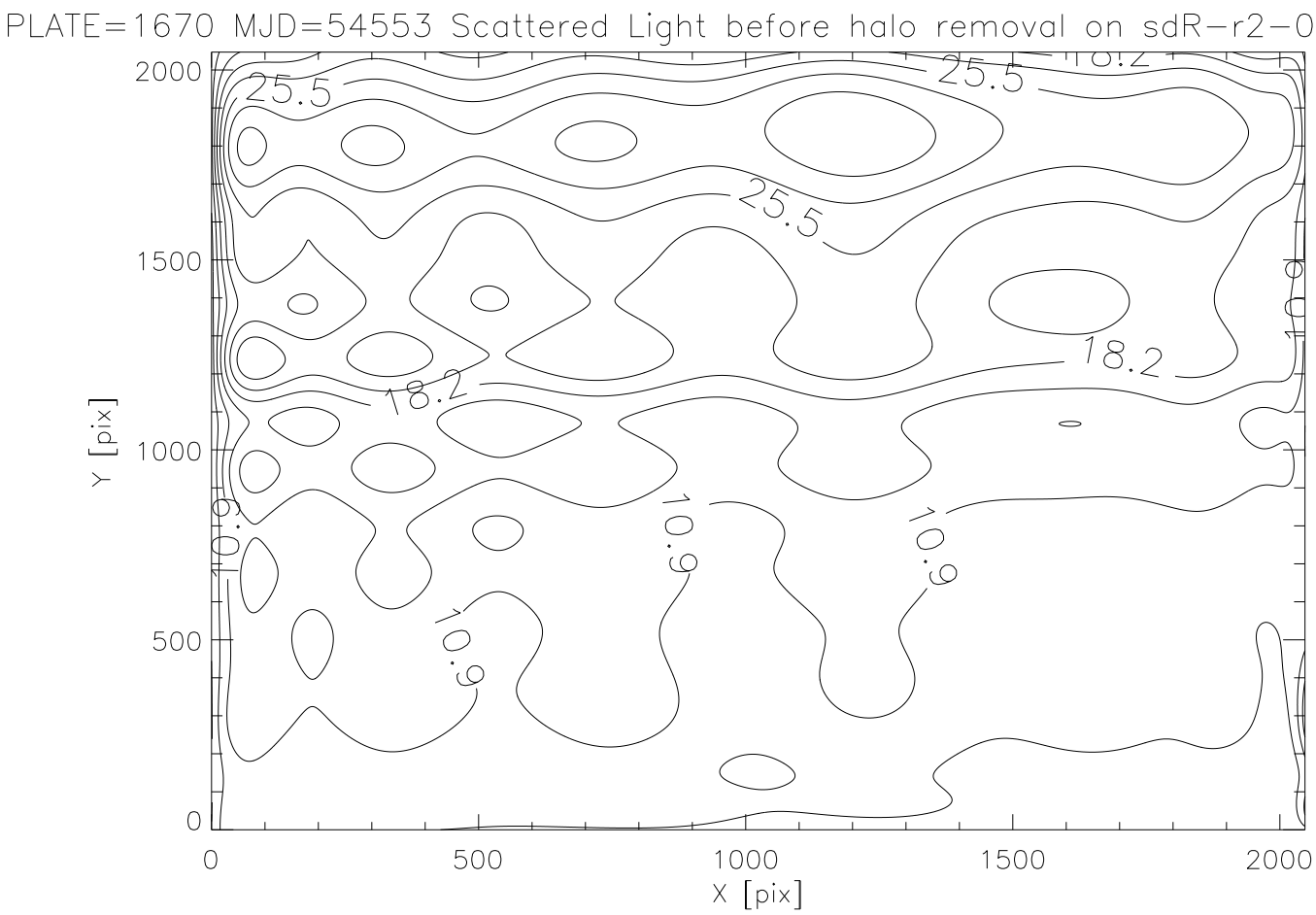

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

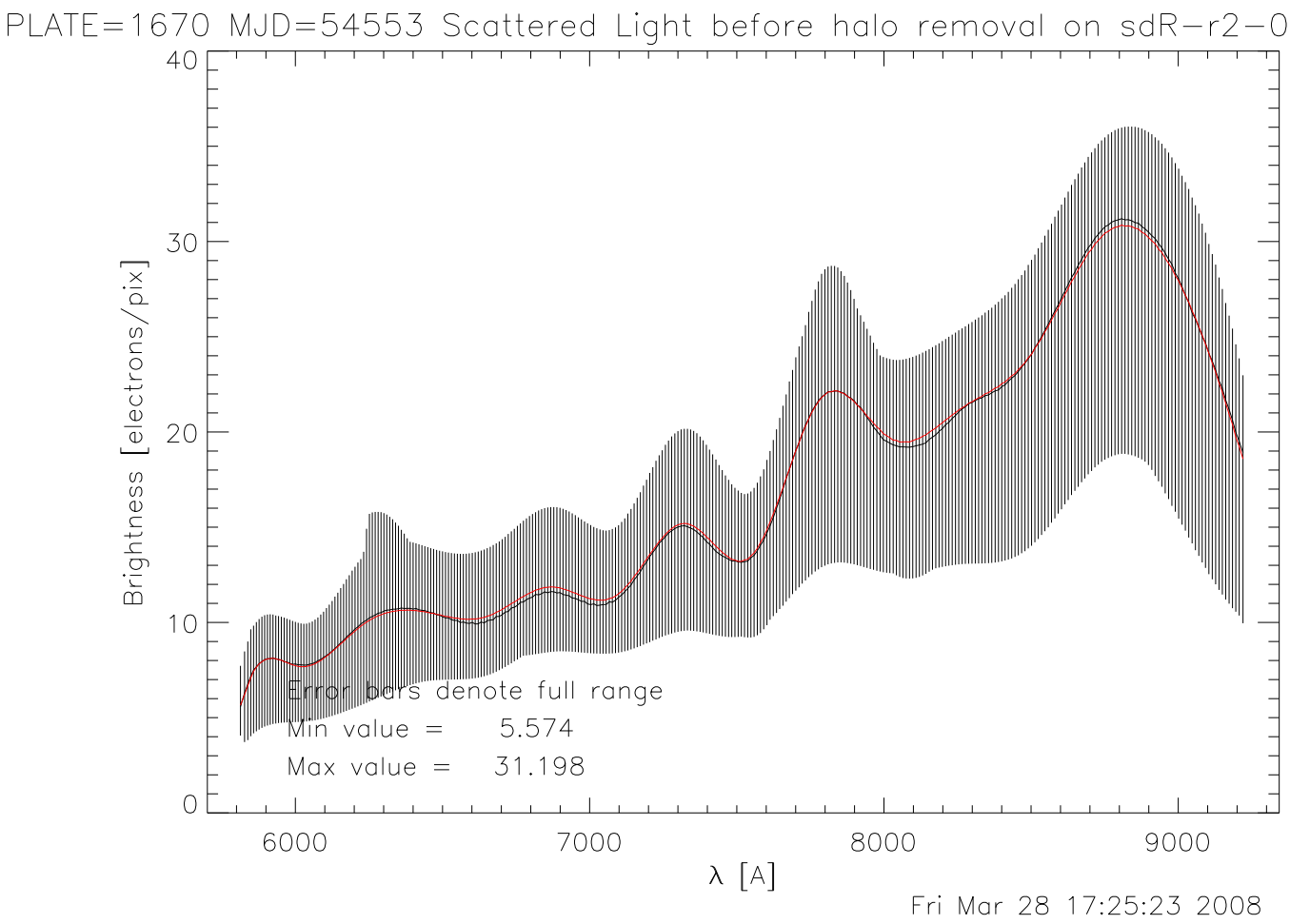

PLATE=1670 MJD=54553 flat extraction chi^2 for sdR-r2-00051331.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

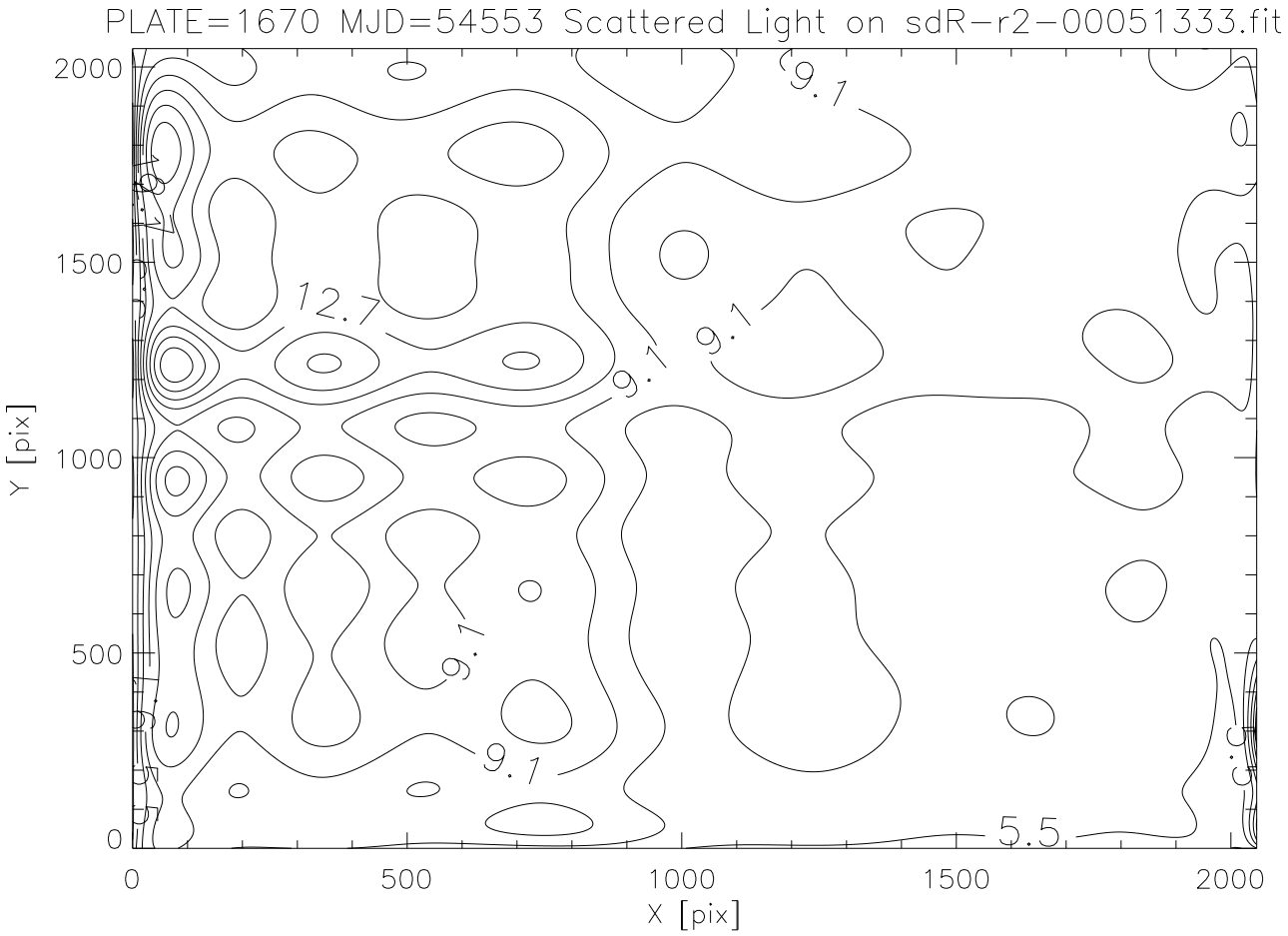

PLATE=1670 MJD=54553 Superflat sdR-r2-00051331.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

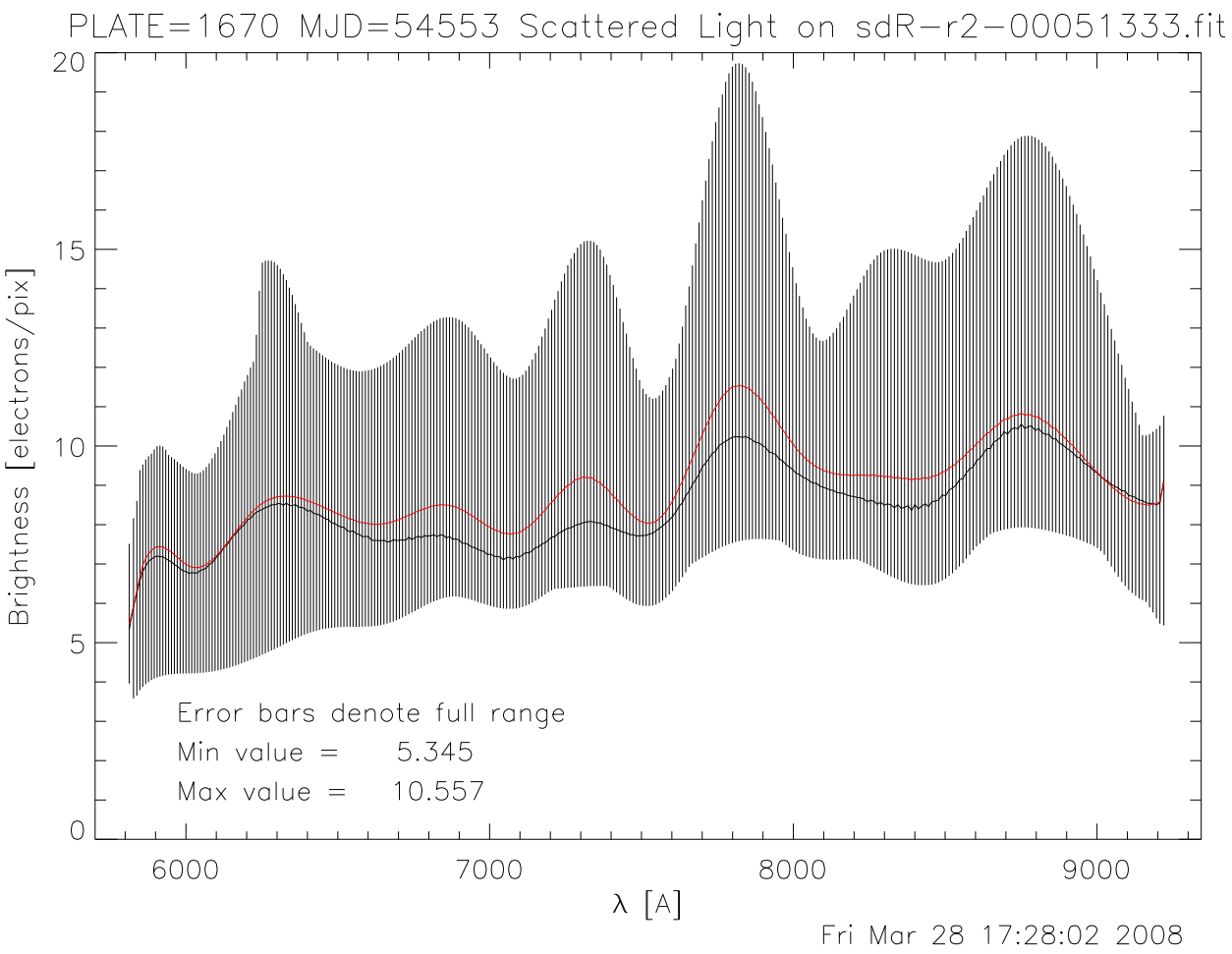

PLATE=1670 MJD=54553 Arcline Fit for sdR-r2-00051332.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Fri Mar 28 17:24:23 2008

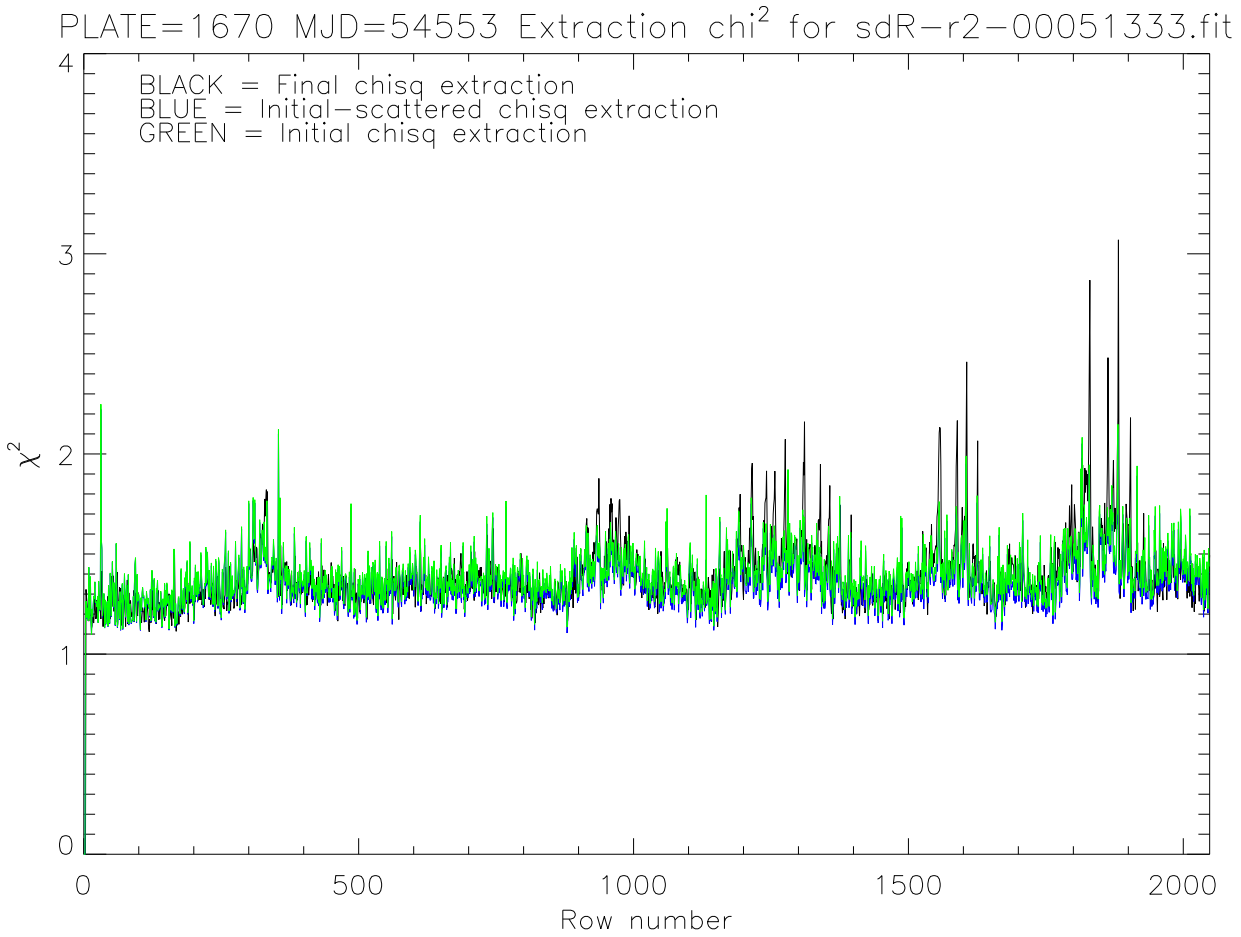

PLATE=1670 MJD=54553 Fiber−Flats for sdR−r2−00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.395
Max value = 1.367
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 28 17:24:30 2008

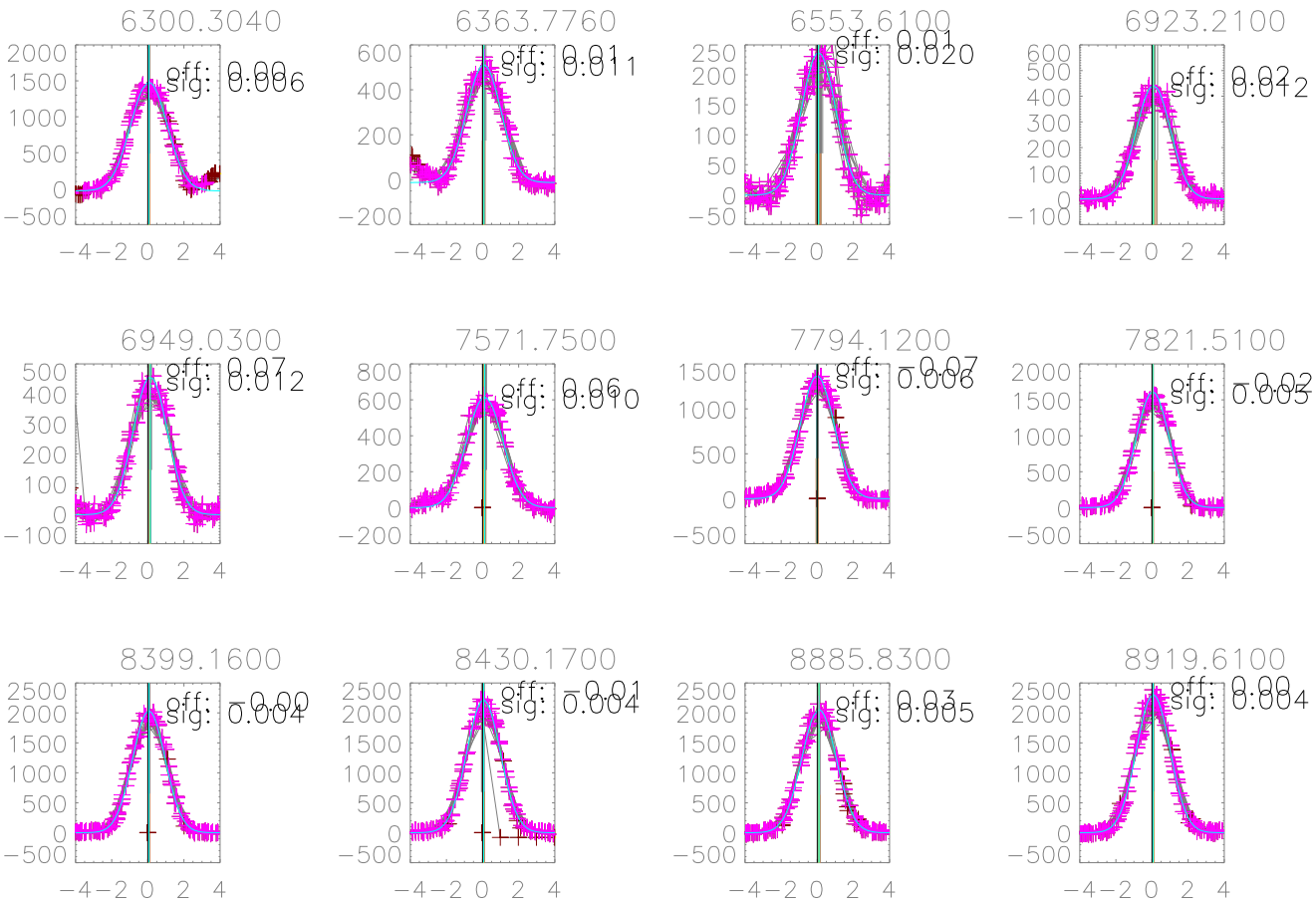

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r2-00051333.fi
25.5
25.5
25.5
18.2
18.2
10.6
10.6
10.6
10.6
Y [pix]
X [pix]
0
500
1000
1500
2000

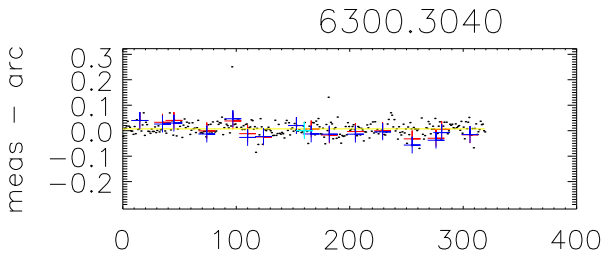

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r2-00051333.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.574
Max value = 31.198
Fri Mar 28 17:25:23 2008

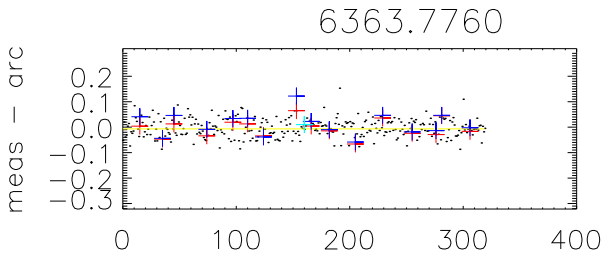

PLATE=1670 MJD=54553 Scattered Light on sdR-r2-00051333.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
12.7
5.5

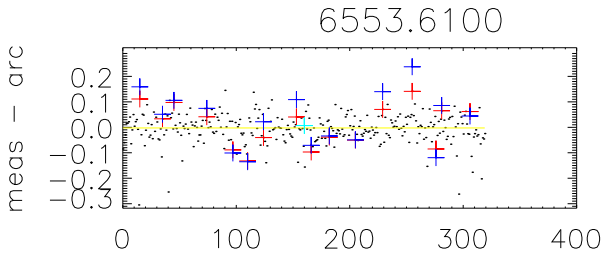

PLATE=1670 MJD=54553 Scattered Light on sdR-r2-00051333.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.345
Max value = 10.557
Fri Mar 28 17:28:02 2008

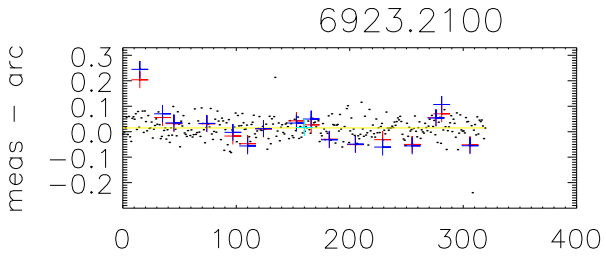

PLATE=1670 MJD=54553 Extraction chi^2 for sdR-r2-00051333.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

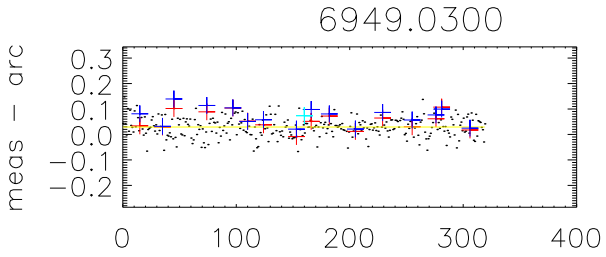

6300.3040
off: 0.00
sig: 0.006
6363.7760
off: 0.01
sig: 0.011
6553.6100
off: 0.01
sig: 0.020
6923.2100
off: 0.02
sig: 0.012
6949.0300
off: 0.07
sig: 0.012
7571.7500
off: 0.06
sig: 0.010
7794.1200
off: -0.07
sig: 0.006
7821.5100
off: -0.02
sig: 0.005
8399.1600
off: -0.00
sig: 0.004
8430.1700
off: -0.01
sig: 0.004
8885.8300
off: 0.03
sig: 0.005
8919.6100
off: 0.00
sig: 0.004

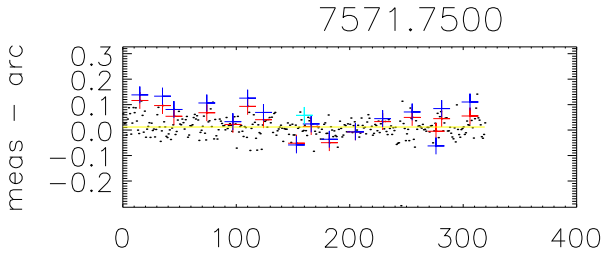

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

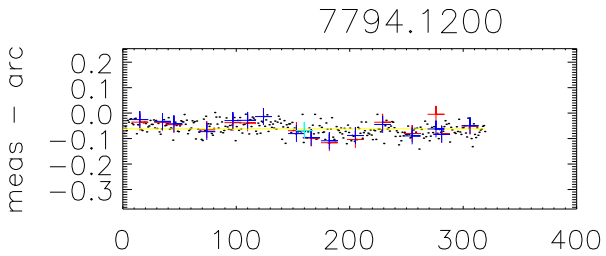

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

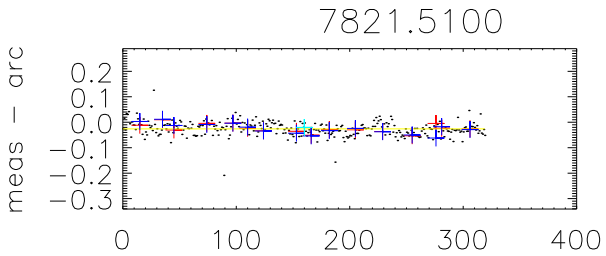

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

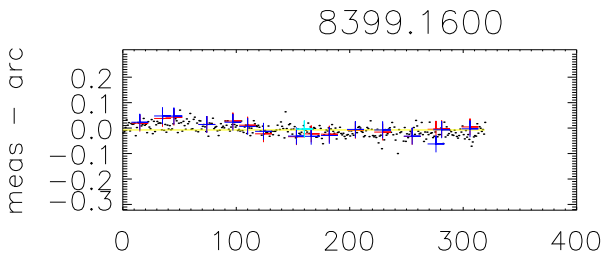

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

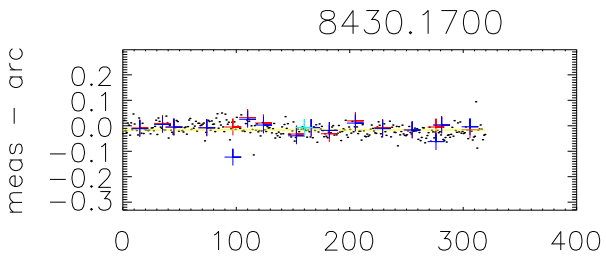

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

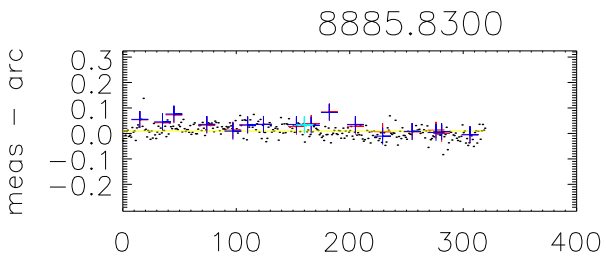

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

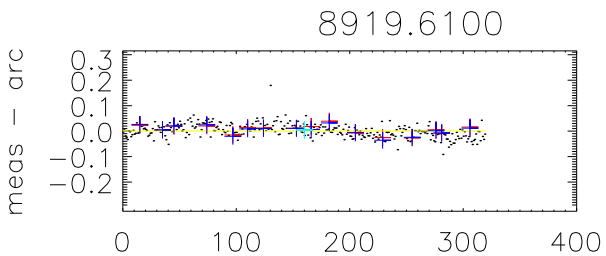

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

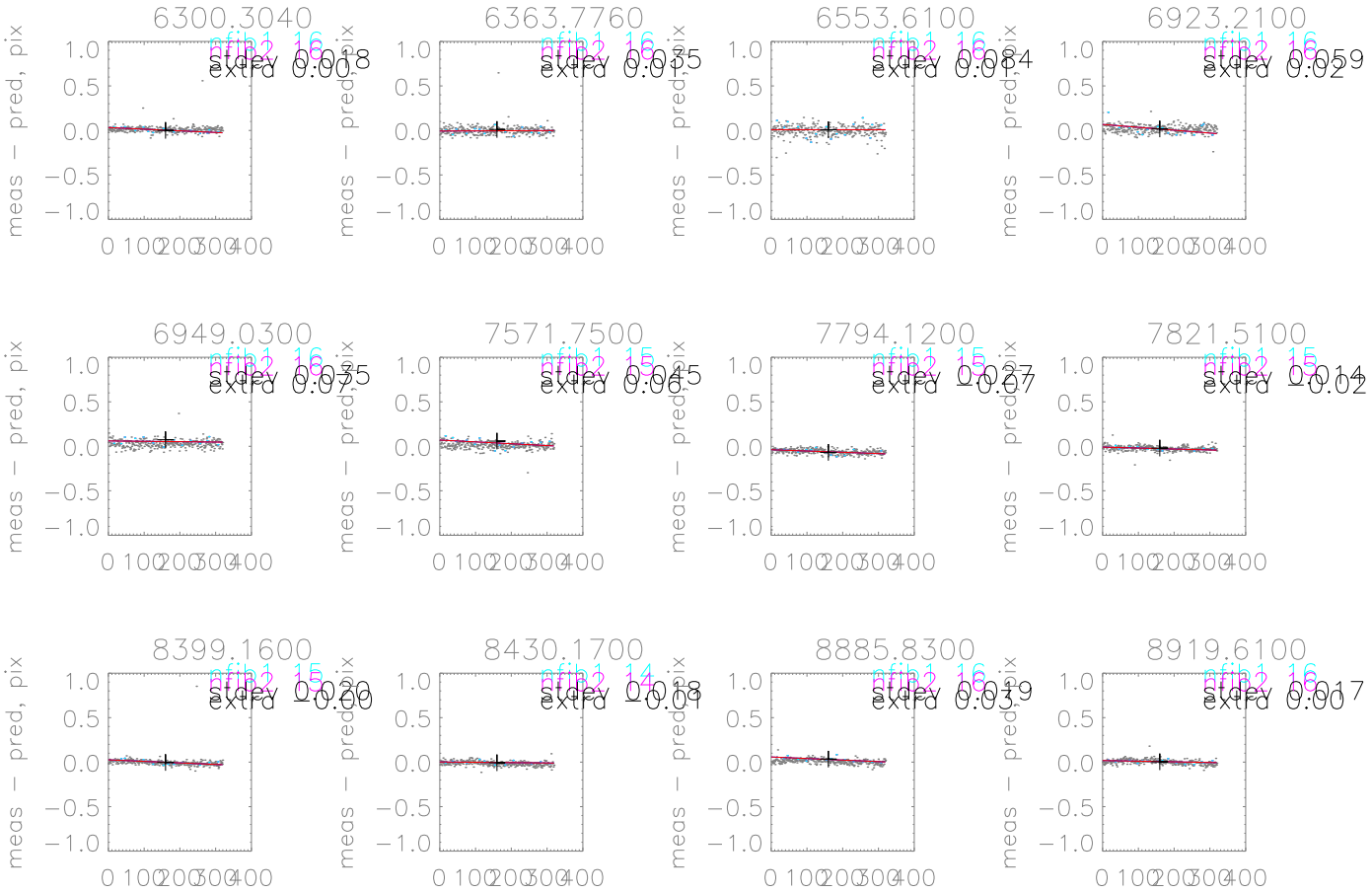

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

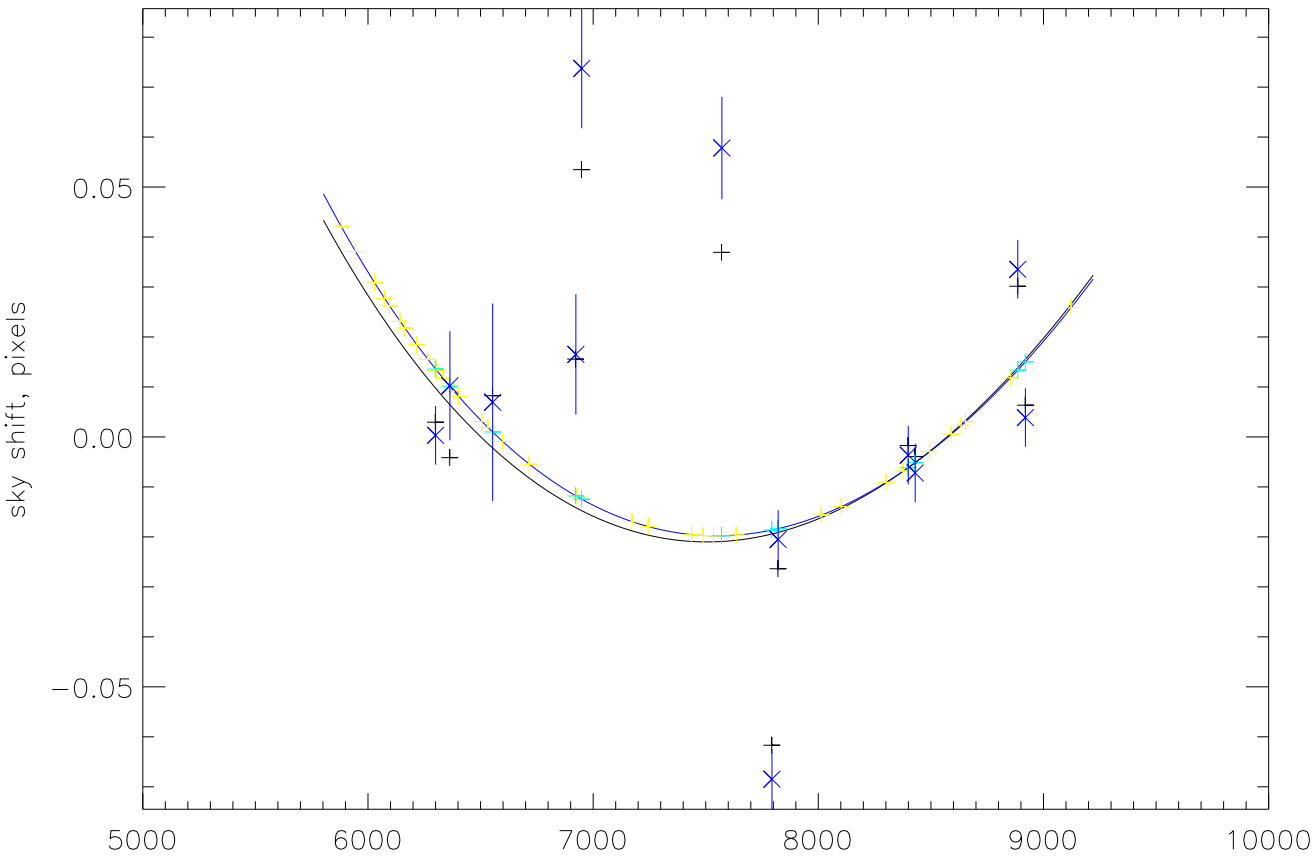

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

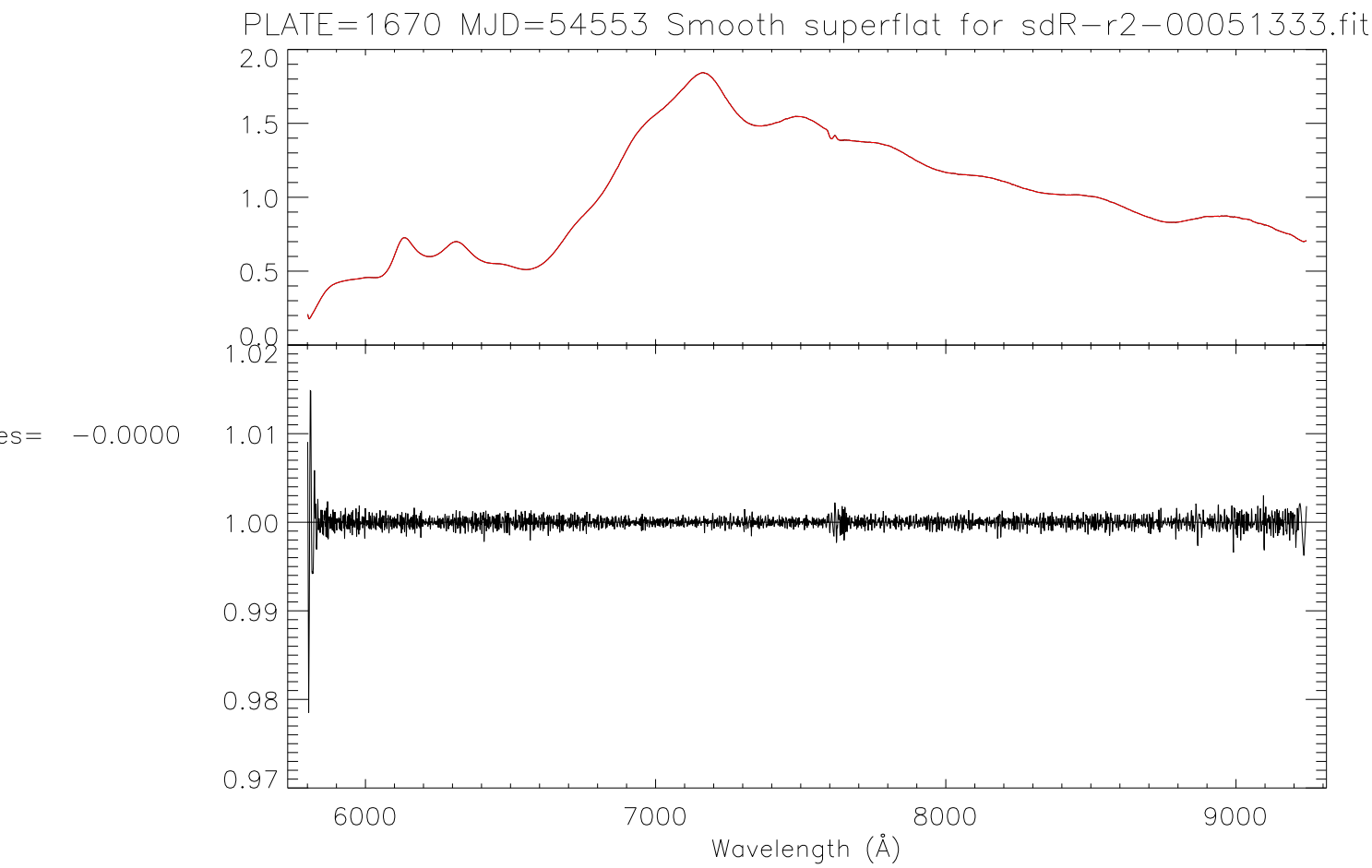

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

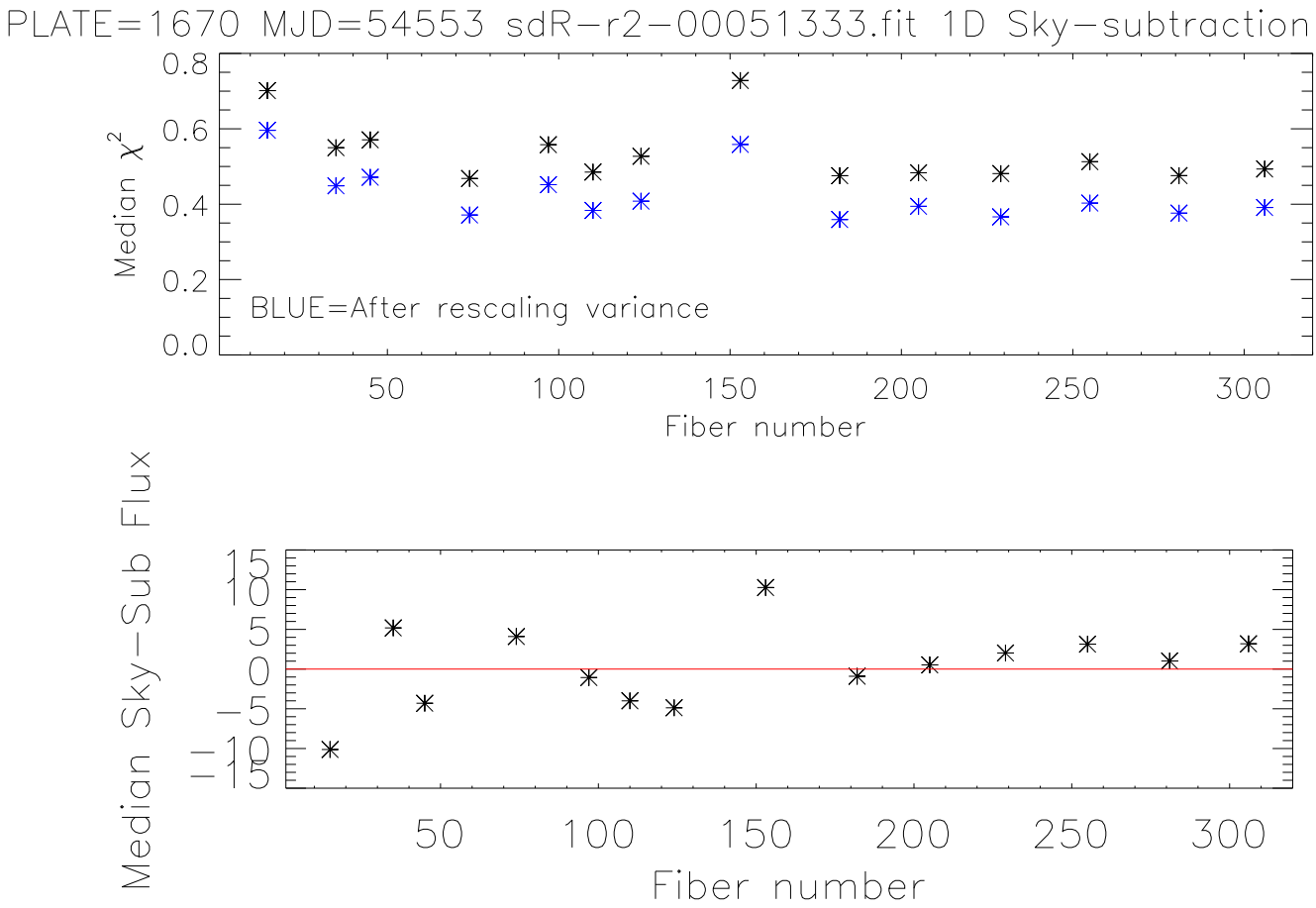

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

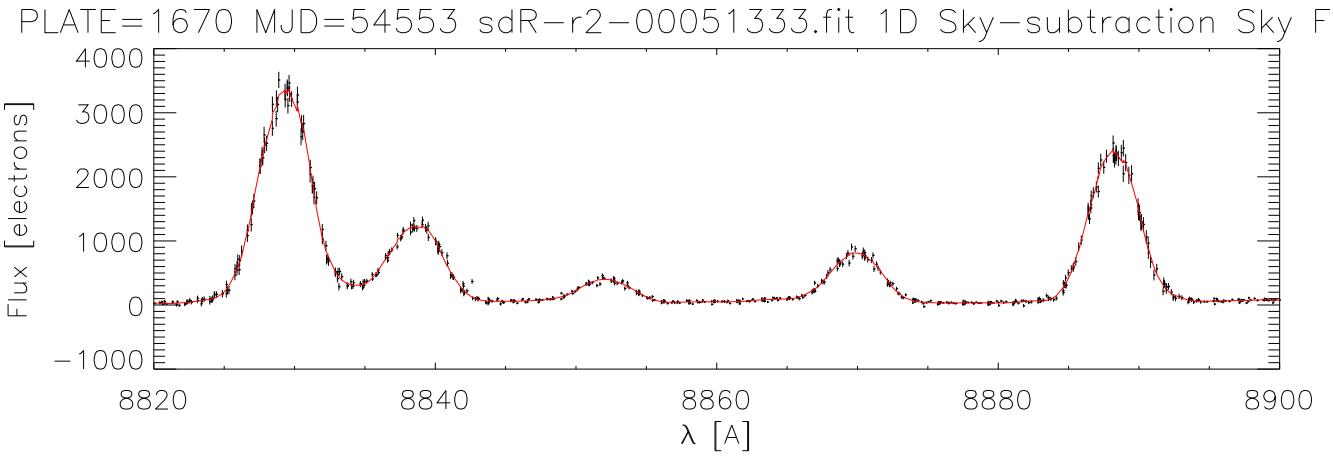

6300.3040
mfib1 16
mfib2 16
stdev 0.018
extra 0.000
6363.7760
mfib1 16
mfib2 16
stdev 0.015
extra 0.015
6553.6100
mfib1 16
mfib2 16
stdev 0.014
extra 0.000
6923.2100
mfib1 16
mfib2 16
stdev 0.059
extra 0.02
6949.0300
mfib1 16
mfib2 16
stdev 0.035
extra 0.07
7571.7500
mfib1 15
mfib2 15
stdev 0.045
extra 0.06
7794.1200
mfib1 15
mfib2 15
stdev 0.027
extra −0.07
7821.5100
mfib1 15
mfib2 15
stdev 0.014
extra −0.02
8399.1600
mfib1 15
mfib2 15
stdev 0.020
extra −0.00
8430.1700
mfib1 14
mfib2 14
stdev 0.018
extra −0.01
8885.8300
mfib1 16
mfib2 16
stdev 0.029
extra 0.03
8919.6100
mfib1 16
mfib2 16
stdev 0.017
extra 0.00
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

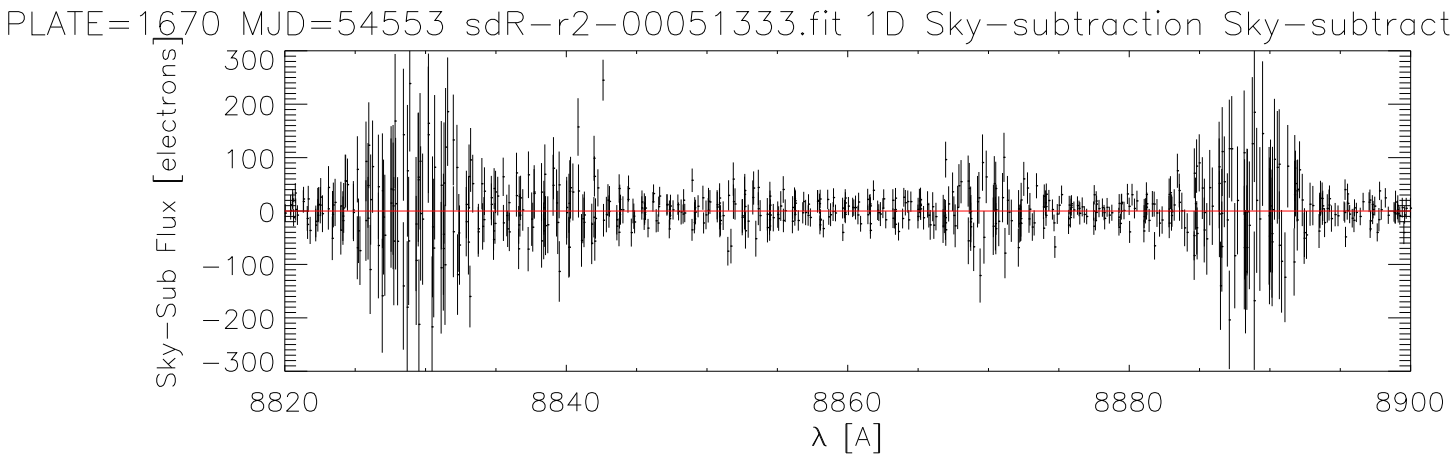

sky shift, pixels
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000

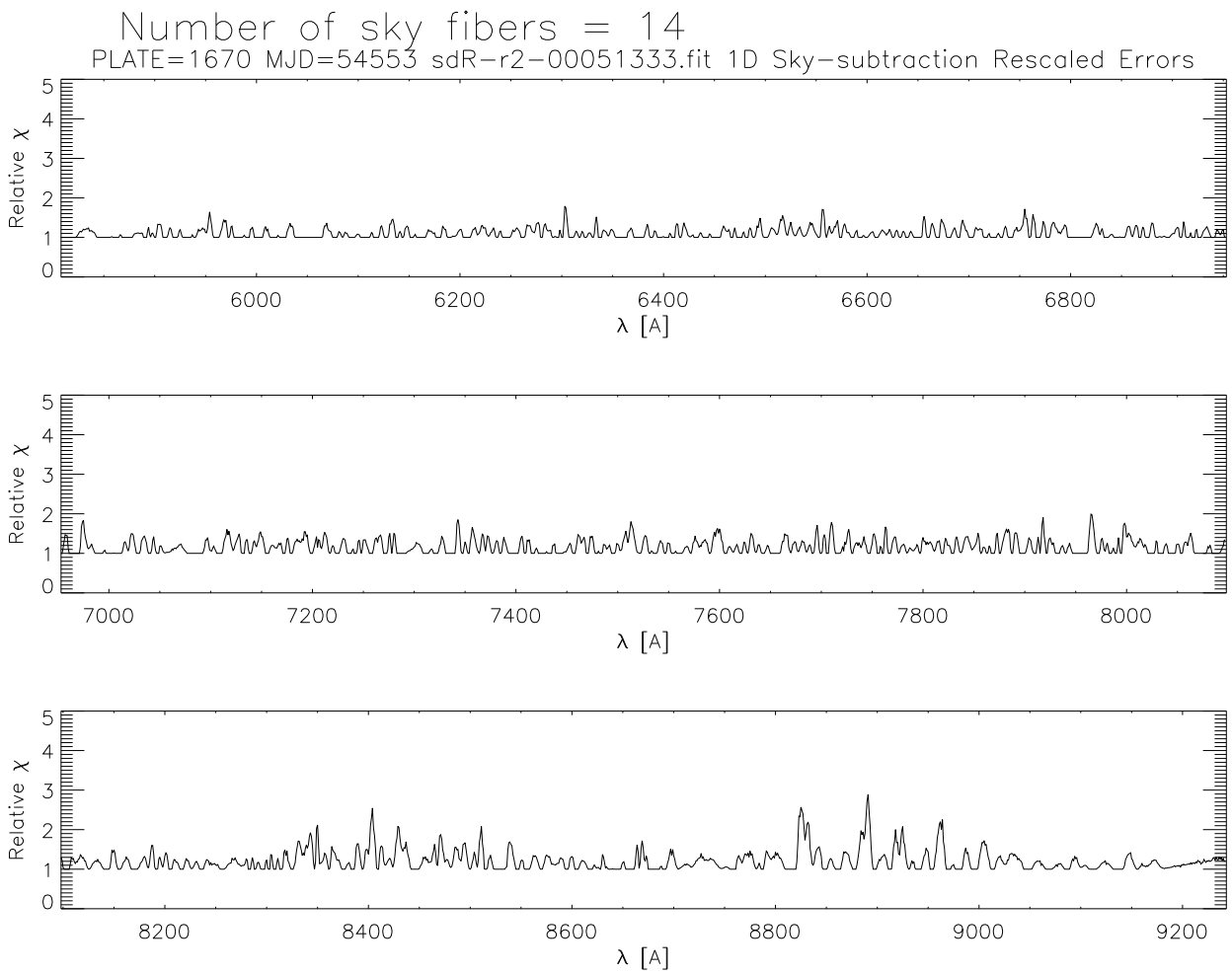

PLATE=1670 MJD=54553 Smooth superflat for sdR-r2-00051333.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

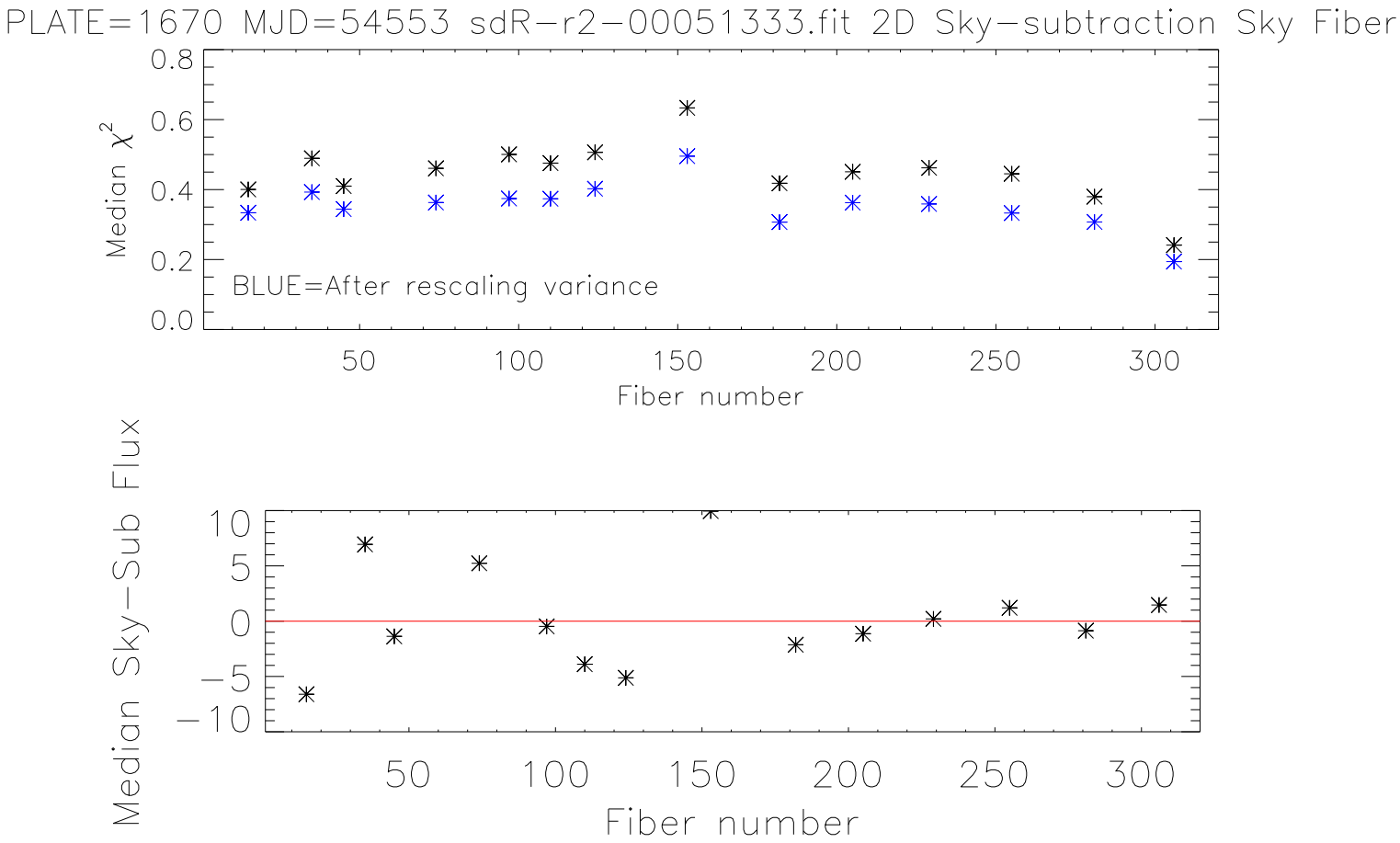
es= −0.0000

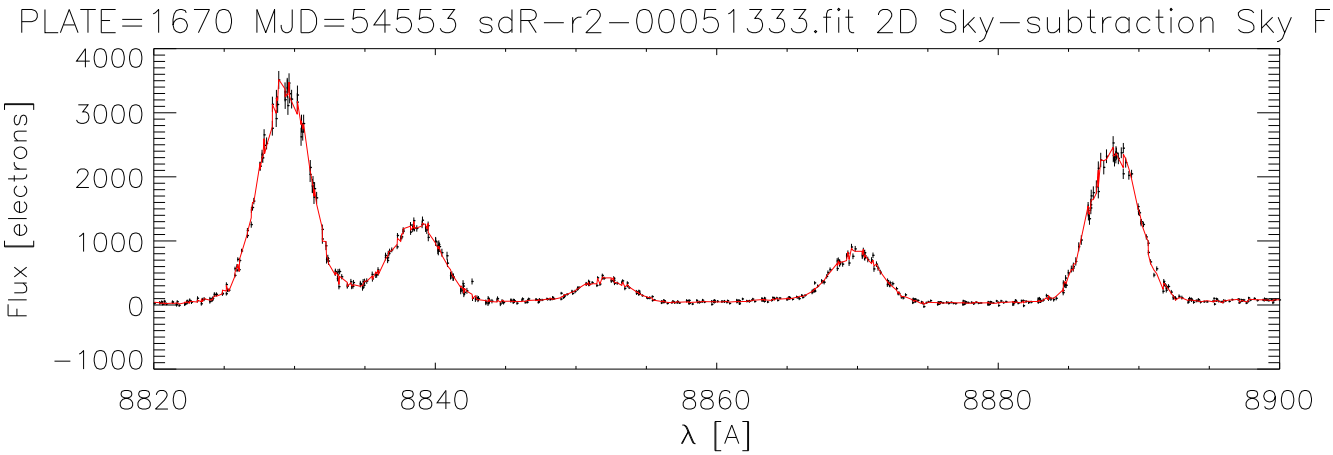

PLATE=1670 MJD=54553 sdR-r2-00051333.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

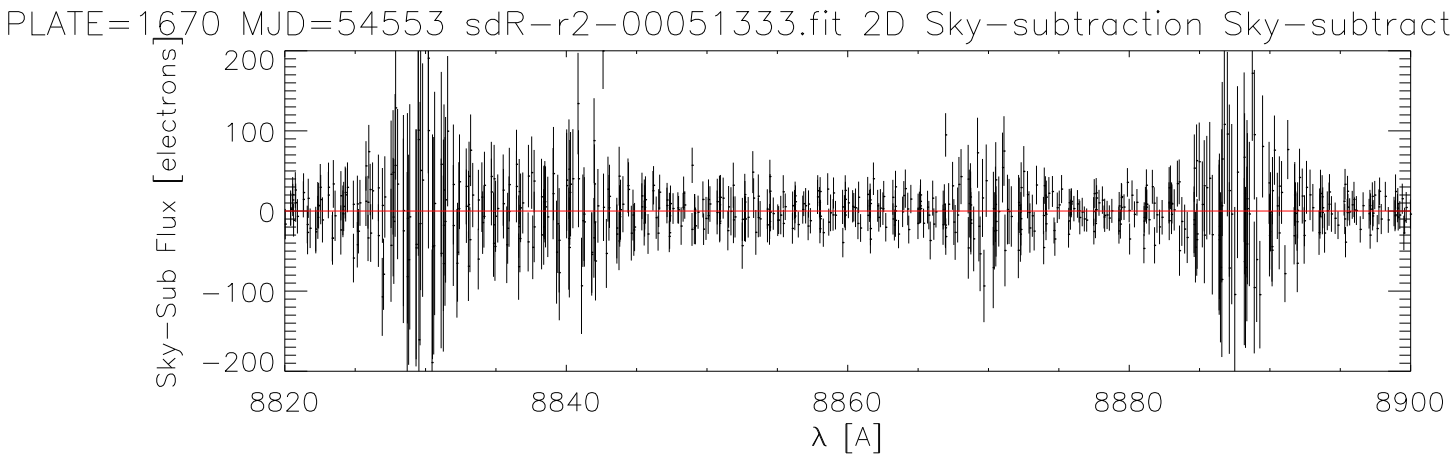

PLATE=1670 MJD=54553 sdR-r2-00051333.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

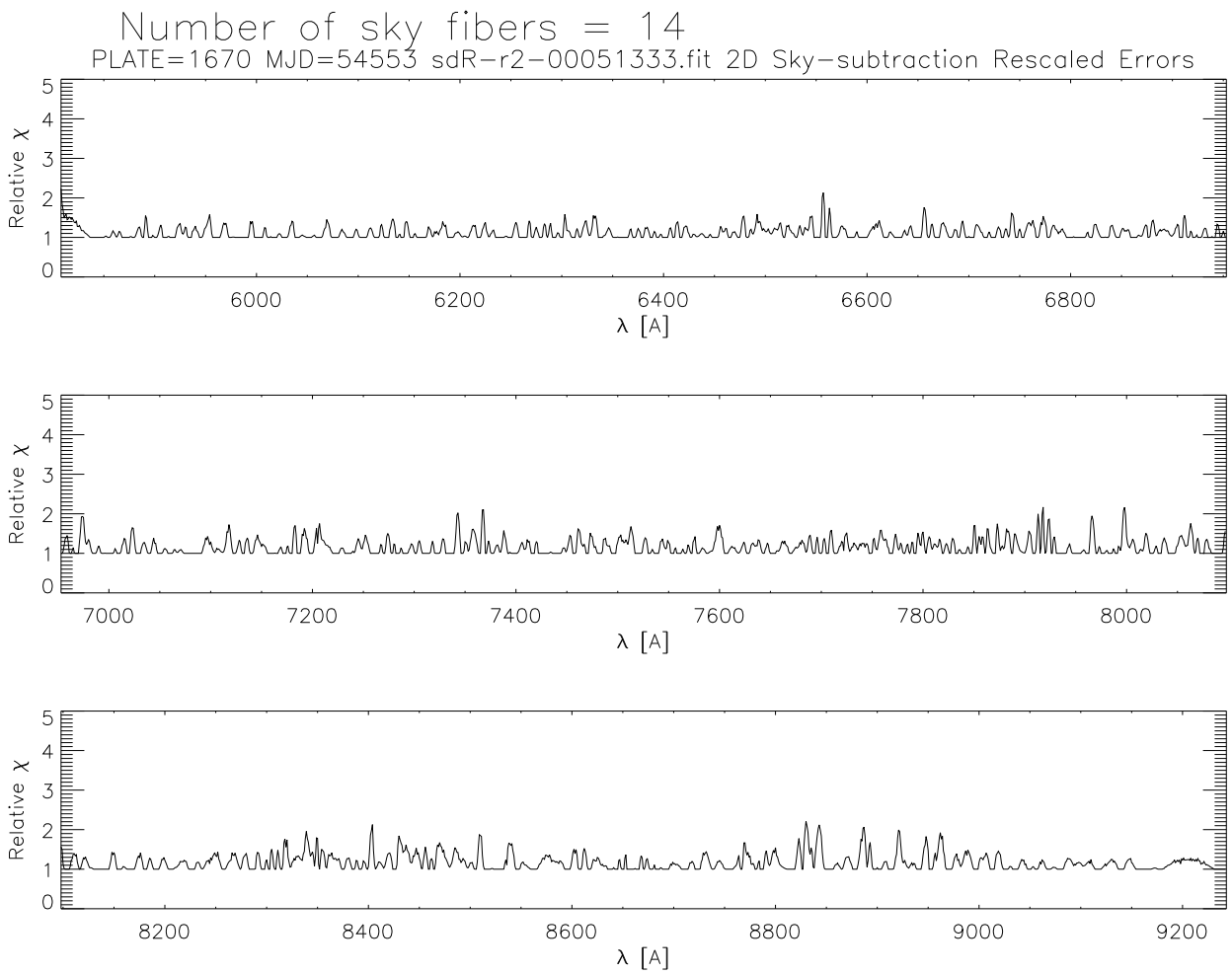

PLATE=1670 MJD=54553 sdR-r2-00051333.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

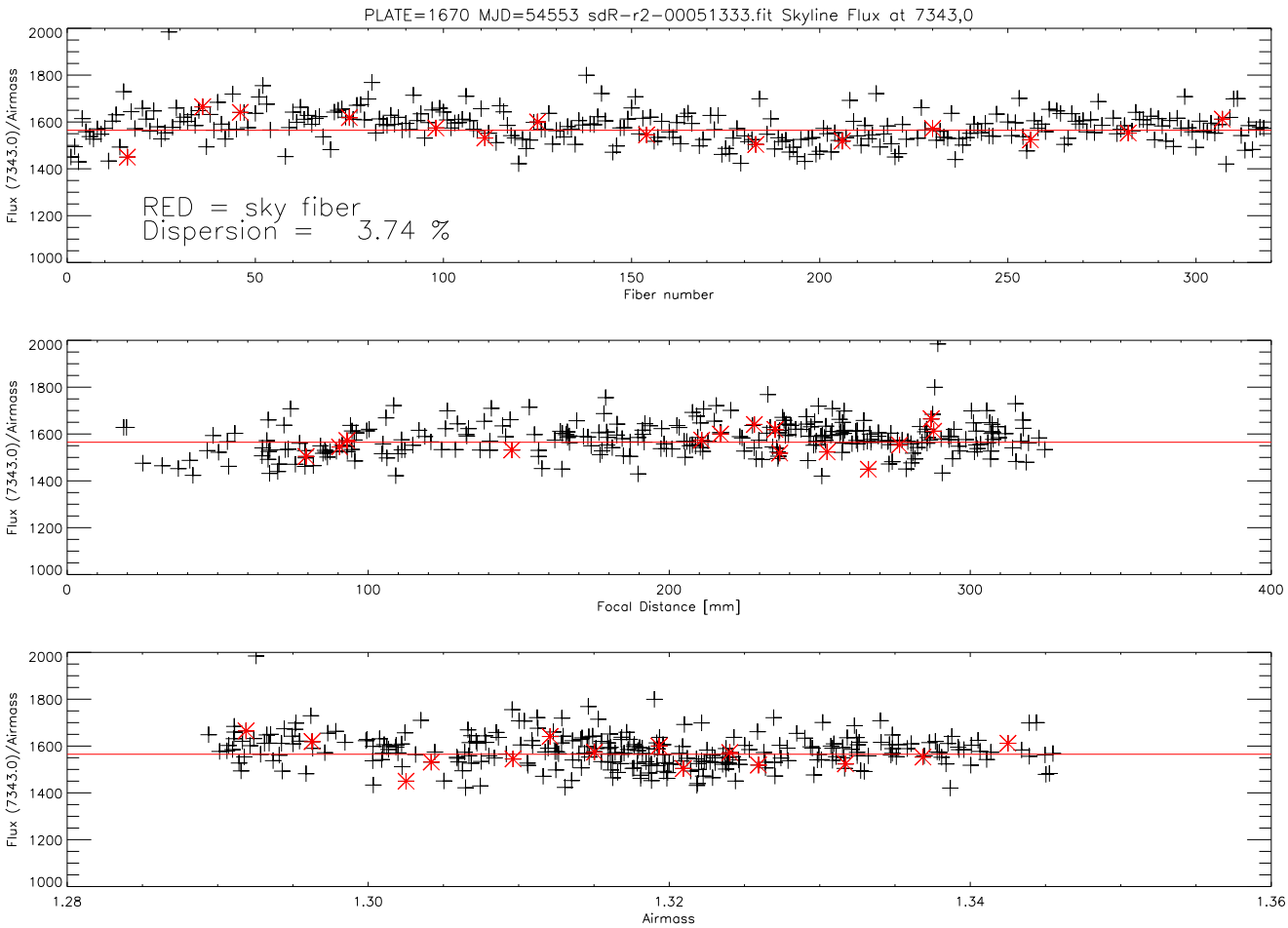

Number of sky fibers = 14
PLATE=1670 MJD=54553 sdR-r2-00051333.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

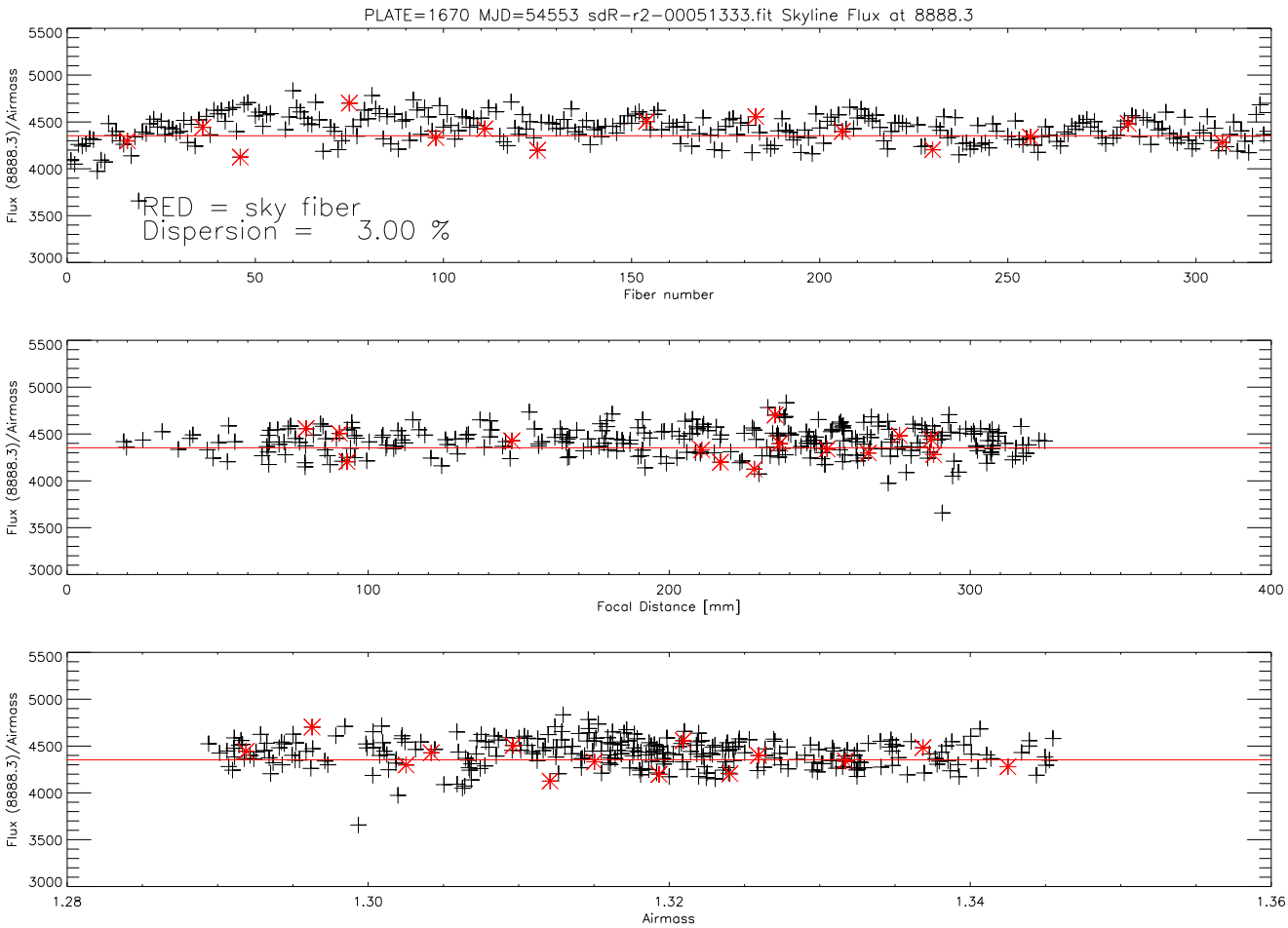

PLATE=1670 MJD=54553 sdR-r2-00051333.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

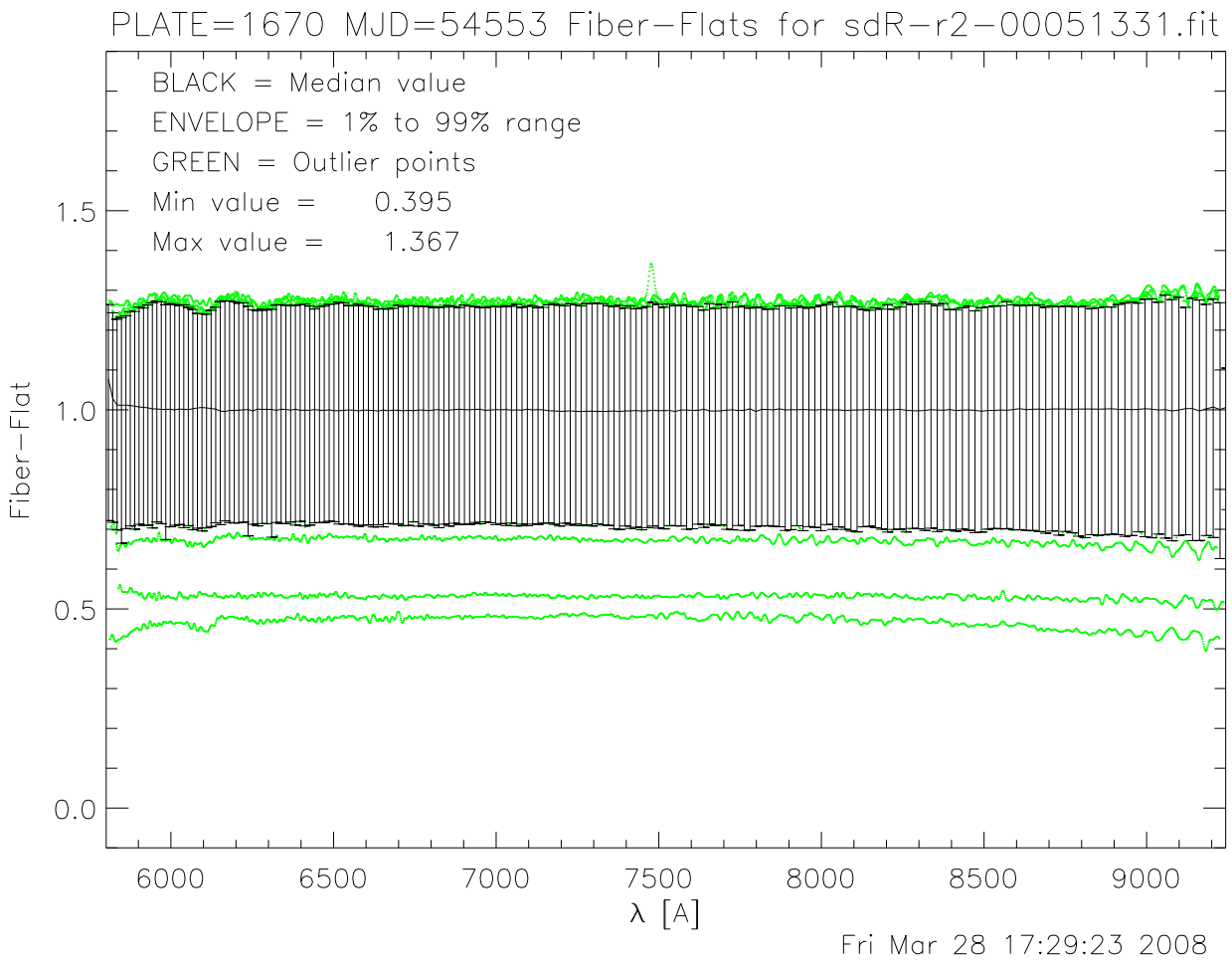

PLATE=1670 MJD=54553 sdR-r2-00051333.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

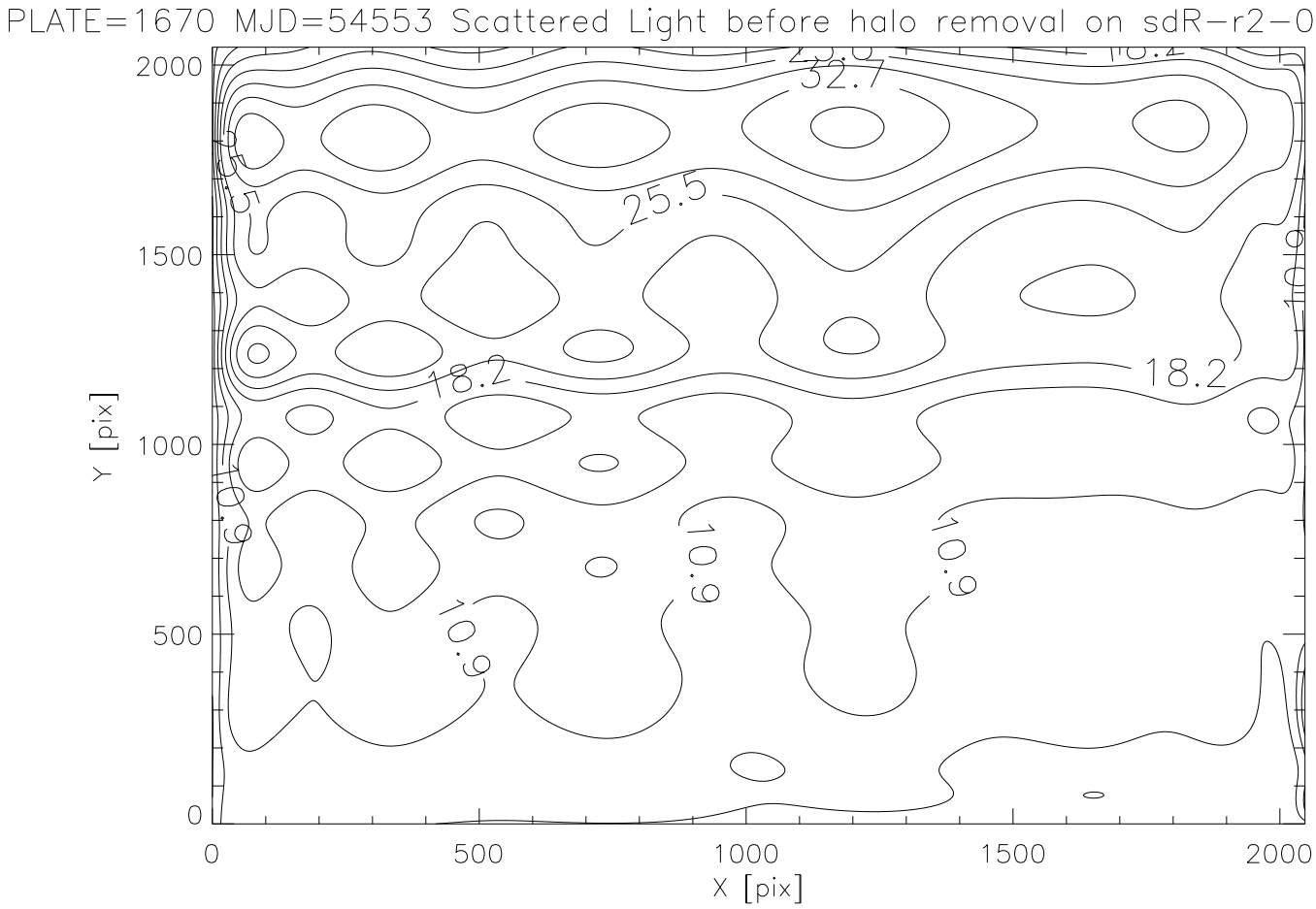

PLATE=1670 MJD=54553 sdR-r2-00051333.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

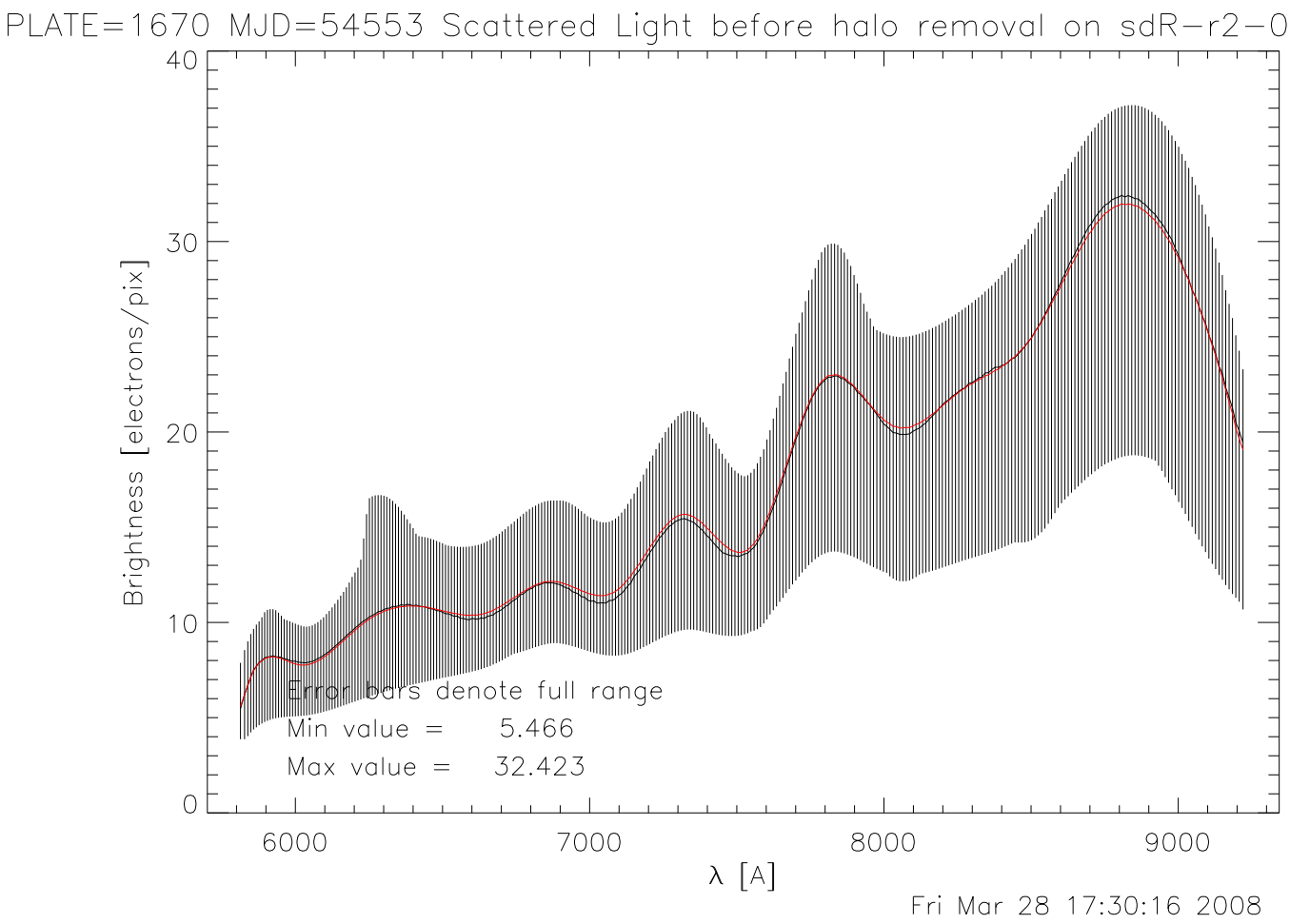

Number of sky fibers = 14
PLATE=1670 MJD=54553 sdR-r2-00051333.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

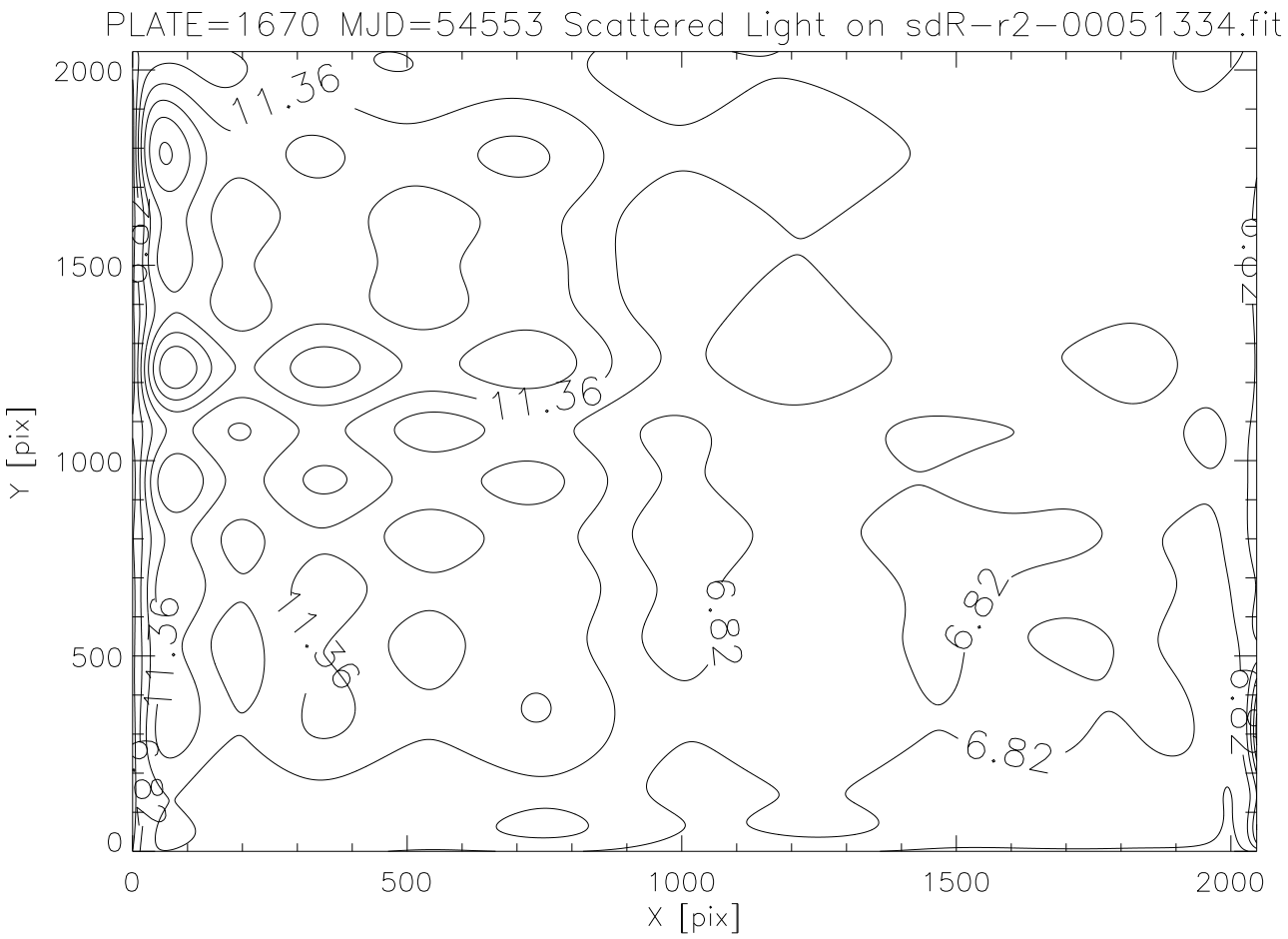

PLATE=1670 MJD=54553 sdR-r2-00051333.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.74 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

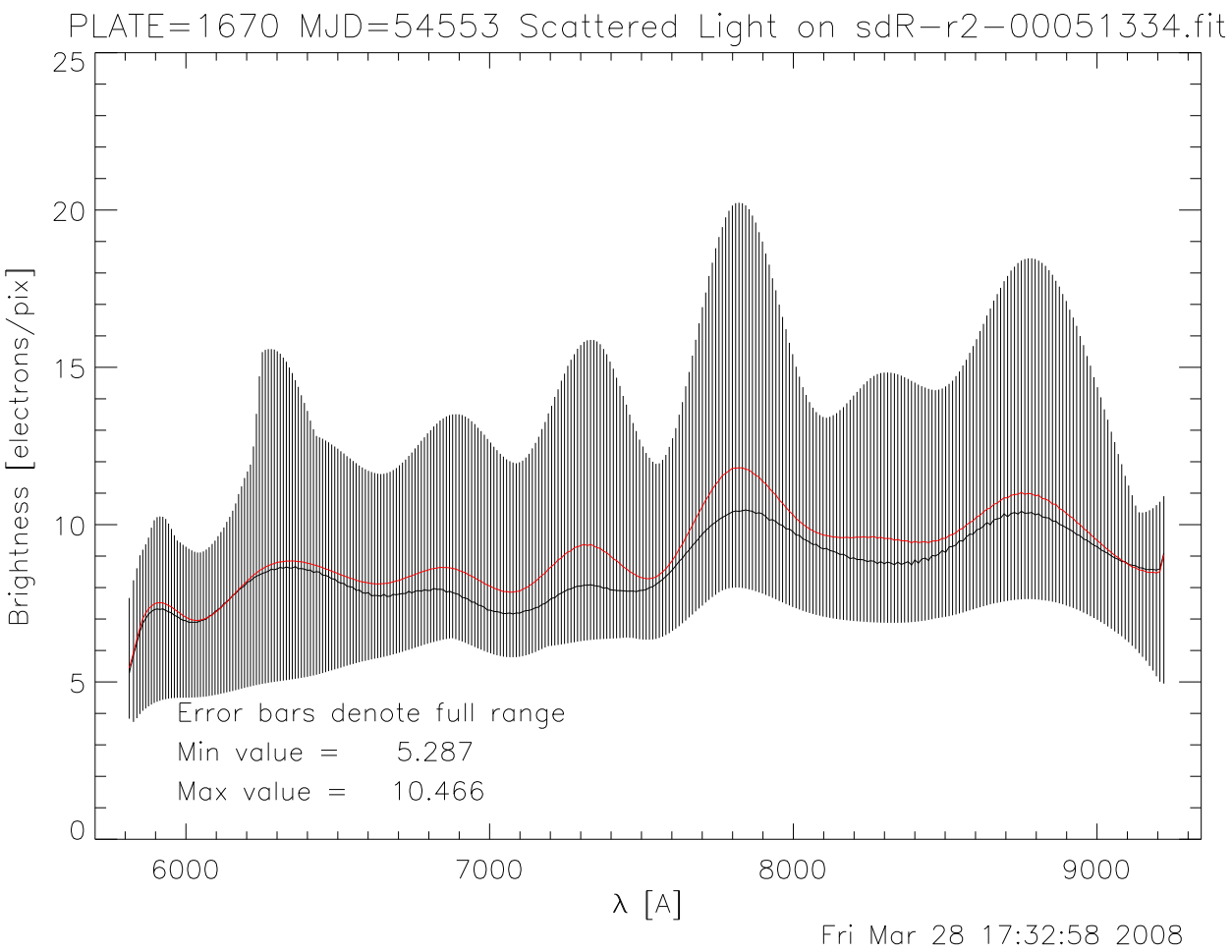

PLATE=1670 MJD=54553 sdR-r2-00051333.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.00 %
Fiber number
Focal Distance [mm]
Airmass

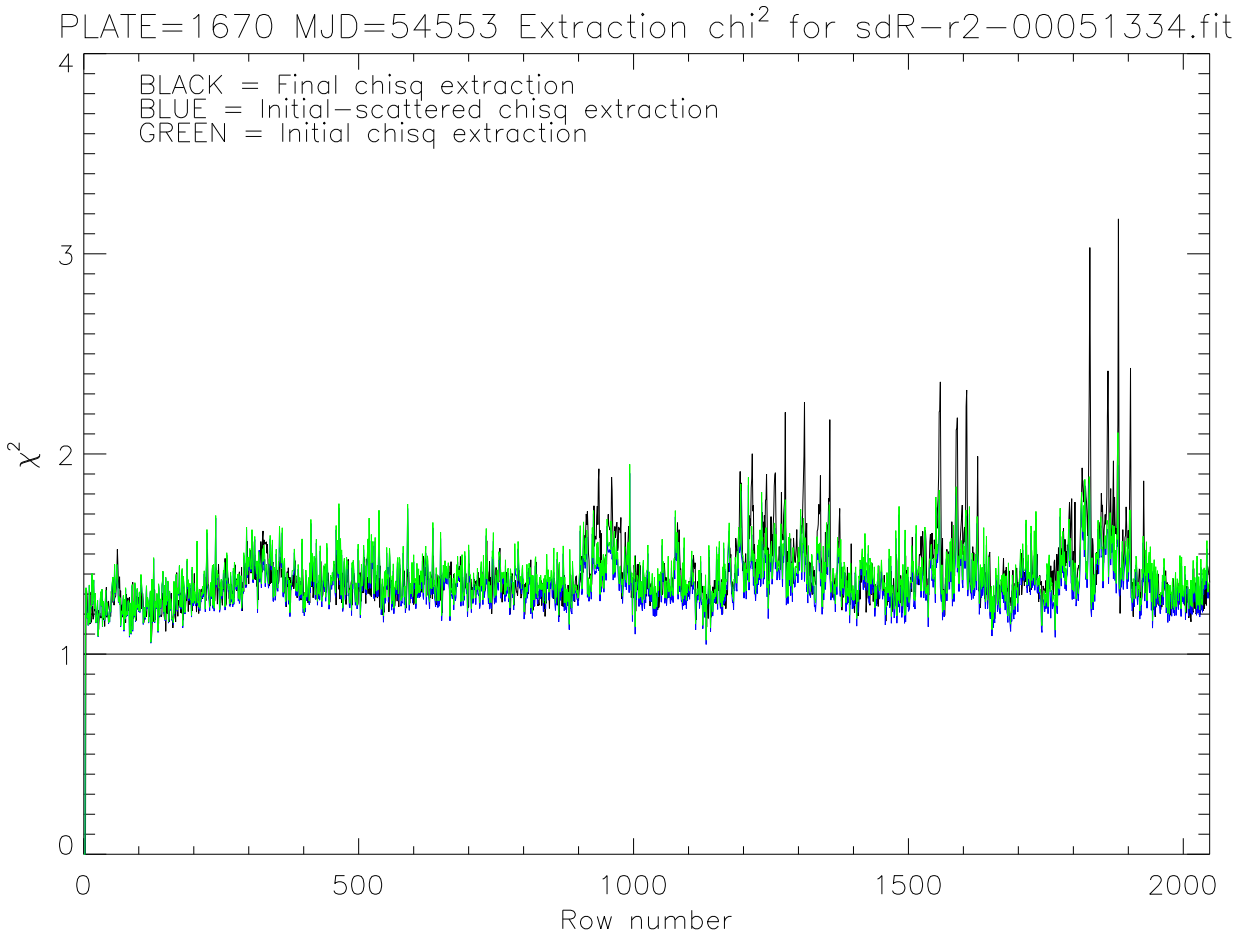

PLATE=1670 MJD=54553 Fiber−Flats for sdR−r2−00051331.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.395
Max value = 1.367
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Fri Mar 28 17:29:23 2008

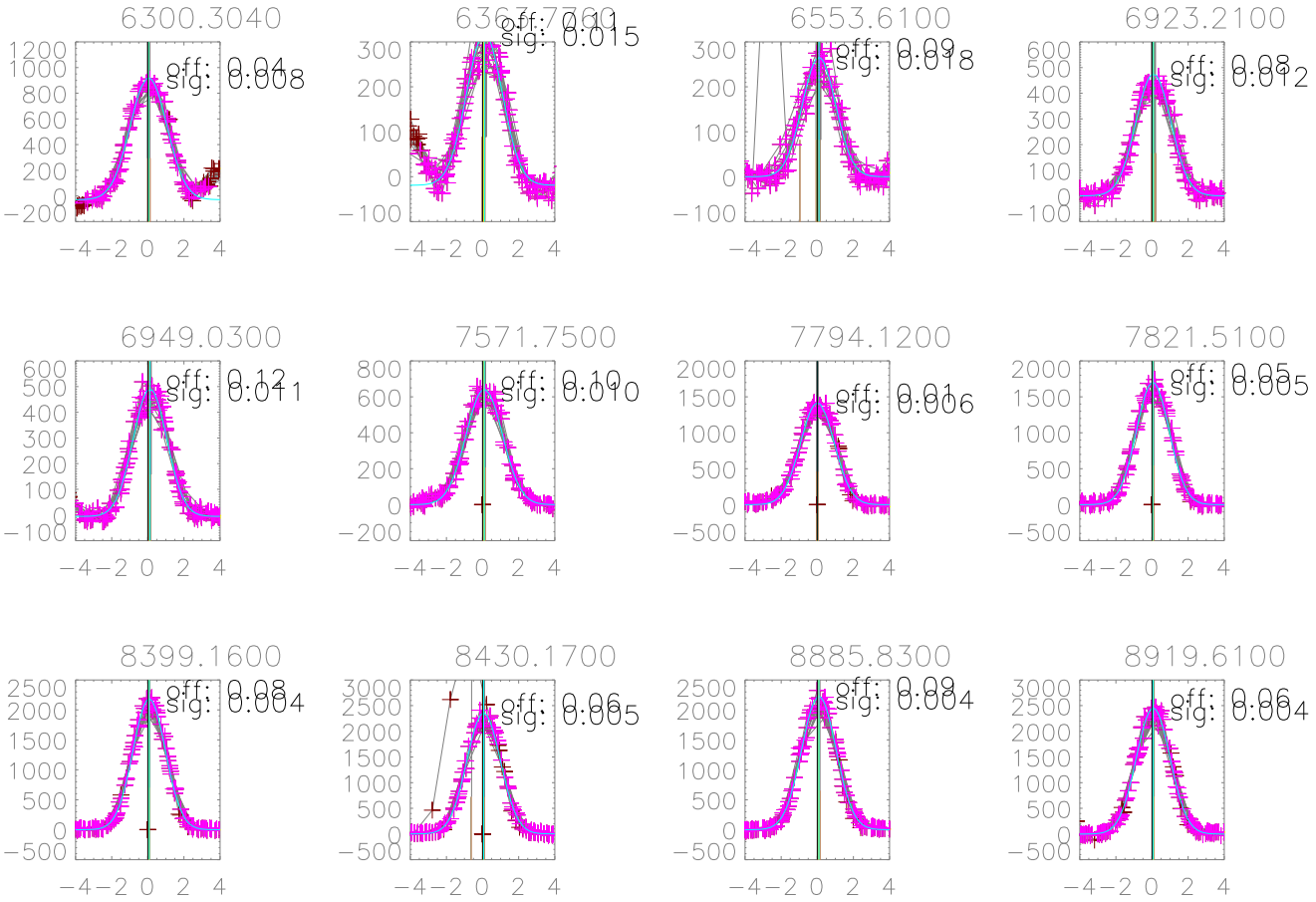

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r2-00051334.fi
32.7
25.5
18.2
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

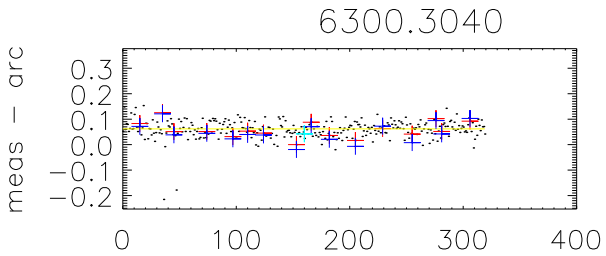

PLATE=1670 MJD=54553 Scattered Light before halo removal on sdR-r2-00051334.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.466
Max value = 32.423
Fri Mar 28 17:30:16 2008

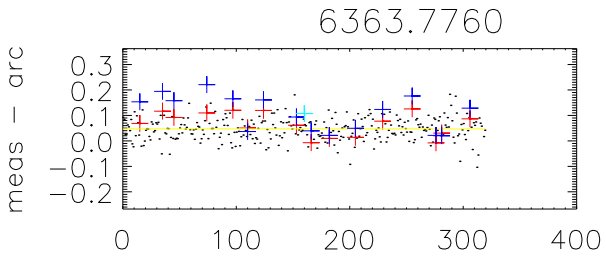

PLATE=1670 MJD=54553 Scattered Light on sdR-r2-00051334.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
6.82

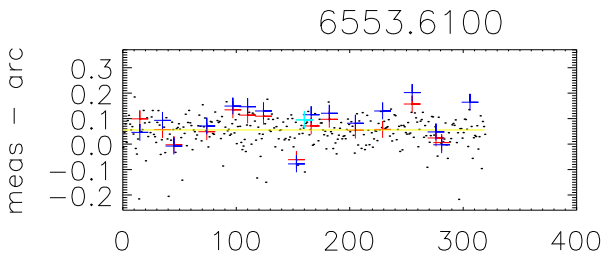

PLATE=1670 MJD=54553 Scattered Light on sdR-r2-00051334.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.287
Max value = 10.466
Fri Mar 28 17:32:58 2008

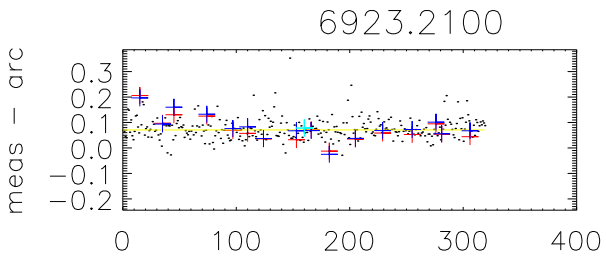

PLATE=1670 MJD=54553 Extraction chi^2 for sdR-r2-00051334.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

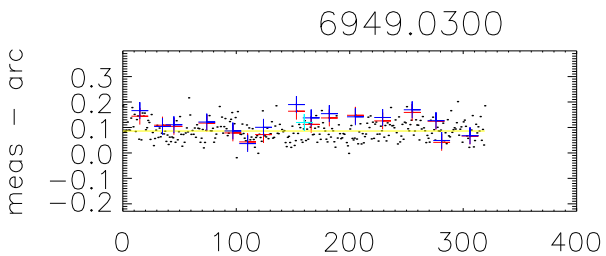

6300.3040
off: 0.04
sig: 0.008
6363.7700
off: 0.09
sig: 0.015
6553.6100
off: 0.09
sig: 0.018
6923.2100
off: 0.08
sig: 0.012
6949.0300
off: 0.12
sig: 0.011
7571.7500
off: 0.10
sig: 0.010
7794.1200
off: 0.01
sig: 0.006
7821.5100
off: 0.05
sig: 0.005
8399.1600
off: 0.08
sig: 0.004
8430.1700
off: 0.06
sig: 0.005
8885.8300
off: 0.09
sig: 0.004
8919.6100
off: 0.06
sig: 0.004

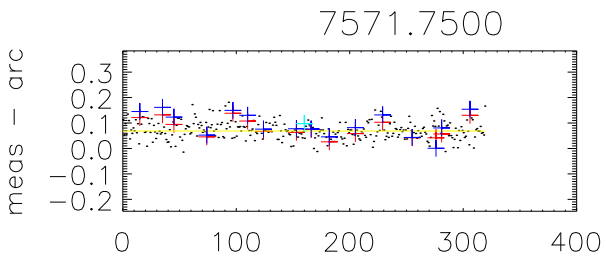

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

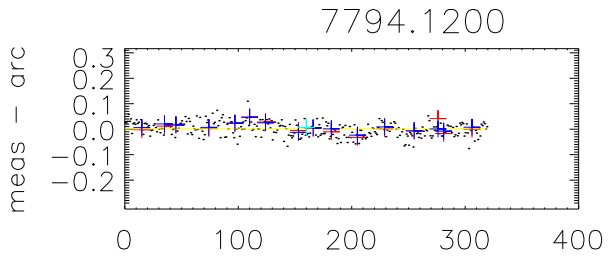

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

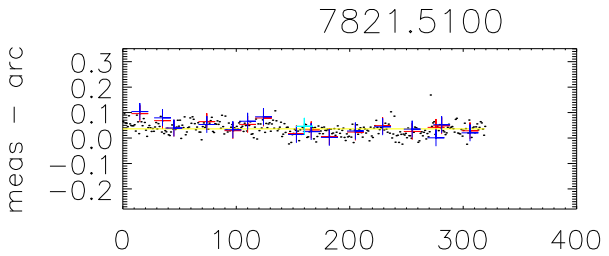

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

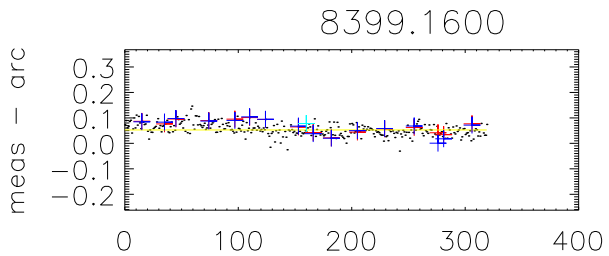

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

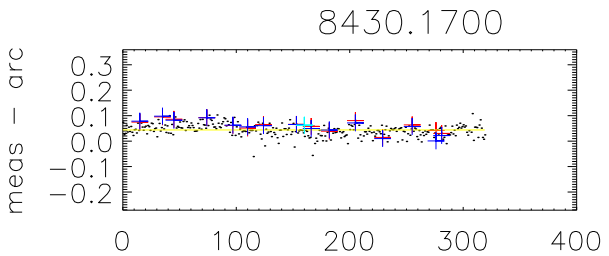

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

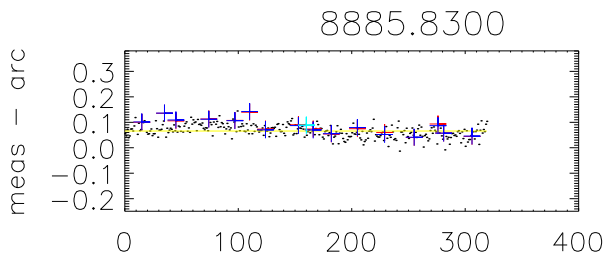

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

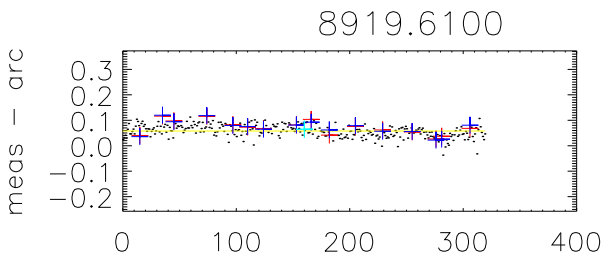

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

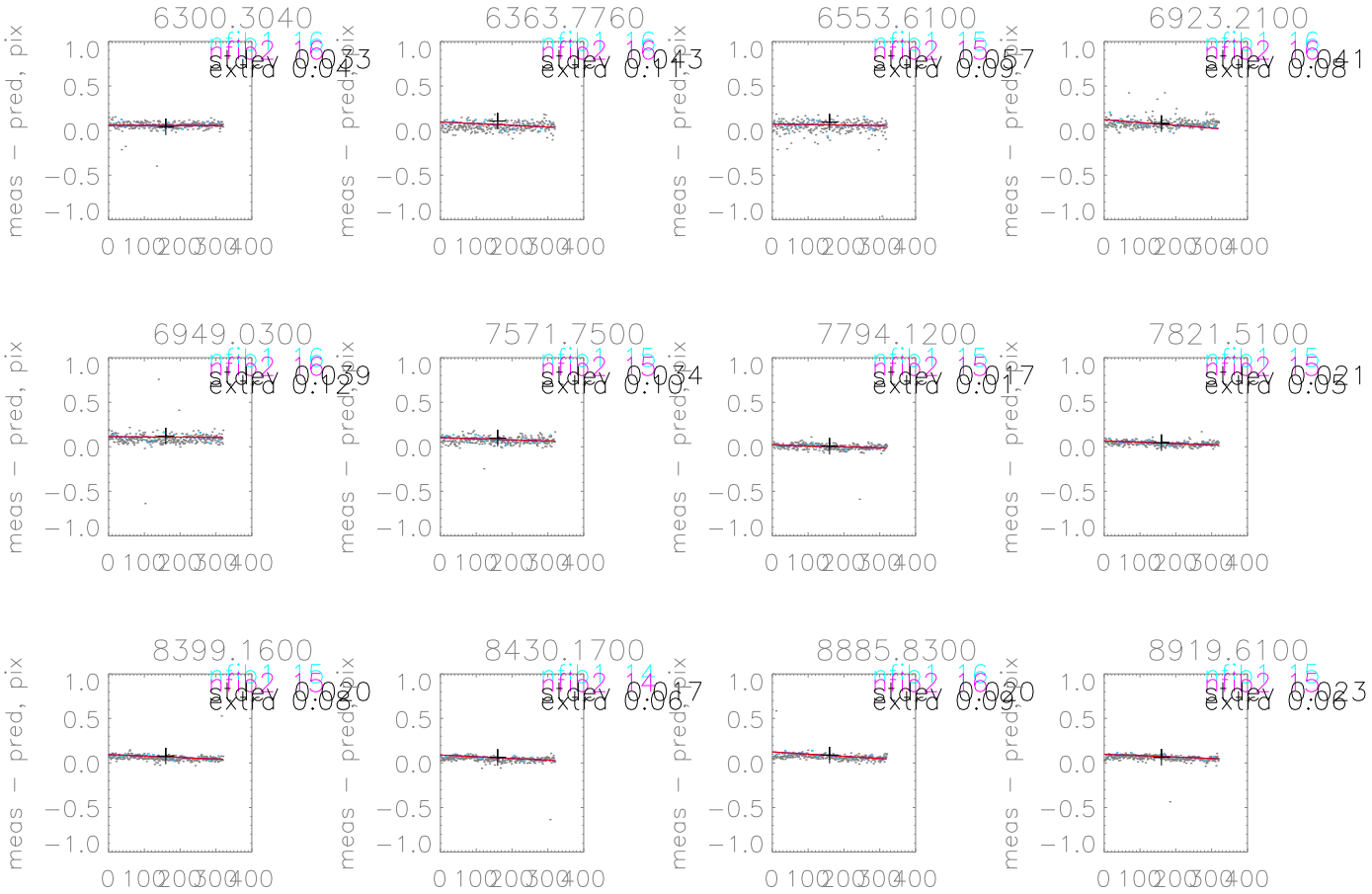

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

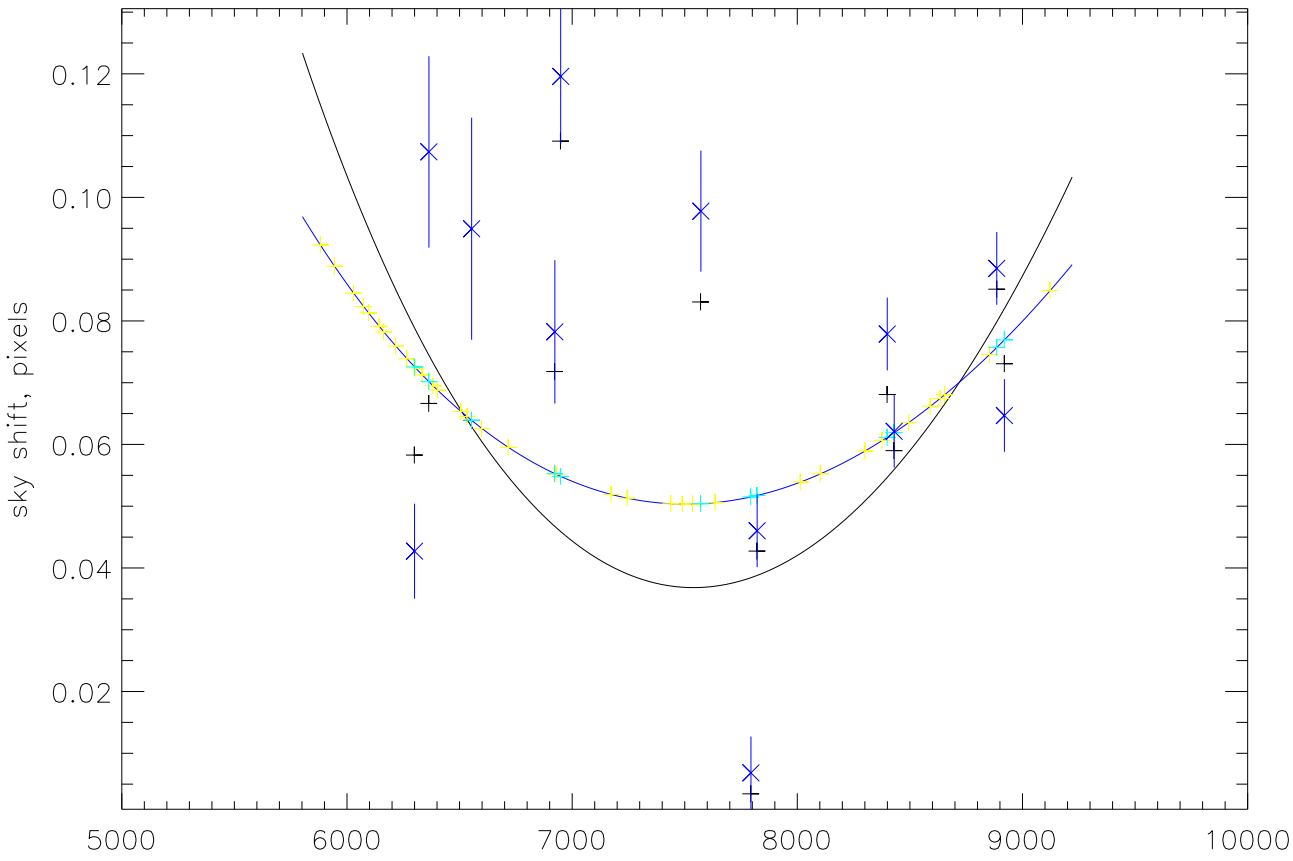

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

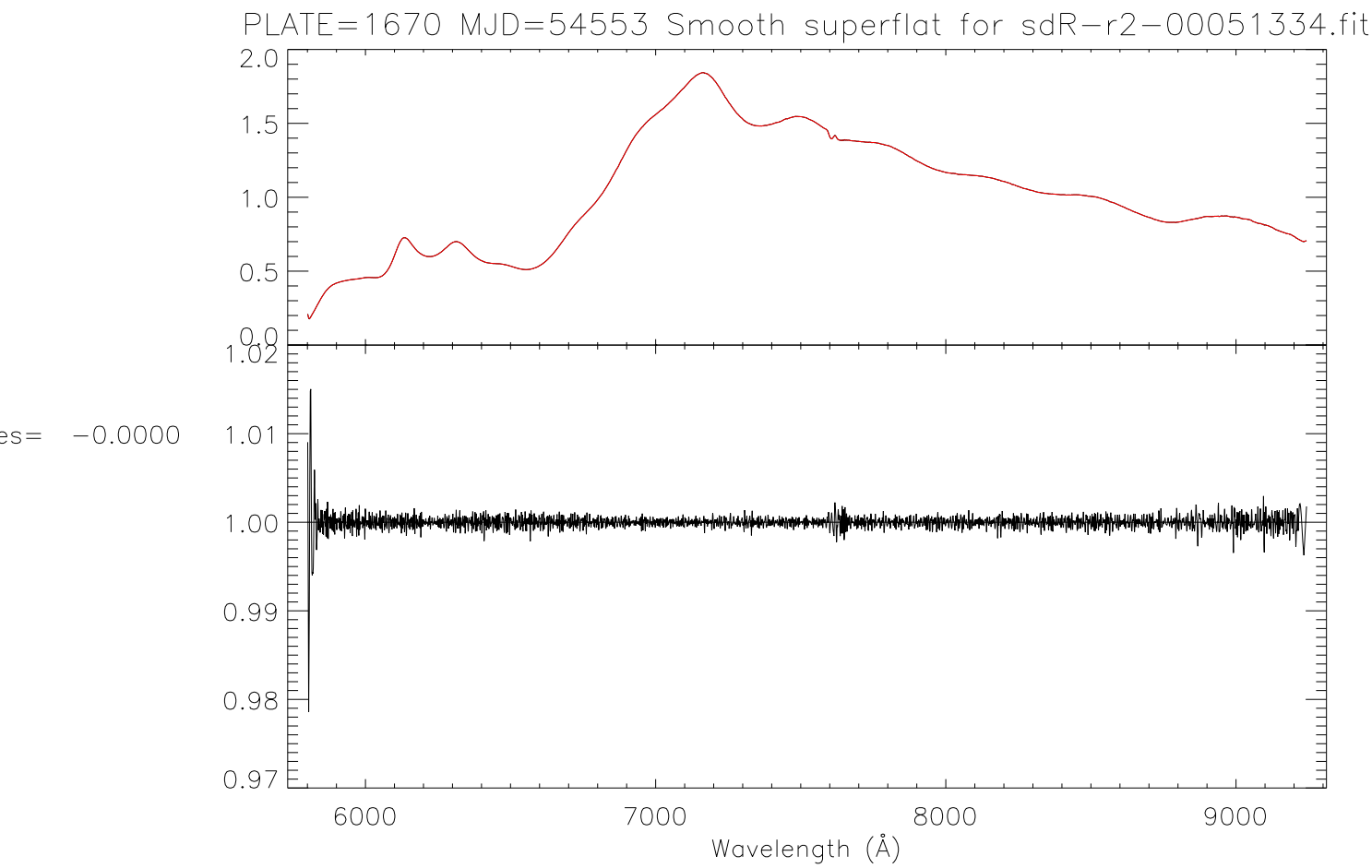

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

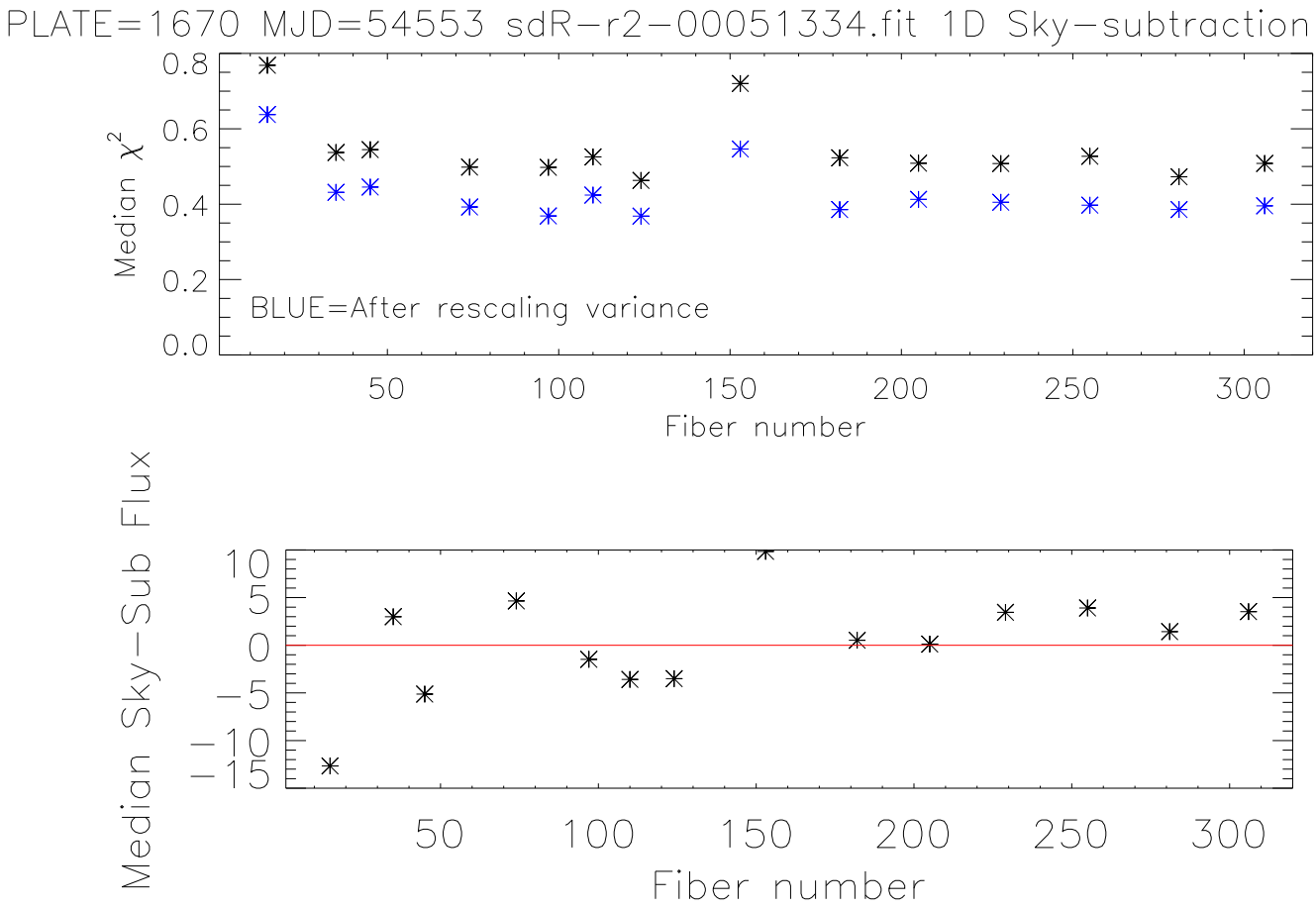

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

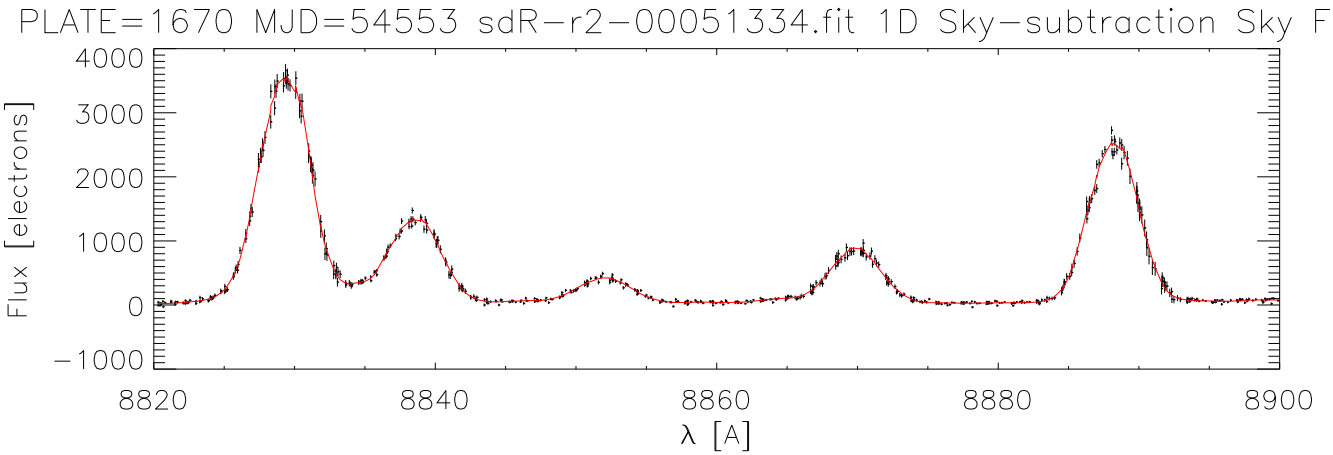

6300.3040
mfib1 16
mfib2 16
stdev 0.033
extra 0.04
6363.7760
mfib1 16
mfib2 16
stdev 0.043
extra 0.113
6553.6100
mfib1 15
mfib2 15
stdev 0.057
extra 0.09
6923.2100
mfib1 16
mfib2 16
stdev 0.041
extra 0.08
6949.0300
mfib1 16
mfib2 16
stdev 0.039
extra 0.12
7571.7500
mfib1 15
mfib2 15
stdev 0.034
extra 0.104
7794.1200
mfib1 15
mfib2 15
stdev 0.017
extra 0.01
7821.5100
mfib1 15
mfib2 15
stdev 0.021
extra 0.05
8399.1600
mfib1 15
mfib2 15
stdev 0.020
extra 0.08
8430.1700
mfib1 14
mfib2 14
stdev 0.017
extra 0.06
8885.8300
mfib1 16
mfib2 16
stdev 0.020
extra 0.09
8919.6100
mfib1 15
mfib2 15
stdev 0.023
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

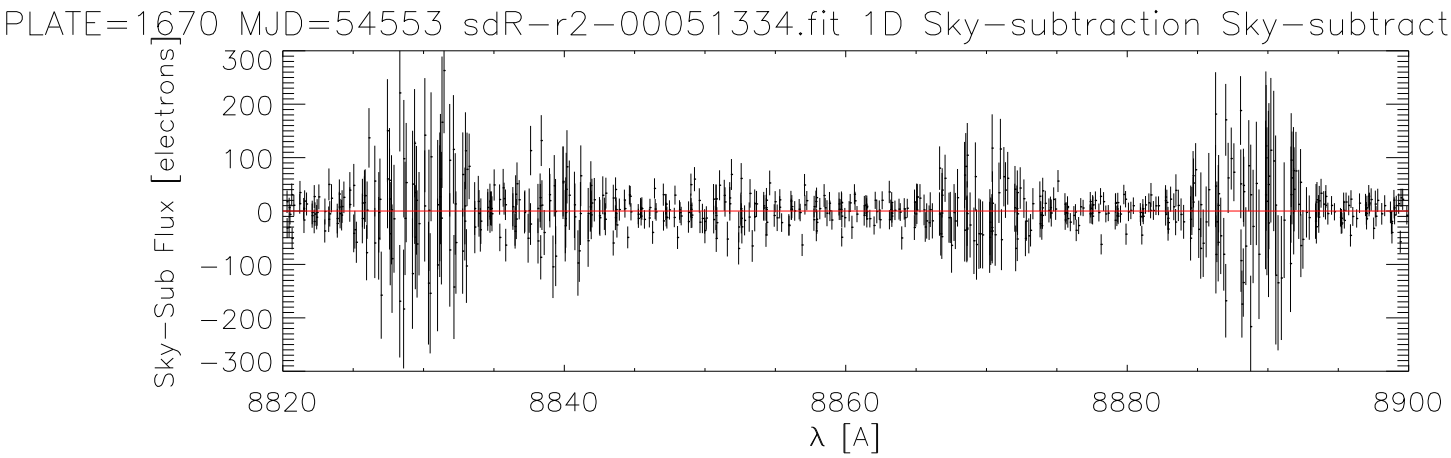

sky shift, pixels
0.12
0.10
0.08
0.06
0.04
0.02
5000
6000
7000
8000
9000
10000

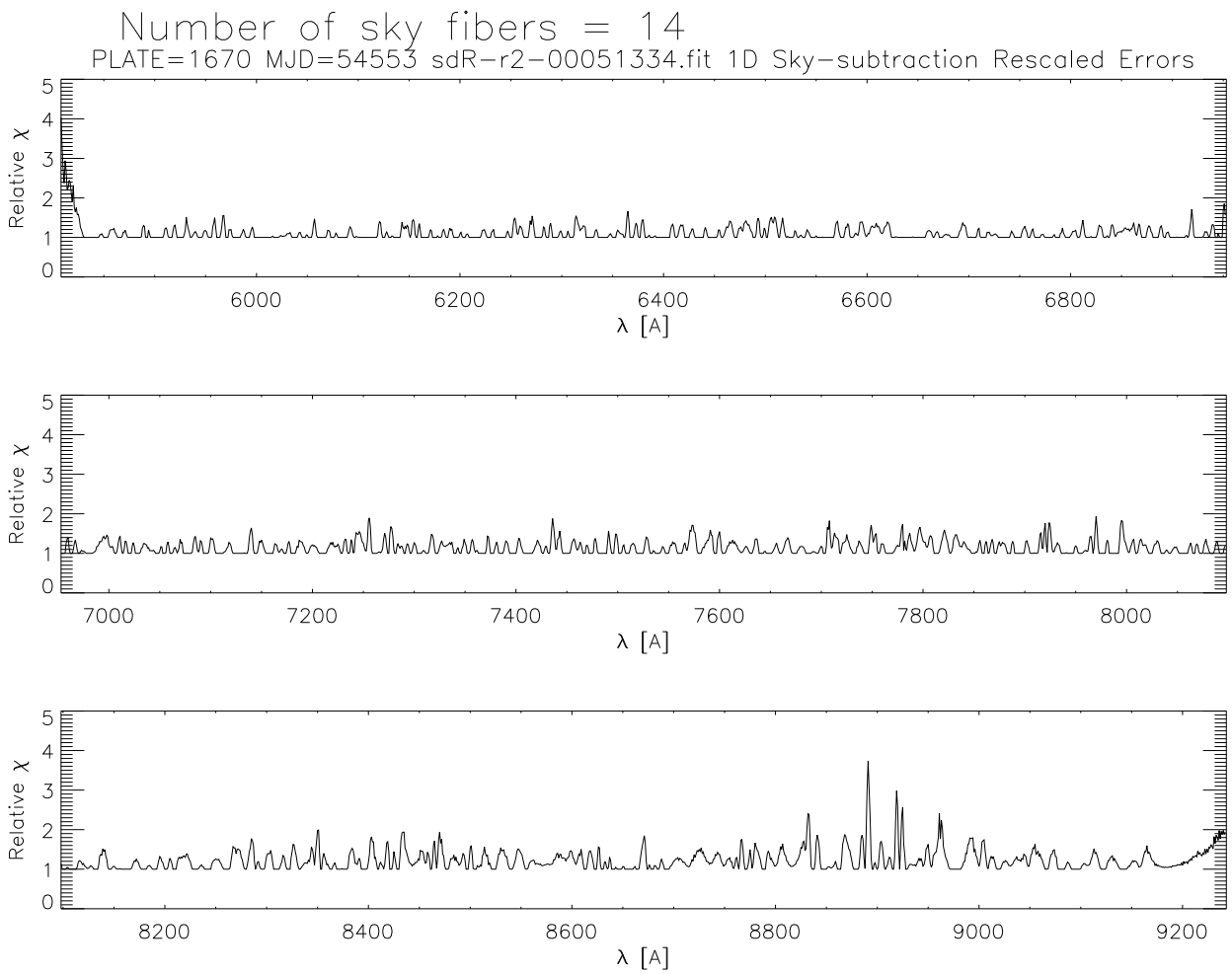

PLATE=1670 MJD=54553 Smooth superflat for sdR-r2-00051334.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
6000
7000
8000
9000
Wavelength (Å)

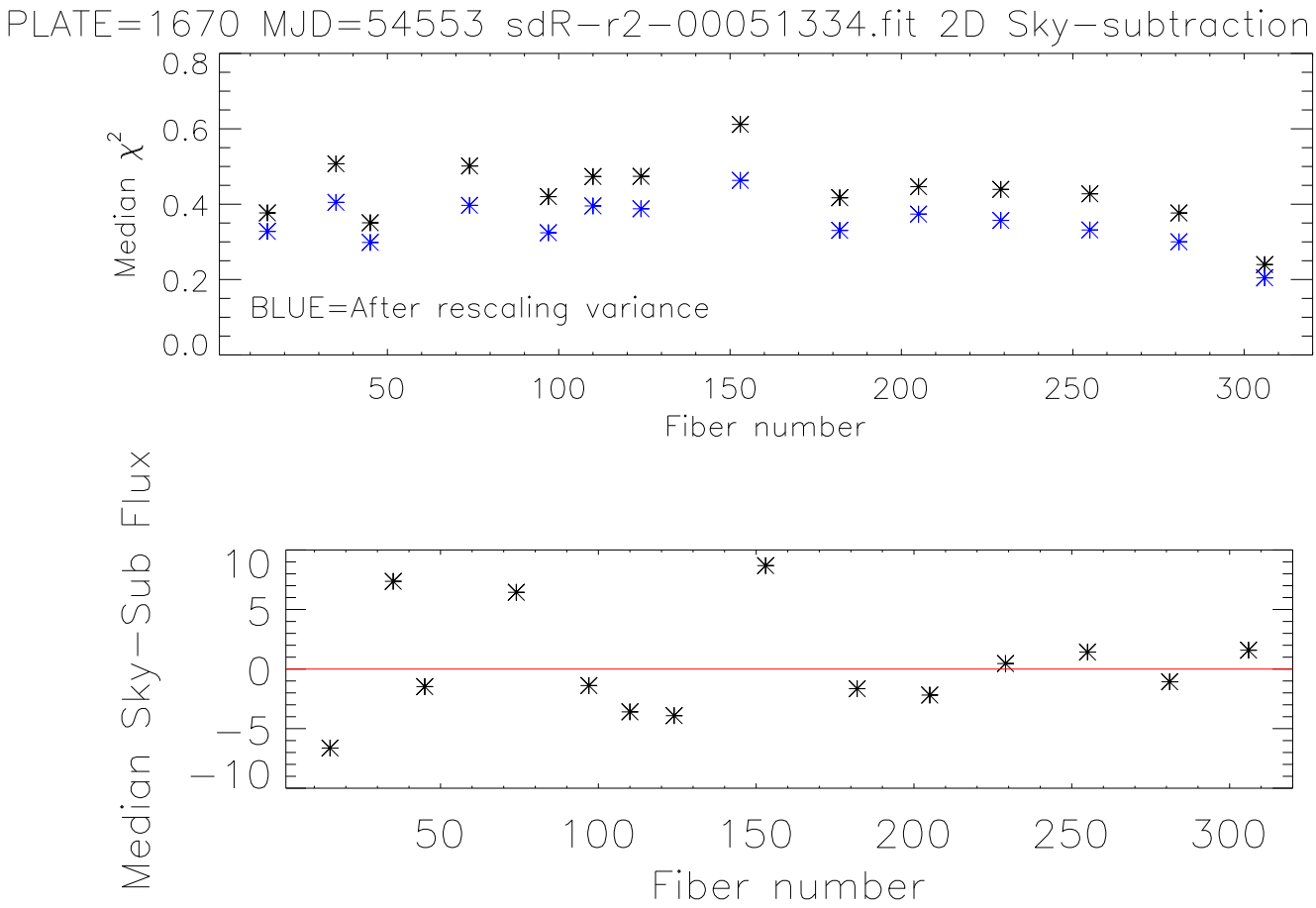
es= −0.0000

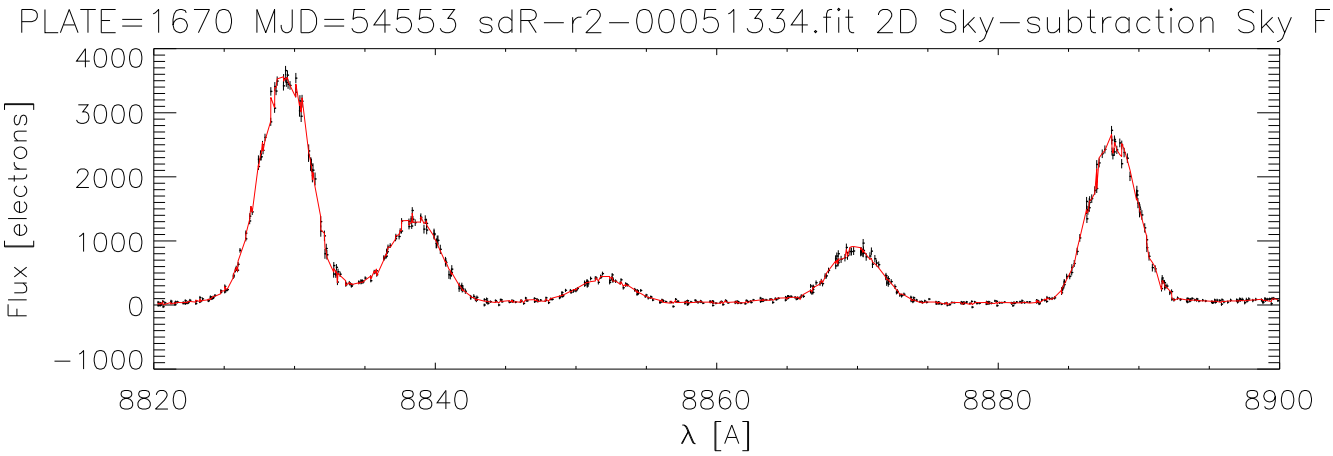

PLATE=1670 MJD=54553 sdR-r2-00051334.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

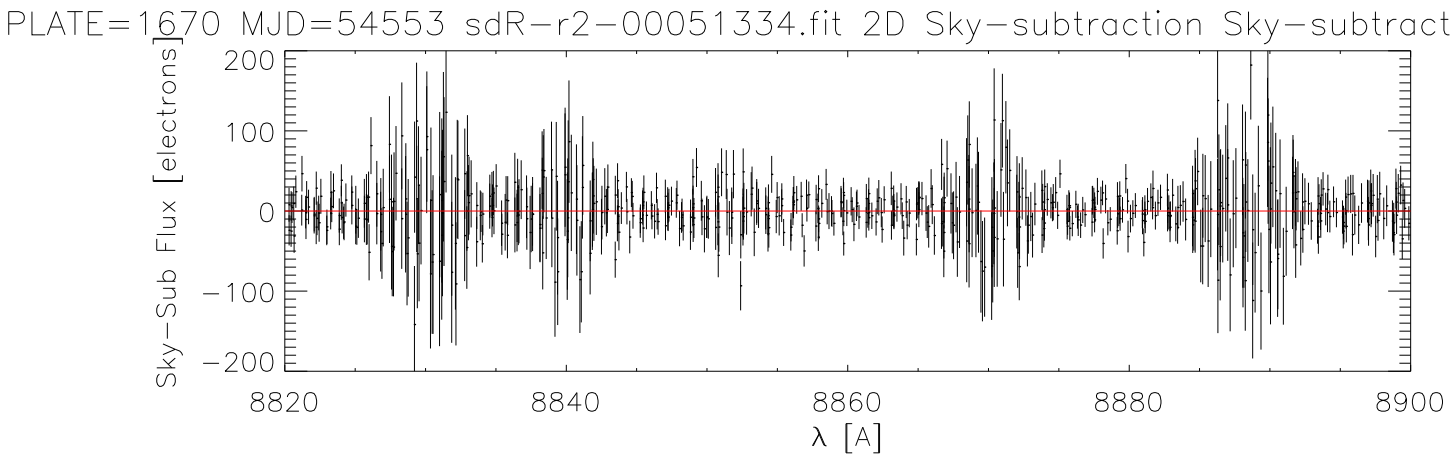

PLATE=1670 MJD=54553 sdR-r2-00051334.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

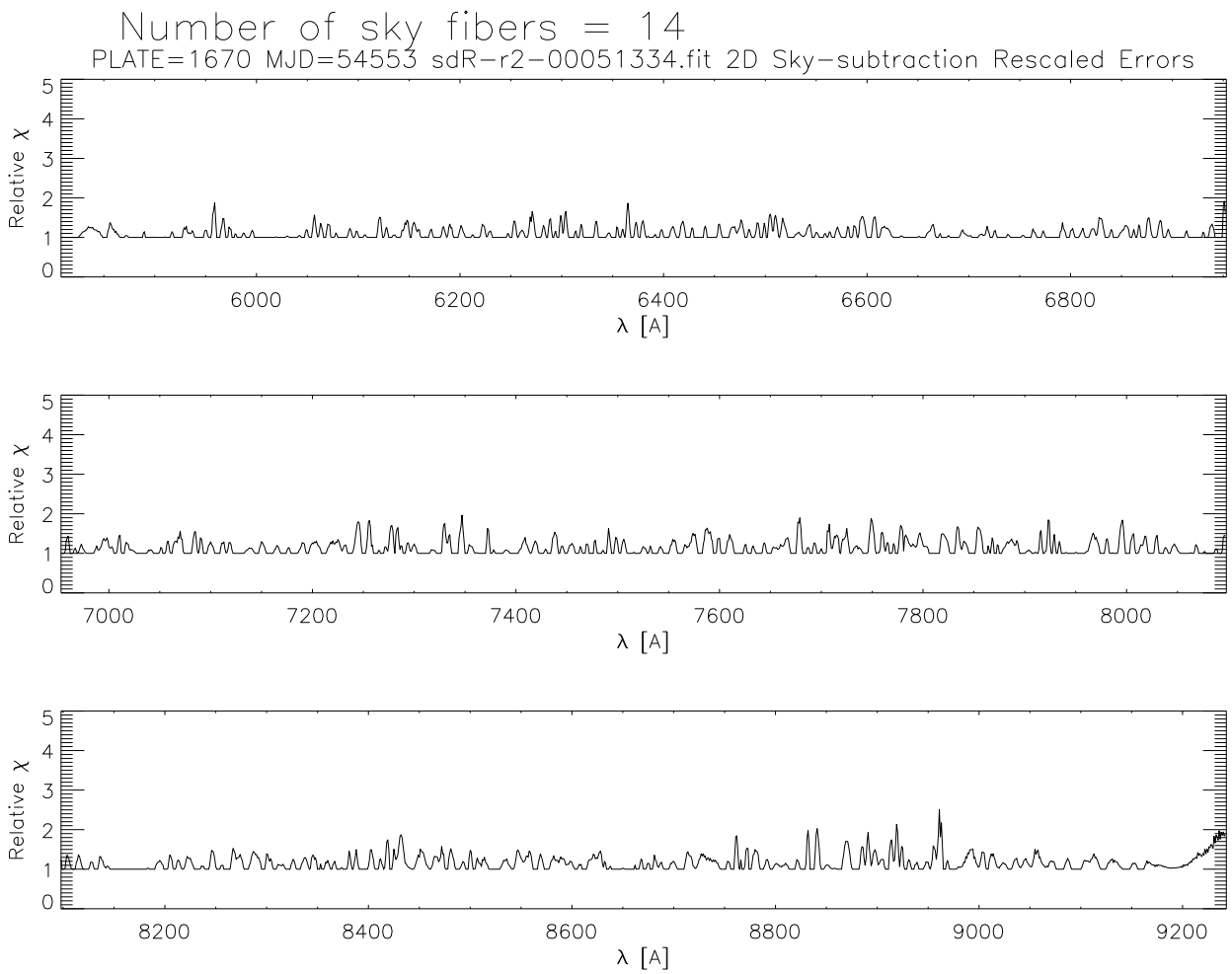

PLATE=1670 MJD=54553 sdR-r2-00051334.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

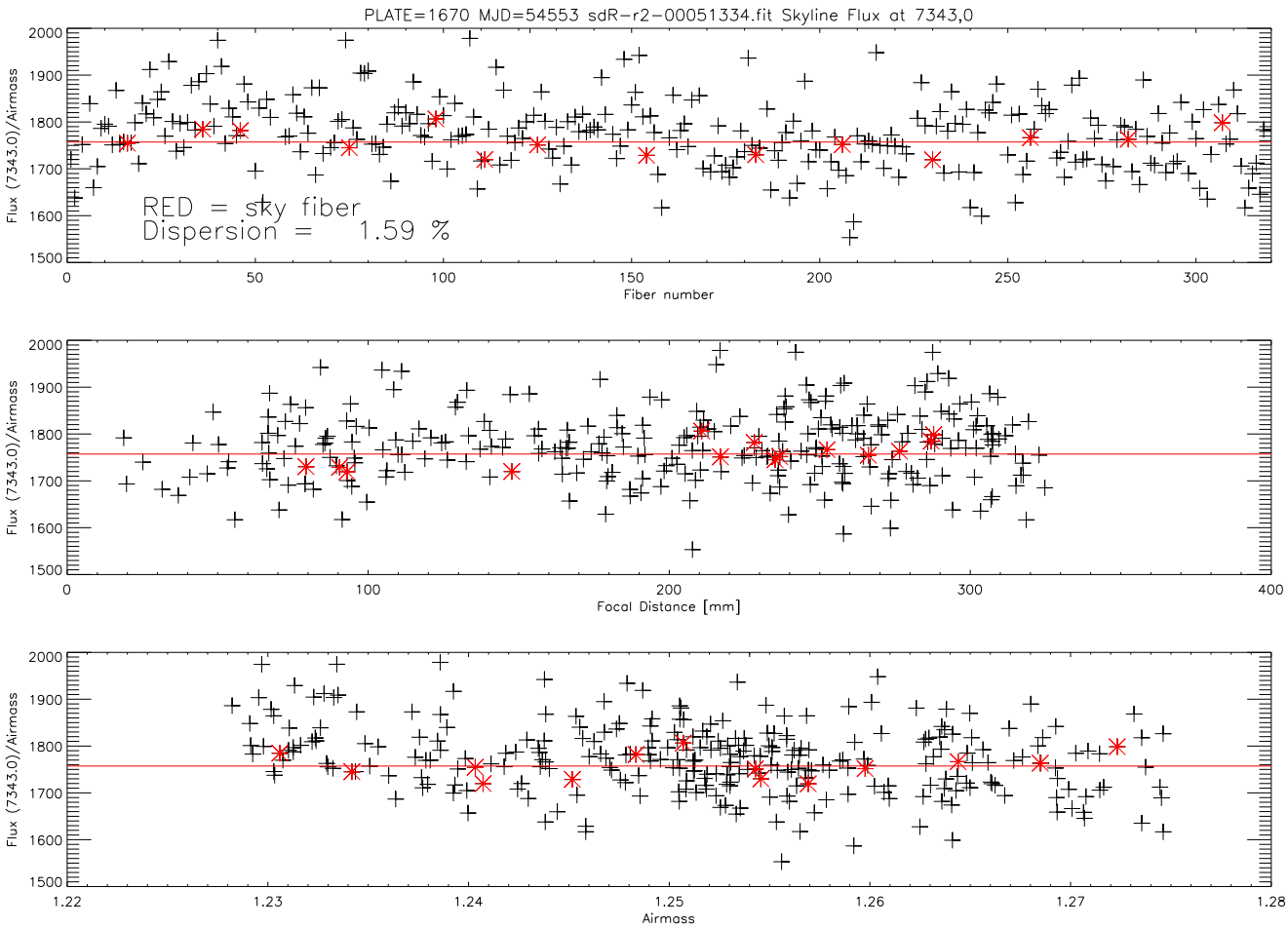

Number of sky fibers = 14
PLATE=1670 MJD=54553 sdR-r2-00051334.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

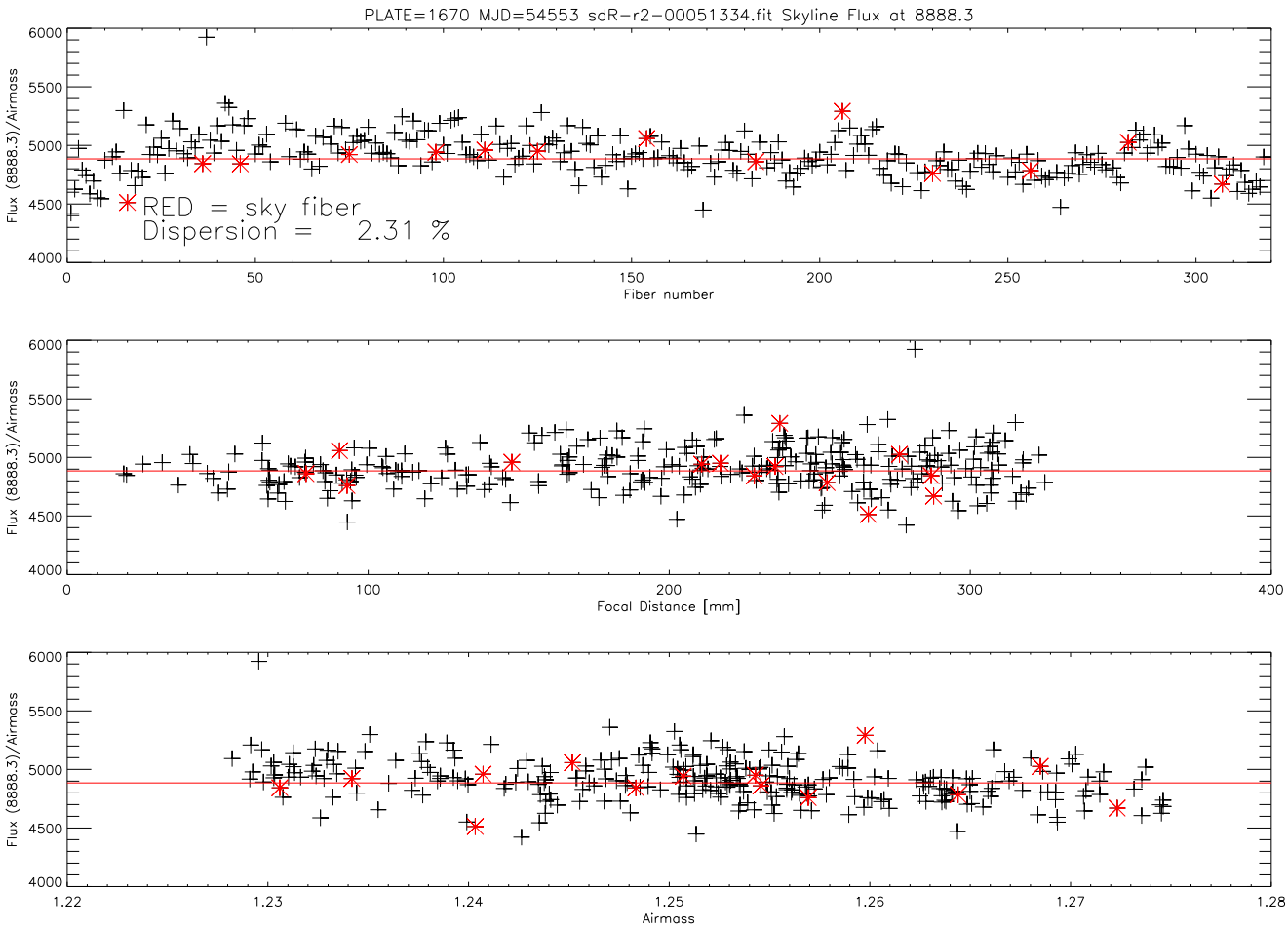

PLATE=1670 MJD=54553 sdR-r2-00051334.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number


PLATE=1670 MJD=54553 sdR-r2-00051334.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]


PLATE=1670 MJD=54553 sdR-r2-00051334.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=1670 MJD=54553 sdR-r2-00051334.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
0
1
2
3
4
5


PLATE=1670 MJD=54553 sdR-r2-00051334.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.59 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1670 MJD=54553 sdR-r2-00051334.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.31 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass