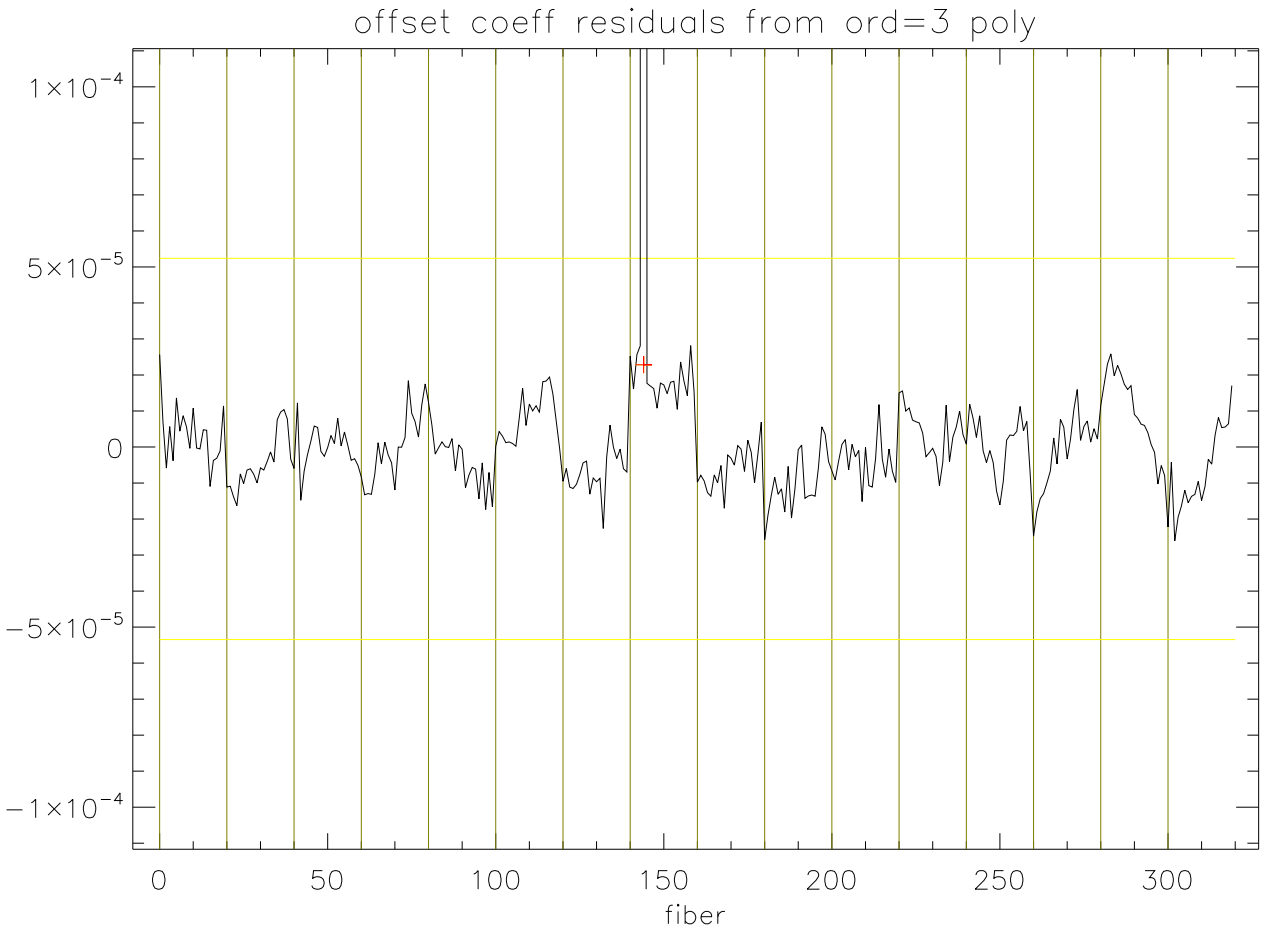
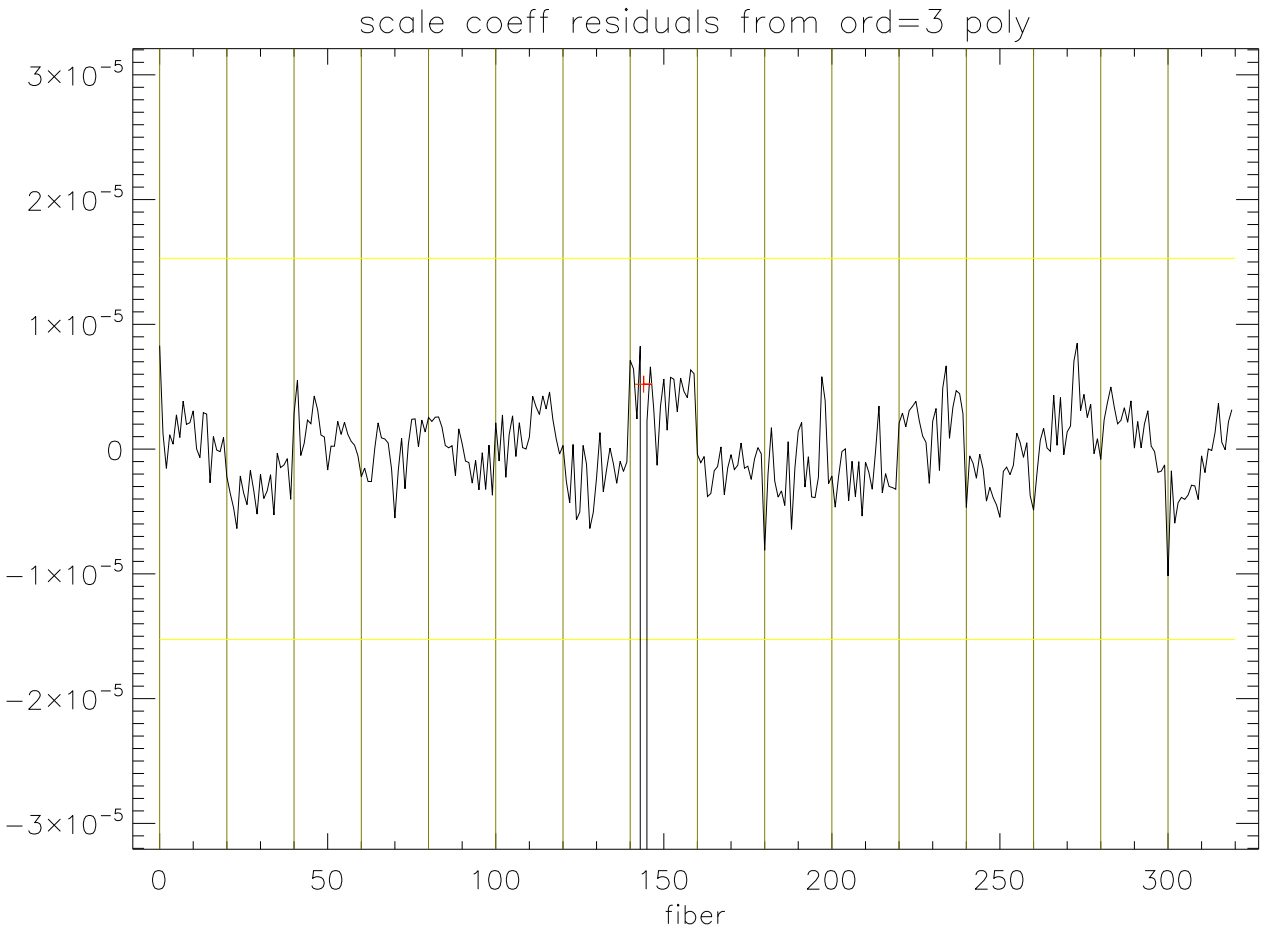
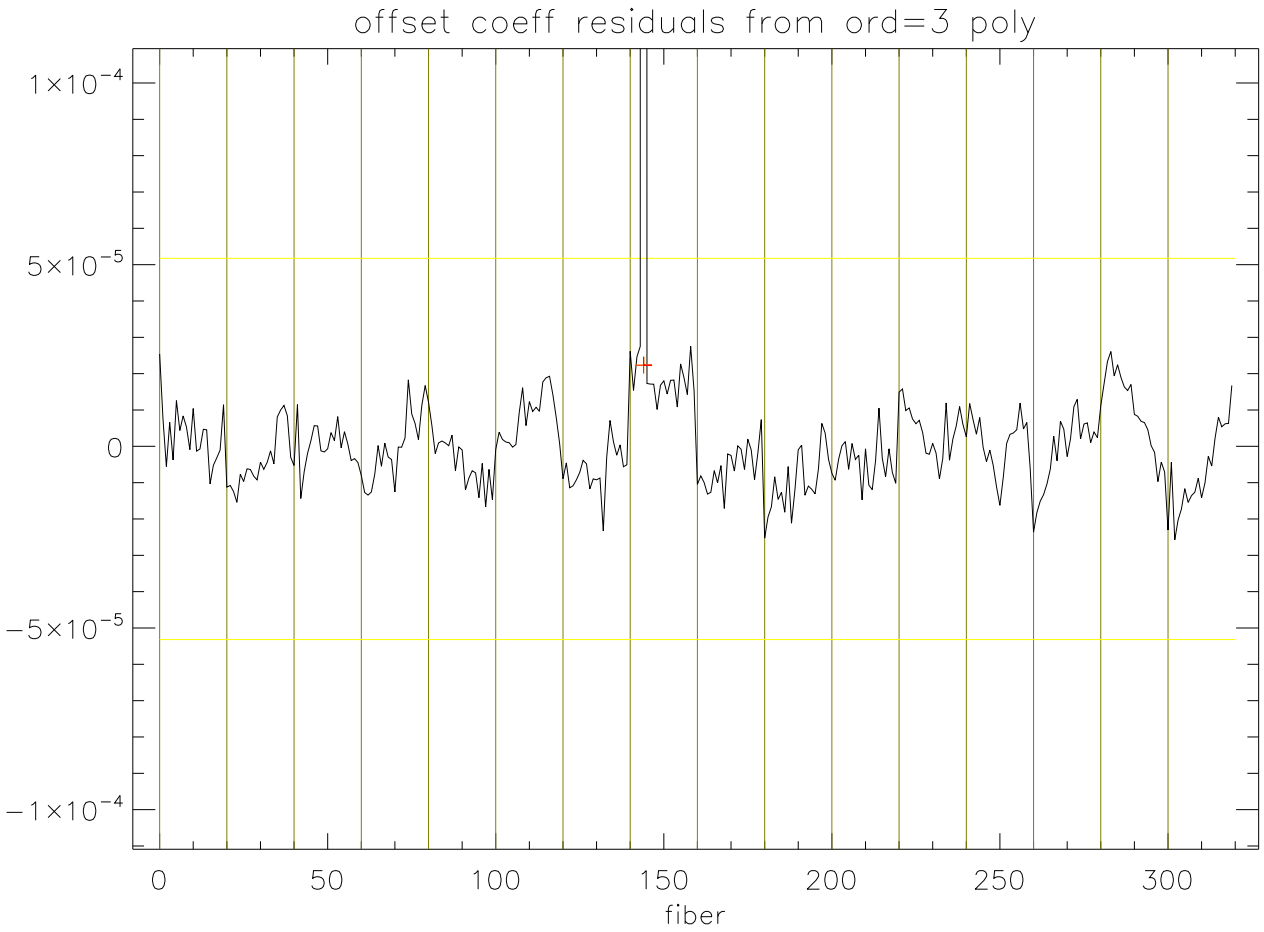
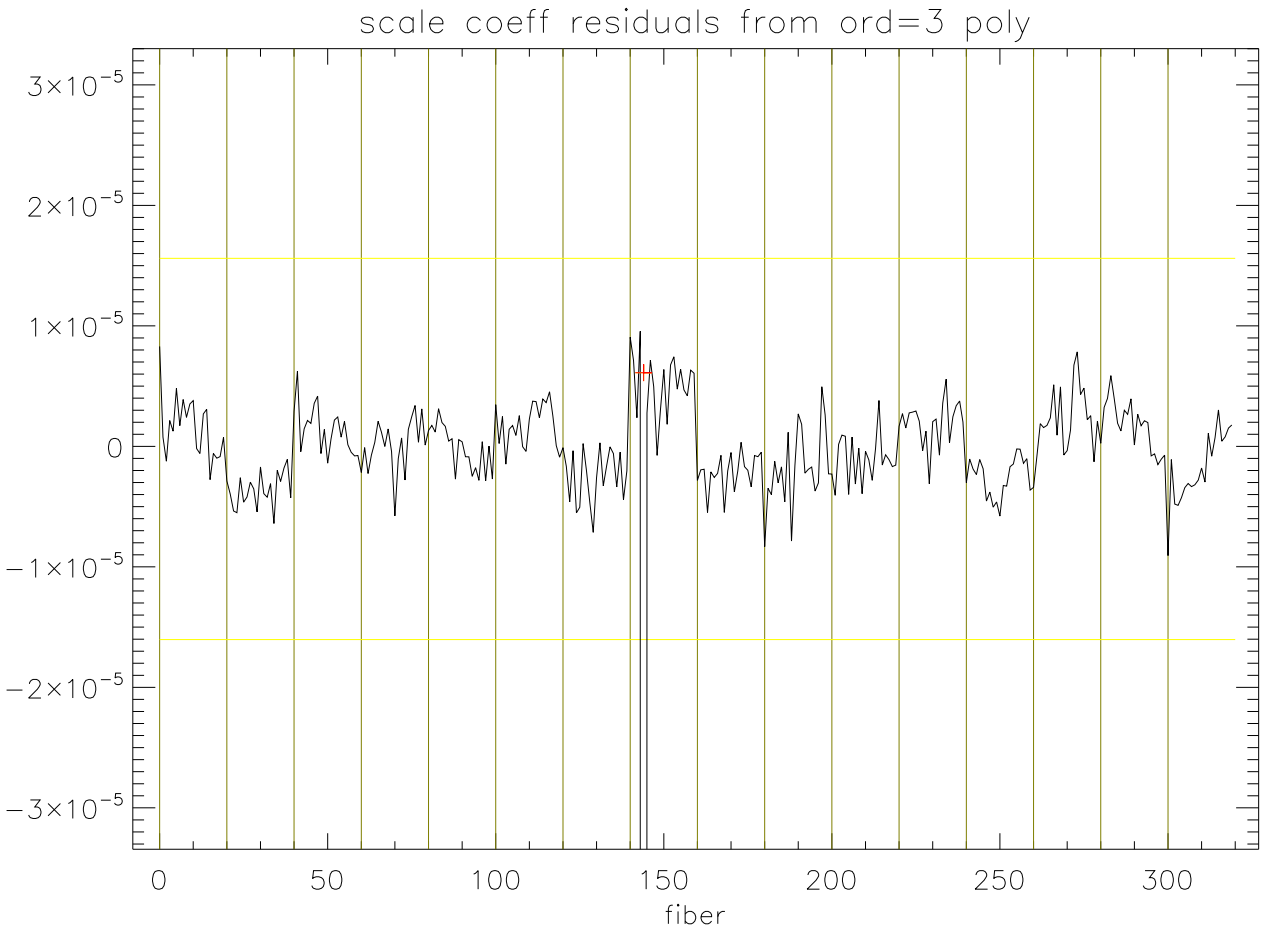
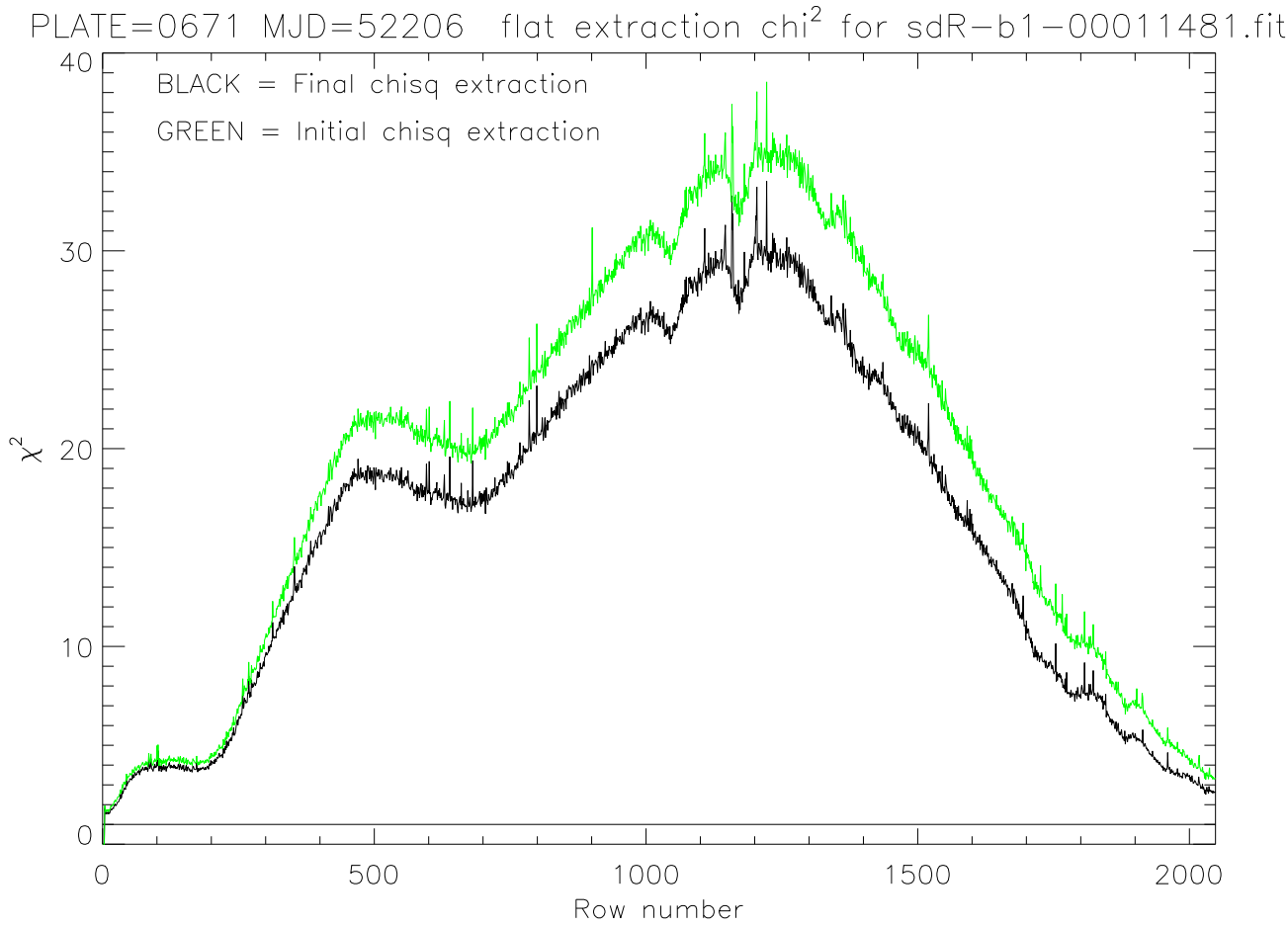
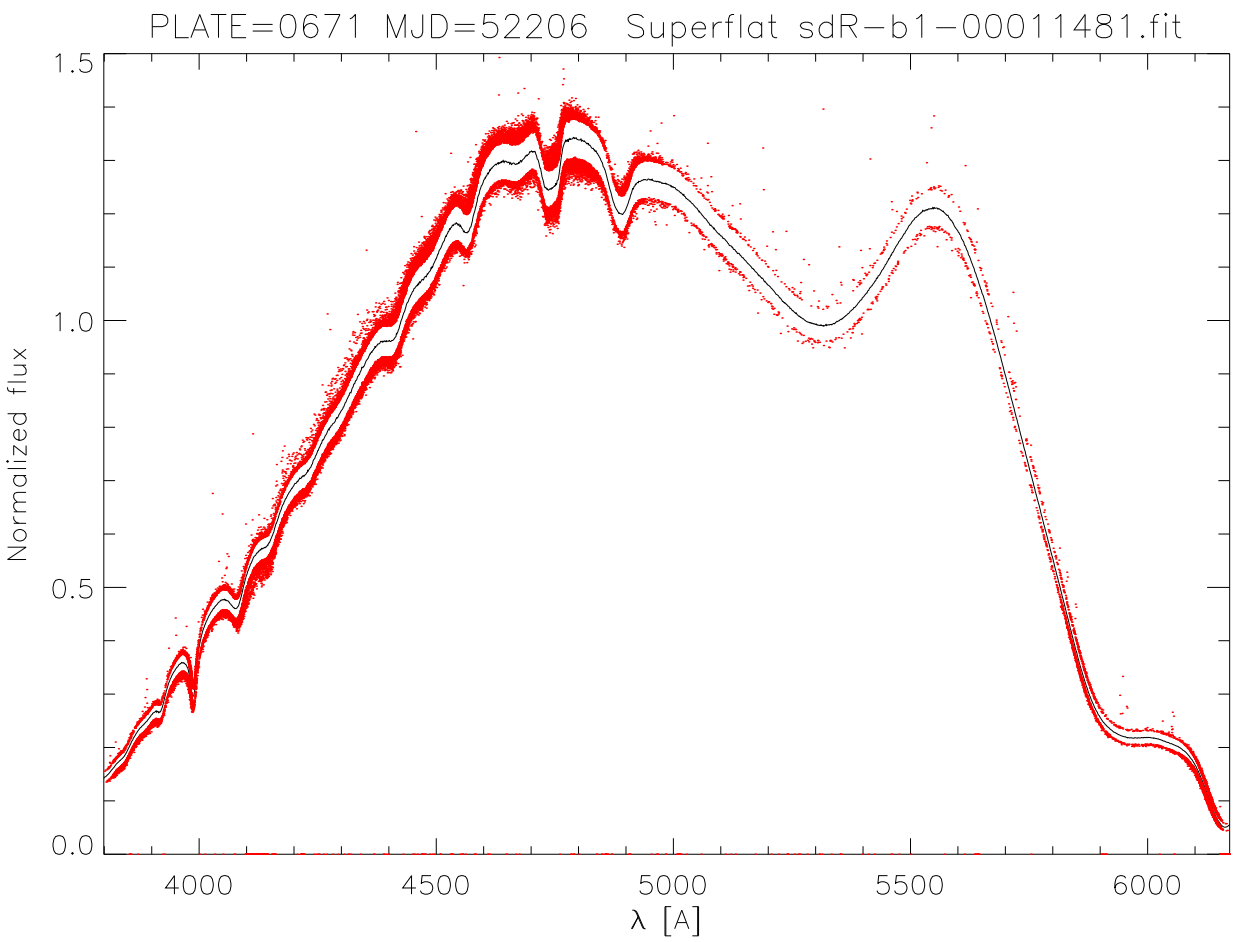

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

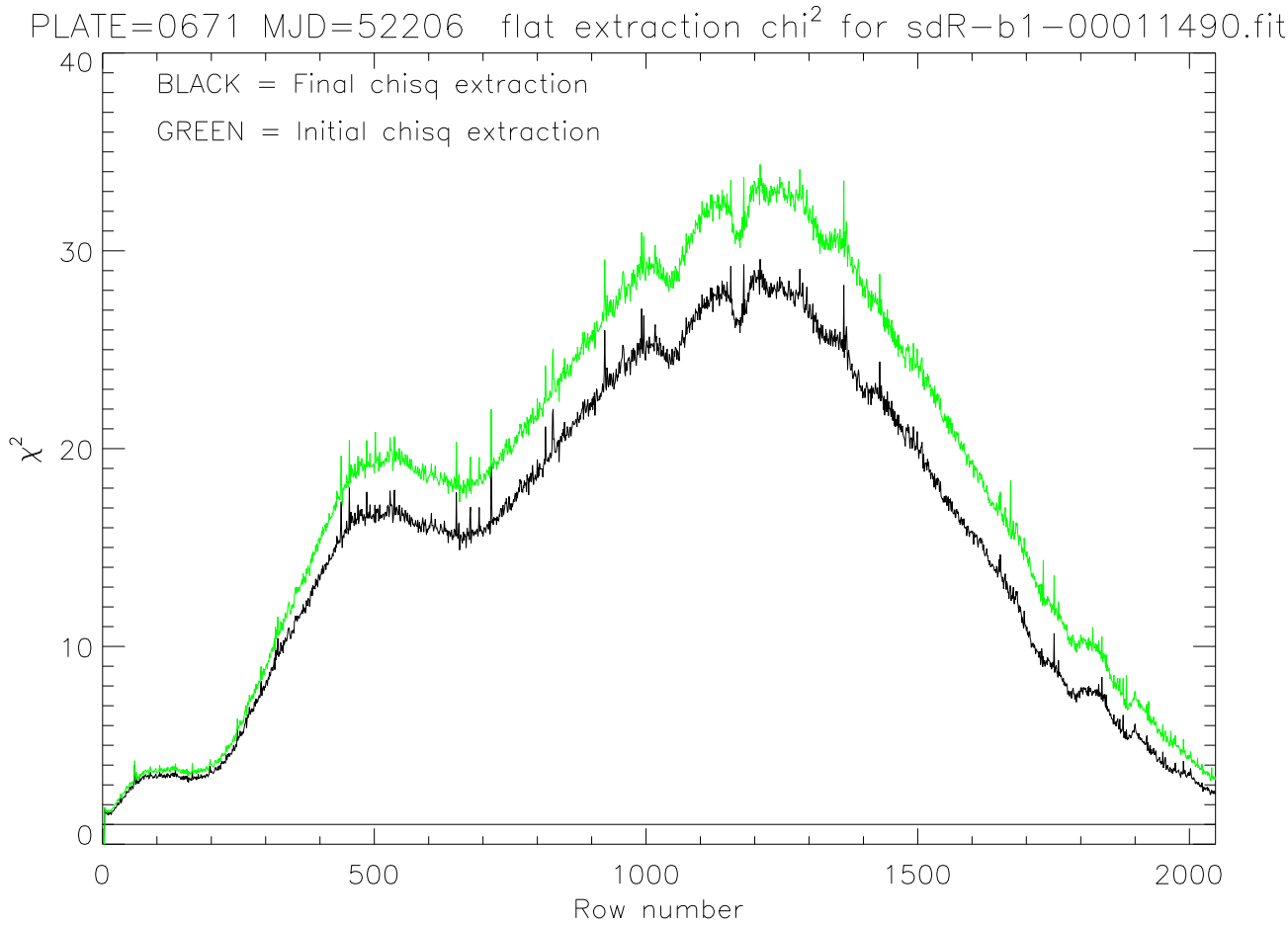

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

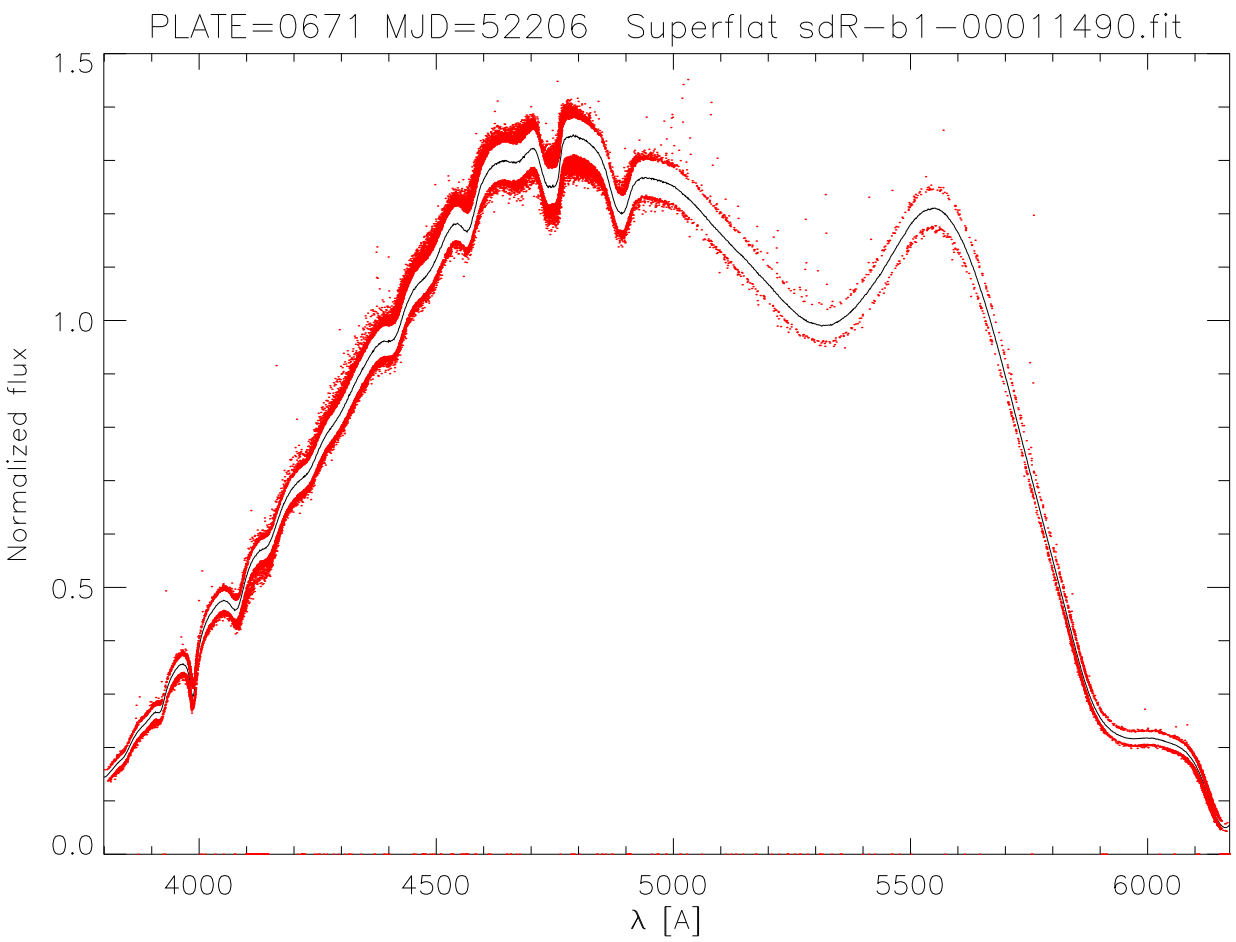

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

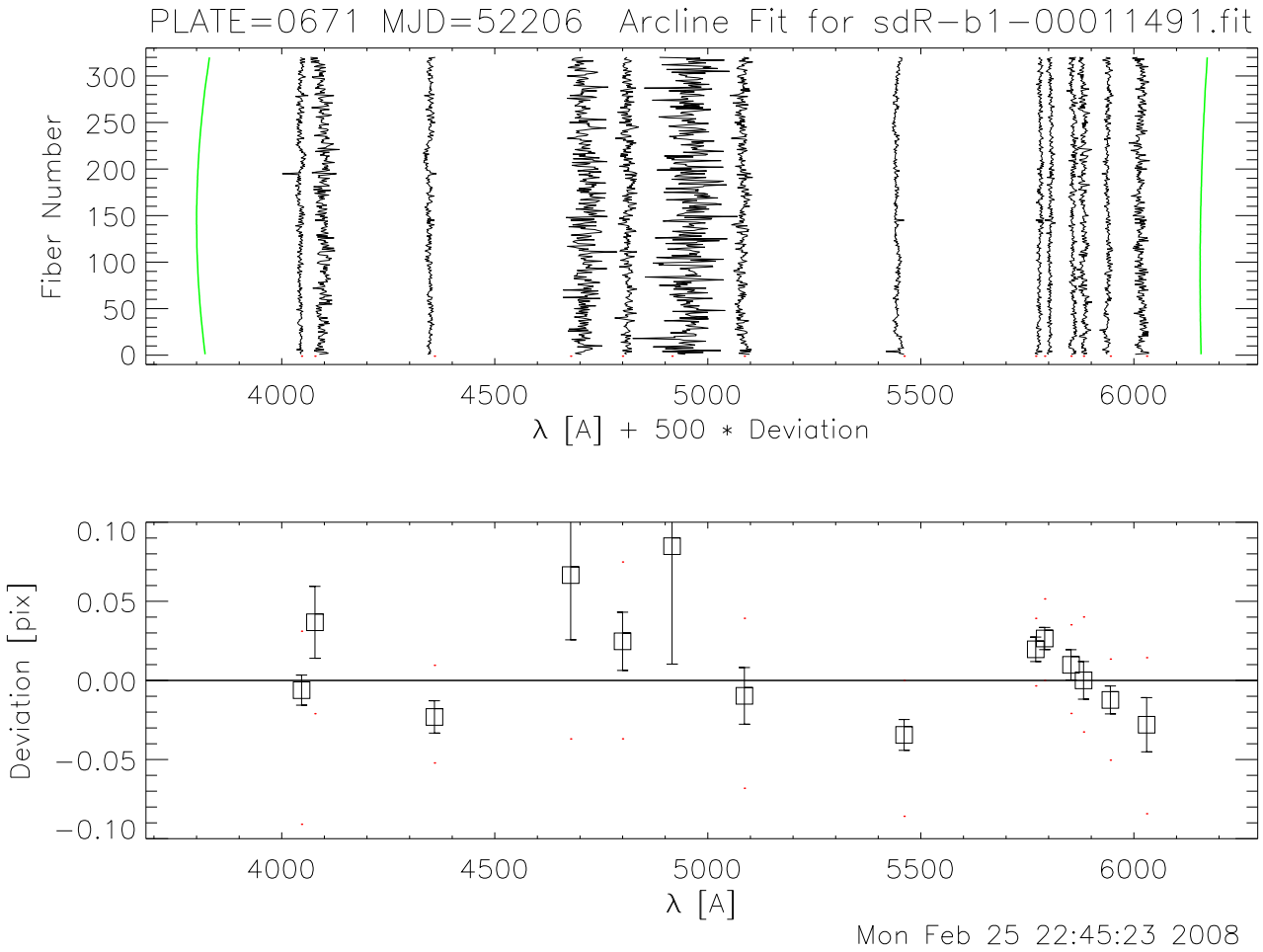

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

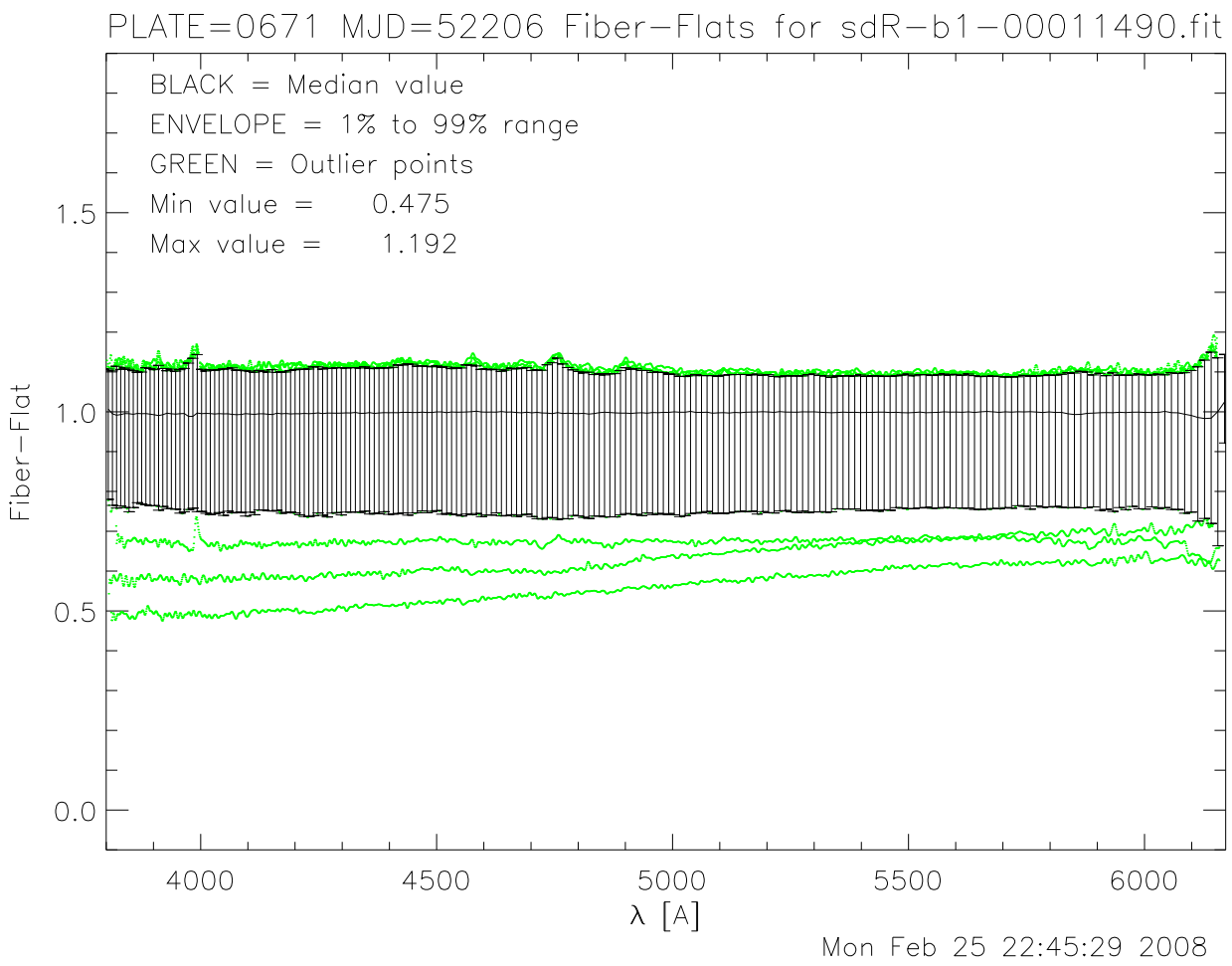

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−b1−00011481.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number

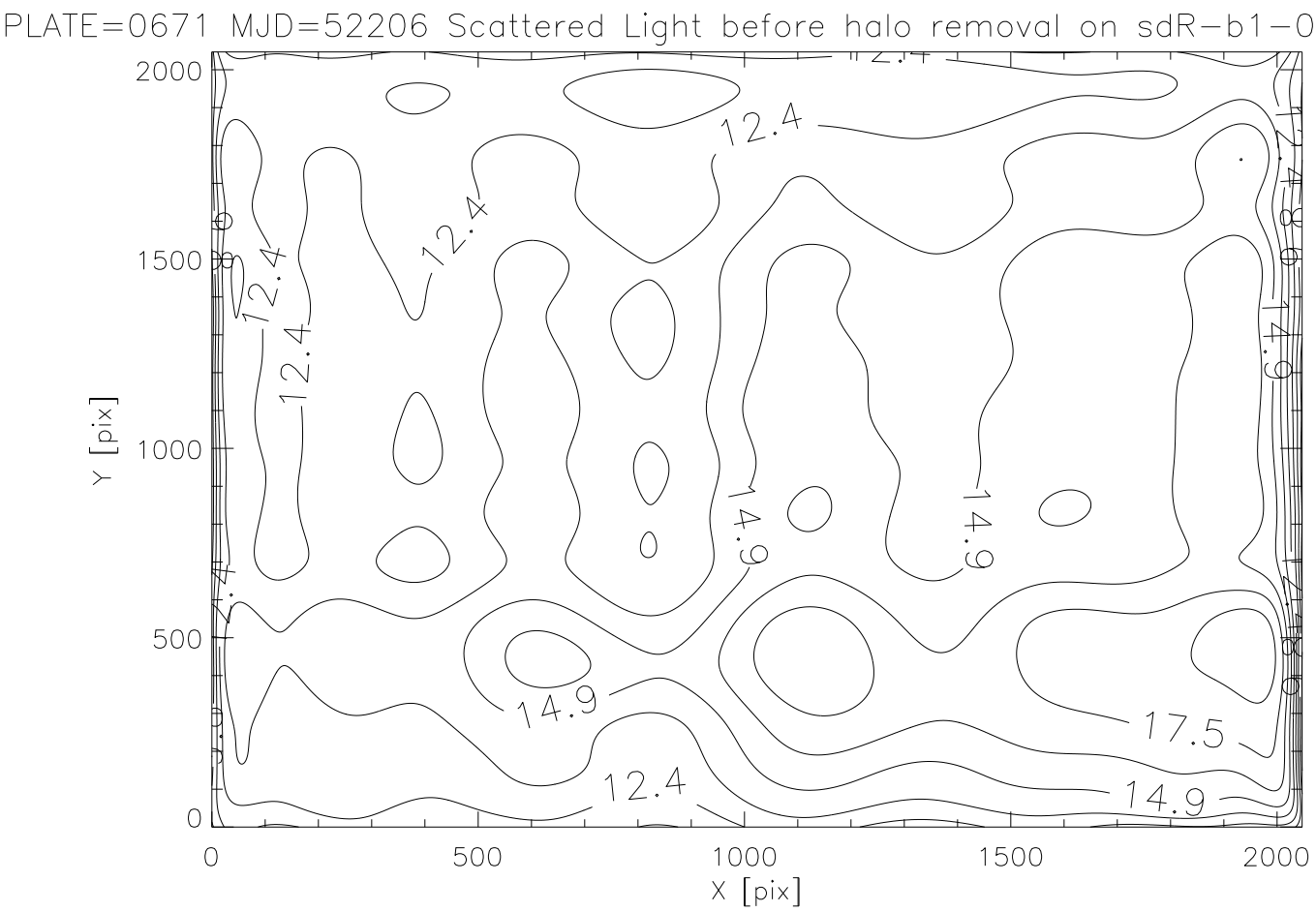

PLATE=0671 MJD=52206 Superflat sdR-b1-00011481.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

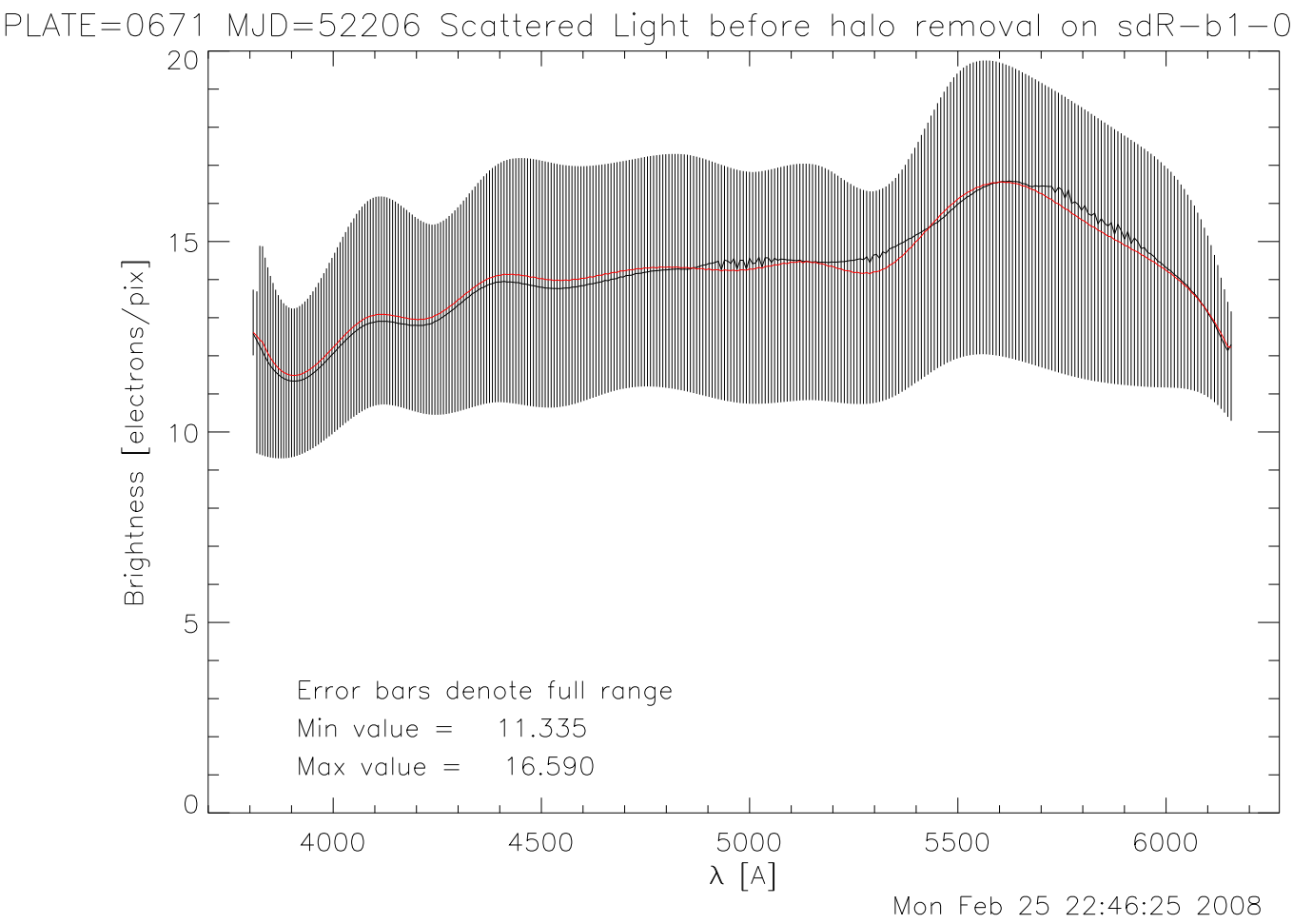

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−b1−00011490.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number

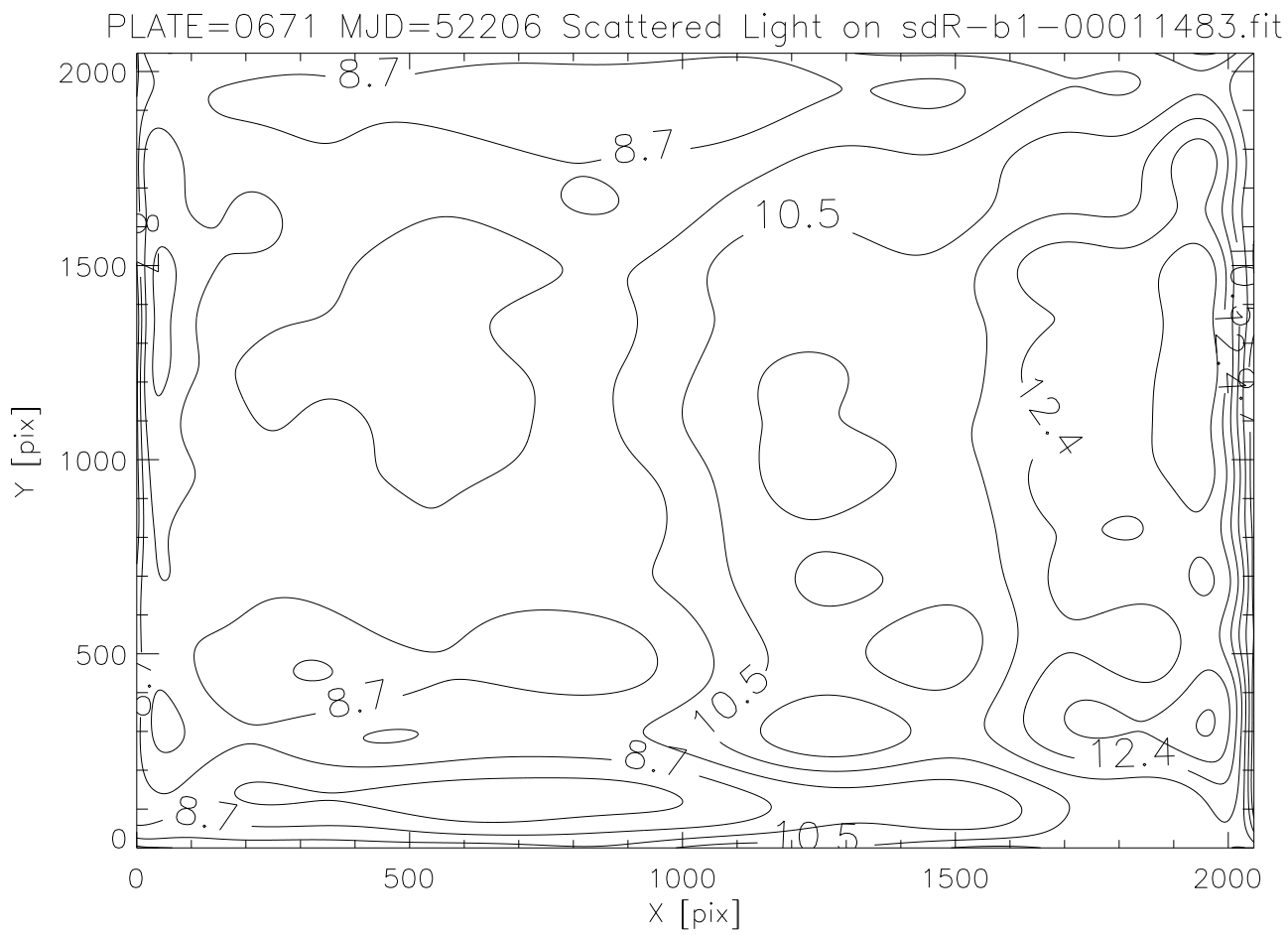

PLATE=0671 MJD=52206 Superflat sdR-b1-00011490.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

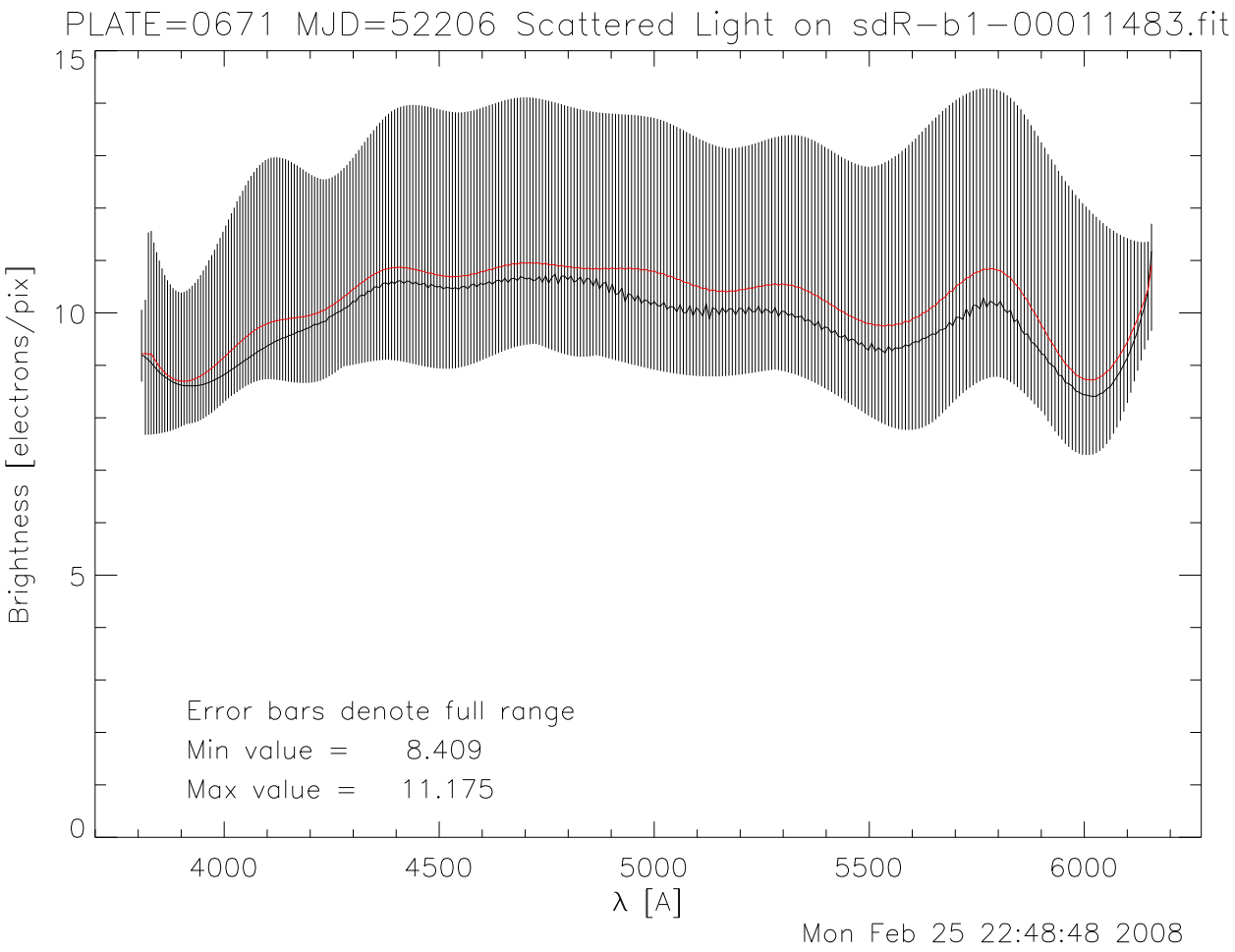

PLATE=0671 MJD=52206 Arcline Fit for sdR-b1-00011491.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:45:23 2008

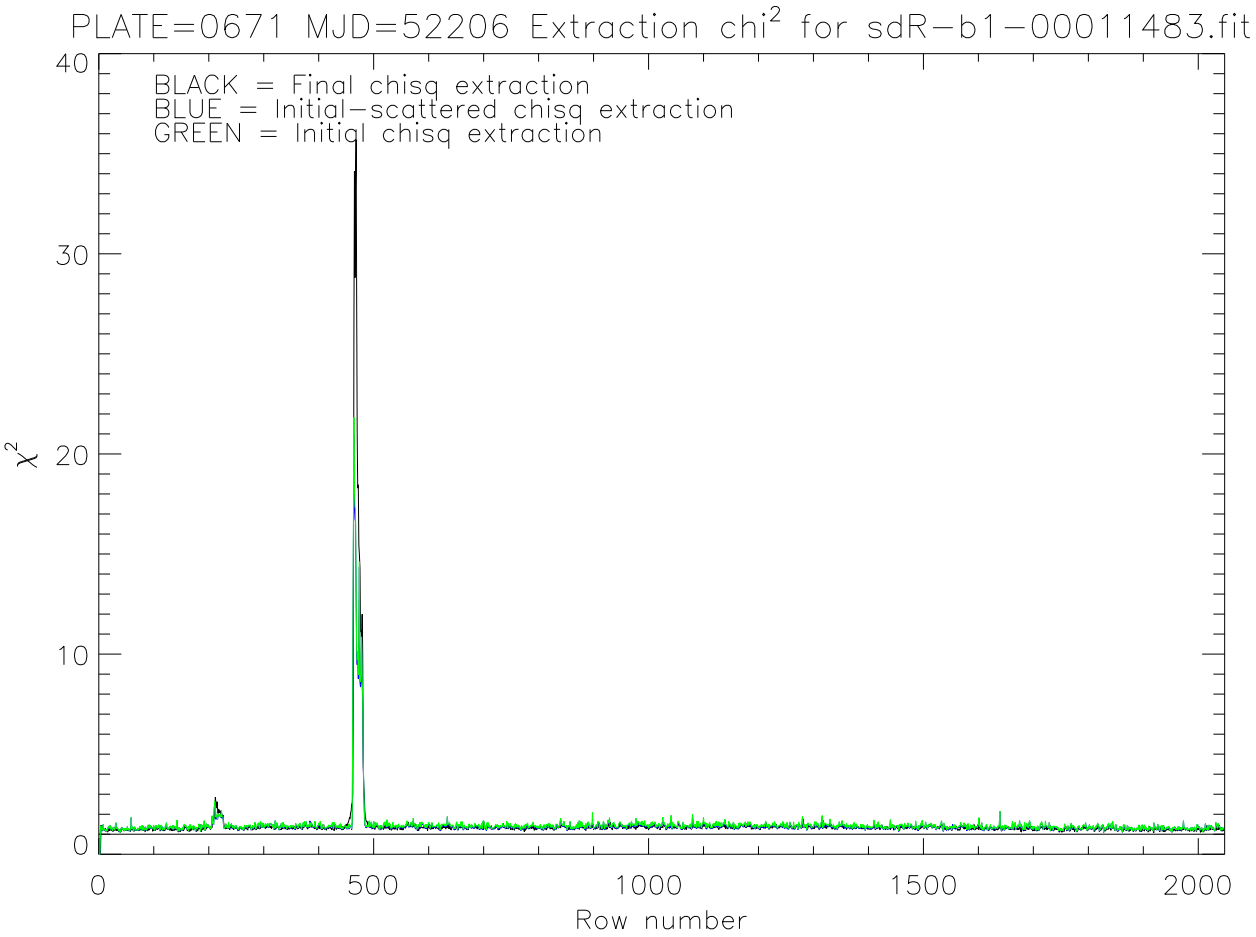

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b1-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.475
Max value = 1.192
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:45:29 2008

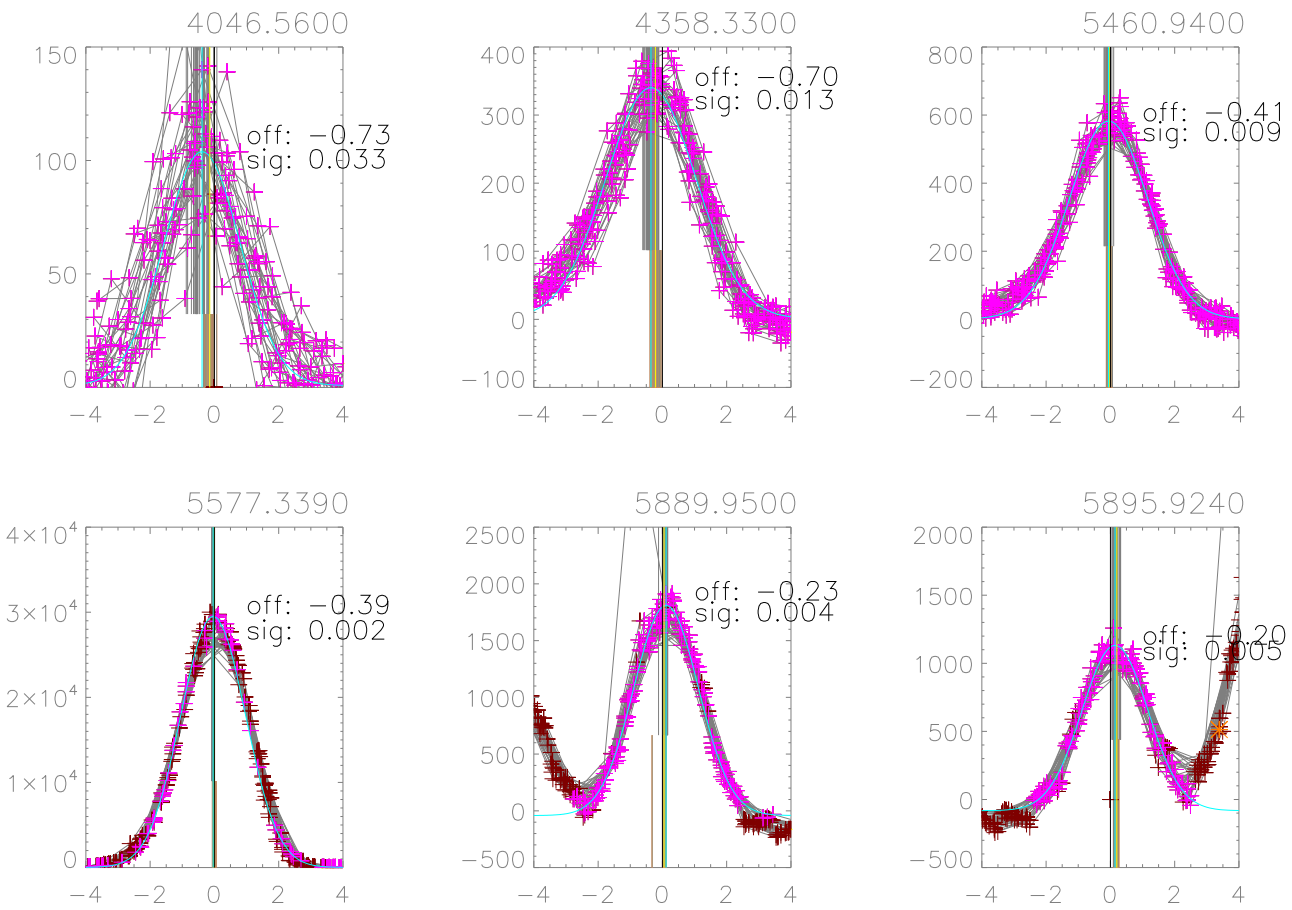

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011483.f
Y [pix]
X [pix]
0
500
1000
1500
2000
12.4
14.9
17.5

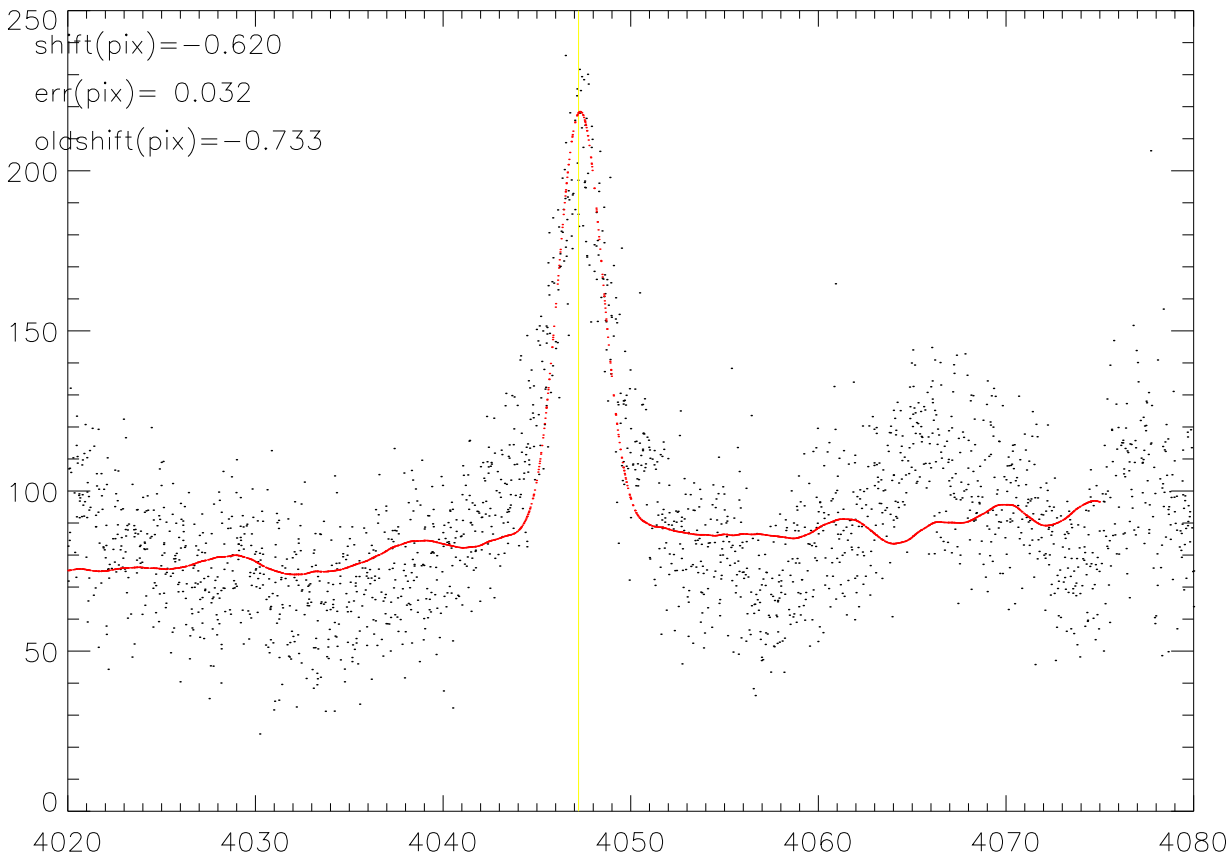

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011483.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.335
Max value = 16.590
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:46:25 2008

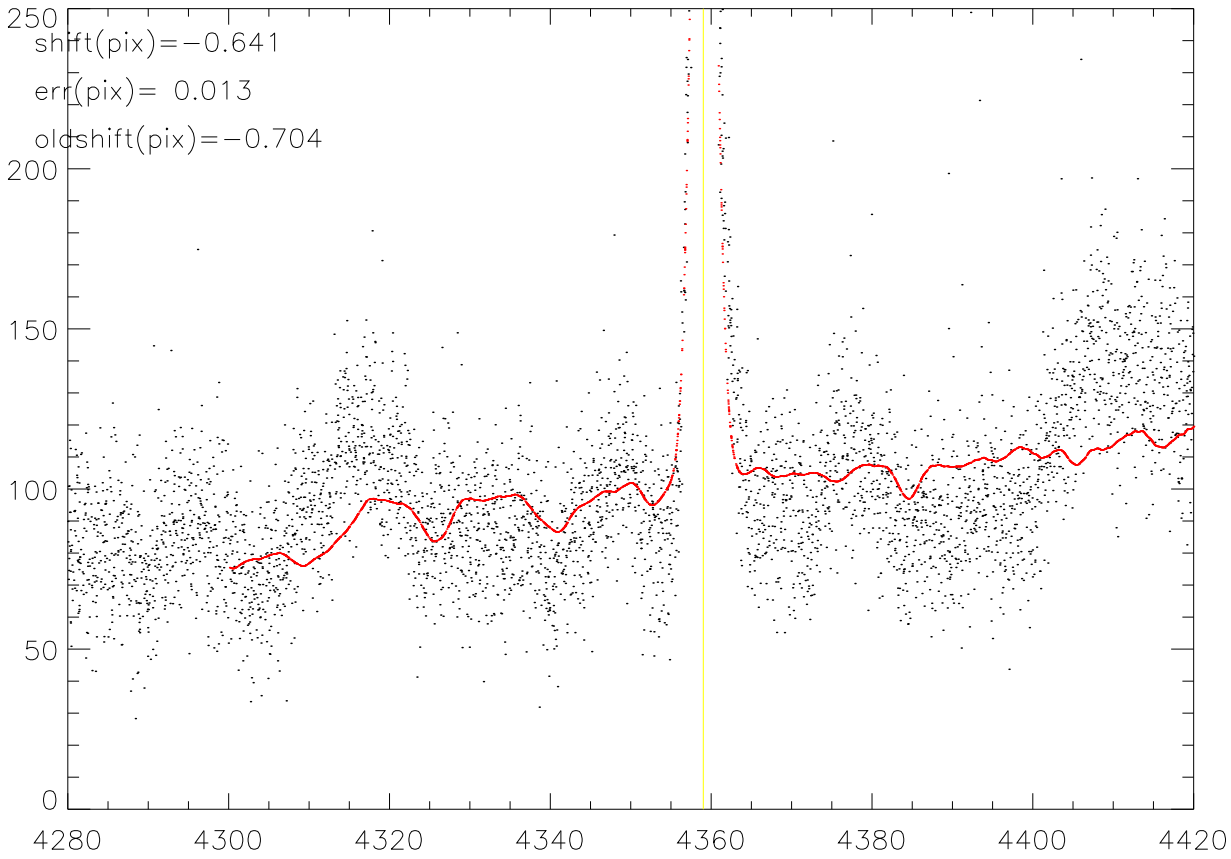

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011483.fit
8.7
8.7
10.5
12.4
12.4
8.7
8.7
8.7
10.5
10.5
12.4
Y [pix]
X [pix]
0
500
1000
1500
2000

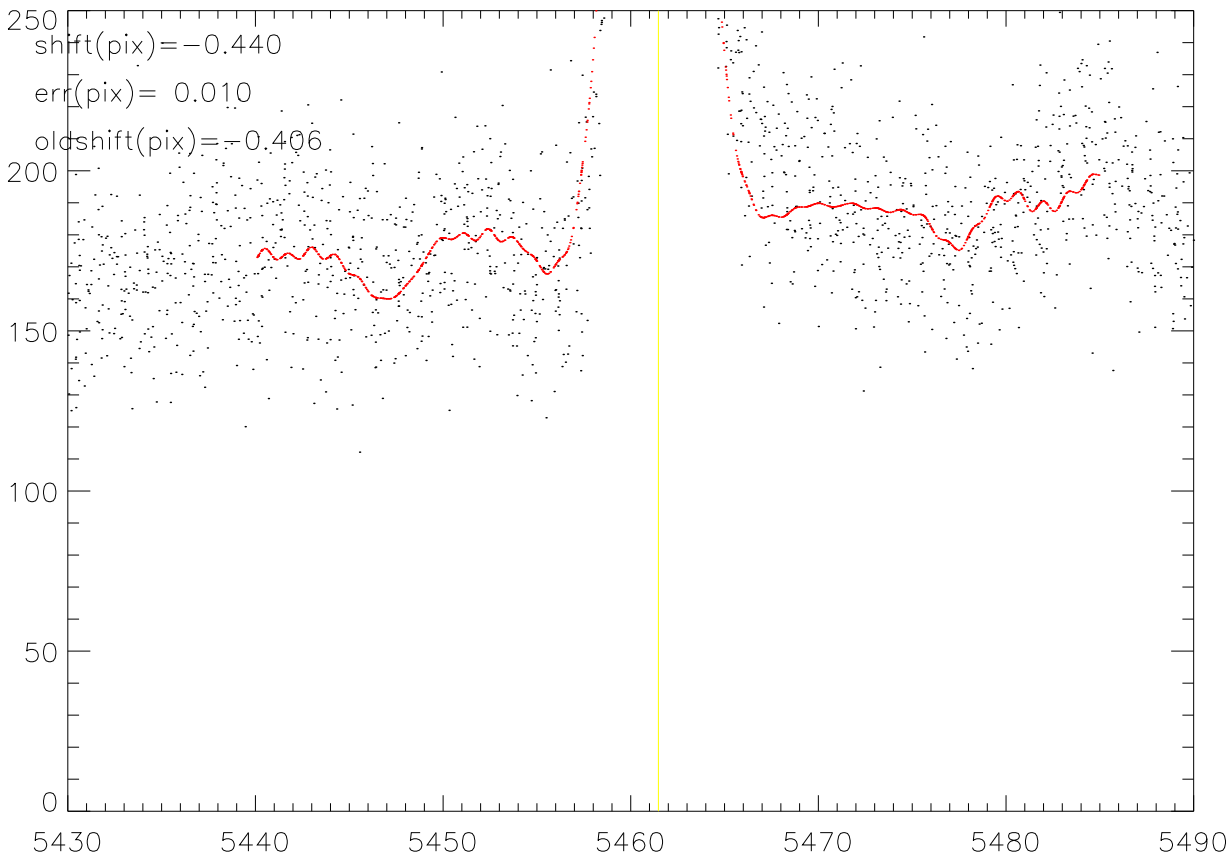

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011483.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.409
Max value = 11.175
Mon Feb 25 22:48:48 2008

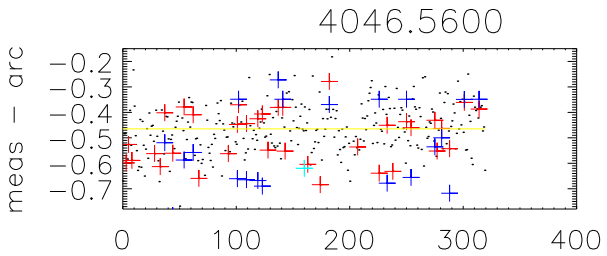

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b1-00011483.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number

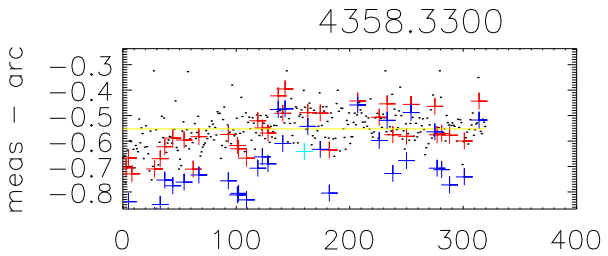

4046.5600
off: −0.73
sig: 0.033
4358.3300
off: −0.70
sig: 0.013
5460.9400
off: −0.41
sig: 0.009
5577.3390
off: −0.39
sig: 0.002
5889.9500
off: −0.23
sig: 0.004
5895.9240
off: −0.20
sig: 0.005

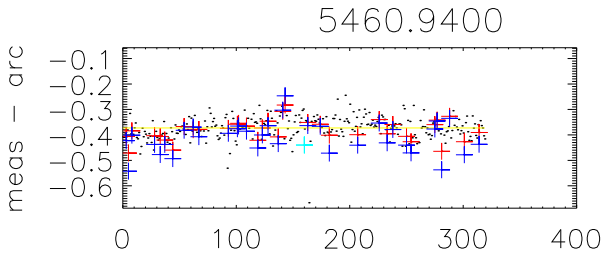

shift(pix)=−0.620
err(pix)= 0.032
oldshift(pix)=−0.733
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

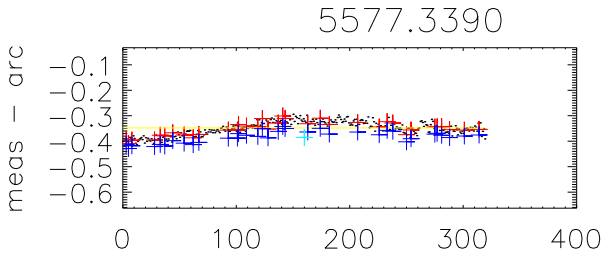

shift(pix)=−0.641
err(pix)= 0.013
oldshift(pix)=−0.704
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

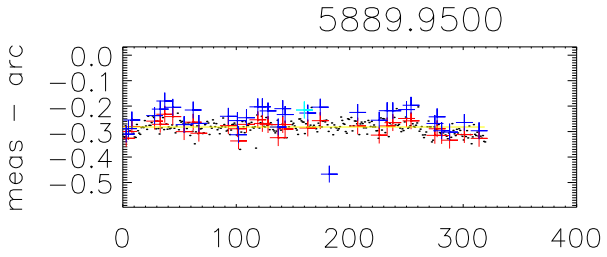

shift(pix)=−0.440
err(pix)= 0.010
oldshift(pix)=−0.406
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

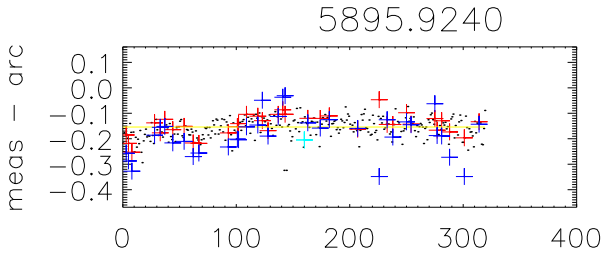

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

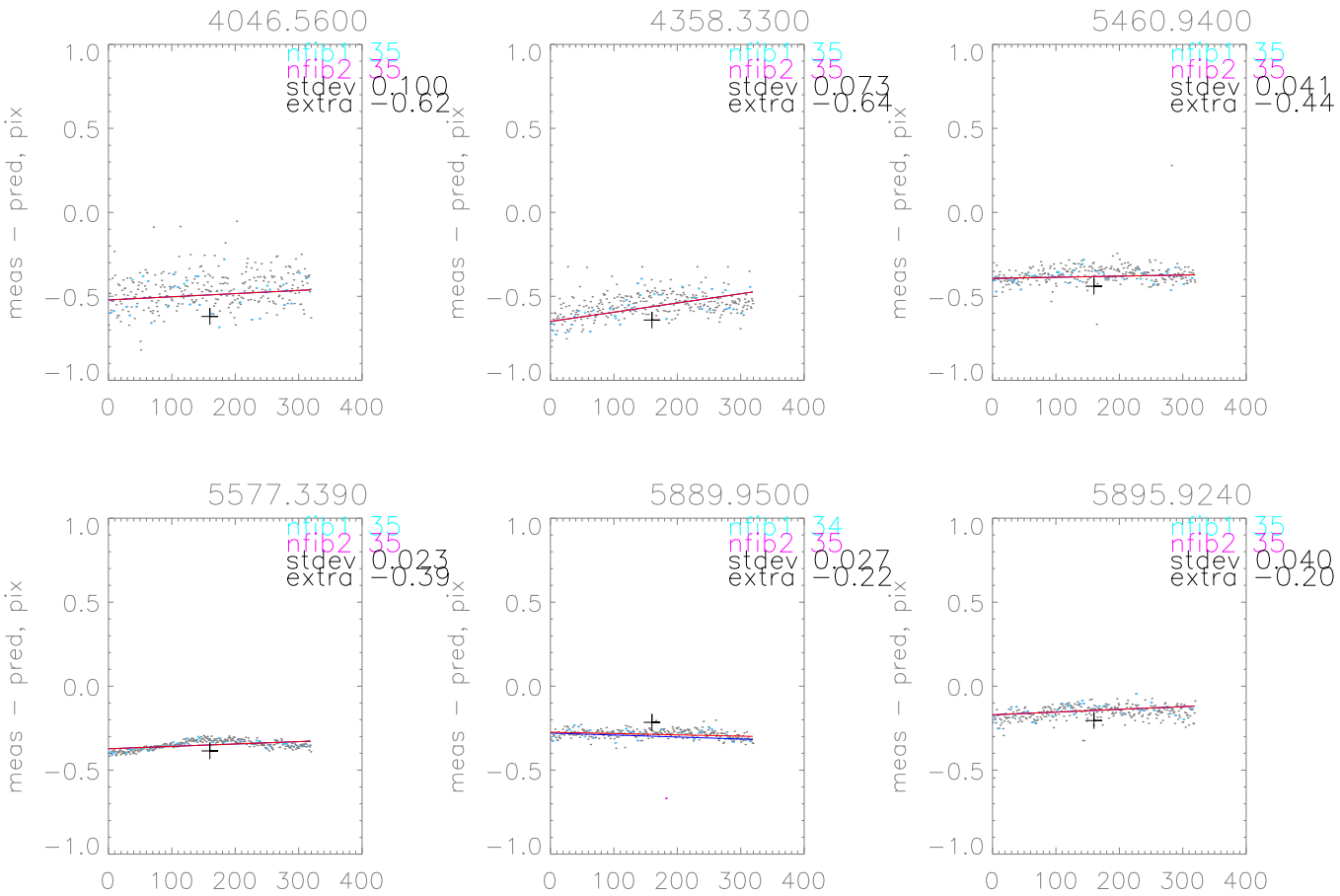

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

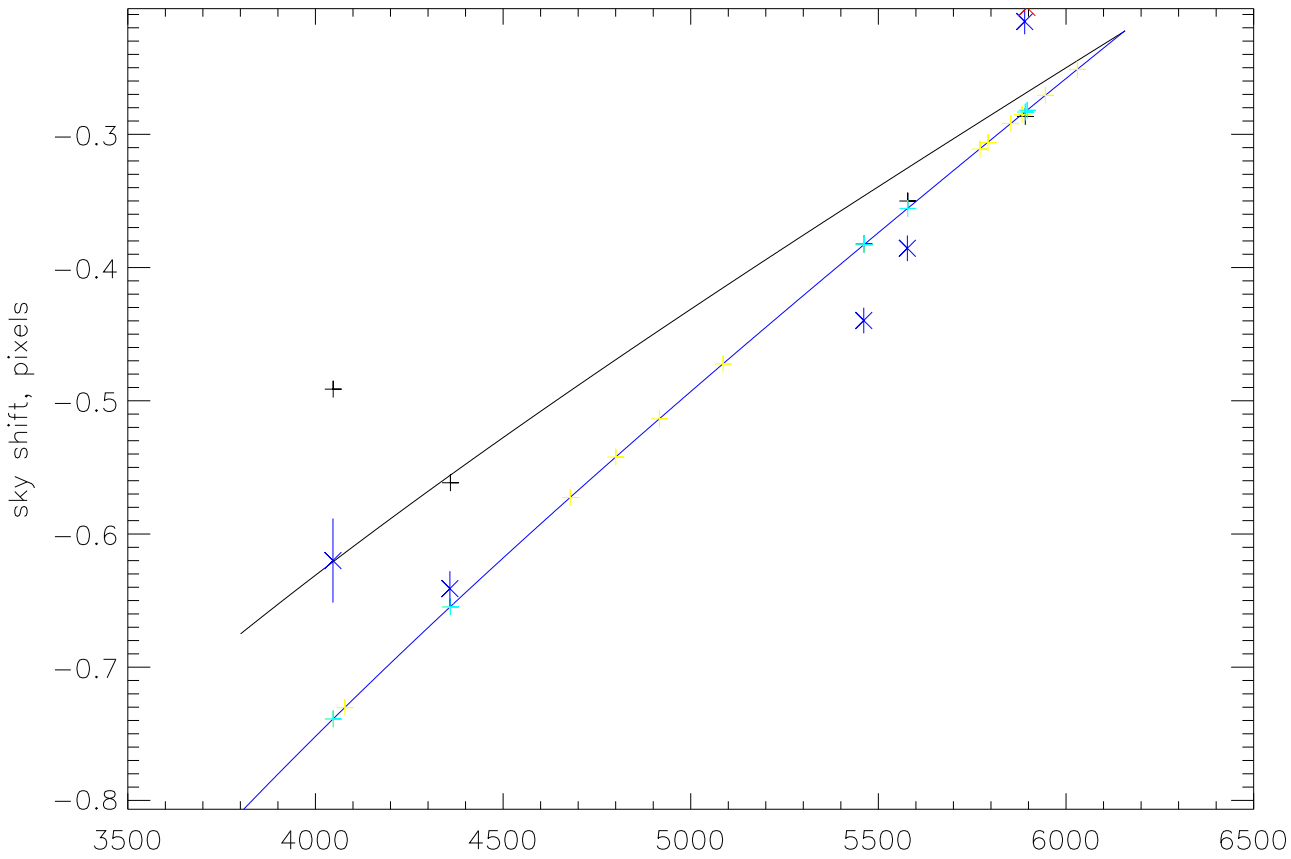

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

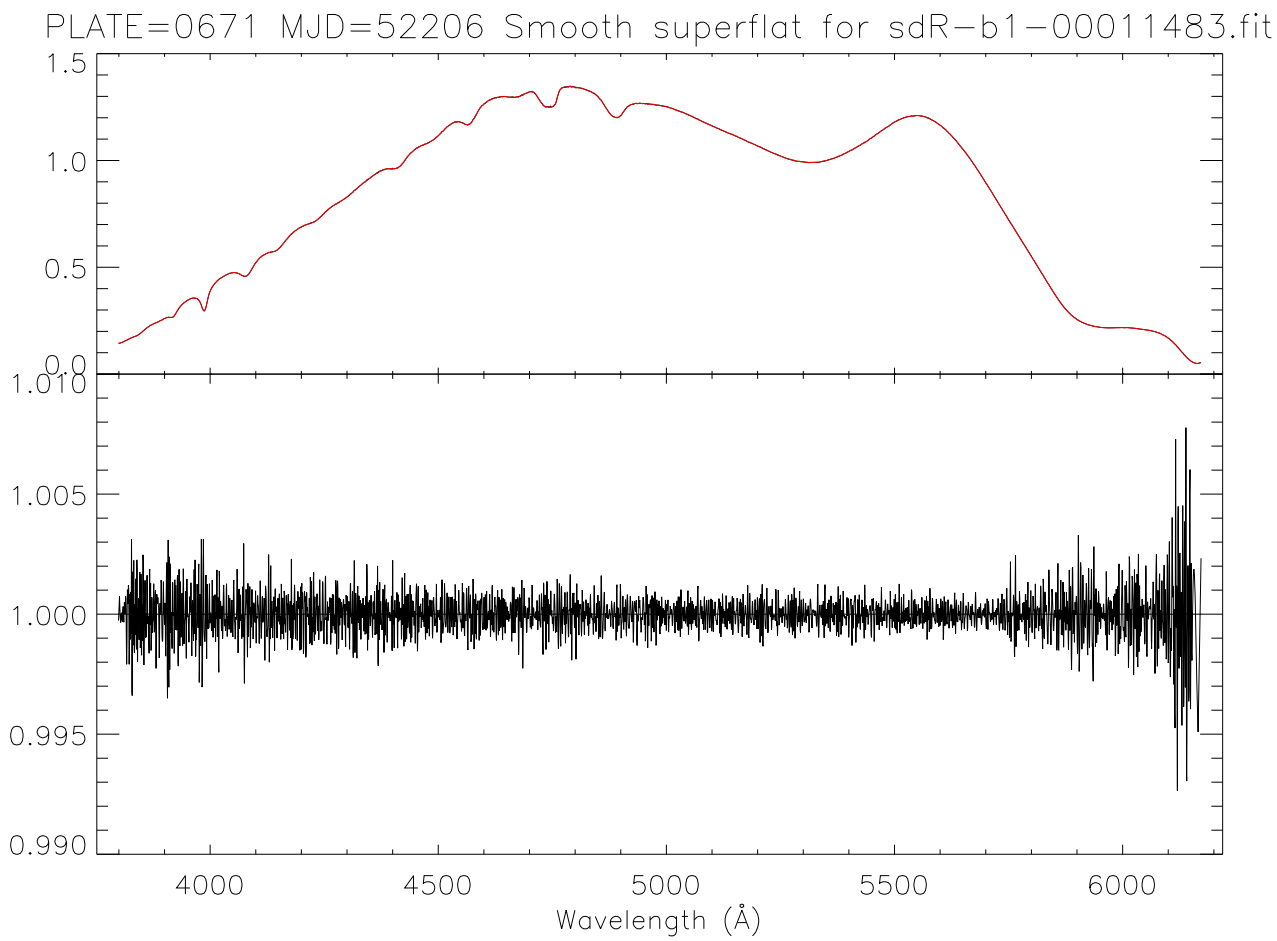

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

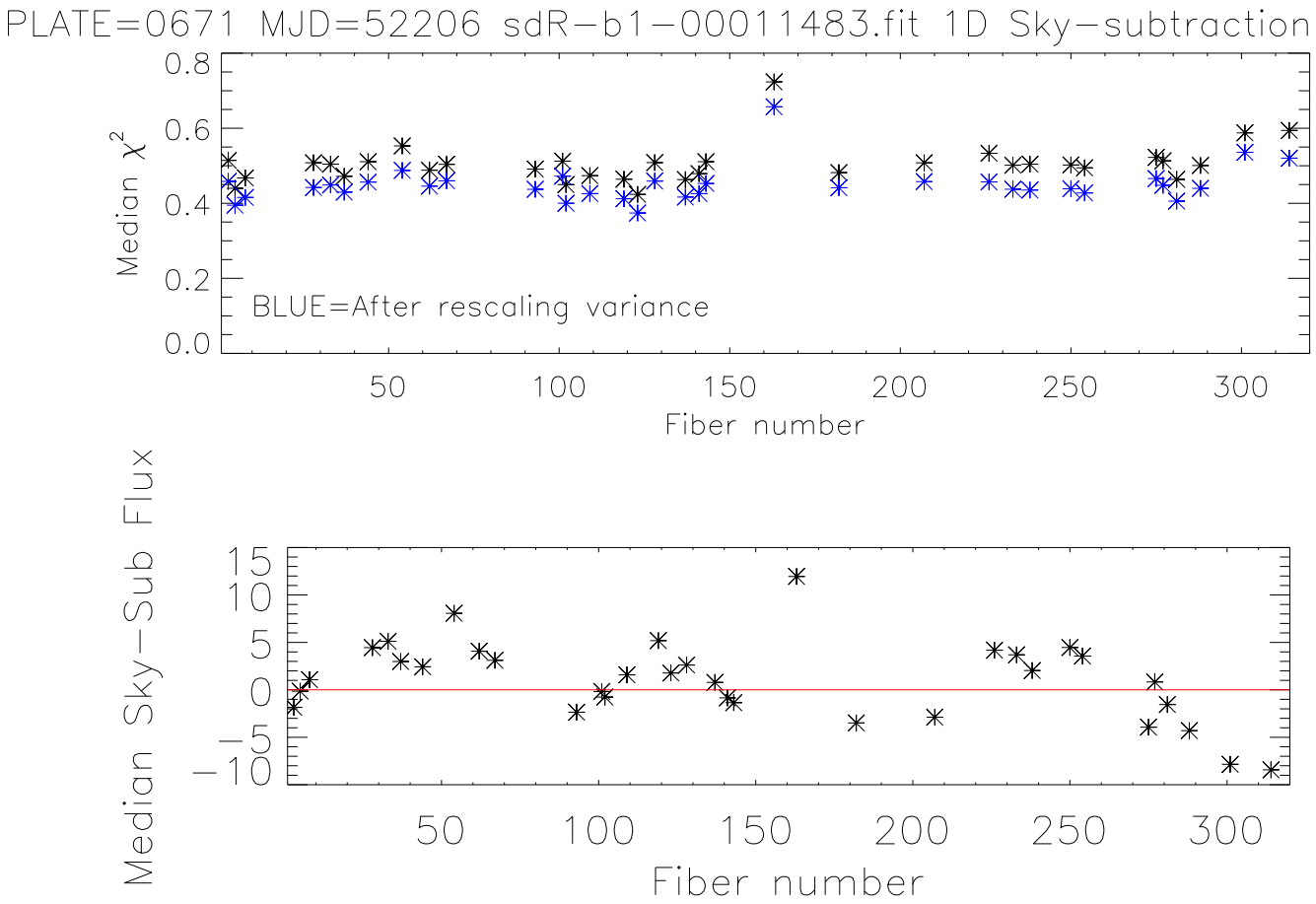

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

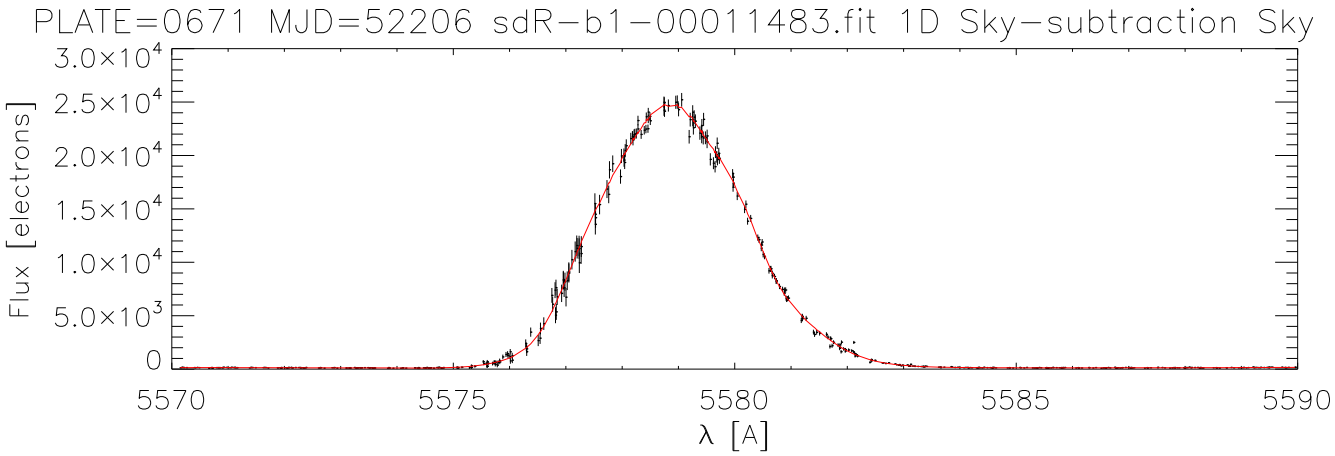

4046.5600
nfib1 35
nfib2 35
stdev 0.100
extra −0.62
4358.3300
nfib1 35
nfib2 35
stdev 0.073
extra −0.64
5460.9400
nfib1 35
nfib2 35
stdev 0.041
extra −0.44
5577.3390
nfib1 35
nfib2 35
stdev 0.023
extra −0.39
5889.9500
nfib1 34
nfib2 35
stdev 0.027
extra −0.22
5895.9240
nfib1 35
nfib2 35
stdev 0.040
extra −0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

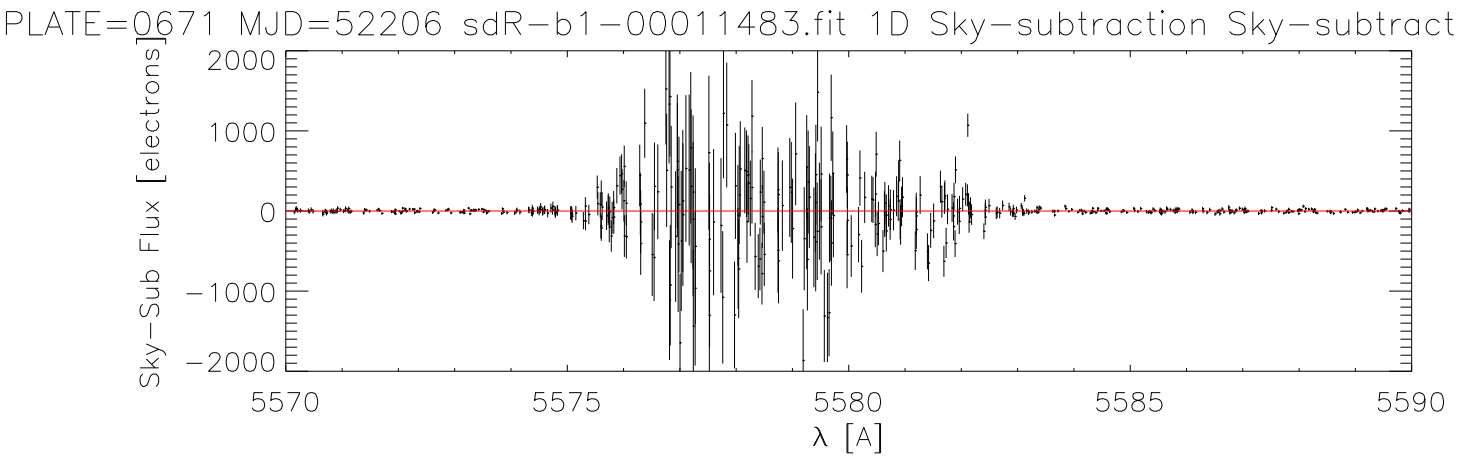

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
3500
4000
4500
5000
5500
6000
6500

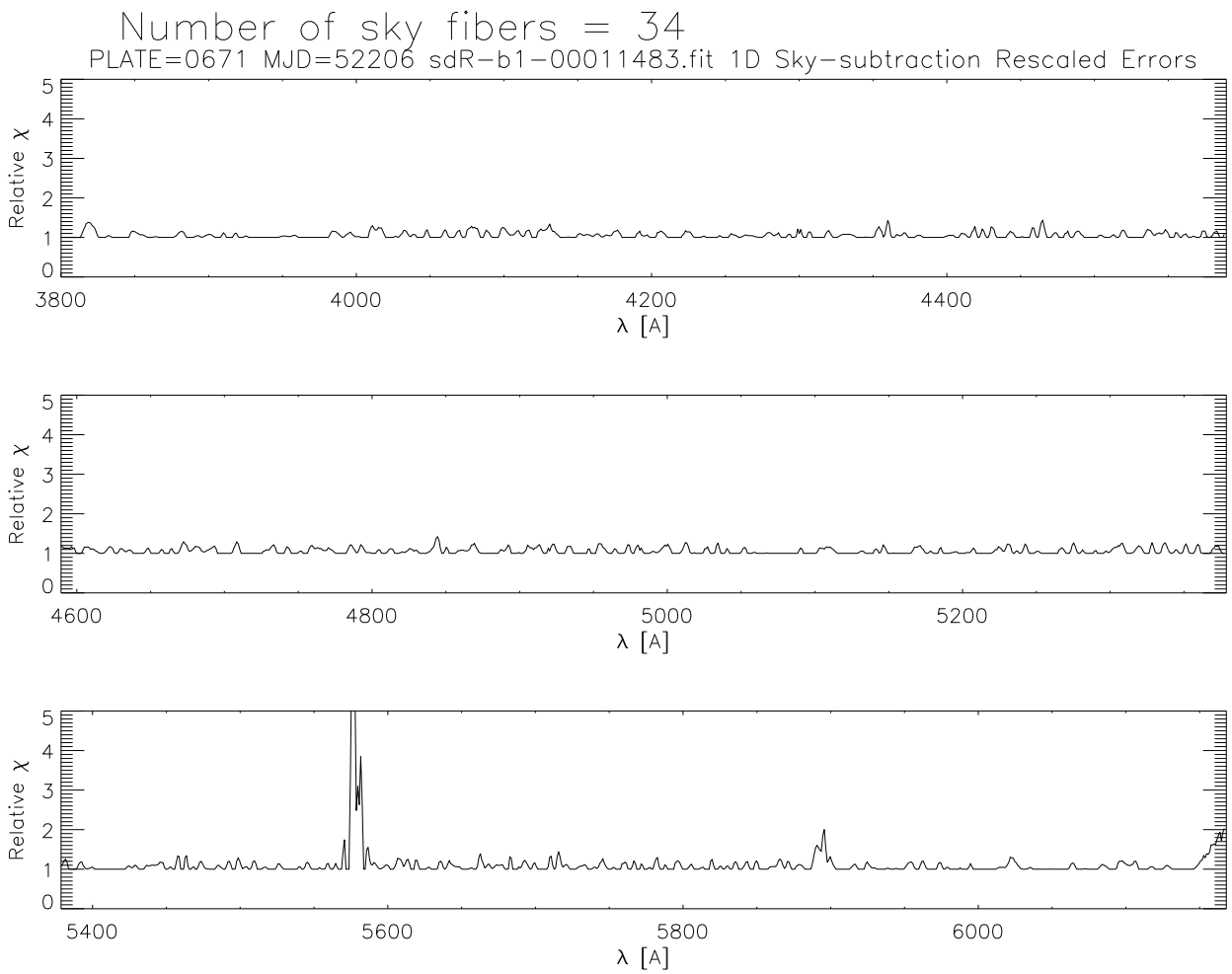
es= −0.0000

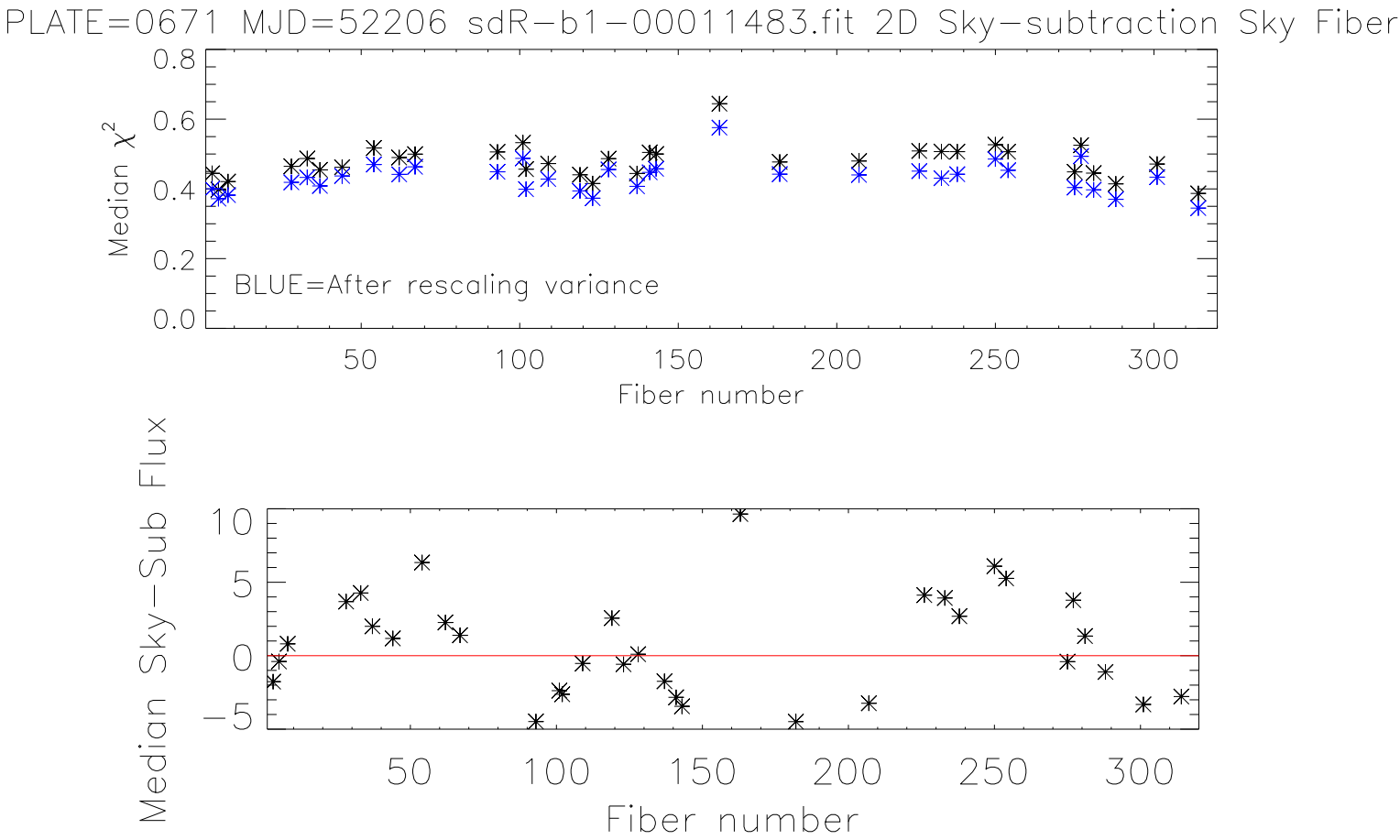

PLATE=0671 MJD=52206 Smooth superflat for sdR−b1−00011483.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

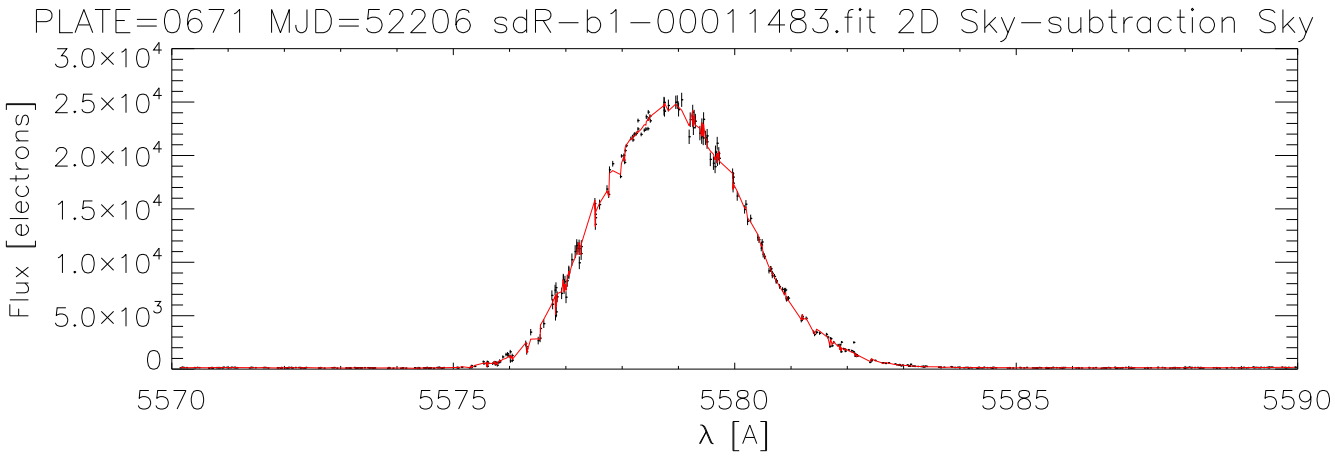

PLATE=0671 MJD=52206 sdR-b1-00011483.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

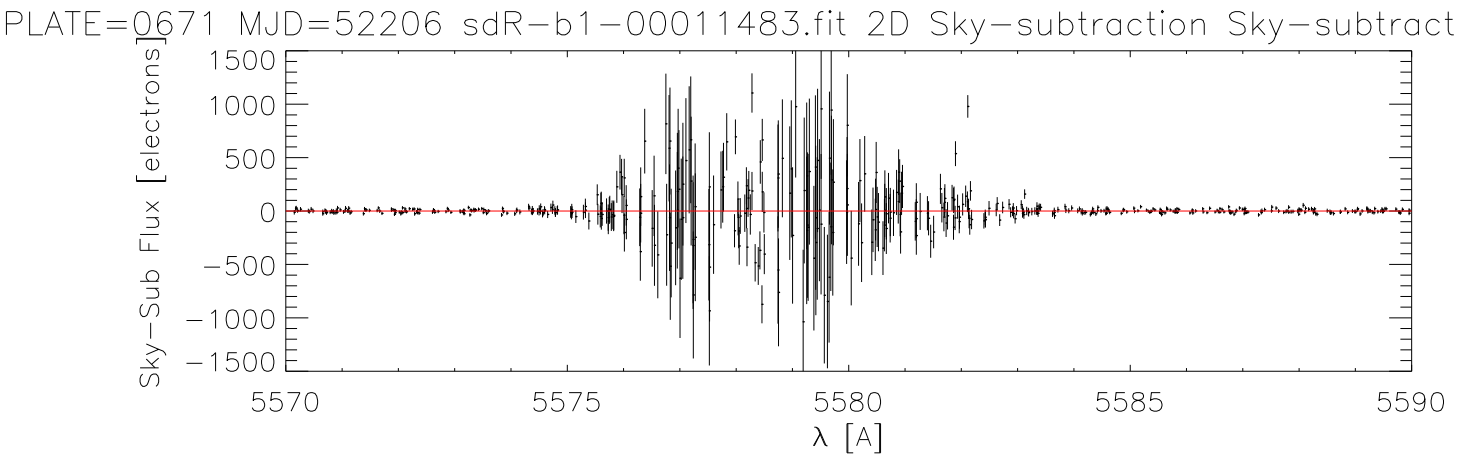

PLATE=0671 MJD=52206 sdR-b1-00011483.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

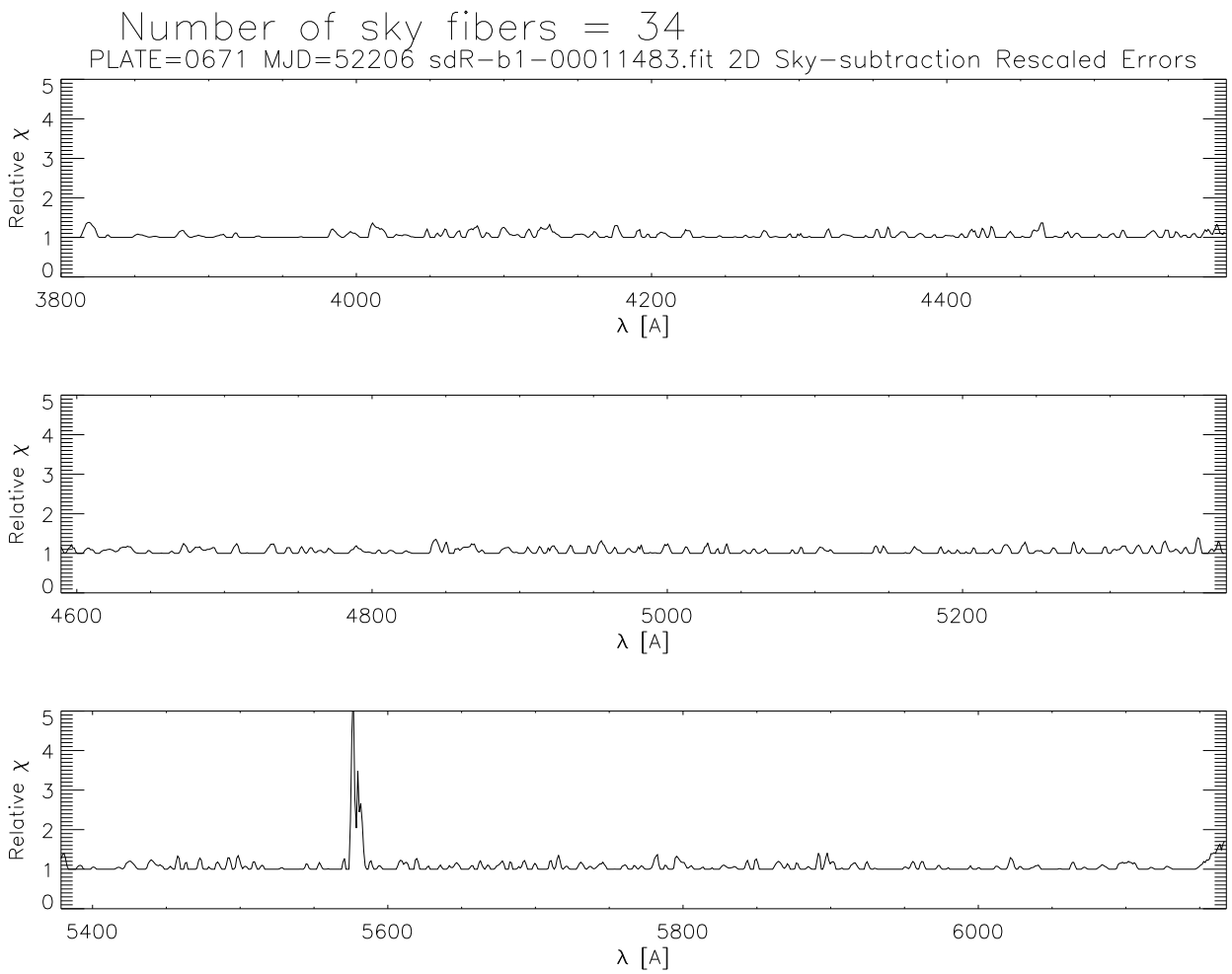

PLATE=0671 MJD=52206 sdR-b1-00011483.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

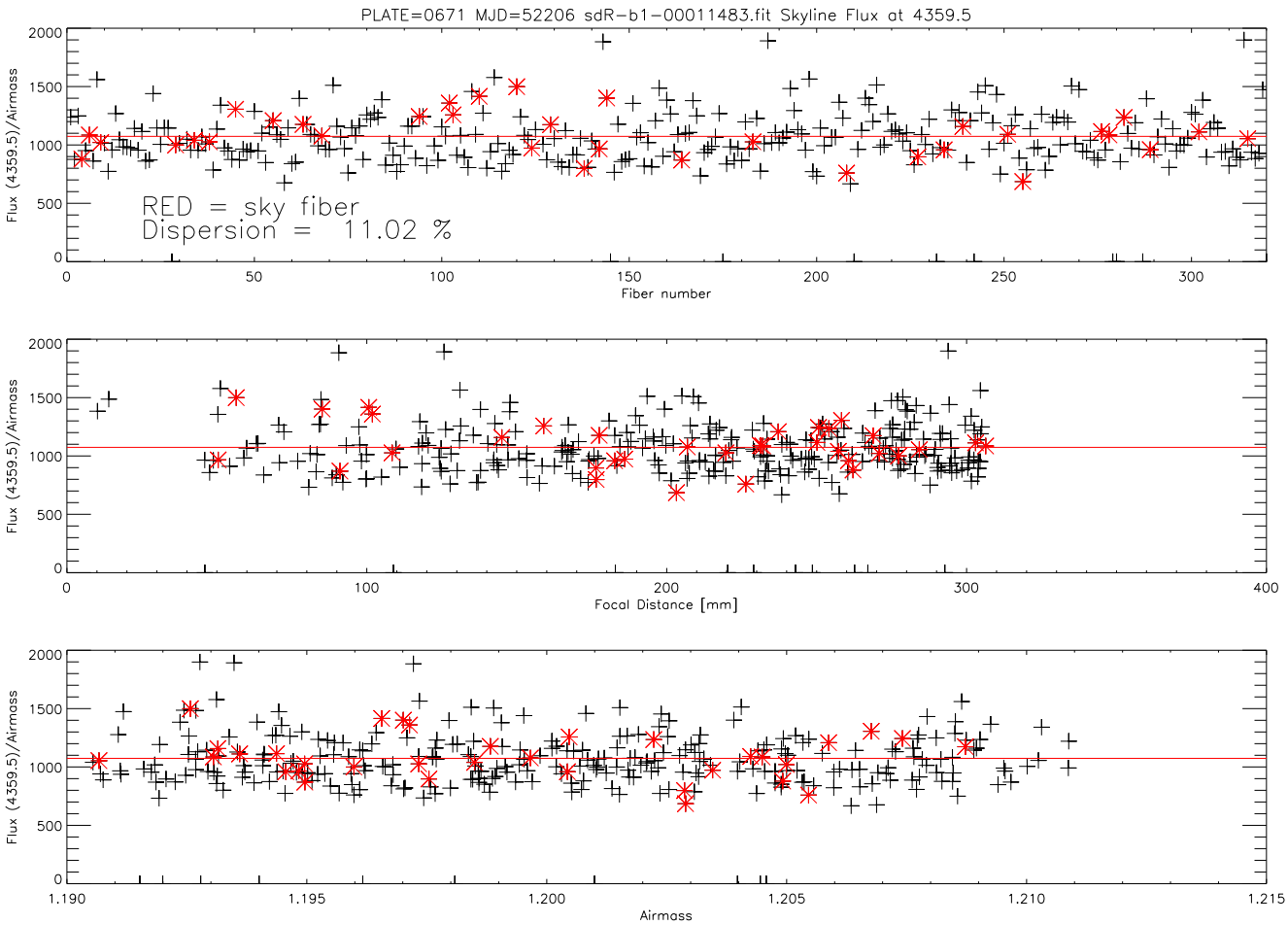

Number of sky fibers = 34
PLATE=0671 MJD=52206 sdR-b1-00011483.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

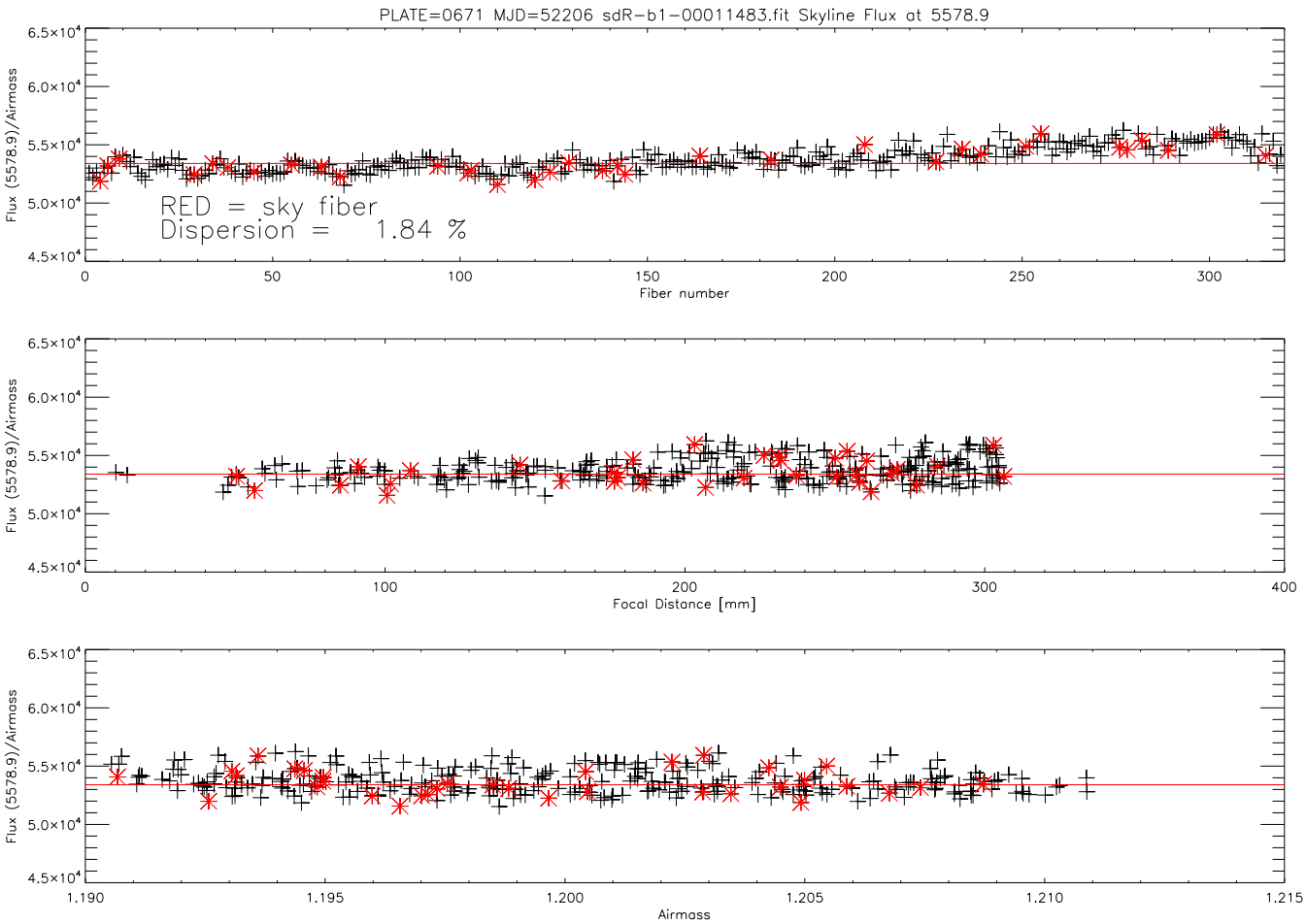

PLATE=0671 MJD=52206 sdR-b1-00011483.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
50
100
150
200
250
300
Fiber number

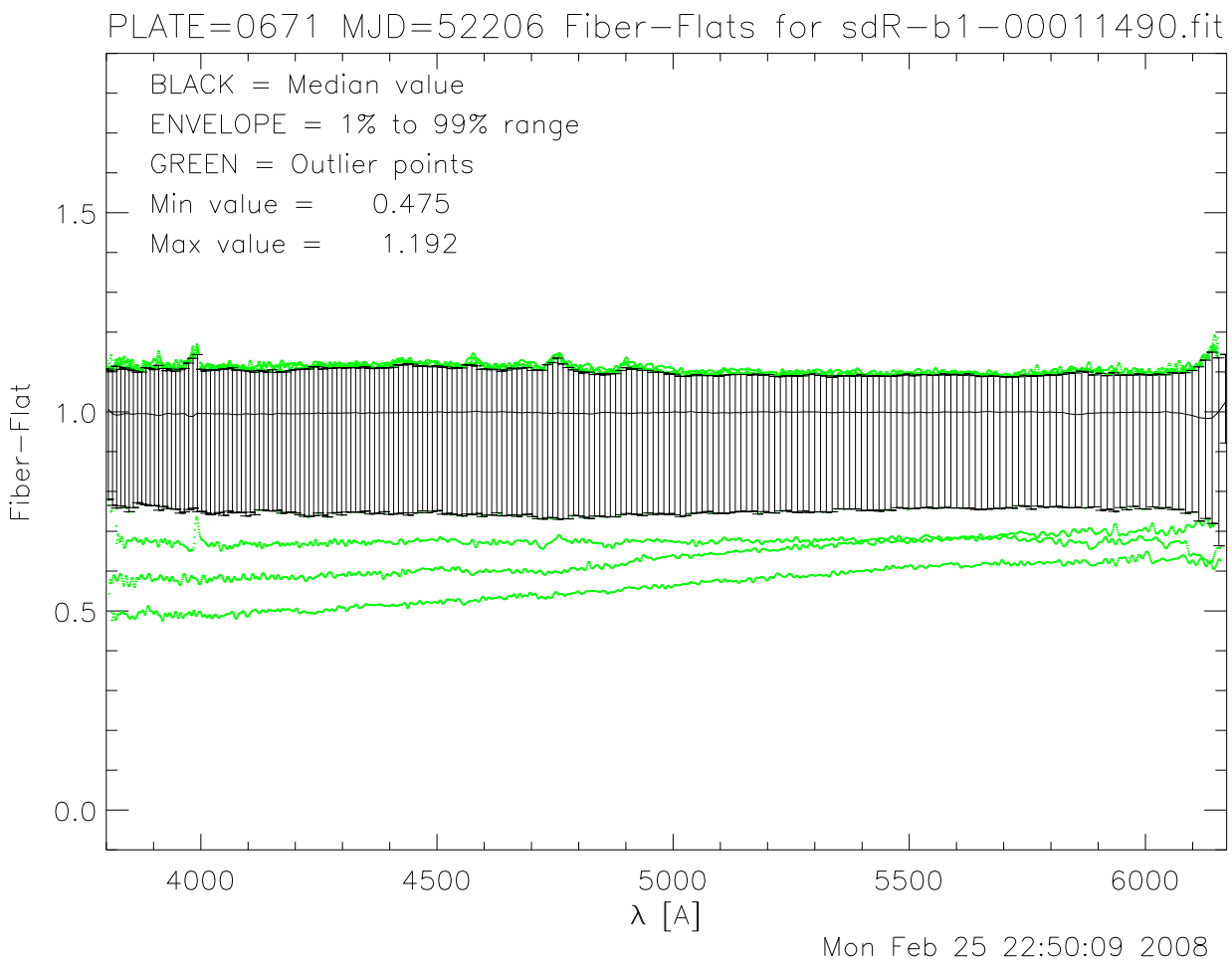

PLATE=0671 MJD=52206 sdR-b1-00011483.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

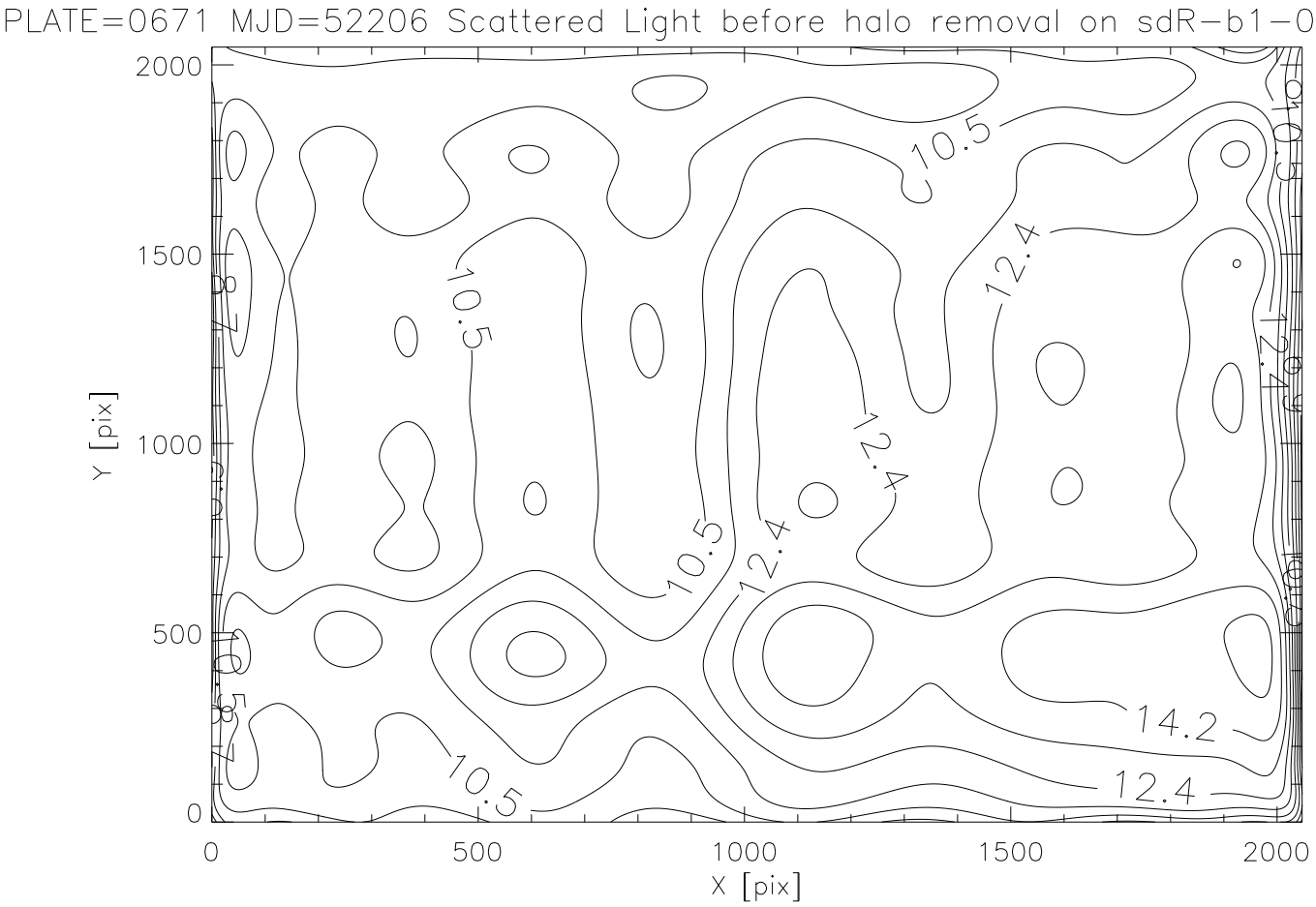

PLATE=0671 MJD=52206 sdR-b1-00011483.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

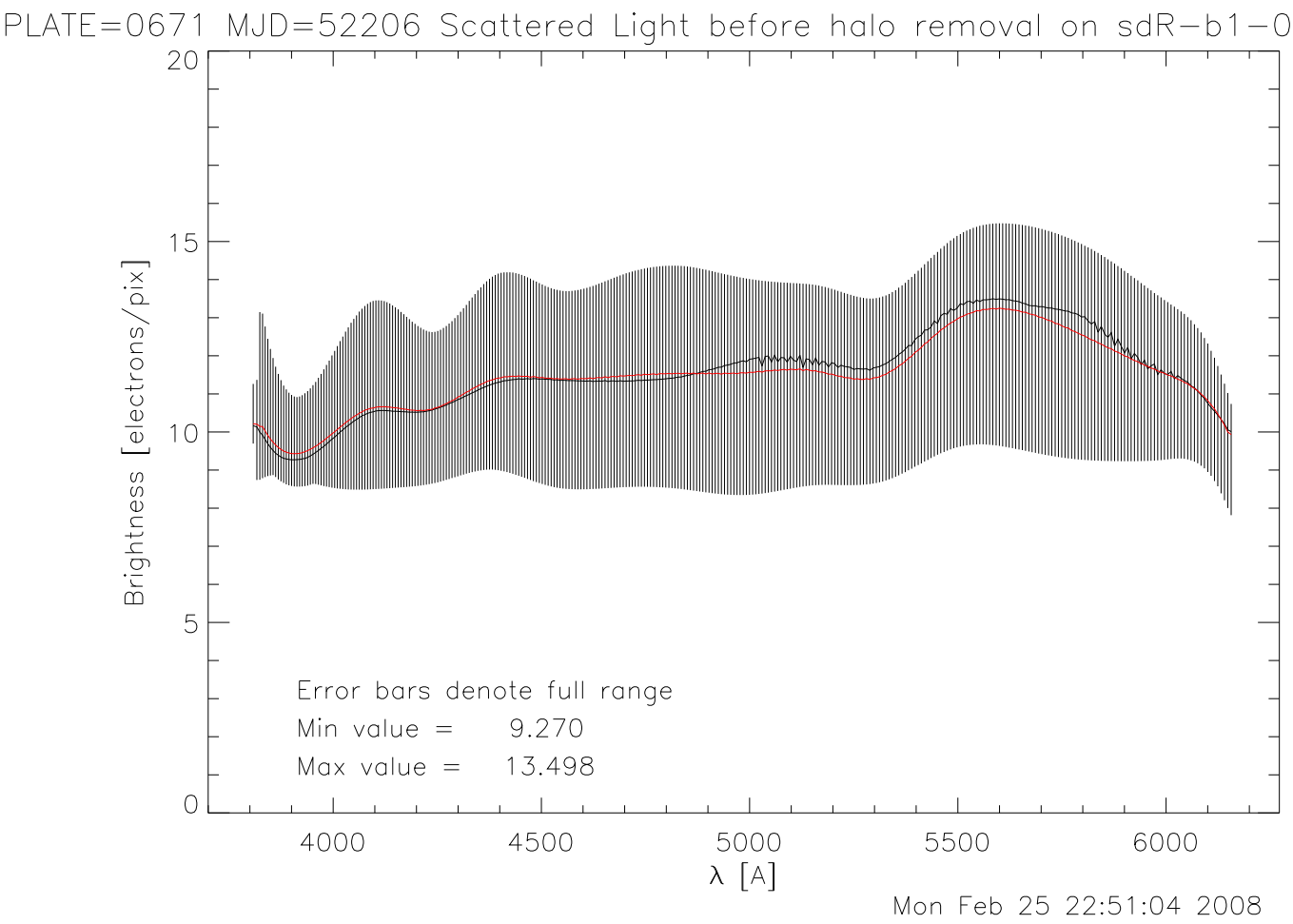

Number of sky fibers = 34
PLATE=0671 MJD=52206 sdR-b1-00011483.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

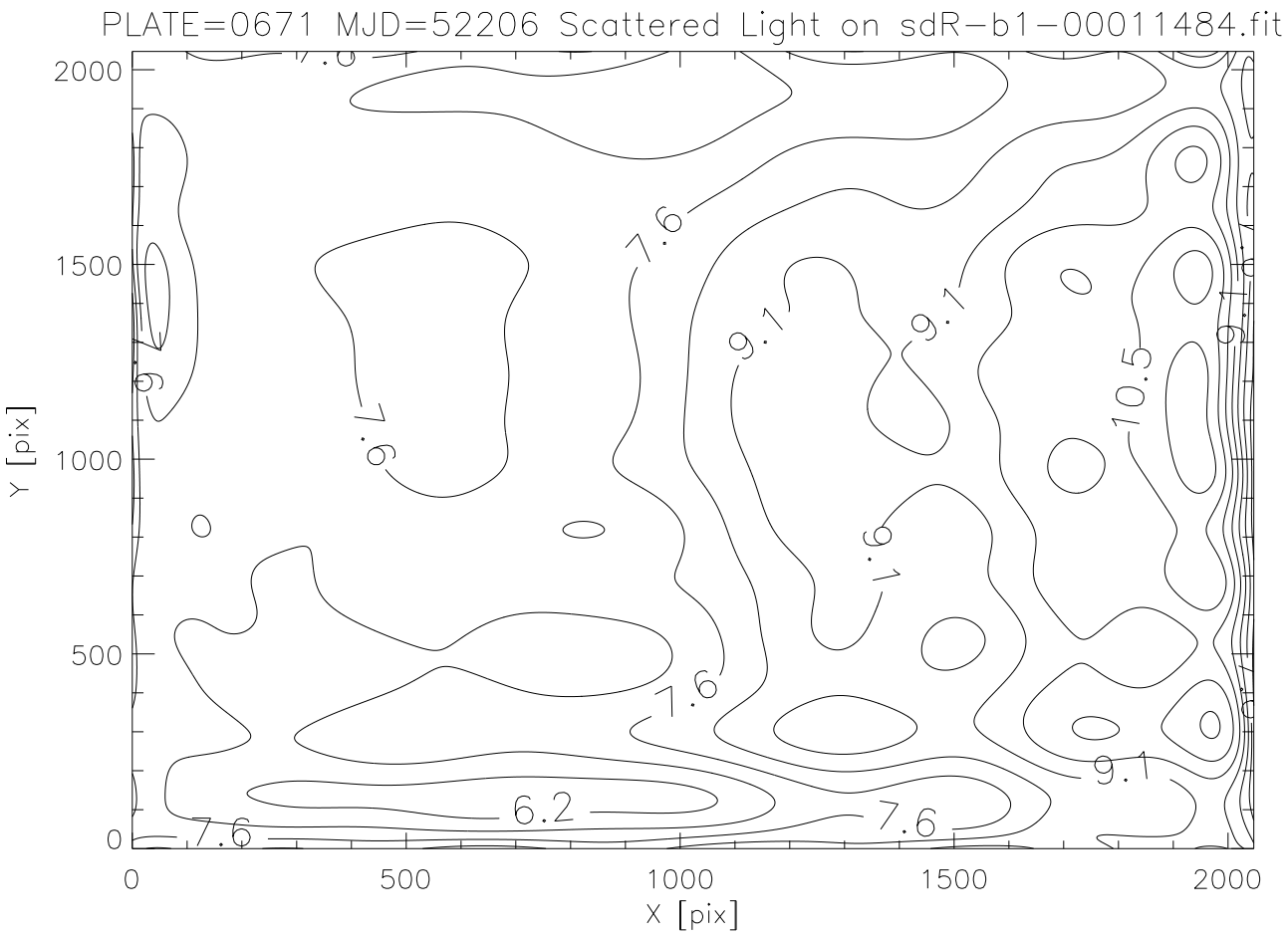

PLATE=0671 MJD=52206 sdR-b1-00011483.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.02 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

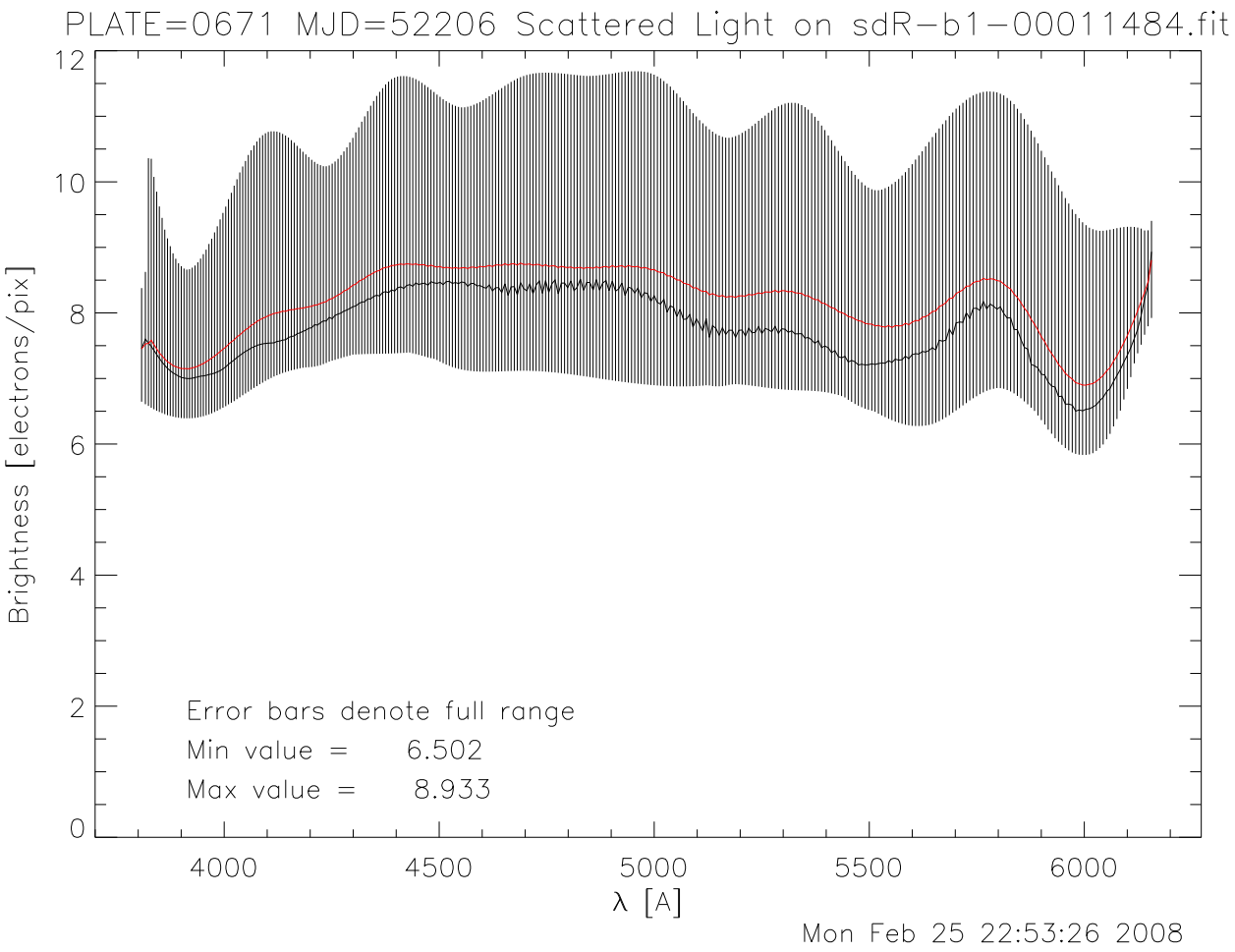

PLATE=0671 MJD=52206 sdR-b1-00011483.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
6.5×10^4
6.0×10^4
5.5×10^4
5.0×10^4
4.5×10^4
RED = sky fiber
Dispersion = 1.84 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
6.5×10^4
6.0×10^4
5.5×10^4
5.0×10^4
4.5×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
6.5×10^4
6.0×10^4
5.5×10^4
5.0×10^4
4.5×10^4
1.190
1.195
1.200
1.205
1.210
1.215
Airmass

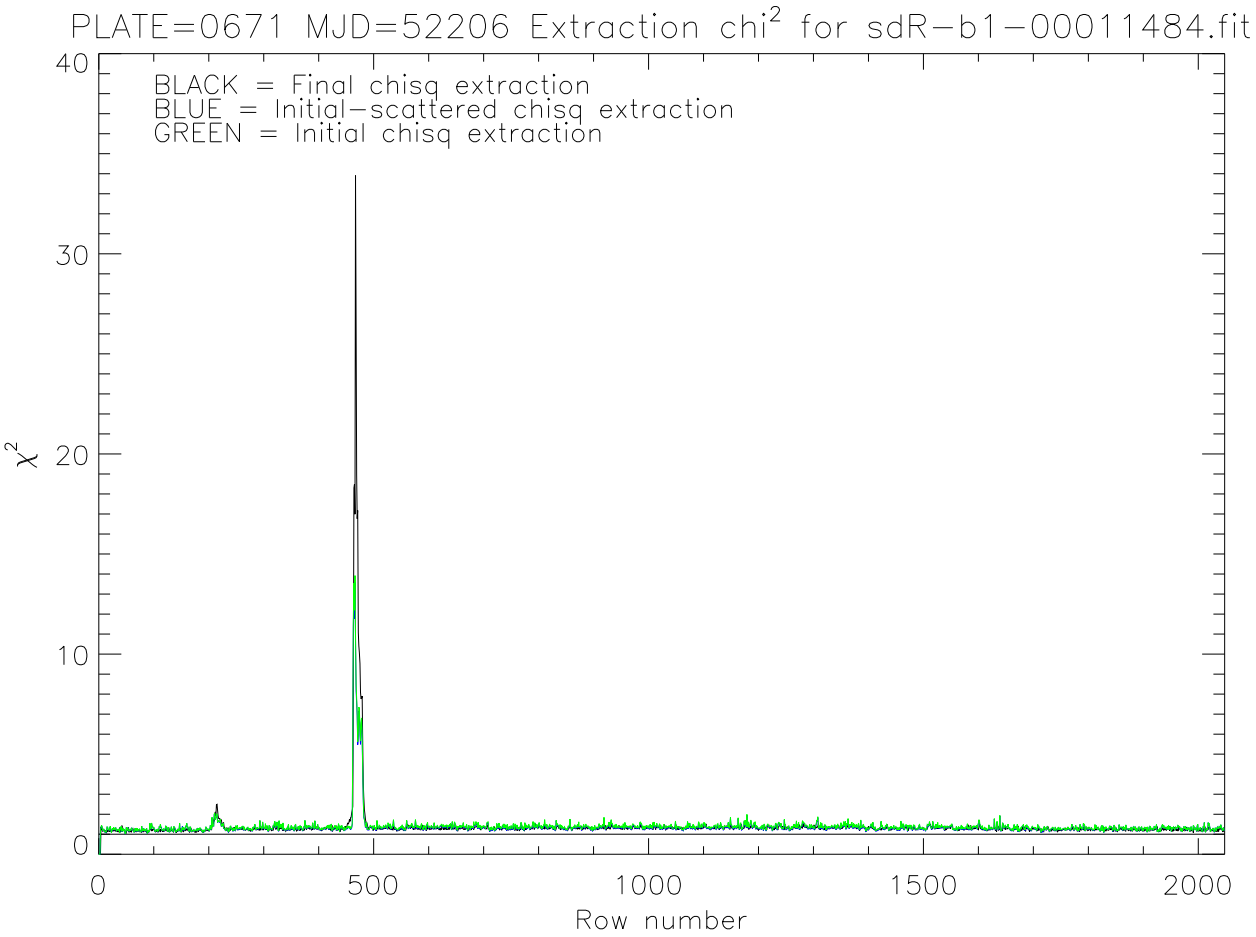

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b1-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.475
Max value = 1.192
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:50:09 2008

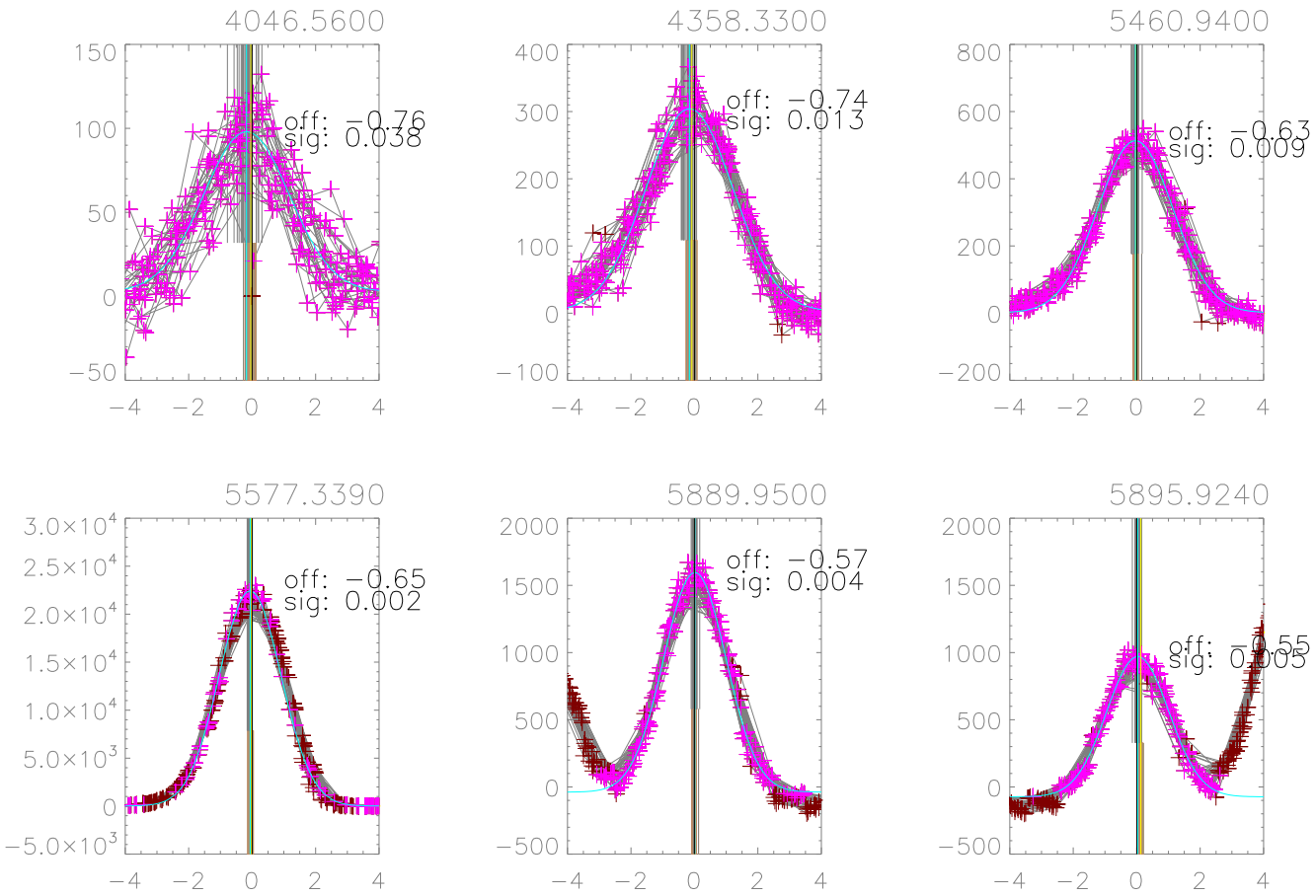

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR−b1−00011484.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
12.4
14.2

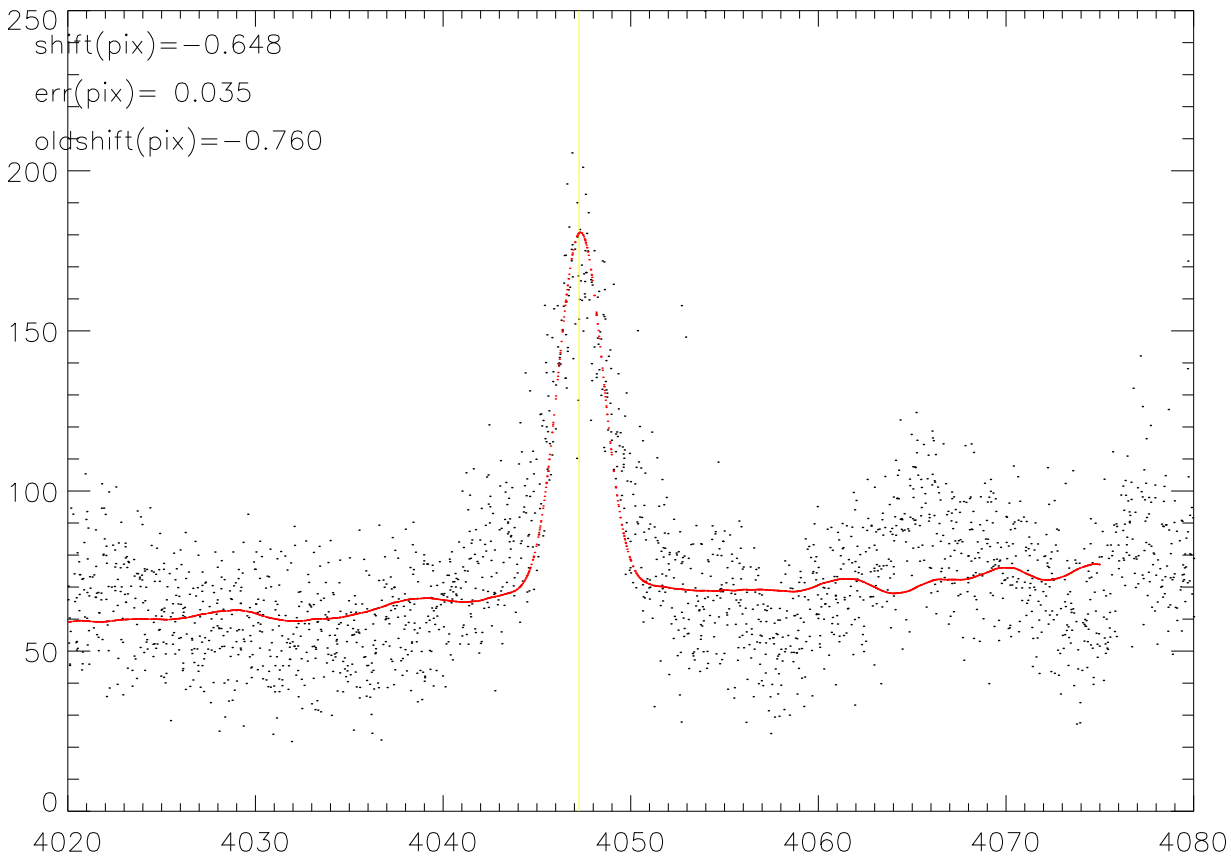

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011484.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.270
Max value = 13.498
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:51:04 2008

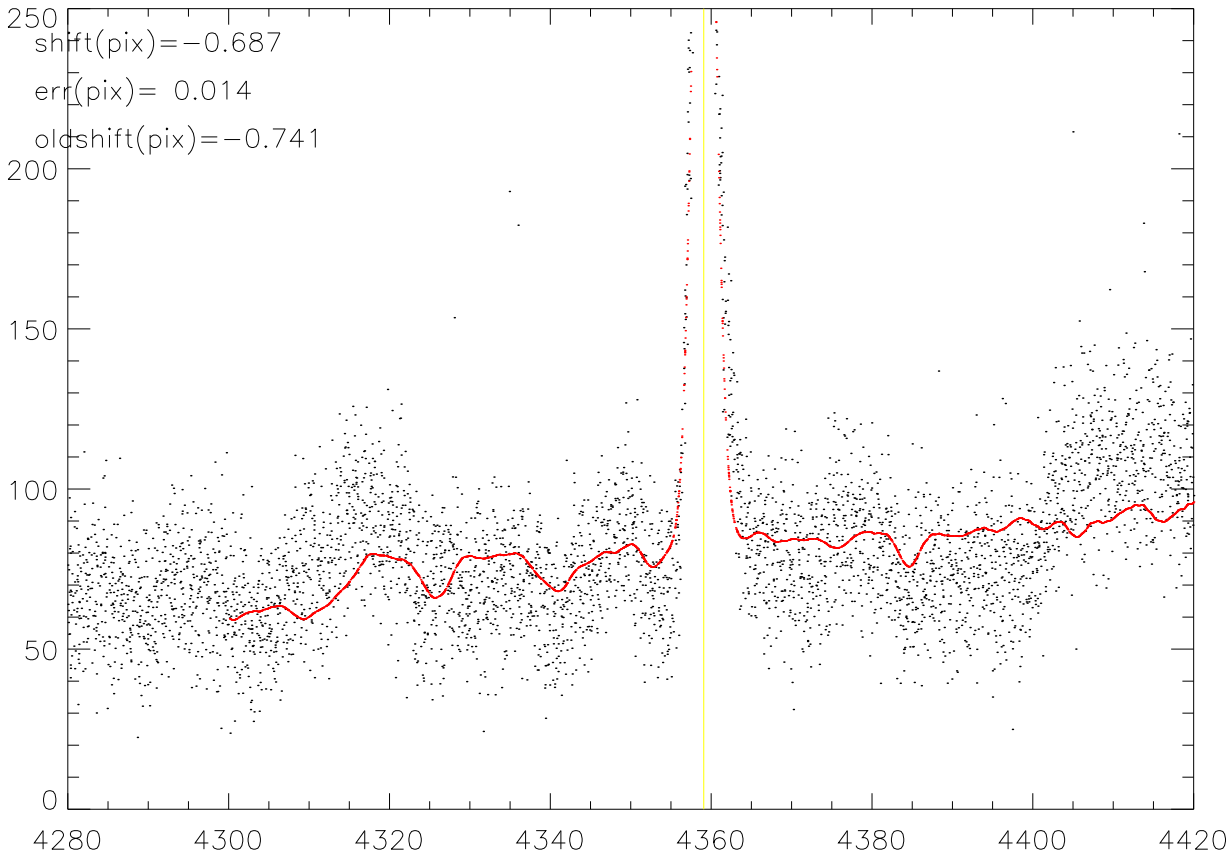

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011484.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.6
9.1
10.5
6.2
0

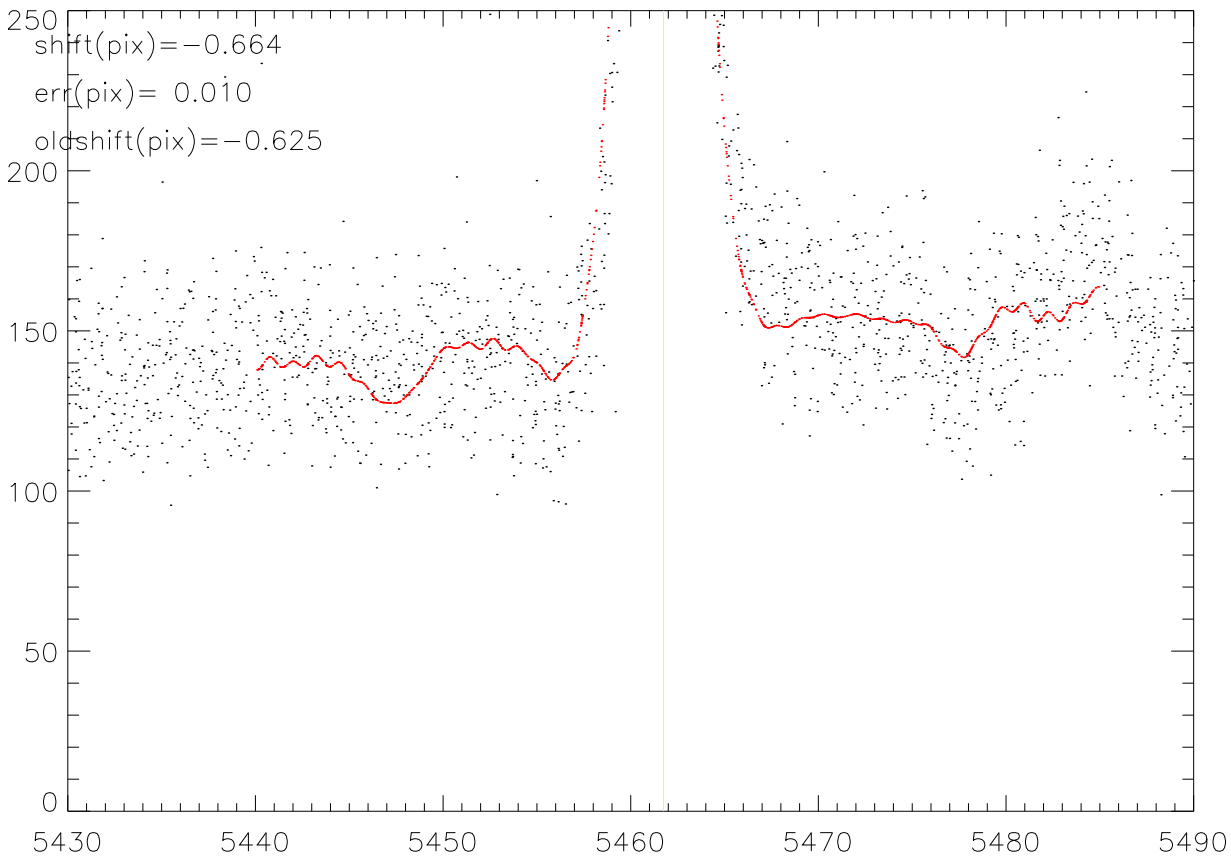

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011484.fit
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 6.502
Max value = 8.933
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:53:26 2008

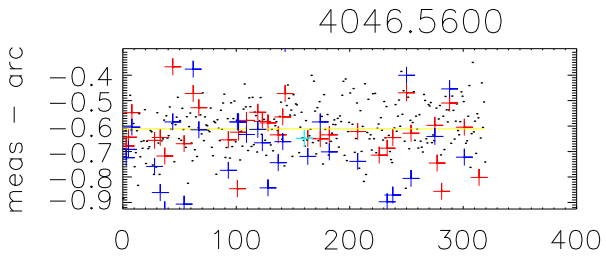

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−b1−00011484.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number

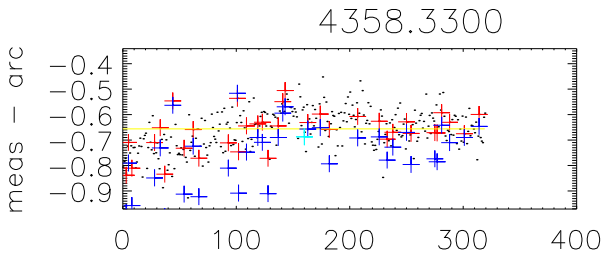

4046.5600
off: −0.76
sig: 0.038
4358.3300
off: −0.74
sig: 0.013
5460.9400
off: −0.63
sig: 0.009
5577.3390
off: −0.65
sig: 0.002
5889.9500
off: −0.57
sig: 0.004
5895.9240
off: −0.55
sig: 0.003

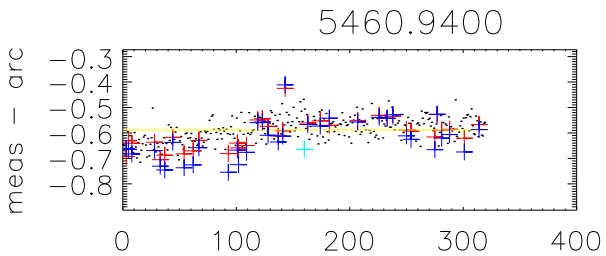

shift(pix)=−0.648
err(pix)= 0.035
oldshift(pix)=−0.760
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

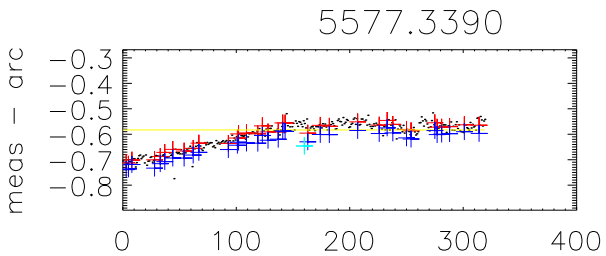

shift(pix)=−0.687
err(pix)= 0.014
oldshift(pix)=−0.741
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

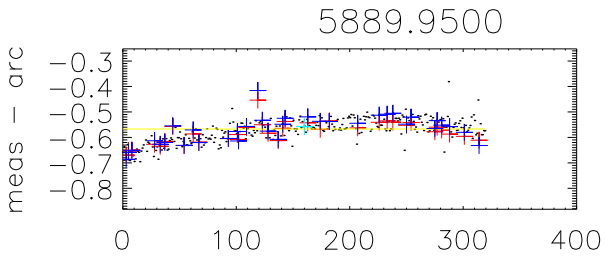

shift(pix)=−0.664
err(pix)= 0.010
oldshift(pix)=−0.625
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

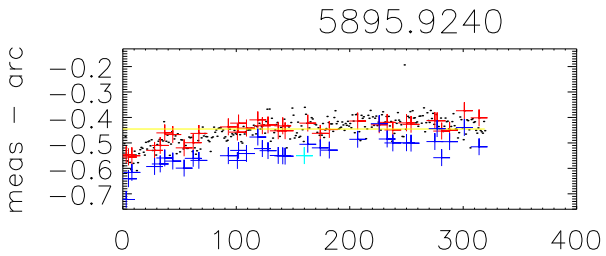

4046.5600
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

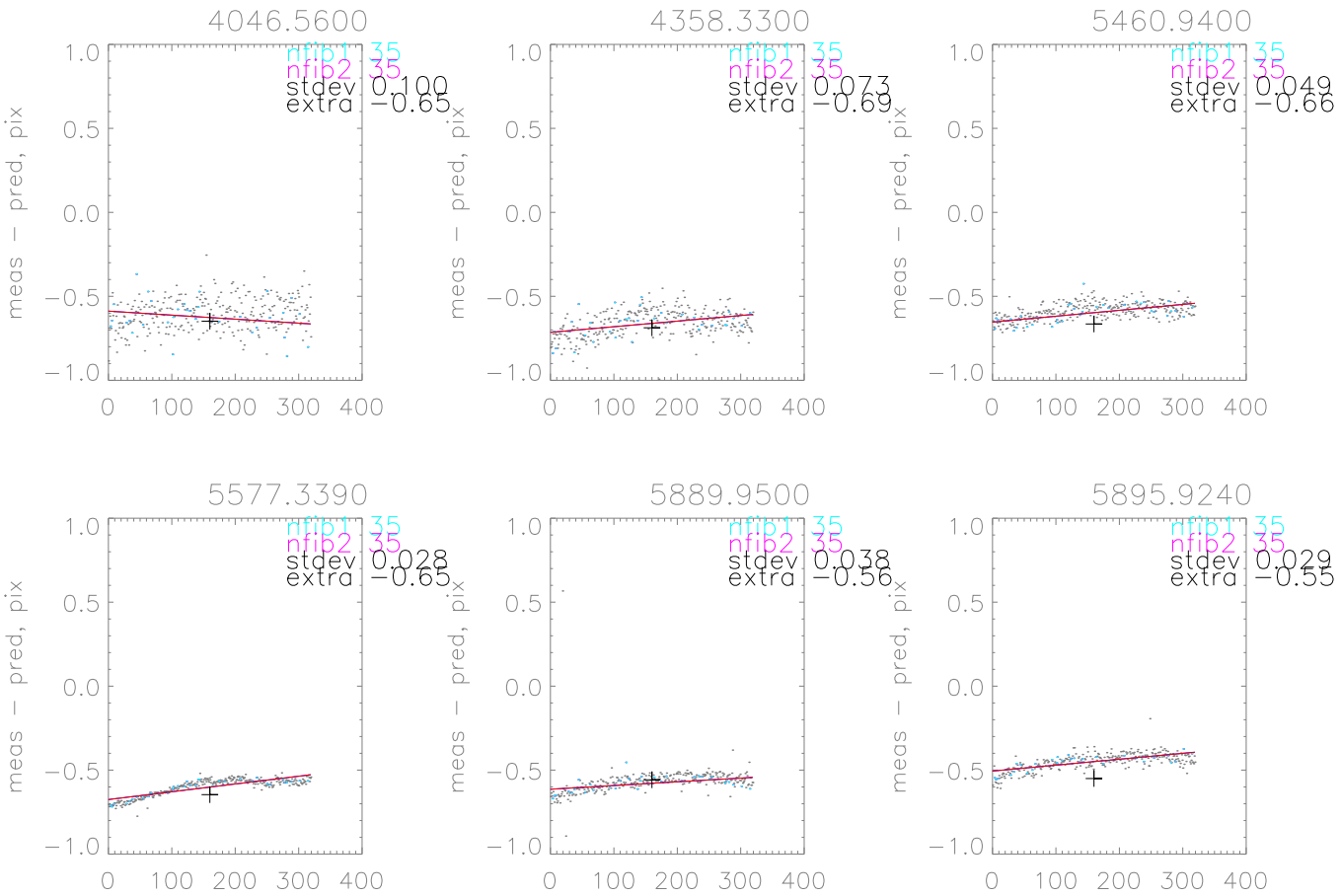

4358.3300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

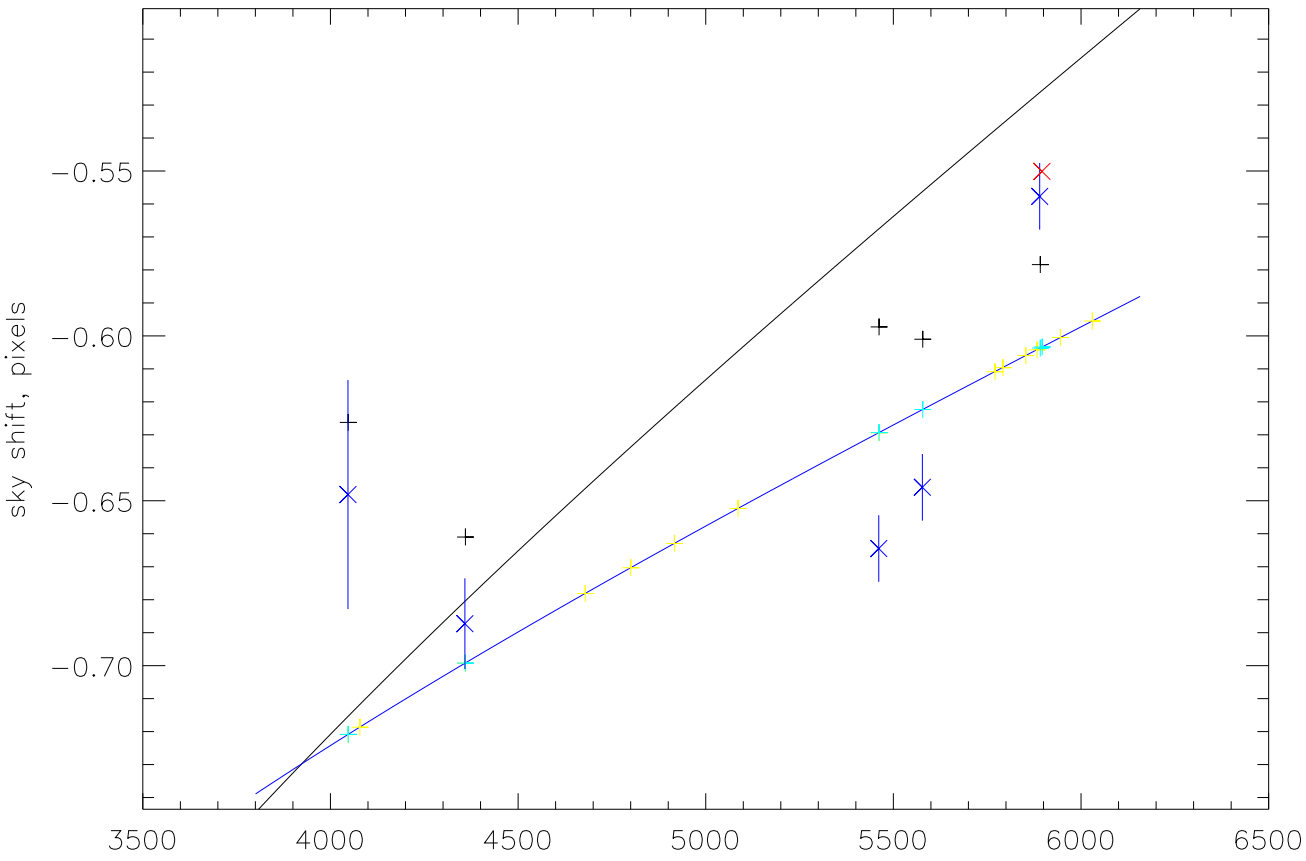

5460.9400
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

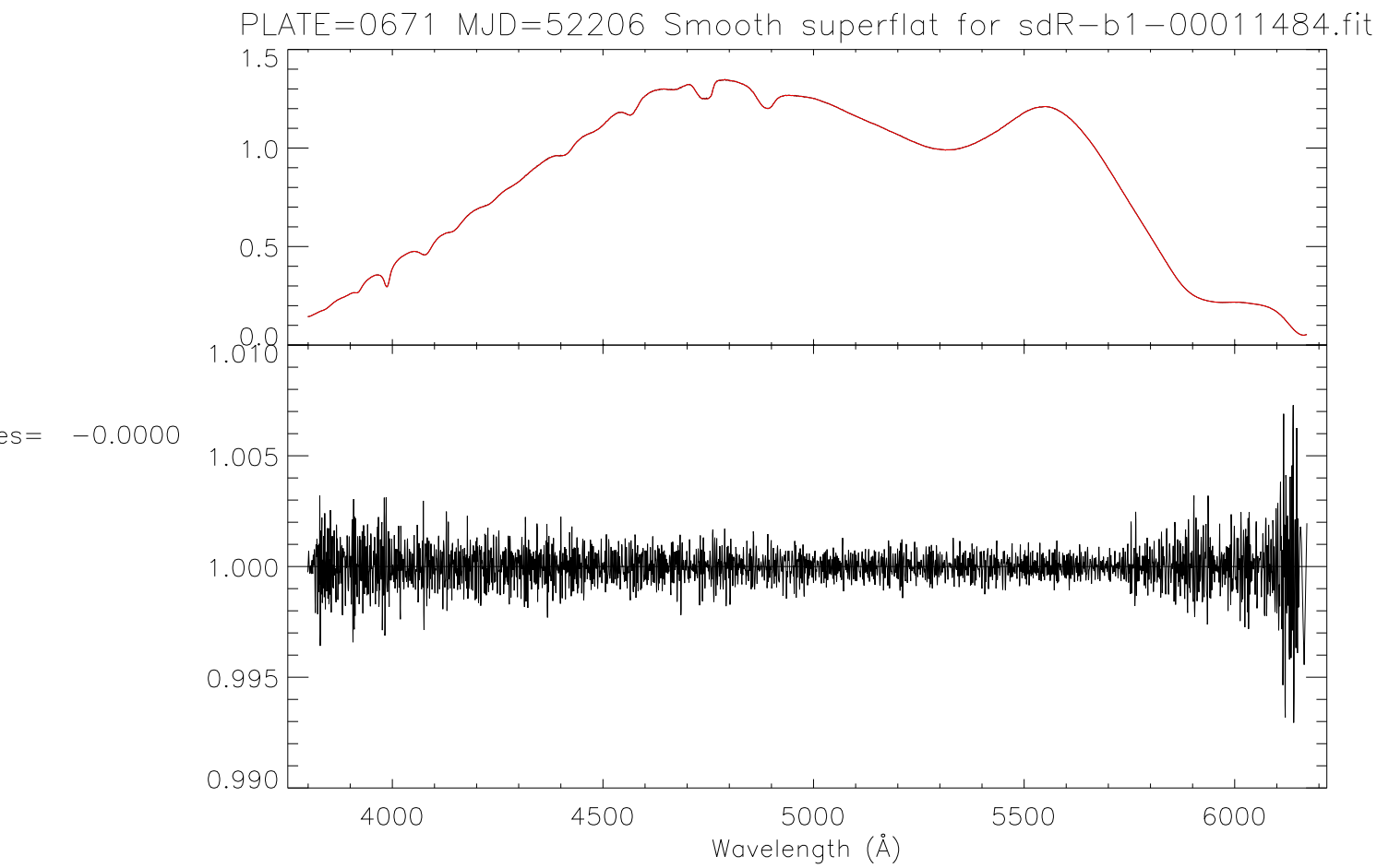

5577.3390
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

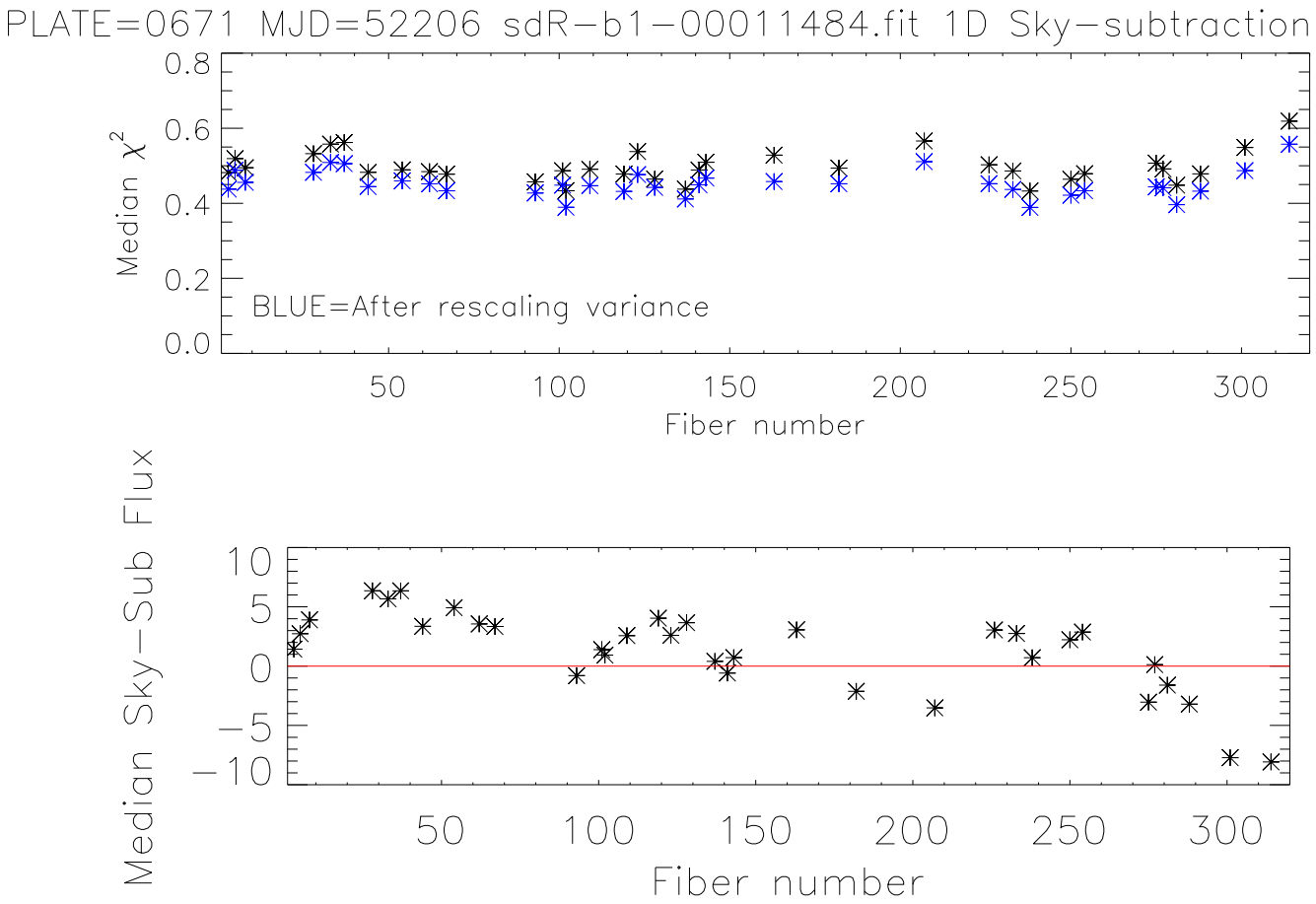

5889.9500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

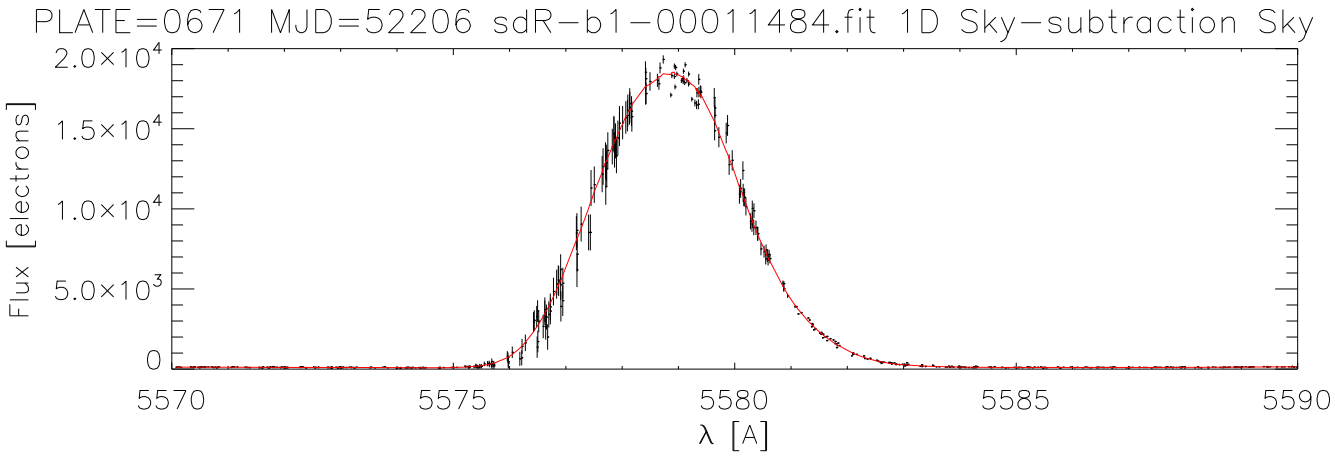

5895.9240
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

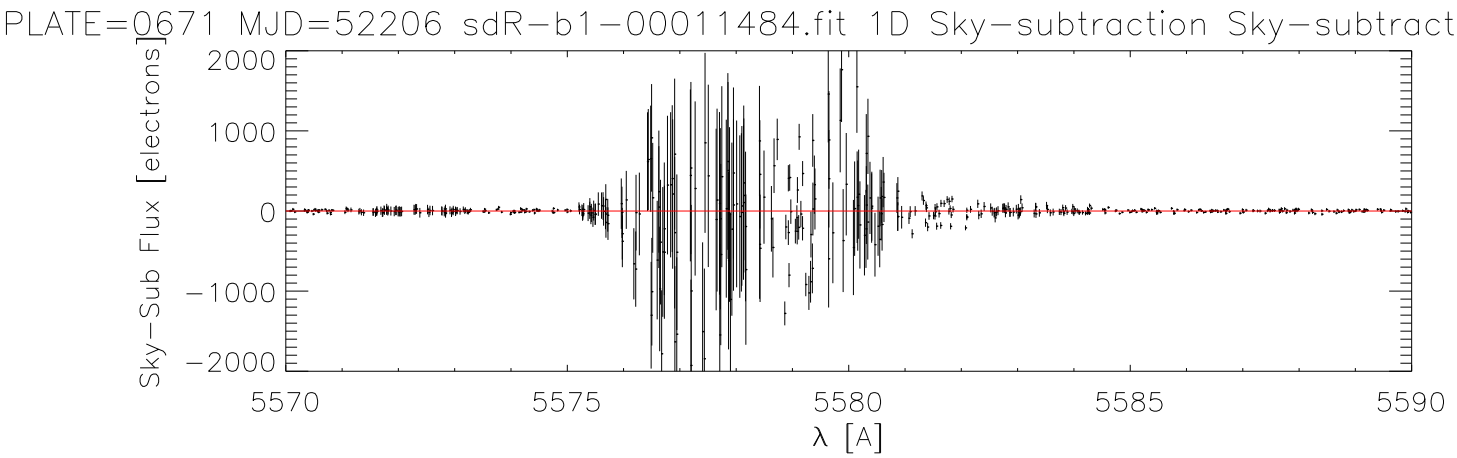

4046.5600
nfib1 35
nfib2 35
stdev 0.100
extra −0.65
4358.3300
nfib1 35
nfib2 35
stdev 0.073
extra −0.69
5460.9400
nfib1 35
nfib2 35
stdev 0.049
extra −0.66
5577.3390
nfib1 35
nfib2 35
stdev 0.028
extra −0.65
5889.9500
nfib1 35
nfib2 35
stdev 0.038
extra −0.56
5895.9240
nfib1 35
nfib2 35
stdev 0.029
extra −0.55
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

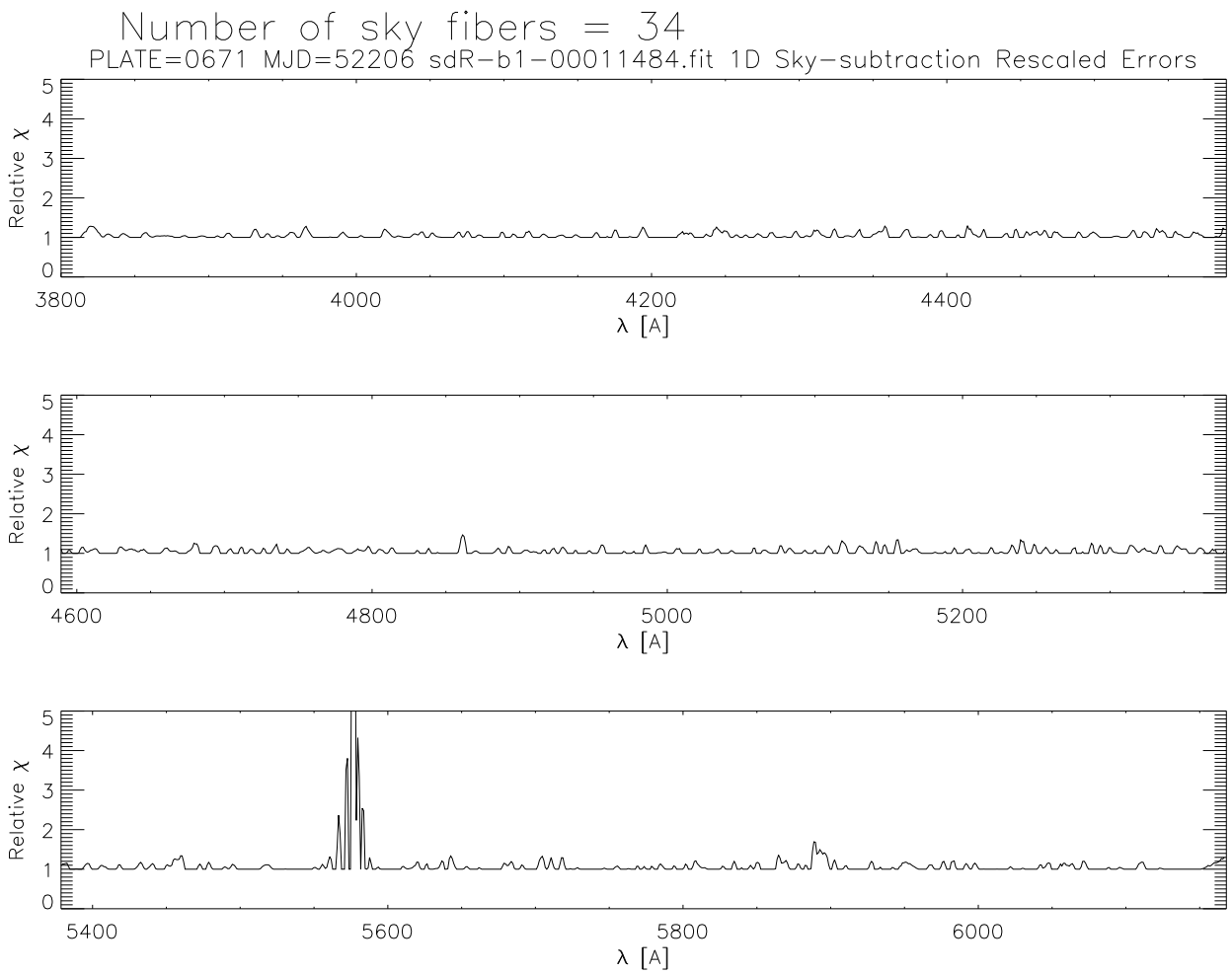

sky shift, pixels
−0.55
−0.60
−0.65
−0.70
3500
4000
4500
5000
5500
6000
6500

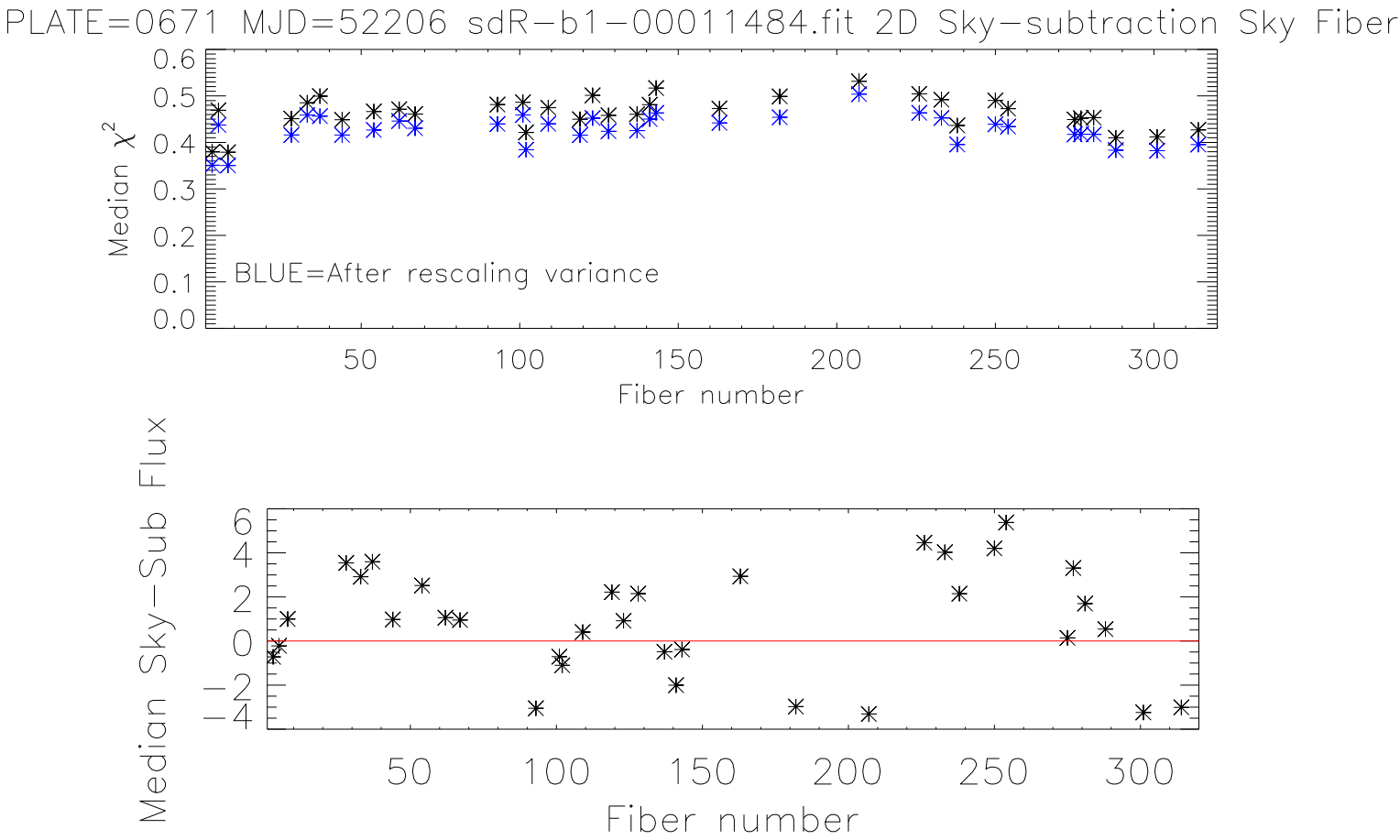

PLATE=0671 MJD=52206 Smooth superflat for sdR-b1-00011484.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

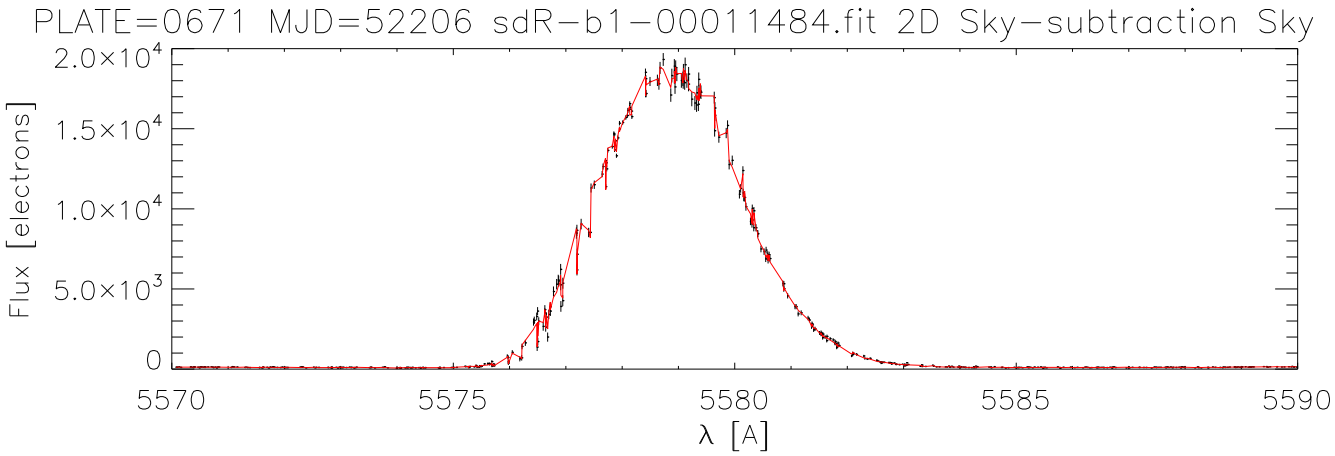

PLATE=0671 MJD=52206 sdR-b1-00011484.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

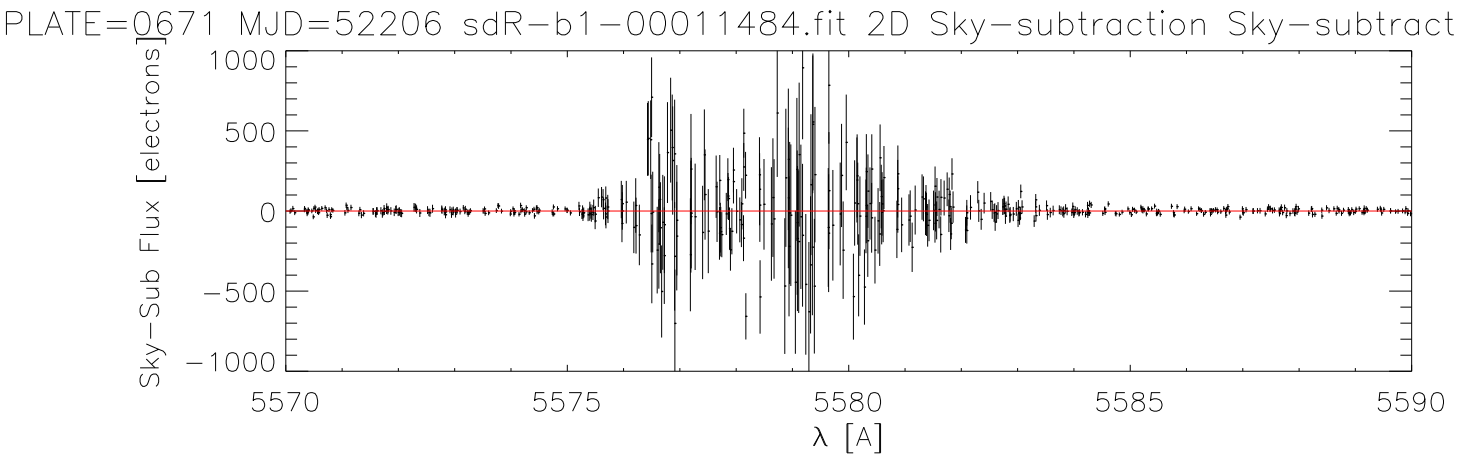

PLATE=0671 MJD=52206 sdR-b1-00011484.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

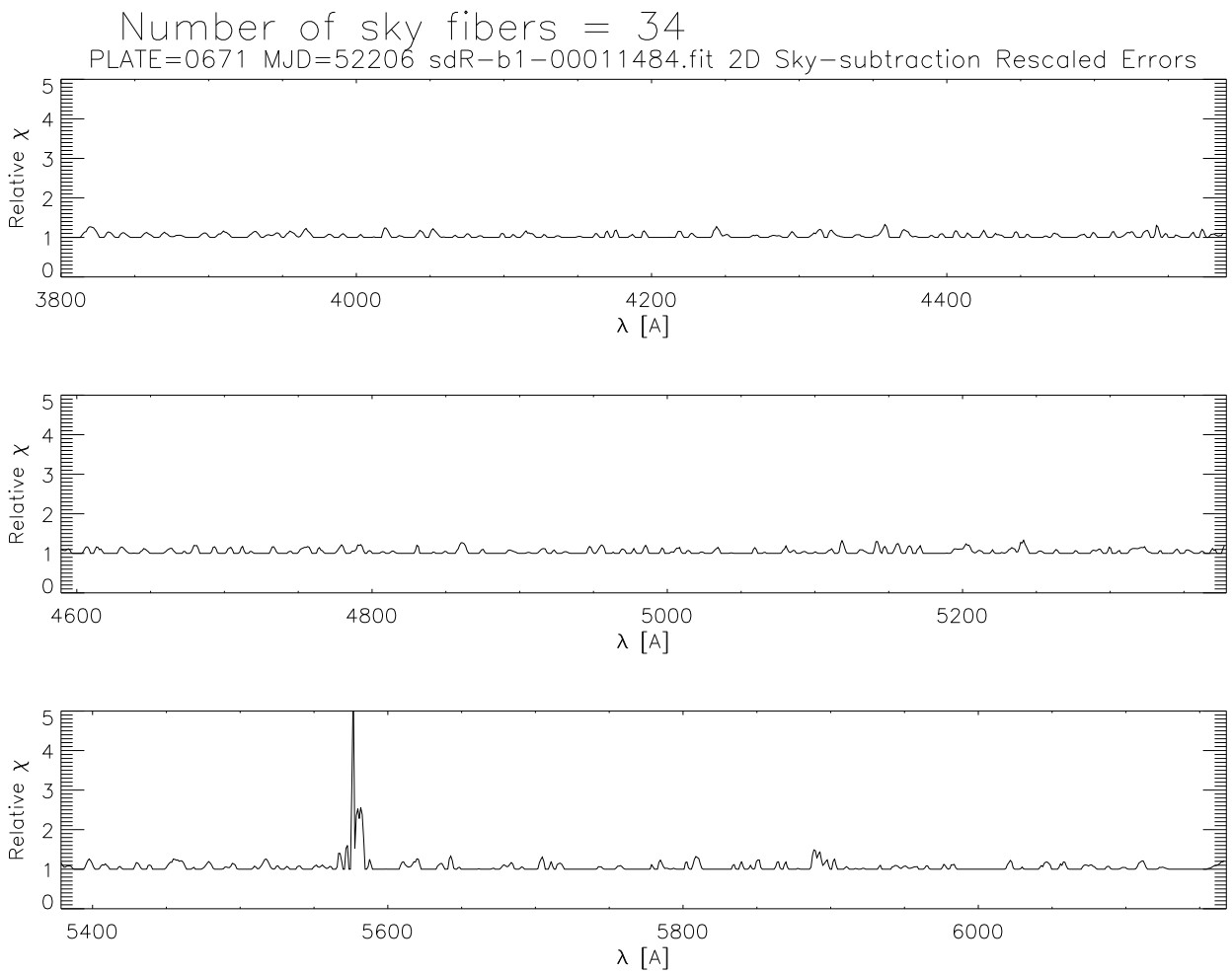

PLATE=0671 MJD=52206 sdR-b1-00011484.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

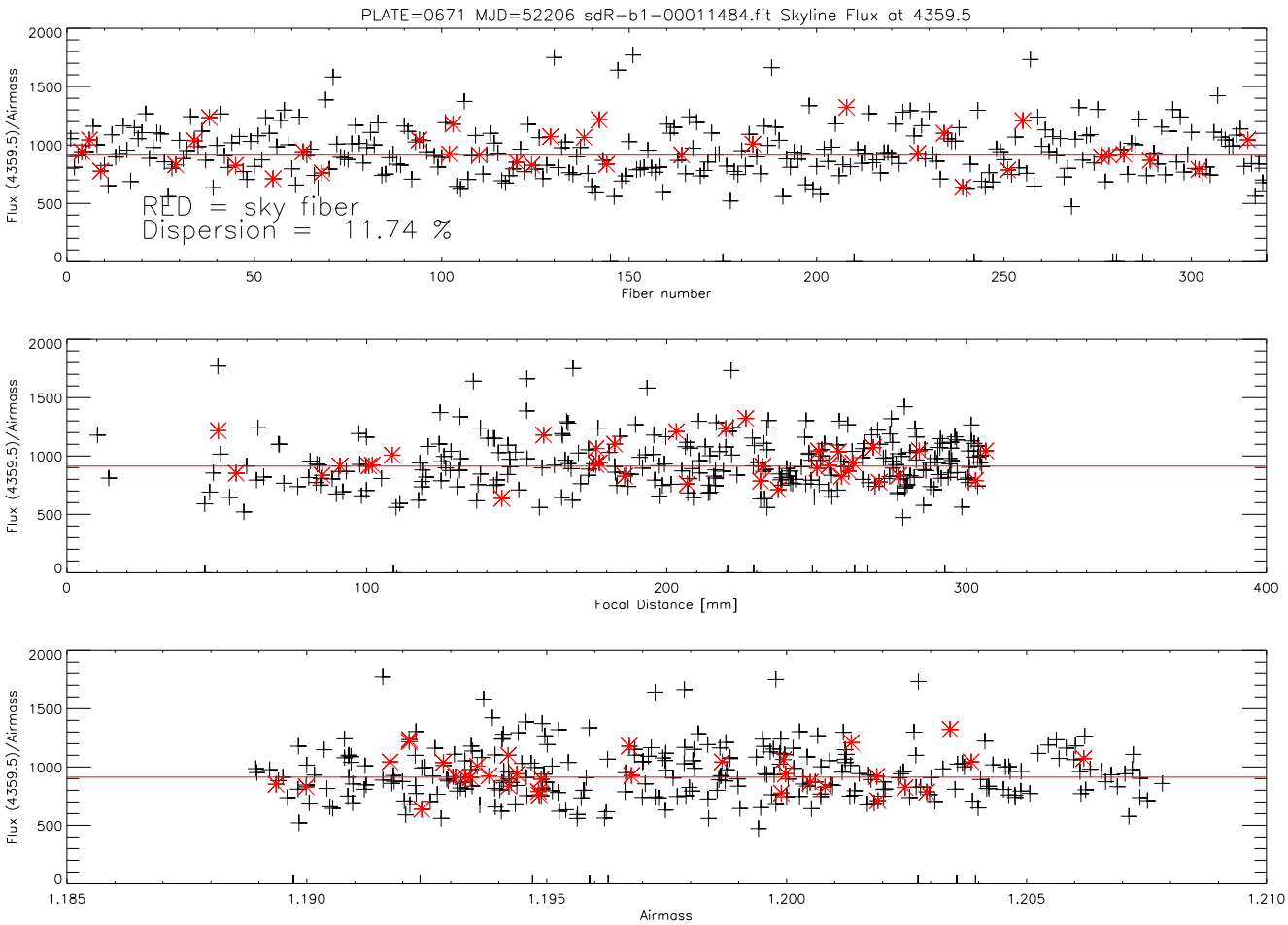

Number of sky fibers = 34
PLATE=0671 MJD=52206 sdR-b1-00011484.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

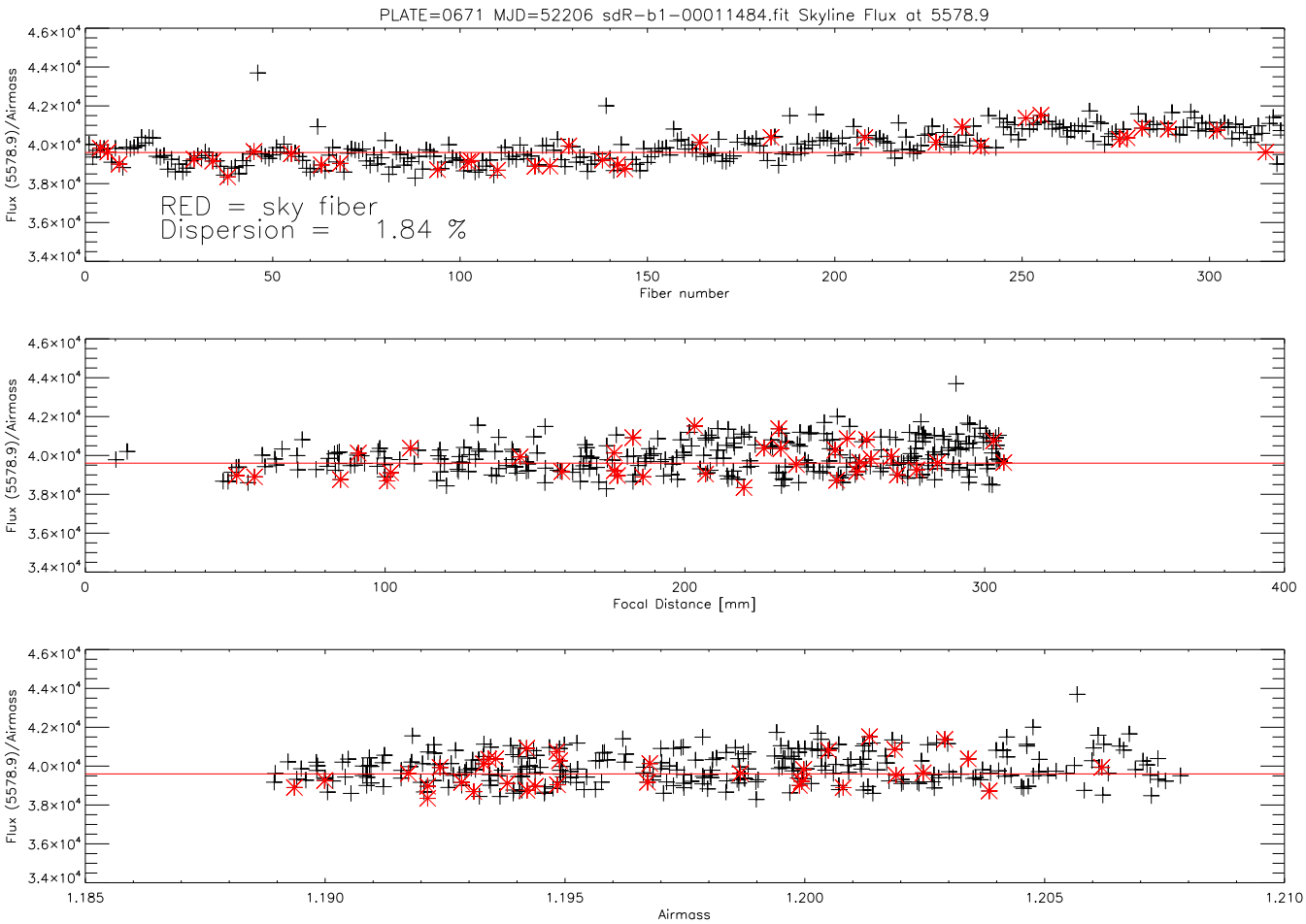

PLATE=0671 MJD=52206 sdR-b1-00011484.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

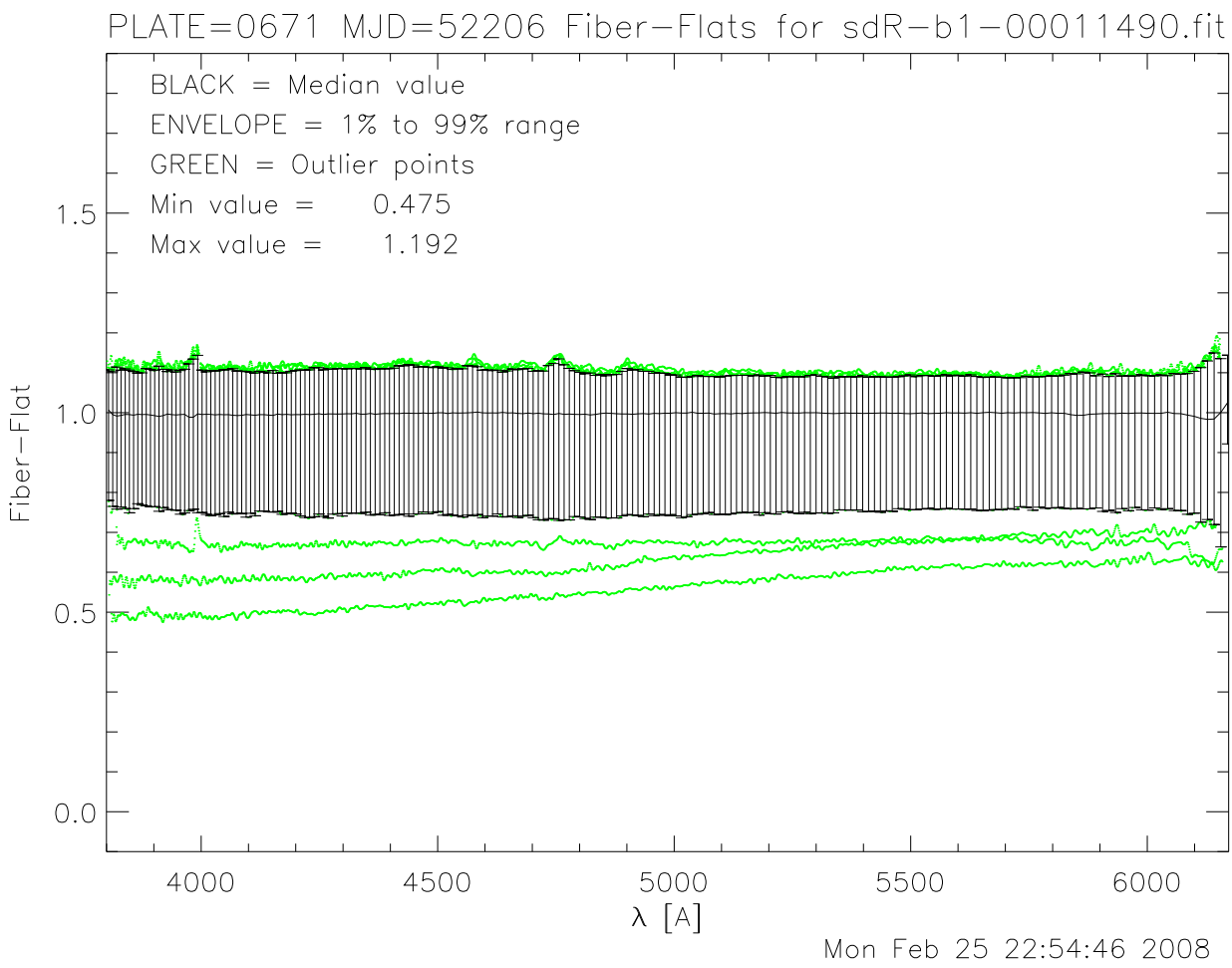

PLATE=0671 MJD=52206 sdR-b1-00011484.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

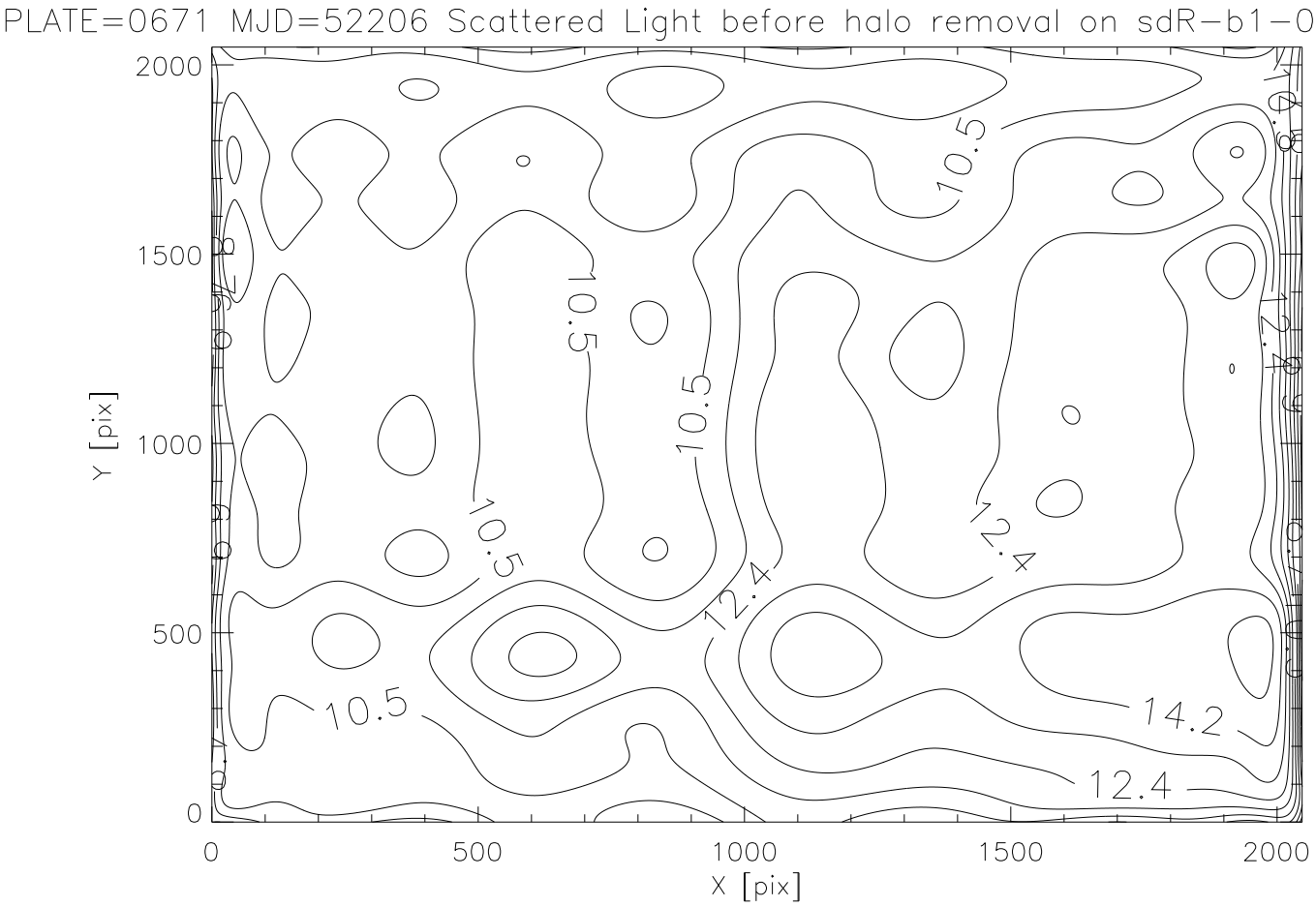

PLATE=0671 MJD=52206 sdR-b1-00011484.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

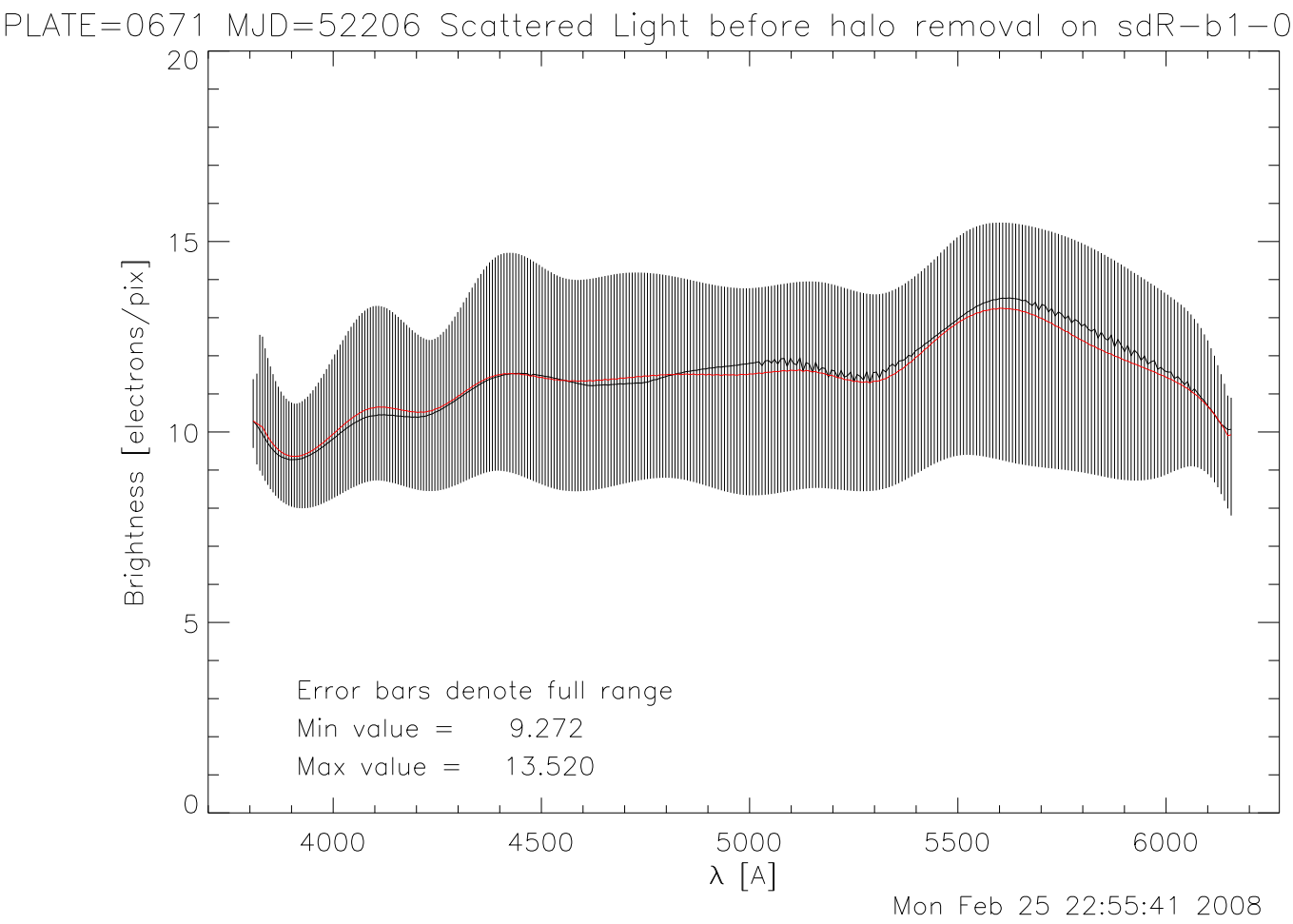

Number of sky fibers = 34
PLATE=0671 MJD=52206 sdR-b1-00011484.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

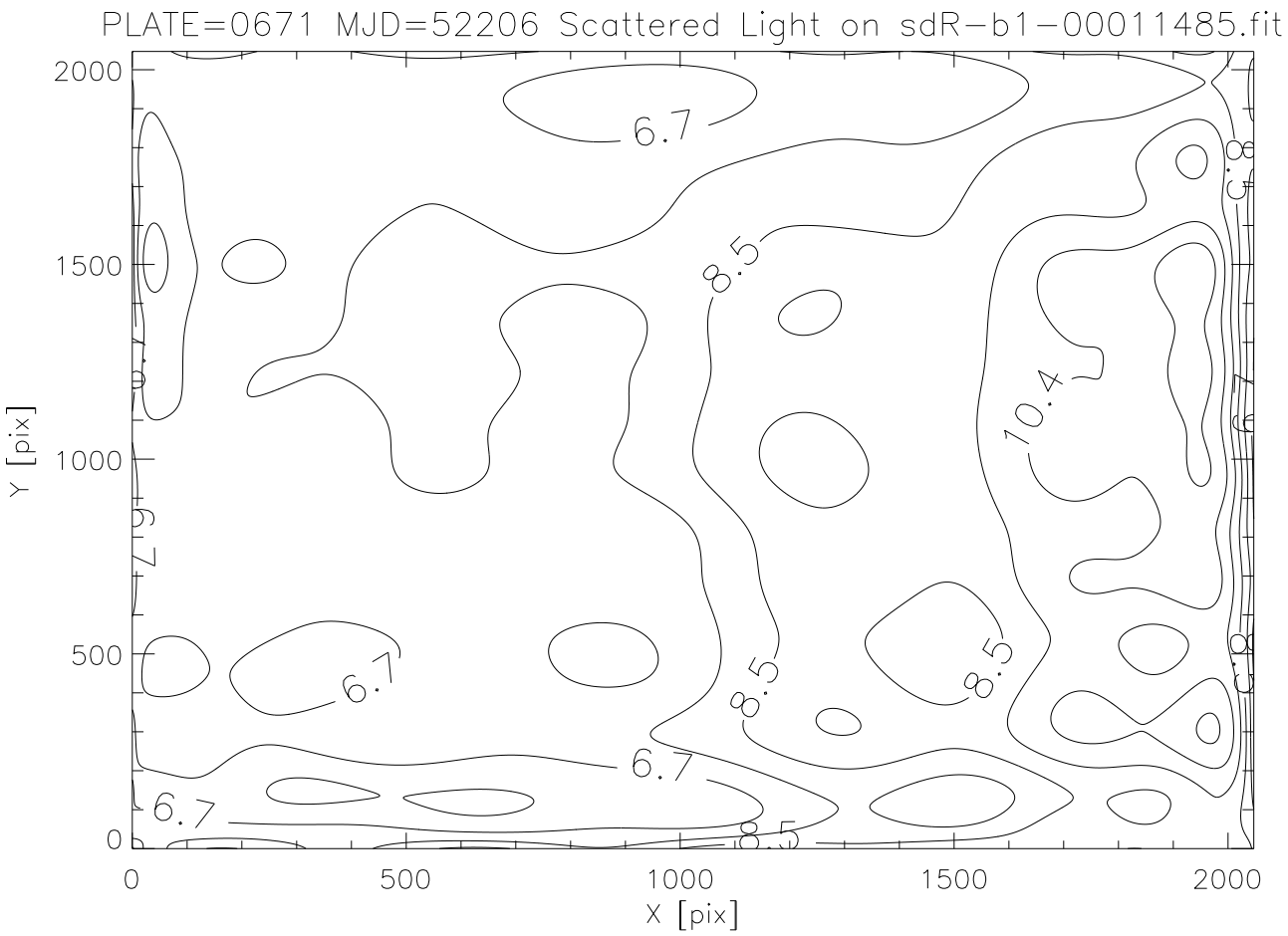

PLATE=0671 MJD=52206 sdR-b1-00011484.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.74 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

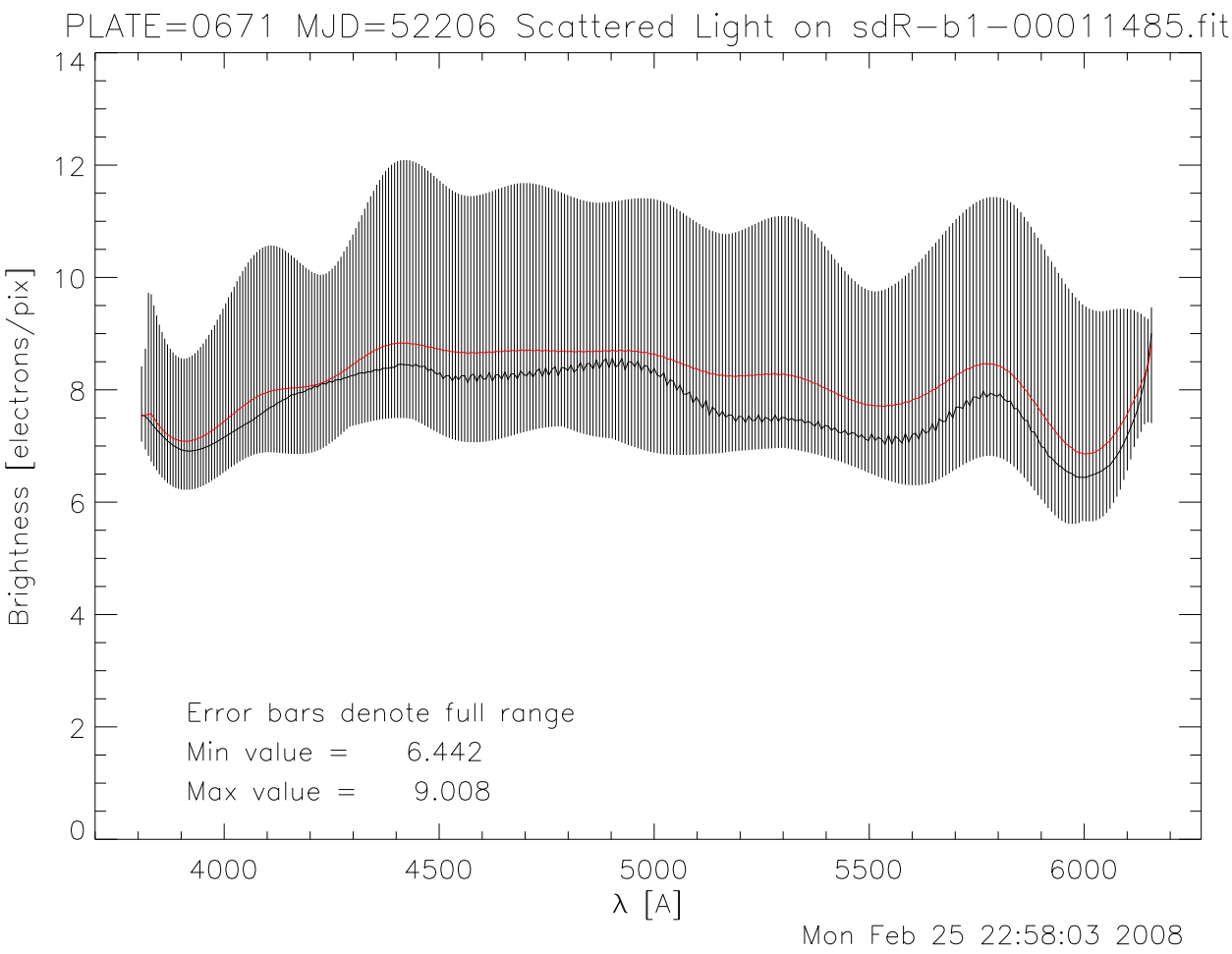

PLATE=0671 MJD=52206 sdR-b1-00011484.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.84 %
Fiber number
Focal Distance [mm]
Airmass

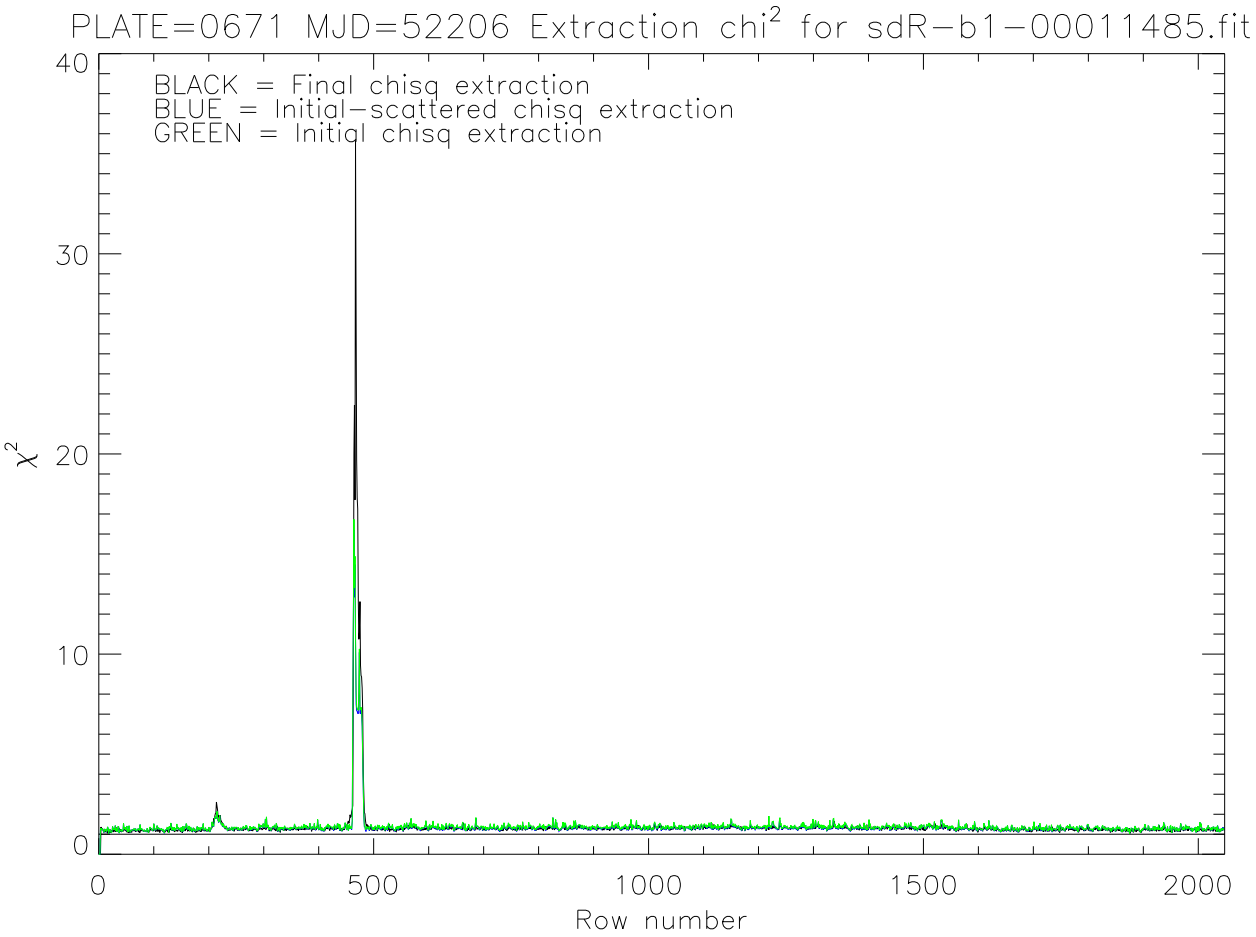

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b1-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.475
Max value = 1.192
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:54:46 2008

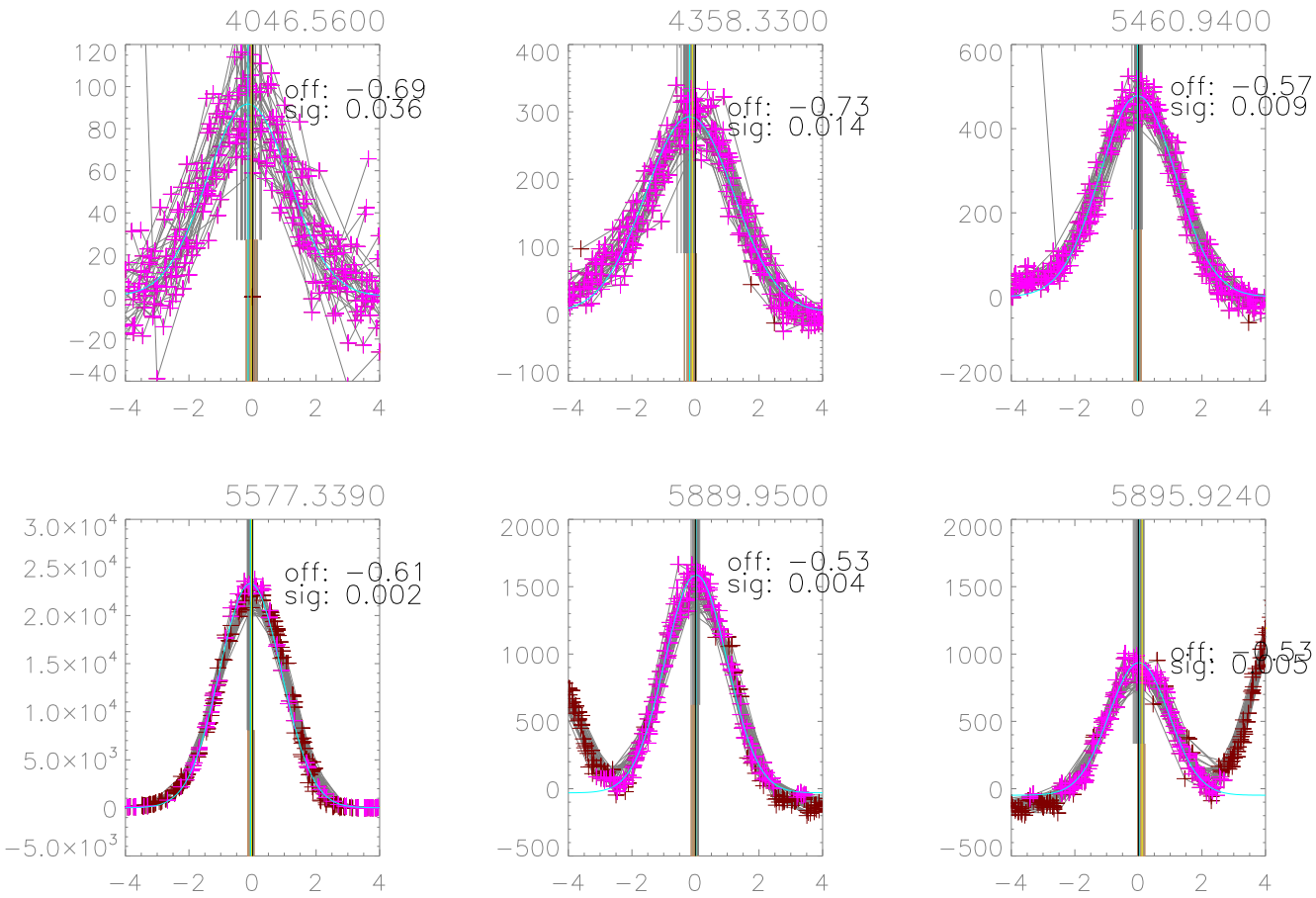

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011485.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
12.4
14.2

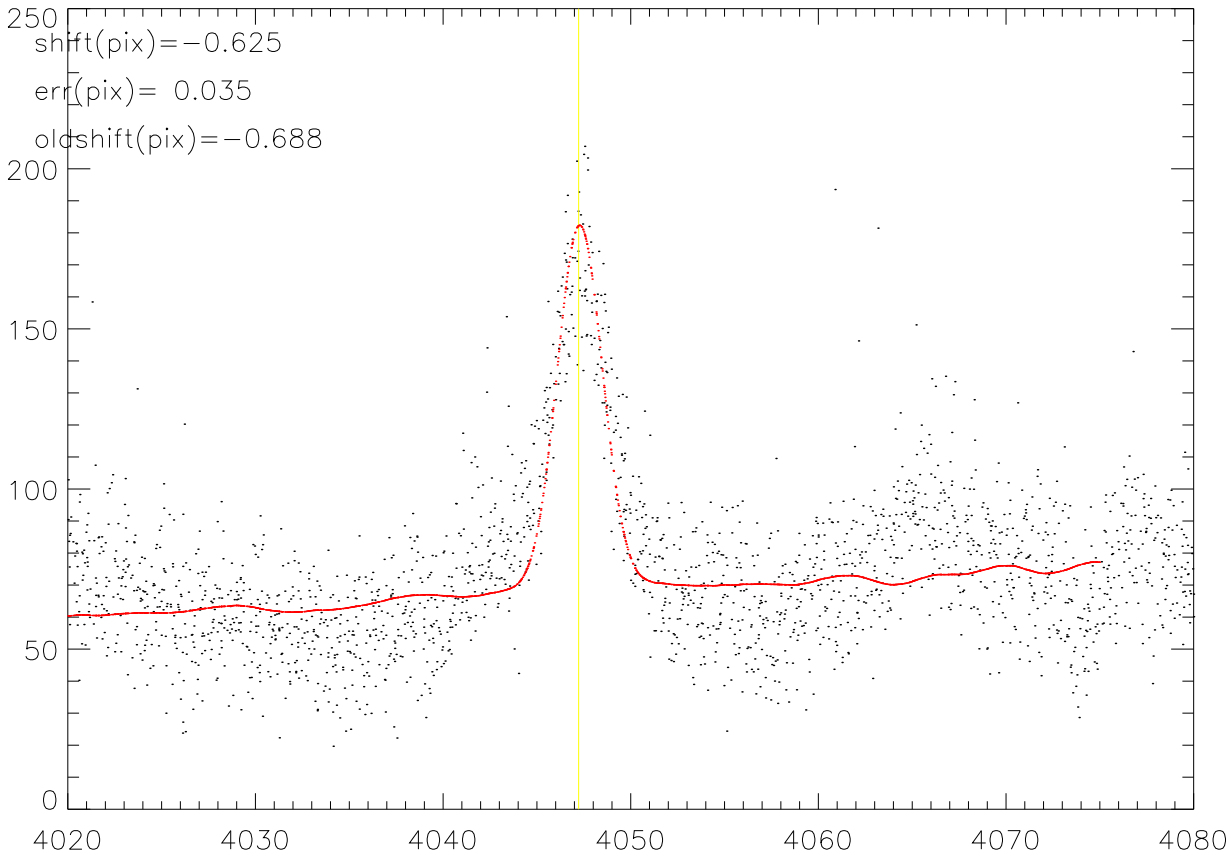

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011485.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.272
Max value = 13.520
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:55:41 2008

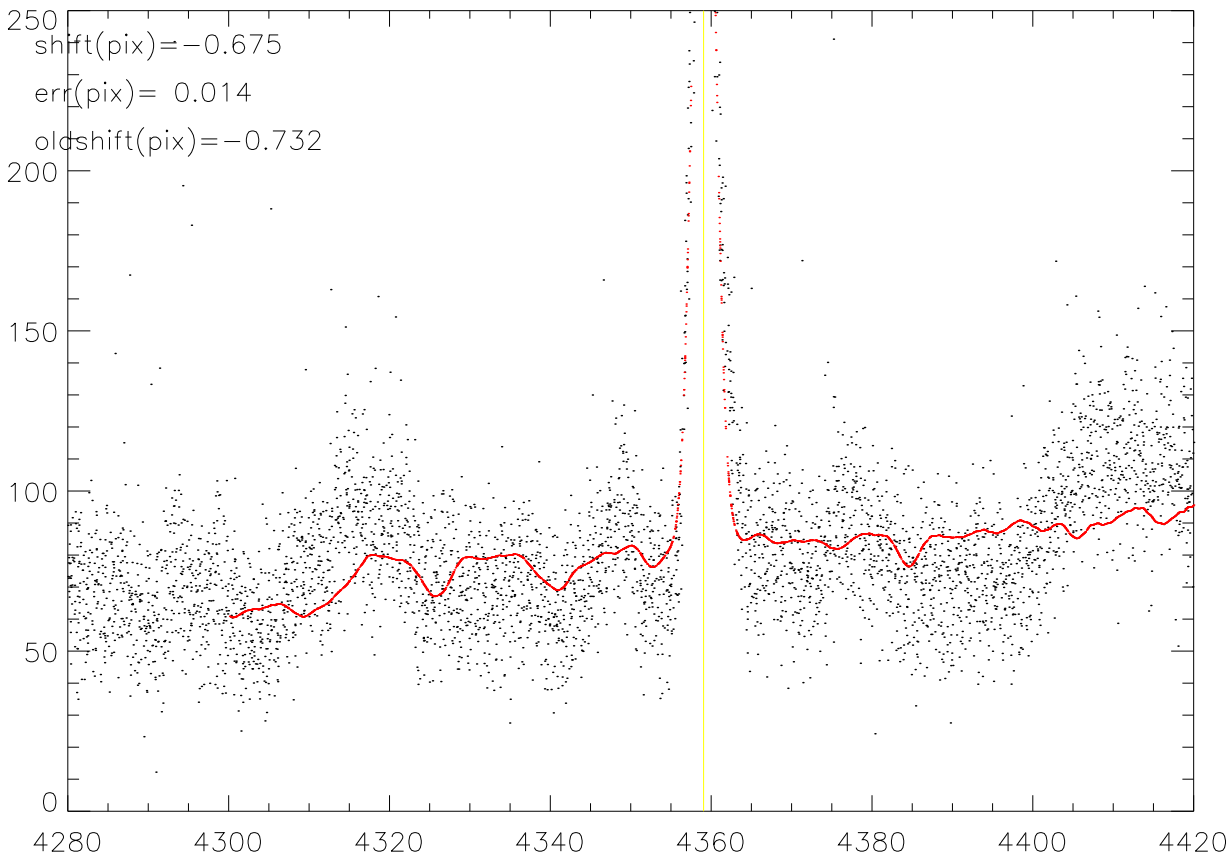

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011485.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.7
8.5
10.4

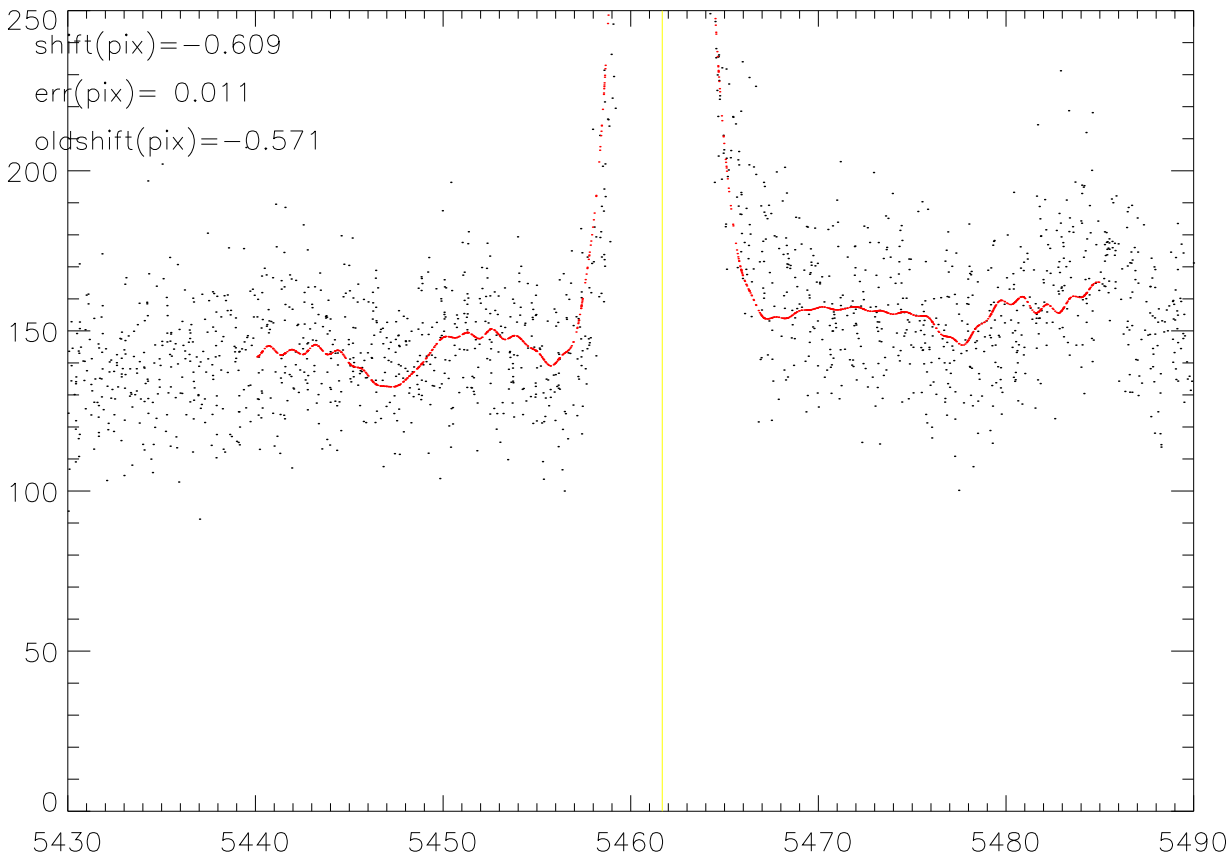

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011485.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.442
Max value = 9.008
Mon Feb 25 22:58:03 2008

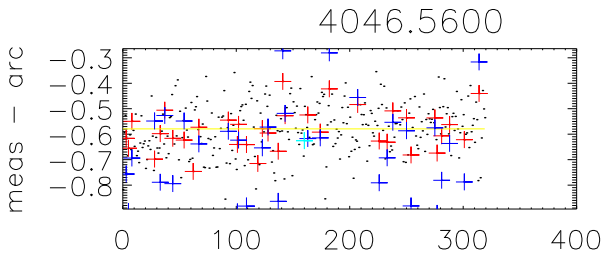

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−b1−00011485.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number

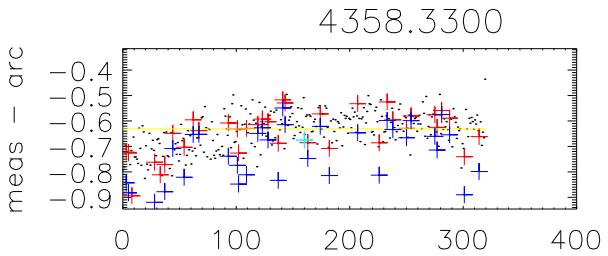

4046.5600
off: −0.69
sig: 0.036
4358.3300
off: −0.73
sig: 0.014
5460.9400
off: −0.57
sig: 0.009
5577.3390
off: −0.61
sig: 0.002
5889.9500
off: −0.53
sig: 0.004
5895.9240
off: −0.53
sig: 0.005

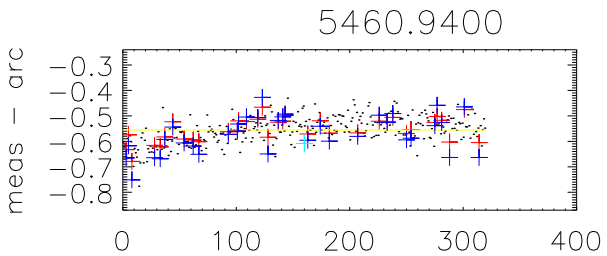

shift(pix)=−0.625
err(pix)= 0.035
oldshift(pix)=−0.688
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

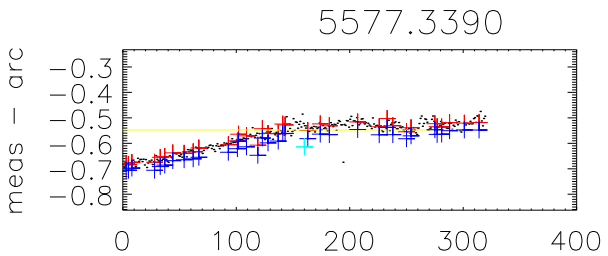

shift(pix)=−0.675
err(pix)= 0.014
oldshift(pix)=−0.732
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

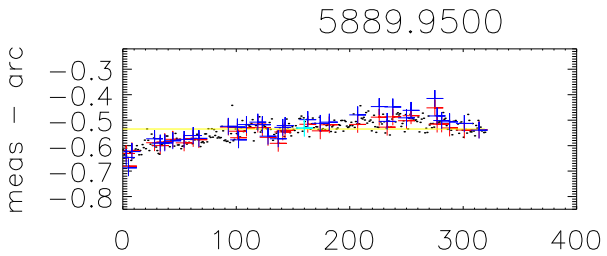

shift(pix)=−0.609
err(pix)= 0.011
oldshift(pix)=−0.571
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

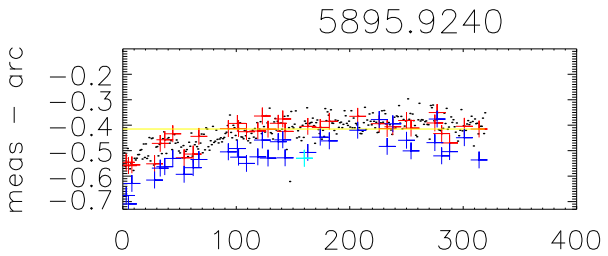

4046.5600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

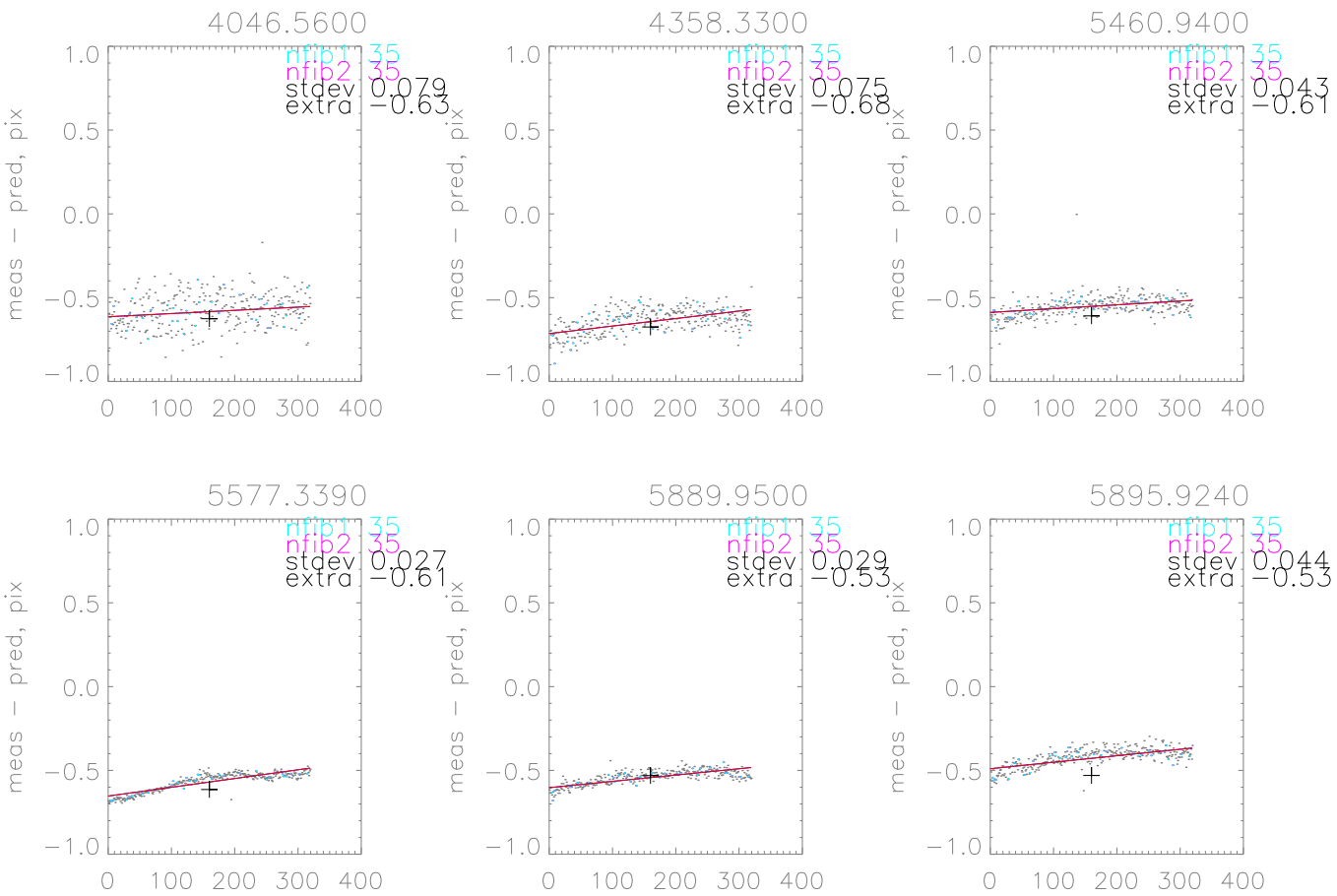

4358.3300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

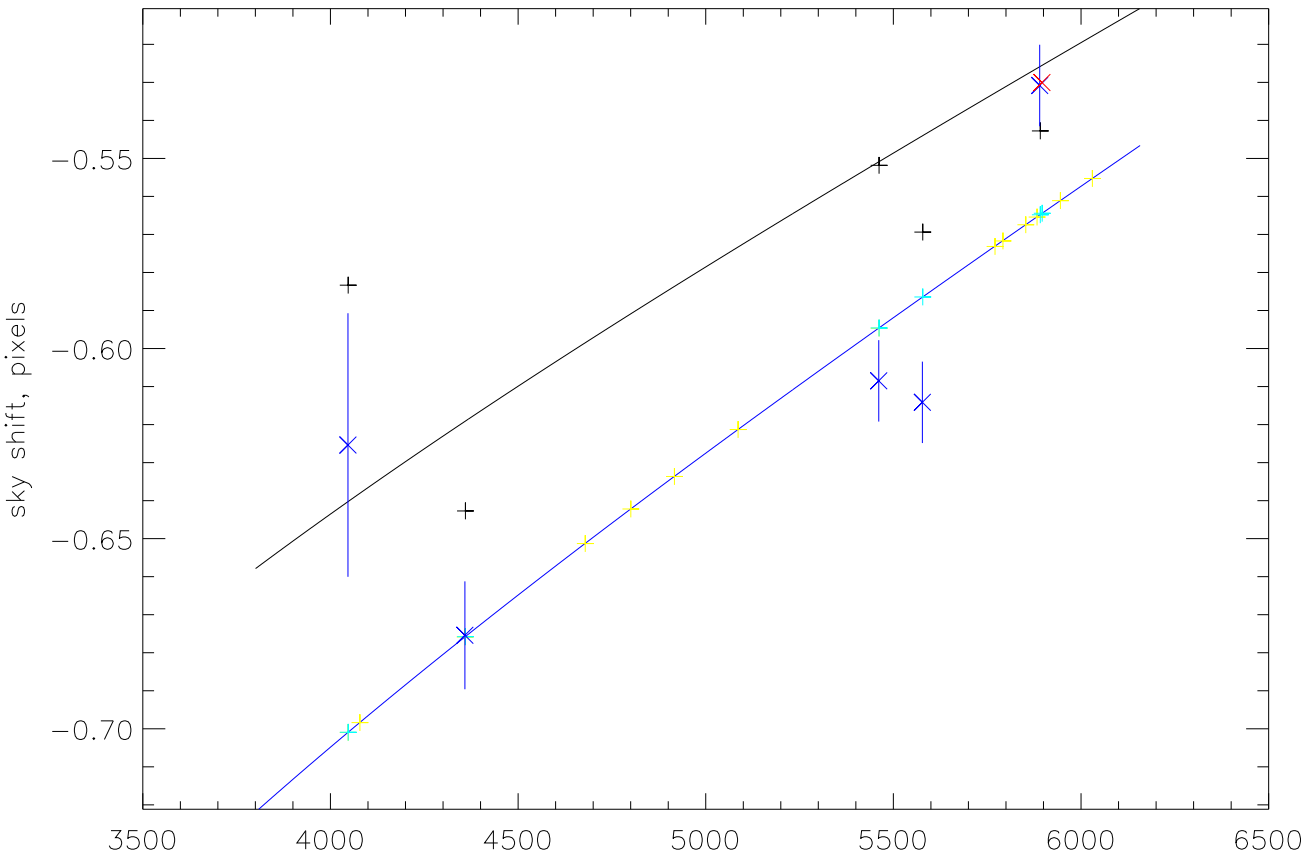

5460.9400
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

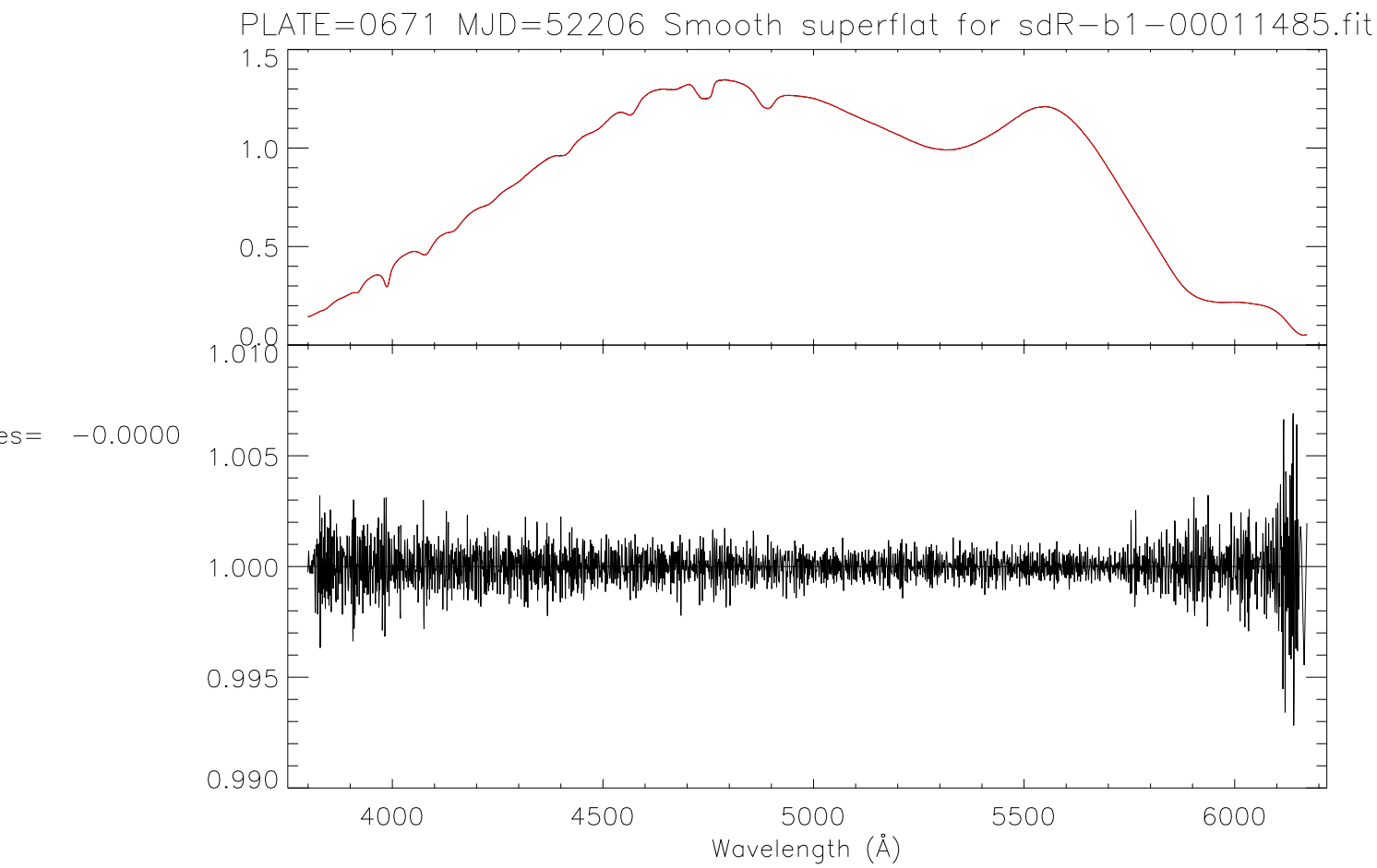

5577.3390
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

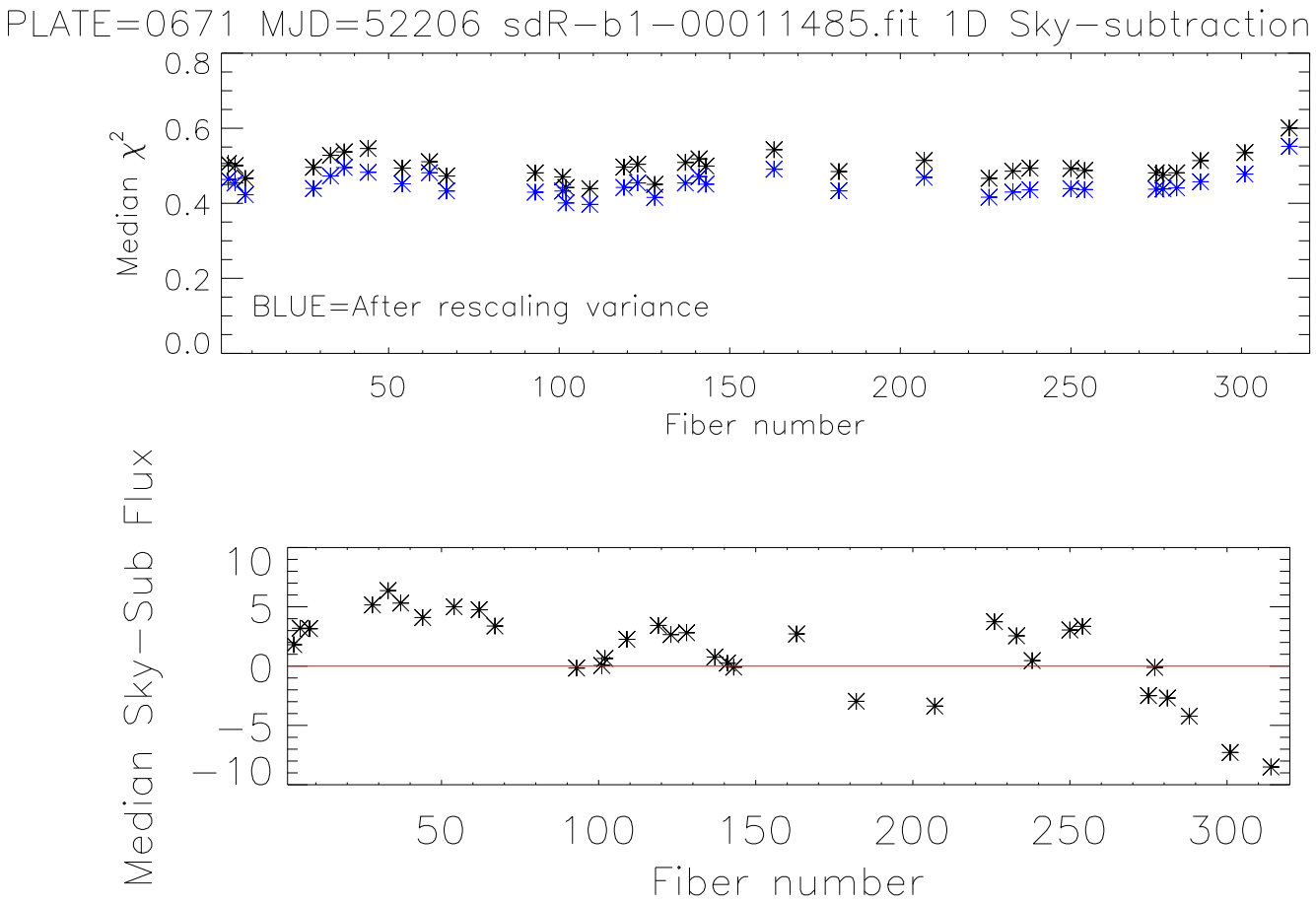

5889.9500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

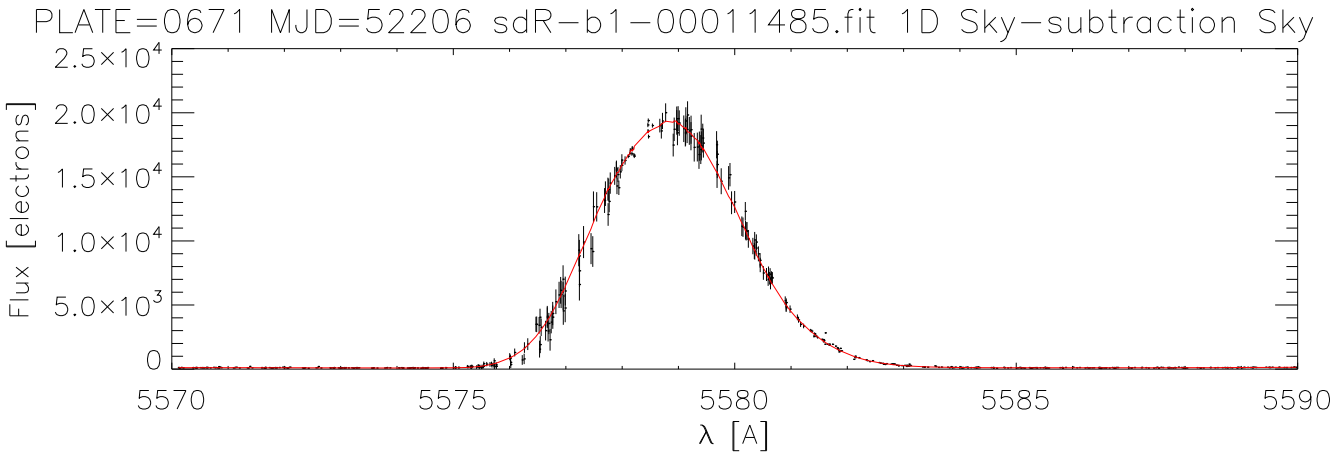

5895.9240
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

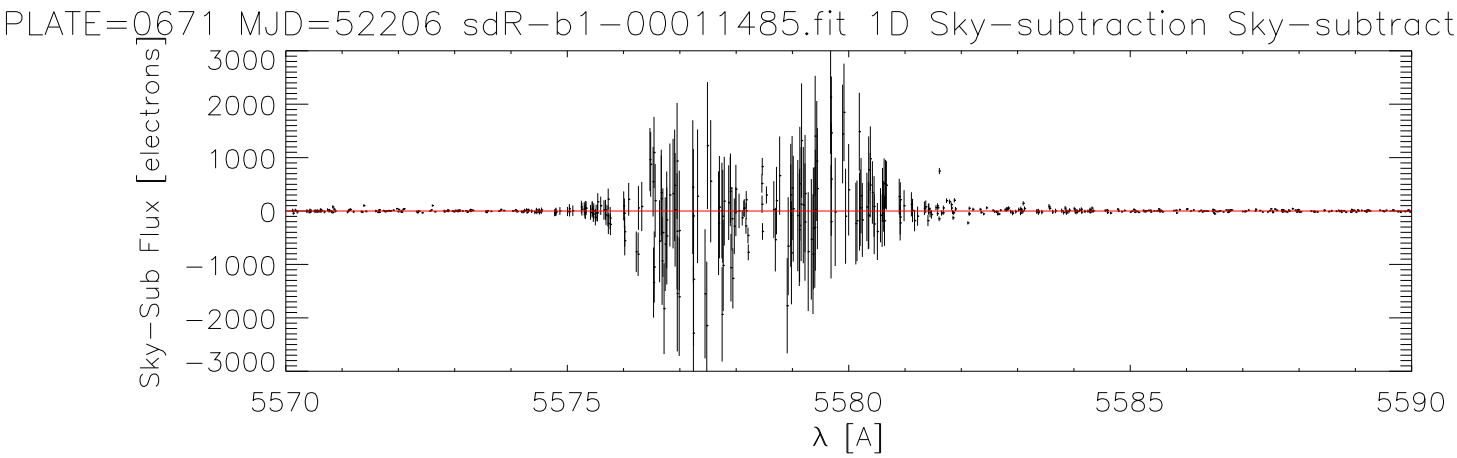

4046.5600
nfib1 35
nfib2 35
stdev 0.079
extra −0.63
4358.3300
nfib1 35
nfib2 35
stdev 0.075
extra −0.68
5460.9400
nfib1 35
nfib2 35
stdev 0.043
extra −0.61
5577.3390
nfib1 35
nfib2 35
stdev 0.027
extra −0.61
5889.9500
nfib1 35
nfib2 35
stdev 0.029
extra −0.53
5895.9240
nfib1 35
nfib2 35
stdev 0.044
extra −0.53
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

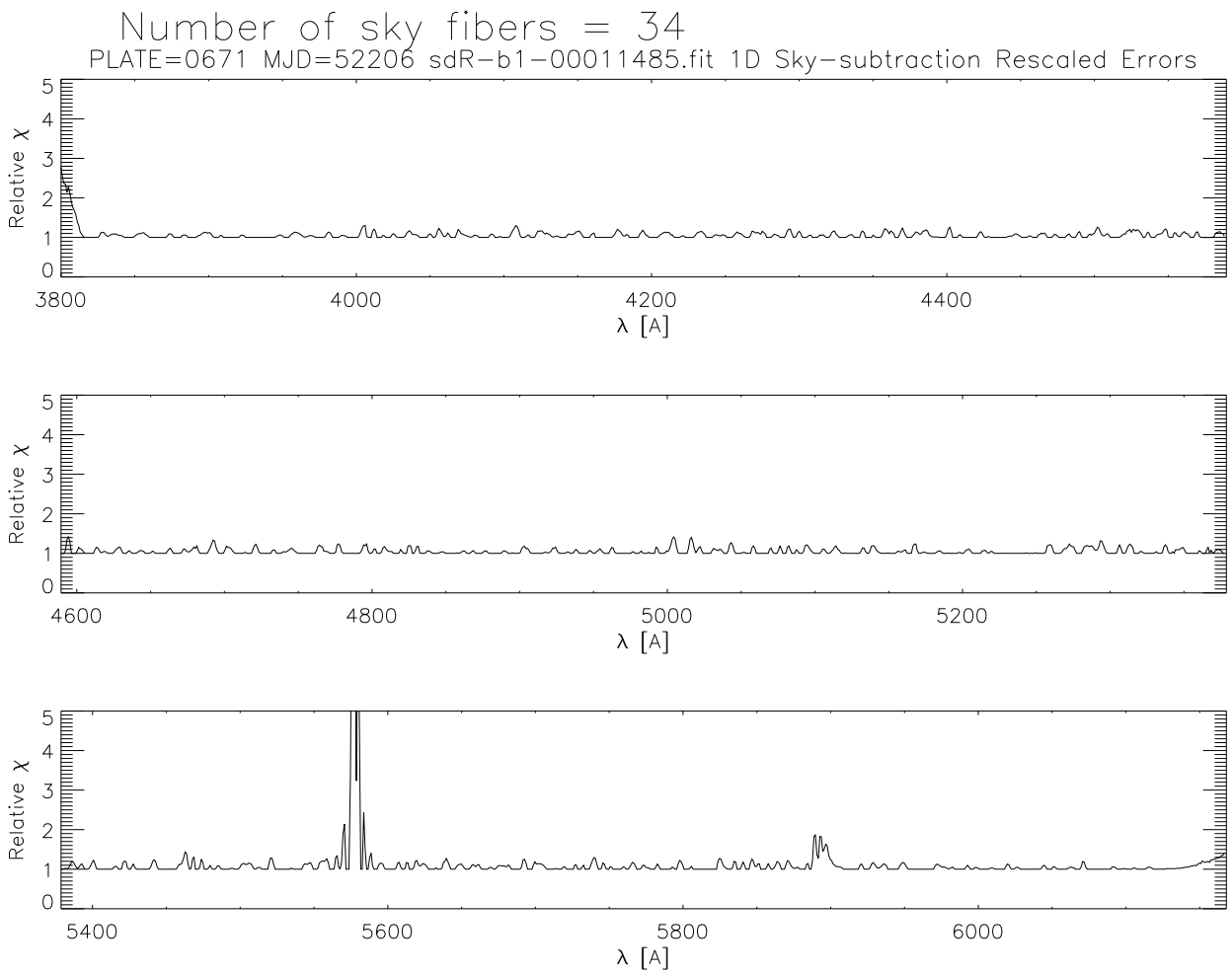

sky shift, pixels
−0.55
−0.60
−0.65
−0.70
3500
4000
4500
5000
5500
6000
6500

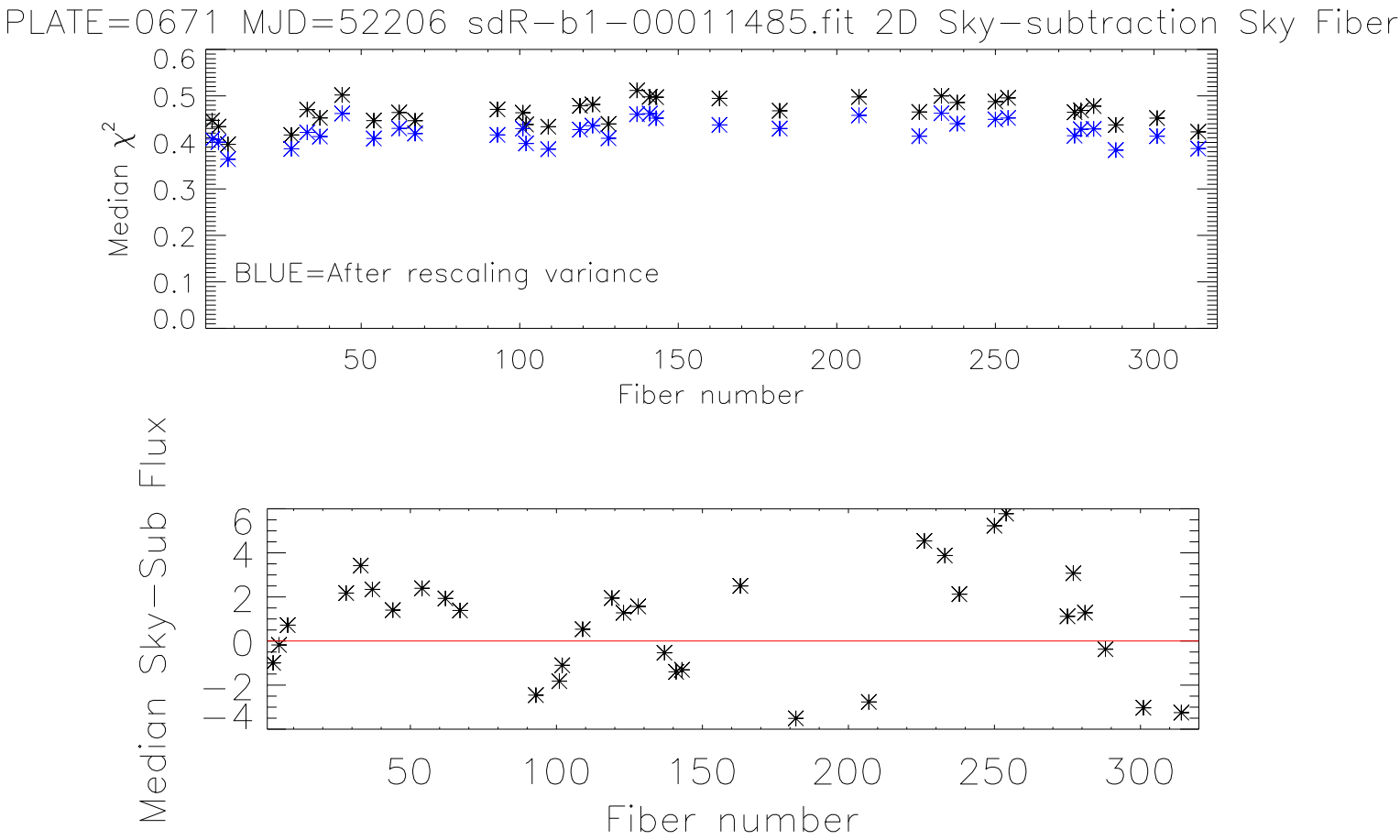

PLATE=0671 MJD=52206 Smooth superflat for sdR-b1-00011485.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

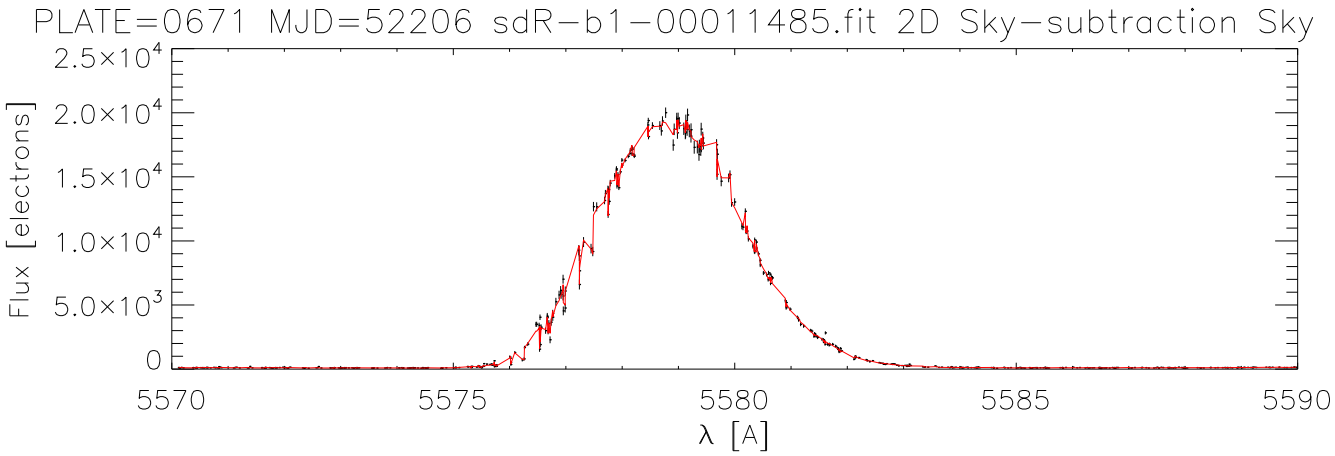

PLATE=0671 MJD=52206 sdR-b1-00011485.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

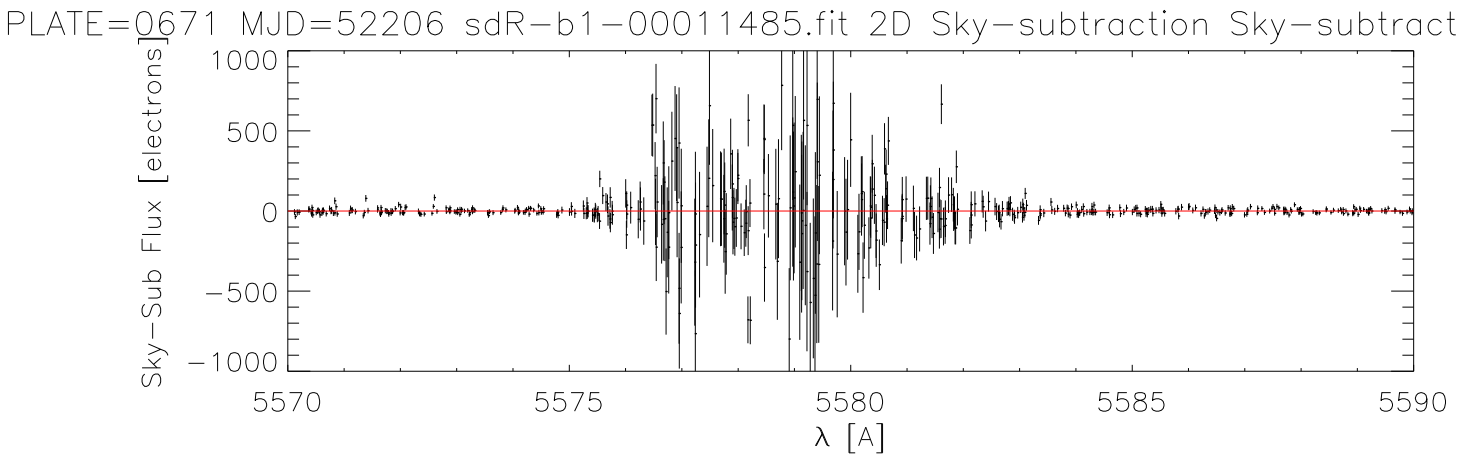

PLATE=0671 MJD=52206 sdR-b1-00011485.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

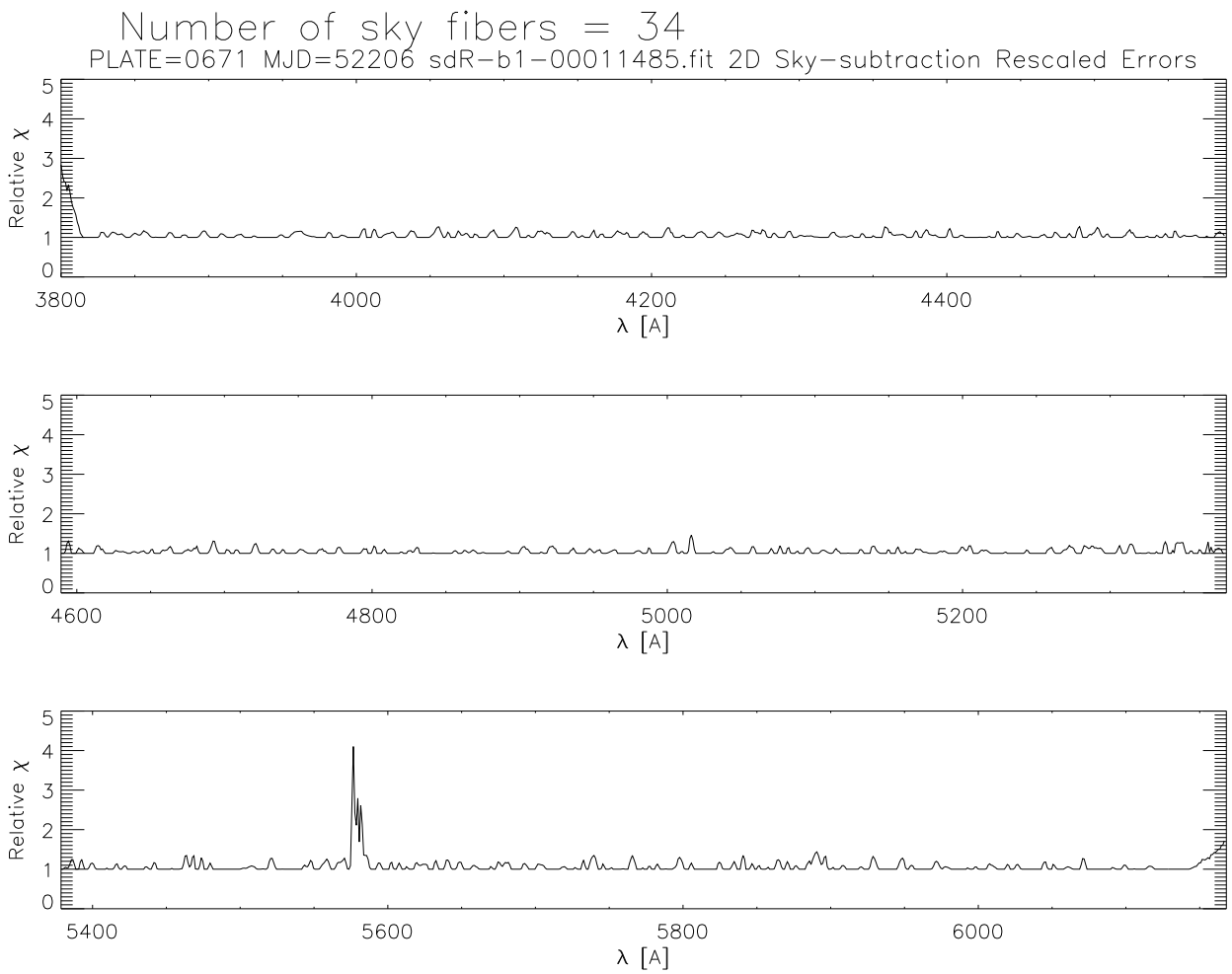

PLATE=0671 MJD=52206 sdR-b1-00011485.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
−3000
5570
5575
5580
5585
5590
λ [A]

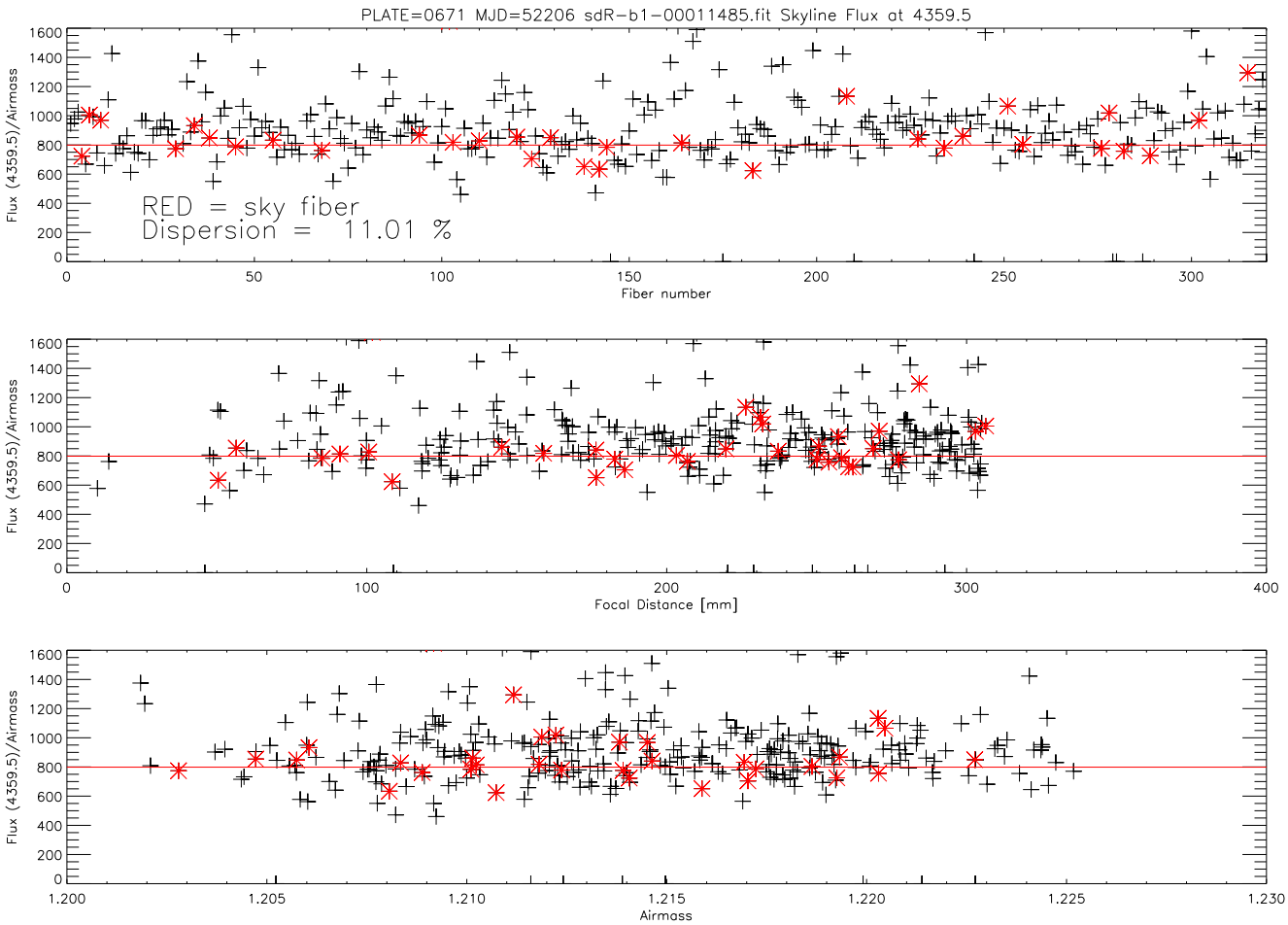

Number of sky fibers = 34
PLATE=0671 MJD=52206 sdR-b1-00011485.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

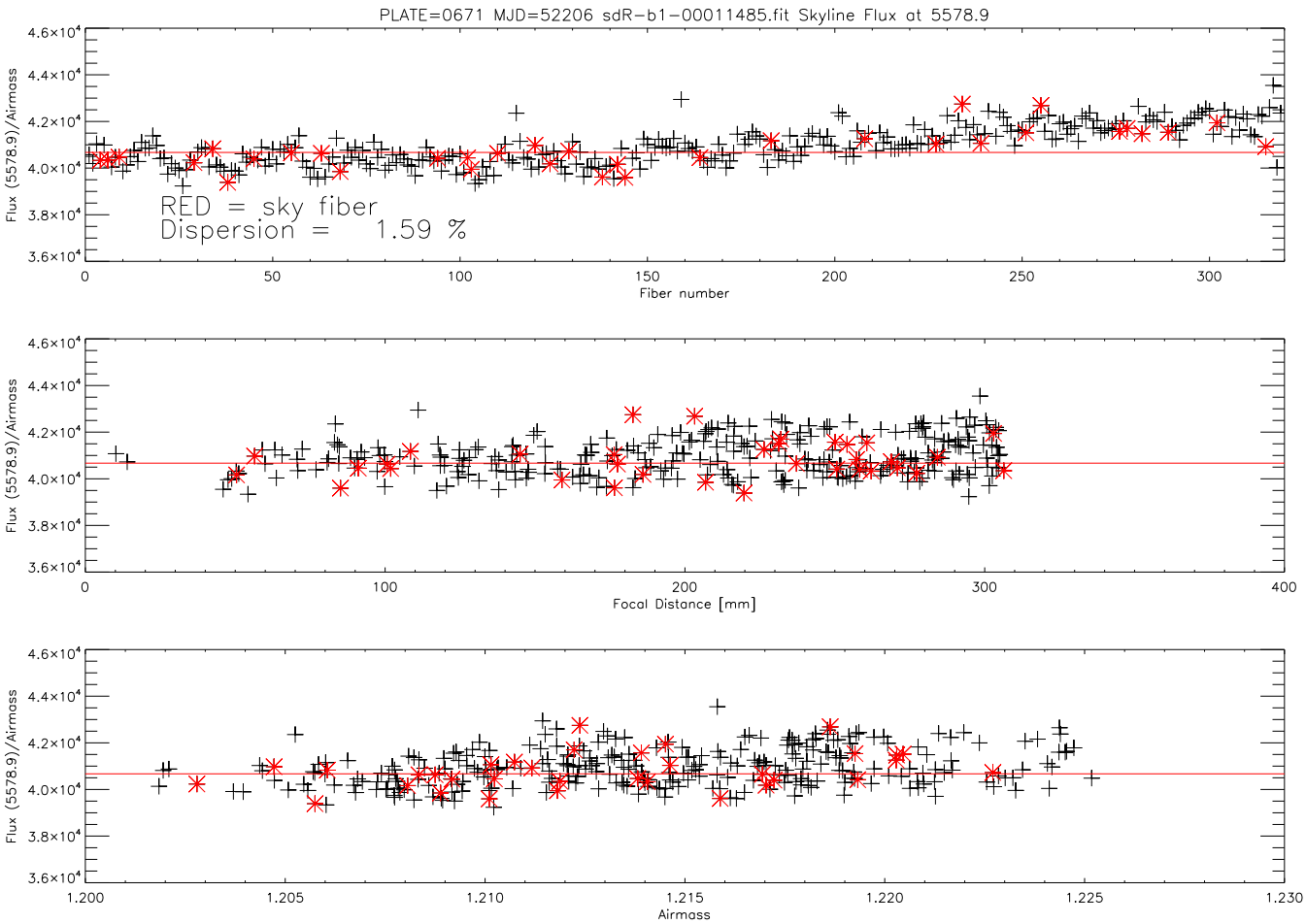

PLATE=0671 MJD=52206 sdR-b1-00011485.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

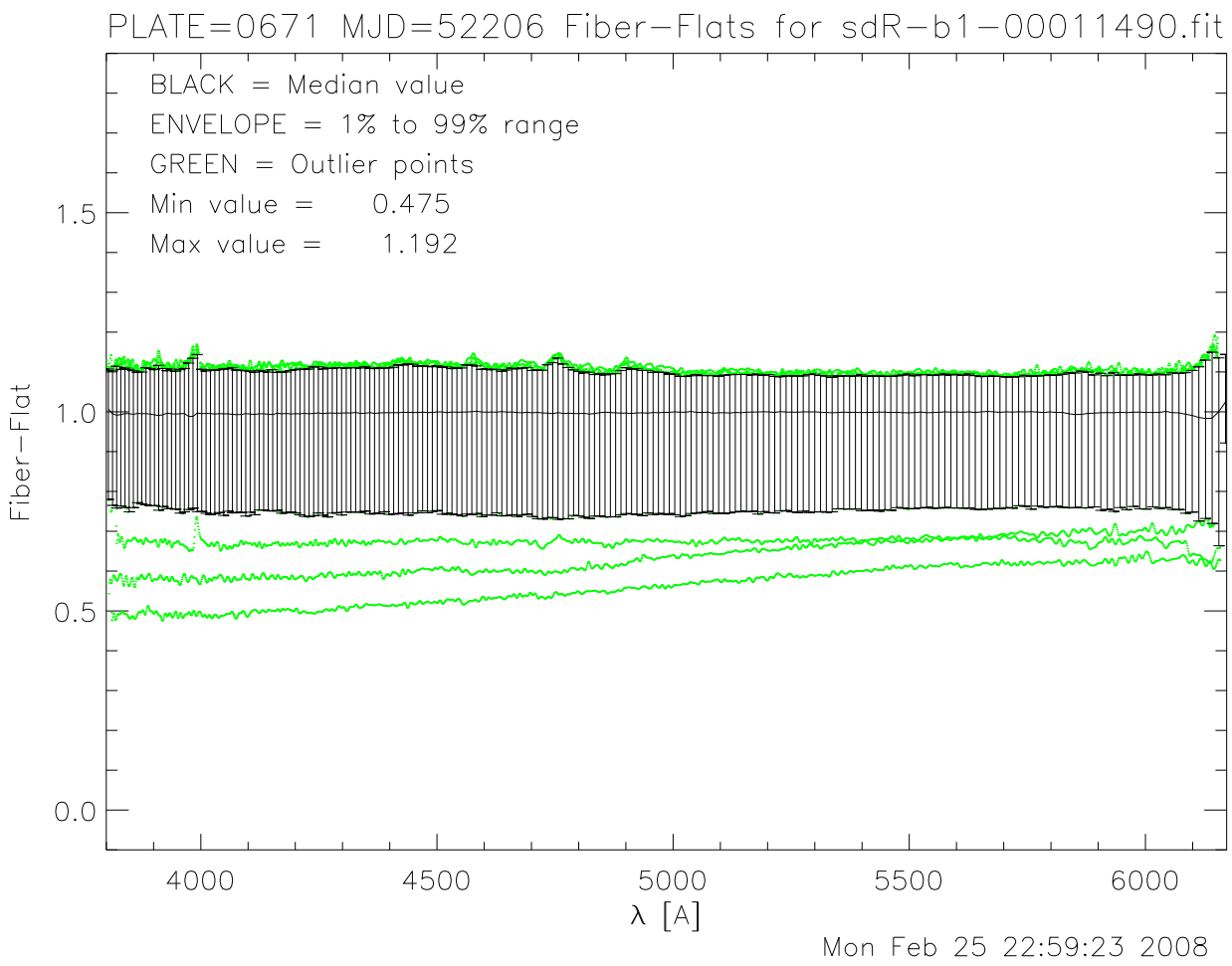

PLATE=0671 MJD=52206 sdR-b1-00011485.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]


PLATE=0671 MJD=52206 sdR-b1-00011485.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 34
PLATE=0671 MJD=52206 sdR-b1-00011485.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=0671 MJD=52206 sdR-b1-00011485.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.01 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=0671 MJD=52206 sdR-b1-00011485.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.59 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0671 MJD=52206 Fiber-Flats for sdR-b1-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.475
Max value = 1.192
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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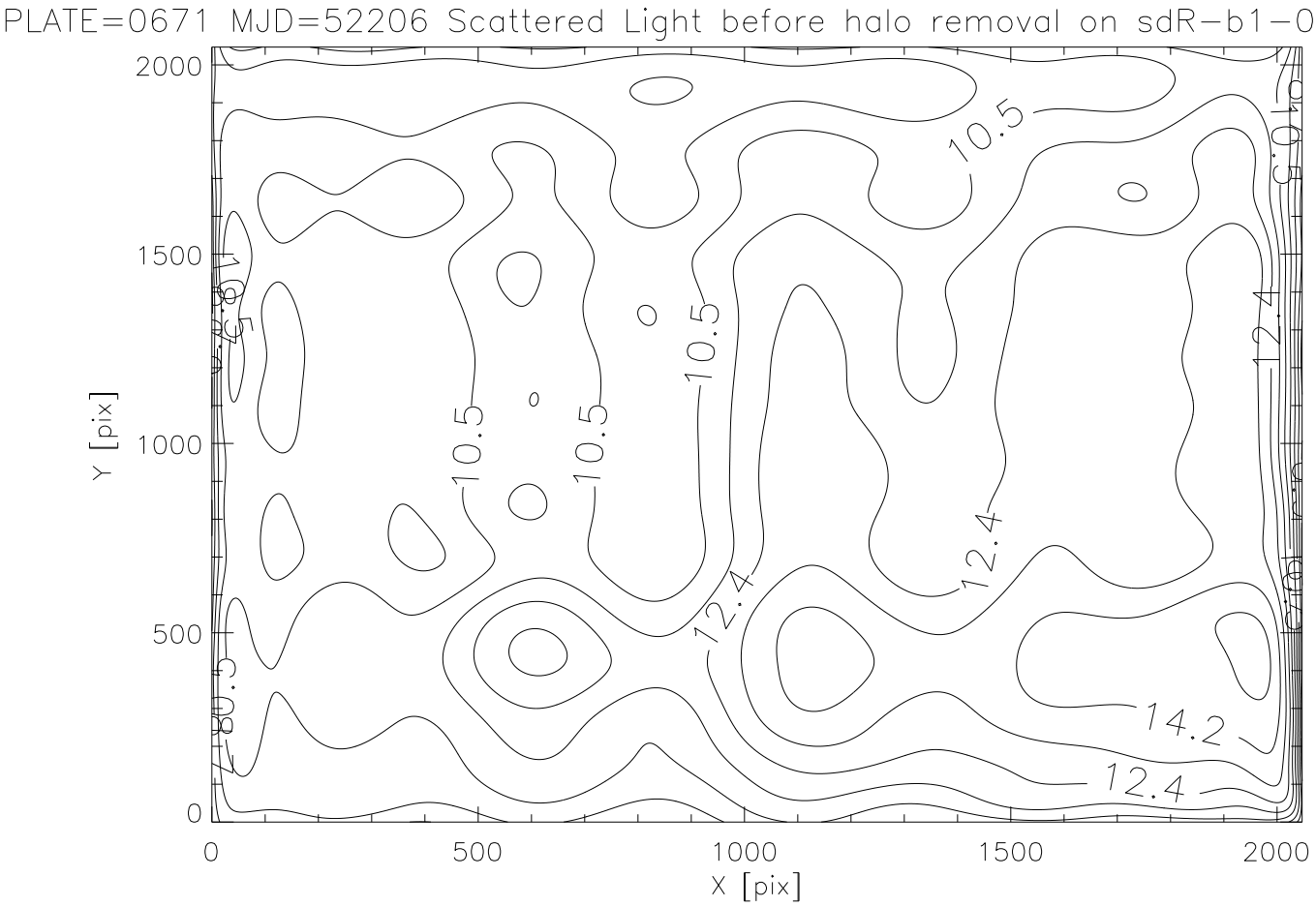
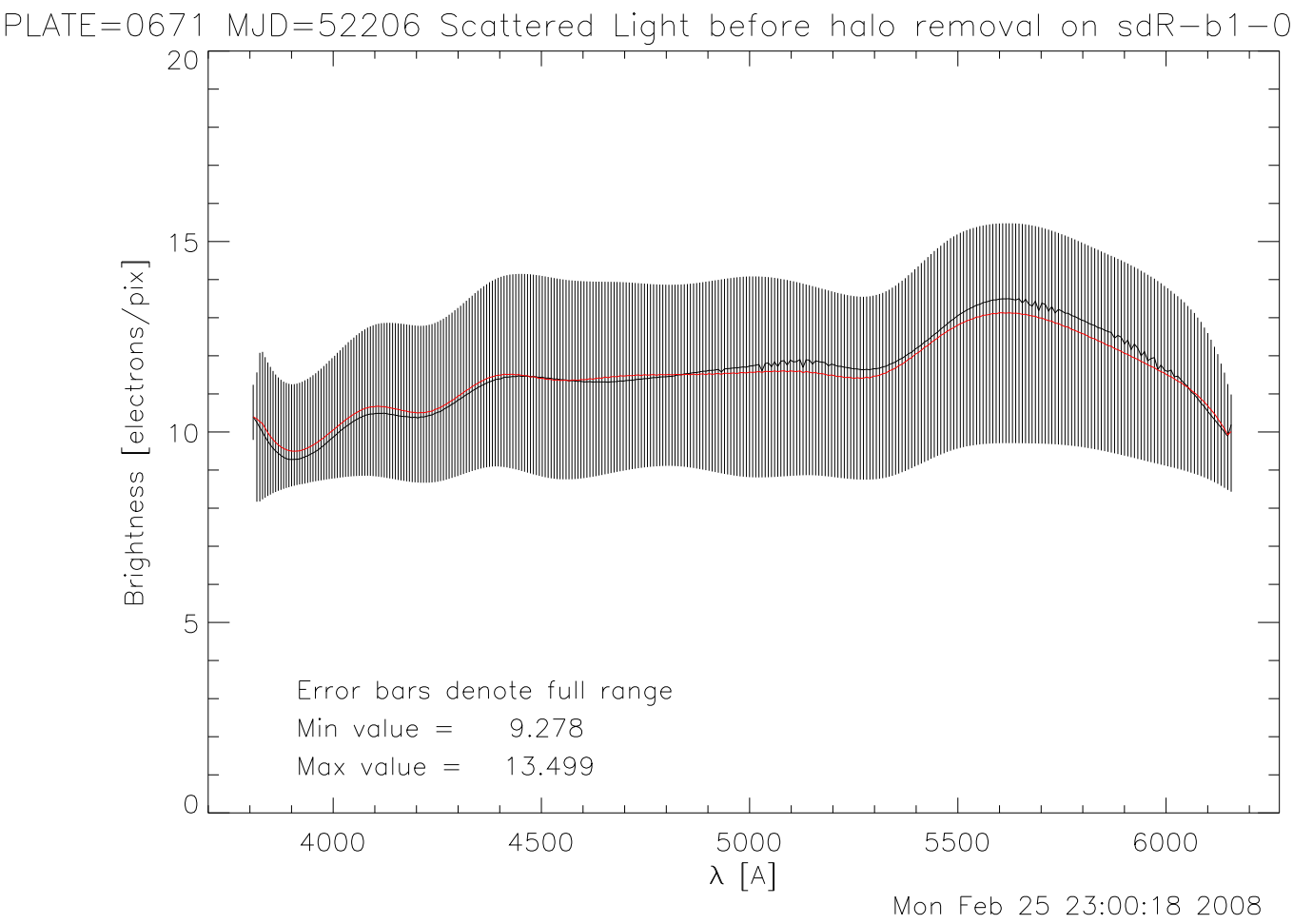
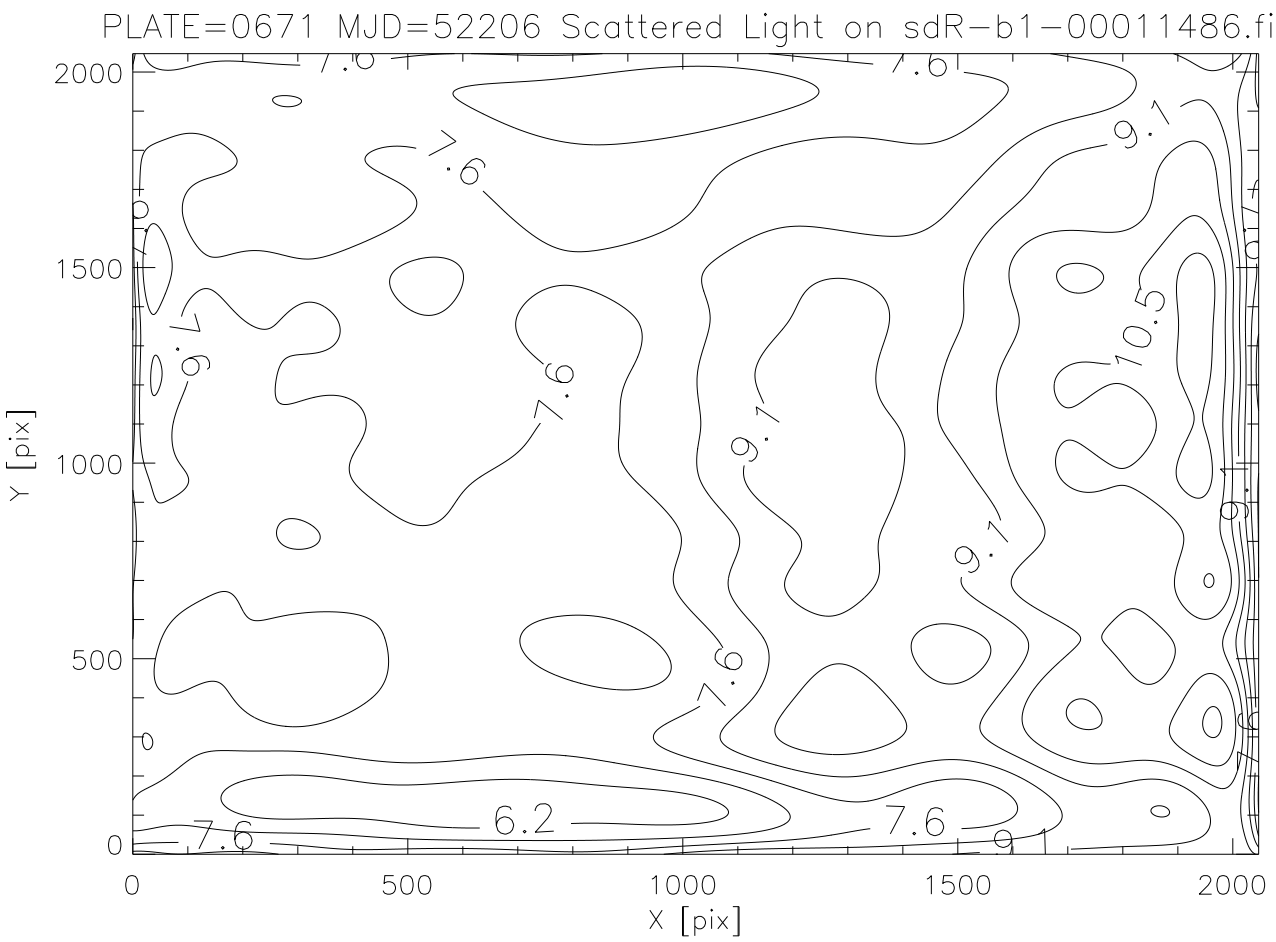
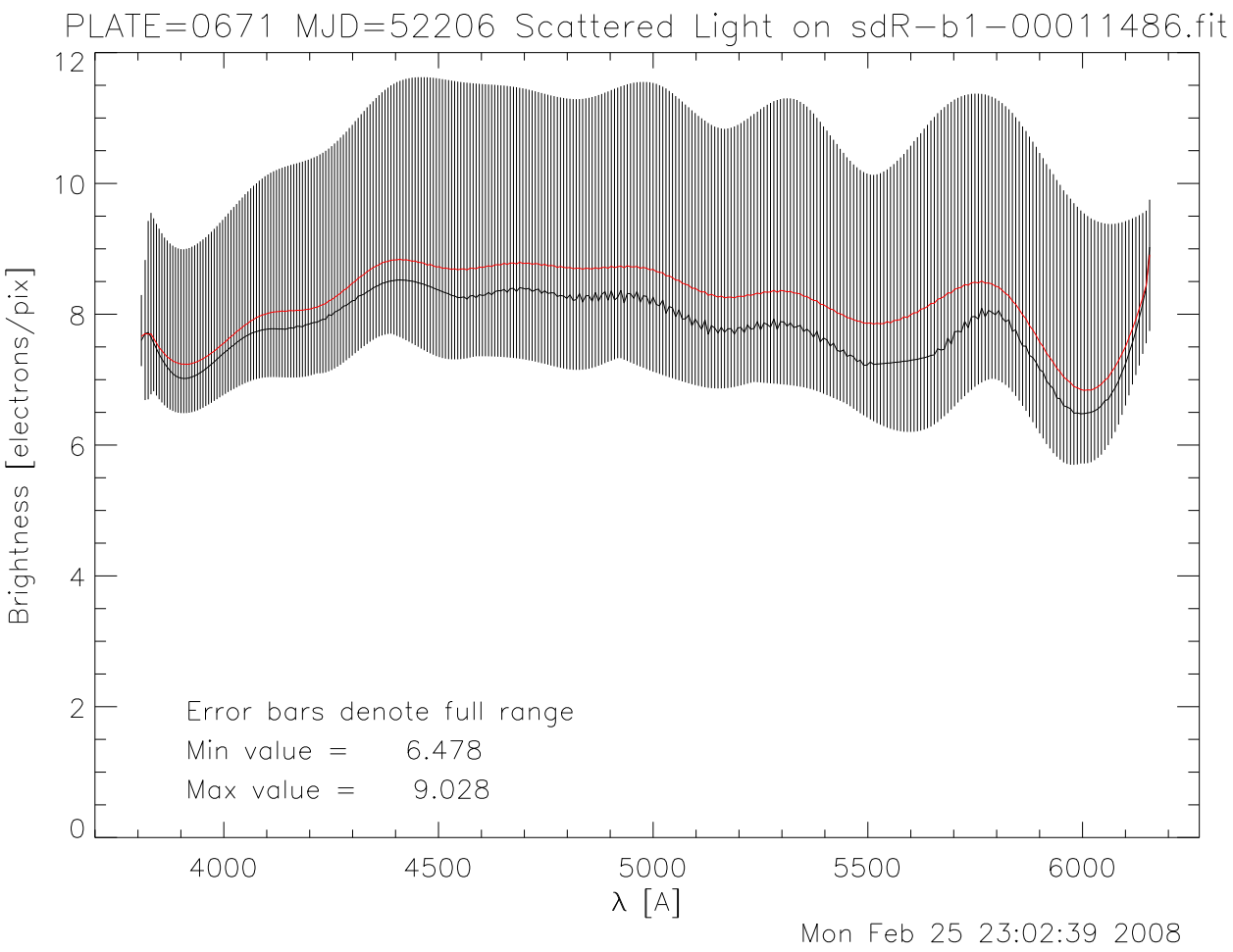
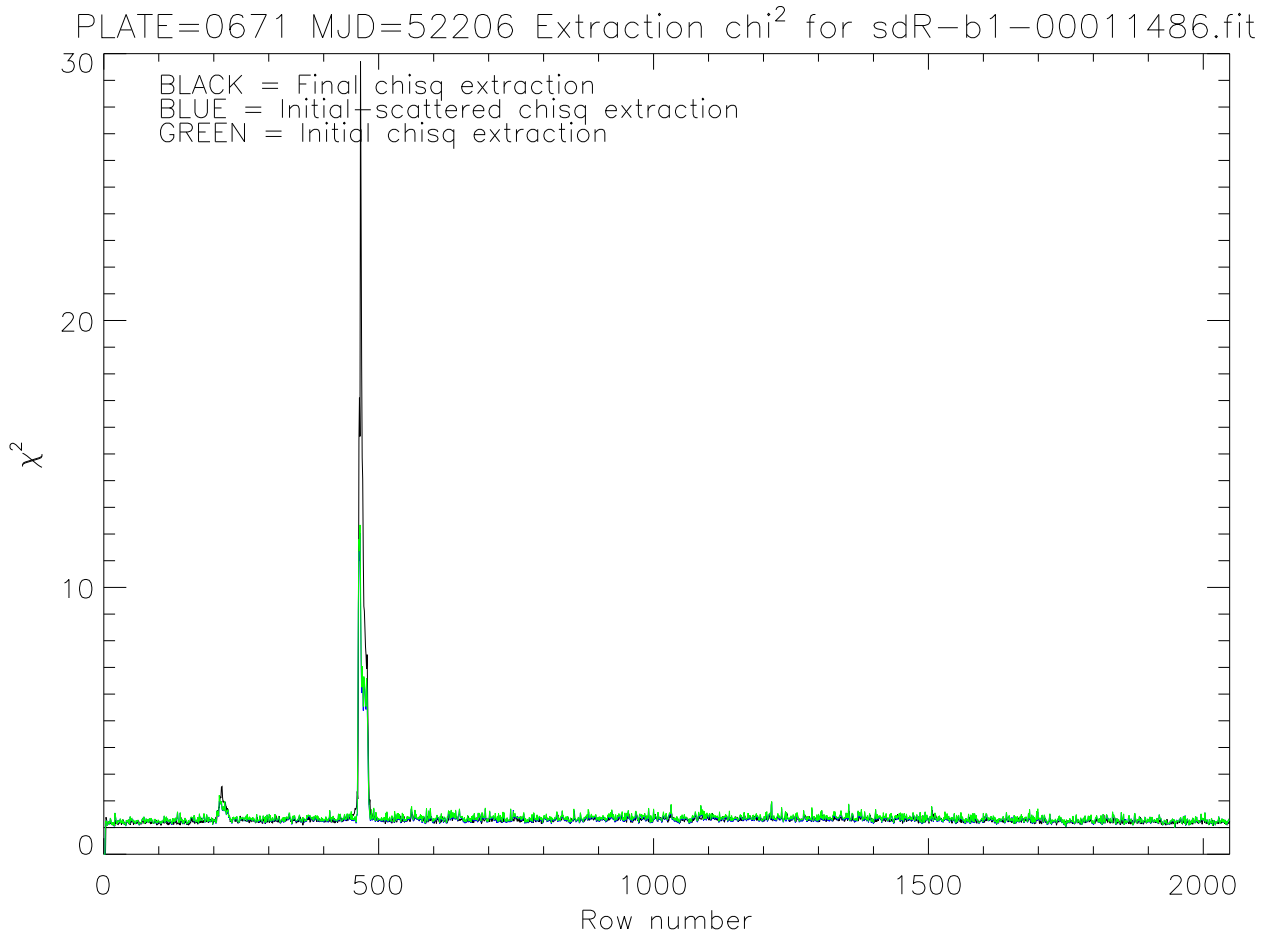
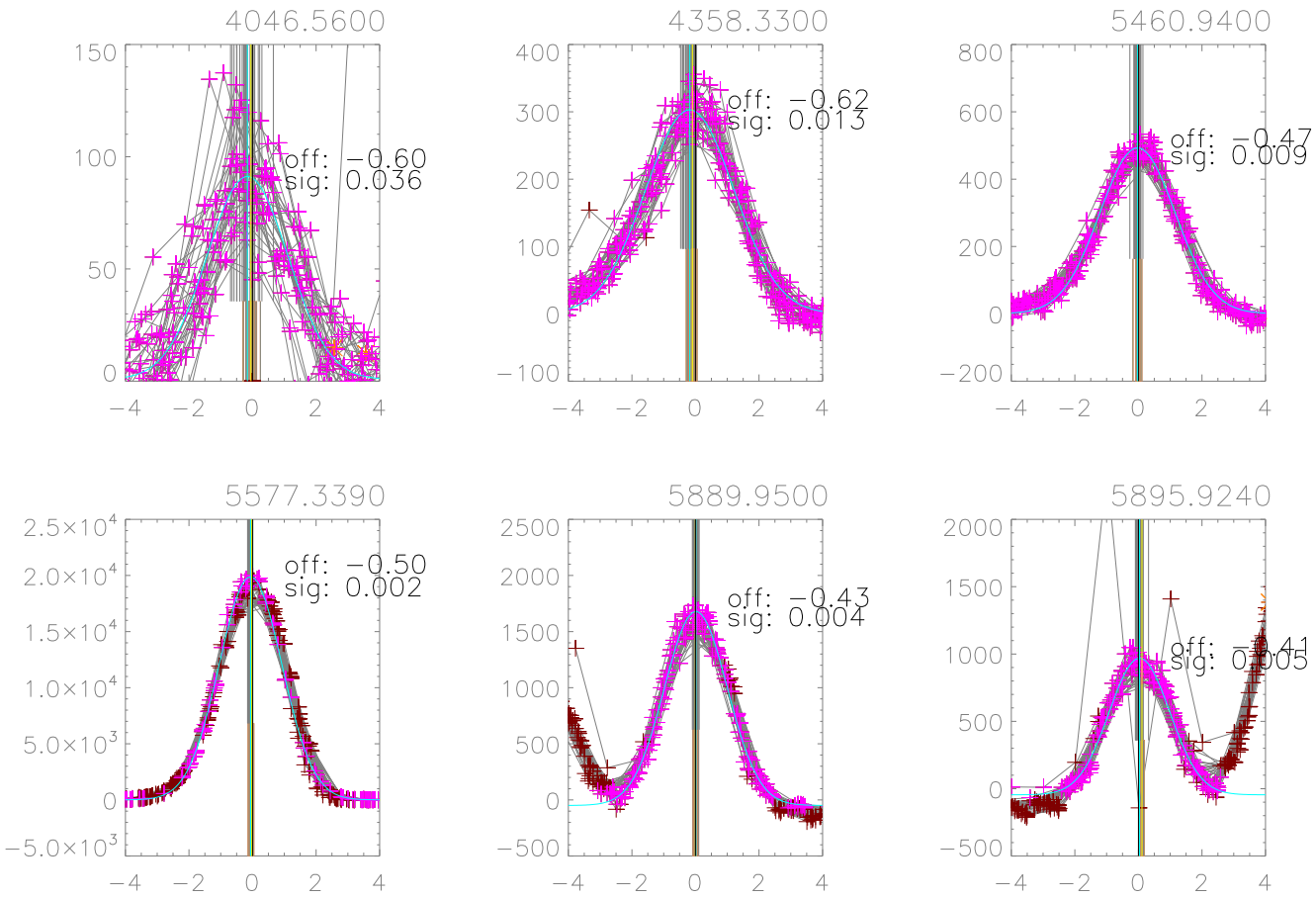

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011486.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
10.5
12.4
14.2
0

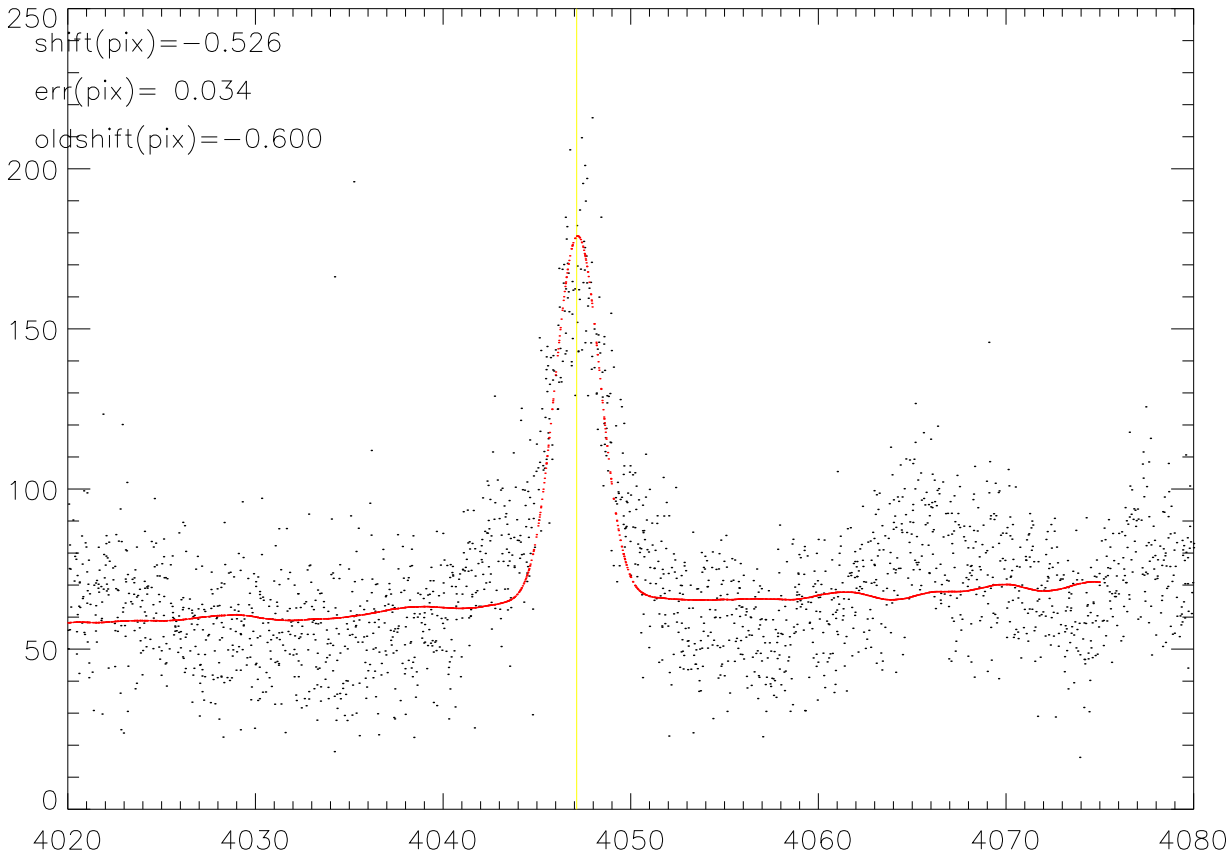

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011486.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.278
Max value = 13.499
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:00:18 2008

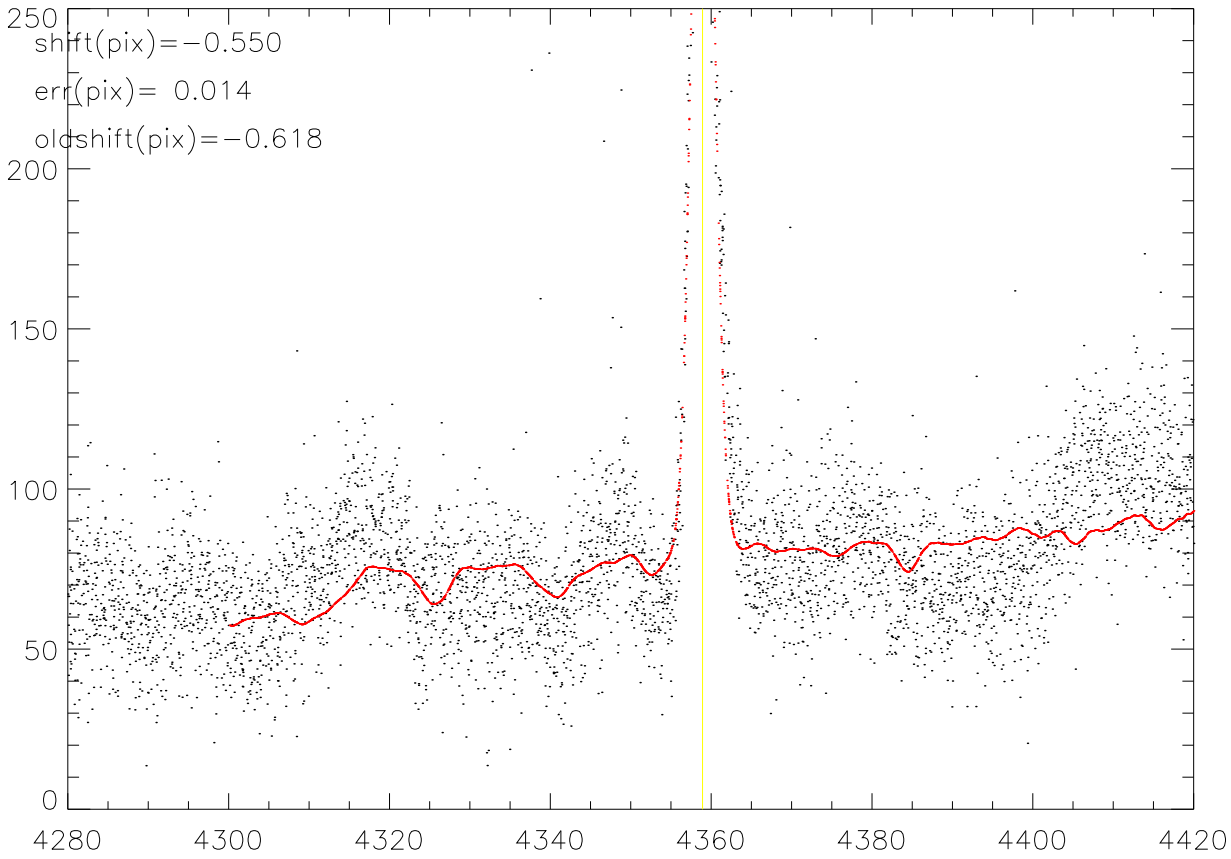

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011486.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.6
9.7
10.5
6.2

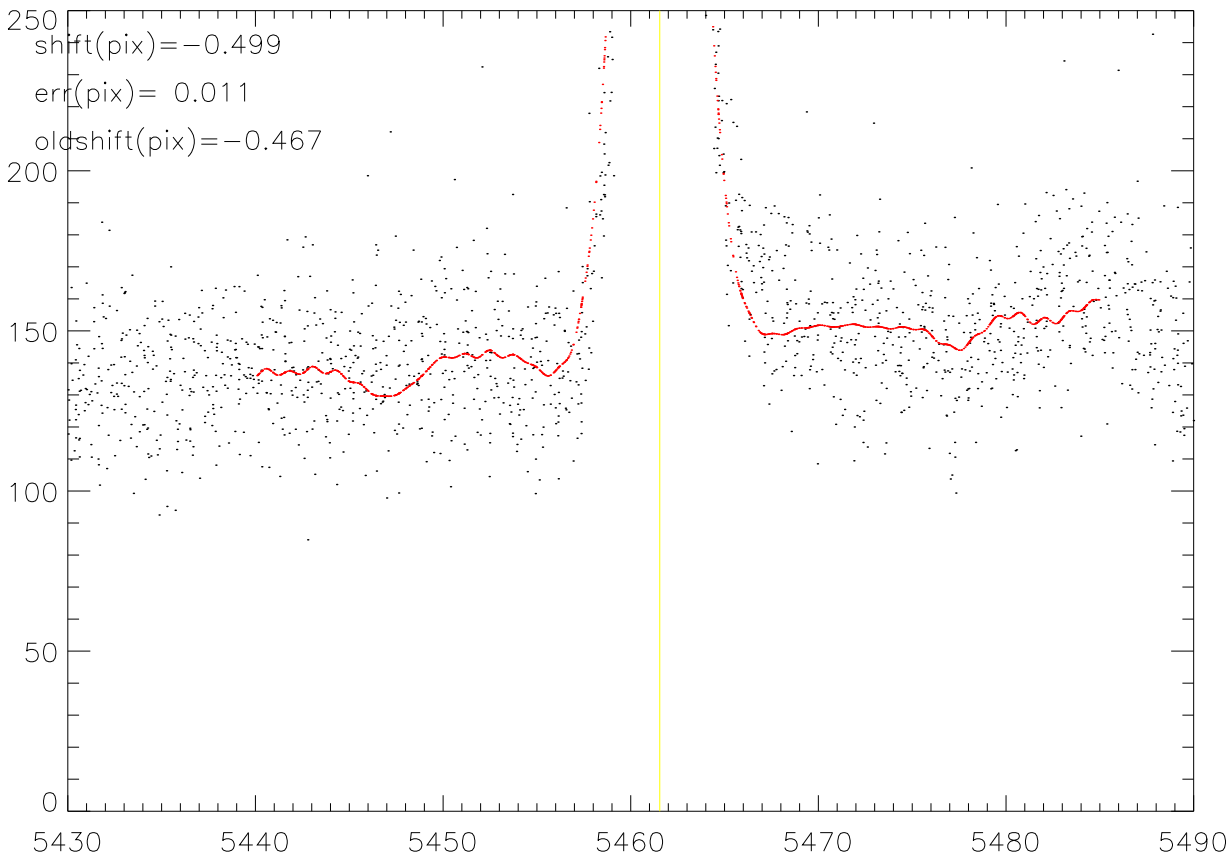

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011486.fit
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 6.478
Max value = 9.028
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:02:39 2008

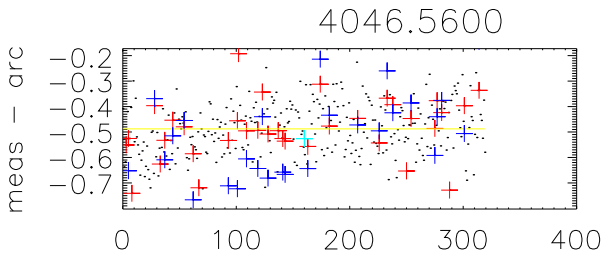

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b1-00011486.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
30
20
10
0
0
500
1000
1500
2000
Row number

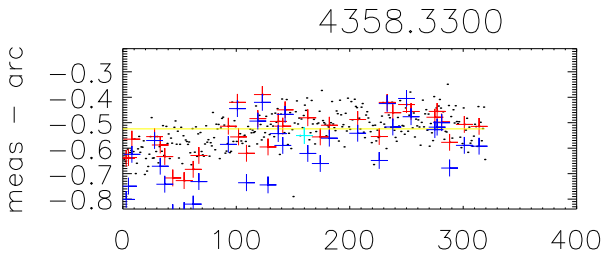

4046.5600
off: −0.60
sig: 0.036
4358.3300
off: −0.62
sig: 0.013
5460.9400
off: −0.47
sig: 0.009
5577.3390
off: −0.50
sig: 0.002
5889.9500
off: −0.43
sig: 0.004
5895.9240
off: −0.41
sig: 0.005

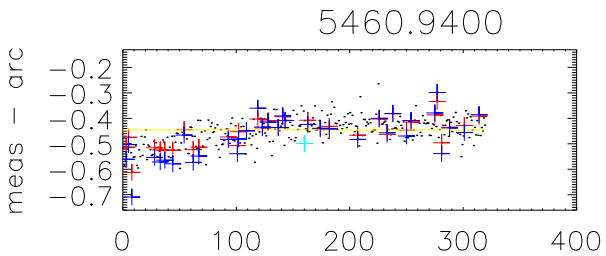

shift(pix)=−0.526
err(pix)= 0.034
oldshift(pix)=−0.600
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

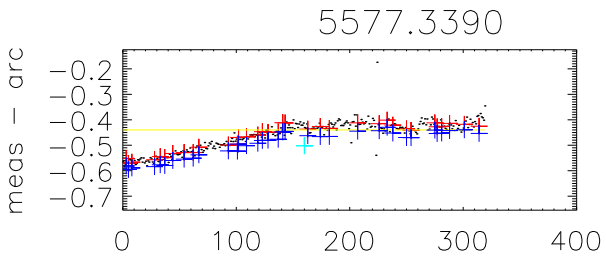

shift(pix)=−0.550
err(pix)= 0.014
oldshift(pix)=−0.618
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

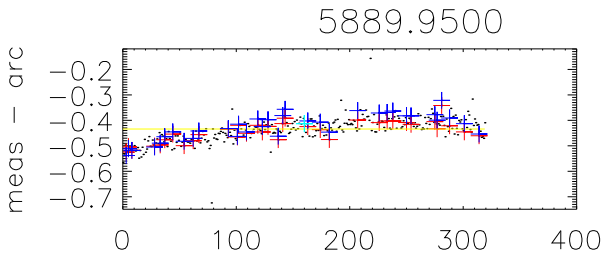

shift(pix)=−0.499
err(pix)= 0.011
oldshift(pix)=−0.467
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

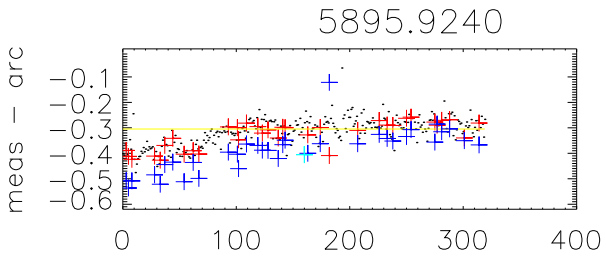

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

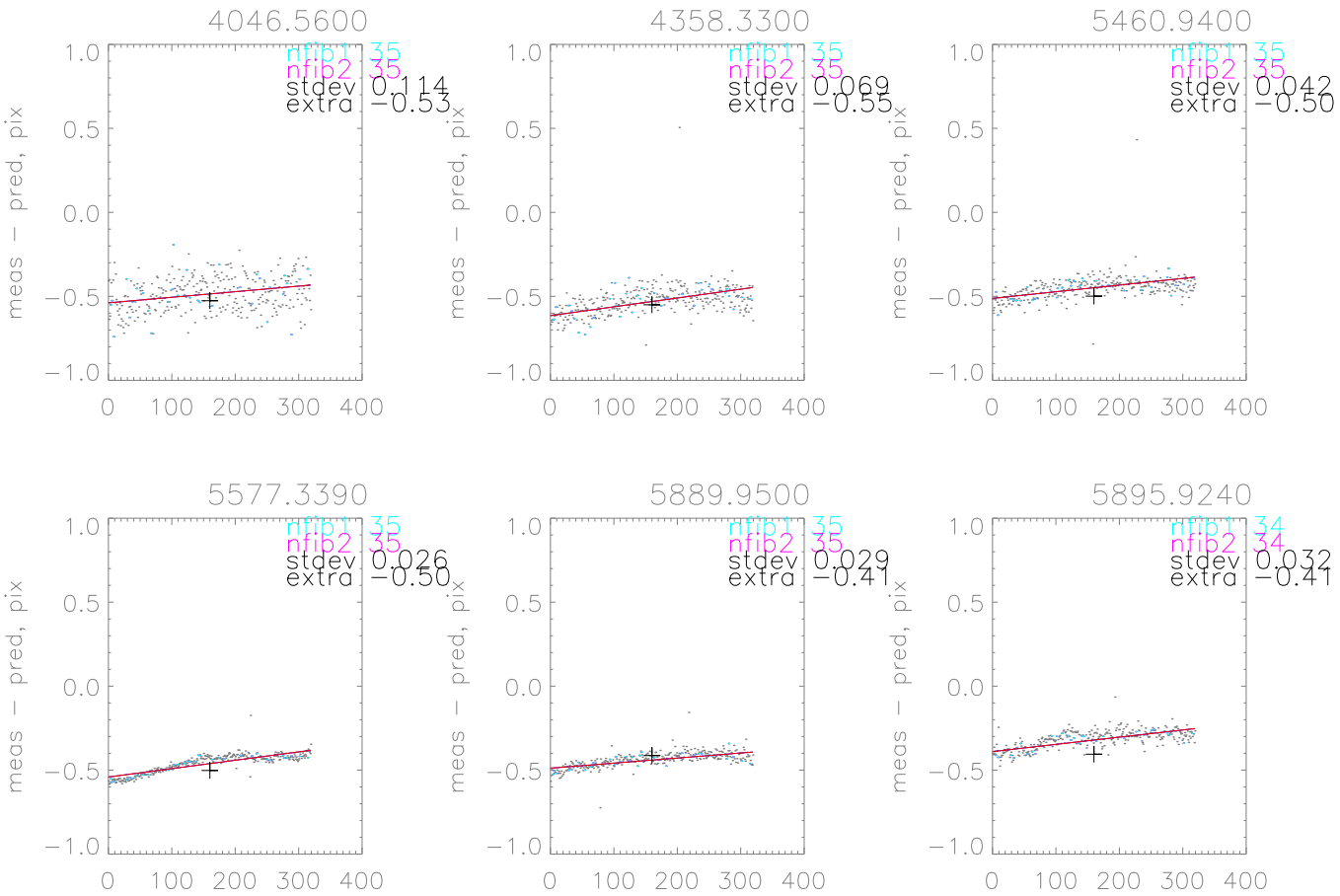

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

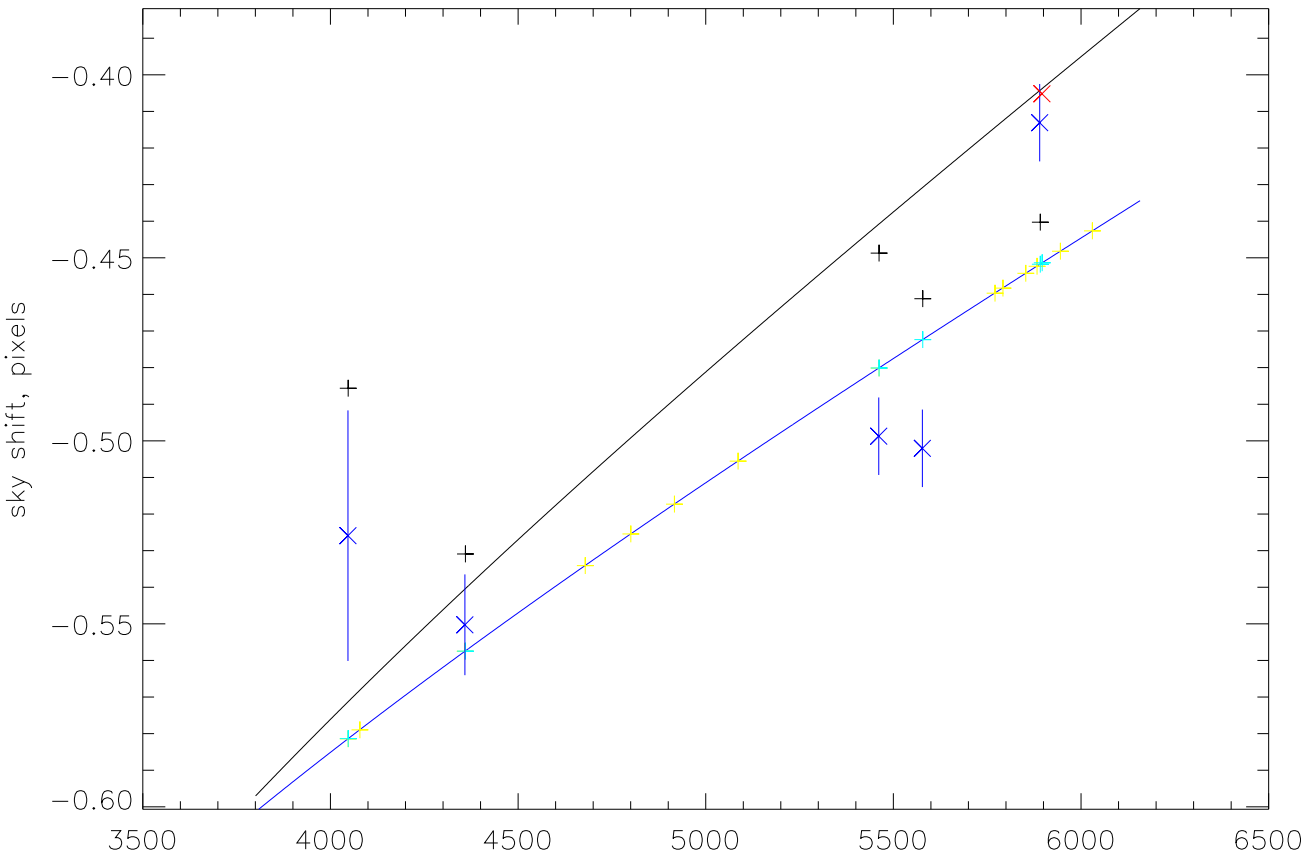

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

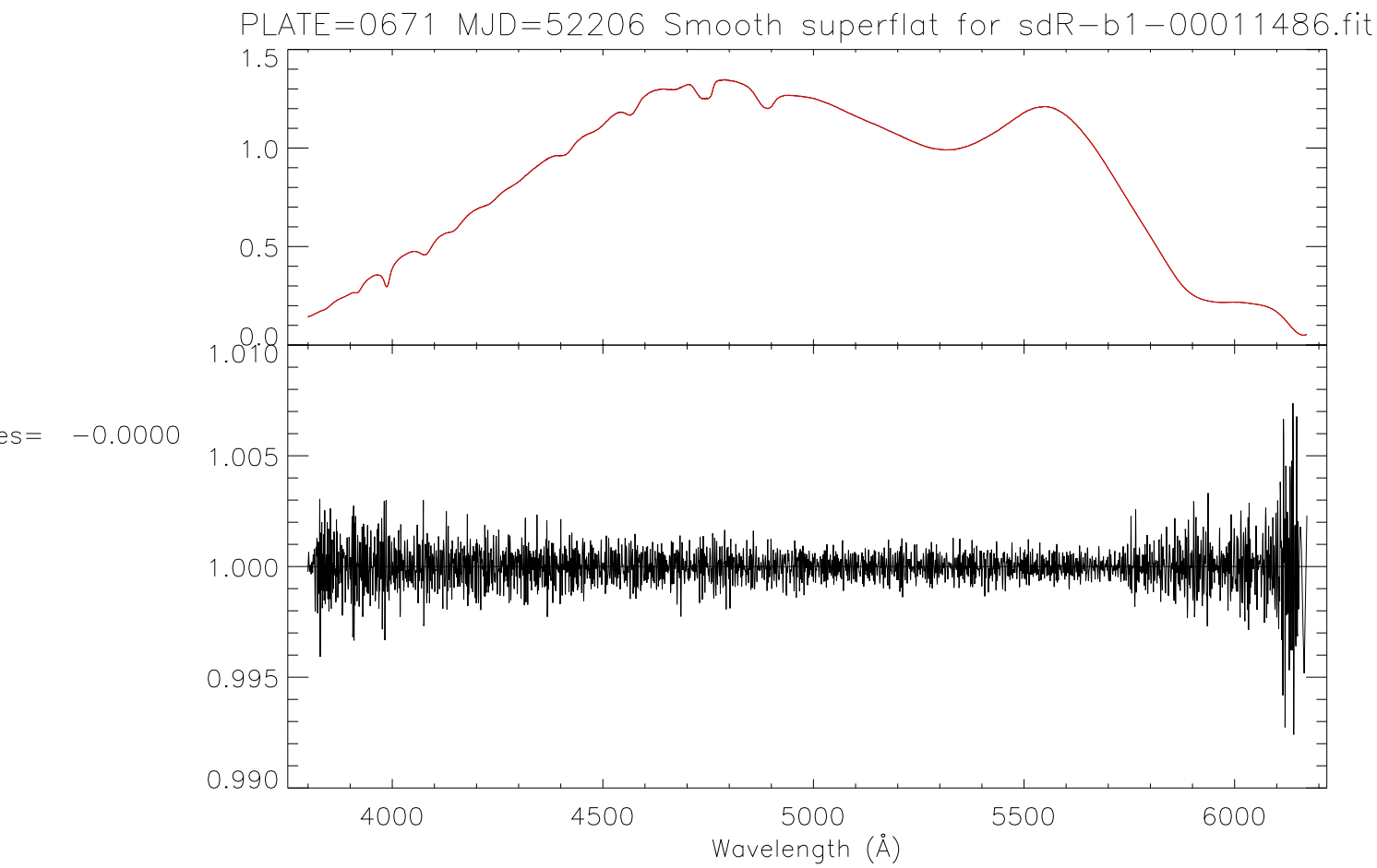

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

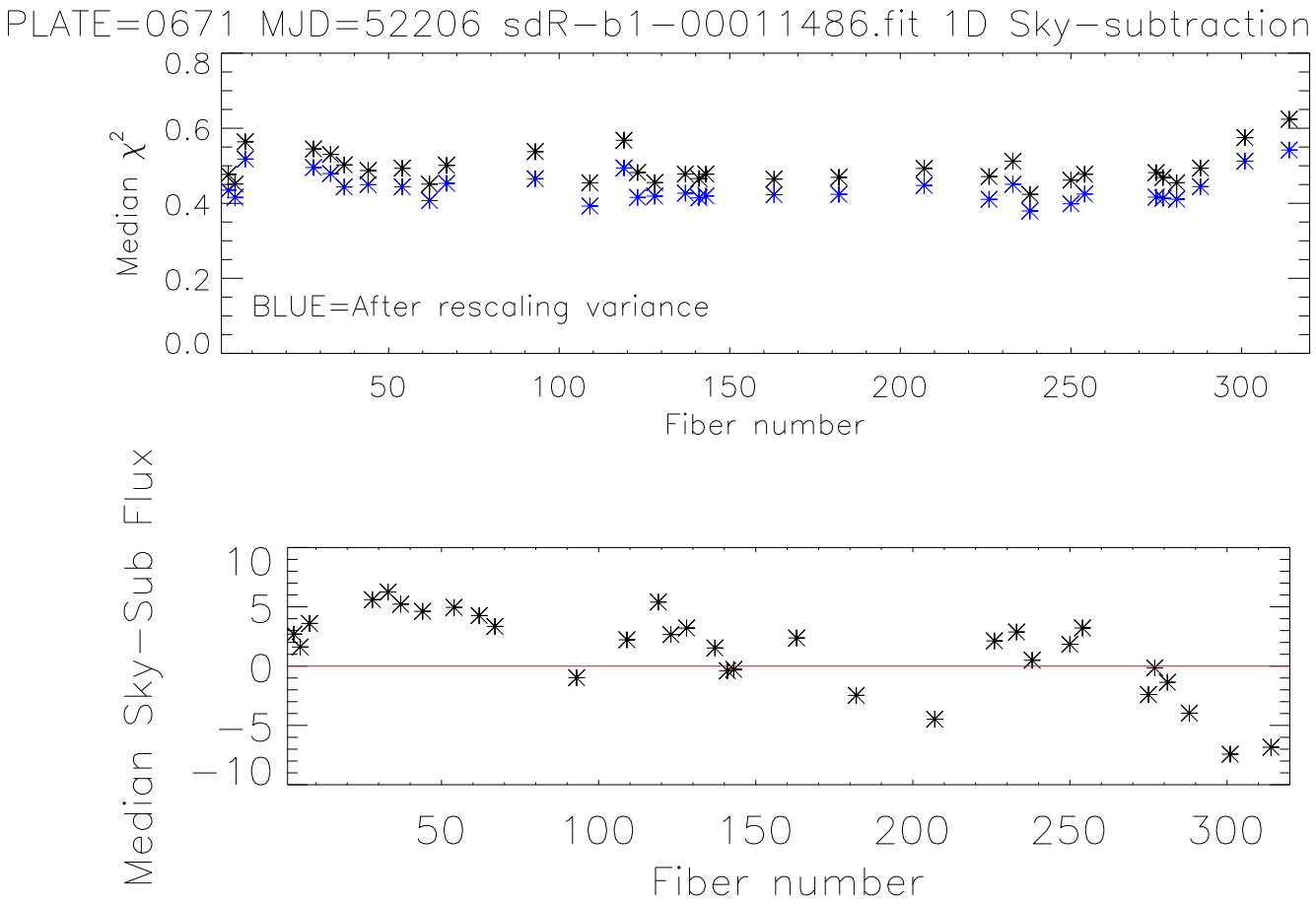

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

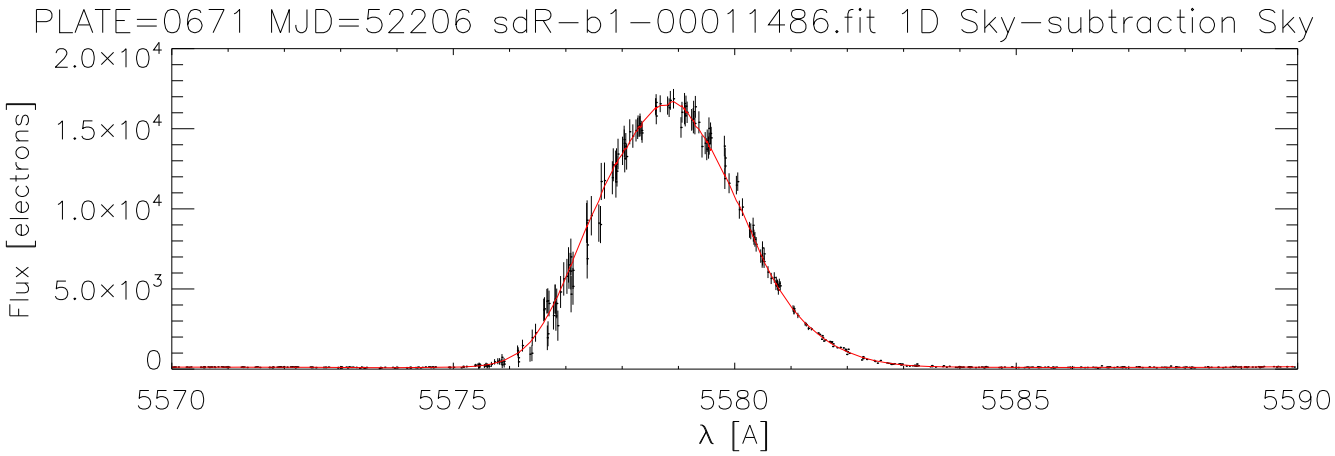

4046.5600
nfib1 35
nfib2 35
stdev 0.114
extra −0.53
4358.3300
nfib1 35
nfib2 35
stdev 0.069
extra −0.55
5460.9400
nfib1 35
nfib2 35
stdev 0.042
extra −0.50
5577.3390
nfib1 35
nfib2 35
stdev 0.026
extra −0.50
5889.9500
nfib1 35
nfib2 35
stdev 0.029
extra −0.41
5895.9240
nfib1 34
nfib2 34
stdev 0.032
extra −0.41
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

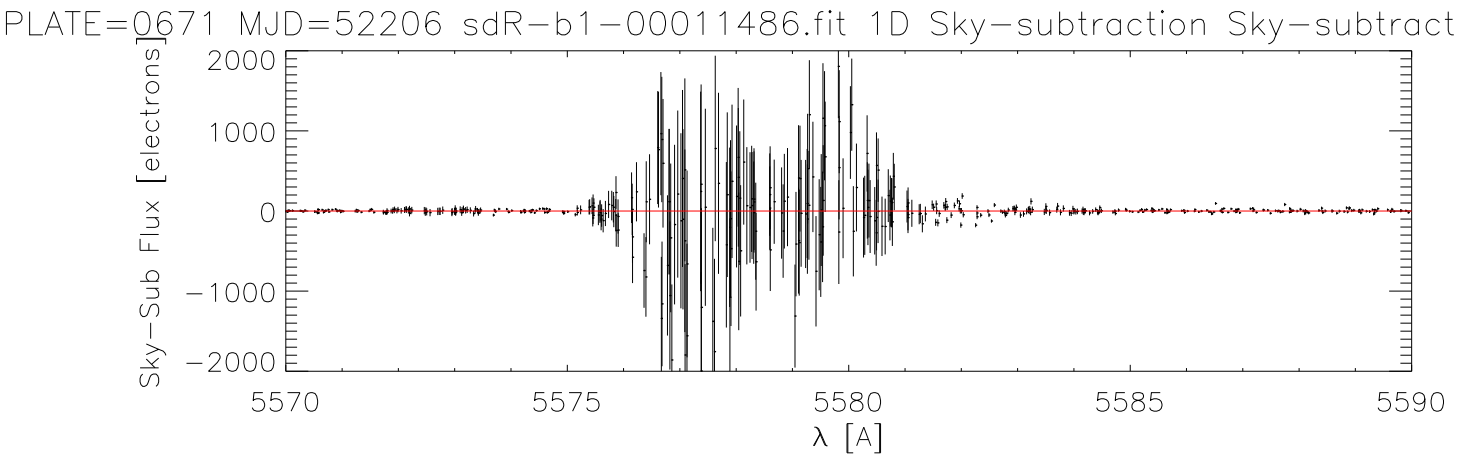

sky shift, pixels
−0.40
−0.45
−0.50
−0.55
−0.60
3500
4000
4500
5000
5500
6000
6500

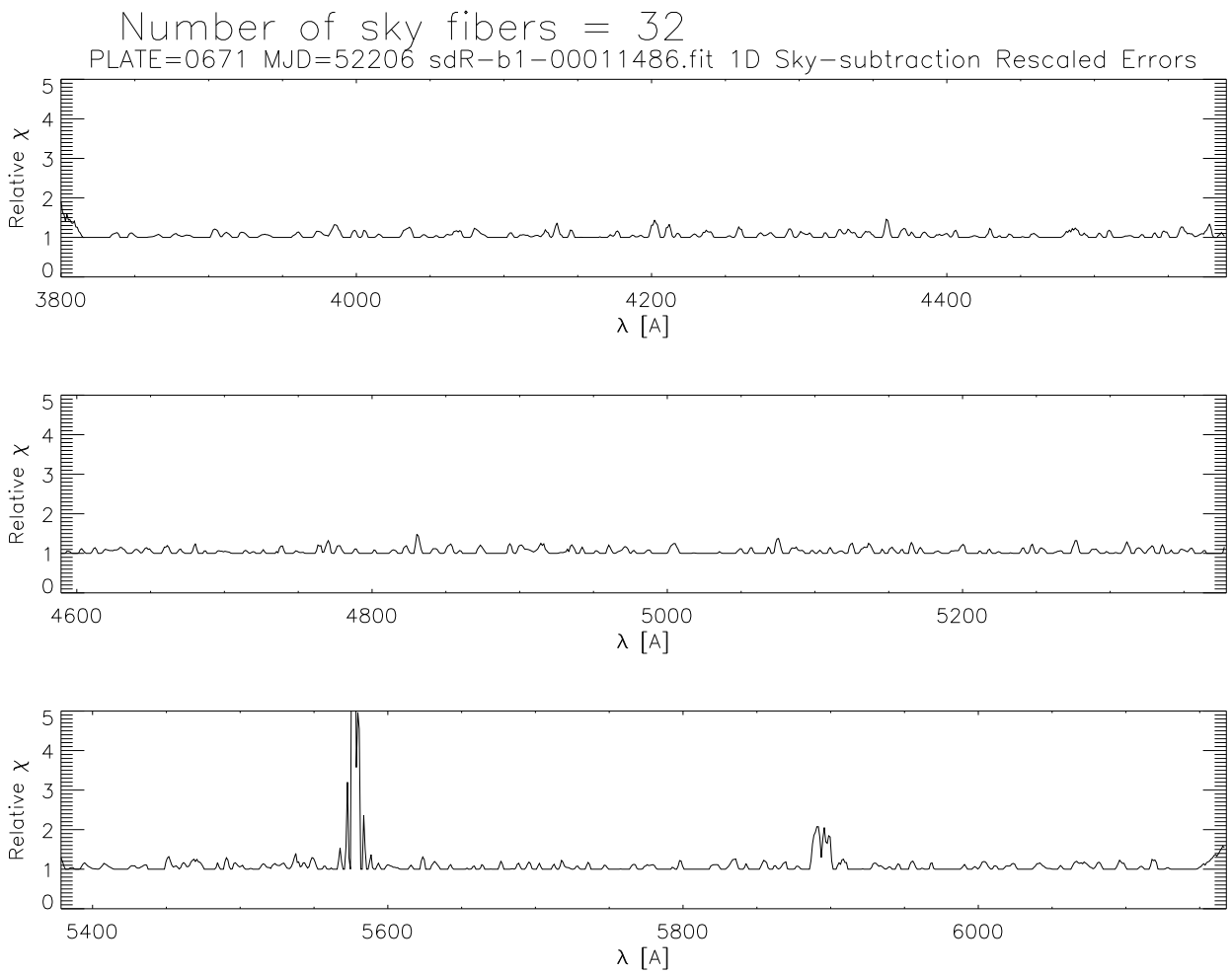

PLATE=0671 MJD=52206 Smooth superflat for sdR-b1-00011486.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

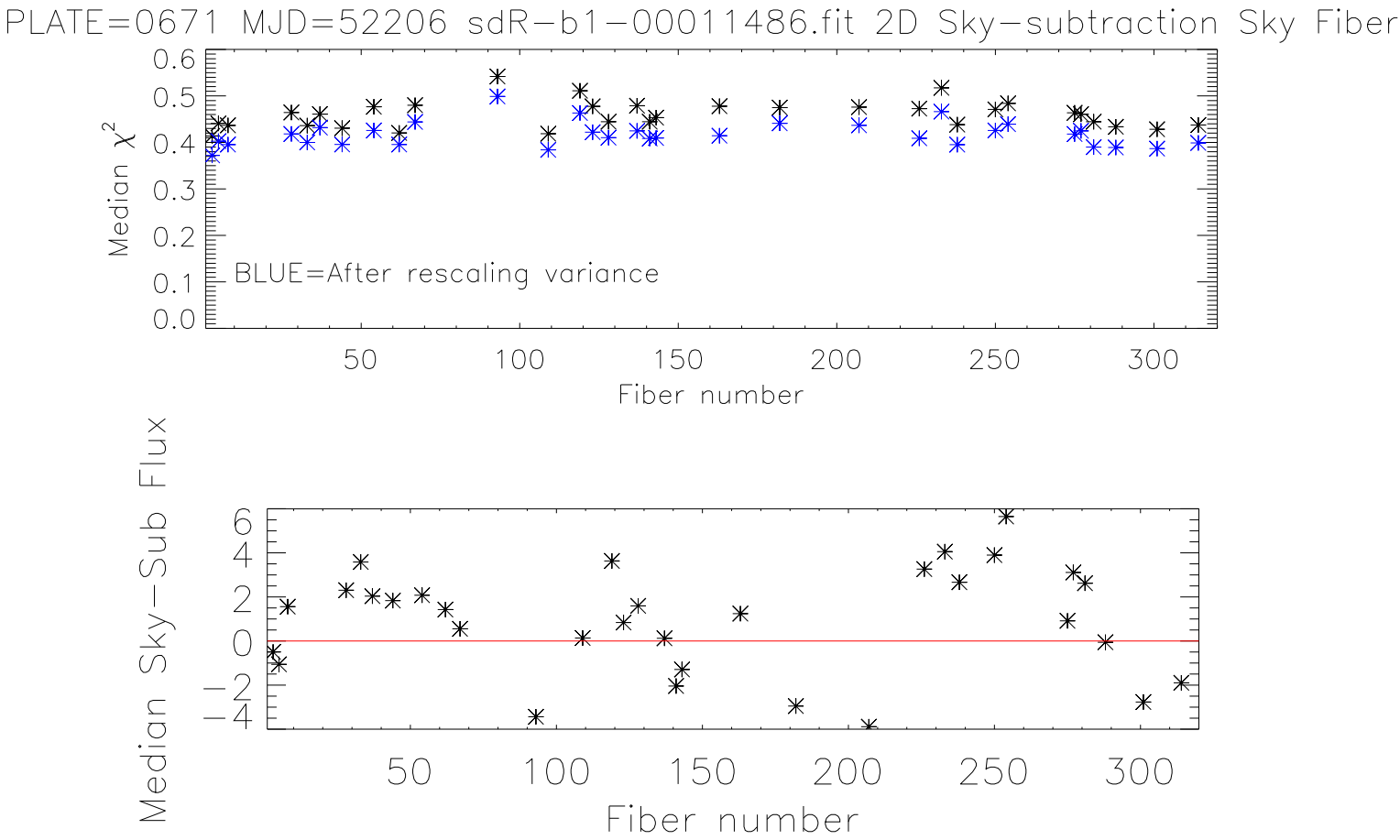
es= −0.0000

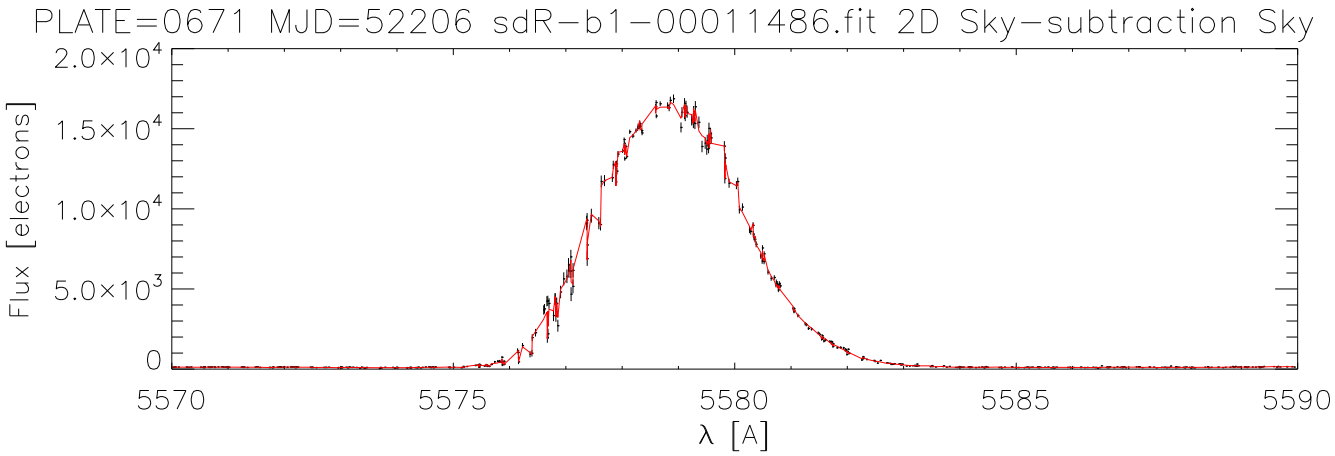

PLATE=0671 MJD=52206 sdR-b1-00011486.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

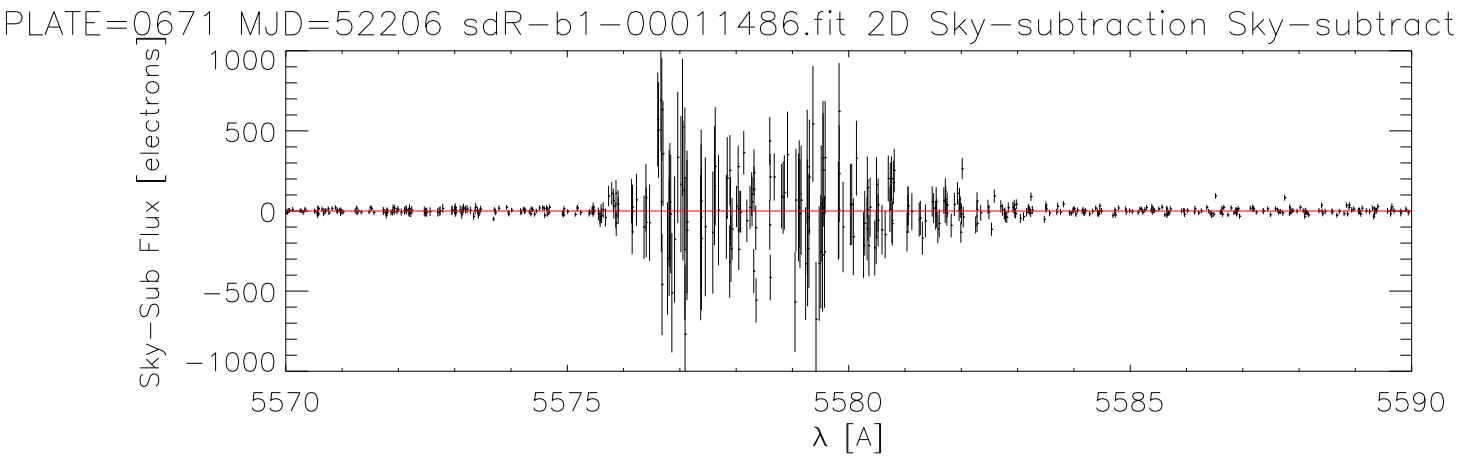

PLATE=0671 MJD=52206 sdR-b1-00011486.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

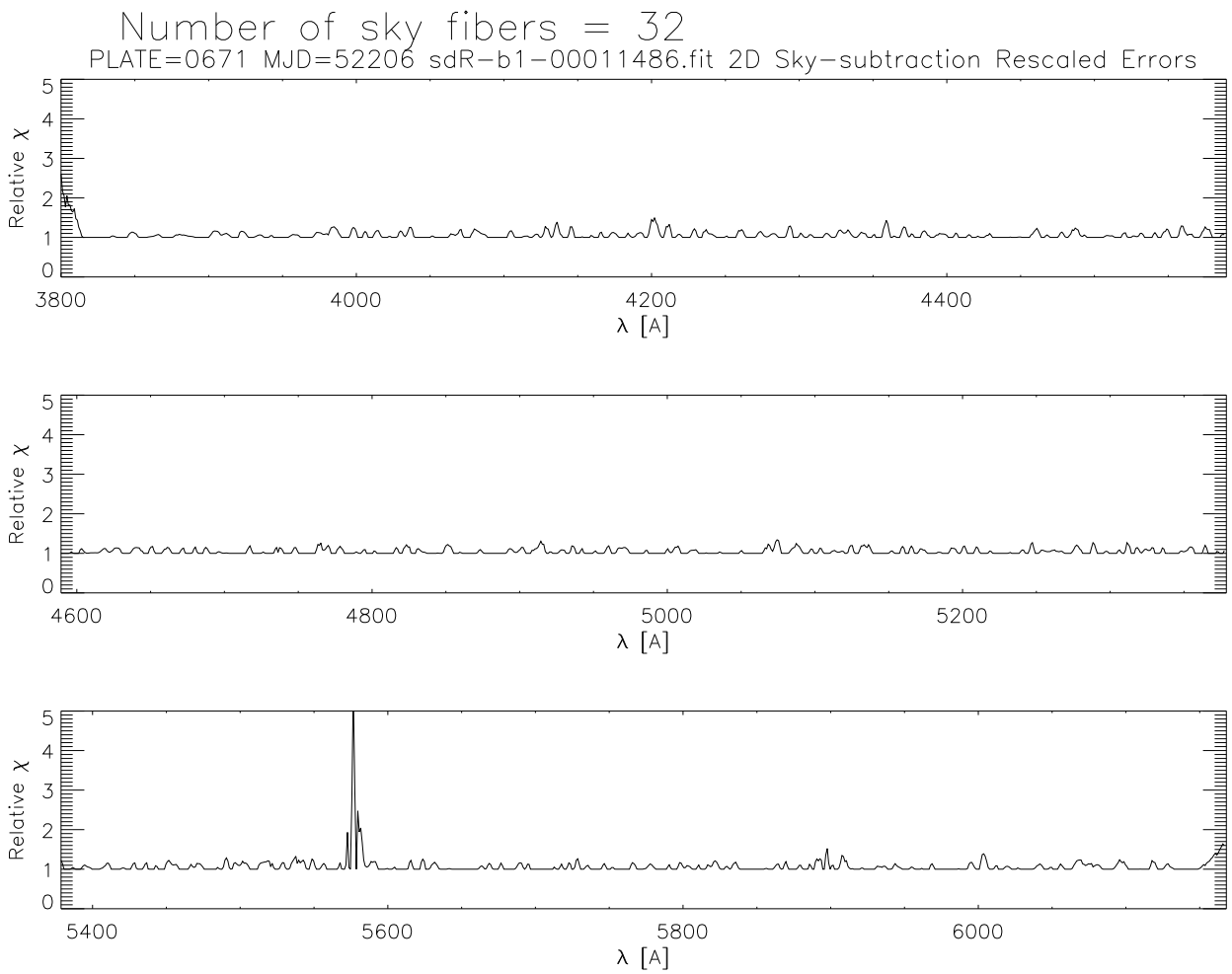

PLATE=0671 MJD=52206 sdR-b1-00011486.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

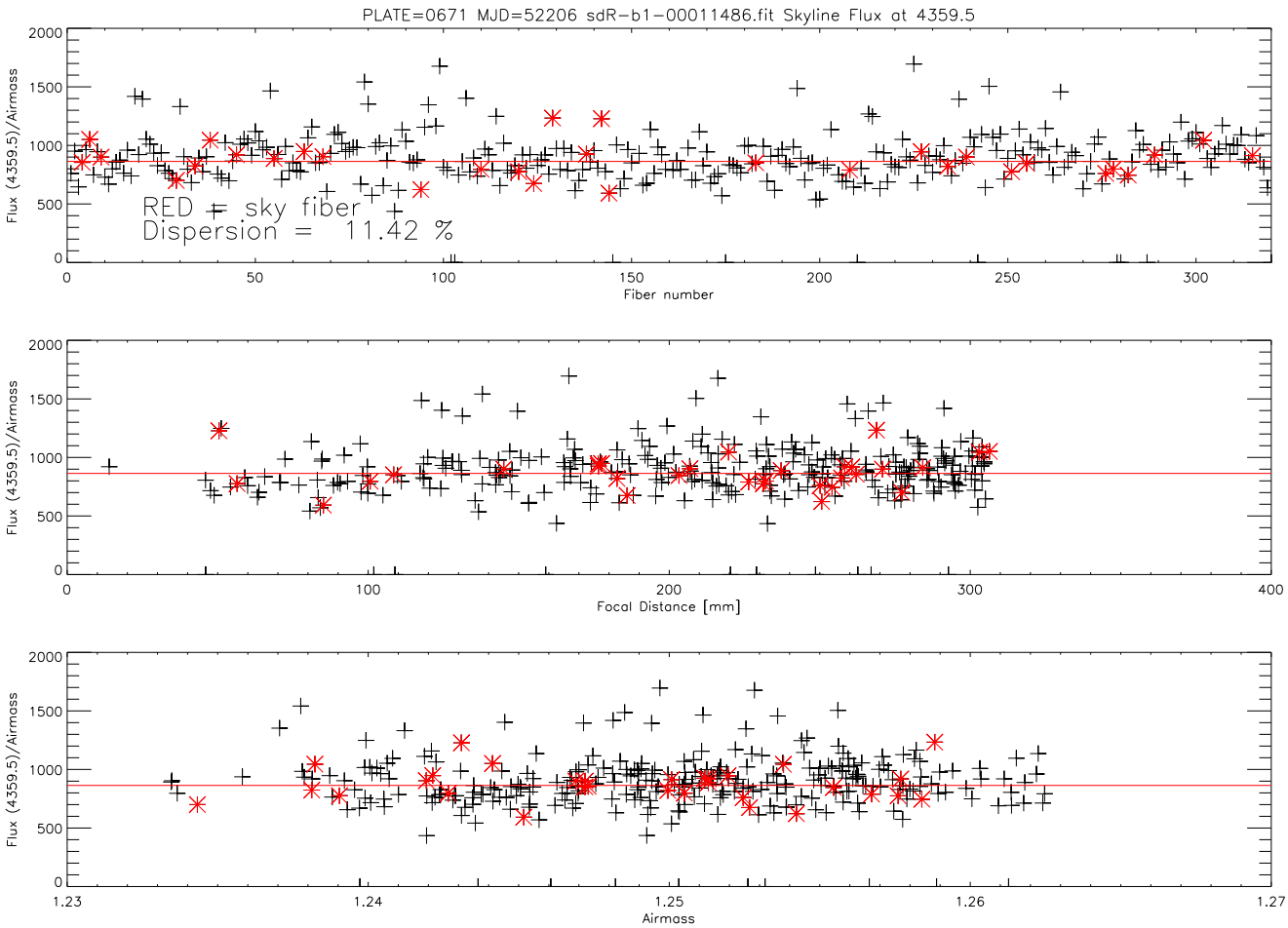

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011486.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

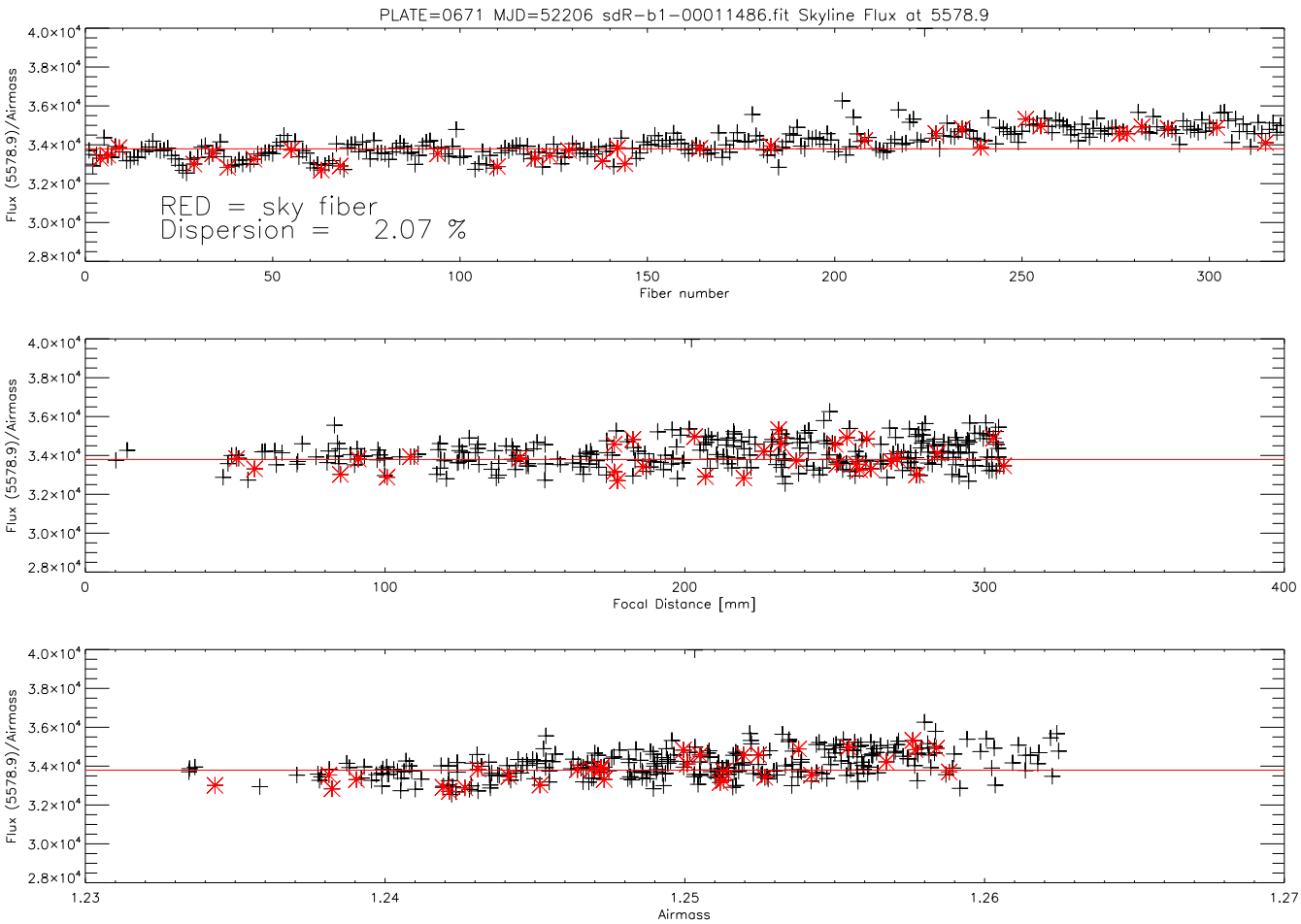

PLATE=0671 MJD=52206 sdR-b1-00011486.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

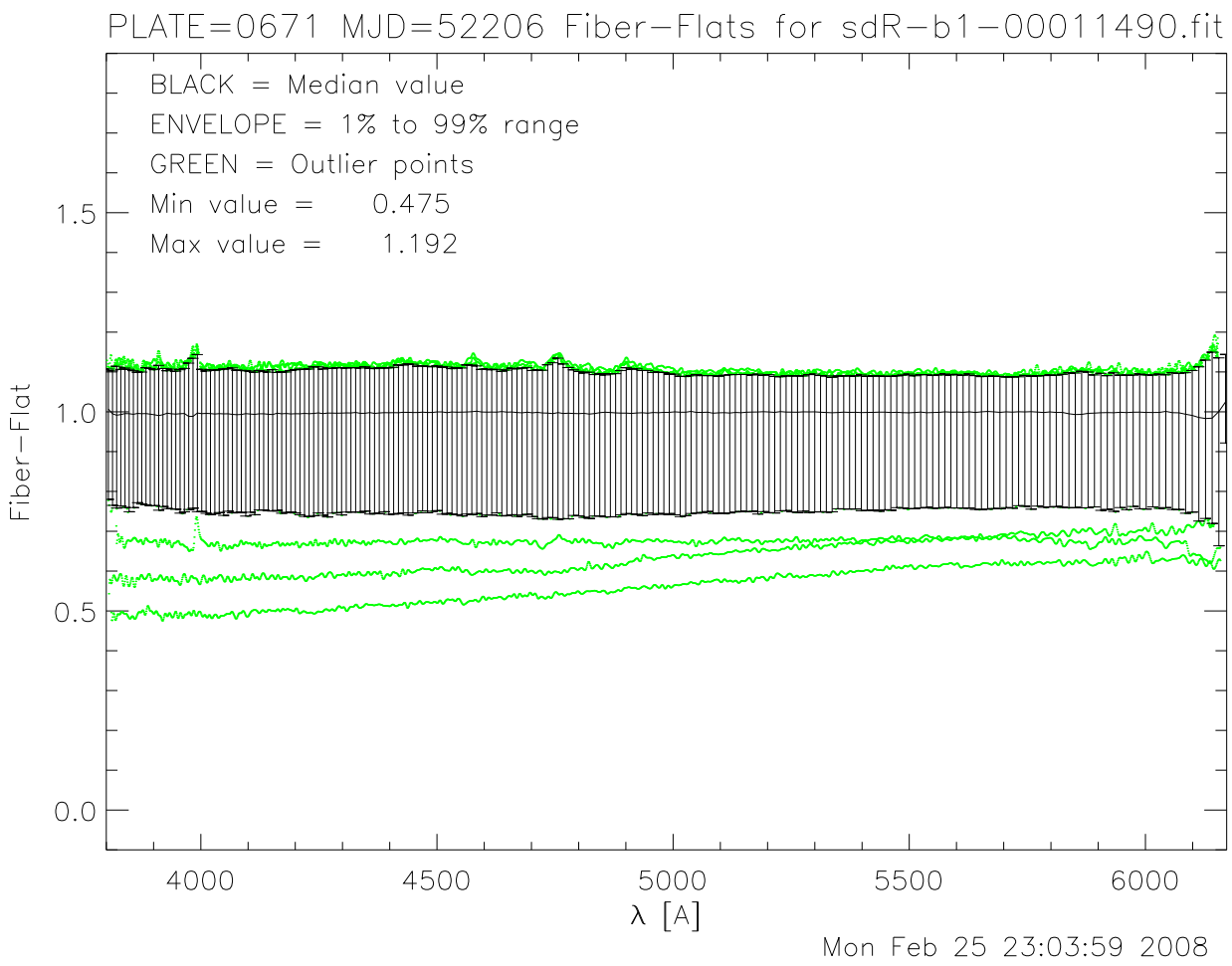

PLATE=0671 MJD=52206 sdR-b1-00011486.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

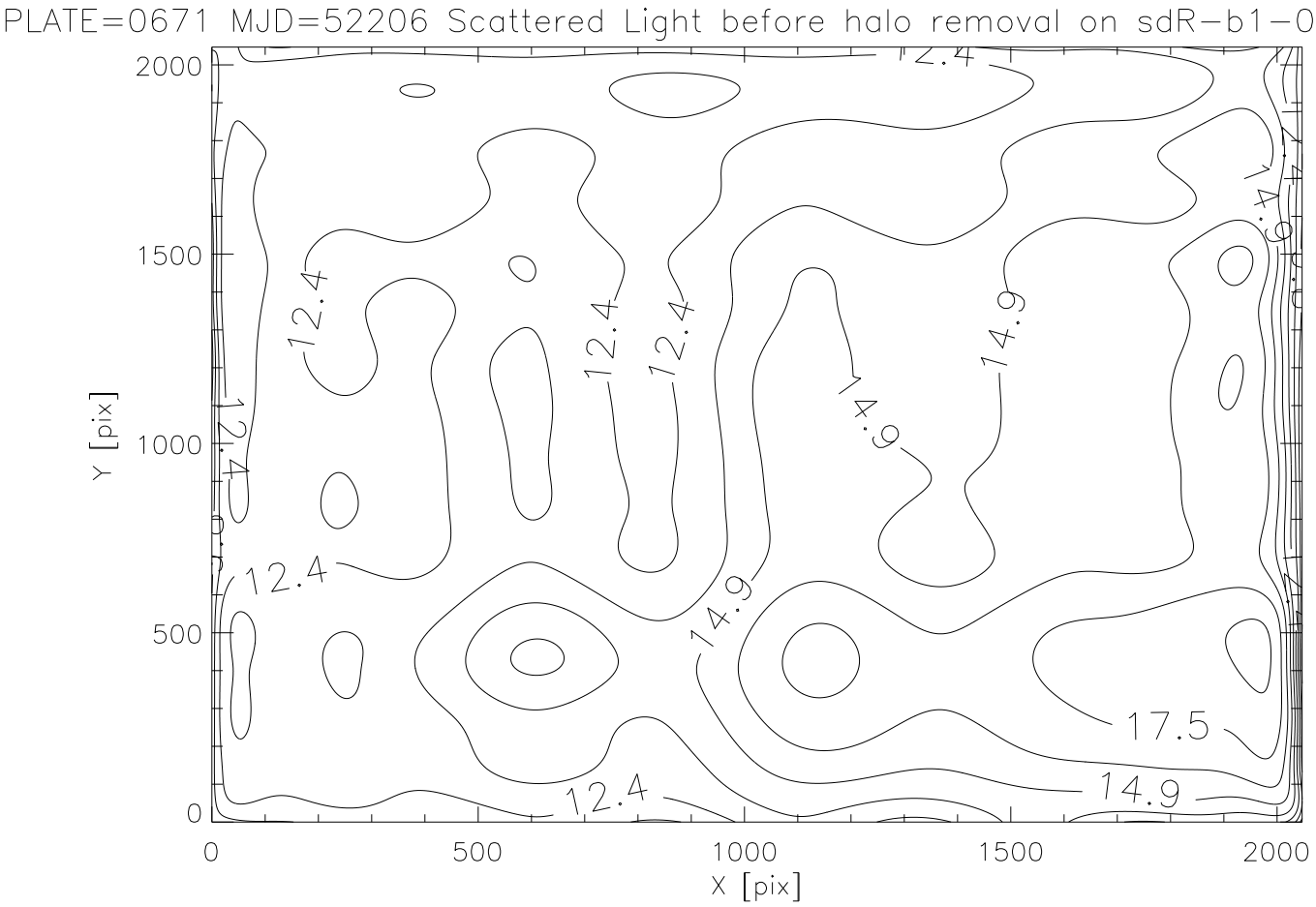

PLATE=0671 MJD=52206 sdR-b1-00011486.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

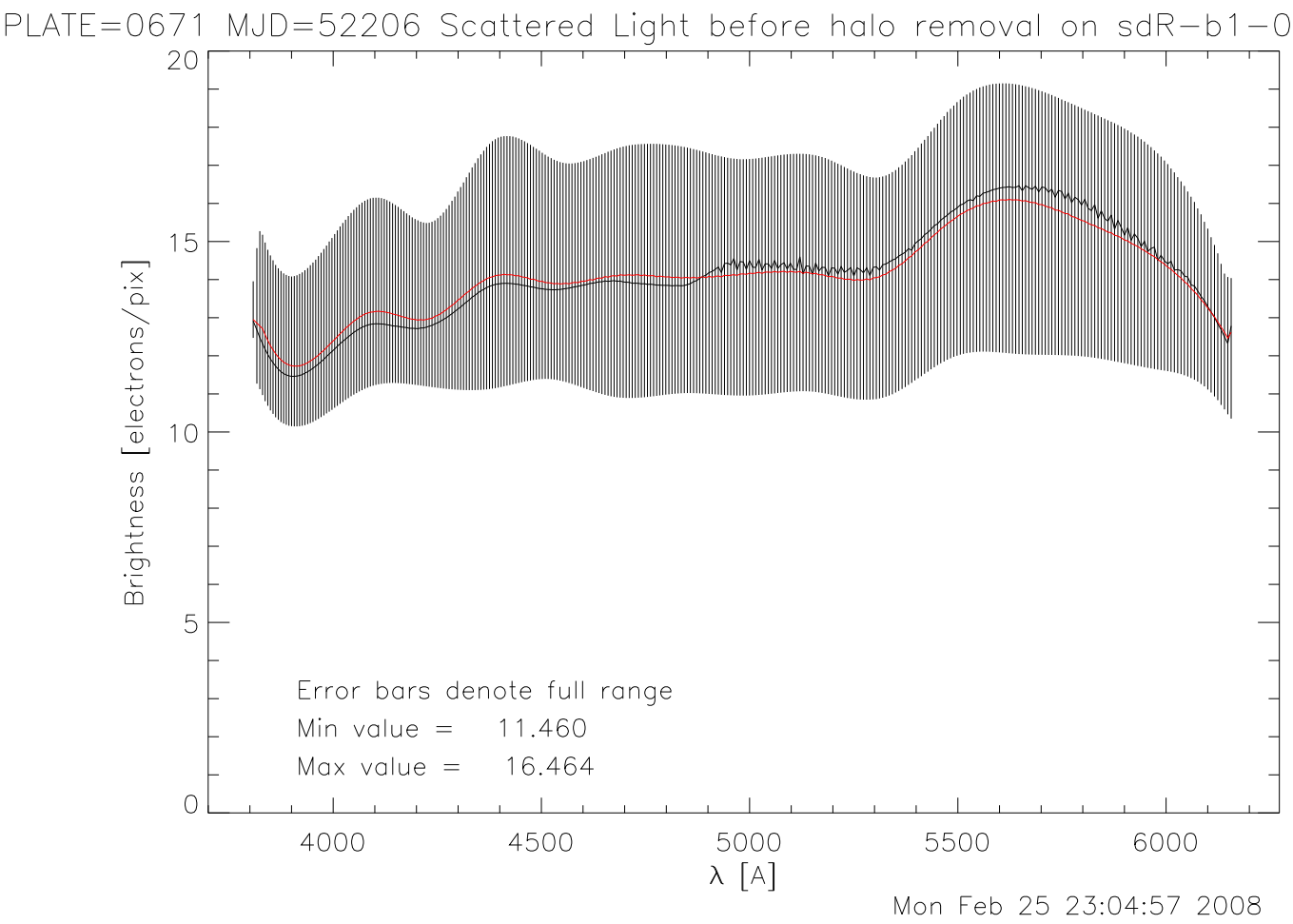

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011486.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

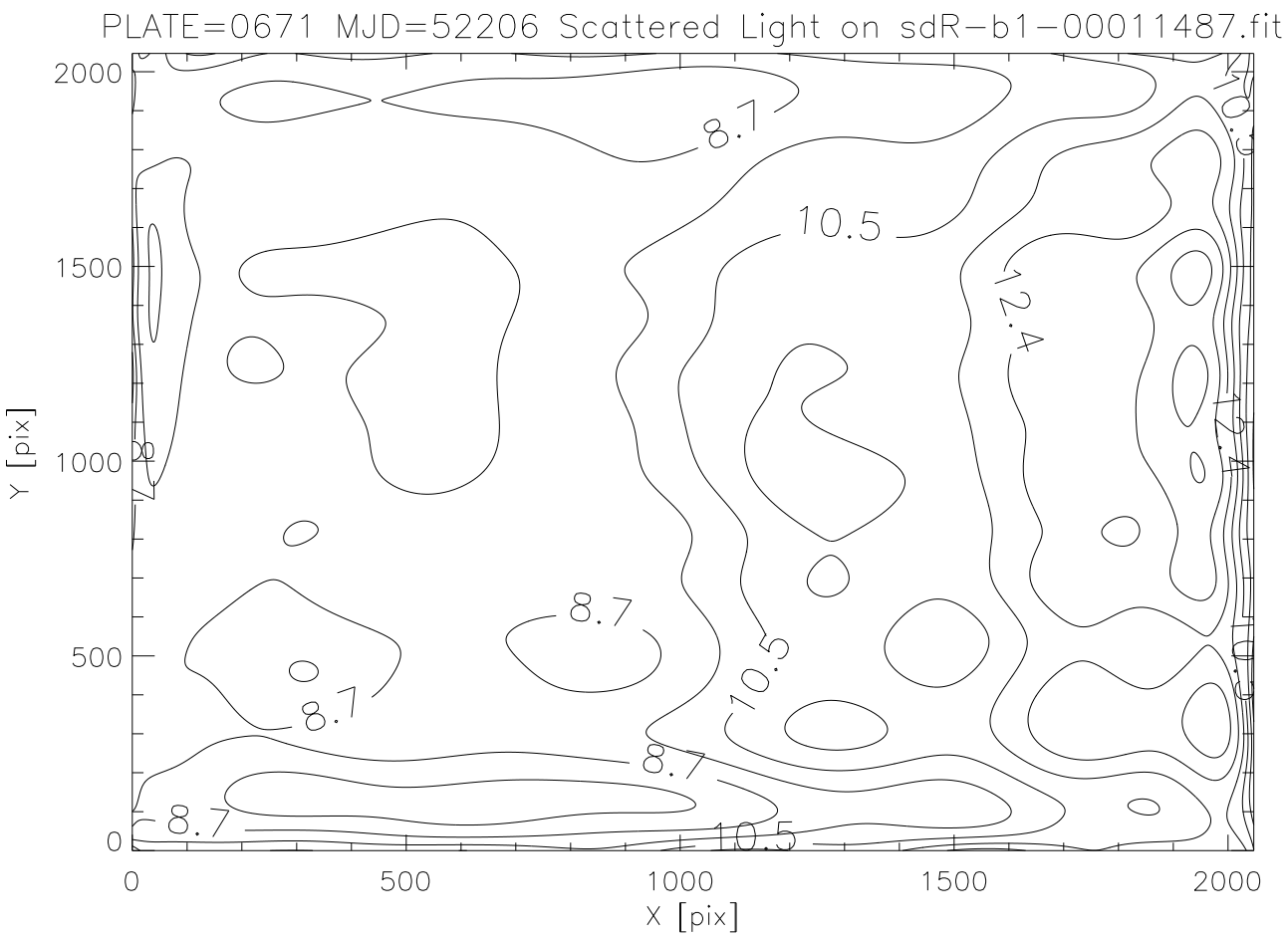

PLATE=0671 MJD=52206 sdR-b1-00011486.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.42 %
Fiber number
Focal Distance [mm]
Airmass

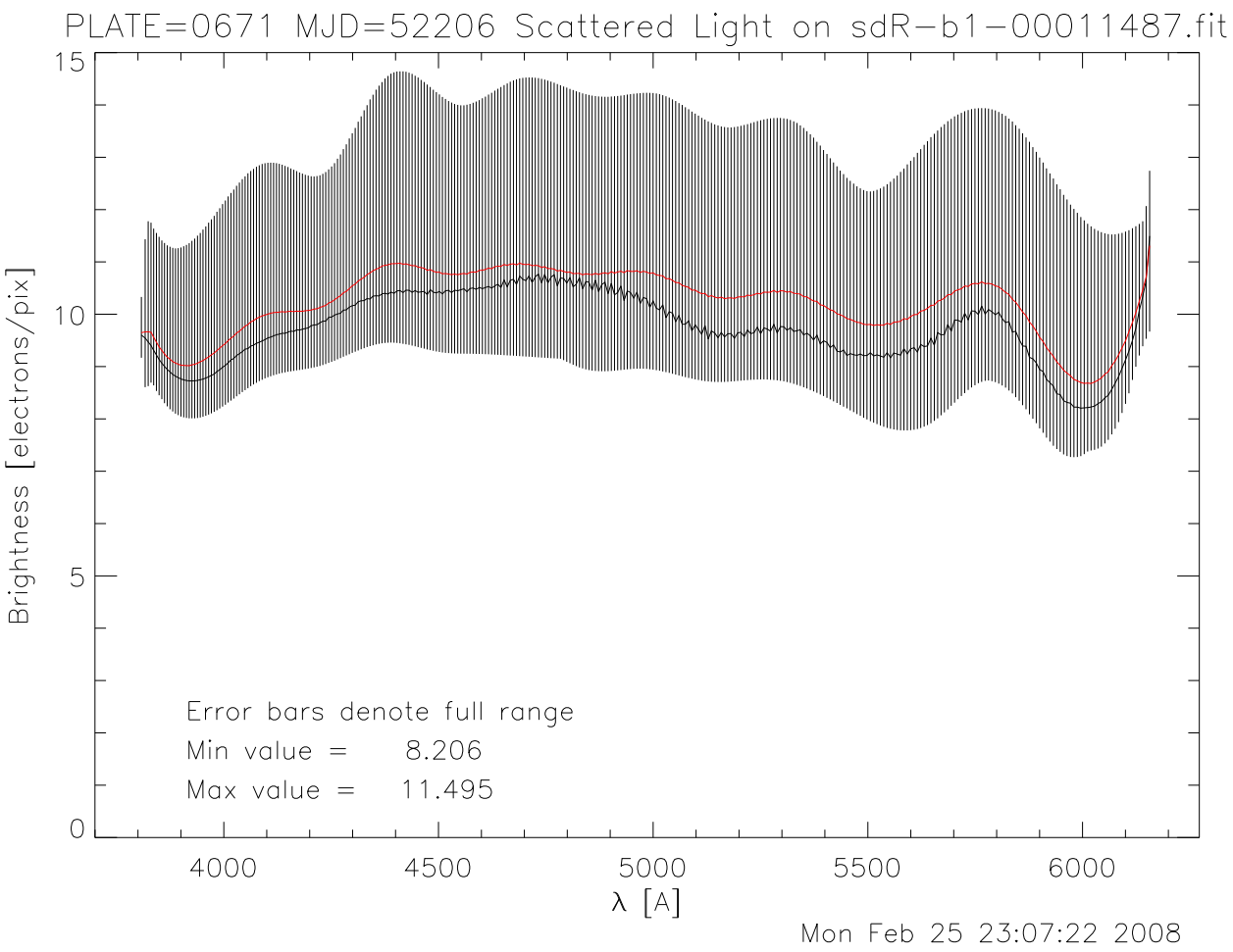

PLATE=0671 MJD=52206 sdR-b1-00011486.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.07 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

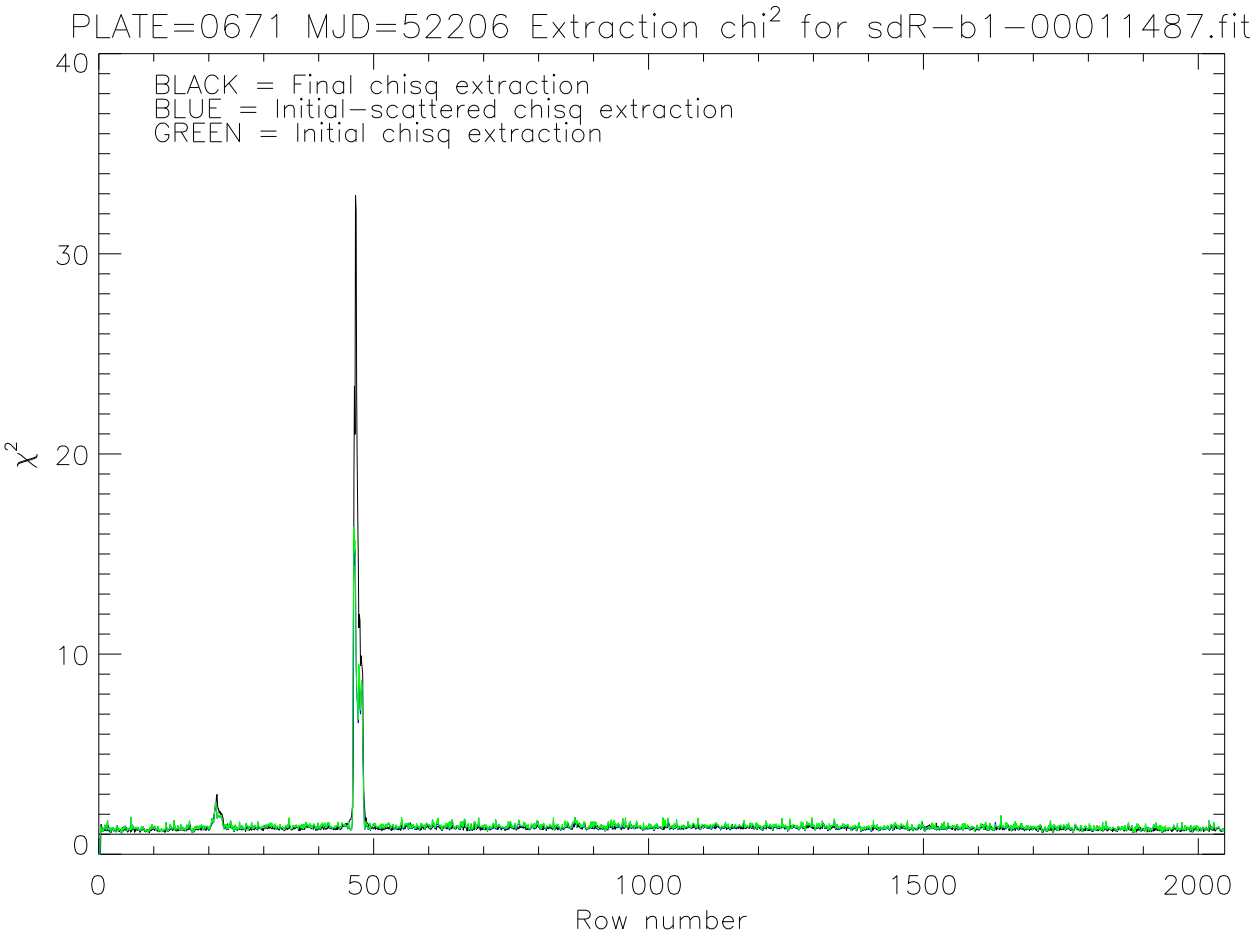

PLATE=0671 MJD=52206 Fiber−Flats for sdR−b1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.475
Max value = 1.192
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:03:59 2008

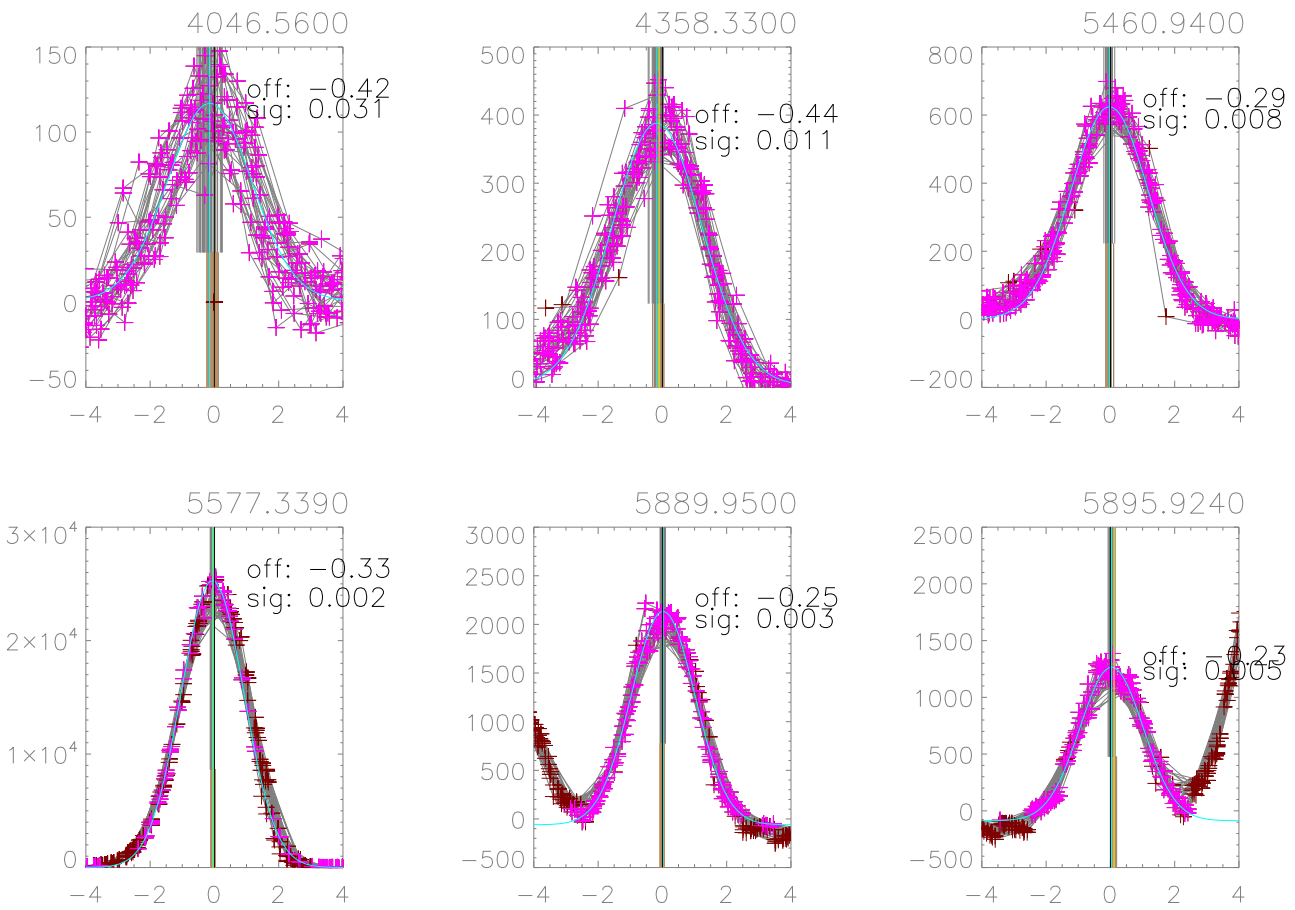

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011487.f
Y [pix]
X [pix]
0
500
1000
1500
2000
12.4
14.9
17.5

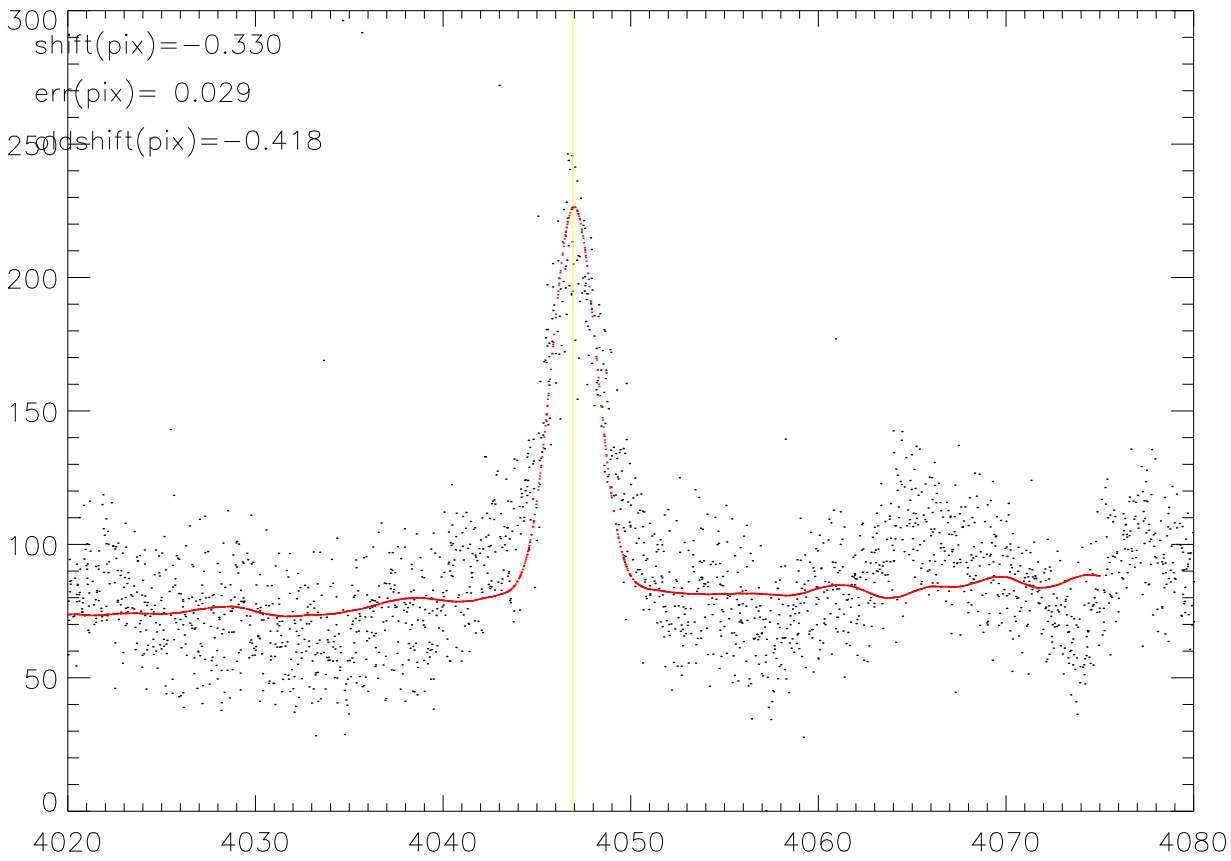

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011487.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 11.460
Max value = 16.464
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:04:57 2008

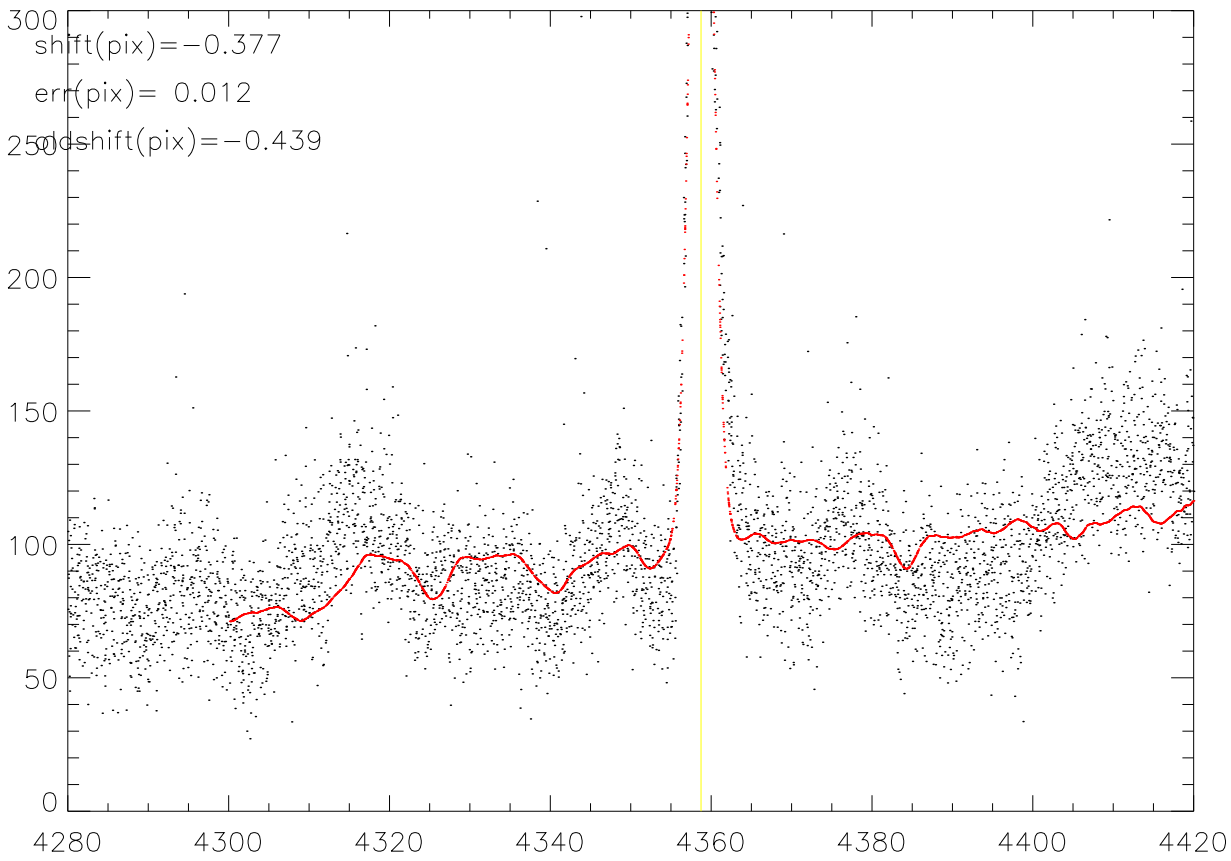

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011487.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
8.7
10.5
12.4
8.7
8.7
8.7
10.5
10.5
12.4

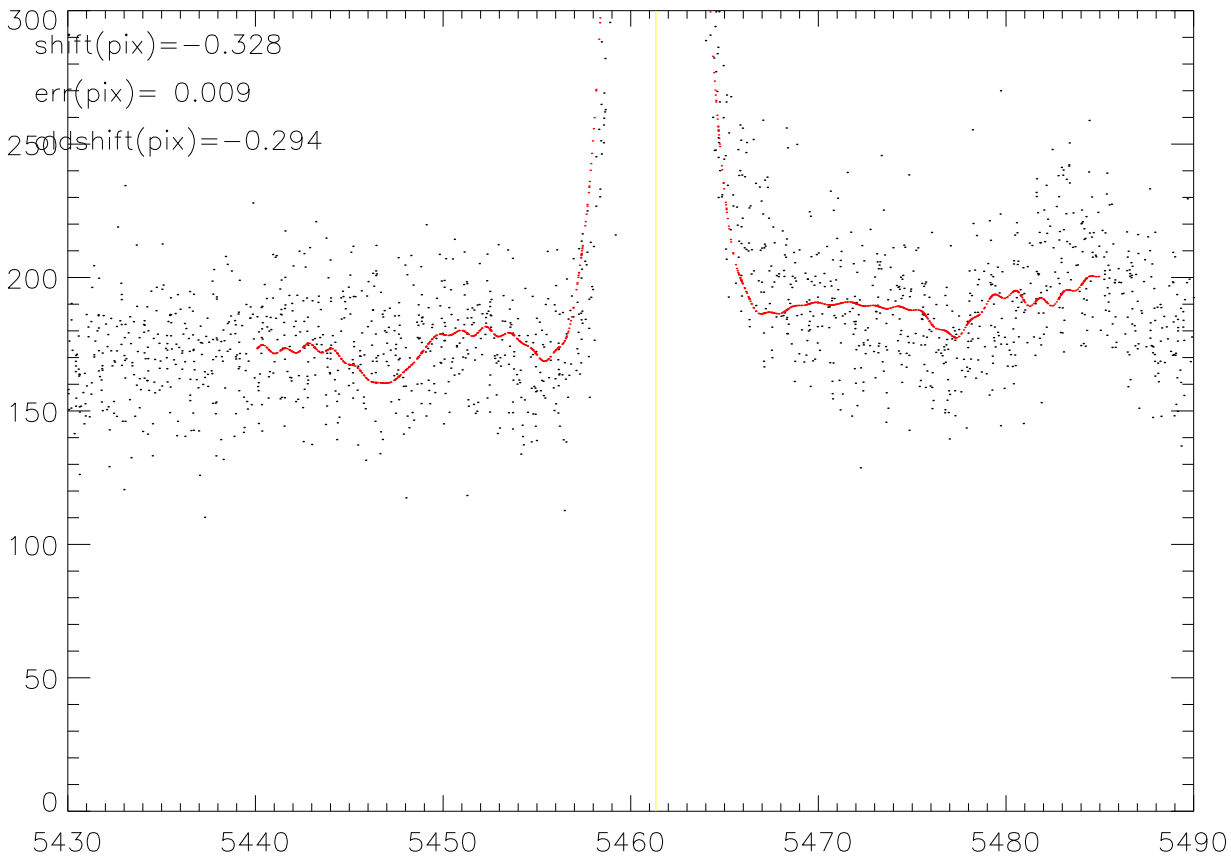

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011487.fit
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.206
Max value = 11.495
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:07:22 2008

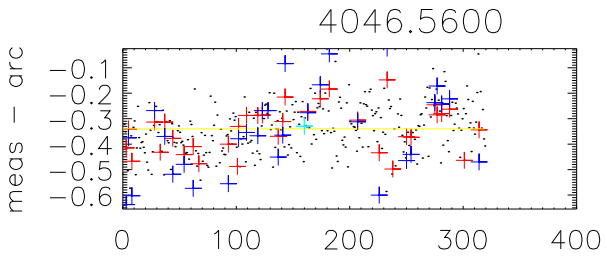

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b1-00011487.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number

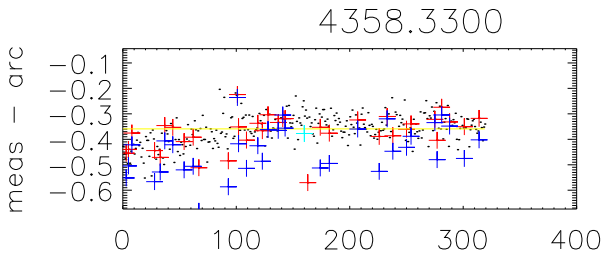

4046.5600
off: −0.42
sig: 0.031
4358.3300
off: −0.44
sig: 0.011
5460.9400
off: −0.29
sig: 0.008
5577.3390
off: −0.33
sig: 0.002
5889.9500
off: −0.25
sig: 0.003
5895.9240
off: −0.23
sig: 0.005

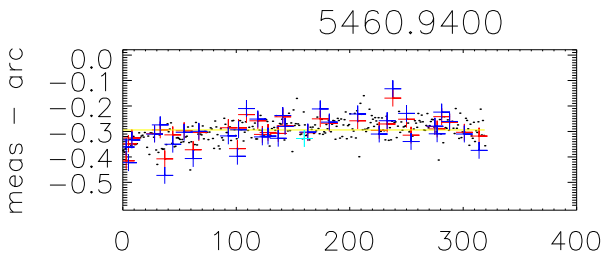

shift(pix)=−0.330
err(pix)= 0.029
oldshift(pix)=−0.418
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

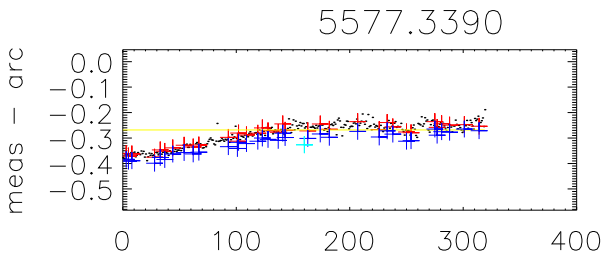

shift(pix)=−0.377
err(pix)= 0.012
oldshift(pix)=−0.439
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

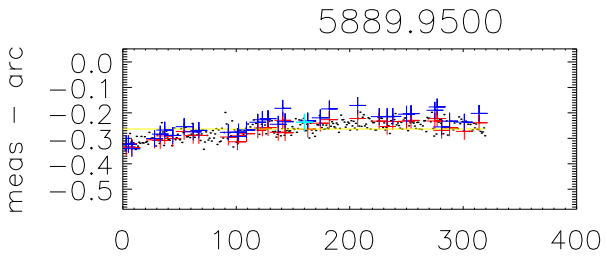

shift(pix)=−0.328
err(pix)= 0.009
oldshift(pix)=−0.294
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

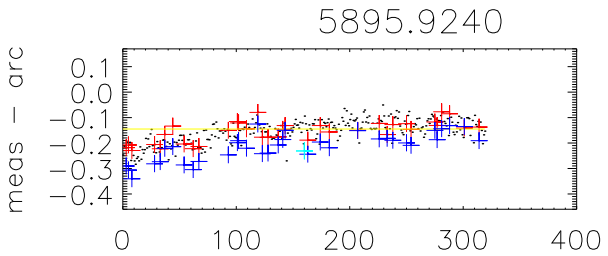

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

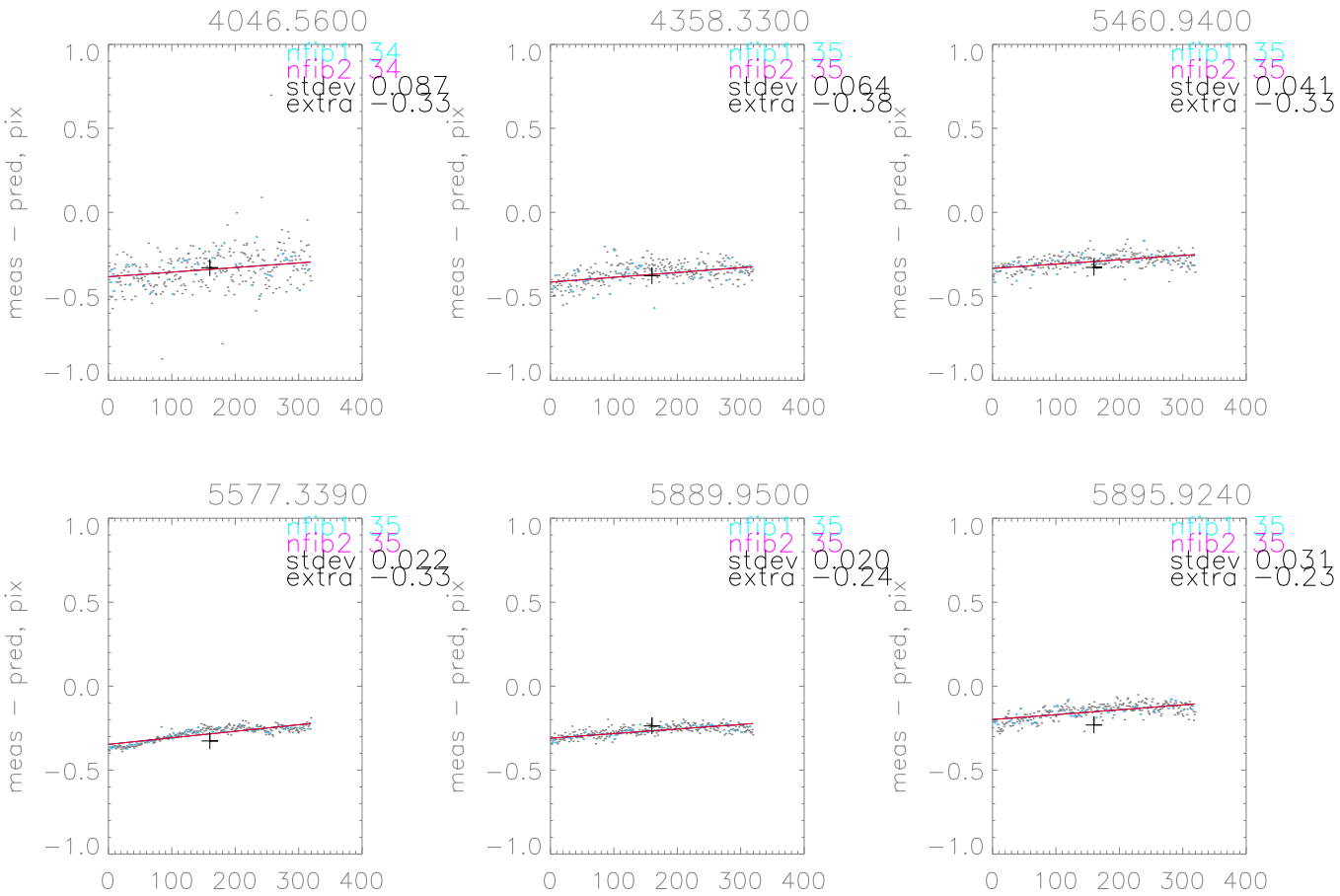

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

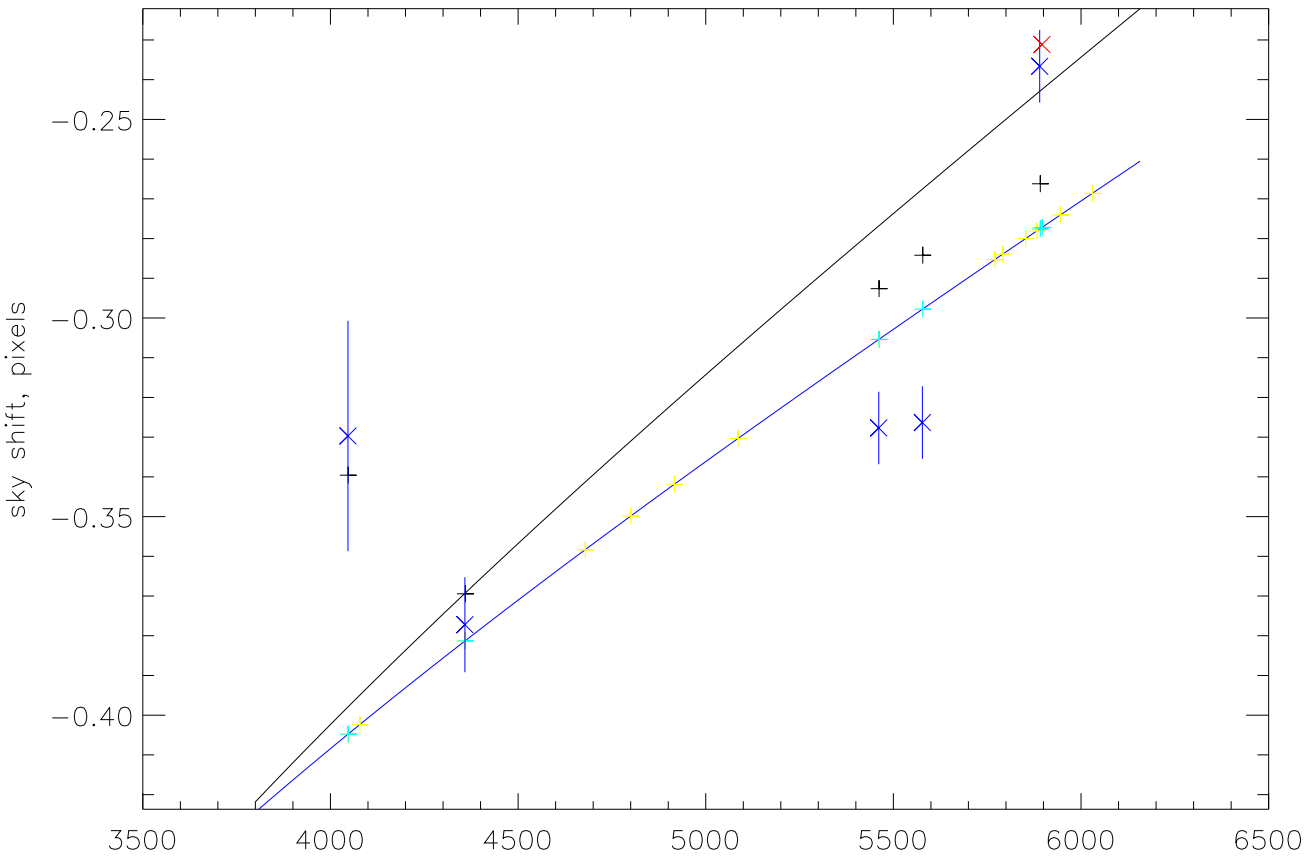

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

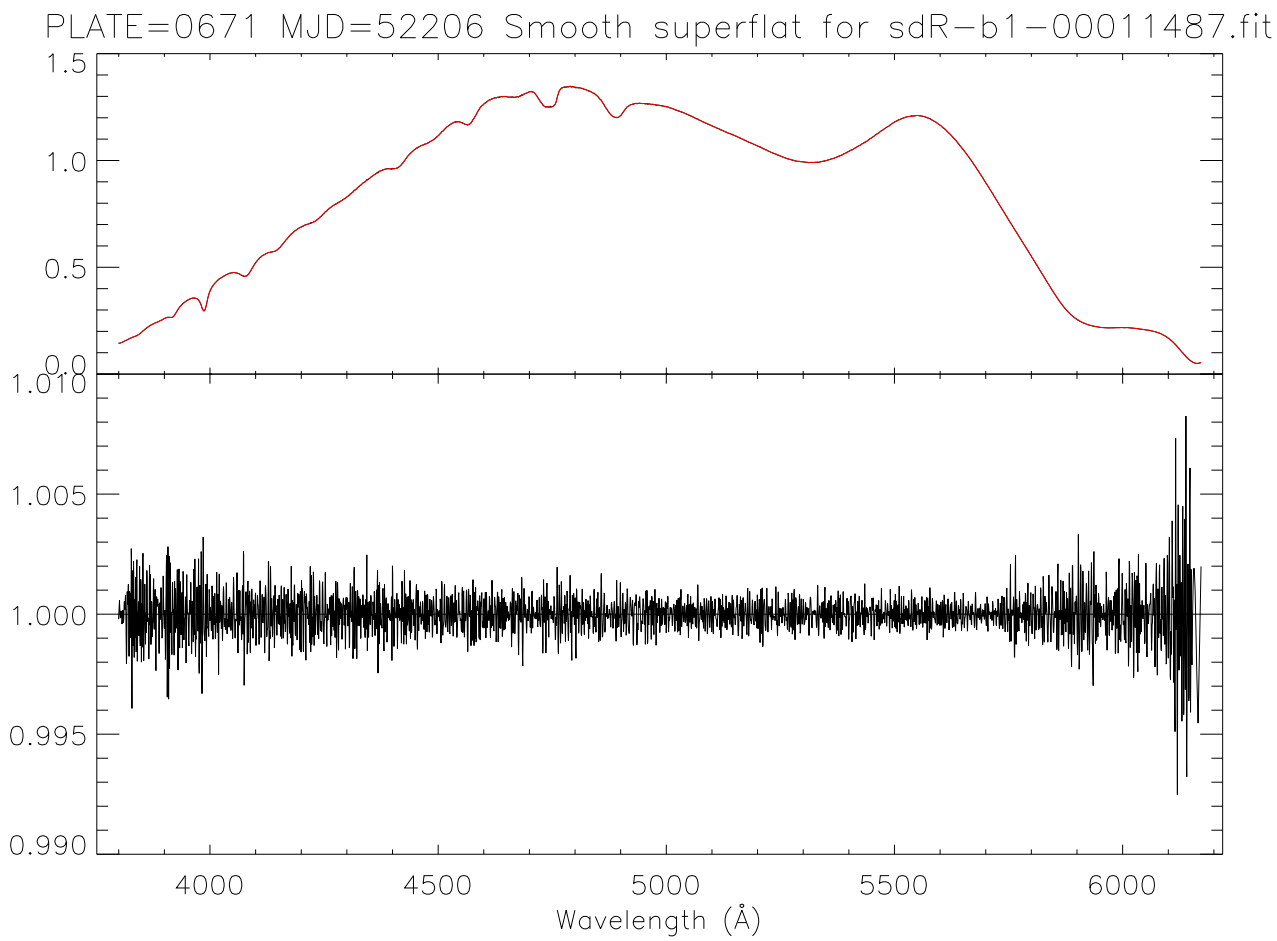

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

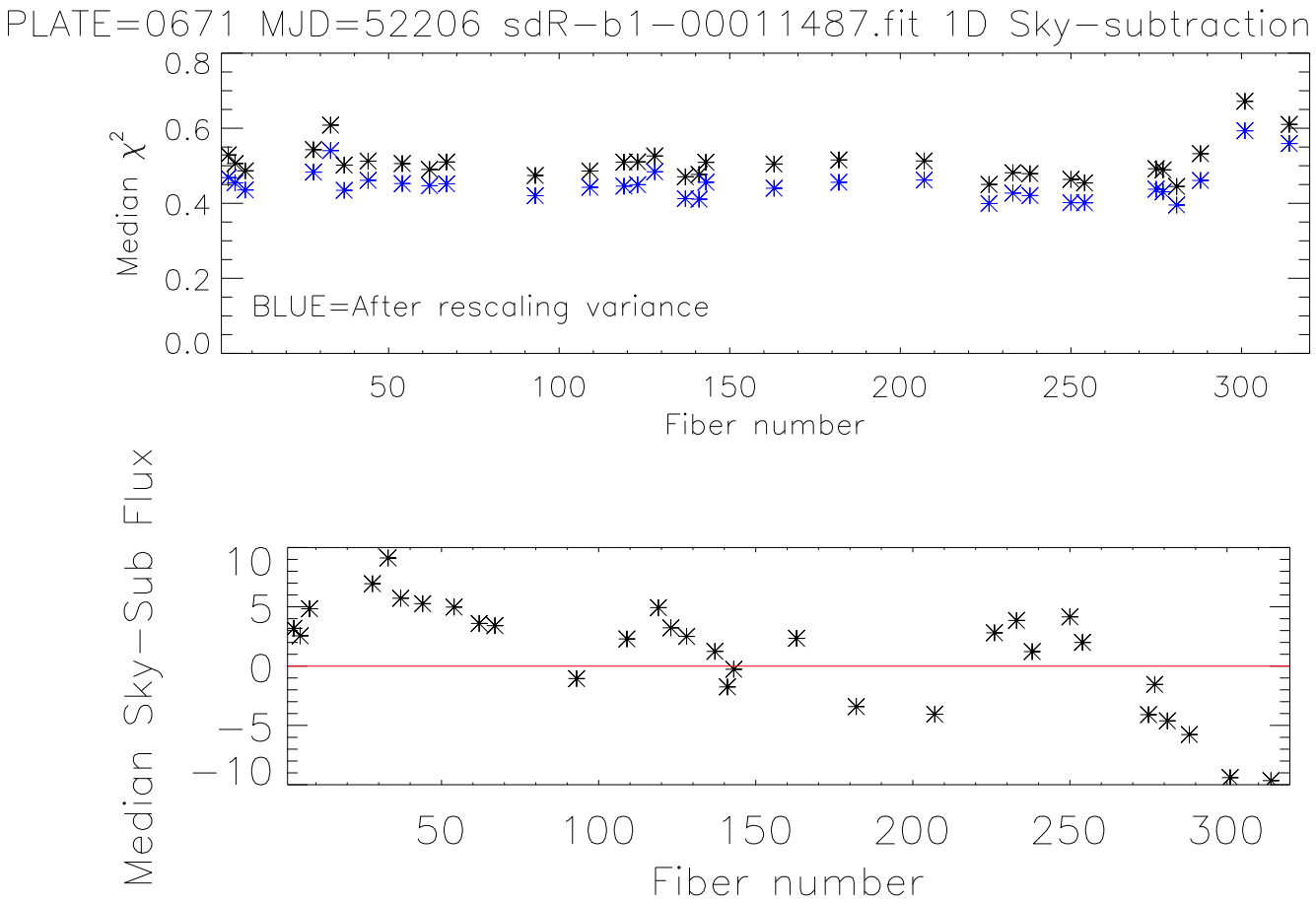

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

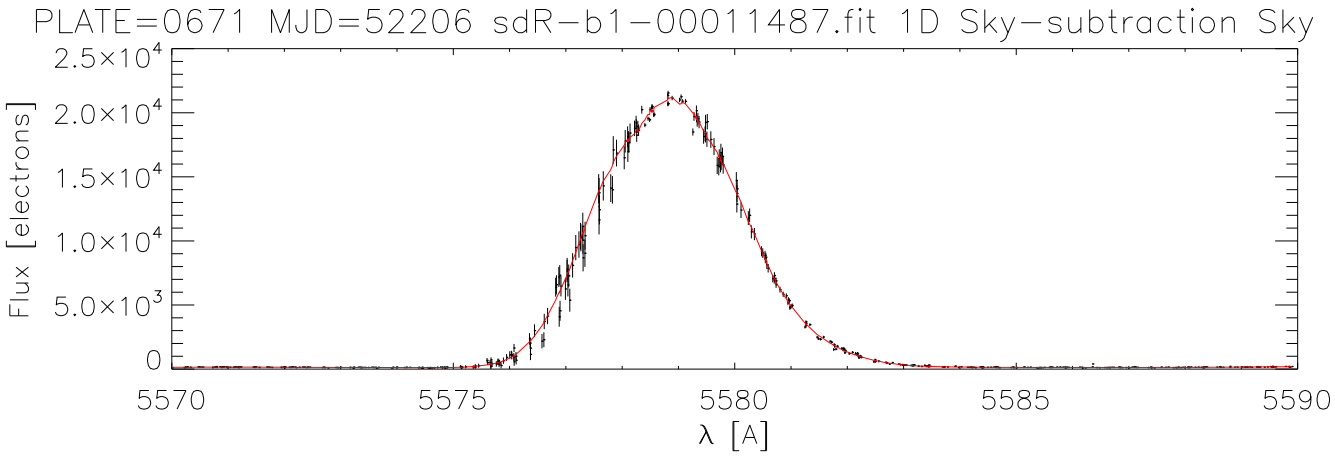

4046.5600
nfib1 34
nfib2 34
stdev 0.087
extra −0.33
4358.3300
nfib1 35
nfib2 35
stdev 0.064
extra −0.38
5460.9400
nfib1 35
nfib2 35
stdev 0.041
extra −0.33
5577.3390
nfib1 35
nfib2 35
stdev 0.022
extra −0.33
5889.9500
nfib1 35
nfib2 35
stdev 0.020
extra −0.24
5895.9240
nfib1 35
nfib2 35
stdev 0.031
extra −0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

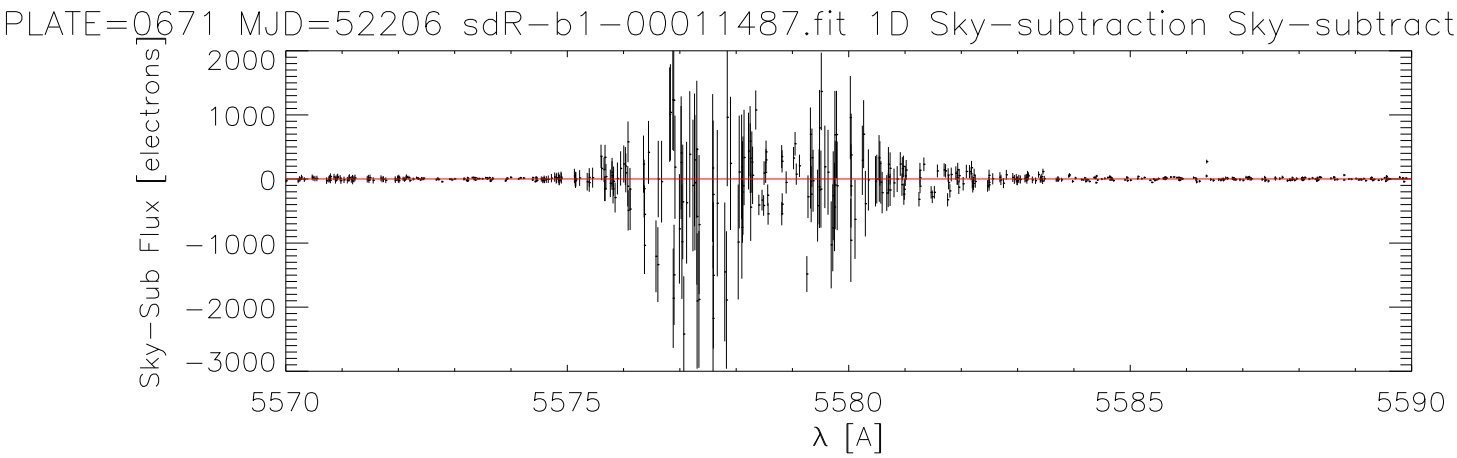

sky shift, pixels
−0.25
−0.30
−0.35
−0.40
3500
4000
4500
5000
5500
6000
6500

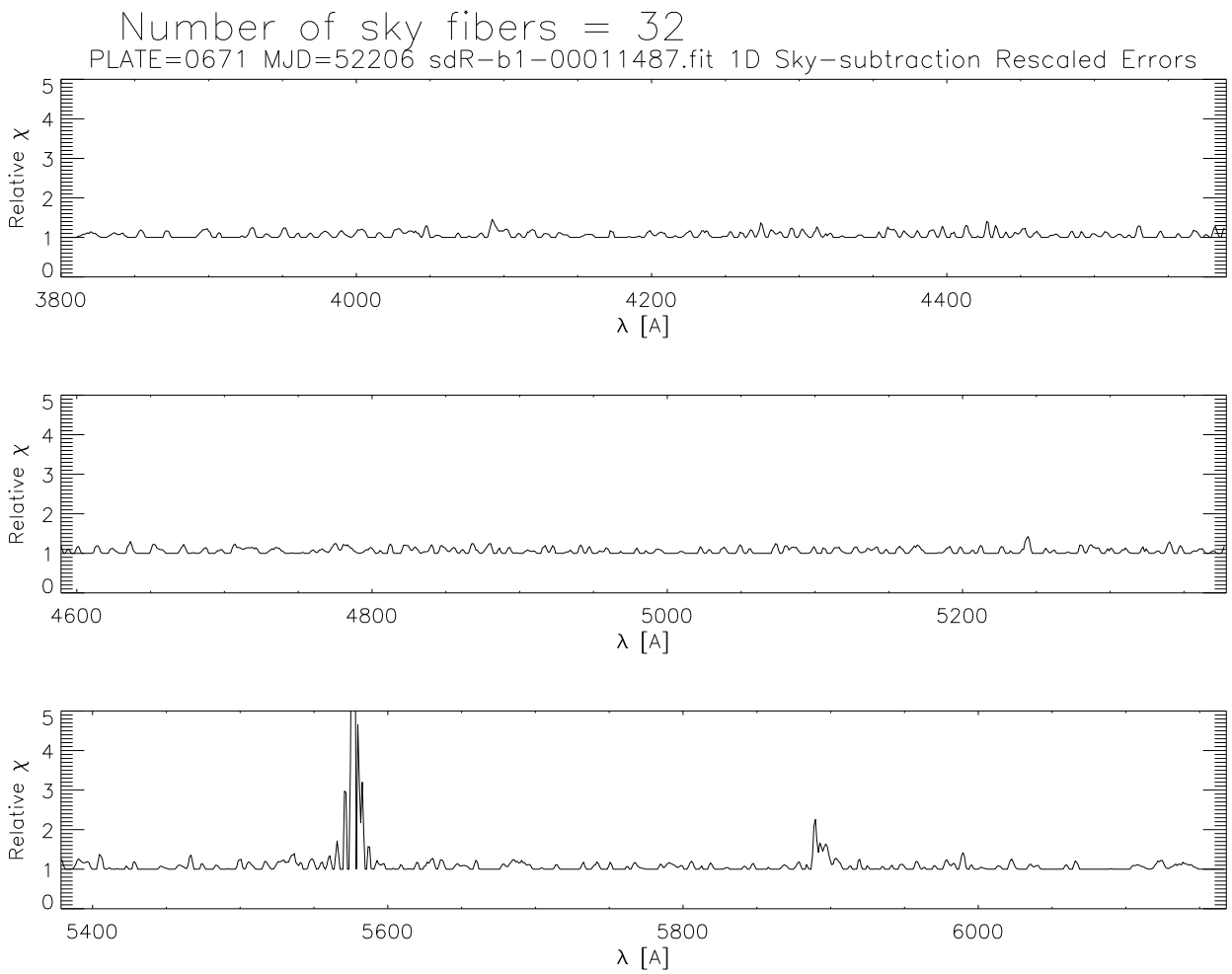
es= 0.0000

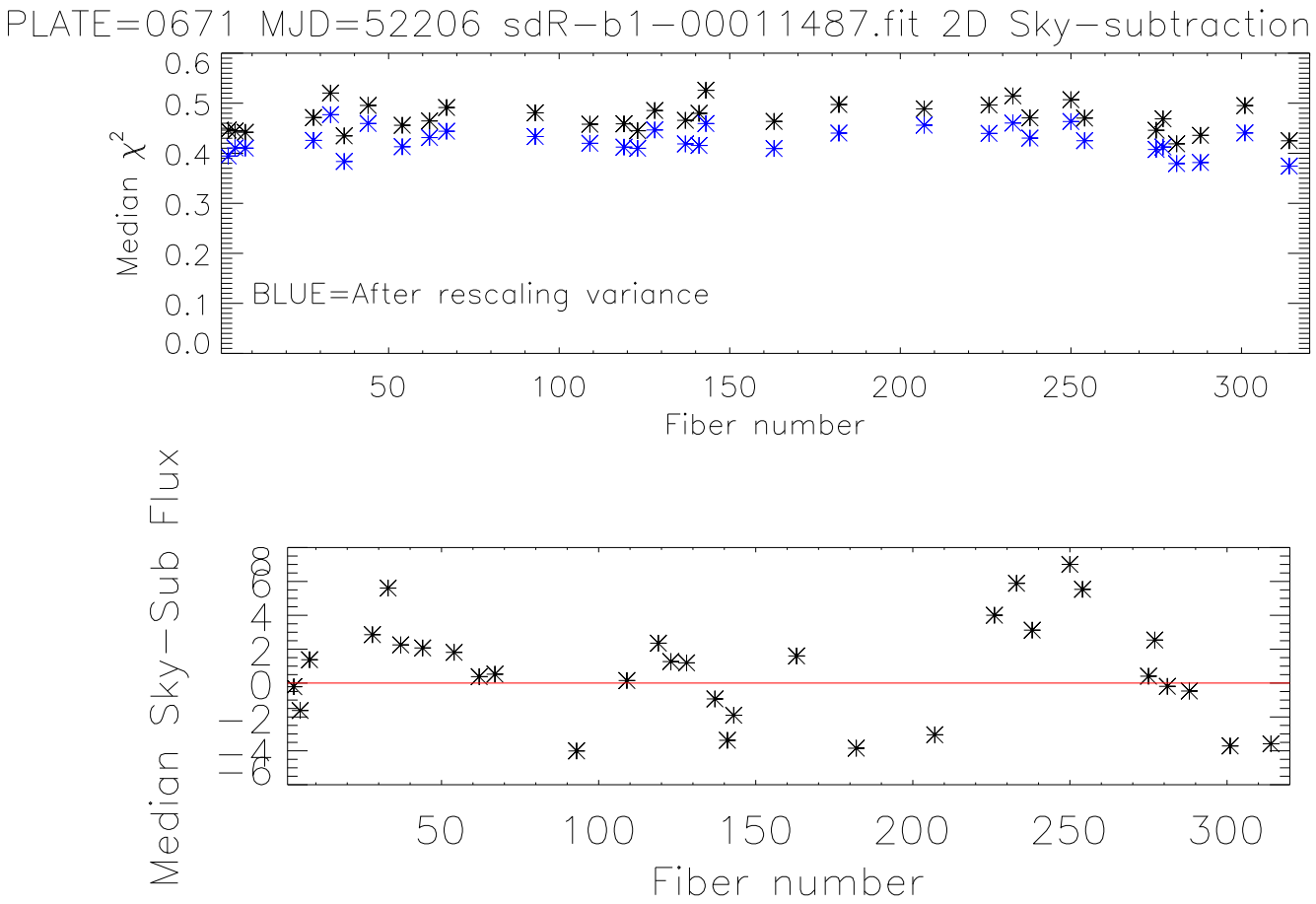

PLATE=0671 MJD=52206 Smooth superflat for sdR-b1-00011487.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

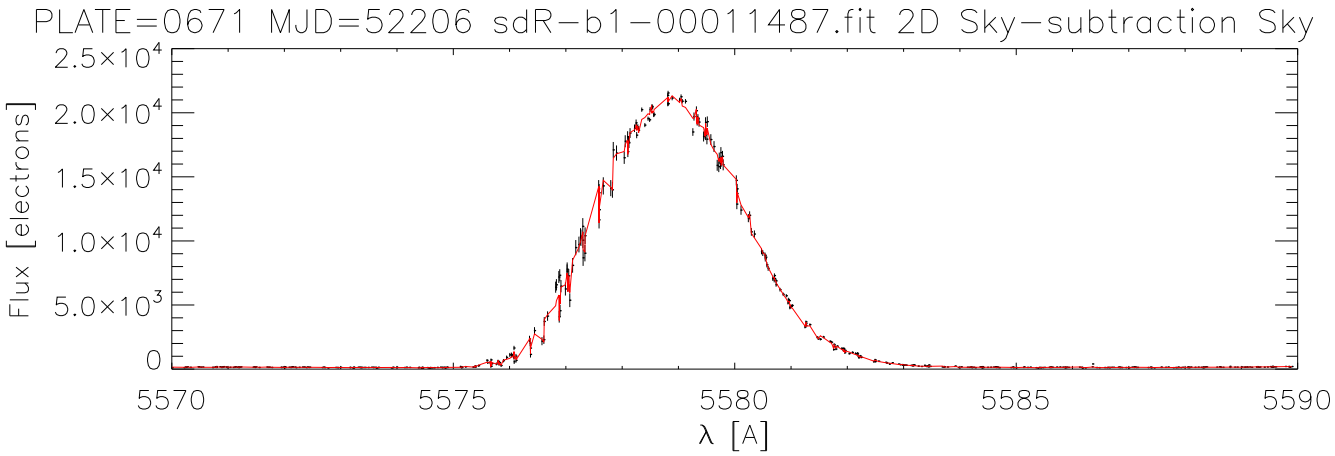

PLATE=0671 MJD=52206 sdR-b1-00011487.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

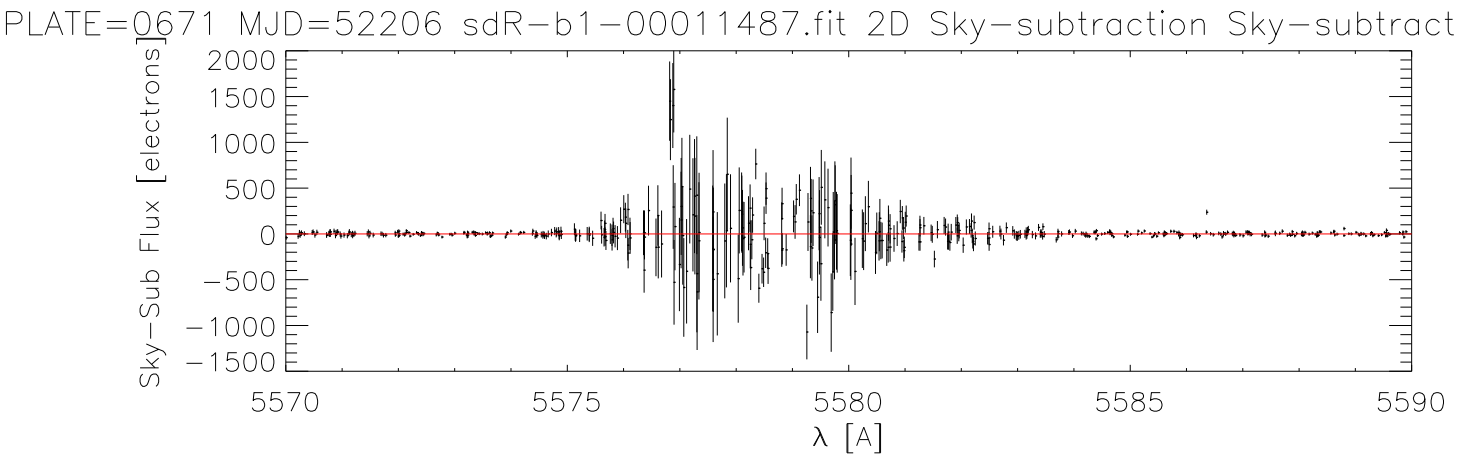

PLATE=0671 MJD=52206 sdR-b1-00011487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

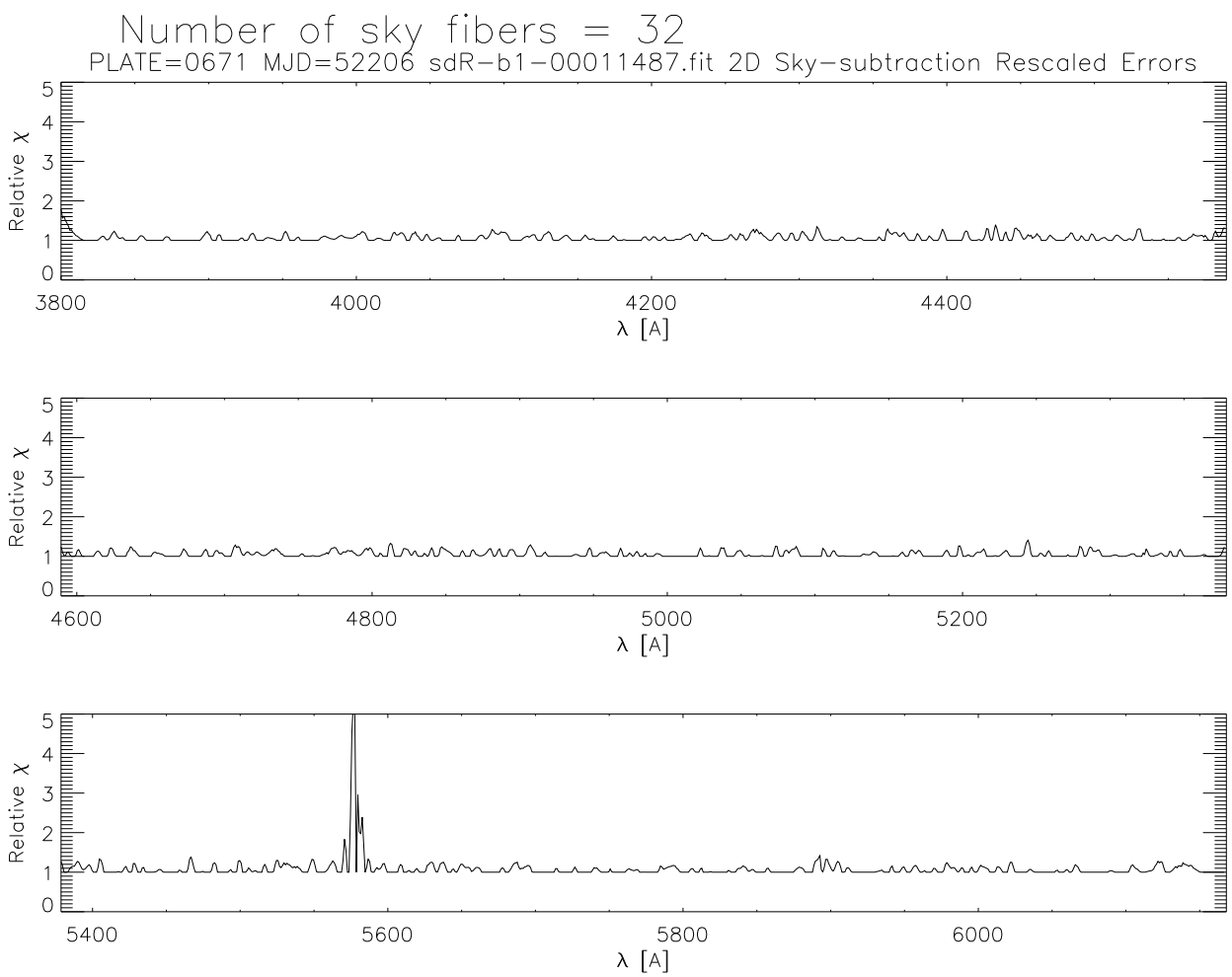

PLATE=0671 MJD=52206 sdR-b1-00011487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
−3000
5570
5575
5580
5585
5590
λ [A]

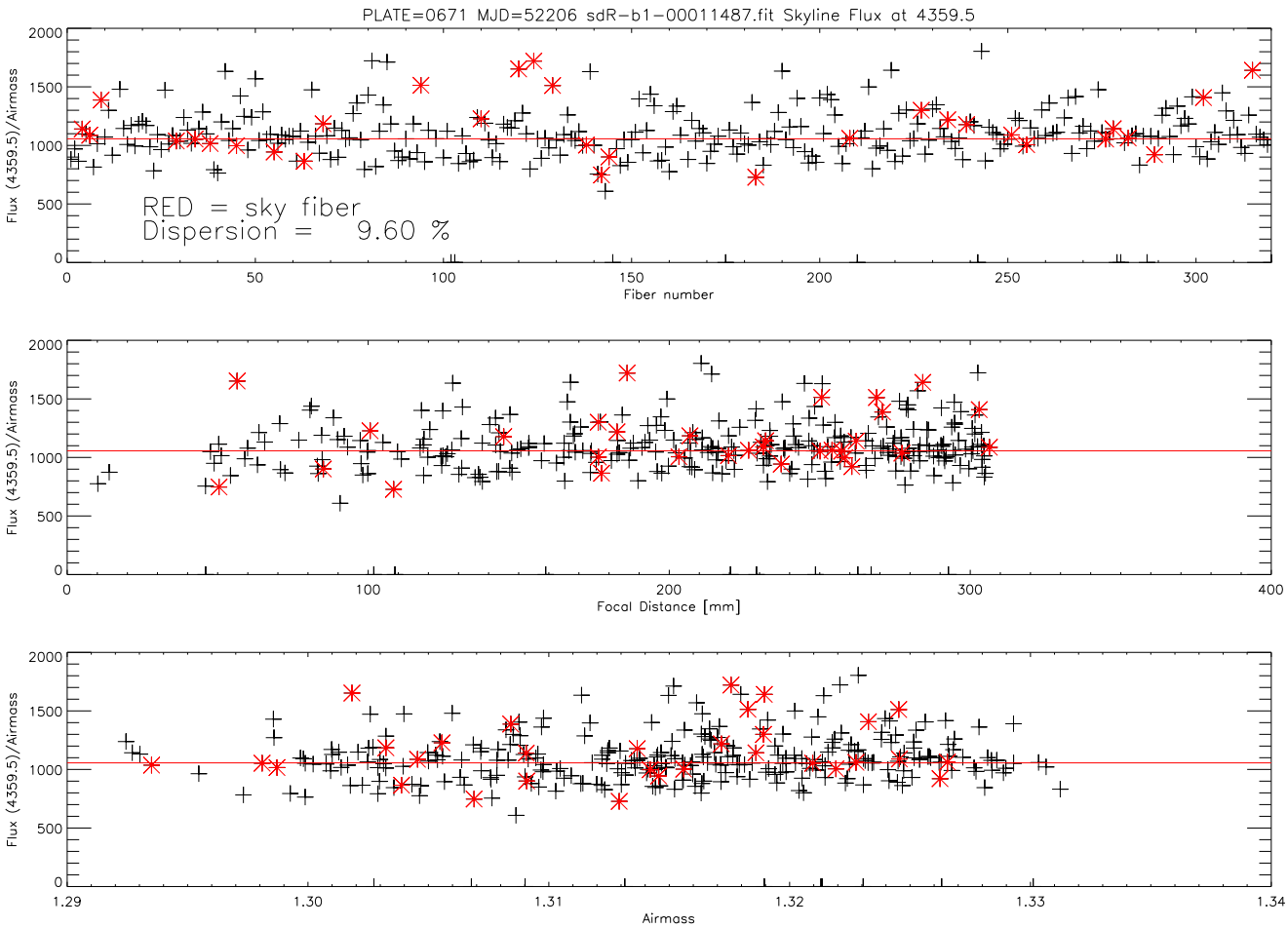

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

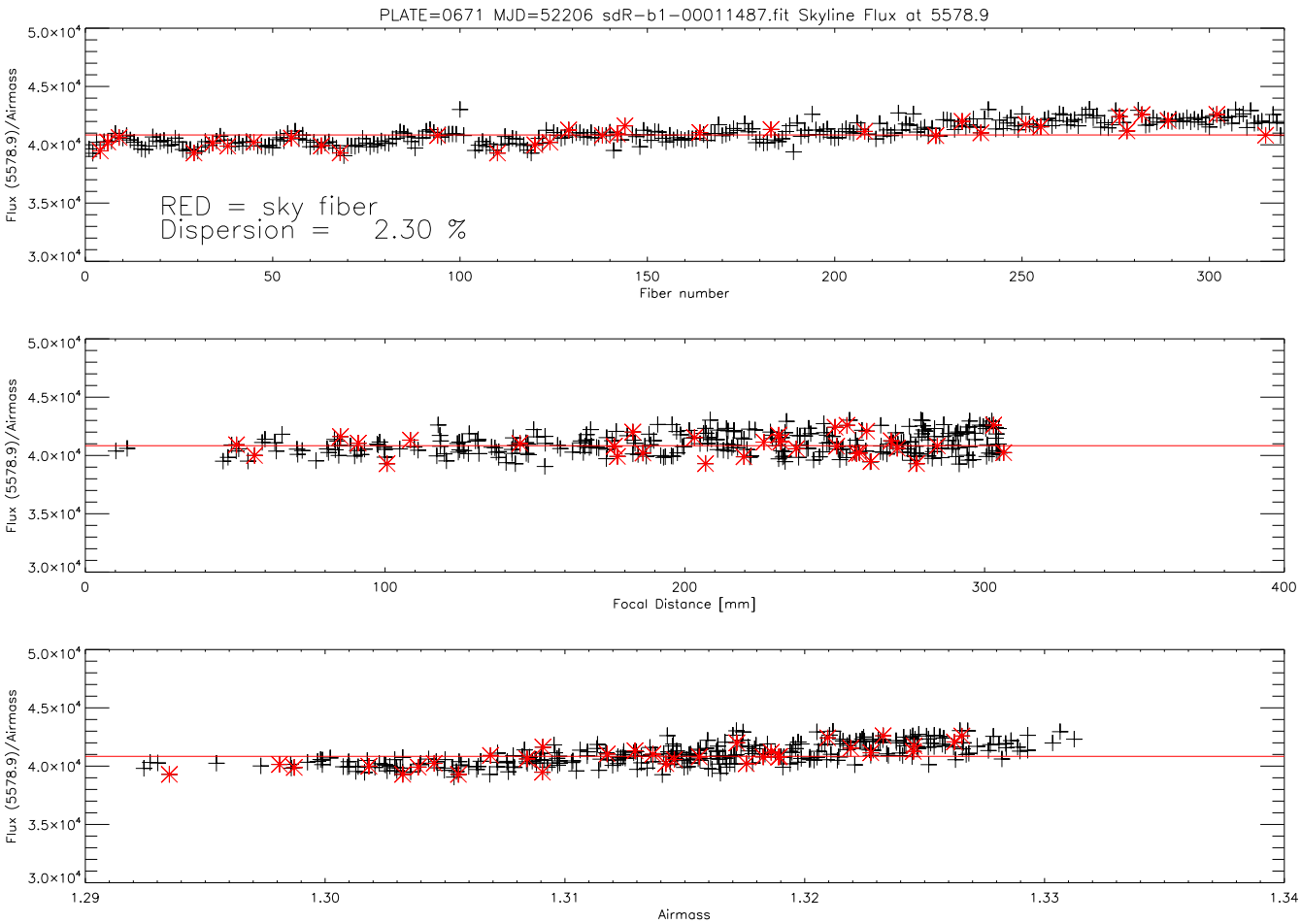

PLATE=0671 MJD=52206 sdR-b1-00011487.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

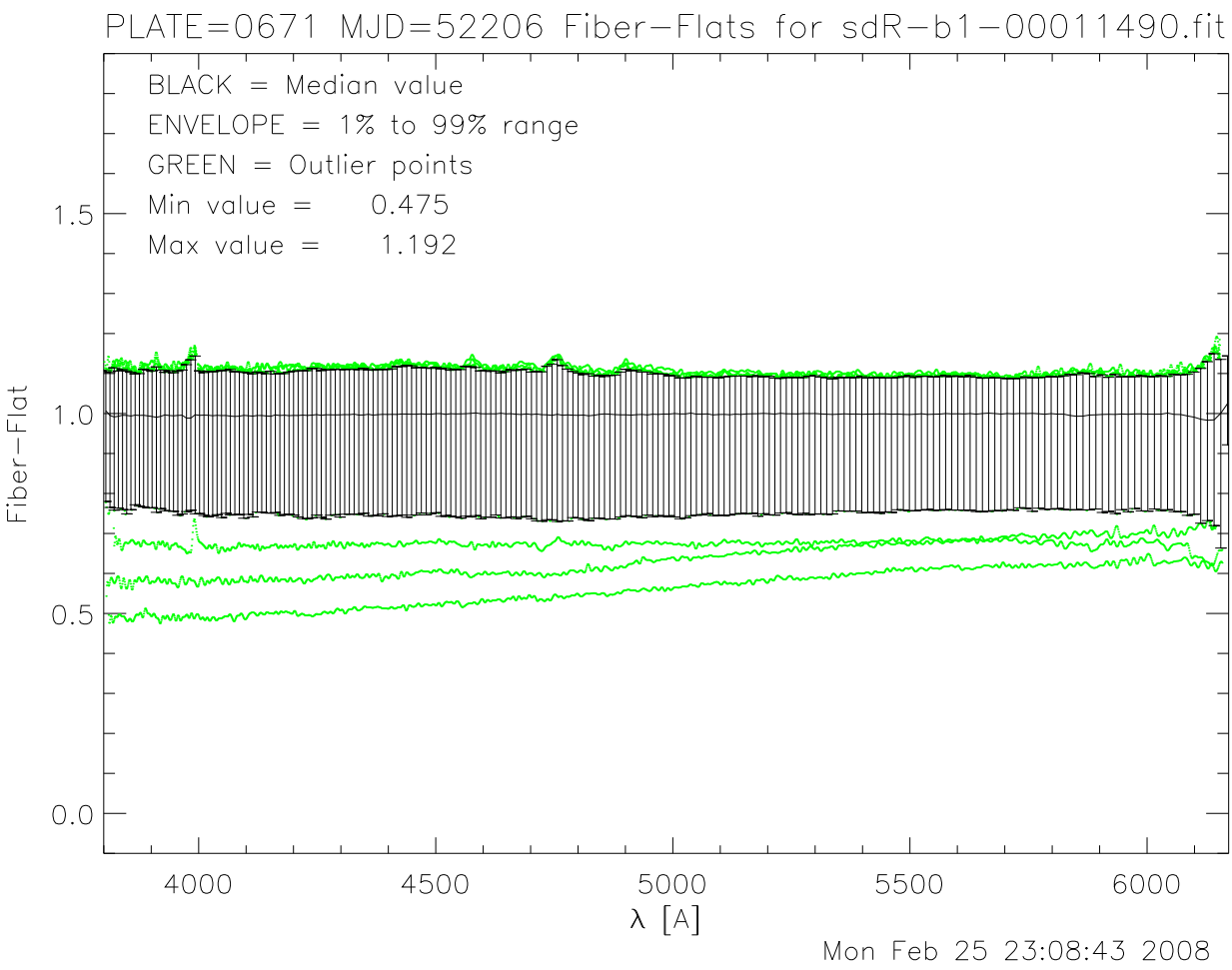

PLATE=0671 MJD=52206 sdR-b1-00011487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

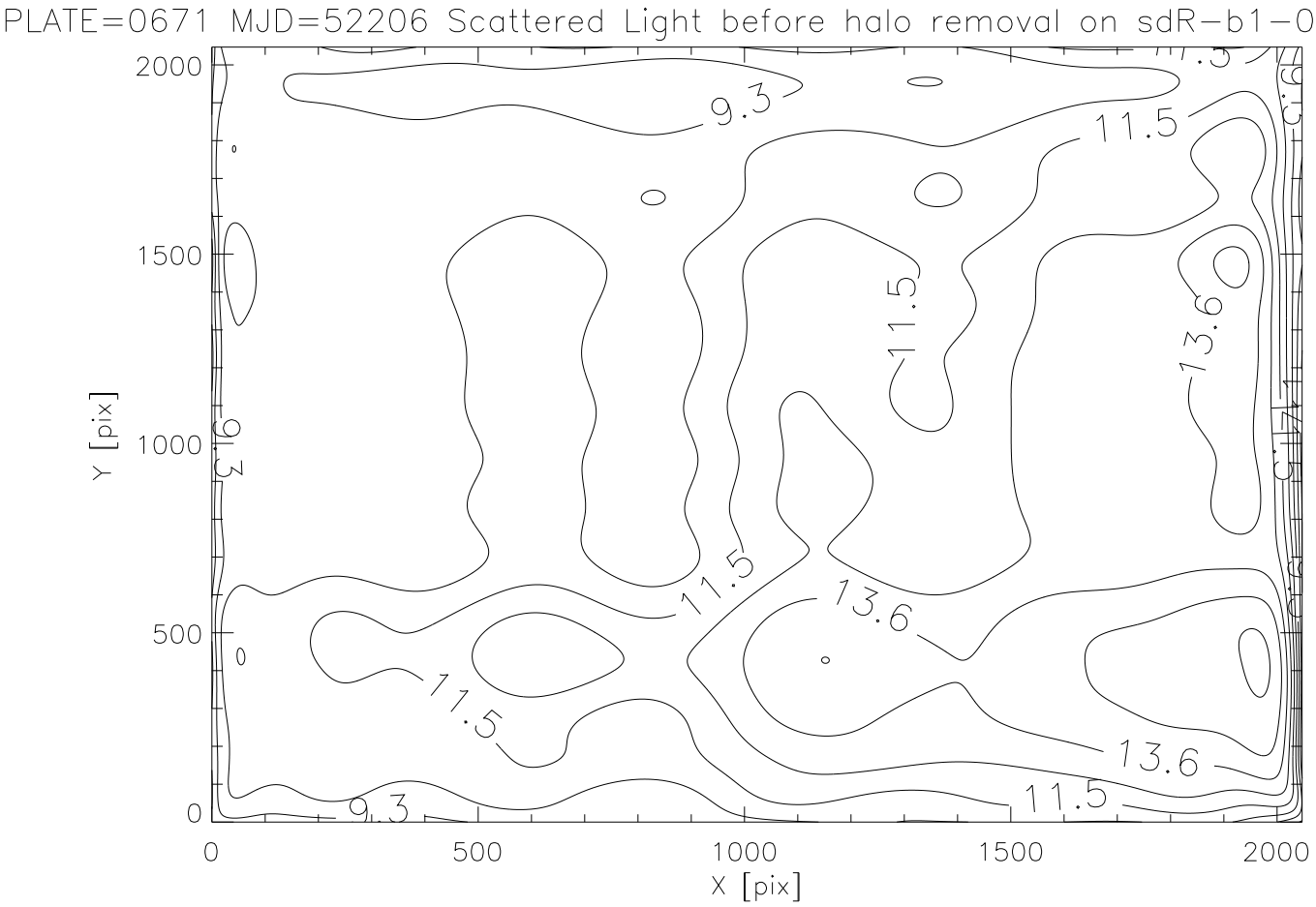

PLATE=0671 MJD=52206 sdR-b1-00011487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

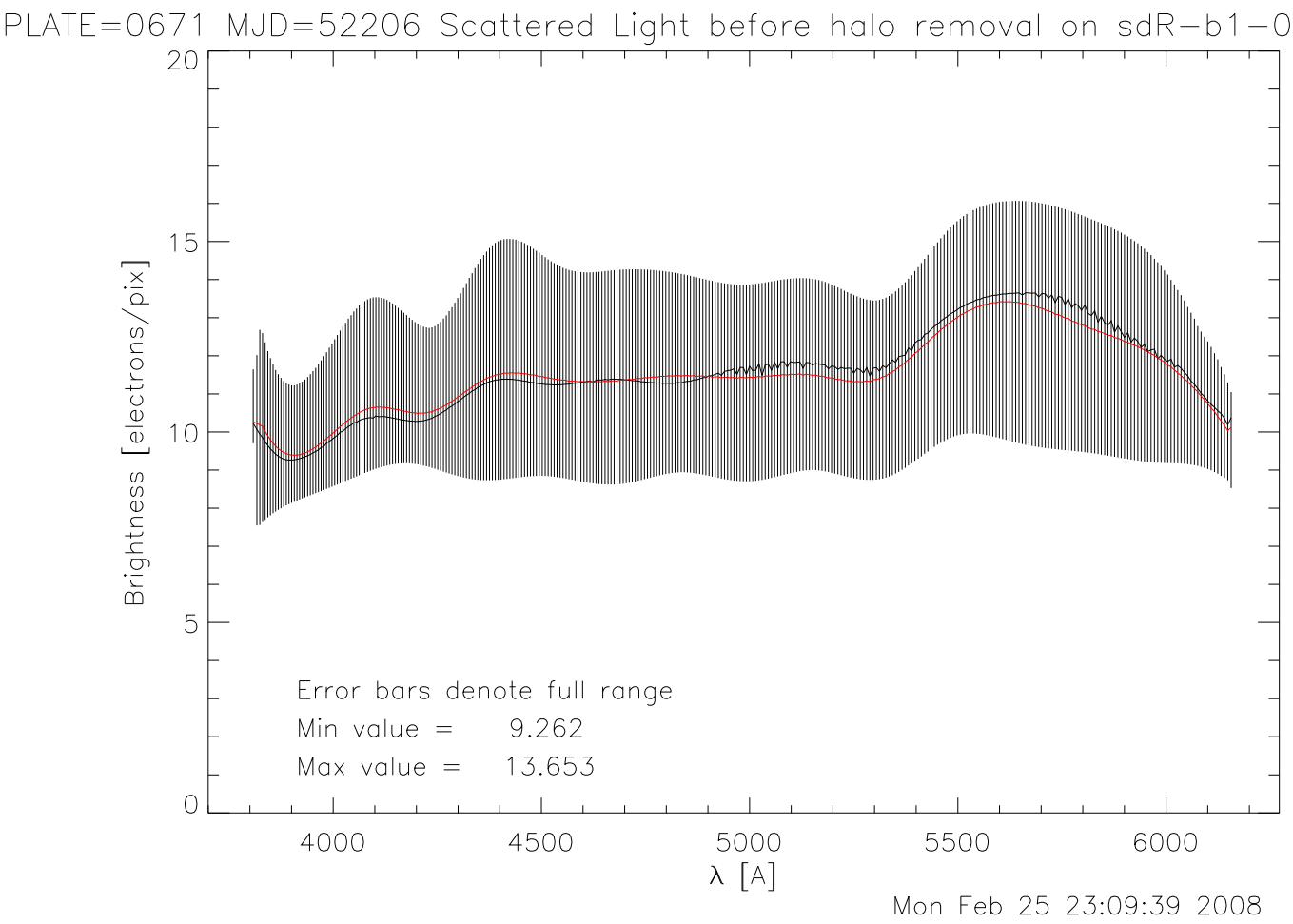

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

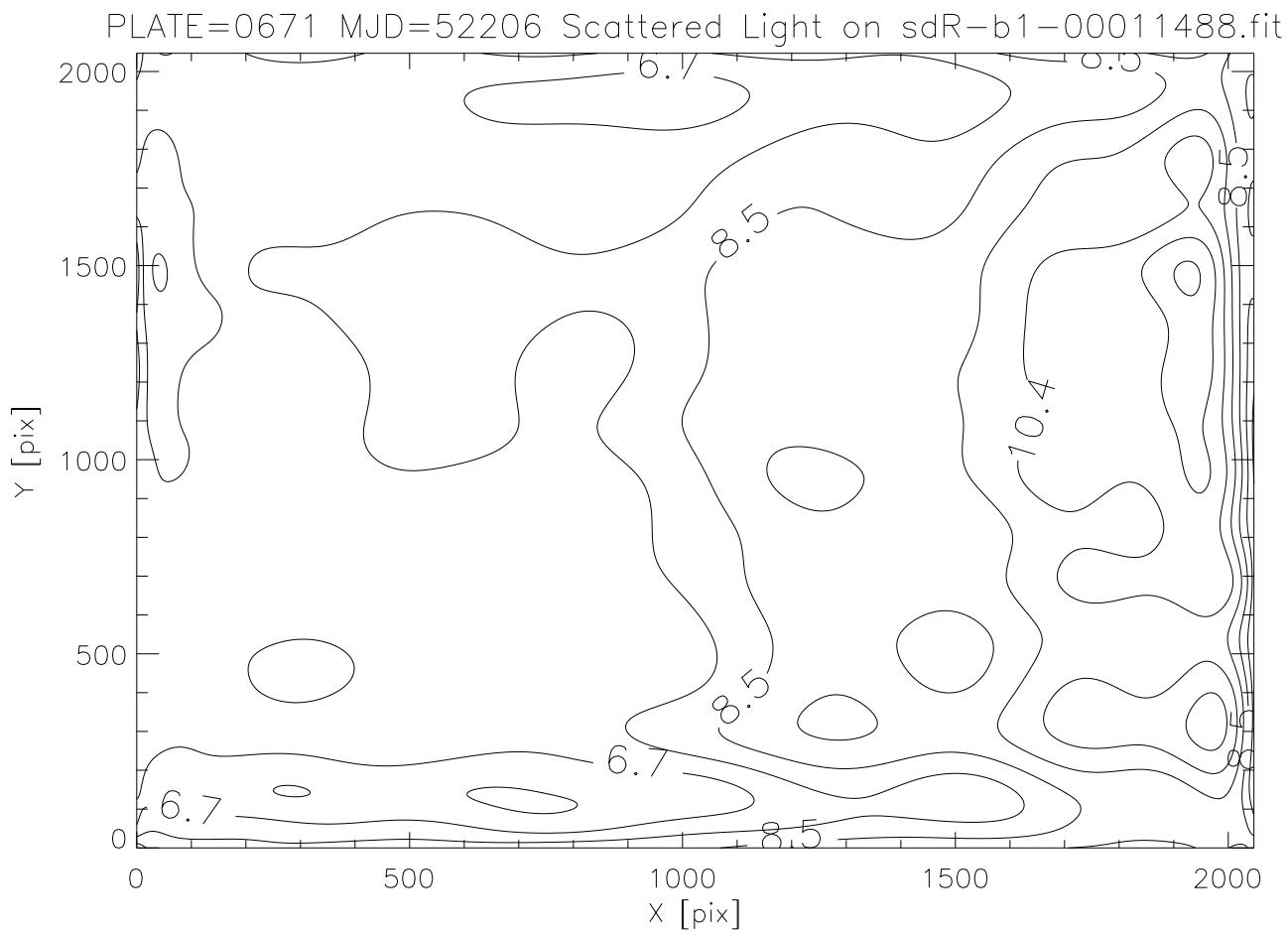

PLATE=0671 MJD=52206 sdR-b1-00011487.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.60 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

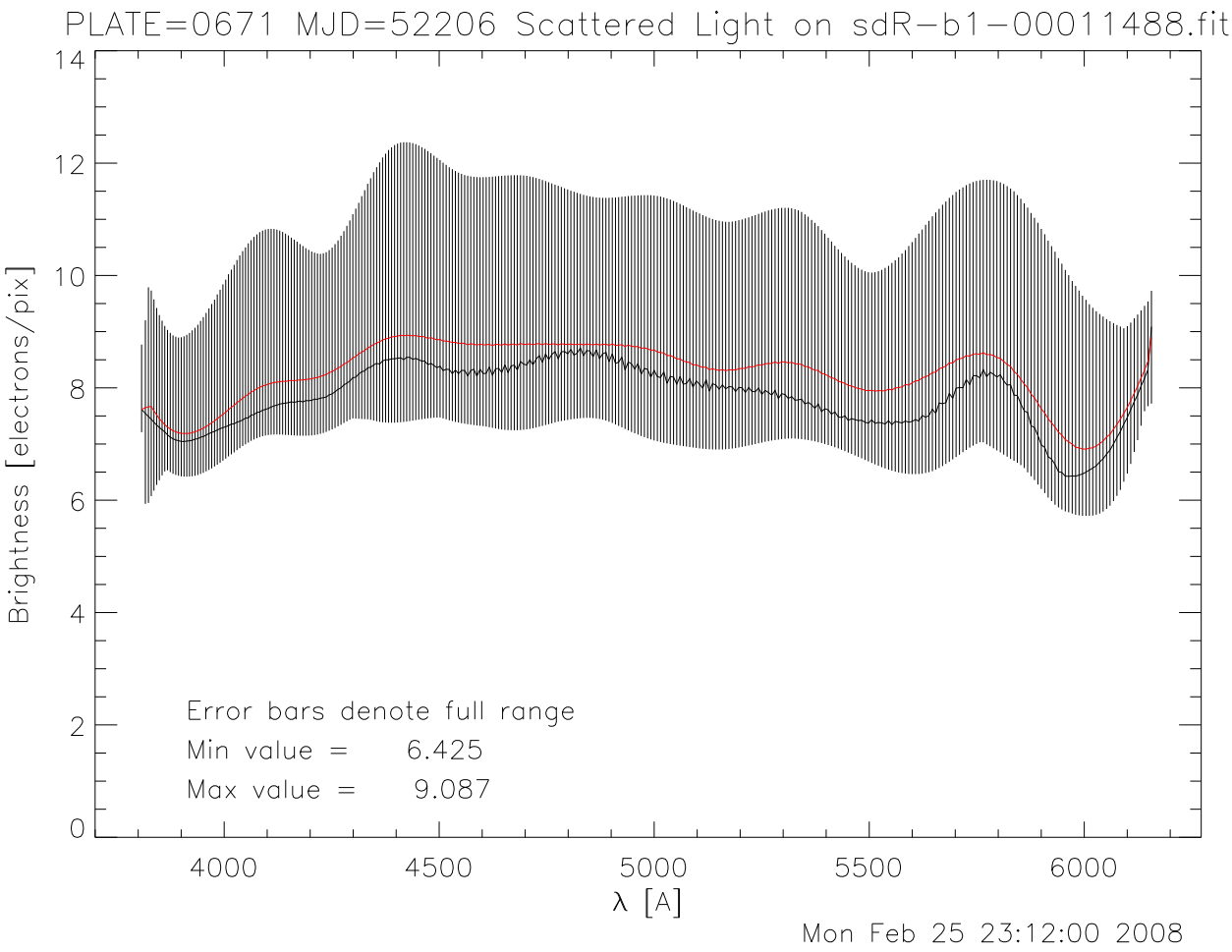

PLATE=0671 MJD=52206 sdR-b1-00011487.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.30 %
Fiber number
Focal Distance [mm]
Airmass

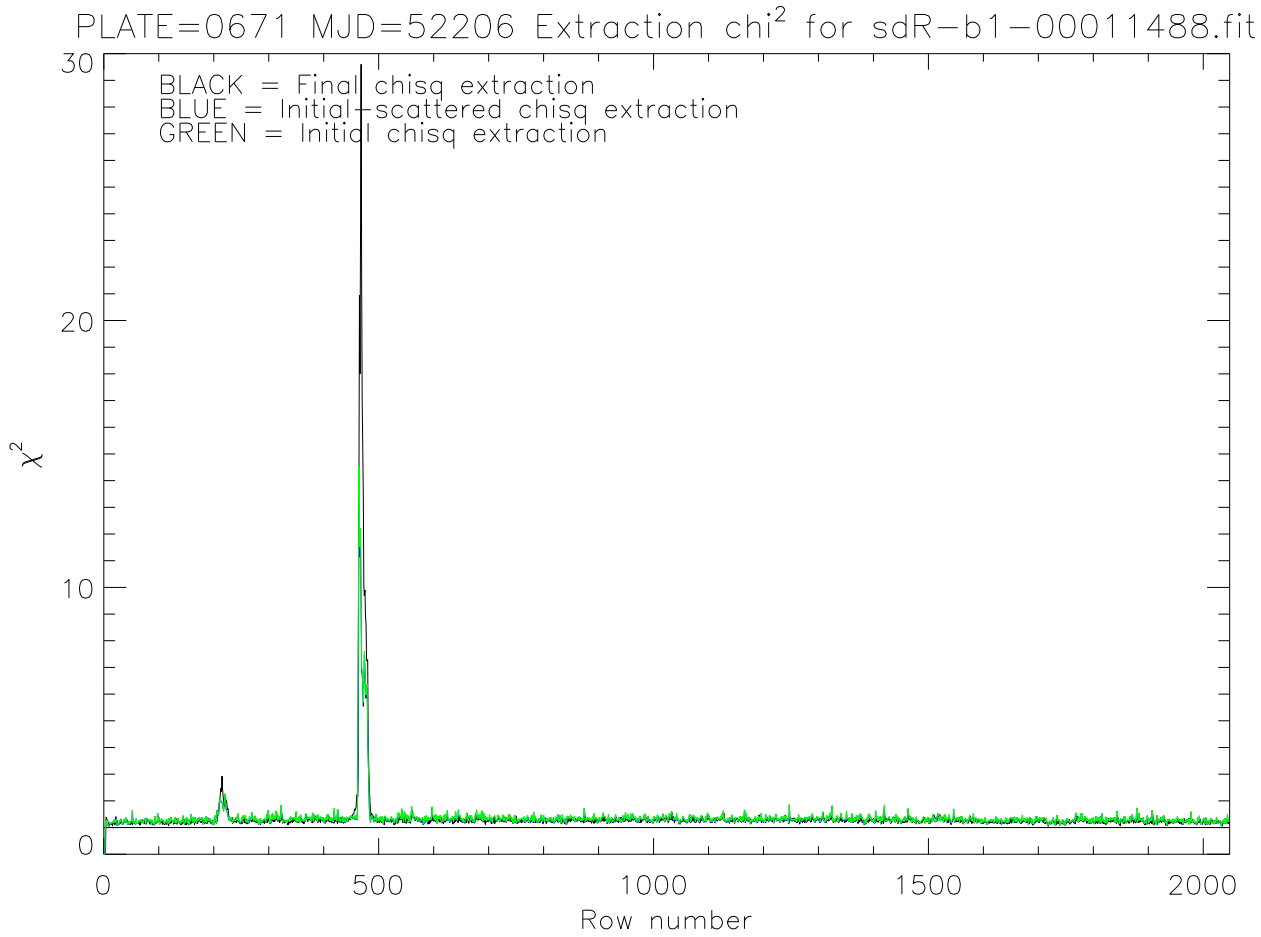

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b1-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.475
Max value = 1.192
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:08:43 2008

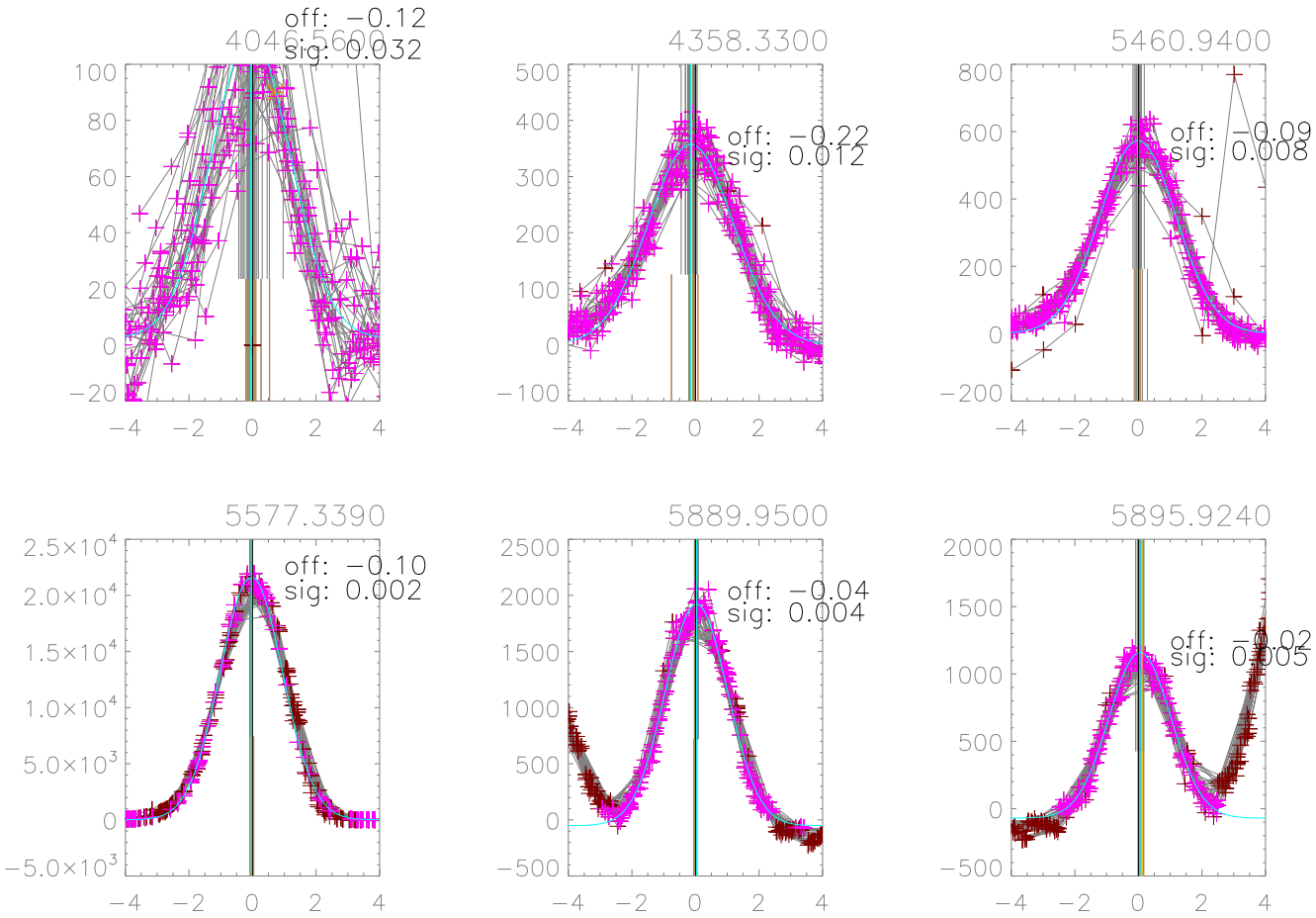

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR−b1−00011488.f
Y [pix]
X [pix]
0
500
1000
1500
2000
9.3
11.5
13.6

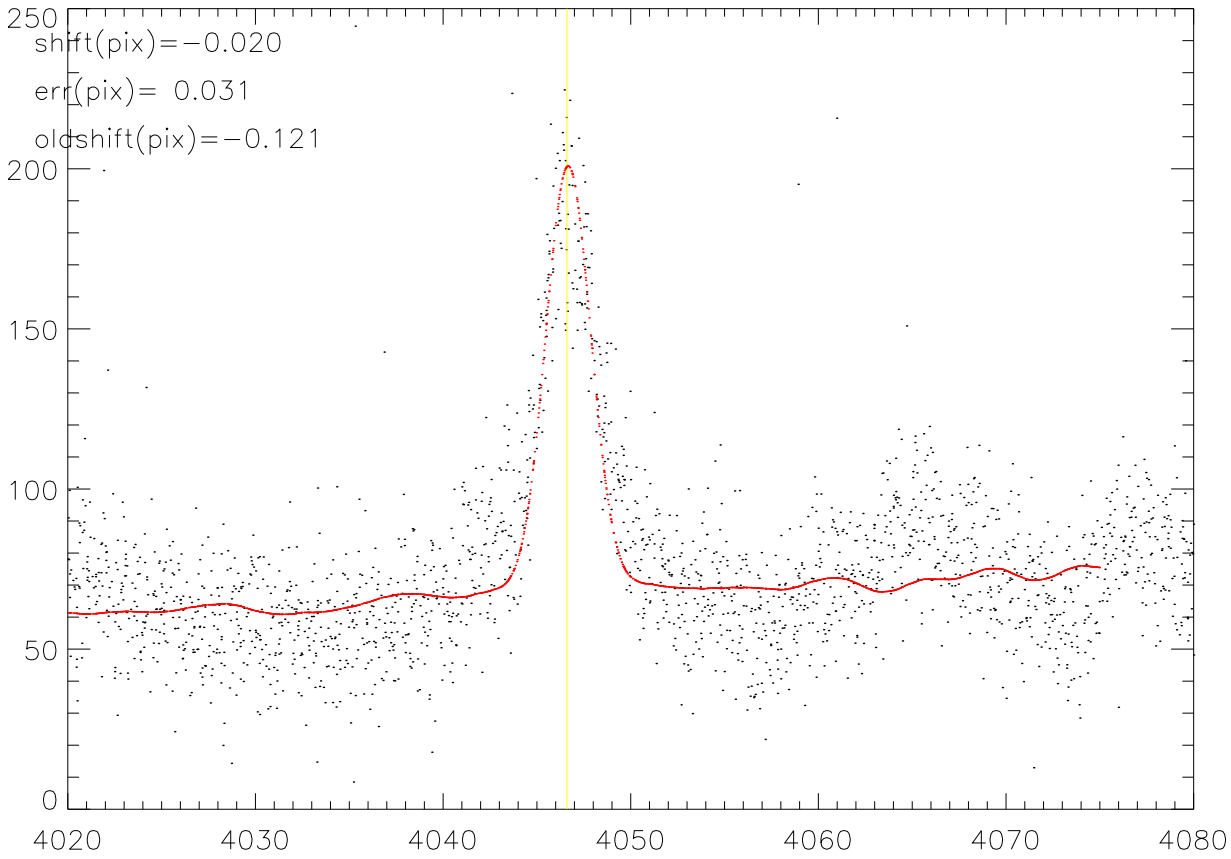

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011488.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.262
Max value = 13.653
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:09:39 2008

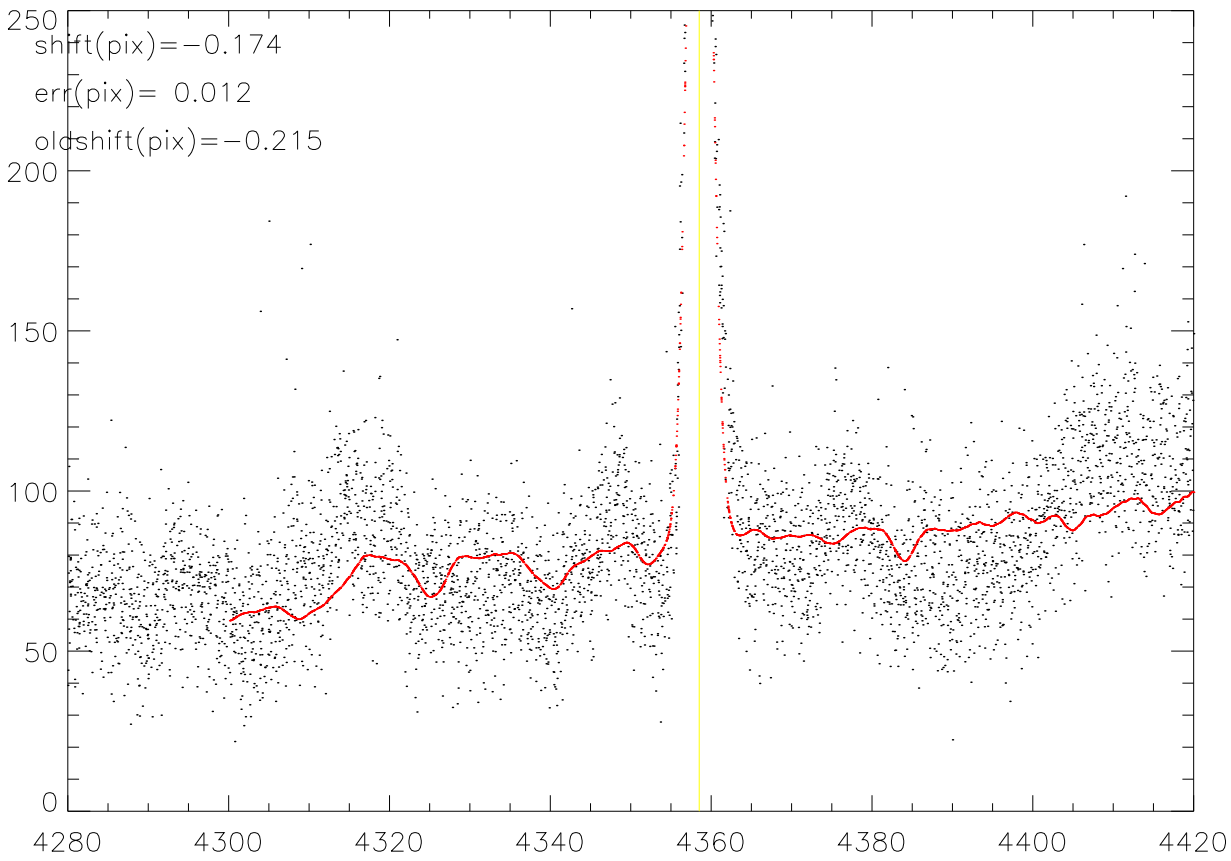

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011488.fit
6.7
8.5
10.4
Y [pix]
X [pix]
0
500
1000
1500
2000

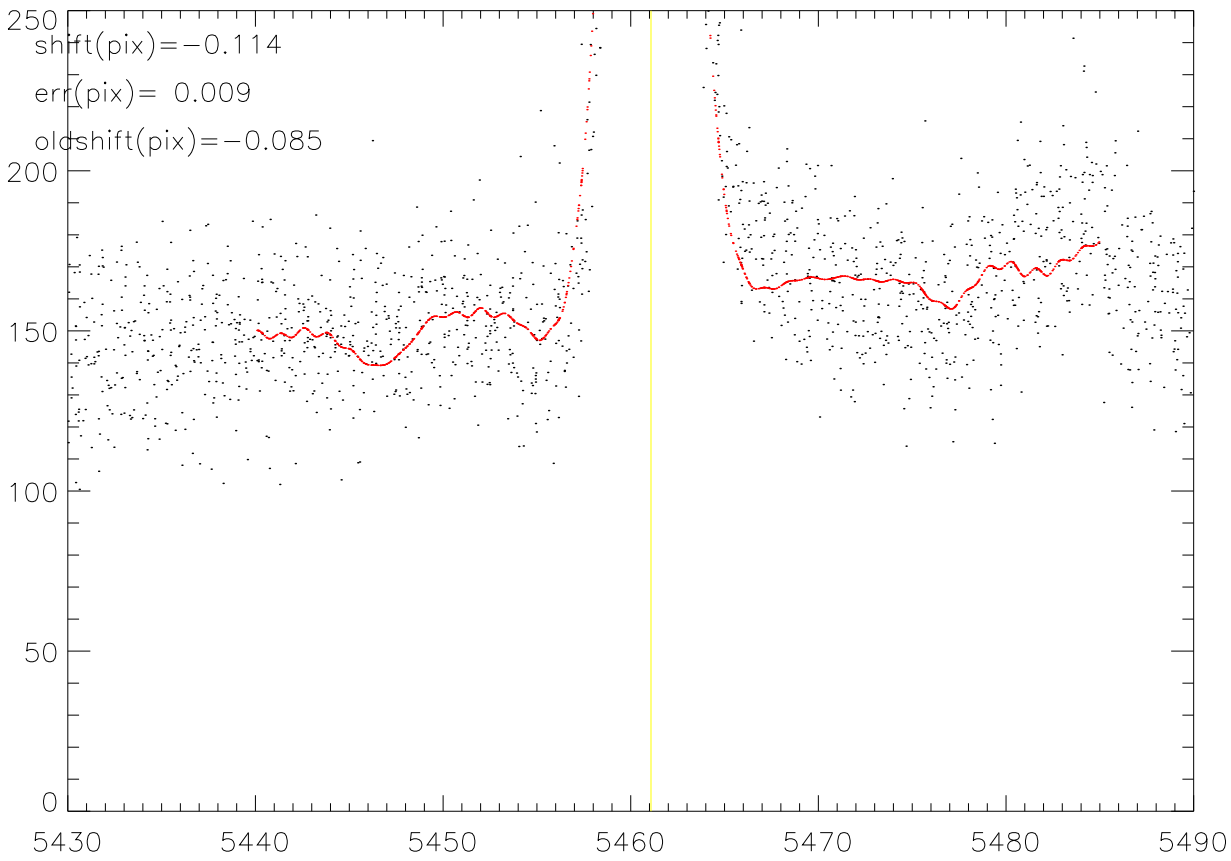

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011488.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.425
Max value = 9.087
Mon Feb 25 23:12:00 2008

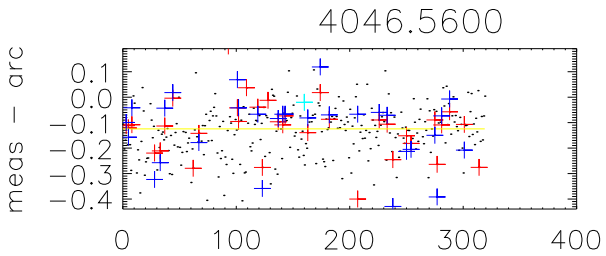

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b1-00011488.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
30
20
10
0
0
500
1000
1500
2000
Row number

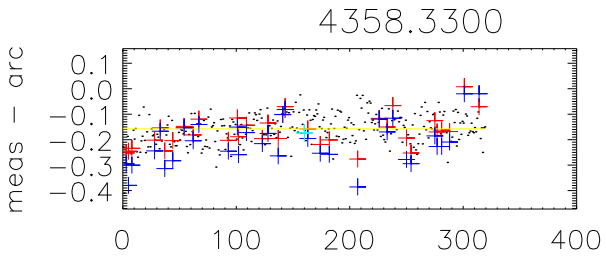

4046.5600
off: −0.12
sig: 0.032
4358.3300
off: −0.22
sig: 0.012
5460.9400
off: −0.09
sig: 0.008
5577.3390
off: −0.10
sig: 0.002
5889.9500
off: −0.04
sig: 0.004
5895.9240
off: −0.02
sig: 0.005

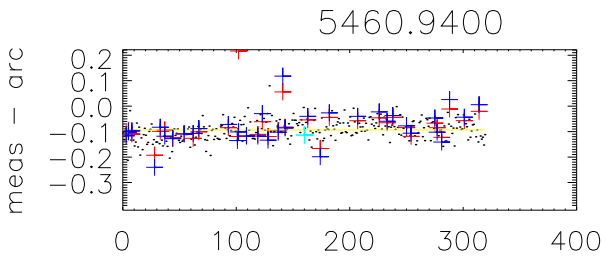

shift(pix)=−0.020
err(pix)= 0.031
oldshift(pix)=−0.121
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

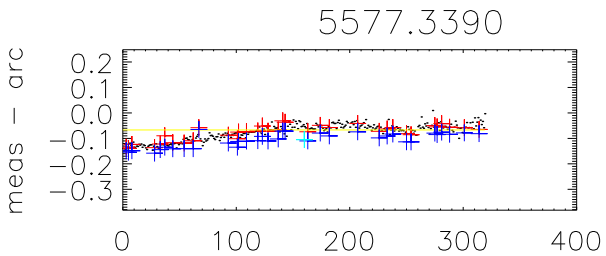

shift(pix)=−0.174
err(pix)= 0.012
oldshift(pix)=−0.215
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

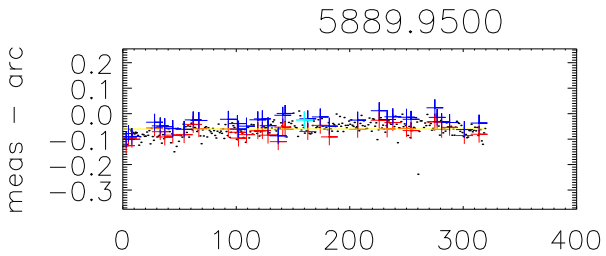

shift(pix)=−0.114
err(pix)= 0.009
oldshift(pix)=−0.085
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

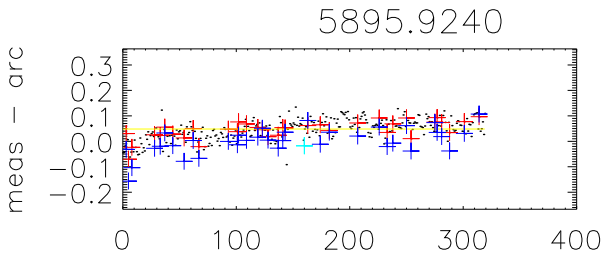

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

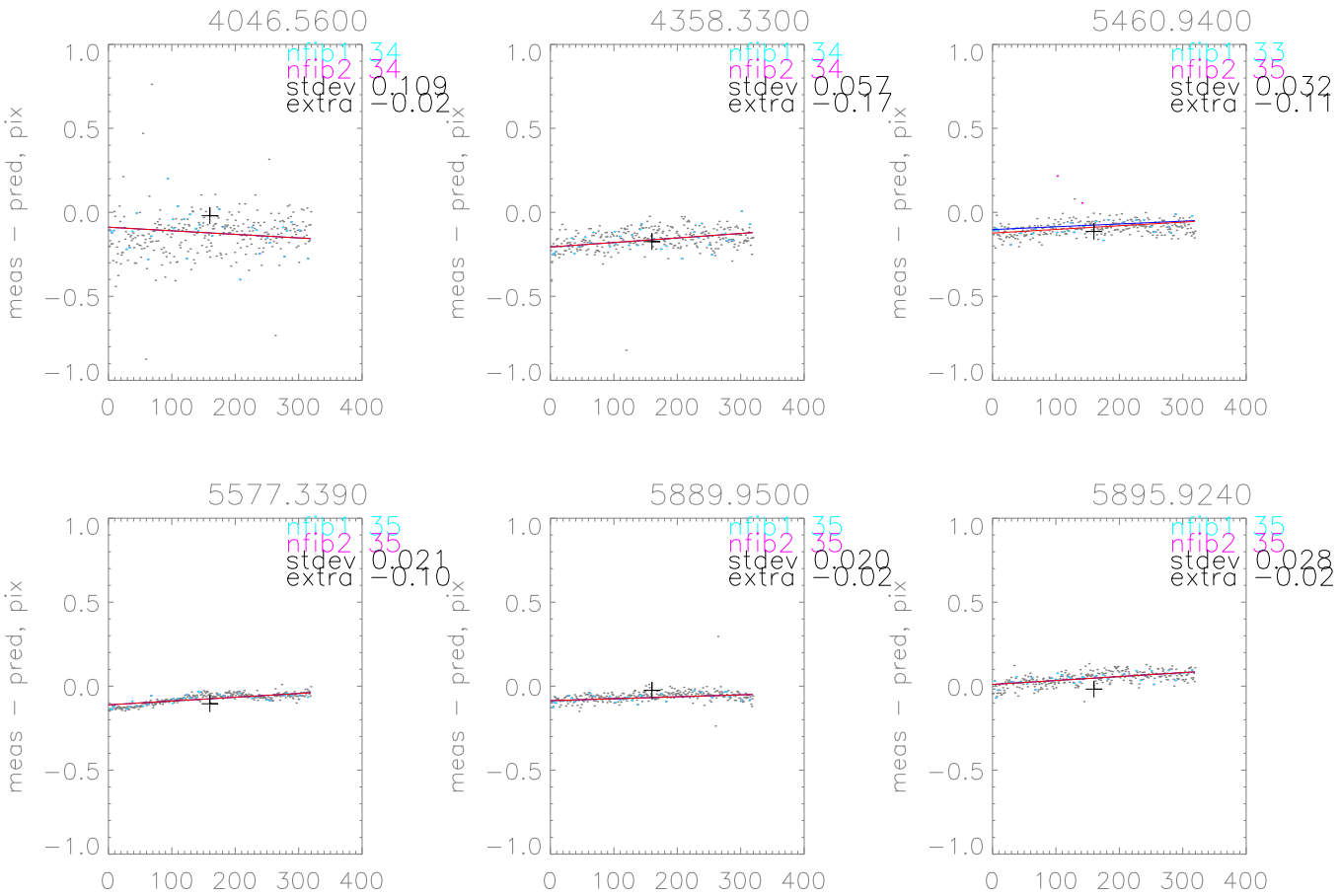

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

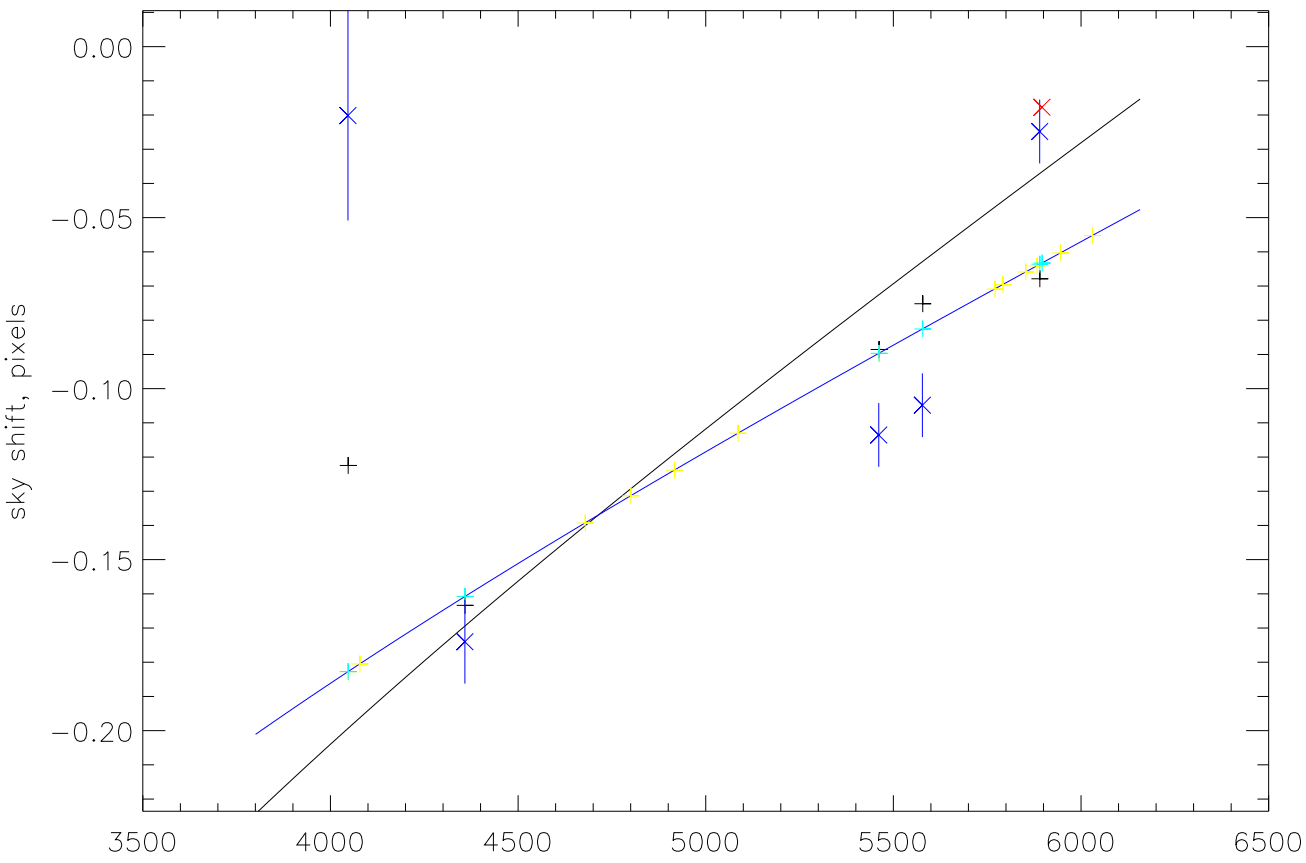

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

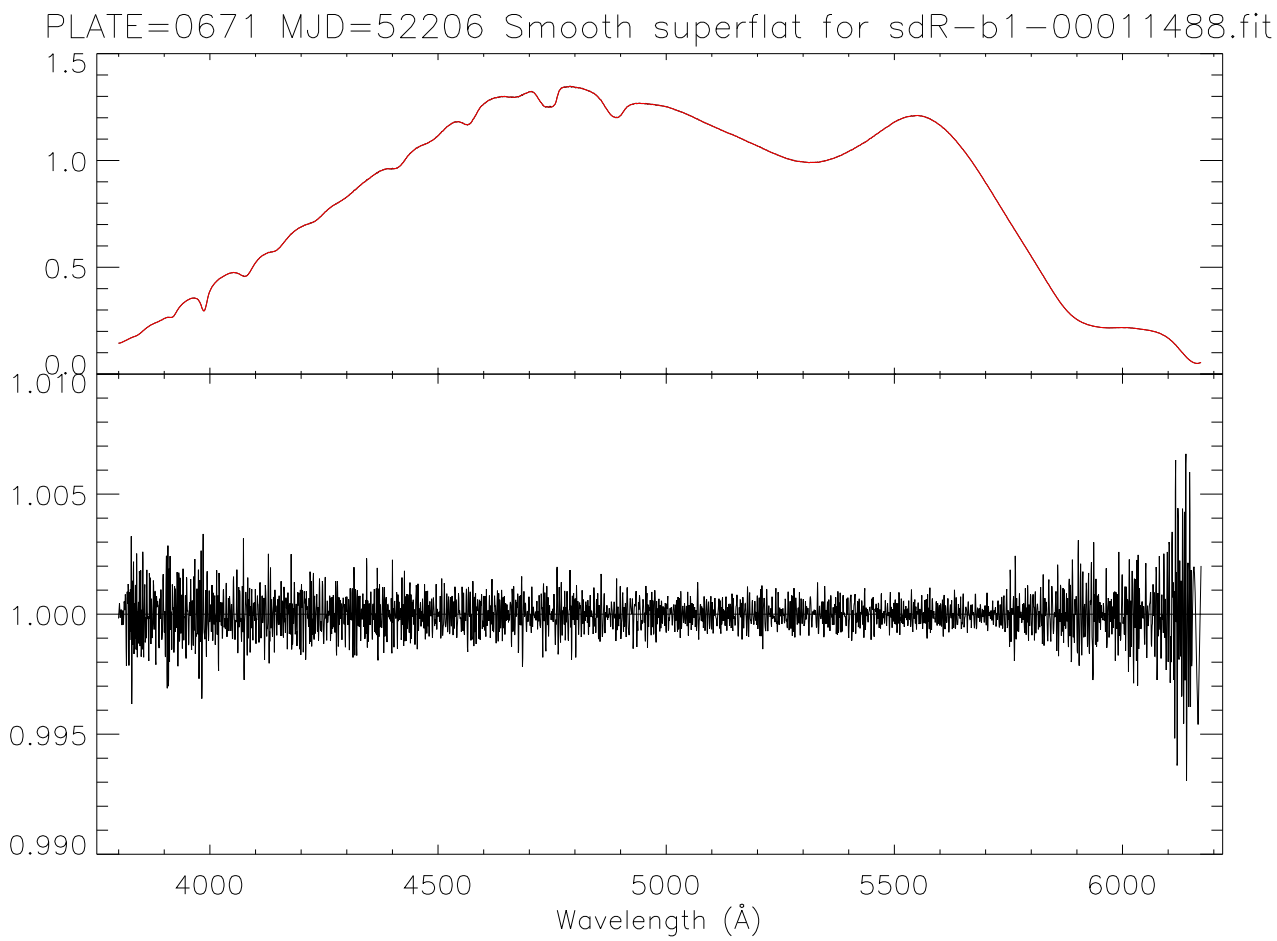

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

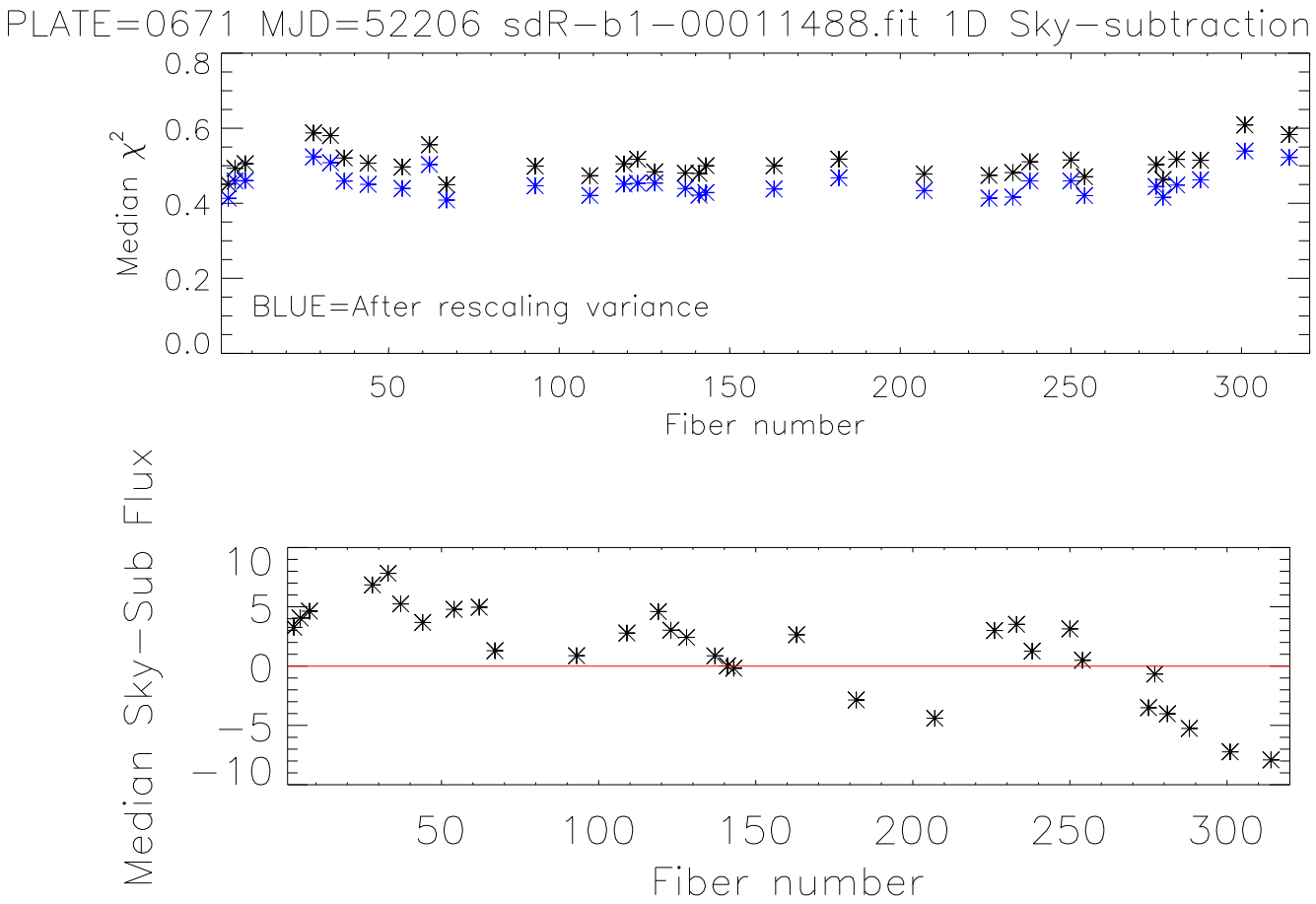

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

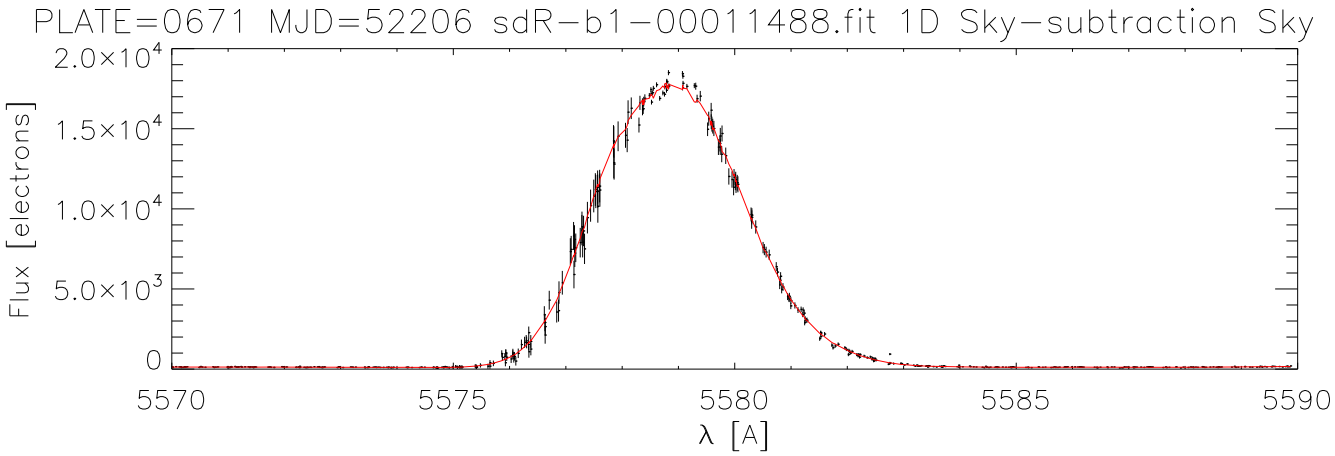

4046.5600
nfib1 34
nfib2 34
stdev 0.109
extra −0.02
4358.3300
nfib1 34
nfib2 34
stdev 0.057
extra −0.17
5460.9400
nfib1 33
nfib2 35
stdev 0.032
extra −0.11
5577.3390
nfib1 35
nfib2 35
stdev 0.021
extra −0.10
5889.9500
nfib1 35
nfib2 35
stdev 0.020
extra −0.02
5895.9240
nfib1 35
nfib2 35
stdev 0.028
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

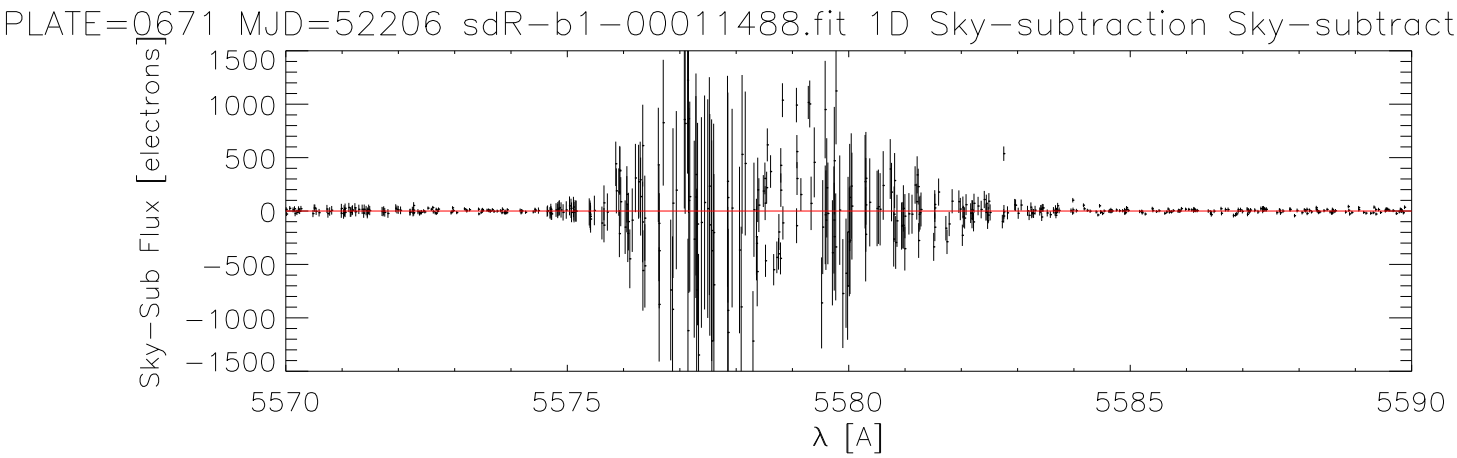

0.00
−0.05
−0.10
−0.15
−0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

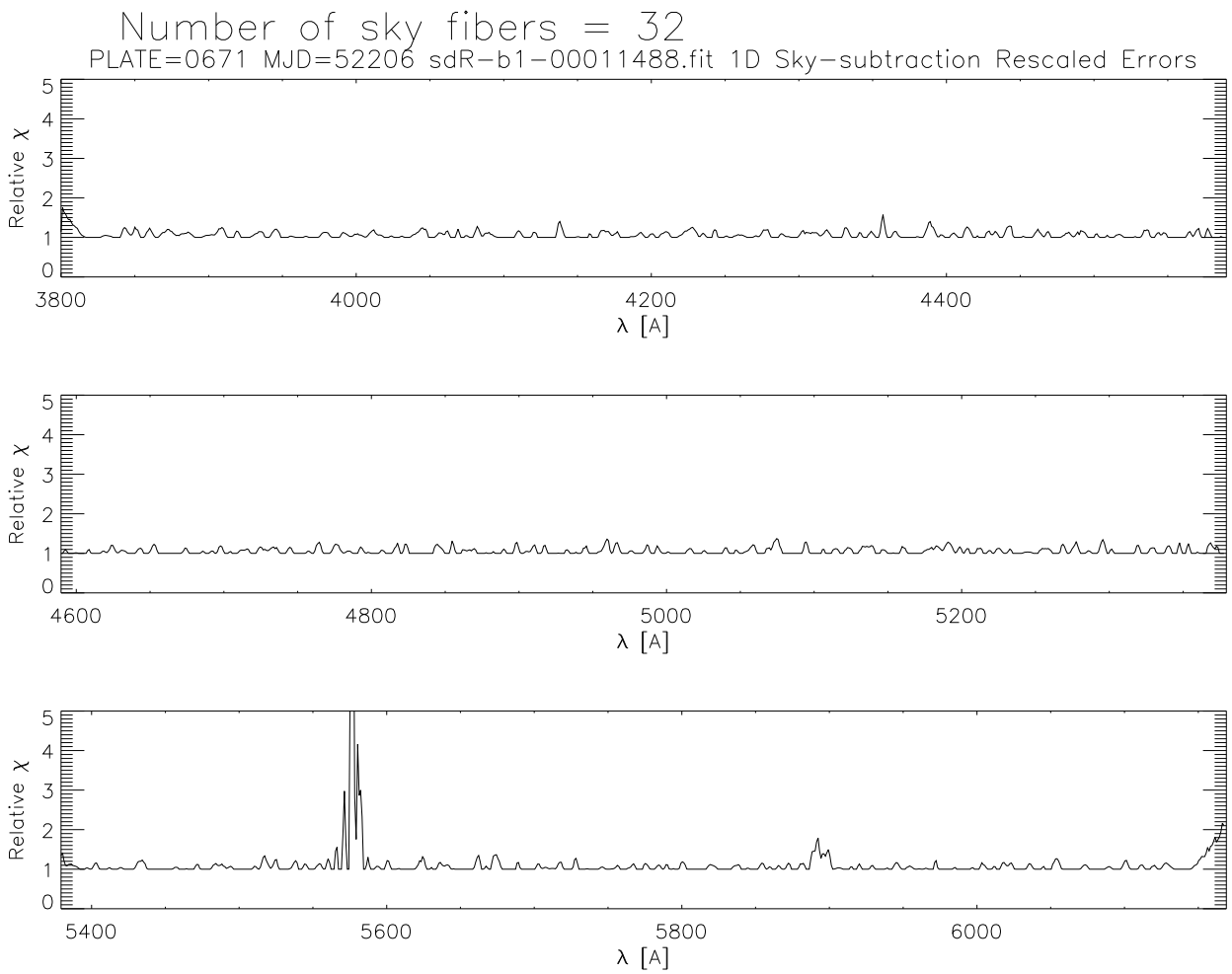
es= 0.0000

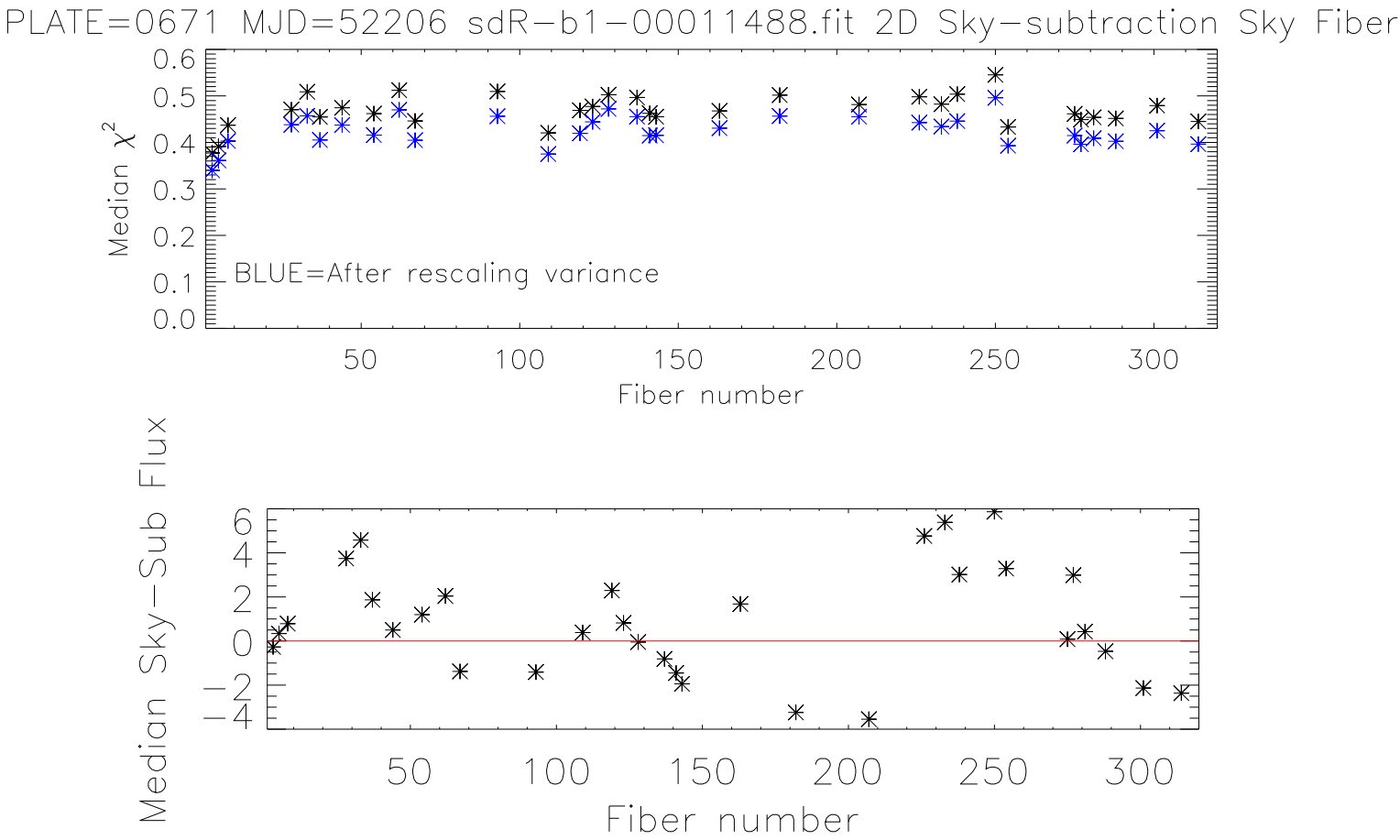

PLATE=0671 MJD=52206 Smooth superflat for sdR-b1-00011488.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

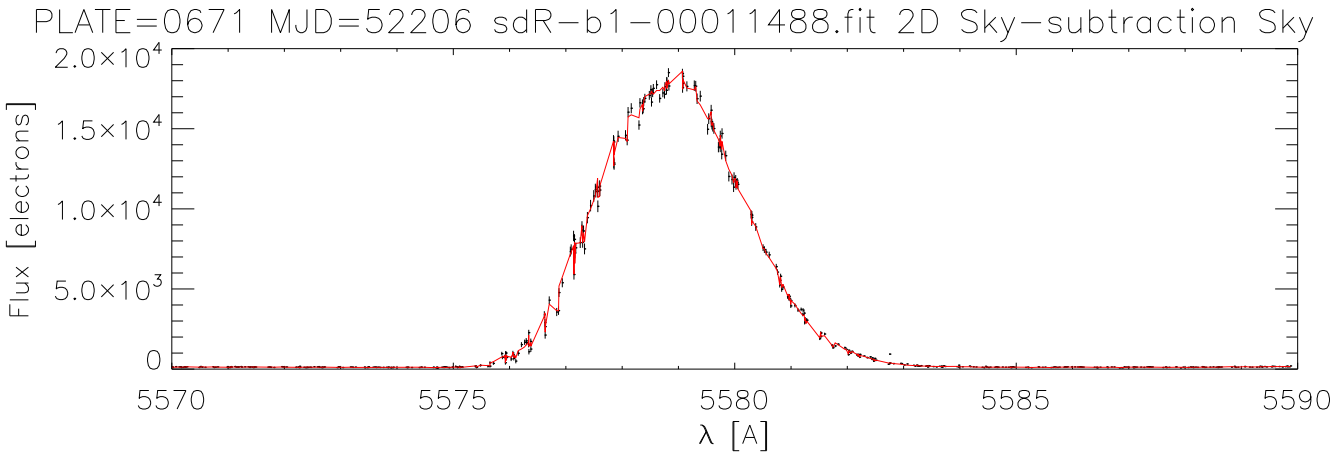

PLATE=0671 MJD=52206 sdR-b1-00011488.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

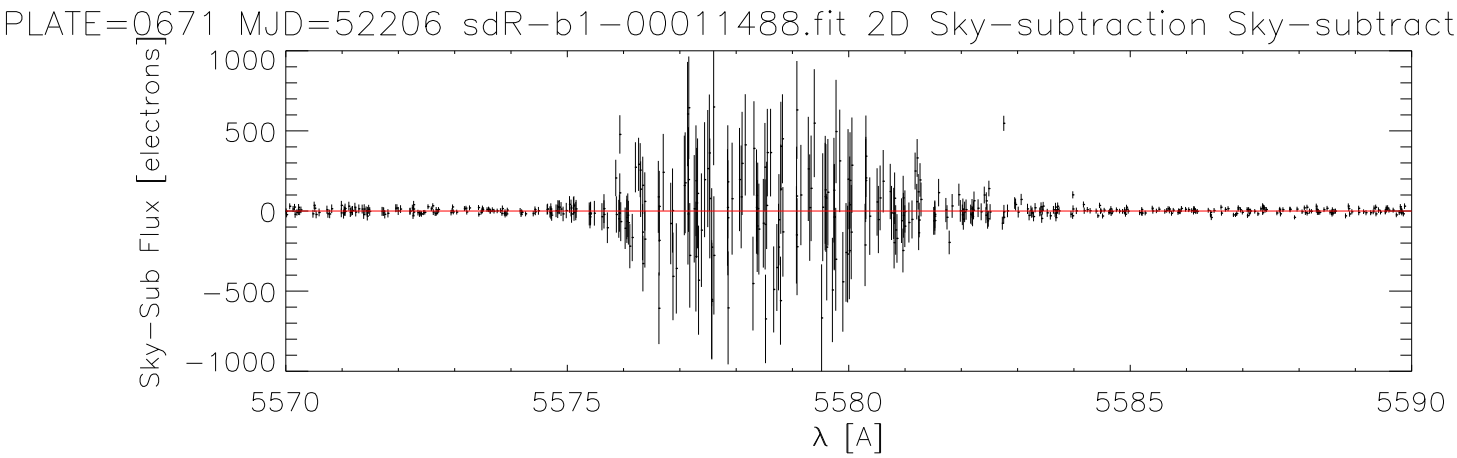

PLATE=0671 MJD=52206 sdR-b1-00011488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

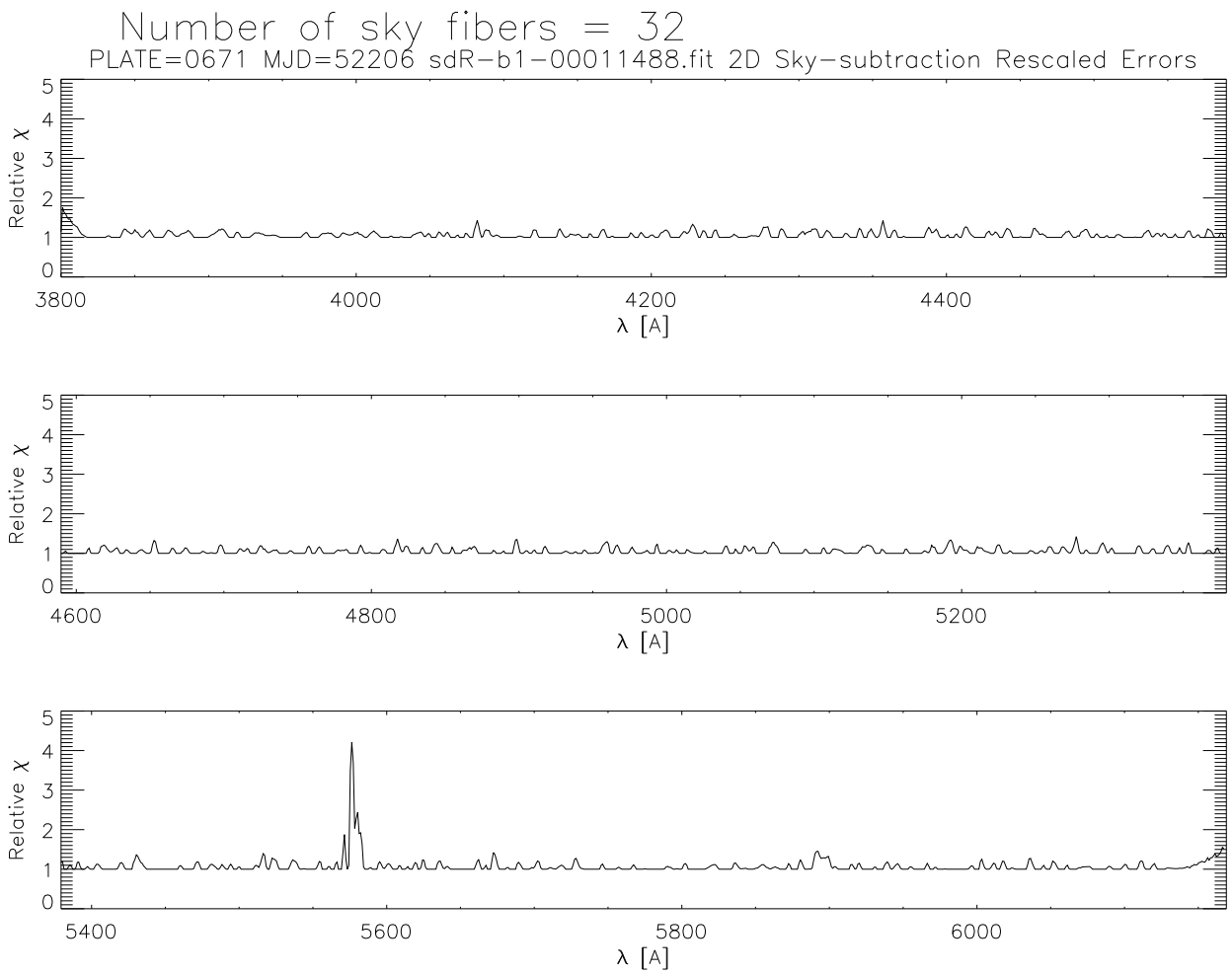

PLATE=0671 MJD=52206 sdR-b1-00011488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
−1500
5570
5575
5580
5585
5590
λ [A]

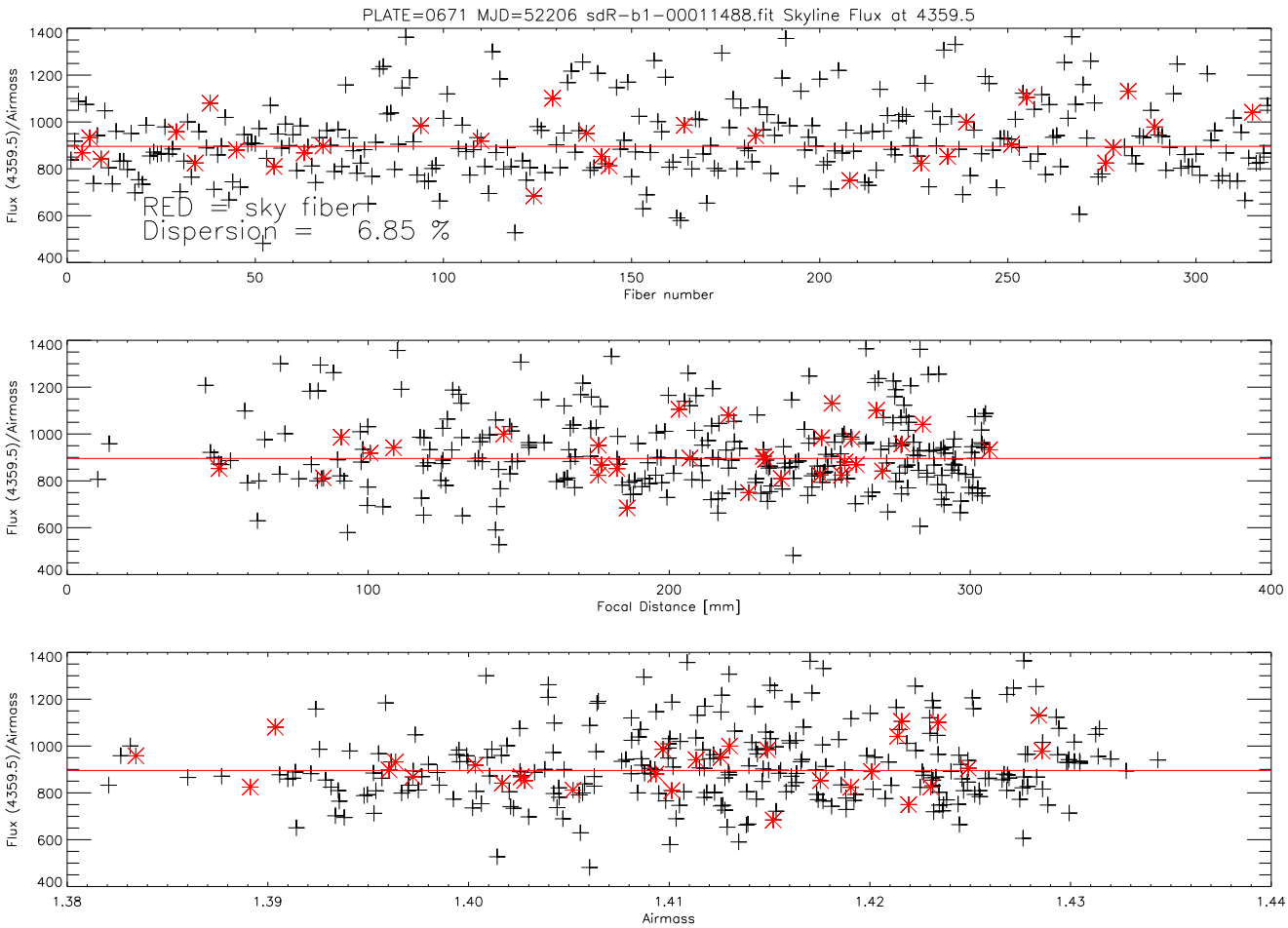

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

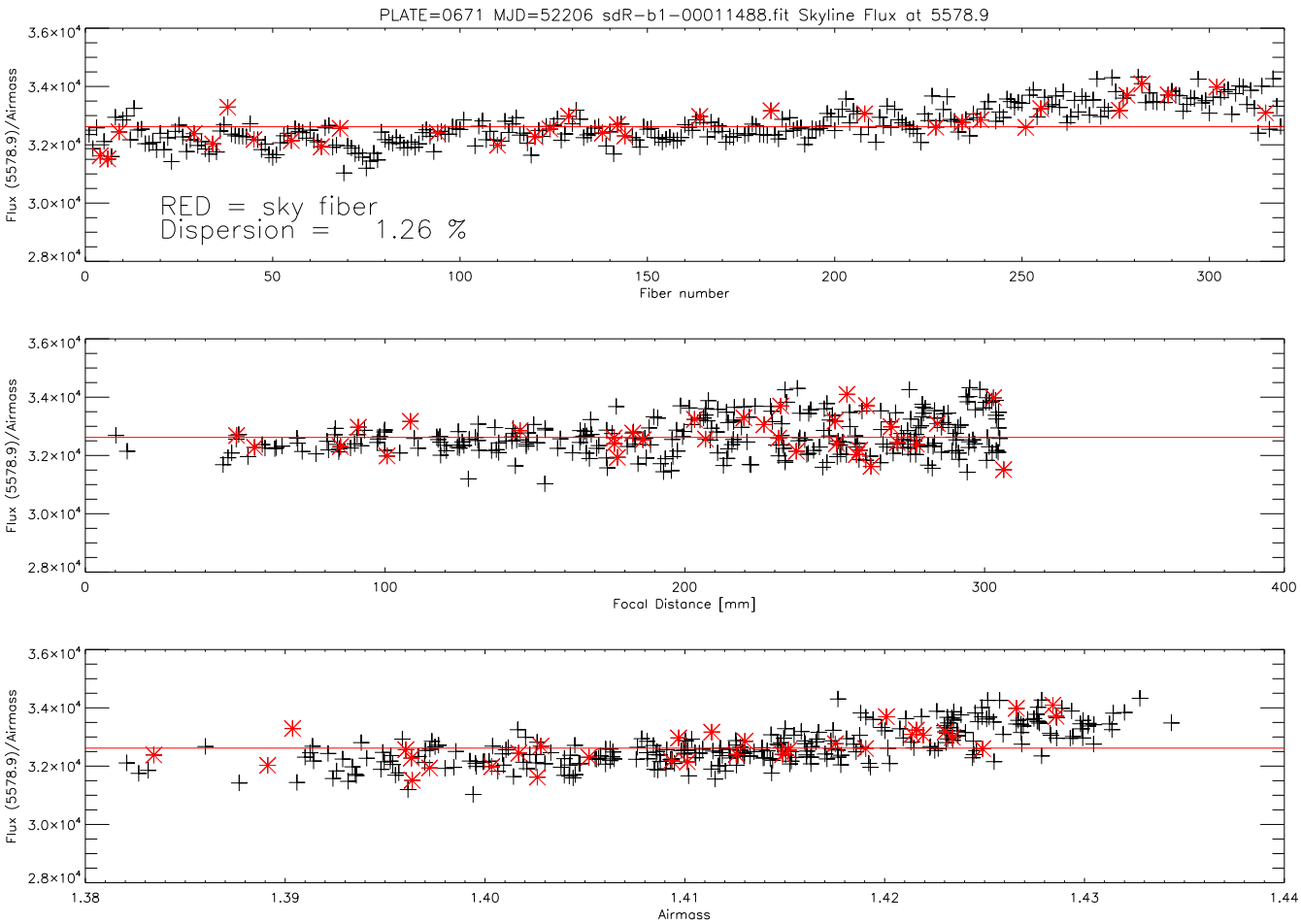

PLATE=0671 MJD=52206 sdR-b1-00011488.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

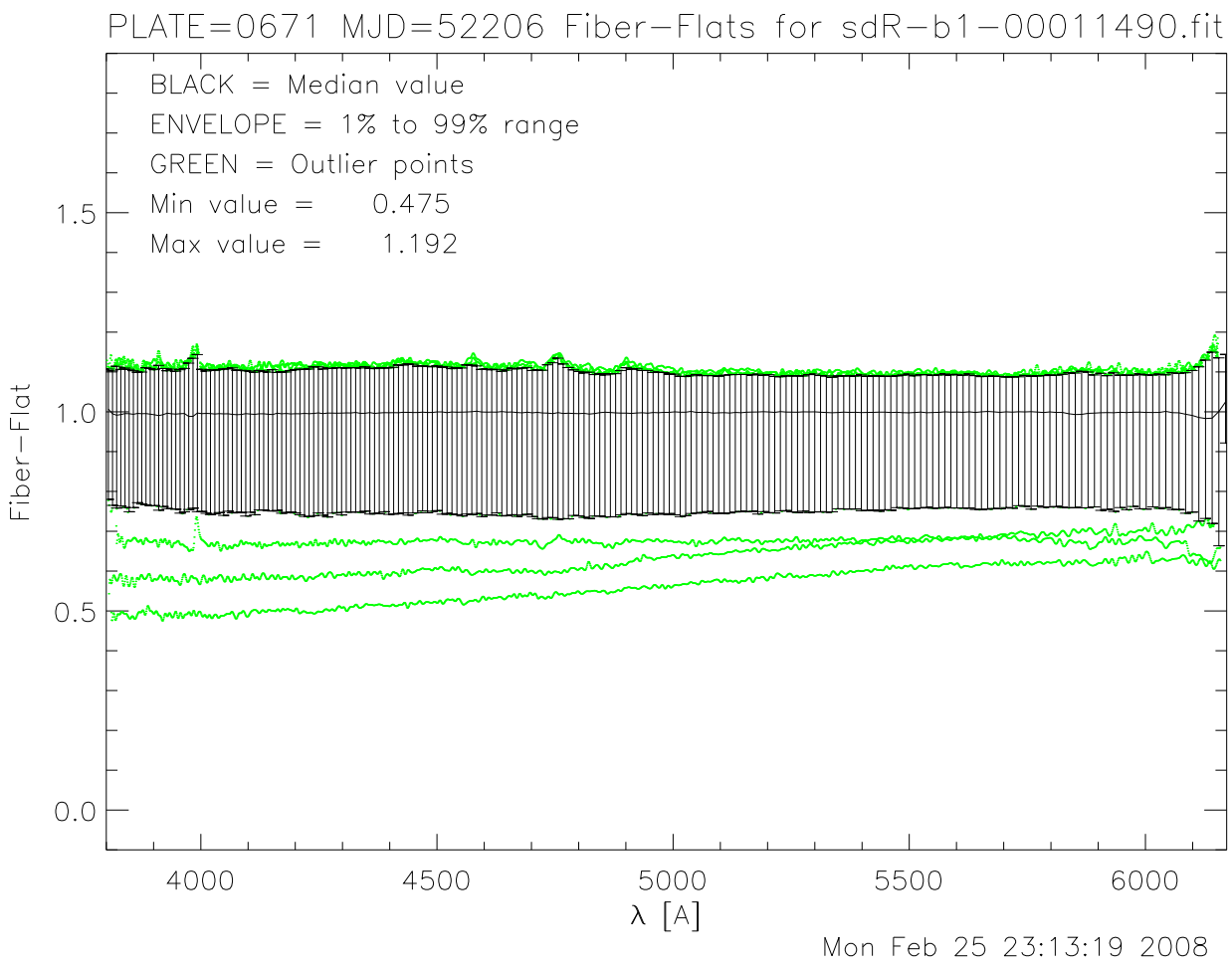

PLATE=0671 MJD=52206 sdR-b1-00011488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

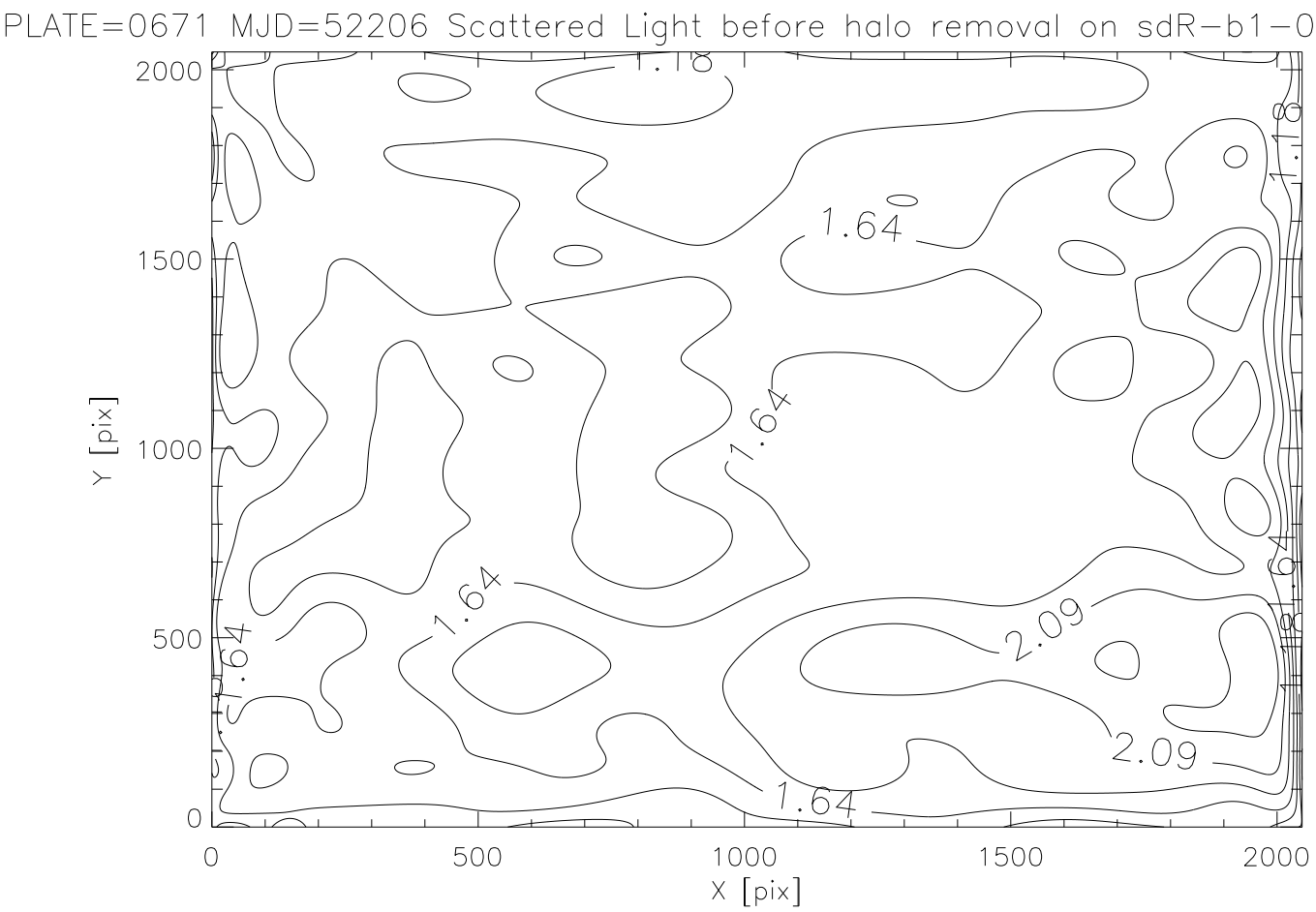

PLATE=0671 MJD=52206 sdR-b1-00011488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

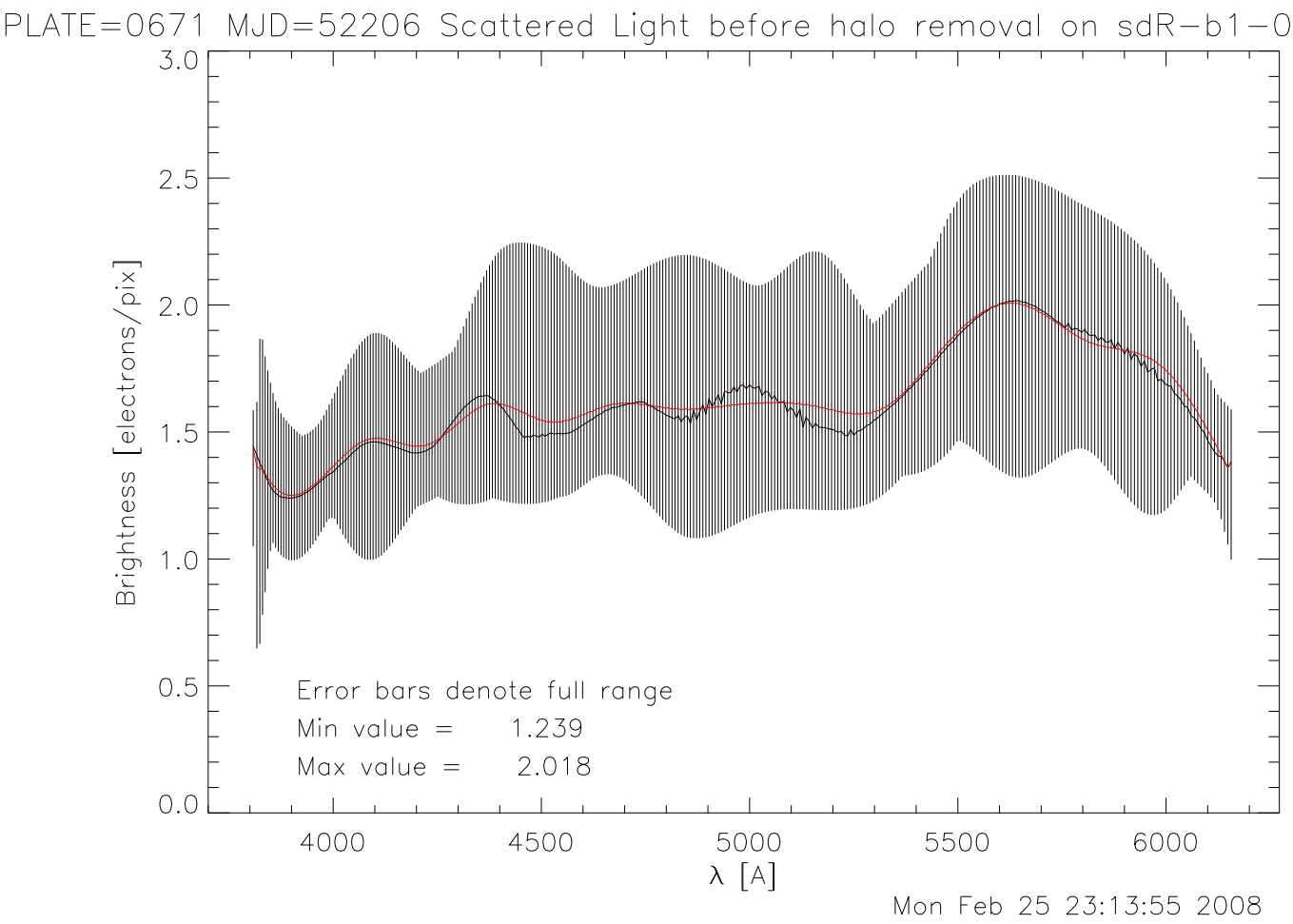

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

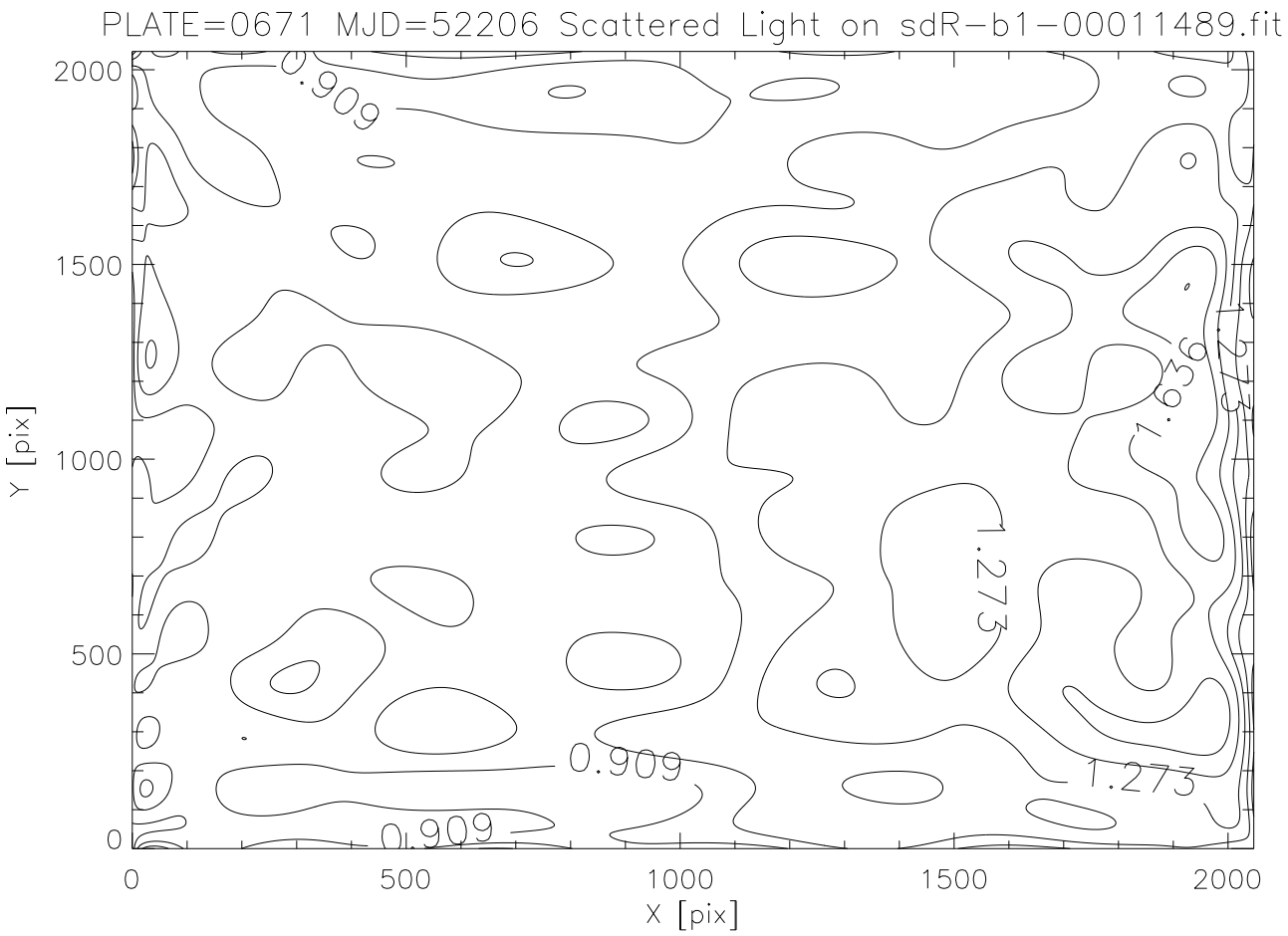

PLATE=0671 MJD=52206 sdR-b1-00011488.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.85 %
Fiber number
Focal Distance [mm]
Airmass

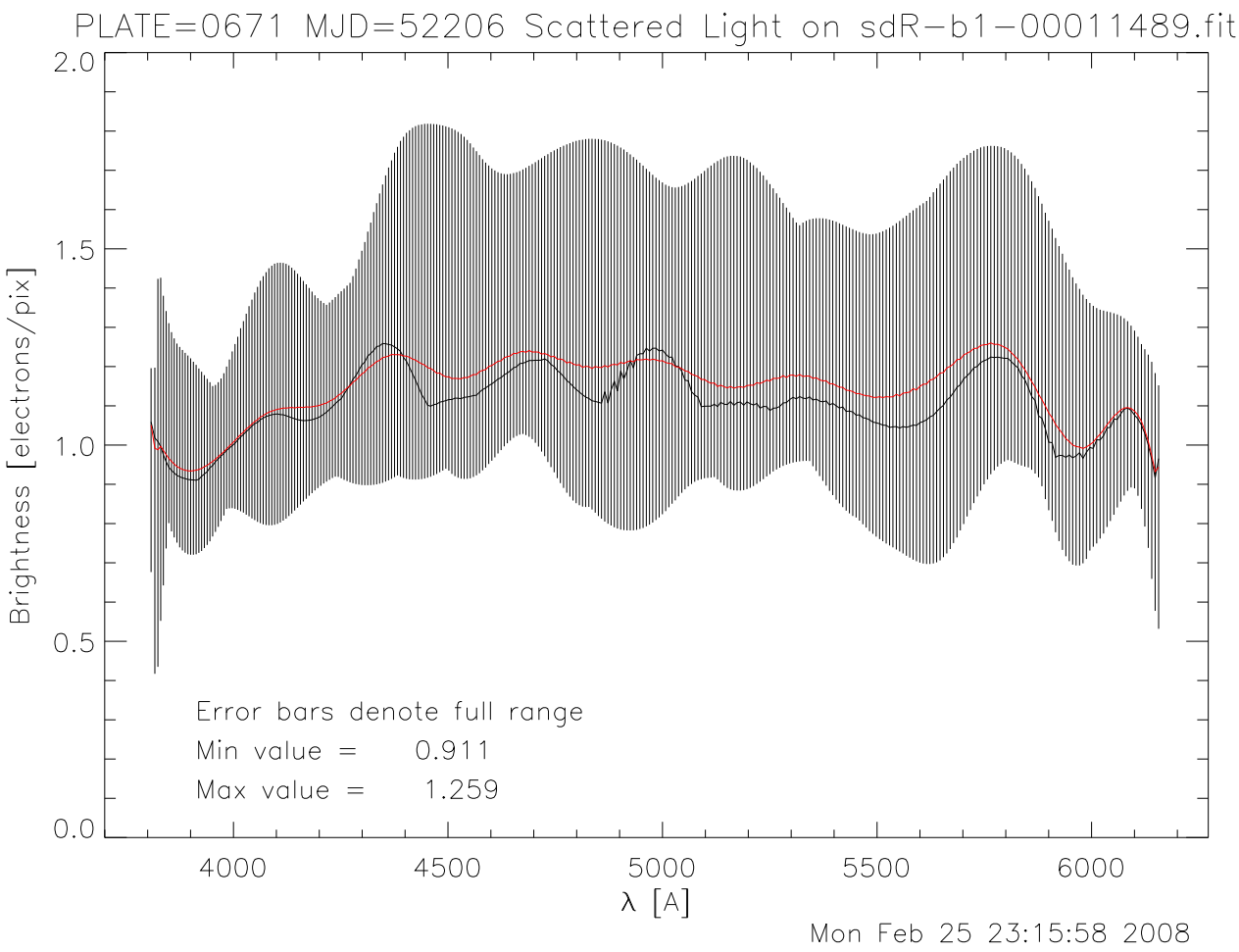

PLATE=0671 MJD=52206 sdR-b1-00011488.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
3.6×10^4
3.4×10^4
3.2×10^4
3.0×10^4
2.8×10^4
RED = sky fiber
Dispersion = 1.26 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
3.6×10^4
3.4×10^4
3.2×10^4
3.0×10^4
2.8×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
3.6×10^4
3.4×10^4
3.2×10^4
3.0×10^4
2.8×10^4
1.38
1.39
1.40
1.41
1.42
1.43
1.44
Airmass

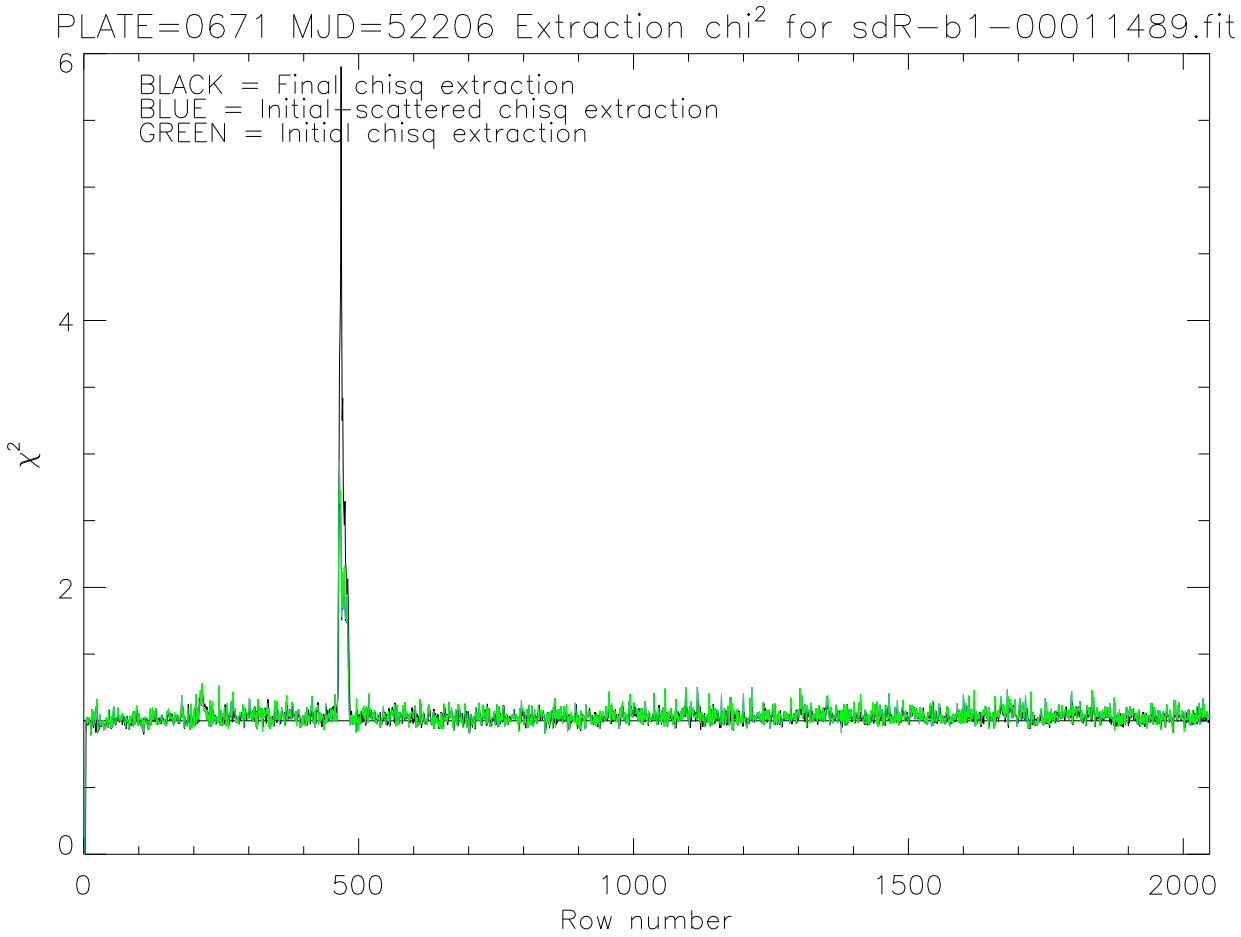

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b1-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.475
Max value = 1.192
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:13:19 2008

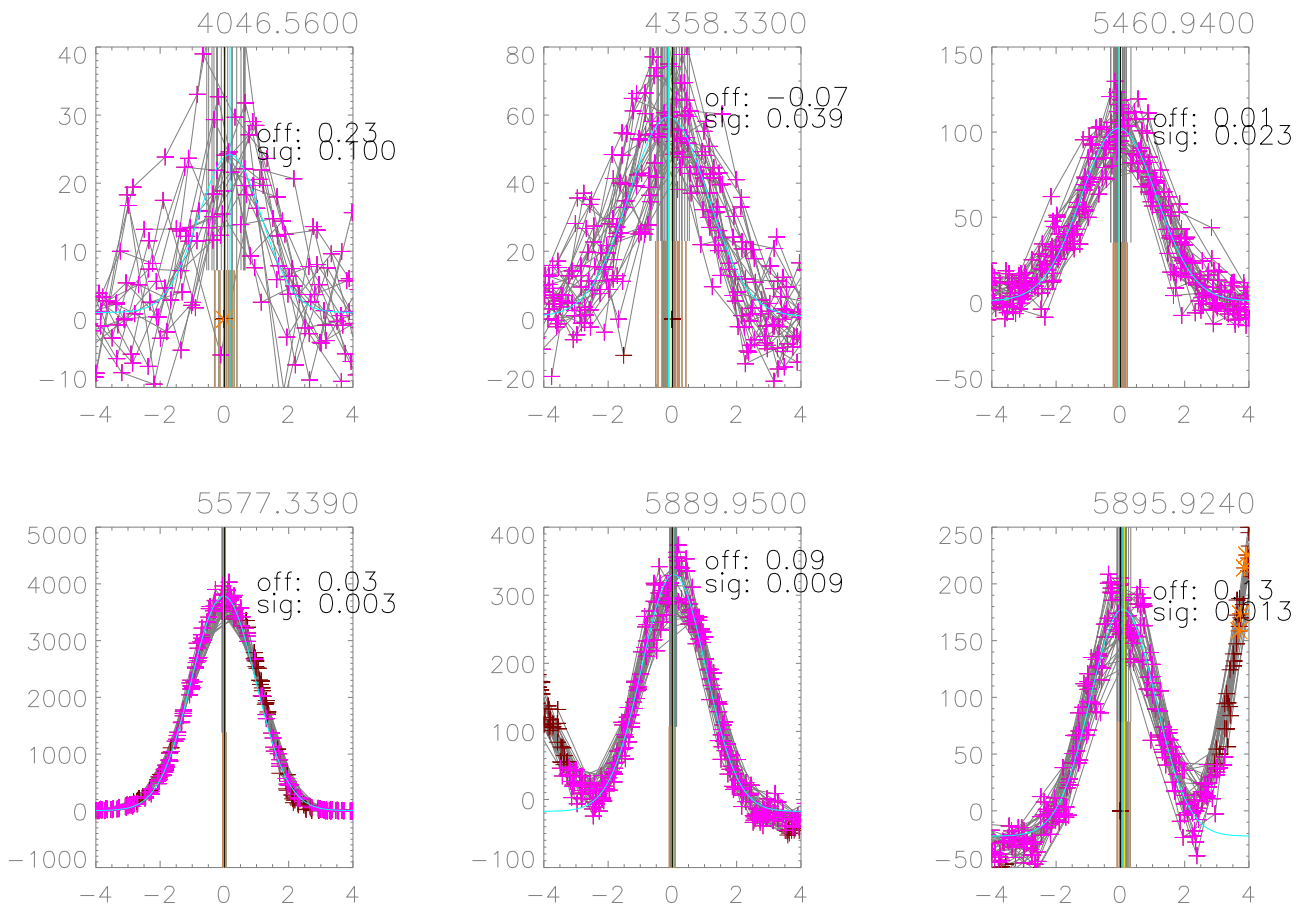

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011489.f
1.18
1.64
2.09
Y [pix]
X [pix]
0
500
1000
1500
2000

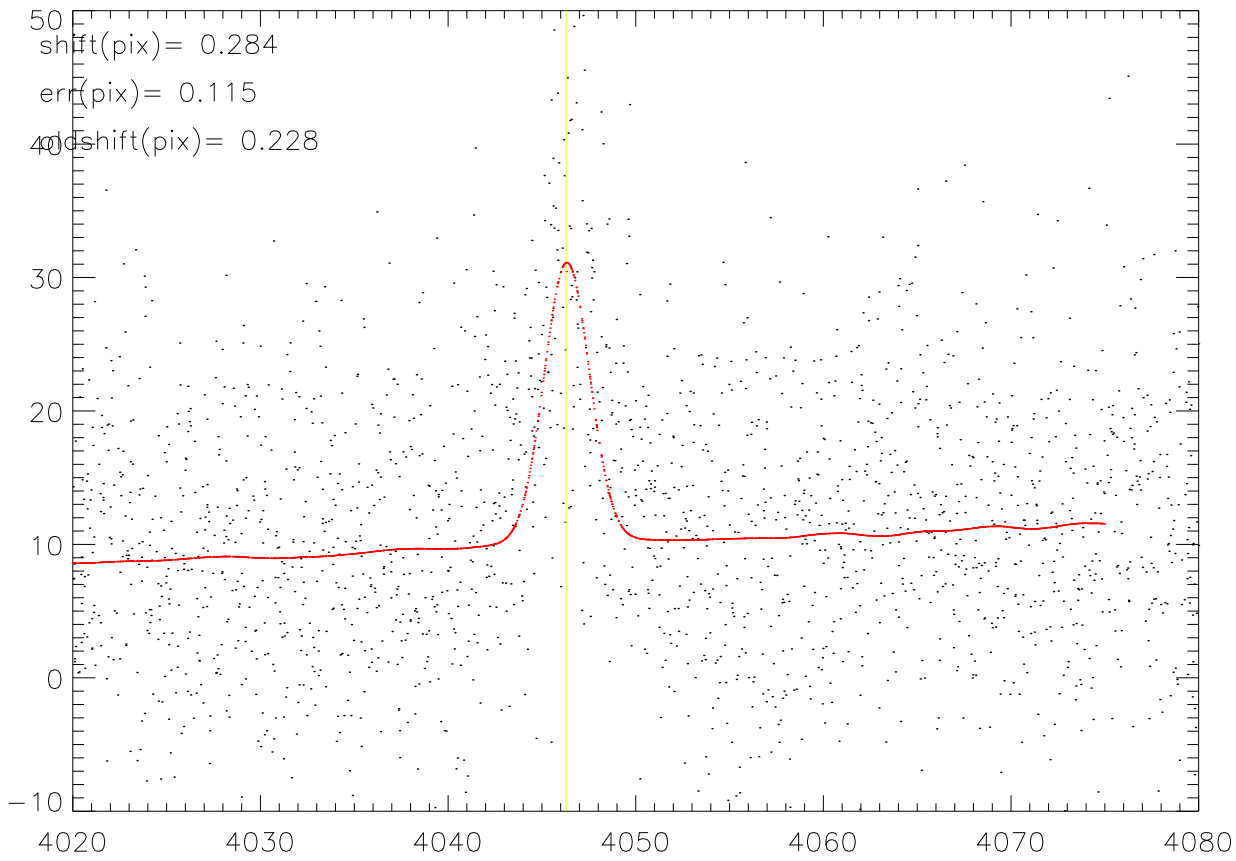

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b1-00011489.f
Brightness [electrons/pix]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.239
Max value = 2.018
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:13:55 2008

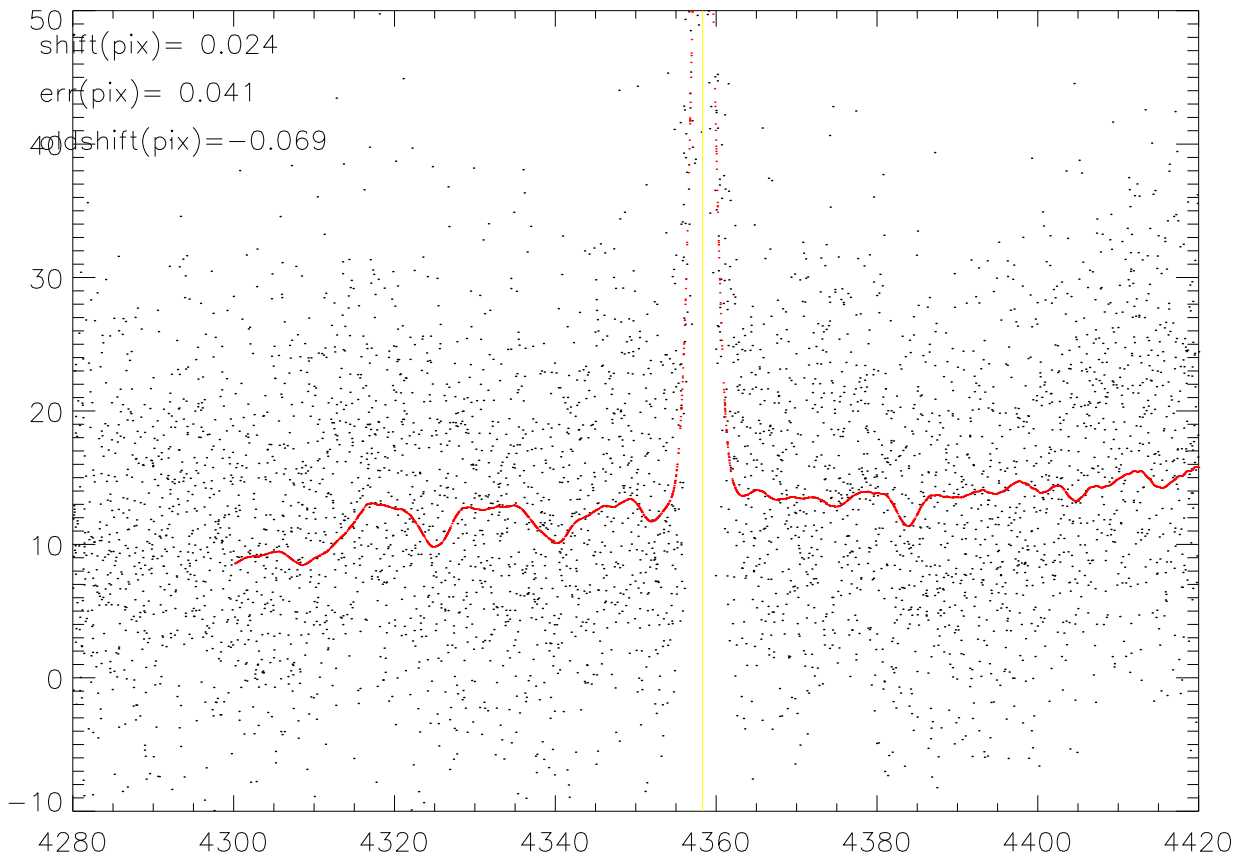

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011489.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0.909
1.273
1.639
1.273
0.909
1.273
0.909

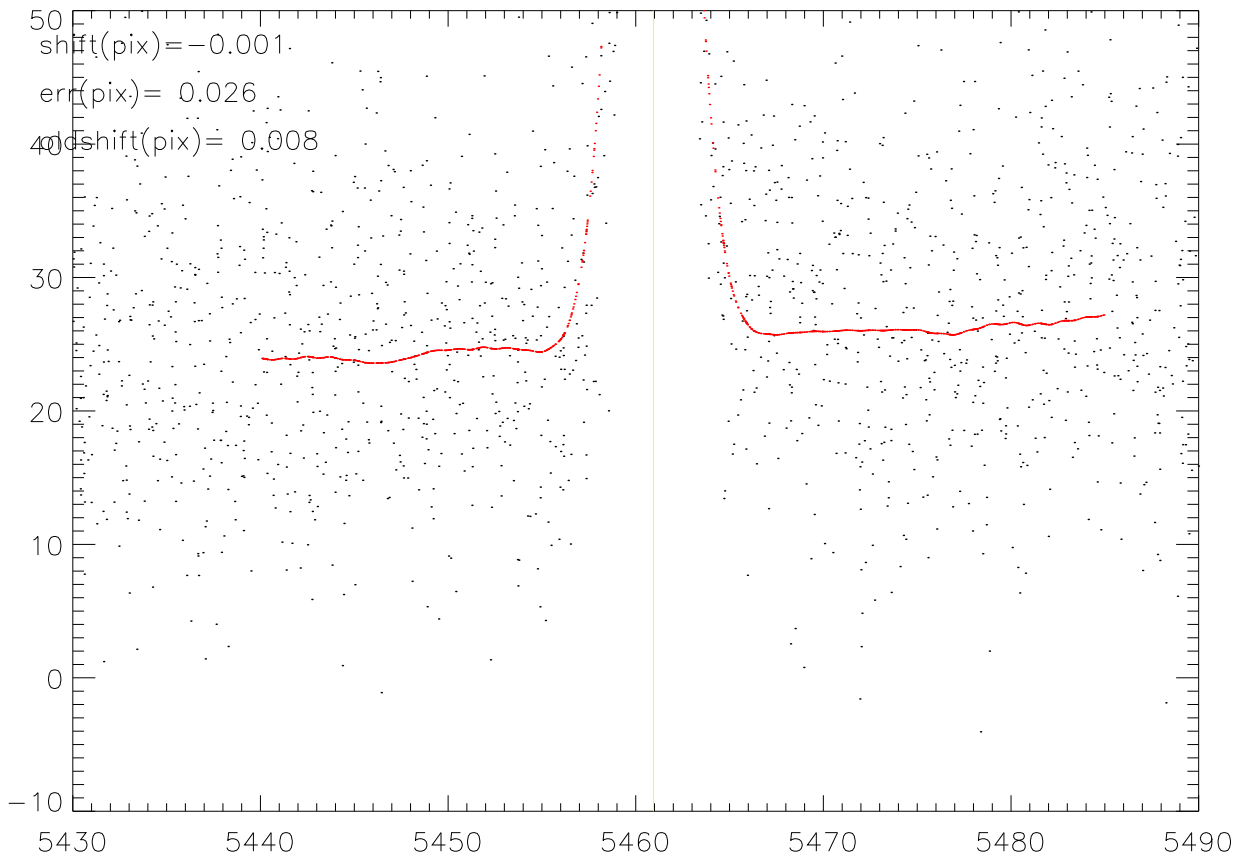

PLATE=0671 MJD=52206 Scattered Light on sdR-b1-00011489.fit
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.911
Max value = 1.259
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:15:58 2008

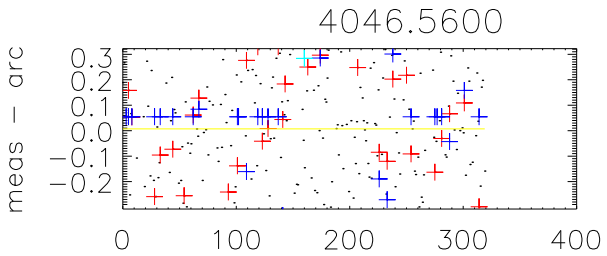

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b1-00011489.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

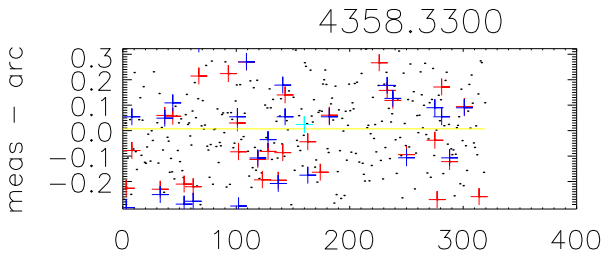

4046.5600
off: 0.23
sig: 0.100
4358.3300
off: −0.07
sig: 0.039
5460.9400
off: 0.01
sig: 0.023
5577.3390
off: 0.03
sig: 0.003
5889.9500
off: 0.09
sig: 0.009
5895.9240
off: 0.13
sig: 0.013

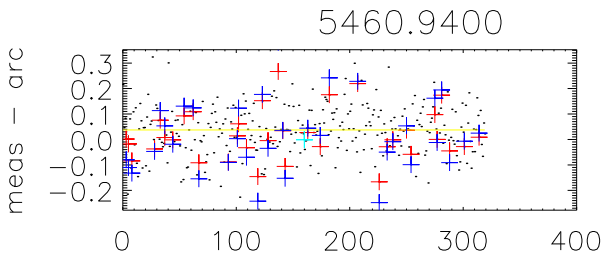

shift(pix)= 0.284
err(pix)= 0.115
oldshift(pix)= 0.228
50
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

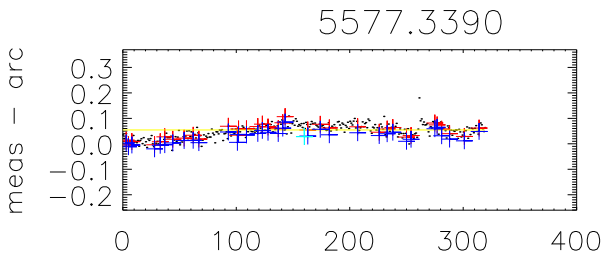

shift(pix)= 0.024
err(pix)= 0.041
oldshift(pix)=−0.069
50
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

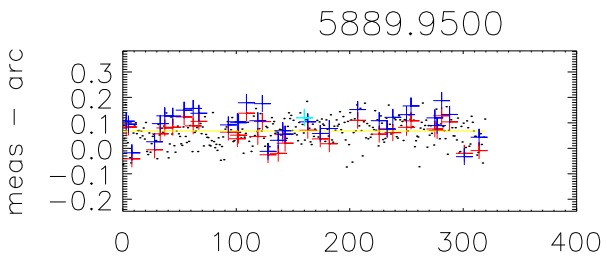

shift(pix)=−0.001
err(pix)= 0.026
oldshift(pix)= 0.008
50
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

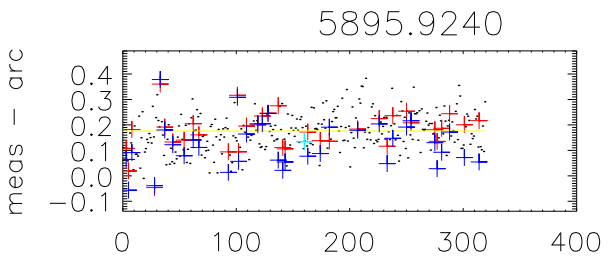

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

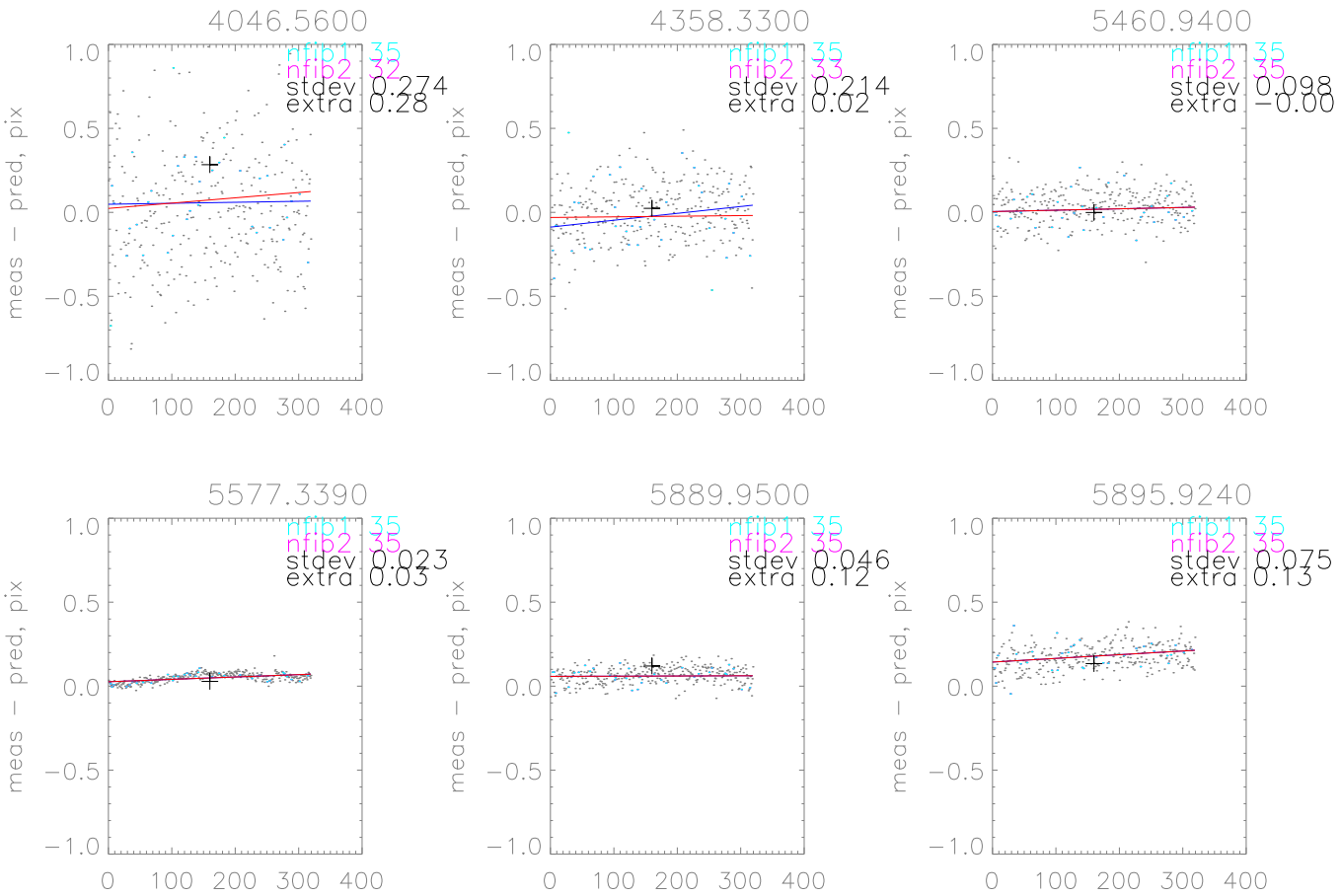

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

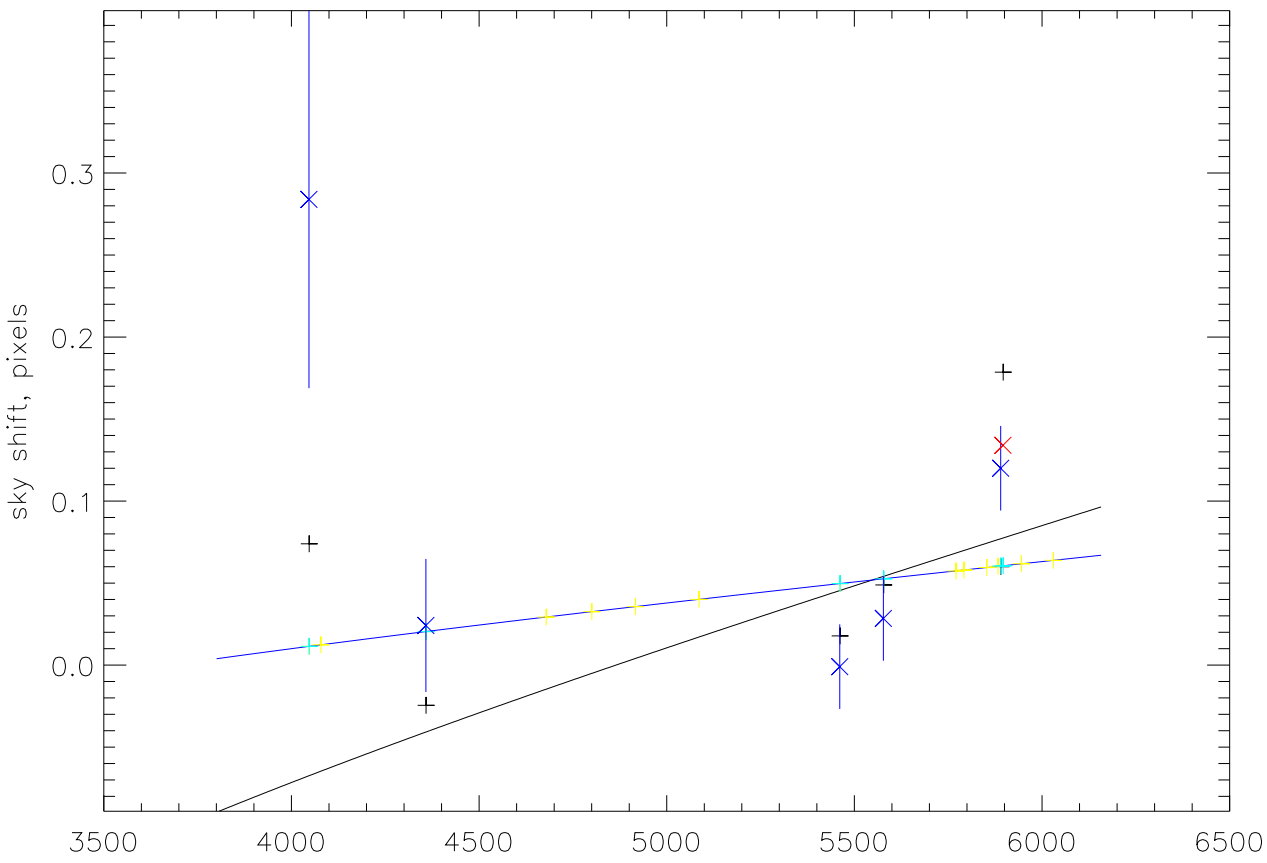

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

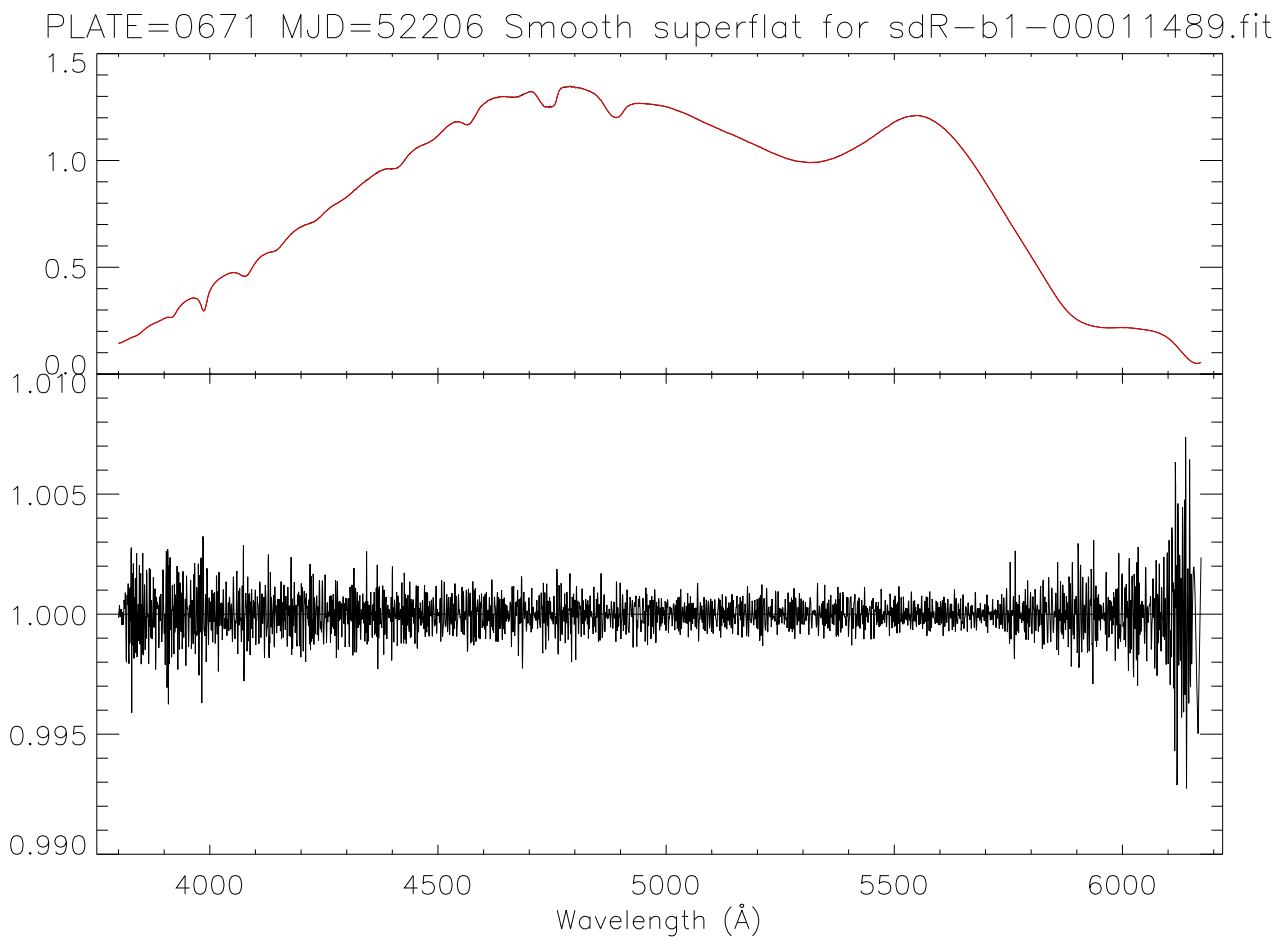

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

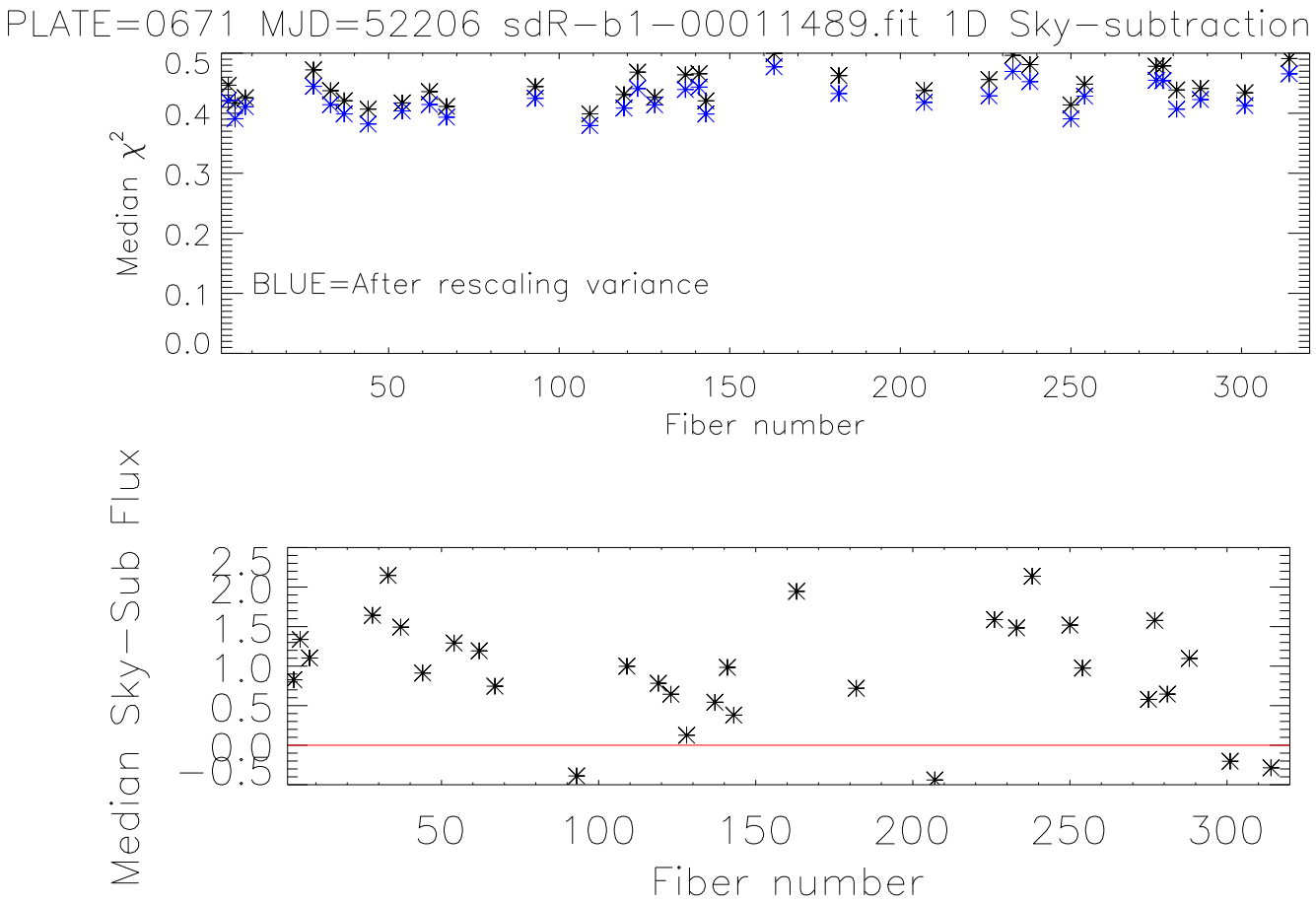

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

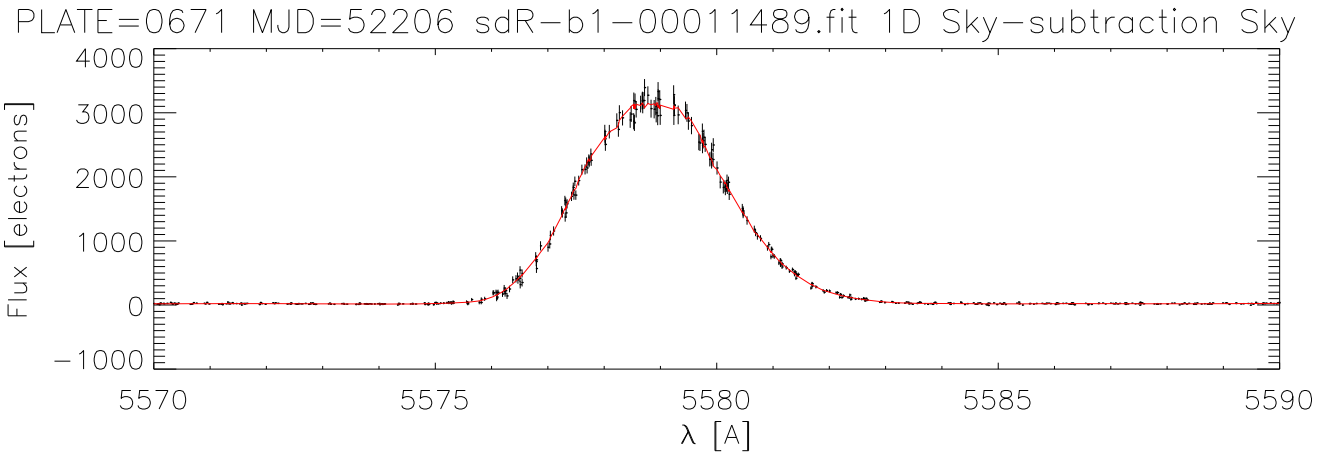

4046.5600
nfib1 35
nfib2 32
stdev 0.274
extra 0.28
4358.3300
nfib1 35
nfib2 33
stdev 0.214
extra 0.02
5460.9400
nfib1 35
nfib2 35
stdev 0.098
extra −0.00
5577.3390
nfib1 35
nfib2 35
stdev 0.023
extra 0.03
5889.9500
nfib1 35
nfib2 35
stdev 0.046
extra 0.12
5895.9240
nfib1 35
nfib2 35
stdev 0.075
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

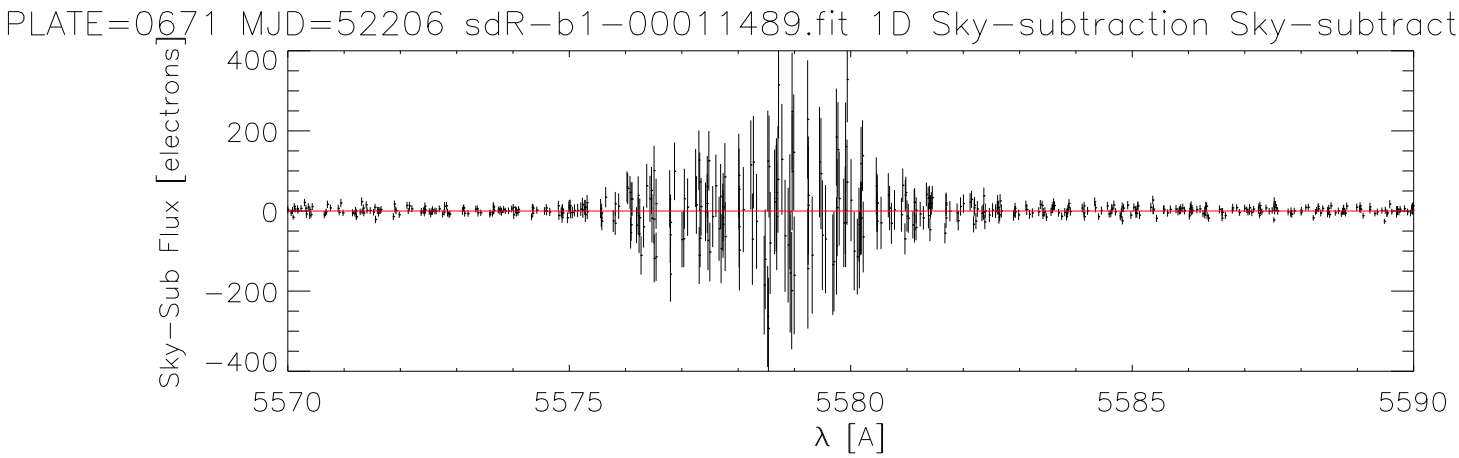

sky shift, pixels
0.3
0.2
0.1
0.0
3500
4000
4500
5000
5500
6000
6500

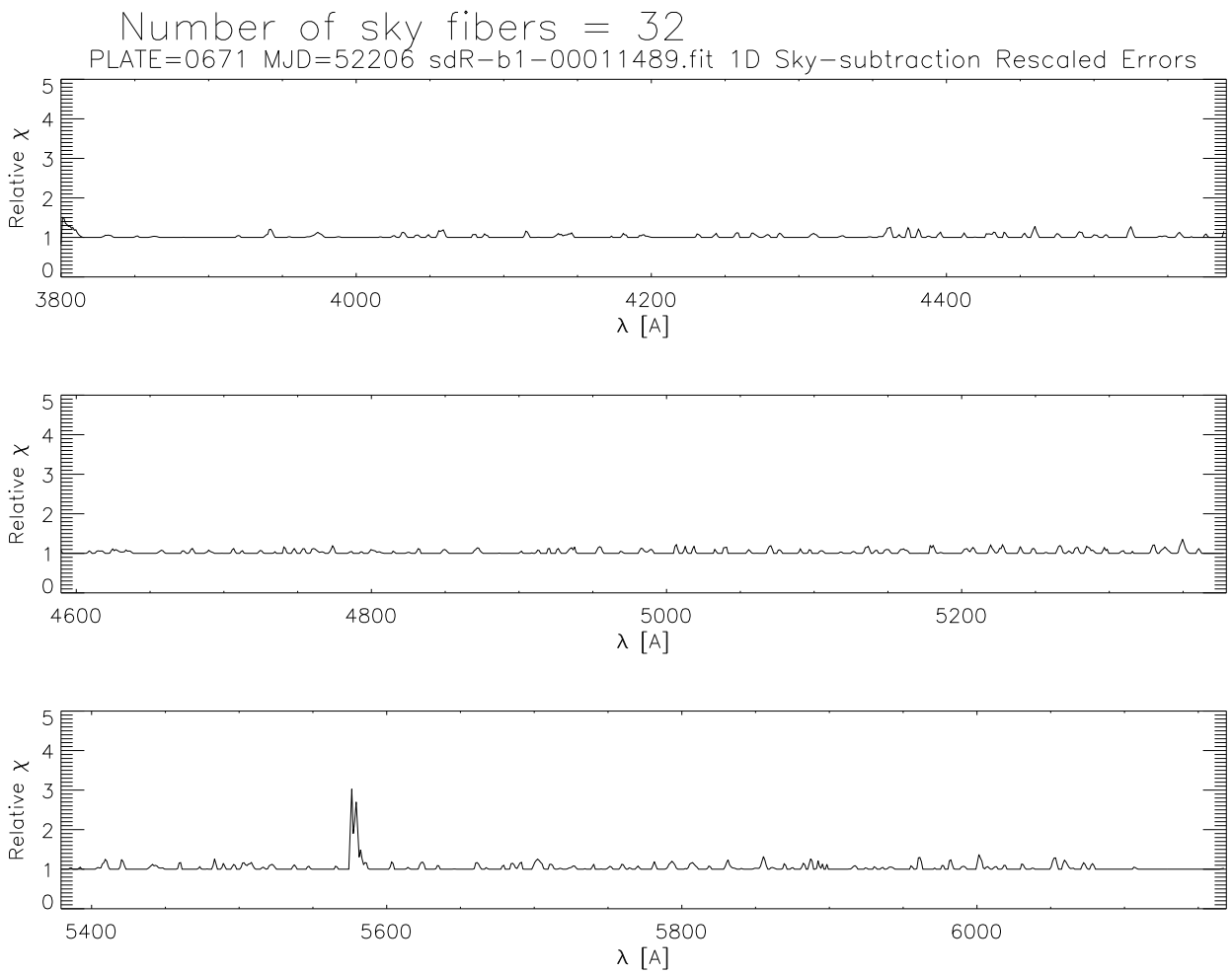
es= 0.0000

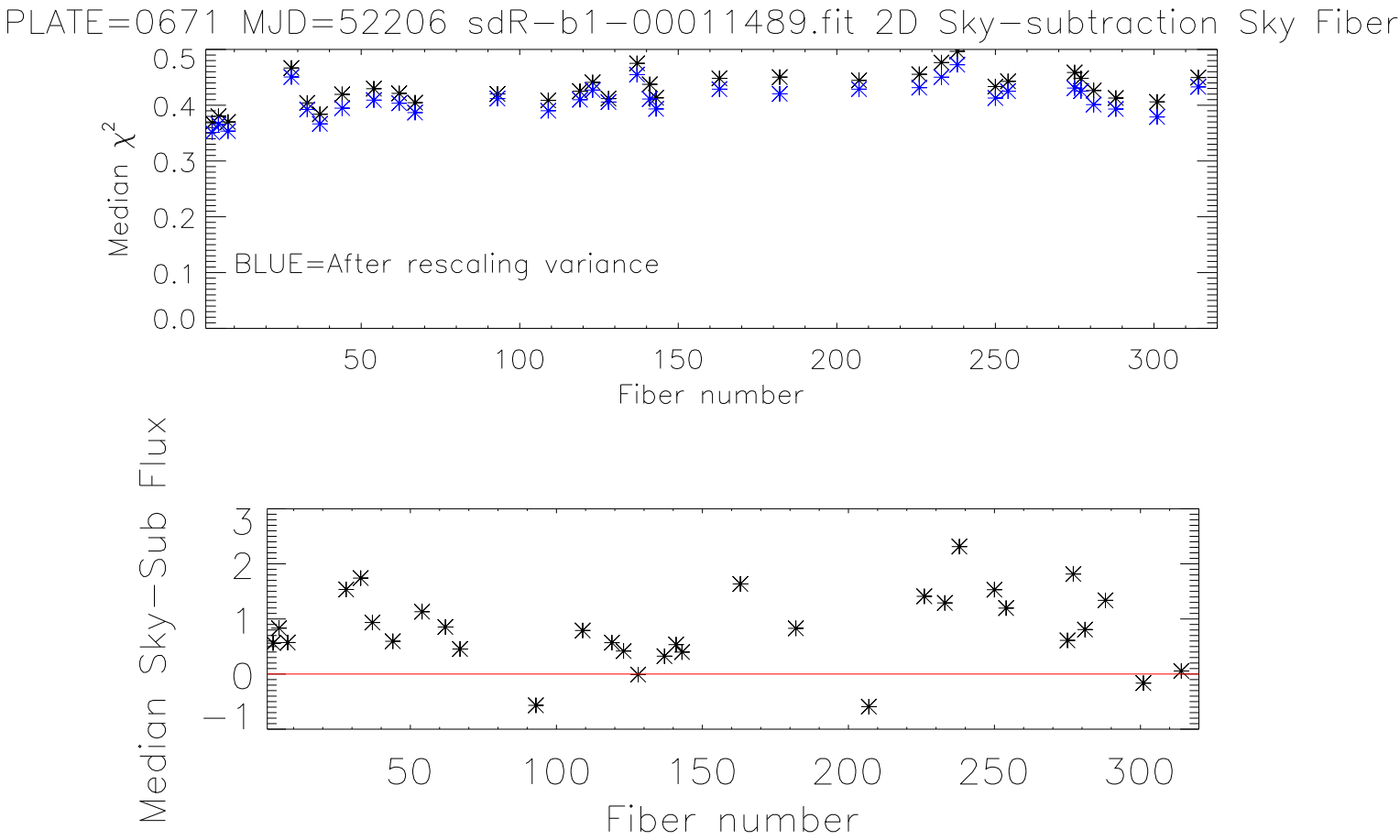

PLATE=0671 MJD=52206 Smooth superflat for sdR-b1-00011489.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

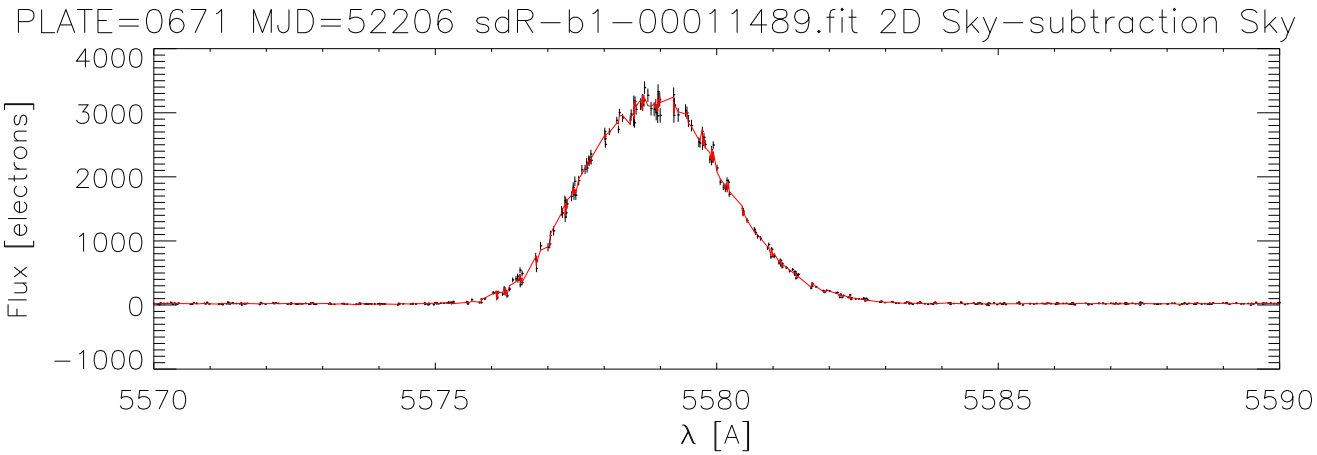

PLATE=0671 MJD=52206 sdR-b1-00011489.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

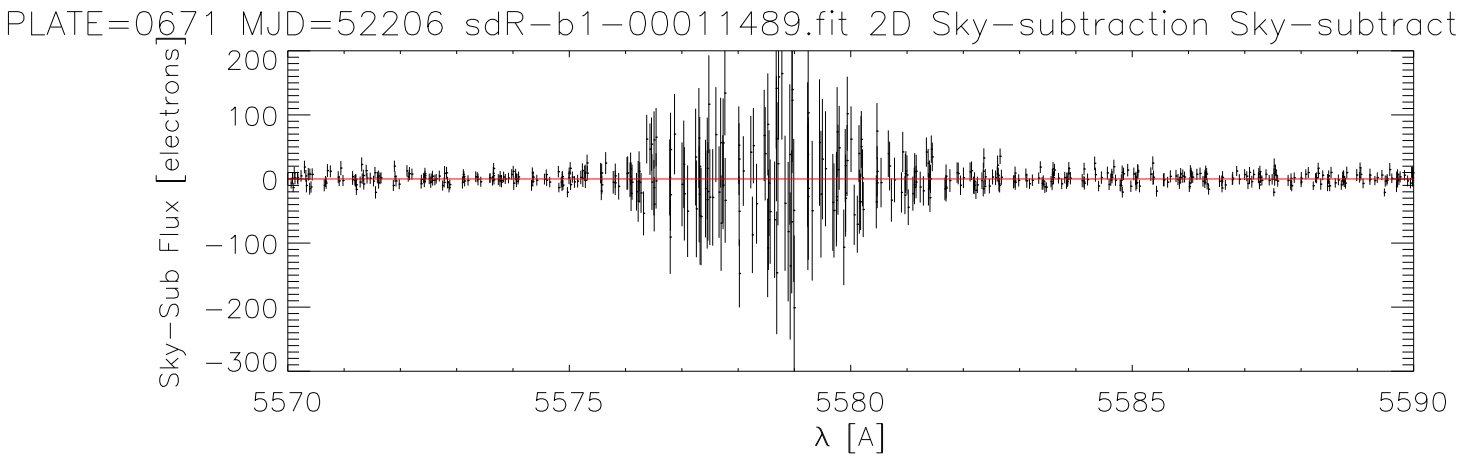

PLATE=0671 MJD=52206 sdR-b1-00011489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
5570
5575
5580
5585
5590
λ [A]

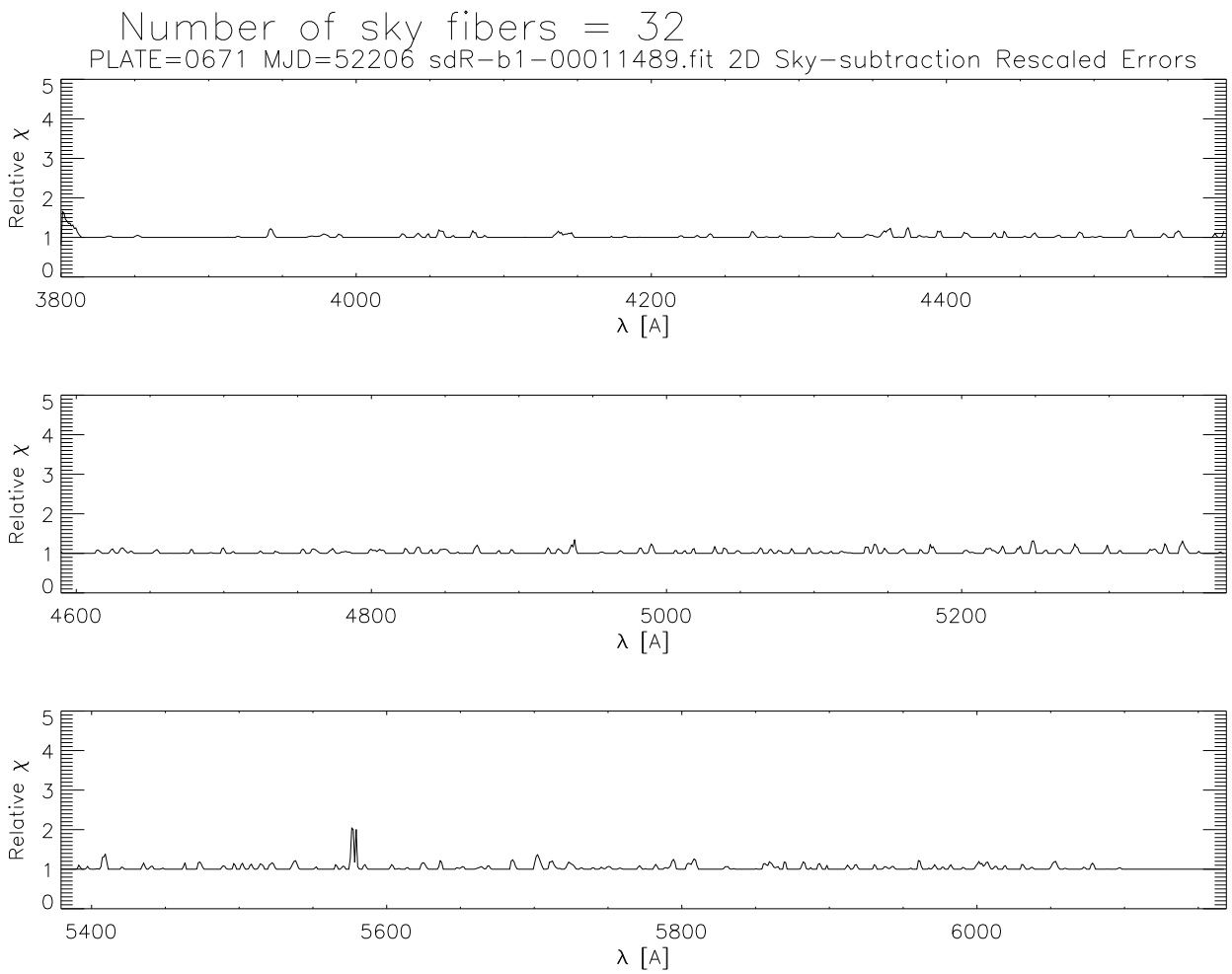

PLATE=0671 MJD=52206 sdR-b1-00011489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

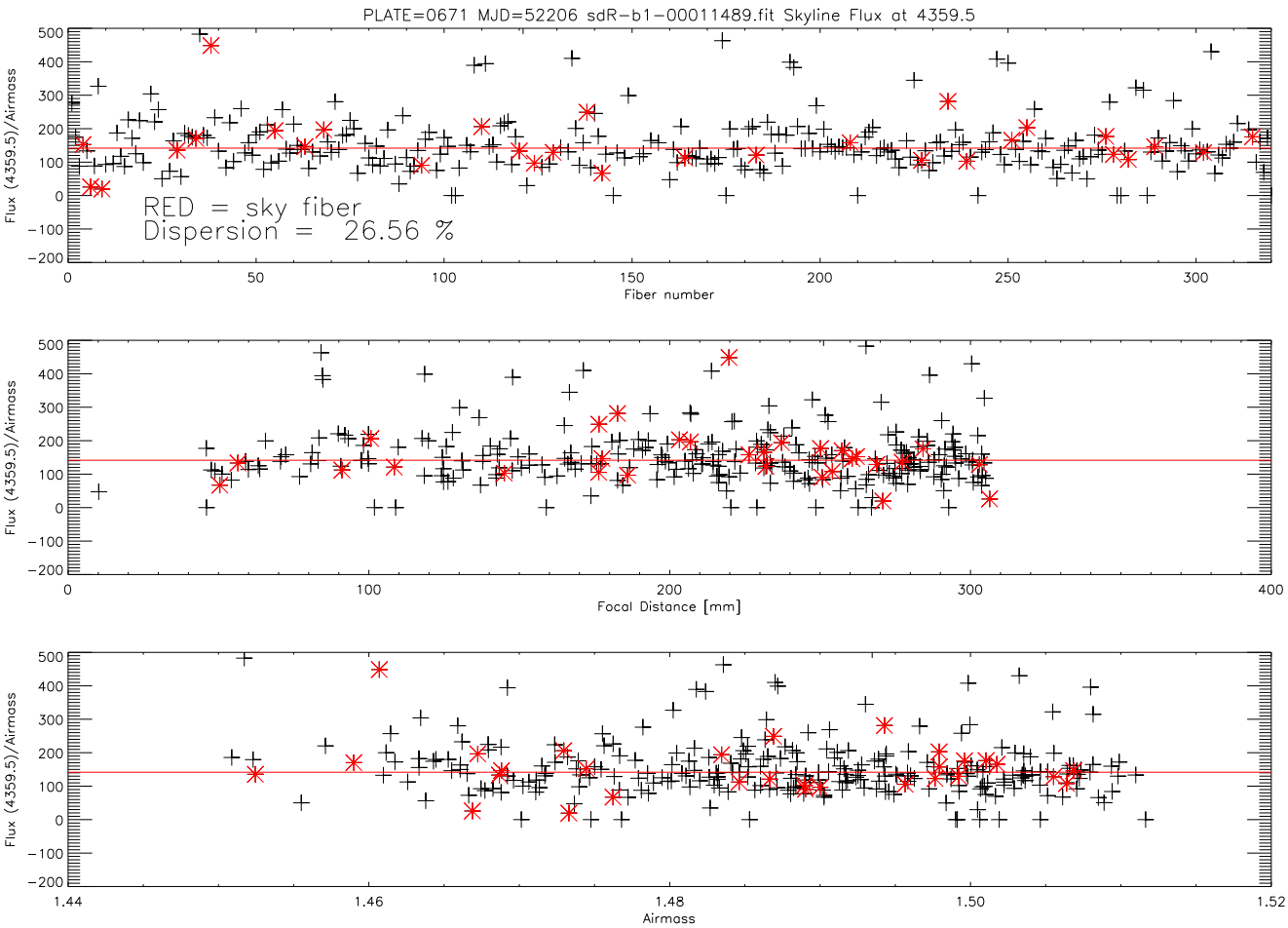

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

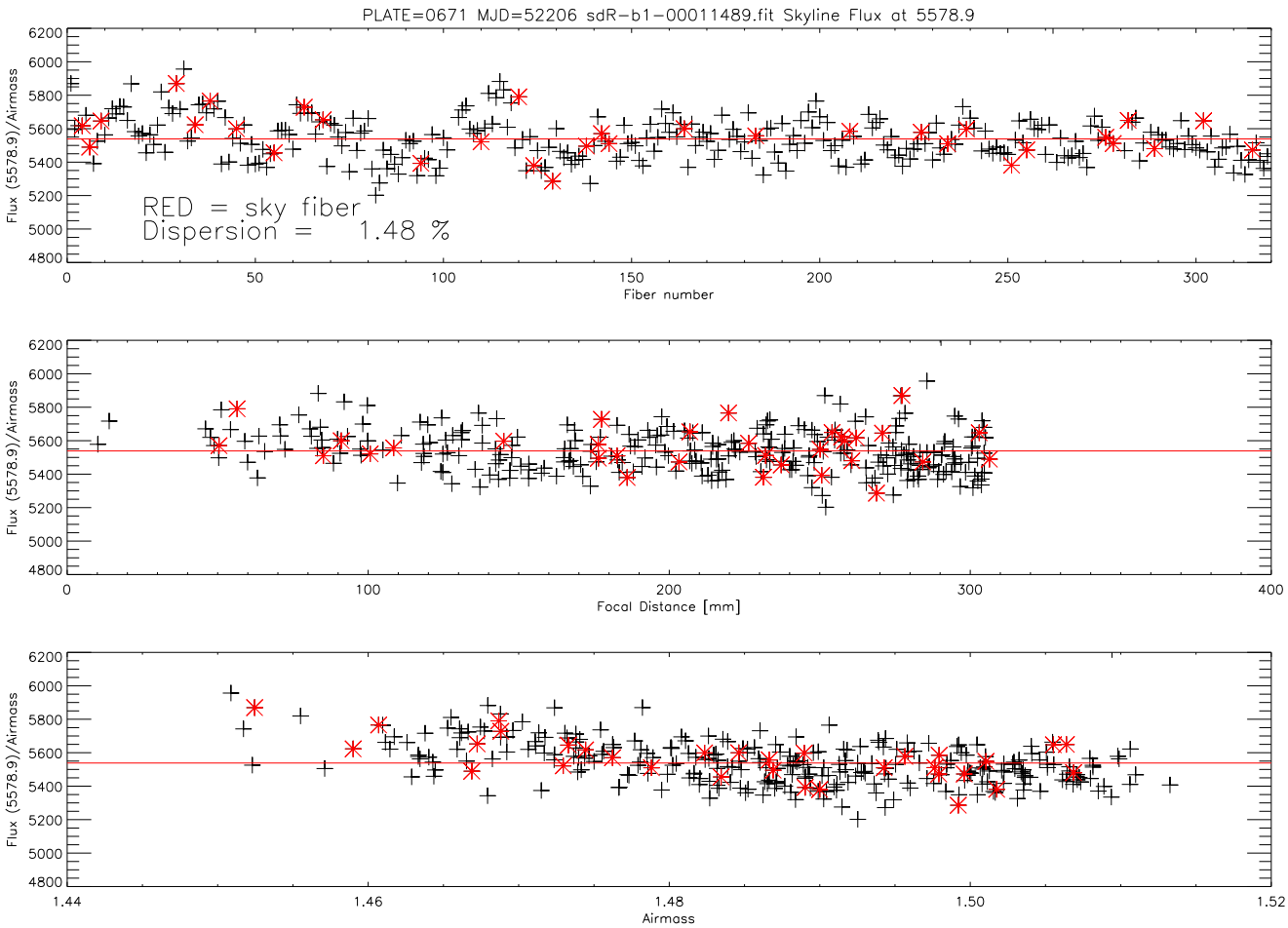

PLATE=0671 MJD=52206 sdR-b1-00011489.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

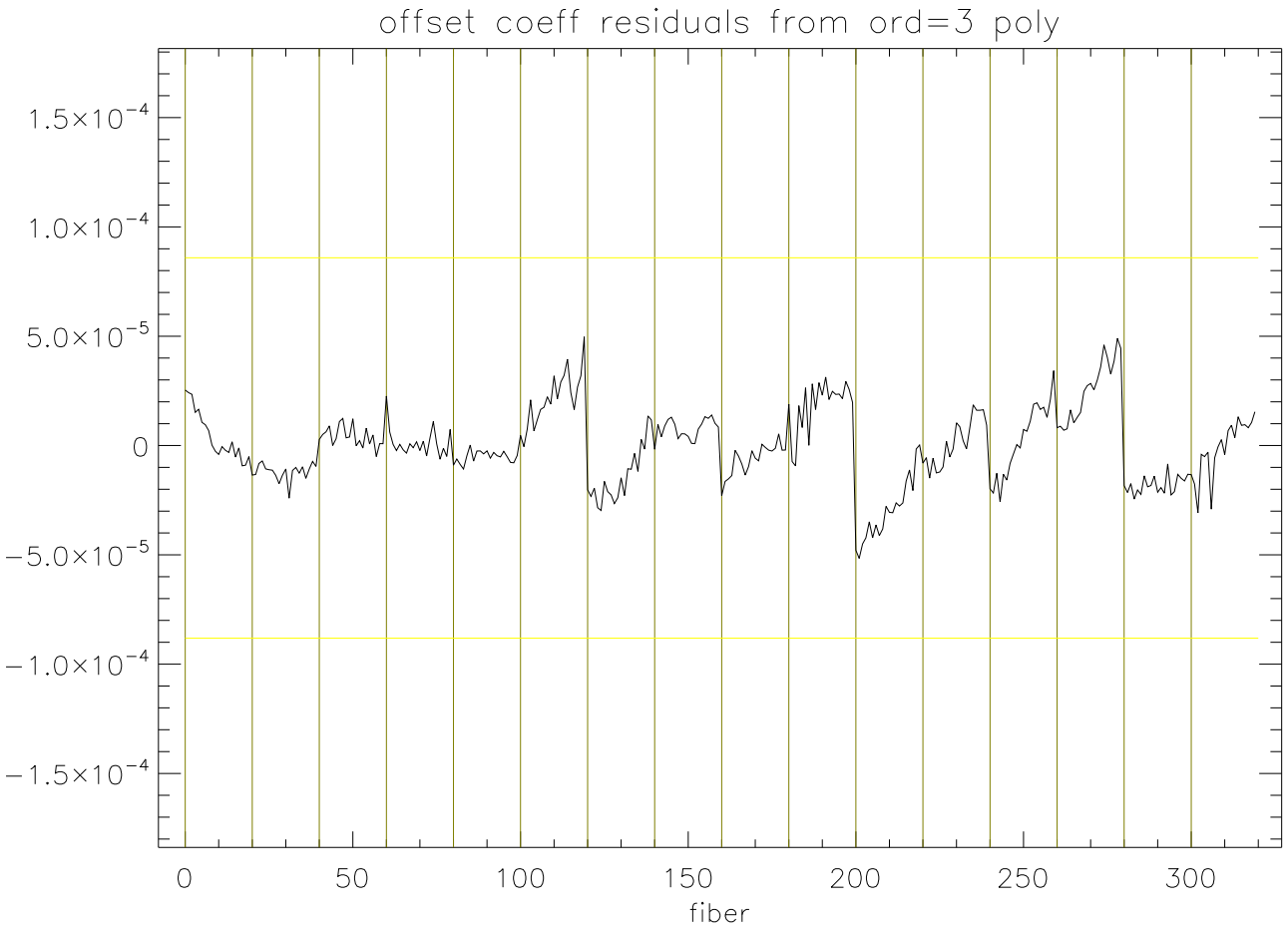

PLATE=0671 MJD=52206 sdR-b1-00011489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
−1000
5570
5575
5580
5585
5590
λ [A]

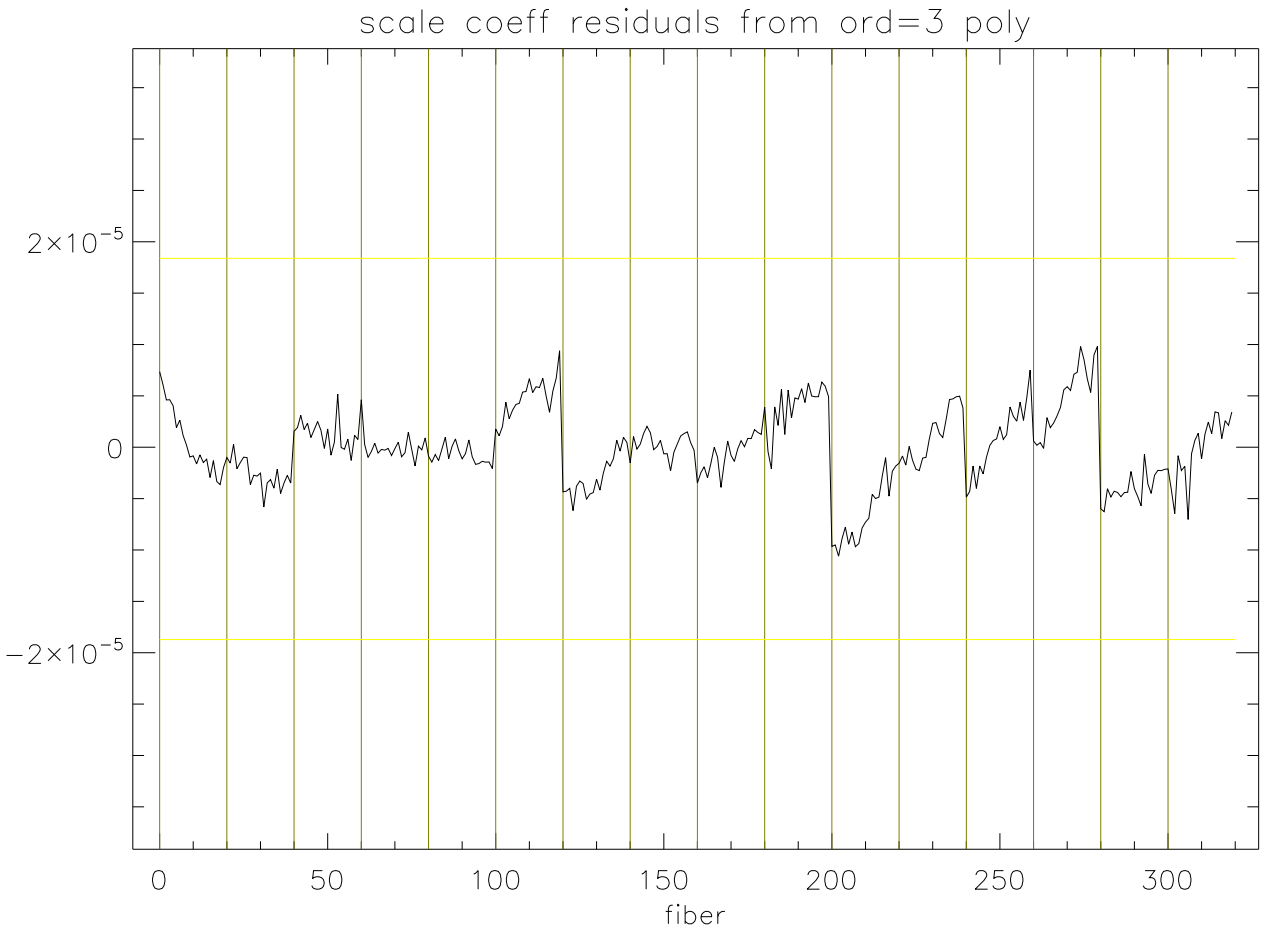

PLATE=0671 MJD=52206 sdR-b1-00011489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

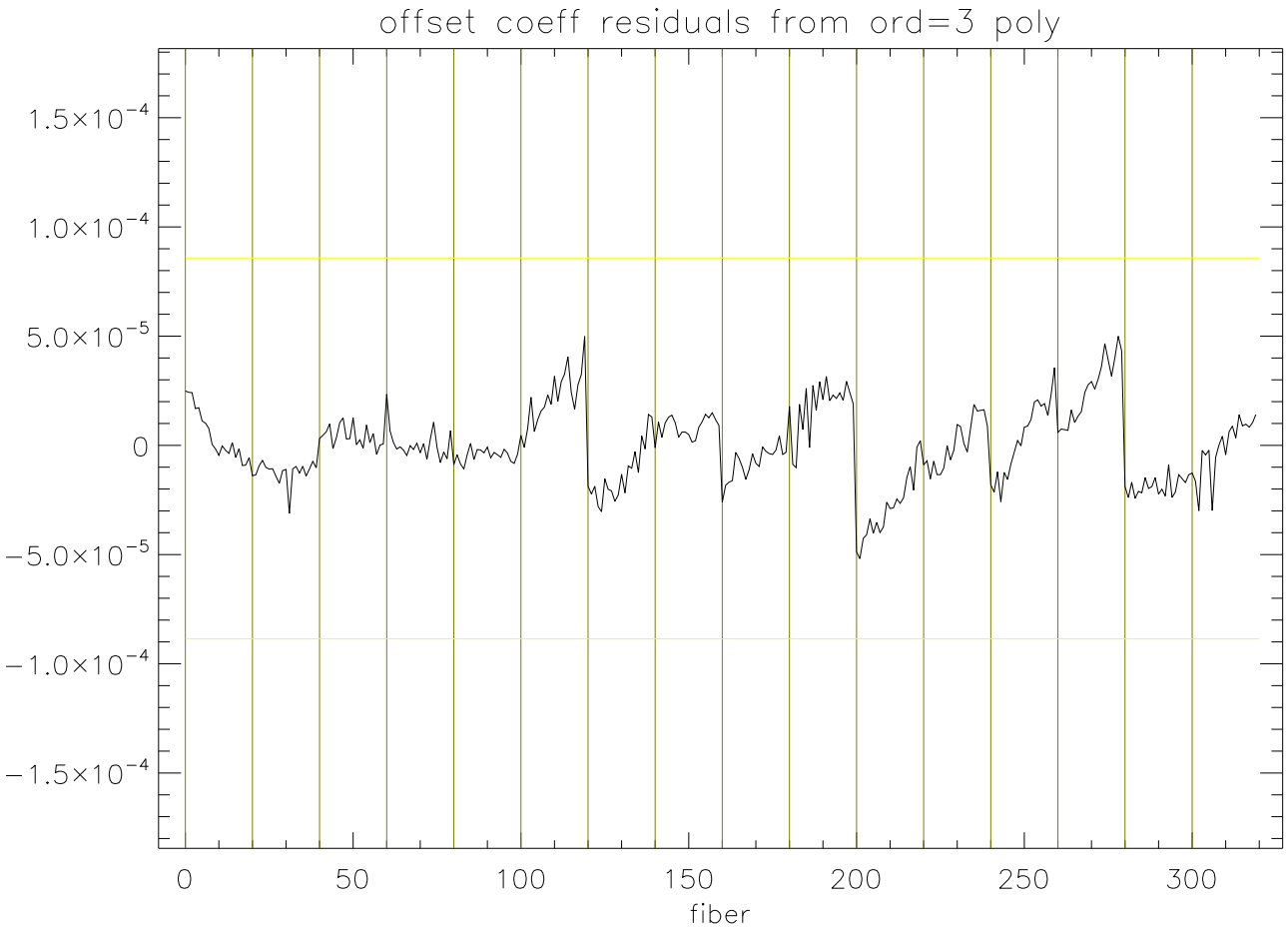

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-b1-00011489.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

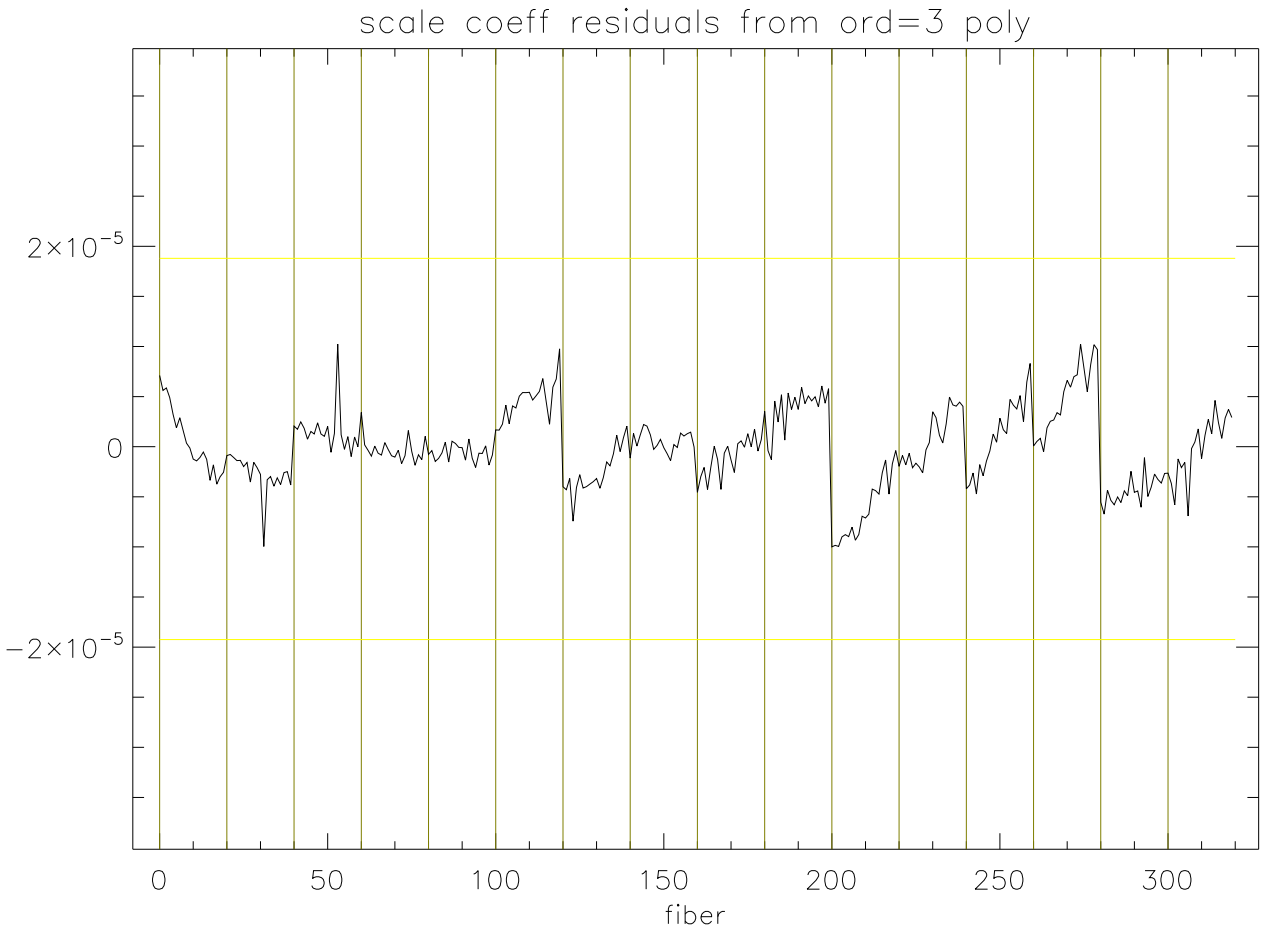

PLATE=0671 MJD=52206 sdR-b1-00011489.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 26.56 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

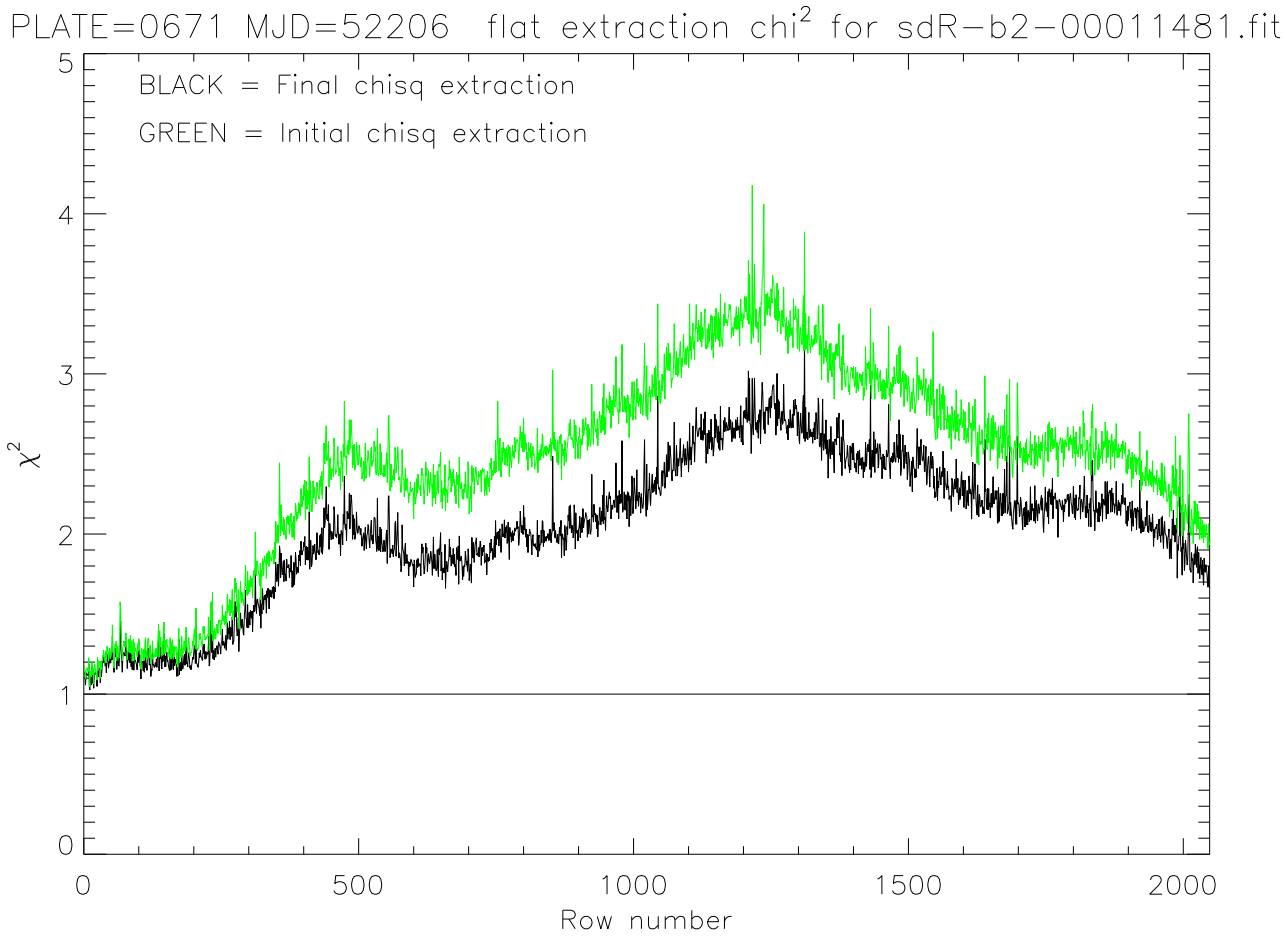

PLATE=0671 MJD=52206 sdR-b1-00011489.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.48 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

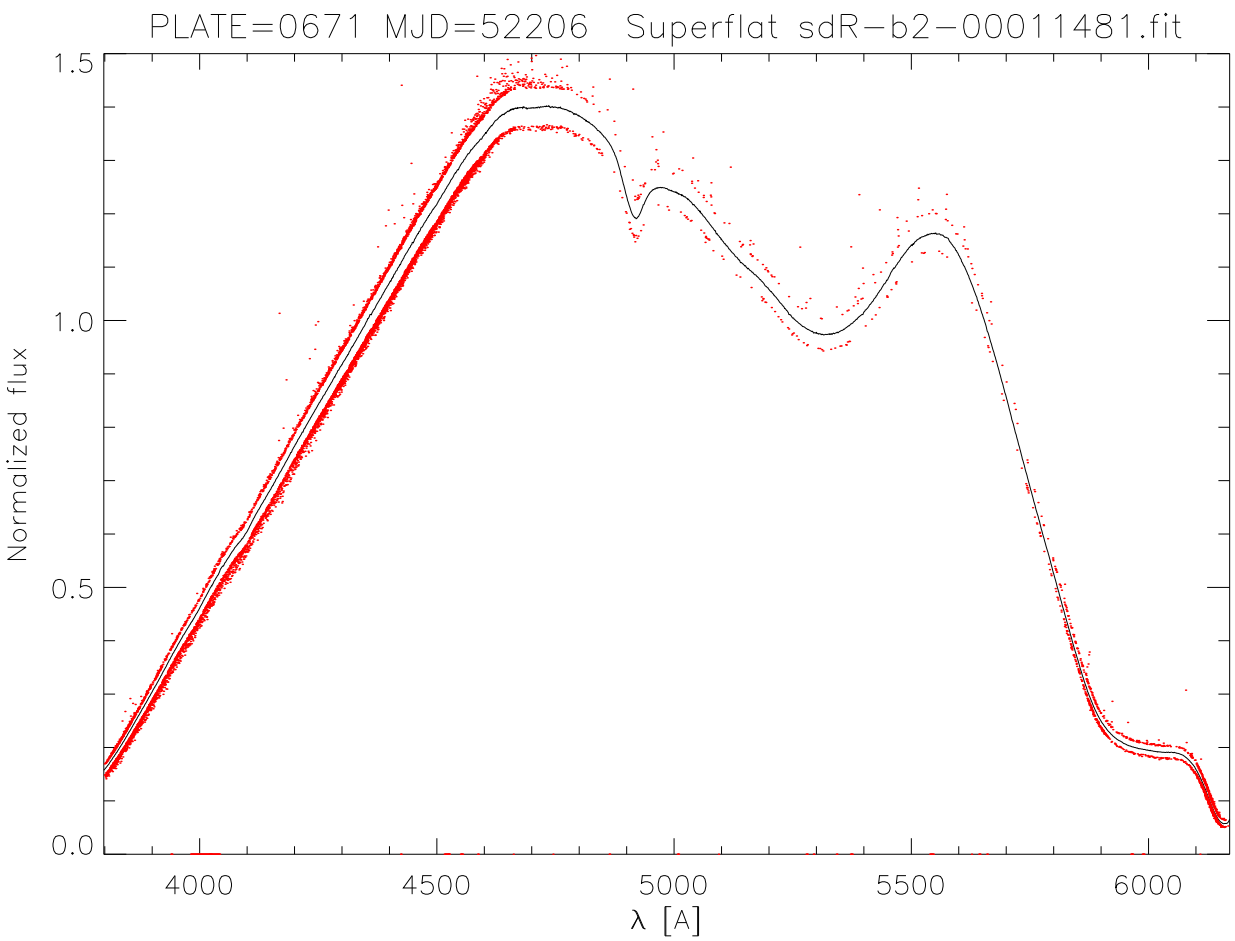

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

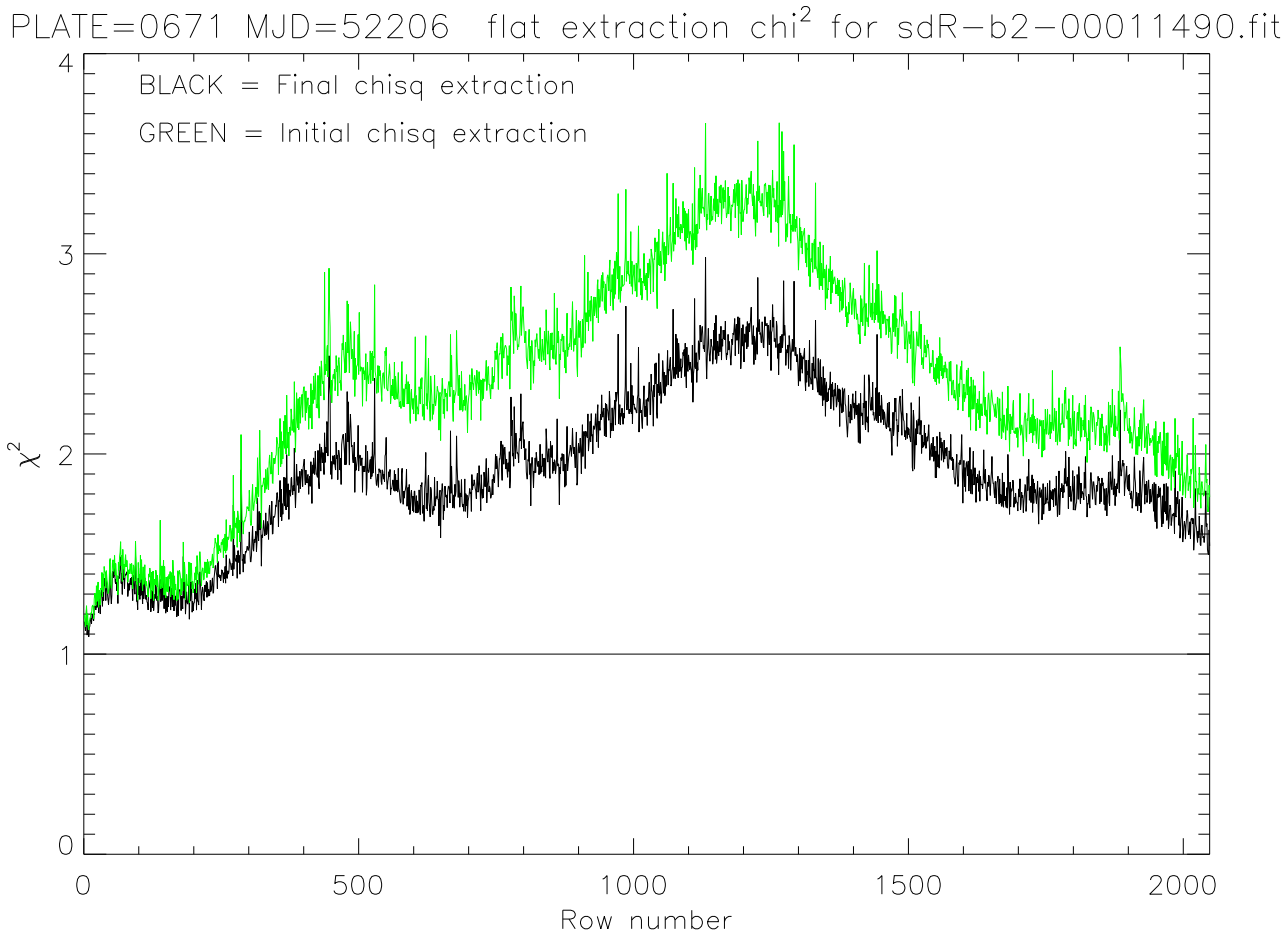

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

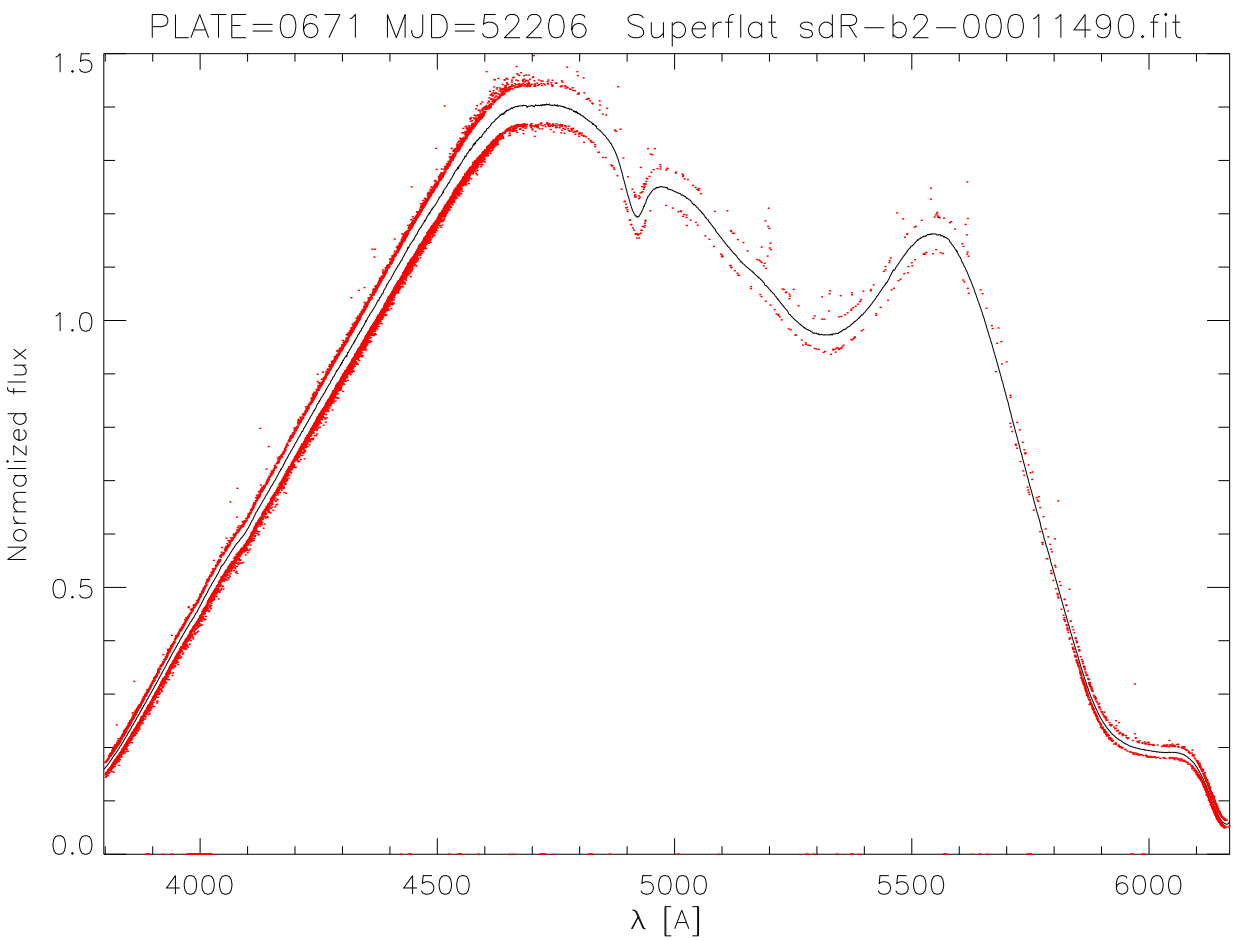

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

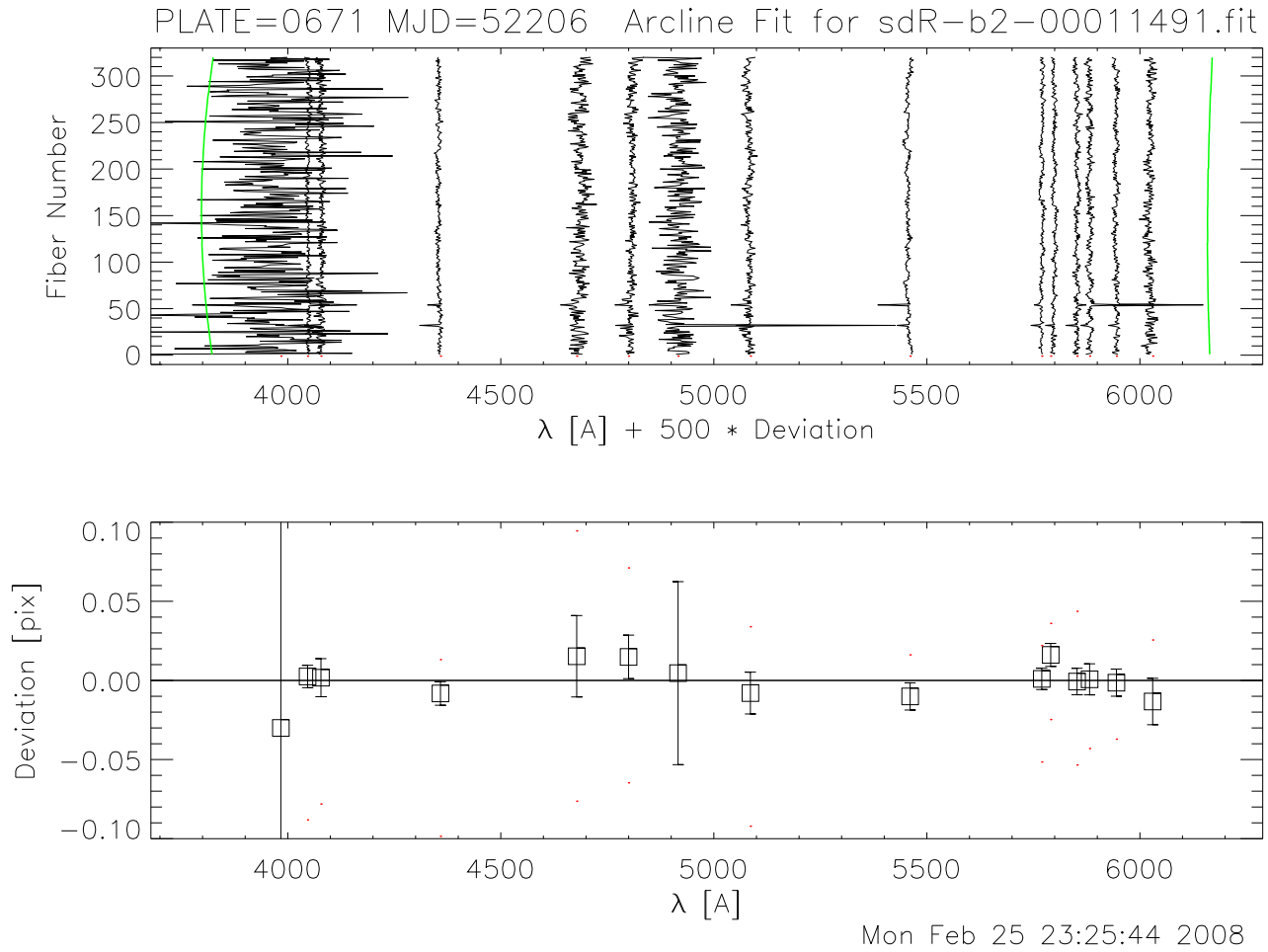

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

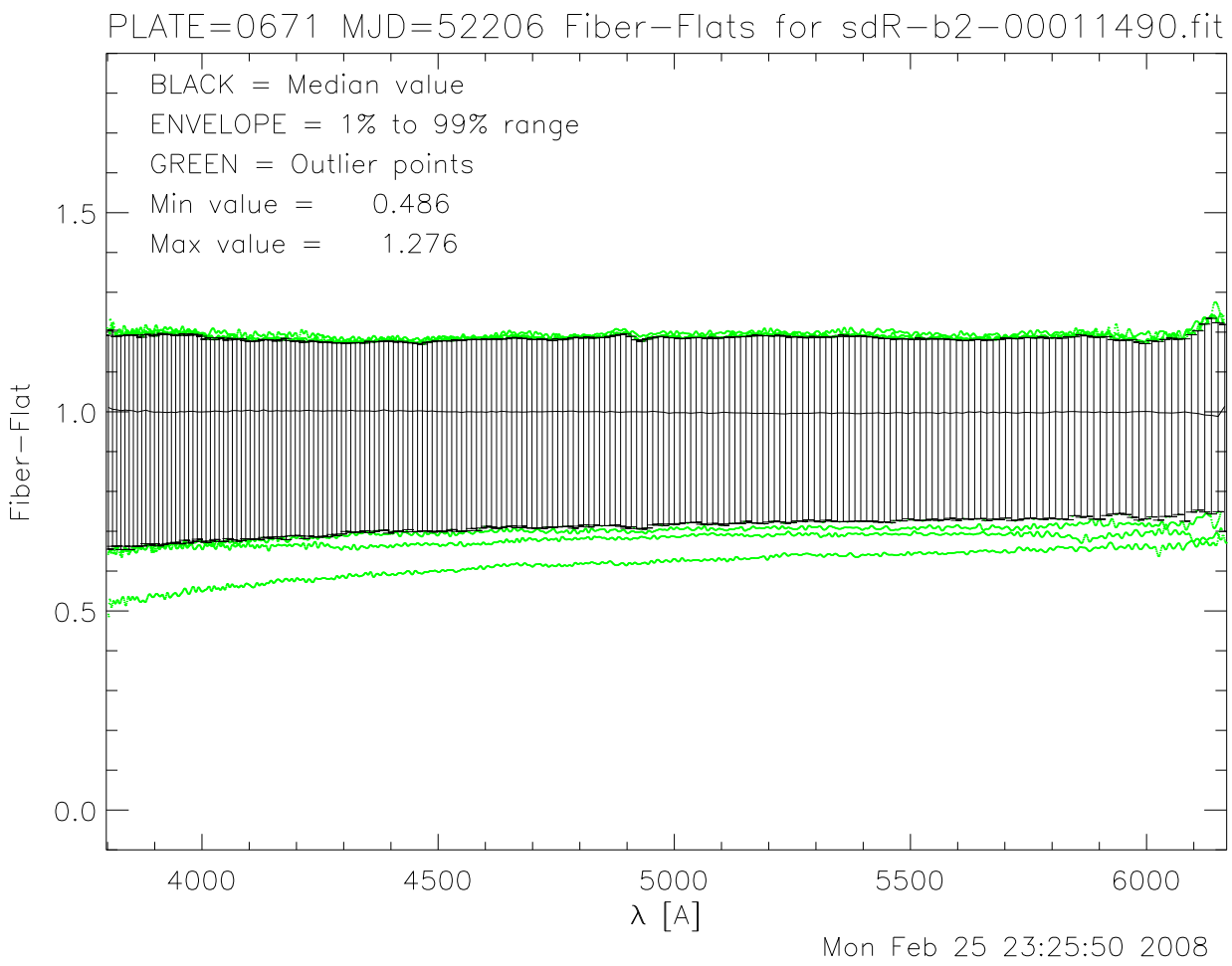

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−b2−00011481.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

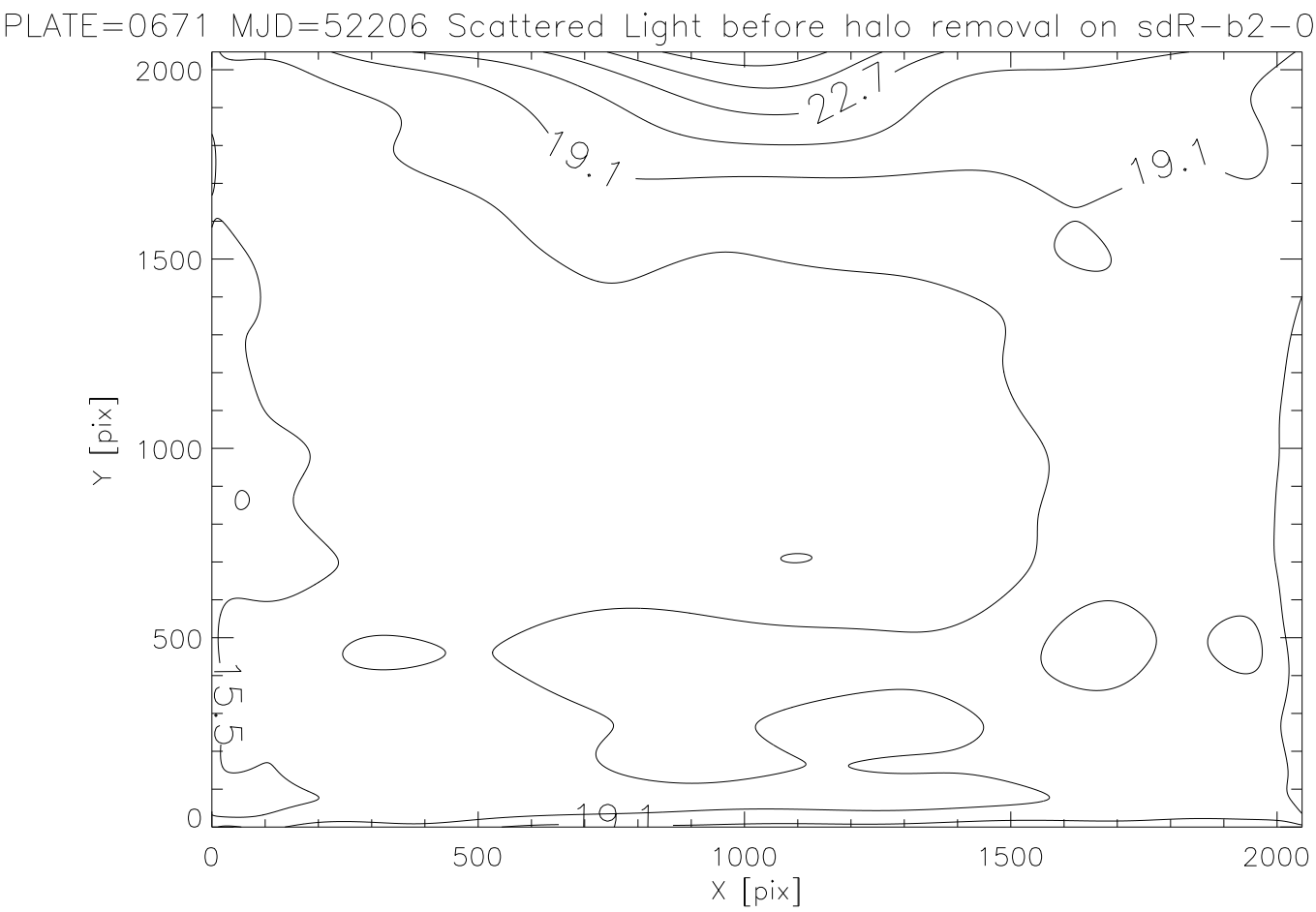

PLATE=0671 MJD=52206 Superflat sdR-b2-00011481.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

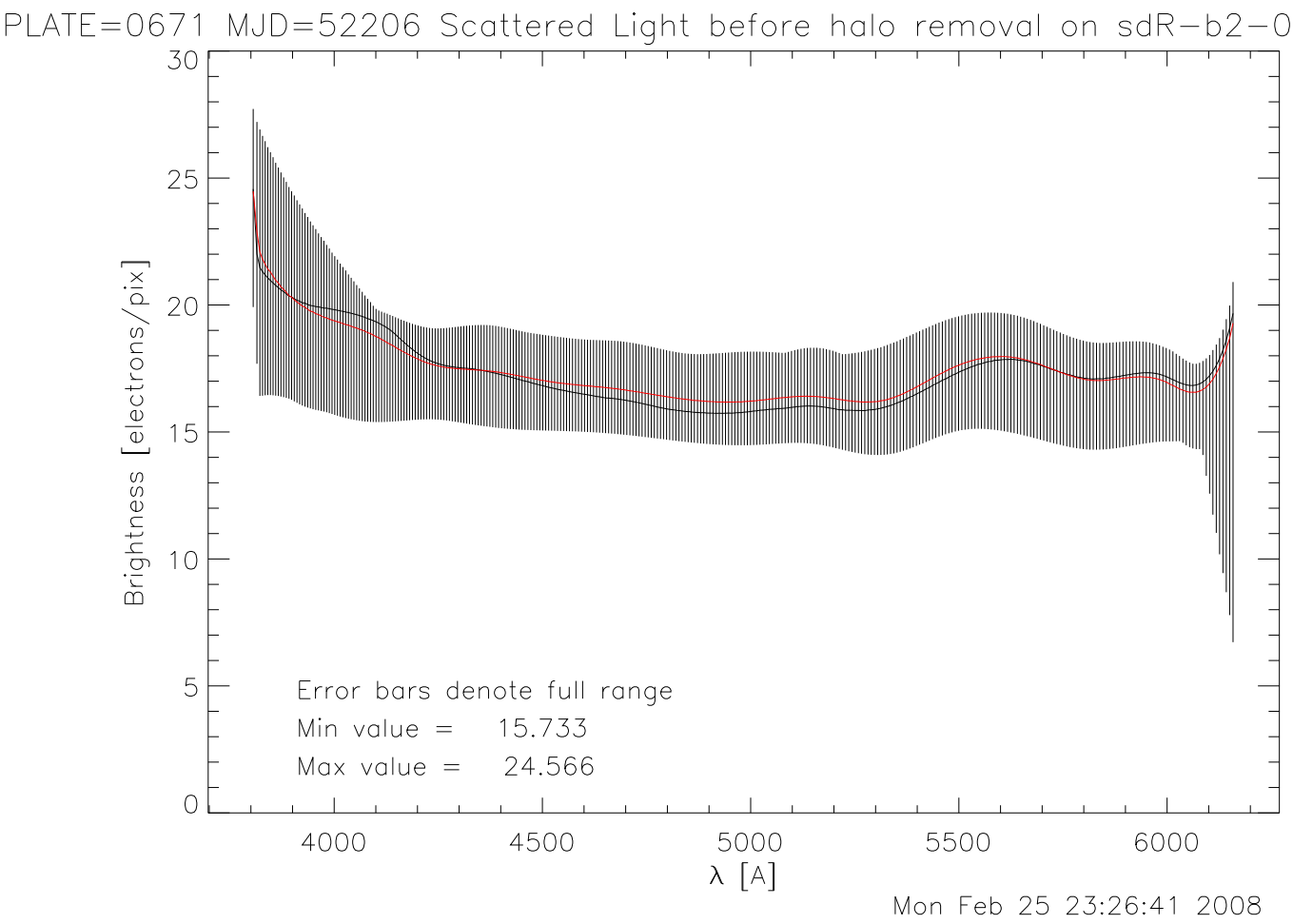

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−b2−00011490.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
0
500
1000
1500
2000

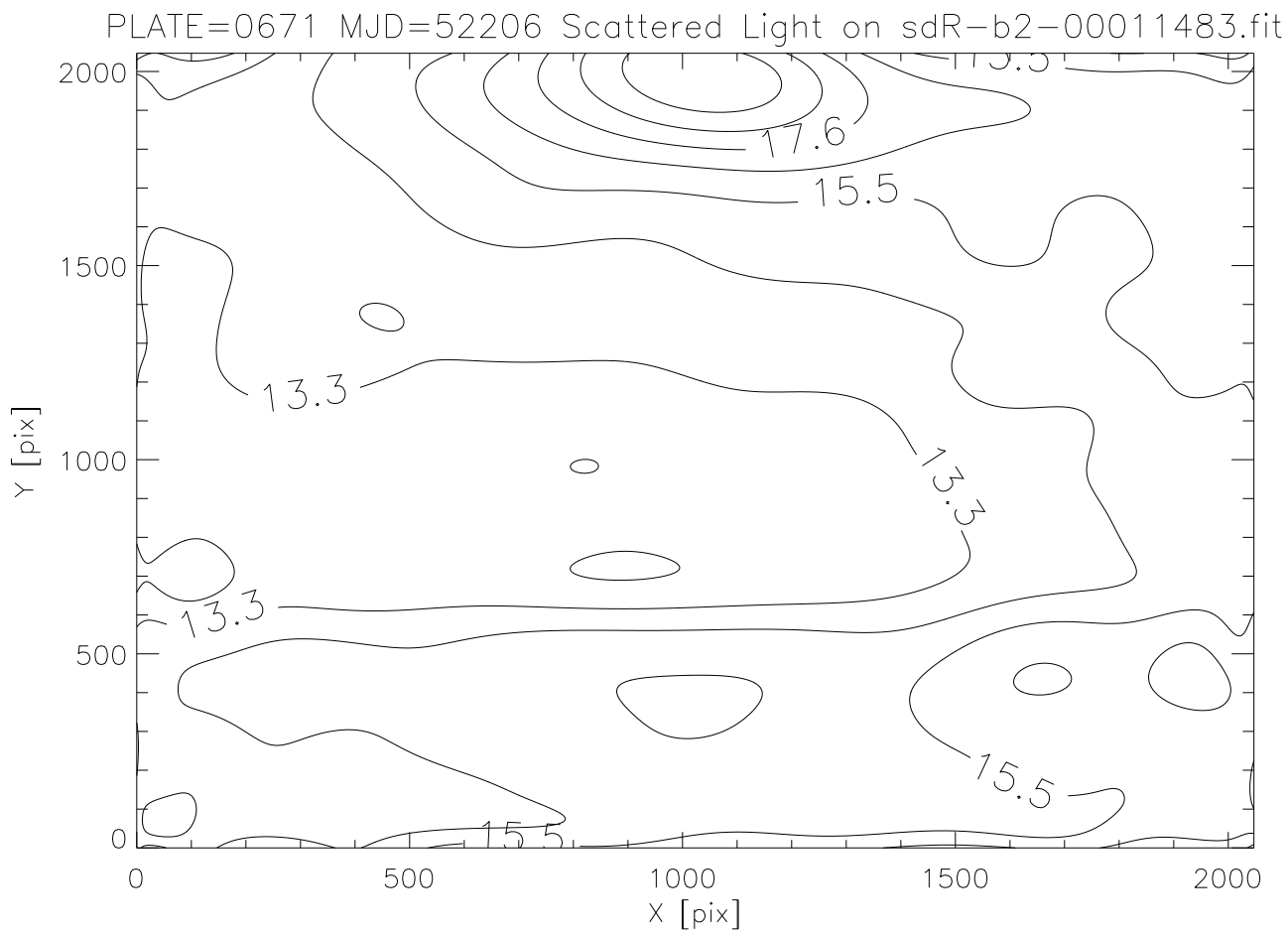

PLATE=0671 MJD=52206 Superflat sdR-b2-00011490.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

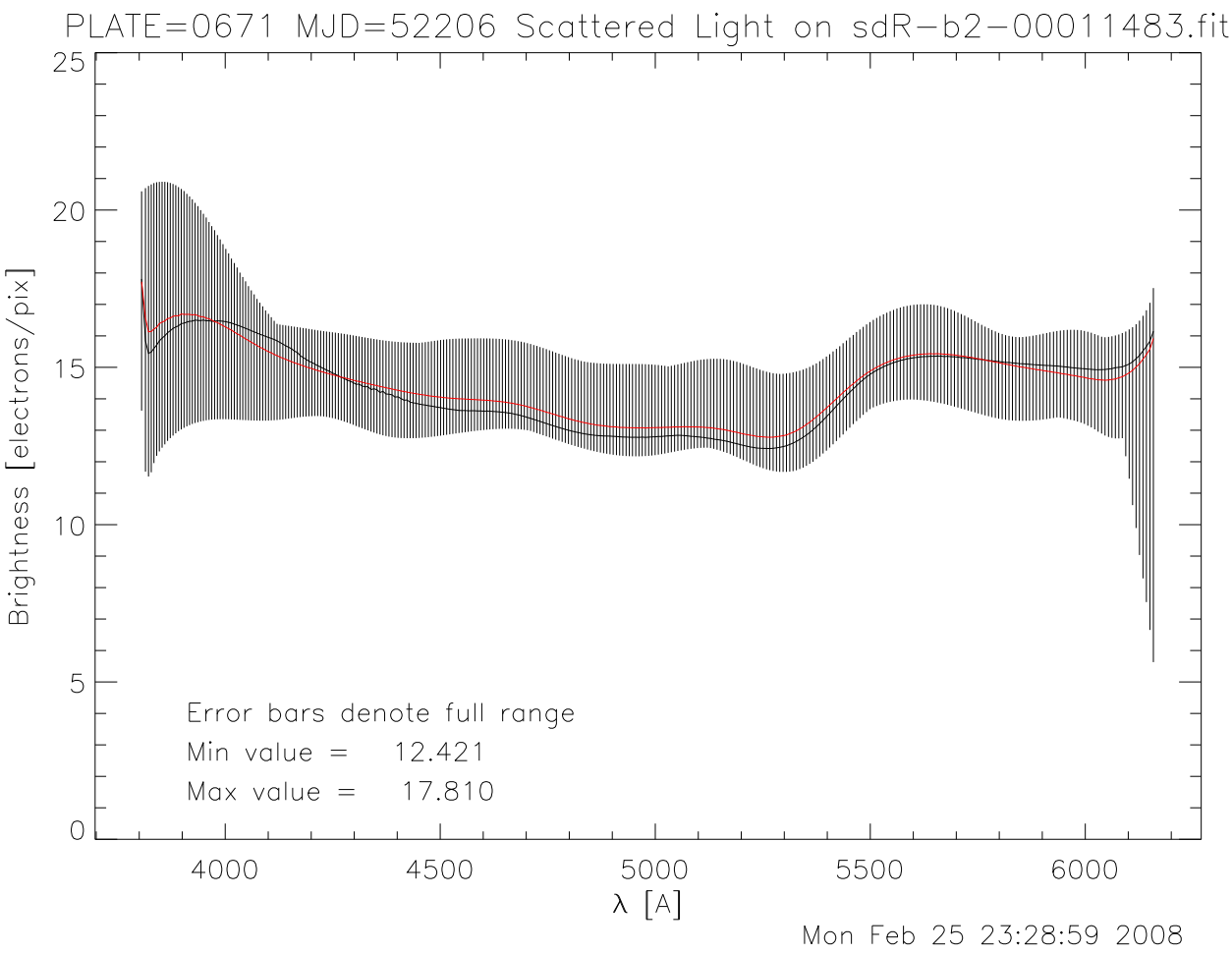

PLATE=0671 MJD=52206 Arcline Fit for sdR-b2-00011491.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:25:44 2008

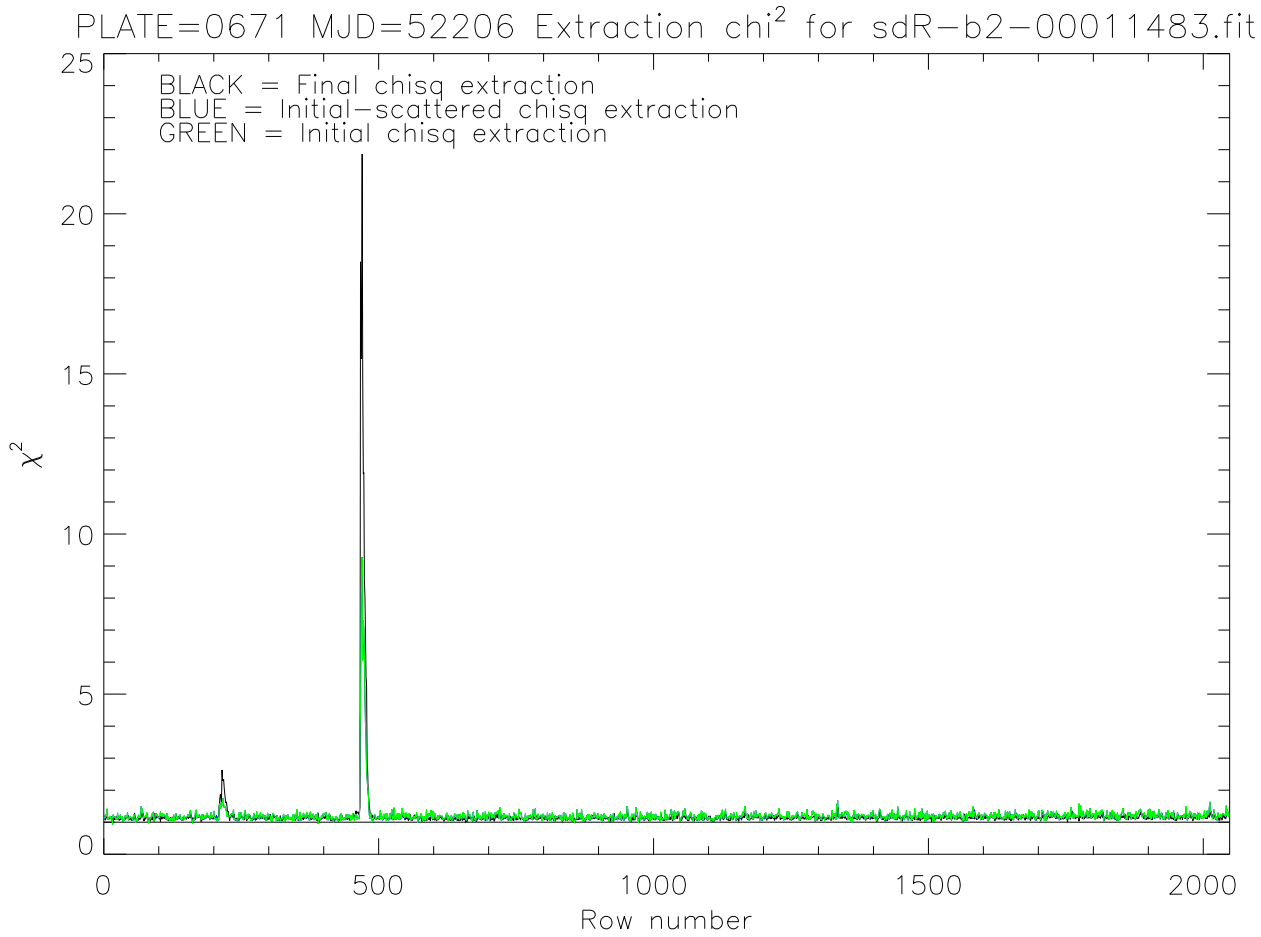

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b2-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.486
Max value = 1.276
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:25:50 2008

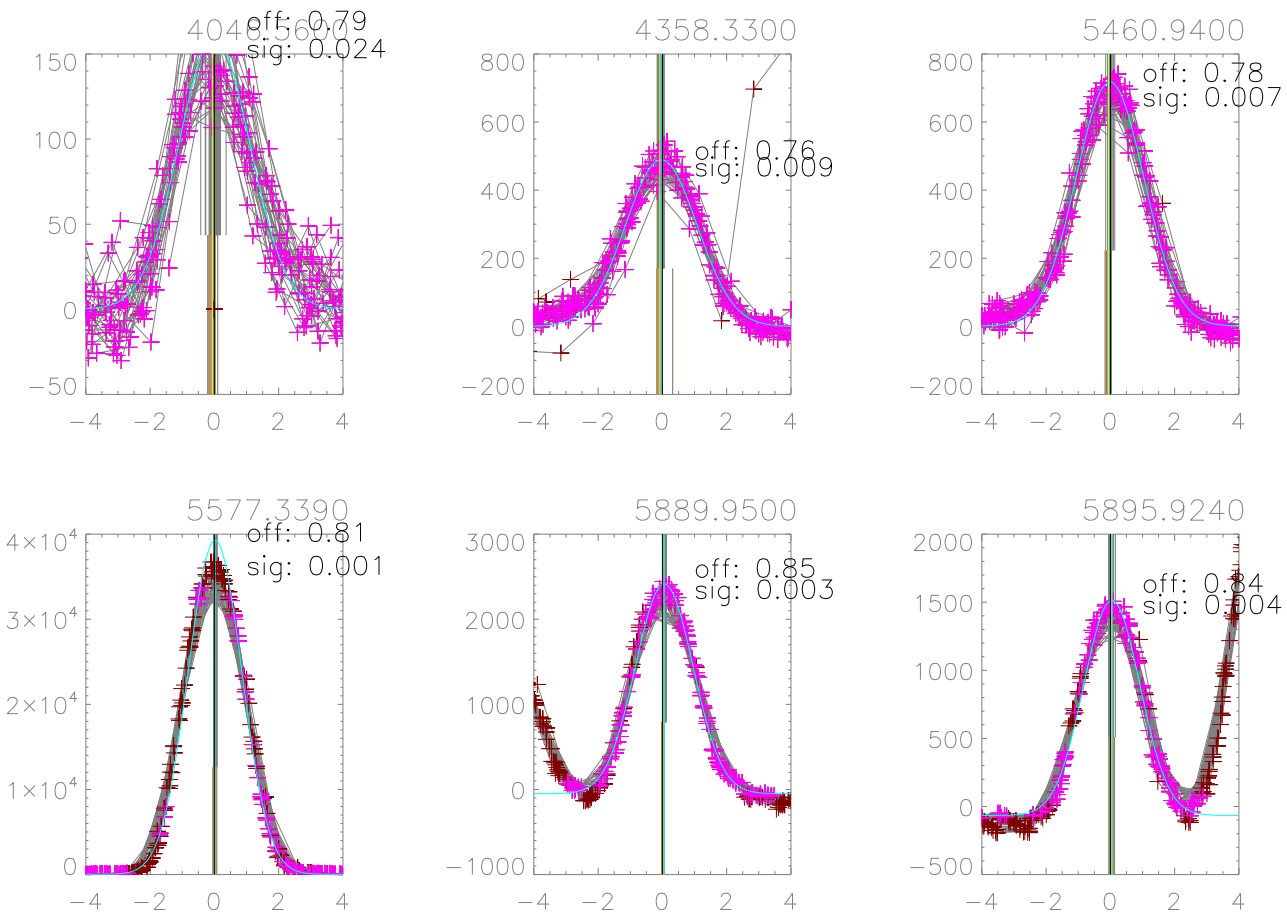

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011483.f
22.7
19.7
19.1
0
15.5
19.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

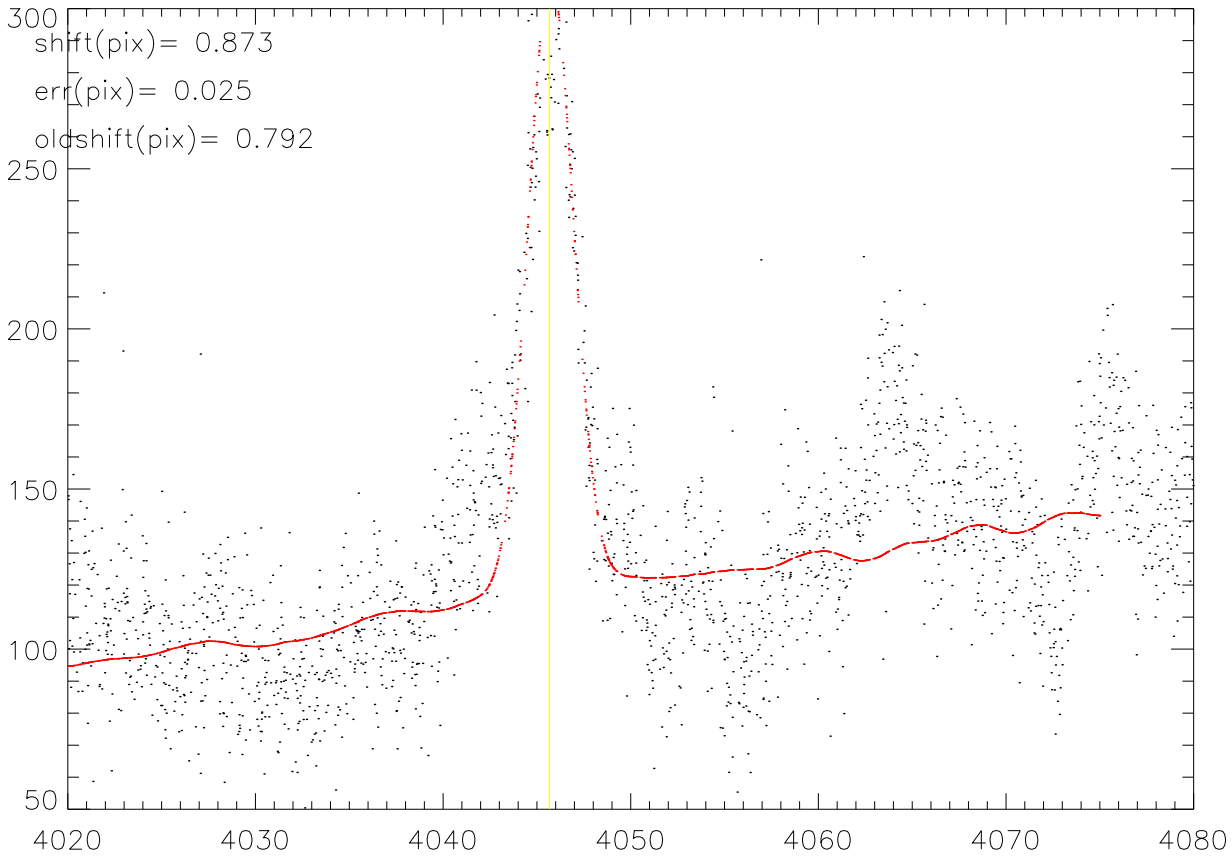

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011483.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 15.733
Max value = 24.566
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:26:41 2008

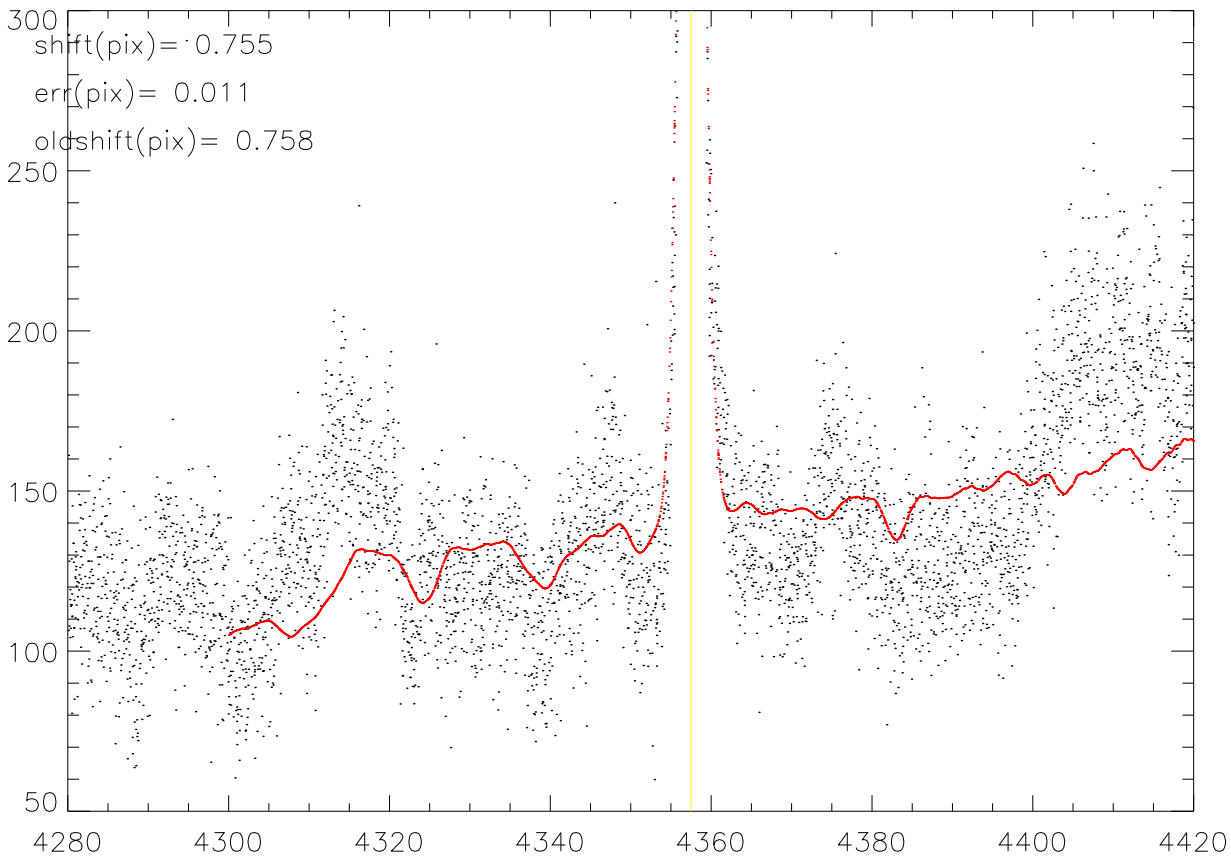

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011483.fit
17.6
15.5
13.3
13.3
13.3
15.5
15.5
Y [pix]
X [pix]
0
500
1000
1500
2000

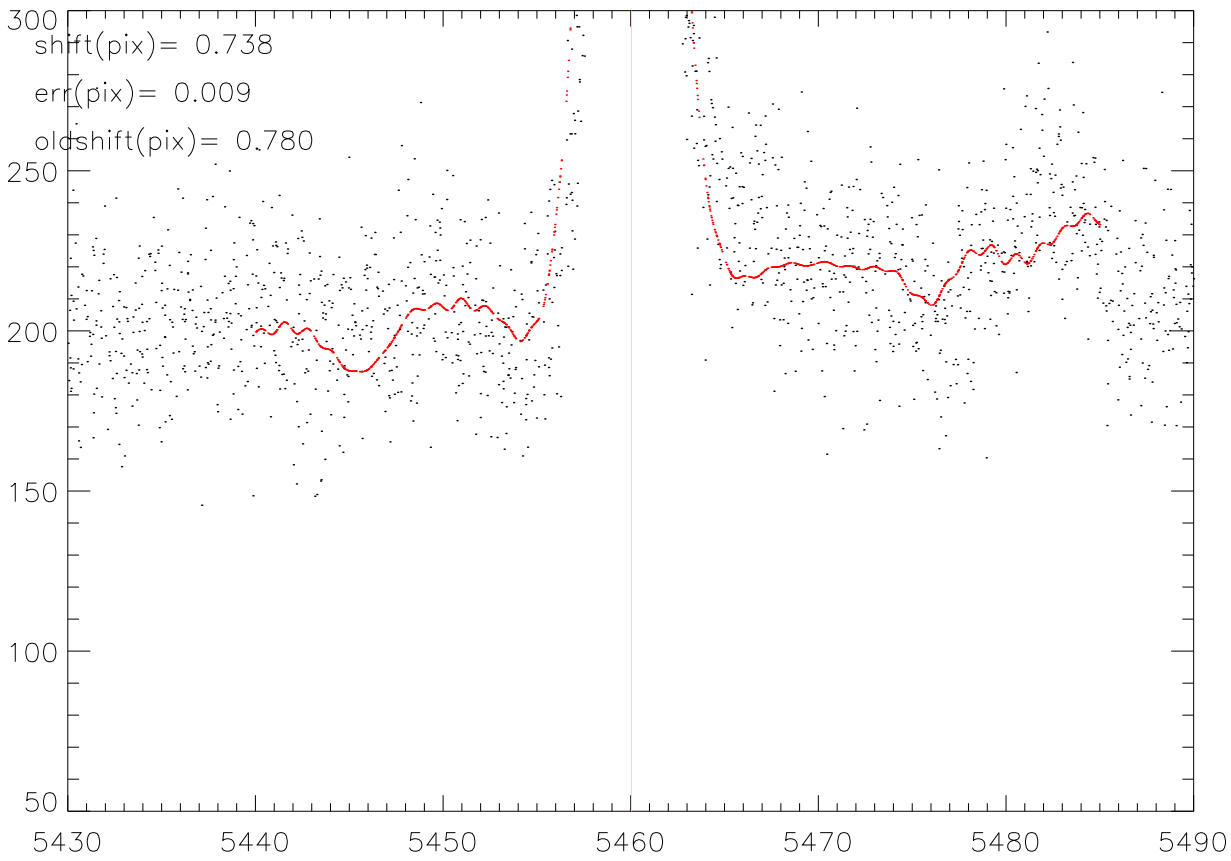

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011483.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 12.421
Max value = 17.810
Mon Feb 25 23:28:59 2008

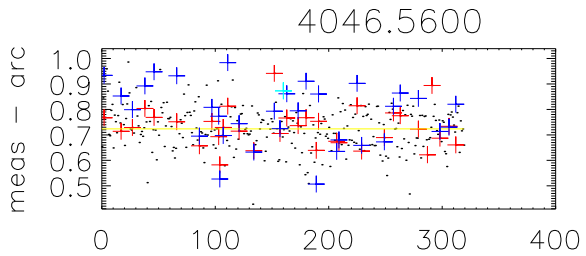

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b2-00011483.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number

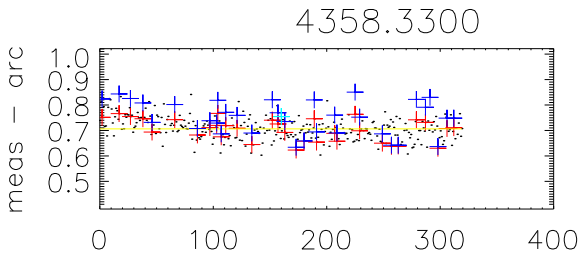

4046.5600
off: 0.79
sig: 0.024
4358.3300
off: 0.76
sig: 0.009
5460.9400
off: 0.78
sig: 0.007
5577.3390
off: 0.81
sig: 0.001
5889.9500
off: 0.85
sig: 0.003
5895.9240
off: 0.84
sig: 0.004

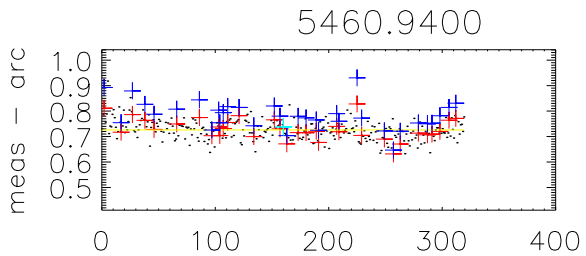

shift(pix)= 0.873
err(pix)= 0.025
oldshift(pix)= 0.792
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

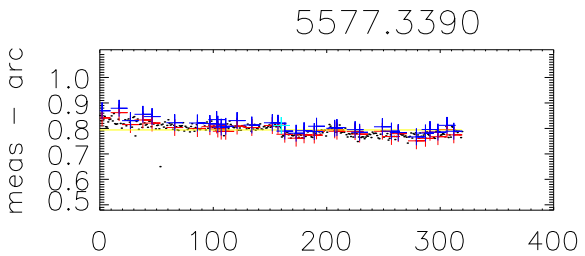

shift(pix)= 0.755
err(pix)= 0.011
oldshift(pix)= 0.758
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

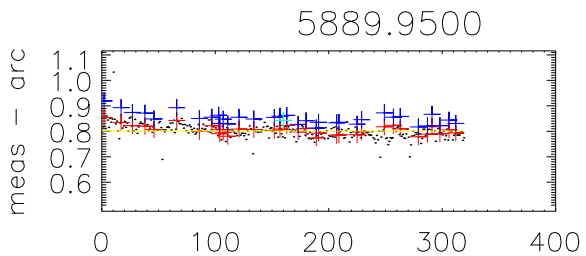

shift(pix)= 0.738
err(pix)= 0.009
oldshift(pix)= 0.780
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

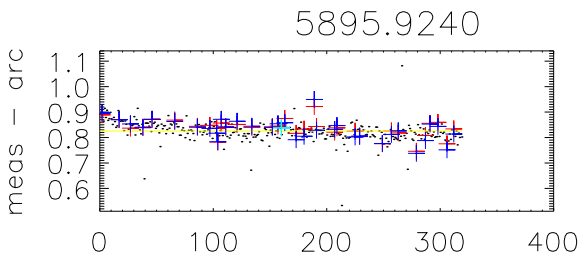

4046.5600
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

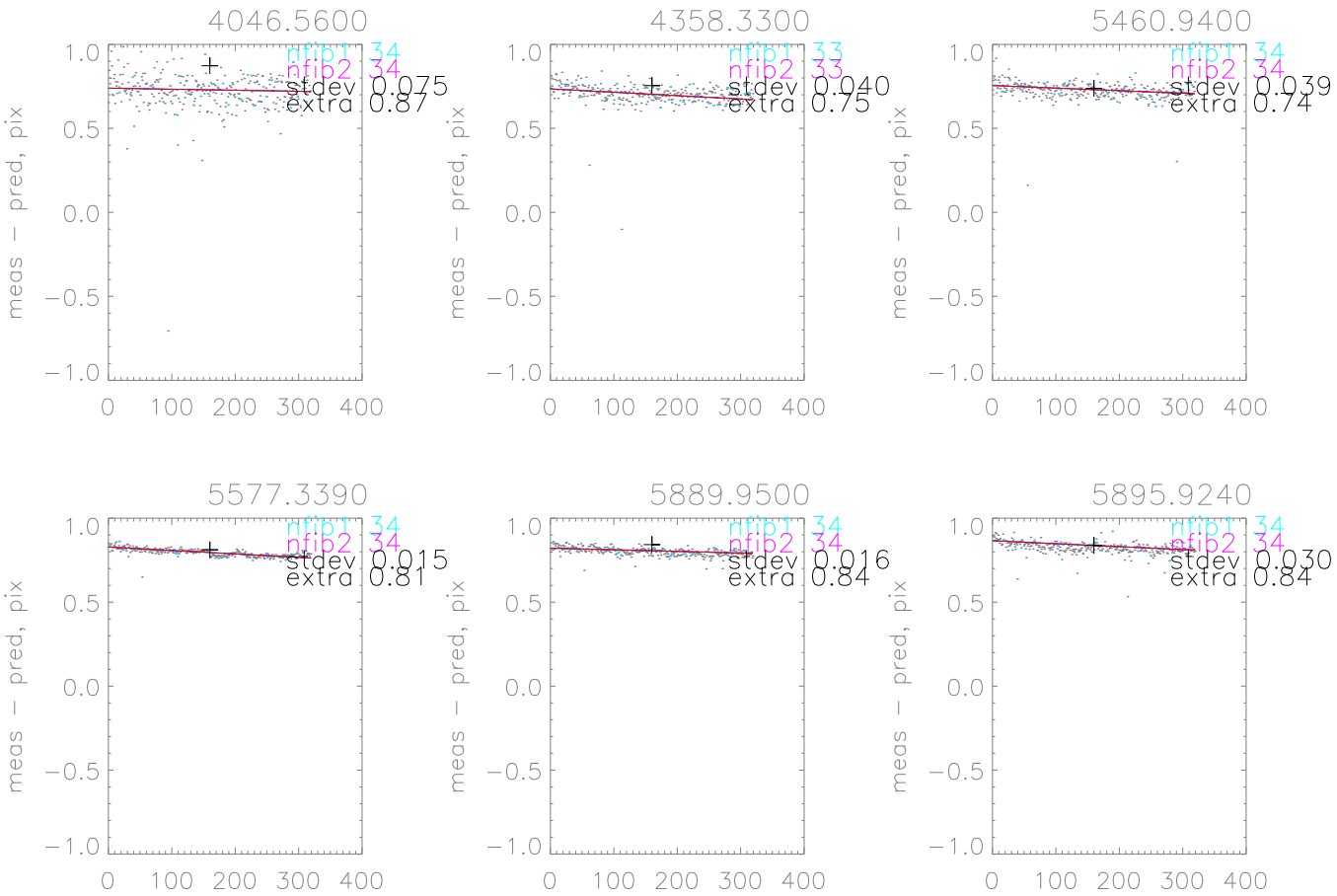

4358.3300
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

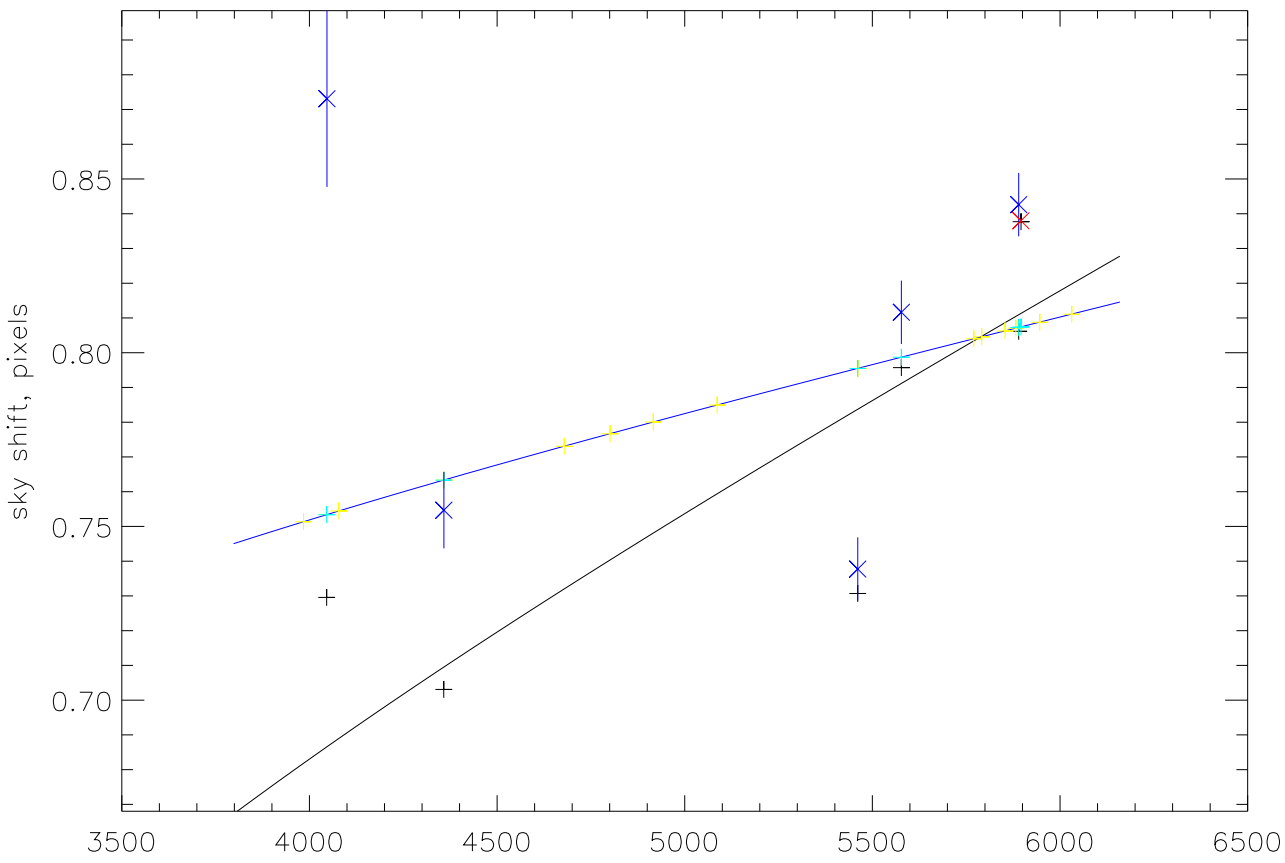

5460.9400
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

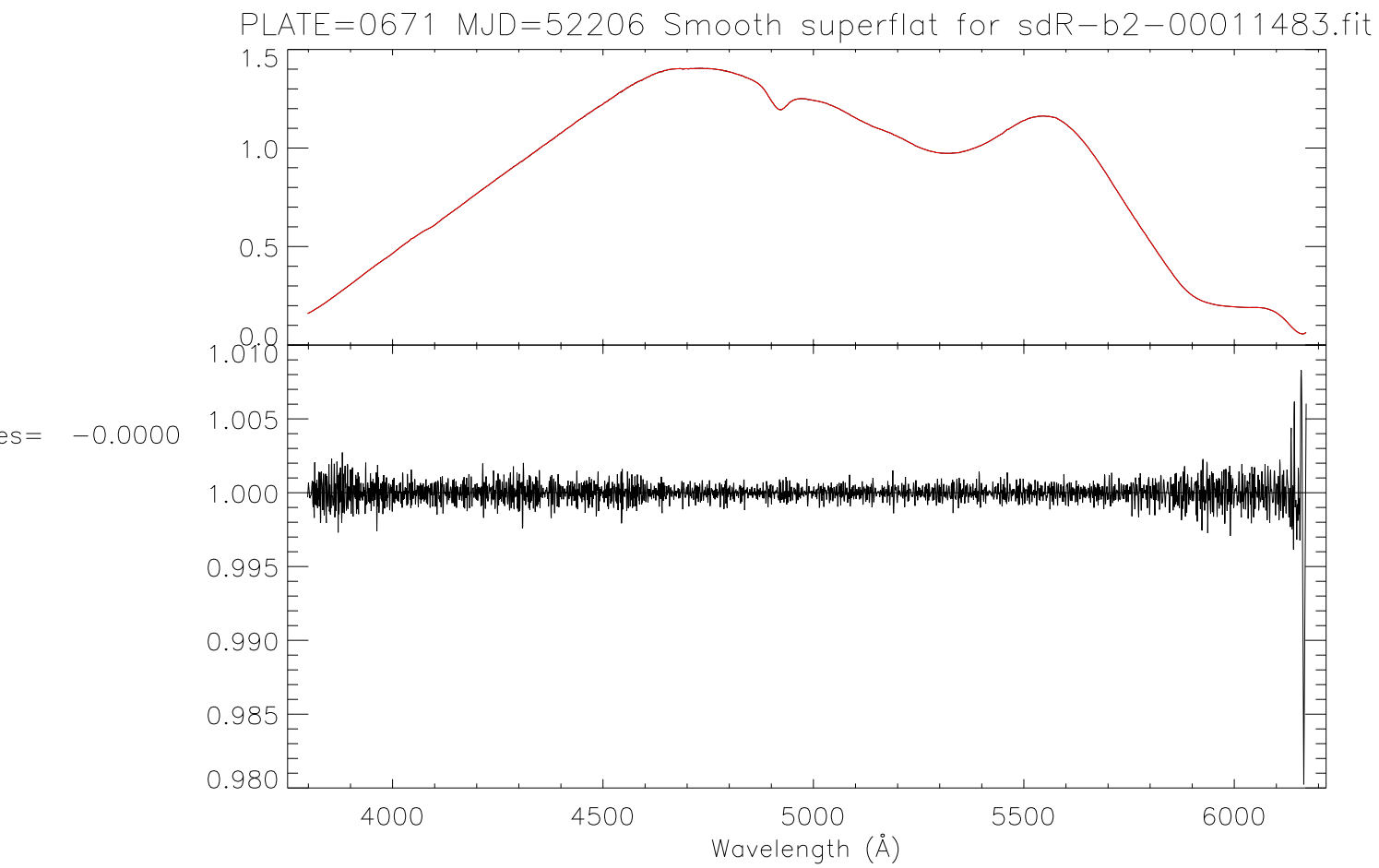

5577.3390
meas − arc
1.0
0.9
0.8
0.7
0.6
0.5
0
100
200
300
400

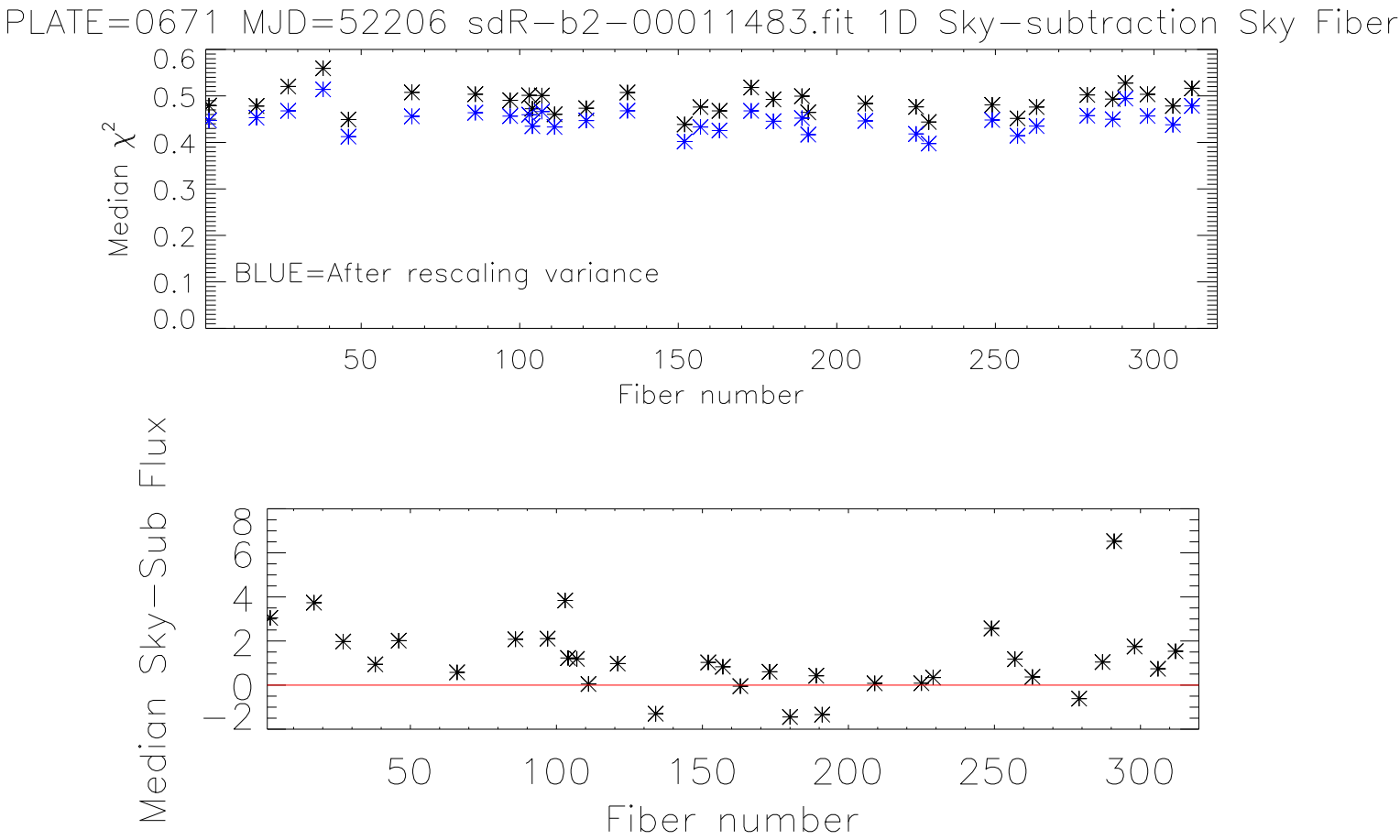

5889.9500
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

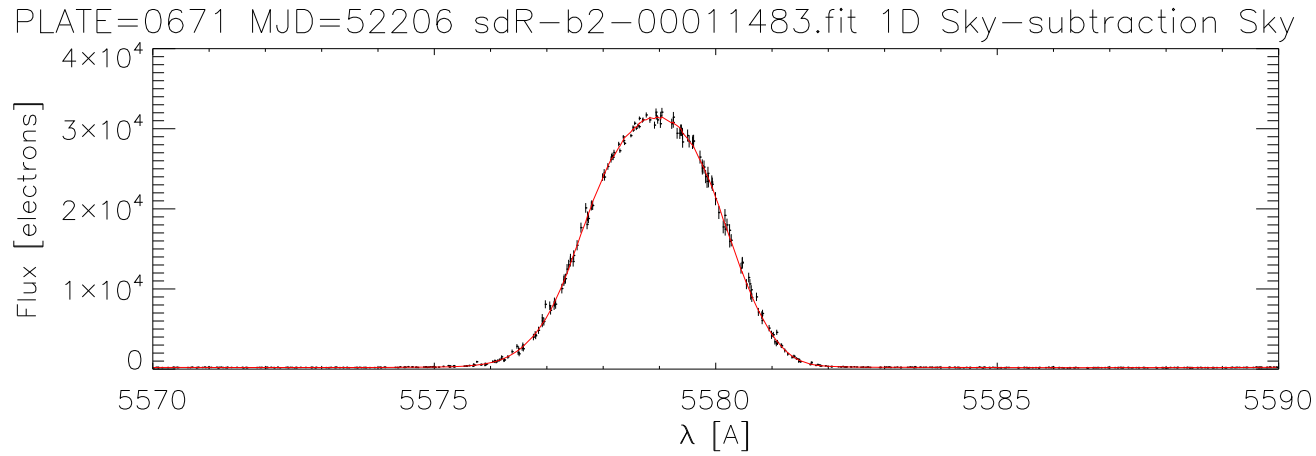

5895.9240
meas − arc
1.1
1.0
0.9
0.8
0.7
0.6
0
100
200
300
400

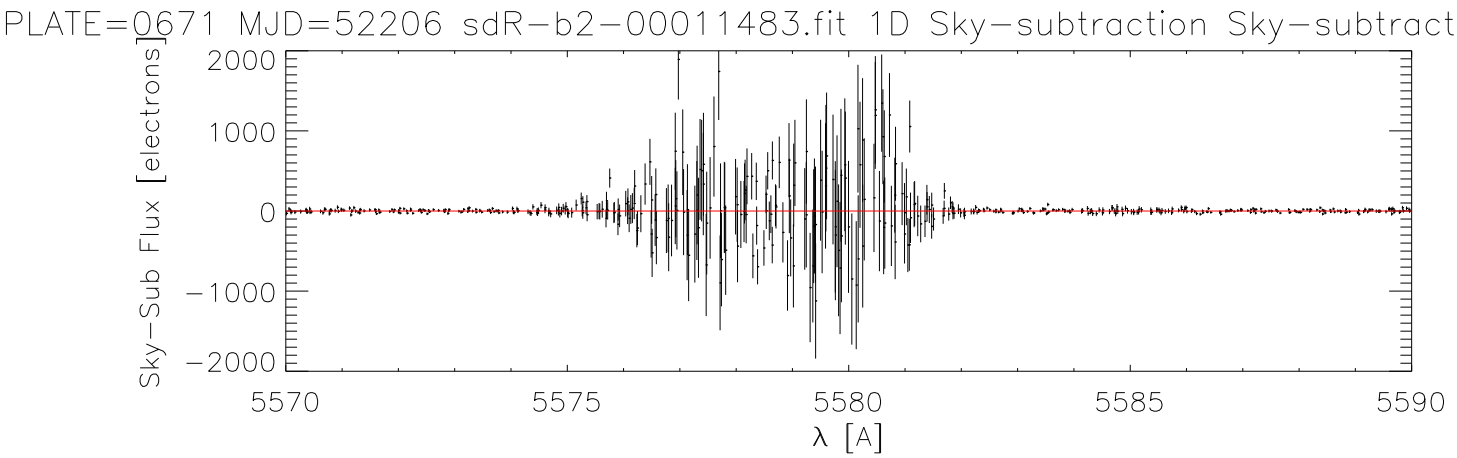

4046.5600
nfib1 34
nfib2 34
stdev 0.075
extra 0.87
4358.3300
nfib1 33
nfib2 33
stdev 0.040
extra 0.75
5460.9400
nfib1 34
nfib2 34
stdev 0.039
extra 0.74
5577.3390
nfib1 34
nfib2 34
stdev 0.015
extra 0.81
5889.9500
nfib1 34
nfib2 34
stdev 0.016
extra 0.84
5895.9240
nfib1 34
nfib2 34
stdev 0.030
extra 0.84
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

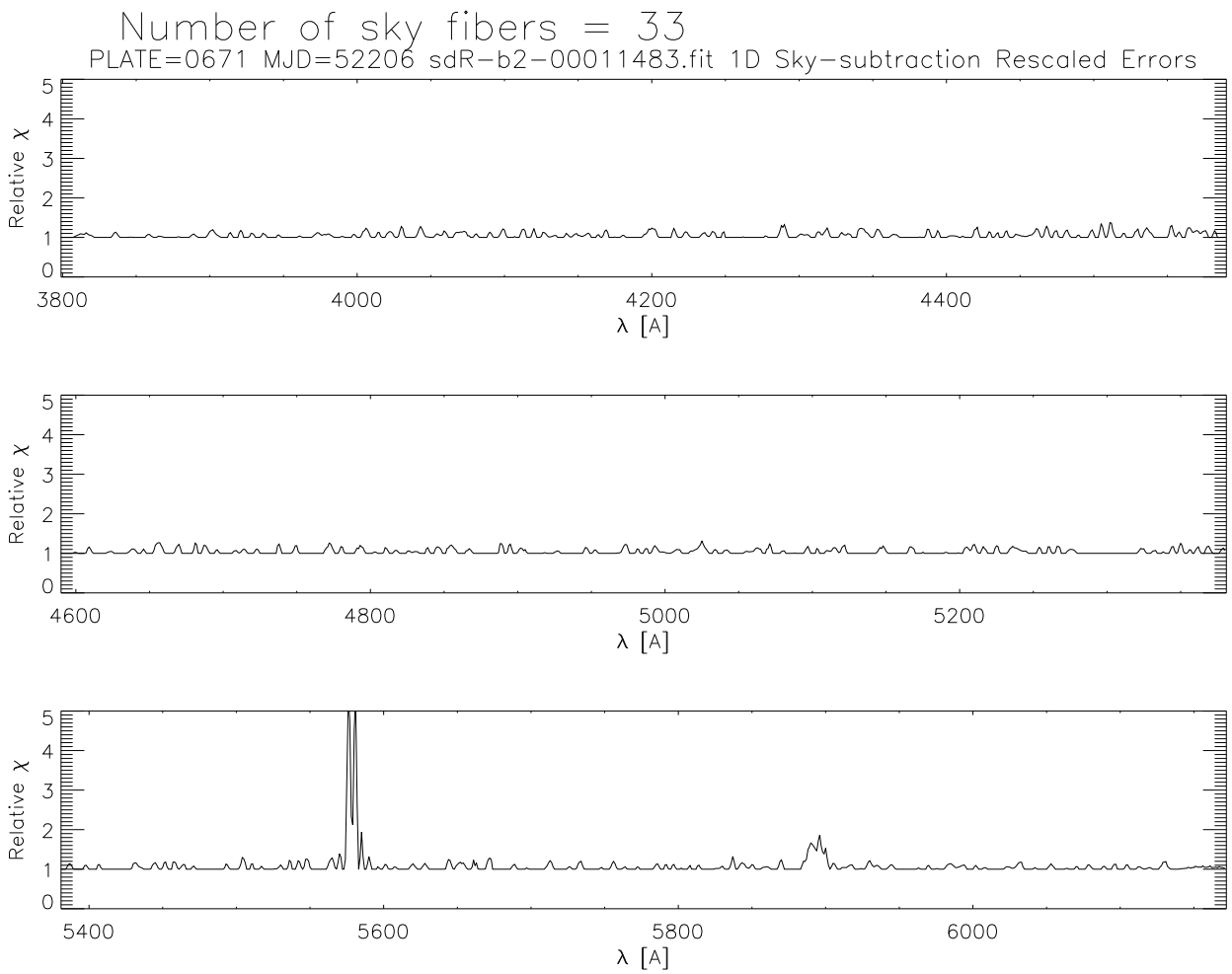

sky shift, pixels
0.85
0.80
0.75
0.70
3500
4000
4500
5000
5500
6000
6500

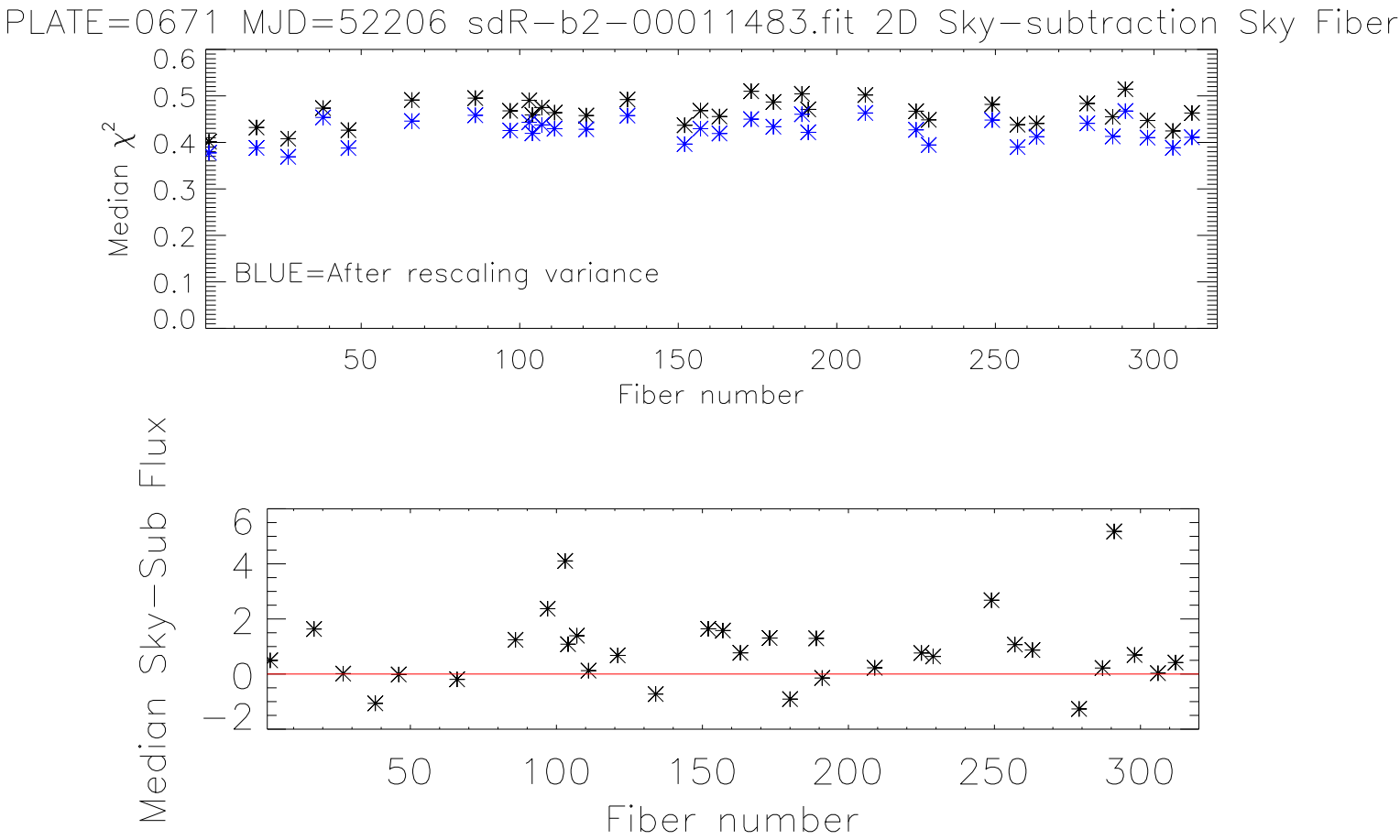

PLATE=0671 MJD=52206 Smooth superflat for sdR-b2-00011483.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

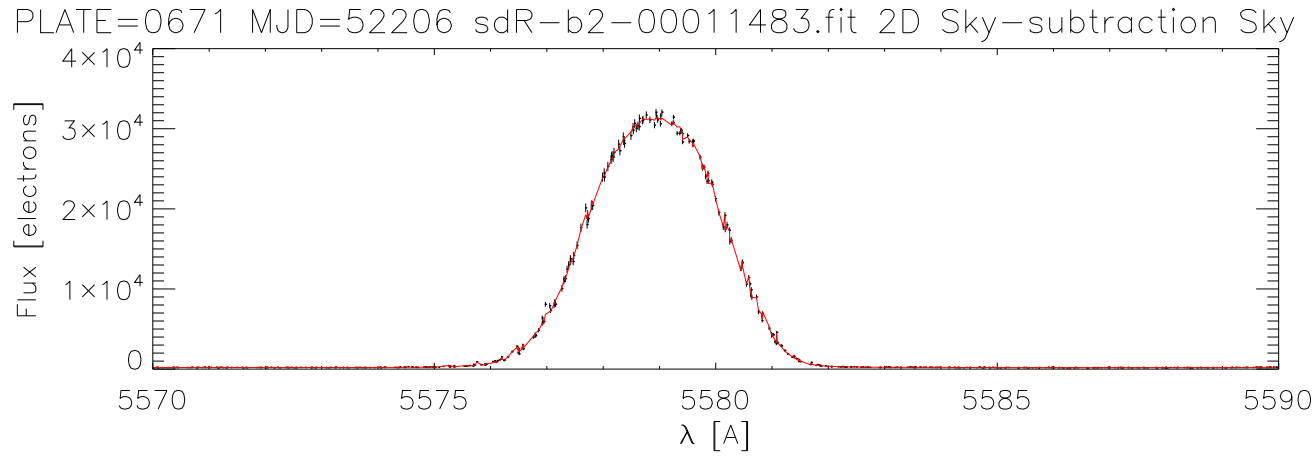

PLATE=0671 MJD=52206 sdR-b2-00011483.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

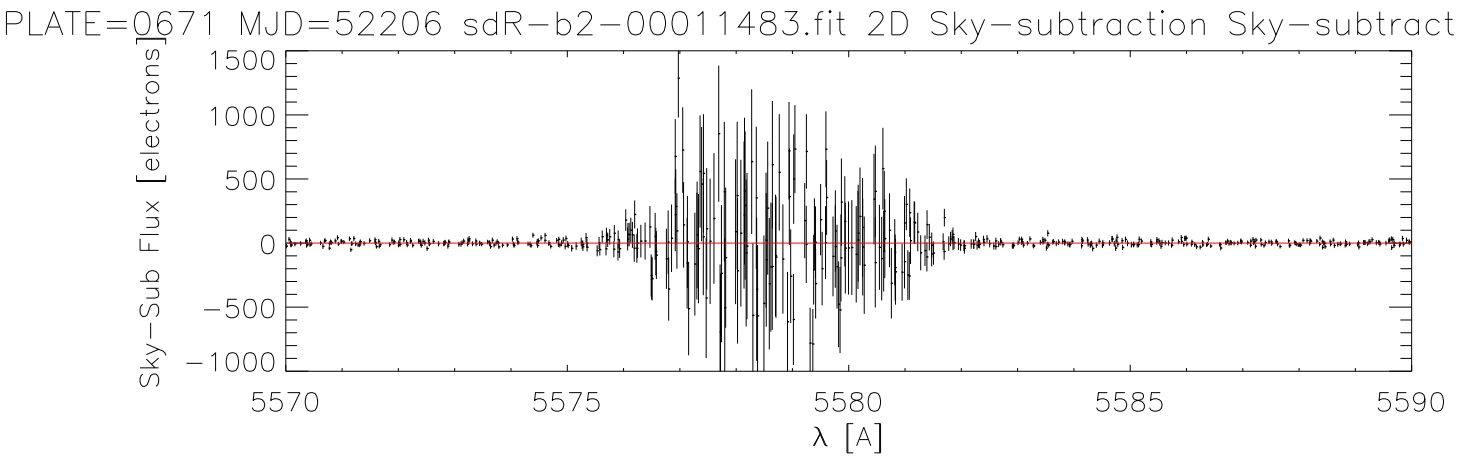

PLATE=0671 MJD=52206 sdR-b2-00011483.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
5570
5575
5580
5585
5590
λ [A]

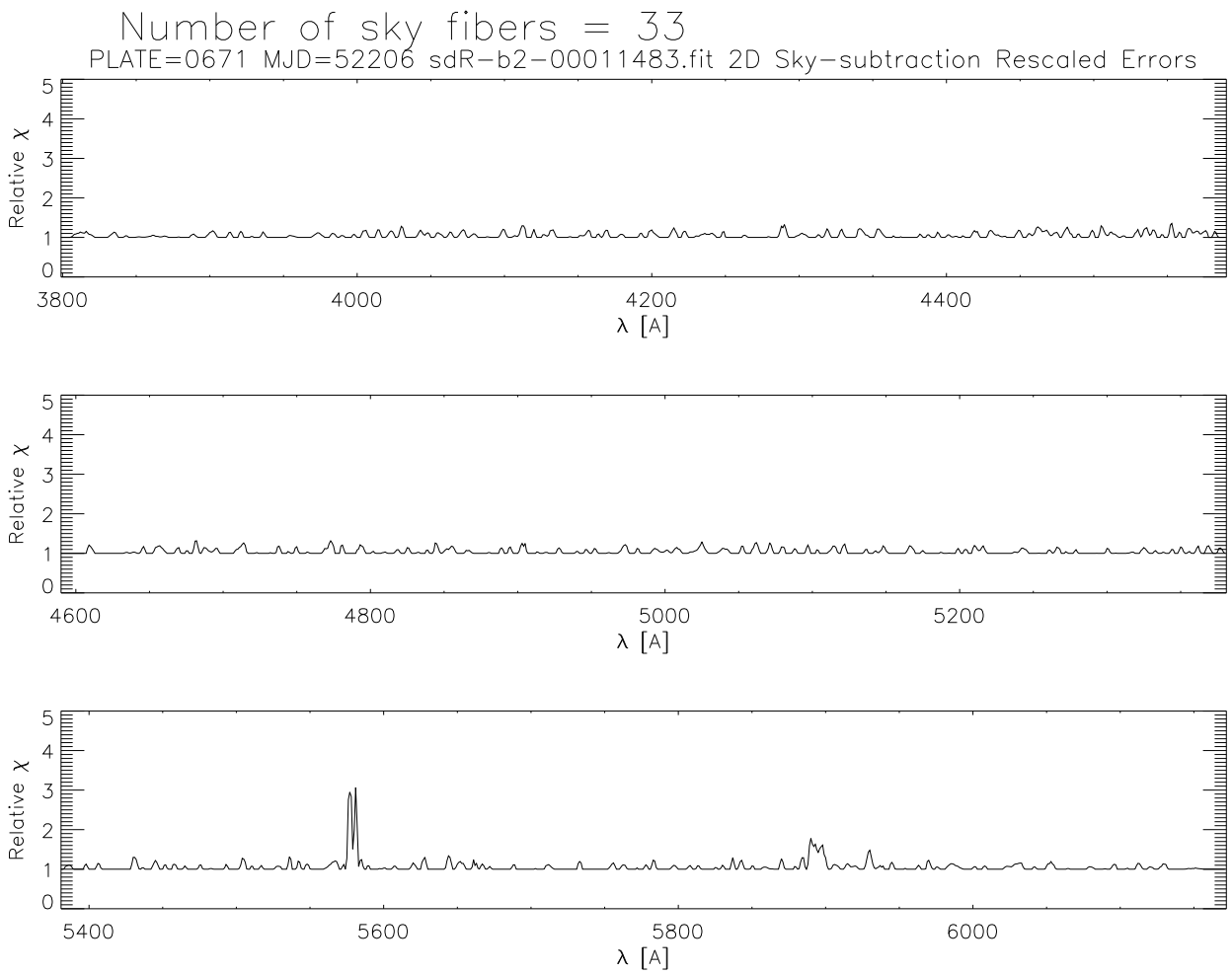

PLATE=0671 MJD=52206 sdR-b2-00011483.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

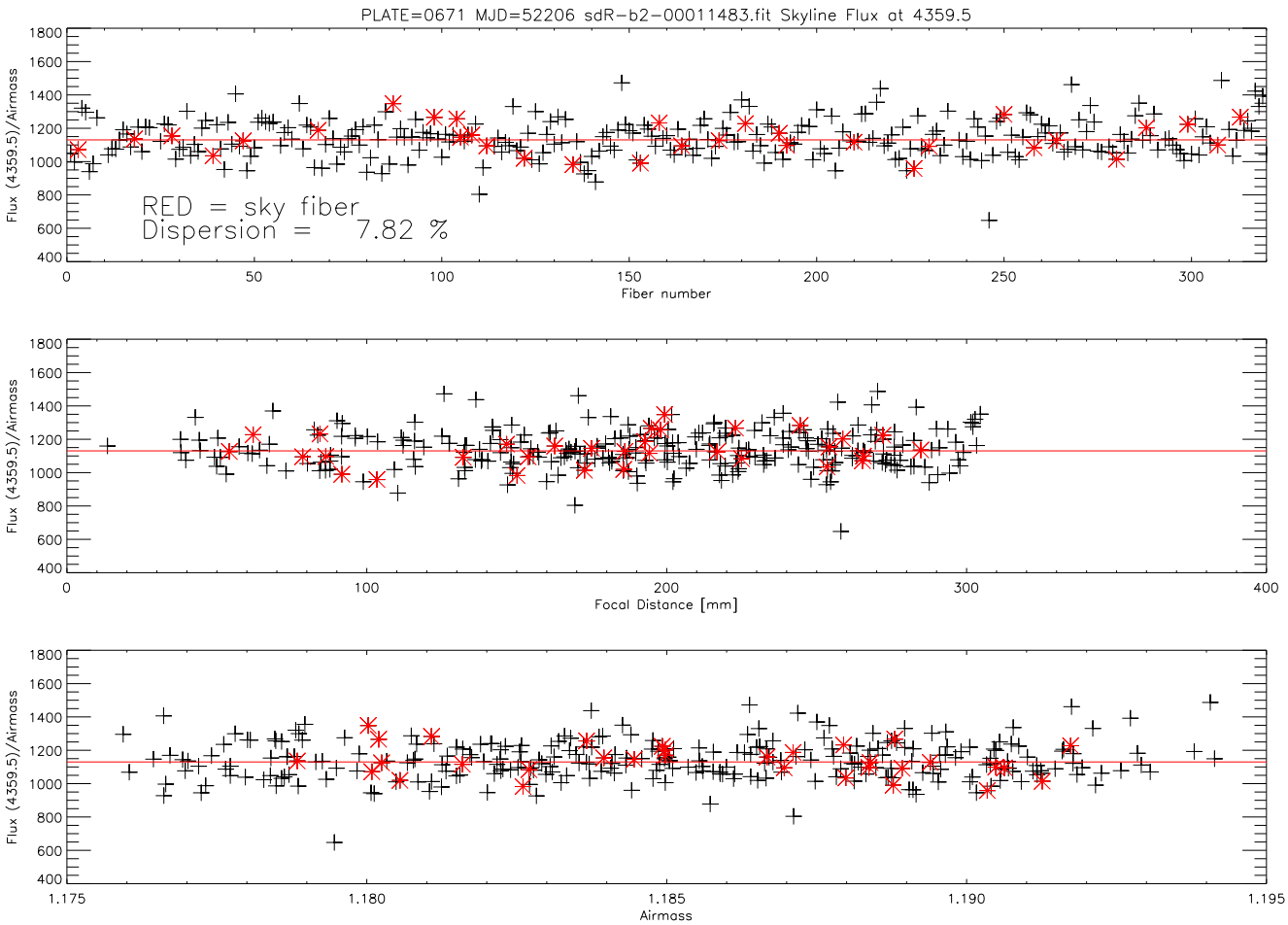

Number of sky fibers = 33
PLATE=0671 MJD=52206 sdR-b2-00011483.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

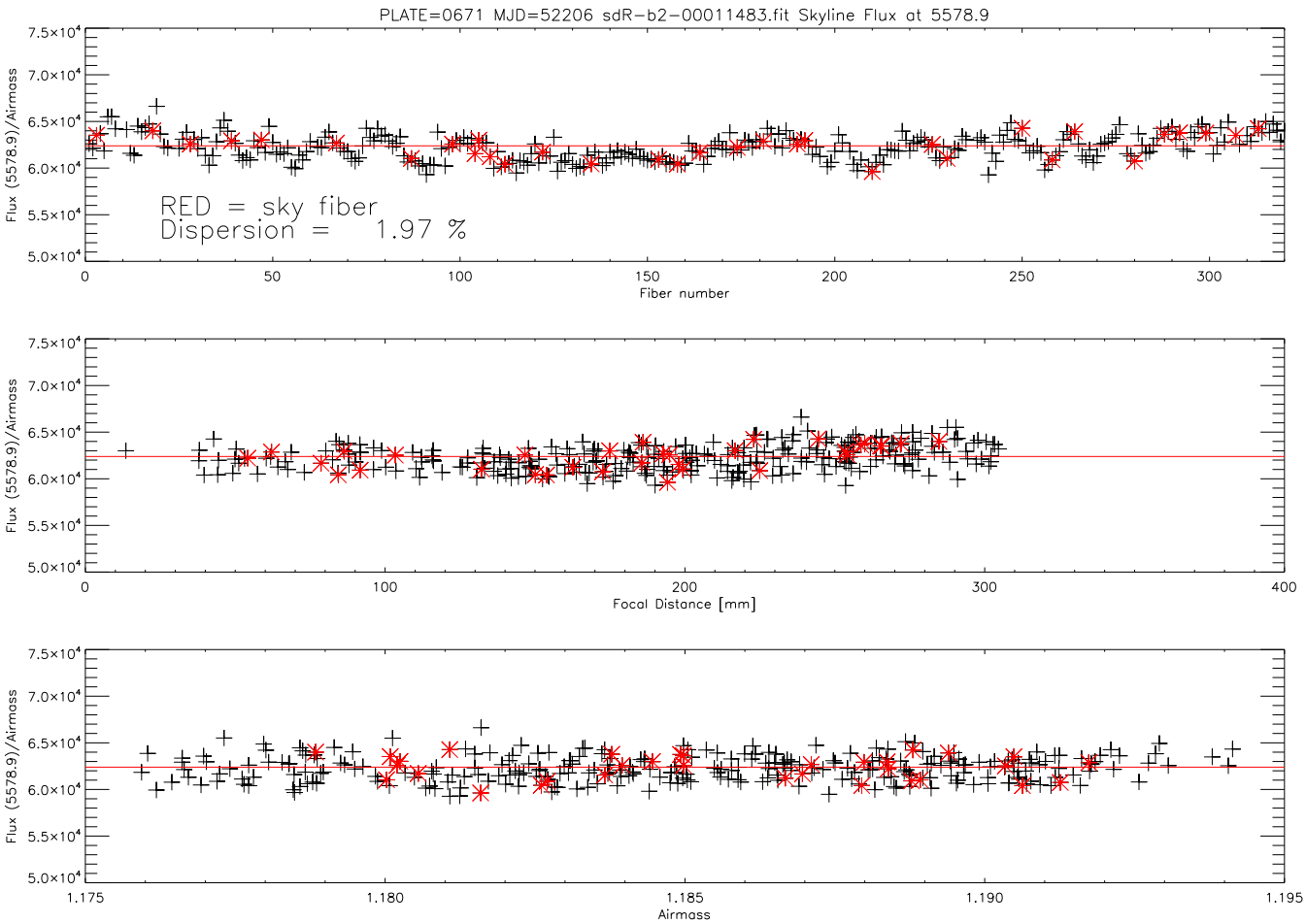

PLATE=0671 MJD=52206 sdR-b2-00011483.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

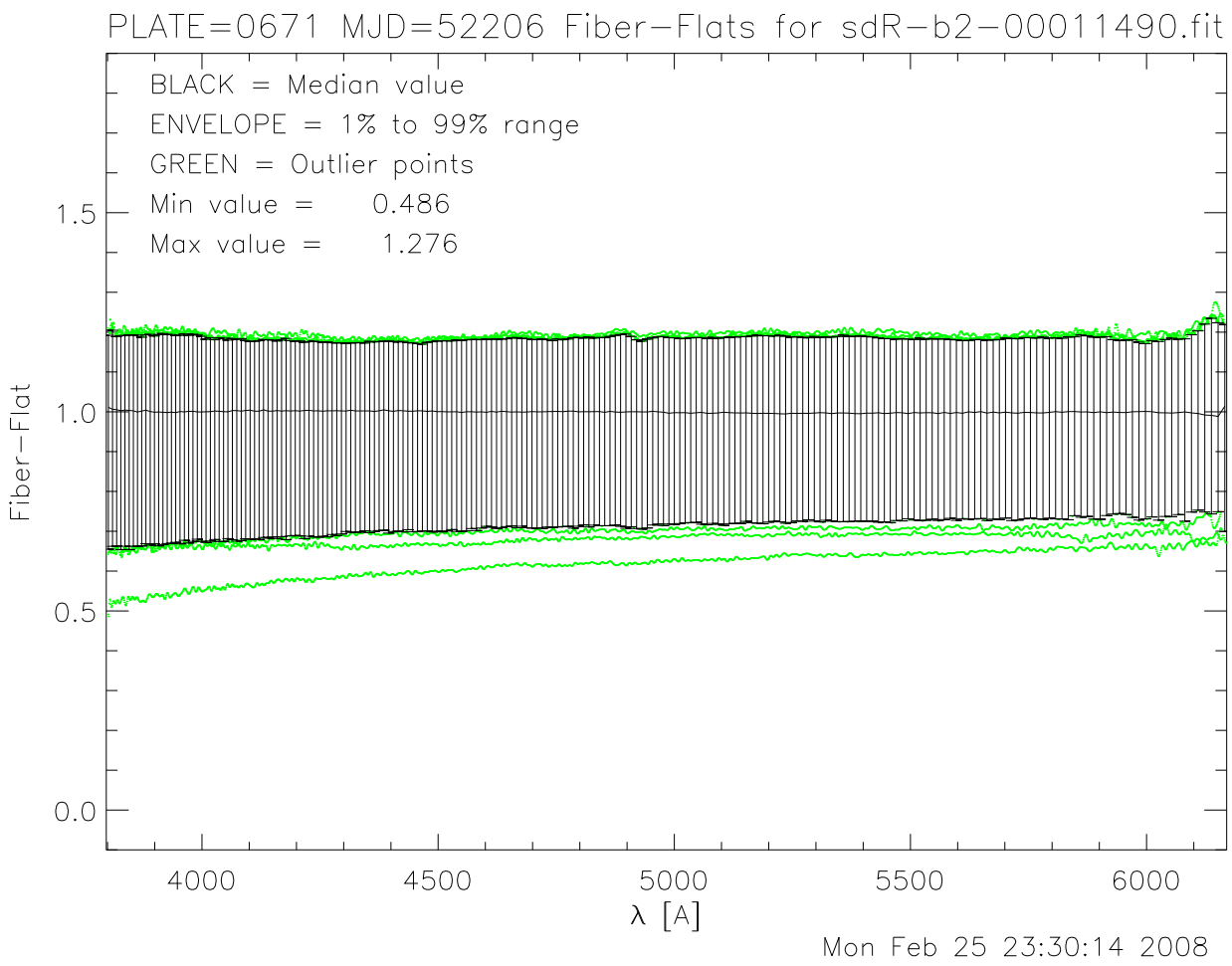

PLATE=0671 MJD=52206 sdR-b2-00011483.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4×10^4
3×10^4
2×10^4
1×10^4
0
5570
5575
5580
5585
5590
λ [A]

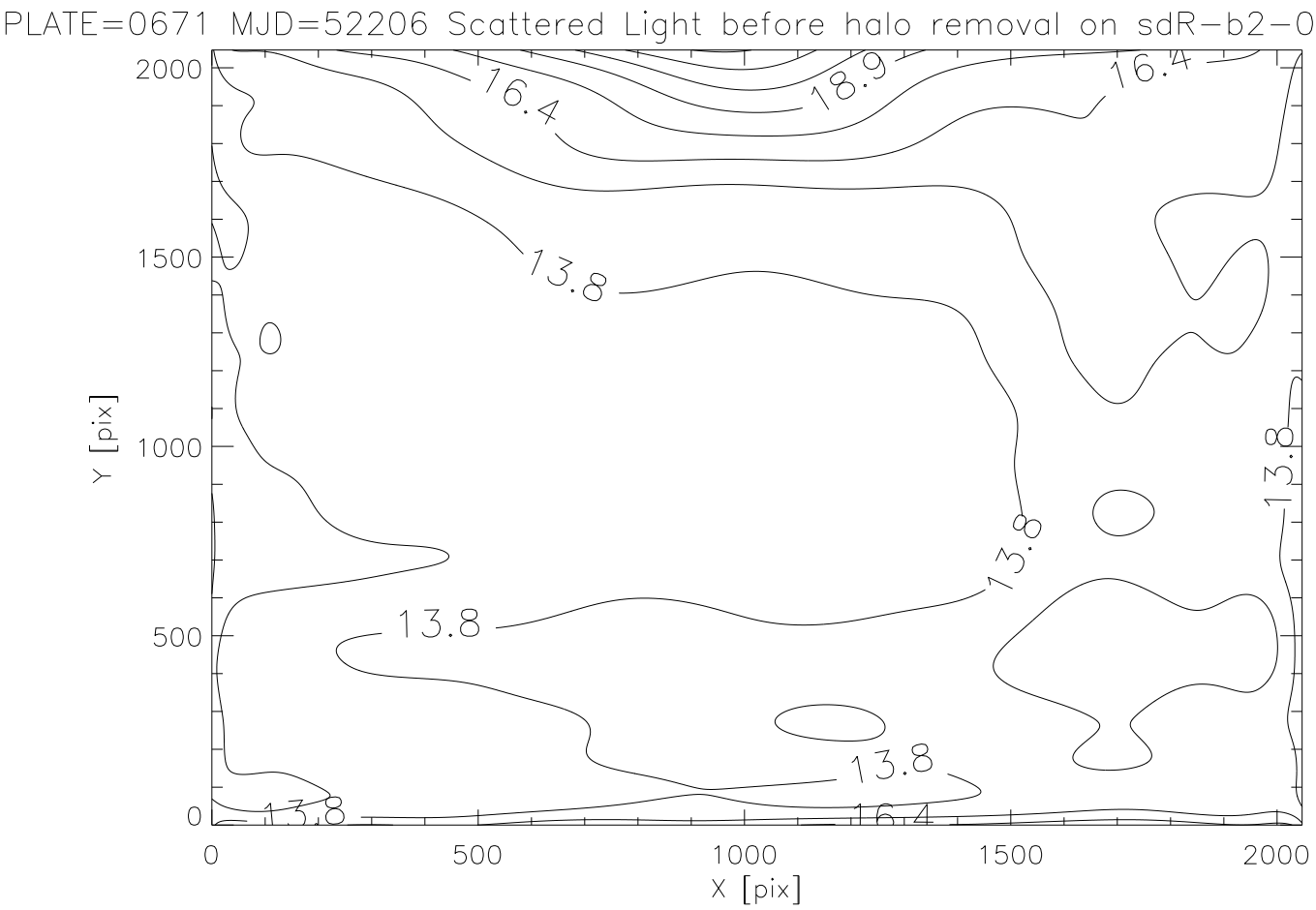

PLATE=0671 MJD=52206 sdR-b2-00011483.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

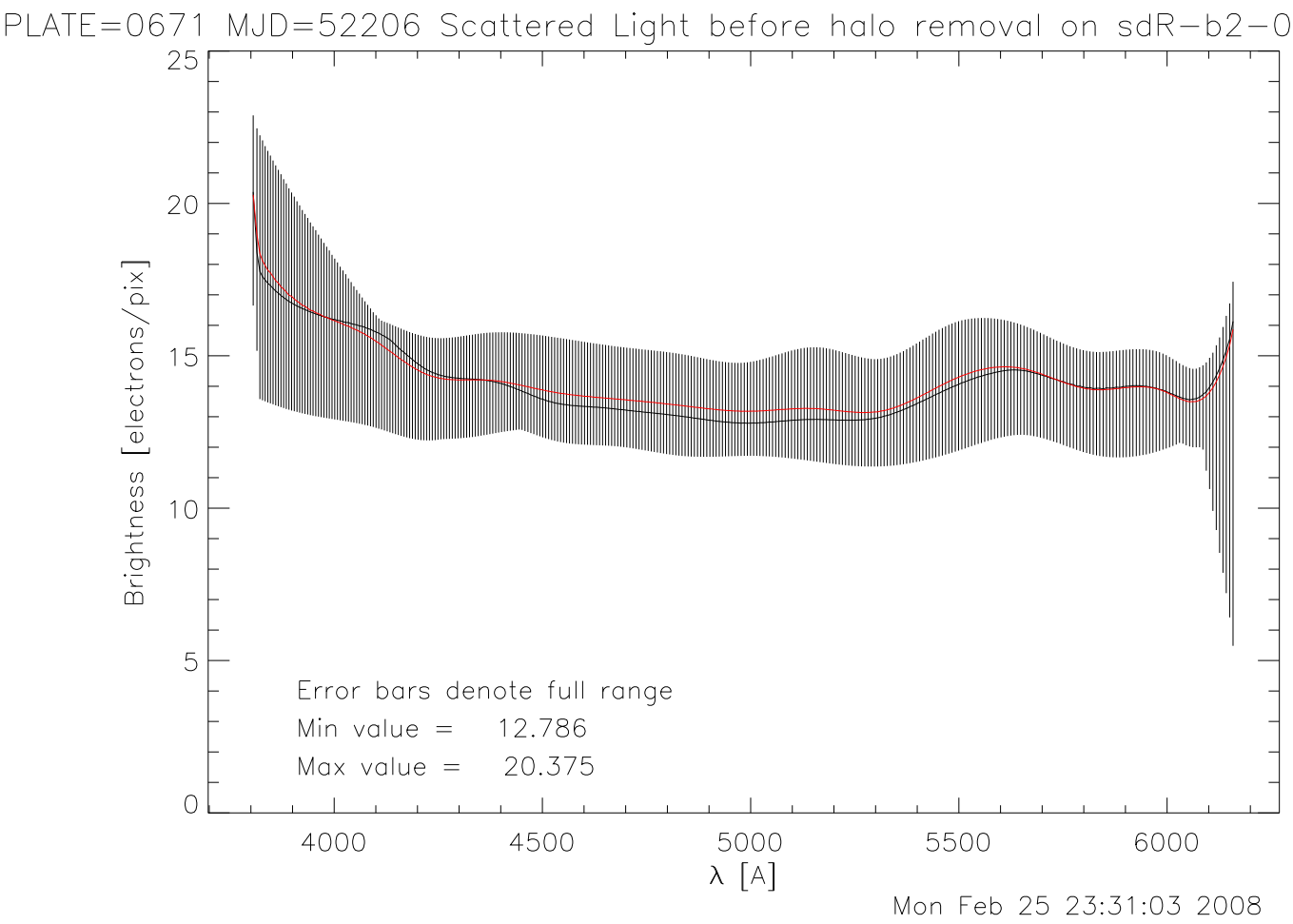

Number of sky fibers = 33
PLATE=0671 MJD=52206 sdR-b2-00011483.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

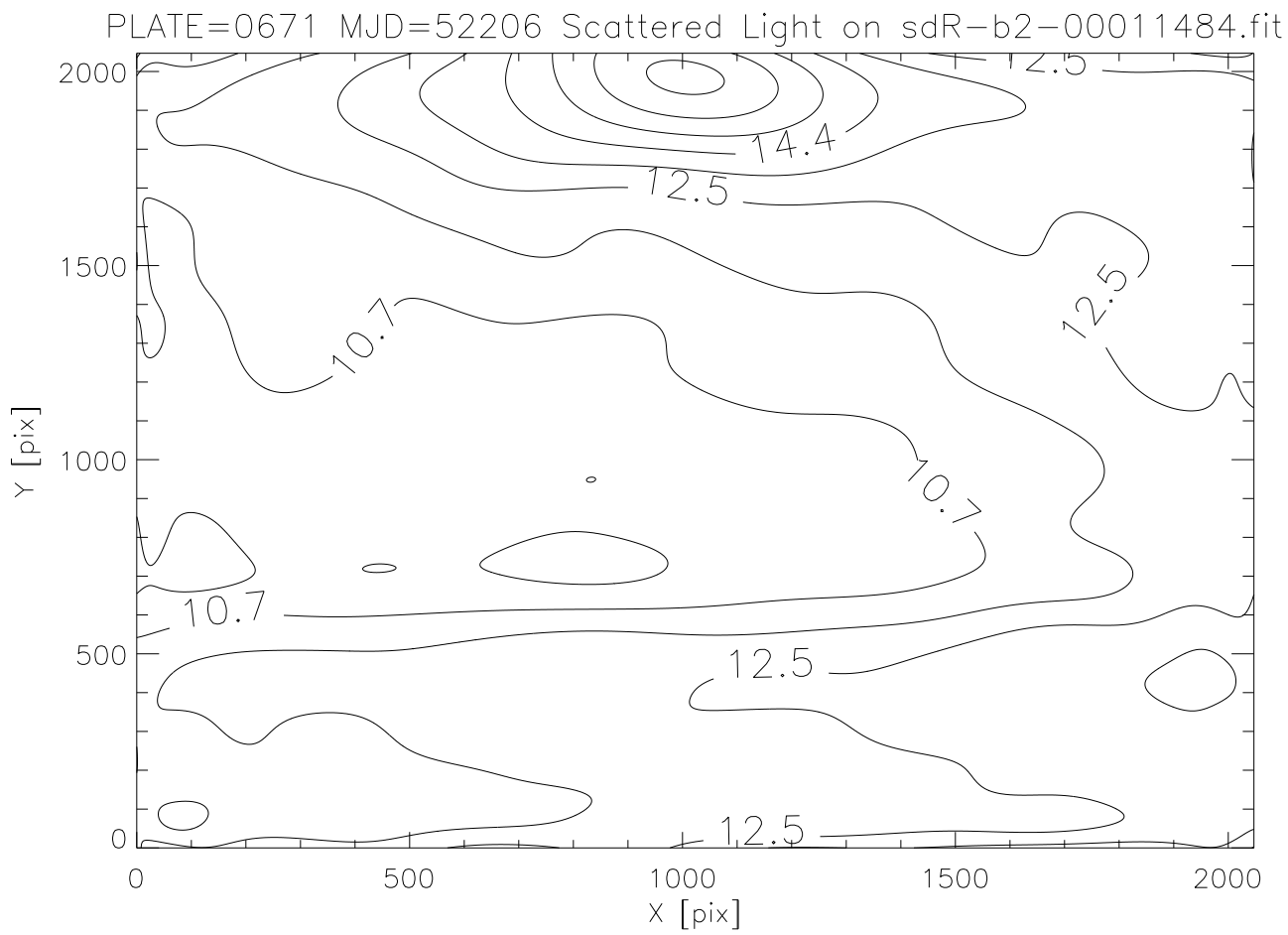

PLATE=0671 MJD=52206 sdR-b2-00011483.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.82 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

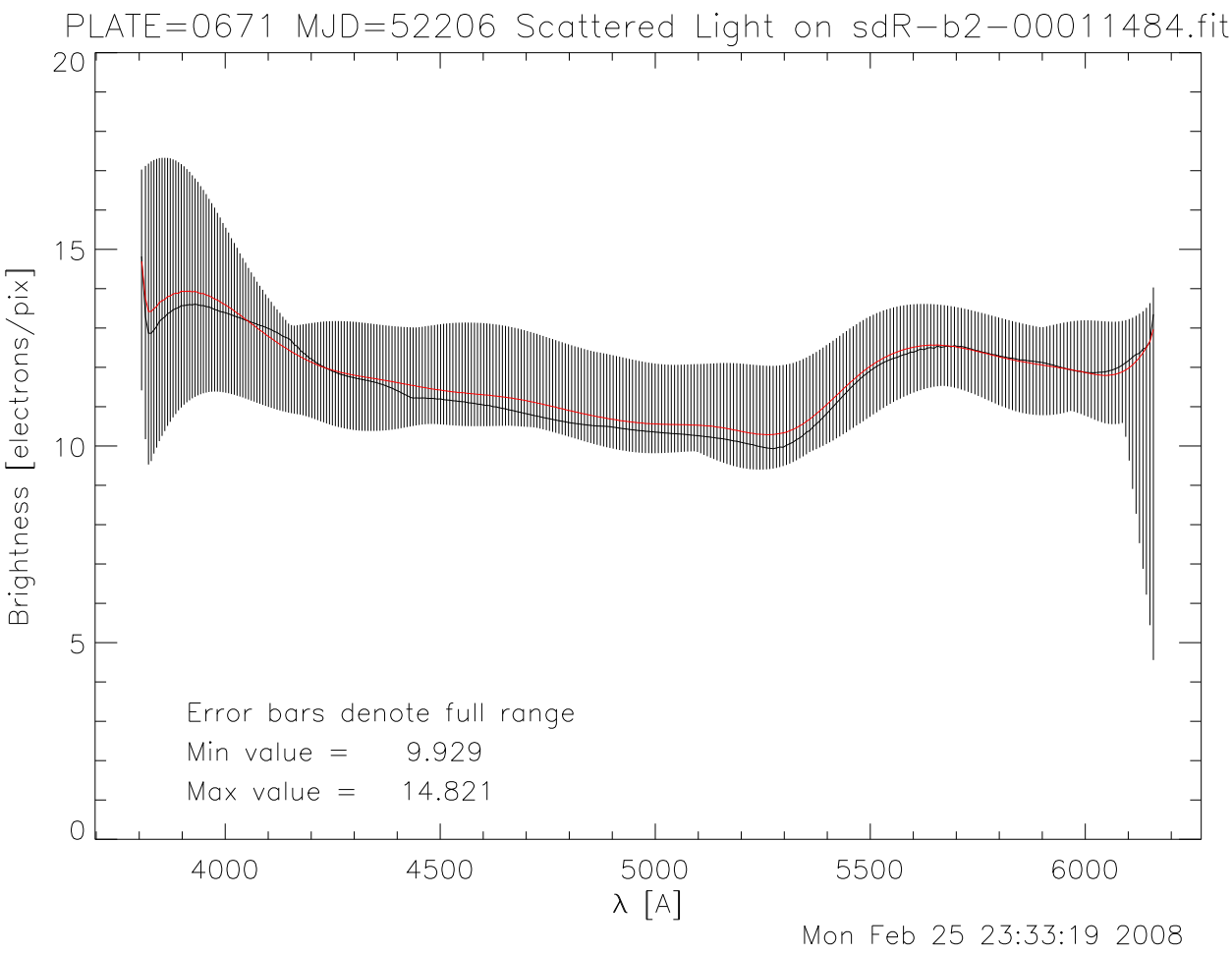

PLATE=0671 MJD=52206 sdR-b2-00011483.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.97 %
Fiber number
Focal Distance [mm]
Airmass

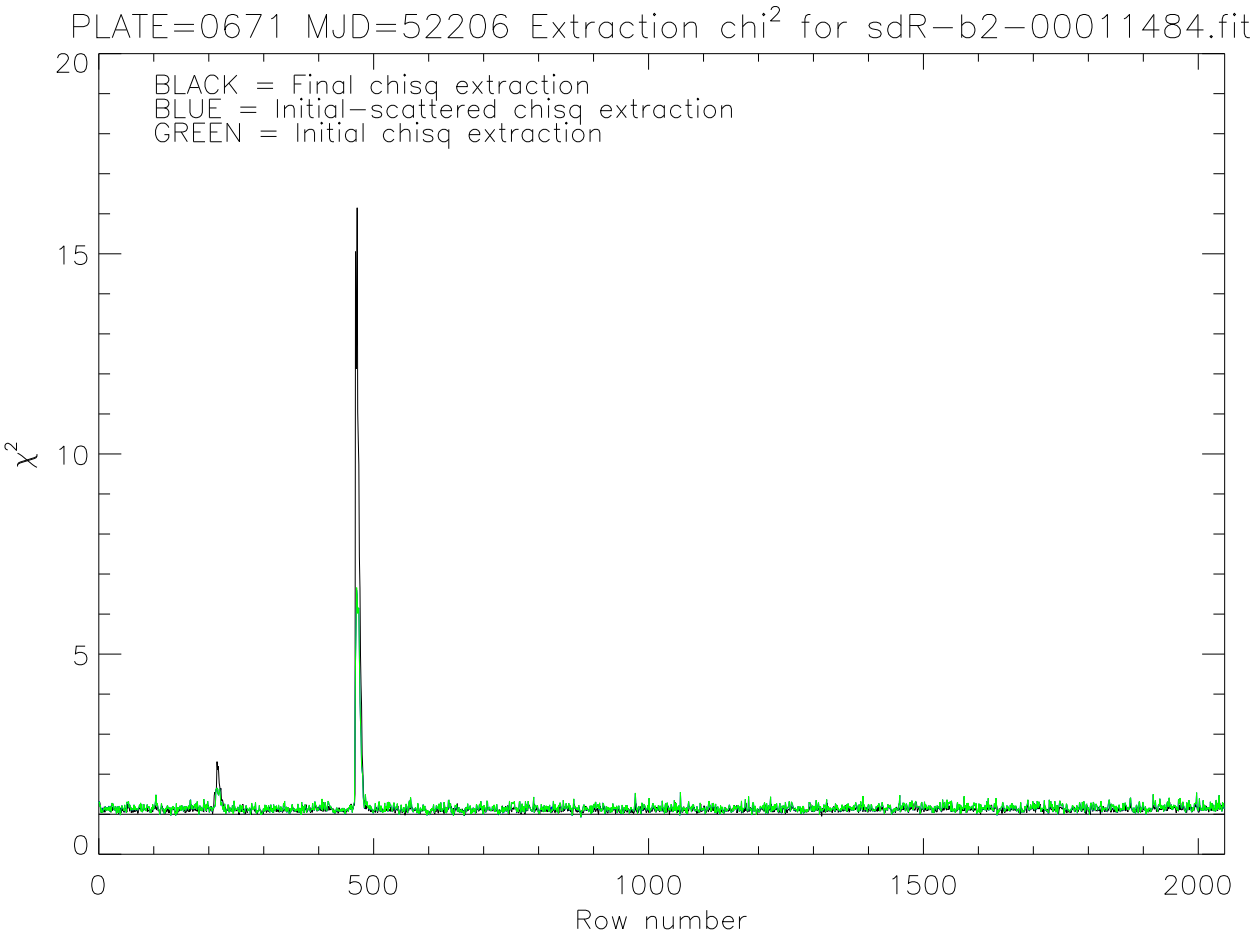

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b2-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.486
Max value = 1.276
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:30:14 2008

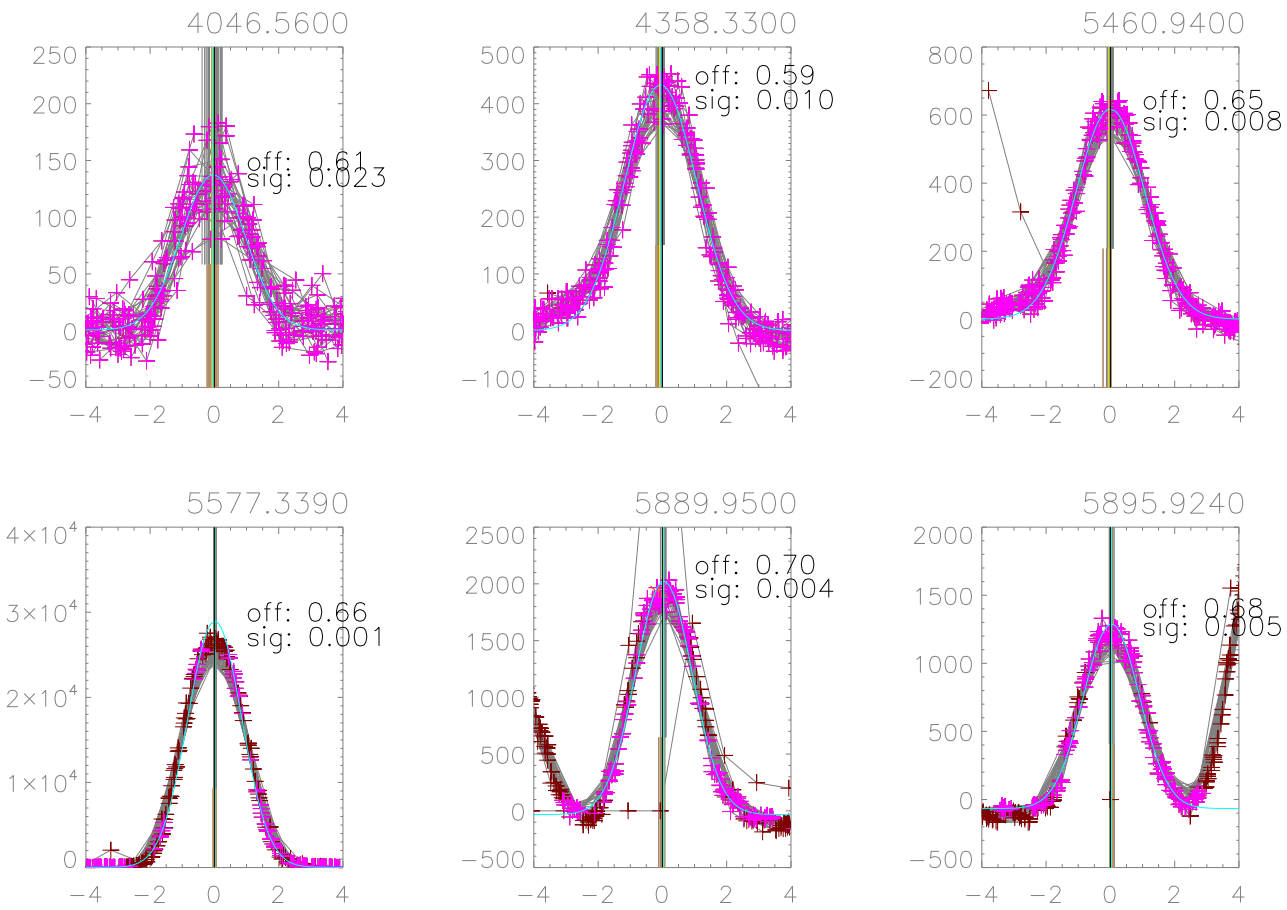

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR−b2−00011484.f
16.4
18.9
16.4
13.8
0
13.8
13.8
13.8
13.8
13.8
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

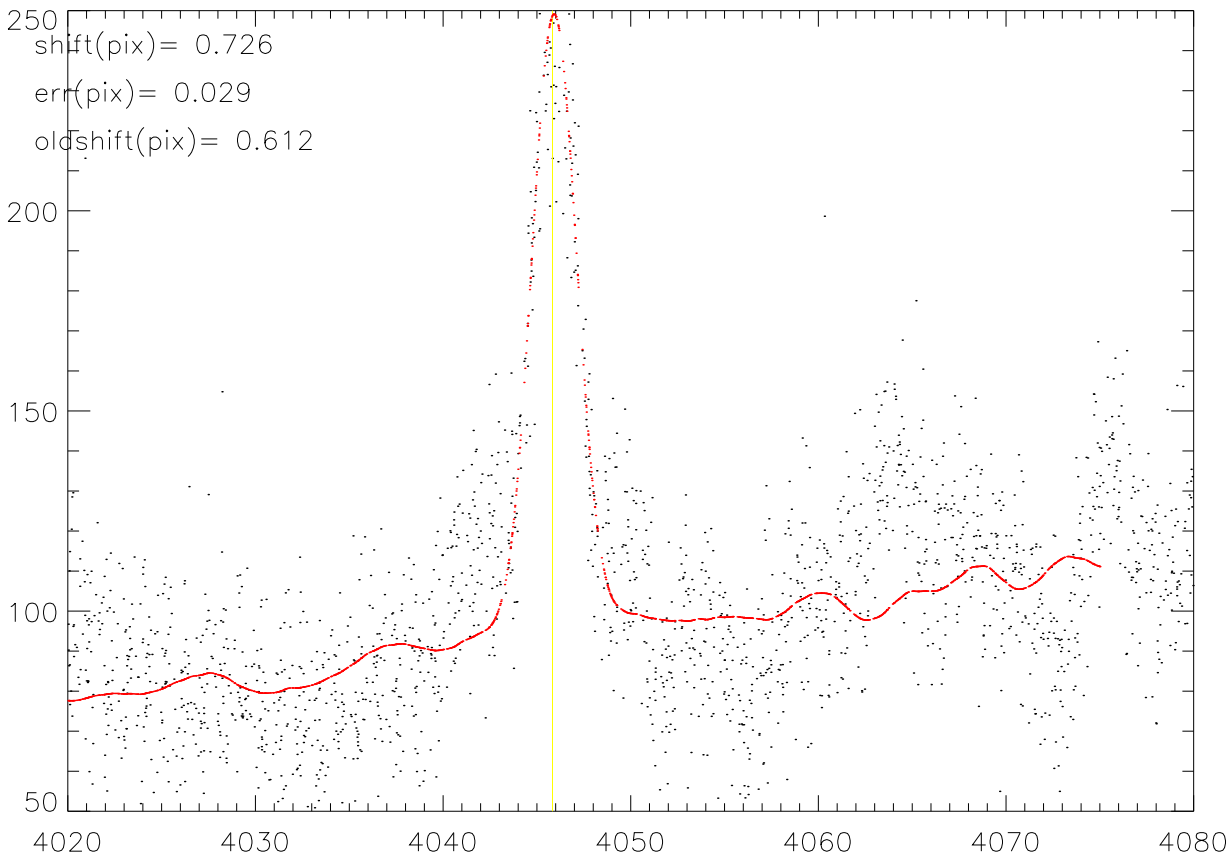

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011484.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.786
Max value = 20.375
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:31:03 2008

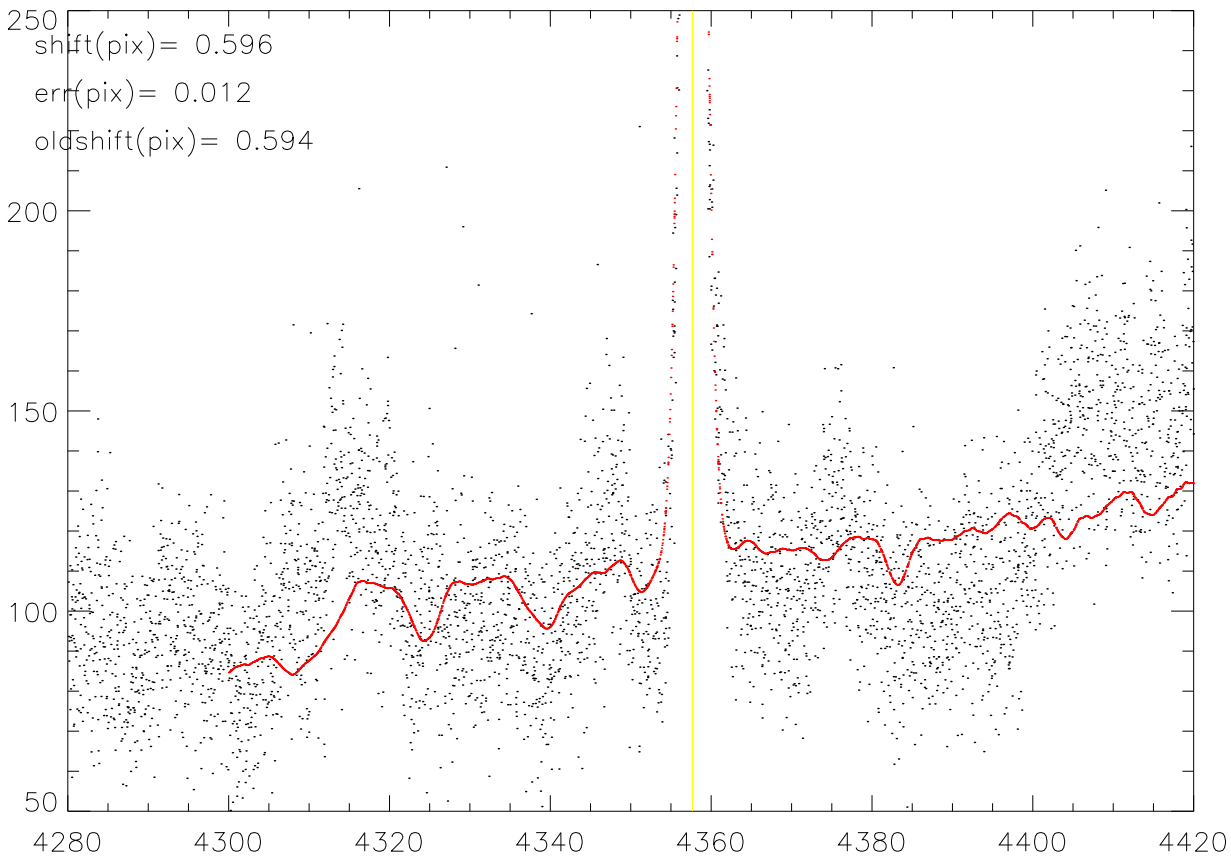

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011484.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
14.4
12.5
10.7

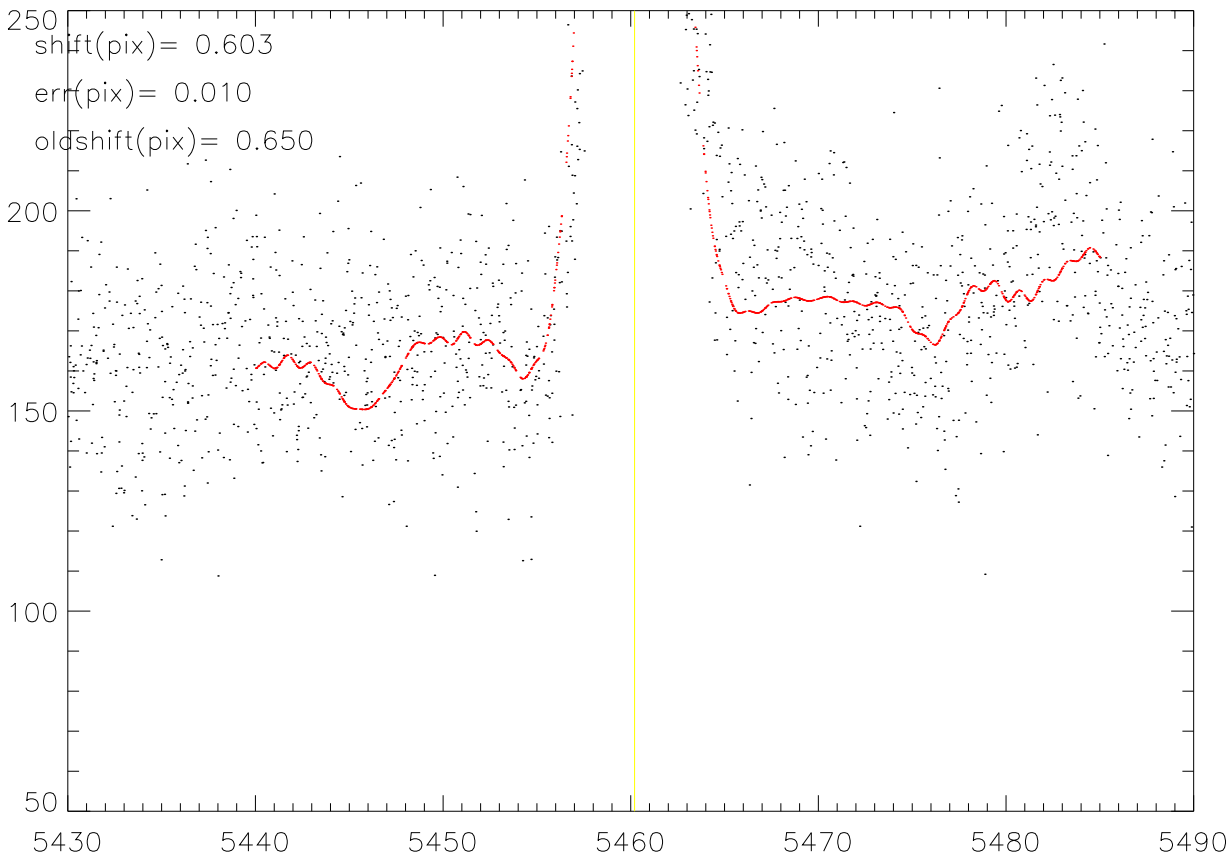

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011484.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 9.929
Max value = 14.821
Mon Feb 25 23:33:19 2008

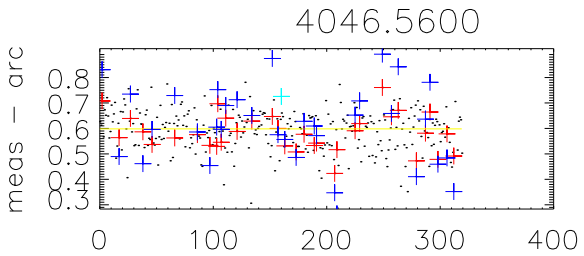

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b2-00011484.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

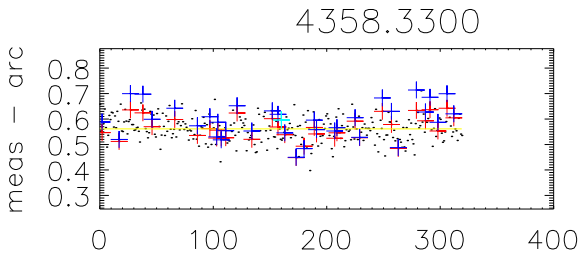

4046.5600
off: 0.61
sig: 0.023
4358.3300
off: 0.59
sig: 0.010
5460.9400
off: 0.65
sig: 0.008
5577.3390
off: 0.66
sig: 0.001
5889.9500
off: 0.70
sig: 0.004
5895.9240
off: 0.68
sig: 0.005

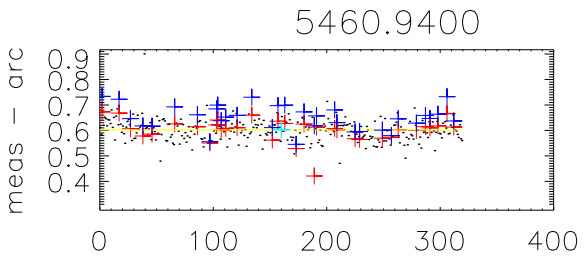

shift(pix)= 0.726
err(pix)= 0.029
oldshift(pix)= 0.612
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

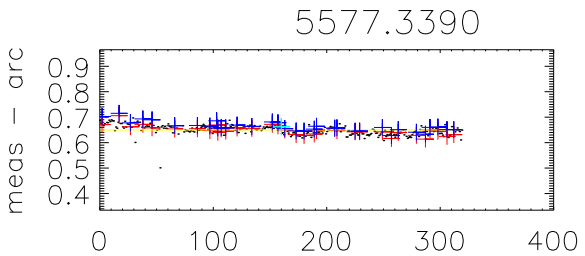

shift(pix)= 0.596
err(pix)= 0.012
oldshift(pix)= 0.594
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

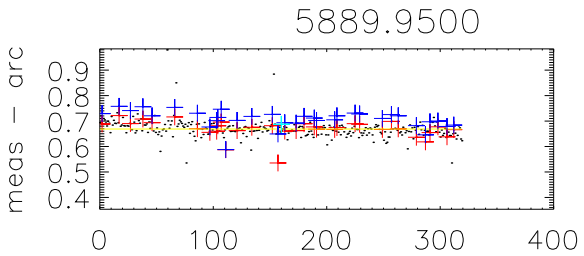

shift(pix)= 0.603
err(pix)= 0.010
oldshift(pix)= 0.650
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

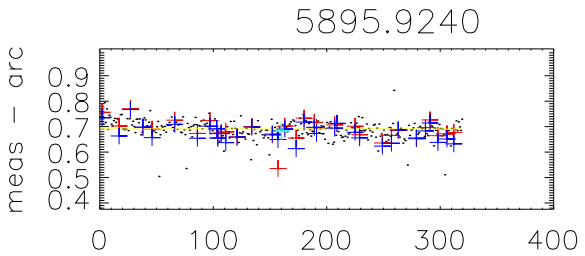

4046.5600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

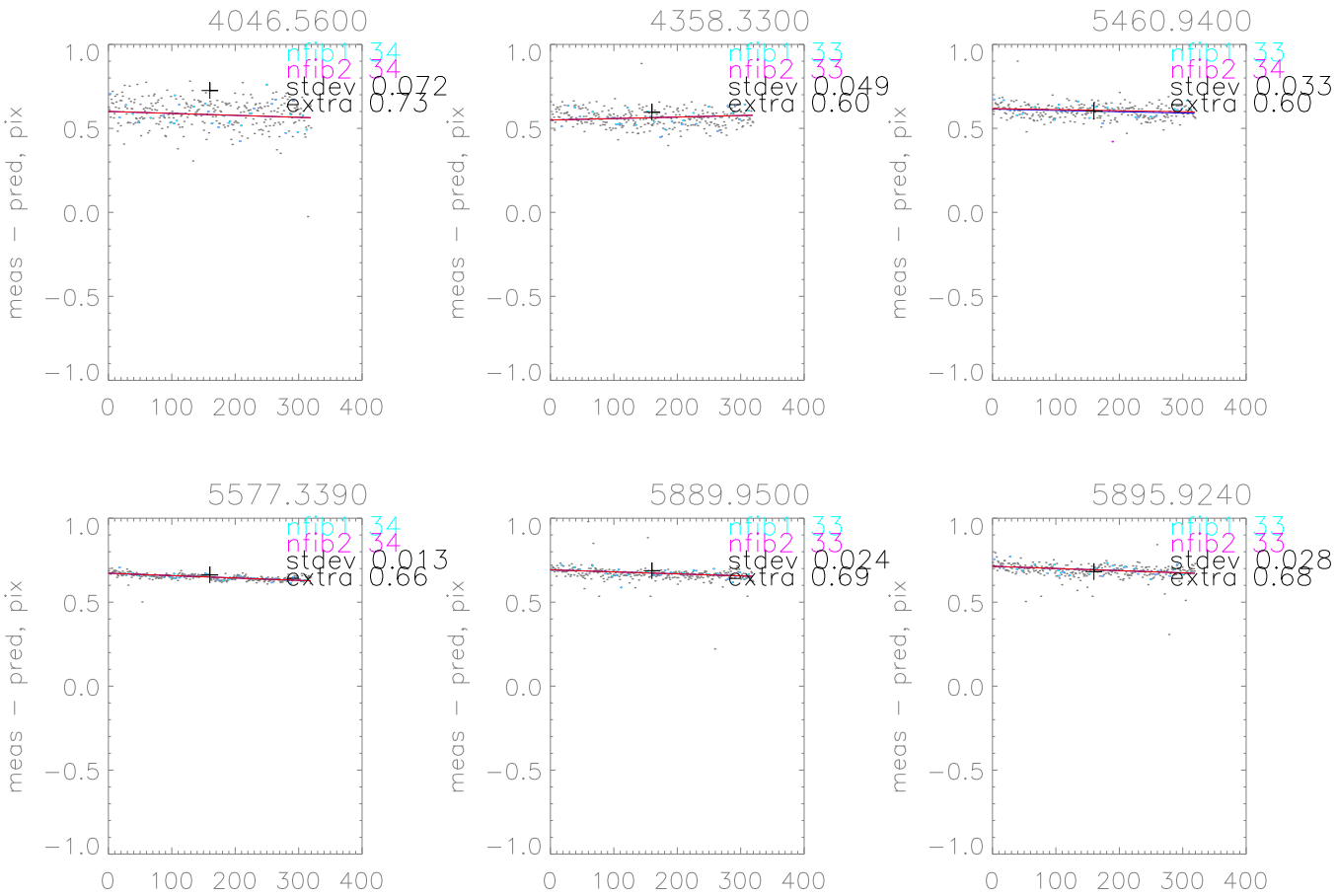

4358.3300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

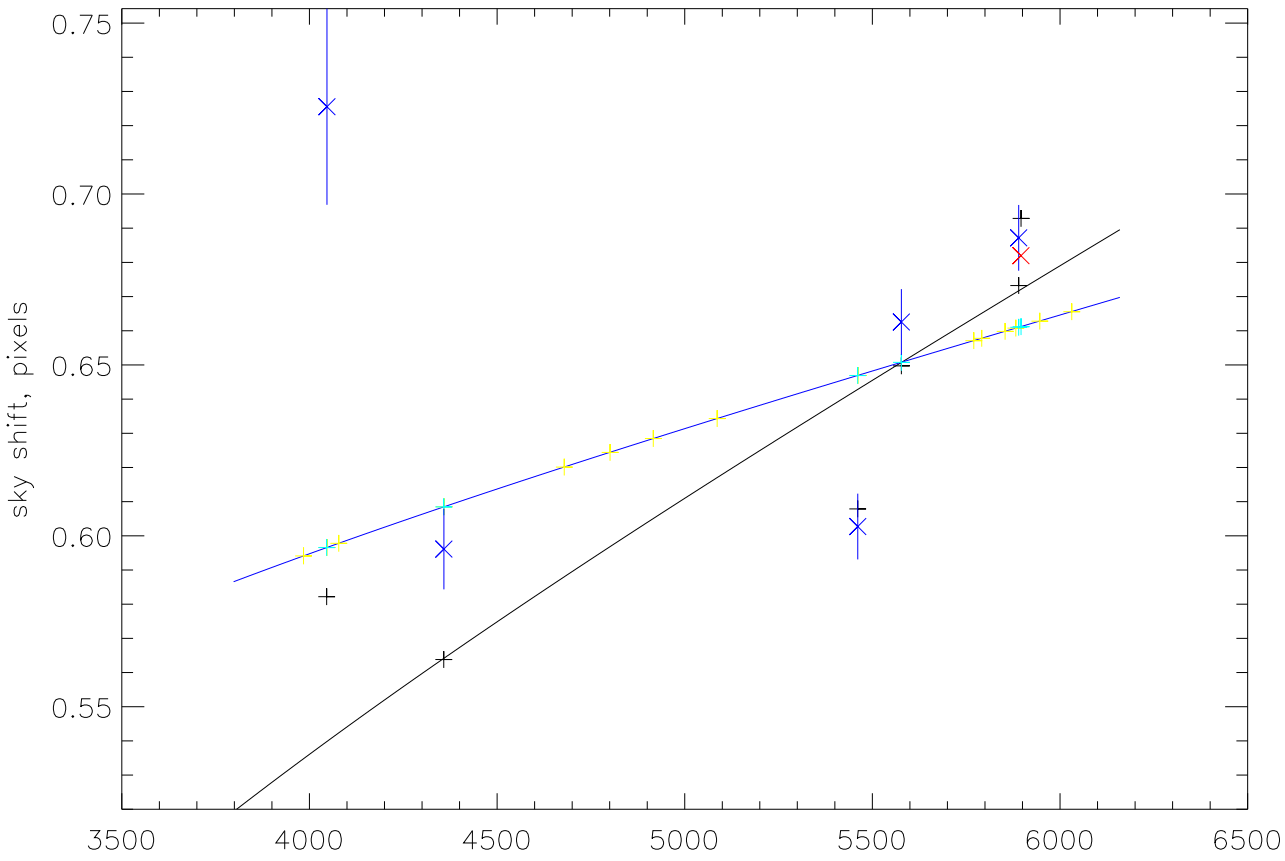

5460.9400
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

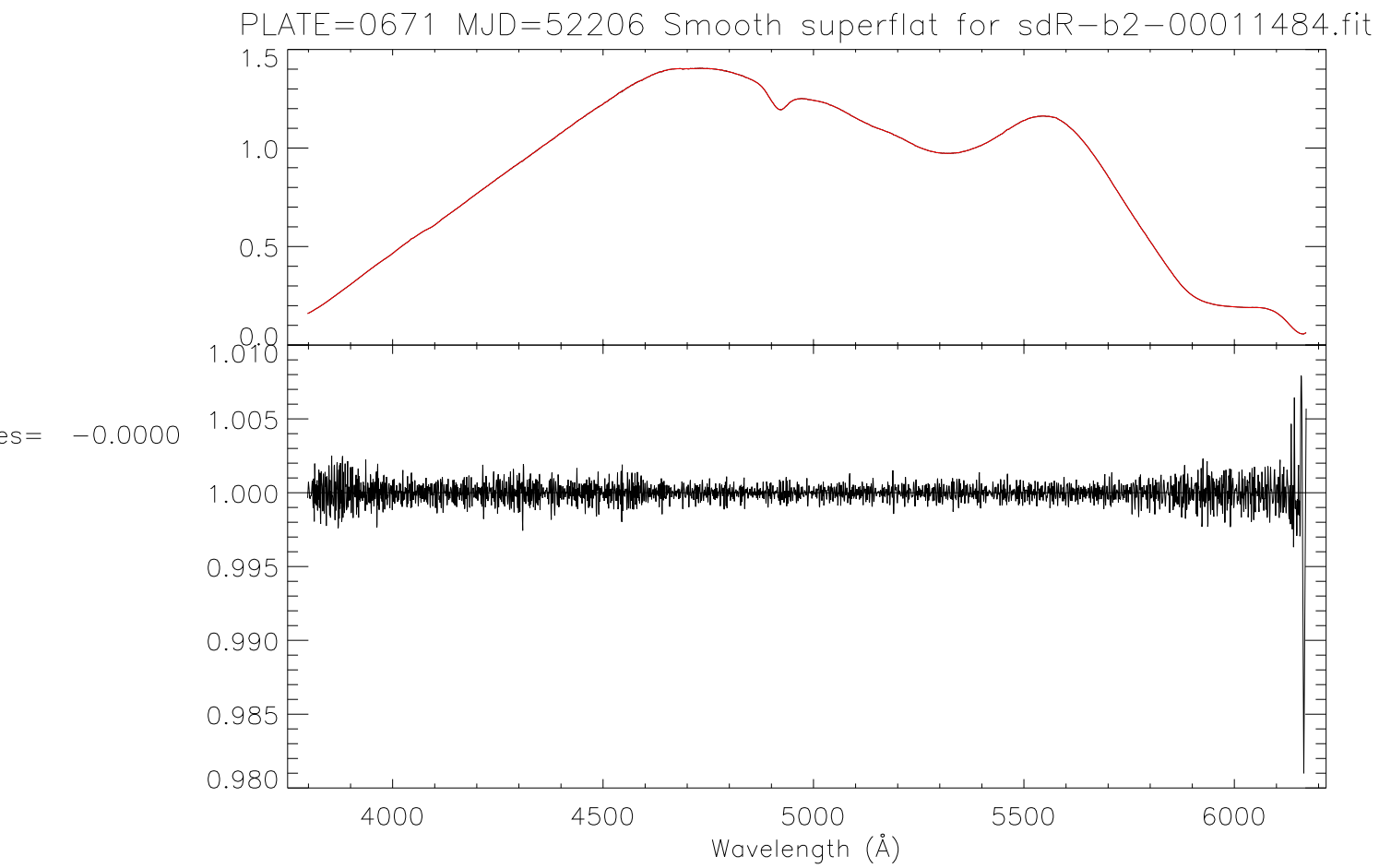

5577.3390
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400


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

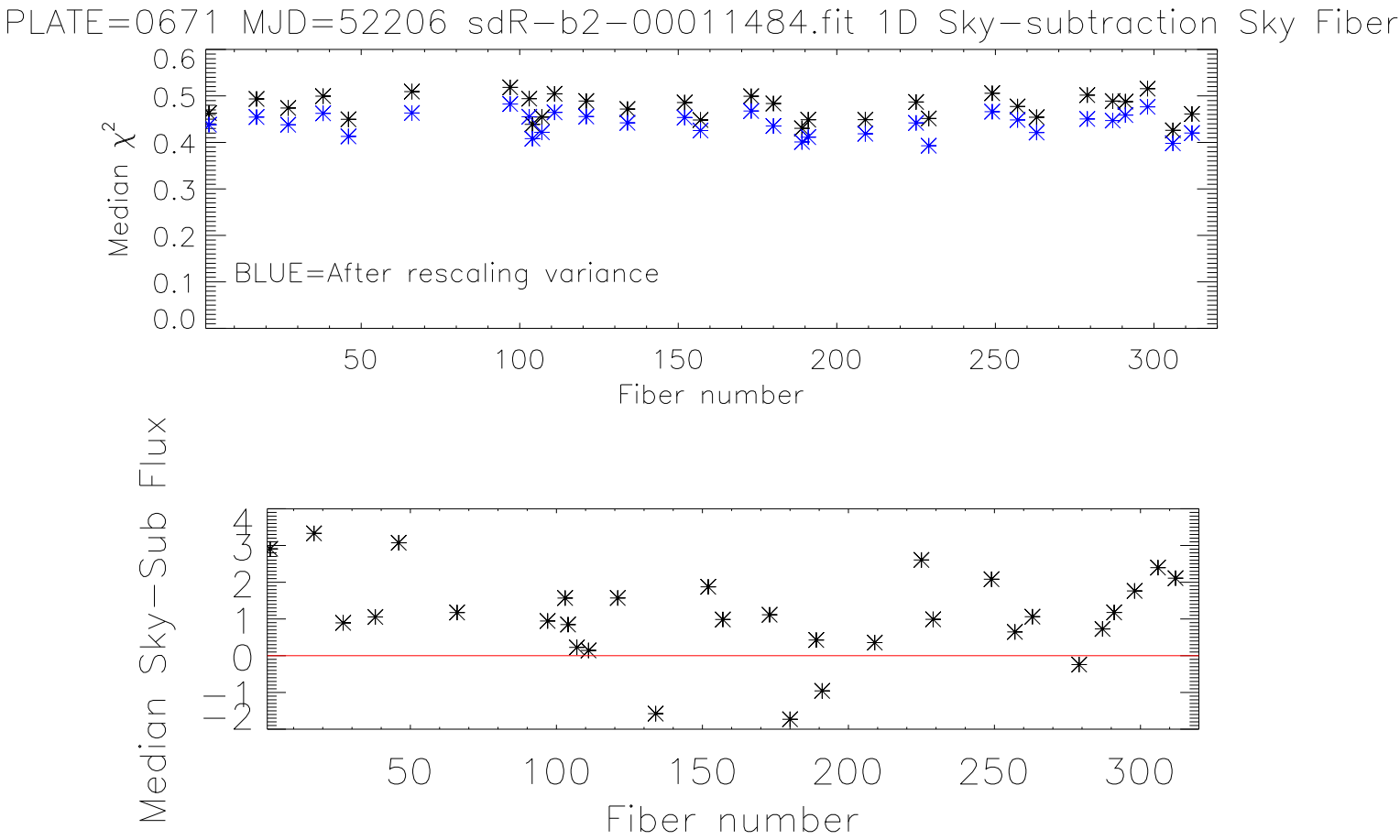

5895.9240
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

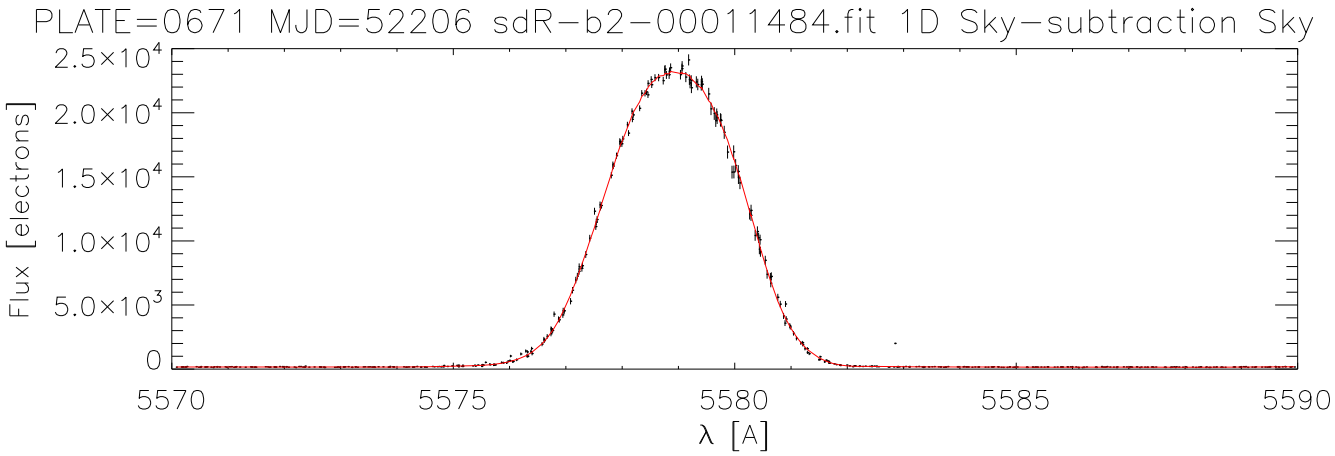

4046.5600
nfib1 34
nfib2 34
stdev 0.072
extra 0.73
4358.3300
nfib1 33
nfib2 33
stdev 0.049
extra 0.60
5460.9400
nfib1 33
nfib2 34
stdev 0.033
extra 0.60
5577.3390
nfib1 34
nfib2 34
stdev 0.013
extra 0.66
5889.9500
nfib1 33
nfib2 33
stdev 0.024
extra 0.69
5895.9240
nfib1 33
nfib2 33
stdev 0.028
extra 0.68
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

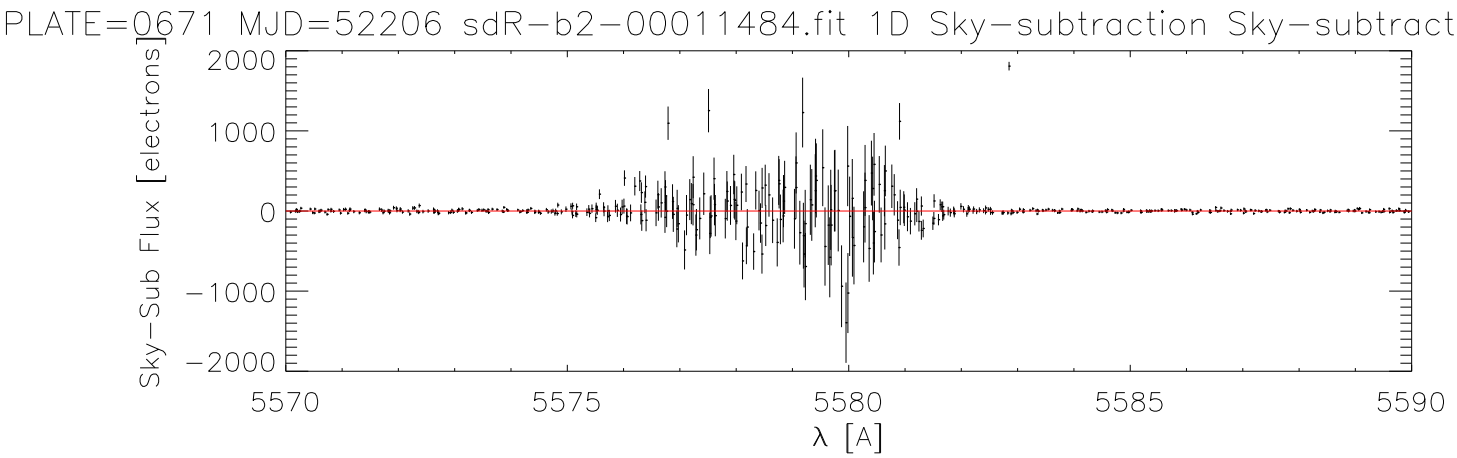

0.75
0.70
0.65
0.60
0.55
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

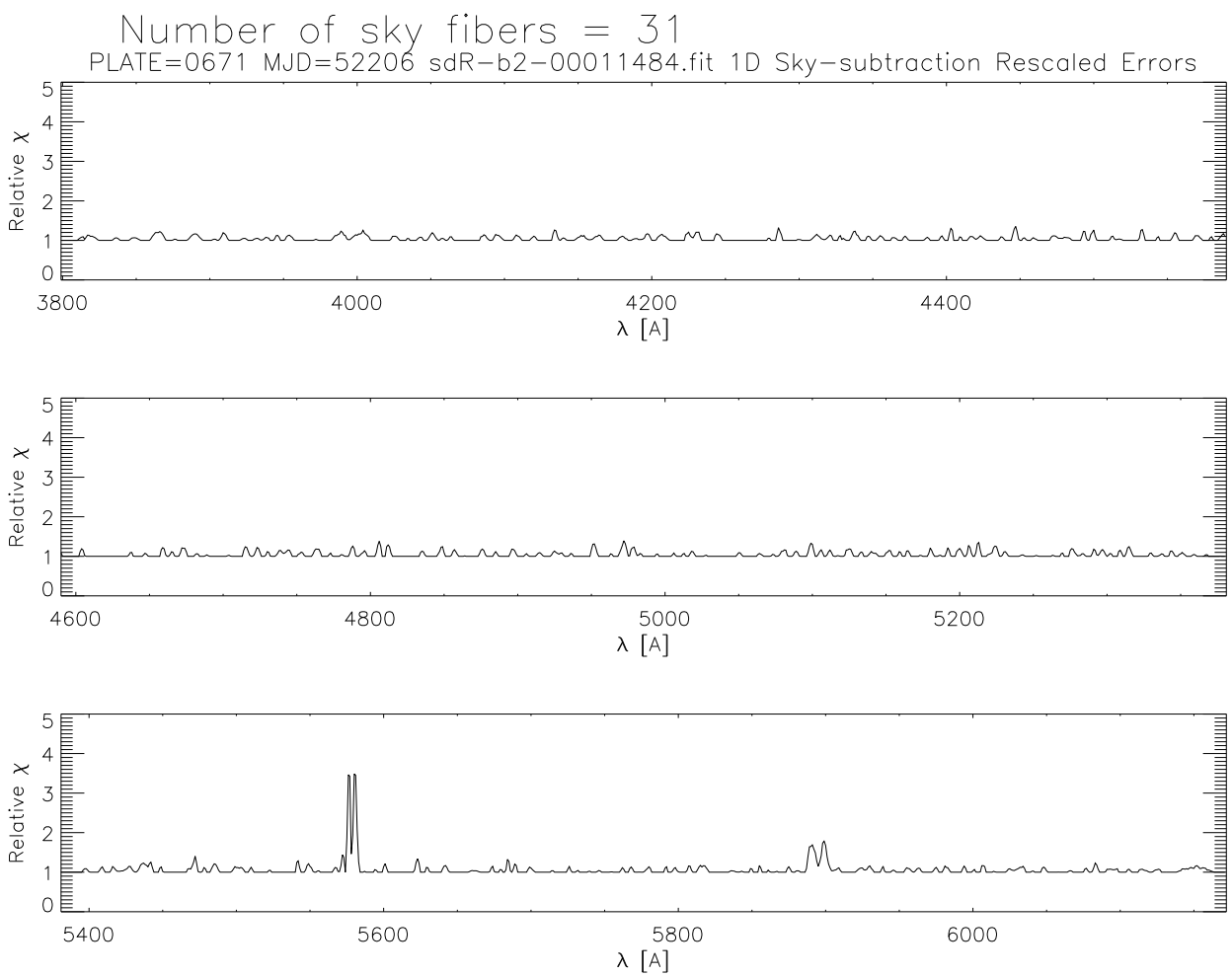

PLATE=0671 MJD=52206 Smooth superflat for sdR-b2-00011484.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
4000
4500
5000
5500
6000
Wavelength (Å)

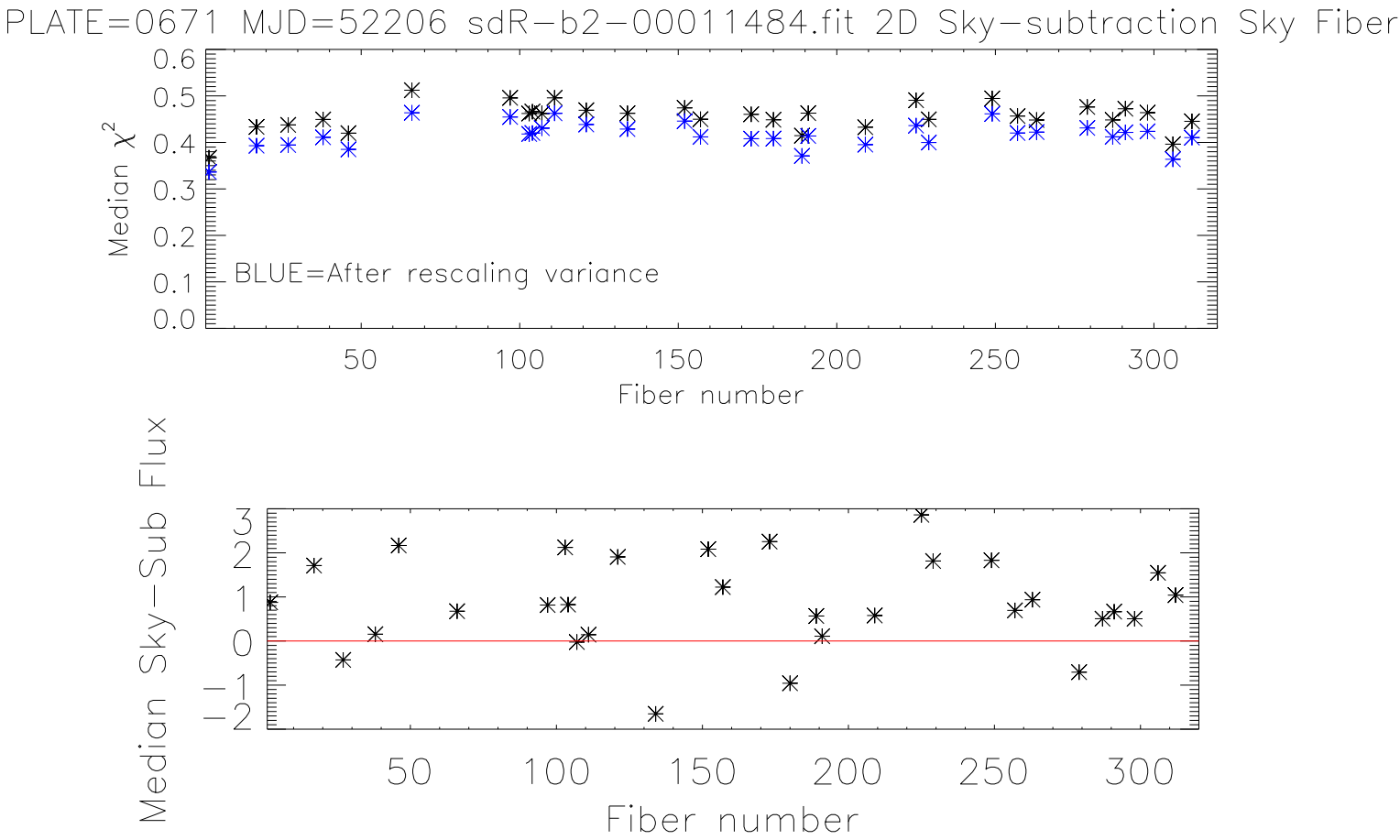
es= −0.0000

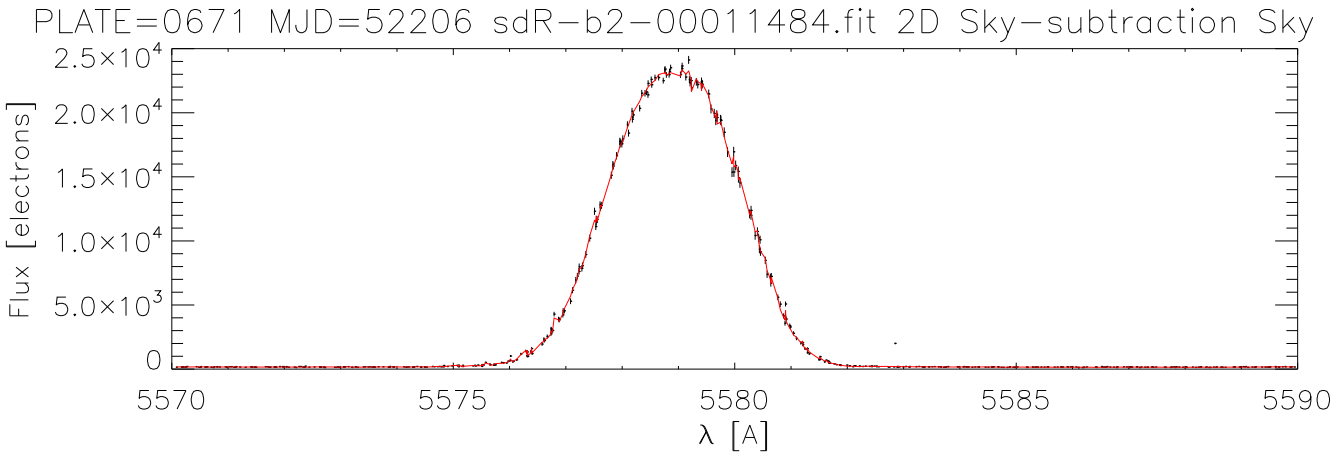

PLATE=0671 MJD=52206 sdR-b2-00011484.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

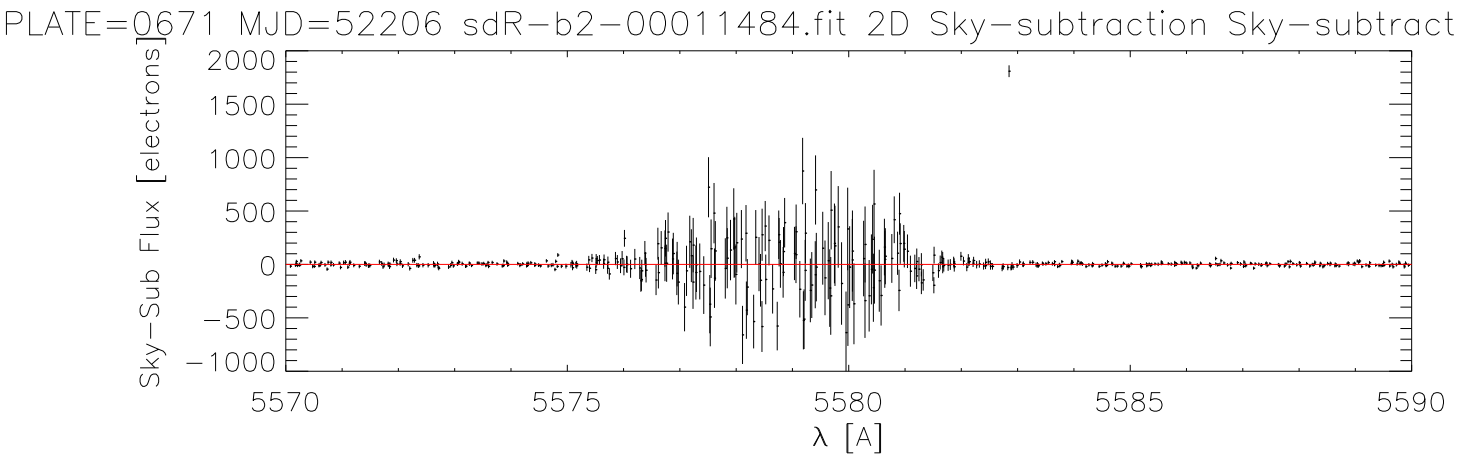

PLATE=0671 MJD=52206 sdR-b2-00011484.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

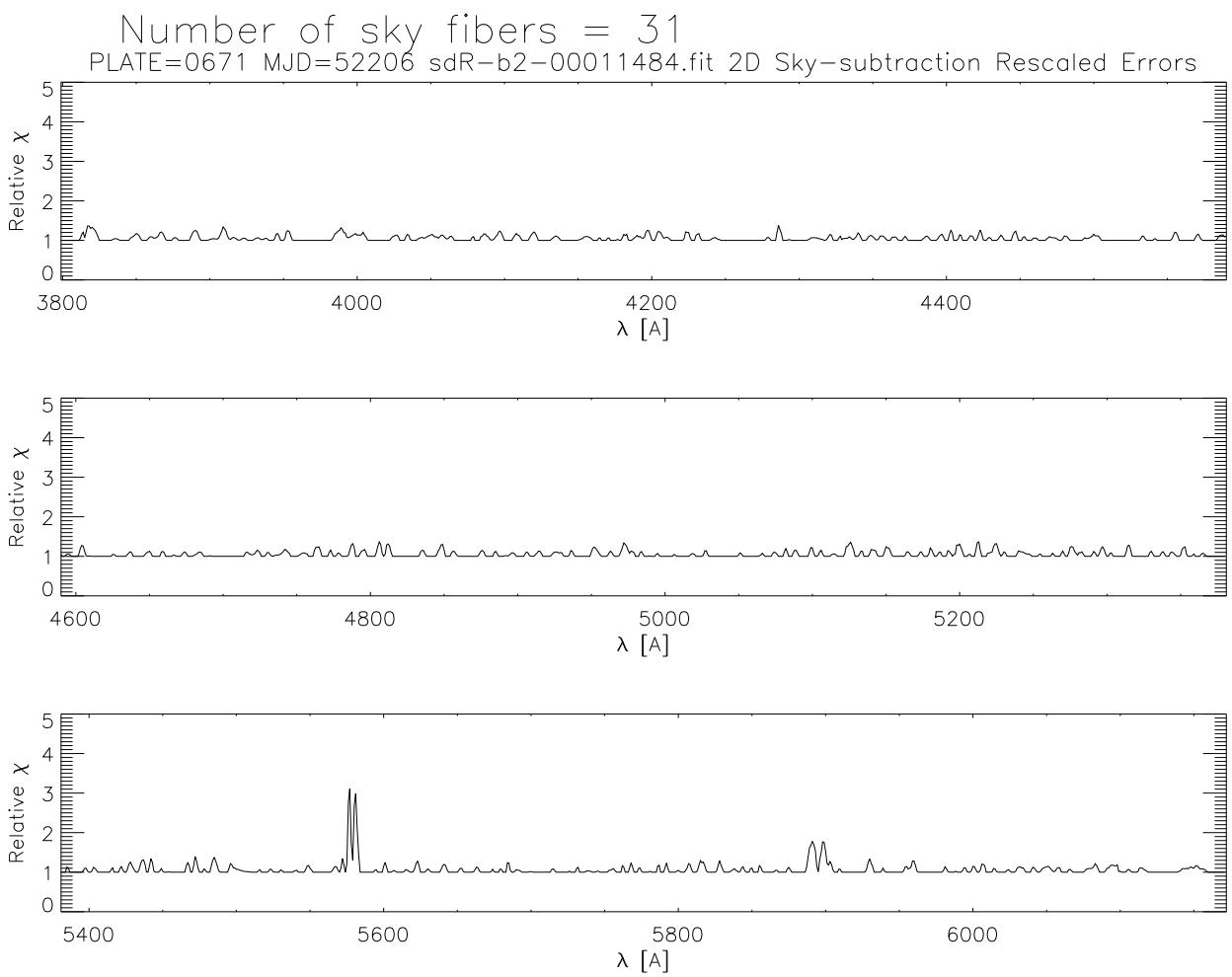

PLATE=0671 MJD=52206 sdR-b2-00011484.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

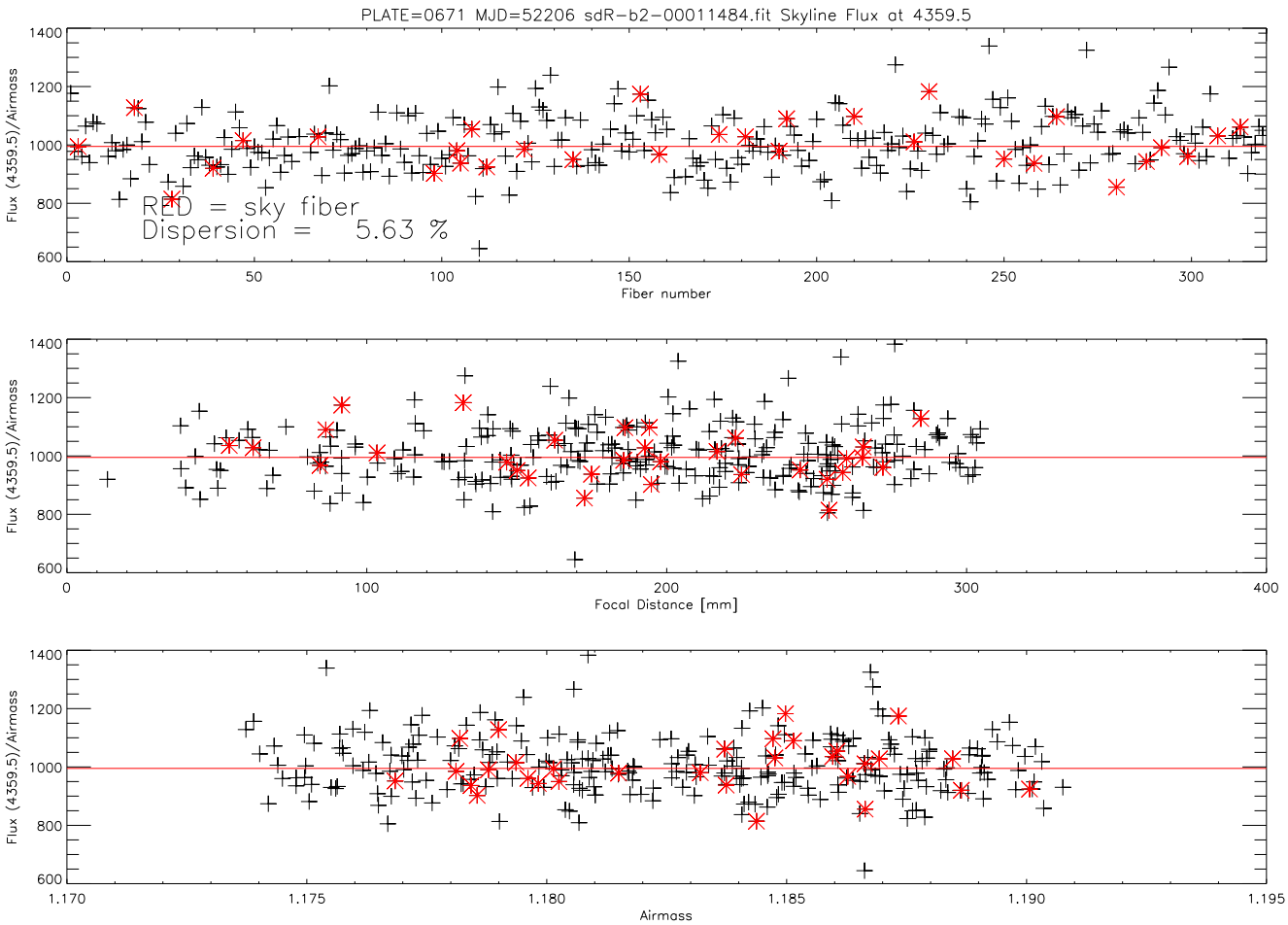

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011484.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

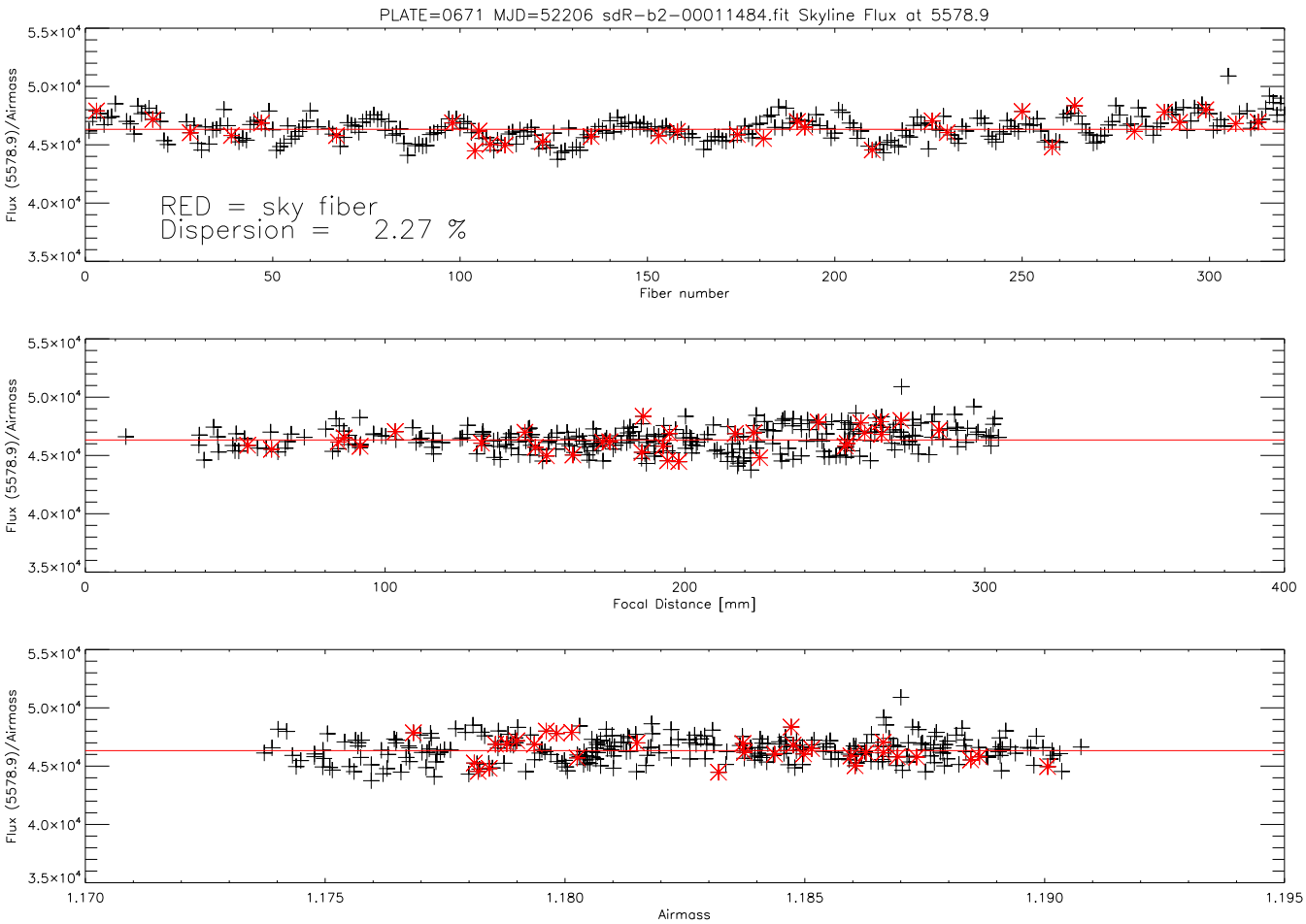

PLATE=0671 MJD=52206 sdR-b2-00011484.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

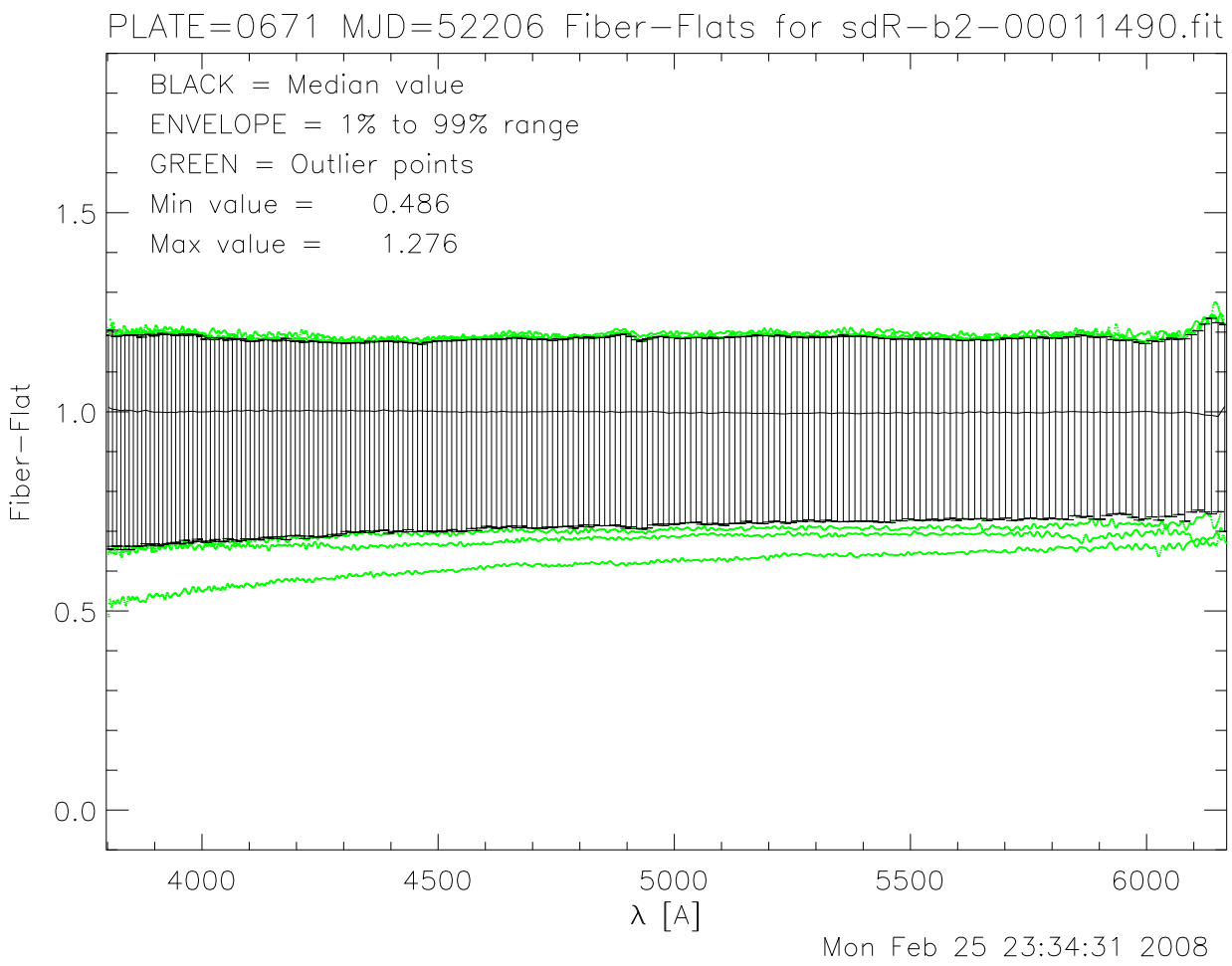

PLATE=0671 MJD=52206 sdR-b2-00011484.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

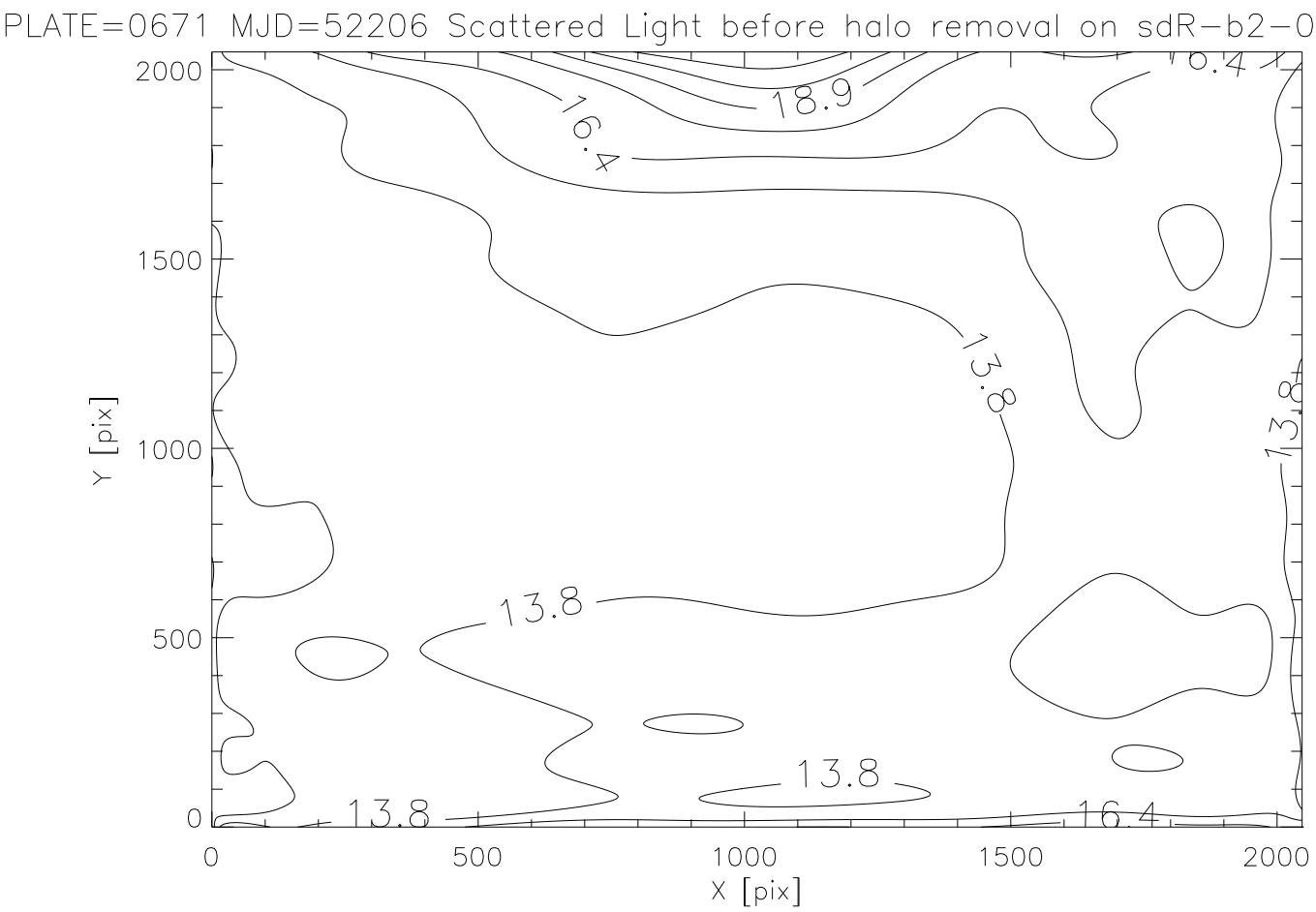

PLATE=0671 MJD=52206 sdR-b2-00011484.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

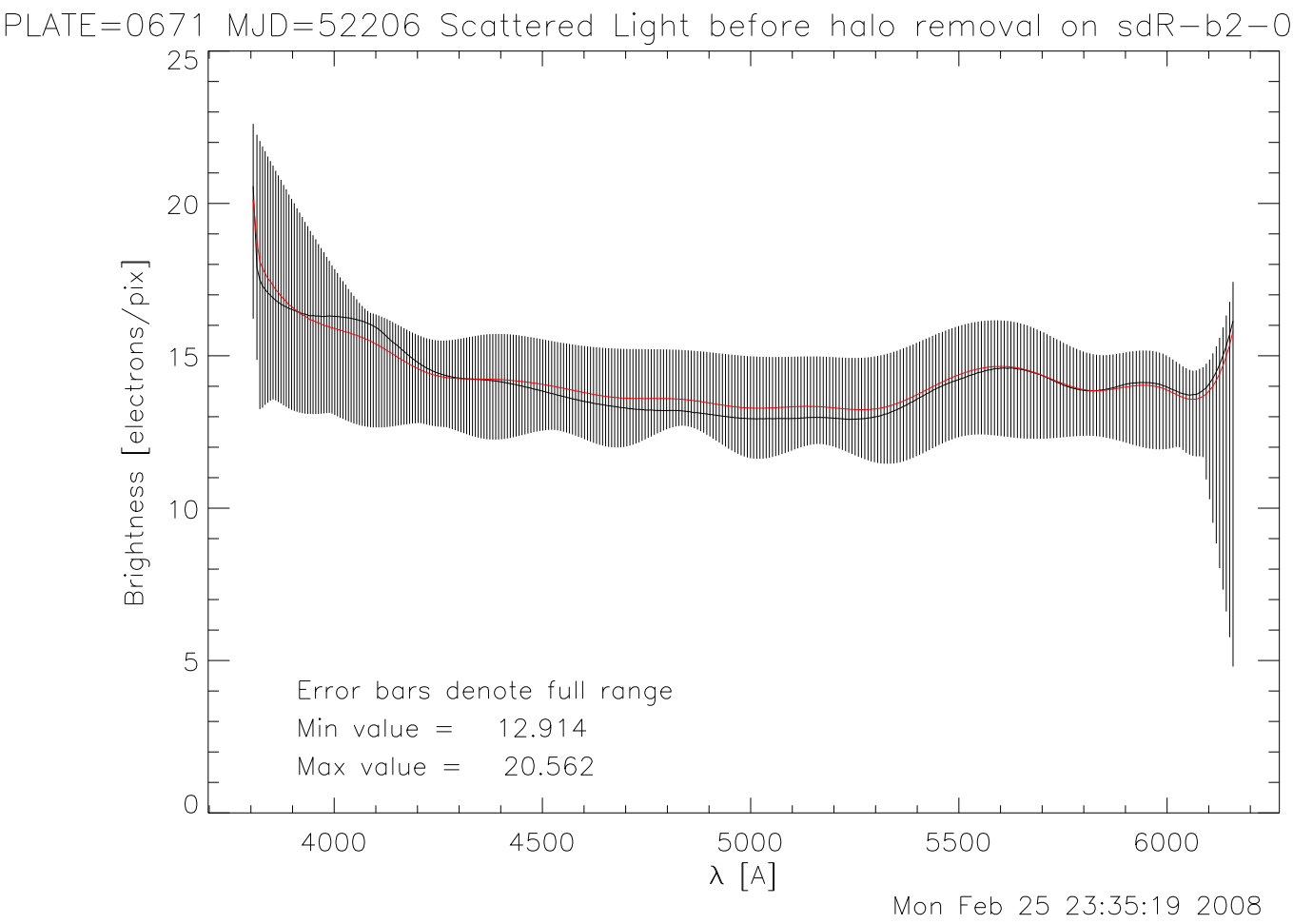

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011484.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

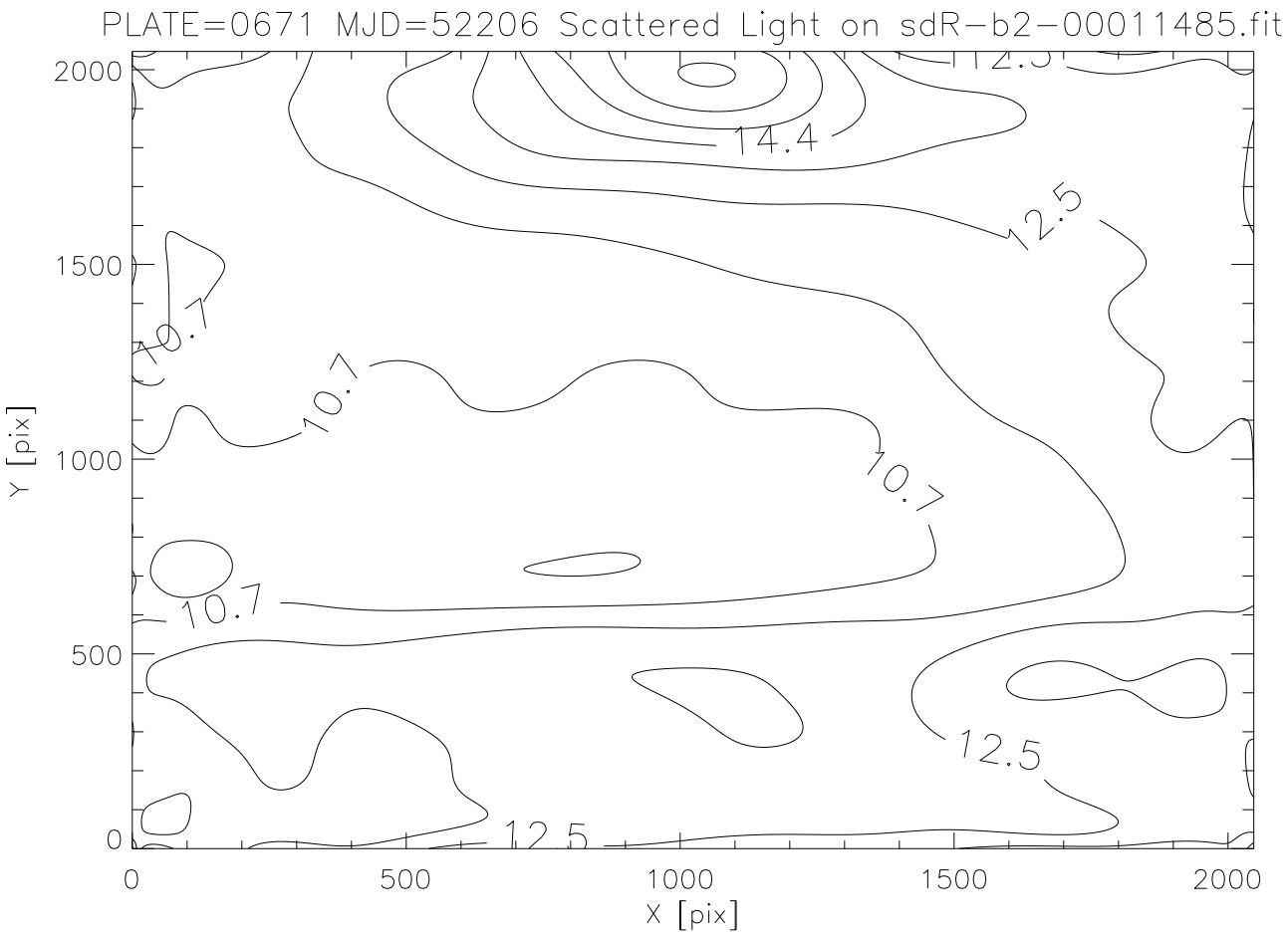

PLATE=0671 MJD=52206 sdR-b2-00011484.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.63 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

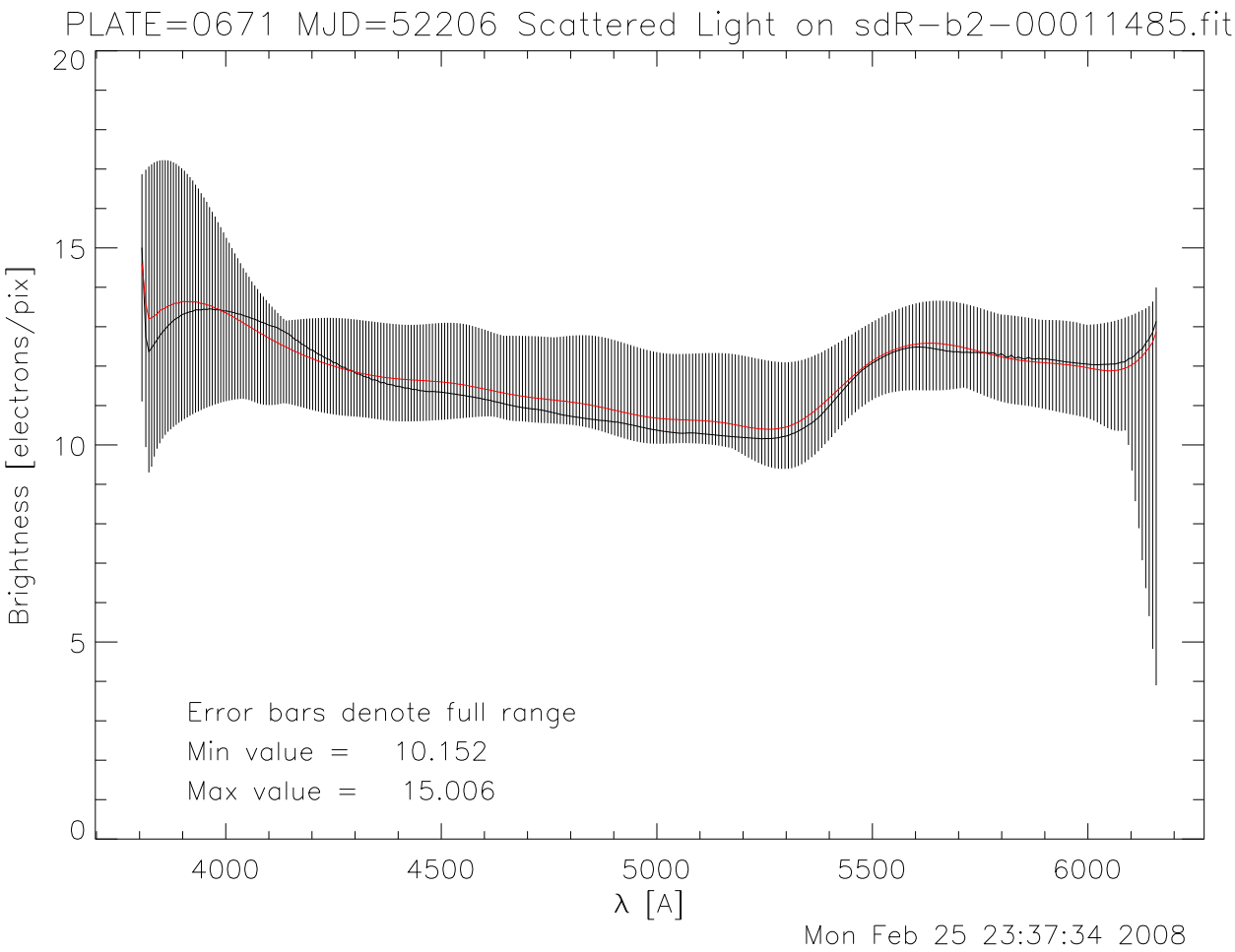

PLATE=0671 MJD=52206 sdR-b2-00011484.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.27 %
Fiber number
Focal Distance [mm]
Airmass

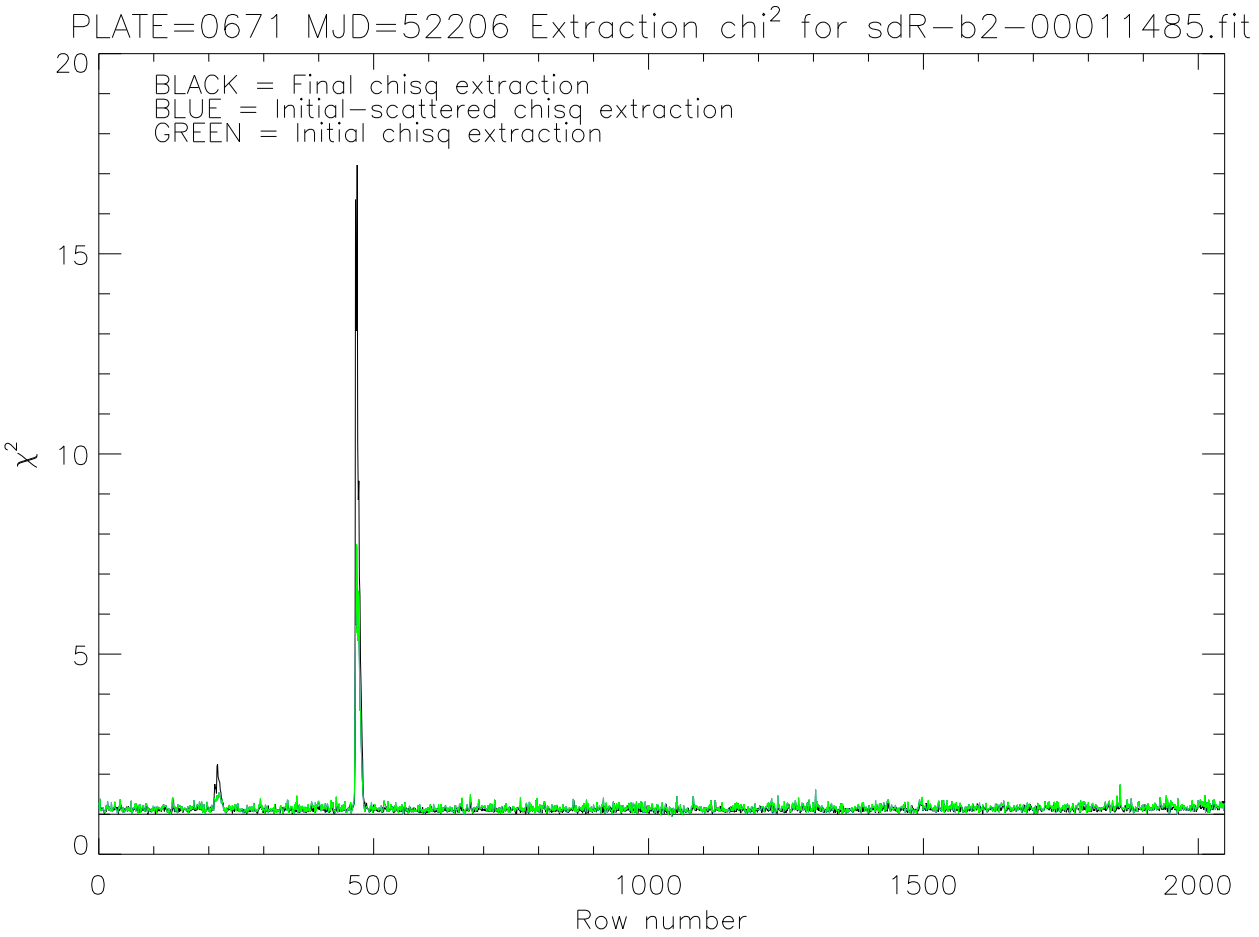

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b2-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.486
Max value = 1.276
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:34:31 2008

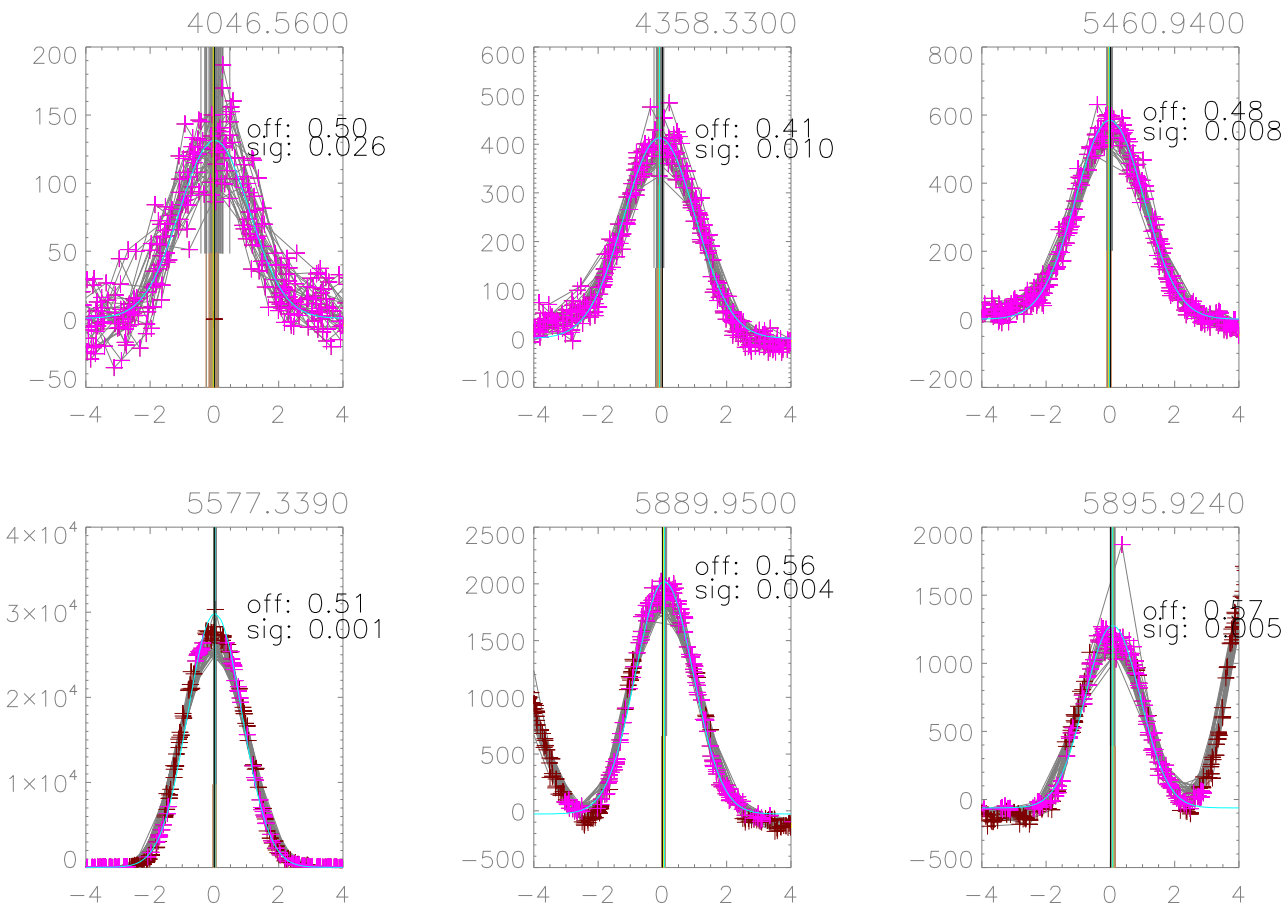

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR−b2−00011485.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
18.9
16.4
13.8
13.8
13.8
13.8
16.4

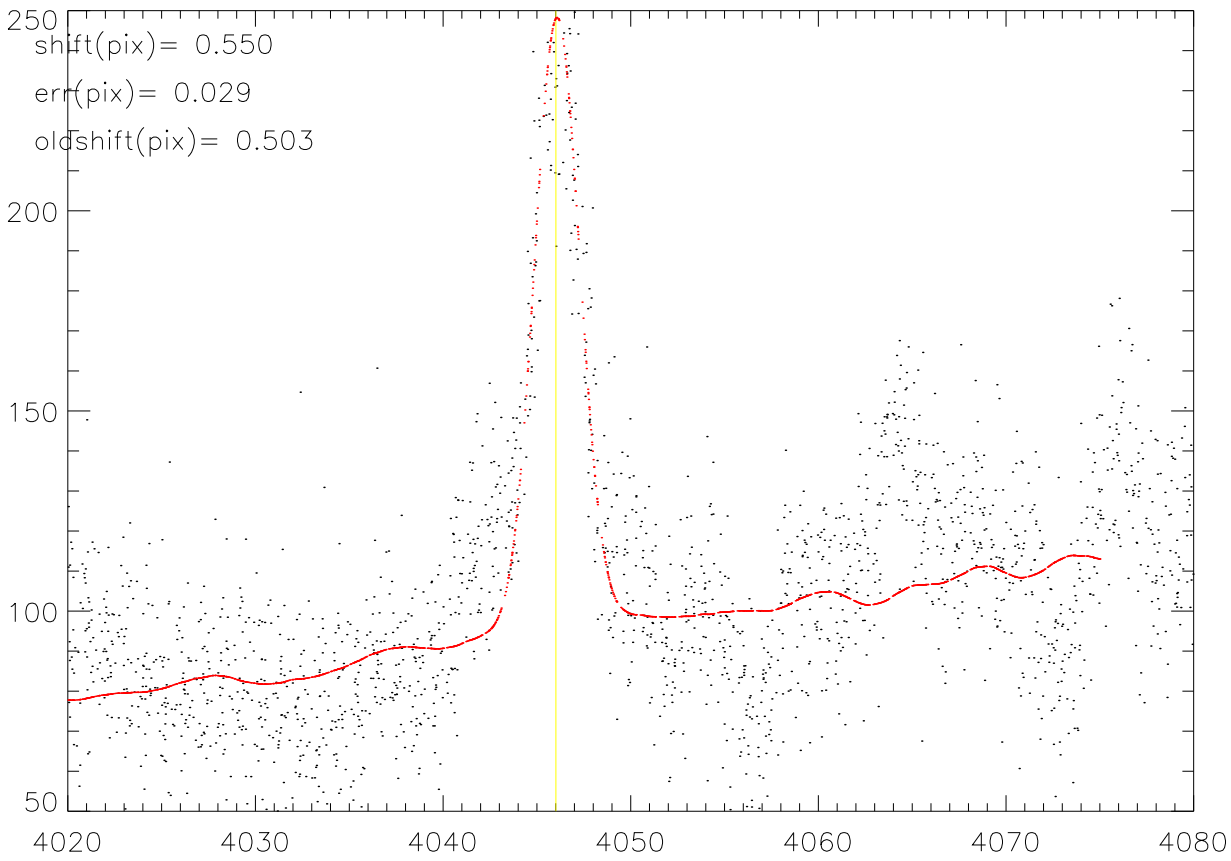

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011485.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.914
Max value = 20.562
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:35:19 2008

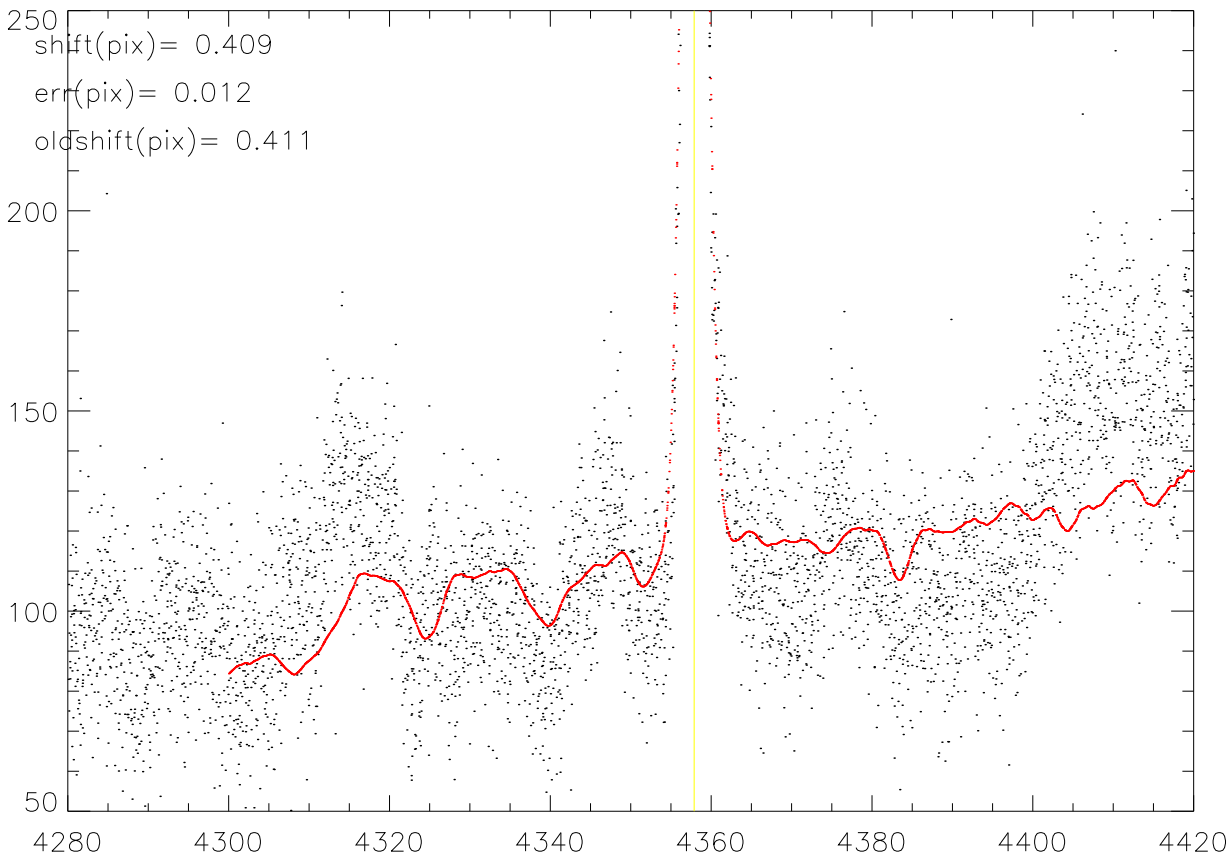

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011485.fit
14.4
12.5
10.7
10.7
10.7
10.7
12.5
12.5
Y [pix]
X [pix]
0
500
1000
1500
2000

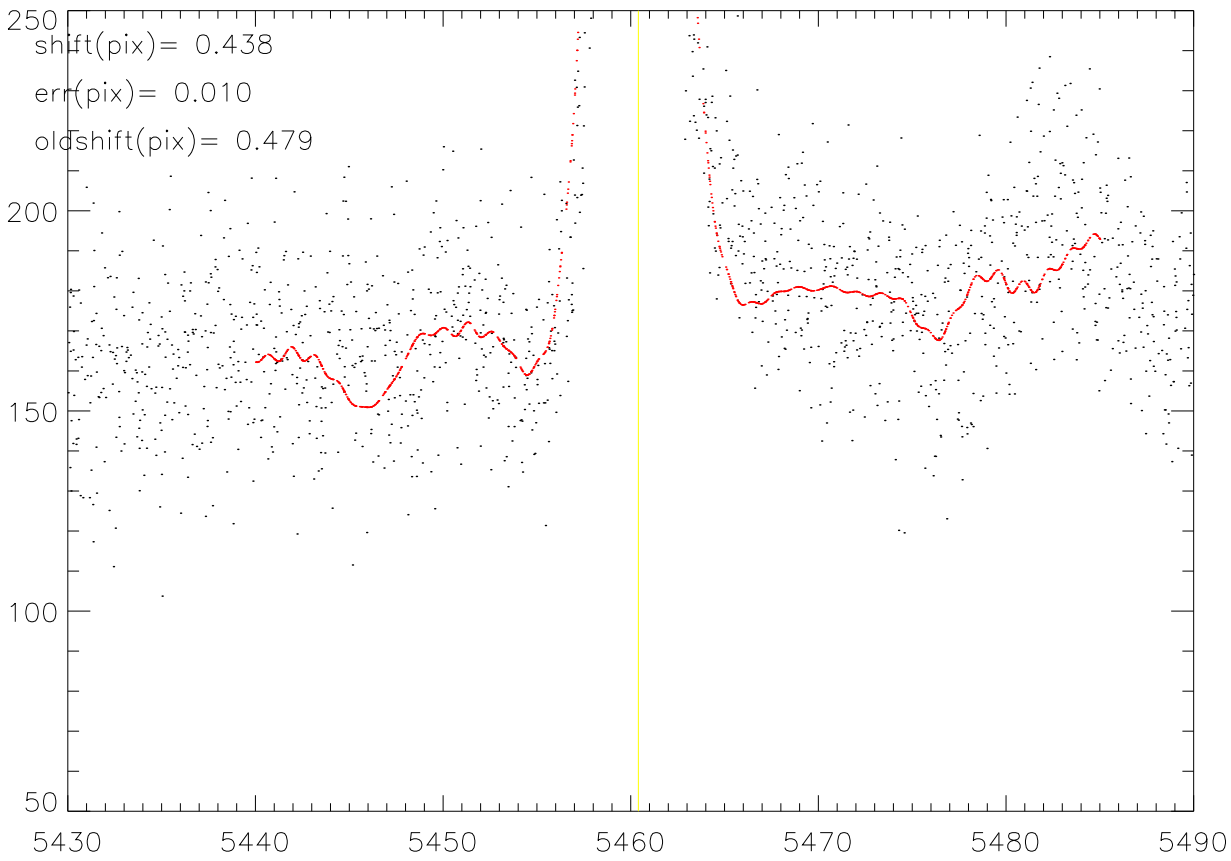

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011485.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 10.152
Max value = 15.006
Mon Feb 25 23:37:34 2008

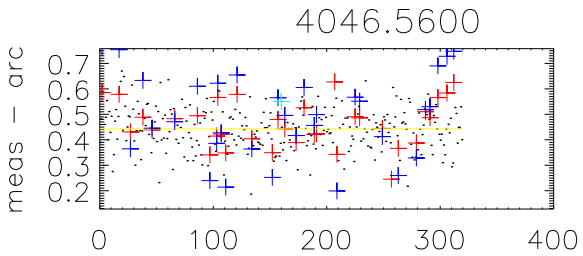

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b2-00011485.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

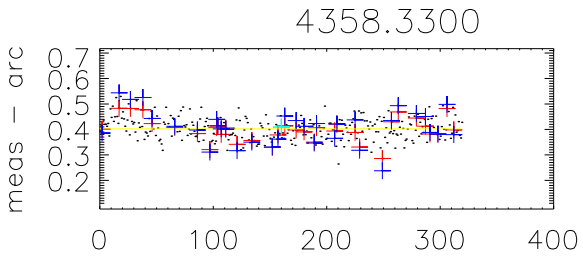

4046.5600
off: 0.50
sig: 0.026
4358.3300
off: 0.41
sig: 0.010
5460.9400
off: 0.48
sig: 0.008
5577.3390
off: 0.51
sig: 0.001
5889.9500
off: 0.56
sig: 0.004
5895.9240
off: 0.57
sig: 0.005

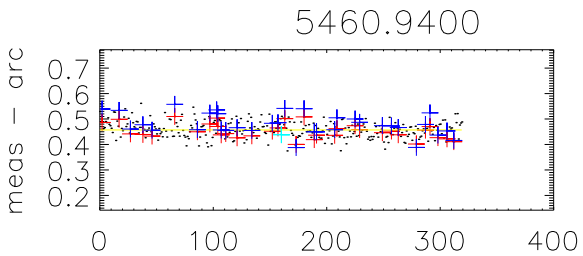

shift(pix)= 0.550
err(pix)= 0.029
oldshift(pix)= 0.503
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

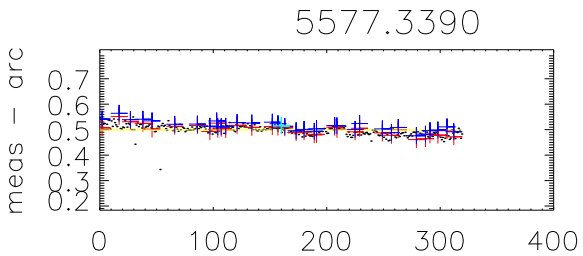

shift(pix)= 0.409
err(pix)= 0.012
oldshift(pix)= 0.411
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

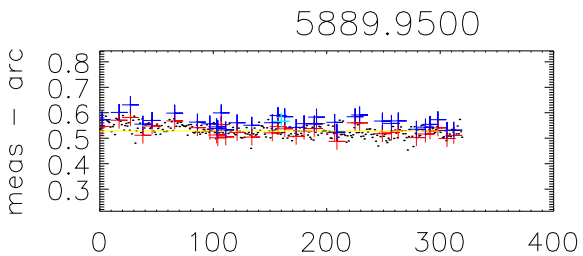

shift(pix)= 0.438
err(pix)= 0.010
oldshift(pix)= 0.479
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

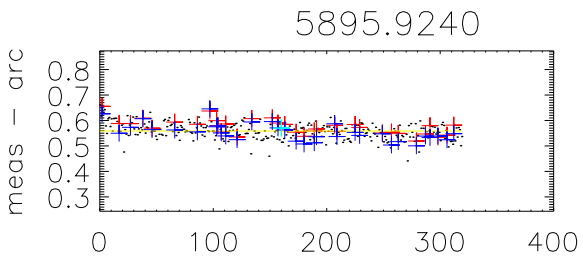

4046.5600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

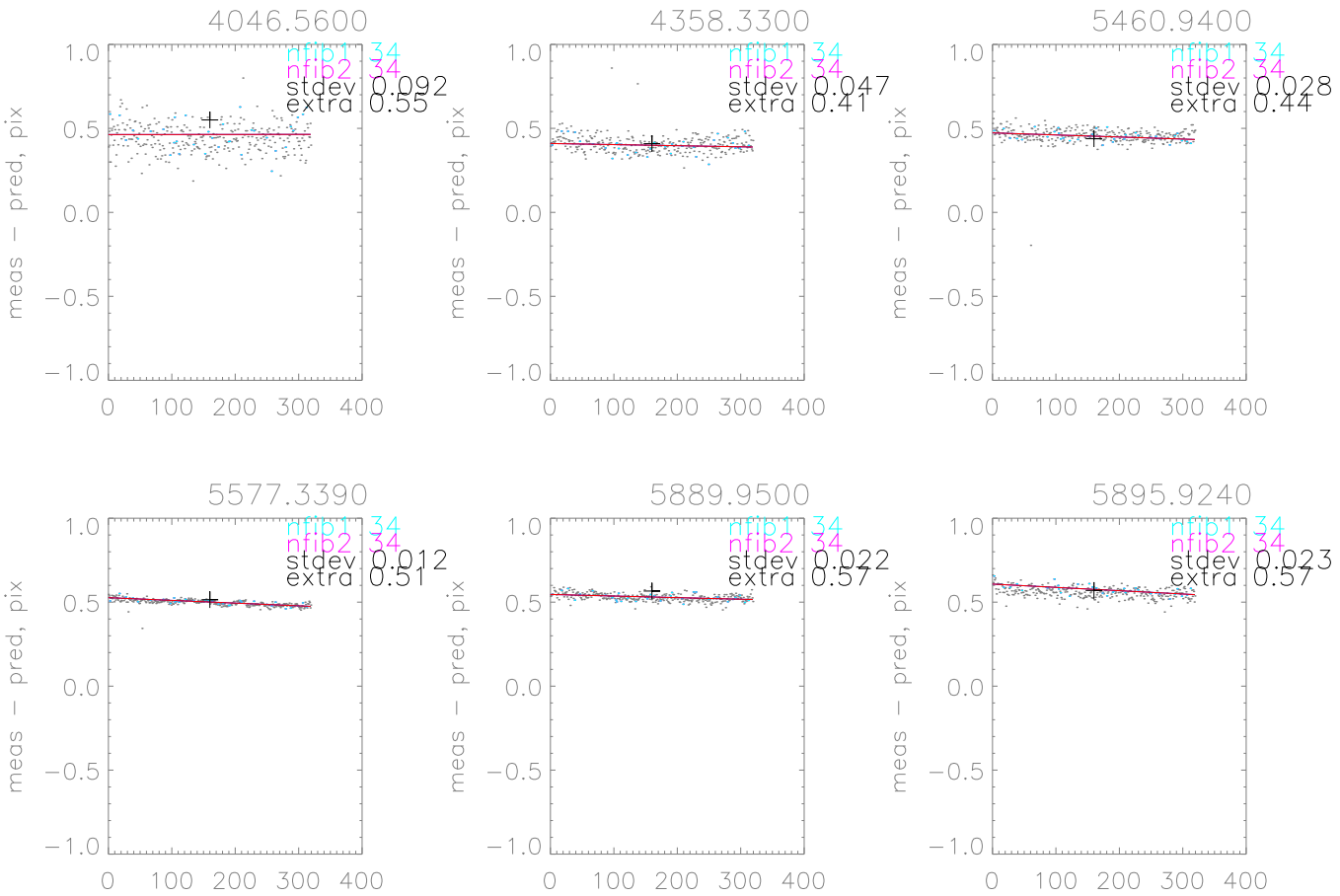

4358.3300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

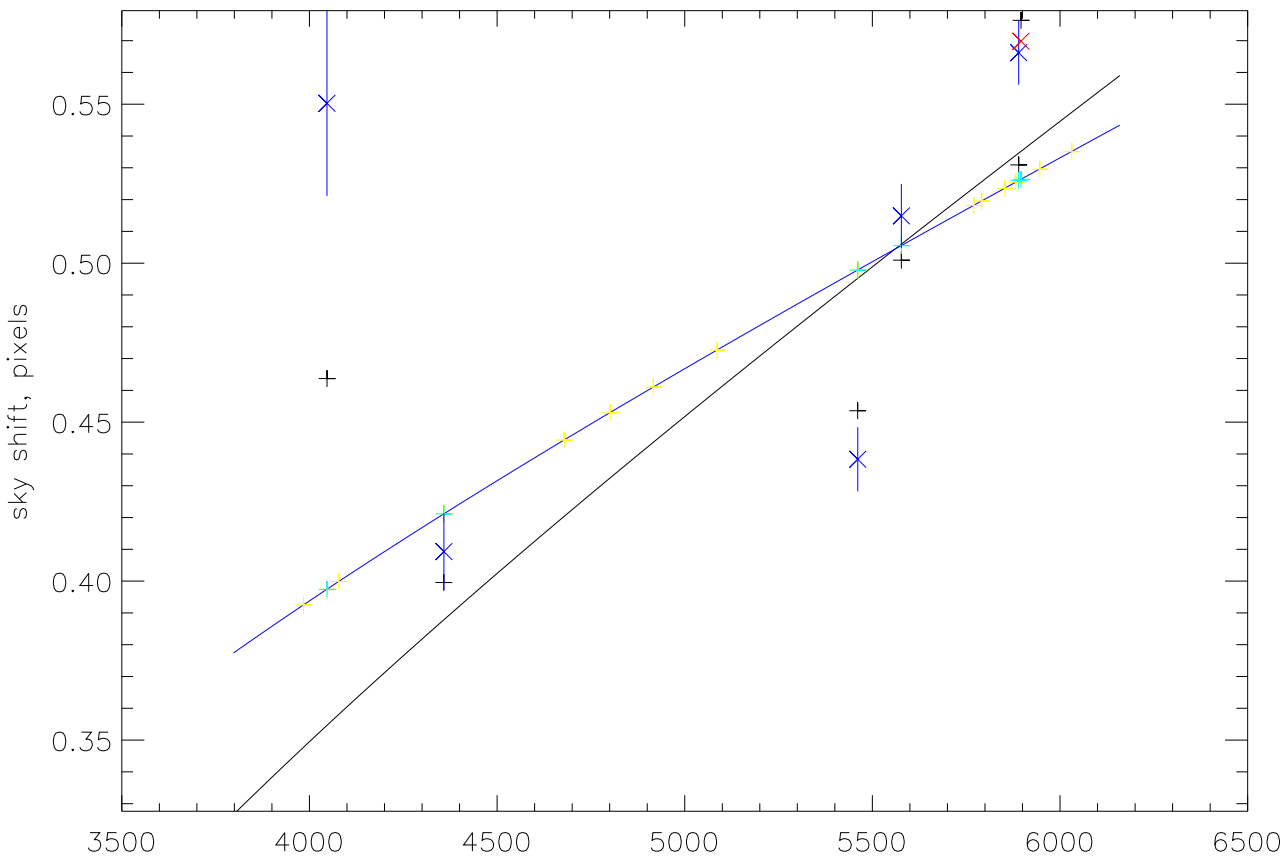

5460.9400
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

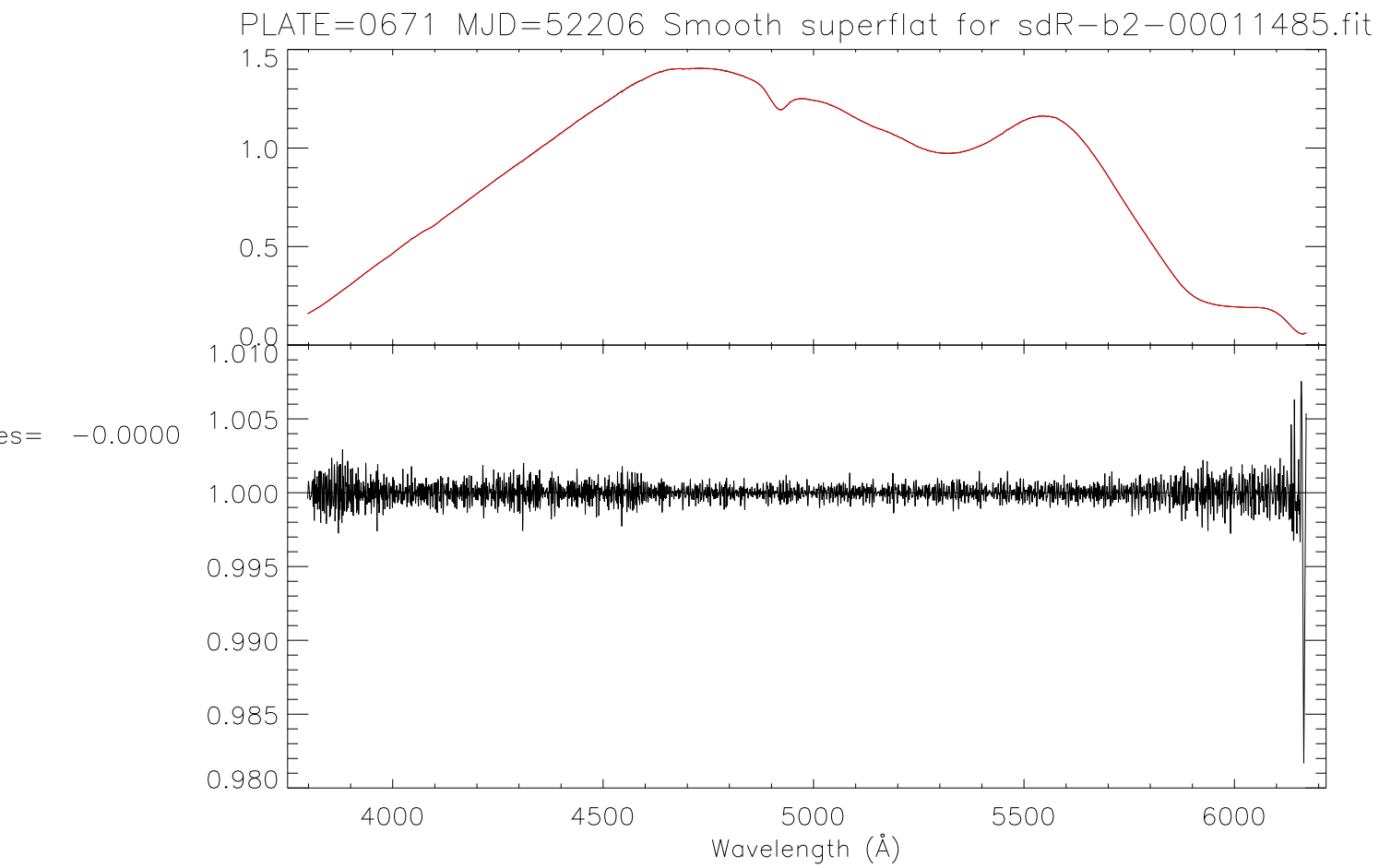

5577.3390
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

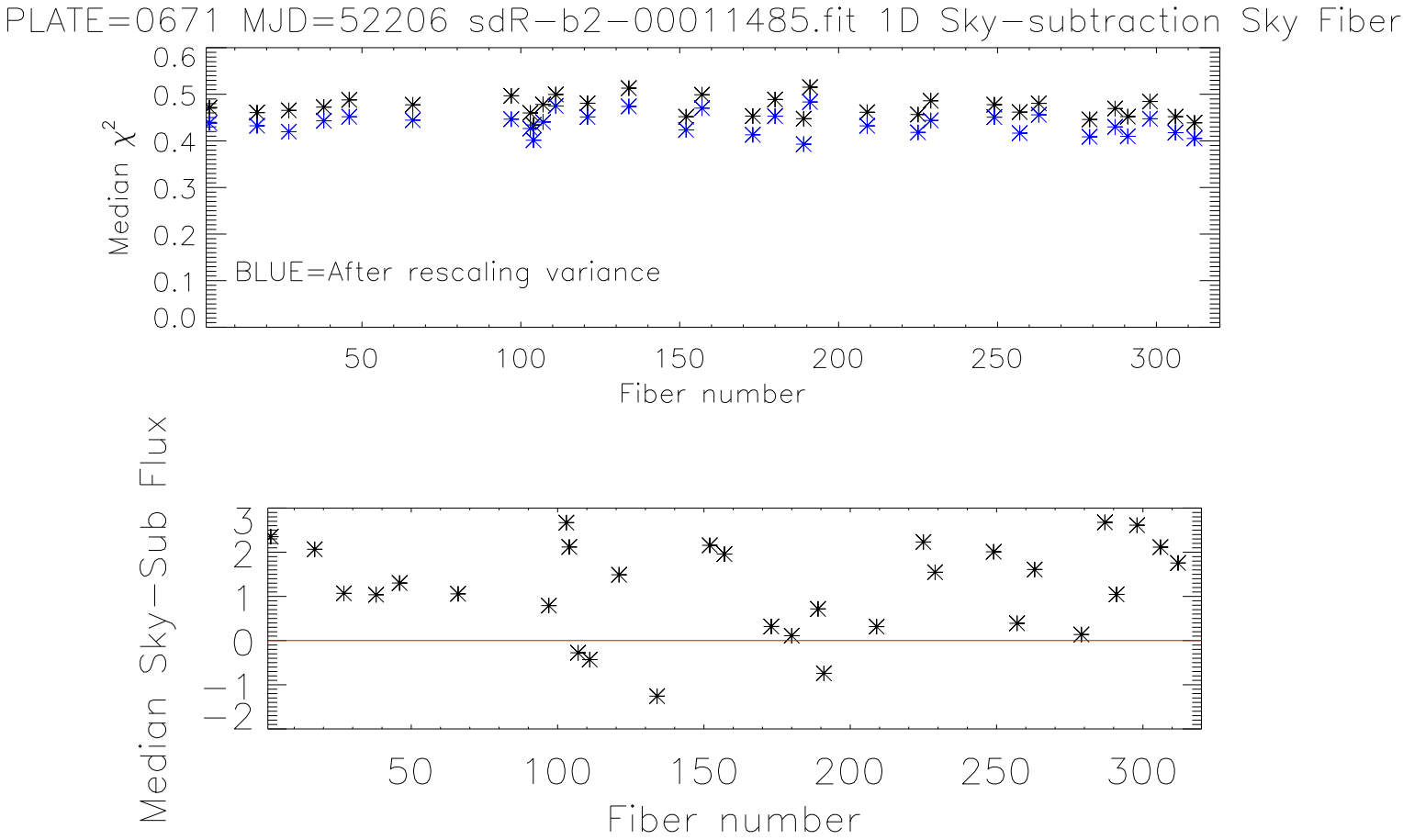

5889.9500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

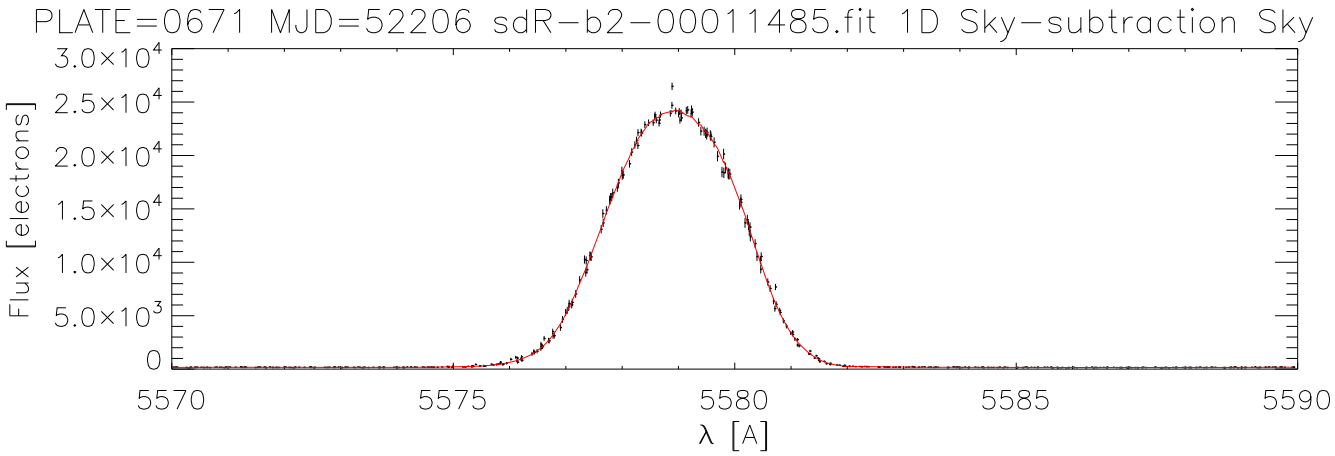

5895.9240
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

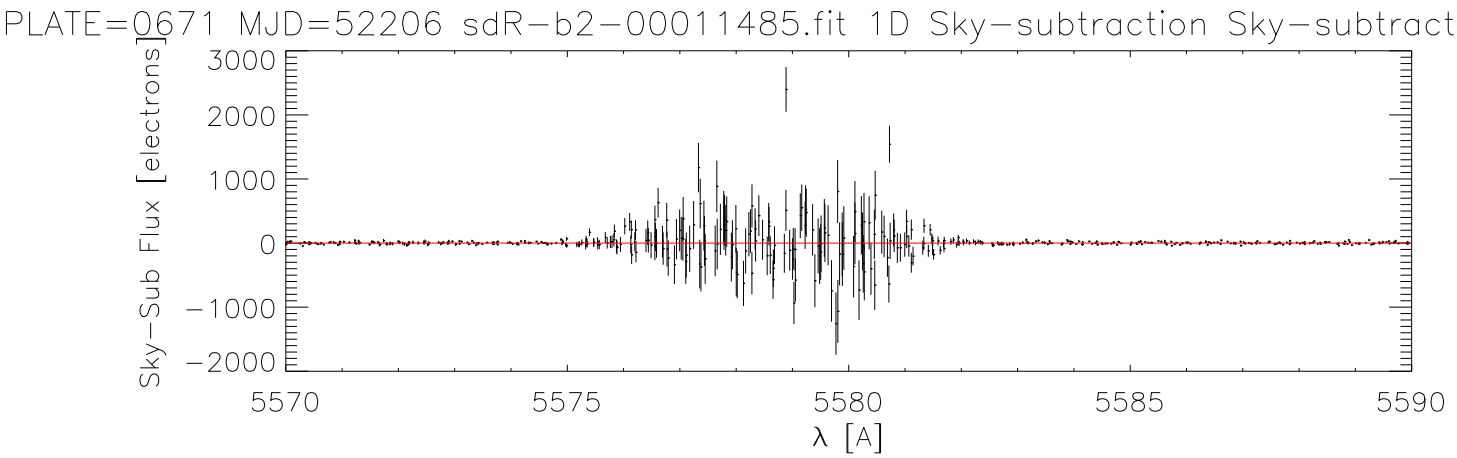

4046.5600
nfib1 34
nfib2 34
stdev 0.092
extra 0.55
4358.3300
nfib1 34
nfib2 34
stdev 0.047
extra 0.41
5460.9400
nfib1 34
nfib2 34
stdev 0.028
extra 0.44
5577.3390
nfib1 34
nfib2 34
stdev 0.012
extra 0.51
5889.9500
nfib1 34
nfib2 34
stdev 0.022
extra 0.57
5895.9240
nfib1 34
nfib2 34
stdev 0.023
extra 0.57
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

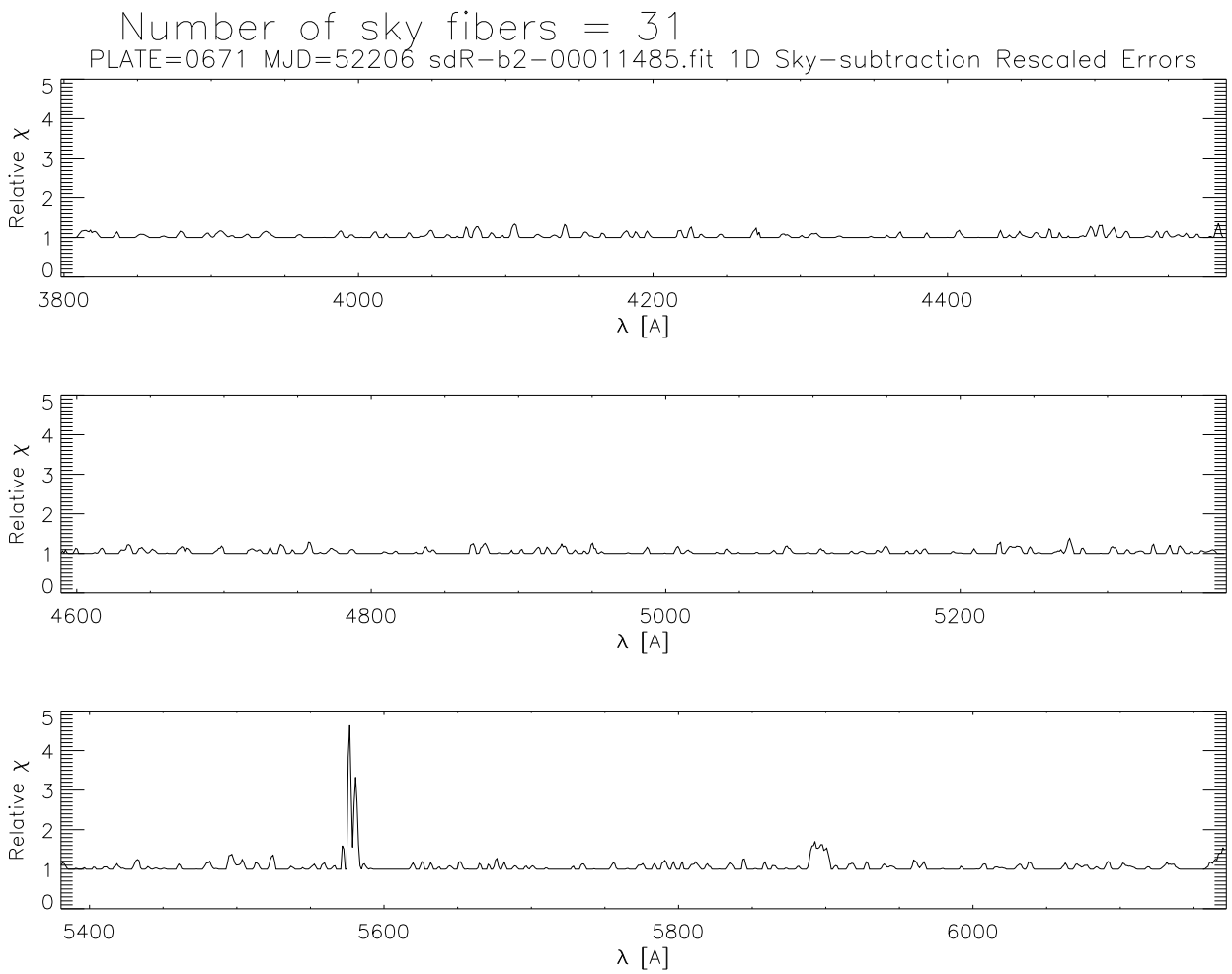

sky shift, pixels
0.55
0.50
0.45
0.40
0.35
3500
4000
4500
5000
5500
6000
6500

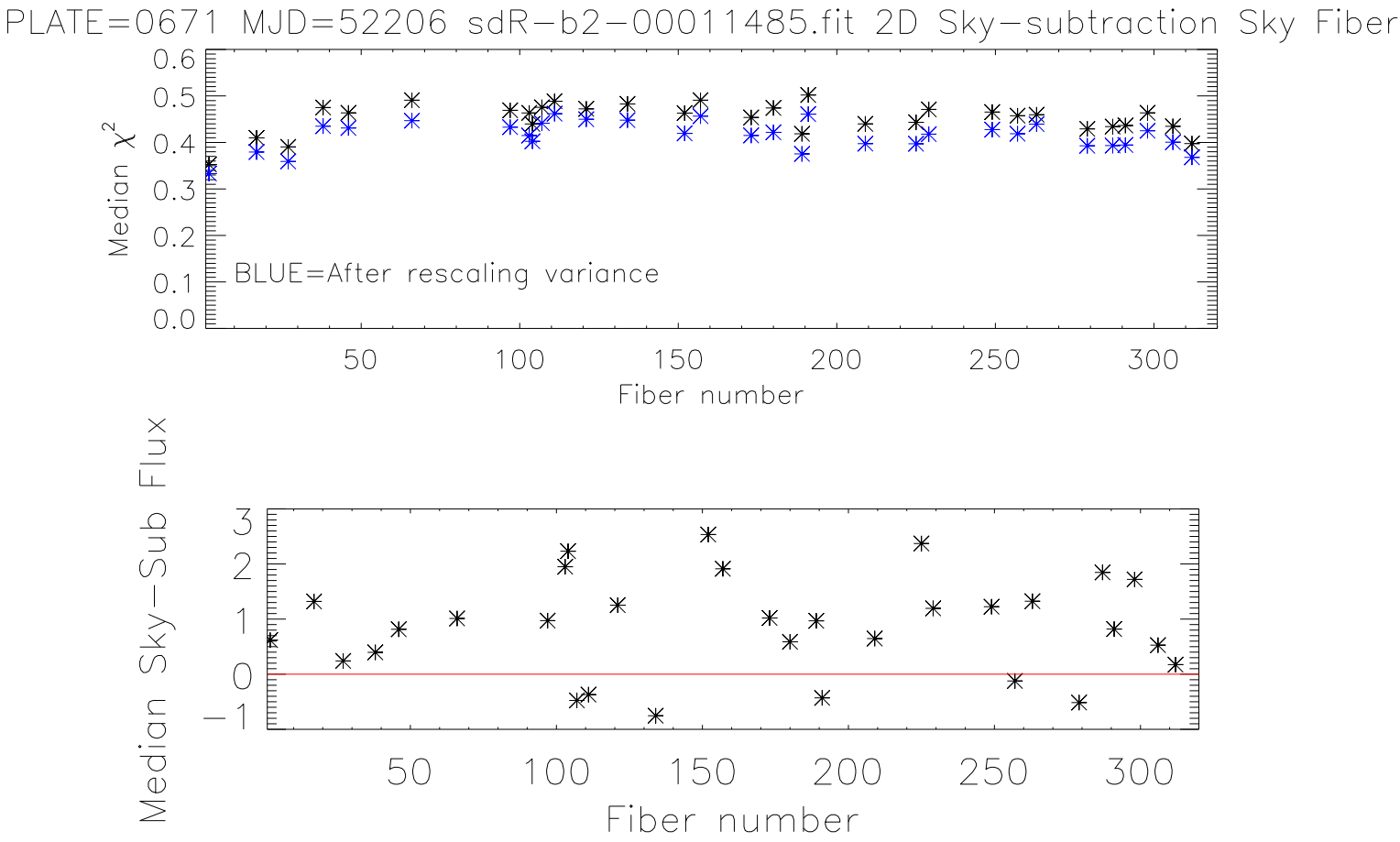

PLATE=0671 MJD=52206 Smooth superflat for sdR-b2-00011485.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

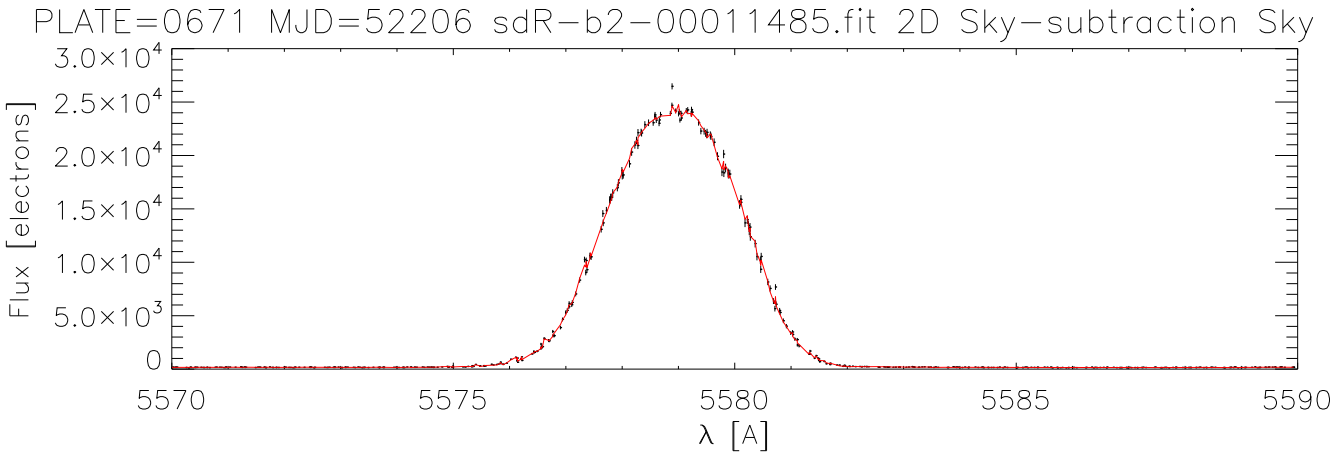

PLATE=0671 MJD=52206 sdR-b2-00011485.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

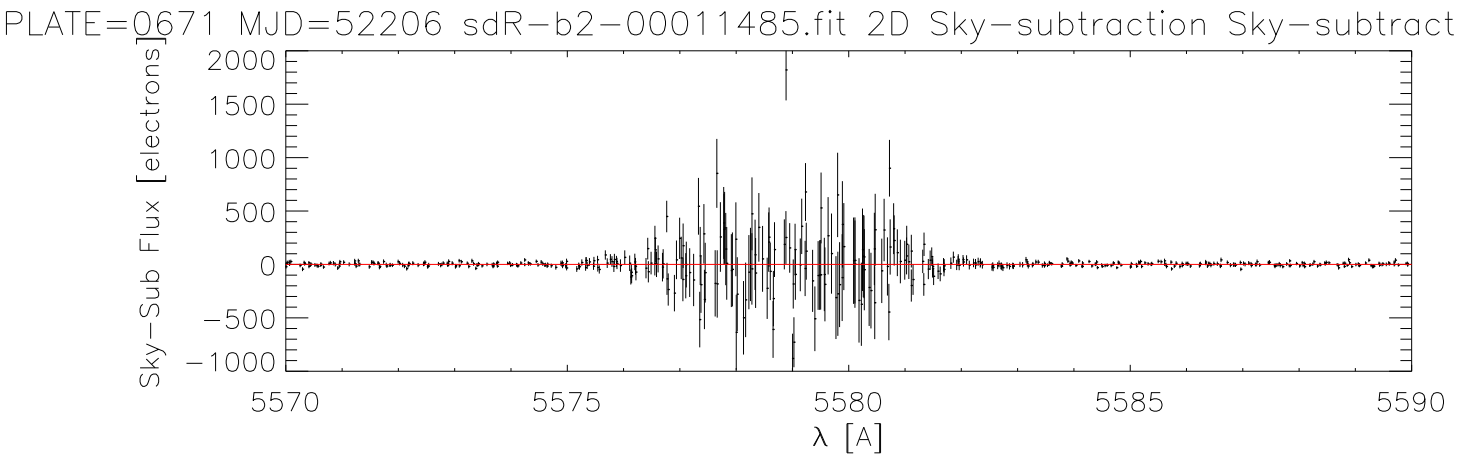

PLATE=0671 MJD=52206 sdR-b2-00011485.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

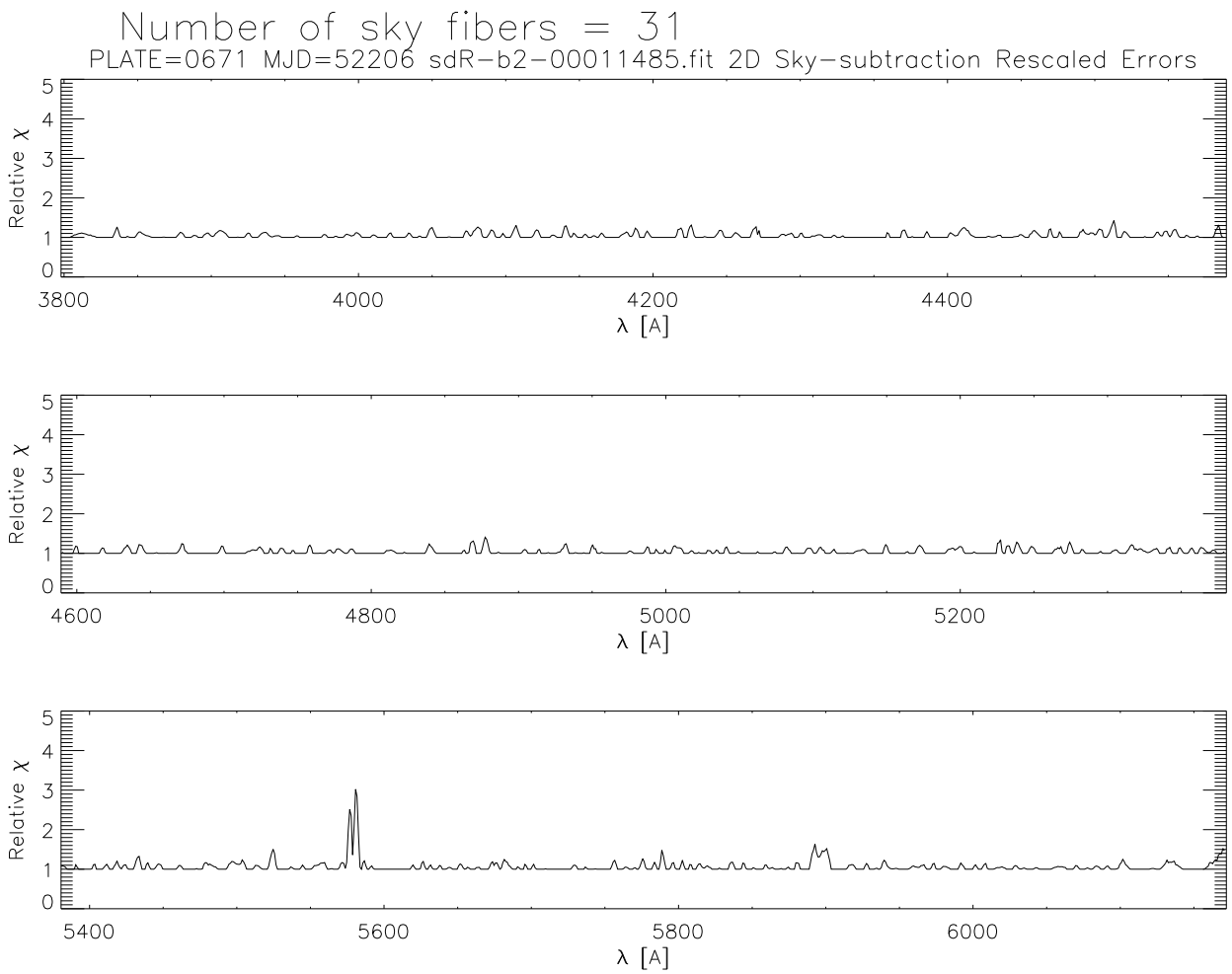

PLATE=0671 MJD=52206 sdR-b2-00011485.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

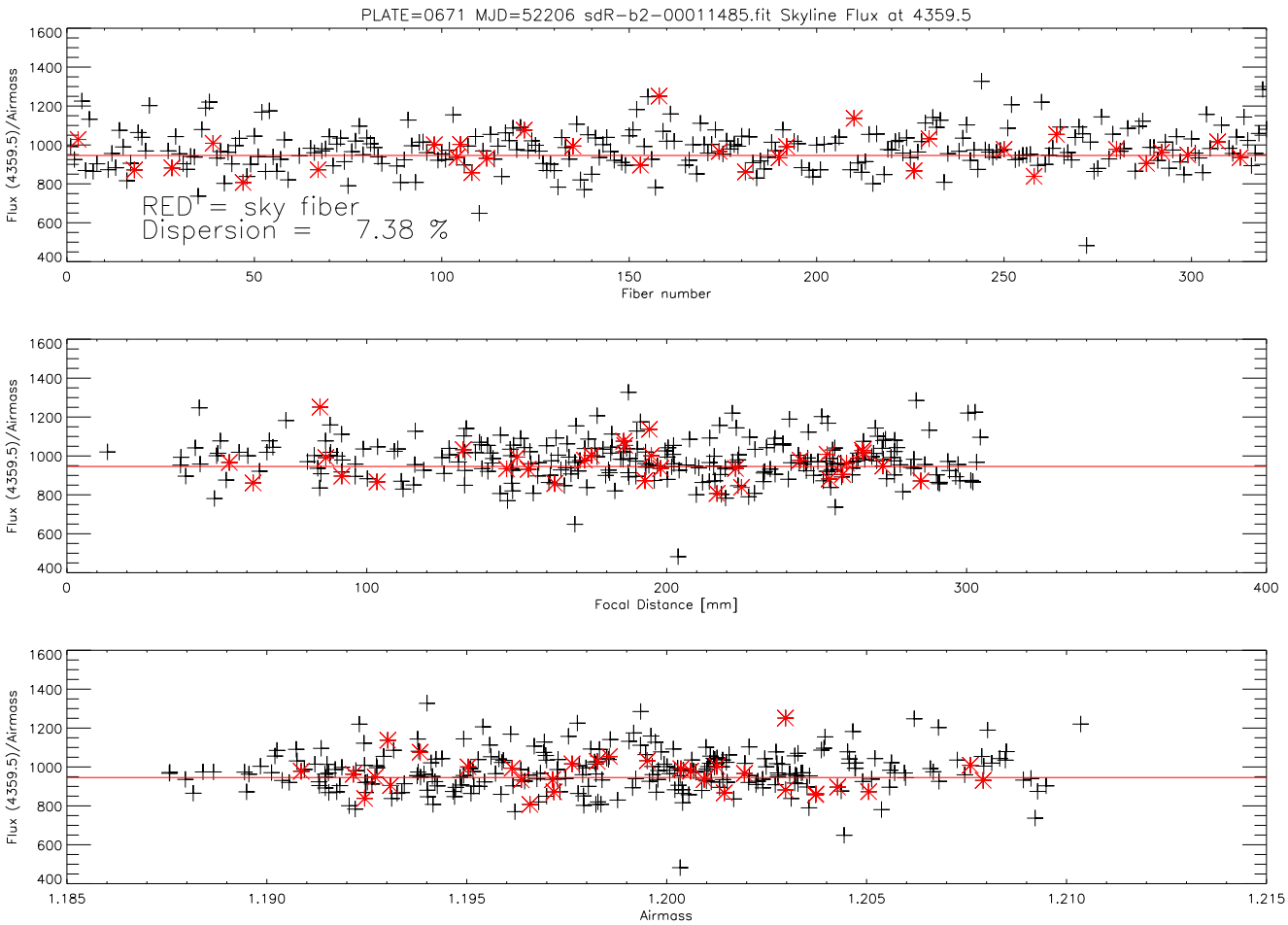

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011485.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

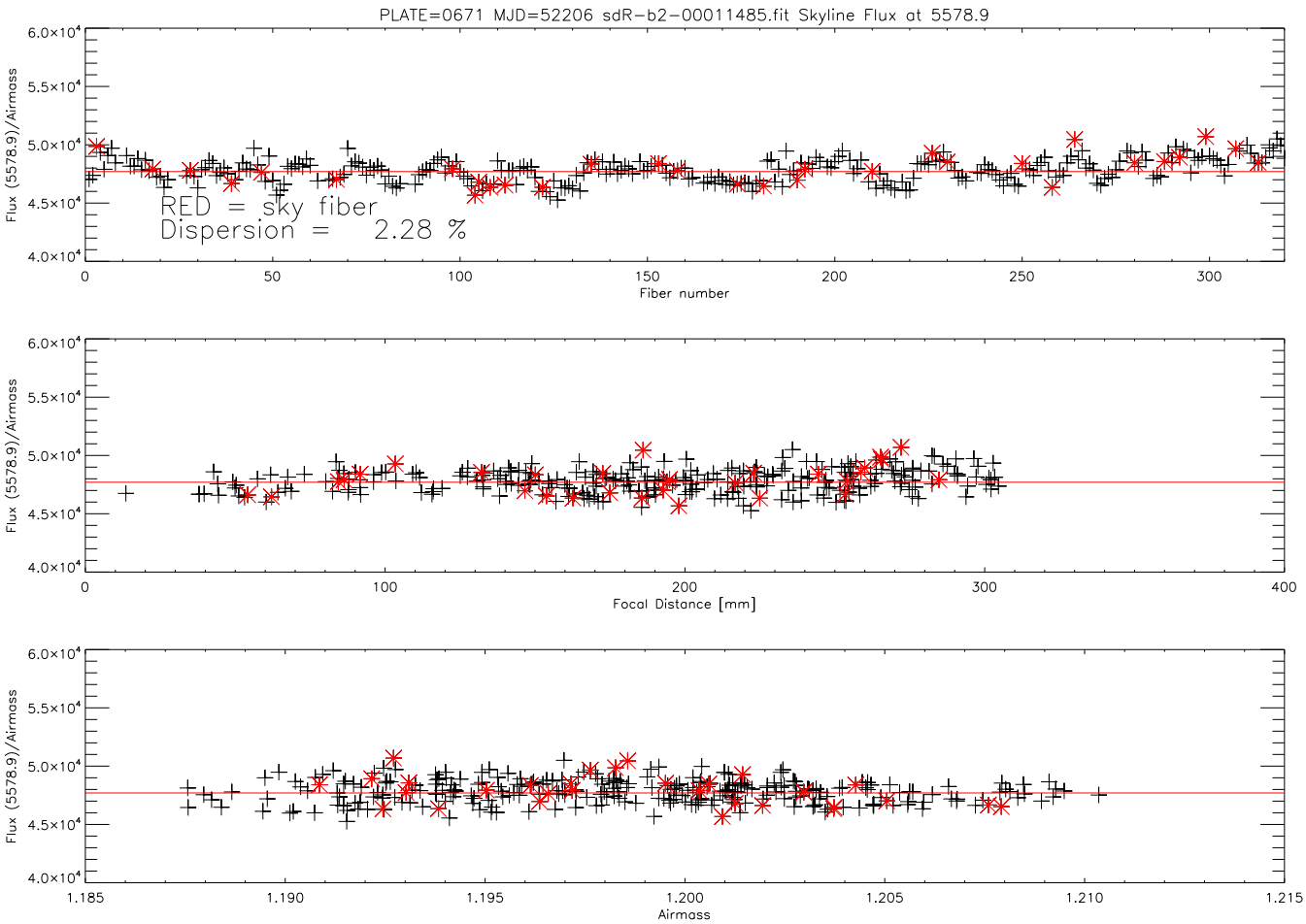

PLATE=0671 MJD=52206 sdR-b2-00011485.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

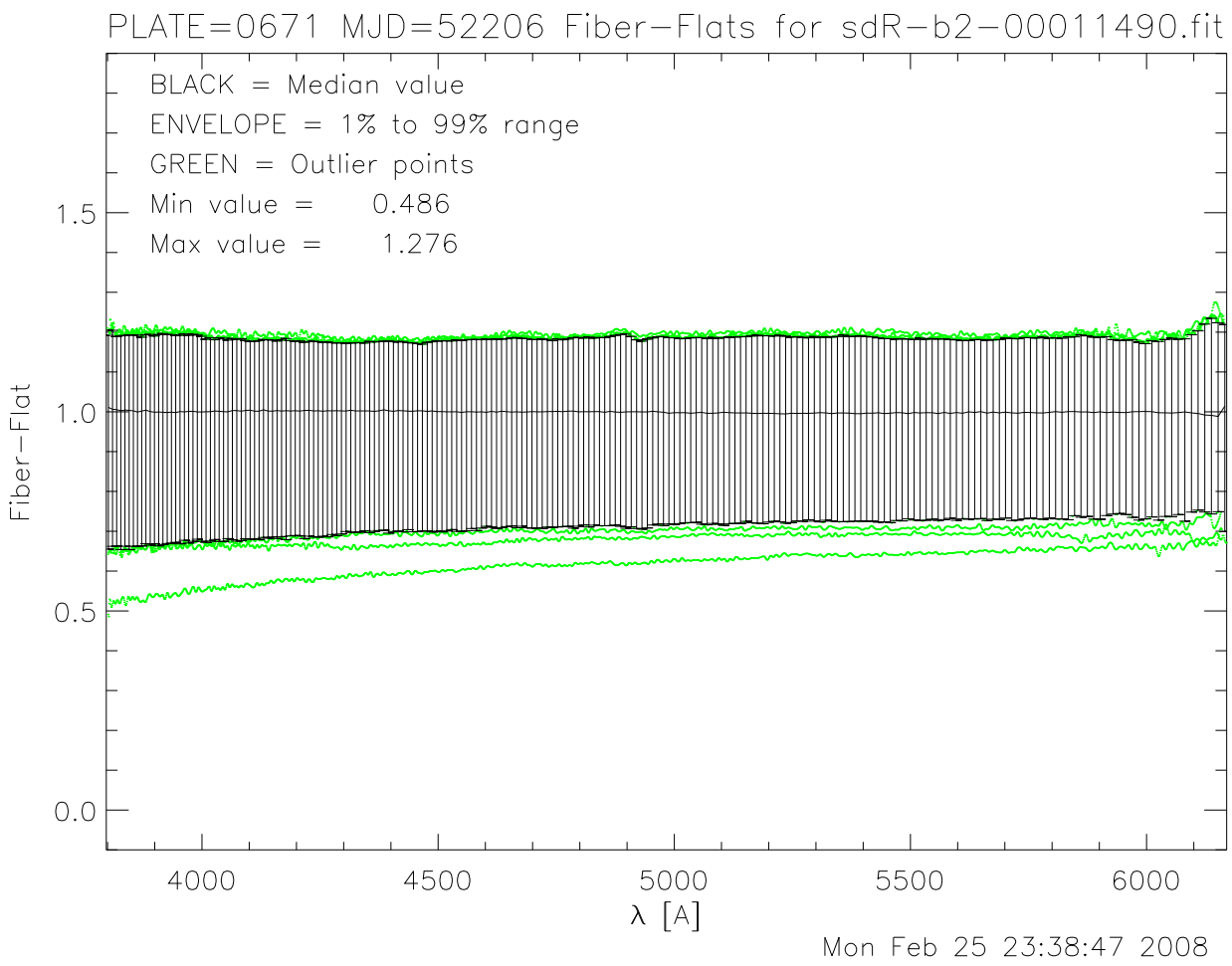

PLATE=0671 MJD=52206 sdR-b2-00011485.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]


PLATE=0671 MJD=52206 sdR-b2-00011485.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011485.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=0671 MJD=52206 sdR-b2-00011485.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.38 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=0671 MJD=52206 sdR-b2-00011485.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
6.0×10^4
5.5×10^4
5.0×10^4
4.5×10^4
4.0×10^4
RED = sky fiber
Dispersion = 2.28 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
6.0×10^4
5.5×10^4
5.0×10^4
4.5×10^4
4.0×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
6.0×10^4
5.5×10^4
5.0×10^4
4.5×10^4
4.0×10^4
1.185
1.190
1.195
1.200
1.205
1.210
1.215
Airmass


PLATE=0671 MJD=52206 Fiber-Flats for sdR-b2-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.486
Max value = 1.276
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
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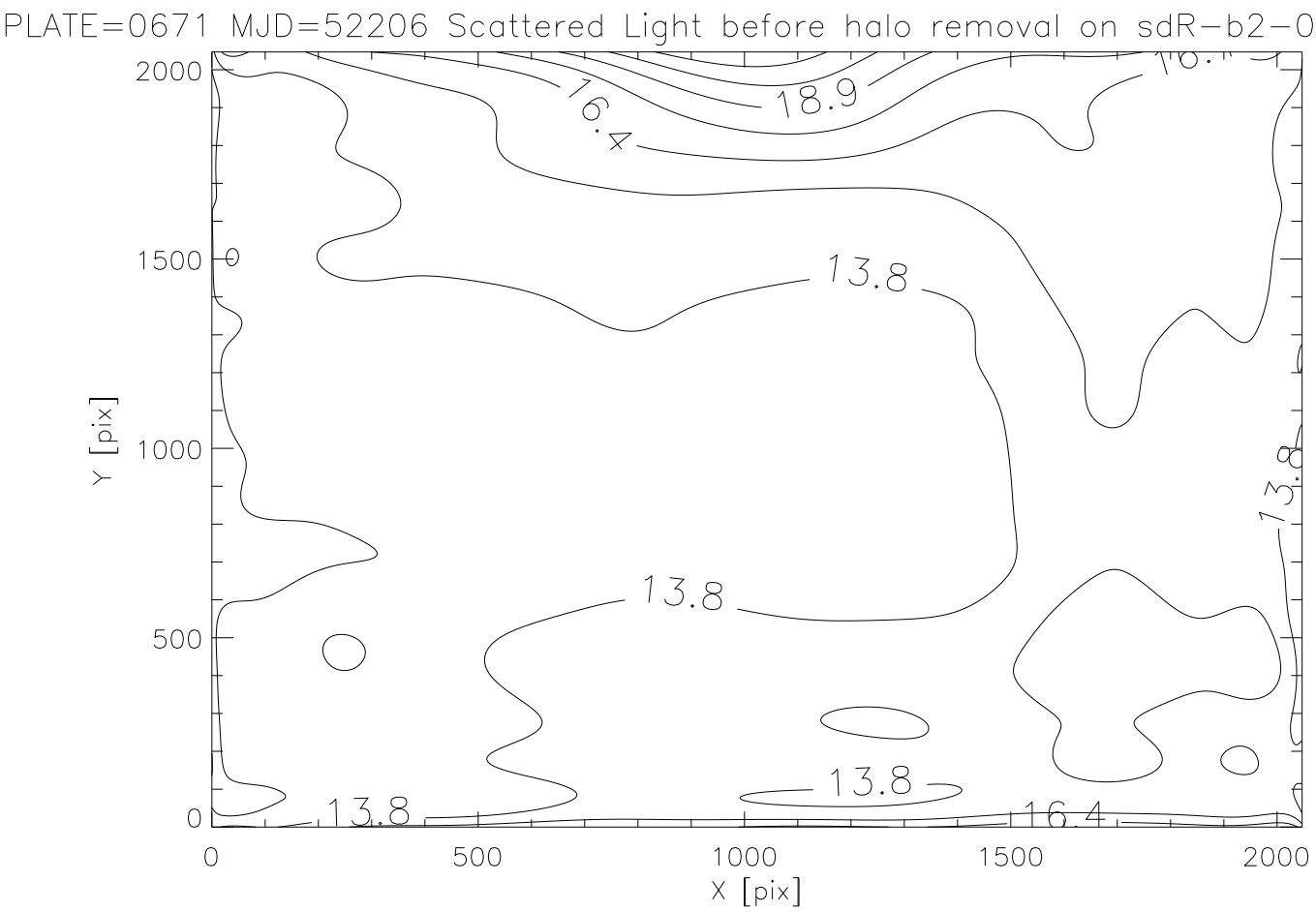
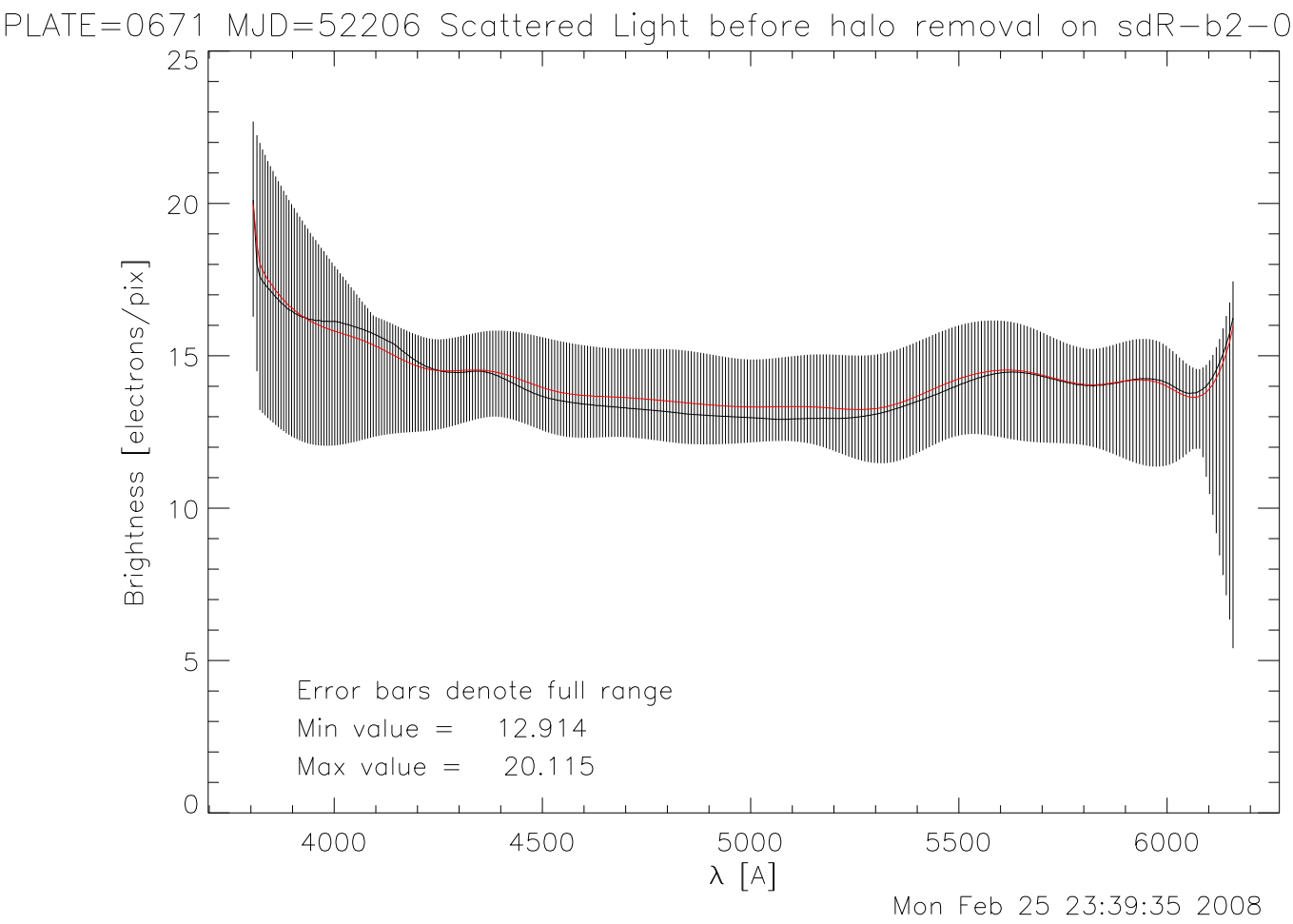
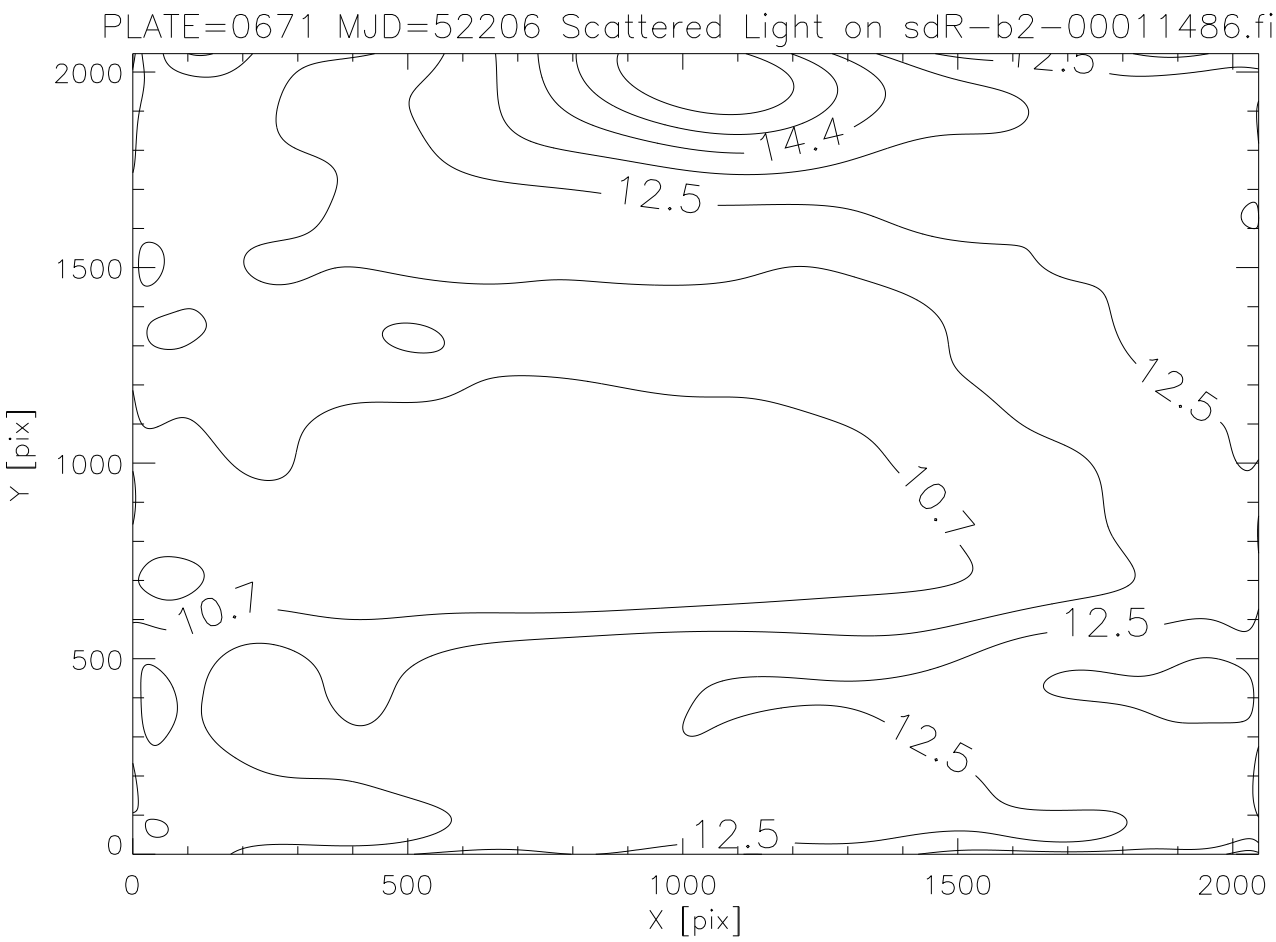
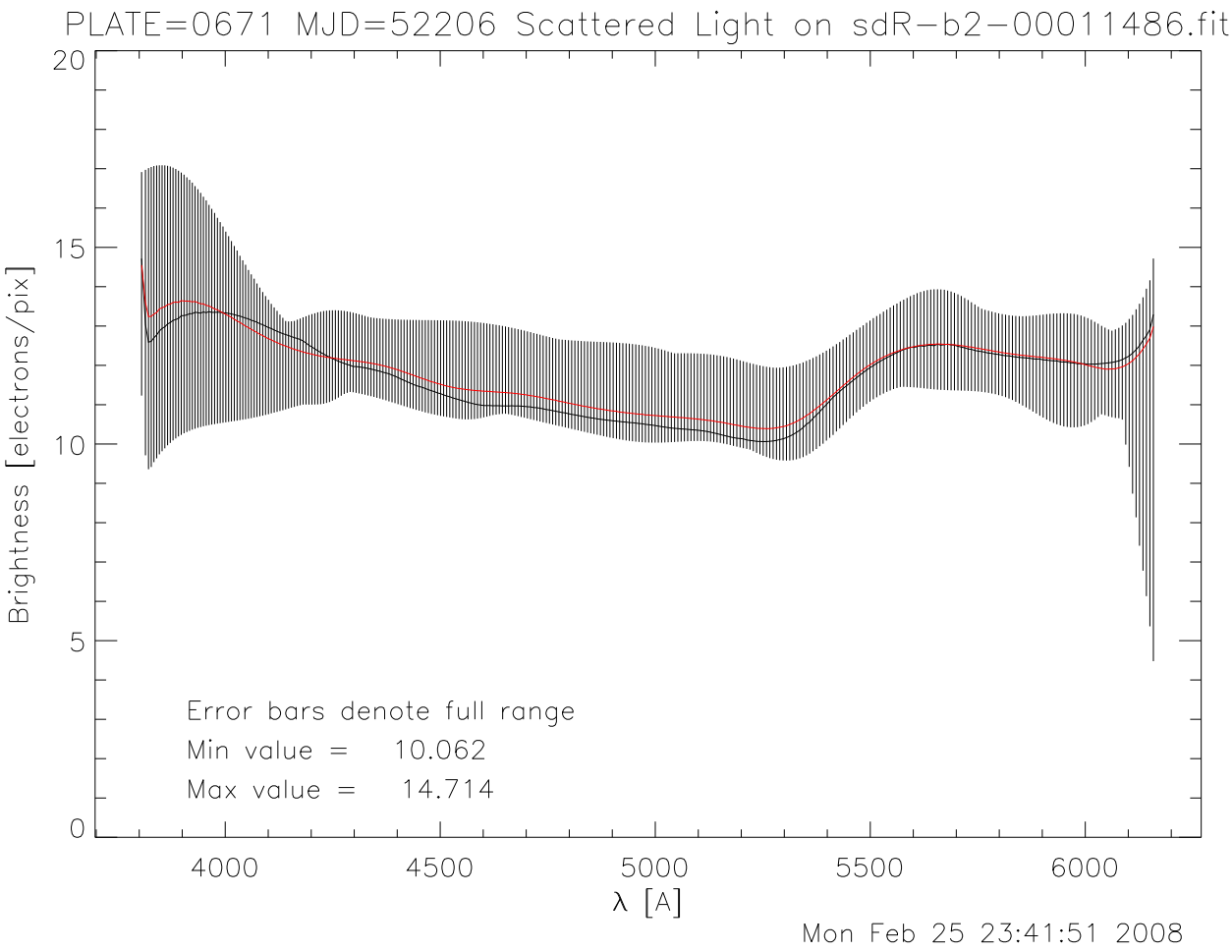
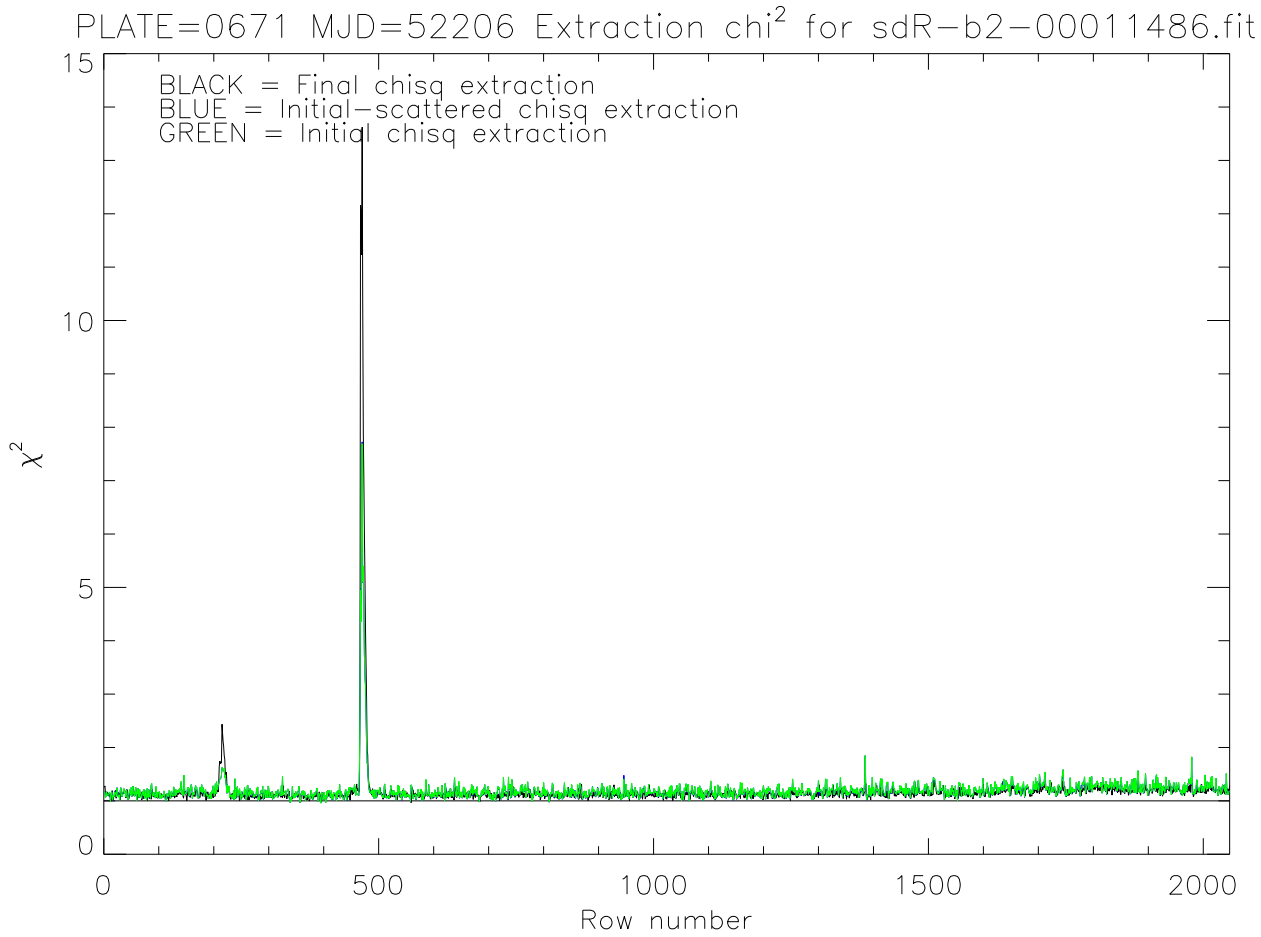
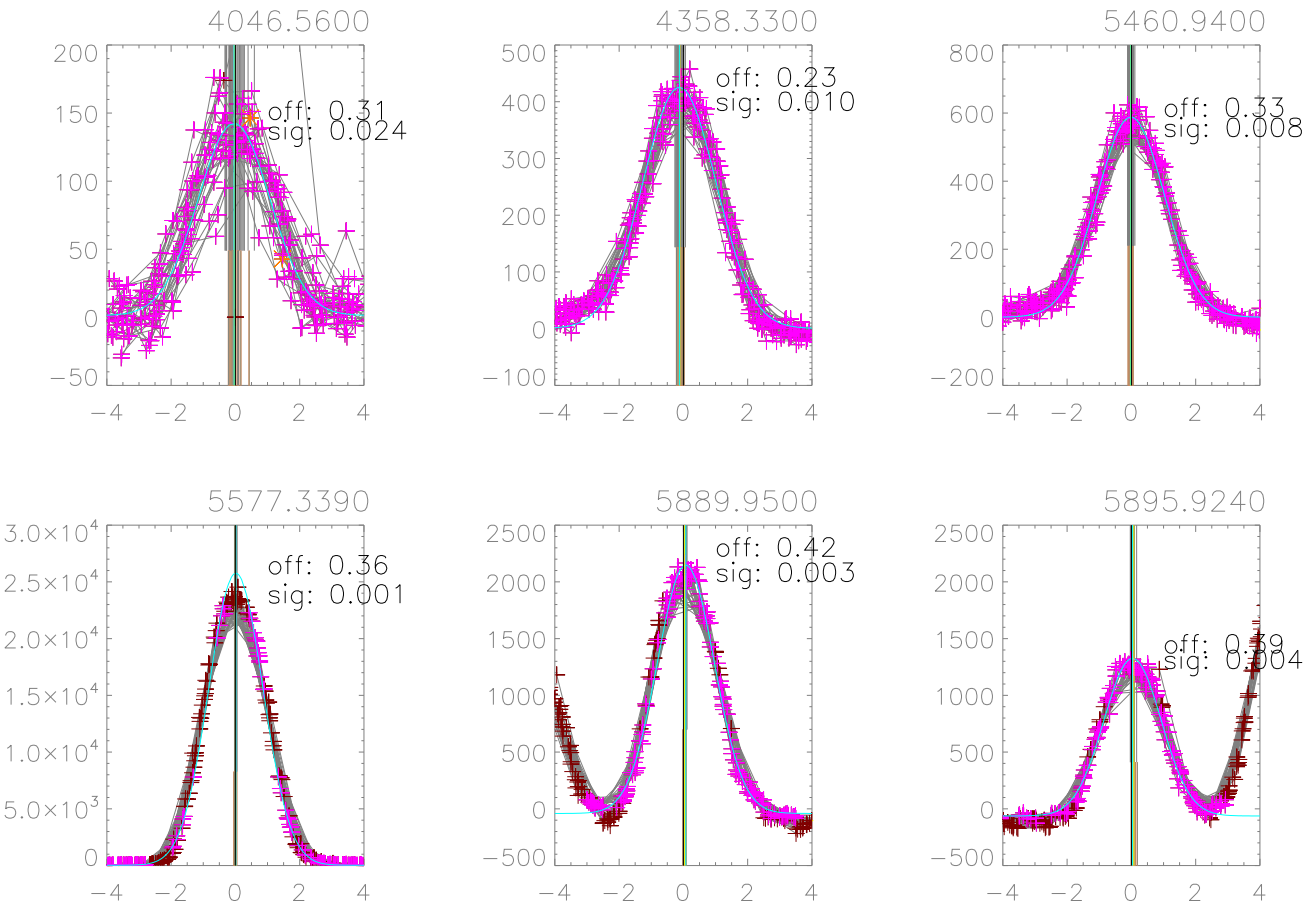

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011486.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
16.4
18.9
13.8
13.8
13.8
13.8
13.8
16.4

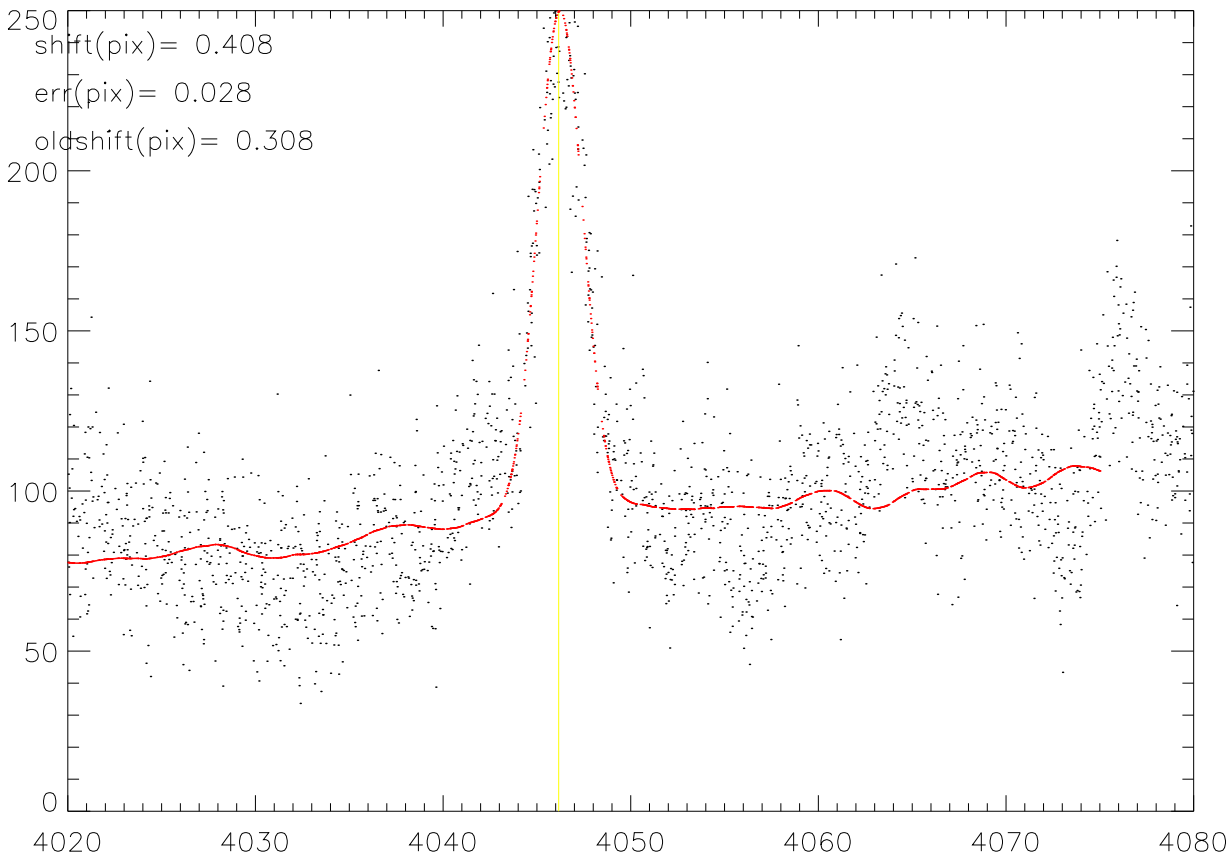

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011486.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.914
Max value = 20.115
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:39:35 2008

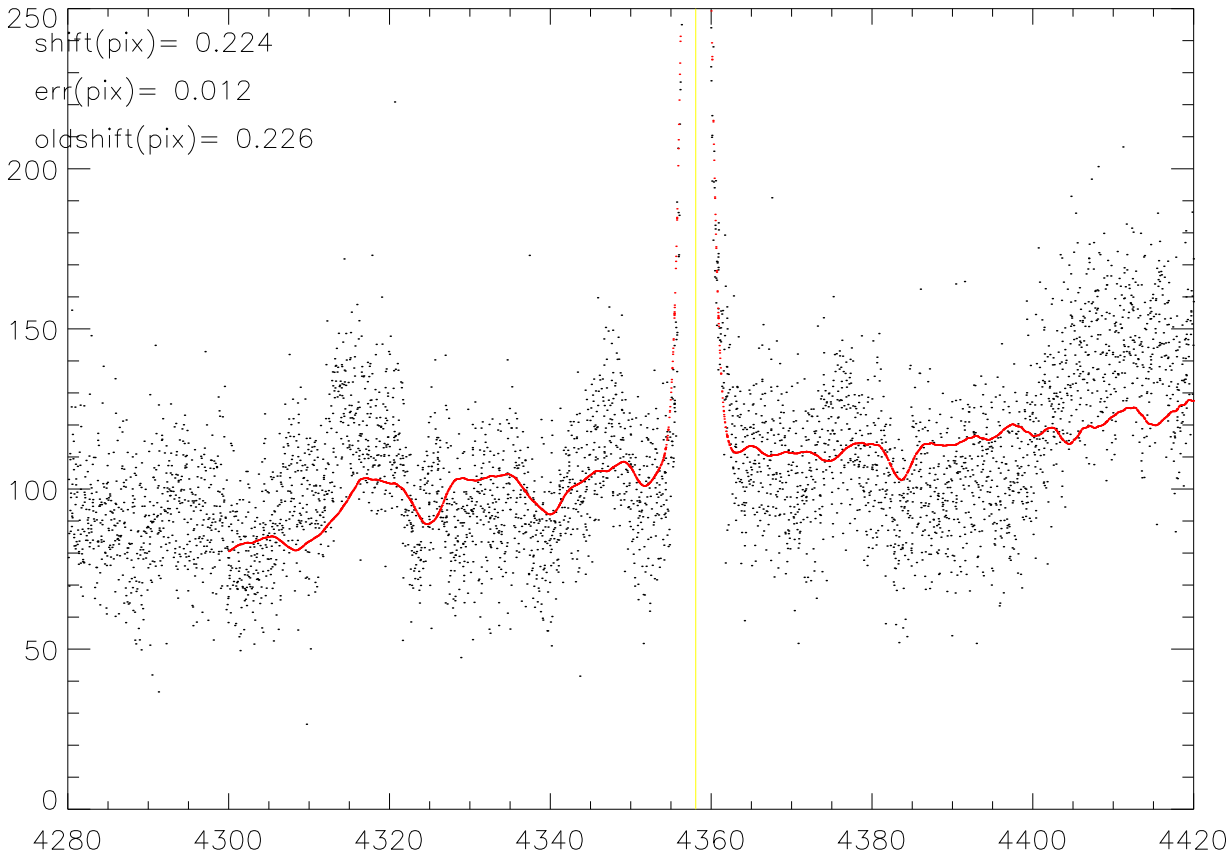

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011486.fit
14.4
12.5
12.5
10.7
10.7
12.5
12.5
12.5
0
0
0
500
1000
1500
2000
Y [pix]
X [pix]

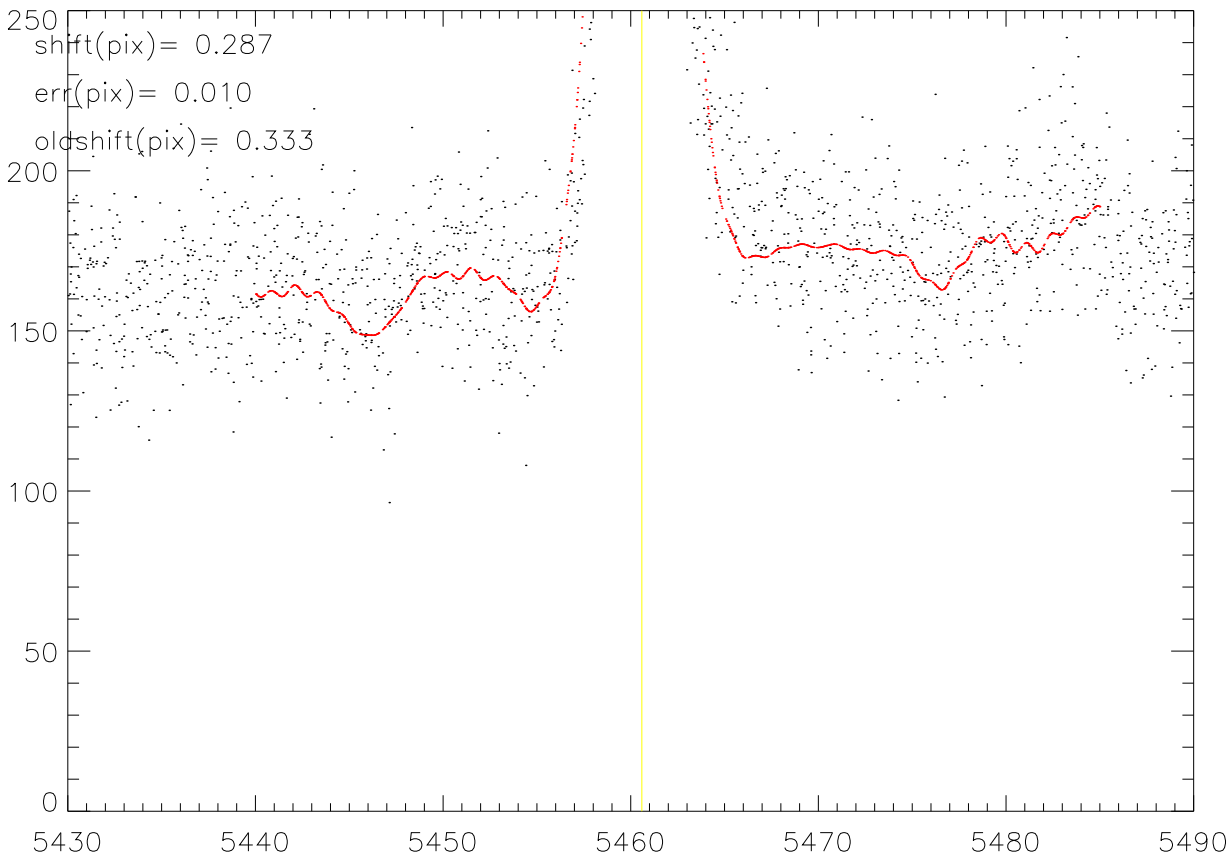

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011486.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 10.062
Max value = 14.714
Mon Feb 25 23:41:51 2008

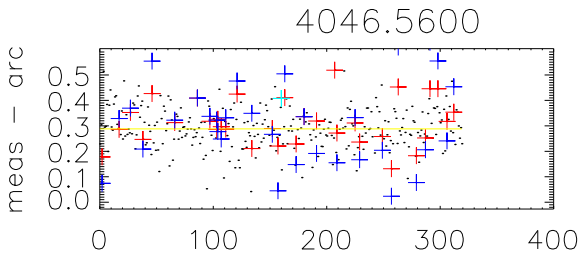

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b2-00011486.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

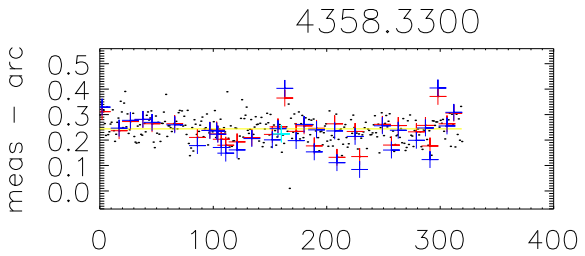

4046.5600
off: 0.31
sig: 0.024
4358.3300
off: 0.23
sig: 0.010
5460.9400
off: 0.33
sig: 0.008
5577.3390
off: 0.36
sig: 0.001
5889.9500
off: 0.42
sig: 0.003
5895.9240
off: 0.39
sig: 0.004

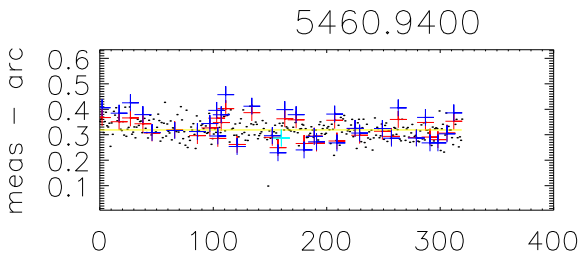

shift(pix)= 0.408
err(pix)= 0.028
oldshift(pix)= 0.308
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

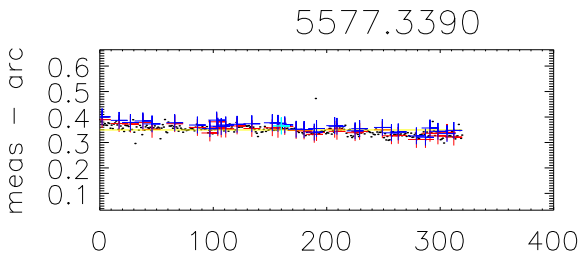

shift(pix)= 0.224
err(pix)= 0.012
oldshift(pix)= 0.226
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

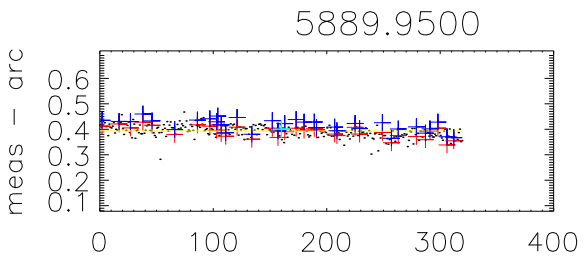

shift(pix)= 0.287
err(pix)= 0.010
oldshift(pix)= 0.333
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

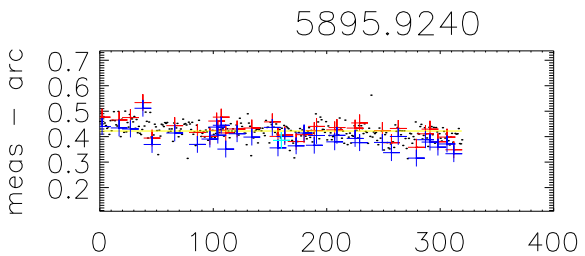

4046.5600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

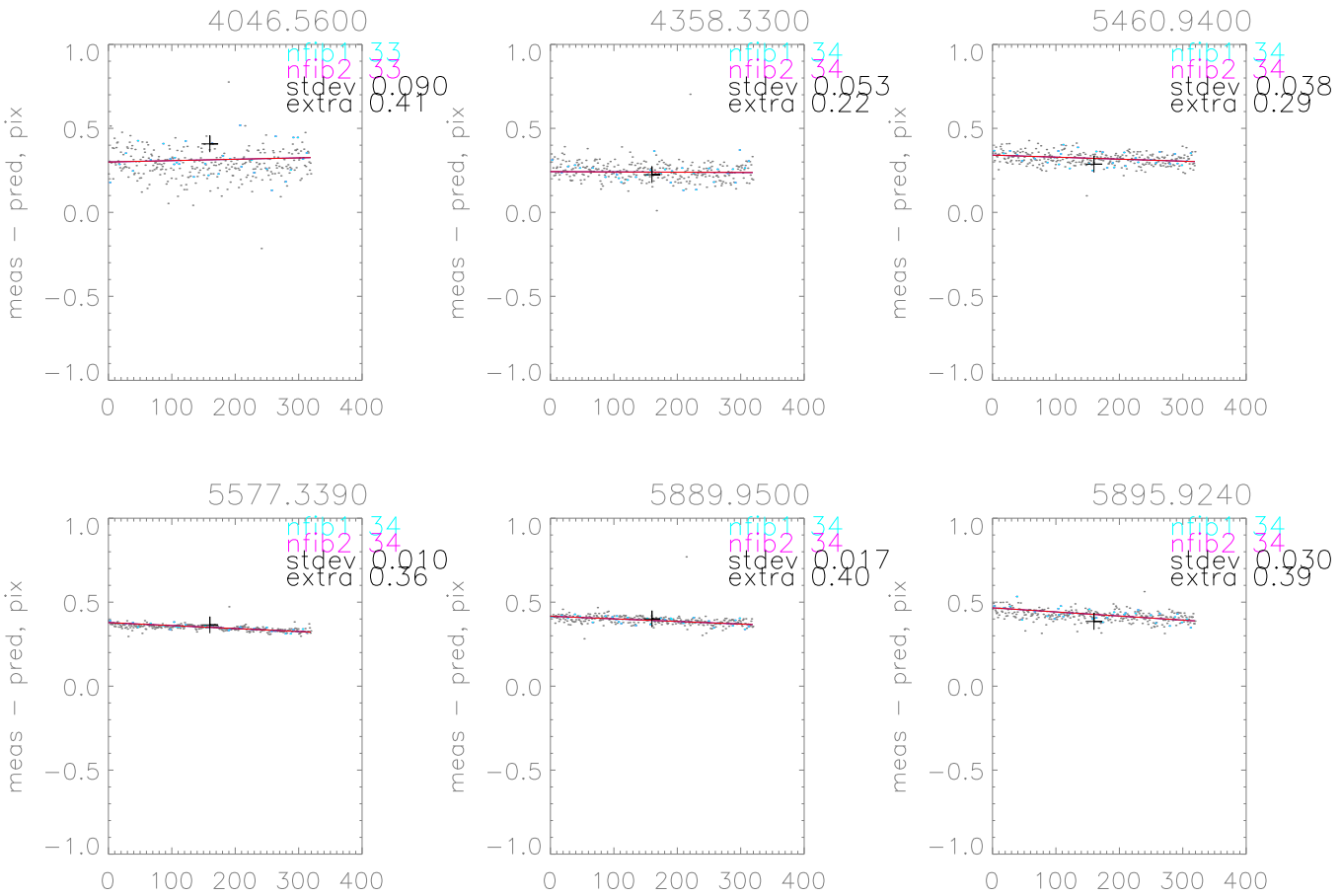

4358.3300
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

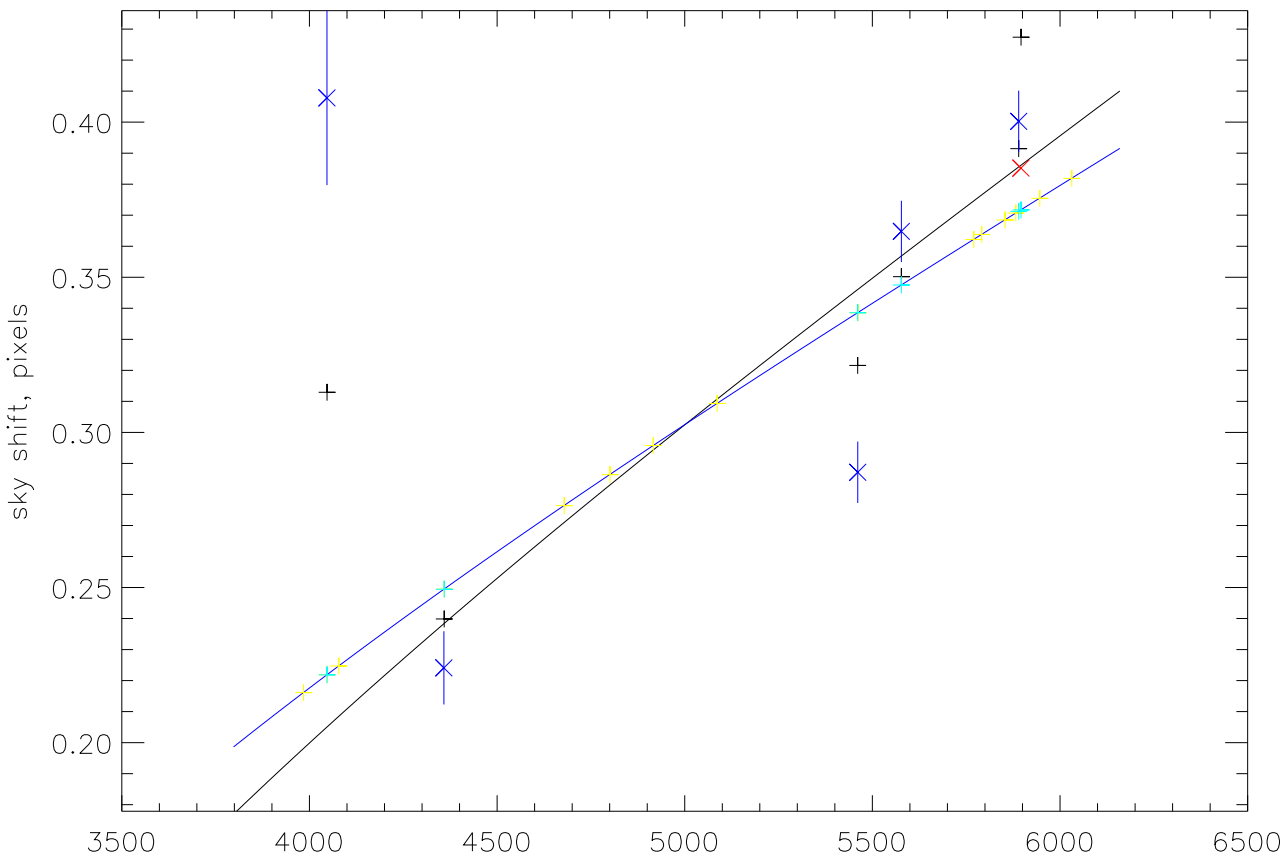

5460.9400
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

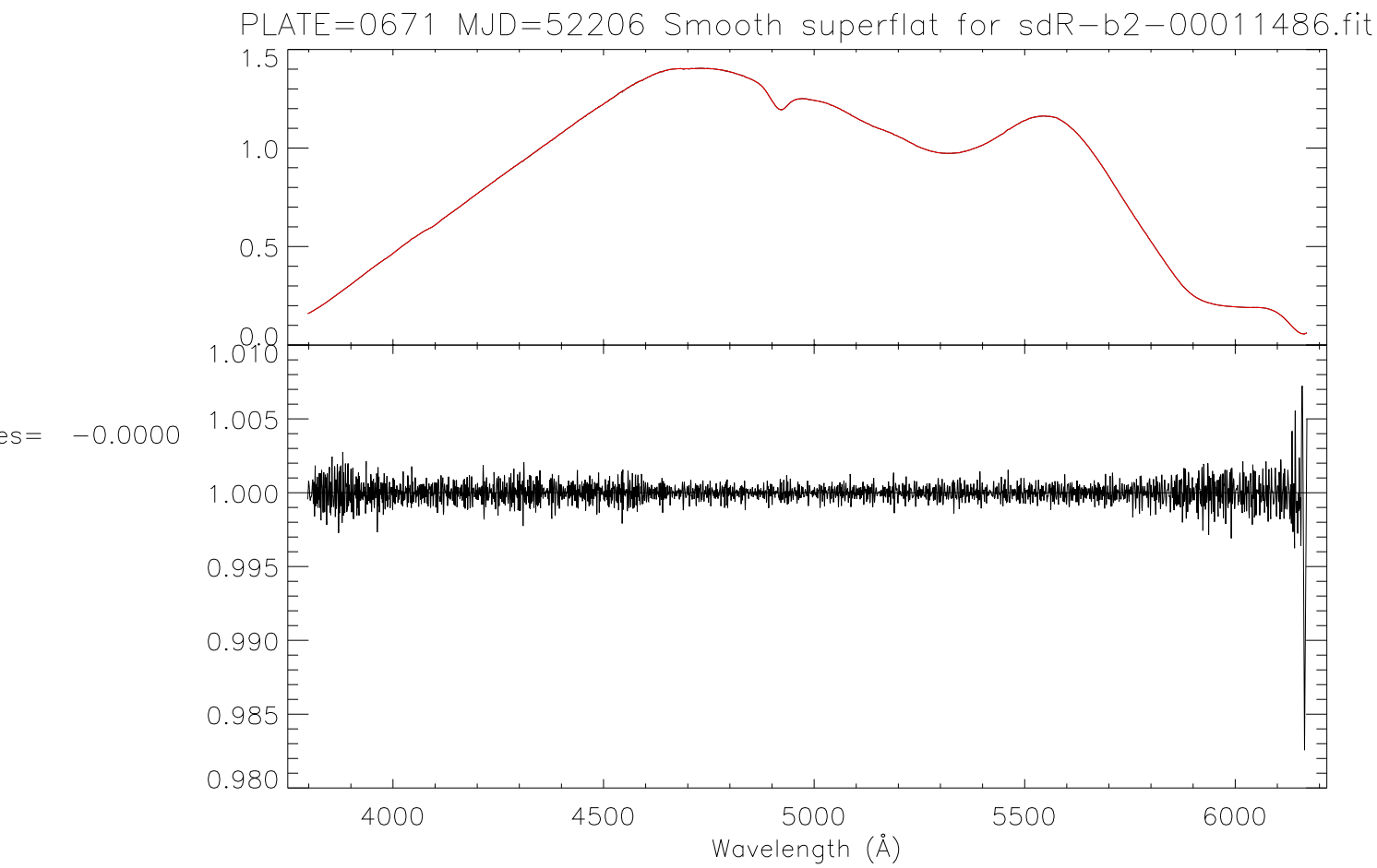

5577.3390
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

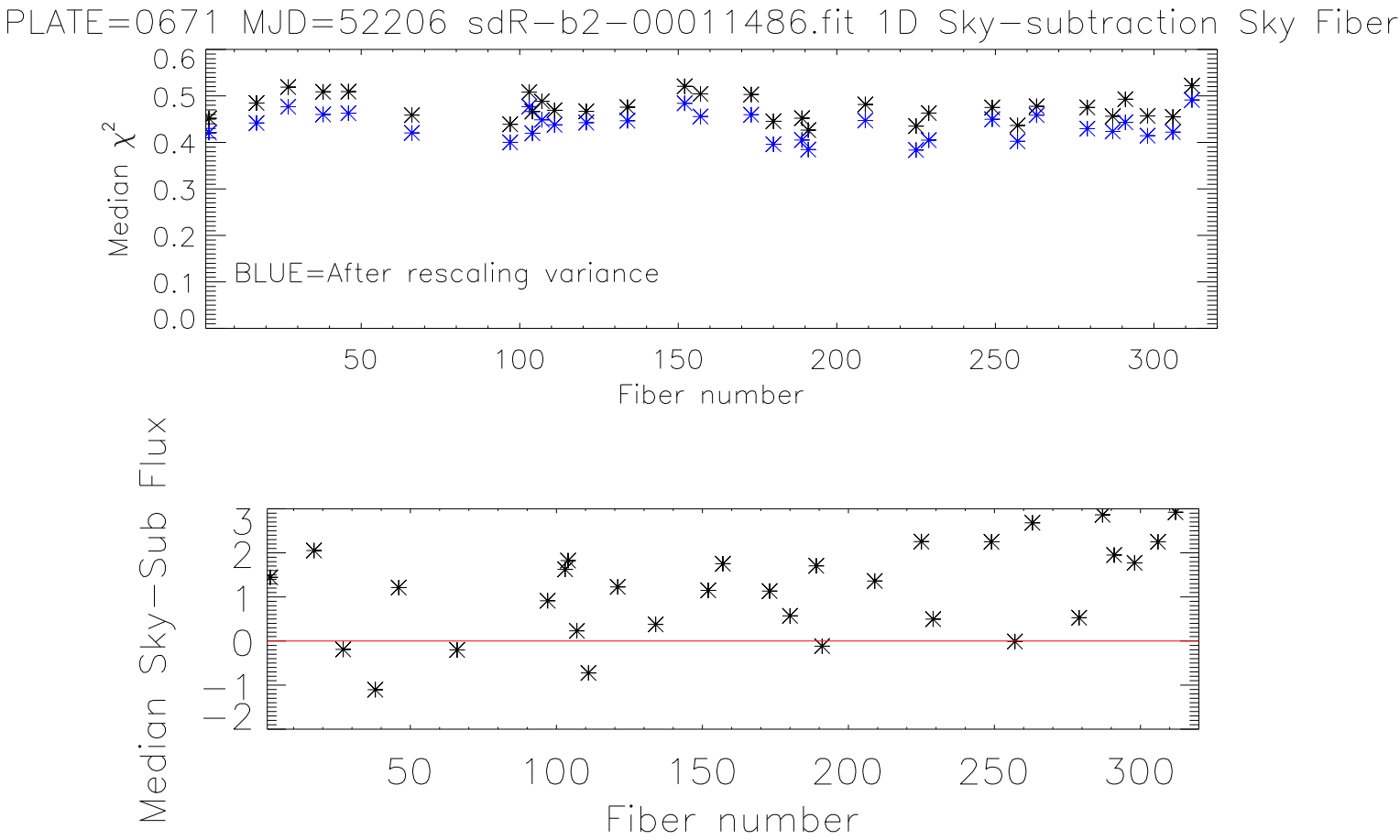

5889.9500
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

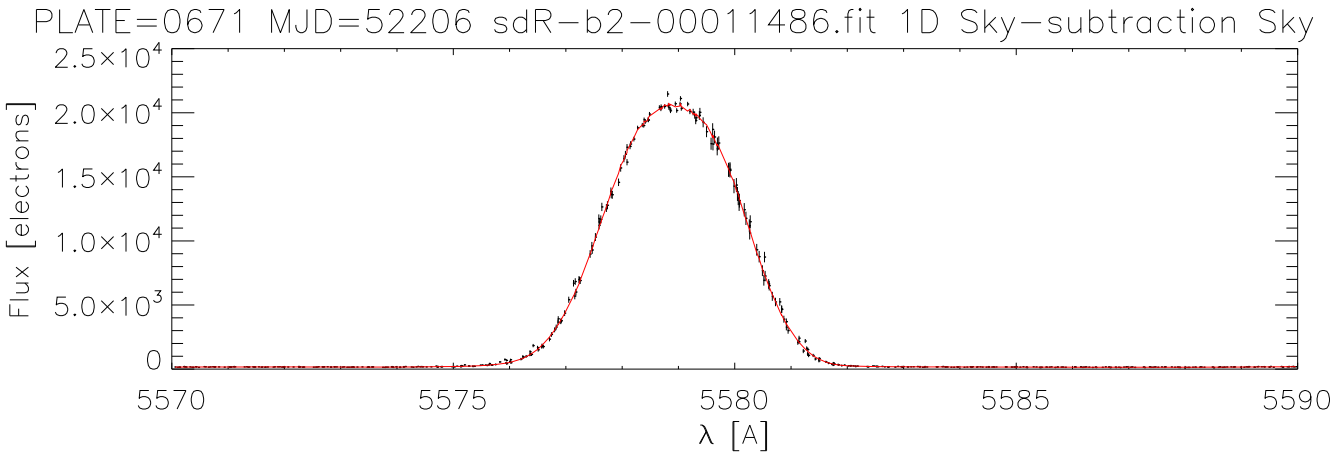

5895.9240
meas − arc
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

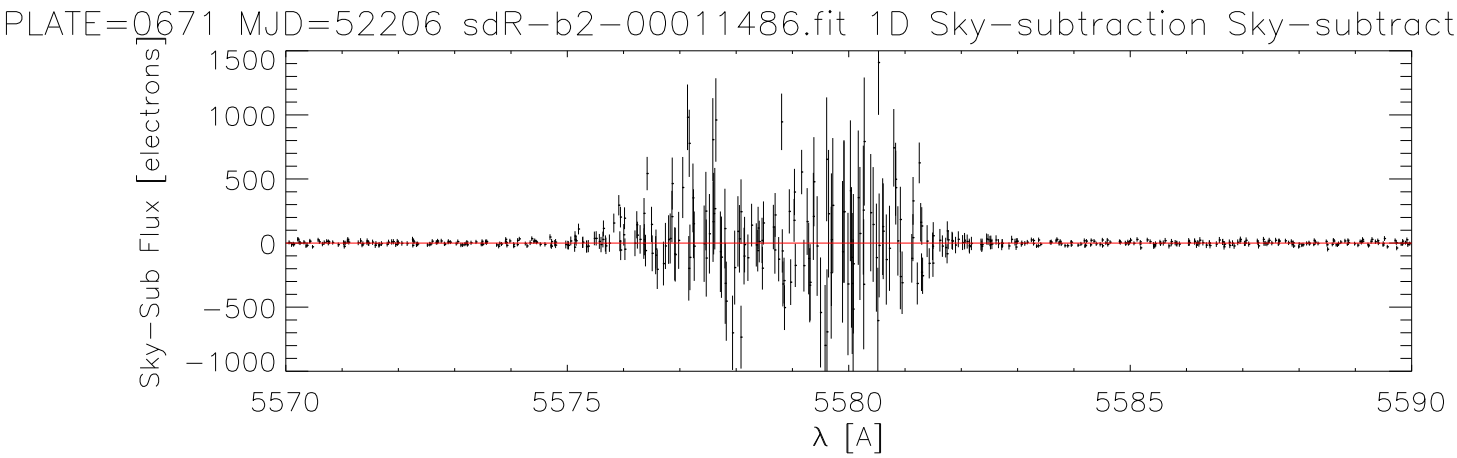

4046.5600
nfib1 33
nfib2 33
stdev 0.090
extra 0.41
4358.3300
nfib1 34
nfib2 34
stdev 0.053
extra 0.22
5460.9400
nfib1 34
nfib2 34
stdev 0.038
extra 0.29
5577.3390
nfib1 34
nfib2 34
stdev 0.010
extra 0.36
5889.9500
nfib1 34
nfib2 34
stdev 0.017
extra 0.40
5895.9240
nfib1 34
nfib2 34
stdev 0.030
extra 0.39
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

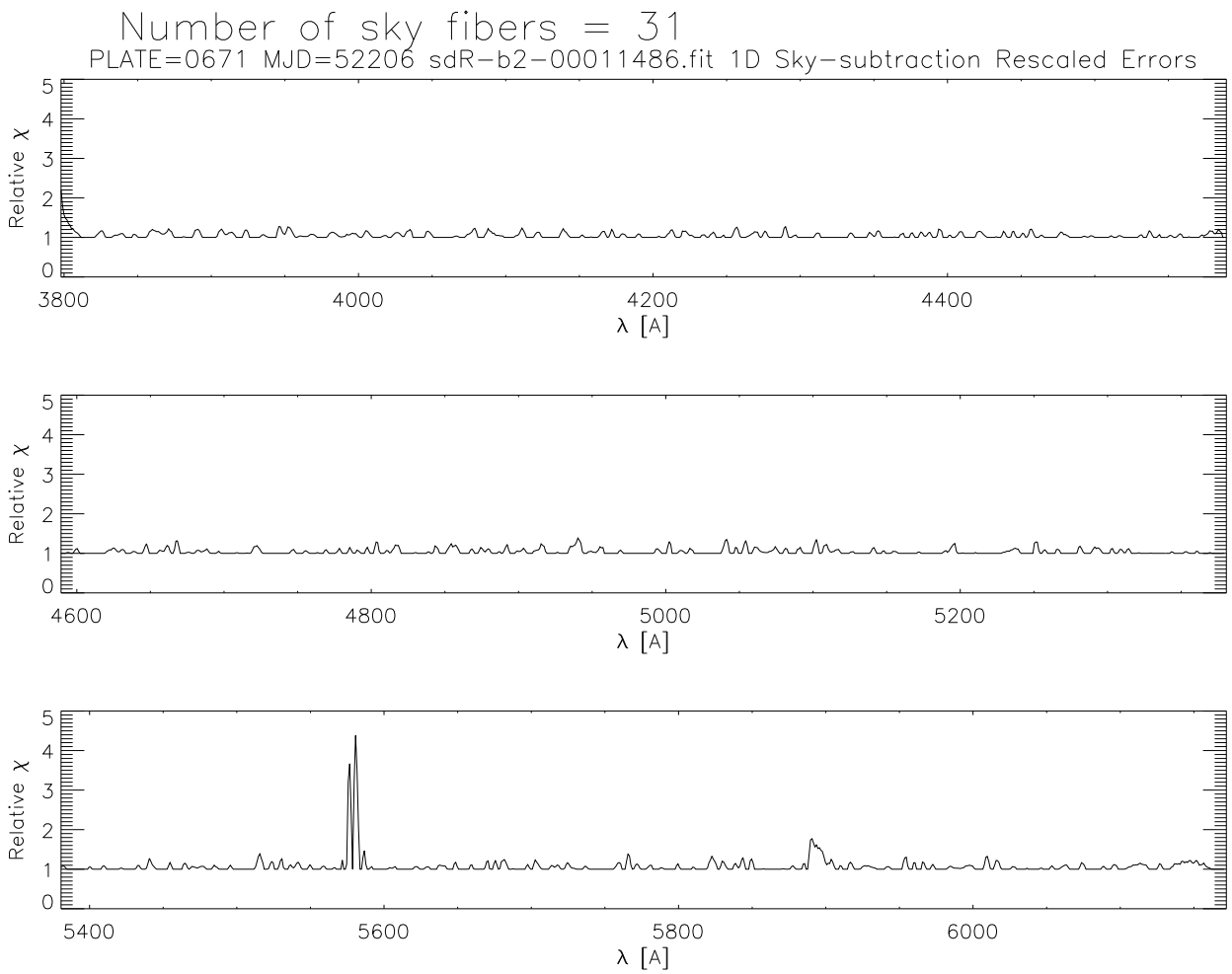

sky shift, pixels
0.40
0.35
0.30
0.25
0.20
3500
4000
4500
5000
5500
6000
6500

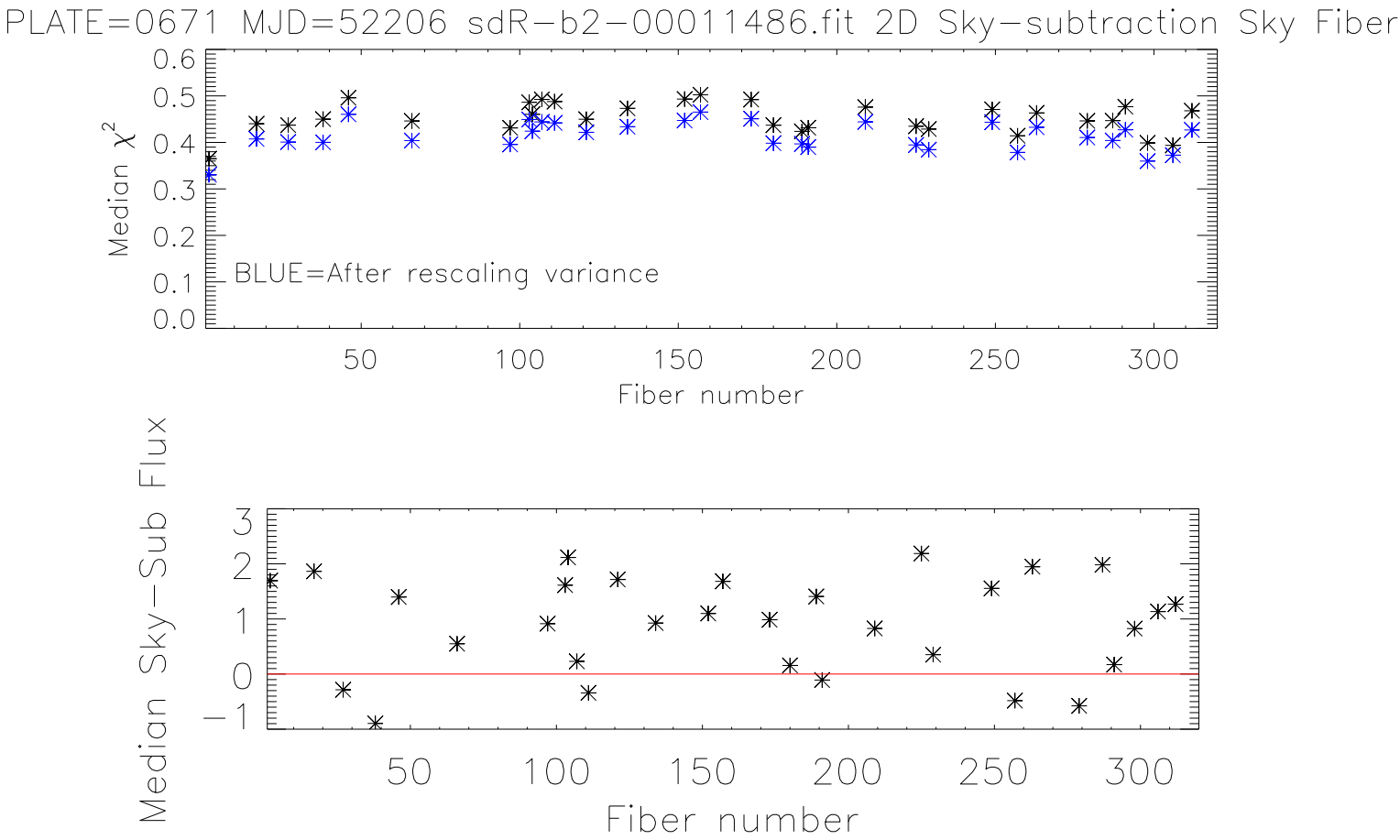

PLATE=0671 MJD=52206 Smooth superflat for sdR-b2-00011486.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

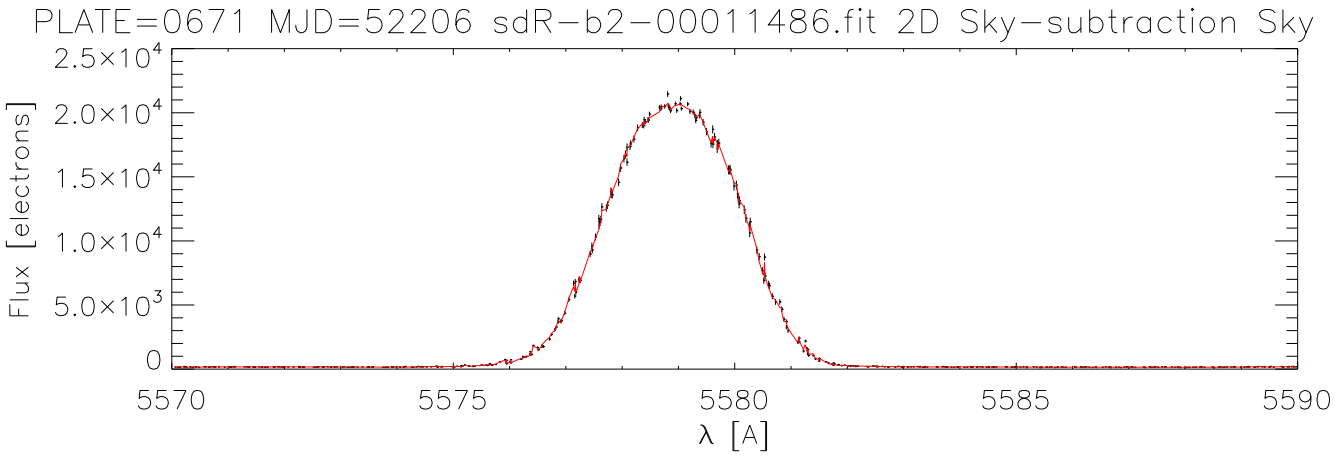

PLATE=0671 MJD=52206 sdR-b2-00011486.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

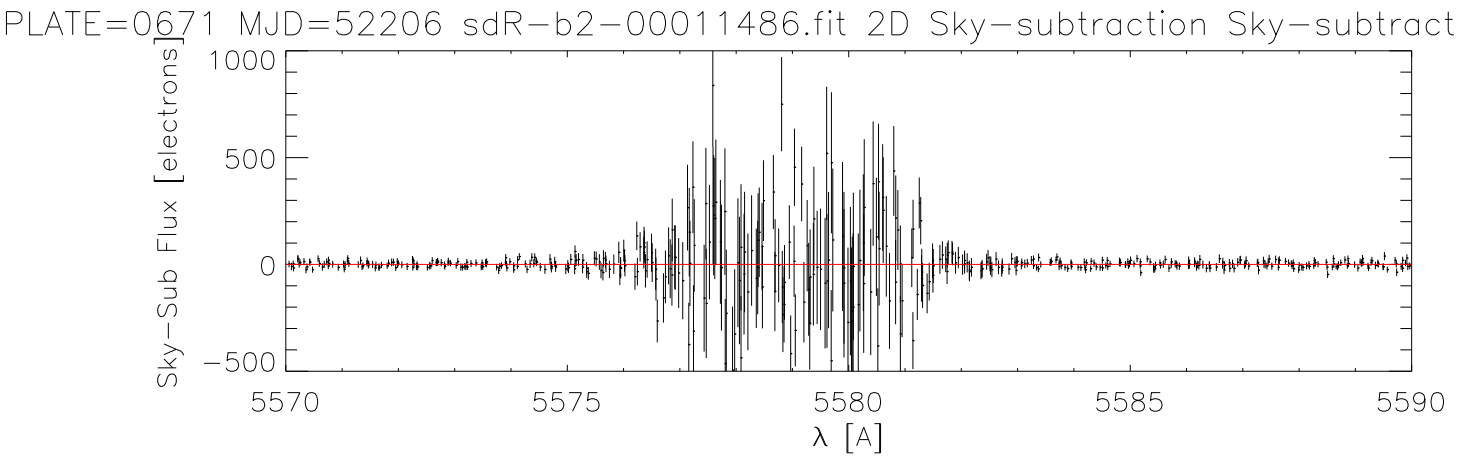

PLATE=0671 MJD=52206 sdR-b2-00011486.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

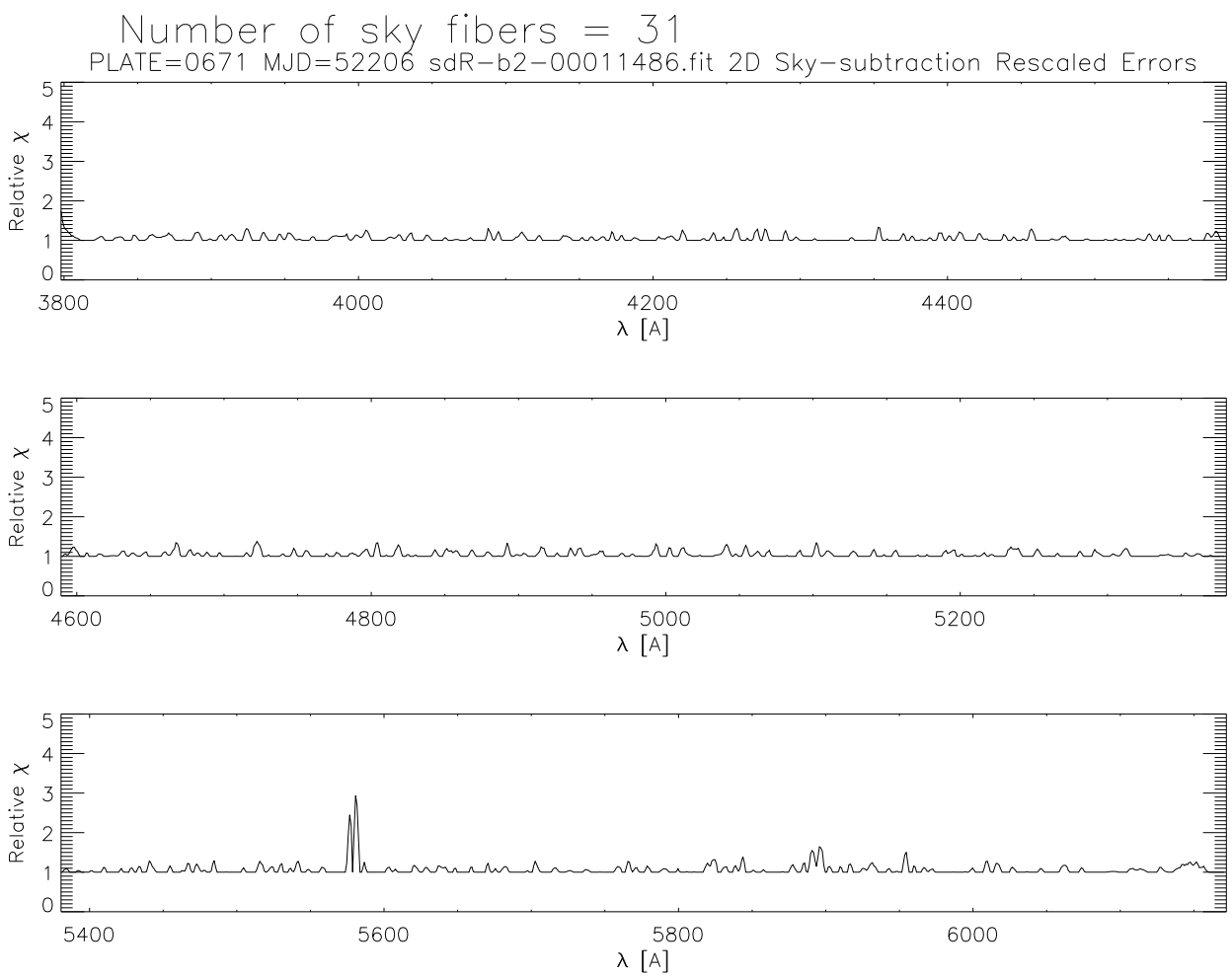

PLATE=0671 MJD=52206 sdR-b2-00011486.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

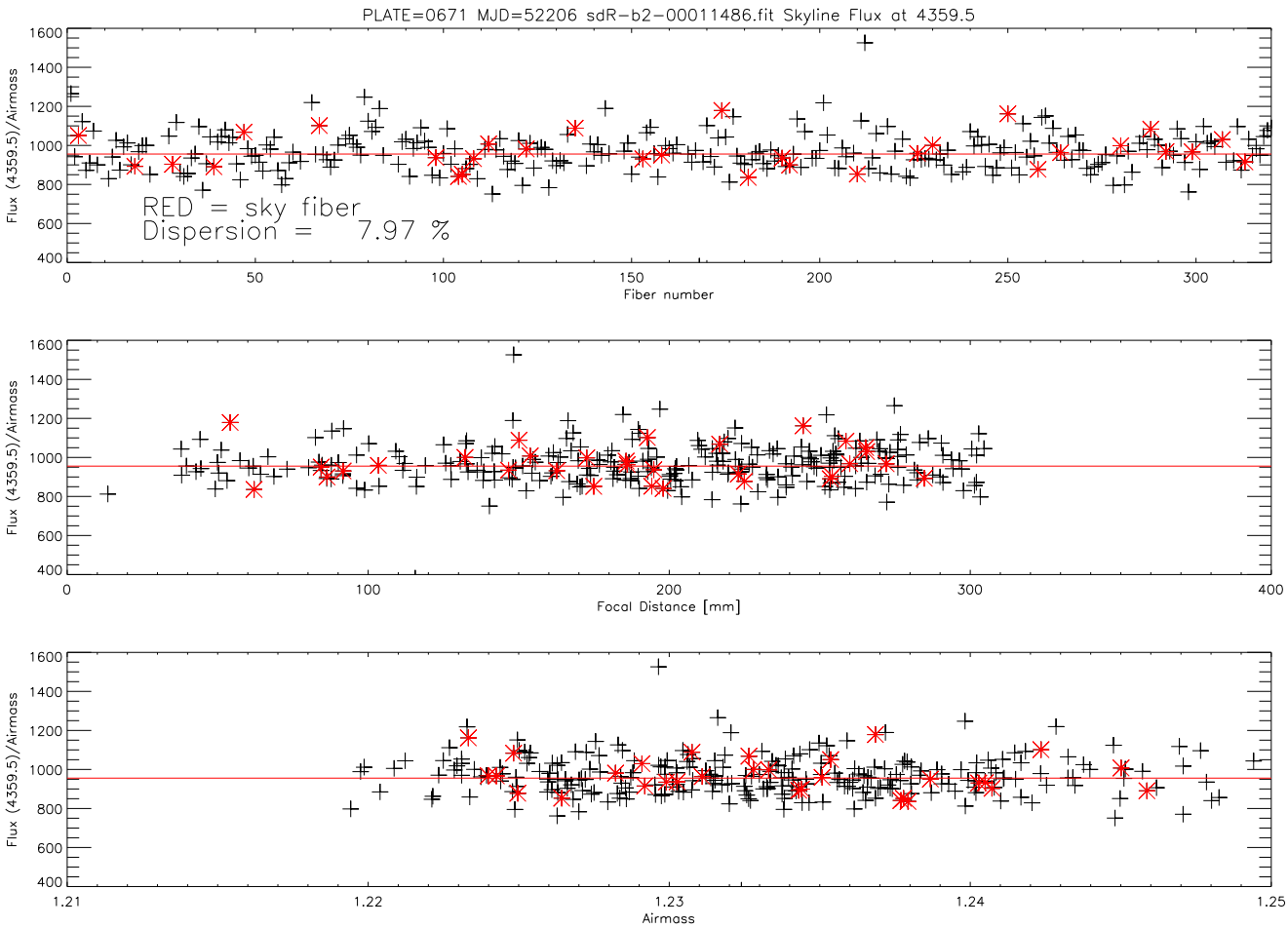

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011486.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

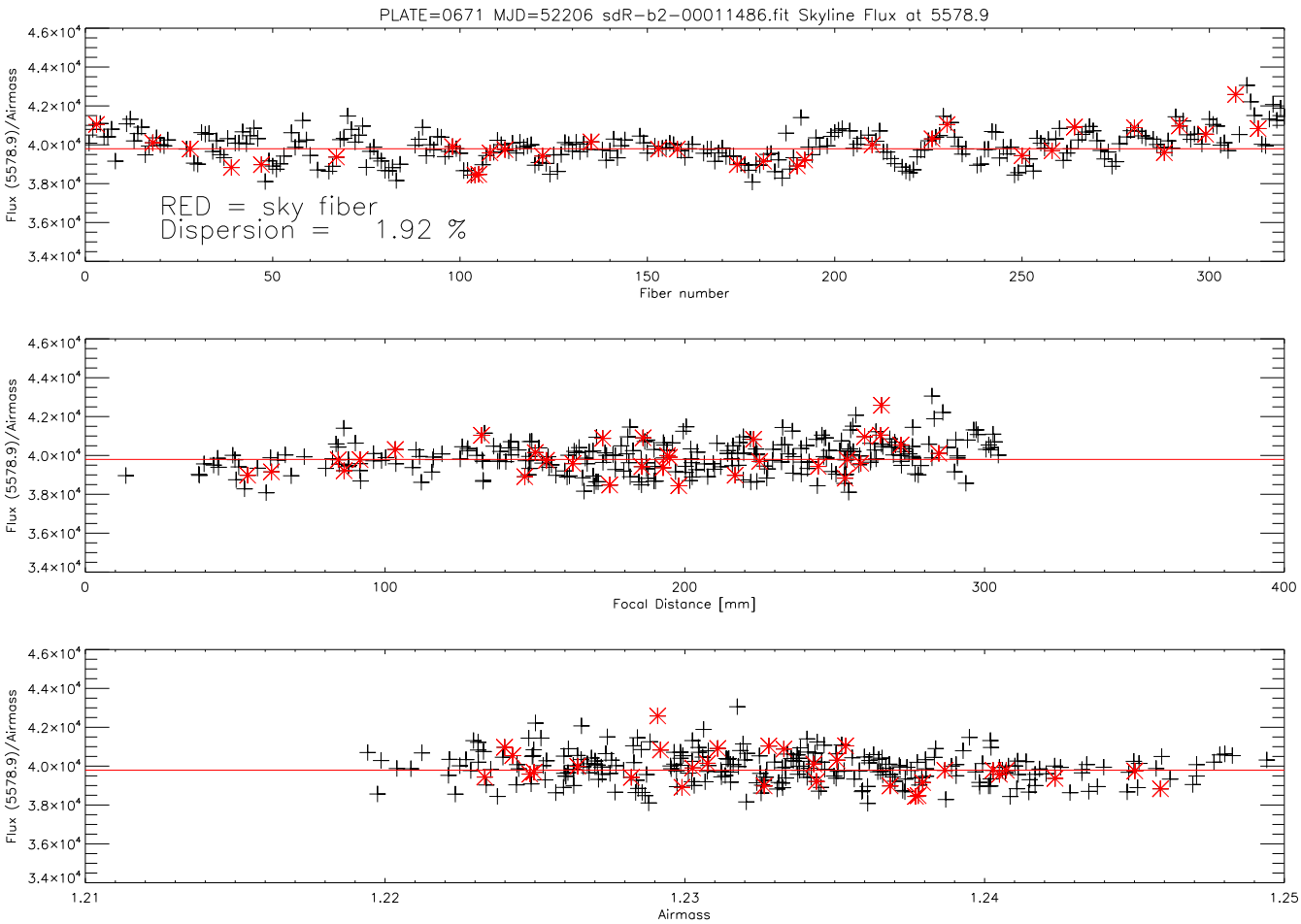

PLATE=0671 MJD=52206 sdR-b2-00011486.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

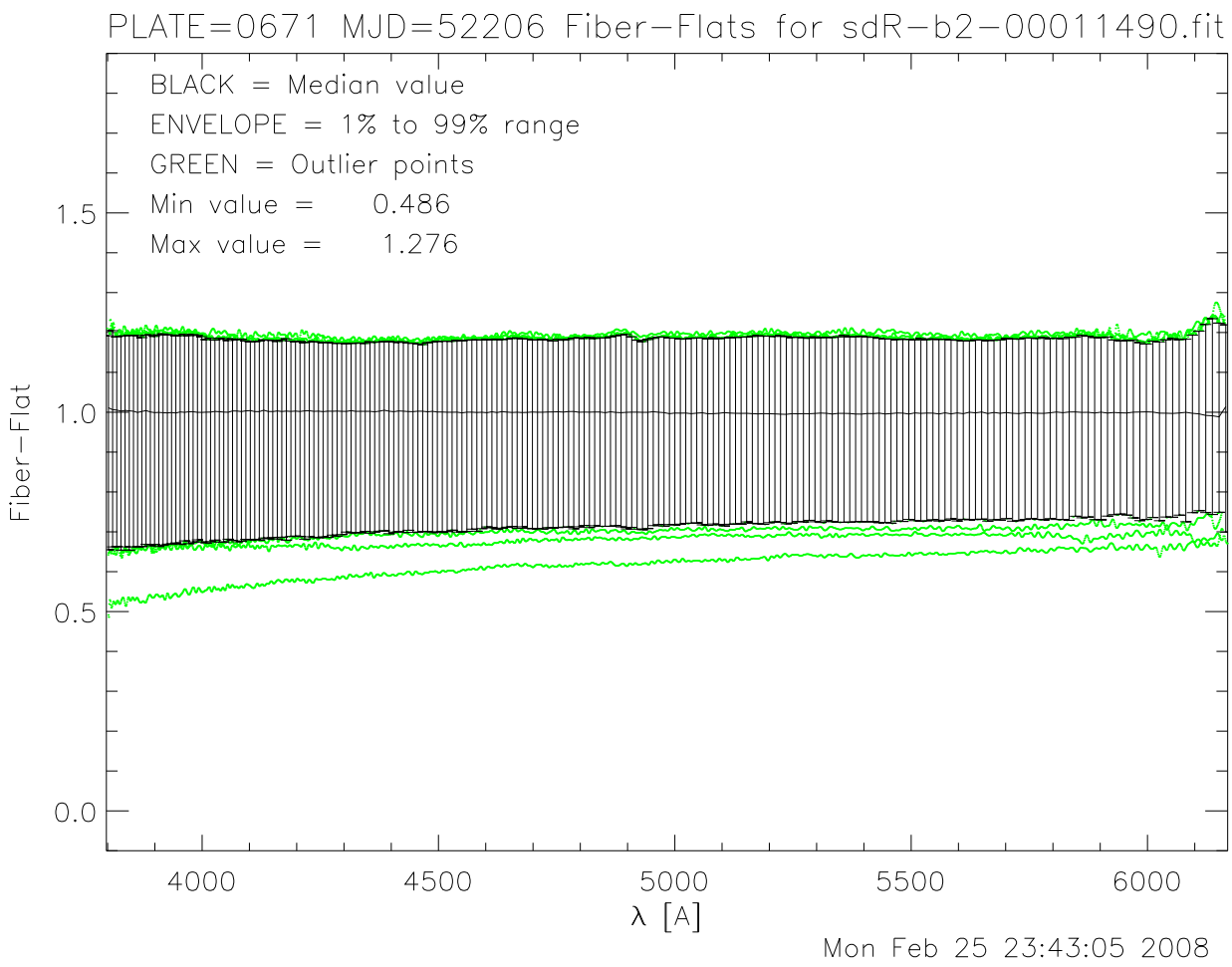

PLATE=0671 MJD=52206 sdR-b2-00011486.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

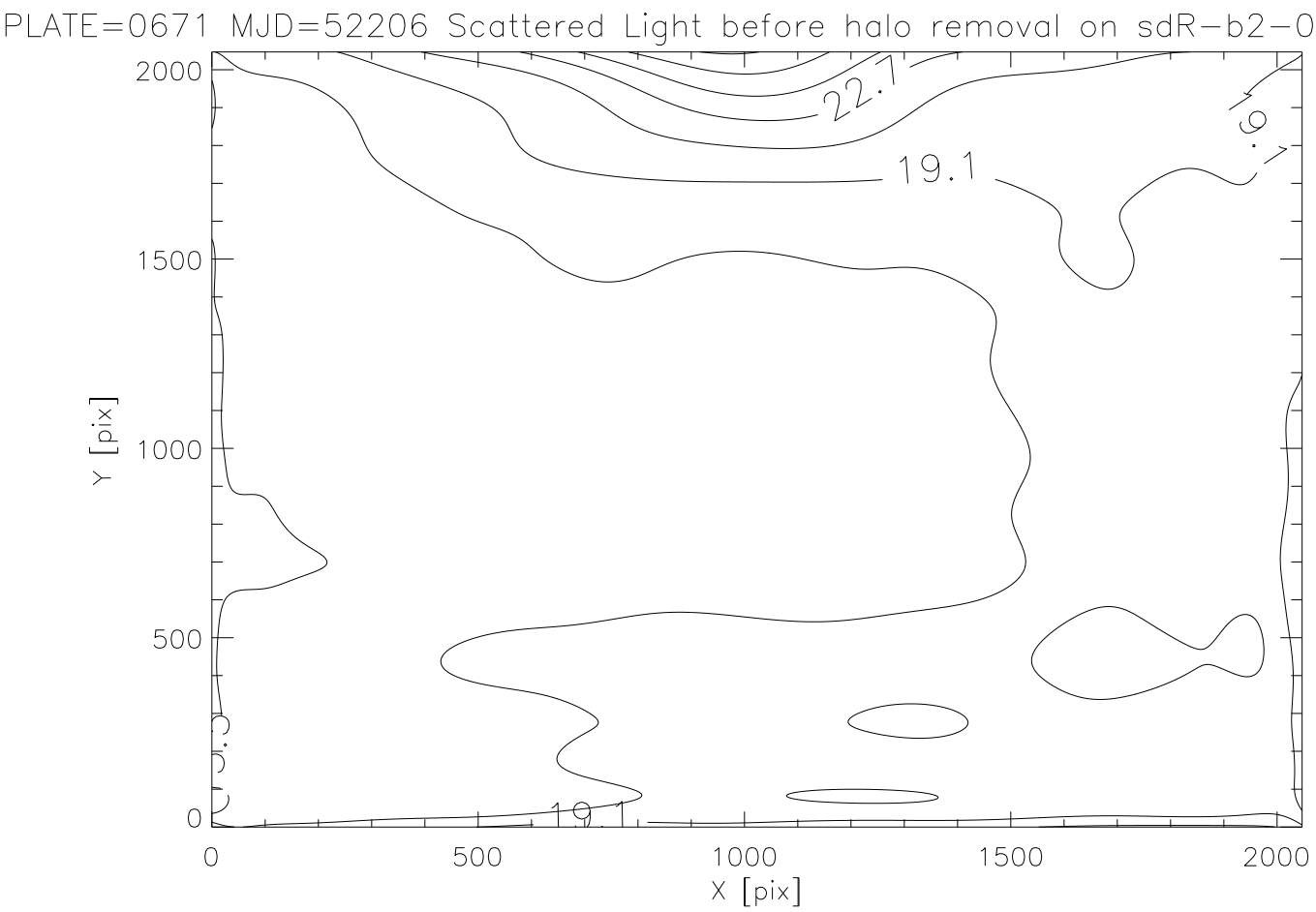

PLATE=0671 MJD=52206 sdR-b2-00011486.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

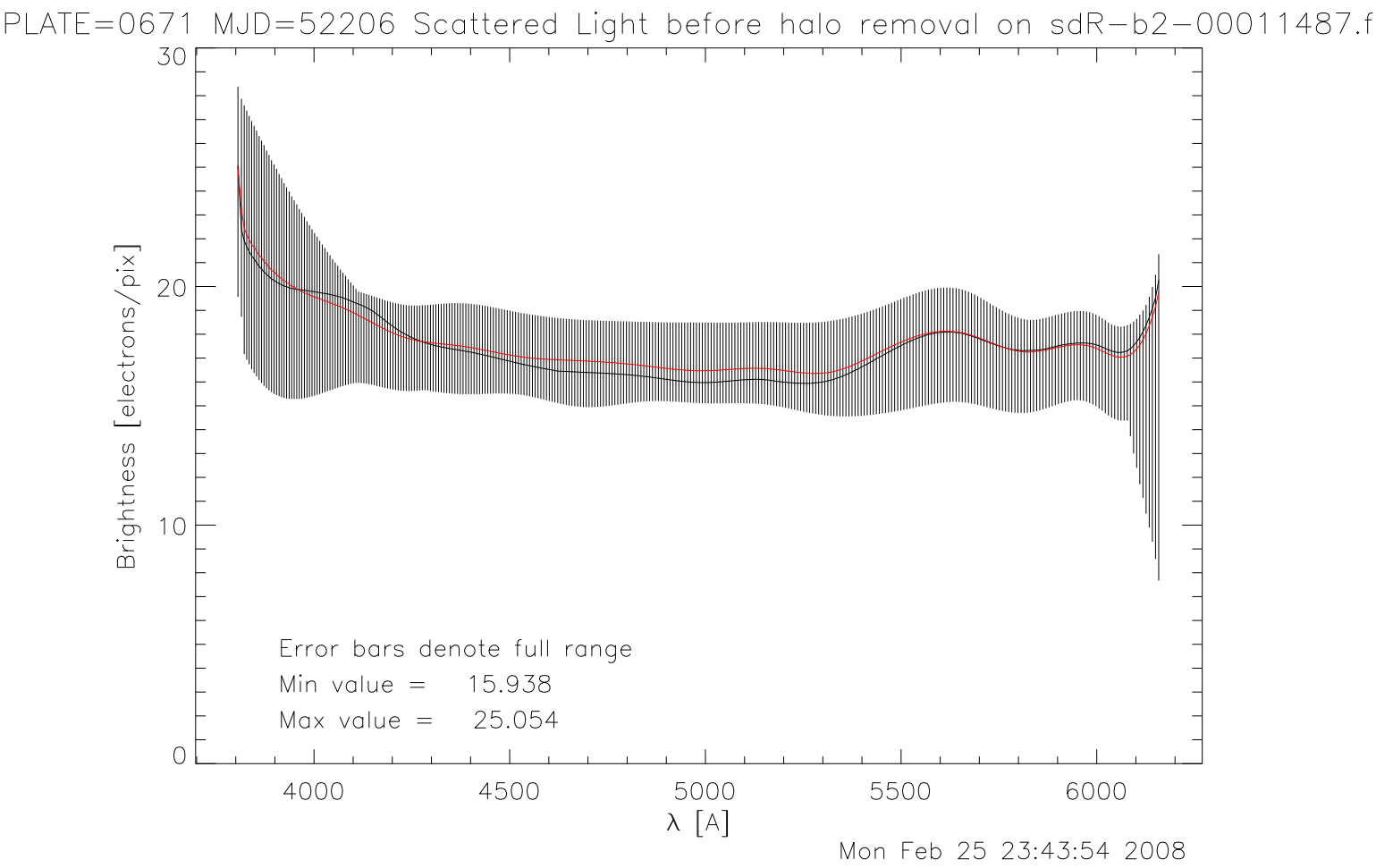

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011486.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

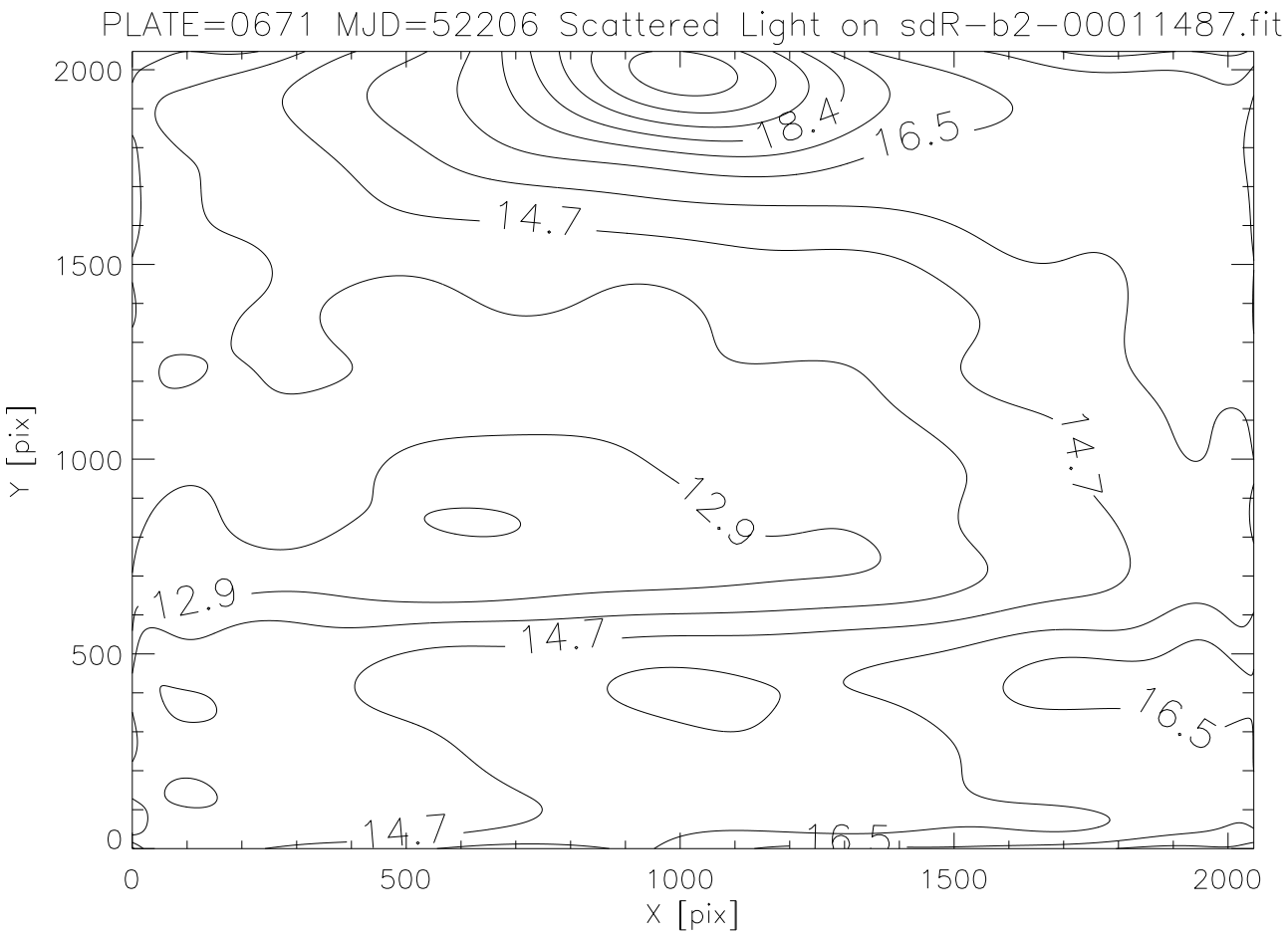

PLATE=0671 MJD=52206 sdR-b2-00011486.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.97 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

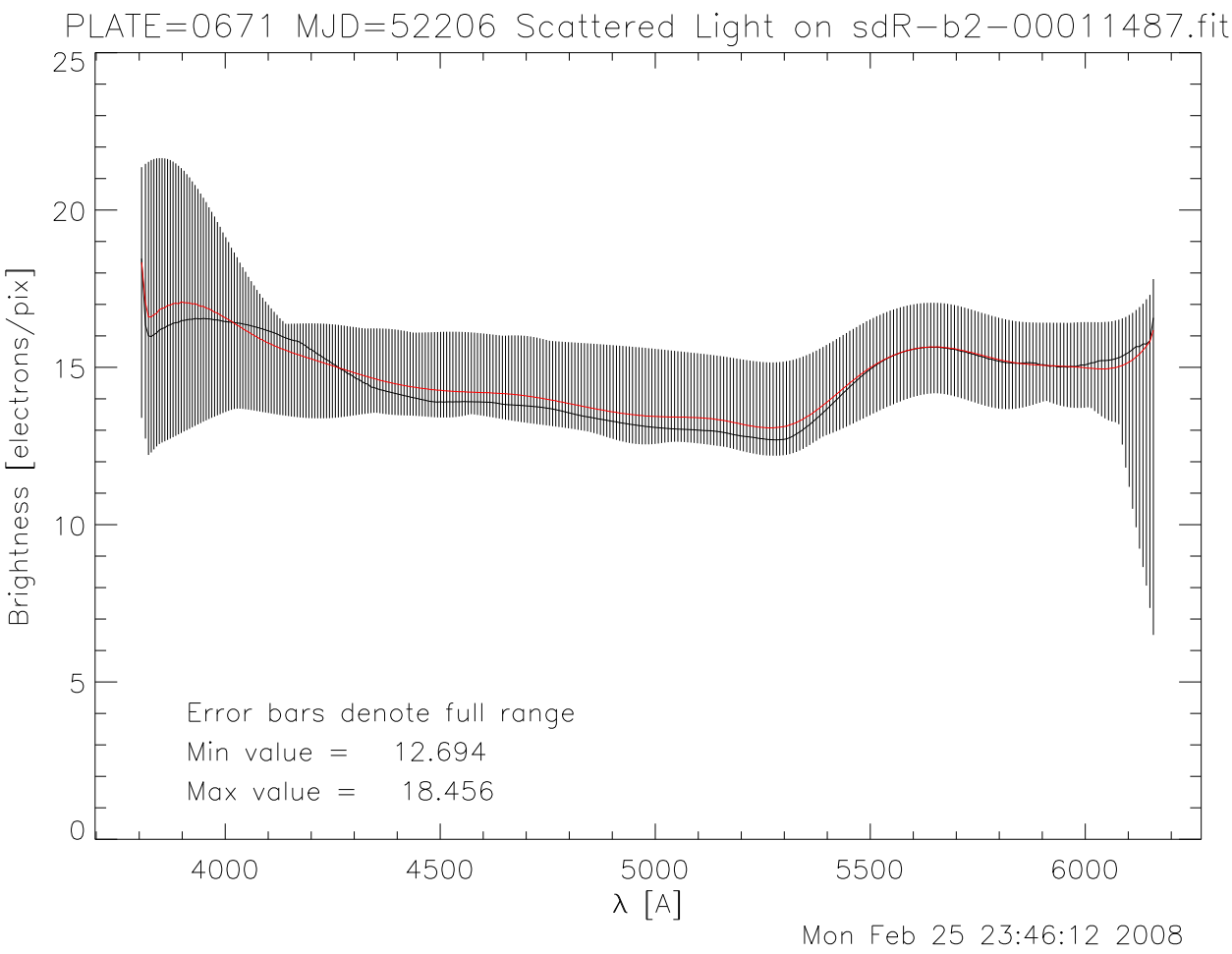

PLATE=0671 MJD=52206 sdR-b2-00011486.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.92 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

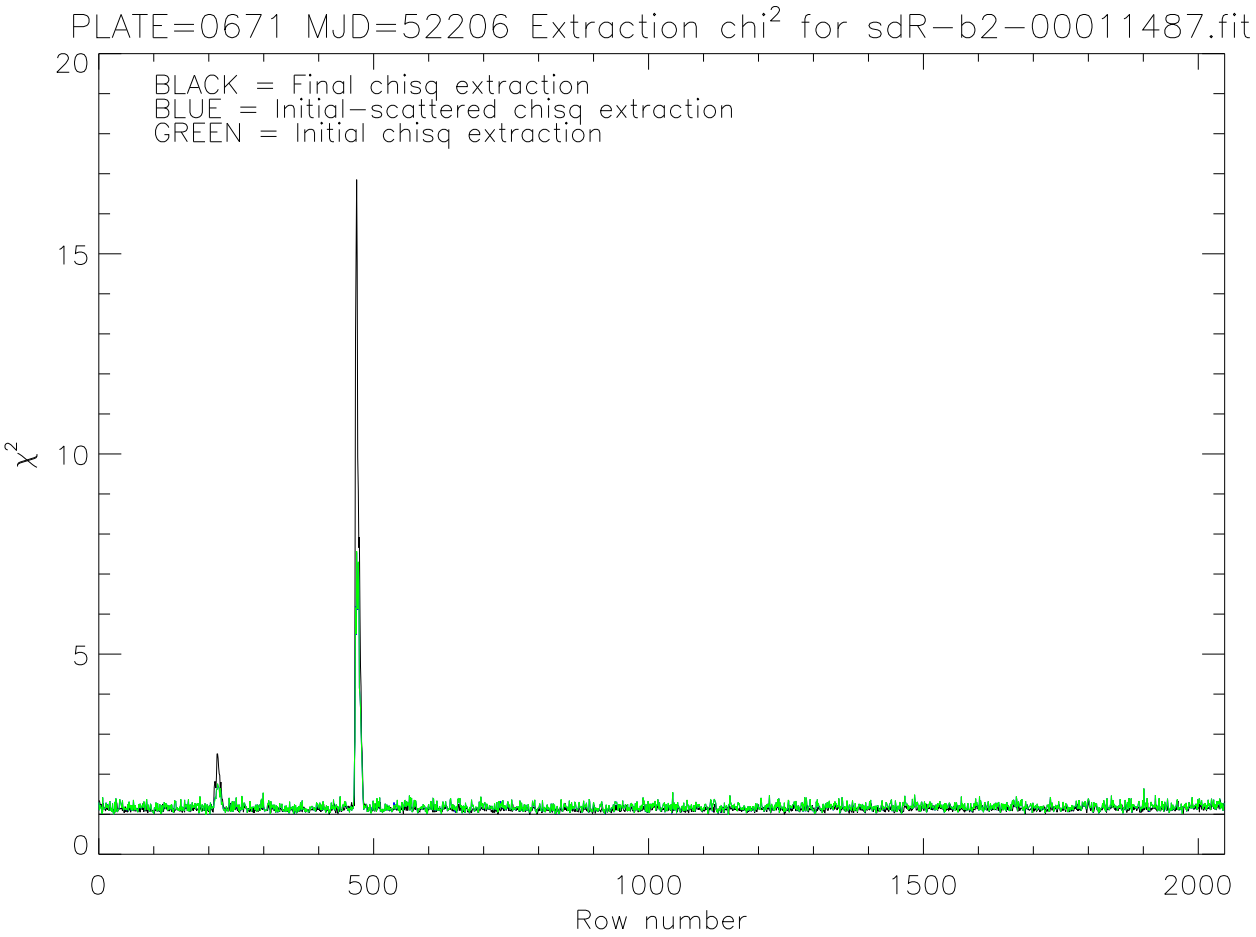

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b2-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.486
Max value = 1.276
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:43:05 2008

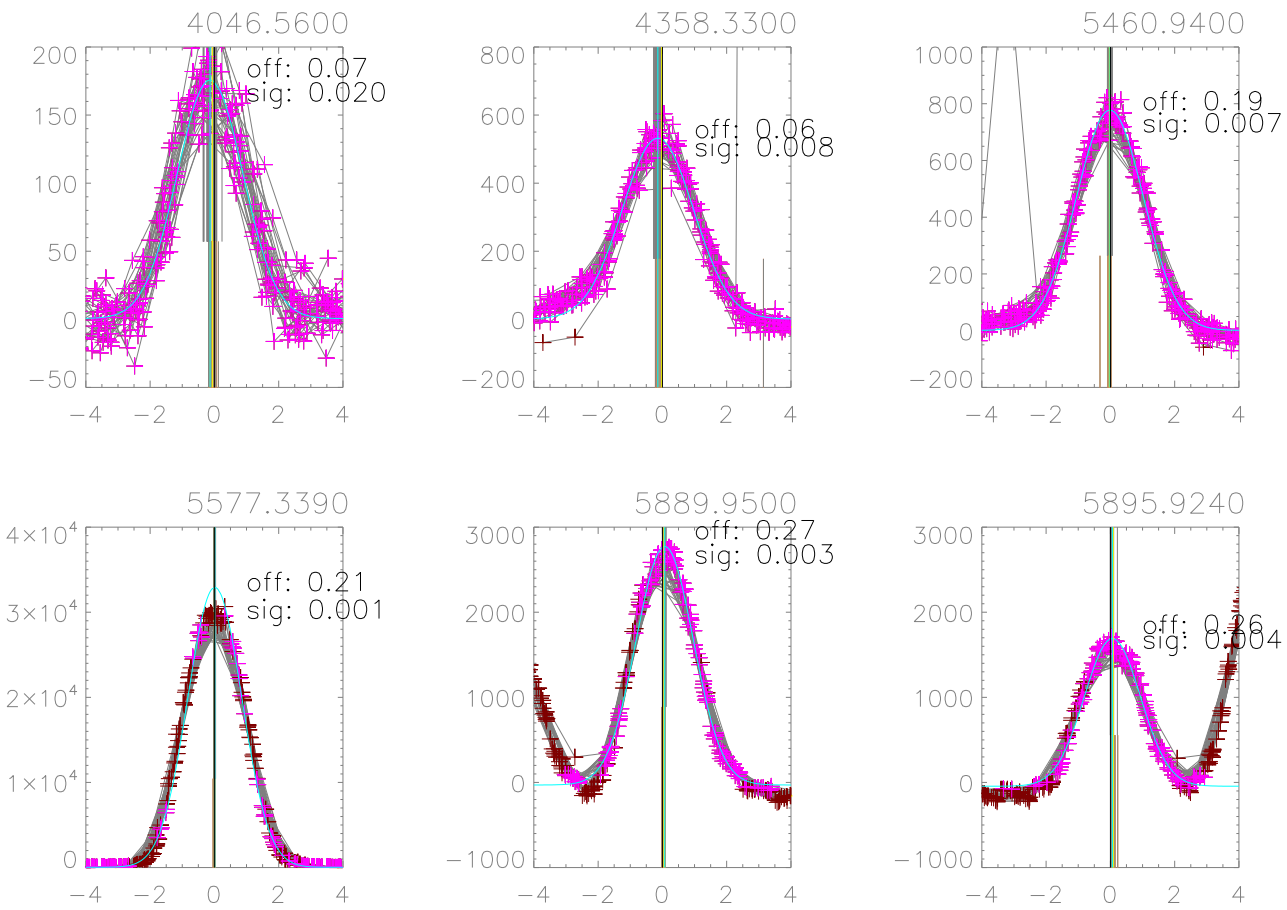

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011487.f
22.7
19.1
19.1
19.1
Y [pix]
X [pix]
0
500
1000
1500
2000

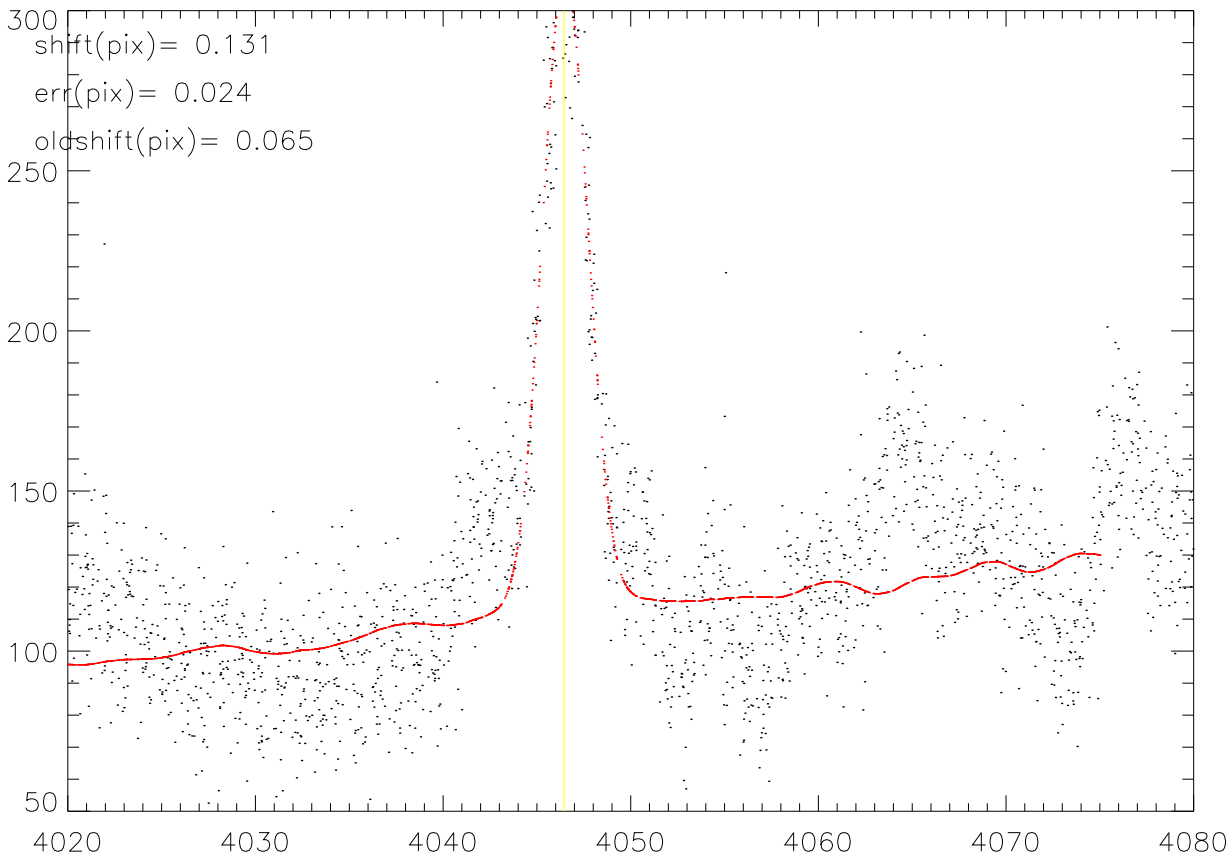

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011487.f
Brightness [electrons/pix]
30
20
10
0
Error bars denote full range
Min value = 15.938
Max value = 25.054
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:43:54 2008

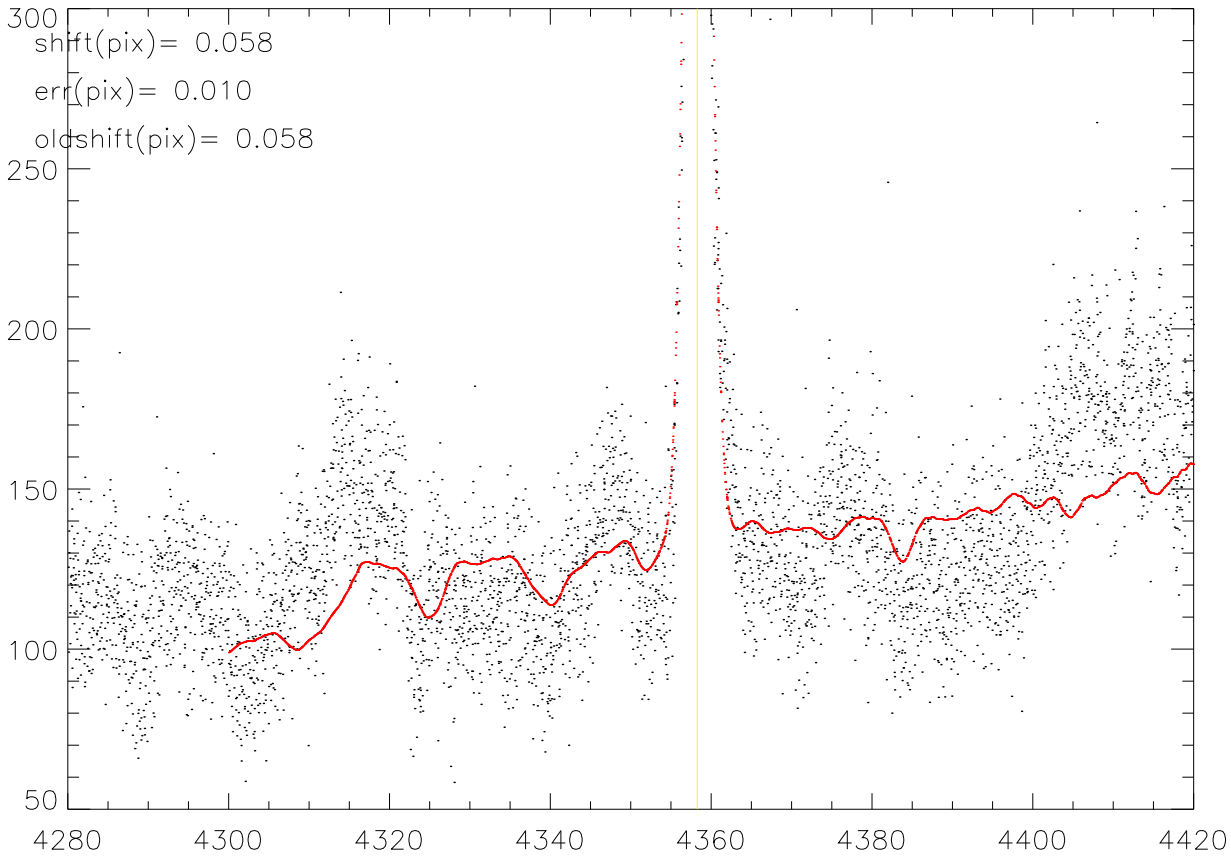

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011487.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
18.4
16.5
14.7
12.9
12.9
14.7
14.7
16.5
14.7
16.5

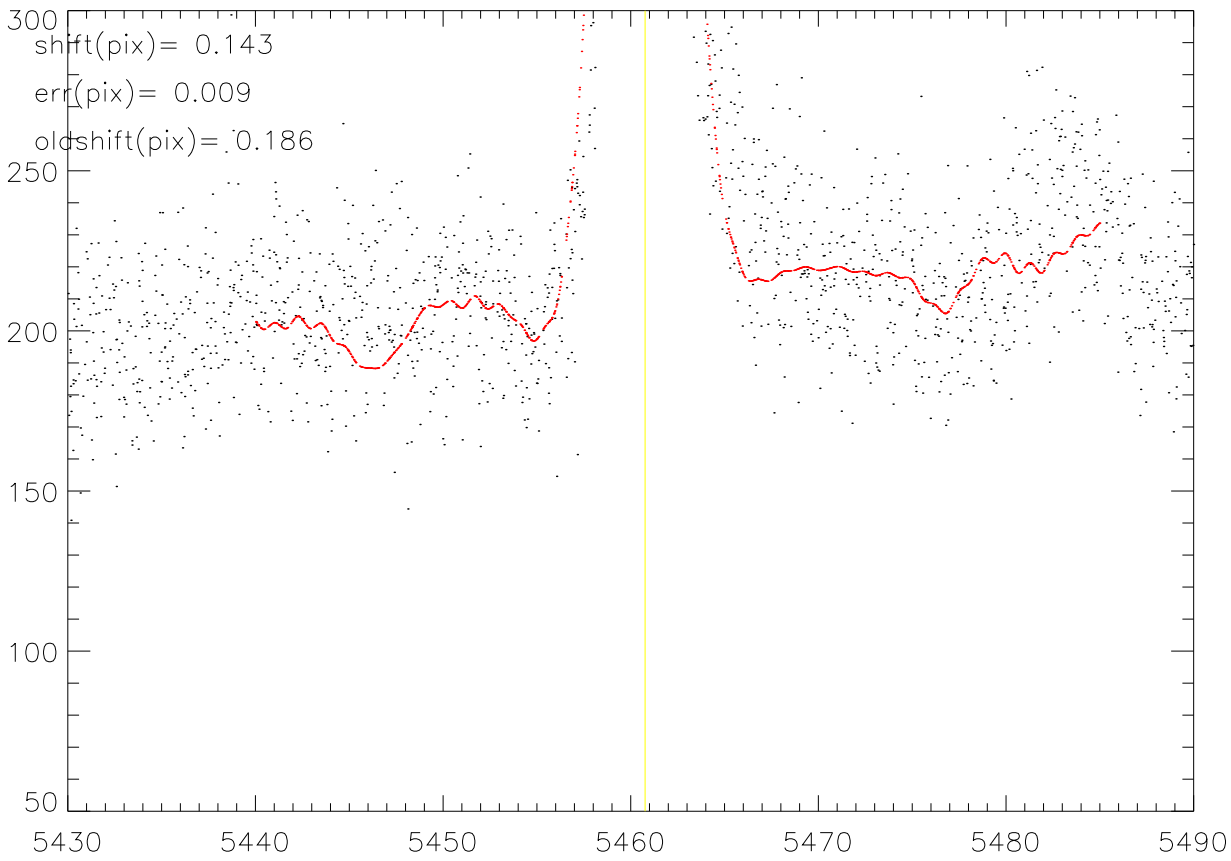

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011487.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 12.694
Max value = 18.456
Mon Feb 25 23:46:12 2008

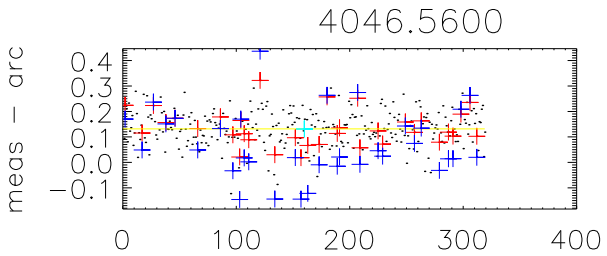

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b2-00011487.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number

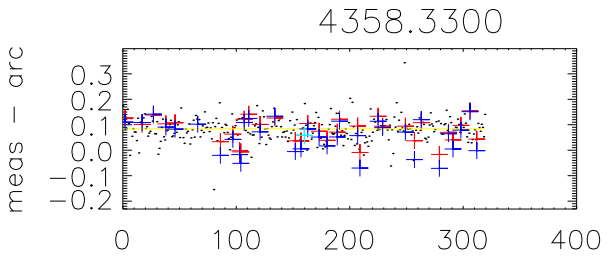

4046.5600
off: 0.07
sig: 0.020
4358.3300
off: 0.06
sig: 0.008
5460.9400
off: 0.19
sig: 0.007
5577.3390
off: 0.21
sig: 0.001
5889.9500
off: 0.27
sig: 0.003
5895.9240
off: 0.26
sig: 0.004

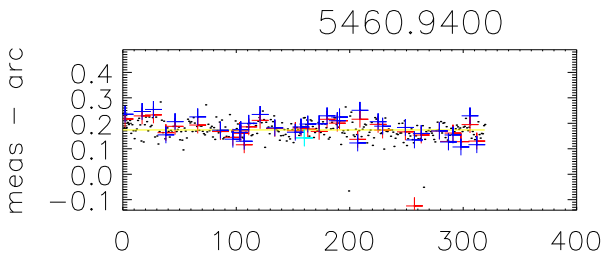

shift(pix)= 0.131
err(pix)= 0.024
oldshift(pix)= 0.065
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

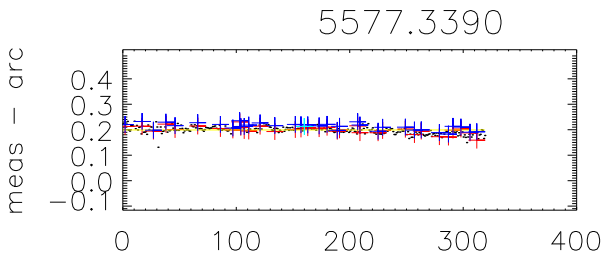

shift(pix)= 0.058
err(pix)= 0.010
oldshift(pix)= 0.058
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

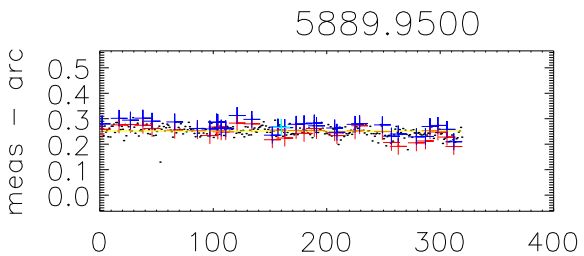

shift(pix)= 0.143
err(pix)= 0.009
oldshift(pix)= 0.186
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

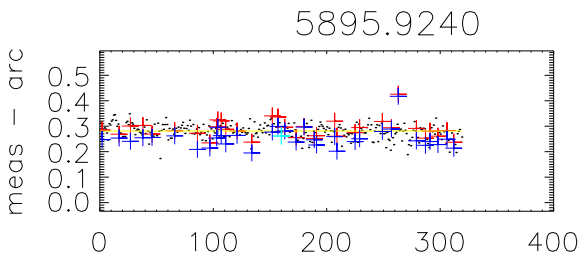

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

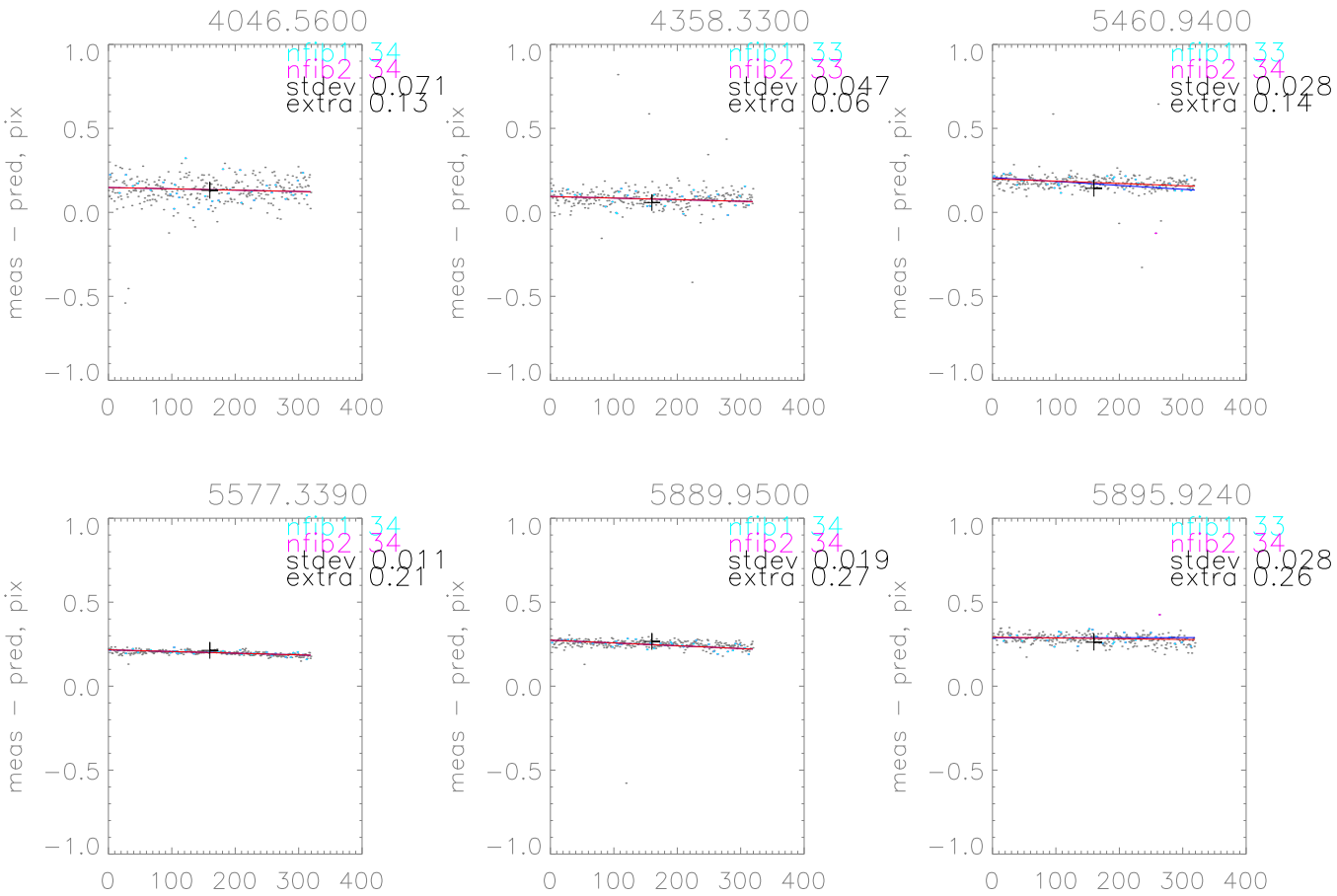

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

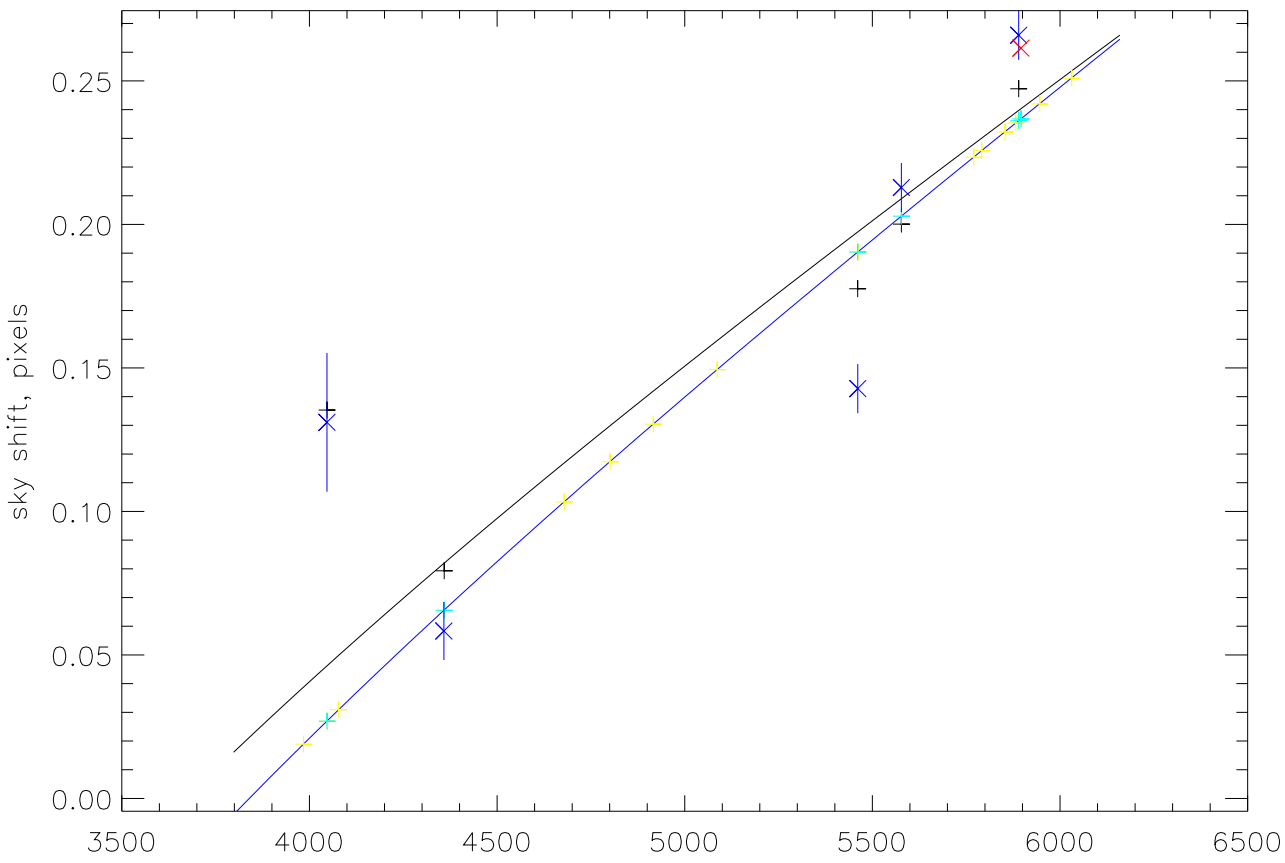

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

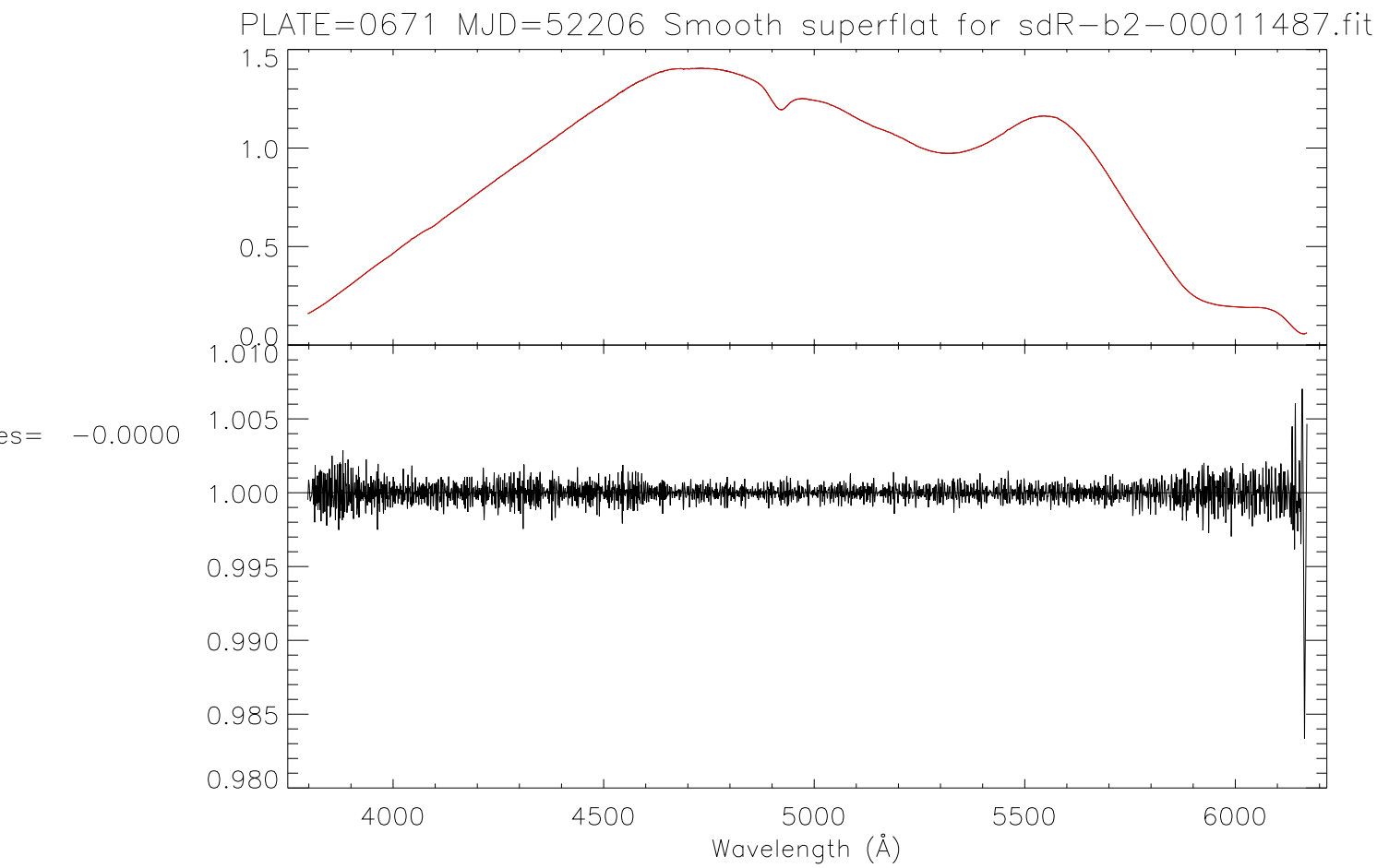

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

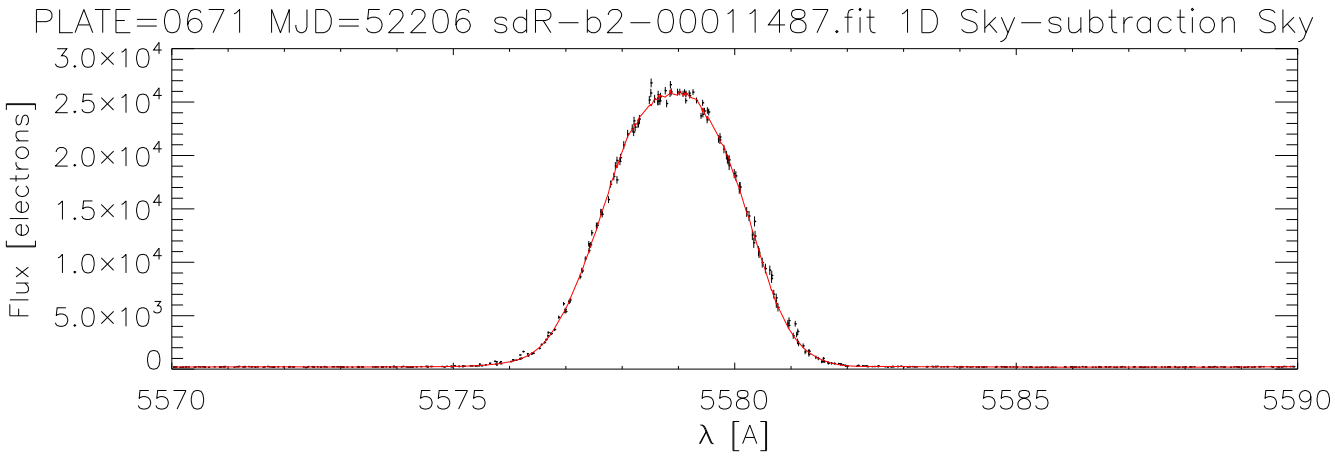

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

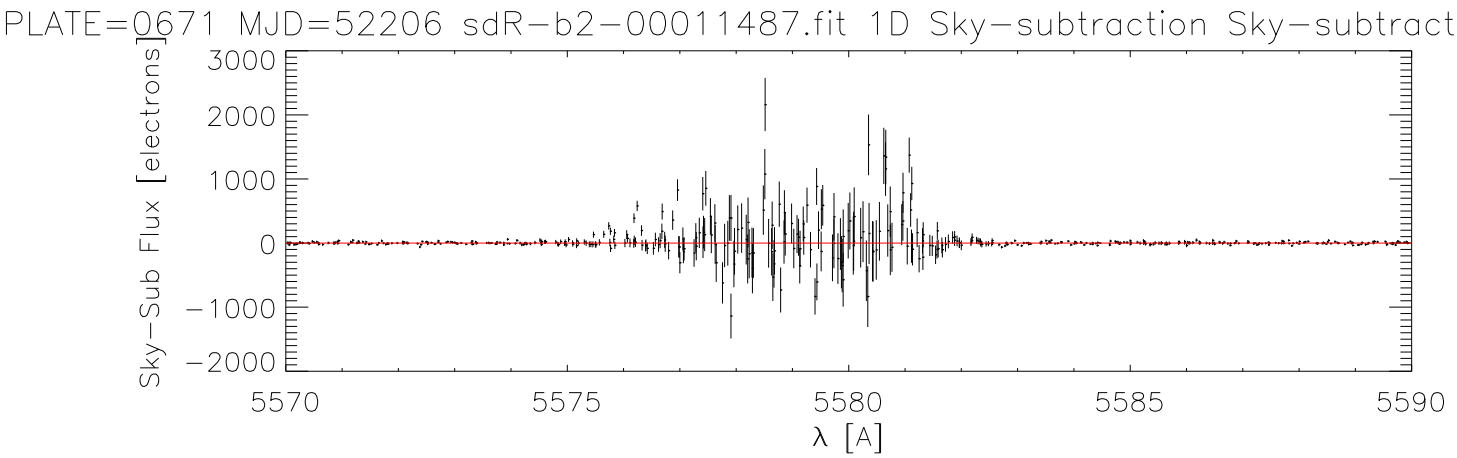

4046.5600
nfib1 34
nfib2 34
stdev 0.071
extra 0.13
4358.3300
nfib1 33
nfib2 33
stdev 0.047
extra 0.06
5460.9400
nfib1 33
nfib2 34
stdev 0.028
extra 0.14
5577.3390
nfib1 34
nfib2 34
stdev 0.011
extra 0.21
5889.9500
nfib1 34
nfib2 34
stdev 0.019
extra 0.27
5895.9240
nfib1 33
nfib2 34
stdev 0.028
extra 0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

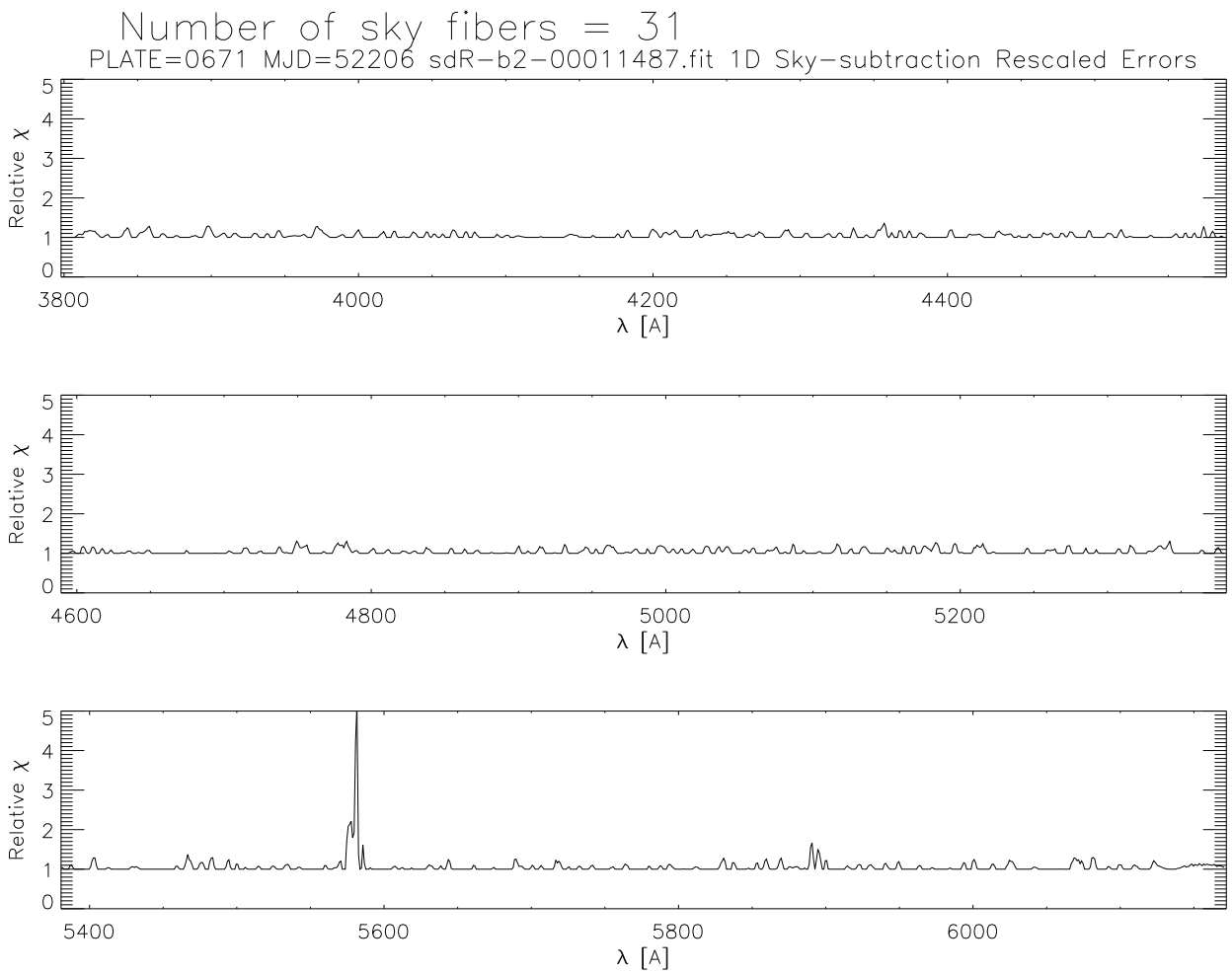

sky shift, pixels
0.00
0.05
0.10
0.15
0.20
0.25
3500
4000
4500
5000
5500
6000
6500

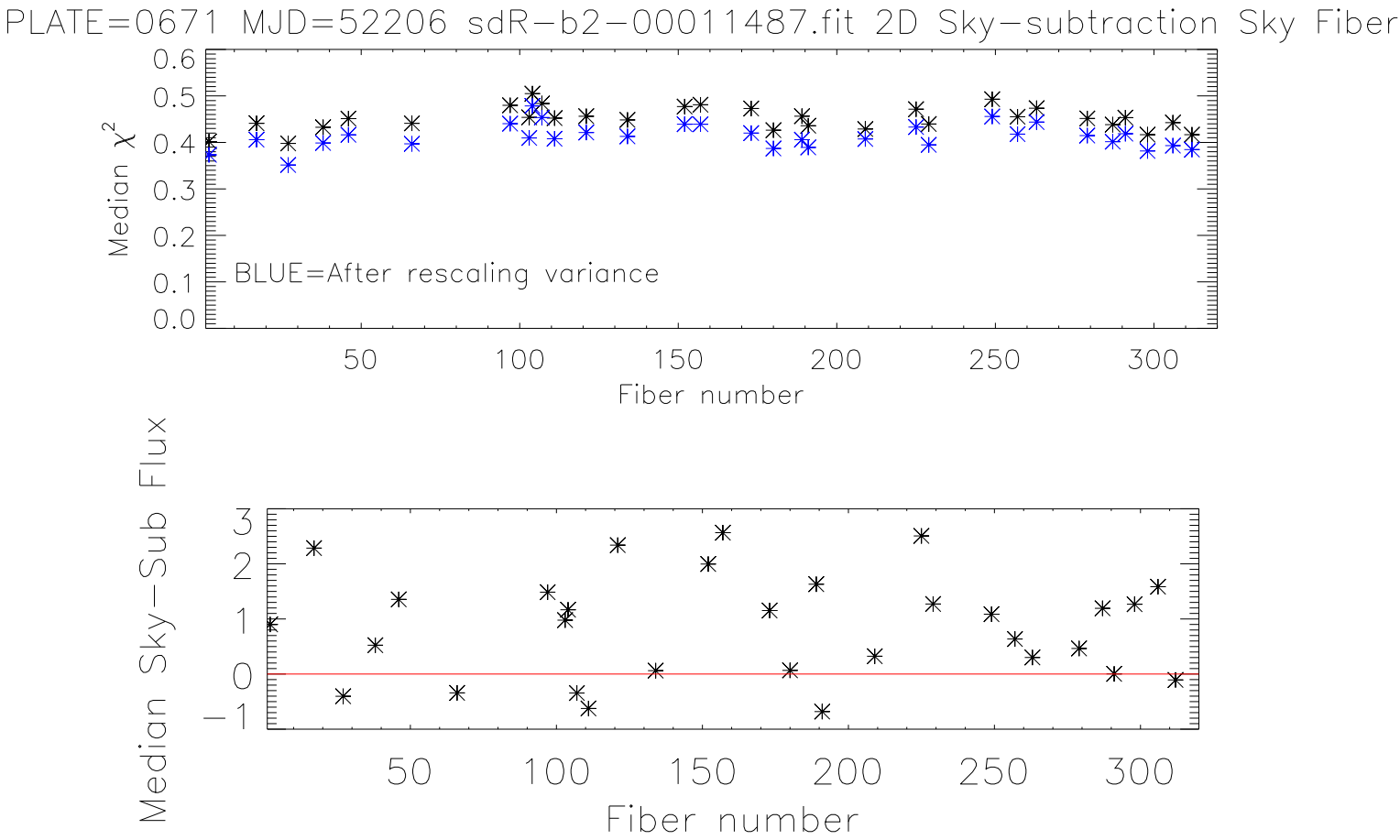

PLATE=0671 MJD=52206 Smooth superflat for sdR-b2-00011487.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

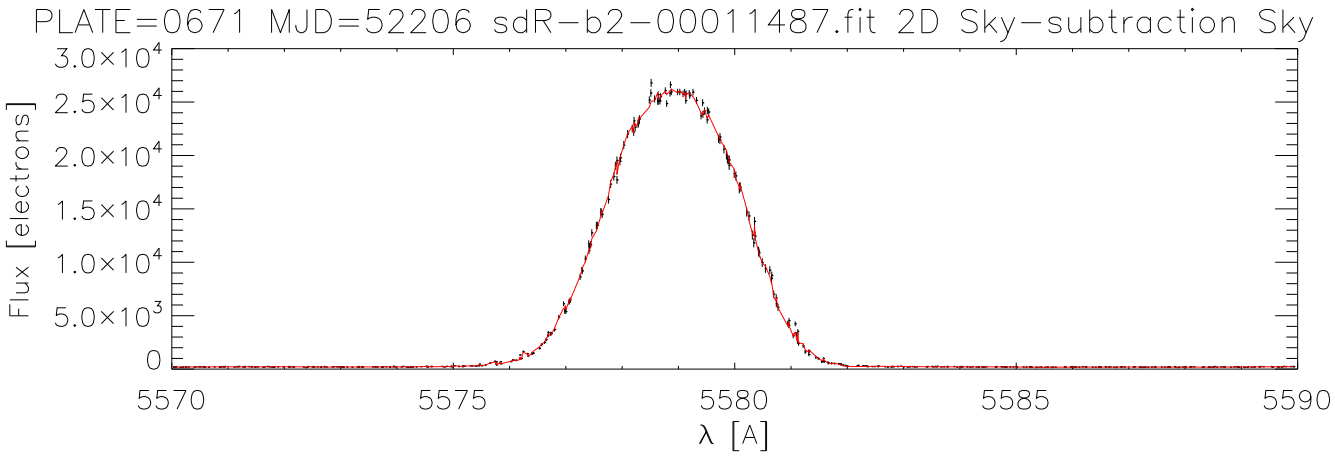
PLATE=0671 MJD=52206 sdR-b2-00011487.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

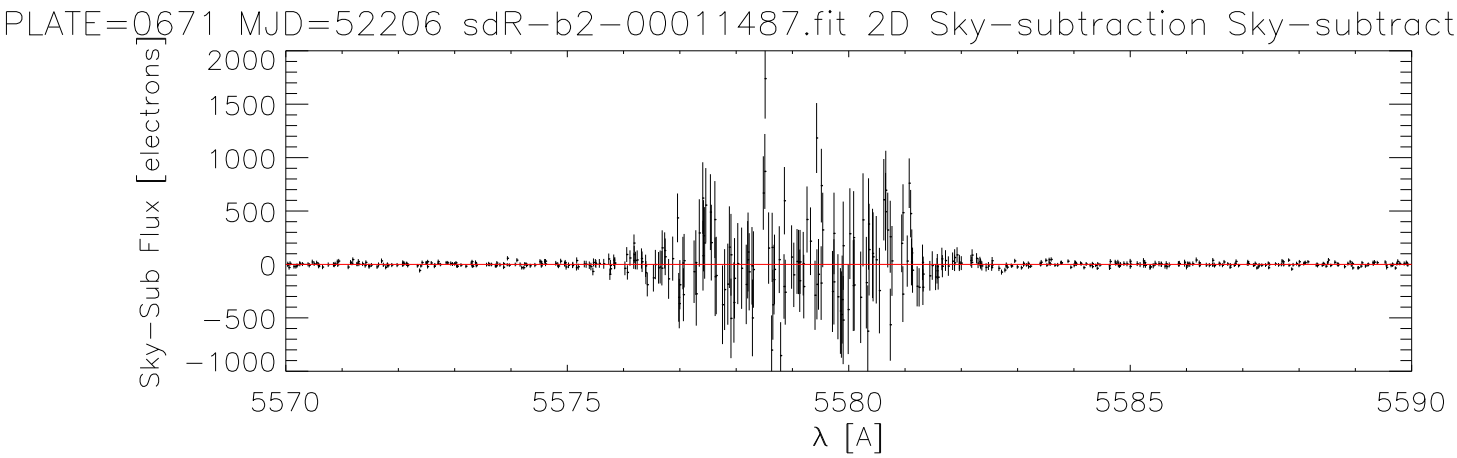

PLATE=0671 MJD=52206 sdR-b2-00011487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

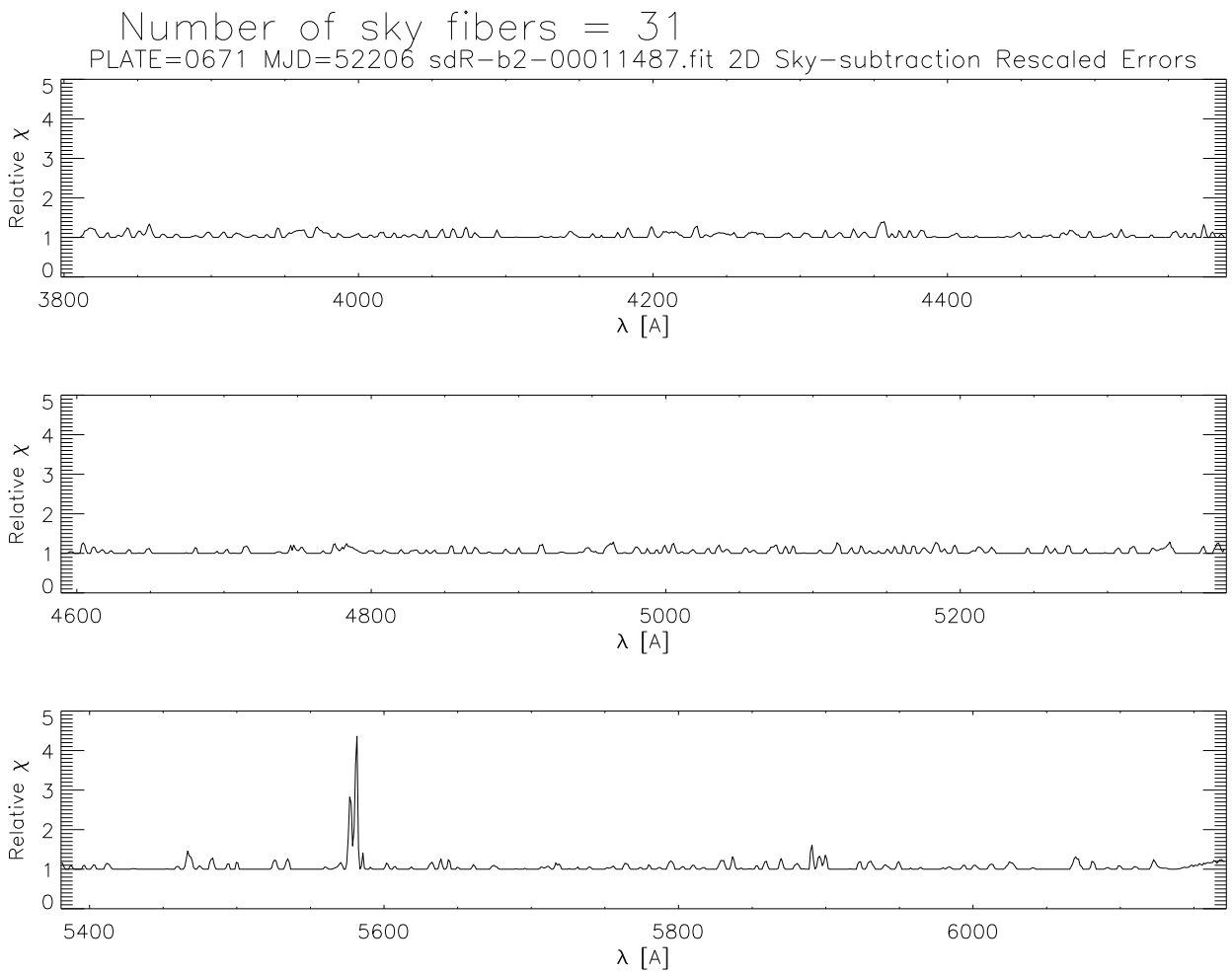

PLATE=0671 MJD=52206 sdR-b2-00011487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
−2000
5570
5575
5580
5585
5590
λ [A]

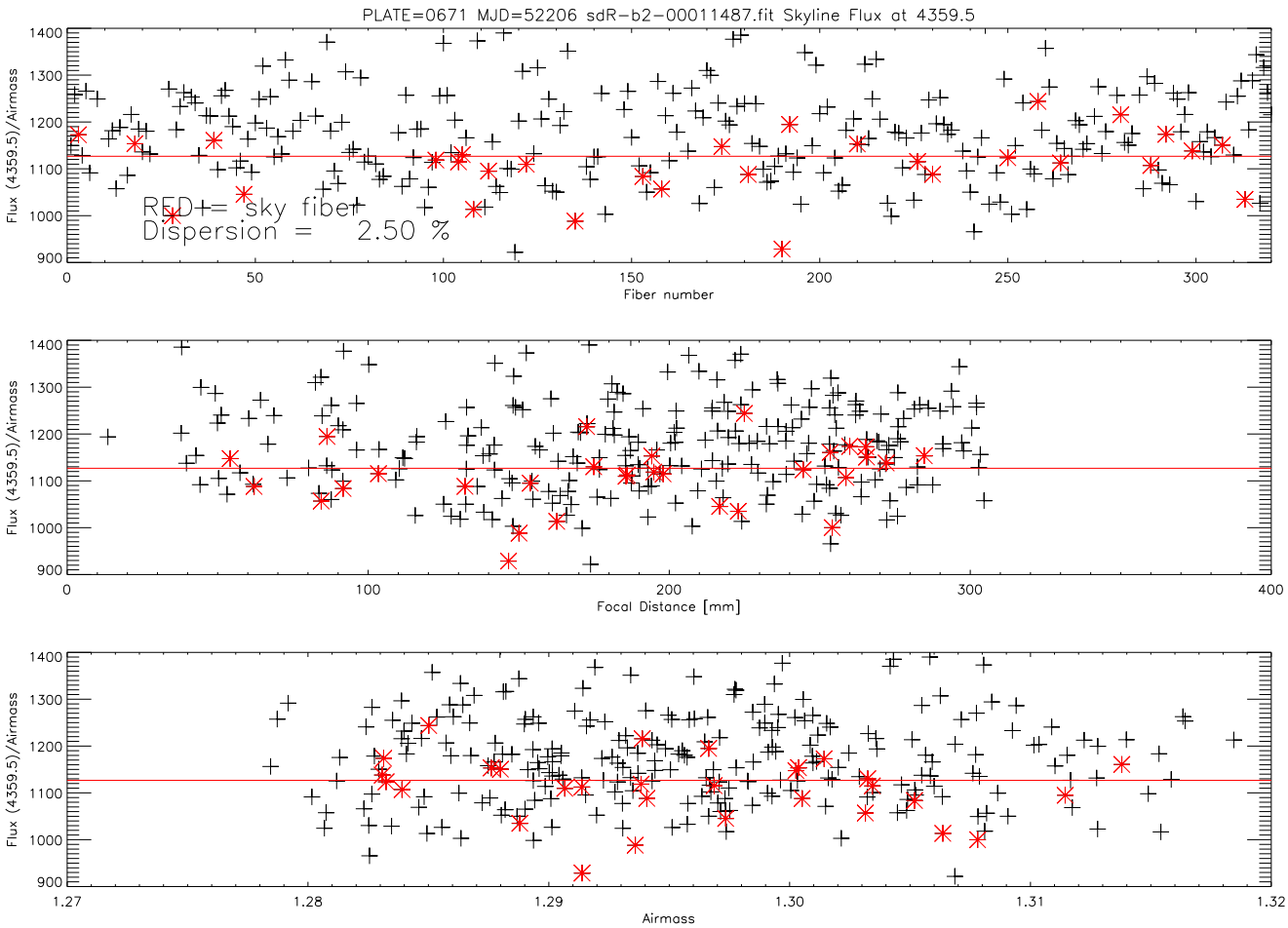

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

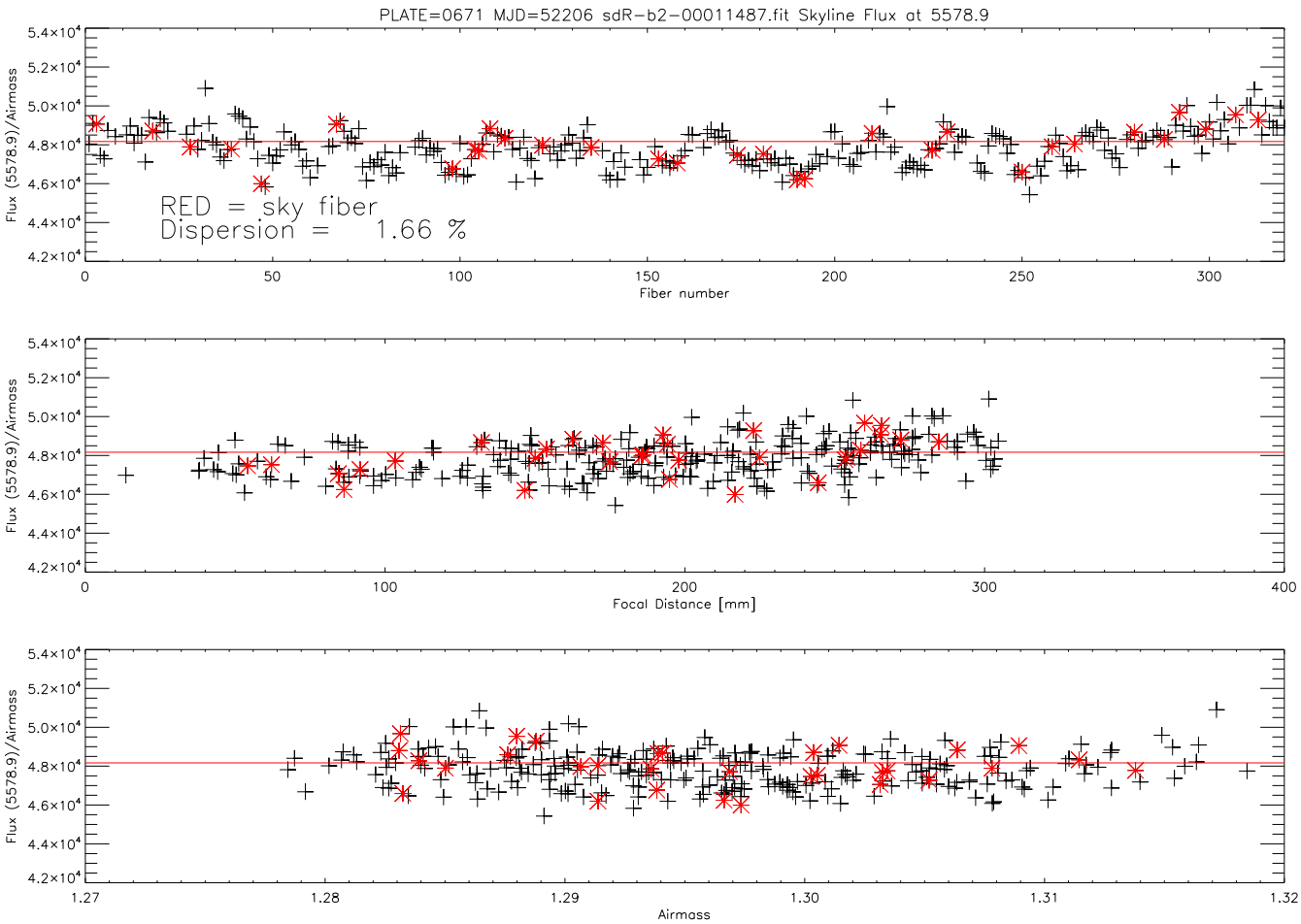

PLATE=0671 MJD=52206 sdR-b2-00011487.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

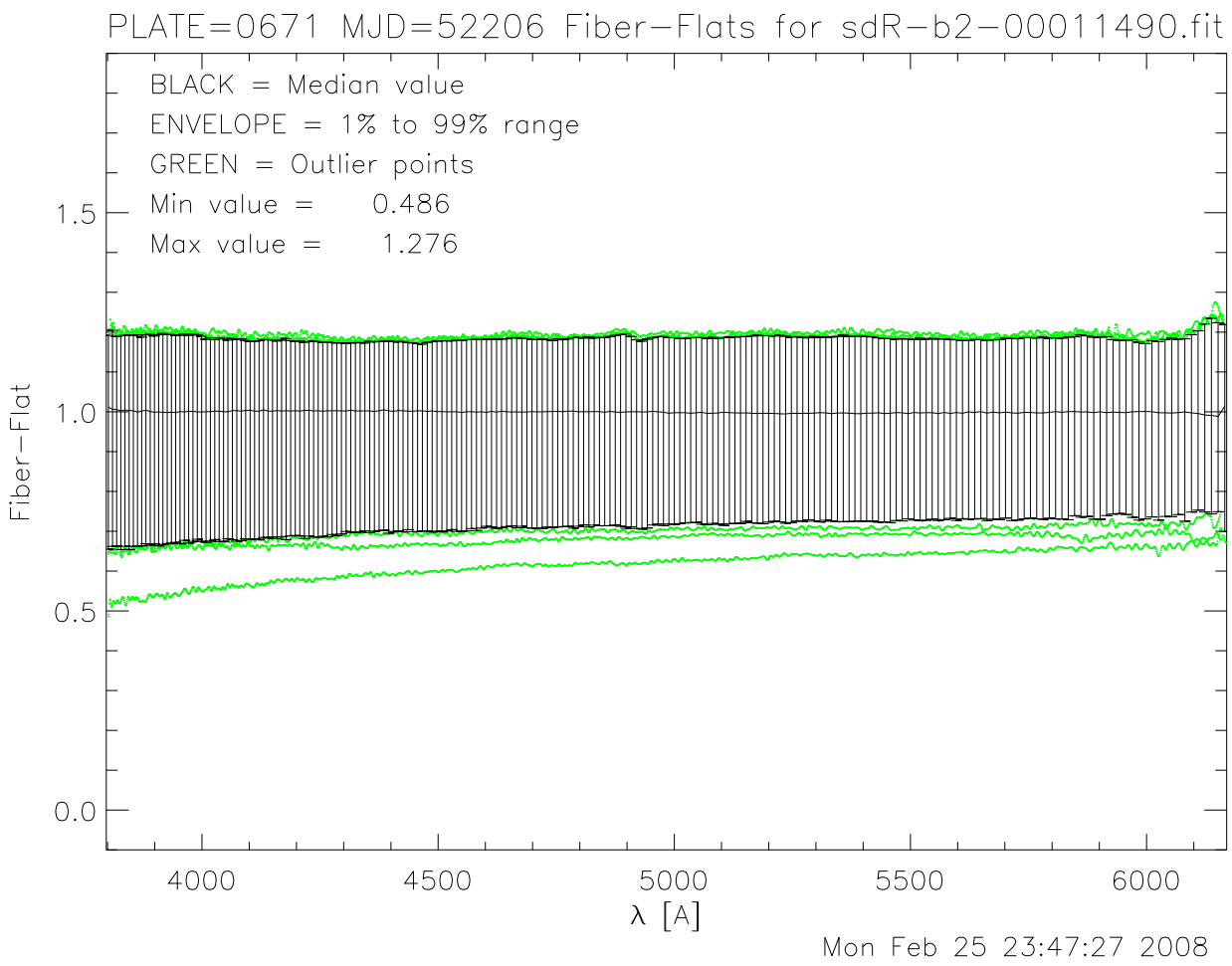

PLATE=0671 MJD=52206 sdR-b2-00011487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3.0×10^4
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

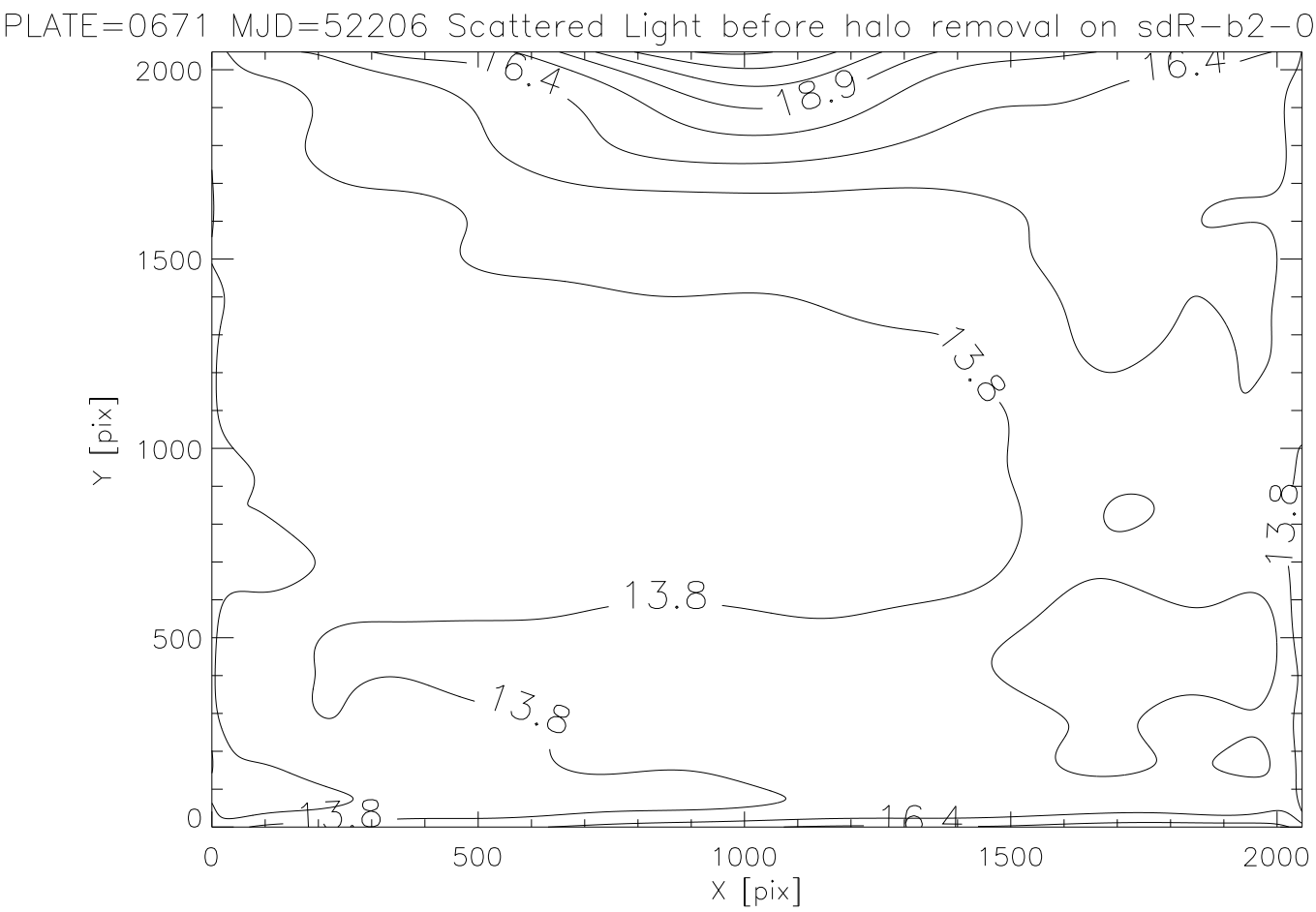

PLATE=0671 MJD=52206 sdR-b2-00011487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

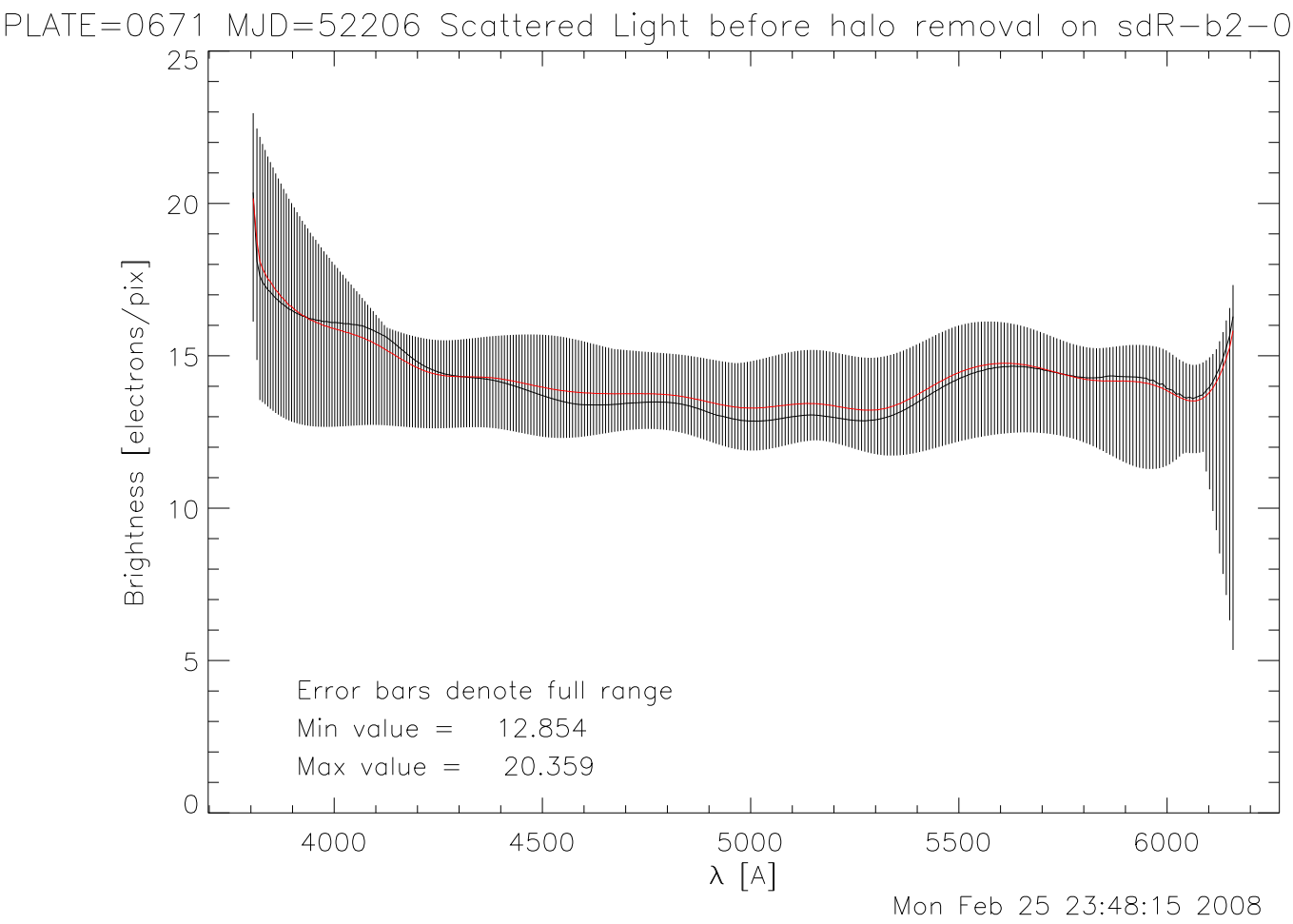

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-b2-00011487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

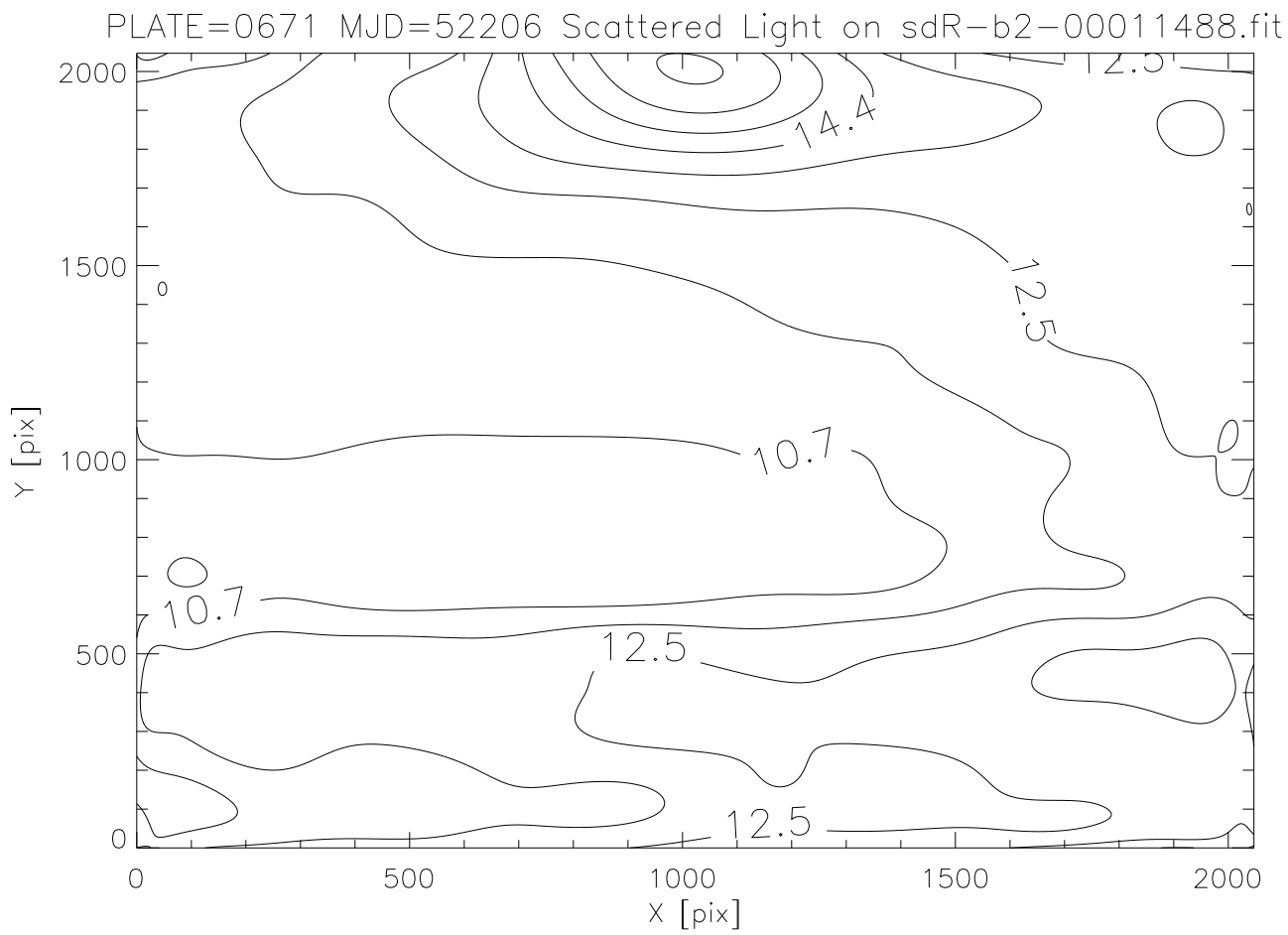

PLATE=0671 MJD=52206 sdR-b2-00011487.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED+= sky fiber
Dispersion = 2.50 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

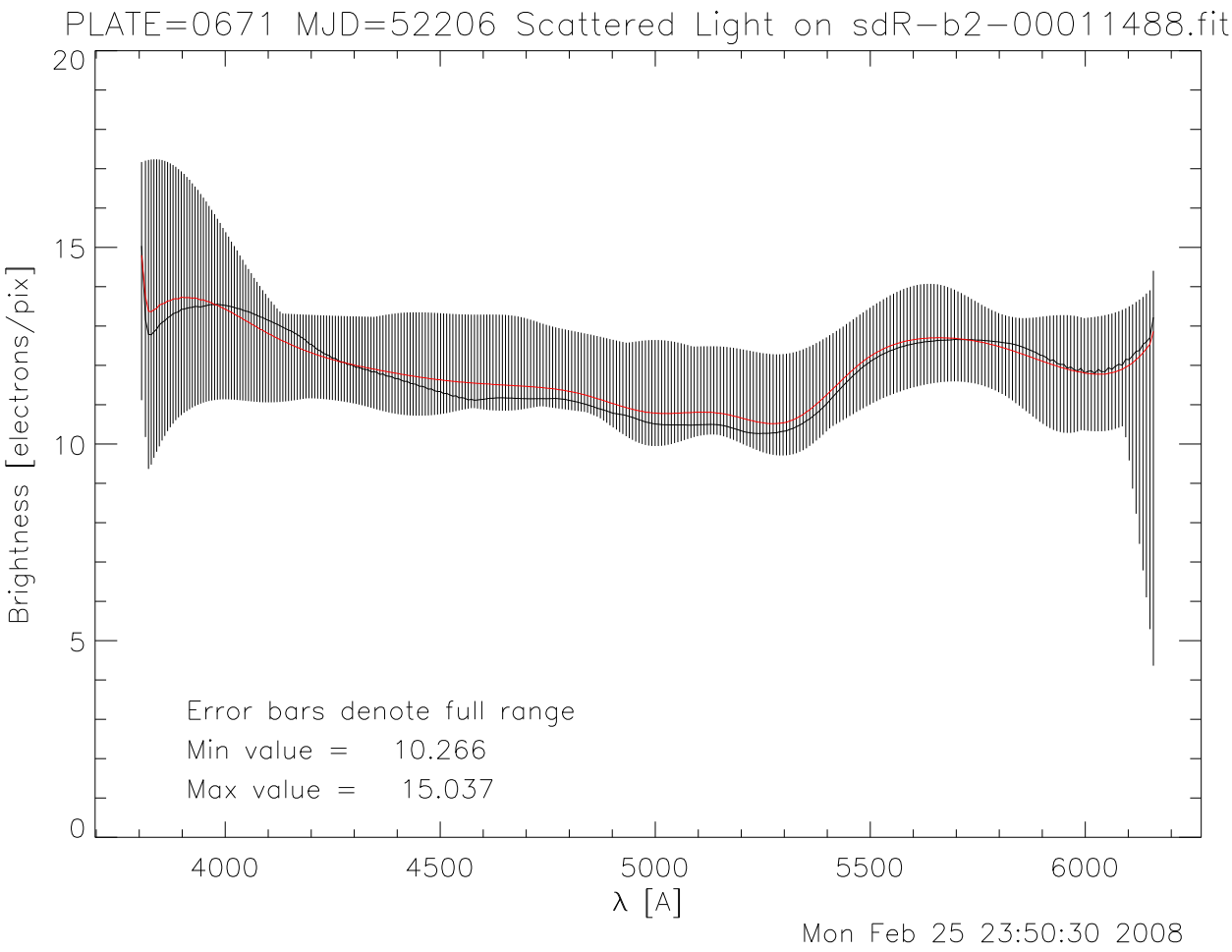

PLATE=0671 MJD=52206 sdR-b2-00011487.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.66 %
Fiber number
Focal Distance [mm]
Airmass

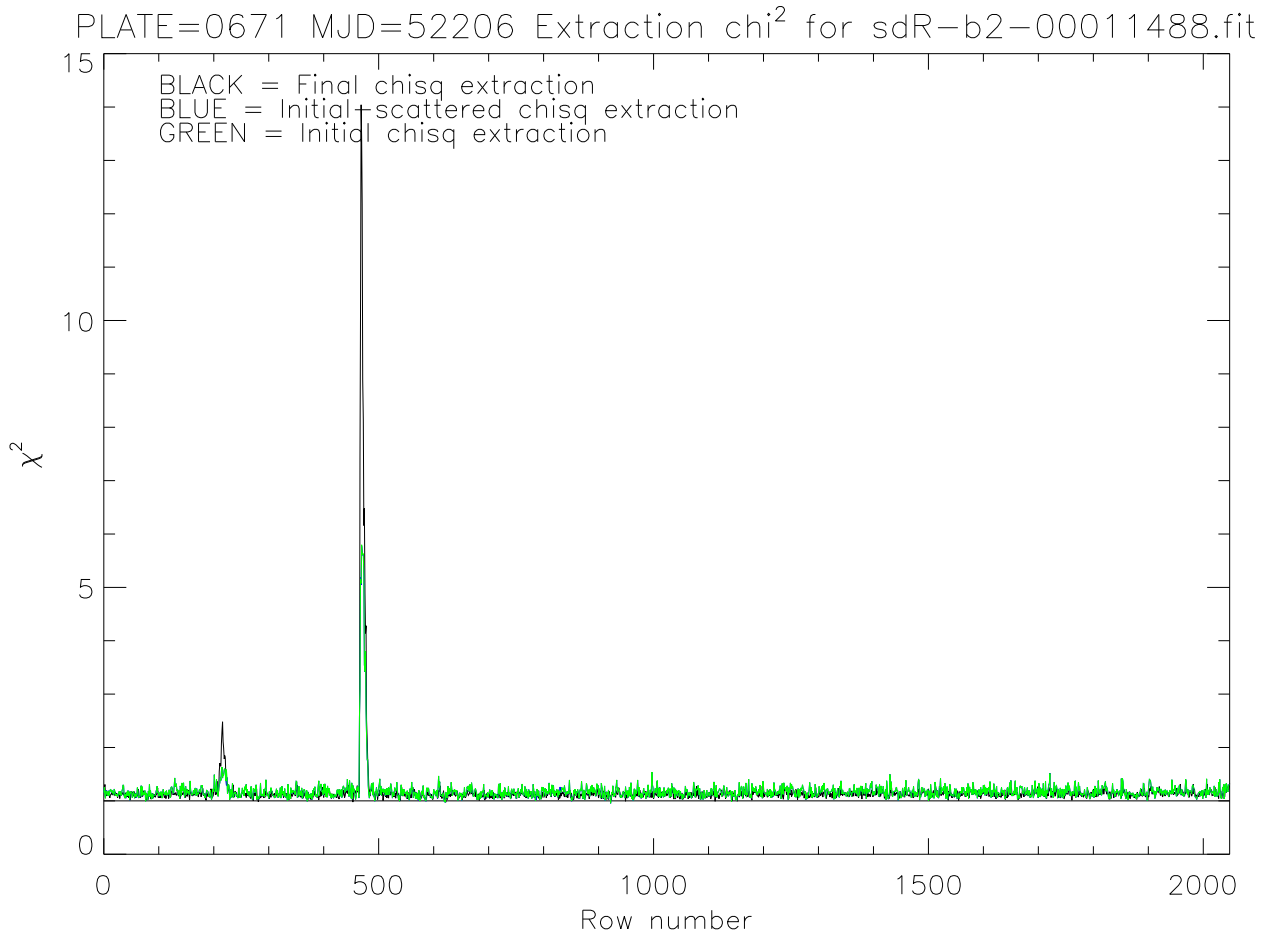

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b2-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.486
Max value = 1.276
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:47:27 2008

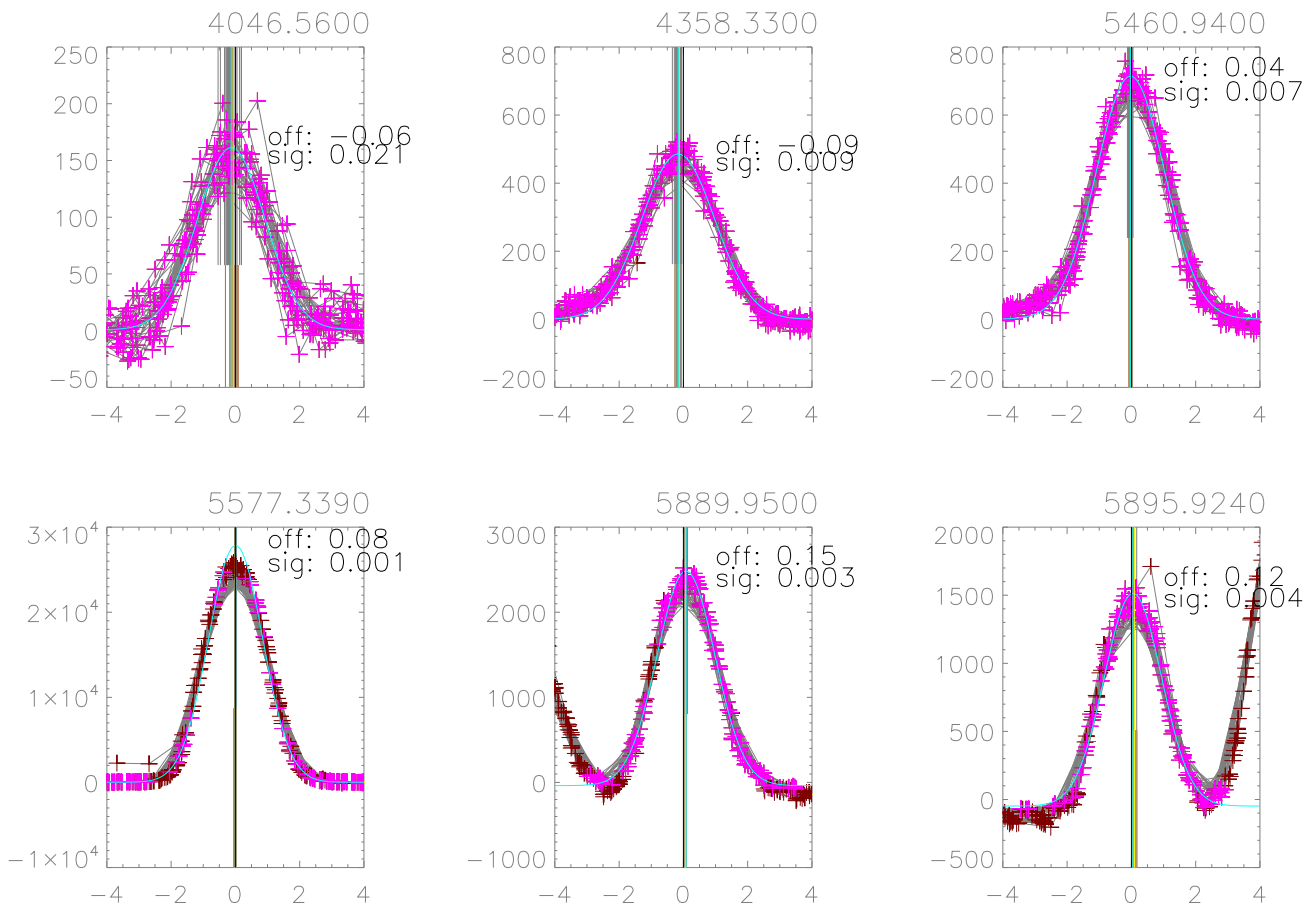

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011488.f
16.4
18.9
16.4
13.8
13.8
13.8
13.8
13.8
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

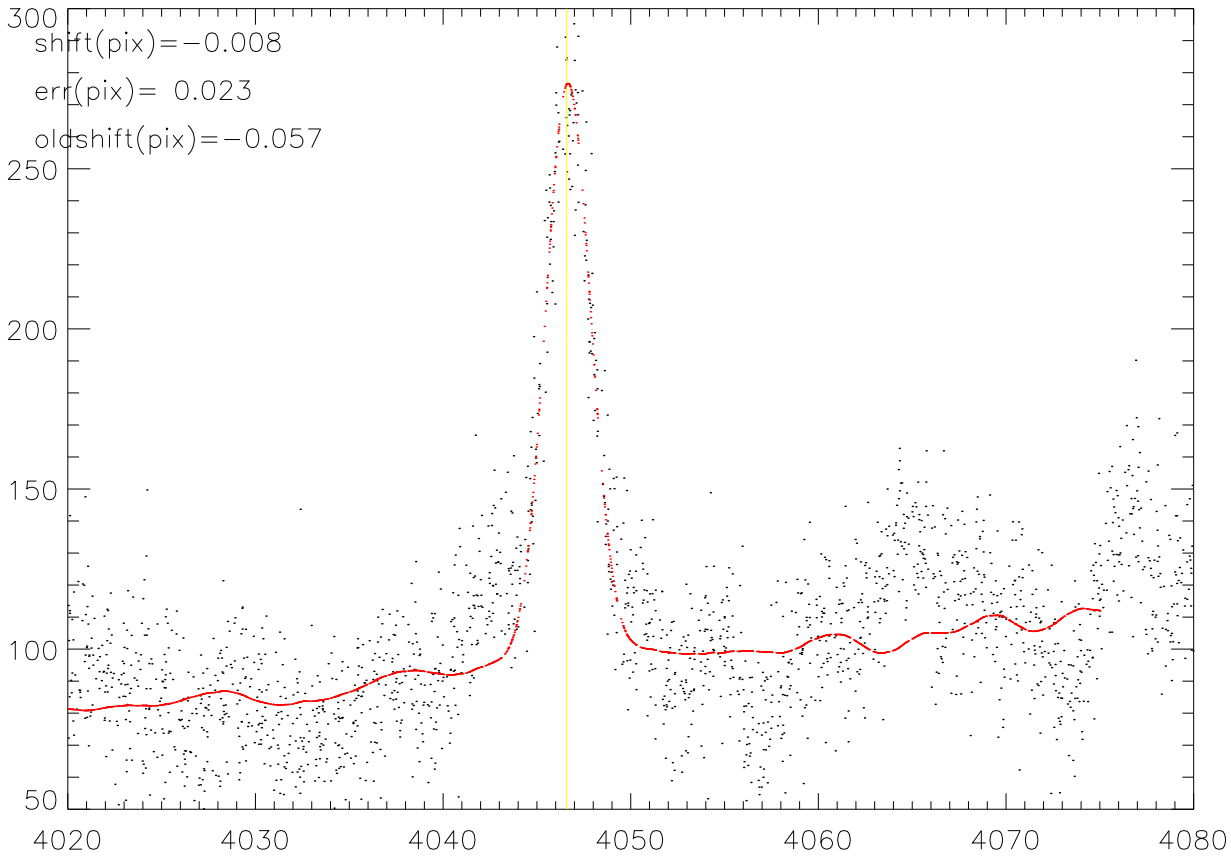

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011488.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 12.854
Max value = 20.359
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:48:15 2008

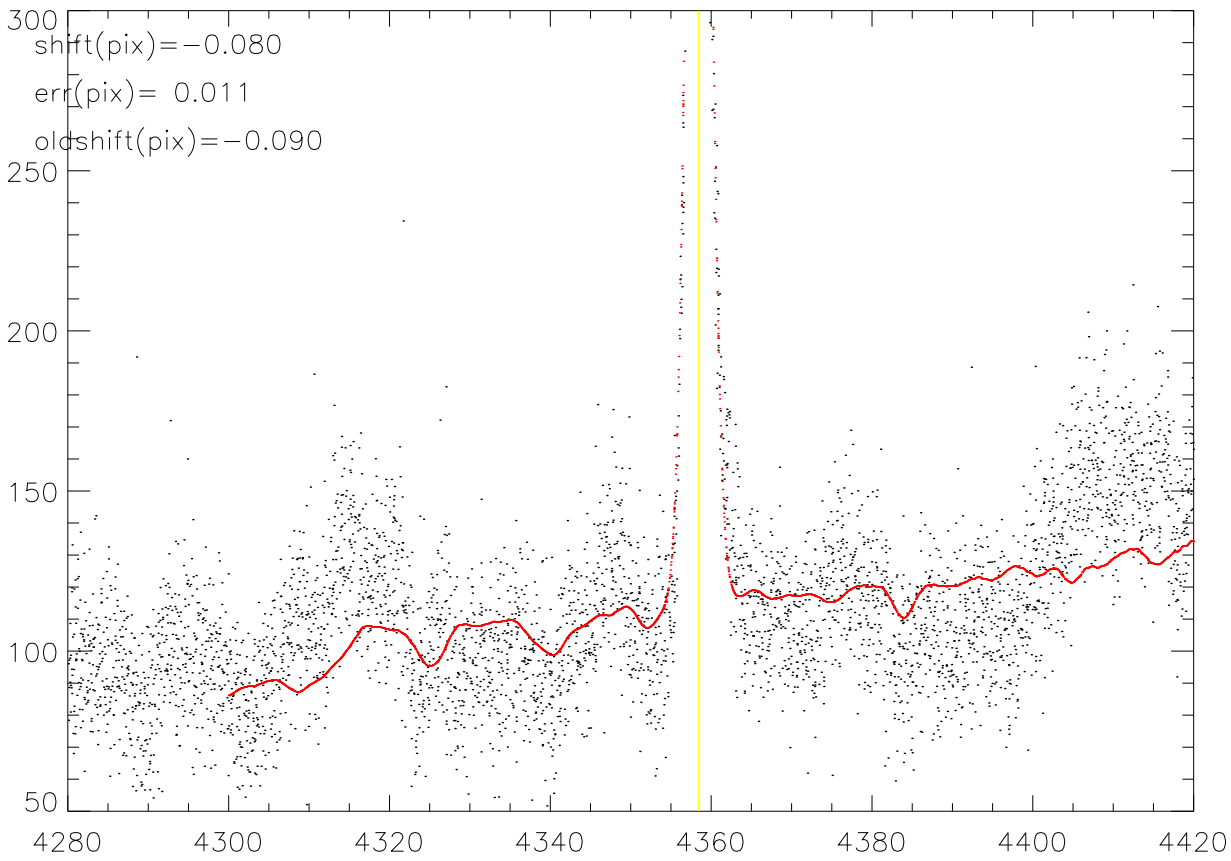

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011488.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
14.4
12.5
10.7
10.7
12.5
12.5

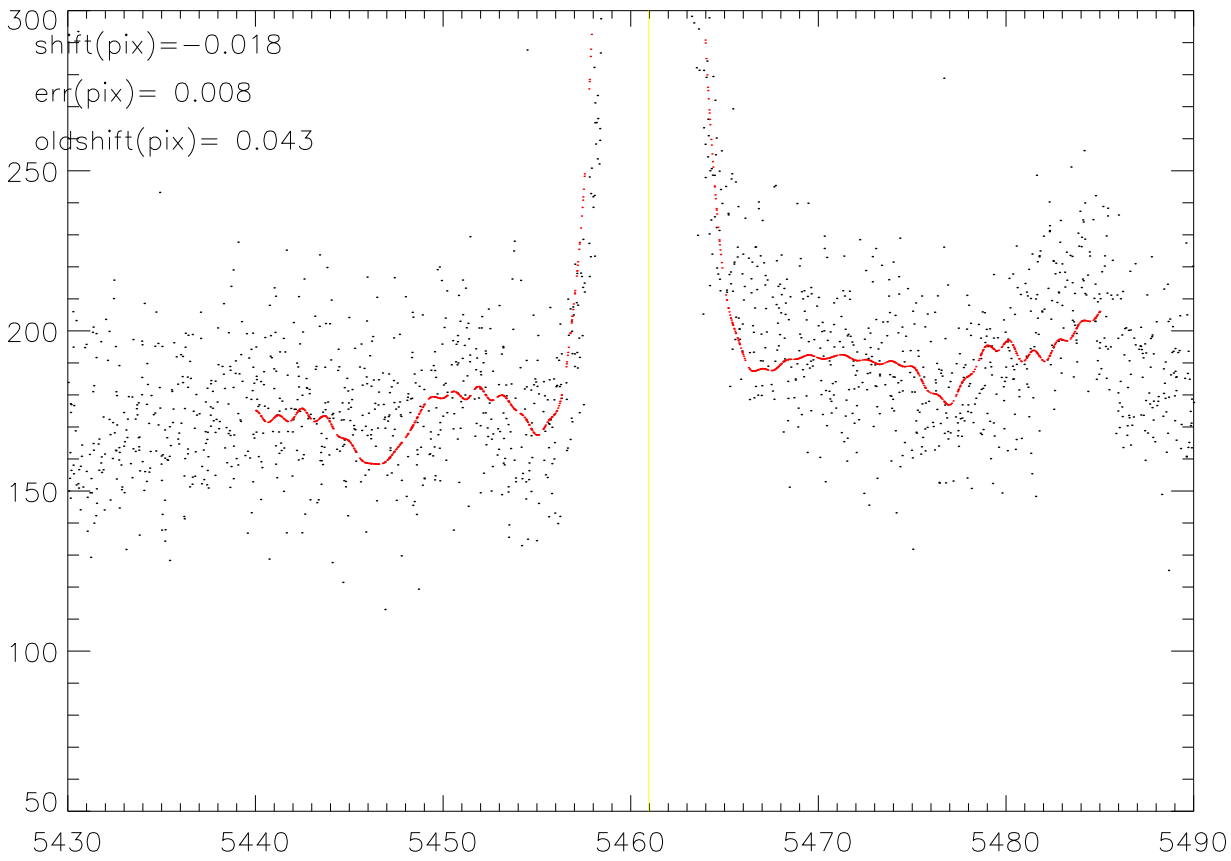

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011488.fit
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 10.266
Max value = 15.037
Mon Feb 25 23:50:30 2008

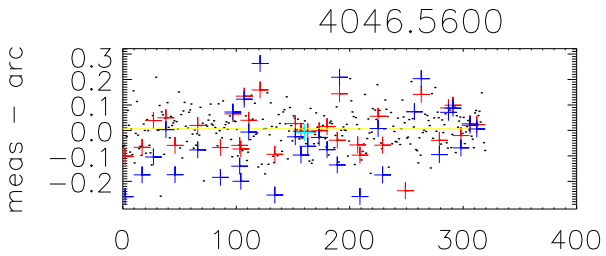

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b2-00011488.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

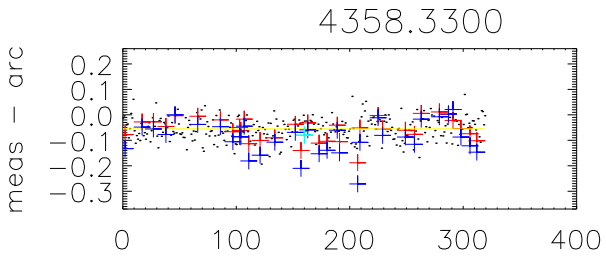

4046.5600
off: −0.06
sig: 0.021
4358.3300
off: −0.09
sig: 0.009
5460.9400
off: 0.04
sig: 0.007
5577.3390
off: 0.08
sig: 0.001
5889.9500
off: 0.15
sig: 0.003
5895.9240
off: 0.12
sig: 0.004

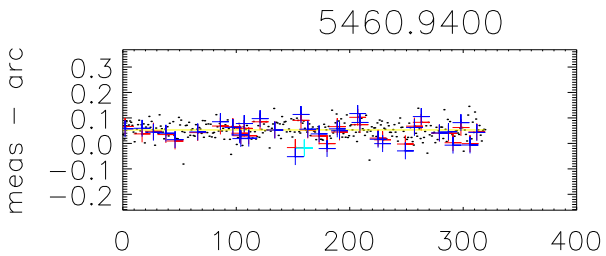

shift(pix)=−0.008
err(pix)= 0.023
oldshift(pix)=−0.057
300
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

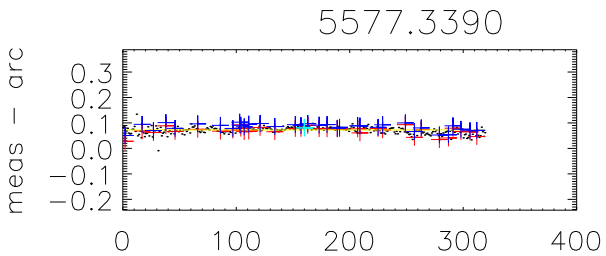

shift(pix)=−0.080
err(pix)= 0.011
oldshift(pix)=−0.090
300
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

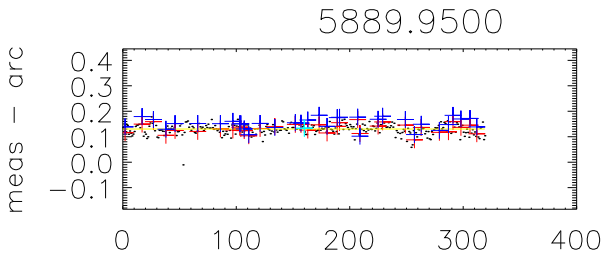

shift(pix)=−0.018
err(pix)= 0.008
oldshift(pix)= 0.043
300
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

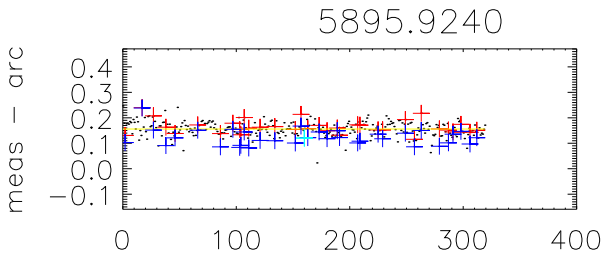

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

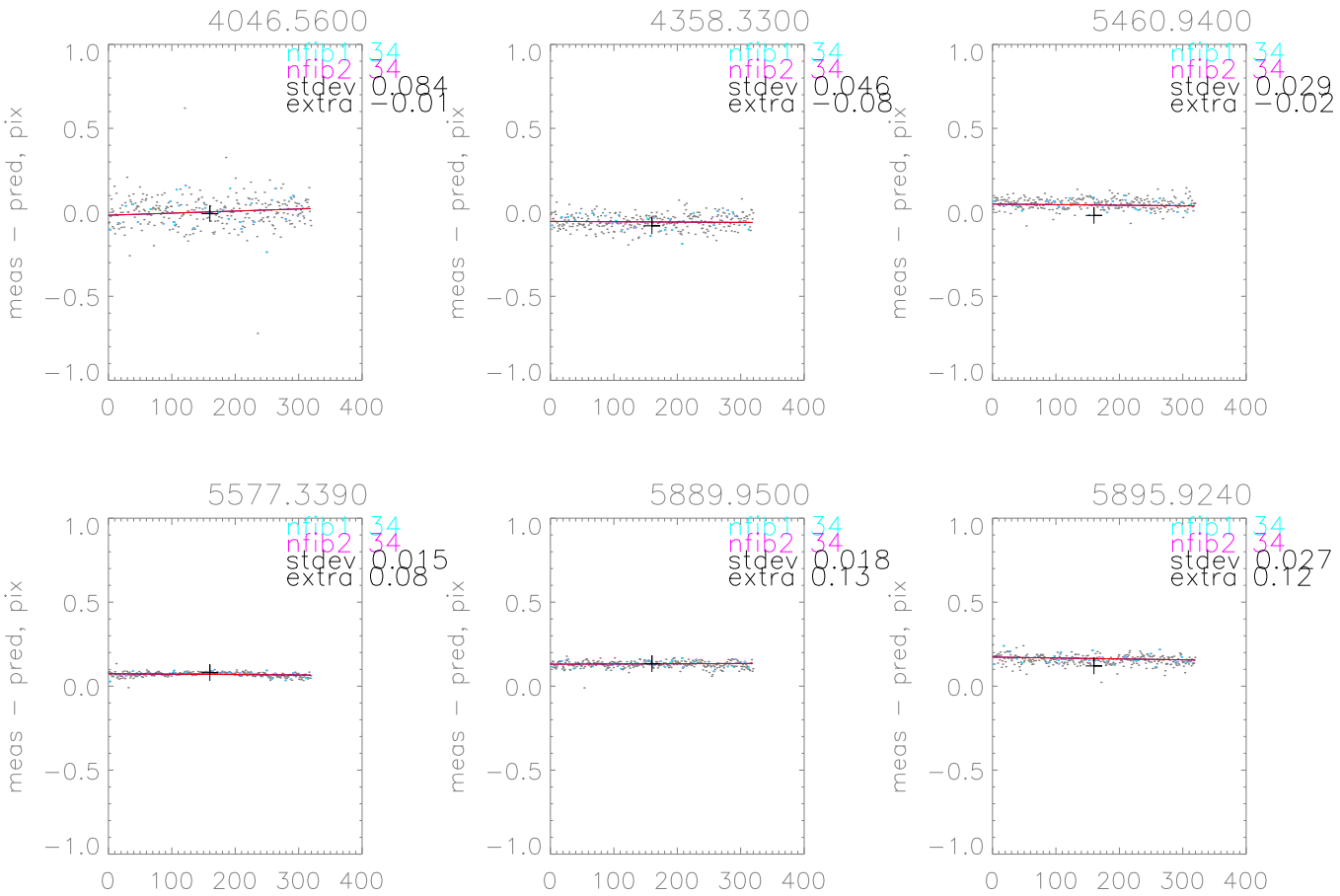

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

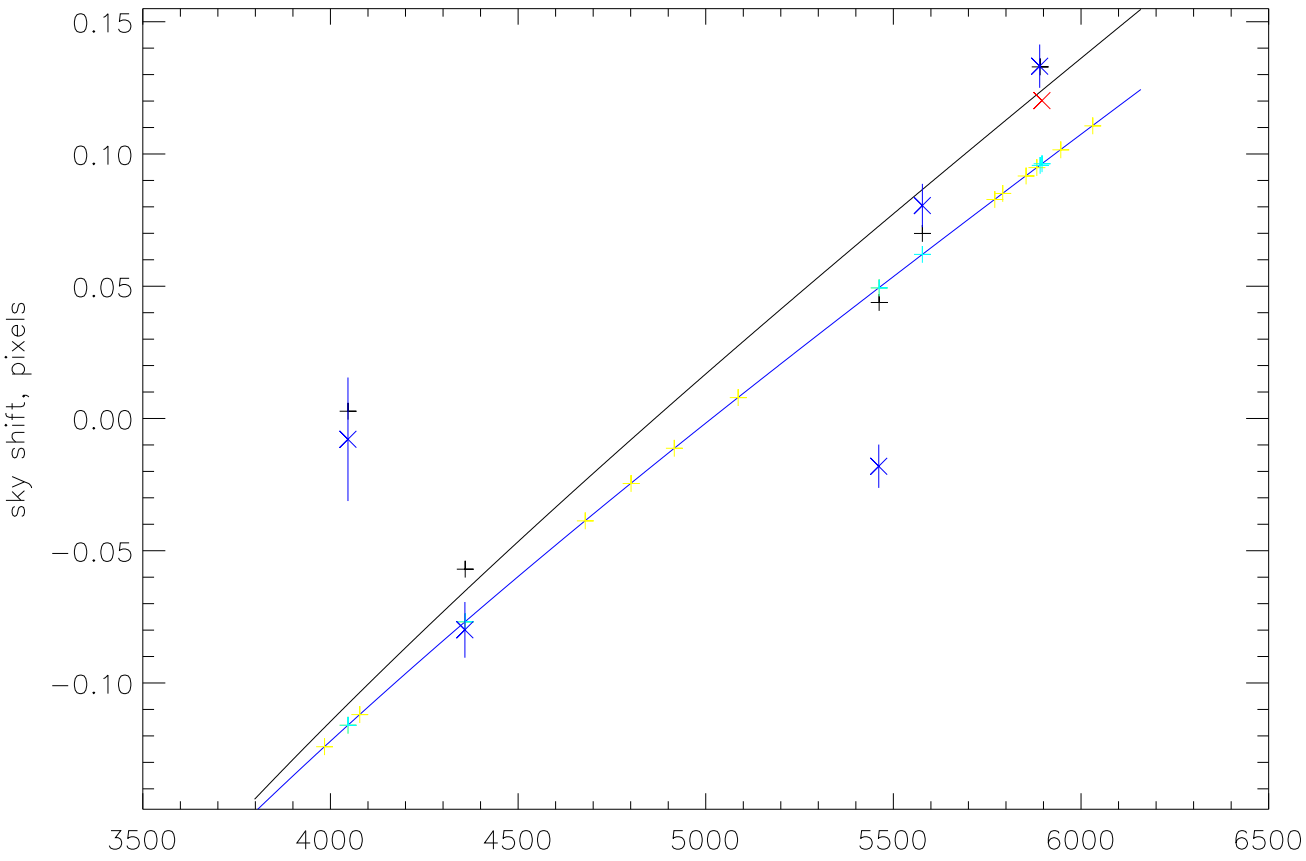

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

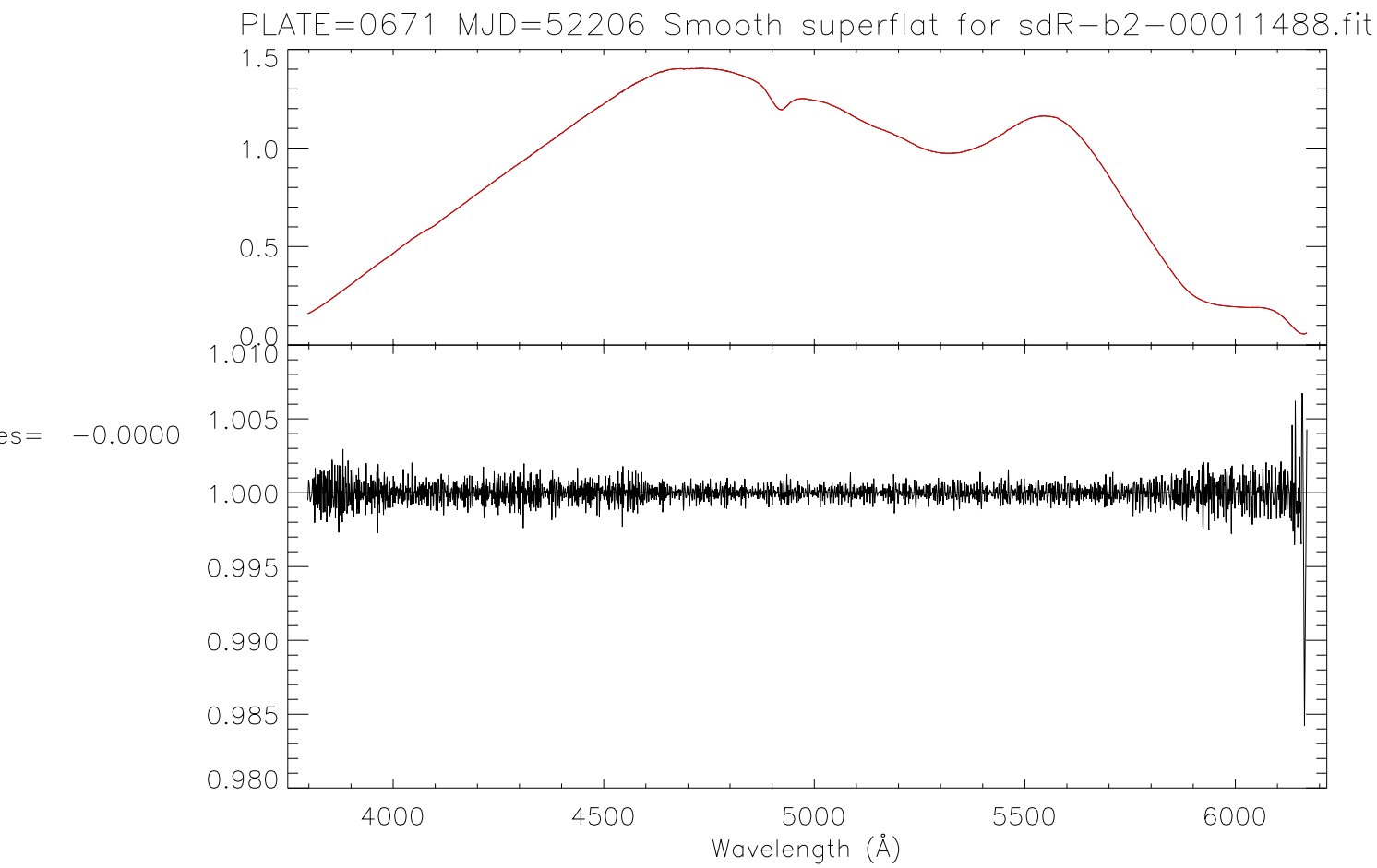

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

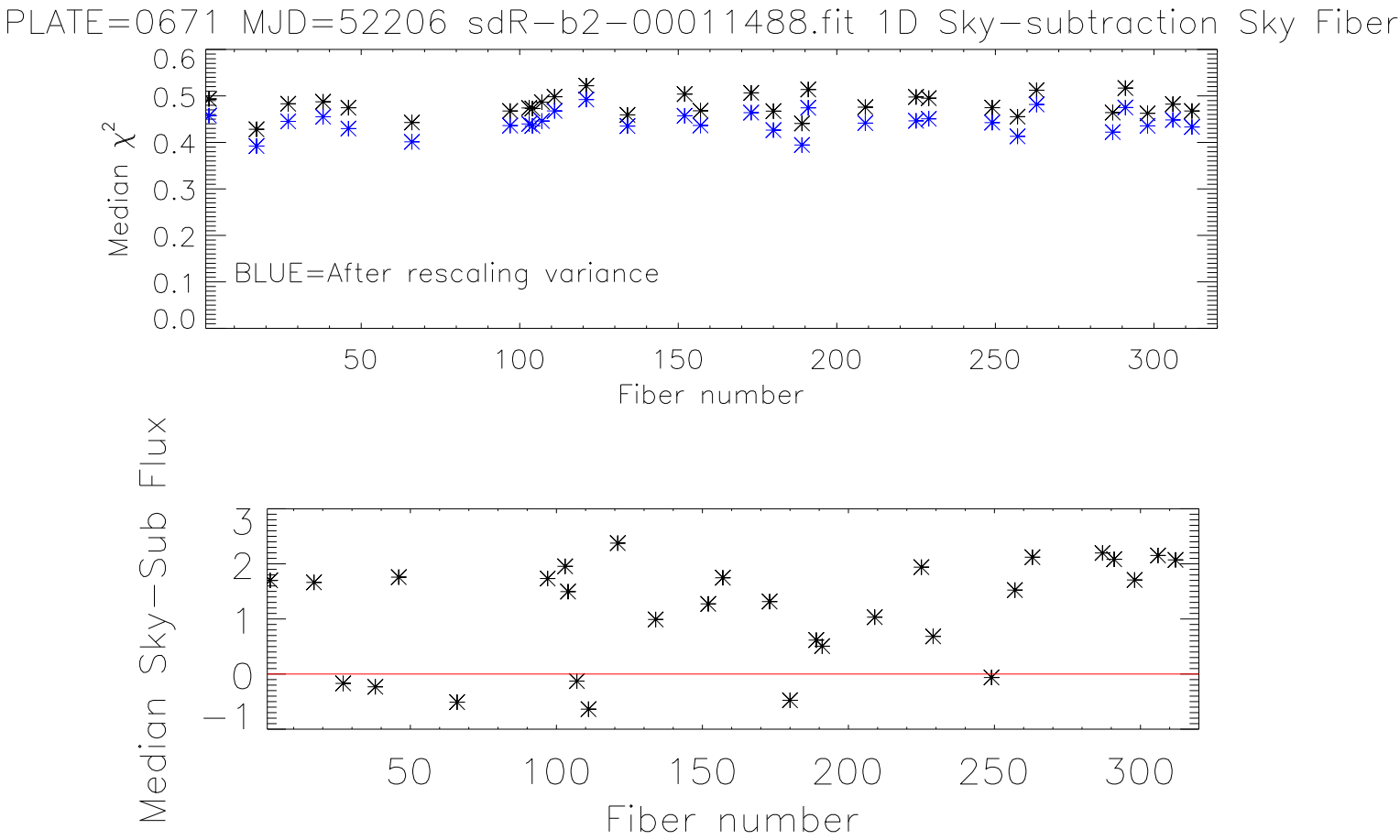

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

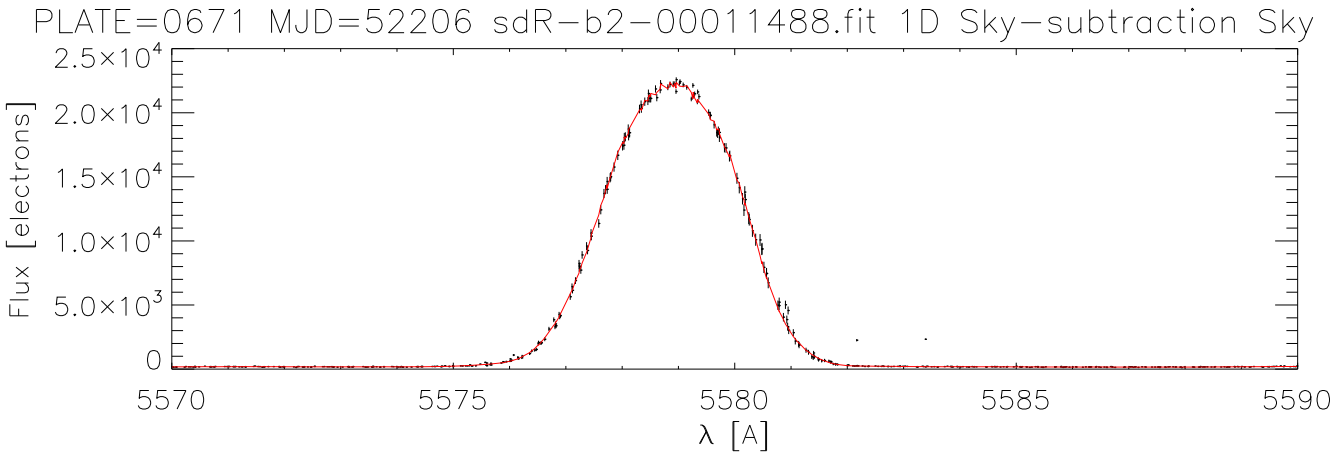

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

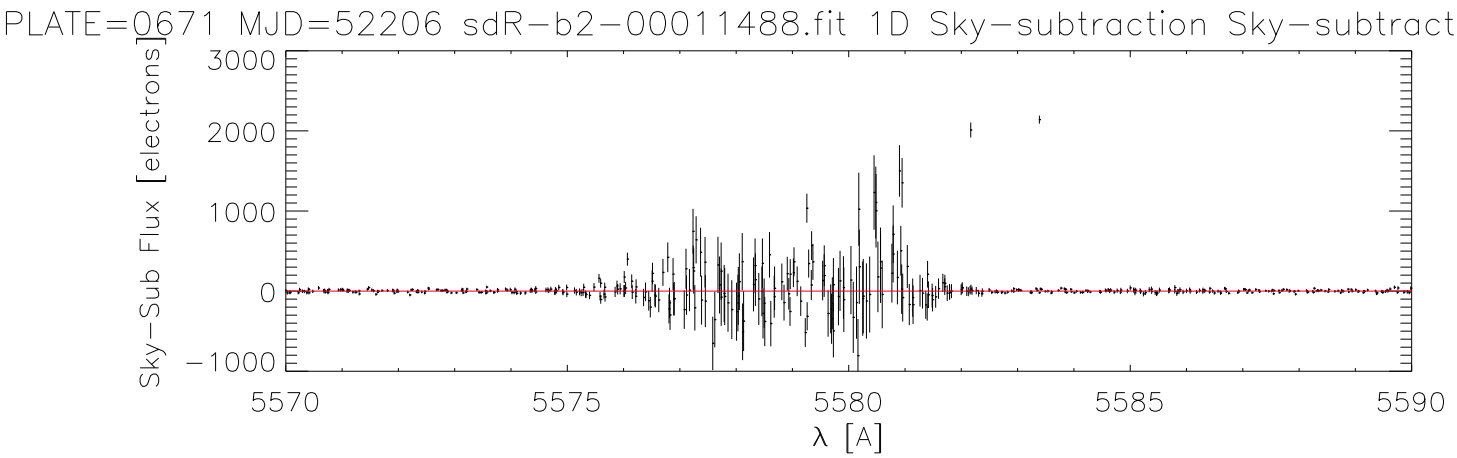

4046.5600
nfib1 34
nfib2 34
stdev 0.084
extra −0.01
4358.3300
nfib1 34
nfib2 34
stdev 0.046
extra −0.08
5460.9400
nfib1 34
nfib2 34
stdev 0.029
extra −0.02
5577.3390
nfib1 34
nfib2 34
stdev 0.015
extra 0.08
5889.9500
nfib1 34
nfib2 34
stdev 0.018
extra 0.13
5895.9240
nfib1 34
nfib2 34
stdev 0.027
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

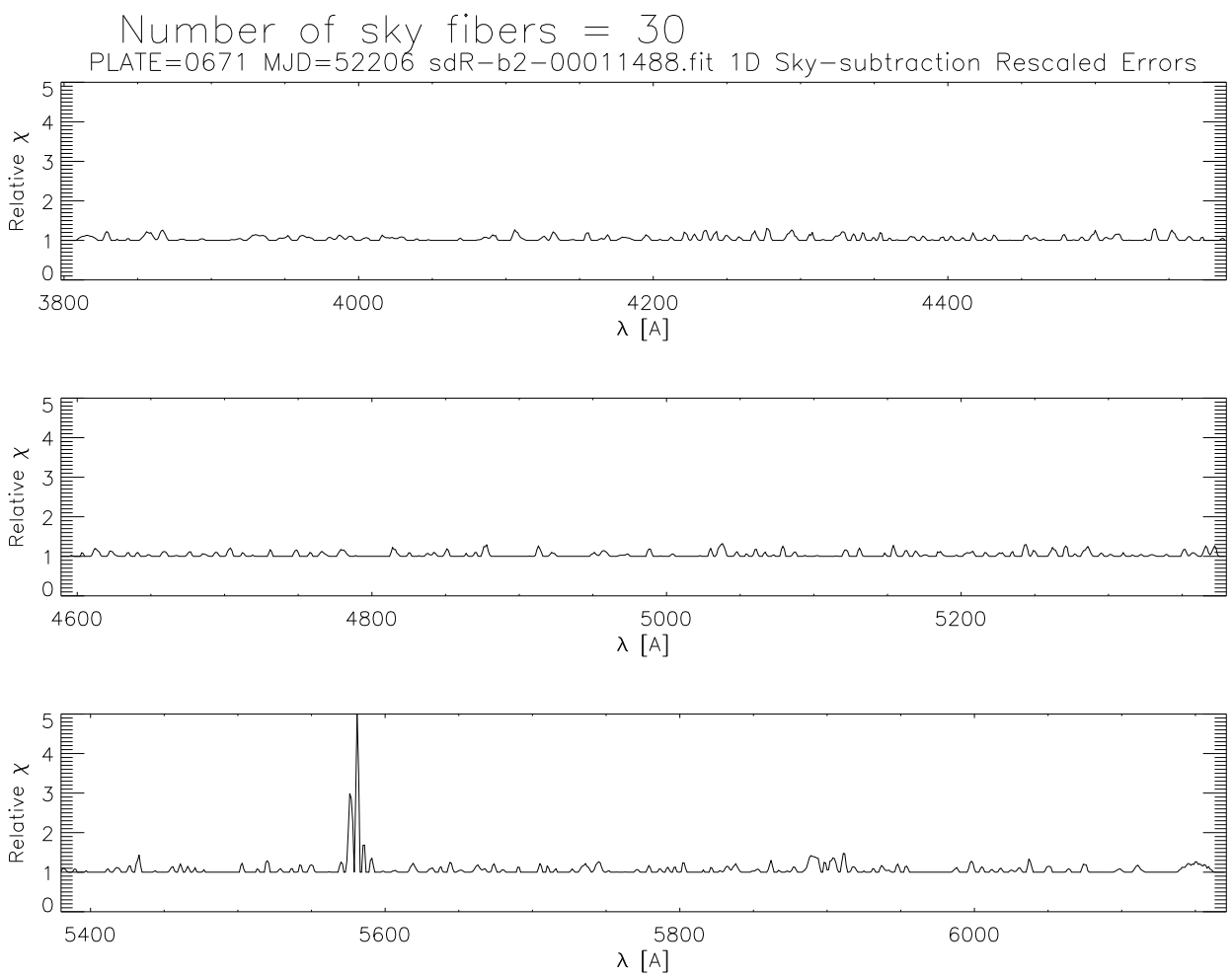

0.15
0.10
0.05
0.00
−0.05
−0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

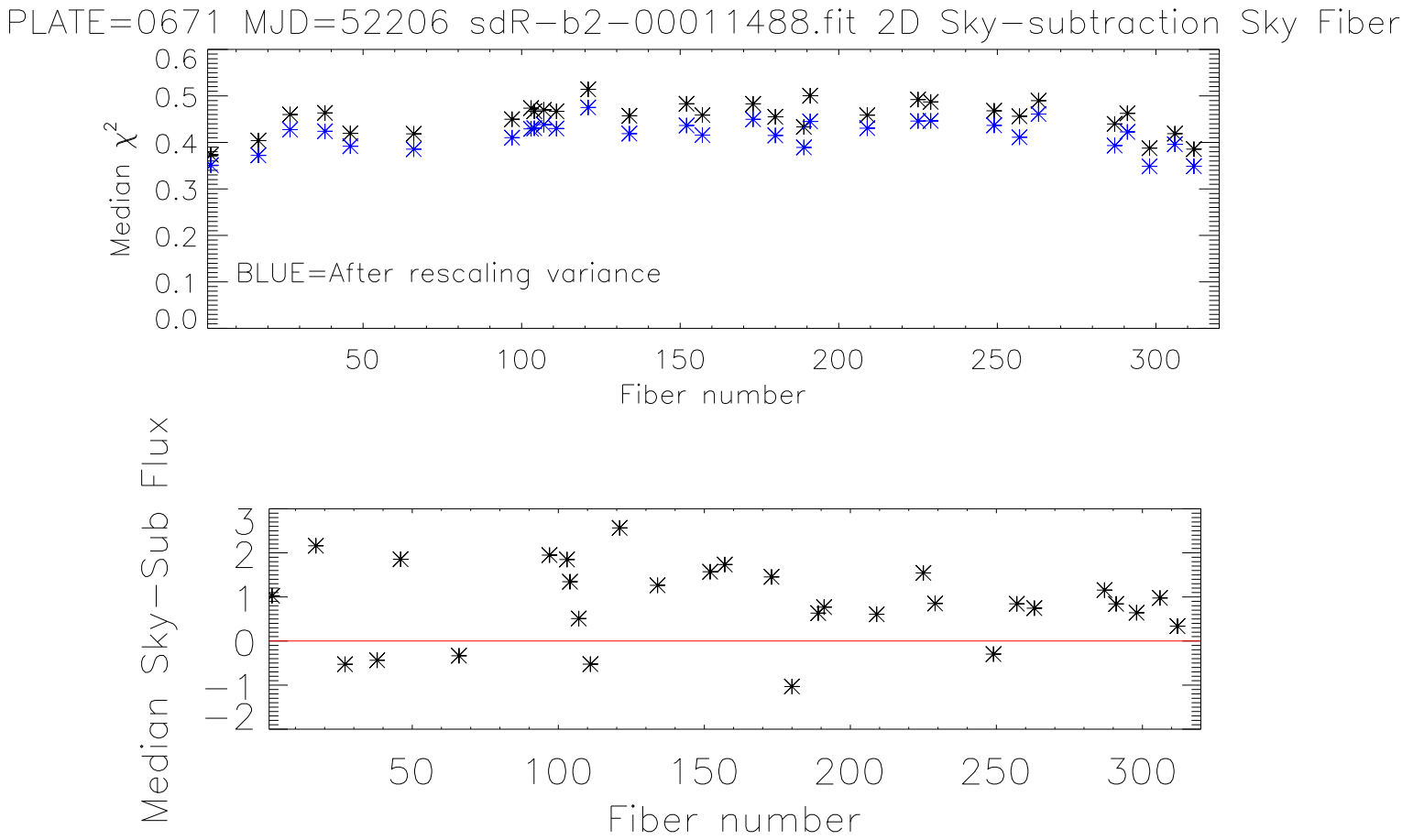

PLATE=0671 MJD=52206 Smooth superflat for sdR-b2-00011488.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

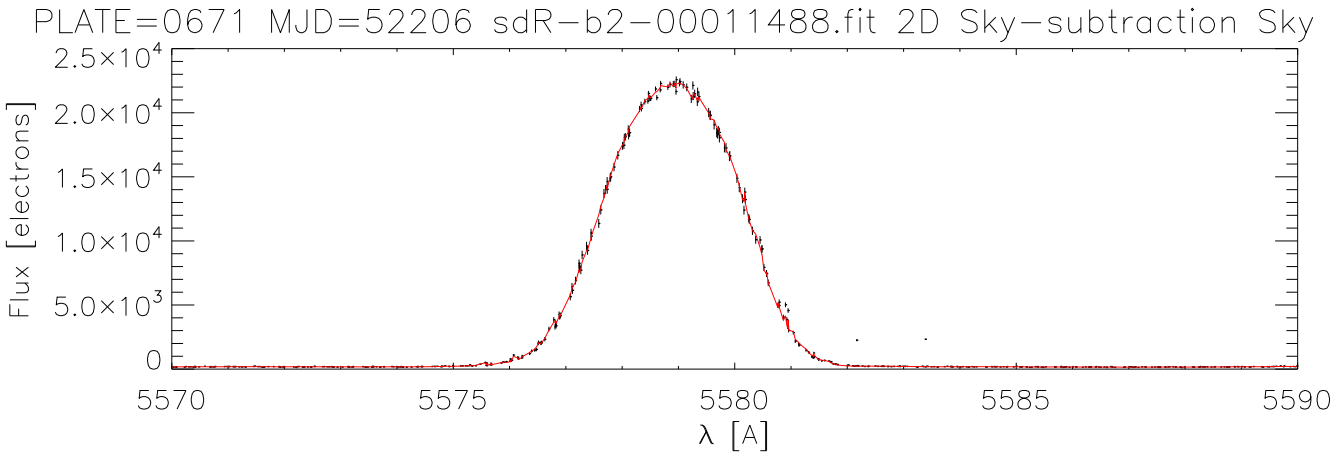

PLATE=0671 MJD=52206 sdR-b2-00011488.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

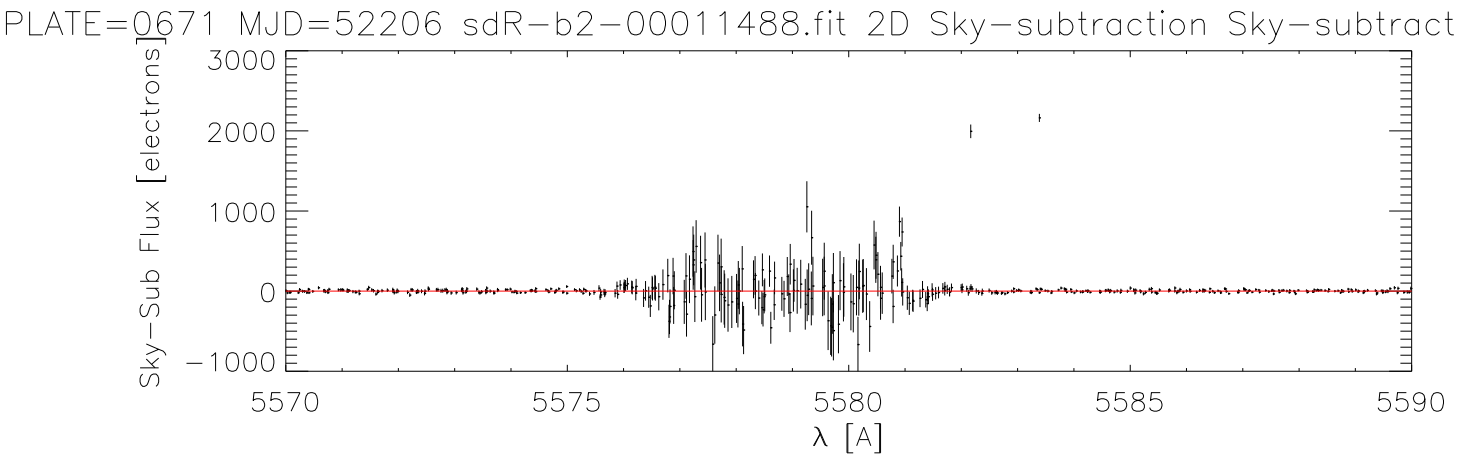

PLATE=0671 MJD=52206 sdR-b2-00011488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

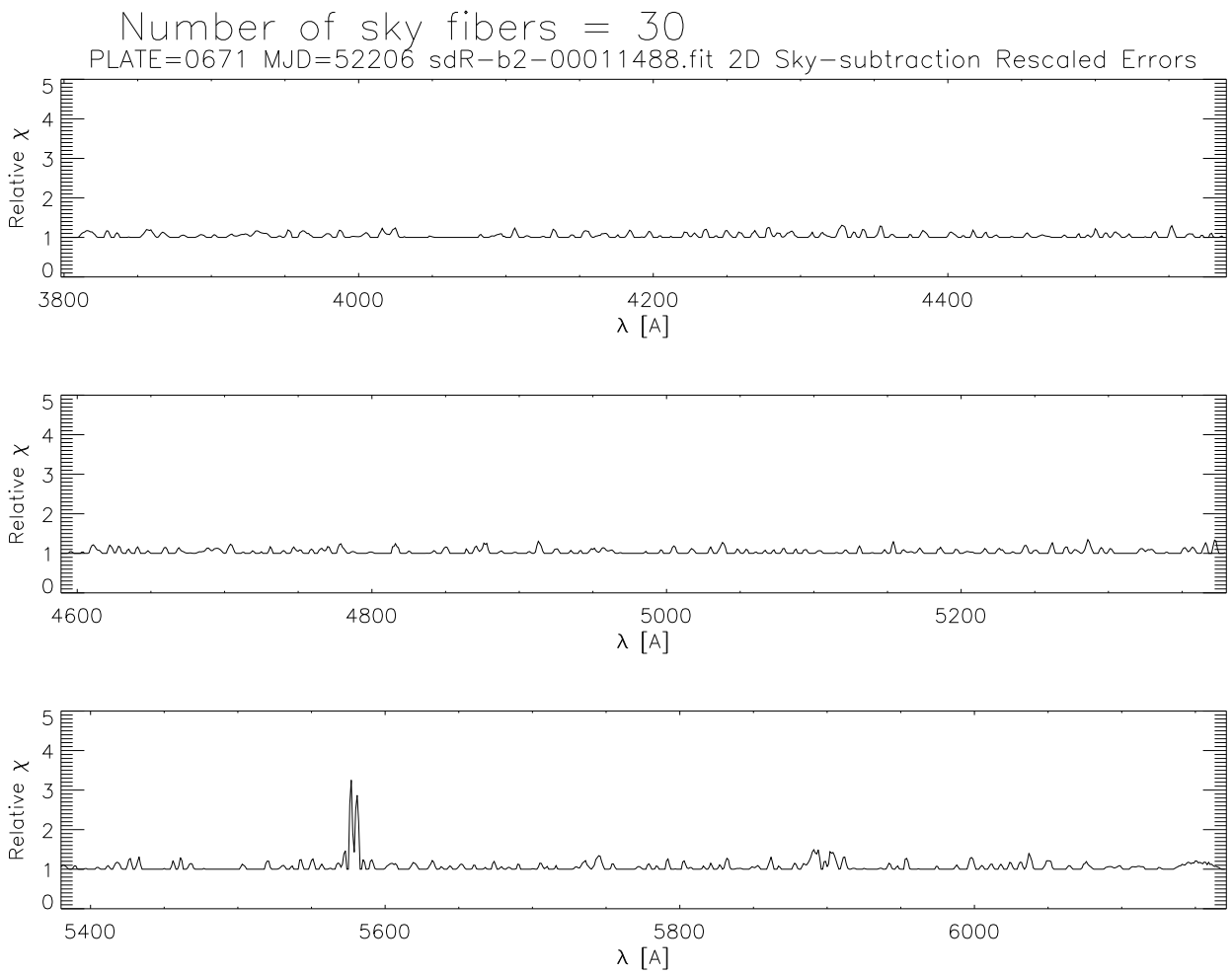

PLATE=0671 MJD=52206 sdR-b2-00011488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
5570
5575
5580
5585
5590
λ [A]

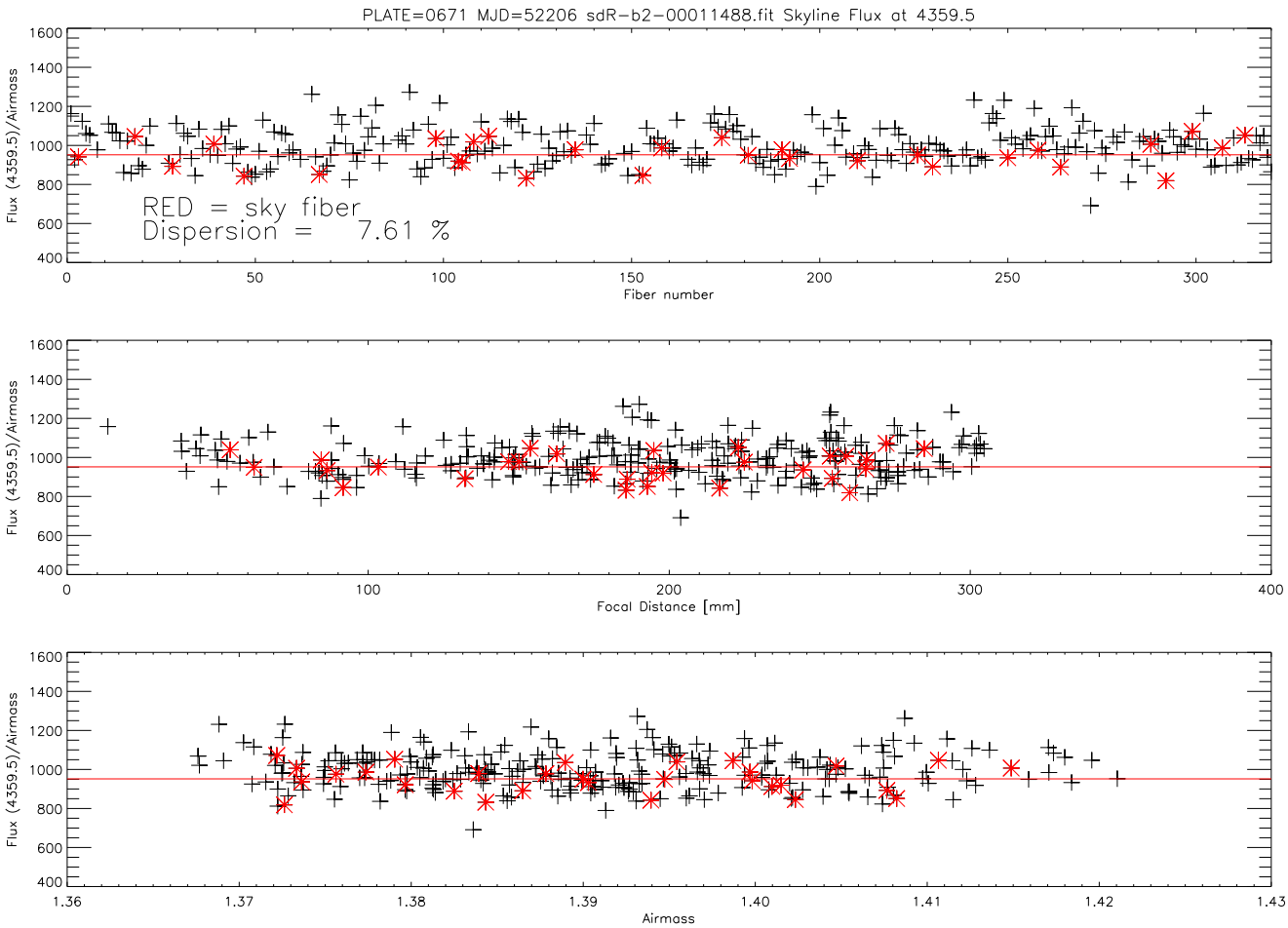

Number of sky fibers = 30
PLATE=0671 MJD=52206 sdR-b2-00011488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

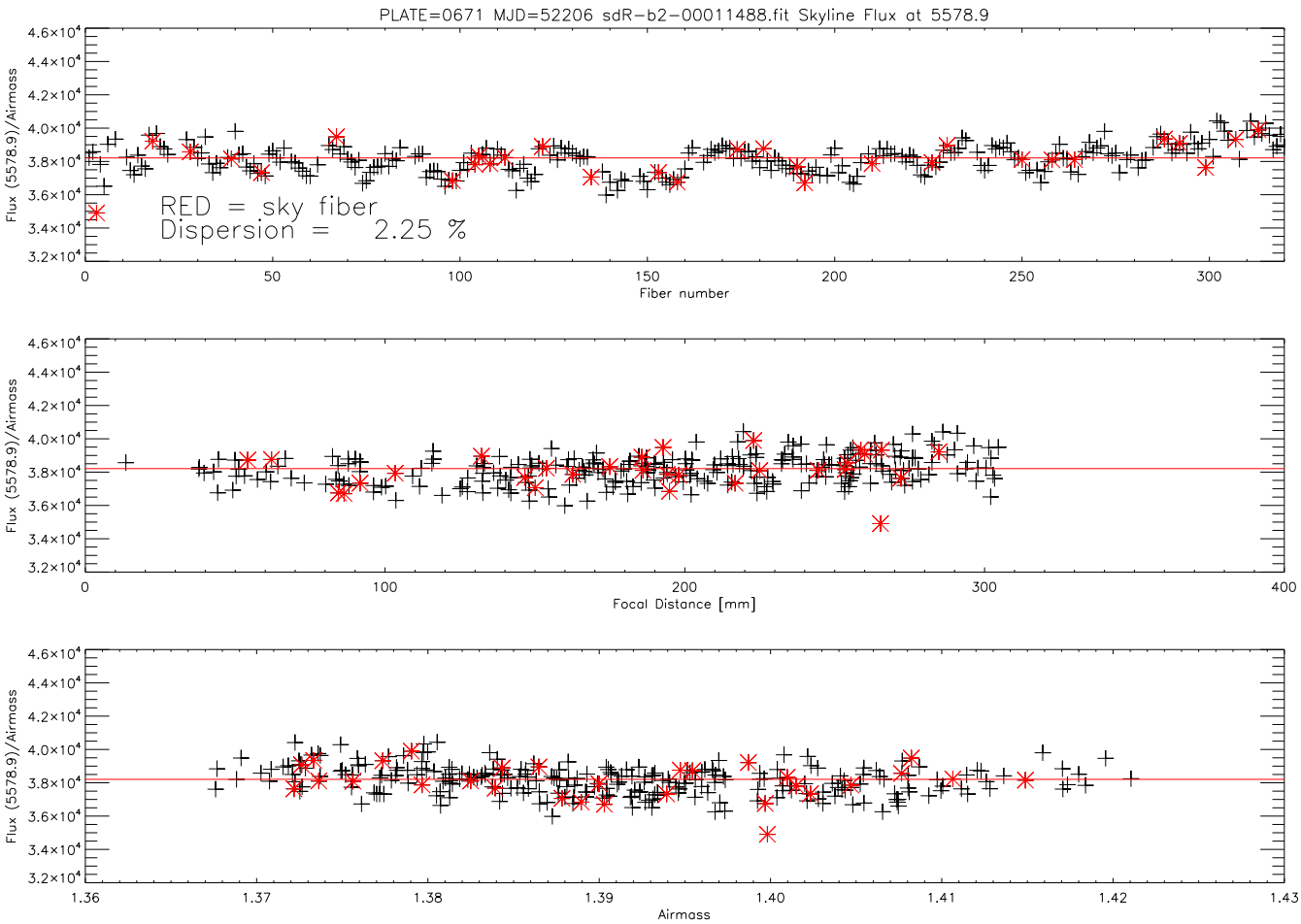

PLATE=0671 MJD=52206 sdR-b2-00011488.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

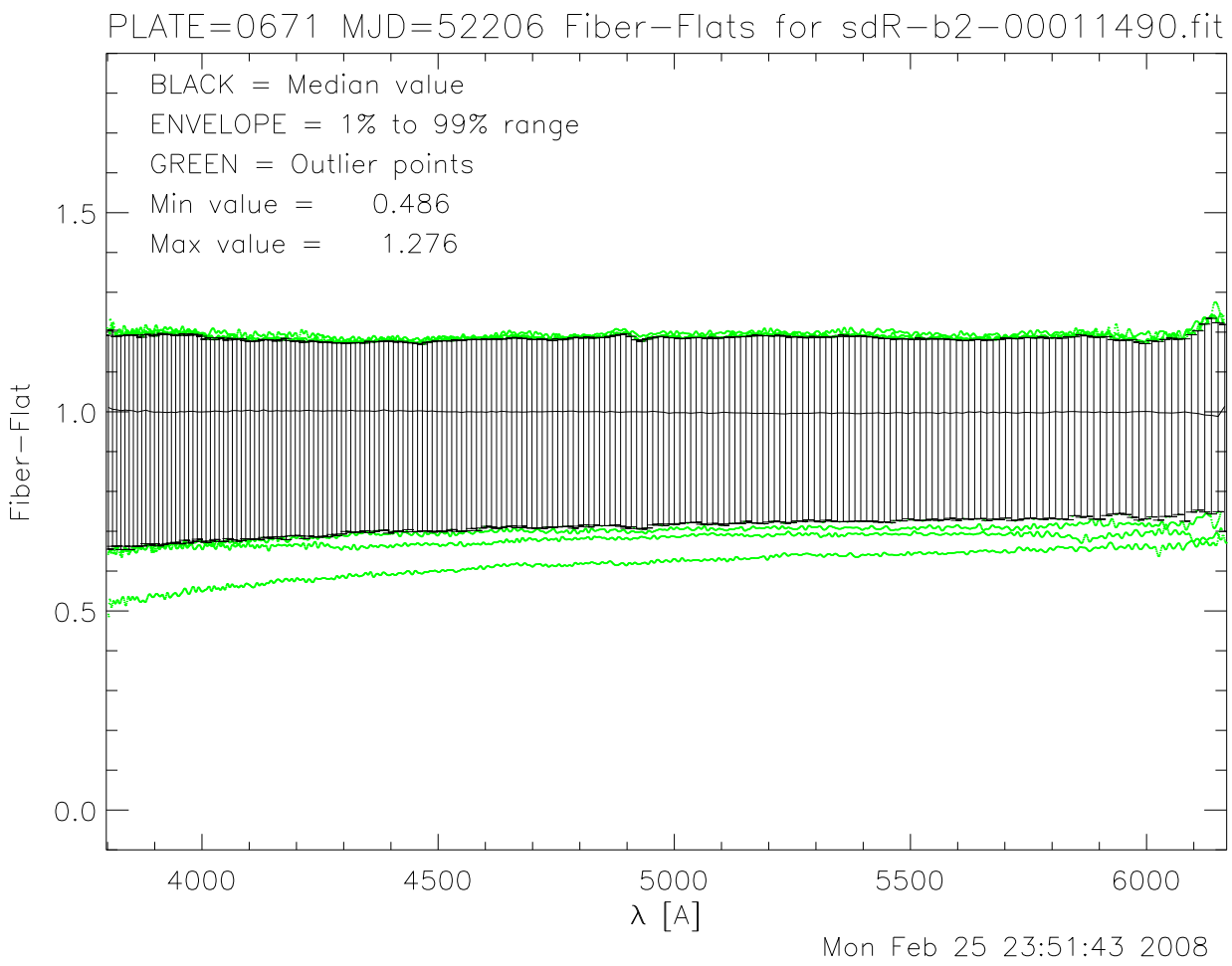

PLATE=0671 MJD=52206 sdR-b2-00011488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2.5×10^4
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

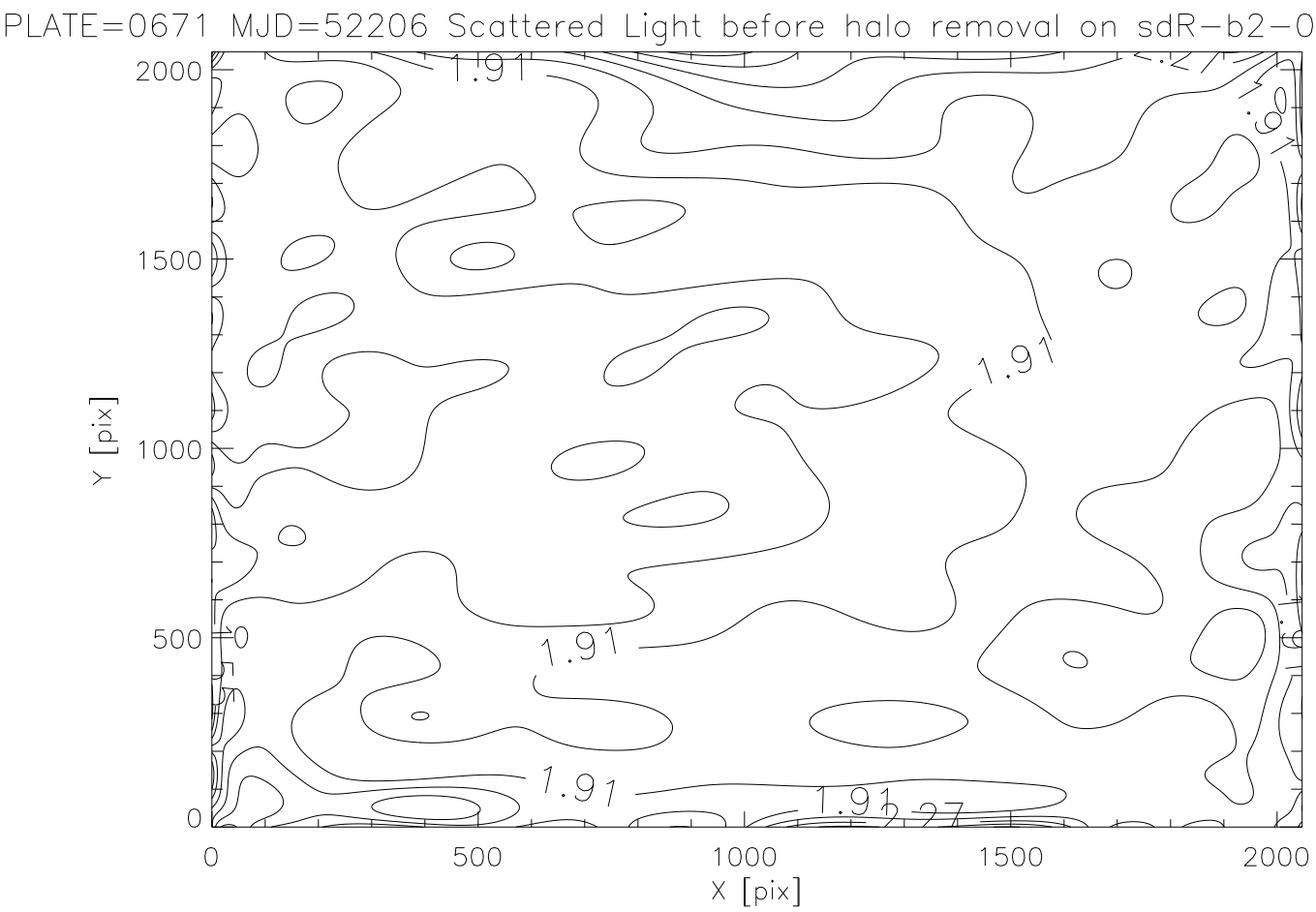

PLATE=0671 MJD=52206 sdR-b2-00011488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
5570
5575
5580
5585
5590
λ [A]

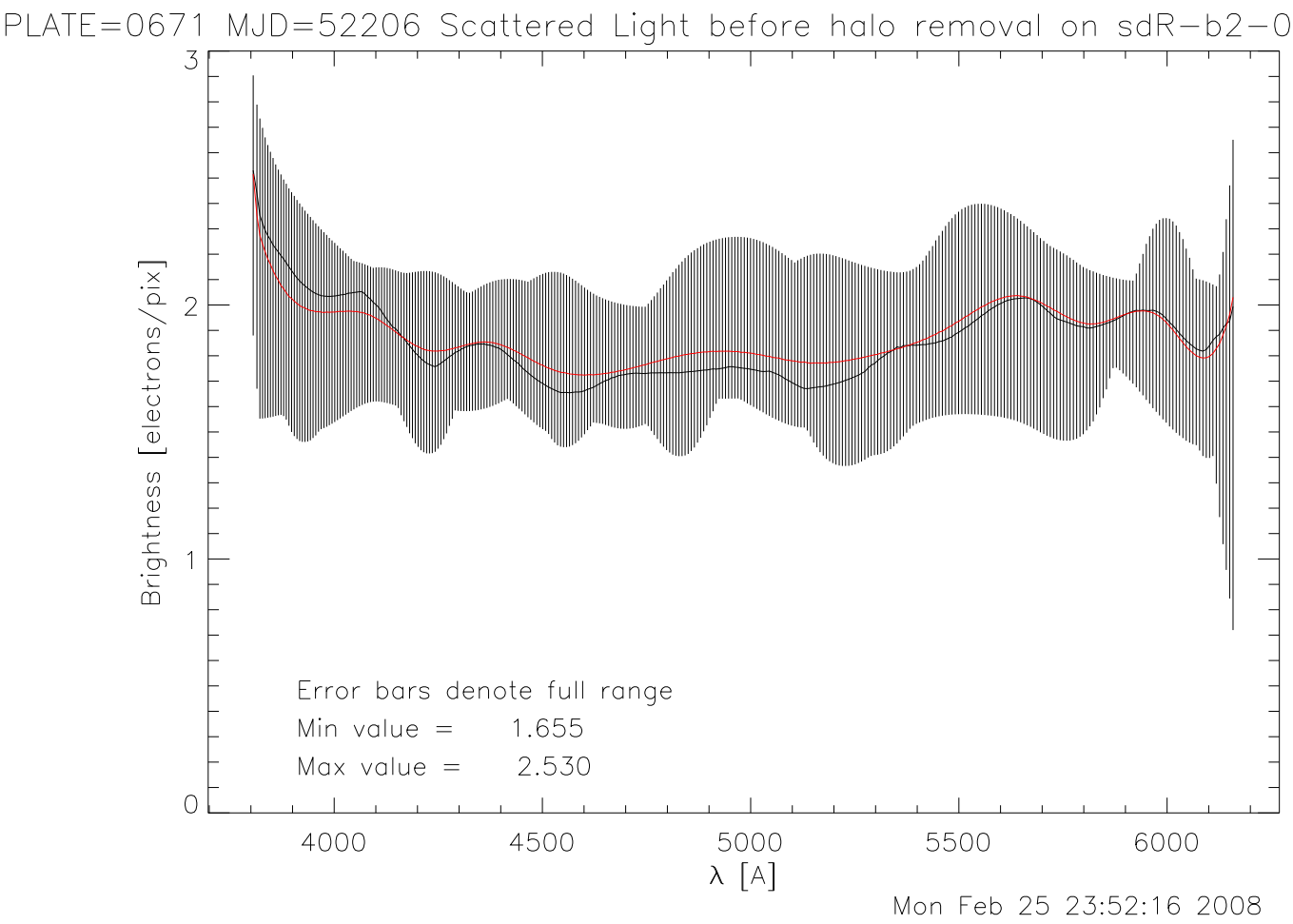

Number of sky fibers = 30
PLATE=0671 MJD=52206 sdR-b2-00011488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

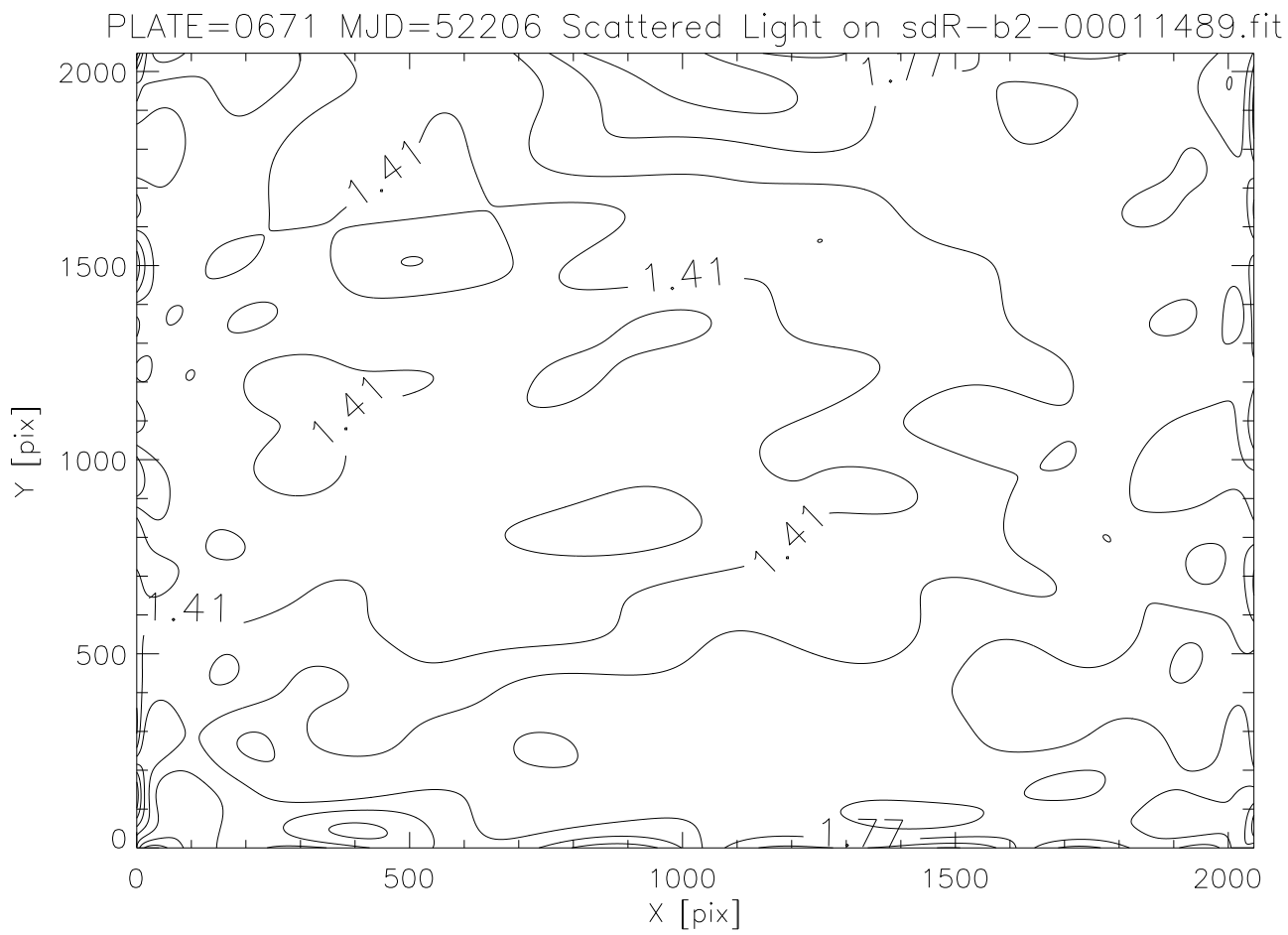

PLATE=0671 MJD=52206 sdR-b2-00011488.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.61 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

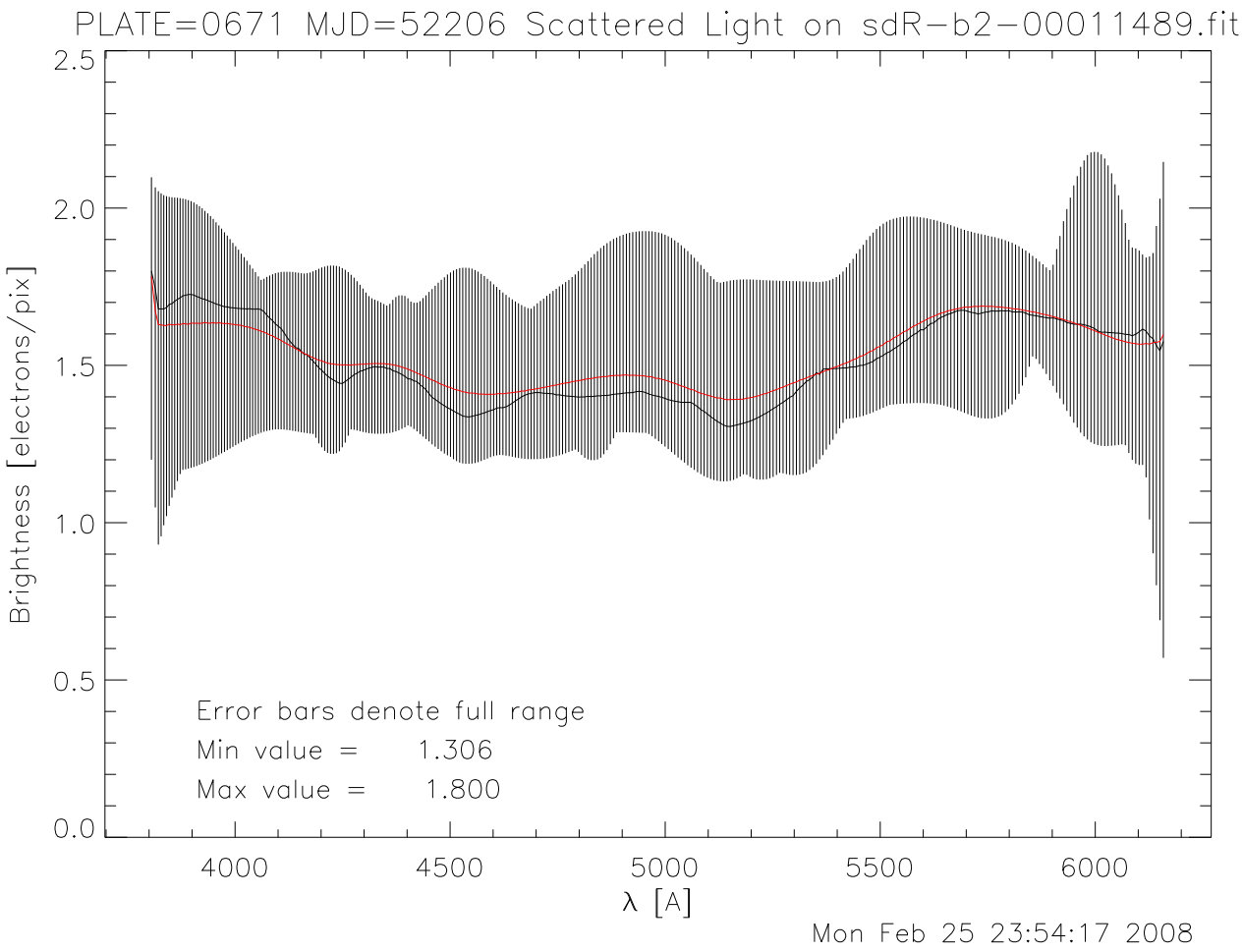

PLATE=0671 MJD=52206 sdR-b2-00011488.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.25 %
Fiber number
Focal Distance [mm]
Airmass

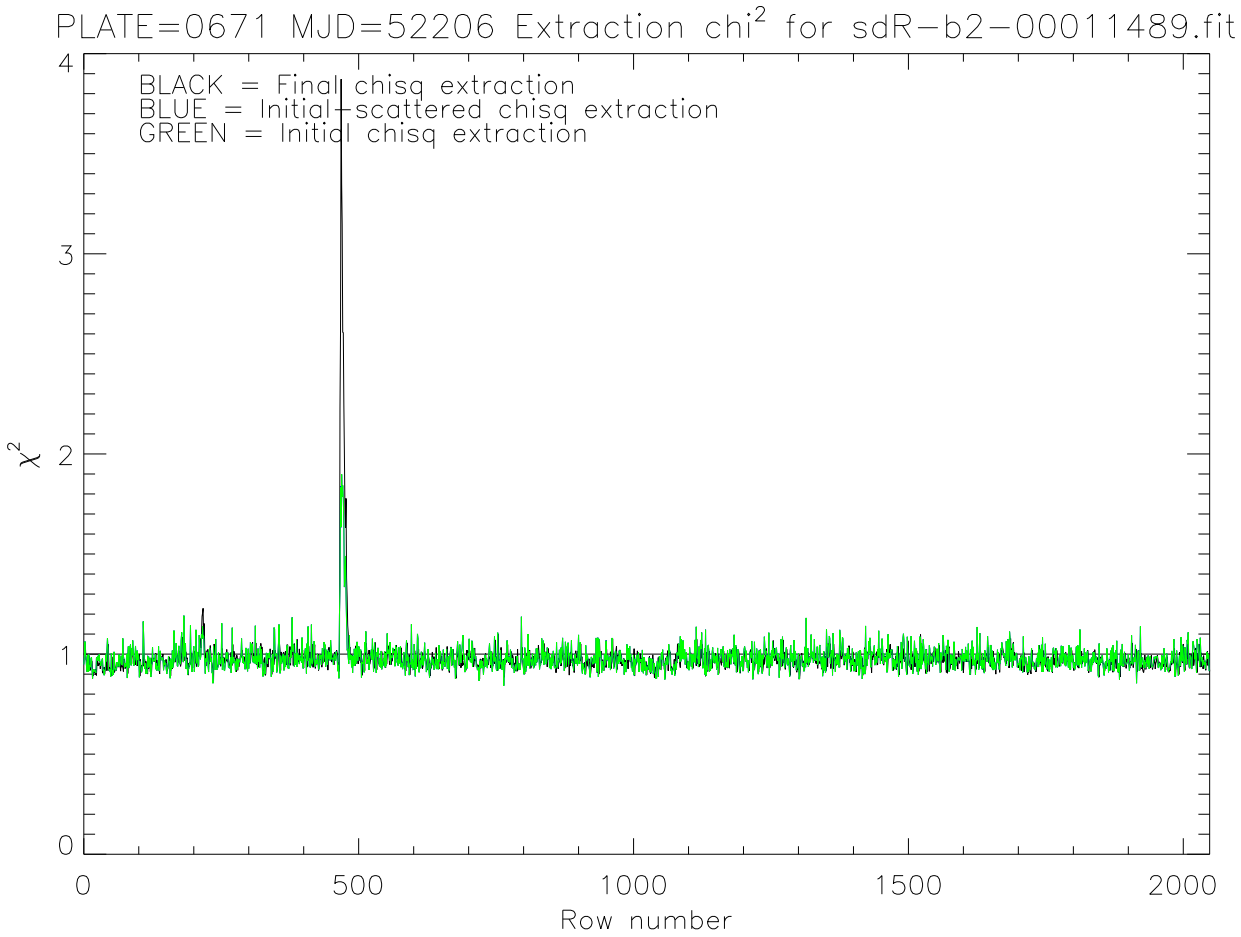

PLATE=0671 MJD=52206 Fiber-Flats for sdR-b2-00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.486
Max value = 1.276
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:51:43 2008

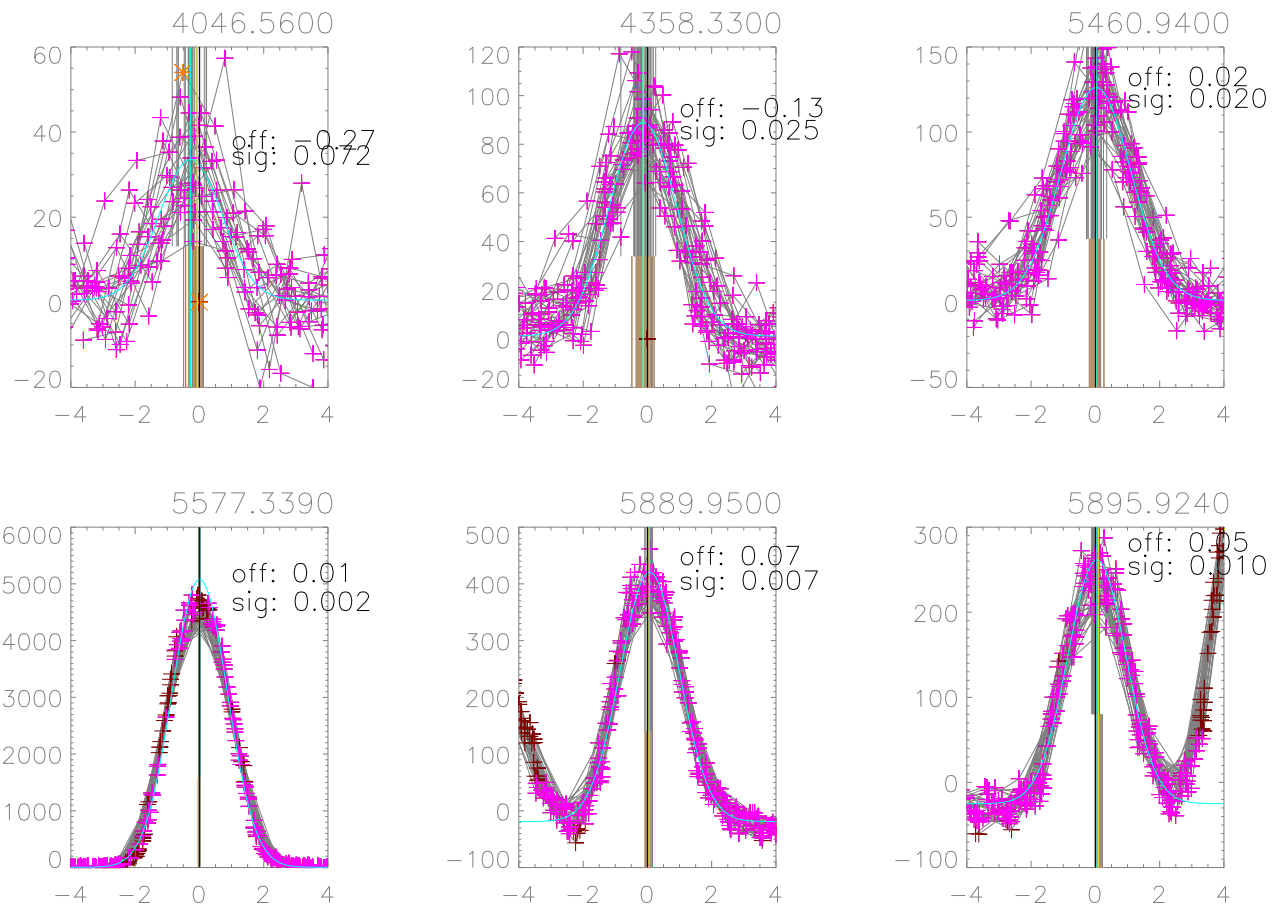

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR−b2−00011489.f
1.91
1.91
1.91
1.91
1.91
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

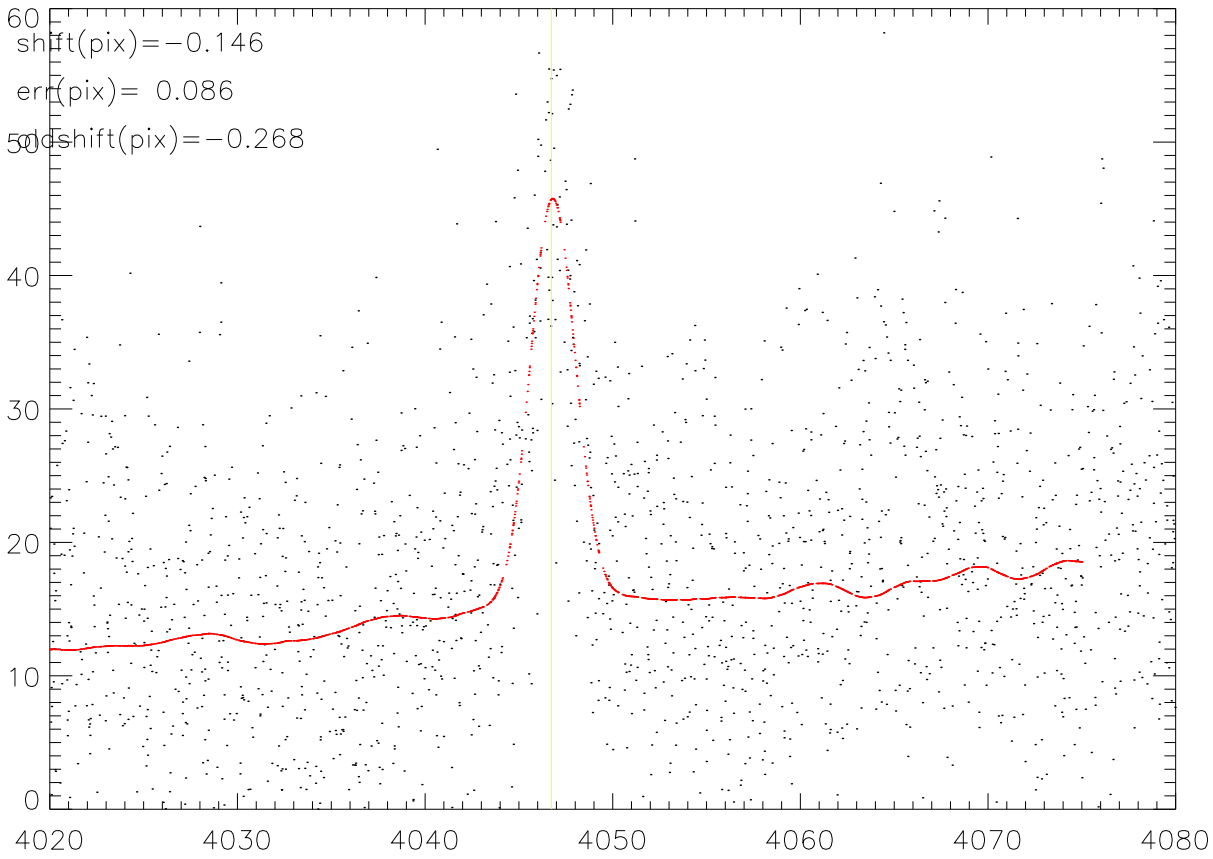

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-b2-00011489.f
Brightness [electrons/pix]
0
1
2
3
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 1.655
Max value = 2.530
Mon Feb 25 23:52:16 2008

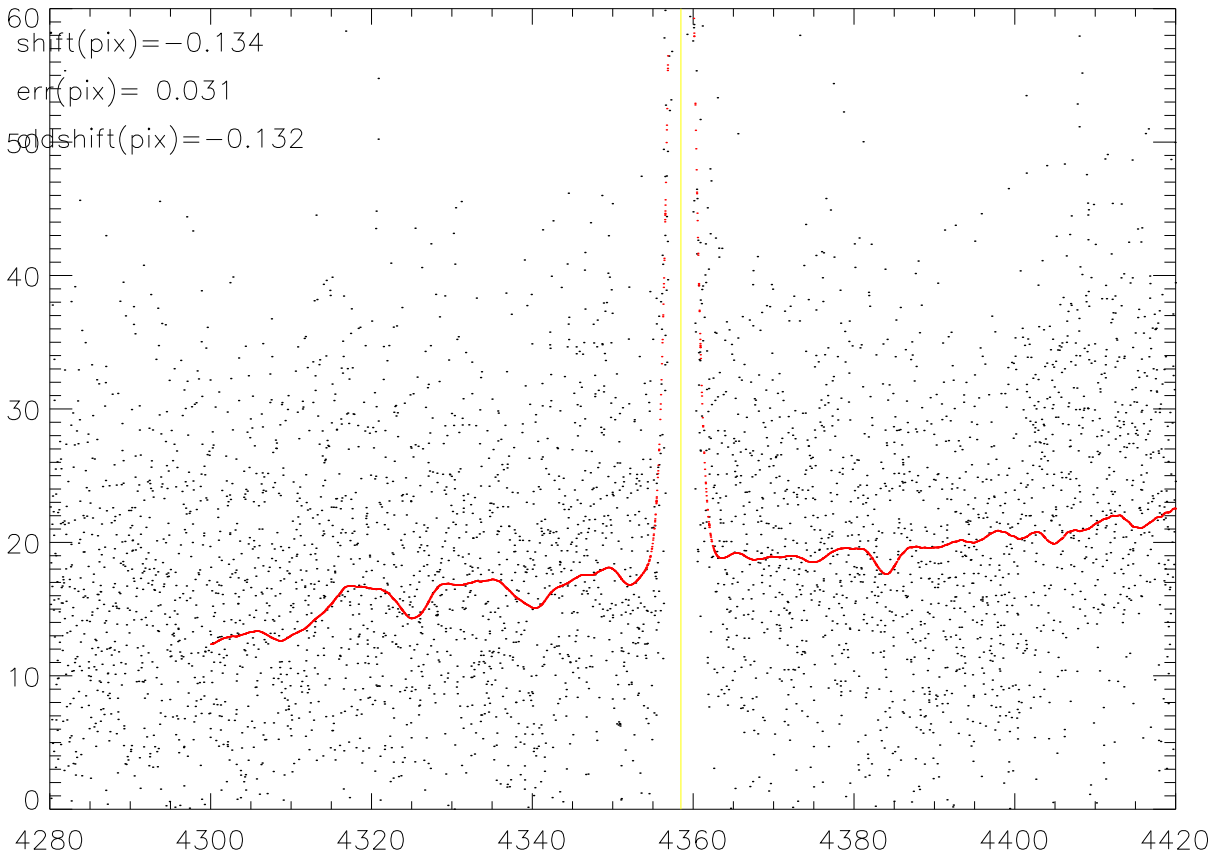

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011489.fit
1.41
1.41
1.41
1.41
1.41
1.77
1.77
0
0
500
1000
1500
2000
Y [pix]
X [pix]

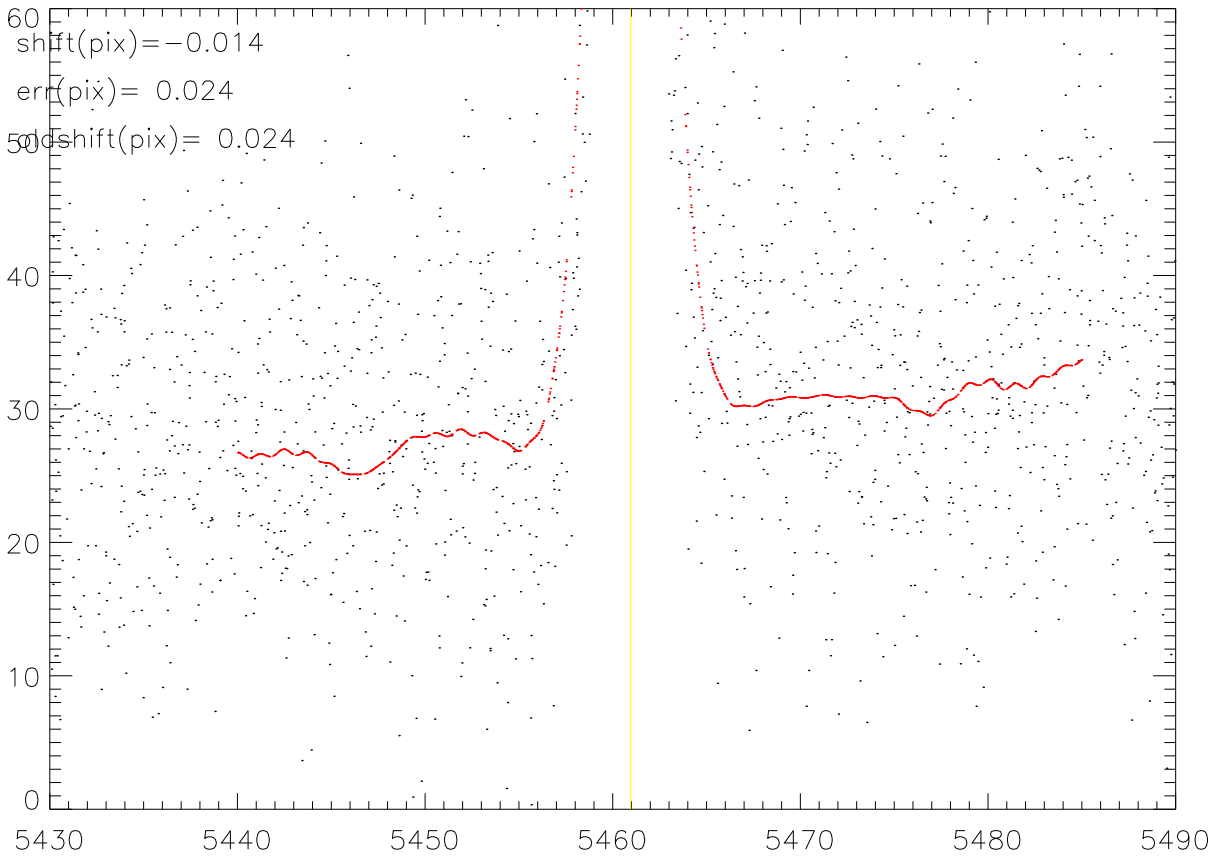

PLATE=0671 MJD=52206 Scattered Light on sdR-b2-00011489.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.306
Max value = 1.800
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 23:54:17 2008

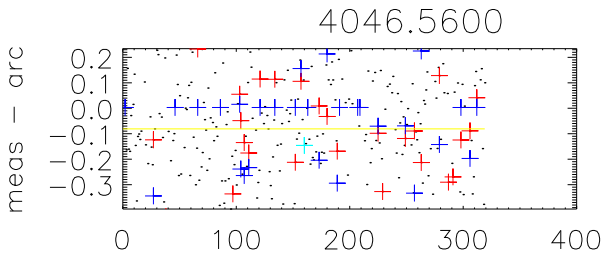

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-b2-00011489.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

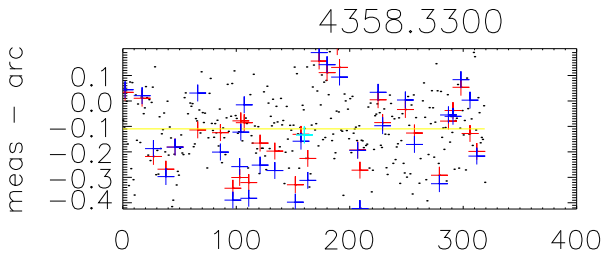

4046.5600
off: −0.27
sig: 0.072
4358.3300
off: −0.13
sig: 0.025
5460.9400
off: 0.02
sig: 0.020
5577.3390
off: 0.01
sig: 0.002
5889.9500
off: 0.07
sig: 0.007
5895.9240
off: 0.05
sig: 0.010

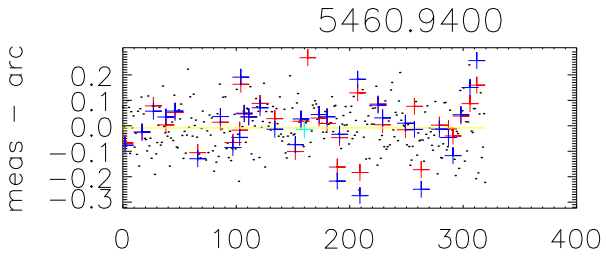

shift(pix)=−0.146
err(pix)= 0.086
oldshift(pix)=−0.268
60
50
40
30
20
10
0
4020
4030
4040
4050
4060
4070
4080

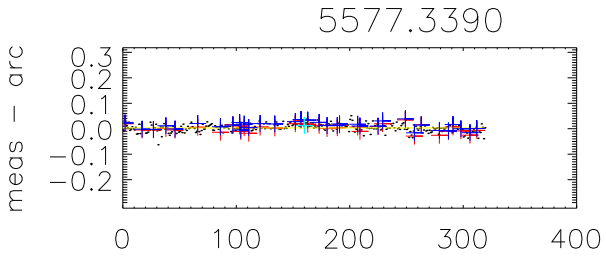

shift(pix)=−0.134
err(pix)= 0.031
oldshift(pix)=−0.132
60
50
40
30
20
10
0
4280
4300
4320
4340
4360
4380
4400
4420

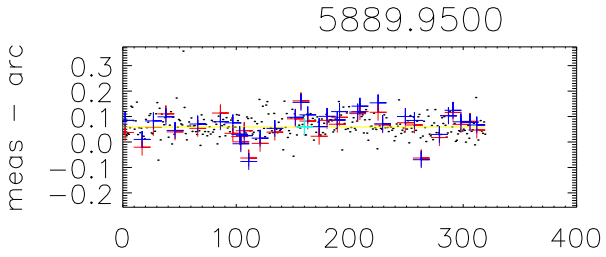

shift(pix)=−0.014
err(pix)= 0.024
oldshift(pix)= 0.024
60
50
40
30
20
10
0
5430
5440
5450
5460
5470
5480
5490

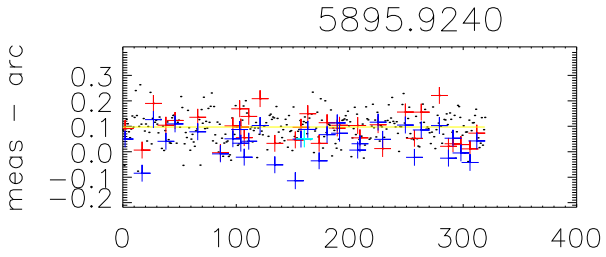

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

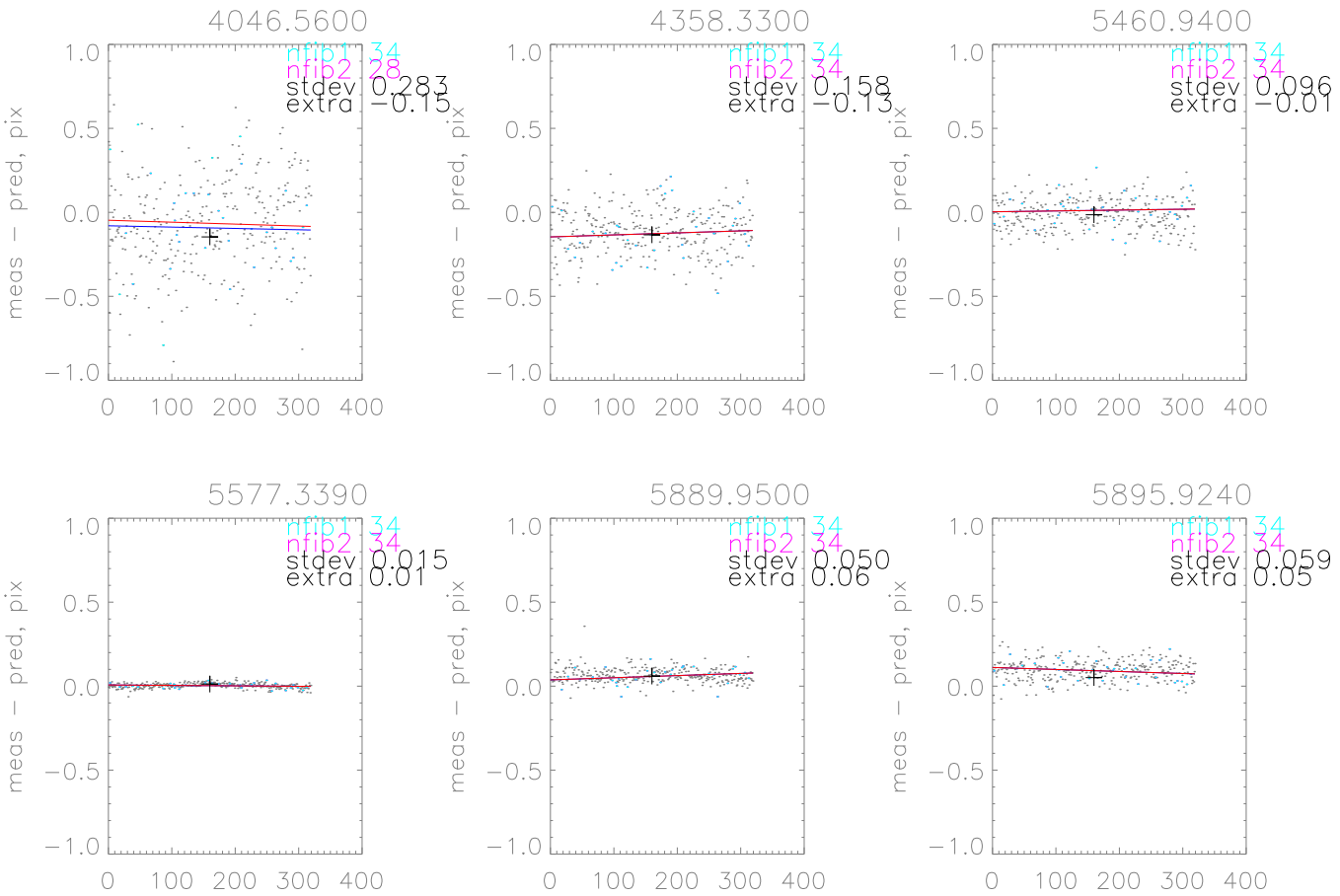

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

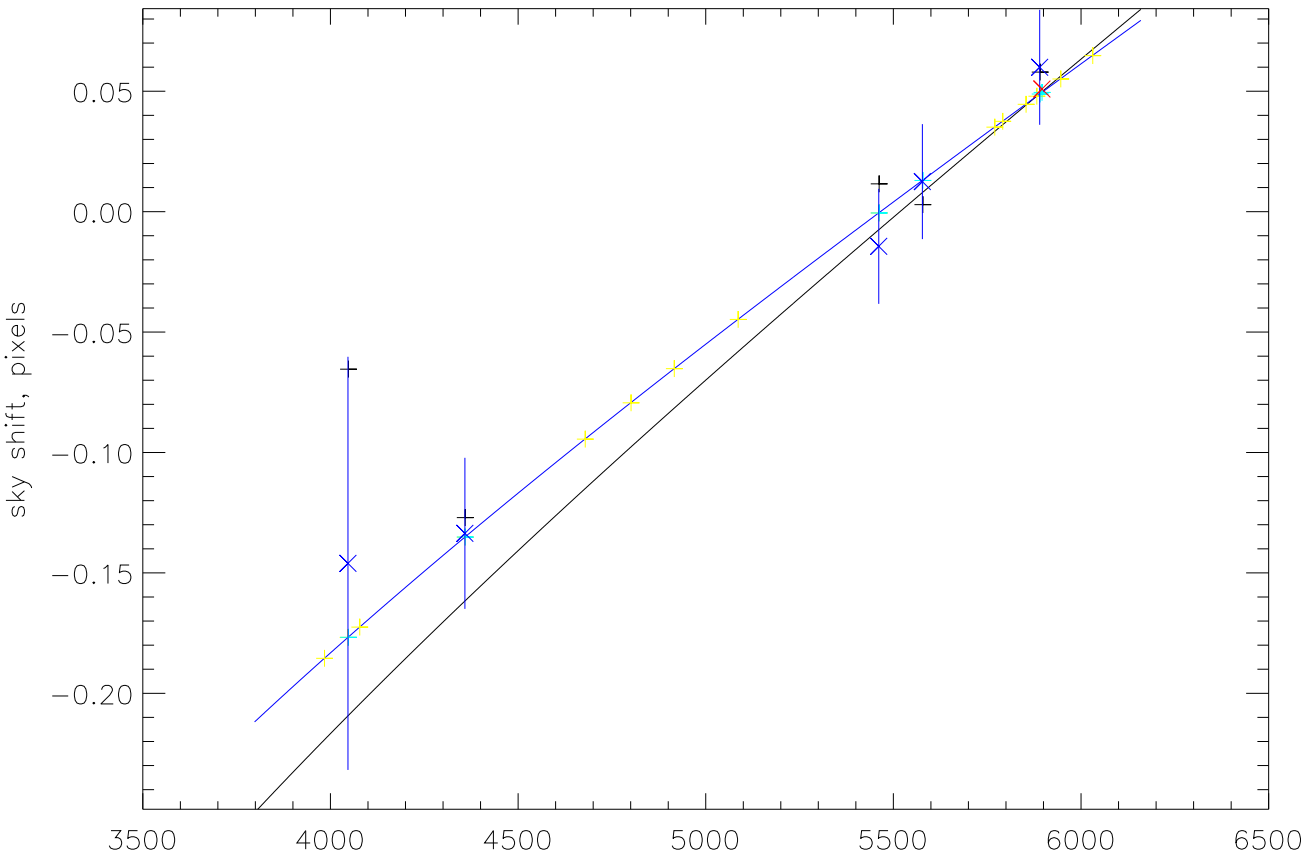

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

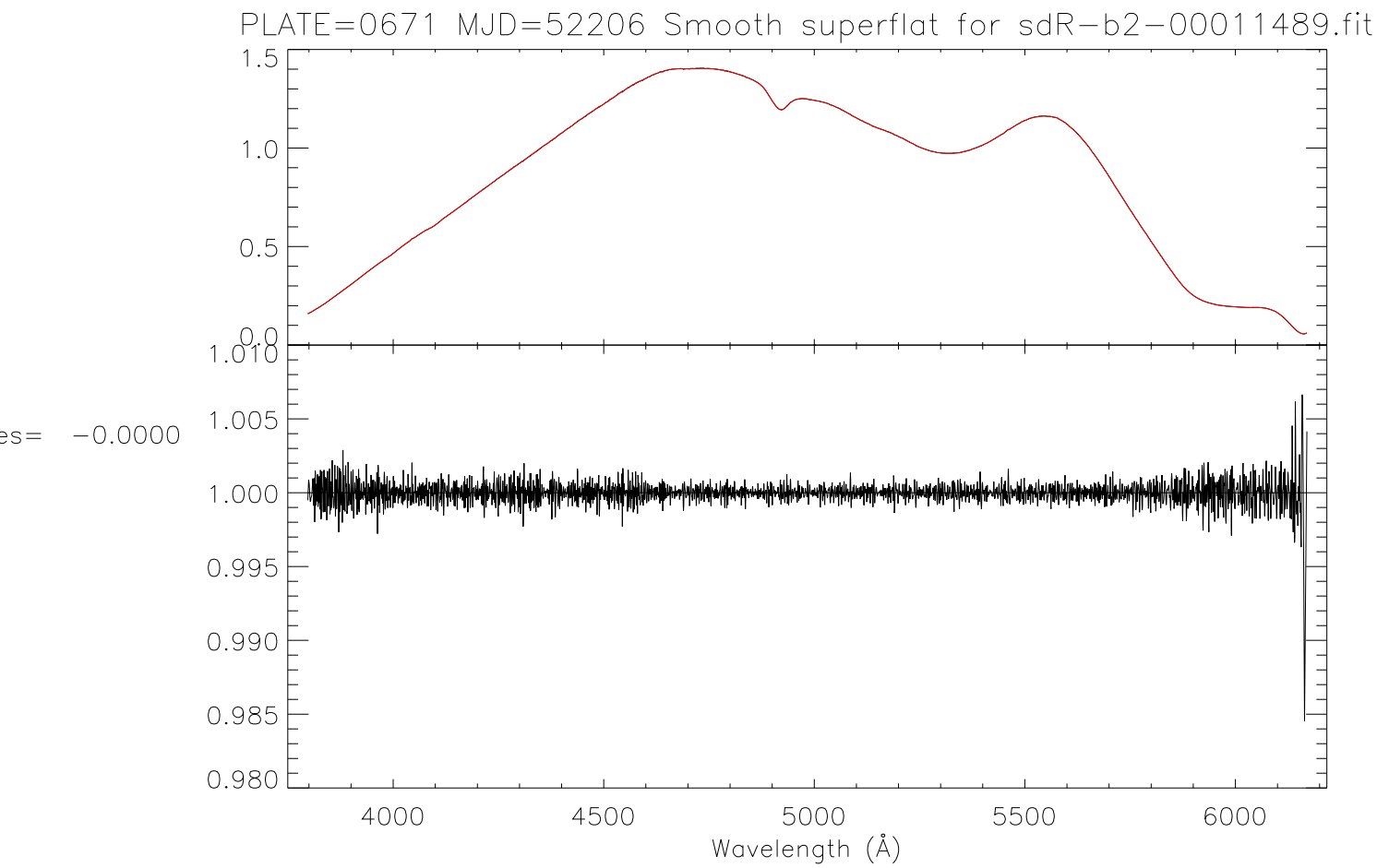

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

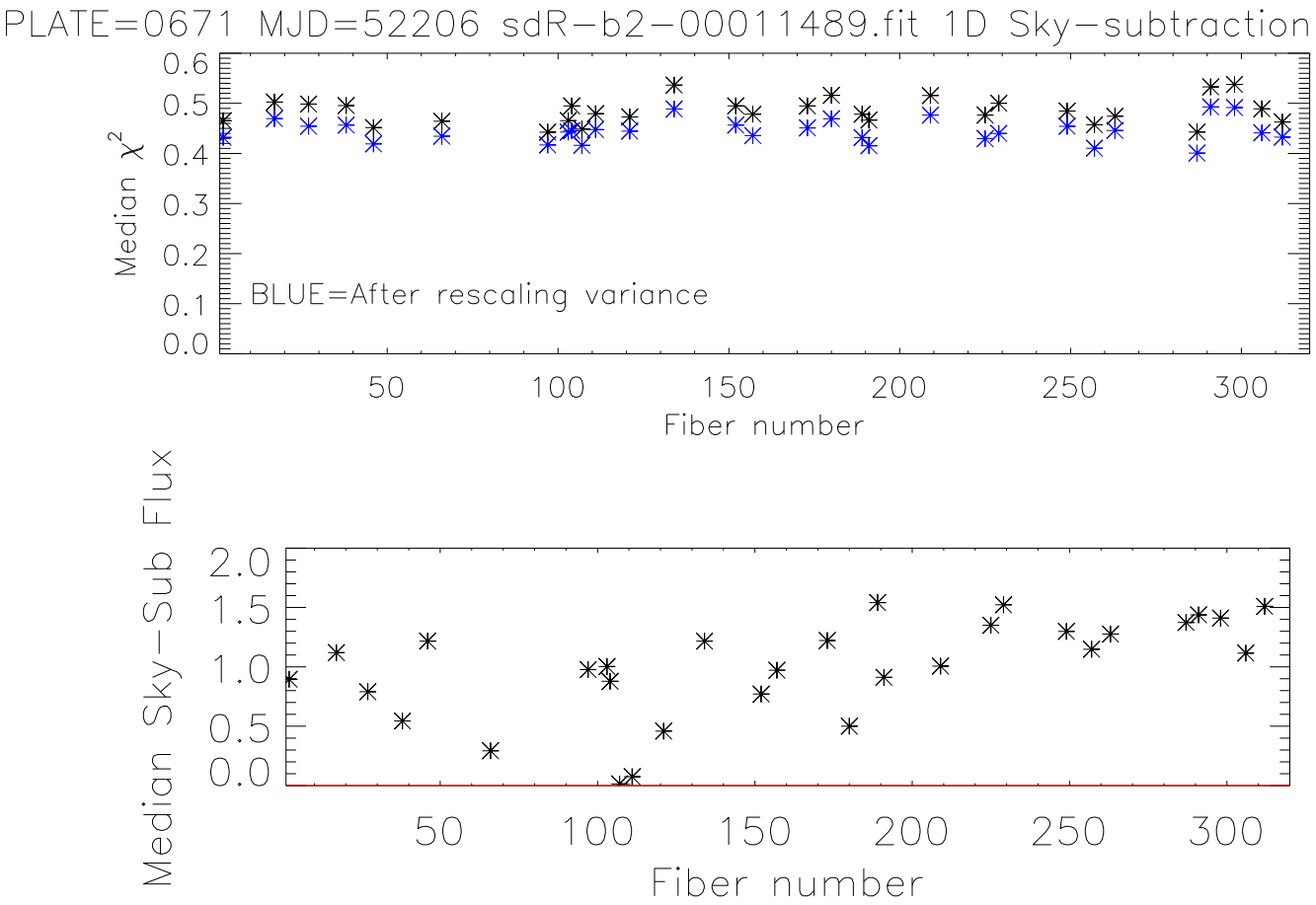

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

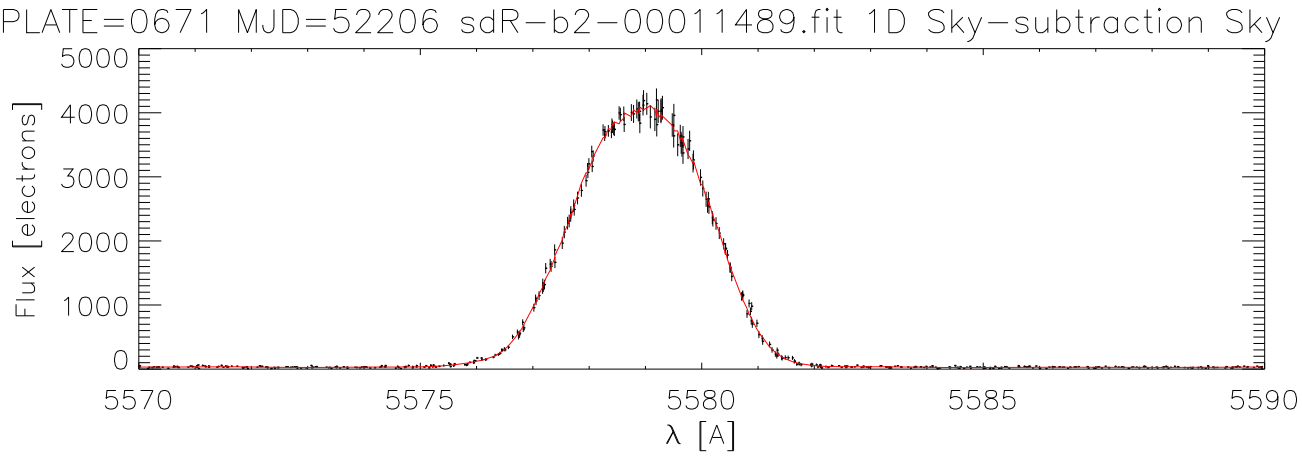

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

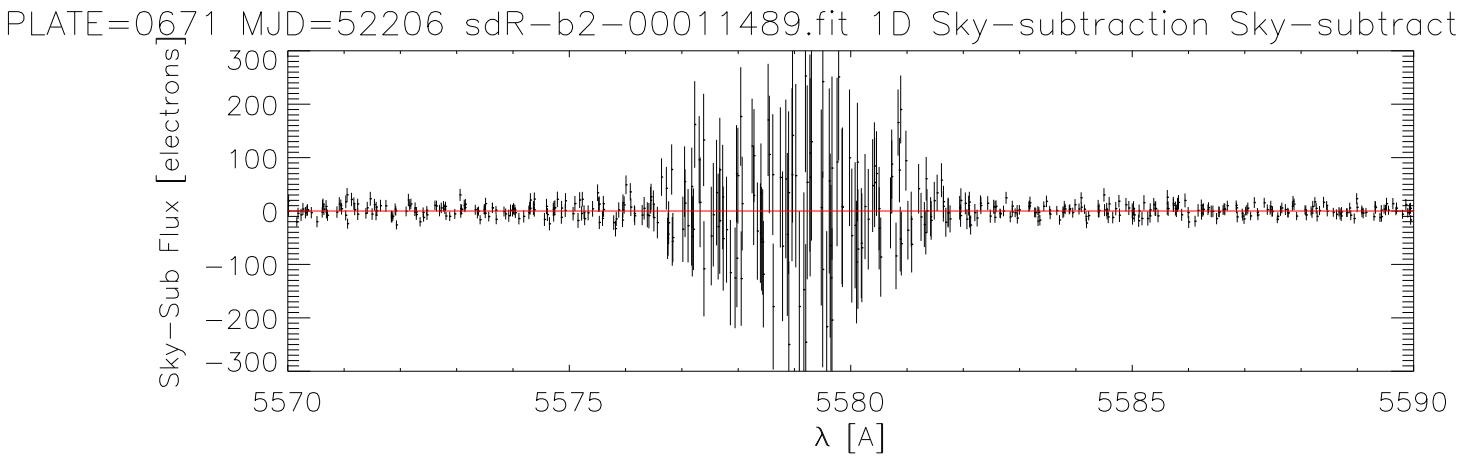

4046.5600
nfib1 34
nfib2 28
stdev 0.283
extra −0.15
4358.3300
nfib1 34
nfib2 34
stdev 0.158
extra −0.13
5460.9400
nfib1 34
nfib2 34
stdev 0.096
extra −0.01
5577.3390
nfib1 34
nfib2 34
stdev 0.015
extra 0.01
5889.9500
nfib1 34
nfib2 34
stdev 0.050
extra 0.06
5895.9240
nfib1 34
nfib2 34
stdev 0.059
extra 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

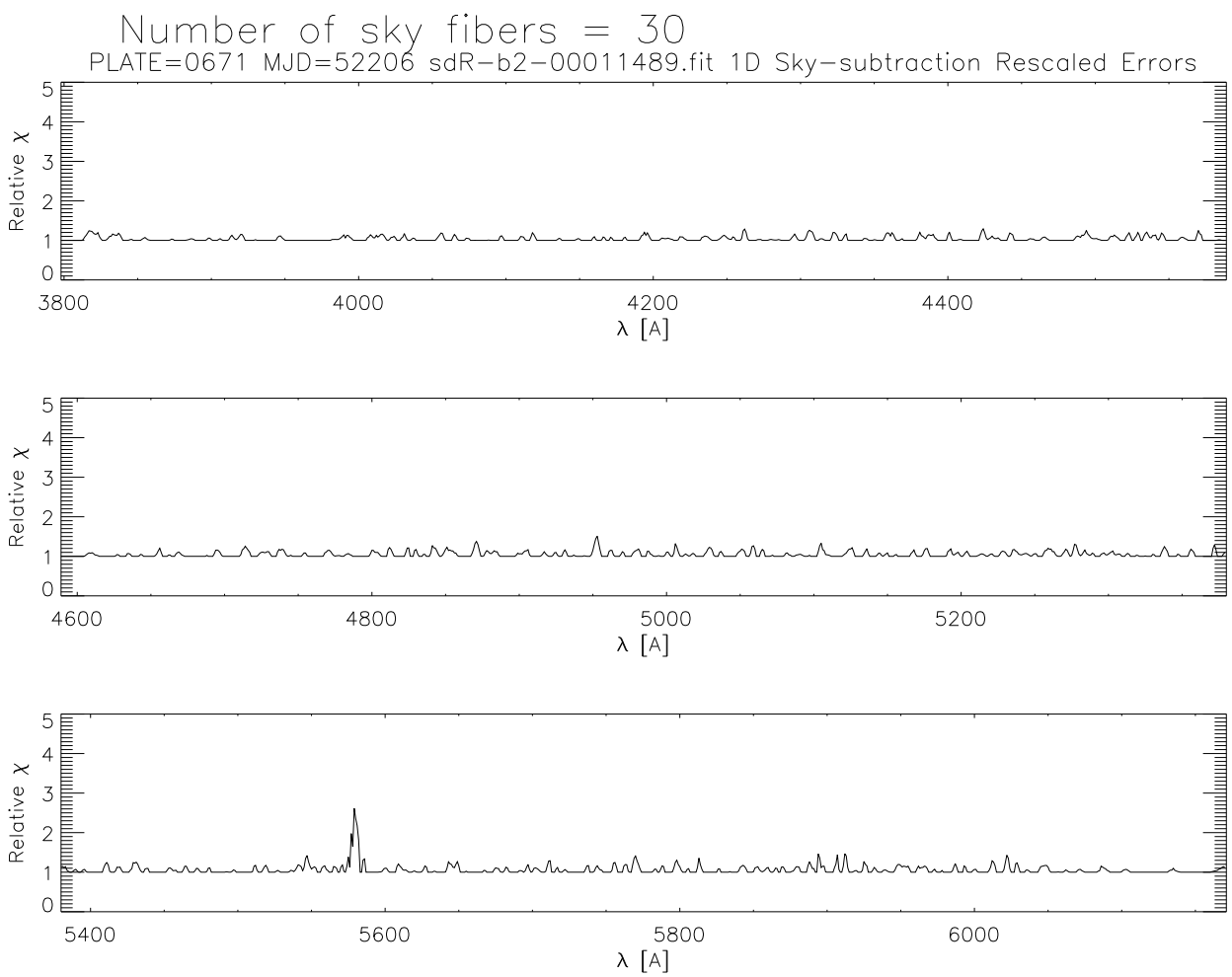

0.05
0.00
−0.05
−0.10
−0.15
−0.20
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

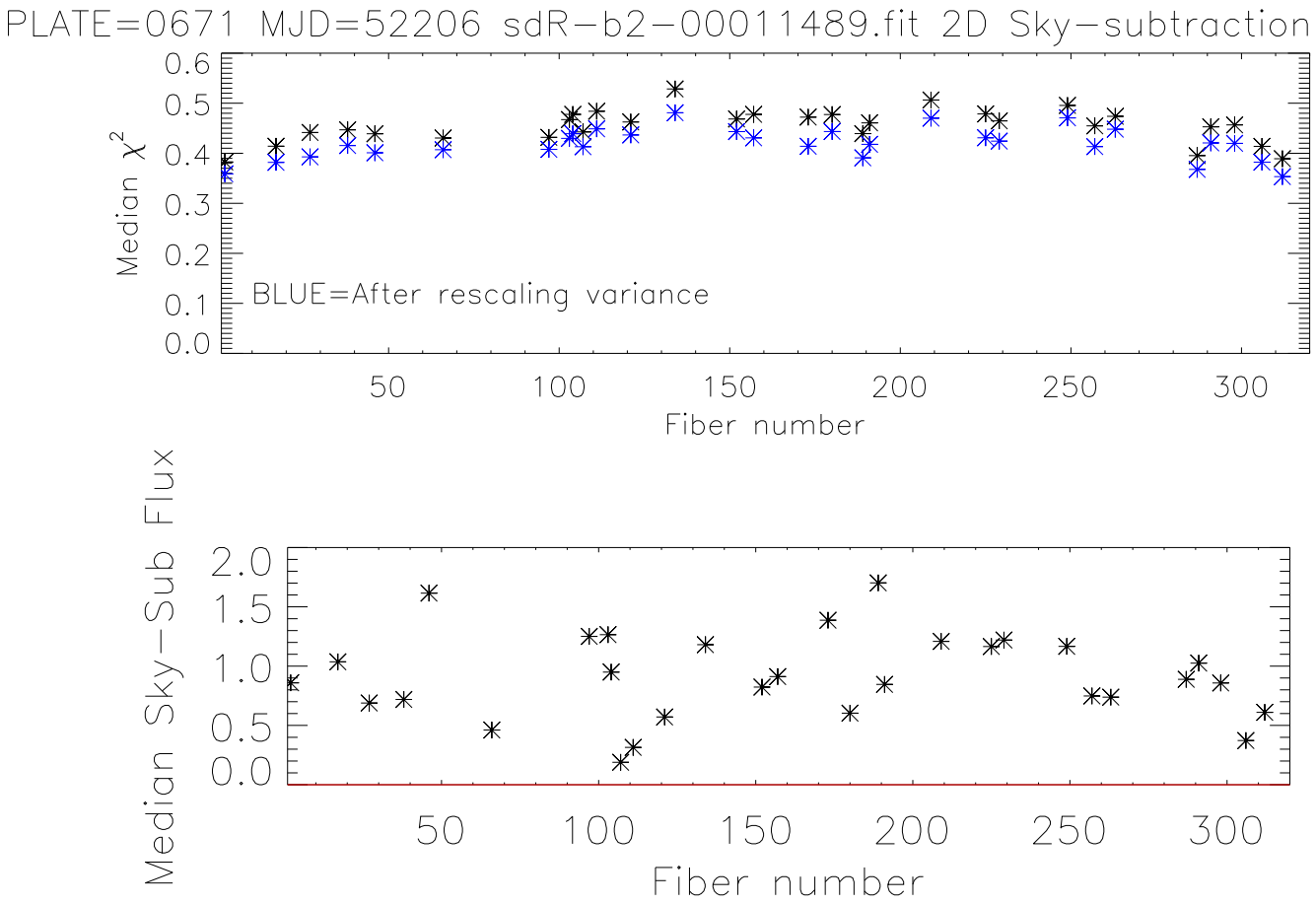

PLATE=0671 MJD=52206 Smooth superflat for sdR-b2-00011489.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

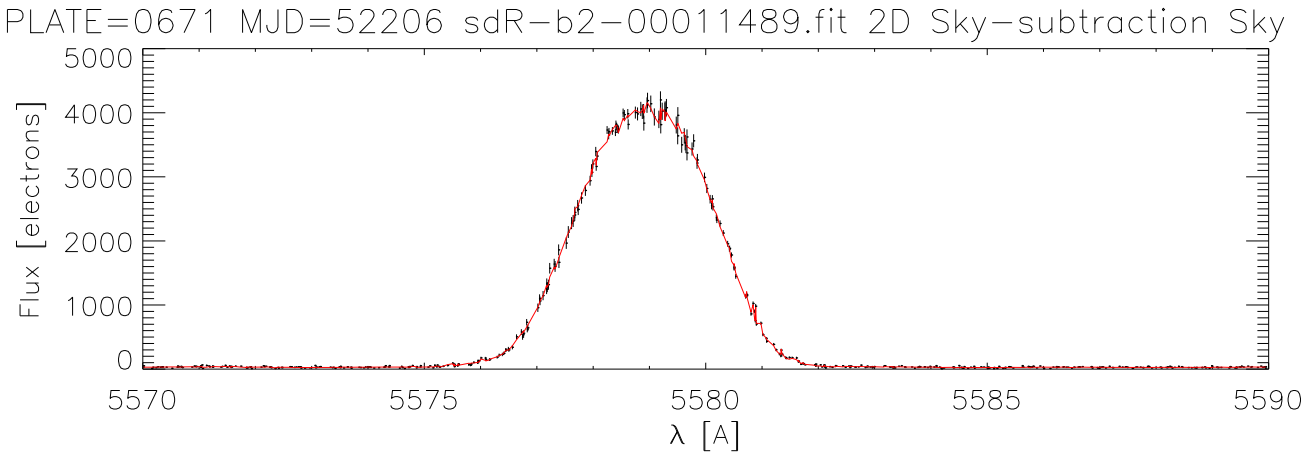

PLATE=0671 MJD=52206 sdR-b2-00011489.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

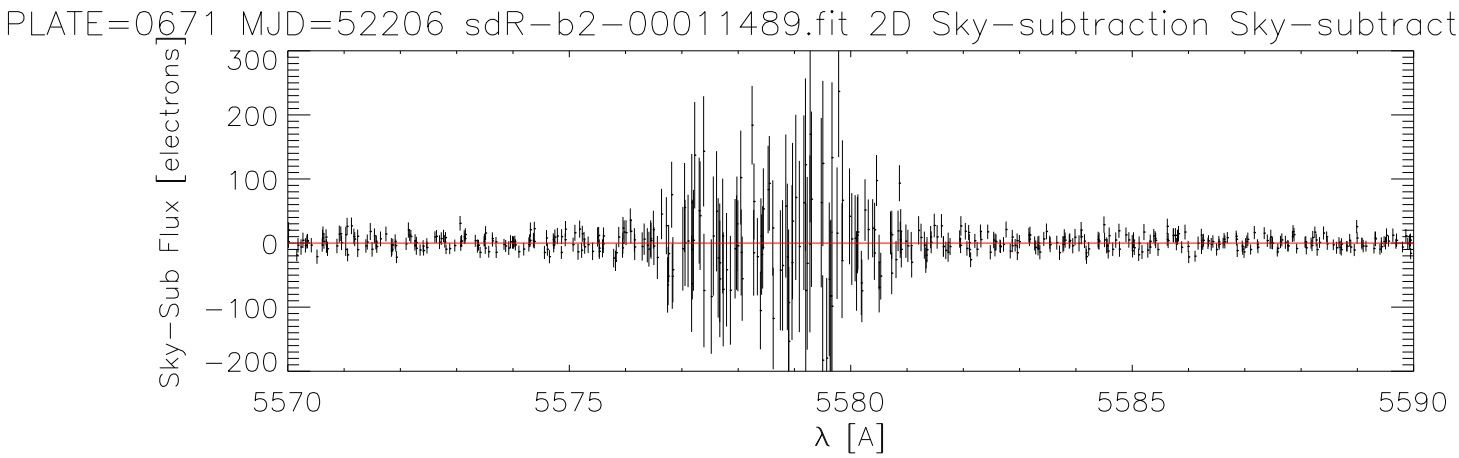

PLATE=0671 MJD=52206 sdR-b2-00011489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

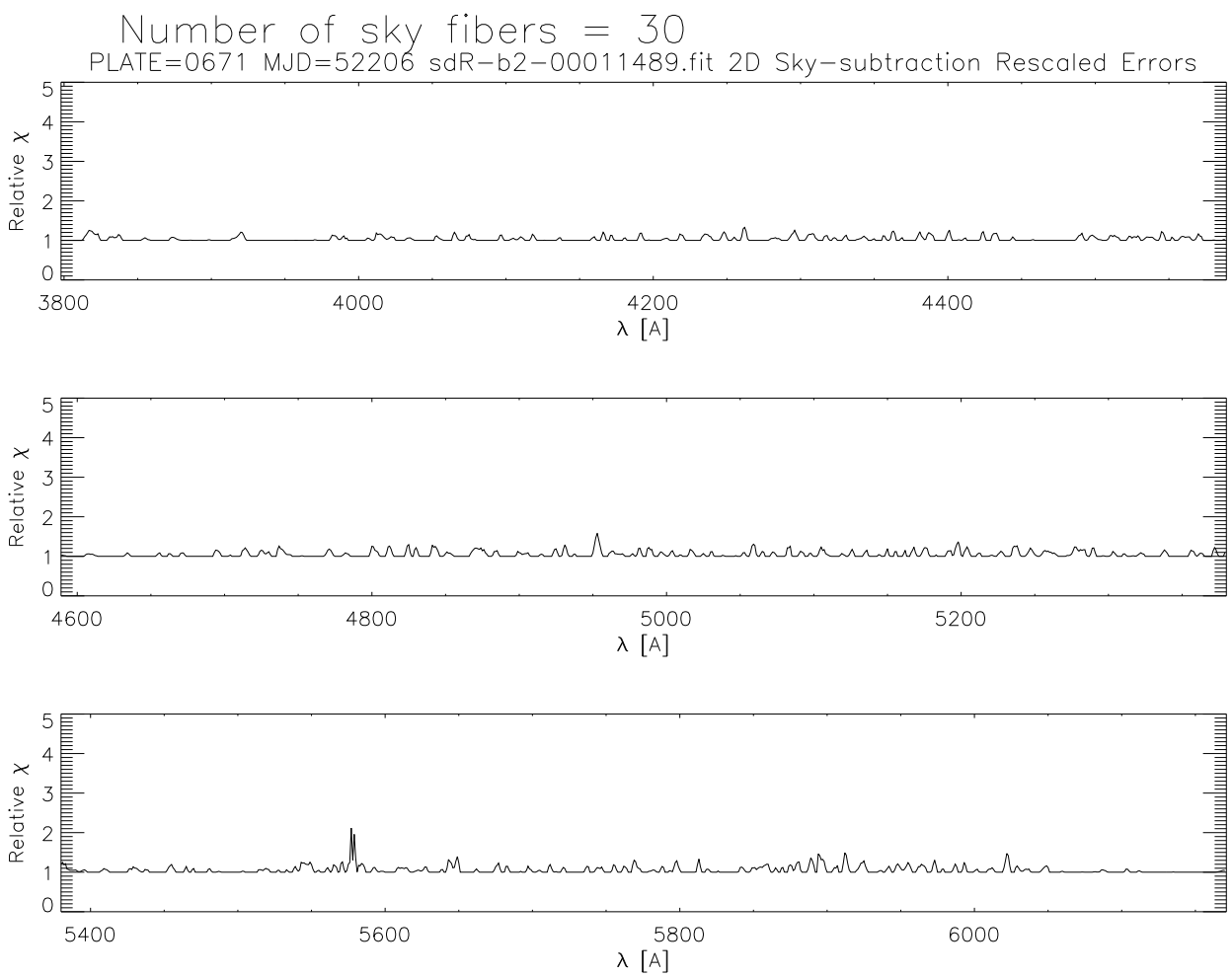

PLATE=0671 MJD=52206 sdR-b2-00011489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

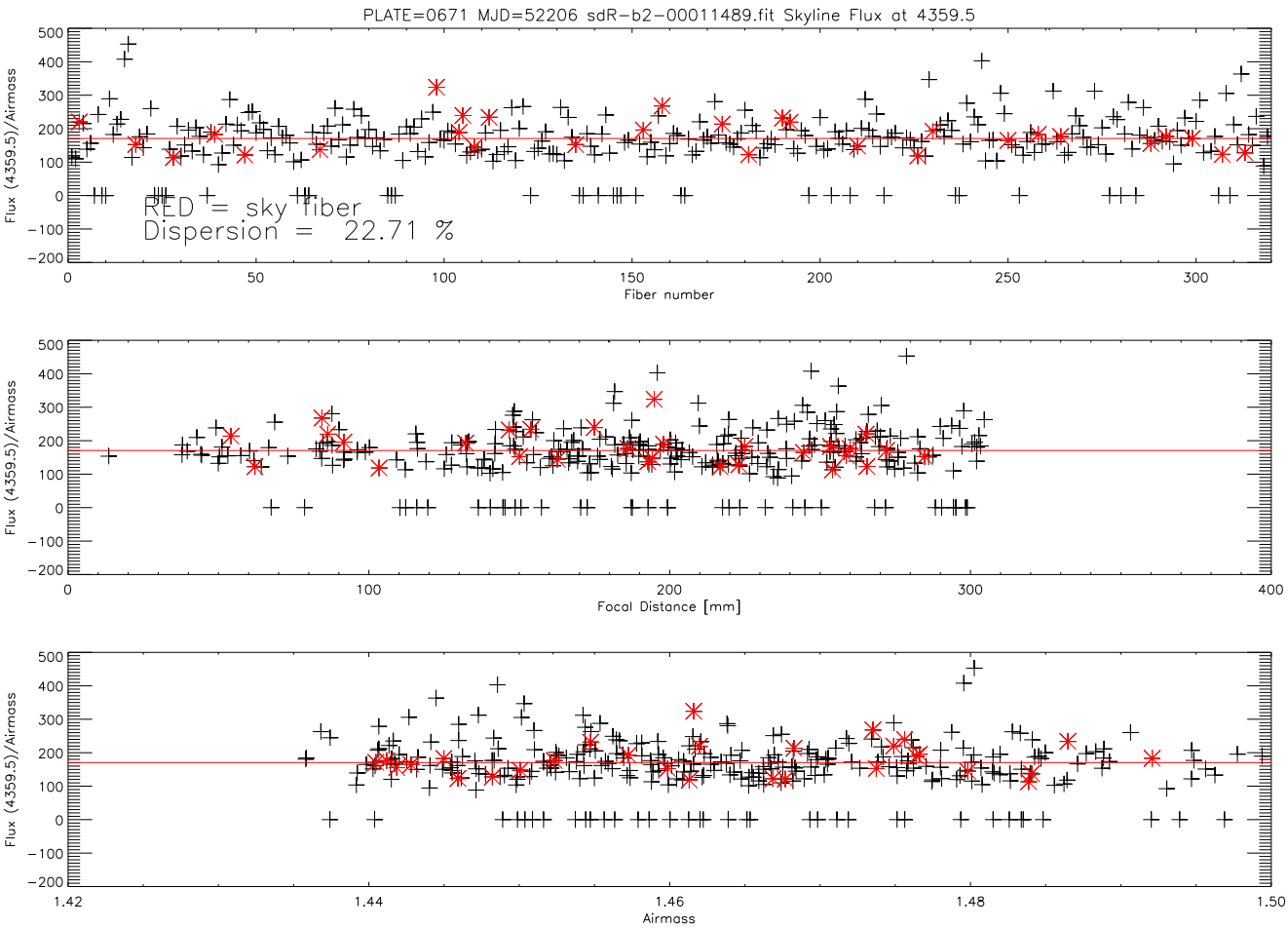

Number of sky fibers = 30
PLATE=0671 MJD=52206 sdR-b2-00011489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

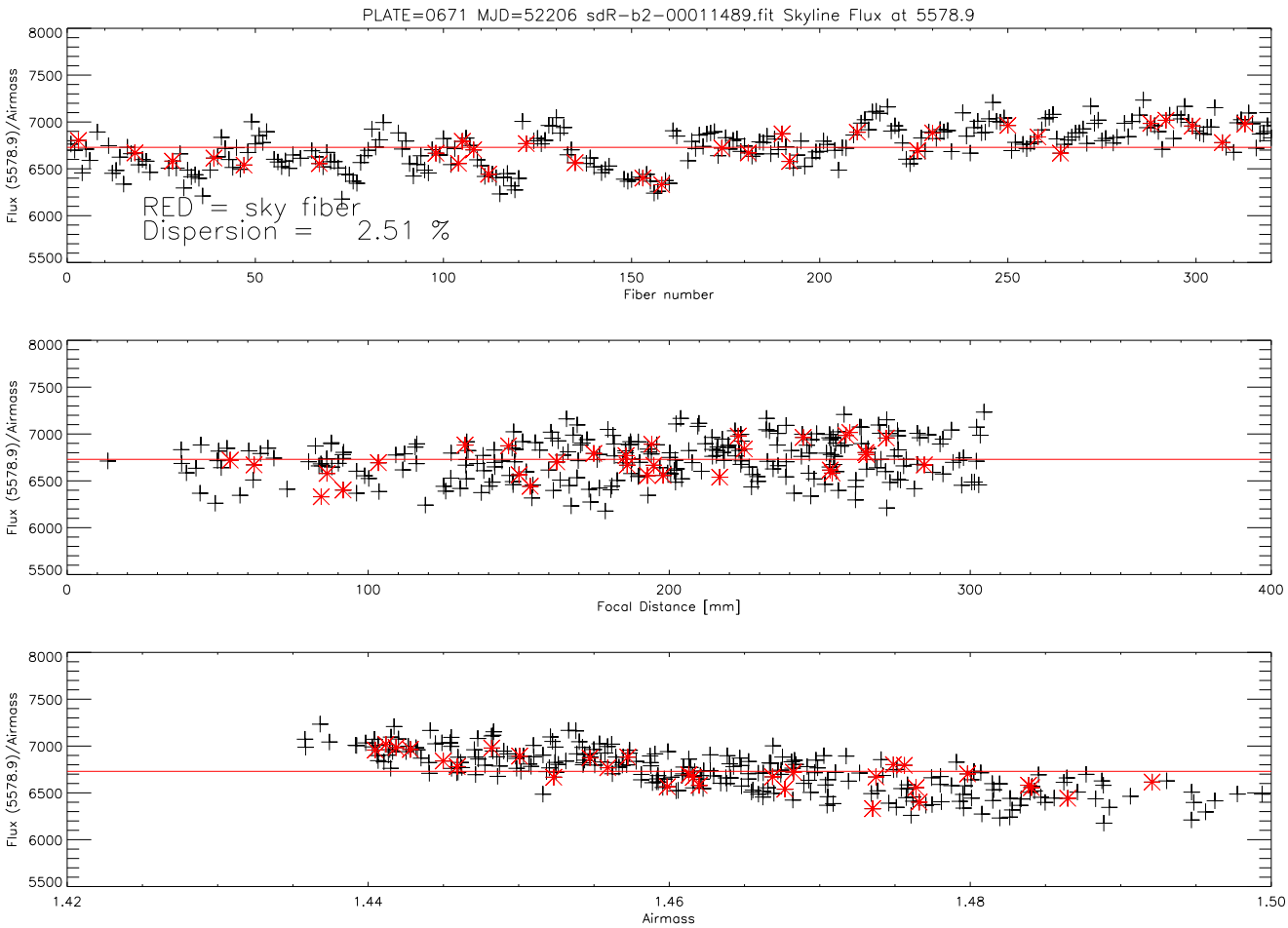

PLATE=0671 MJD=52206 sdR-b2-00011489.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

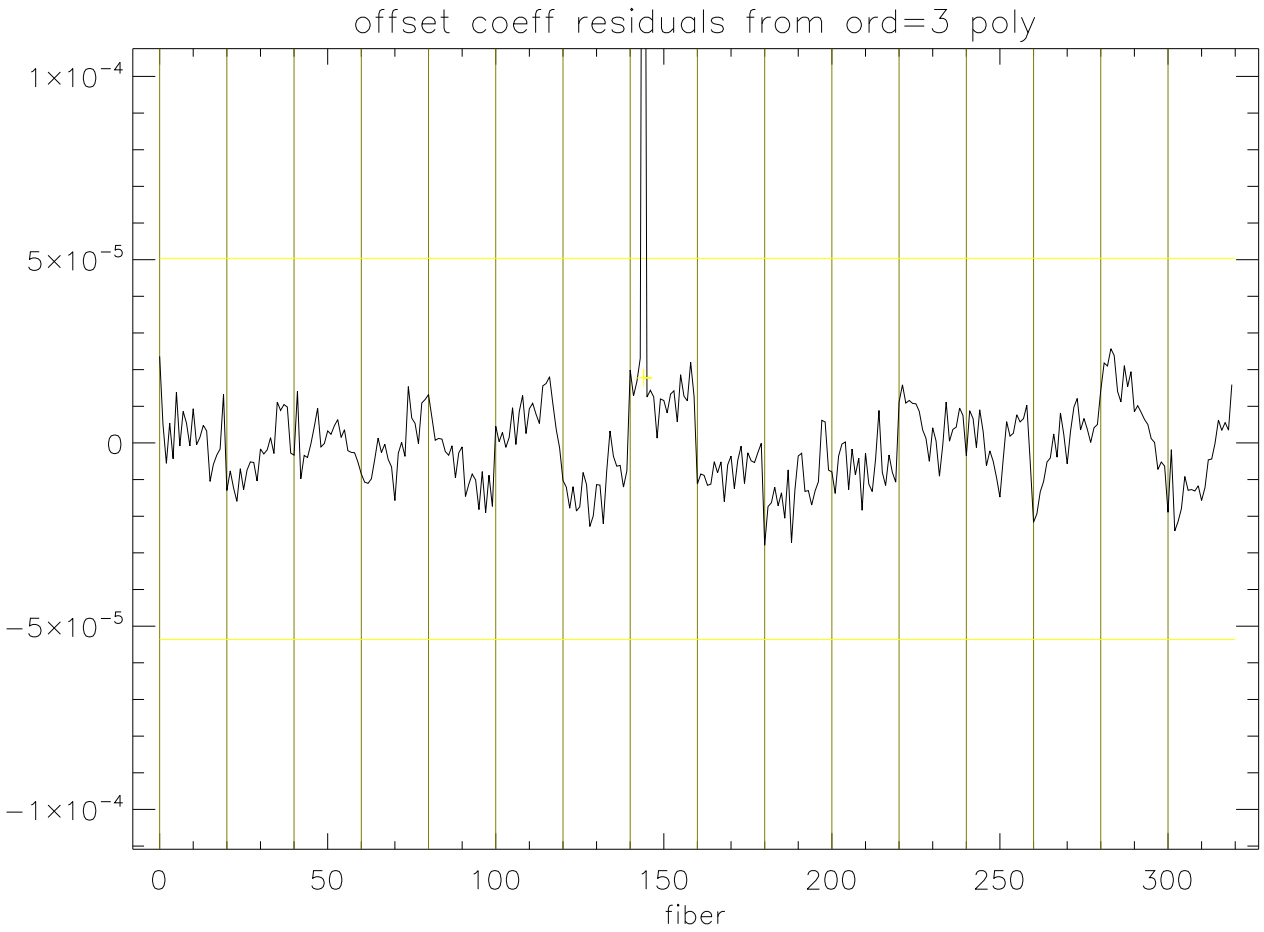

PLATE=0671 MJD=52206 sdR-b2-00011489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

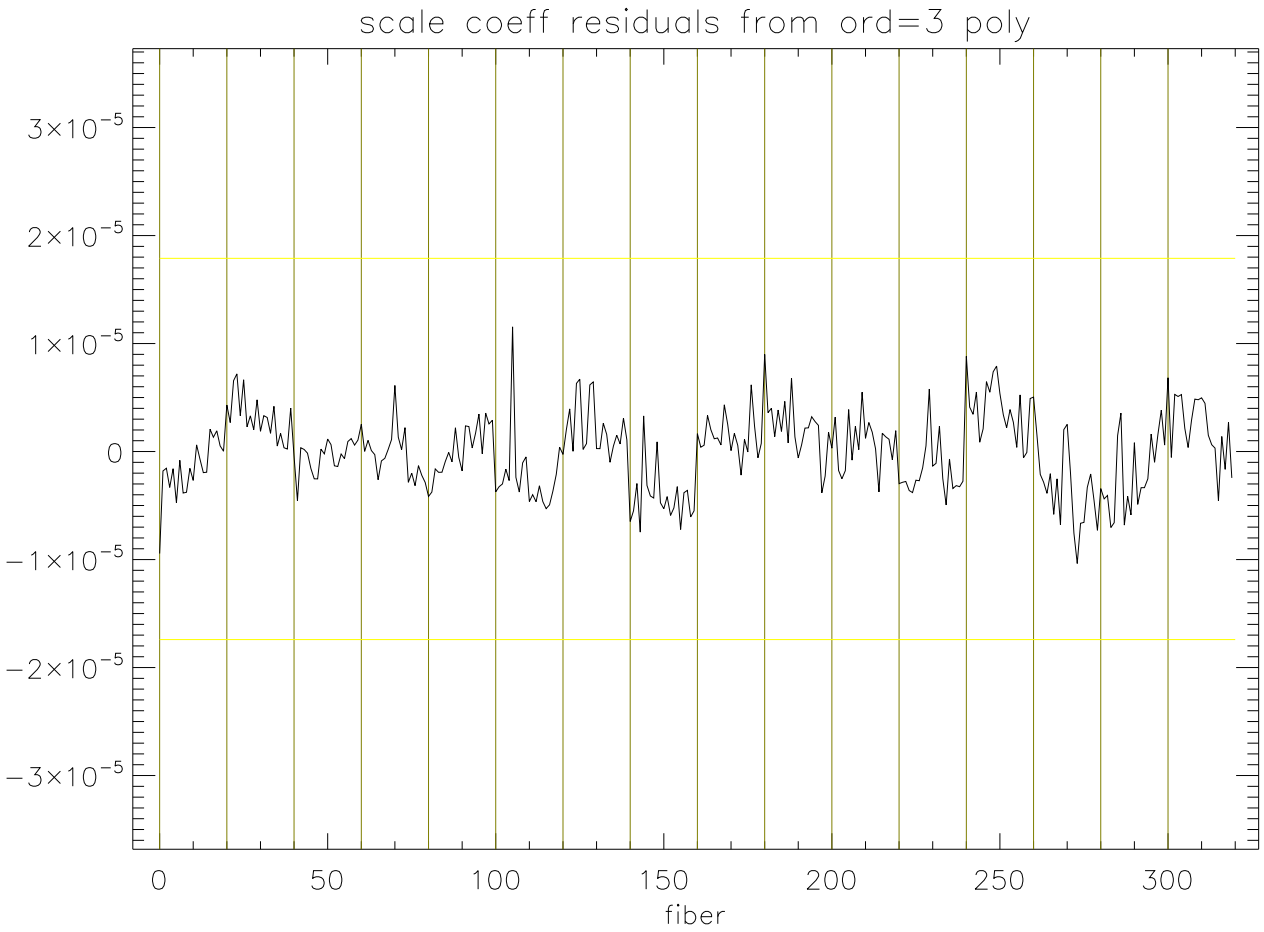

PLATE=0671 MJD=52206 sdR-b2-00011489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

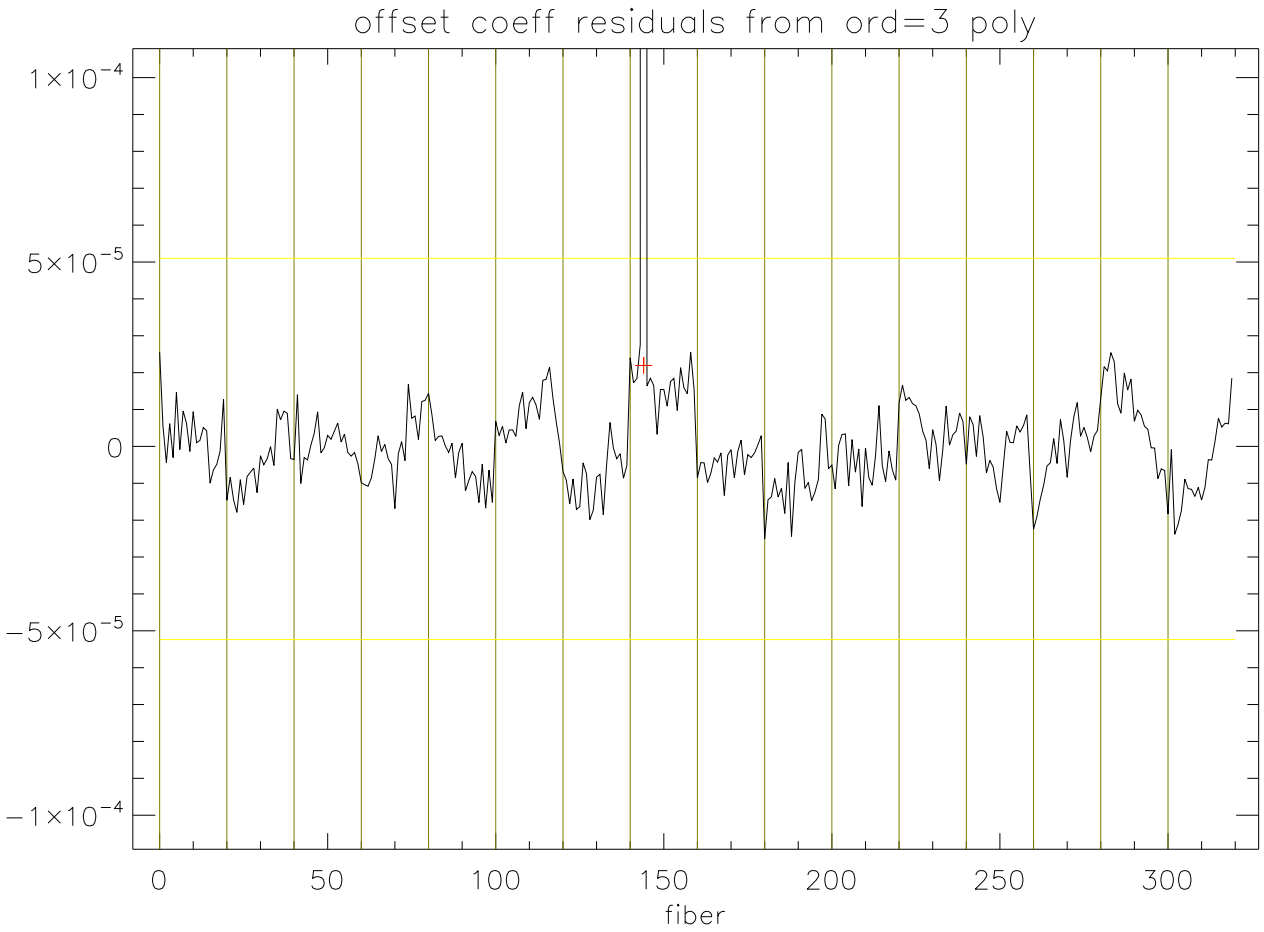

Number of sky fibers = 30
PLATE=0671 MJD=52206 sdR-b2-00011489.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

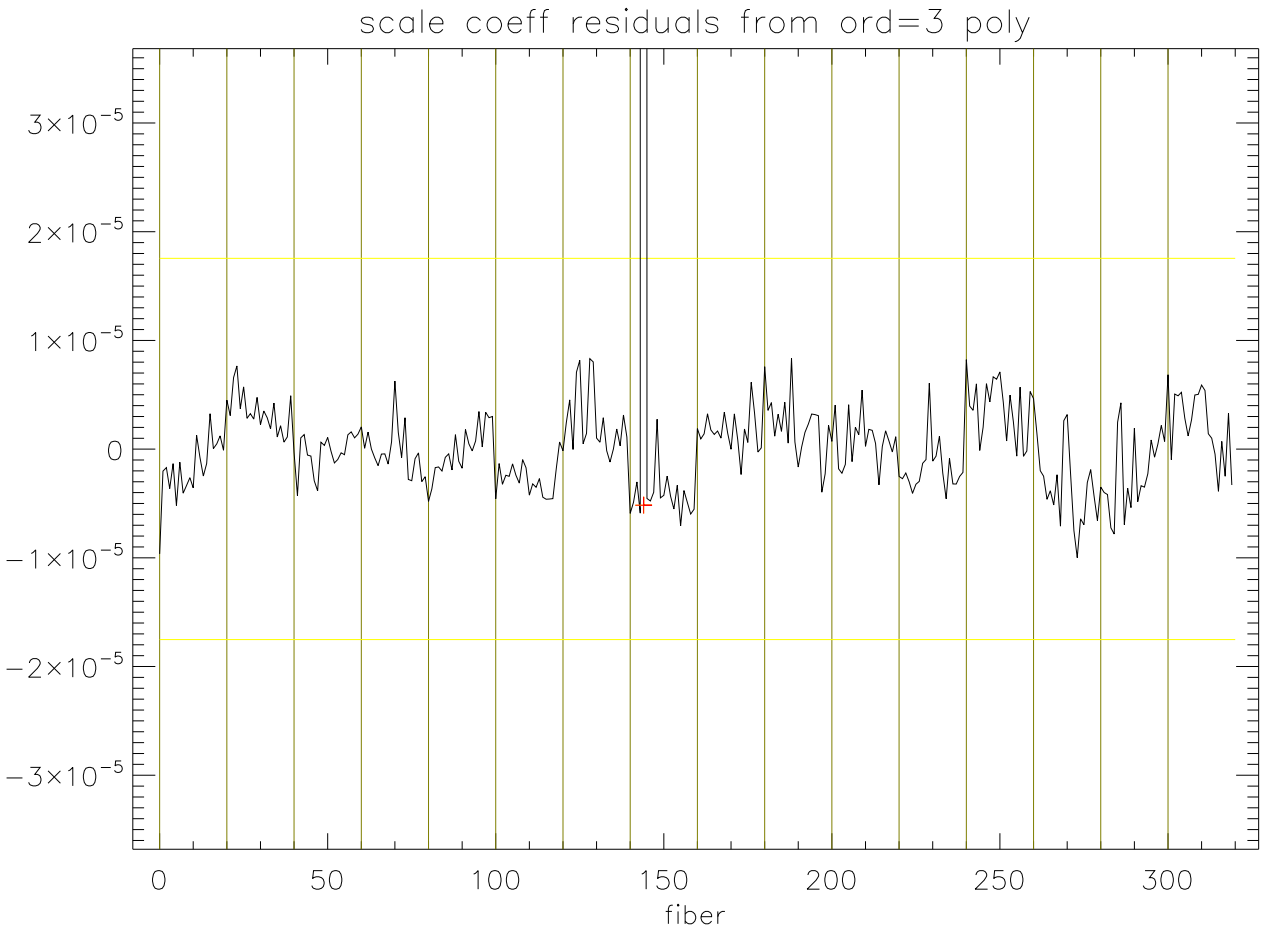

PLATE=0671 MJD=52206 sdR-b2-00011489.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 22.71 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

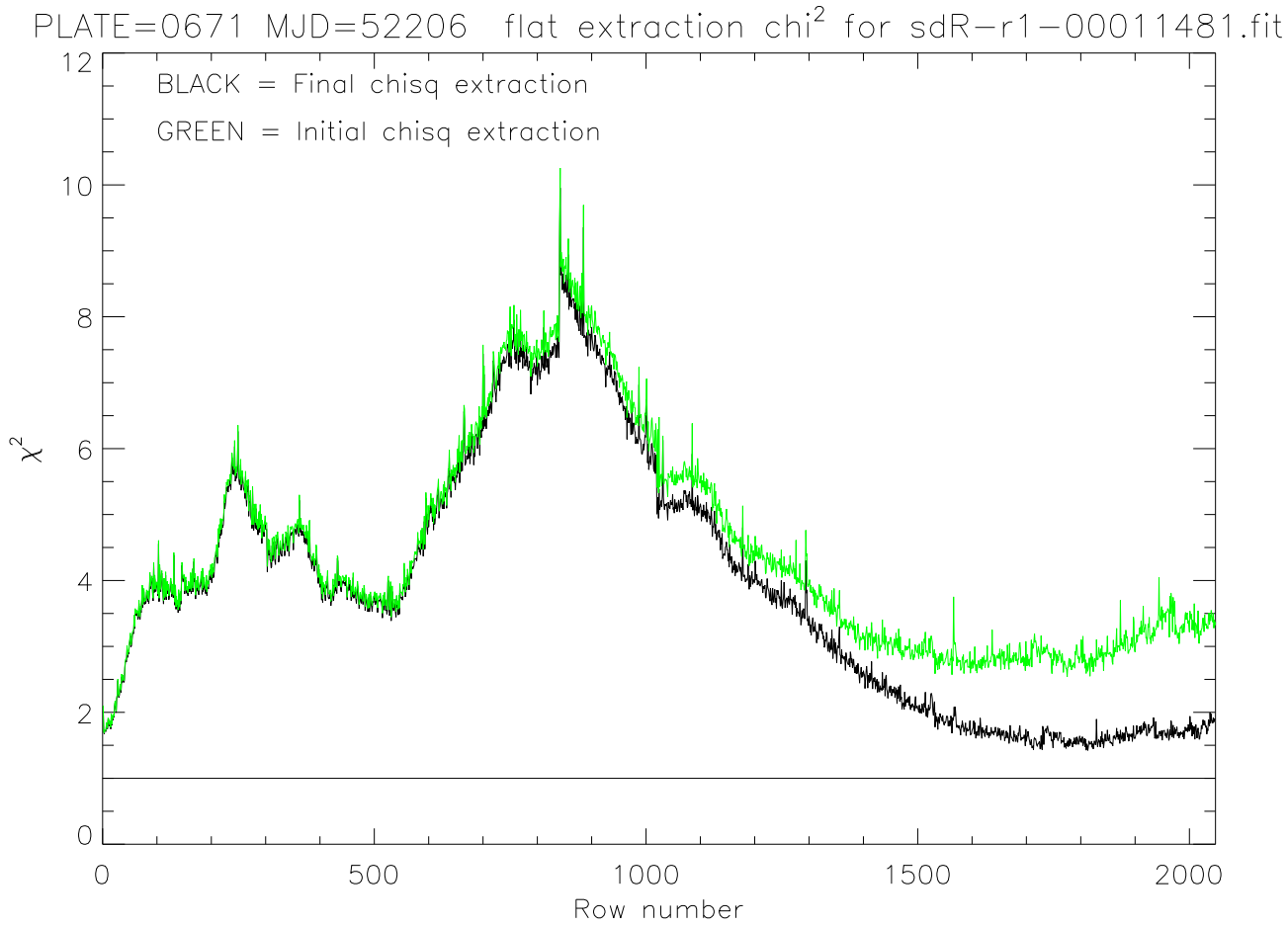

PLATE=0671 MJD=52206 sdR-b2-00011489.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.51 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

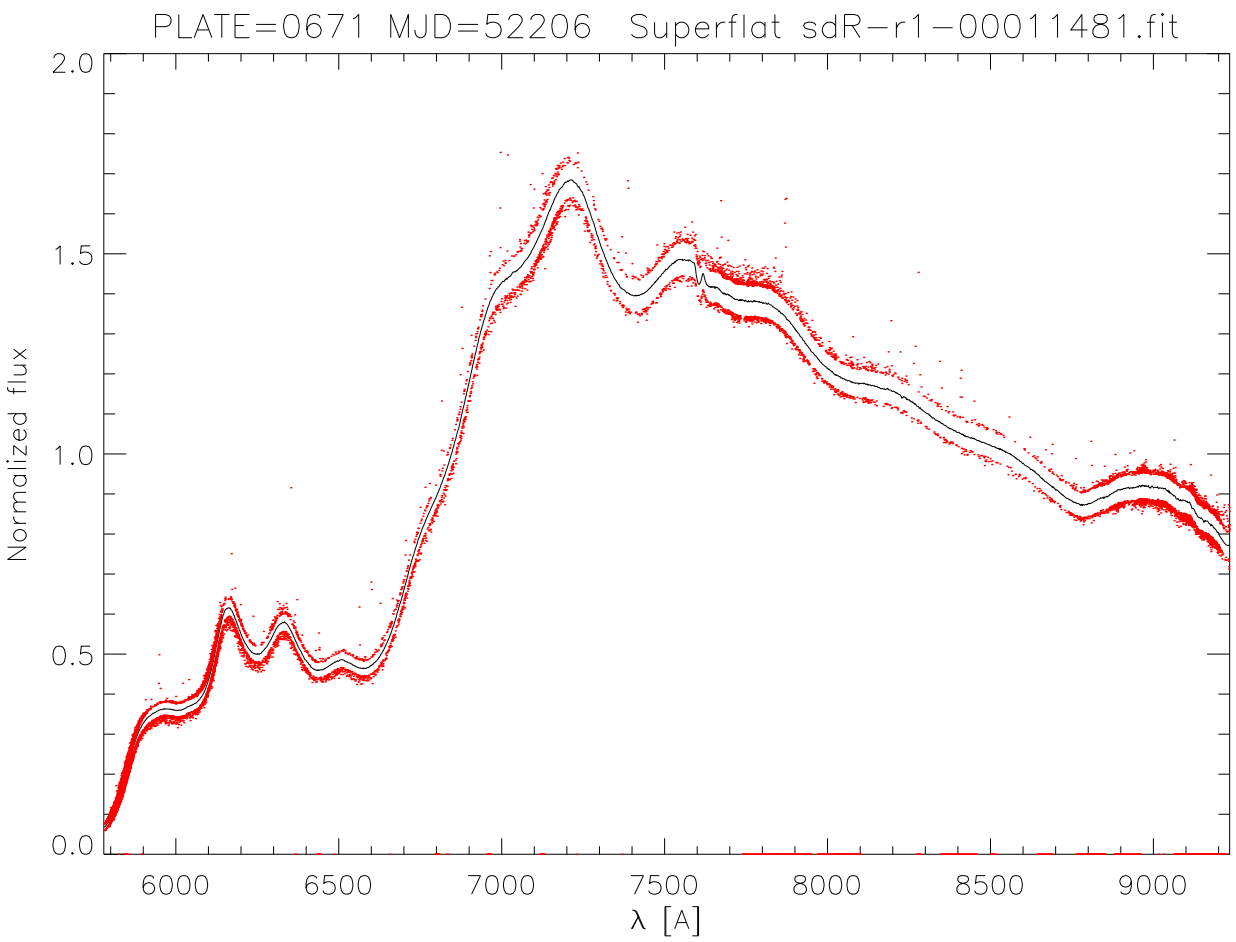

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

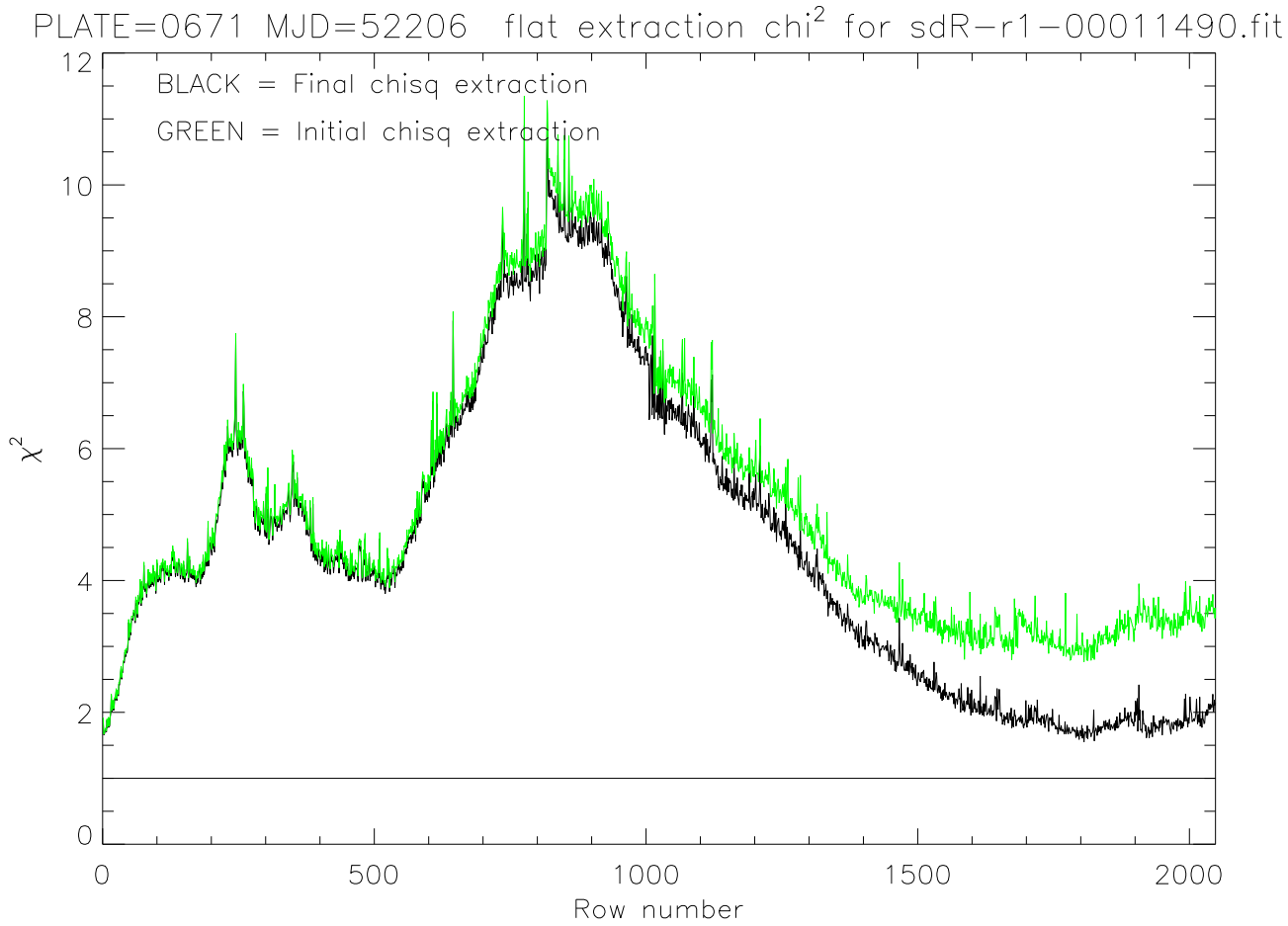

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

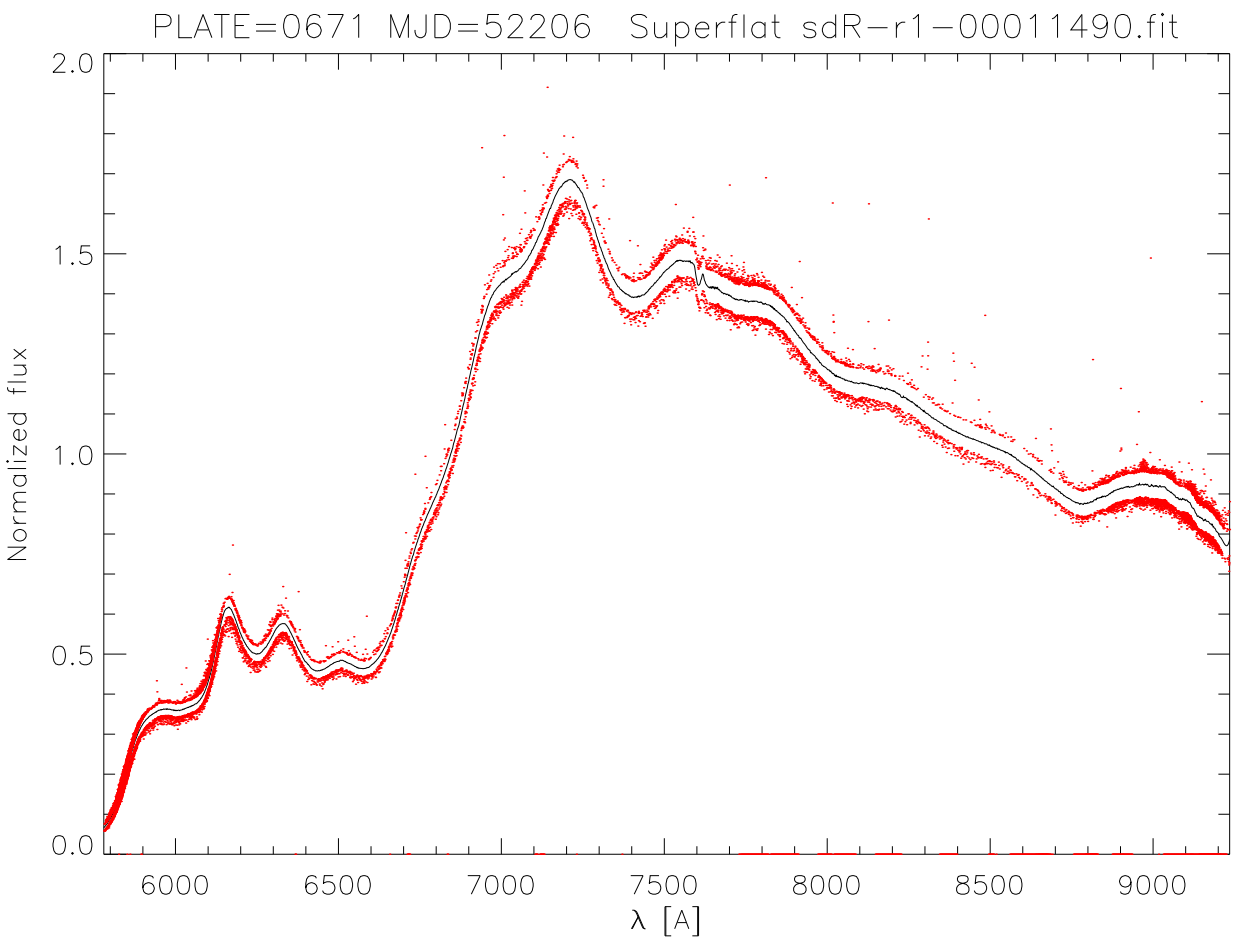

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

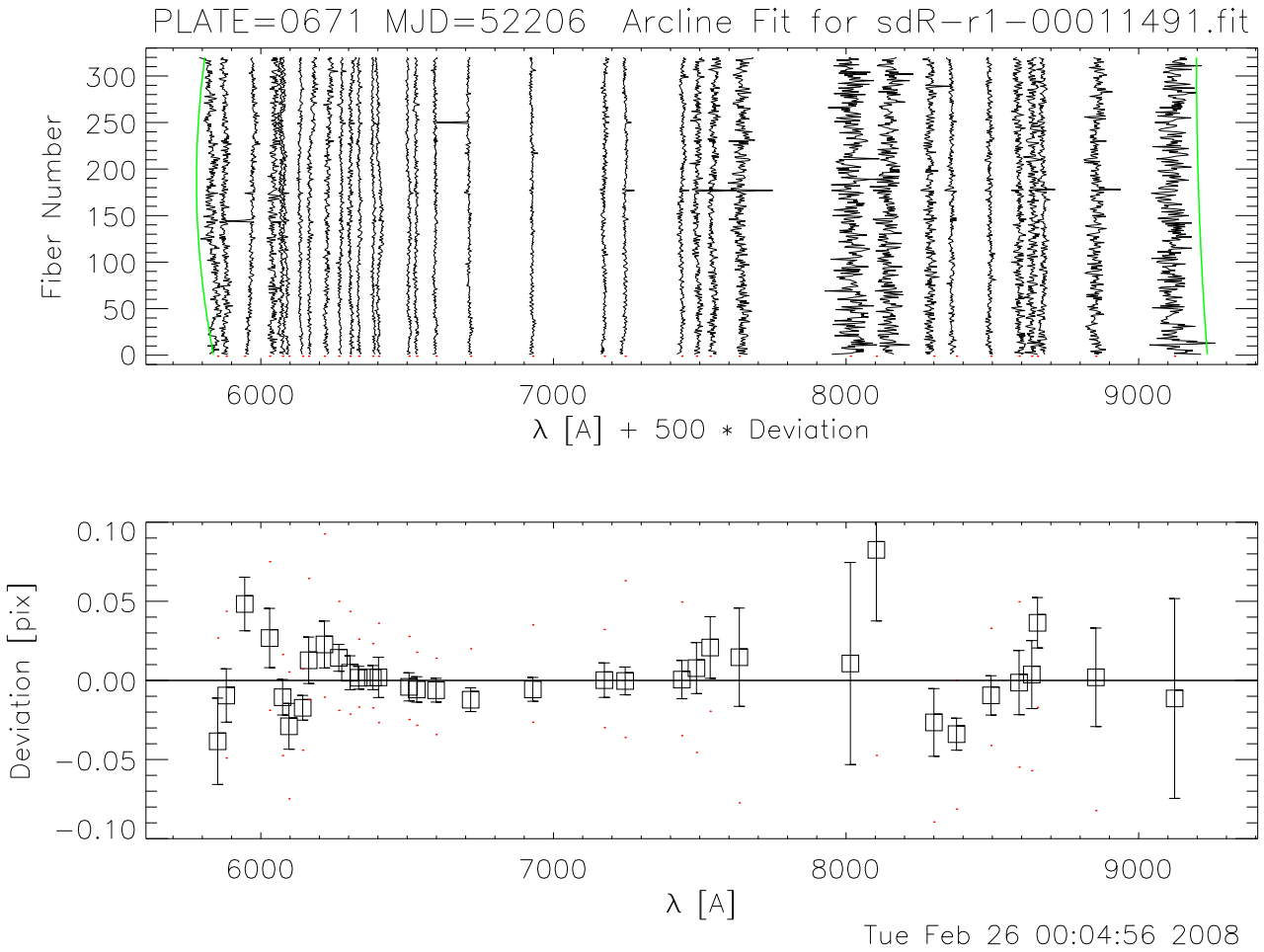

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

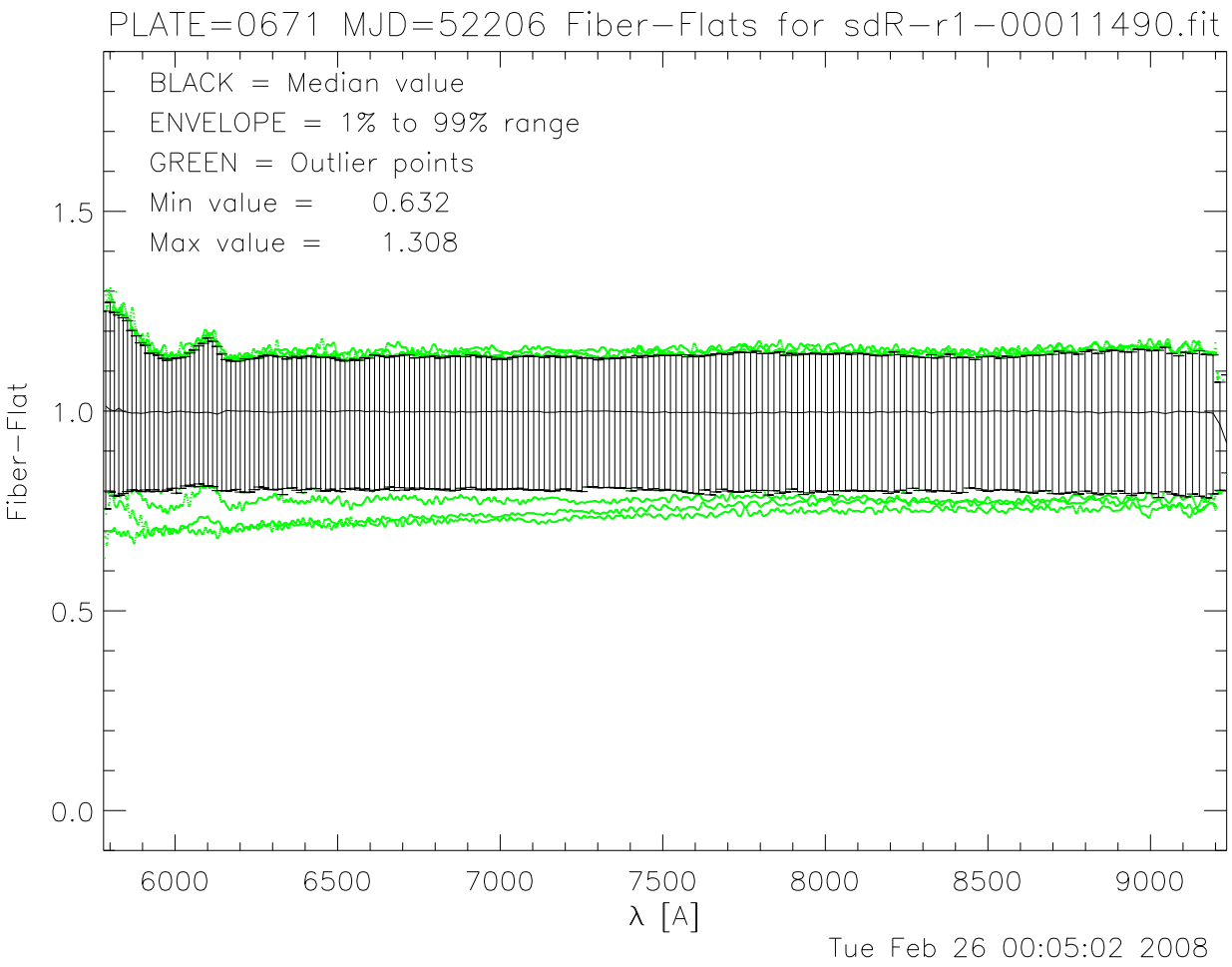

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−r1−00011481.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

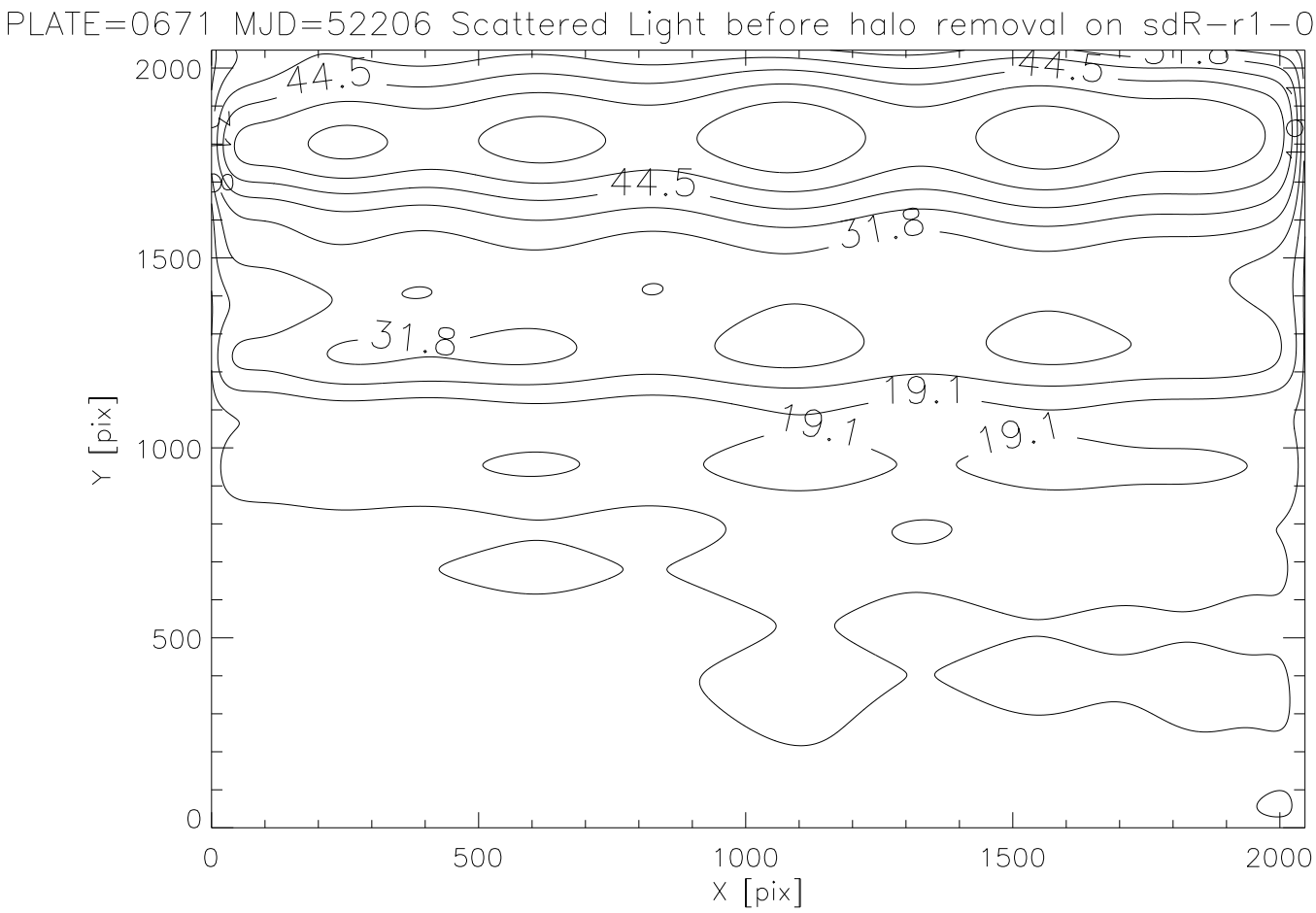

PLATE=0671 MJD=52206 Superflat sdR-r1-00011481.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

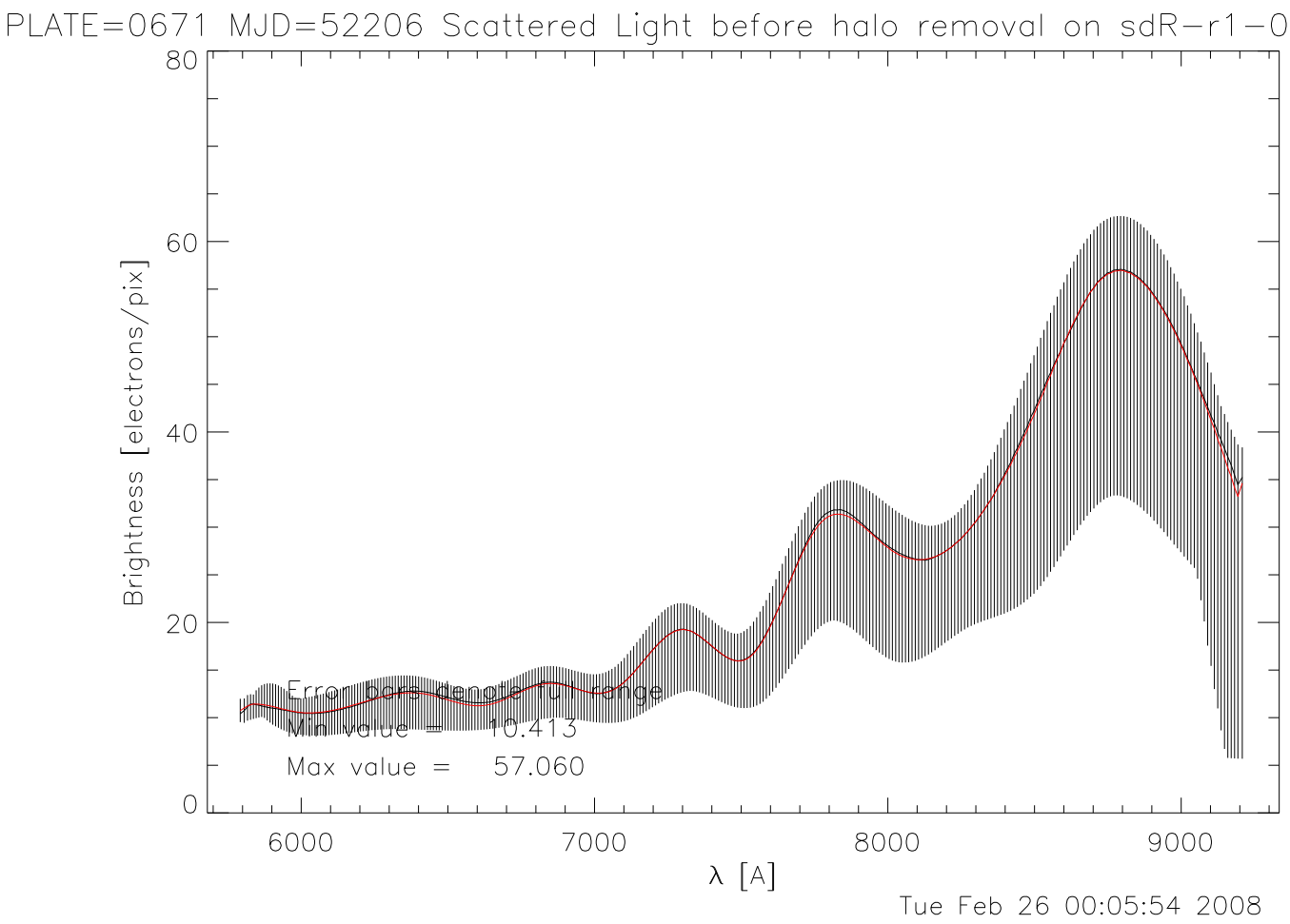

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−r1−00011490.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

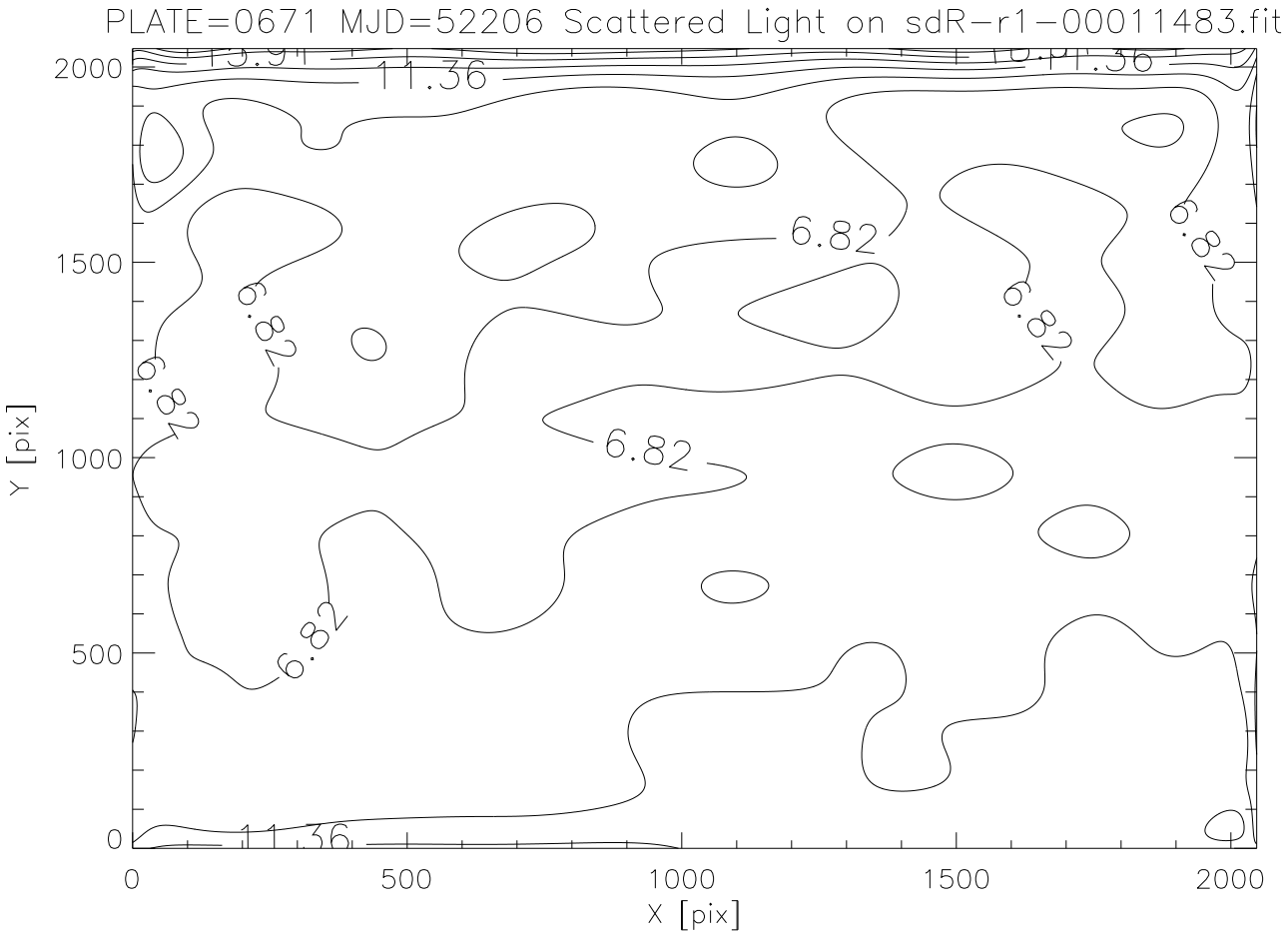

PLATE=0671 MJD=52206 Superflat sdR-r1-00011490.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

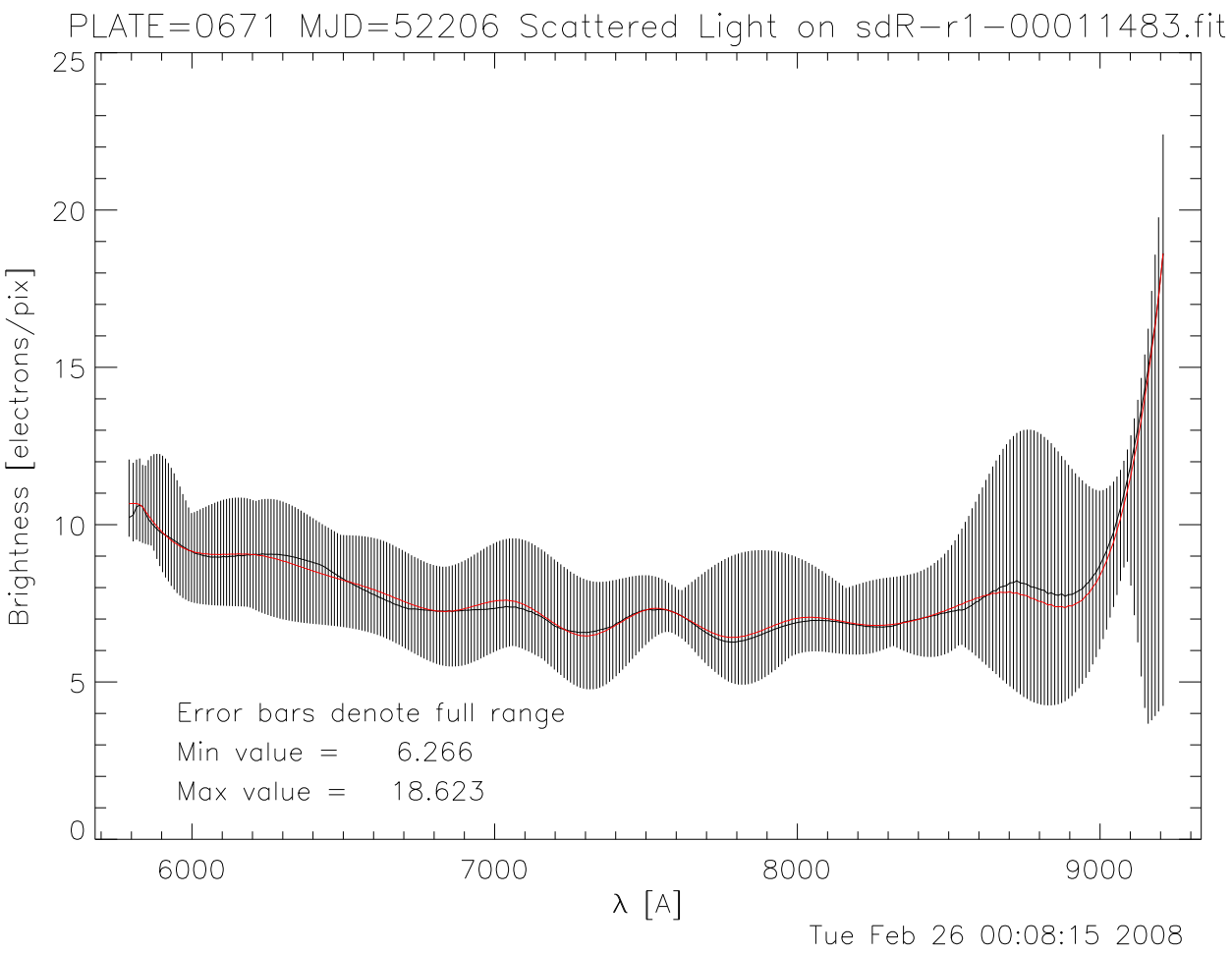

PLATE=0671 MJD=52206 Arcline Fit for sdR-r1-00011491.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 26 00:04:56 2008

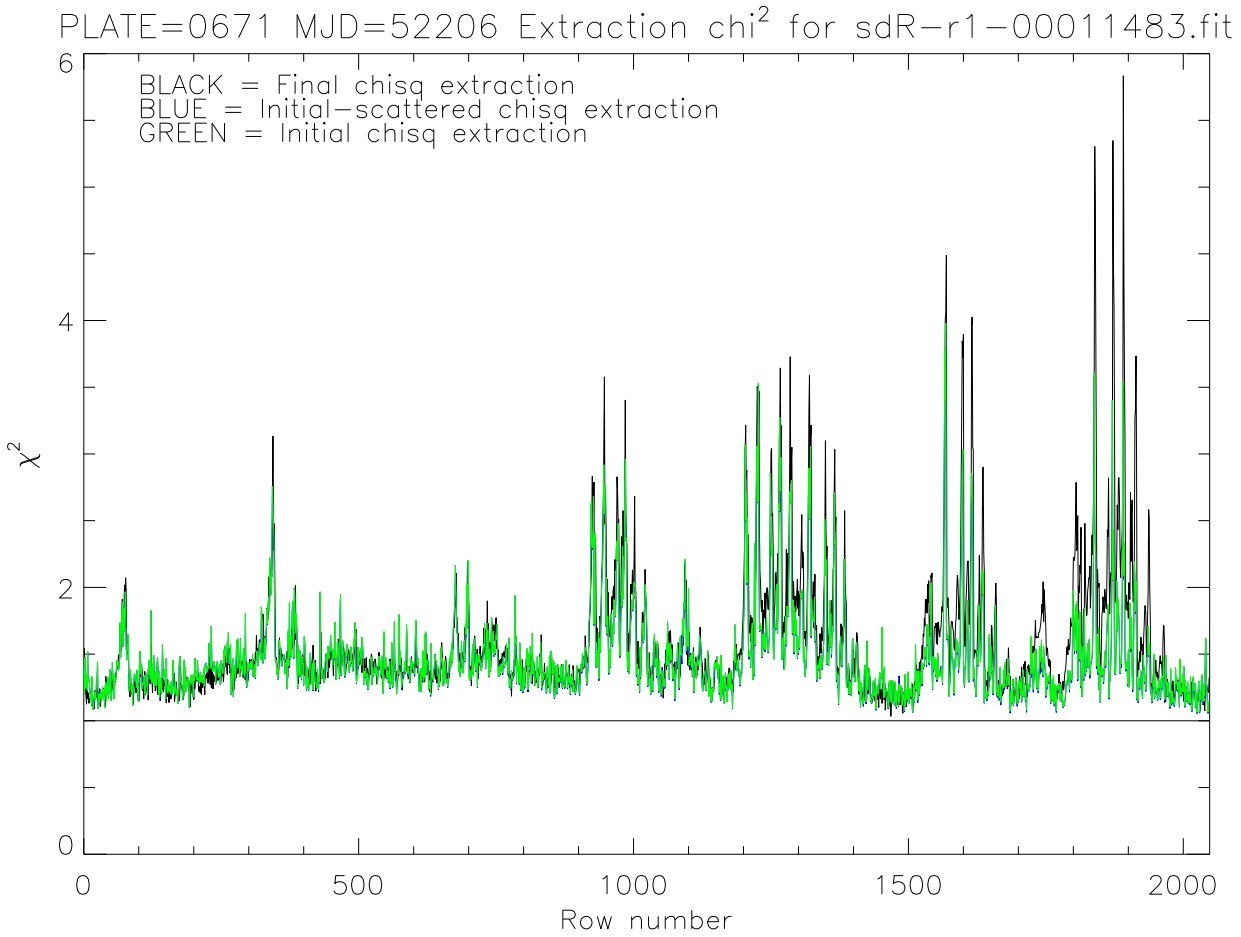

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.632
Max value = 1.308
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:05:02 2008

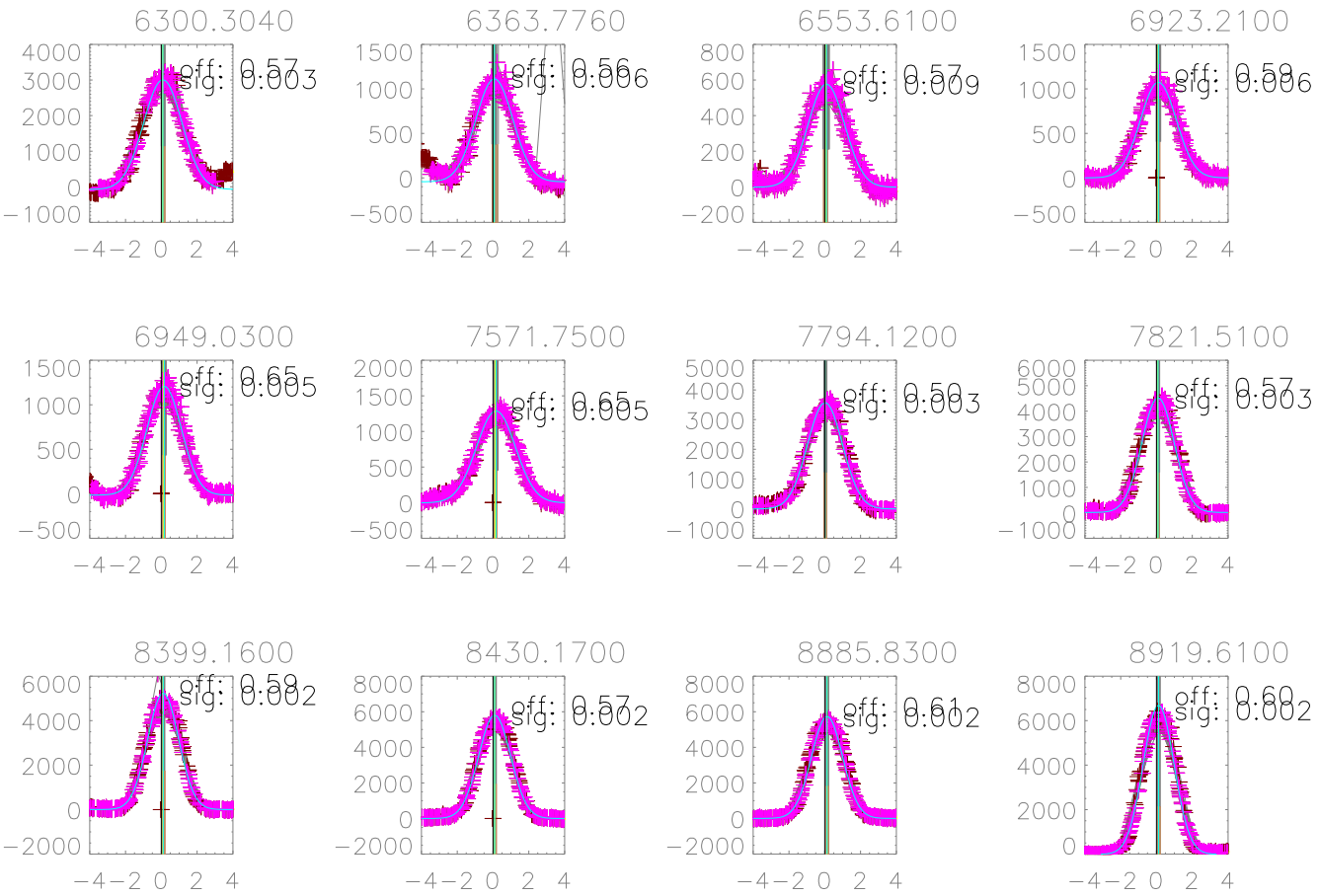

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011483.fi
44.5
44.5
44.5
31.8
31.8
19.1
19.1
19.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

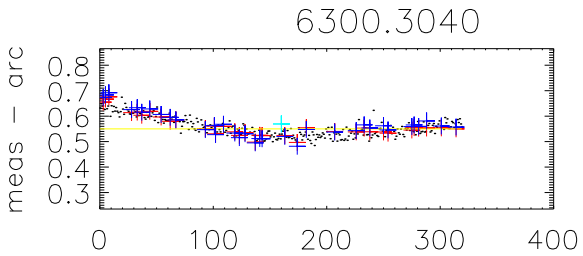

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011483.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 10.413
Max value = 57.060
Tue Feb 26 00:05:54 2008

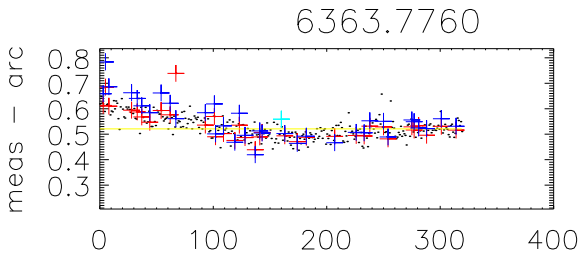

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011483.fit
11.36
6.82
6.82
6.82
6.82
6.82
6.82
11.36
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

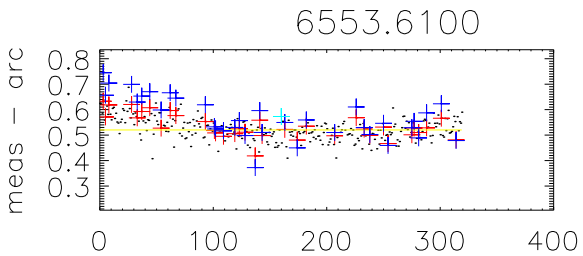

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011483.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.266
Max value = 18.623
Tue Feb 26 00:08:15 2008

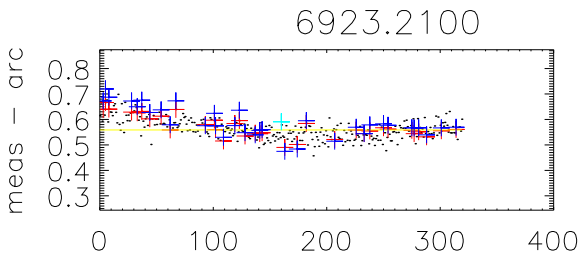

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r1−00011483.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

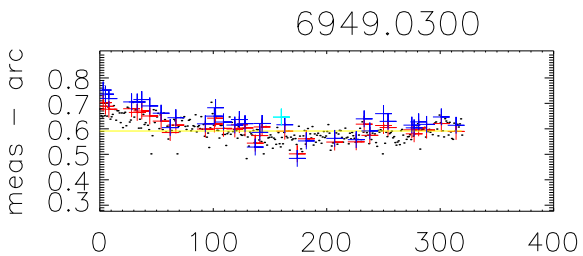

6300.3040
off: 0.57
sig: 0.003
6363.7760
off: 0.56
sig: 0.006
6553.6100
off: 0.57
sig: 0.009
6923.2100
off: 0.58
sig: 0.006
6949.0300
off: 0.65
sig: 0.005
7571.7500
off: 0.65
sig: 0.005
7794.1200
off: 0.50
sig: 0.003
7821.5100
off: 0.57
sig: 0.003
8399.1600
off: 0.58
sig: 0.002
8430.1700
off: 0.57
sig: 0.002
8885.8300
off: 0.61
sig: 0.002
8919.6100
off: 0.60
sig: 0.002

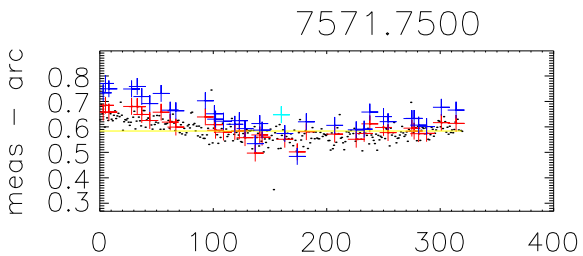

6300.3040
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

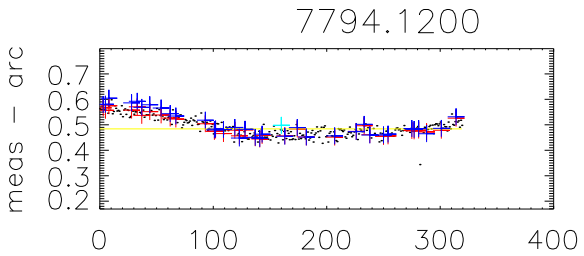

6363.7760
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

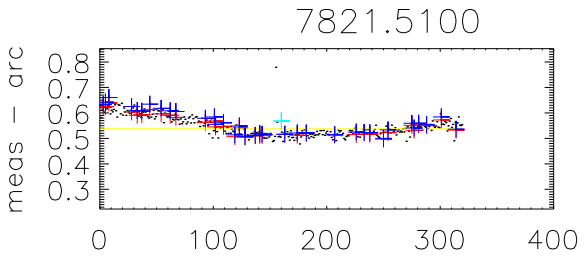

6553.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

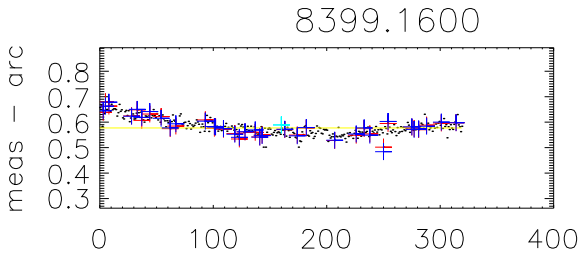

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

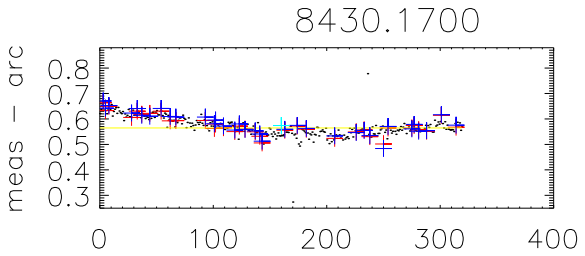

6949.0300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

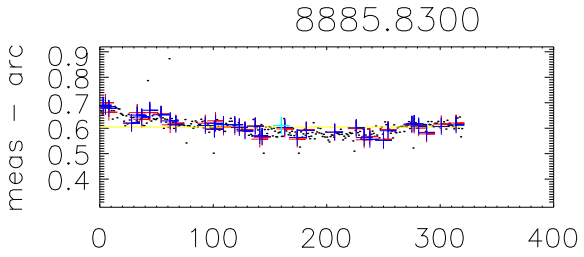

7571.7500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

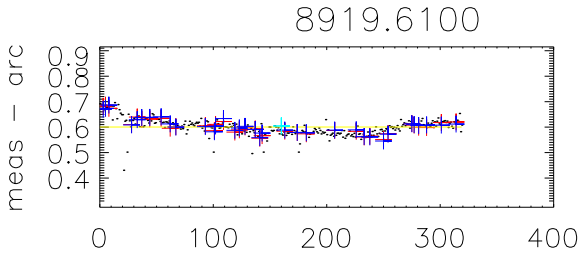

7794.1200
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

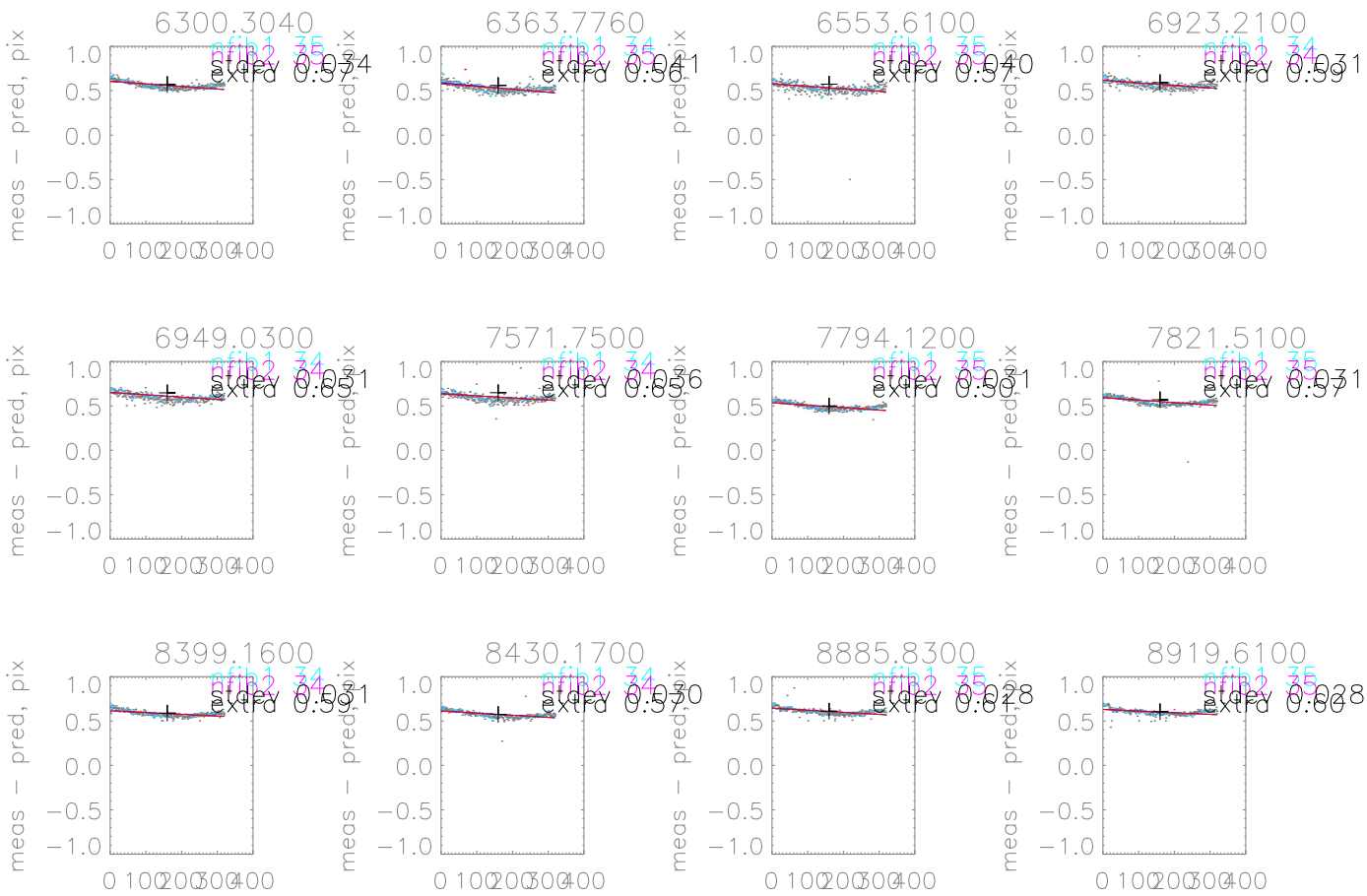

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

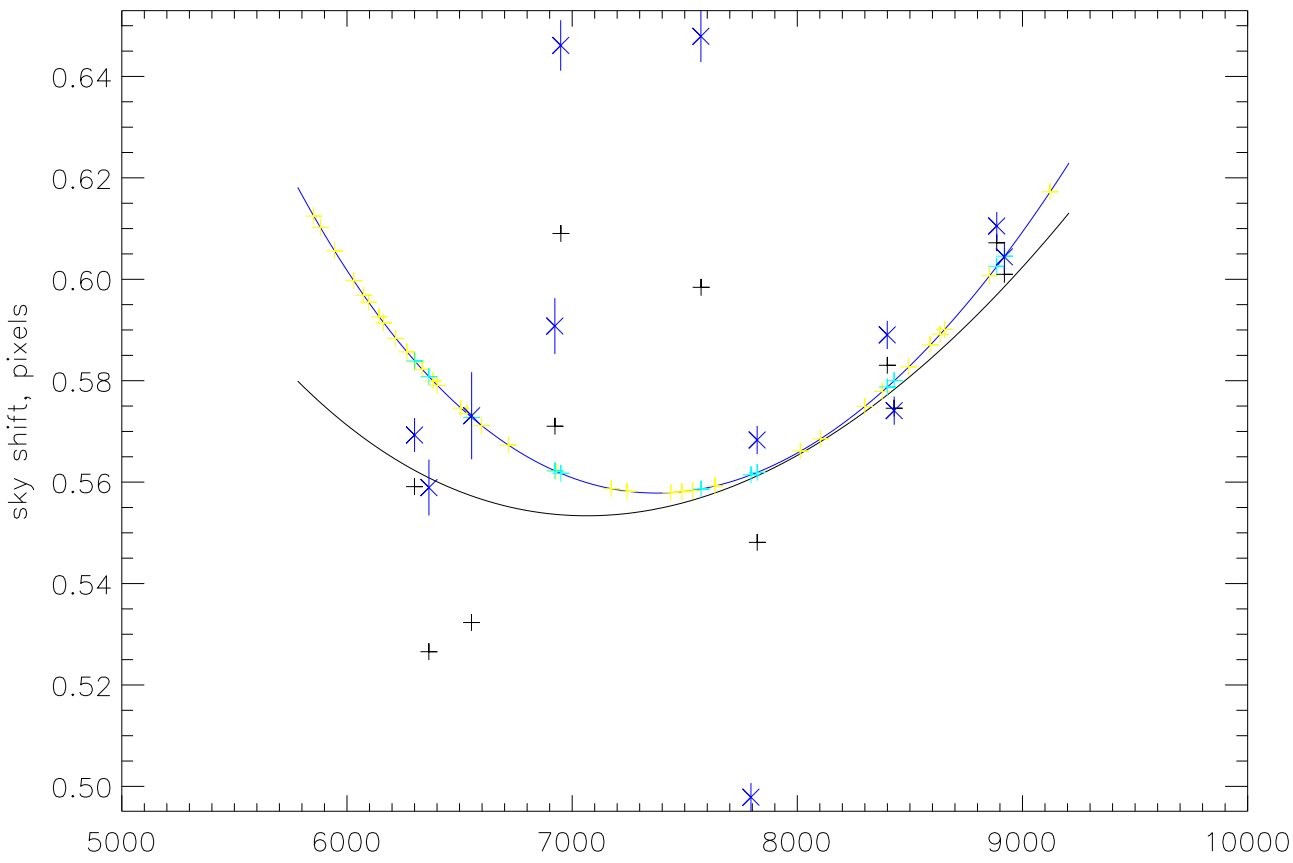

8399.1600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400


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

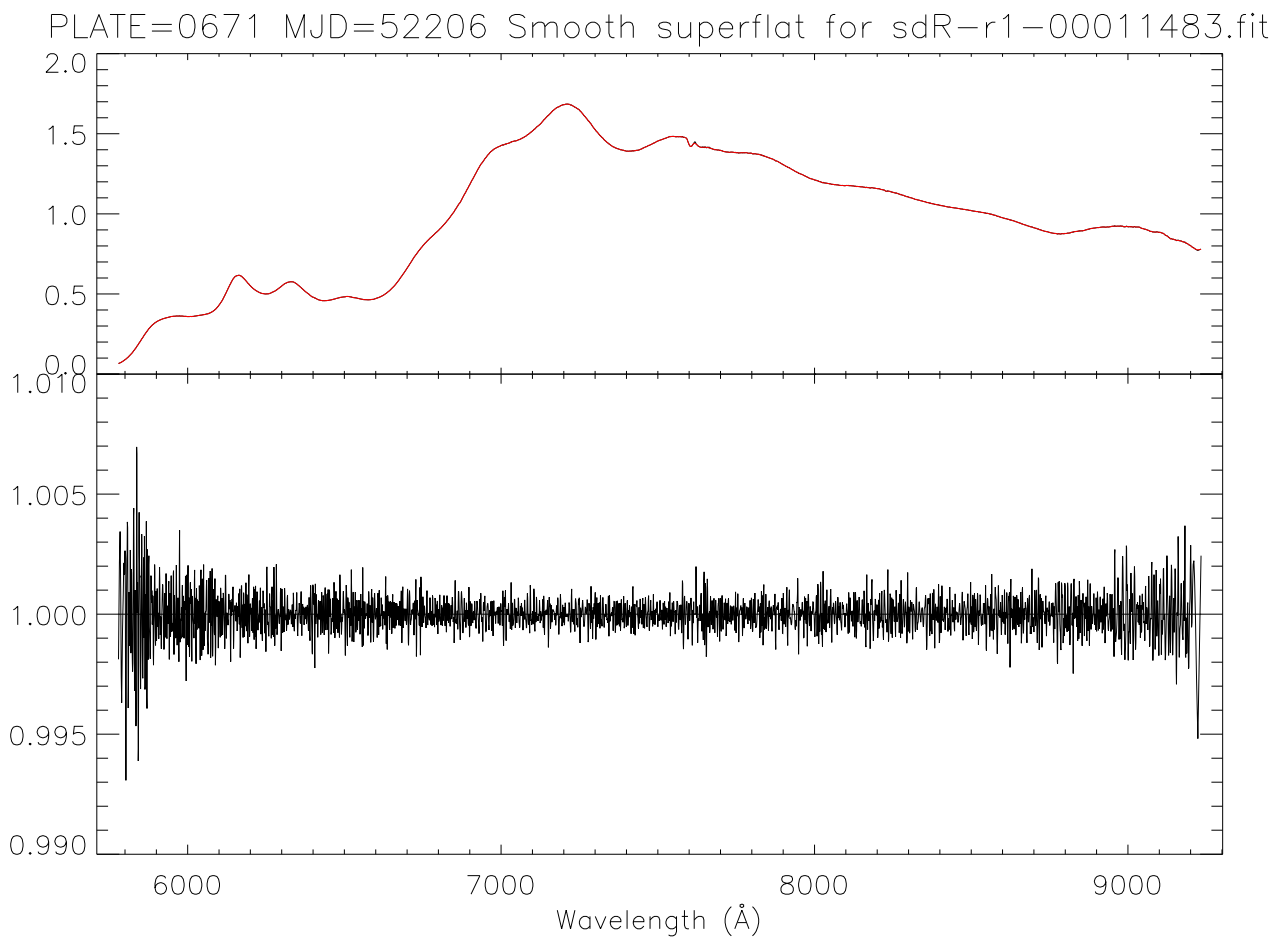

8885.8300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

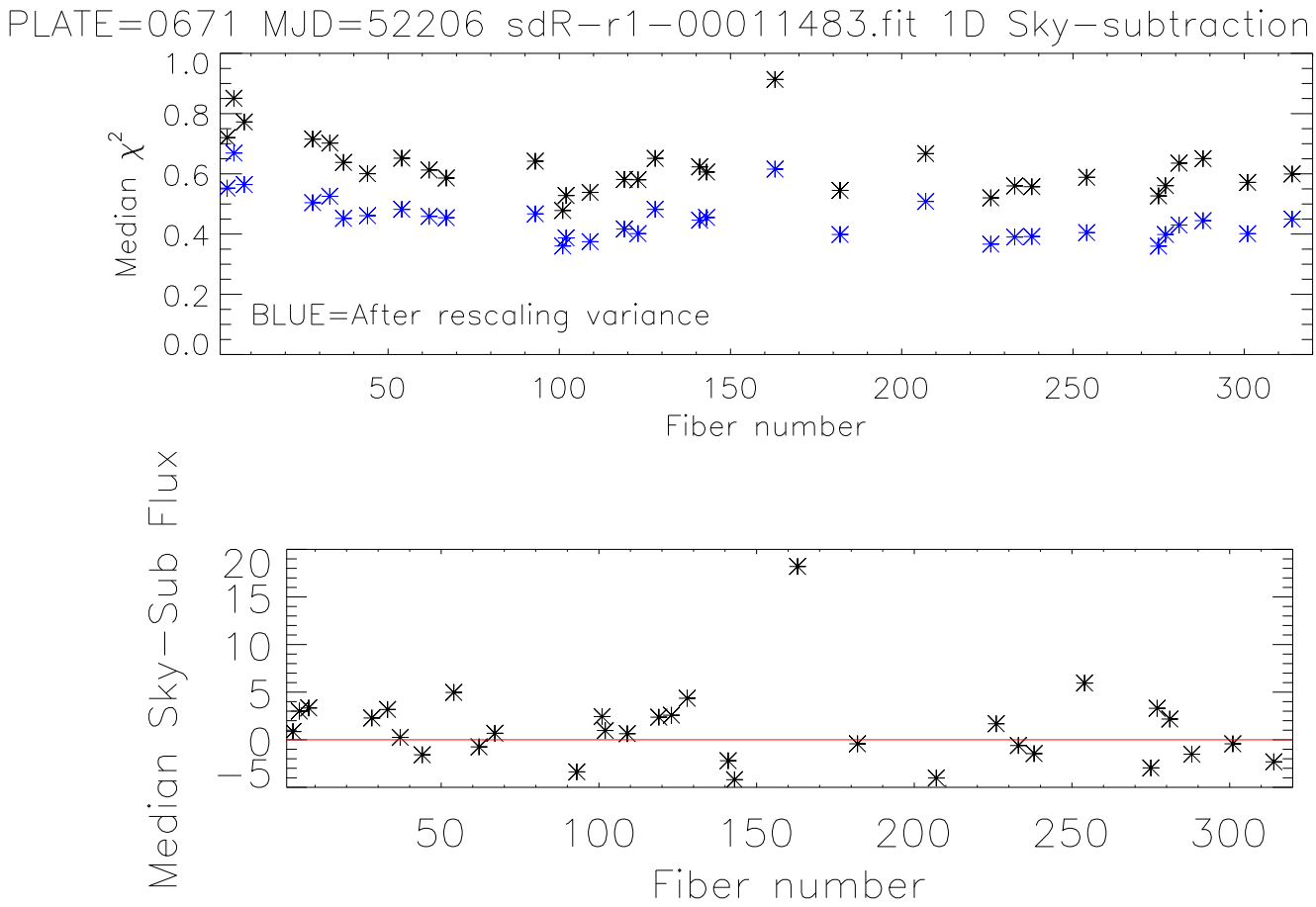

8919.6100
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

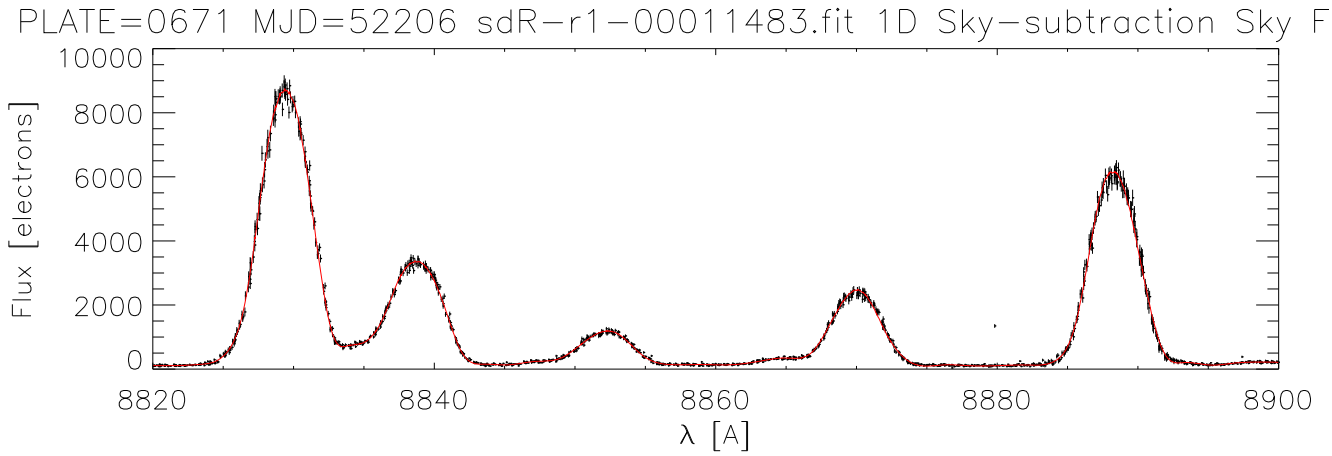

6300.3040
stdev 0.034
extra 0.57
6363.7760
stdev 0.041
extra 0.56
6553.6100
stdev 0.040
extra 0.57
6923.2100
stdev 0.031
extra 0.59
6949.0300
stdev 0.031
extra 0.65
7571.7500
stdev 0.036
extra 0.65
7794.1200
stdev 0.031
extra 0.58
7821.5100
stdev 0.031
extra 0.57
8399.1600
stdev 0.031
extra 0.59
8430.1700
stdev 0.030
extra 0.57
8885.8300
stdev 0.028
extra 0.61
8919.6100
stdev 0.028
extra 0.60
meas − pred, pix
mfhi1 34
mfhi2 35

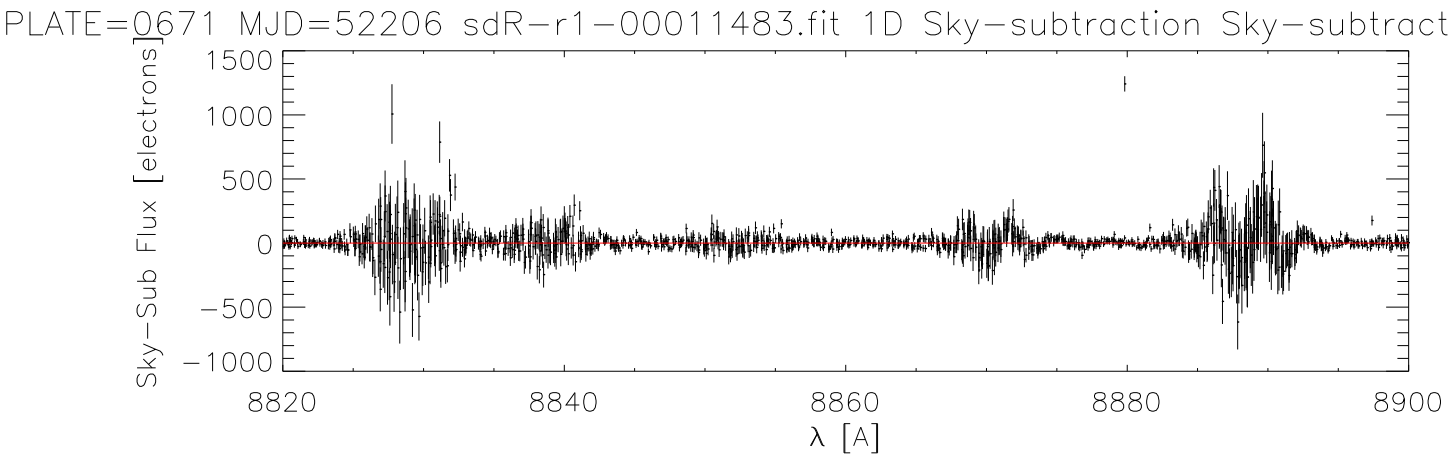

sky shift, pixels
0.64
0.62
0.60
0.58
0.56
0.54
0.52
0.50
5000
6000
7000
8000
9000
10000

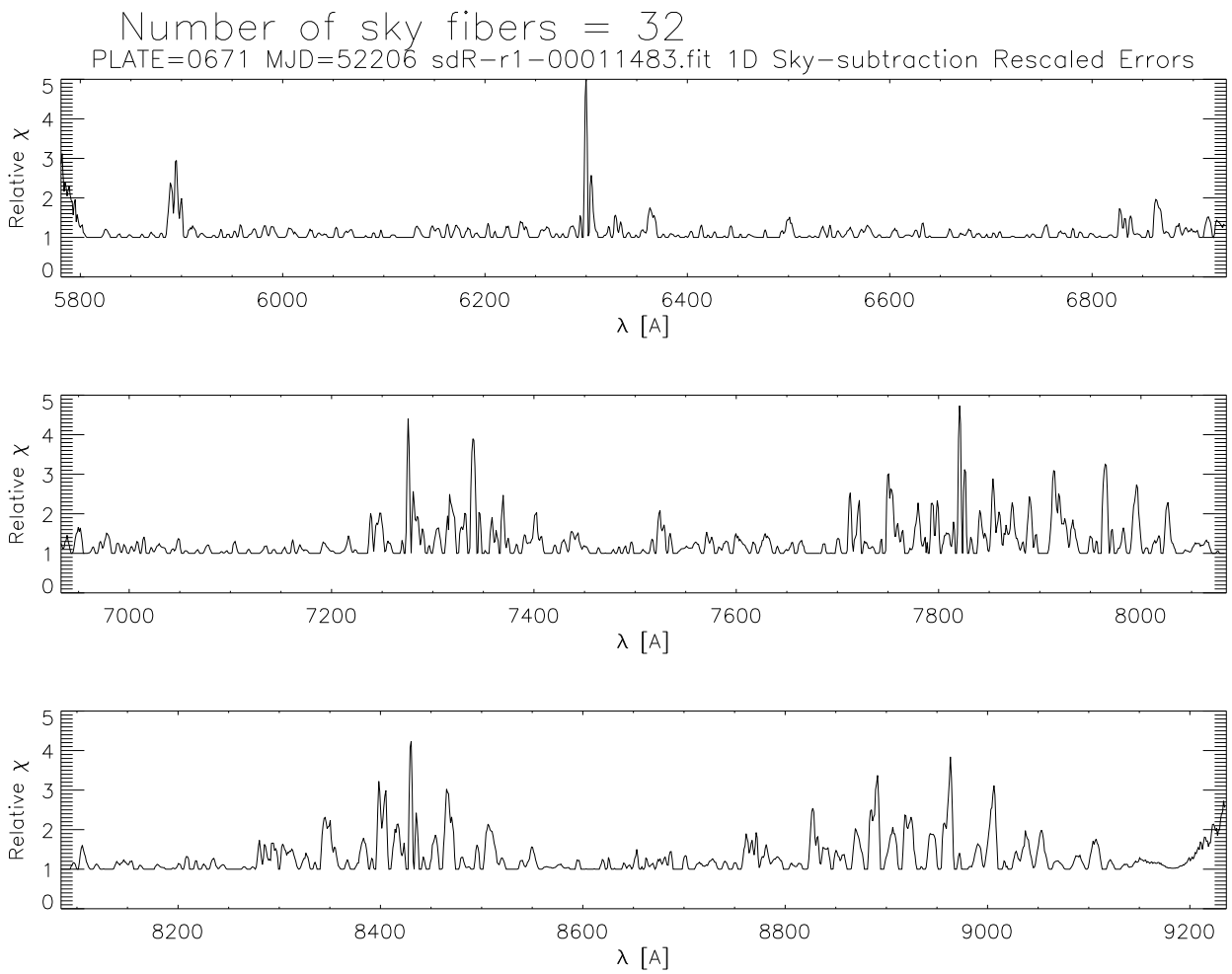
es= 0.0000

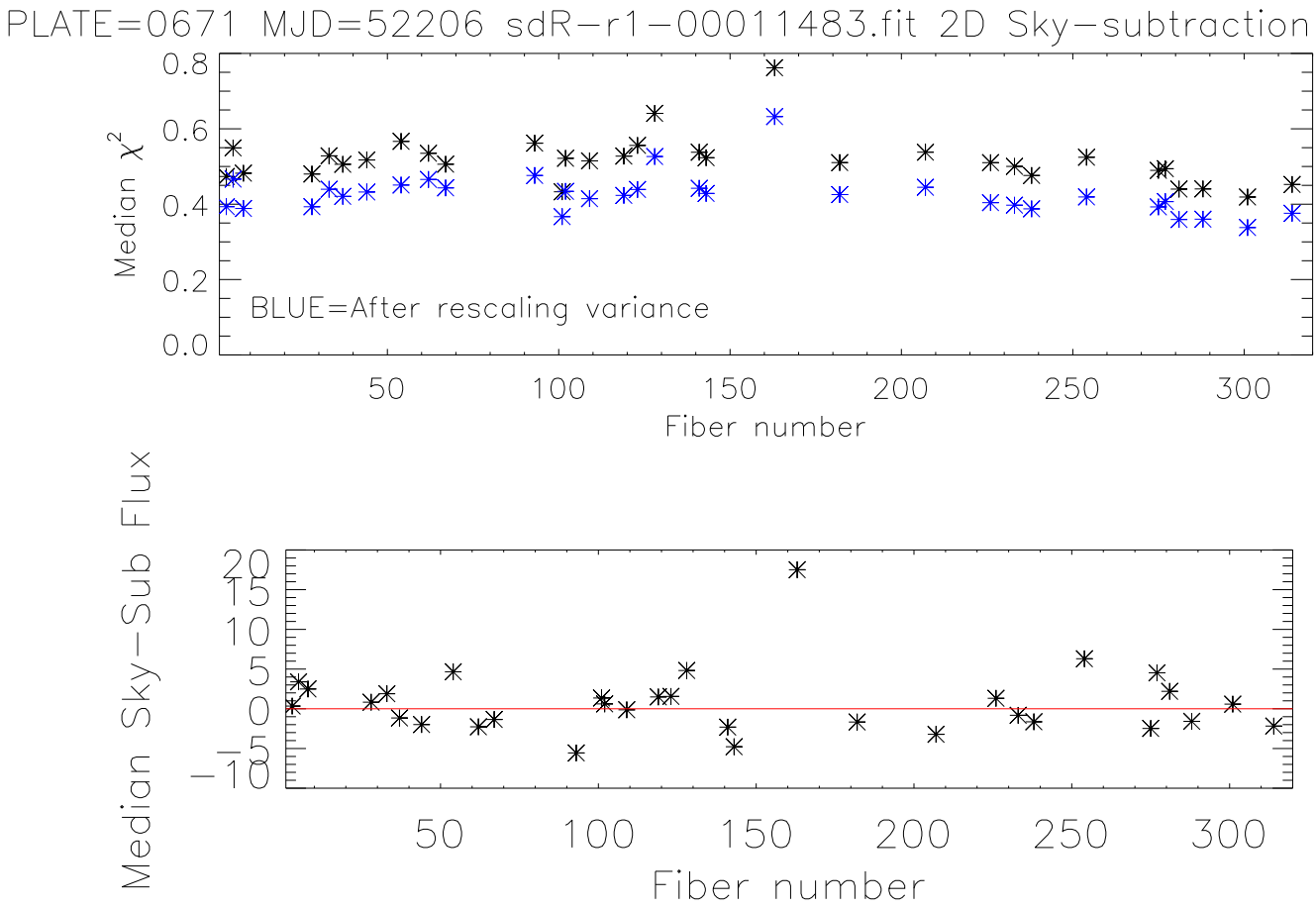

PLATE=0671 MJD=52206 Smooth superflat for sdR-r1-00011483.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)


PLATE=0671 MJD=52206 sdR-r1-00011483.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

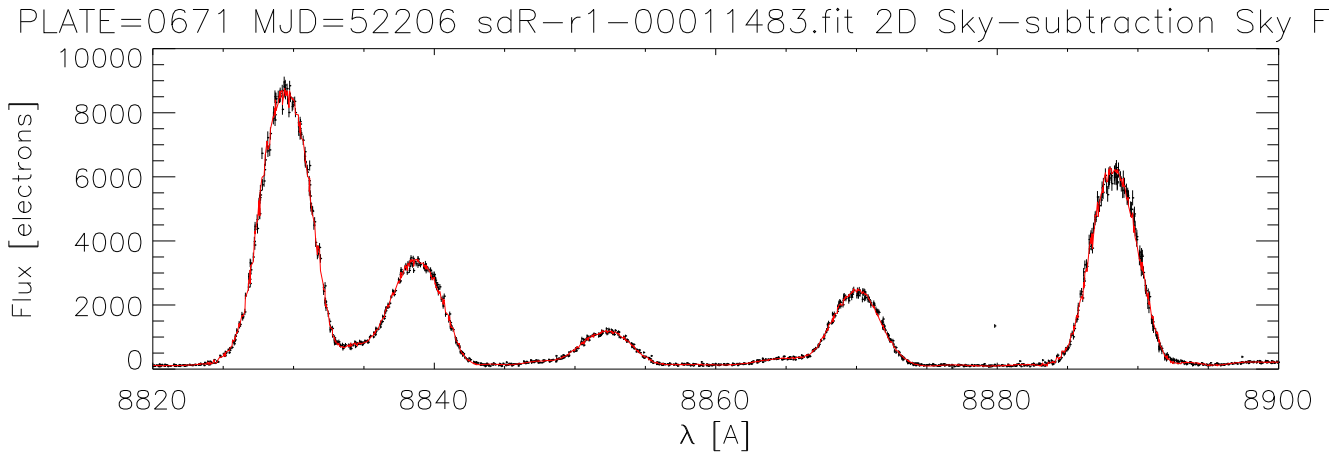

PLATE=0671 MJD=52206 sdR-r1-00011483.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

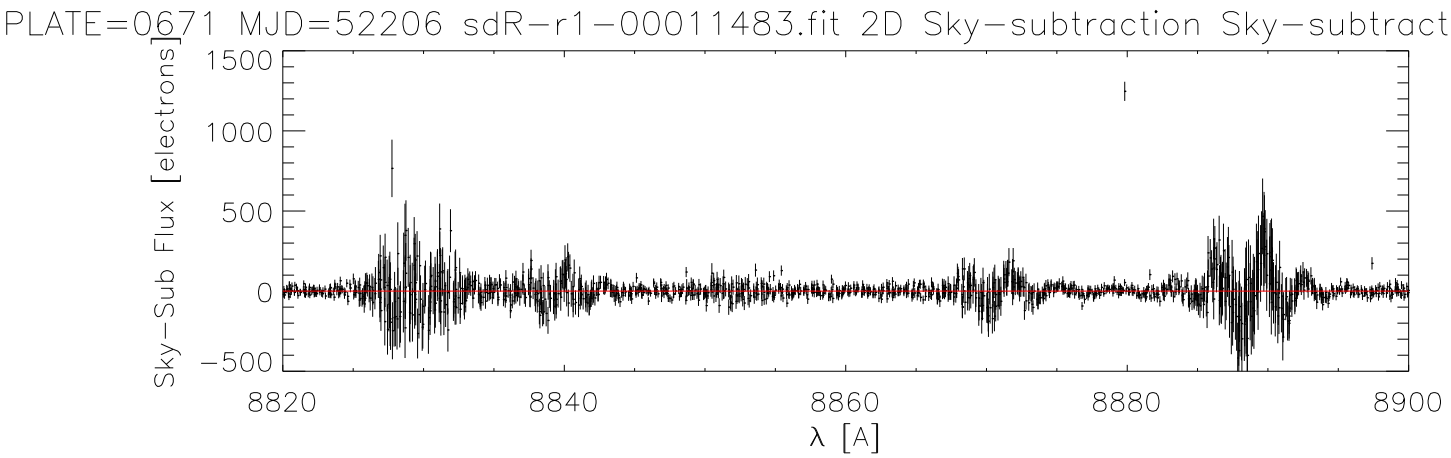

PLATE=0671 MJD=52206 sdR-r1-00011483.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

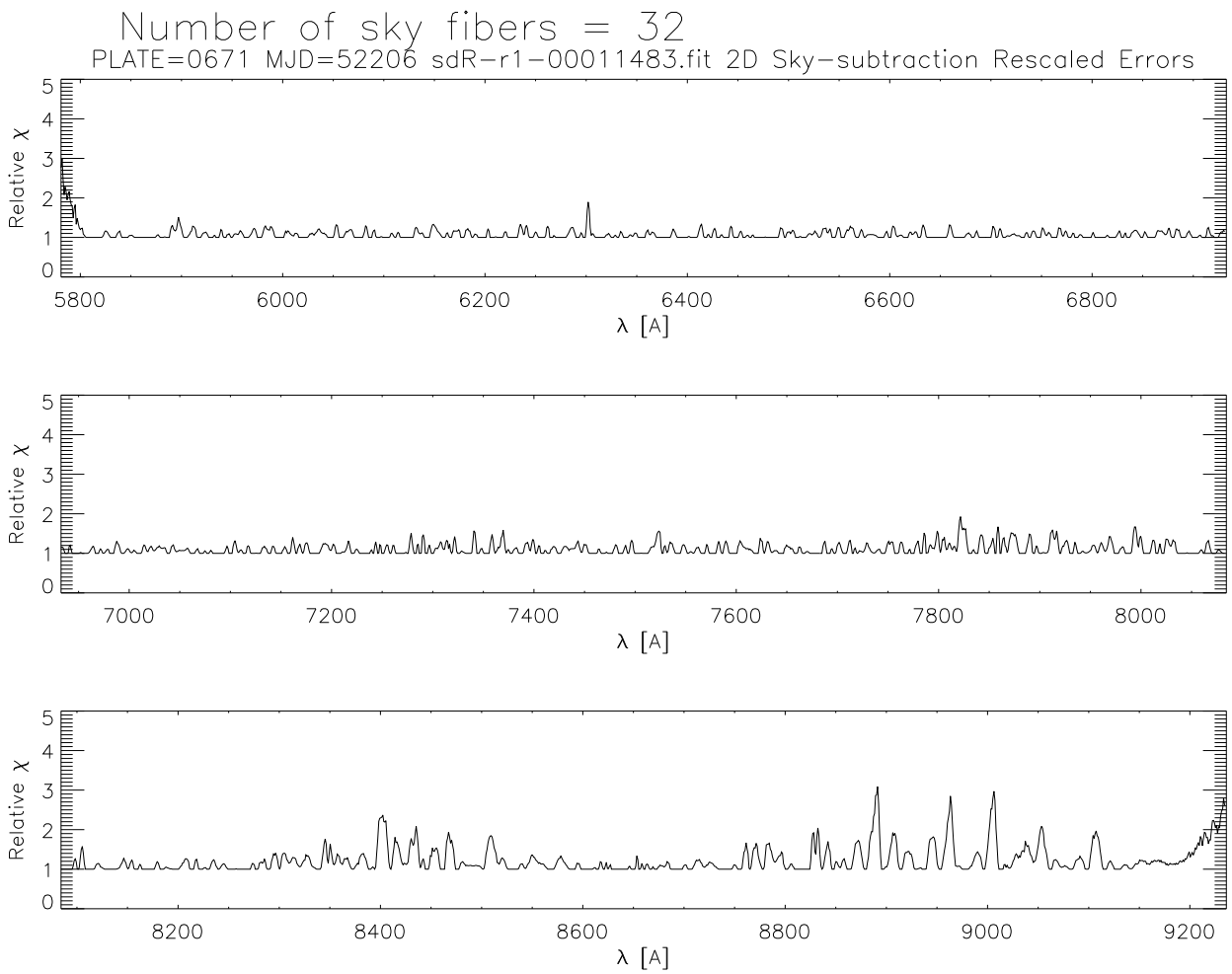

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r1-00011483.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

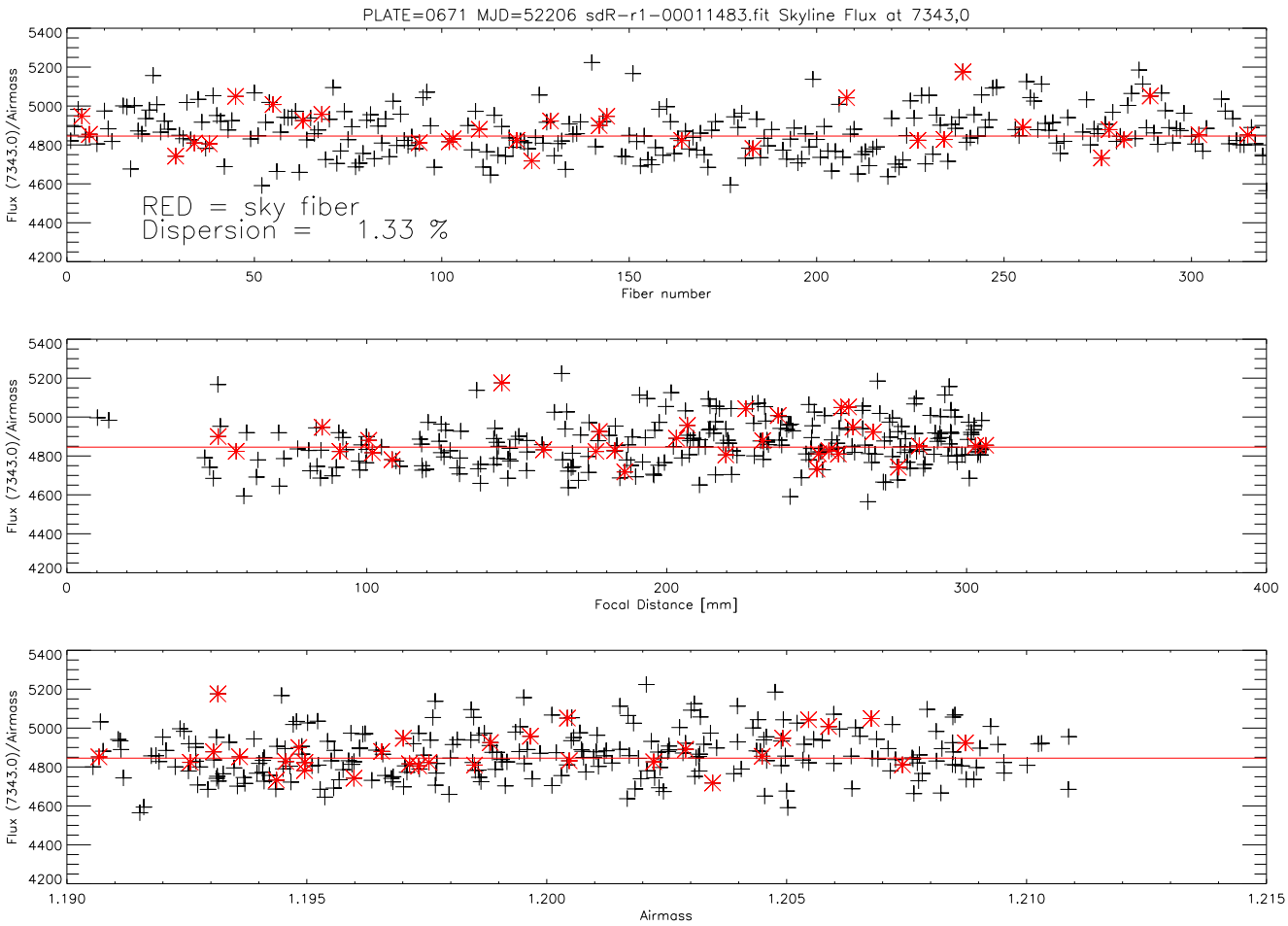

PLATE=0671 MJD=52206 sdR-r1-00011483.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

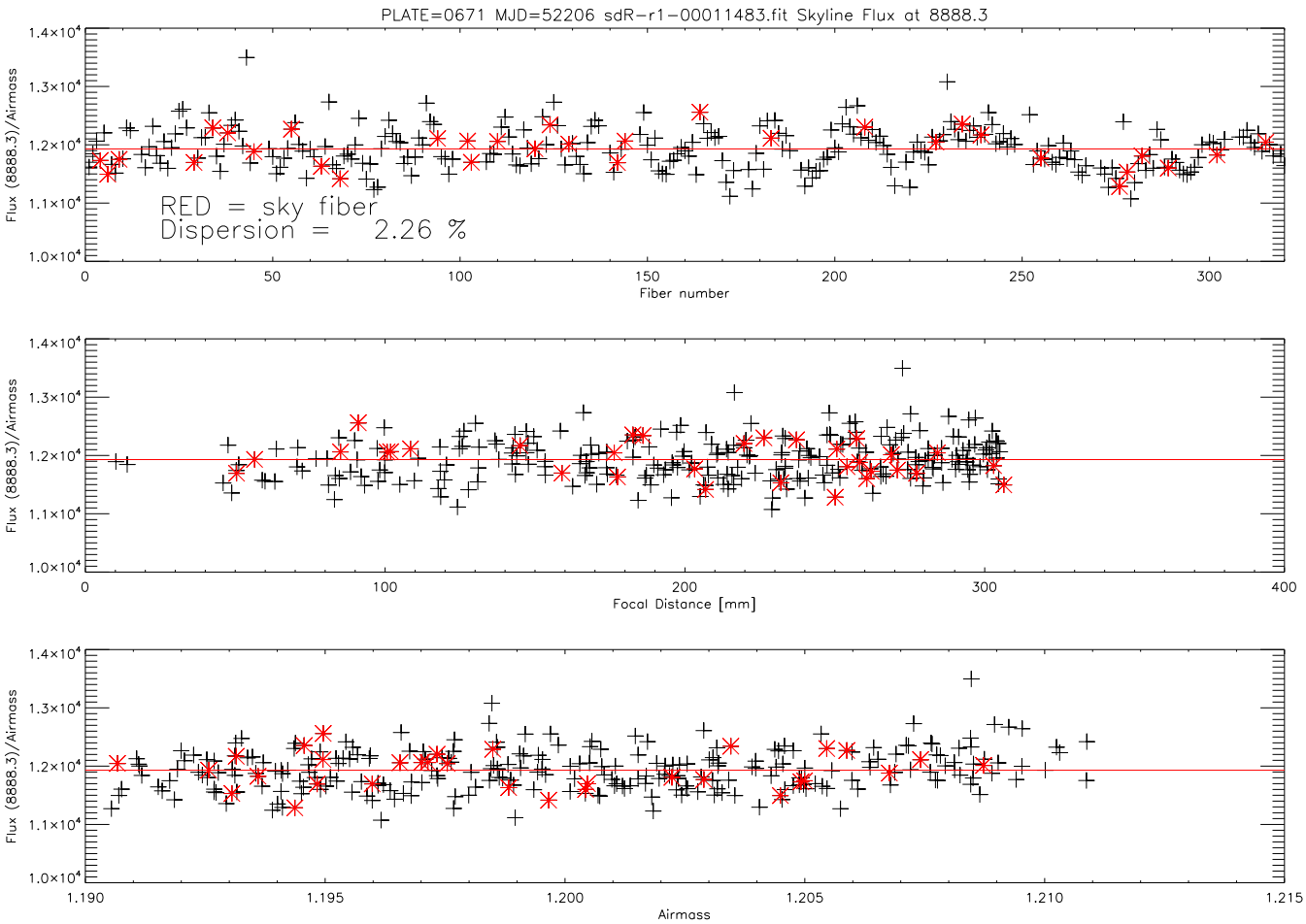
Median Sky-Sub Flux
20
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

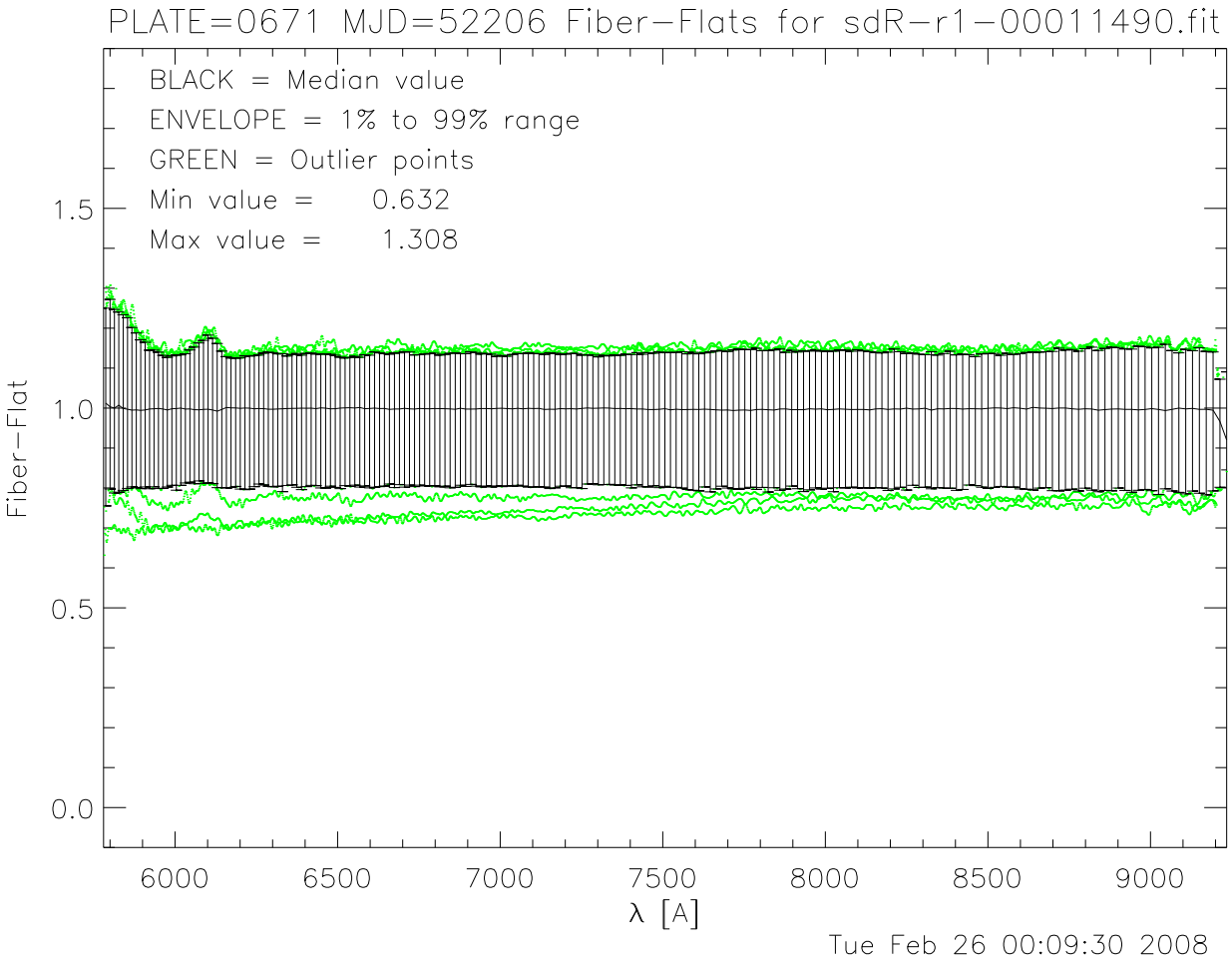

PLATE=0671 MJD=52206 sdR-r1-00011483.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

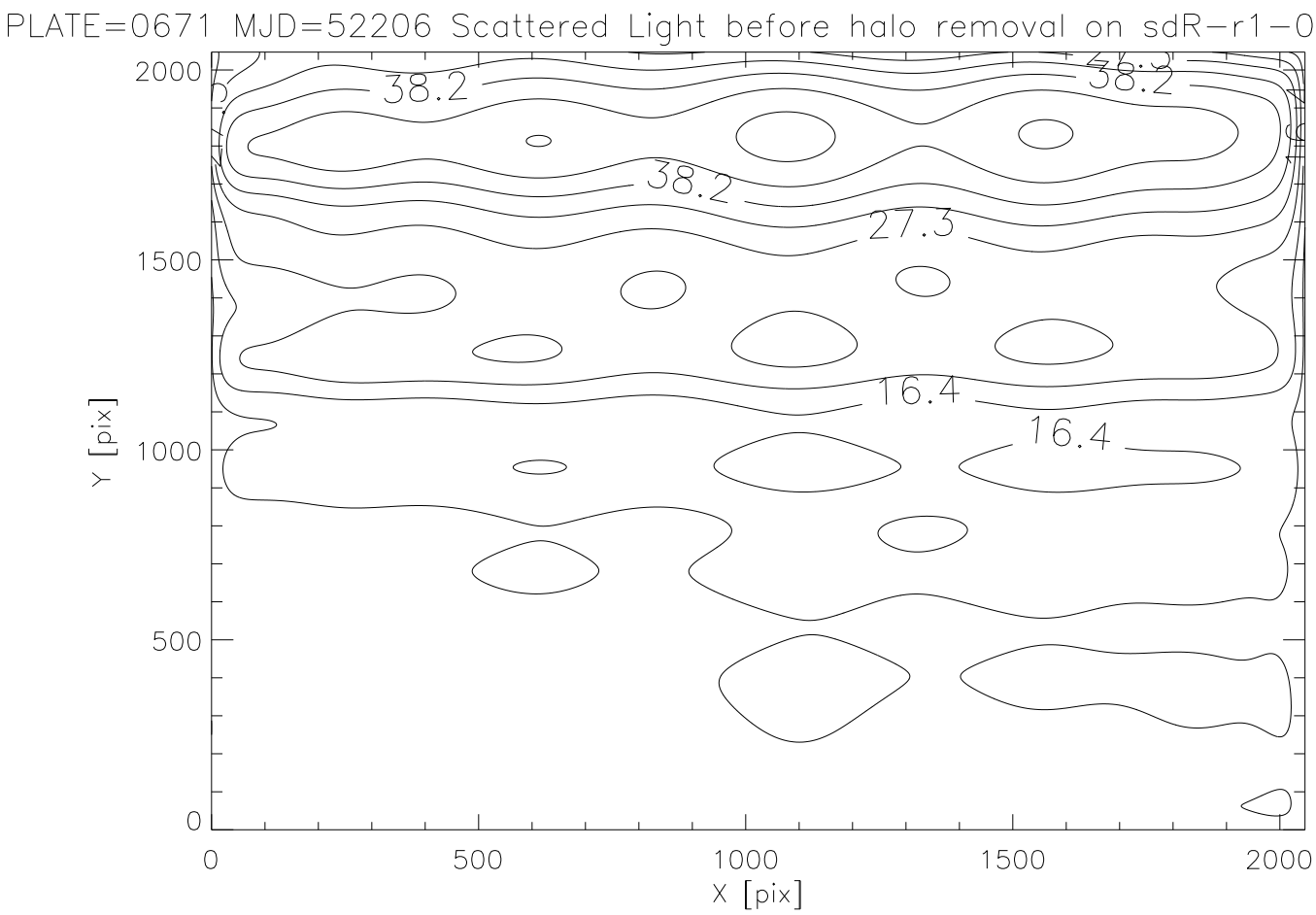

PLATE=0671 MJD=52206 sdR-r1-00011483.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

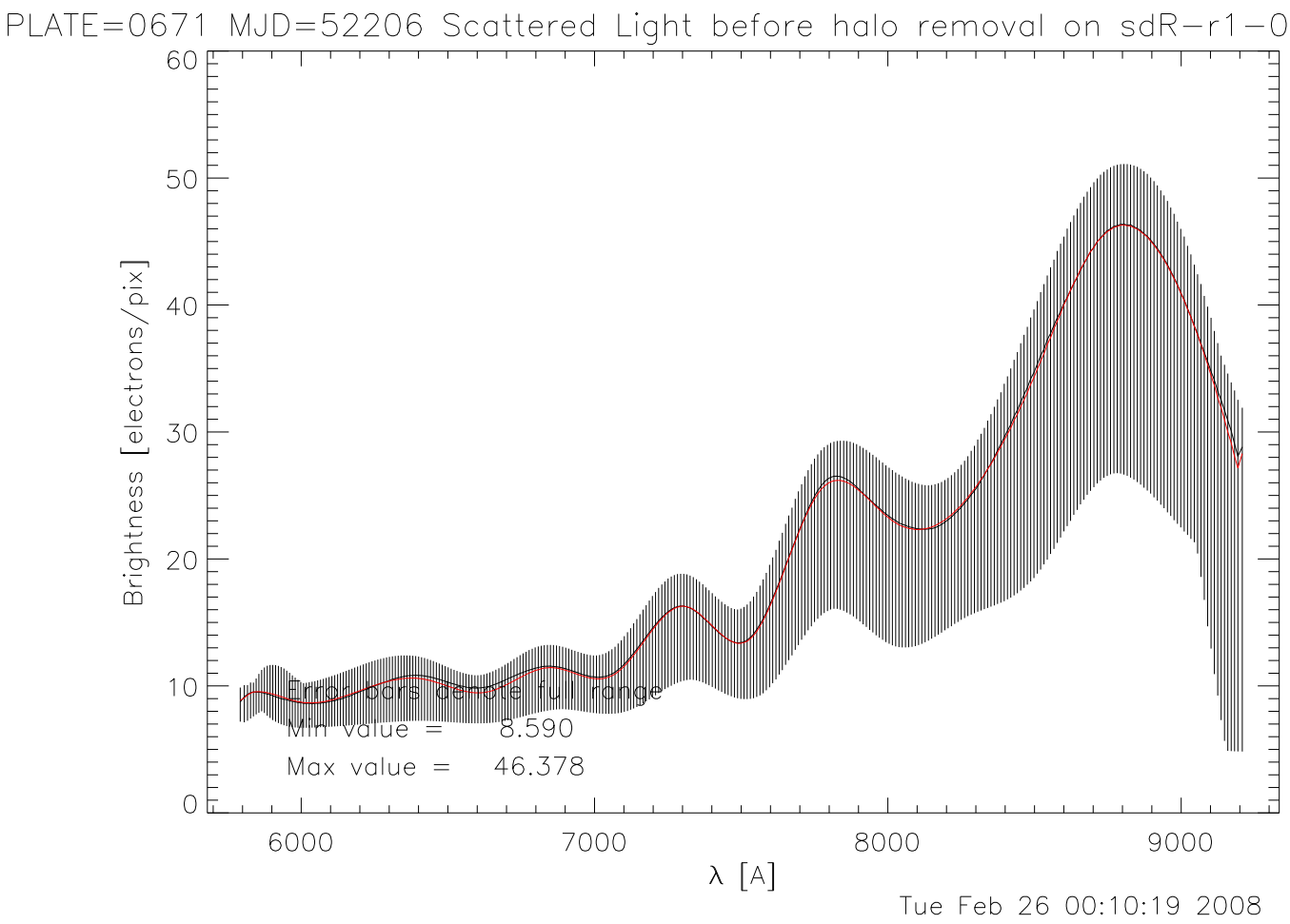

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r1-00011483.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

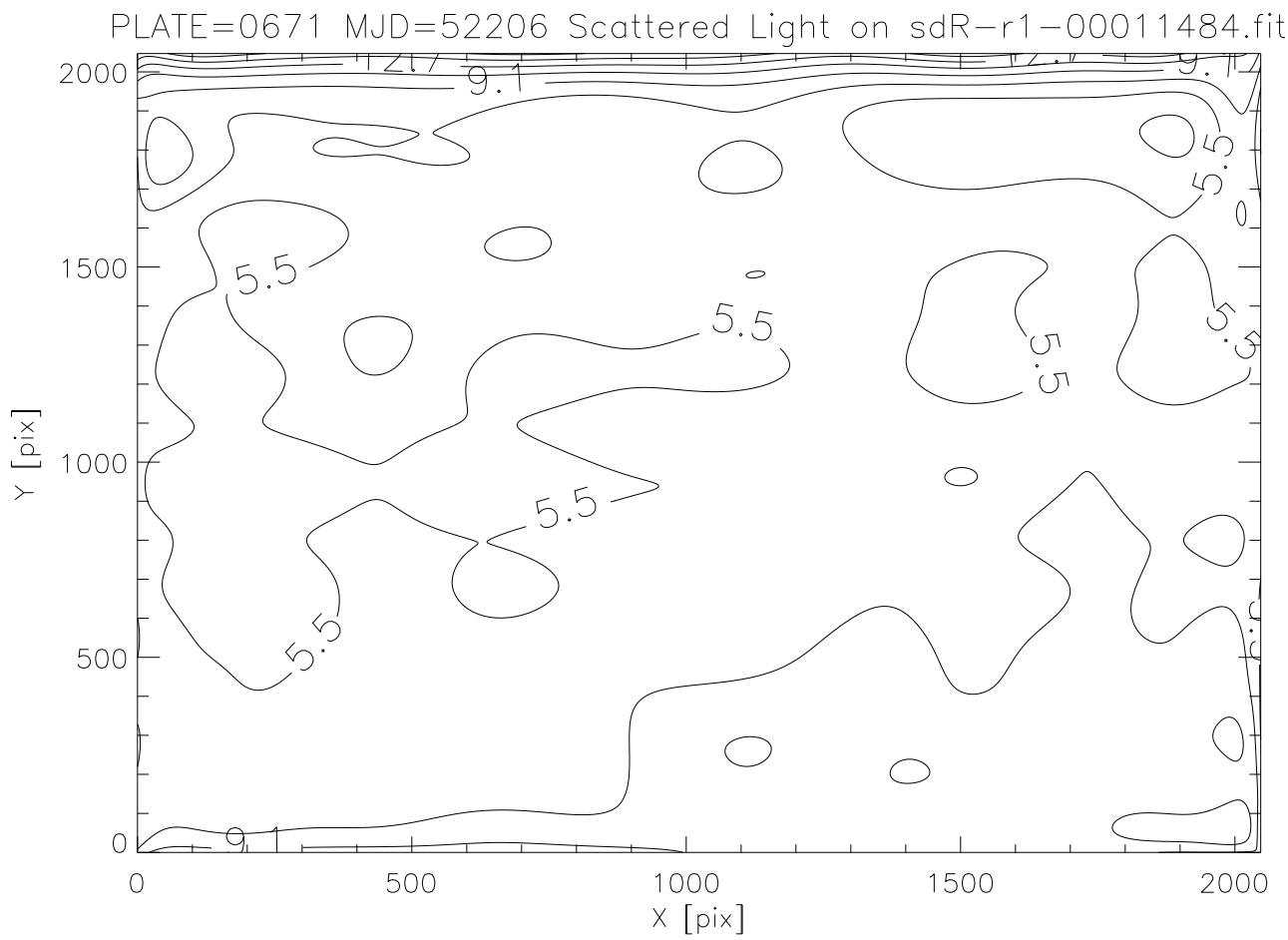

PLATE=0671 MJD=52206 sdR-r1-00011483.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.33 %
Fiber number
Focal Distance [mm]
Airmass

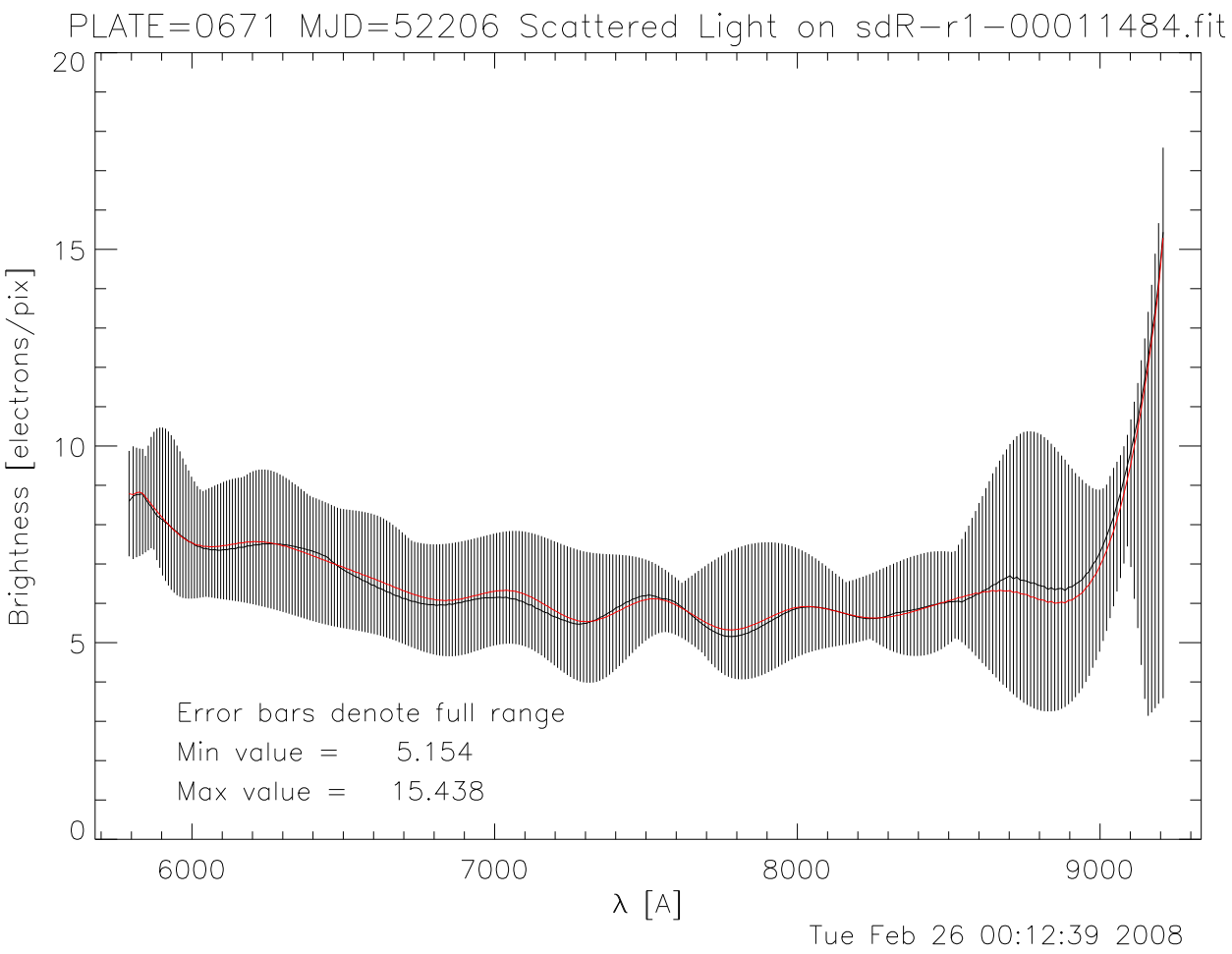

PLATE=0671 MJD=52206 sdR-r1-00011483.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.26 %
Fiber number
Focal Distance [mm]
Airmass

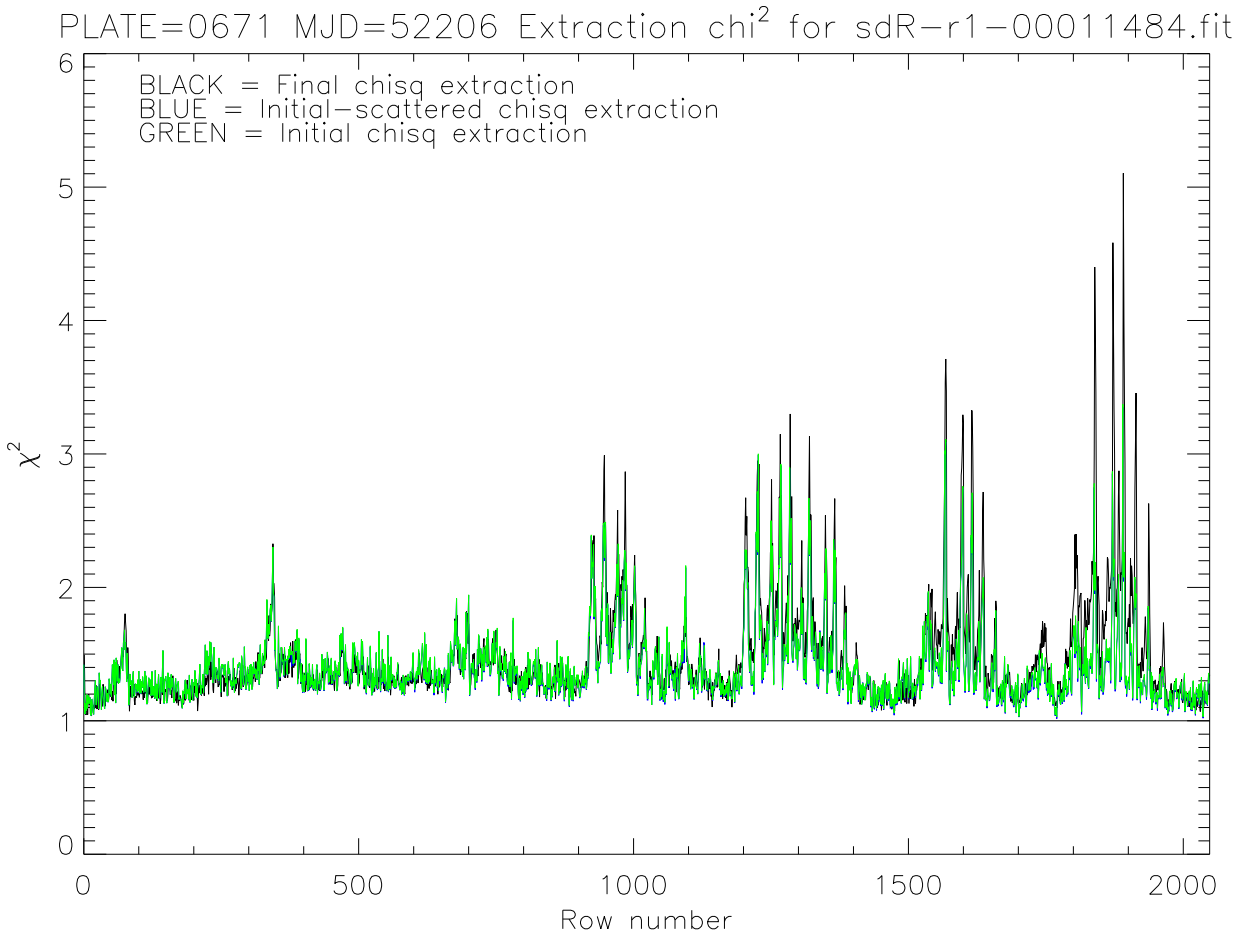

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.632
Max value = 1.308
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:09:30 2008

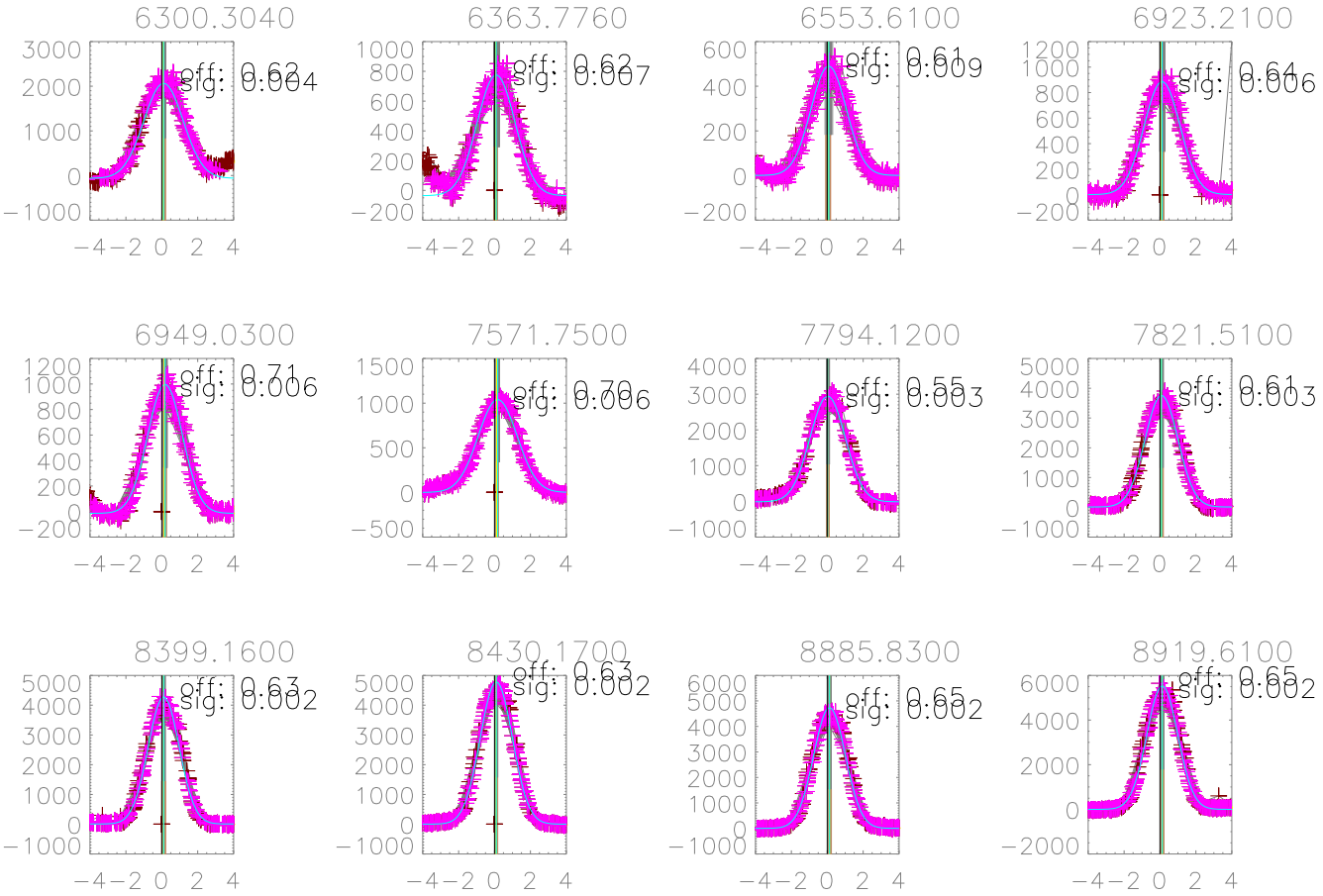

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011484.fi
38.2
38.2
38.2
27.3
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

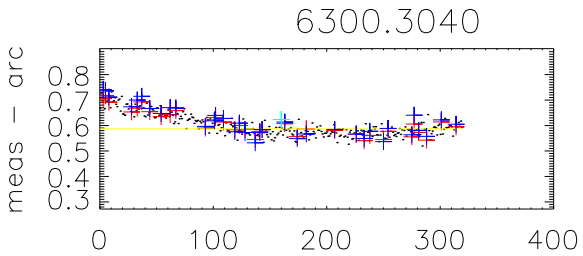

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011484.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.590
Max value = 46.378
Tue Feb 26 00:10:19 2008

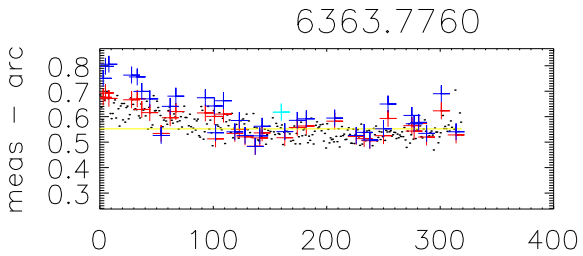

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011484.fit
9.1
5.5
0
Y [pix]
X [pix]
0
500
1000
1500
2000

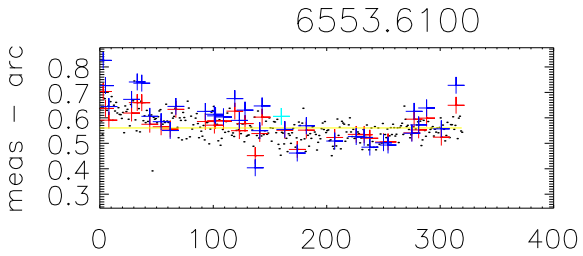

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011484.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.154
Max value = 15.438
Tue Feb 26 00:12:39 2008

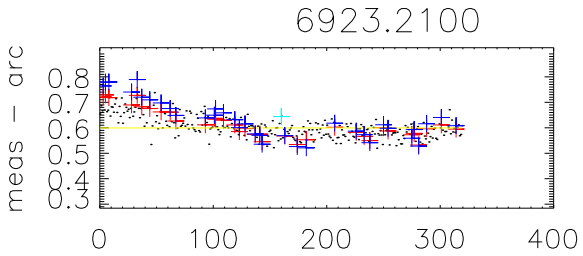

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r1−00011484.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

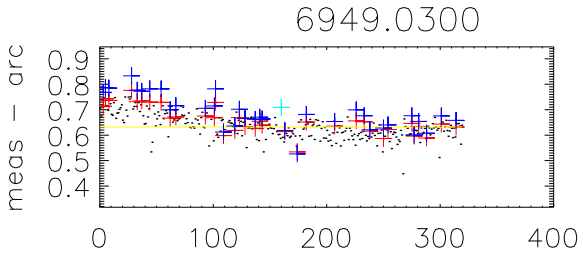

6300.3040
off: 0.62
sig: 0.004
6363.7760
off: 0.62
sig: 0.007
6553.6100
off: 0.61
sig: 0.009
6923.2100
off: 0.64
sig: 0.006
6949.0300
off: 0.71
sig: 0.006
7571.7500
off: 0.70
sig: 0.006
7794.1200
off: 0.55
sig: 0.003
7821.5100
off: 0.61
sig: 0.003
8399.1600
off: 0.63
sig: 0.002
8430.1700
off: 0.63
sig: 0.002
8885.8300
off: 0.65
sig: 0.002
8919.6100
off: 0.65
sig: 0.002

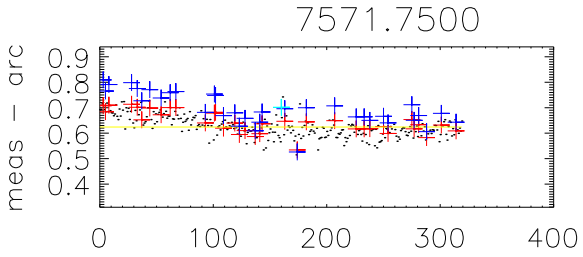

6300.3040
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

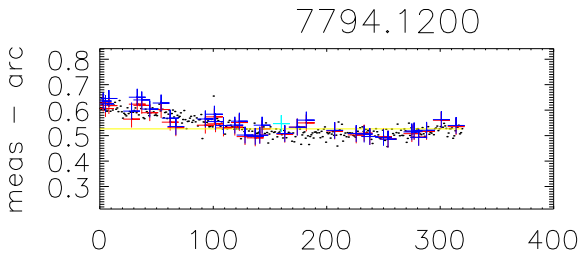

6363.7760
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

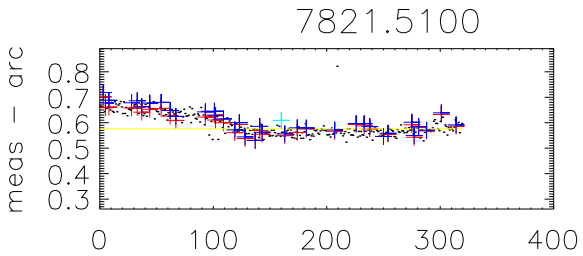

6553.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

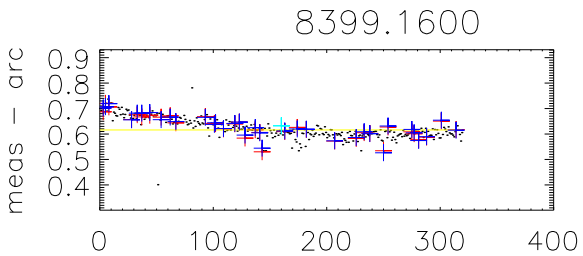

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

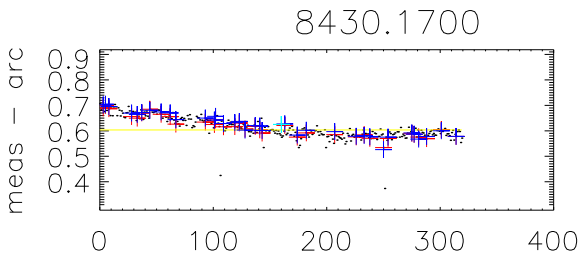

6949.0300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

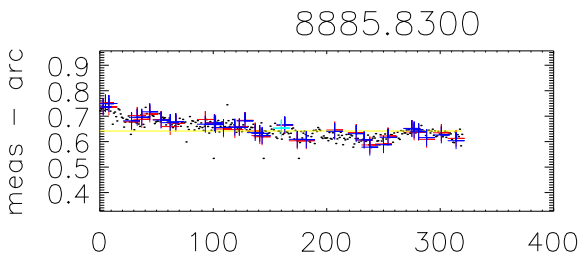

7571.7500
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

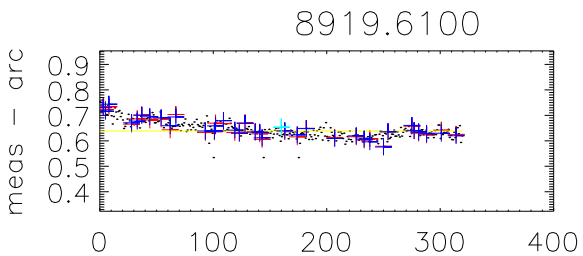

7794.1200
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

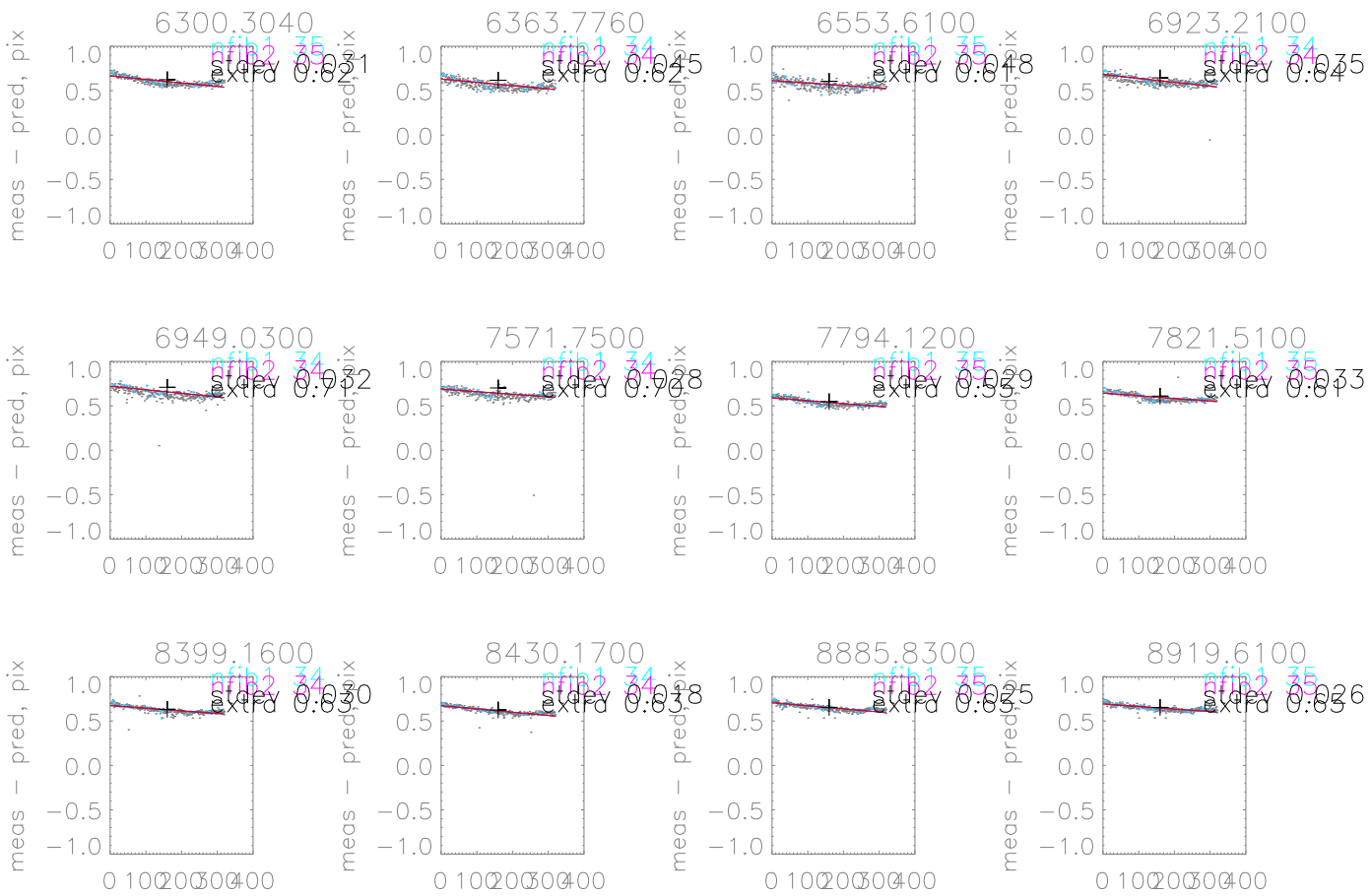

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

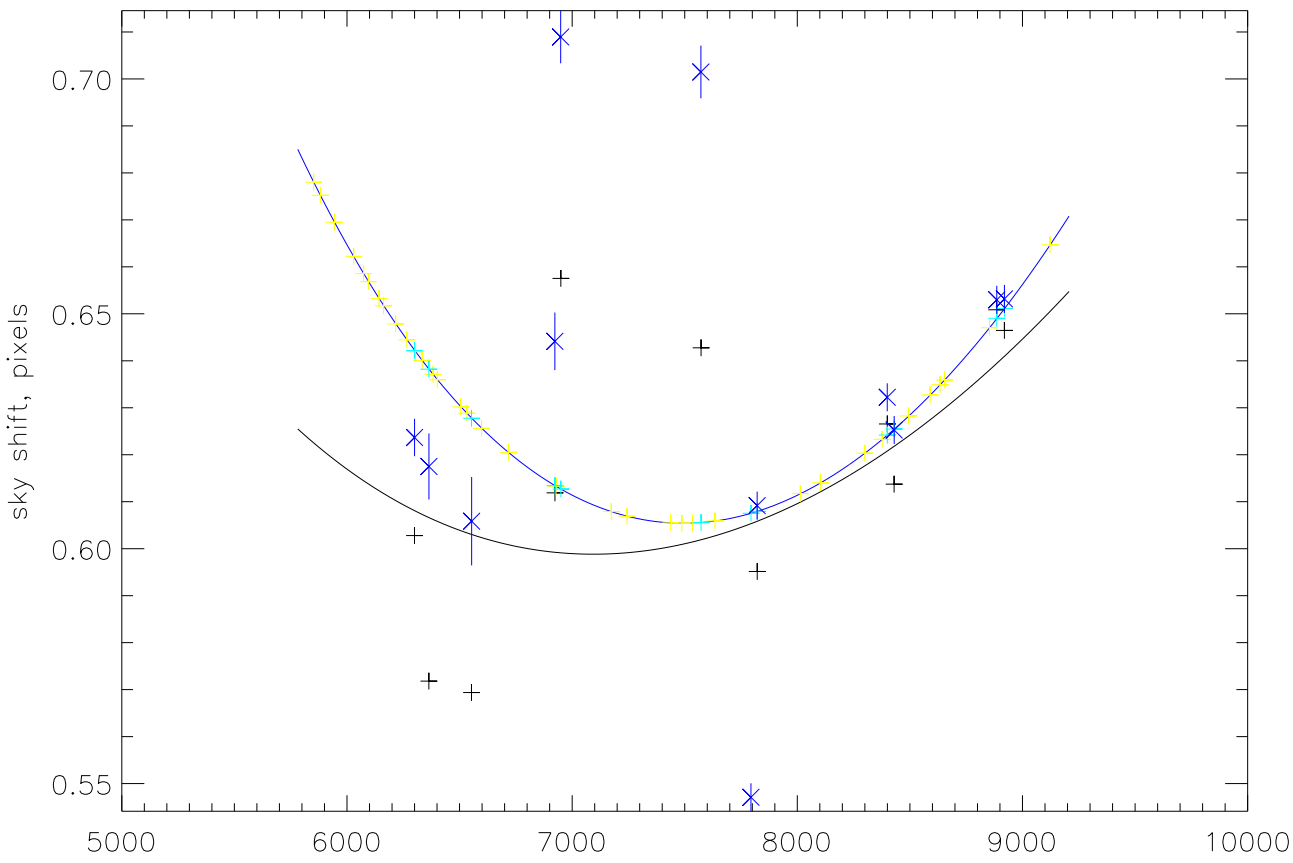

8399.1600
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

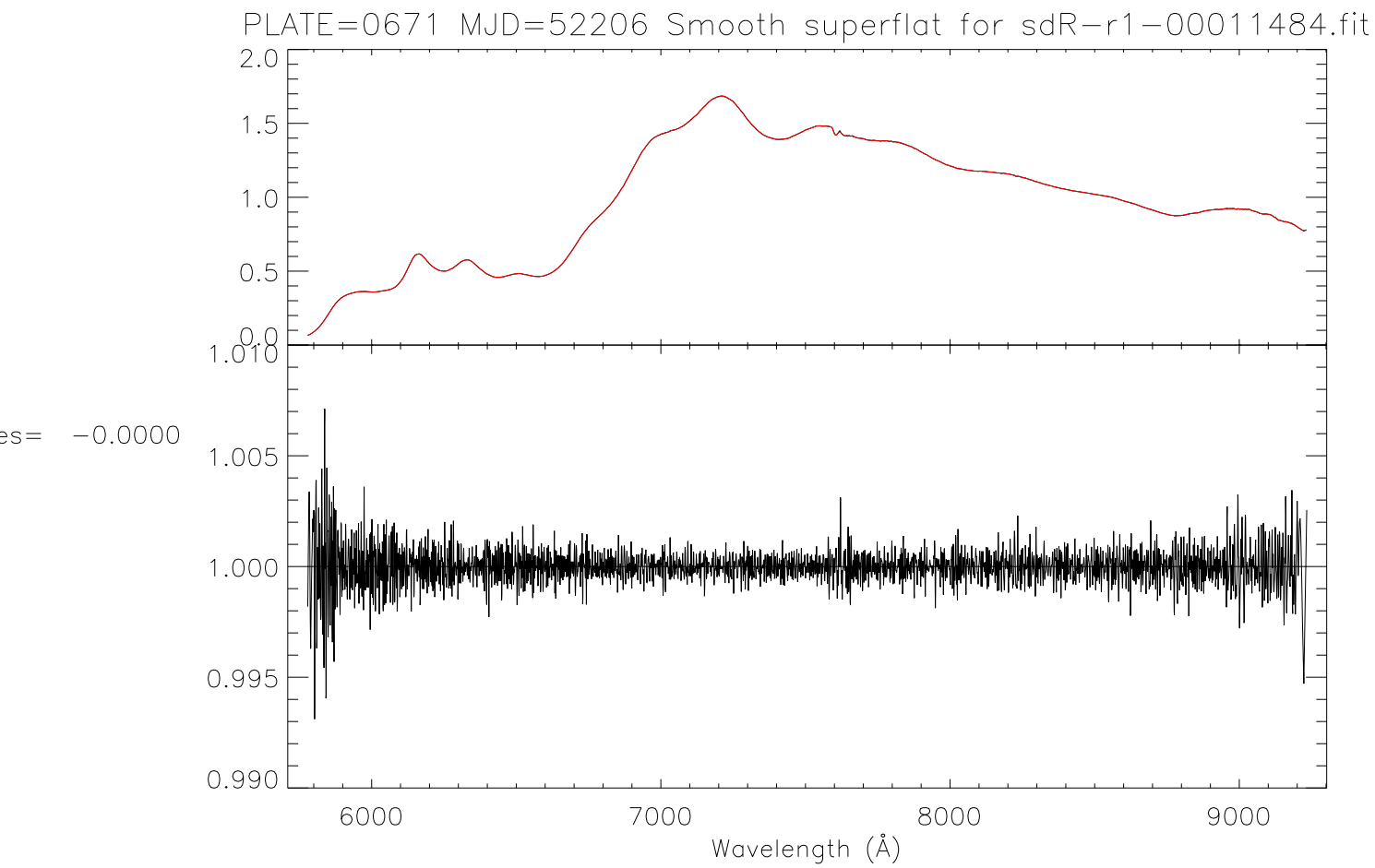

8430.1700
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

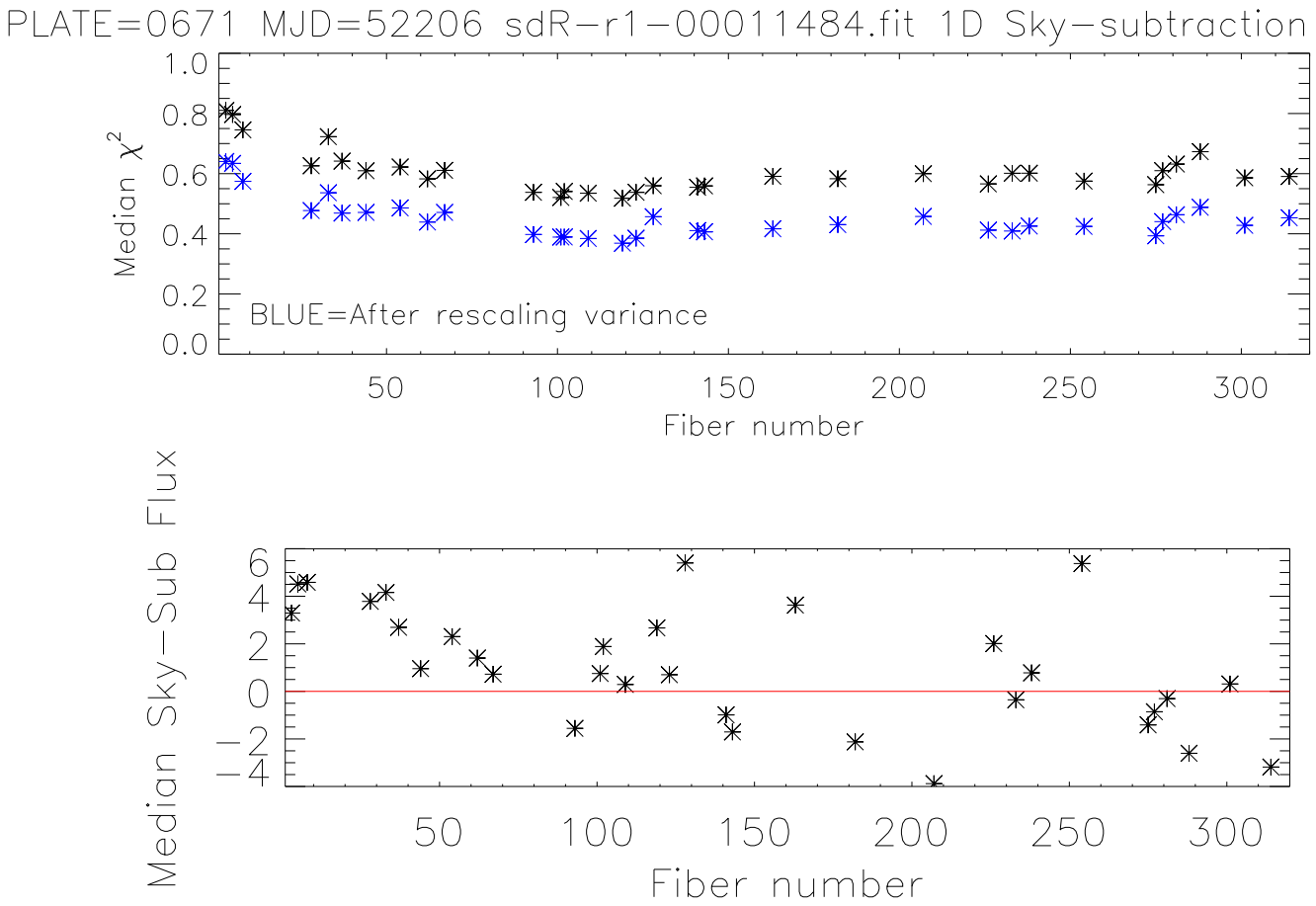

8885.8300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

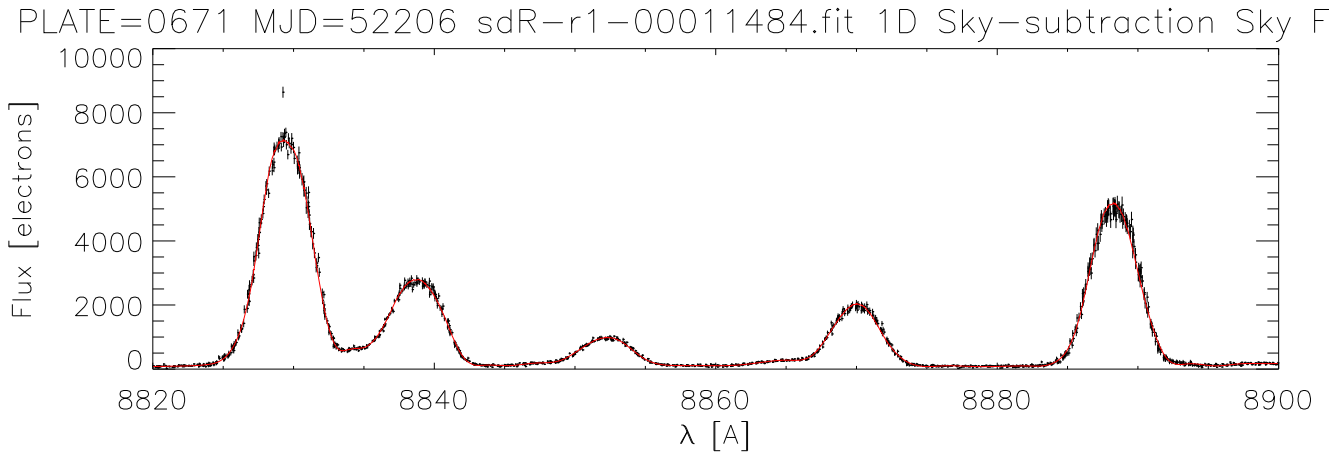

8919.6100
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

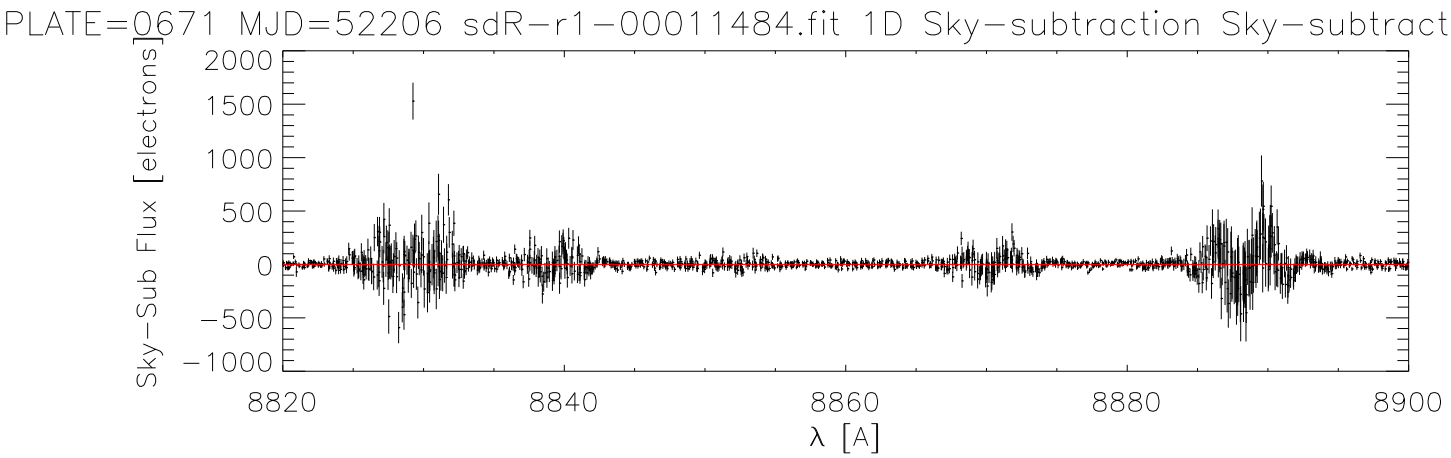

6300.3040
stdev 0.021
extra 0.82
6363.7760
stdev 0.045
extra 0.82
6553.6100
stdev 0.048
extra 0.81
6923.2100
stdev 0.035
extra 0.84
6949.0300
stdev 0.032
extra 0.71
7571.7500
stdev 0.028
extra 0.76
7794.1200
stdev 0.029
extra 0.55
7821.5100
stdev 0.033
extra 0.81
8399.1600
stdev 0.030
extra 0.63
8430.1700
stdev 0.038
extra 0.63
8885.8300
stdev 0.025
extra 0.63
8919.6100
stdev 0.026
extra 0.63
meas − pred, pix
mfib1 34
mfib2 35

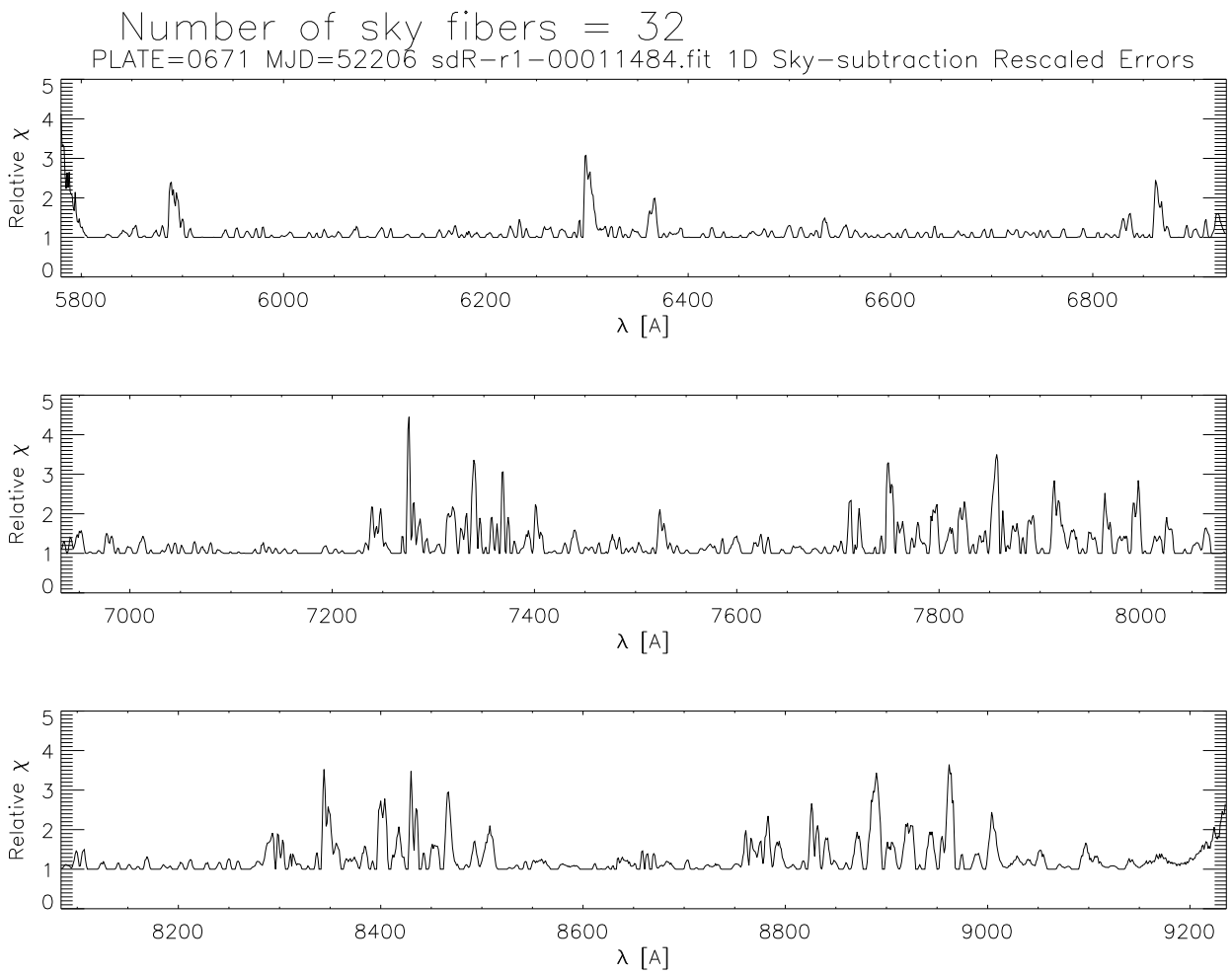

0.70
0.65
0.60
0.55
sky shift, pixels
5000
6000
7000
8000
9000
10000

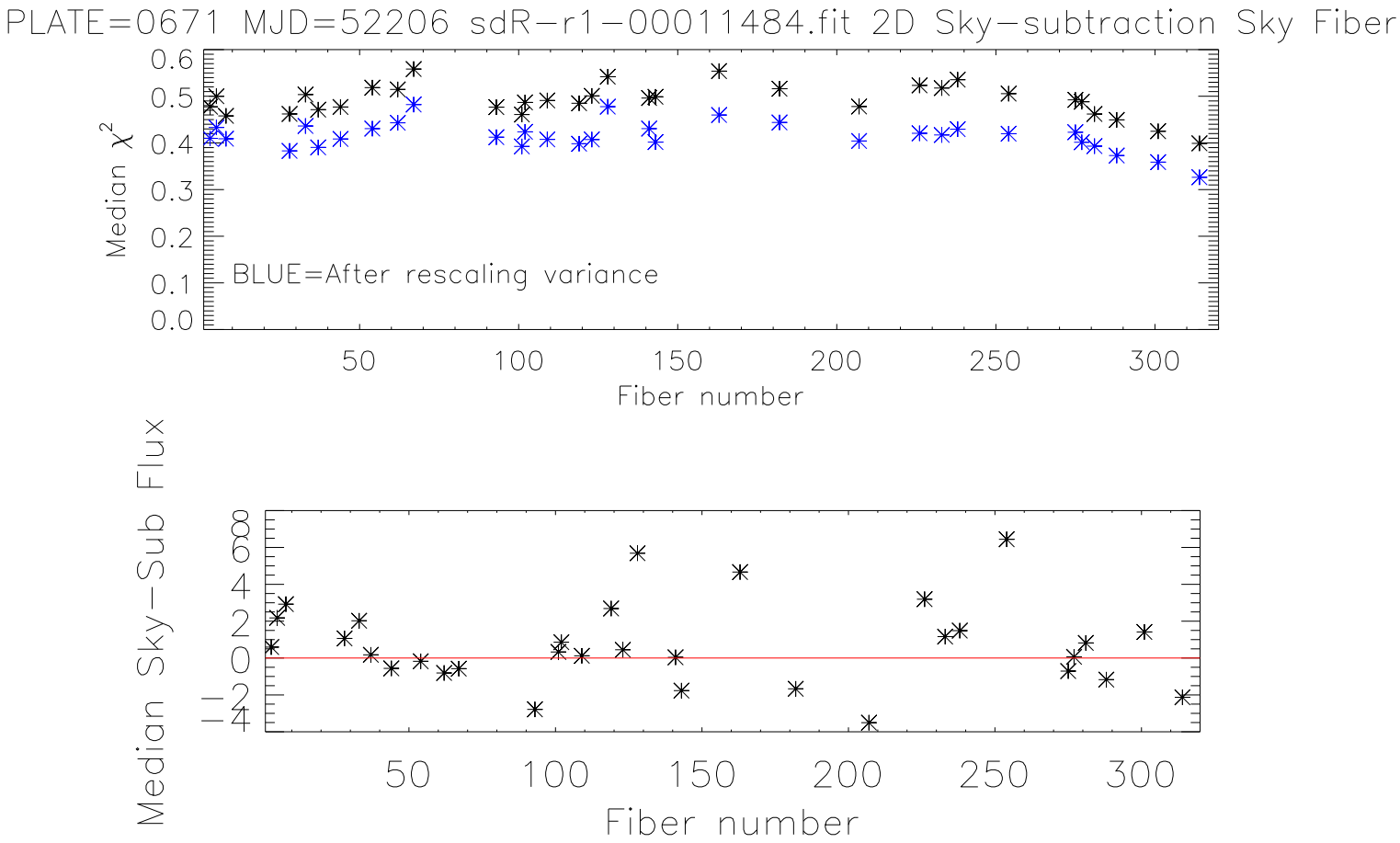

PLATE=0671 MJD=52206 Smooth superflat for sdR-r1-00011484.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

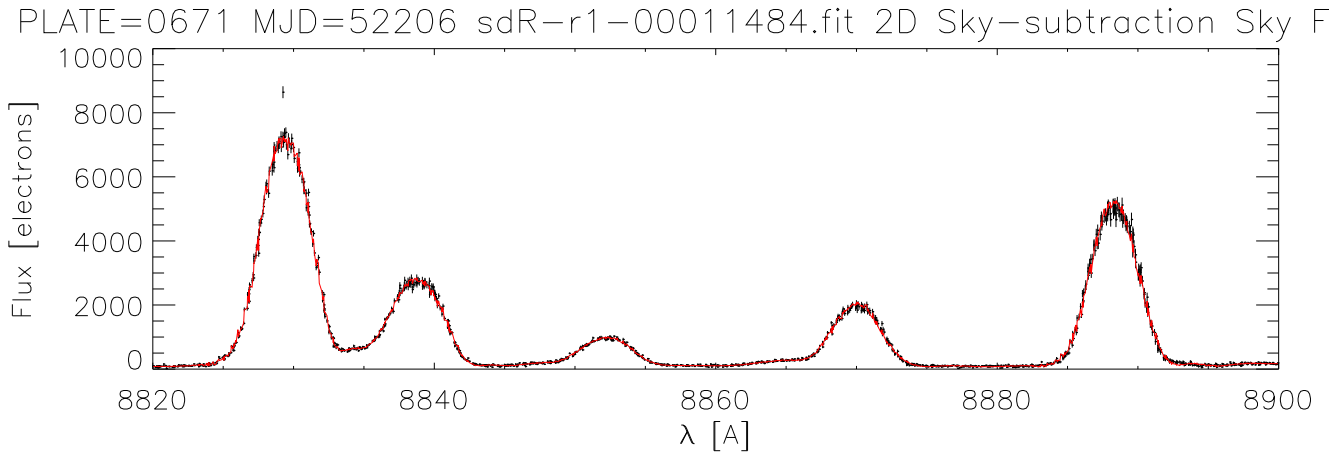

PLATE=0671 MJD=52206 sdR-r1-00011484.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
-2
-4
50
100
150
200
250
300
Fiber number

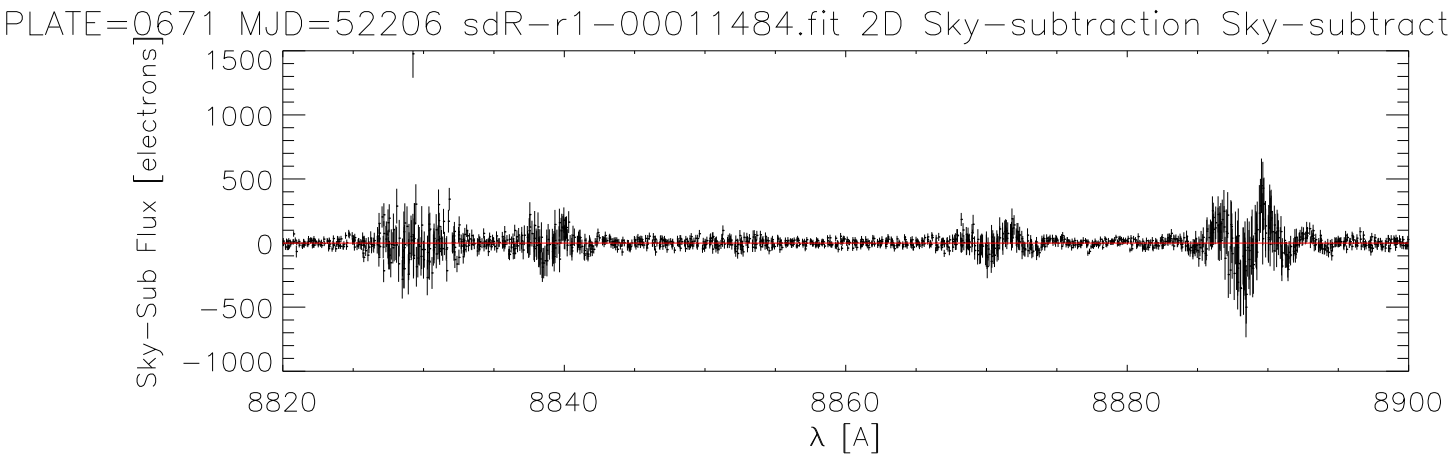

PLATE=0671 MJD=52206 sdR-r1-00011484.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

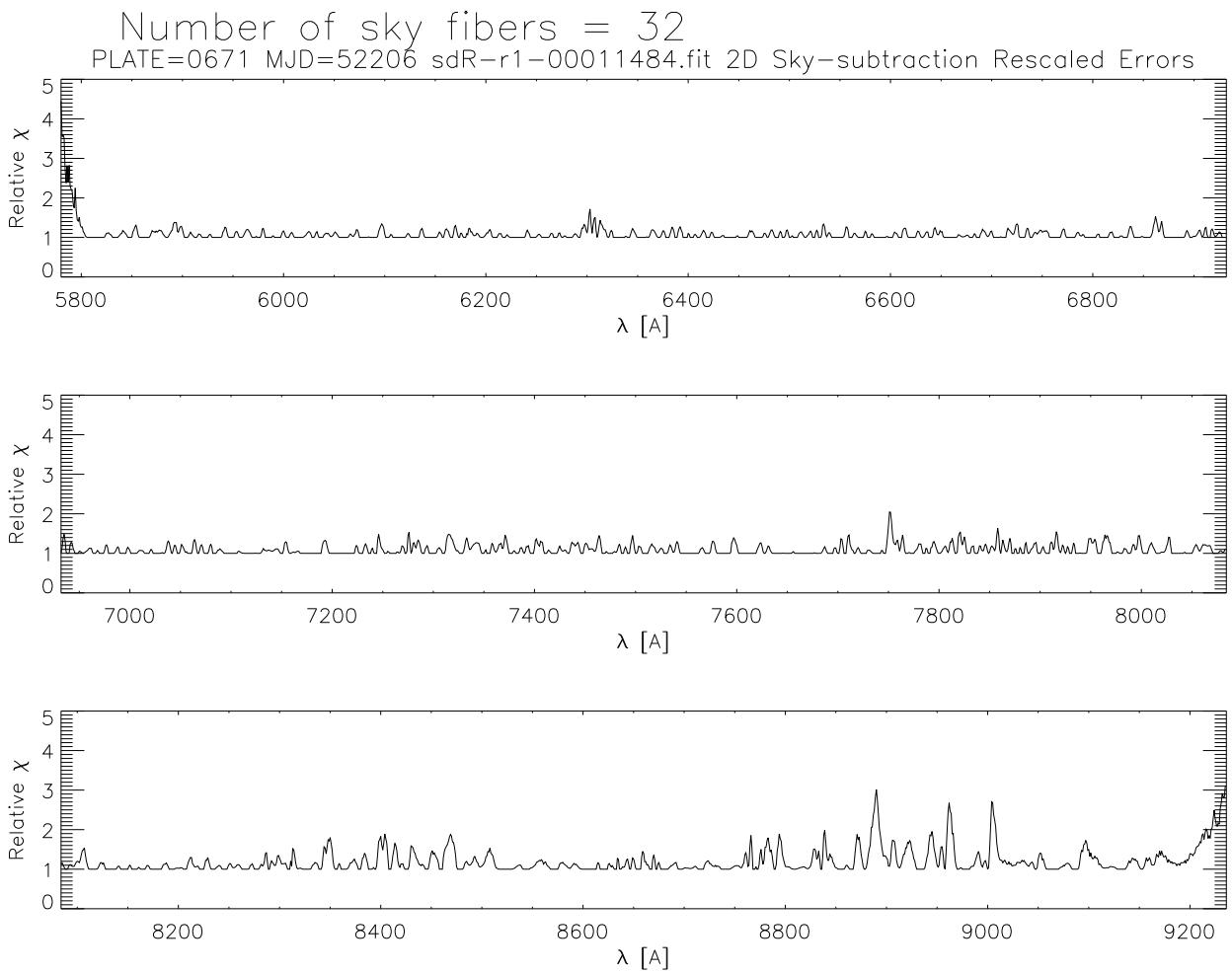

PLATE=0671 MJD=52206 sdR-r1-00011484.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

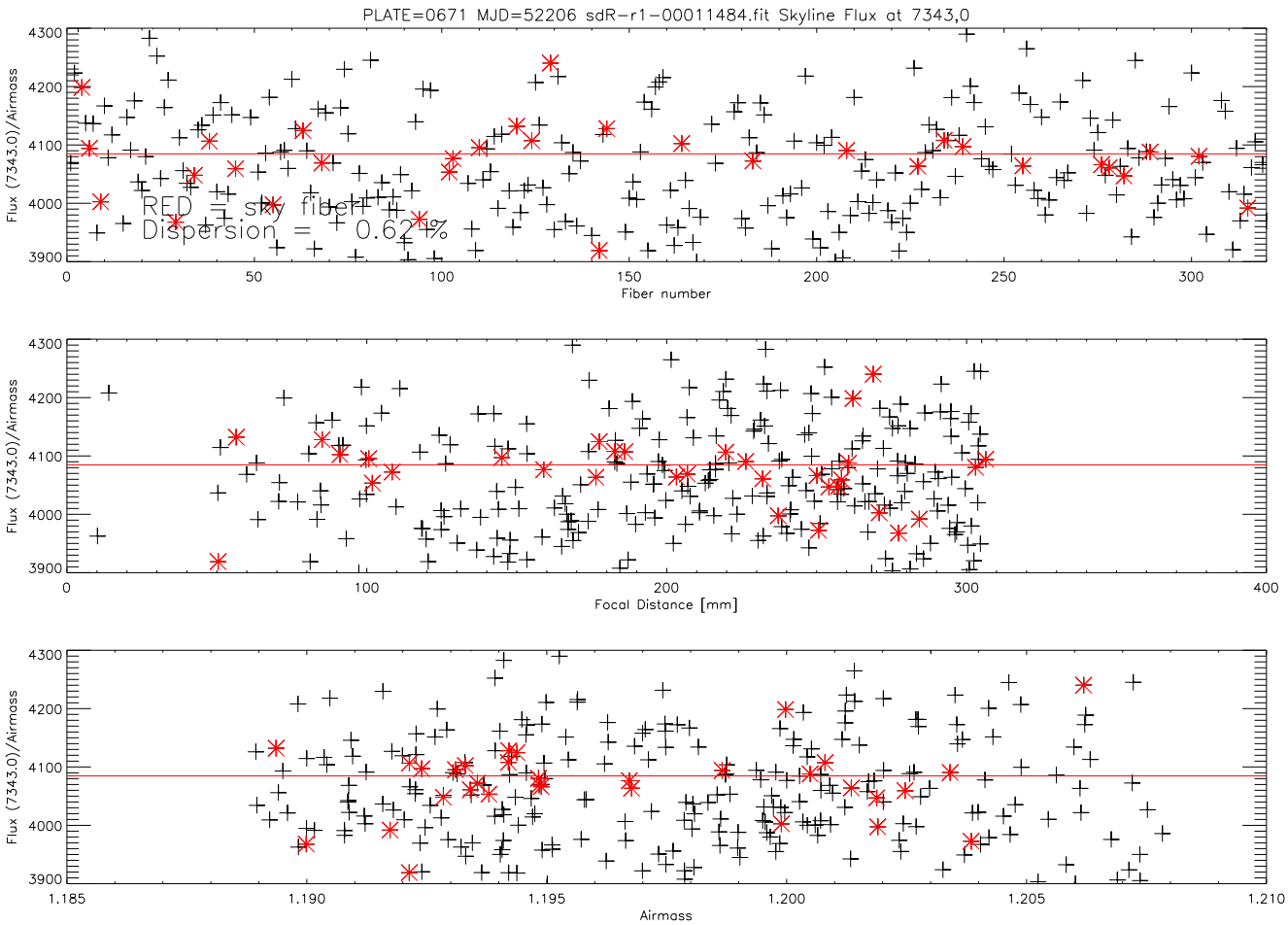

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r1-00011484.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

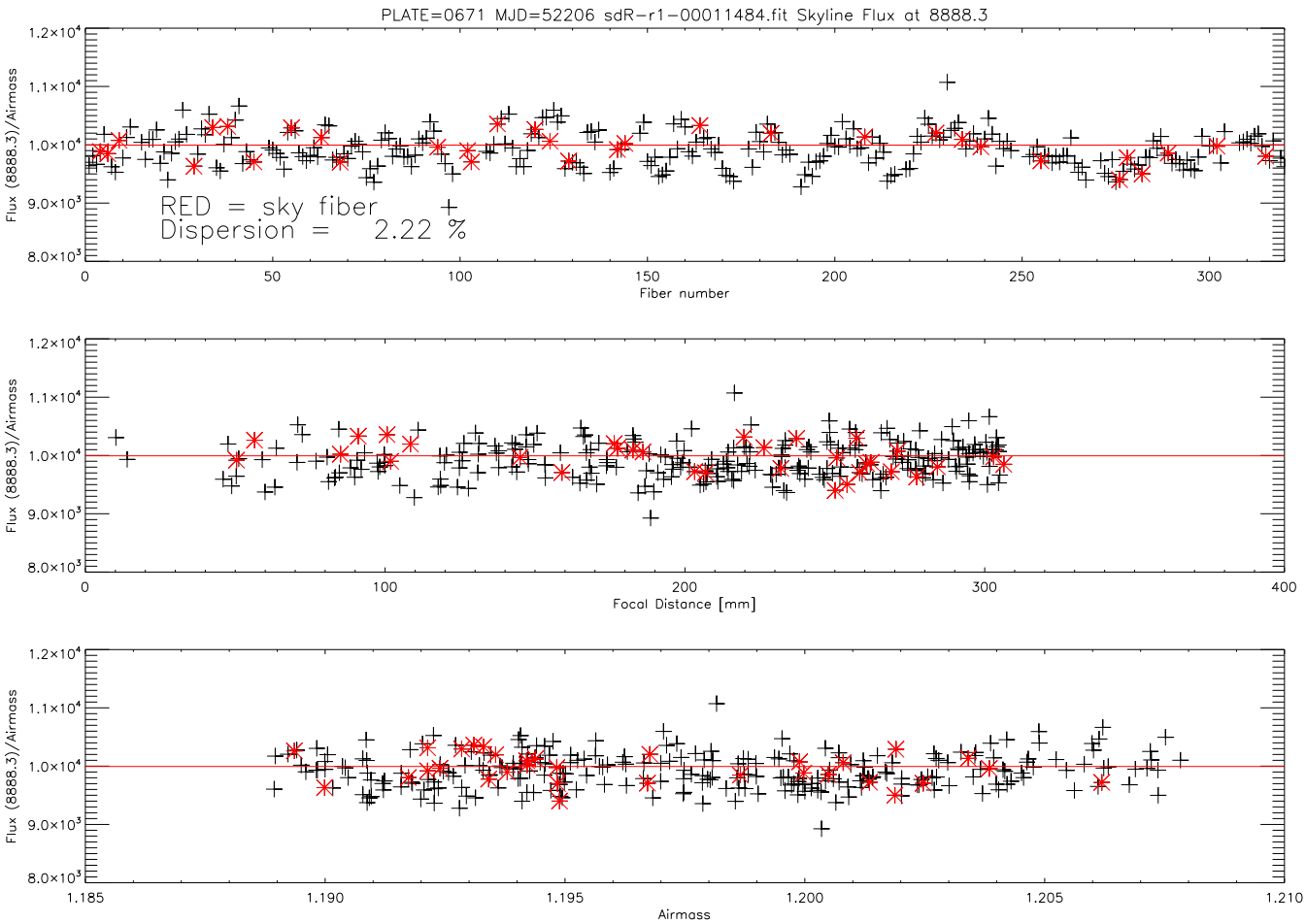

PLATE=0671 MJD=52206 sdR-r1-00011484.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

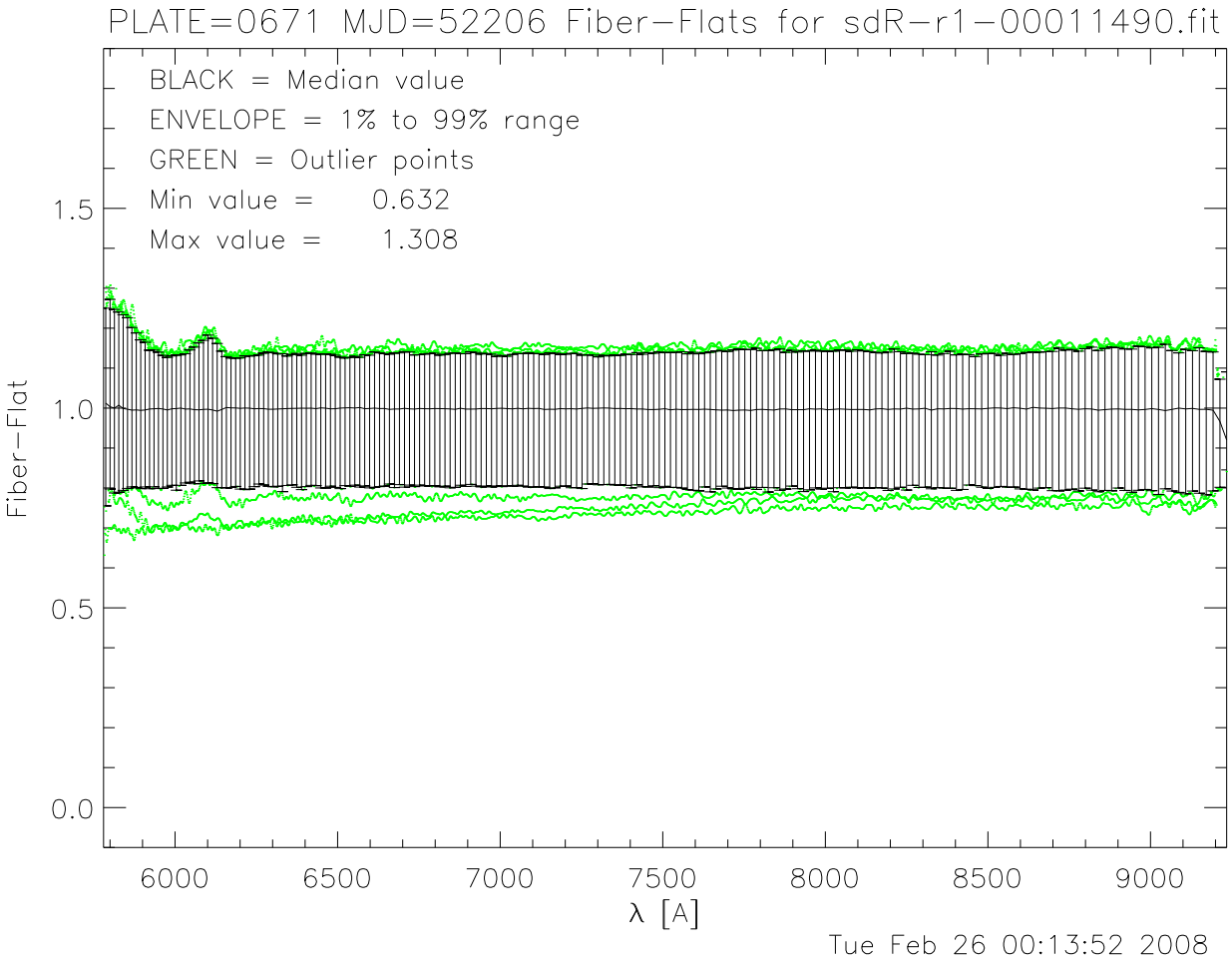

PLATE=0671 MJD=52206 sdR-r1-00011484.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

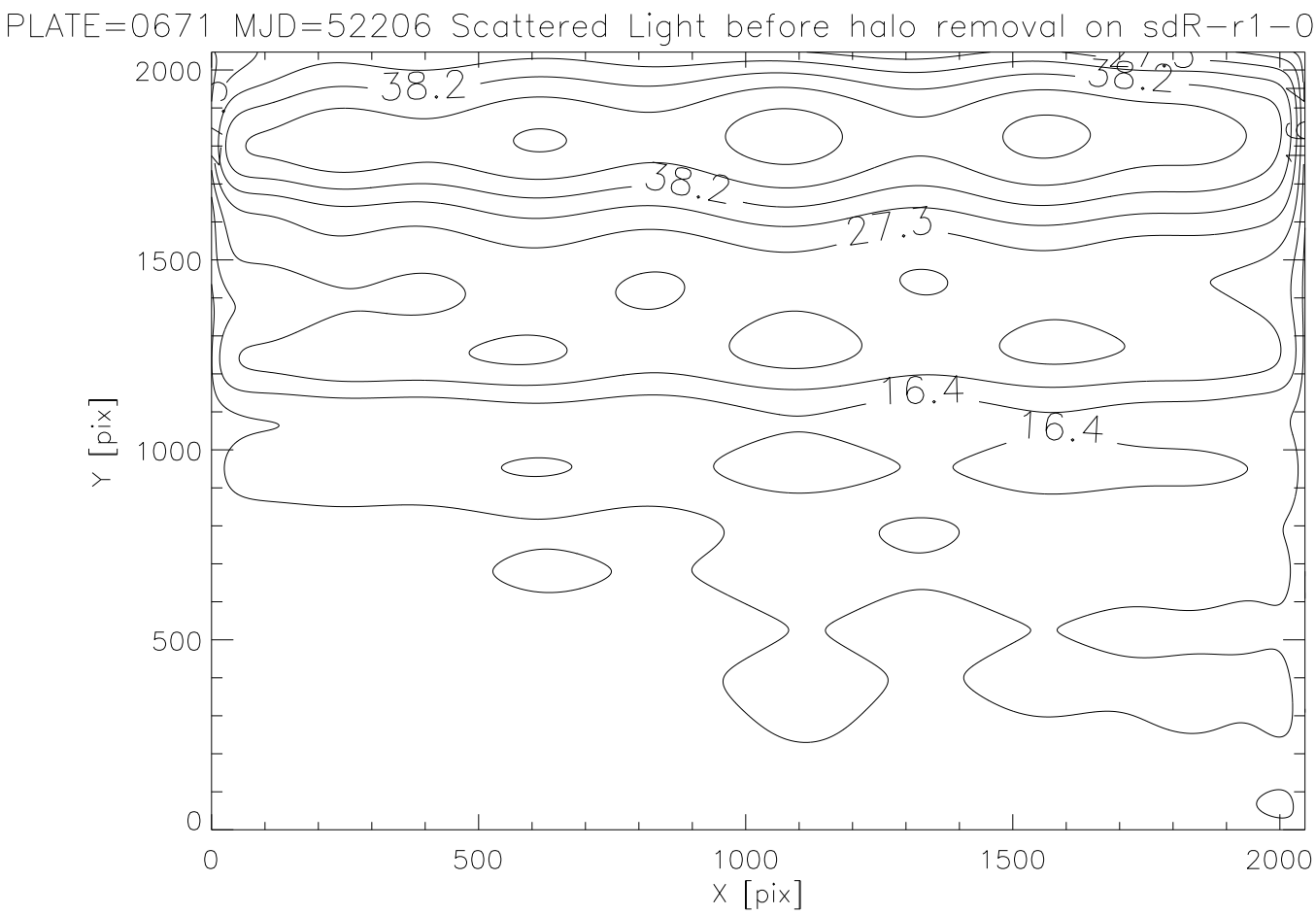

PLATE=0671 MJD=52206 sdR-r1-00011484.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

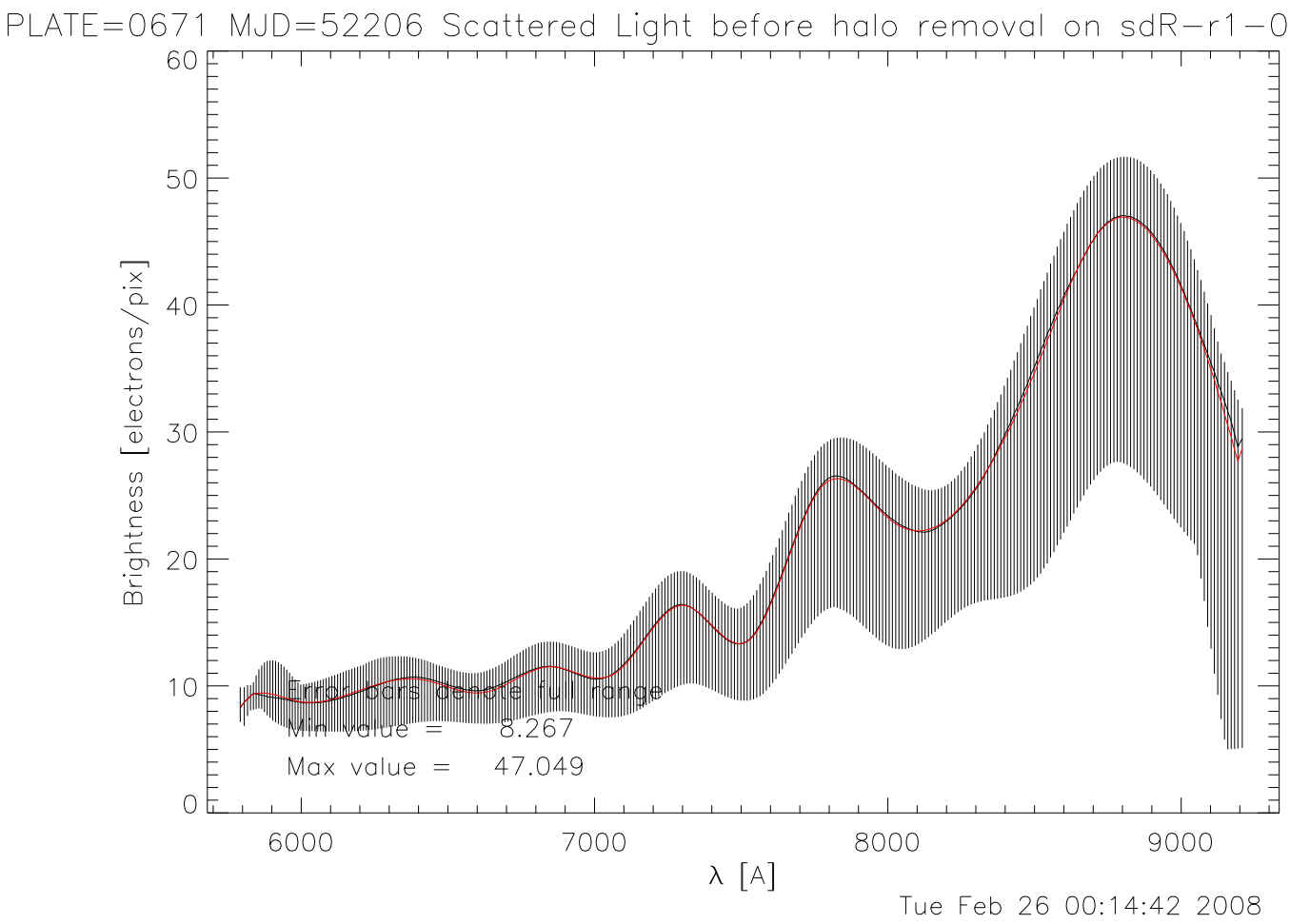

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r1-00011484.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

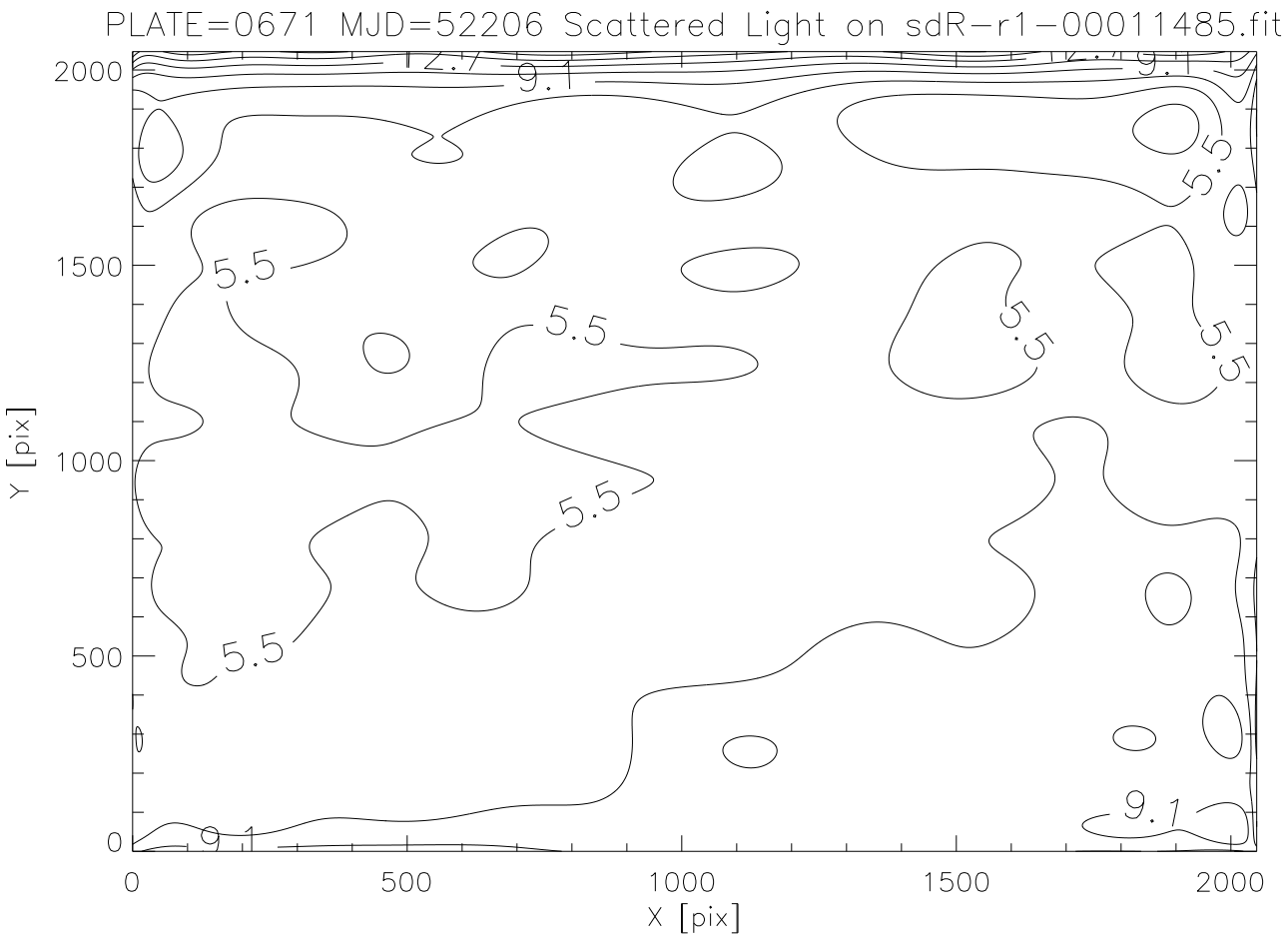

PLATE=0671 MJD=52206 sdR-r1-00011484.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 0.624%
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

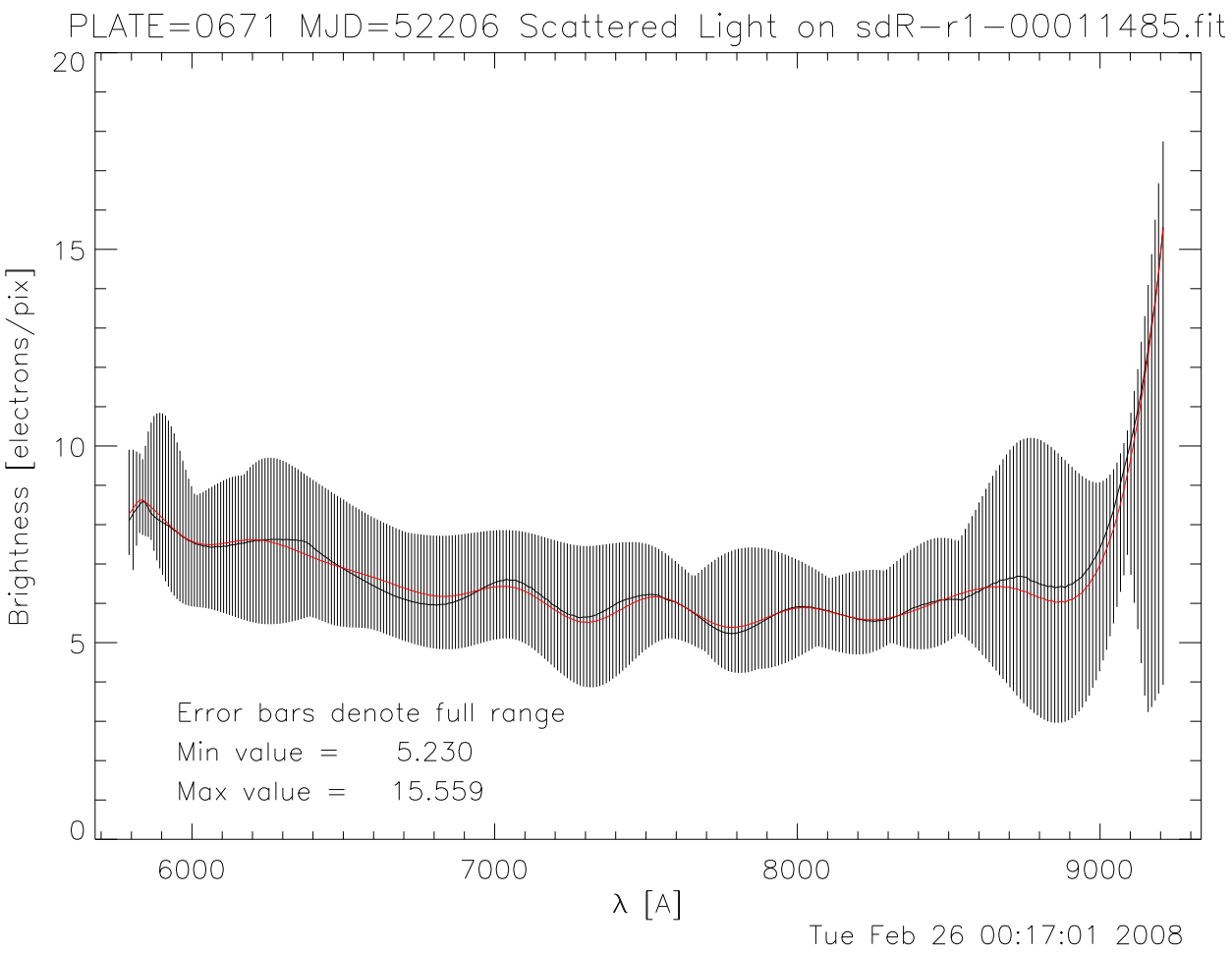

PLATE=0671 MJD=52206 sdR-r1-00011484.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.22 %
Fiber number
Focal Distance [mm]
Airmass

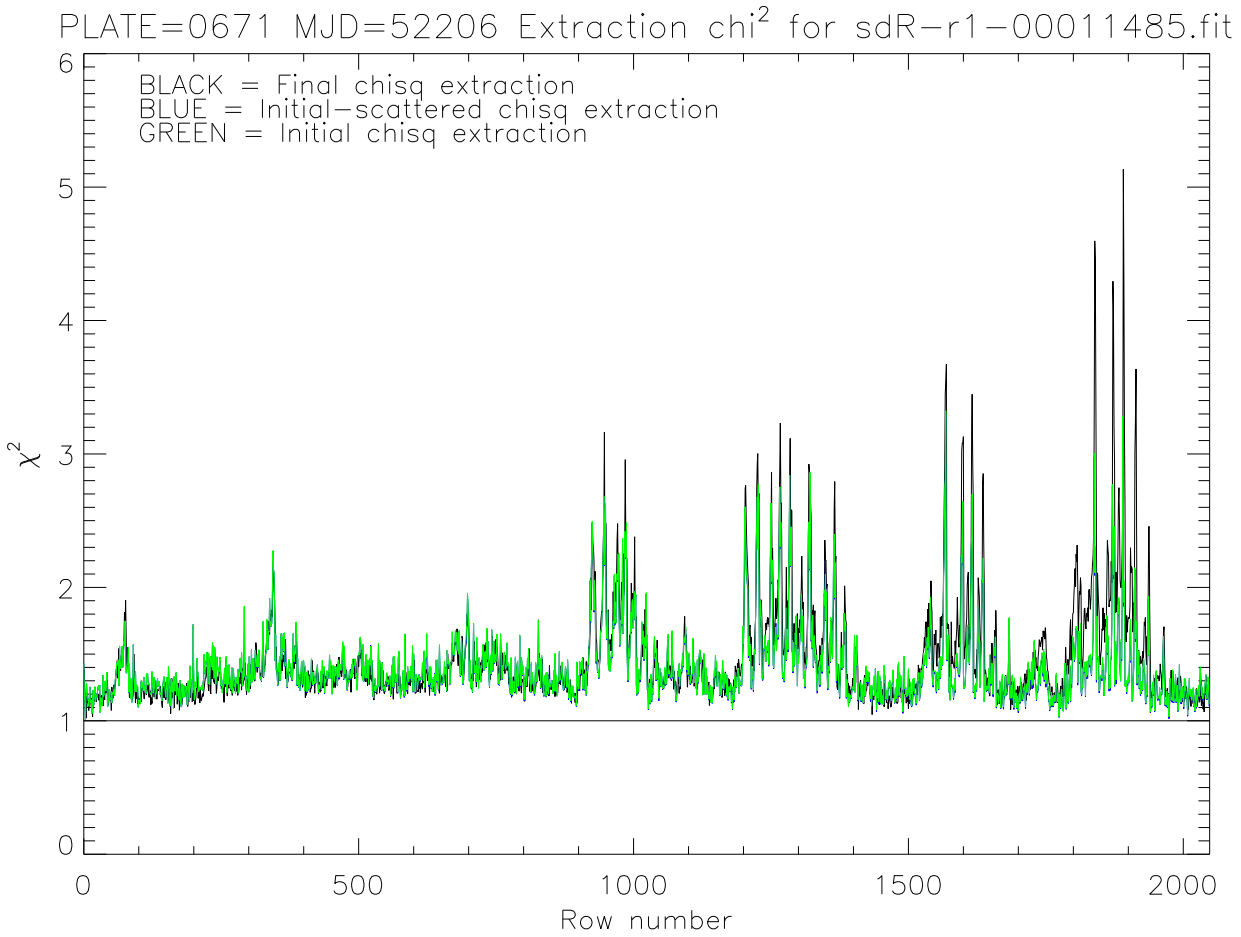

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.632
Max value = 1.308
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:13:52 2008

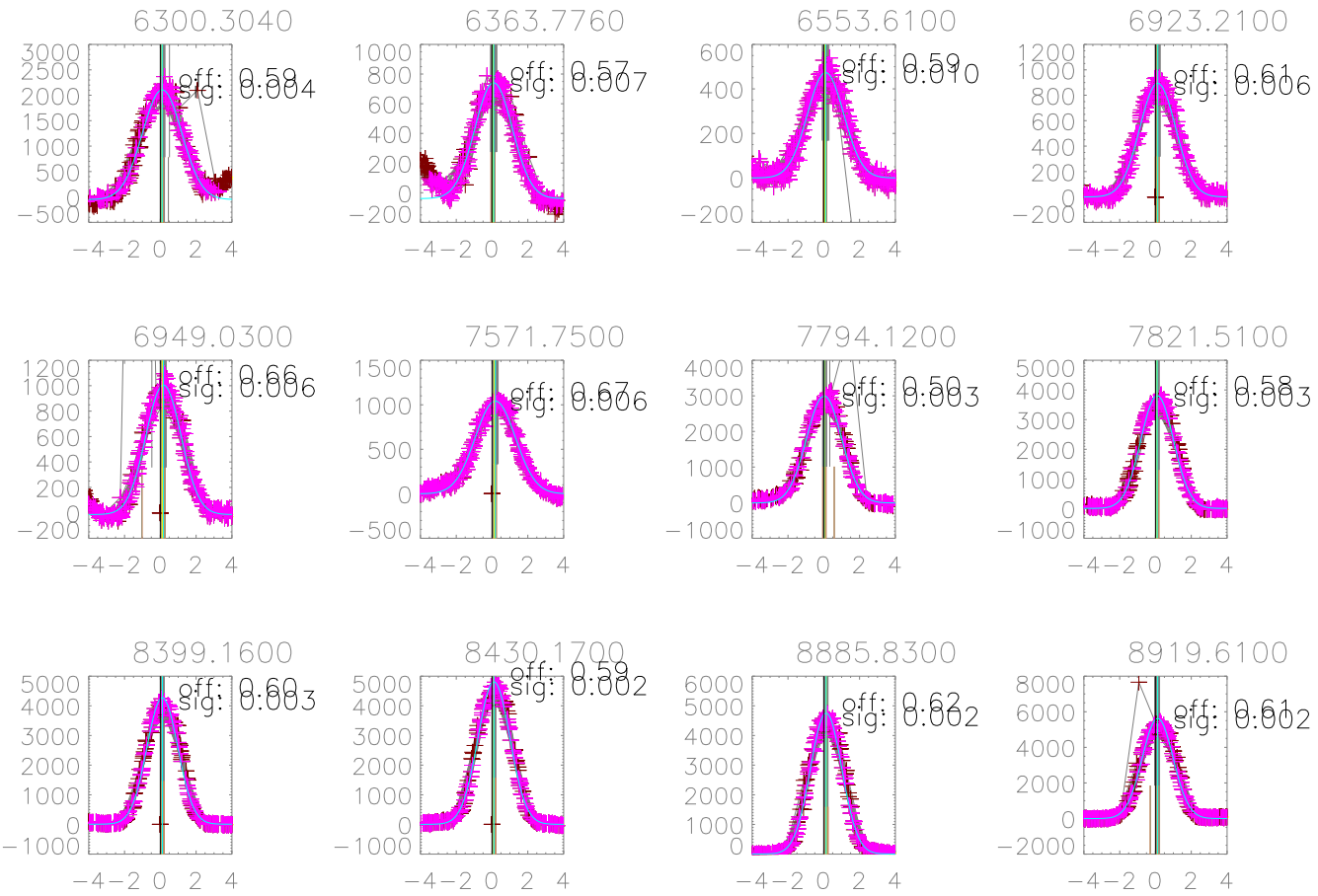

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011485.fi
38.2
38.2
38.2
27.3
16.4
16.4
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

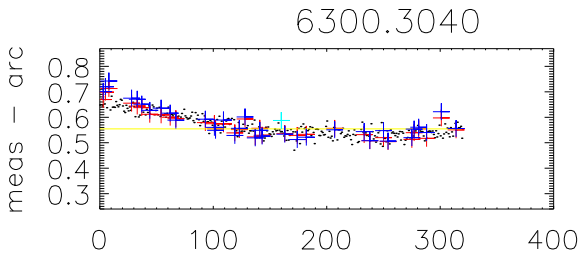

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011485.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.267
Max value = 47.049
Tue Feb 26 00:14:42 2008

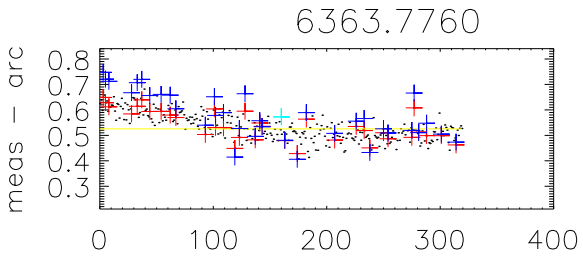

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011485.fit
12.7
9.1
5.5
5.5
5.5
5.5
5.5
5.5
9.1
9.1
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

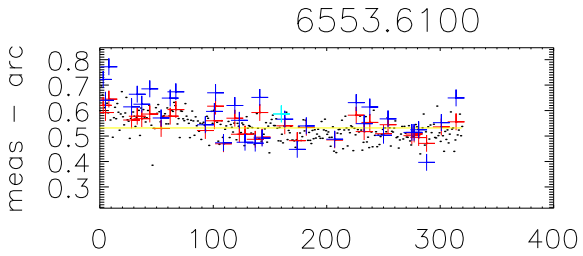

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011485.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.230
Max value = 15.559
Tue Feb 26 00:17:01 2008

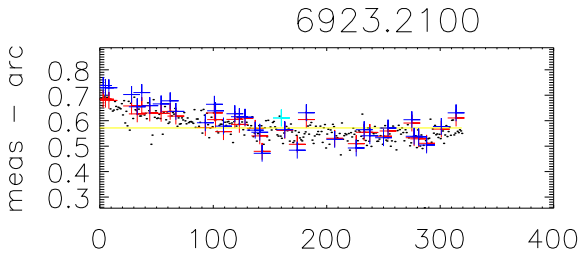

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r1−00011485.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

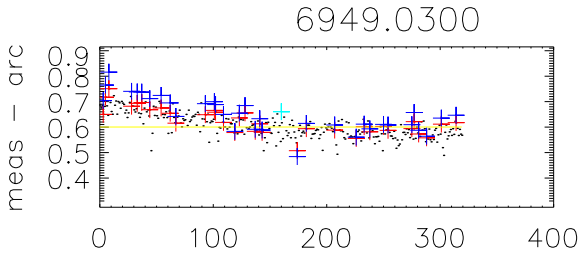

6300.3040
off: 0.59
sig: 0.004
6363.7760
off: 0.57
sig: 0.007
6553.6100
off: 0.59
sig: 0.010
6923.2100
off: 0.61
sig: 0.006
6949.0300
off: 0.66
sig: 0.006
7571.7500
off: 0.67
sig: 0.006
7794.1200
off: 0.50
sig: 0.003
7821.5100
off: 0.58
sig: 0.003
8399.1600
off: 0.60
sig: 0.003
8430.1700
off: 0.59
sig: 0.002
8885.8300
off: 0.62
sig: 0.002
8919.6100
off: 0.61
sig: 0.002

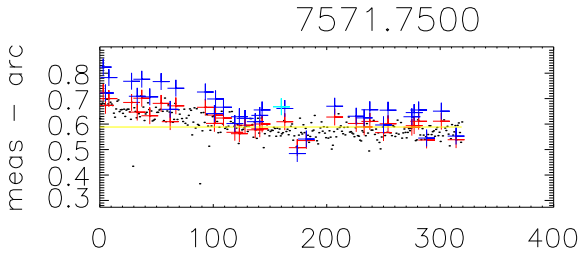

6300.3040
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

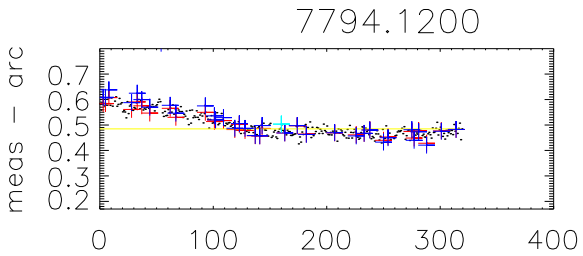

6363.7760
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

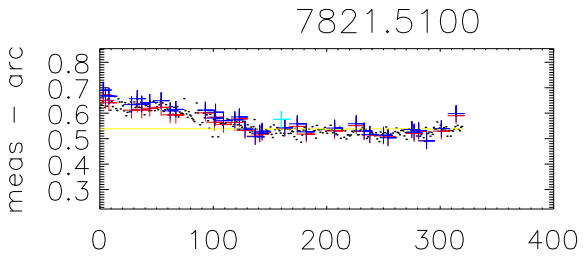

6553.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

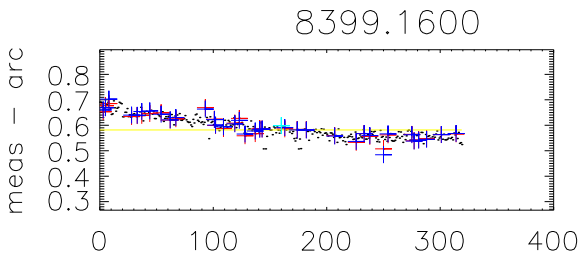

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

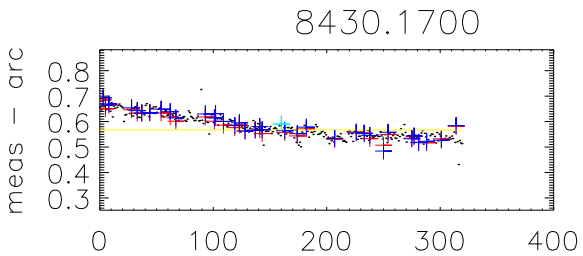

6949.0300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

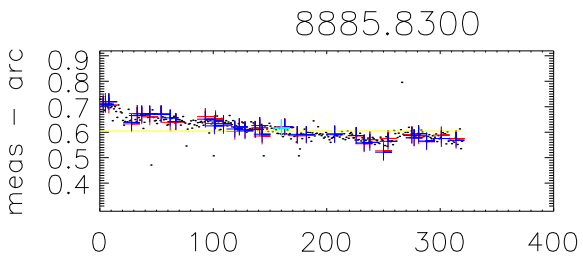

7571.7500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

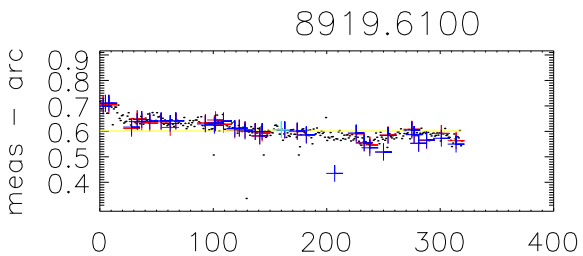

7794.1200
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

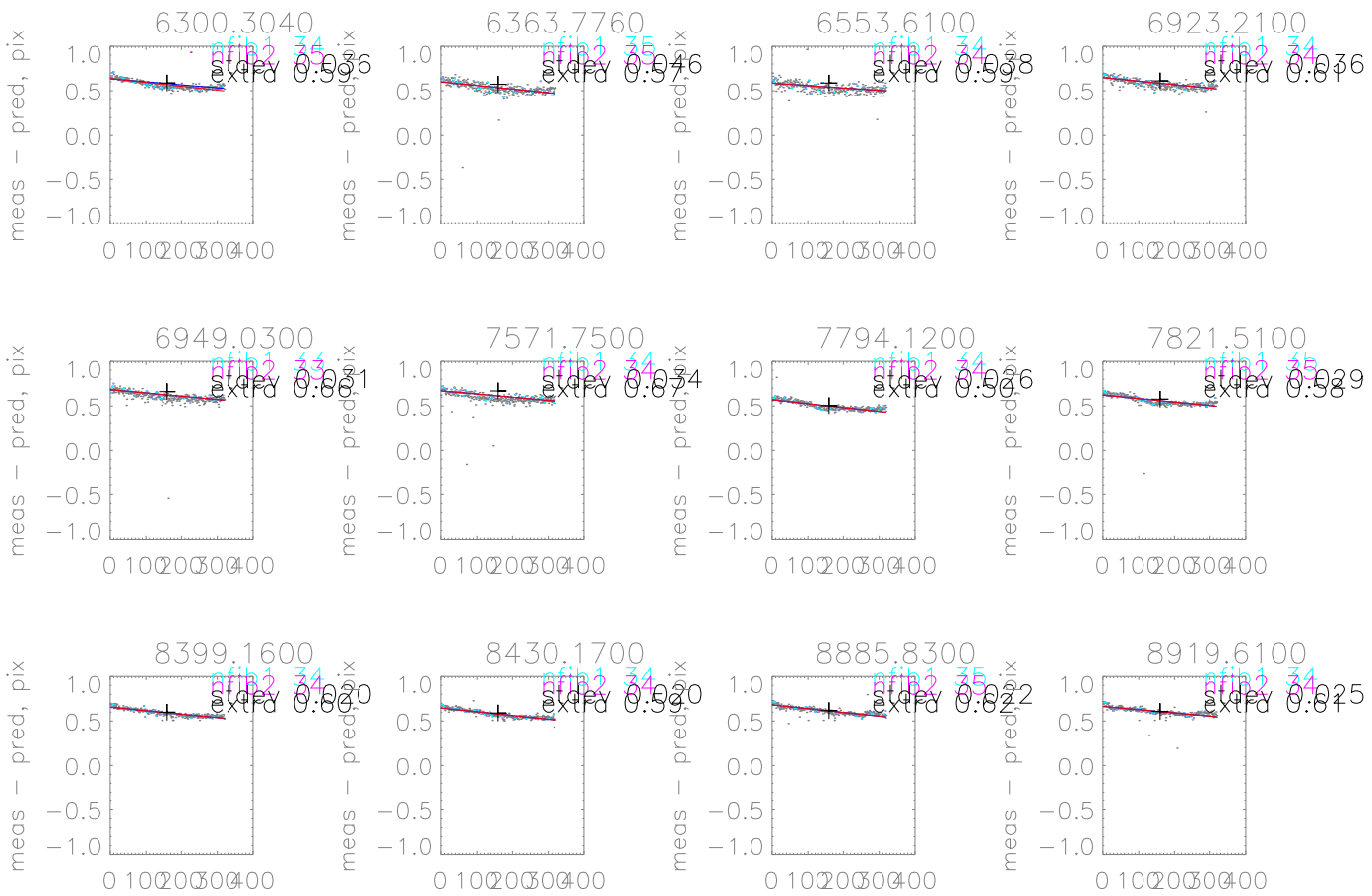

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

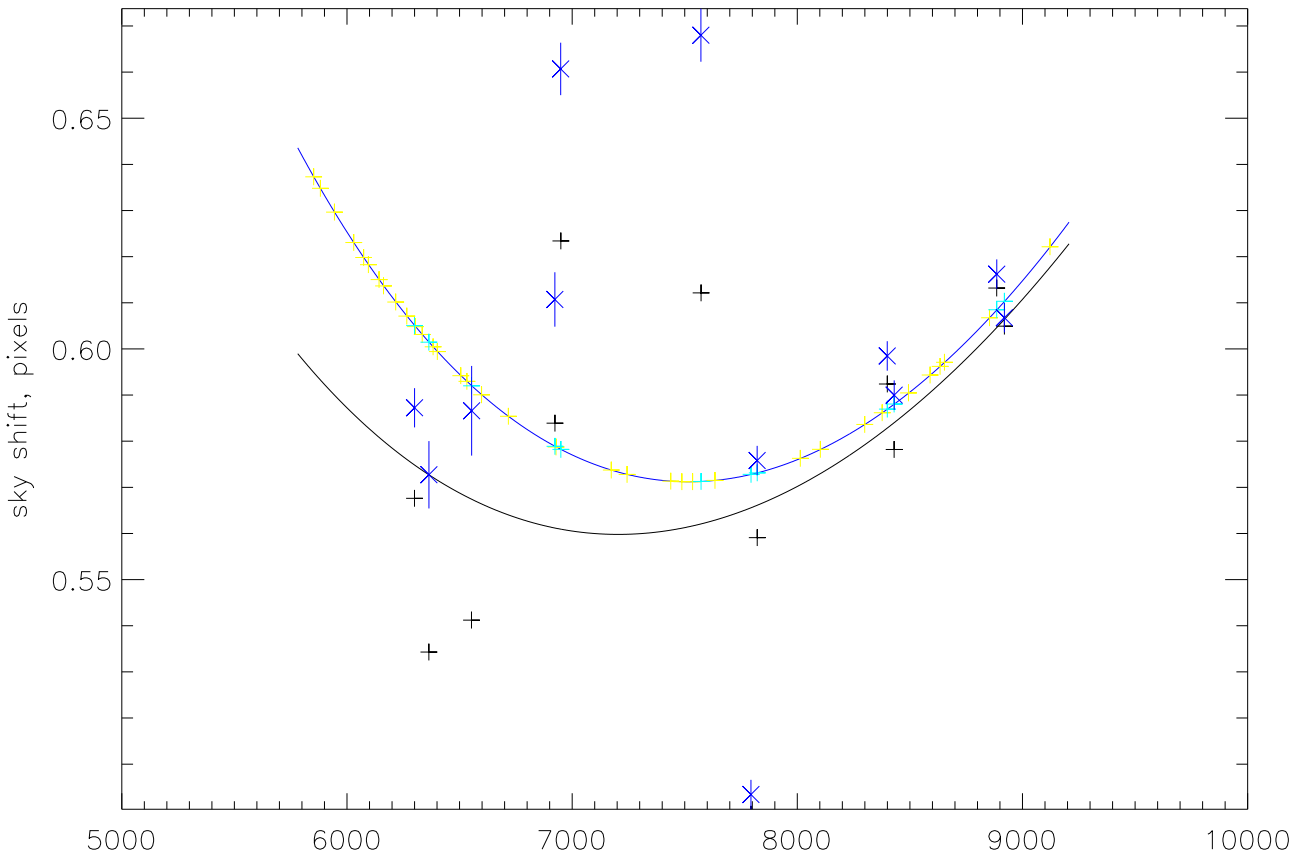

8399.1600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

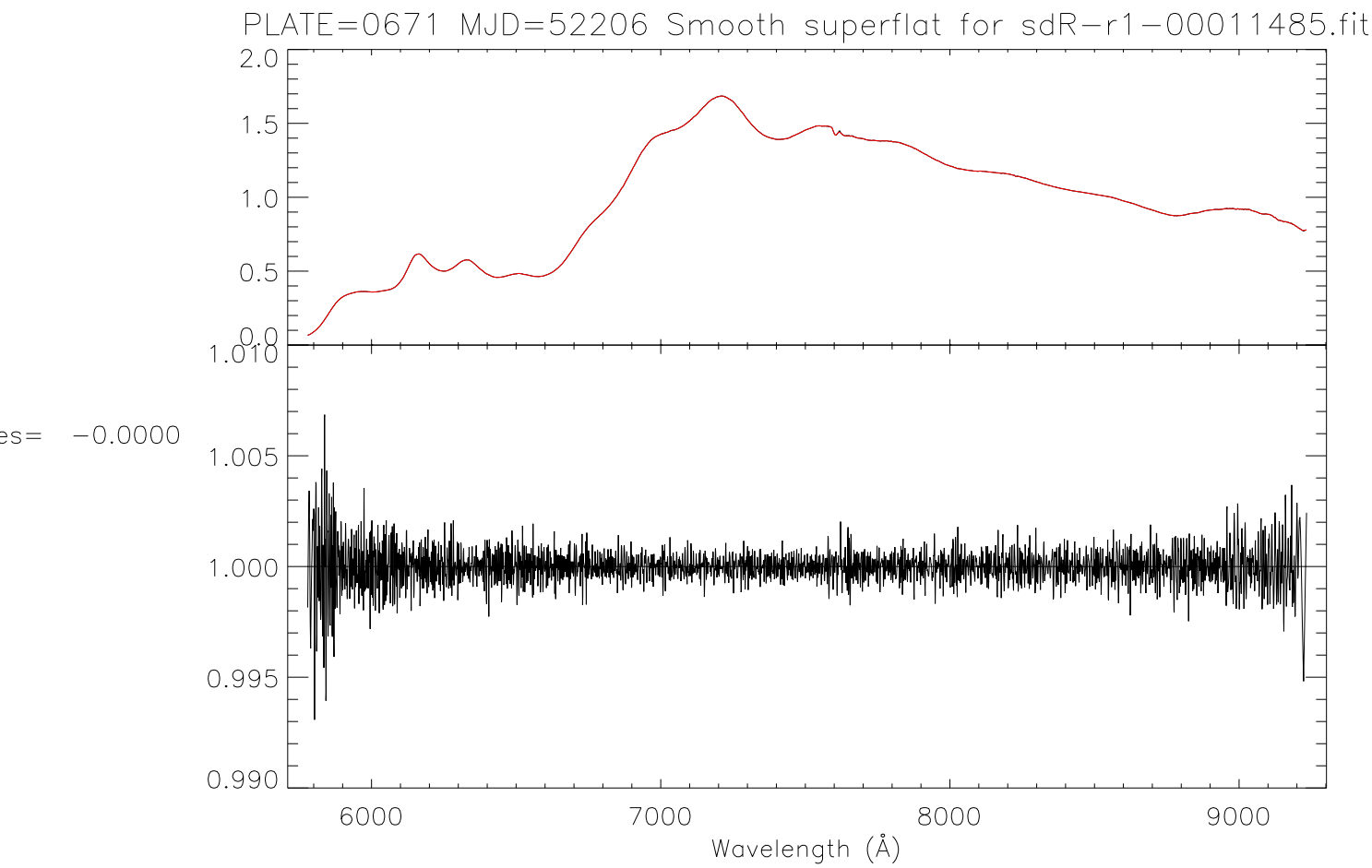

8430.1700
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

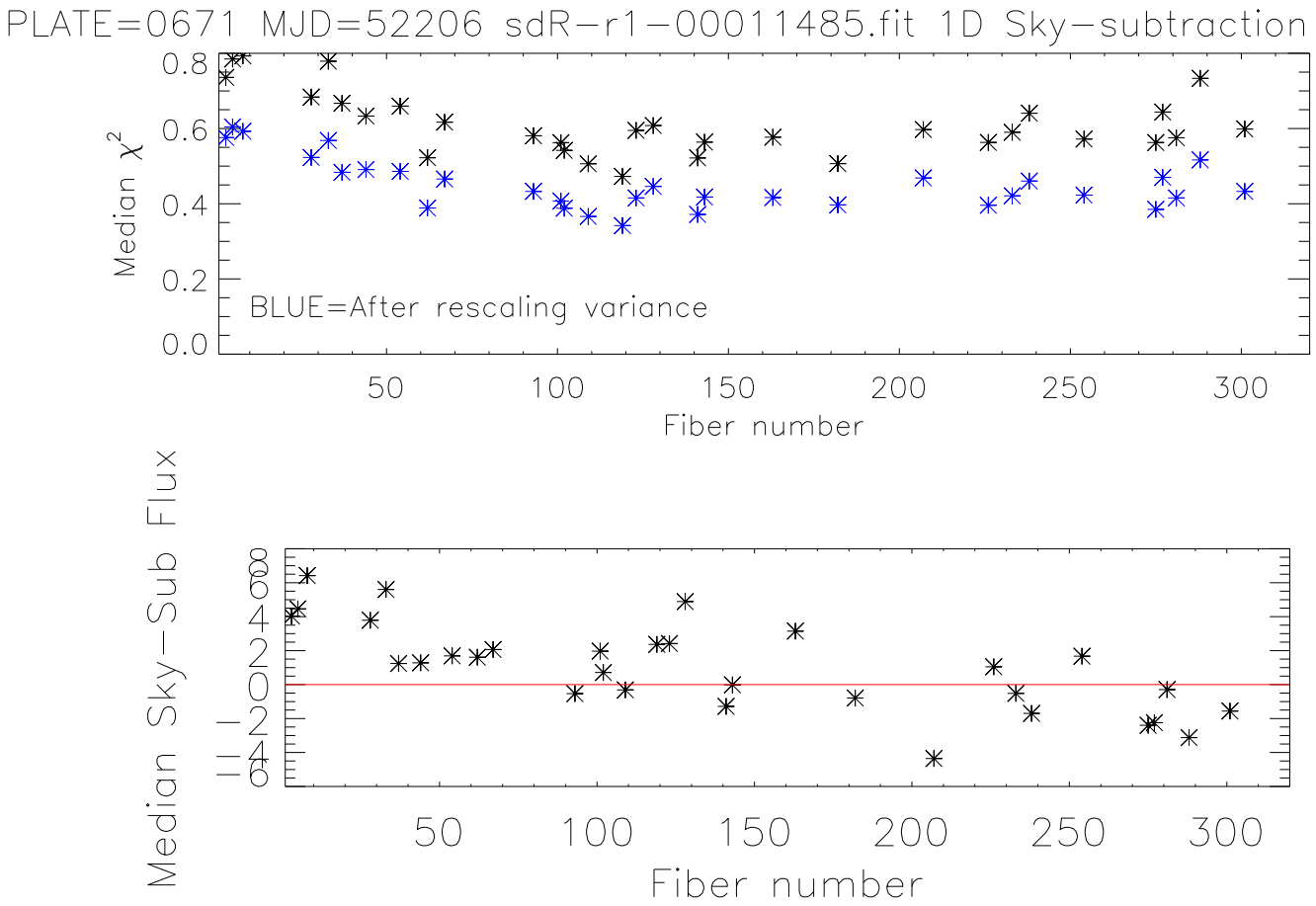

8885.8300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

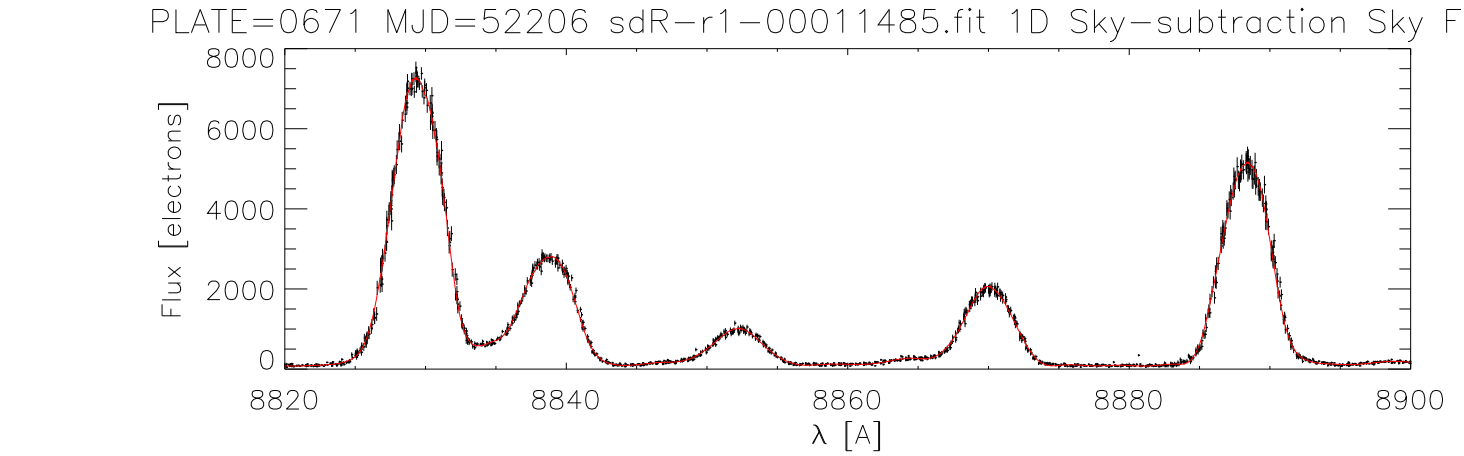

8919.6100
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

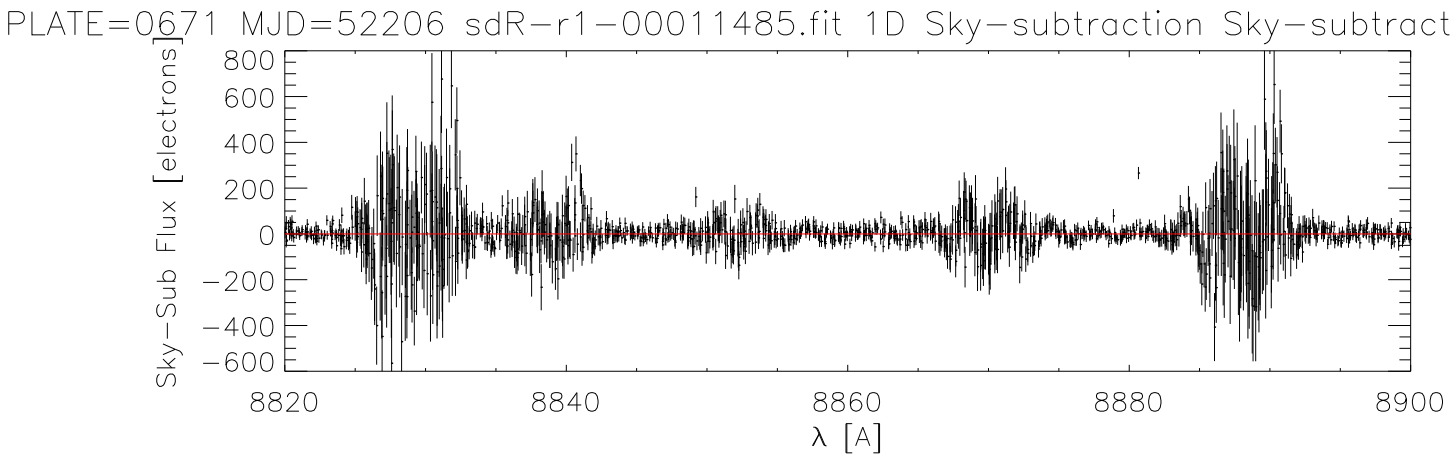

6300.3040
stdev 0.036
extra 0.596
6363.7760
stdev 0.046
extra 0.574
6553.6100
stdev 0.038
extra 0.598
6923.2100
stdev 0.036
extra 0.61
6949.0300
stdev 0.031
extra 0.661
7571.7500
stdev 0.034
extra 0.674
7794.1200
stdev 0.026
extra 0.56
7821.5100
stdev 0.029
extra 0.58
8399.1600
stdev 0.020
extra 0.66
8430.1700
stdev 0.020
extra 0.59
8885.8300
stdev 0.022
extra 0.62
8919.6100
stdev 0.025
extra 0.61
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

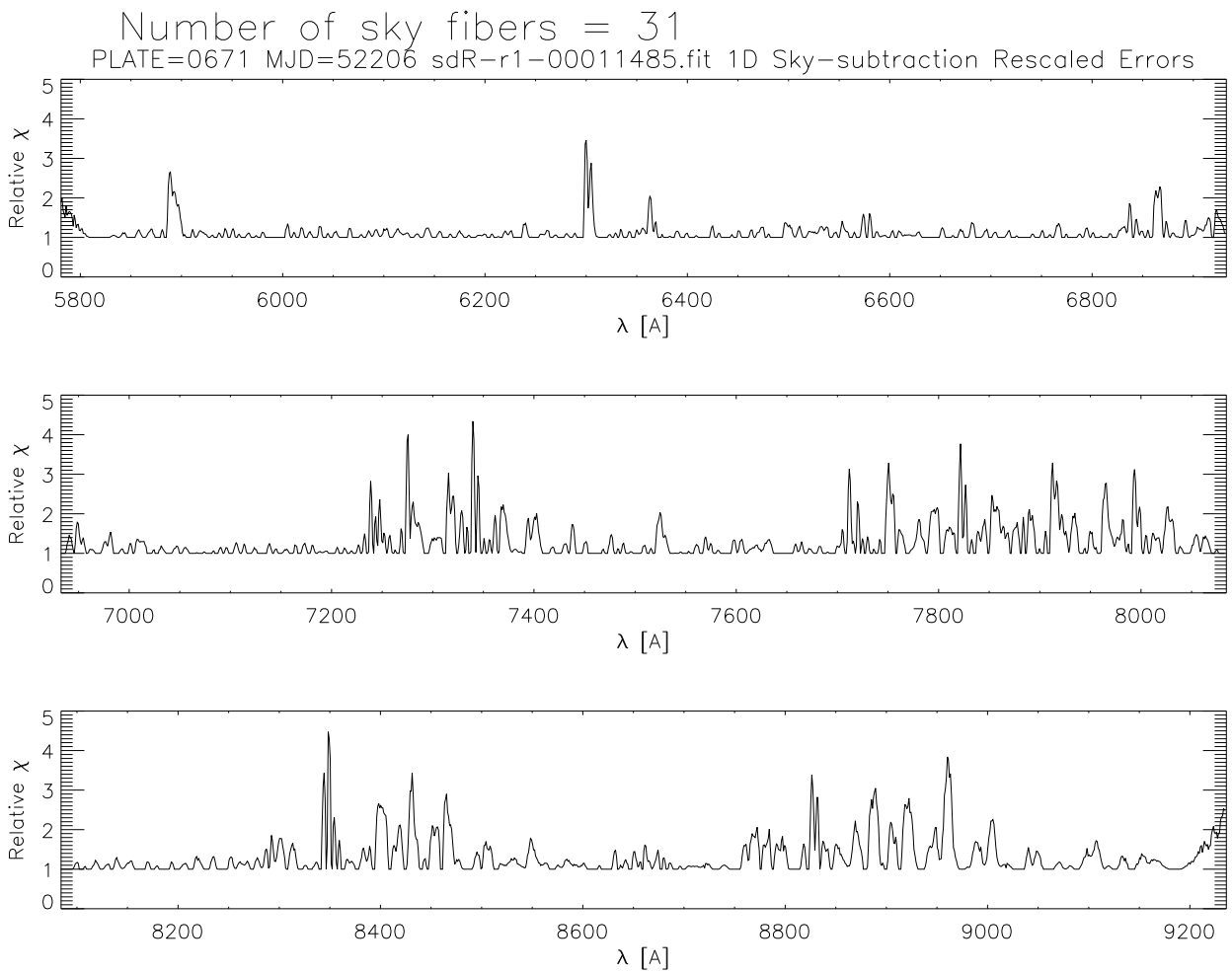

sky shift, pixels
0.65
0.60
0.55
5000
6000
7000
8000
9000
10000

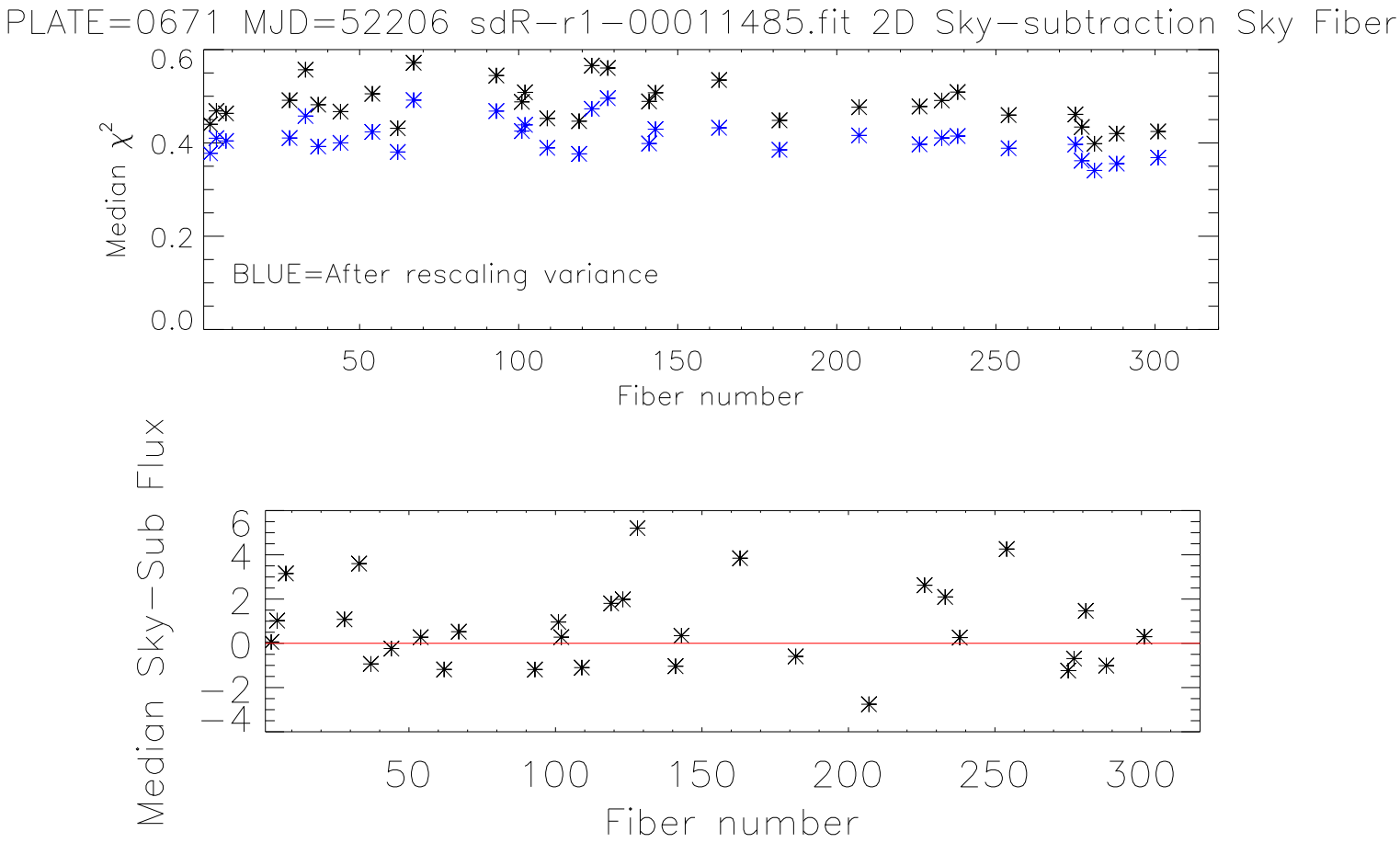

PLATE=0671 MJD=52206 Smooth superflat for sdR-r1-00011485.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

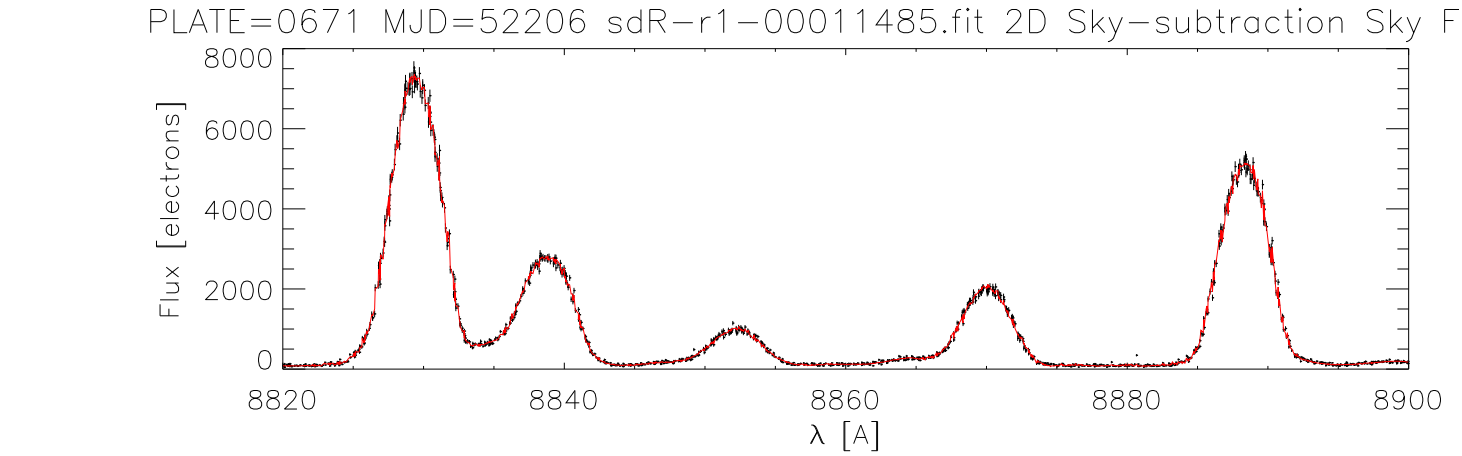

PLATE=0671 MJD=52206 sdR-r1-00011485.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

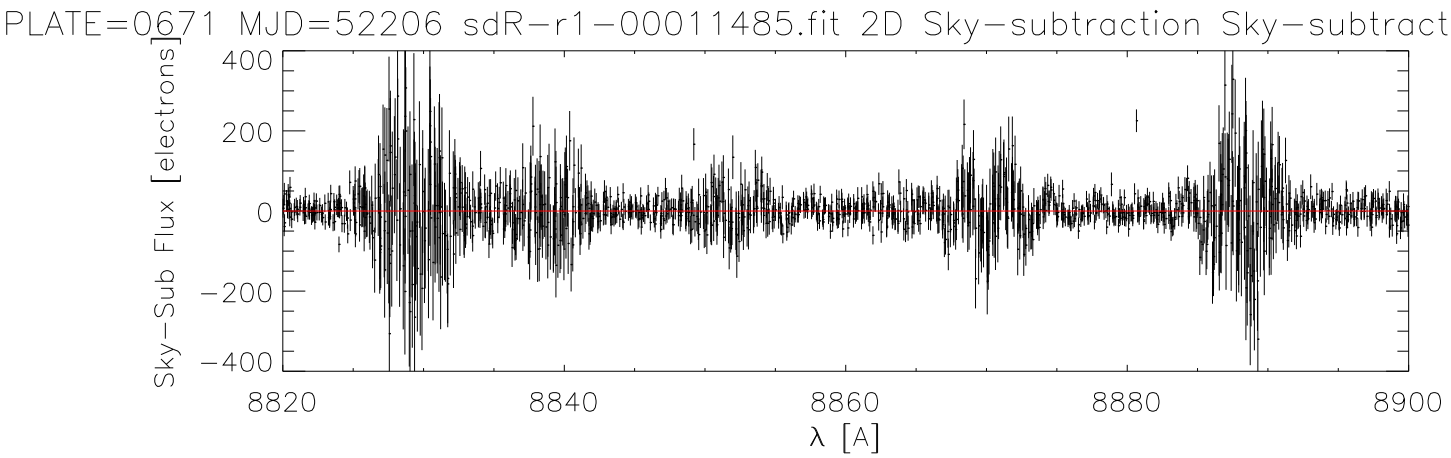

PLATE=0671 MJD=52206 sdR-r1-00011485.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

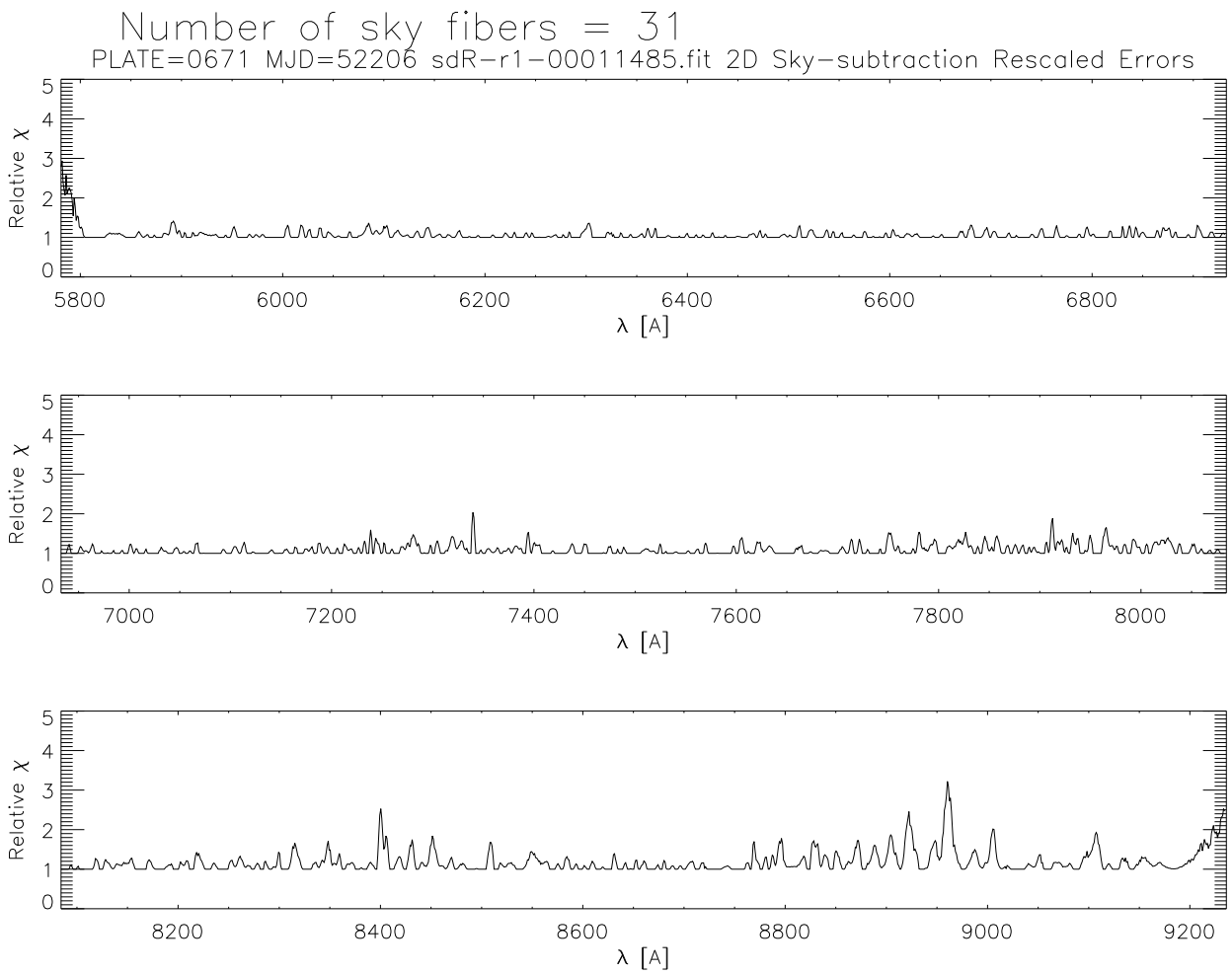

PLATE=0671 MJD=52206 sdR-r1-00011485.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

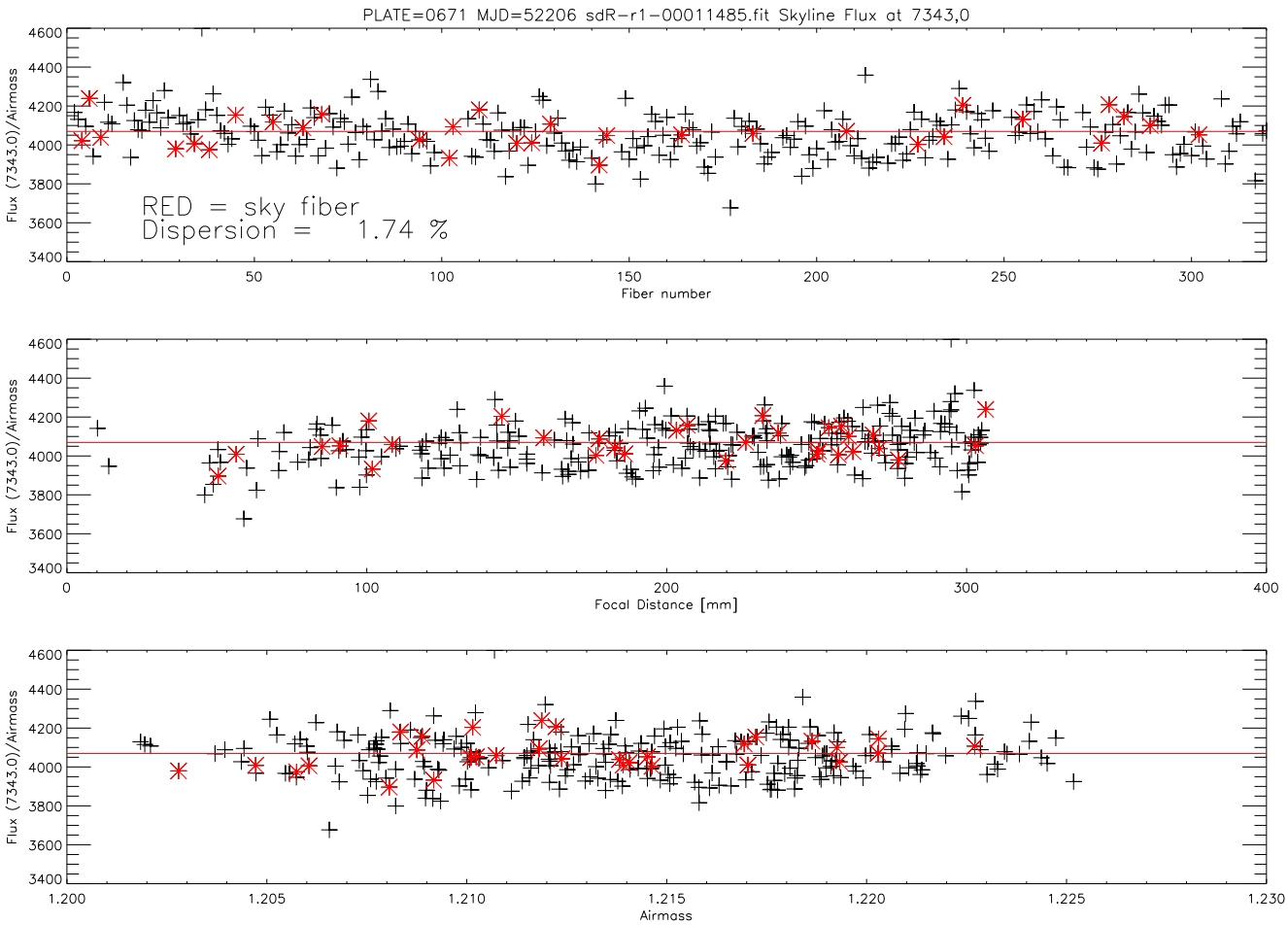

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011485.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

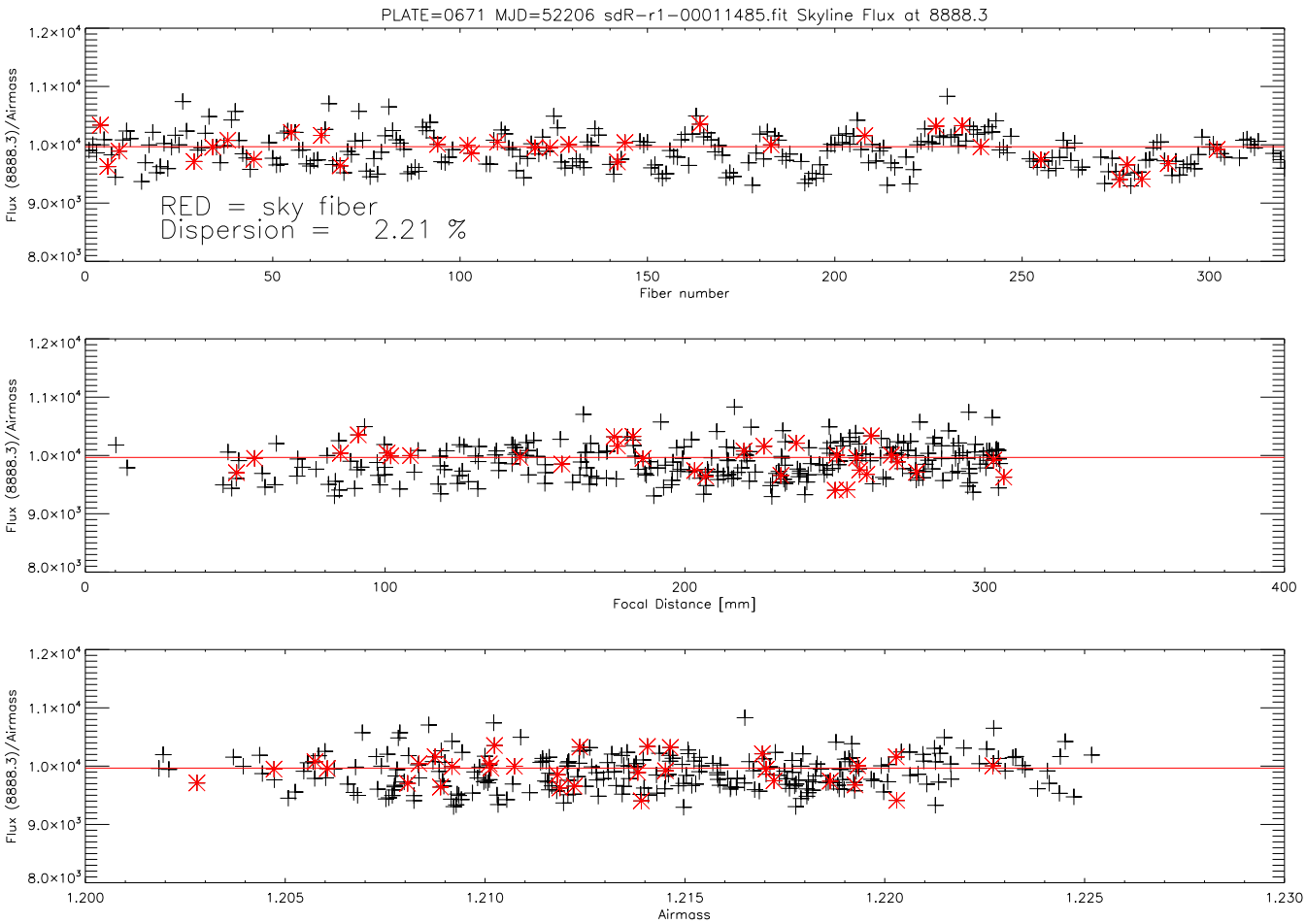

PLATE=0671 MJD=52206 sdR-r1-00011485.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

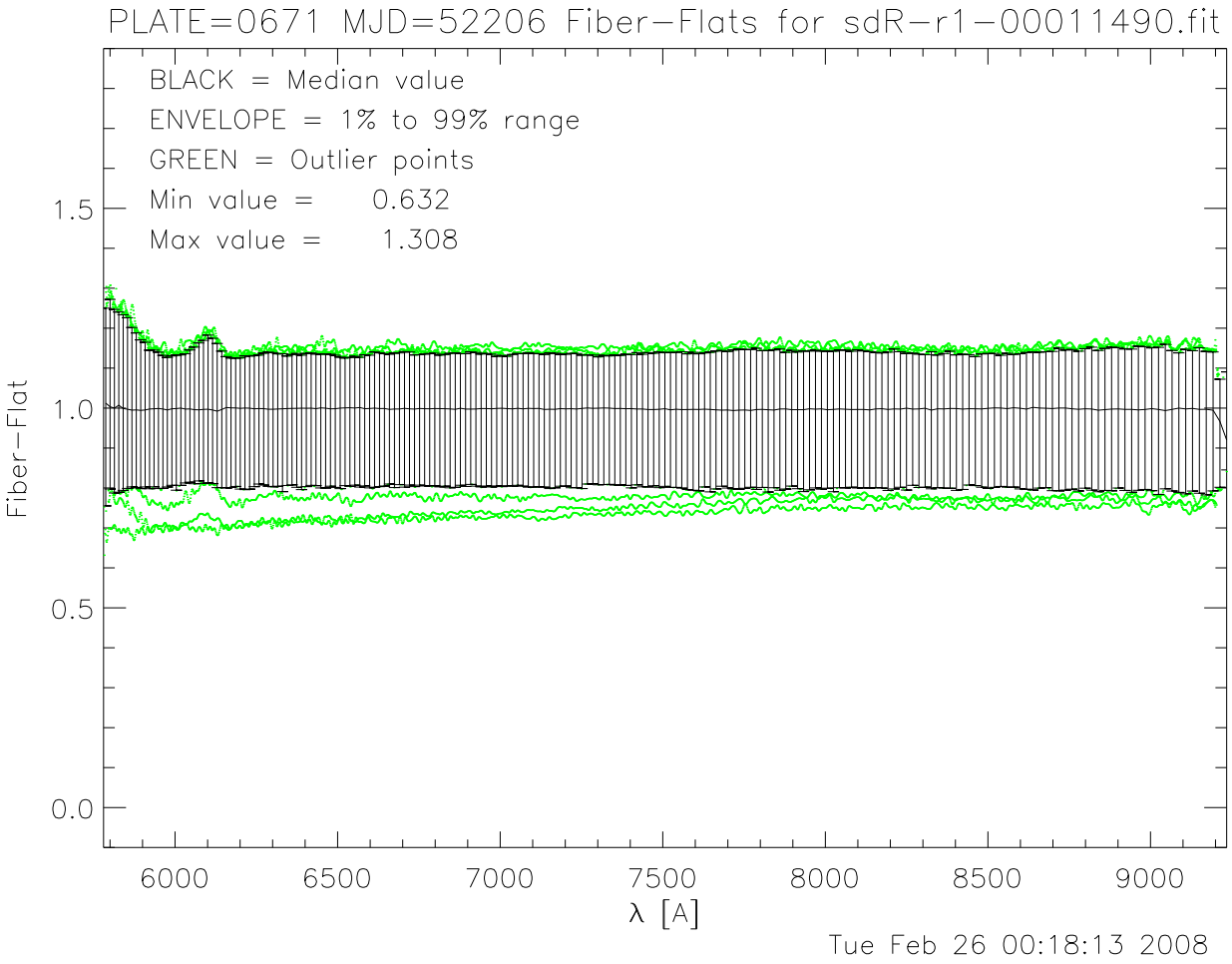

PLATE=0671 MJD=52206 sdR-r1-00011485.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

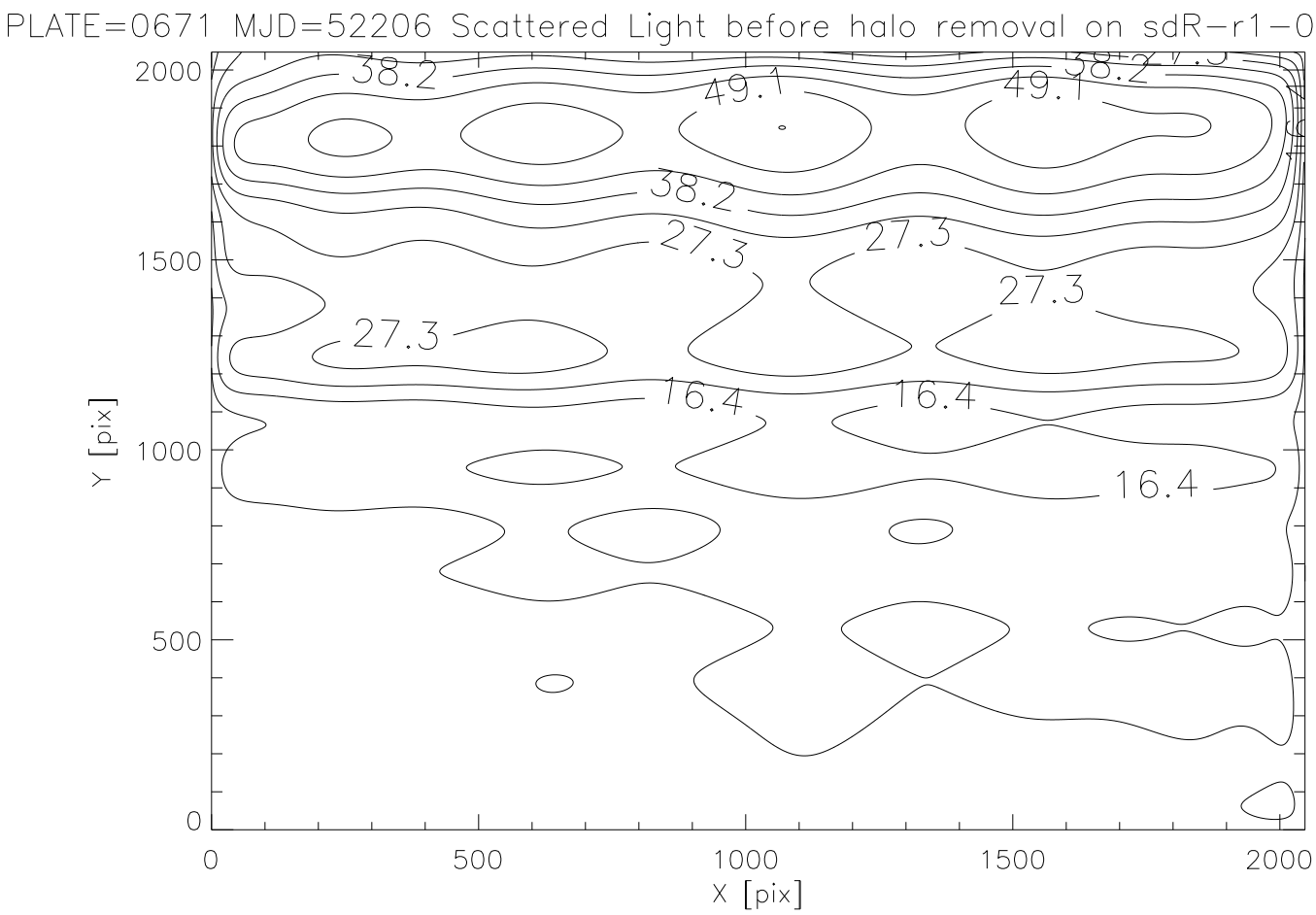

PLATE=0671 MJD=52206 sdR-r1-00011485.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

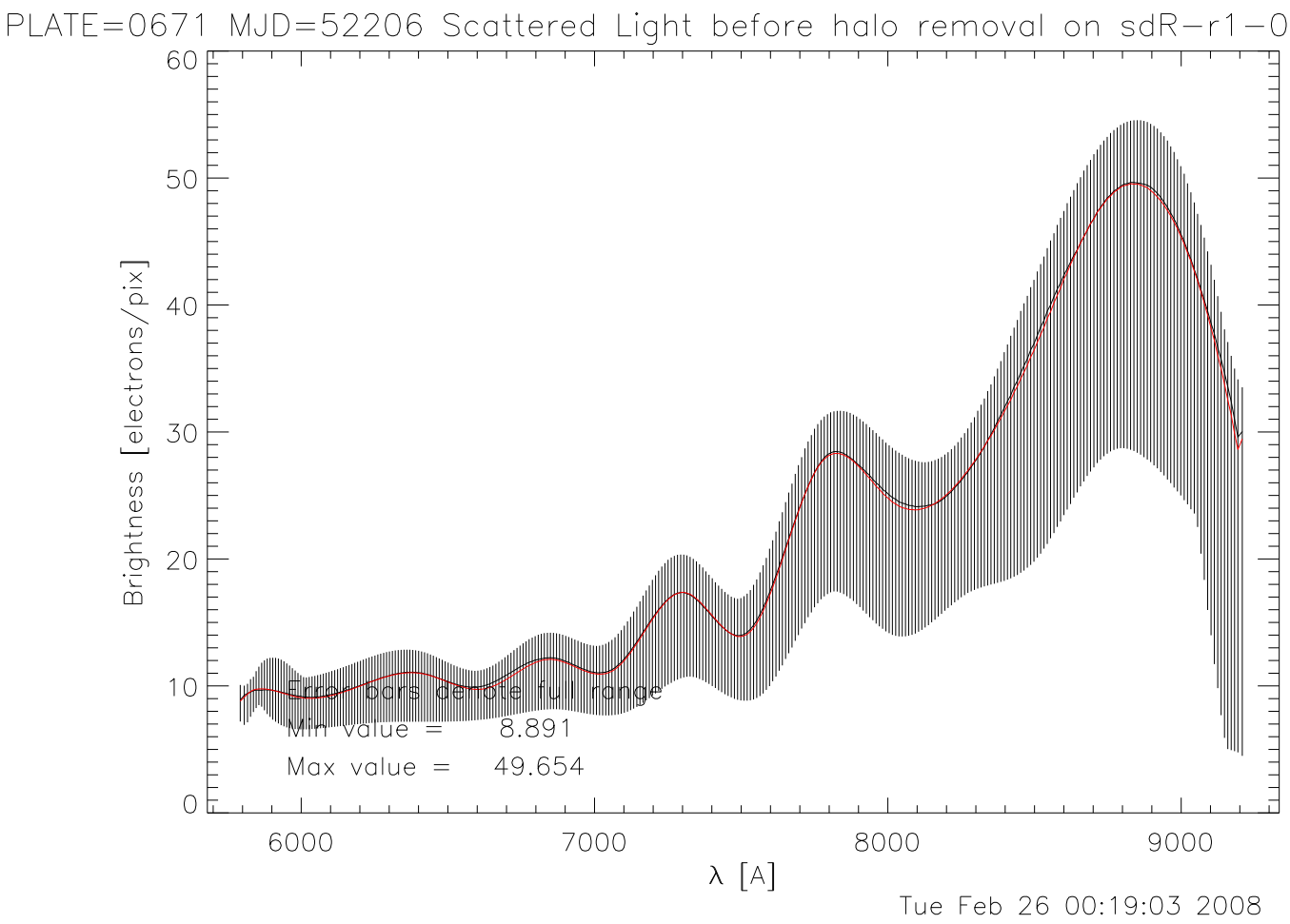

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011485.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

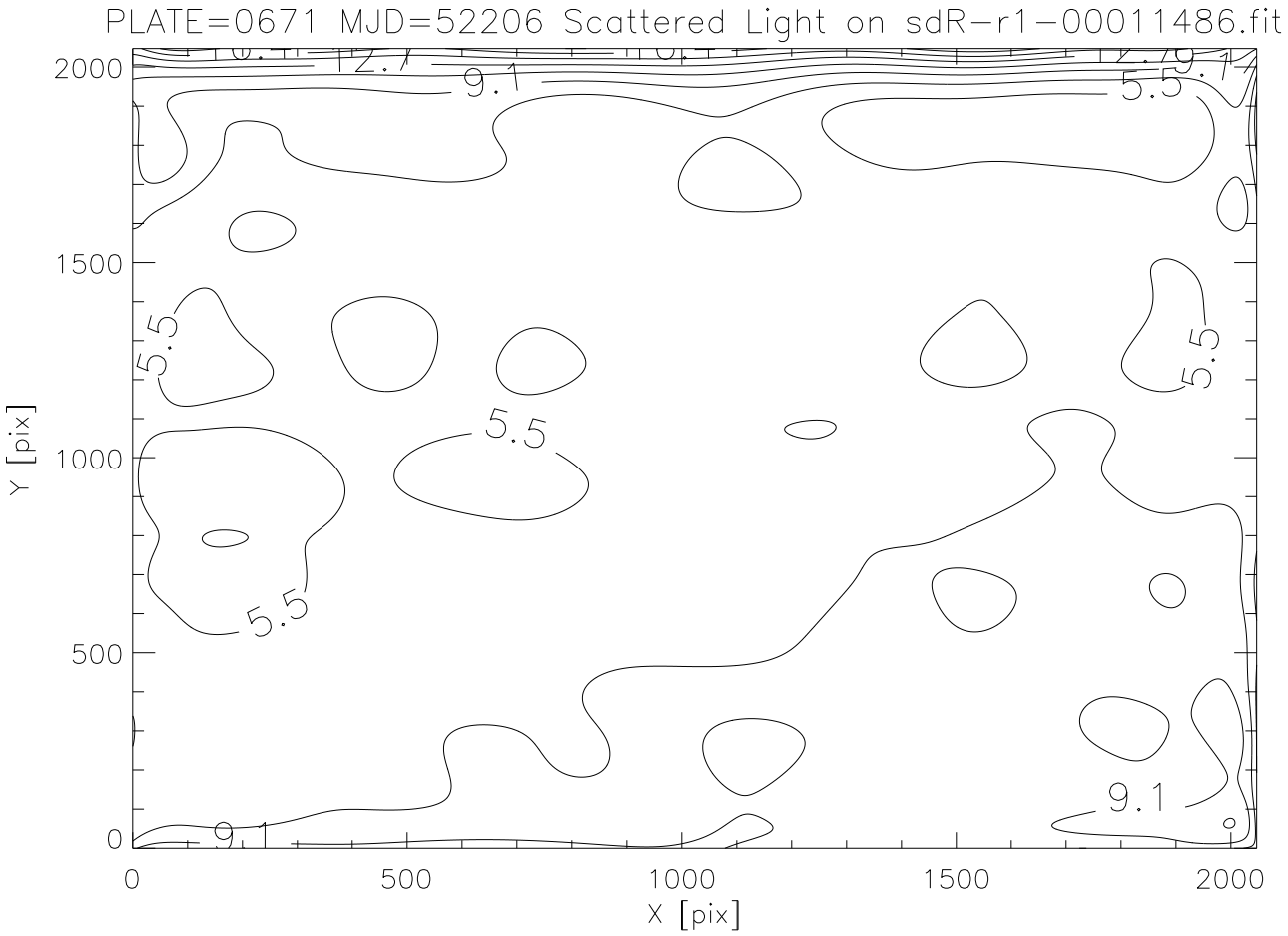

PLATE=0671 MJD=52206 sdR-r1-00011485.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.74 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

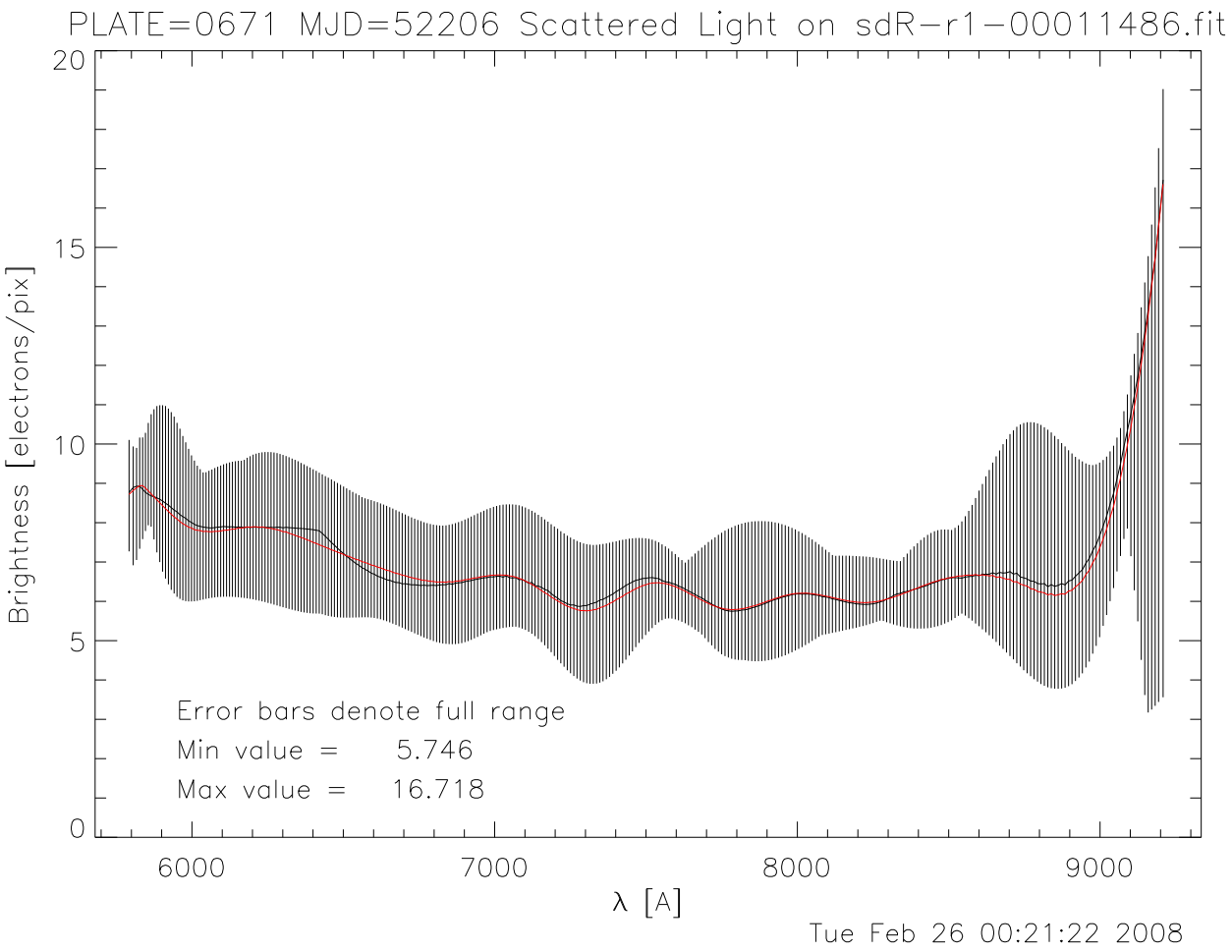

PLATE=0671 MJD=52206 sdR-r1-00011485.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Focal Distance [mm]
Airmass

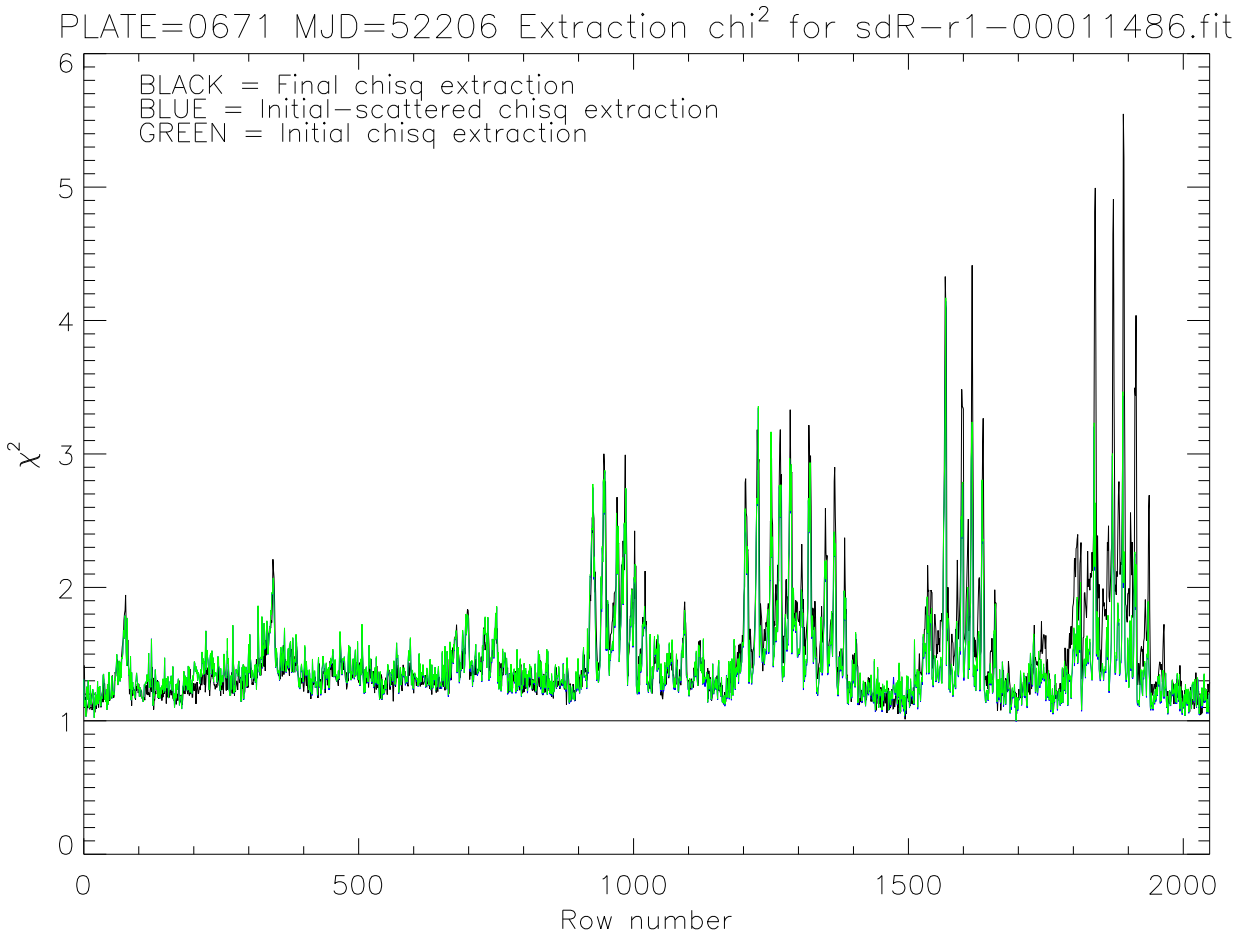

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.632
Max value = 1.308
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:18:13 2008

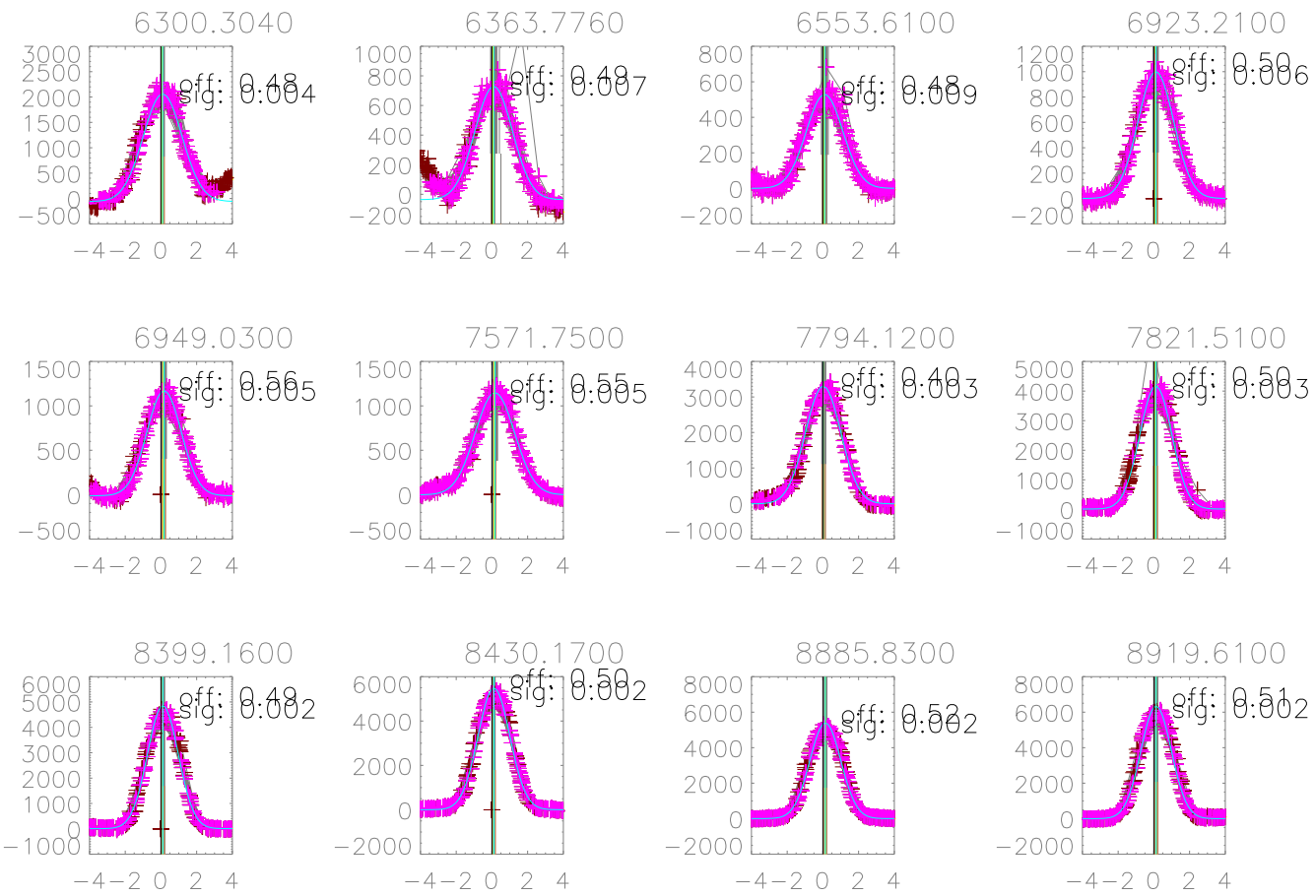

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR−r1−00011486.fi
38.2
49.1
49.1
38.2
38.2
27.3
27.3
27.3
27.3
16.4
16.4
16.4
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

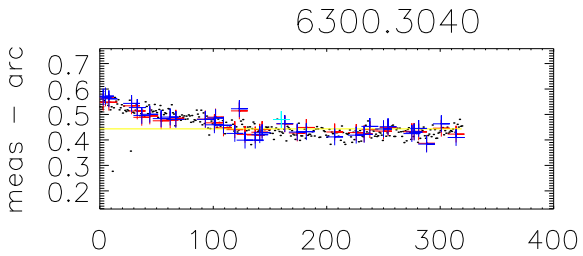

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011486.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.891
Max value = 49.654
Tue Feb 26 00:19:03 2008

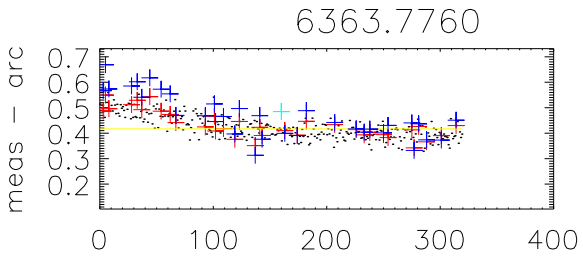

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011486.fit
9.1
5.5
5.5
5.5
5.5
9.1
9.1
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

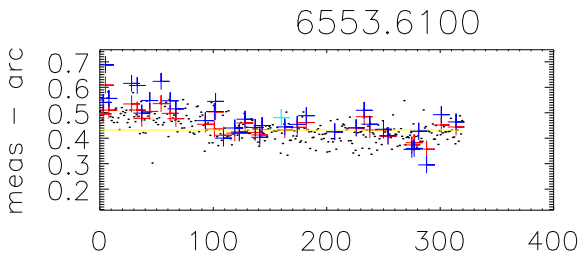

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011486.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.746
Max value = 16.718
Tue Feb 26 00:21:22 2008

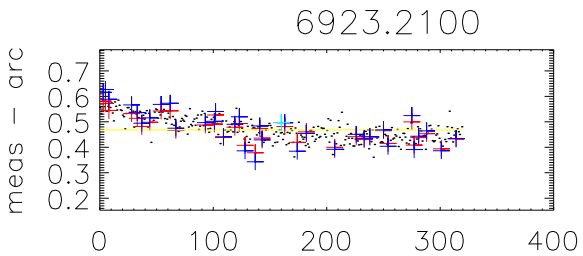

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r1−00011486.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

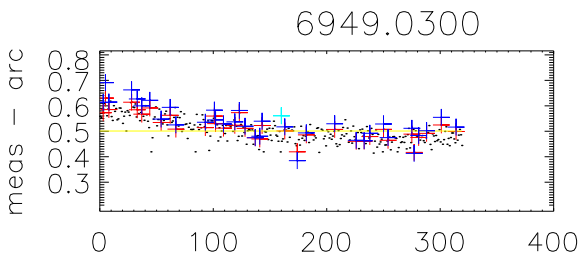

6300.3040
off: 0.48
sig: 0.004
6363.7760
off: 0.48
sig: 0.007
6553.6100
off: 0.48
sig: 0.009
6923.2100
off: 0.50
sig: 0.006
6949.0300
off: 0.56
sig: 0.005
7571.7500
off: 0.55
sig: 0.005
7794.1200
off: 0.40
sig: 0.003
7821.5100
off: 0.50
sig: 0.003
8399.1600
off: 0.48
sig: 0.002
8430.1700
off: 0.50
sig: 0.002
8885.8300
off: 0.52
sig: 0.002
8919.6100
off: 0.51
sig: 0.002

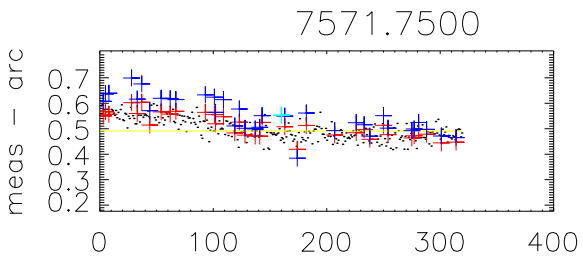

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

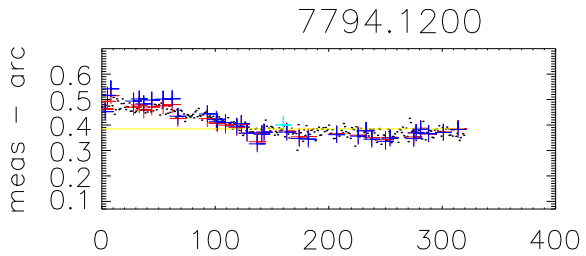

6363.7760
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

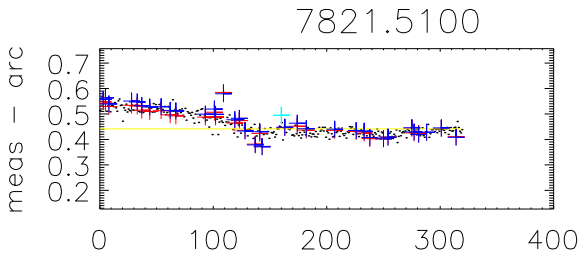

6553.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

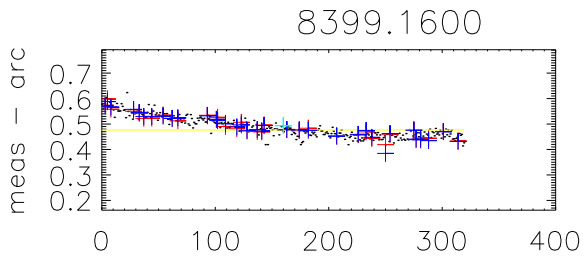

6923.2100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

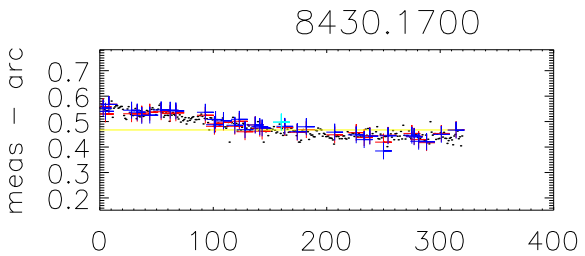

6949.0300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

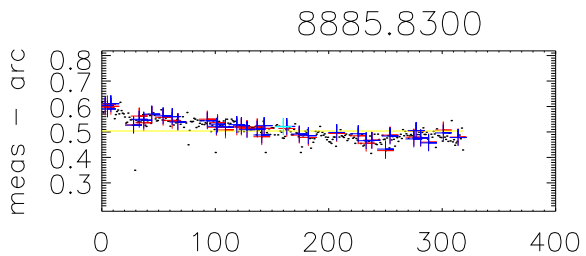

7571.7500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

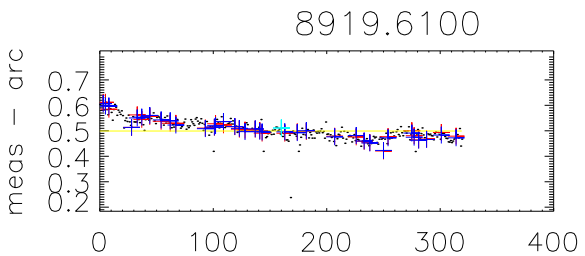

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

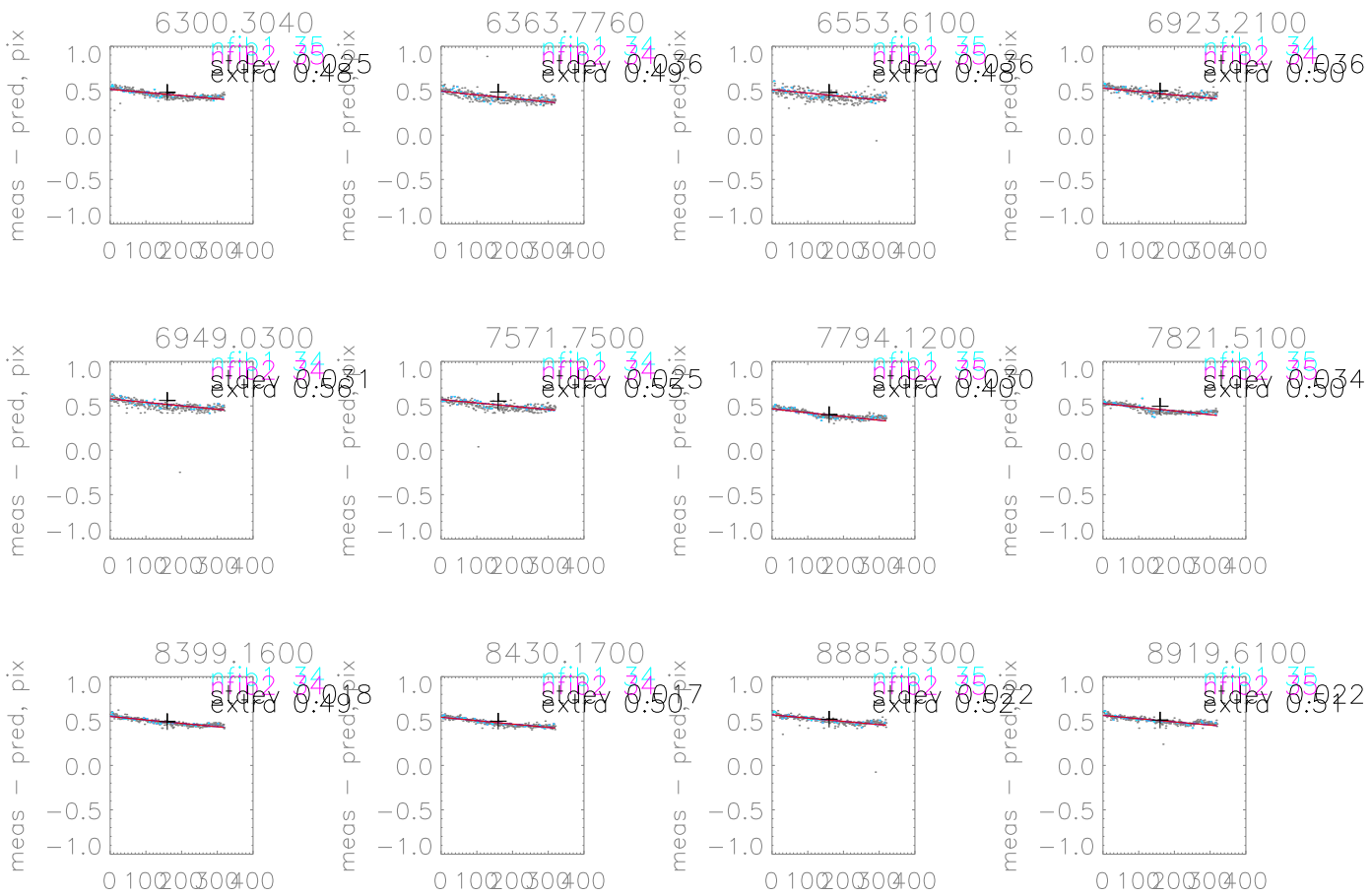

7821.5100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

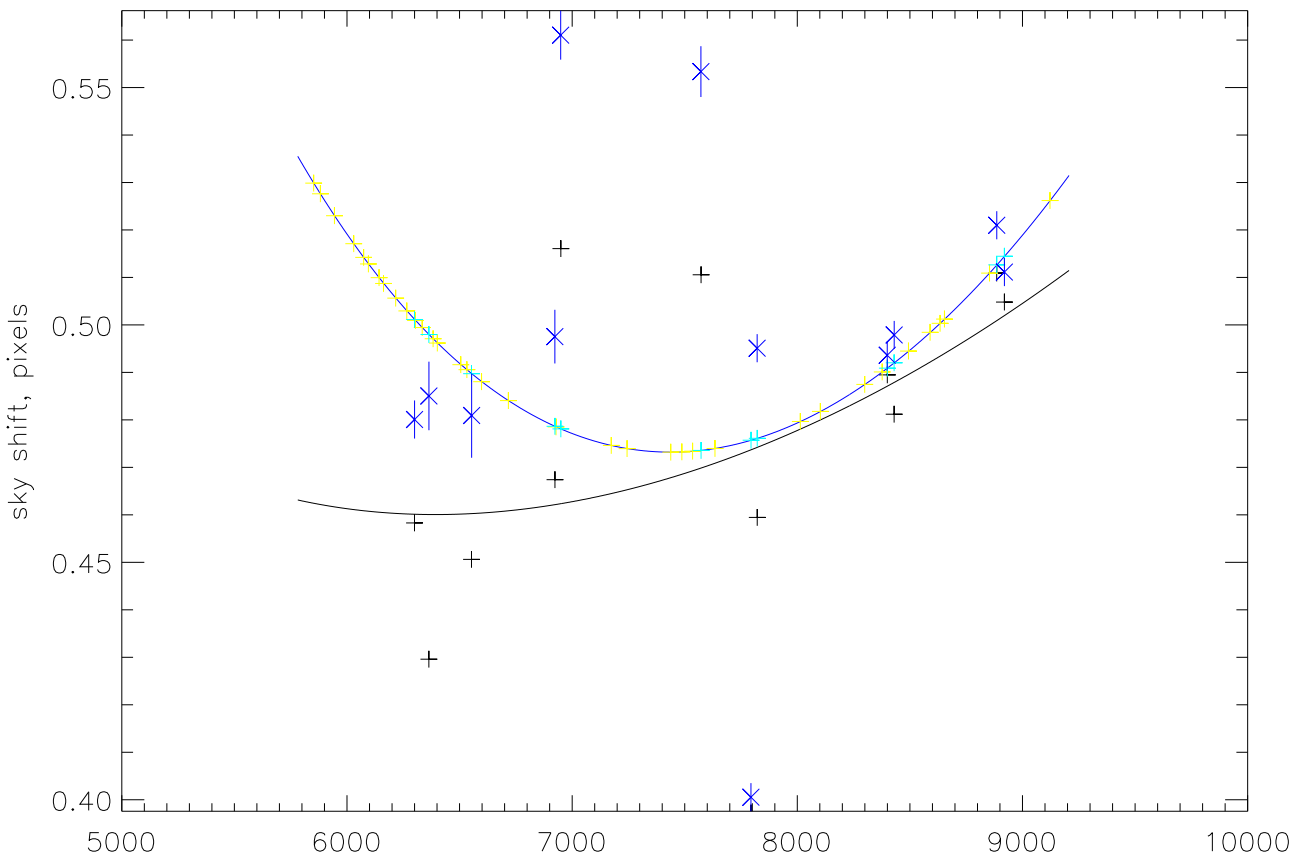

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

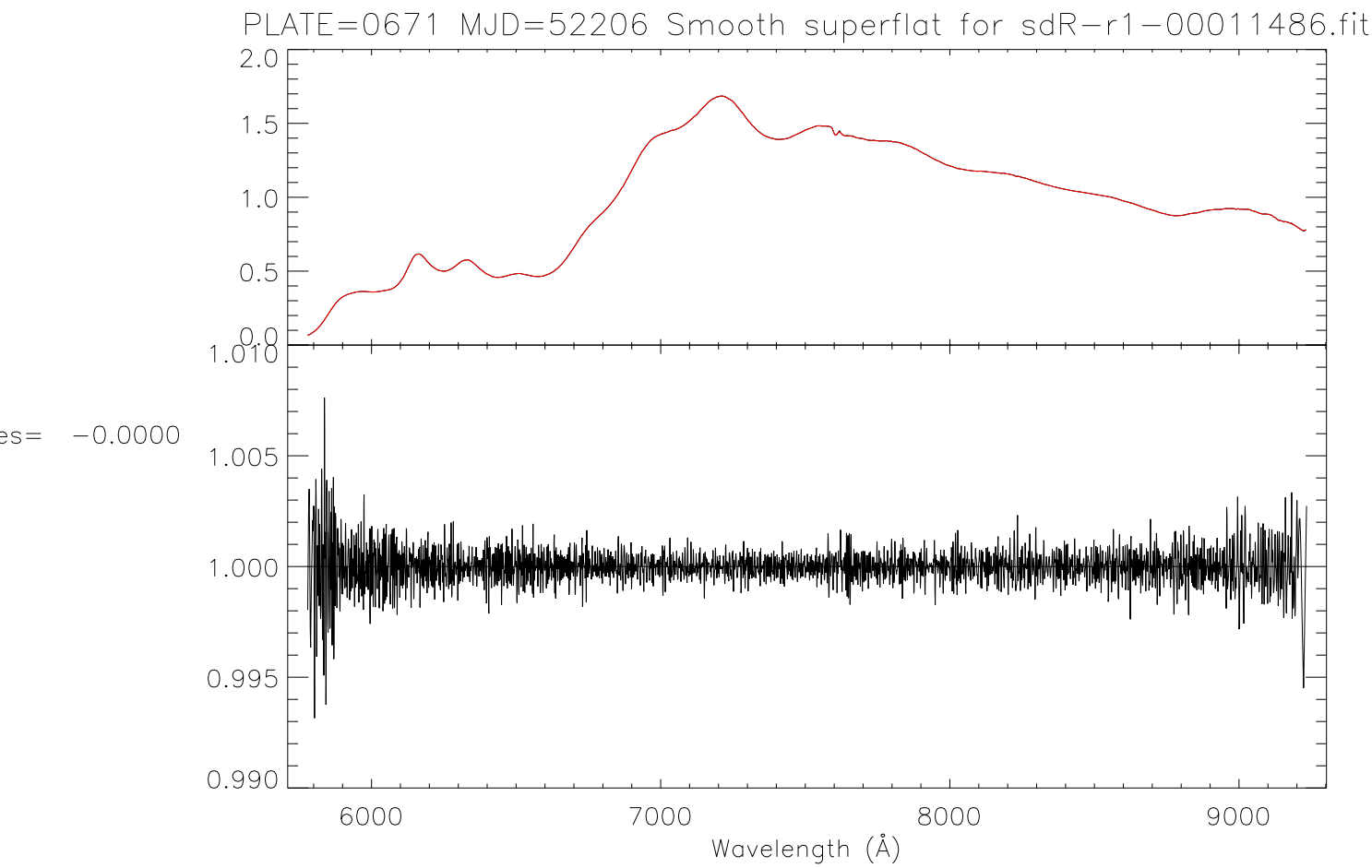

8430.1700
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


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

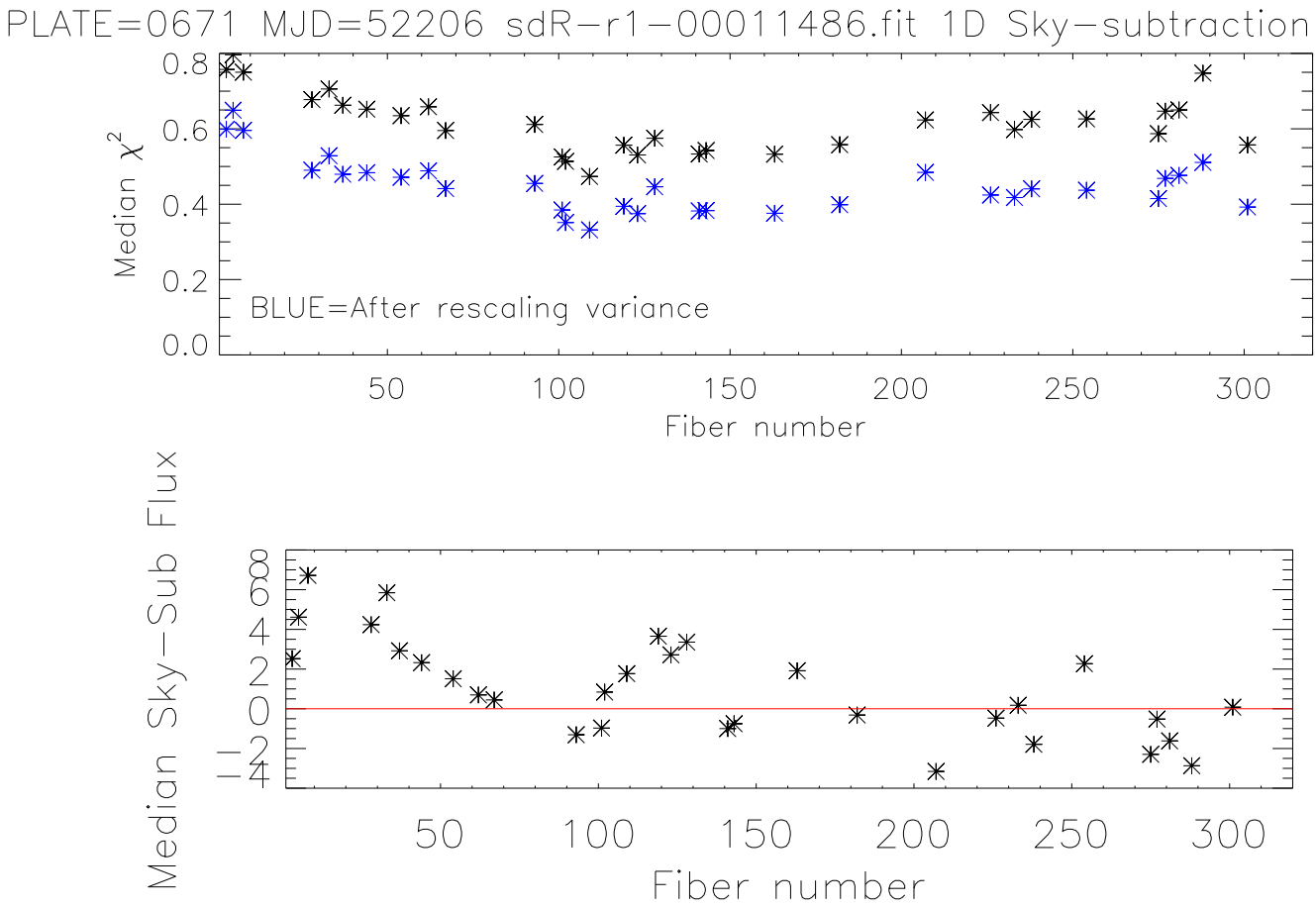

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

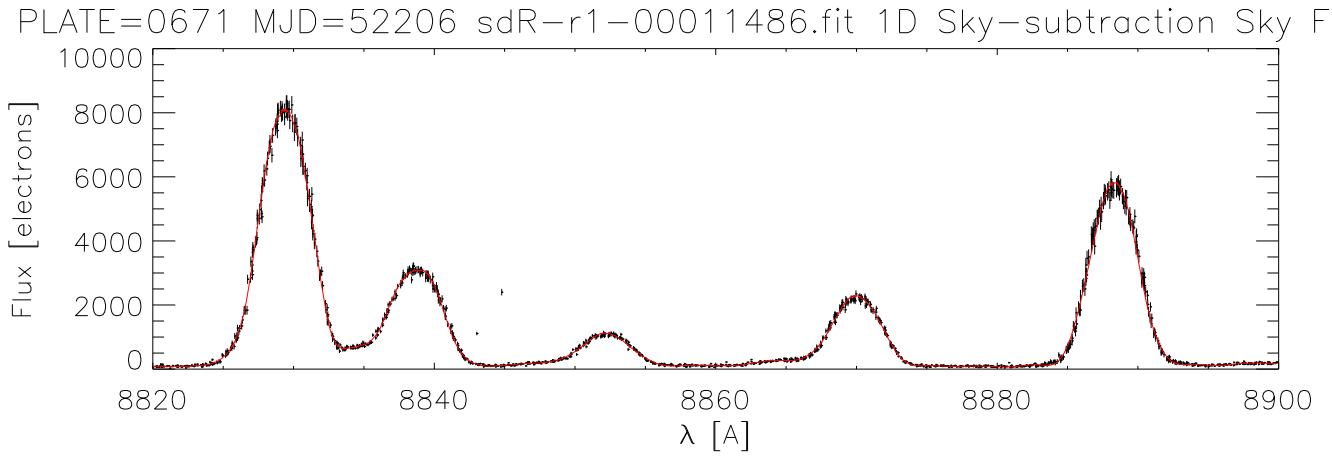

6300.3040
stdev 0.025
extra 0.48
6363.7760
stdev 0.036
extra 0.49
6553.6100
stdev 0.036
extra 0.48
6923.2100
stdev 0.036
extra 0.50
6949.0300
stdev 0.031
extra 0.56
7571.7500
stdev 0.025
extra 0.55
7794.1200
stdev 0.030
extra 0.40
7821.5100
stdev 0.034
extra 0.50
8399.1600
stdev 0.018
extra 0.49
8430.1700
stdev 0.017
extra 0.50
8885.8300
stdev 0.022
extra 0.52
8919.6100
stdev 0.022
extra 0.51
meas − pred, pix
mfib1 34
mfib2 35

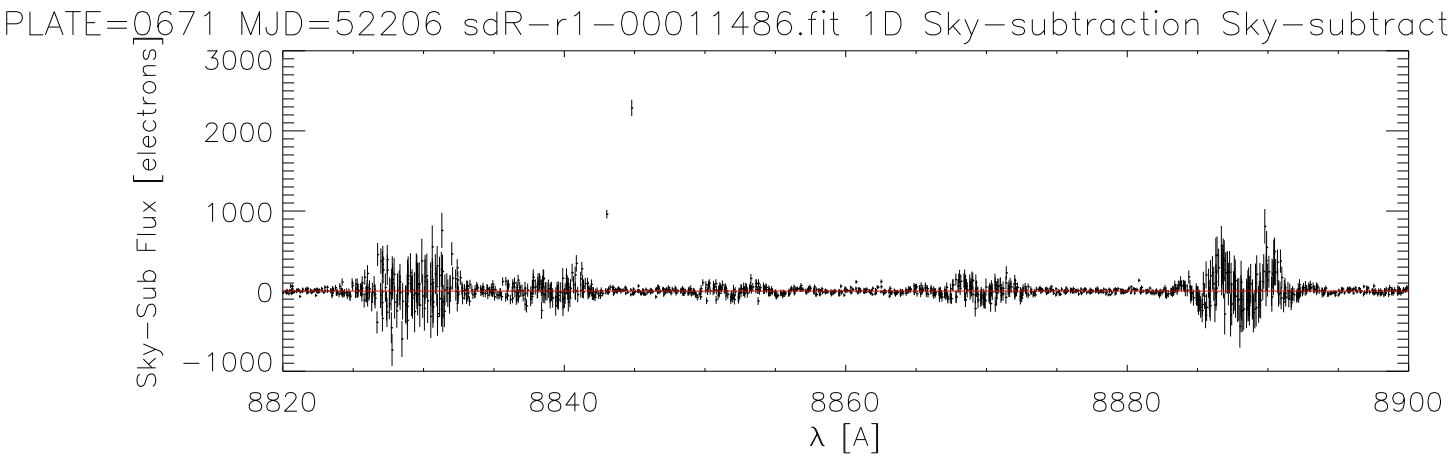

sky shift, pixels
0.55
0.50
0.45
0.40
5000
6000
7000
8000
9000
10000

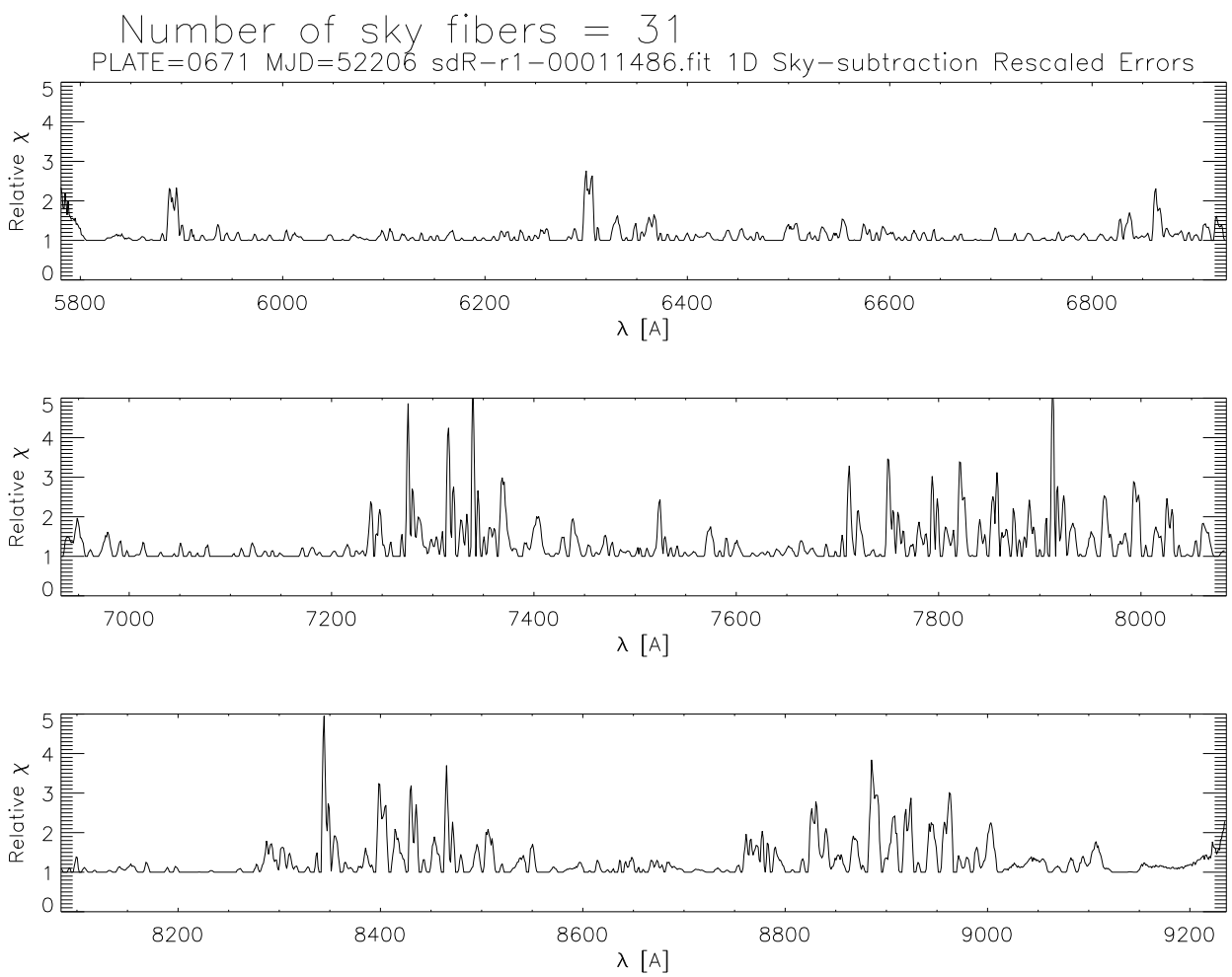

PLATE=0671 MJD=52206 Smooth superflat for sdR-r1-00011486.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

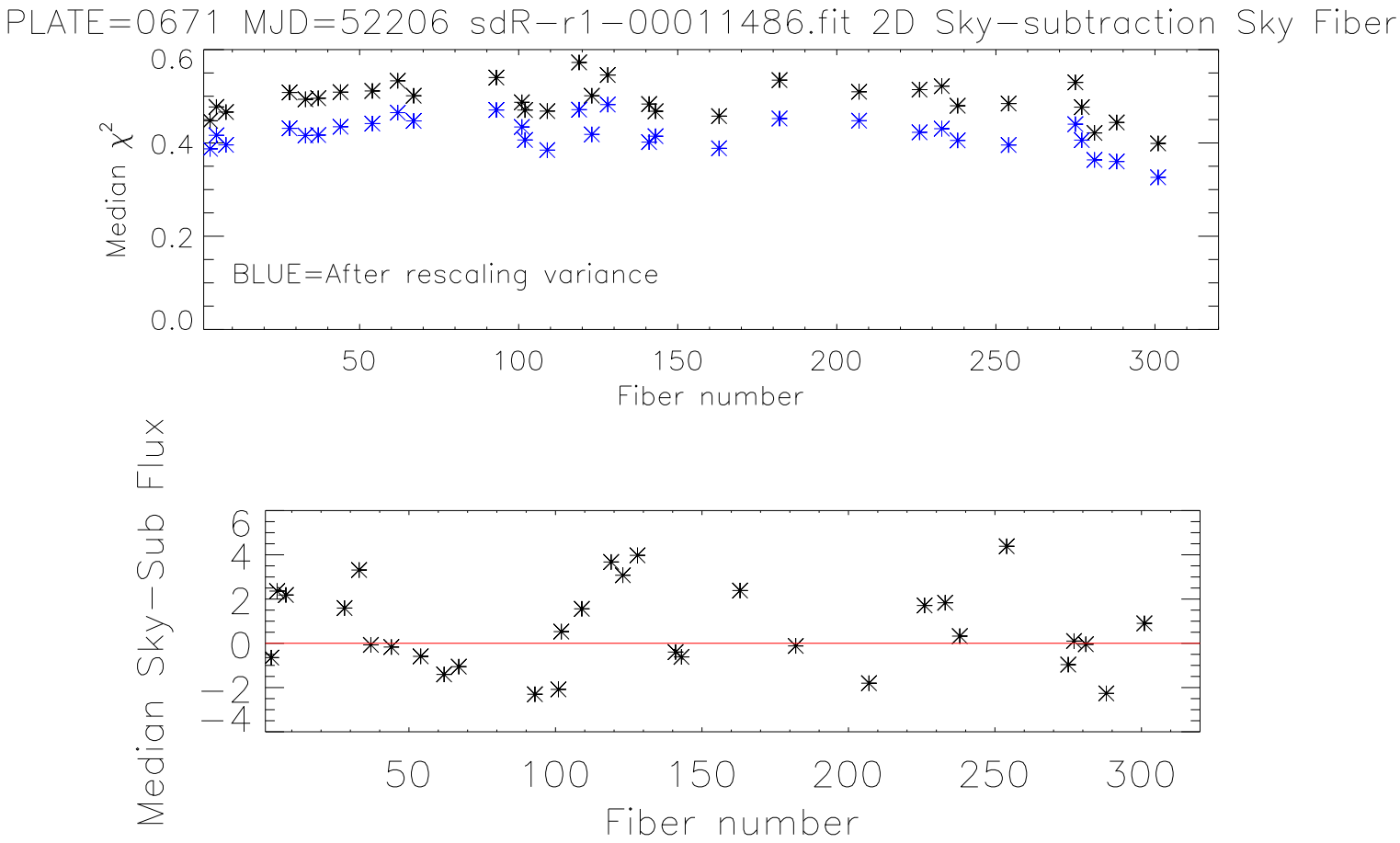
es= −0.0000

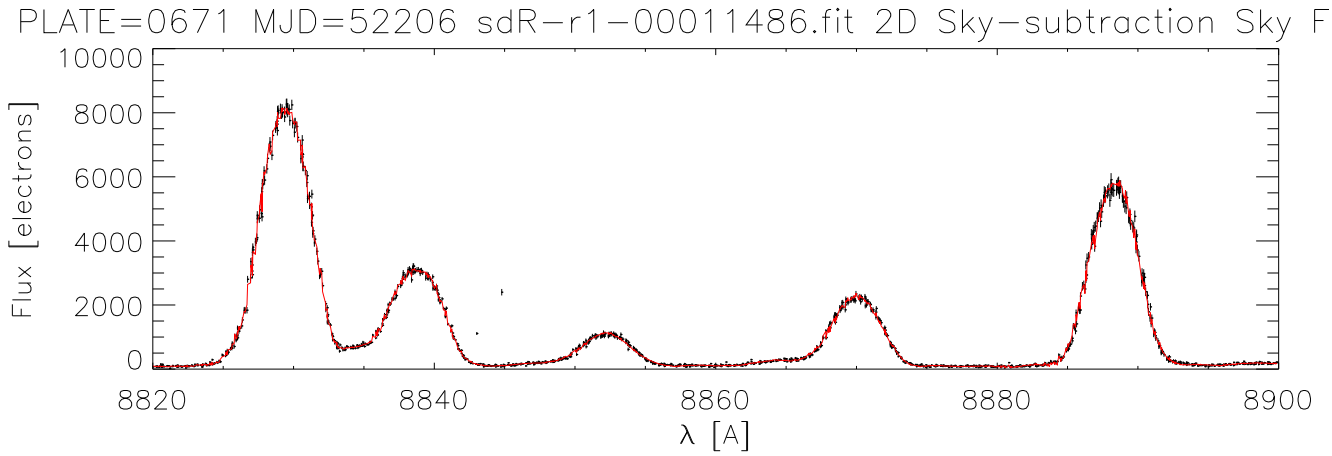

PLATE=0671 MJD=52206 sdR-r1-00011486.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

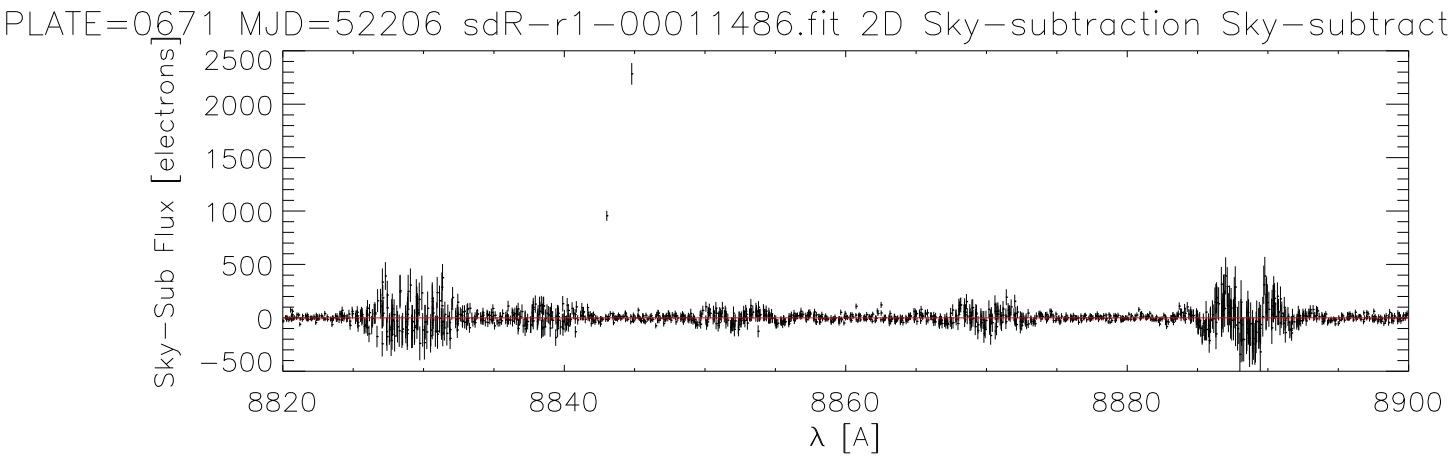

PLATE=0671 MJD=52206 sdR-r1-00011486.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

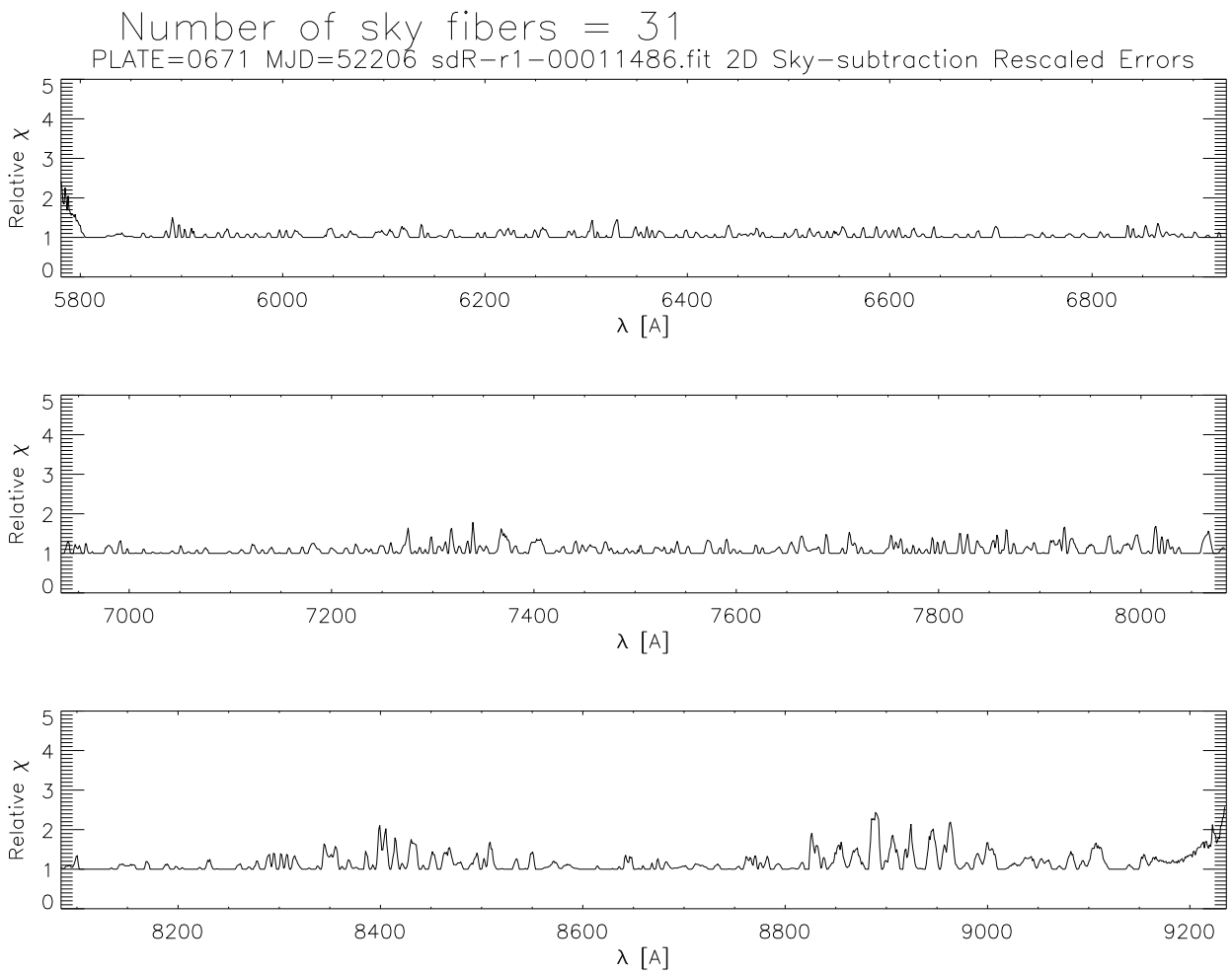

PLATE=0671 MJD=52206 sdR-r1-00011486.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

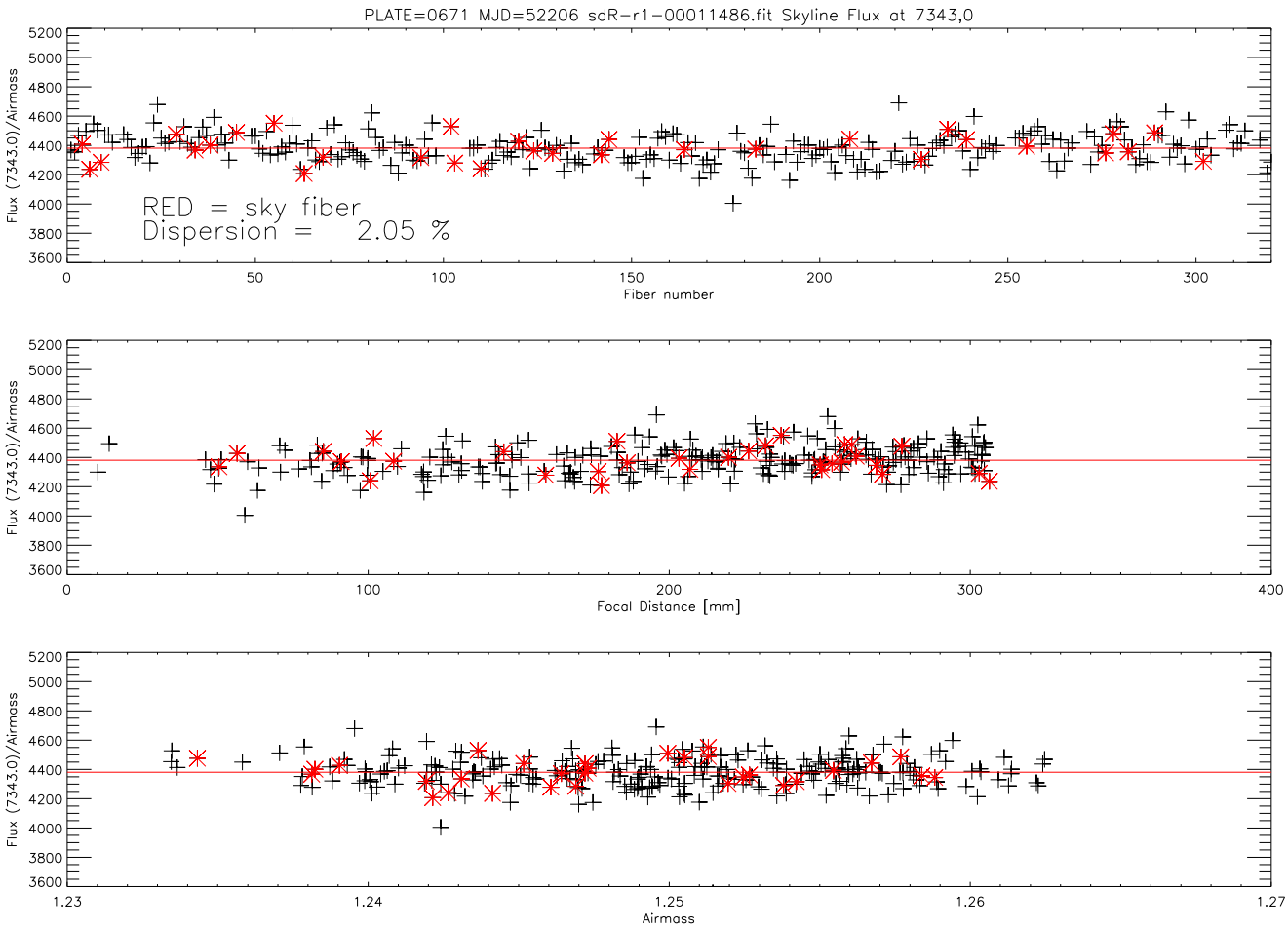

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011486.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

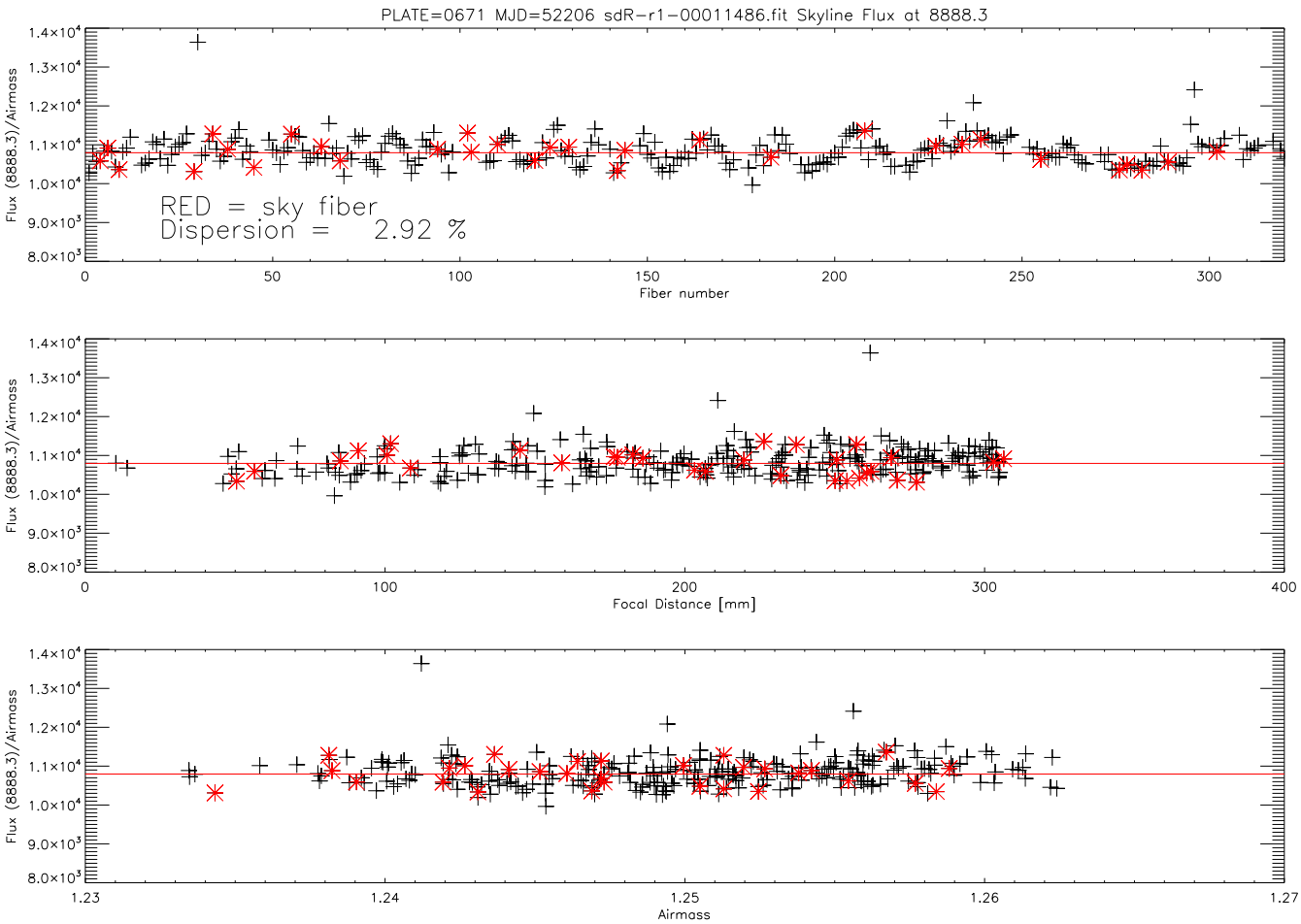

PLATE=0671 MJD=52206 sdR-r1-00011486.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

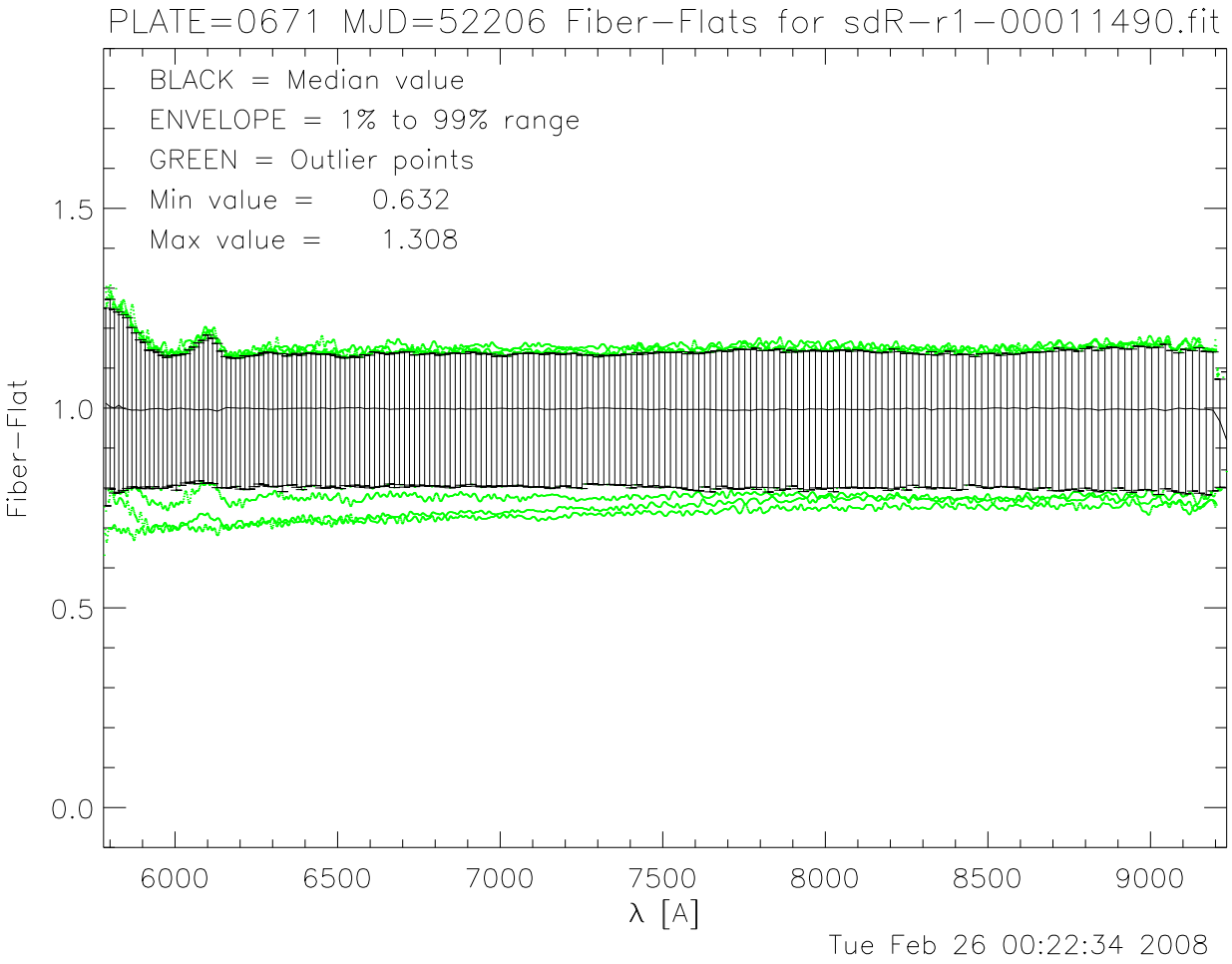

PLATE=0671 MJD=52206 sdR-r1-00011486.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

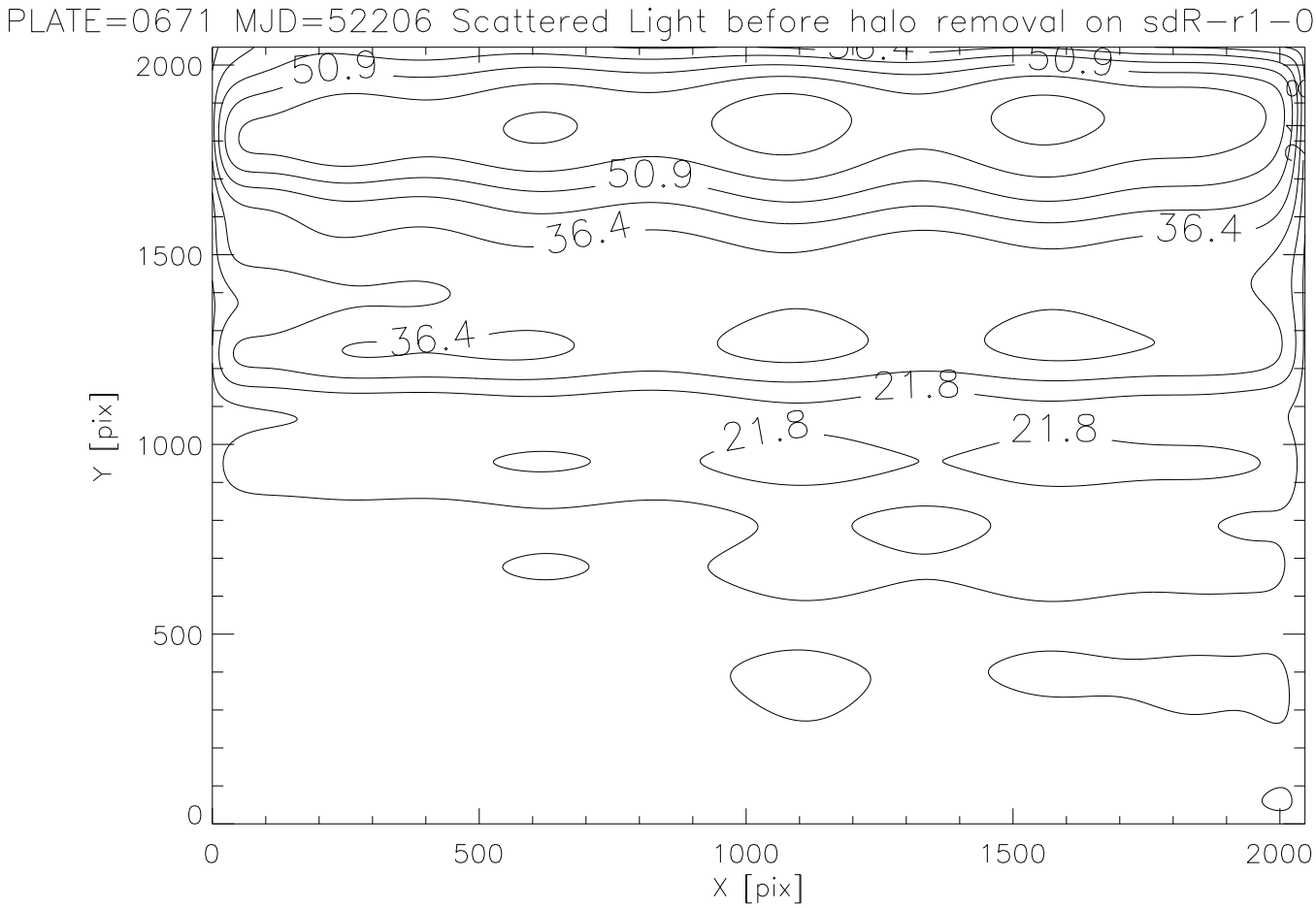

PLATE=0671 MJD=52206 sdR-r1-00011486.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

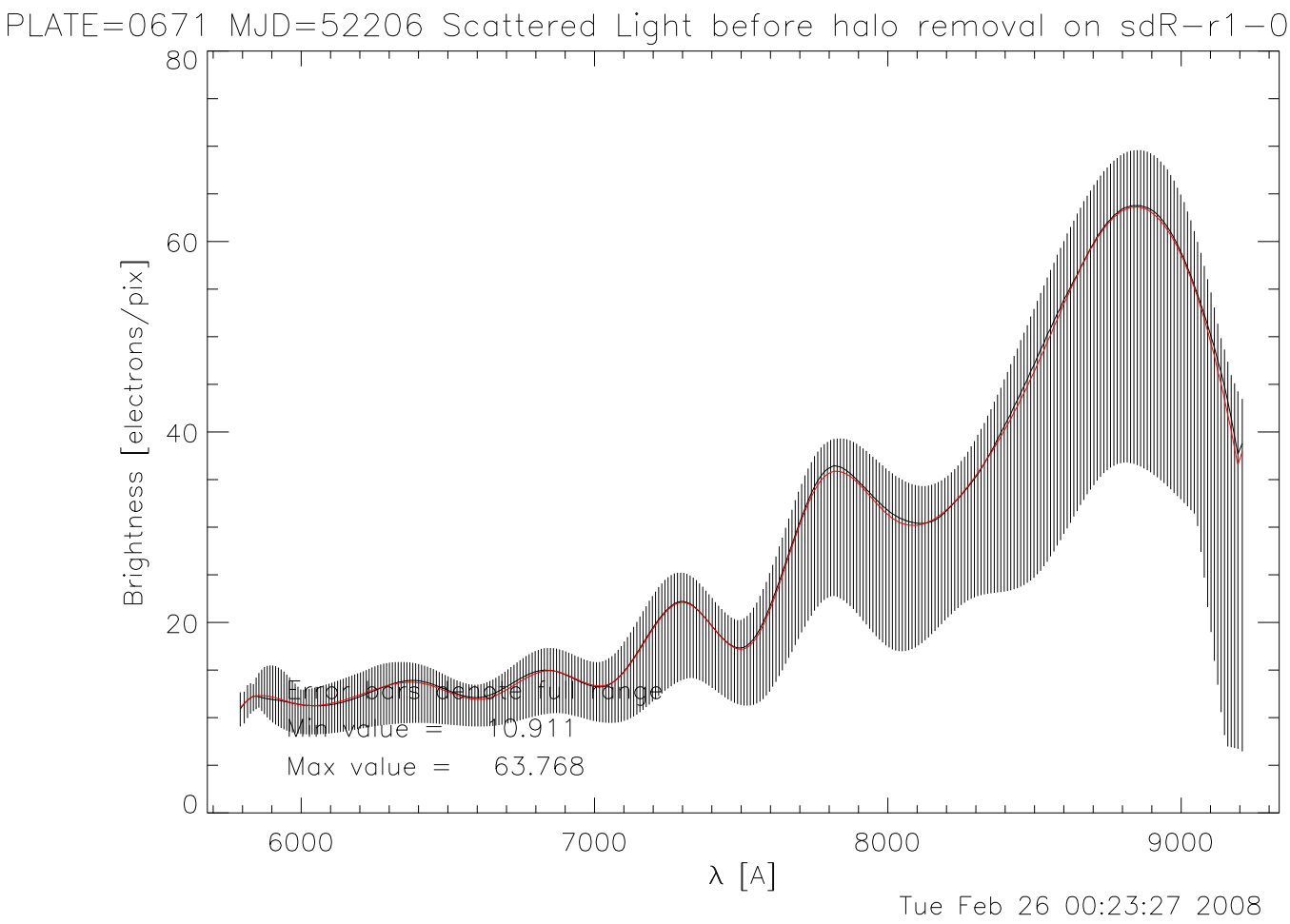

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011486.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

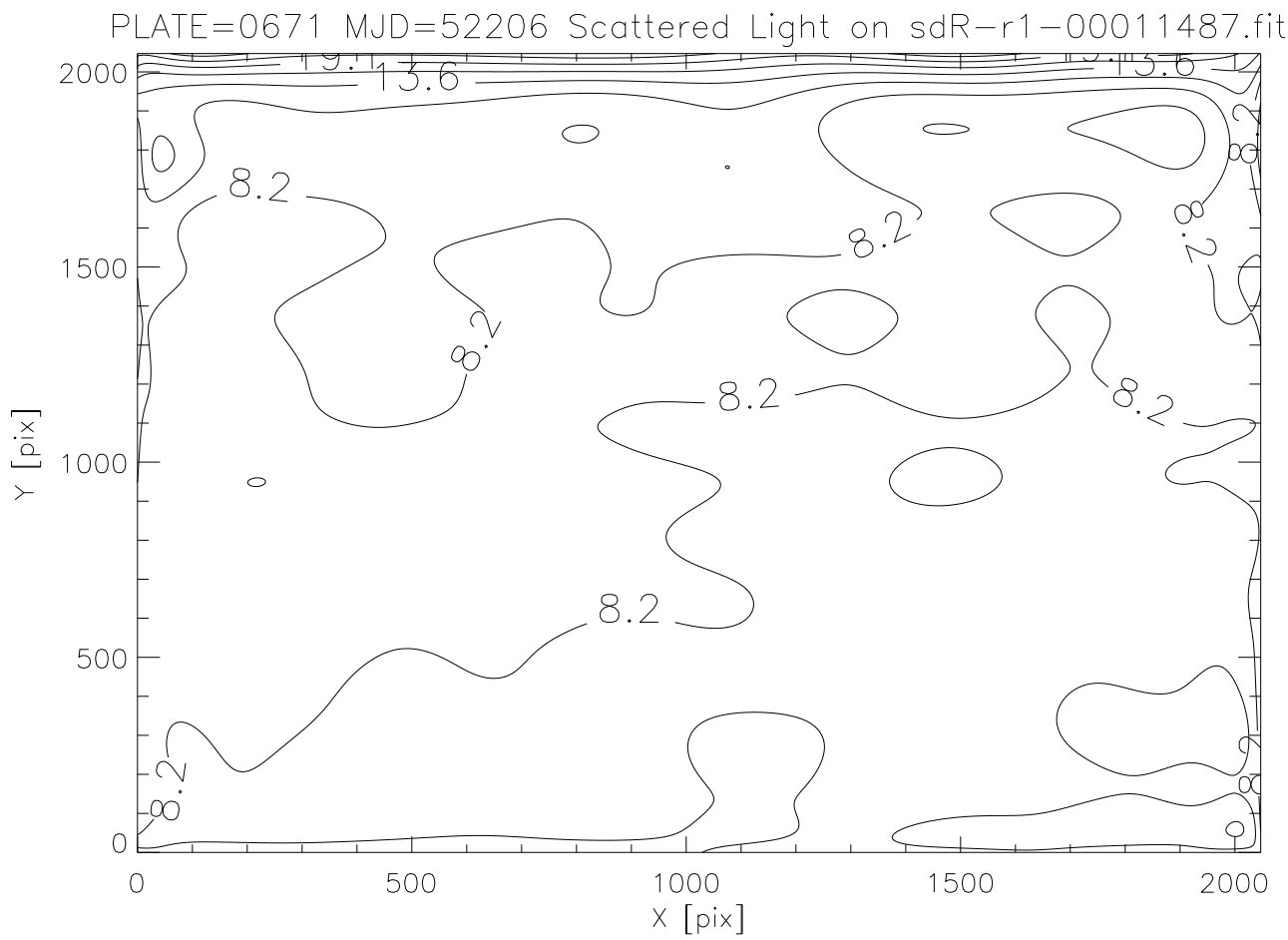

PLATE=0671 MJD=52206 sdR-r1-00011486.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.05 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

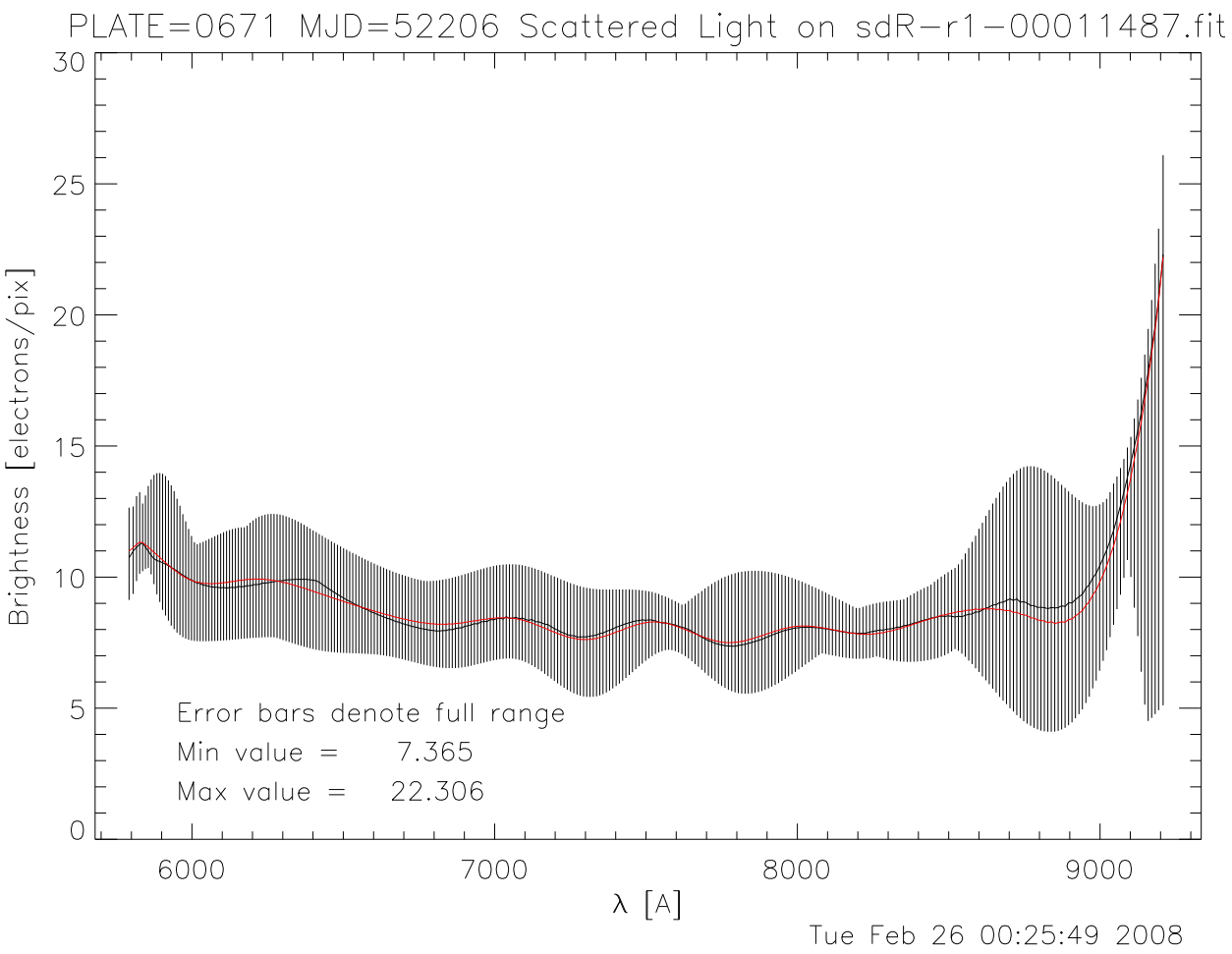

PLATE=0671 MJD=52206 sdR-r1-00011486.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.92 %
Fiber number
Focal Distance [mm]
Airmass

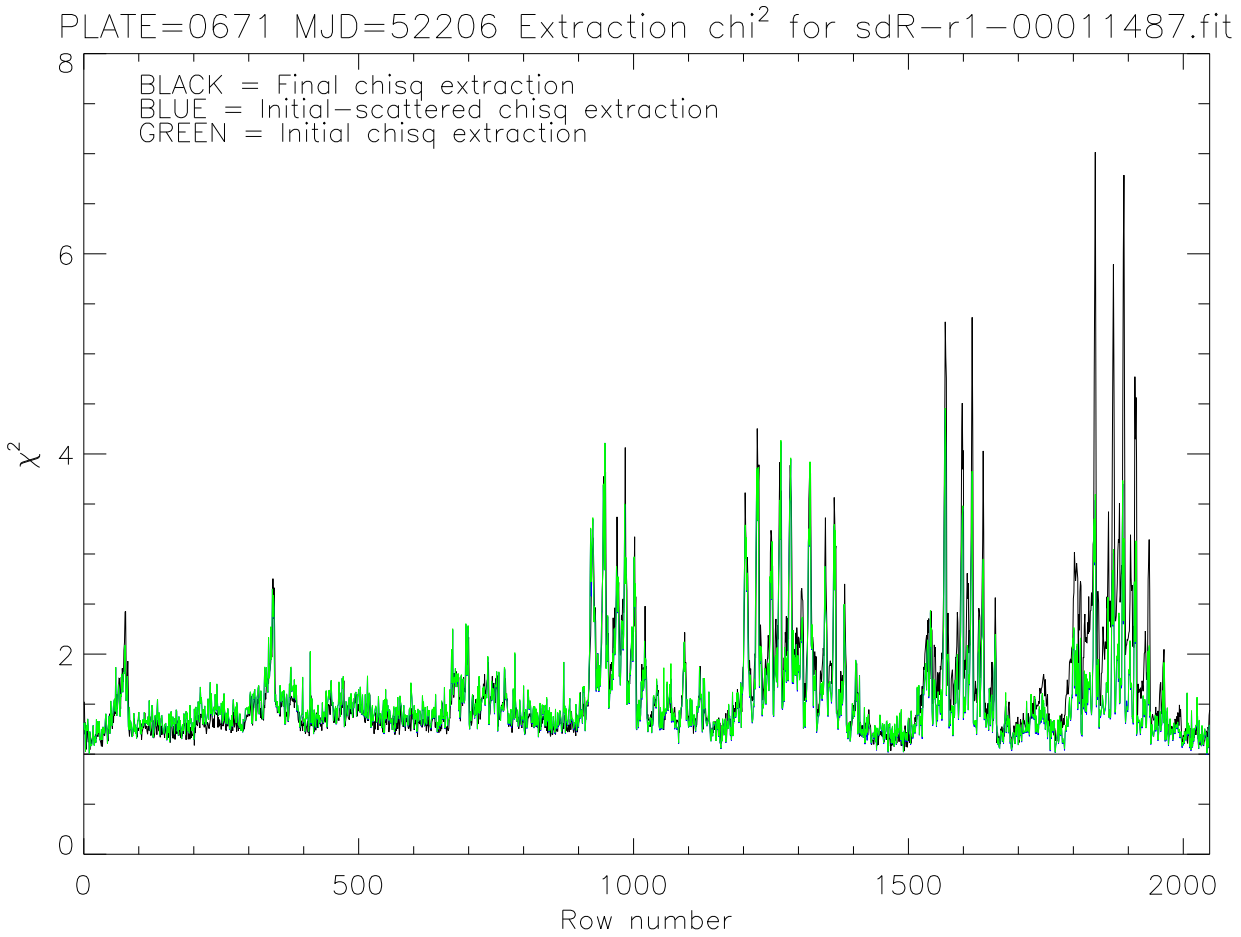

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.632
Max value = 1.308
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:22:34 2008

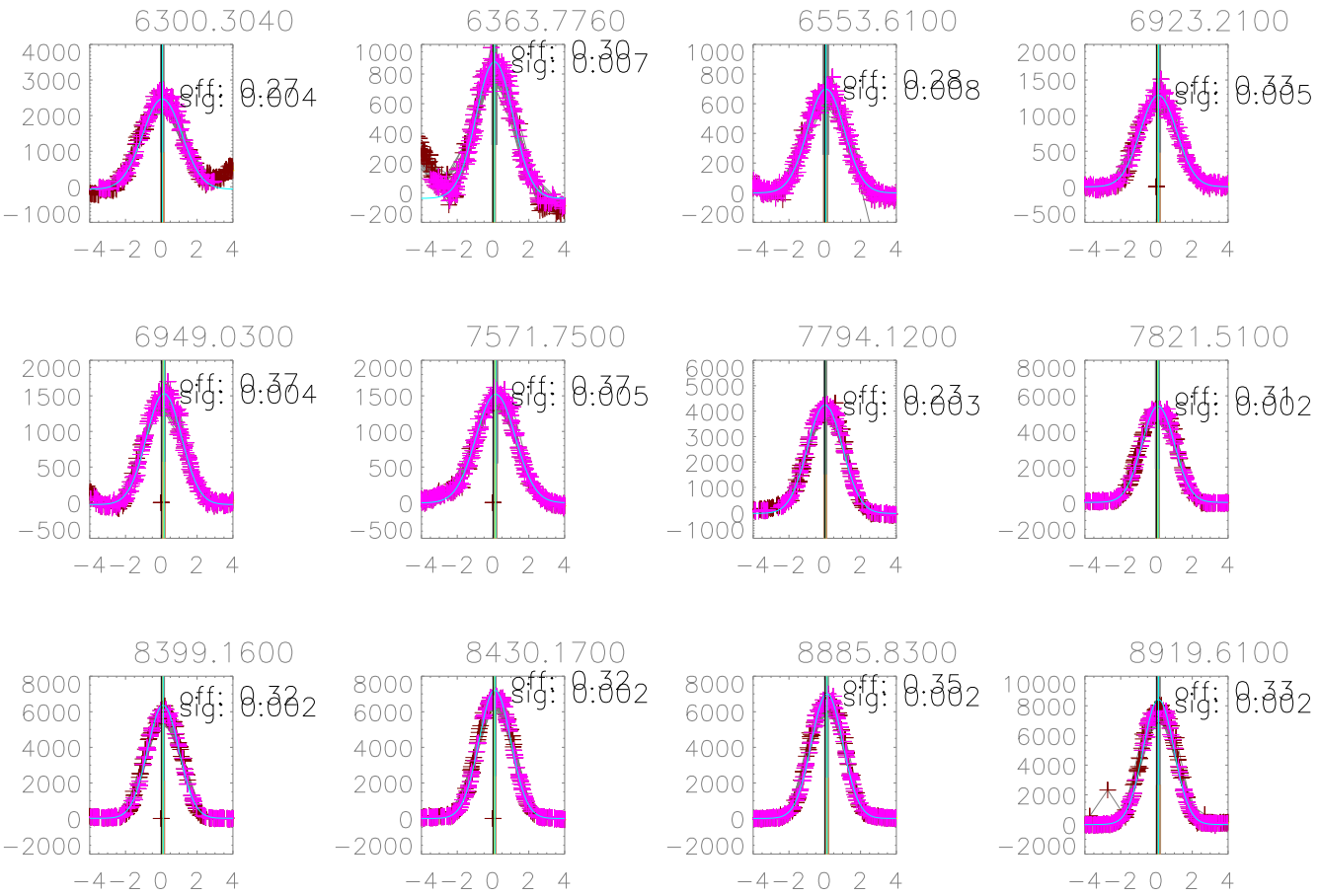

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011487.fi
50.9
50.9
50.9
36.4
36.4
36.4
21.8
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

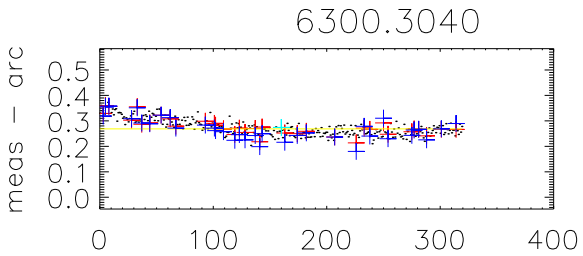

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011487.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 10.911
Max value = 63.768
Tue Feb 26 00:23:27 2008

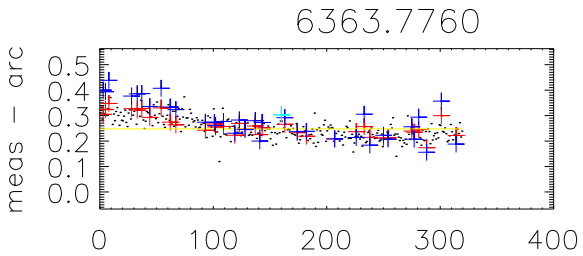

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011487.fit
13.6
8.2
0
Y [pix]
X [pix]
0
500
1000
1500
2000

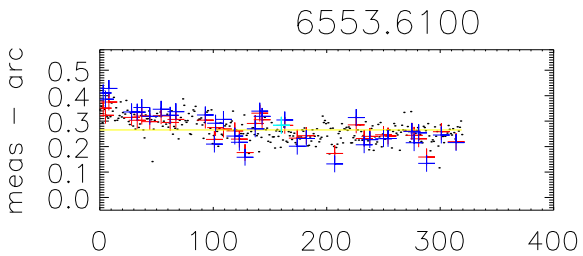

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011487.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.365
Max value = 22.306
Tue Feb 26 00:25:49 2008

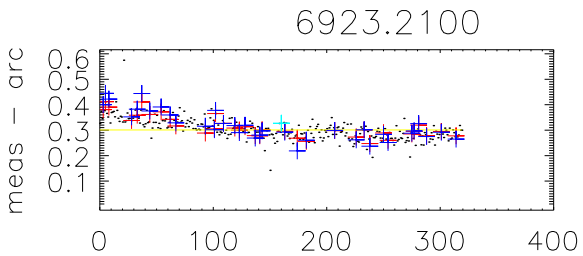

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r1−00011487.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

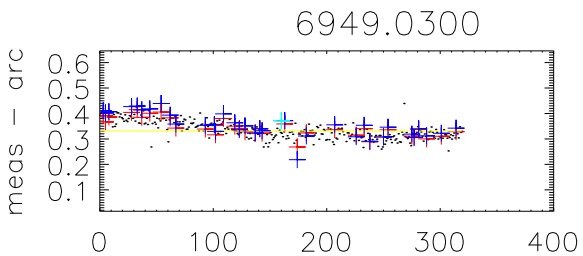

6300.3040
off: 0.27
sig: 0.004
6363.7760
off: 0.30
sig: 0.007
6553.6100
off: 0.28
sig: 0.008
6923.2100
off: 0.33
sig: 0.005
6949.0300
off: 0.37
sig: 0.004
7571.7500
off: 0.37
sig: 0.005
7794.1200
off: 0.23
sig: 0.003
7821.5100
off: 0.31
sig: 0.002
8399.1600
off: 0.32
sig: 0.002
8430.1700
off: 0.32
sig: 0.002
8885.8300
off: 0.35
sig: 0.002
8919.6100
off: 0.33
sig: 0.002

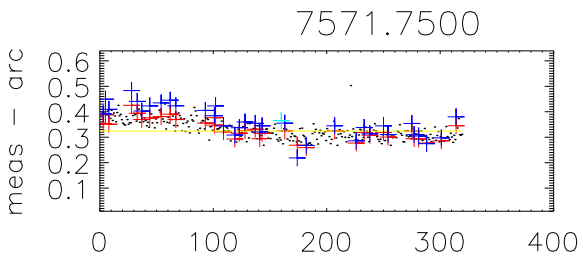

6300.3040
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

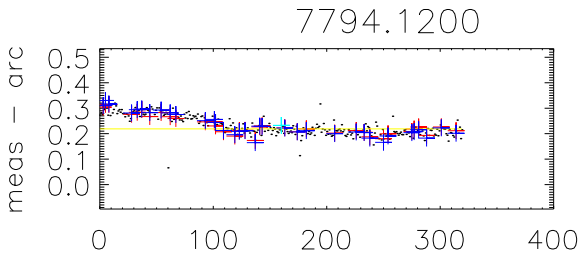

6363.7760
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

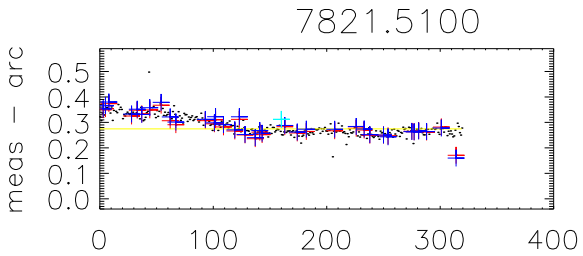

6553.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

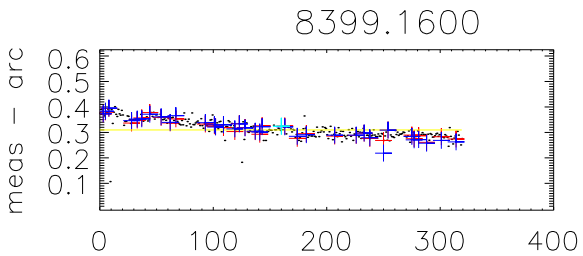

6923.2100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

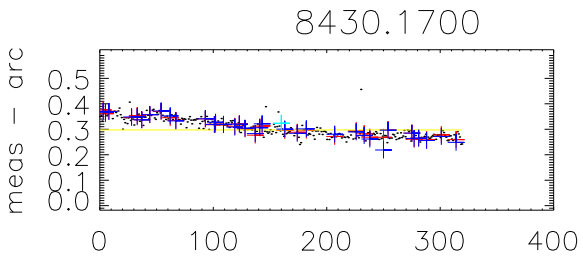

6949.0300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

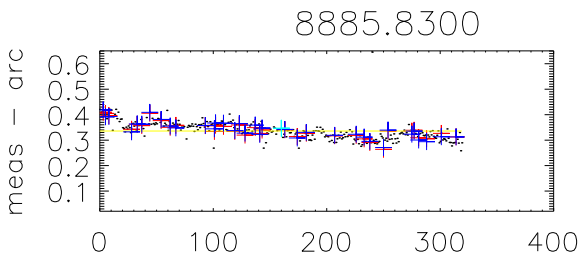

7571.7500
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

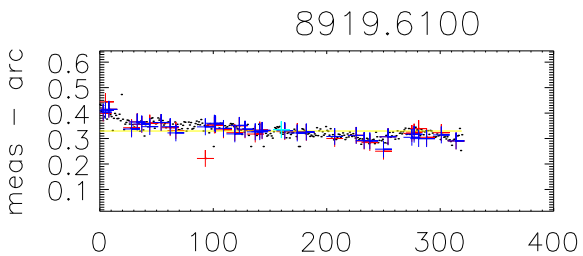

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

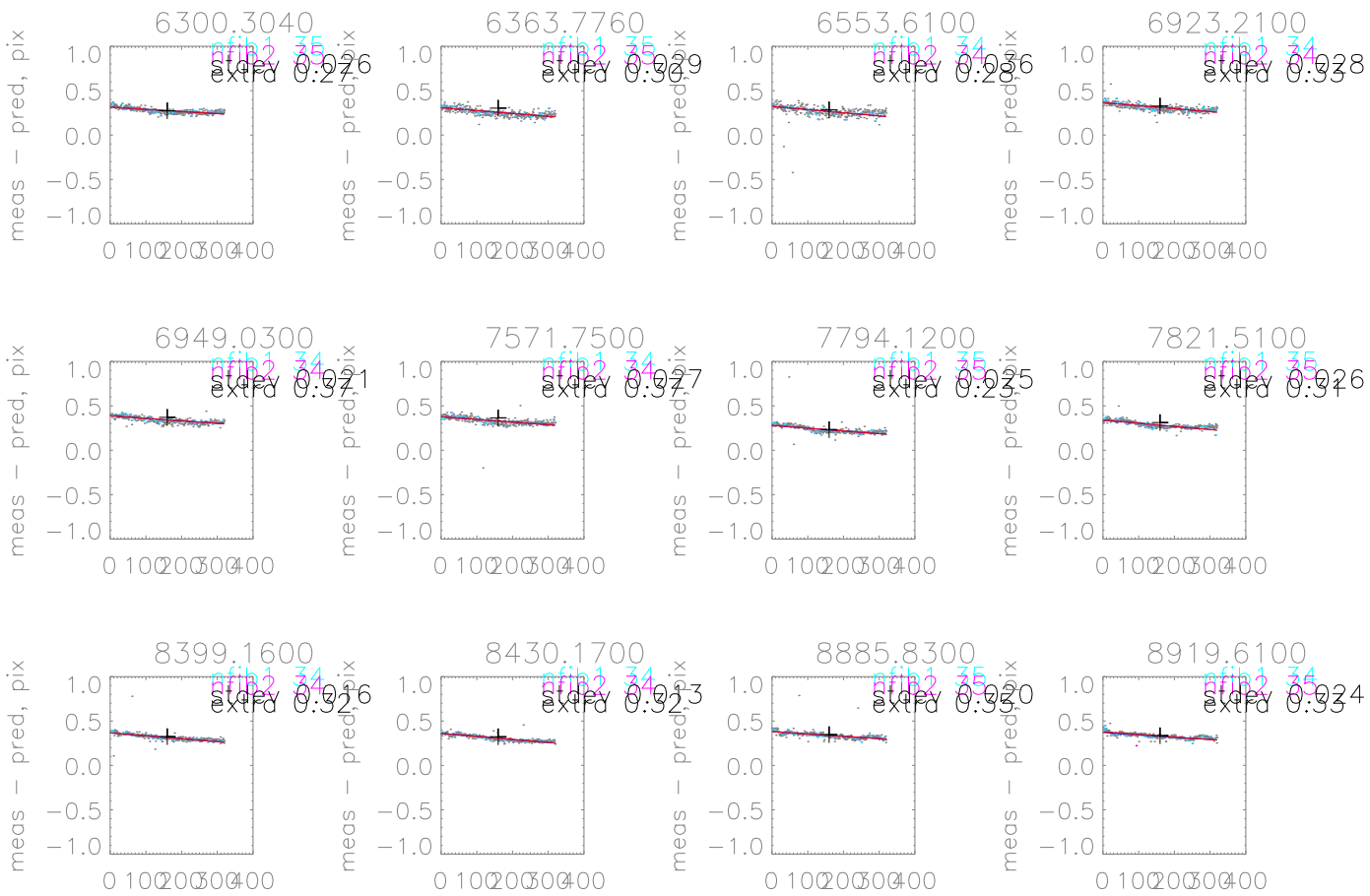

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

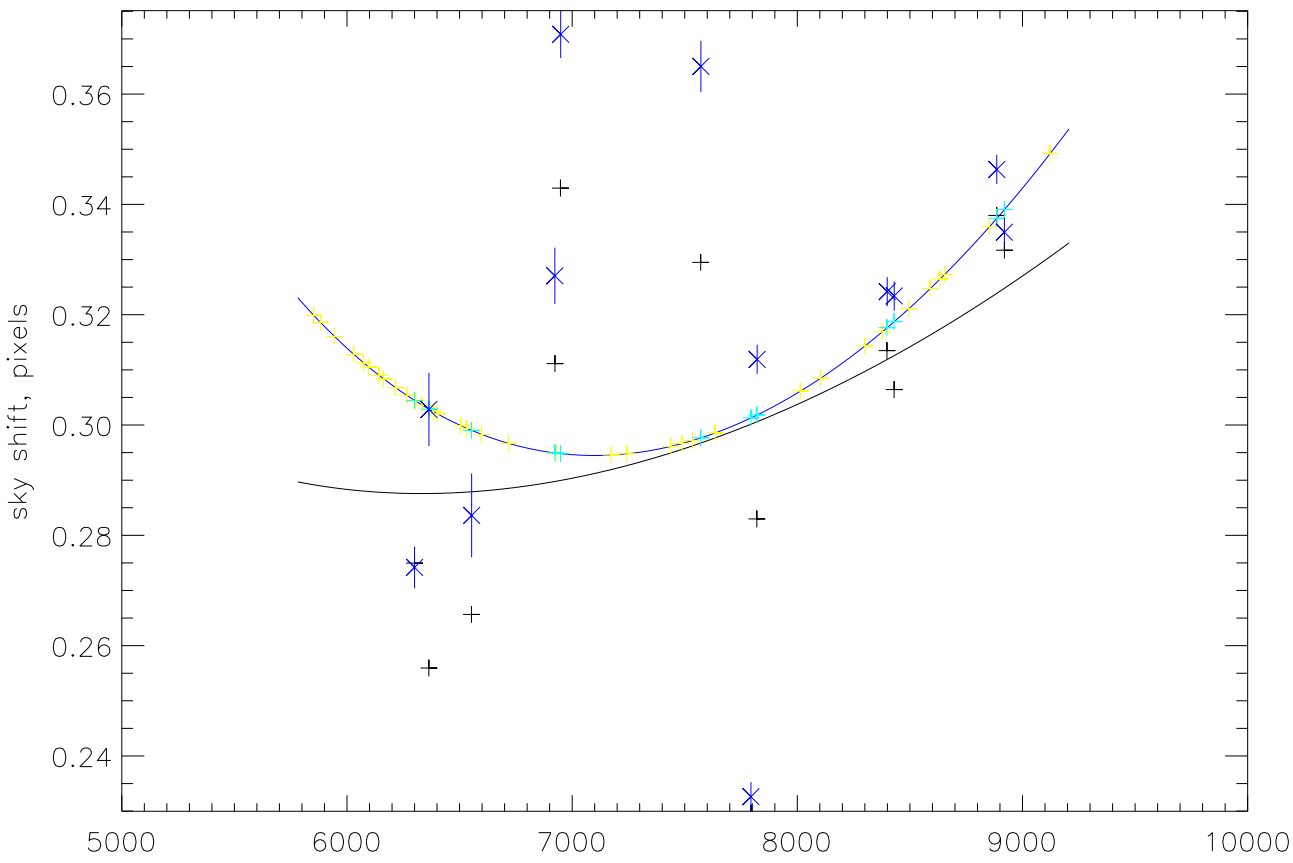

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400


8430.1700
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

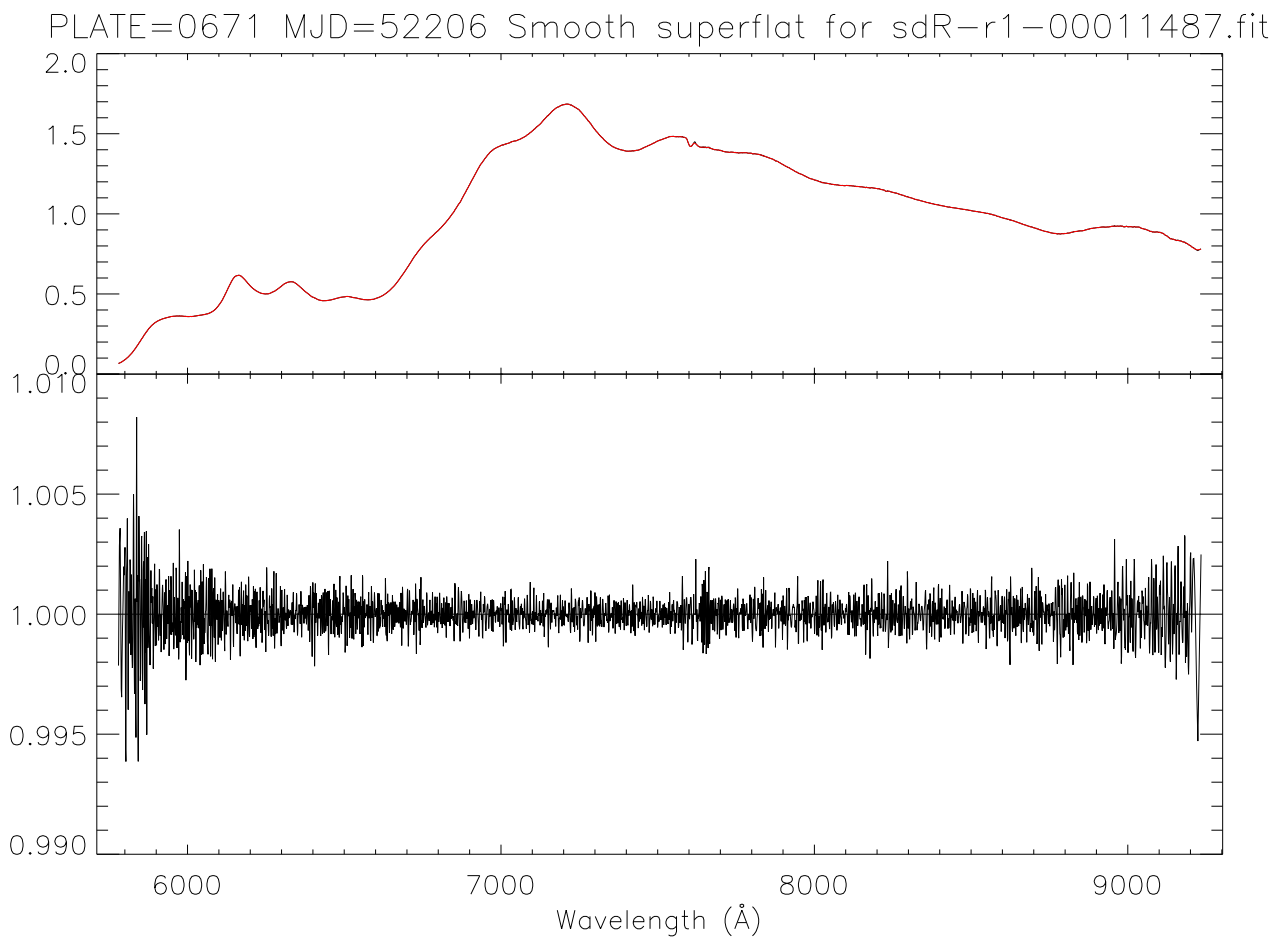

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

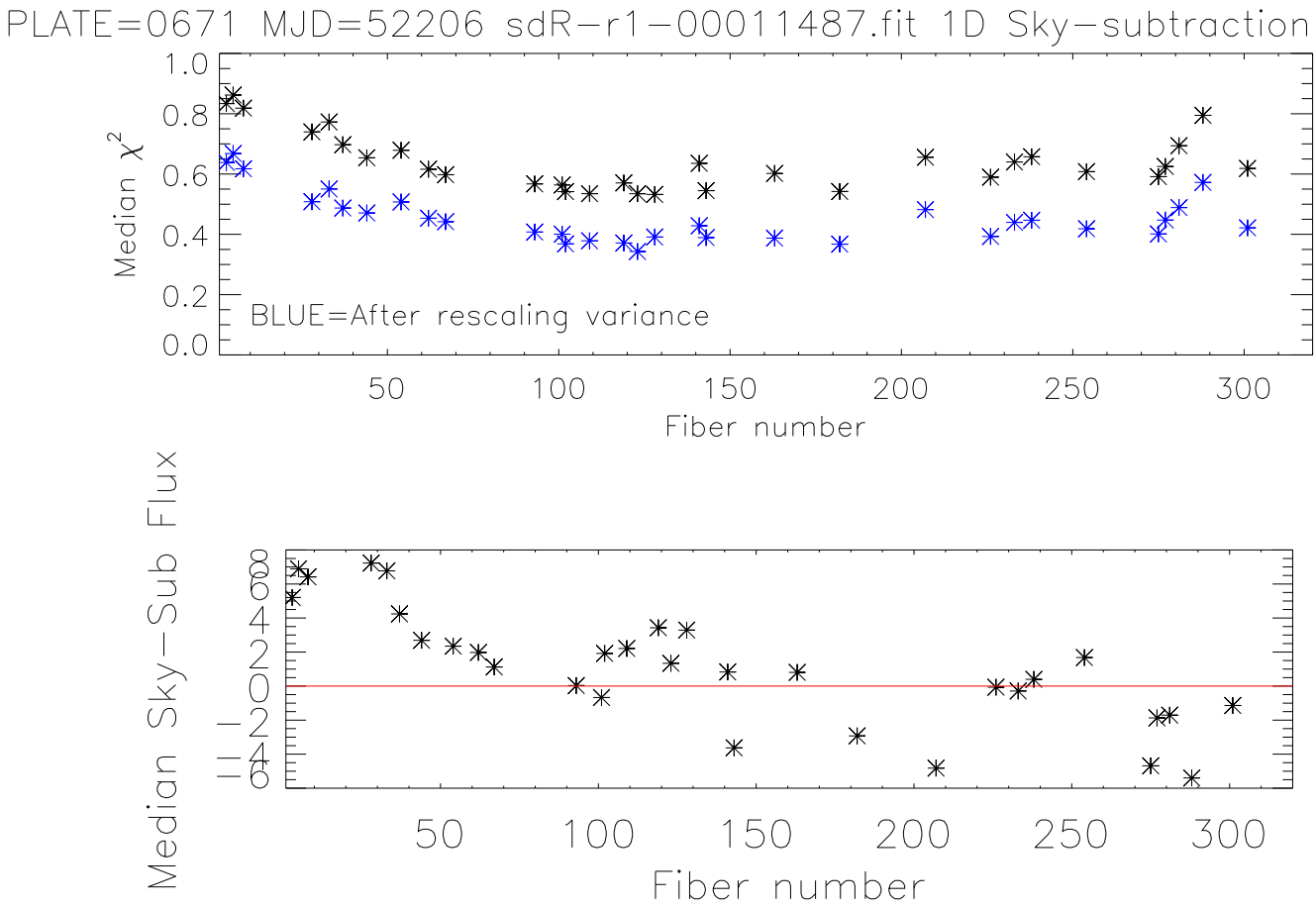

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

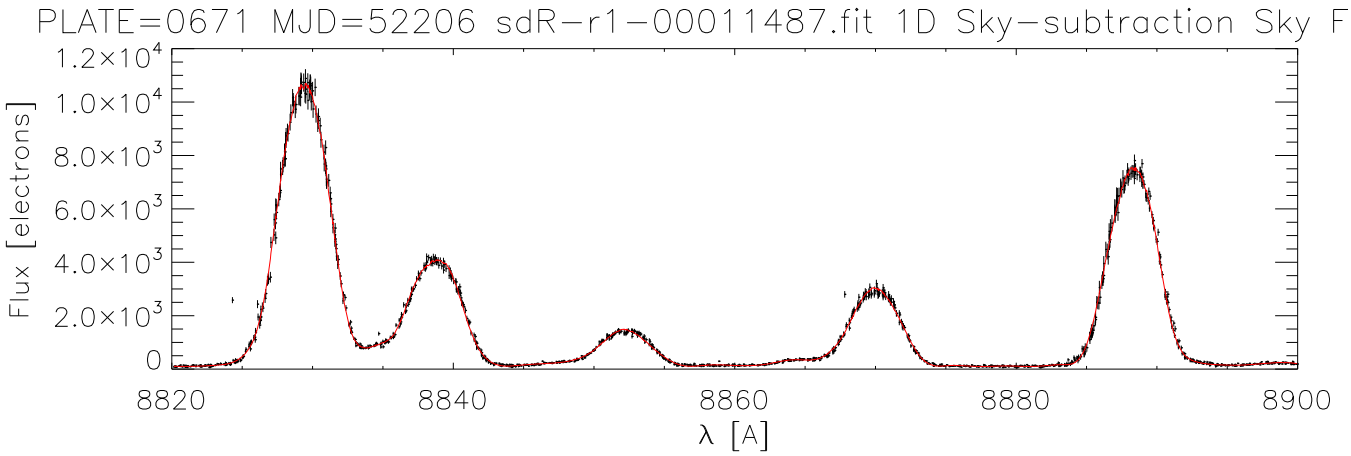

6300.3040
stdev 0.026
extra 0.27
6363.7760
stdev 0.029
extra 0.30
6553.6100
stdev 0.036
extra 0.28
6923.2100
stdev 0.028
extra 0.33
6949.0300
stdev 0.021
extra 0.37
7571.7500
stdev 0.027
extra 0.37
7794.1200
stdev 0.025
extra 0.23
7821.5100
stdev 0.026
extra 0.31
8399.1600
stdev 0.016
extra 0.32
8430.1700
stdev 0.013
extra 0.32
8885.8300
stdev 0.020
extra 0.33
8919.6100
stdev 0.024
extra 0.33
meas − pred, pix

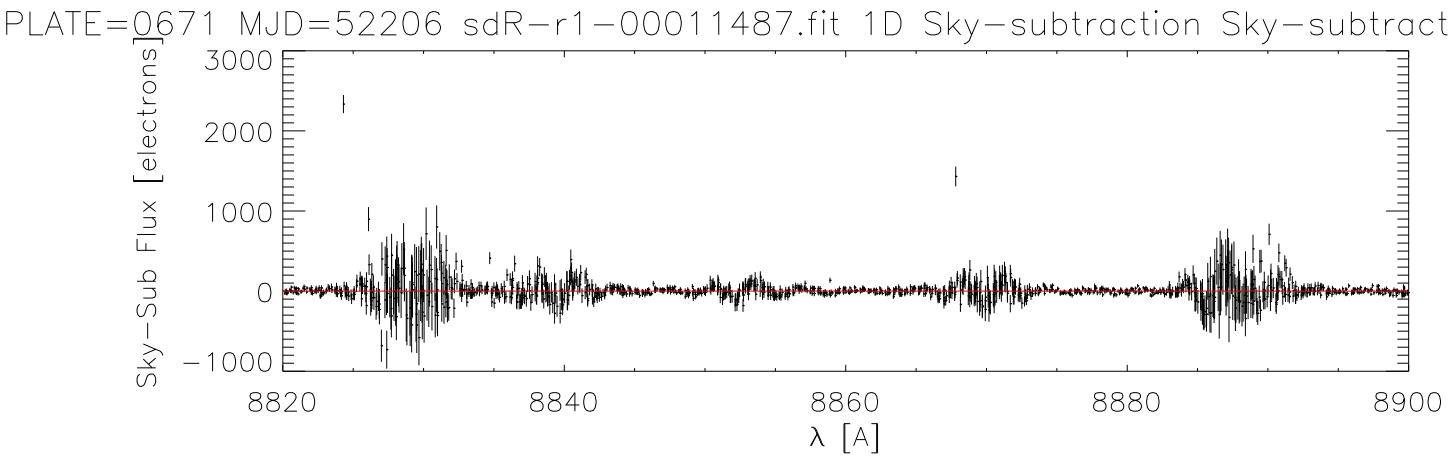

sky shift, pixels
0.36
0.34
0.32
0.30
0.28
0.26
0.24
5000
6000
7000
8000
9000
10000

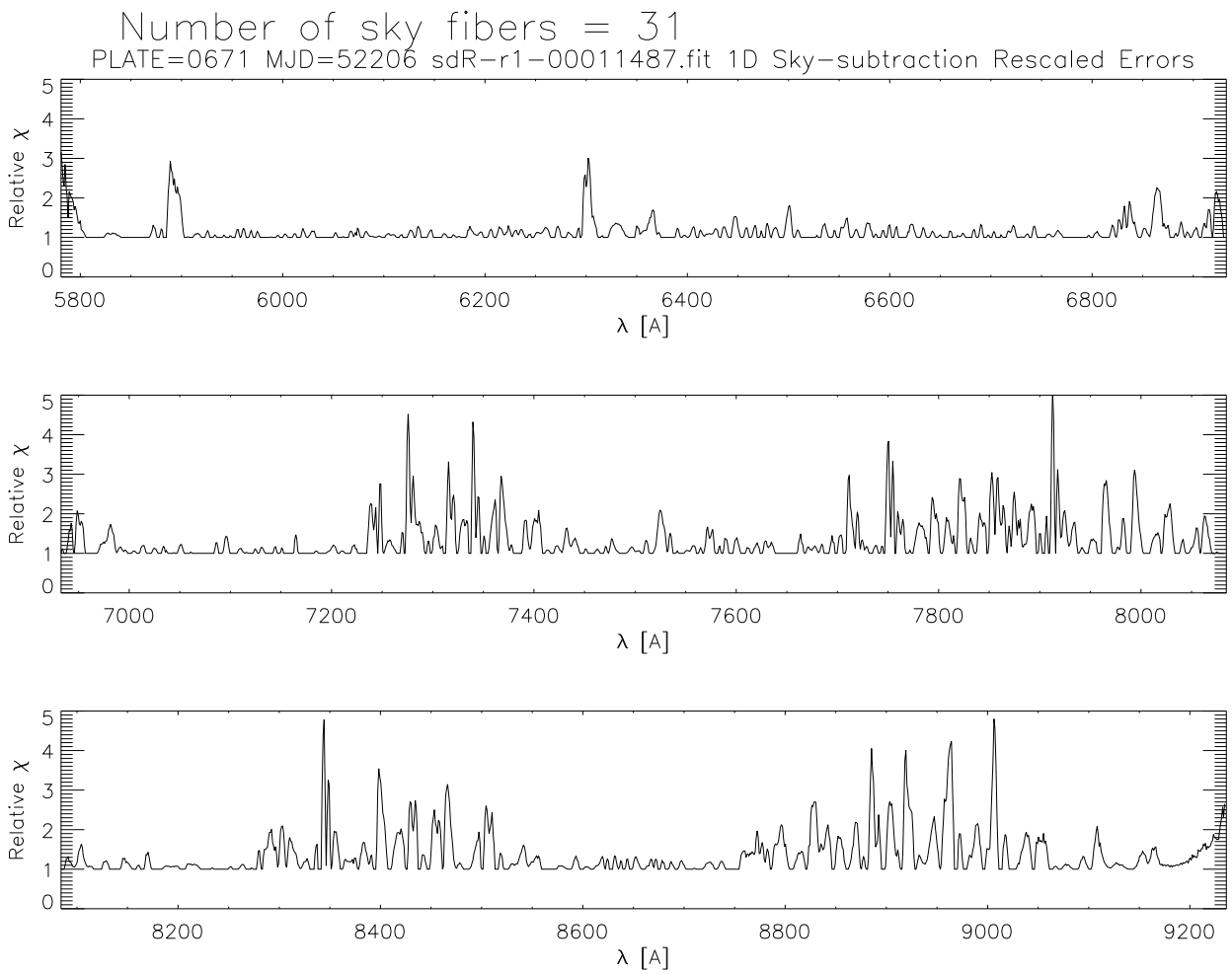
es= −0.0000

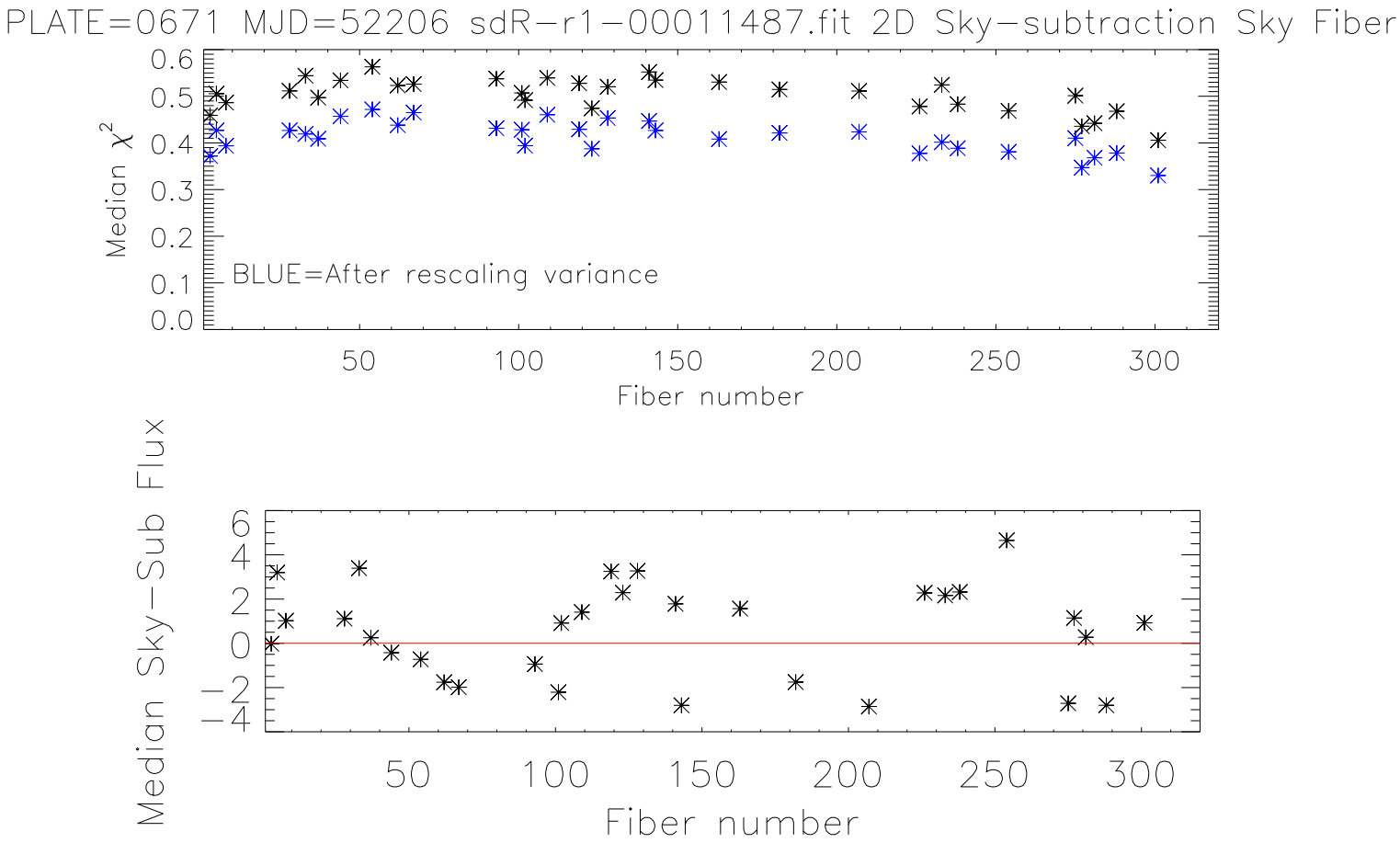

PLATE=0671 MJD=52206 Smooth superflat for sdR−r1−00011487.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

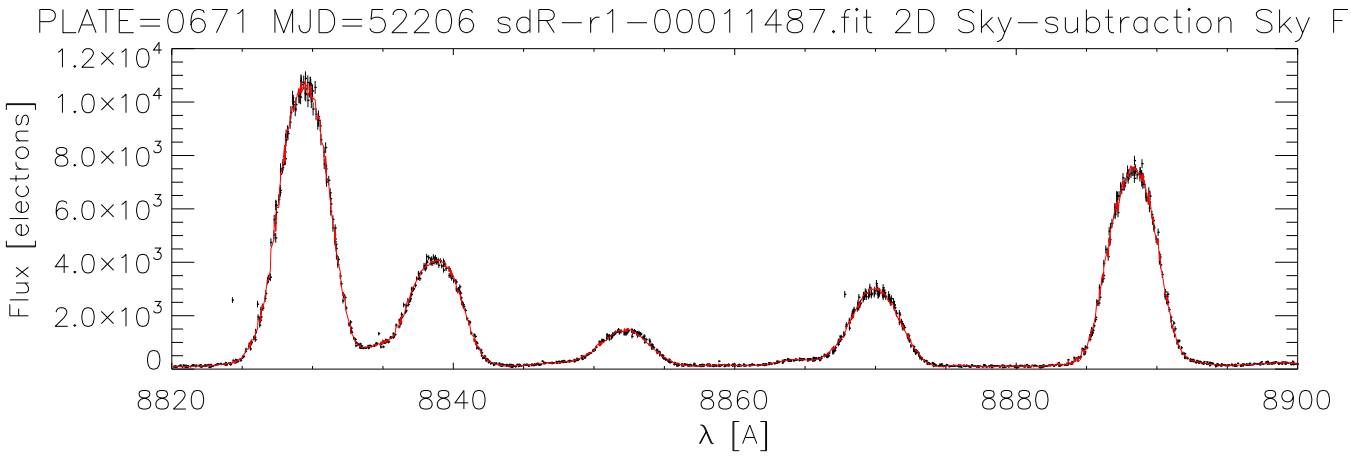

PLATE=0671 MJD=52206 sdR-r1-00011487.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
Fiber number

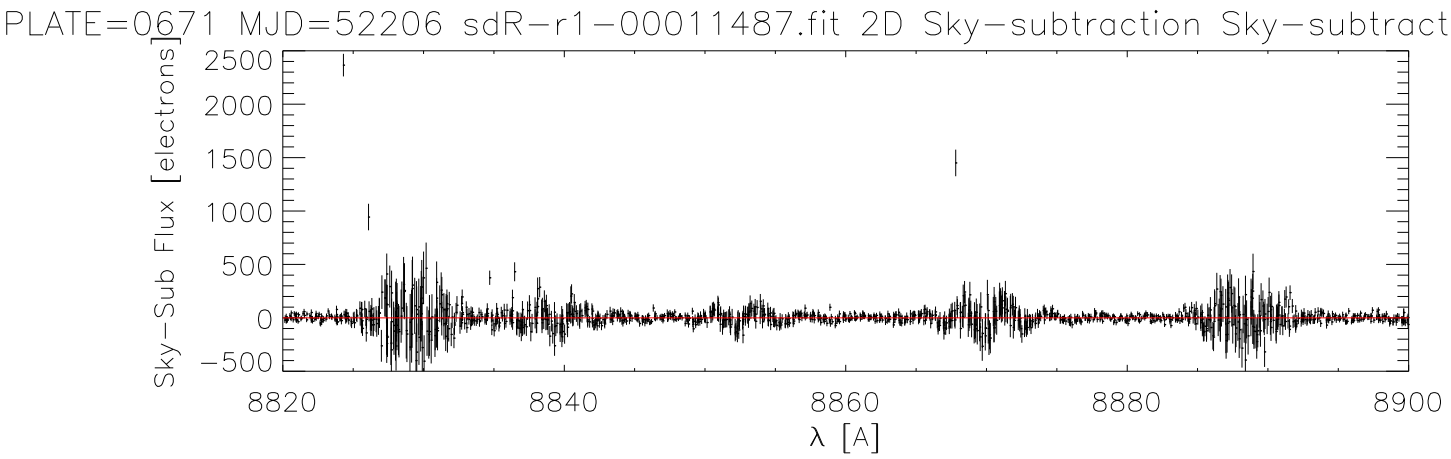

PLATE=0671 MJD=52206 sdR-r1-00011487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

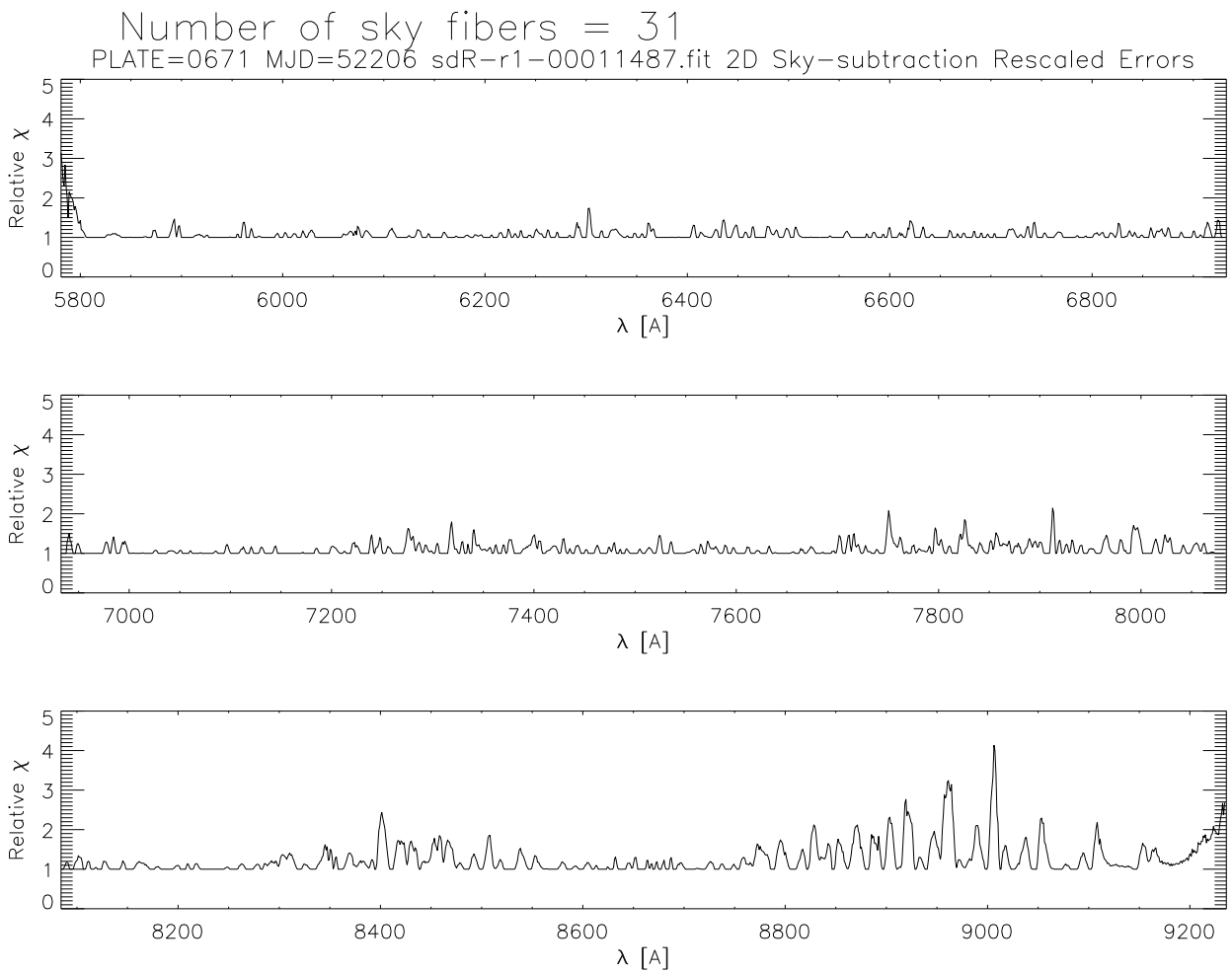

PLATE=0671 MJD=52206 sdR-r1-00011487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

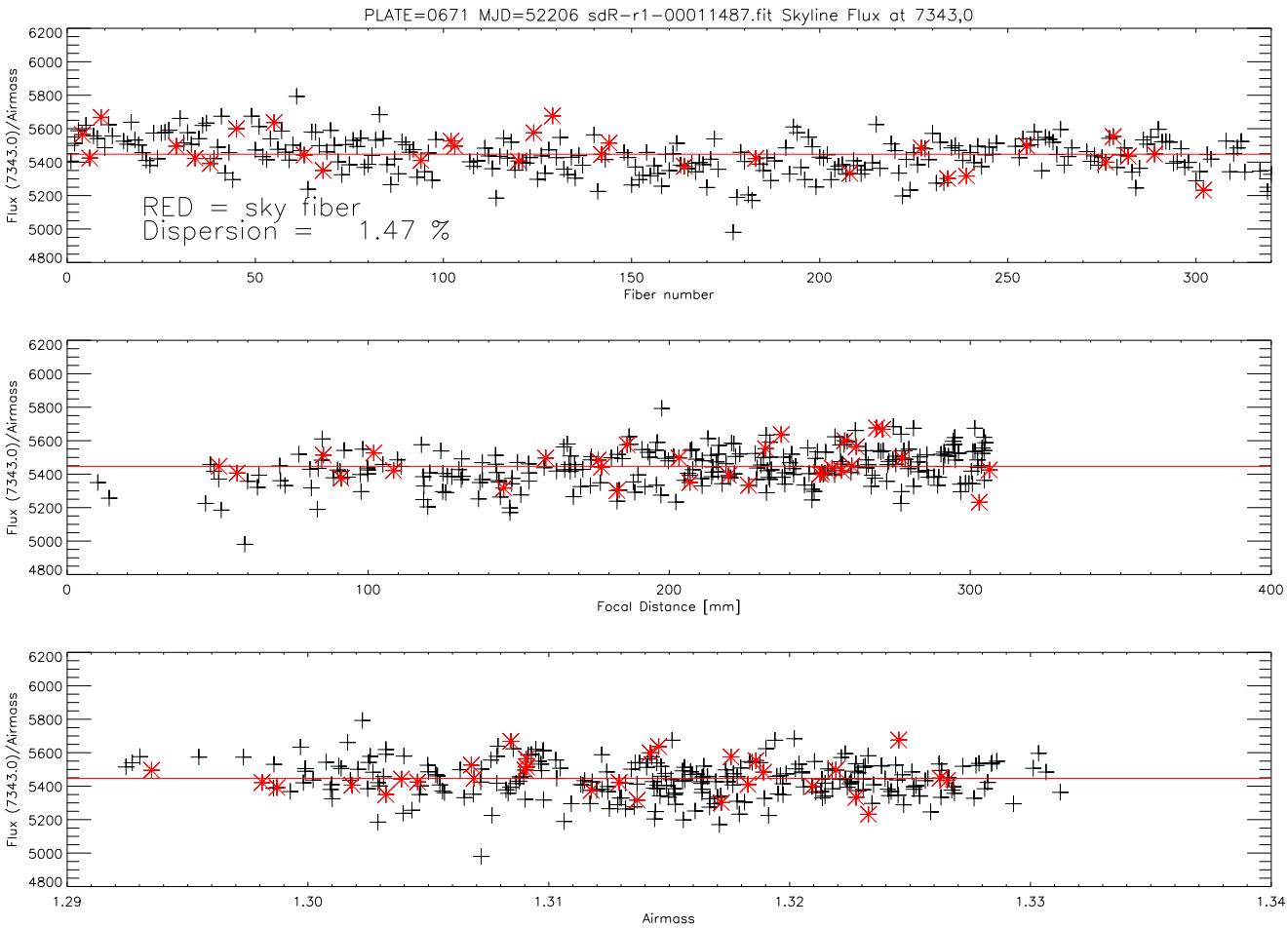

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

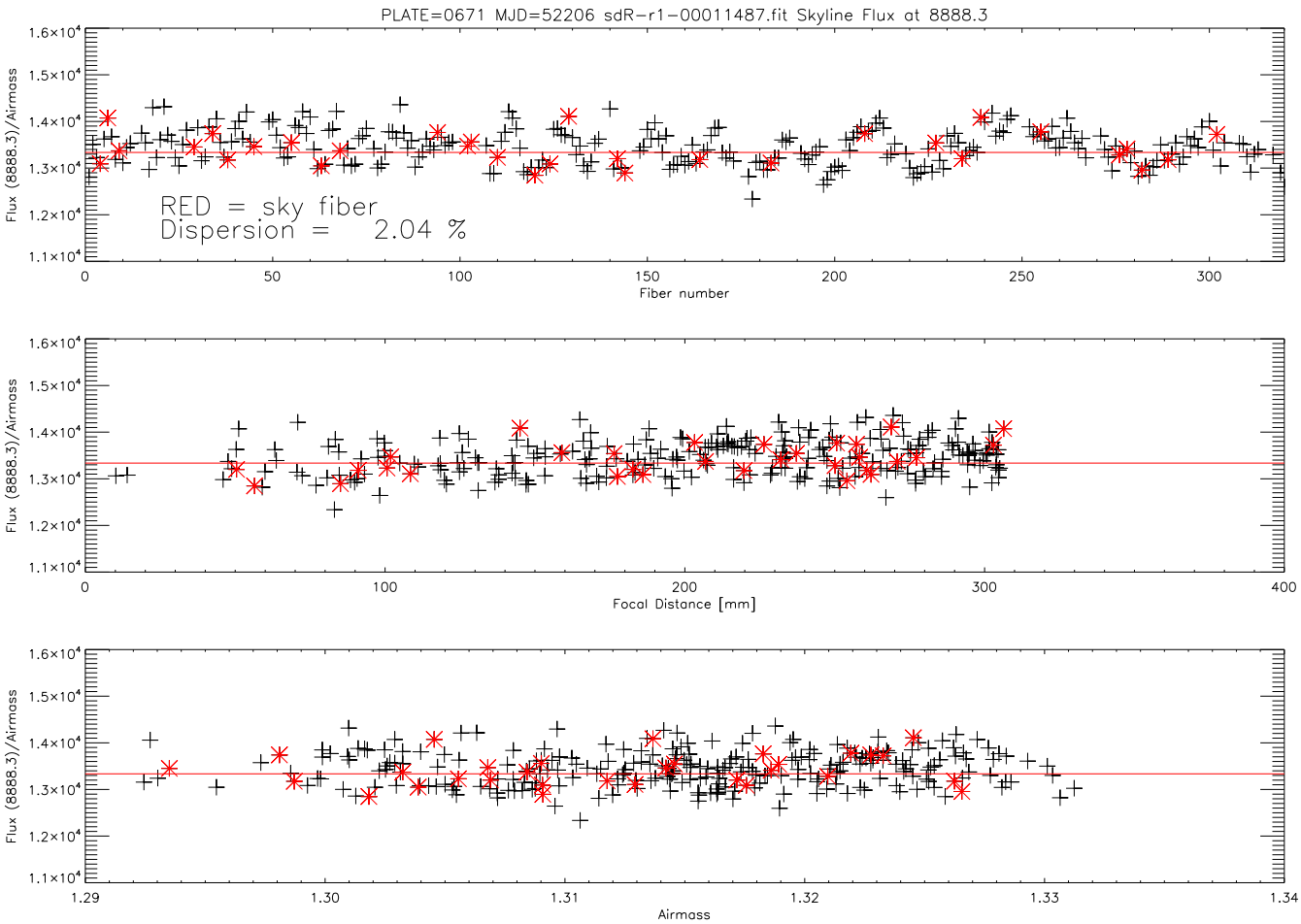

PLATE=0671 MJD=52206 sdR-r1-00011487.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

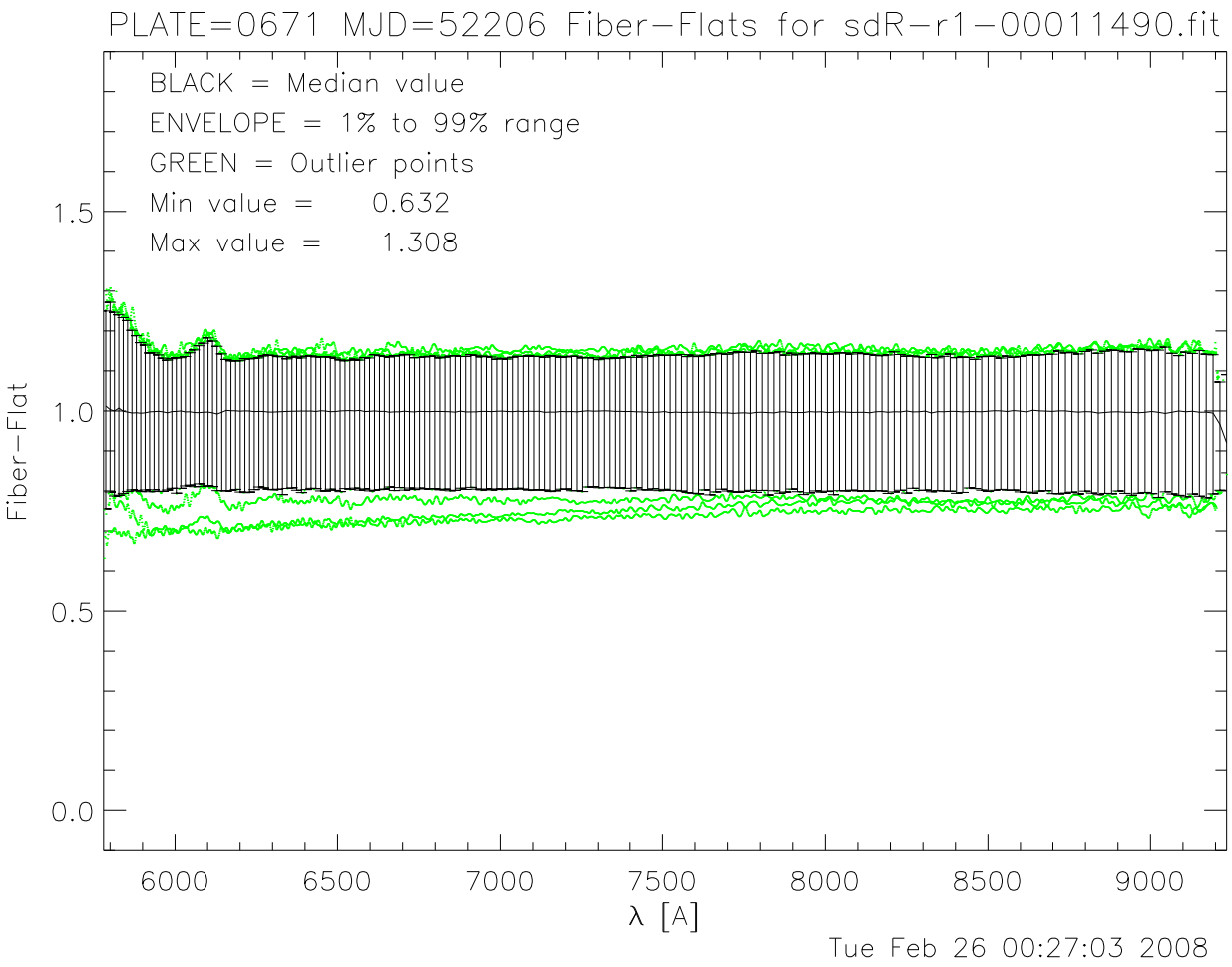

PLATE=0671 MJD=52206 sdR-r1-00011487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

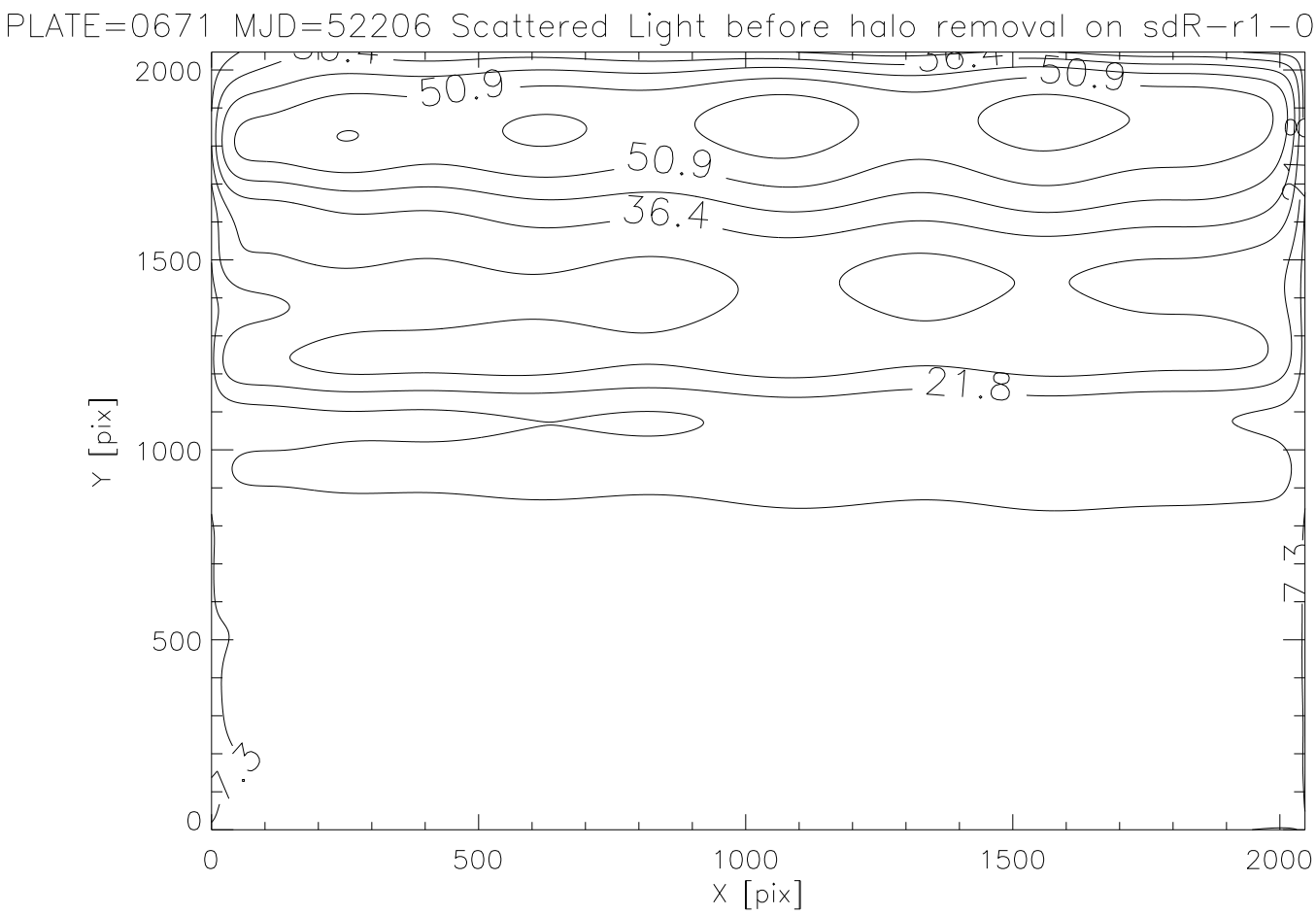

PLATE=0671 MJD=52206 sdR-r1-00011487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

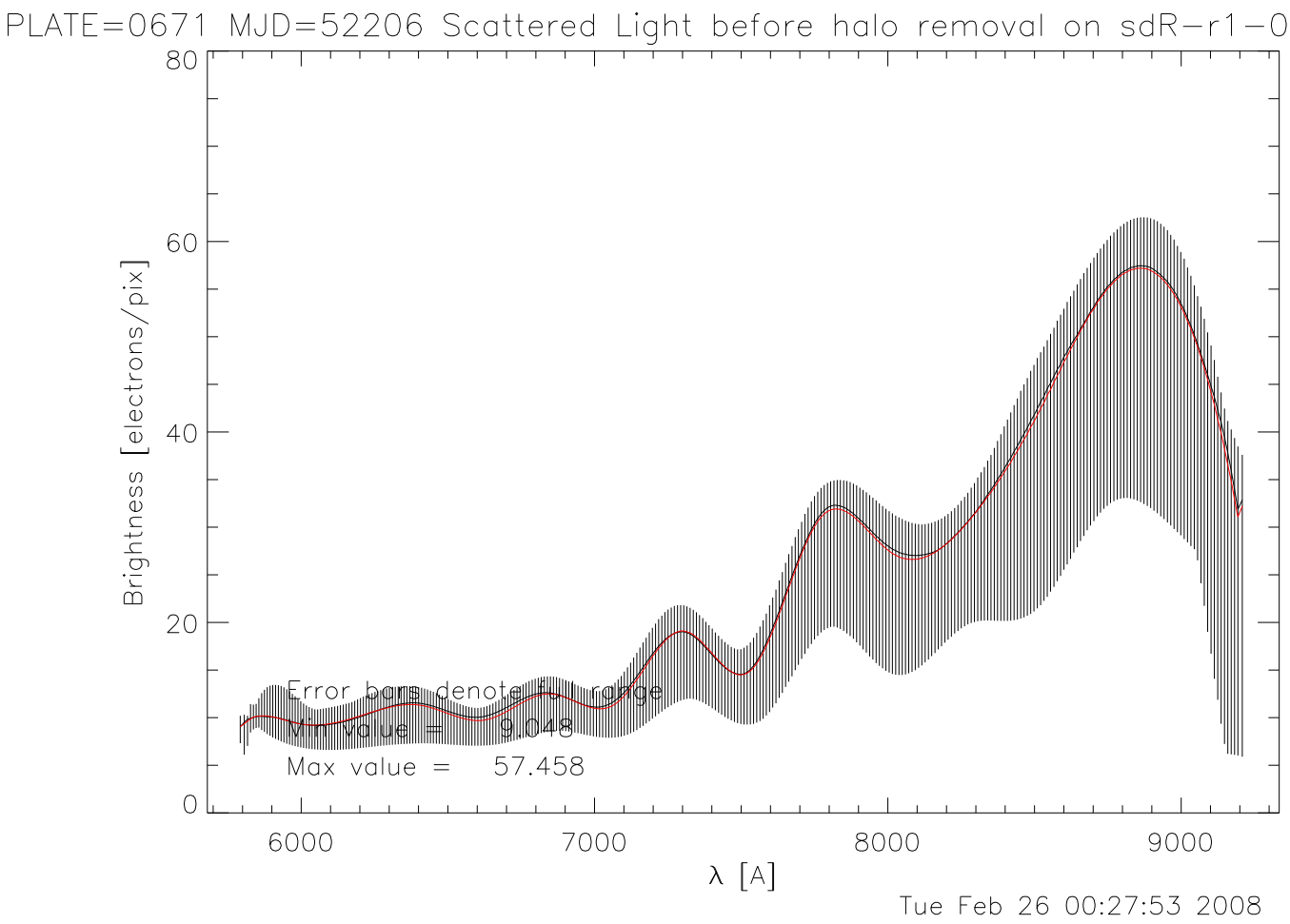

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

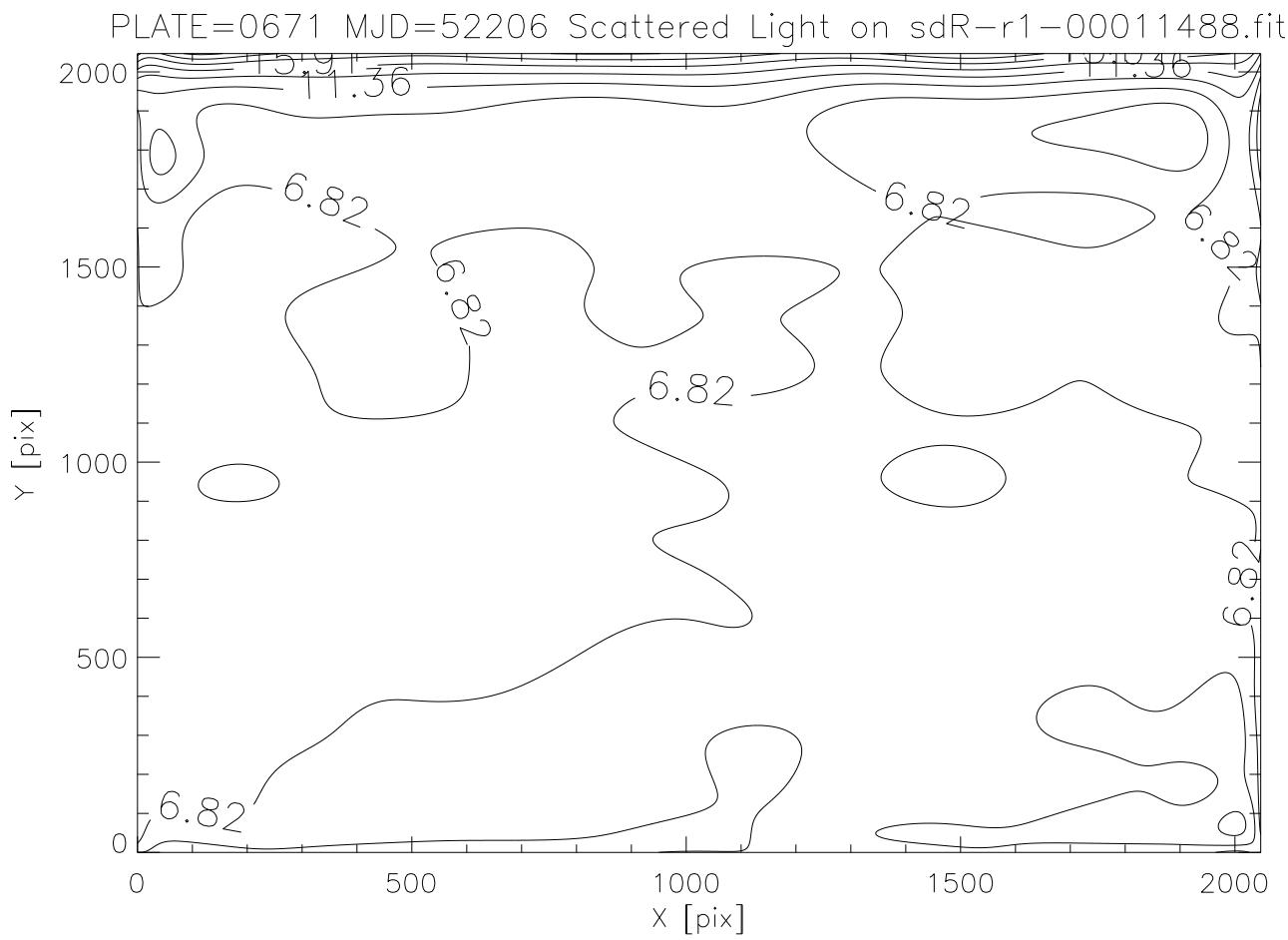

PLATE=0671 MJD=52206 sdR-r1-00011487.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.47 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

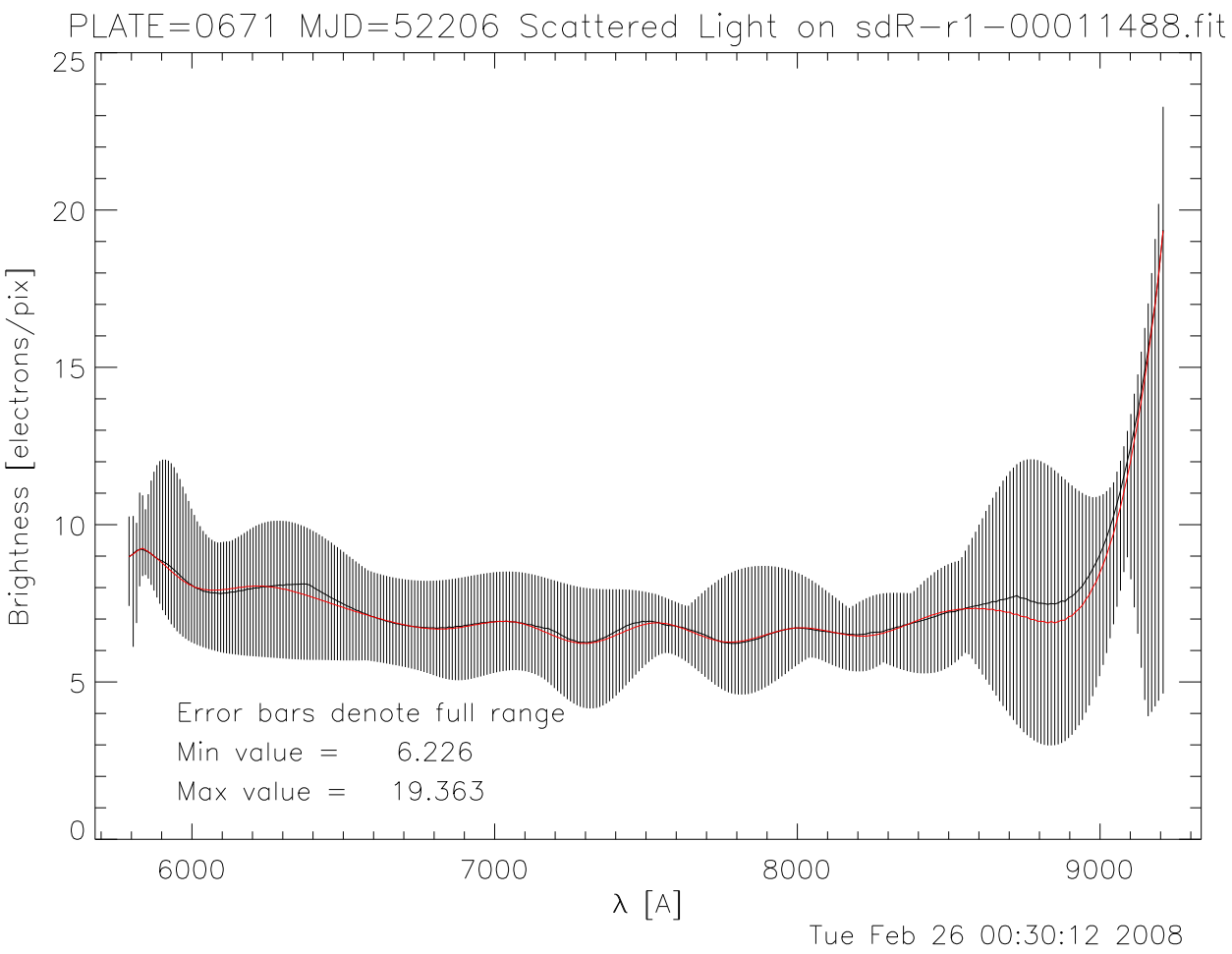

PLATE=0671 MJD=52206 sdR-r1-00011487.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
1.1×10^4
RED = sky fiber
Dispersion = 2.04 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
1.1×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.6×10^4
1.5×10^4
1.4×10^4
1.3×10^4
1.2×10^4
1.1×10^4
1.29
1.30
1.31
1.32
1.33
1.34
Airmass

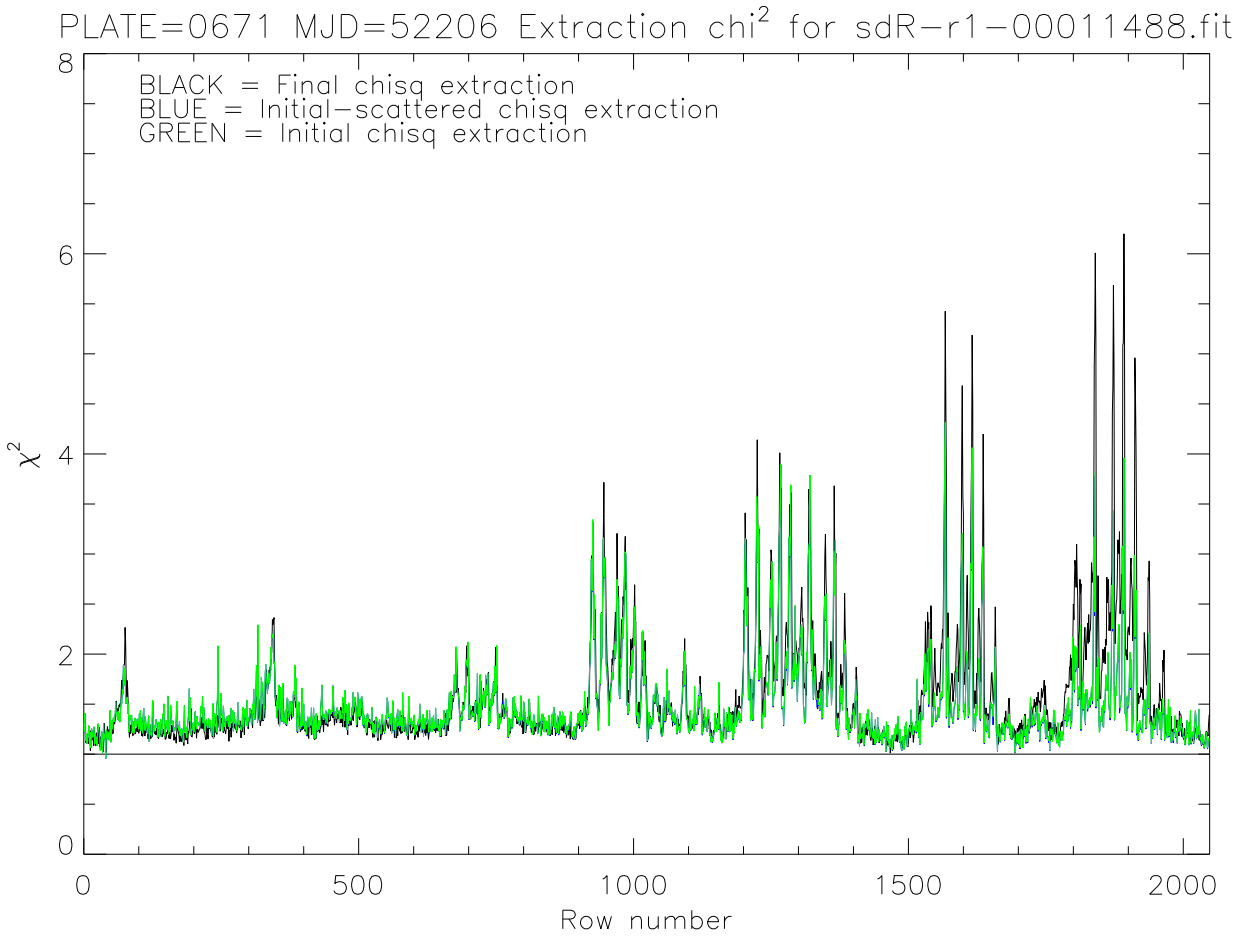

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.632
Max value = 1.308
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:27:03 2008

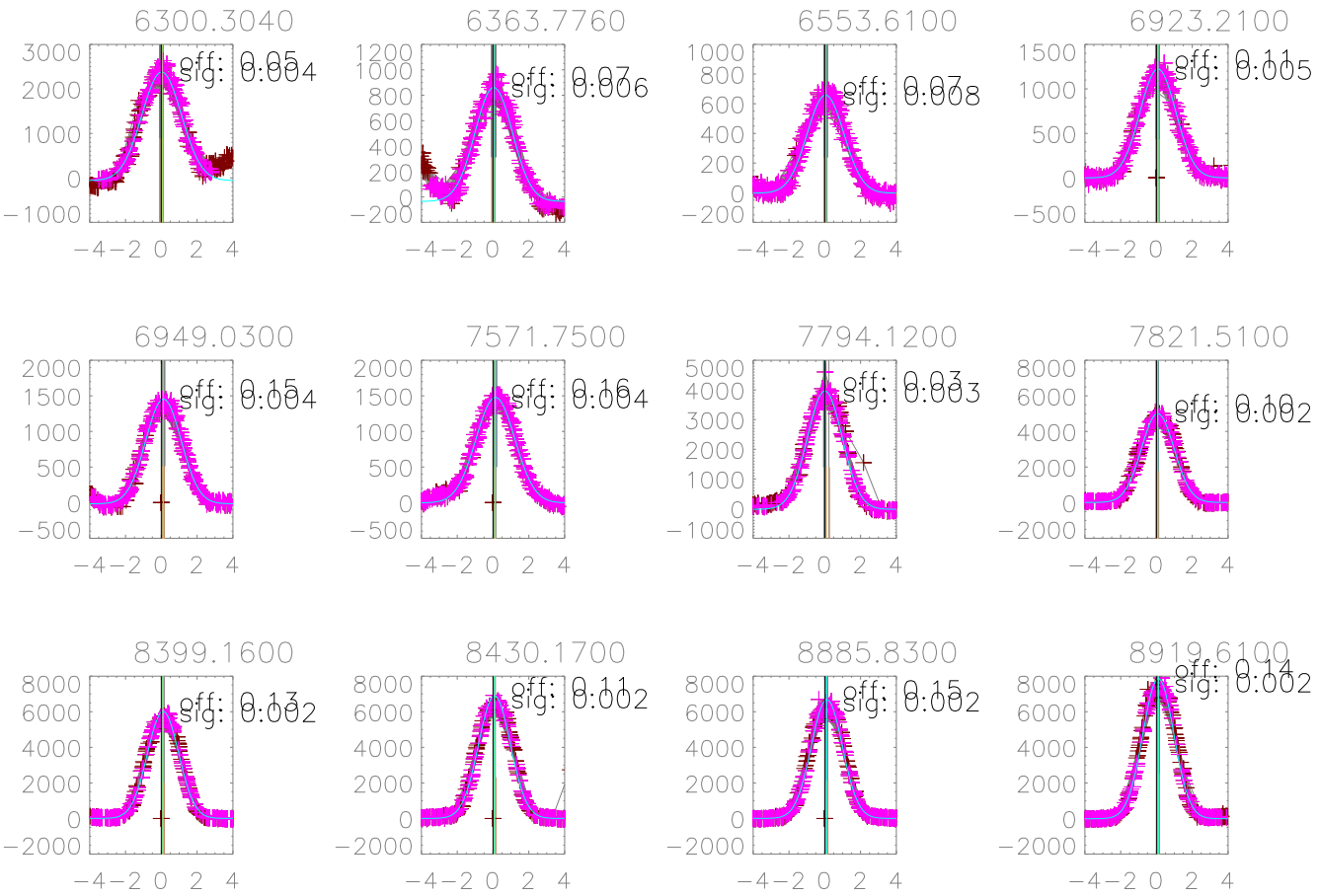

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011488.fi
50.9
50.9
50.9
36.4
21.8
7.3
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

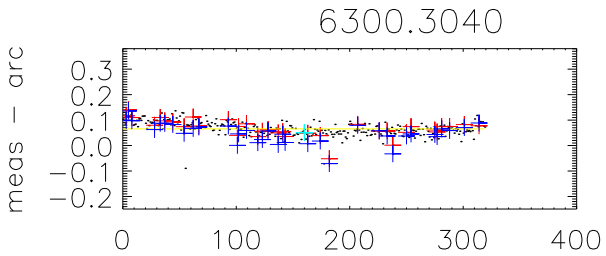

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011488.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.048
Max value = 57.458
Tue Feb 26 00:27:53 2008

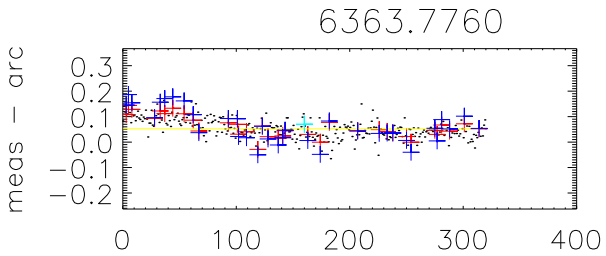

PLATE=0671 MJD=52206 Scattered Light on sdR−r1−00011488.fit
11.36
6.82
6.82
6.82
6.82
6.82
6.82
0
Y [pix]
X [pix]
0
500
1000
1500
2000

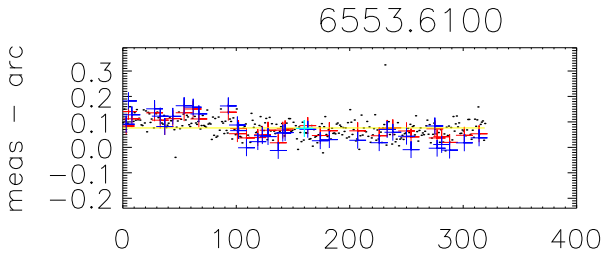

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011488.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.226
Max value = 19.363
Tue Feb 26 00:30:12 2008

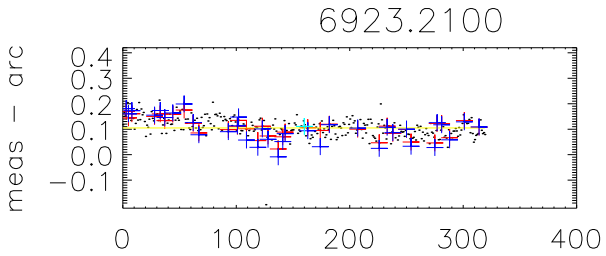

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r1−00011488.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

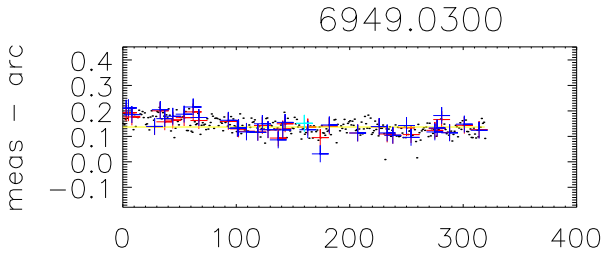

6300.3040
off: 0.05
sig: 0.004
6363.7760
off: 0.07
sig: 0.006
6553.6100
off: 0.07
sig: 0.008
6923.2100
off: 0.11
sig: 0.005
6949.0300
off: 0.15
sig: 0.004
7571.7500
off: 0.16
sig: 0.004
7794.1200
off: 0.03
sig: 0.003
7821.5100
off: 0.10
sig: 0.002
8399.1600
off: 0.13
sig: 0.002
8430.1700
off: 0.11
sig: 0.002
8885.8300
off: 0.15
sig: 0.002
8919.6100
off: 0.14
sig: 0.002

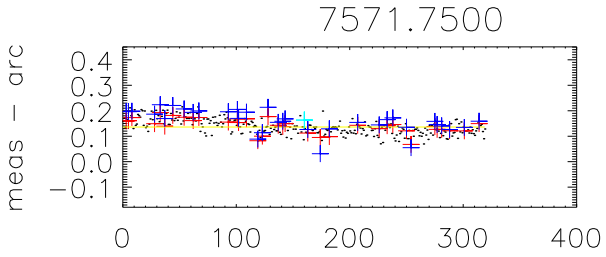

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

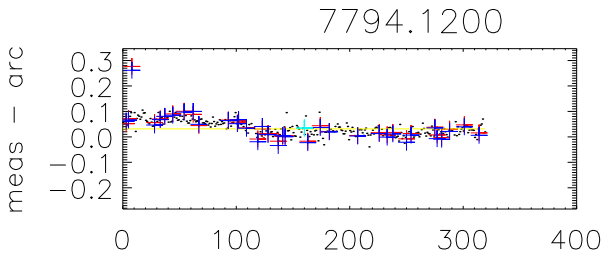

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

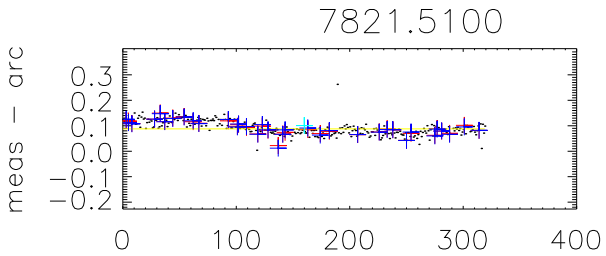

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

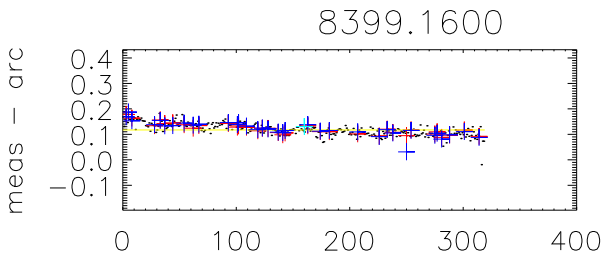

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

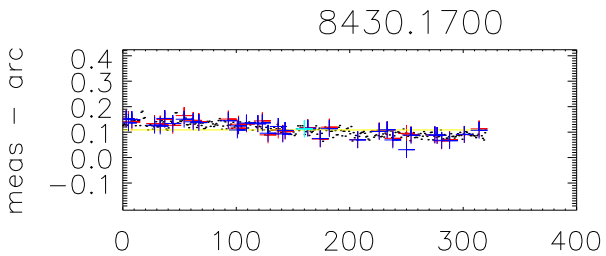

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

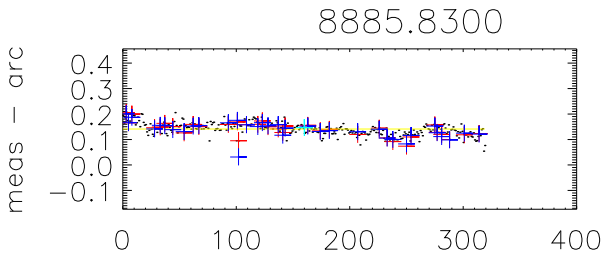

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

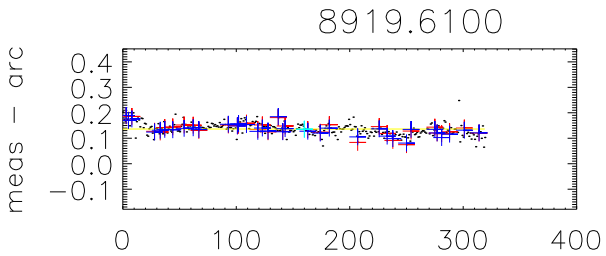

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

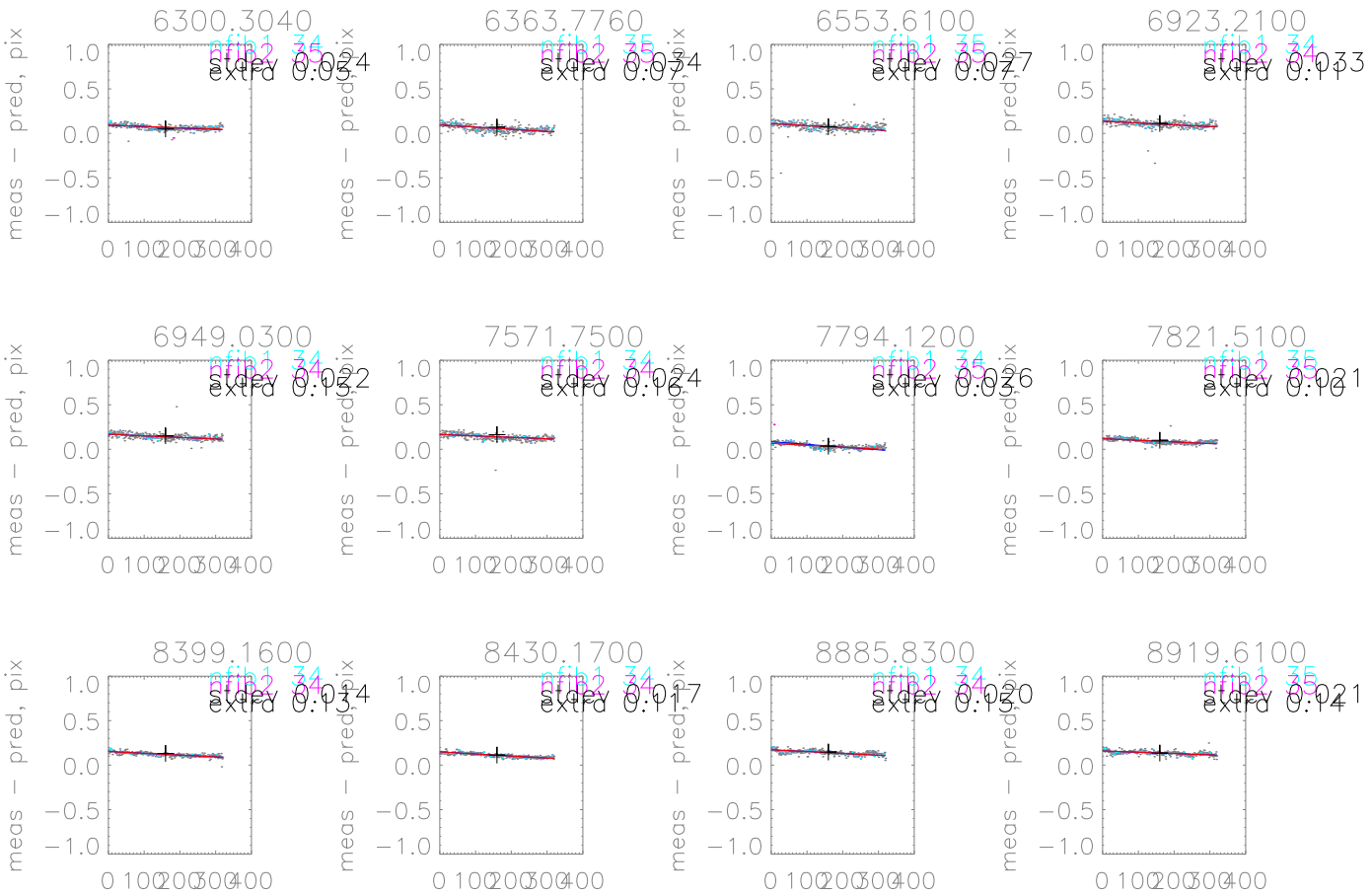

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

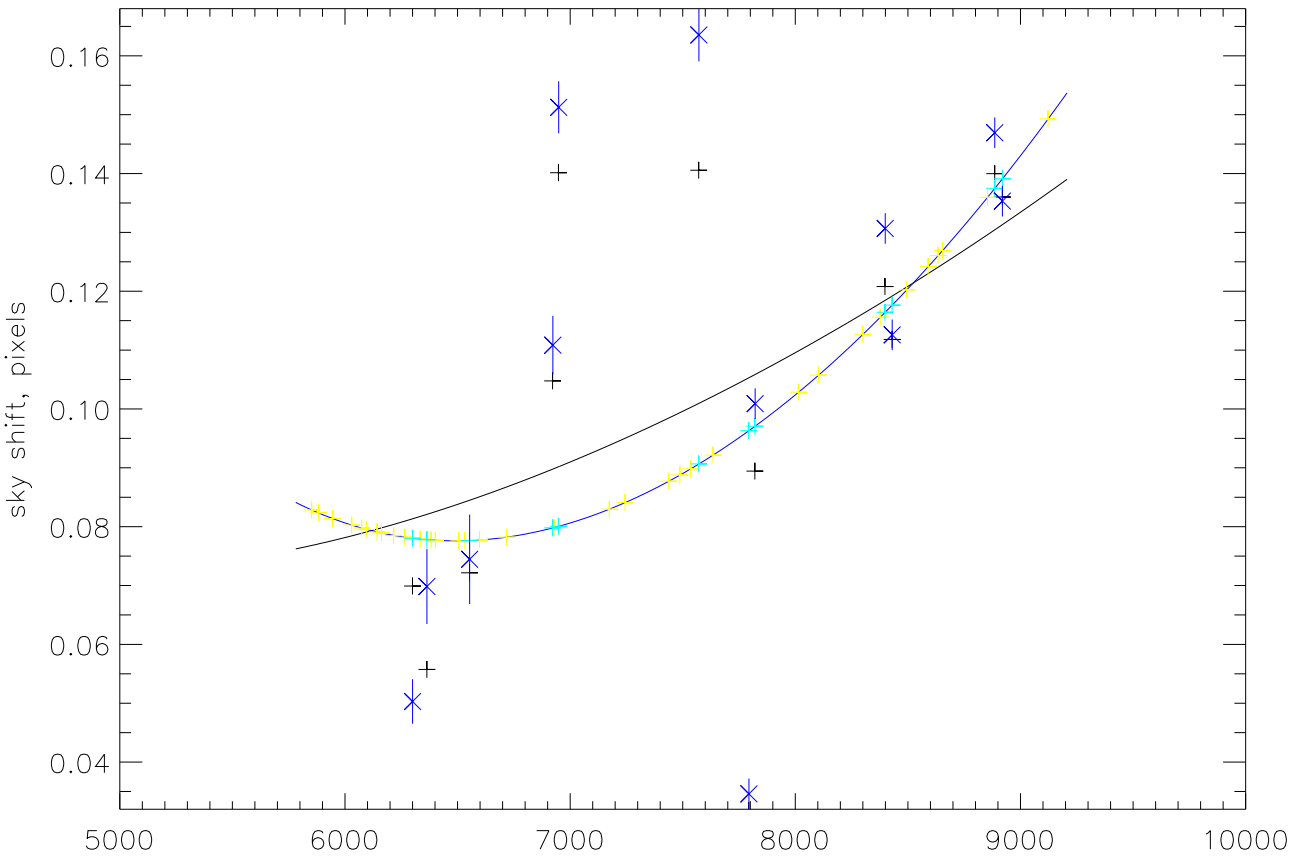

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

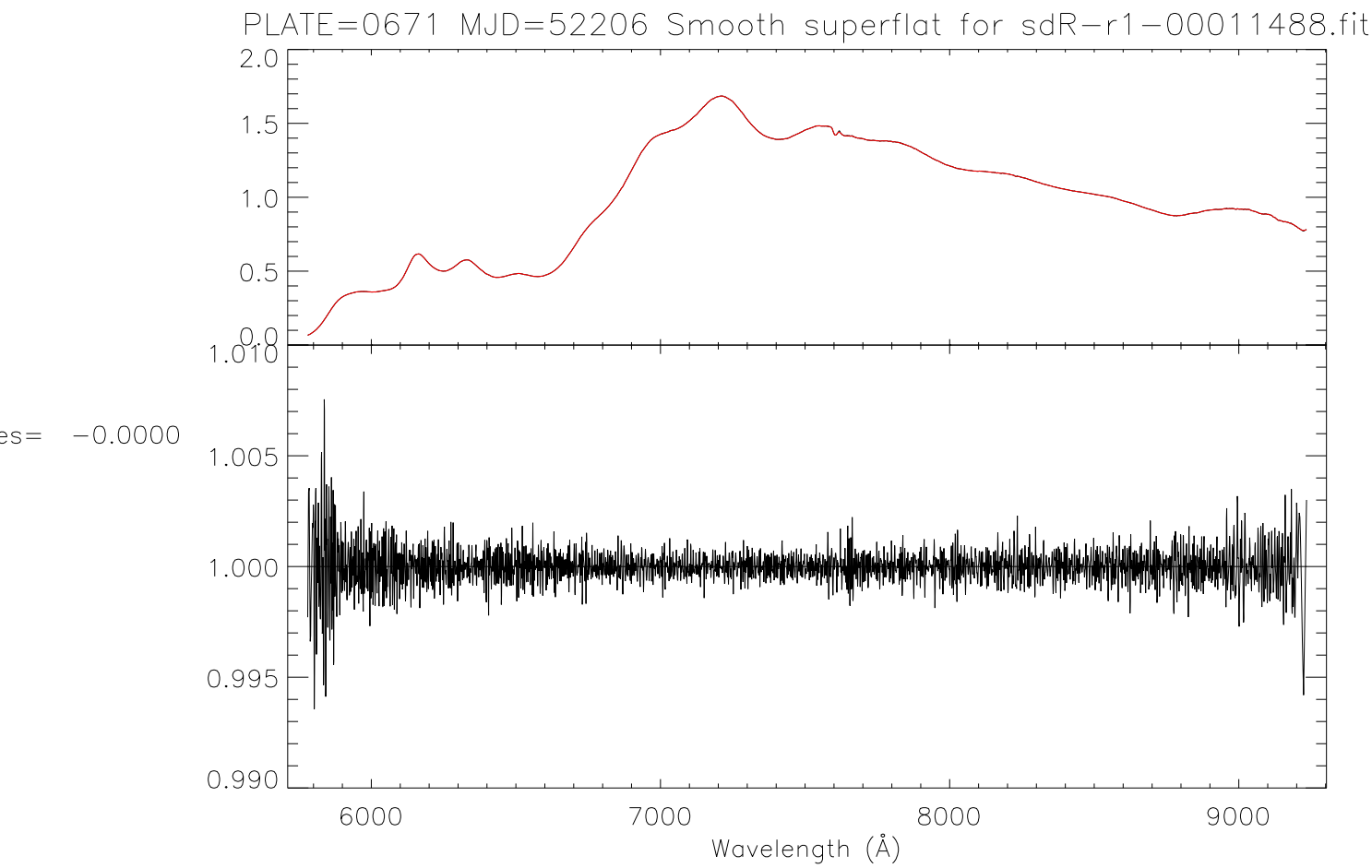

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

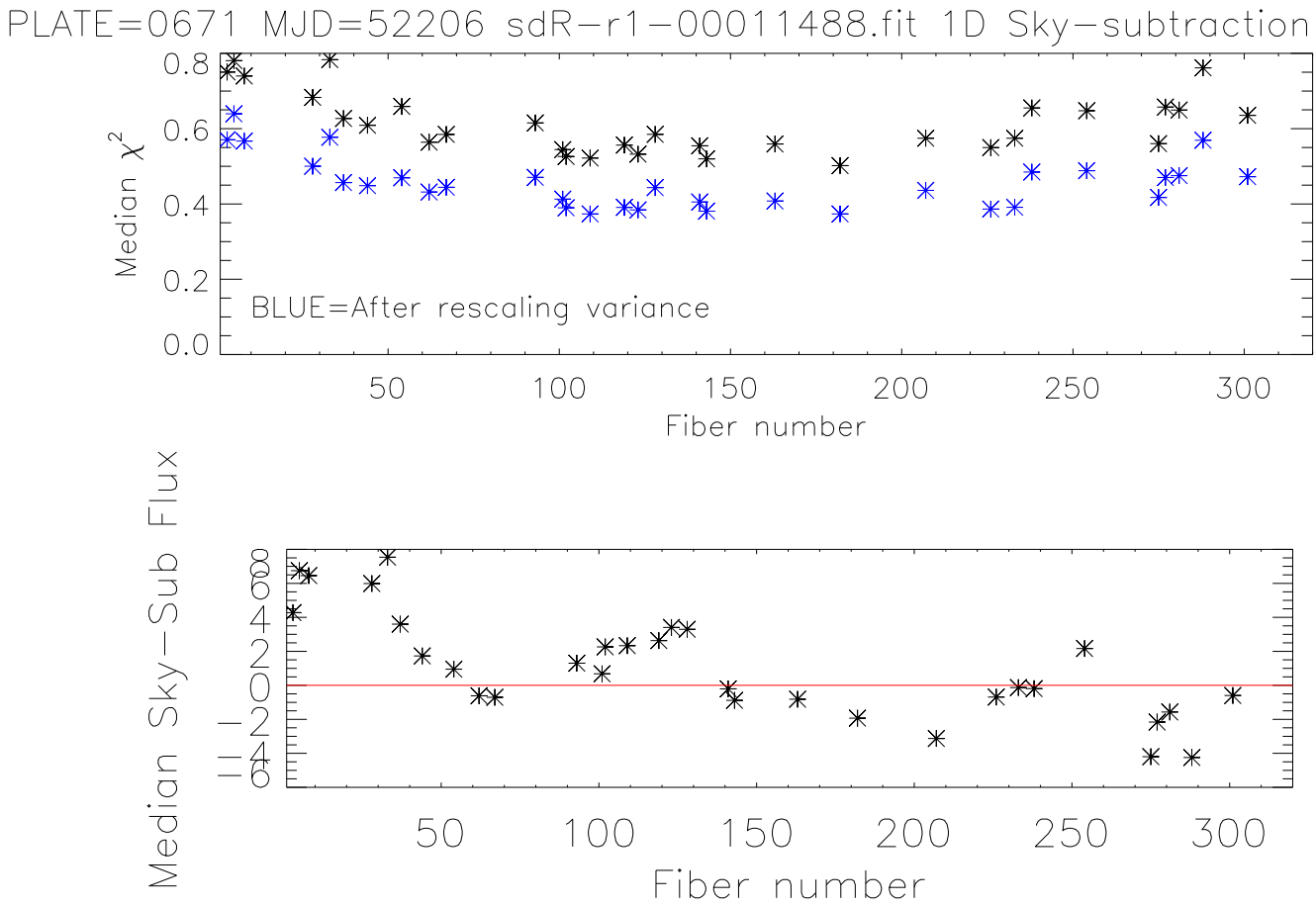

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

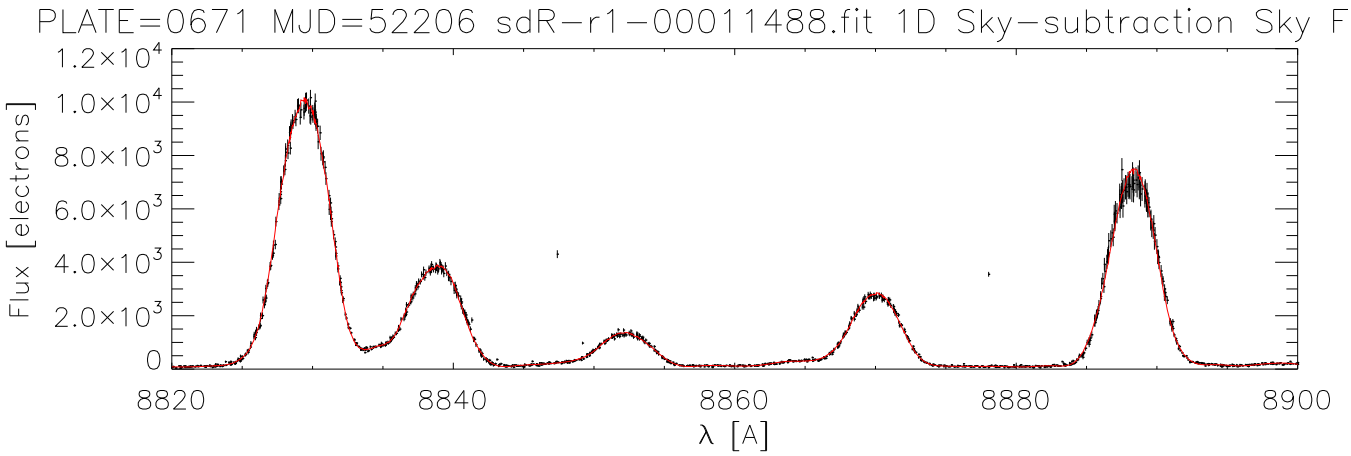

6300.3040
mfib1 34
mfib2 34
stdev 0.024
extra 0.05
6363.7760
mfib1 35
mfib2 35
stdev 0.034
extra 0.07
6553.6100
mfib1 35
mfib2 34
stdev 0.027
extra 0.07
6923.2100
mfib1 34
mfib2 34
stdev 0.033
extra 0.11
6949.0300
mfib1 34
mfib2 34
stdev 0.022
extra 0.13
7571.7500
mfib1 34
mfib2 34
stdev 0.024
extra 0.16
7794.1200
mfib1 34
mfib2 34
stdev 0.026
extra 0.03
7821.5100
mfib1 35
mfib2 35
stdev 0.021
extra 0.10
8399.1600
mfib1 34
mfib2 34
stdev 0.034
extra 0.13
8430.1700
mfib1 34
mfib2 34
stdev 0.017
extra 0.11
8885.8300
mfib1 34
mfib2 34
stdev 0.020
extra 0.13
8919.6100
mfib1 35
mfib2 35
stdev 0.021
extra 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

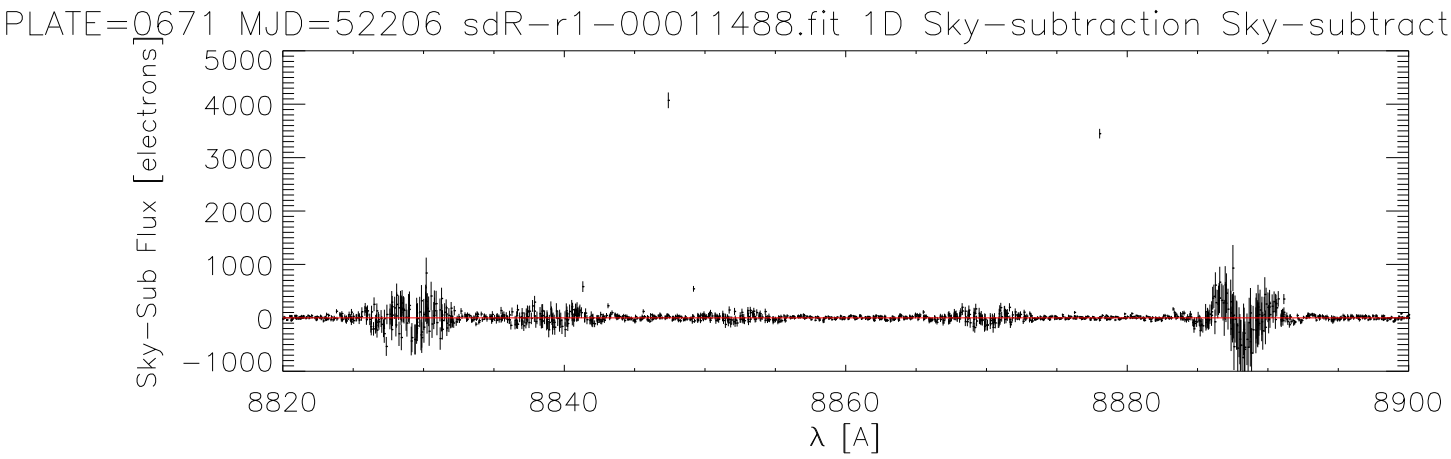

sky shift, pixels
0.16
0.14
0.12
0.10
0.08
0.06
0.04
5000
6000
7000
8000
9000
10000

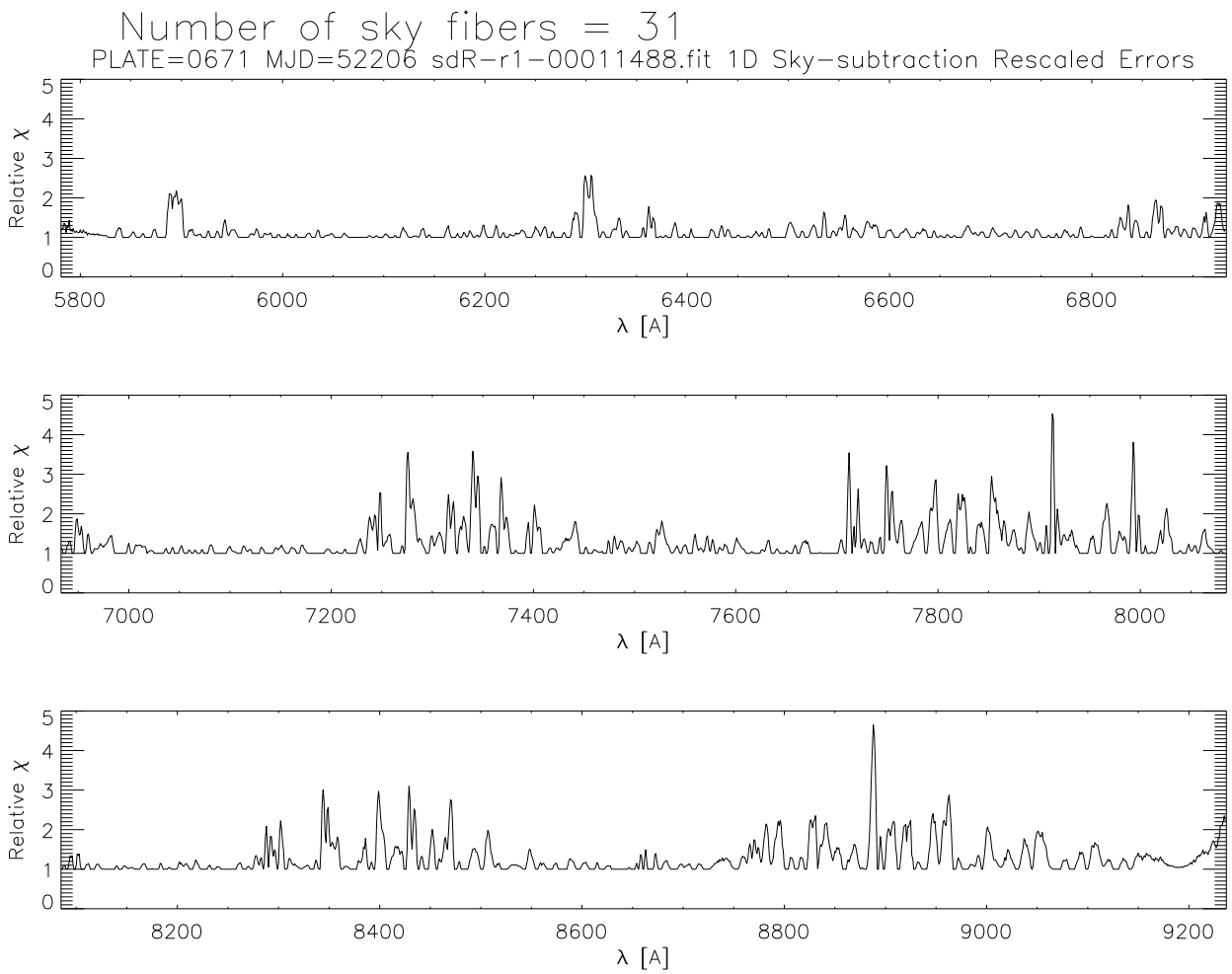

PLATE=0671 MJD=52206 Smooth superflat for sdR-r1-00011488.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

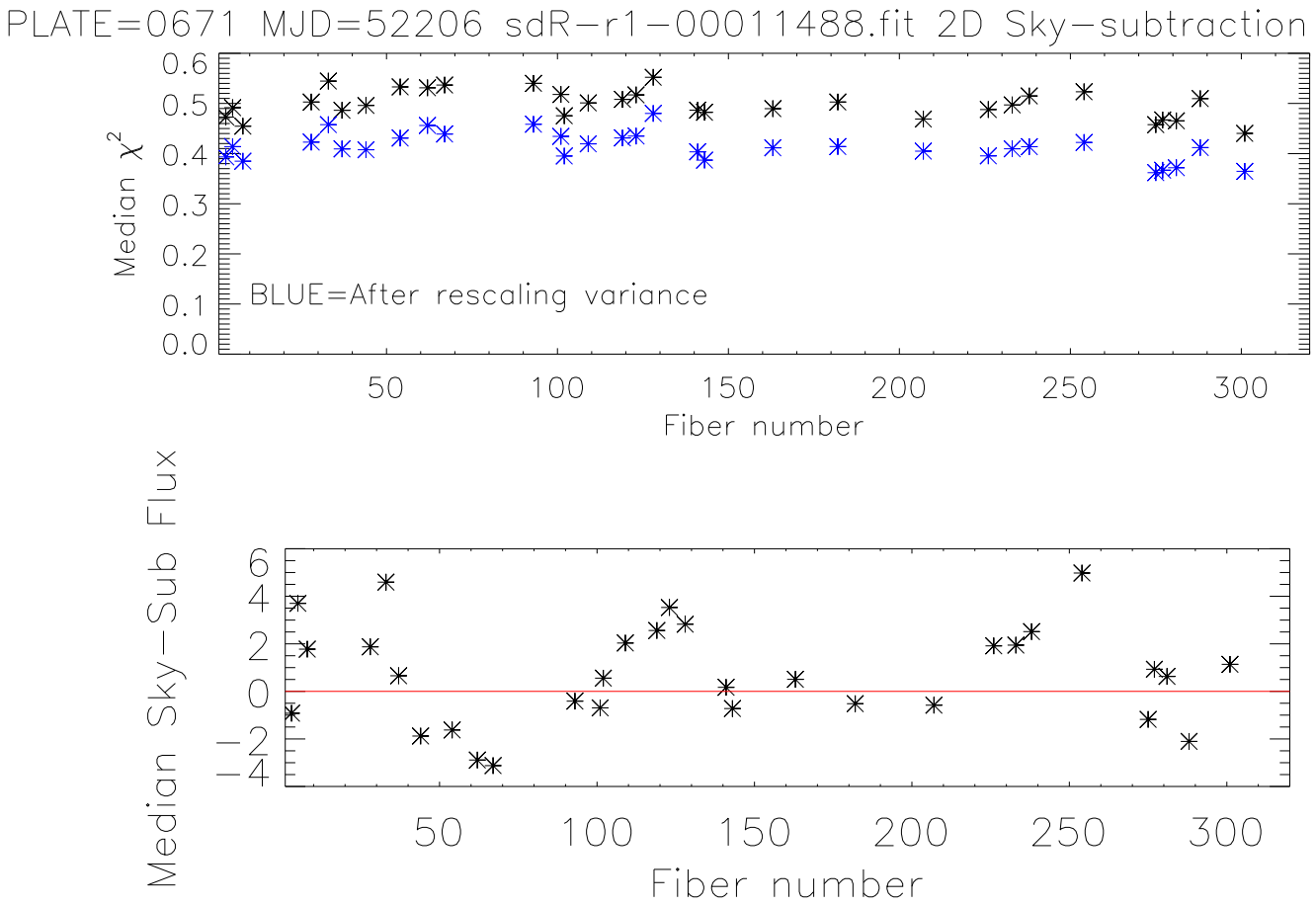
es= −0.0000

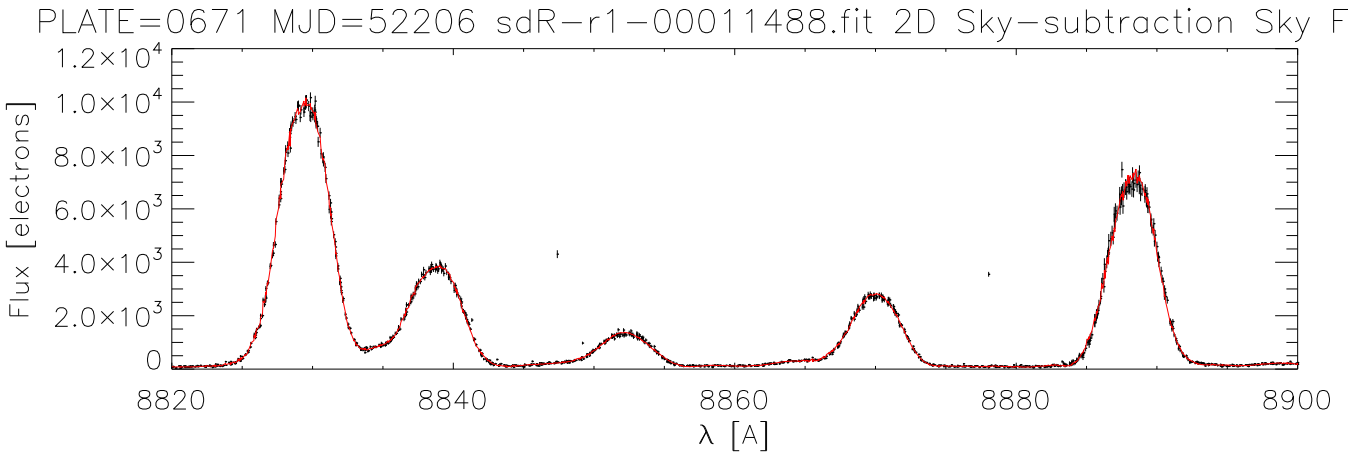

PLATE=0671 MJD=52206 sdR-r1-00011488.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-1.1
-1.0
-0.9
-0.8
-0.7
-0.6
50
100
150
200
250
300
Fiber number

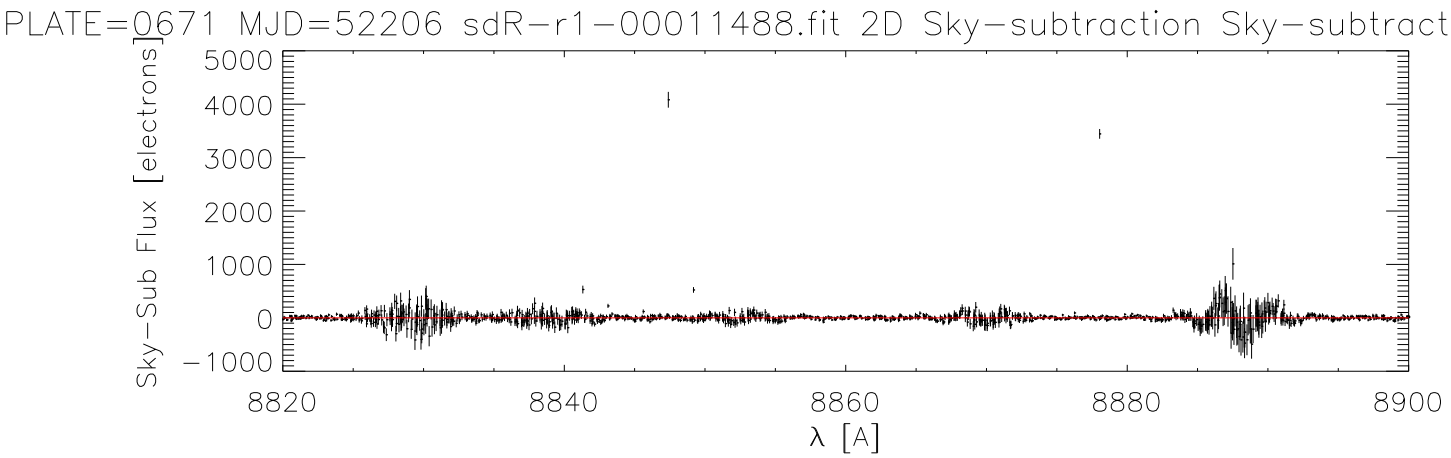

PLATE=0671 MJD=52206 sdR-r1-00011488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

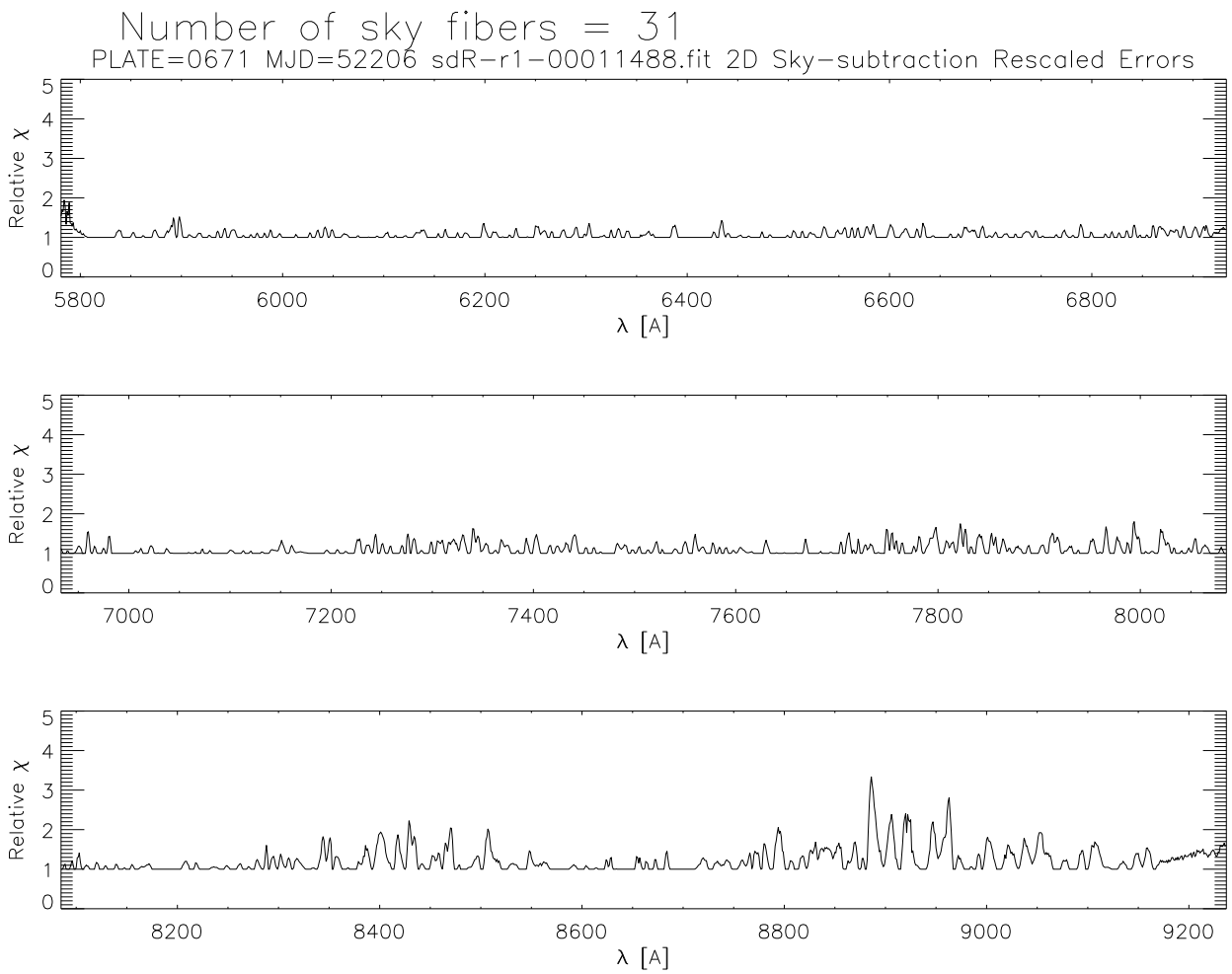

PLATE=0671 MJD=52206 sdR-r1-00011488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

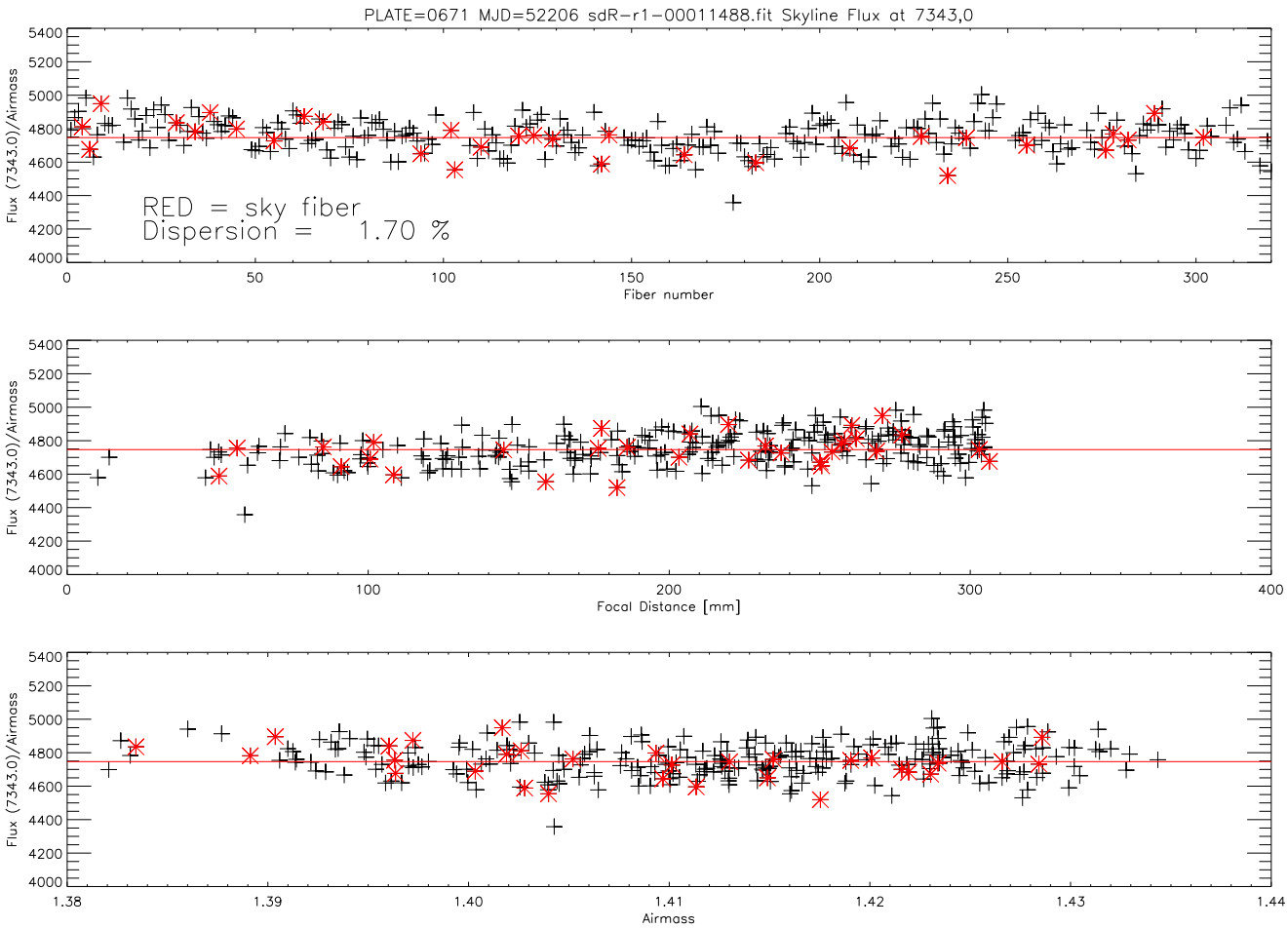

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

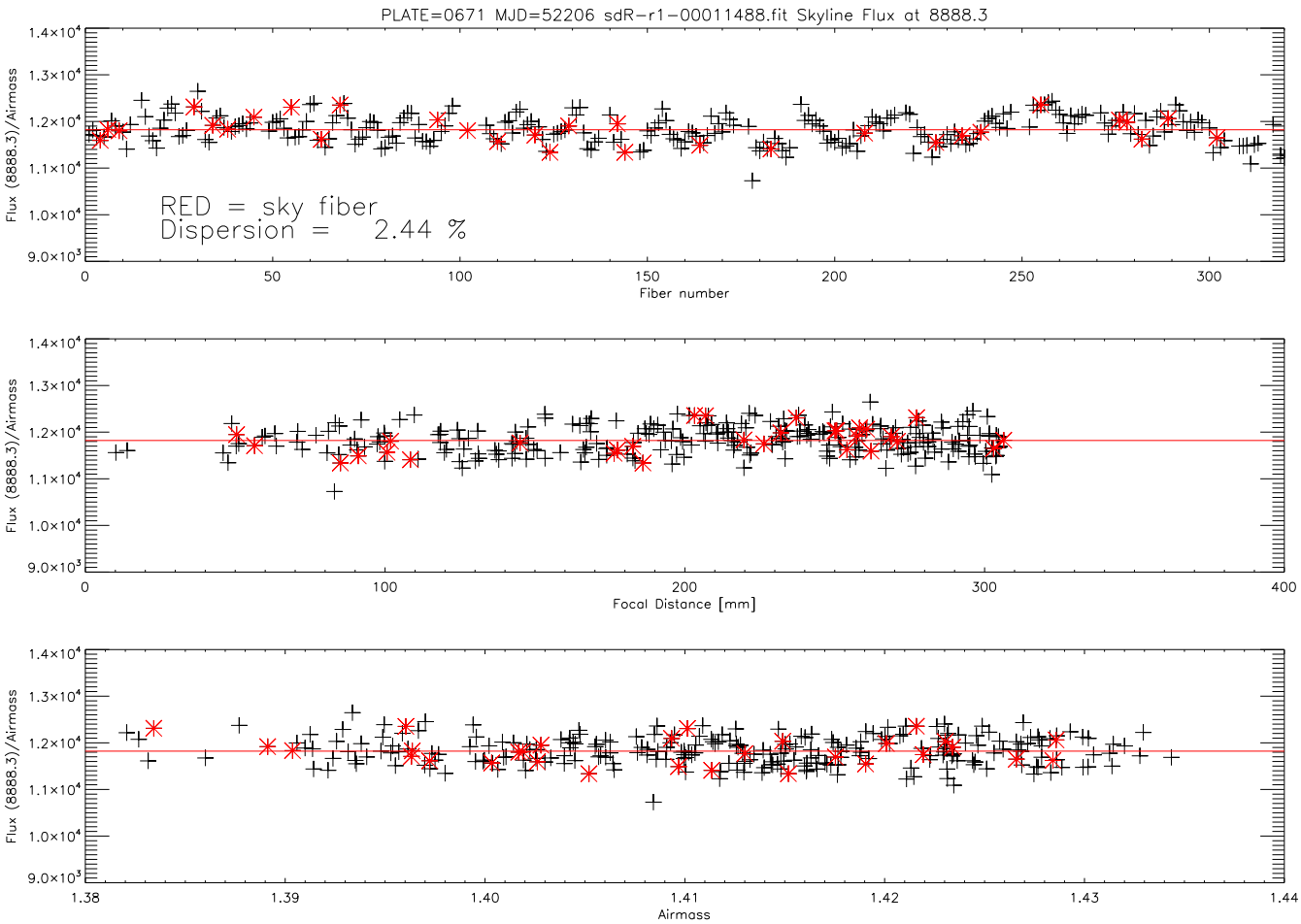

PLATE=0671 MJD=52206 sdR-r1-00011488.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

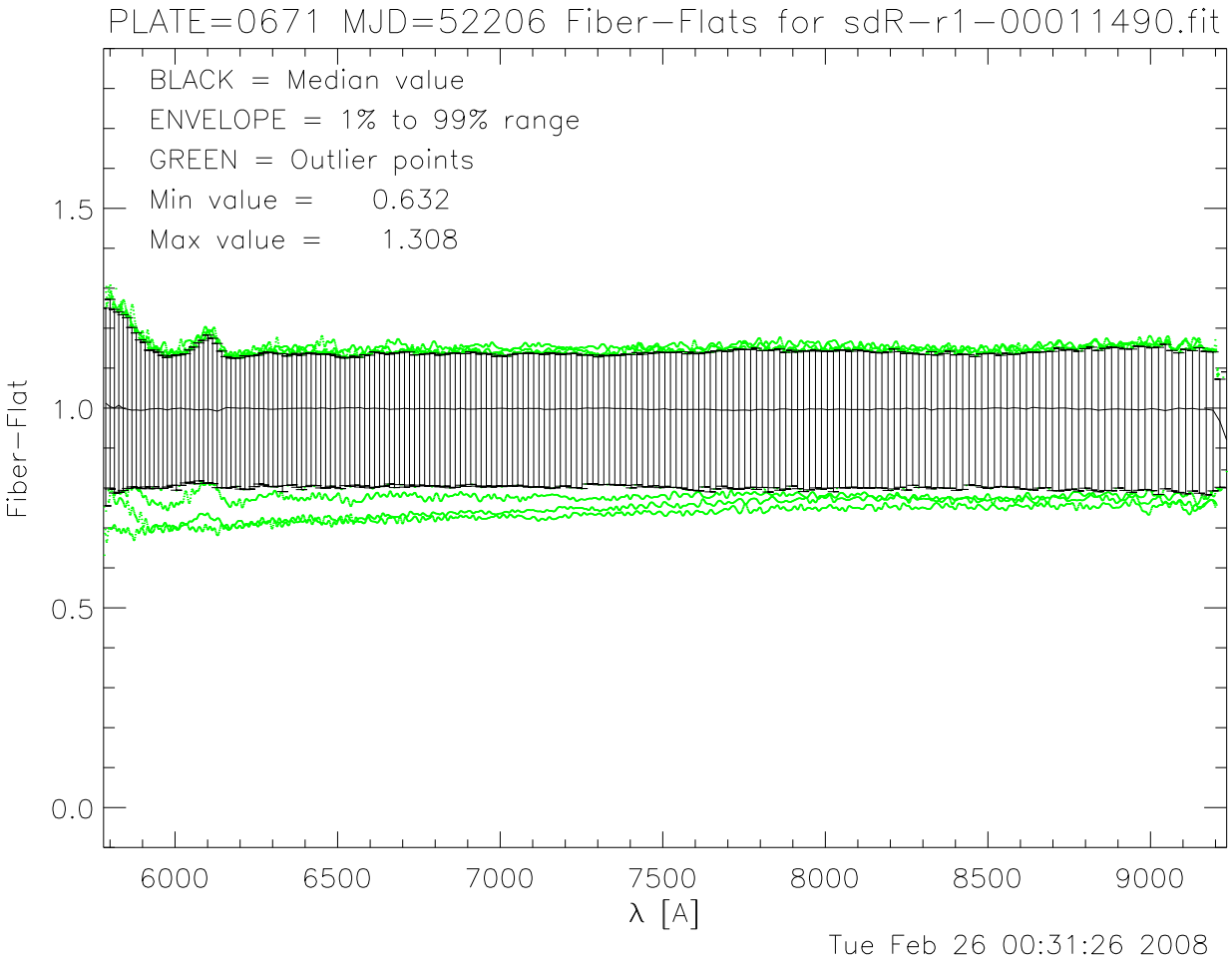

PLATE=0671 MJD=52206 sdR-r1-00011488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

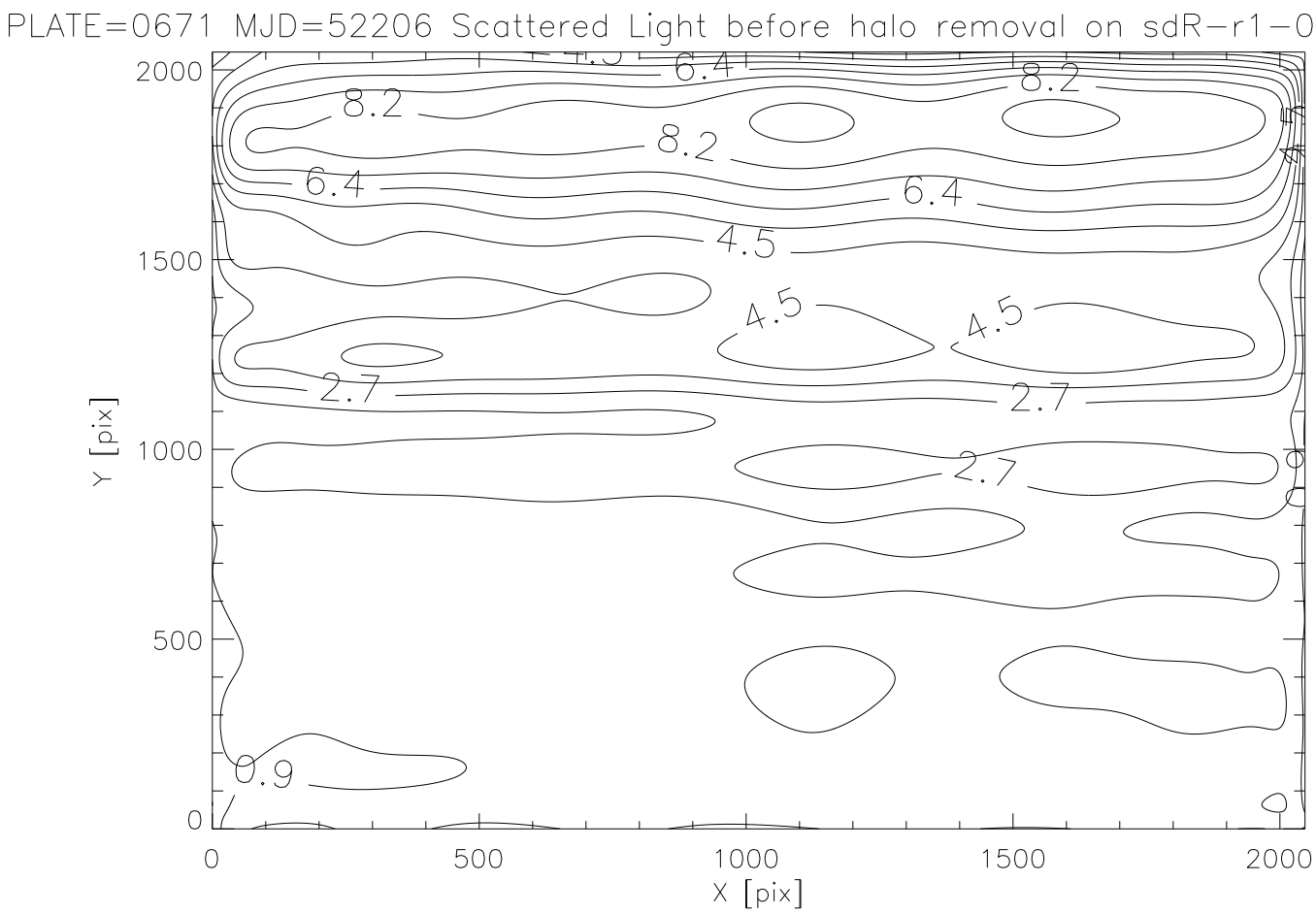

PLATE=0671 MJD=52206 sdR-r1-00011488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

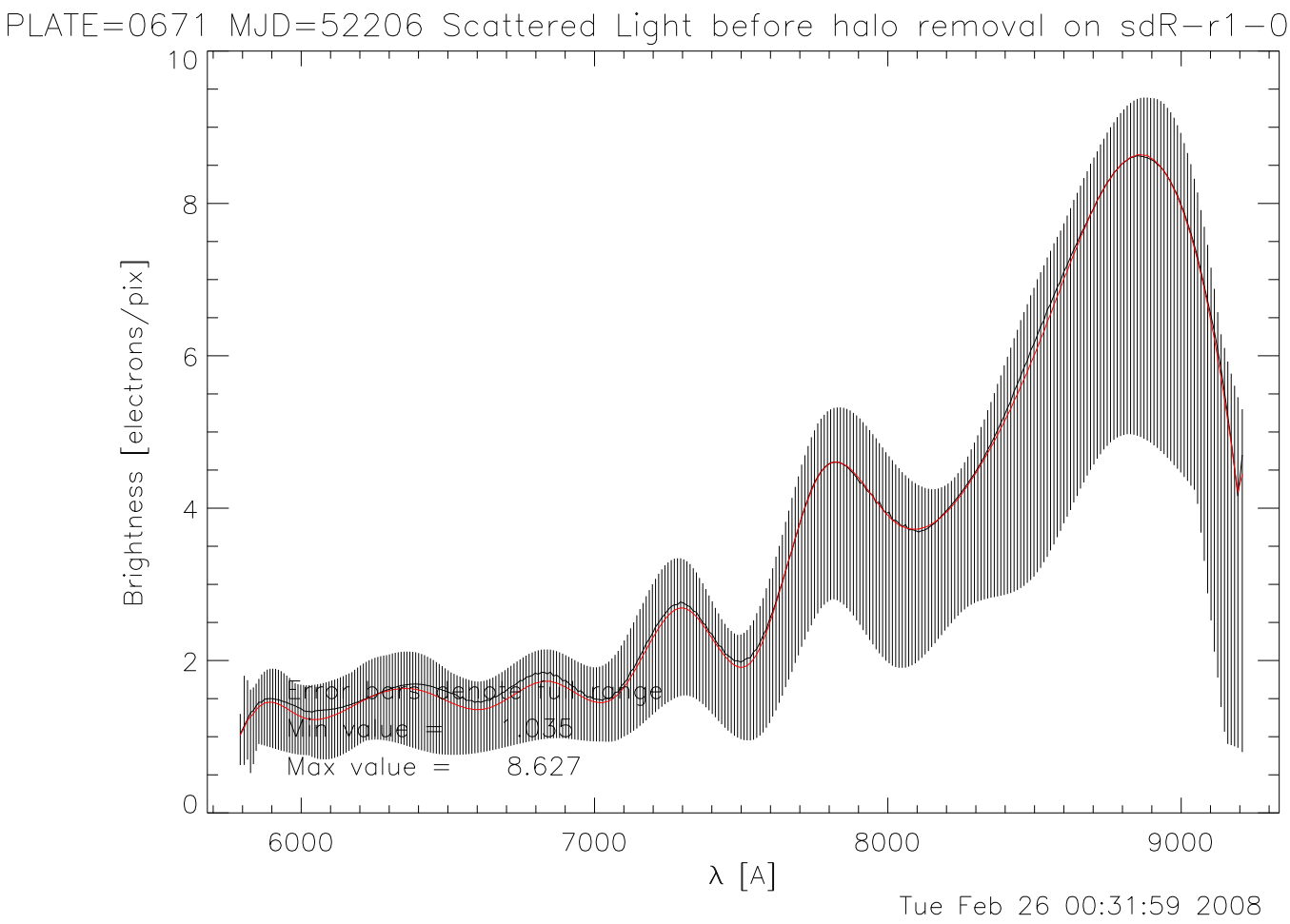

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

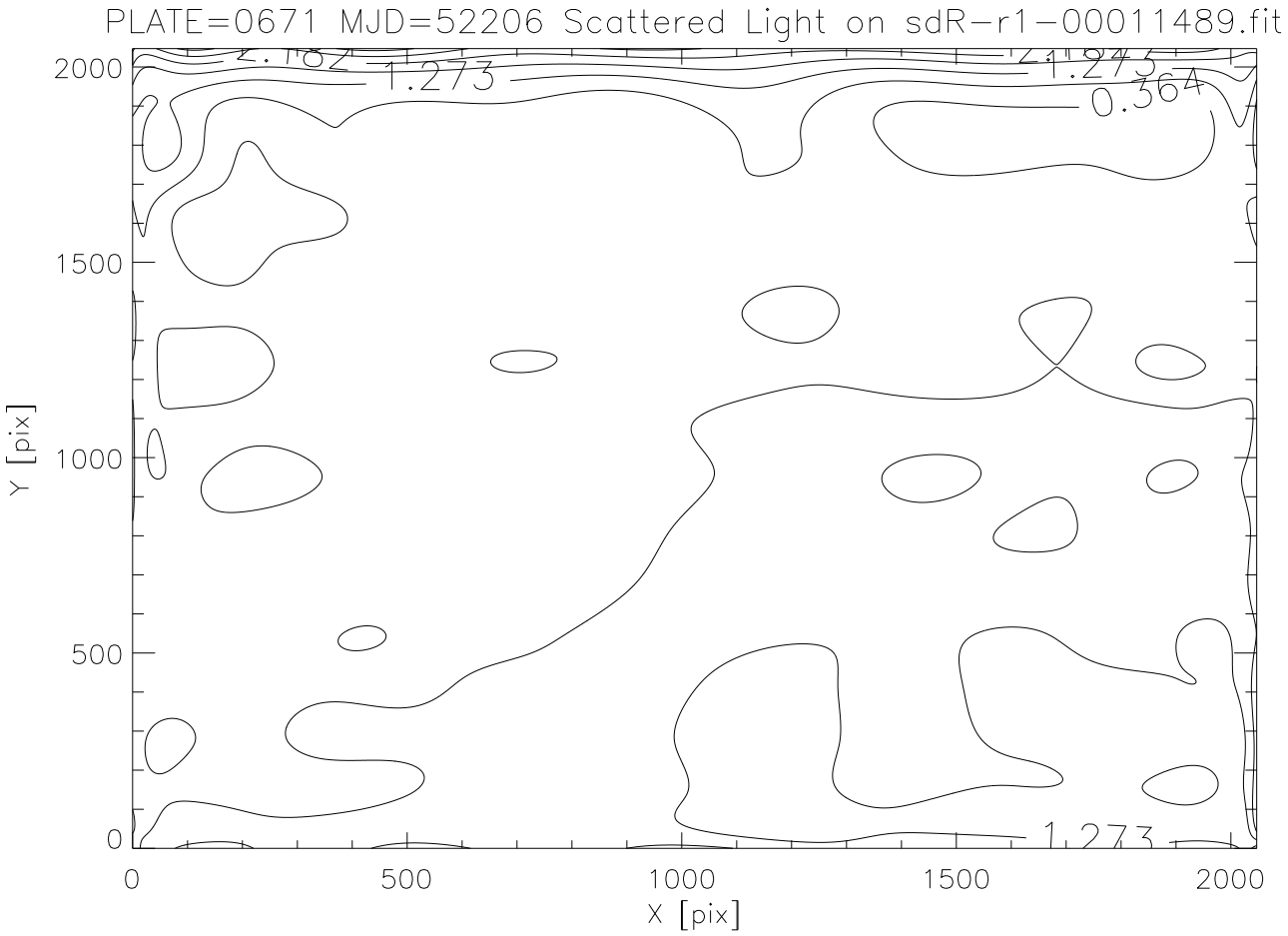

PLATE=0671 MJD=52206 sdR-r1-00011488.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.70 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

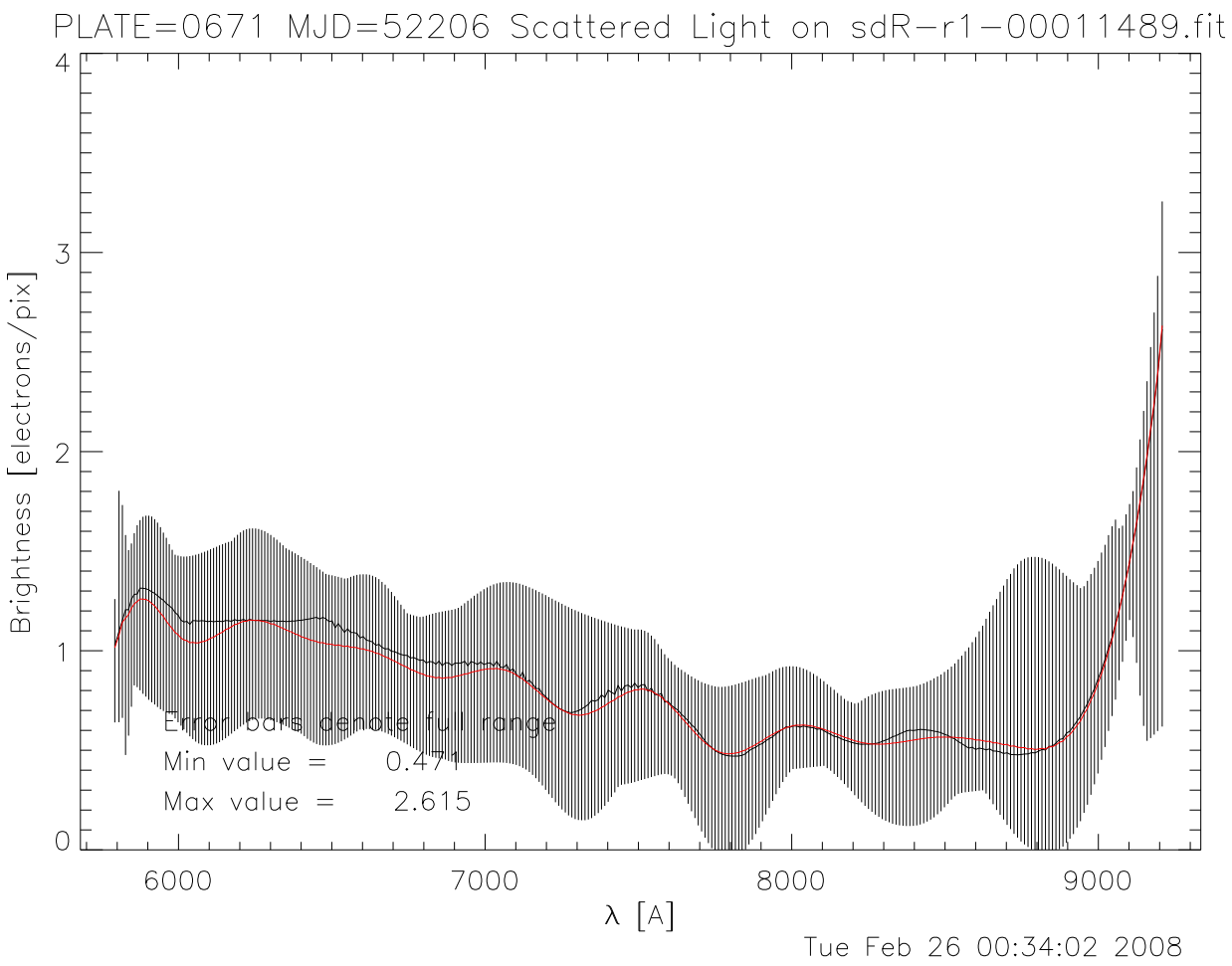

PLATE=0671 MJD=52206 sdR-r1-00011488.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.44 %
Fiber number
Focal Distance [mm]
Airmass

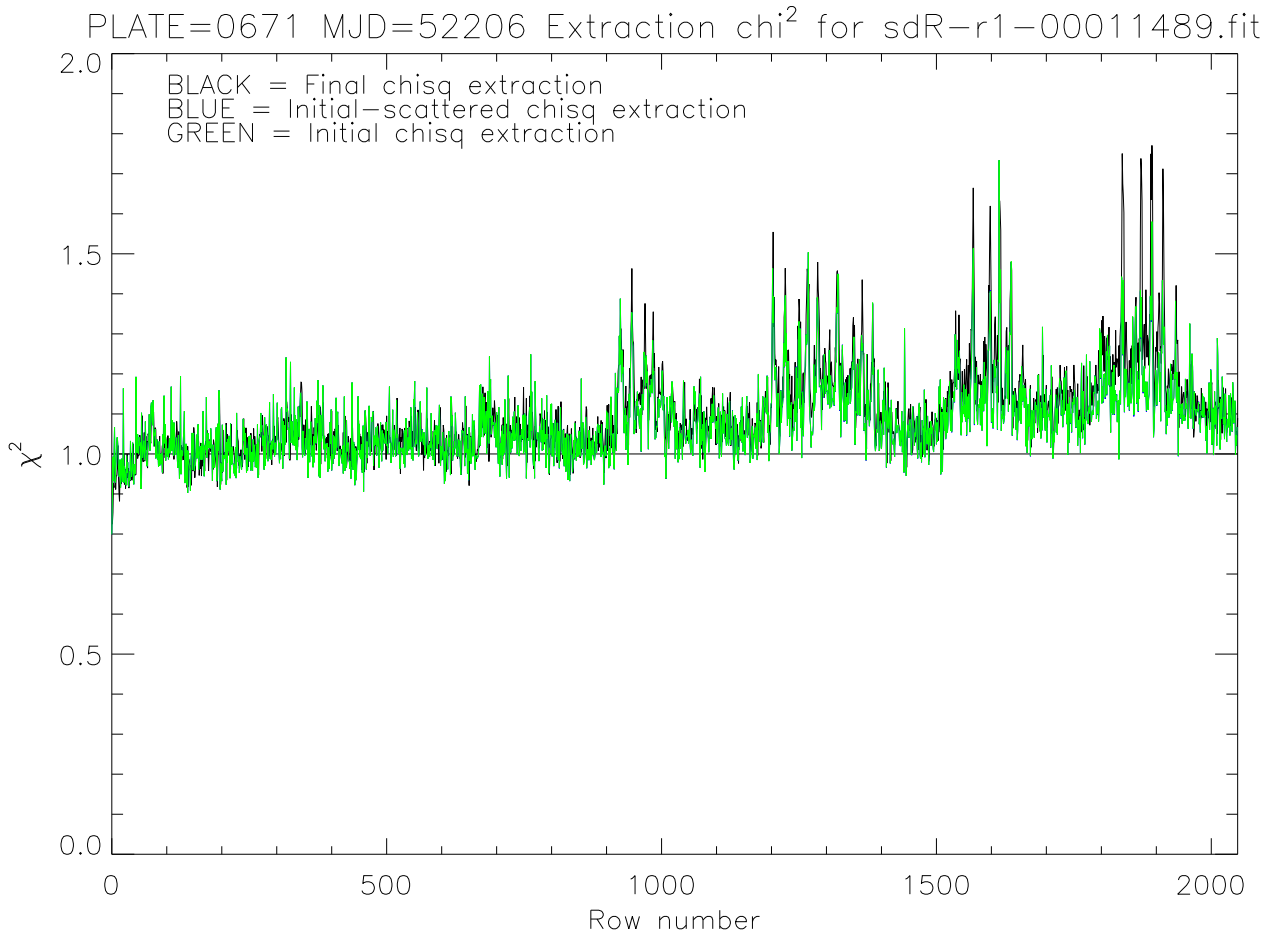

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r1−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.632
Max value = 1.308
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:31:26 2008

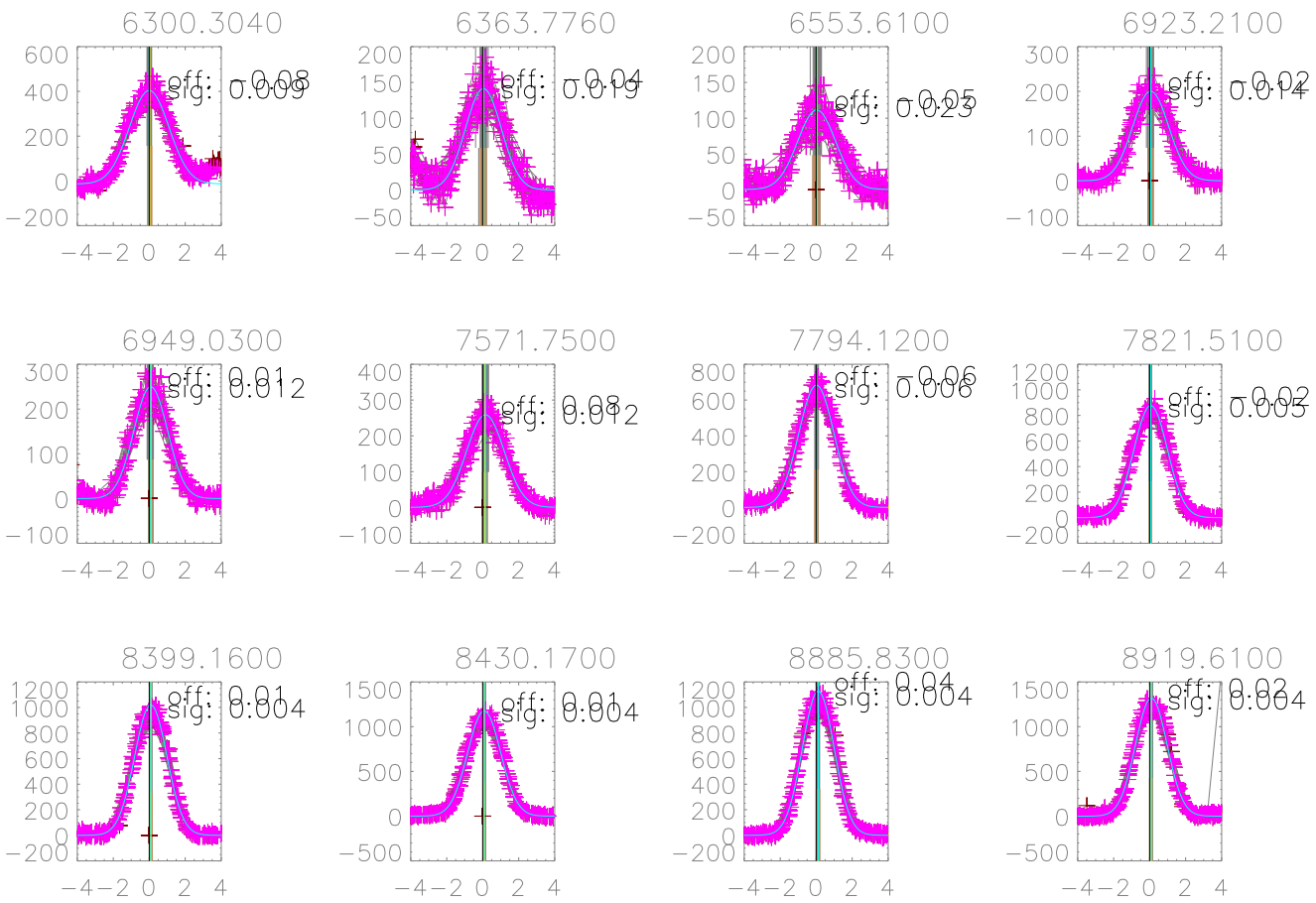

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011489.fi
6.4
8.2
8.2
8.2
6.4
6.4
4.5
4.5
4.5
2.7
2.7
2.7
0.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

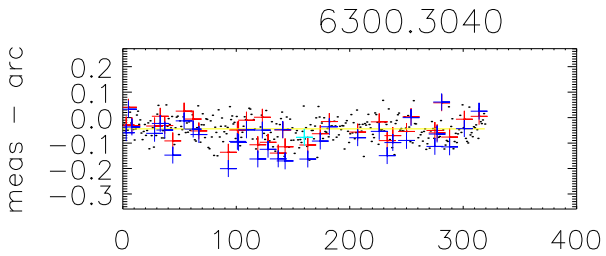

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r1-00011489.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 10% range
Min value = -.035
Max value = 8.627
Tue Feb 26 00:31:59 2008

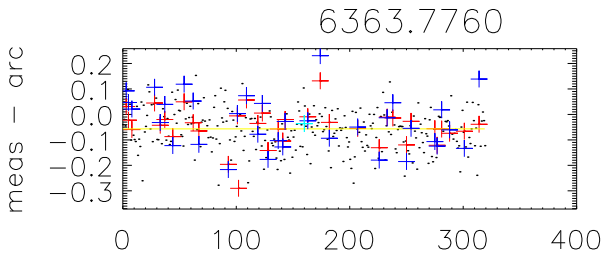

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011489.fit
2.182
1.273
1.273
0.364
1.273
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

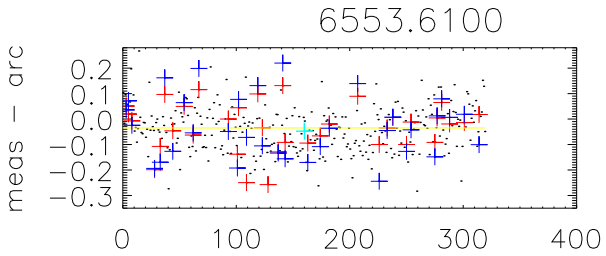

PLATE=0671 MJD=52206 Scattered Light on sdR-r1-00011489.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.471
Max value = 2.615
Tue Feb 26 00:34:02 2008

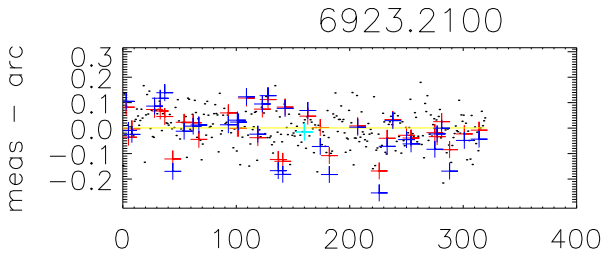

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r1−00011489.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

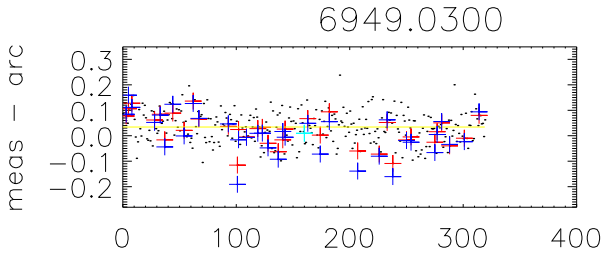

6300.3040
off: −0.08
sig: 0.009
6363.7760
off: −0.04
sig: 0.019
6553.6100
off: −0.05
sig: 0.023
6923.2100
off: −0.02
sig: 0.014
6949.0300
off: 0.01
sig: 0.012
7571.7500
off: 0.08
sig: 0.012
7794.1200
off: −0.06
sig: 0.006
7821.5100
off: −0.02
sig: 0.005
8399.1600
off: 0.01
sig: 0.004
8430.1700
off: 0.01
sig: 0.004
8885.8300
off: 0.04
sig: 0.004
8919.6100
off: 0.02
sig: 0.004

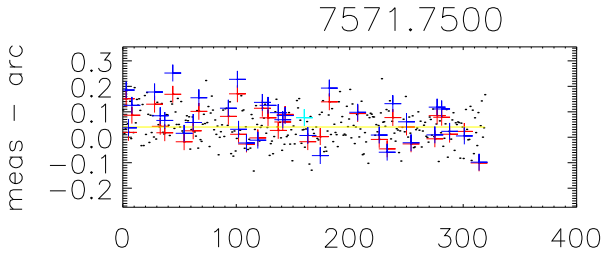

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

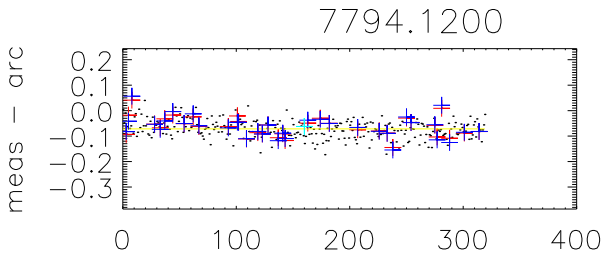

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

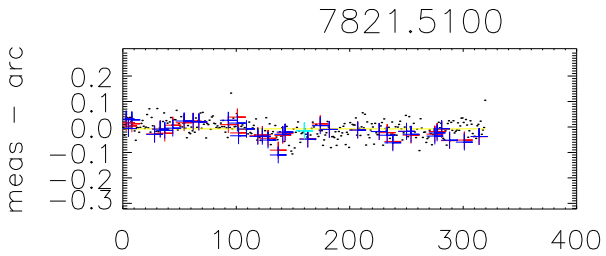

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

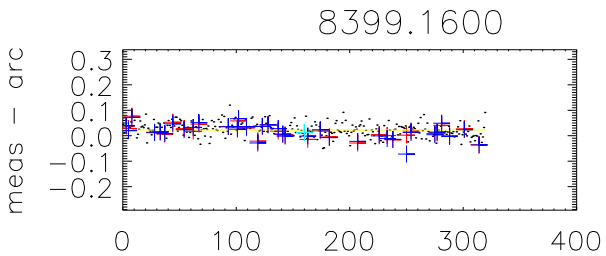

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

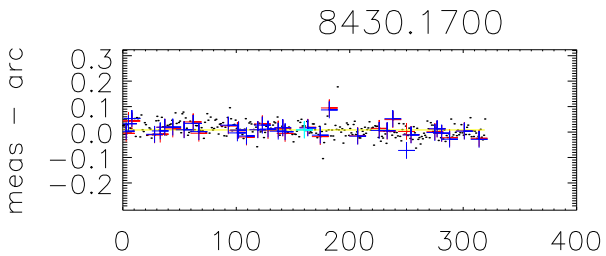

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

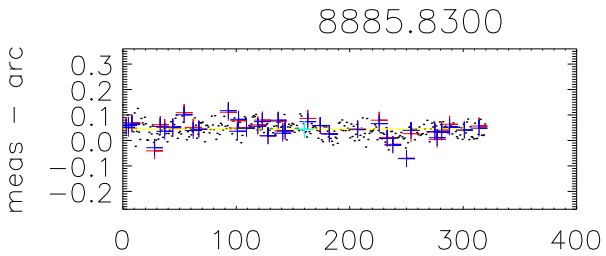

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

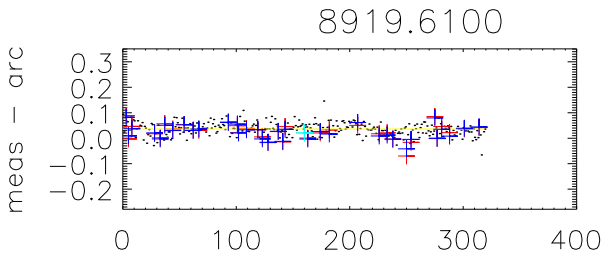

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

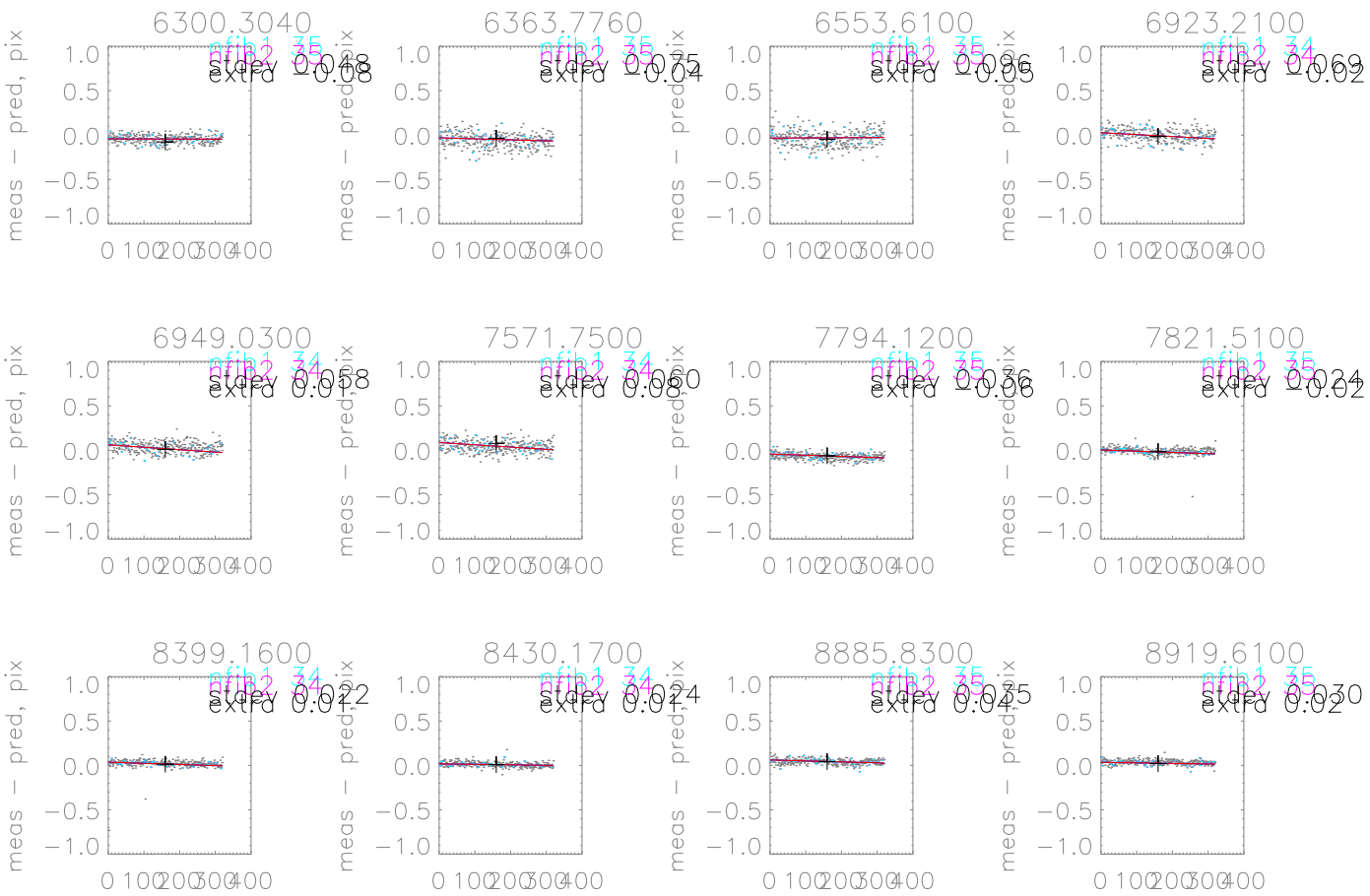

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

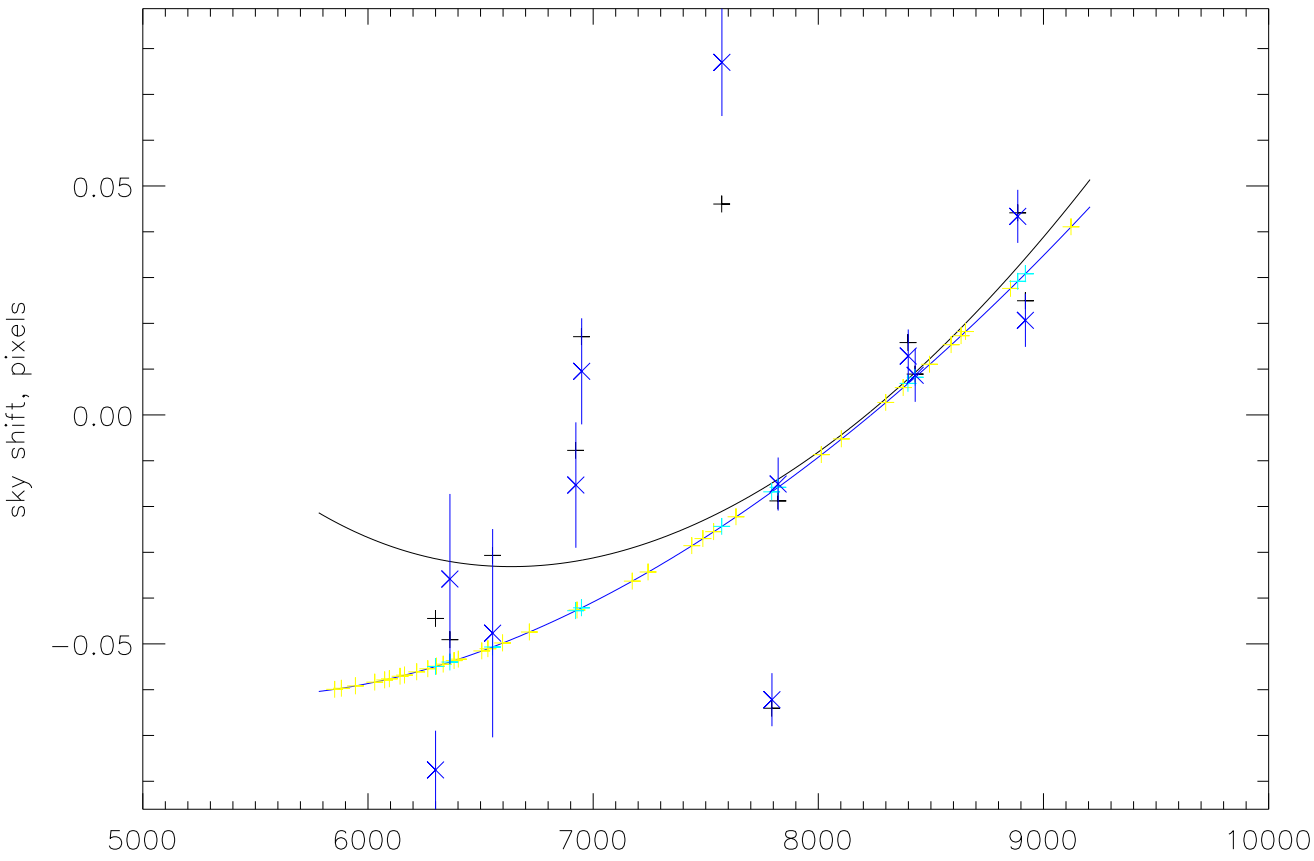

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

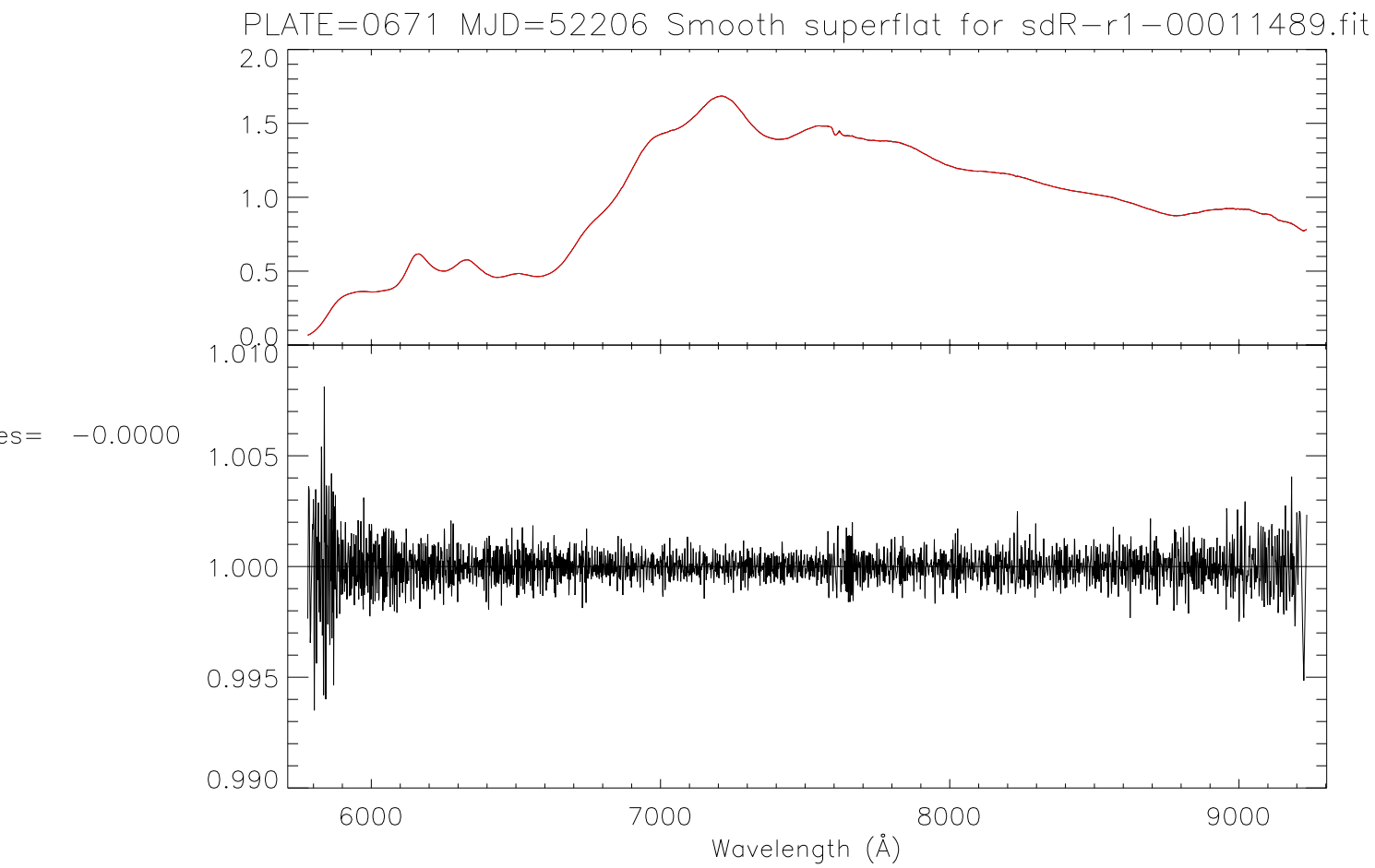

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

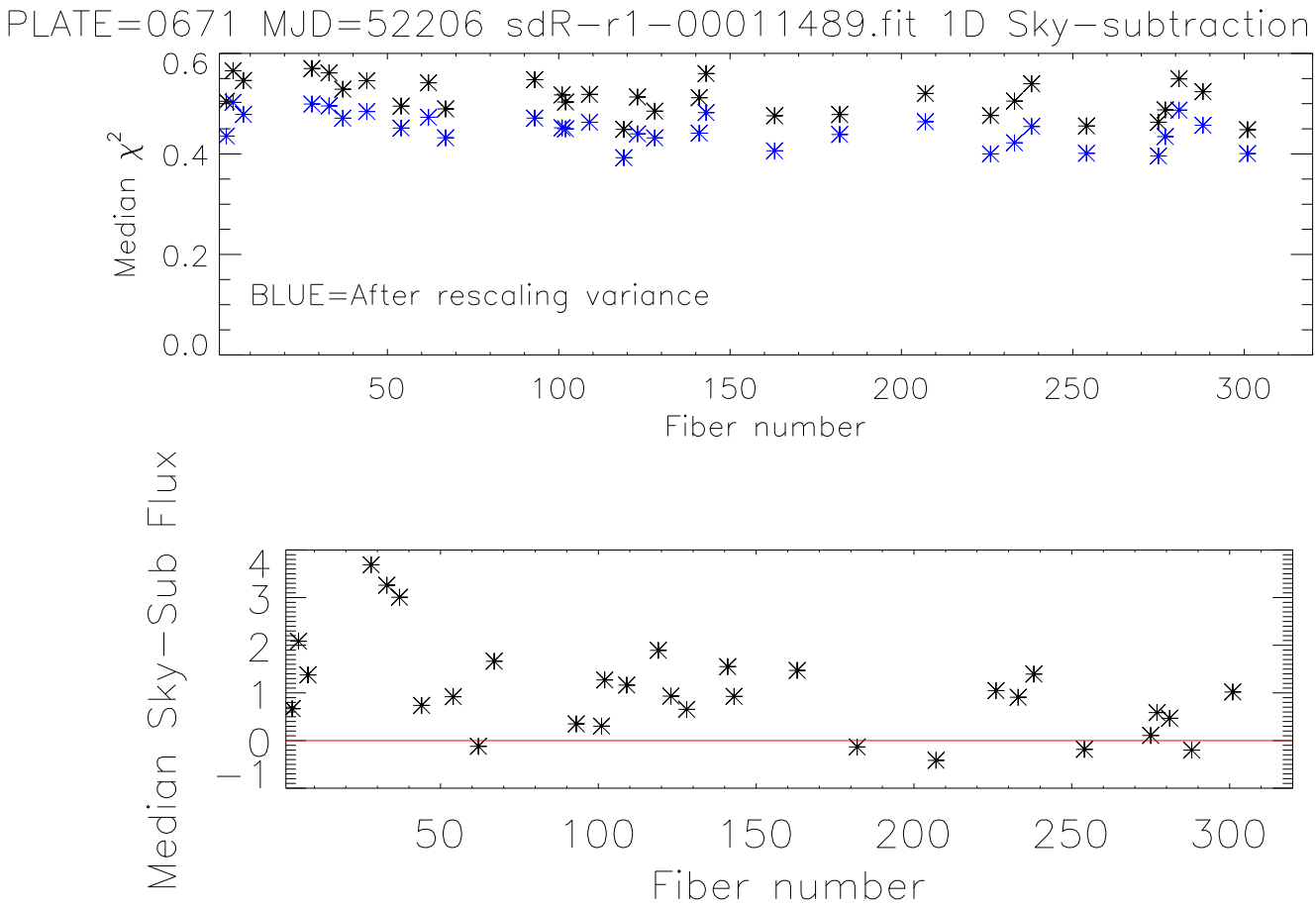

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

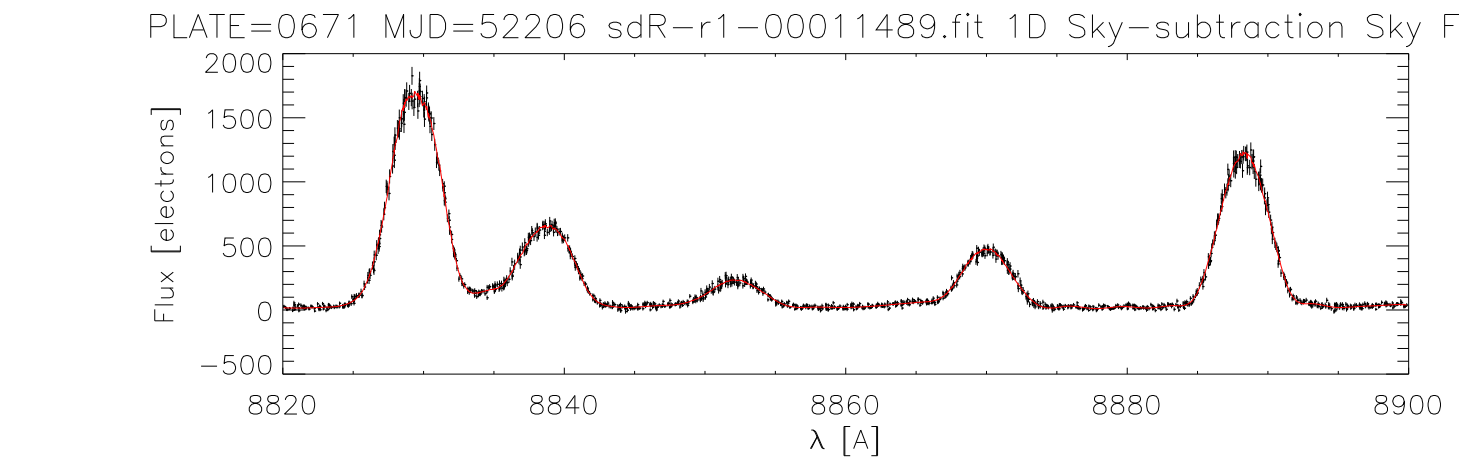

6300.3040
mfib1 35
mfib2 34
stdev 0.048
extra −0.08
6363.7760
mfib1 35
mfib2 34
stdev 0.075
extra −0.04
6553.6100
mfib1 35
mfib2 35
stdev 0.096
extra −0.06
6923.2100
mfib1 35
mfib2 34
stdev 0.069
extra −0.02
6949.0300
mfib1 34
mfib2 34
stdev 0.058
extra 0.018
7571.7500
mfib1 34
mfib2 34
stdev 0.060
extra 0.08
7794.1200
mfib1 35
mfib2 35
stdev 0.036
extra −0.06
7821.5100
mfib1 35
mfib2 35
stdev 0.024
extra −0.02
8399.1600
mfib1 34
mfib2 34
stdev 0.022
extra 0.012
8430.1700
mfib1 34
mfib2 34
stdev 0.024
extra 0.01
8885.8300
mfib1 35
mfib2 35
stdev 0.035
extra 0.04
8919.6100
mfib1 35
mfib2 35
stdev 0.030
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

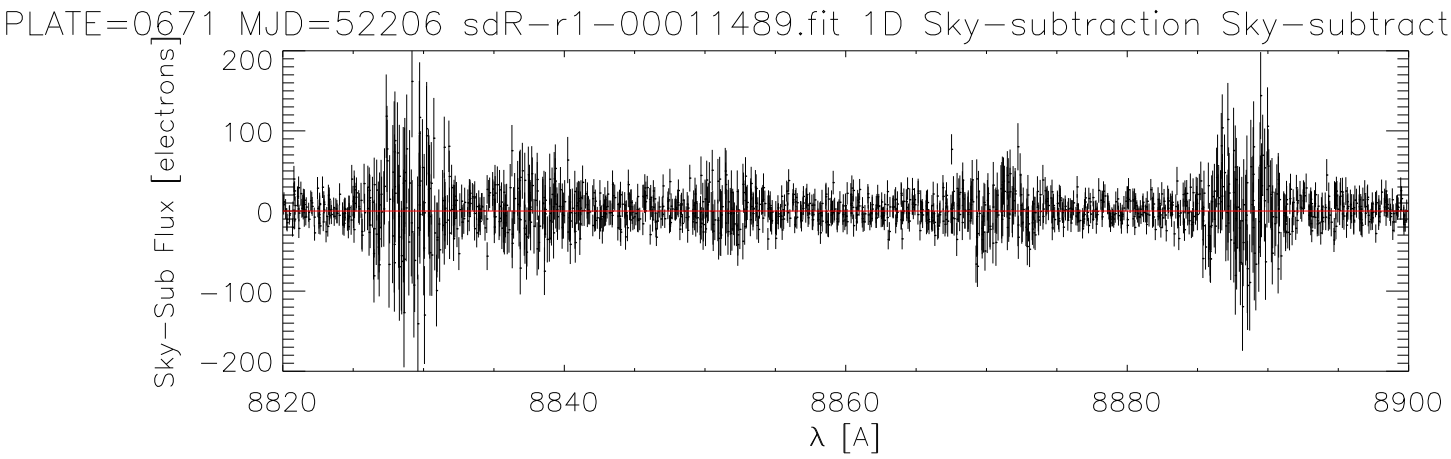

sky shift, pixels
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000

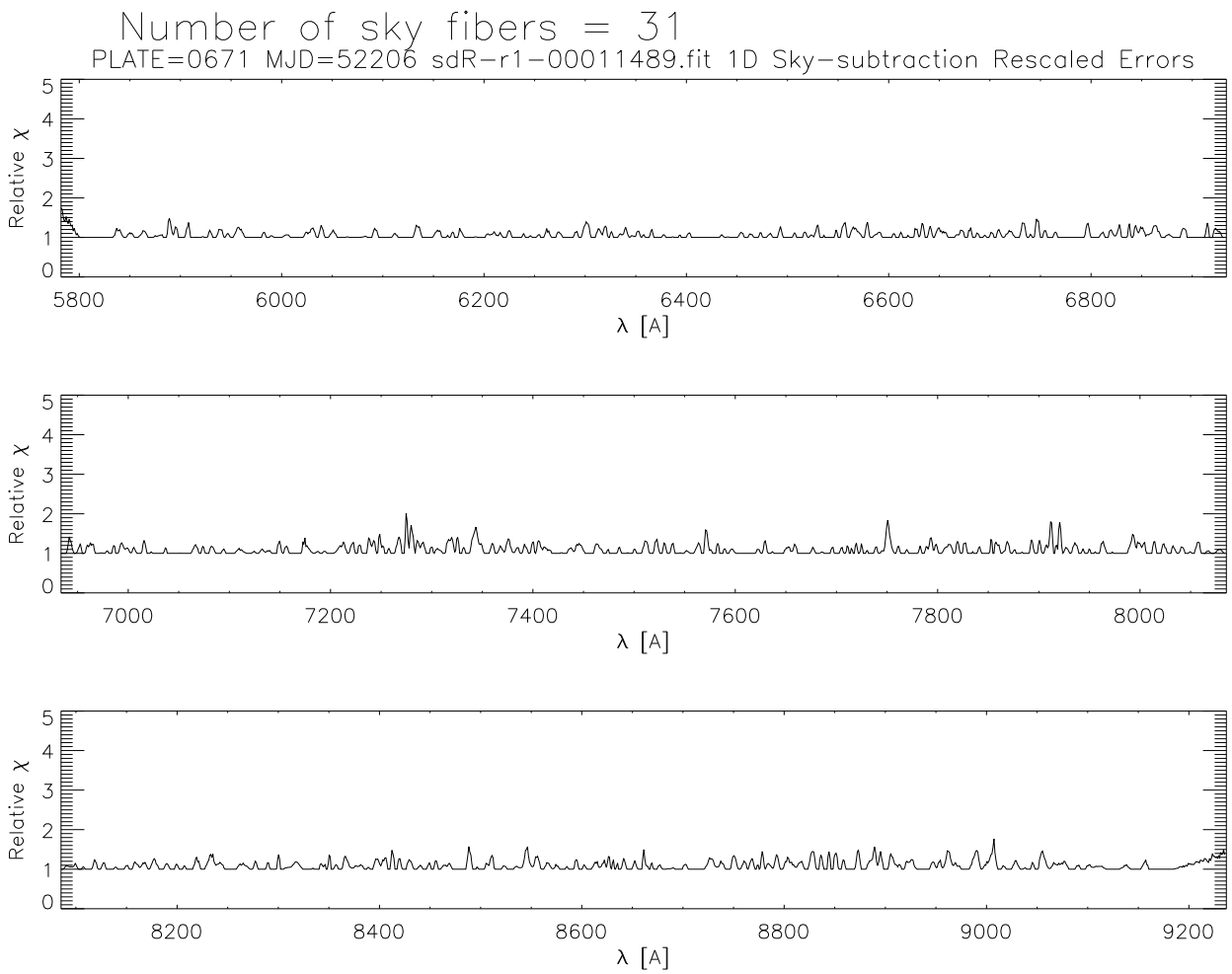

PLATE=0671 MJD=52206 Smooth superflat for sdR-r1-00011489.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

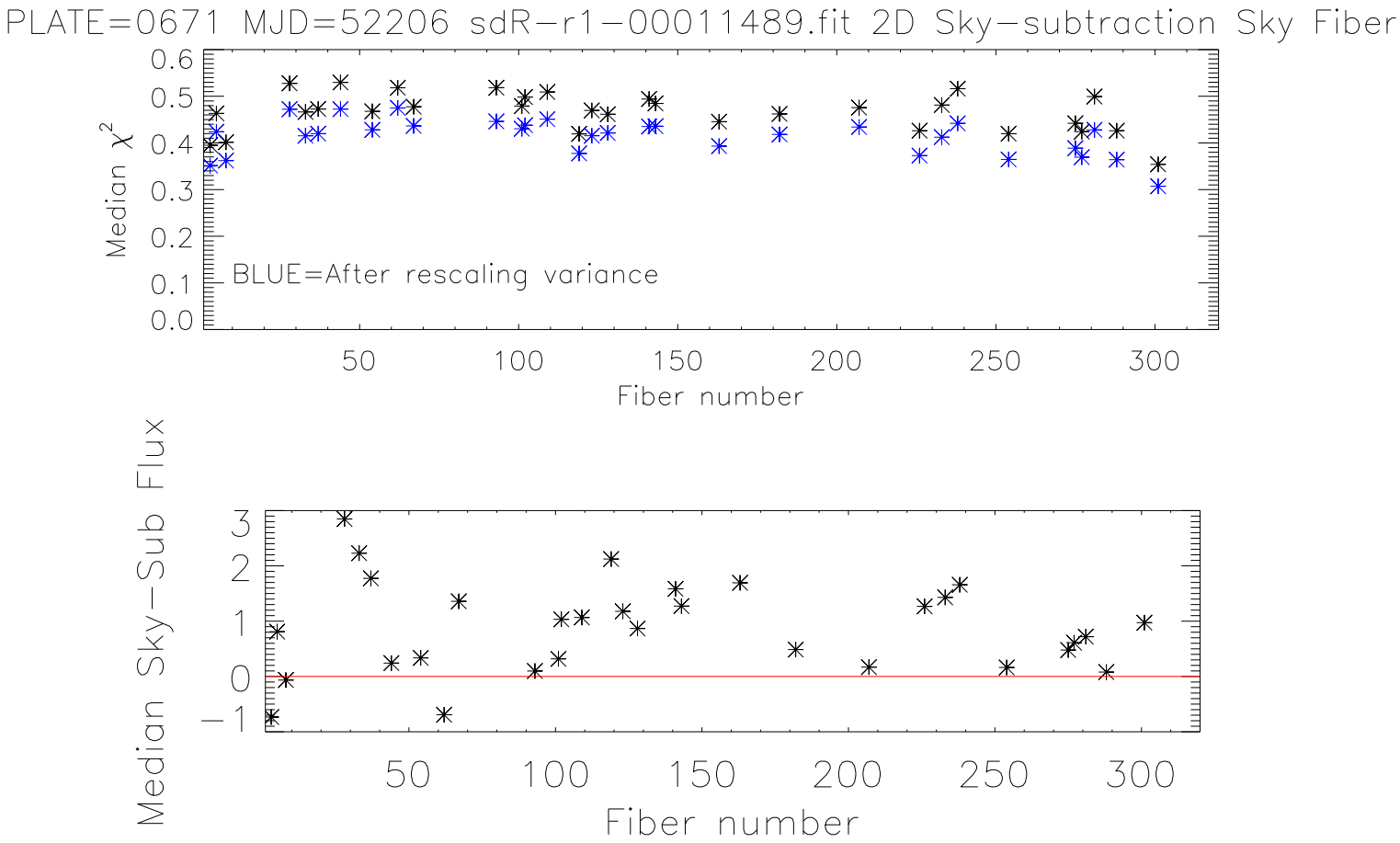

PLATE=0671 MJD=52206 sdR-r1-00011489.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

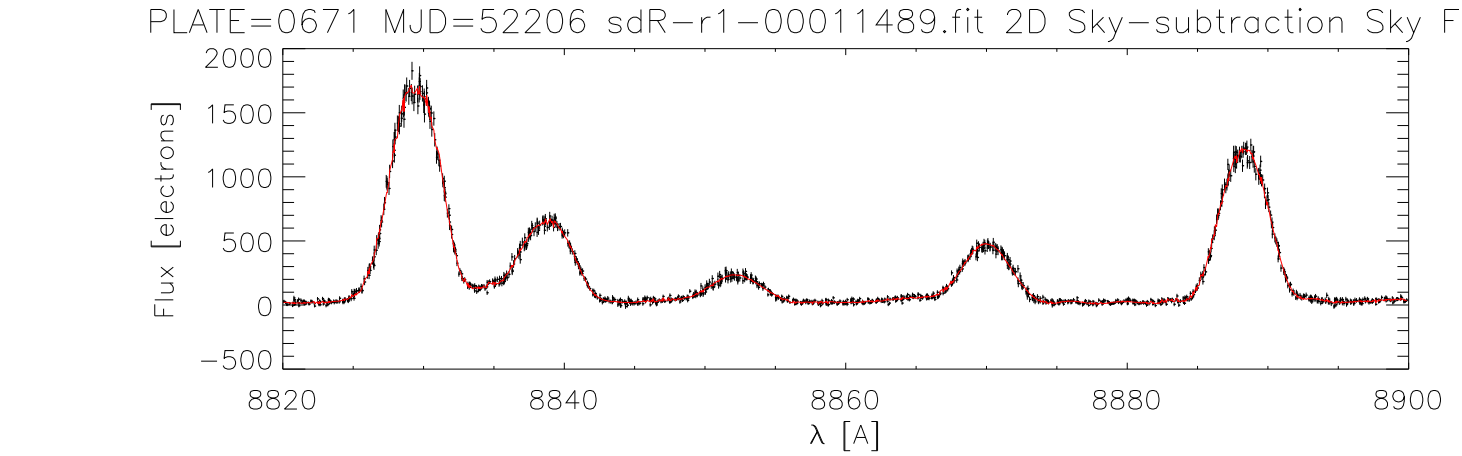
Median Sky-Sub Flux
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

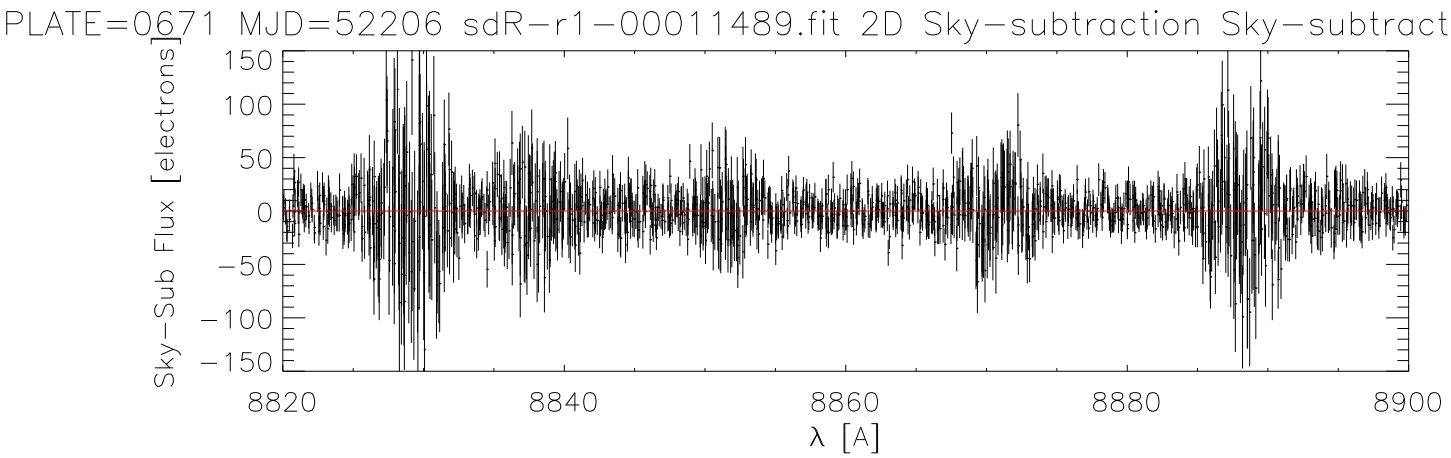

PLATE=0671 MJD=52206 sdR-r1-00011489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

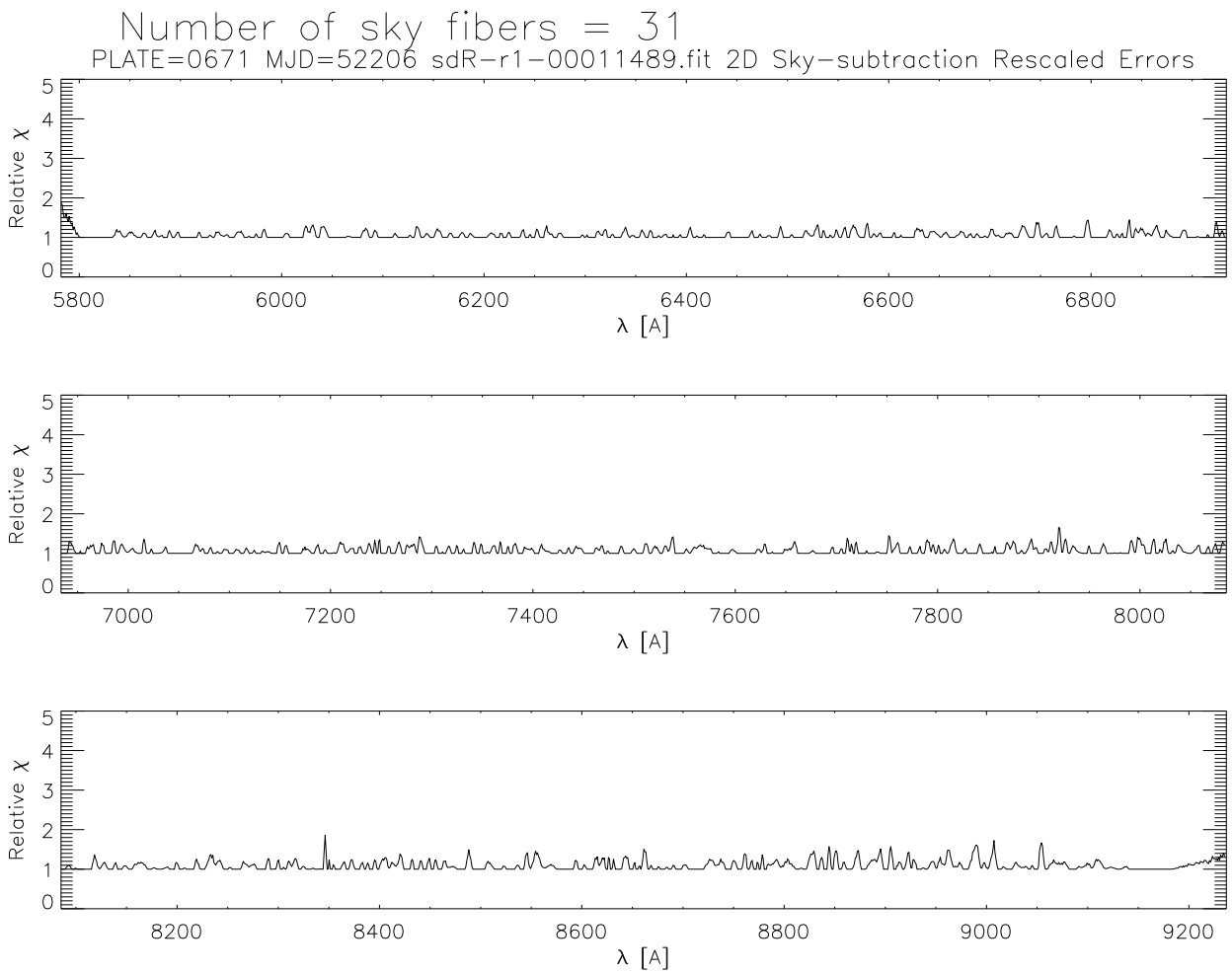

PLATE=0671 MJD=52206 sdR-r1-00011489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

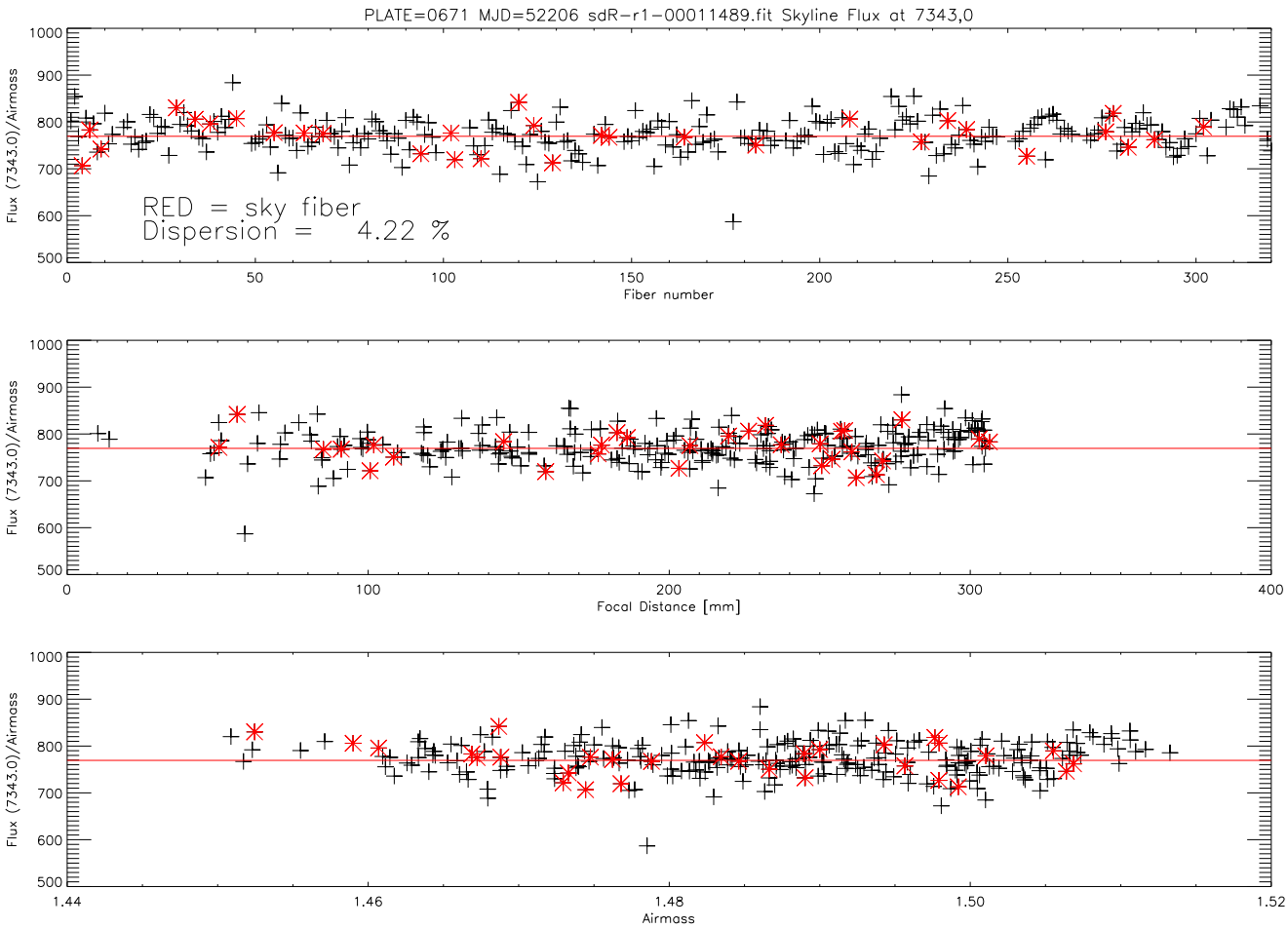

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

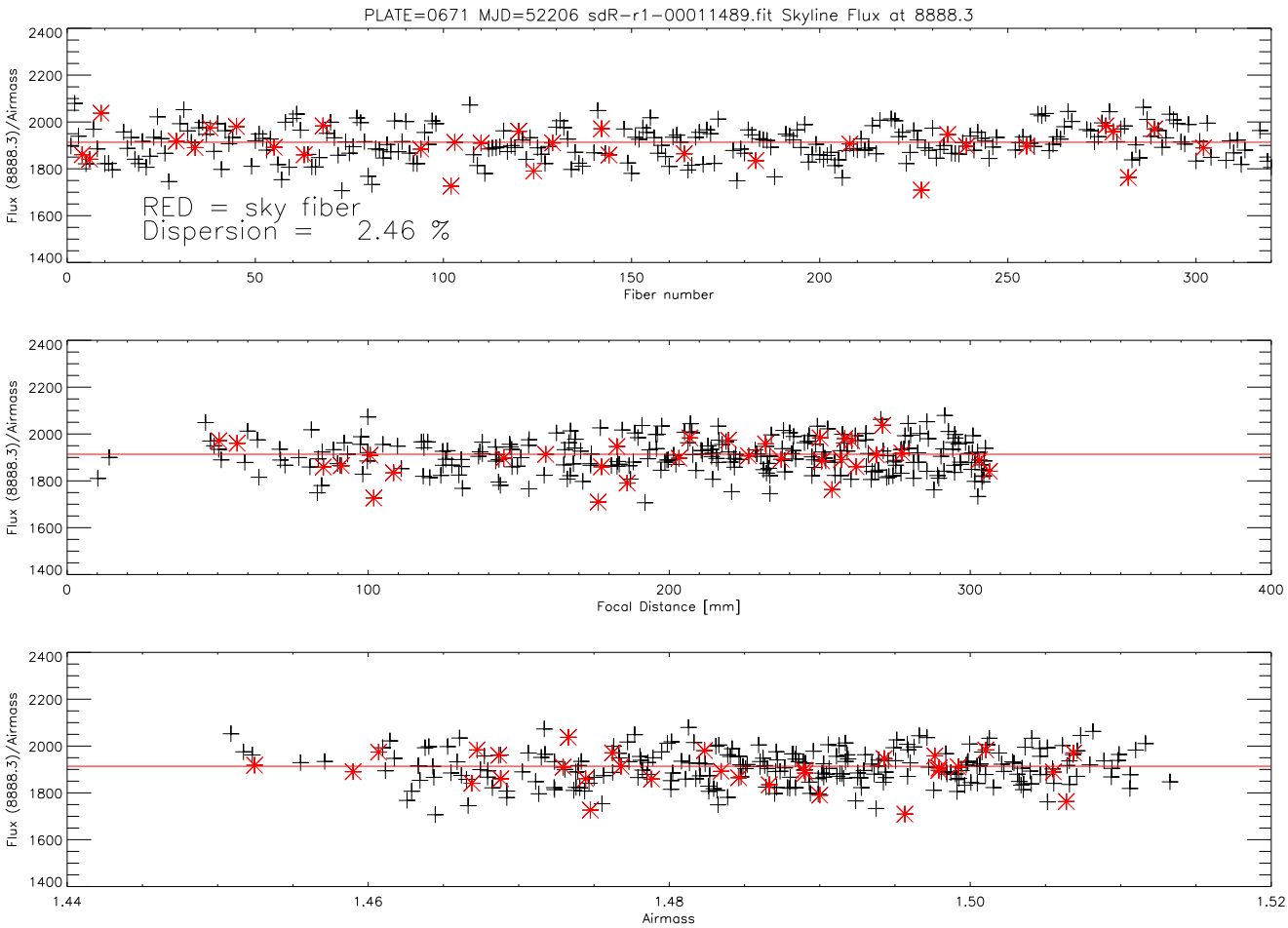

PLATE=0671 MJD=52206 sdR-r1-00011489.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

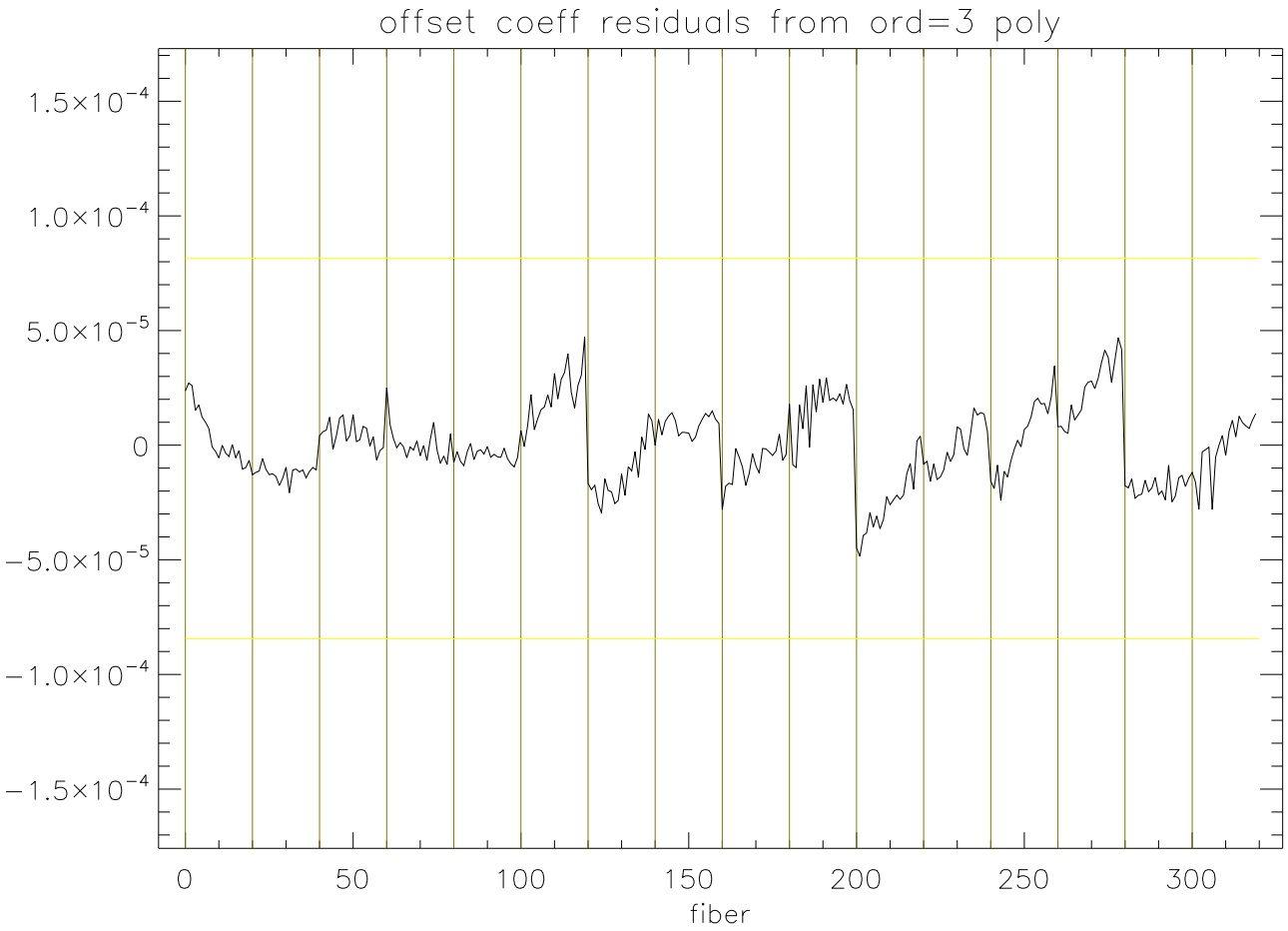

PLATE=0671 MJD=52206 sdR-r1-00011489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

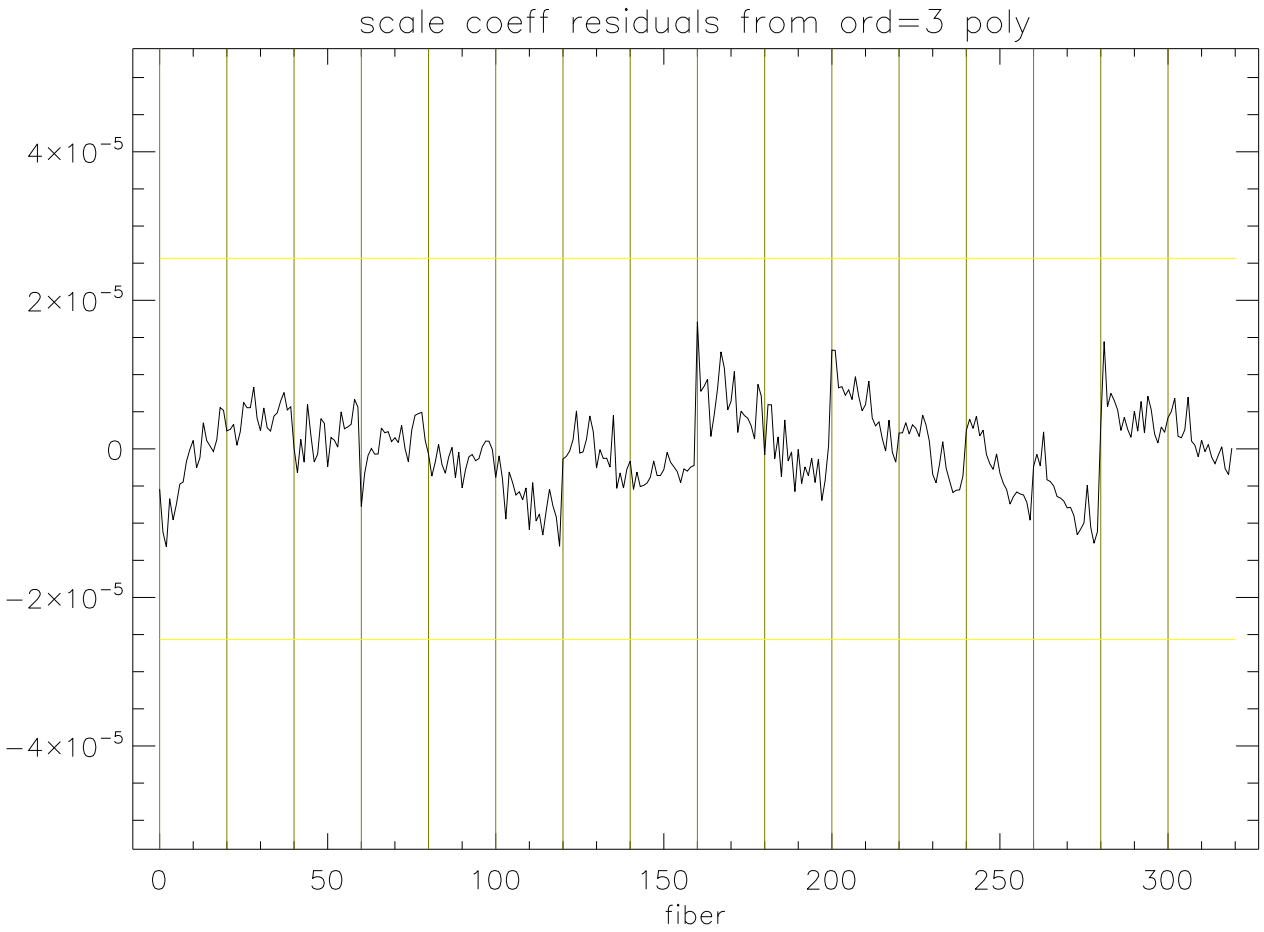

PLATE=0671 MJD=52206 sdR-r1-00011489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

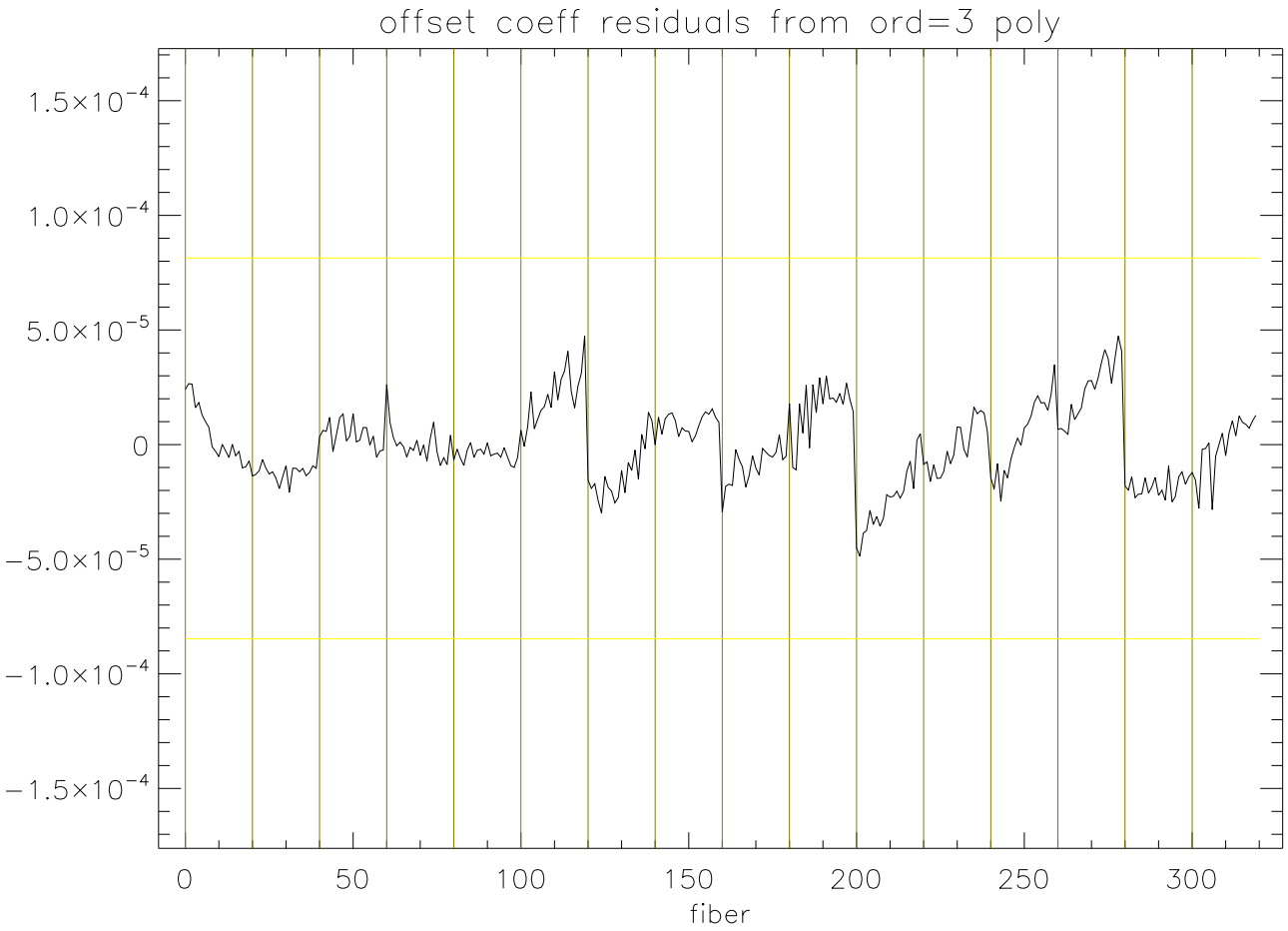

Number of sky fibers = 31
PLATE=0671 MJD=52206 sdR-r1-00011489.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

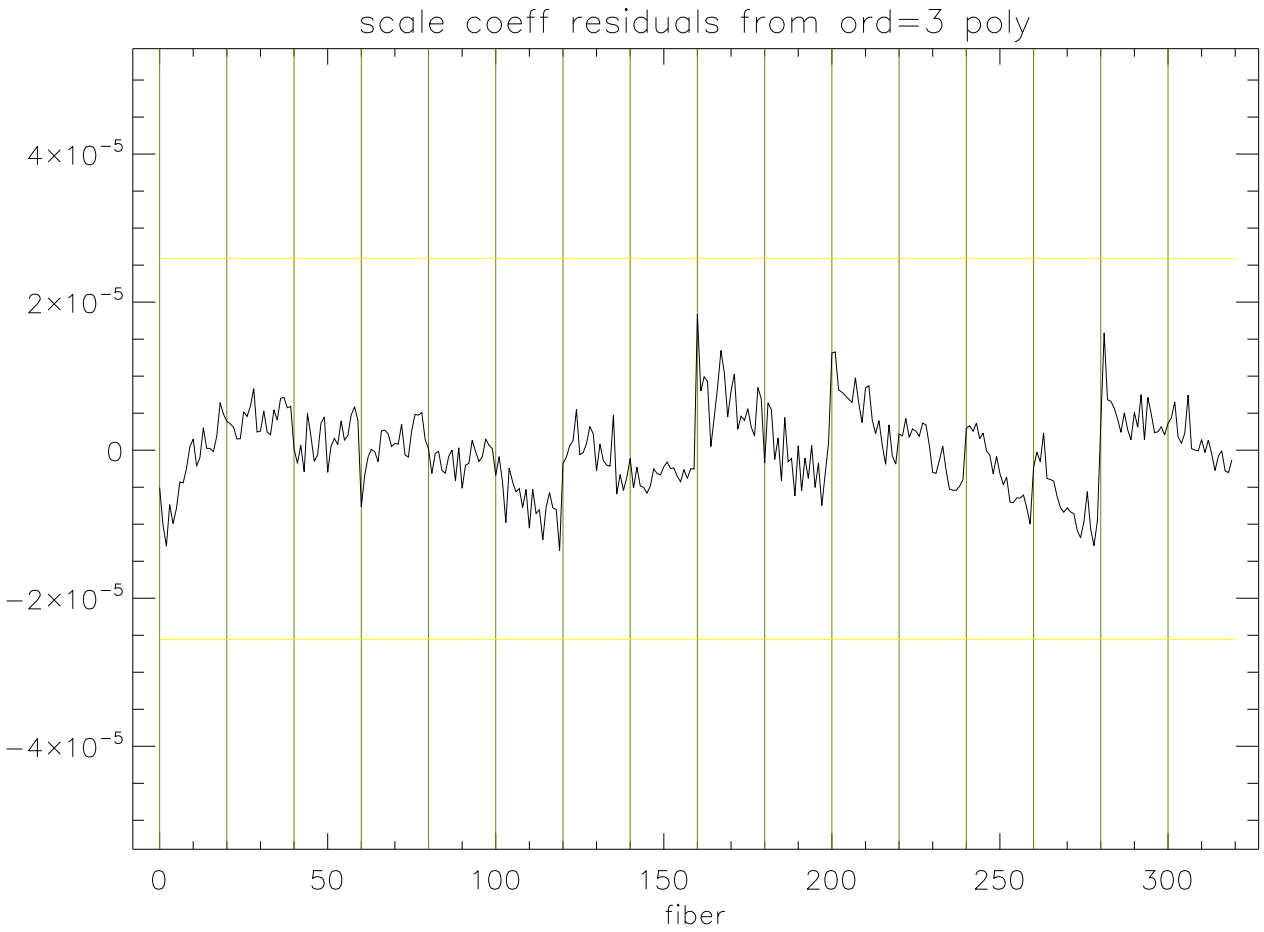

PLATE=0671 MJD=52206 sdR-r1-00011489.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 4.22 %
Fiber number
Focal Distance [mm]
Airmass

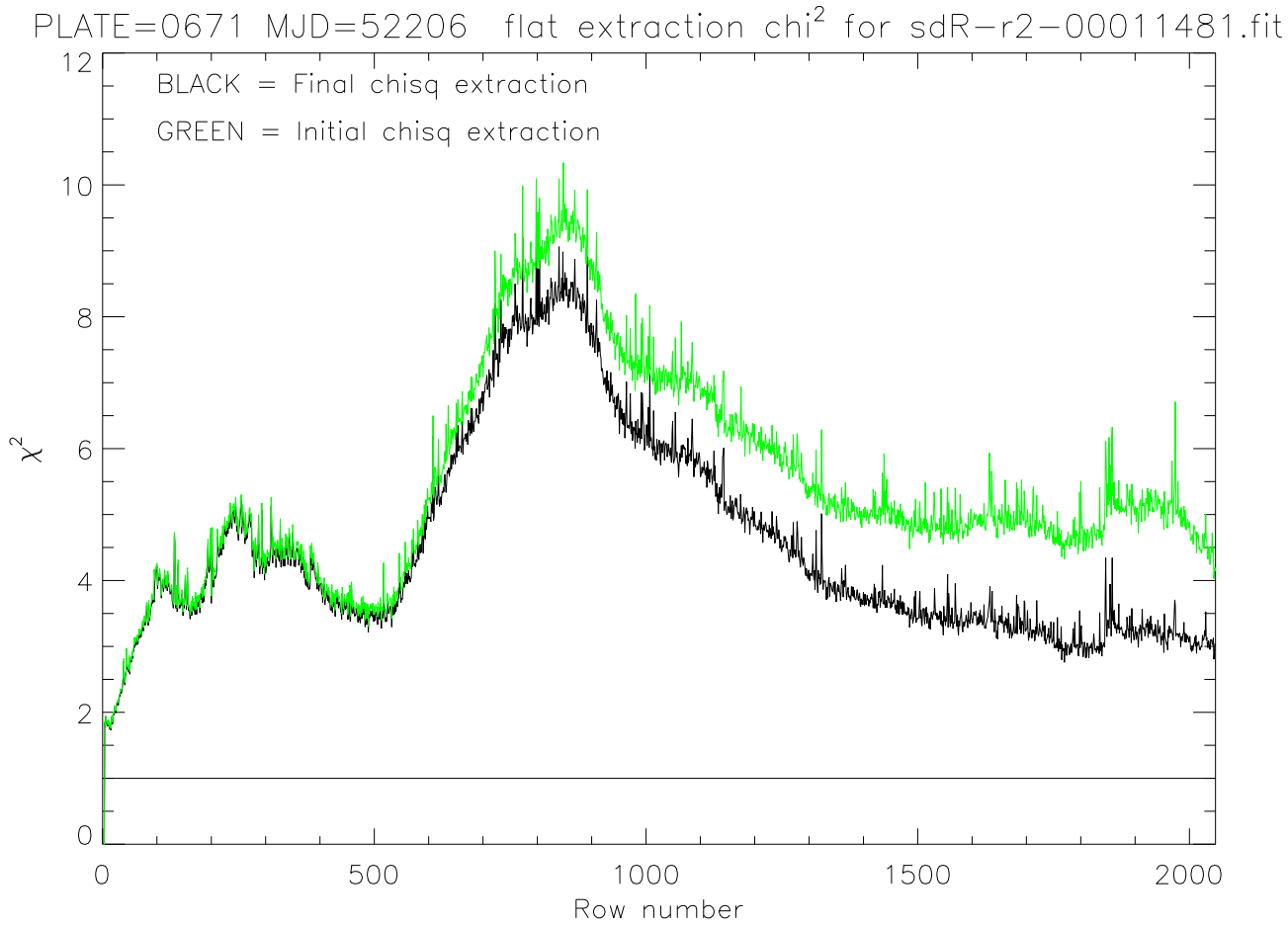

PLATE=0671 MJD=52206 sdR-r1-00011489.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.46 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

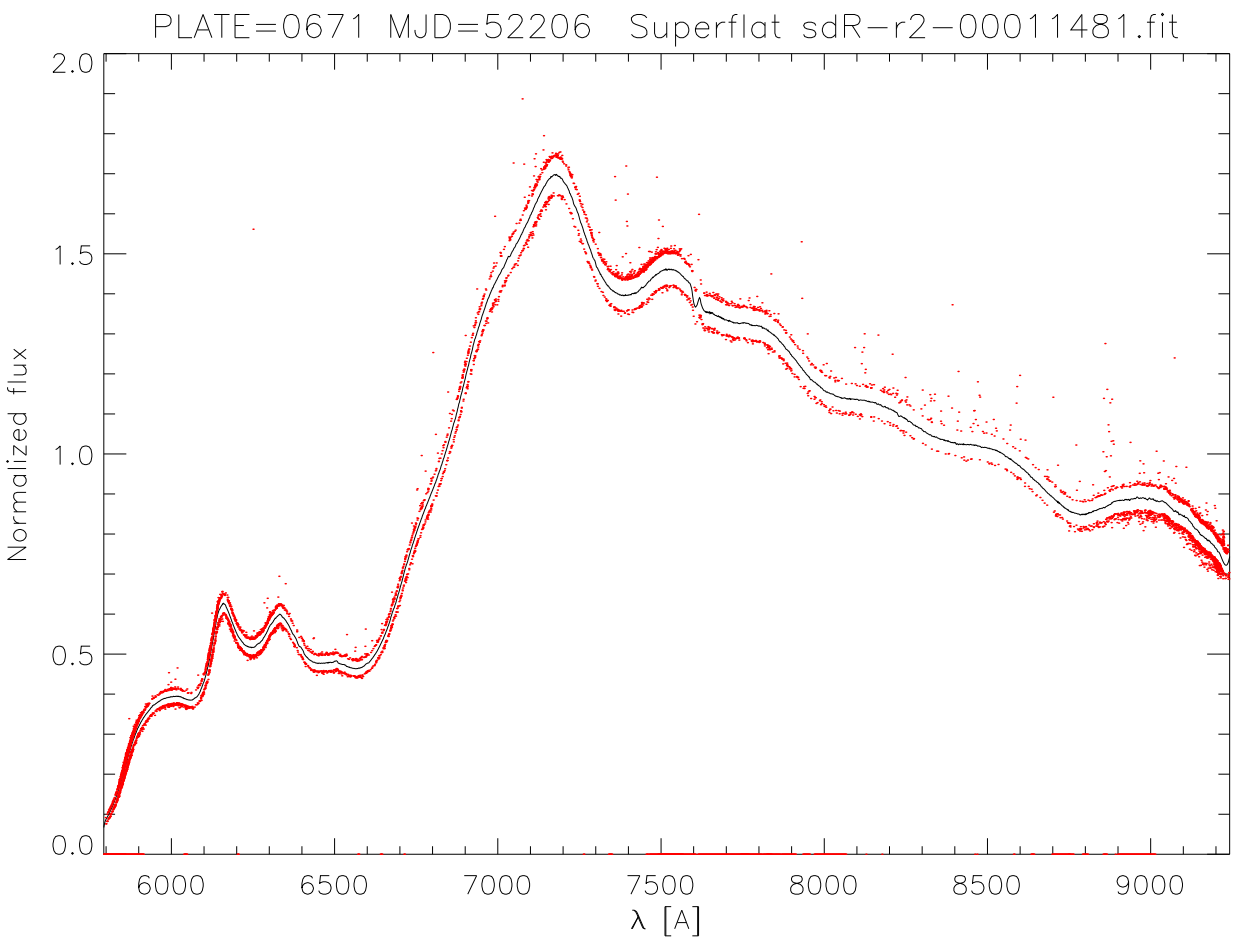

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

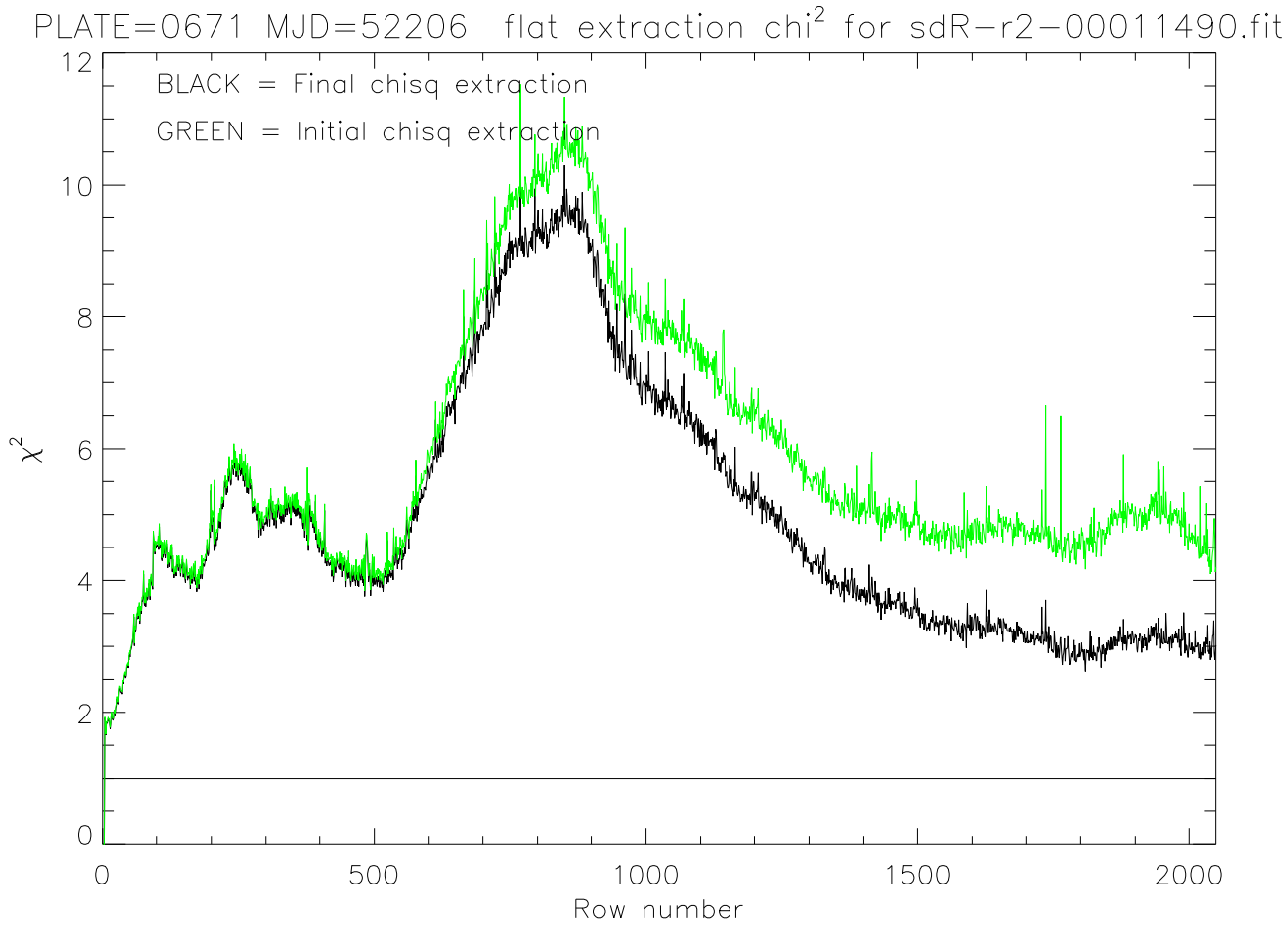

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

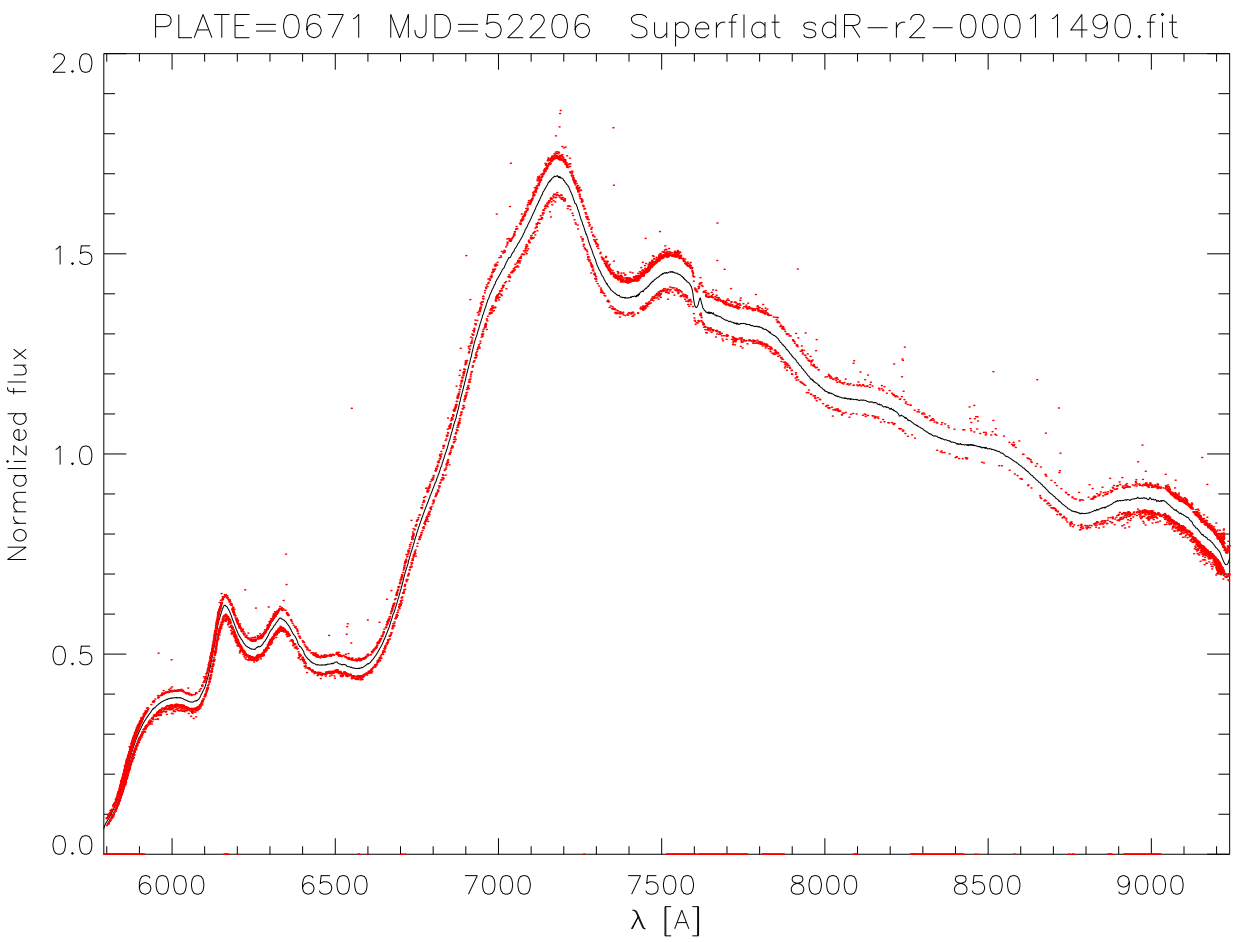

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

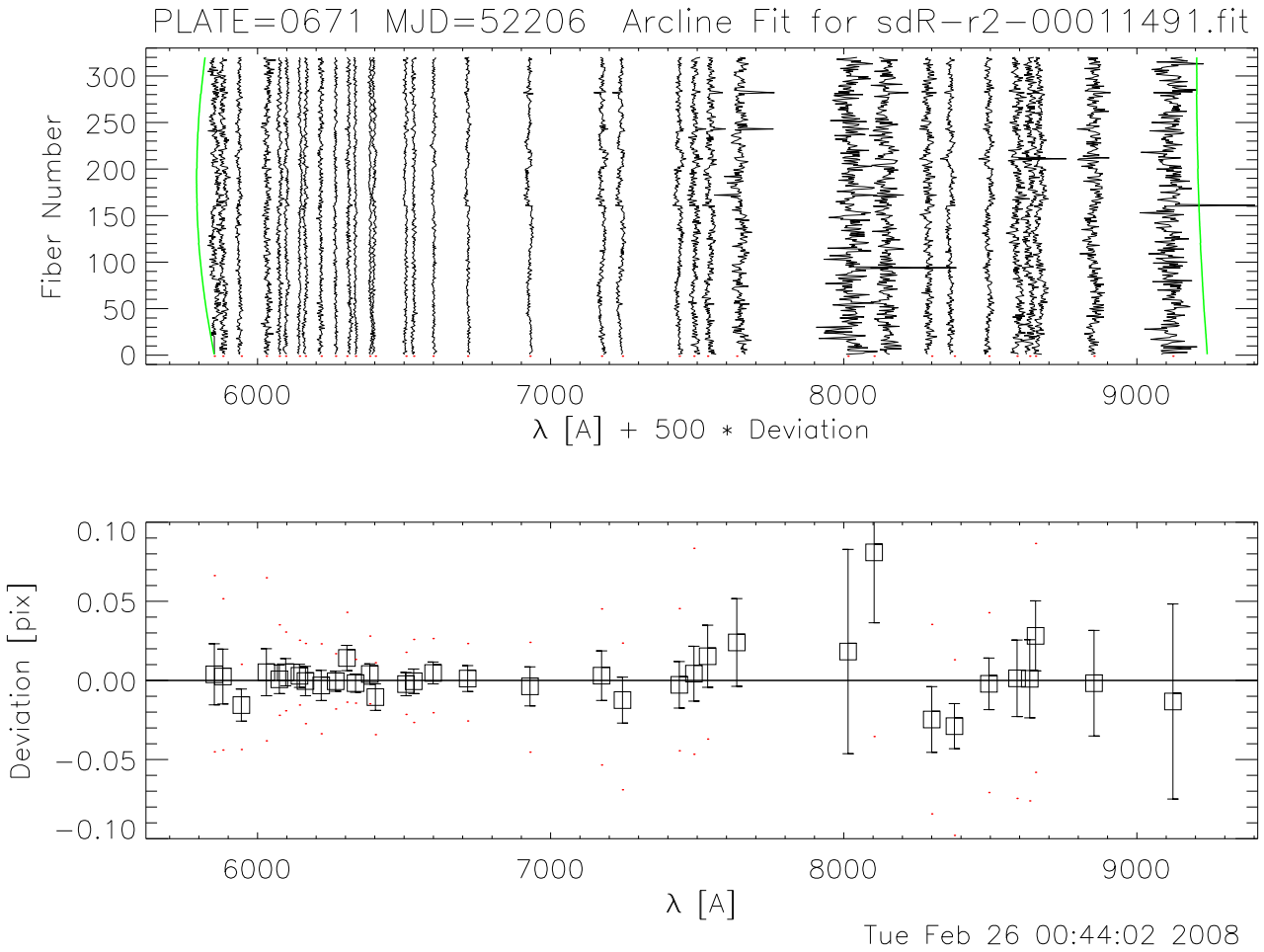

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

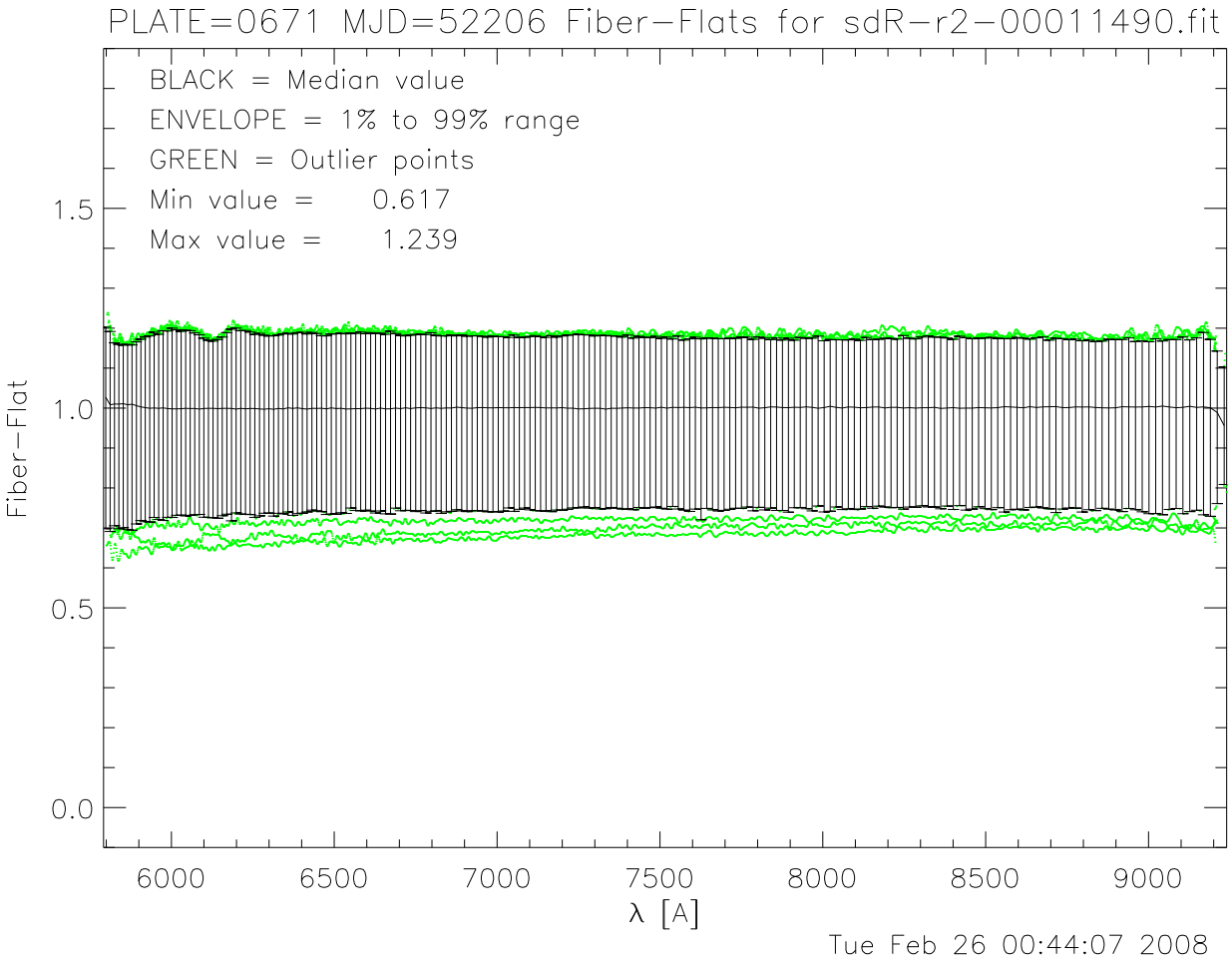

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−r2−00011481.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

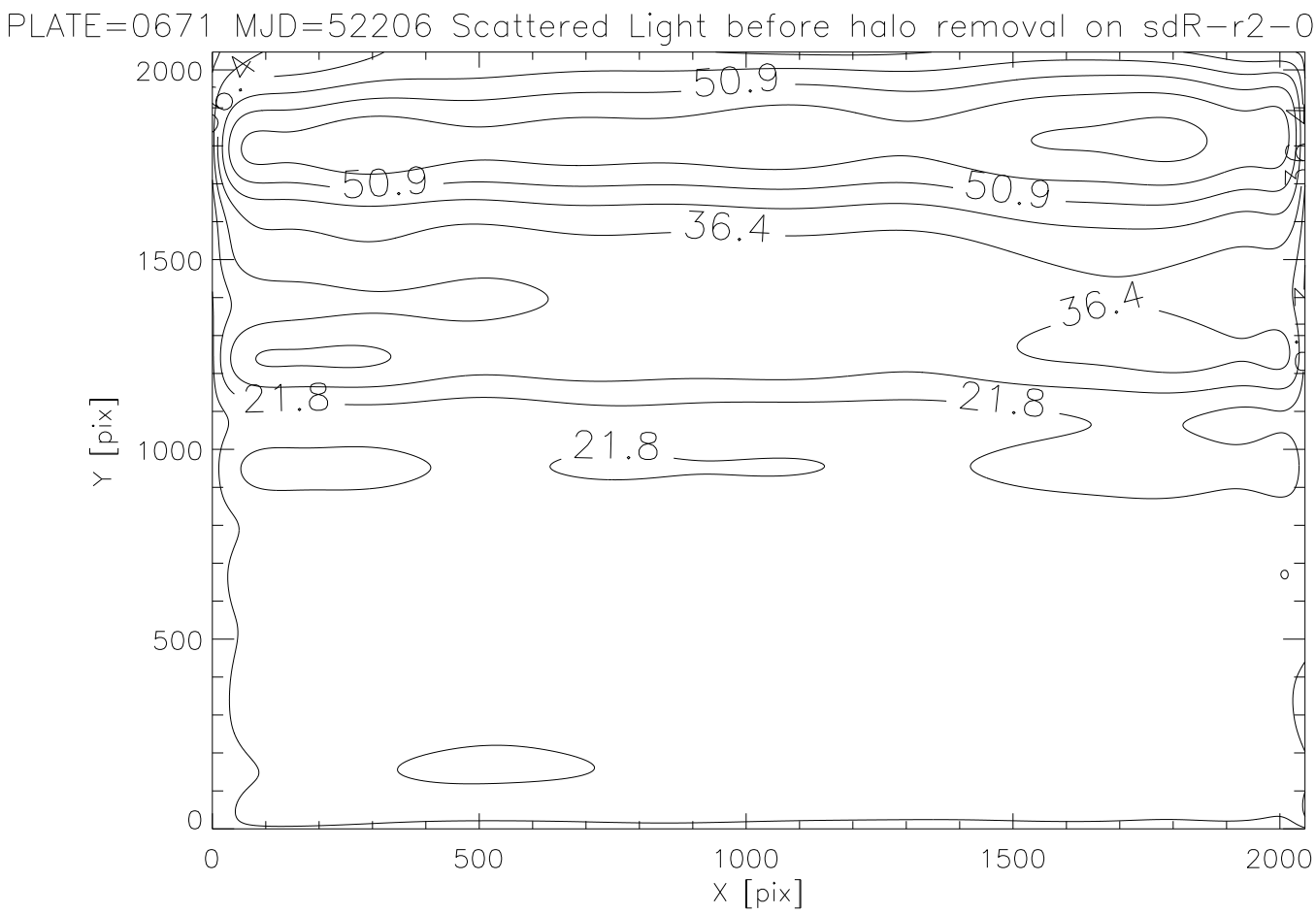

PLATE=0671 MJD=52206 Superflat sdR-r2-00011481.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

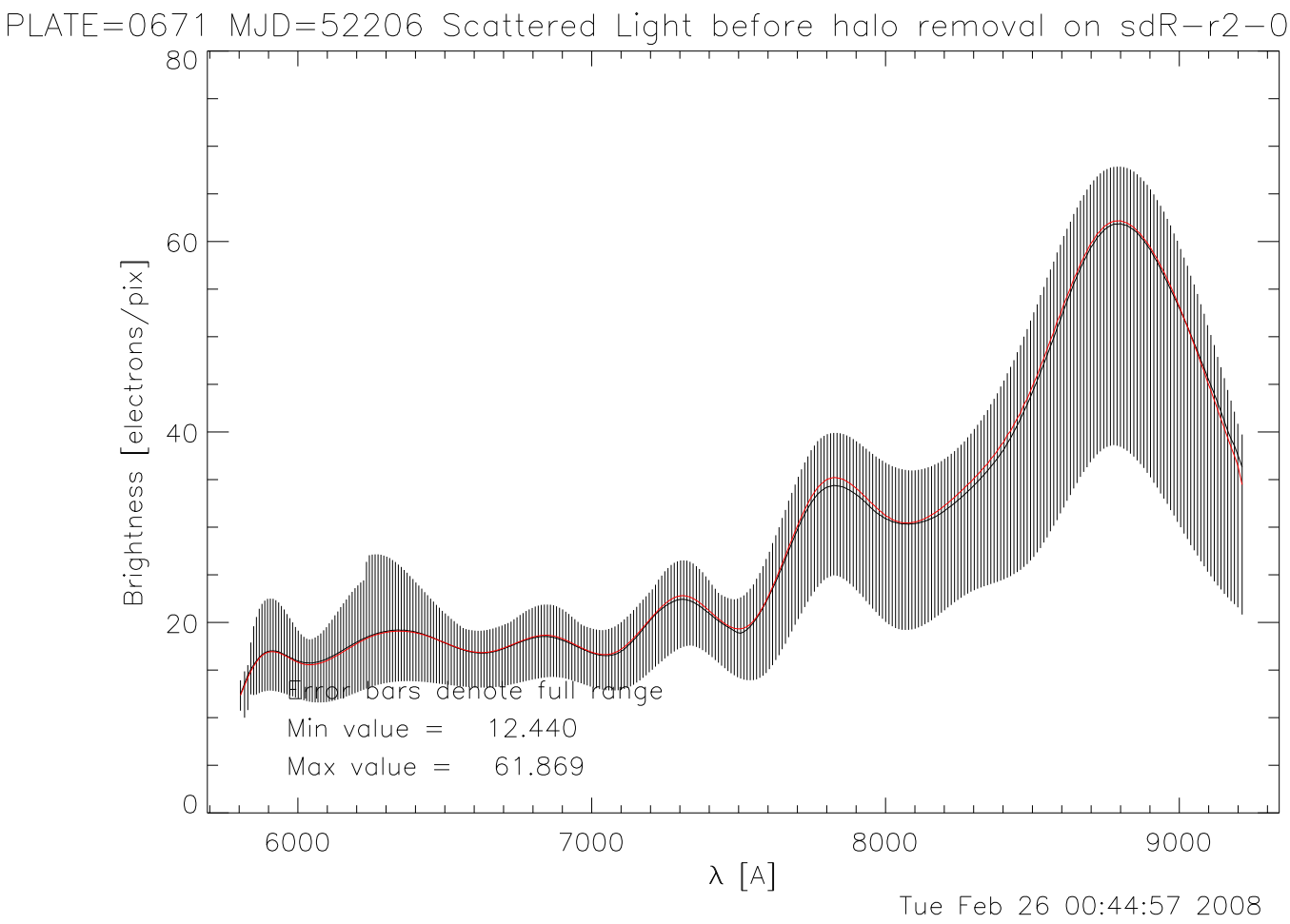

PLATE=0671 MJD=52206 flat extraction chi^2 for sdR−r2−00011490.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

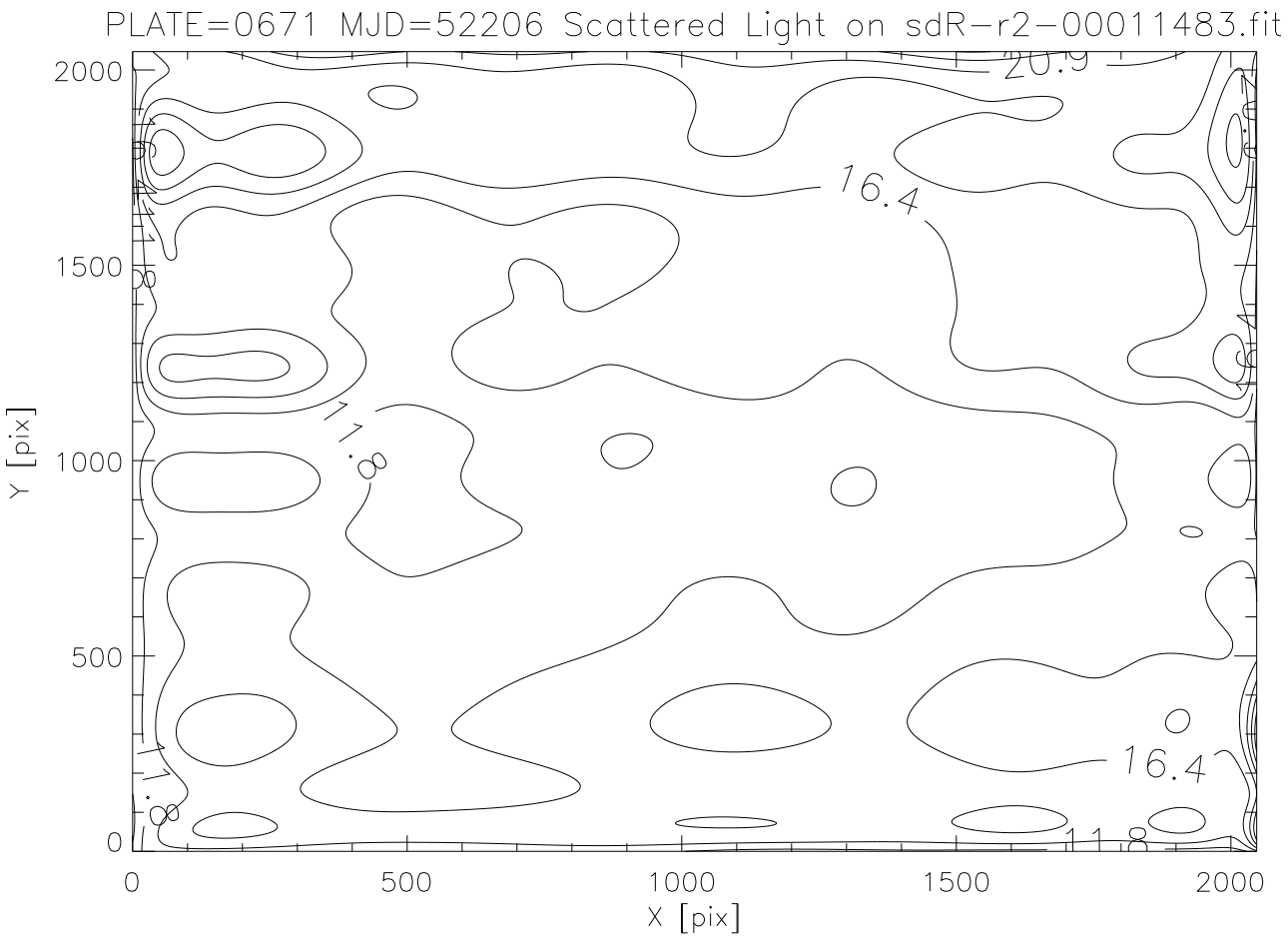

PLATE=0671 MJD=52206 Superflat sdR-r2-00011490.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

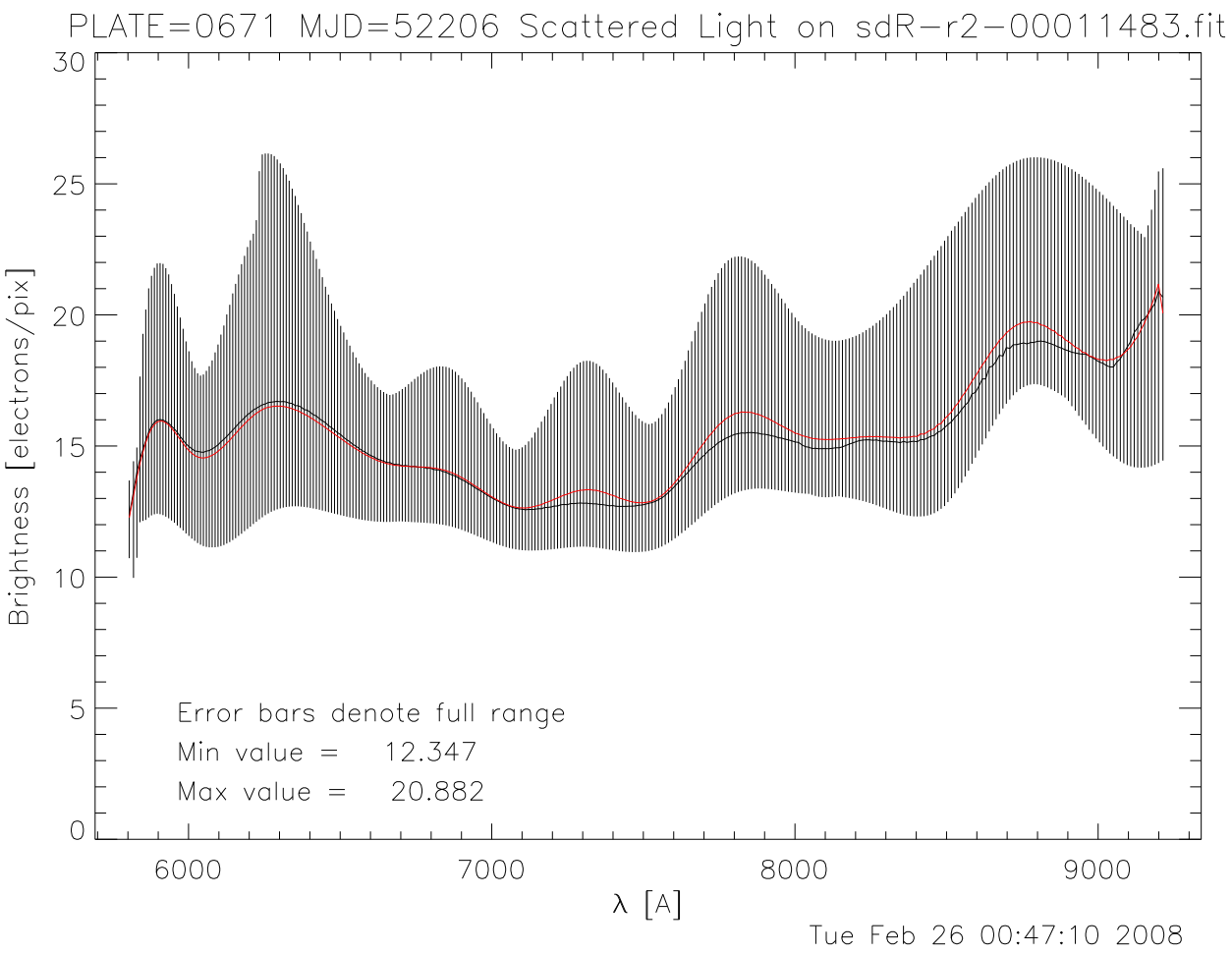

PLATE=0671 MJD=52206 Arcline Fit for sdR-r2-00011491.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 26 00:44:02 2008

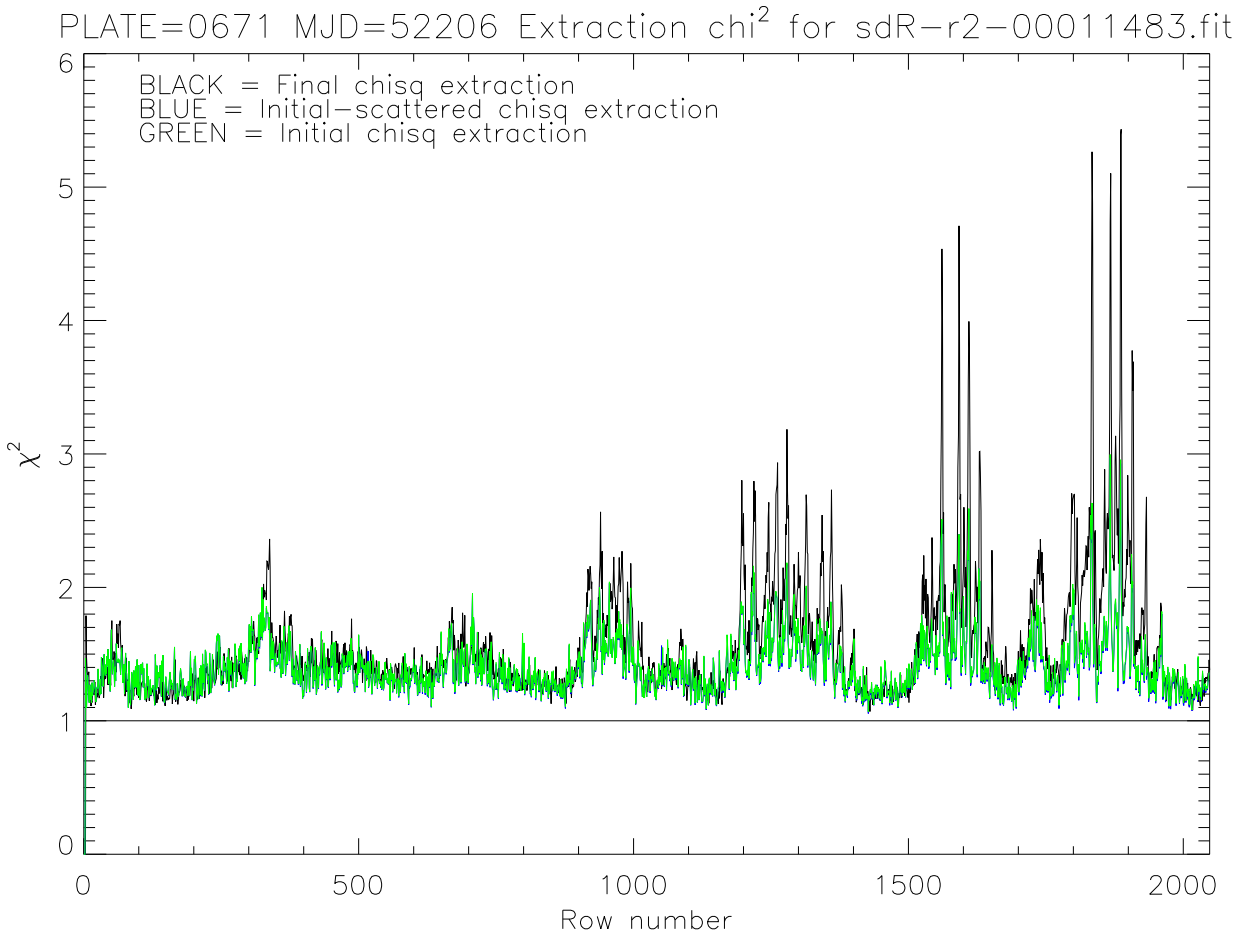

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r2−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.617
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:44:07 2008

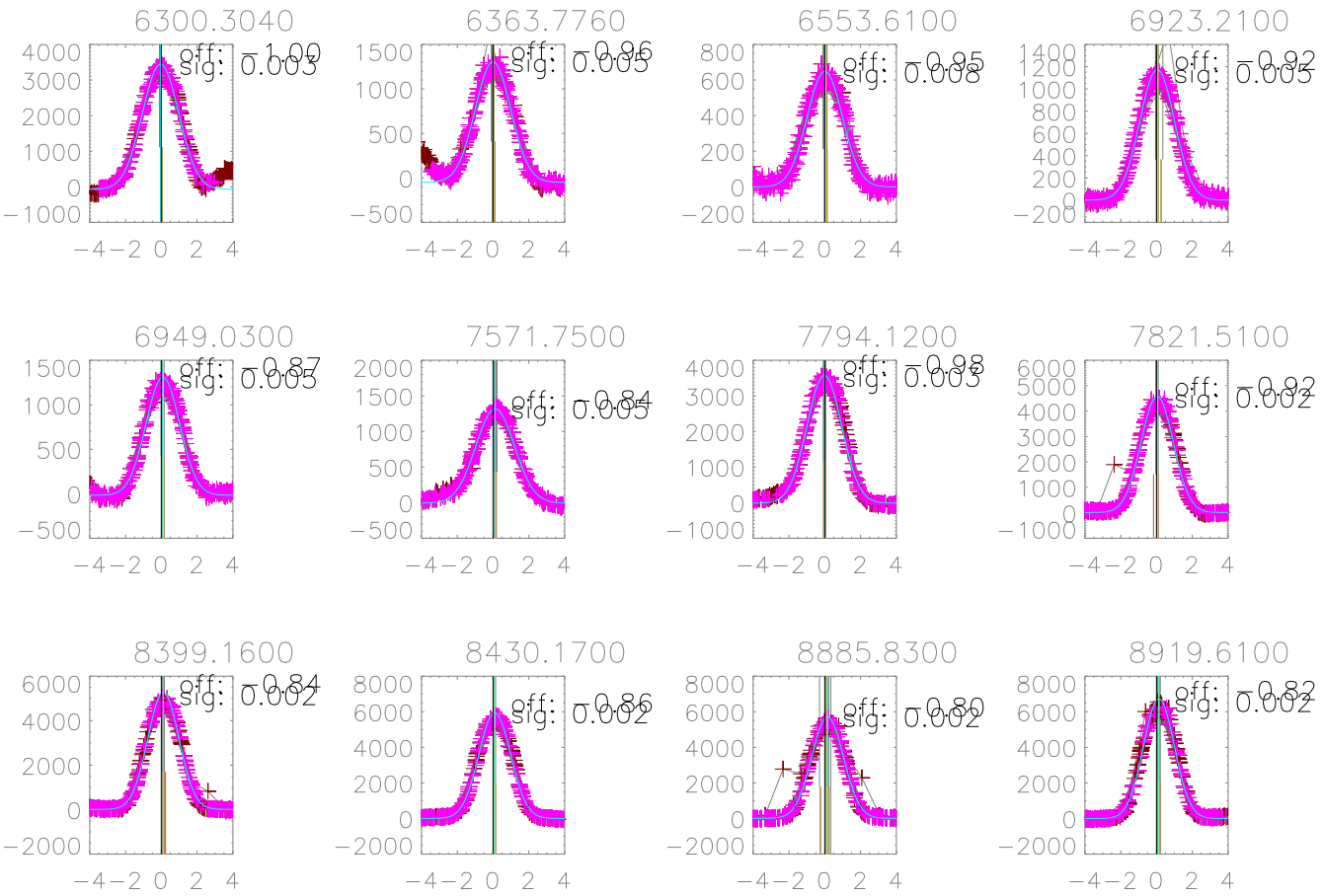

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011483.fi
50.9
50.9
50.9
36.4
36.4
21.8
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

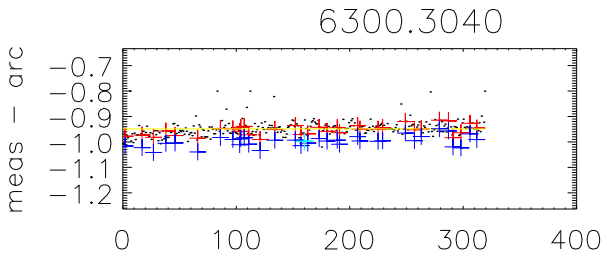

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011483.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 12.440
Max value = 61.869
Tue Feb 26 00:44:57 2008

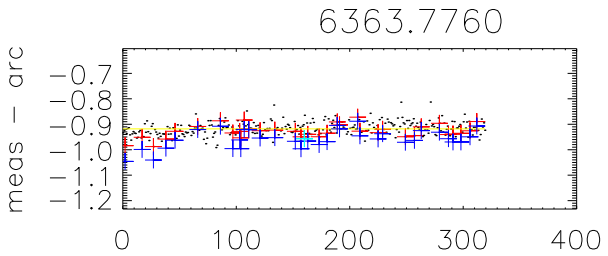

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011483.fit
20.9
16.4
11.8
16.4
11.8
11.8
Y [pix]
X [pix]
0
500
1000
1500
2000

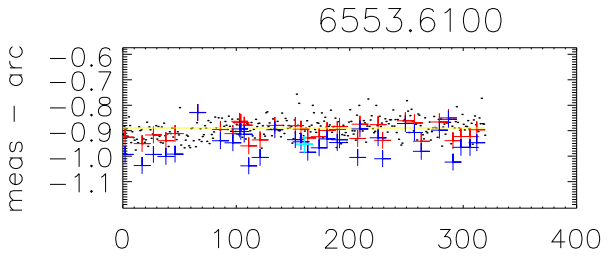

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011483.fit
Brightness [electrons/pix]
30
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.347
Max value = 20.882
Tue Feb 26 00:47:10 2008

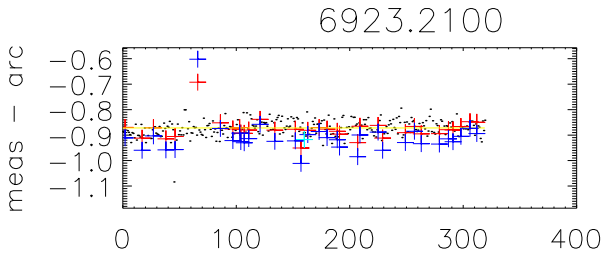

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r2−00011483.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

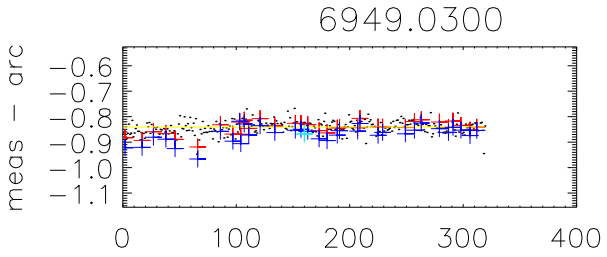

6300.3040
off: -1.00
sig: 0.003
6363.7760
off: -0.96
sig: 0.005
6553.6100
off: -0.85
sig: 0.008
6923.2100
off: -0.92
sig: 0.005
6949.0300
off: -0.87
sig: 0.005
7571.7500
off: -0.84
sig: 0.005
7794.1200
off: -0.98
sig: 0.003
7821.5100
off: -0.92
sig: 0.002
8399.1600
off: -0.84
sig: 0.002
8430.1700
off: -0.86
sig: 0.002
8885.8300
off: -0.80
sig: 0.002
8919.6100
off: -0.82
sig: 0.002

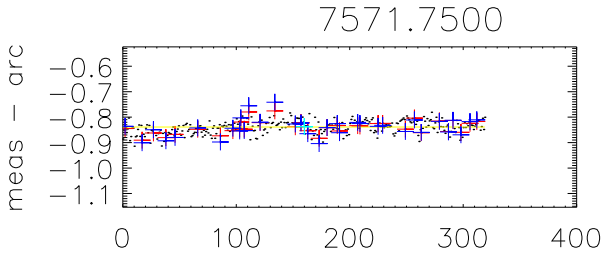

6300.3040
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

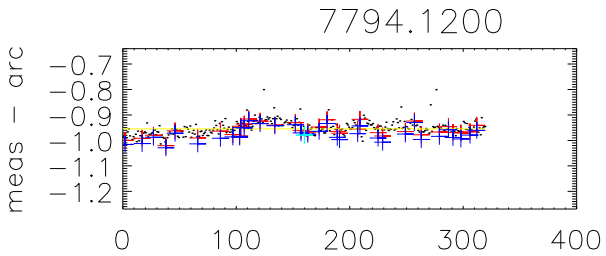

6363.7760
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

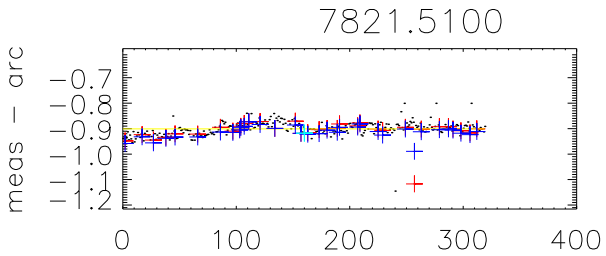

6553.6100
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

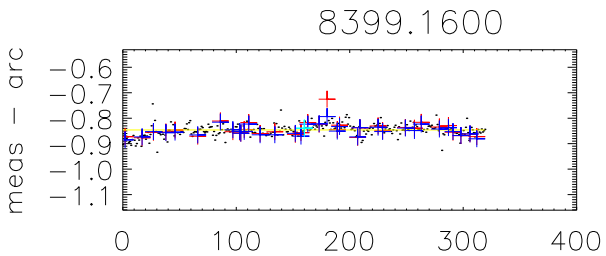

6923.2100
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

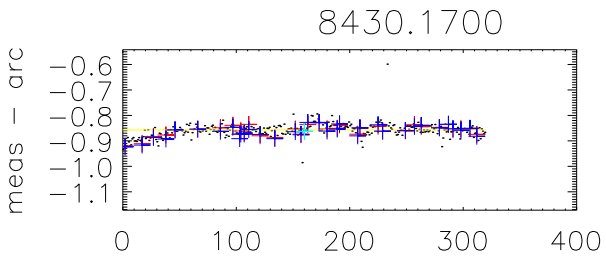

6949.0300
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

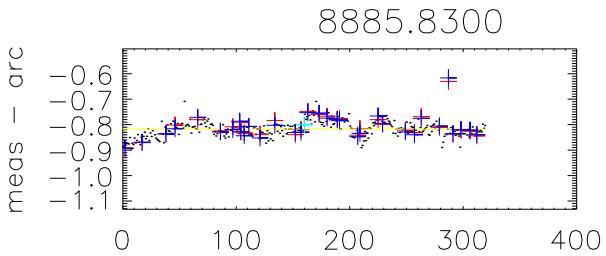

7571.7500
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

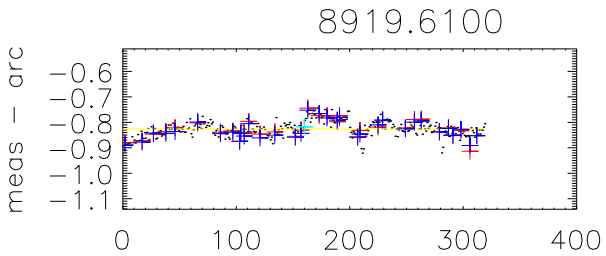

7794.1200
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

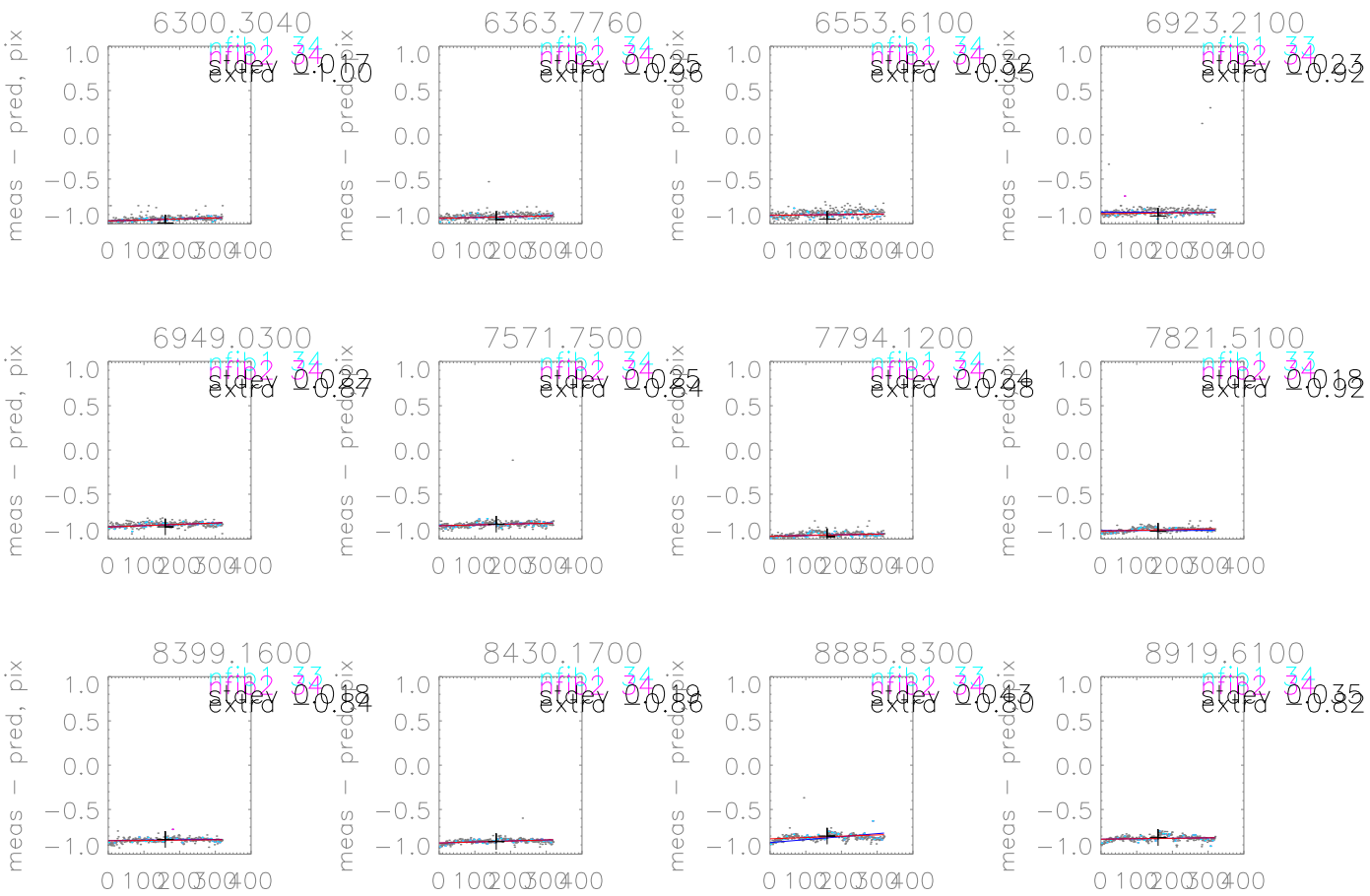

7821.5100
meas − arc
−0.7
−0.8
−0.9
−1.0
−1.1
−1.2
0
100
200
300
400

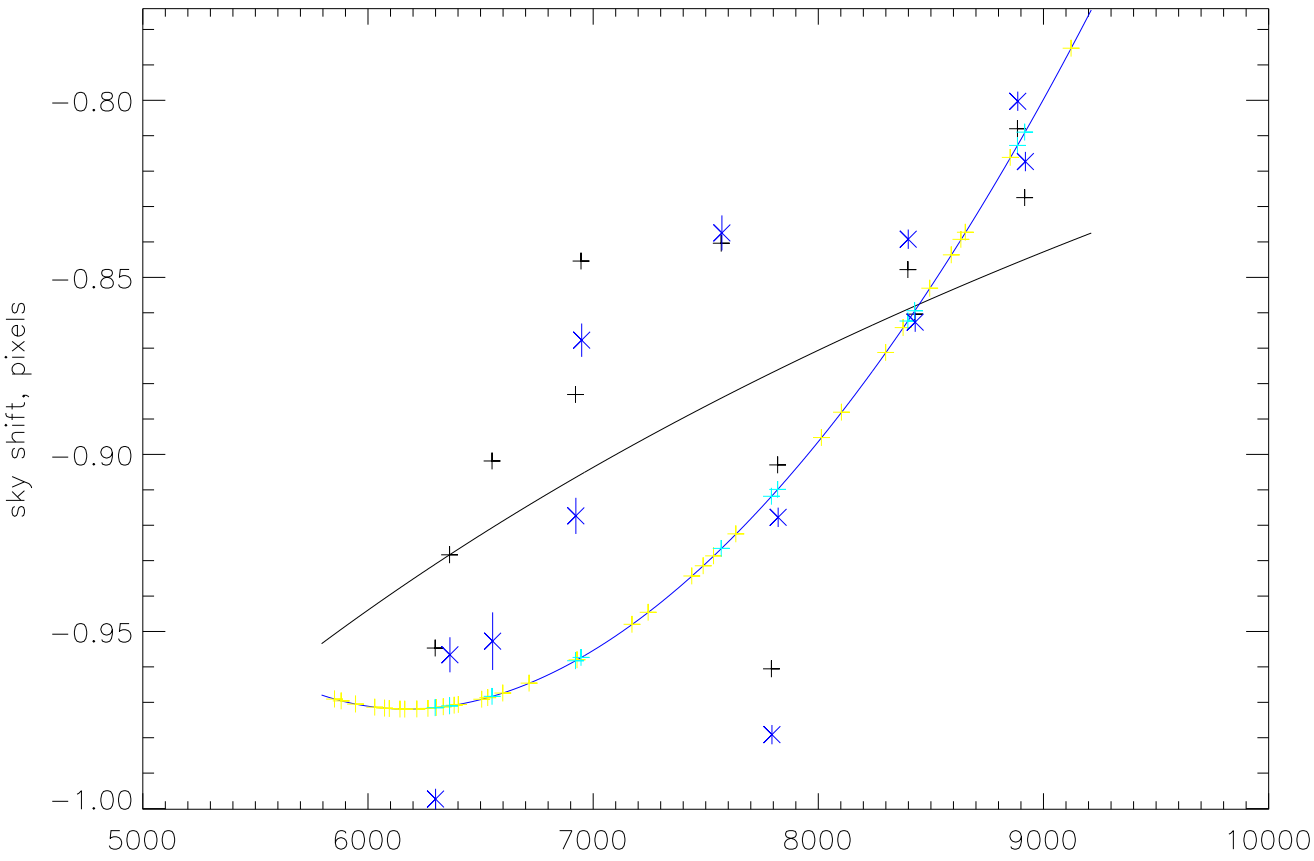

8399.1600
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400


8430.1700
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

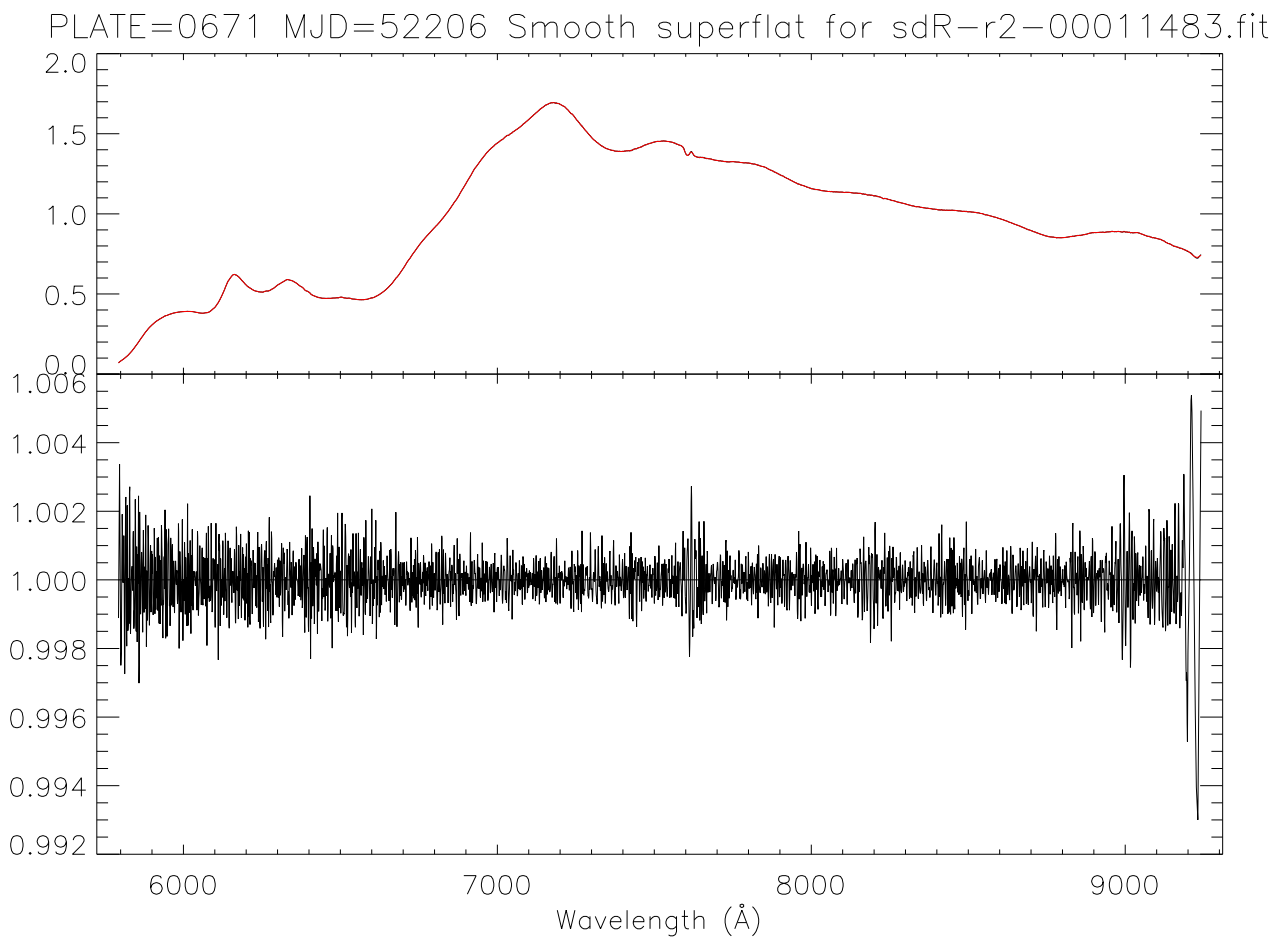

8885.8300
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

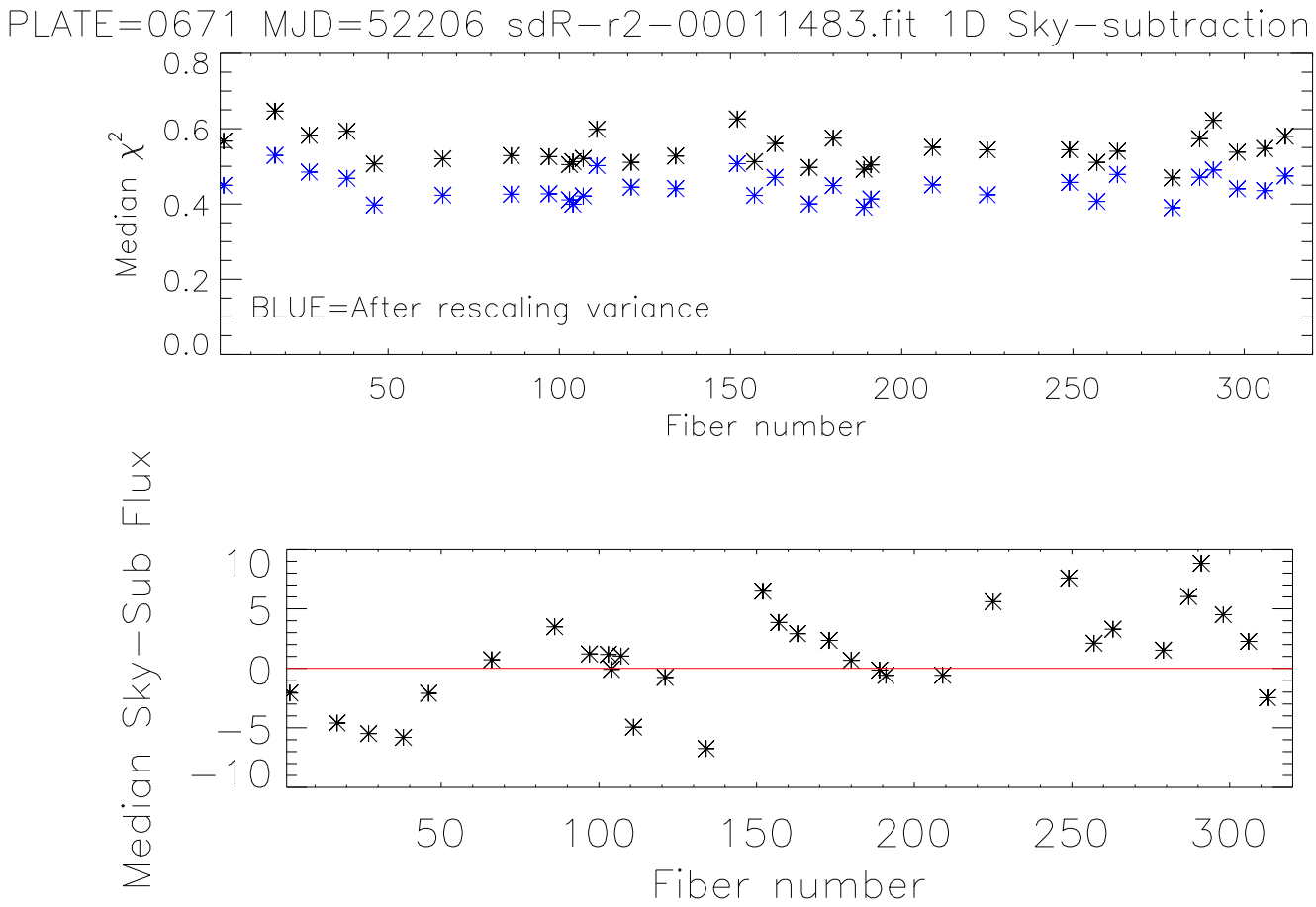

8919.6100
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

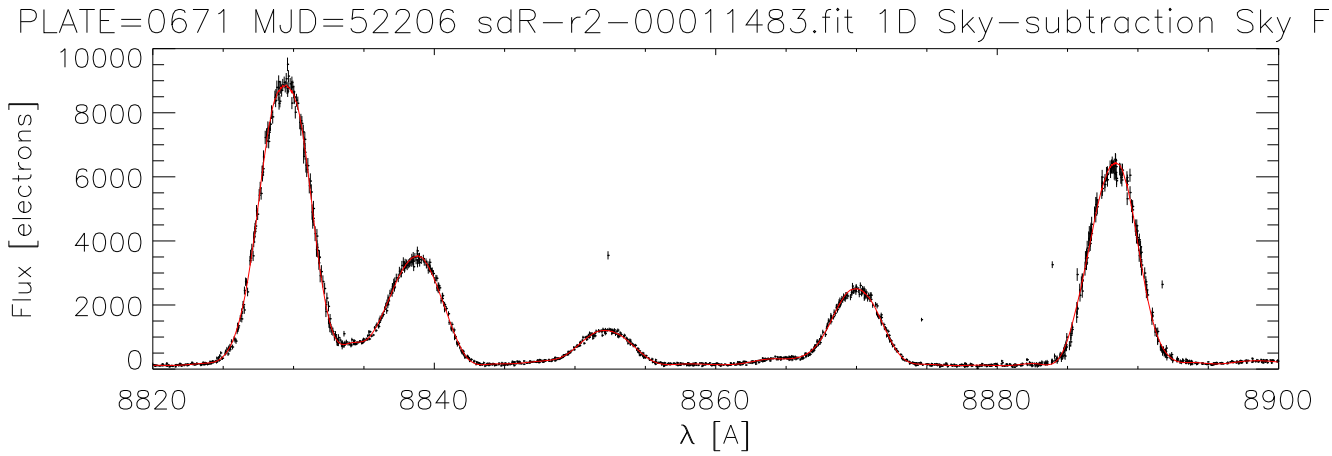

6300.3040
stdev 0.017
extra 1.00
6363.7760
stdev 0.025
extra 0.98
6553.6100
stdev 0.032
extra 0.95
6923.2100
stdev 0.023
extra 0.92
6949.0300
stdev 0.022
extra 0.87
7571.7500
stdev 0.025
extra 0.84
7794.1200
stdev 0.024
extra 0.98
7821.5100
stdev 0.018
extra 0.92
8399.1600
stdev 0.018
extra 0.84
8430.1700
stdev 0.019
extra 0.86
8885.8300
stdev 0.043
extra 0.80
8919.6100
stdev 0.035
extra 0.82
meas − pred, pix
mfib1 34
mfib2 34

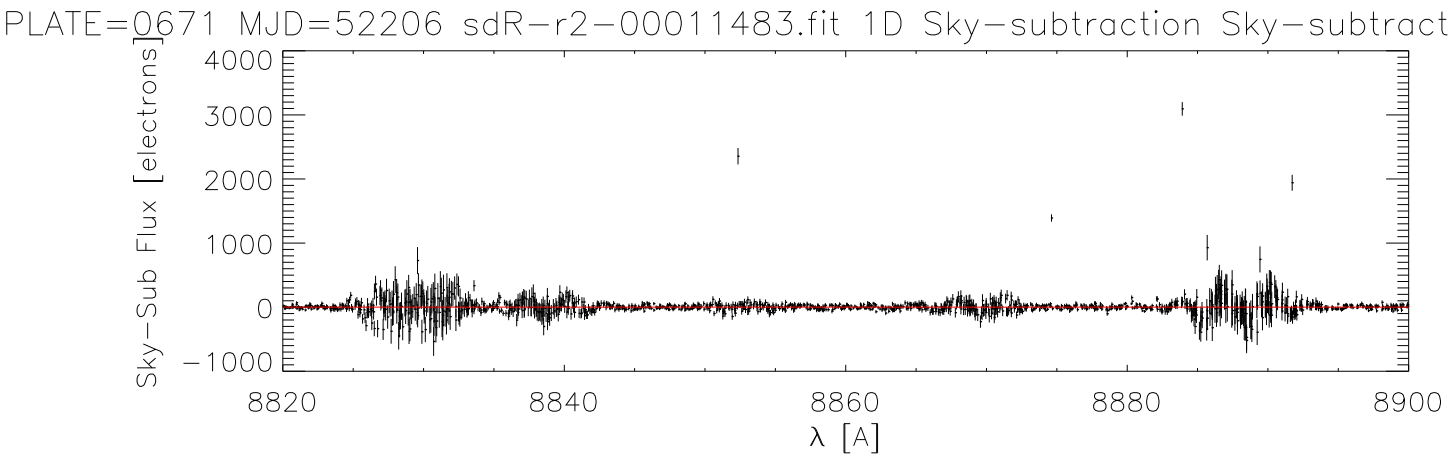

sky shift, pixels
−0.80
−0.85
−0.90
−0.95
−1.00
5000
6000
7000
8000
9000
10000

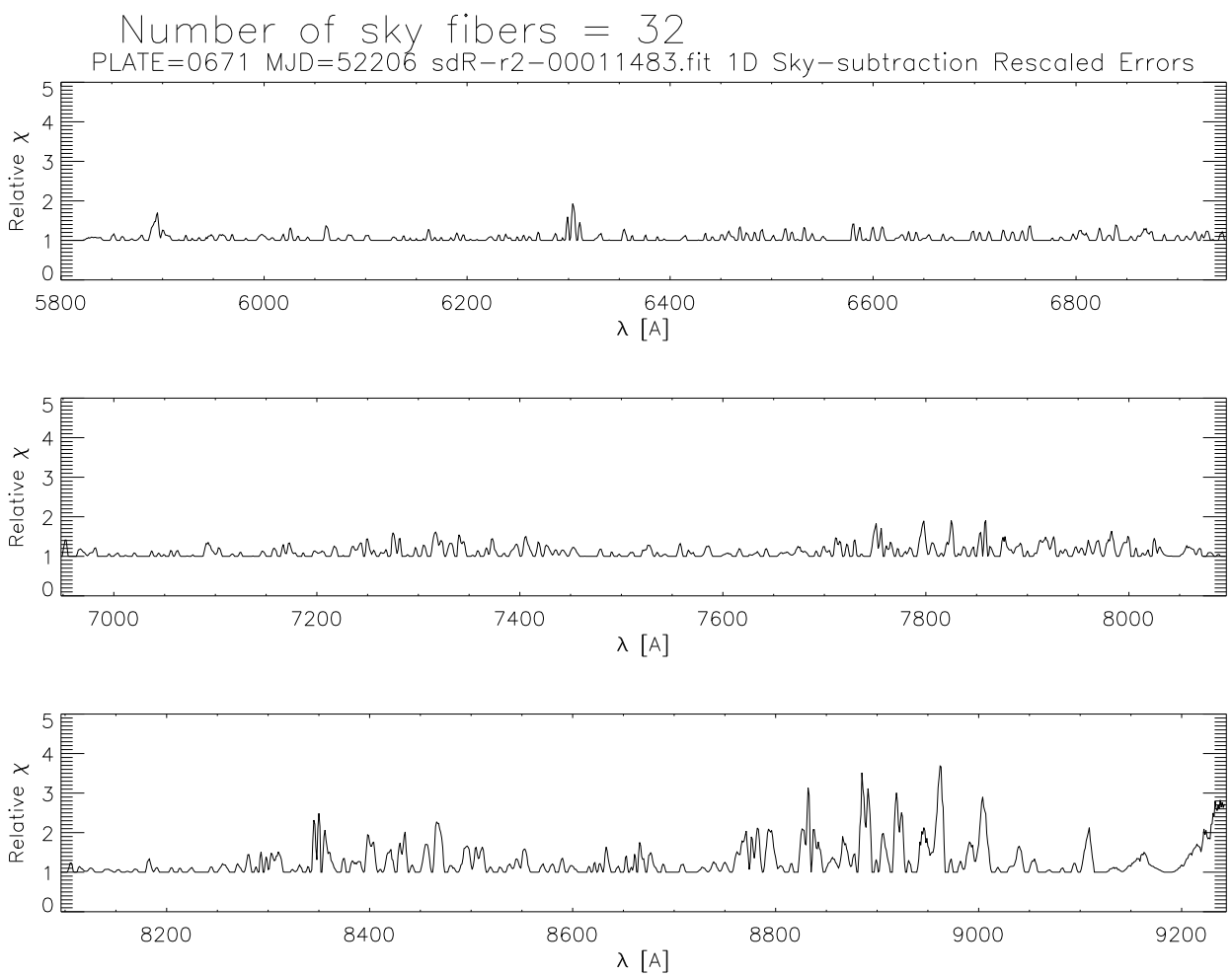
es= −0.0000

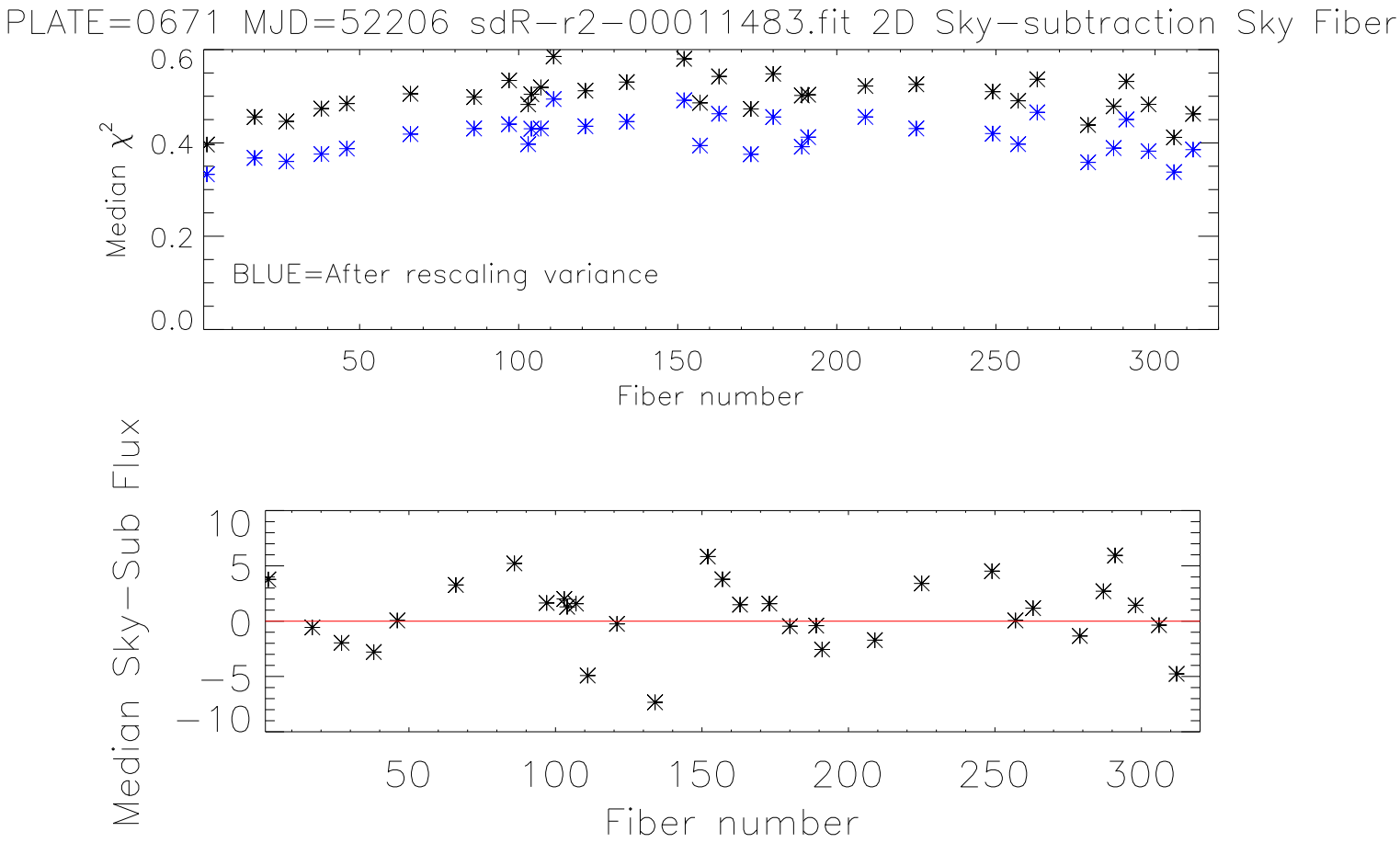

PLATE=0671 MJD=52206 Smooth superflat for sdR−r2−00011483.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

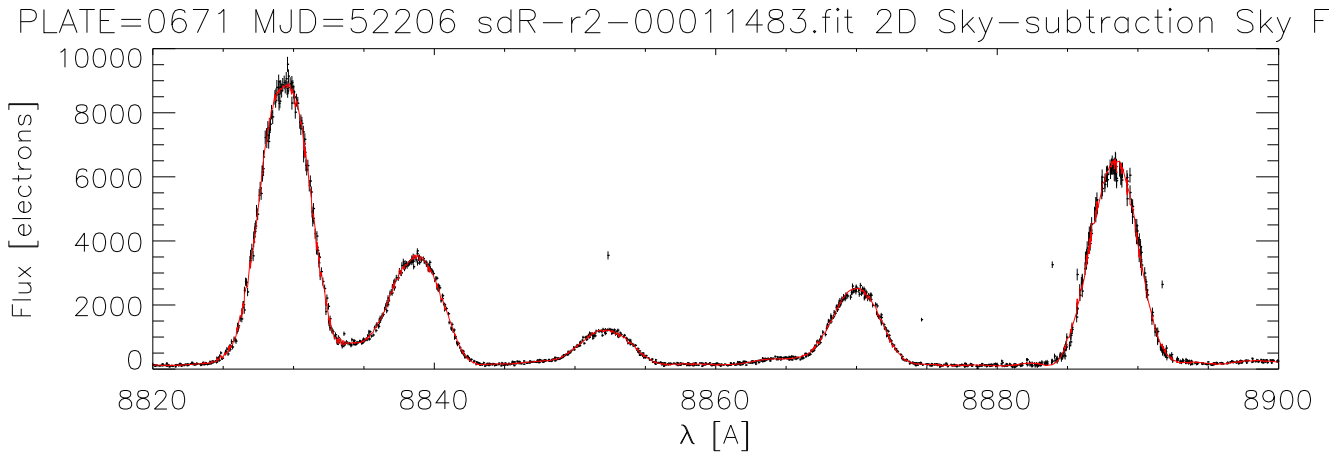

PLATE=0671 MJD=52206 sdR-r2-00011483.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

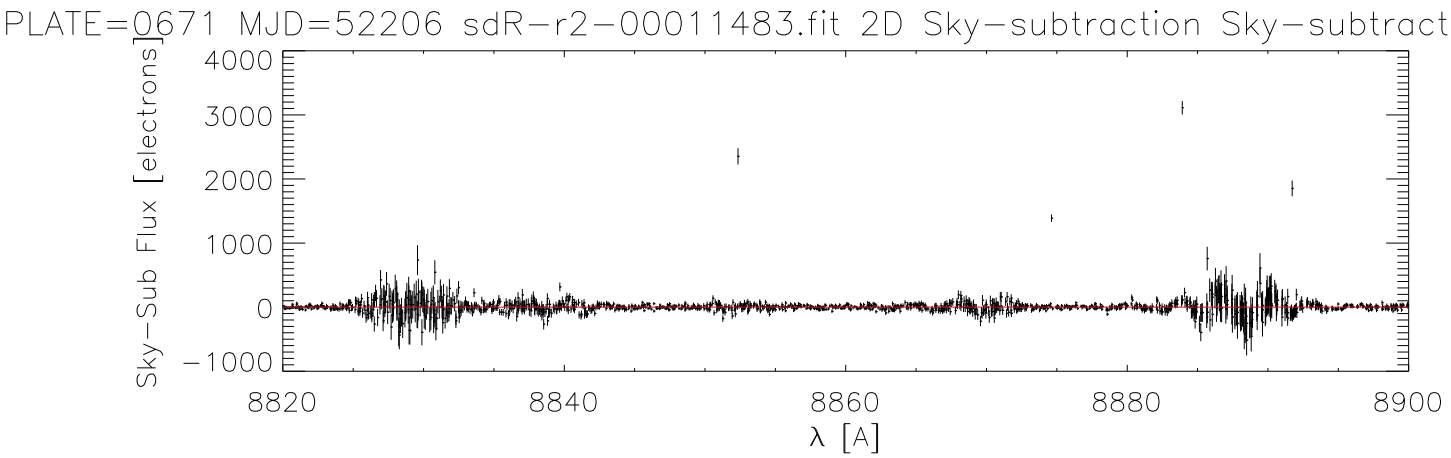

PLATE=0671 MJD=52206 sdR-r2-00011483.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

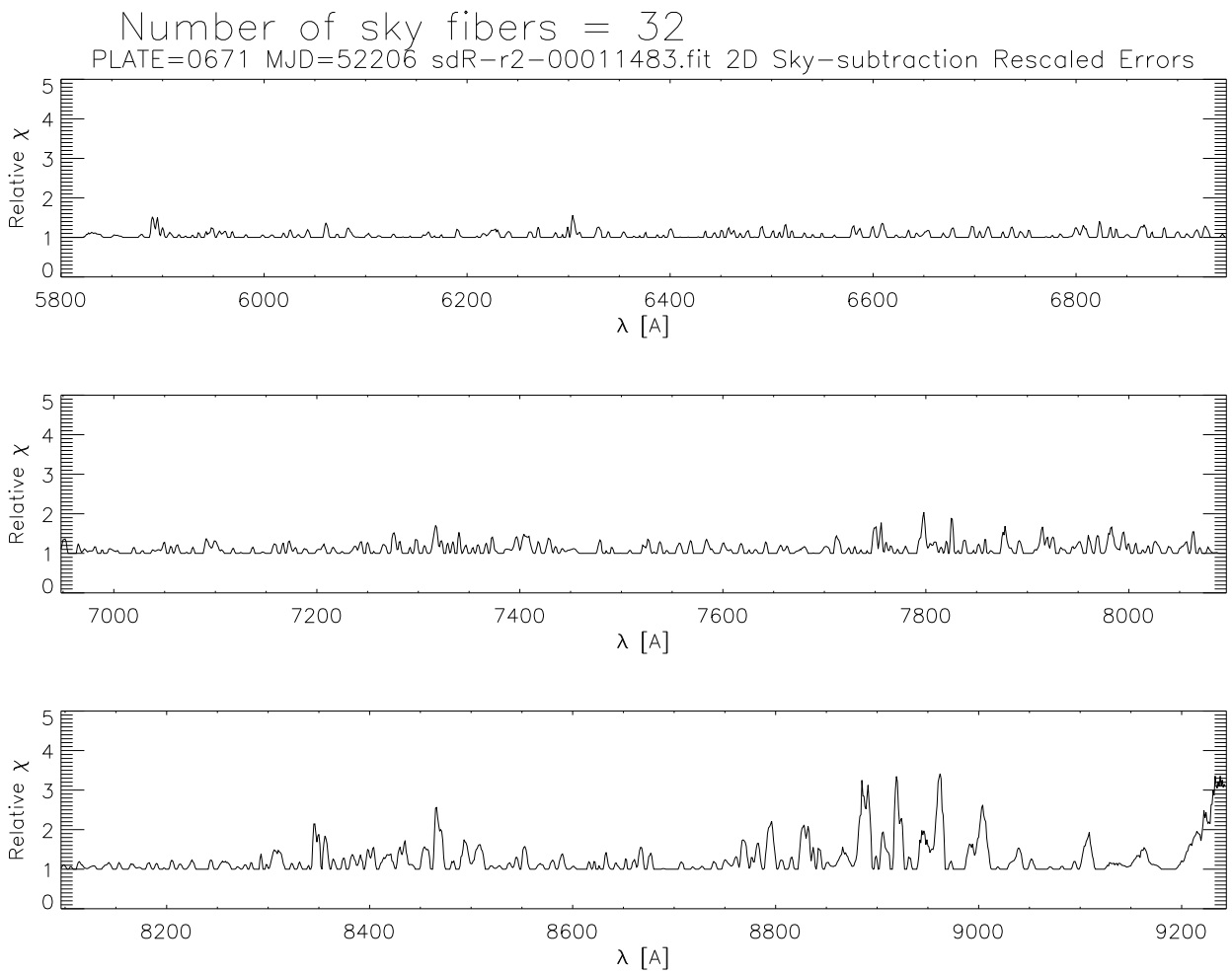

PLATE=0671 MJD=52206 sdR-r2-00011483.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

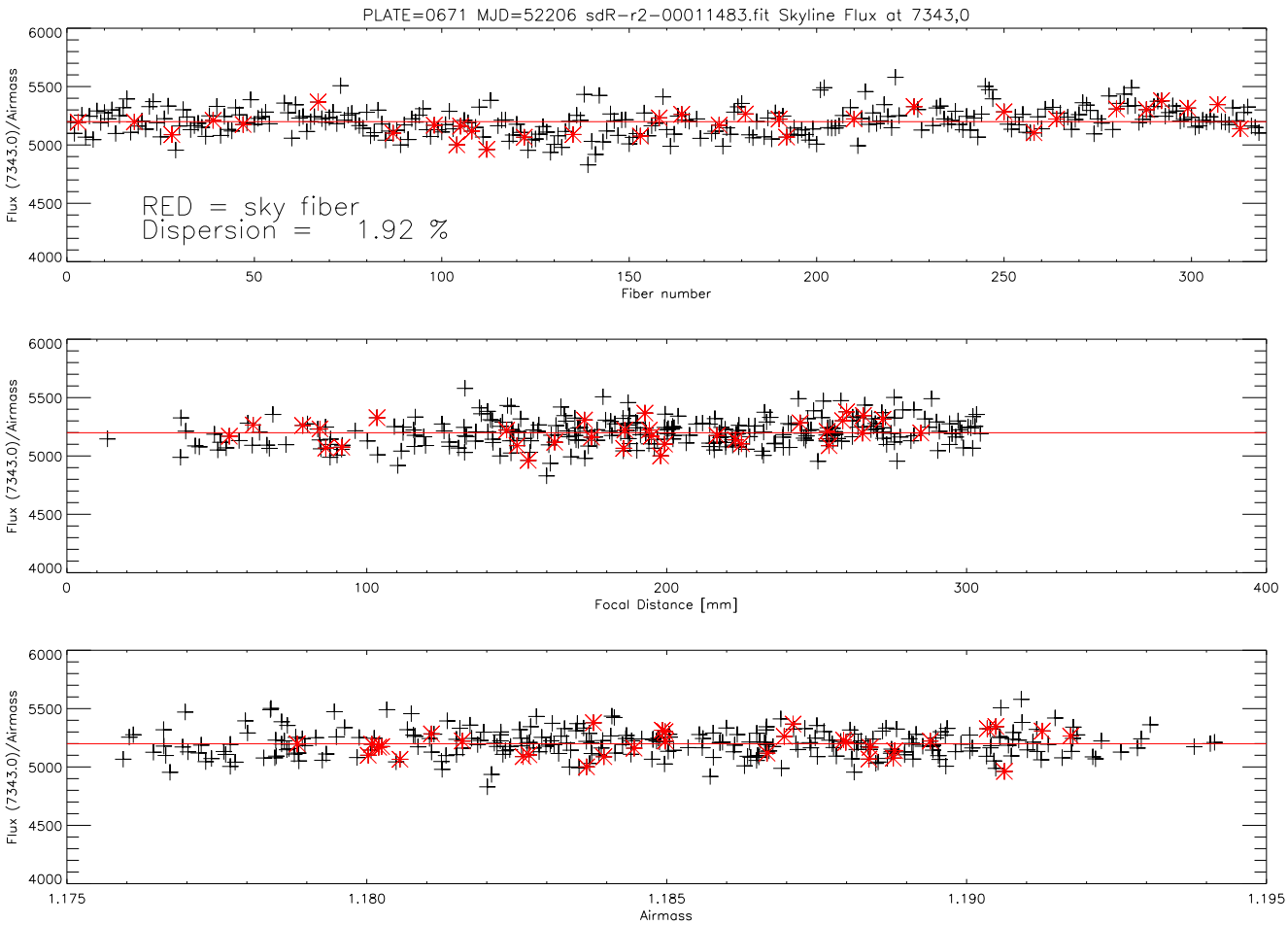

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011483.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

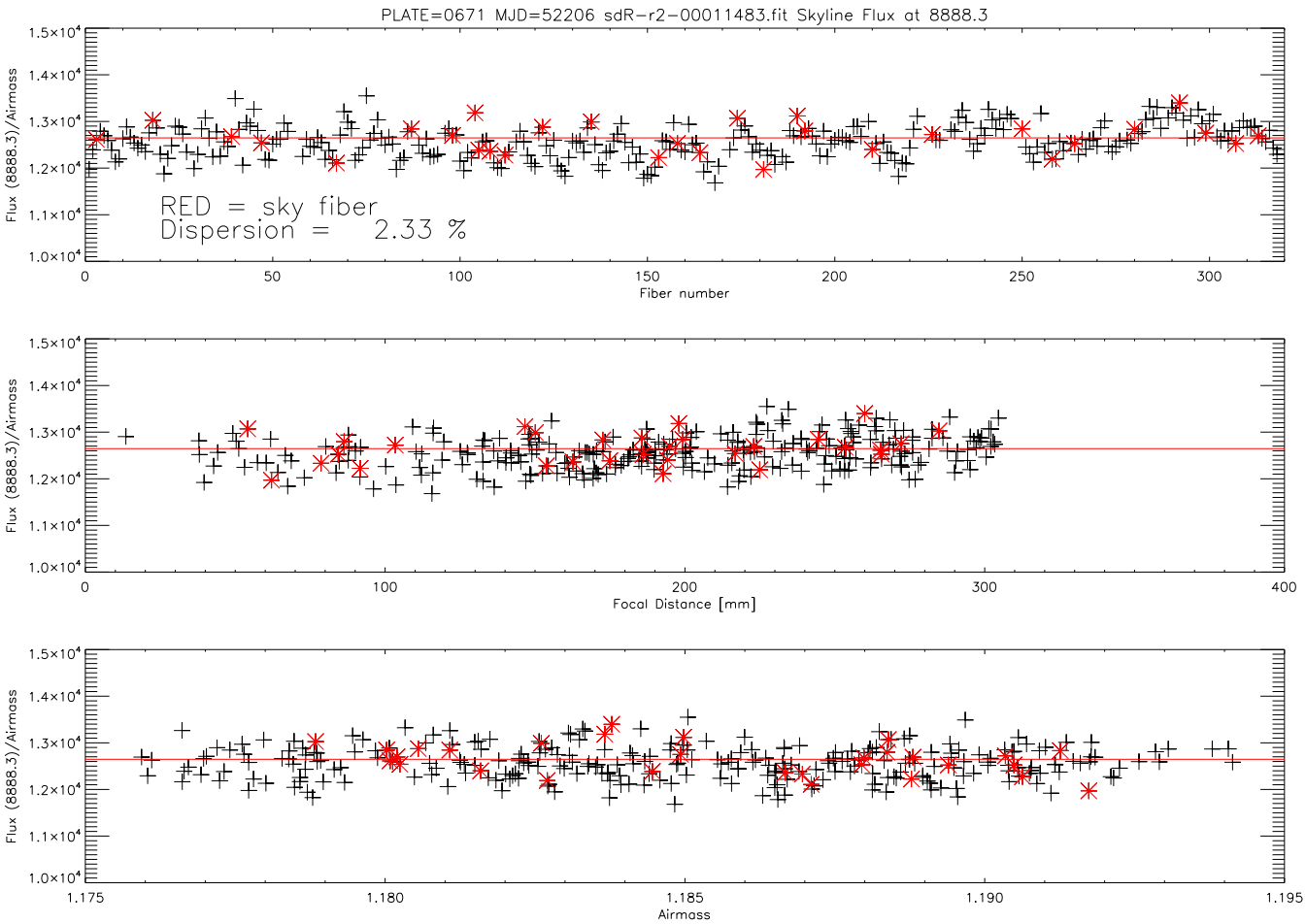

PLATE=0671 MJD=52206 sdR-r2-00011483.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

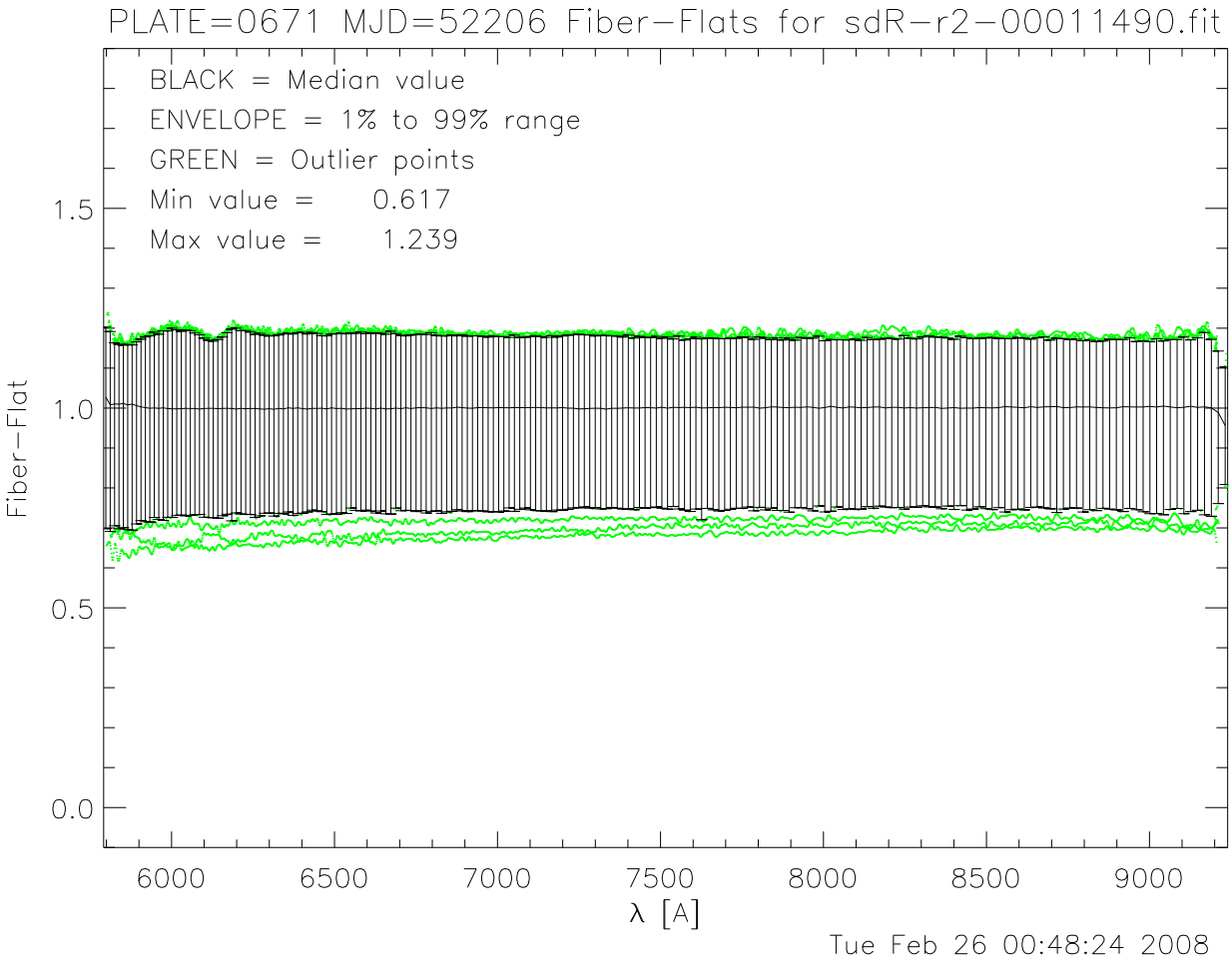

PLATE=0671 MJD=52206 sdR-r2-00011483.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

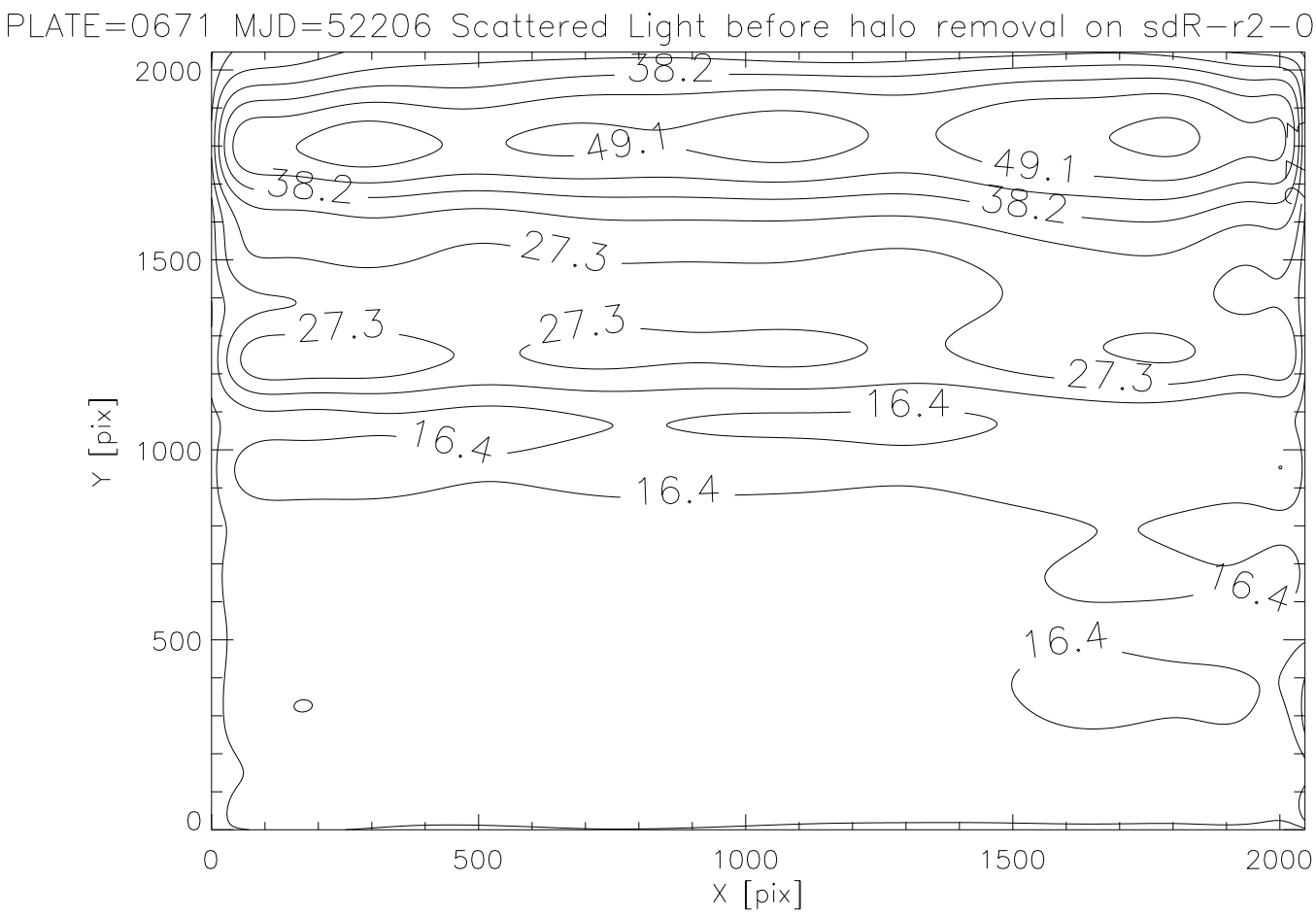

PLATE=0671 MJD=52206 sdR-r2-00011483.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

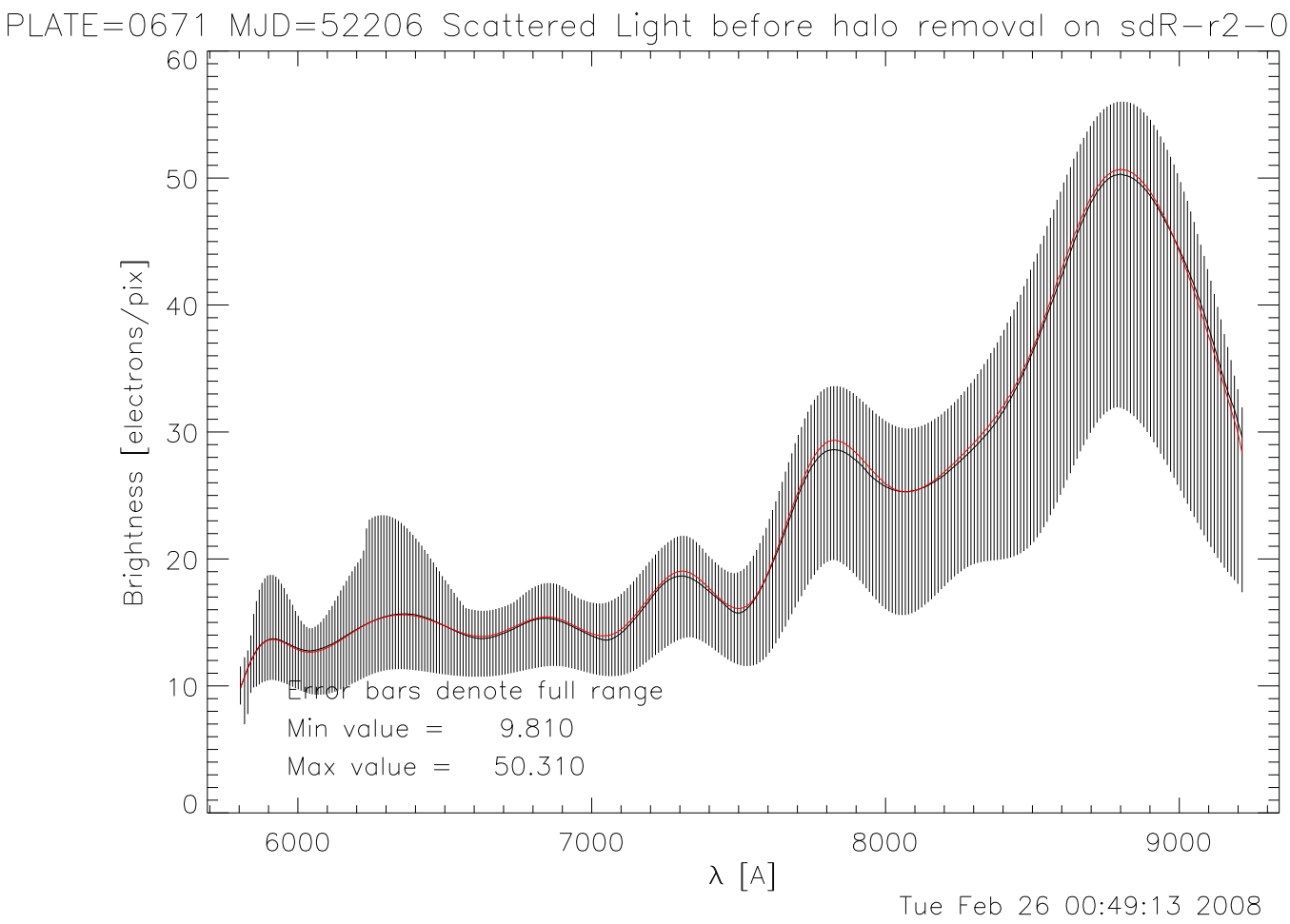

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011483.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

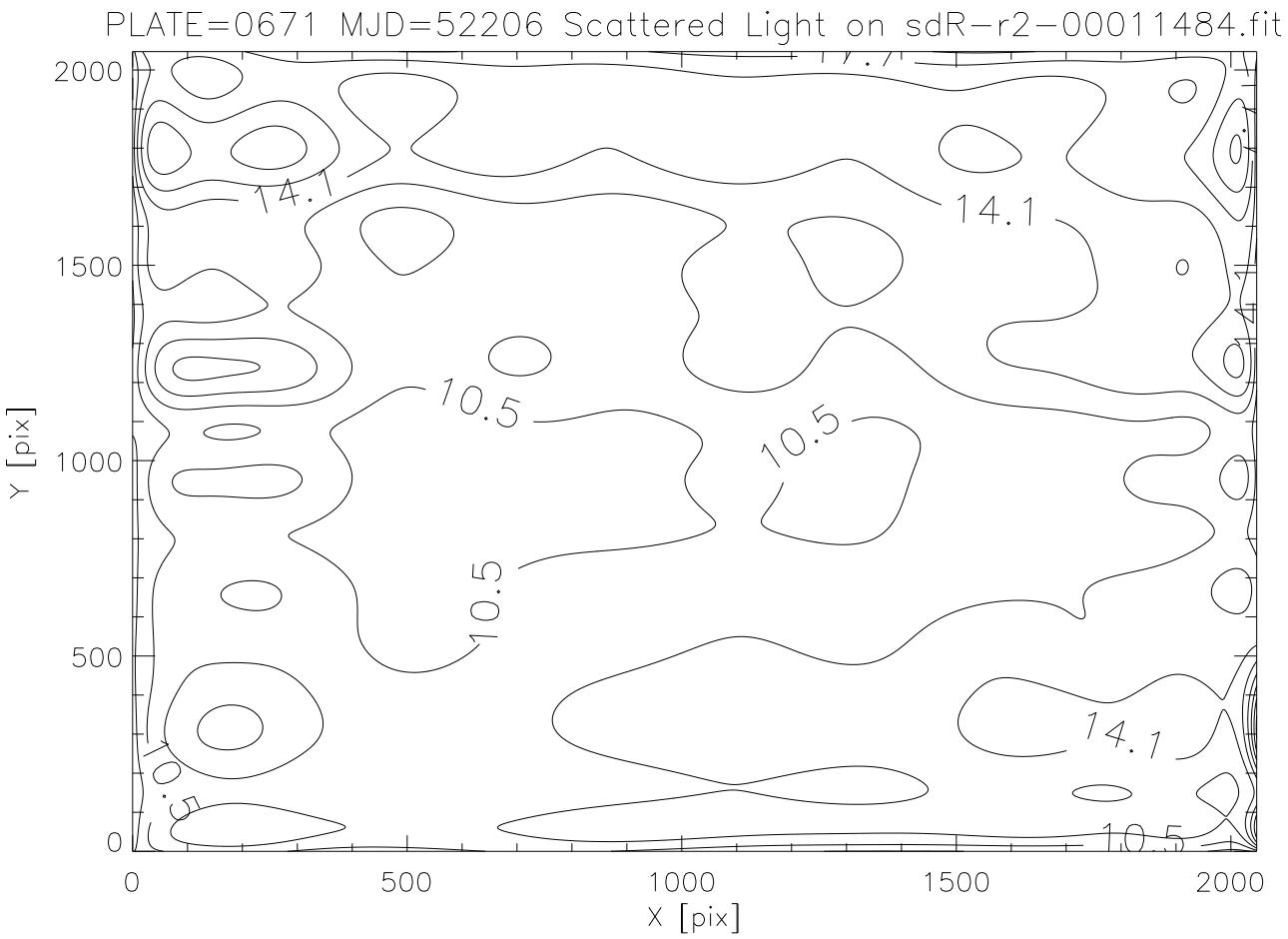

PLATE=0671 MJD=52206 sdR-r2-00011483.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.92 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

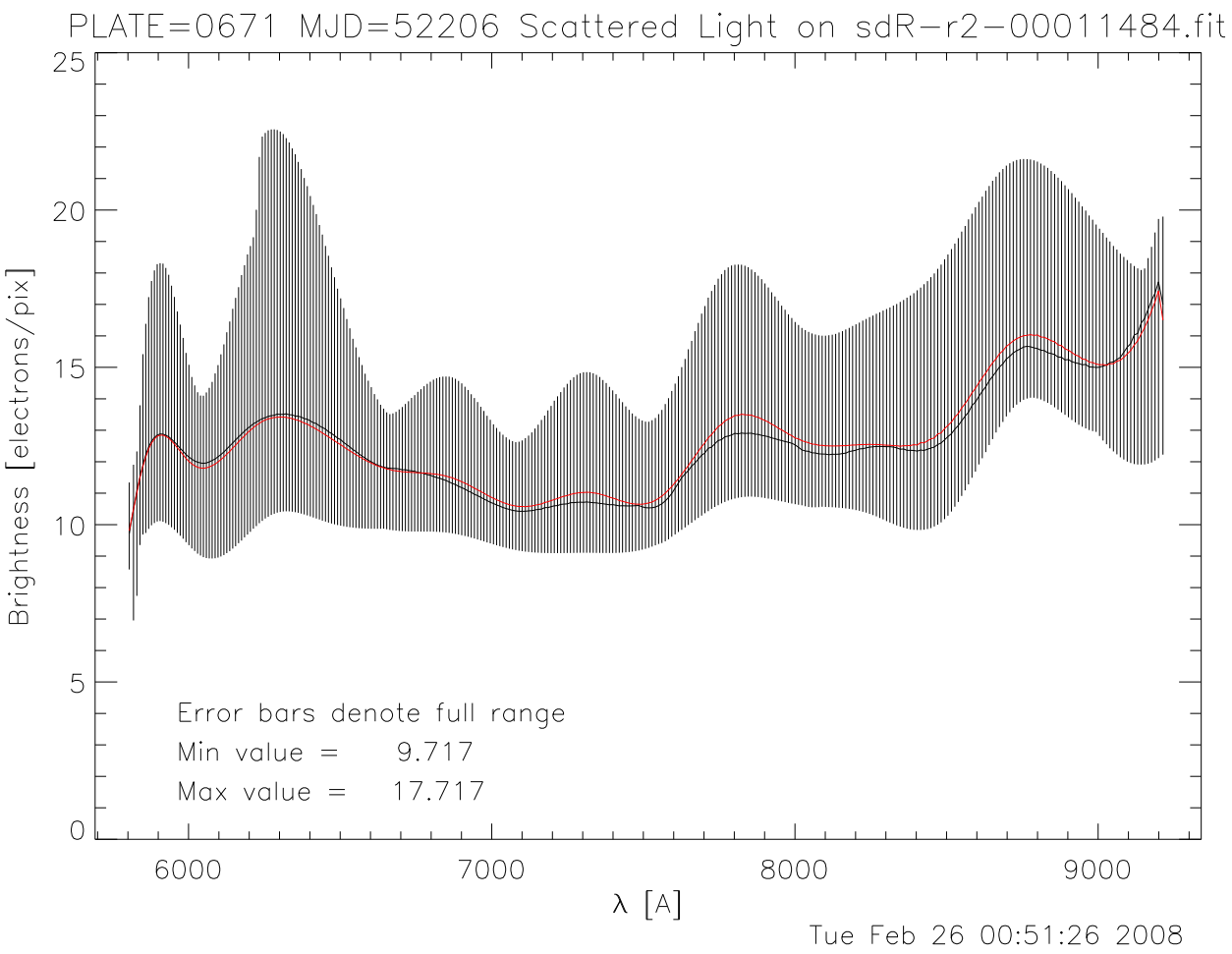

PLATE=0671 MJD=52206 sdR-r2-00011483.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.33 %
Fiber number
Focal Distance [mm]
Airmass

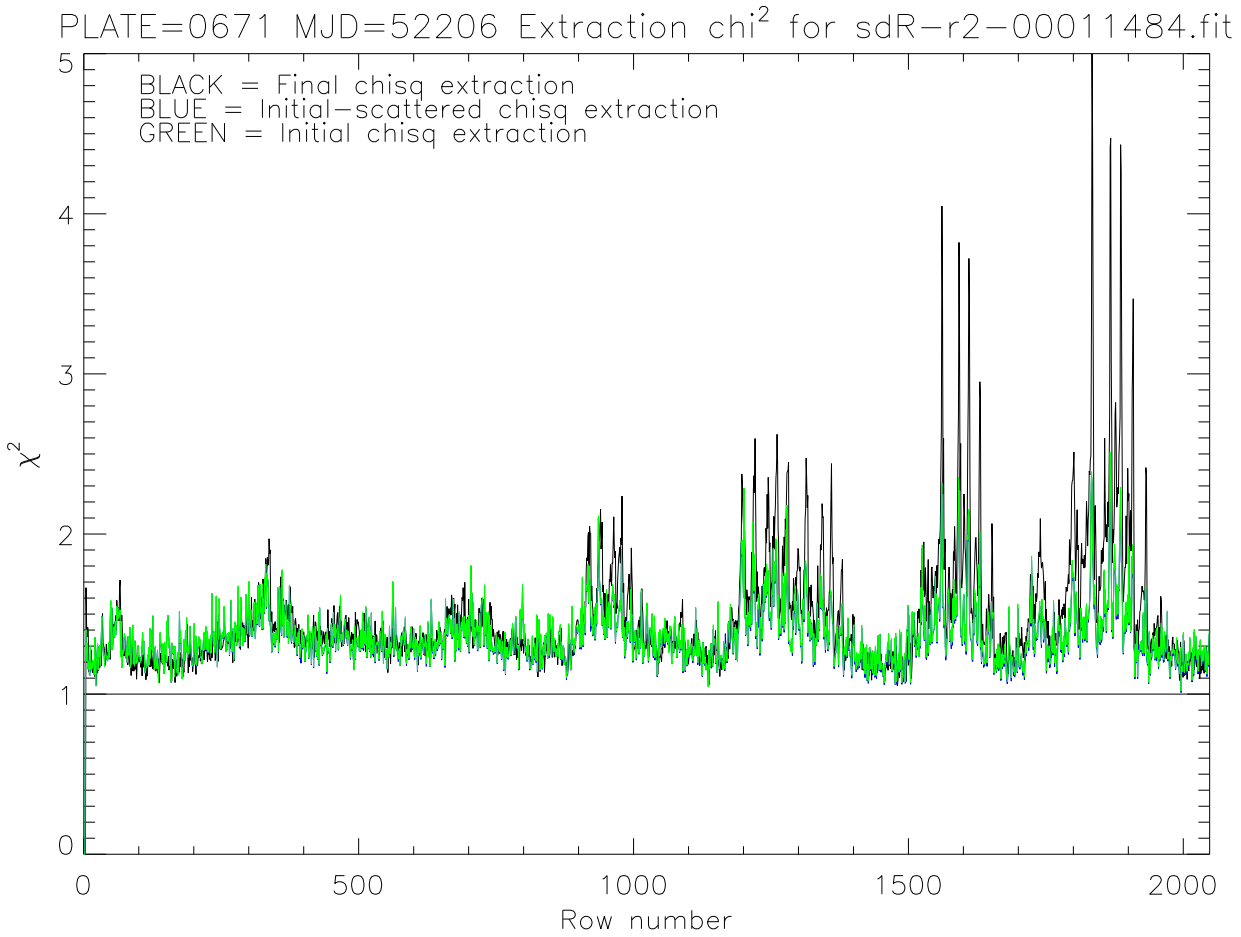

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r2−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.617
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:48:24 2008

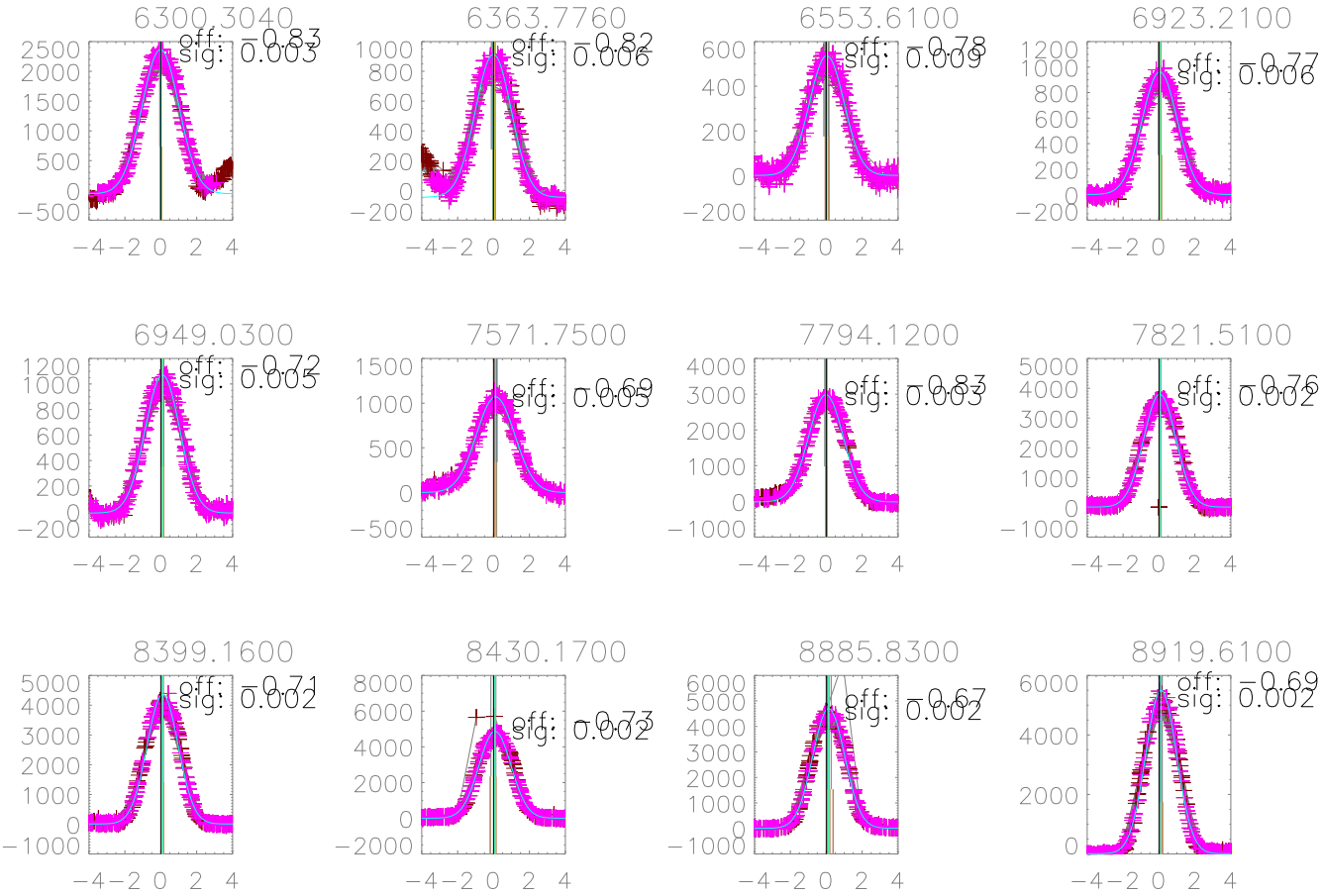

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011484.fi
38.2
49.1
49.1
38.2
38.2
27.3
27.3
27.3
27.3
16.4
16.4
16.4
16.4
16.4
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

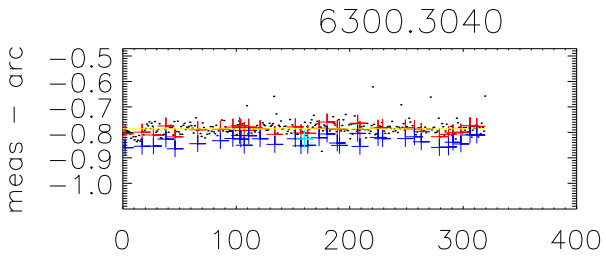

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011484.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.810
Max value = 50.310
Tue Feb 26 00:49:13 2008

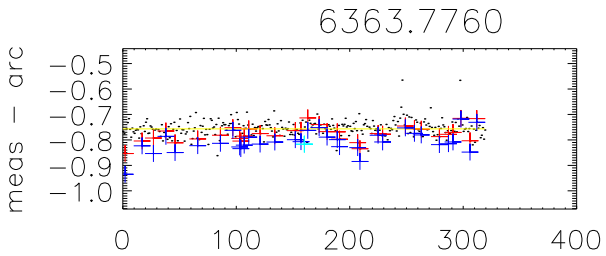

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011484.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
14.1
10.5

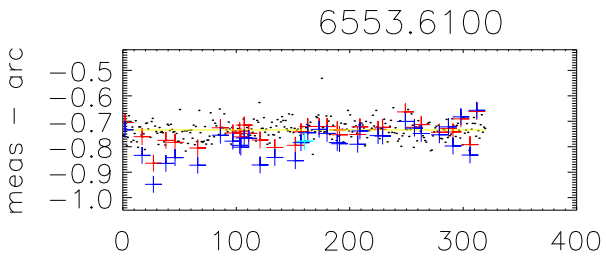

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011484.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.717
Max value = 17.717
Tue Feb 26 00:51:26 2008

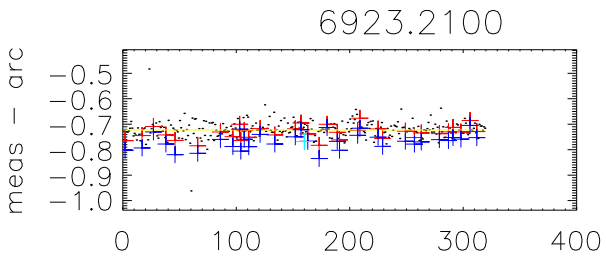

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r2−00011484.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

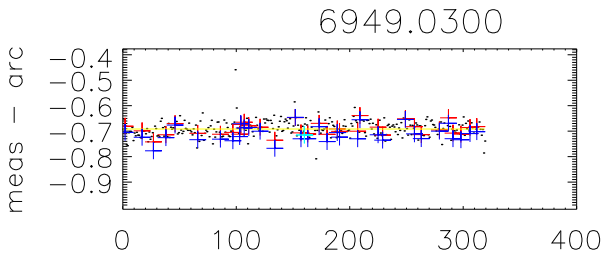

6300.3040
off: −0.83
sig: 0.003
6363.7760
off: −0.82
sig: 0.006
6553.6100
off: −0.78
sig: 0.009
6923.2100
off: −0.77
sig: 0.006
6949.0300
off: −0.72
sig: 0.005
7571.7500
off: −0.69
sig: 0.005
7794.1200
off: −0.83
sig: 0.003
7821.5100
off: −0.76
sig: 0.002
8399.1600
off: −0.71
sig: 0.002
8430.1700
off: −0.73
sig: 0.002
8885.8300
off: −0.67
sig: 0.002
8919.6100
off: −0.69
sig: 0.002

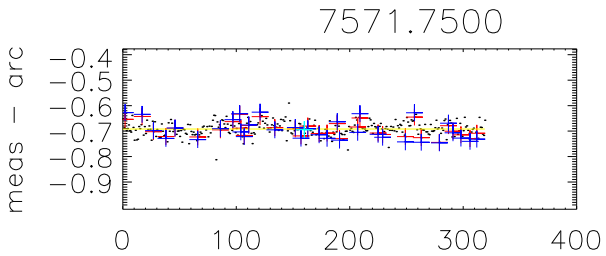

6300.3040
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

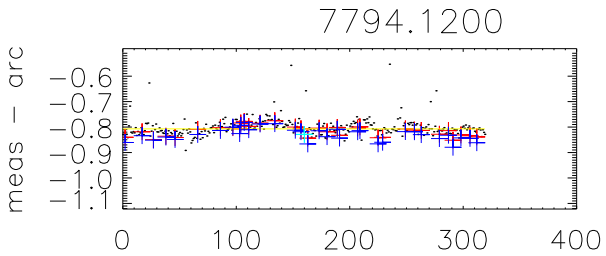

6363.7760
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

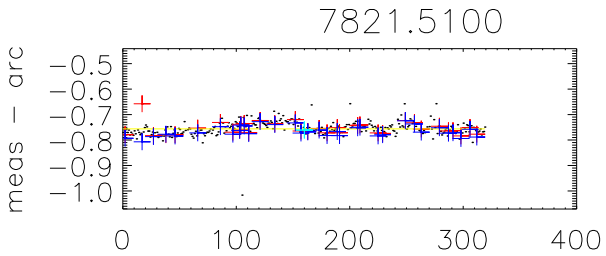

6553.6100
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

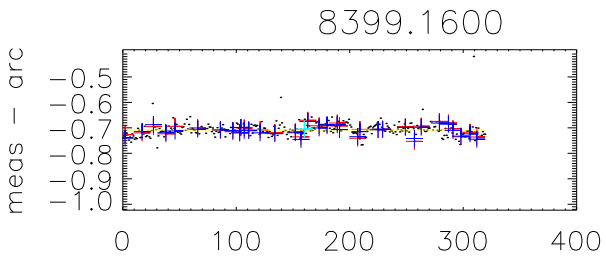

6923.2100
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

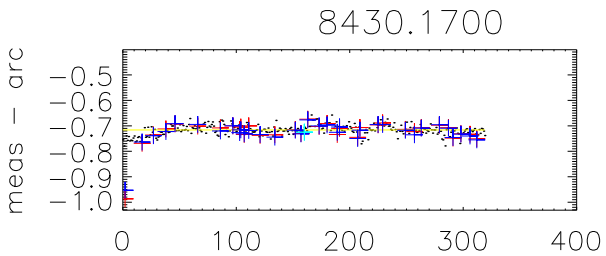

6949.0300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

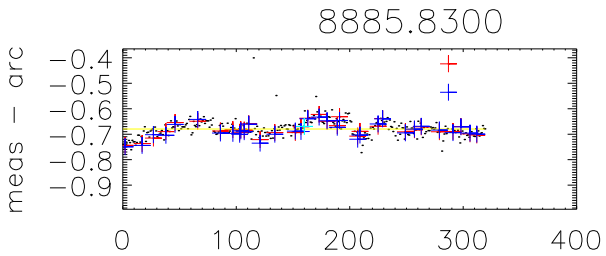

7571.7500
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

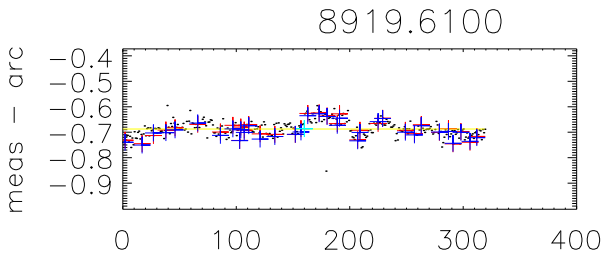

7794.1200
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

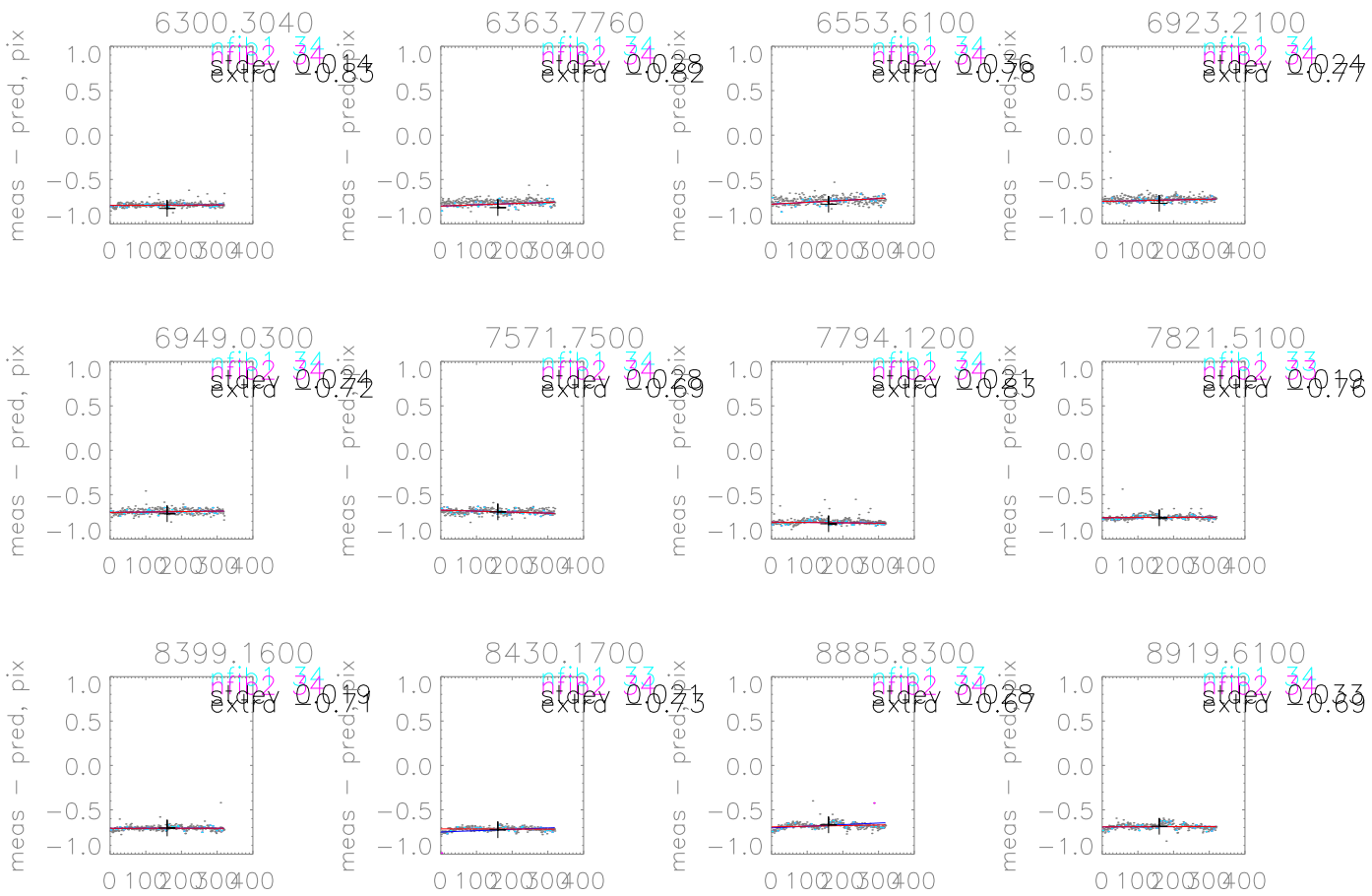

7821.5100
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

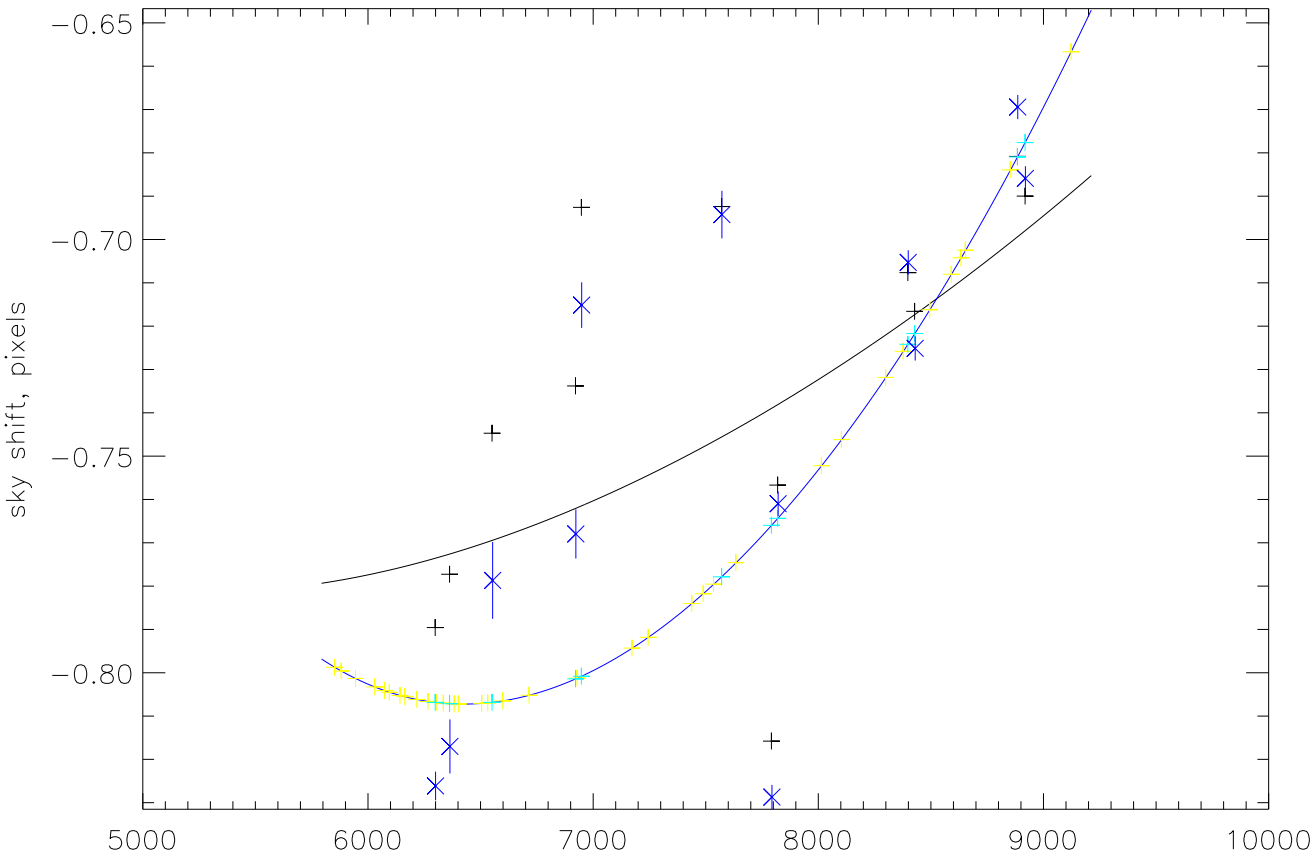

8399.1600
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

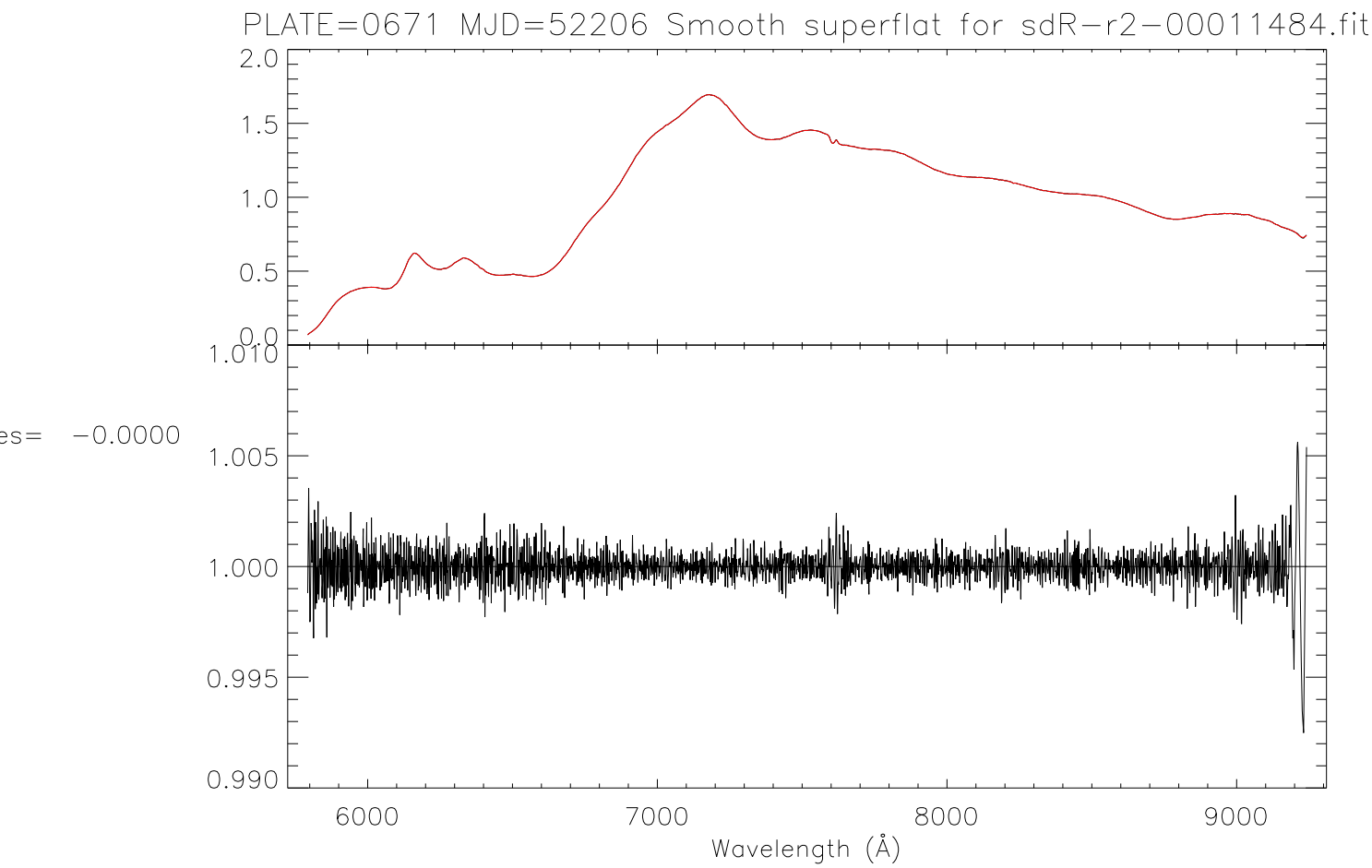

8430.1700
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

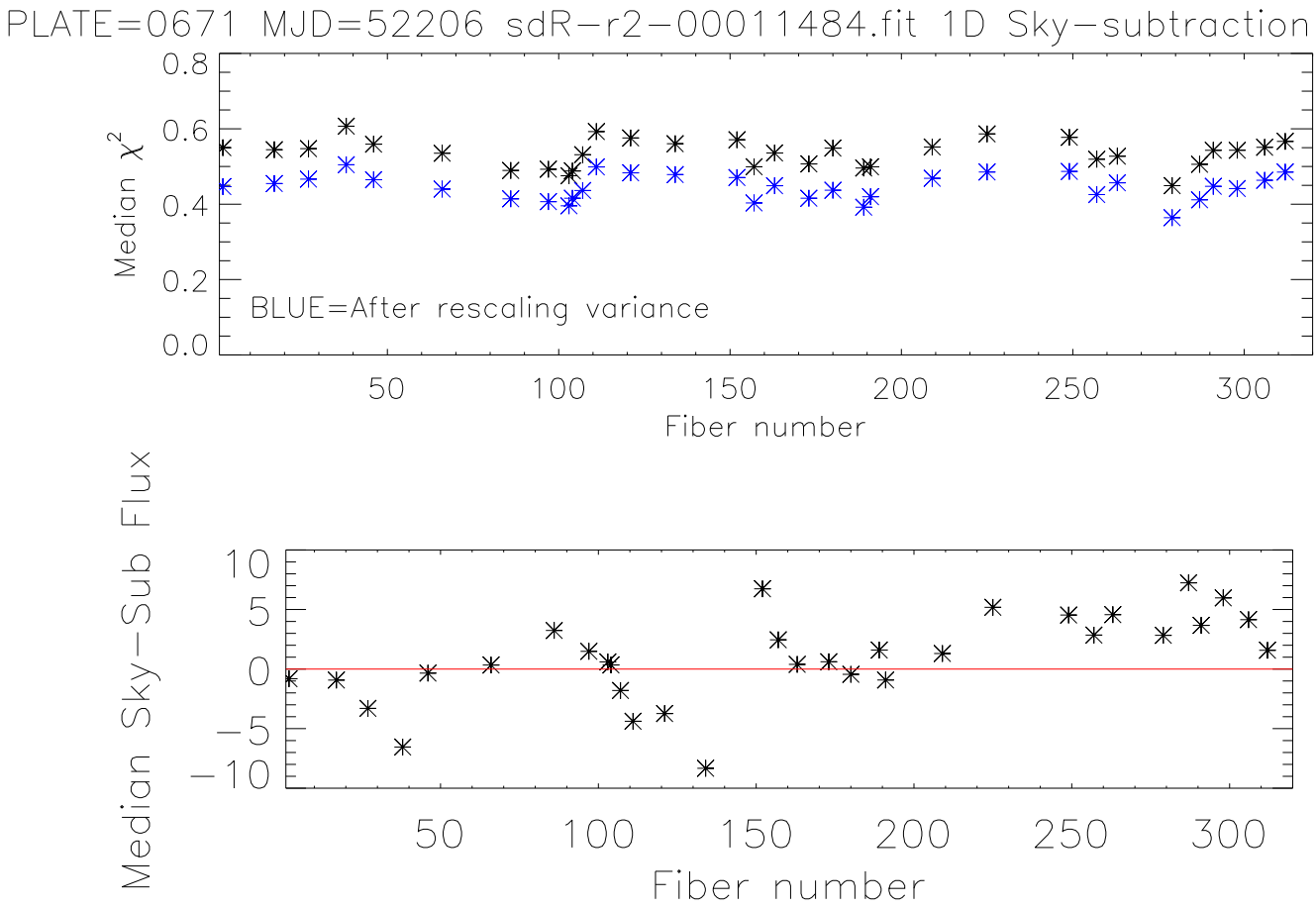

8885.8300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

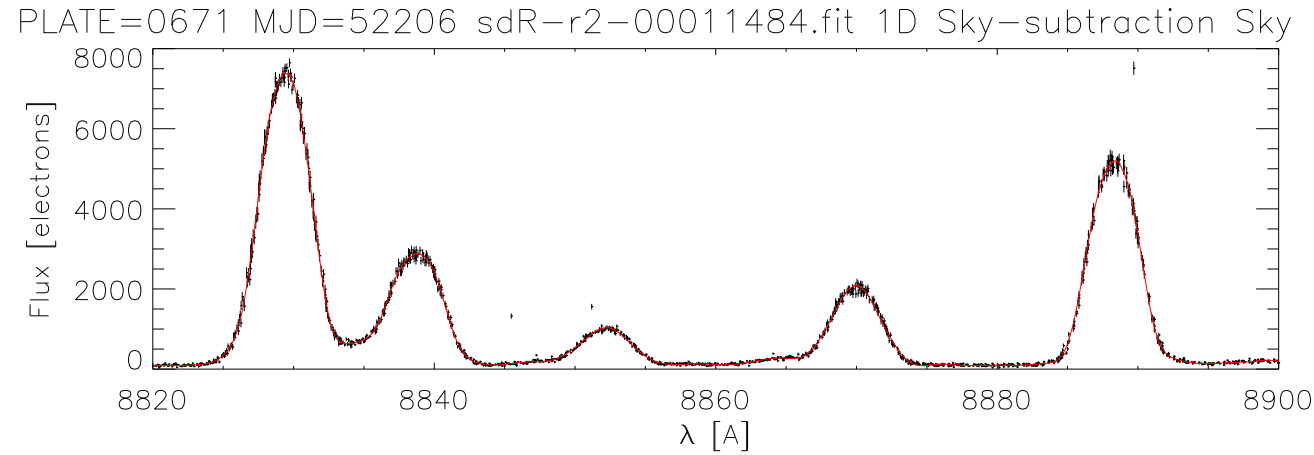

8919.6100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

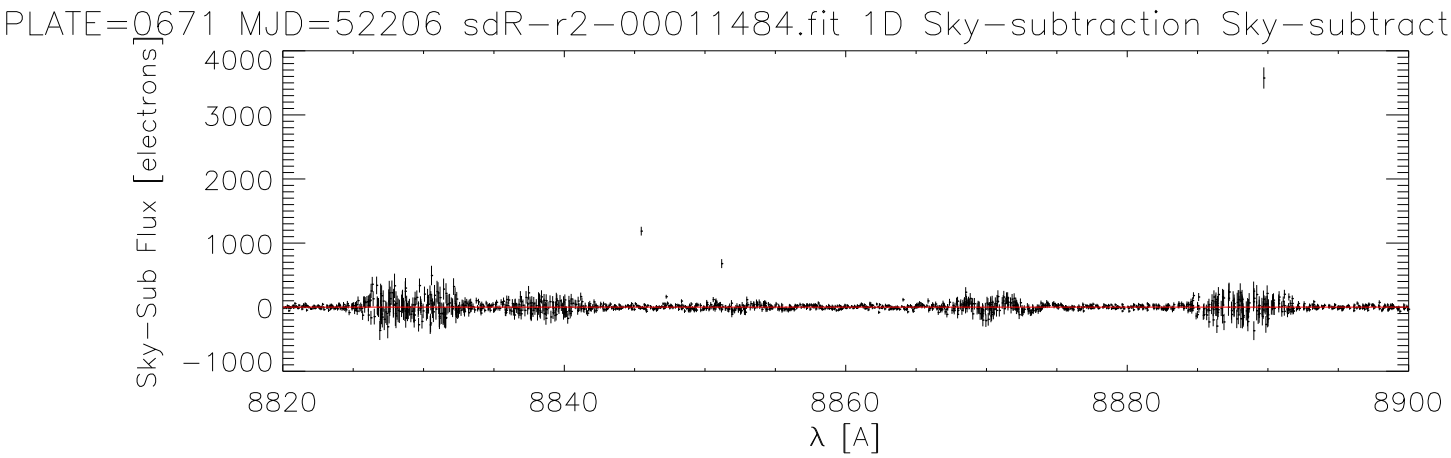

6300.3040
mfib1 34
mfib2 34
stdev 0.024
extra -0.83
6363.7760
mfib1 34
mfib2 34
stdev 0.028
extra -0.82
6553.6100
mfib1 34
mfib2 34
stdev 0.036
extra -0.78
6923.2100
mfib1 34
mfib2 34
stdev 0.024
extra -0.77
6949.0300
mfib1 34
mfib2 34
stdev 0.024
extra -0.72
7571.7500
mfib1 34
mfib2 34
stdev 0.028
extra -0.69
7794.1200
mfib1 34
mfib2 34
stdev 0.021
extra -0.83
7821.5100
mfib1 33
mfib2 34
stdev 0.019
extra -0.78
8399.1600
mfib1 34
mfib2 34
stdev 0.019
extra -0.71
8430.1700
mfib1 33
mfib2 34
stdev 0.021
extra -0.73
8885.8300
mfib1 33
mfib2 34
stdev 0.028
extra -0.67
8919.6100
mfib1 34
mfib2 34
stdev 0.033
extra -0.69
meas - pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

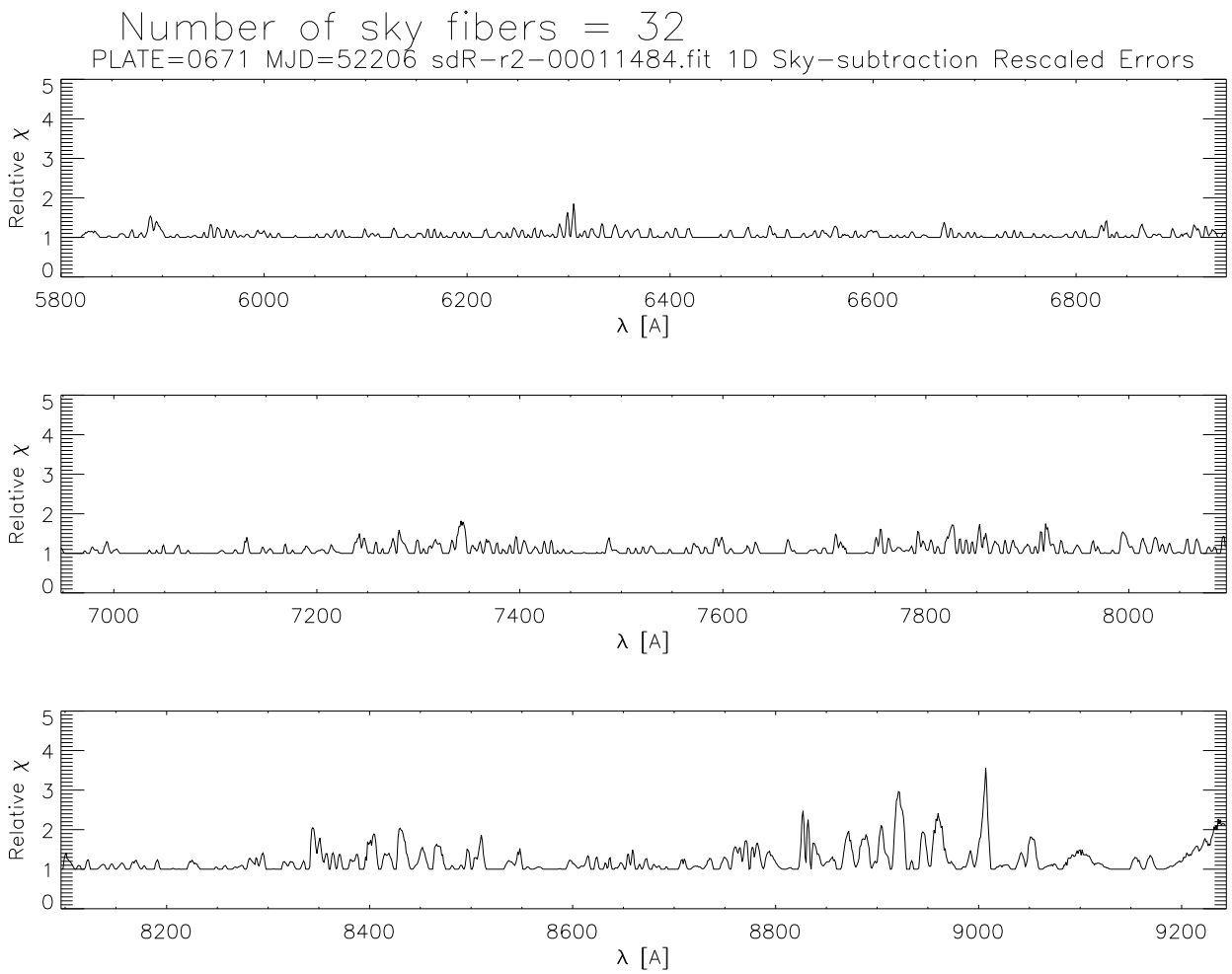

−0.65
−0.70
−0.75
−0.80
sky shift, pixels
5000
6000
7000
8000
9000
10000

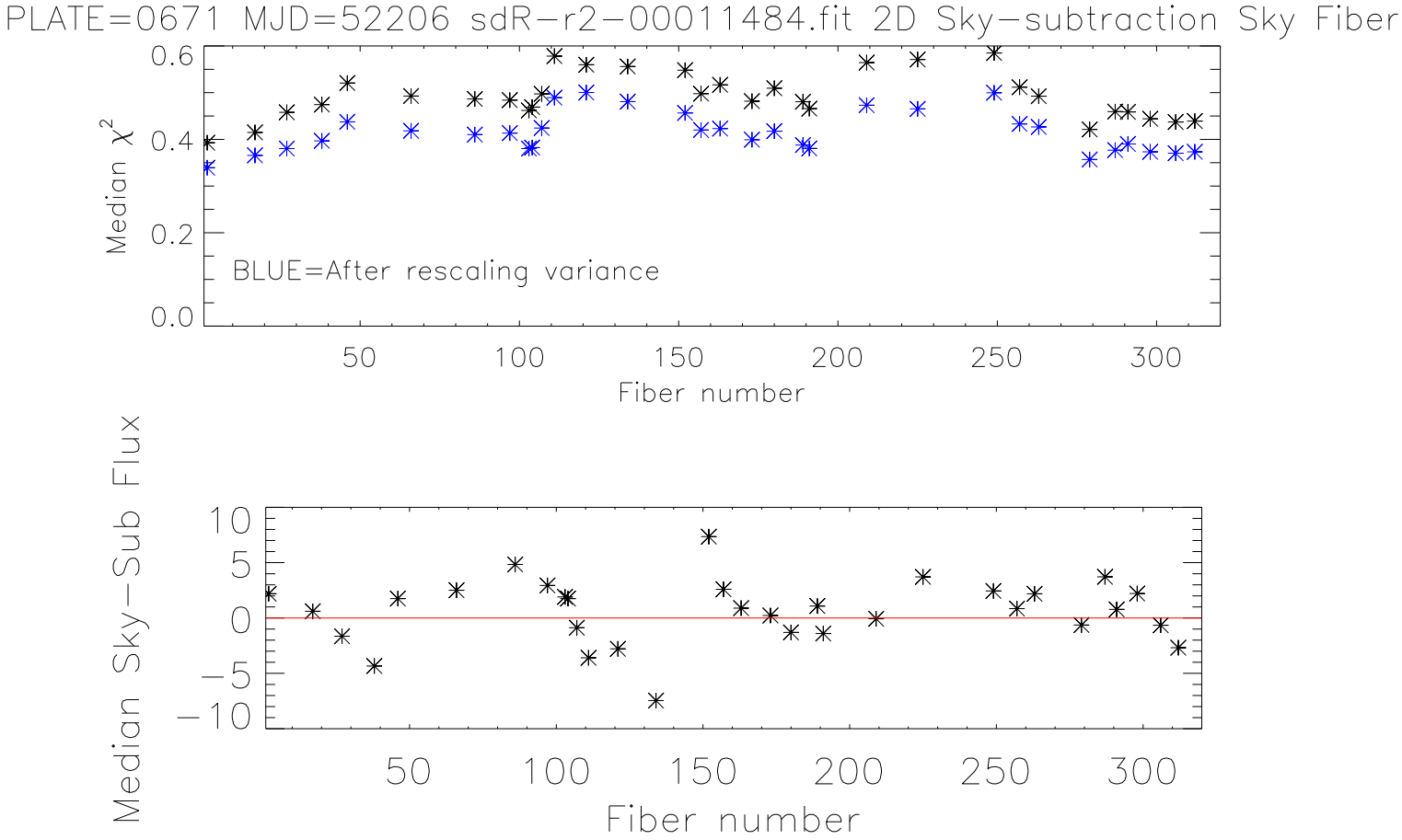

PLATE=0671 MJD=52206 Smooth superflat for sdR-r2-00011484.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

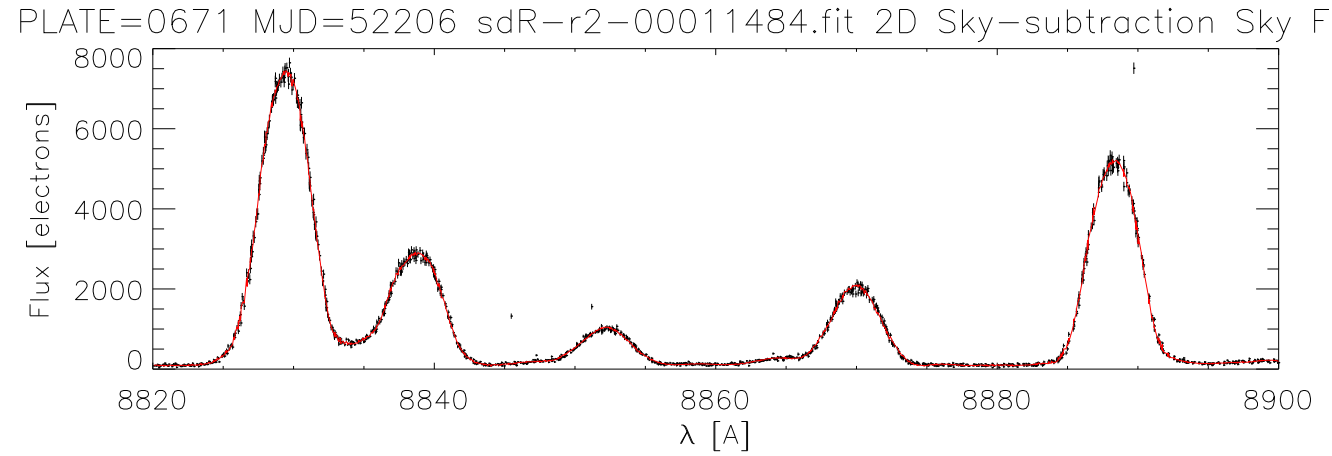

PLATE=0671 MJD=52206 sdR-r2-00011484.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

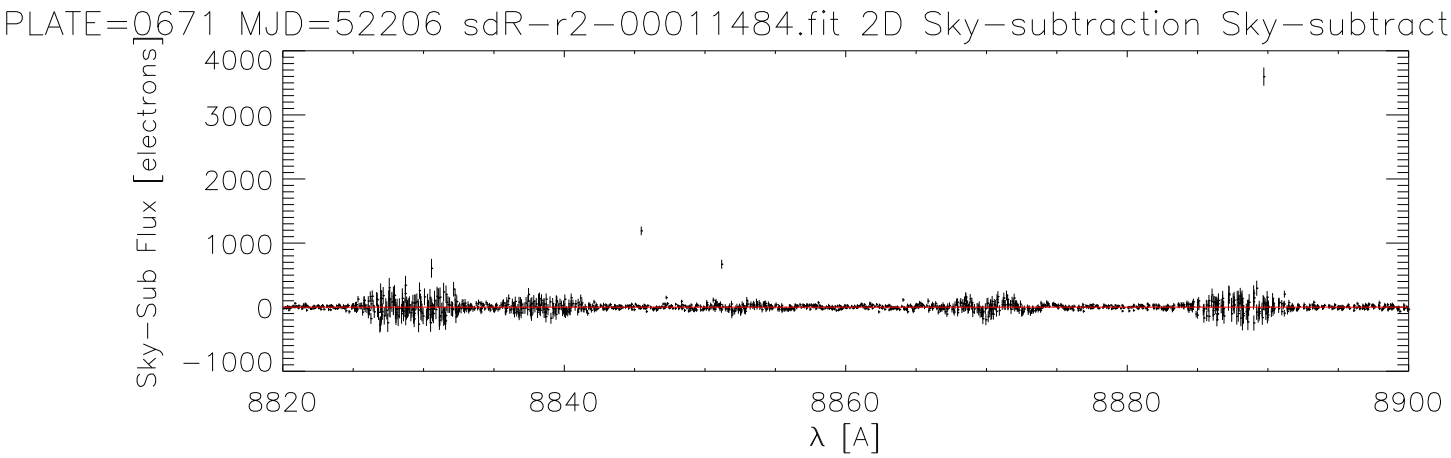

PLATE=0671 MJD=52206 sdR-r2-00011484.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

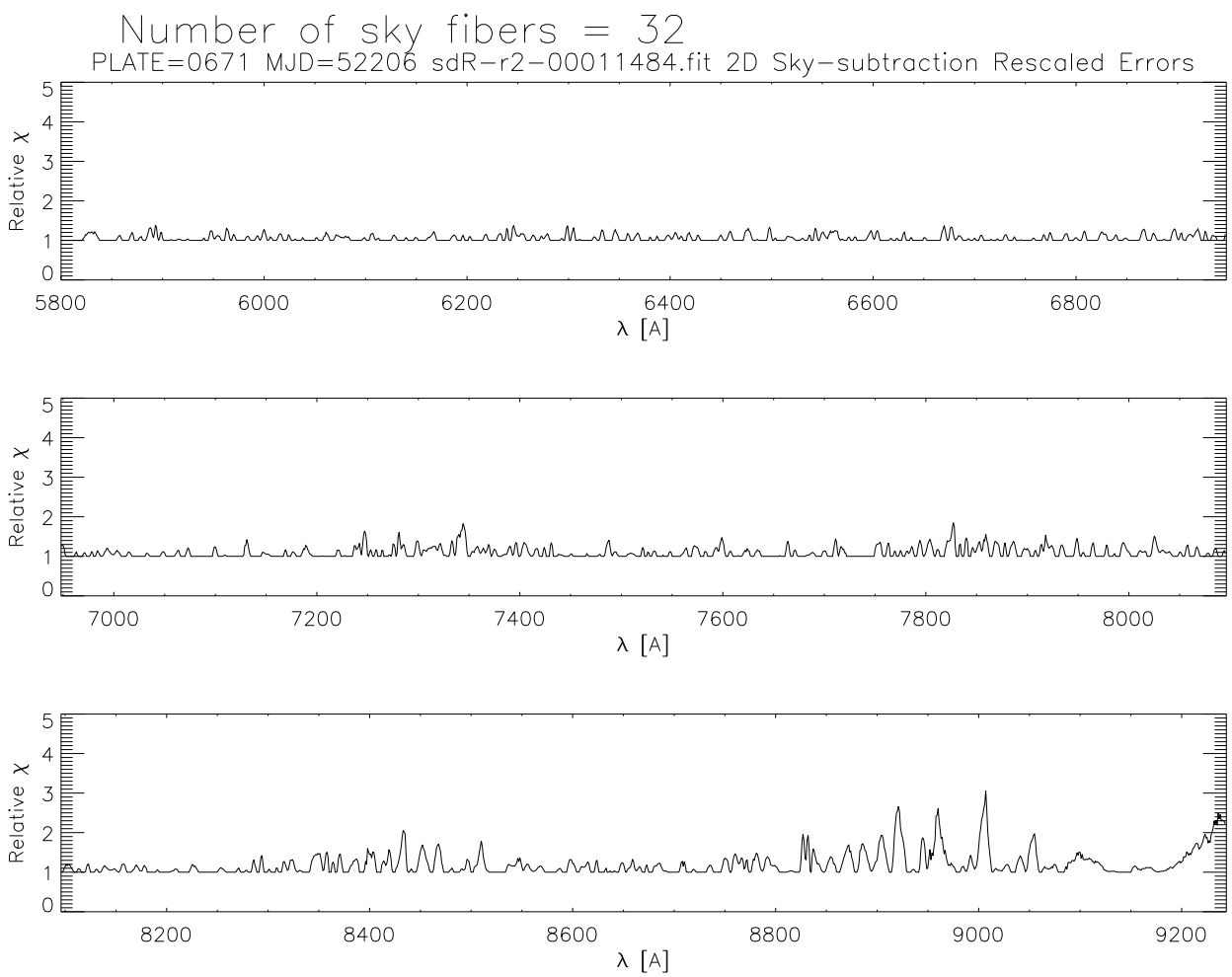

PLATE=0671 MJD=52206 sdR-r2-00011484.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

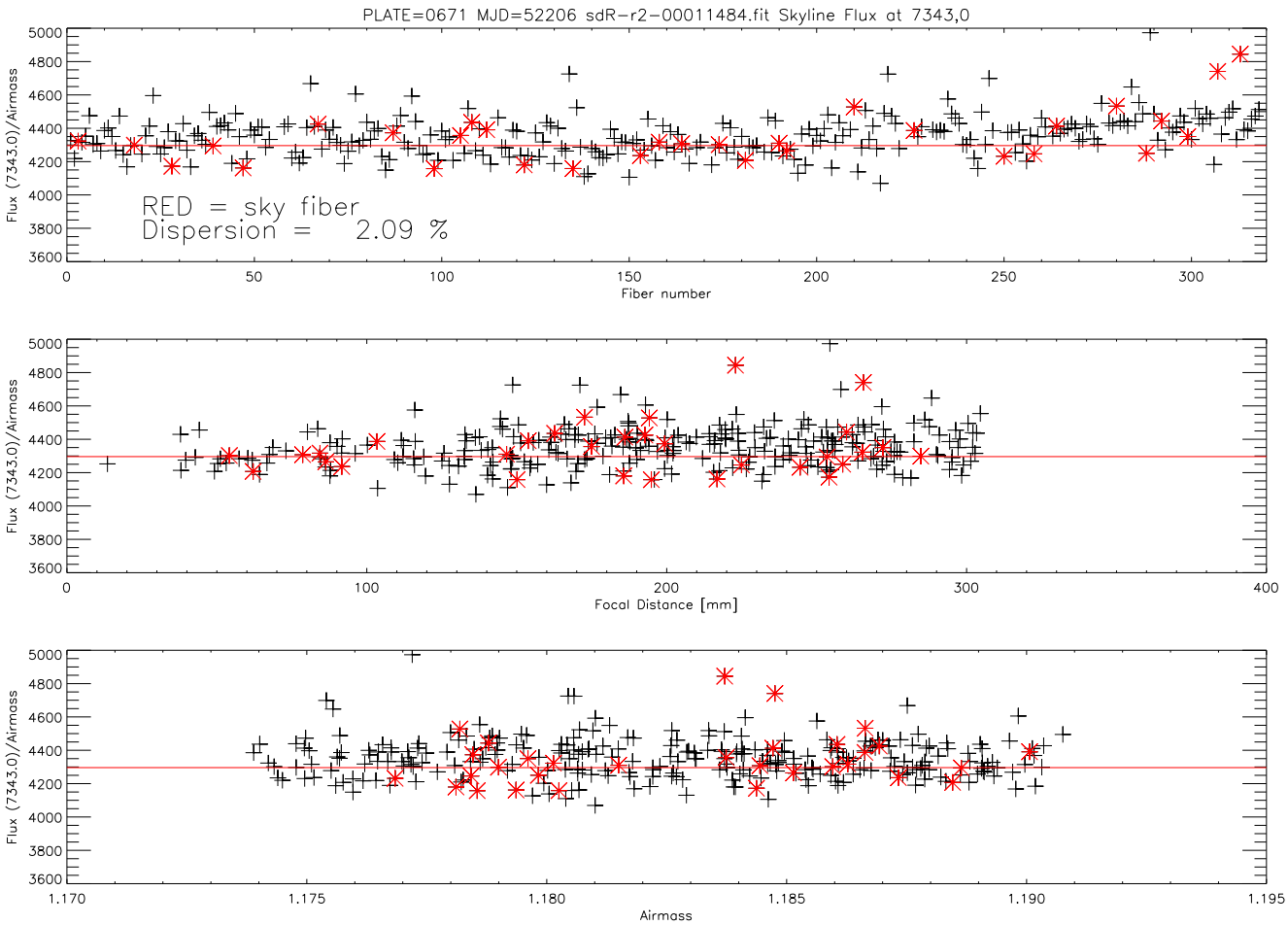

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011484.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

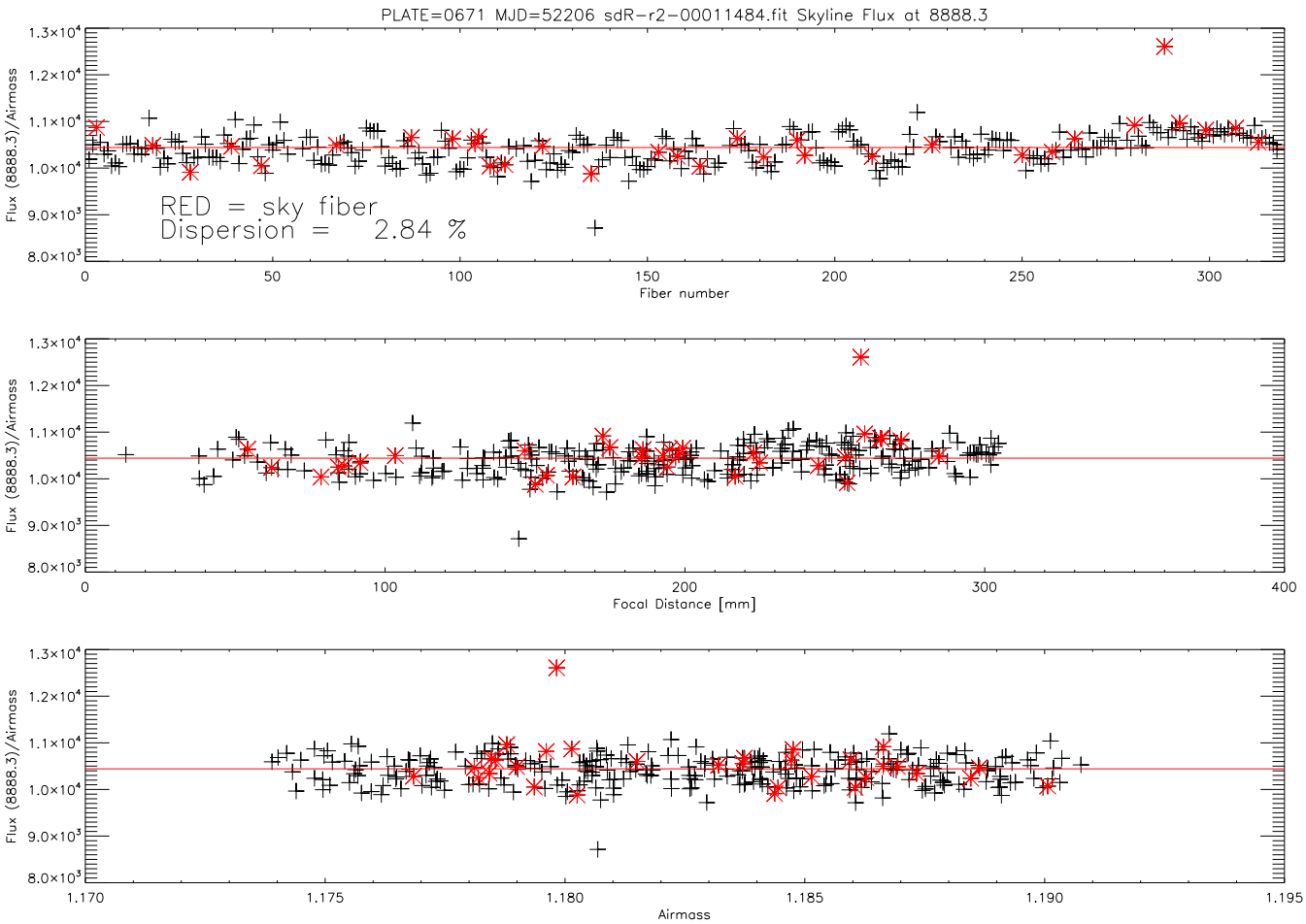

PLATE=0671 MJD=52206 sdR-r2-00011484.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

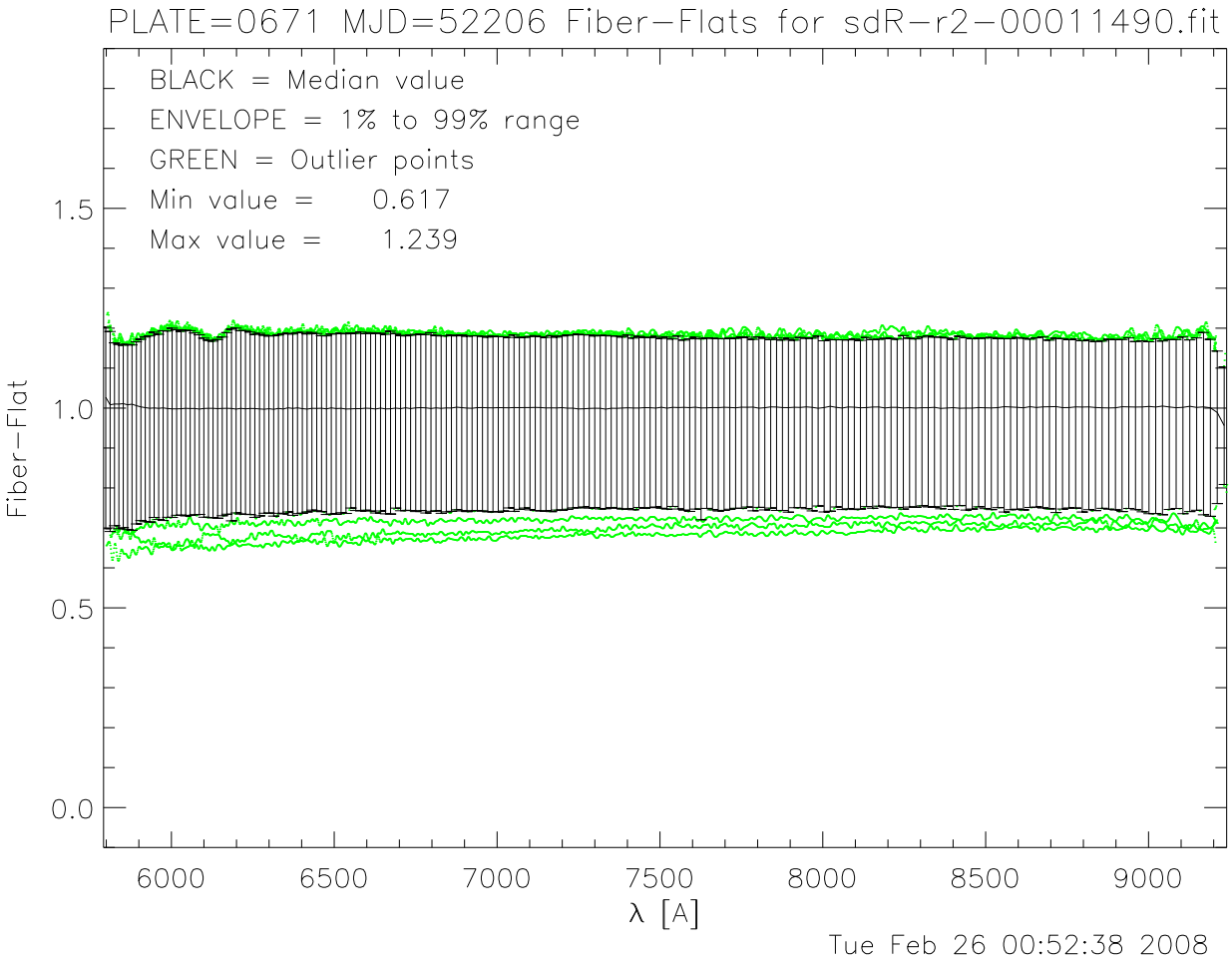

PLATE=0671 MJD=52206 sdR-r2-00011484.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

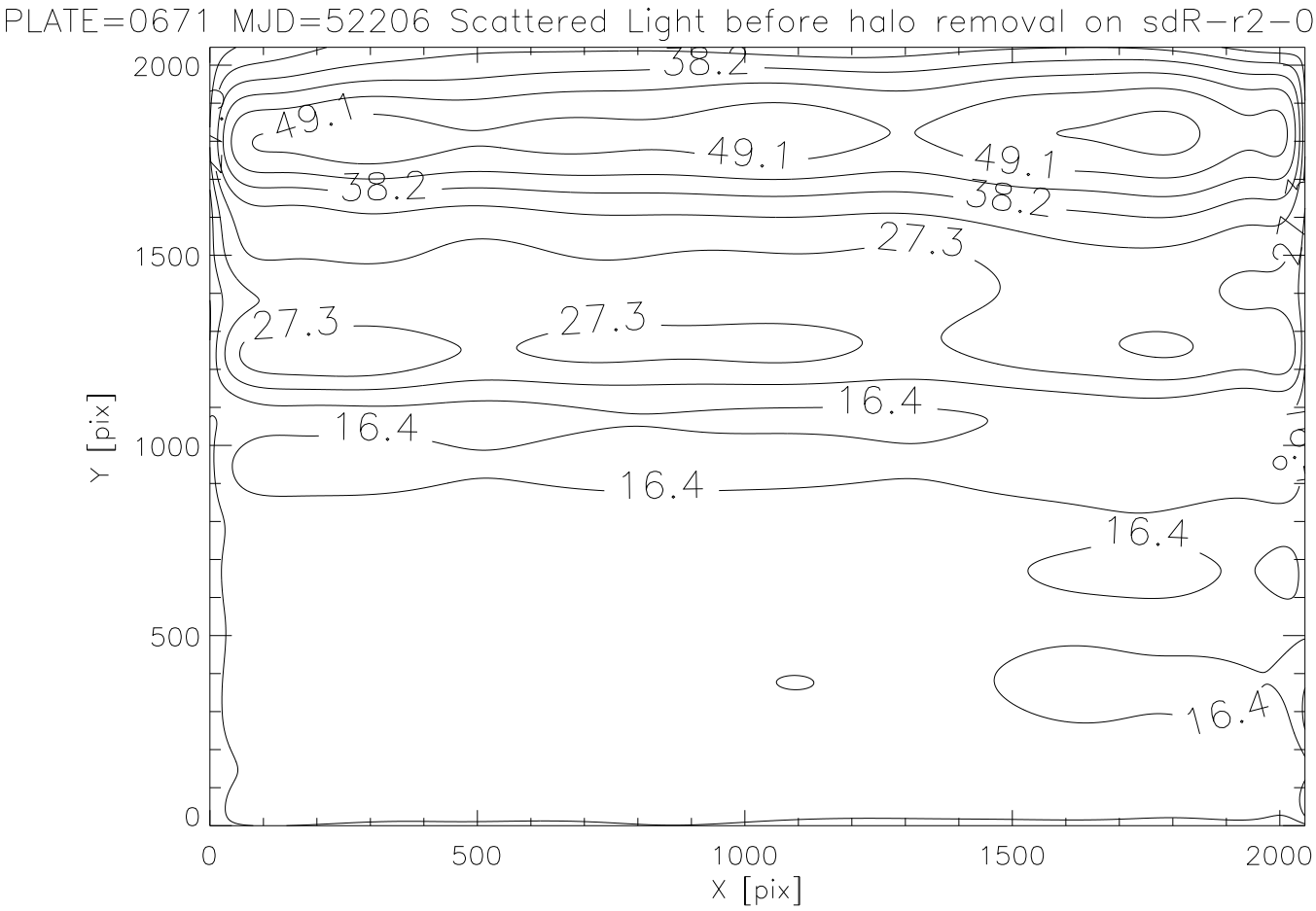

PLATE=0671 MJD=52206 sdR-r2-00011484.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

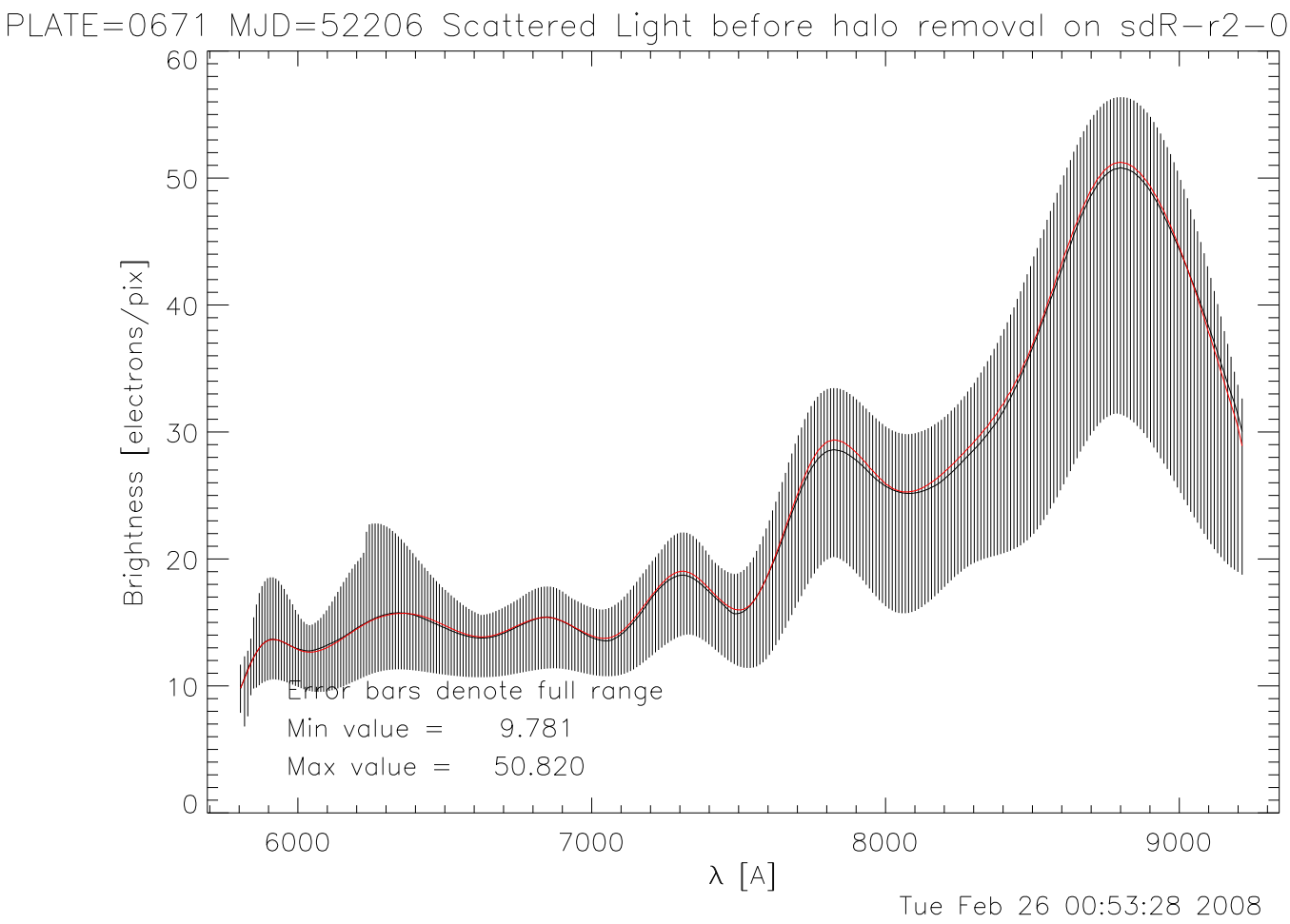

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011484.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

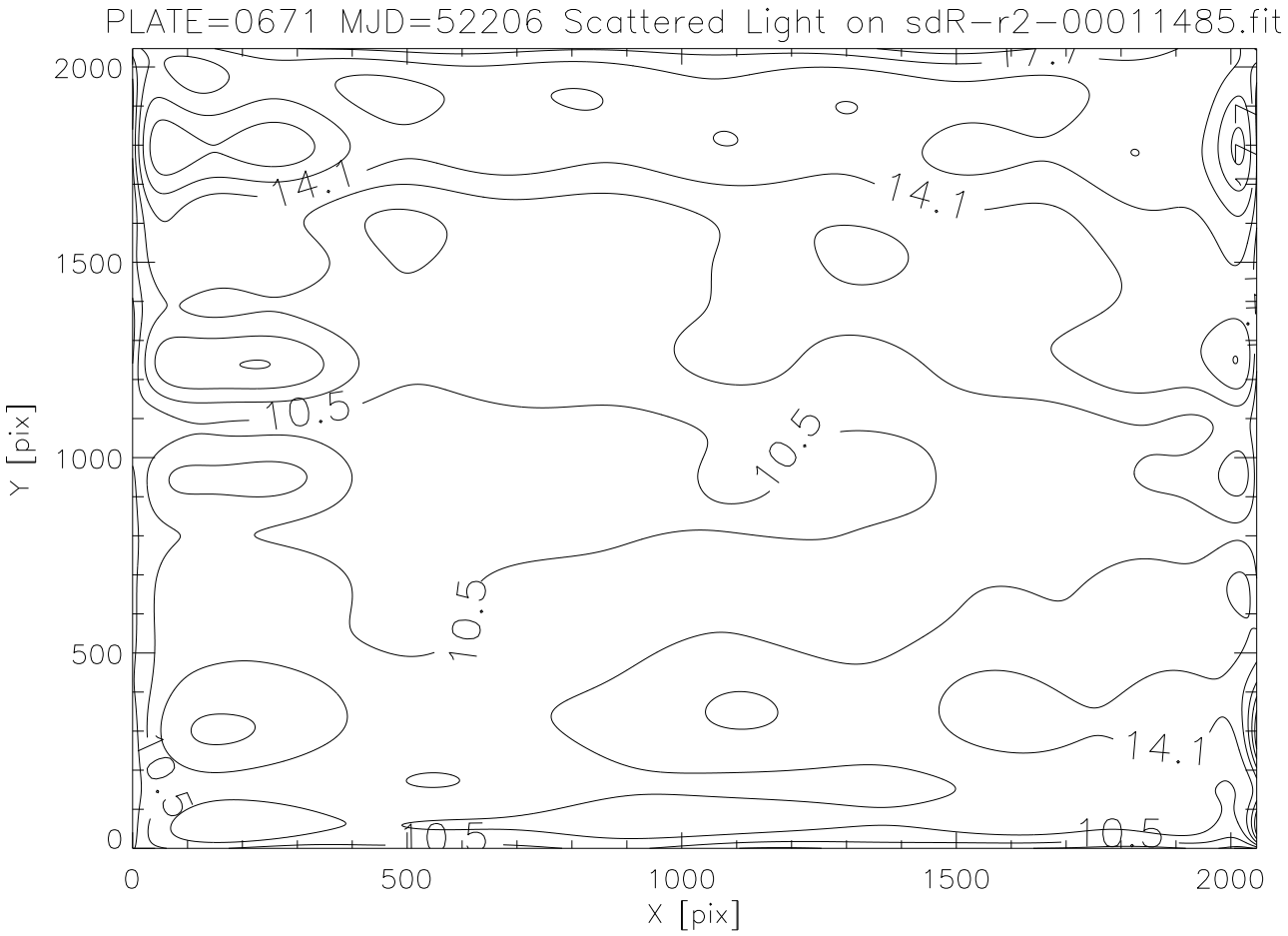

PLATE=0671 MJD=52206 sdR-r2-00011484.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.09 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

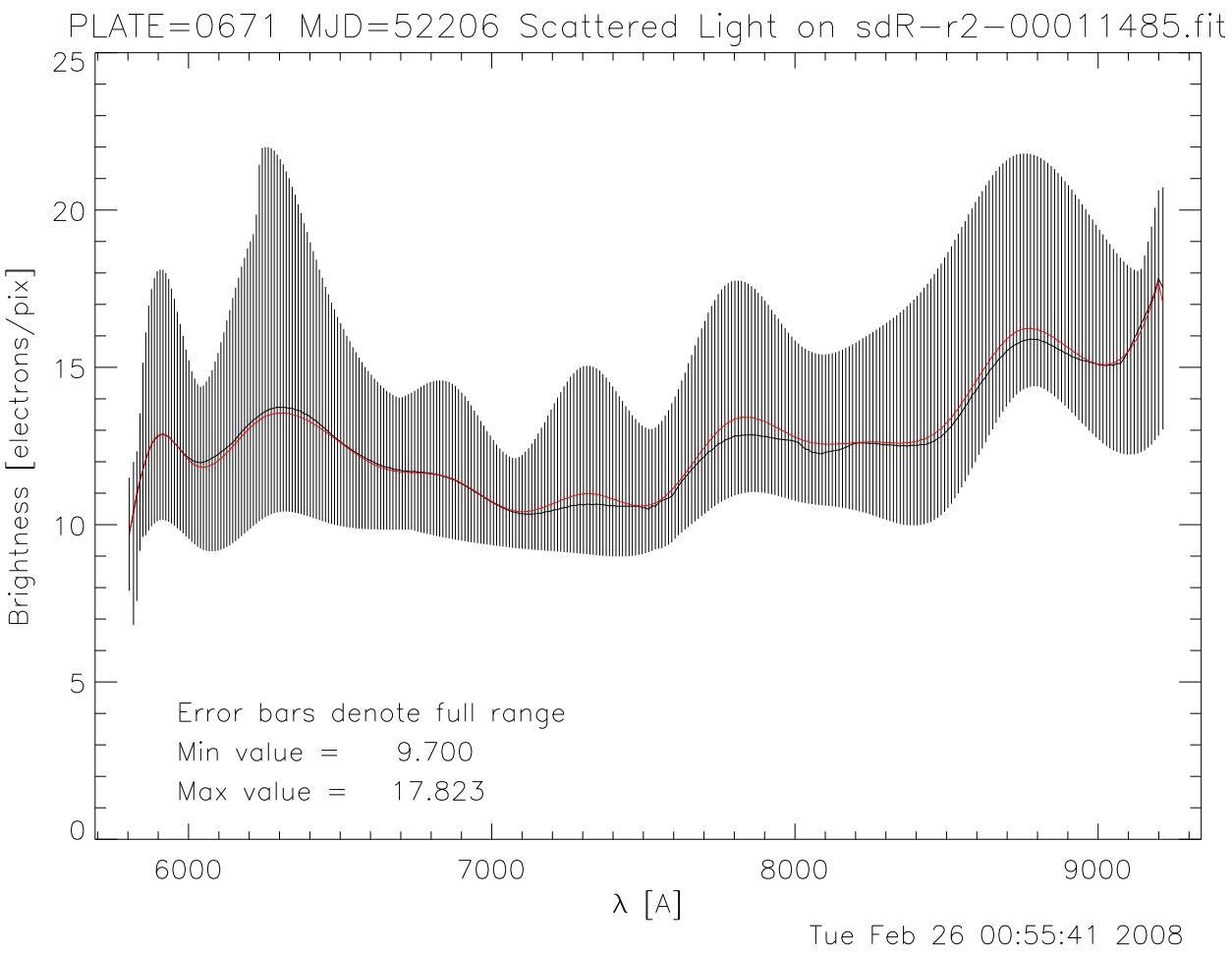

PLATE=0671 MJD=52206 sdR-r2-00011484.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.84 %
Fiber number
Focal Distance [mm]
Airmass

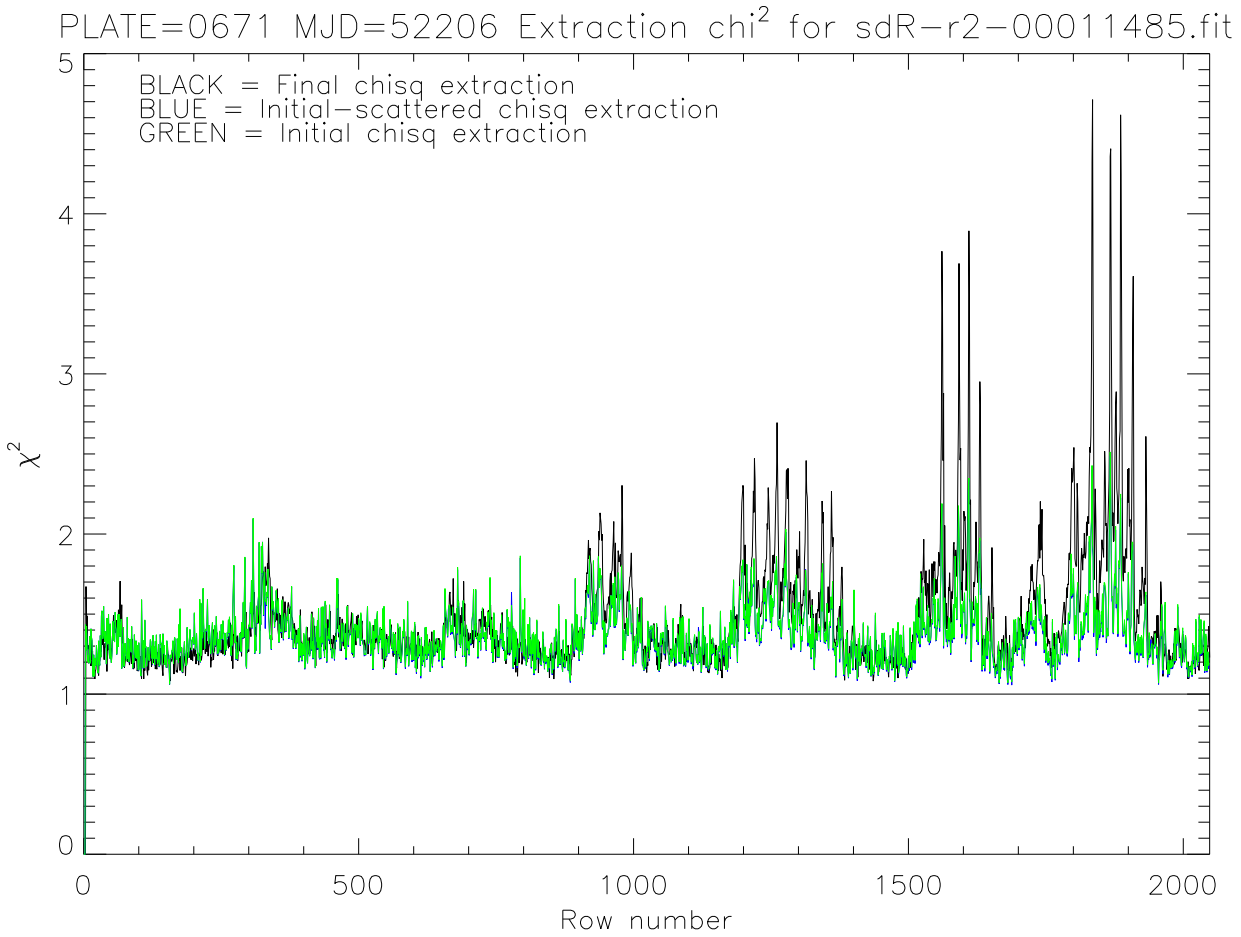

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r2−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.617
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:52:38 2008

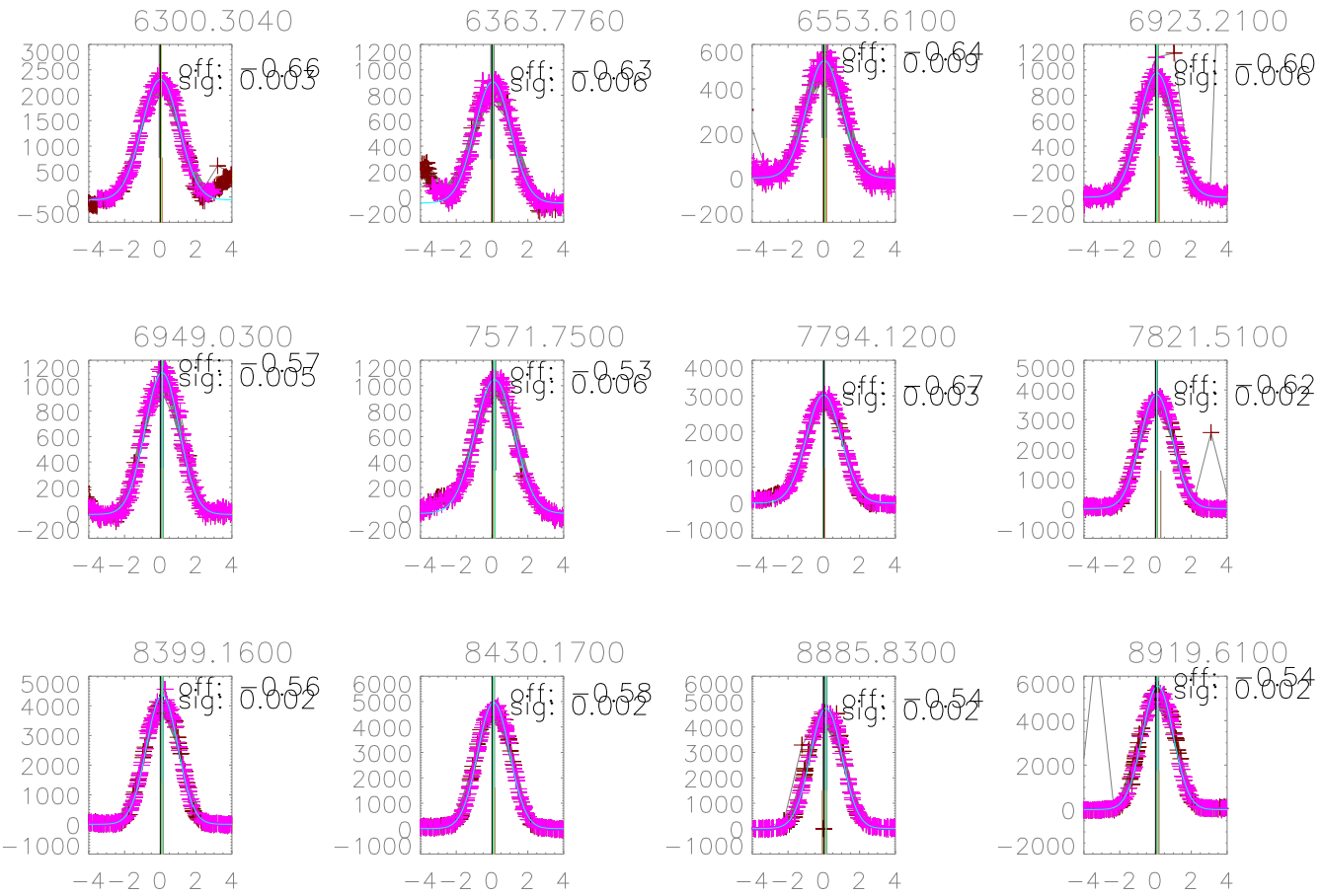

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011485.fi
38.2
49.1
49.1
49.1
38.2
38.2
27.3
27.3
27.3
16.4
16.4
16.4
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

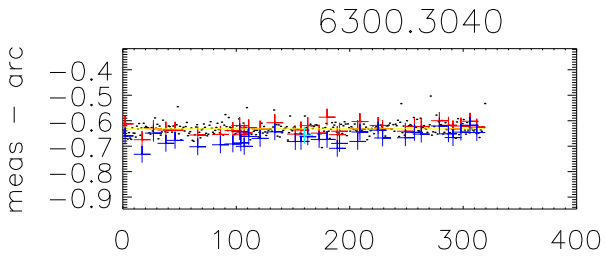

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011485.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.781
Max value = 50.820
Tue Feb 26 00:53:28 2008

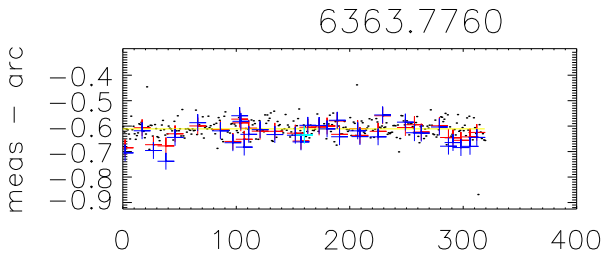

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011485.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
14.1
10.5

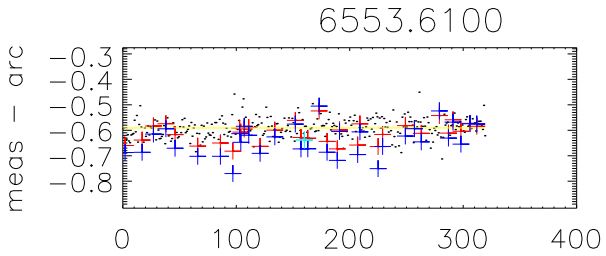

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011485.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.700
Max value = 17.823
Tue Feb 26 00:55:41 2008

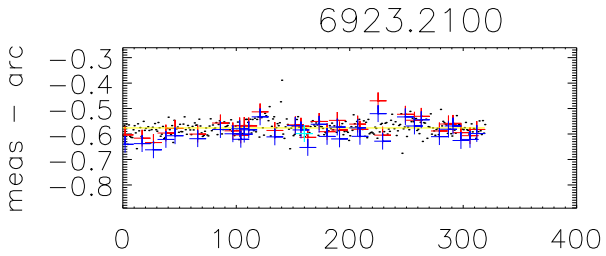

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r2−00011485.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

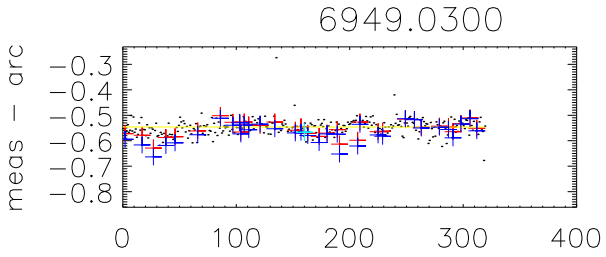

6300.3040
off: −0.66
sig: 0.003
6363.7760
off: −0.63
sig: 0.006
6553.6100
off: −0.64
sig: 0.009
6923.2100
off: −0.60
sig: 0.006
6949.0300
off: −0.57
sig: 0.005
7571.7500
off: −0.53
sig: 0.006
7794.1200
off: −0.67
sig: 0.003
7821.5100
off: −0.62
sig: 0.002
8399.1600
off: −0.56
sig: 0.002
8430.1700
off: −0.58
sig: 0.002
8885.8300
off: −0.54
sig: 0.002
8919.6100
off: −0.54
sig: 0.002

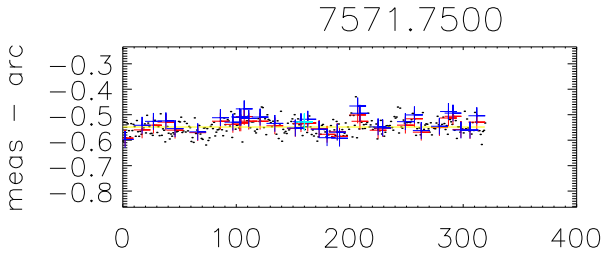

6300.3040
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

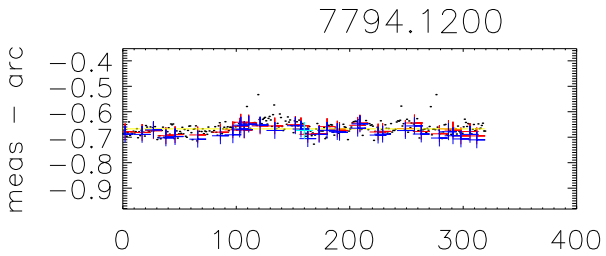

6363.7760
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

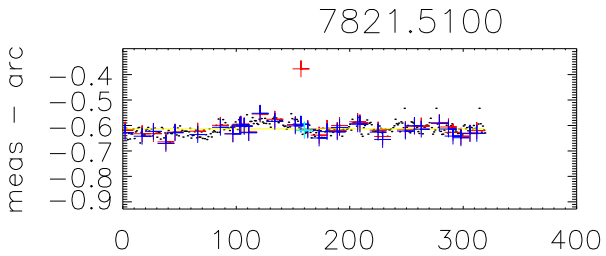

6553.6100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

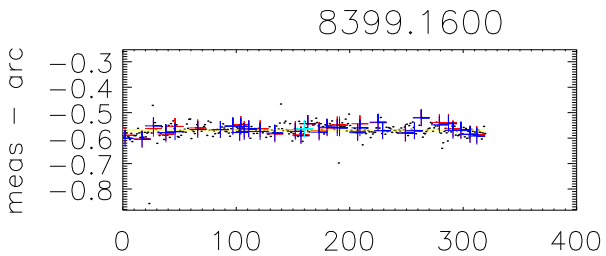

6923.2100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

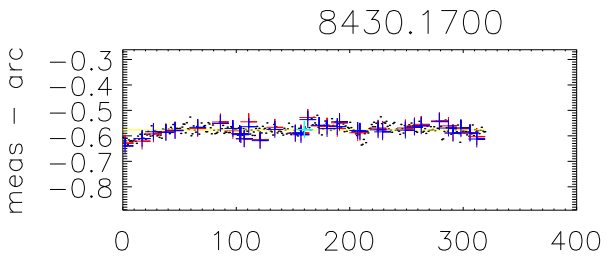

6949.0300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

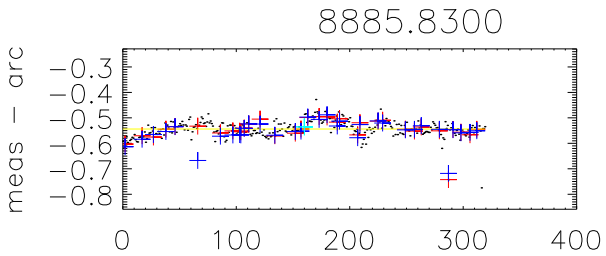

7571.7500
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

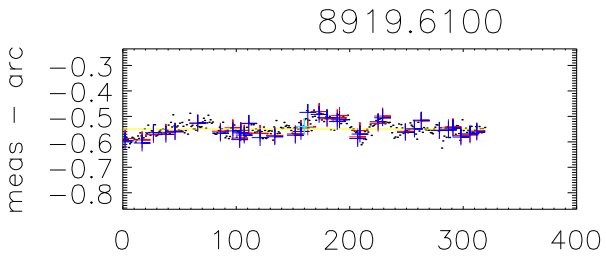

7794.1200
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

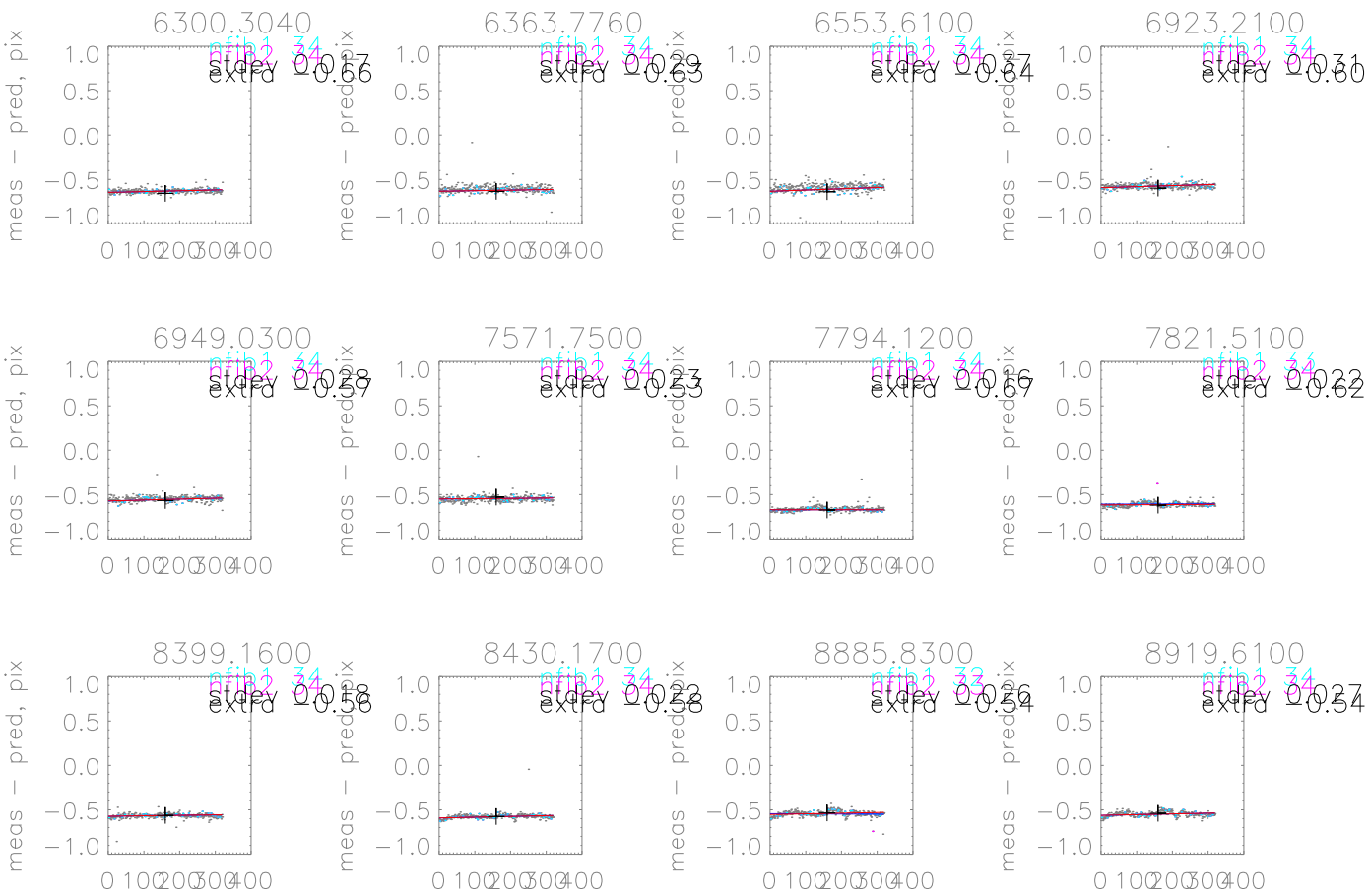

7821.5100
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

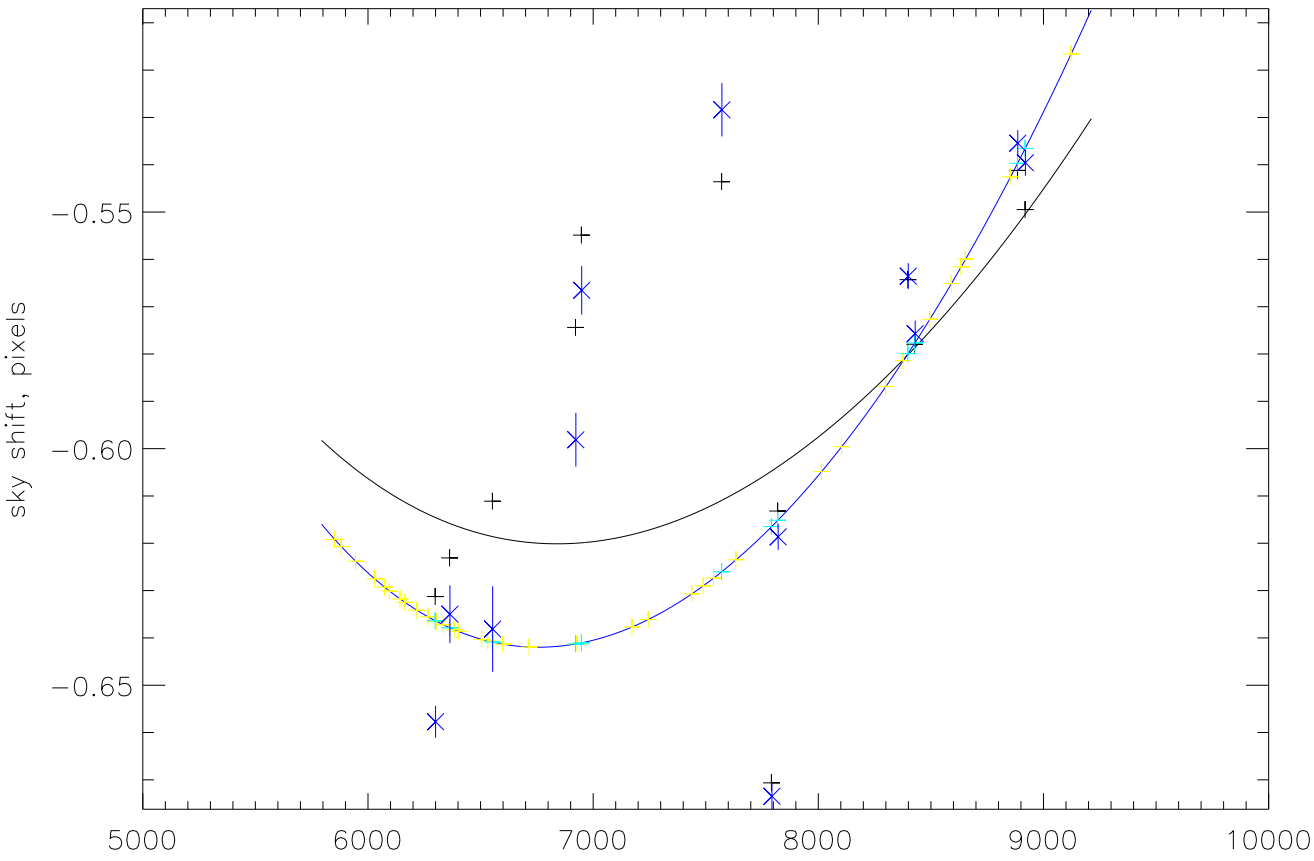

8399.1600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

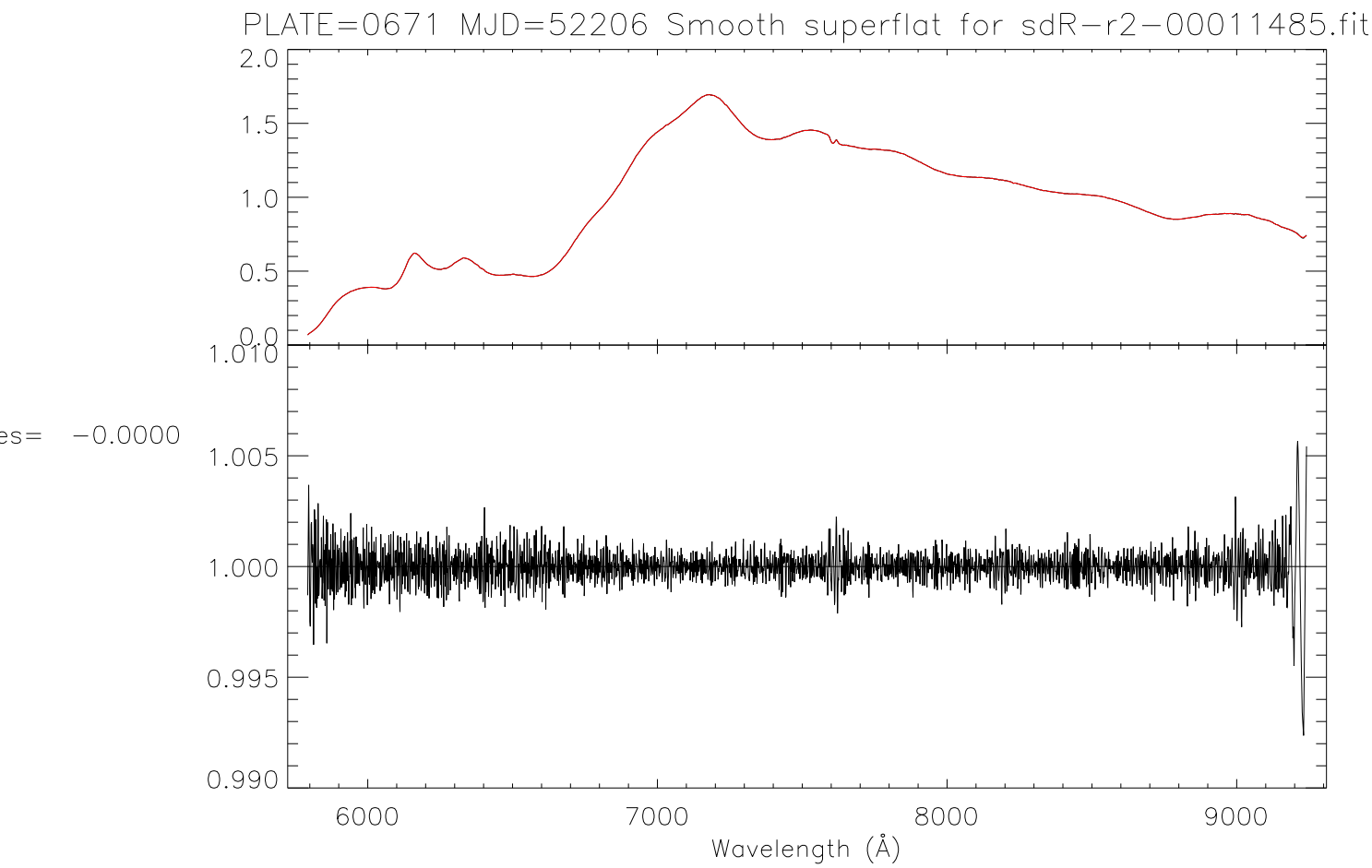

8430.1700
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

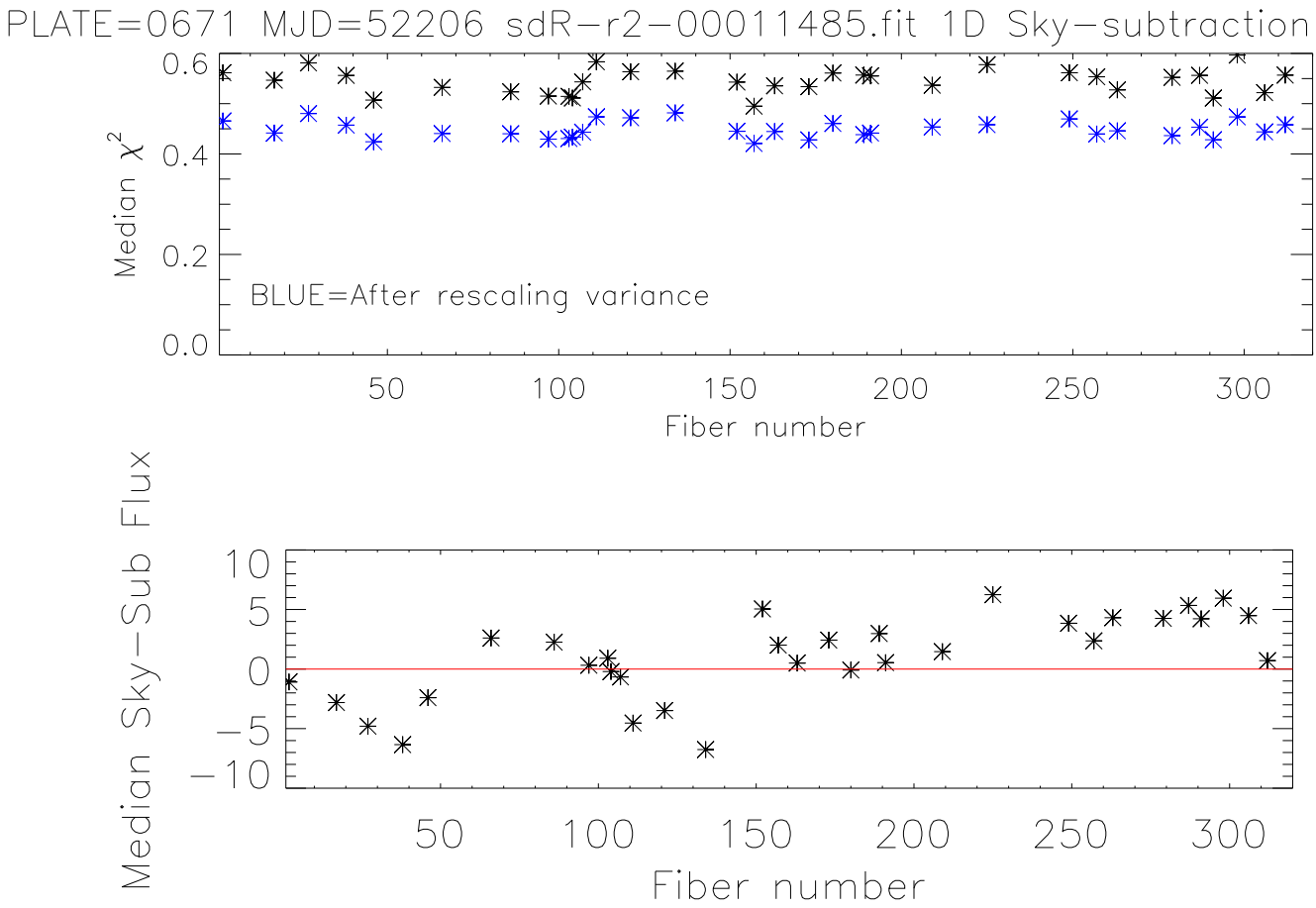

8885.8300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

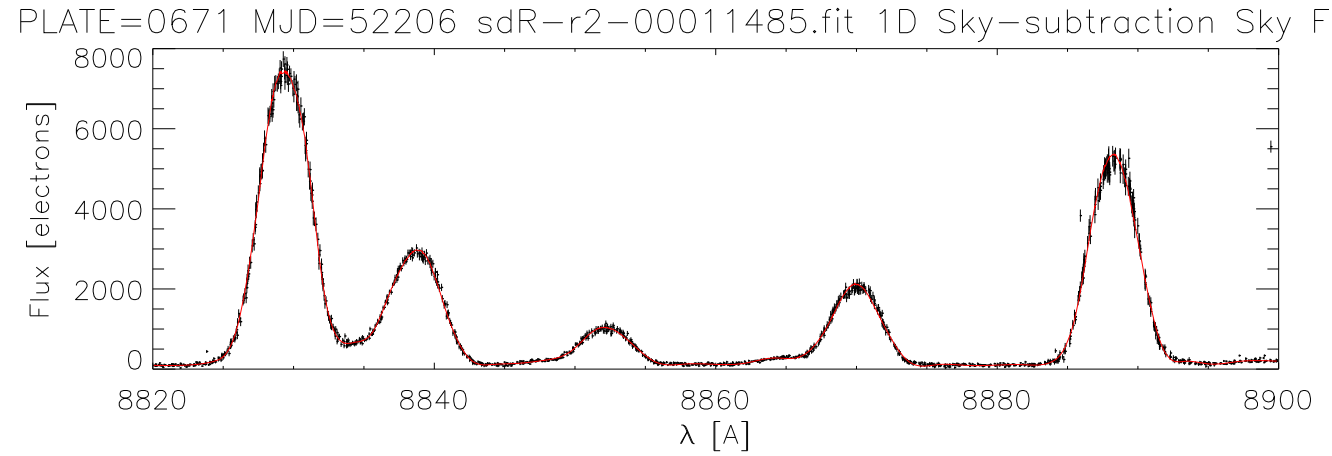

8919.6100
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

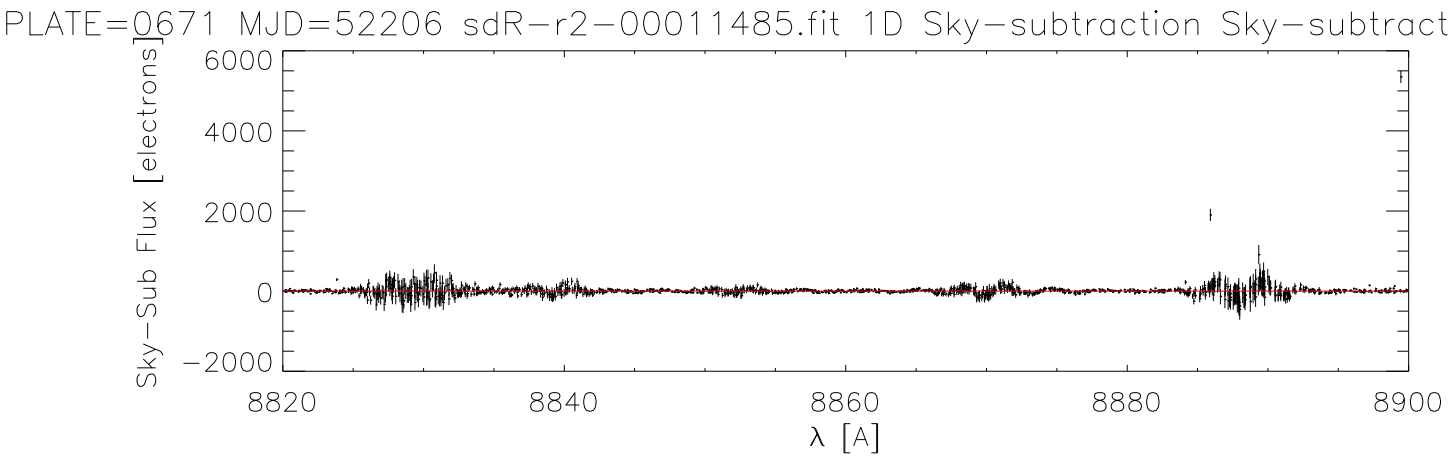

6300.3040
mfib1 34
mfib2 34
stdev 0.017
extra -0.66
6363.7760
mfib1 34
mfib2 34
stdev 0.029
extra -0.63
6553.6100
mfib1 34
mfib2 34
stdev 0.037
extra -0.64
6923.2100
mfib1 34
mfib2 34
stdev 0.031
extra -0.60
6949.0300
mfib1 34
mfib2 34
stdev 0.028
extra -0.57
7571.7500
mfib1 34
mfib2 34
stdev 0.023
extra -0.53
7794.1200
mfib1 34
mfib2 34
stdev 0.016
extra -0.67
7821.5100
mfib1 37
mfib2 34
stdev 0.022
extra -0.62
8399.1600
mfib1 34
mfib2 34
stdev 0.018
extra -0.56
8430.1700
mfib1 34
mfib2 34
stdev 0.022
extra -0.58
8885.8300
mfib1 32
mfib2 33
stdev 0.026
extra -0.54
8919.6100
mfib1 34
mfib2 34
stdev 0.027
extra -0.54
meas - pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

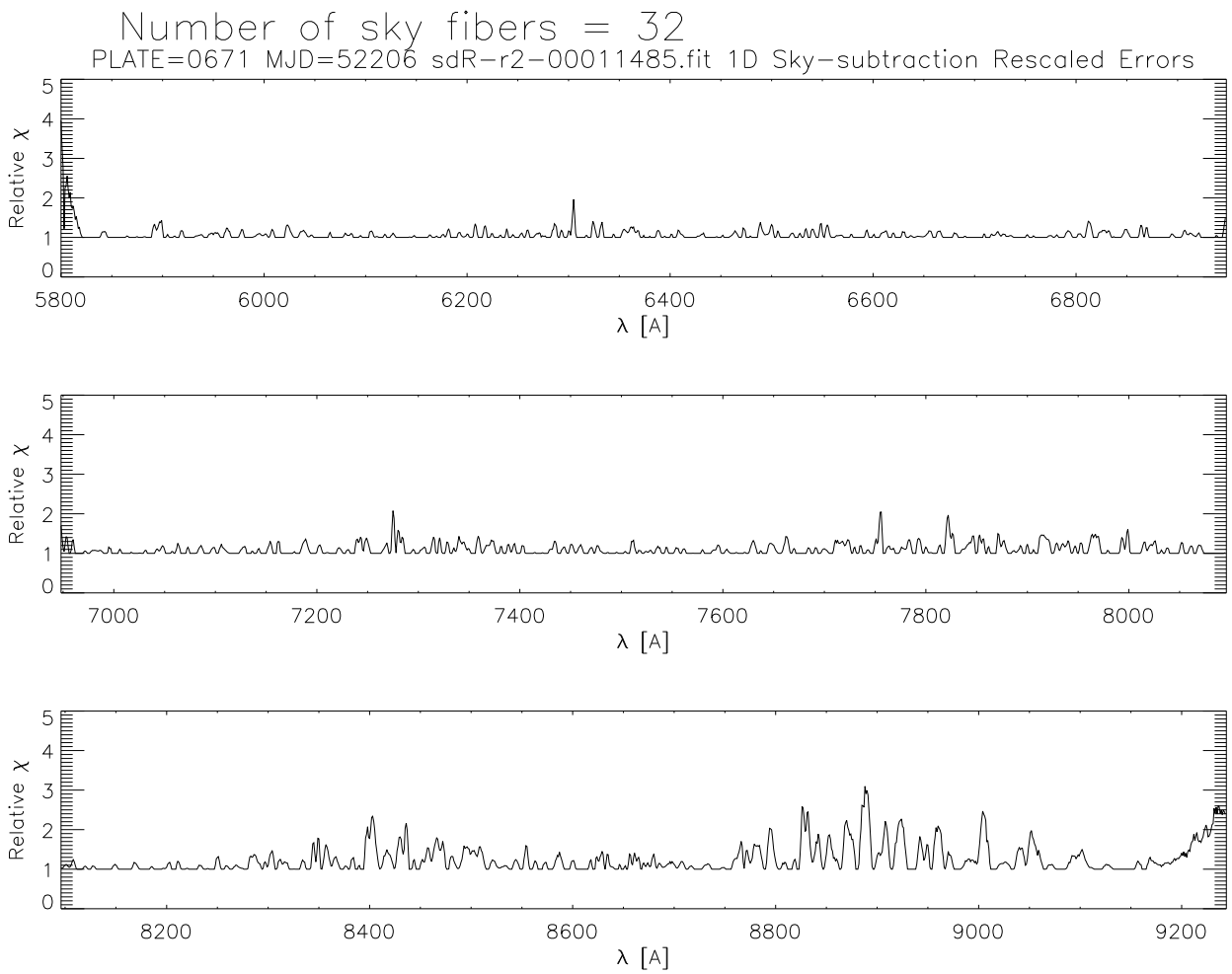

sky shift, pixels
−0.55
−0.60
−0.65
5000
6000
7000
8000
9000
10000

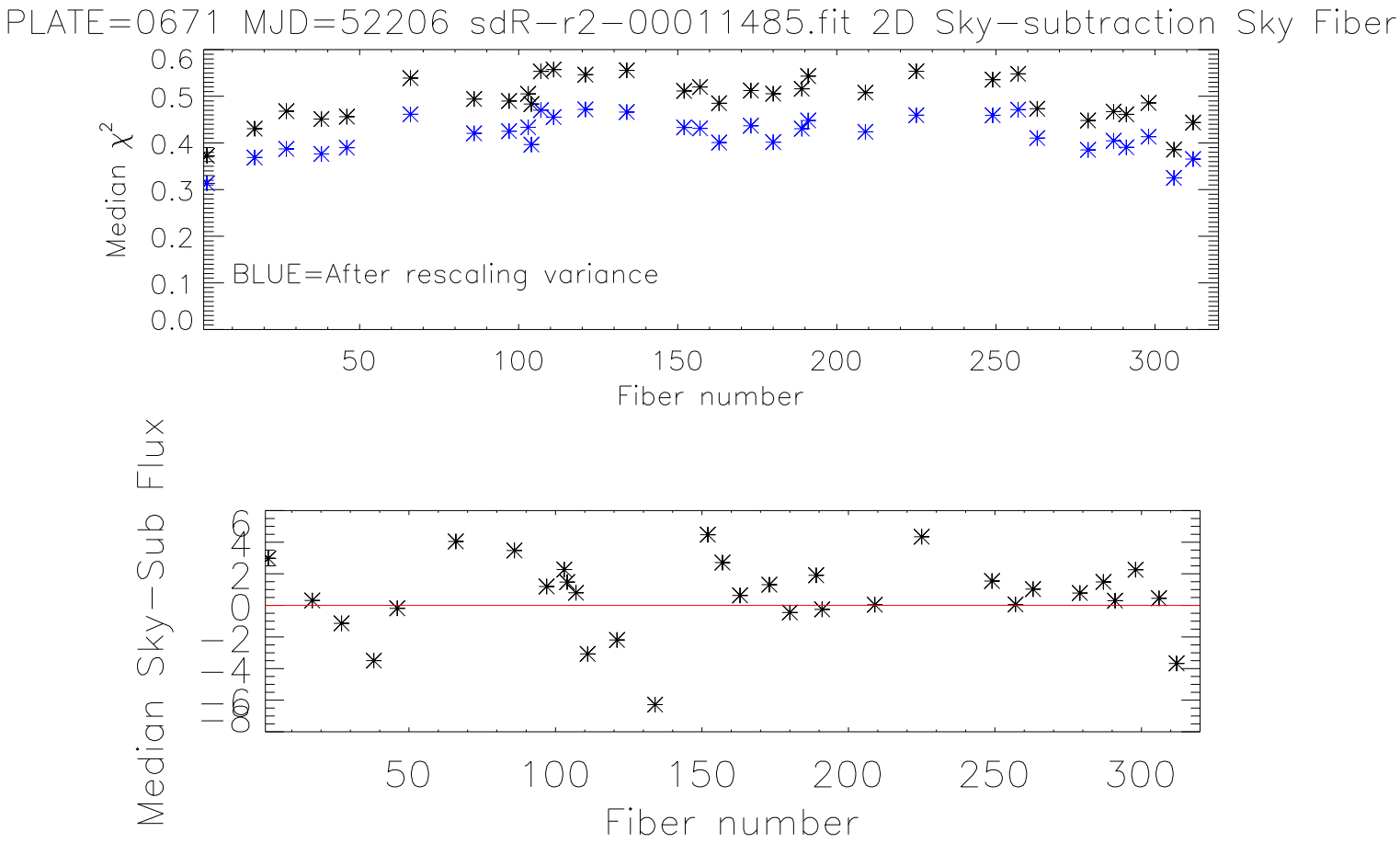

PLATE=0671 MJD=52206 Smooth superflat for sdR-r2-00011485.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

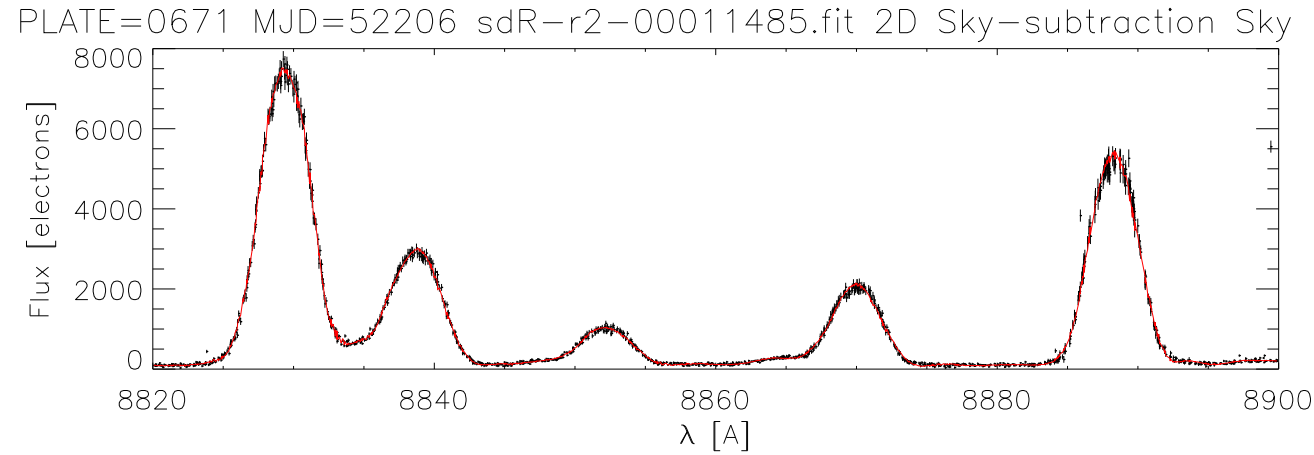

PLATE=0671 MJD=52206 sdR-r2-00011485.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

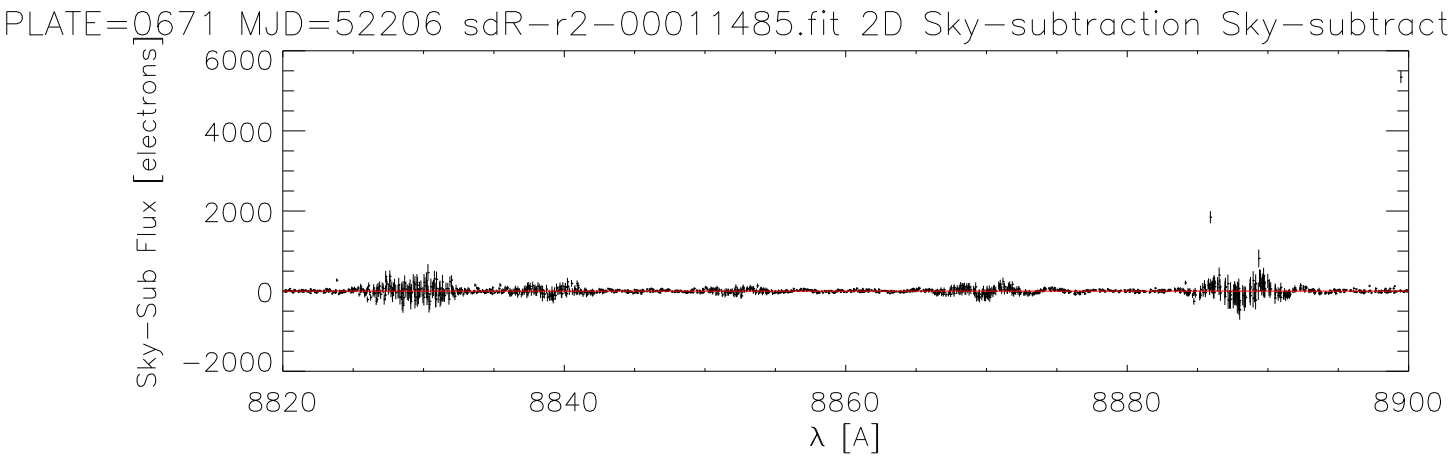

PLATE=0671 MJD=52206 sdR-r2-00011485.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

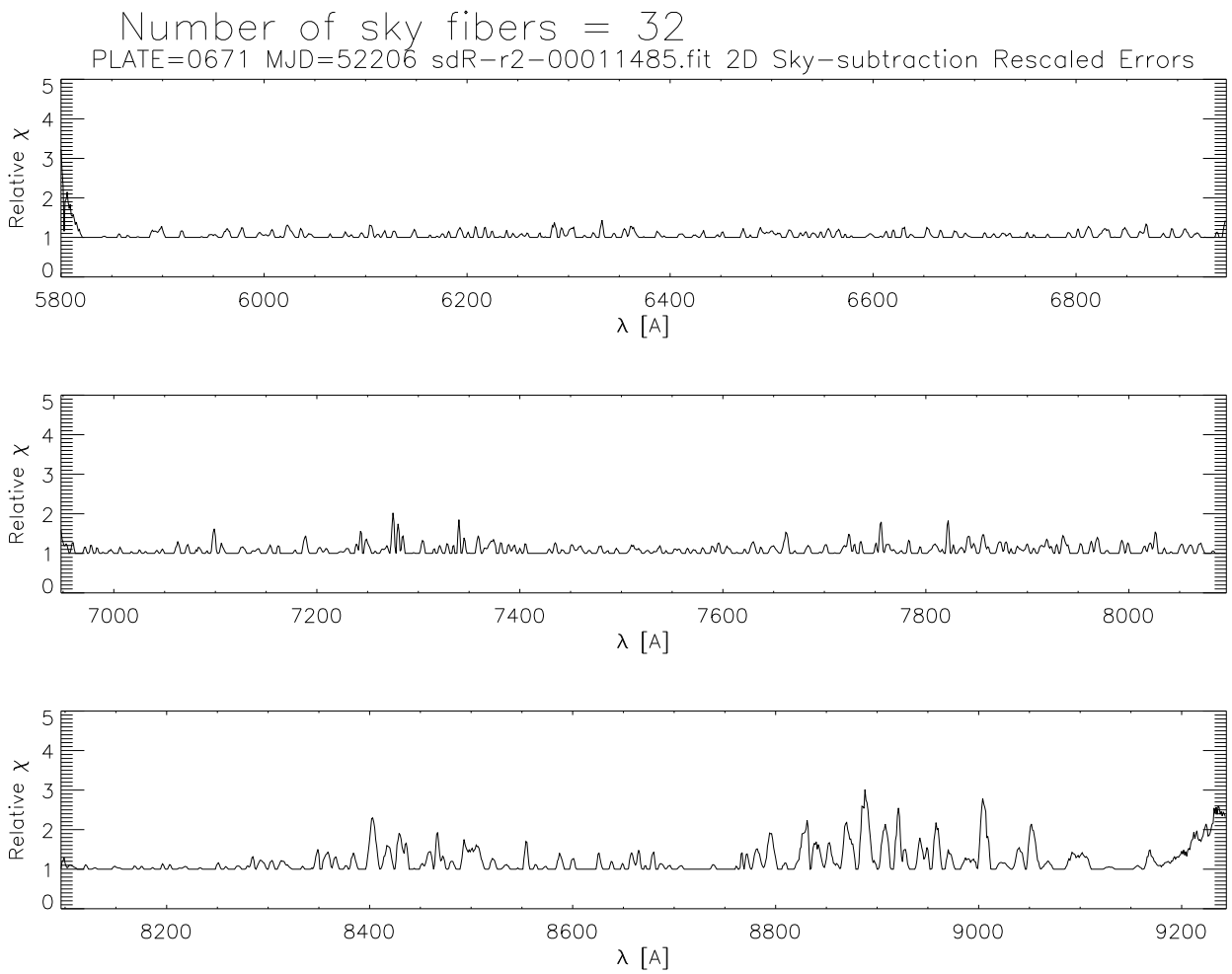

PLATE=0671 MJD=52206 sdR-r2-00011485.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

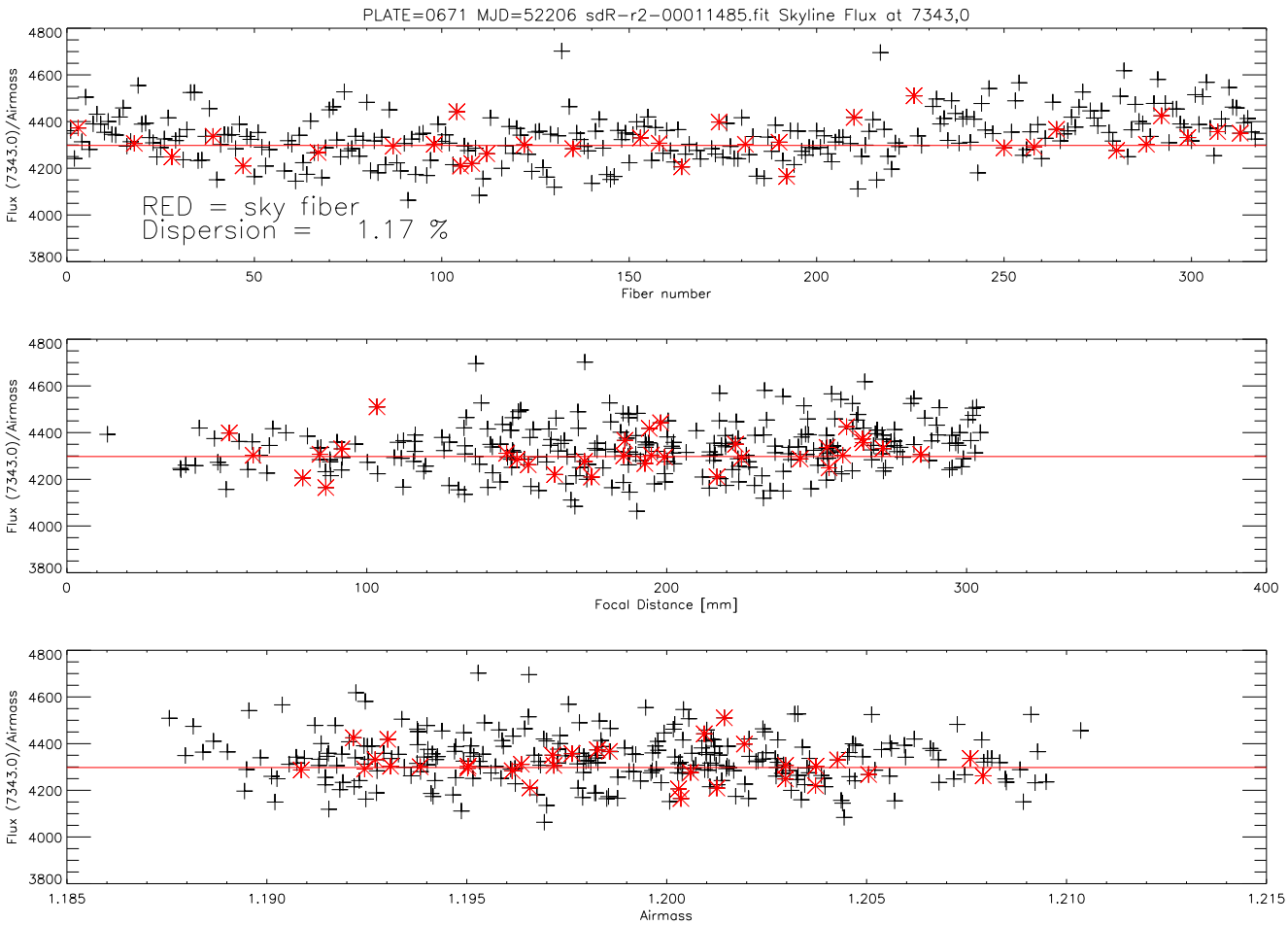

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011485.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

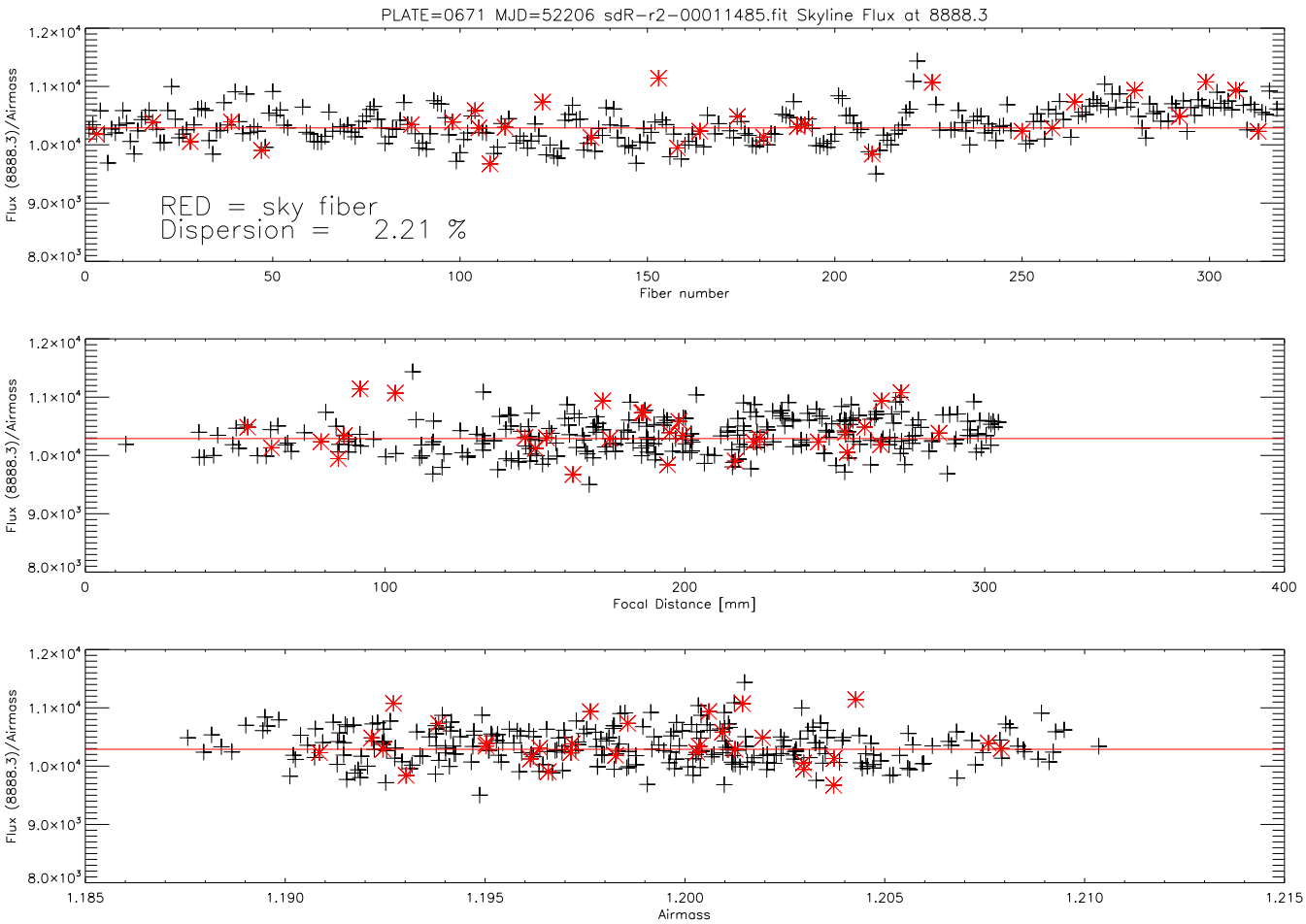

PLATE=0671 MJD=52206 sdR-r2-00011485.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11.4
-11.2
-11.0
-10.8
-10.6
50
100
150
200
250
300
Fiber number

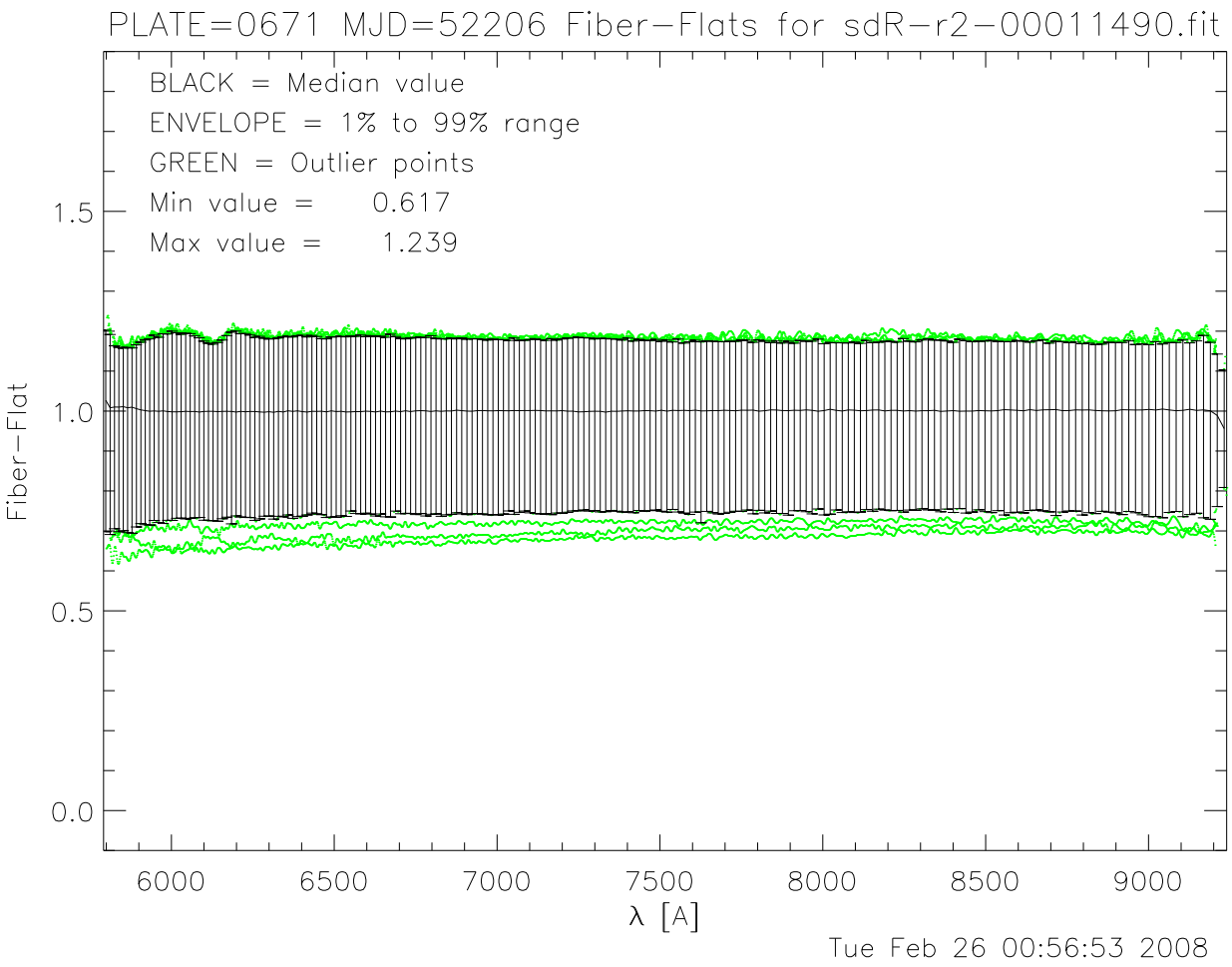

PLATE=0671 MJD=52206 sdR-r2-00011485.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

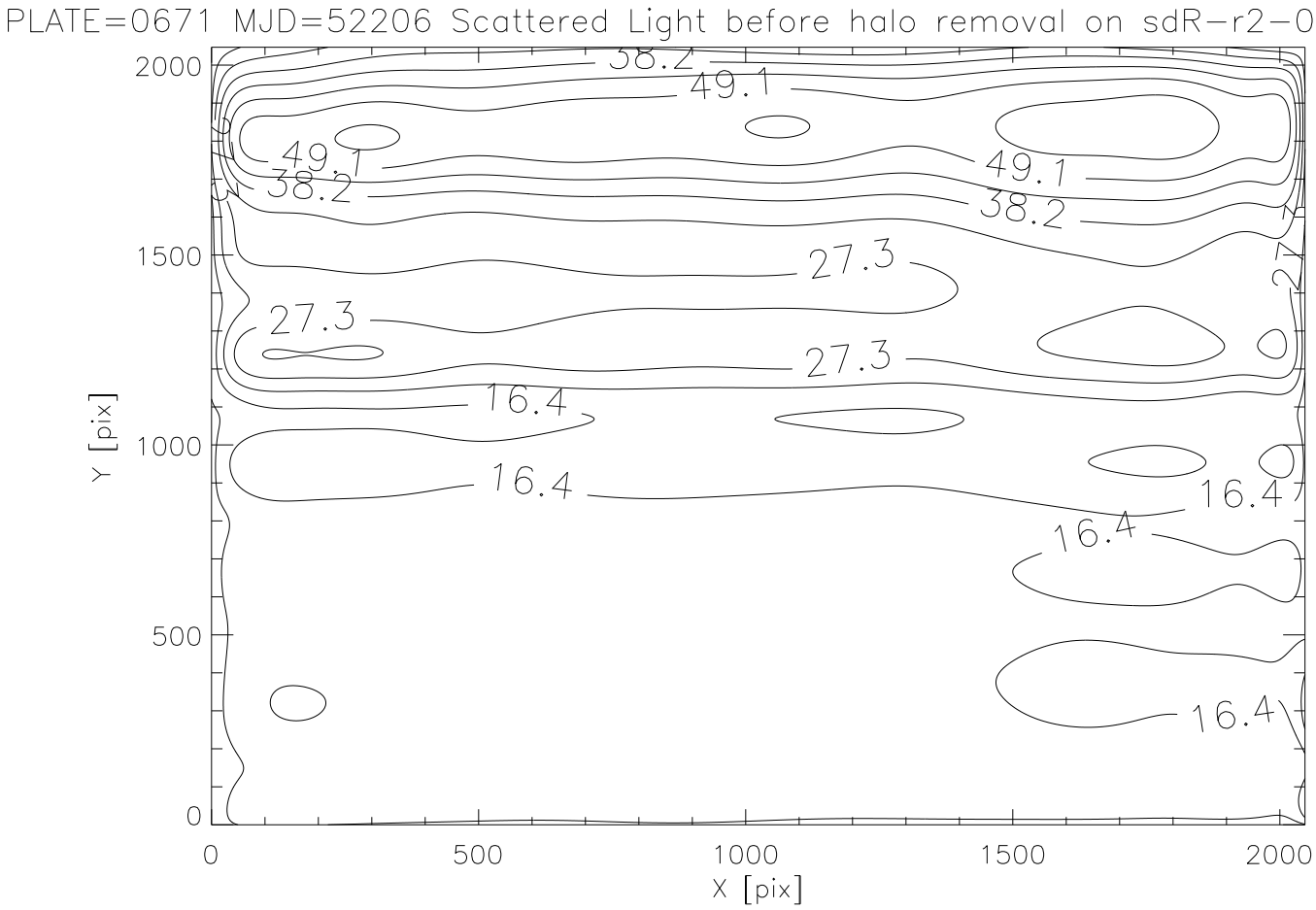

PLATE=0671 MJD=52206 sdR-r2-00011485.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

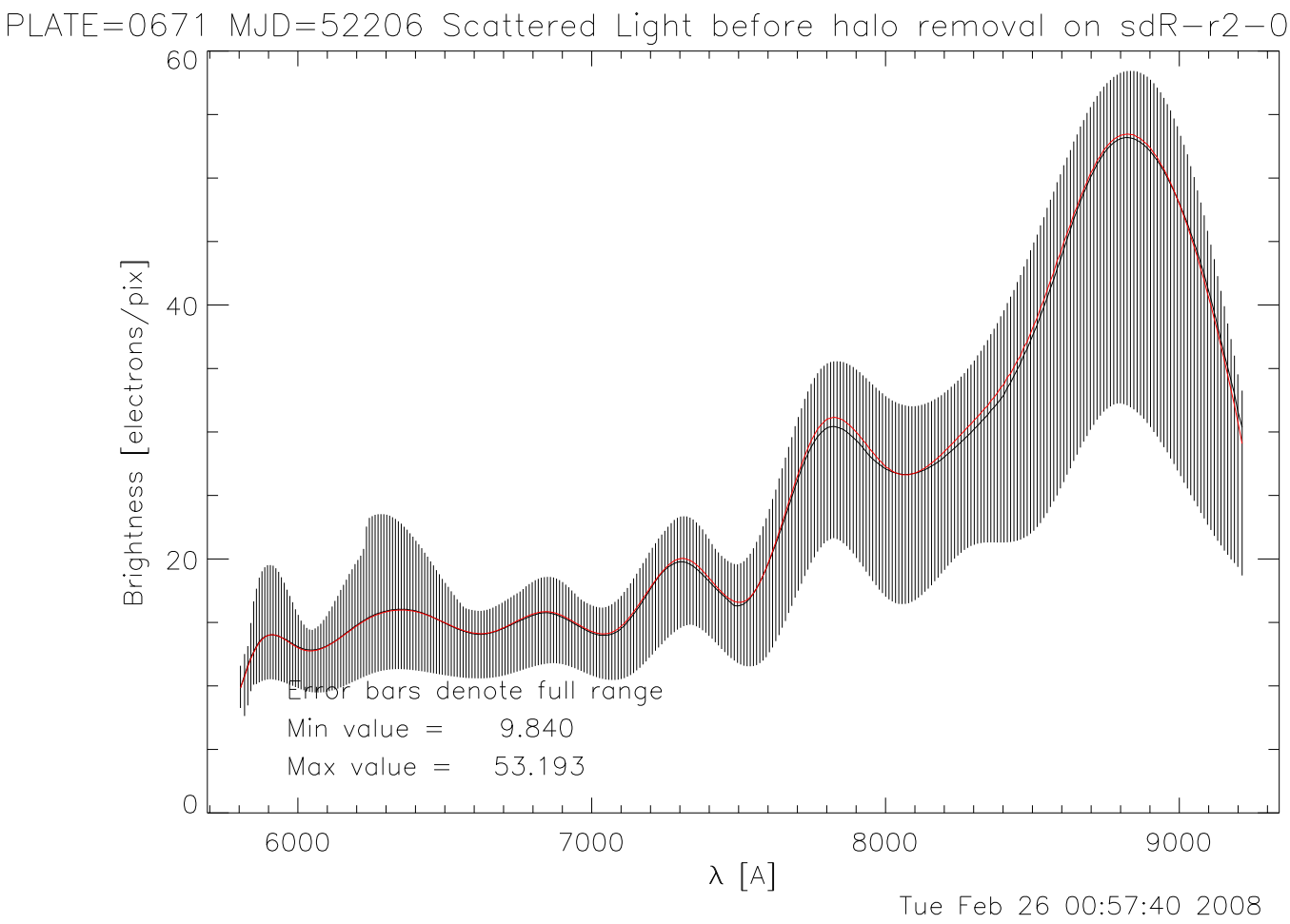

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011485.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

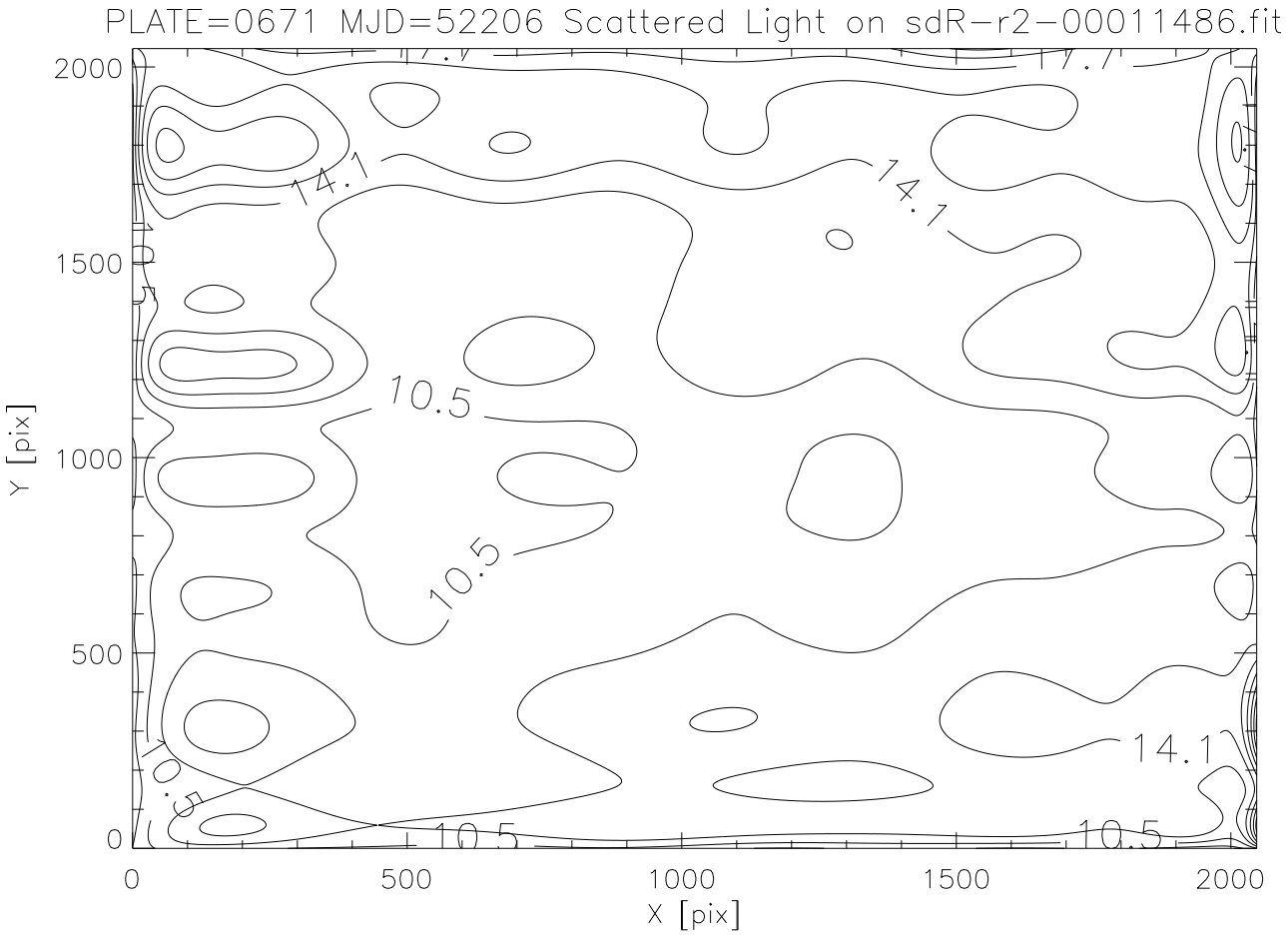

PLATE=0671 MJD=52206 sdR-r2-00011485.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.17 %
Fiber number
Focal Distance [mm]
Airmass

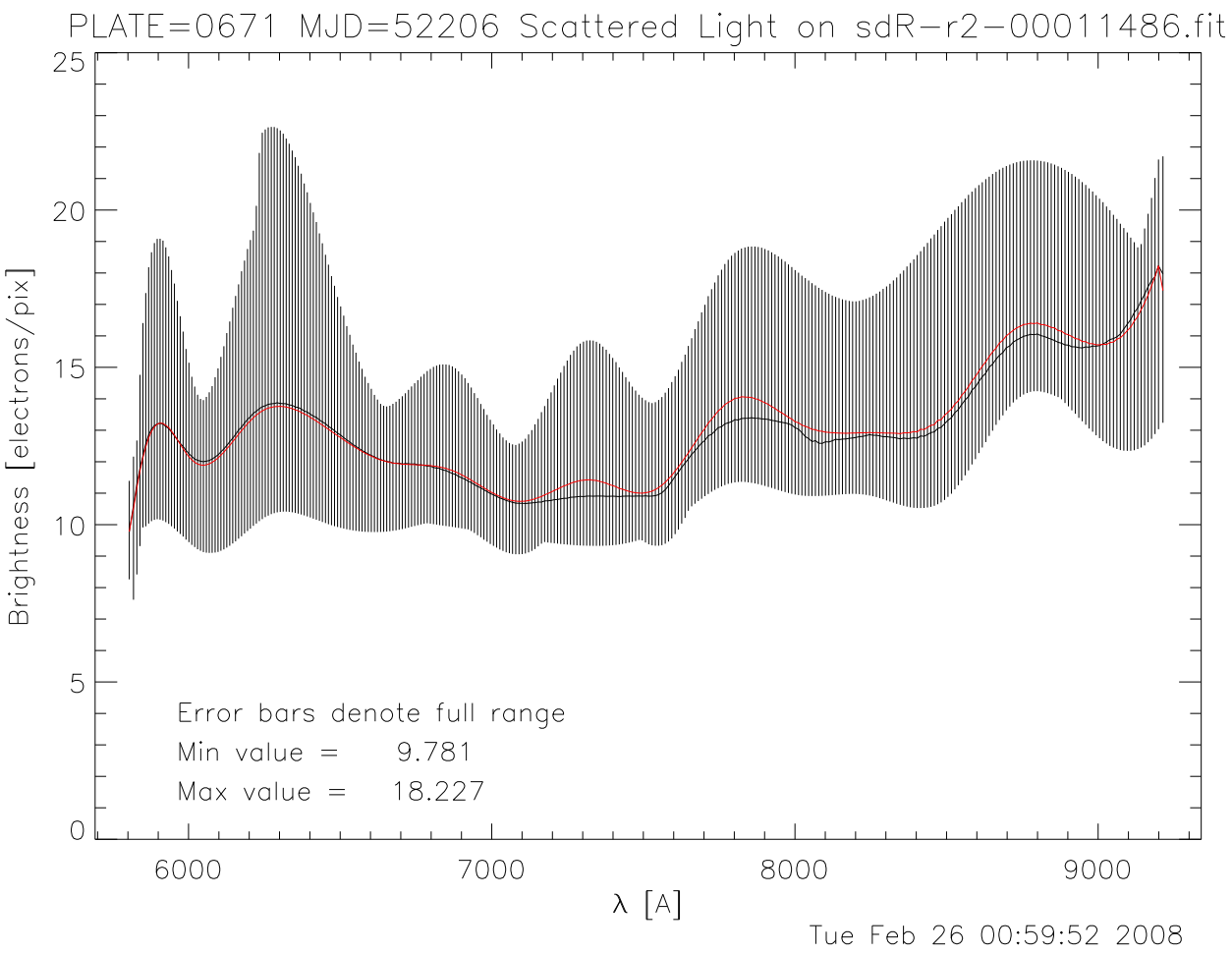

PLATE=0671 MJD=52206 sdR-r2-00011485.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Focal Distance [mm]
Airmass

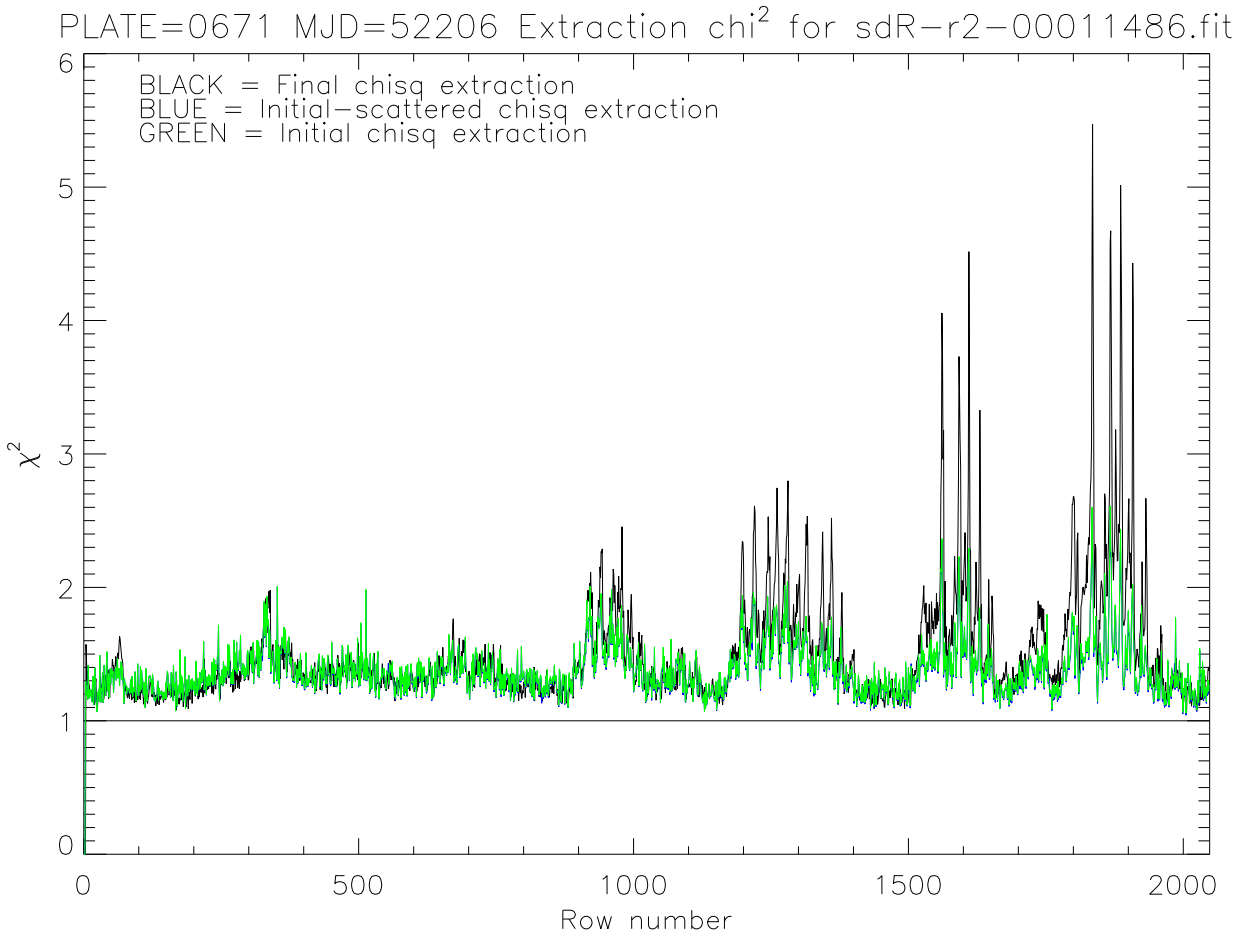

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r2−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.617
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:56:53 2008

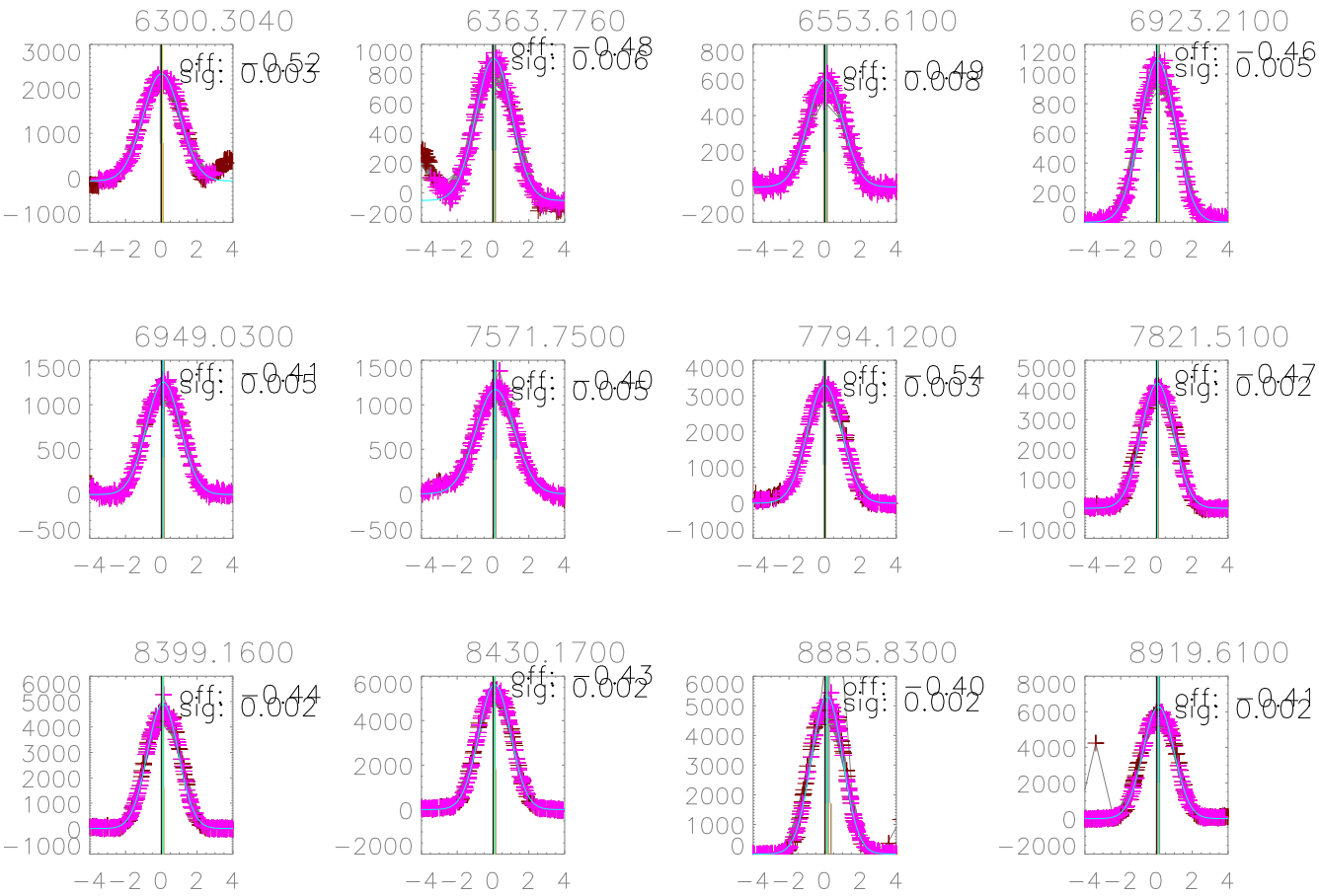

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011486.fi
38.2
49.1
49.1
38.2
49.1
38.2
27.3
27.3
27.3
16.4
16.4
16.4
16.4
16.4
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

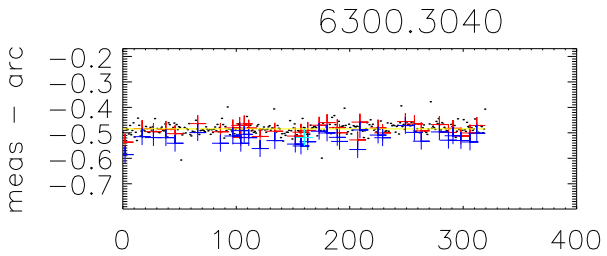

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011486.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.840
Max value = 53.193
Tue Feb 26 00:57:40 2008

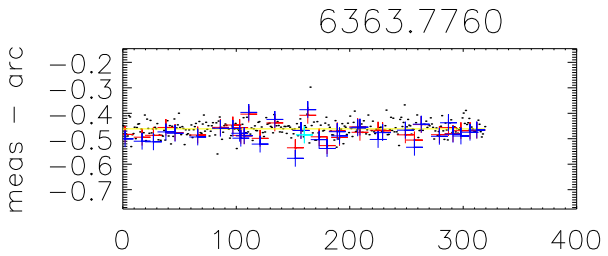

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011486.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
14.1
10.5

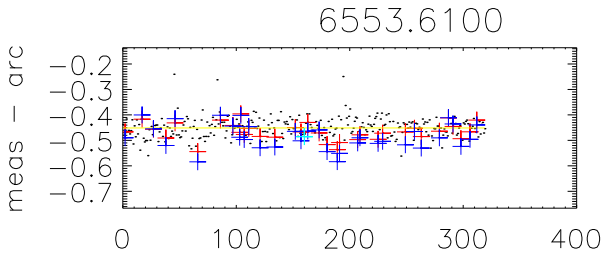

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011486.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.781
Max value = 18.227
Tue Feb 26 00:59:52 2008

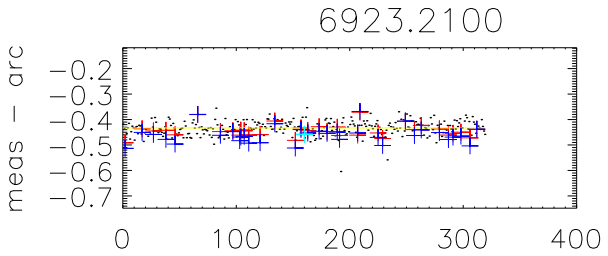

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r2−00011486.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

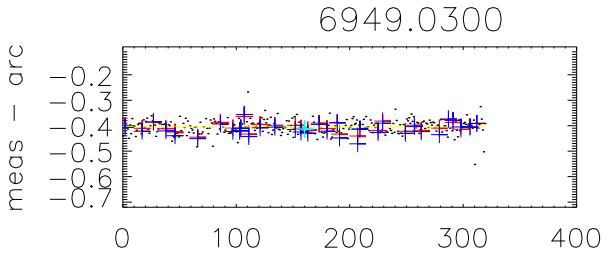

6300.3040
off: −0.52
sig: 0.003
6363.7760
off: −0.48
sig: 0.006
6553.6100
off: −0.49
sig: 0.008
6923.2100
off: −0.46
sig: 0.005
6949.0300
off: −0.41
sig: 0.005
7571.7500
off: −0.40
sig: 0.005
7794.1200
off: −0.54
sig: 0.003
7821.5100
off: −0.47
sig: 0.002
8399.1600
off: −0.44
sig: 0.002
8430.1700
off: −0.43
sig: 0.002
8885.8300
off: −0.40
sig: 0.002
8919.6100
off: −0.41
sig: 0.002

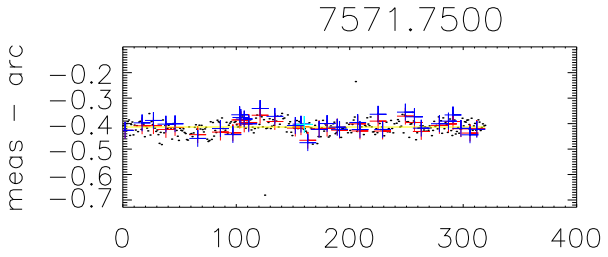

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

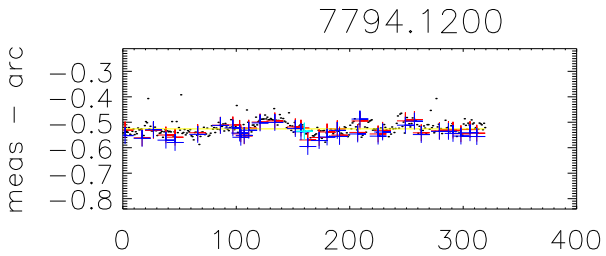

6363.7760
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

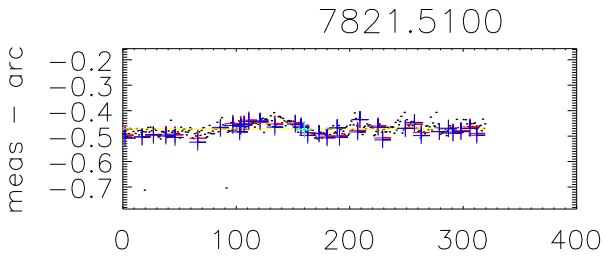

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

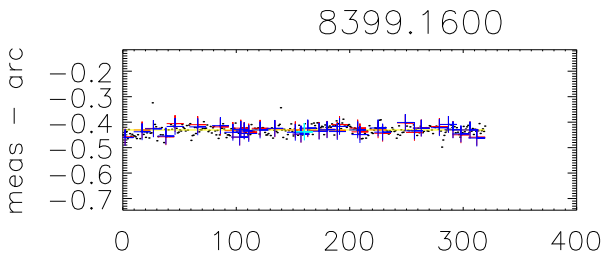

6923.2100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

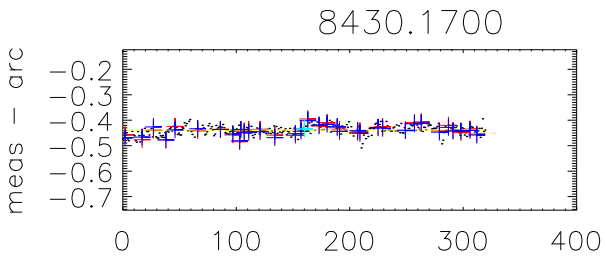

6949.0300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

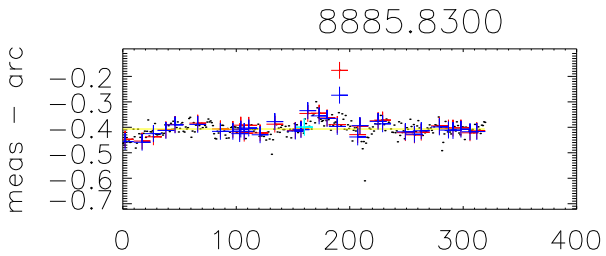

7571.7500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

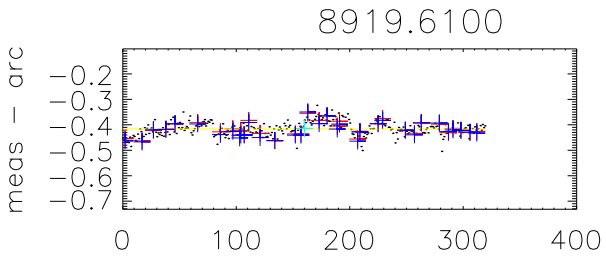

7794.1200
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

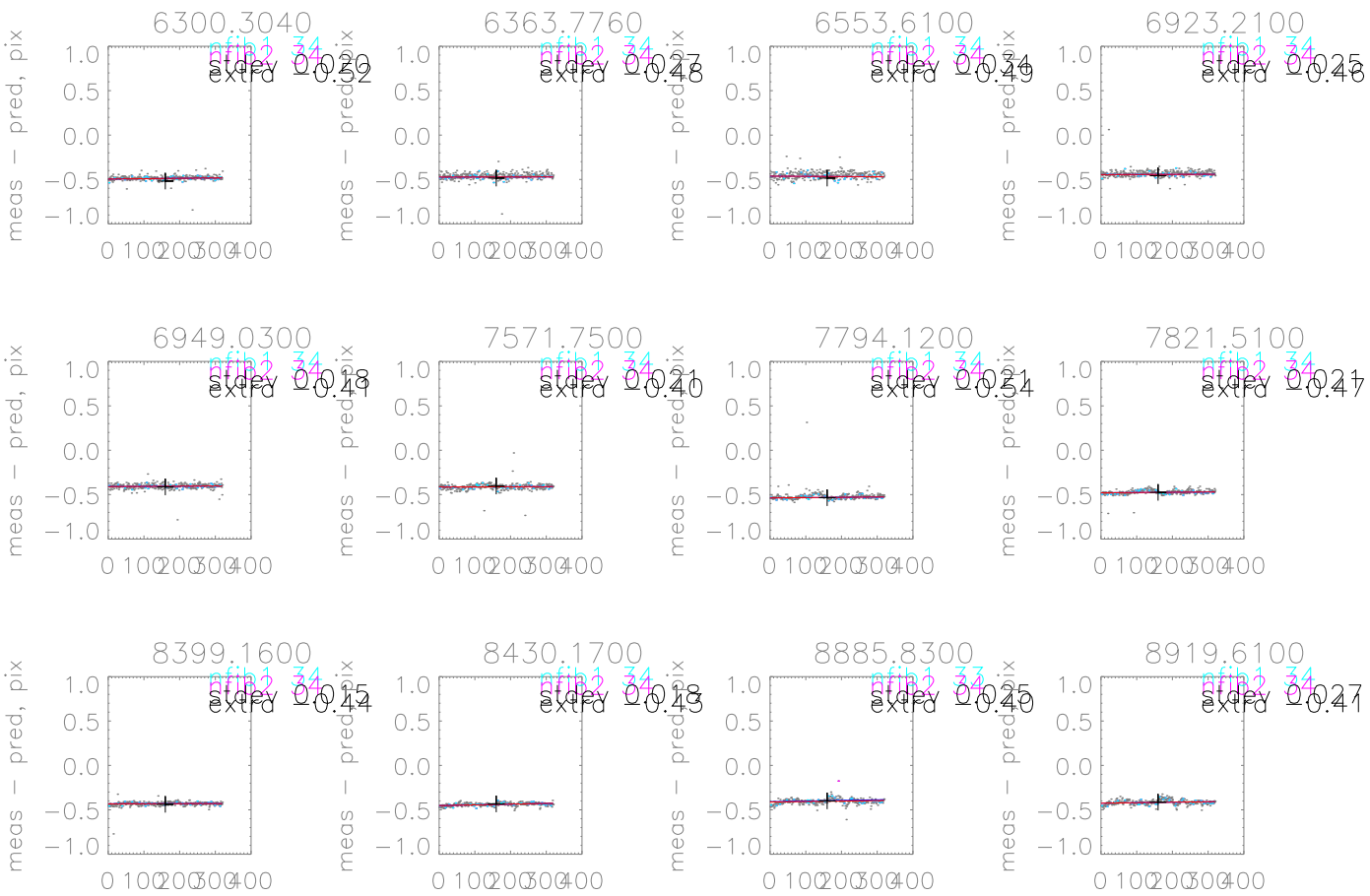

7821.5100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

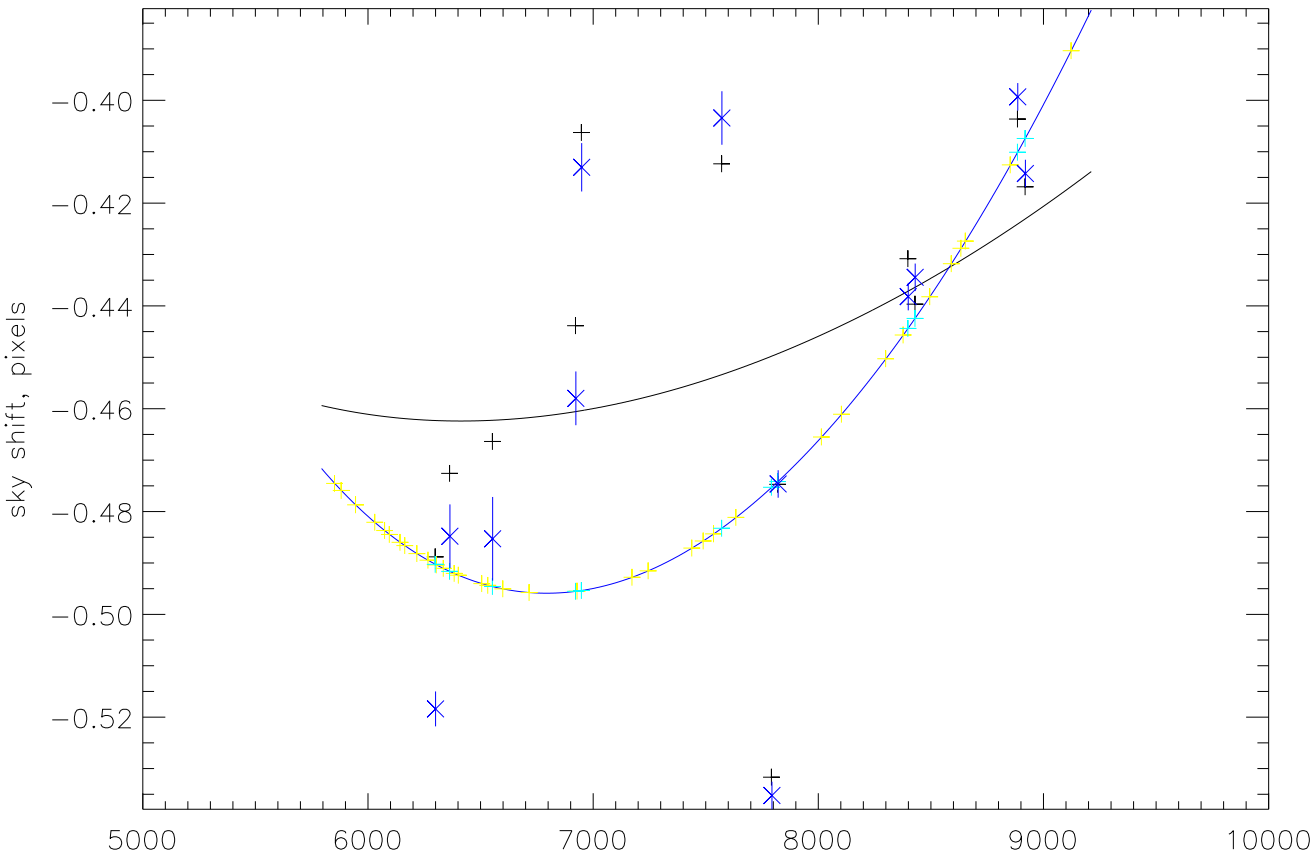

8399.1600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

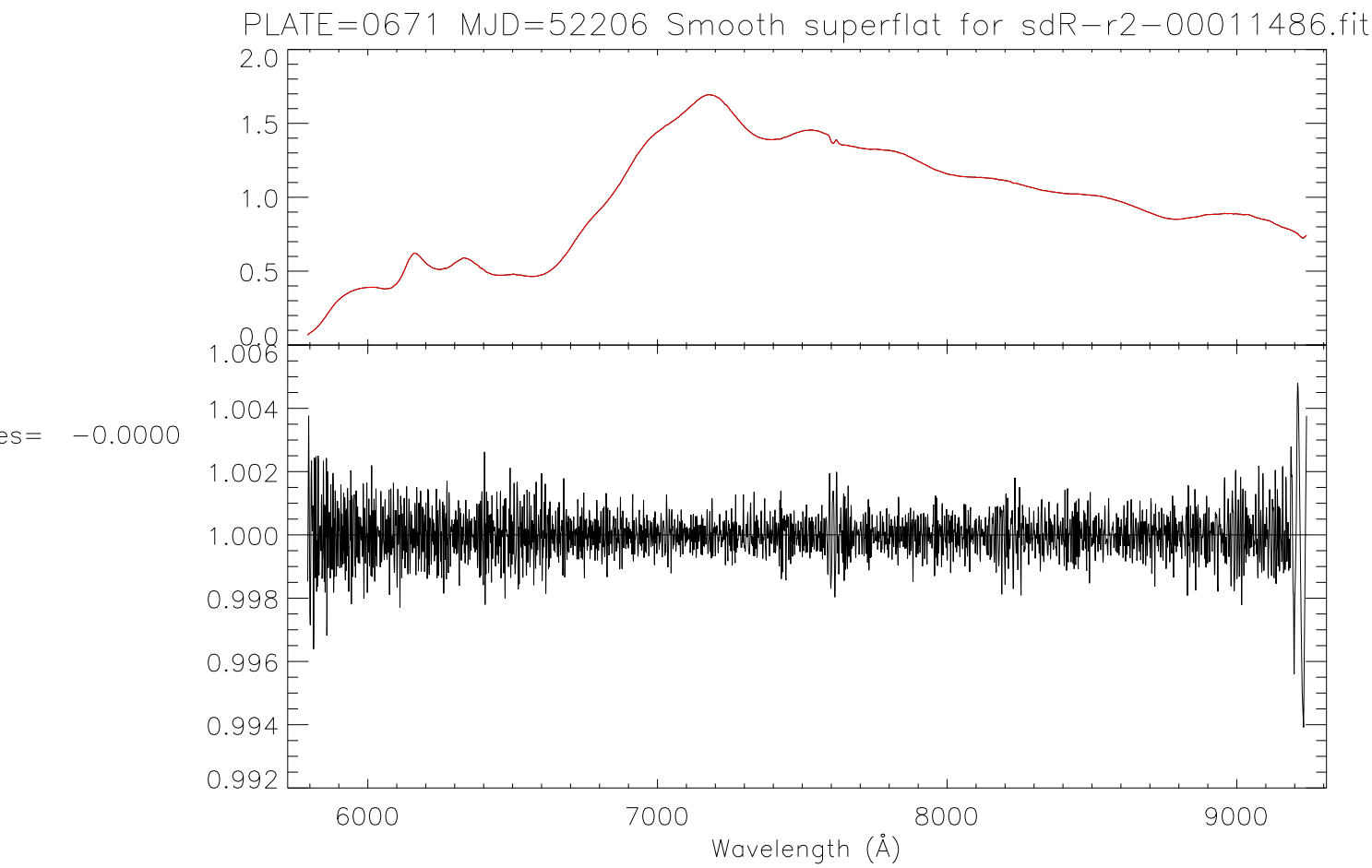

8430.1700
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

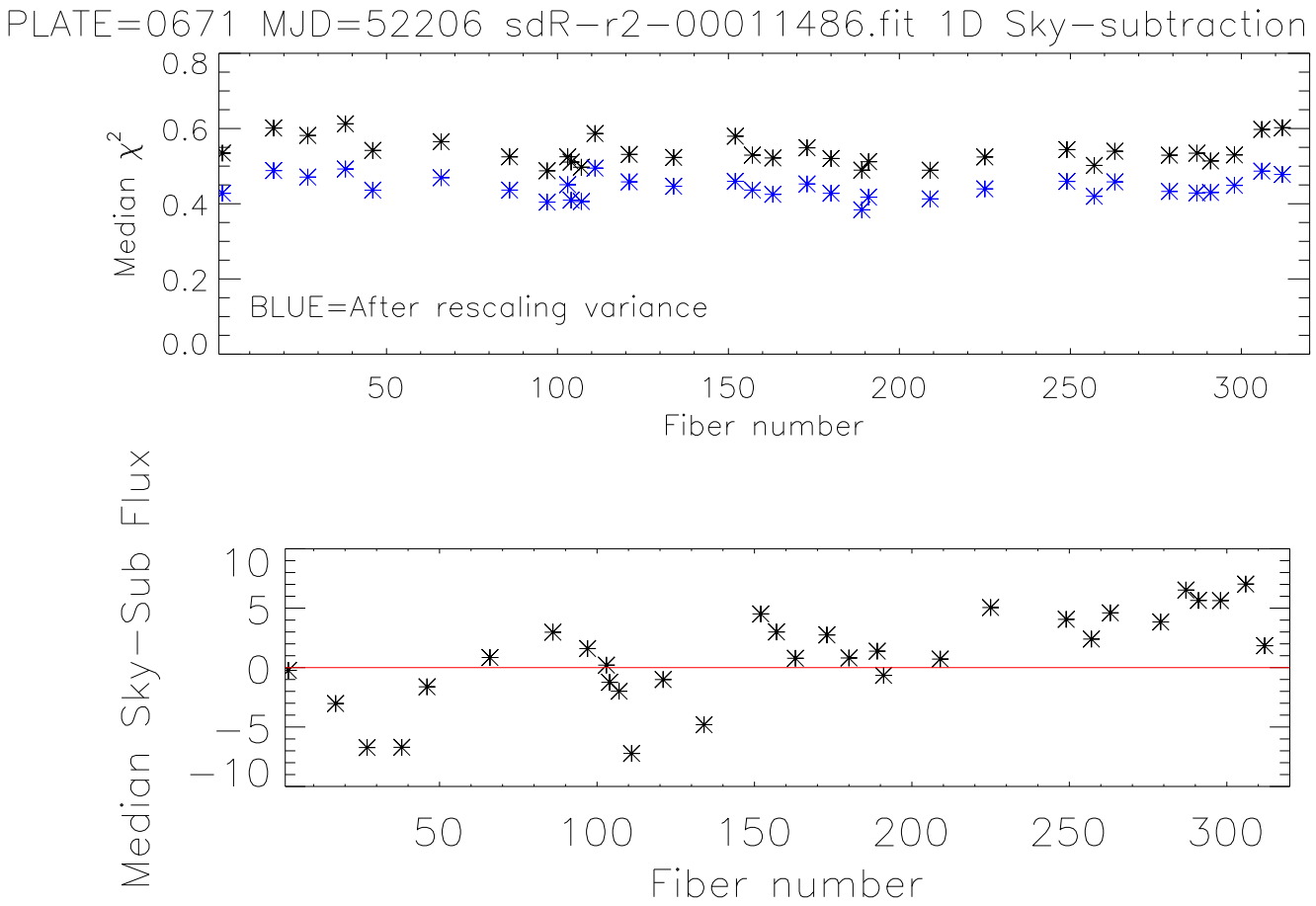

8919.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

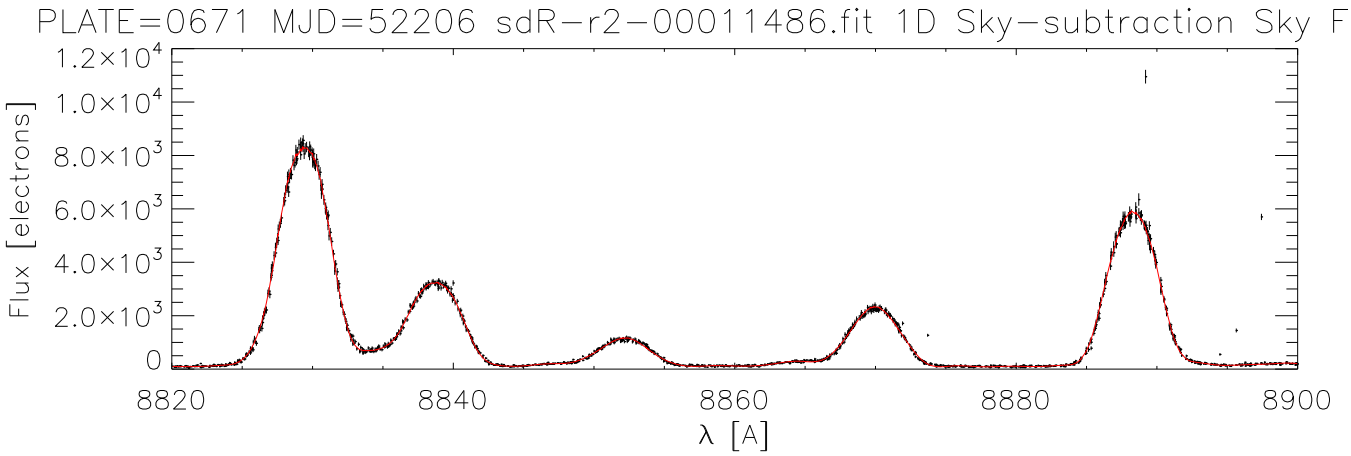

6300.3040
stdev 0.020
extra −0.52
6363.7760
stdev 0.027
extra −0.48
6553.6100
stdev 0.034
extra −0.49
6923.2100
stdev 0.025
extra −0.48
6949.0300
stdev 0.018
extra −0.49
7571.7500
stdev 0.021
extra −0.40
7794.1200
stdev 0.021
extra −0.54
7821.5100
stdev 0.021
extra −0.47
8399.1600
stdev 0.015
extra −0.44
8430.1700
stdev 0.018
extra −0.43
8885.8300
stdev 0.025
extra −0.40
8919.6100
stdev 0.027
extra −0.41
meas − pred, pix
mfib1 34
mfib2 34

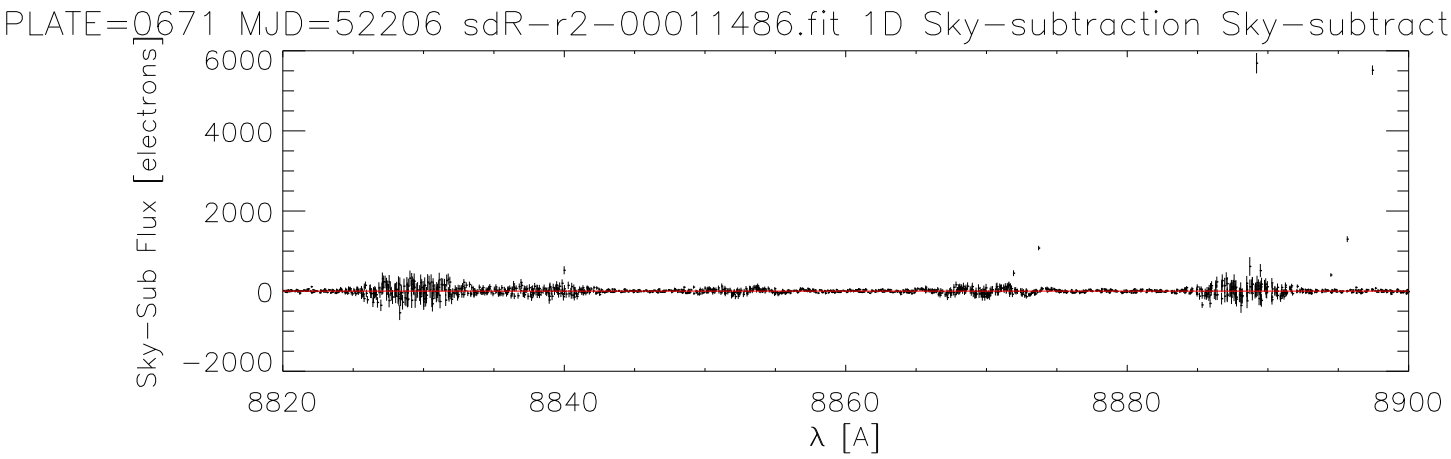

sky shift, pixels
−0.40
−0.42
−0.44
−0.46
−0.48
−0.50
−0.52
5000
6000
7000
8000
9000
10000

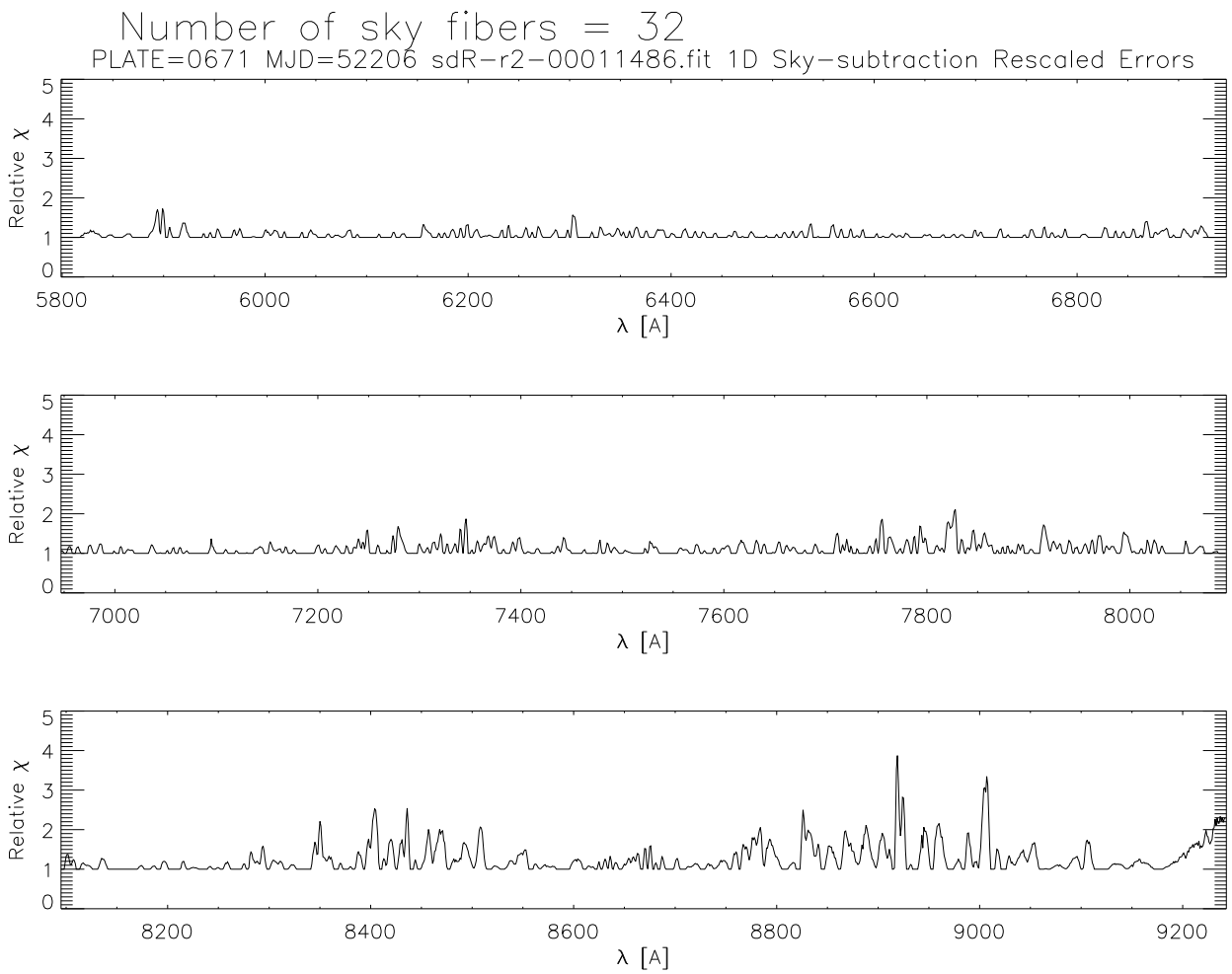

PLATE=0671 MJD=52206 Smooth superflat for sdR-r2-00011486.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

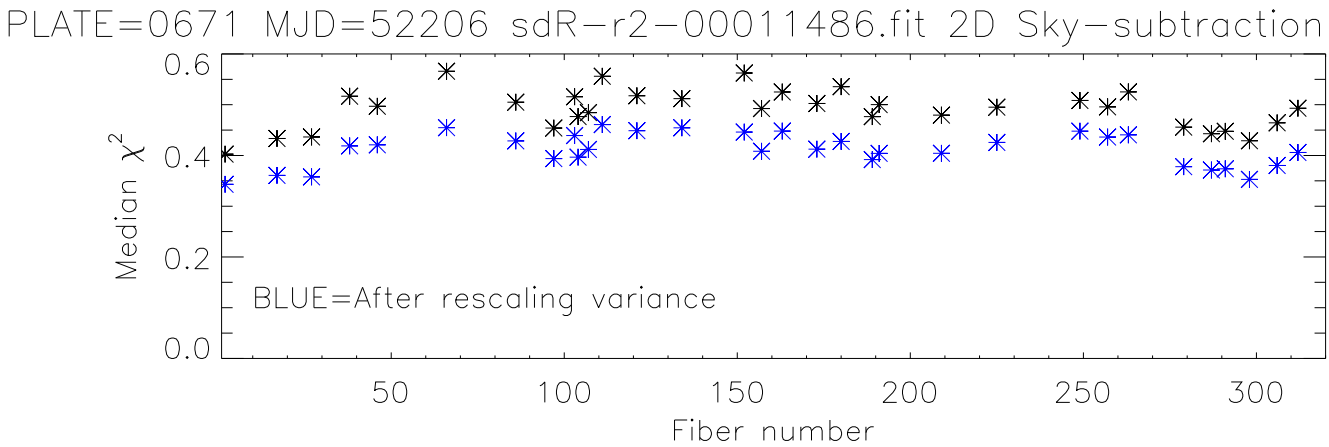
es= −0.0000

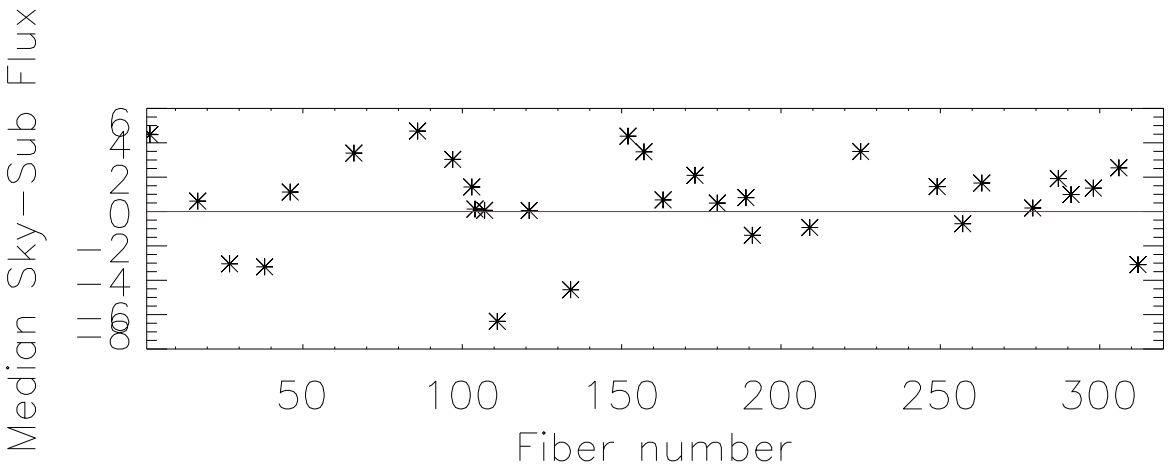

PLATE=0671 MJD=52206 sdR-r2-00011486.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

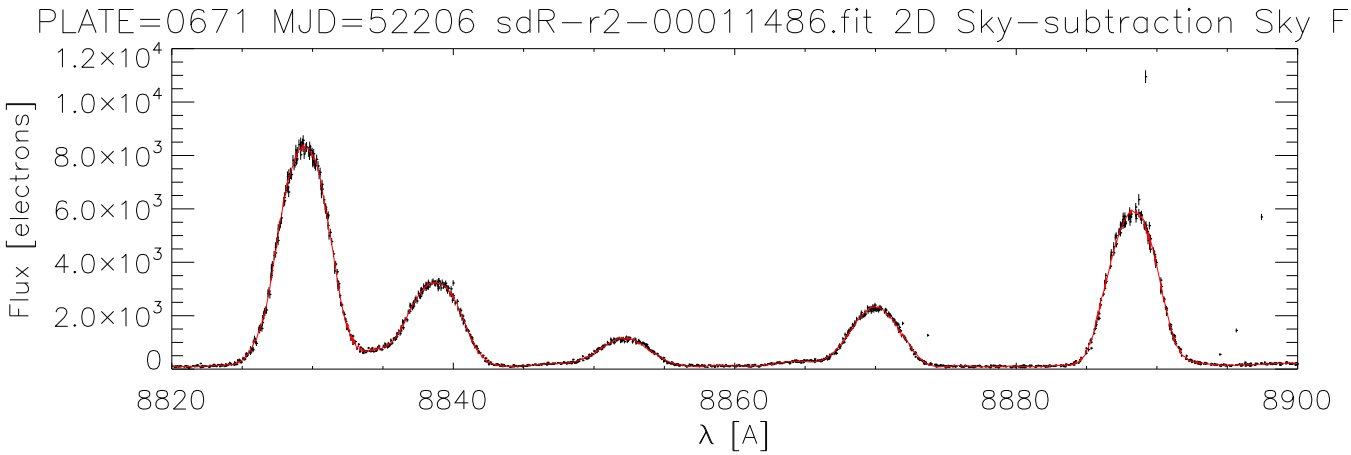

PLATE=0671 MJD=52206 sdR-r2-00011486.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

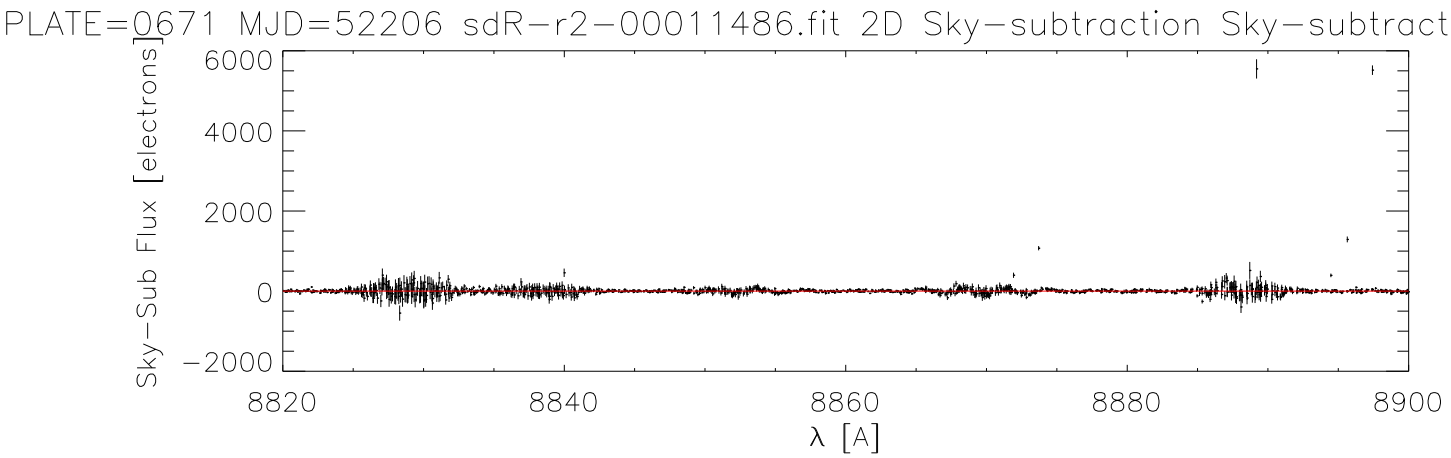

PLATE=0671 MJD=52206 sdR-r2-00011486.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

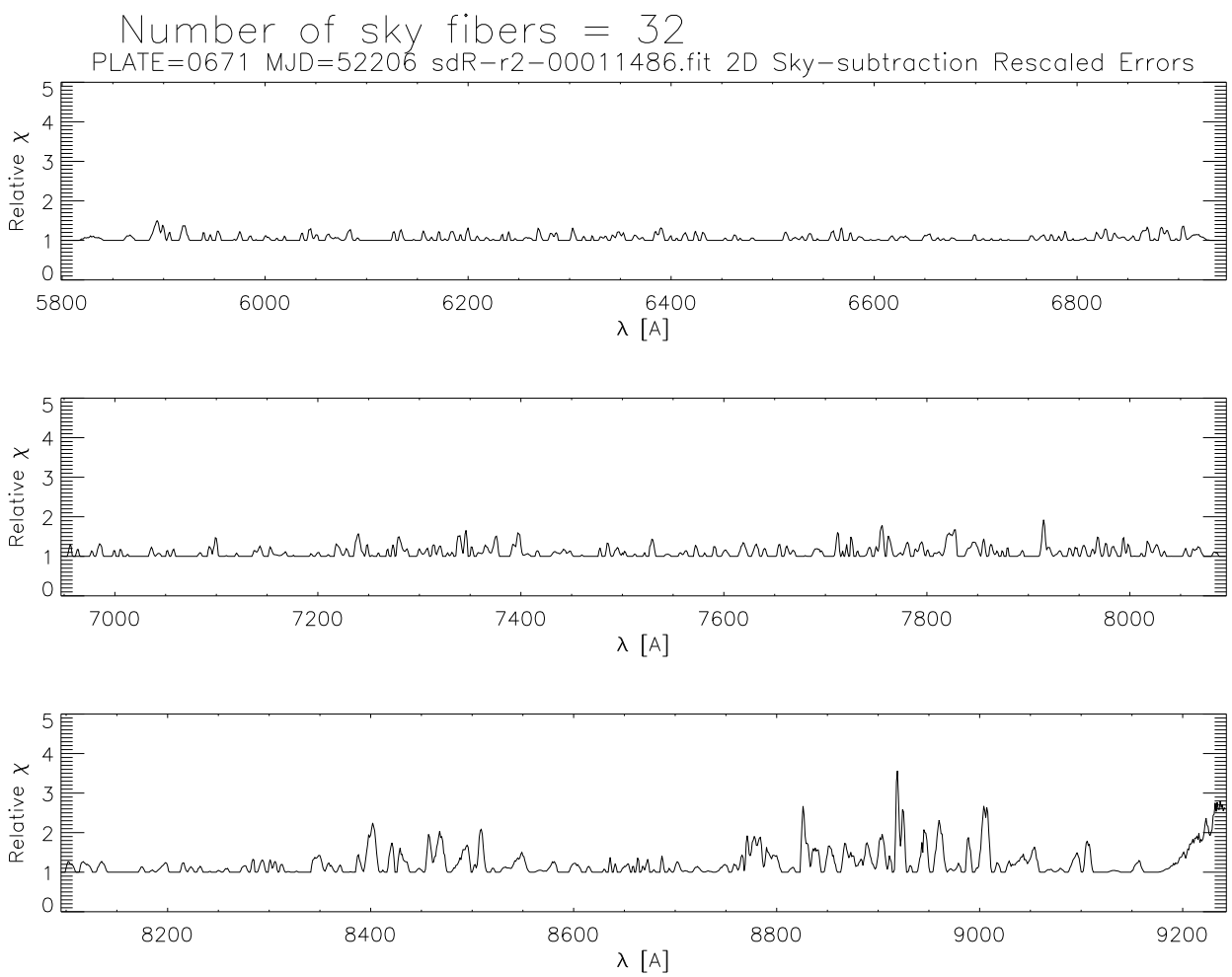

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011486.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

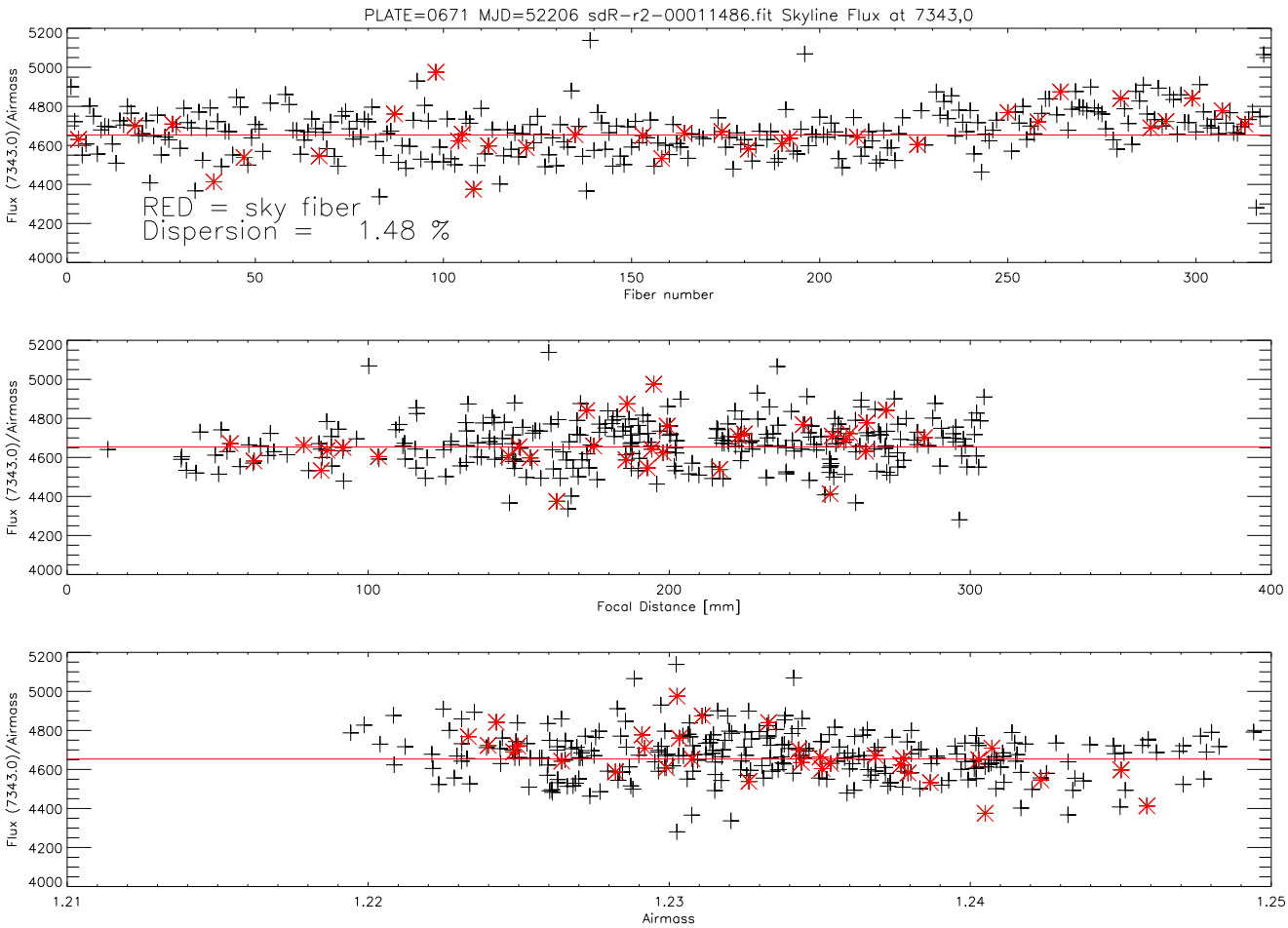

PLATE=0671 MJD=52206 sdR-r2-00011486.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

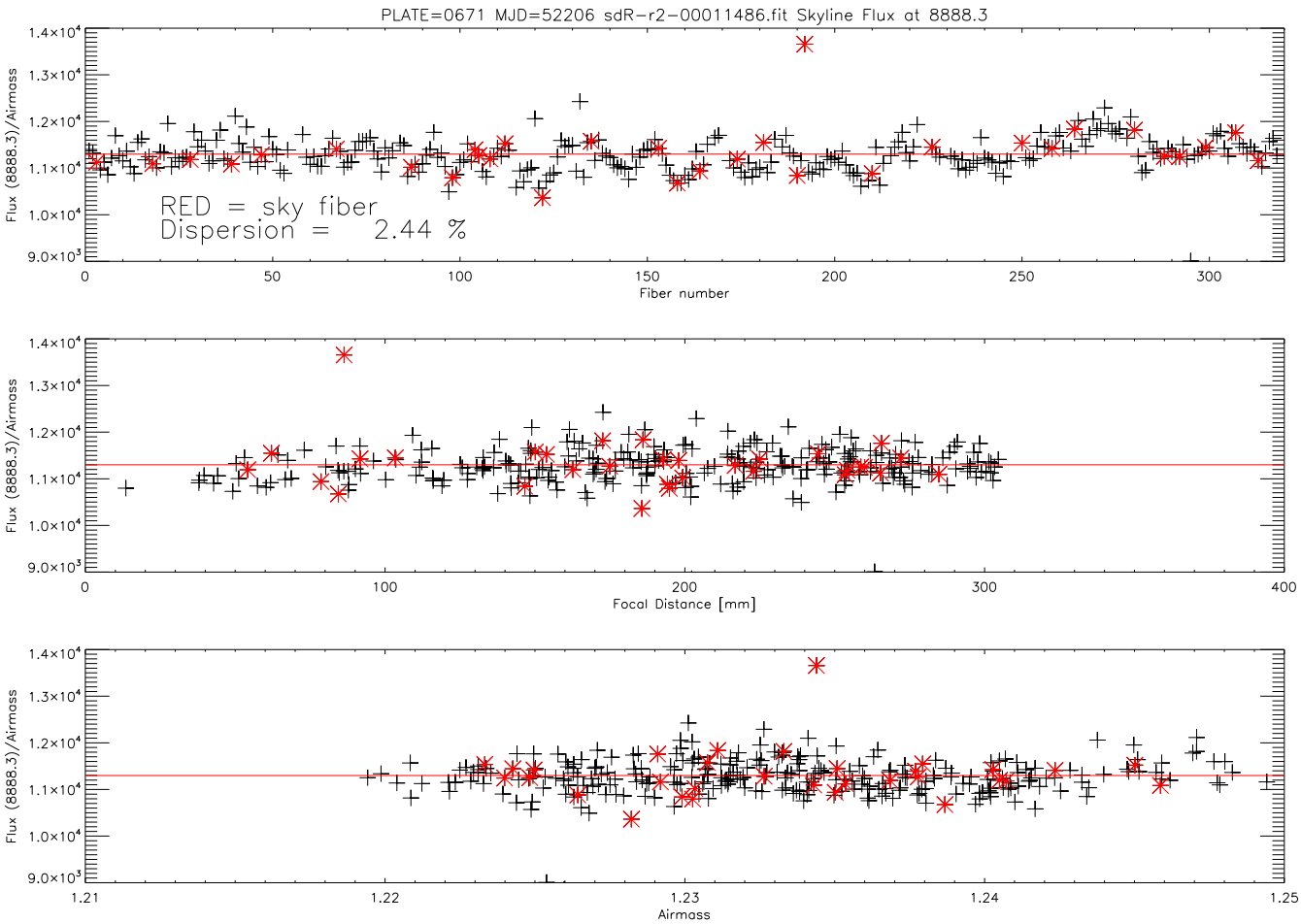

Median Sky-Sub Flux
Fiber number

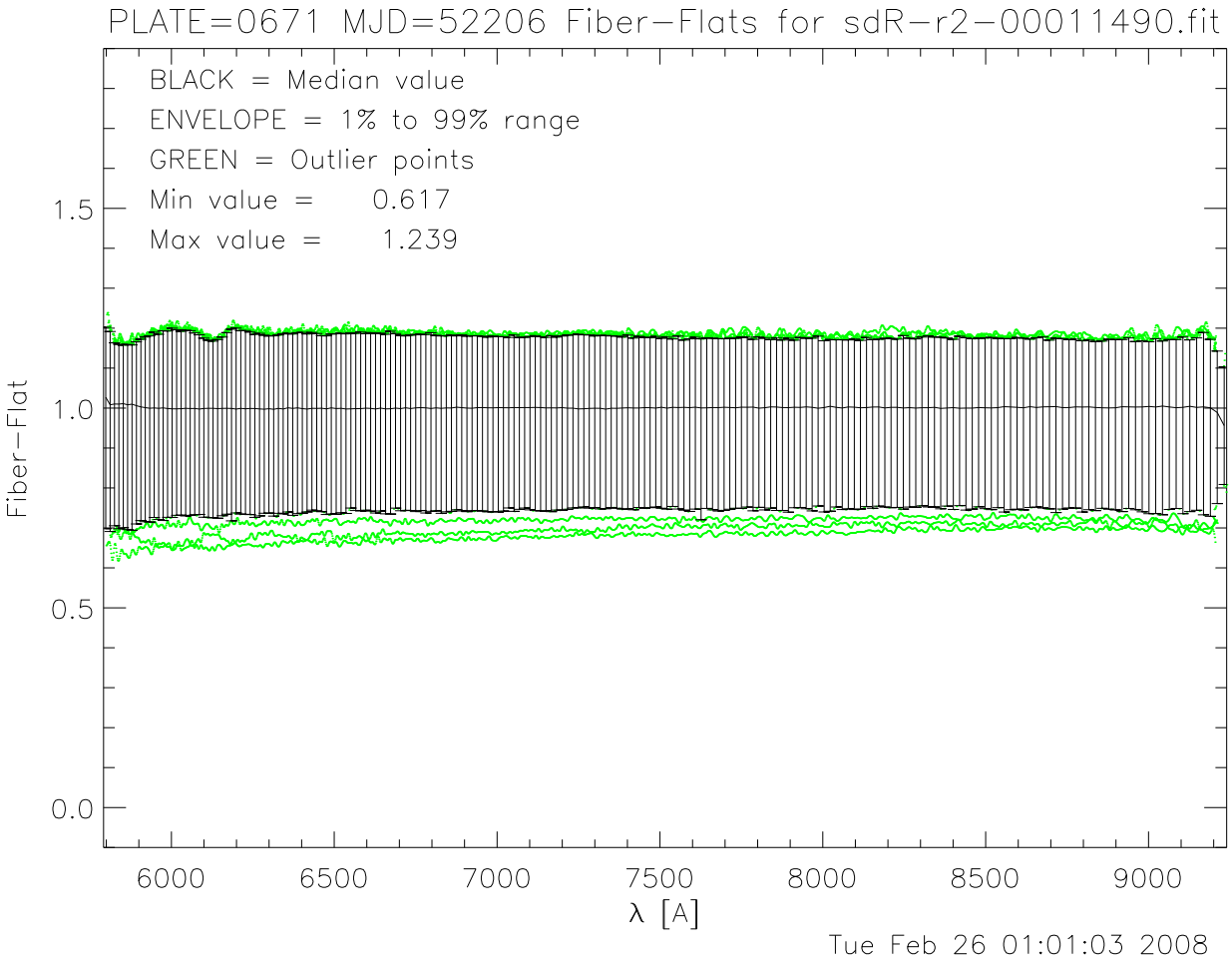

PLATE=0671 MJD=52206 sdR-r2-00011486.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

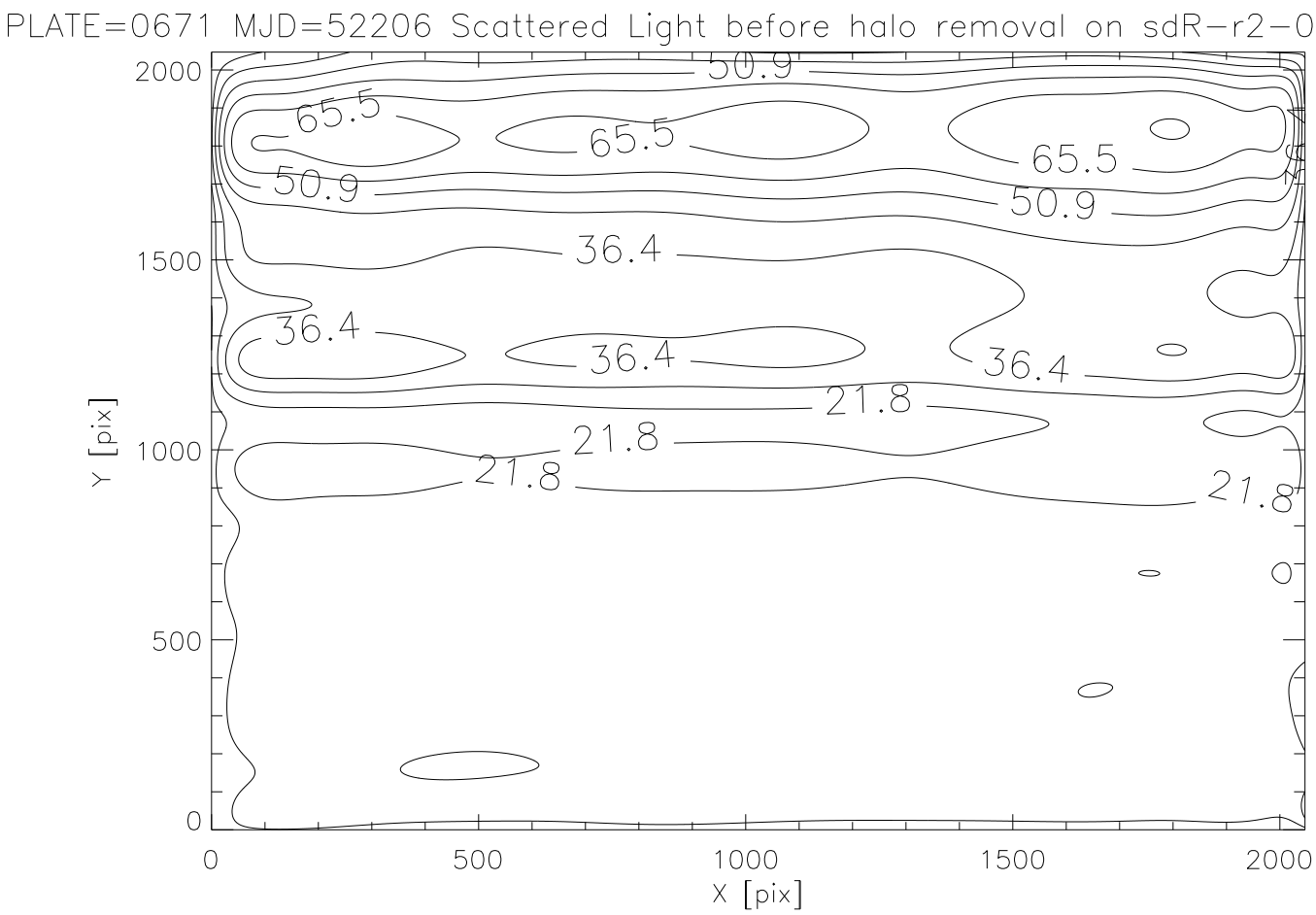

PLATE=0671 MJD=52206 sdR-r2-00011486.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

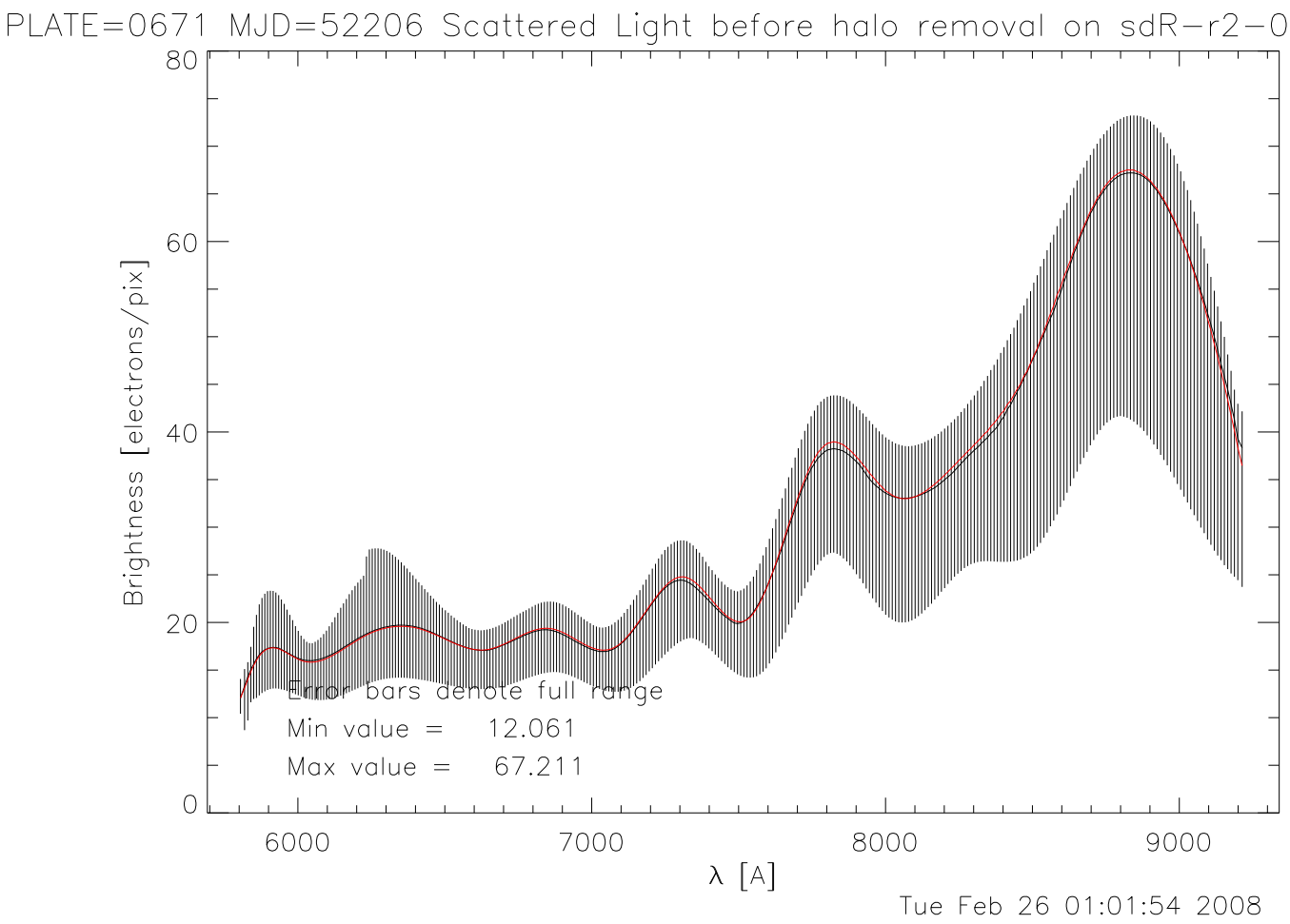

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011486.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

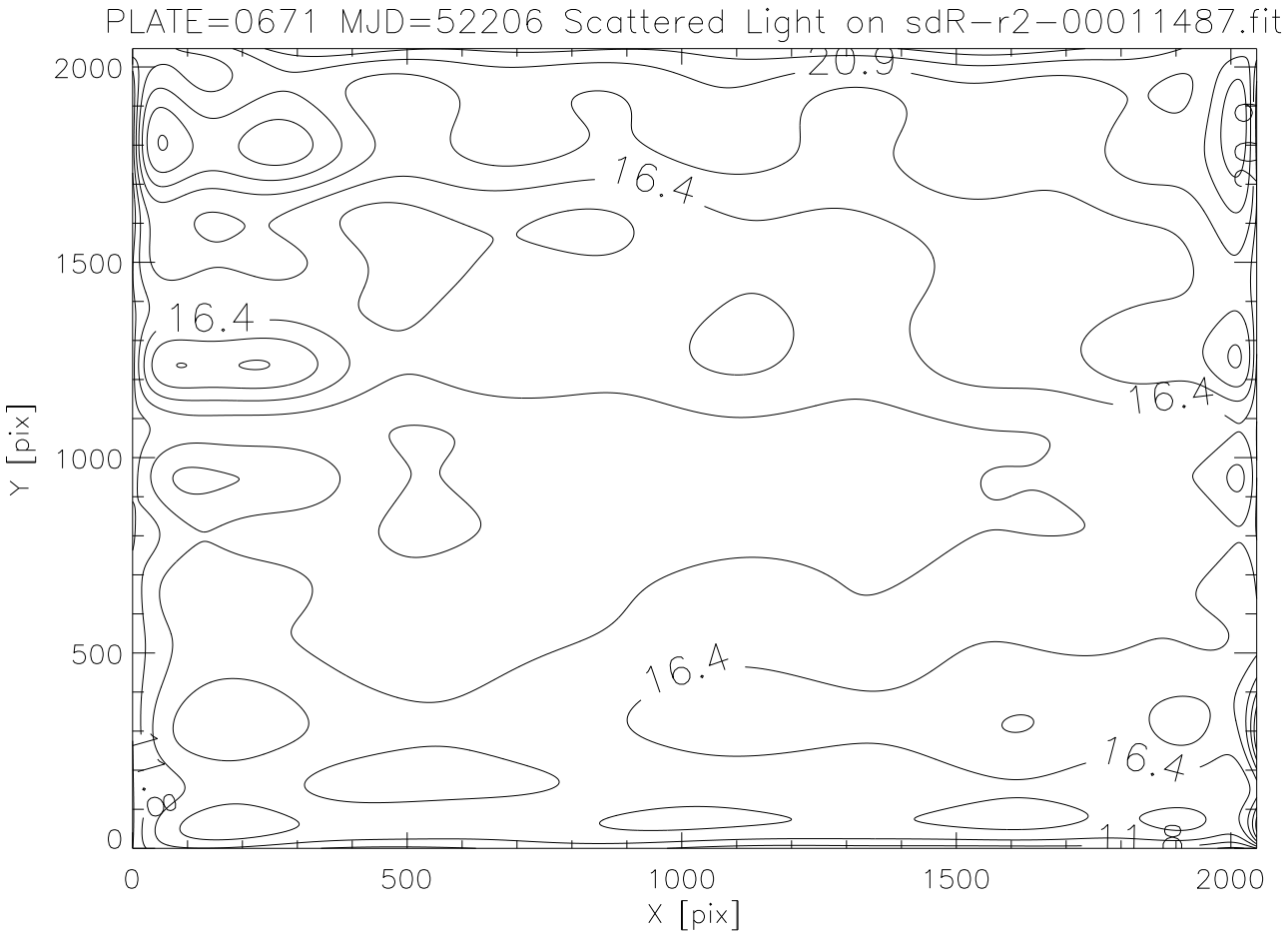

PLATE=0671 MJD=52206 sdR-r2-00011486.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.48 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

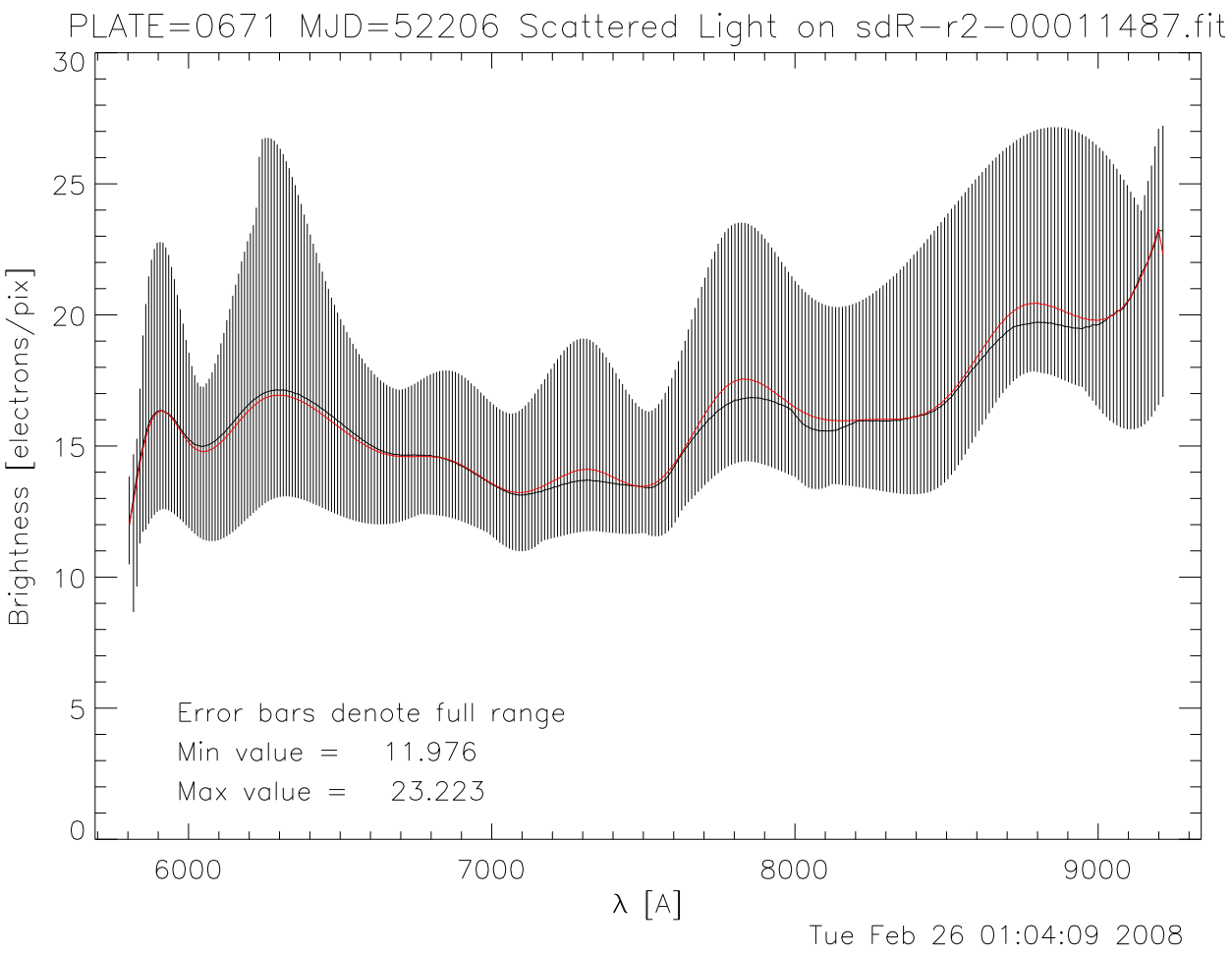

PLATE=0671 MJD=52206 sdR-r2-00011486.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.44 %
Fiber number
Focal Distance [mm]
Airmass

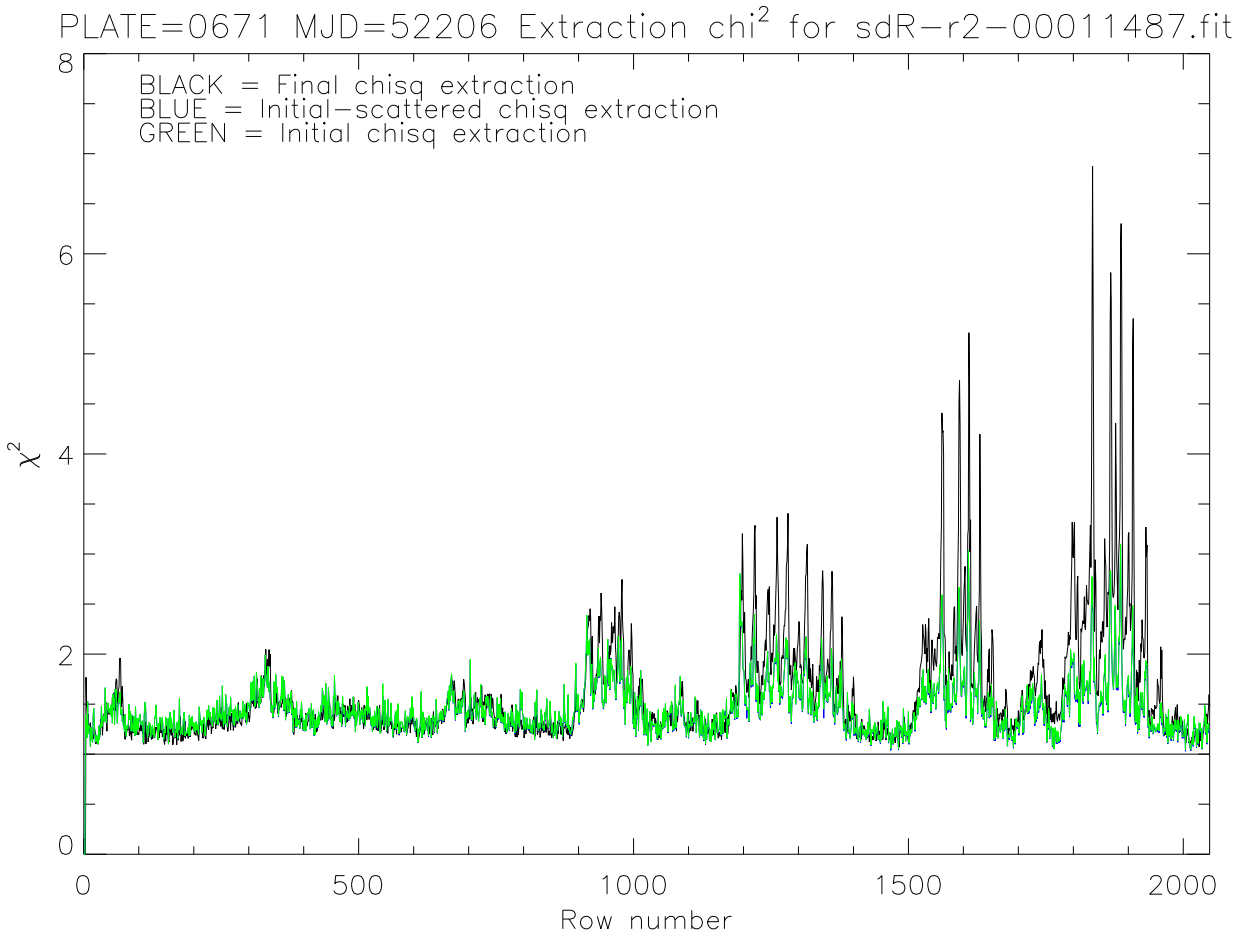

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r2−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.617
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 01:01:03 2008

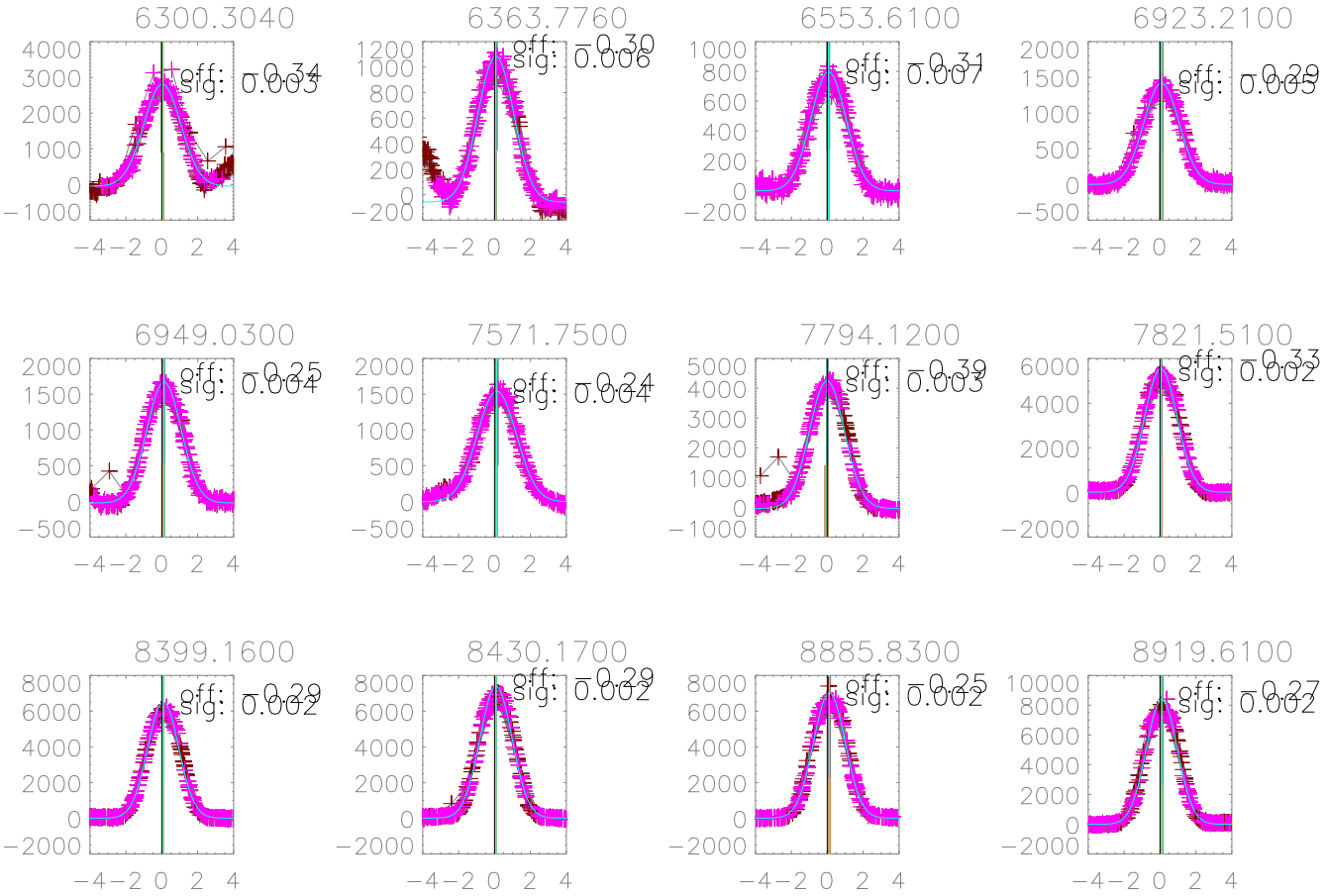

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011487.fi
50.9
65.5
65.5
65.5
50.9
50.9
36.4
36.4
36.4
36.4
21.8
21.8
21.8
21.8
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

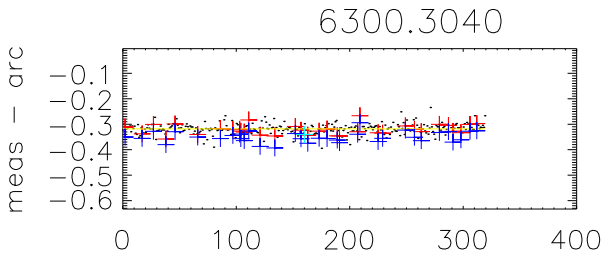

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011487.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 12.061
Max value = 67.211
Tue Feb 26 01:01:54 2008

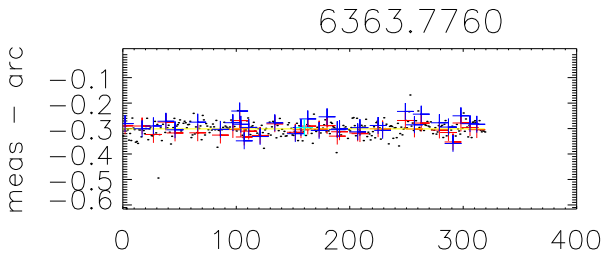

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011487.fit
20.9
16.4
16.4
16.4
16.4
16.4
11.8
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

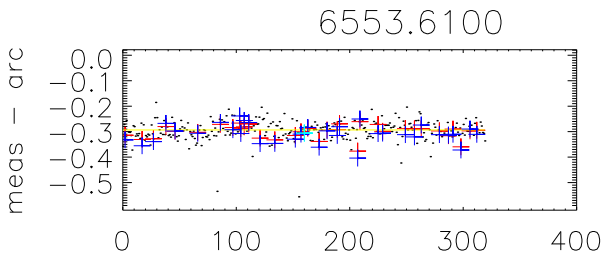

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011487.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.976
Max value = 23.223
Tue Feb 26 01:04:09 2008

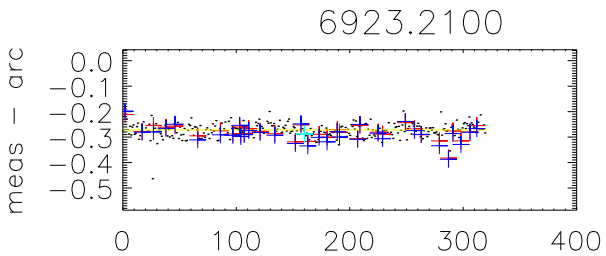

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r2−00011487.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

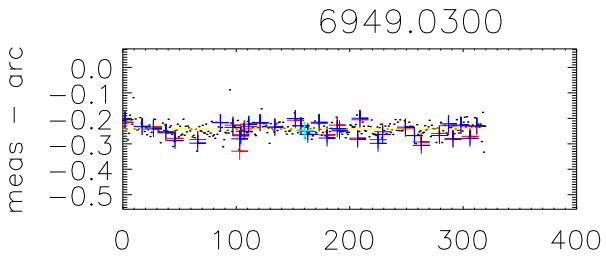

6300.3040
off: −0.34
sig: 0.003
6363.7760
off: −0.30
sig: 0.006
6553.6100
off: −0.31
sig: 0.007
6923.2100
off: −0.29
sig: 0.005
6949.0300
off: −0.25
sig: 0.004
7571.7500
off: −0.24
sig: 0.004
7794.1200
off: −0.39
sig: 0.003
7821.5100
off: −0.33
sig: 0.002
8399.1600
off: −0.29
sig: 0.002
8430.1700
off: −0.29
sig: 0.002
8885.8300
off: −0.25
sig: 0.002
8919.6100
off: −0.27
sig: 0.002

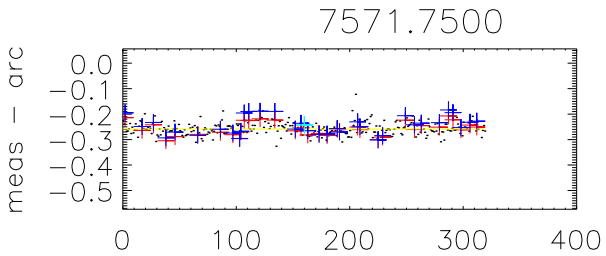

6300.3040
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

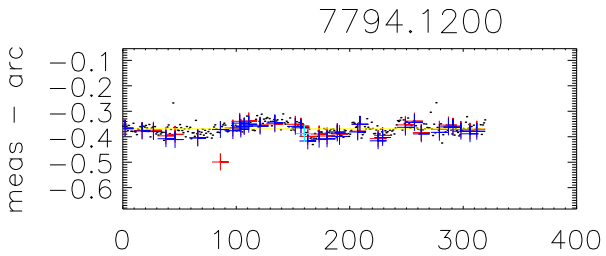

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

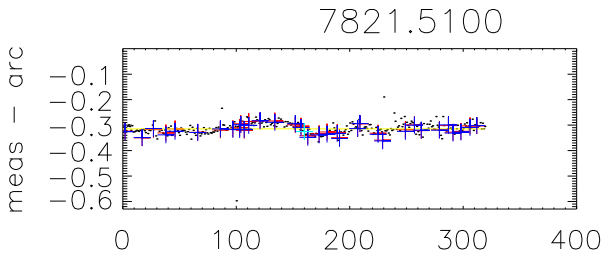

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

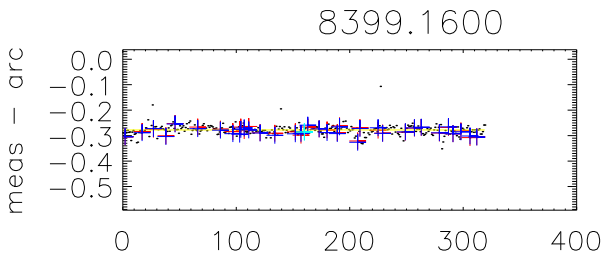

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

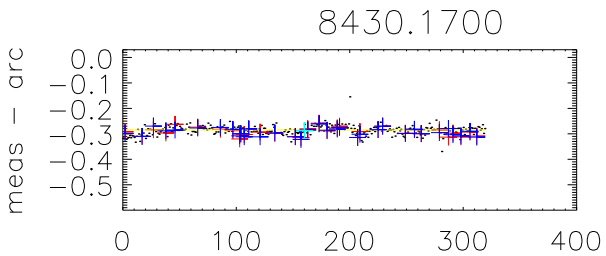

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

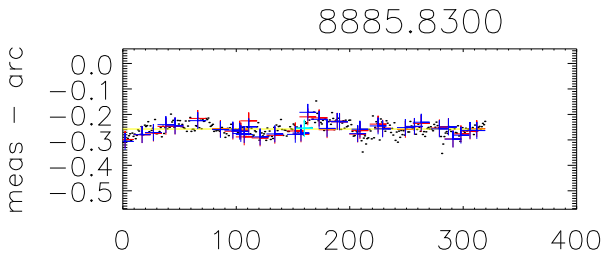

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

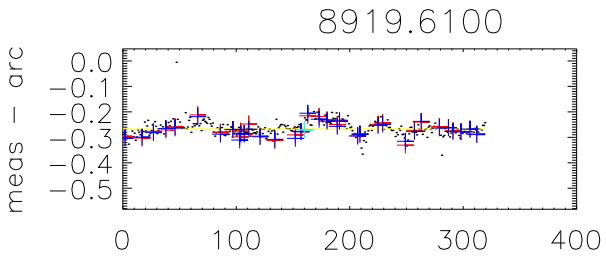

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

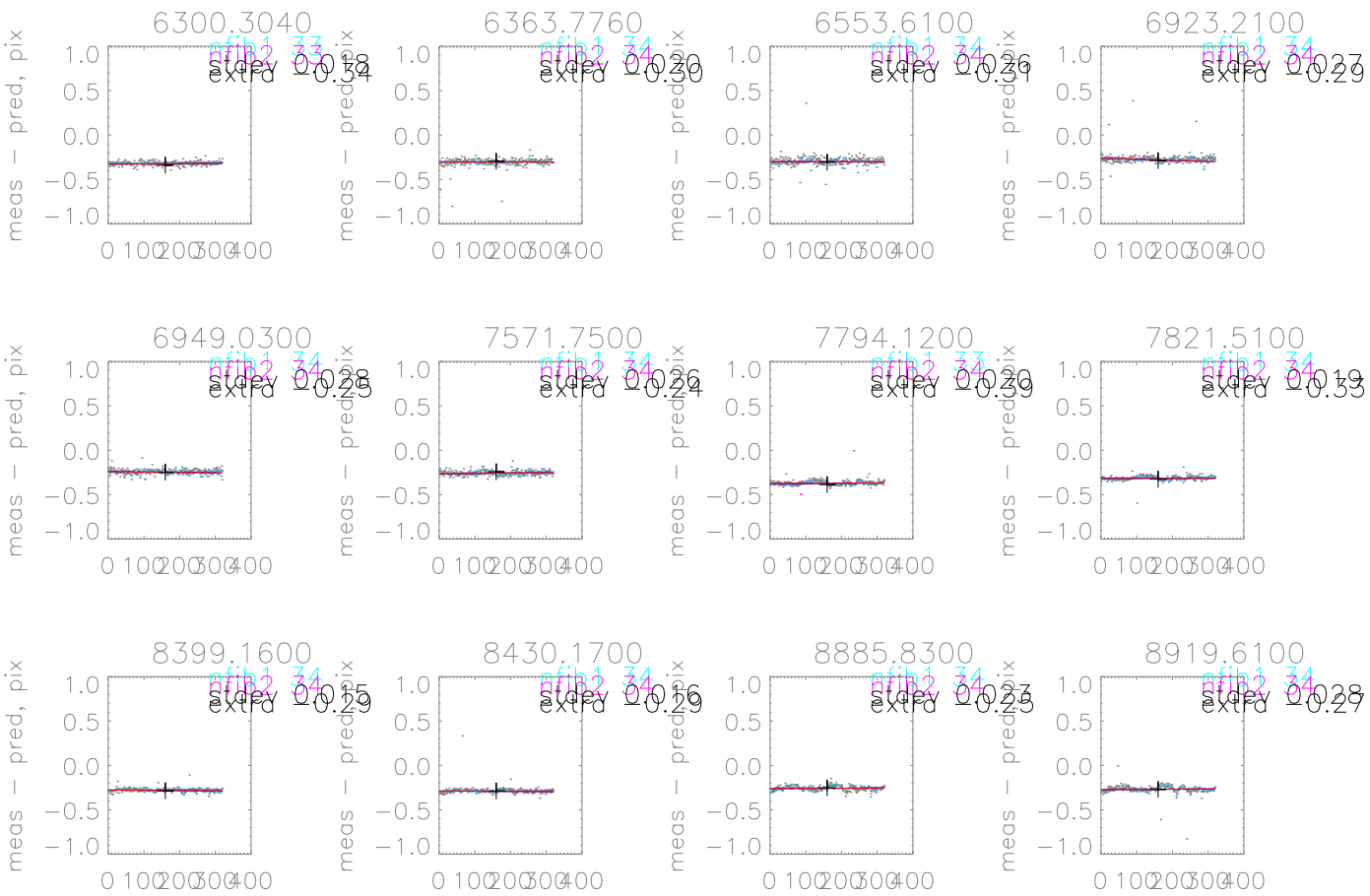

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

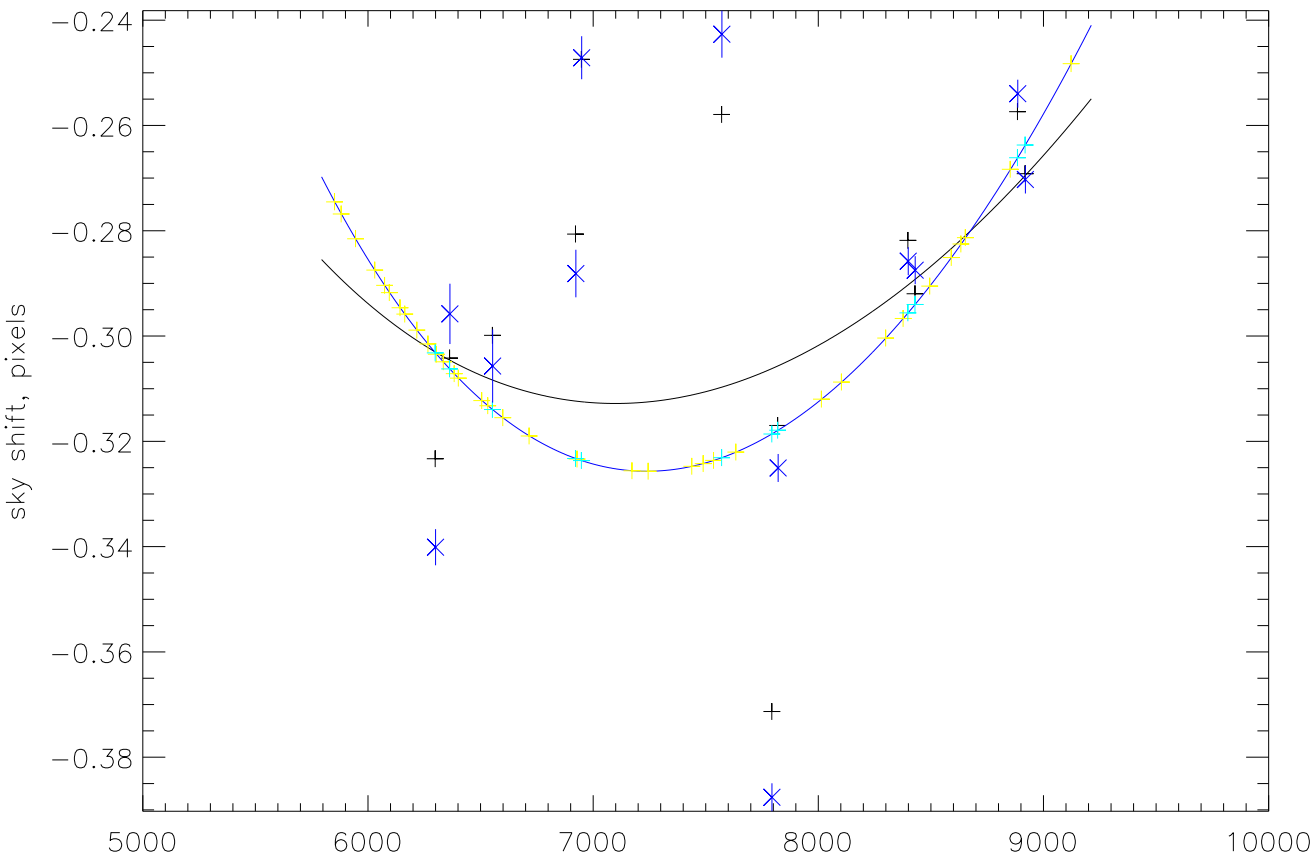

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

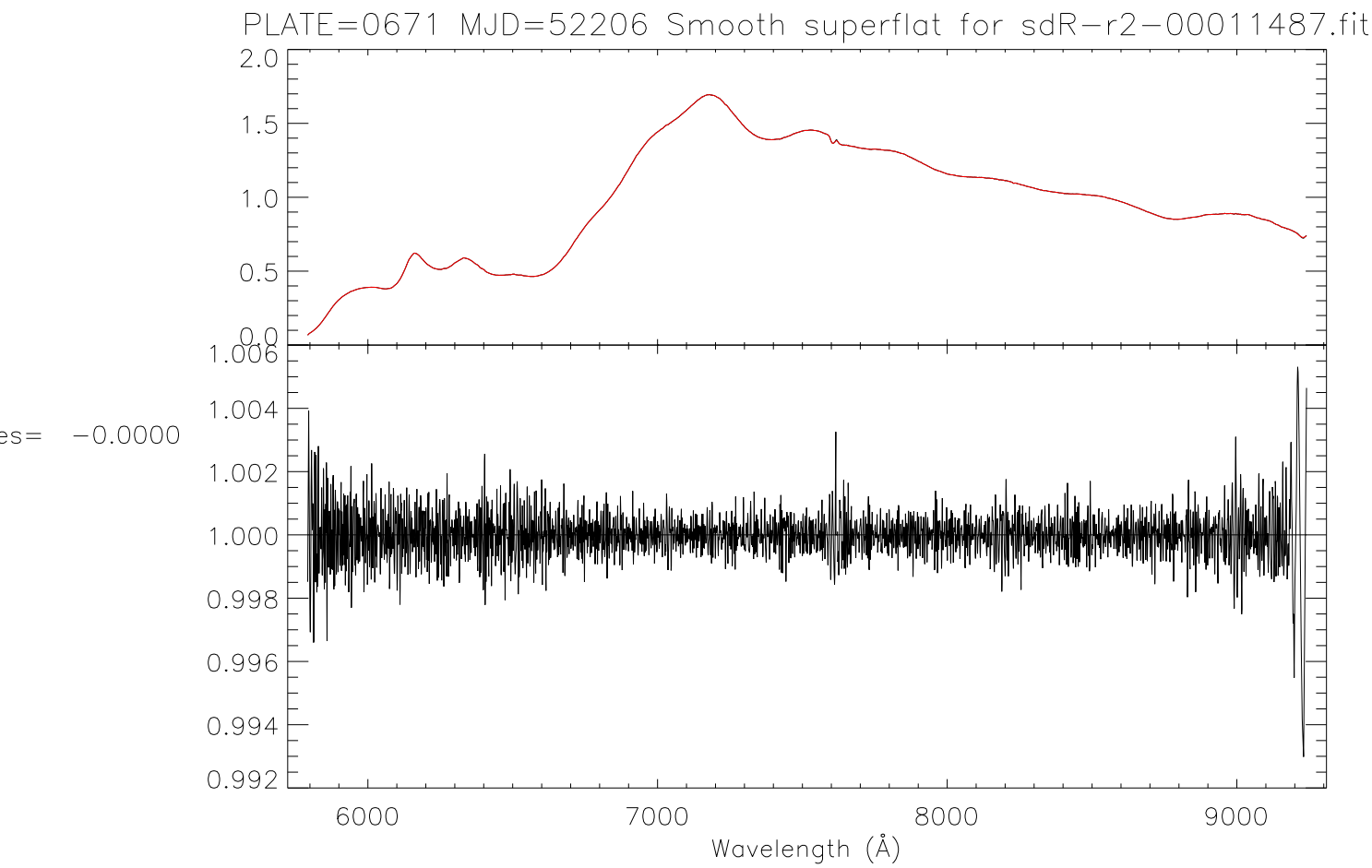

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

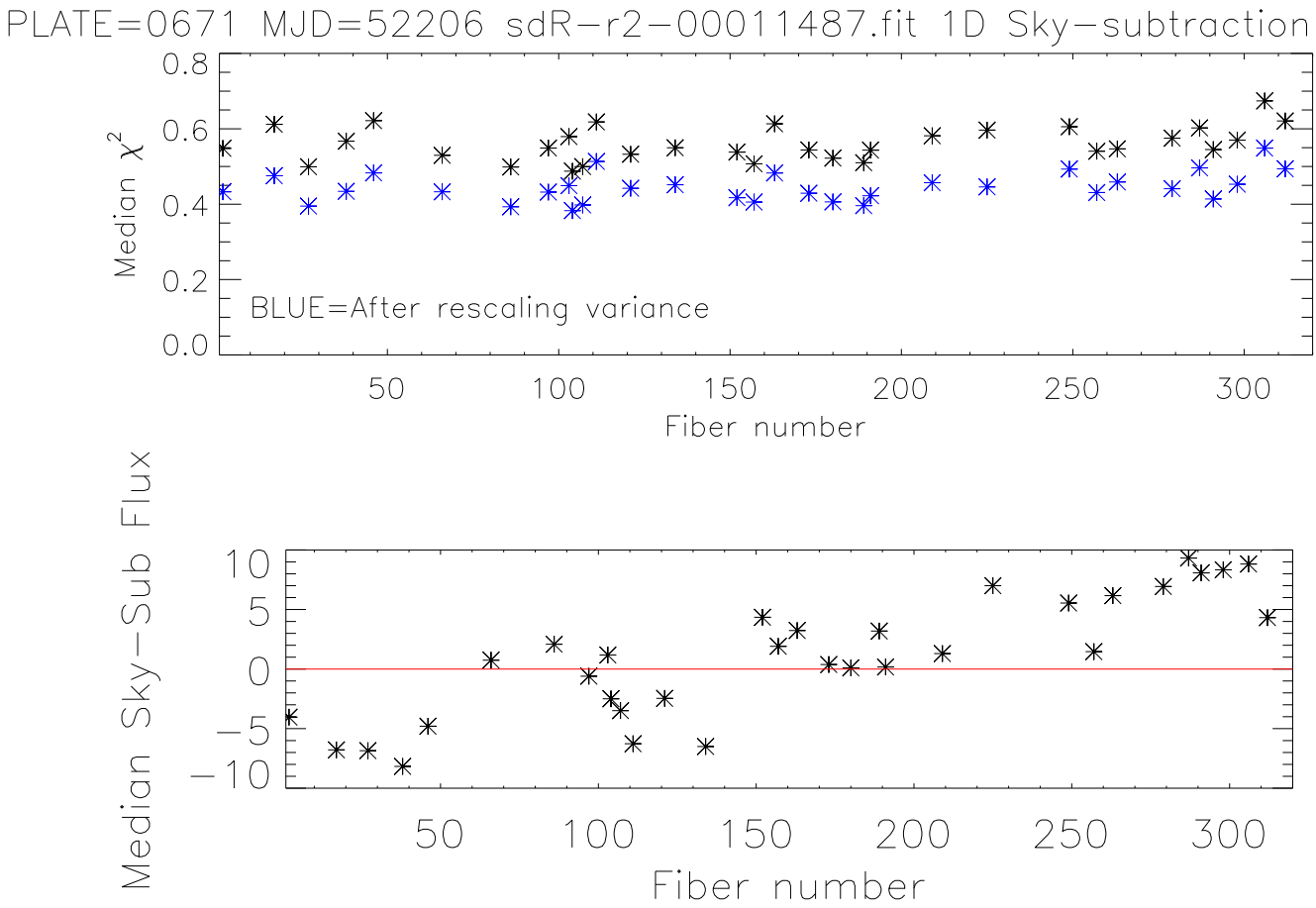

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

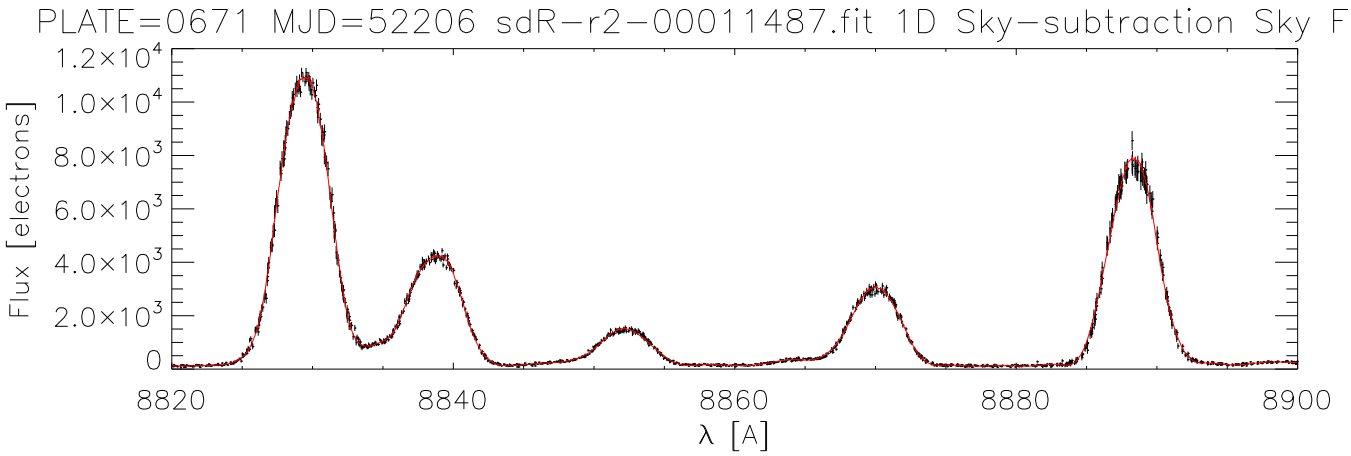

6300.3040
mfib1 33
mfib2 34
stdev 0.18
extra −0.34
6363.7760
mfib1 34
mfib2 34
stdev 0.20
extra −0.30
6553.6100
mfib1 34
mfib2 34
stdev 0.26
extra −0.31
6923.2100
mfib1 34
mfib2 34
stdev 0.27
extra −0.29
6949.0300
mfib1 34
mfib2 34
stdev 0.28
extra −0.25
7571.7500
mfib1 34
mfib2 34
stdev 0.26
extra −0.24
7794.1200
mfib1 33
mfib2 34
stdev 0.30
extra −0.39
7821.5100
mfib1 34
mfib2 34
stdev 0.19
extra −0.33
8399.1600
mfib1 34
mfib2 34
stdev 0.15
extra −0.29
8430.1700
mfib1 34
mfib2 34
stdev 0.16
extra −0.29
8885.8300
mfib1 34
mfib2 34
stdev 0.23
extra −0.25
8919.6100
mfib1 34
mfib2 34
stdev 0.28
extra −0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

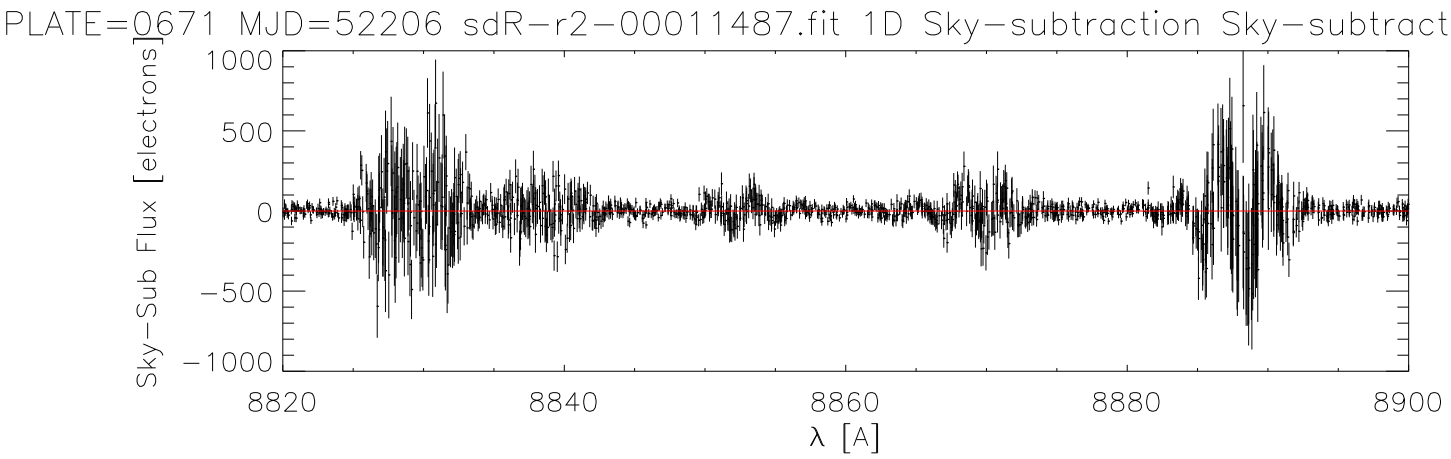

−0.24
−0.26
−0.28
−0.30
−0.32
−0.34
−0.36
−0.38
sky shift, pixels
5000
6000
7000
8000
9000
10000

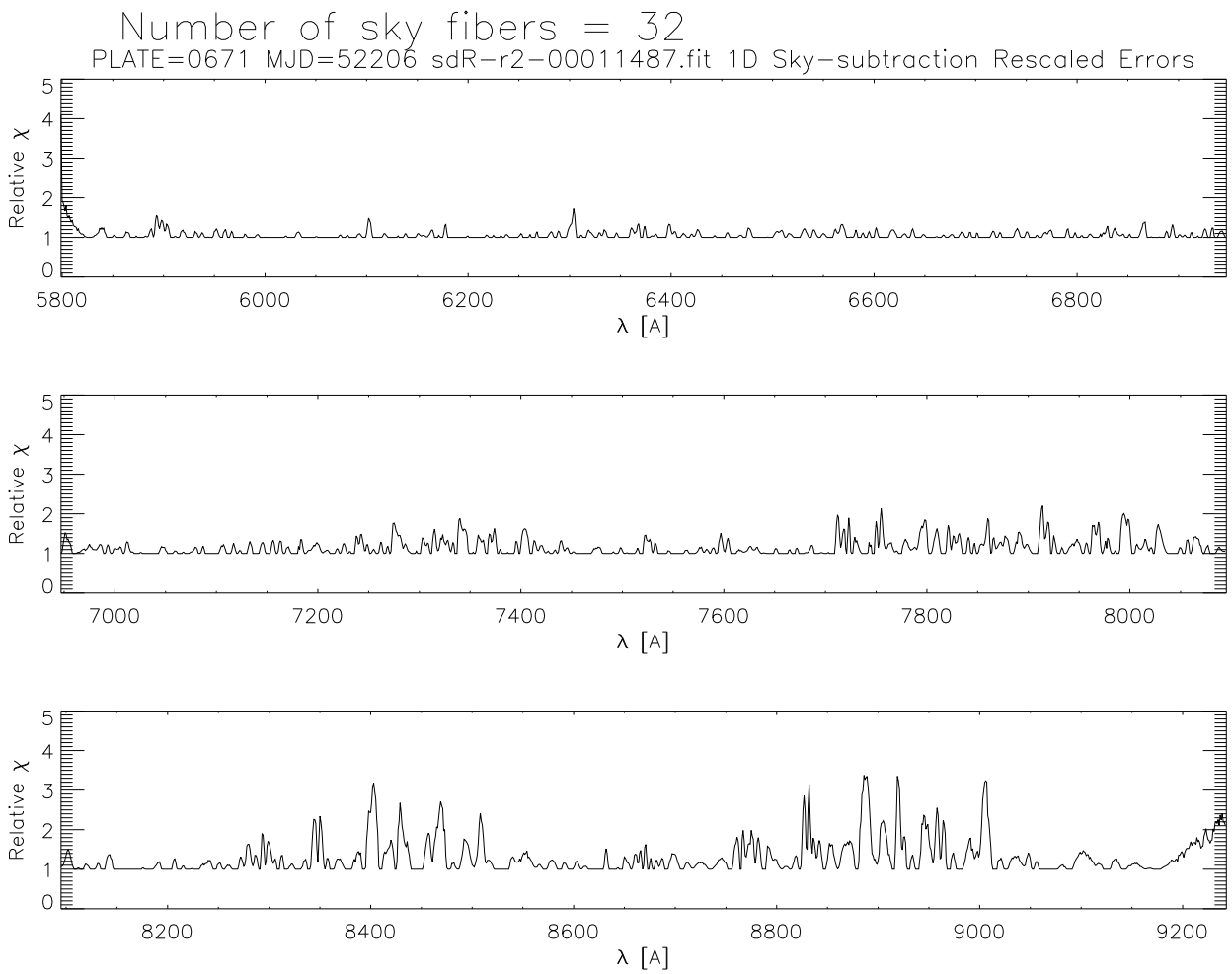

PLATE=0671 MJD=52206 Smooth superflat for sdR-r2-00011487.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

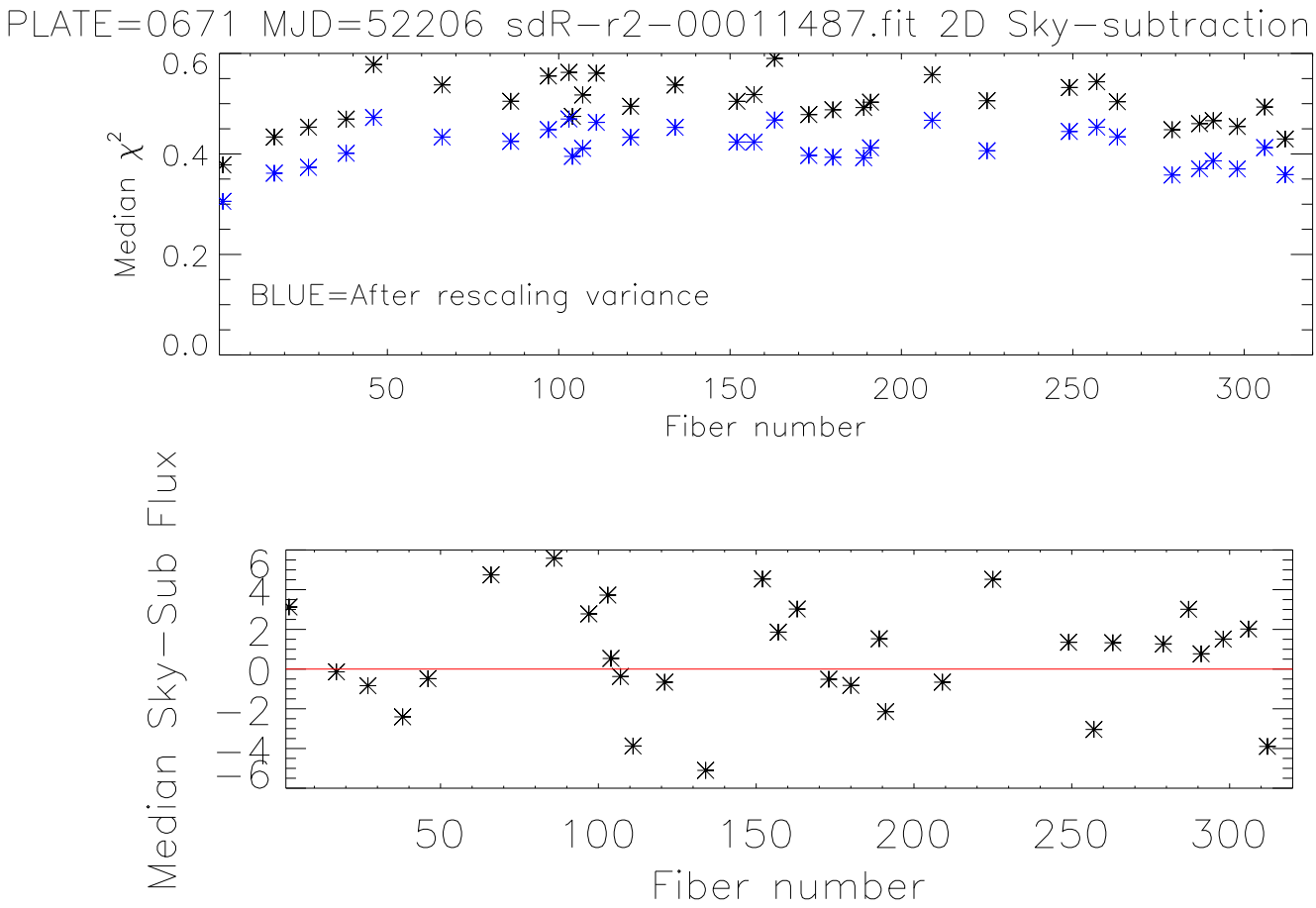
es= −0.0000

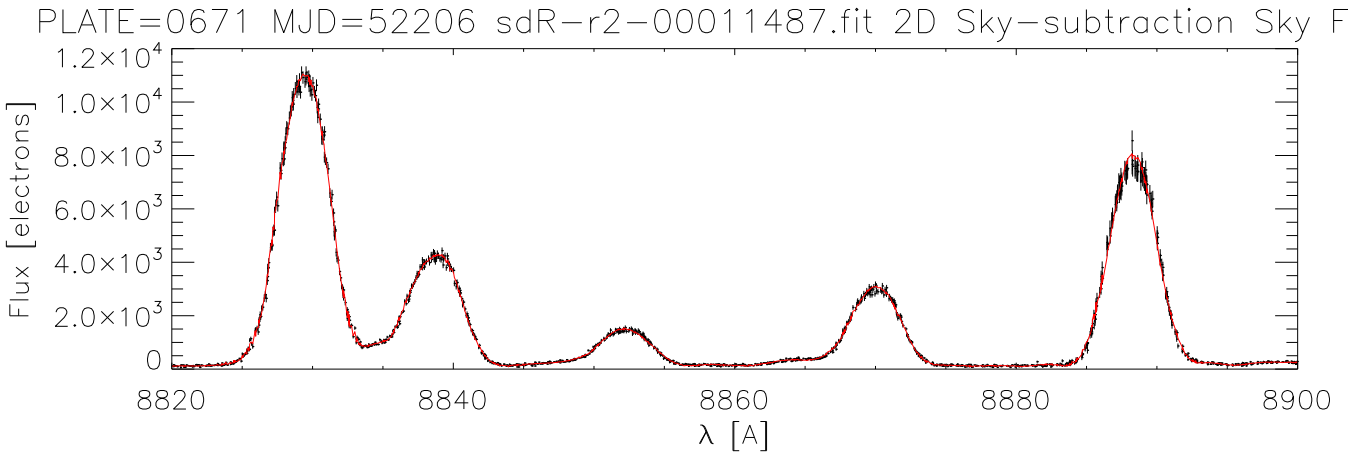

PLATE=0671 MJD=52206 sdR-r2-00011487.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

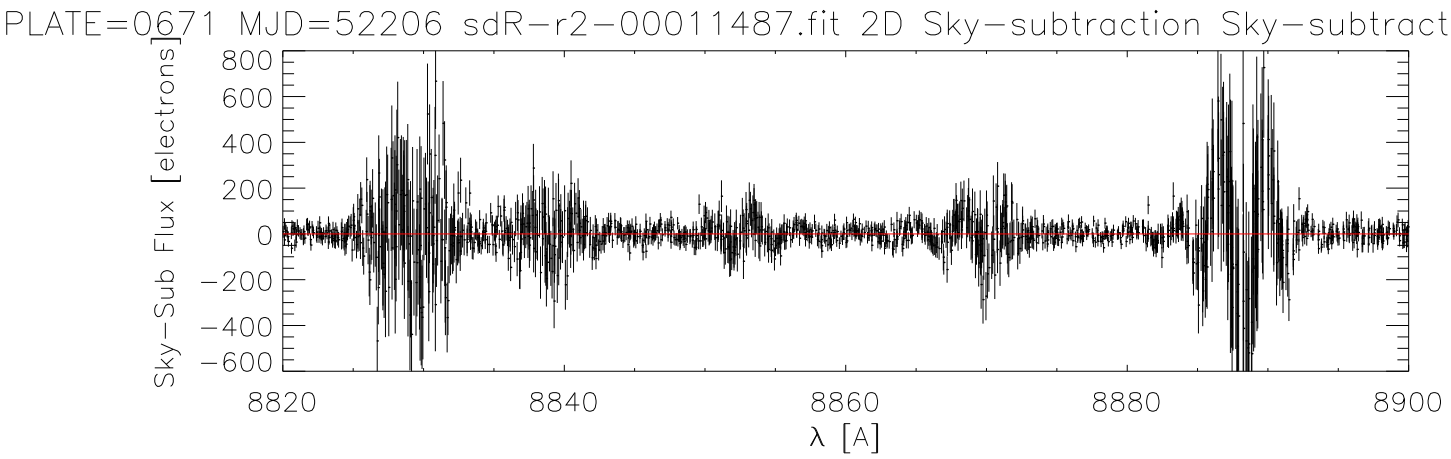

PLATE=0671 MJD=52206 sdR-r2-00011487.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

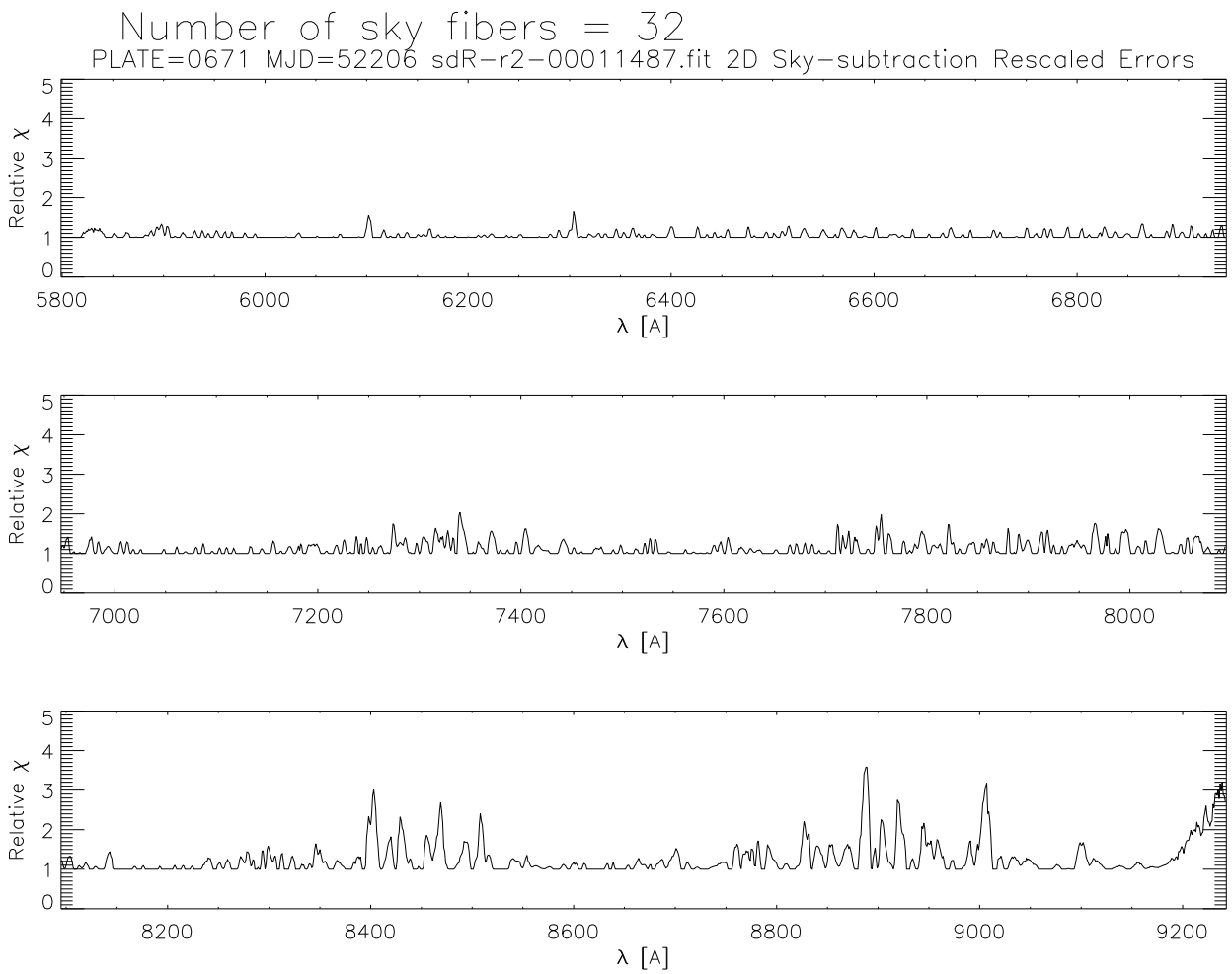

PLATE=0671 MJD=52206 sdR-r2-00011487.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
8820
8840
8860
8880
8900
λ [A]

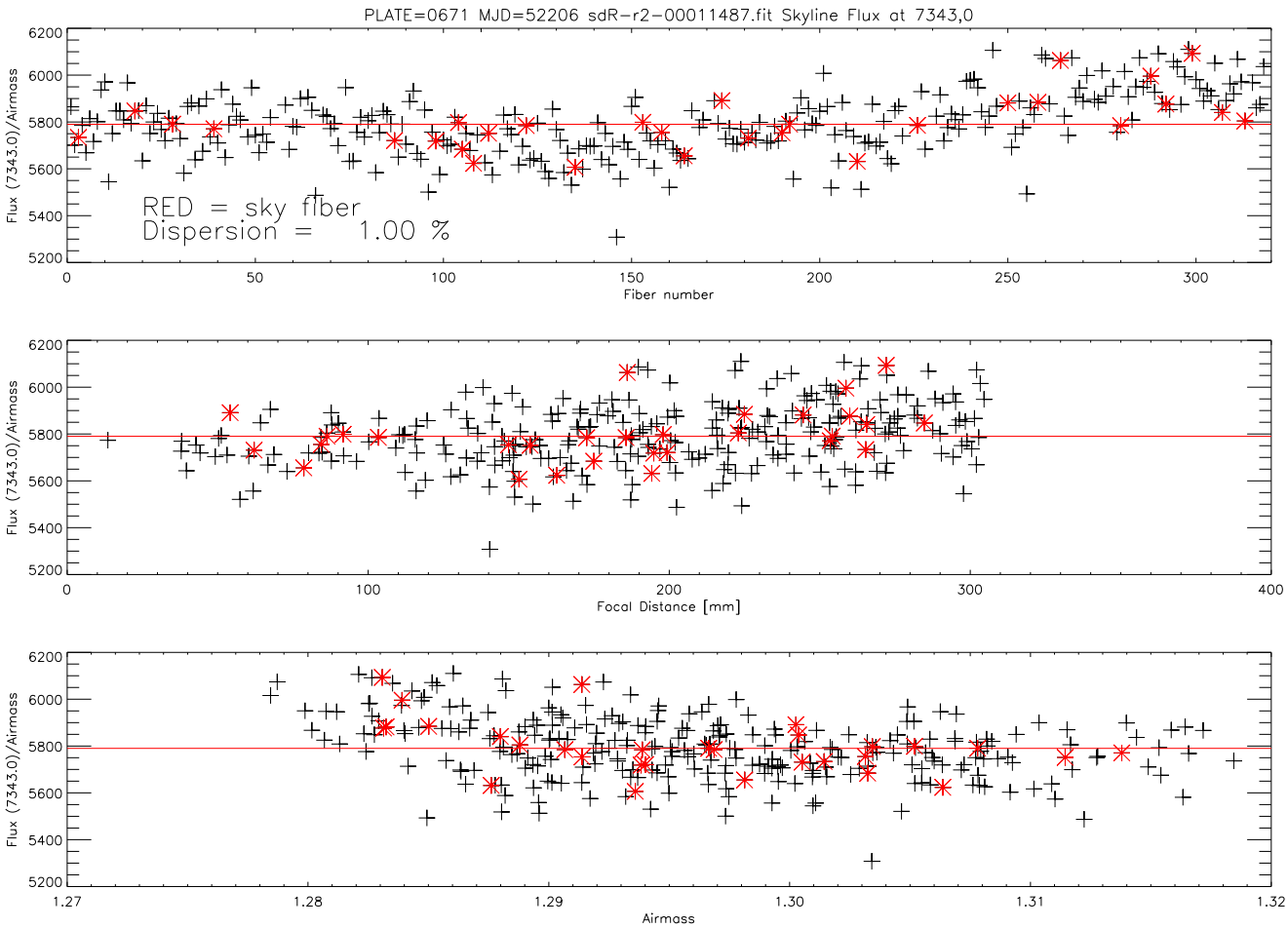

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011487.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

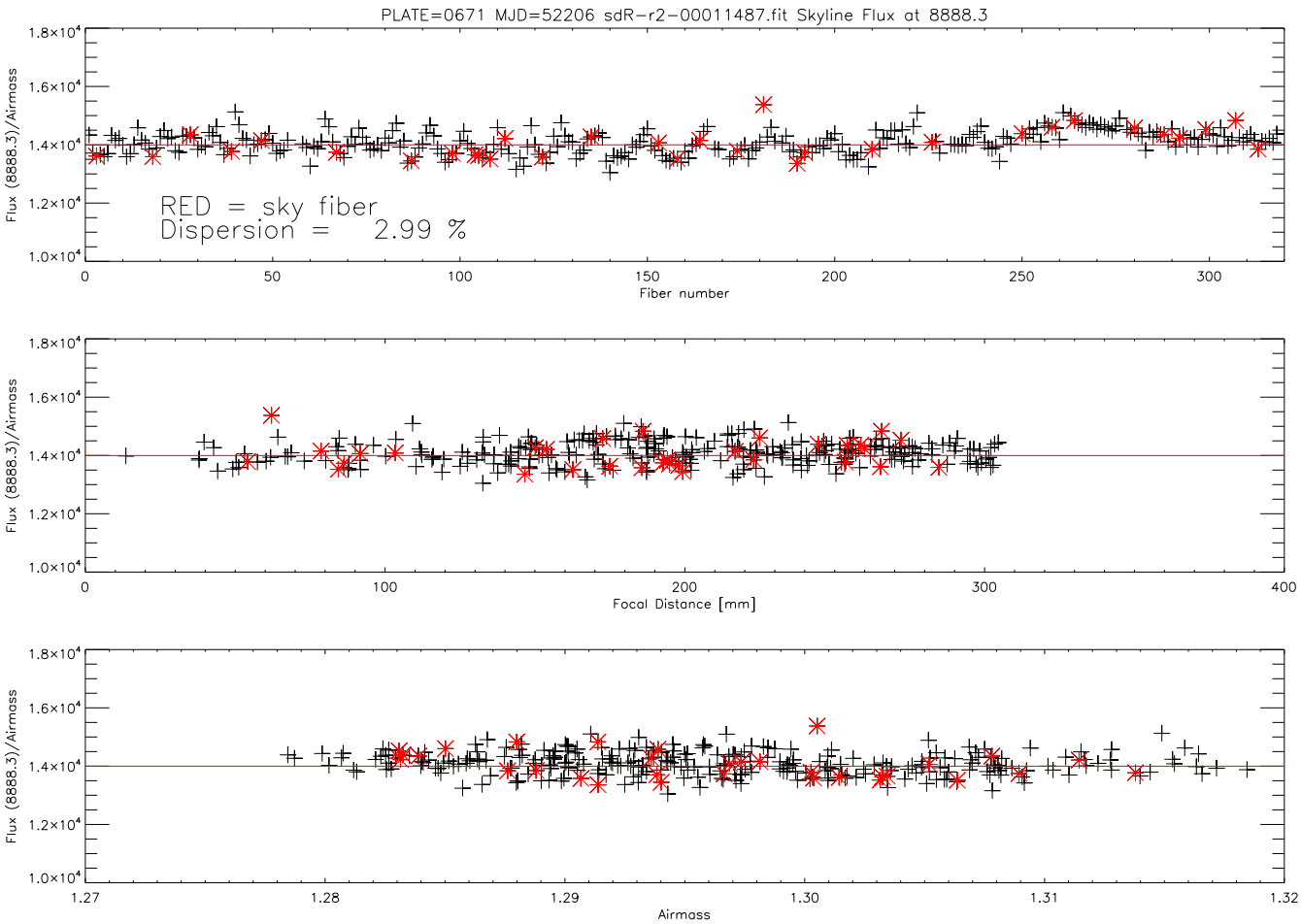

PLATE=0671 MJD=52206 sdR-r2-00011487.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

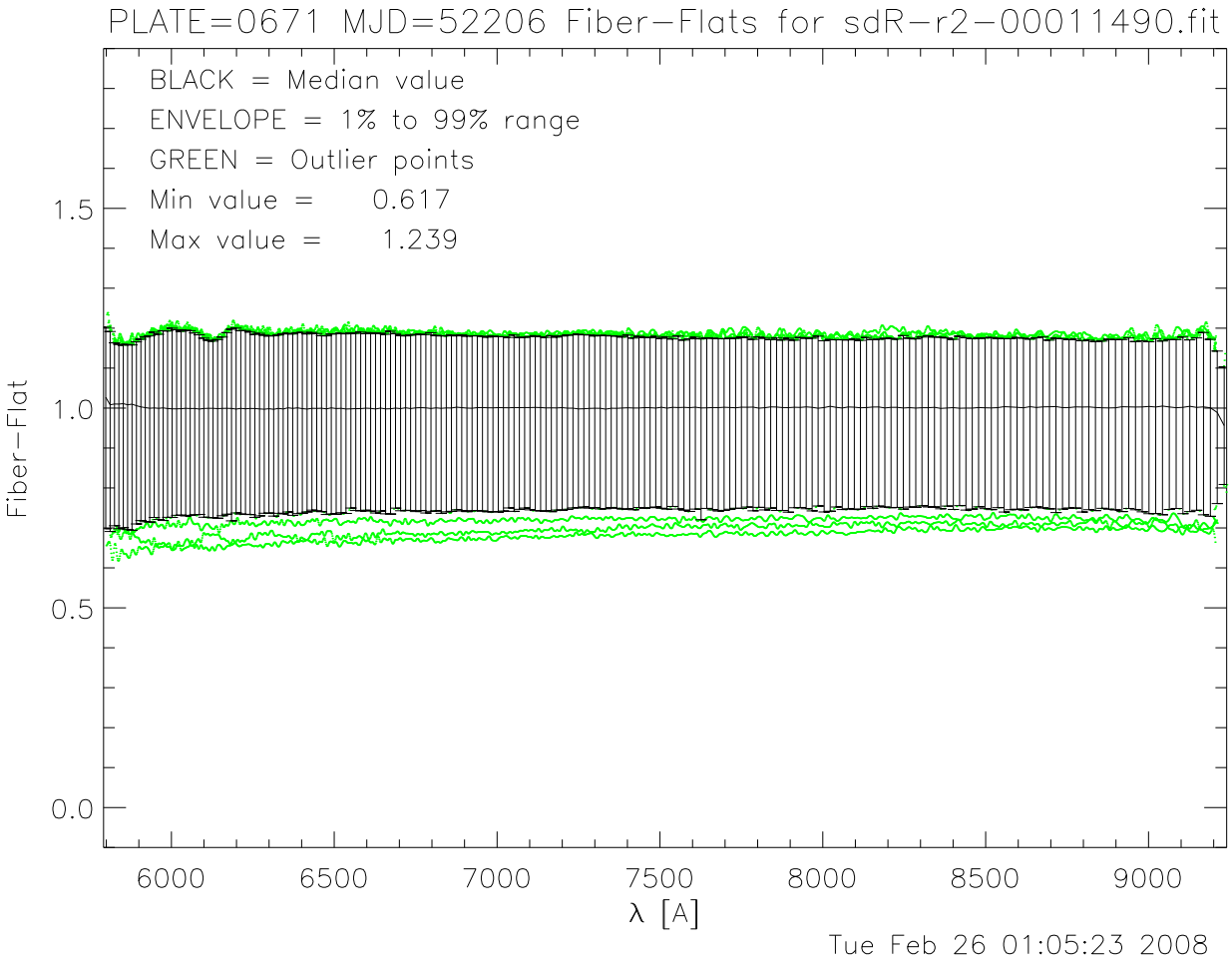

PLATE=0671 MJD=52206 sdR-r2-00011487.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

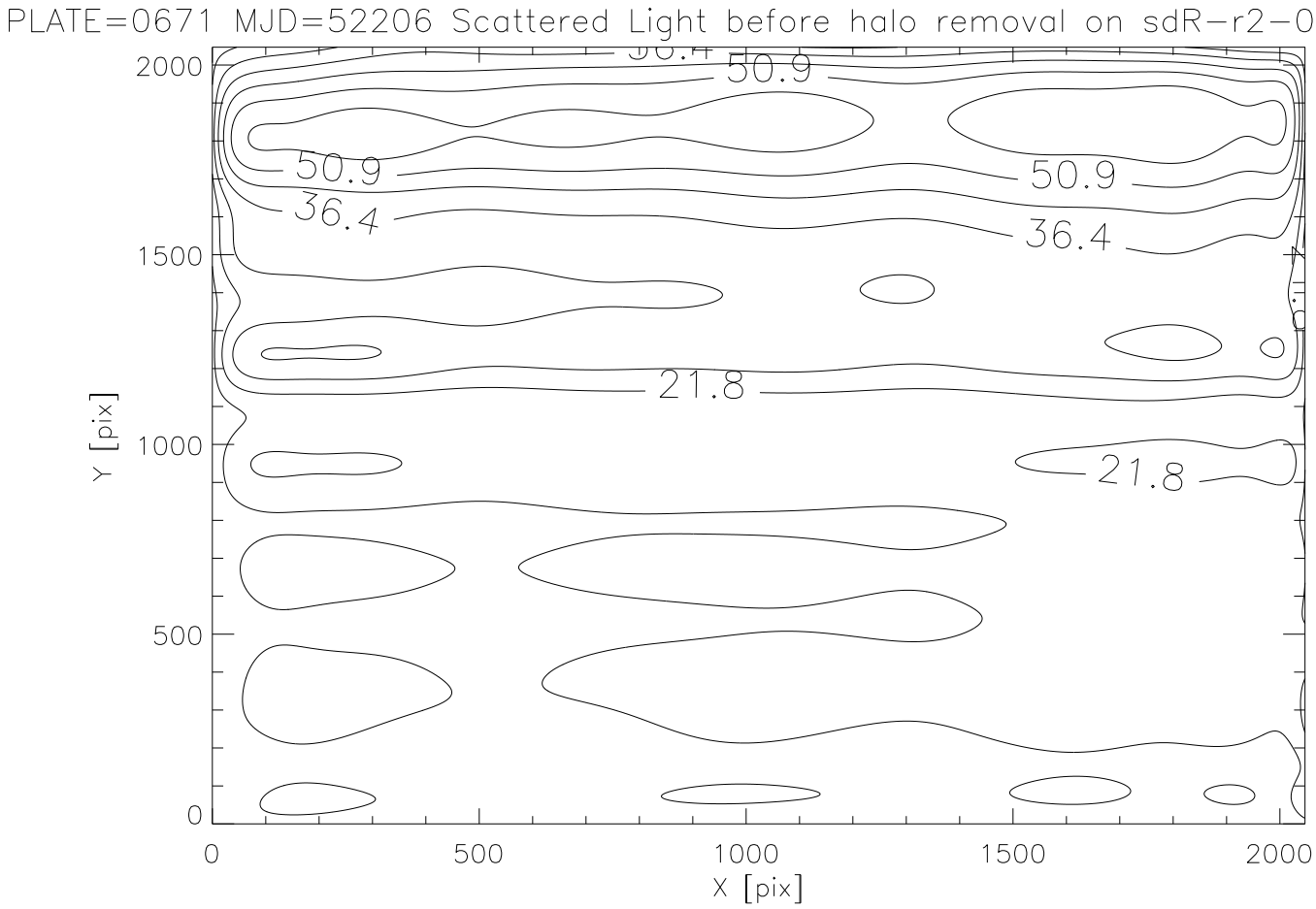

PLATE=0671 MJD=52206 sdR-r2-00011487.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
−600
8820
8840
8860
8880
8900
λ [A]

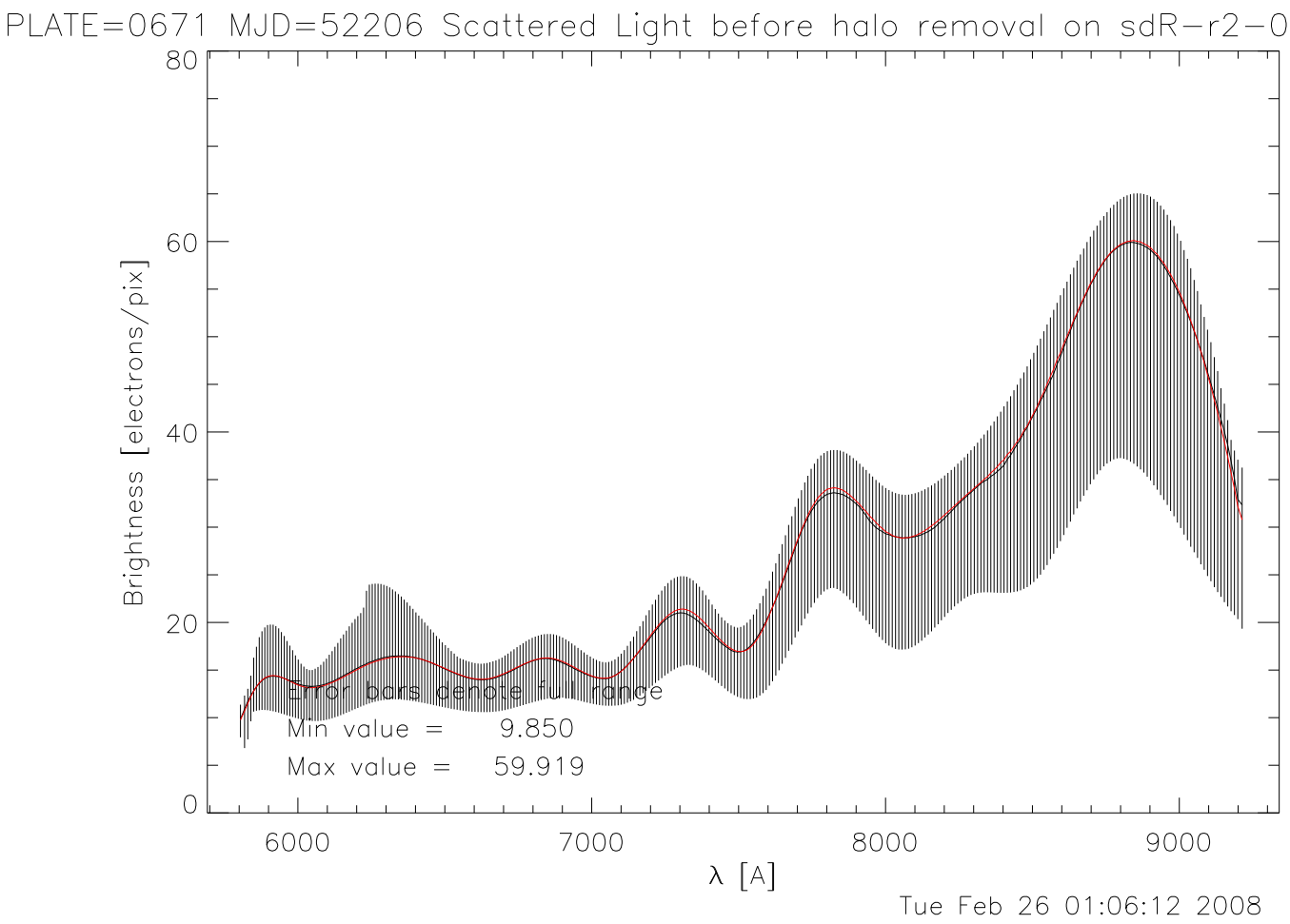

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011487.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

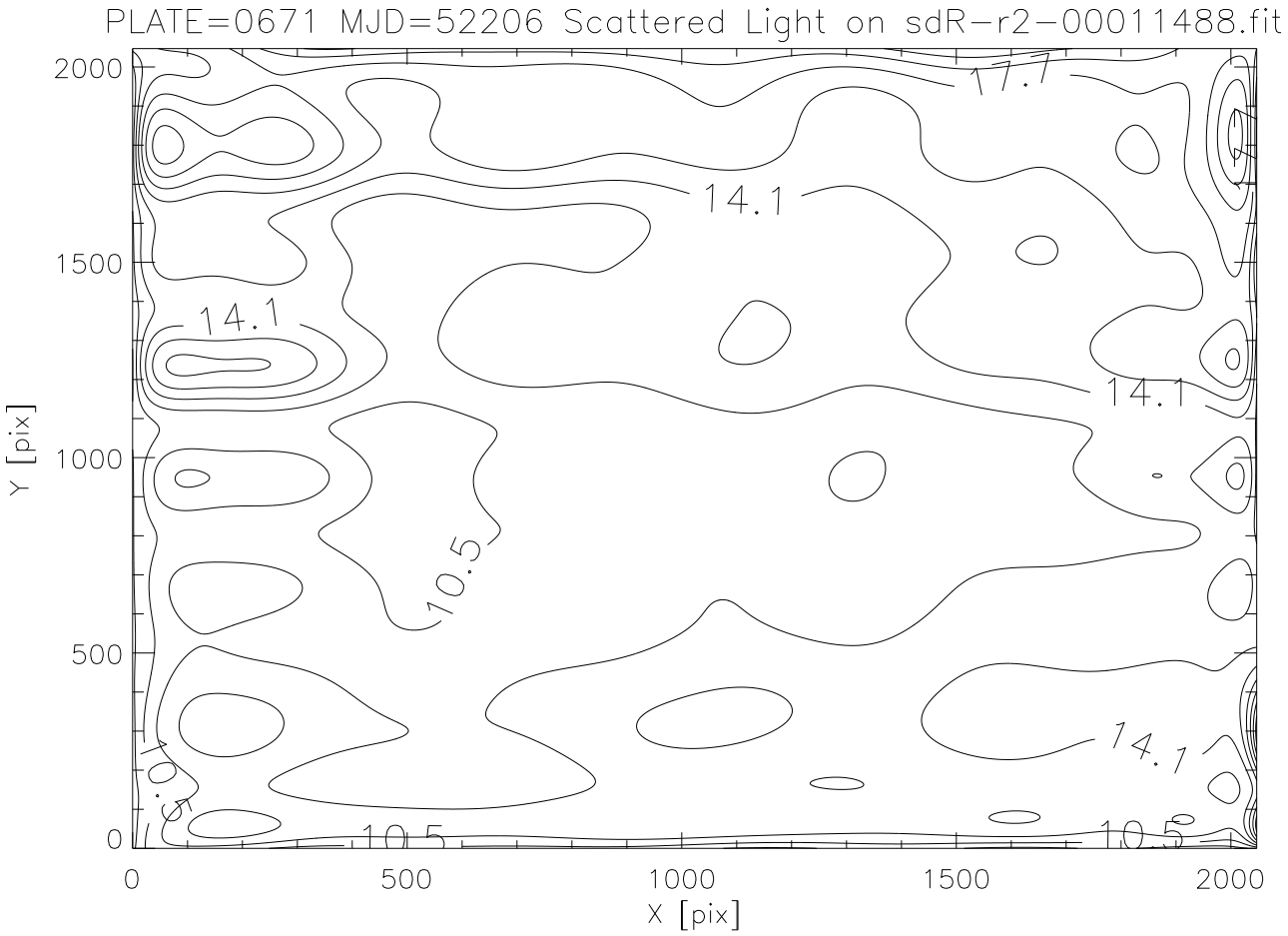

PLATE=0671 MJD=52206 sdR-r2-00011487.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.00 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

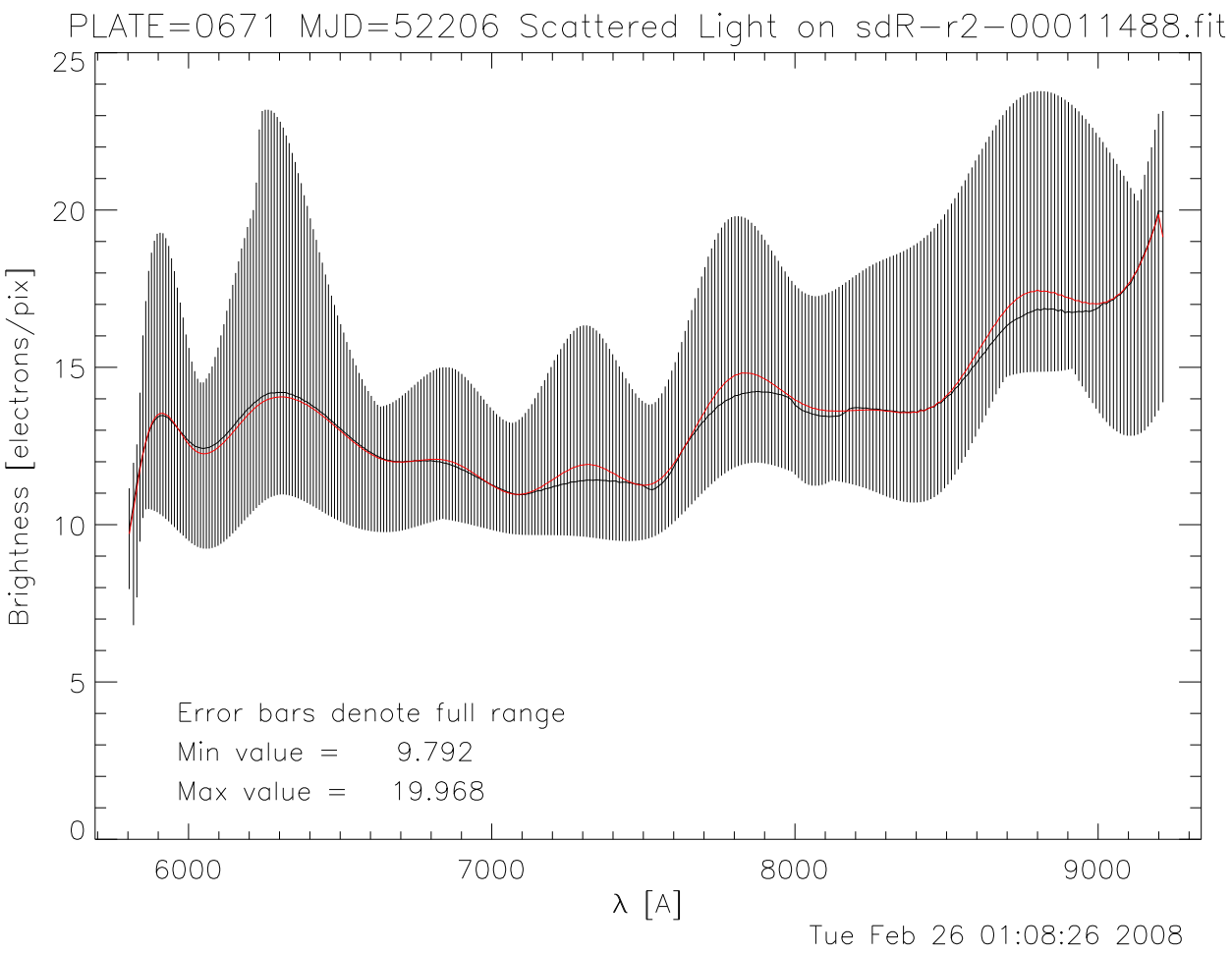

PLATE=0671 MJD=52206 sdR-r2-00011487.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.99 %
Fiber number
Focal Distance [mm]
Airmass

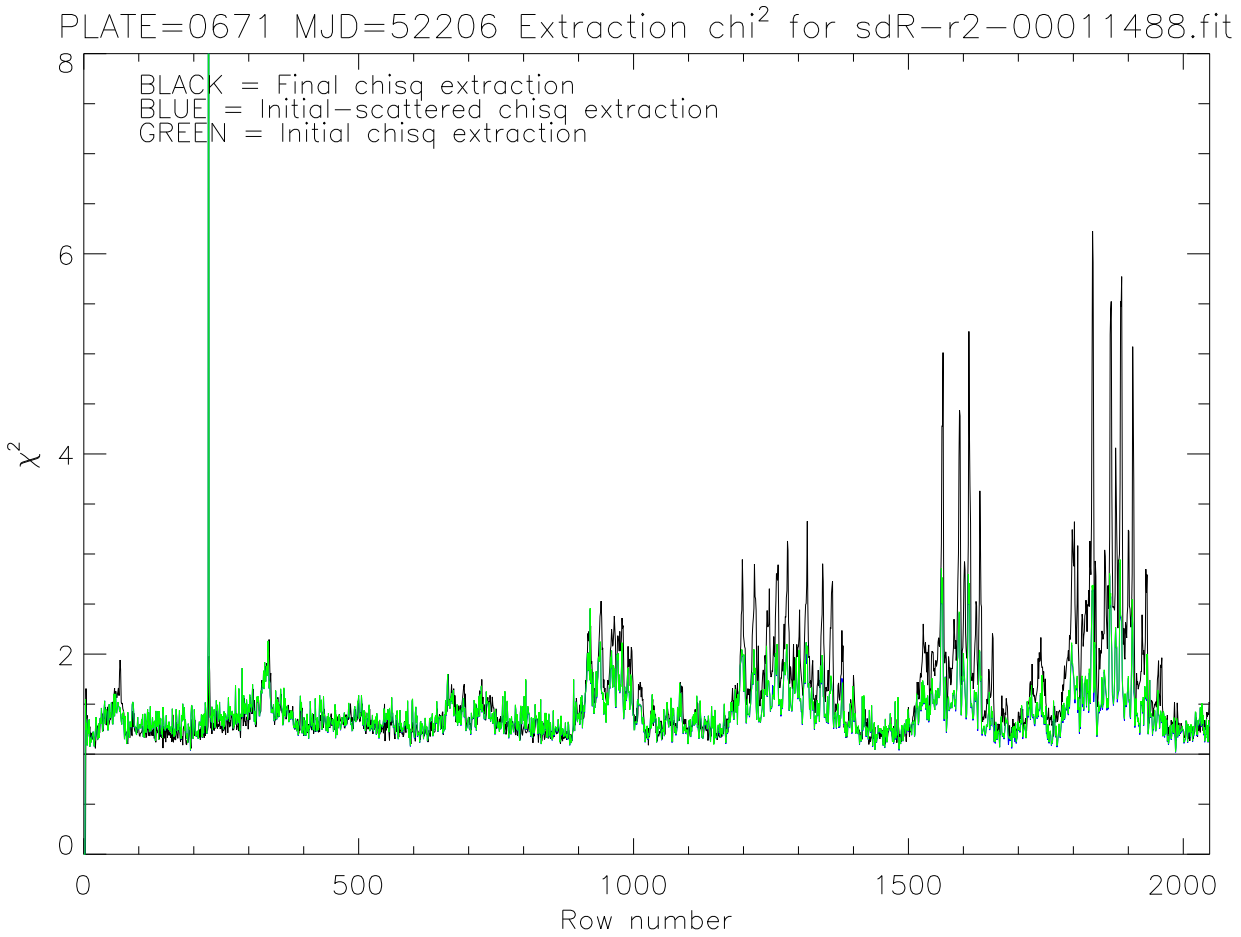

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r2−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.617
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 01:05:23 2008

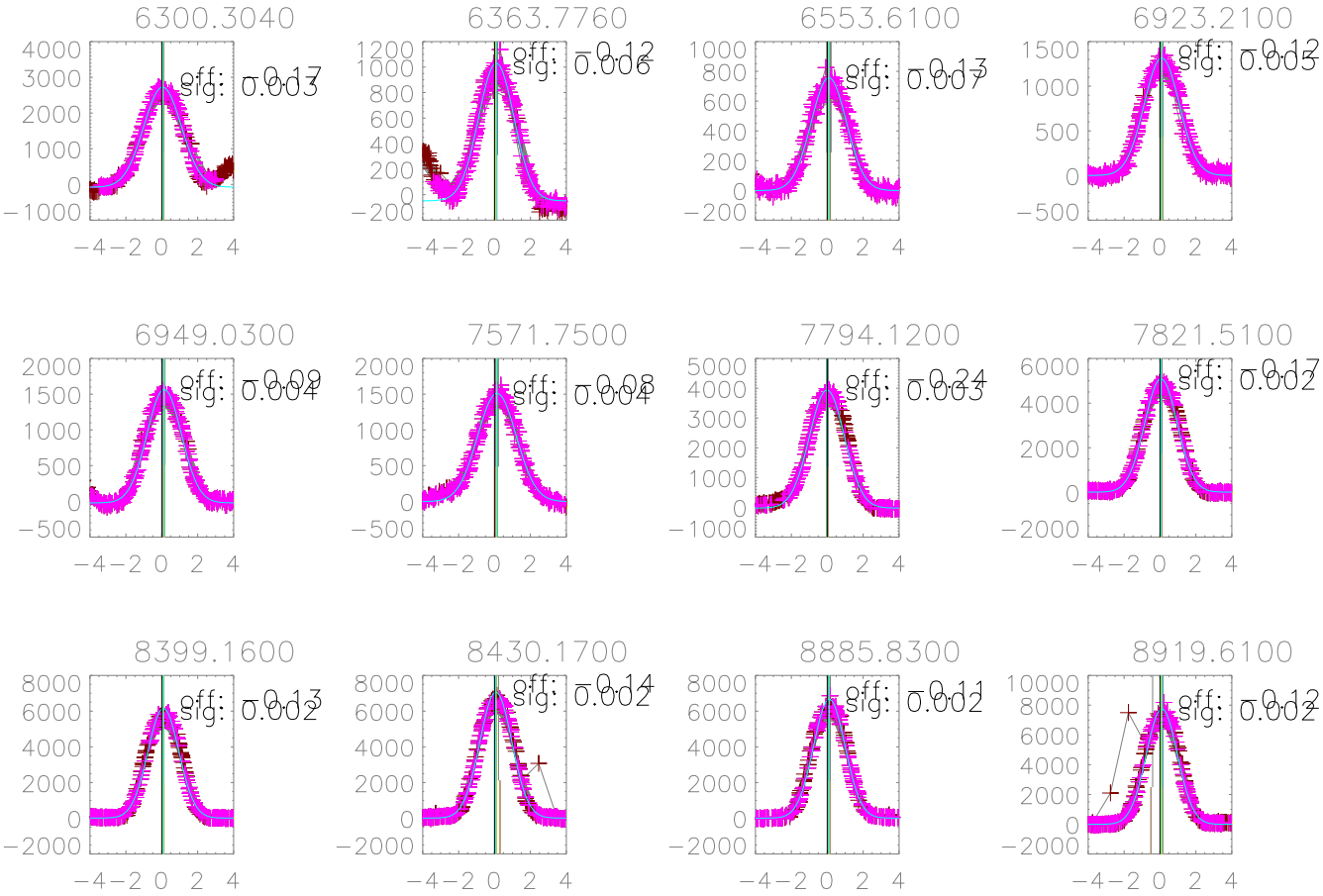

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011488.fi
50.9
50.9
50.9
36.4
36.4
21.8
21.8
Y [pix]
X [pix]
0
500
1000
1500
2000

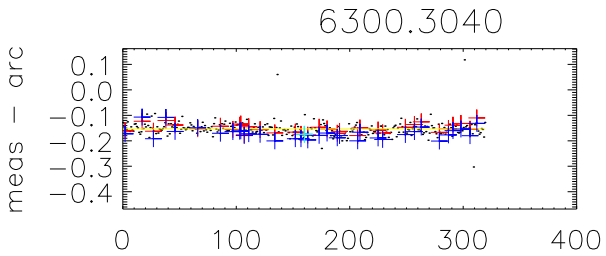

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011488.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.850
Max value = 59.919
Tue Feb 26 01:06:12 2008

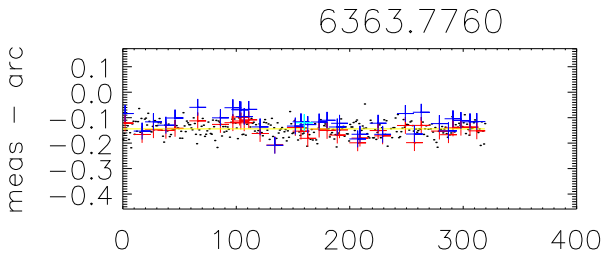

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011488.fit
17.7
14.1
14.1
14.1
10.5
10.5
14.1
10.5
10.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

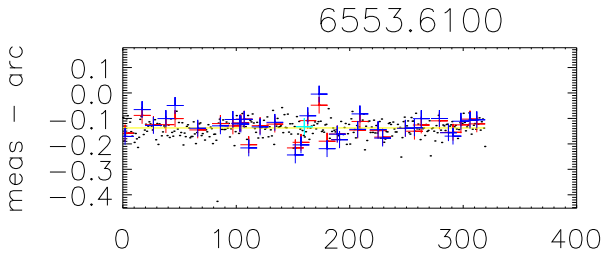

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011488.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.792
Max value = 19.968
Tue Feb 26 01:08:26 2008

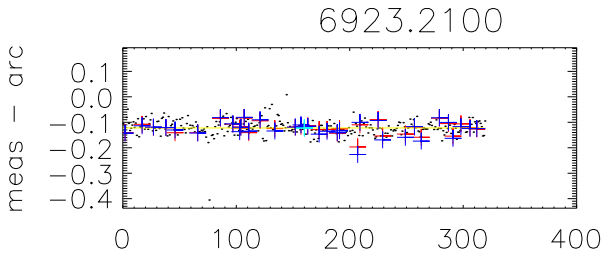

PLATE=0671 MJD=52206 Extraction chi^2 for sdR-r2-00011488.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

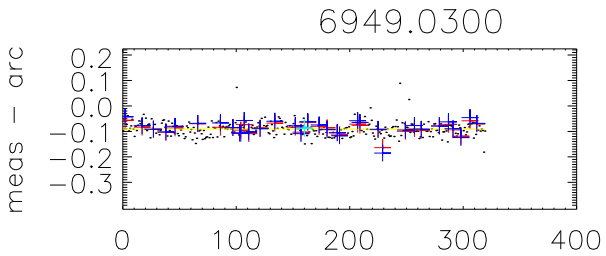

6300.3040
off: −0.17
sig: 0.003
6363.7760
off: −0.12
sig: 0.006
6553.6100
off: −0.13
sig: 0.007
6923.2100
off: −0.12
sig: 0.005
6949.0300
off: −0.09
sig: 0.004
7571.7500
off: −0.08
sig: 0.004
7794.1200
off: −0.24
sig: 0.003
7821.5100
off: −0.17
sig: 0.002
8399.1600
off: −0.13
sig: 0.002
8430.1700
off: −0.14
sig: 0.002
8885.8300
off: −0.11
sig: 0.002
8919.6100
off: −0.12
sig: 0.002

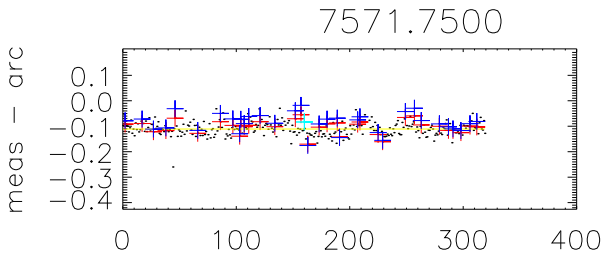

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

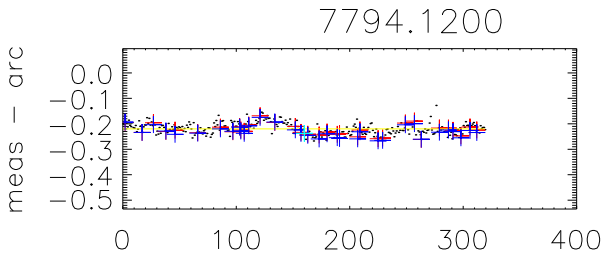

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

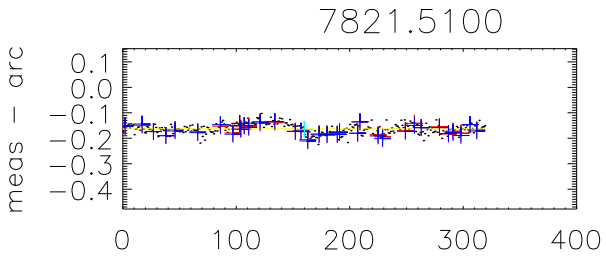

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

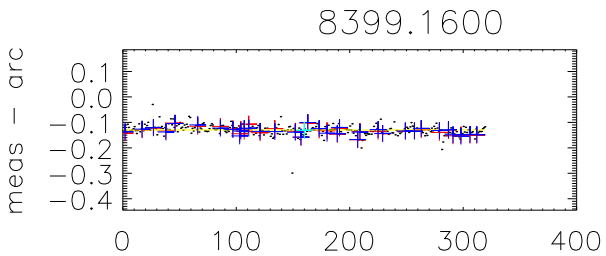

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

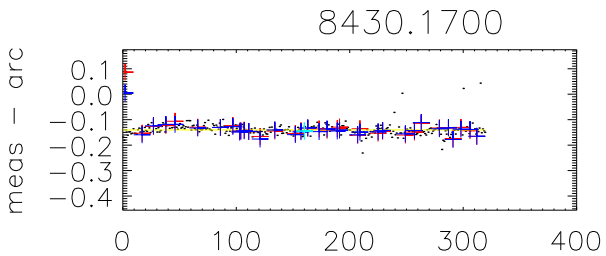

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

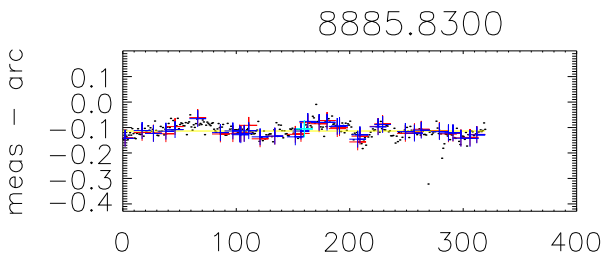

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

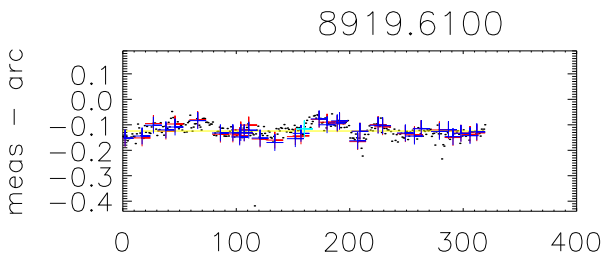

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

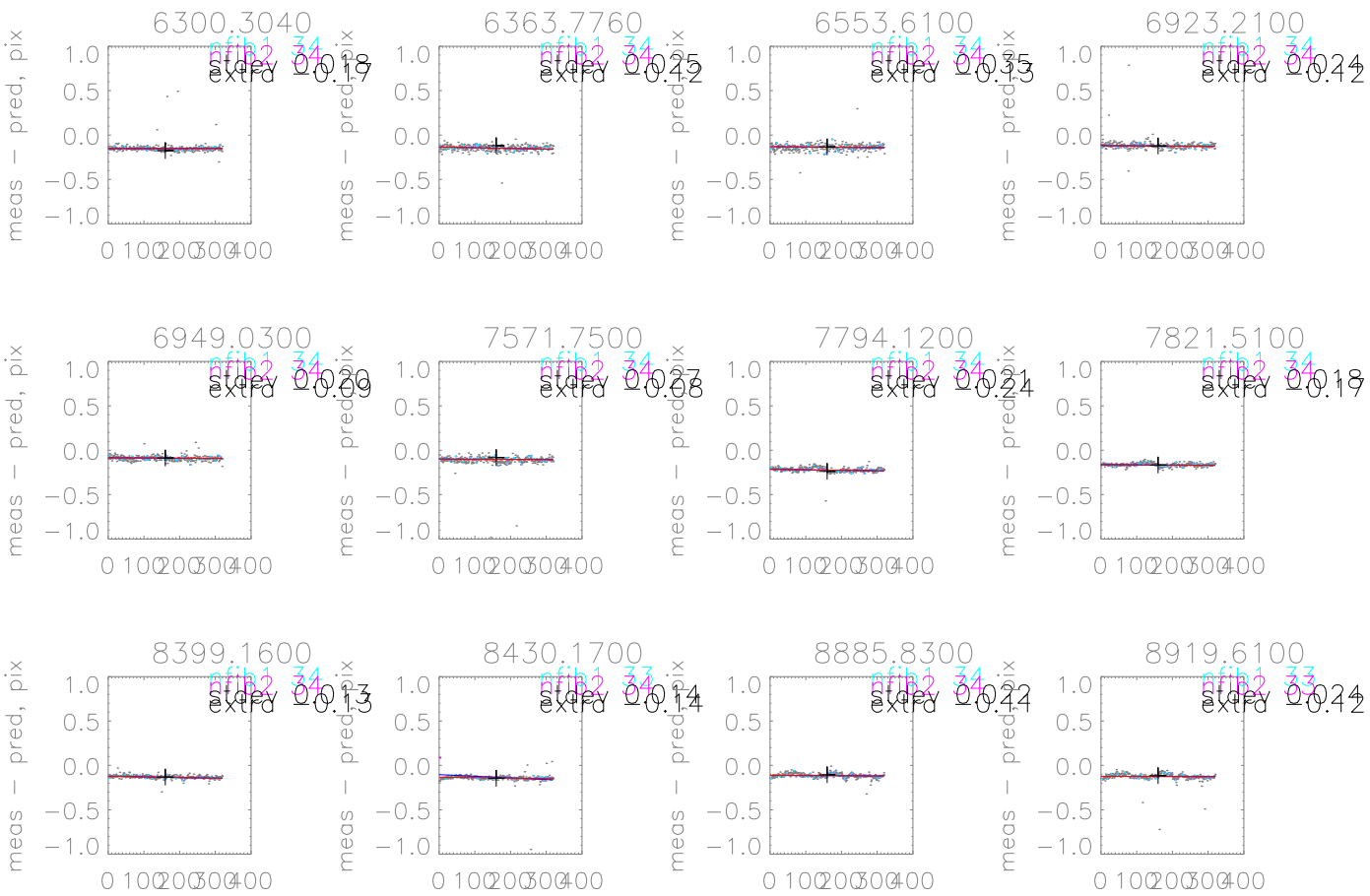

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

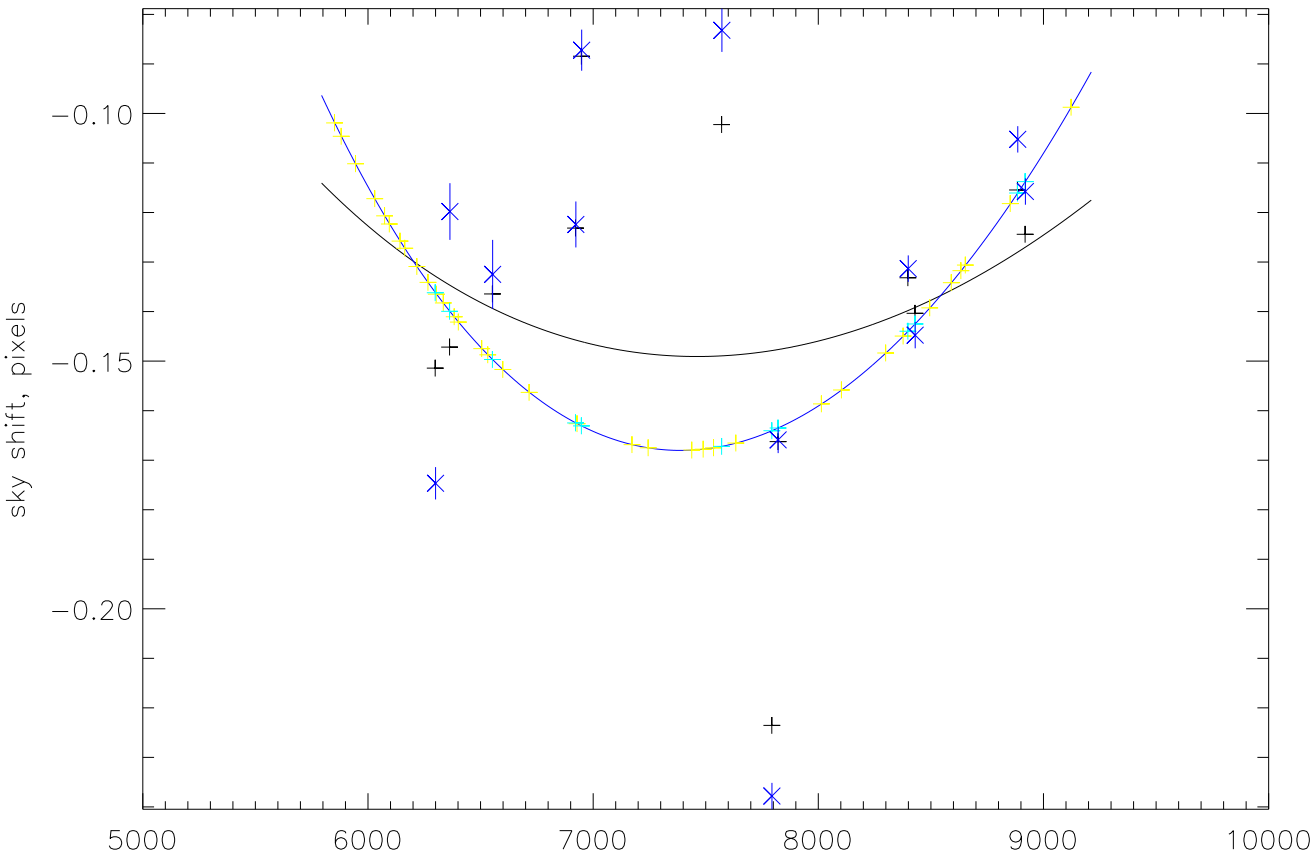

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

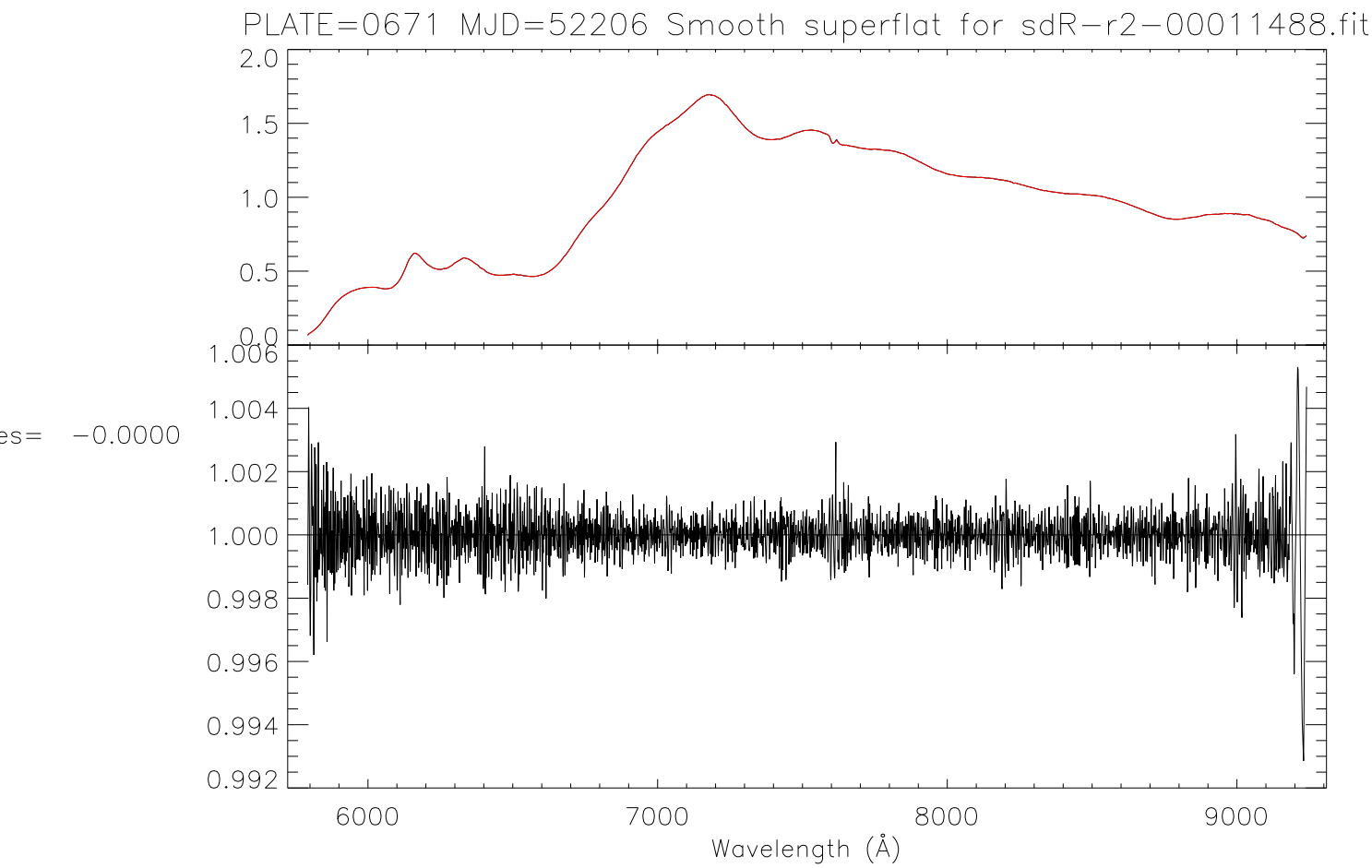

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

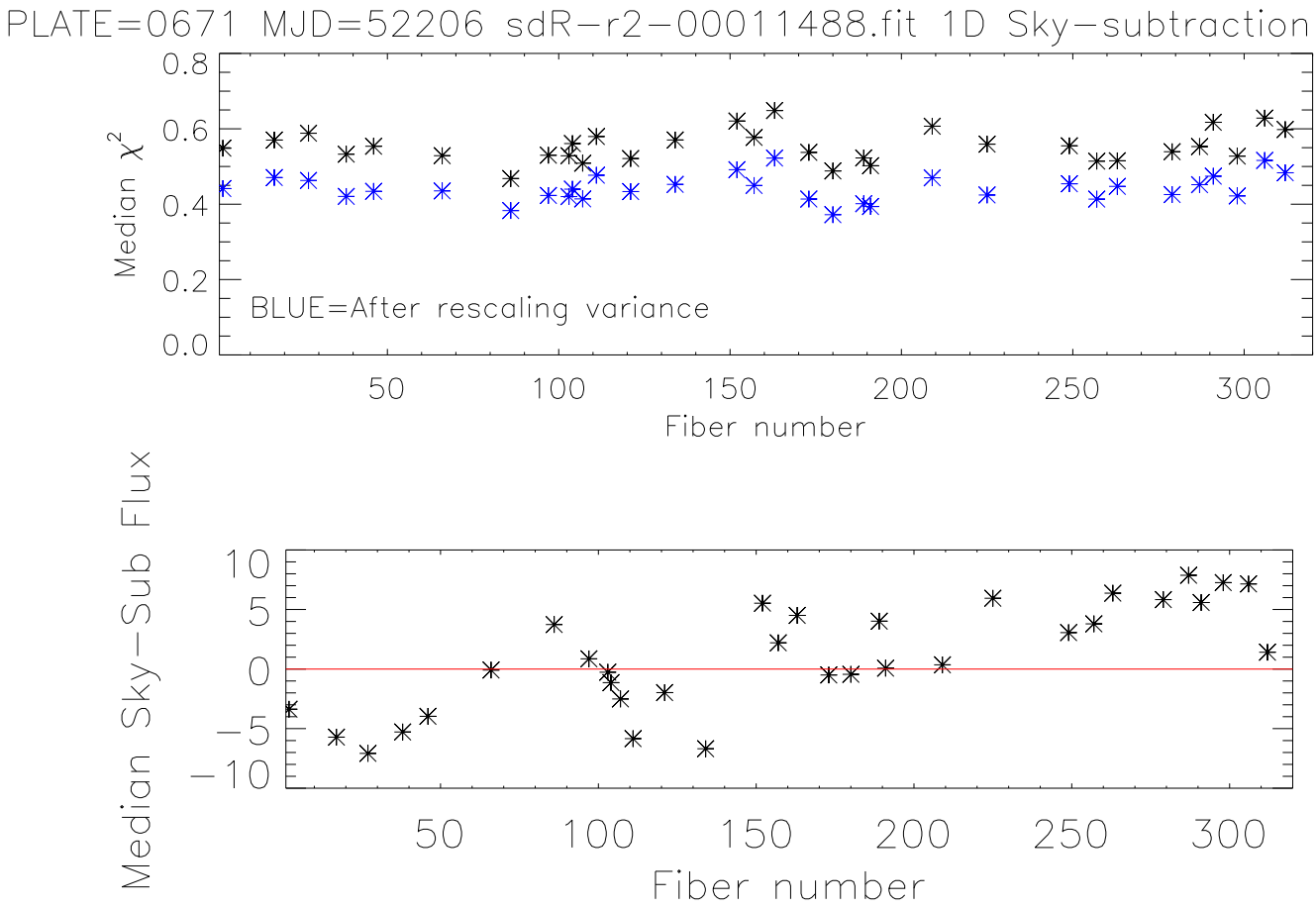

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

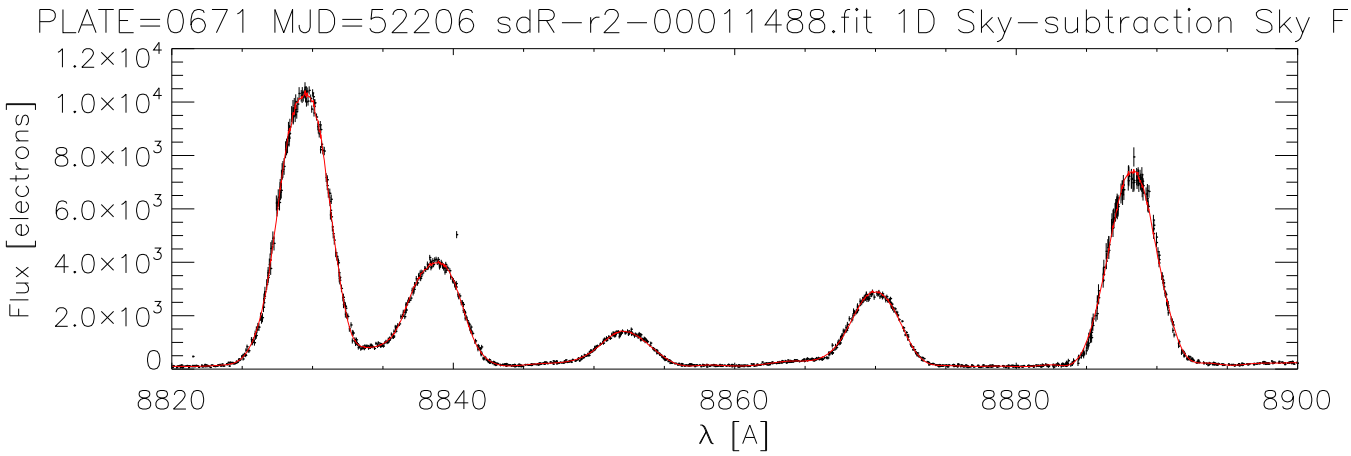

6300.3040
stdev 0.018
extra 0.17
6363.7760
stdev 0.025
extra 0.42
6553.6100
stdev 0.035
extra 0.13
6923.2100
stdev 0.024
extra 0.42
6949.0300
stdev 0.020
extra 0.09
7571.7500
stdev 0.027
extra 0.08
7794.1200
stdev 0.021
extra 0.24
7821.5100
stdev 0.018
extra 0.17
8399.1600
stdev 0.013
extra 0.13
8430.1700
stdev 0.014
extra 0.14
8885.8300
stdev 0.022
extra 0.44
8919.6100
stdev 0.024
extra 0.42
meas − pred, pix

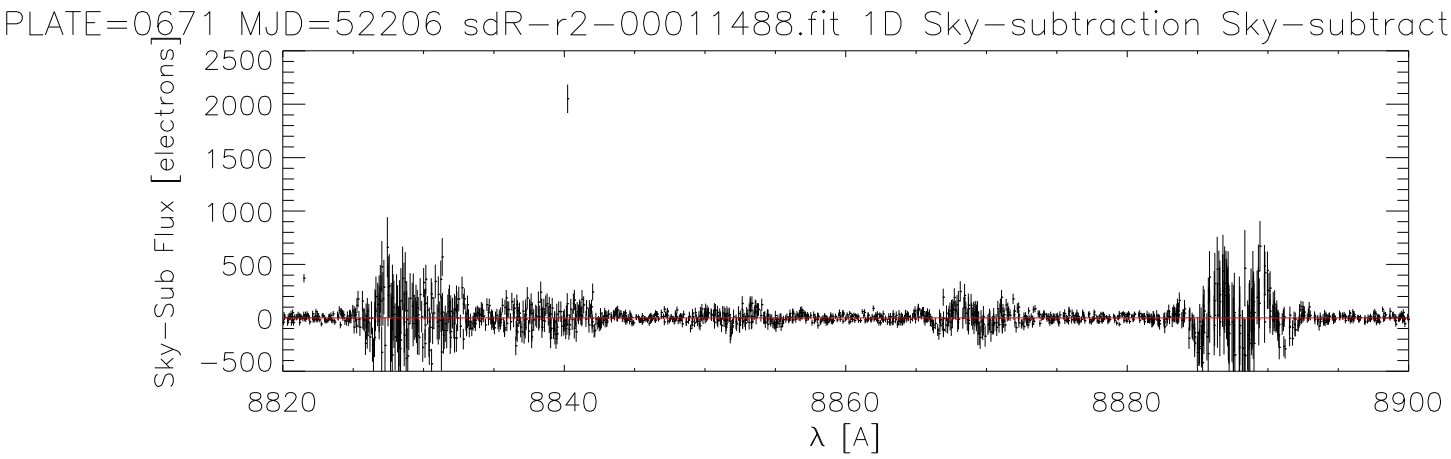

−0.10
−0.15
−0.20
sky shift, pixels
5000
6000
7000
8000
9000
10000

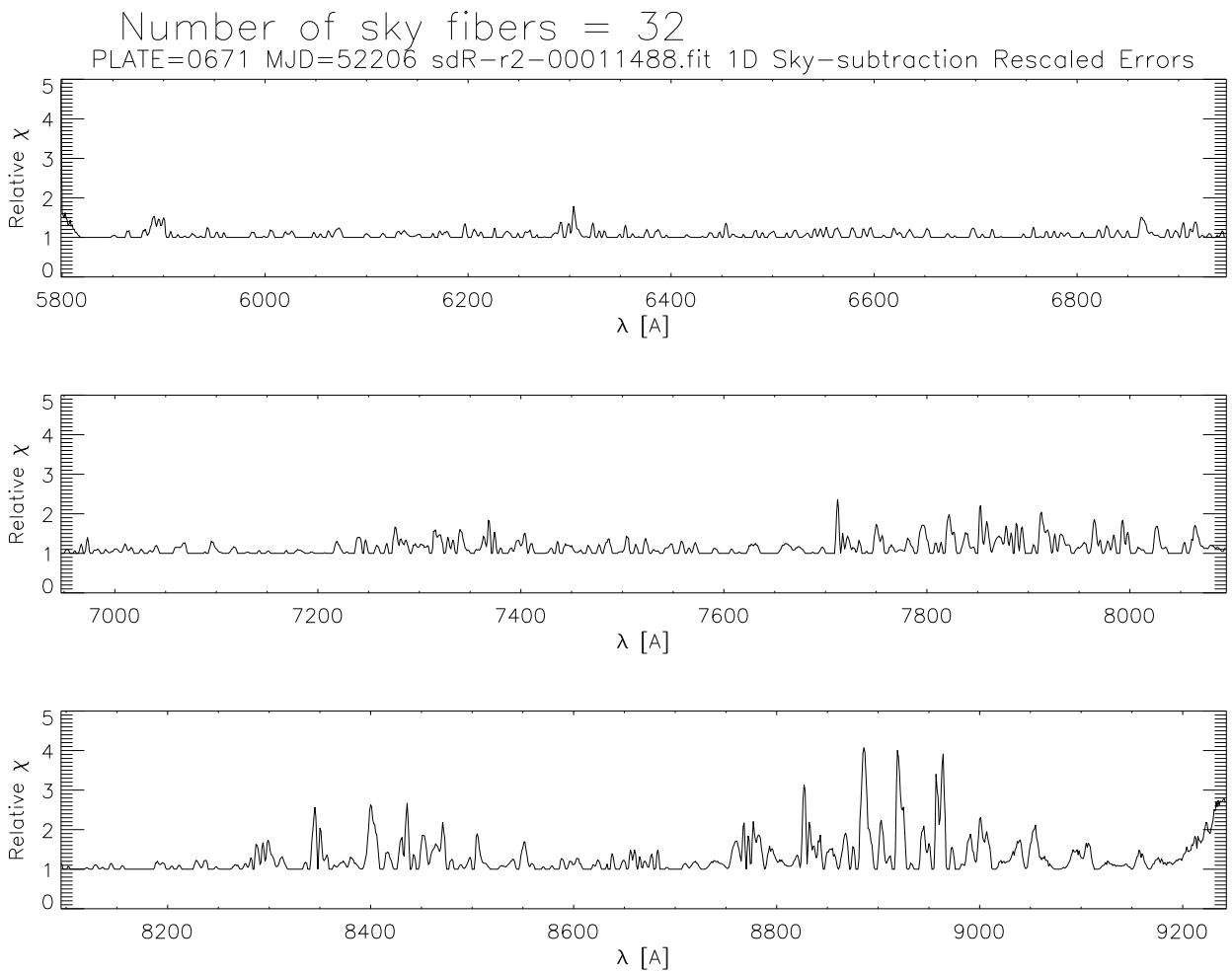

PLATE=0671 MJD=52206 Smooth superflat for sdR-r2-00011488.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

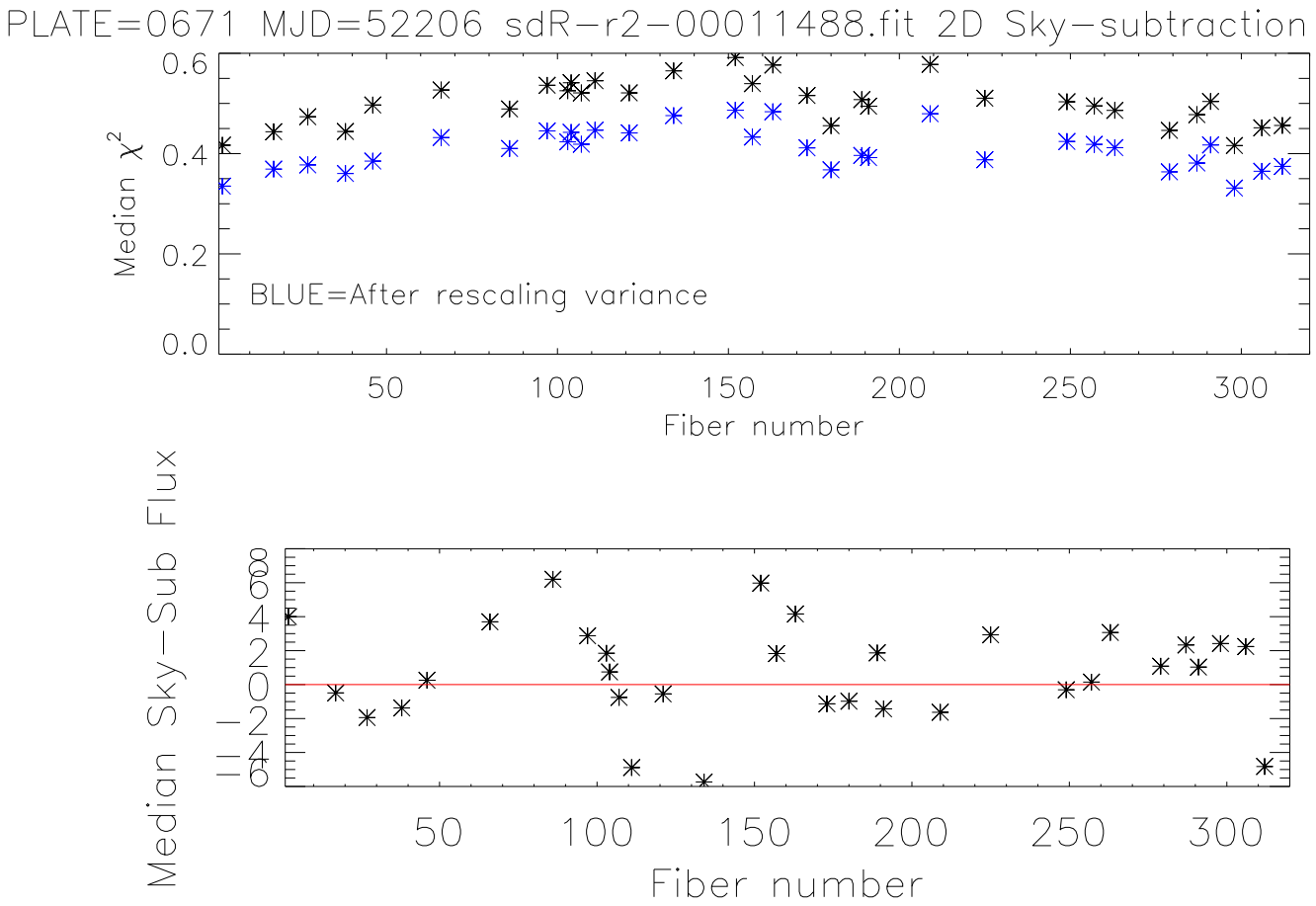
es= −0.0000

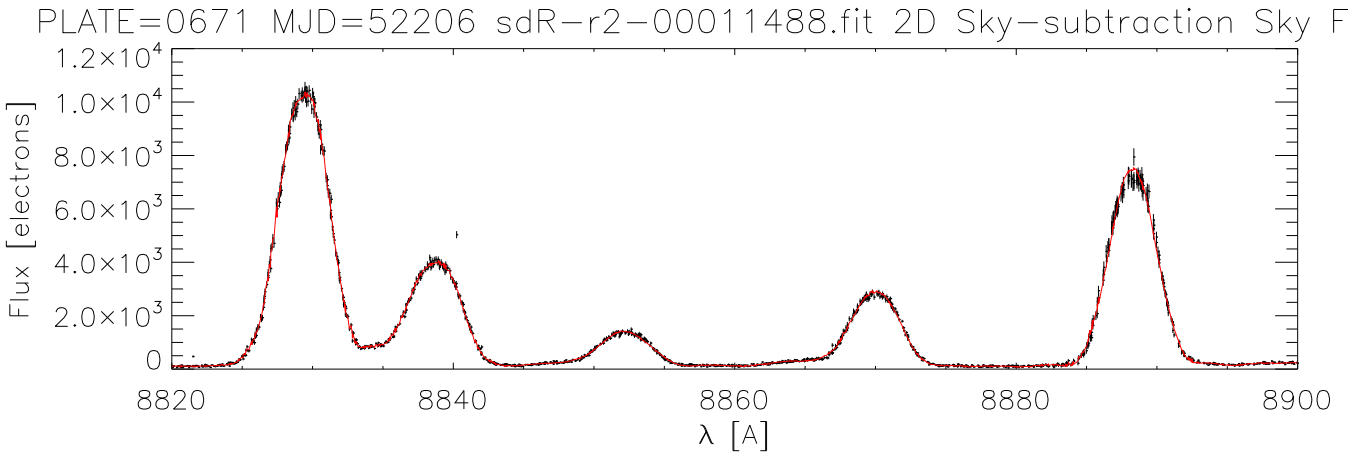

PLATE=0671 MJD=52206 sdR-r2-00011488.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

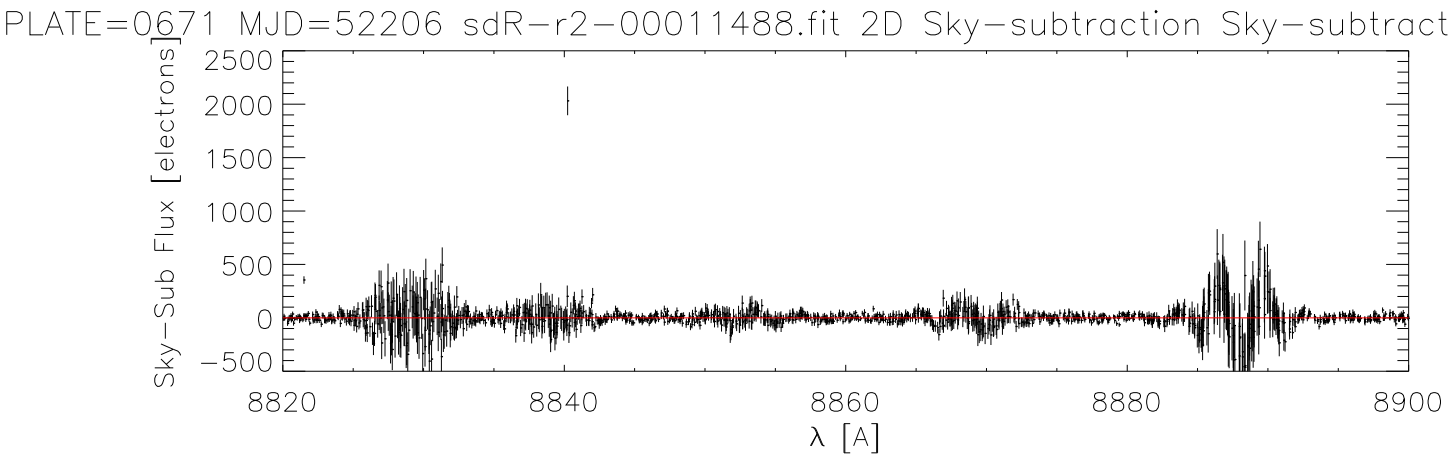

PLATE=0671 MJD=52206 sdR-r2-00011488.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

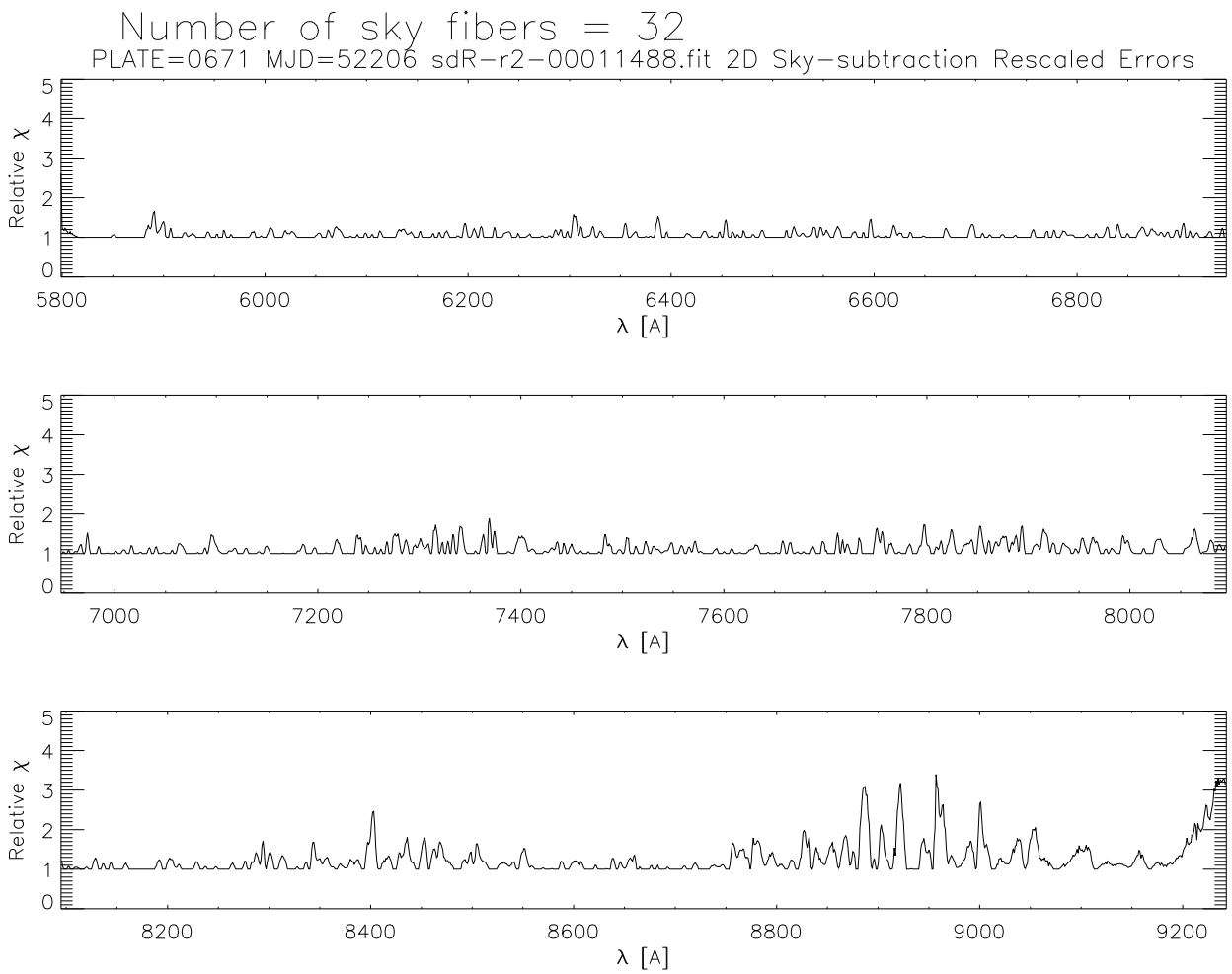

PLATE=0671 MJD=52206 sdR-r2-00011488.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

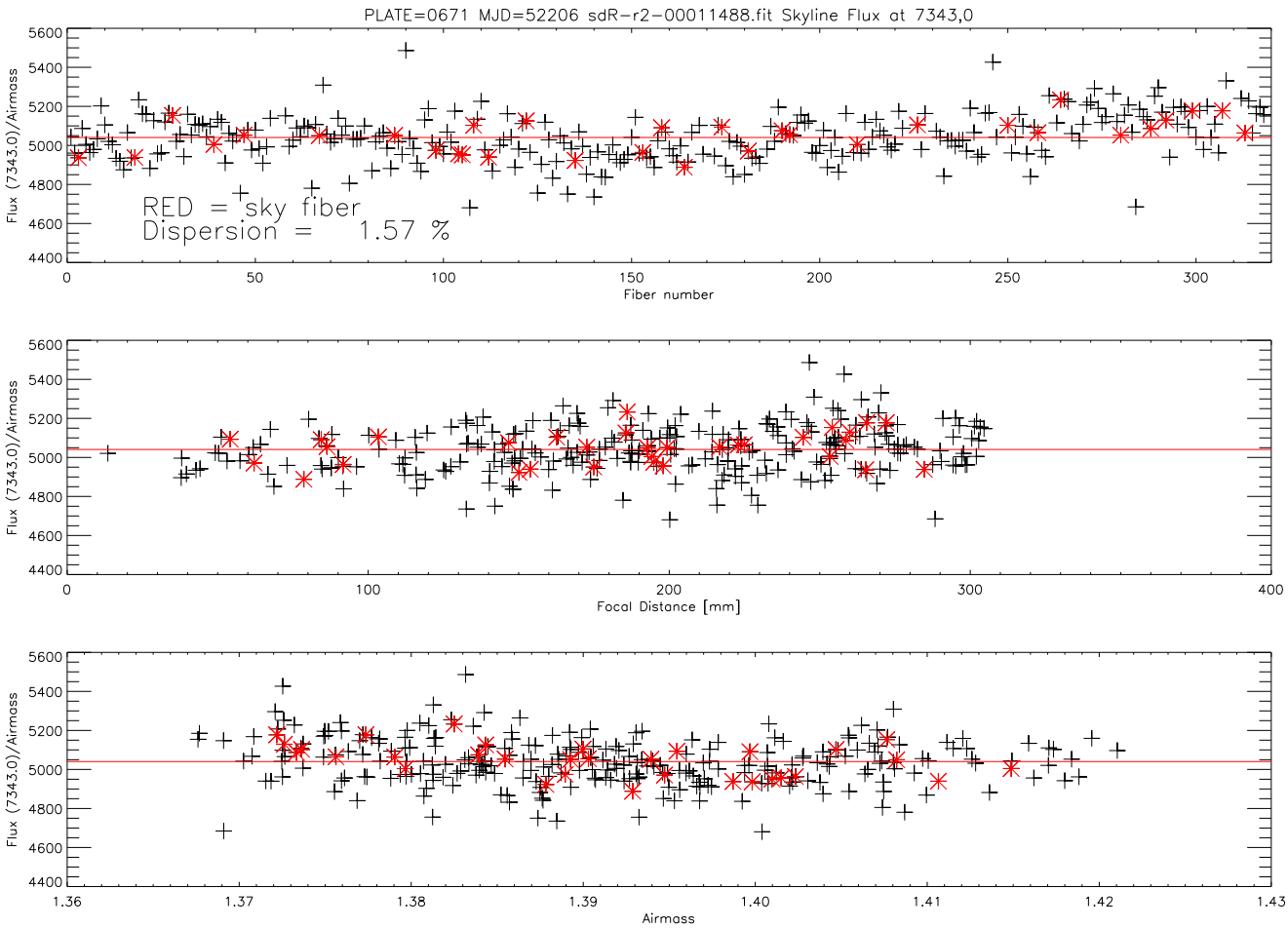

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011488.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

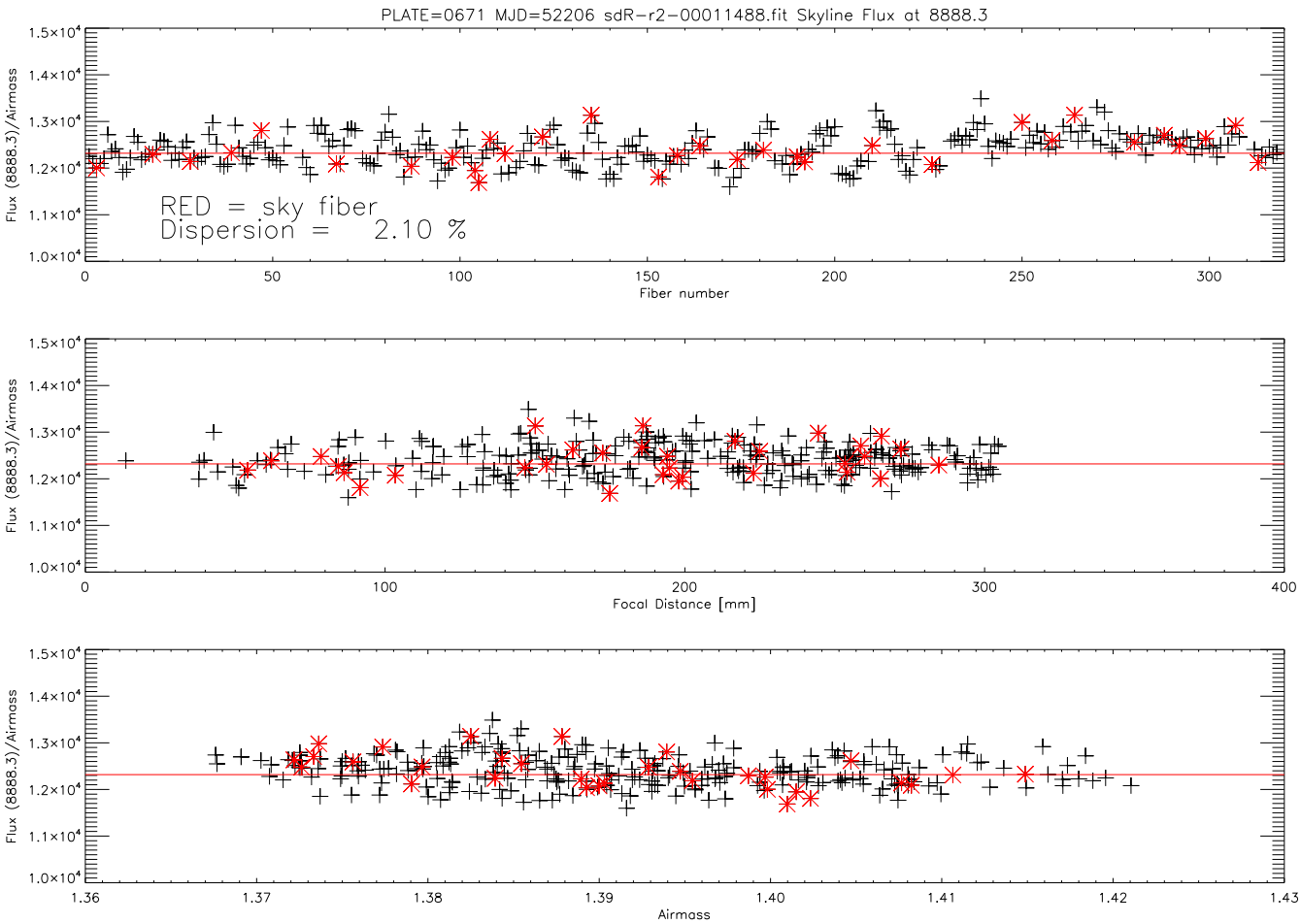

PLATE=0671 MJD=52206 sdR-r2-00011488.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-4
2
0
4
6
8
50
100
150
200
250
300
Fiber number

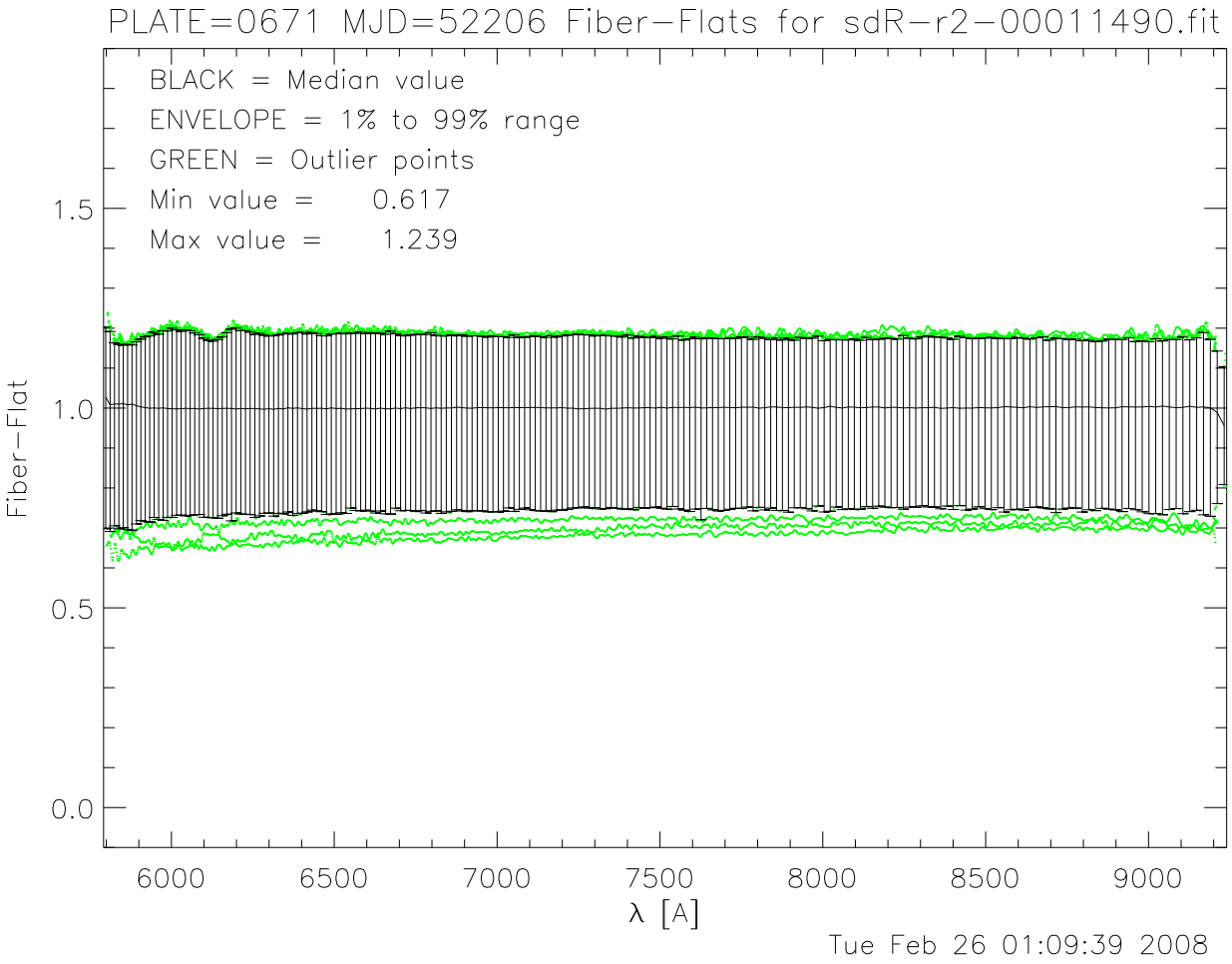

PLATE=0671 MJD=52206 sdR-r2-00011488.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

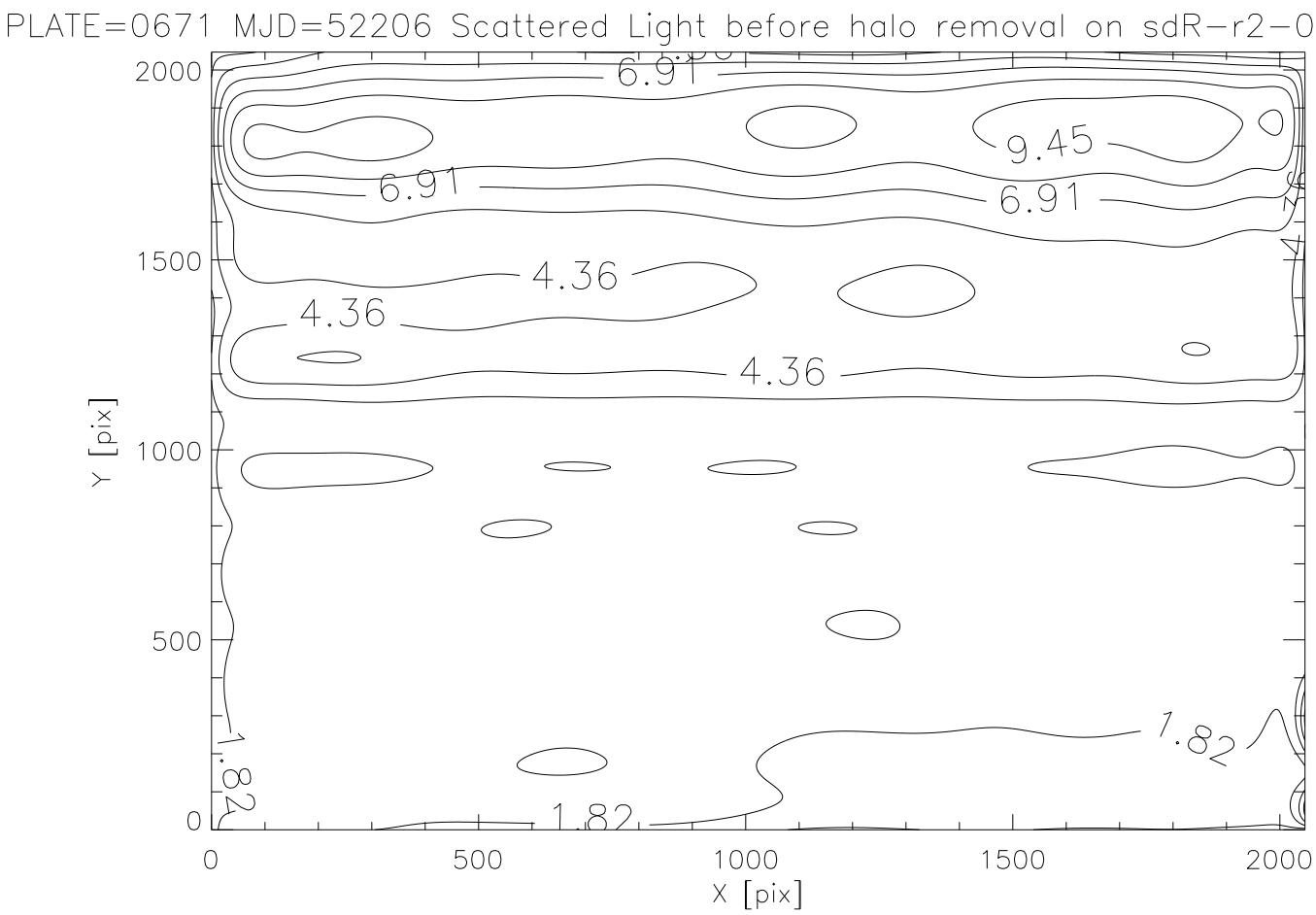

PLATE=0671 MJD=52206 sdR-r2-00011488.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

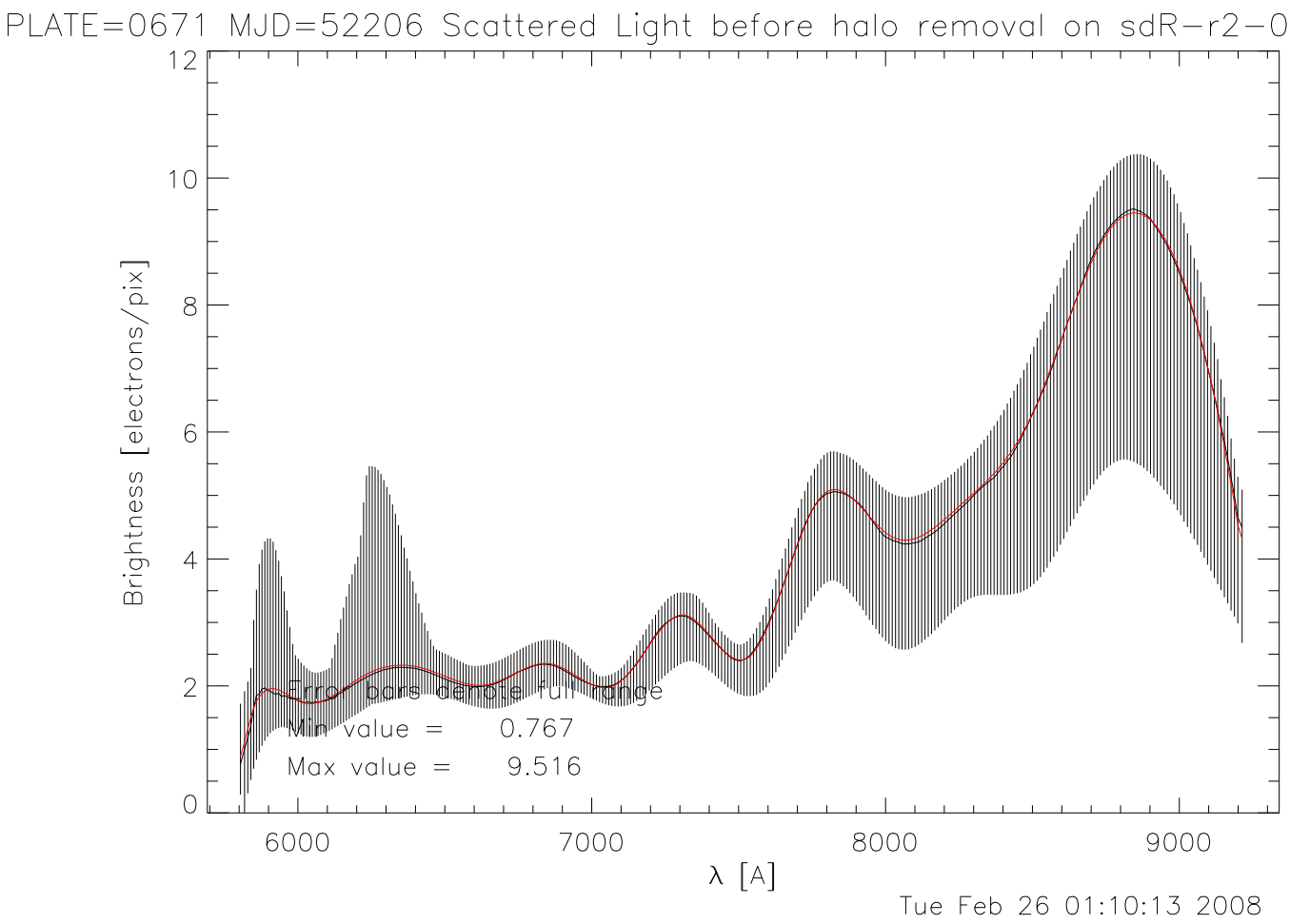

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011488.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

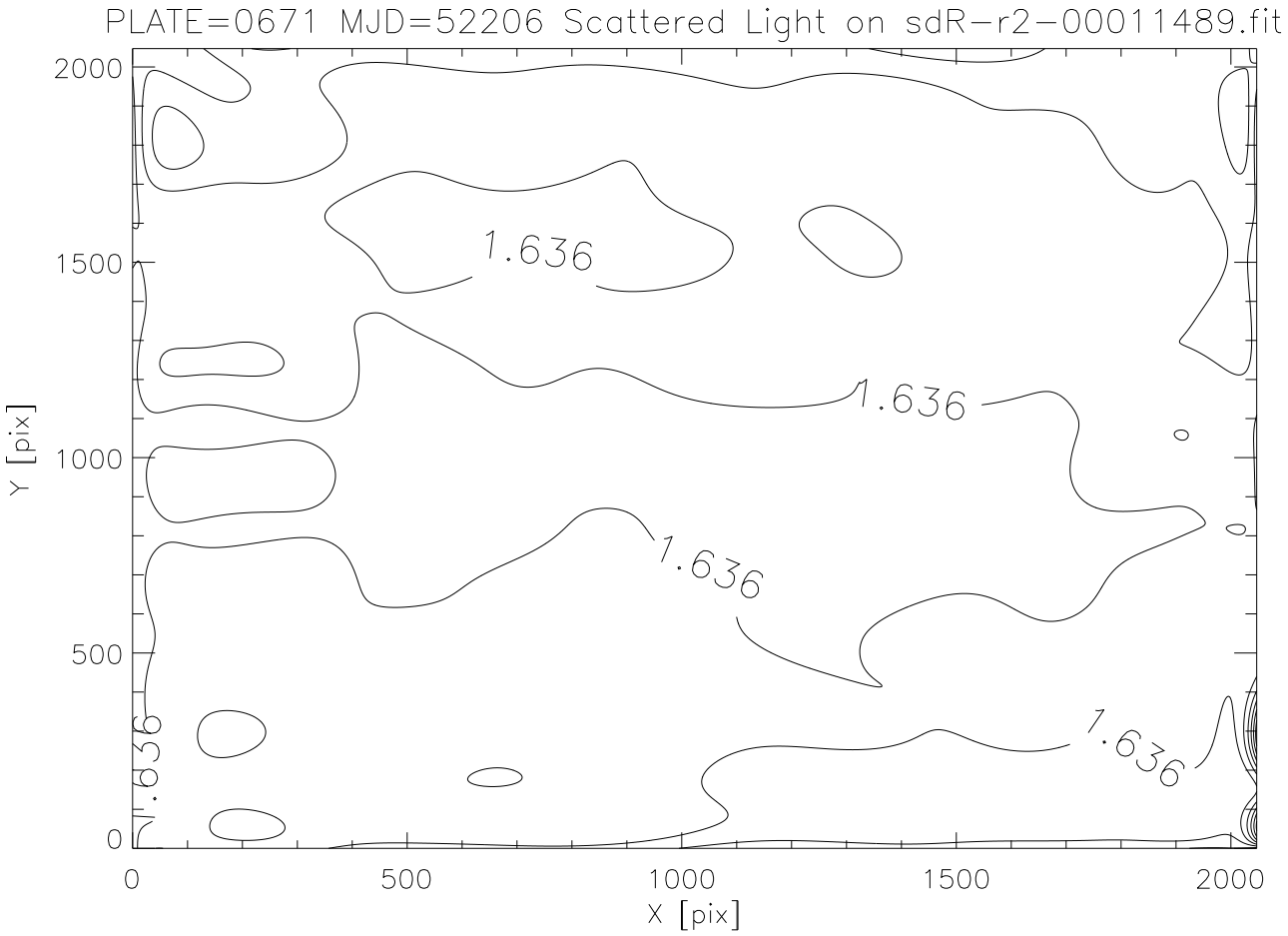

PLATE=0671 MJD=52206 sdR-r2-00011488.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.57 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

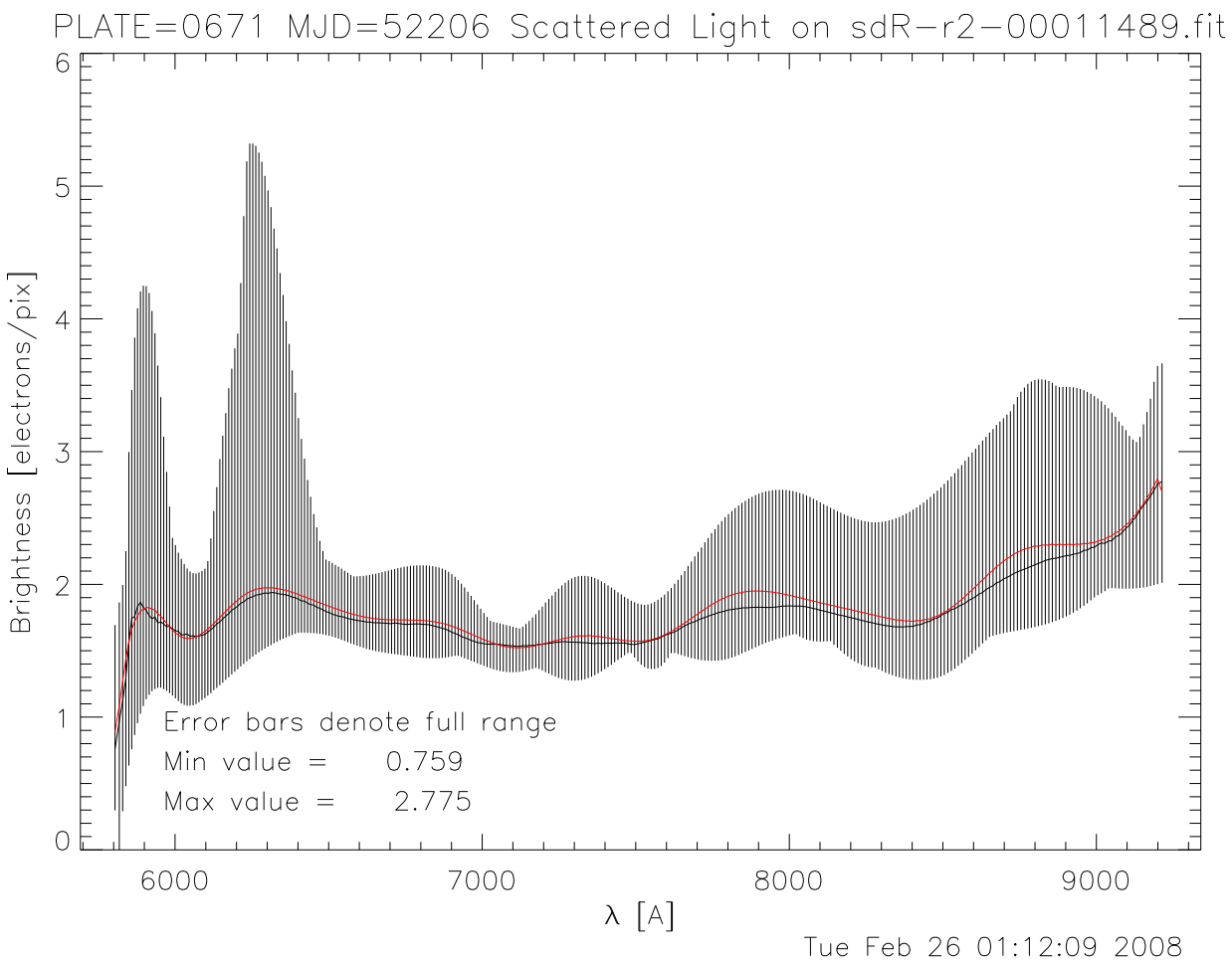

PLATE=0671 MJD=52206 sdR-r2-00011488.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.10 %
Fiber number
Focal Distance [mm]
Airmass

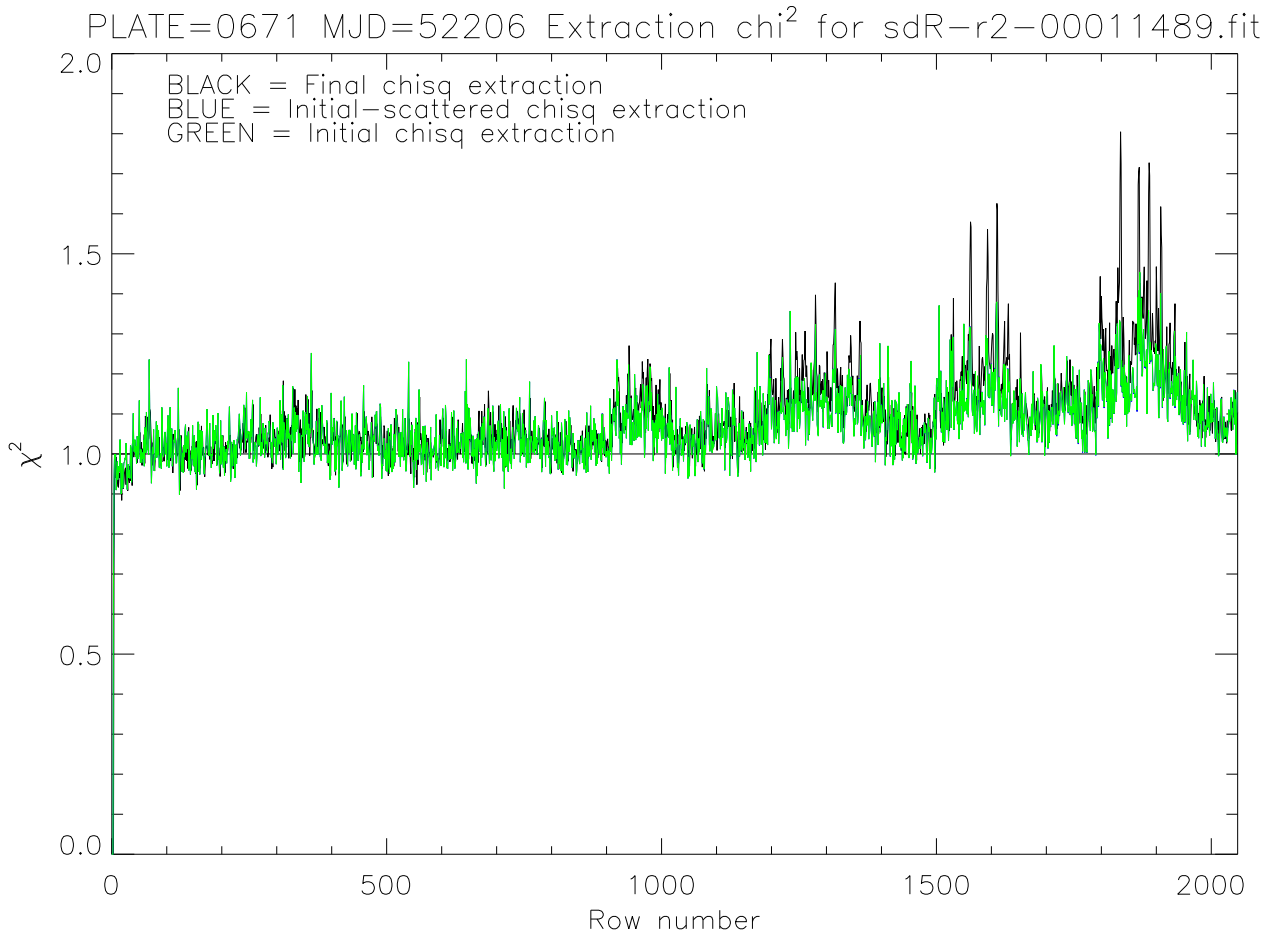

PLATE=0671 MJD=52206 Fiber−Flats for sdR−r2−00011490.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.617
Max value = 1.239
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 01:09:39 2008

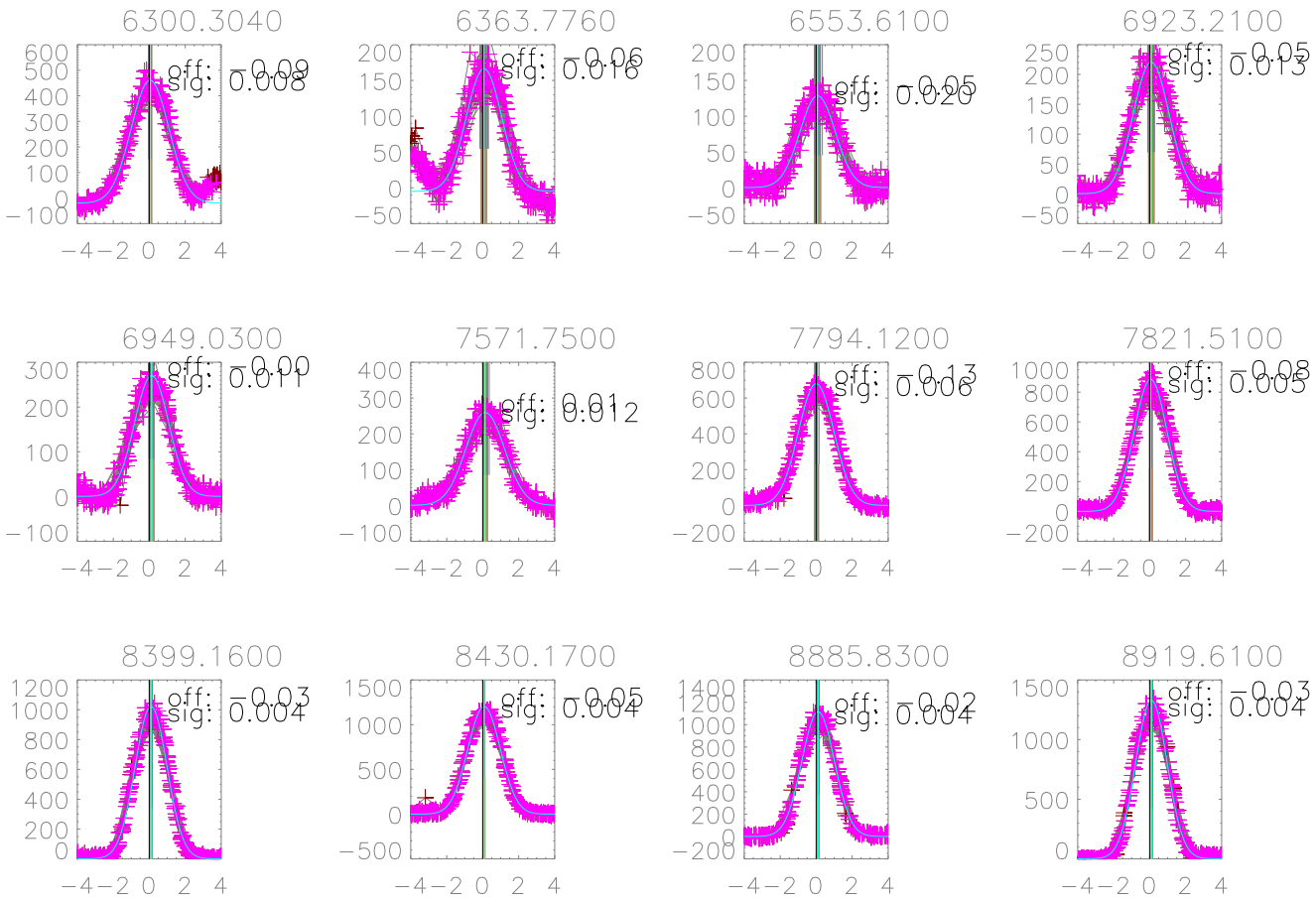

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR−r2−00011489.fi
6.91
9.45
6.91
6.91
4.36
4.36
4.36
1.82
1.82
1.82
Y [pix]
X [pix]
0
500
1000
1500
2000

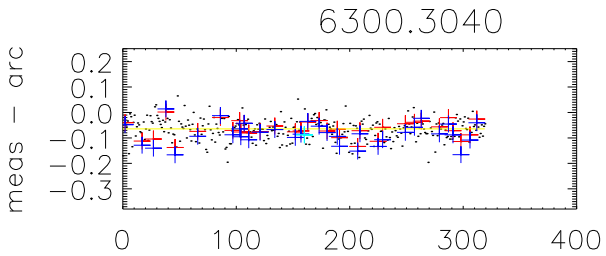

PLATE=0671 MJD=52206 Scattered Light before halo removal on sdR-r2-00011489.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.767
Max value = 9.516
Tue Feb 26 01:10:13 2008

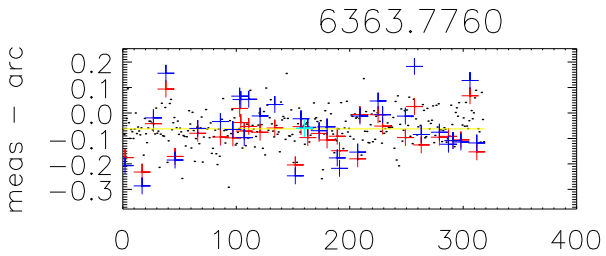

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011489.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
1.636
1.636
1.636
1.636
1.636

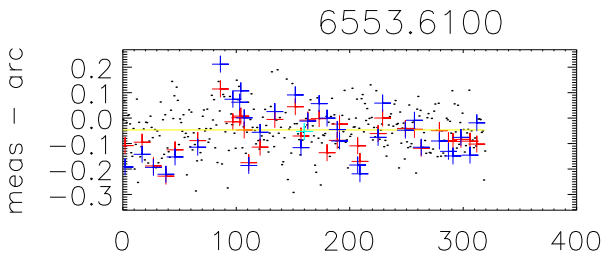

PLATE=0671 MJD=52206 Scattered Light on sdR-r2-00011489.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.759
Max value = 2.775
Tue Feb 26 01:12:09 2008

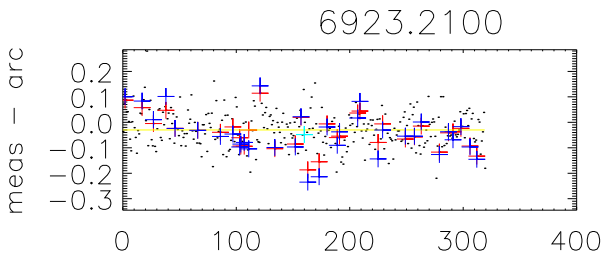

PLATE=0671 MJD=52206 Extraction chi^2 for sdR−r2−00011489.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

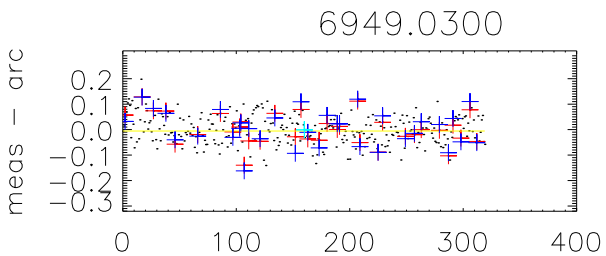

6300.3040
off: −0.09
sig: 0.008
6363.7760
off: −0.06
sig: 0.016
6553.6100
off: −0.05
sig: 0.020
6923.2100
off: −0.05
sig: 0.013
6949.0300
off: −0.00
sig: 0.011
7571.7500
off: 0.01
sig: 0.012
7794.1200
off: −0.13
sig: 0.006
7821.5100
off: −0.08
sig: 0.005
8399.1600
off: −0.03
sig: 0.004
8430.1700
off: −0.05
sig: 0.004
8885.8300
off: −0.02
sig: 0.004
8919.6100
off: −0.03
sig: 0.004

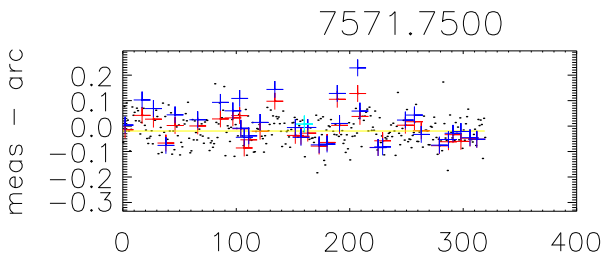

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

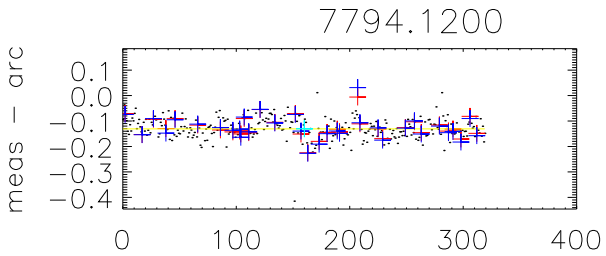

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

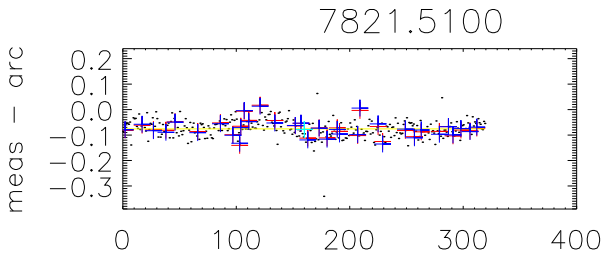

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

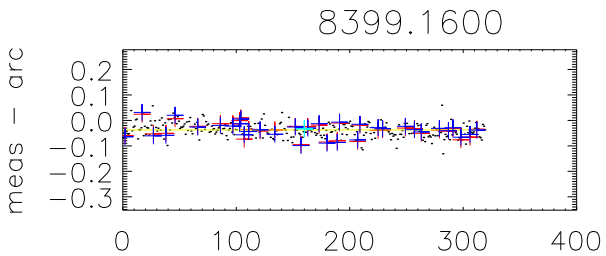

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

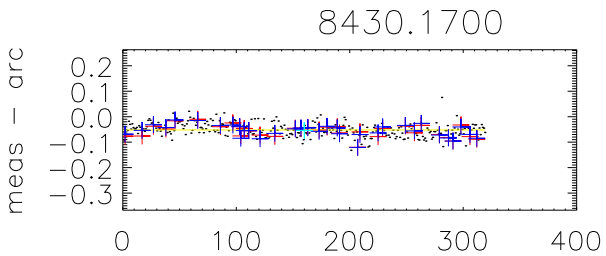

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

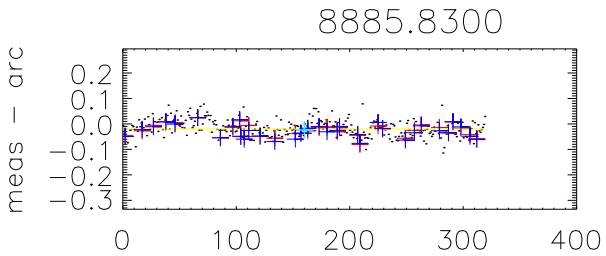

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

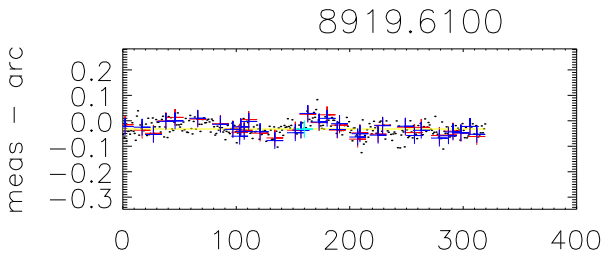

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

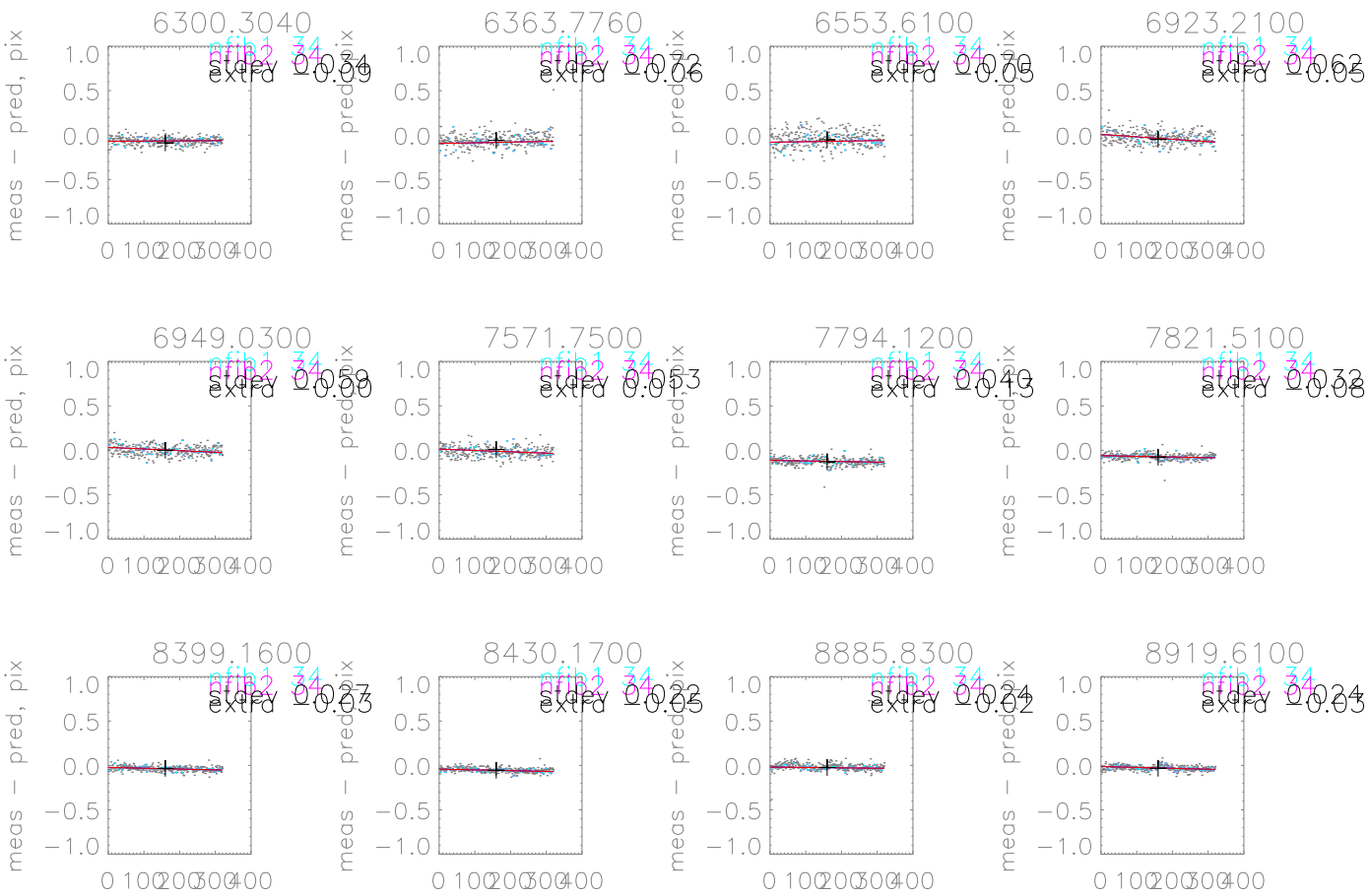

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

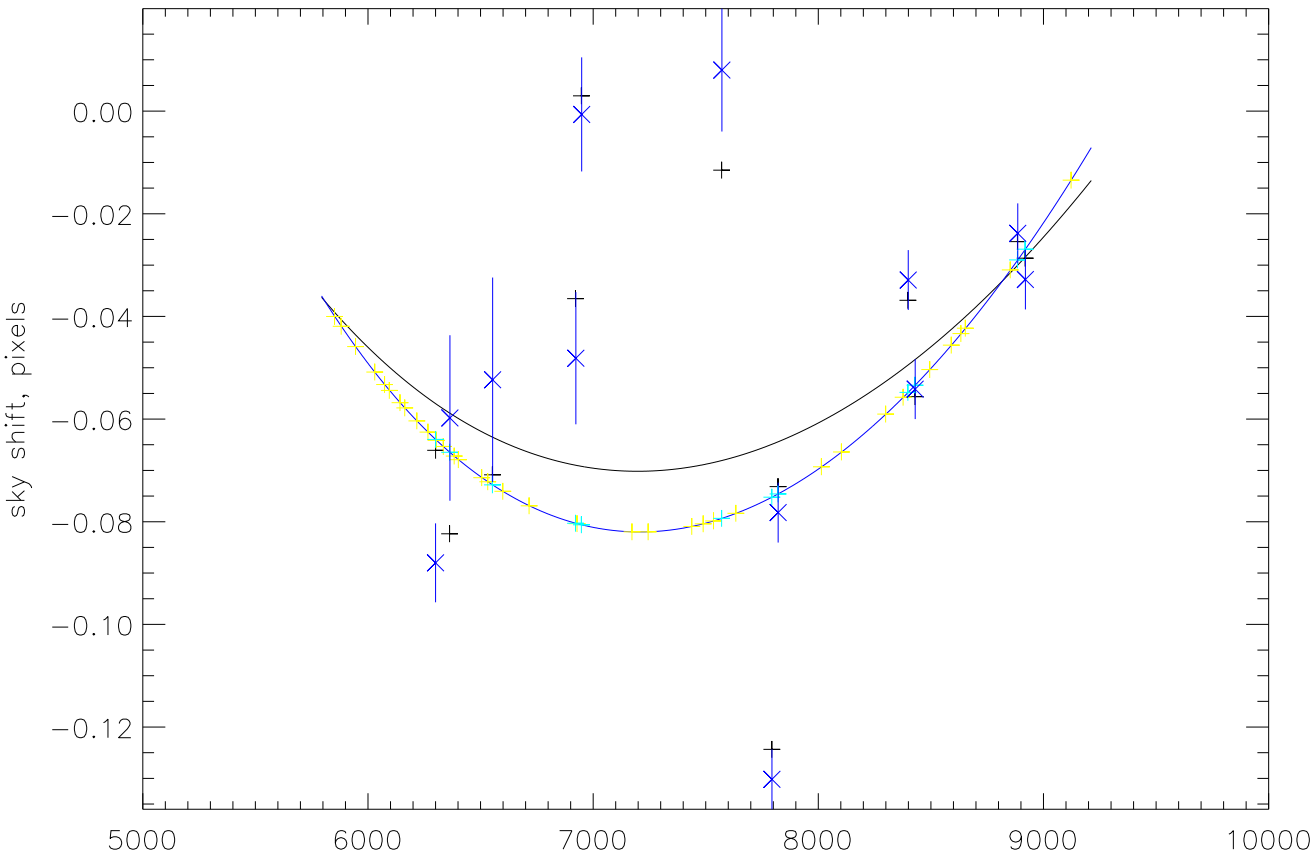

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

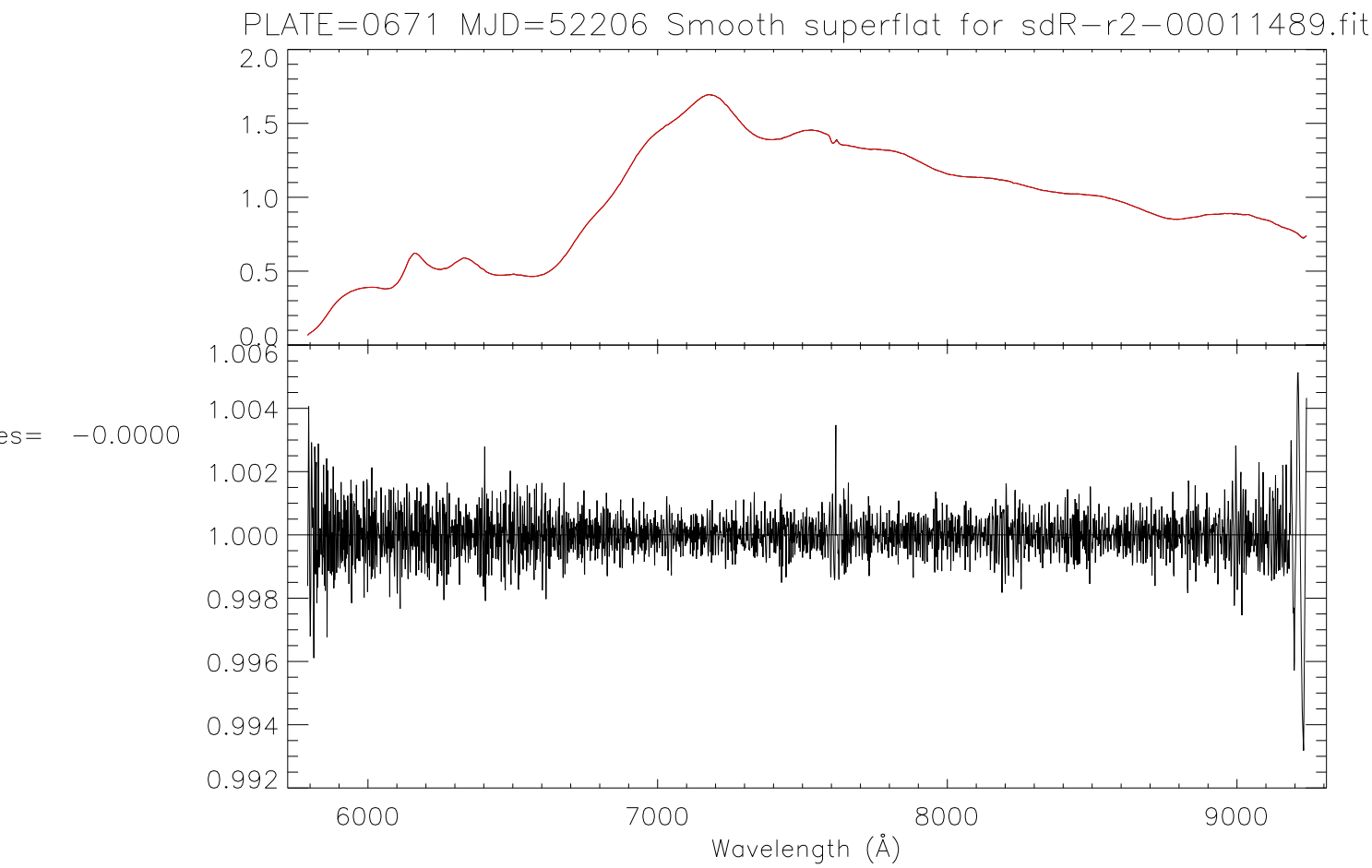

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

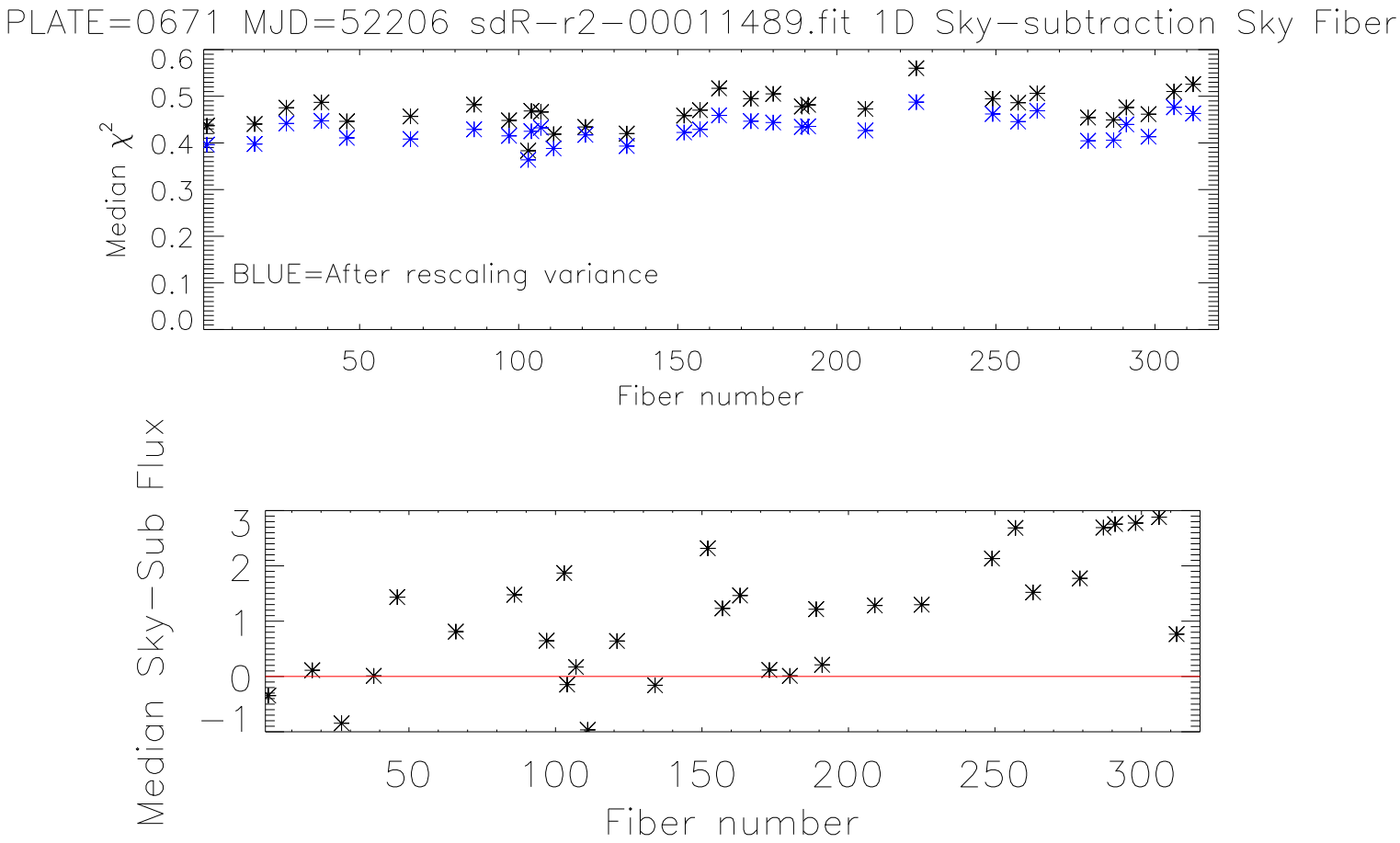

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

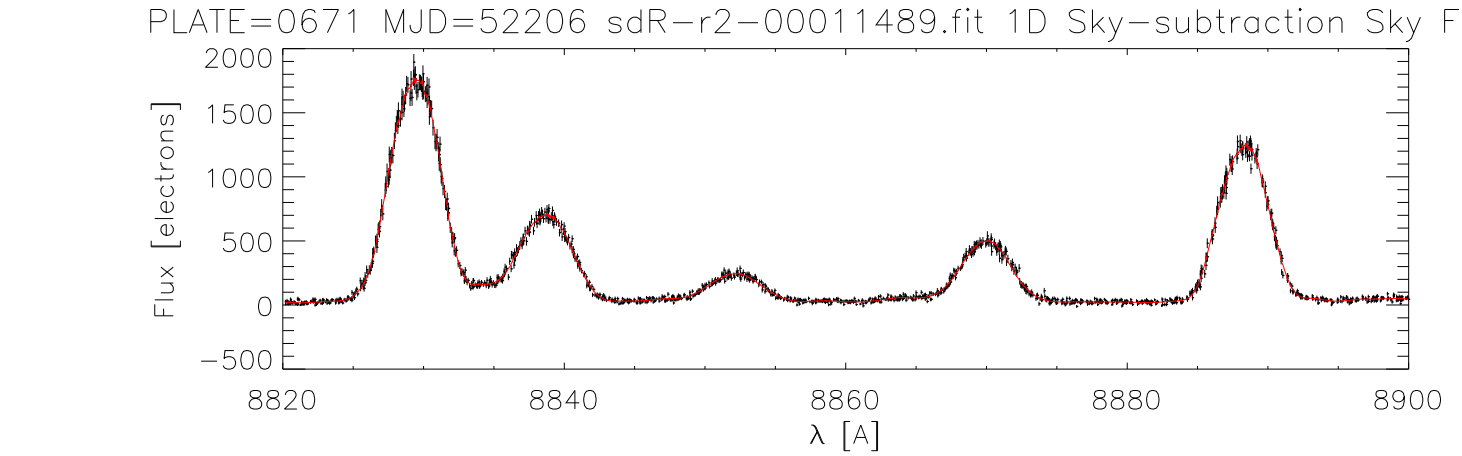

6300.3040
mfib1 34
mfib2 34
stdev 0.034
extra 0.09
6363.7760
mfib1 34
mfib2 34
stdev 0.032
extra 0.06
6553.6100
mfib1 34
mfib2 34
stdev 0.030
extra 0.05
6923.2100
mfib1 34
mfib2 34
stdev 0.062
extra 0.05
6949.0300
mfib1 34
mfib2 34
stdev 0.059
extra 0.00
7571.7500
mfib1 34
mfib2 34
stdev 0.053
extra 0.01
7794.1200
mfib1 34
mfib2 34
stdev 0.040
extra 0.13
7821.5100
mfib1 34
mfib2 34
stdev 0.032
extra 0.08
8399.1600
mfib1 34
mfib2 34
stdev 0.027
extra 0.03
8430.1700
mfib1 34
mfib2 34
stdev 0.022
extra 0.05
8885.8300
mfib1 34
mfib2 34
stdev 0.024
extra 0.02
8919.6100
mfib1 34
mfib2 34
stdev 0.024
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

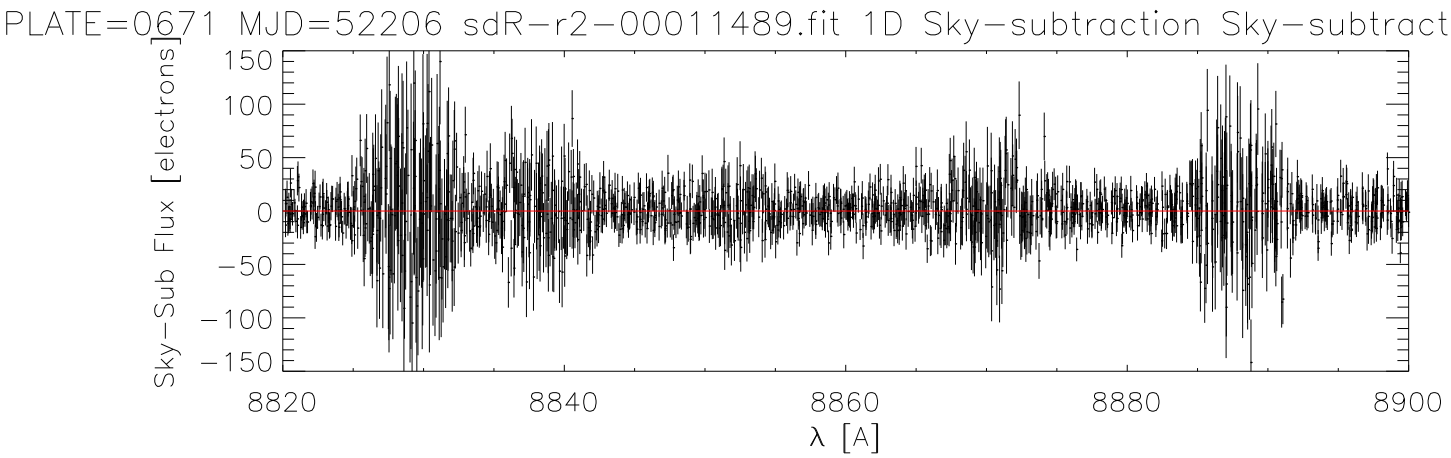

0.00
−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
sky shift, pixels
5000
6000
7000
8000
9000
10000

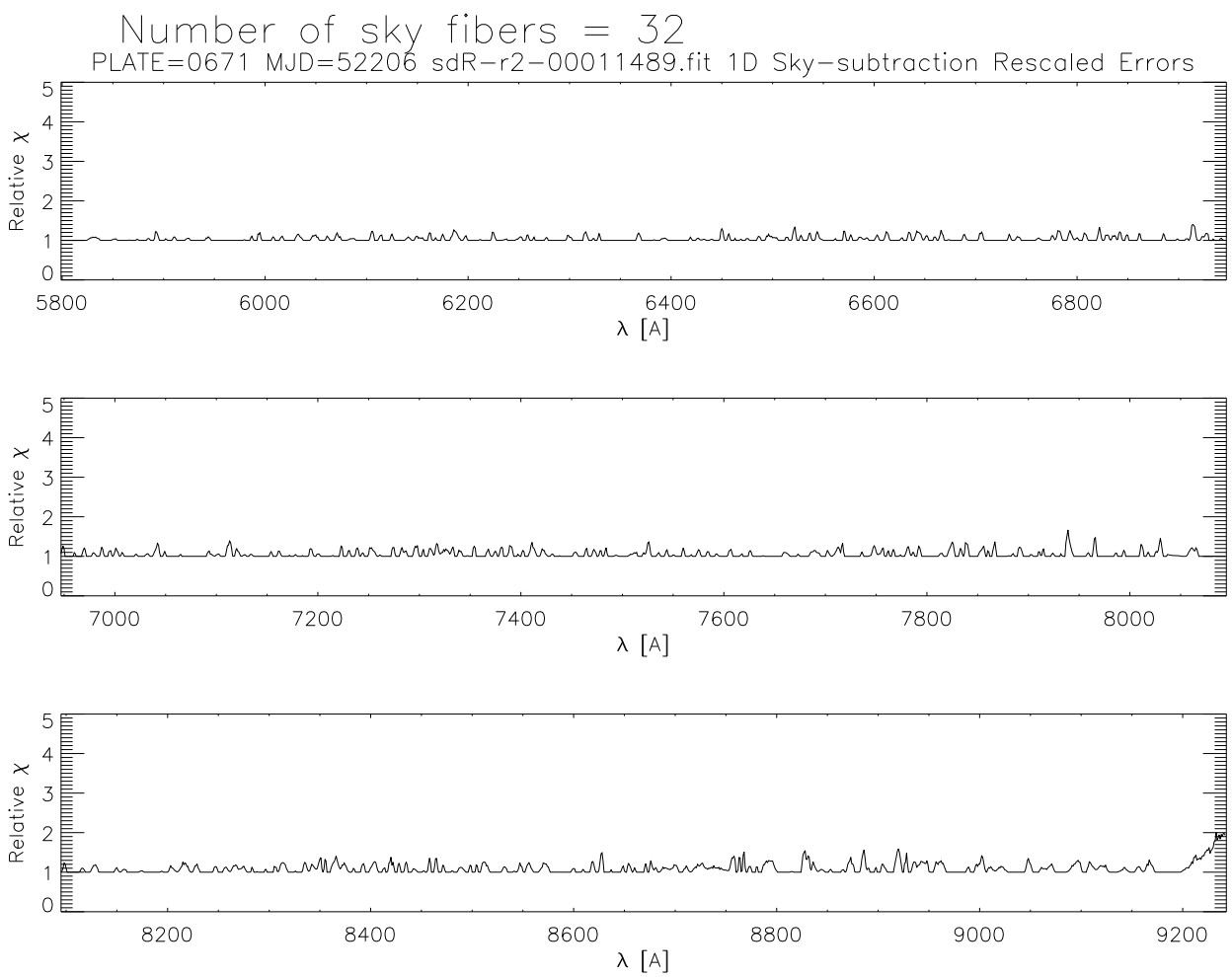

PLATE=0671 MJD=52206 Smooth superflat for sdR-r2-00011489.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

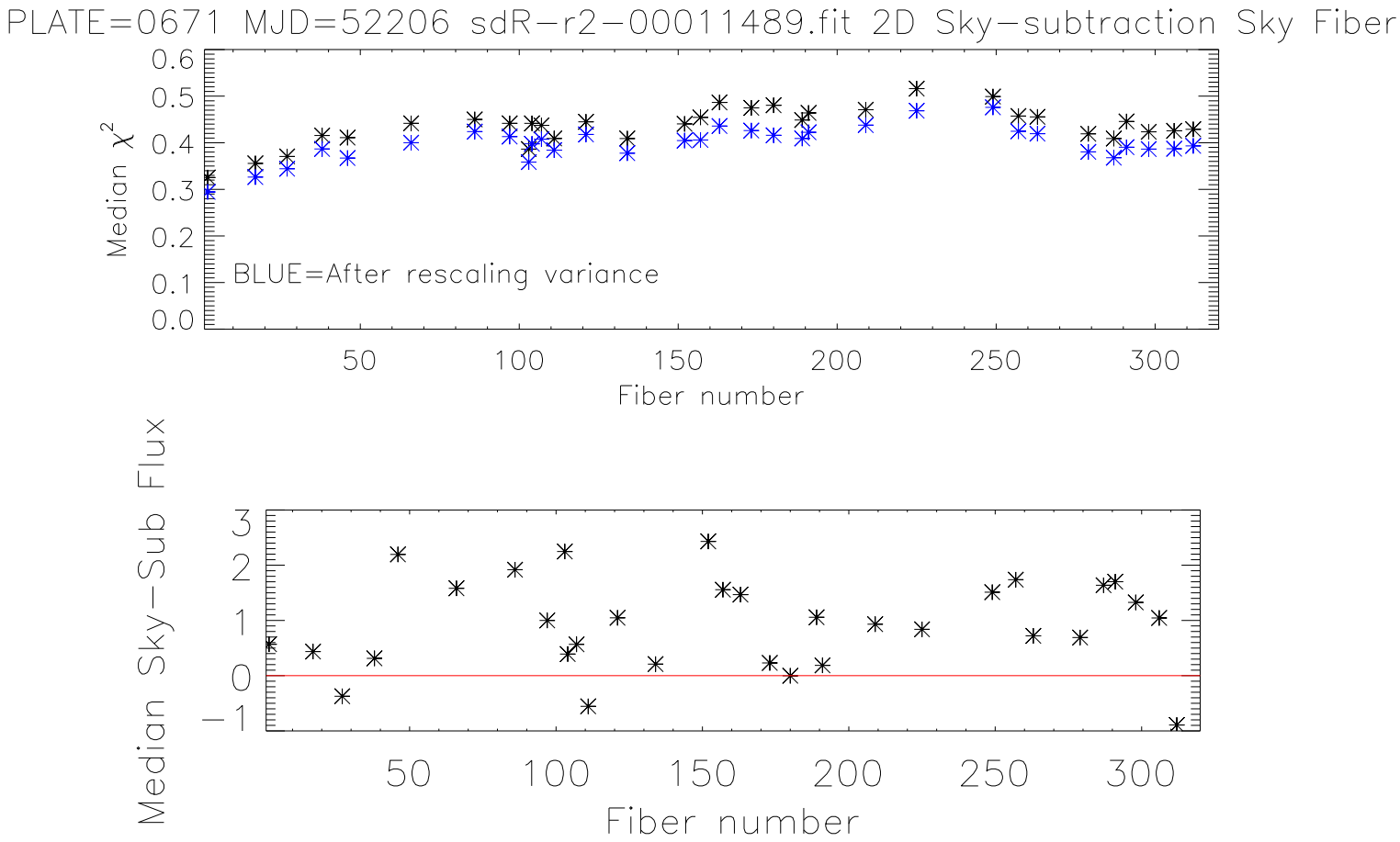
es= −0.0000

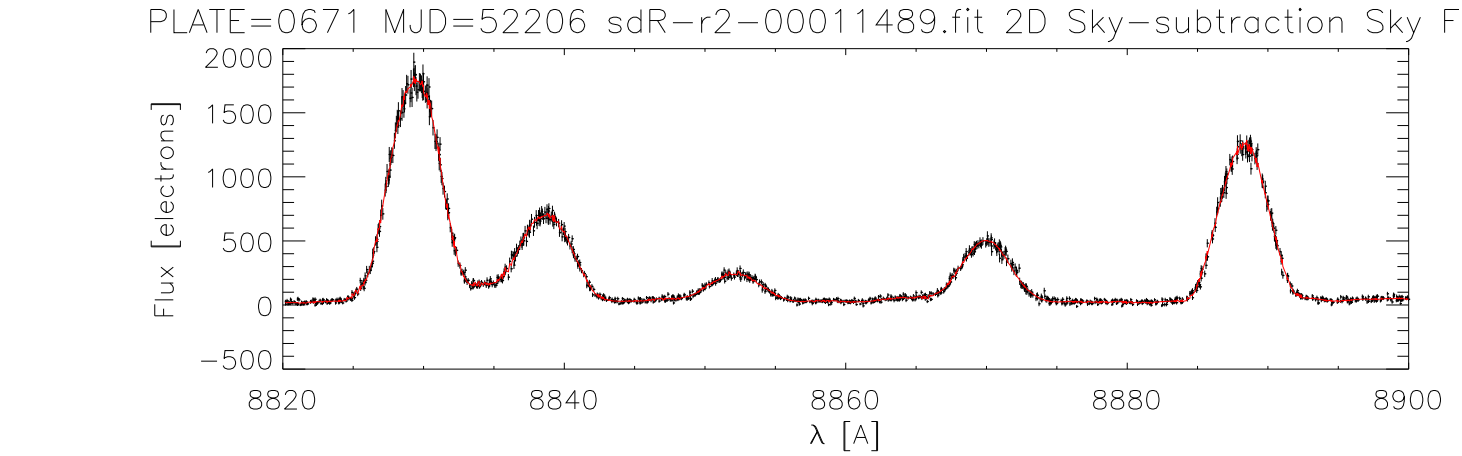

PLATE=0671 MJD=52206 sdR-r2-00011489.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

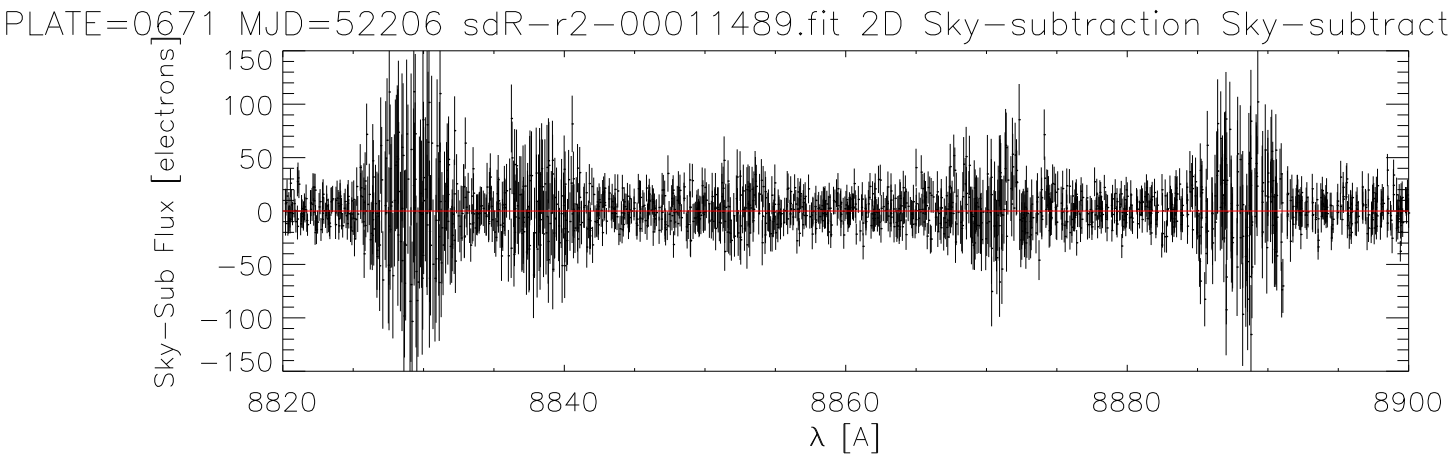

PLATE=0671 MJD=52206 sdR-r2-00011489.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

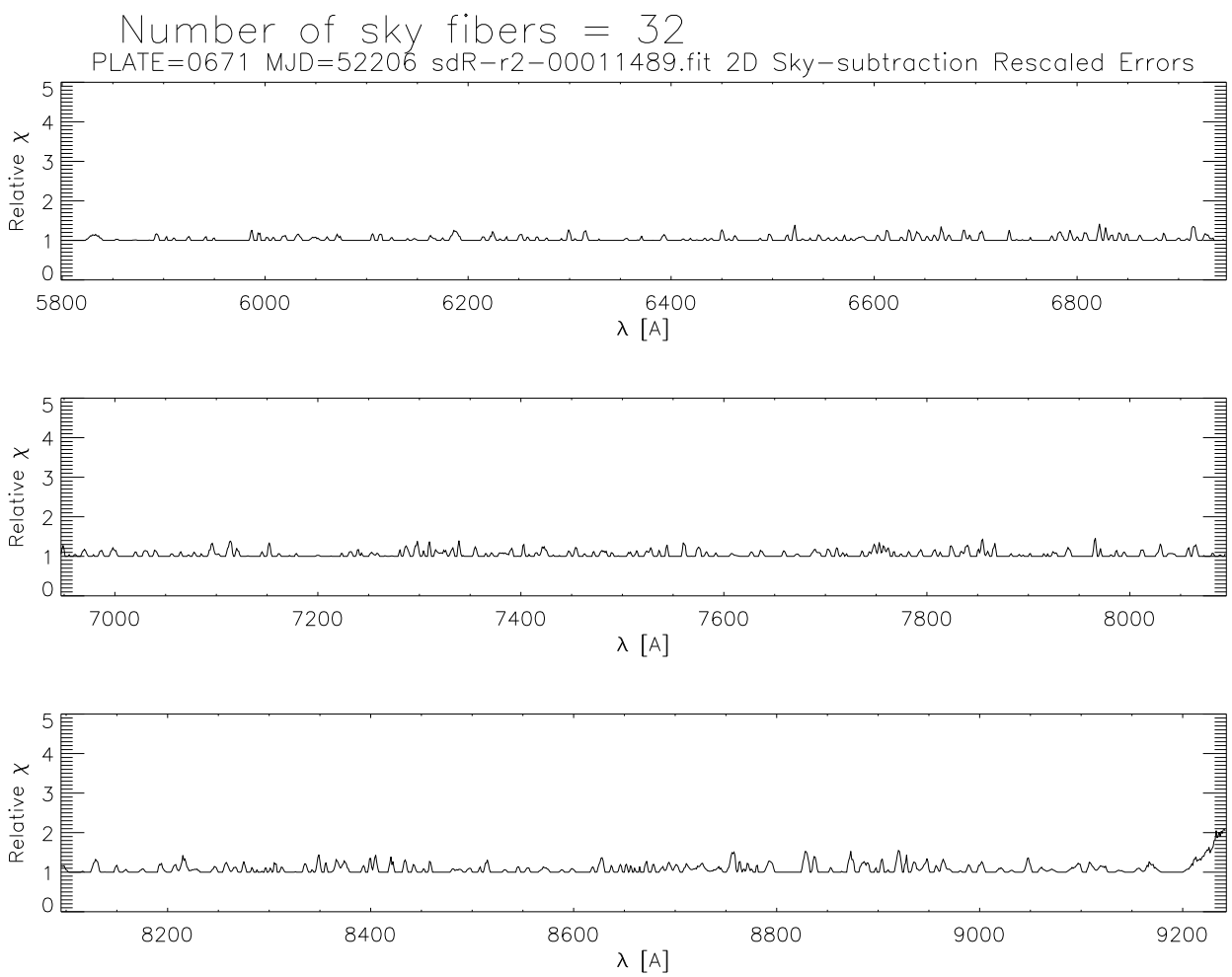

PLATE=0671 MJD=52206 sdR-r2-00011489.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

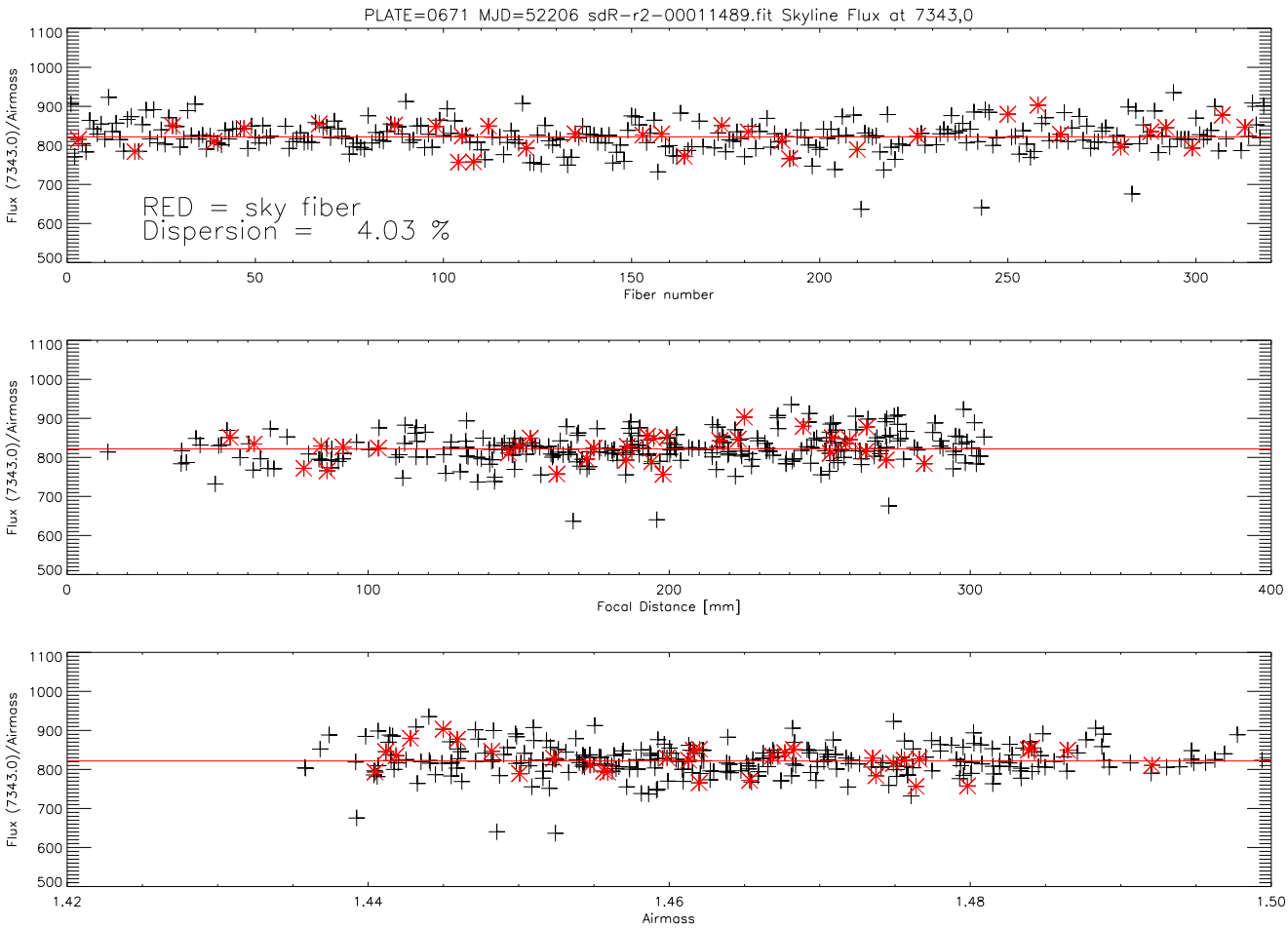

Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011489.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

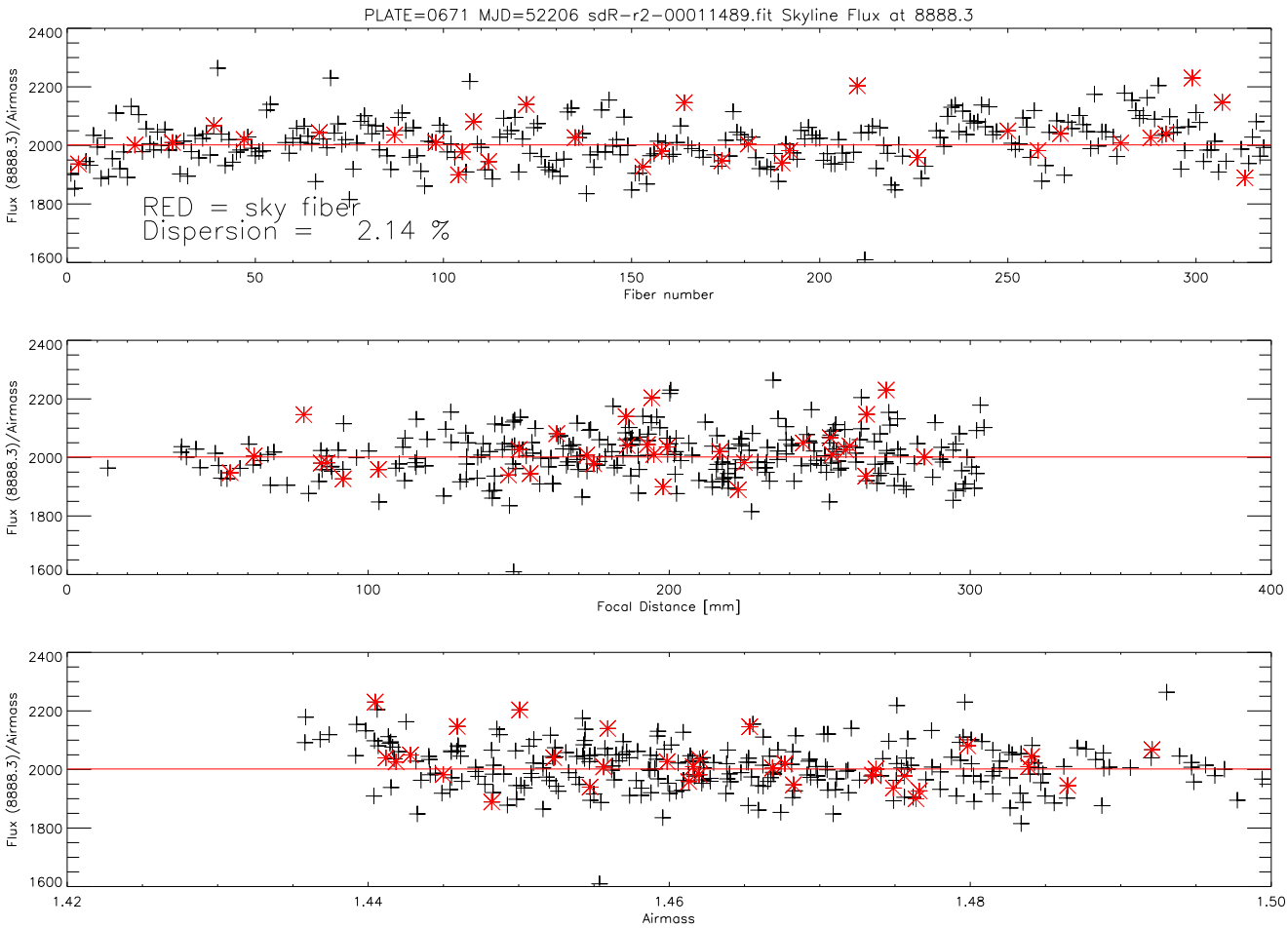

PLATE=0671 MJD=52206 sdR-r2-00011489.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0671 MJD=52206 sdR-r2-00011489.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]


PLATE=0671 MJD=52206 sdR-r2-00011489.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 32
PLATE=0671 MJD=52206 sdR-r2-00011489.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=0671 MJD=52206 sdR-r2-00011489.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=0671 MJD=52206 sdR-r2-00011489.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.14 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass