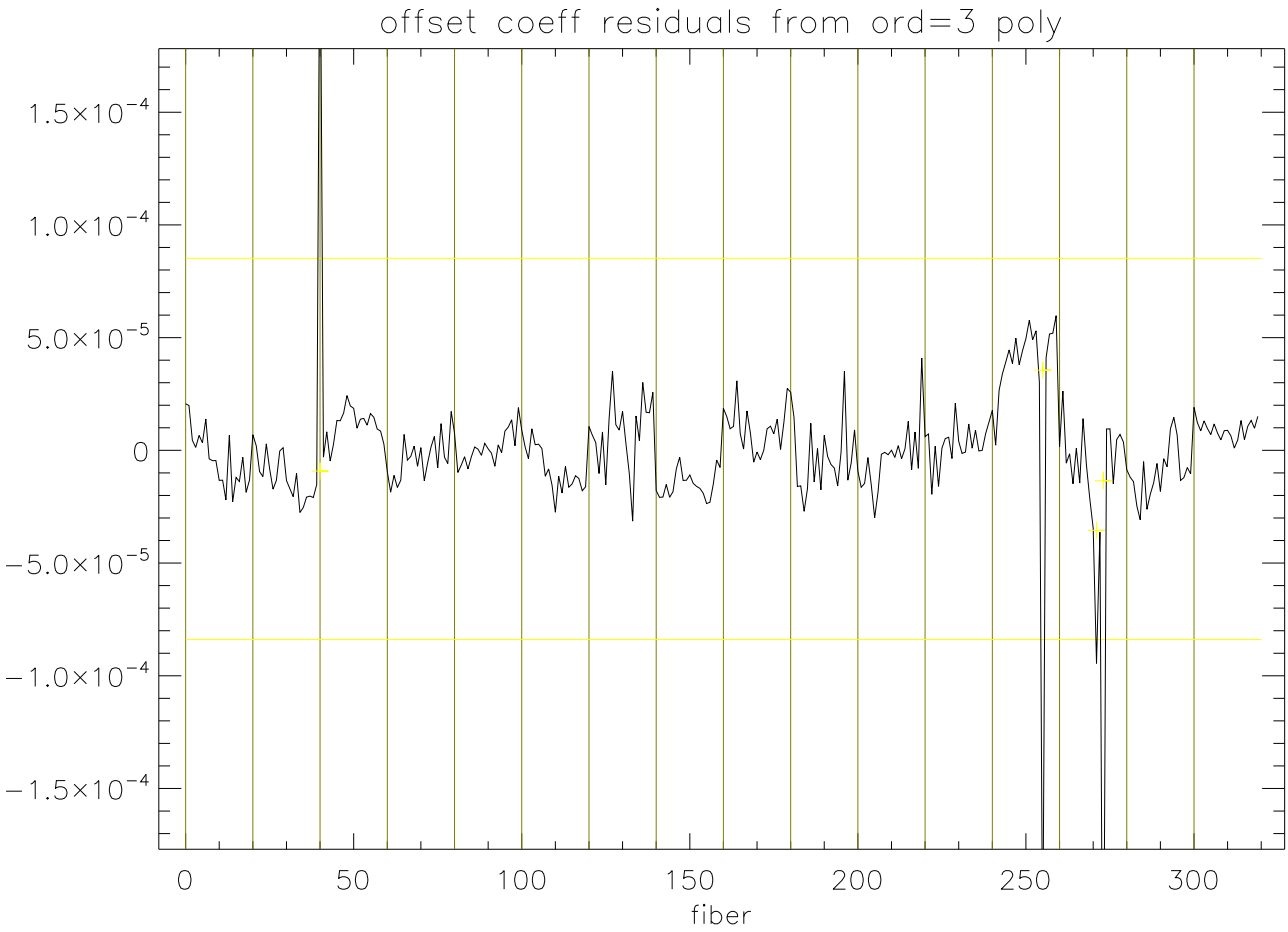
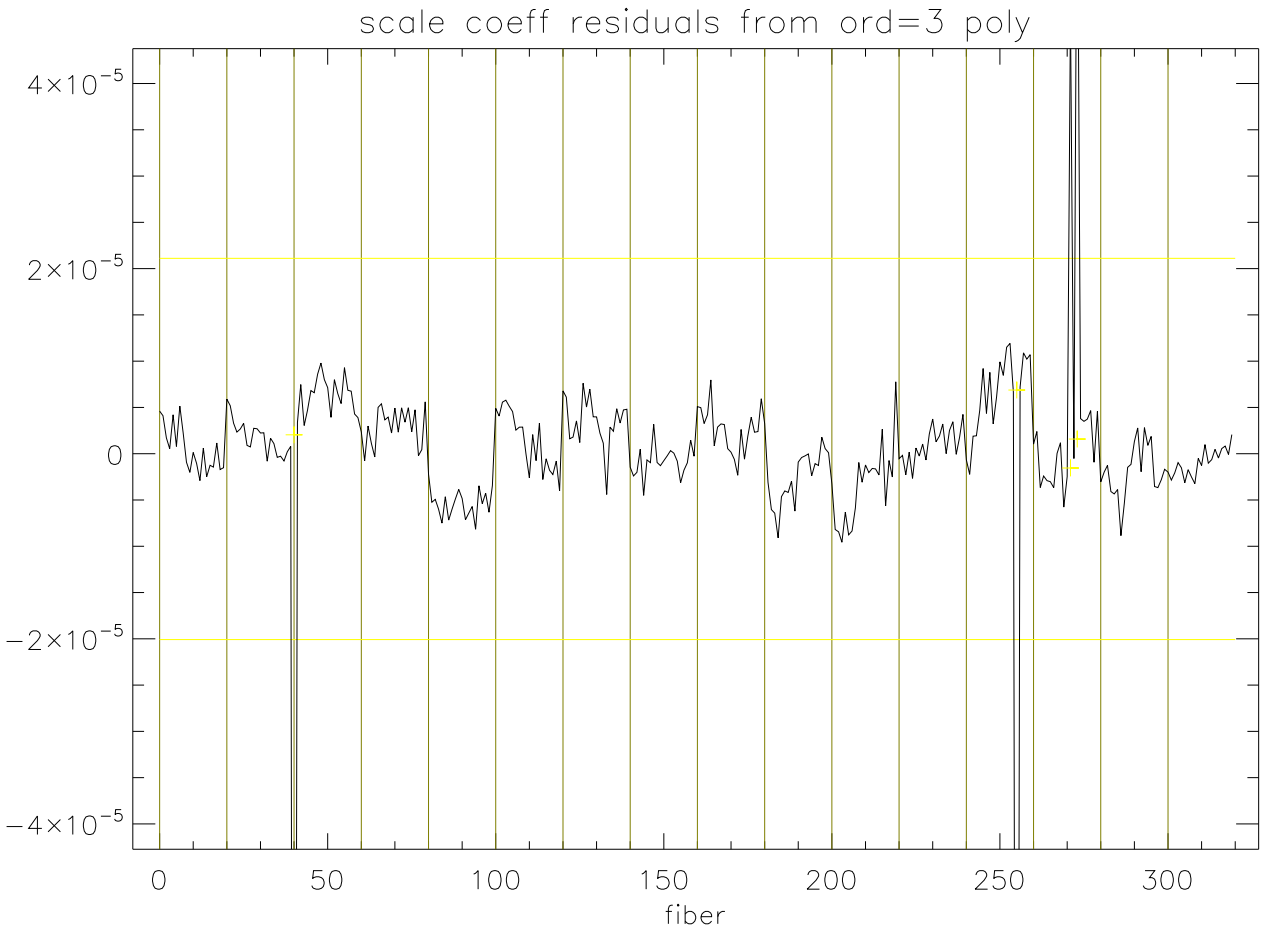
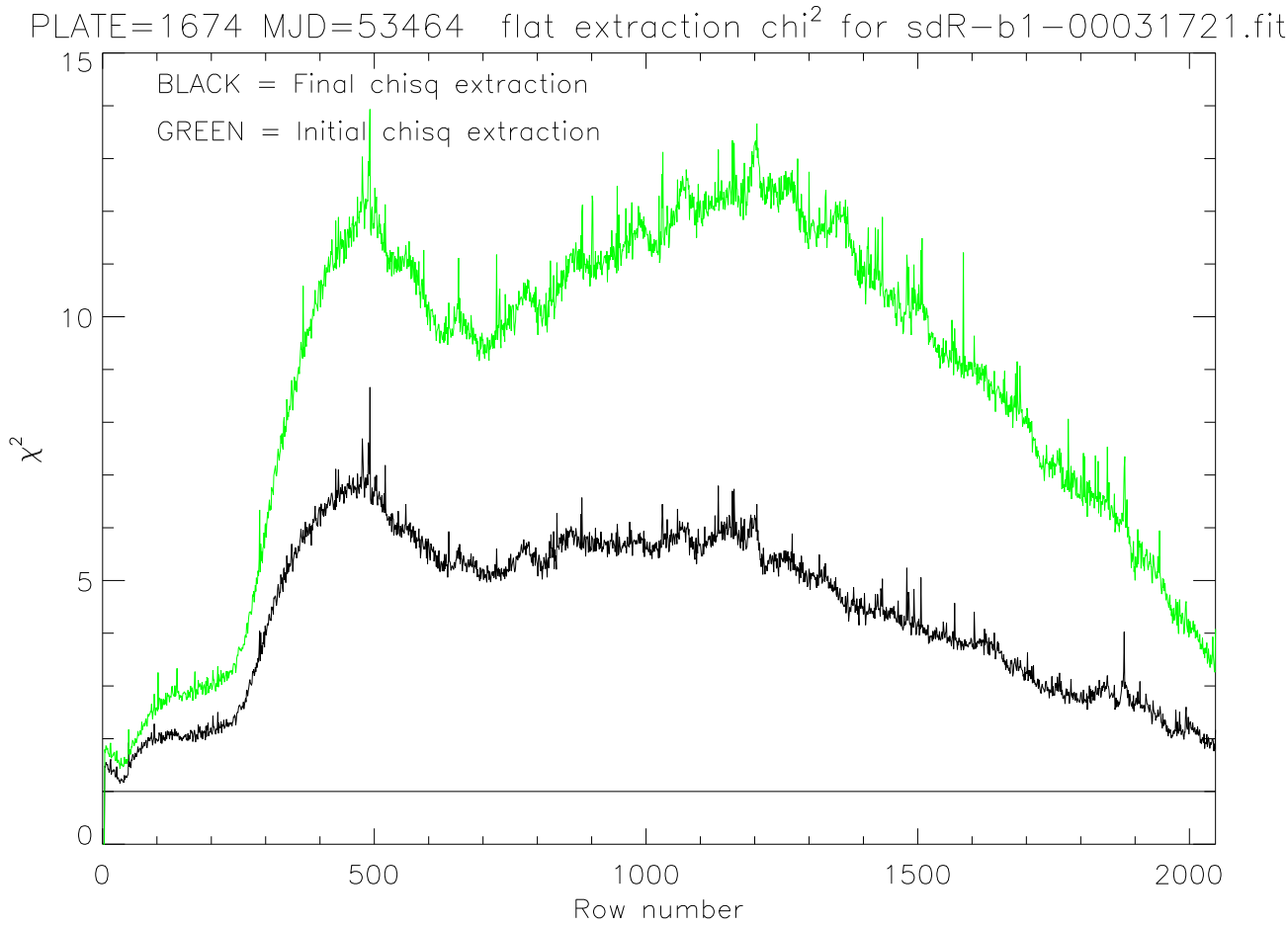
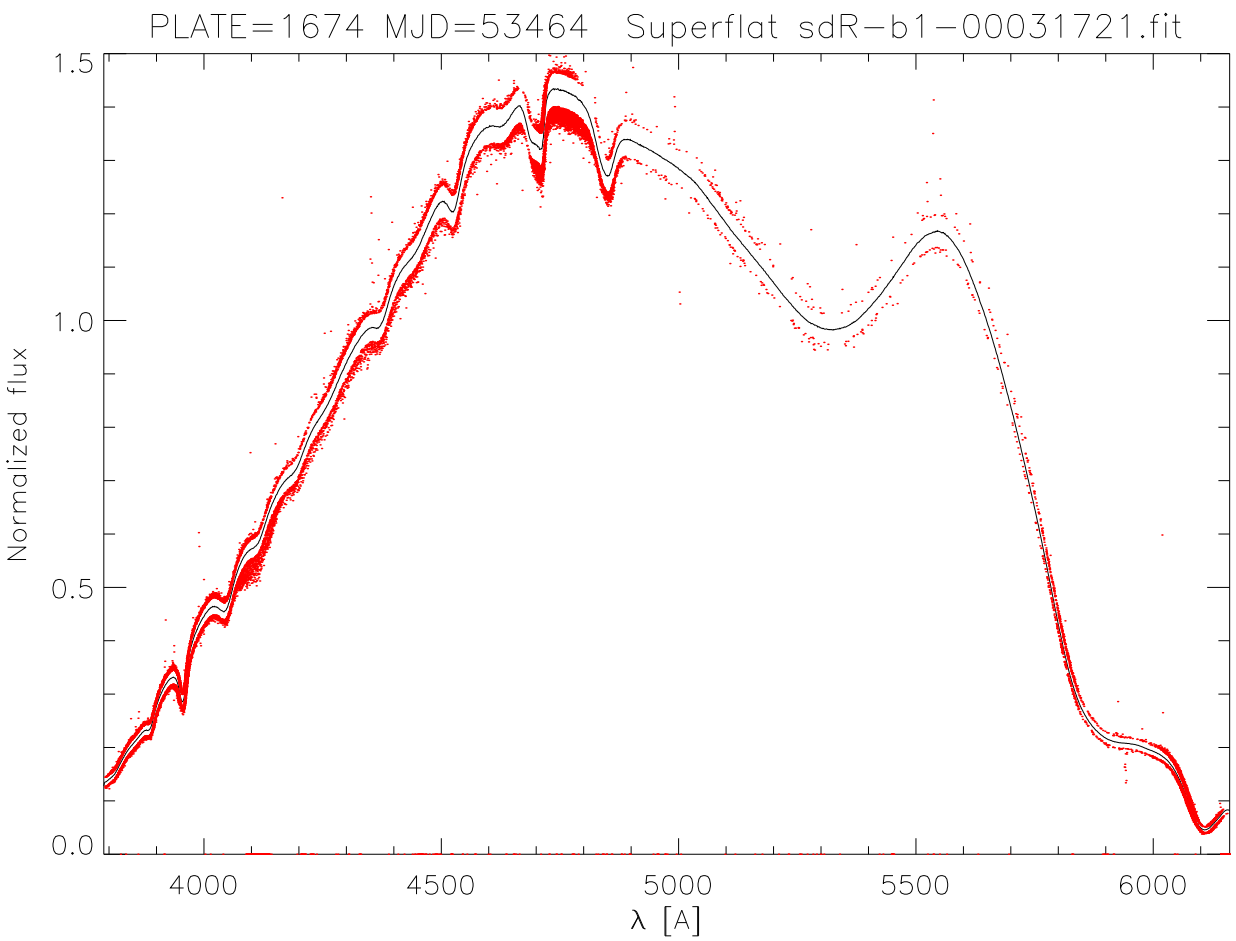
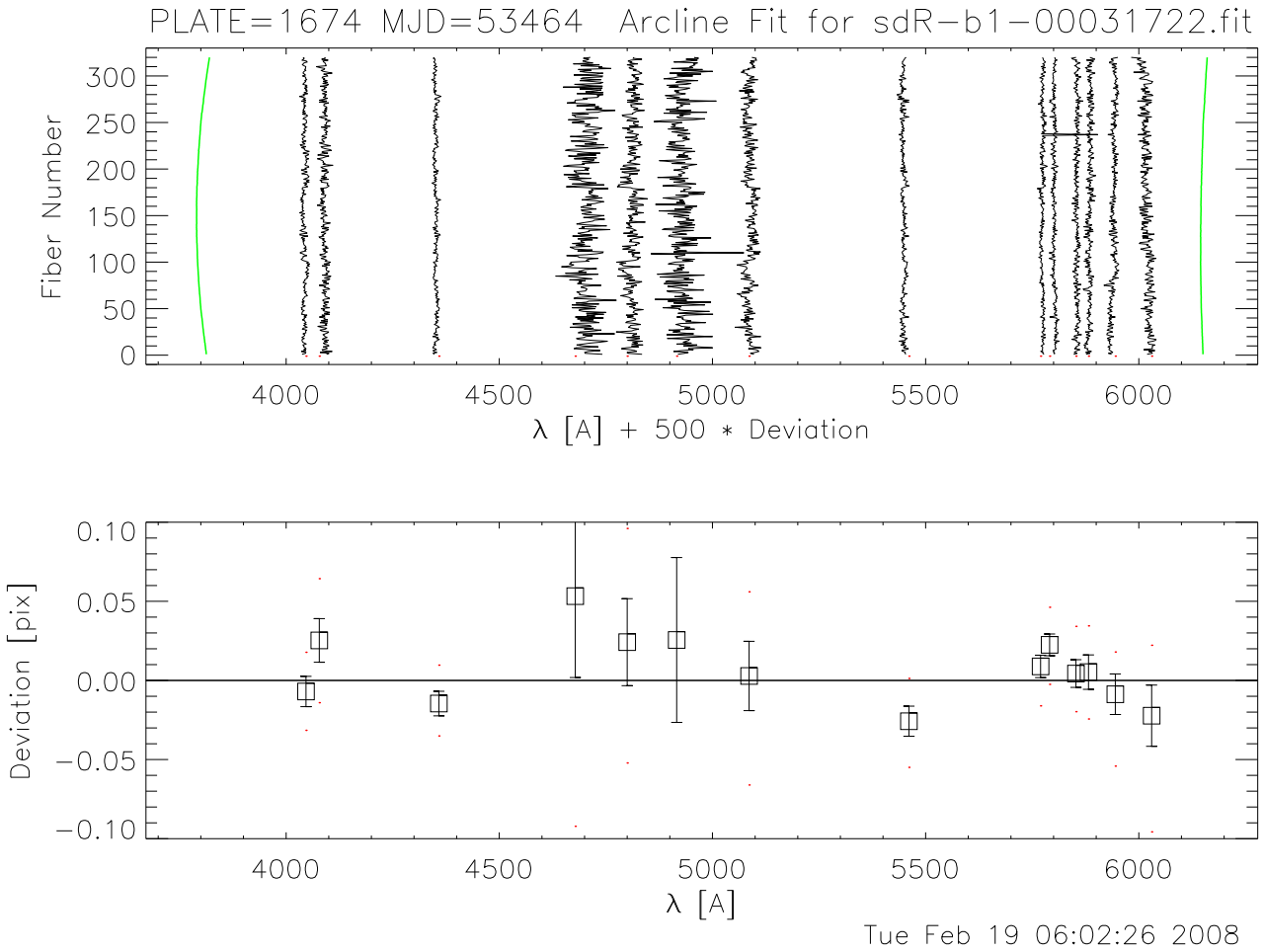
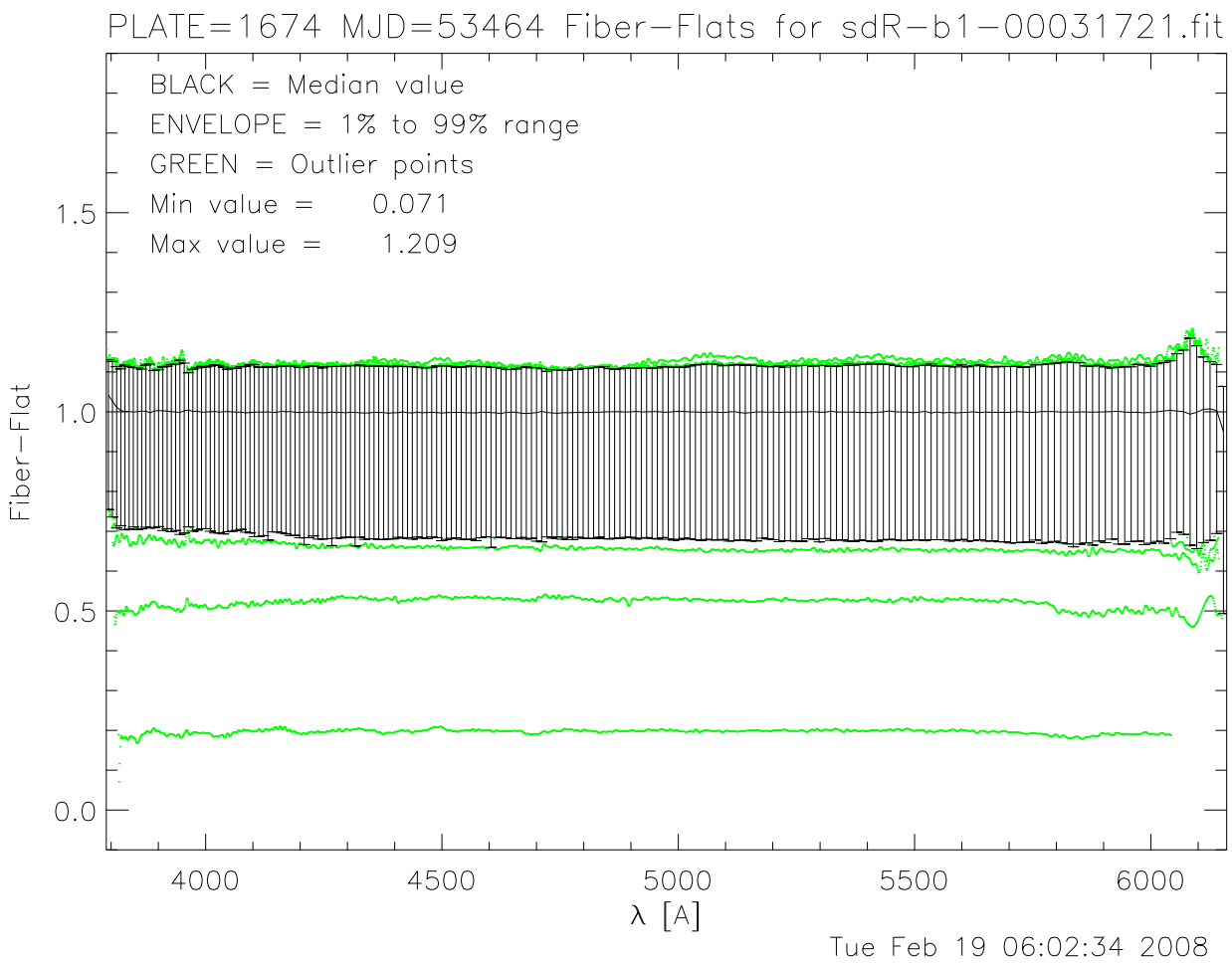

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

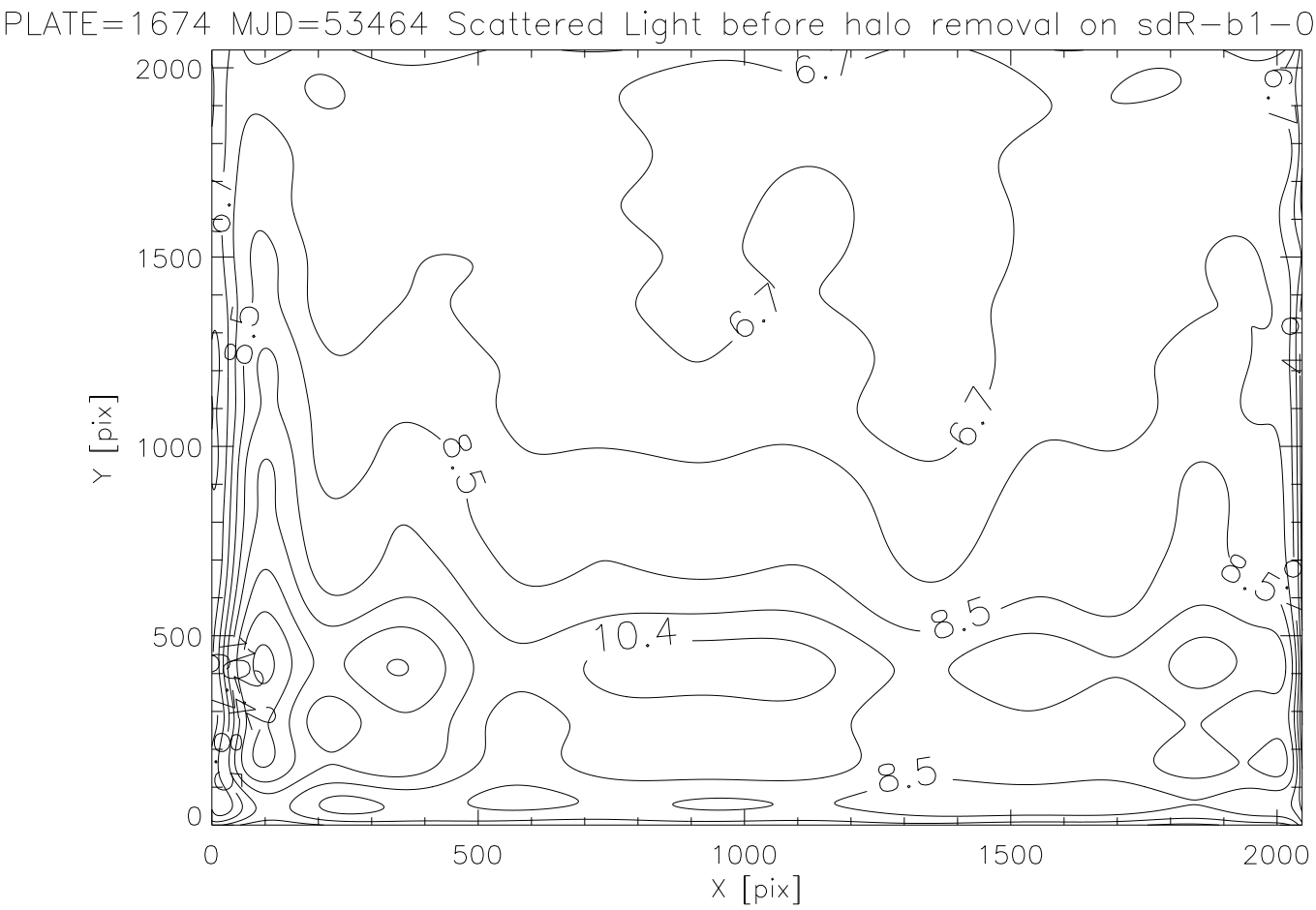

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

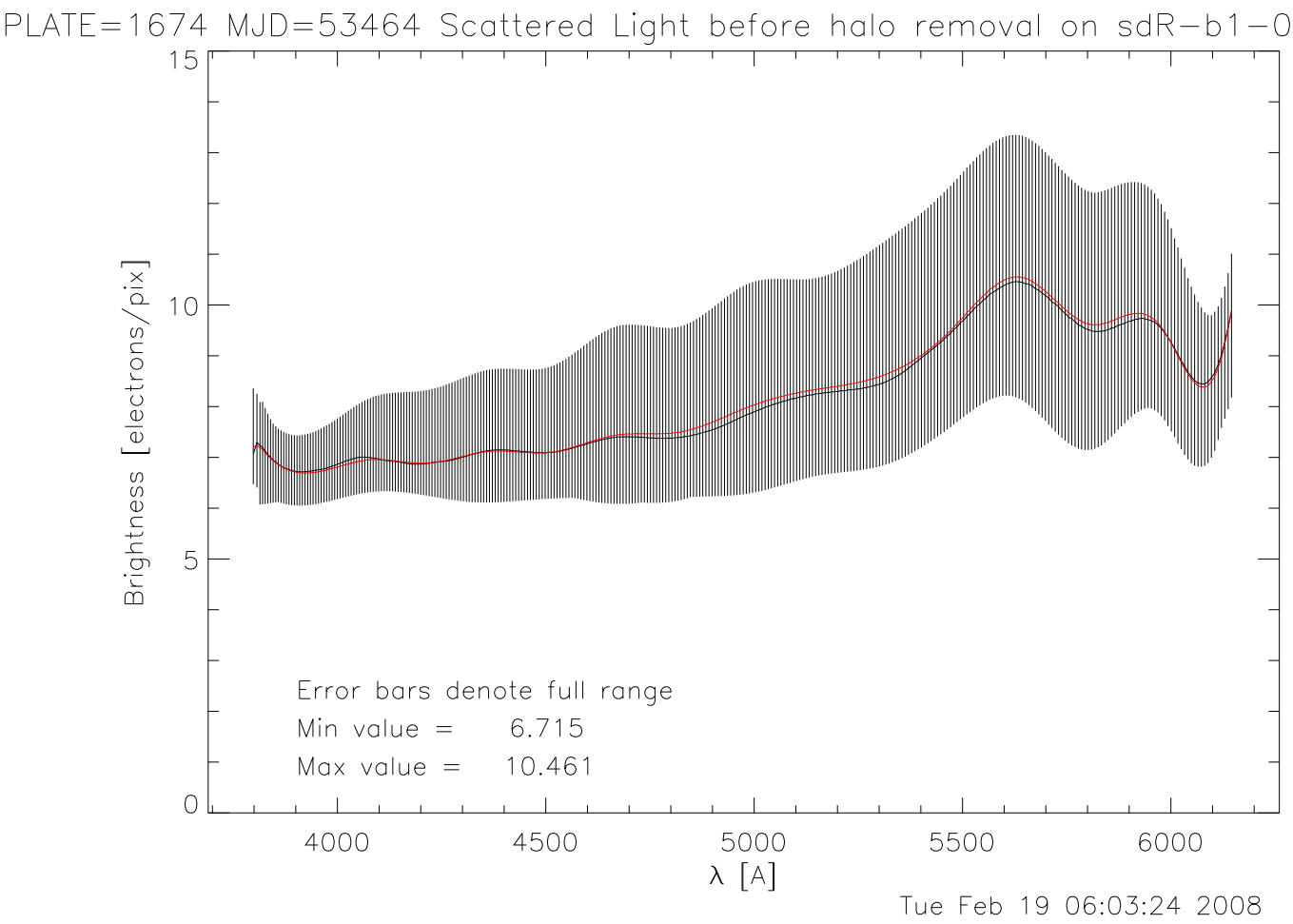

PLATE=1674 MJD=53464 flat extraction chi^2 for sdR-b1-00031721.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

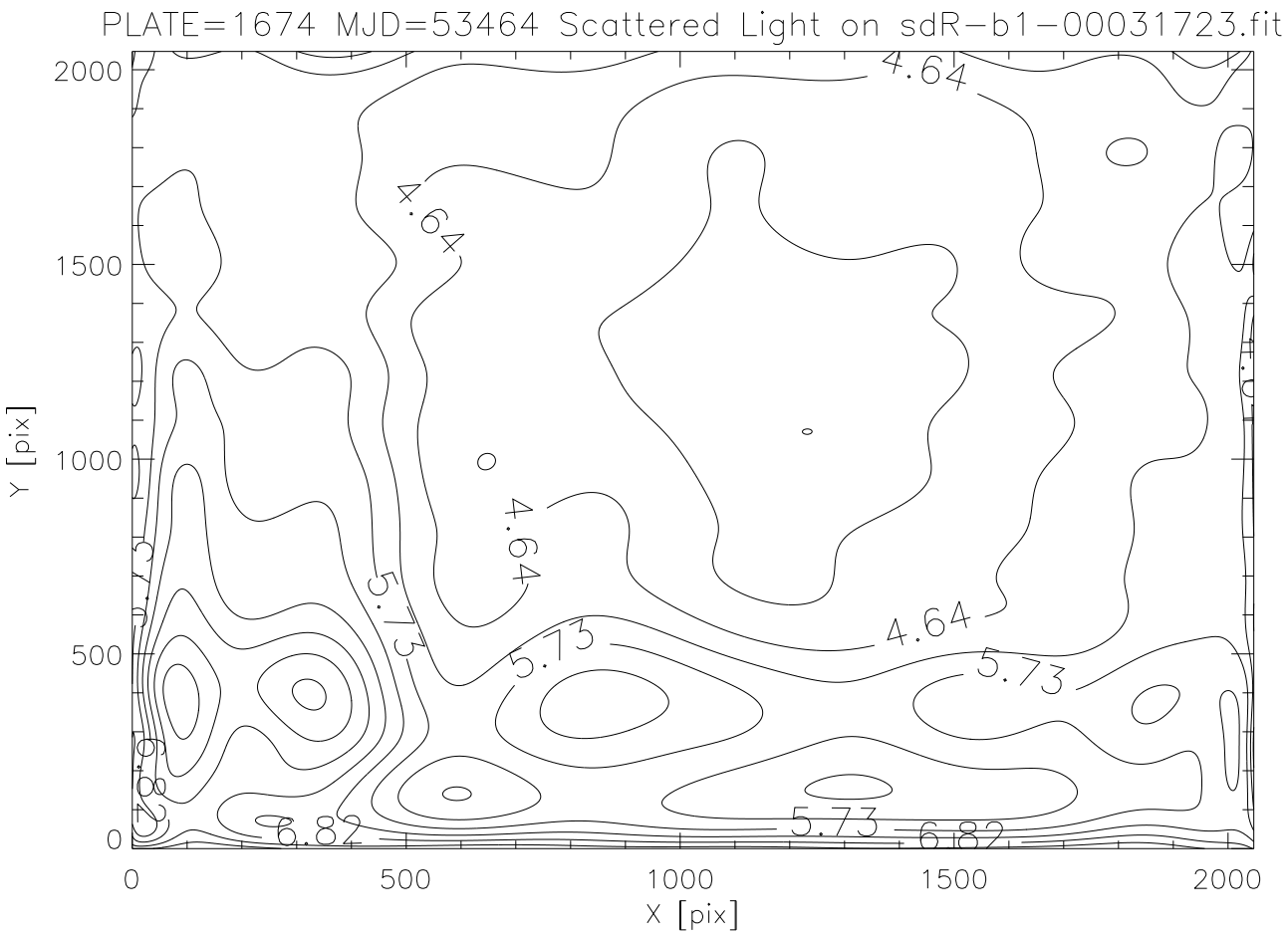

PLATE=1674 MJD=53464 Superflat sdR-b1-00031721.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

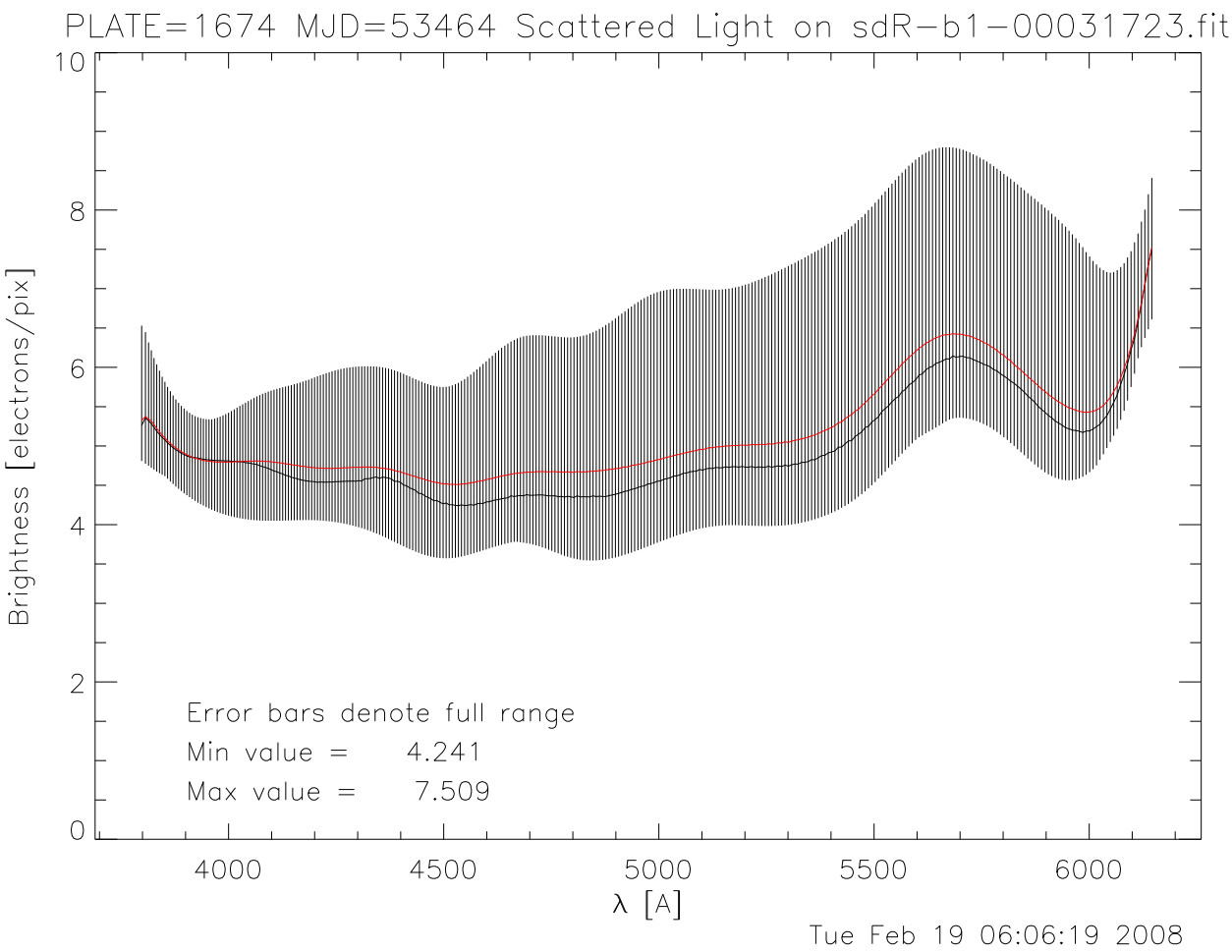

PLATE=1674 MJD=53464 Arcline Fit for sdR-b1-00031722.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:02:26 2008

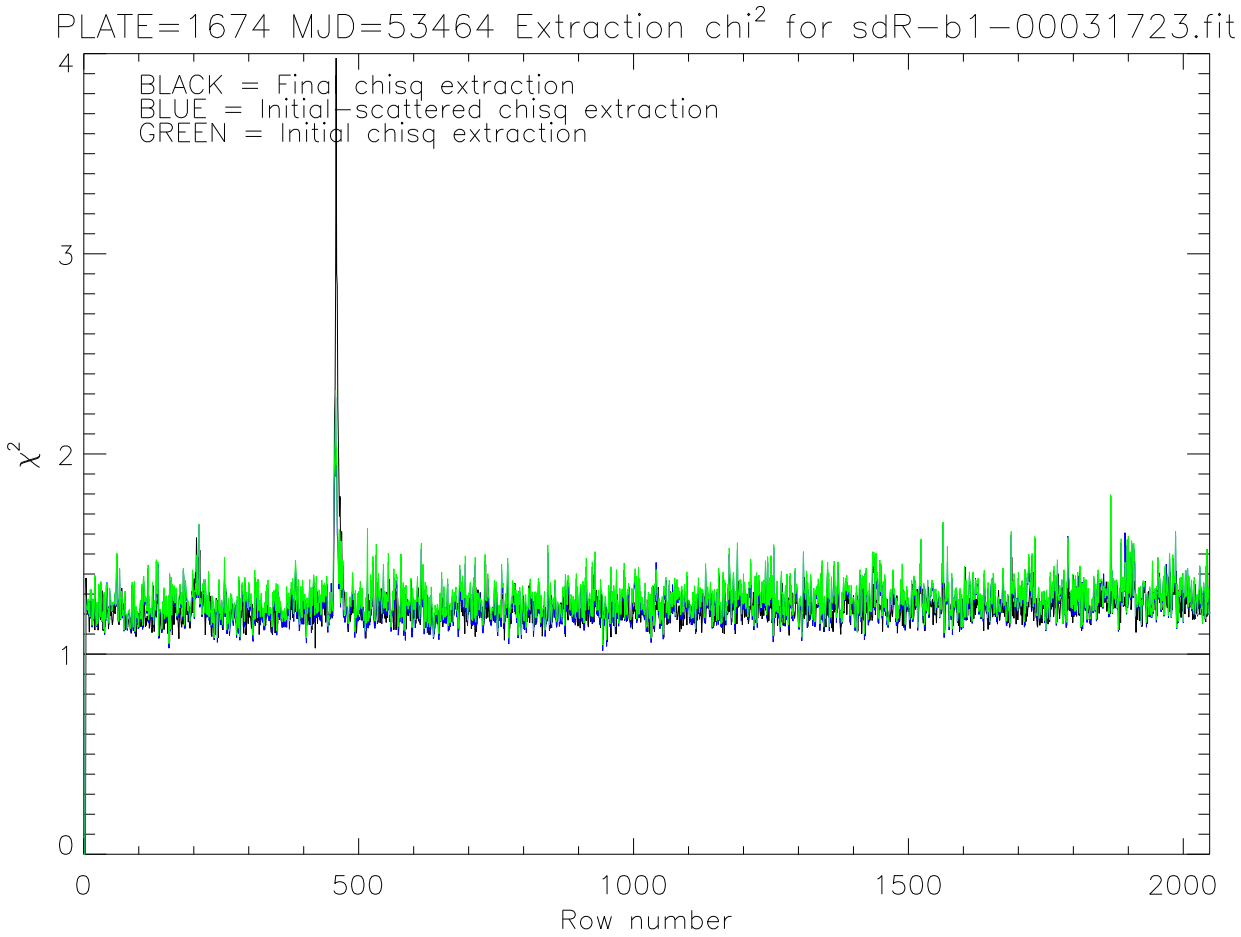

PLATE=1674 MJD=53464 Fiber−Flats for sdR−b1−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.071
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:02:34 2008

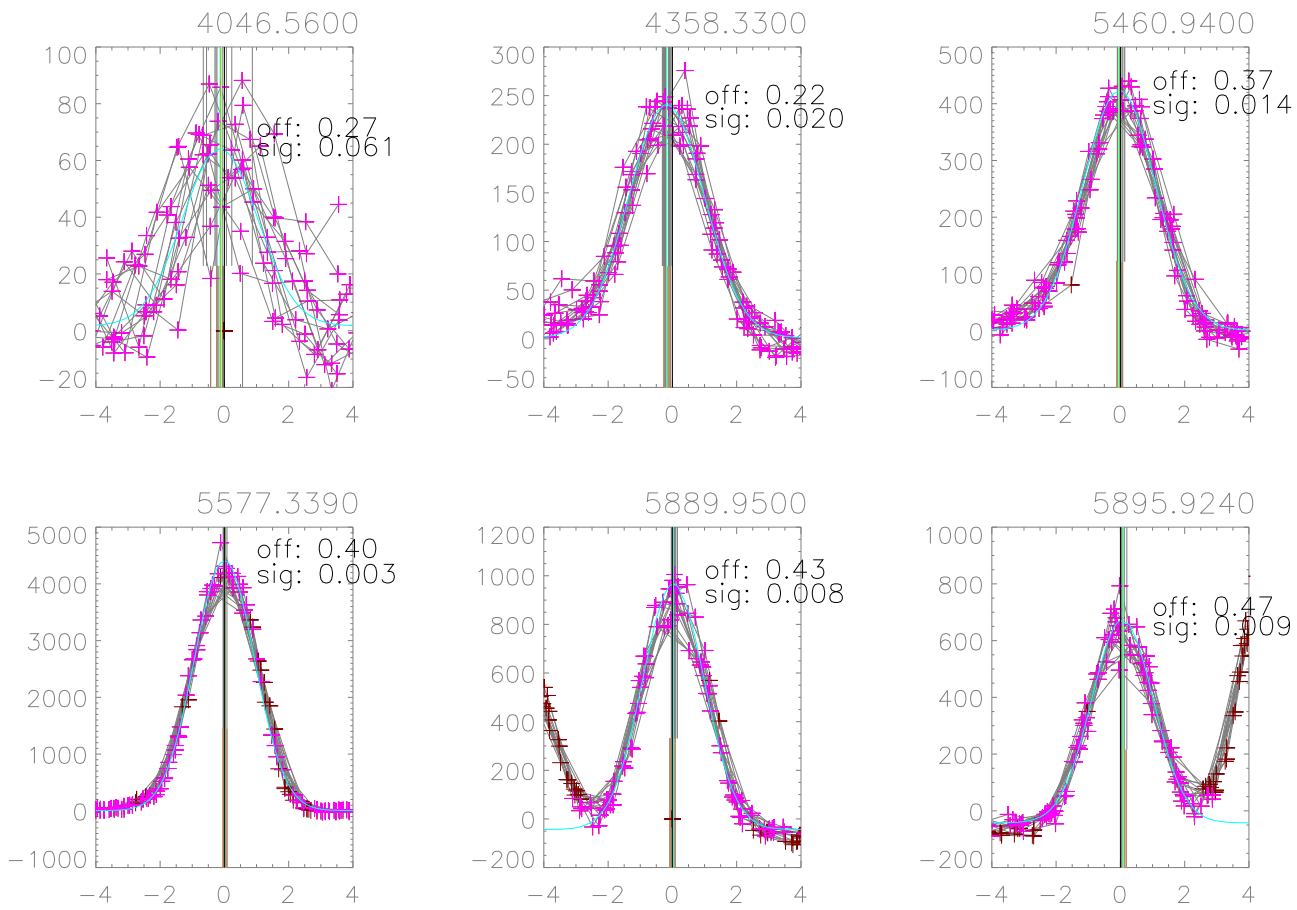

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR−b1−00031723.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.7
8.5
10.4

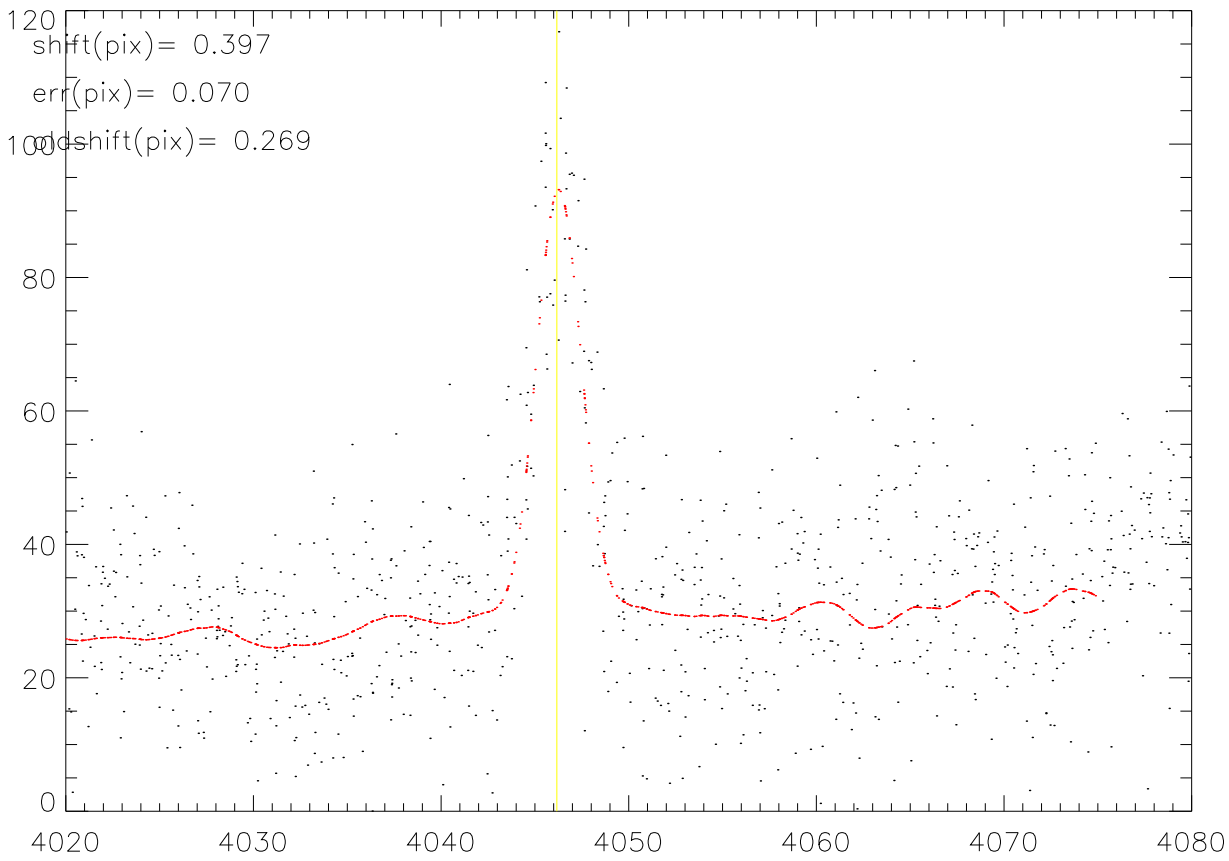

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b1-00031723.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.715
Max value = 10.461
Tue Feb 19 06:03:24 2008

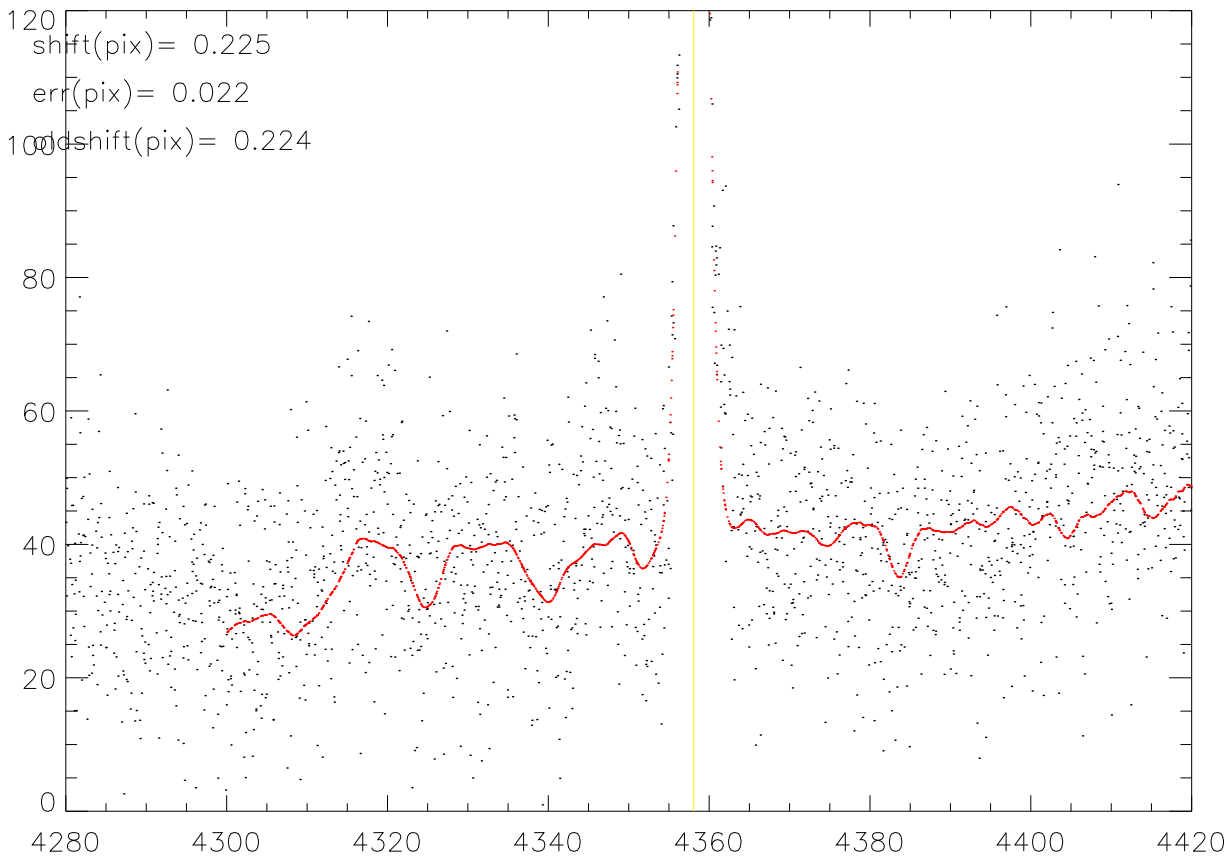

PLATE=1674 MJD=53464 Scattered Light on sdR-b1-00031723.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.64
5.73
6.82

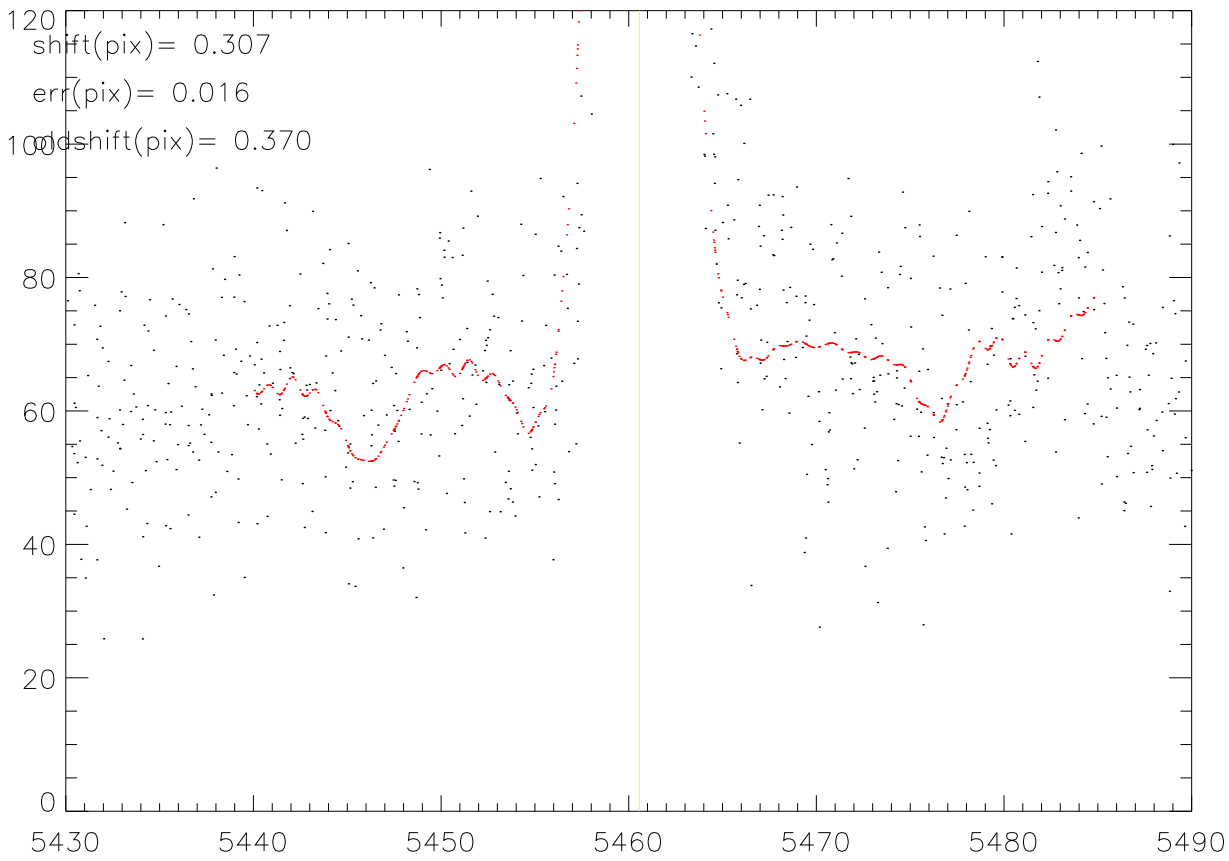

PLATE=1674 MJD=53464 Scattered Light on sdR-b1-00031723.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.241
Max value = 7.509
Tue Feb 19 06:06:19 2008

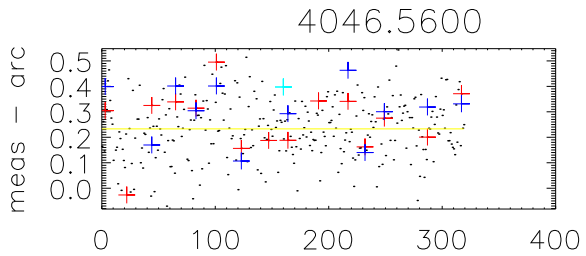

PLATE=1674 MJD=53464 Extraction chi^2 for sdR-b1-00031723.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

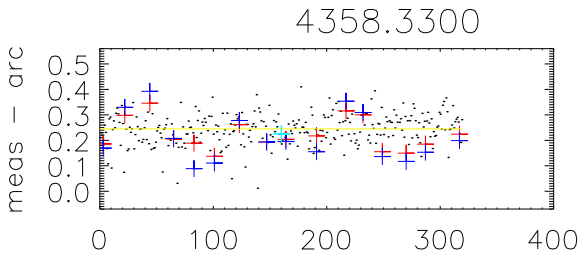

4046.5600
off: 0.27
sig: 0.061
4358.3300
off: 0.22
sig: 0.020
5460.9400
off: 0.37
sig: 0.014
5577.3390
off: 0.40
sig: 0.003
5889.9500
off: 0.43
sig: 0.008
5895.9240
off: 0.47
sig: 0.009

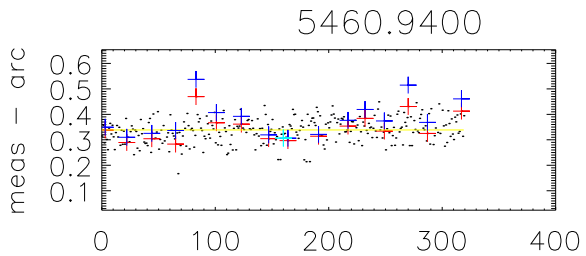

shift(pix)= 0.397
err(pix)= 0.070
oldshift(pix)= 0.269
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

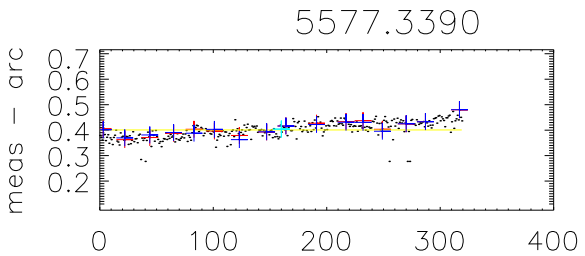

shift(pix)= 0.225
err(pix)= 0.022
oldshift(pix)= 0.224
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

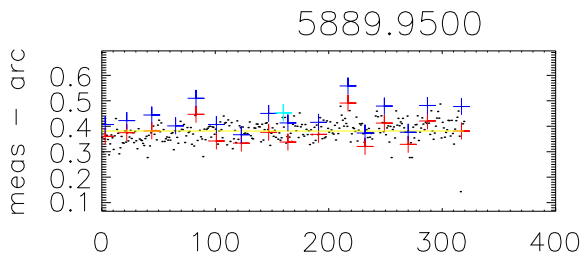

shift(pix)= 0.307
err(pix)= 0.016
oldshift(pix)= 0.370
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

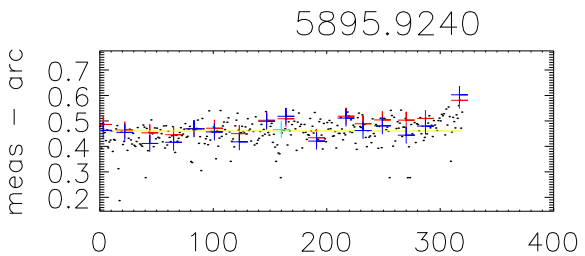

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

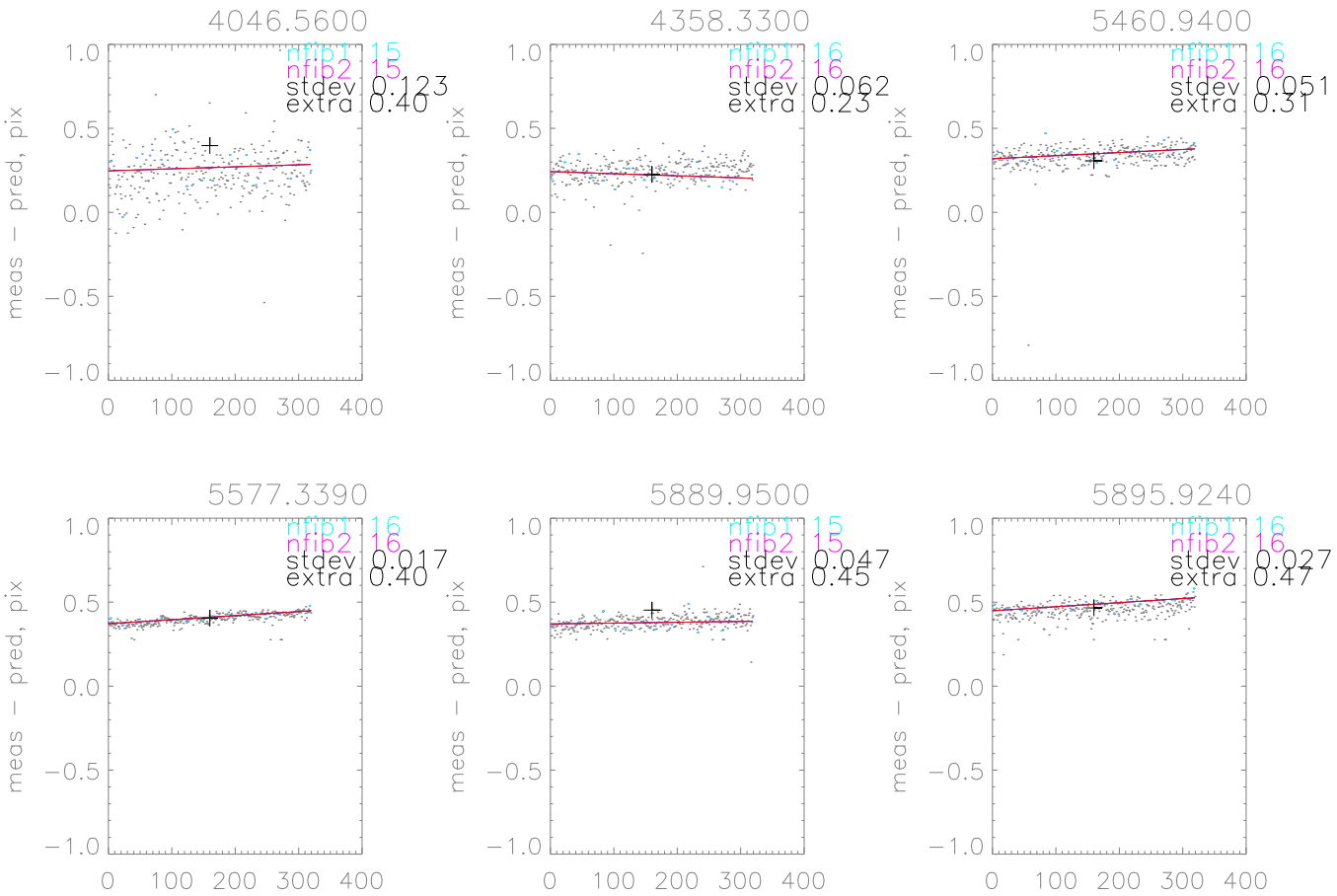

4358.3300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

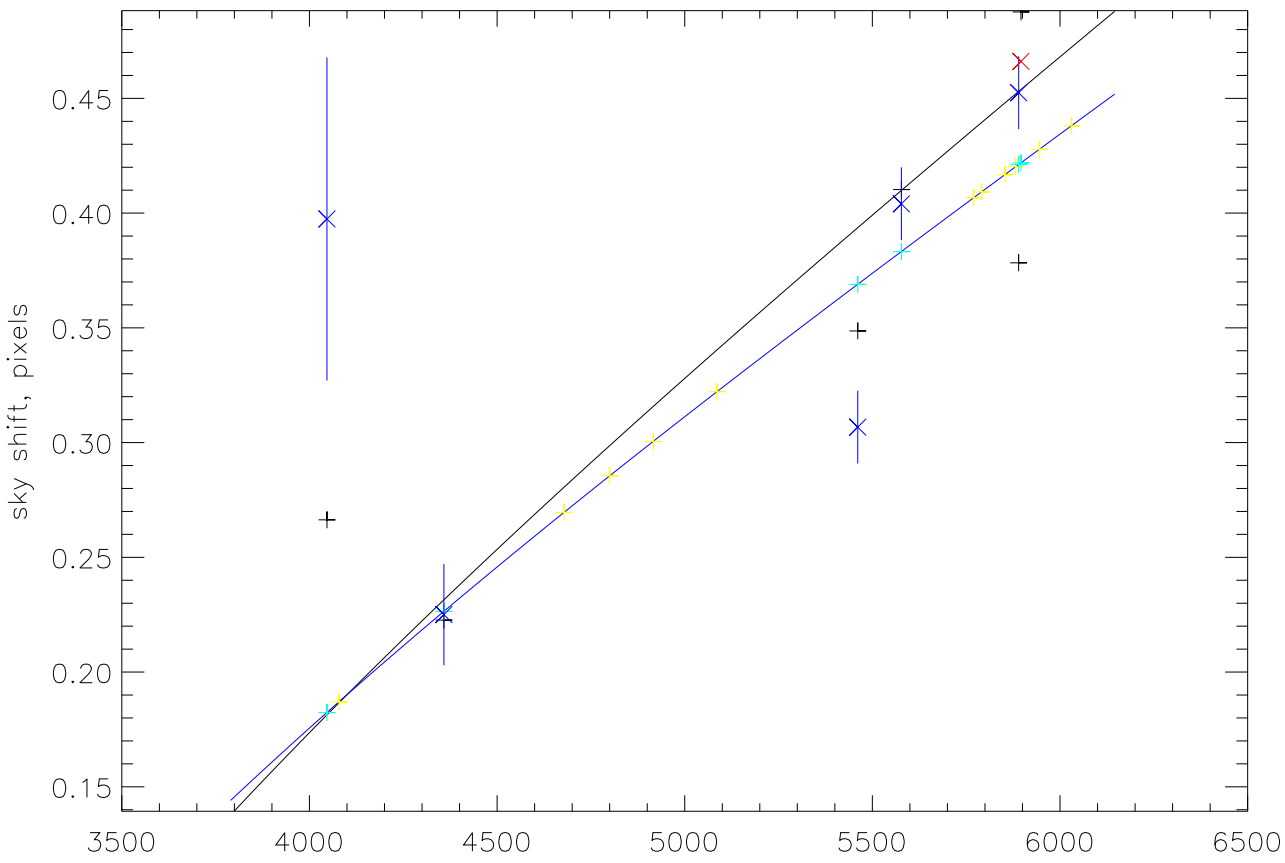

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


5577.3390
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

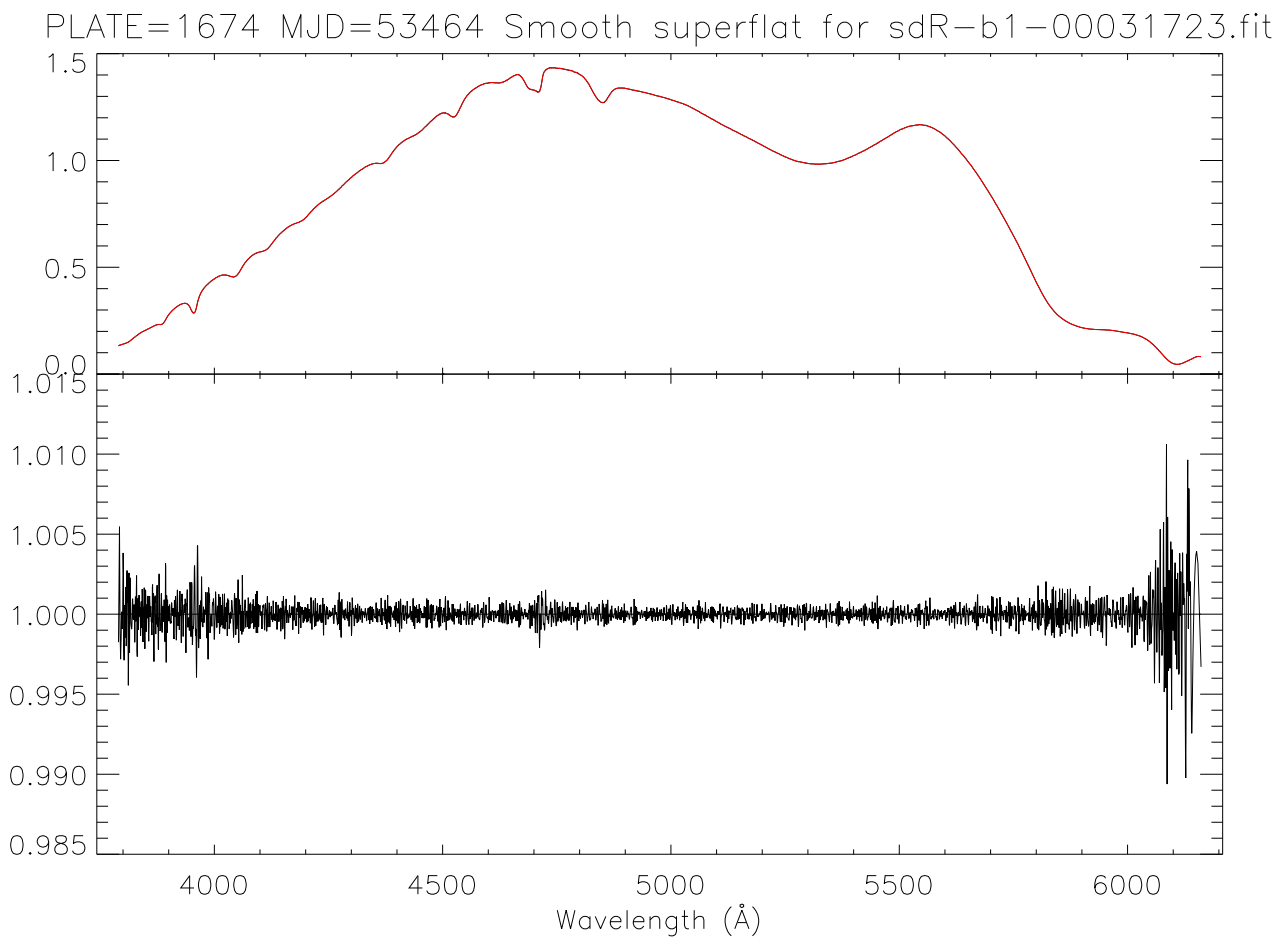

5889.9500
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

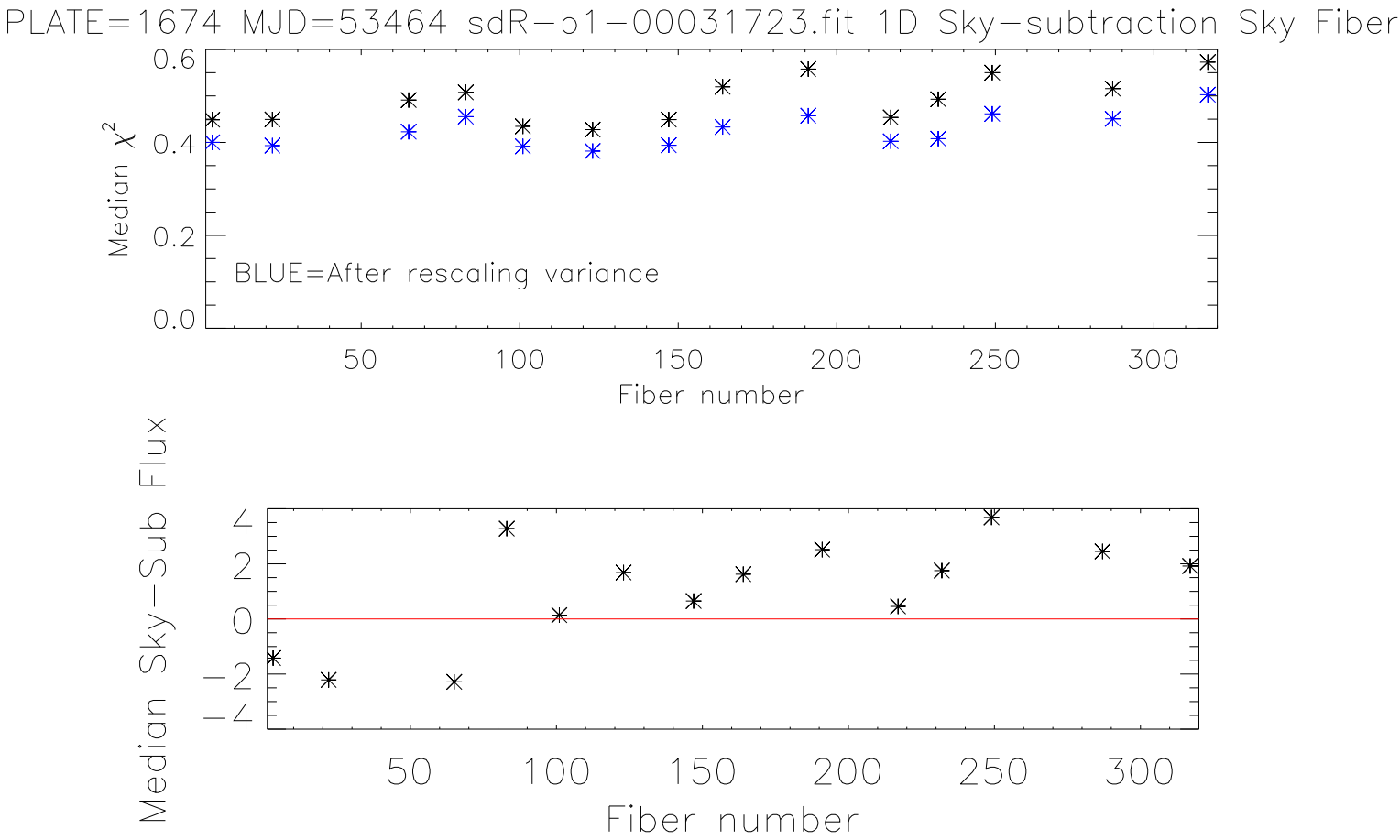

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

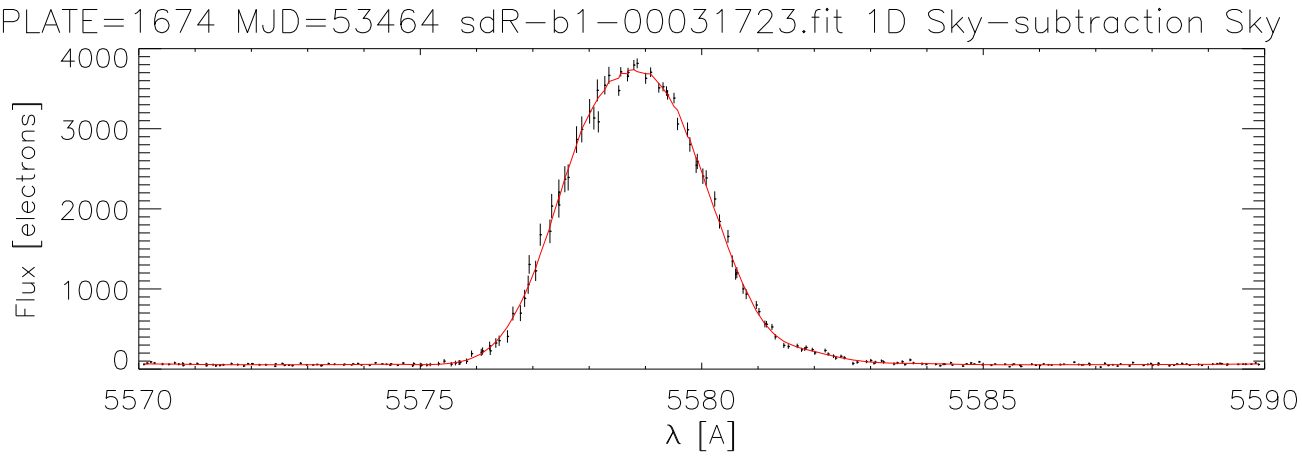

4046.5600
nfib1 15
nfib2 15
stdev 0.123
extra 0.40
4358.3300
nfib1 16
nfib2 16
stdev 0.062
extra 0.23
5460.9400
nfib1 16
nfib2 16
stdev 0.051
extra 0.31
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.40
5889.9500
nfib1 15
nfib2 15
stdev 0.047
extra 0.45
5895.9240
nfib1 16
nfib2 16
stdev 0.027
extra 0.47
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

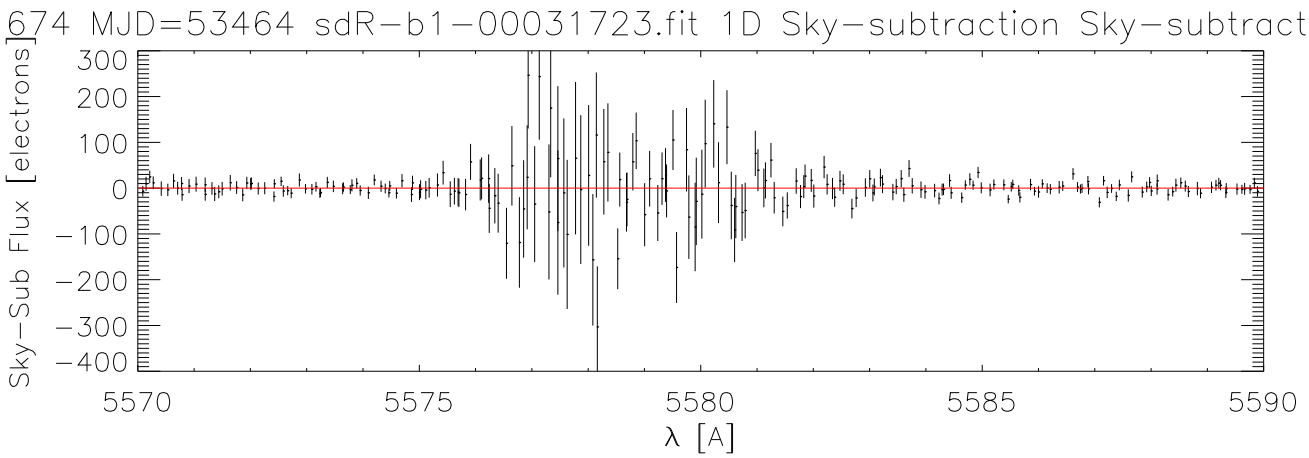

sky shift, pixels
0.45
0.40
0.35
0.30
0.25
0.20
0.15
3500
4000
4500
5000
5500
6000
6500

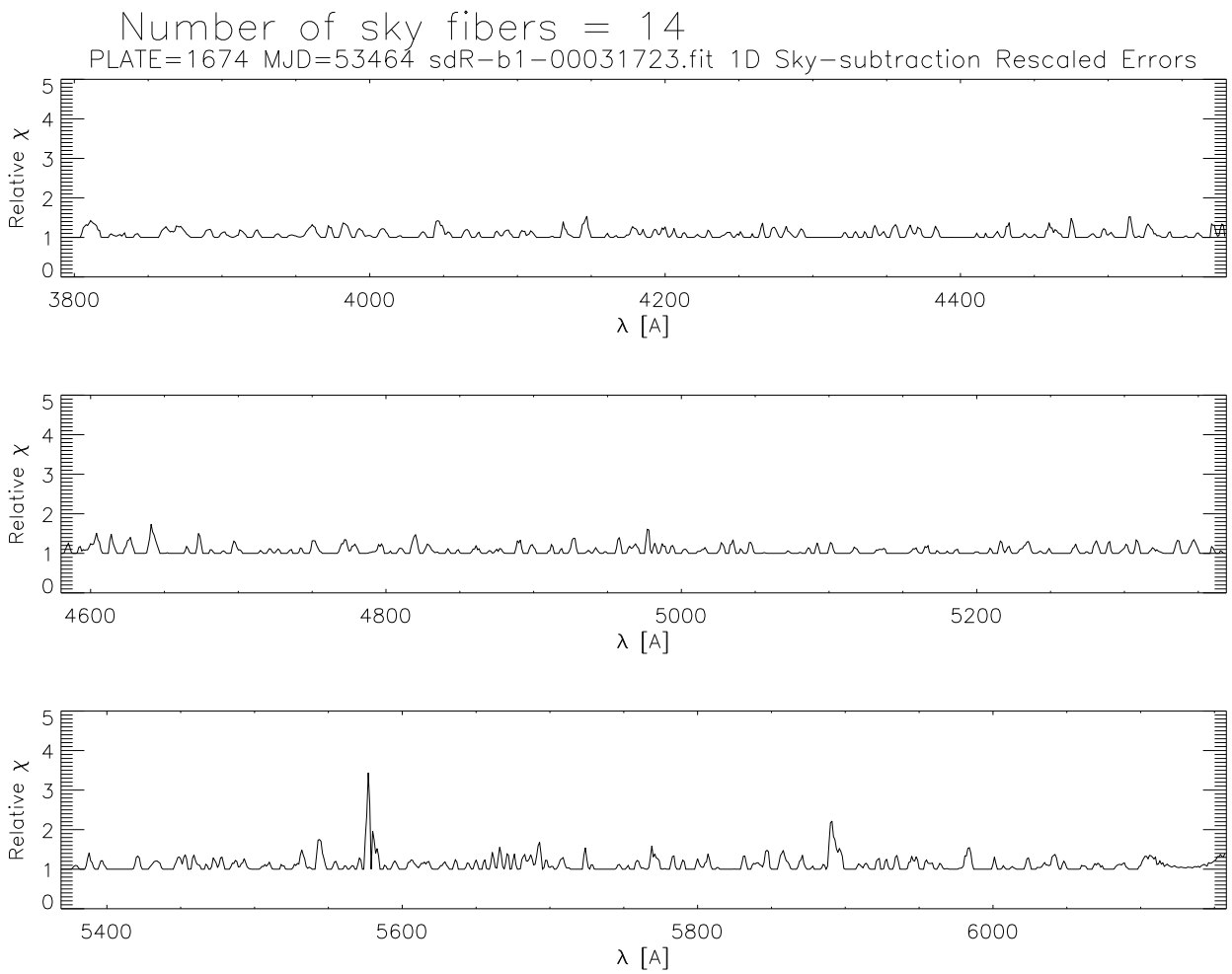
es= 0.0000

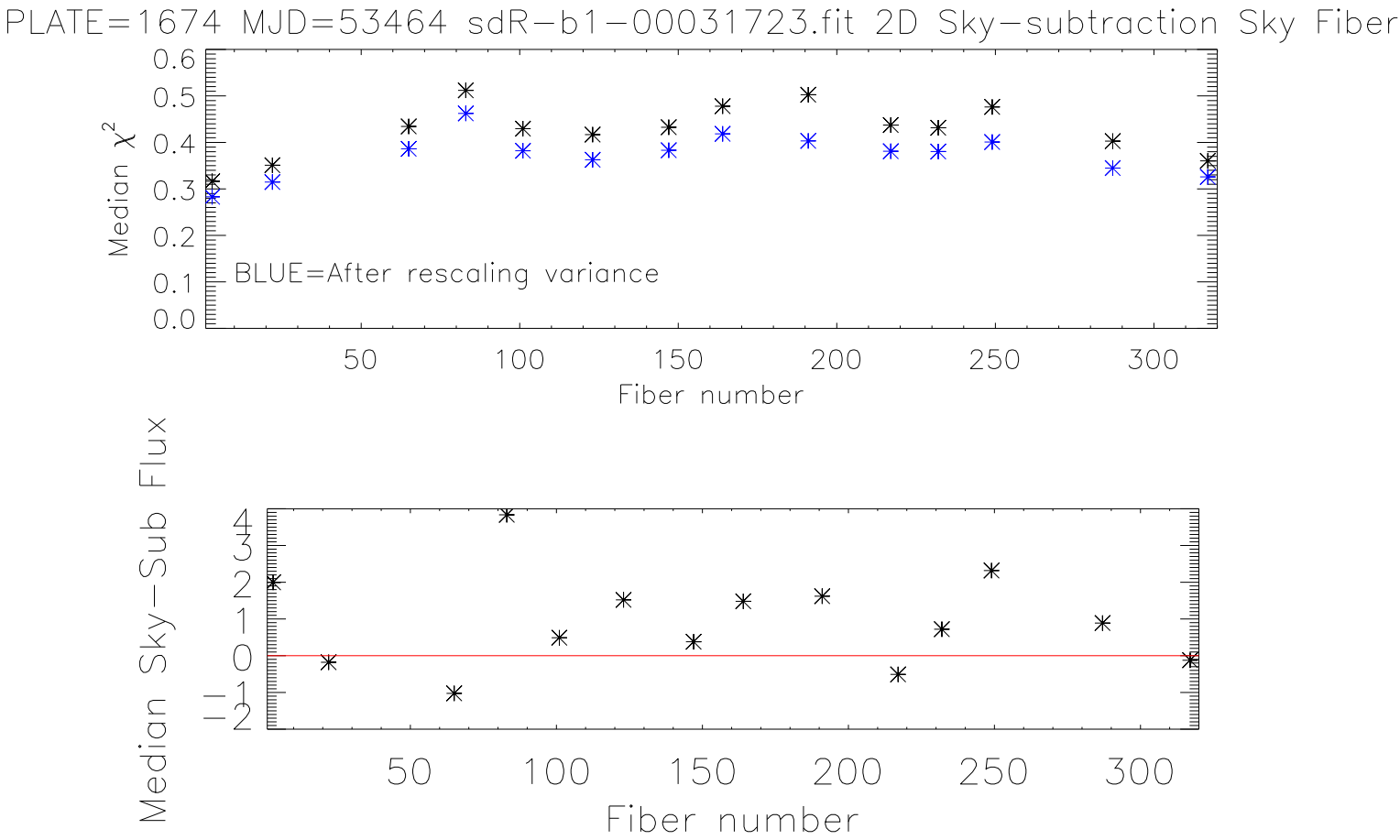

PLATE=1674 MJD=53464 Smooth superflat for sdR-b1-00031723.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

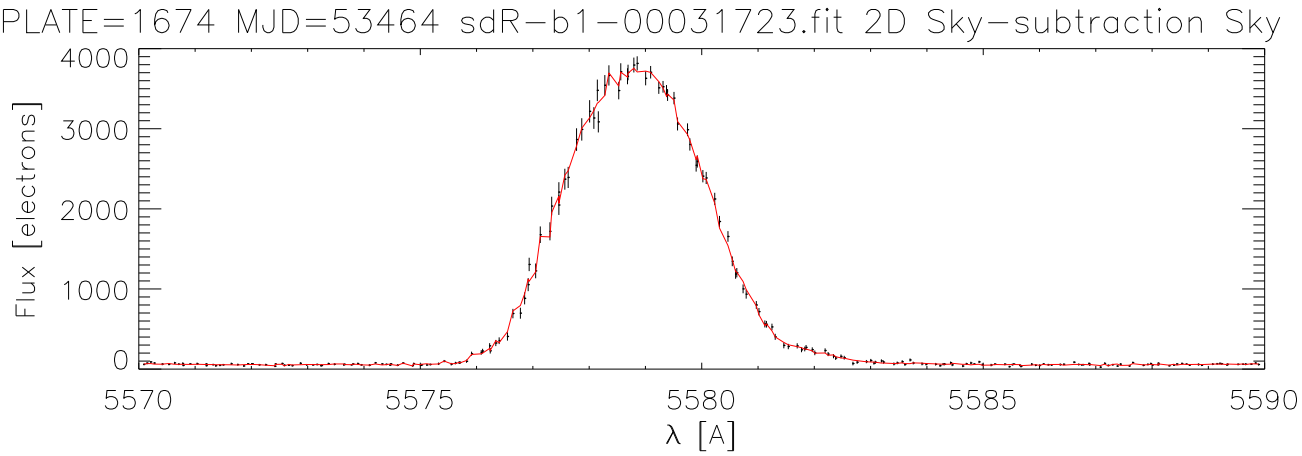

PLATE=1674 MJD=53464 sdR-b1-00031723.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

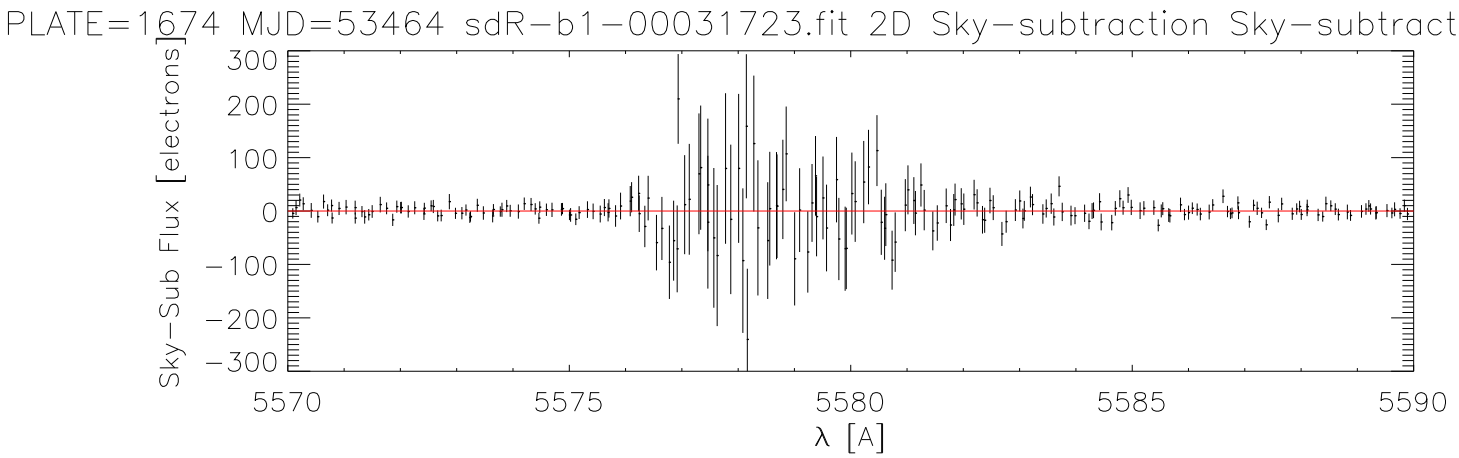

PLATE=1674 MJD=53464 sdR-b1-00031723.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

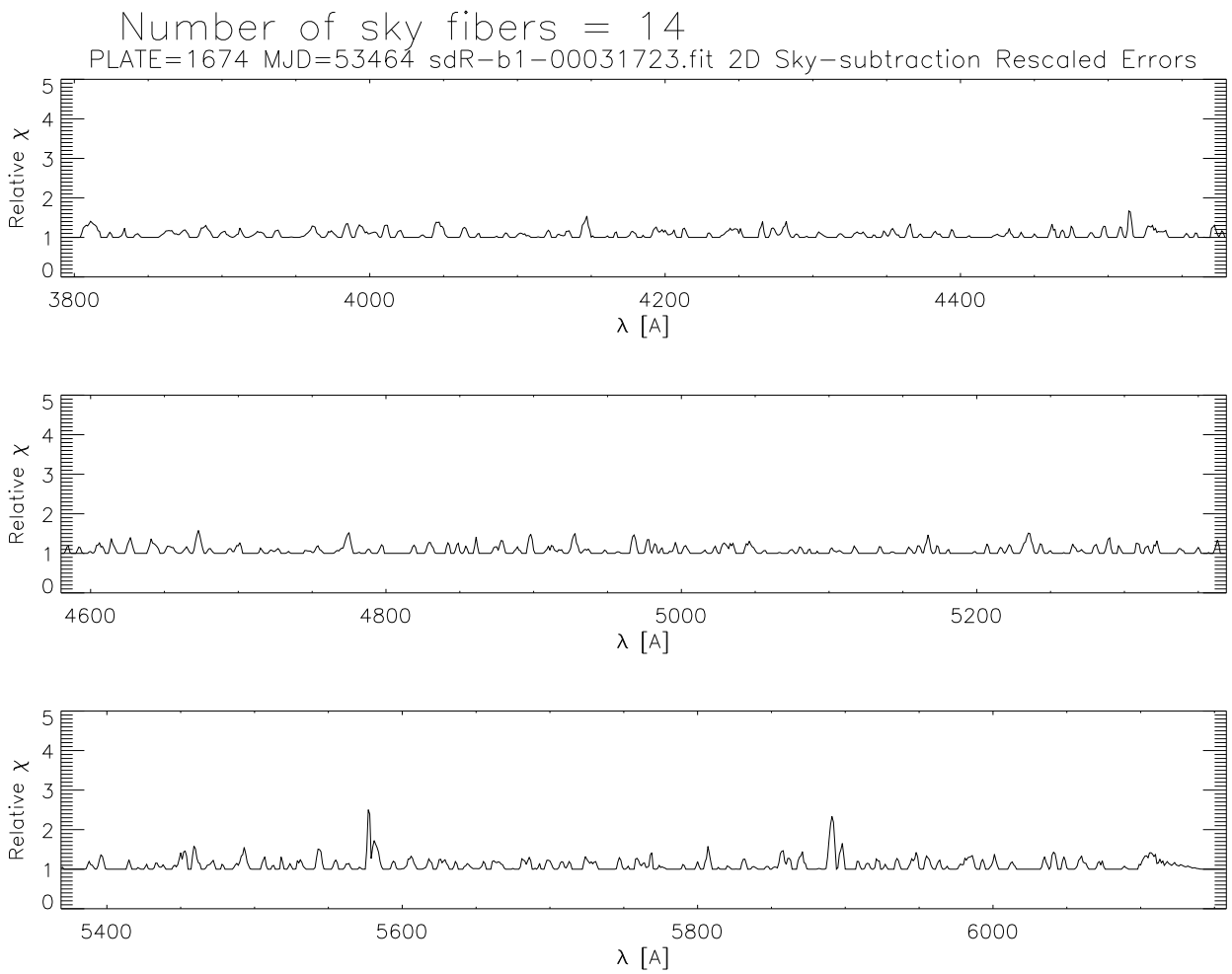

PLATE=1674 MJD=53464 sdR-b1-00031723.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
5570
5575
5580
5585
5590
λ [A]

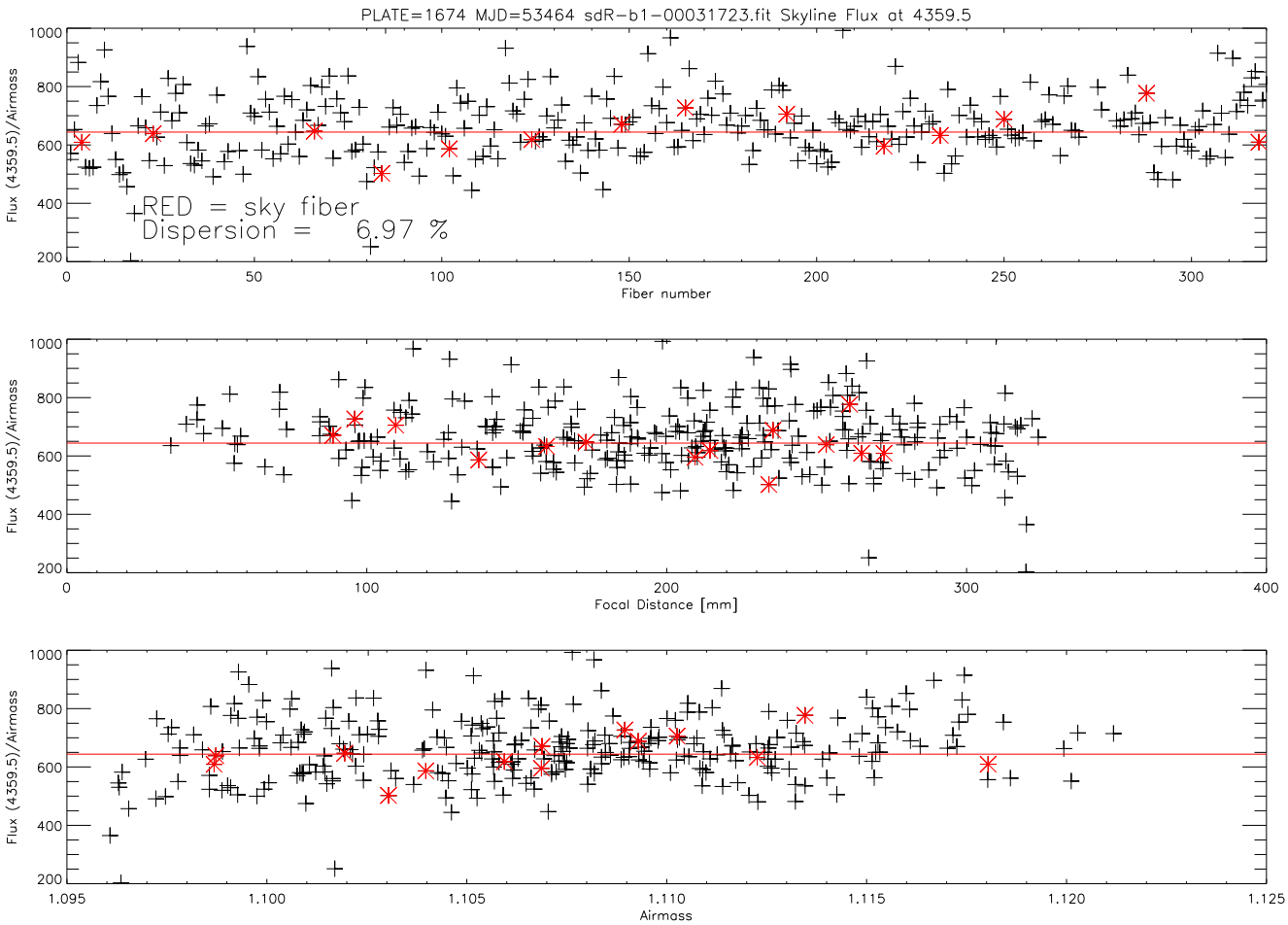

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-b1-00031723.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

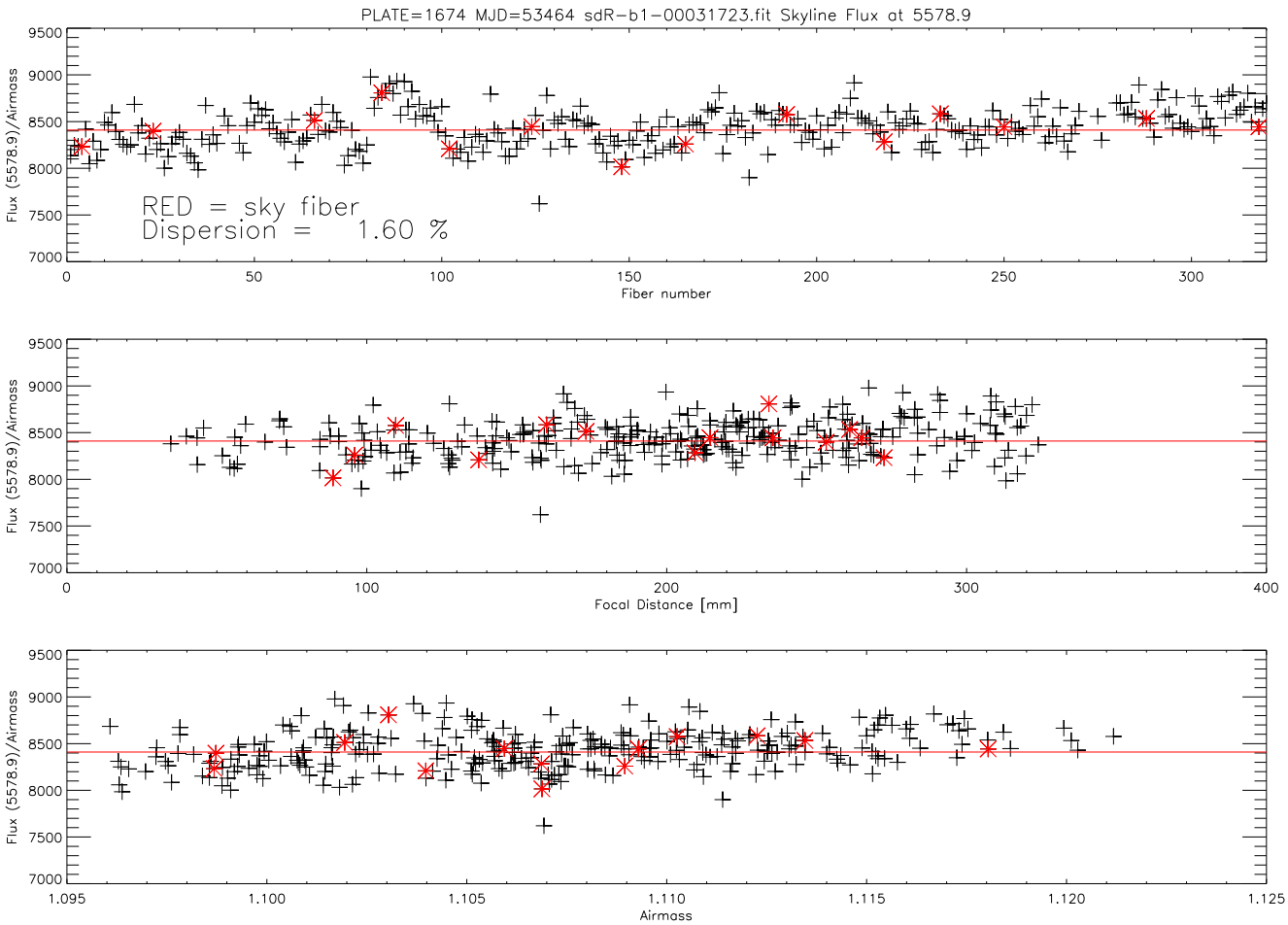

PLATE=1674 MJD=53464 sdR-b1-00031723.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

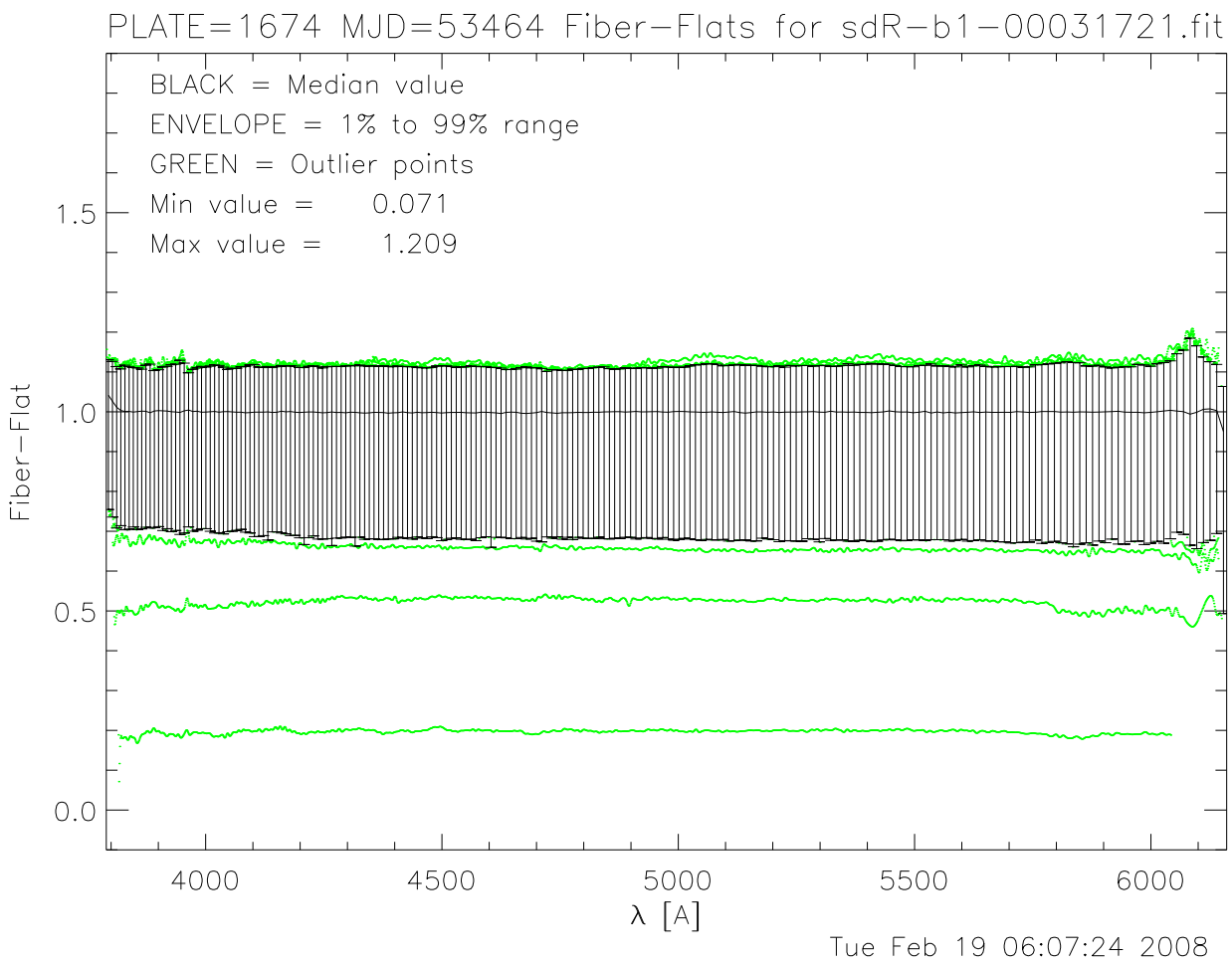

PLATE=1674 MJD=53464 sdR-b1-00031723.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

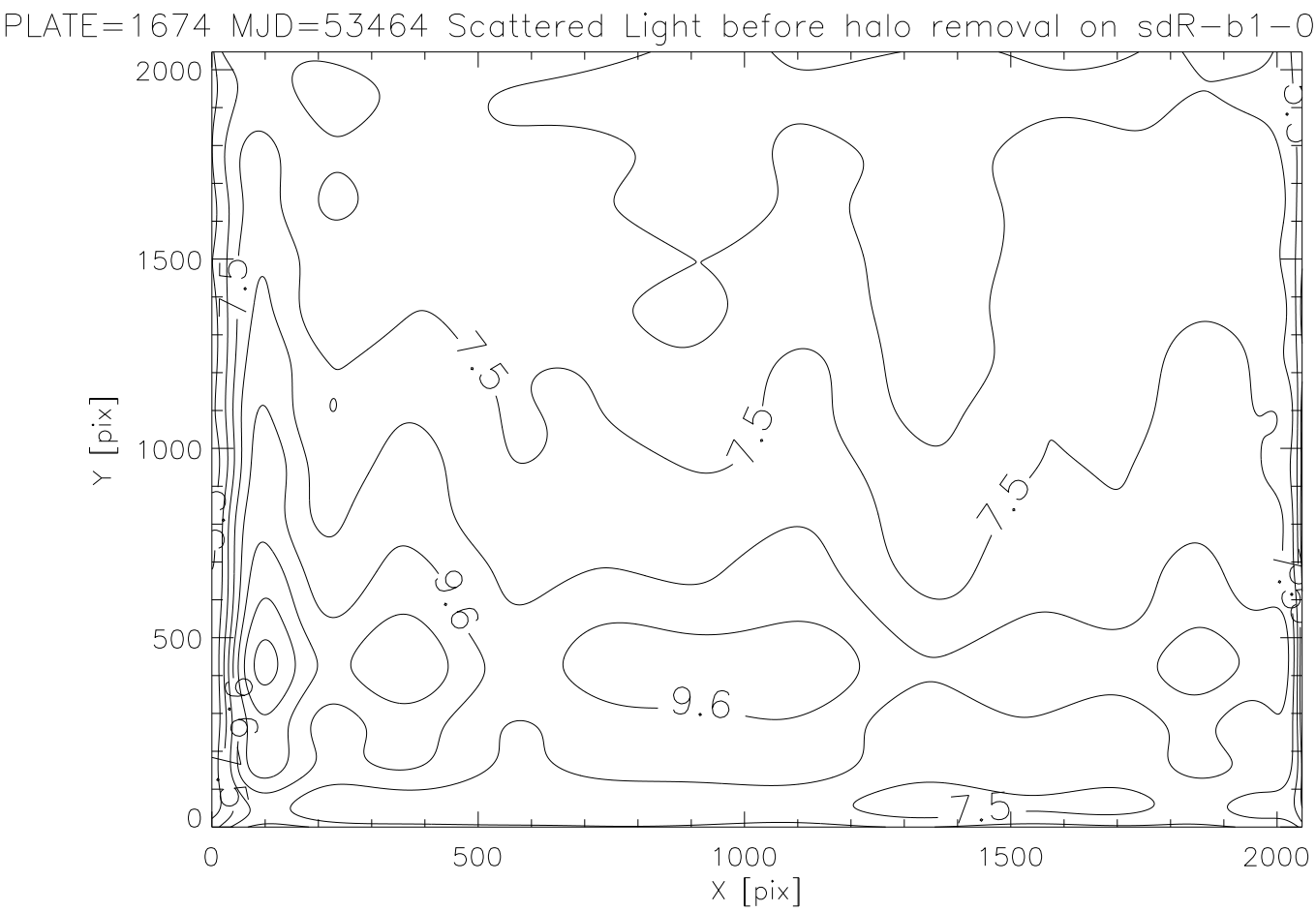

PLATE=1674 MJD=53464 sdR-b1-00031723.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

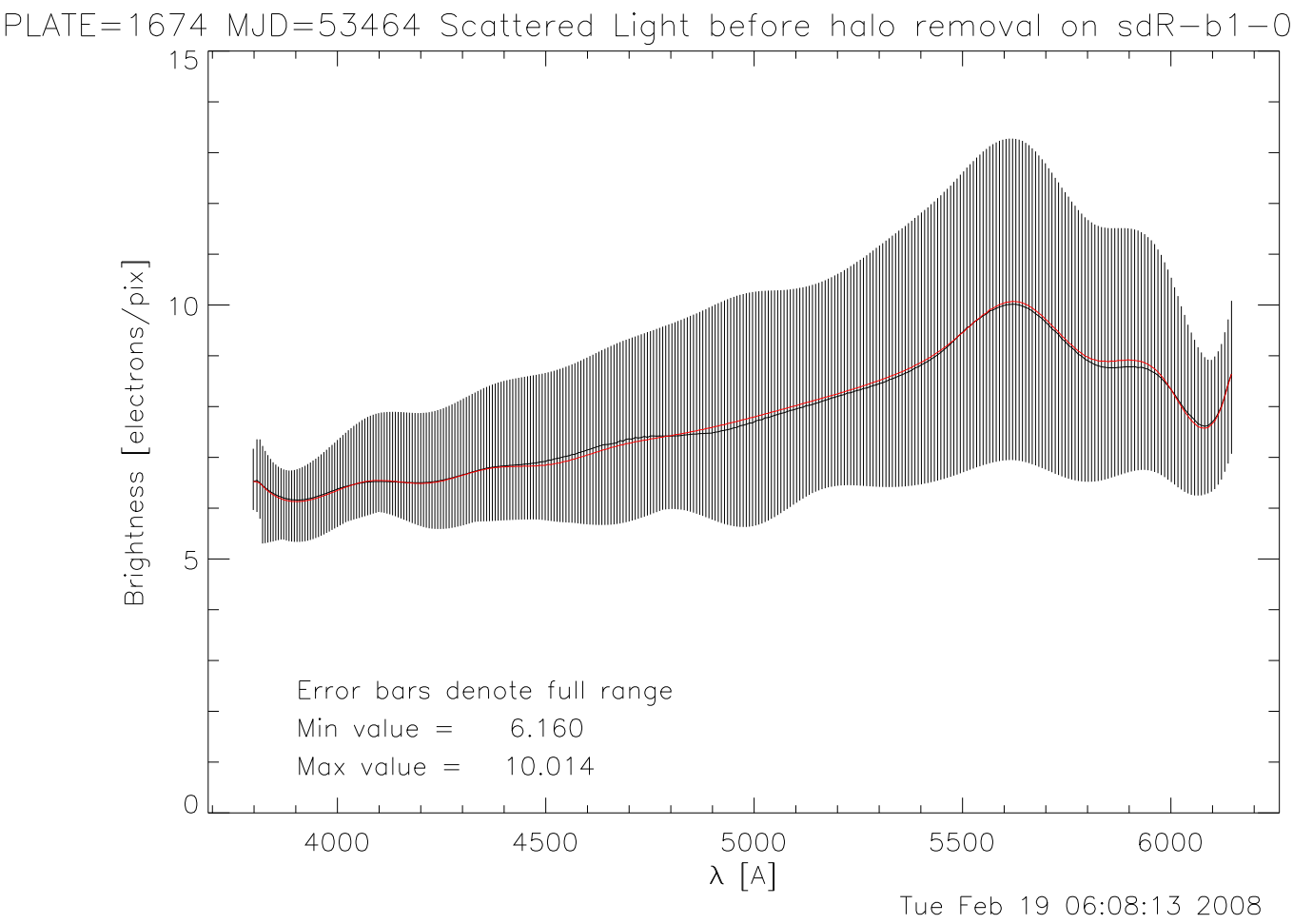

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-b1-00031723.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

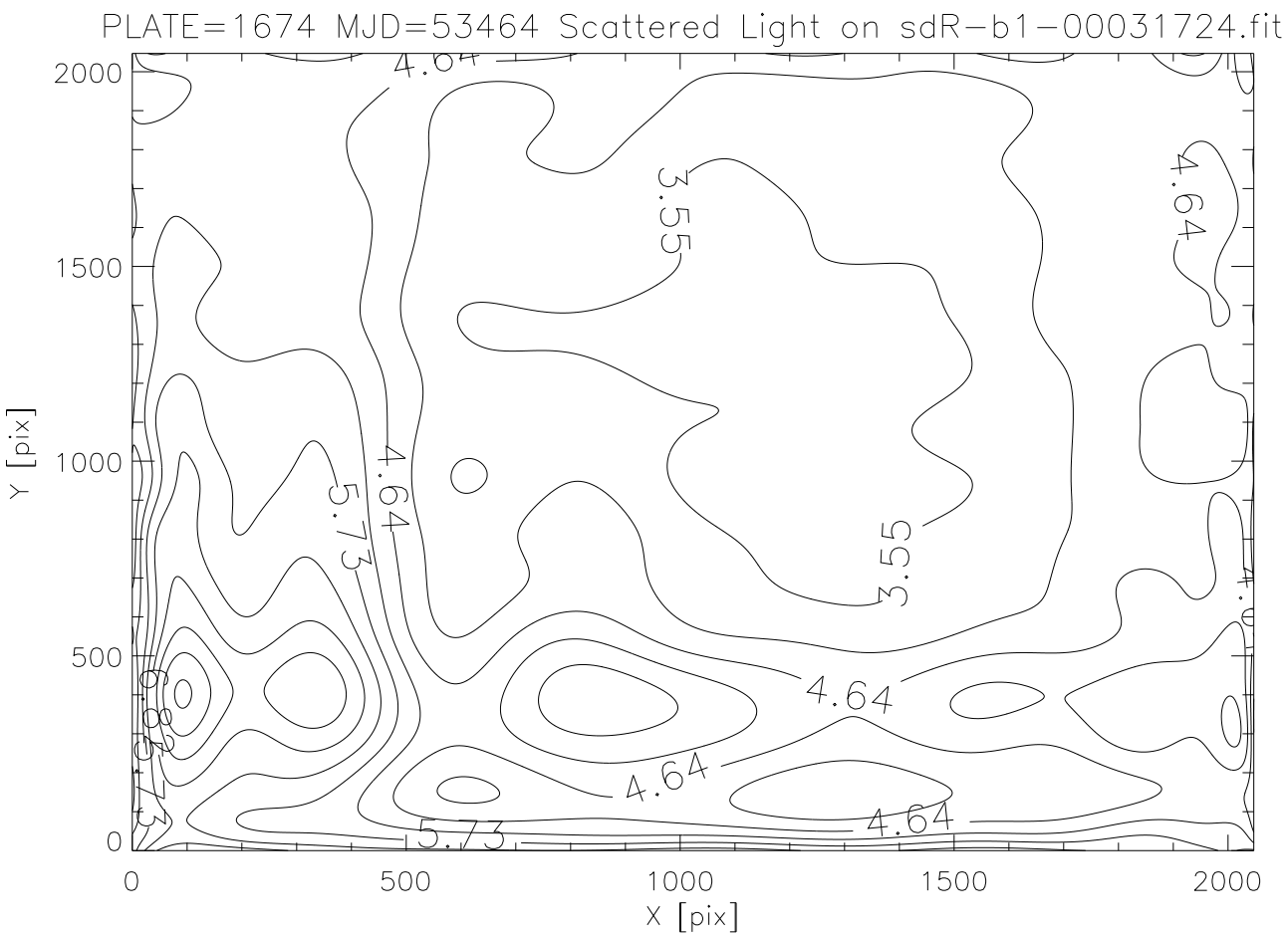

PLATE=1674 MJD=53464 sdR-b1-00031723.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.97 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

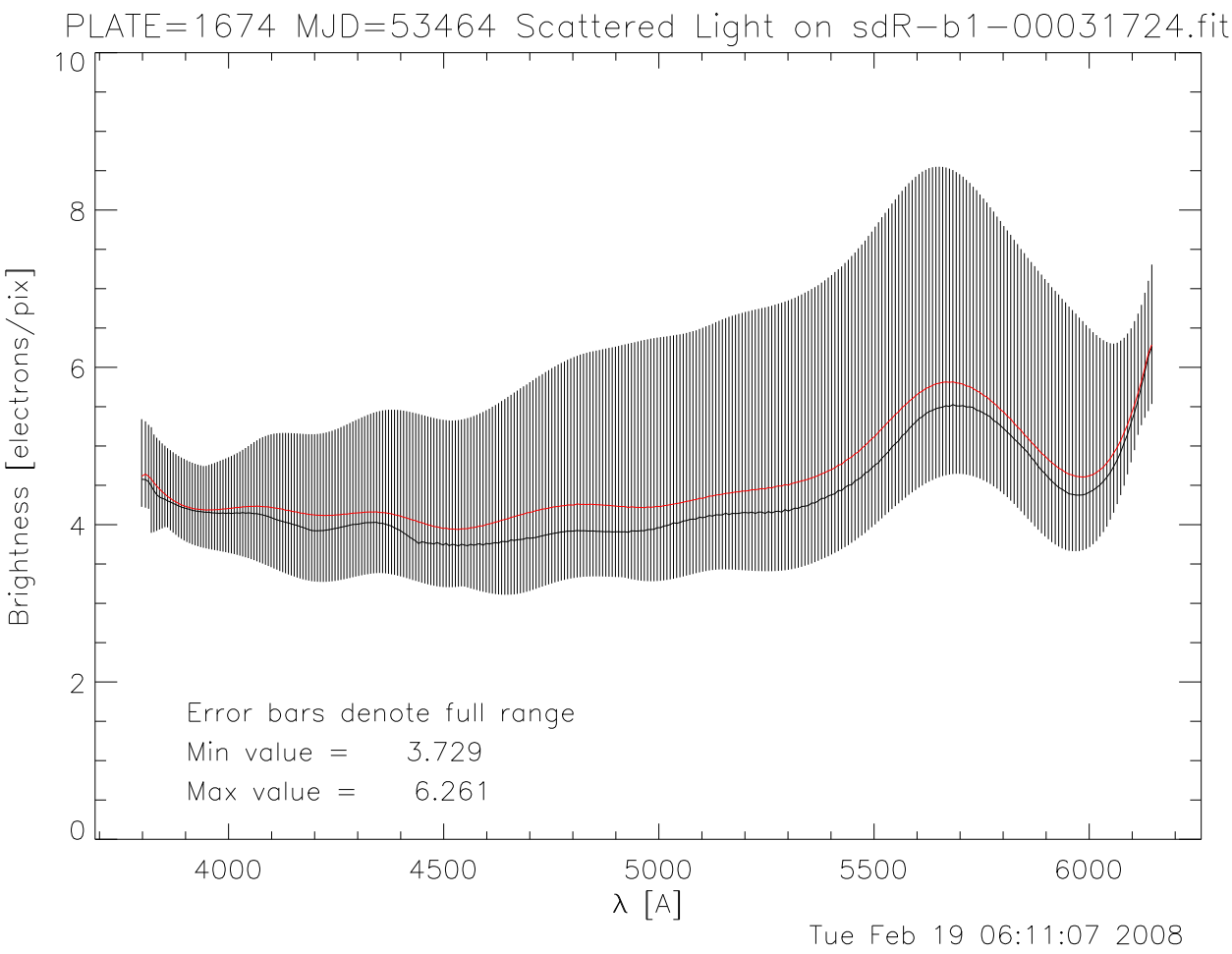

PLATE=1674 MJD=53464 sdR-b1-00031723.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.60 %
Fiber number
Focal Distance [mm]
Airmass

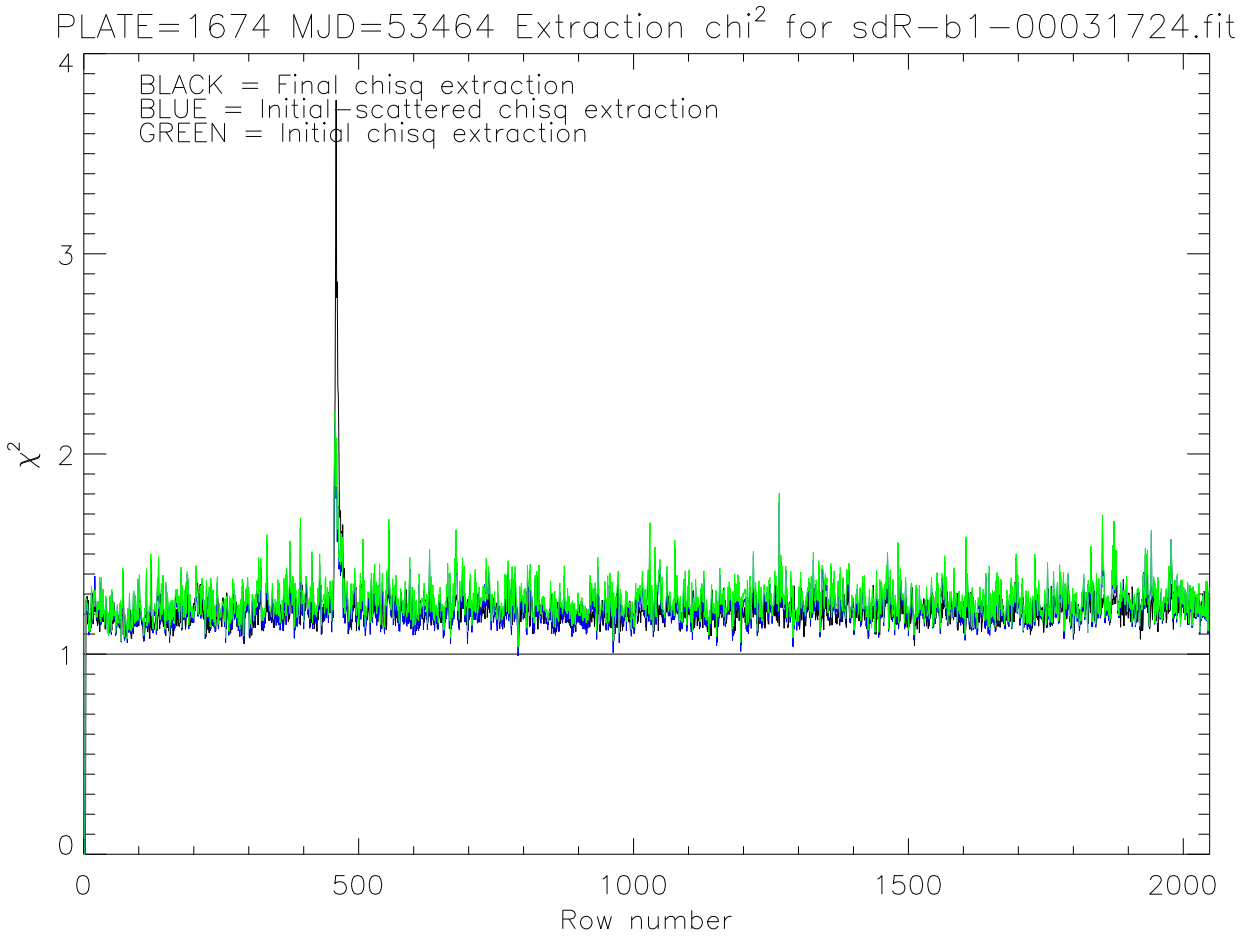

PLATE=1674 MJD=53464 Fiber−Flats for sdR−b1−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.071
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:07:24 2008

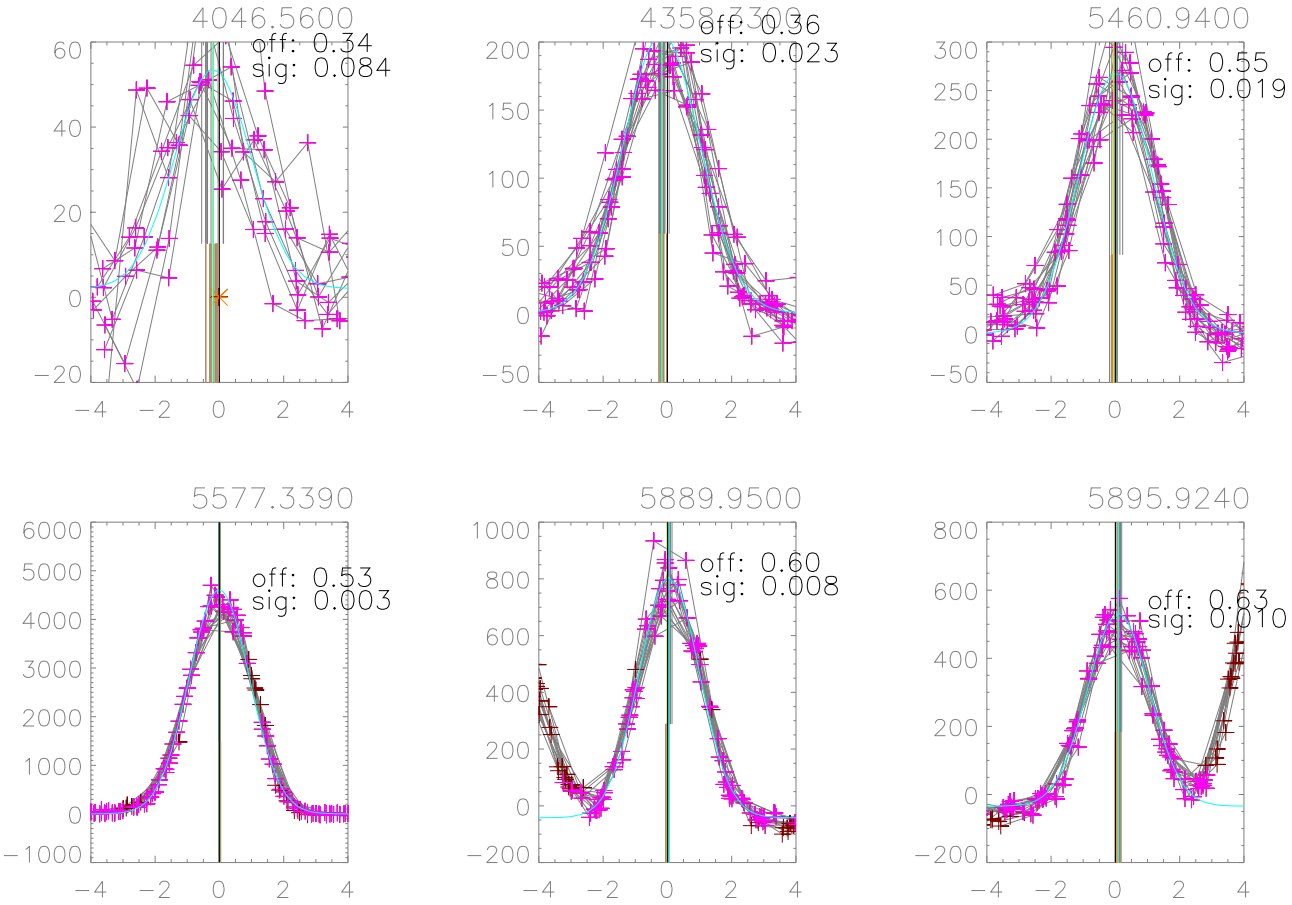

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b1-00031724.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.5
9.6

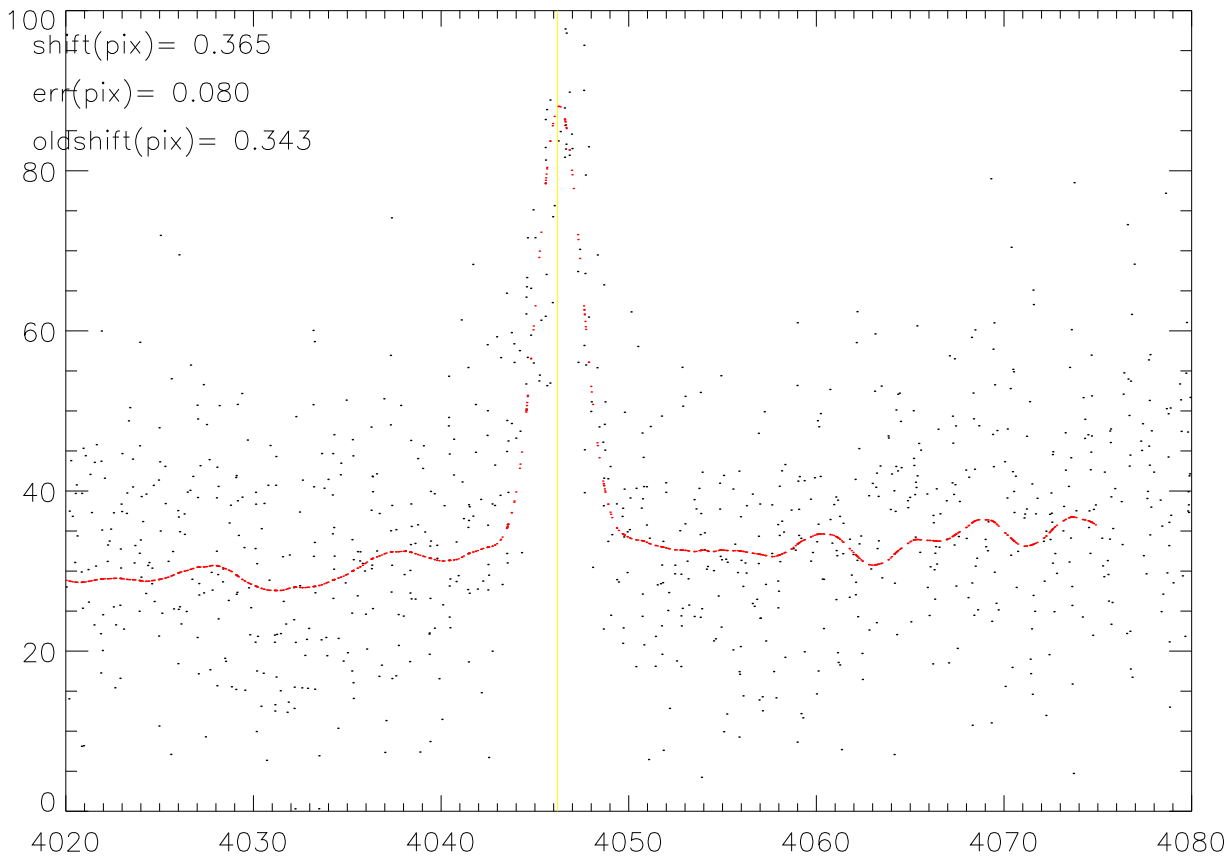

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b1-00031724.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.160
Max value = 10.014
Tue Feb 19 06:08:13 2008

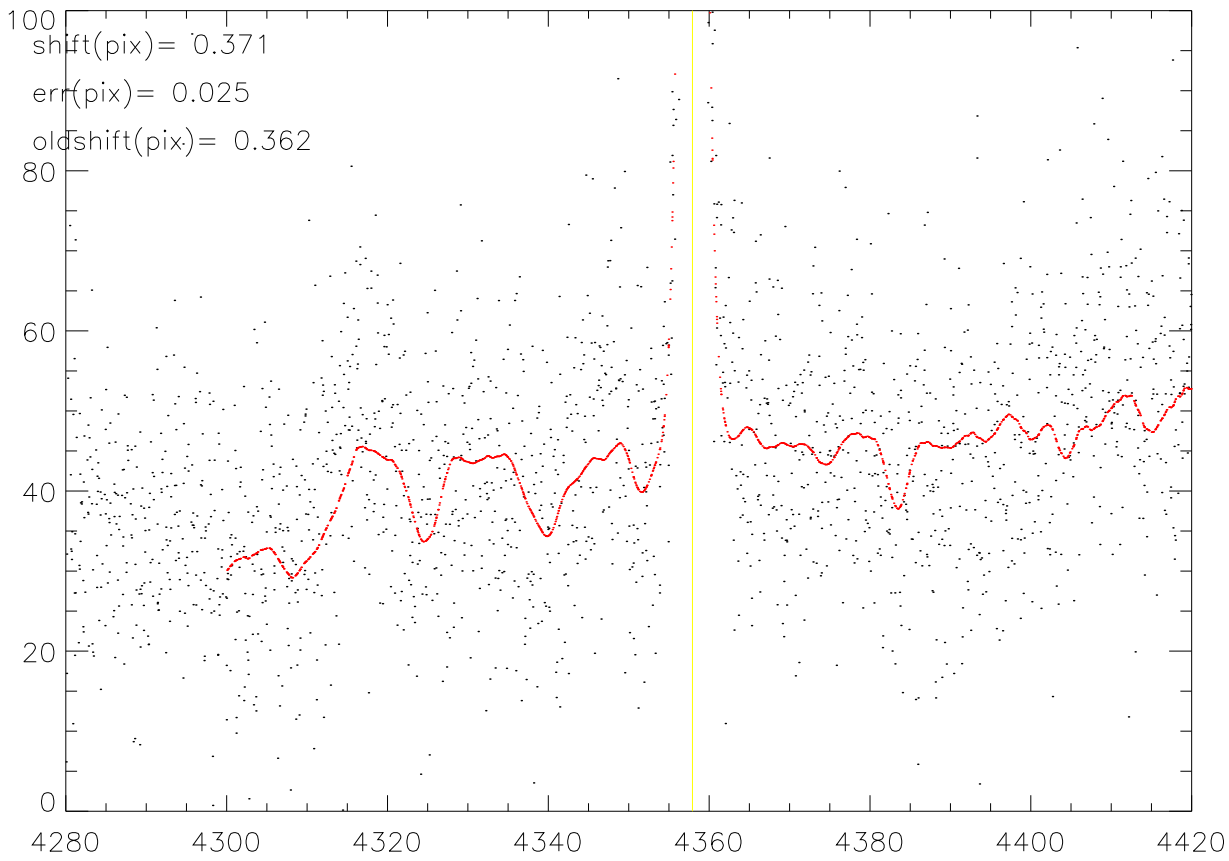

PLATE=1674 MJD=53464 Scattered Light on sdR-b1-00031724.fit
4.64
3.55
4.64
4.64
5.73
3.55
4.64
4.64
4.64
5.73
5.73
Y [pix]
X [pix]
0
500
1000
1500
2000

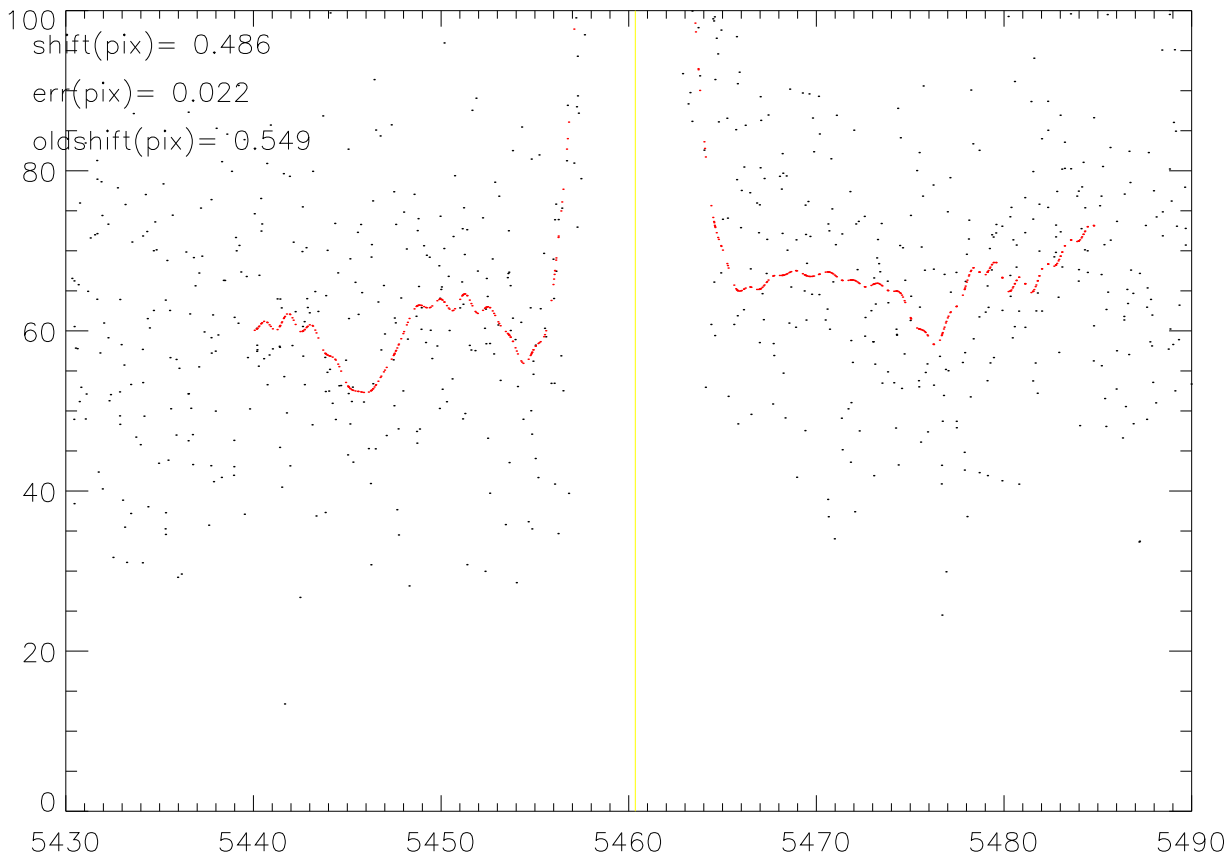

PLATE=1674 MJD=53464 Scattered Light on sdR-b1-00031724.fit
Brightness [electrons/pix]
10
8
6
4
2
0
Error bars denote full range
Min value = 3.729
Max value = 6.261
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:11:07 2008

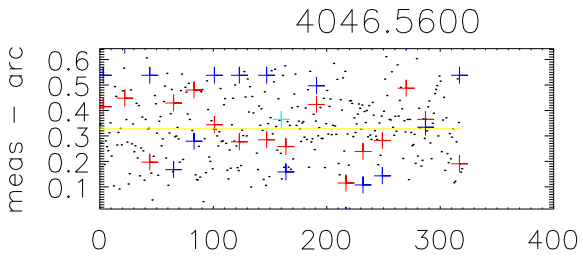

PLATE=1674 MJD=53464 Extraction chi^2 for sdR-b1-00031724.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

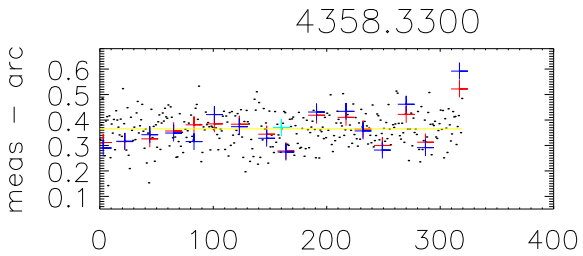

4046.5600
off: 0.34
sig: 0.084
4358.3300
off: 0.36
sig: 0.023
5460.9400
off: 0.55
sig: 0.019
5577.3390
off: 0.53
sig: 0.003
5889.9500
off: 0.60
sig: 0.008
5895.9240
off: 0.63
sig: 0.010

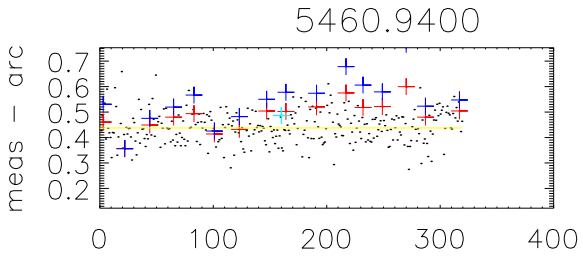

shift(pix)= 0.365
err(pix)= 0.080
oldshift(pix)= 0.343
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

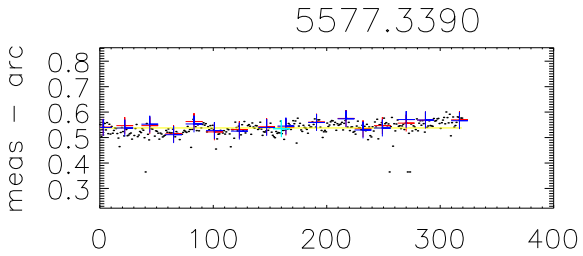

shift(pix)= 0.371
err(pix)= 0.025
oldshift(pix)= 0.362
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

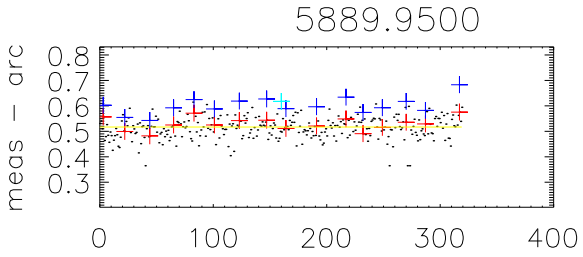

shift(pix)= 0.486
err(pix)= 0.022
oldshift(pix)= 0.549
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

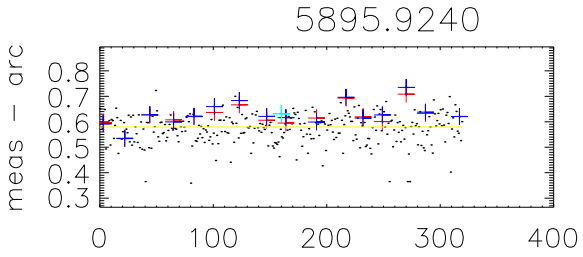

4046.5600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

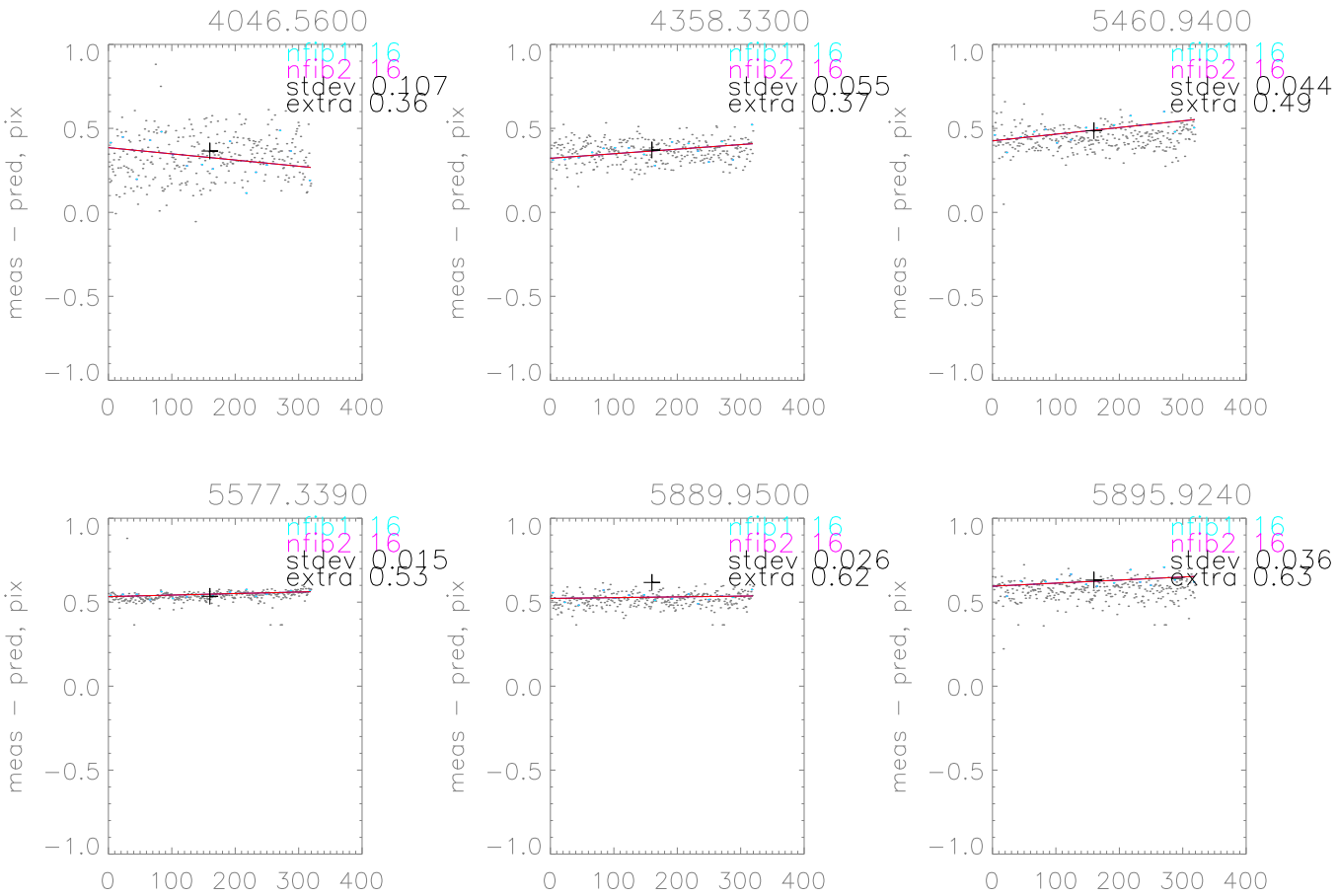

4358.3300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

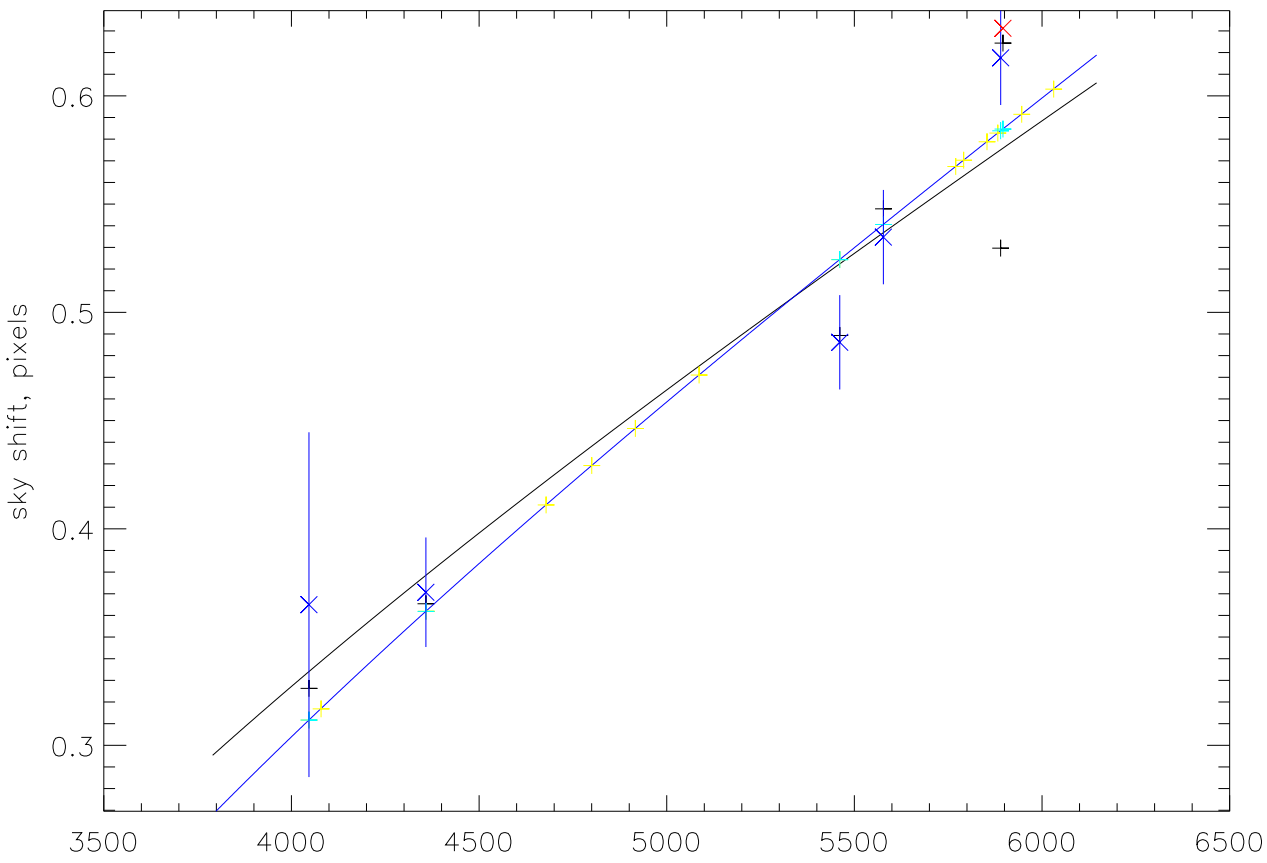

5460.9400
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400


5577.3390
meas − arc
0.3
0.4
0.5
0.6
0.7
0.8
0
100
200
300
400

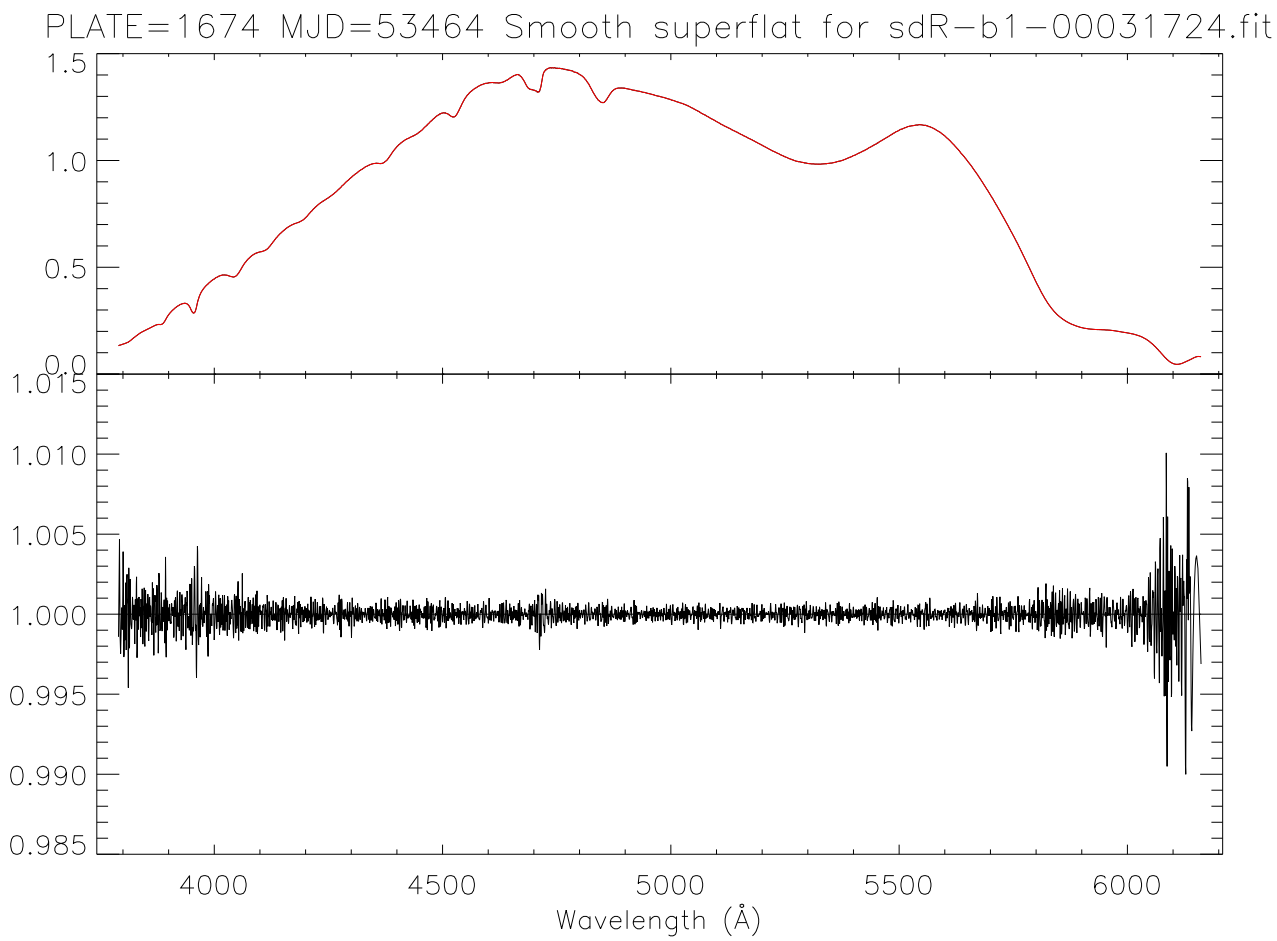

5889.9500
meas − arc
0.3
0.4
0.5
0.6
0.7
0.8
0
100
200
300
400

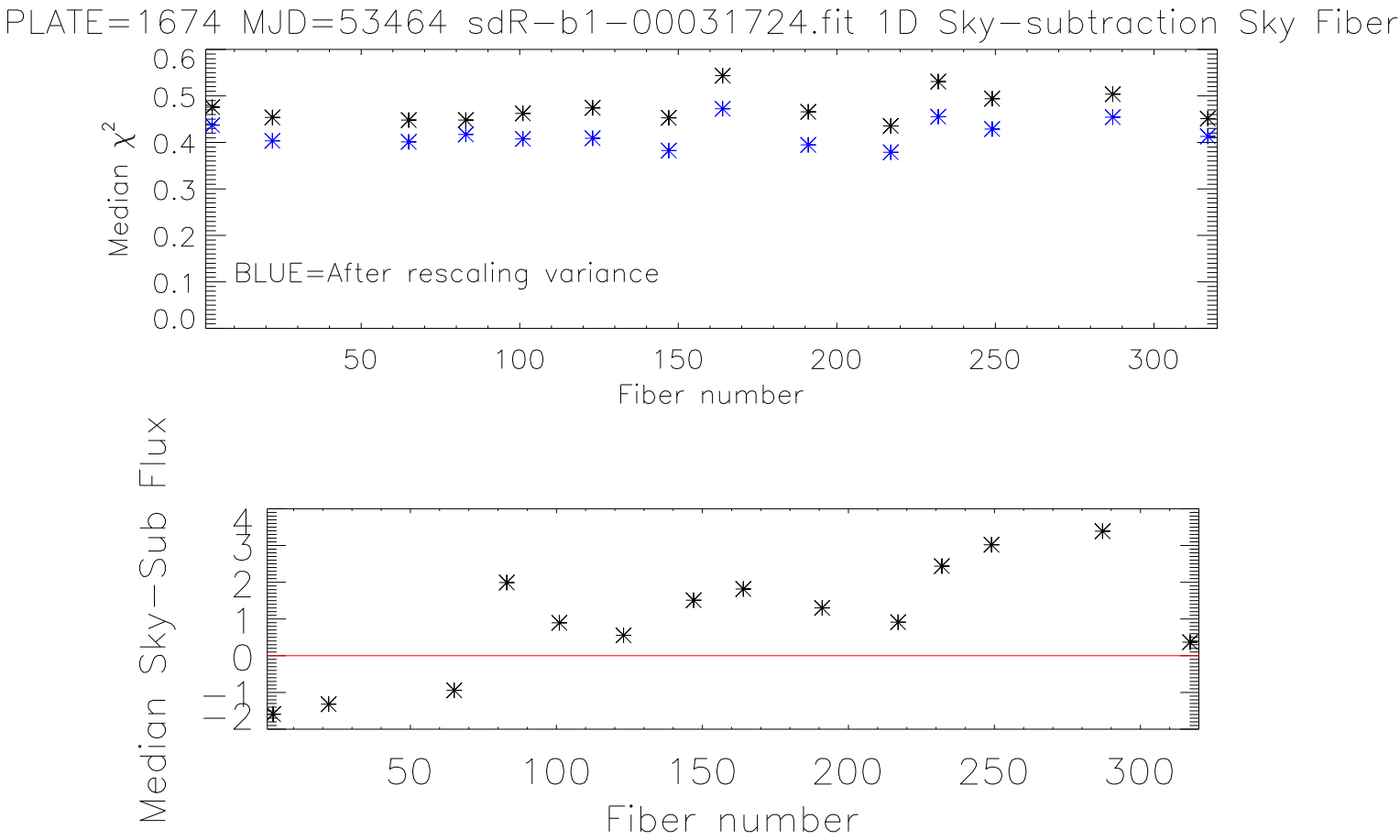

5895.9240
meas − arc
0.3
0.4
0.5
0.6
0.7
0.8
0
100
200
300
400

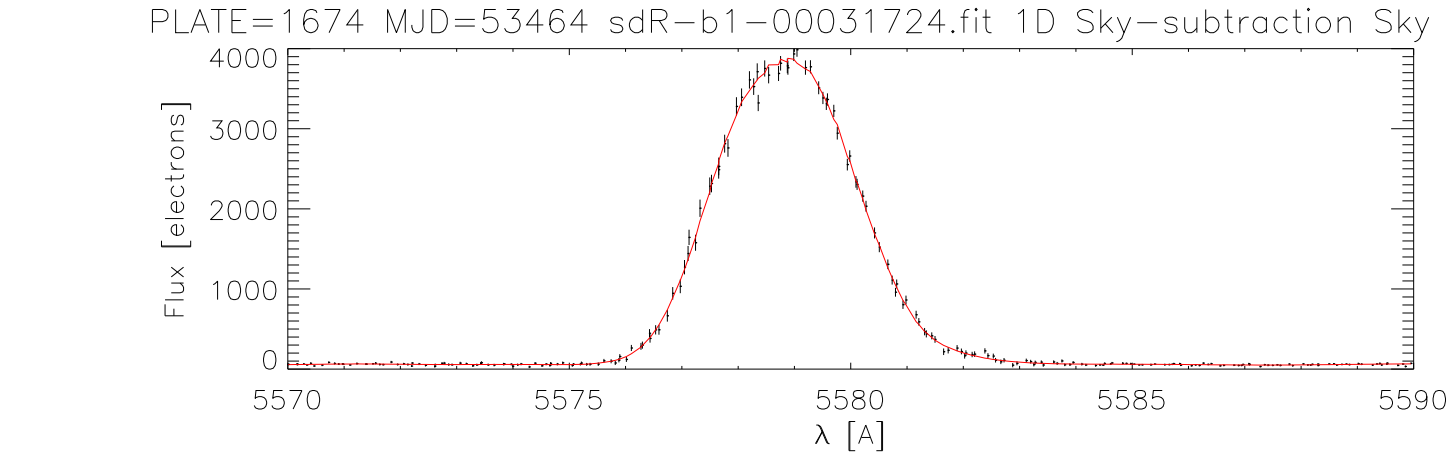

4046.5600
nfib1 16
nfib2 16
stdev 0.107
extra 0.36
4358.3300
nfib1 16
nfib2 16
stdev 0.055
extra 0.37
5460.9400
nfib1 16
nfib2 16
stdev 0.044
extra 0.49
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.53
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra 0.62
5895.9240
nfib1 16
nfib2 16
stdev 0.036
extra 0.63
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

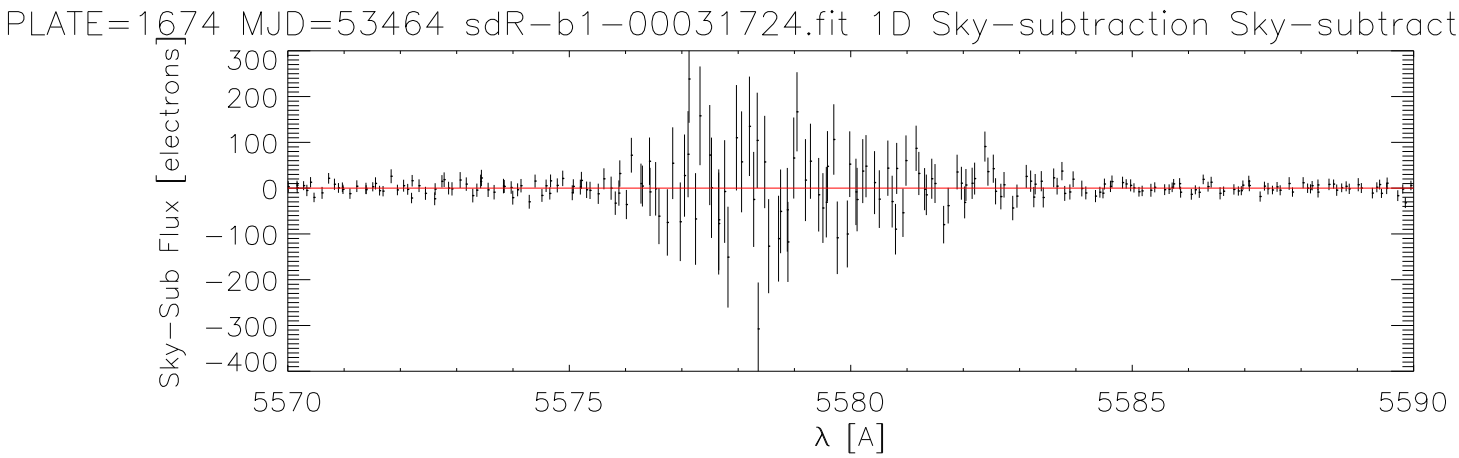

sky shift, pixels
0.3
0.4
0.5
0.6
3500
4000
4500
5000
5500
6000
6500

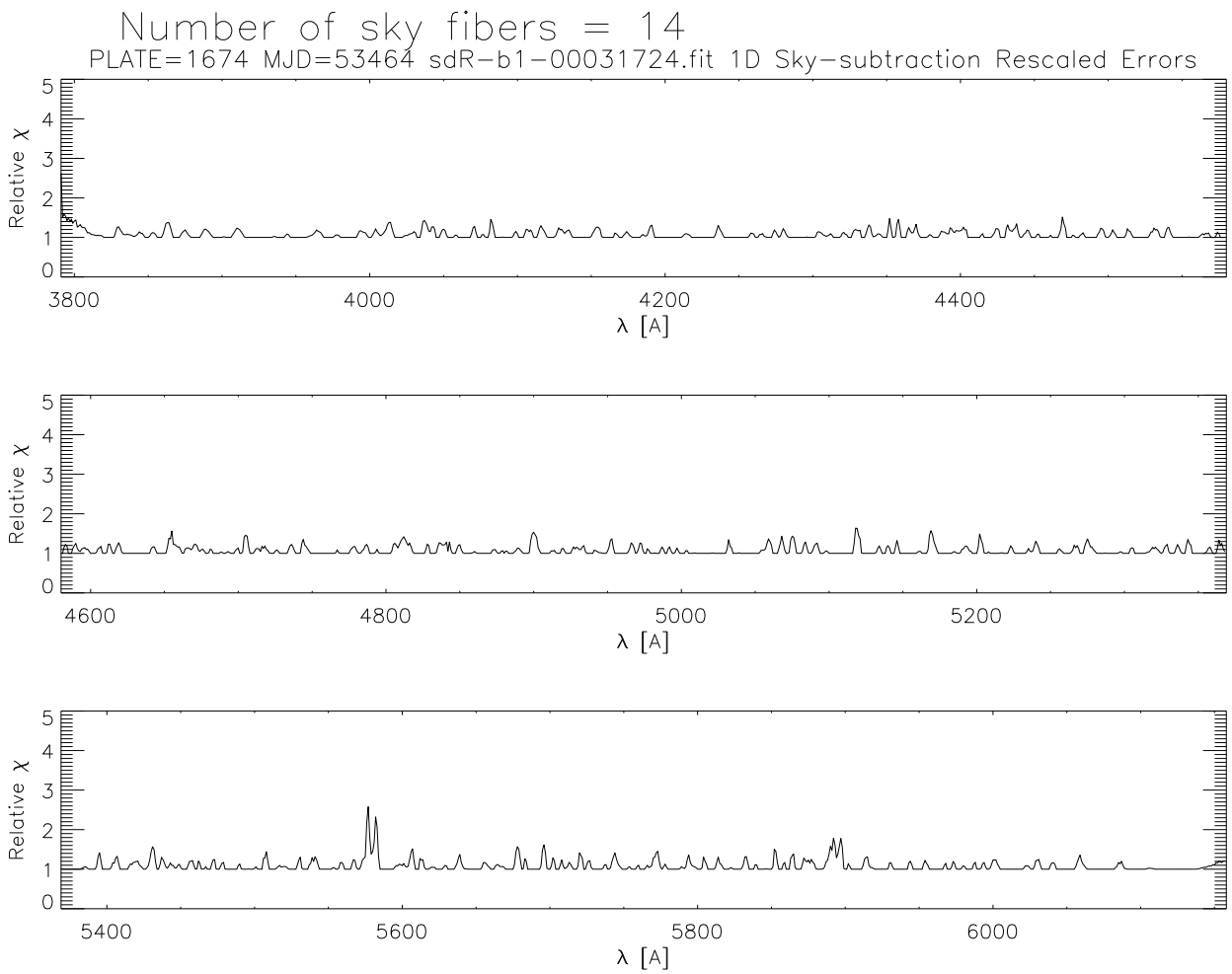
es= 0.0000

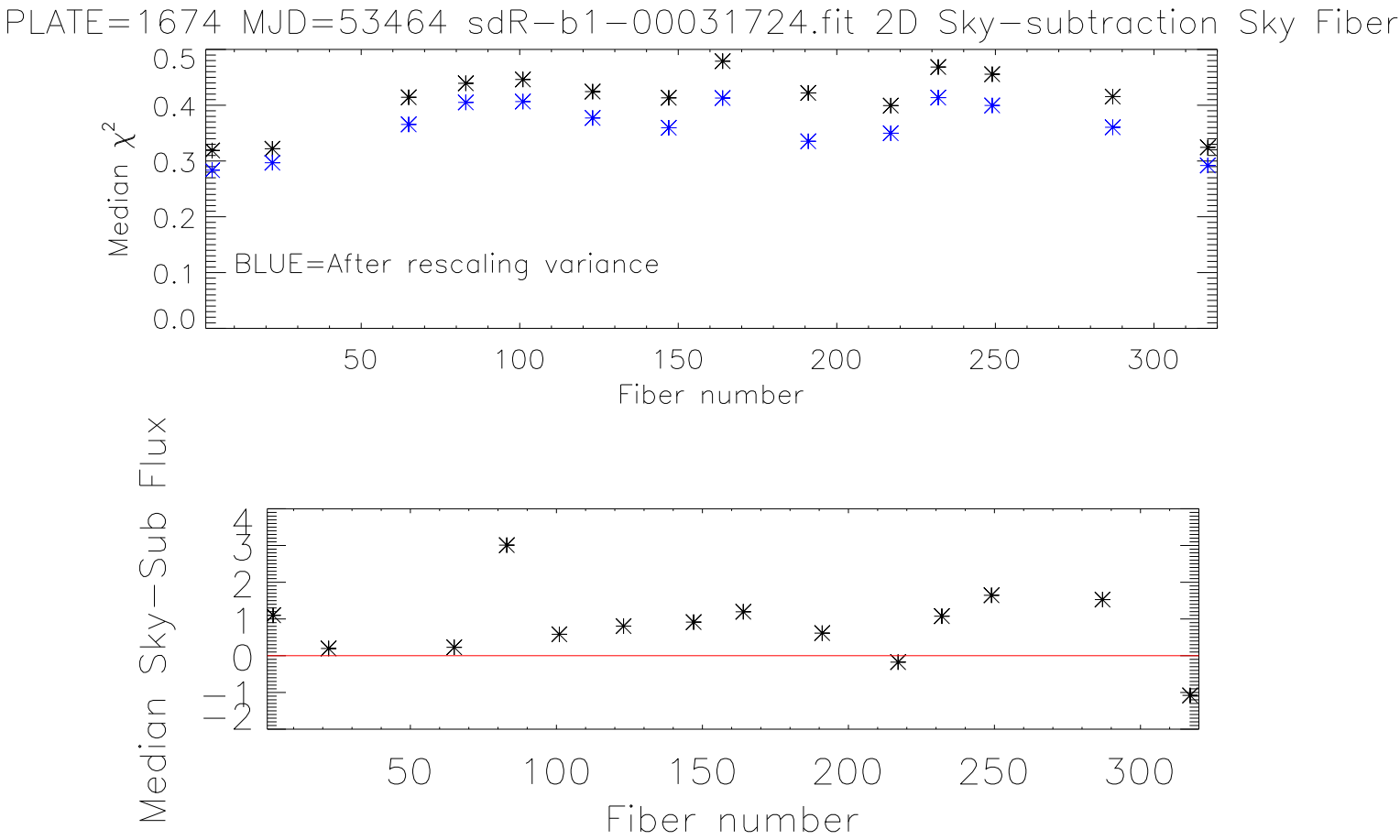

PLATE=1674 MJD=53464 Smooth superflat for sdR-b1-00031724.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

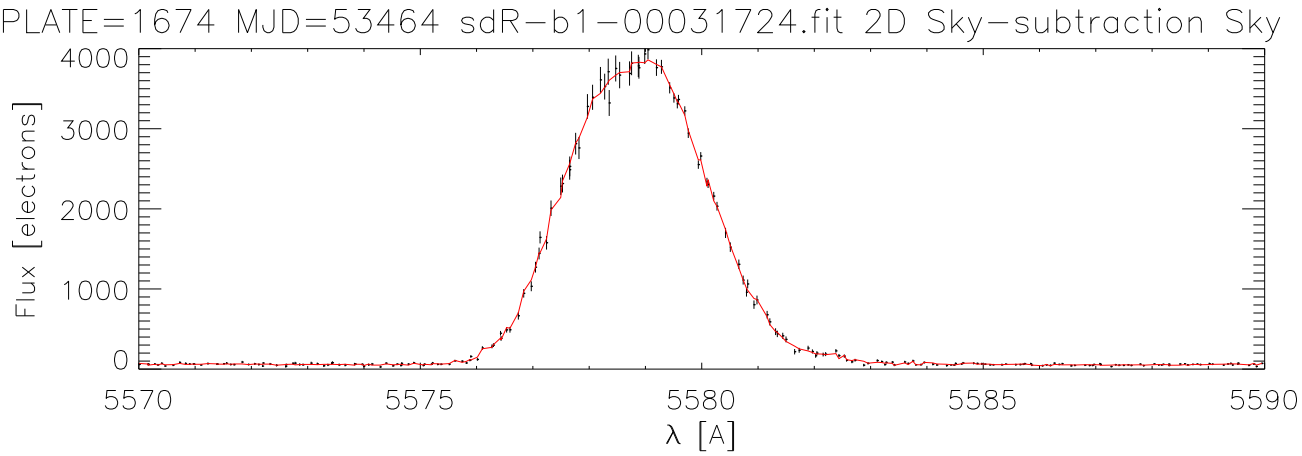

PLATE=1674 MJD=53464 sdR-b1-00031724.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

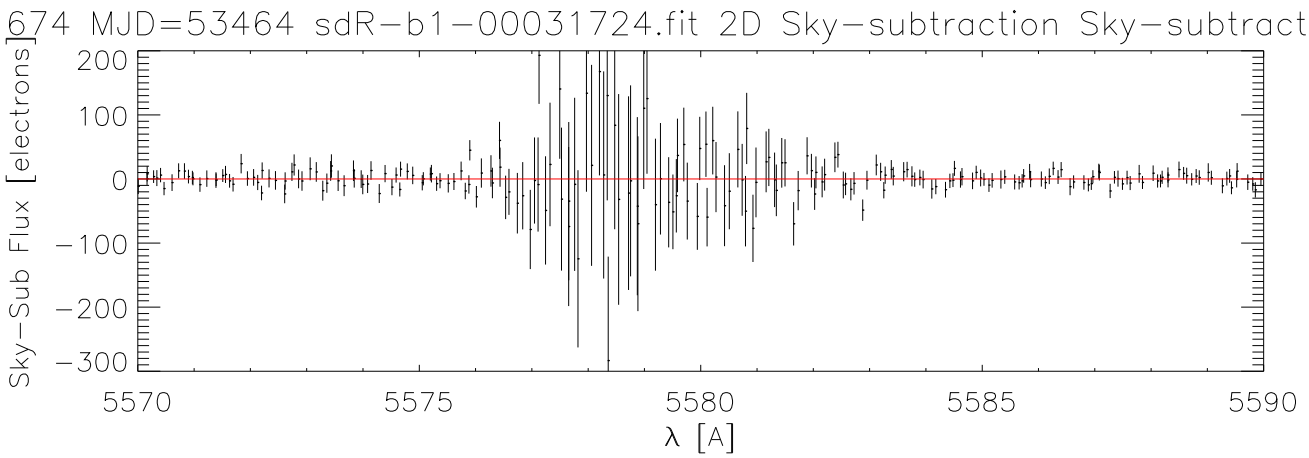

PLATE=1674 MJD=53464 sdR-b1-00031724.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

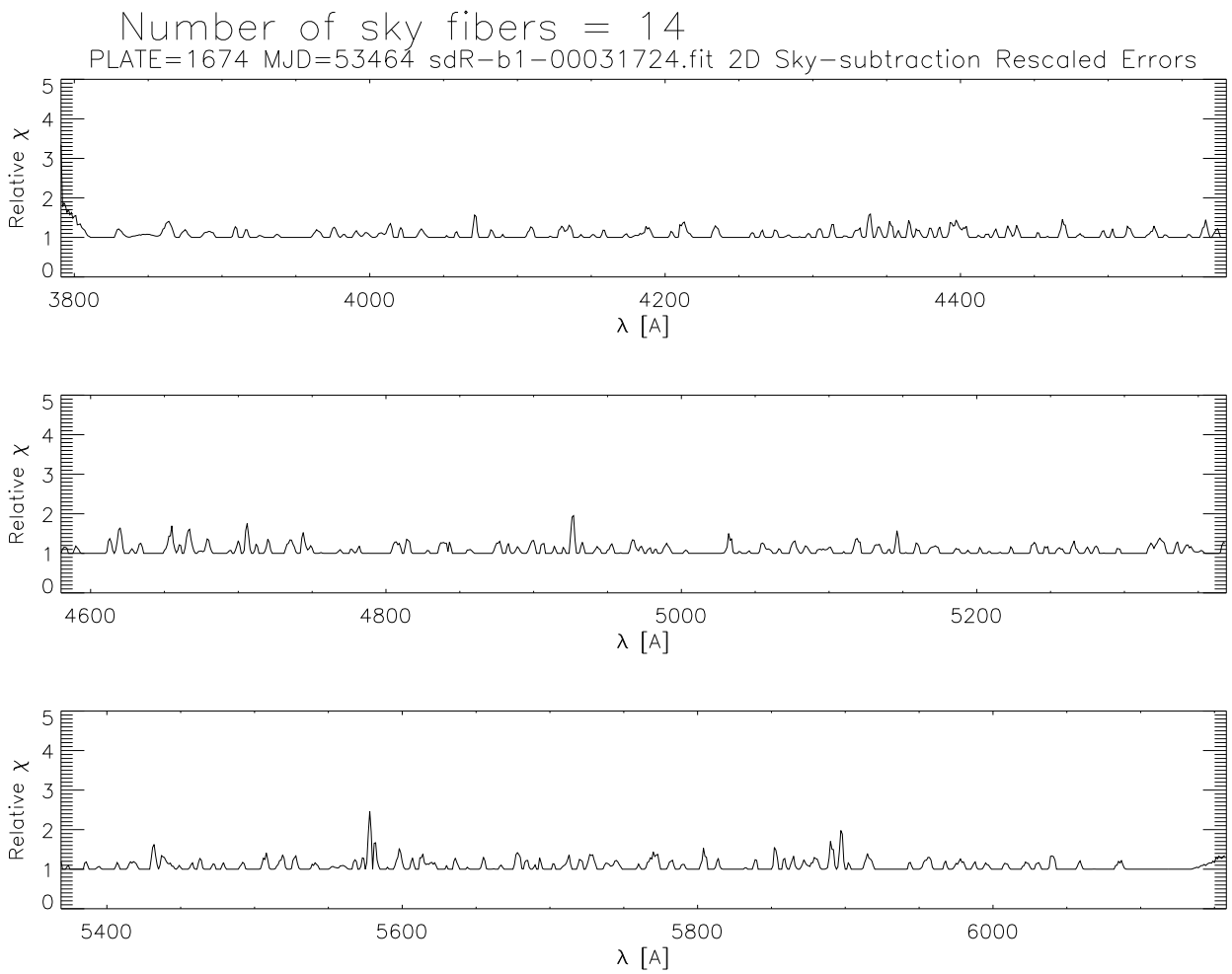

PLATE=1674 MJD=53464 sdR-b1-00031724.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
5570
5575
5580
5585
5590
λ [A]

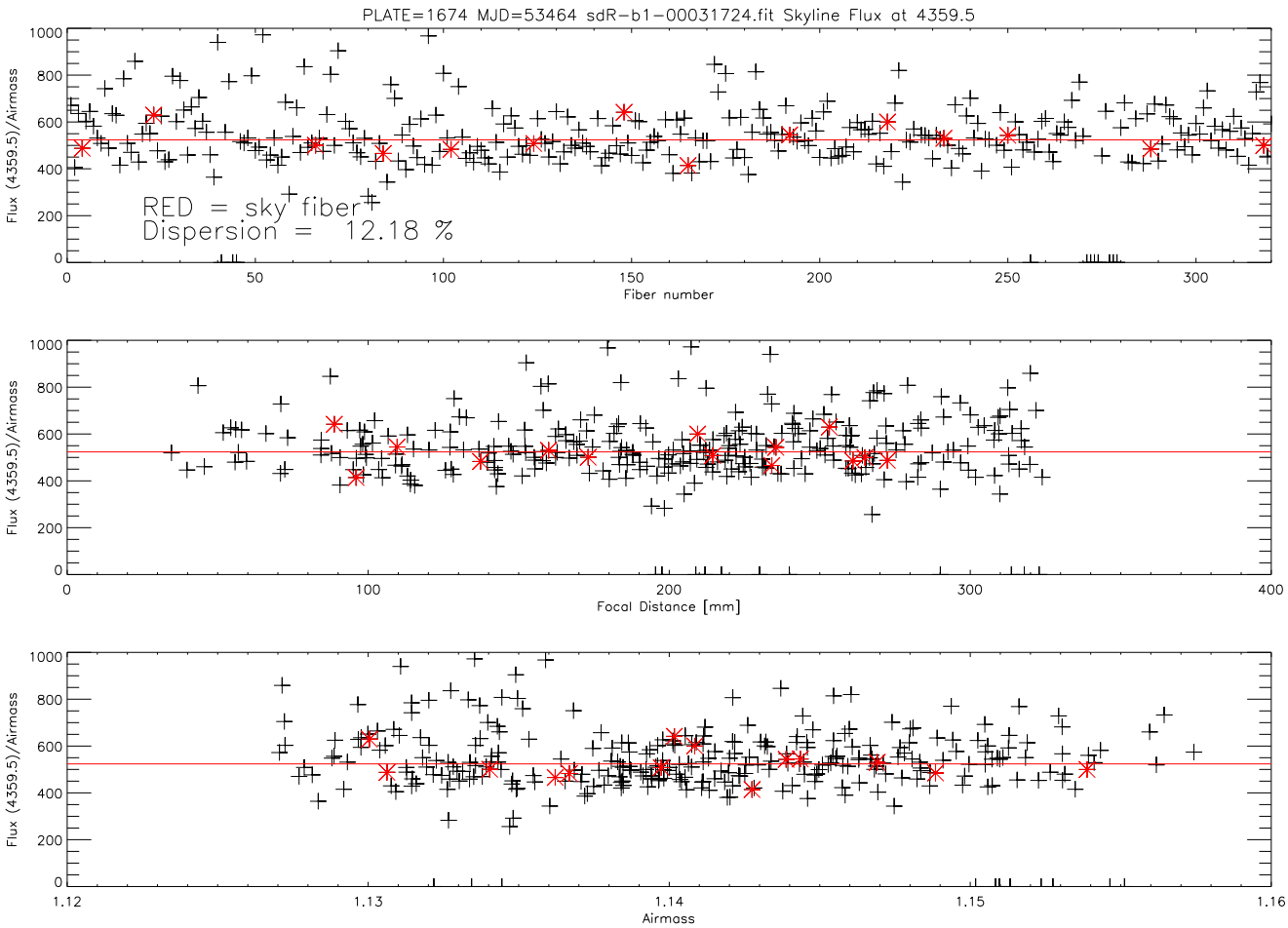

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-b1-00031724.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

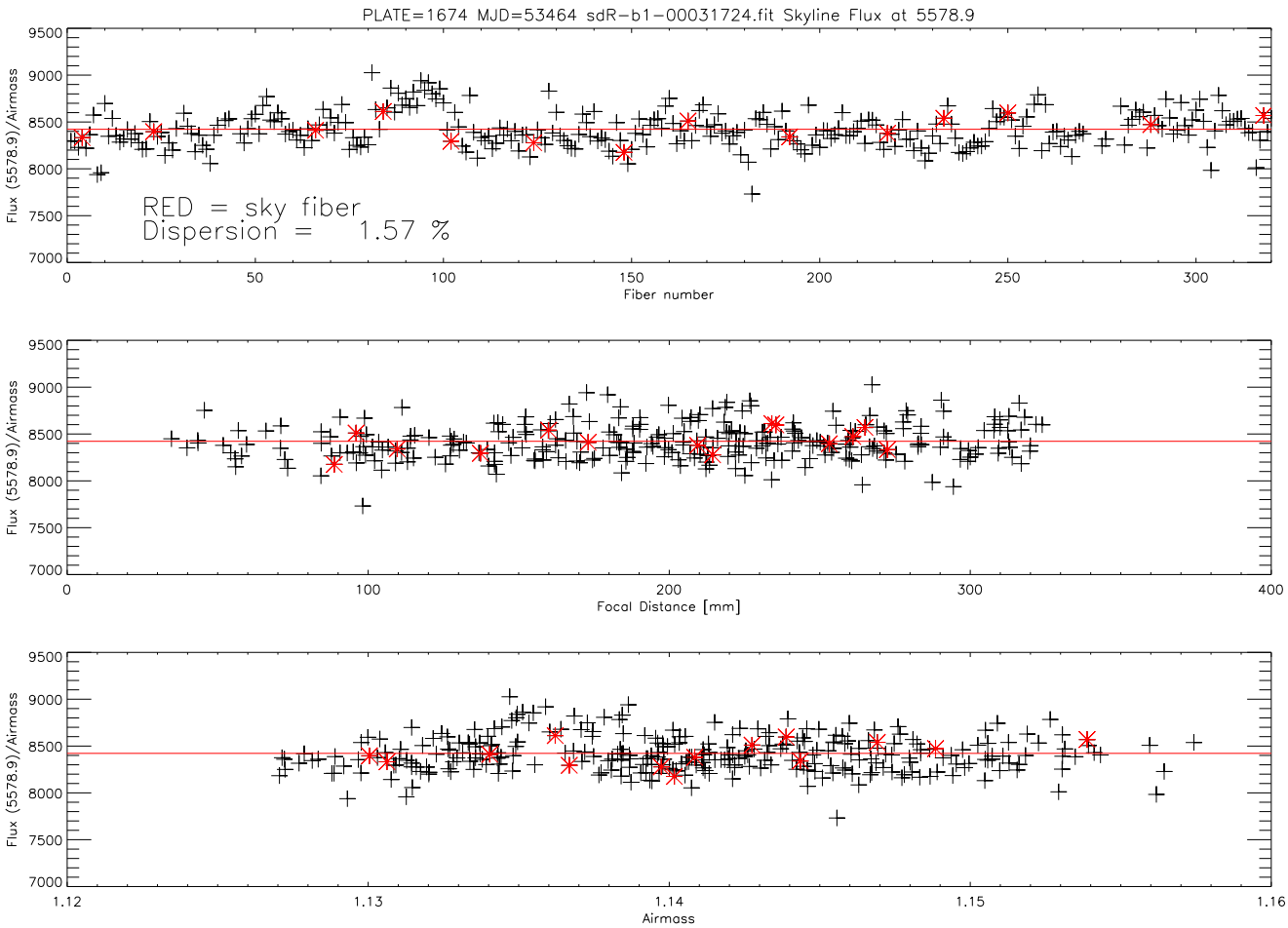

PLATE=1674 MJD=53464 sdR-b1-00031724.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

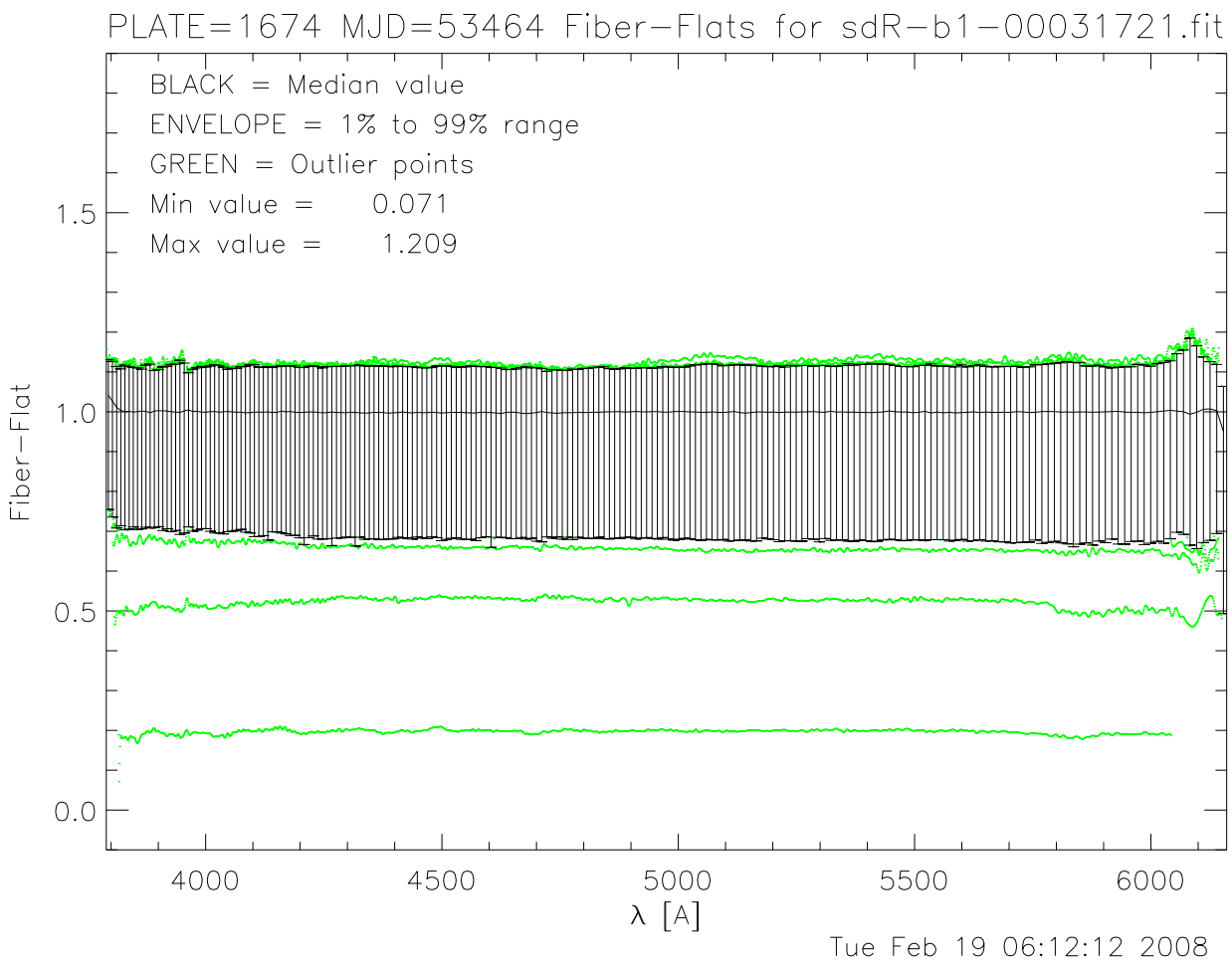

PLATE=1674 MJD=53464 sdR-b1-00031724.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

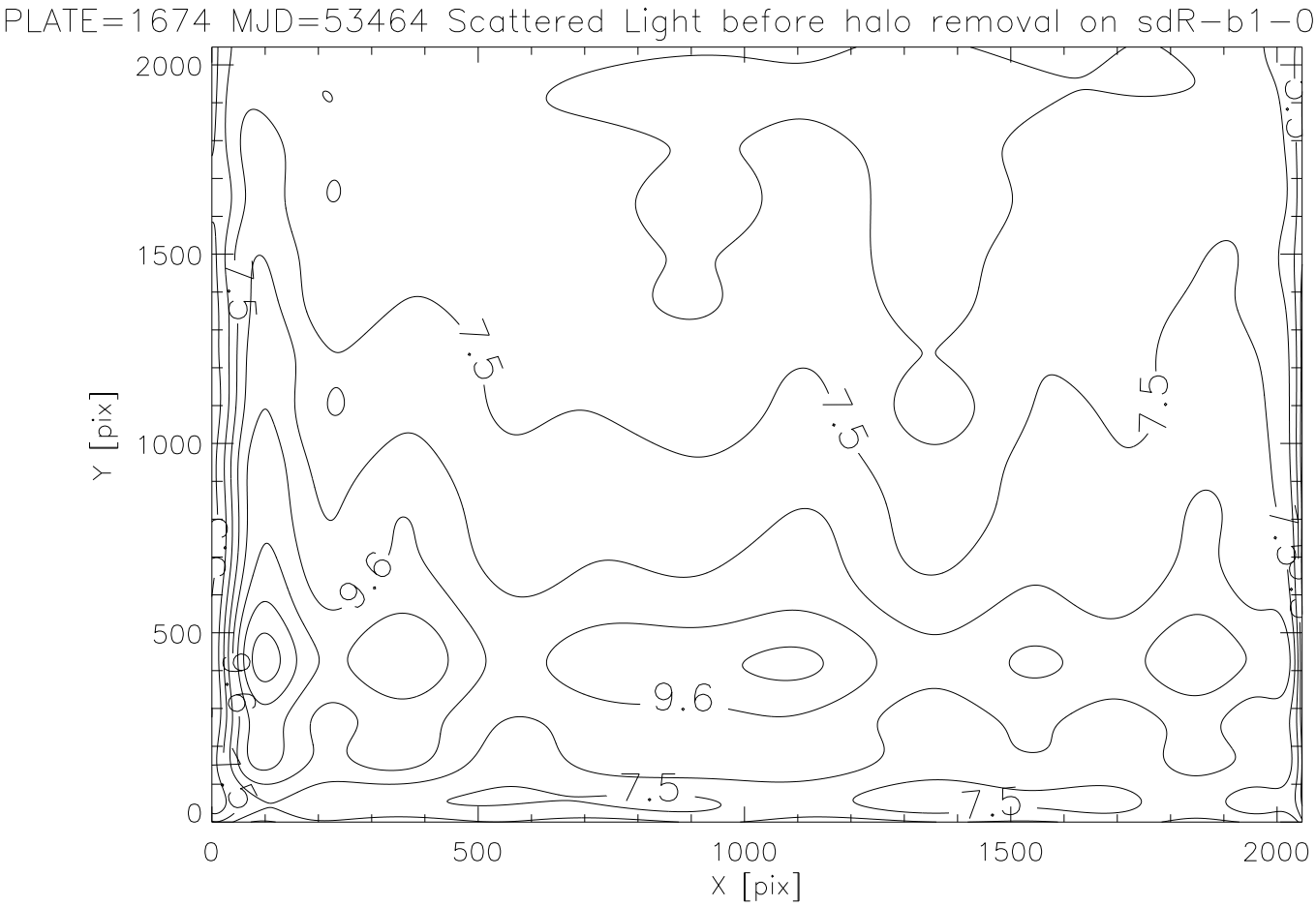

PLATE=1674 MJD=53464 sdR-b1-00031724.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

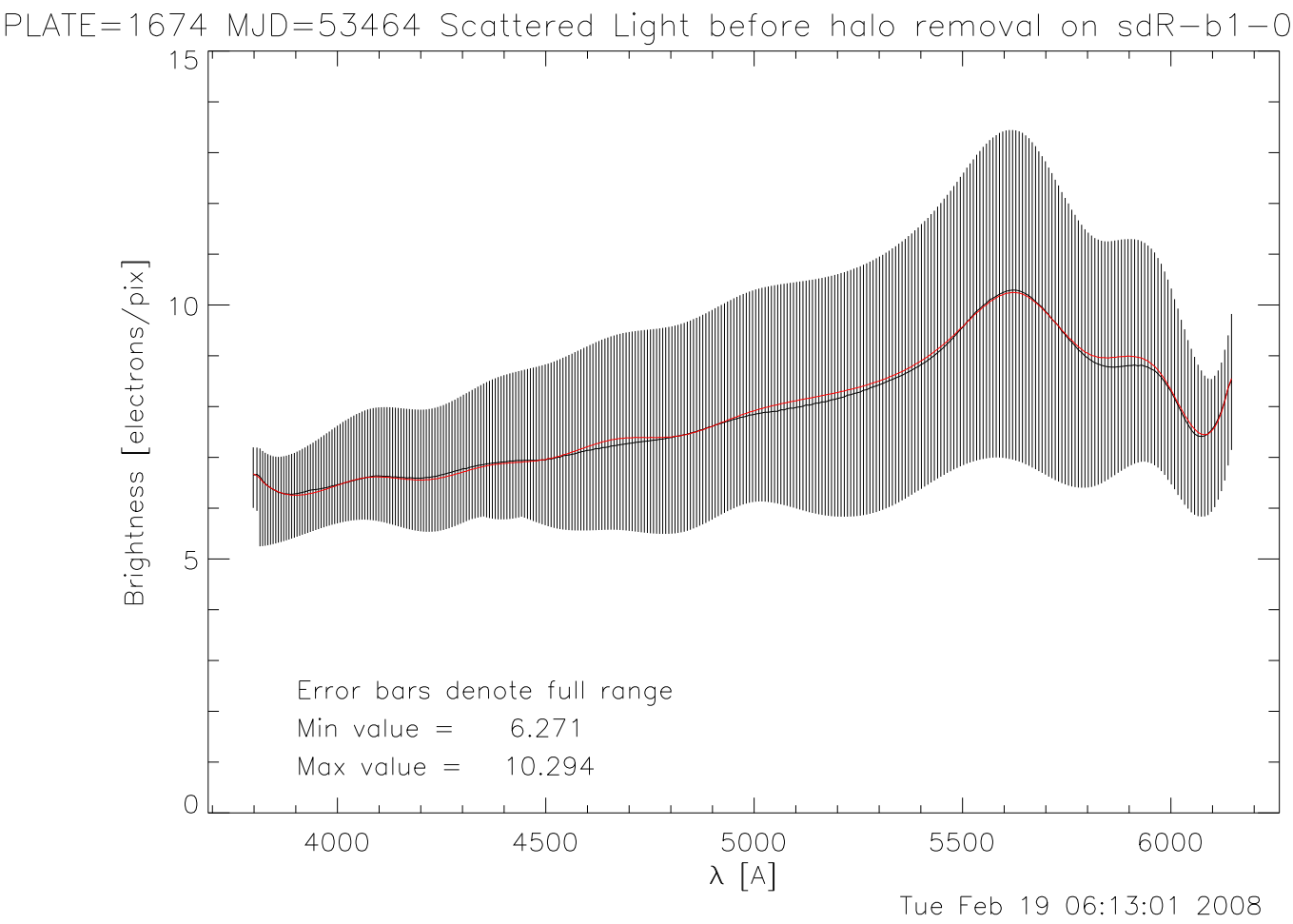

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-b1-00031724.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

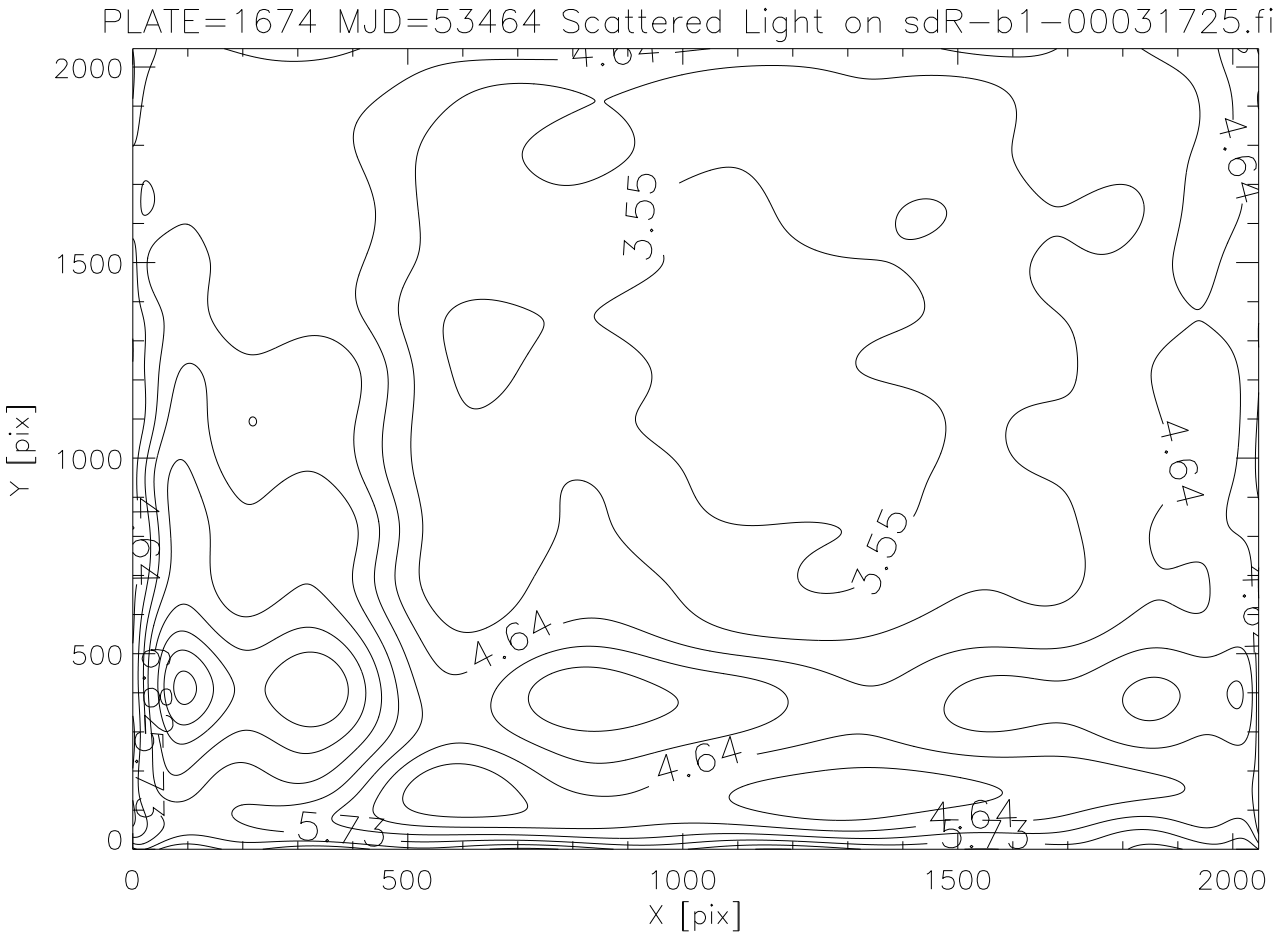

PLATE=1674 MJD=53464 sdR-b1-00031724.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.18 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

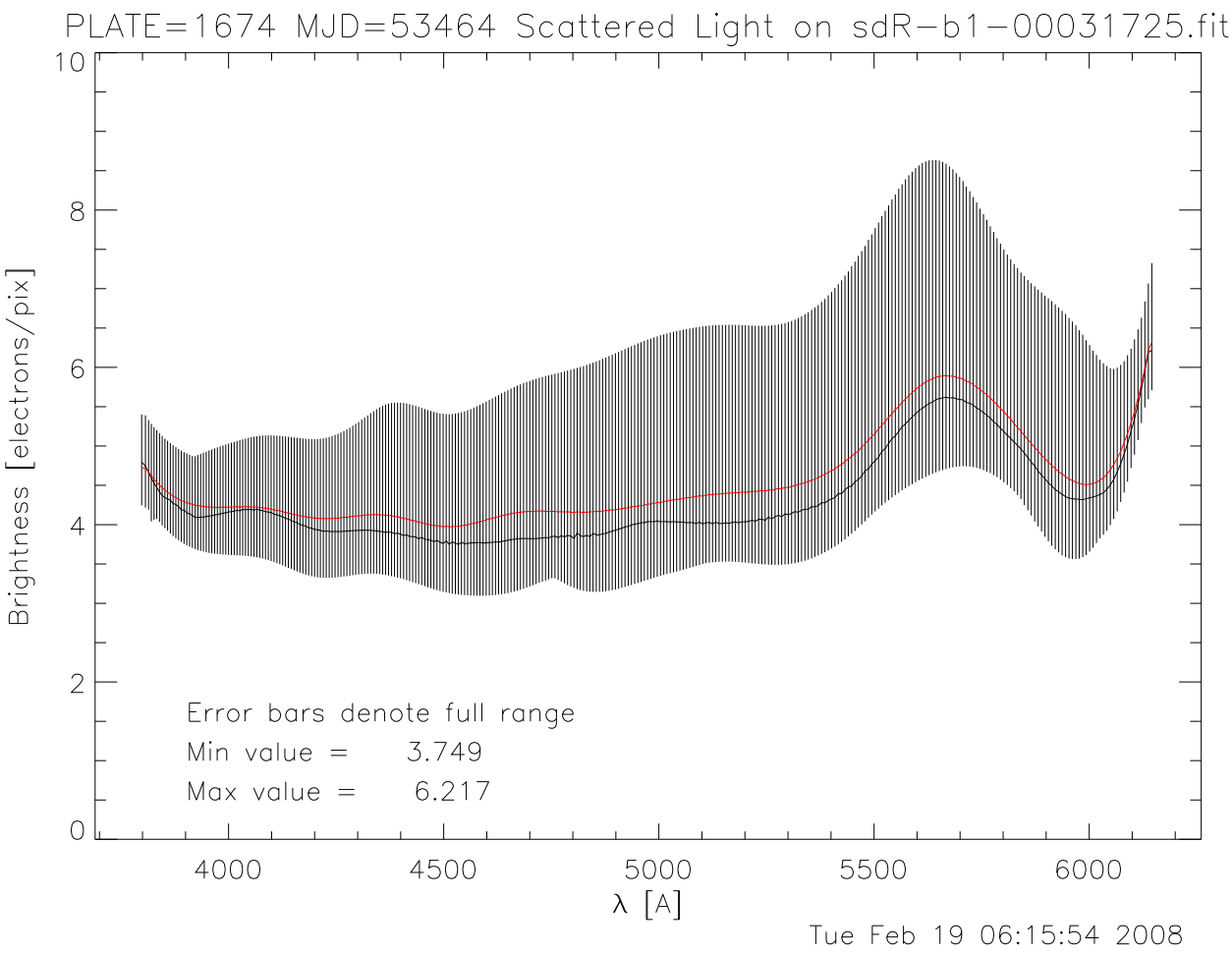

PLATE=1674 MJD=53464 sdR-b1-00031724.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.57 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

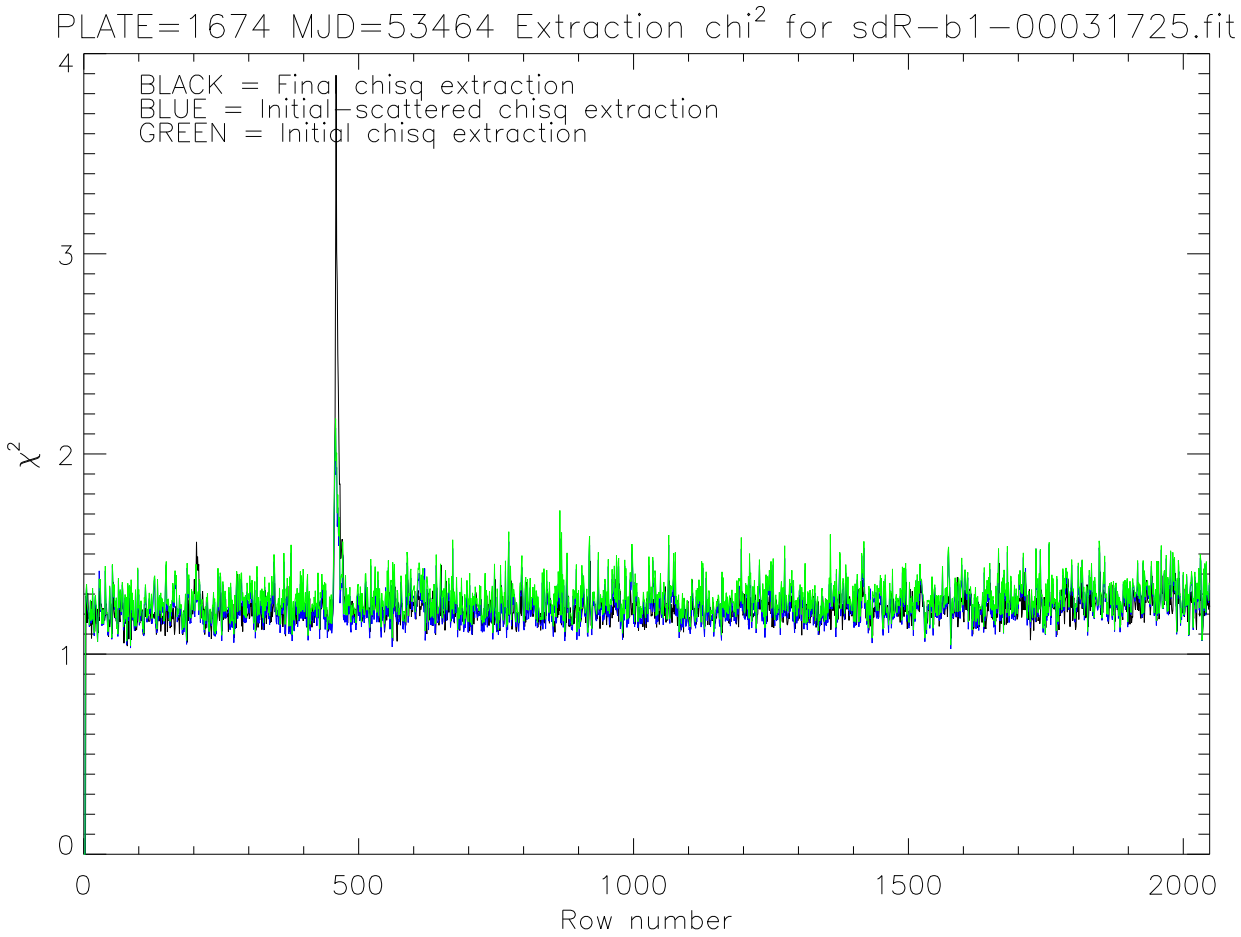

PLATE=1674 MJD=53464 Fiber−Flats for sdR−b1−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.071
Max value = 1.209
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:12:12 2008

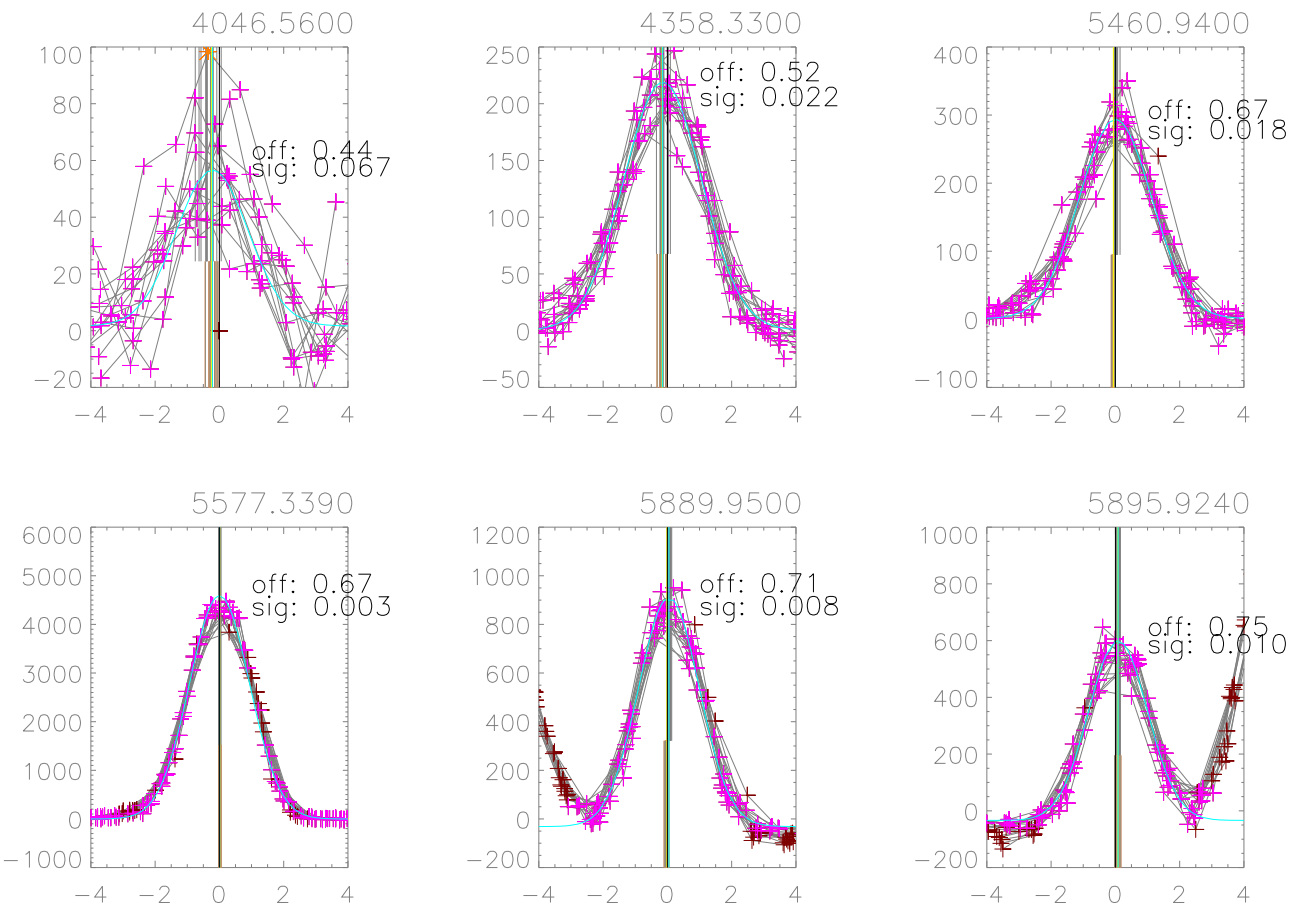

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b1-00031725.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
9.6

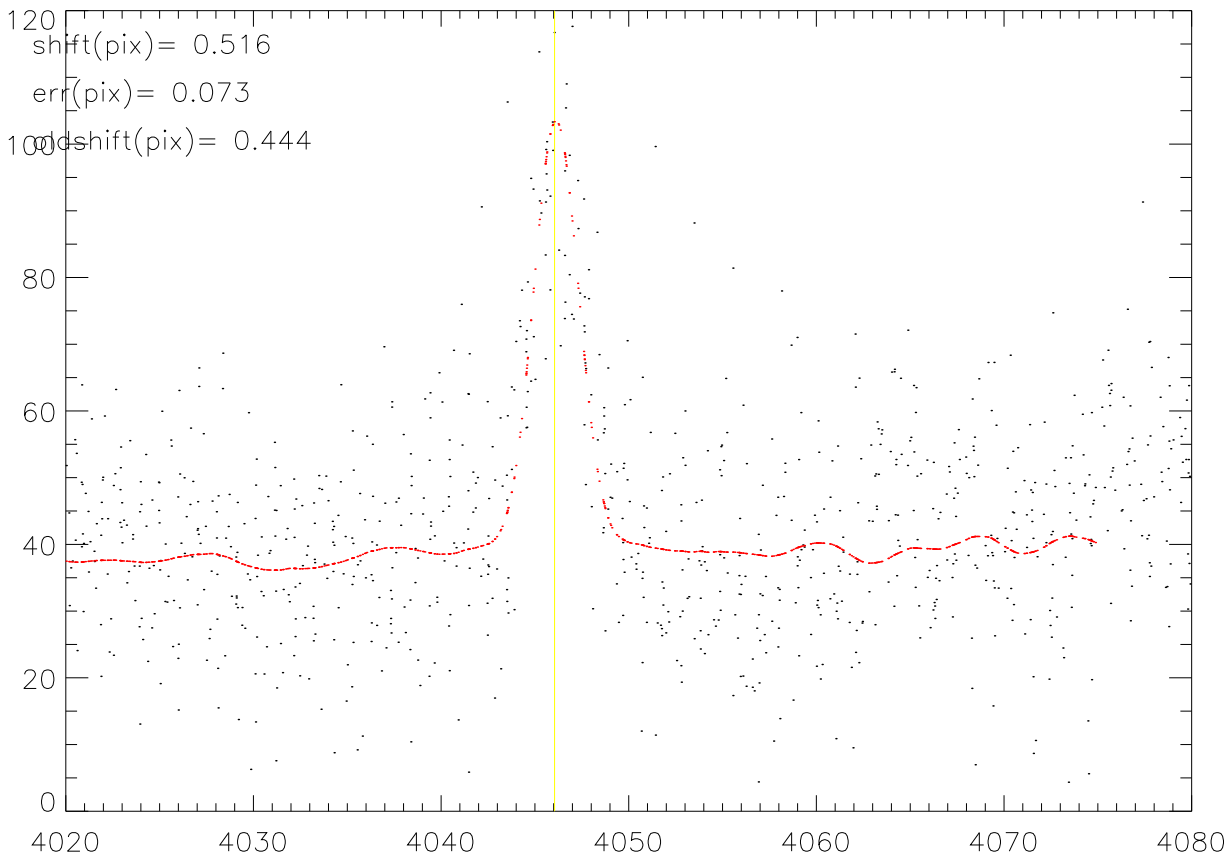

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b1-00031725.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.271
Max value = 10.294
Tue Feb 19 06:13:01 2008

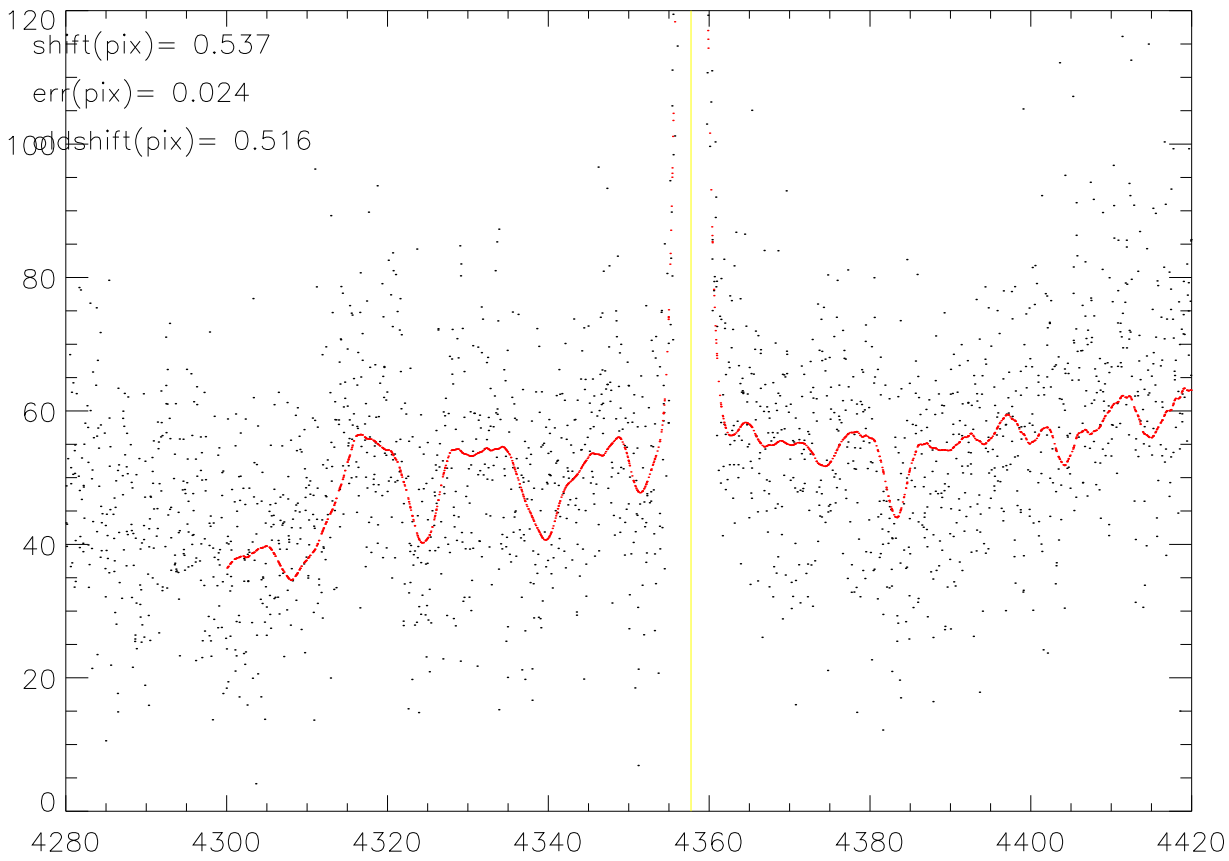

PLATE=1674 MJD=53464 Scattered Light on sdR−b1−00031725.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.64
3.55
5.73

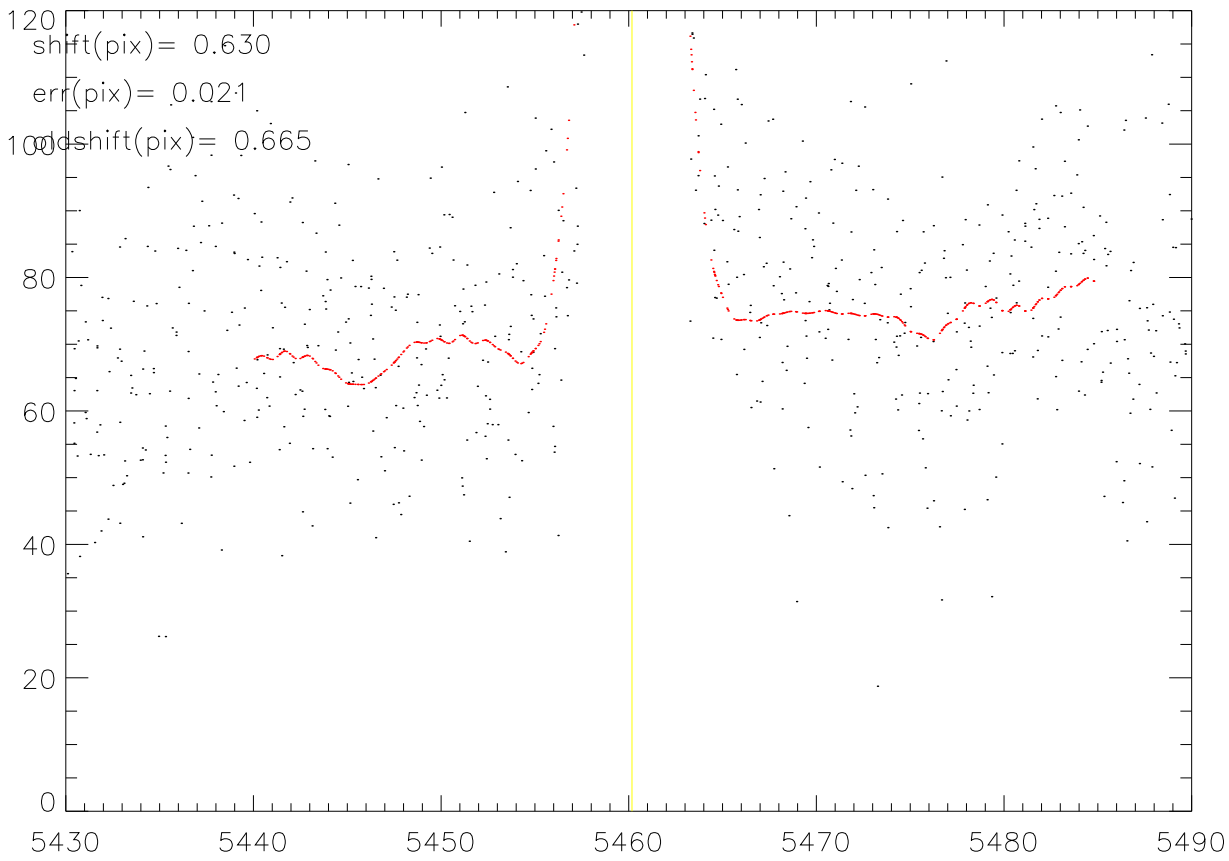

PLATE=1674 MJD=53464 Scattered Light on sdR-b1-00031725.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.749
Max value = 6.217
Tue Feb 19 06:15:54 2008

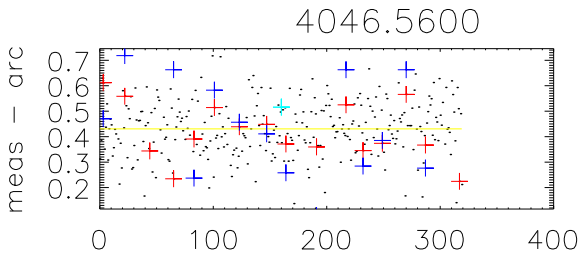

PLATE=1674 MJD=53464 Extraction chi^2 for sdR-b1-00031725.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

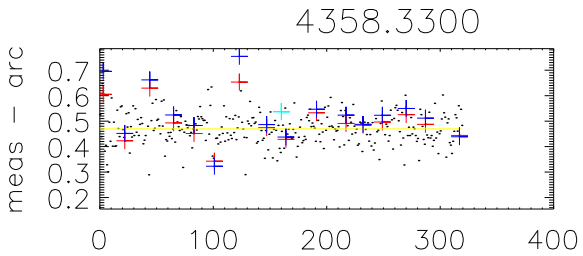

4046.5600
off: 0.44
sig: 0.067
4358.3300
off: 0.52
sig: 0.022
5460.9400
off: 0.67
sig: 0.018
5577.3390
off: 0.67
sig: 0.003
5889.9500
off: 0.71
sig: 0.008
5895.9240
off: 0.75
sig: 0.010

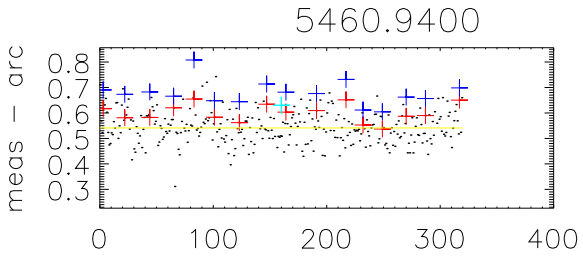

shift(pix)= 0.516
err(pix)= 0.073
oldshift(pix)= 0.444
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

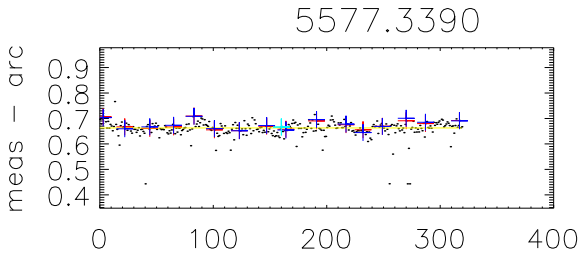

shift(pix)= 0.537
err(pix)= 0.024
oldshift(pix)= 0.516
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

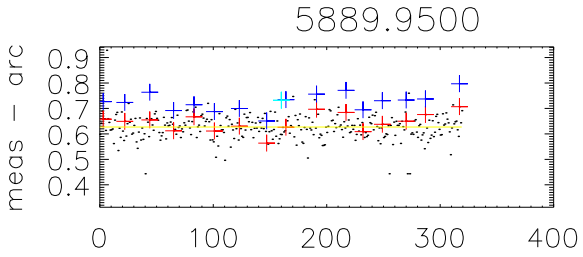

shift(pix)= 0.630
err(pix)= 0.021
oldshift(pix)= 0.665
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

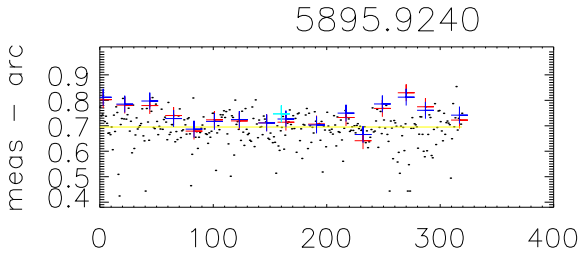

4046.5600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

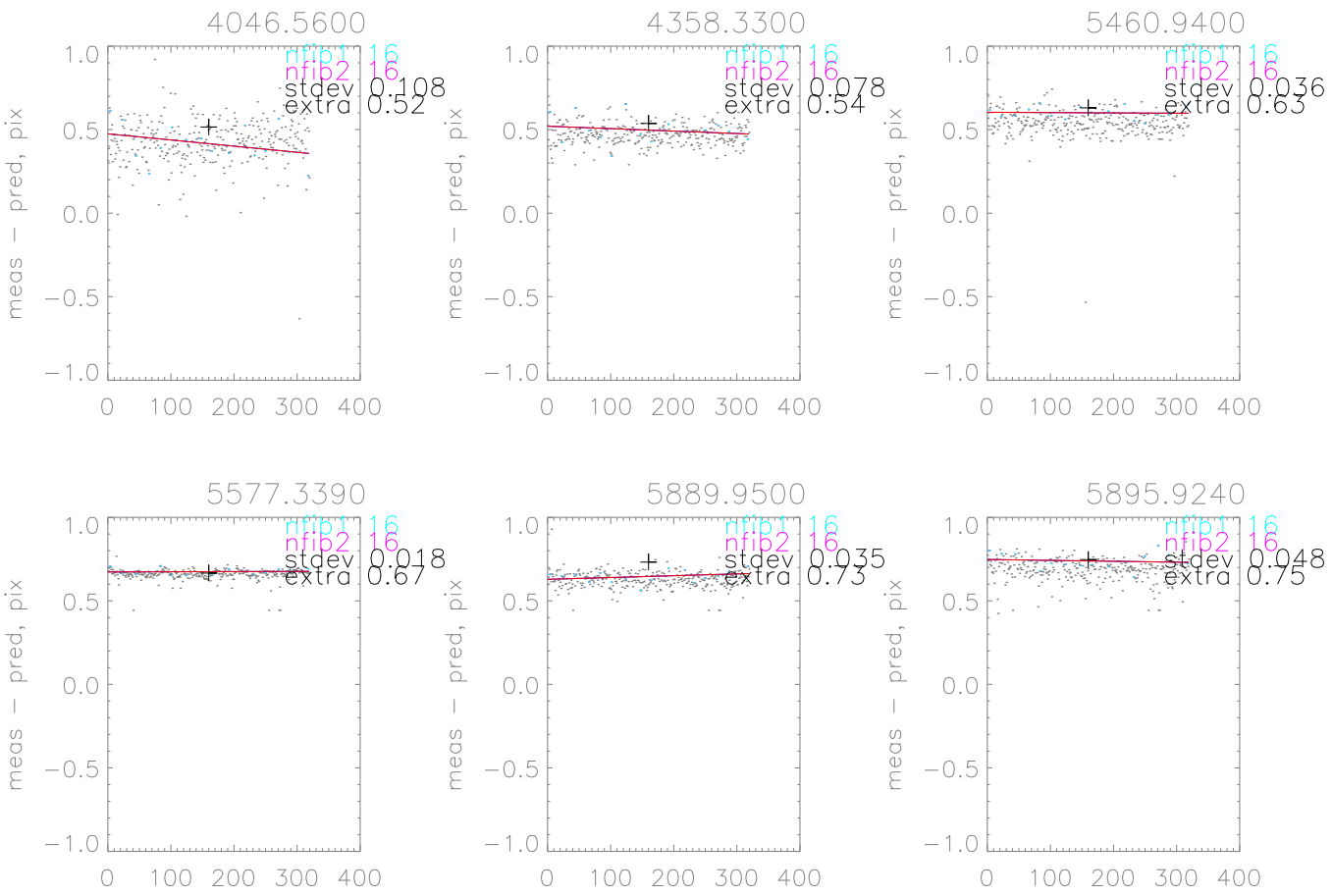

4358.3300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

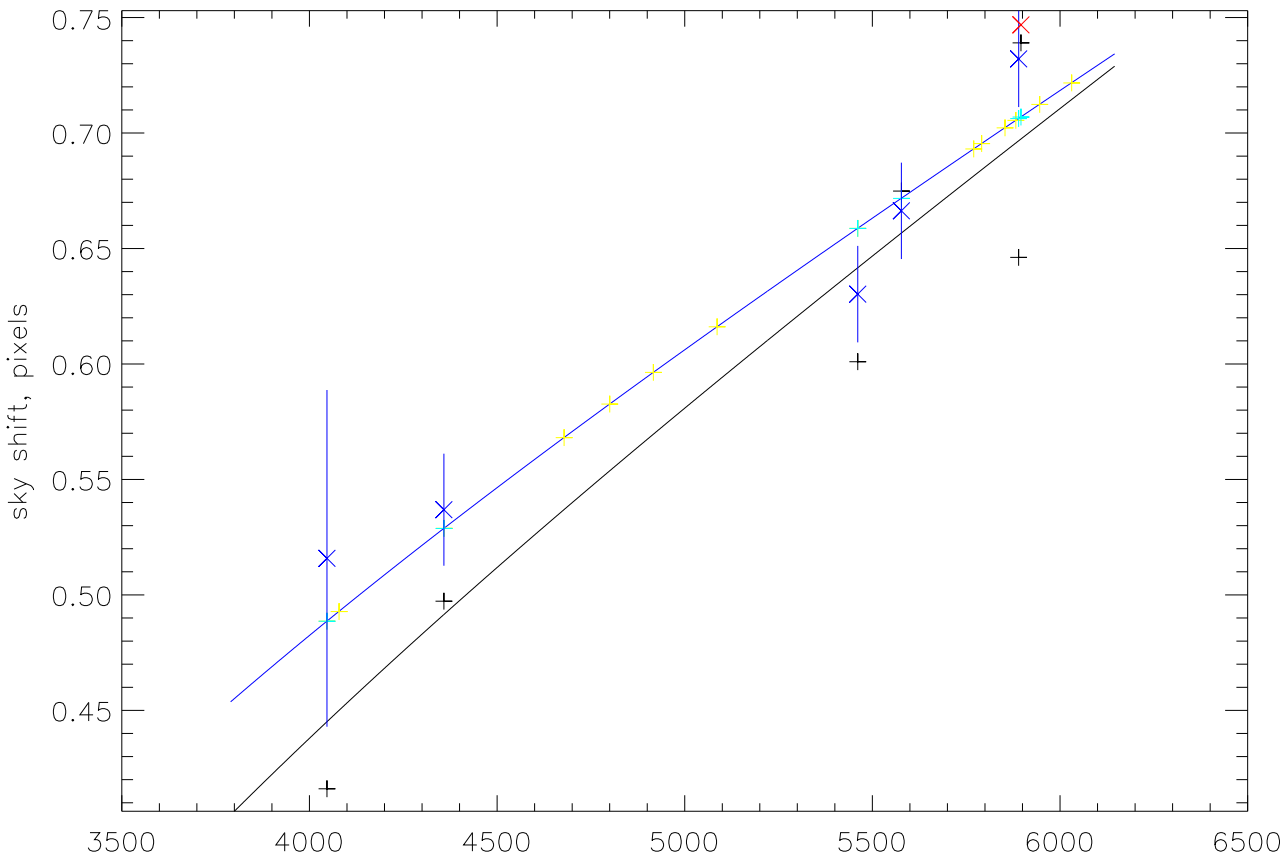

5460.9400
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

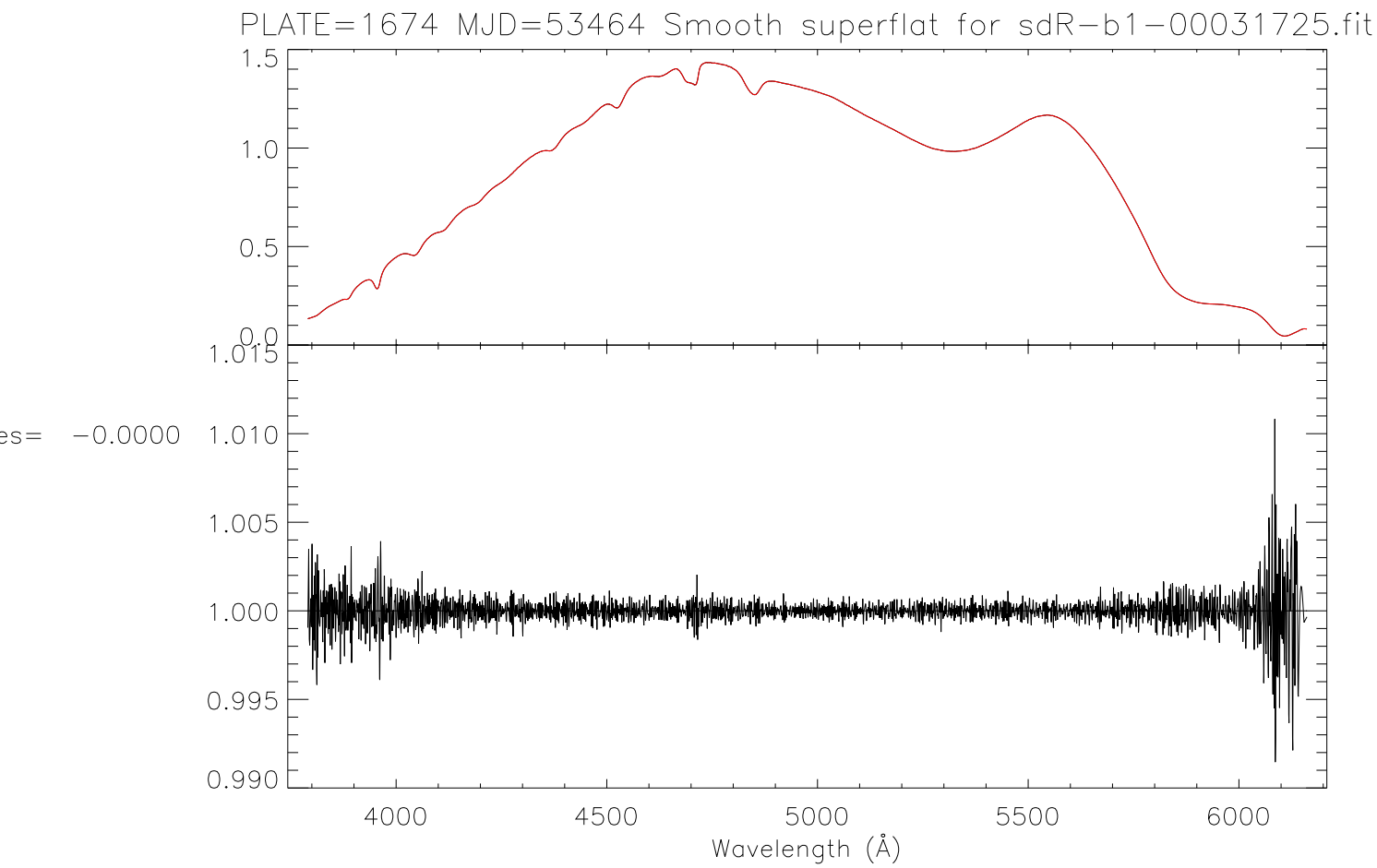

5577.3390
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

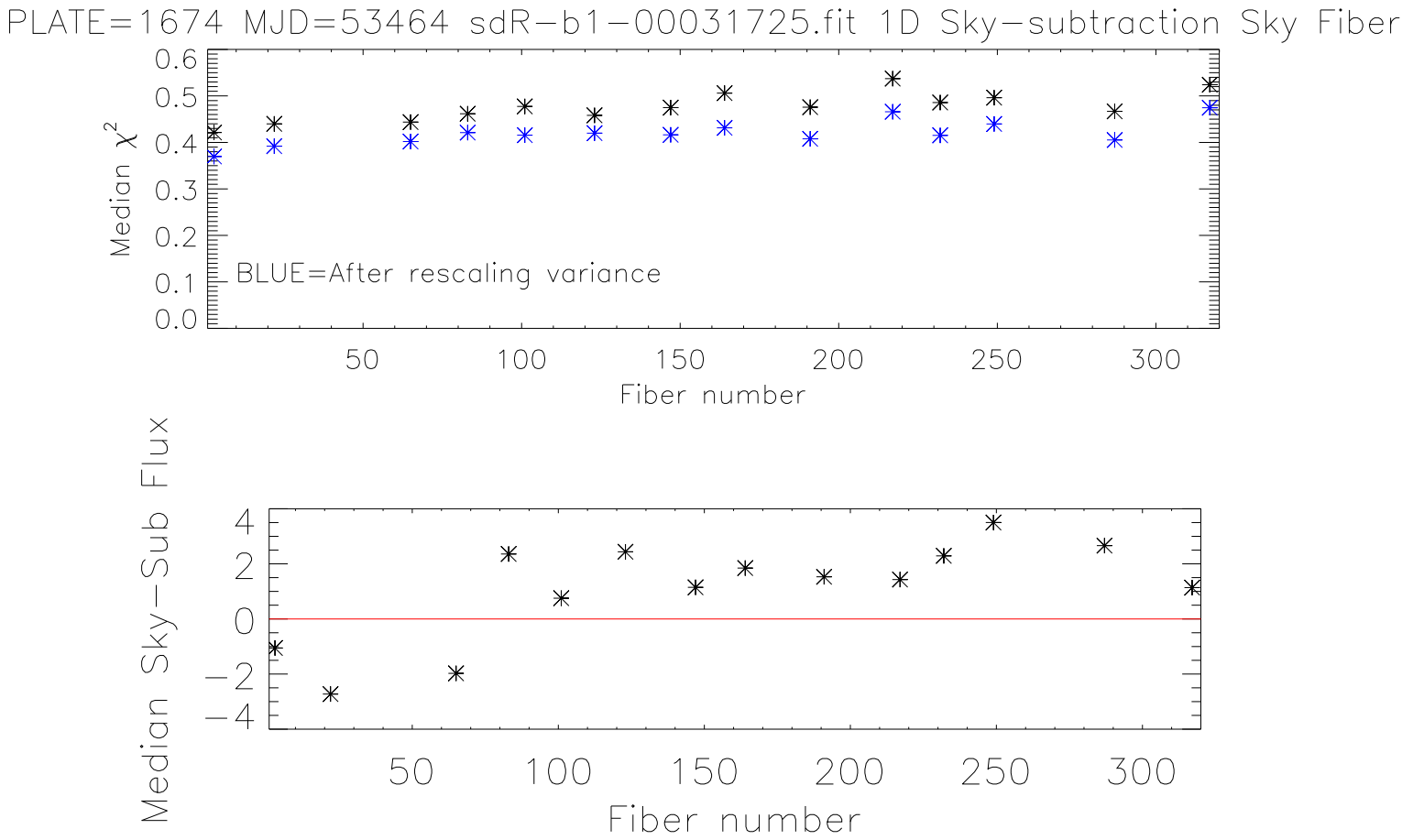

5889.9500
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

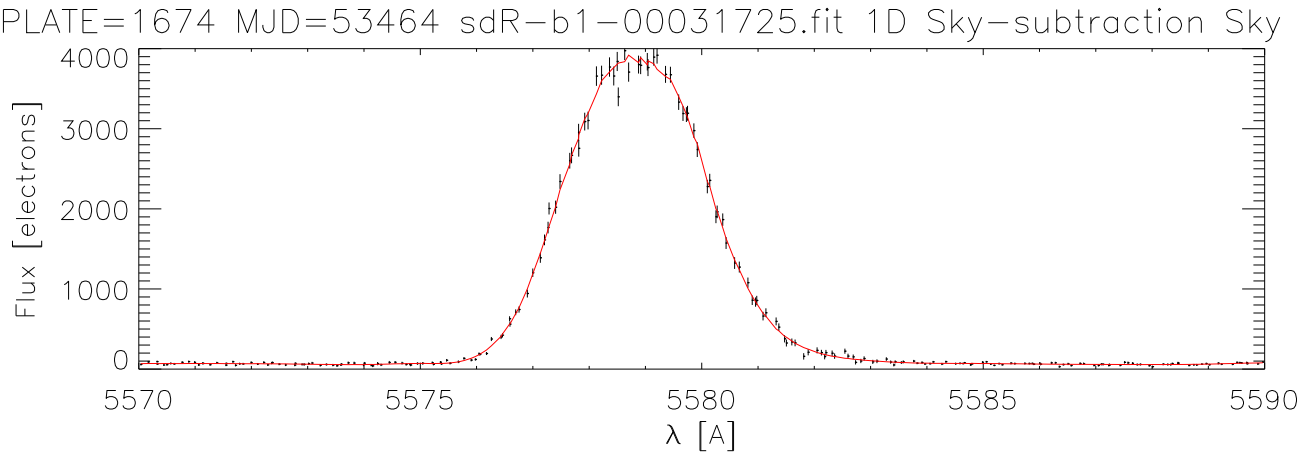

5895.9240
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

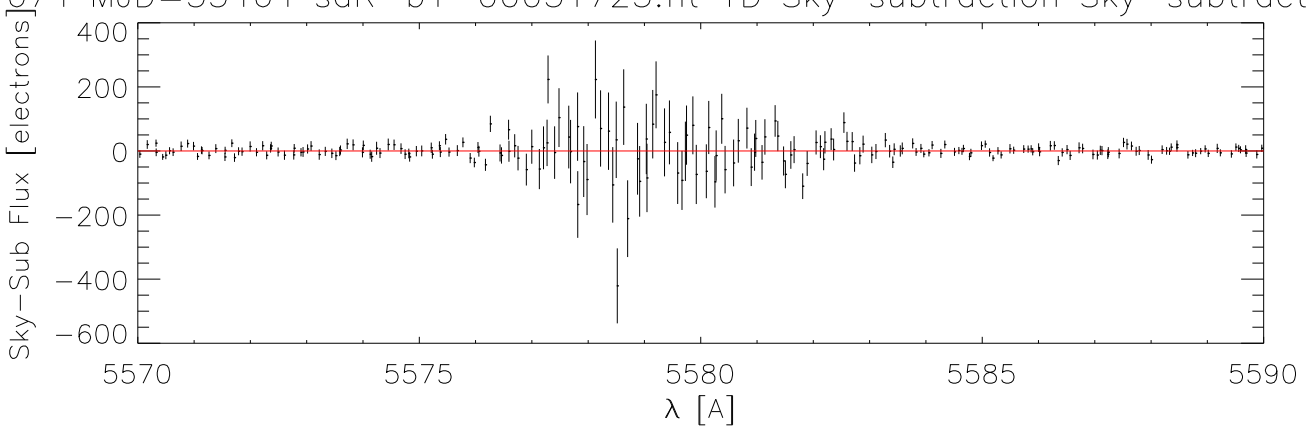

4046.5600
nfib1 16
nfib2 16
stdev 0.108
extra 0.52
4358.3300
nfib1 16
nfib2 16
stdev 0.078
extra 0.54
5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra 0.63
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra 0.67
5889.9500
nfib1 16
nfib2 16
stdev 0.035
extra 0.73
5895.9240
nfib1 16
nfib2 16
stdev 0.048
extra 0.75
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

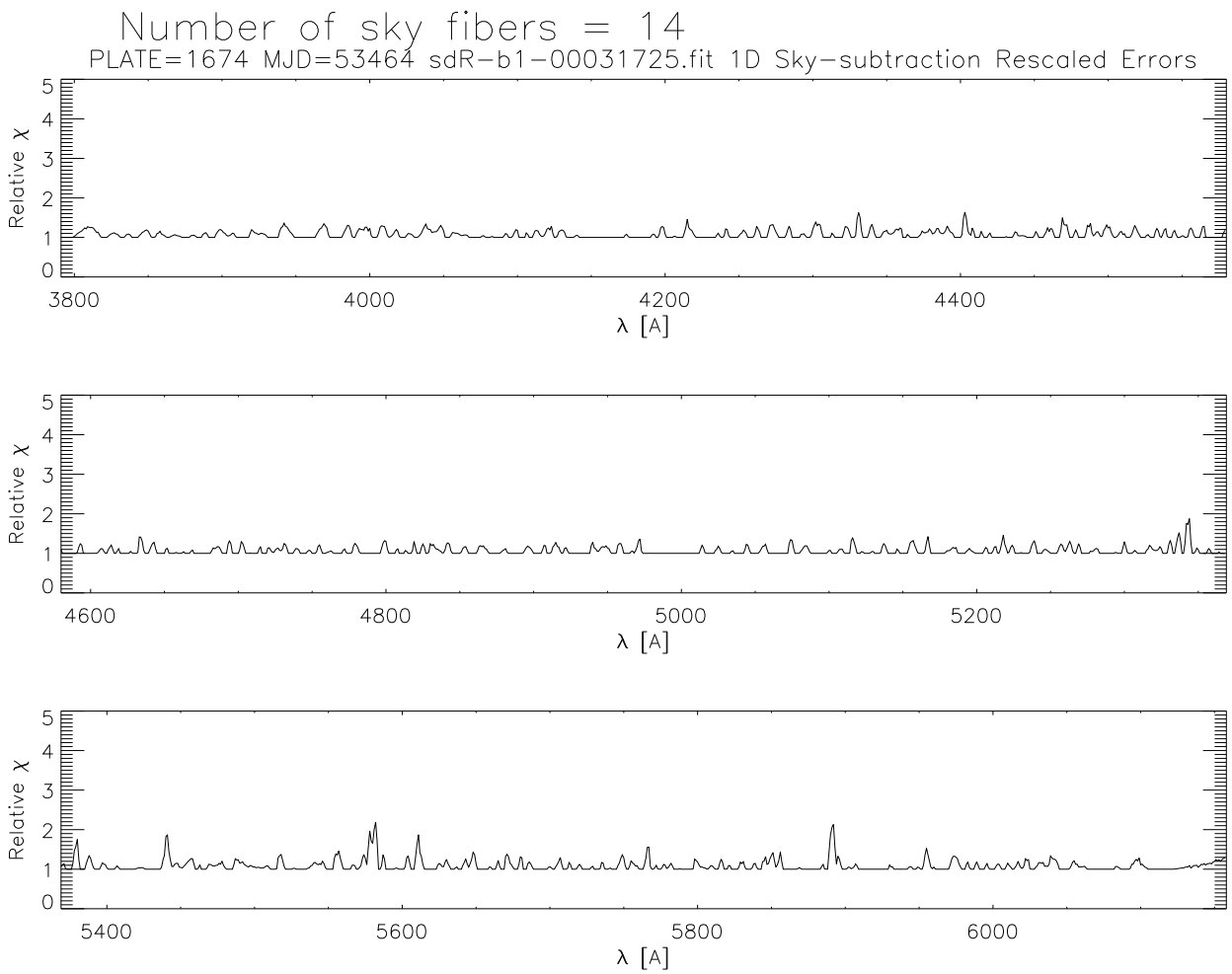

0.75
0.70
0.65
0.60
0.55
0.50
0.45
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

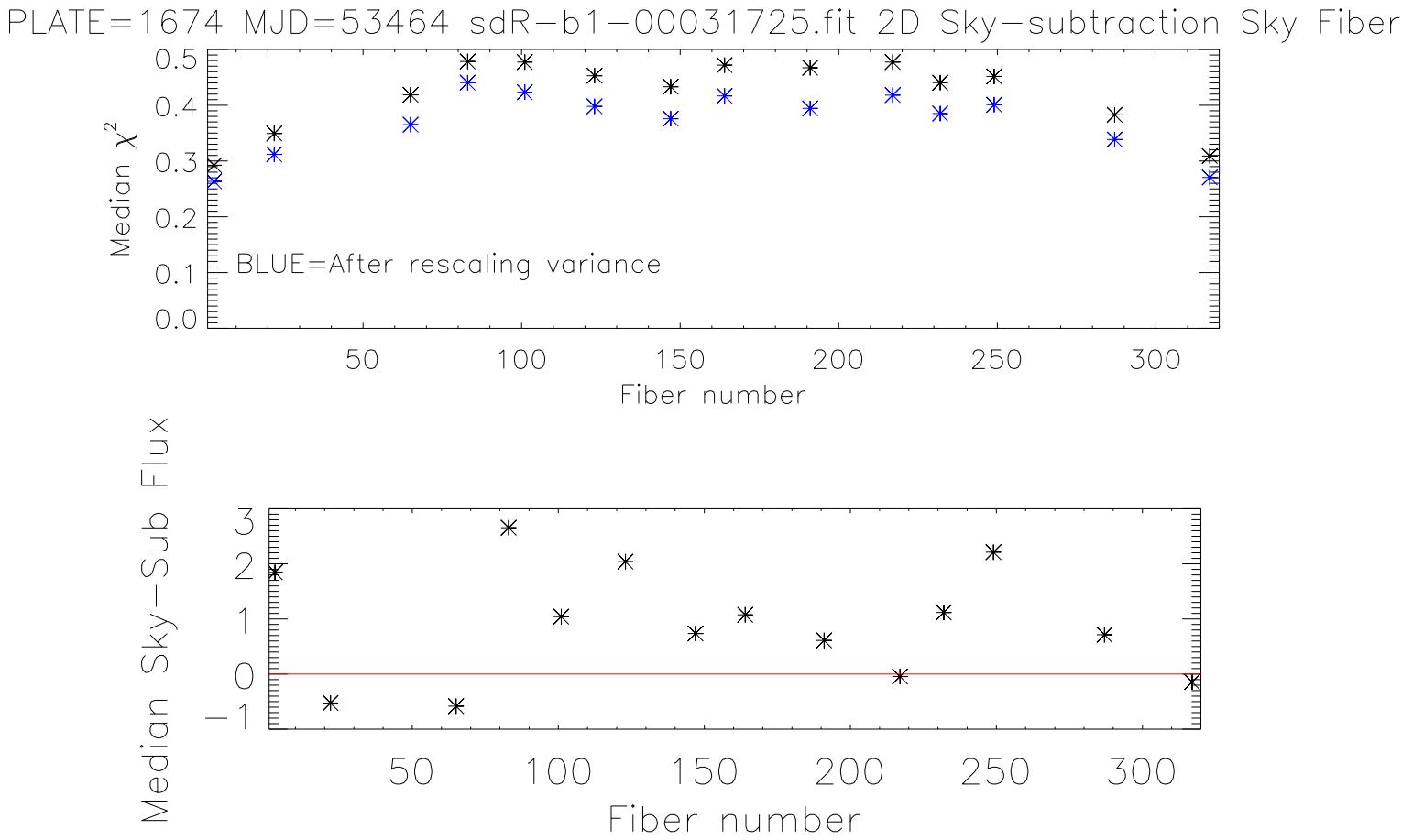

PLATE=1674 MJD=53464 Smooth superflat for sdR-b1-00031725.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

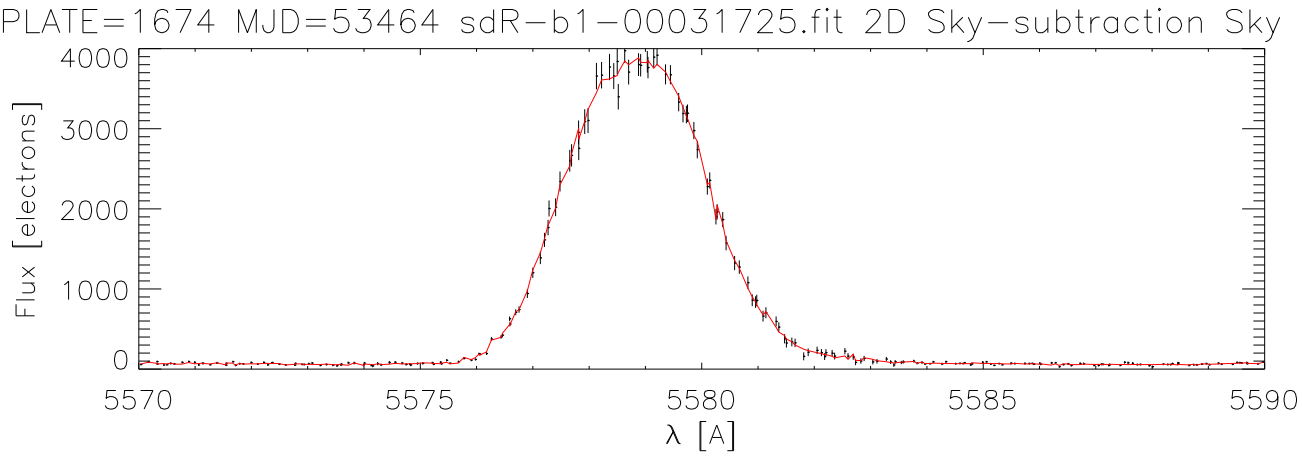

PLATE=1674 MJD=53464 sdR-b1-00031725.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

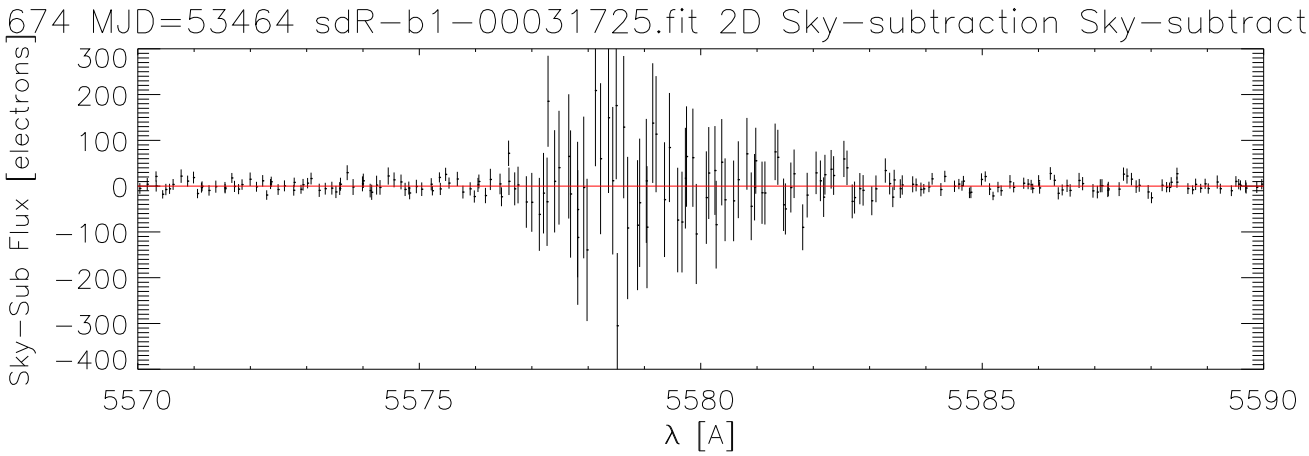

PLATE=1674 MJD=53464 sdR-b1-00031725.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

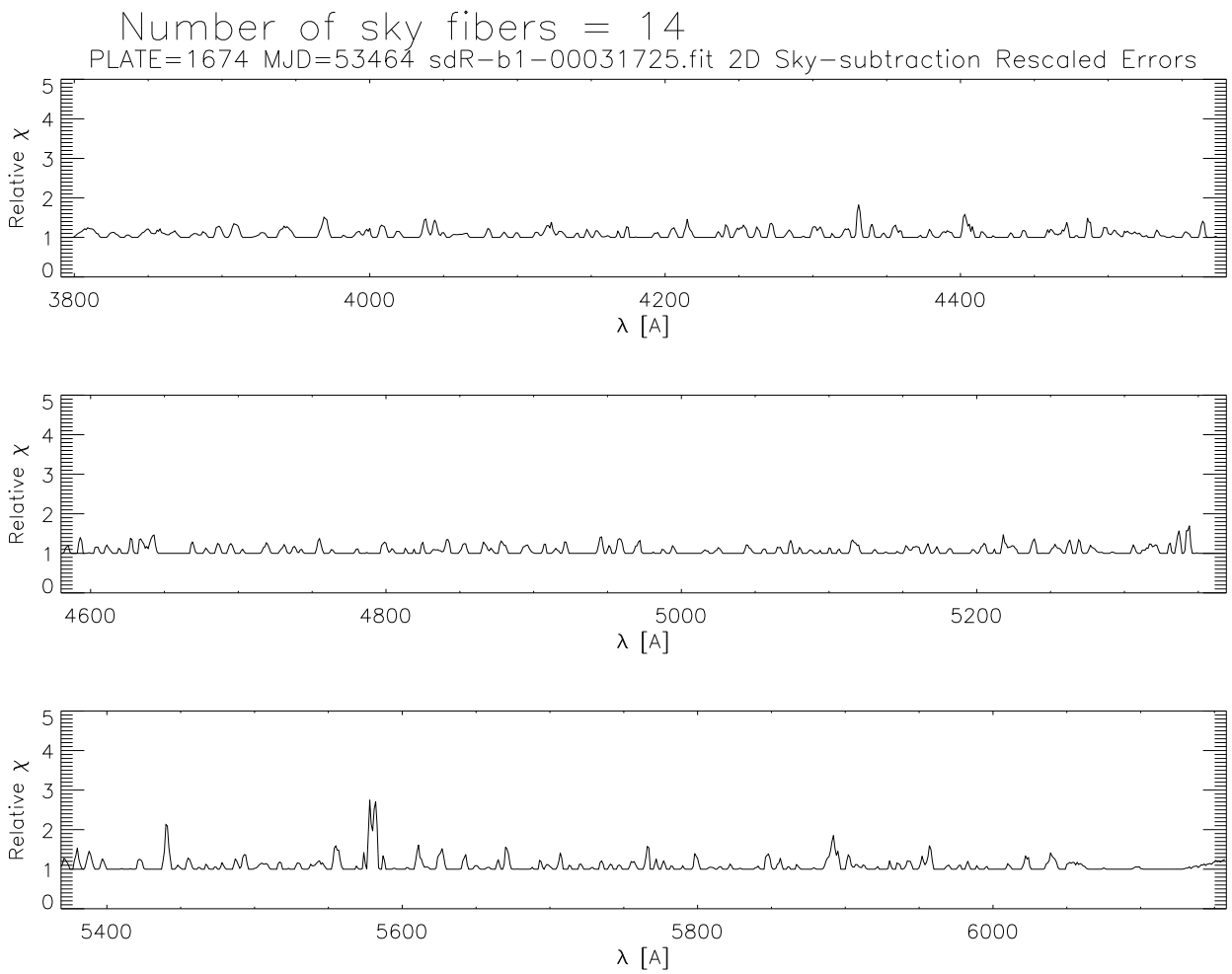

PLATE=1674 MJD=53464 sdR-b1-00031725.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

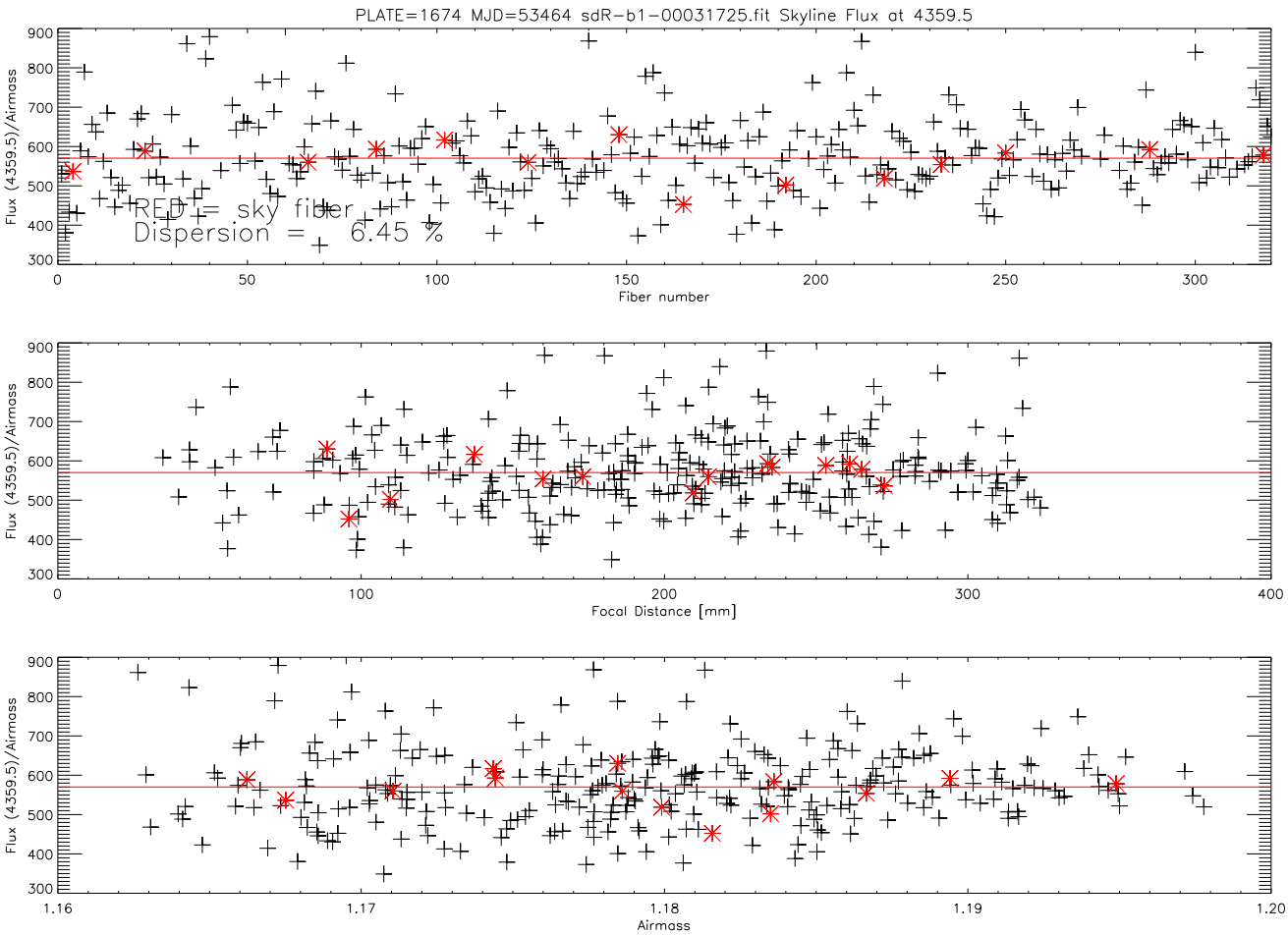

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-b1-00031725.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

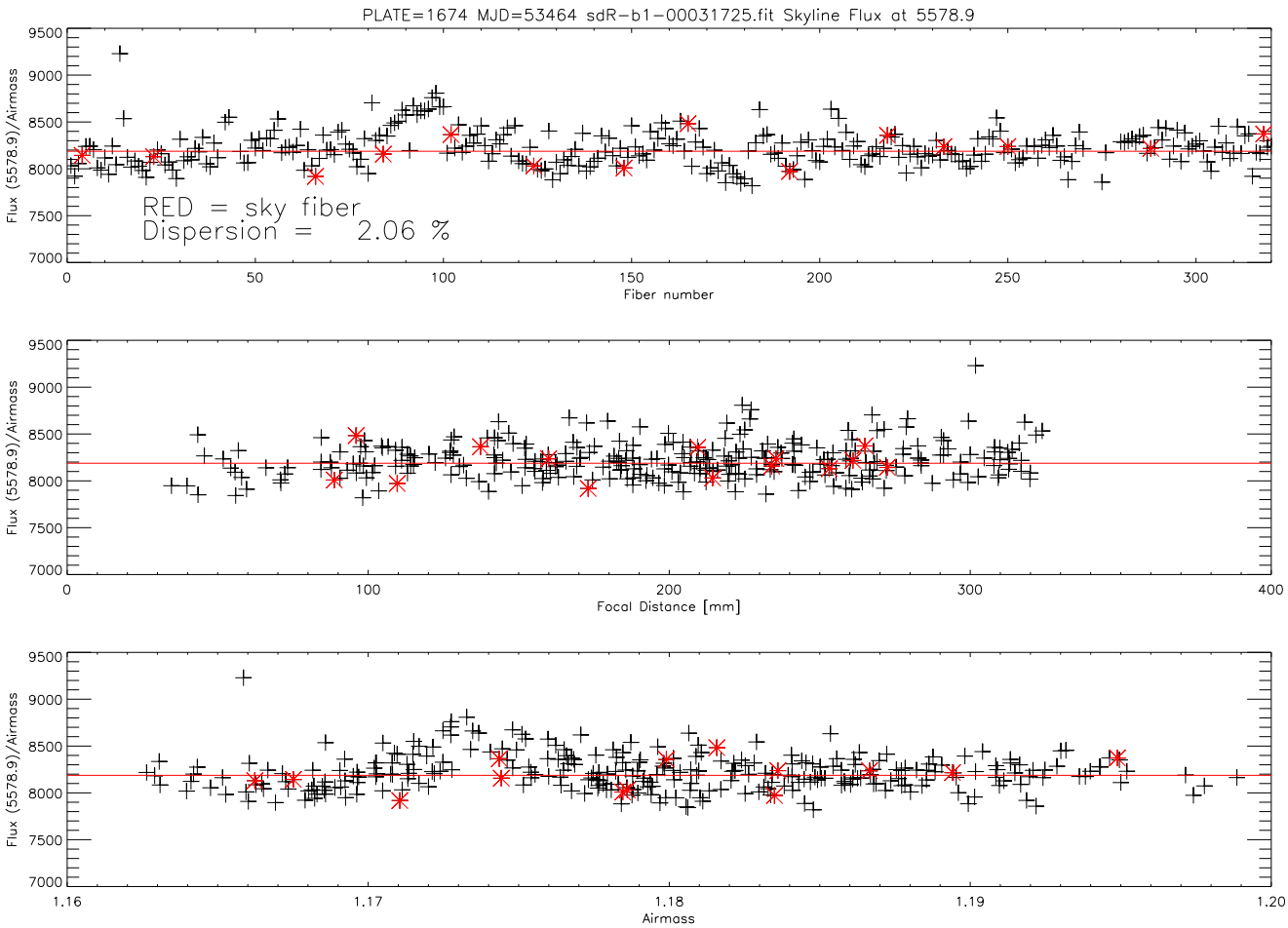

PLATE=1674 MJD=53464 sdR-b1-00031725.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

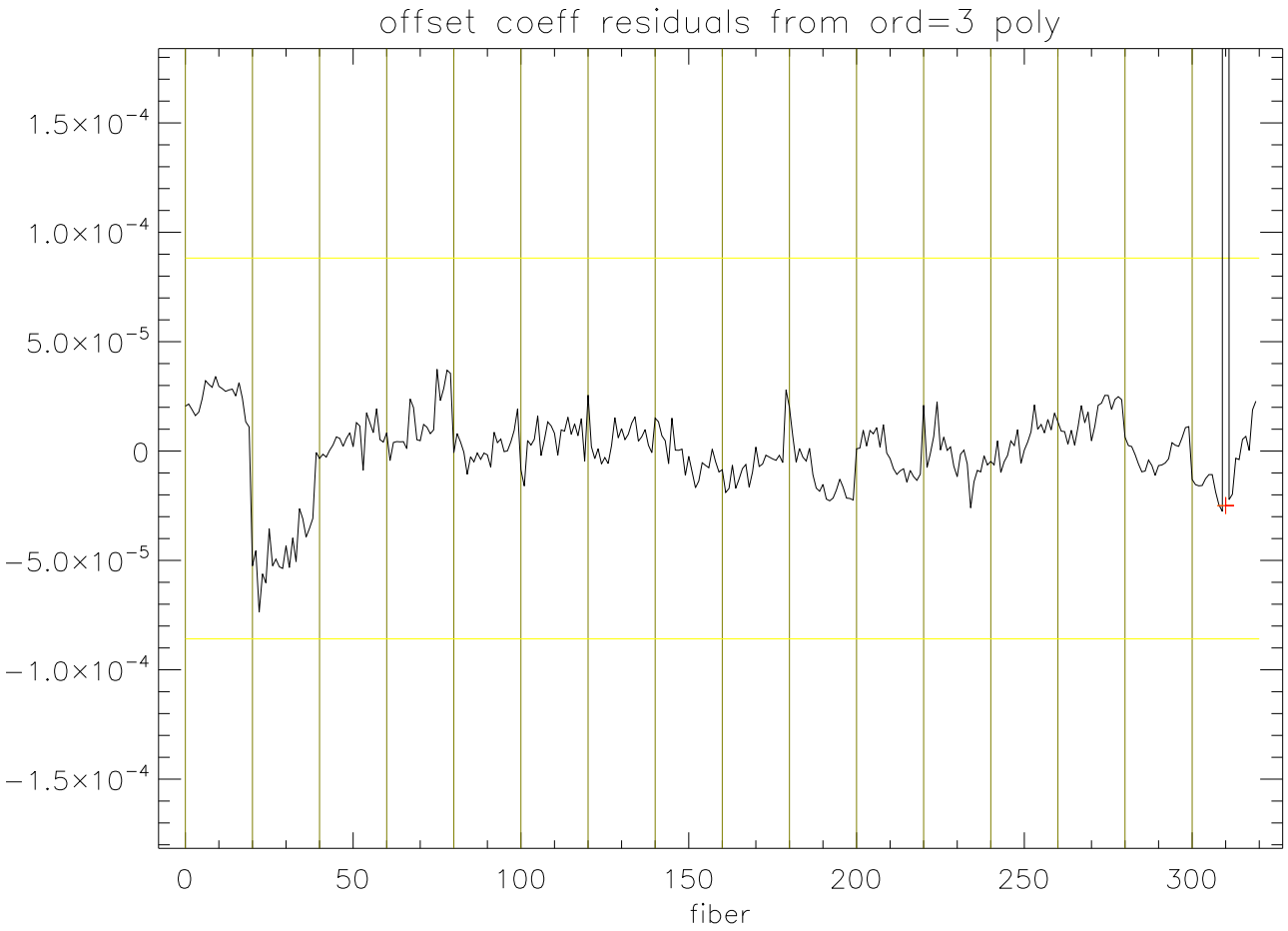

PLATE=1674 MJD=53464 sdR-b1-00031725.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

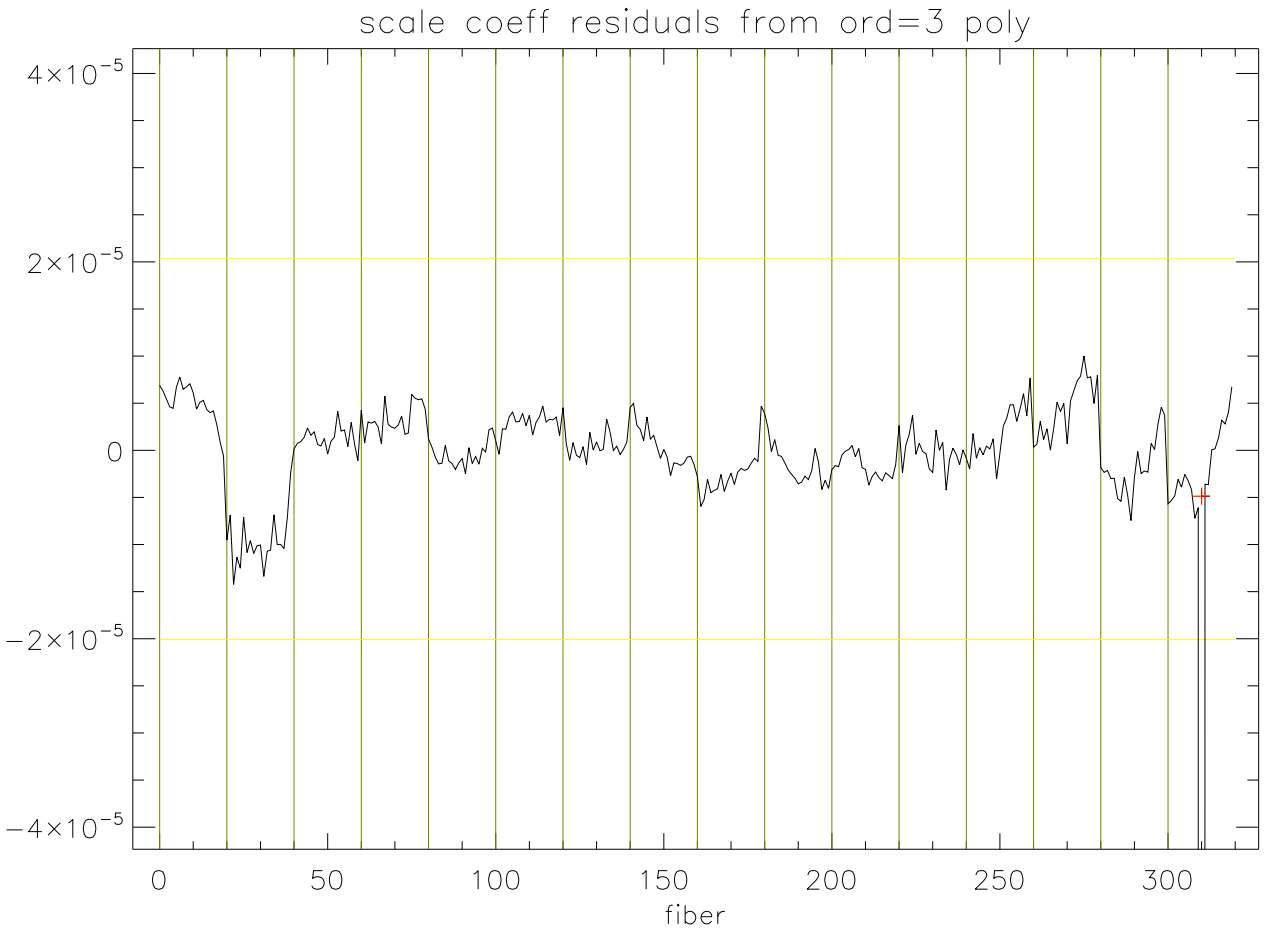

PLATE=1674 MJD=53464 sdR-b1-00031725.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
5570
5575
5580
5585
5590
λ [A]

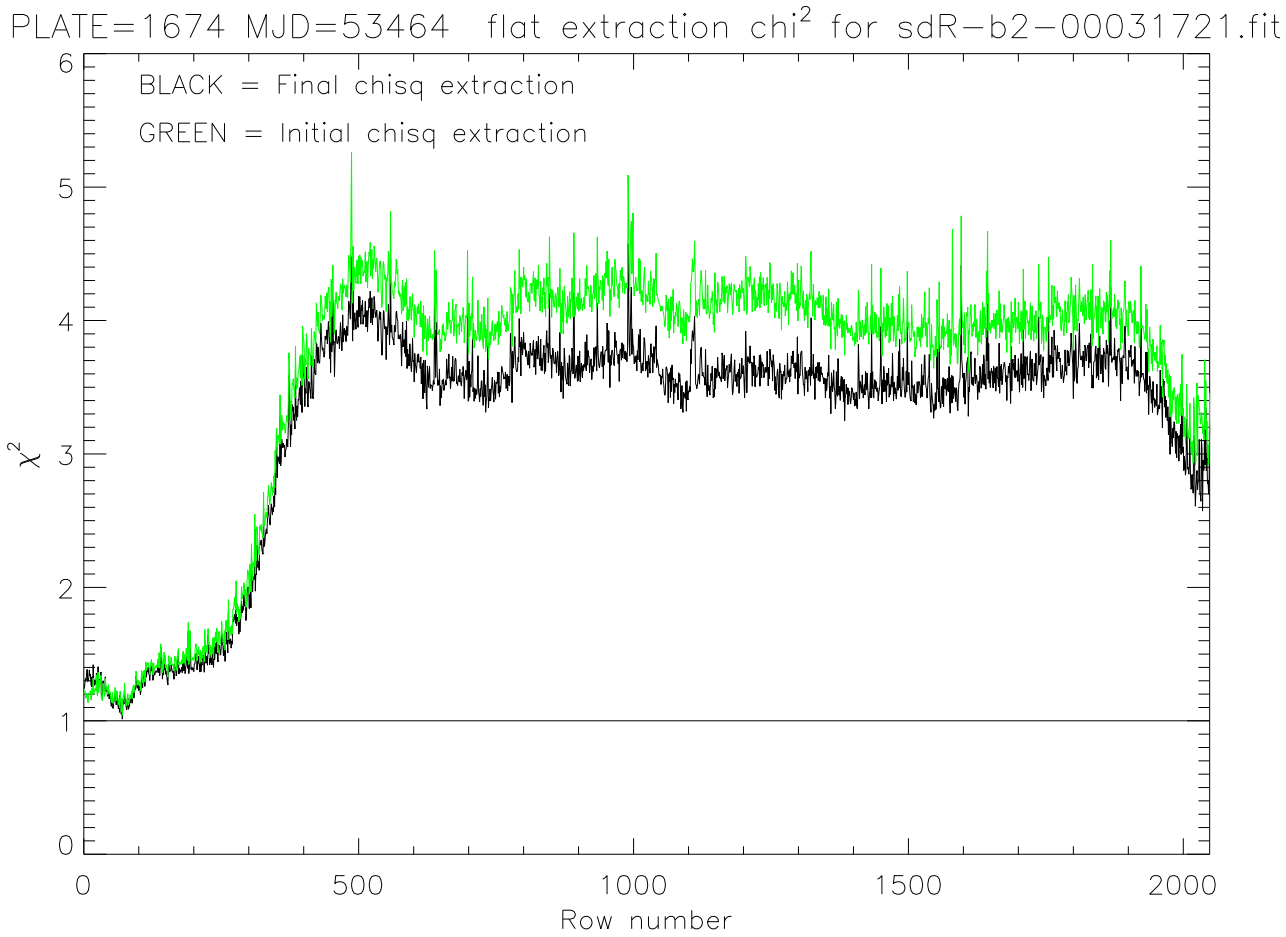

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-b1-00031725.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

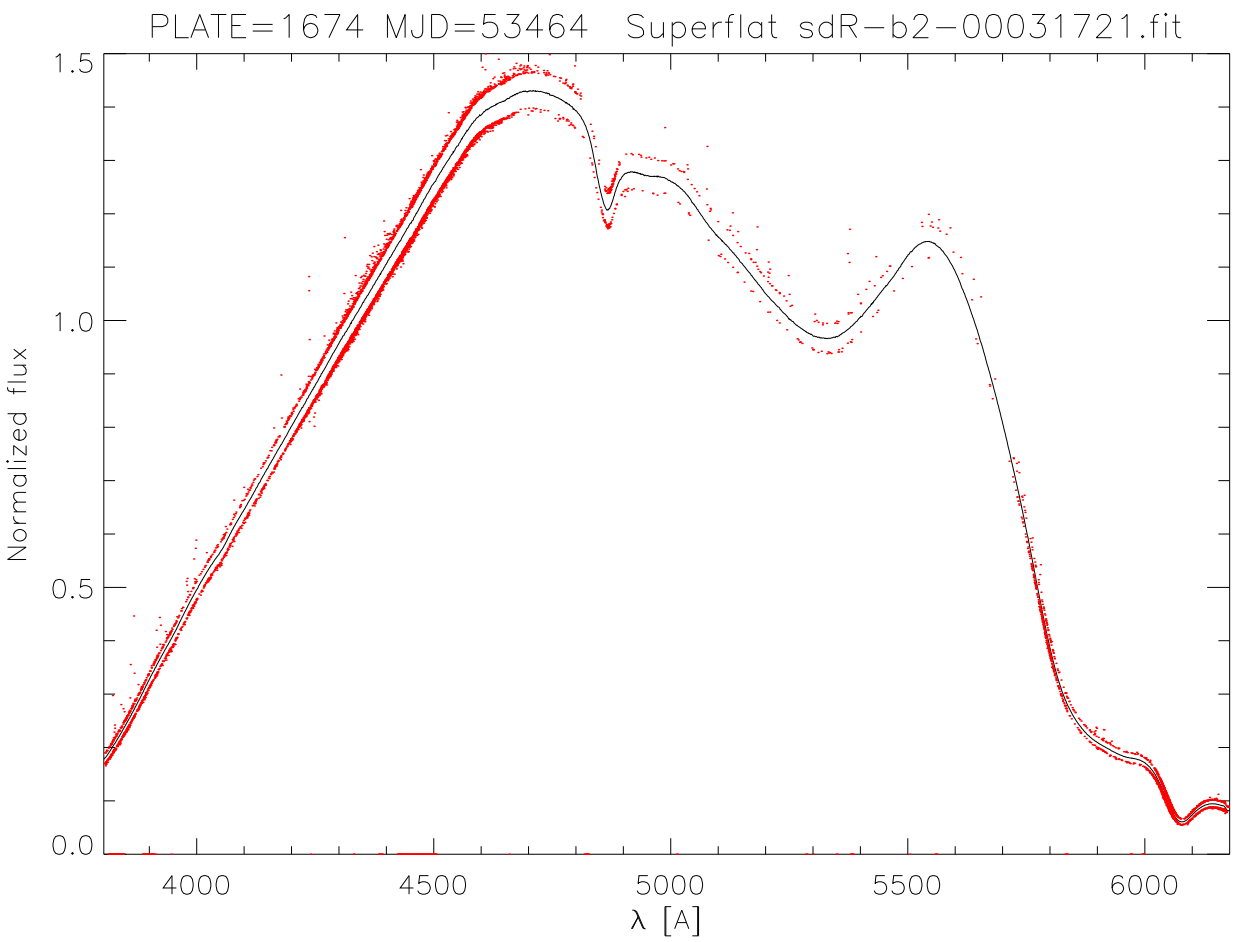

PLATE=1674 MJD=53464 sdR-b1-00031725.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.45 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

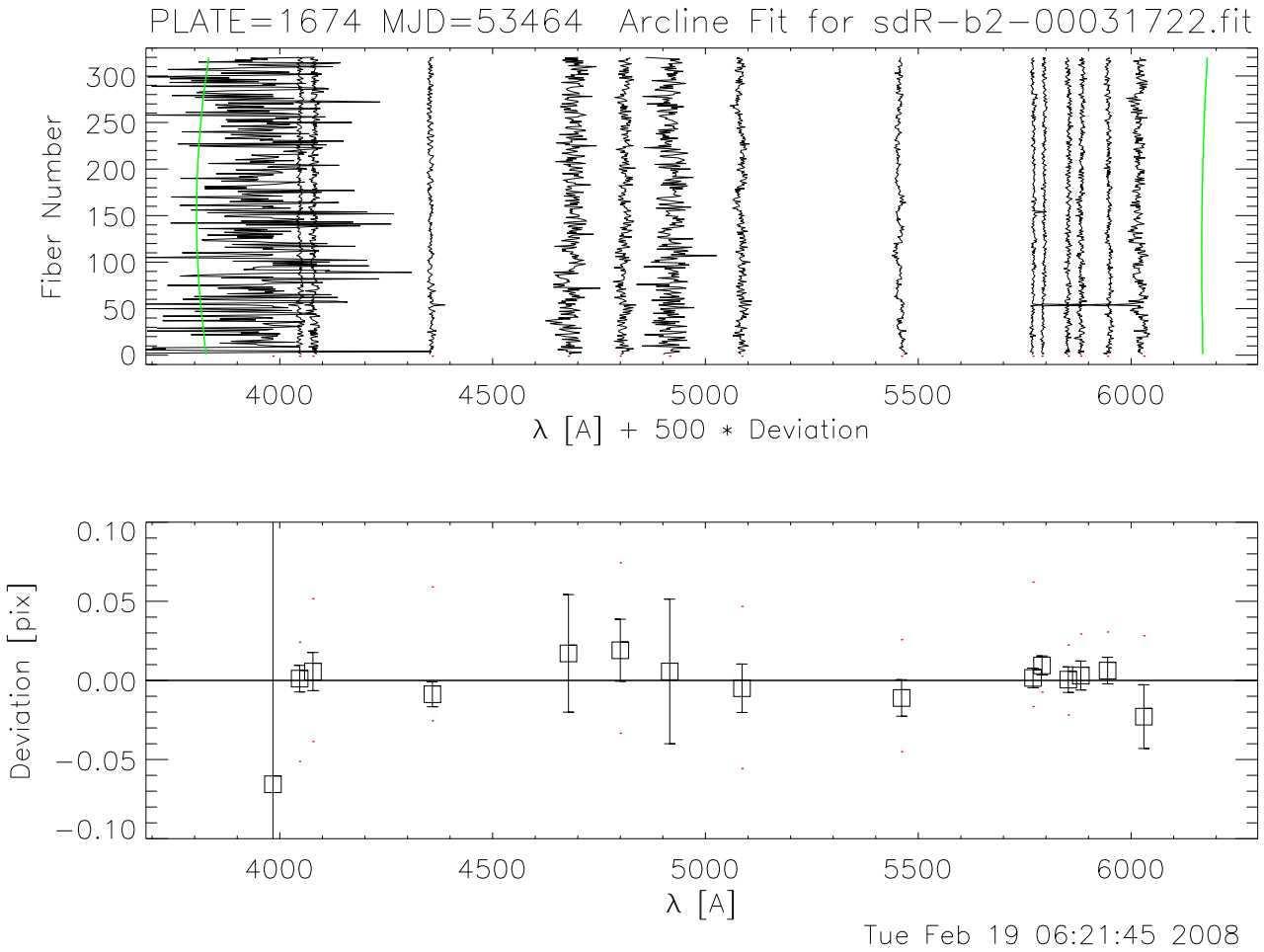

PLATE=1674 MJD=53464 sdR-b1-00031725.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.06 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

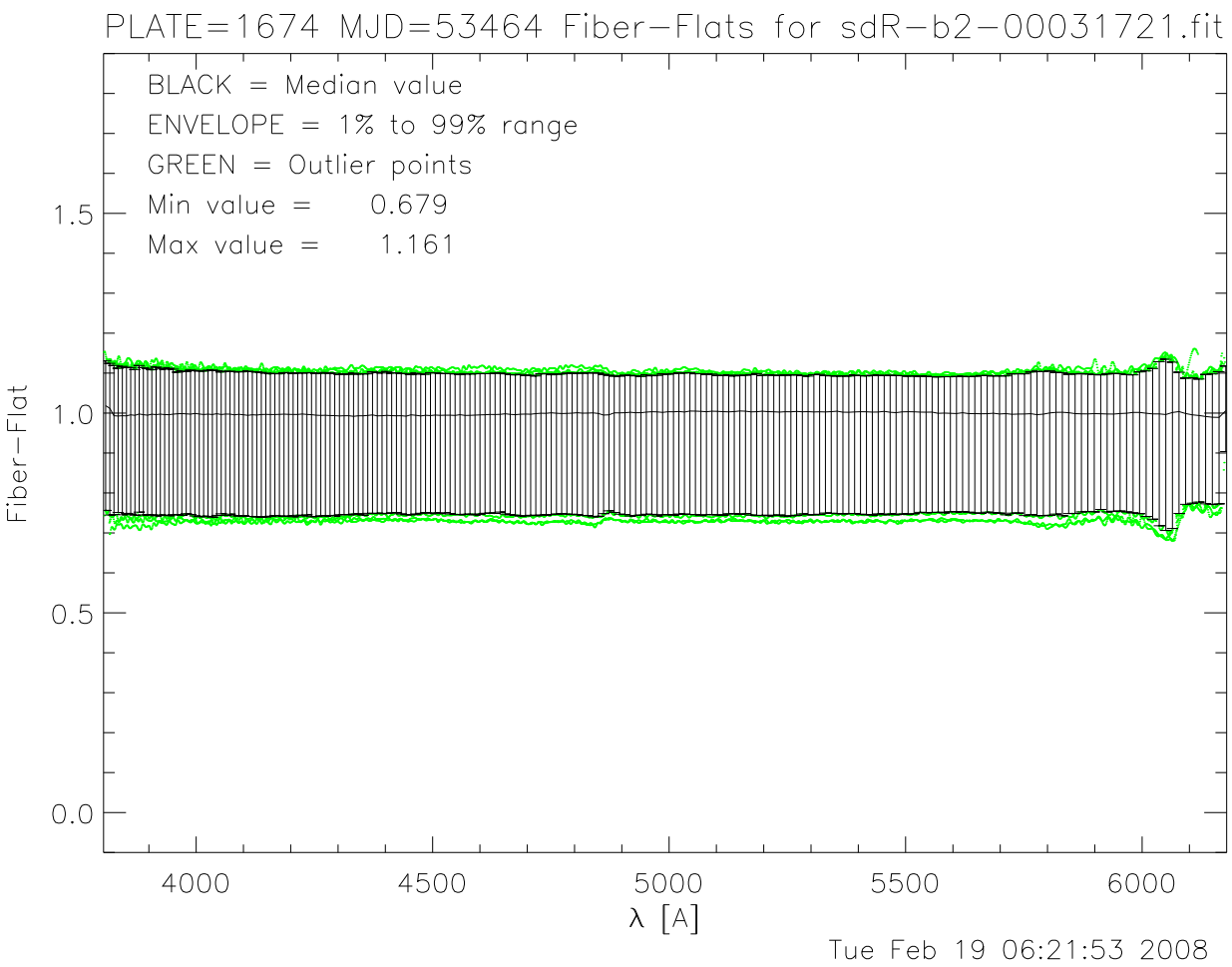

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

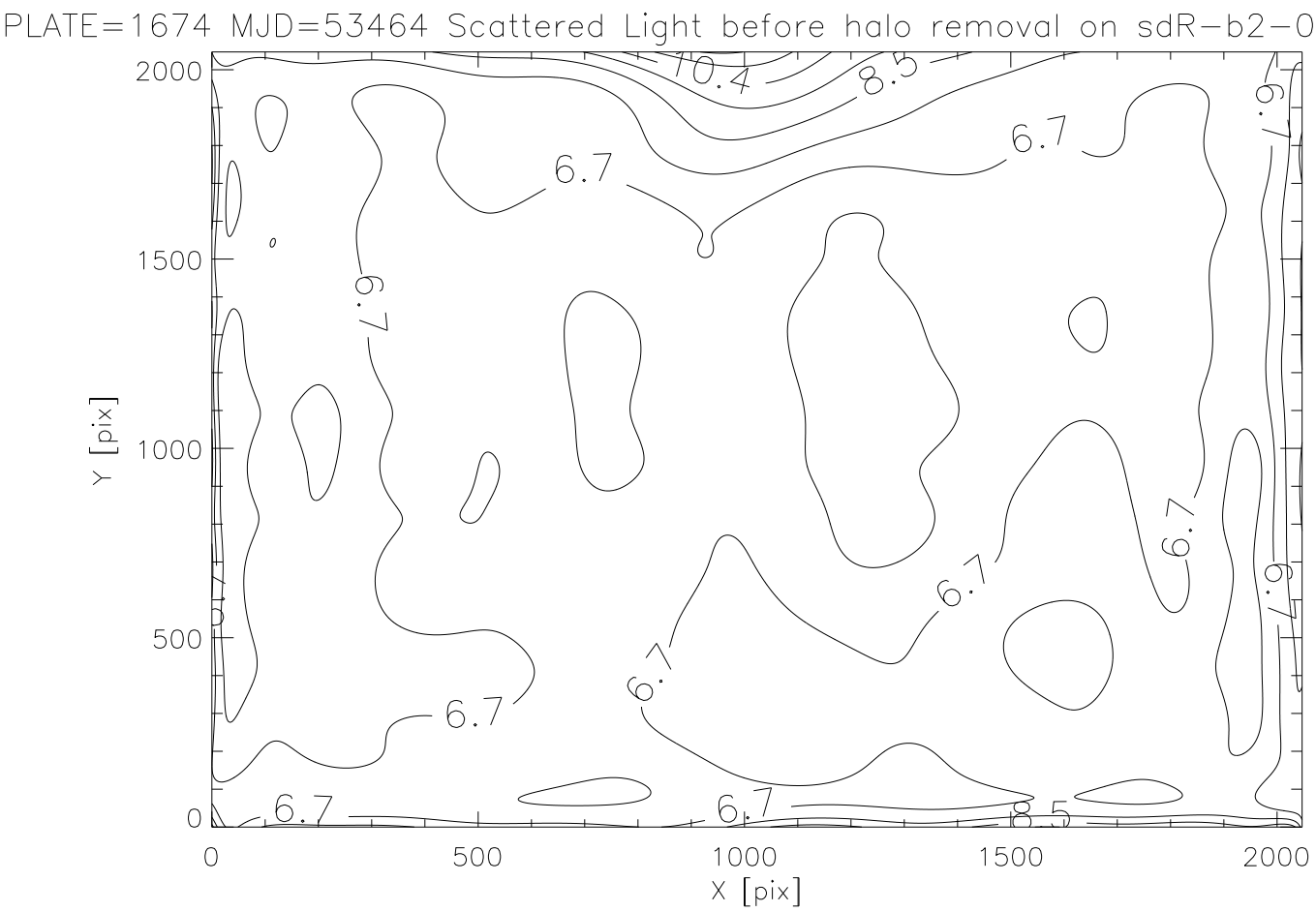

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

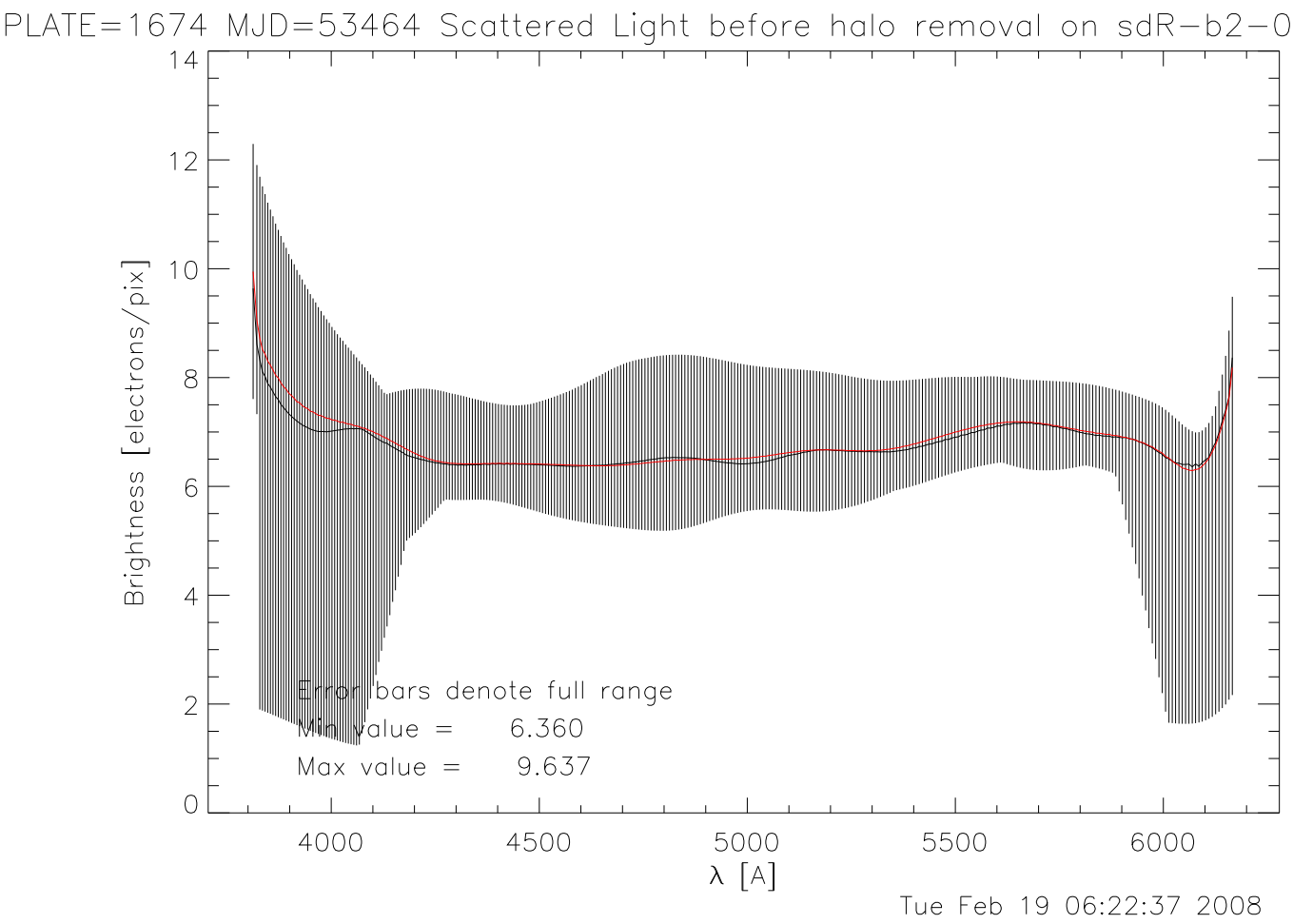

PLATE=1674 MJD=53464 flat extraction chi^2 for sdR-b2-00031721.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

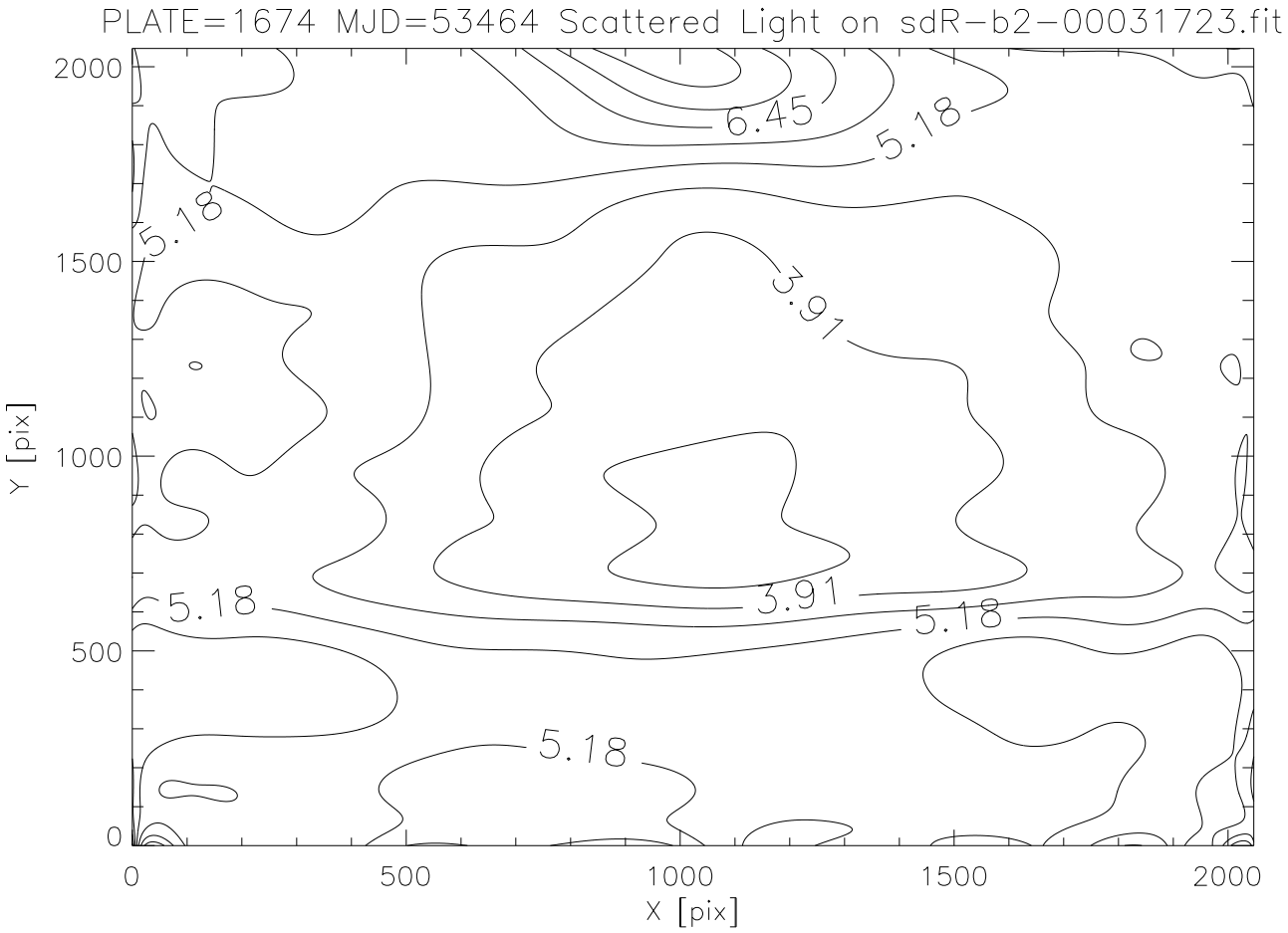

PLATE=1674 MJD=53464 Superflat sdR-b2-00031721.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

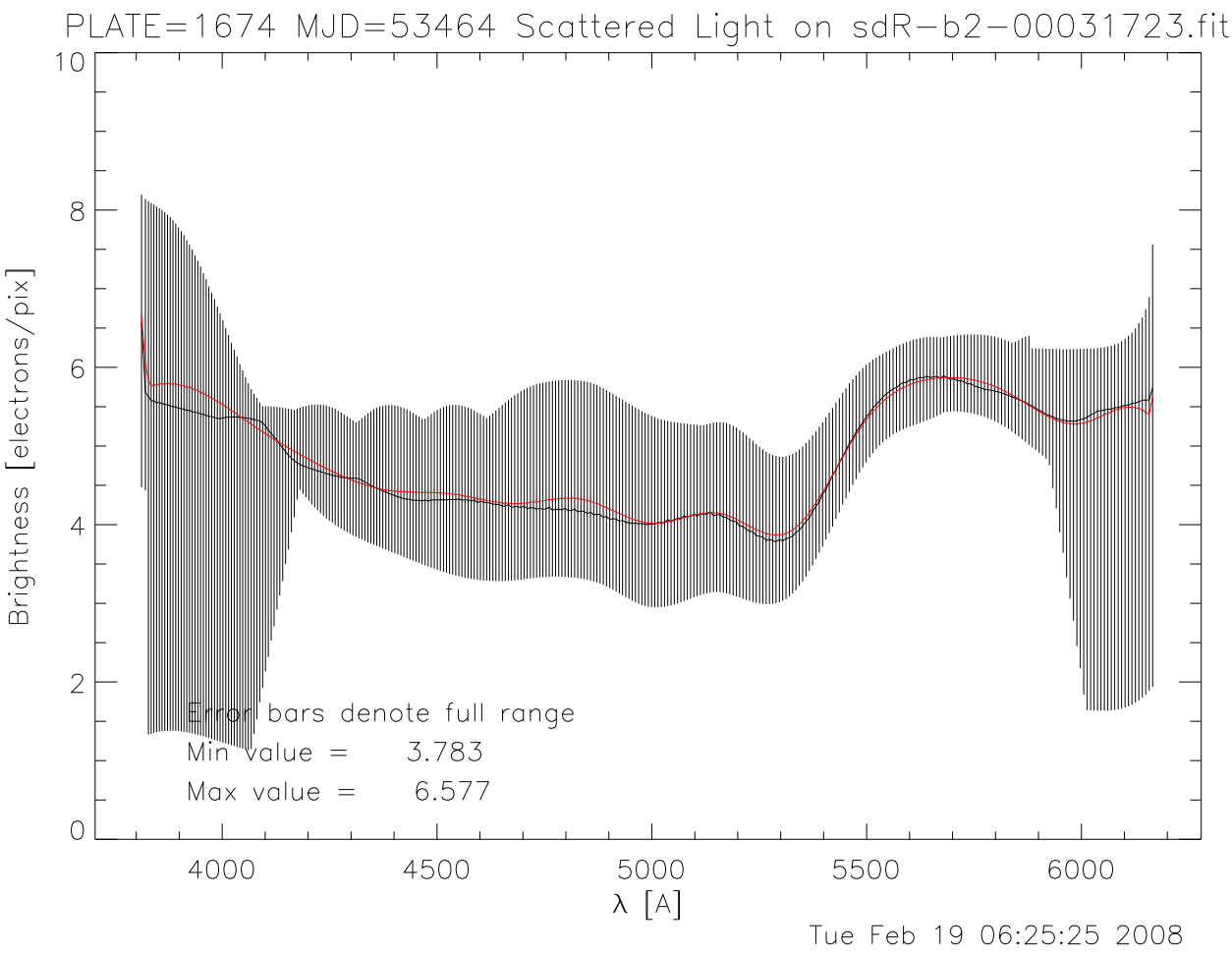

PLATE=1674 MJD=53464 Arcline Fit for sdR-b2-00031722.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:21:45 2008

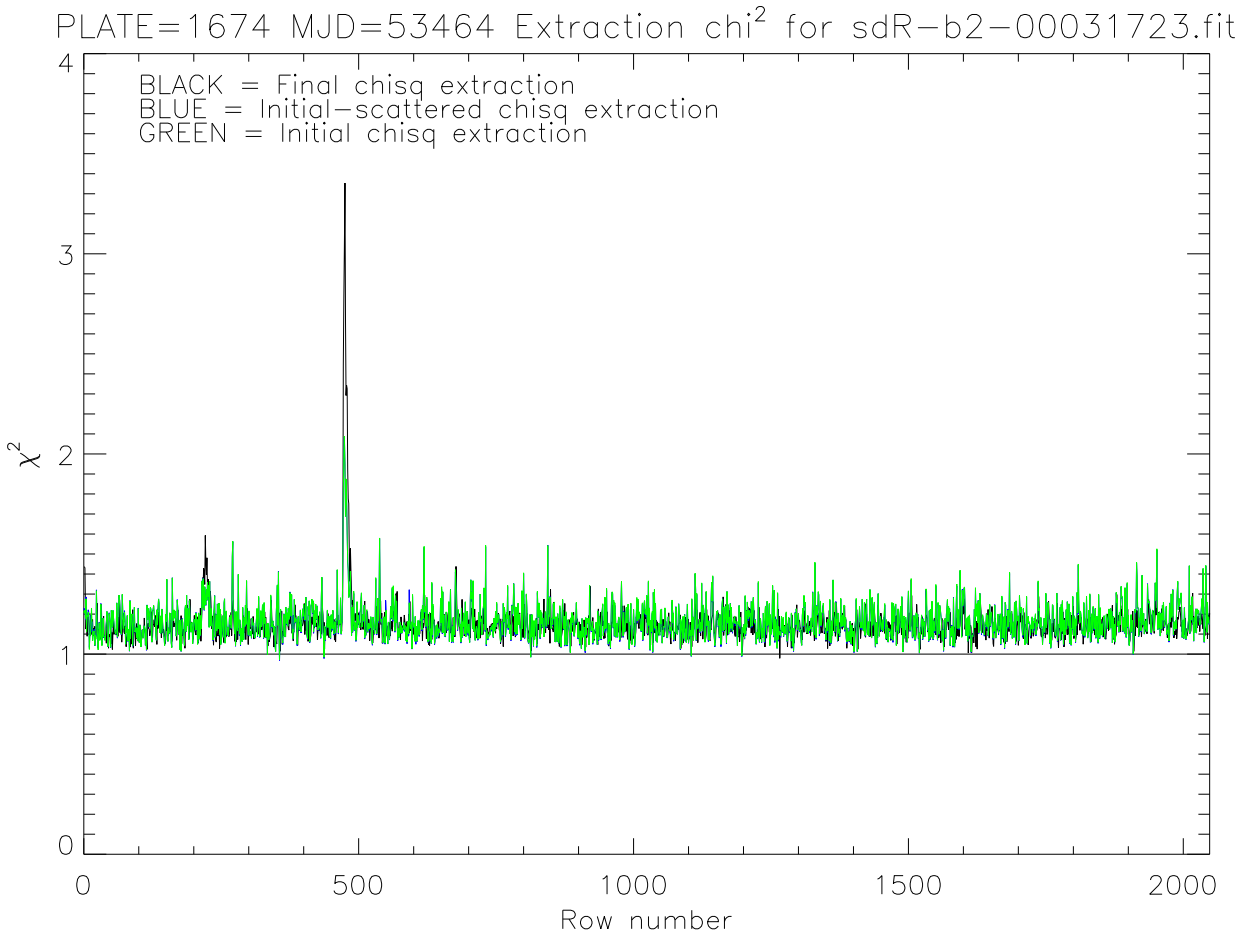

PLATE=1674 MJD=53464 Fiber-Flats for sdR-b2-00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.679
Max value = 1.161
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:21:53 2008

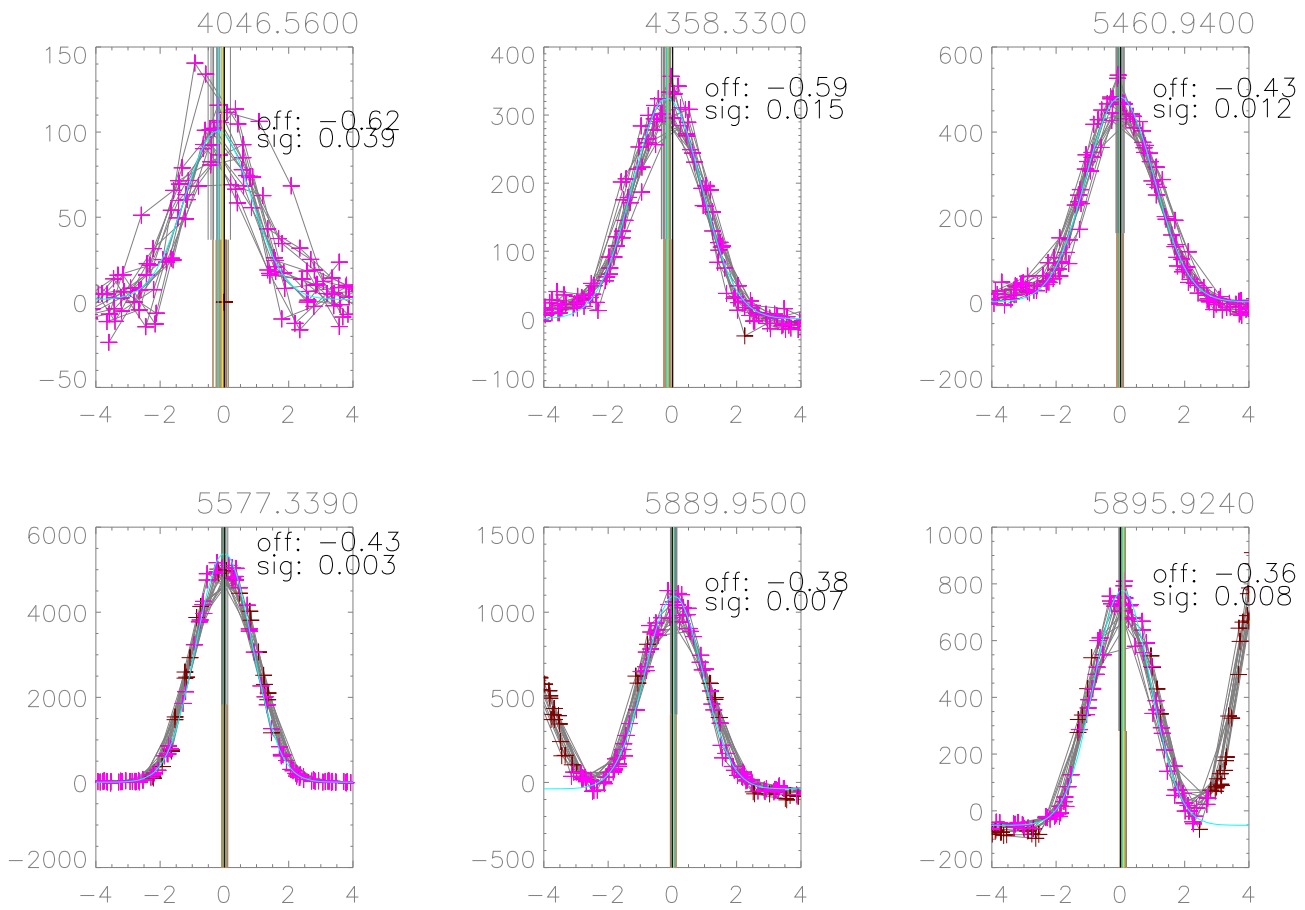

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b2-00031723.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.4
8.5
6.7
6.7
6.7
6.7
6.7
6.7
6.7
6.7
6.7
6.7
6.7
6.7
8.5

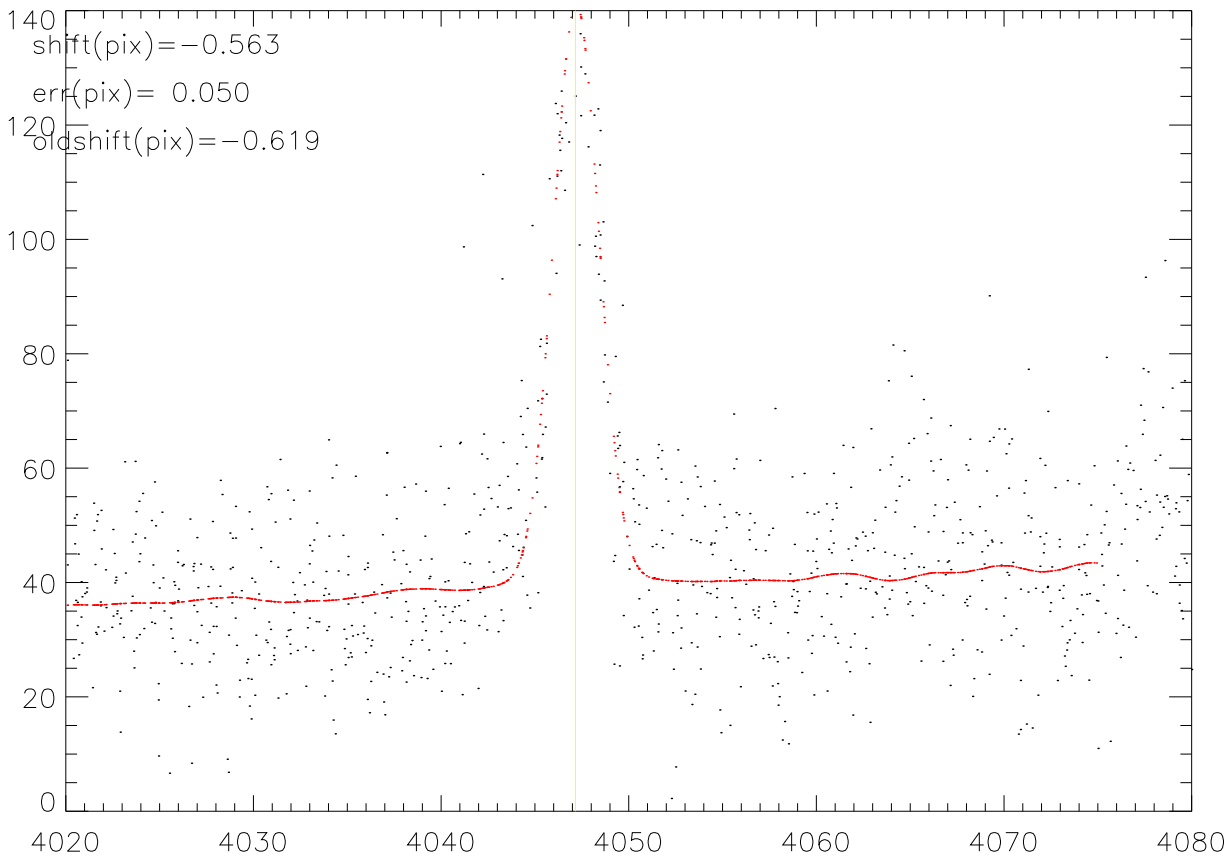

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b2-00031723.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.360
Max value = 9.637
Tue Feb 19 06:22:37 2008

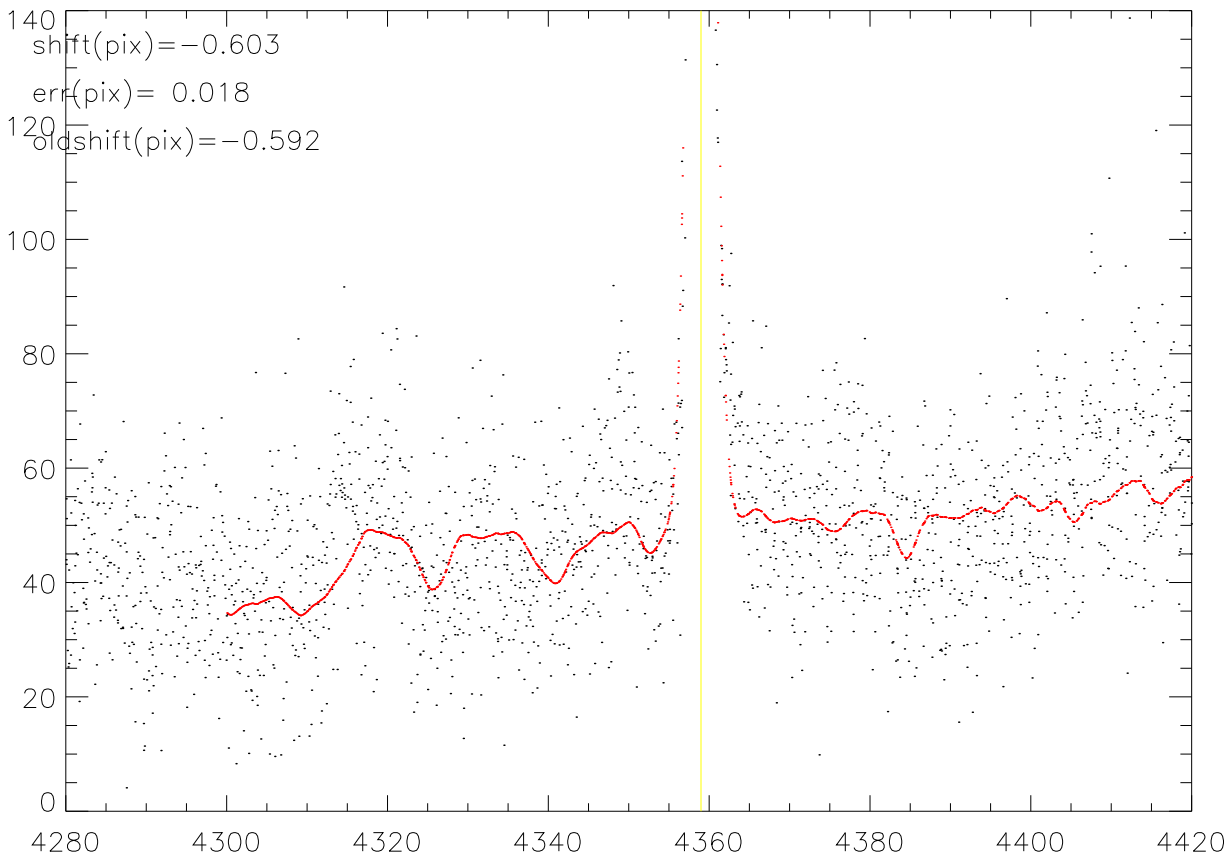

PLATE=1674 MJD=53464 Scattered Light on sdR-b2-00031723.fit
6.45
5.18
5.18
3.91
0
0
5.18
3.91
5.18
5.18
0
500
1000
1500
2000
Y [pix]
X [pix]

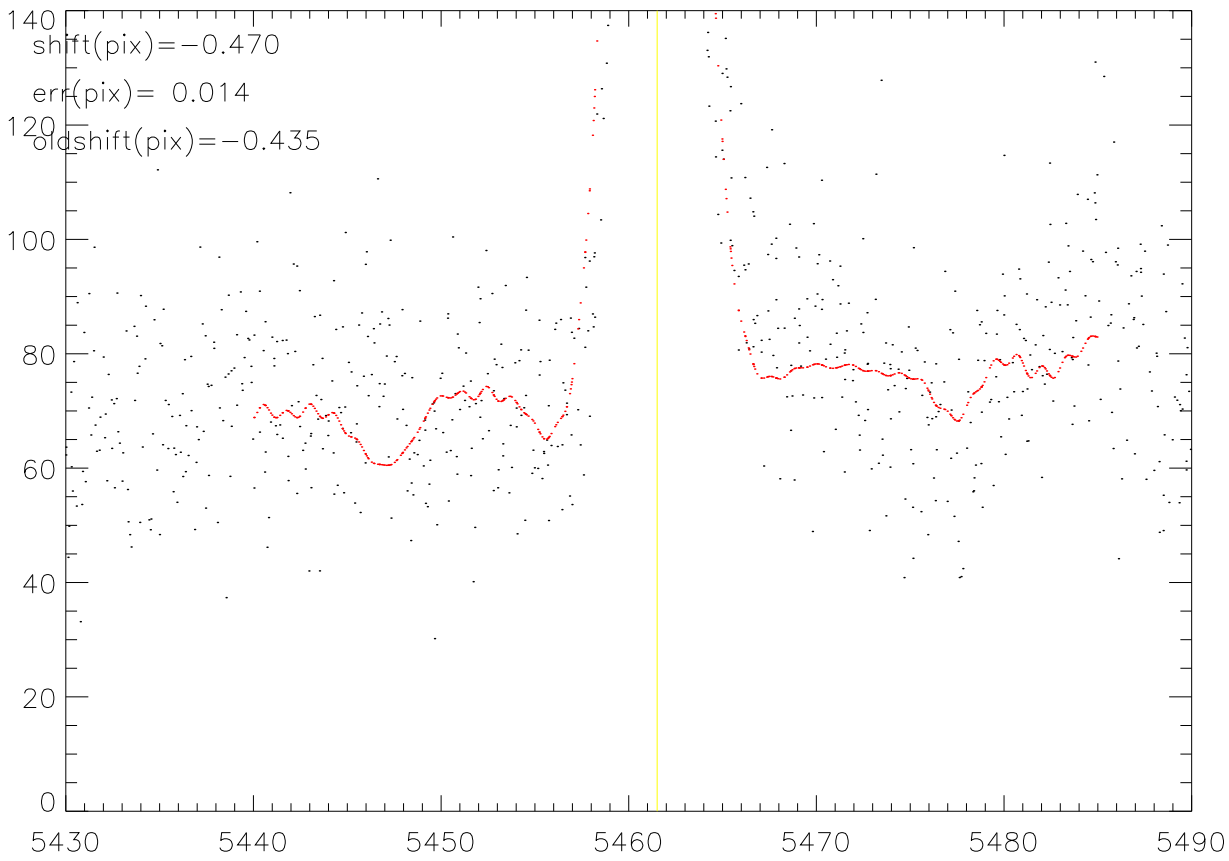

PLATE=1674 MJD=53464 Scattered Light on sdR-b2-00031723.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.783
Max value = 6.577
Tue Feb 19 06:25:25 2008

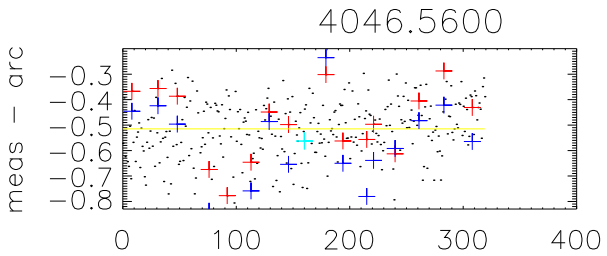

PLATE=1674 MJD=53464 Extraction chi^2 for sdR-b2-00031723.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

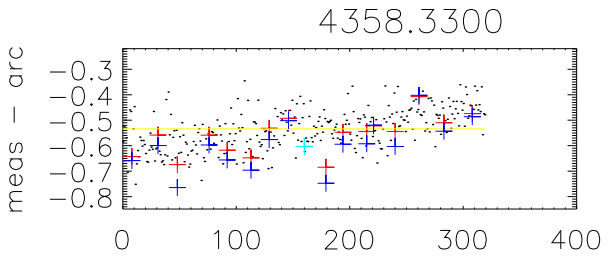

4046.5600
off: −0.62
sig: 0.039
4358.3300
off: −0.59
sig: 0.015
5460.9400
off: −0.43
sig: 0.012
5577.3390
off: −0.43
sig: 0.003
5889.9500
off: −0.38
sig: 0.007
5895.9240
off: −0.36
sig: 0.008

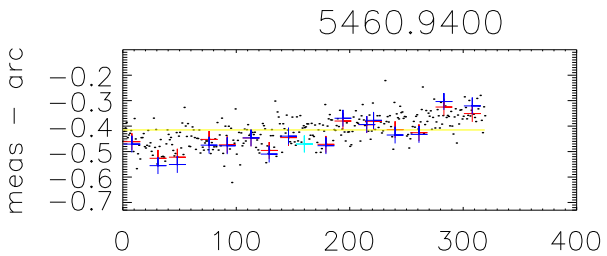

shift(pix)=−0.563
err(pix)= 0.050
oldshift(pix)=−0.619
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

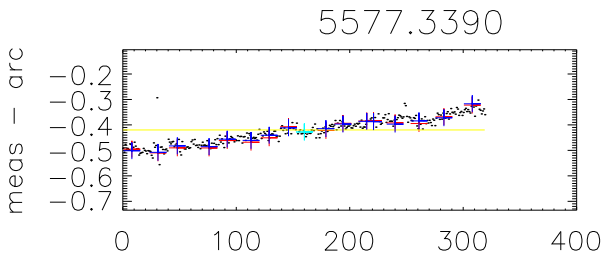

shift(pix)=−0.603
err(pix)= 0.018
oldshift(pix)=−0.592
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

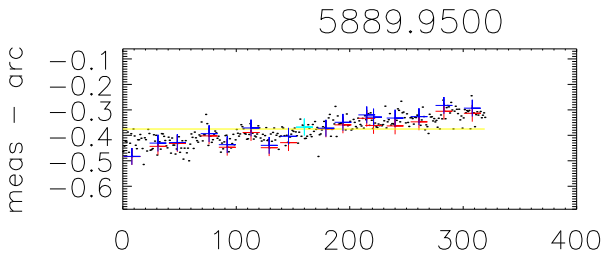

shift(pix)=−0.470
err(pix)= 0.014
oldshift(pix)=−0.435
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

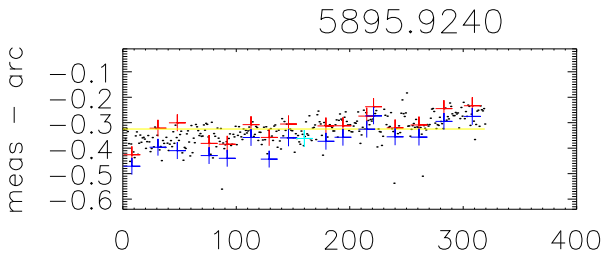

4046.5600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

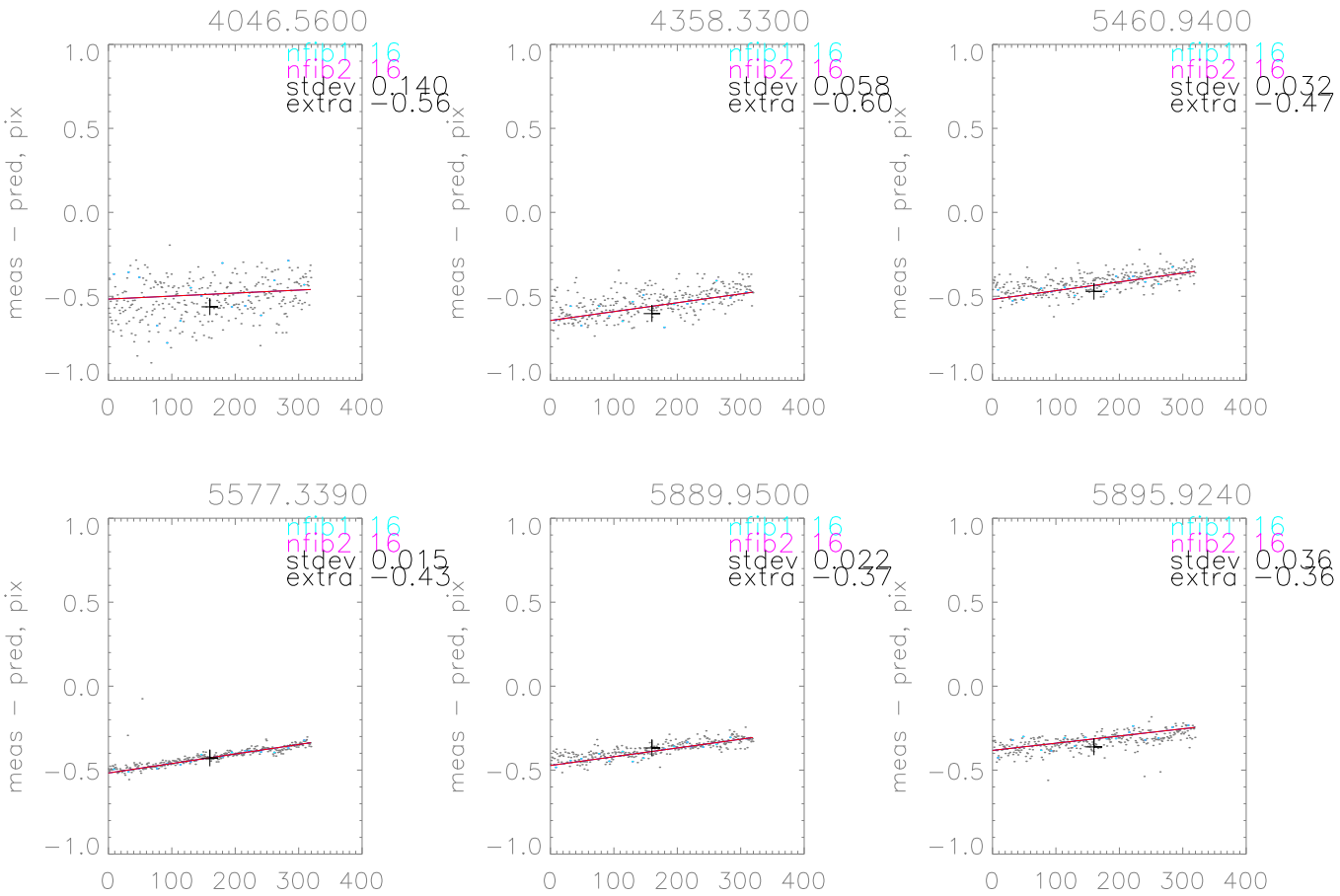

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

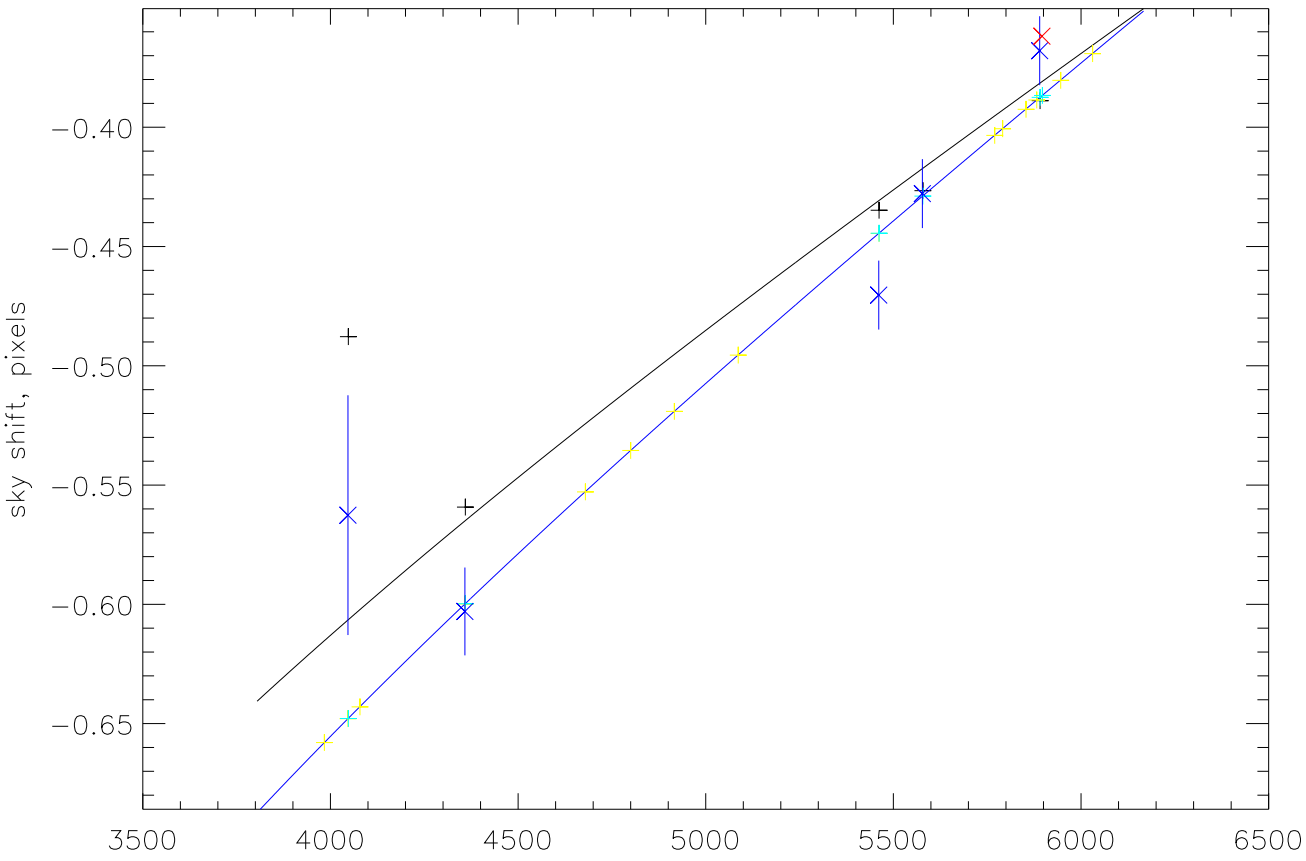

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

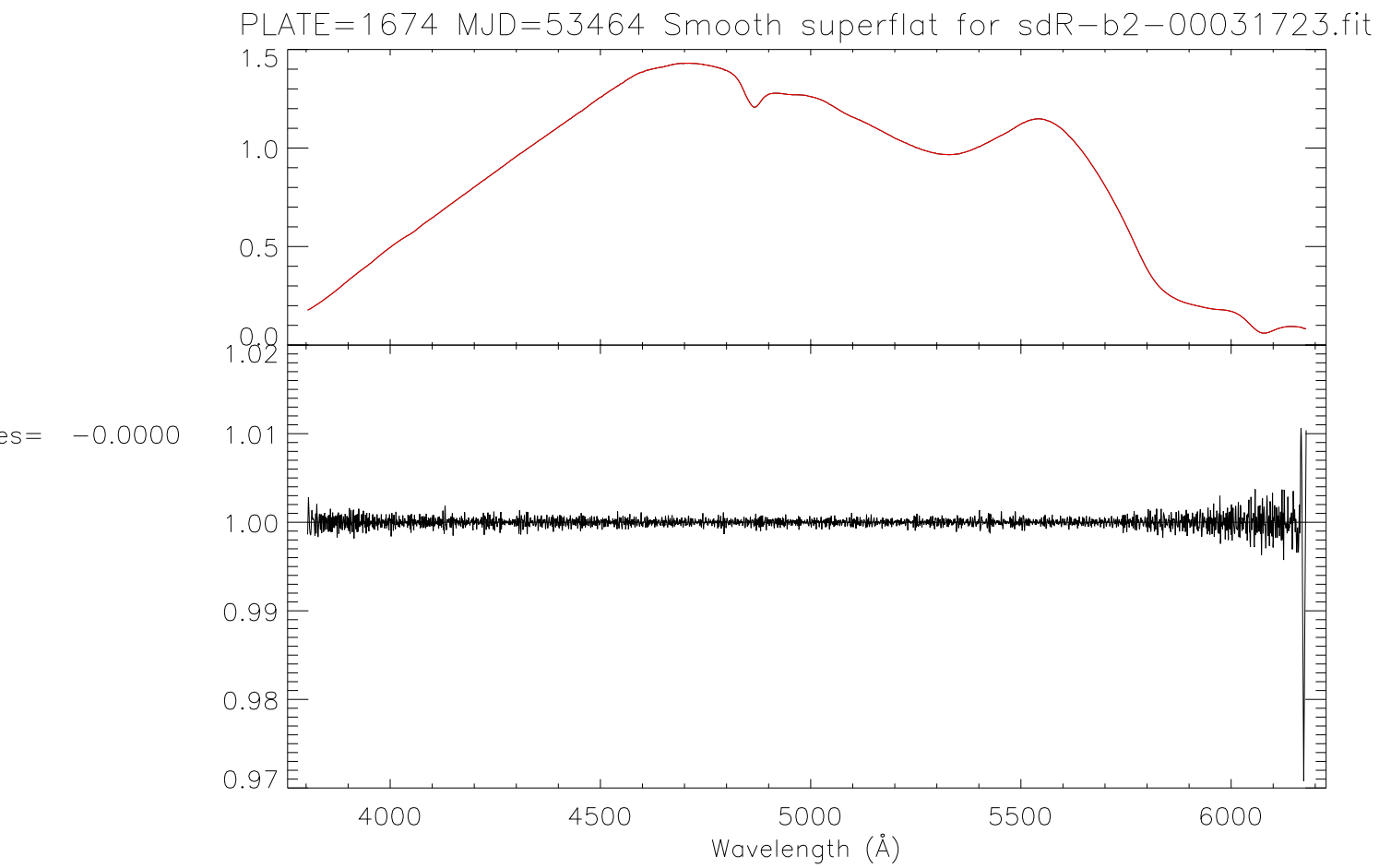

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


5889.9500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

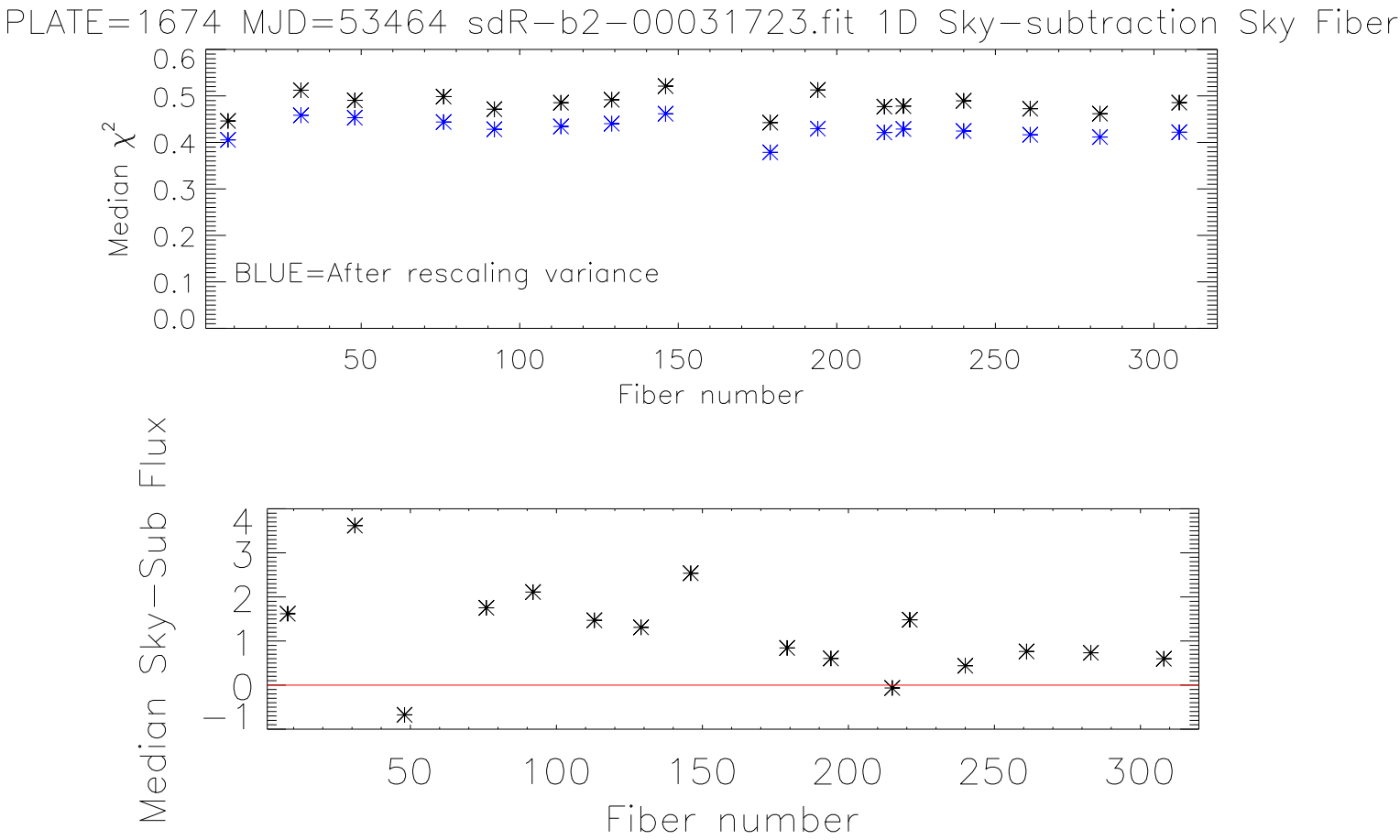

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

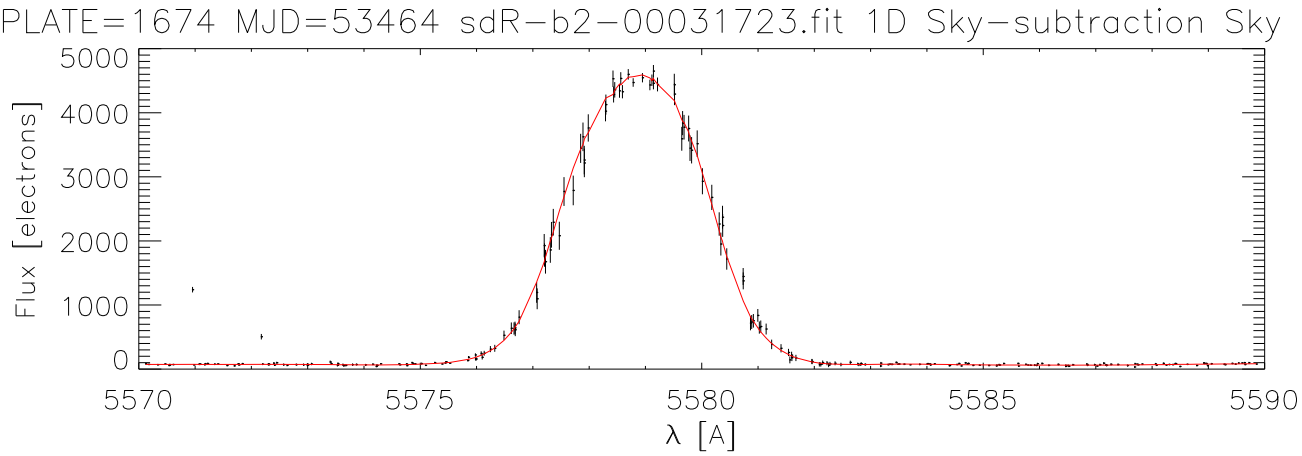

4046.5600
nfib1 16
nfib2 16
stdev 0.140
extra −0.56
4358.3300
nfib1 16
nfib2 16
stdev 0.058
extra −0.60
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra −0.47
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.43
5889.9500
nfib1 16
nfib2 16
stdev 0.022
extra −0.37
5895.9240
nfib1 16
nfib2 16
stdev 0.036
extra −0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

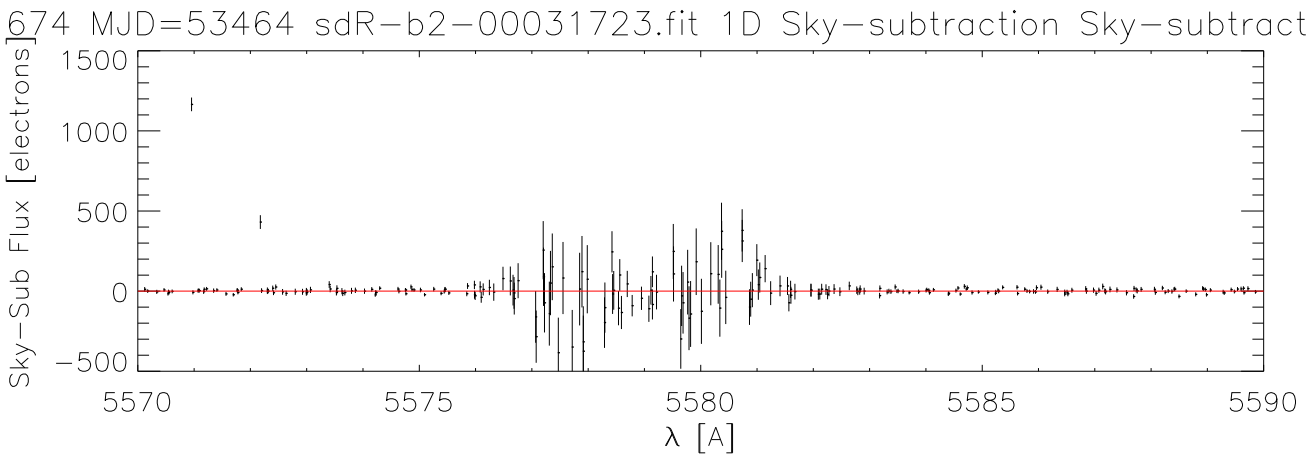

sky shift, pixels
−0.40
−0.45
−0.50
−0.55
−0.60
−0.65
3500
4000
4500
5000
5500
6000
6500

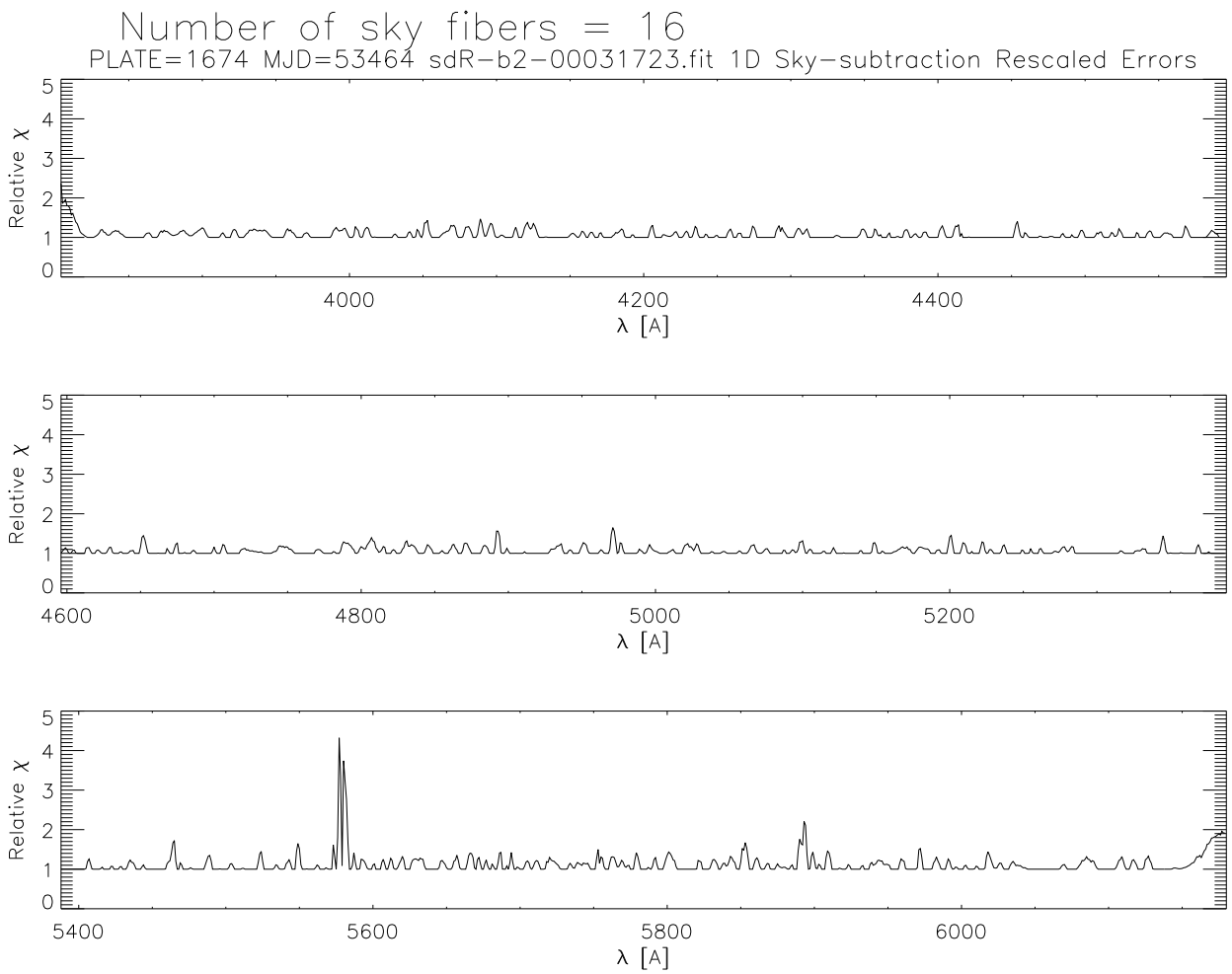

PLATE=1674 MJD=53464 Smooth superflat for sdR-b2-00031723.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

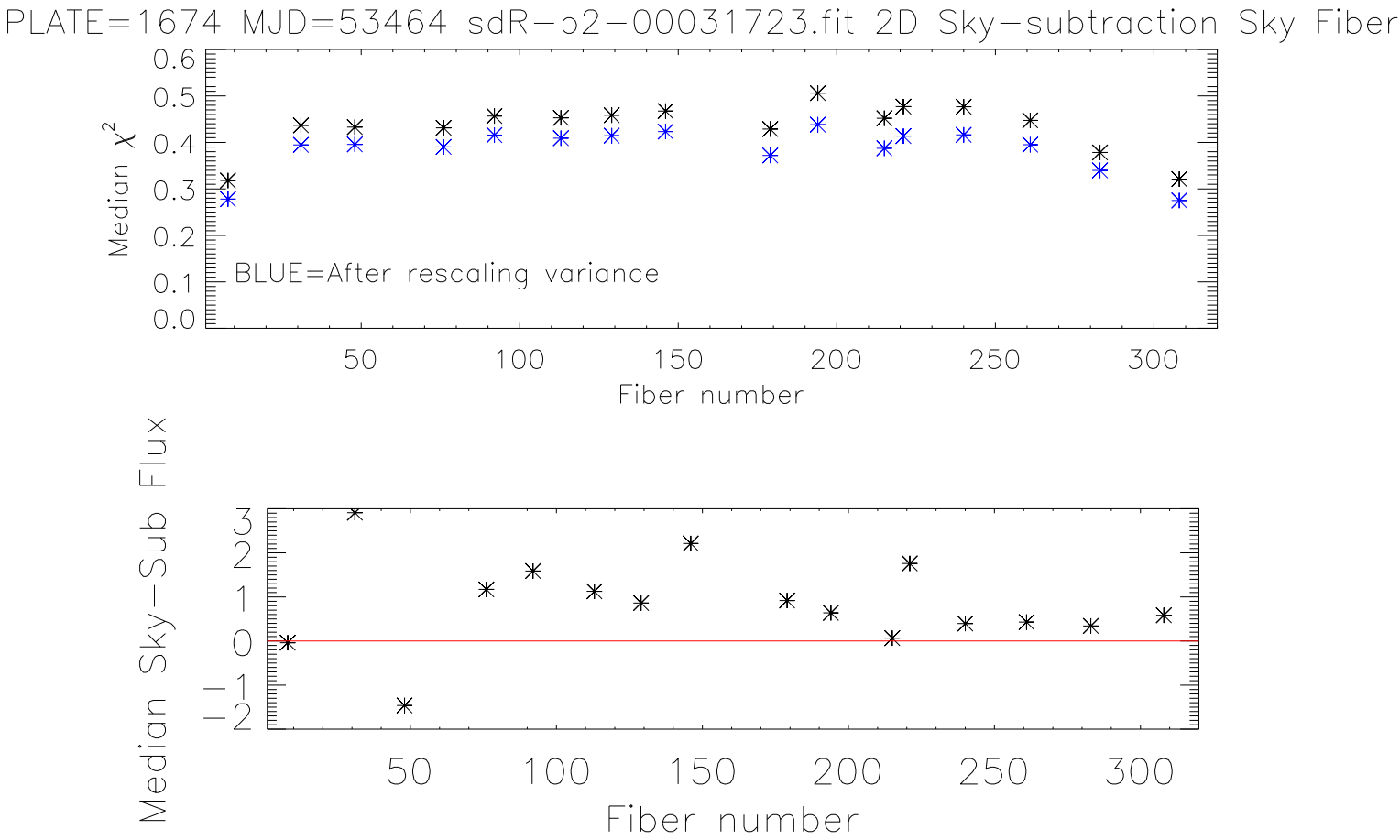
es= −0.0000

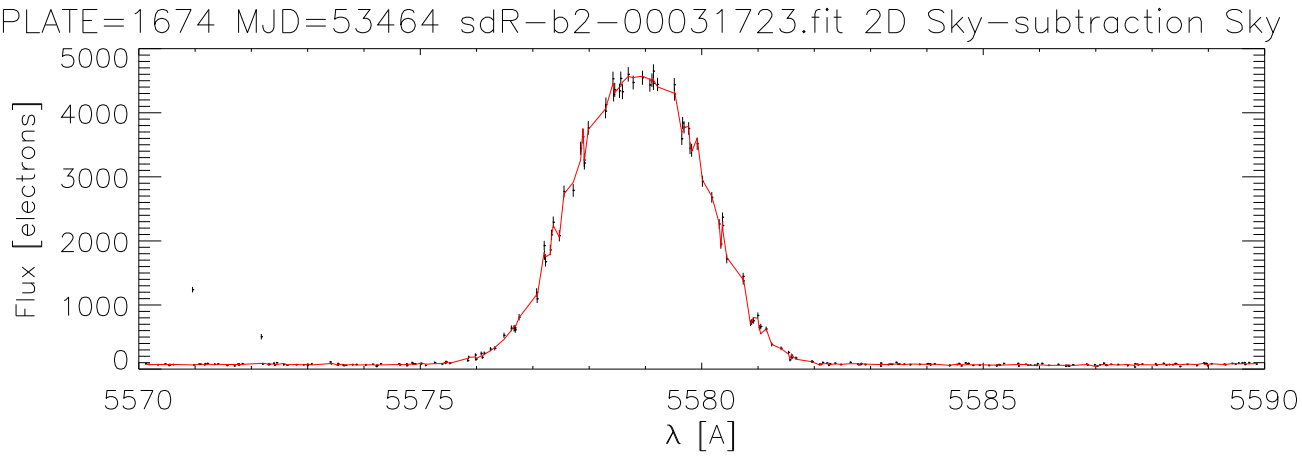

PLATE=1674 MJD=53464 sdR-b2-00031723.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

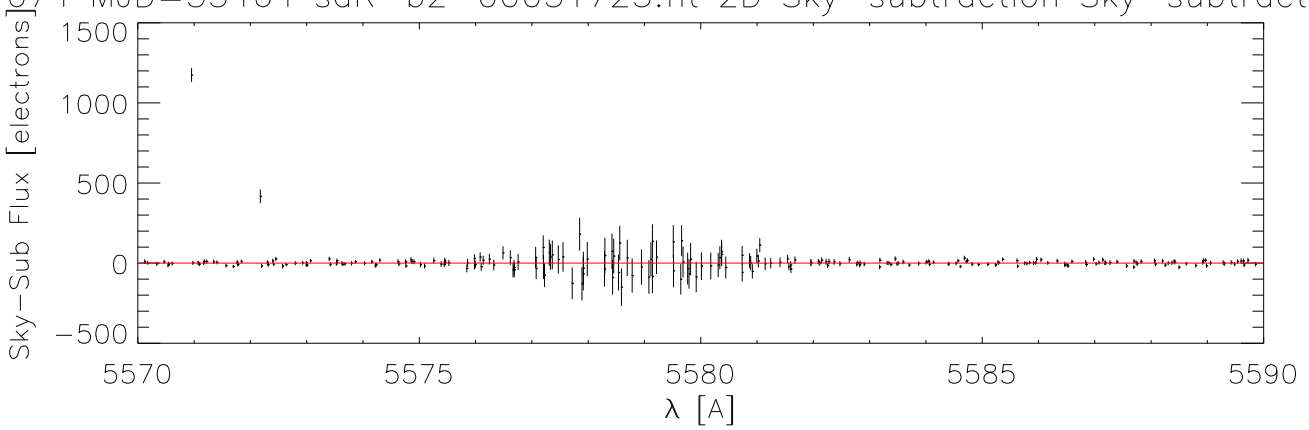

PLATE=1674 MJD=53464 sdR-b2-00031723.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

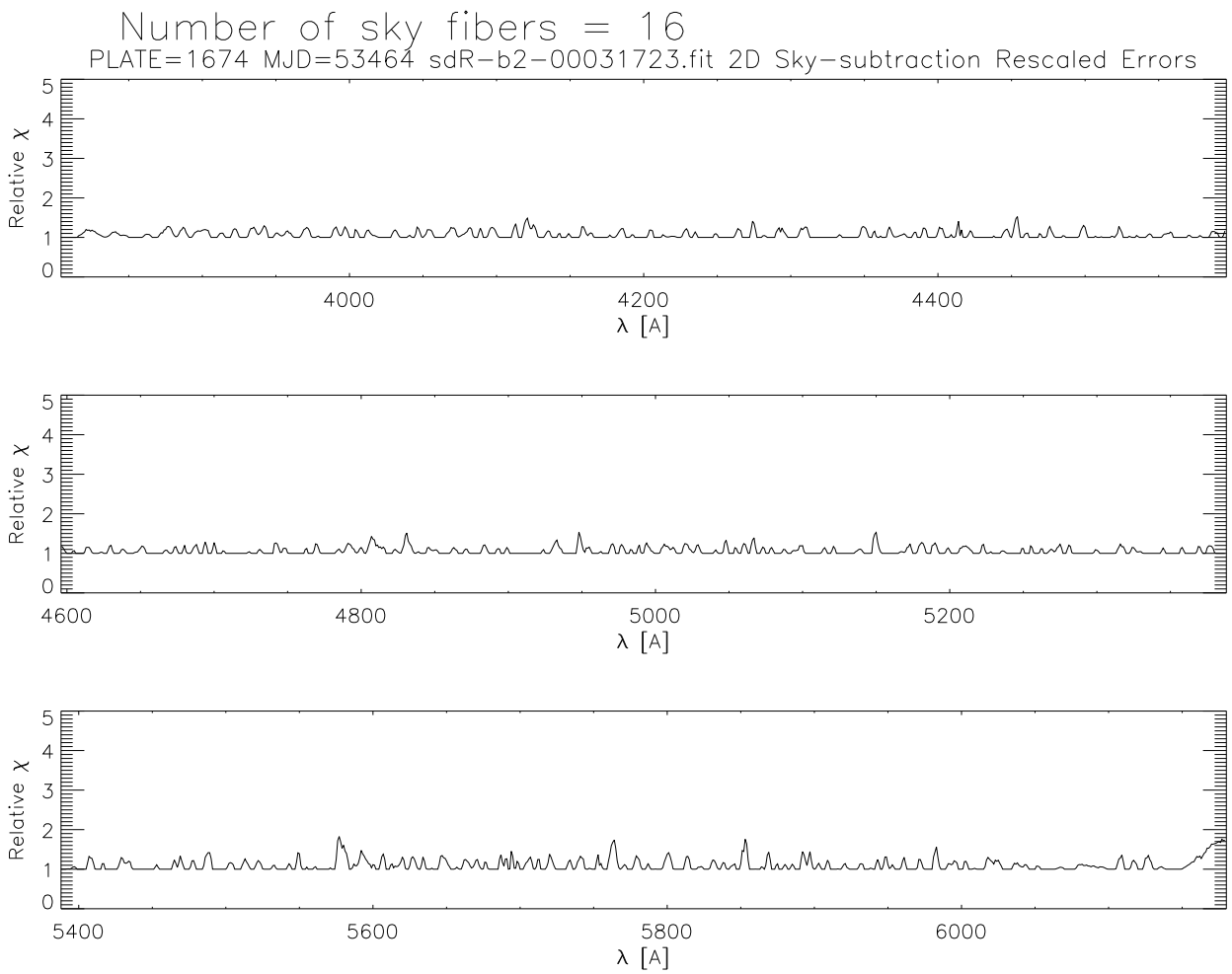

PLATE=1674 MJD=53464 sdR-b2-00031723.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

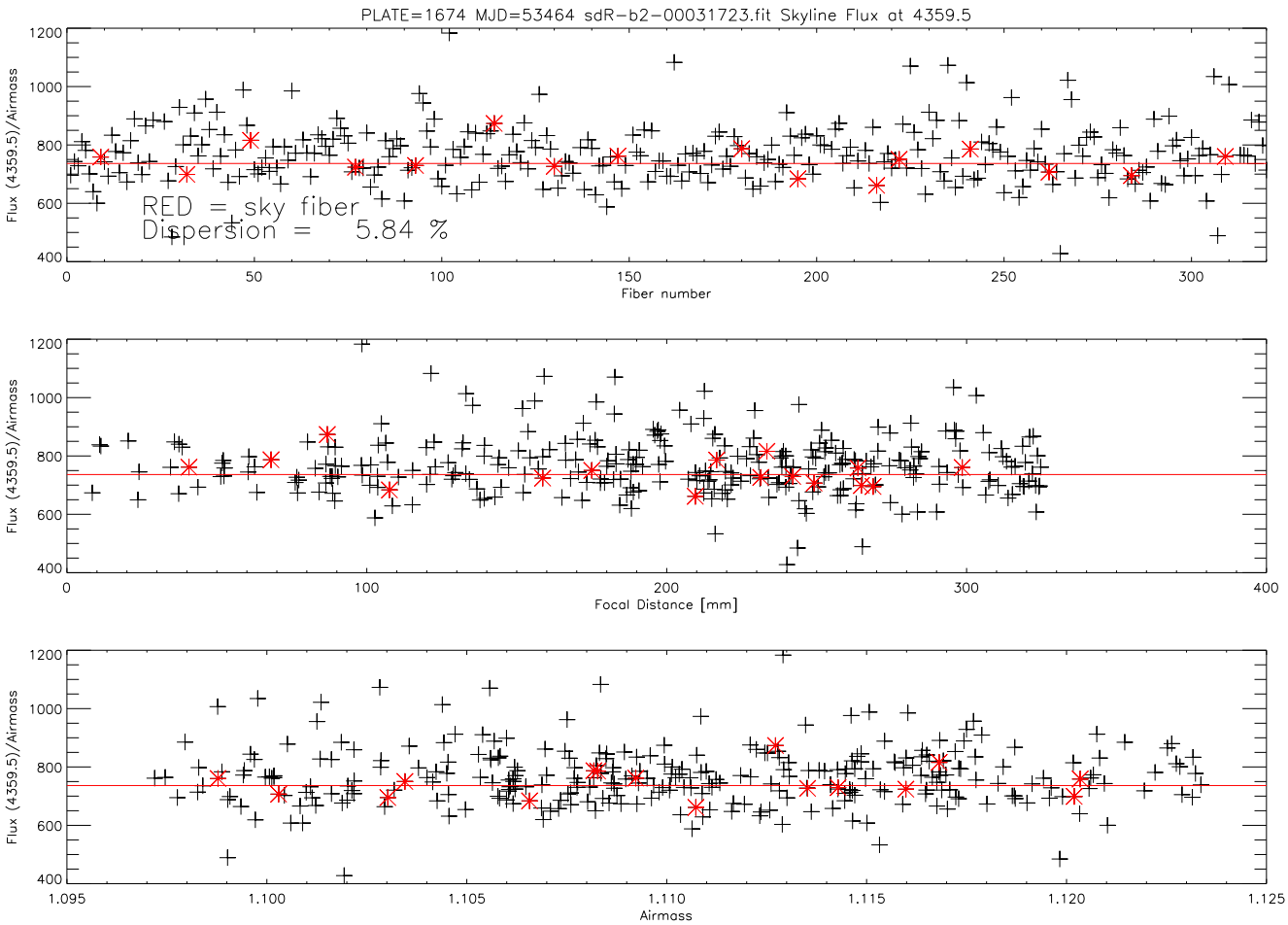

Number of sky fibers = 16
PLATE=1674 MJD=53464 sdR-b2-00031723.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

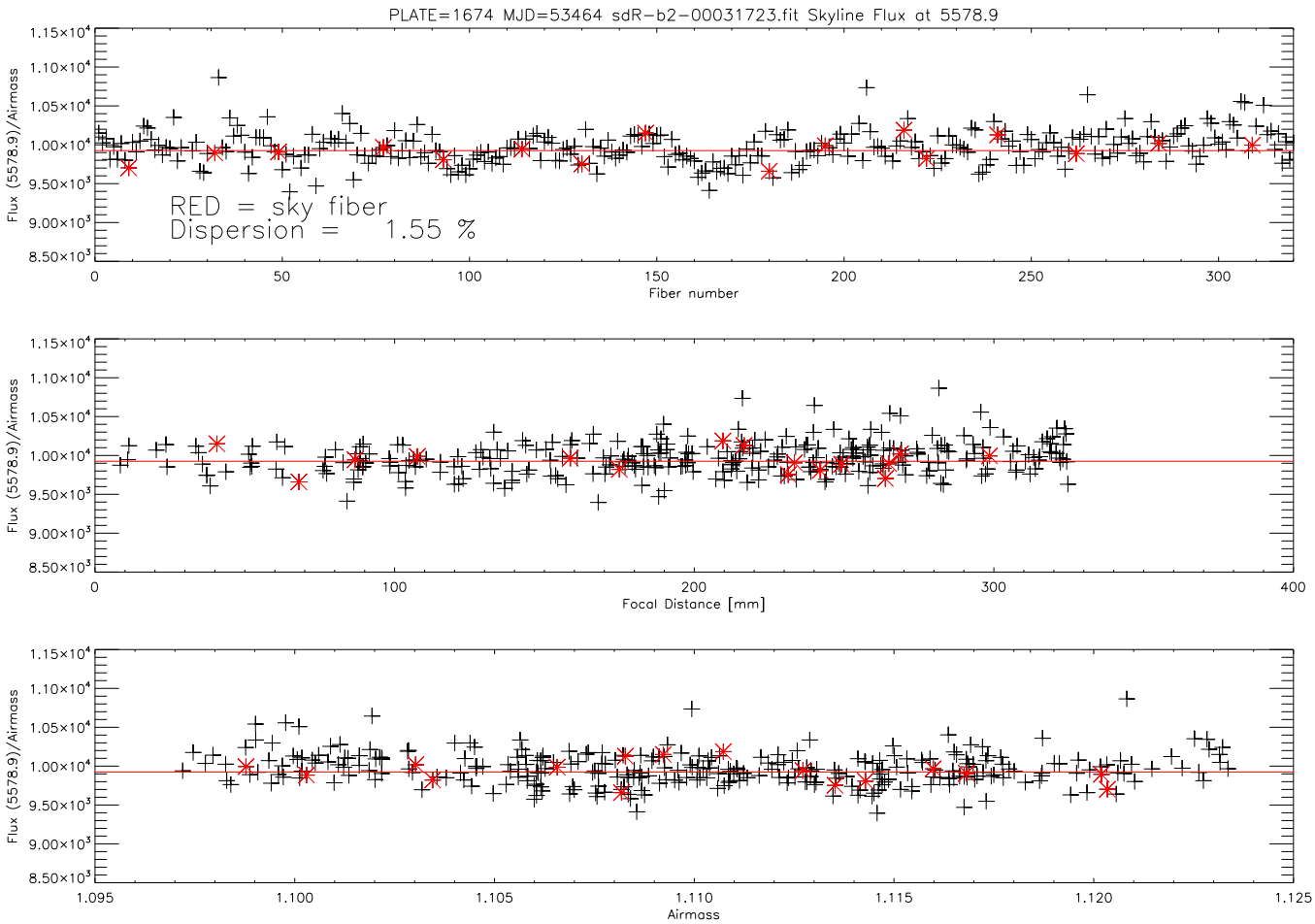

PLATE=1674 MJD=53464 sdR-b2-00031723.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

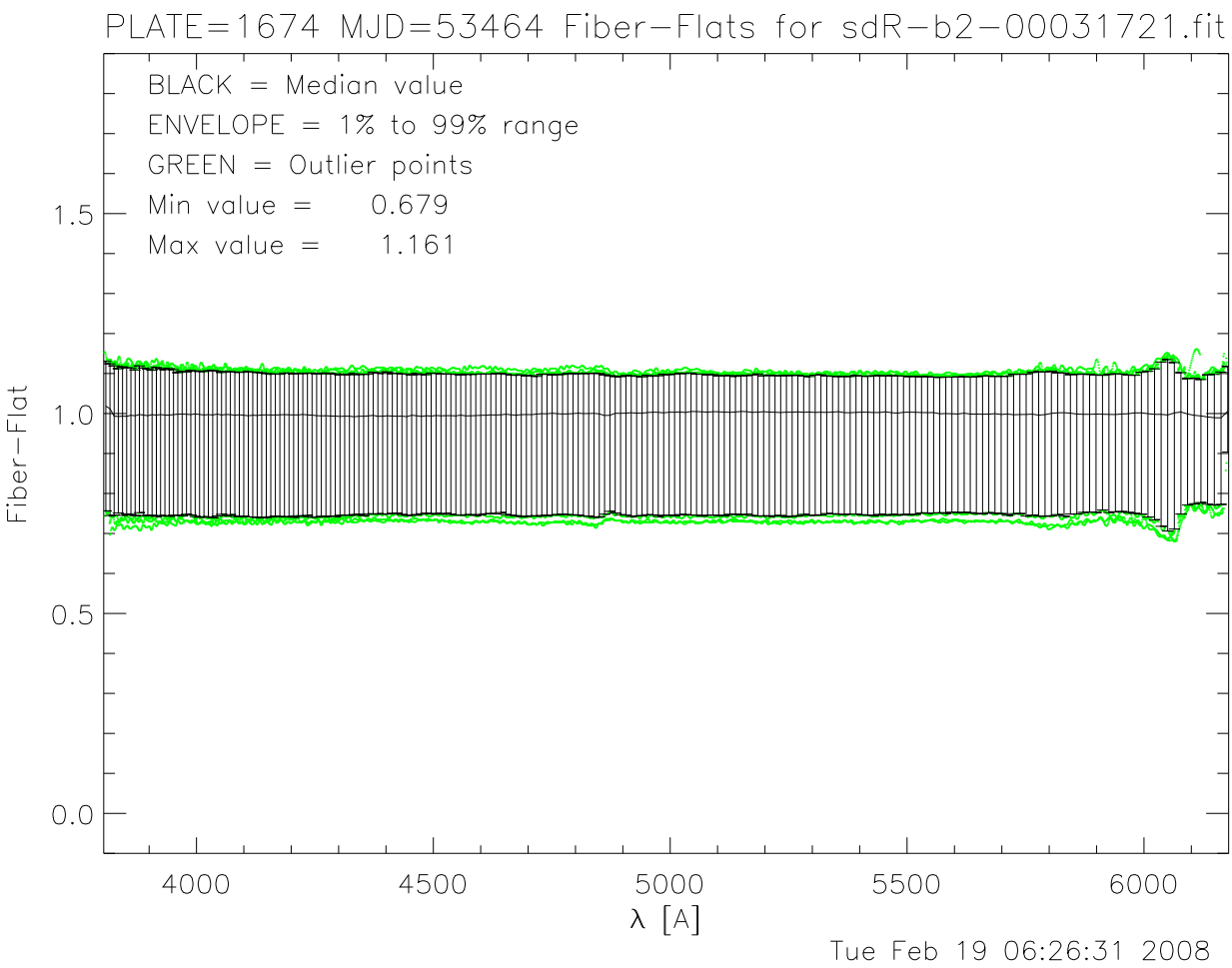

PLATE=1674 MJD=53464 sdR-b2-00031723.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

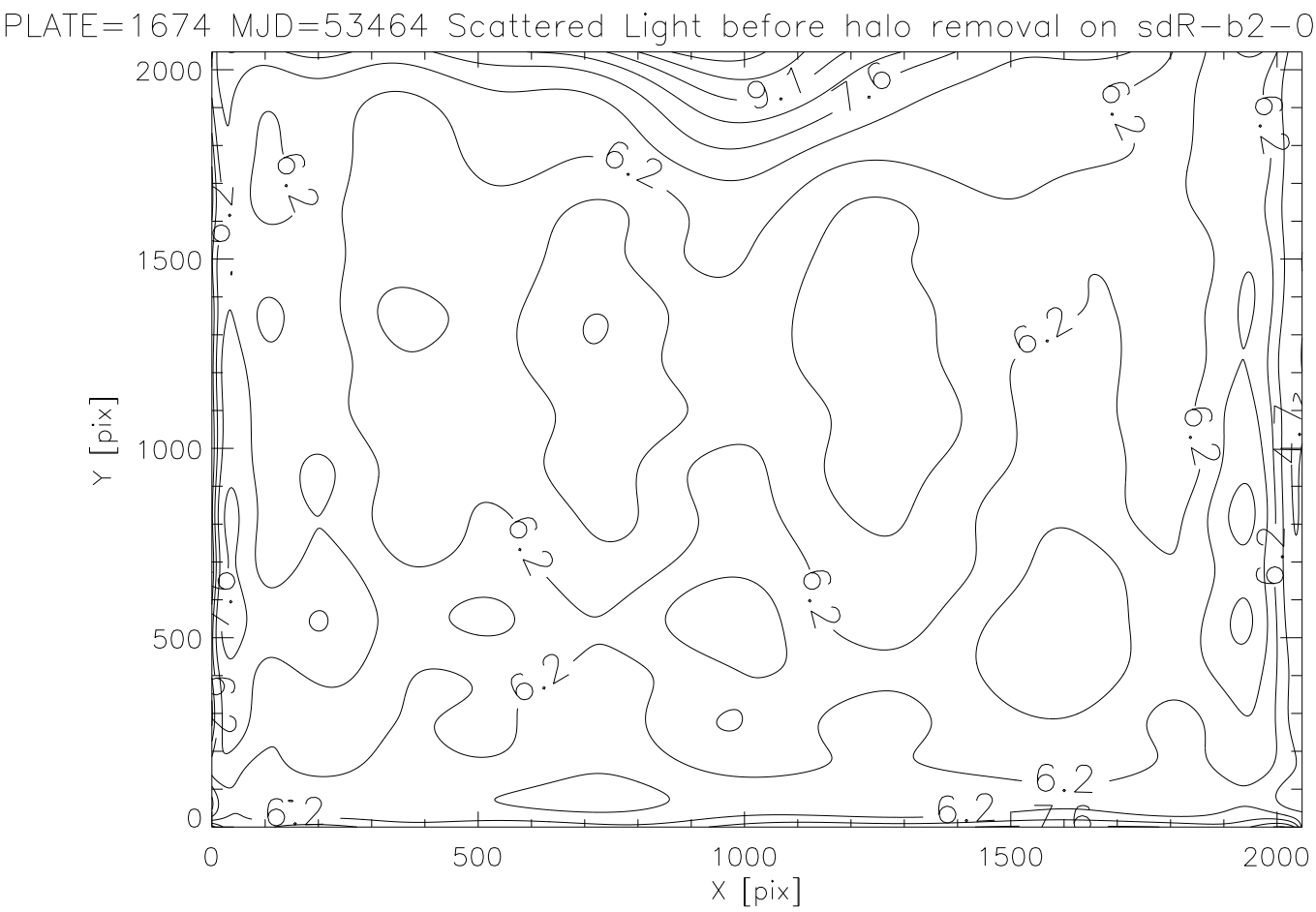

PLATE=1674 MJD=53464 sdR-b2-00031723.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

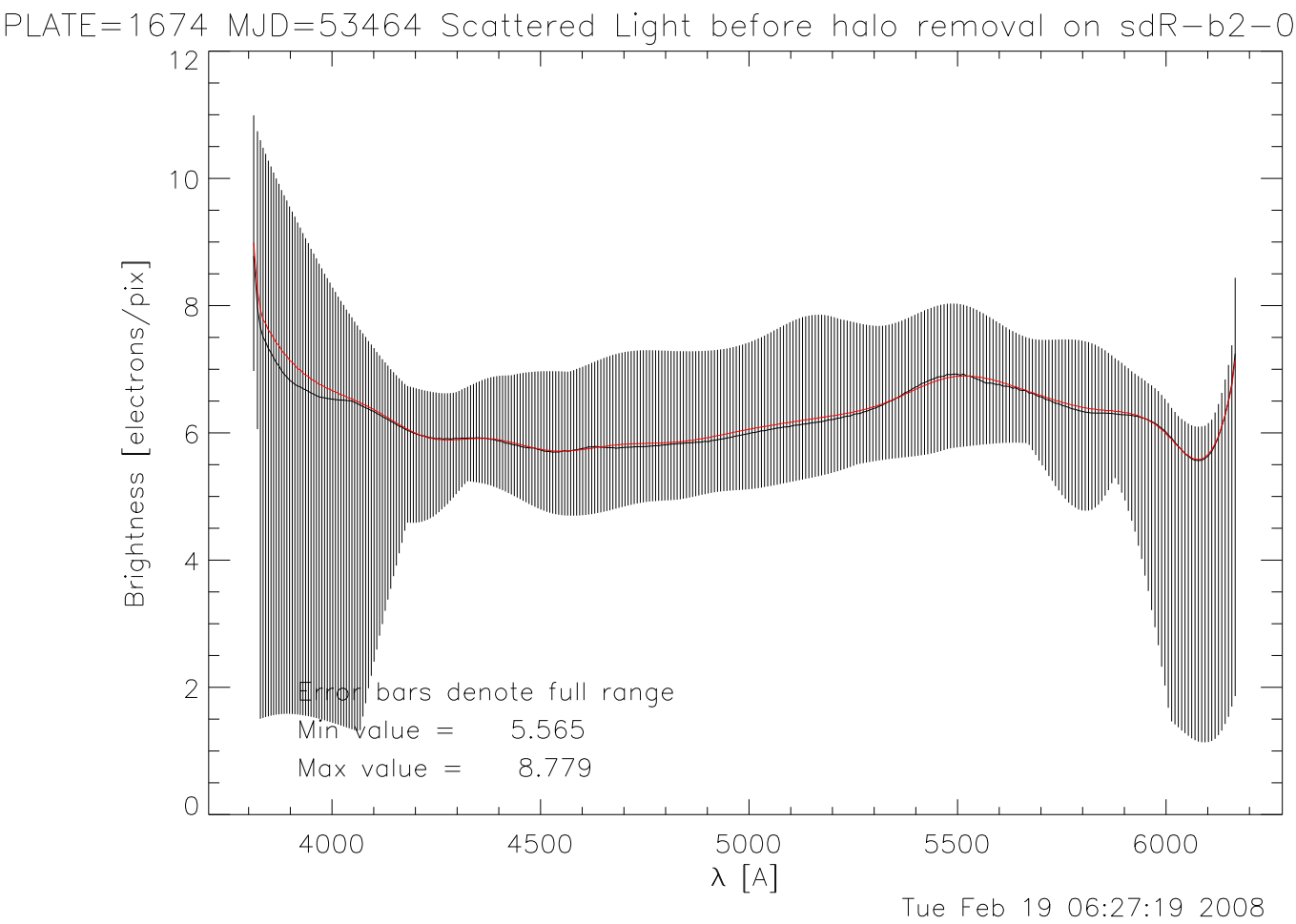

Number of sky fibers = 16
PLATE=1674 MJD=53464 sdR-b2-00031723.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

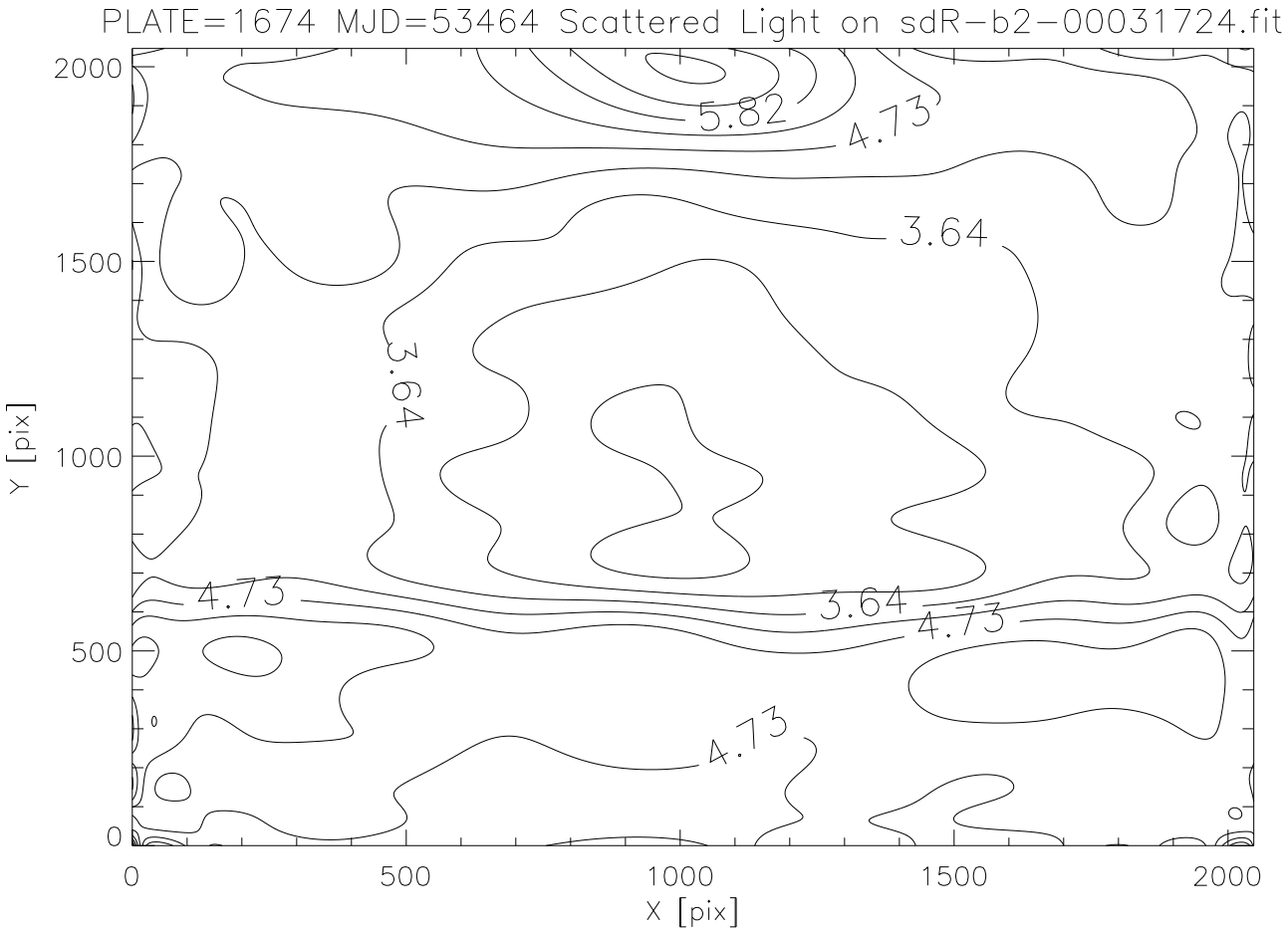

PLATE=1674 MJD=53464 sdR-b2-00031723.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.84 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

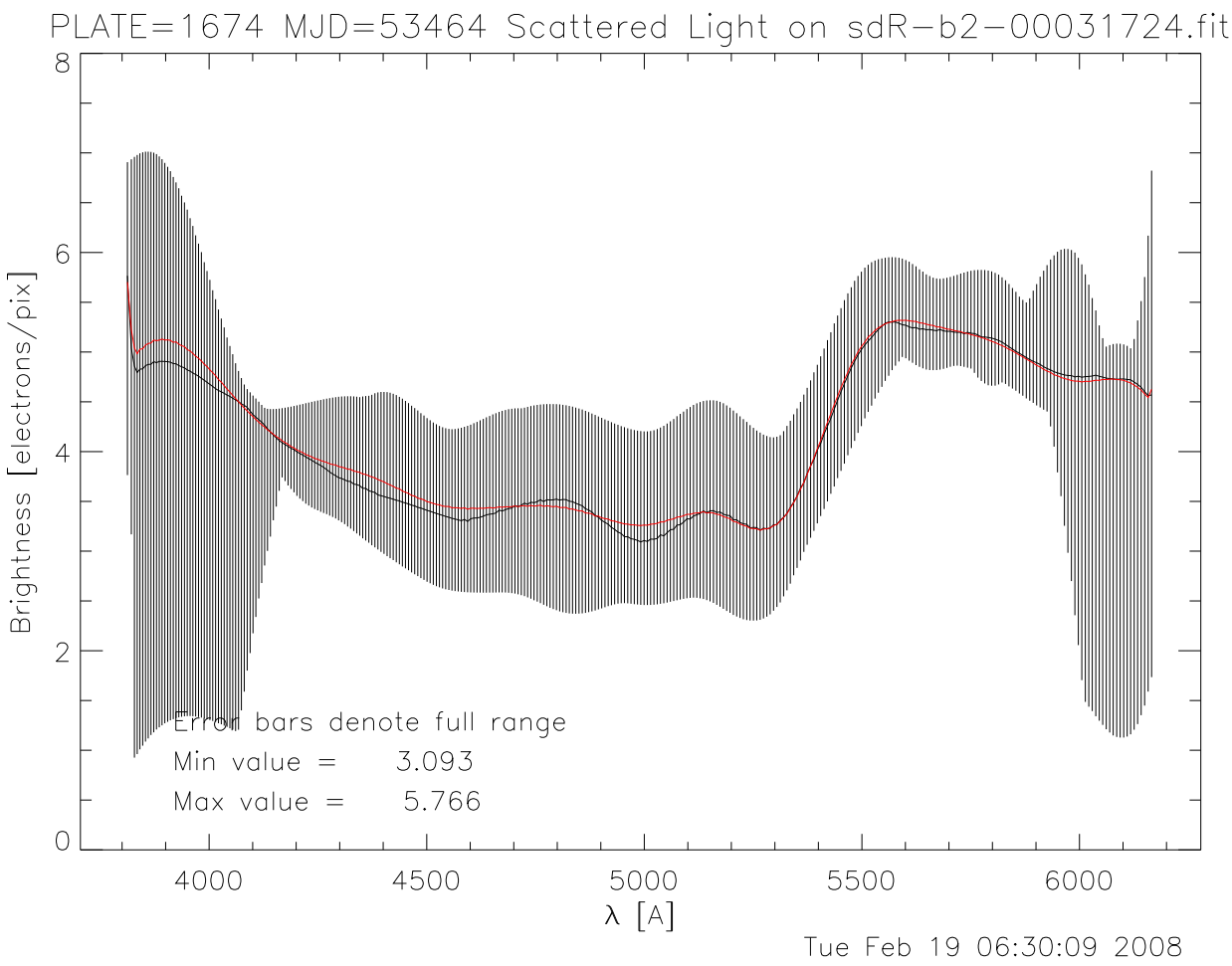

PLATE=1674 MJD=53464 sdR-b2-00031723.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.55 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

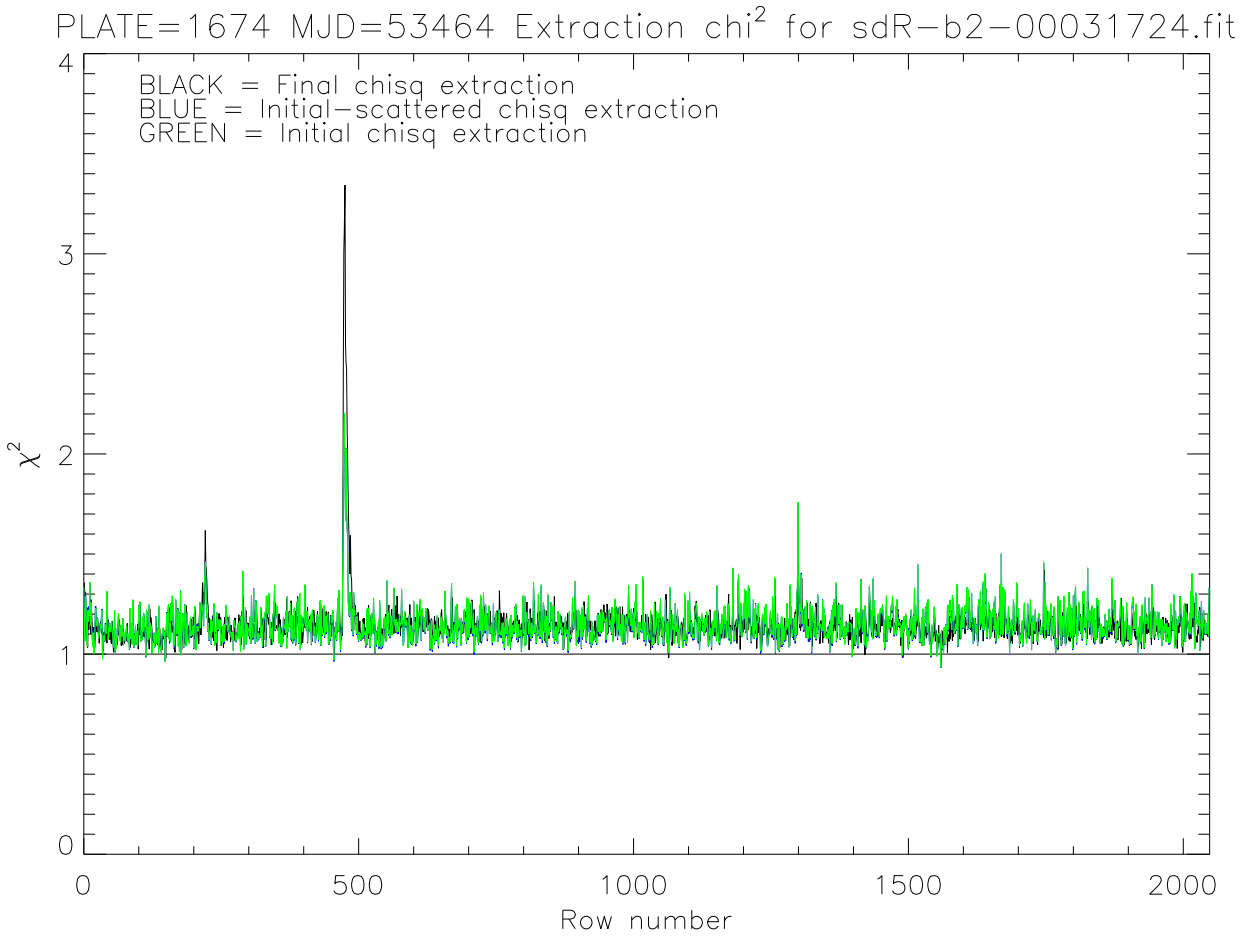

PLATE=1674 MJD=53464 Fiber-Flats for sdR-b2-00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.679
Max value = 1.161
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:26:31 2008

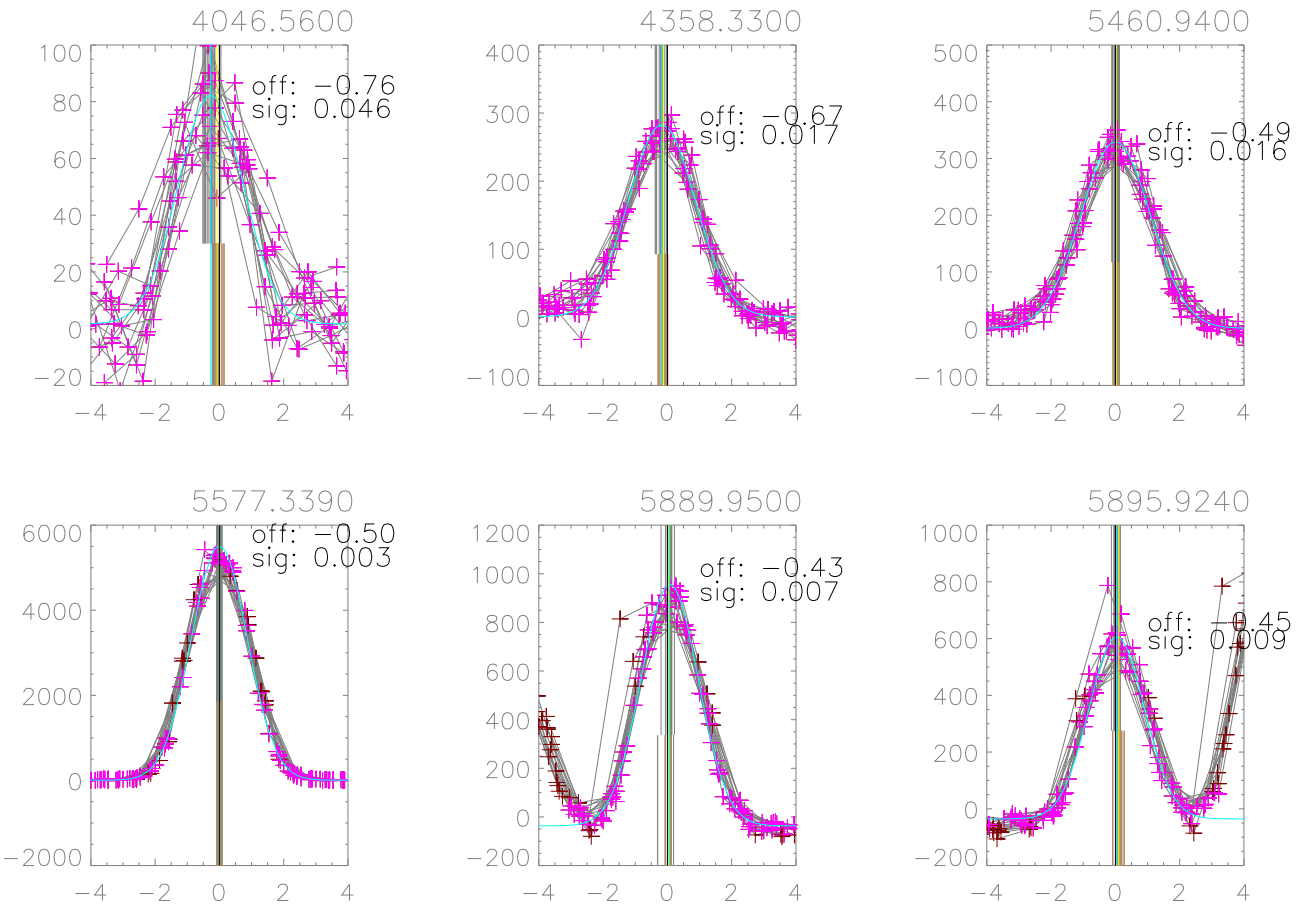

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b2-00031724.f
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
7.6
6.2

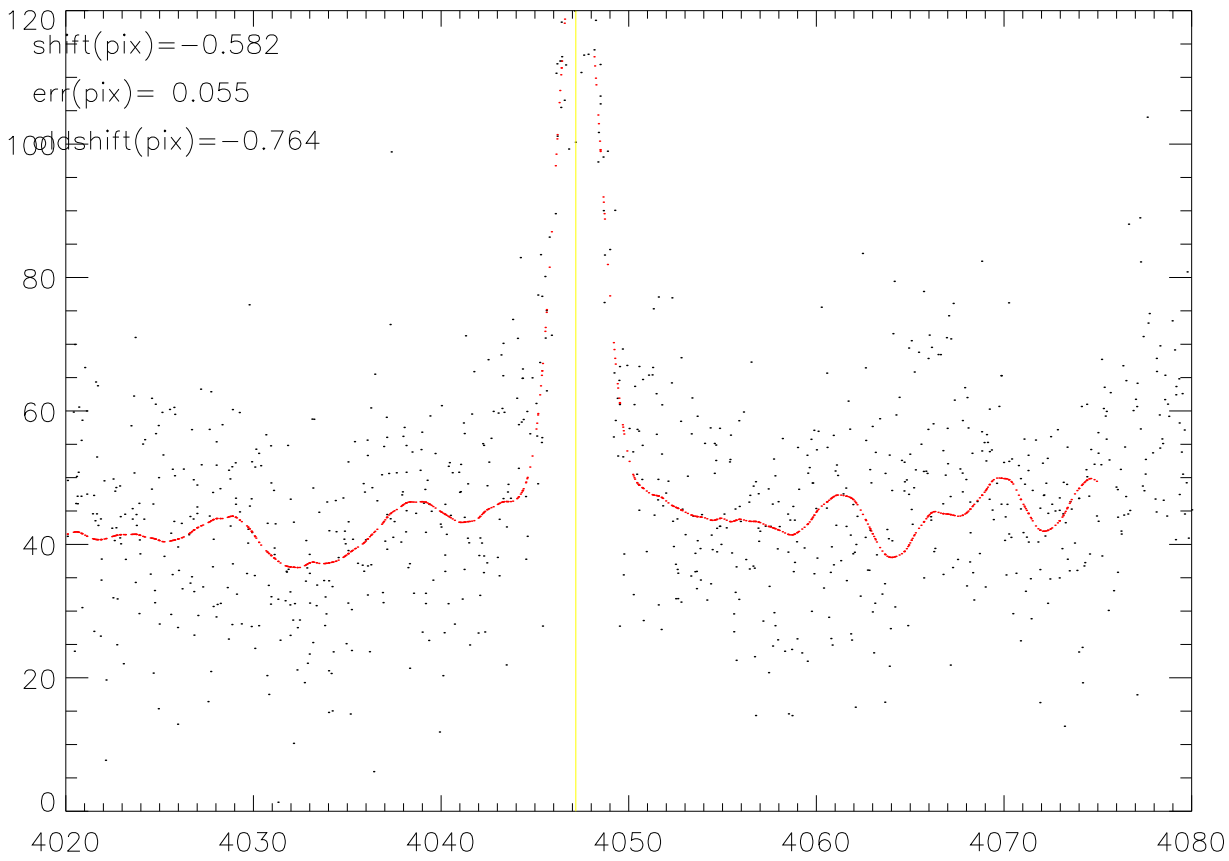

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b2-00031724.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.565
Max value = 8.779
Tue Feb 19 06:27:19 2008

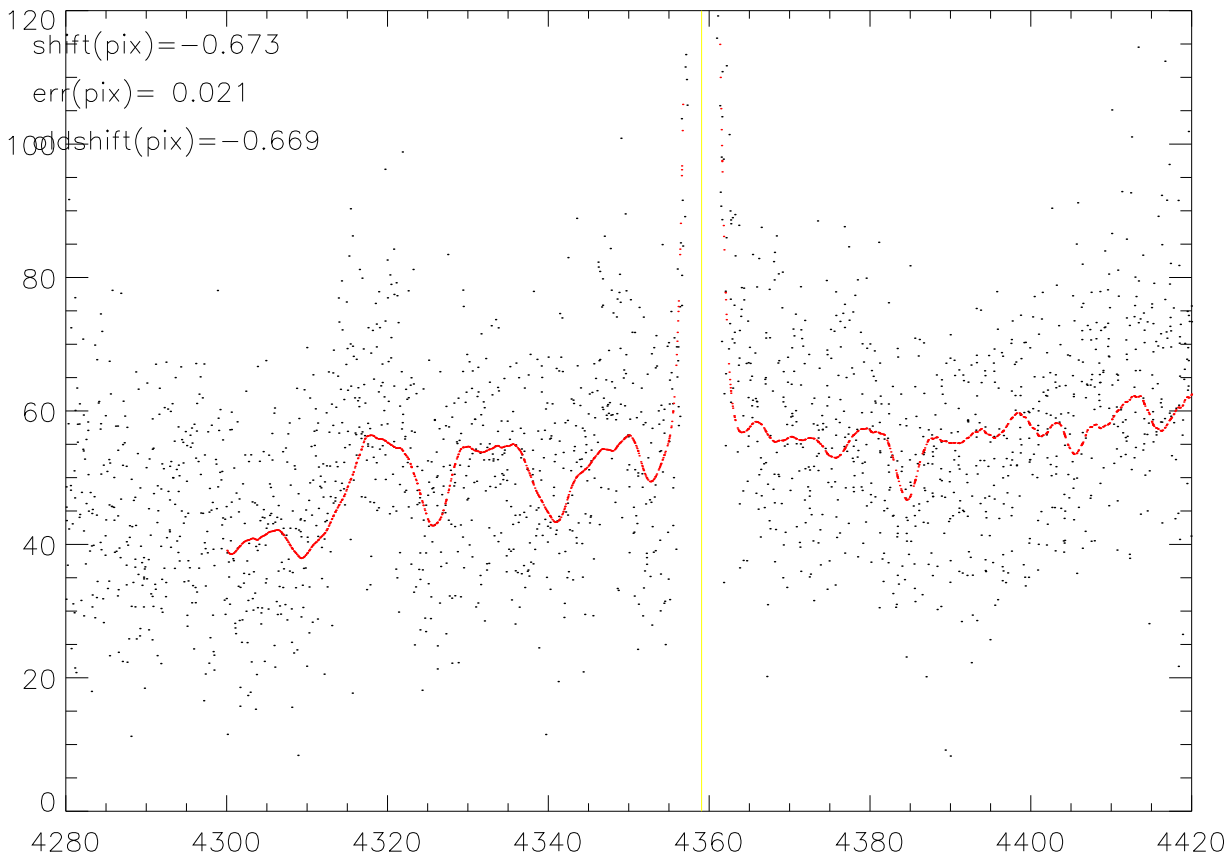

PLATE=1674 MJD=53464 Scattered Light on sdR-b2-00031724.fit
5.82
4.73
3.64
3.64
4.73
3.64
4.73
4.73
0
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

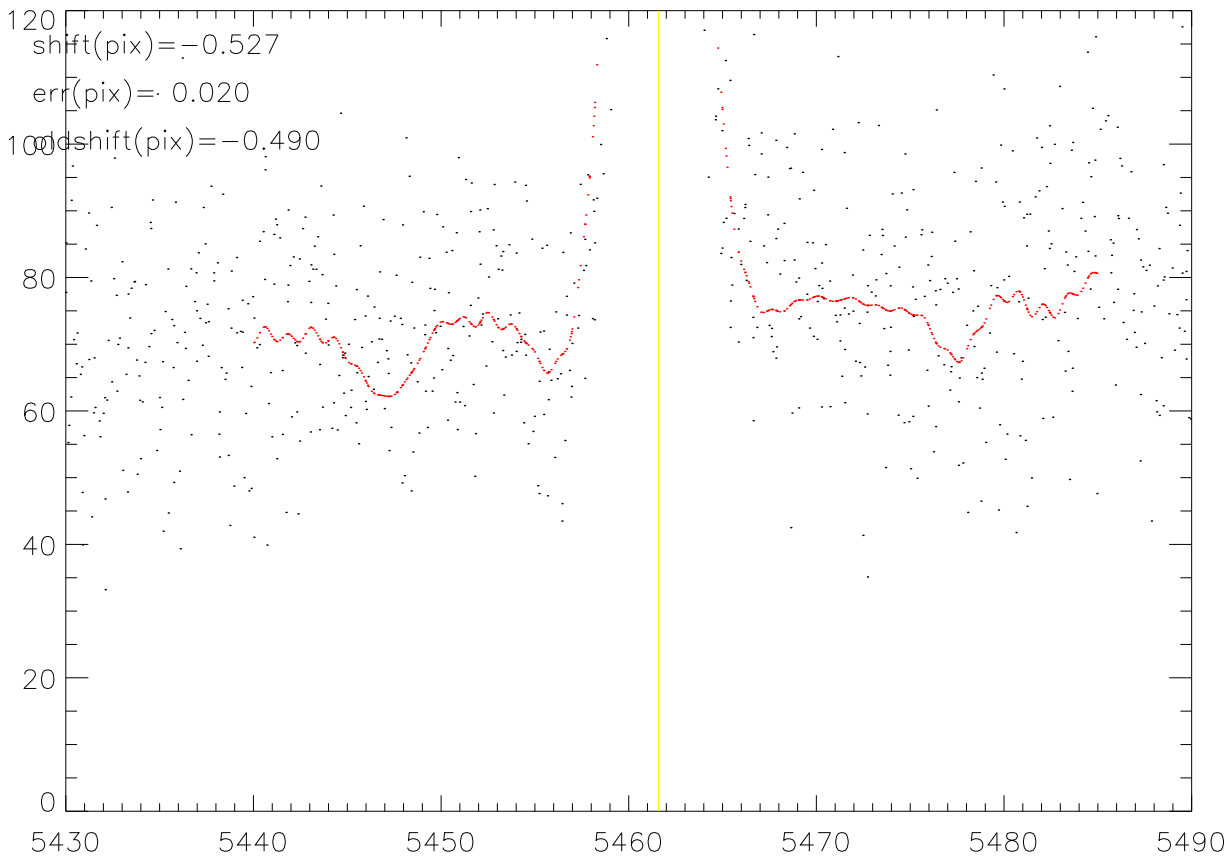

PLATE=1674 MJD=53464 Scattered Light on sdR-b2-00031724.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.093
Max value = 5.766
Tue Feb 19 06:30:09 2008

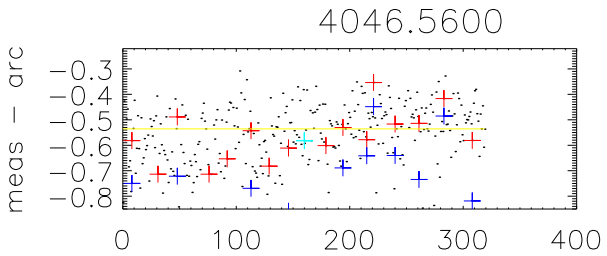

PLATE=1674 MJD=53464 Extraction chi^2 for sdR-b2-00031724.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

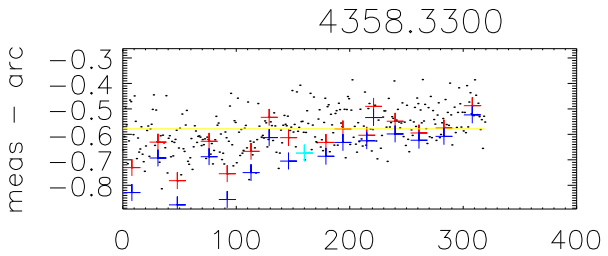

4046.5600
off: −0.76
sig: 0.046
4358.3300
off: −0.67
sig: 0.017
5460.9400
off: −0.49
sig: 0.016
5577.3390
off: −0.50
sig: 0.003
5889.9500
off: −0.43
sig: 0.007
5895.9240
off: −0.45
sig: 0.009

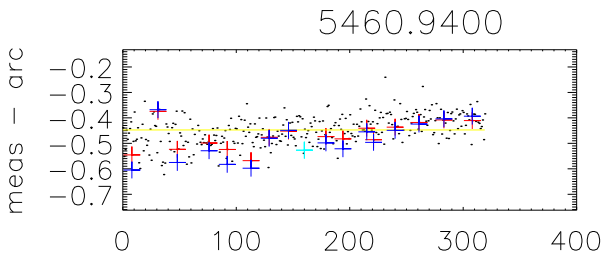

shift(pix)=−0.582
err(pix)= 0.055
oldshift(pix)=−0.764
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

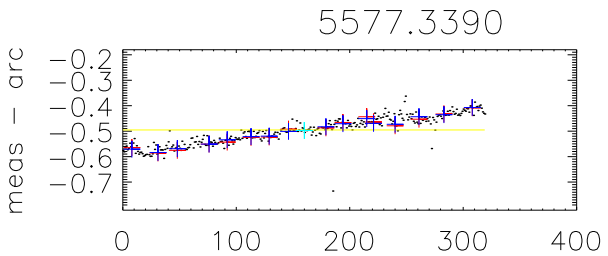

shift(pix)=−0.673
err(pix)= 0.021
oldshift(pix)=−0.669
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

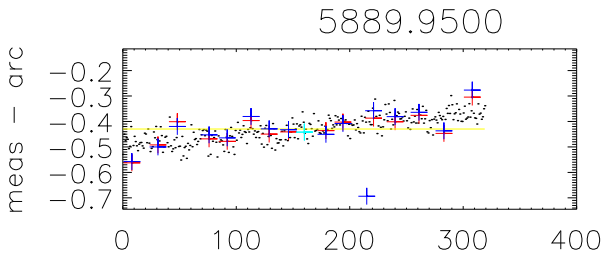

shift(pix)=−0.527
err(pix)= 0.020
oldshift(pix)=−0.490
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

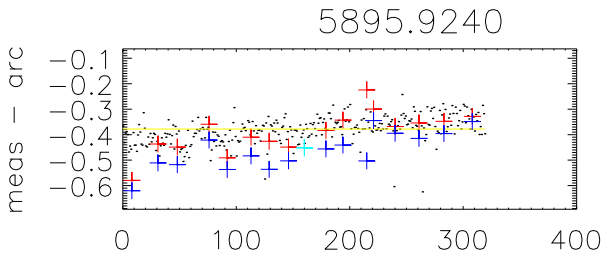

4046.5600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

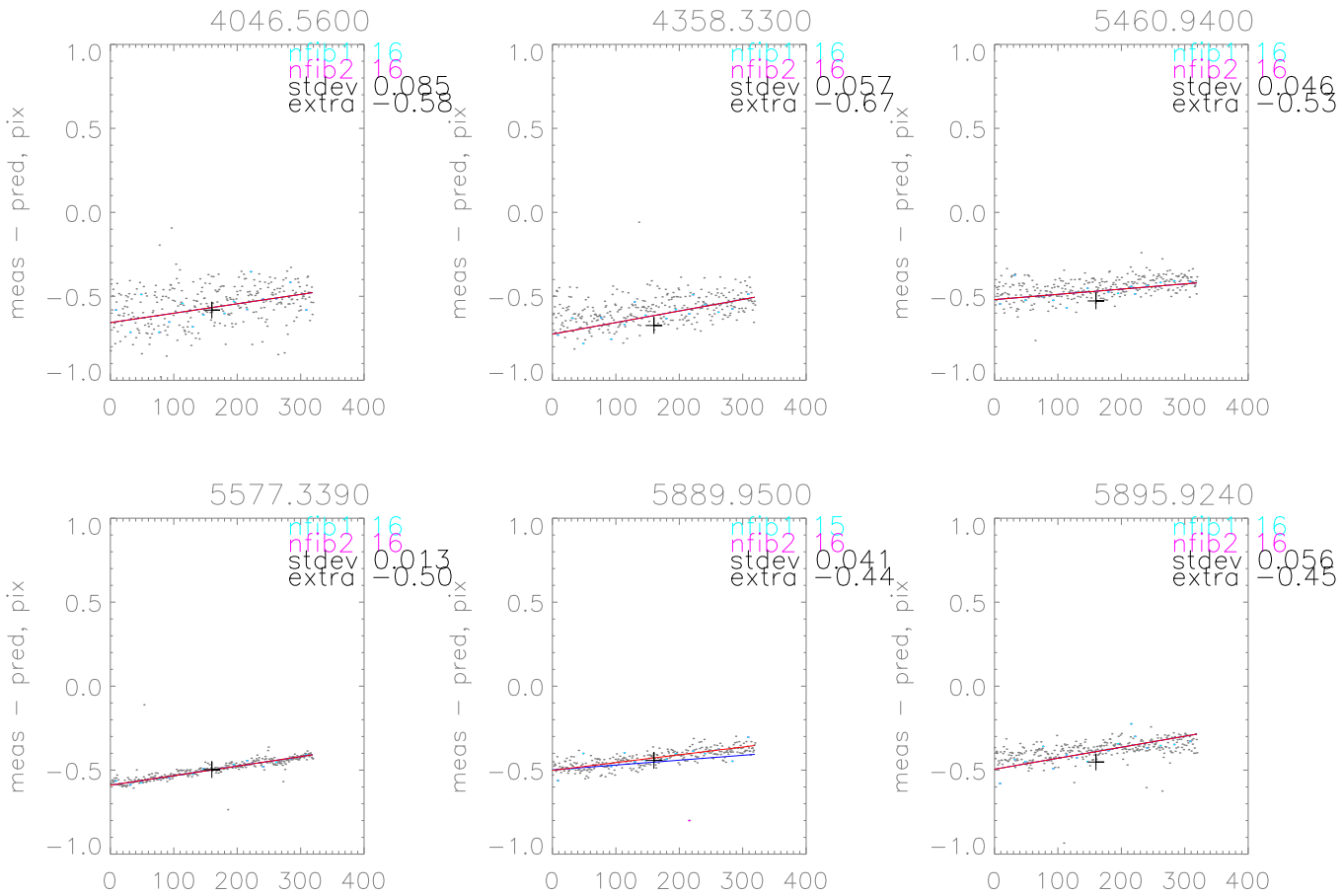

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

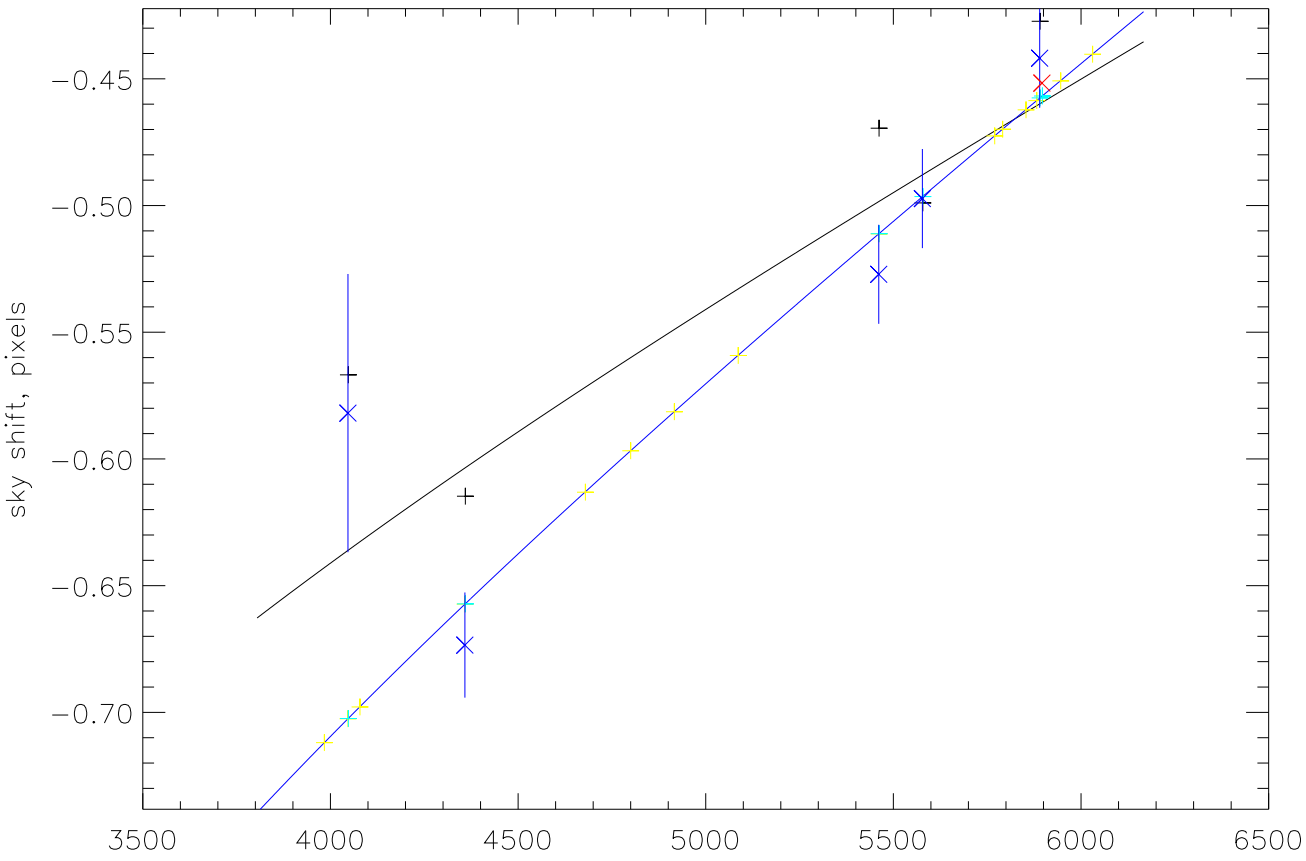

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

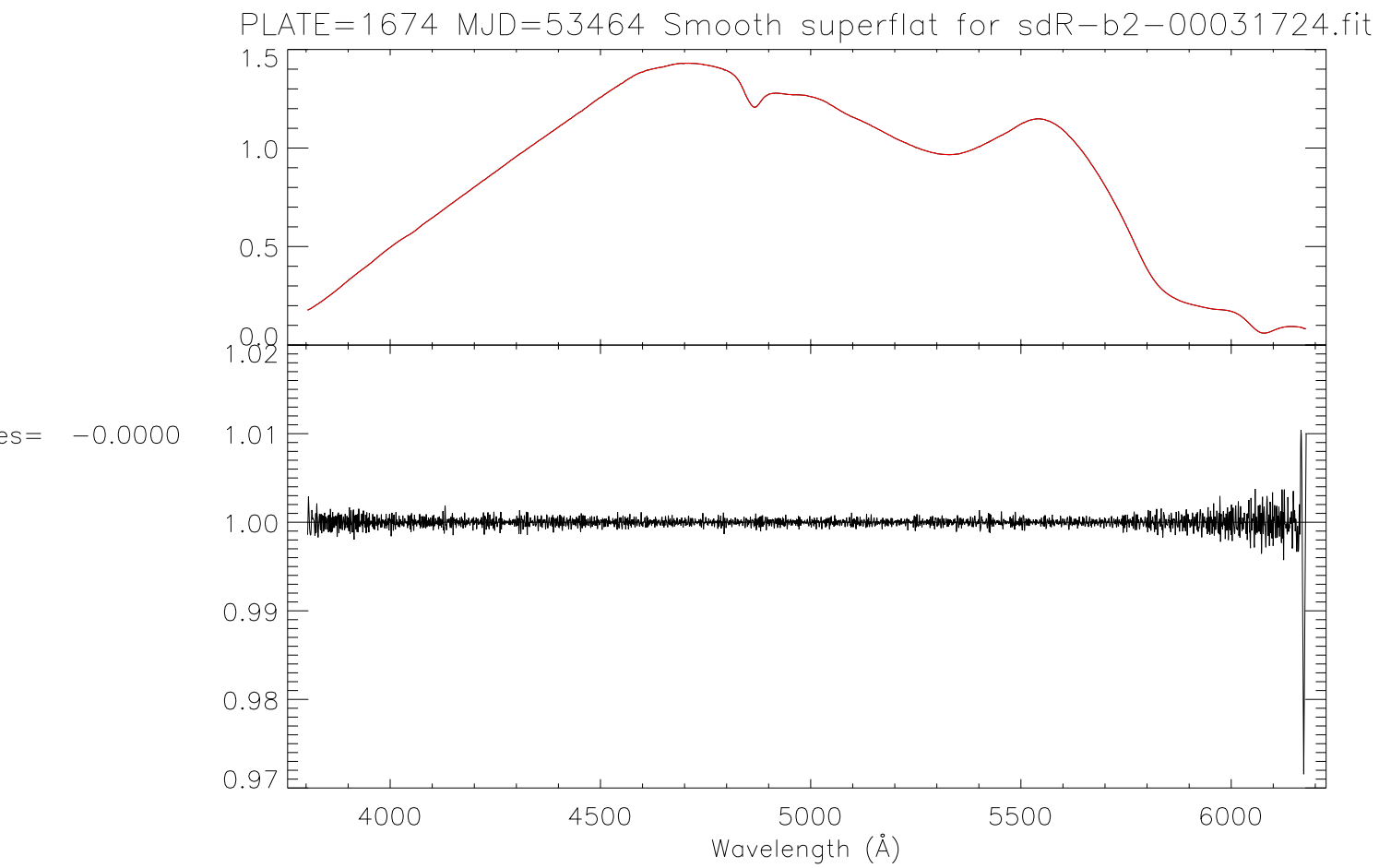

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


5889.9500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

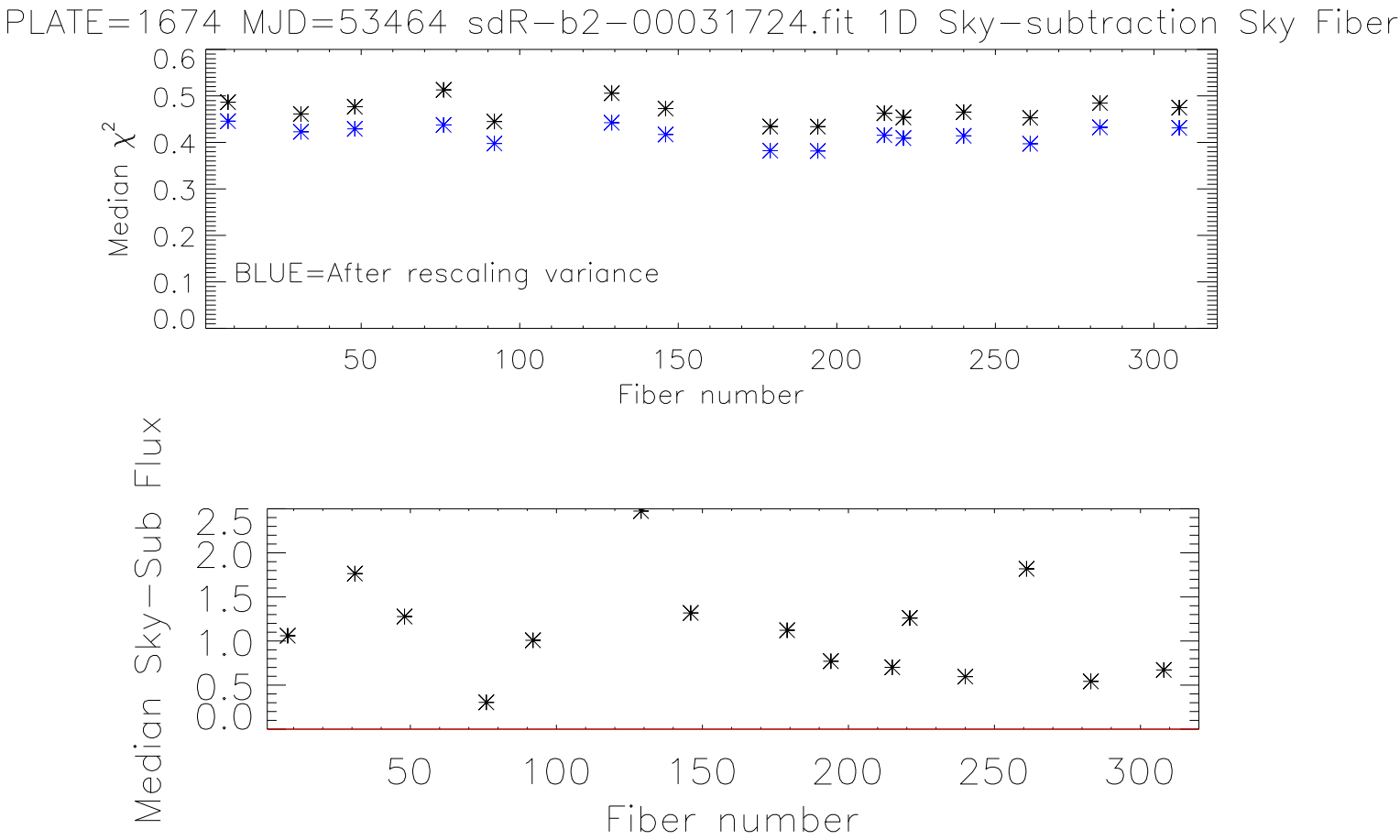

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

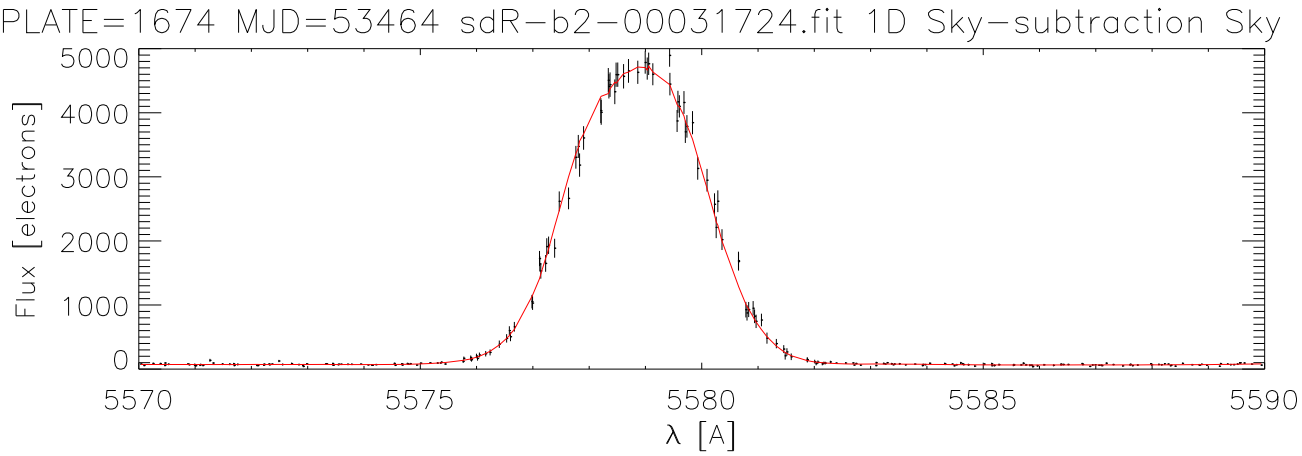

4046.5600
nfib1 16
nfib2 16
stdev 0.085
extra −0.58
4358.3300
nfib1 16
nfib2 16
stdev 0.057
extra −0.67
5460.9400
nfib1 16
nfib2 16
stdev 0.046
extra −0.53
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra −0.50
5889.9500
nfib1 15
nfib2 16
stdev 0.041
extra −0.44
5895.9240
nfib1 16
nfib2 16
stdev 0.056
extra −0.45
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

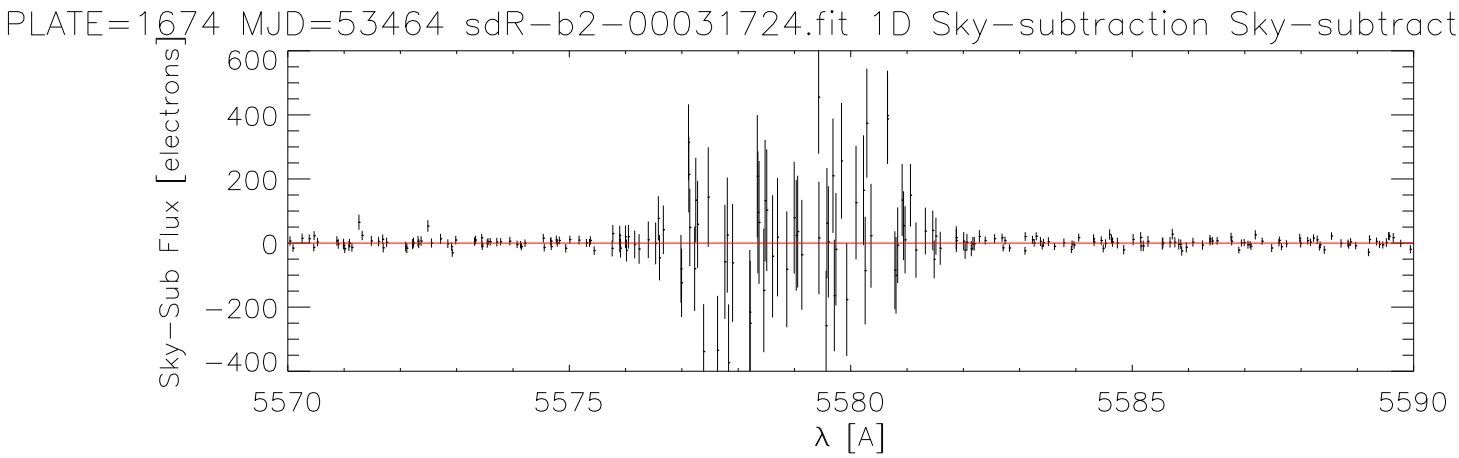

sky shift, pixels
−0.45
−0.50
−0.55
−0.60
−0.65
−0.70
3500
4000
4500
5000
5500
6000
6500

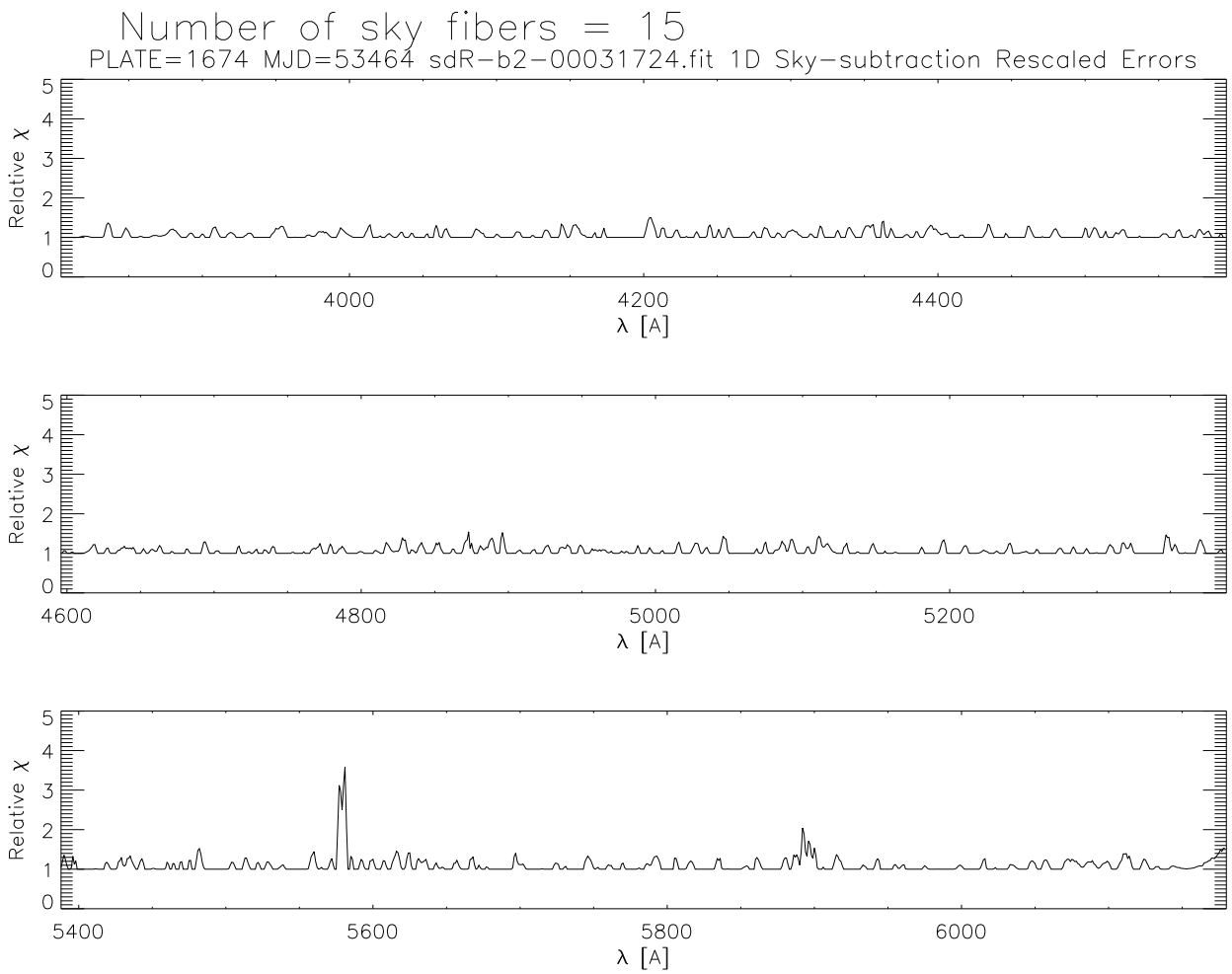

PLATE=1674 MJD=53464 Smooth superflat for sdR-b2-00031724.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

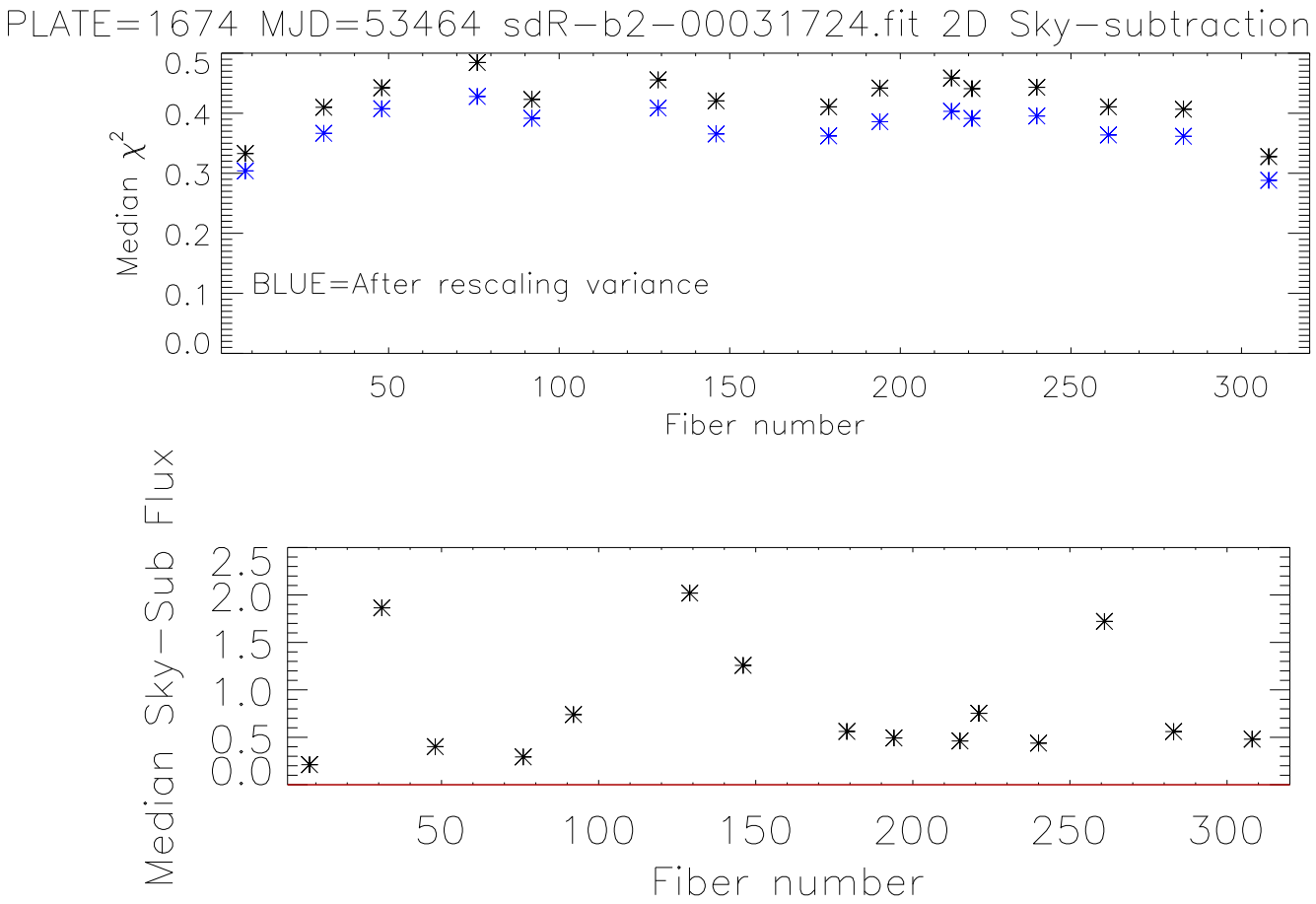
es= −0.0000

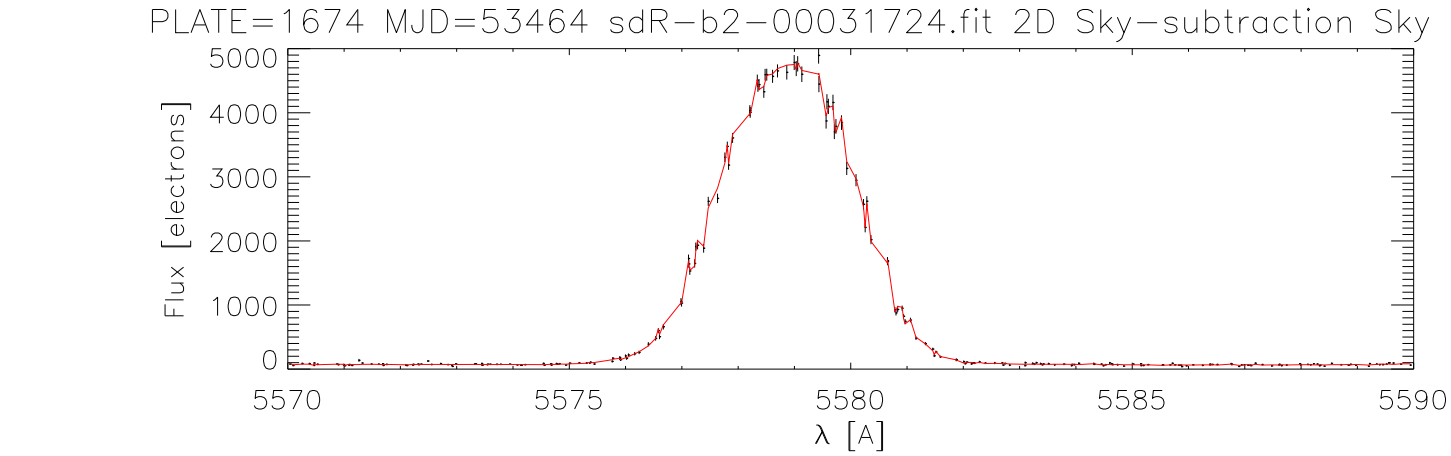

PLATE=1674 MJD=53464 sdR-b2-00031724.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

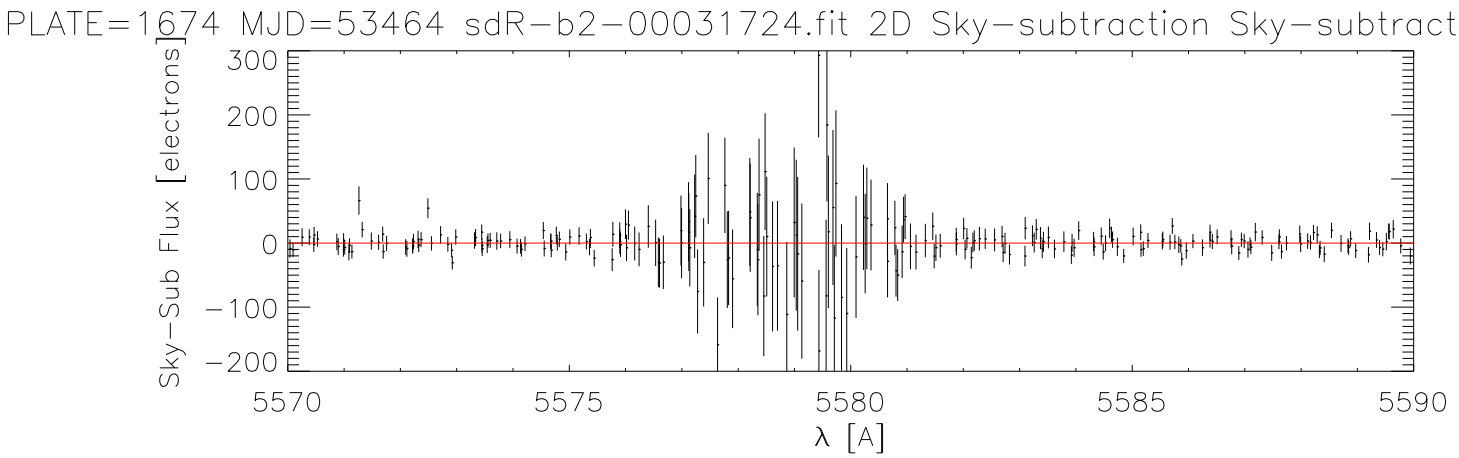

PLATE=1674 MJD=53464 sdR-b2-00031724.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

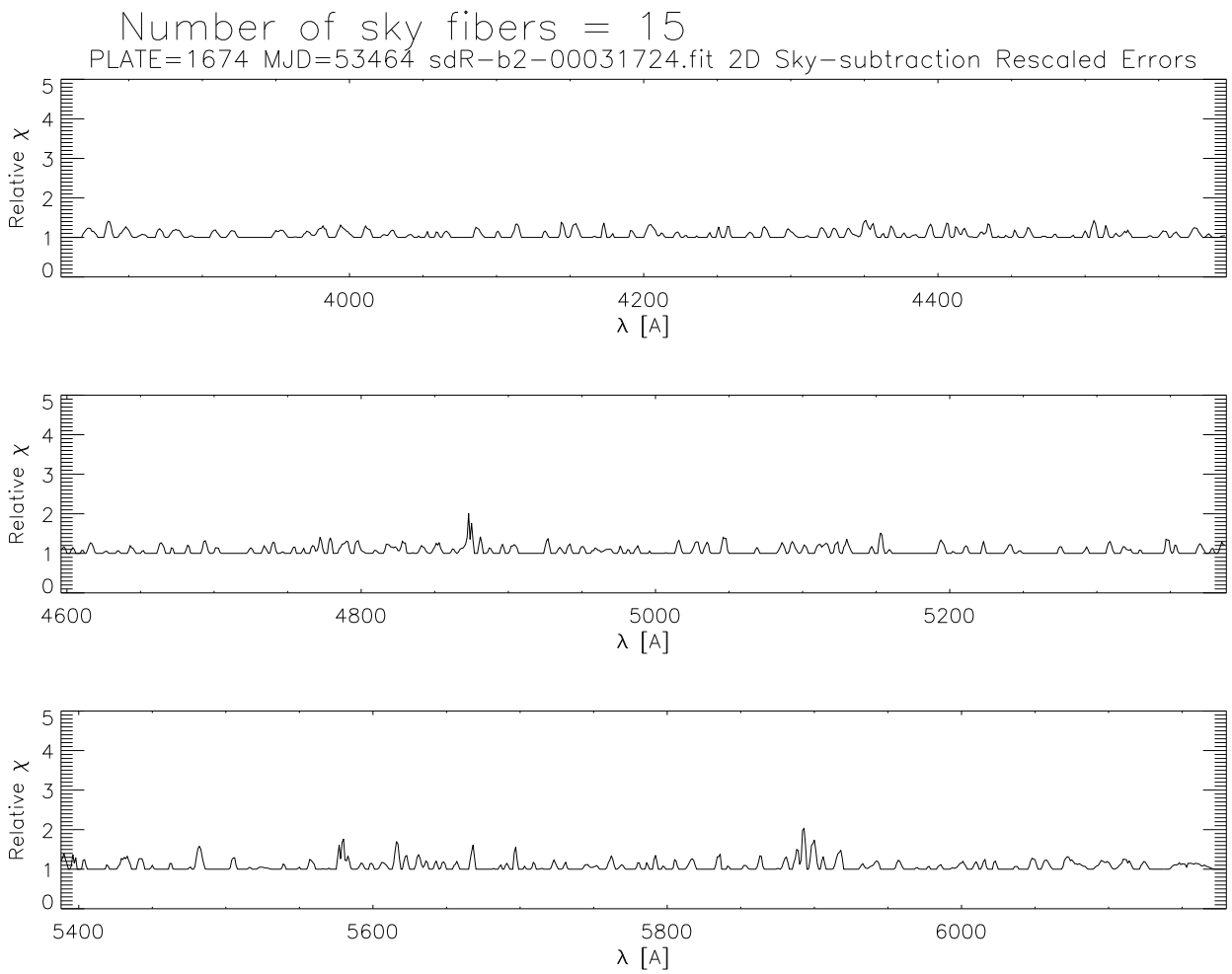

PLATE=1674 MJD=53464 sdR-b2-00031724.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

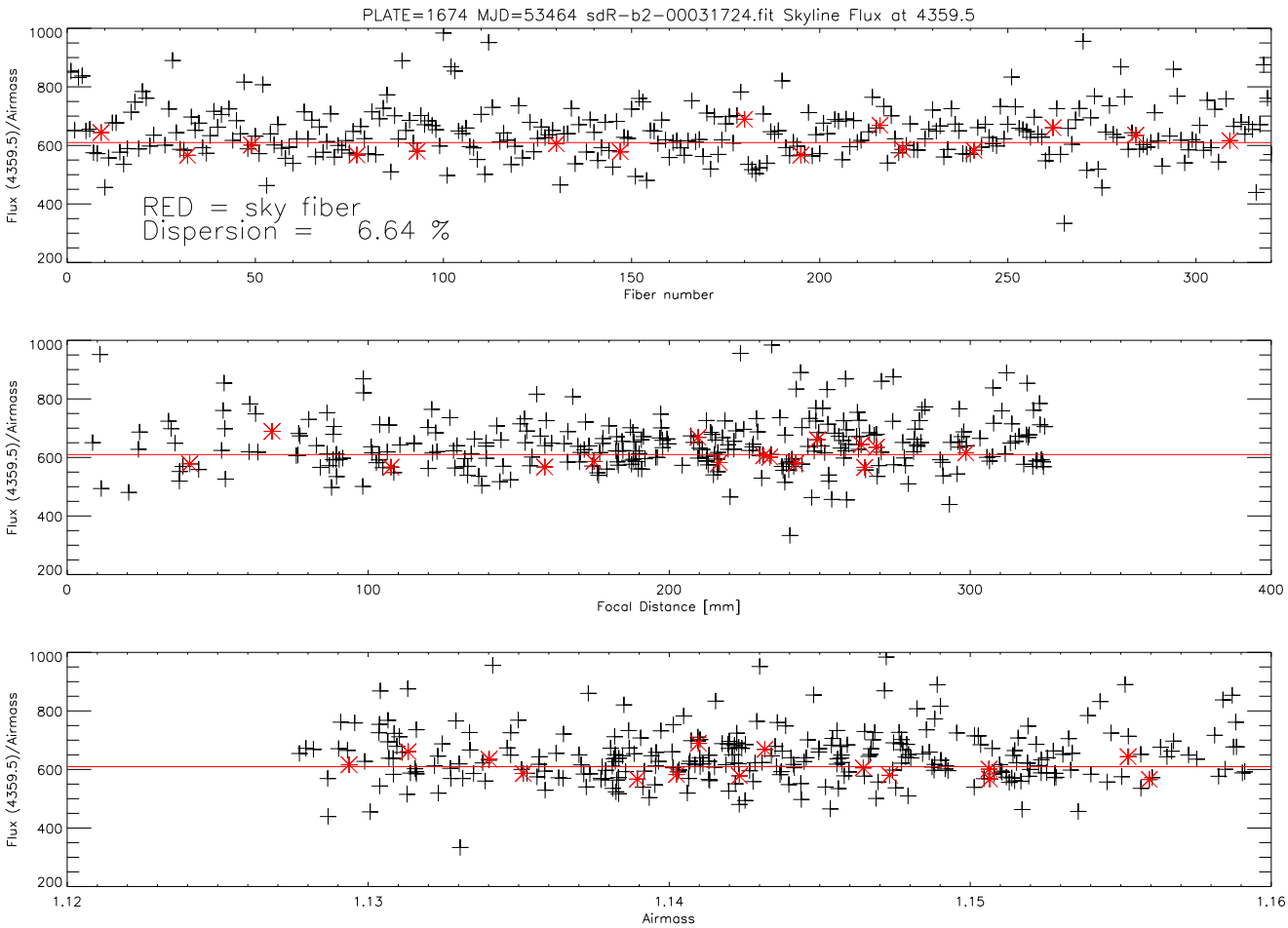

Number of sky fibers = 15
PLATE=1674 MJD=53464 sdR-b2-00031724.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

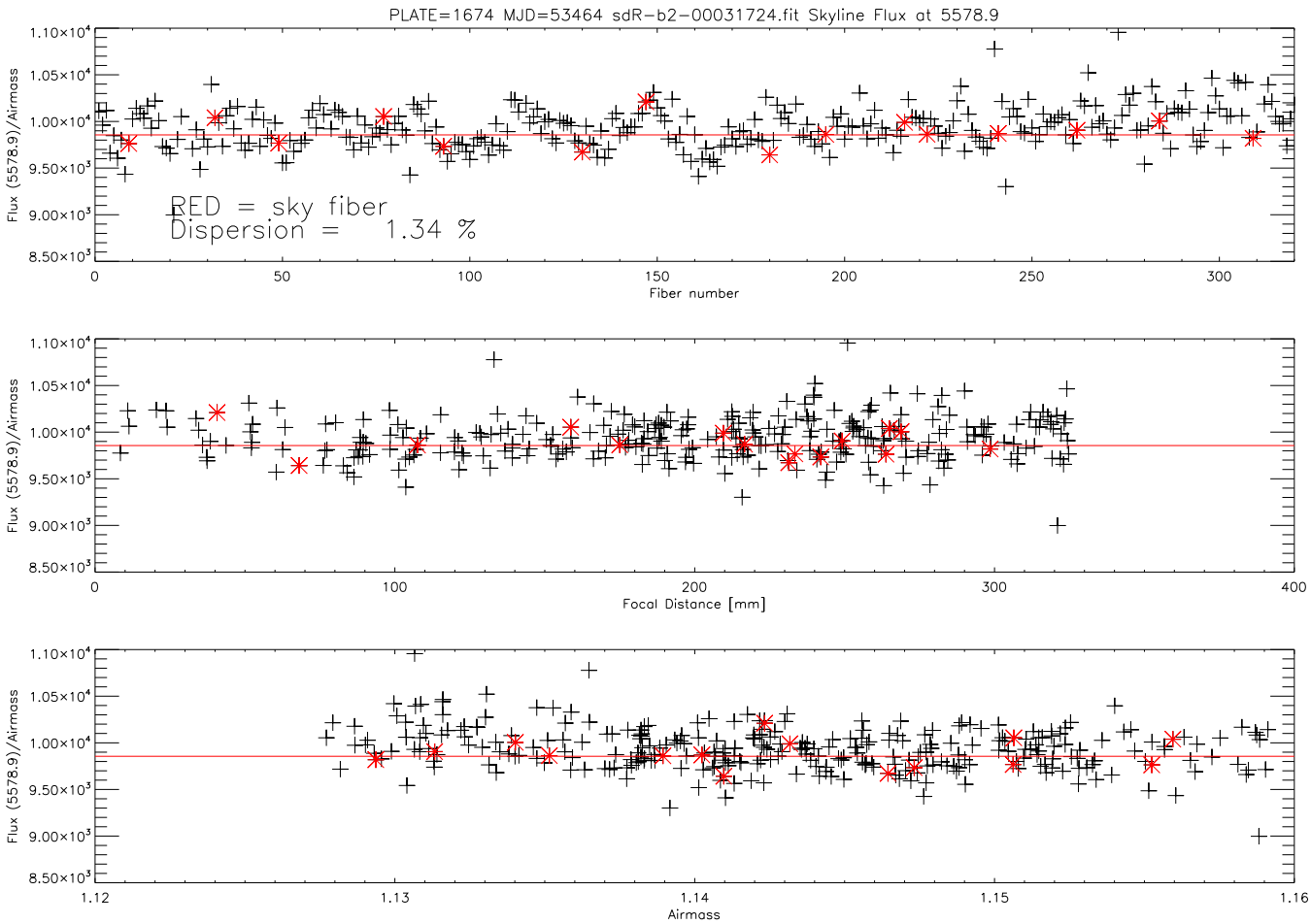

PLATE=1674 MJD=53464 sdR-b2-00031724.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

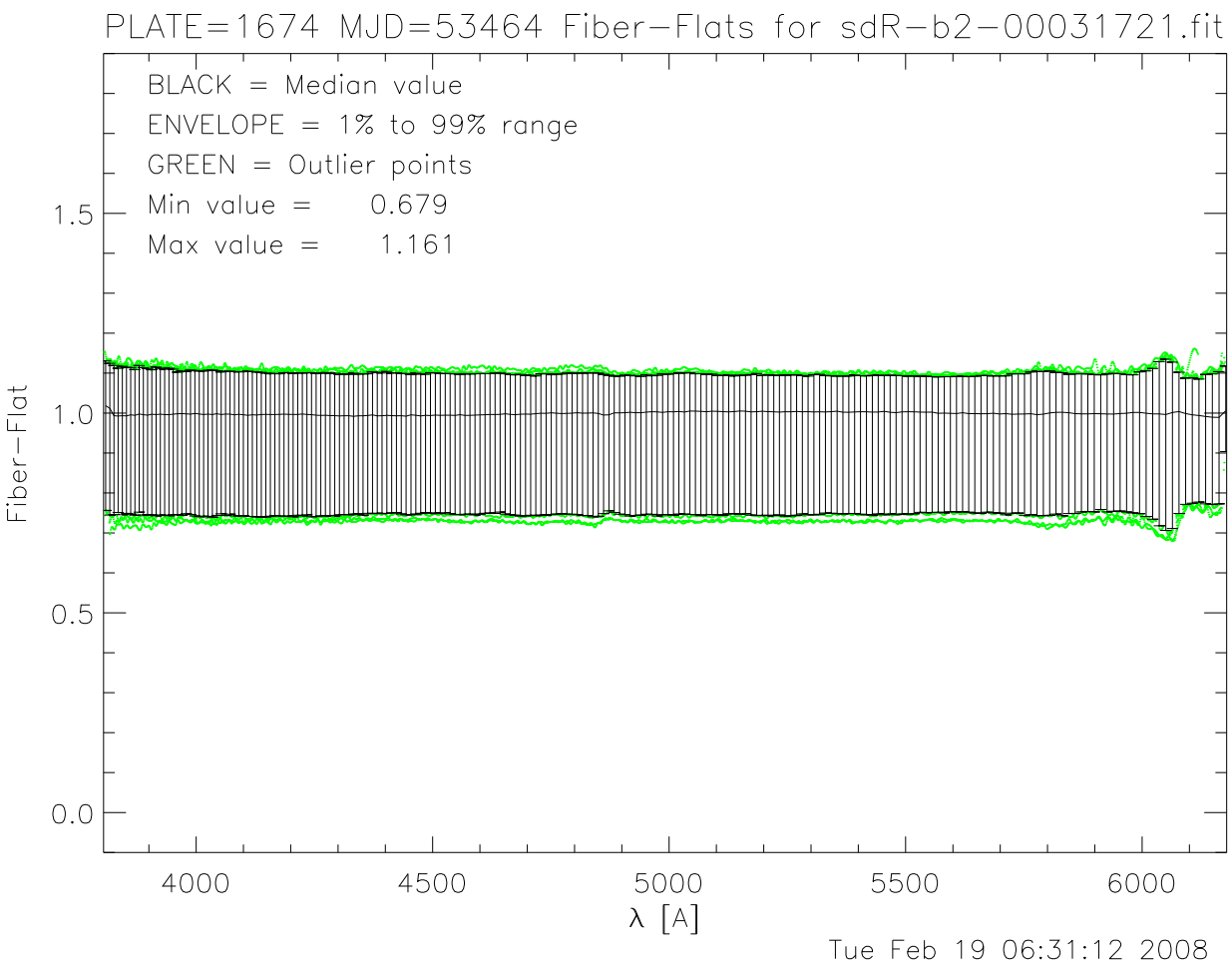

PLATE=1674 MJD=53464 sdR-b2-00031724.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

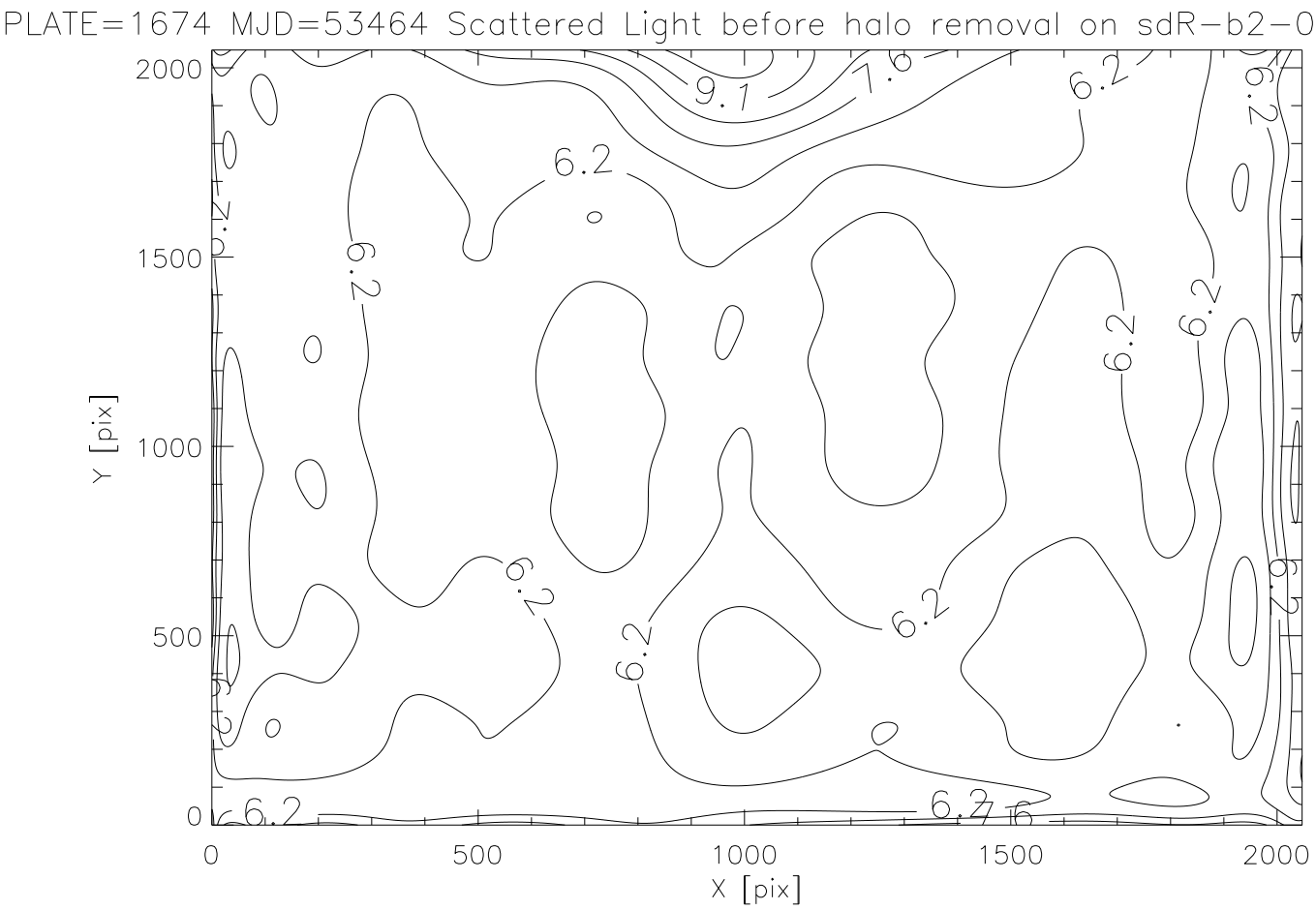

PLATE=1674 MJD=53464 sdR-b2-00031724.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

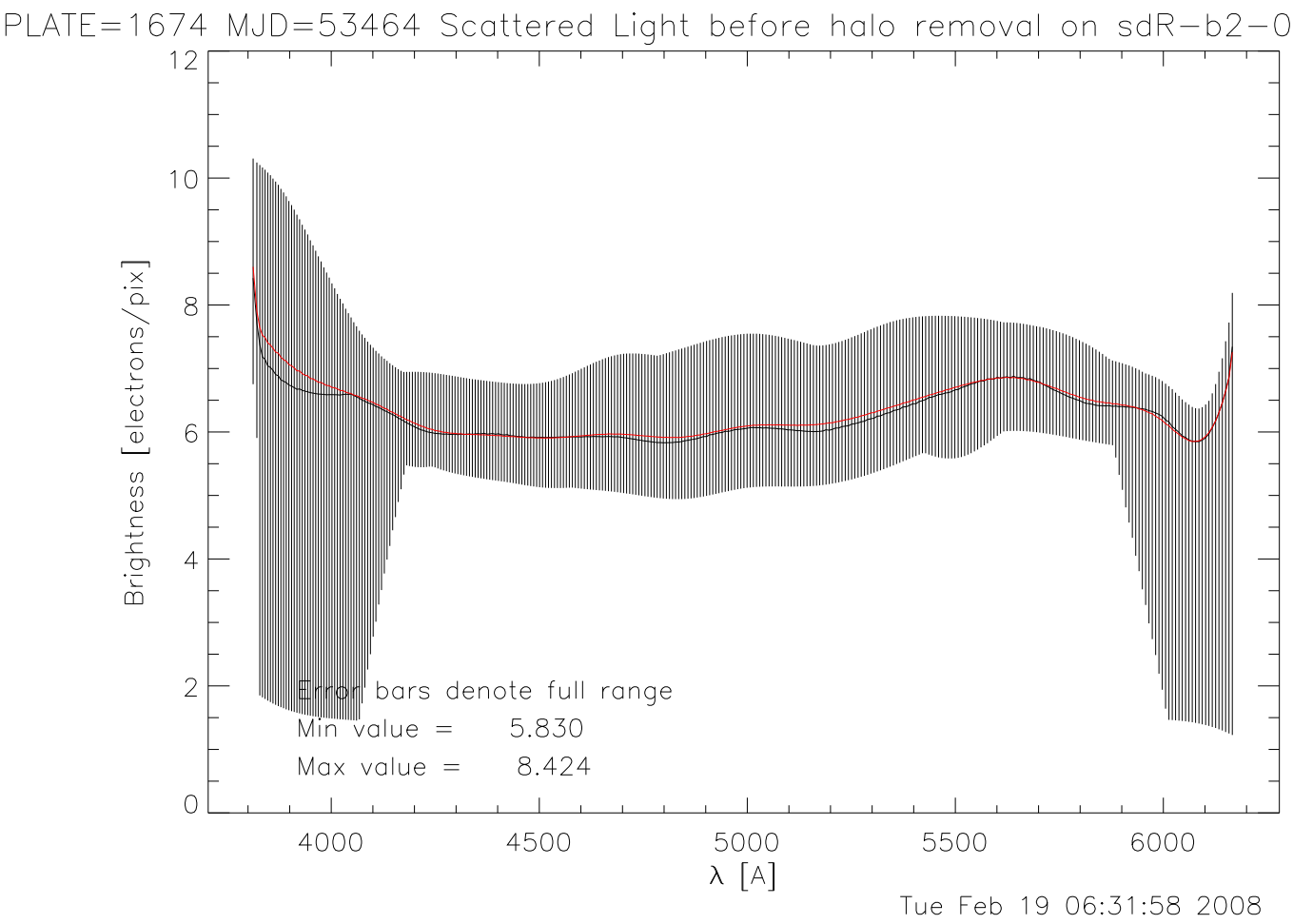

Number of sky fibers = 15
PLATE=1674 MJD=53464 sdR-b2-00031724.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

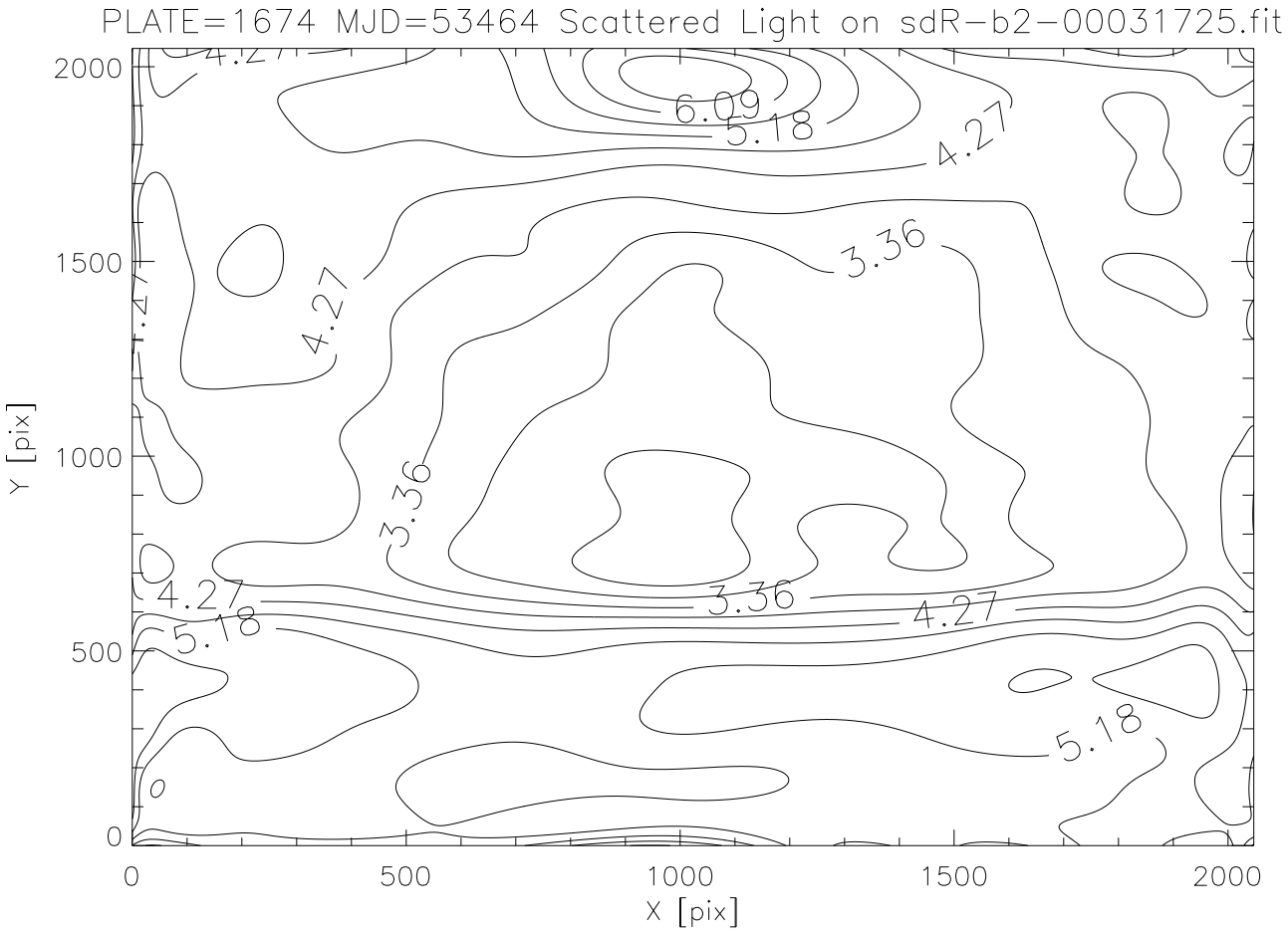

PLATE=1674 MJD=53464 sdR-b2-00031724.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 6.64 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

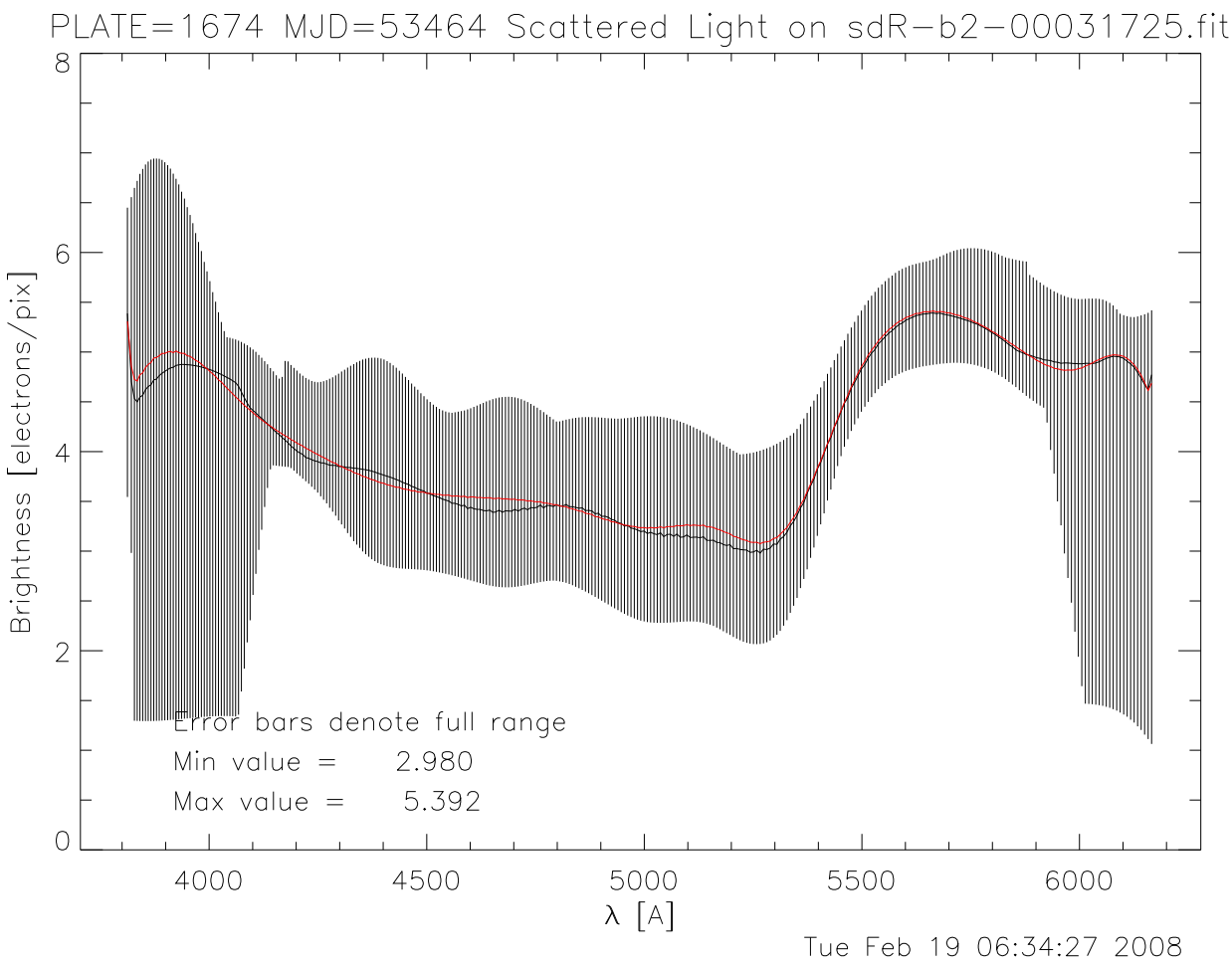

PLATE=1674 MJD=53464 sdR-b2-00031724.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.34 %
Fiber number
Focal Distance [mm]
Airmass

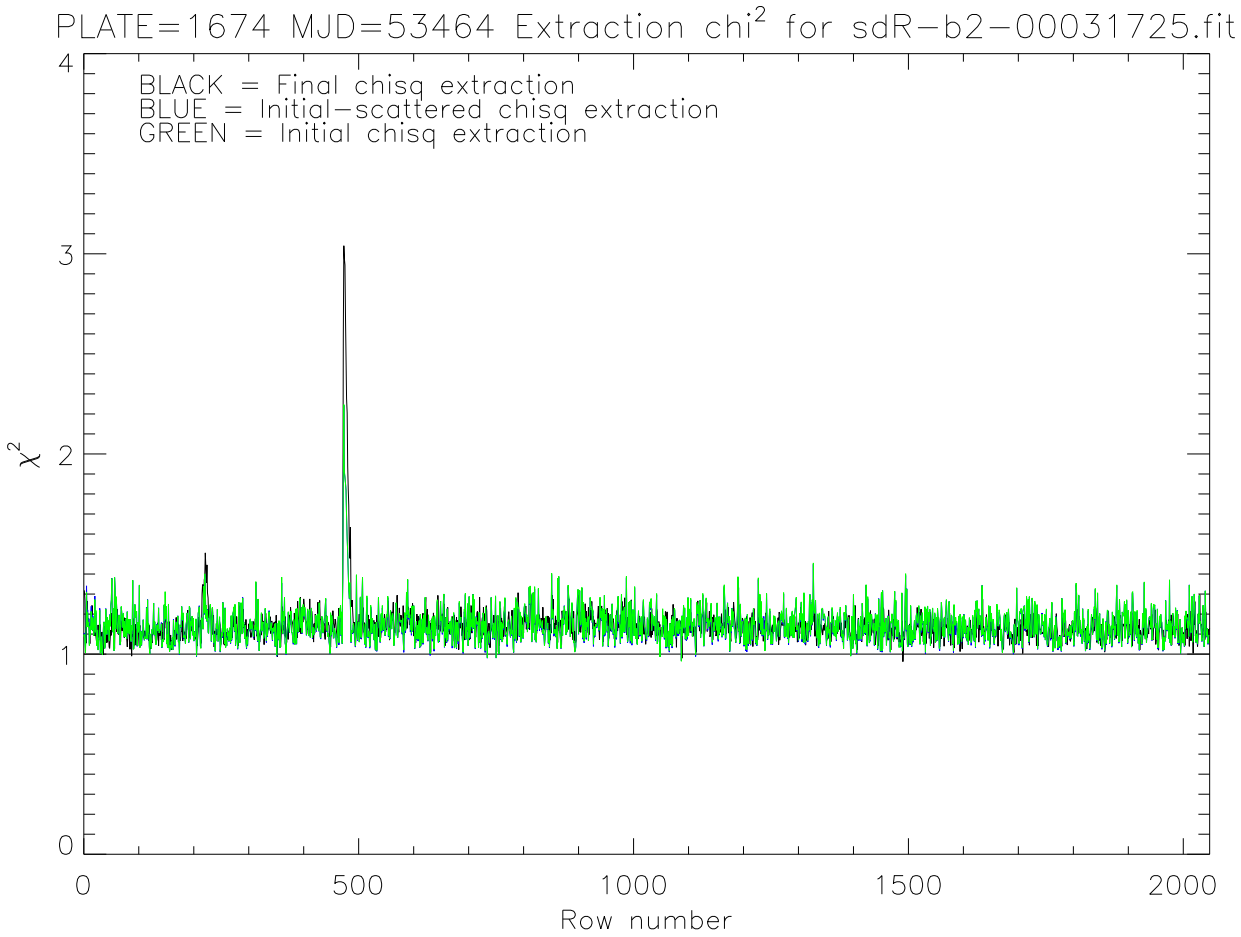

PLATE=1674 MJD=53464 Fiber-Flats for sdR-b2-00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.679
Max value = 1.161
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 06:31:12 2008

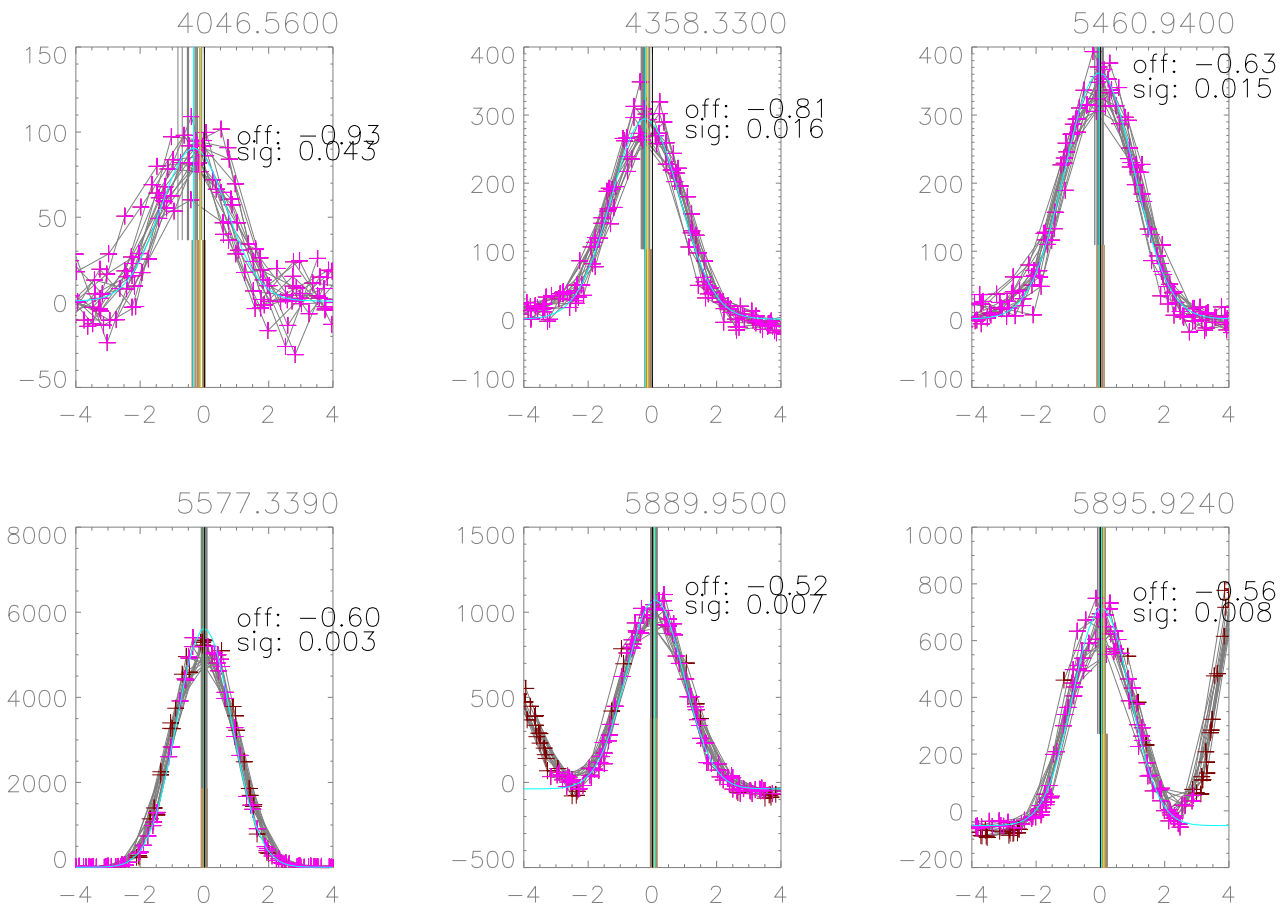

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b2-00031725.f
9.1
7.6
6.2
0
Y [pix]
X [pix]
2000
1500
1000
500
0

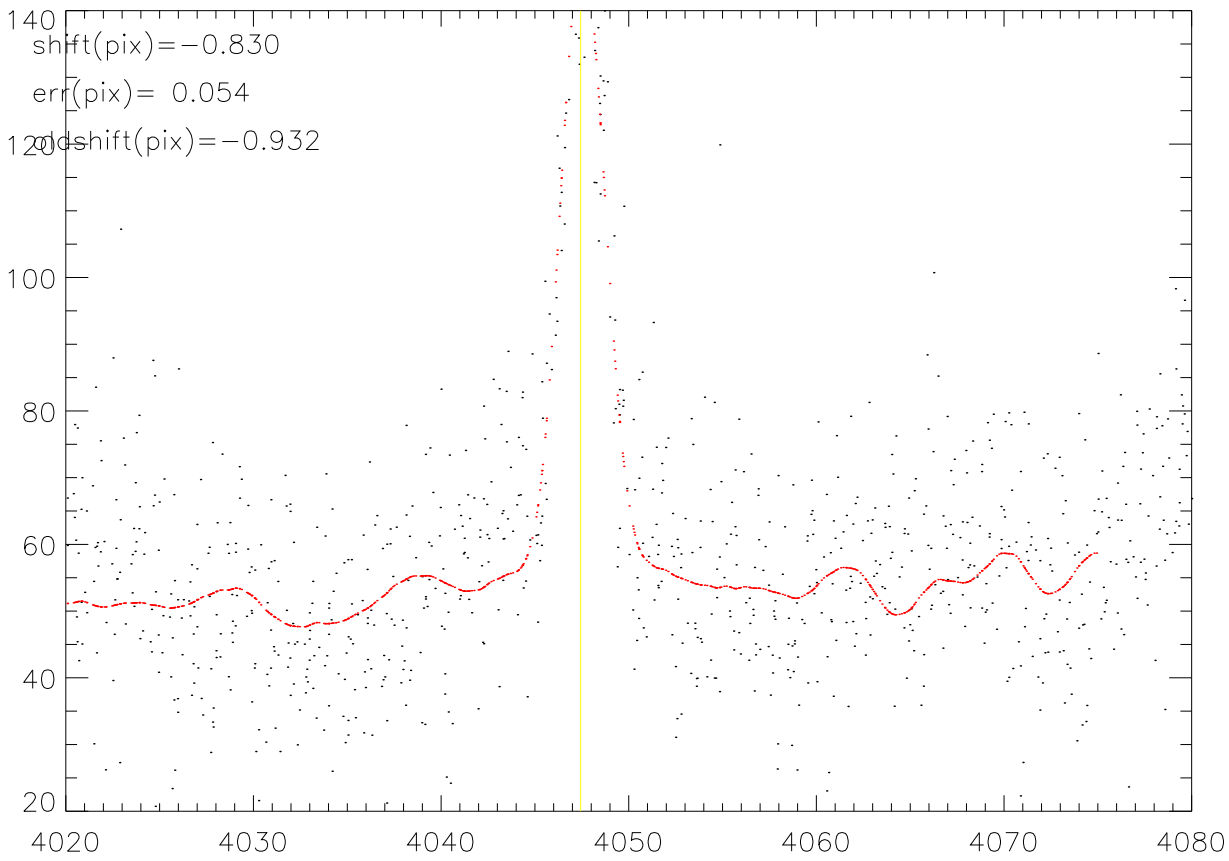

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-b2-00031725.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.830
Max value = 8.424
Tue Feb 19 06:31:58 2008

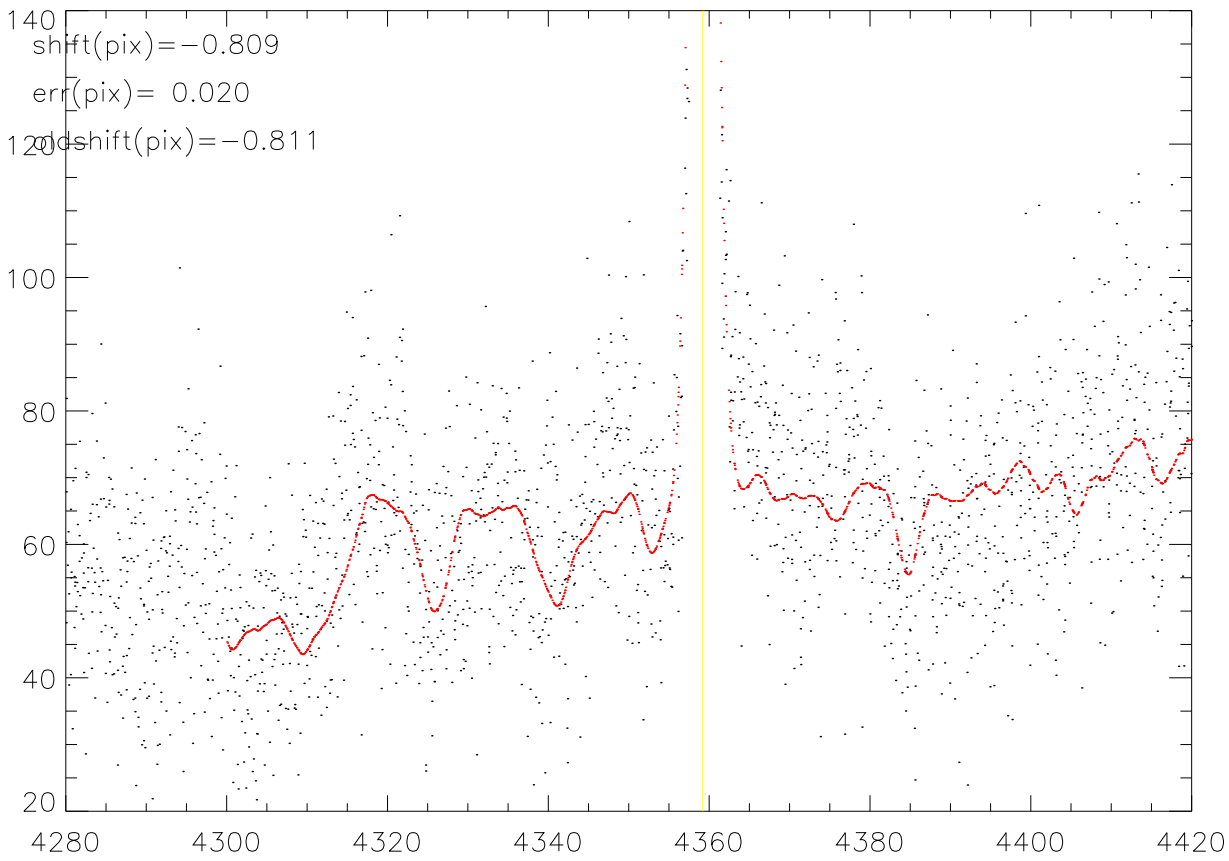

PLATE=1674 MJD=53464 Scattered Light on sdR-b2-00031725.fit
6.09
5.18
4.27
3.36
0
Y [pix]
X [pix]
0
500
1000
1500
2000

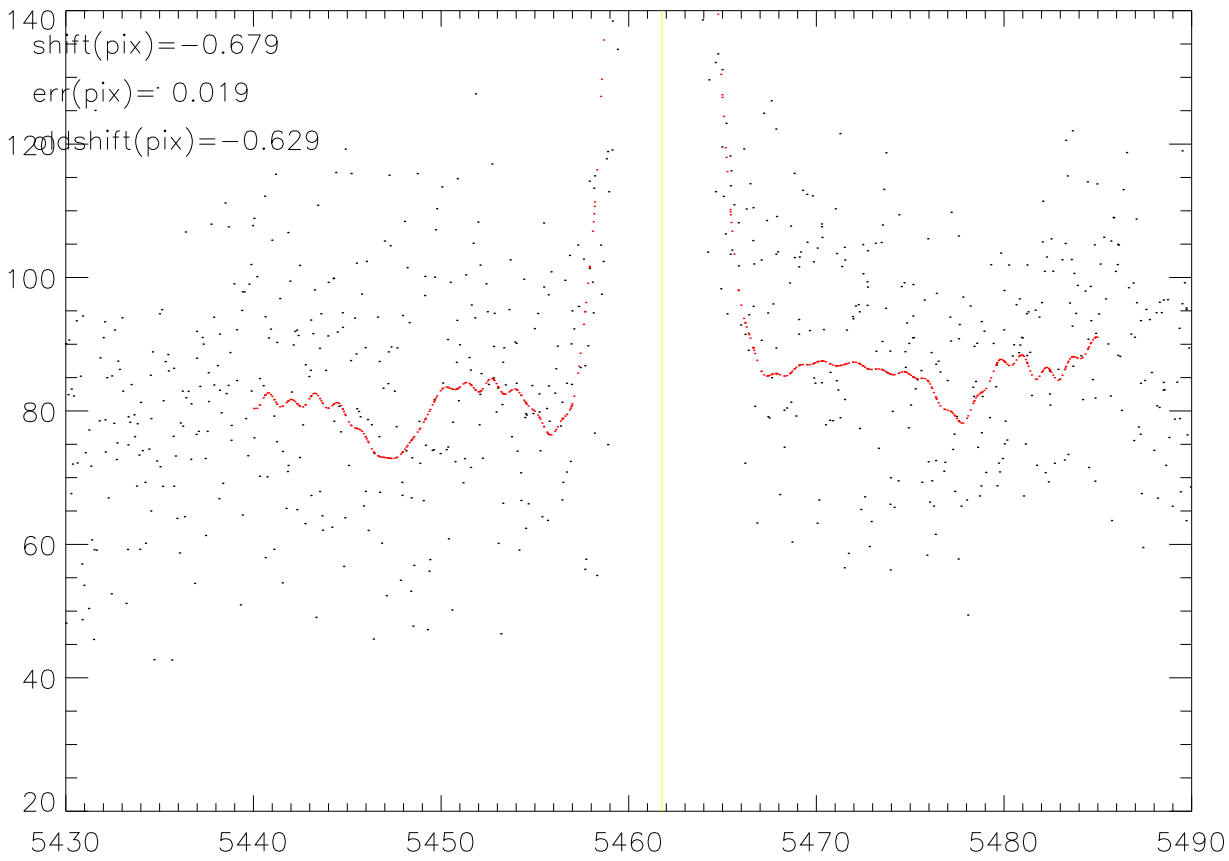

PLATE=1674 MJD=53464 Scattered Light on sdR-b2-00031725.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.980
Max value = 5.392
Tue Feb 19 06:34:27 2008

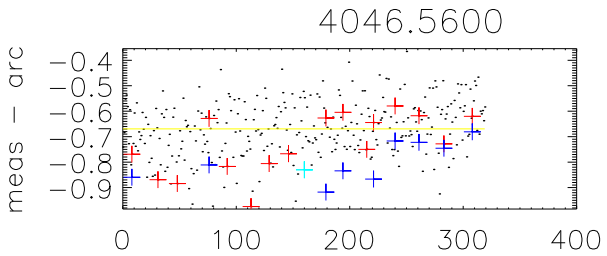

PLATE=1674 MJD=53464 Extraction chi^2 for sdR-b2-00031725.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

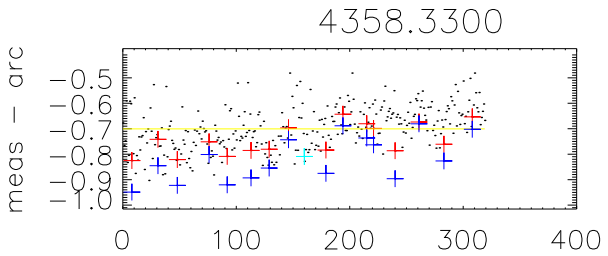

4046.5600
off: −0.93
sig: 0.043
4358.3300
off: −0.81
sig: 0.016
5460.9400
off: −0.63
sig: 0.015
5577.3390
off: −0.60
sig: 0.003
5889.9500
off: −0.52
sig: 0.007
5895.9240
off: −0.56
sig: 0.008

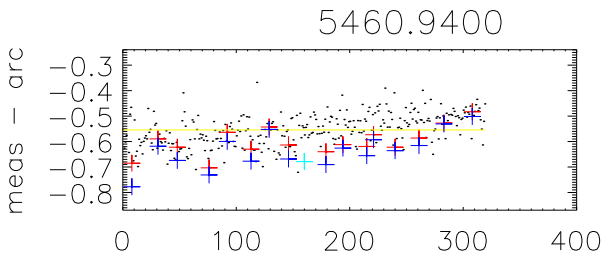

shift(pix)=−0.830
err(pix)= 0.054
oldshift(pix)=−0.932
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

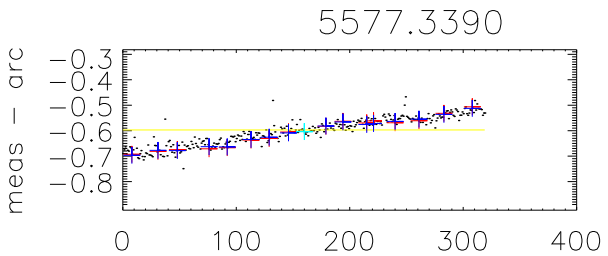

shift(pix)=−0.809
err(pix)= 0.020
oldshift(pix)=−0.811
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

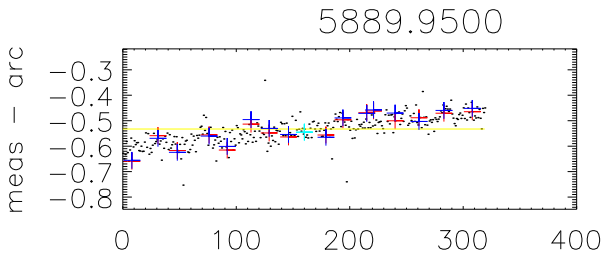

shift(pix)=−0.679
err(pix)= 0.019
oldshift(pix)=−0.629
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

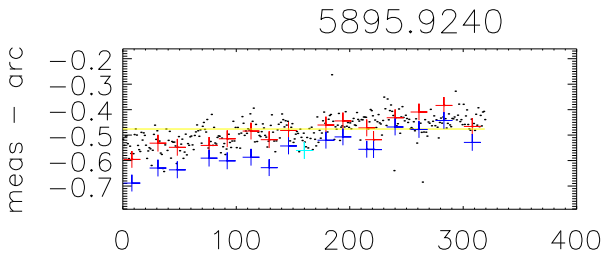

4046.5600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

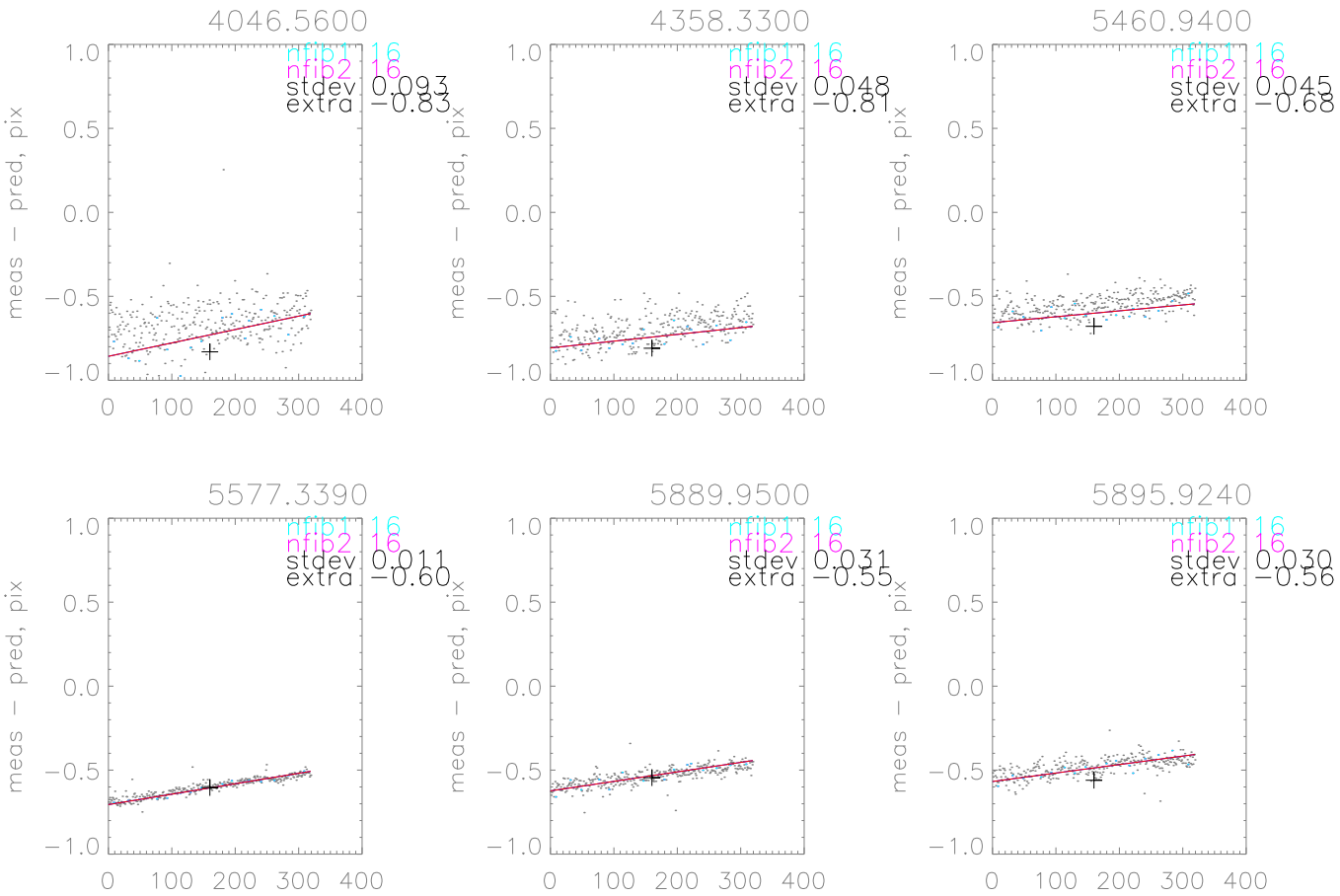

4358.3300
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

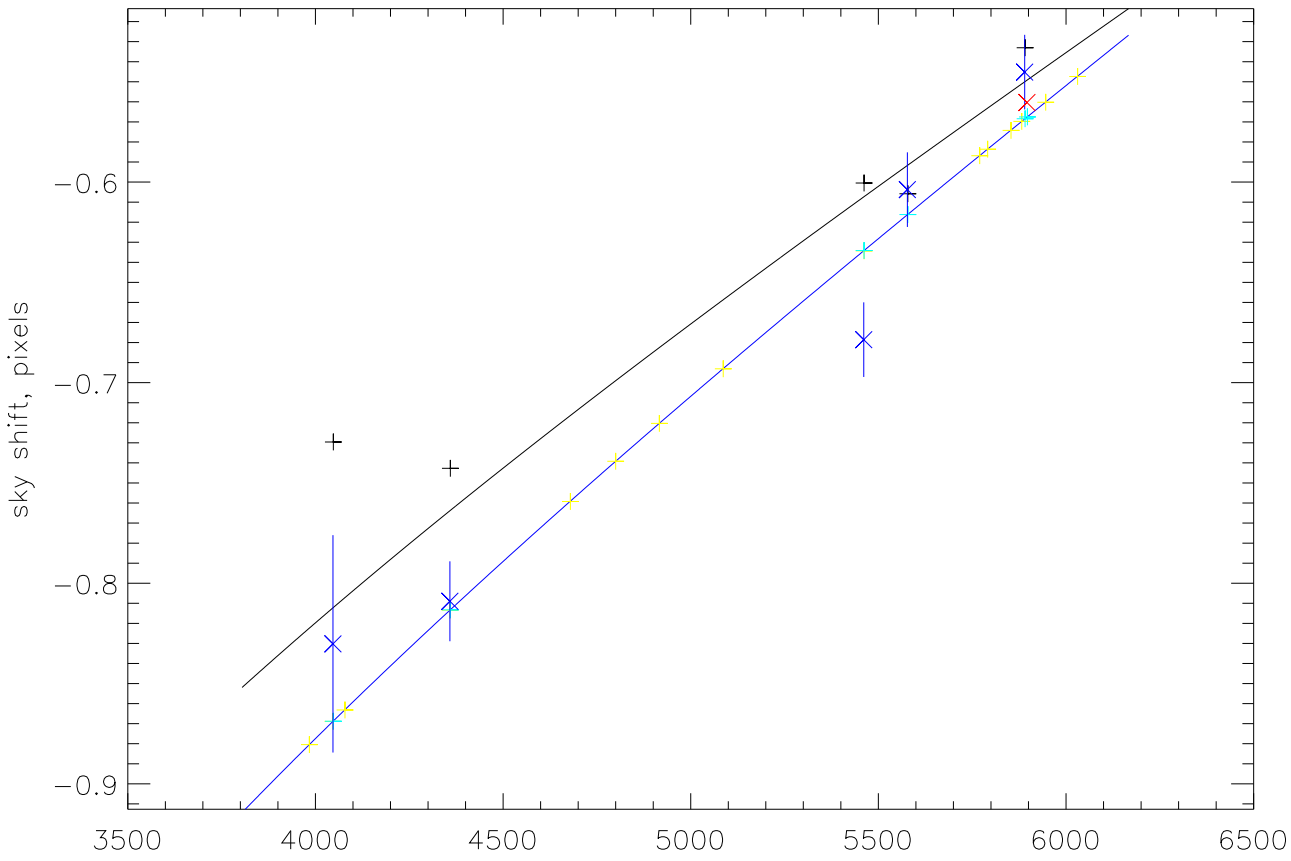

5460.9400
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

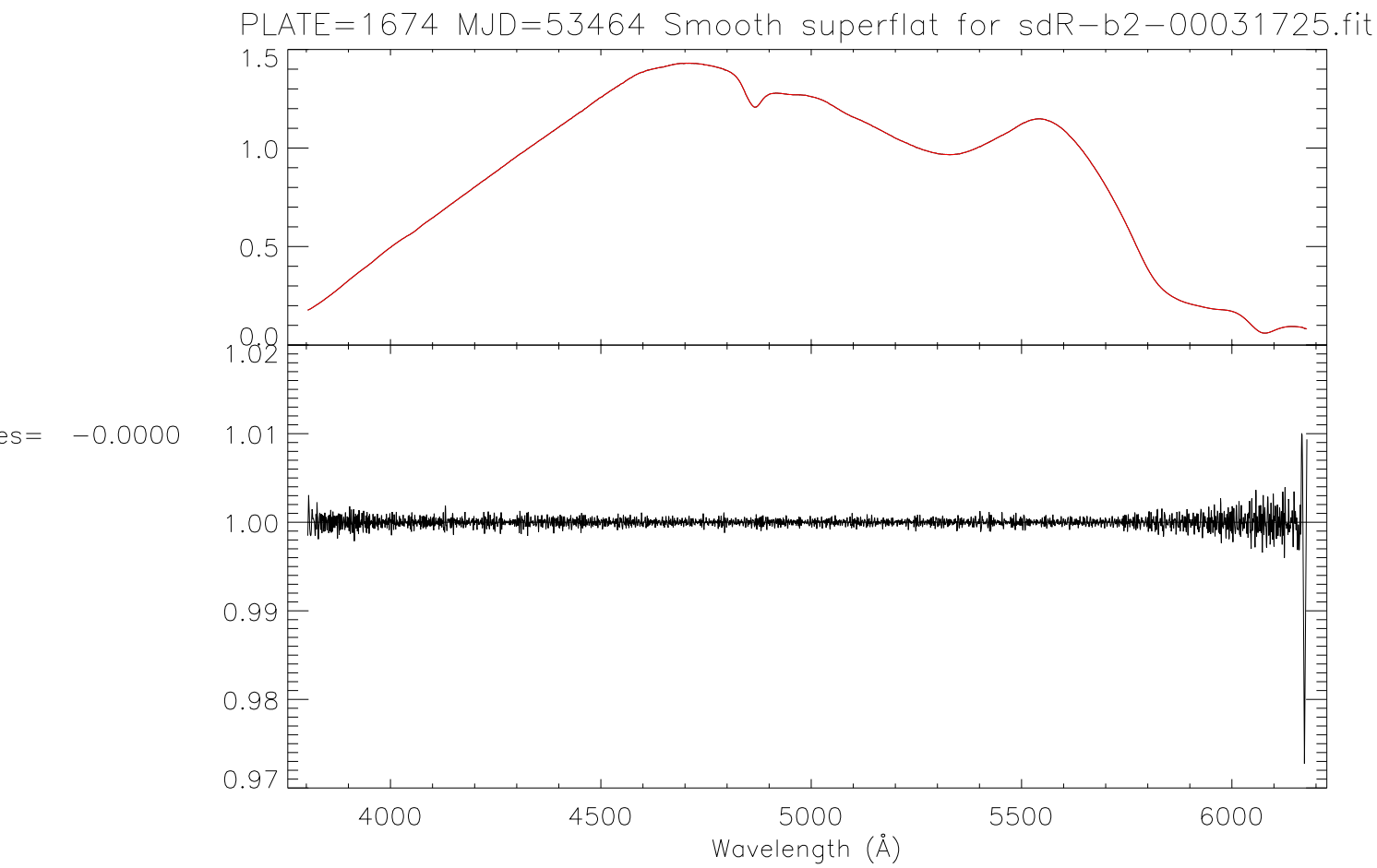

5577.3390
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400


5889.9500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

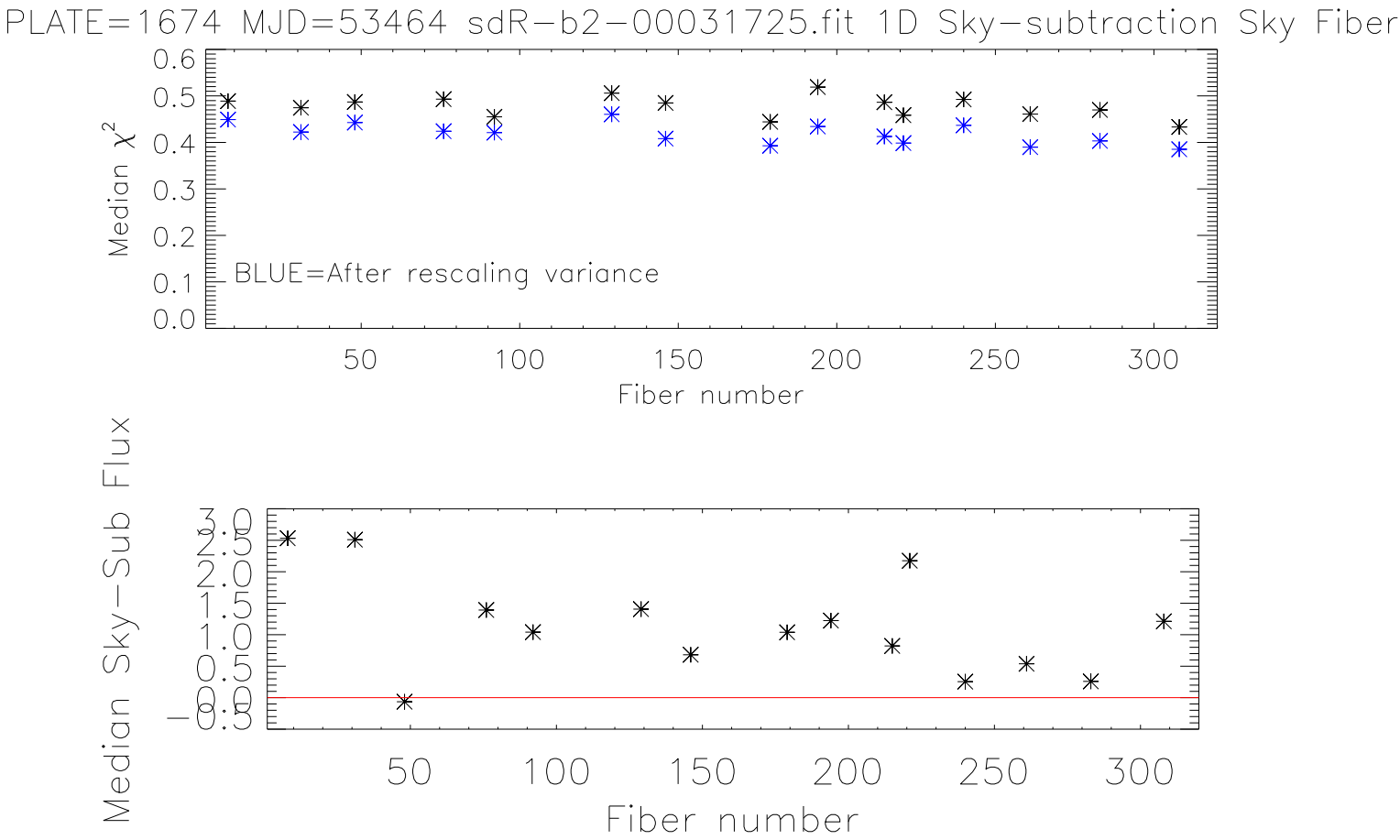

5895.9240
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

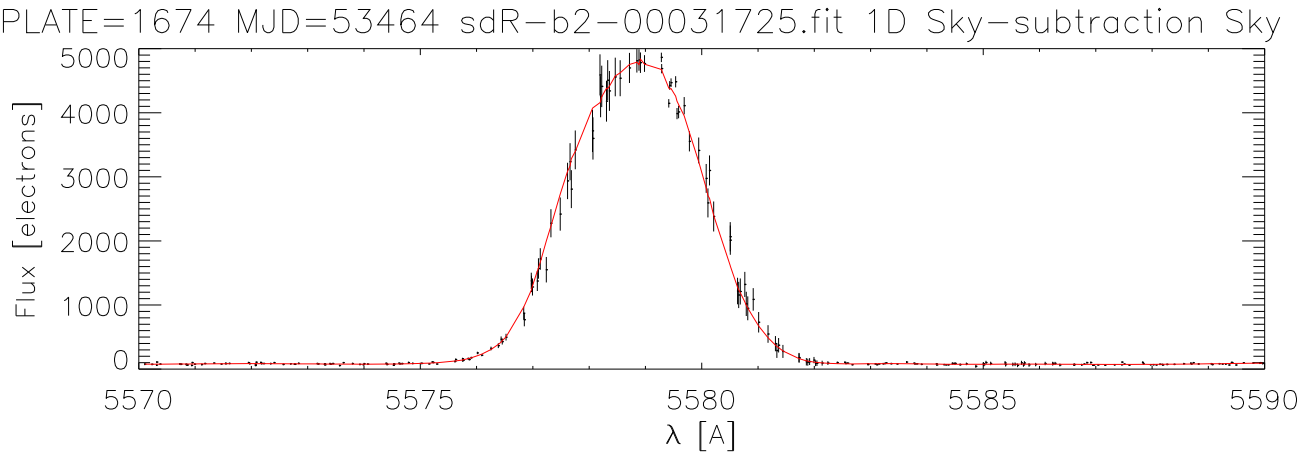

4046.5600
nfib1 16
nfib2 16
stdev 0.093
extra −0.83
4358.3300
nfib1 16
nfib2 16
stdev 0.048
extra −0.81
5460.9400
nfib1 16
nfib2 16
stdev 0.045
extra −0.68
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra −0.60
5889.9500
nfib1 16
nfib2 16
stdev 0.031
extra −0.55
5895.9240
nfib1 16
nfib2 16
stdev 0.030
extra −0.56
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

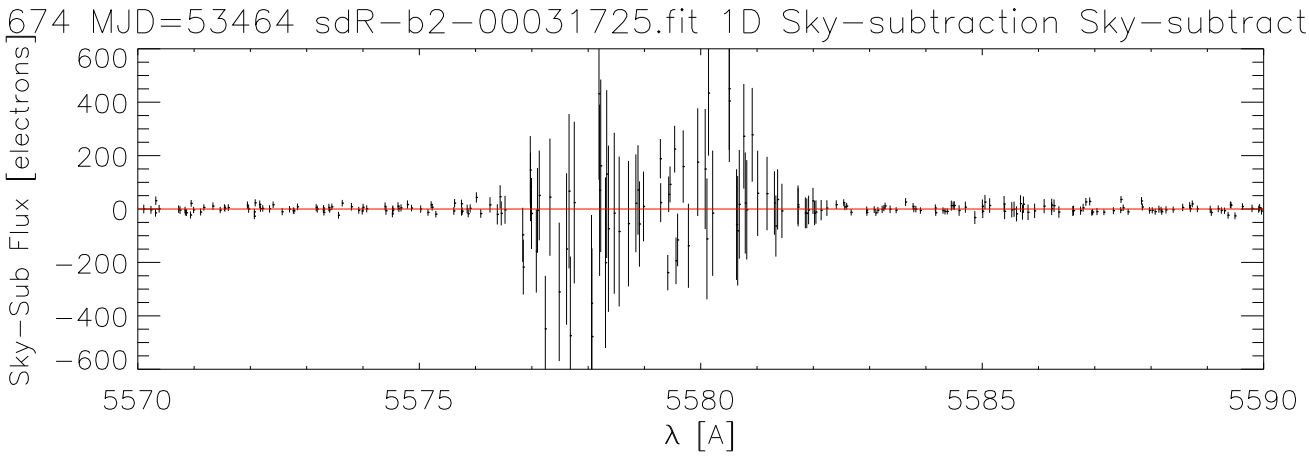

sky shift, pixels
−0.6
−0.7
−0.8
−0.9
3500
4000
4500
5000
5500
6000
6500

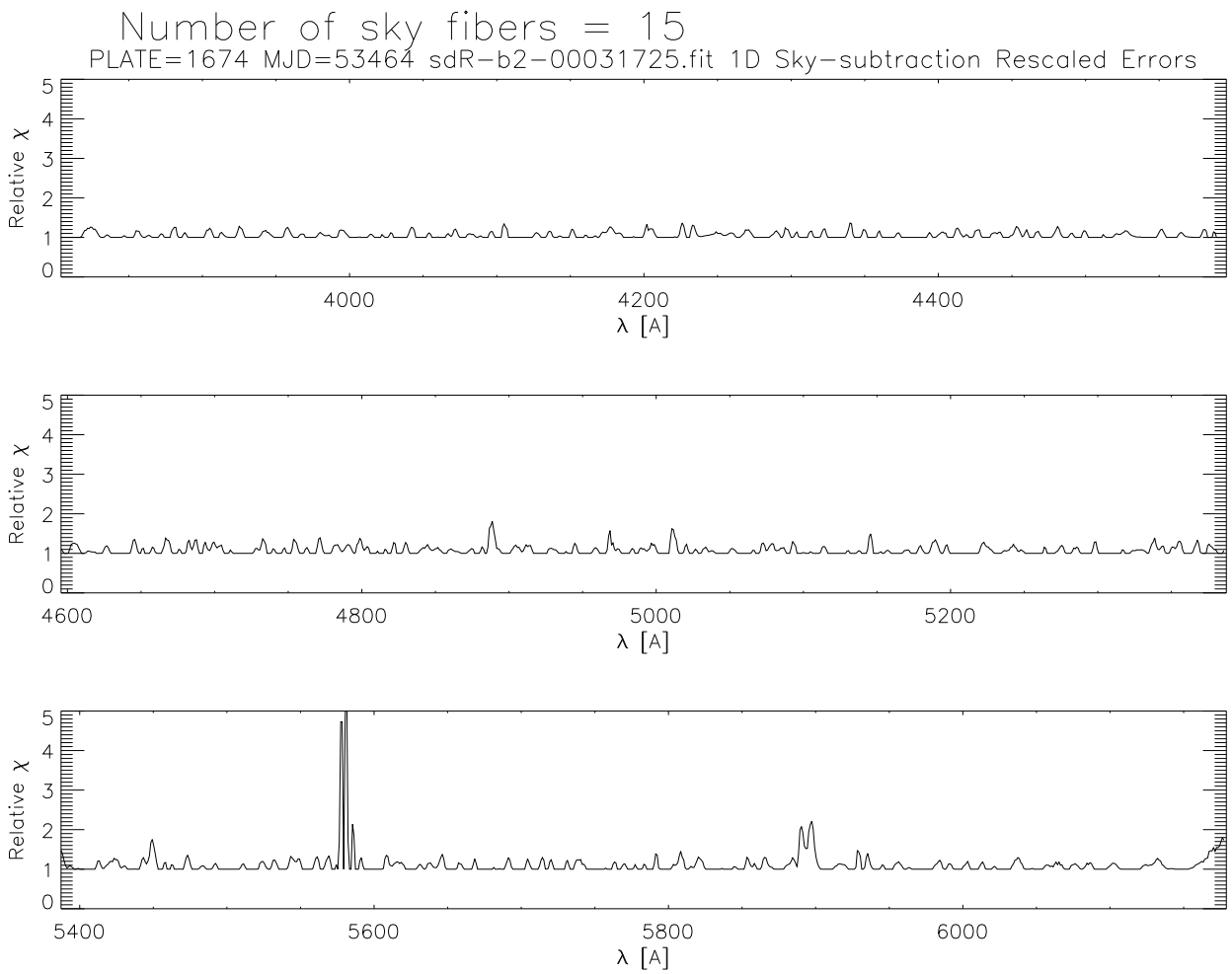

PLATE=1674 MJD=53464 Smooth superflat for sdR-b2-00031725.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

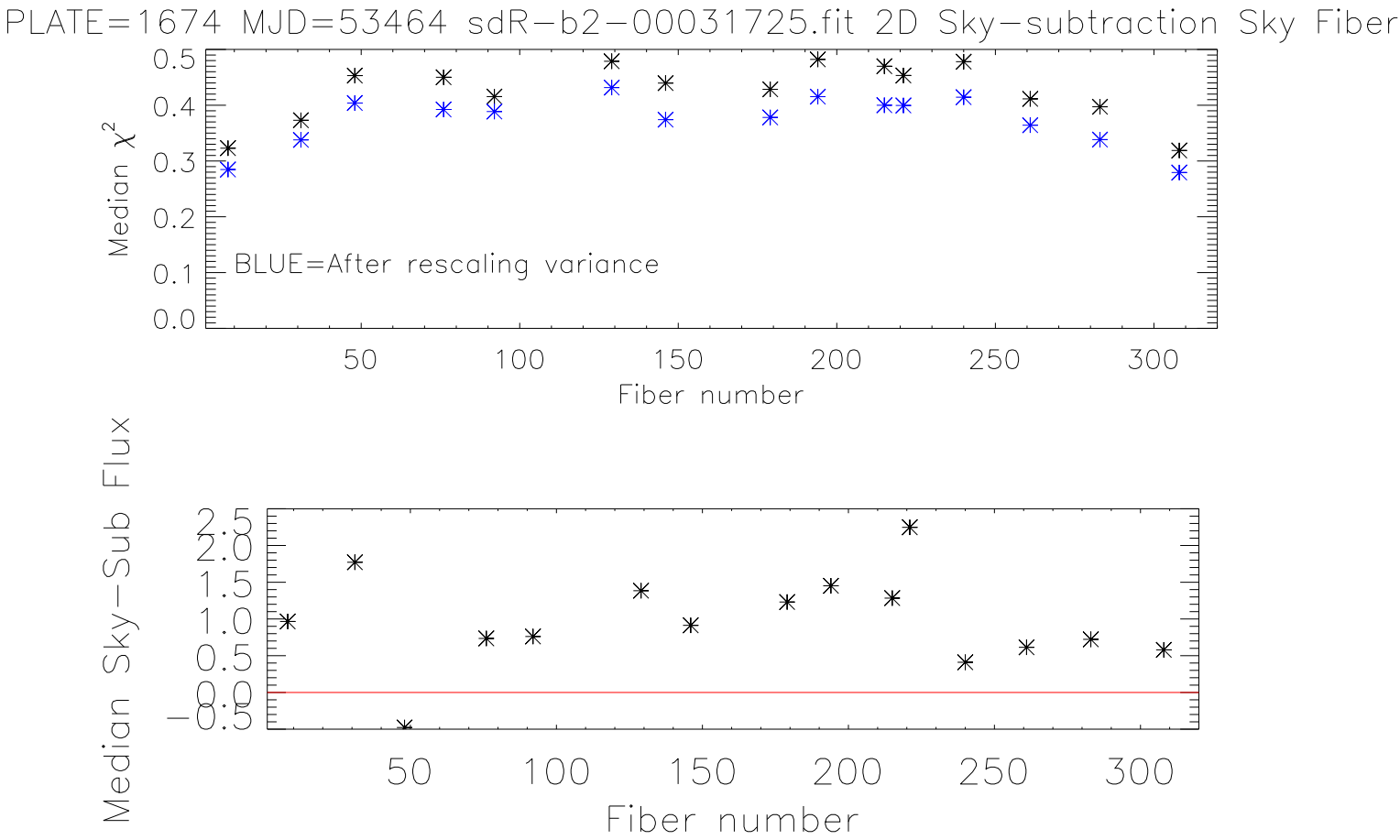
es= −0.0000

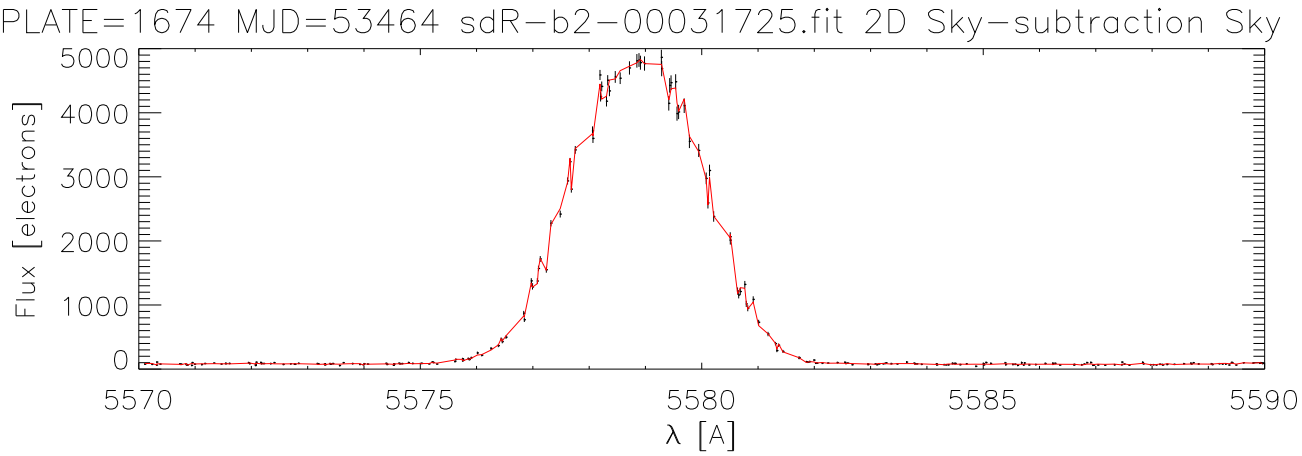

PLATE=1674 MJD=53464 sdR-b2-00031725.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

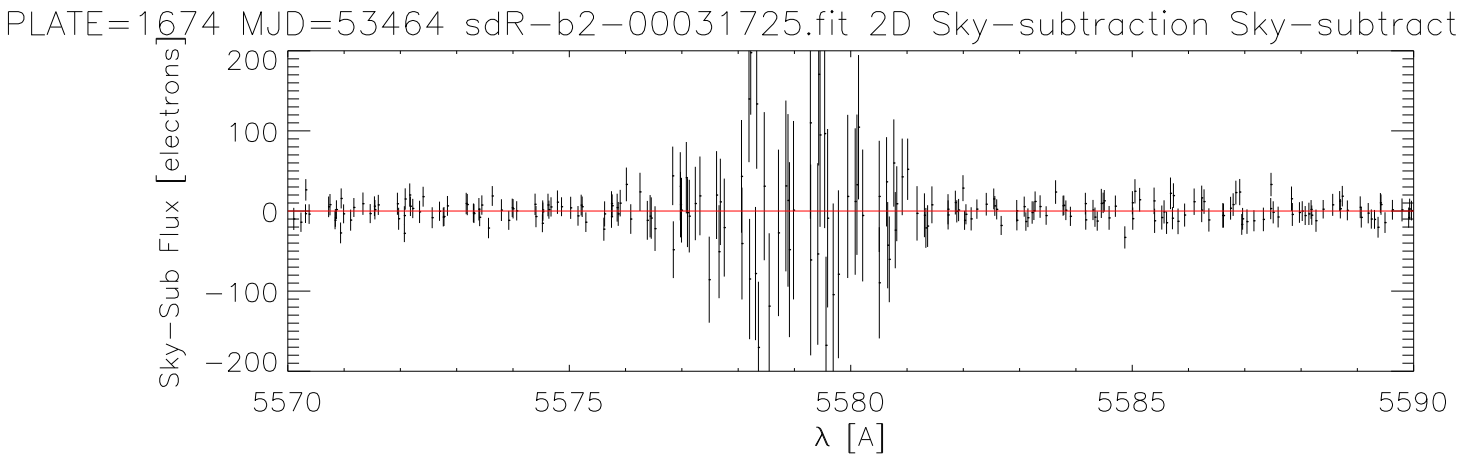

PLATE=1674 MJD=53464 sdR-b2-00031725.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

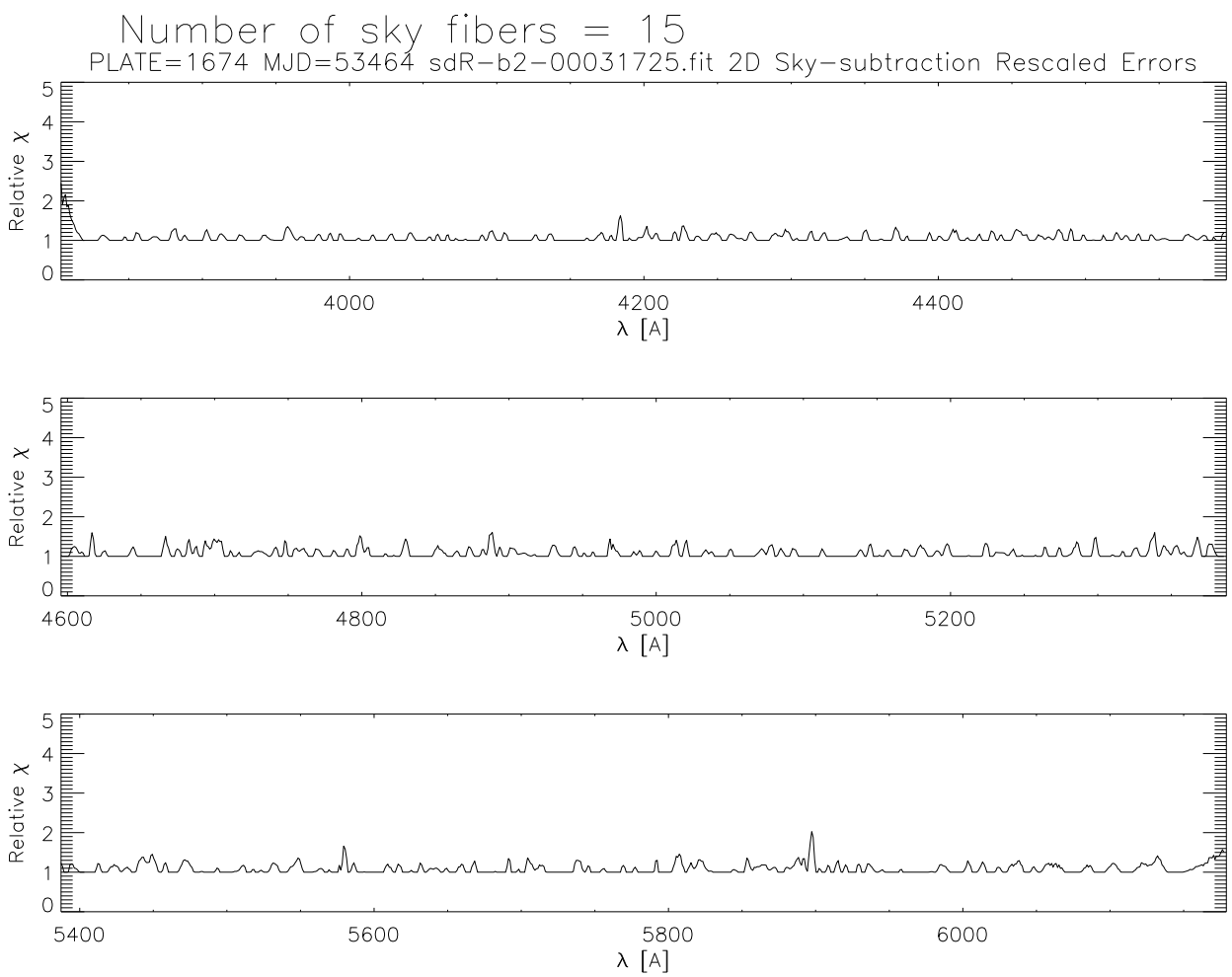

PLATE=1674 MJD=53464 sdR-b2-00031725.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

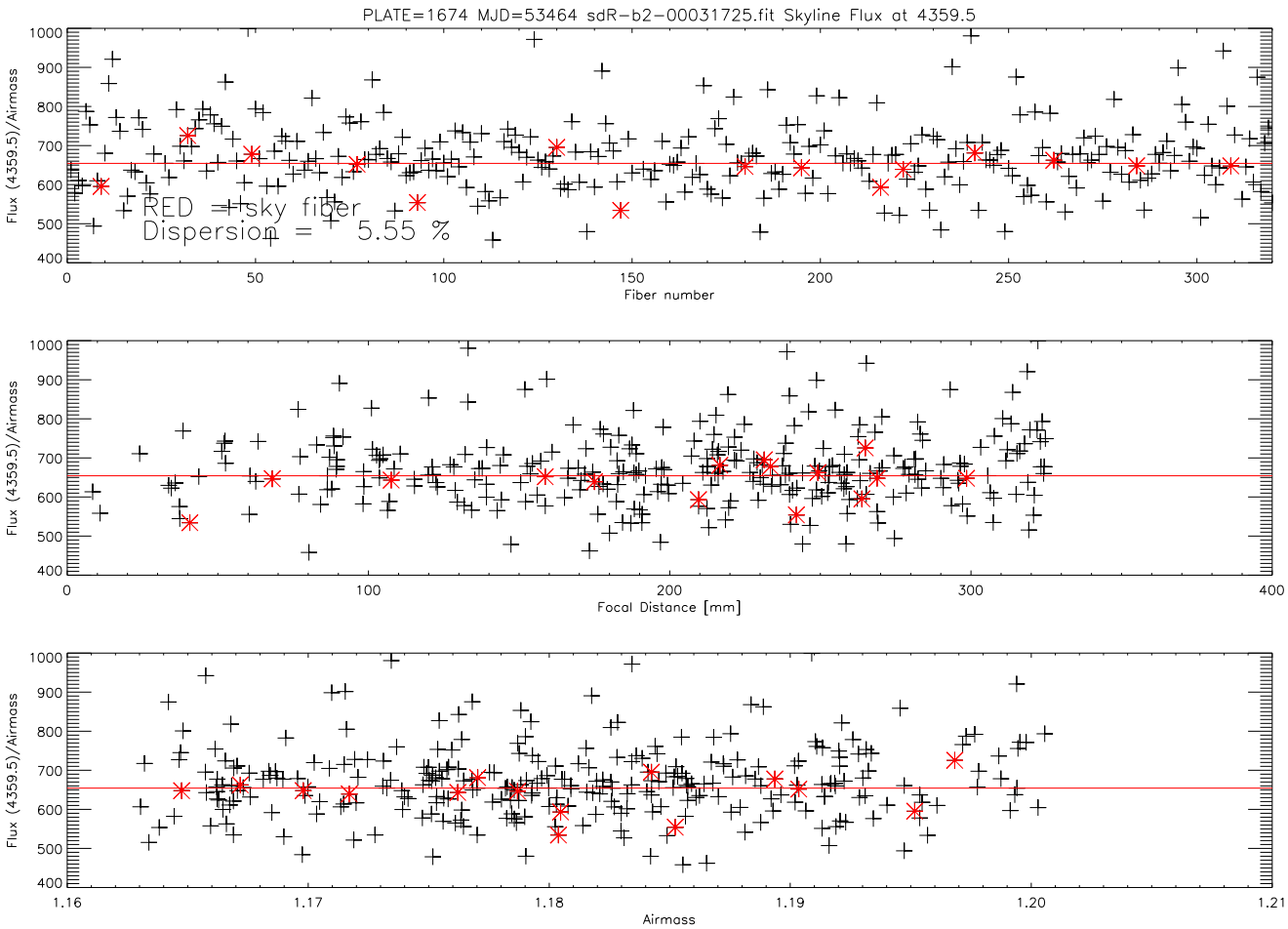

Number of sky fibers = 15
PLATE=1674 MJD=53464 sdR-b2-00031725.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

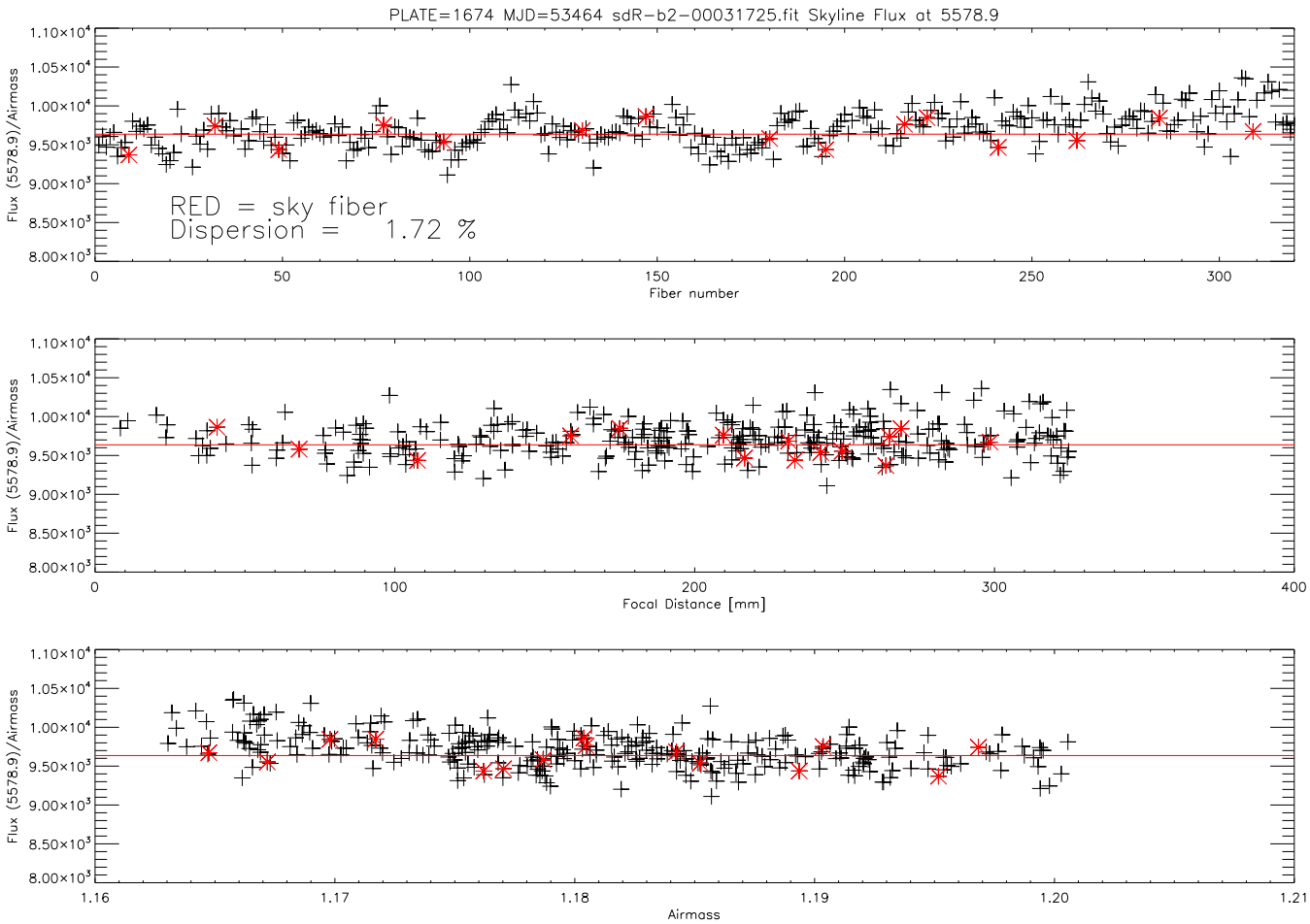

PLATE=1674 MJD=53464 sdR-b2-00031725.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

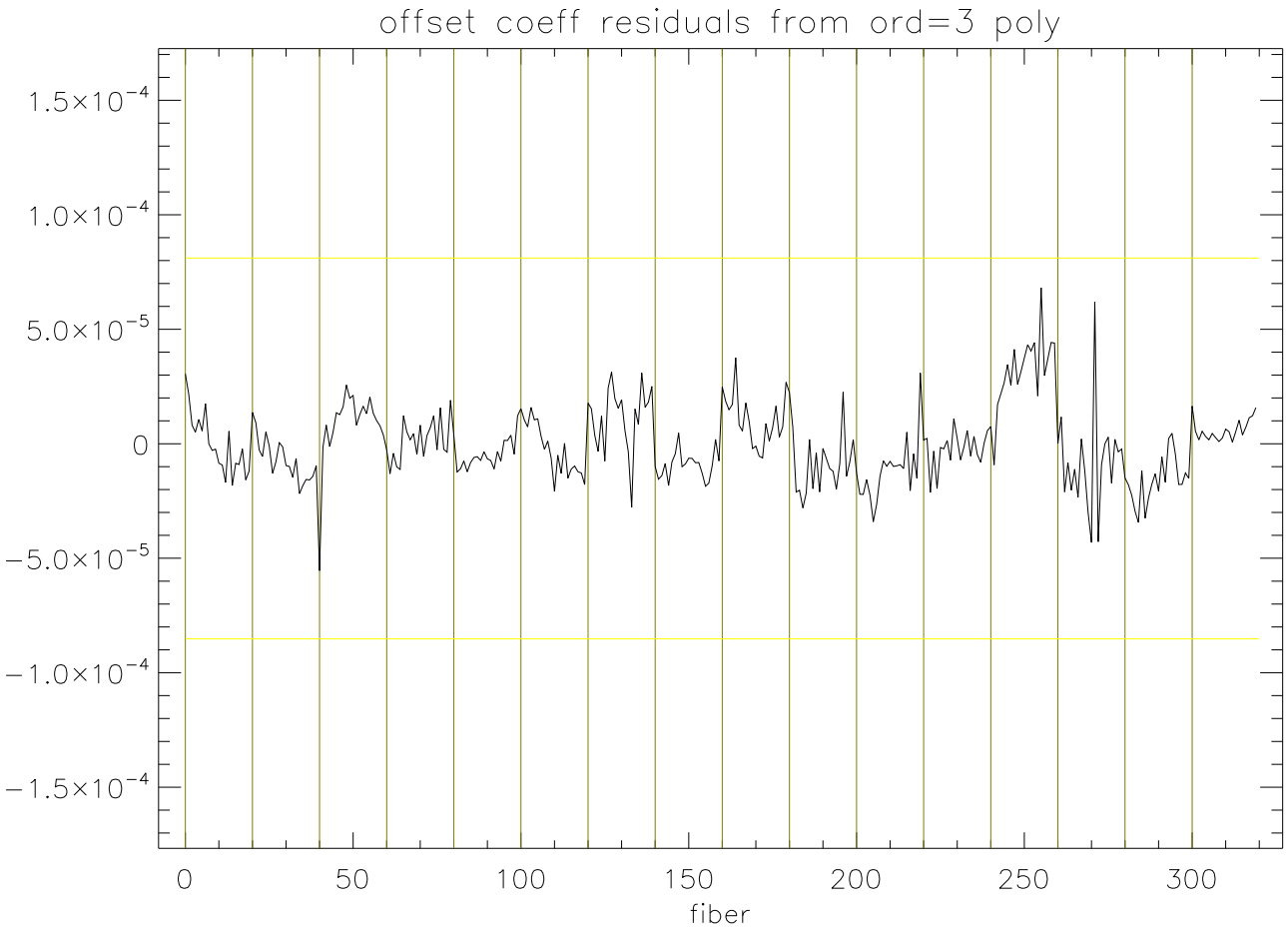

PLATE=1674 MJD=53464 sdR-b2-00031725.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

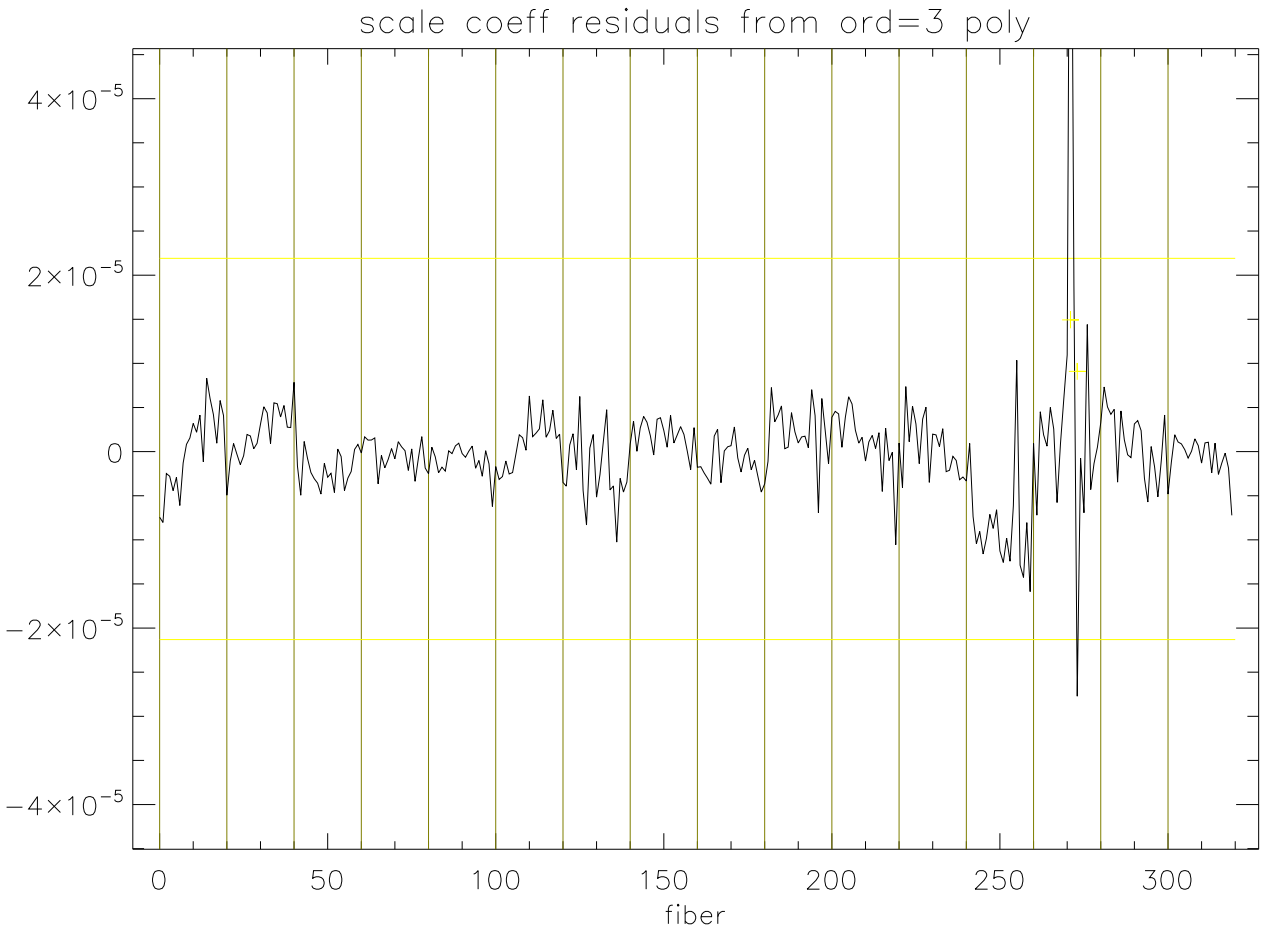

PLATE=1674 MJD=53464 sdR-b2-00031725.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

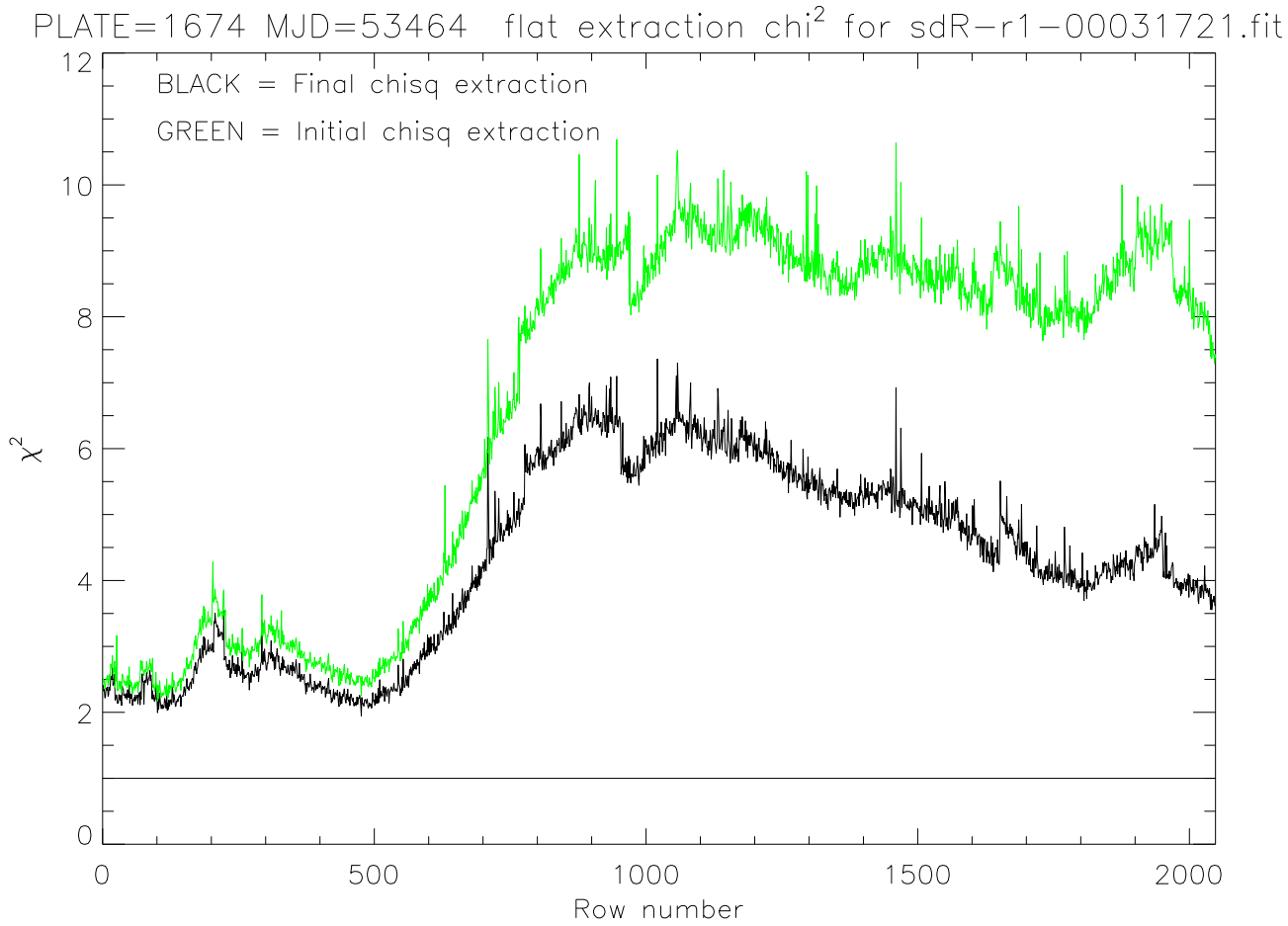

Number of sky fibers = 15
PLATE=1674 MJD=53464 sdR-b2-00031725.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

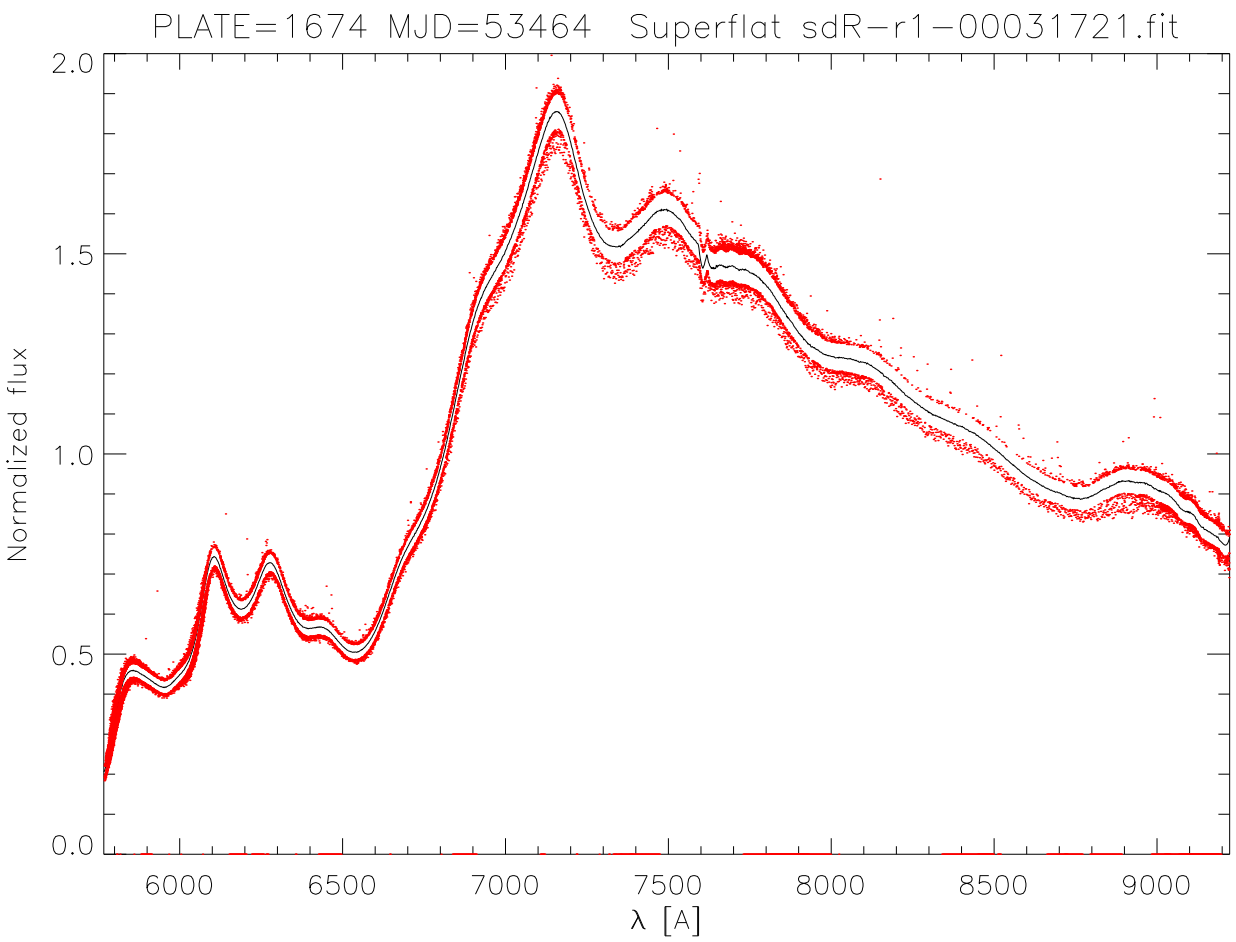

PLATE=1674 MJD=53464 sdR-b2-00031725.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.55 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

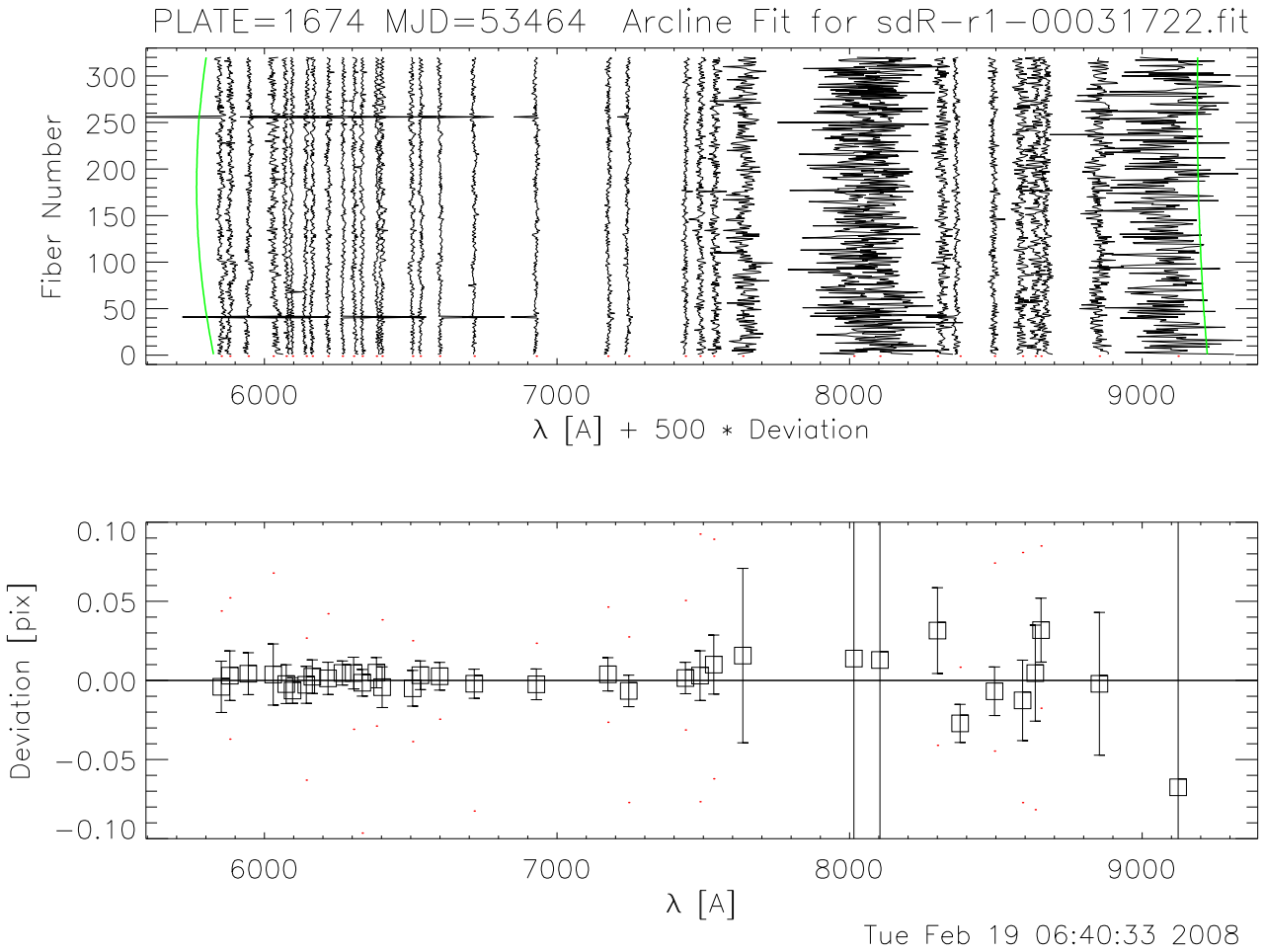

PLATE=1674 MJD=53464 sdR-b2-00031725.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.72 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

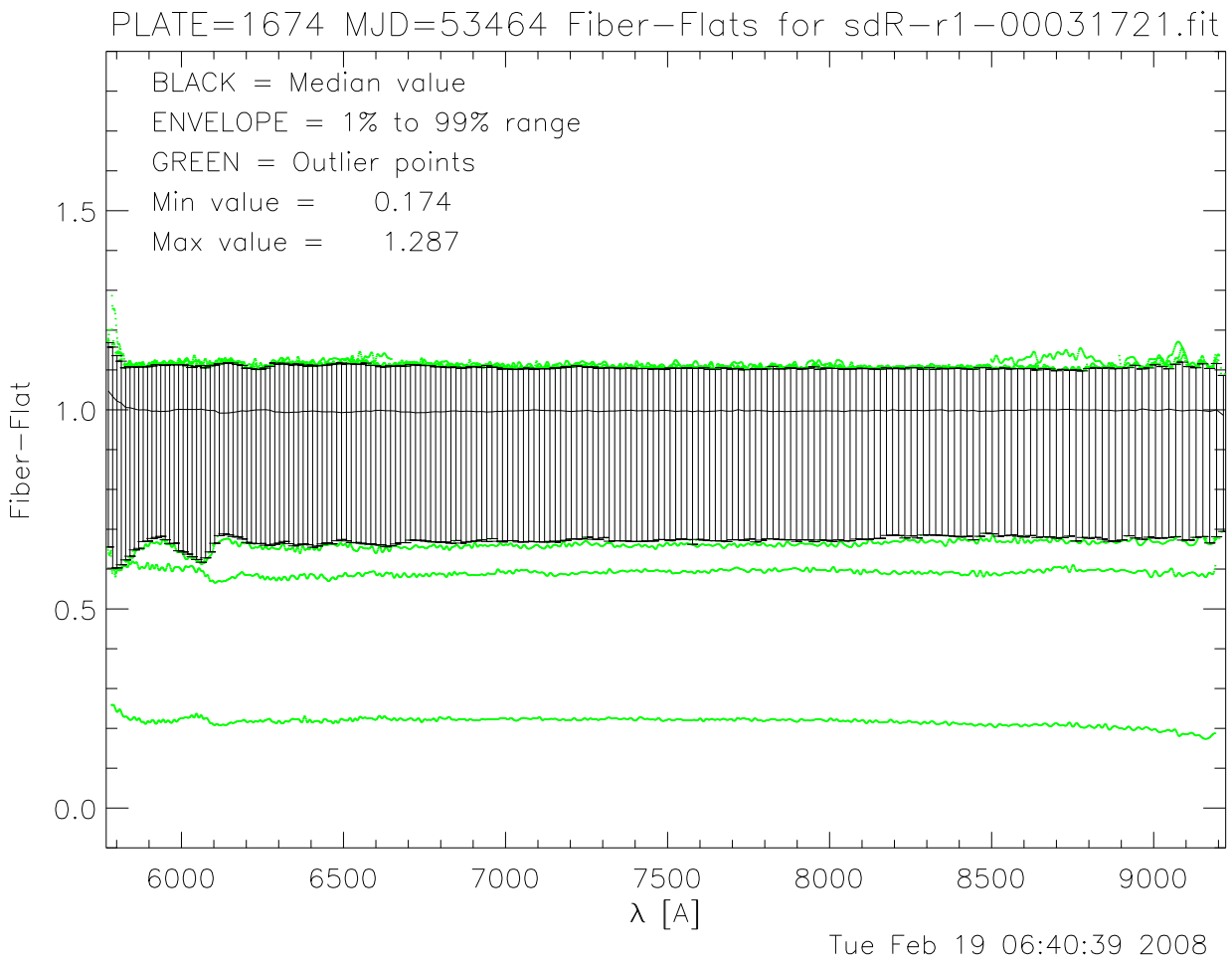

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

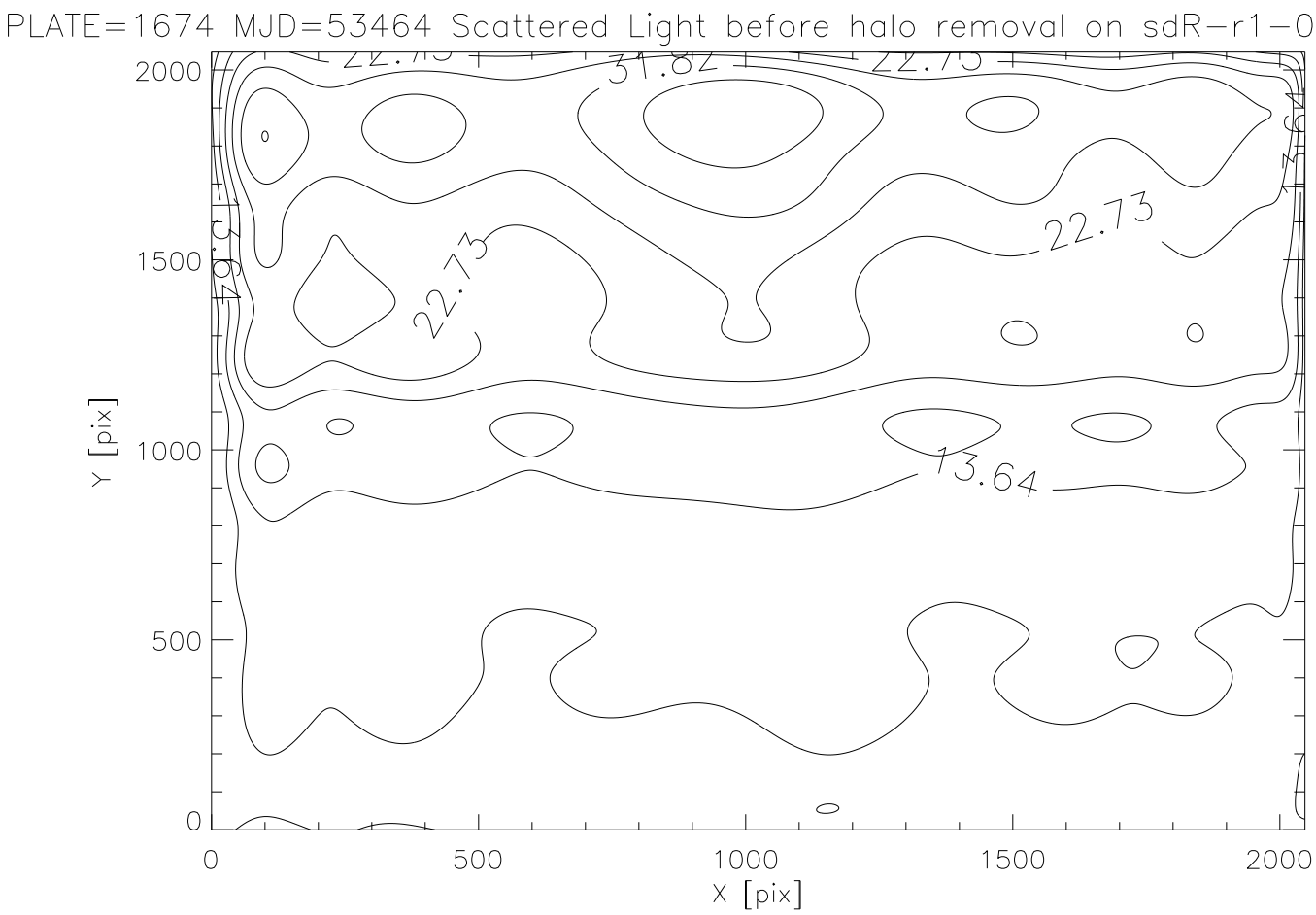

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

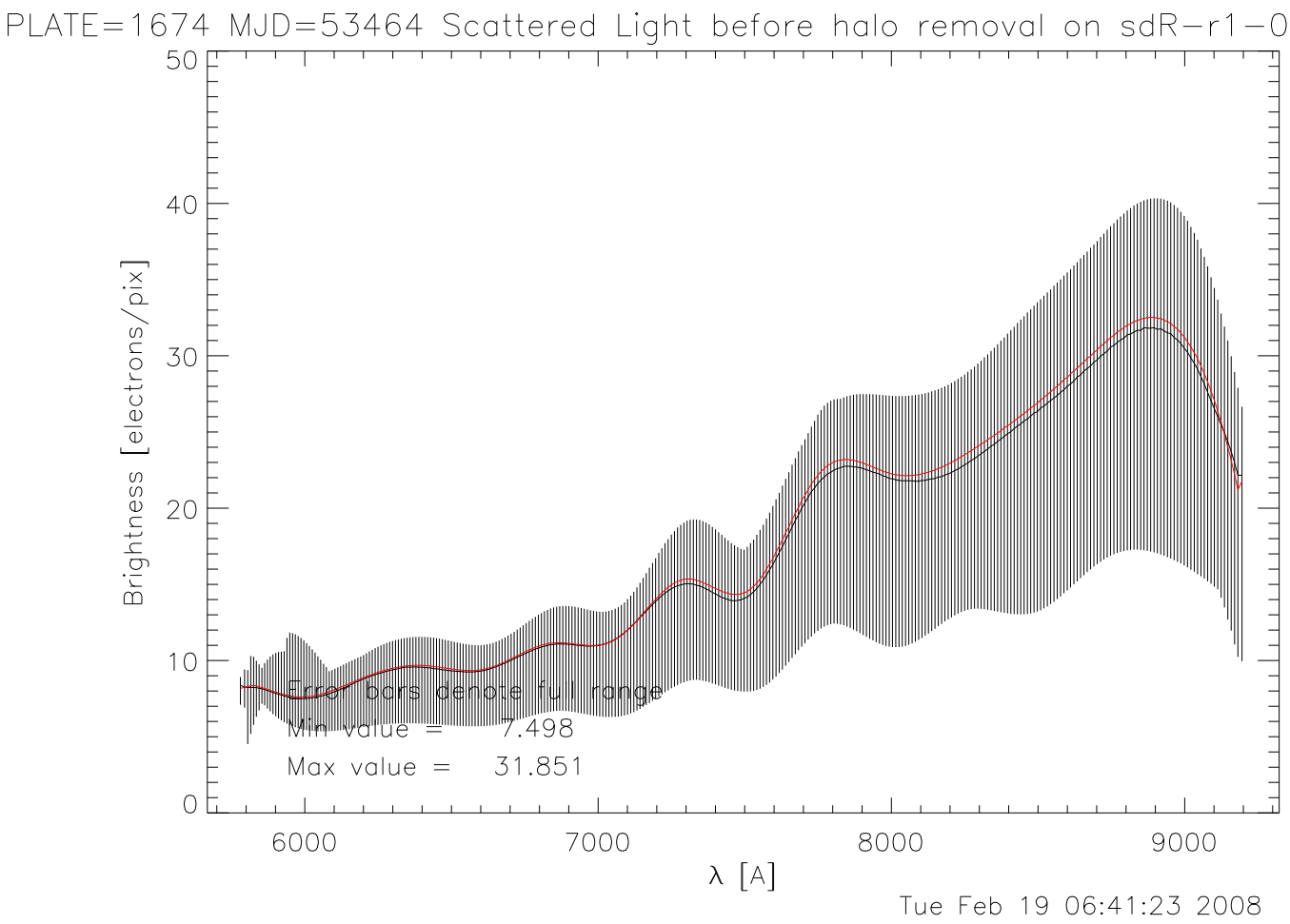

PLATE=1674 MJD=53464 flat extraction chi^2 for sdR−r1−00031721.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

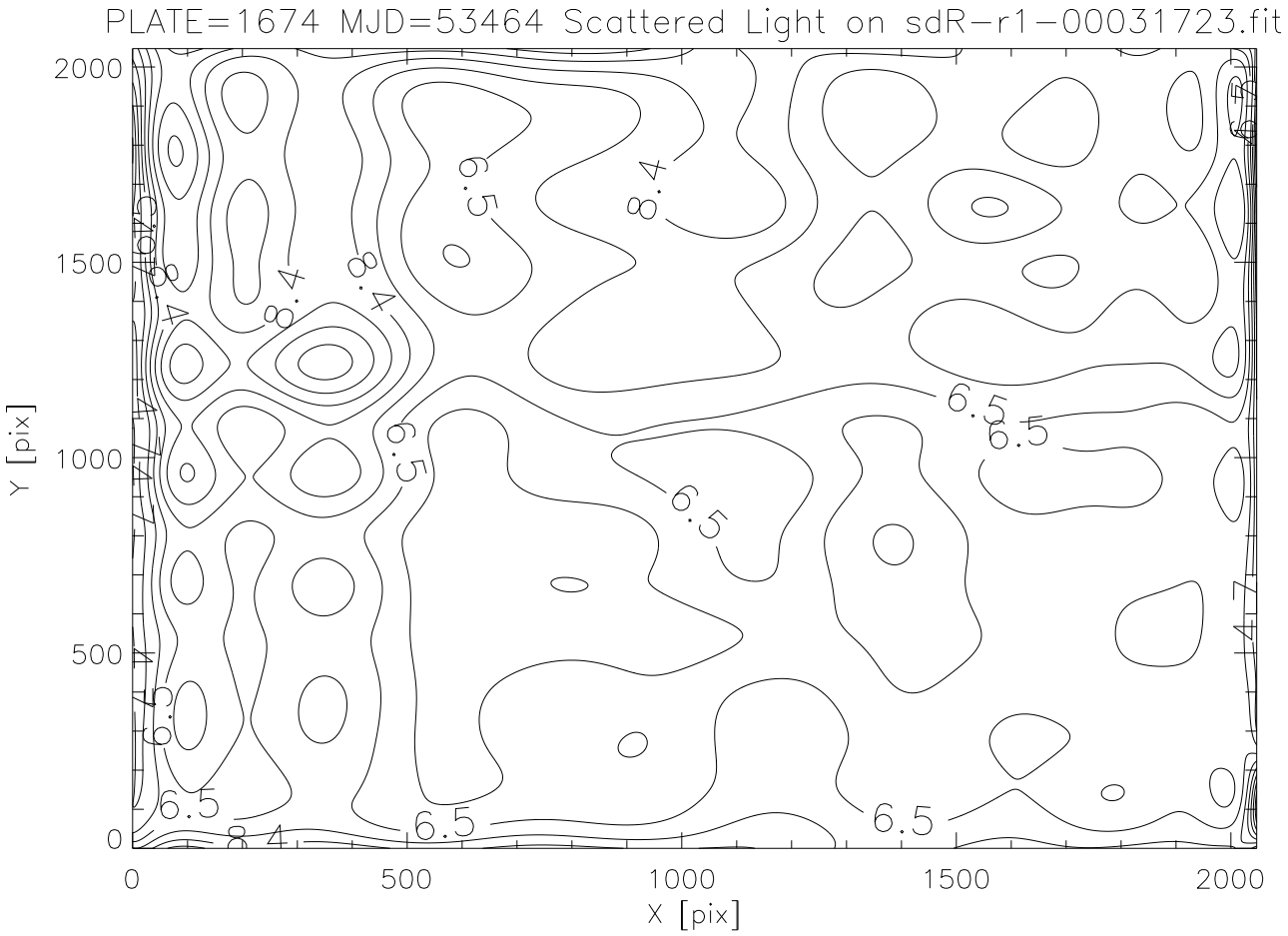

PLATE=1674 MJD=53464 Superflat sdR-r1-00031721.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

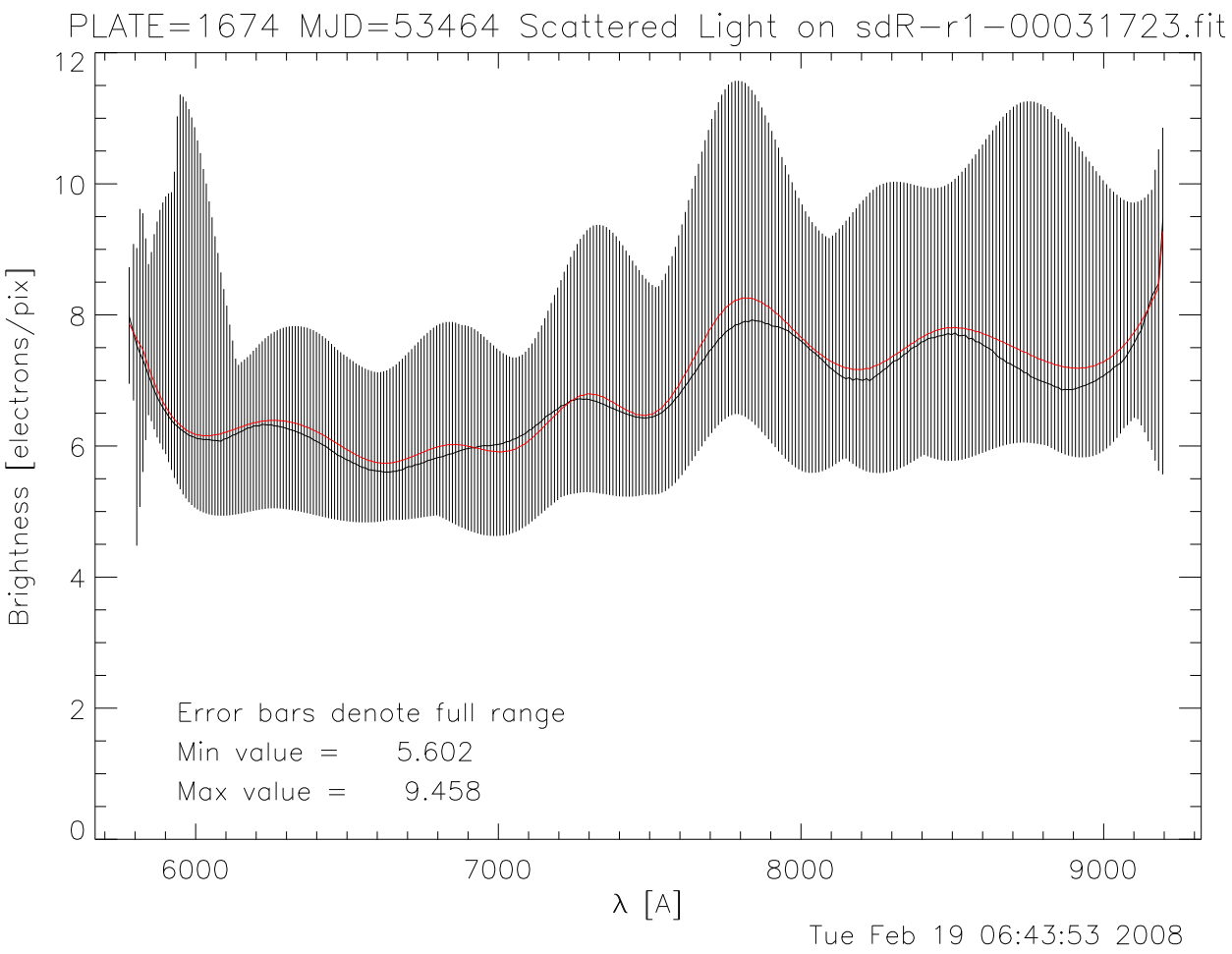

PLATE=1674 MJD=53464 Arcline Fit for sdR-r1-00031722.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 19 06:40:33 2008

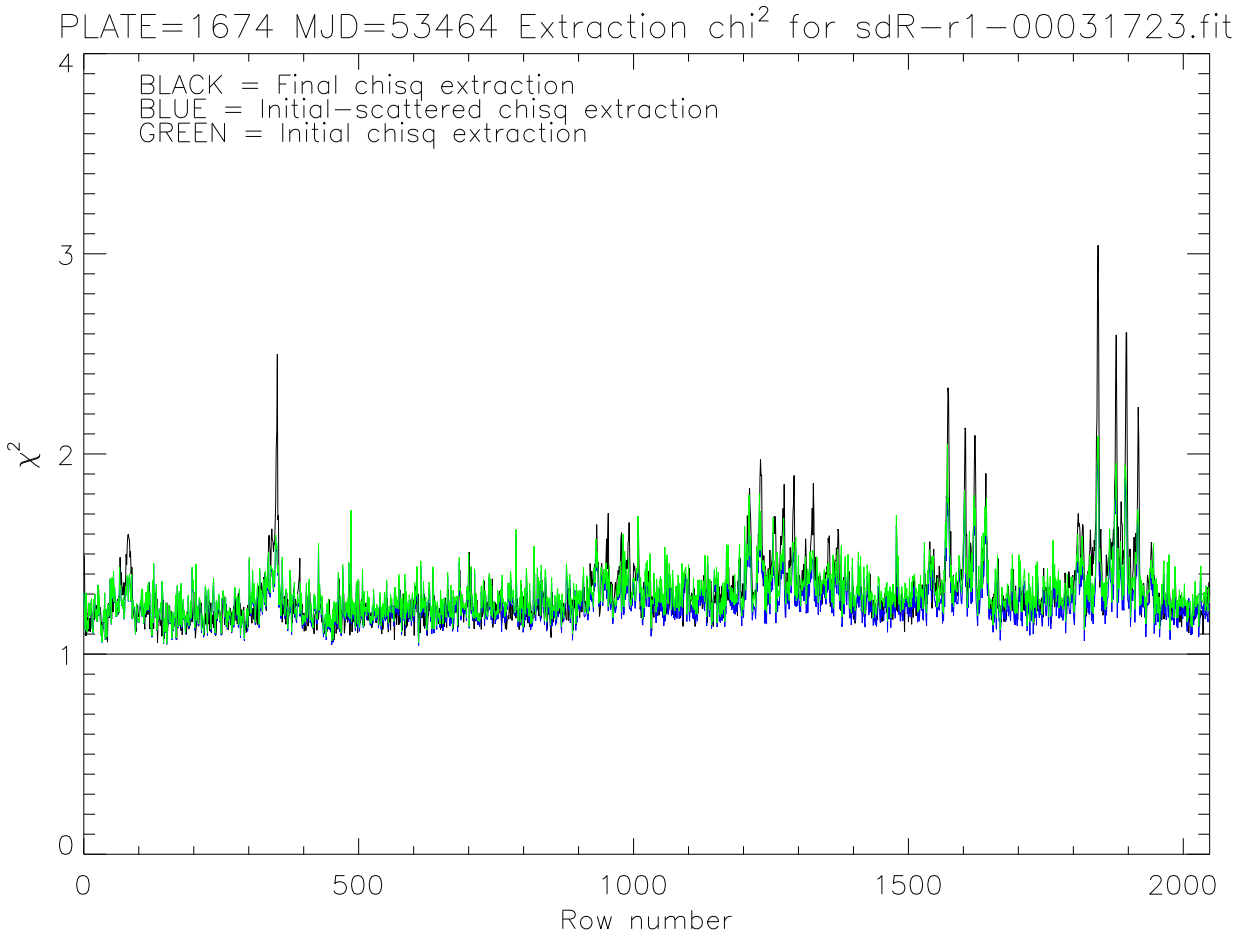

PLATE=1674 MJD=53464 Fiber−Flats for sdR−r1−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.174
Max value = 1.287
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 06:40:39 2008

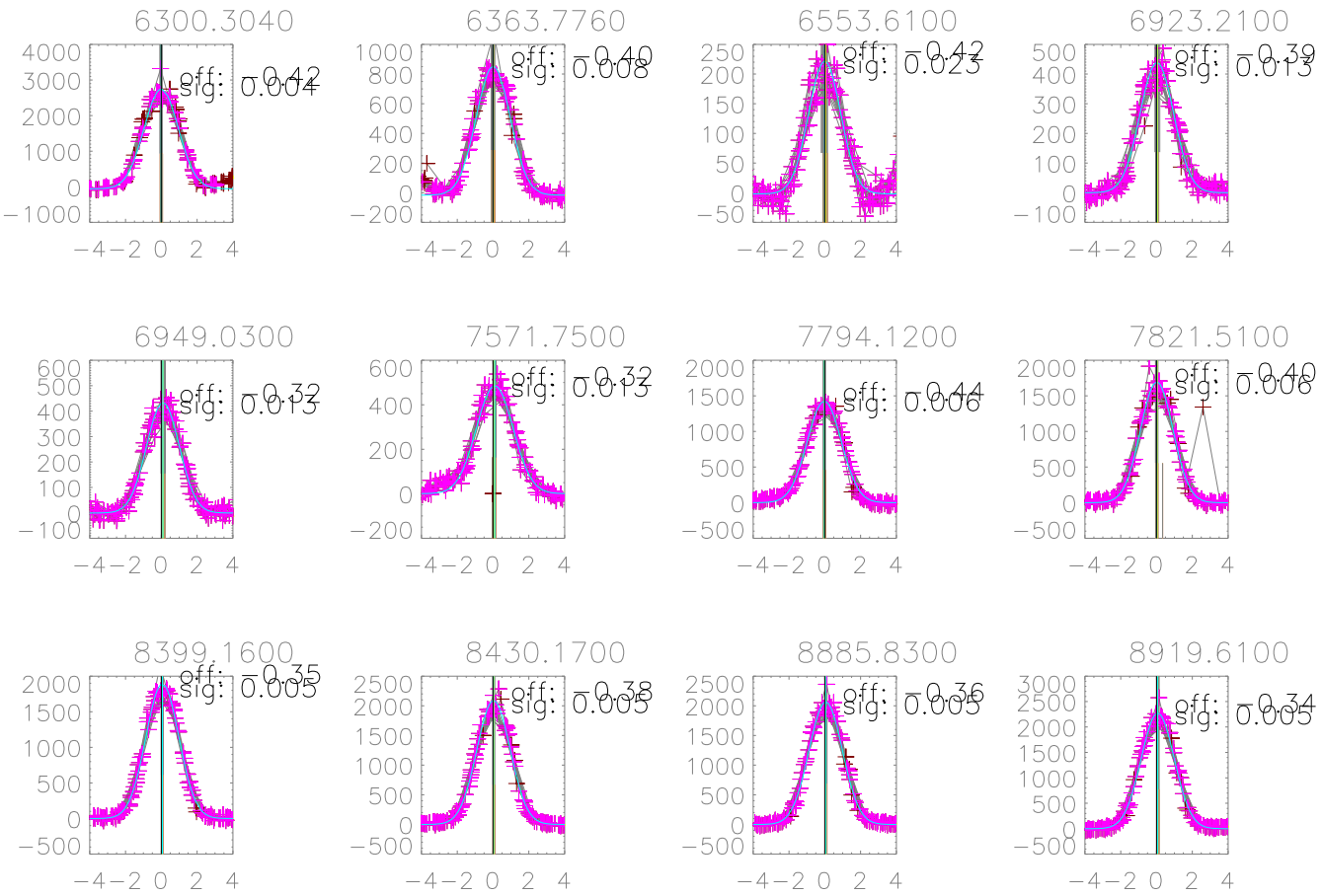

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r1-00031723.fi
31.82
22.73
22.73
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

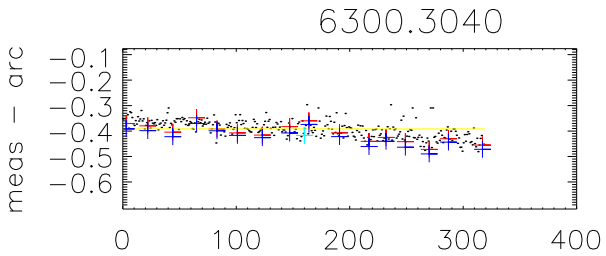

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r1-00031723.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.498
Max value = 31.851
Tue Feb 19 06:41:23 2008

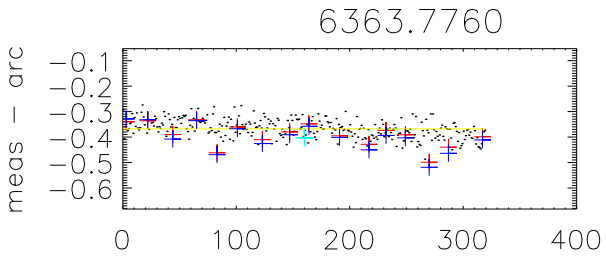

PLATE=1674 MJD=53464 Scattered Light on sdR-r1-00031723.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
6.5

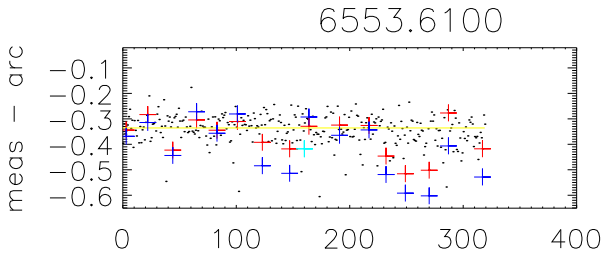

PLATE=1674 MJD=53464 Scattered Light on sdR-r1-00031723.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.602
Max value = 9.458
Tue Feb 19 06:43:53 2008

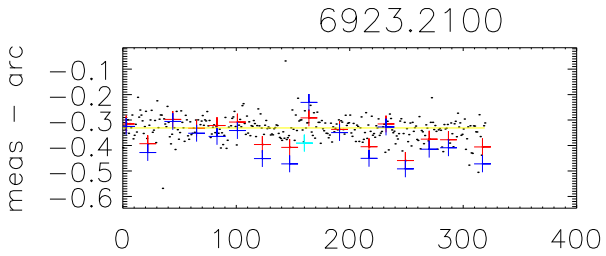

PLATE=1674 MJD=53464 Extraction chi^2 for sdR−r1−00031723.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

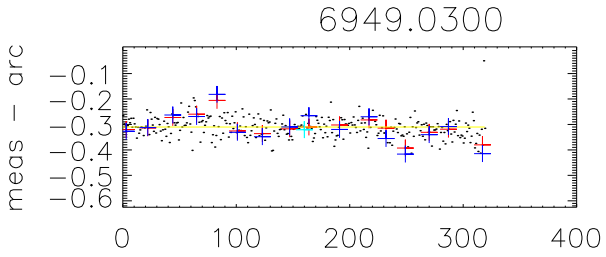

6300.3040
off: −0.42
sig: 0.004
6363.7760
off: −0.40
sig: 0.008
6553.6100
off: −0.42
sig: 0.023
6923.2100
off: −0.39
sig: 0.013
6949.0300
off: −0.32
sig: 0.013
7571.7500
off: −0.32
sig: 0.013
7794.1200
off: −0.44
sig: 0.006
7821.5100
off: −0.40
sig: 0.006
8399.1600
off: −0.35
sig: 0.005
8430.1700
off: −0.38
sig: 0.005
8885.8300
off: −0.36
sig: 0.005
8919.6100
off: −0.34
sig: 0.005

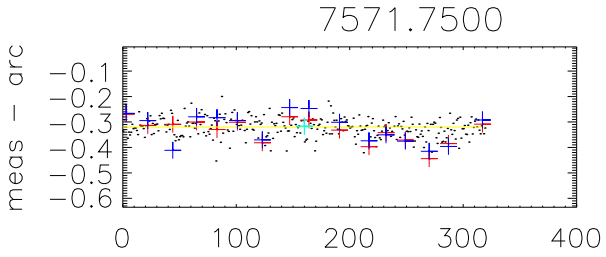

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

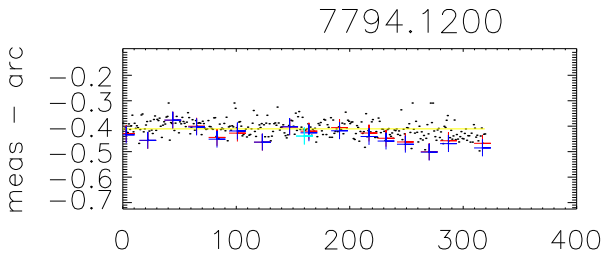

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

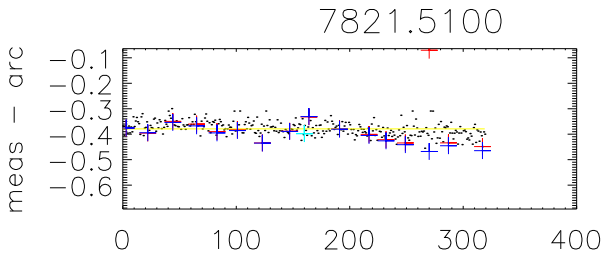

6553.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

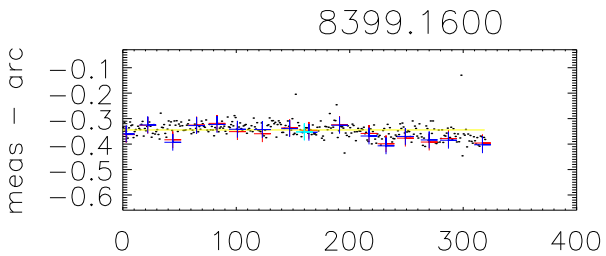

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

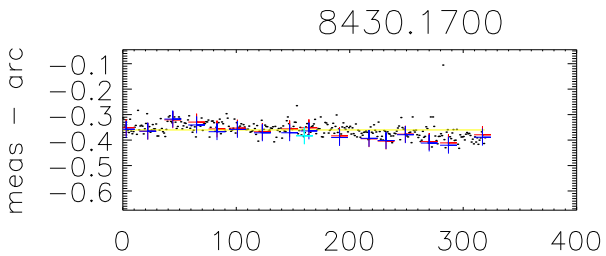

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

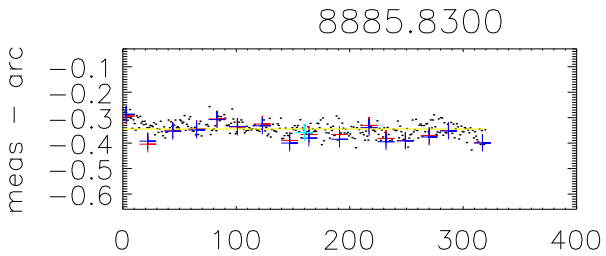

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

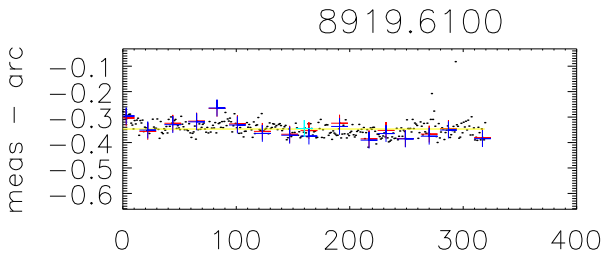

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

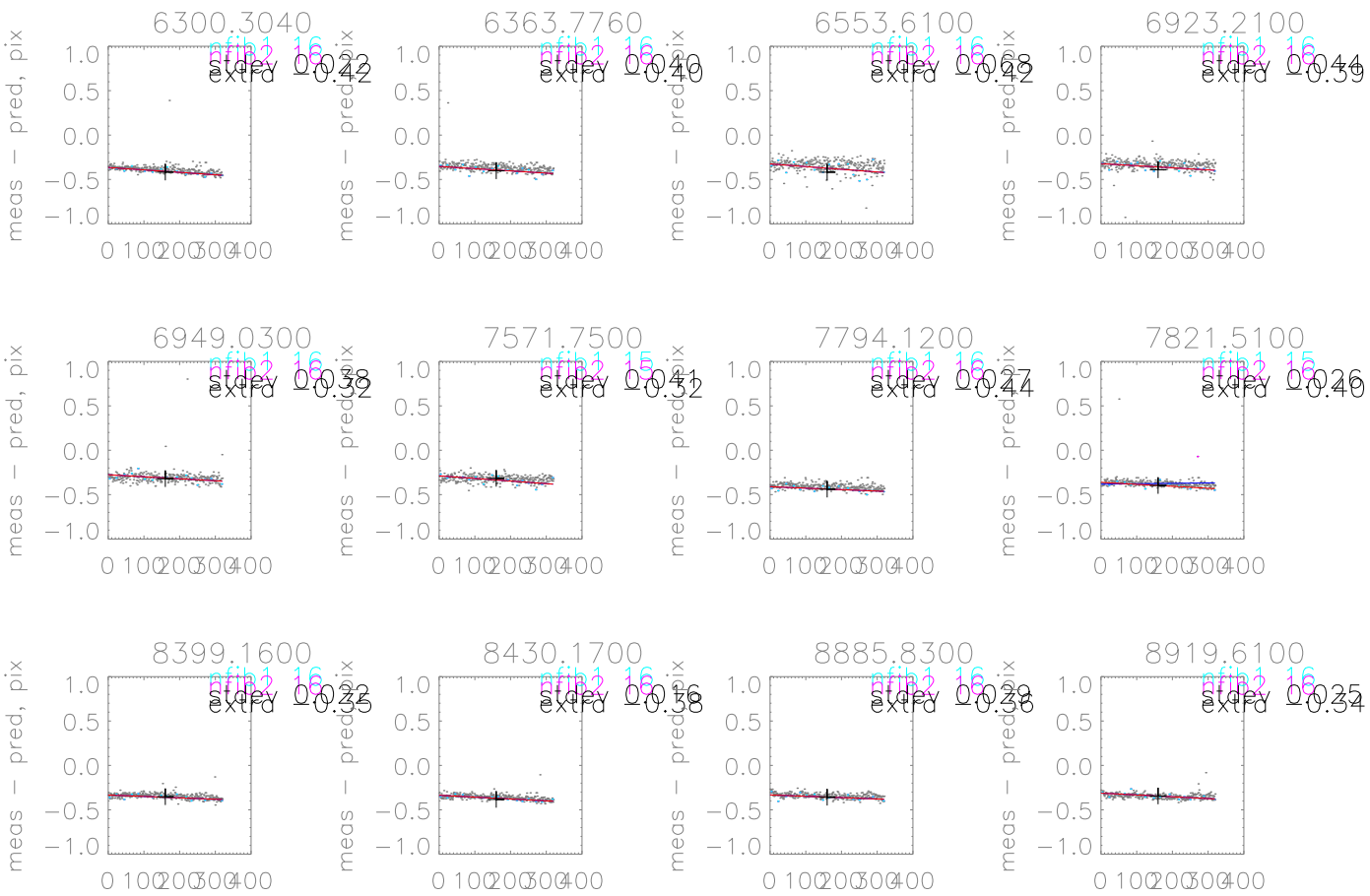

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

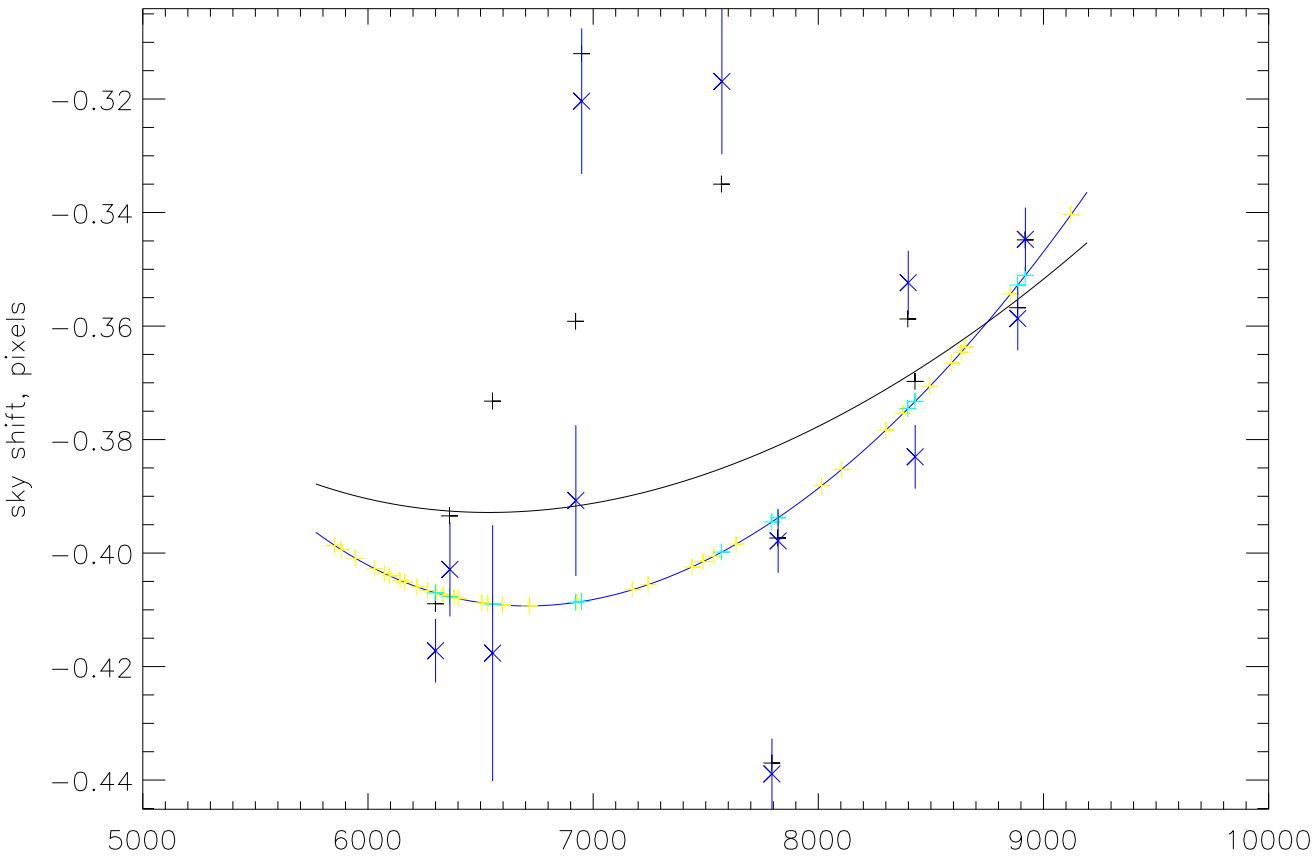

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

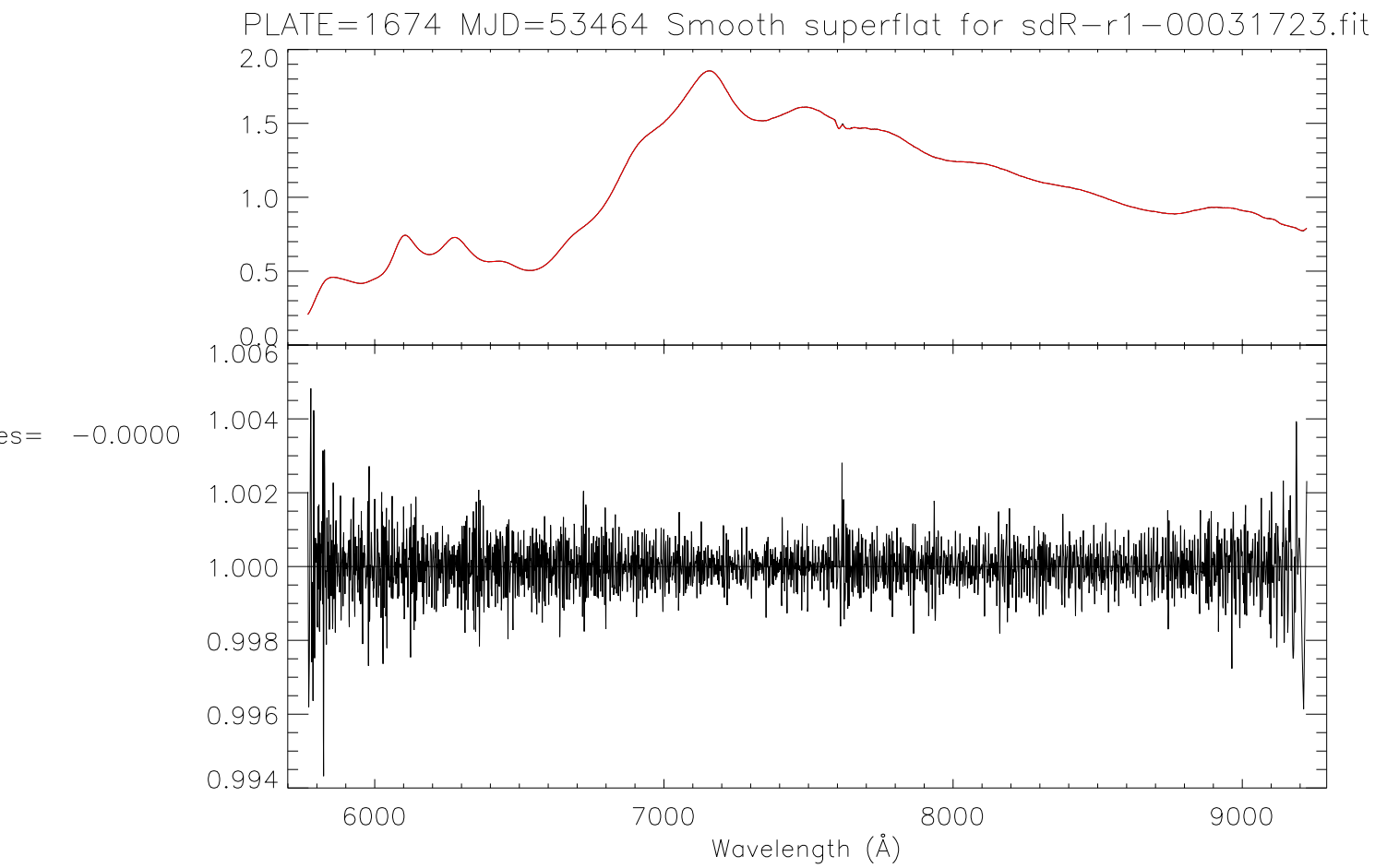

8430.1700
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

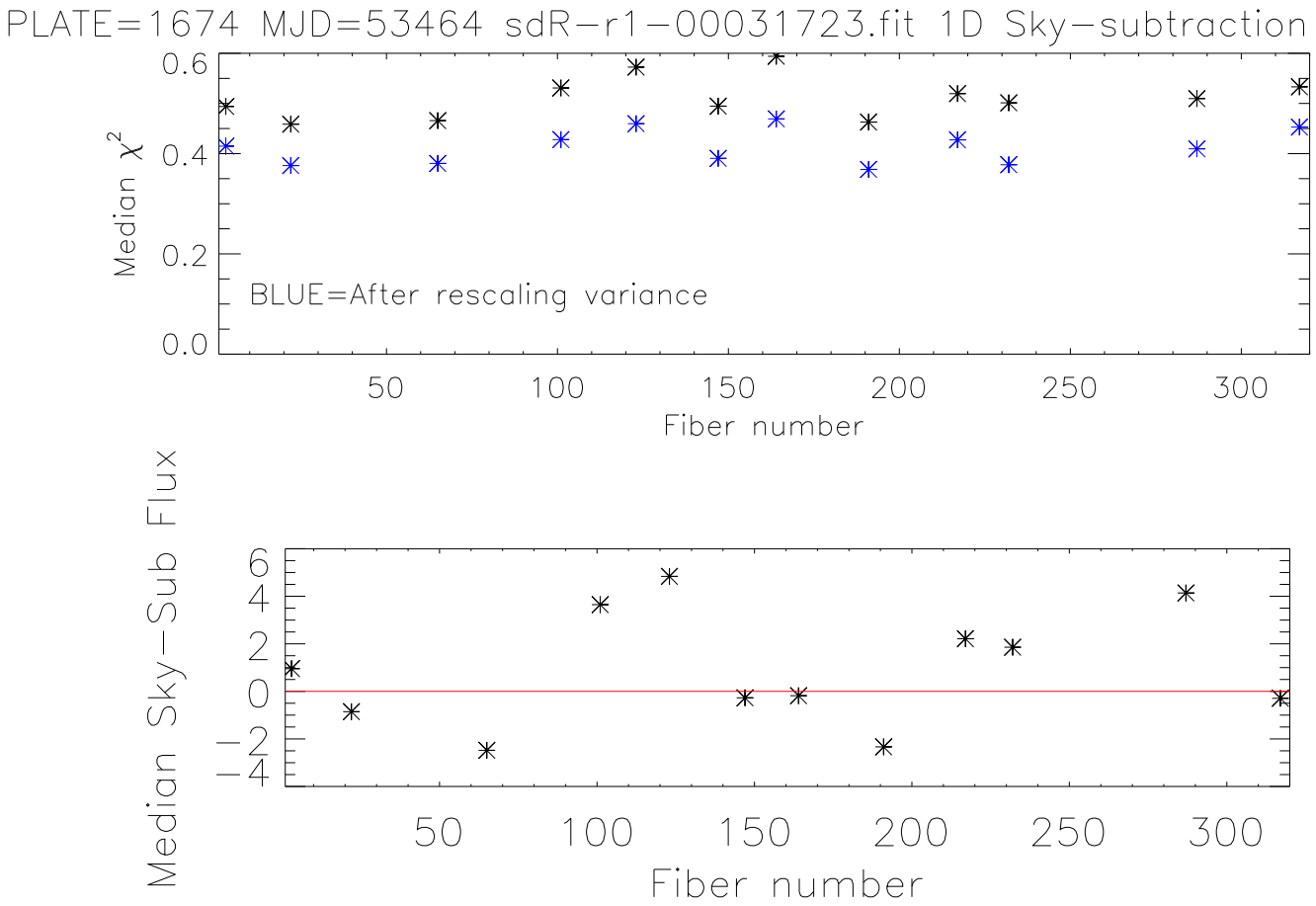

8885.8300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

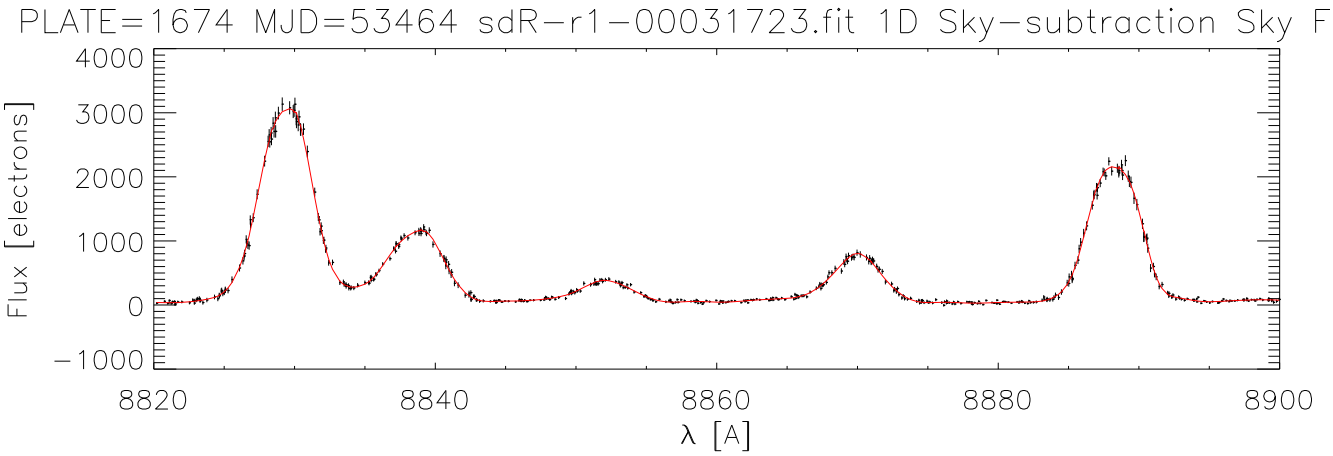

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

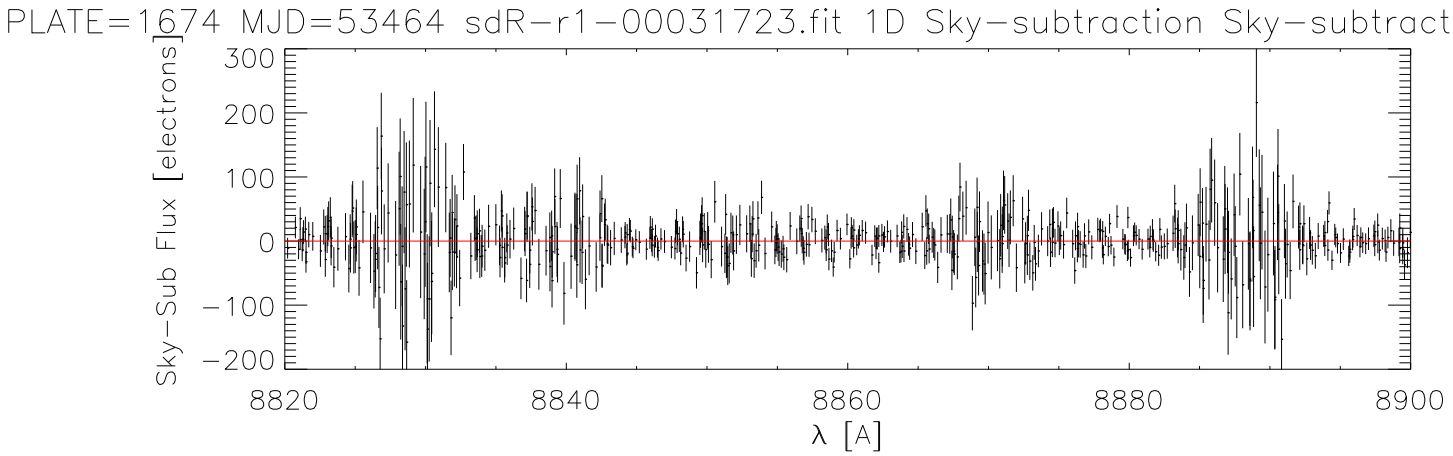

6300.3040
stdev 0.022
extra −0.42
6363.7760
stdev 0.040
extra −0.40
6553.6100
stdev 0.068
extra −0.42
6923.2100
stdev 0.044
extra −0.39
6949.0300
stdev 0.038
extra −0.32
7571.7500
stdev 0.041
extra −0.32
7794.1200
stdev 0.027
extra −0.44
7821.5100
stdev 0.026
extra −0.40
8399.1600
stdev 0.022
extra −0.35
8430.1700
stdev 0.016
extra −0.38
8885.8300
stdev 0.029
extra −0.36
8919.6100
stdev 0.025
extra −0.34
meas − pred, pix

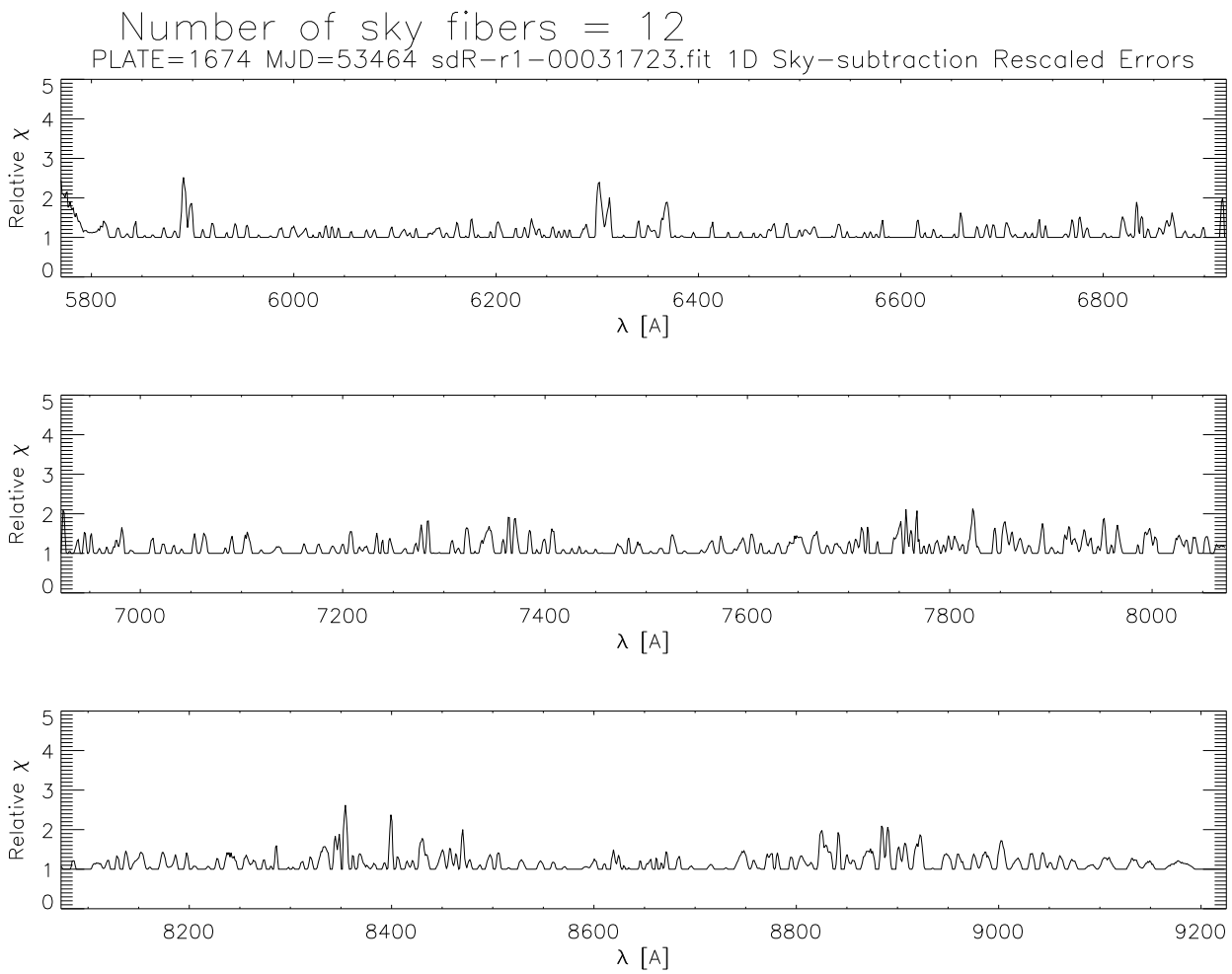

sky shift, pixels
−0.32
−0.34
−0.36
−0.38
−0.40
−0.42
−0.44
5000
6000
7000
8000
9000
10000

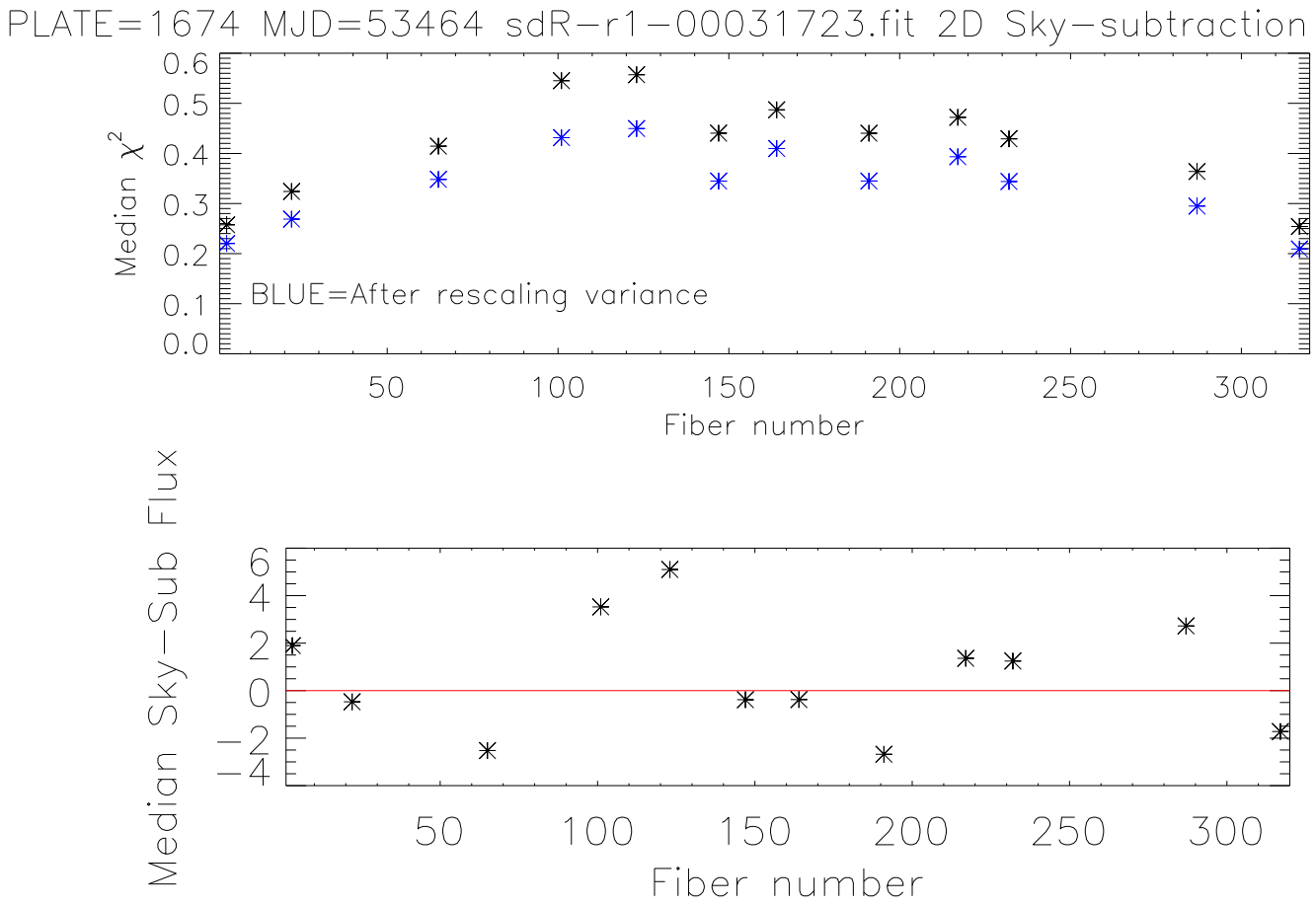

PLATE=1674 MJD=53464 Smooth superflat for sdR-r1-00031723.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

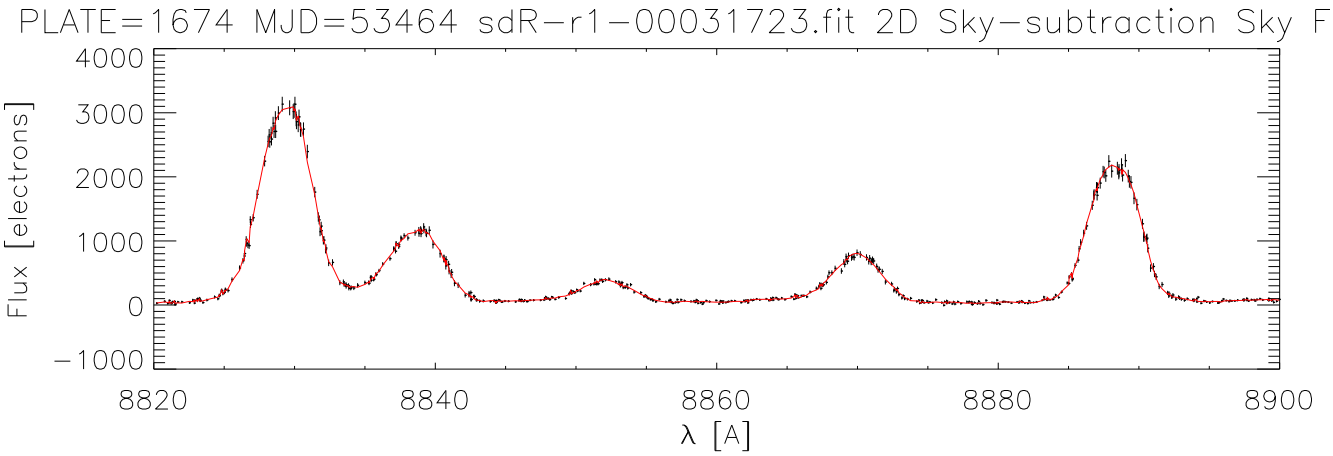

PLATE=1674 MJD=53464 sdR-r1-00031723.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

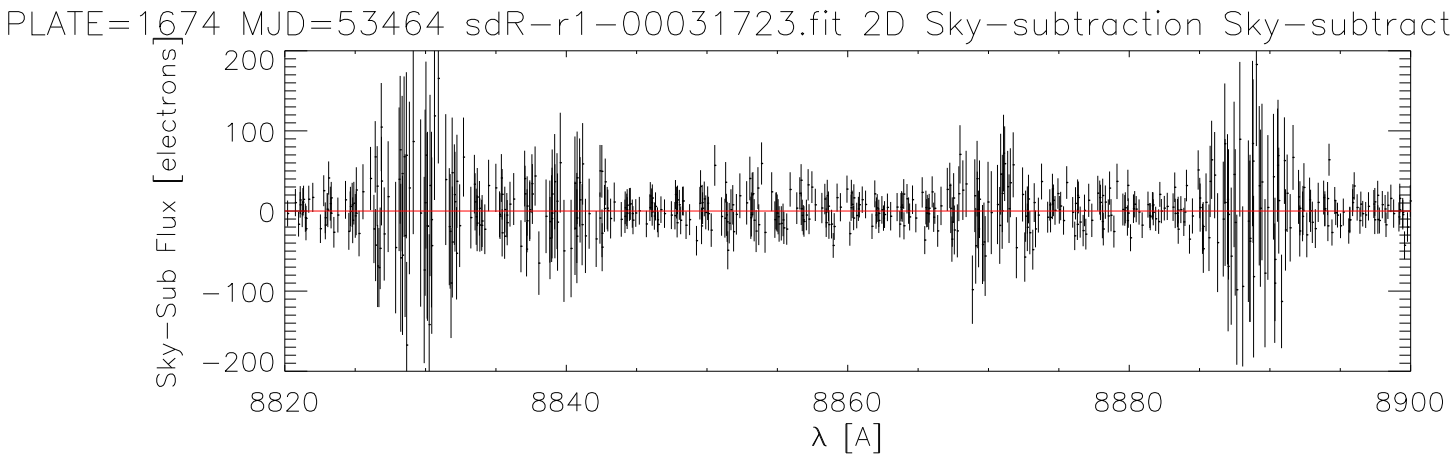

PLATE=1674 MJD=53464 sdR-r1-00031723.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

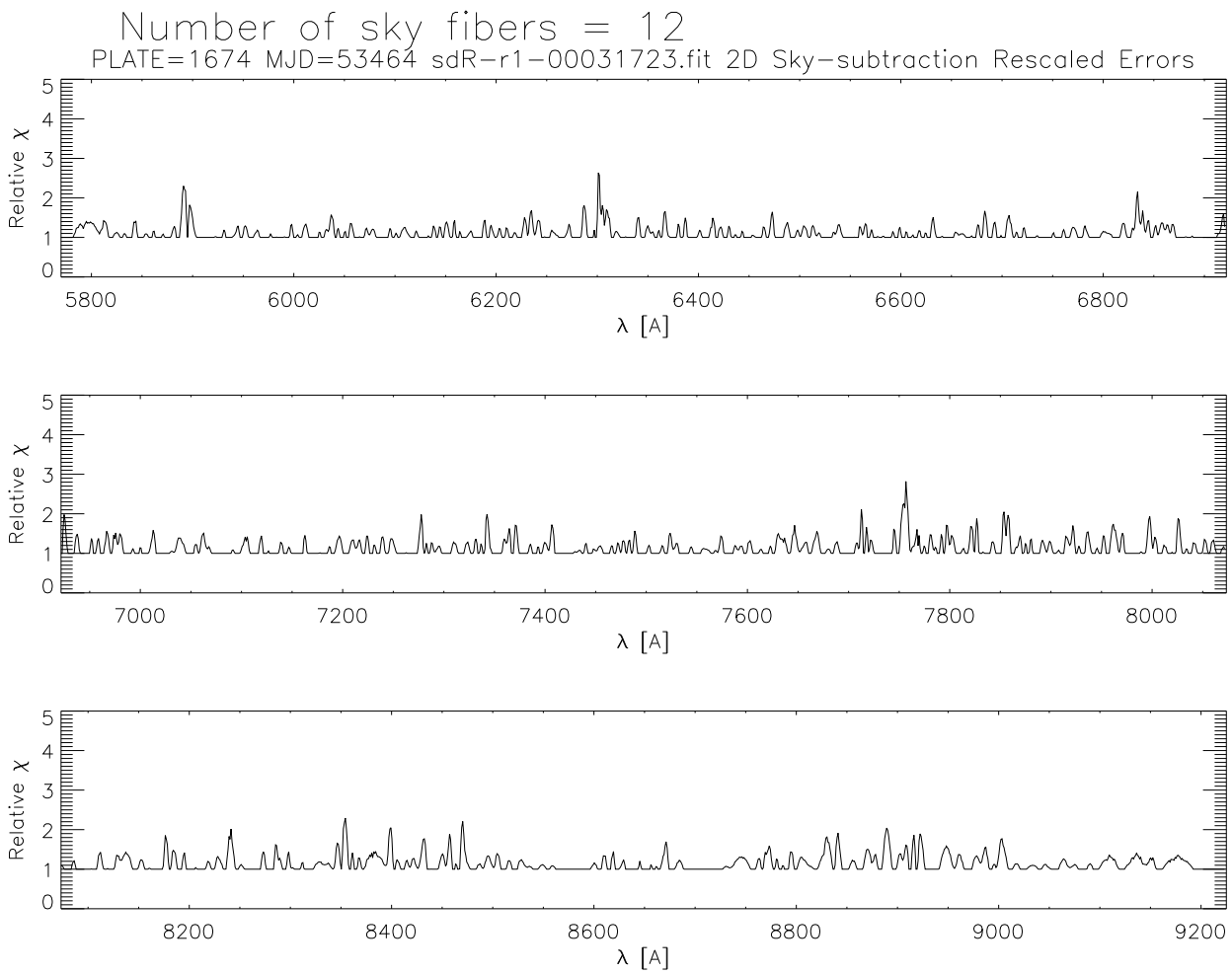

PLATE=1674 MJD=53464 sdR-r1-00031723.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

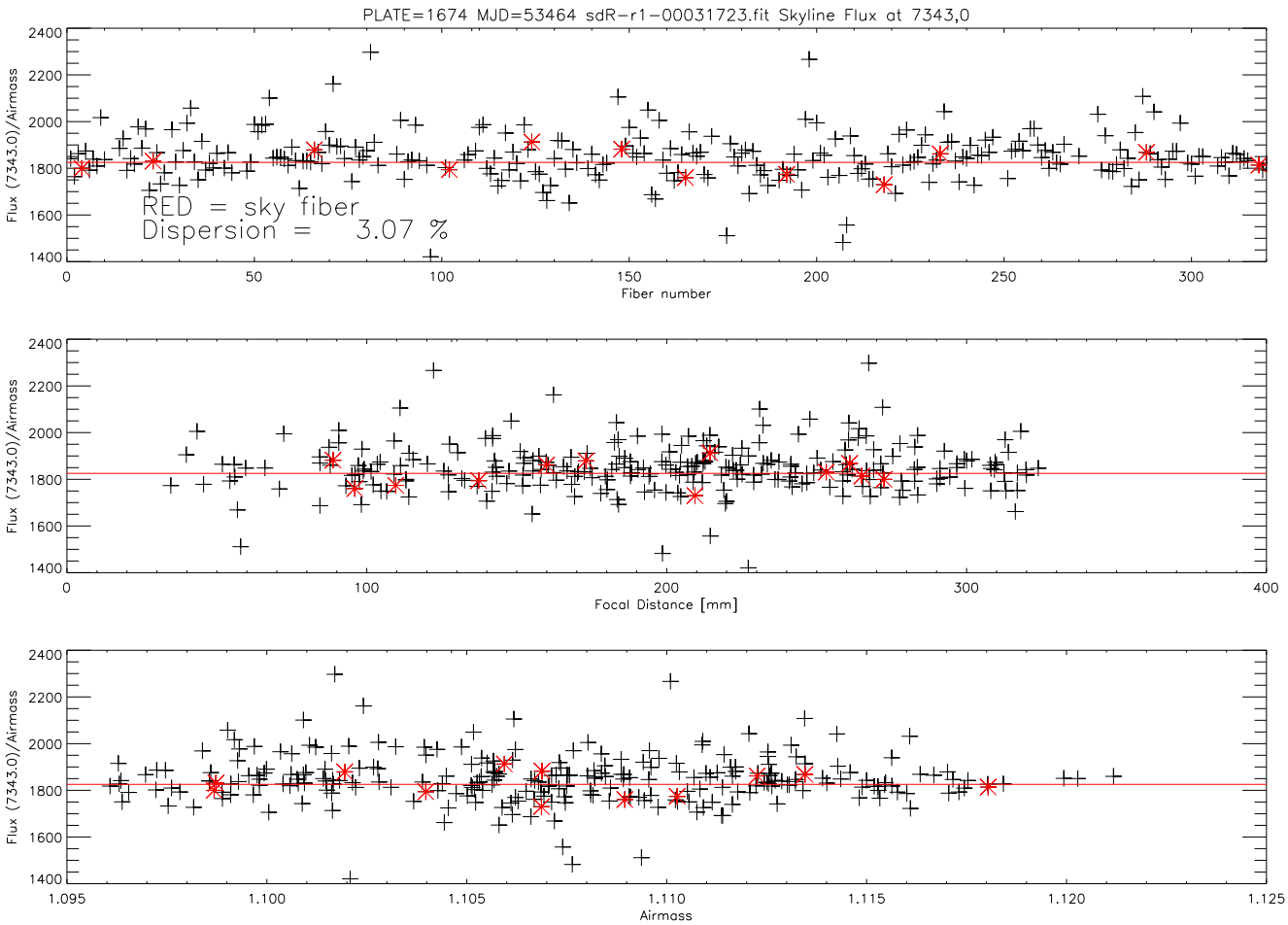

Number of sky fibers = 12
PLATE=1674 MJD=53464 sdR-r1-00031723.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

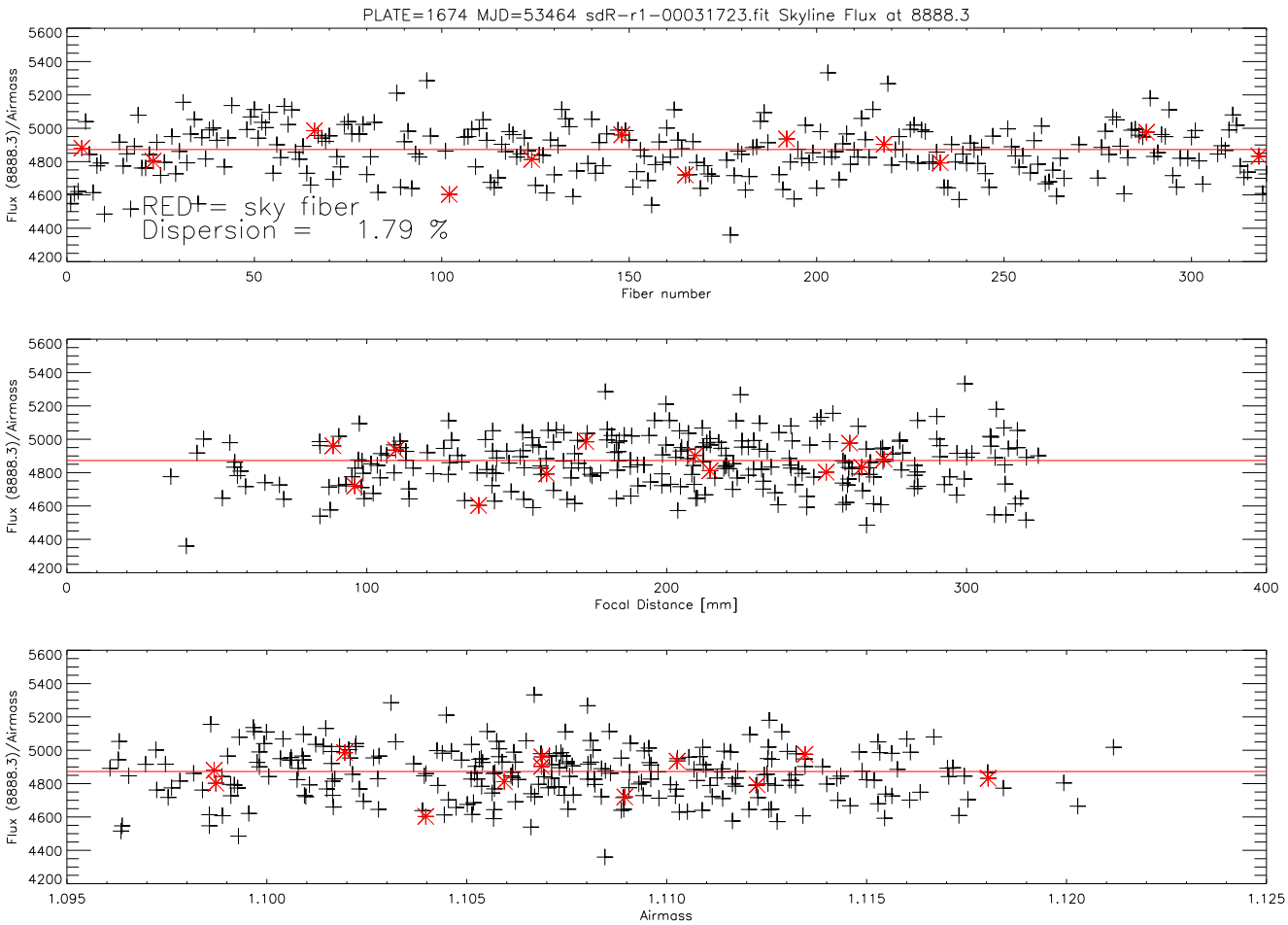

PLATE=1674 MJD=53464 sdR-r1-00031723.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

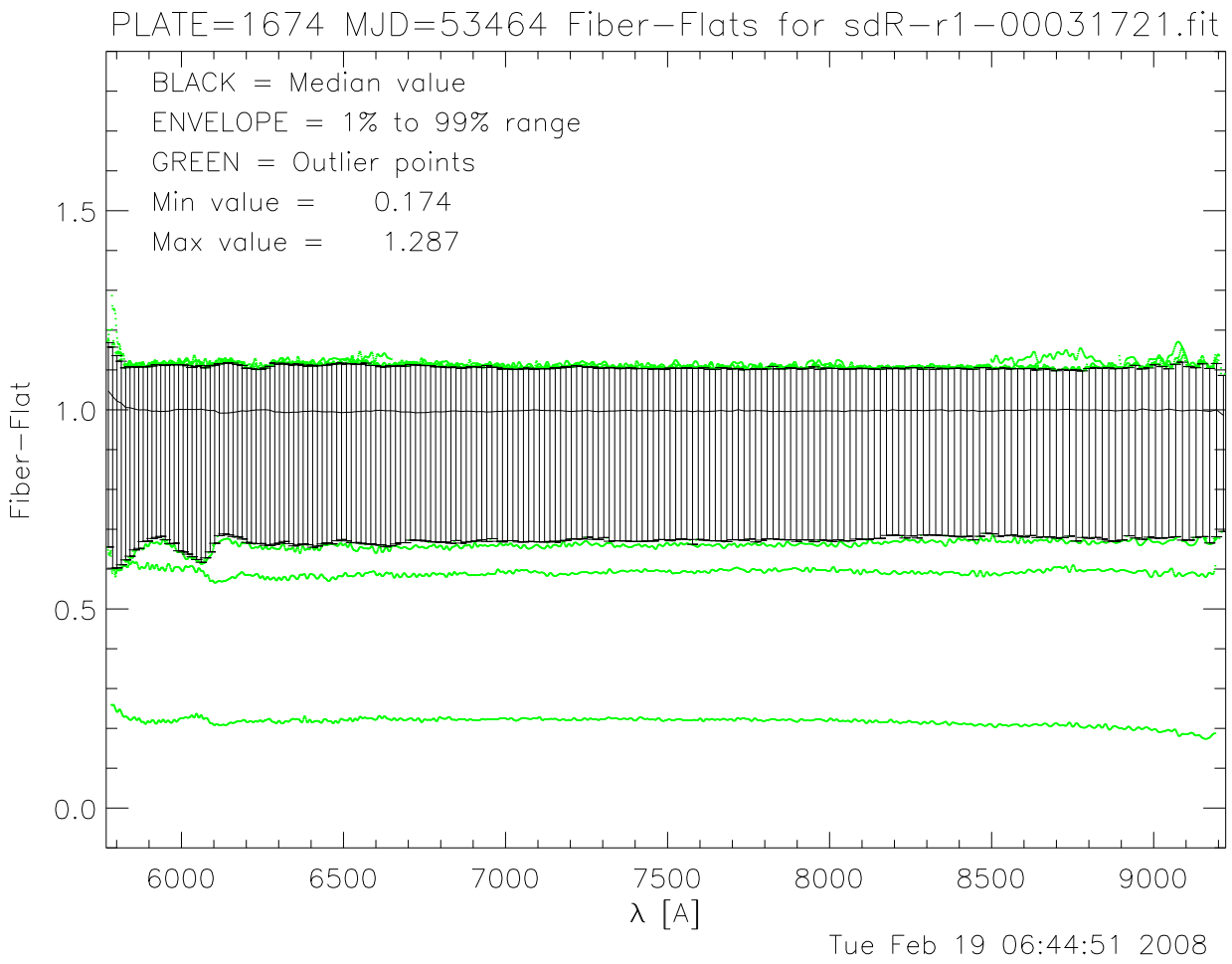

PLATE=1674 MJD=53464 sdR-r1-00031723.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

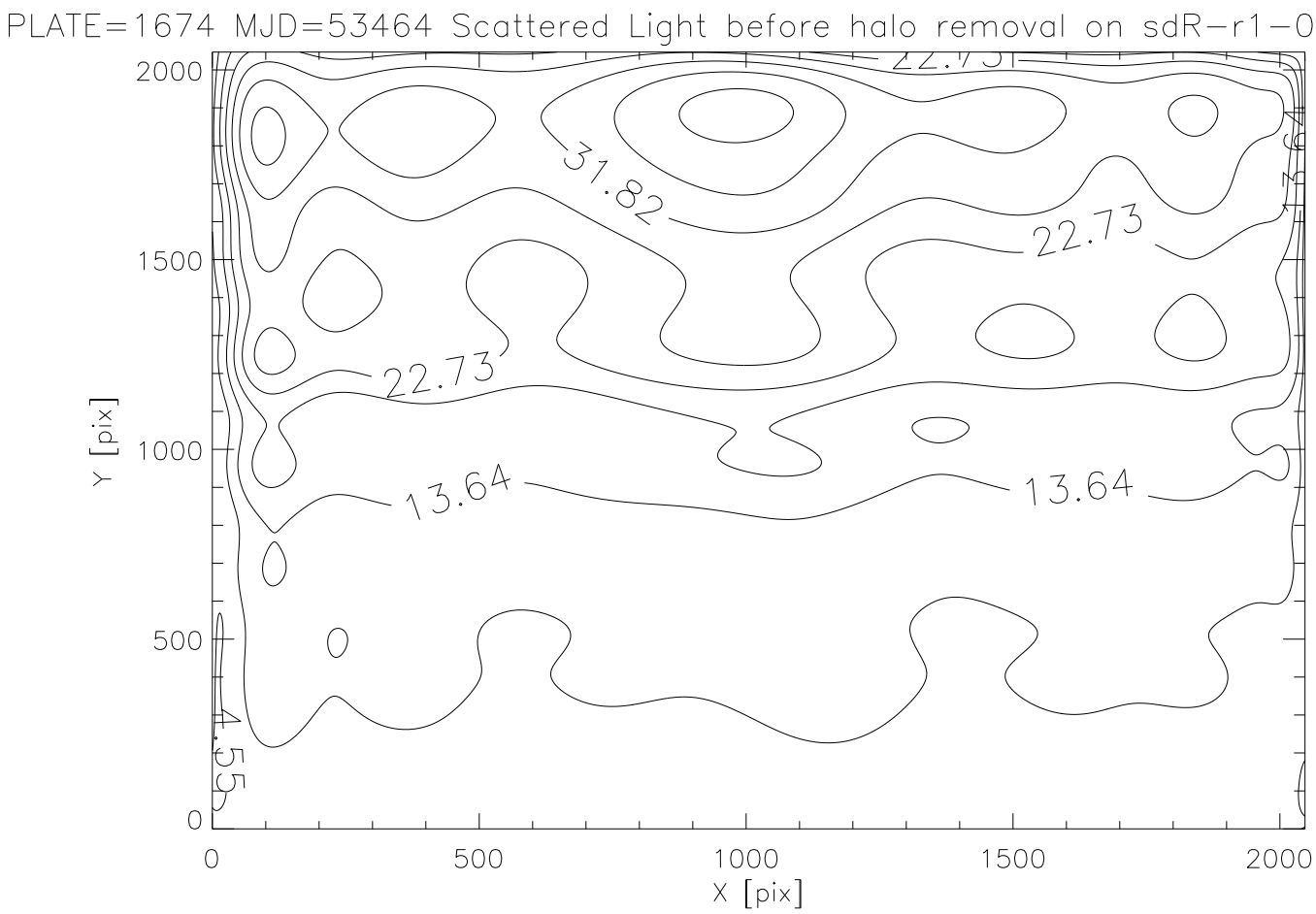

PLATE=1674 MJD=53464 sdR-r1-00031723.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

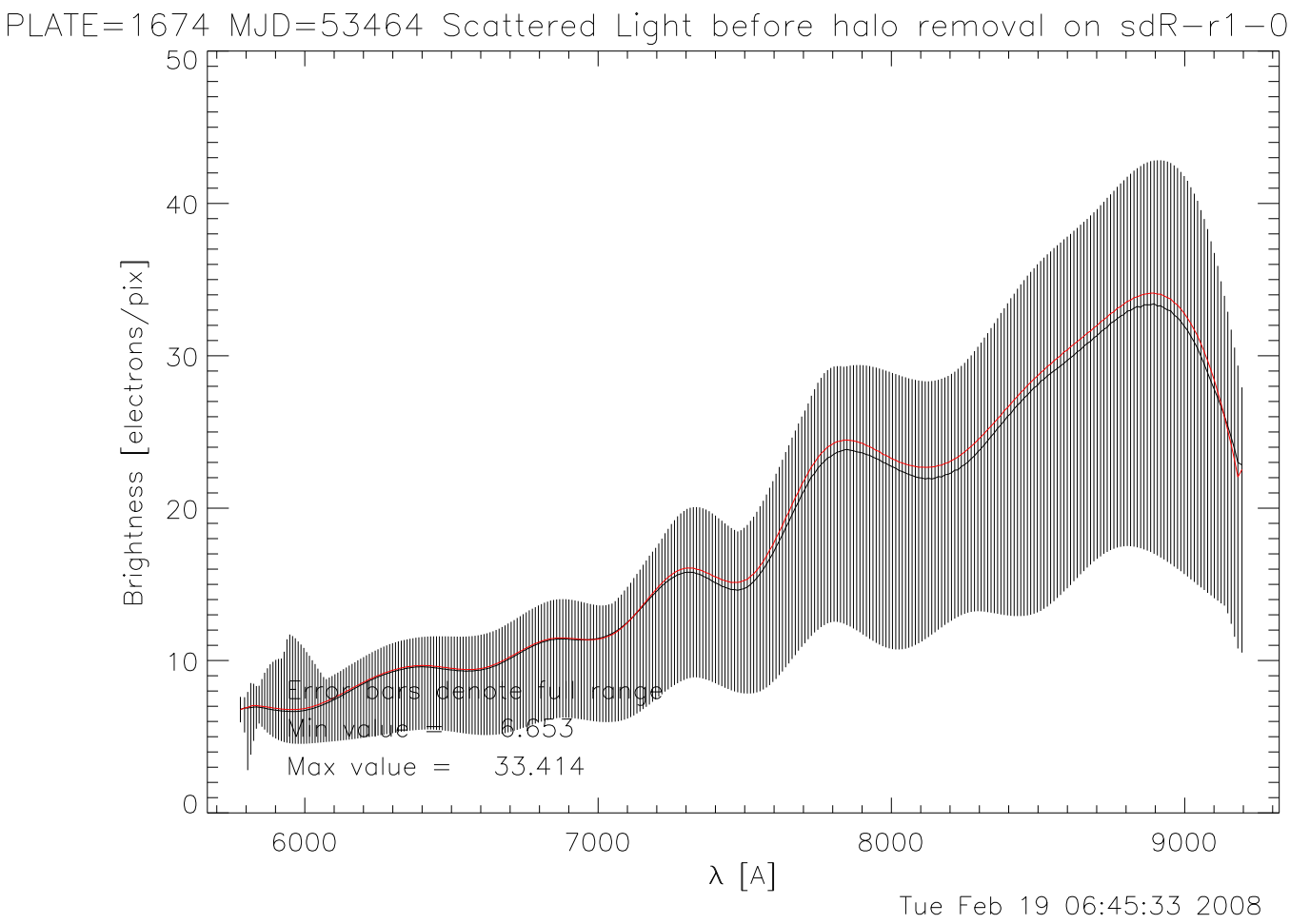

Number of sky fibers = 12
PLATE=1674 MJD=53464 sdR-r1-00031723.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

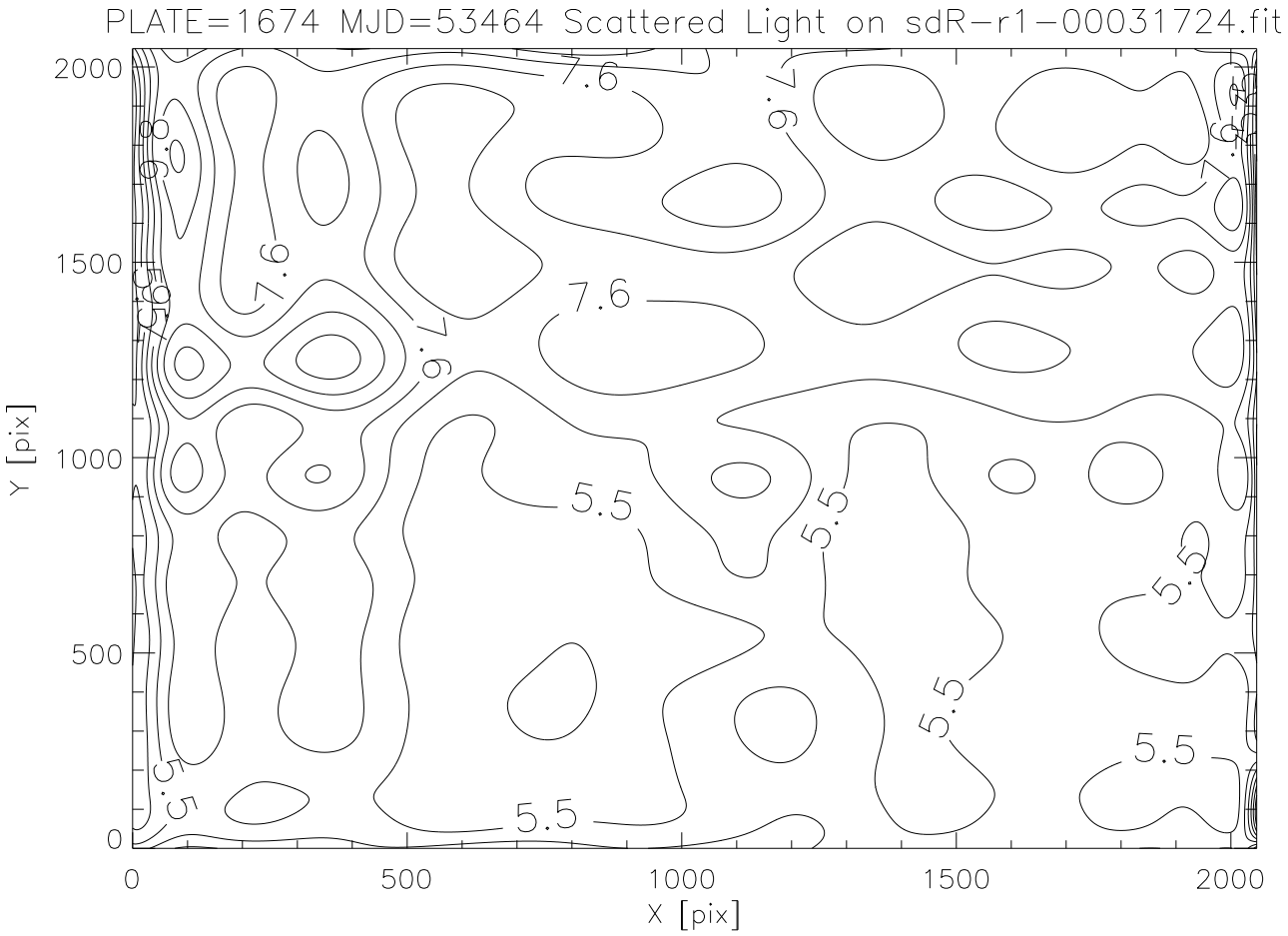

PLATE=1674 MJD=53464 sdR-r1-00031723.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.07 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

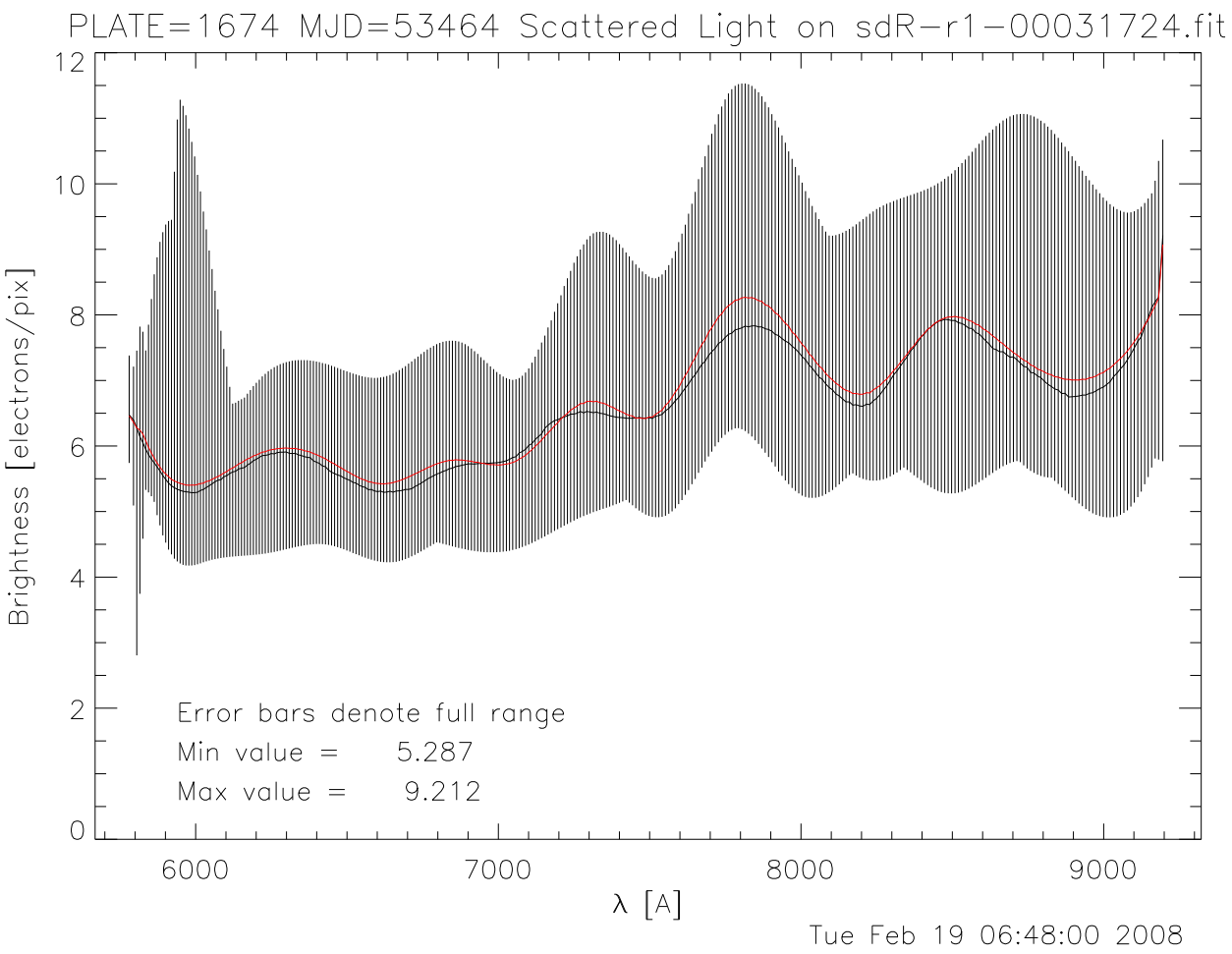

PLATE=1674 MJD=53464 sdR-r1-00031723.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
+RED+= sky fiber
Dispersion = 1.79 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

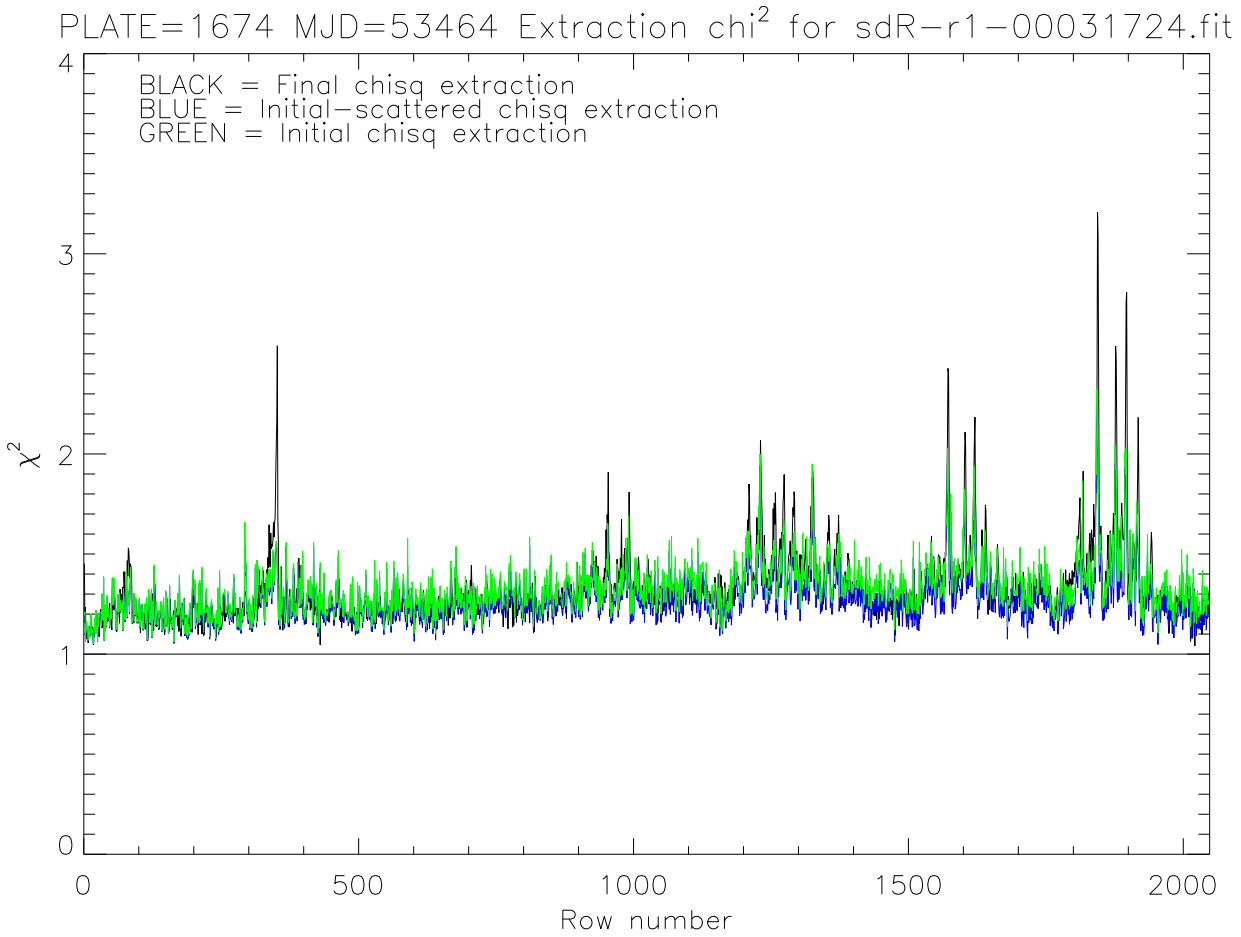

PLATE=1674 MJD=53464 Fiber−Flats for sdR−r1−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.174
Max value = 1.287
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 06:44:51 2008

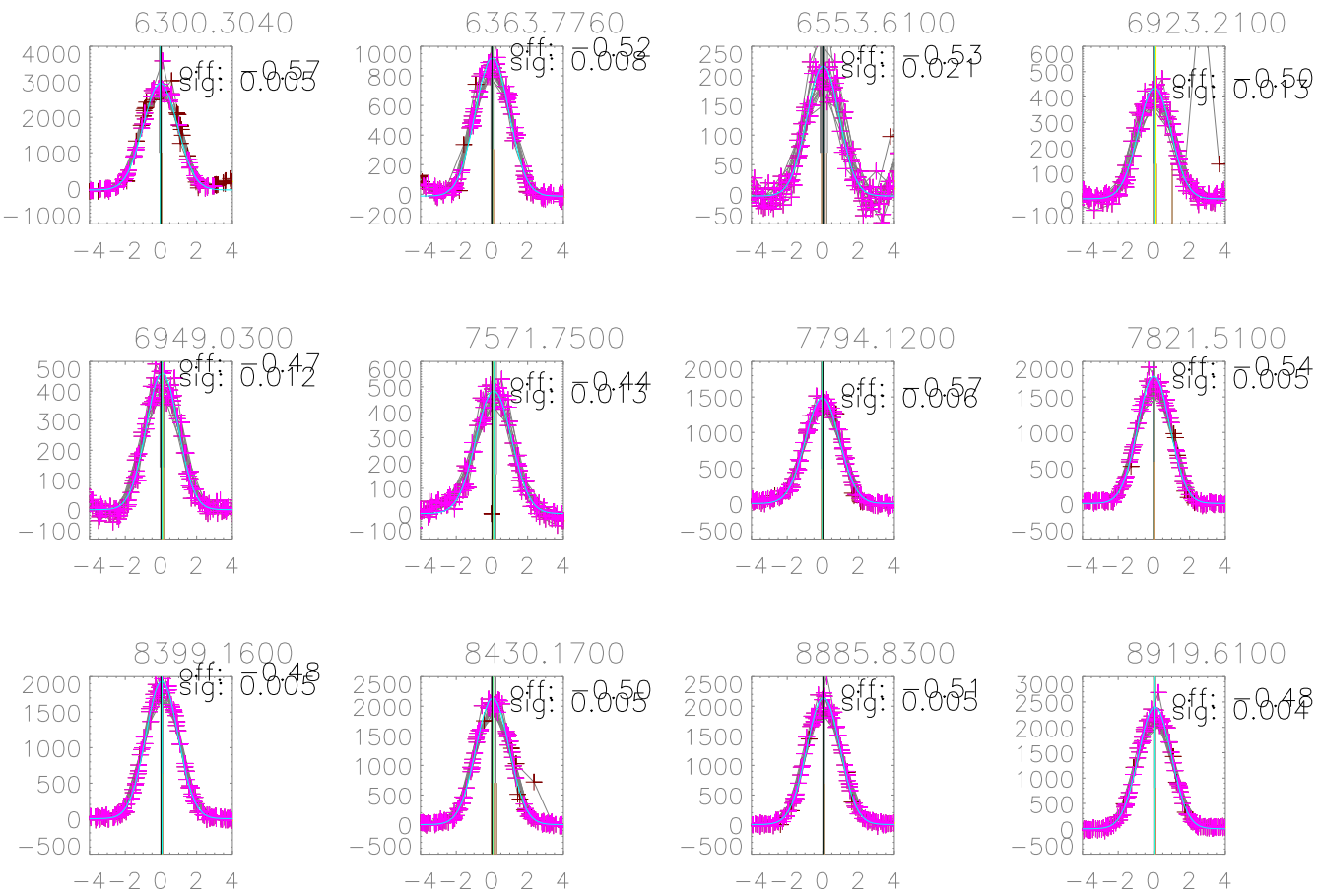

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r1-00031724.fi
31.82
22.73
22.73
13.64
13.64
0
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

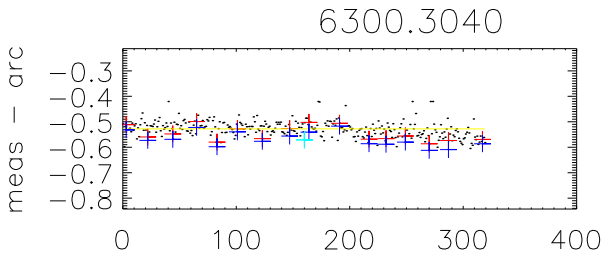

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r1-00031724.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.653
Max value = 33.414
Tue Feb 19 06:45:33 2008

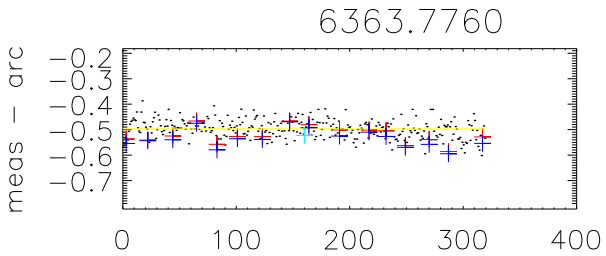

PLATE=1674 MJD=53464 Scattered Light on sdR−r1−00031724.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.6
5.5

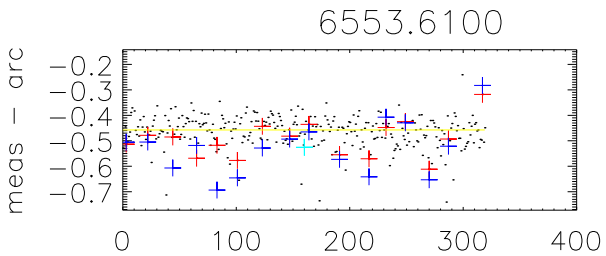

PLATE=1674 MJD=53464 Scattered Light on sdR-r1-00031724.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.287
Max value = 9.212
Tue Feb 19 06:48:00 2008

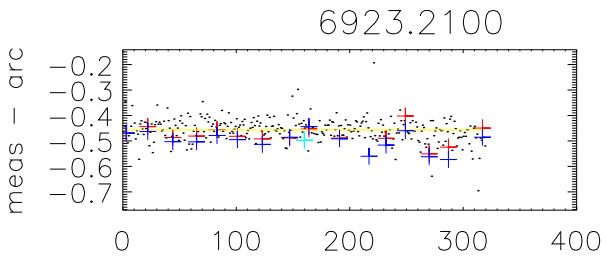

PLATE=1674 MJD=53464 Extraction chi^2 for sdR−r1−00031724.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

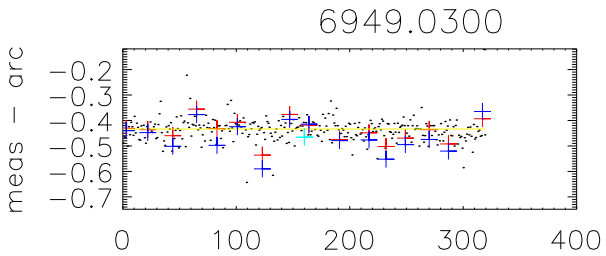

6300.3040
off: −0.57
sig: 0.005
6363.7760
off: −0.52
sig: 0.008
6553.6100
off: −0.53
sig: 0.021
6923.2100
off: −0.50
sig: 0.013
6949.0300
off: −0.47
sig: 0.012
7571.7500
off: −0.44
sig: 0.013
7794.1200
off: −0.57
sig: 0.006
7821.5100
off: −0.54
sig: 0.005
8399.1600
off: −0.48
sig: 0.005
8430.1700
off: −0.50
sig: 0.005
8885.8300
off: −0.51
sig: 0.005
8919.6100
off: −0.48
sig: 0.004

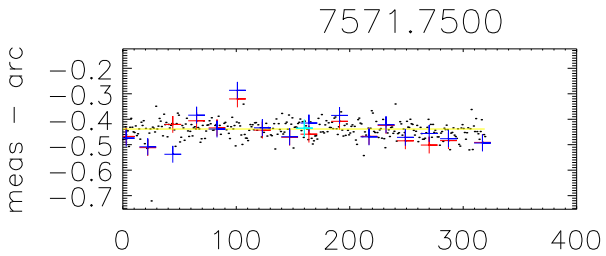

6300.3040
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

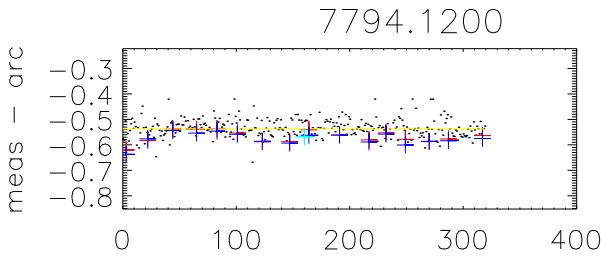

6363.7760
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

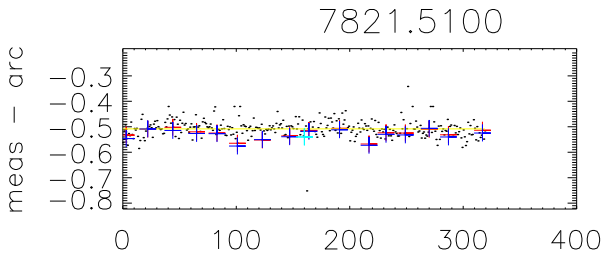

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

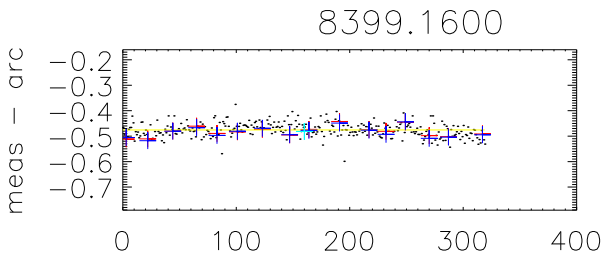

6923.2100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

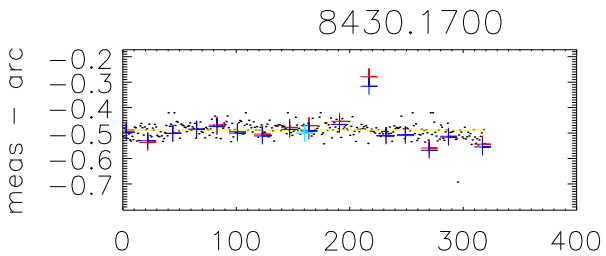

6949.0300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

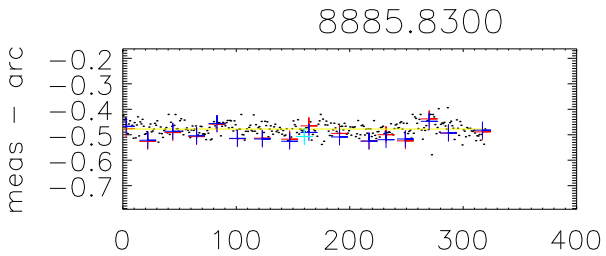

7571.7500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

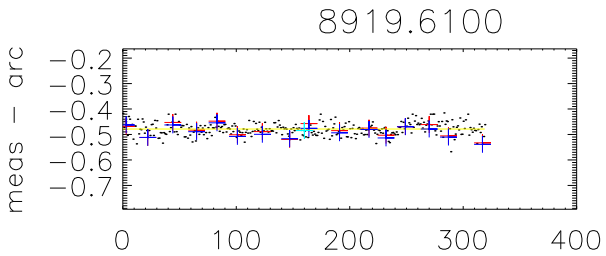

7794.1200
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

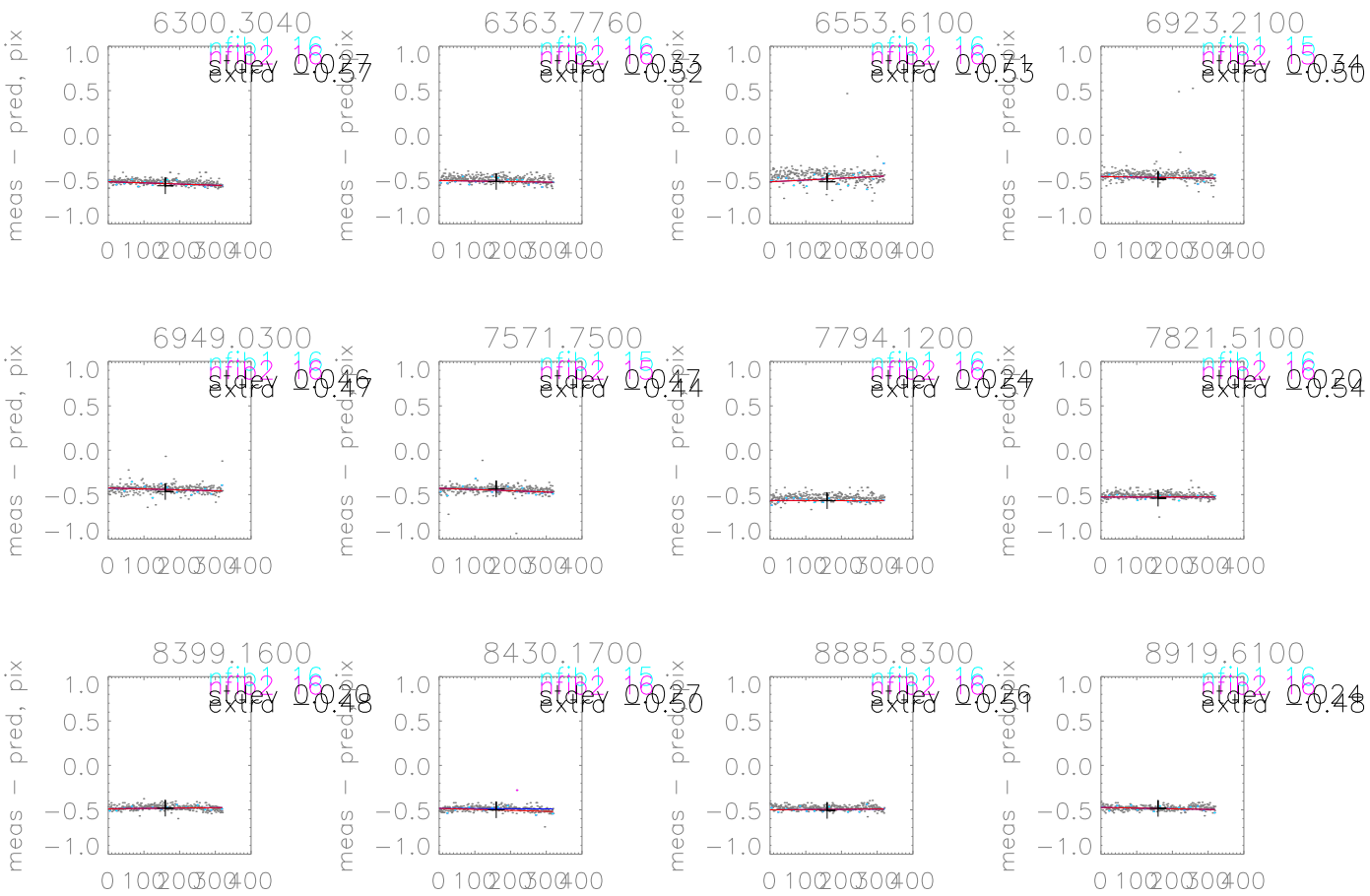

7821.5100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

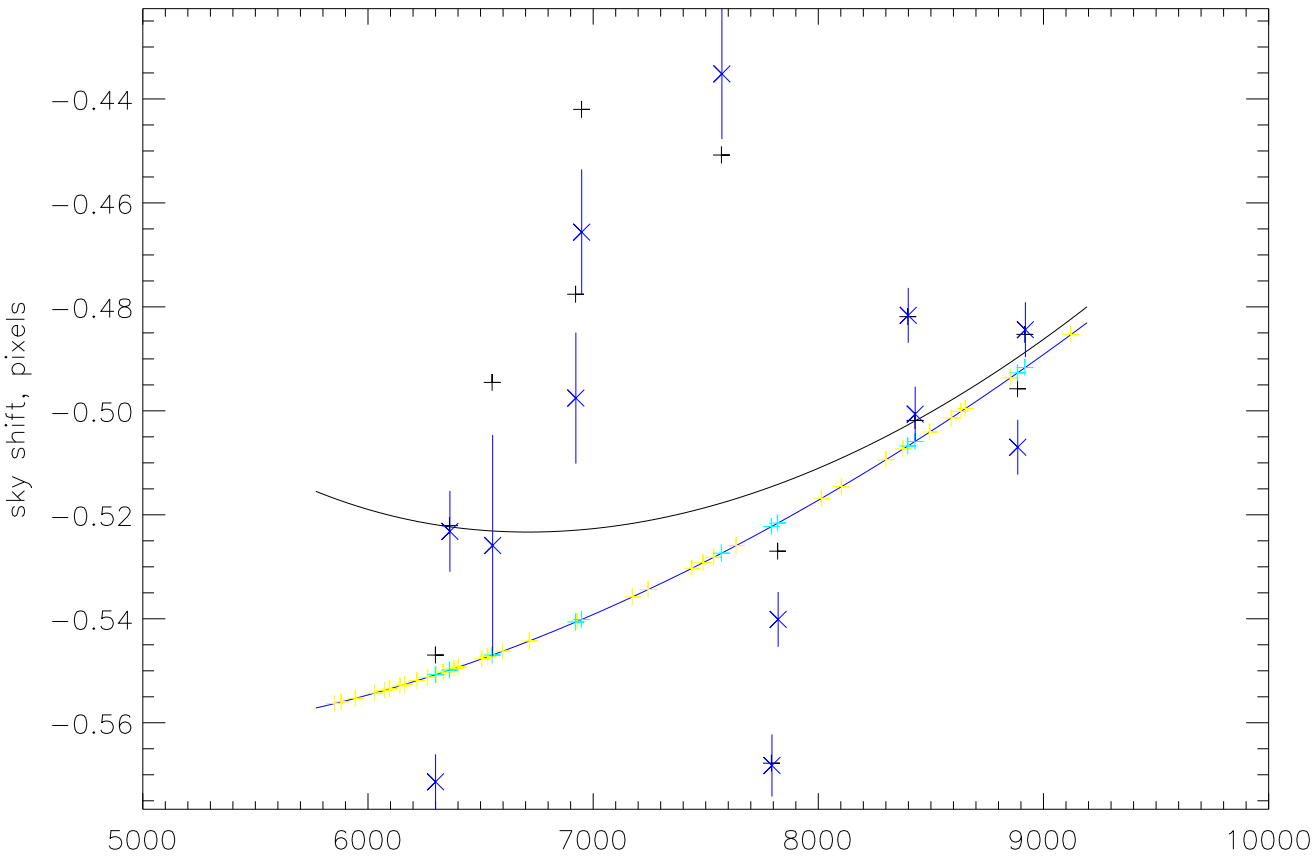

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

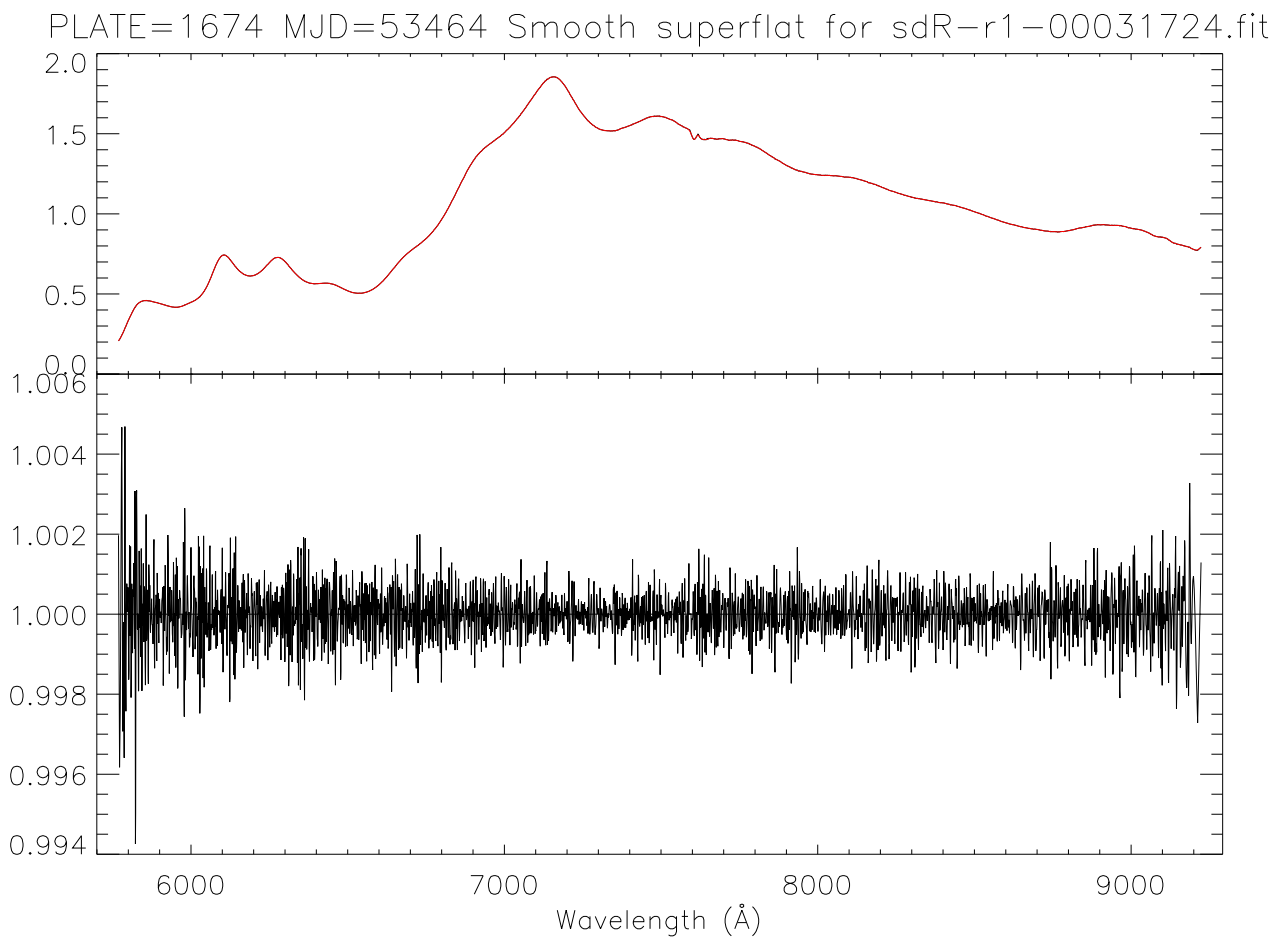

8885.8300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

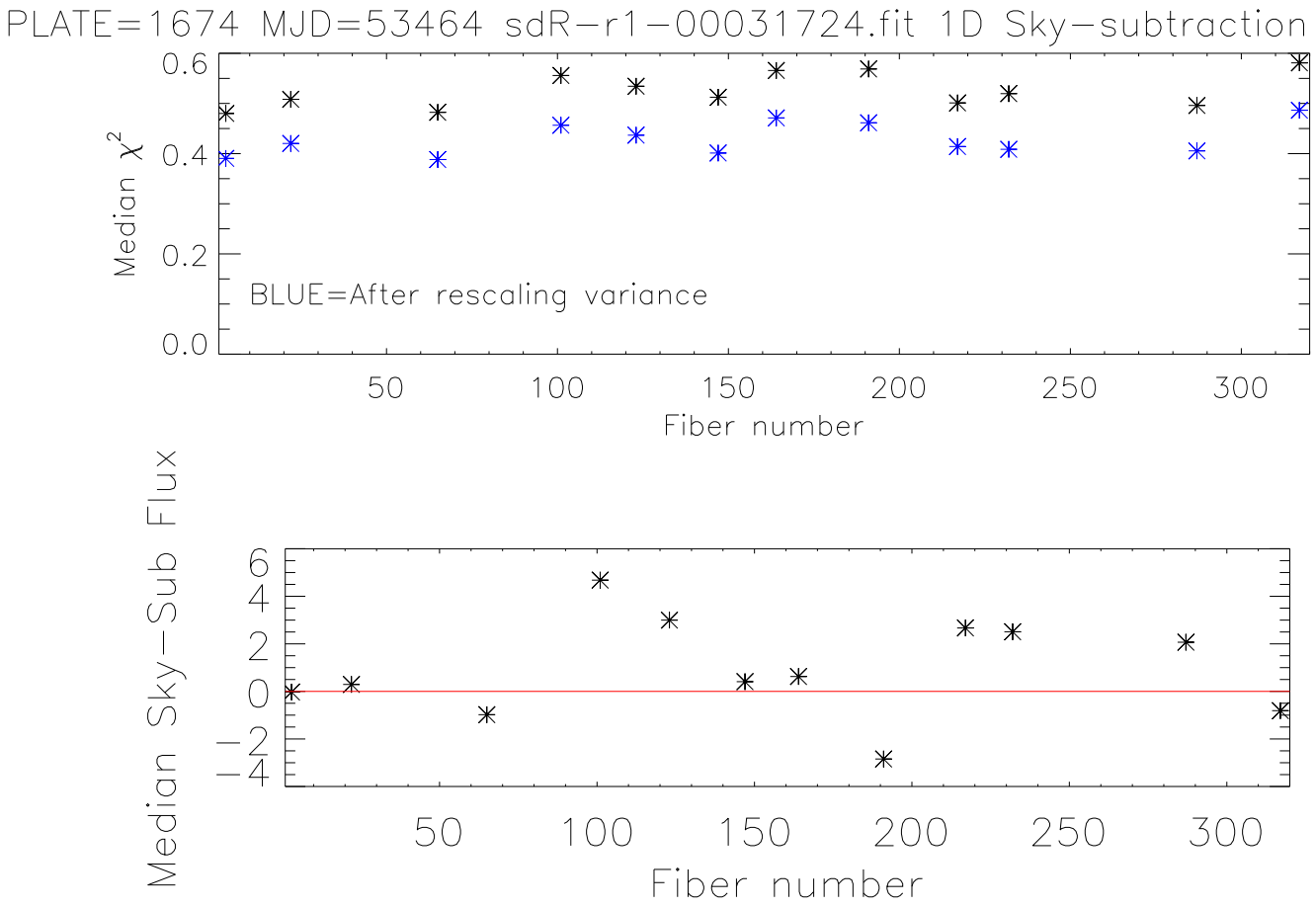

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

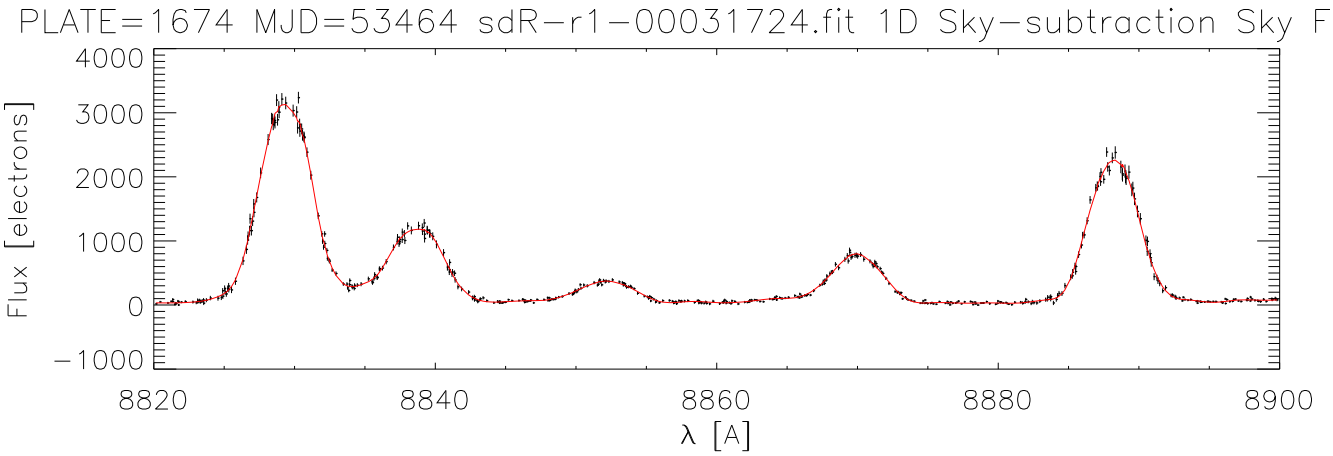

6300.3040
stdev 0.027
extra −0.57
6363.7760
stdev 0.033
extra −0.52
6553.6100
stdev 0.071
extra −0.53
6923.2100
stdev 0.034
extra −0.50
6949.0300
stdev 0.046
extra −0.47
7571.7500
stdev 0.047
extra −0.44
7794.1200
stdev 0.024
extra −0.57
7821.5100
stdev 0.020
extra −0.54
8399.1600
stdev 0.020
extra −0.48
8430.1700
stdev 0.027
extra −0.50
8885.8300
stdev 0.026
extra −0.51
8919.6100
stdev 0.024
extra −0.48
meas − pred, pix
meas − pred, pix

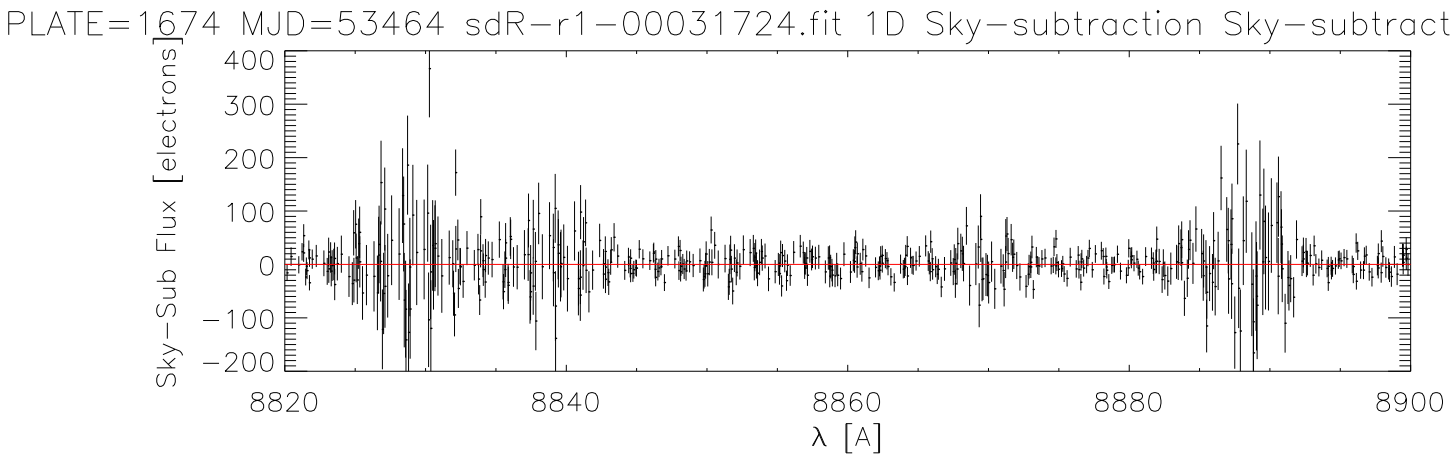

sky shift, pixels
−0.44
−0.46
−0.48
−0.50
−0.52
−0.54
−0.56
5000
6000
7000
8000
9000
10000

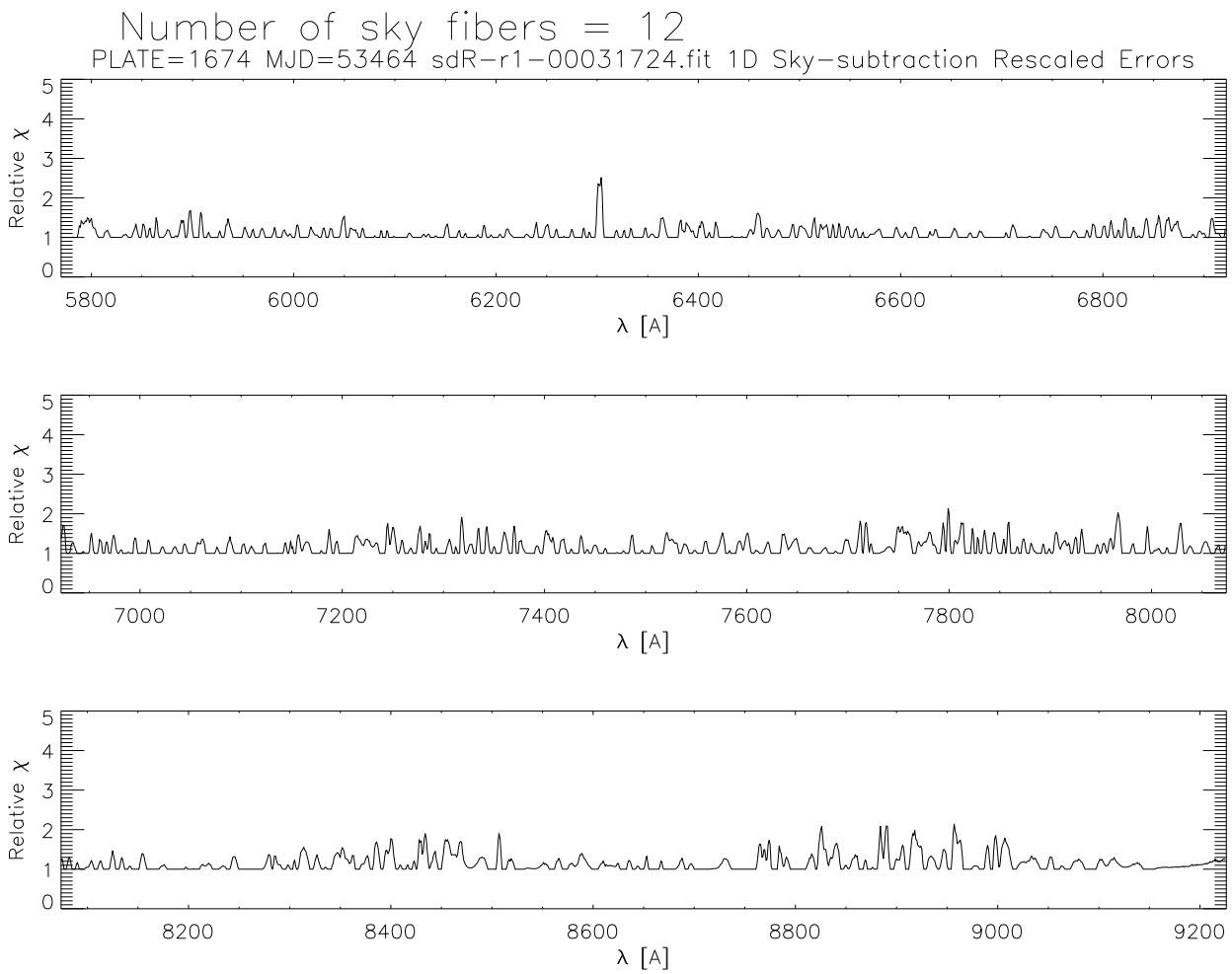
es= 0.0000

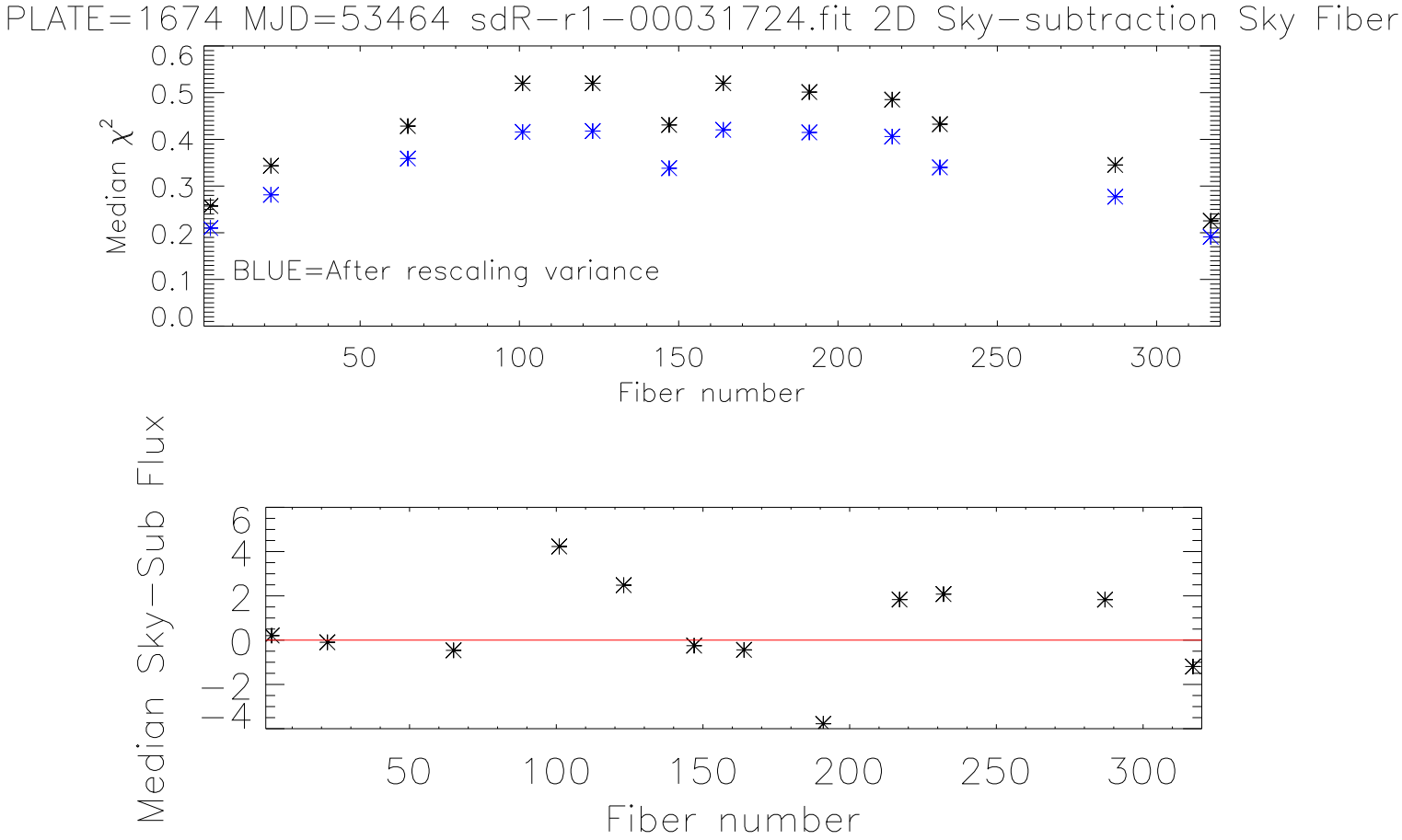

PLATE=1674 MJD=53464 Smooth superflat for sdR-r1-00031724.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

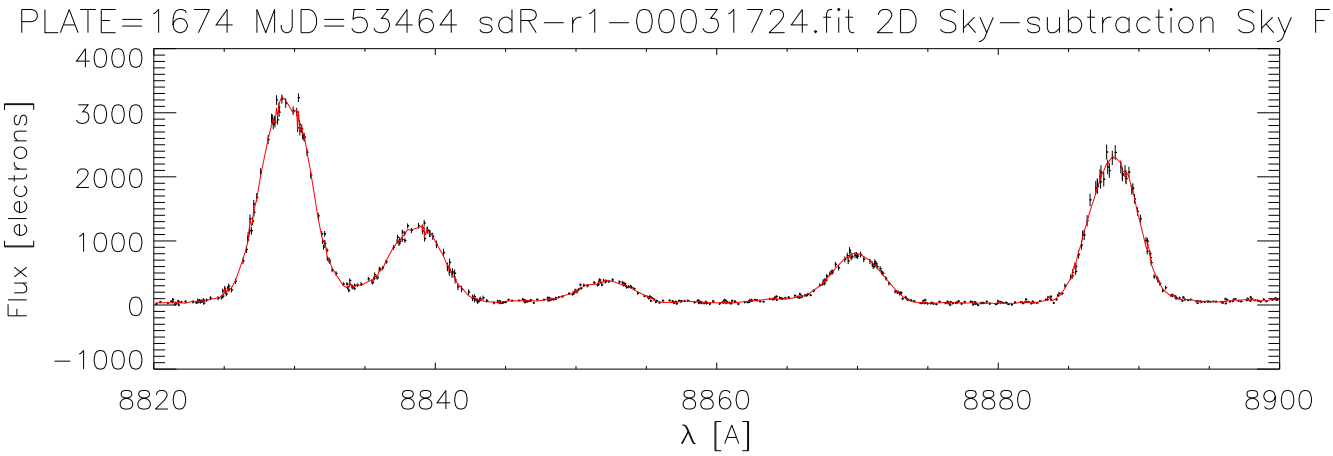

PLATE=1674 MJD=53464 sdR-r1-00031724.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

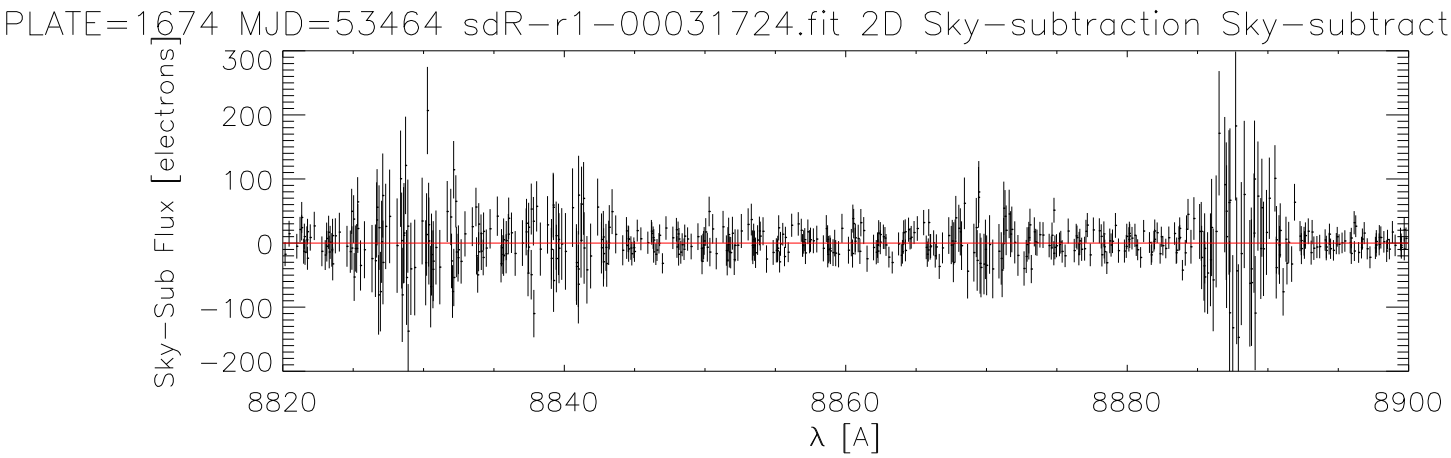

PLATE=1674 MJD=53464 sdR-r1-00031724.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

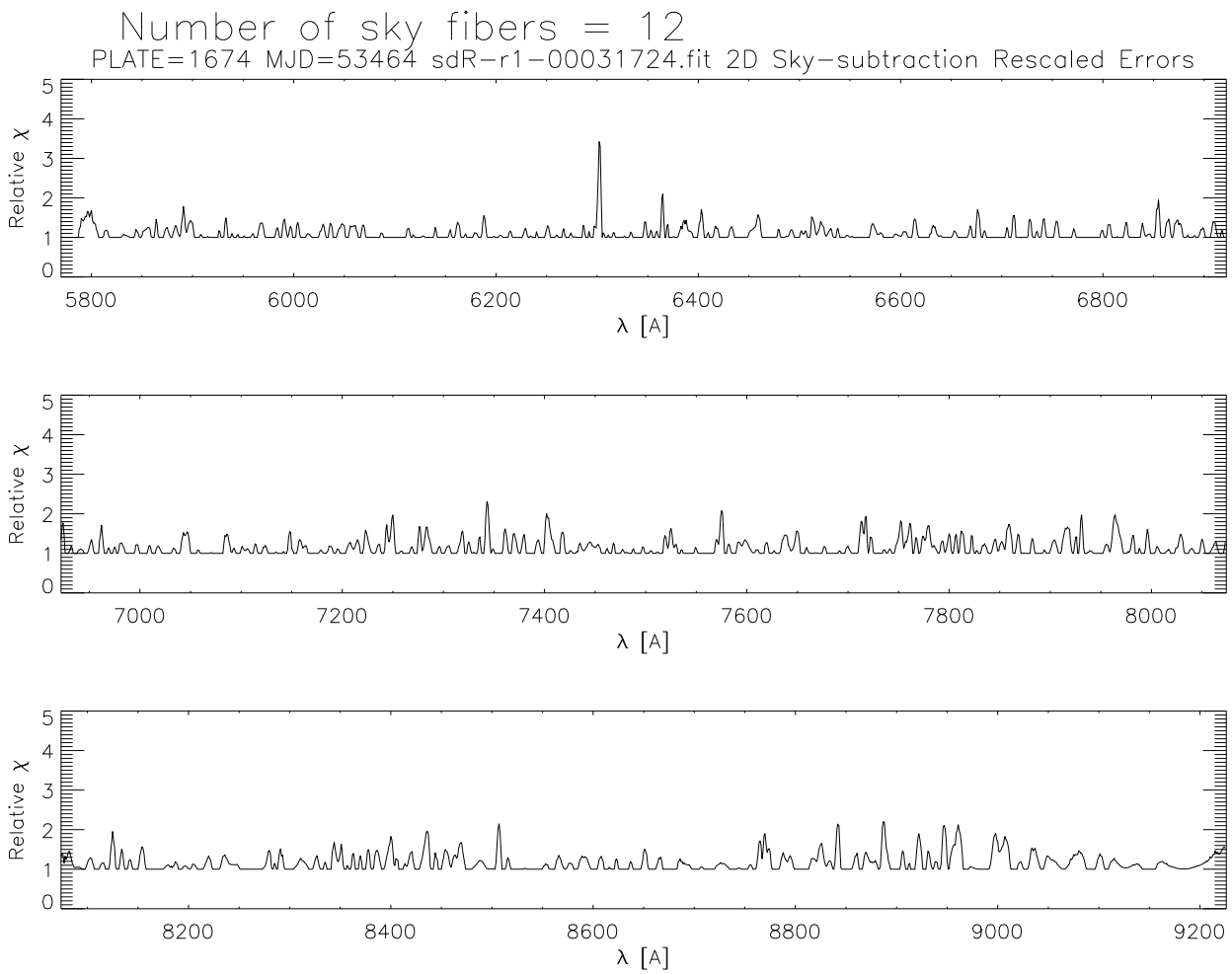

PLATE=1674 MJD=53464 sdR-r1-00031724.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

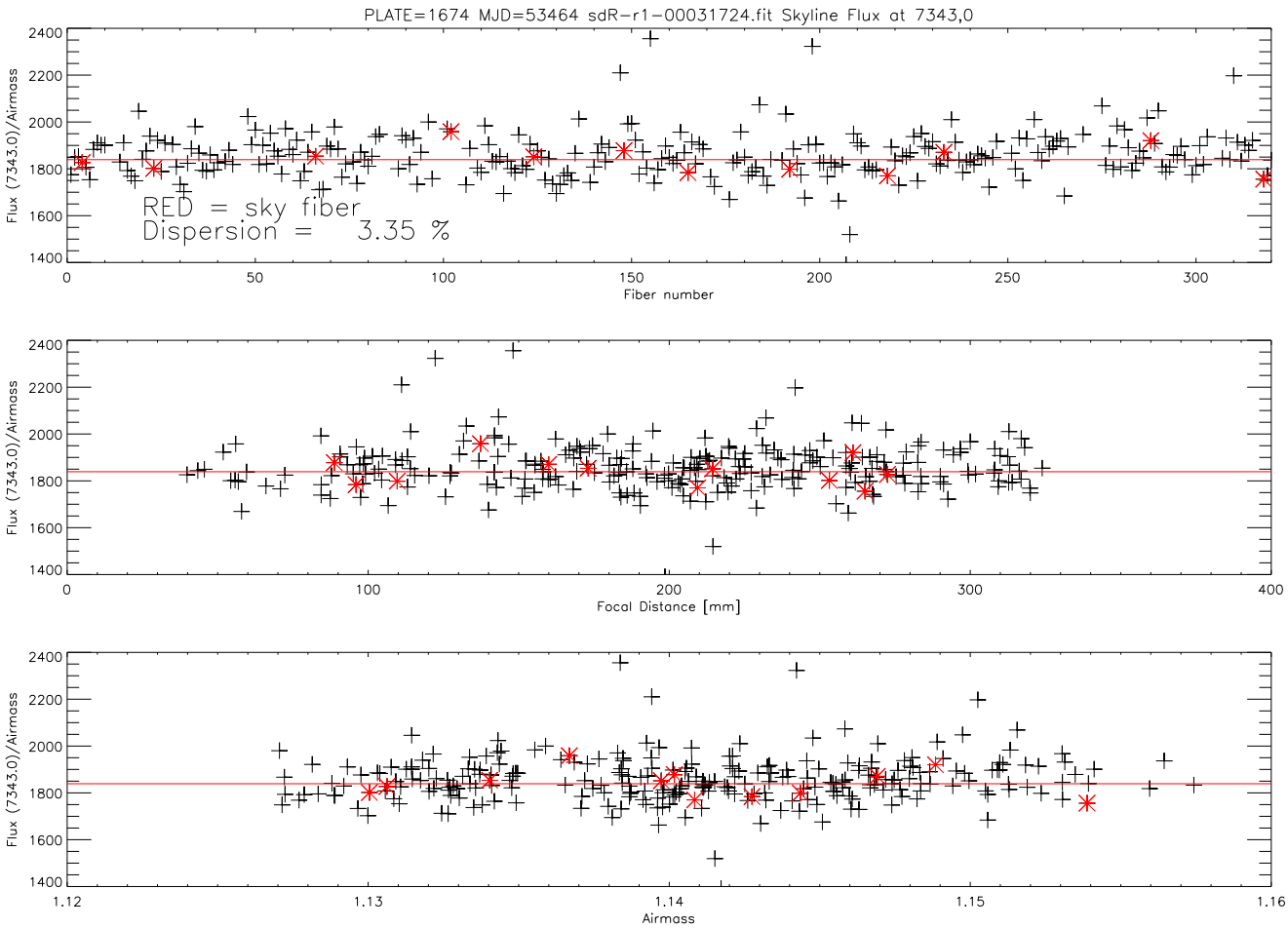

Number of sky fibers = 12
PLATE=1674 MJD=53464 sdR-r1-00031724.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

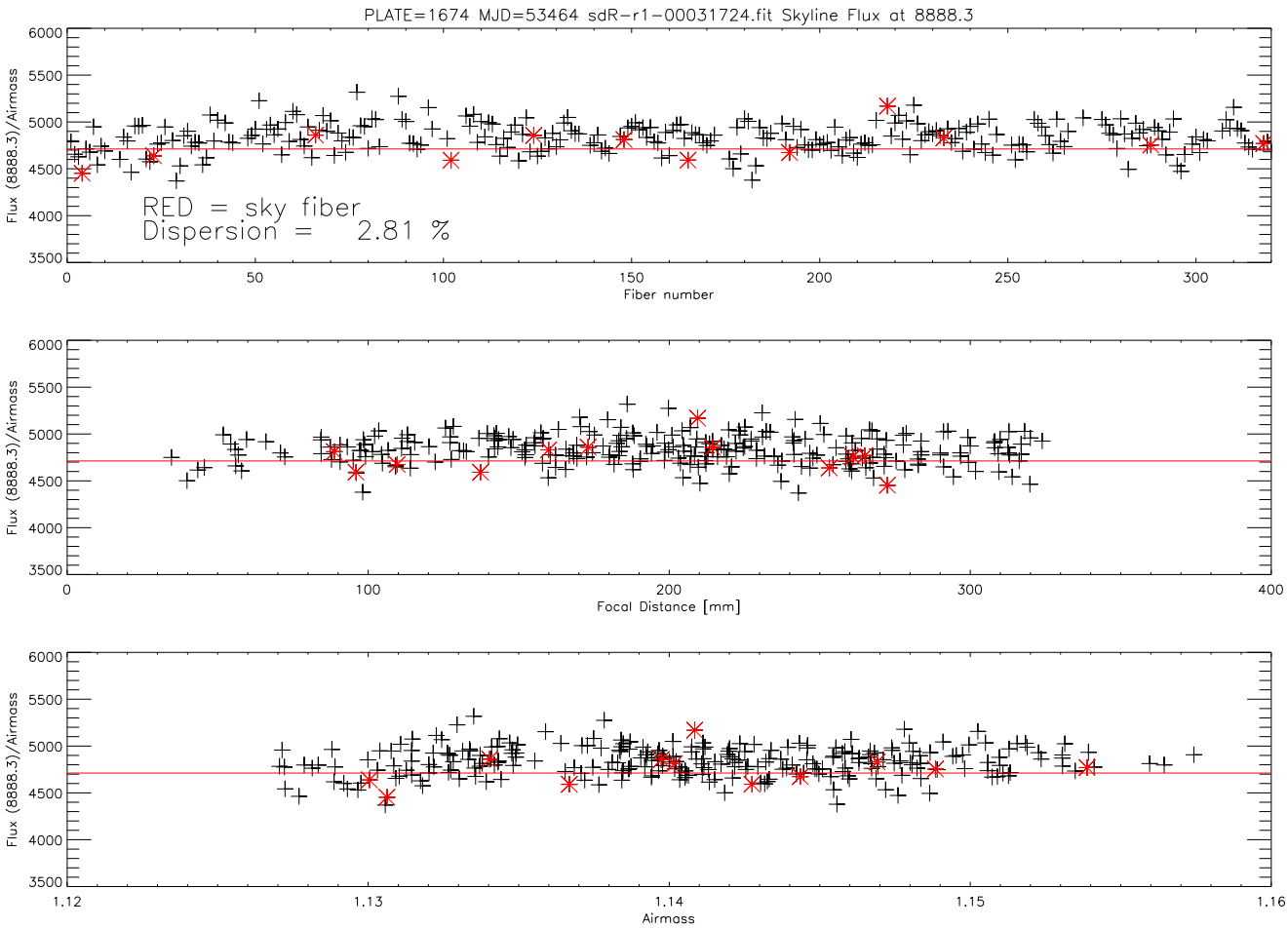

PLATE=1674 MJD=53464 sdR-r1-00031724.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

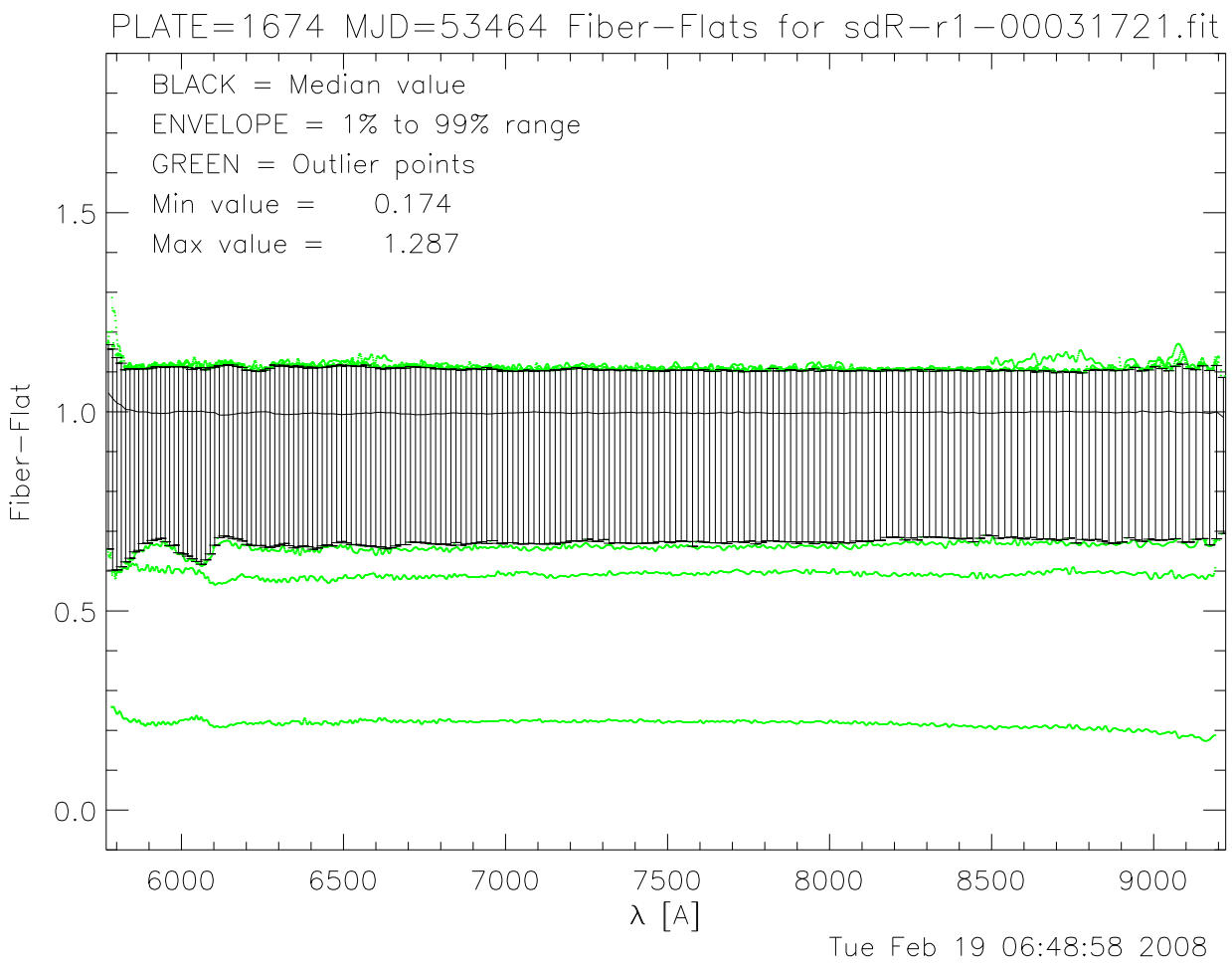

PLATE=1674 MJD=53464 sdR-r1-00031724.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

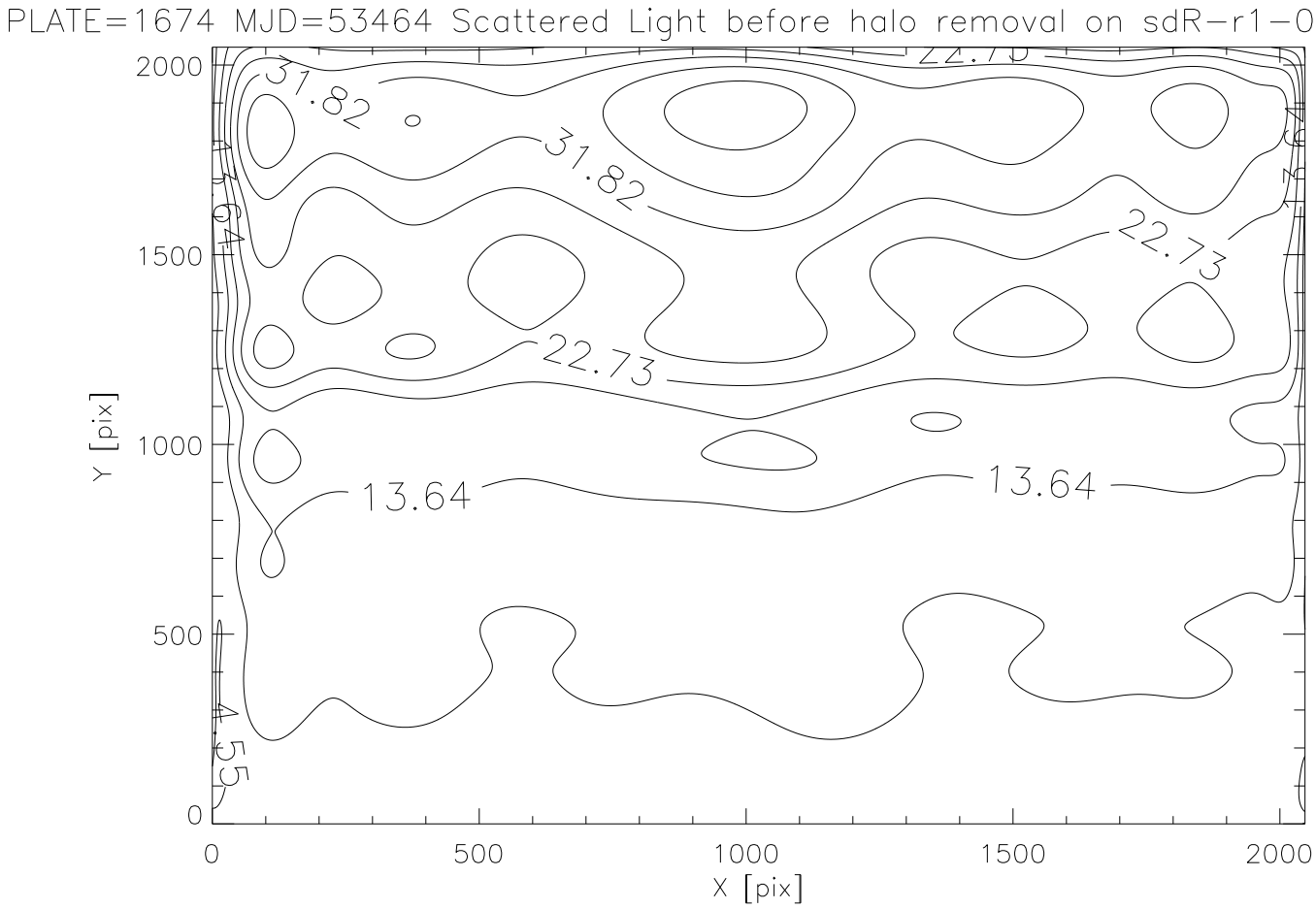

PLATE=1674 MJD=53464 sdR-r1-00031724.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

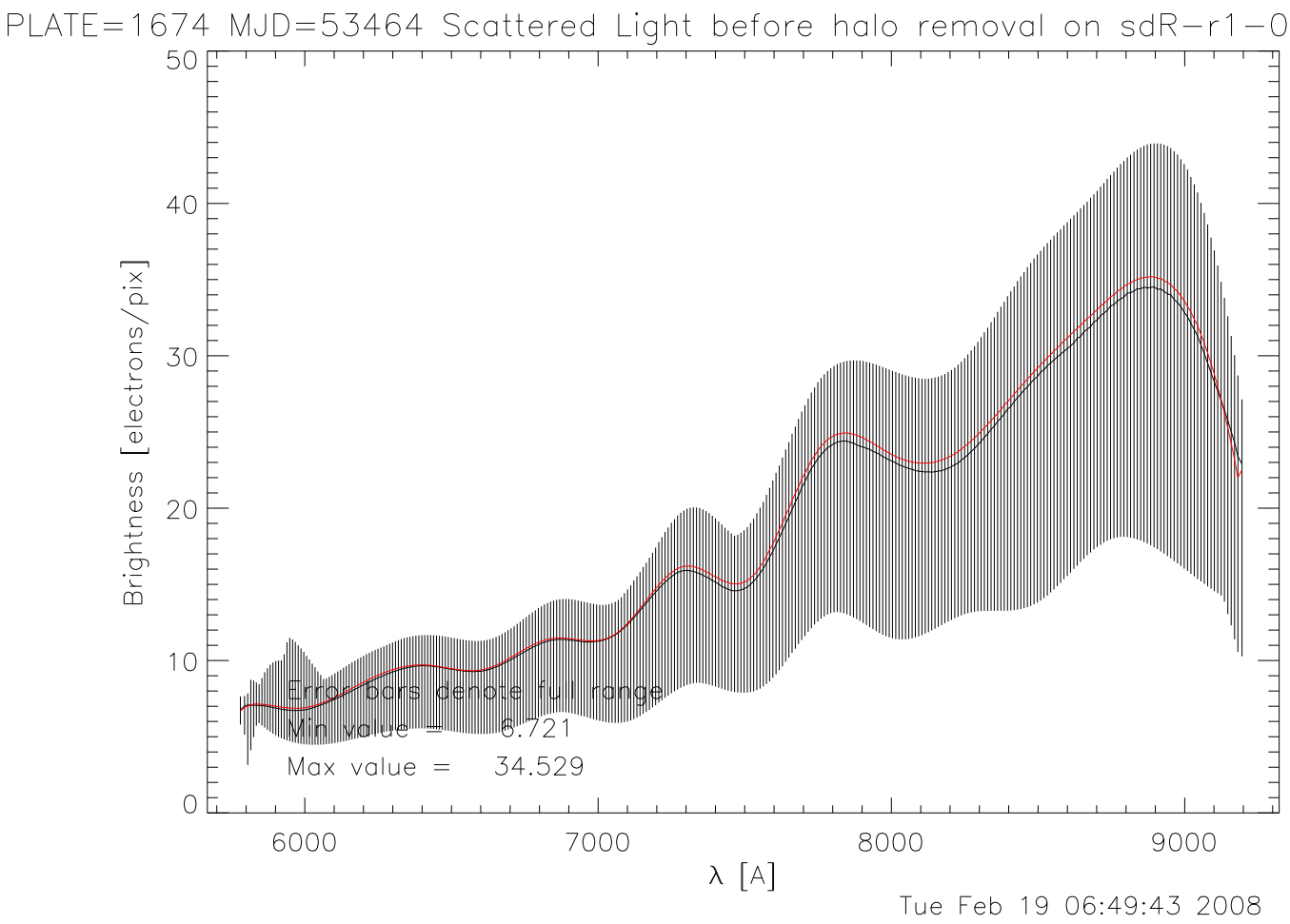

Number of sky fibers = 12
PLATE=1674 MJD=53464 sdR-r1-00031724.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

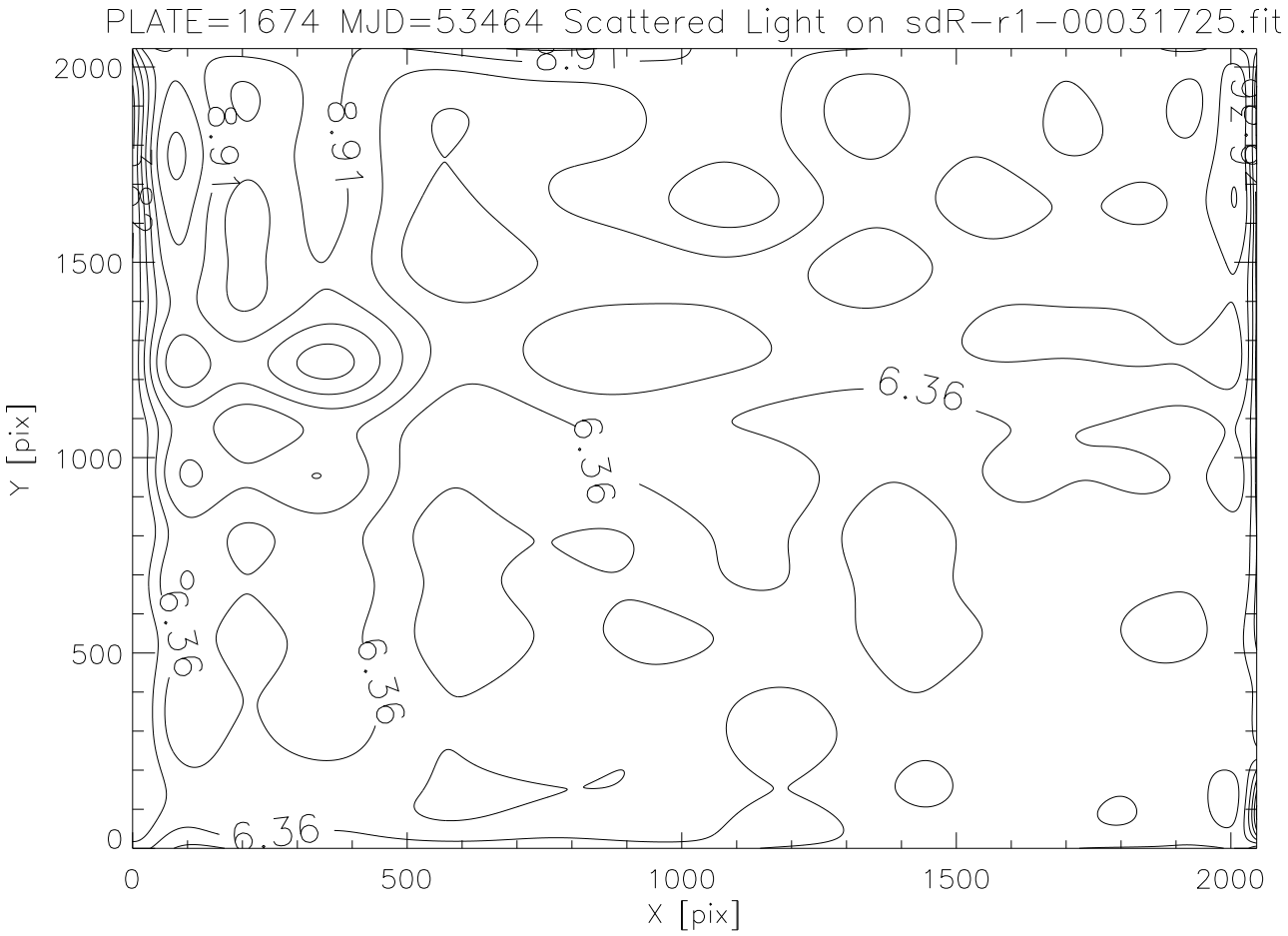

PLATE=1674 MJD=53464 sdR-r1-00031724.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.35 %
Fiber number
Focal Distance [mm]
Airmass

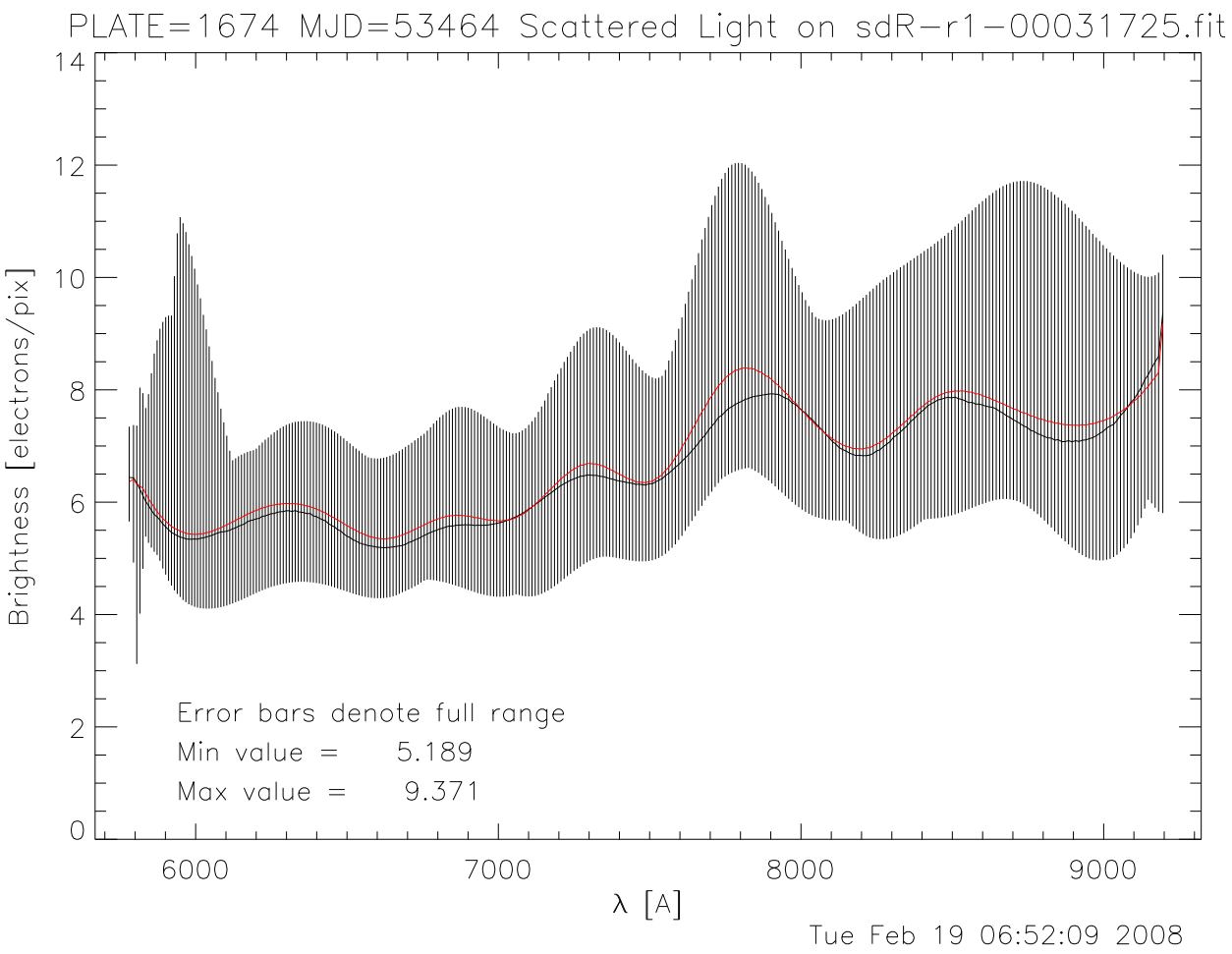

PLATE=1674 MJD=53464 sdR-r1-00031724.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.81 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

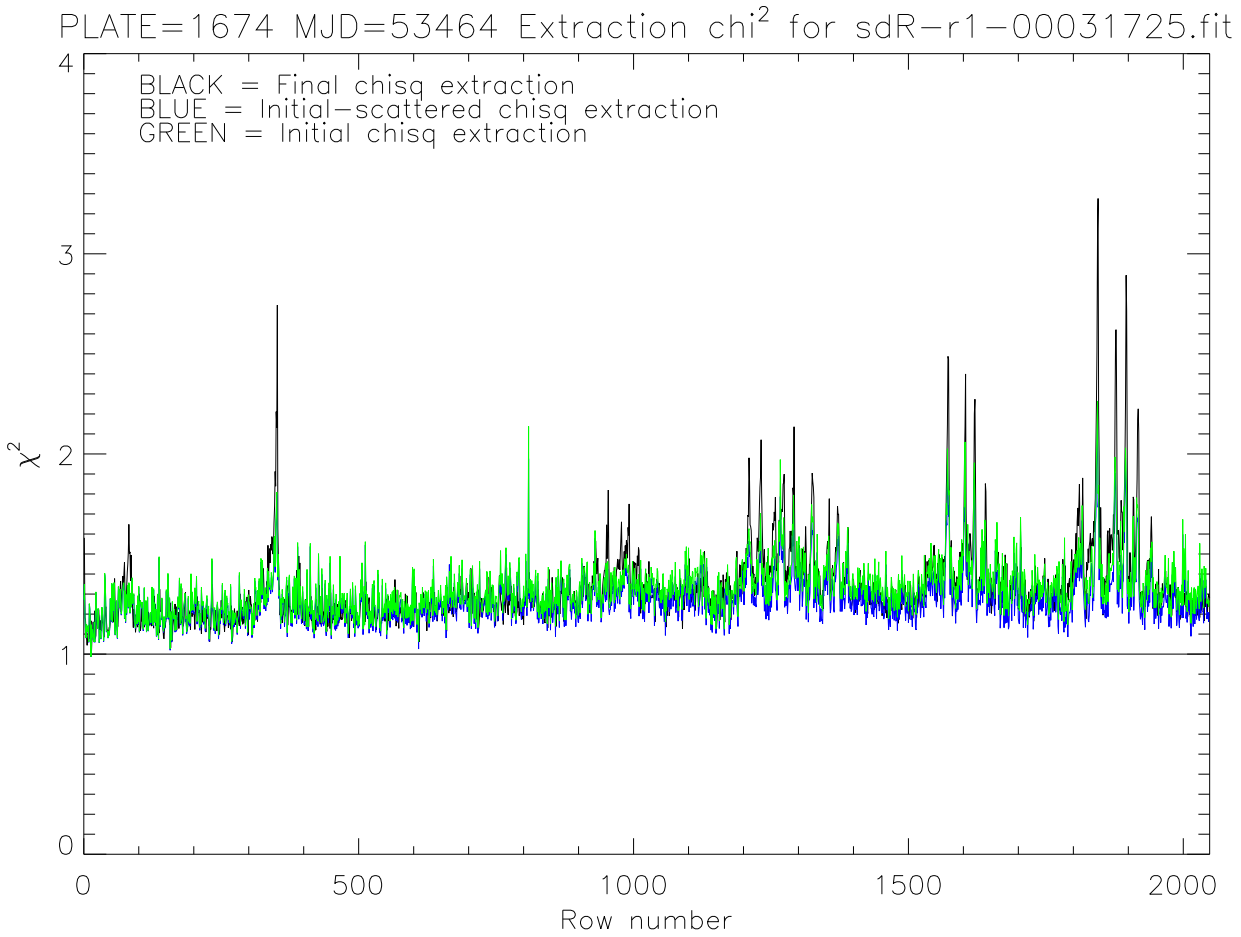

PLATE=1674 MJD=53464 Fiber−Flats for sdR−r1−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.174
Max value = 1.287
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 06:48:58 2008

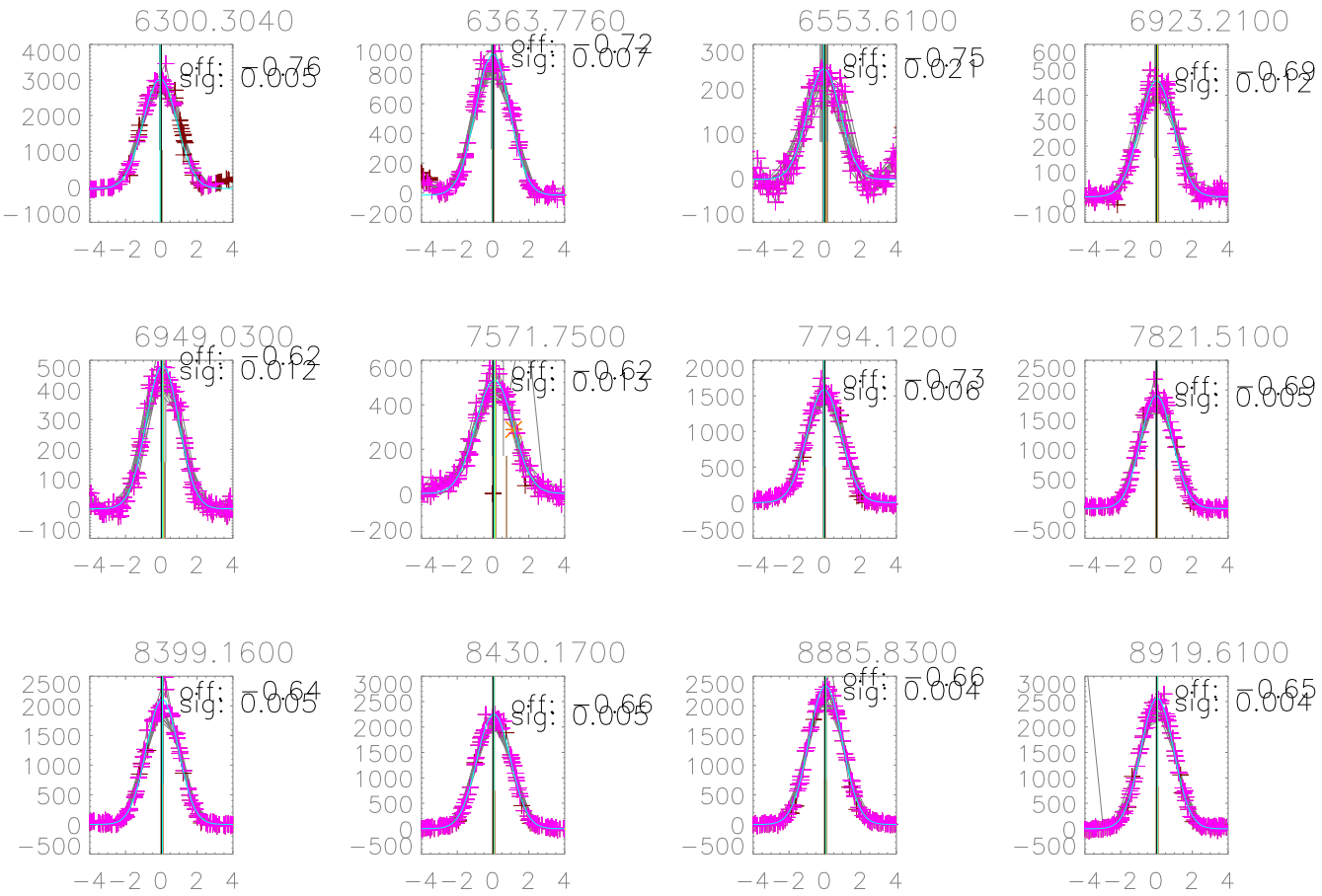

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r1-00031725.fi
31.82
31.82
22.73
22.73
13.64
13.64
4.55
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

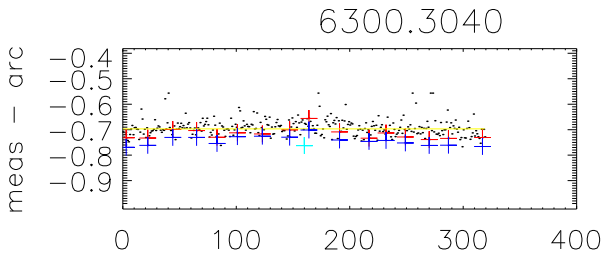

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r1-00031725.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.721
Max value = 34.529
Tue Feb 19 06:49:43 2008

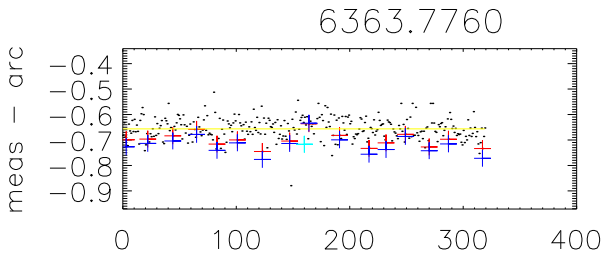

PLATE=1674 MJD=53464 Scattered Light on sdR-r1-00031725.fit
8.91
8.91
8.91
8.91
6.36
6.36
6.36
6.36
6.36
Y [pix]
X [pix]
0
500
1000
1500
2000

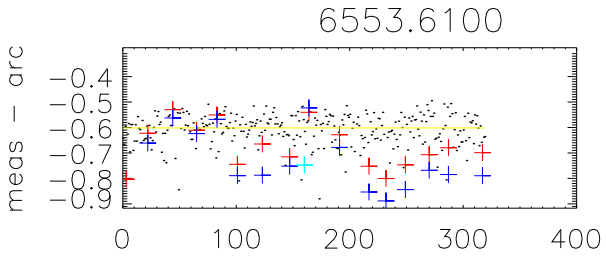

PLATE=1674 MJD=53464 Scattered Light on sdR-r1-00031725.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.189
Max value = 9.371
Tue Feb 19 06:52:09 2008

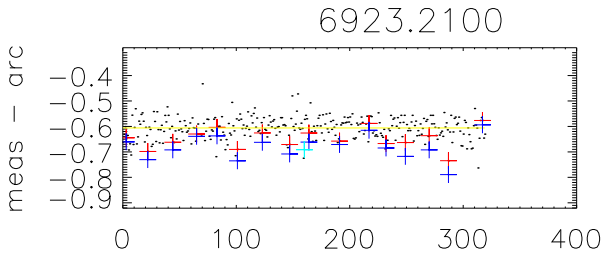

PLATE=1674 MJD=53464 Extraction chi^2 for sdR−r1−00031725.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

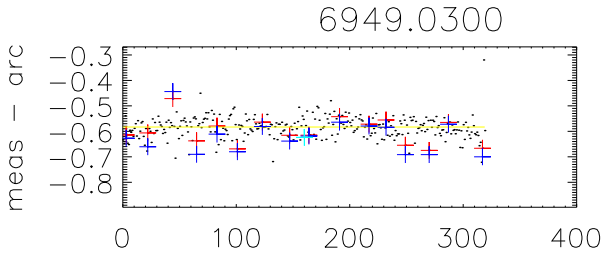

6300.3040
off: −0.76
sig: 0.005
6363.7760
off: −0.72
sig: 0.007
6553.6100
off: −0.75
sig: 0.021
6923.2100
off: −0.69
sig: 0.012
6949.0300
off: −0.62
sig: 0.012
7571.7500
off: −0.62
sig: 0.013
7794.1200
off: −0.73
sig: 0.006
7821.5100
off: −0.69
sig: 0.005
8399.1600
off: −0.64
sig: 0.005
8430.1700
off: −0.66
sig: 0.005
8885.8300
off: −0.66
sig: 0.004
8919.6100
off: −0.65
sig: 0.004

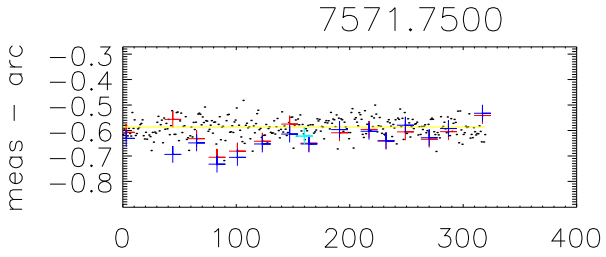

6300.3040
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

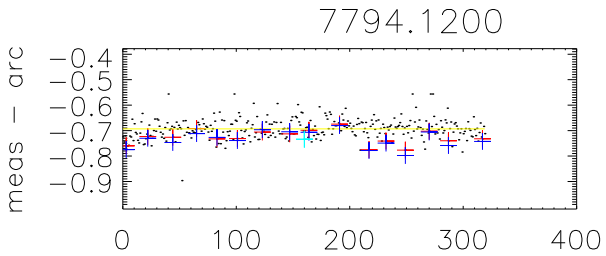

6363.7760
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

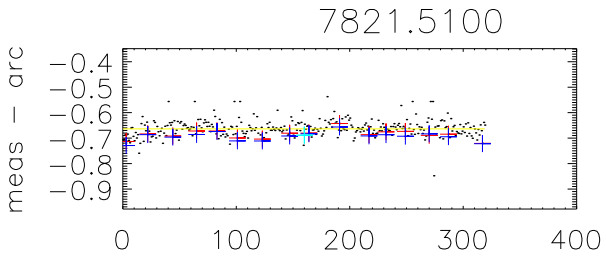

6553.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

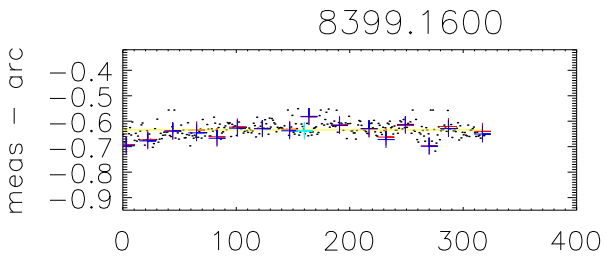

6923.2100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

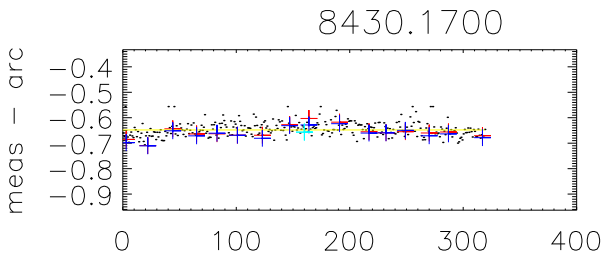

6949.0300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

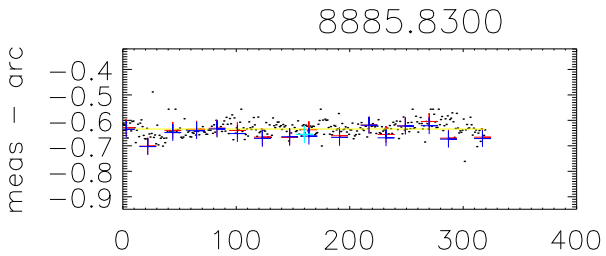

7571.7500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

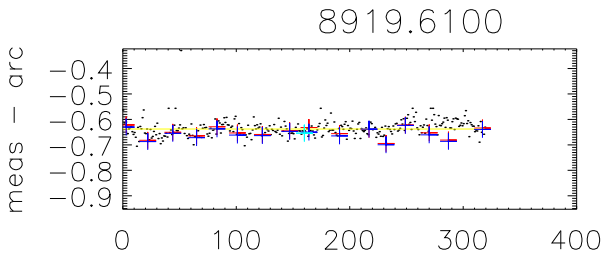

7794.1200
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

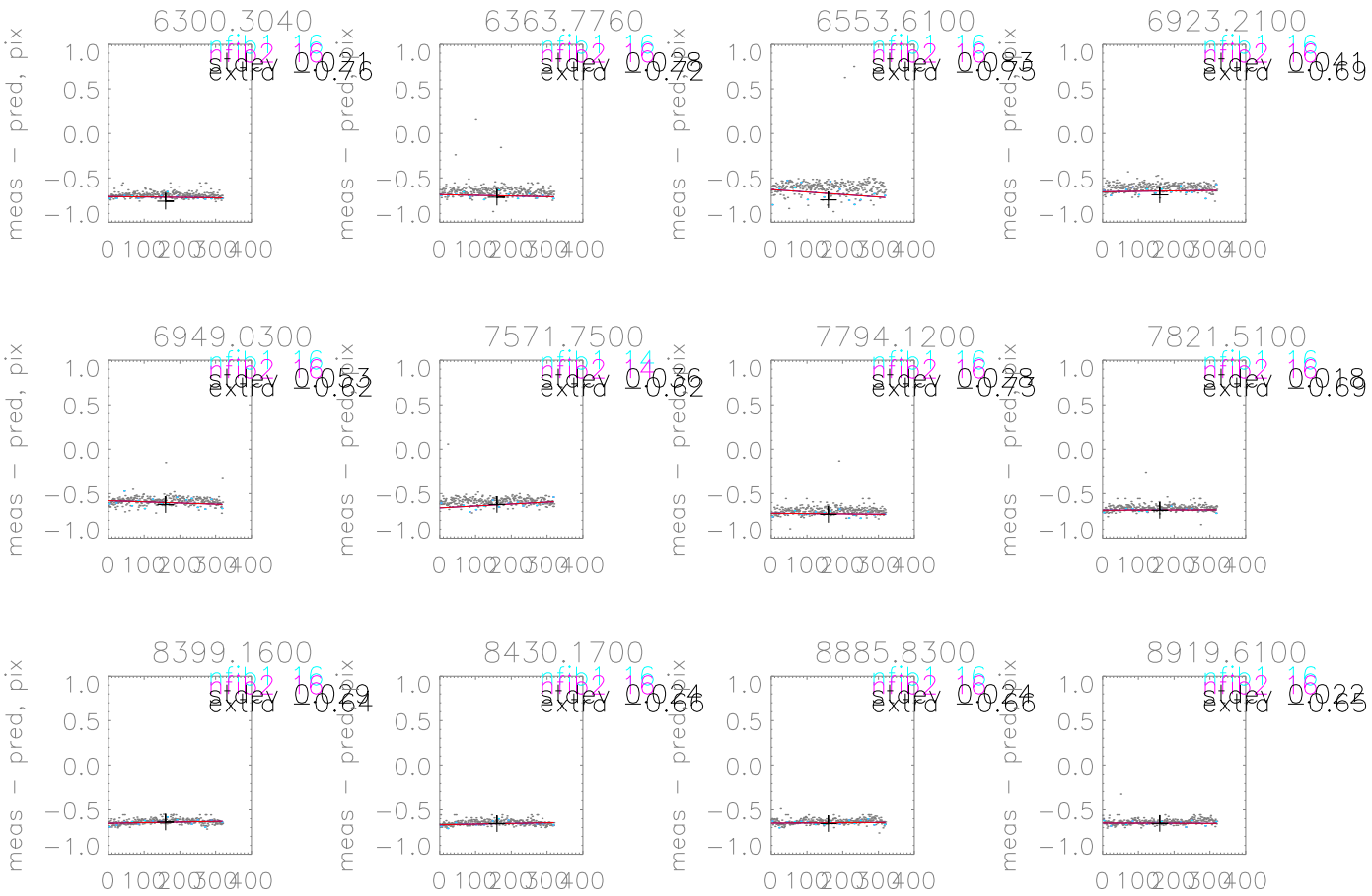

7821.5100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

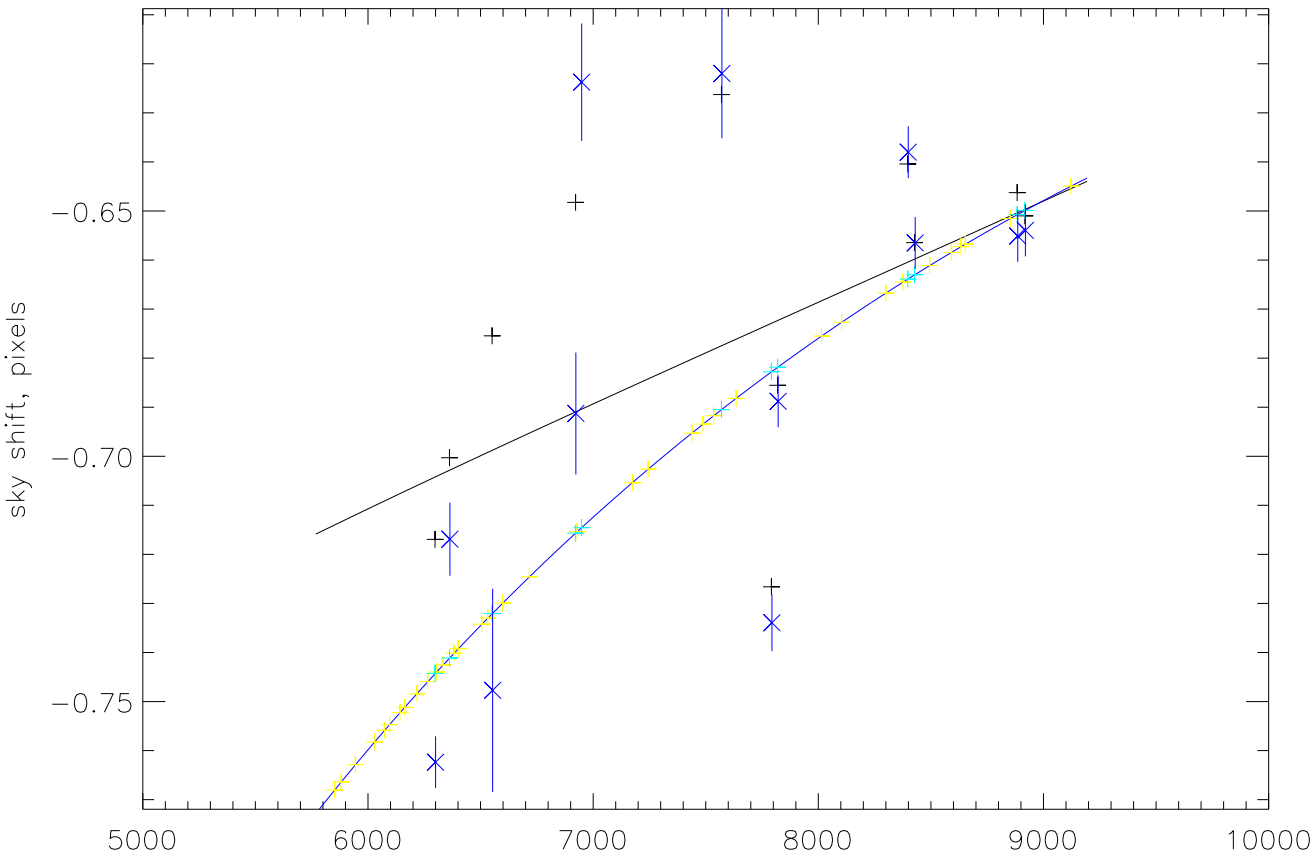

8399.1600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400


8430.1700
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

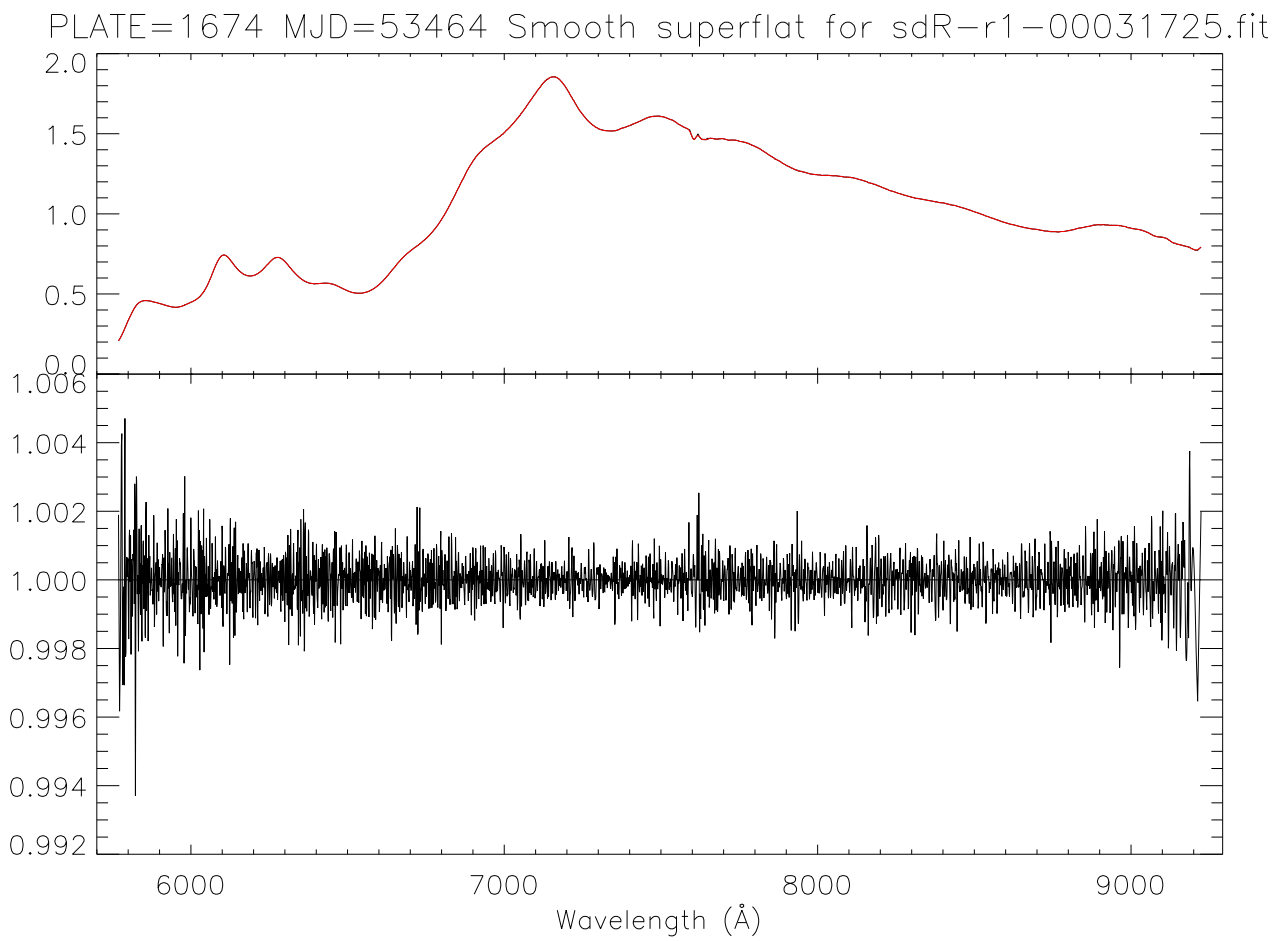

8885.8300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

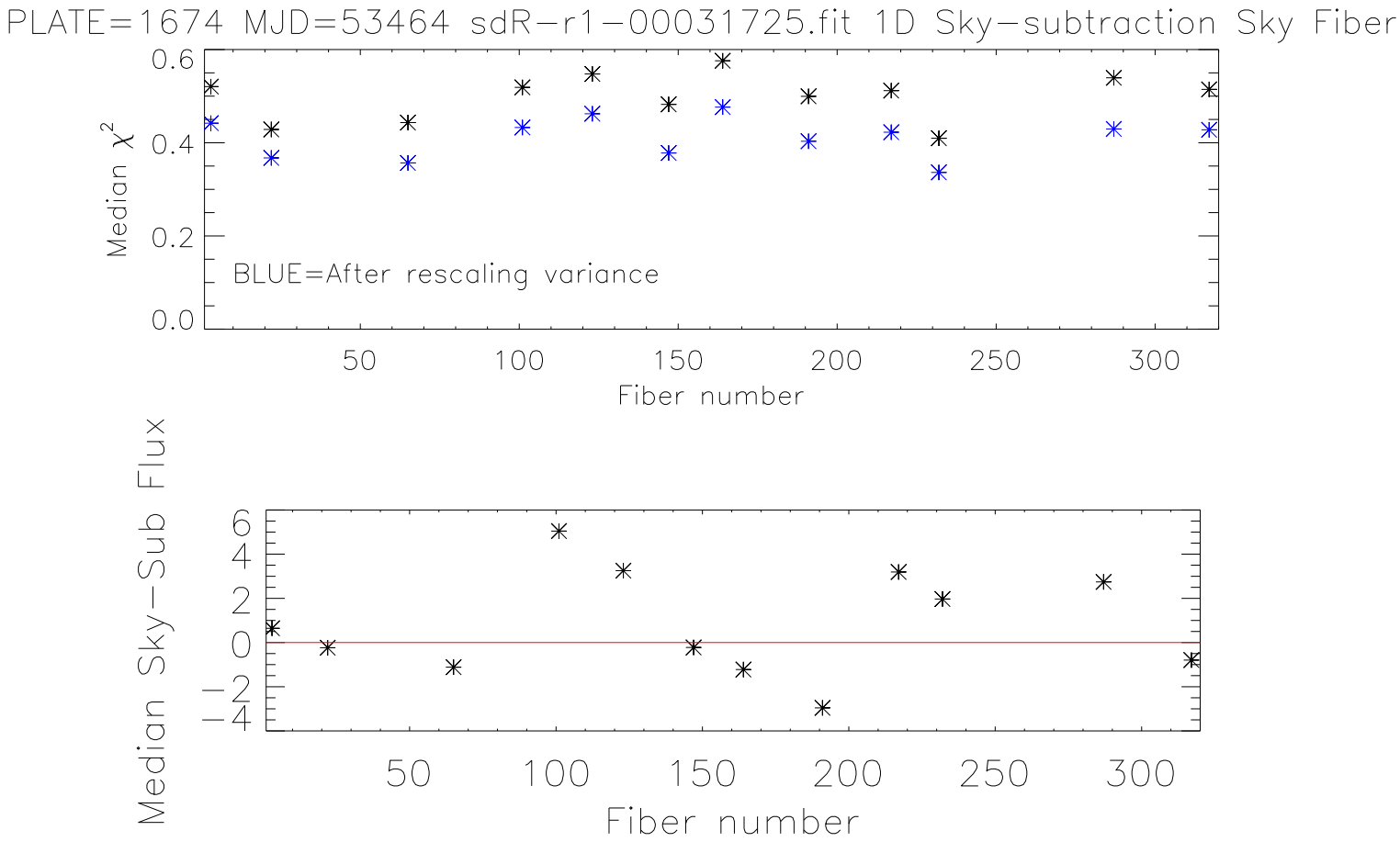

8919.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

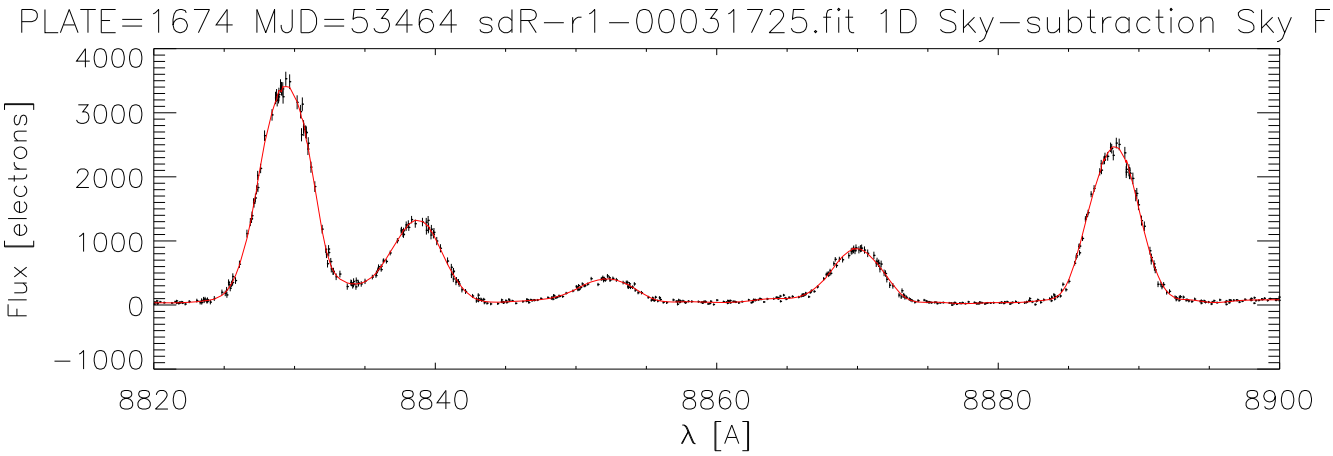

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 16
mfib2 16
stdev 0.21
extra −0.76
stdev 0.28
extra −0.72
stdev 0.83
extra −0.75
stdev 0.41
extra −0.69
mfib1 16
mfib2 16
stdev 0.53
extra −0.62
mfib1 14
mfib2 16
stdev 0.36
extra −0.62
mfib1 16
mfib2 16
stdev 0.28
extra −0.73
mfib1 16
mfib2 16
stdev 0.18
extra −0.69
mfib1 16
mfib2 16
stdev 0.29
extra −0.64
mfib1 16
mfib2 16
stdev 0.24
extra −0.66
mfib1 16
mfib2 16
stdev 0.24
extra −0.66
mfib1 16
mfib2 16
stdev 0.22
extra −0.65
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

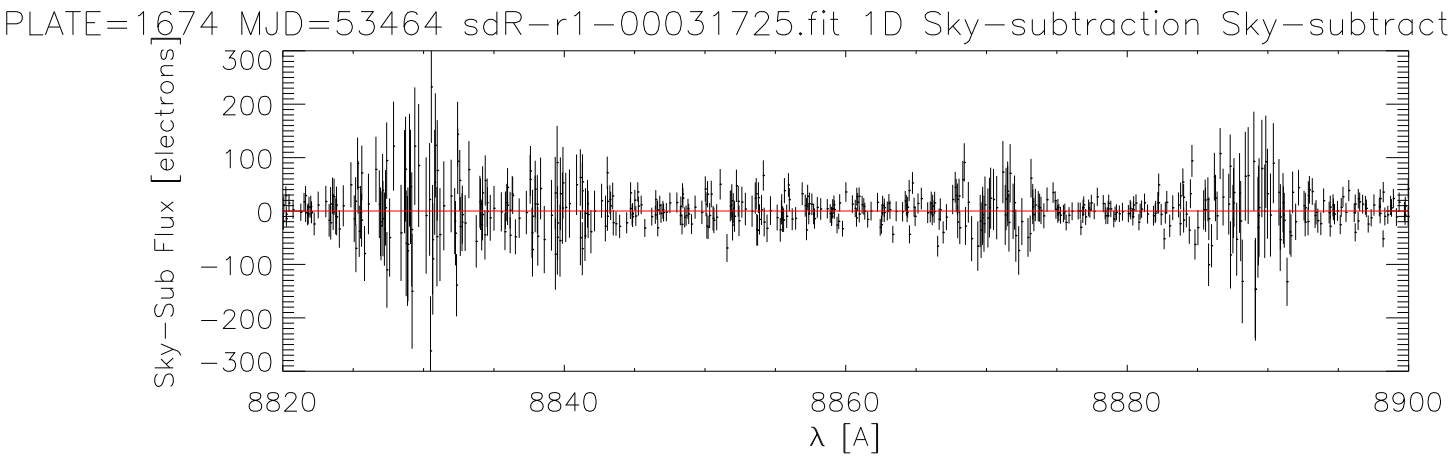

sky shift, pixels
−0.65
−0.70
−0.75
5000
6000
7000
8000
9000
10000

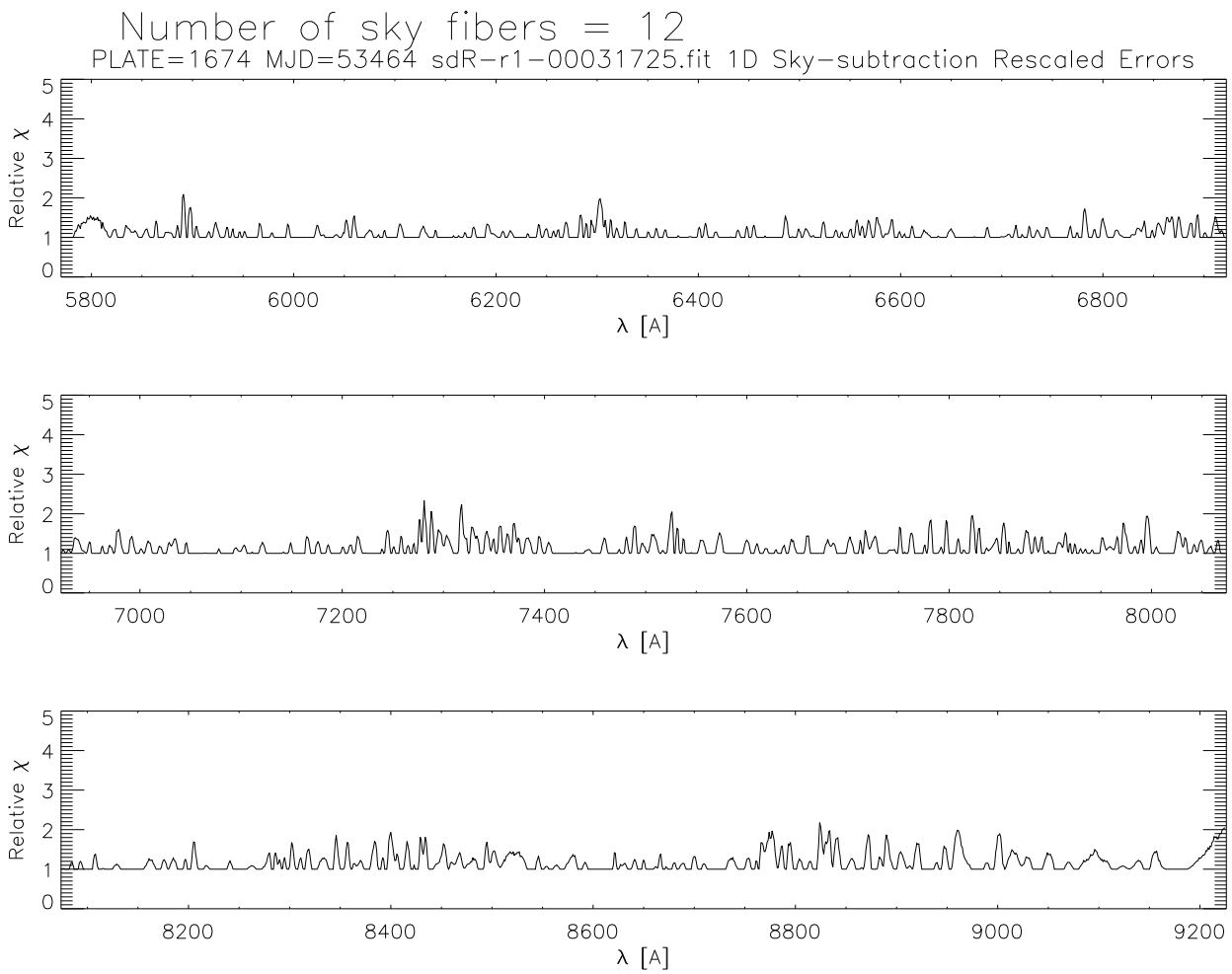
es= −0.0000

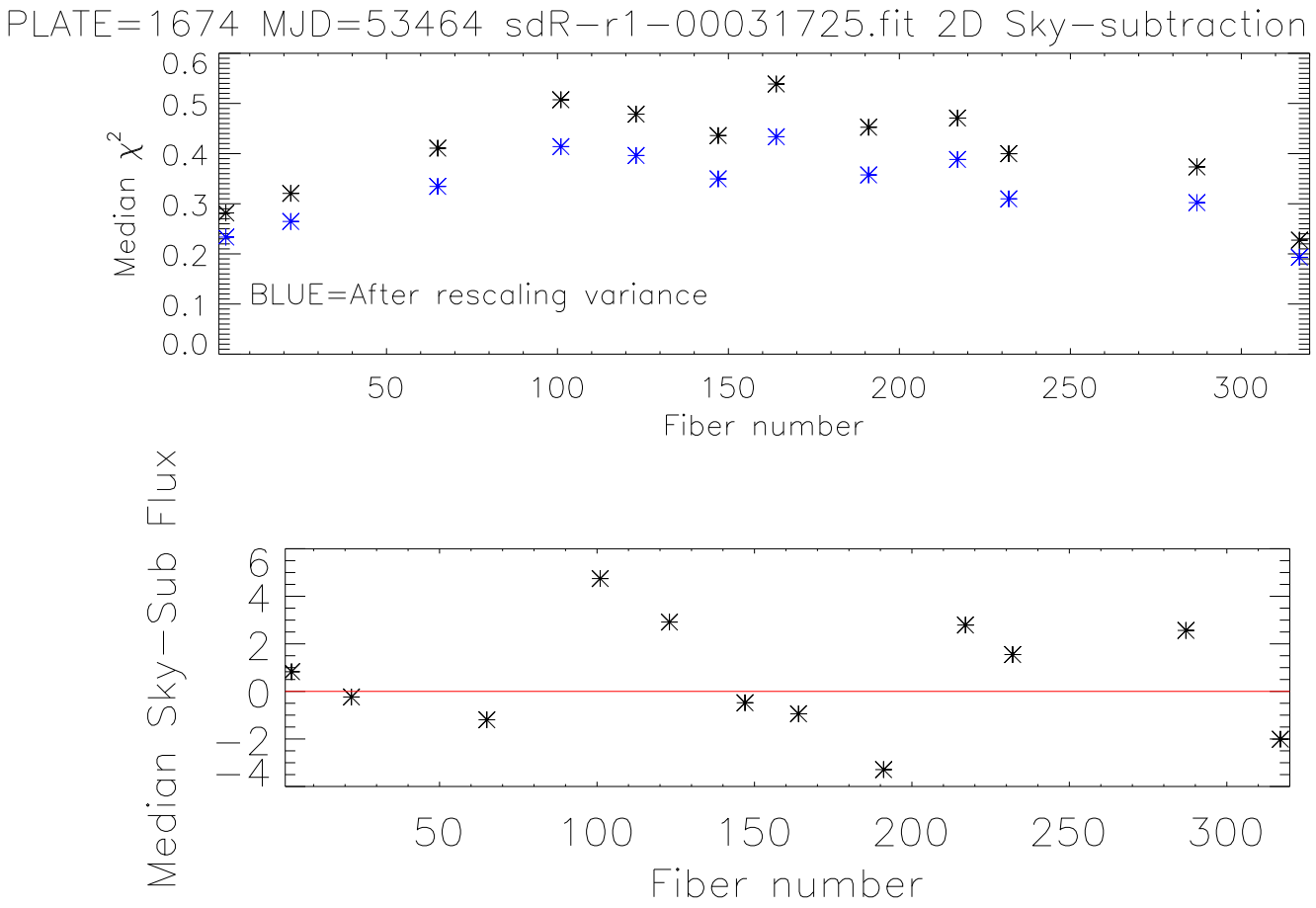

PLATE=1674 MJD=53464 Smooth superflat for sdR−r1−00031725.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

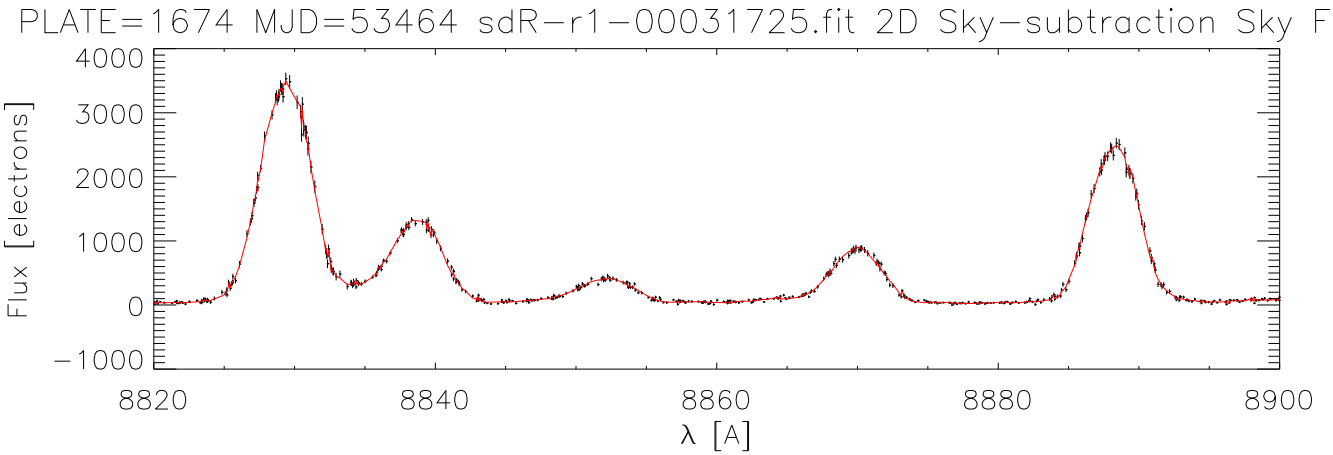

PLATE=1674 MJD=53464 sdR-r1-00031725.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

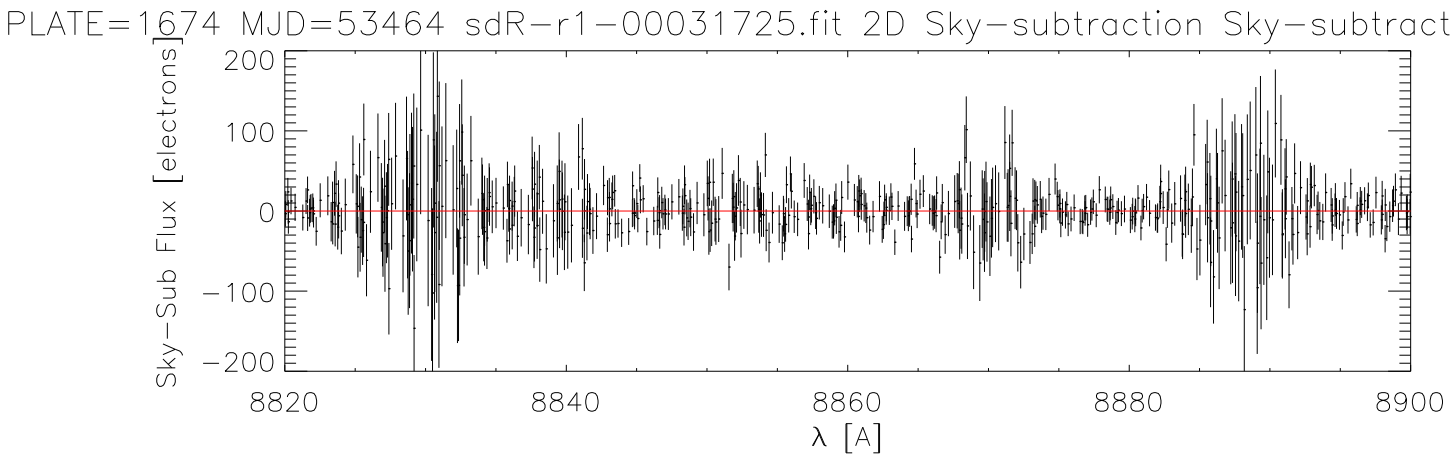

PLATE=1674 MJD=53464 sdR-r1-00031725.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

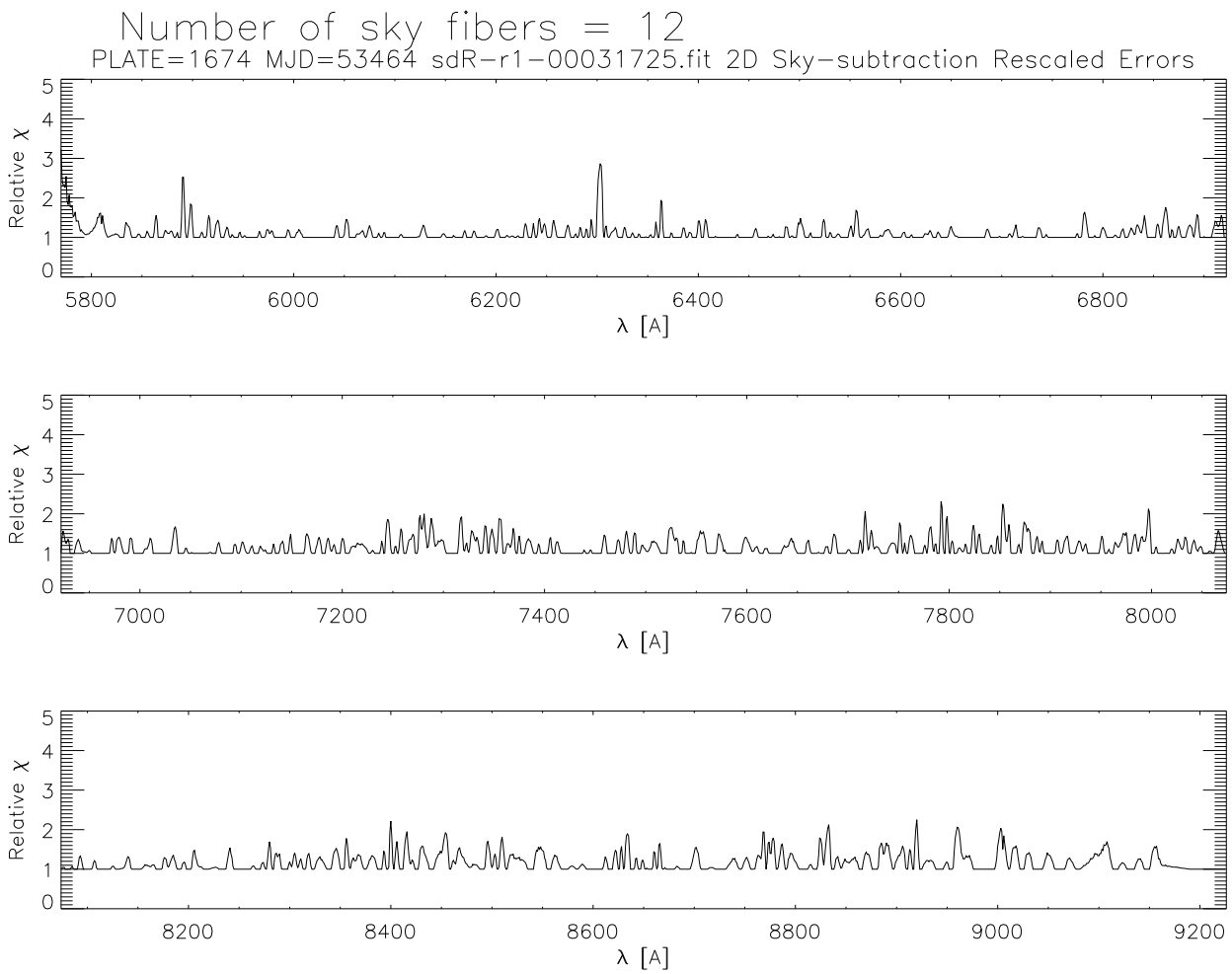

PLATE=1674 MJD=53464 sdR-r1-00031725.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

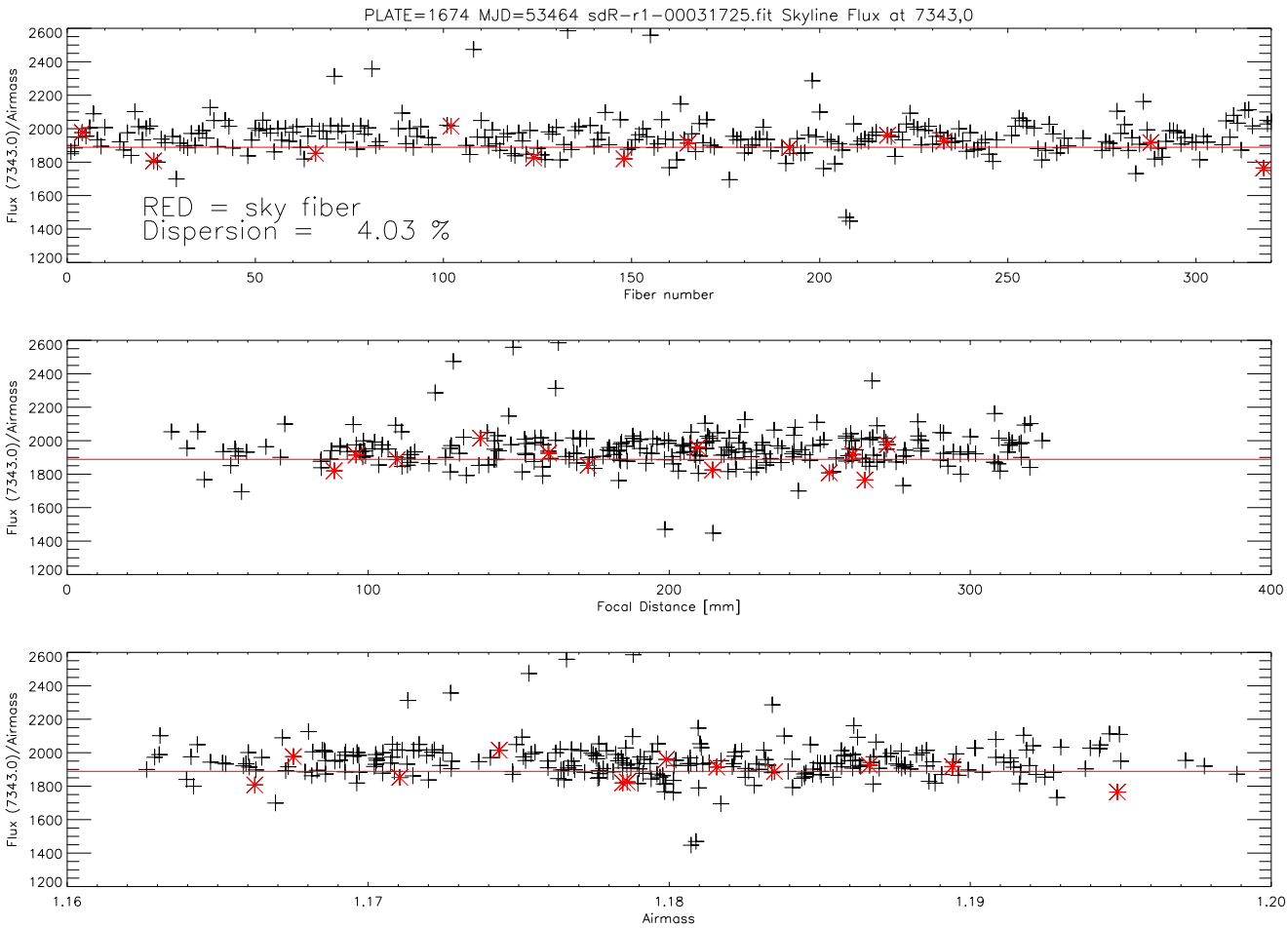

Number of sky fibers = 12
PLATE=1674 MJD=53464 sdR-r1-00031725.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

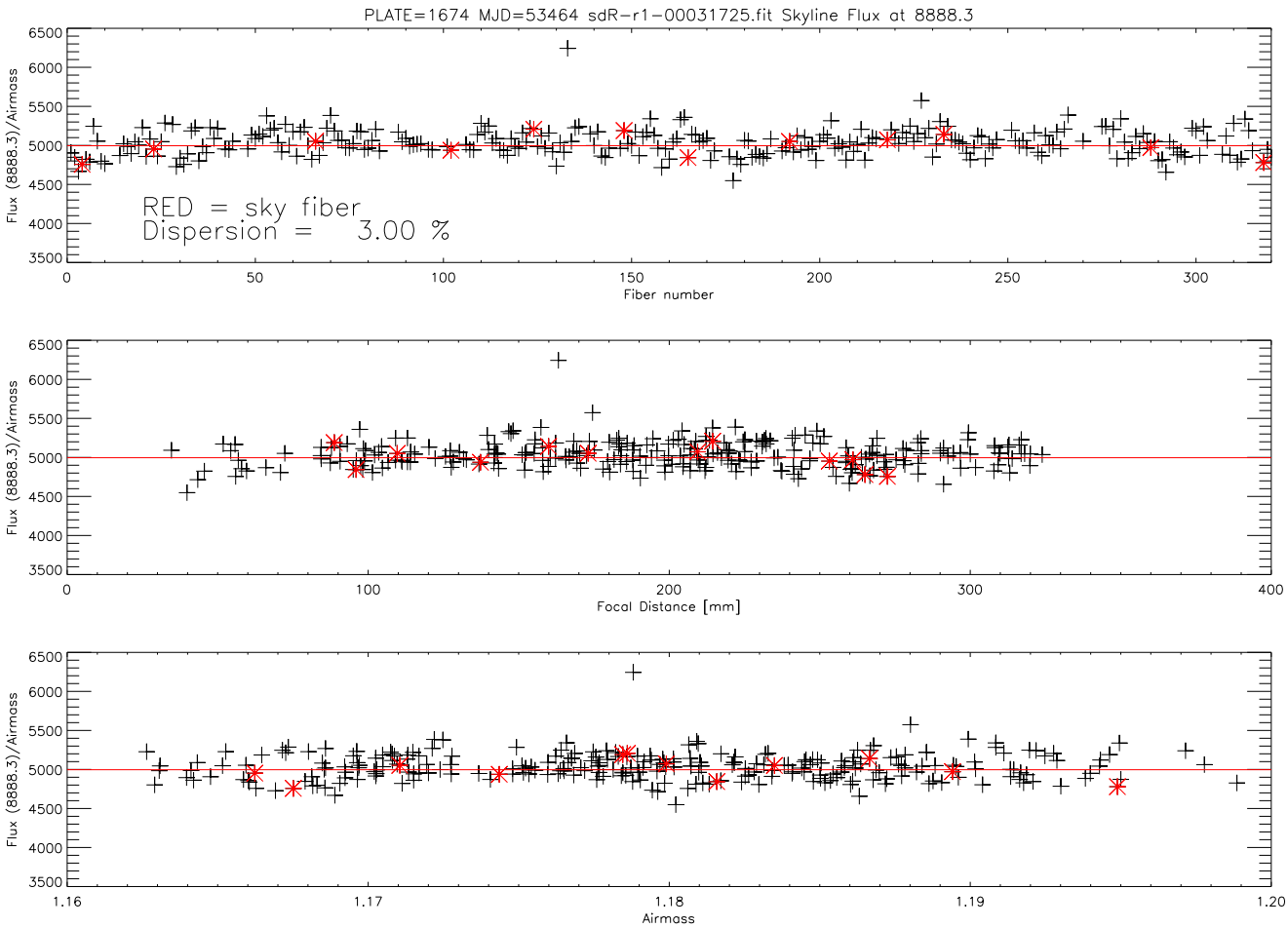

PLATE=1674 MJD=53464 sdR-r1-00031725.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

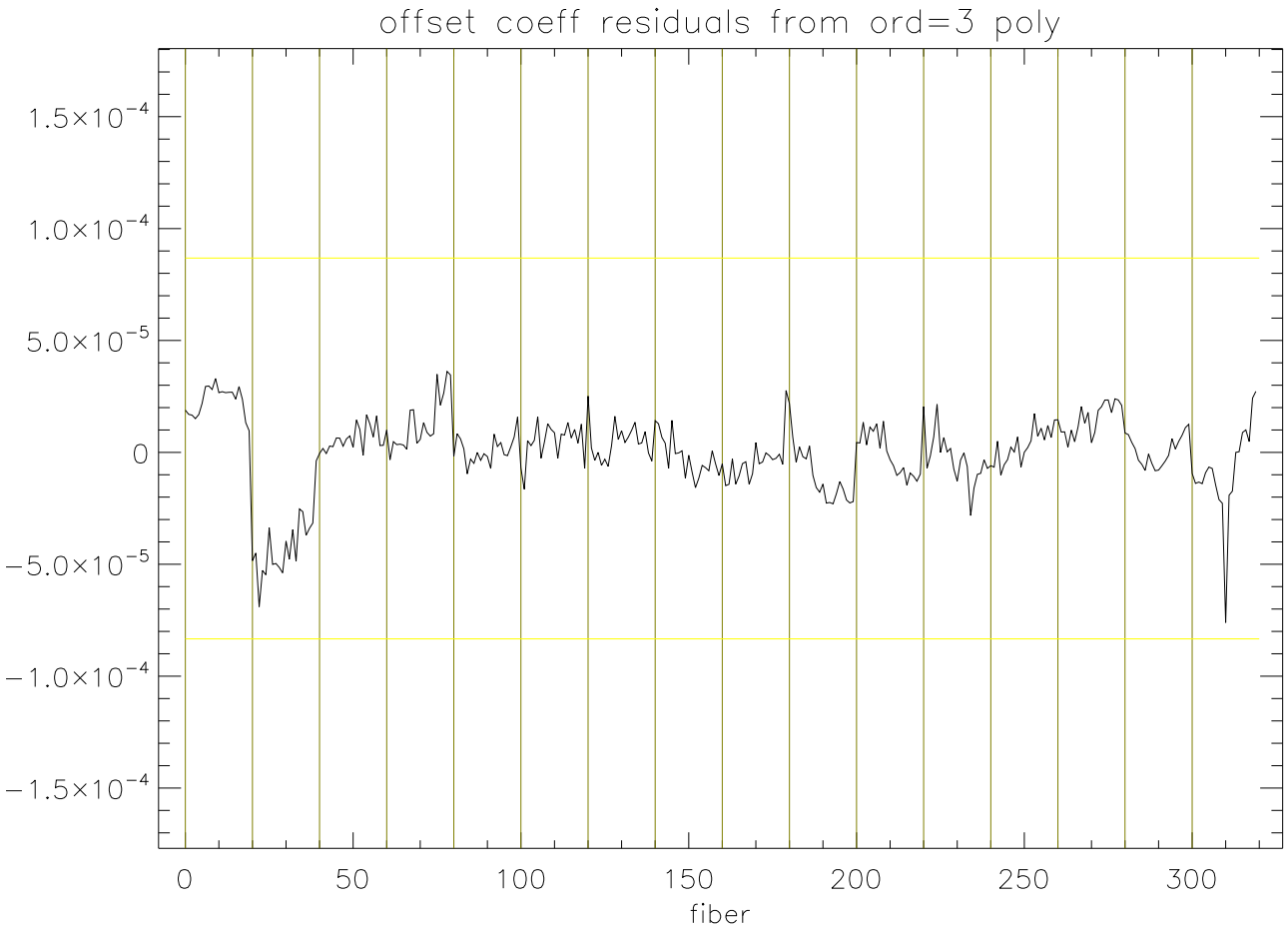

PLATE=1674 MJD=53464 sdR-r1-00031725.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

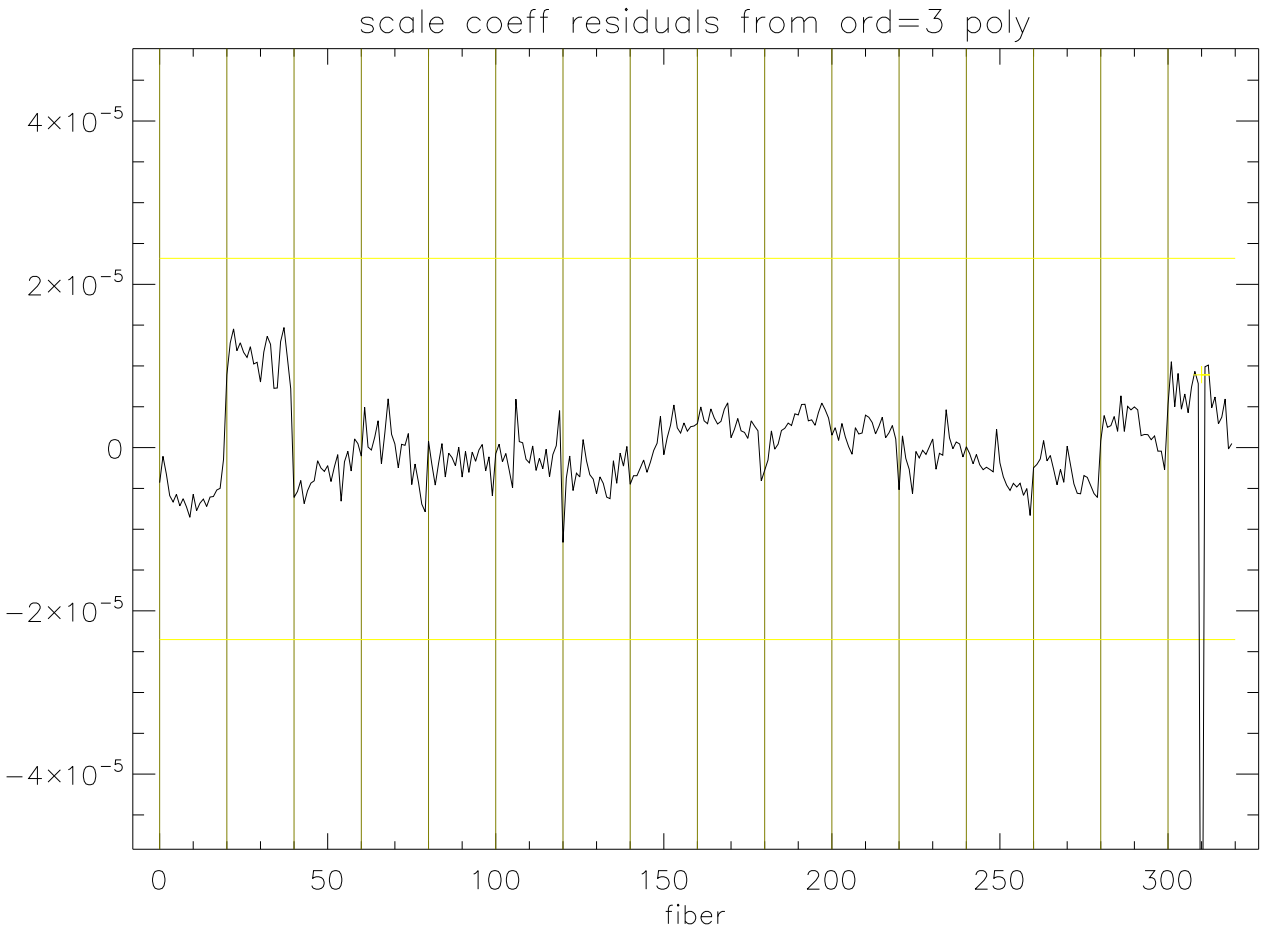

PLATE=1674 MJD=53464 sdR-r1-00031725.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

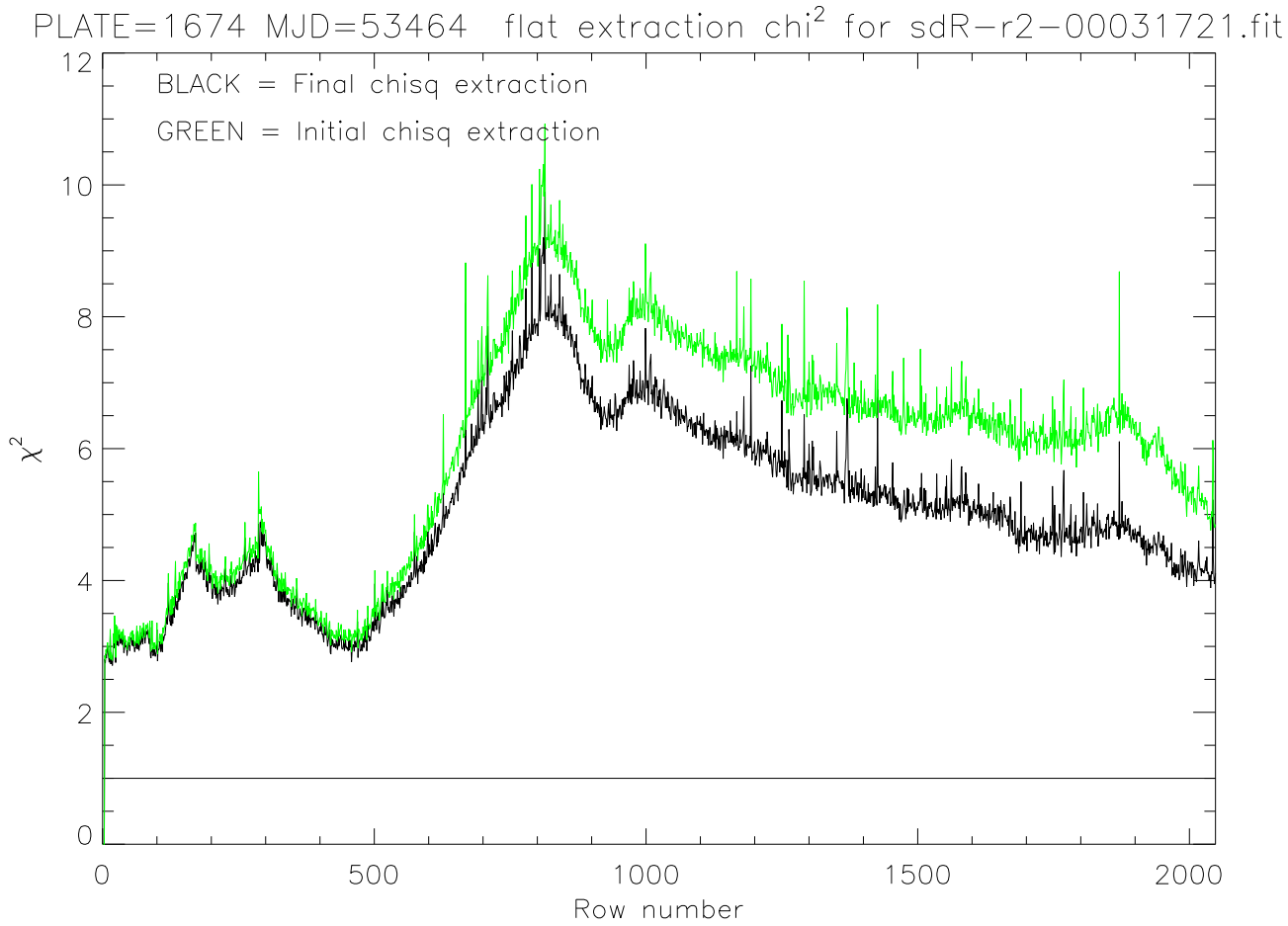

Number of sky fibers = 12
PLATE=1674 MJD=53464 sdR-r1-00031725.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

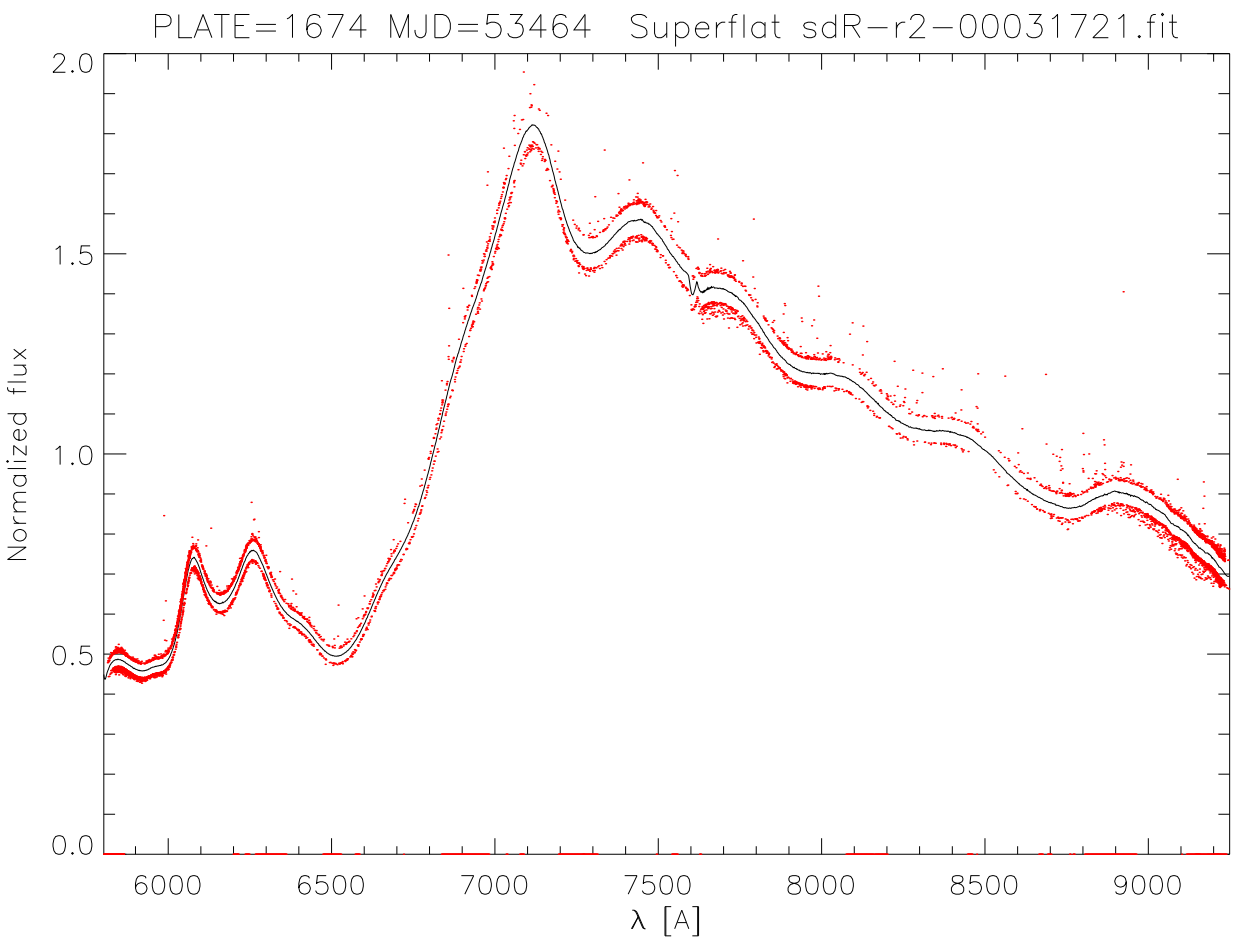

PLATE=1674 MJD=53464 sdR-r1-00031725.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.03 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

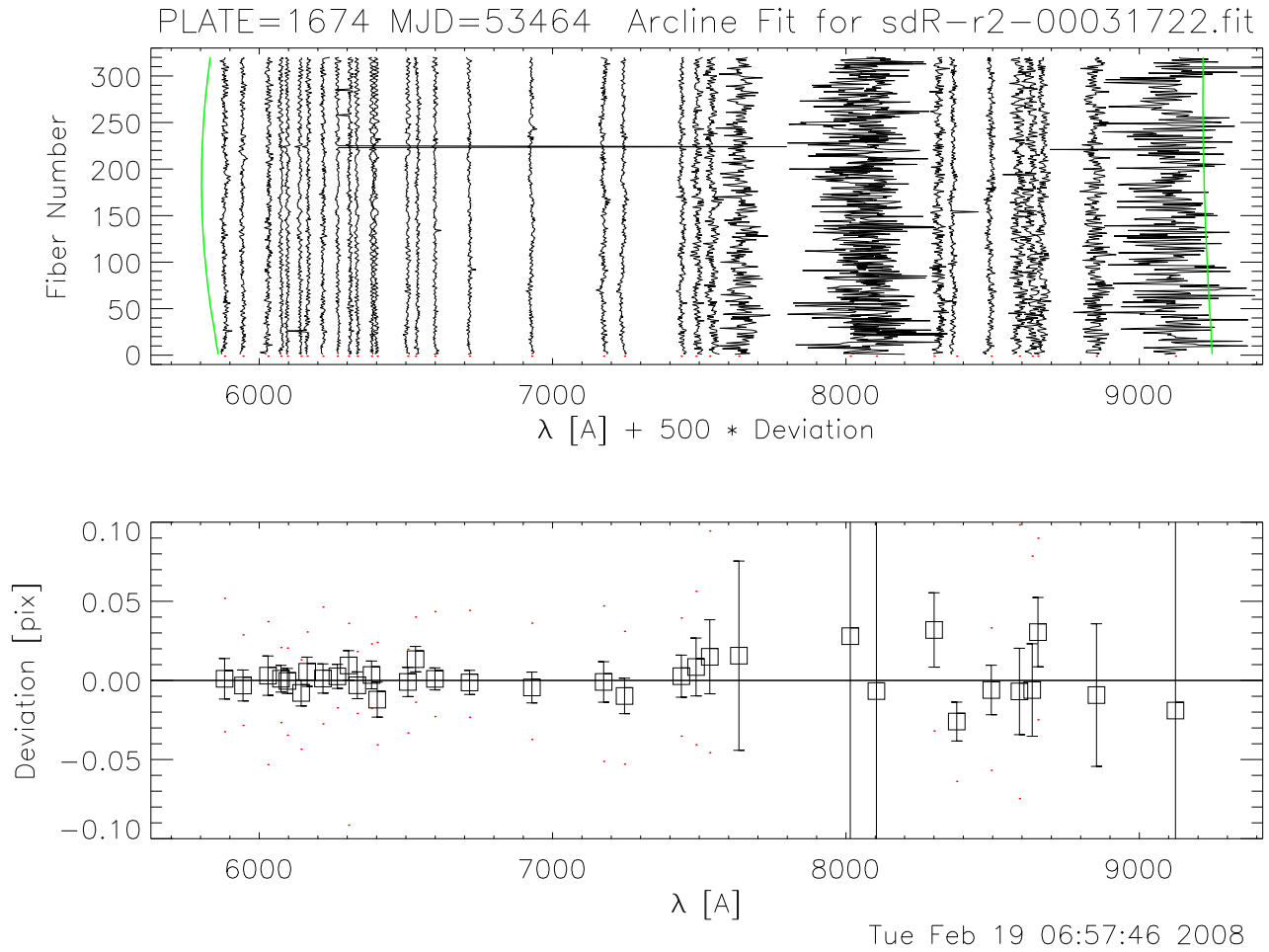

PLATE=1674 MJD=53464 sdR-r1-00031725.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.00 %
Fiber number
Focal Distance [mm]
Airmass

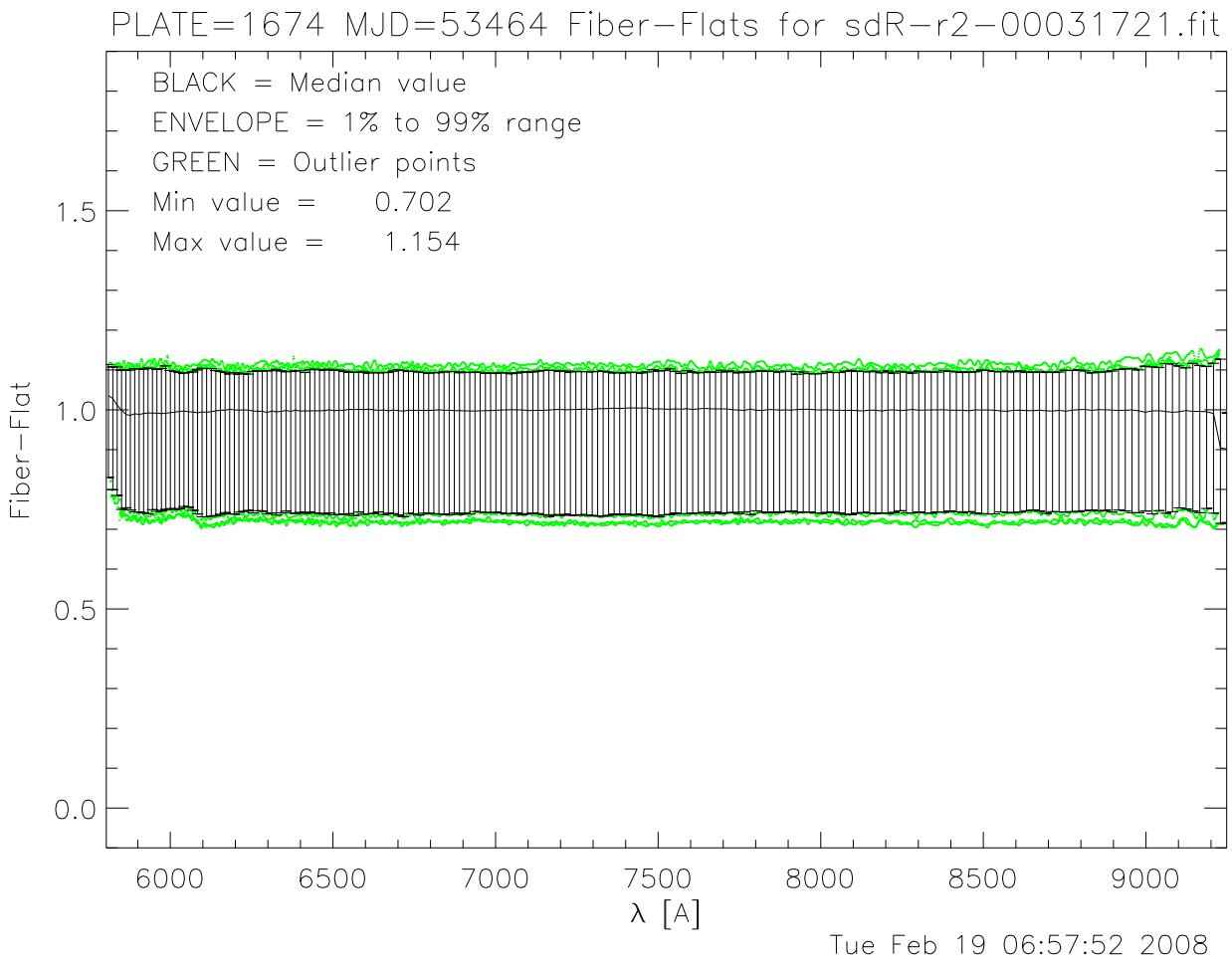

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

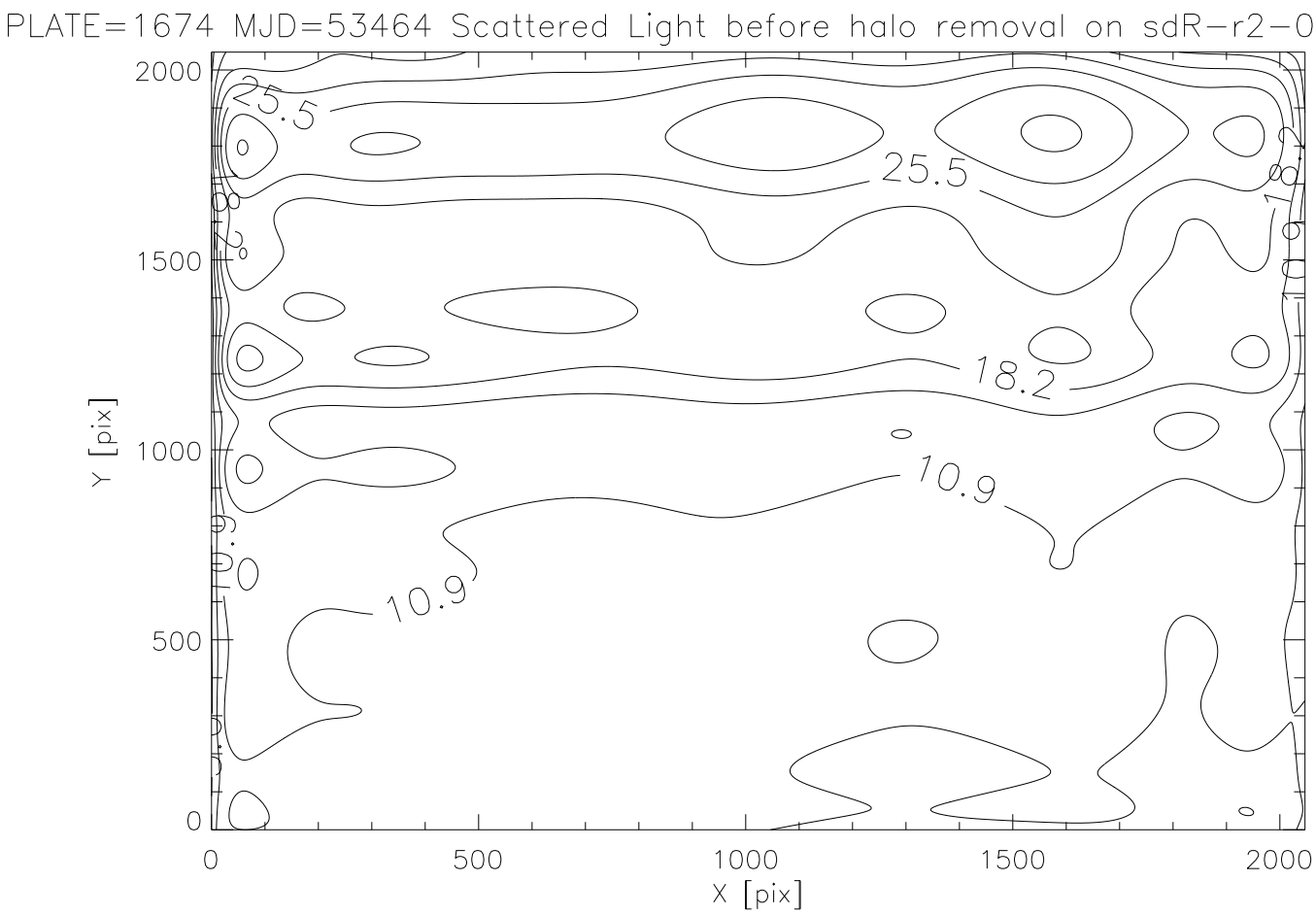

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

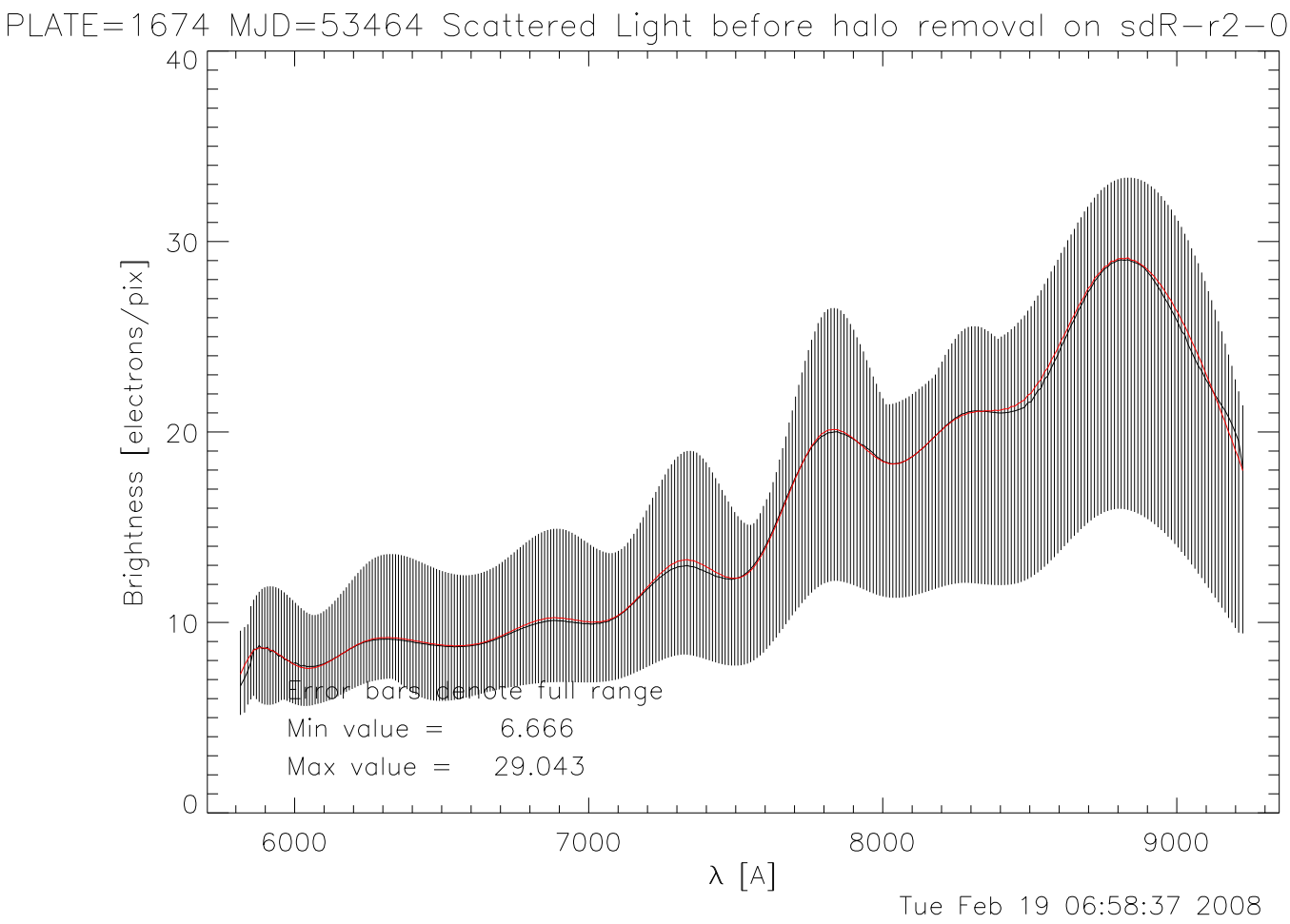

PLATE=1674 MJD=53464 flat extraction chi^2 for sdR−r2−00031721.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

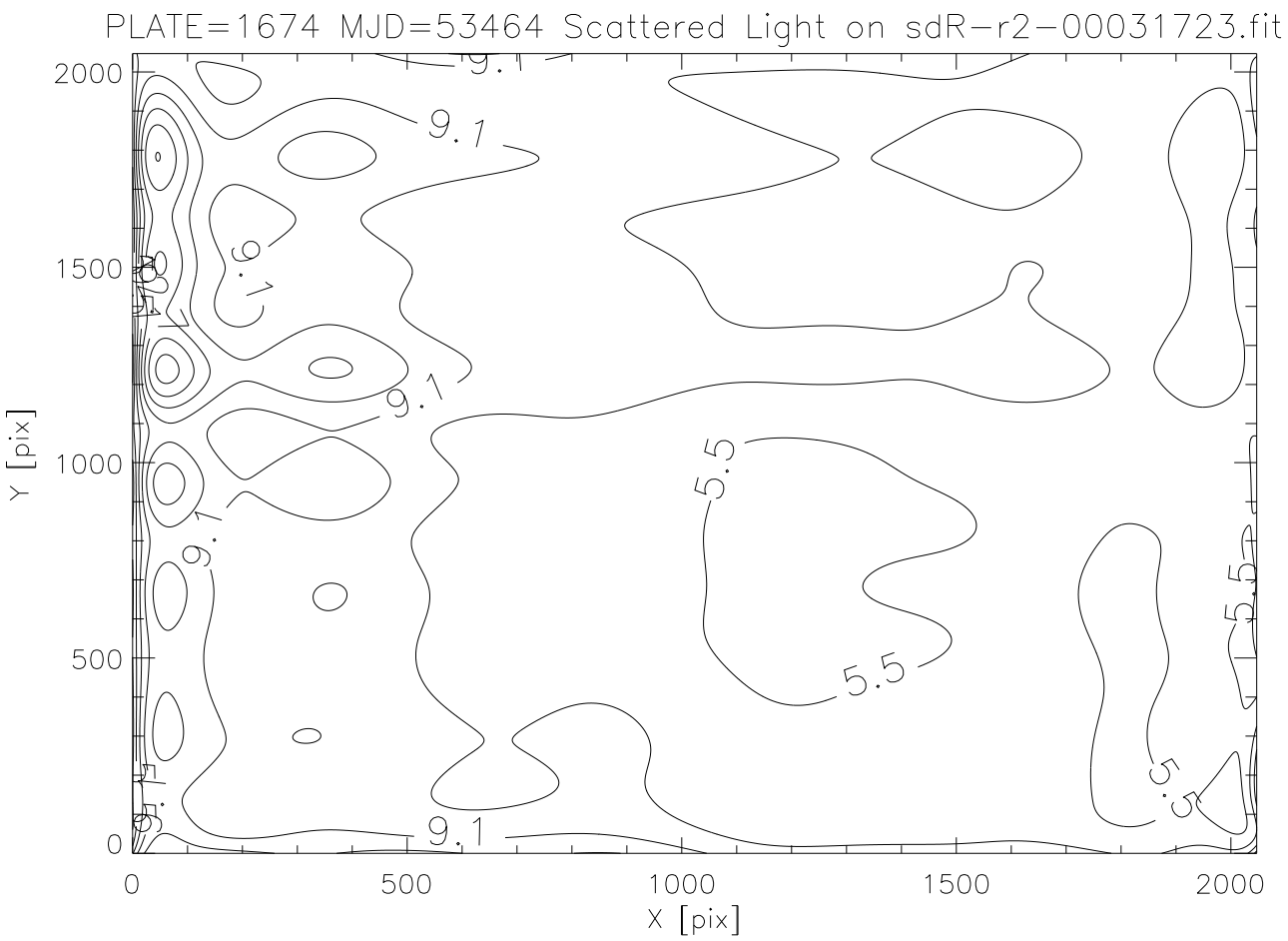

PLATE=1674 MJD=53464 Superflat sdR-r2-00031721.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

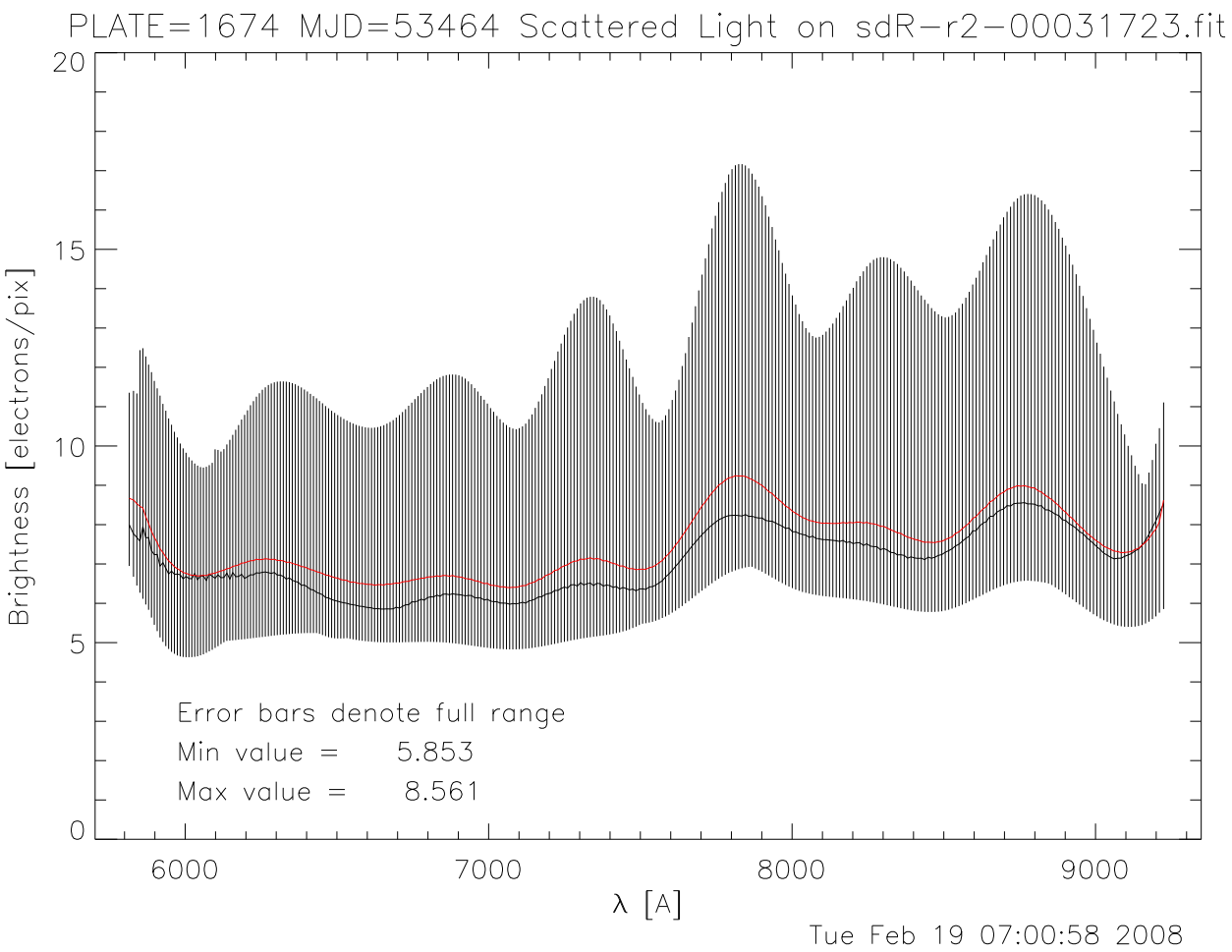

PLATE=1674 MJD=53464 Arcline Fit for sdR-r2-00031722.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 19 06:57:46 2008

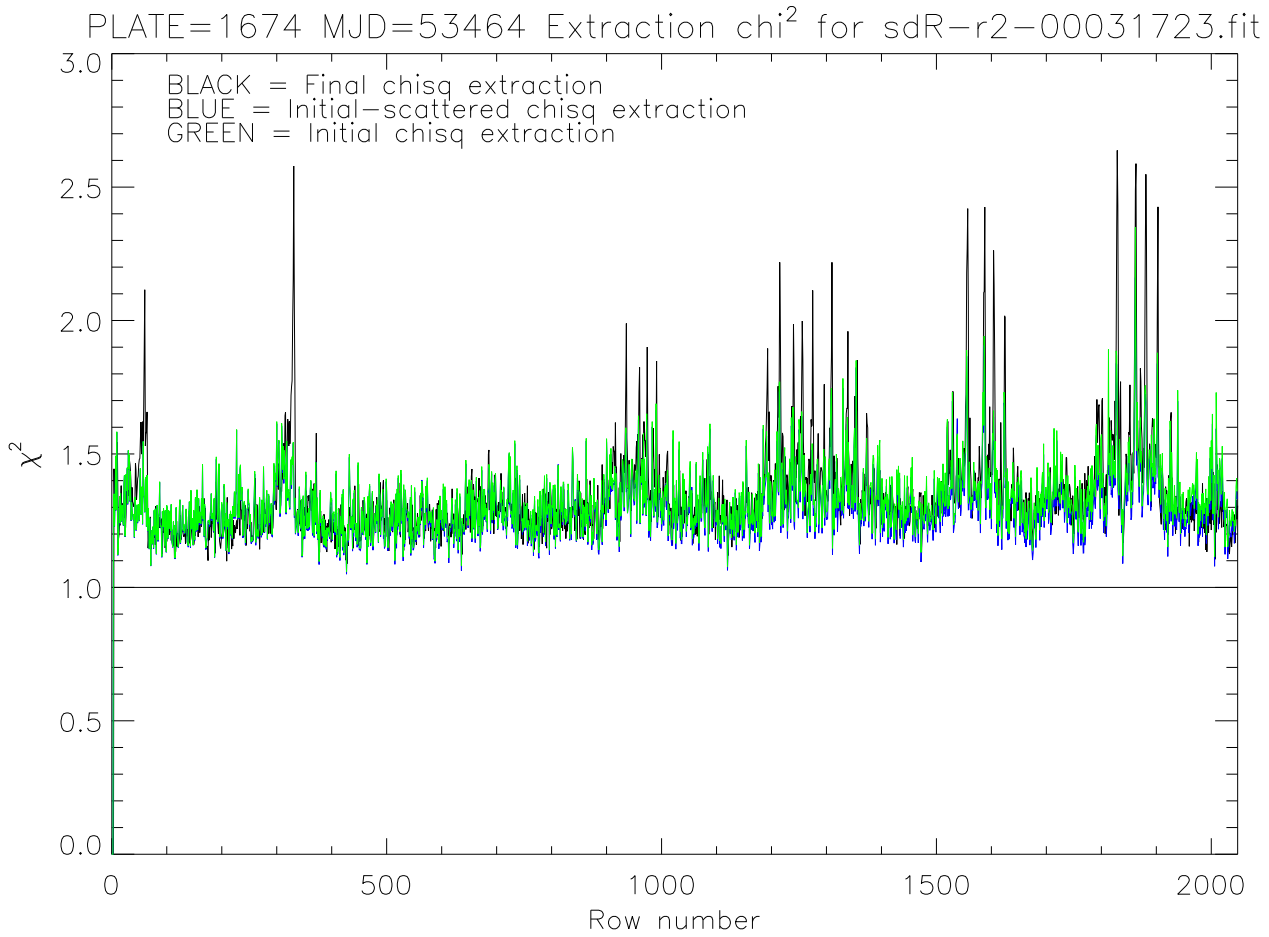

PLATE=1674 MJD=53464 Fiber−Flats for sdR−r2−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.702
Max value = 1.154
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 06:57:52 2008

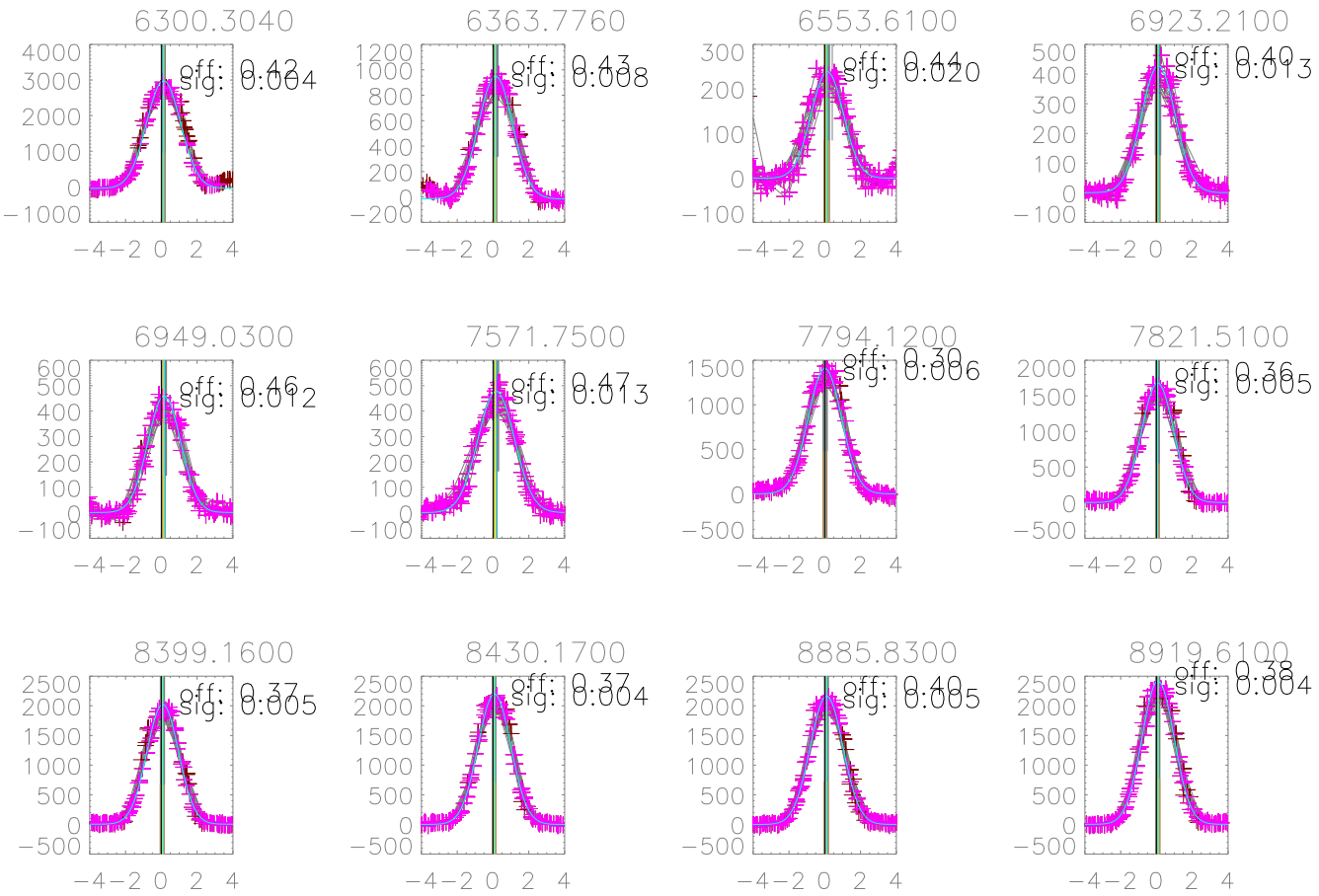

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r2-00031723.fi
25.5
25.5
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

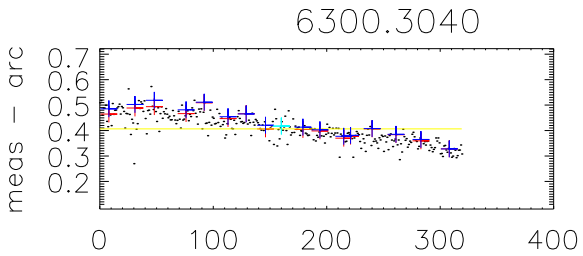

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r2-00031723.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.666
Max value = 29.043
Tue Feb 19 06:58:37 2008

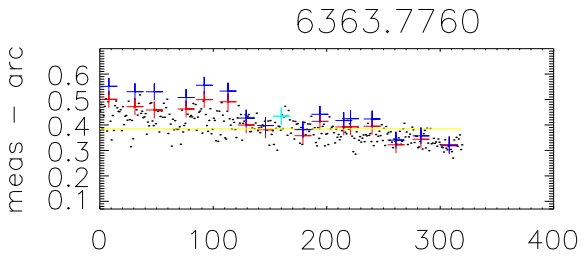

PLATE=1674 MJD=53464 Scattered Light on sdR-r2-00031723.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
5.5
5.3

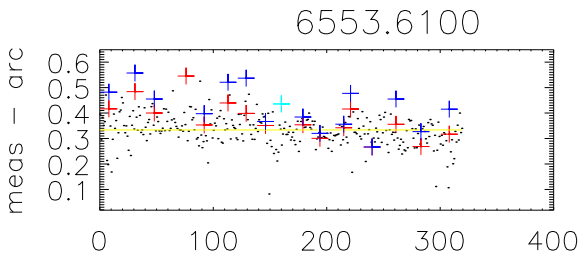

PLATE=1674 MJD=53464 Scattered Light on sdR-r2-00031723.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.853
Max value = 8.561
Tue Feb 19 07:00:58 2008

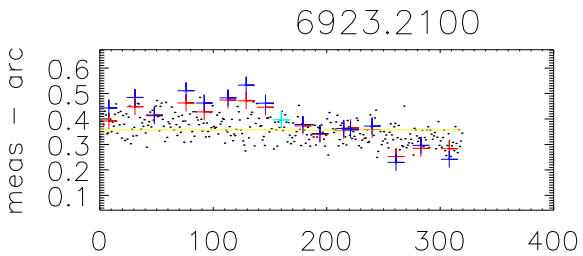

PLATE=1674 MJD=53464 Extraction chi^2 for sdR-r2-00031723.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

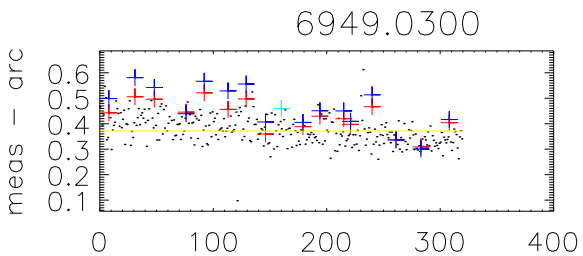

6300.3040
off: 0.42
sig: 0.004
6363.7760
off: 0.43
sig: 0.008
6553.6100
off: 0.44
sig: 0.020
6923.2100
off: 0.40
sig: 0.013
6949.0300
off: 0.46
sig: 0.012
7571.7500
off: 0.47
sig: 0.013
7794.1200
off: 0.30
sig: 0.006
7821.5100
off: 0.36
sig: 0.005
8399.1600
off: 0.37
sig: 0.005
8430.1700
off: 0.37
sig: 0.004
8885.8300
off: 0.40
sig: 0.005
8919.6100
off: 0.38
sig: 0.004

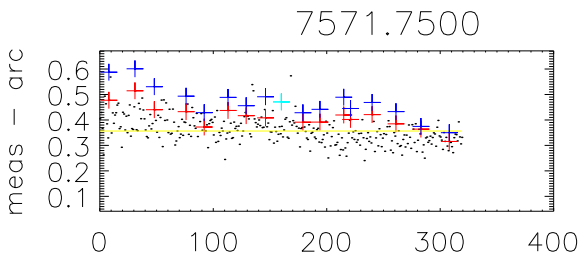

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

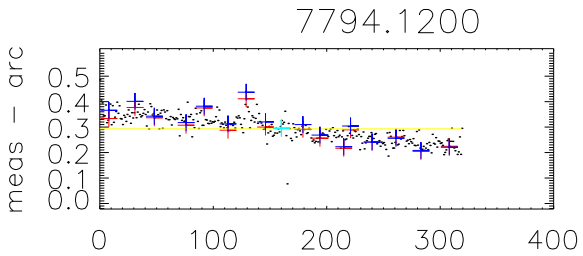

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

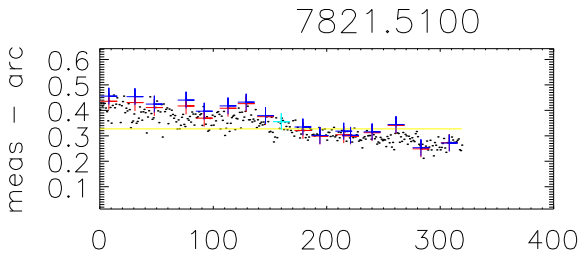

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

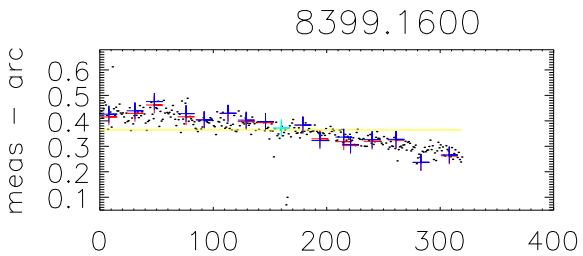

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

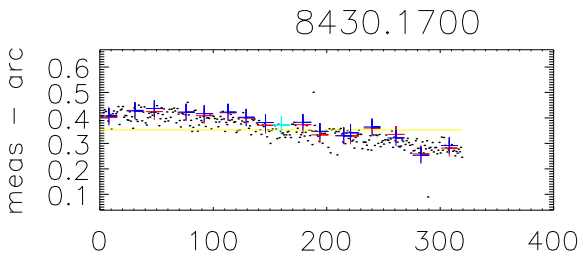

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

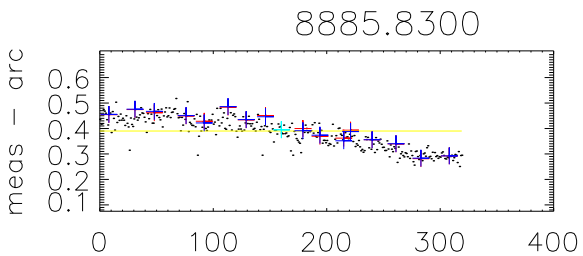

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

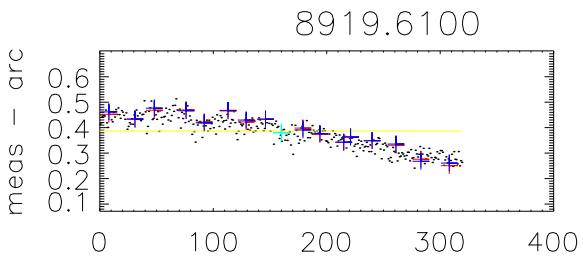

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

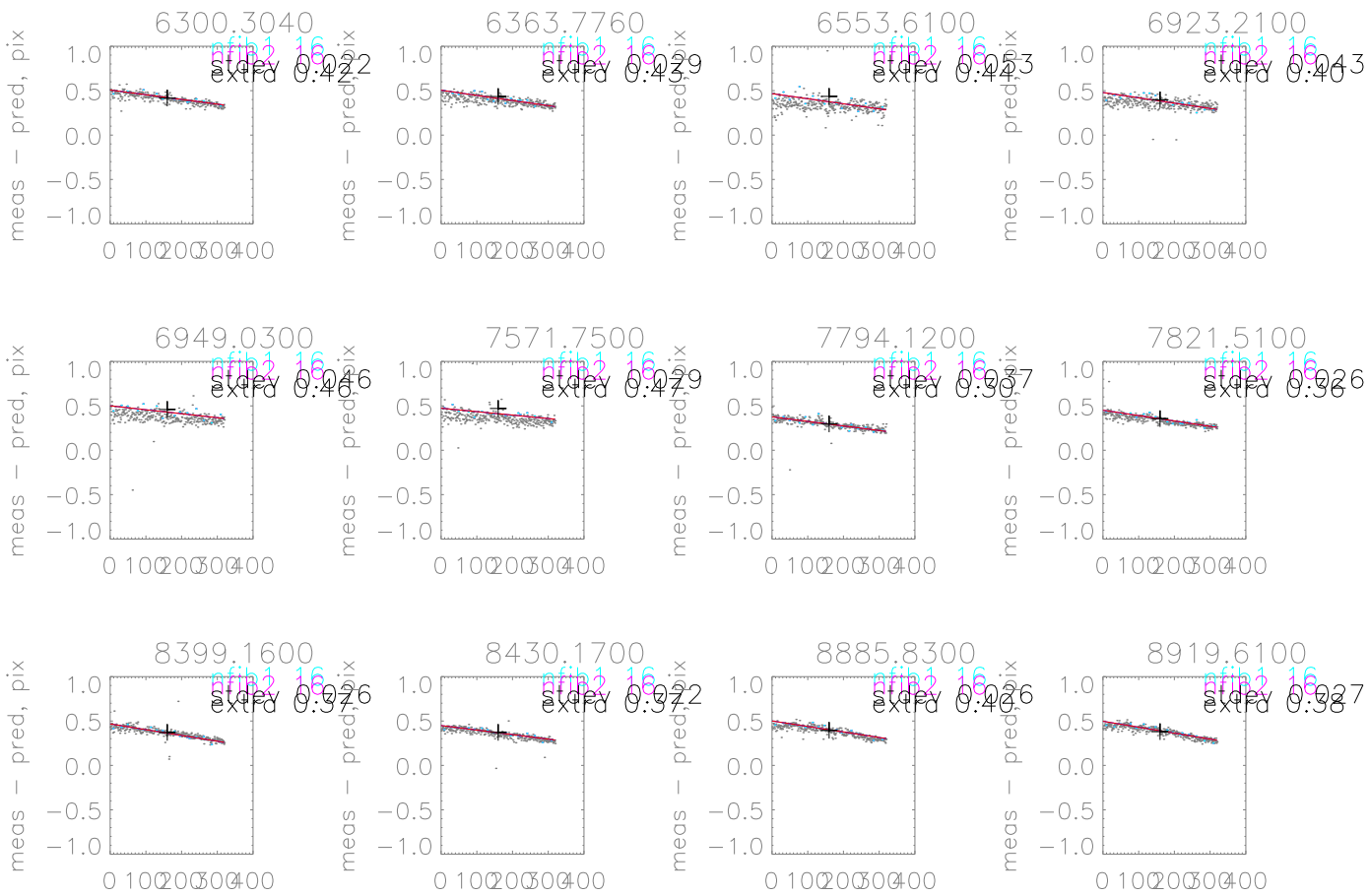

7821.5100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

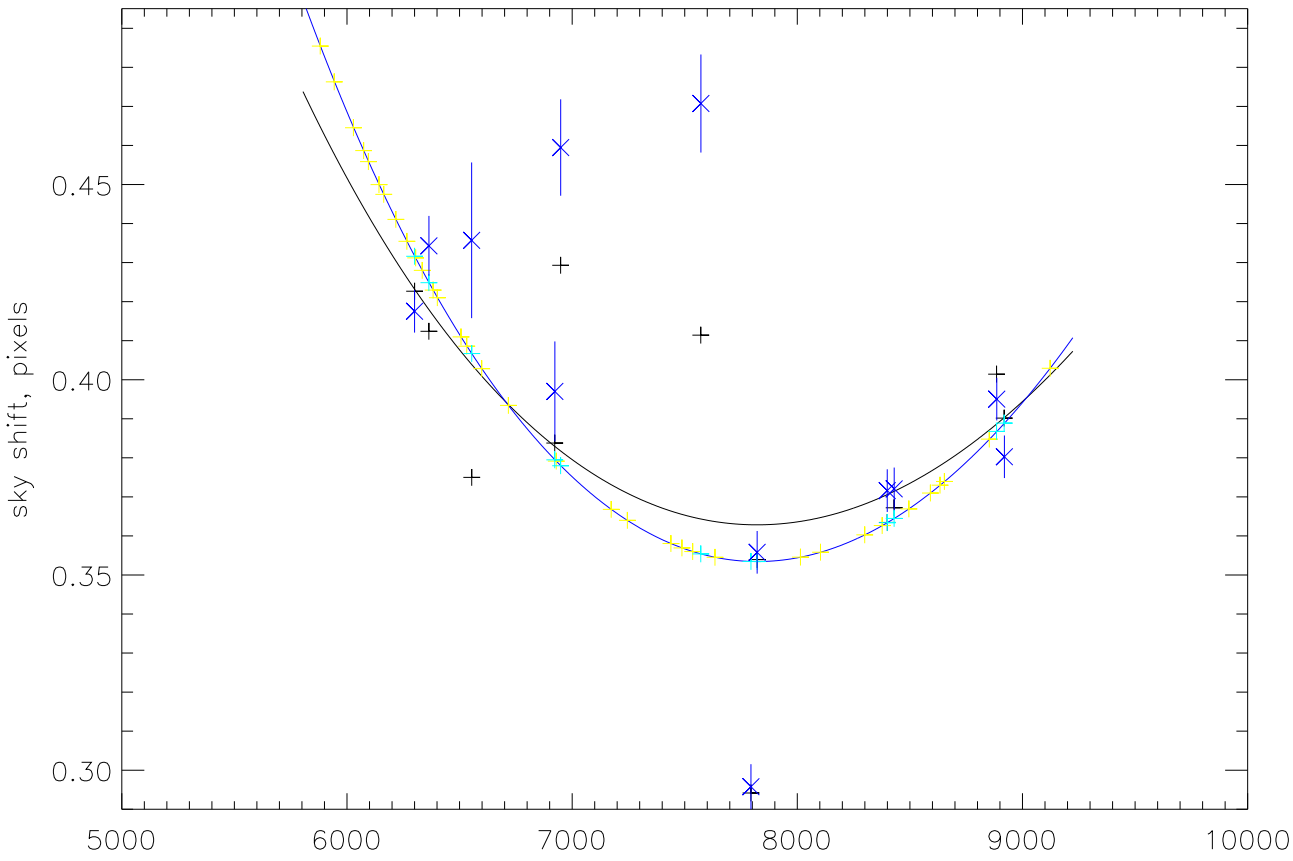

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


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

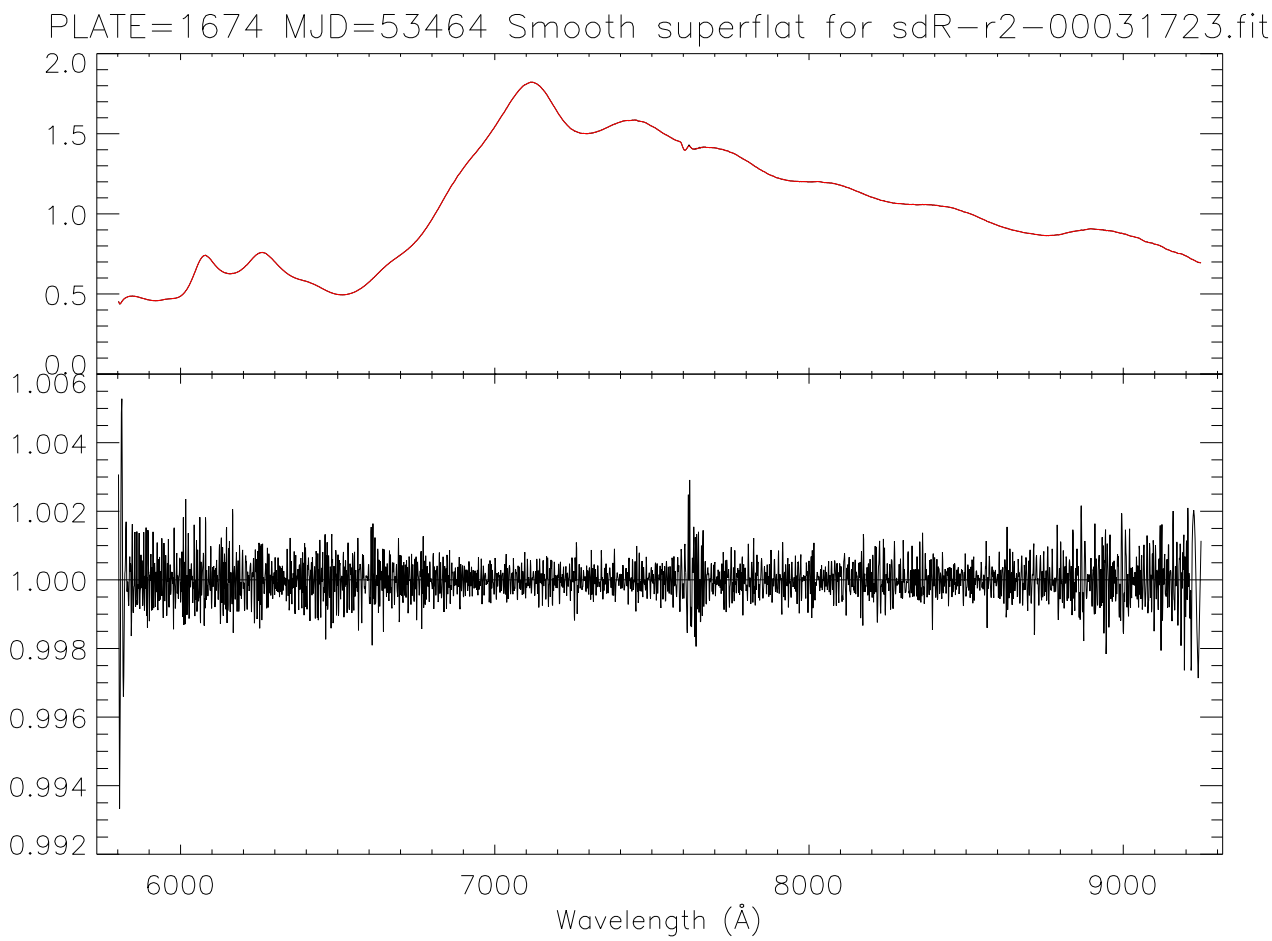

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

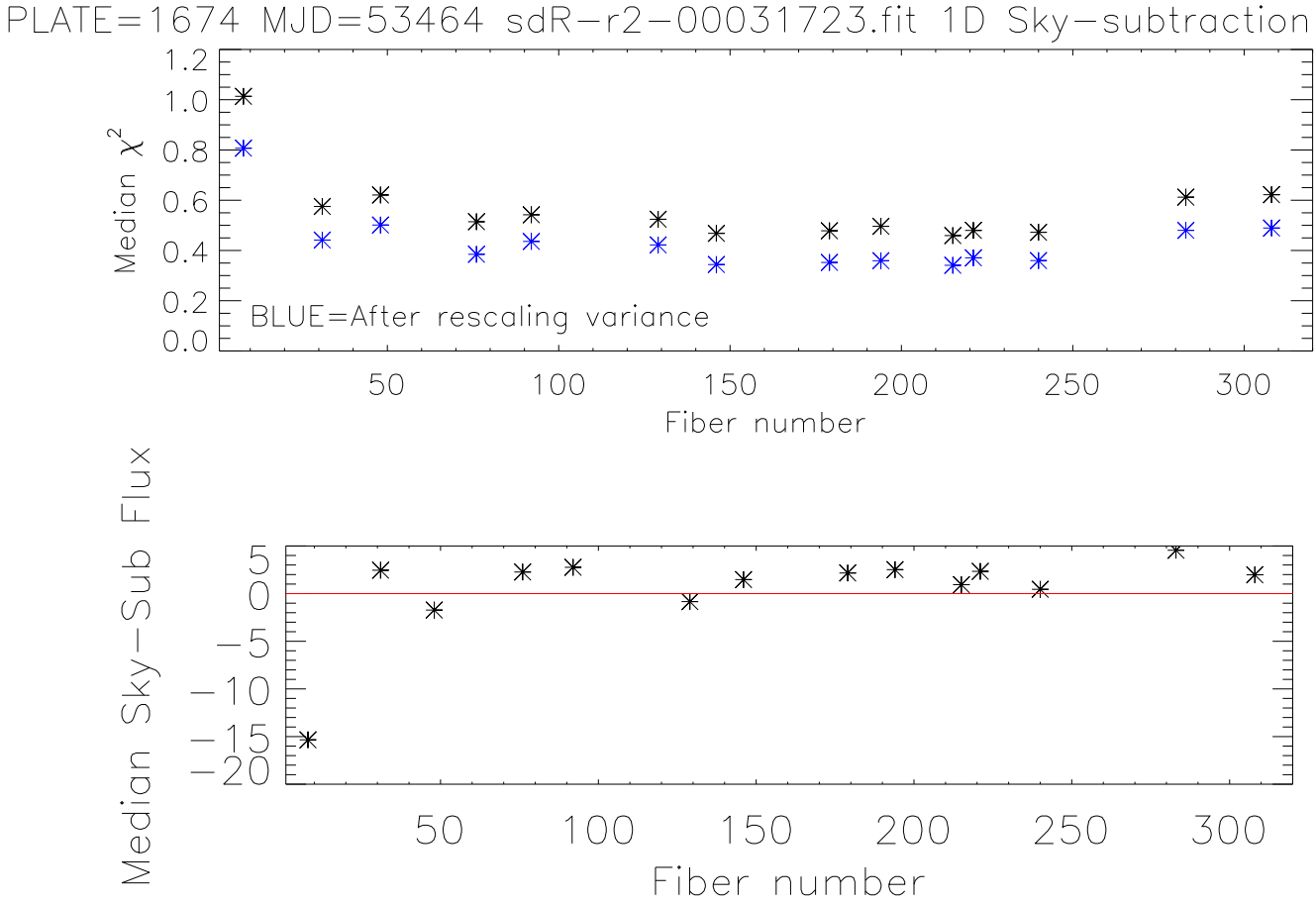

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

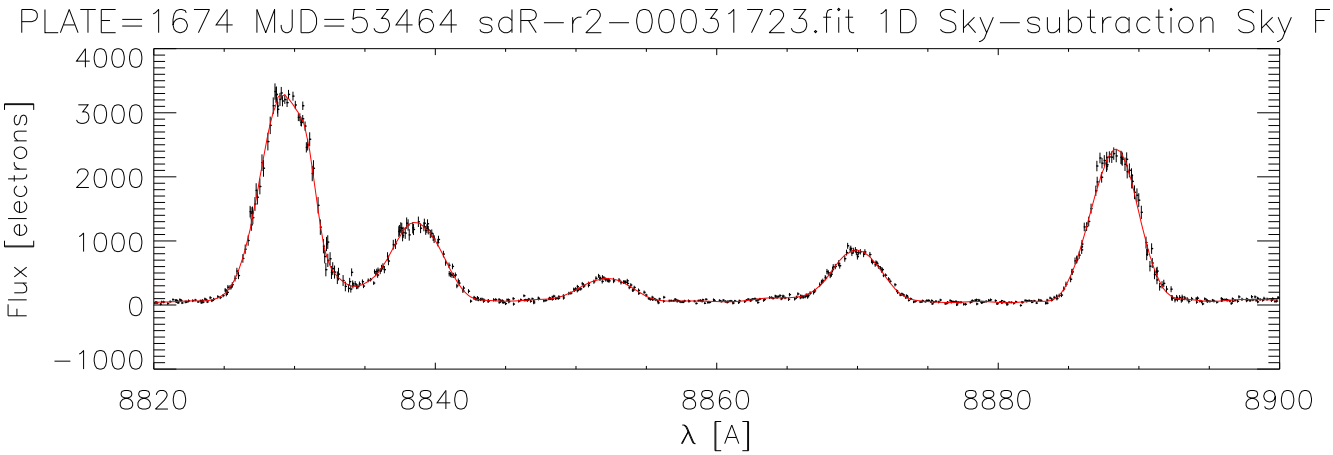

6300.3040
stdev 0.022
extra 0.42
6363.7760
stdev 0.029
extra 0.43
6553.6100
stdev 0.053
extra 0.44
6923.2100
stdev 0.043
extra 0.40
6949.0300
stdev 0.046
extra 0.46
7571.7500
stdev 0.029
extra 0.47
7794.1200
stdev 0.037
extra 0.30
7821.5100
stdev 0.026
extra 0.36
8399.1600
stdev 0.026
extra 0.37
8430.1700
stdev 0.022
extra 0.37
8885.8300
stdev 0.026
extra 0.40
8919.6100
stdev 0.027
extra 0.38
meas − pred, pix
mfhd2 16
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

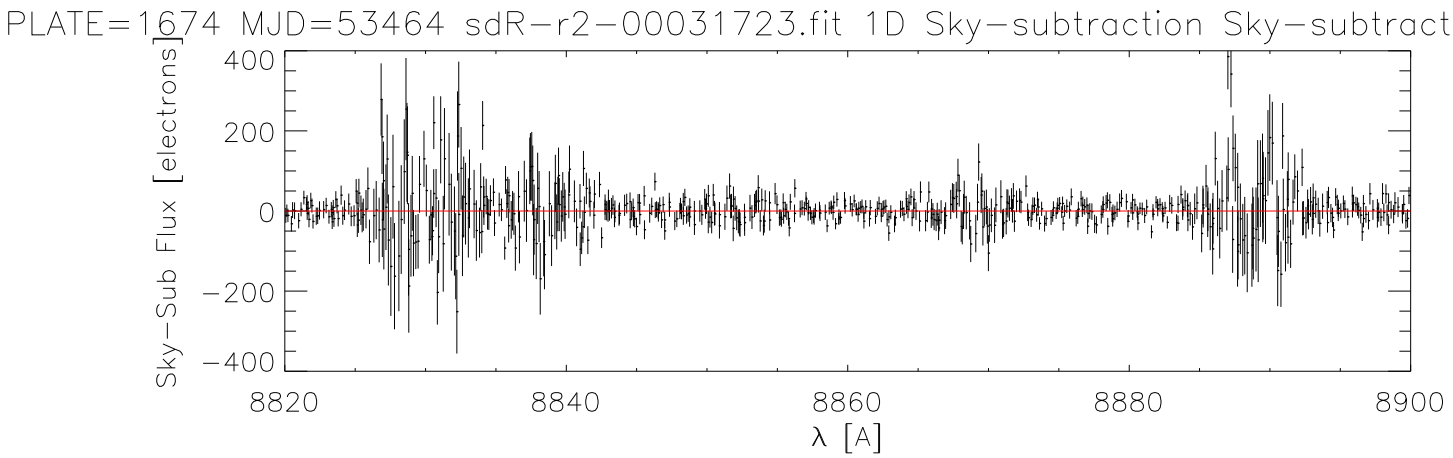

sky shift, pixels
0.45
0.40
0.35
0.30
5000
6000
7000
8000
9000
10000

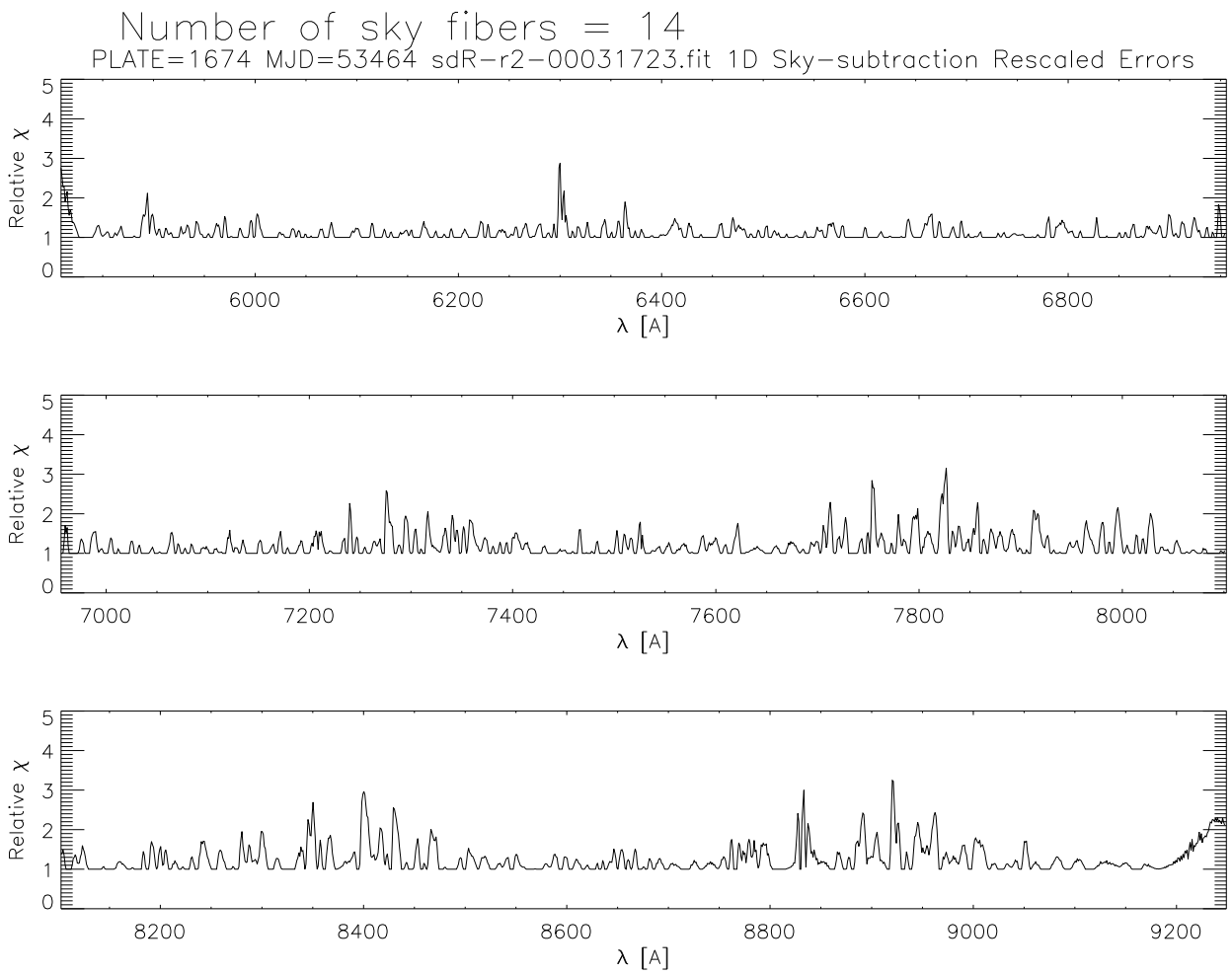
es= −0.0000

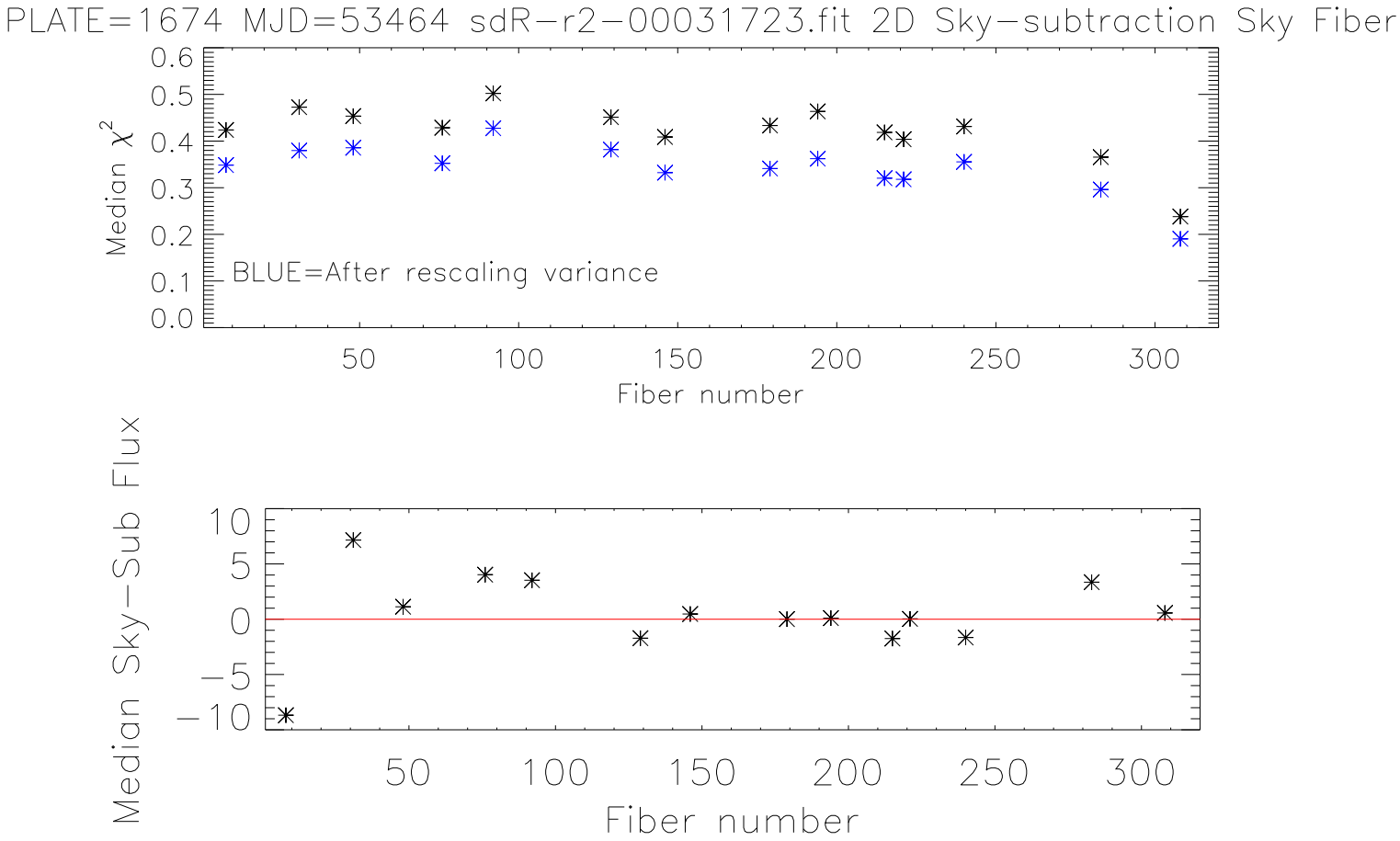

PLATE=1674 MJD=53464 Smooth superflat for sdR−r2−00031723.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

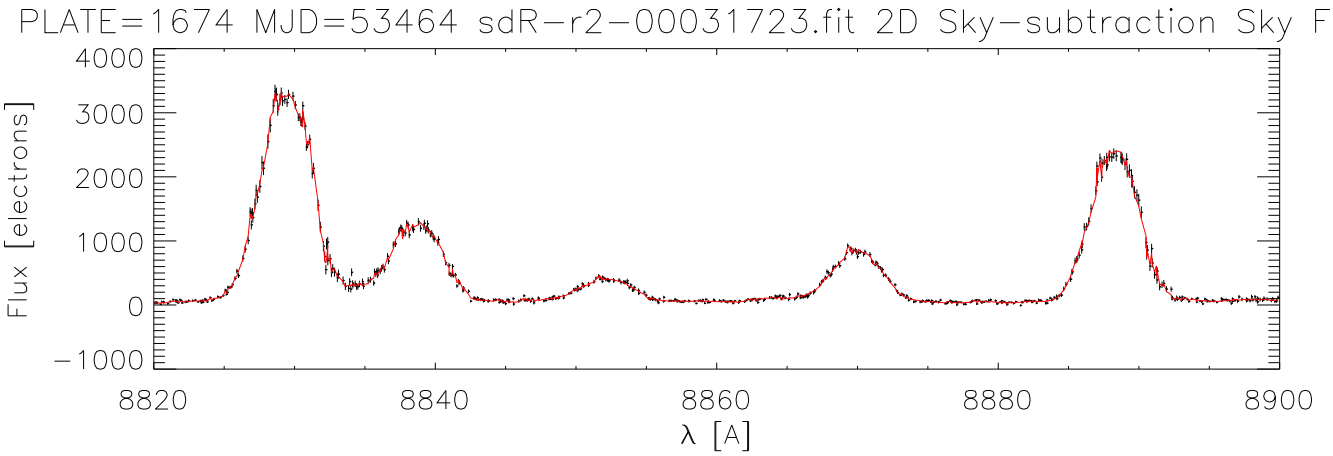

PLATE=1674 MJD=53464 sdR-r2-00031723.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

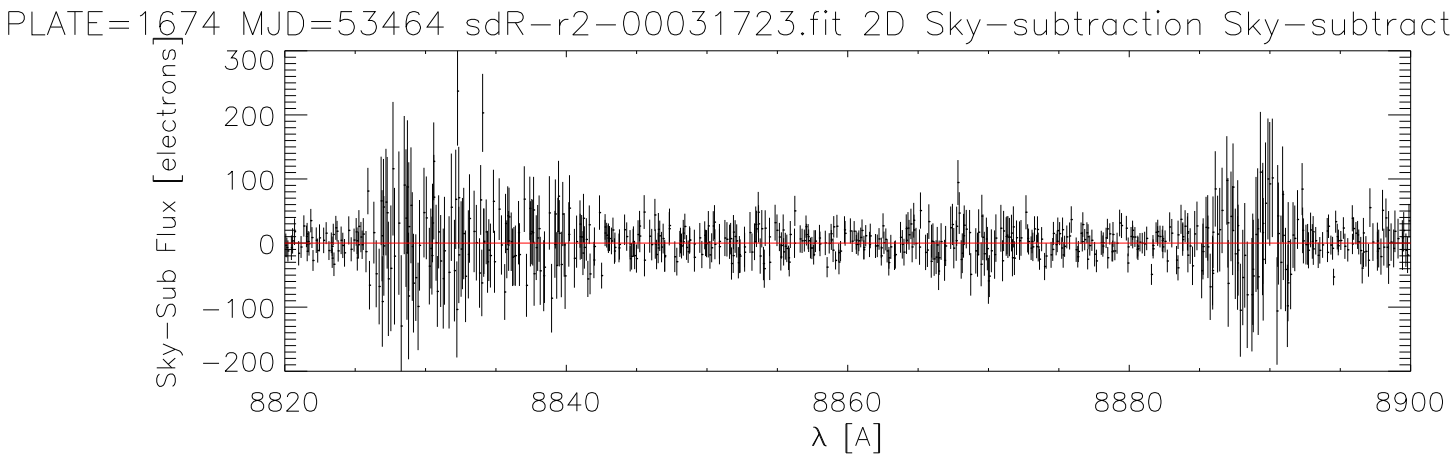

PLATE=1674 MJD=53464 sdR-r2-00031723.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

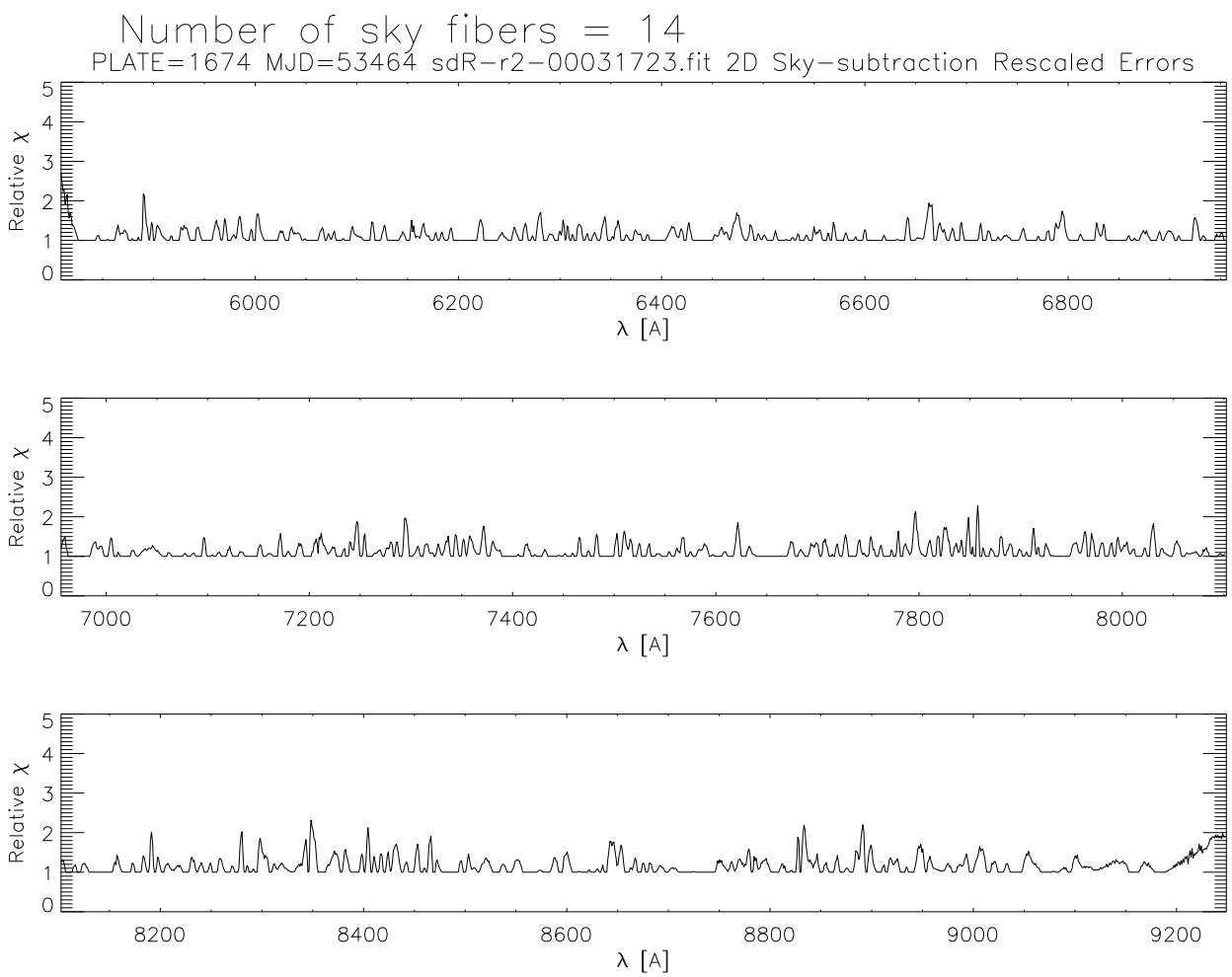

PLATE=1674 MJD=53464 sdR-r2-00031723.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

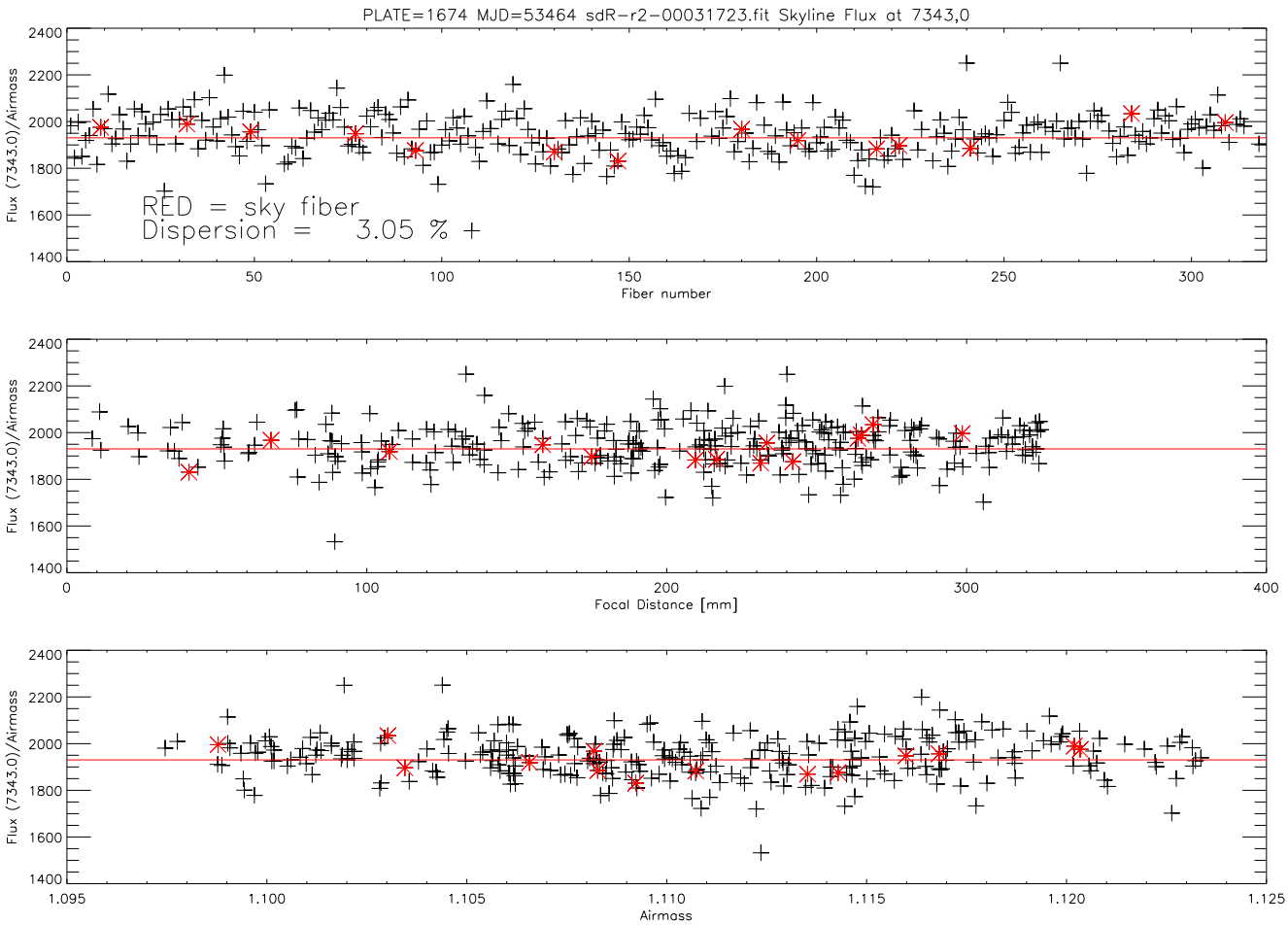

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-r2-00031723.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

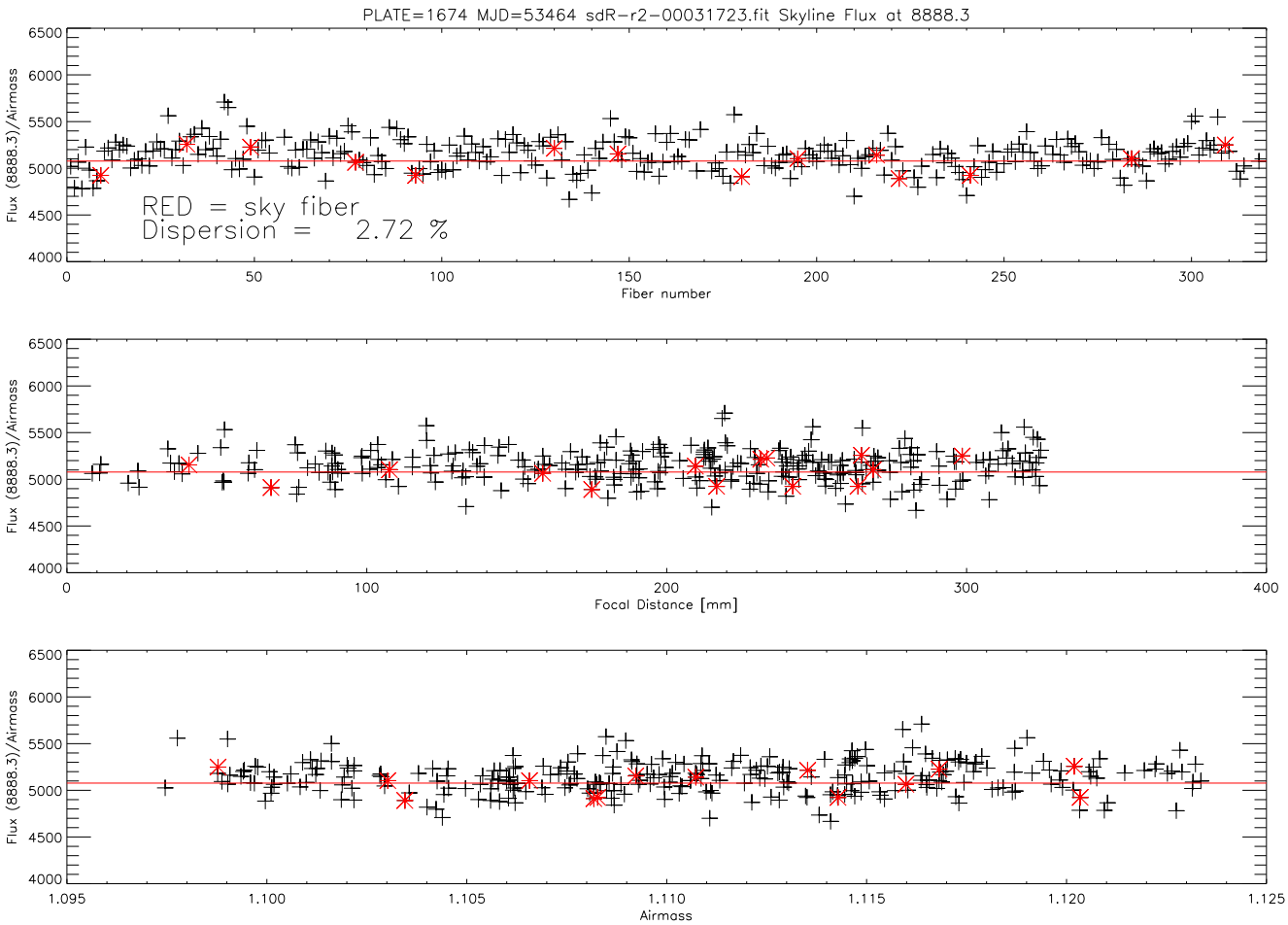

PLATE=1674 MJD=53464 sdR-r2-00031723.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

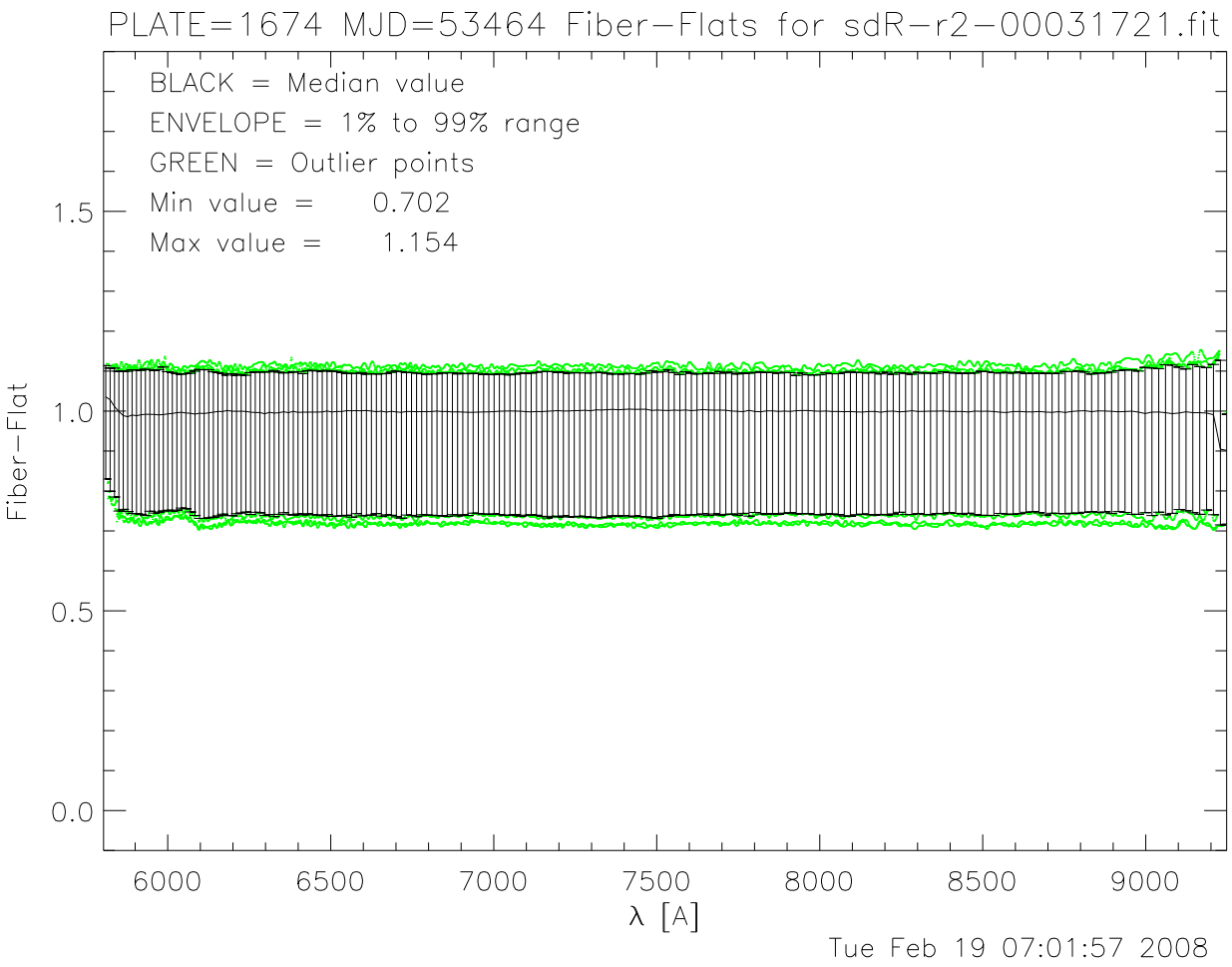

PLATE=1674 MJD=53464 sdR-r2-00031723.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

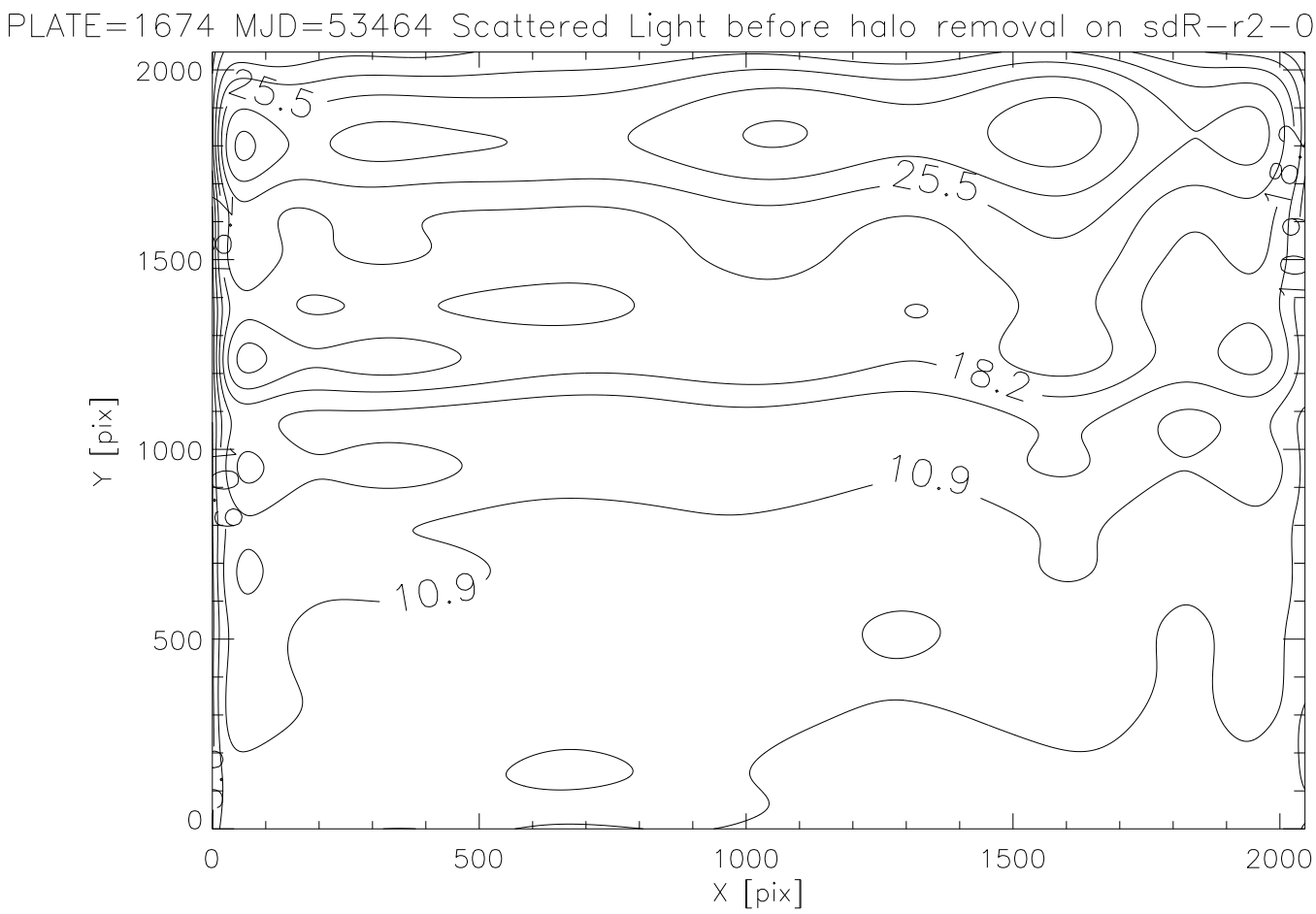

PLATE=1674 MJD=53464 sdR-r2-00031723.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

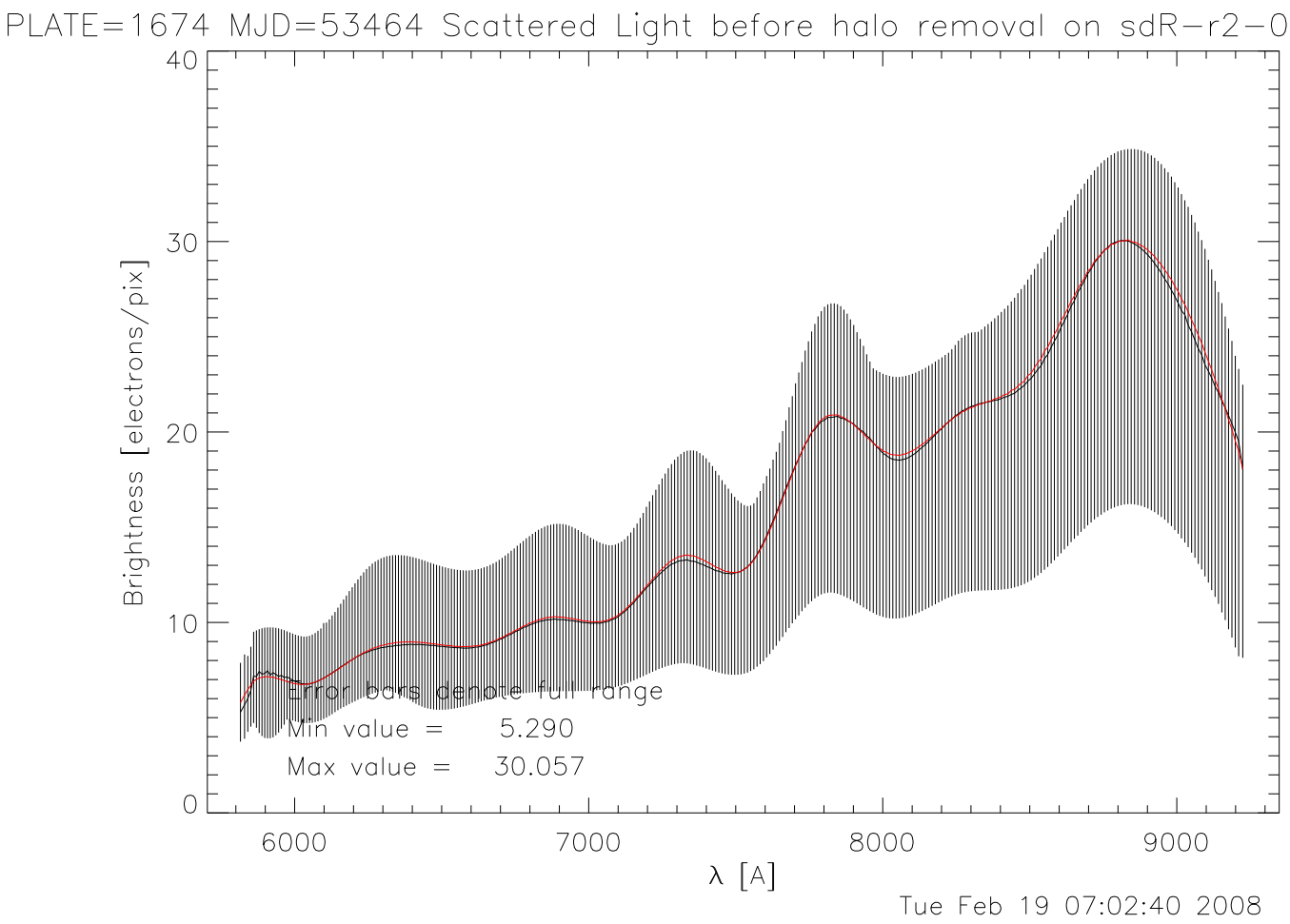

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-r2-00031723.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

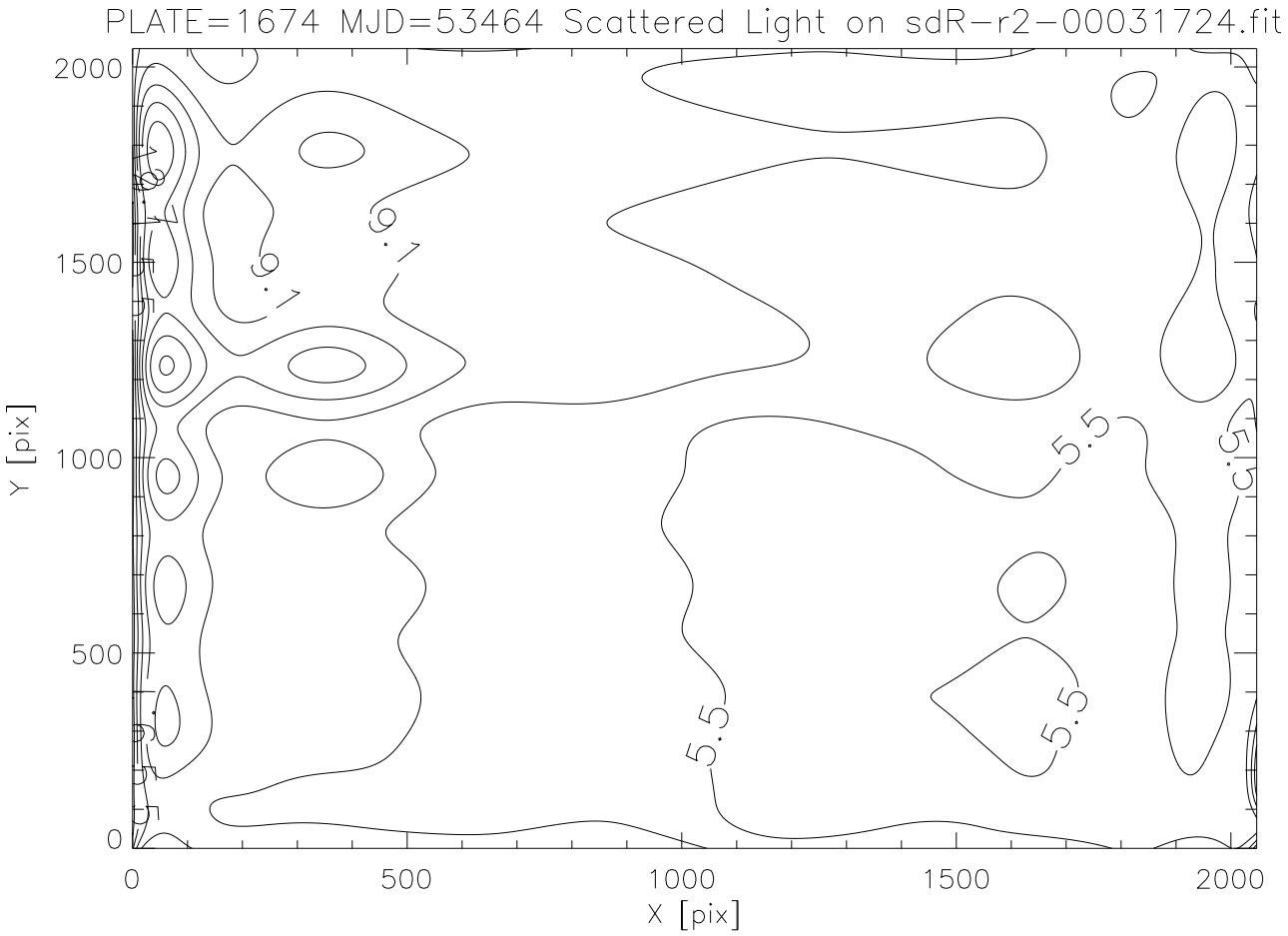

PLATE=1674 MJD=53464 sdR-r2-00031723.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.05 % +
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

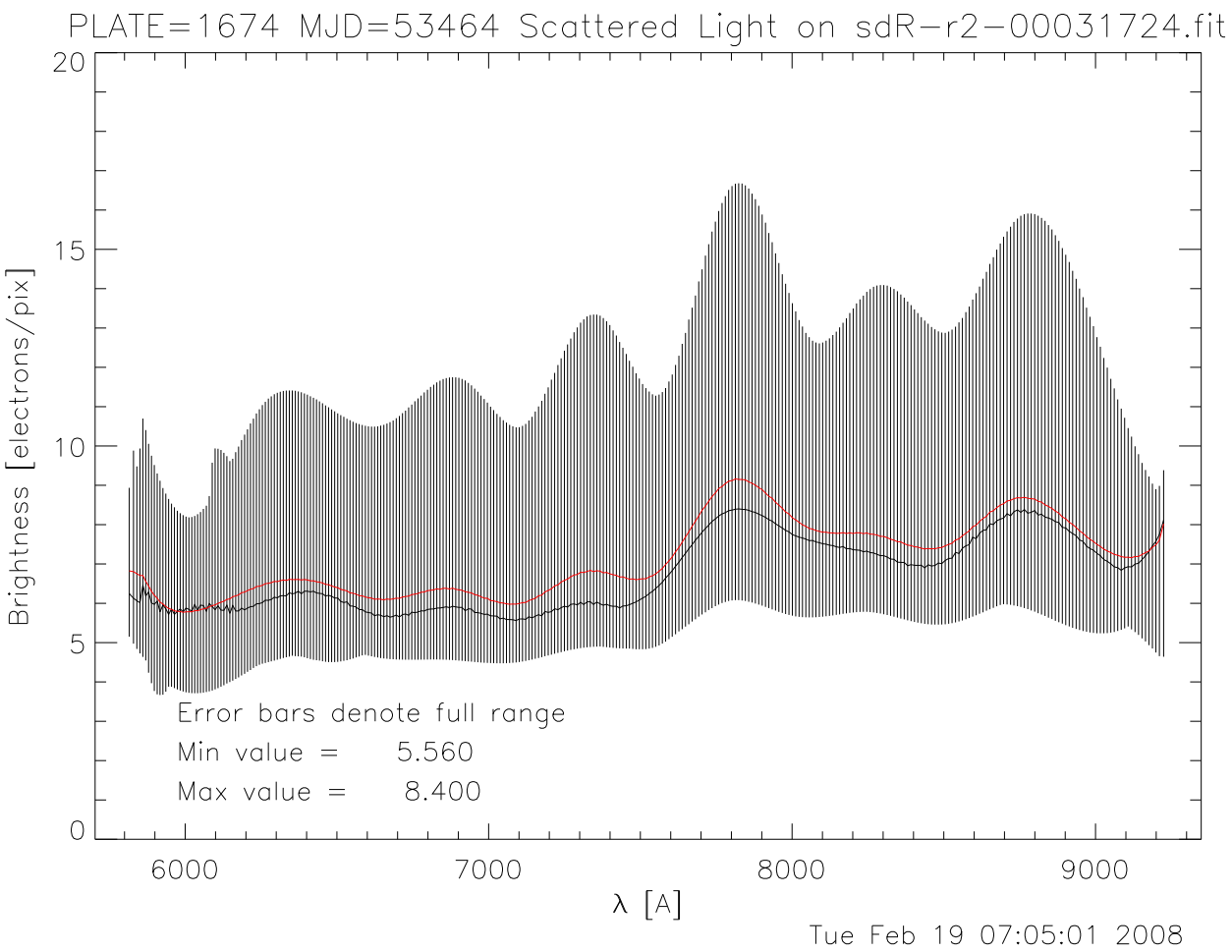

PLATE=1674 MJD=53464 sdR-r2-00031723.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.72 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

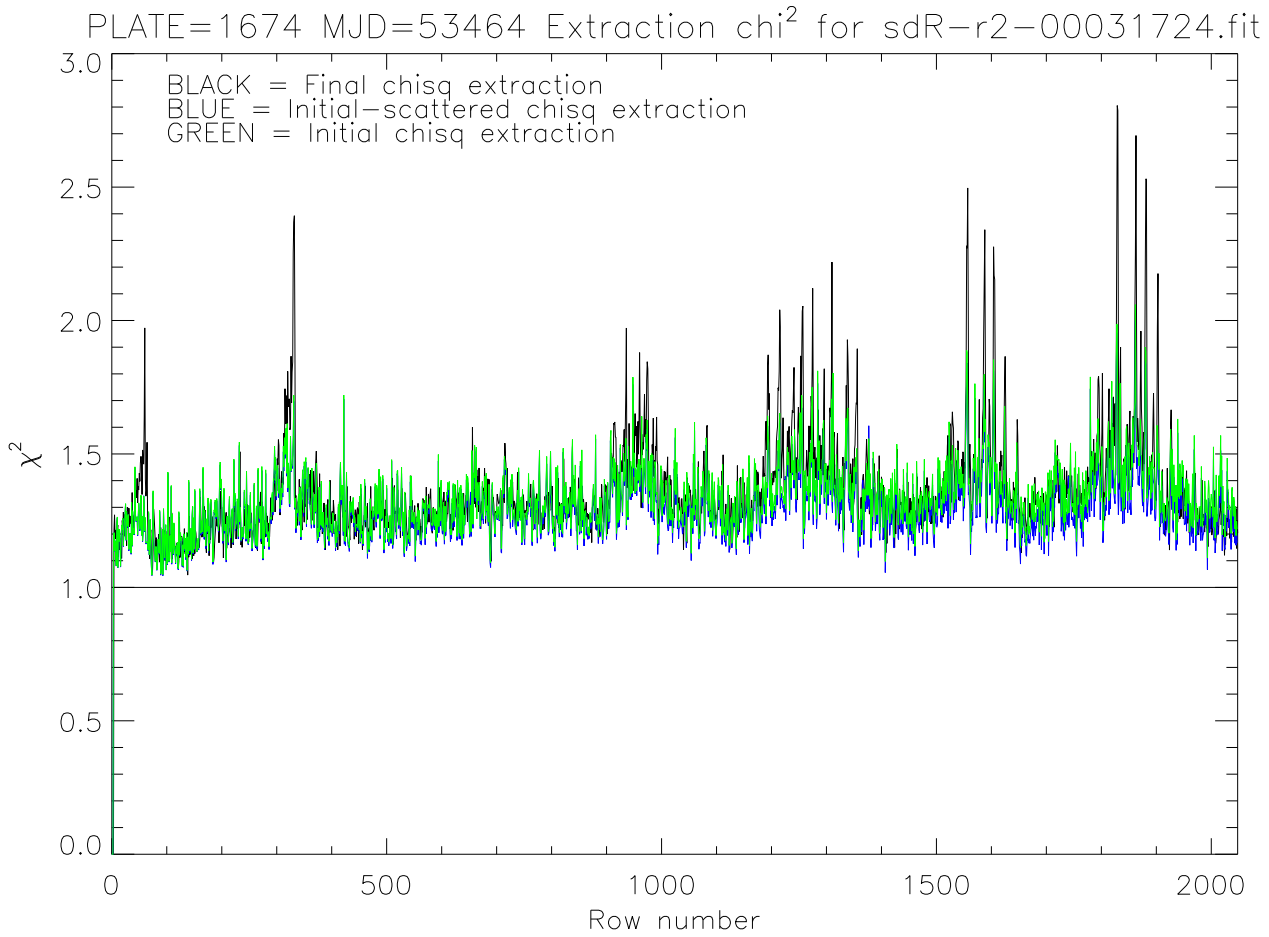

PLATE=1674 MJD=53464 Fiber−Flats for sdR−r2−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.702
Max value = 1.154
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 07:01:57 2008

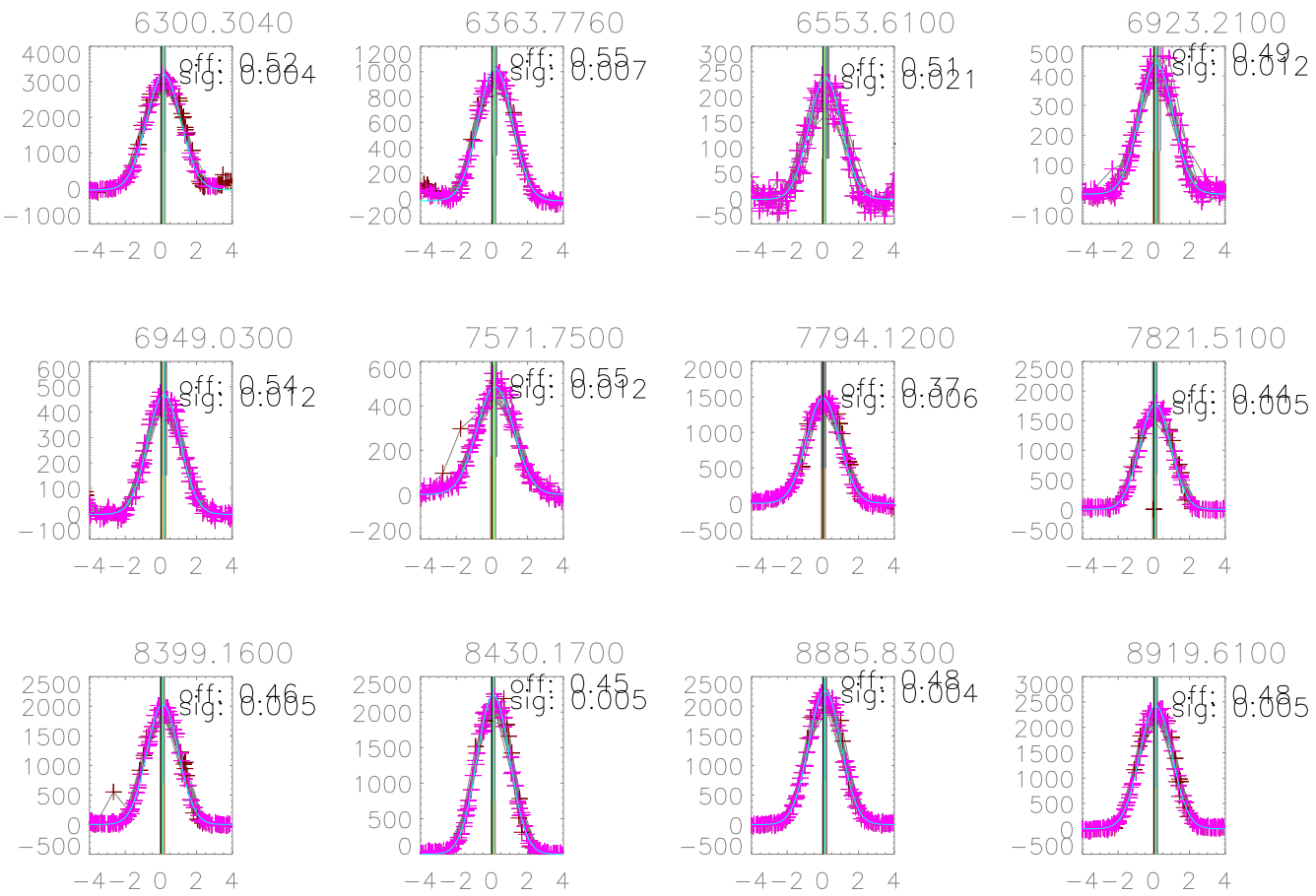

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR−r2−00031724.fi
25.5
25.5
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

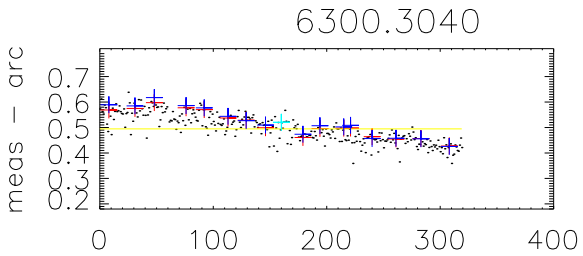

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r2-00031724.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.290
Max value = 30.057
Tue Feb 19 07:02:40 2008

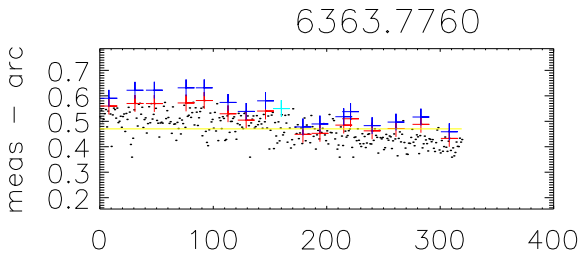

PLATE=1674 MJD=53464 Scattered Light on sdR-r2-00031724.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.7
9.7
5.5
5.5
5.5
5.5

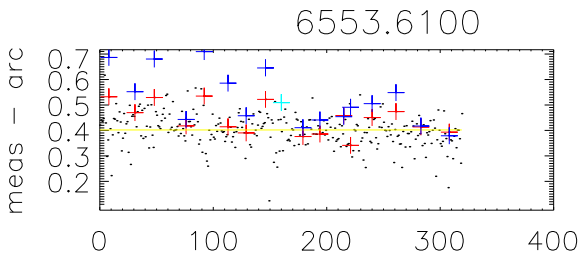

PLATE=1674 MJD=53464 Scattered Light on sdR-r2-00031724.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.560
Max value = 8.400
Tue Feb 19 07:05:01 2008

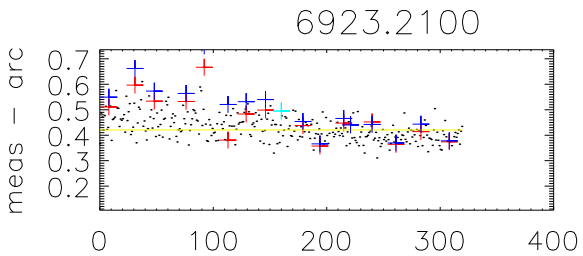

PLATE=1674 MJD=53464 Extraction chi^2 for sdR−r2−00031724.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

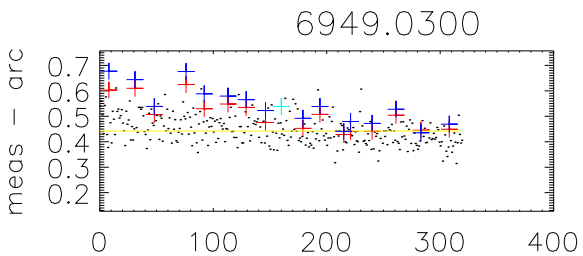

6300.3040
off: 0.52
sig: 0.004
6363.7760
off: 0.55
sig: 0.007
6553.6100
off: 0.51
sig: 0.021
6923.2100
off: 0.49
sig: 0.012
6949.0300
off: 0.54
sig: 0.012
7571.7500
off: 0.55
sig: 0.012
7794.1200
off: 0.37
sig: 0.006
7821.5100
off: 0.44
sig: 0.005
8399.1600
off: 0.46
sig: 0.005
8430.1700
off: 0.45
sig: 0.005
8885.8300
off: 0.48
sig: 0.004
8919.6100
off: 0.48
sig: 0.005

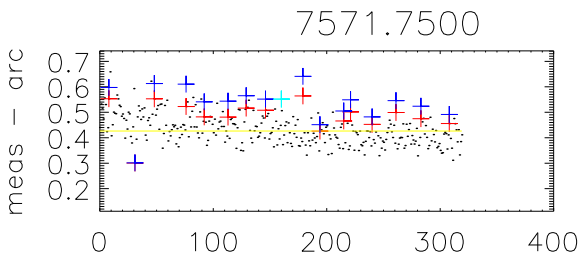

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

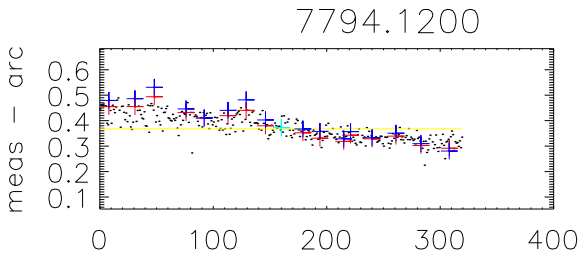

6363.7760
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

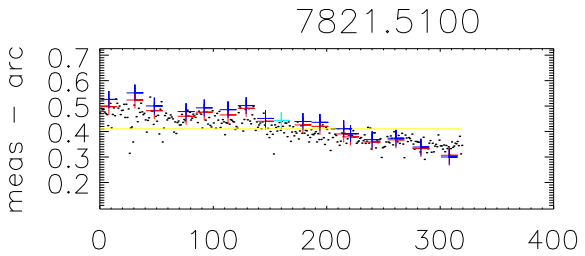

6553.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

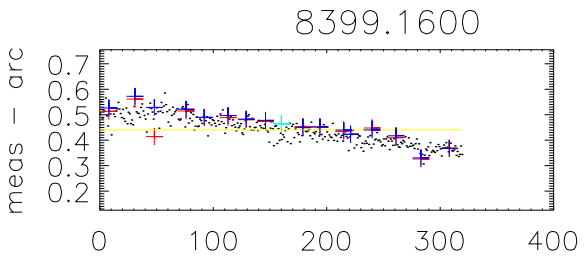

6923.2100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

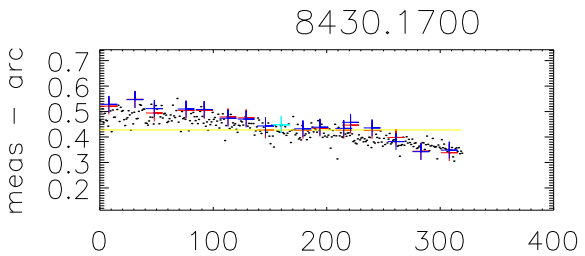

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

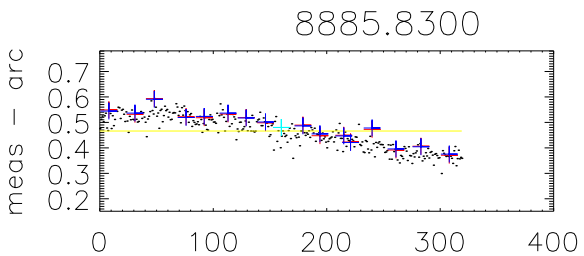

7571.7500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

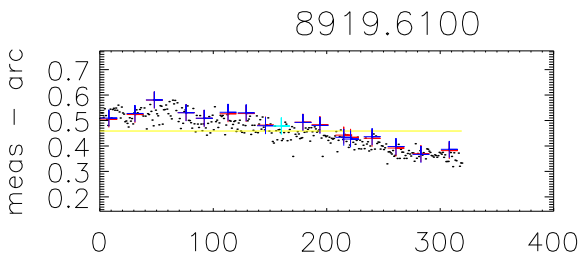

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

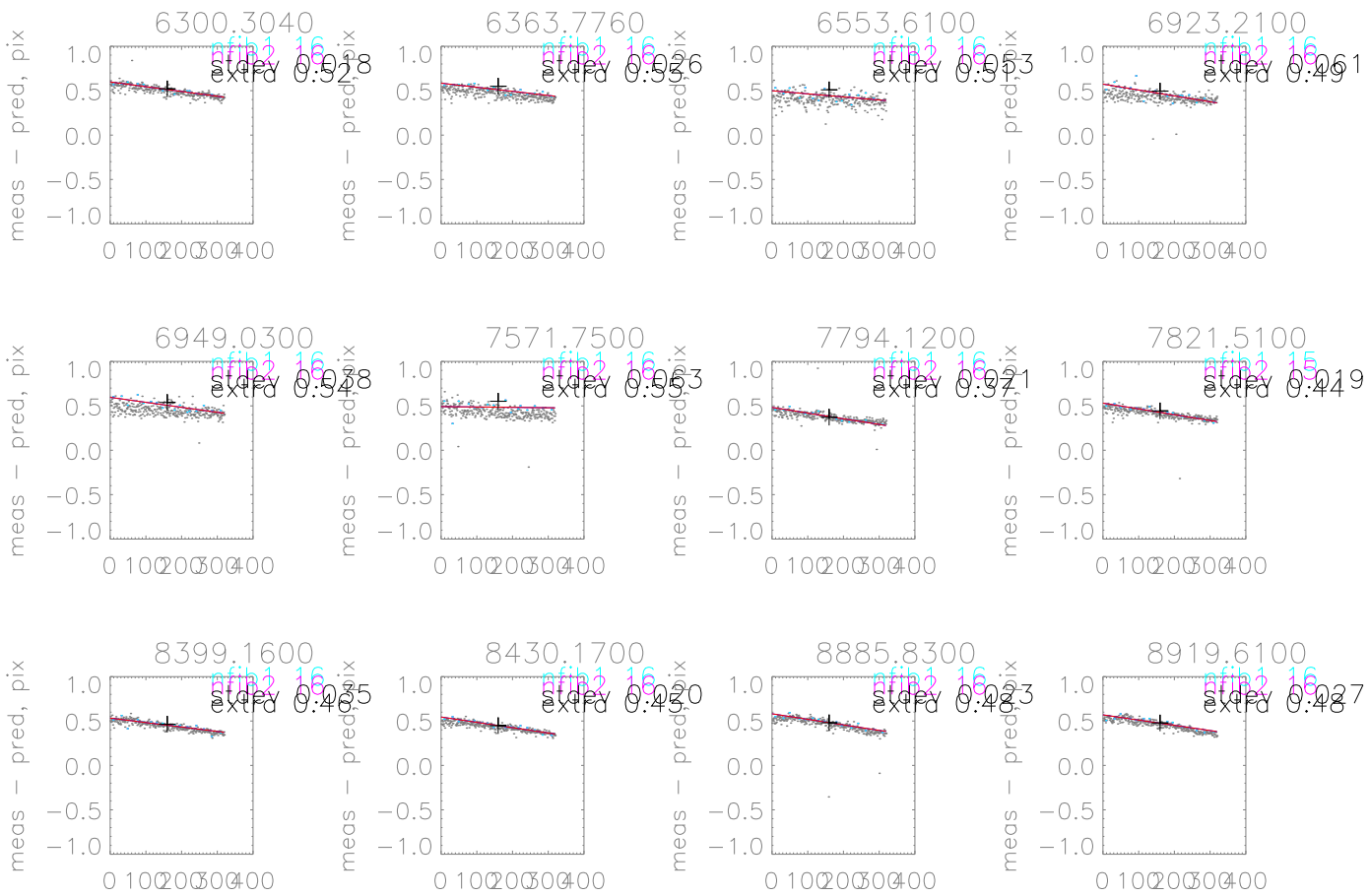

7821.5100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

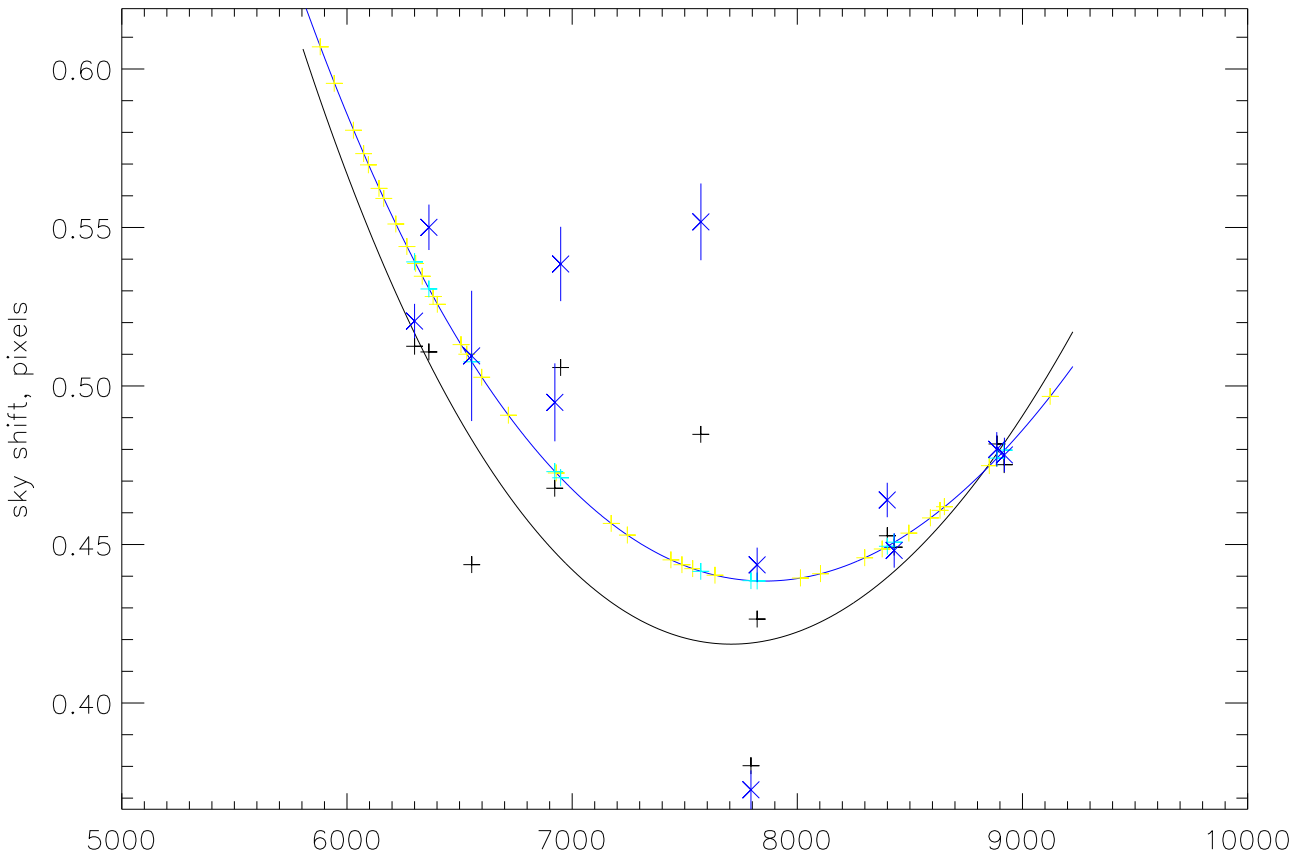

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


8430.1700
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

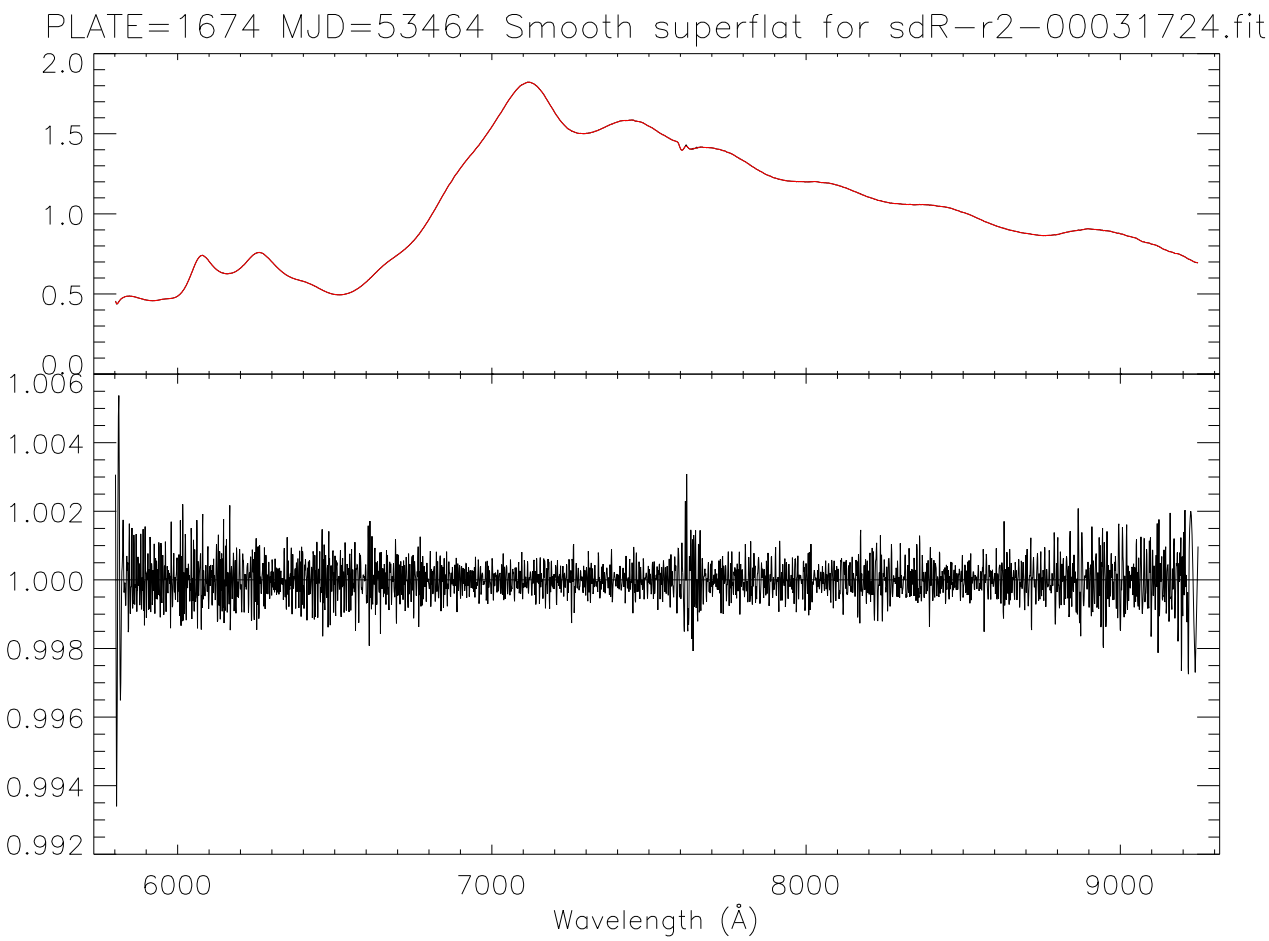

8885.8300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

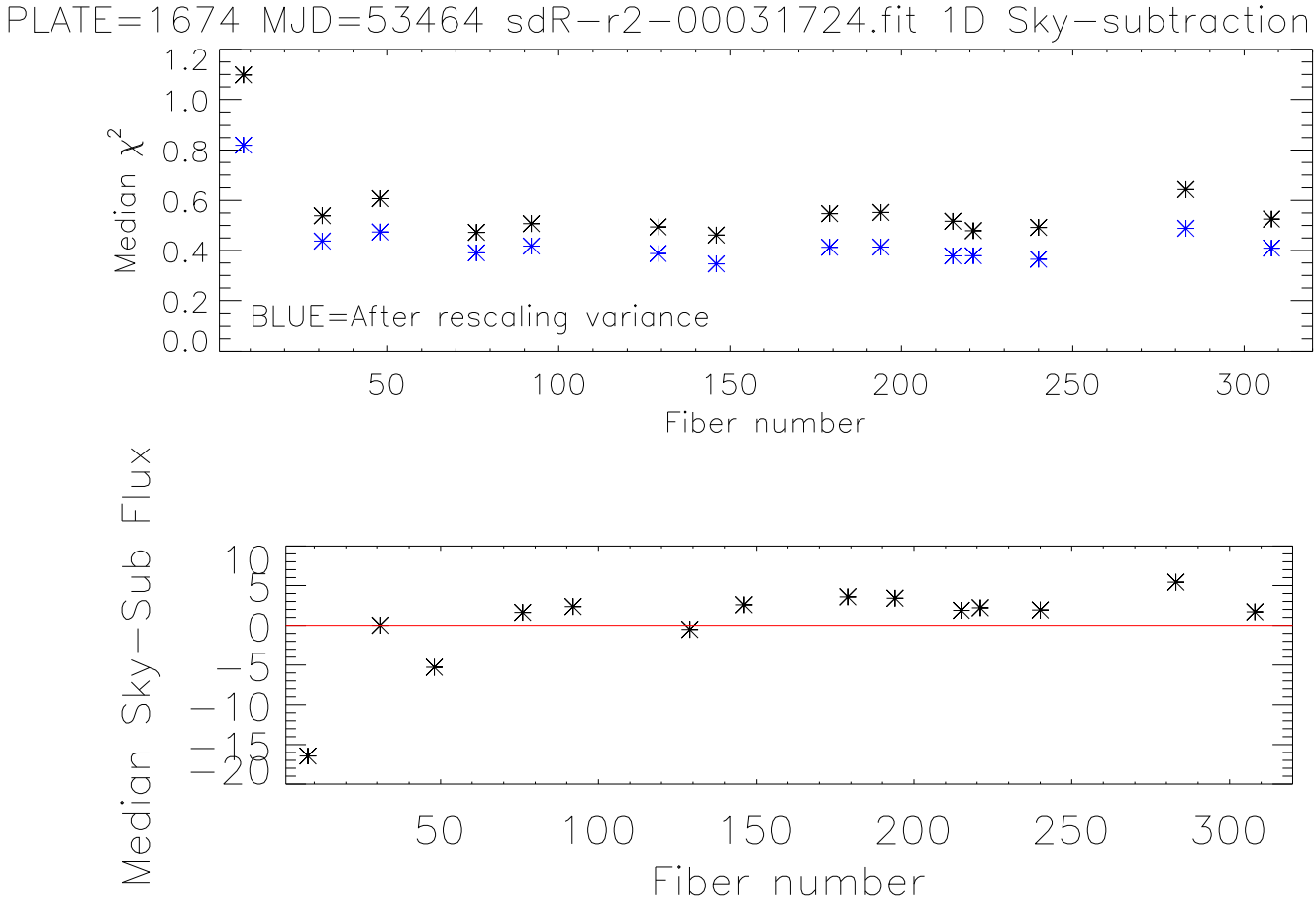

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

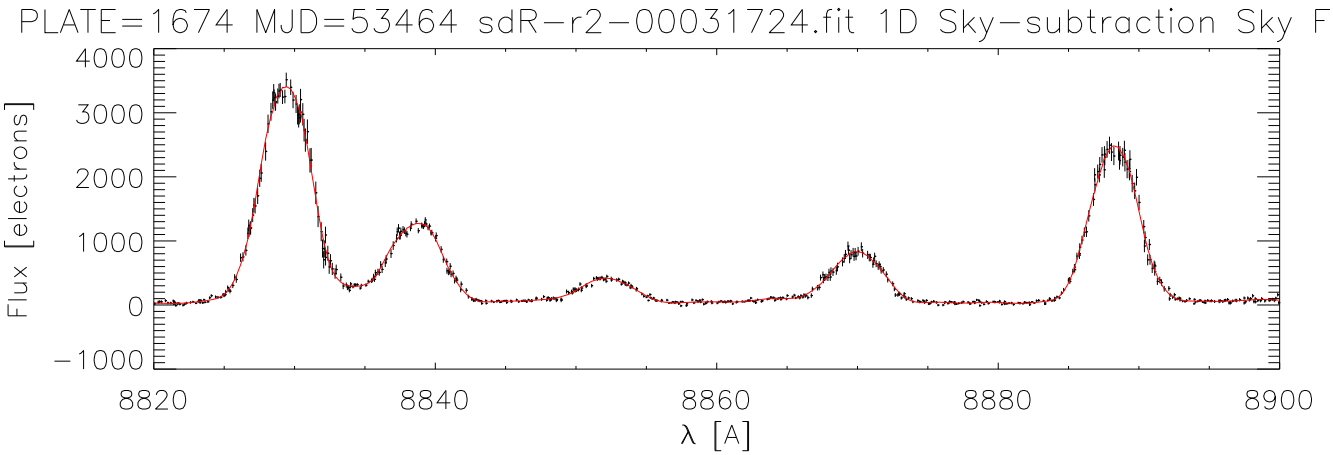

6300.3040
stdev 0.028
extra 0.52
6363.7760
stdev 0.026
extra 0.55
6553.6100
stdev 0.053
extra 0.51
6923.2100
stdev 0.061
extra 0.49
6949.0300
stdev 0.038
extra 0.54
7571.7500
stdev 0.063
extra 0.55
7794.1200
stdev 0.021
extra 0.37
7821.5100
stdev 0.019
extra 0.44
8399.1600
stdev 0.035
extra 0.46
8430.1700
stdev 0.020
extra 0.43
8885.8300
stdev 0.023
extra 0.48
8919.6100
stdev 0.027
extra 0.48
meas − pred, pix
mfib1 16
mfib2 16

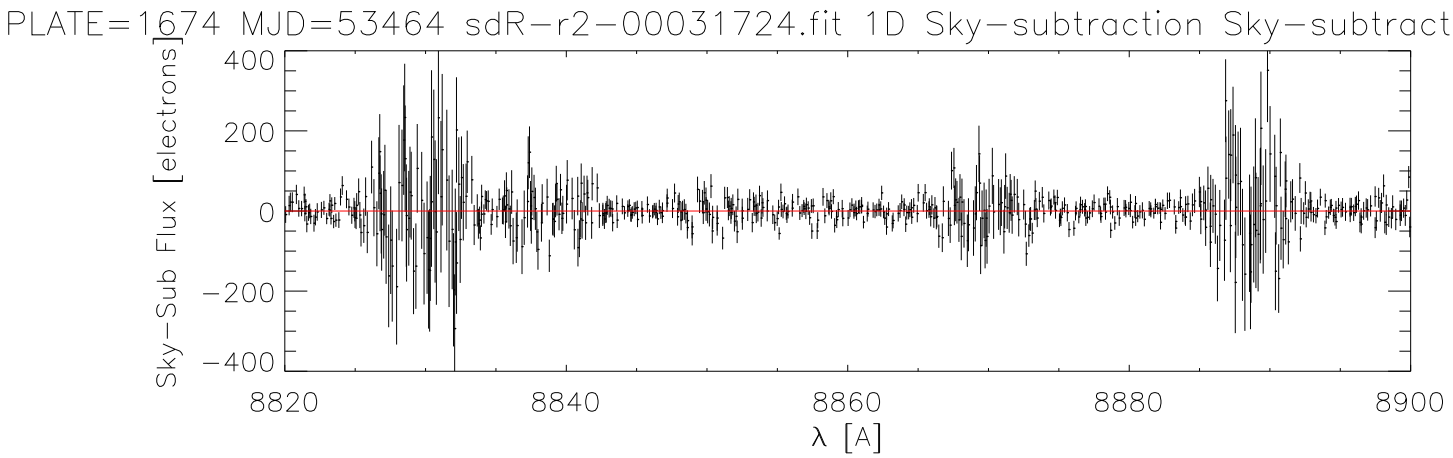

sky shift, pixels
0.60
0.55
0.50
0.45
0.40
5000
6000
7000
8000
9000
10000

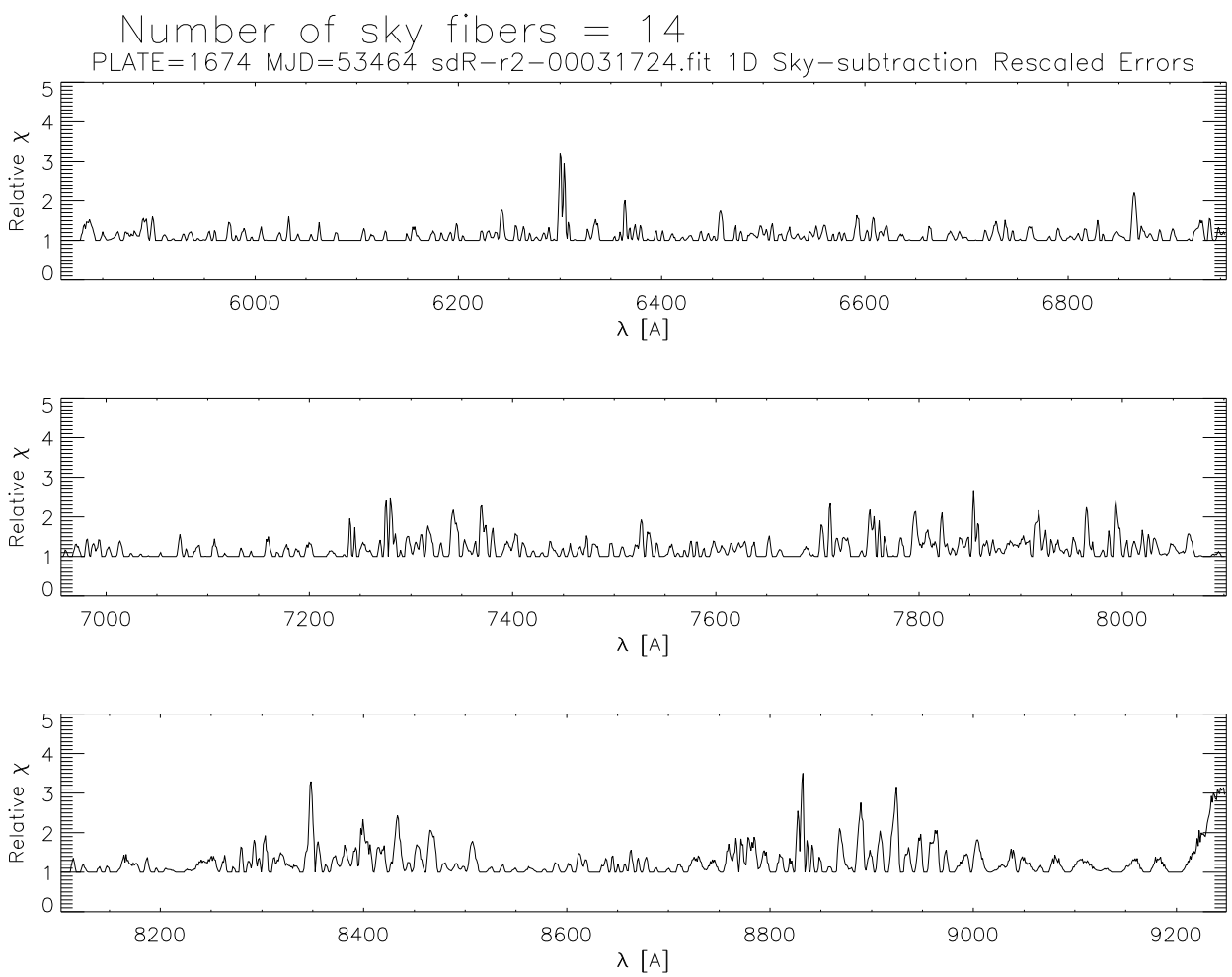
es= −0.0000

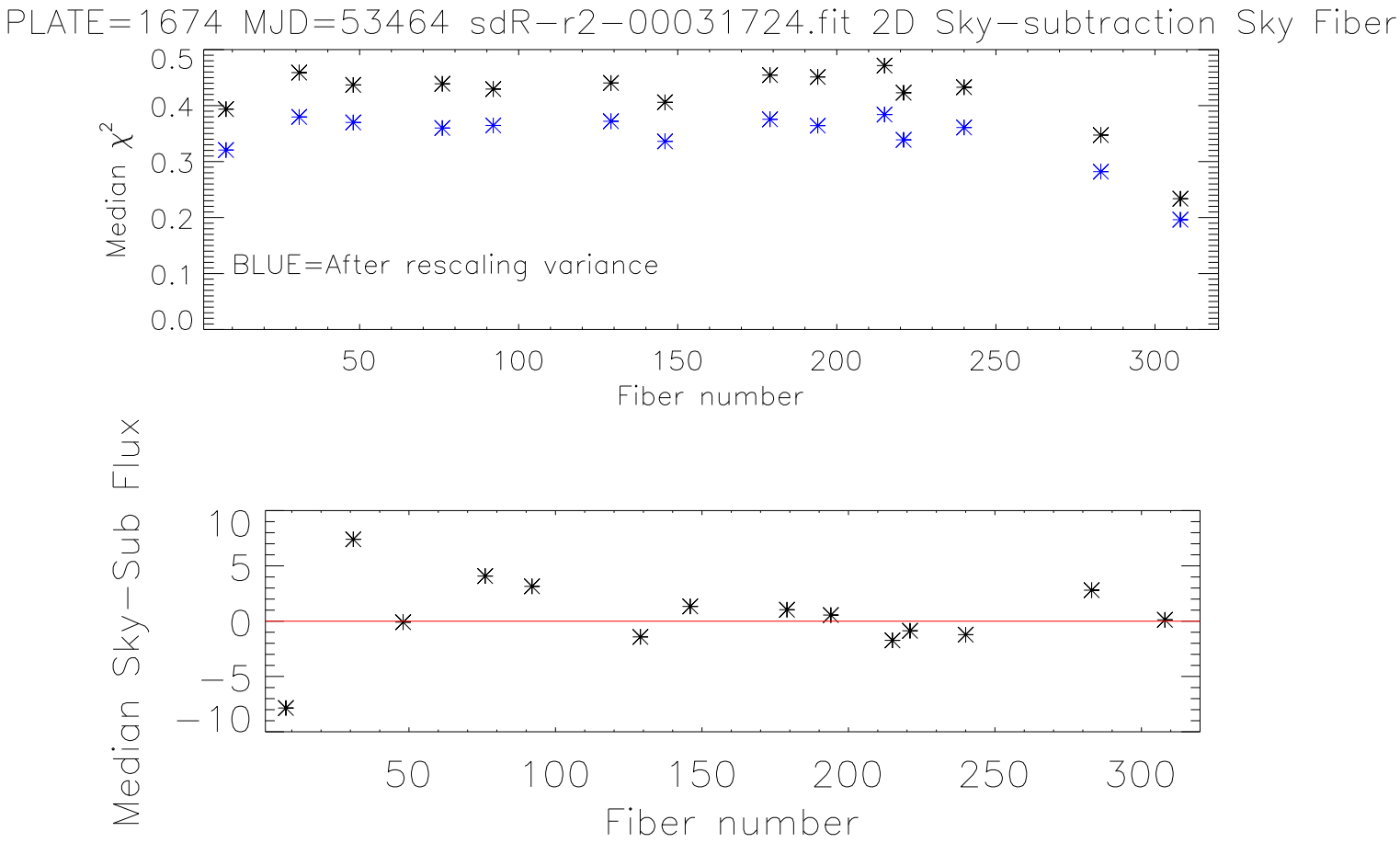

PLATE=1674 MJD=53464 Smooth superflat for sdR−r2−00031724.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

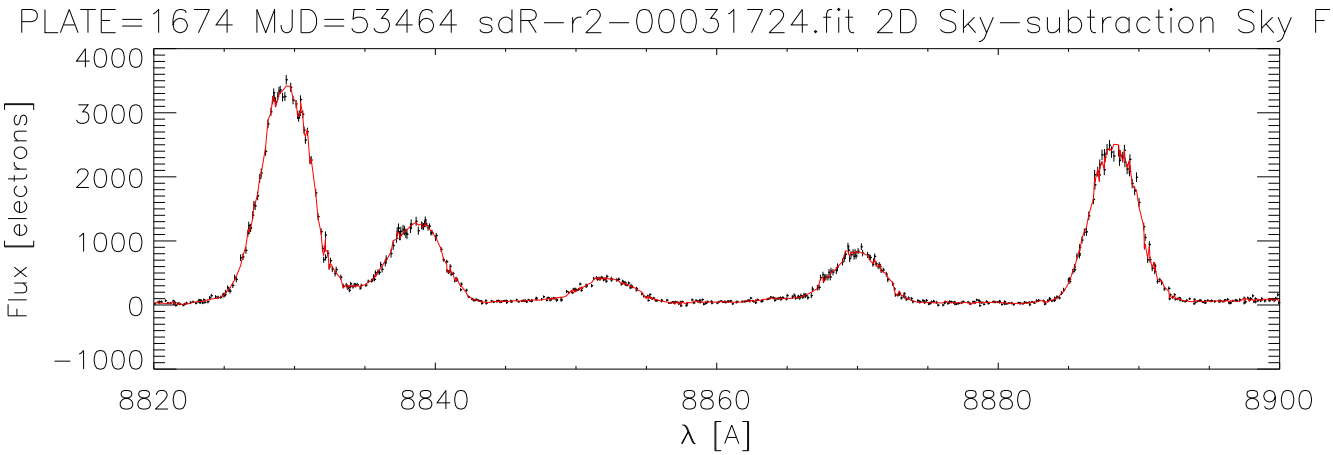

PLATE=1674 MJD=53464 sdR-r2-00031724.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

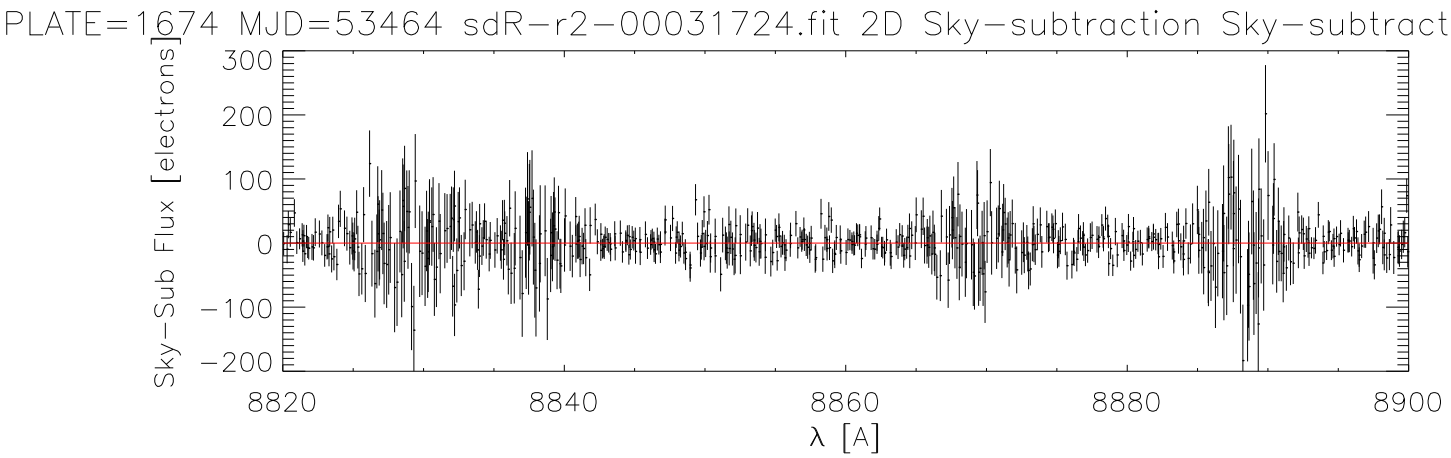

PLATE=1674 MJD=53464 sdR-r2-00031724.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

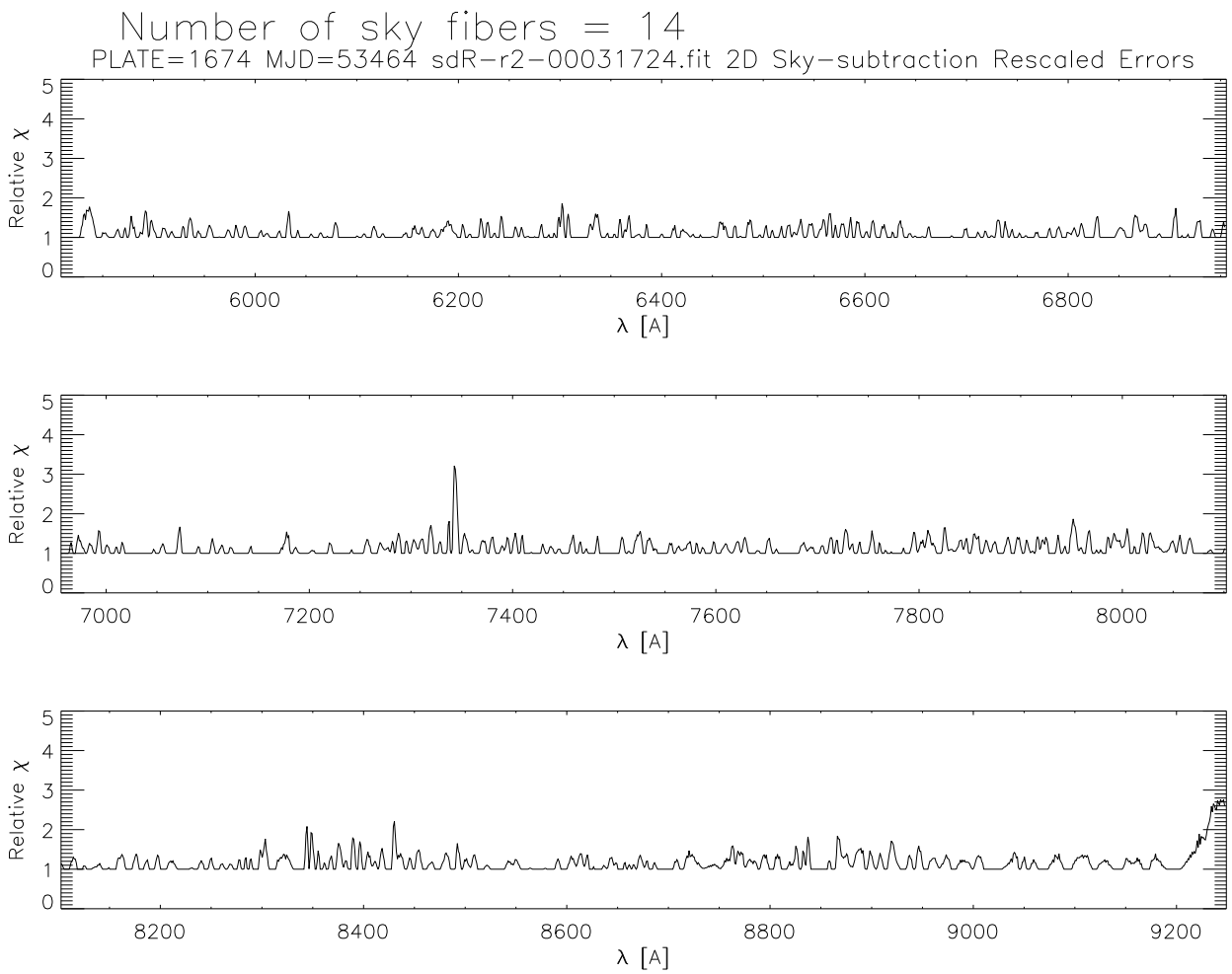

PLATE=1674 MJD=53464 sdR-r2-00031724.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

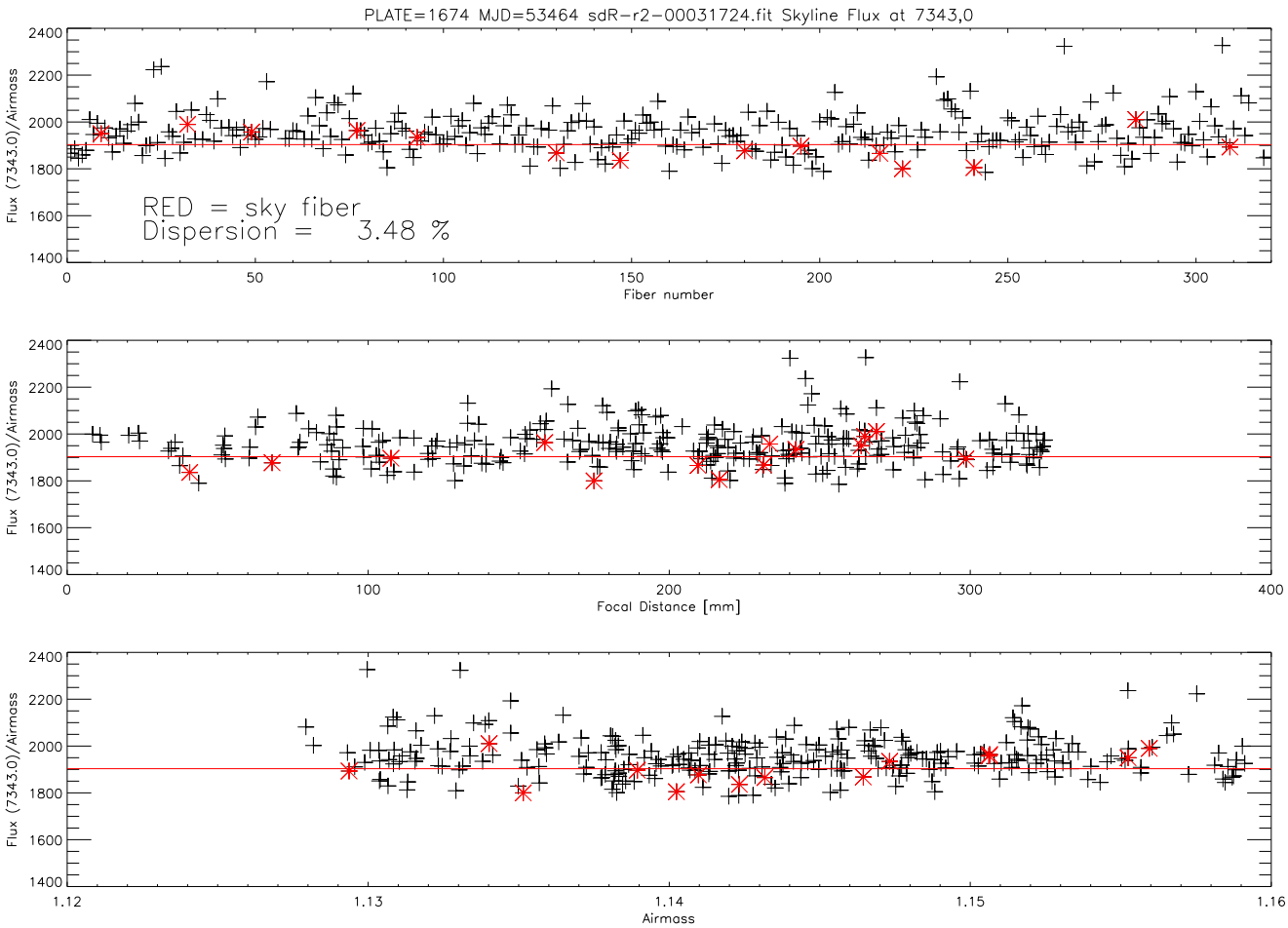

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-r2-00031724.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

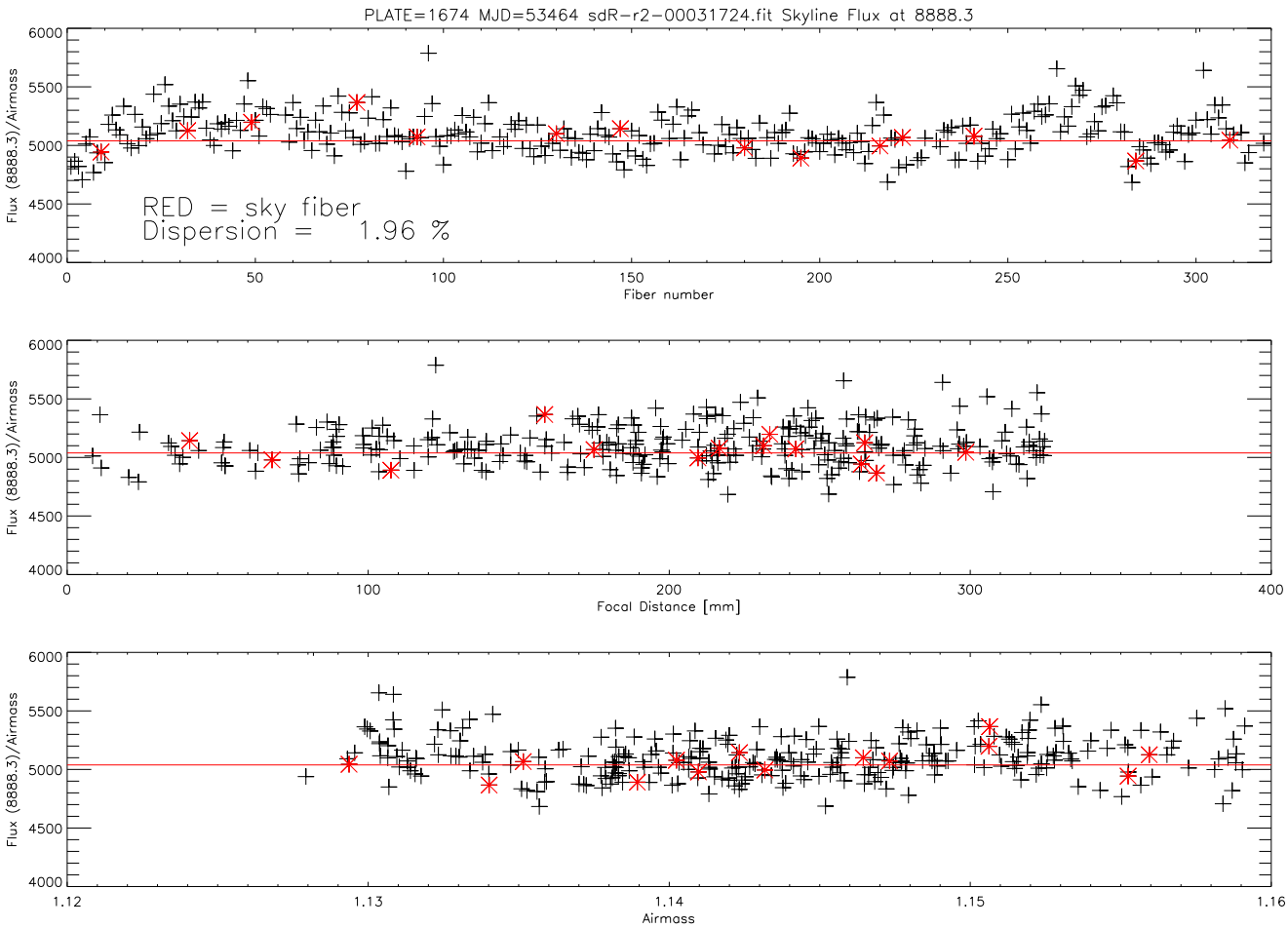

PLATE=1674 MJD=53464 sdR-r2-00031724.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

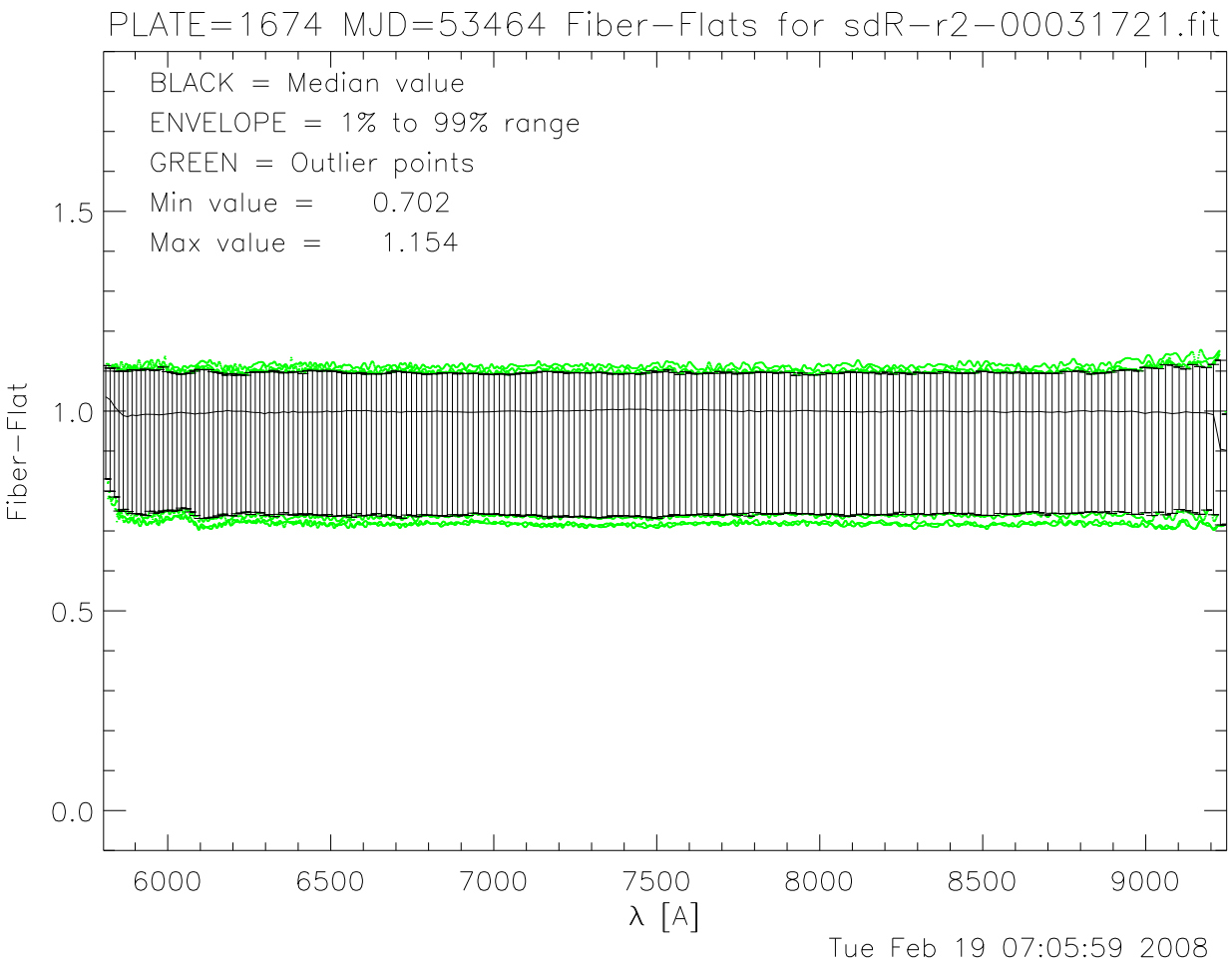

PLATE=1674 MJD=53464 sdR-r2-00031724.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

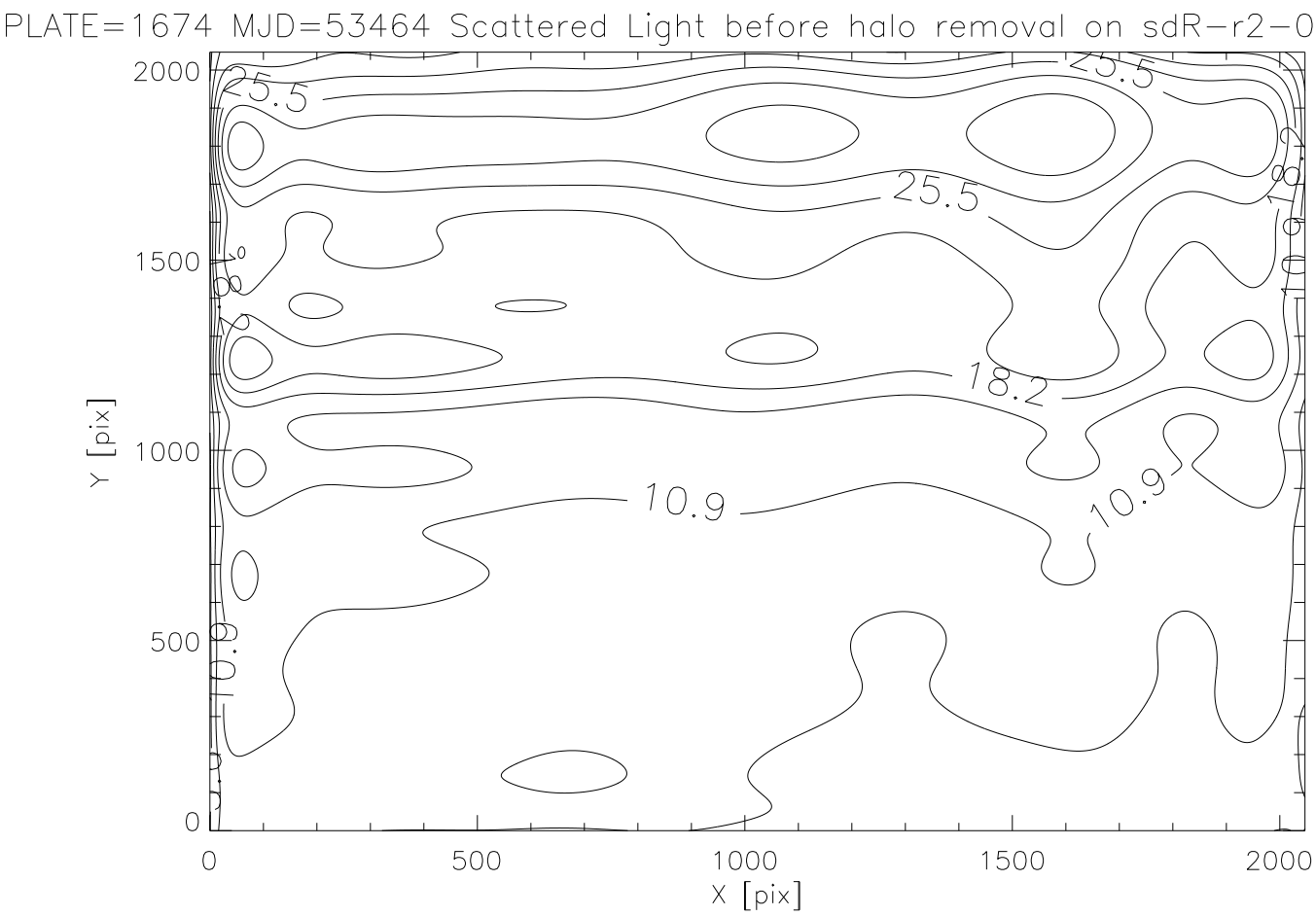

PLATE=1674 MJD=53464 sdR-r2-00031724.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

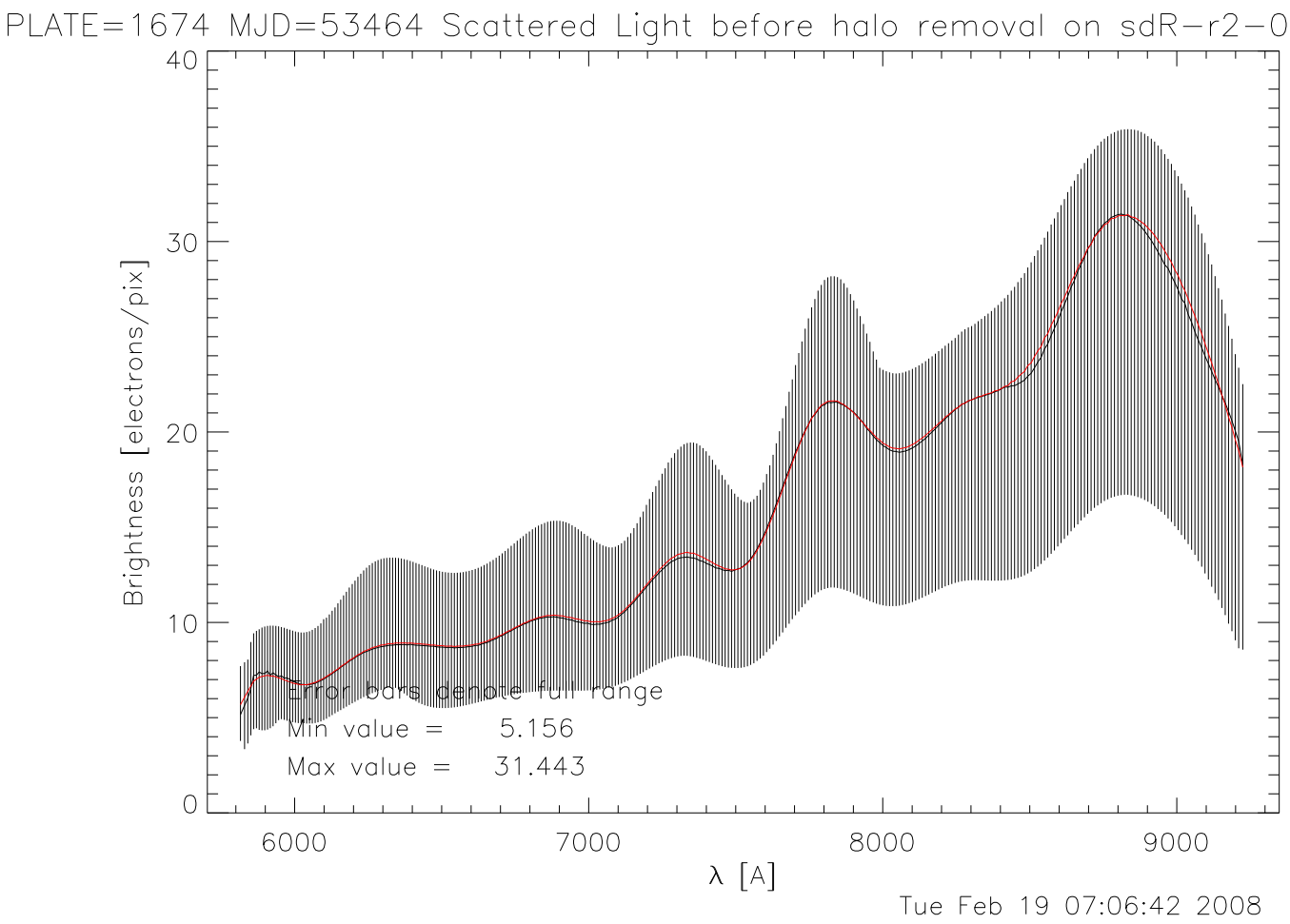

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-r2-00031724.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

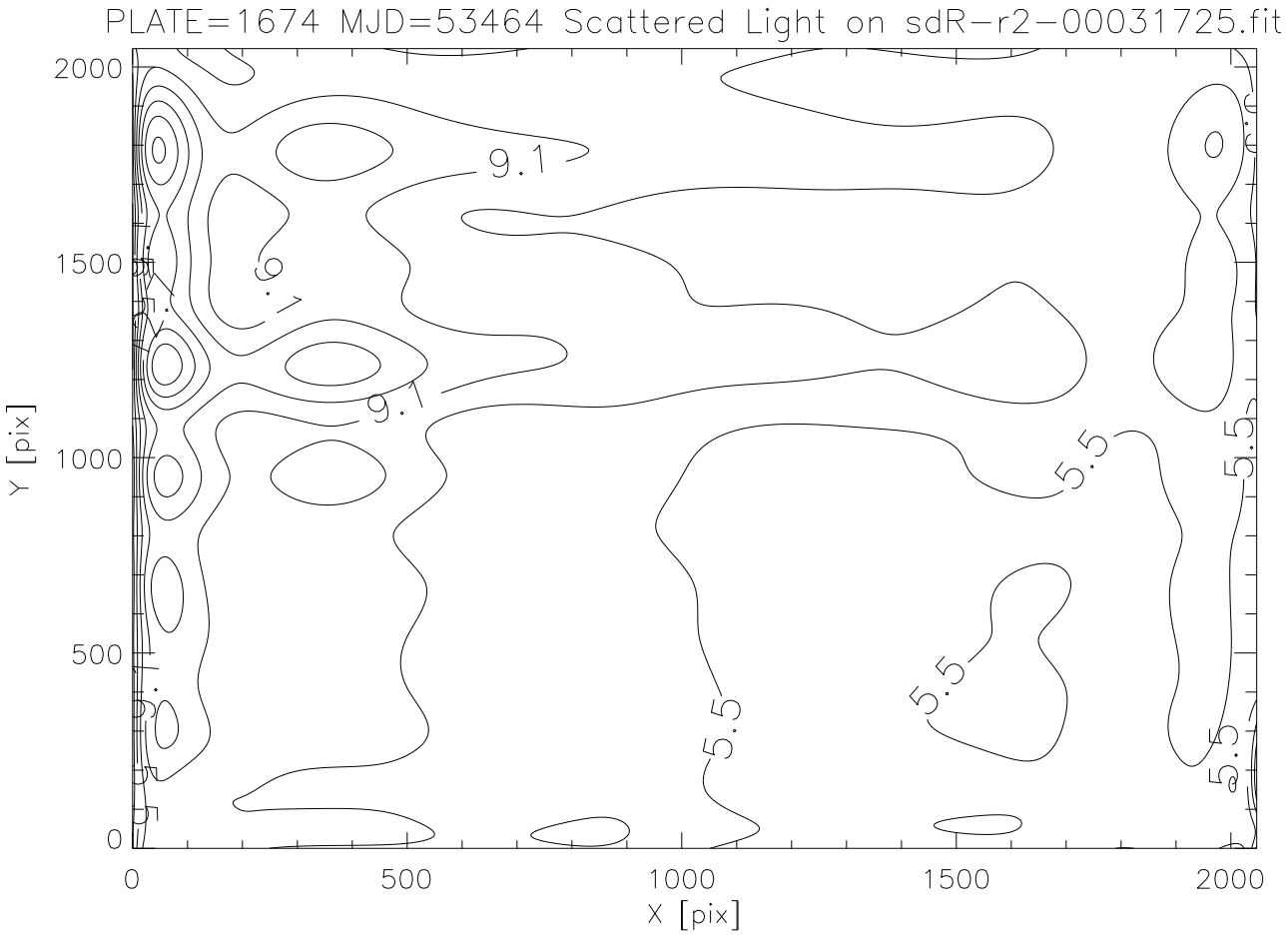

PLATE=1674 MJD=53464 sdR-r2-00031724.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.48 %
Fiber number
Focal Distance [mm]
Airmass

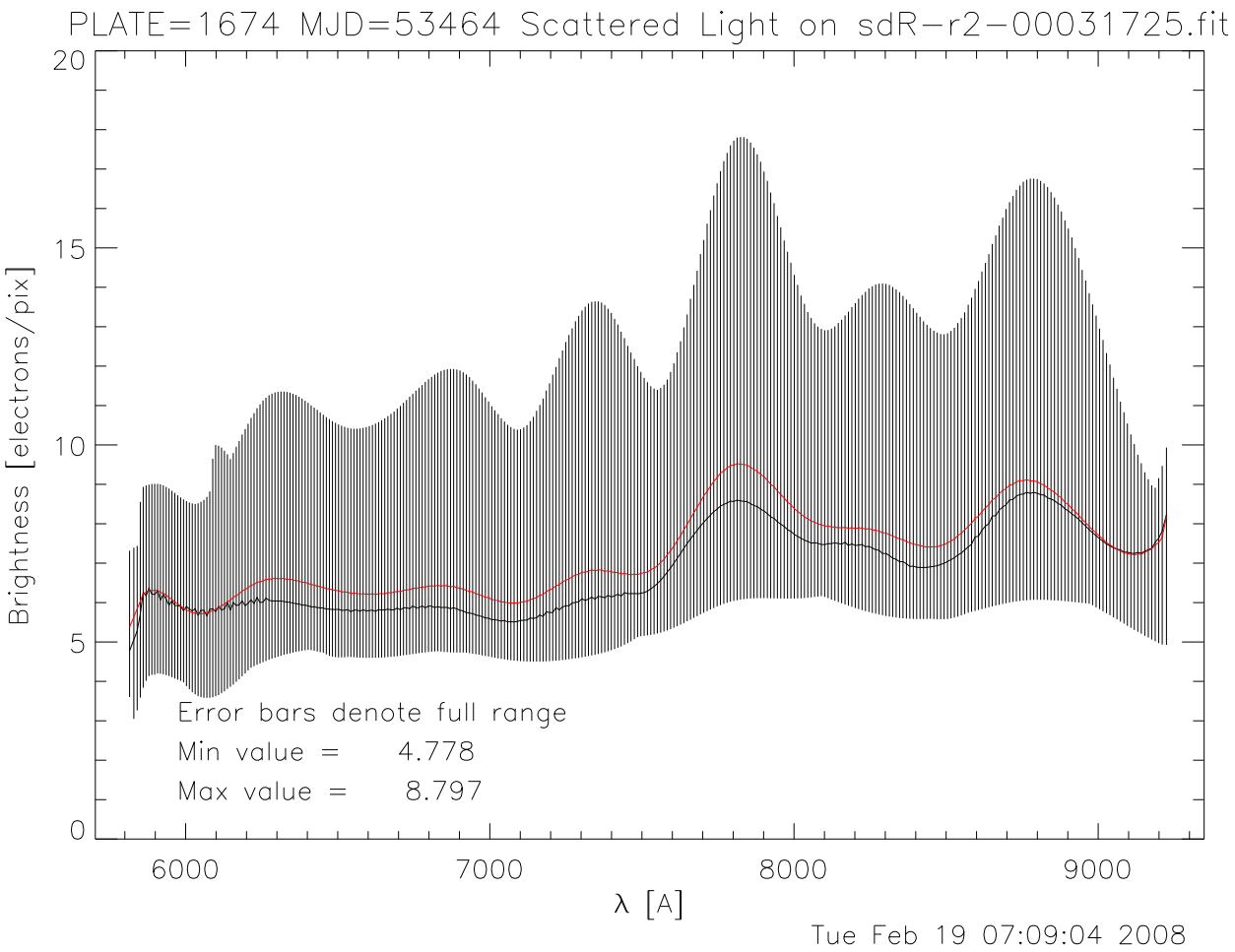

PLATE=1674 MJD=53464 sdR-r2-00031724.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.96 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

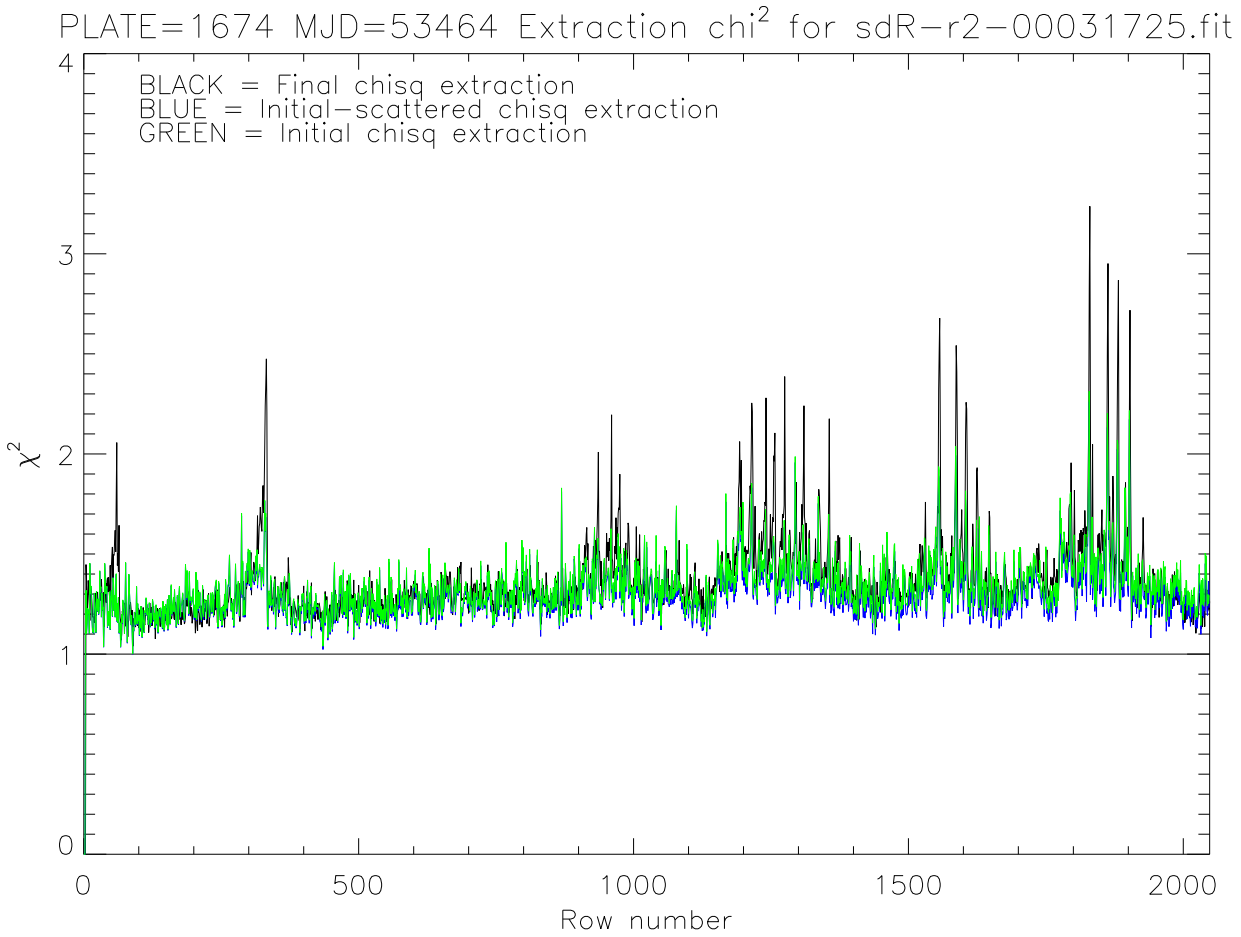

PLATE=1674 MJD=53464 Fiber−Flats for sdR−r2−00031721.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.702
Max value = 1.154
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 07:05:59 2008

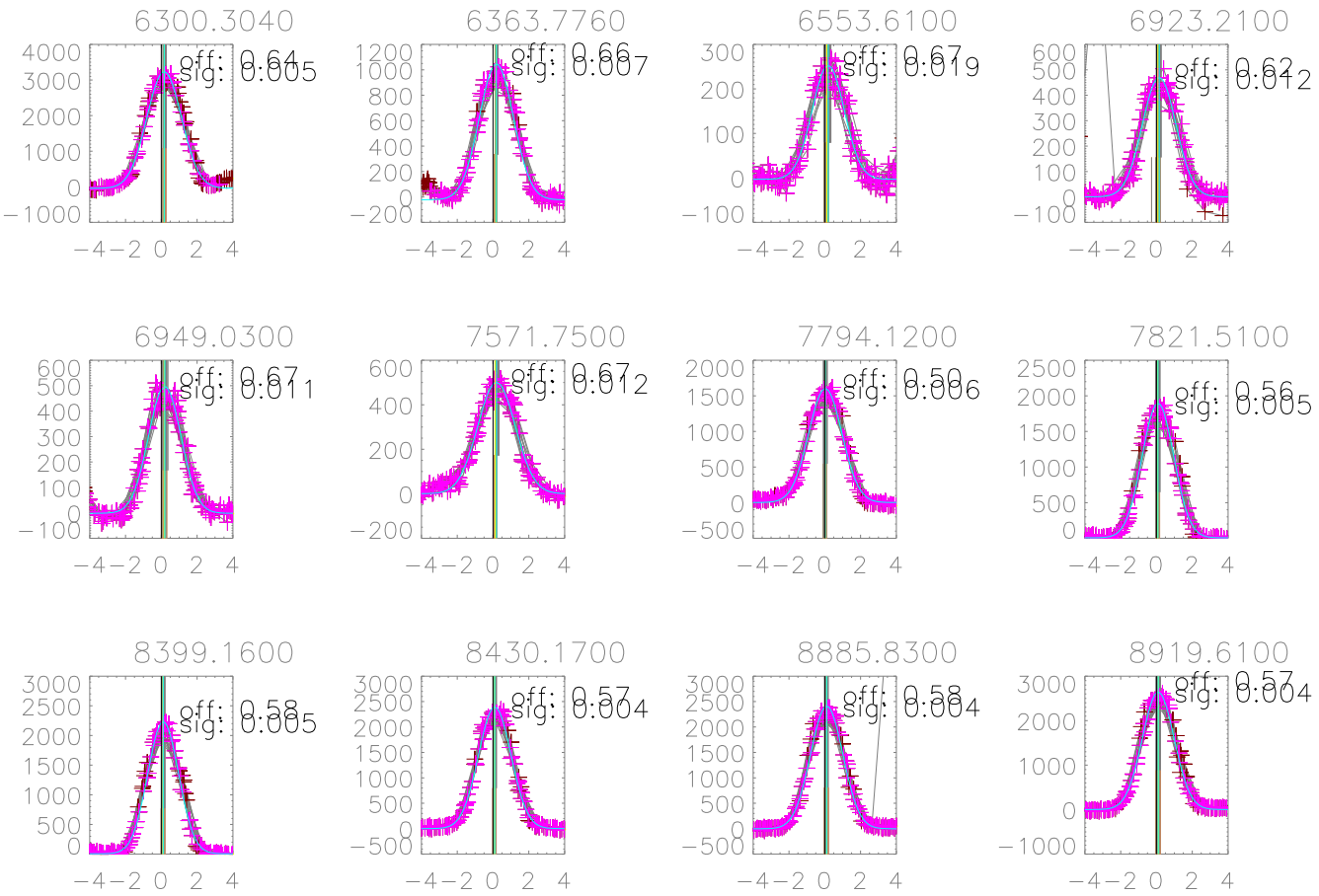

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r2-00031725.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

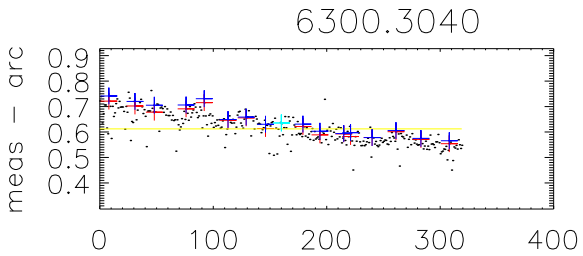

PLATE=1674 MJD=53464 Scattered Light before halo removal on sdR-r2-00031725.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.156
Max value = 31.443
Tue Feb 19 07:06:42 2008

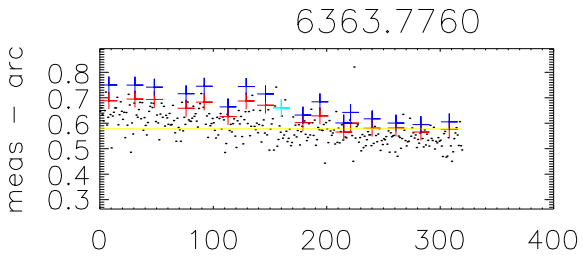

PLATE=1674 MJD=53464 Scattered Light on sdR-r2-00031725.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
5.5

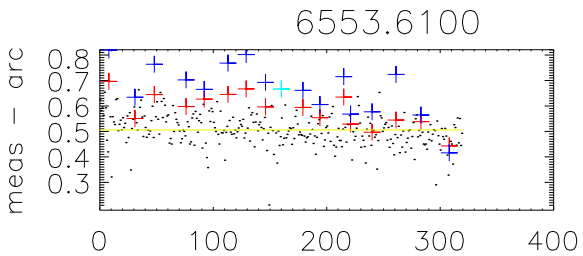

PLATE=1674 MJD=53464 Scattered Light on sdR-r2-00031725.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.778
Max value = 8.797
Tue Feb 19 07:09:04 2008

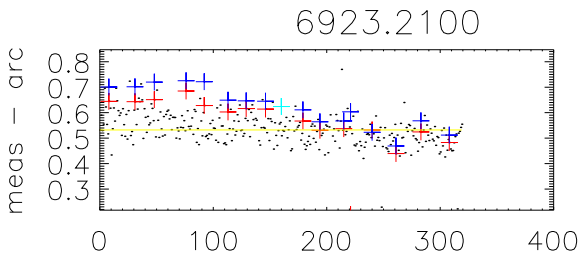

PLATE=1674 MJD=53464 Extraction chi^2 for sdR−r2−00031725.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

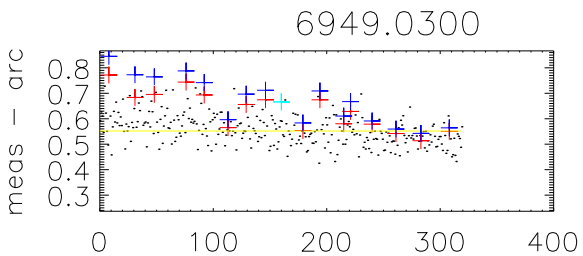

6300.3040
off: 0.64
sig: 0.005
6363.7760
off: 0.66
sig: 0.007
6553.6100
off: 0.67
sig: 0.019
6923.2100
off: 0.62
sig: 0.012
6949.0300
off: 0.67
sig: 0.011
7571.7500
off: 0.67
sig: 0.012
7794.1200
off: 0.50
sig: 0.006
7821.5100
off: 0.56
sig: 0.005
8399.1600
off: 0.58
sig: 0.005
8430.1700
off: 0.57
sig: 0.004
8885.8300
off: 0.58
sig: 0.004
8919.6100
off: 0.57
sig: 0.004

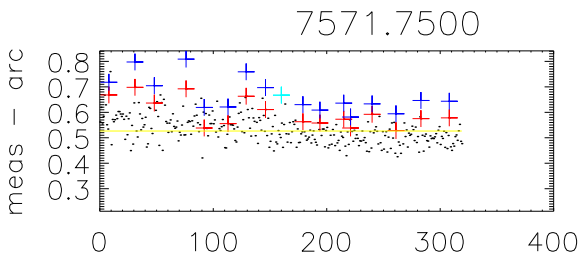

6300.3040
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

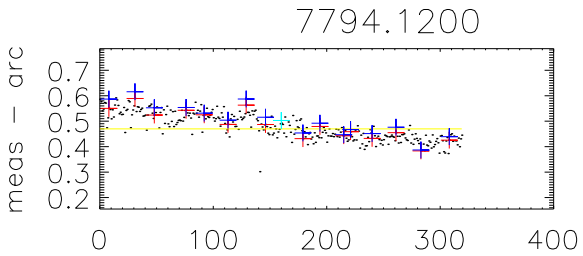

6363.7760
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

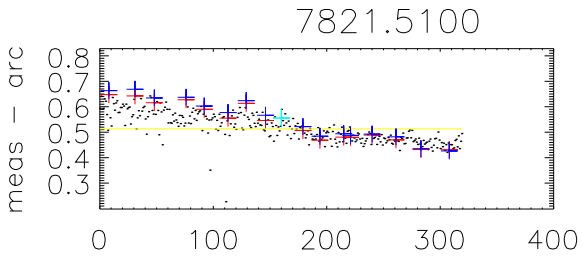

6553.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

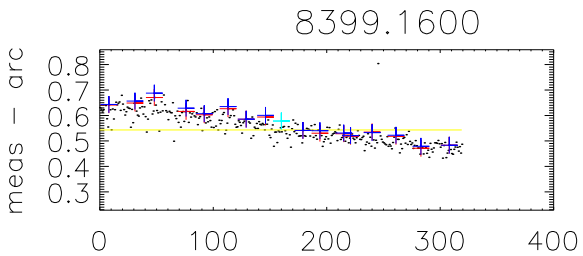

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

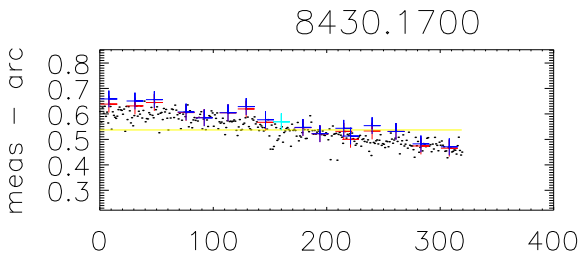

6949.0300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

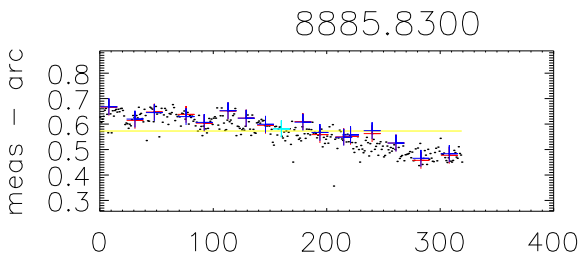

7571.7500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

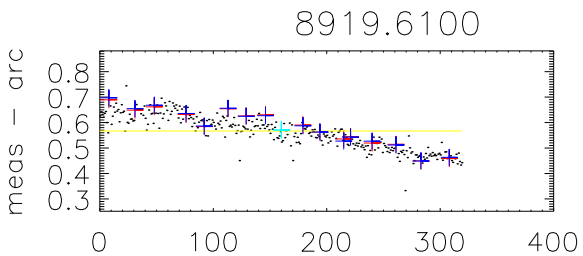

7794.1200
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

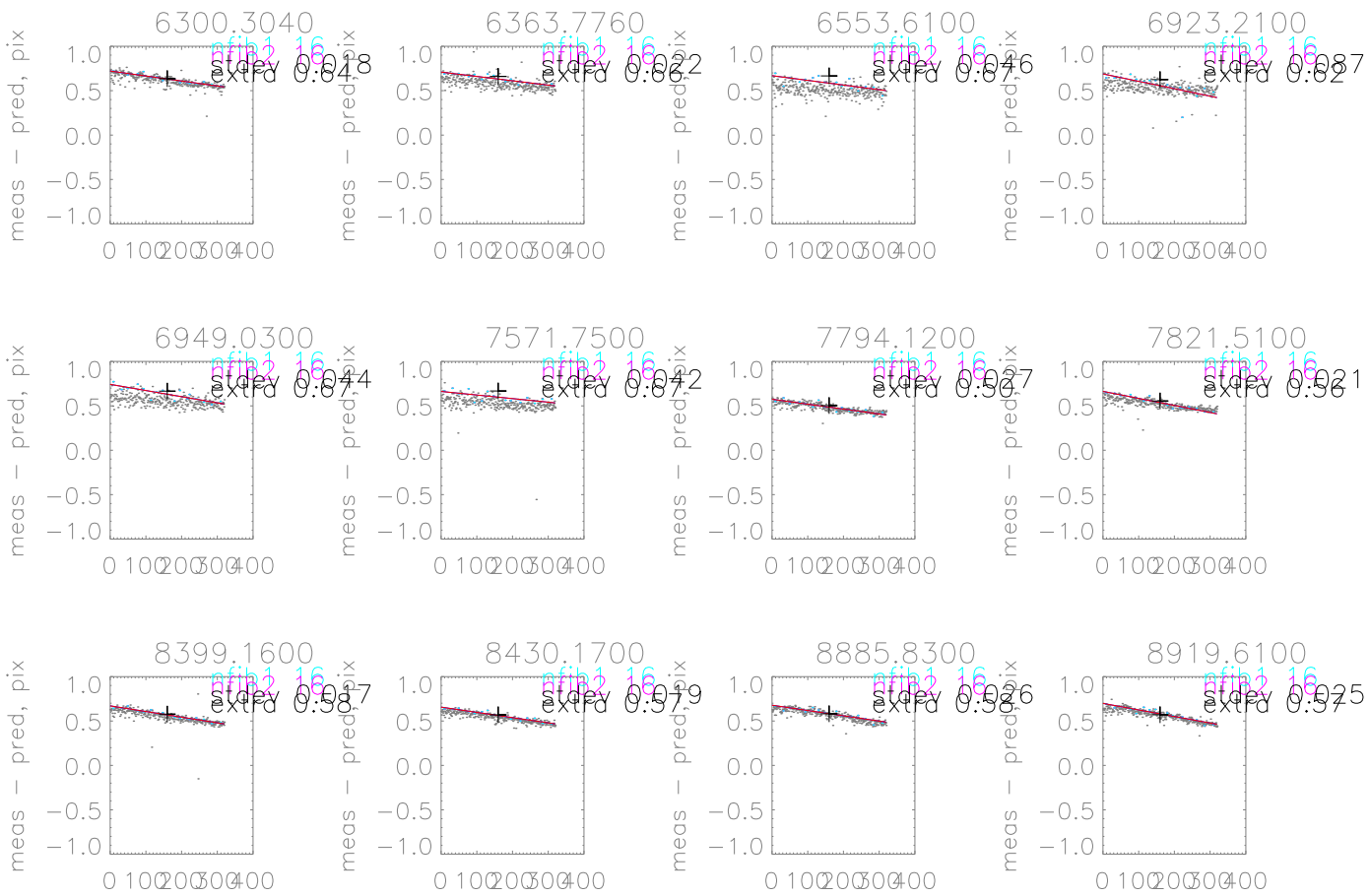

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

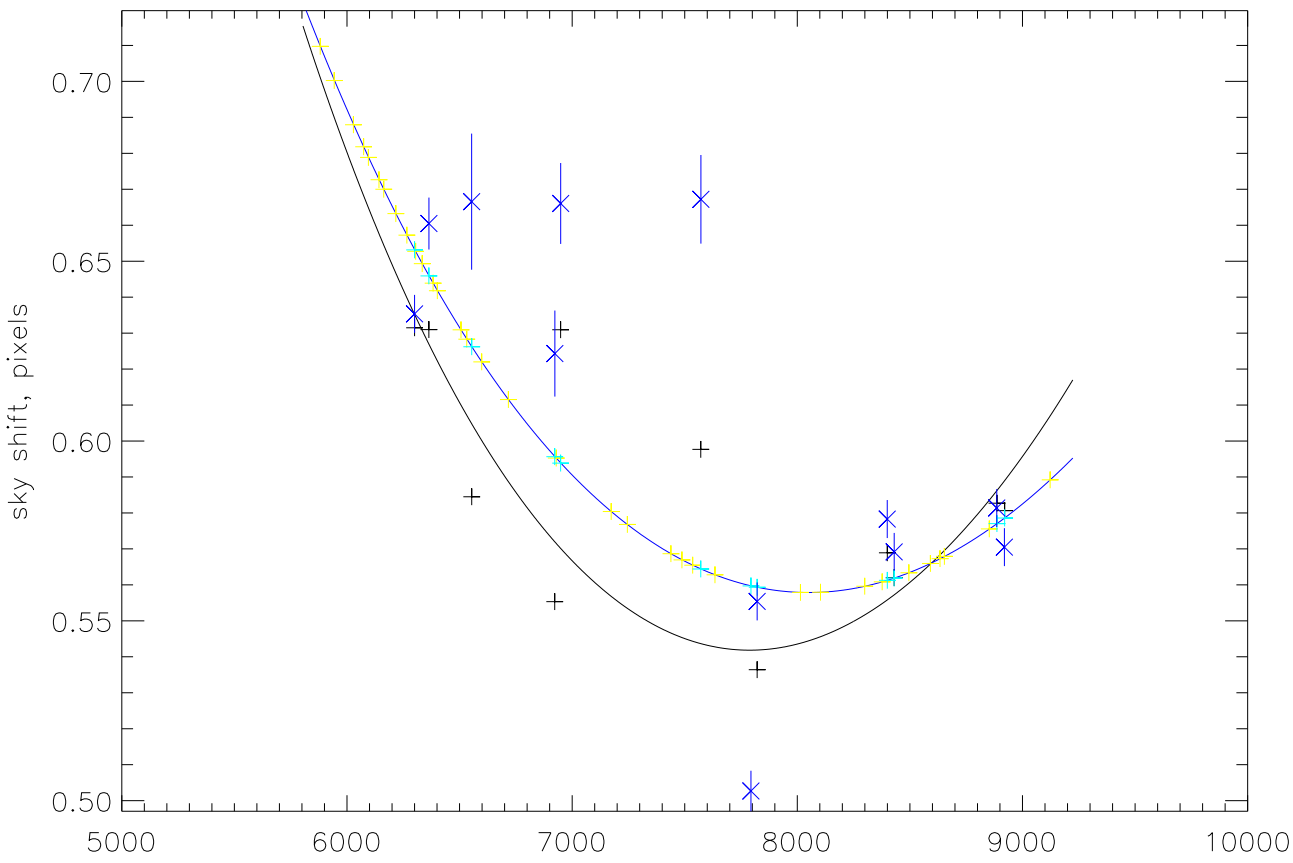

8399.1600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


8430.1700
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

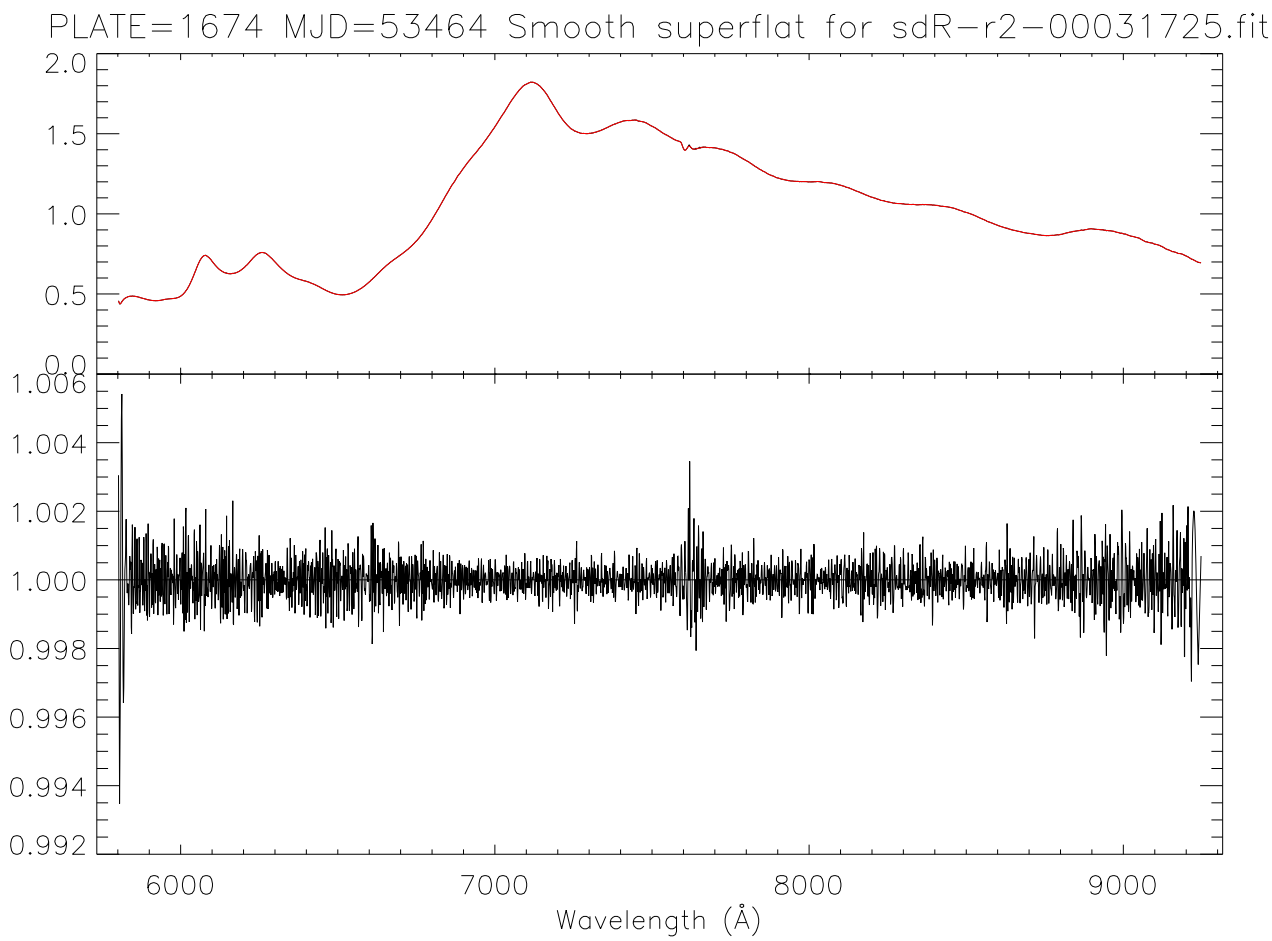

8885.8300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

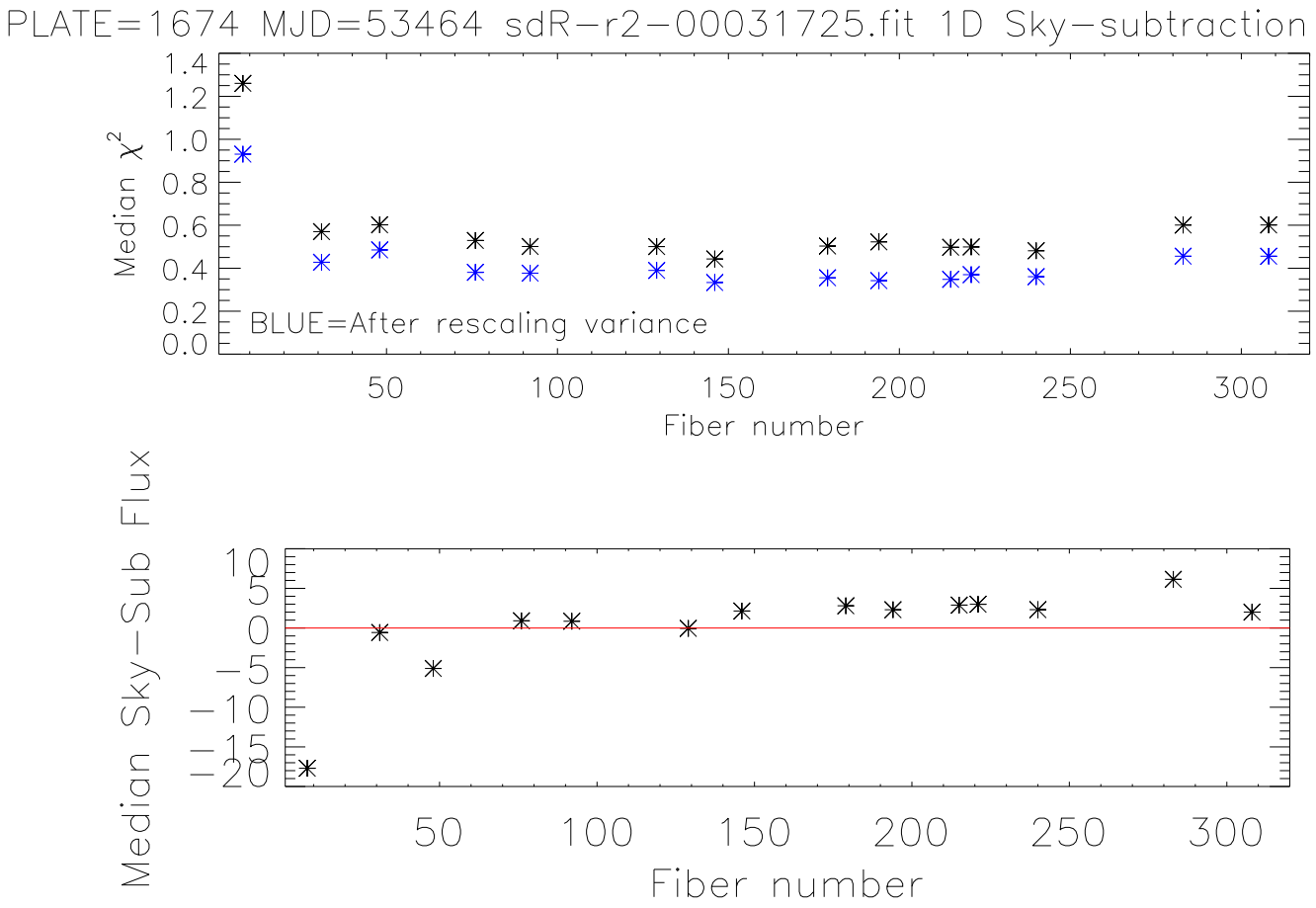

8919.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

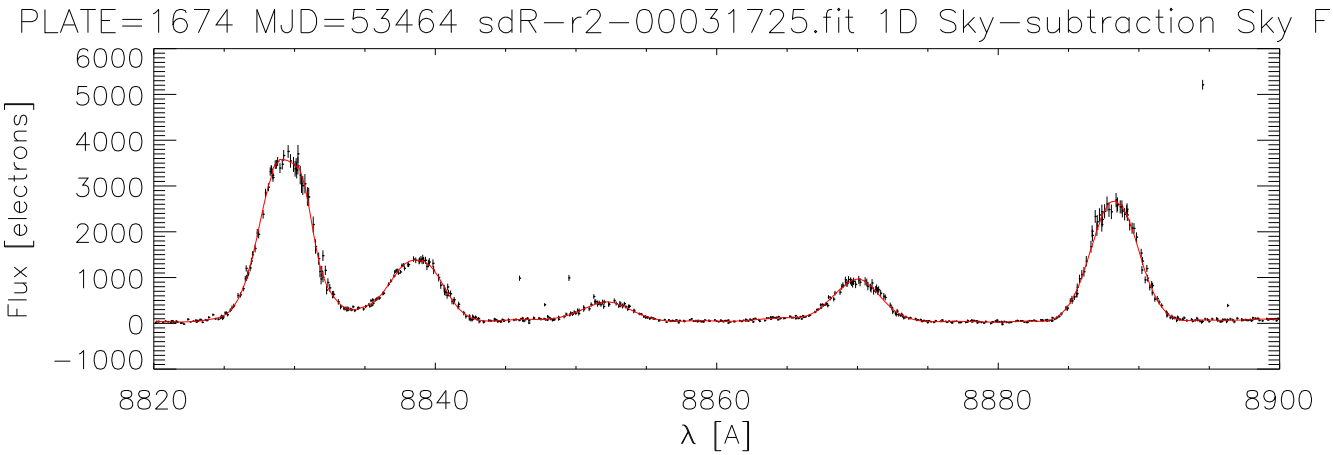

6300.3040
stdev 0.048
extra 0.84
6363.7760
stdev 0.022
extra 0.86
6553.6100
stdev 0.046
extra 0.87
6923.2100
stdev 0.087
extra 0.82
6949.0300
stdev 0.044
extra 0.87
7571.7500
stdev 0.042
extra 0.87
7794.1200
stdev 0.027
extra 0.90
7821.5100
stdev 0.021
extra 0.90
8399.1600
stdev 0.047
extra 0.88
8430.1700
stdev 0.079
extra 0.87
8885.8300
stdev 0.026
extra 0.88
8919.6100
stdev 0.025
extra 0.87
meas − pred, pix
mfbx2 16

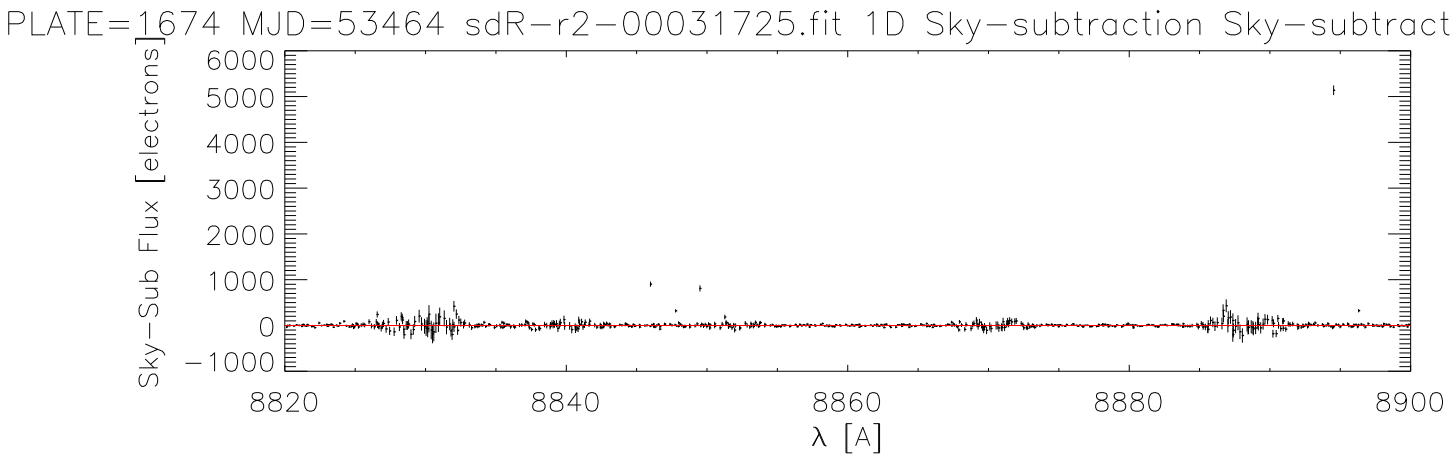

sky shift, pixels
0.70
0.65
0.60
0.55
0.50
5000
6000
7000
8000
9000
10000

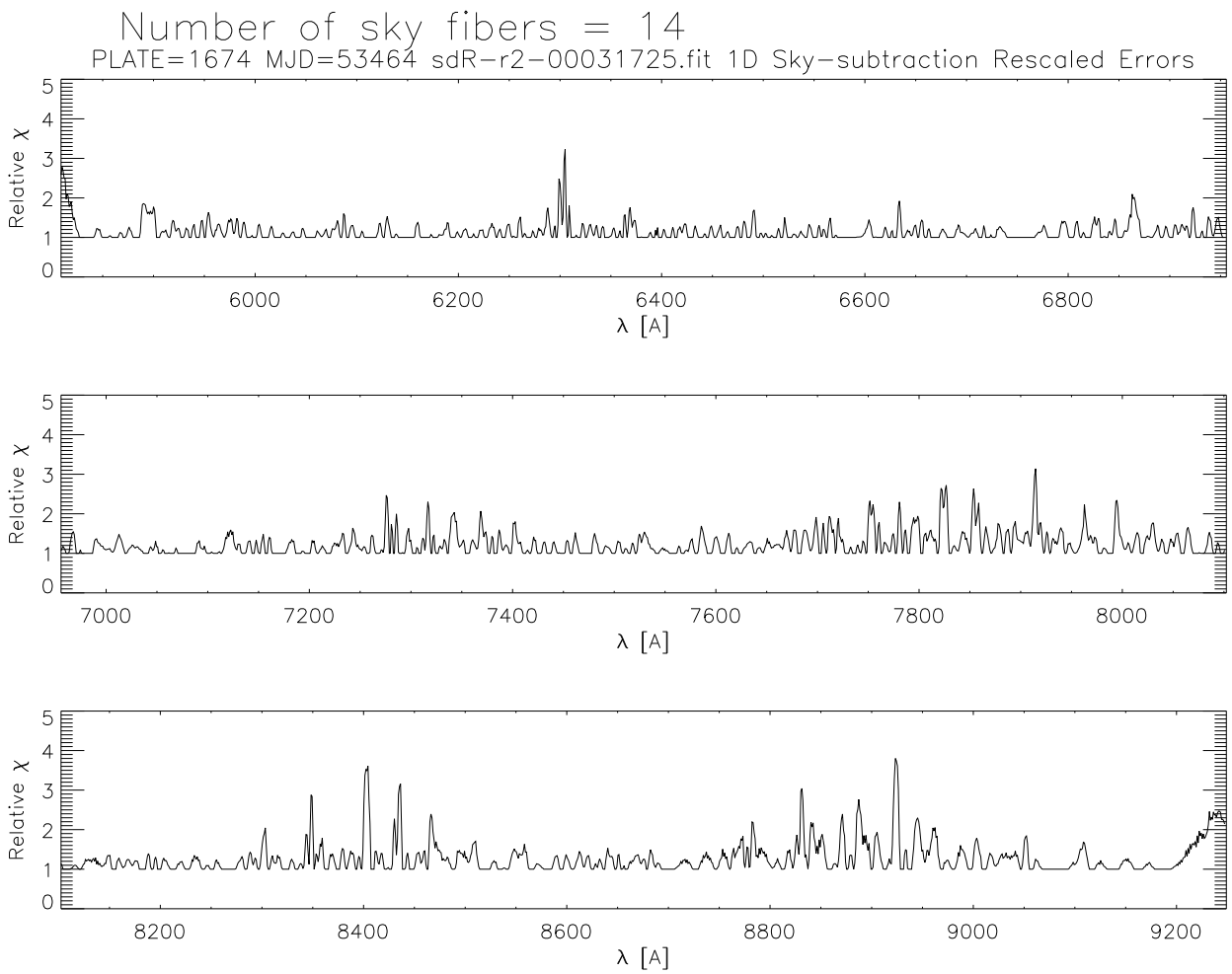
es= 0.0000

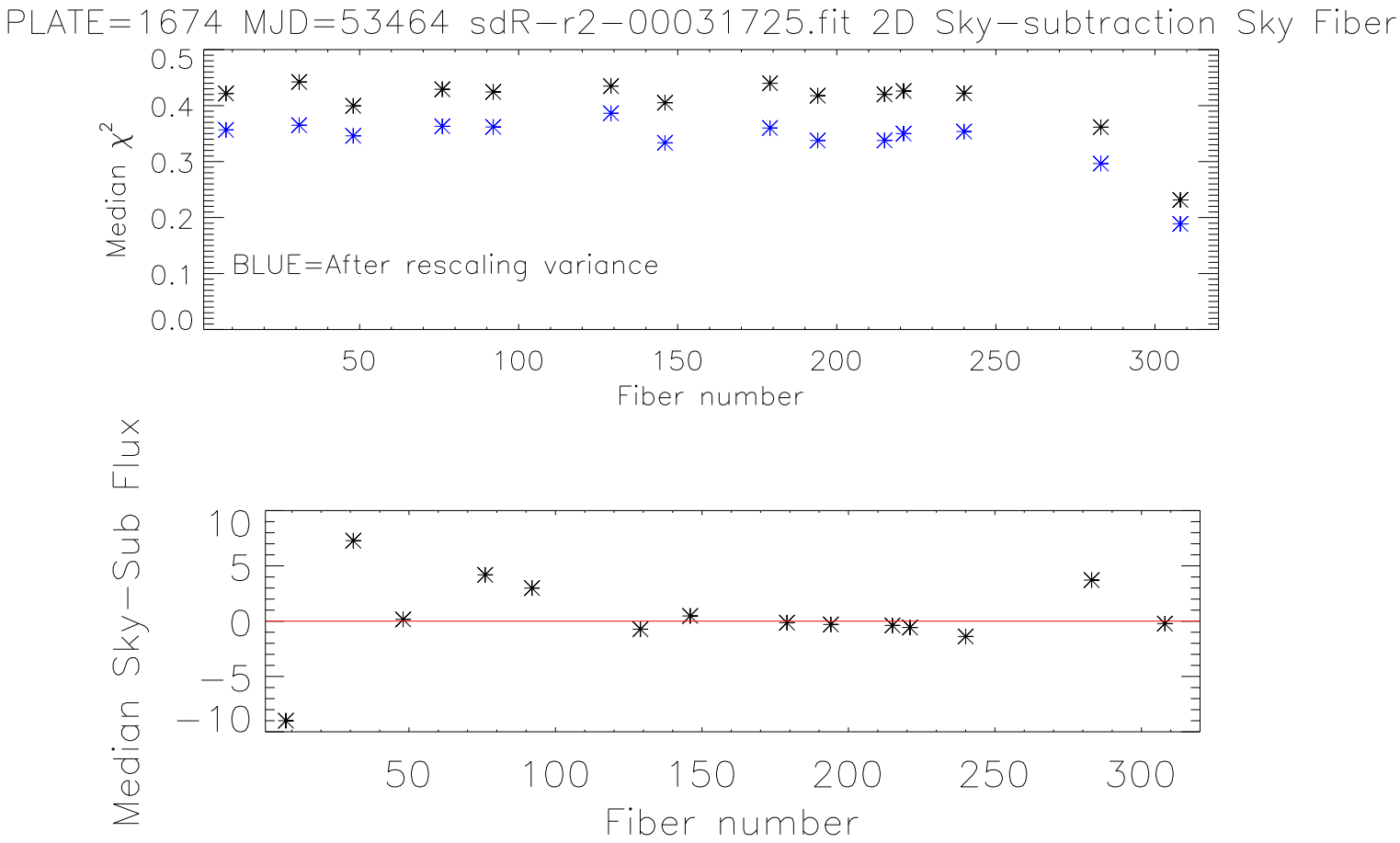

PLATE=1674 MJD=53464 Smooth superflat for sdR-r2-00031725.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

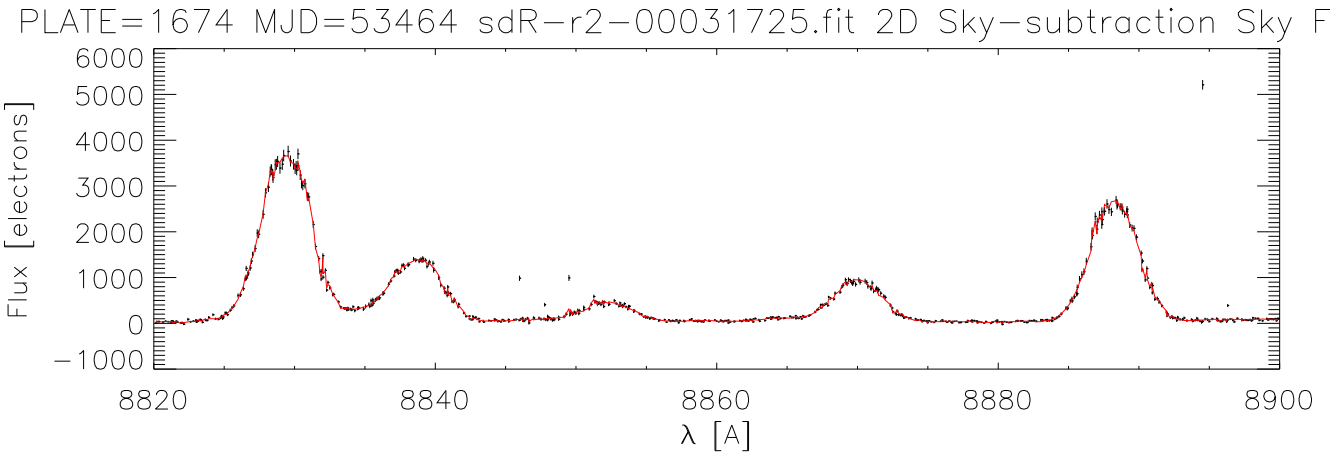

PLATE=1674 MJD=53464 sdR-r2-00031725.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

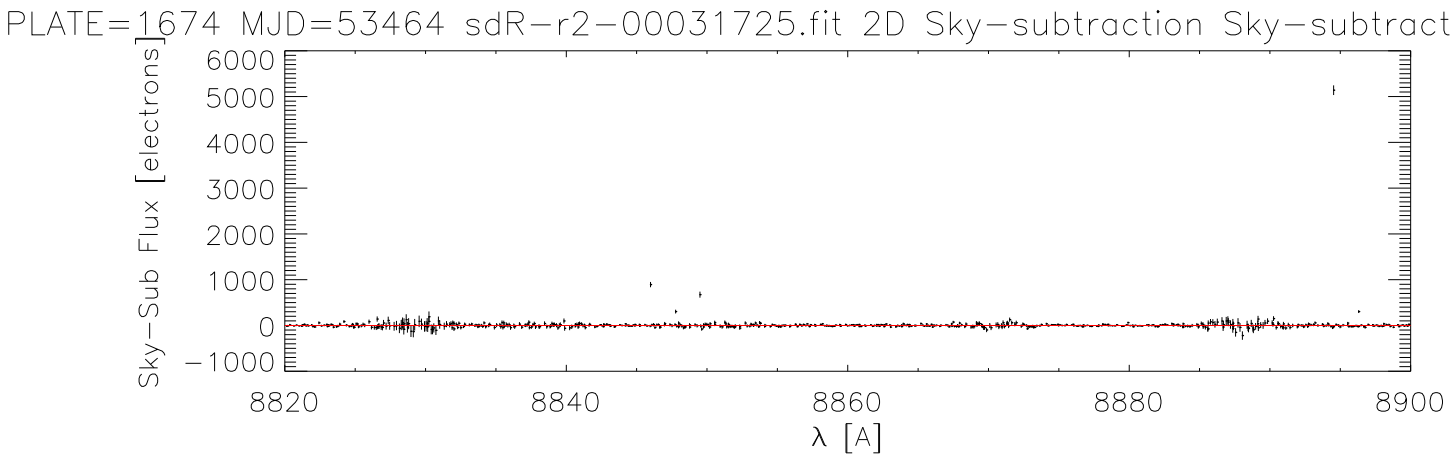

PLATE=1674 MJD=53464 sdR-r2-00031725.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

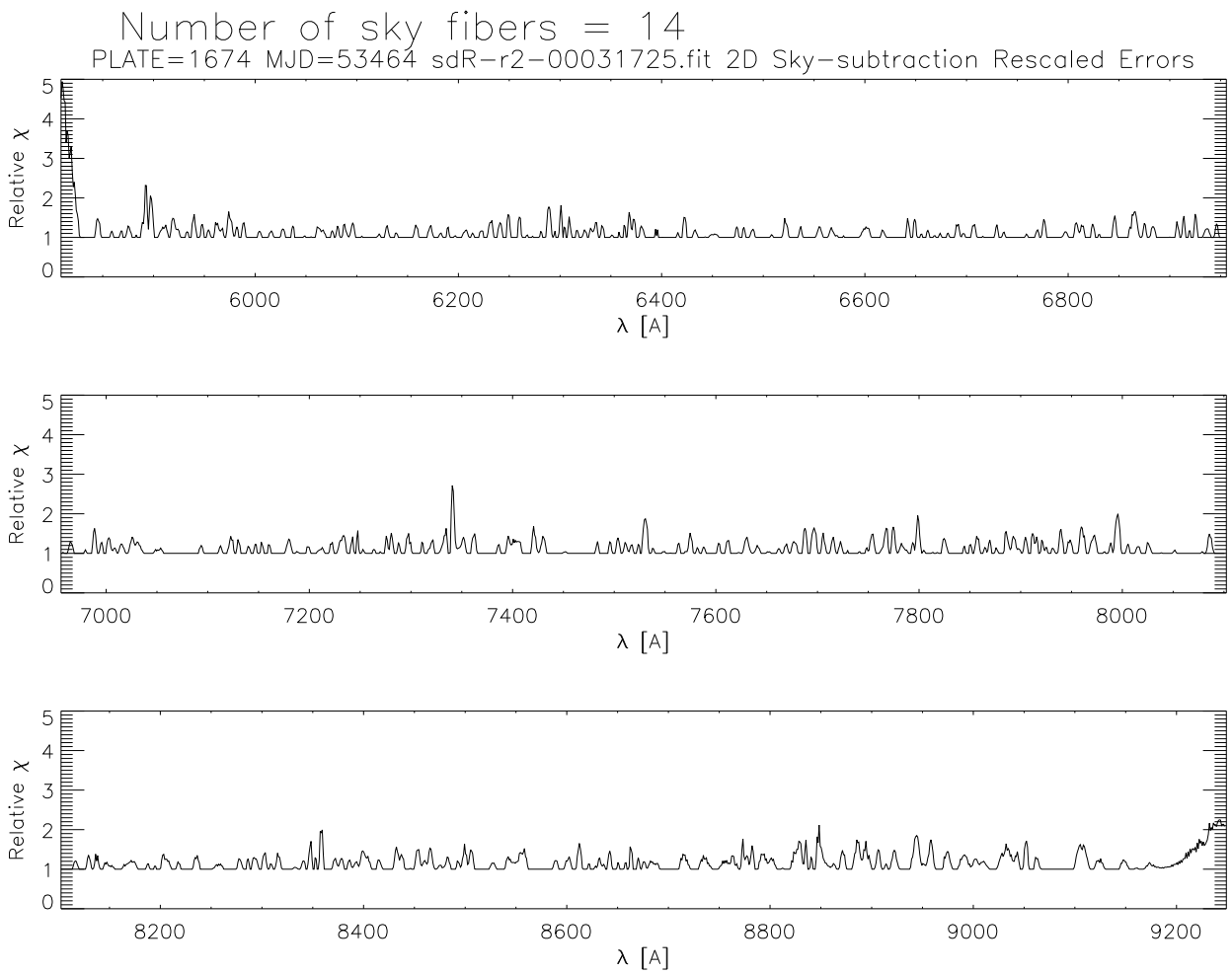

PLATE=1674 MJD=53464 sdR-r2-00031725.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

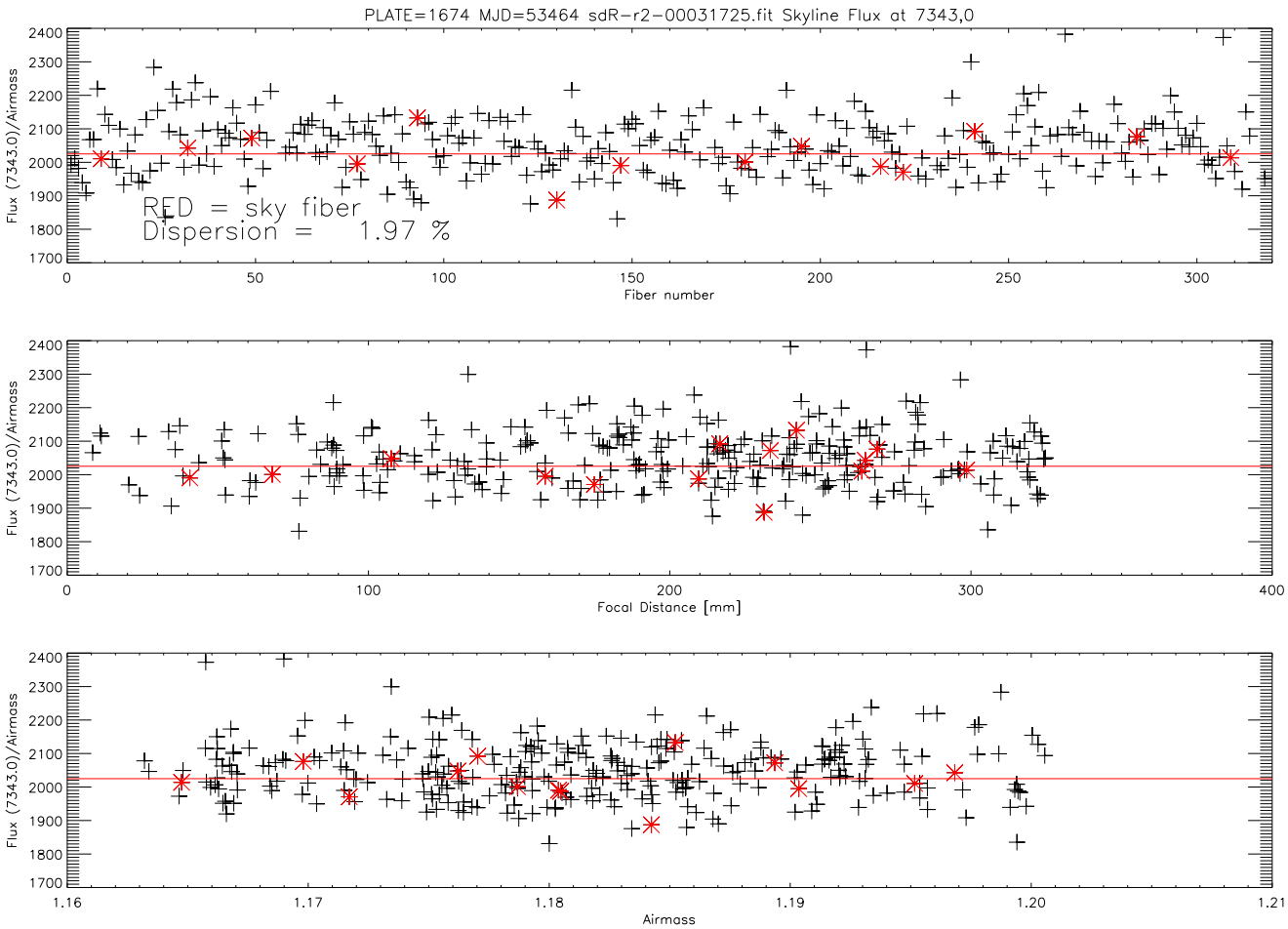

Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-r2-00031725.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

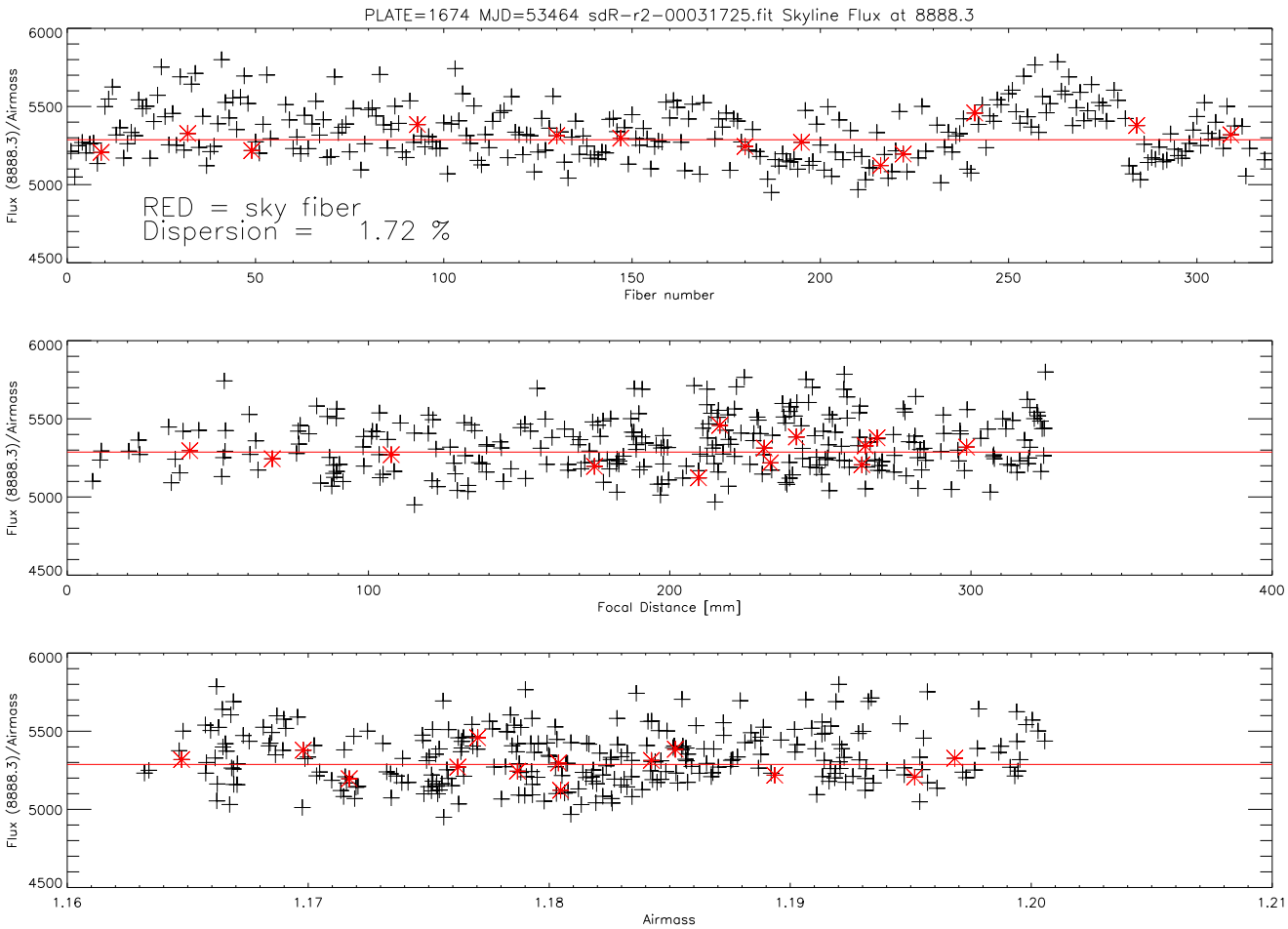

PLATE=1674 MJD=53464 sdR-r2-00031725.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=1674 MJD=53464 sdR-r2-00031725.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


PLATE=1674 MJD=53464 sdR-r2-00031725.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=1674 MJD=53464 sdR-r2-00031725.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=1674 MJD=53464 sdR-r2-00031725.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=1674 MJD=53464 sdR-r2-00031725.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.72 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass