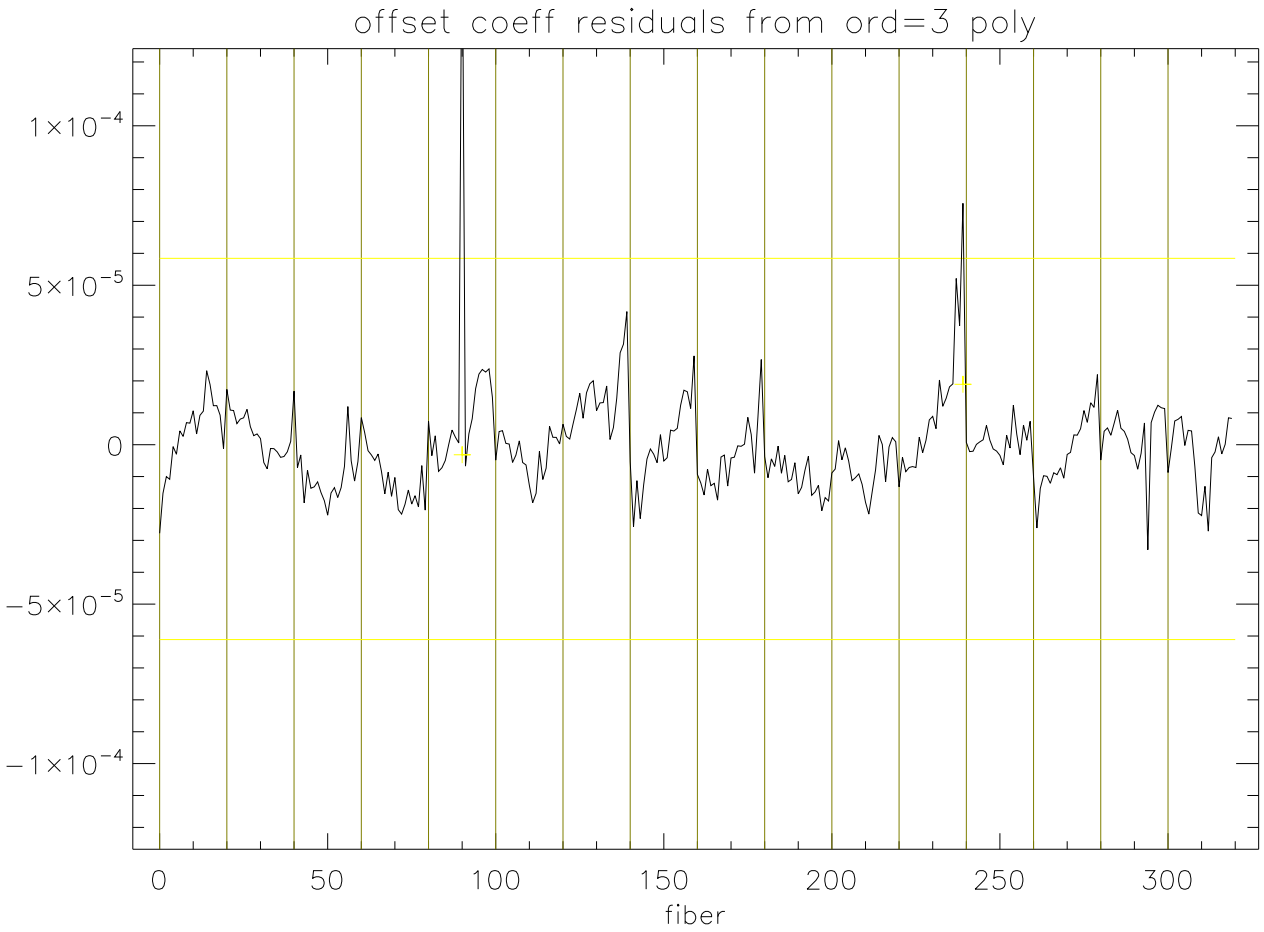
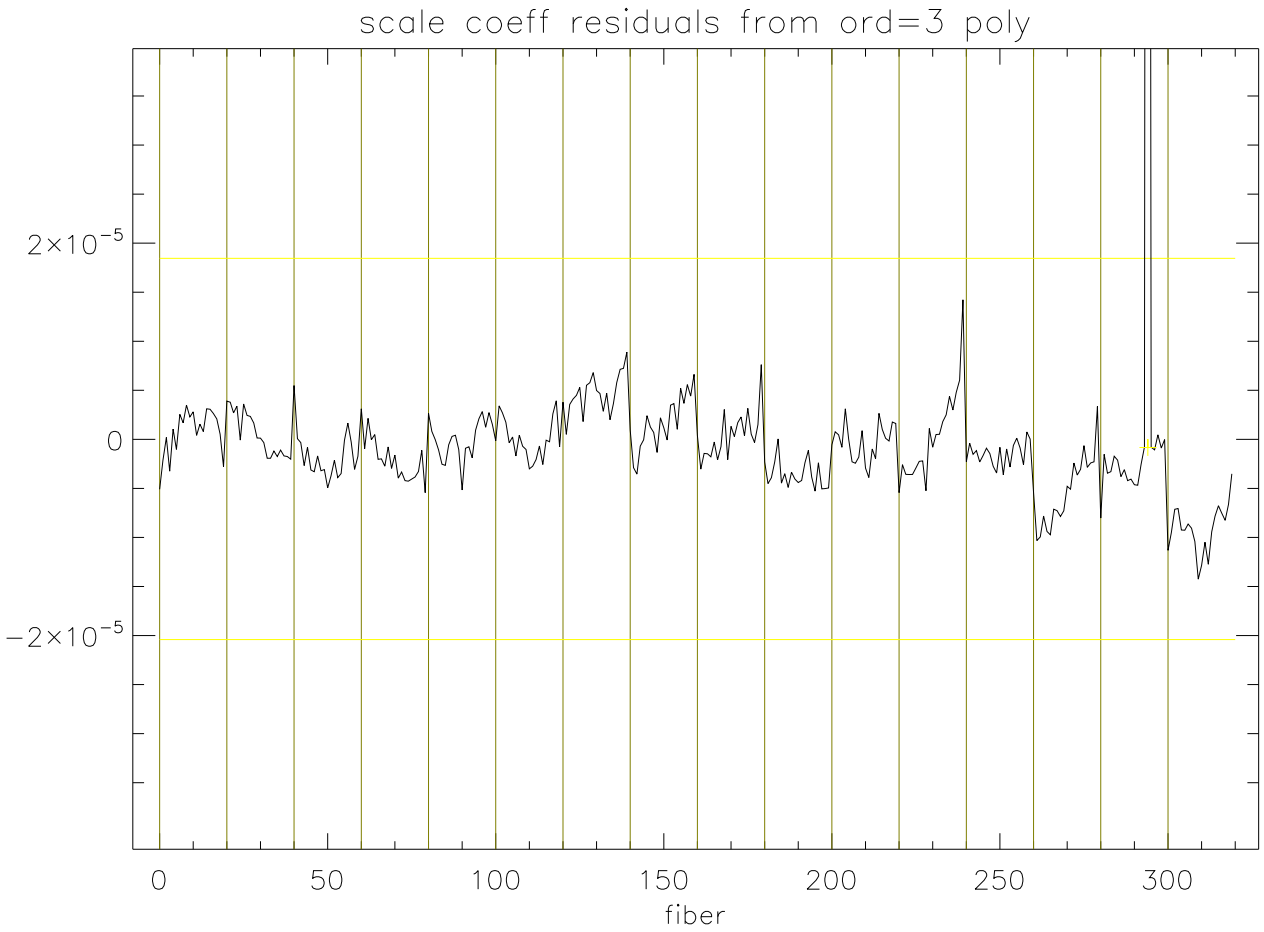
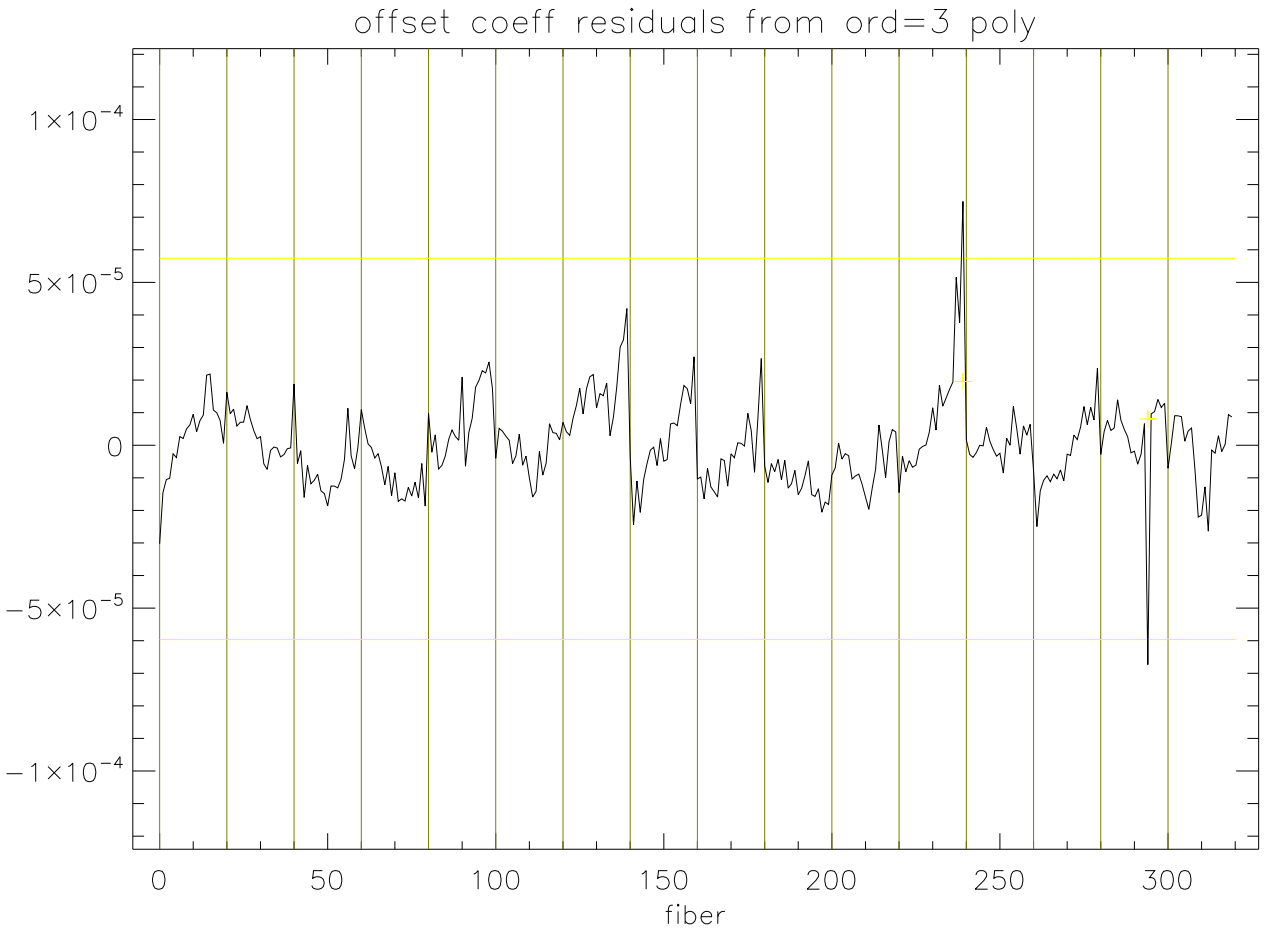
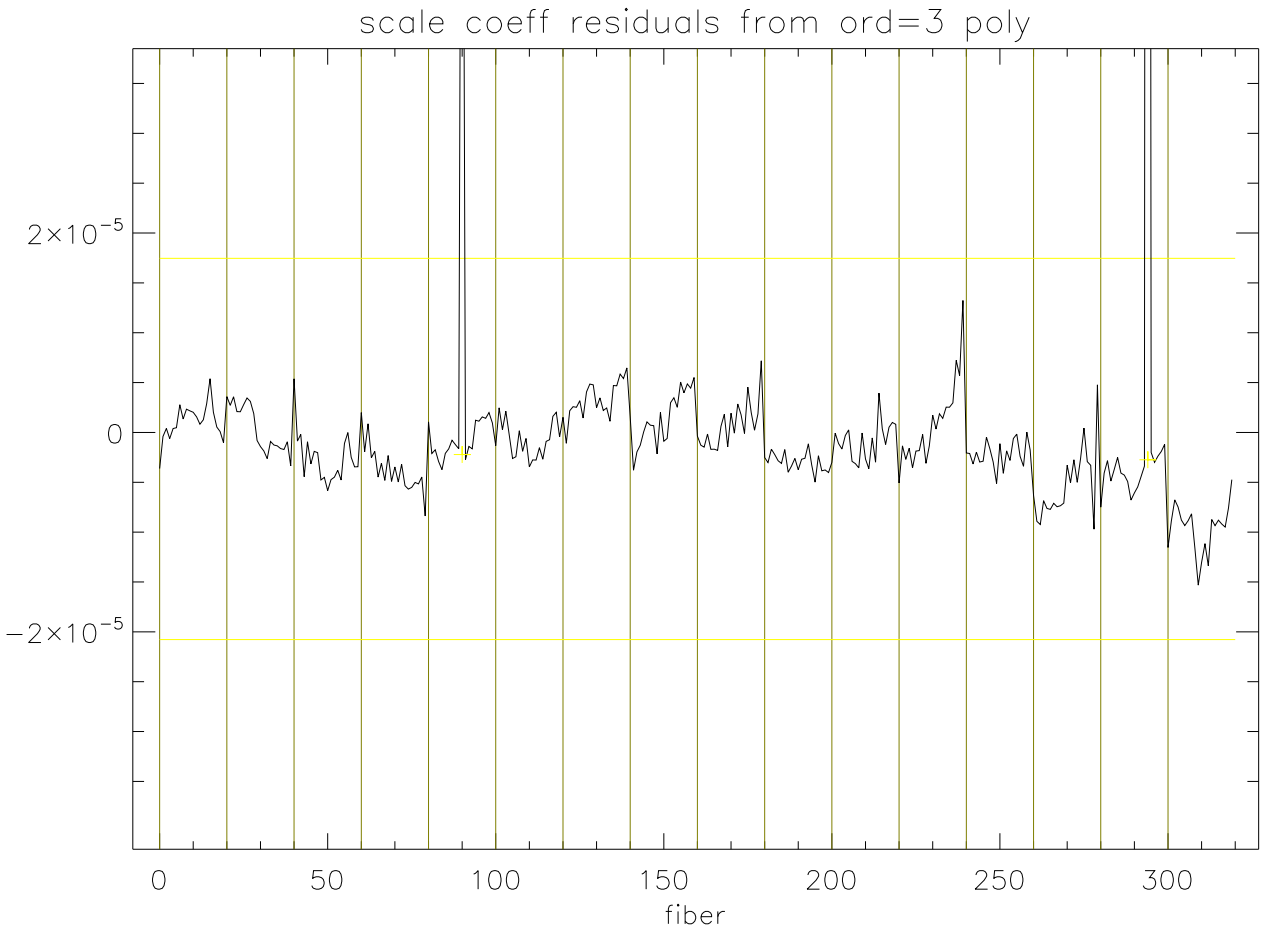
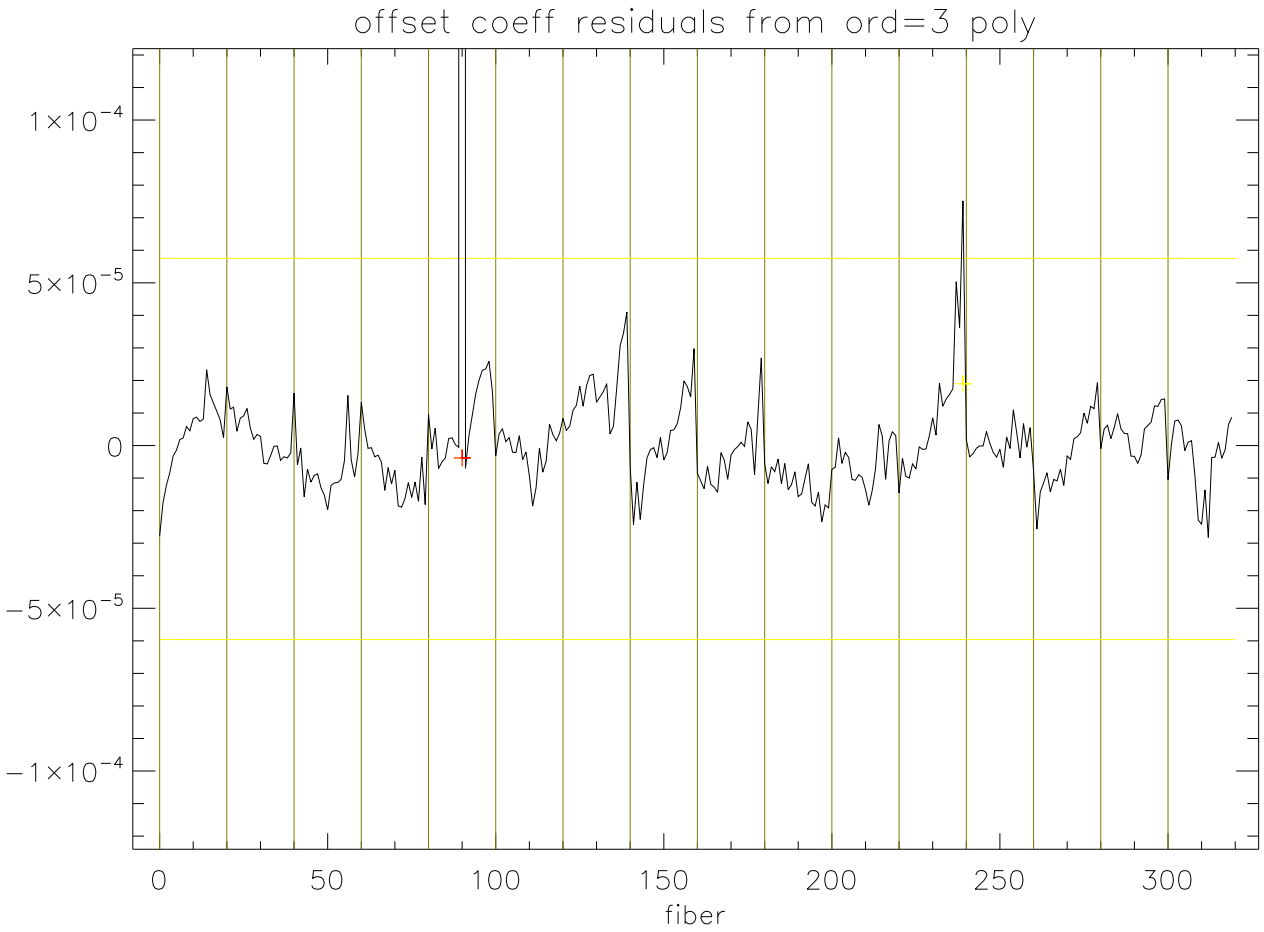
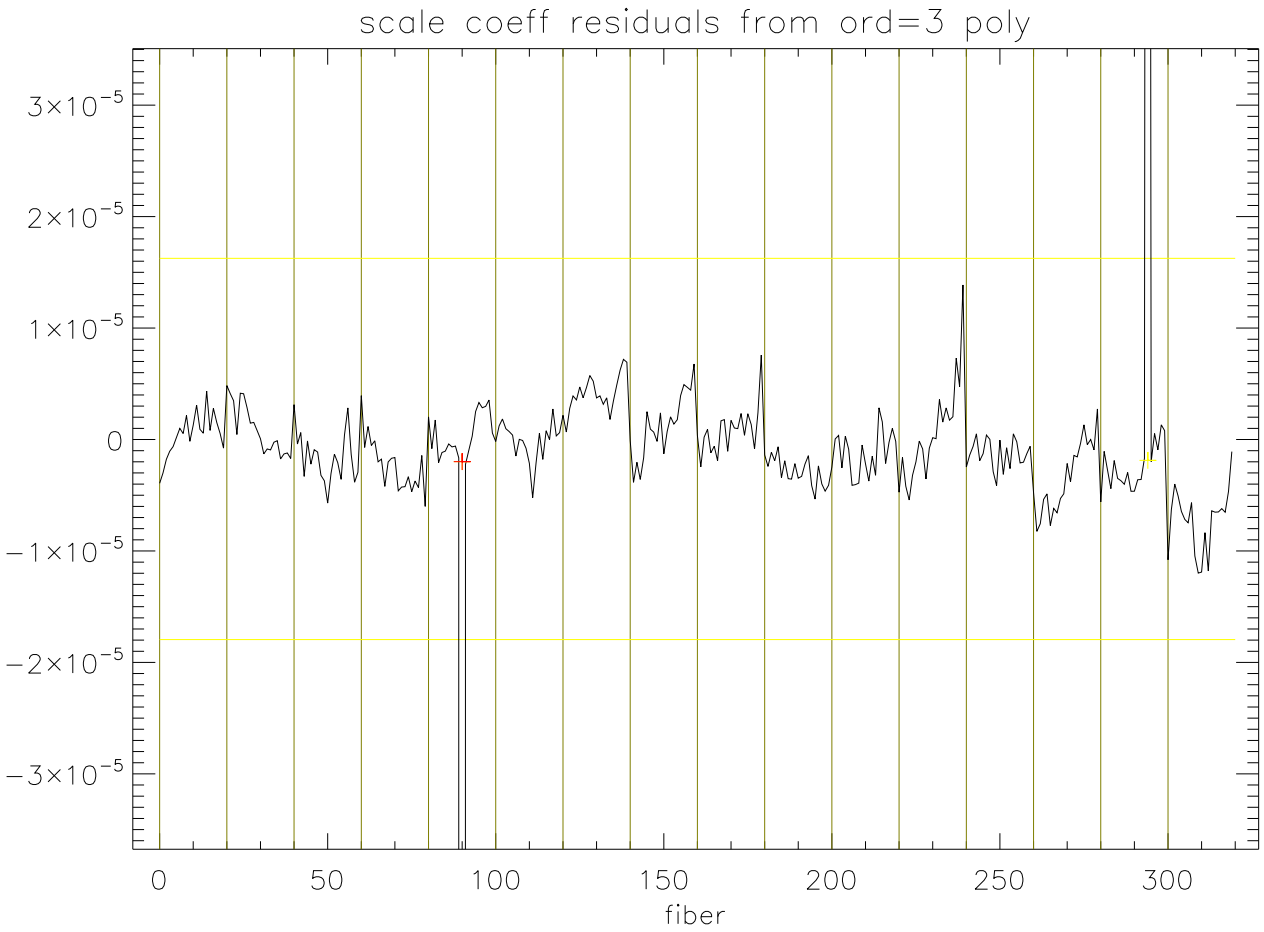

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

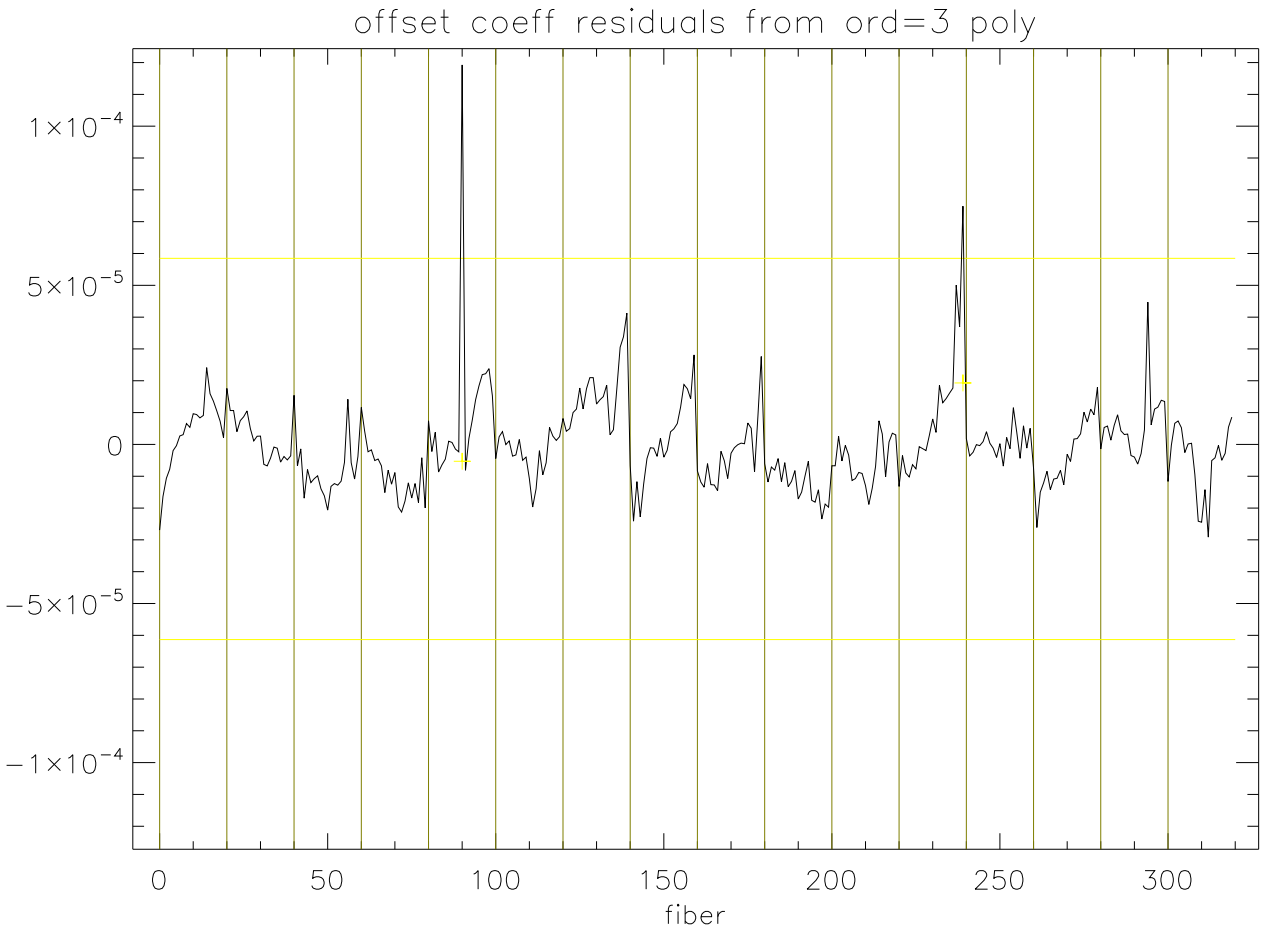

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
0
50
100
150
200
250
300
fiber

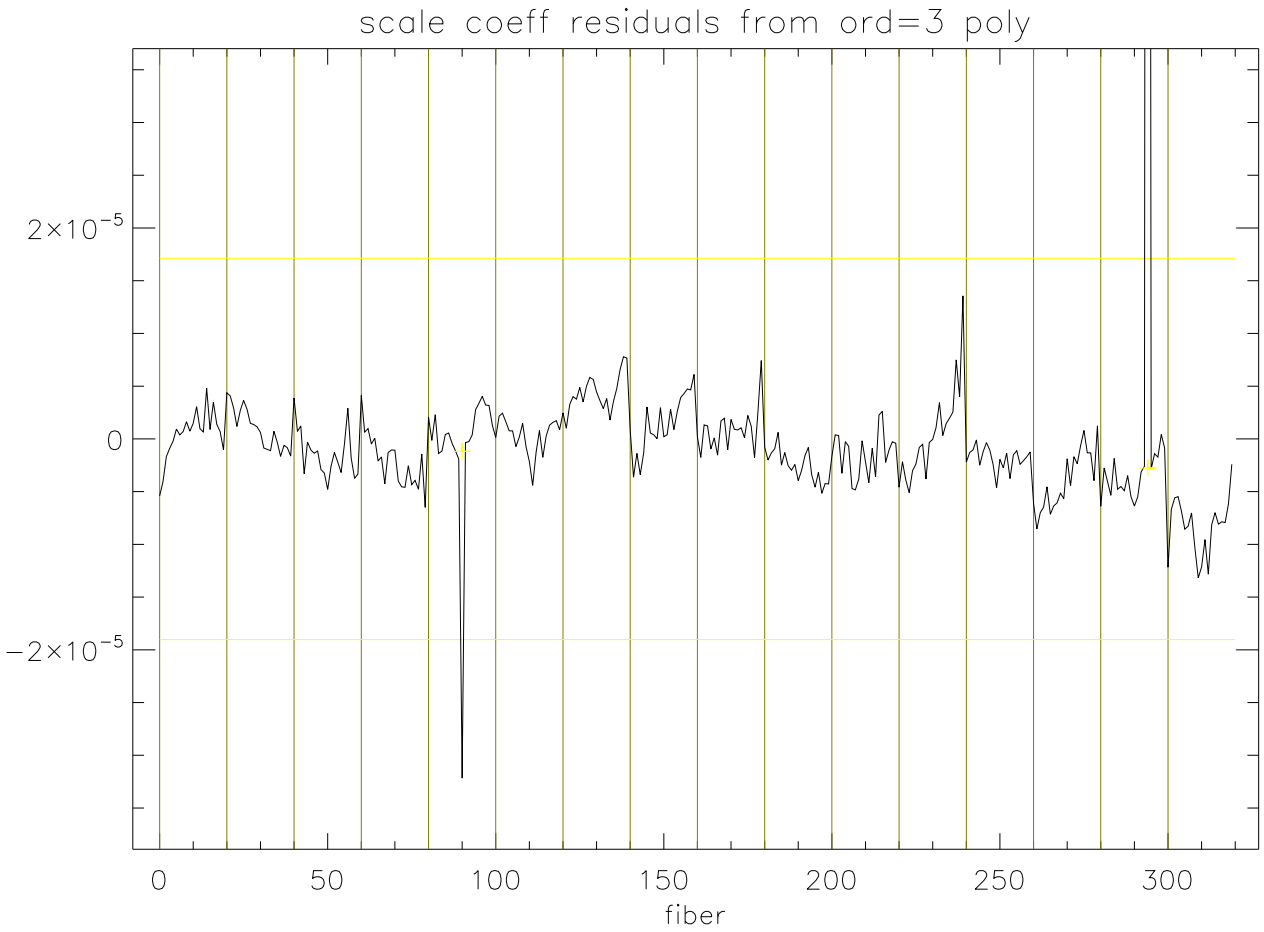

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

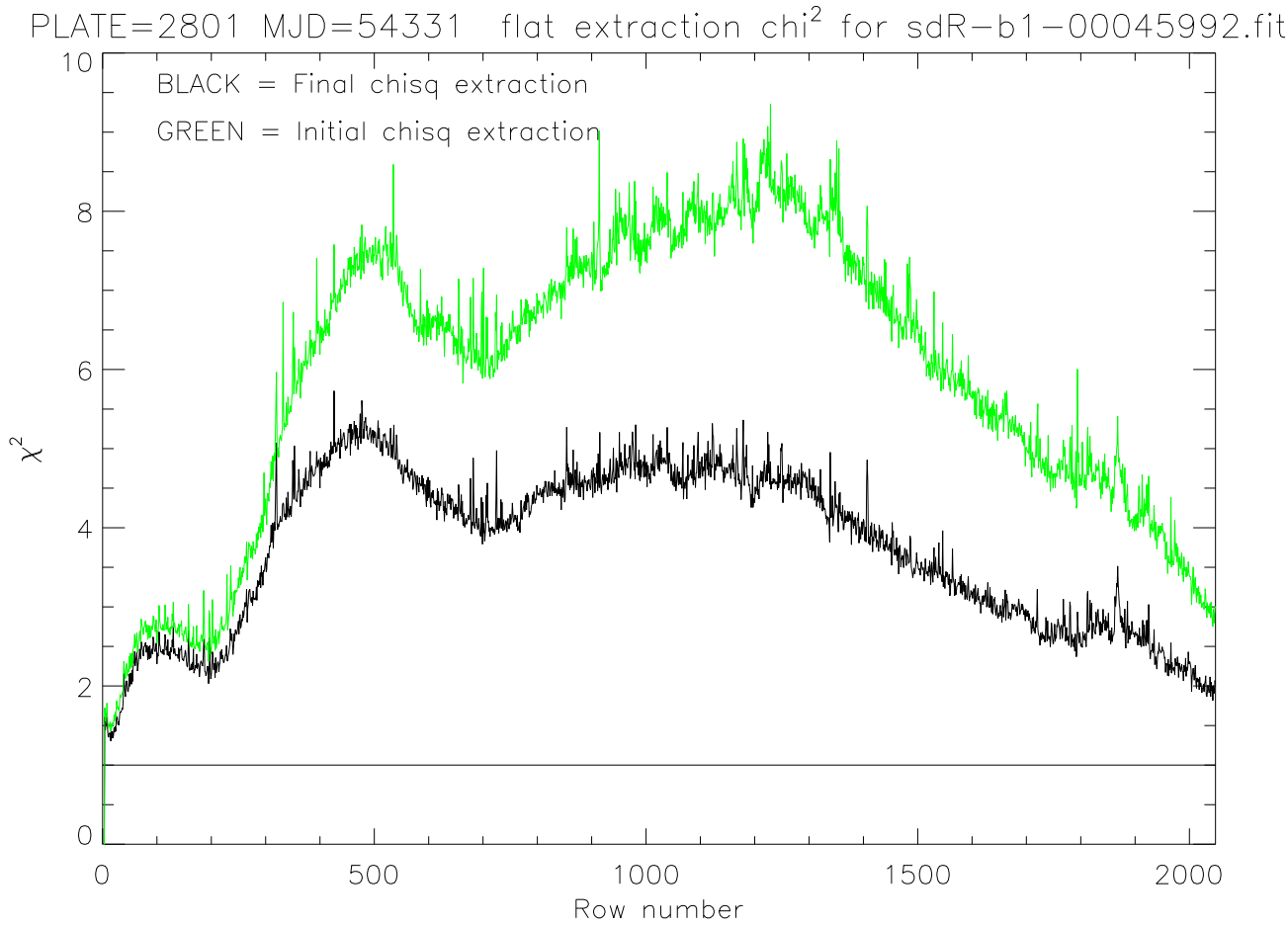

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

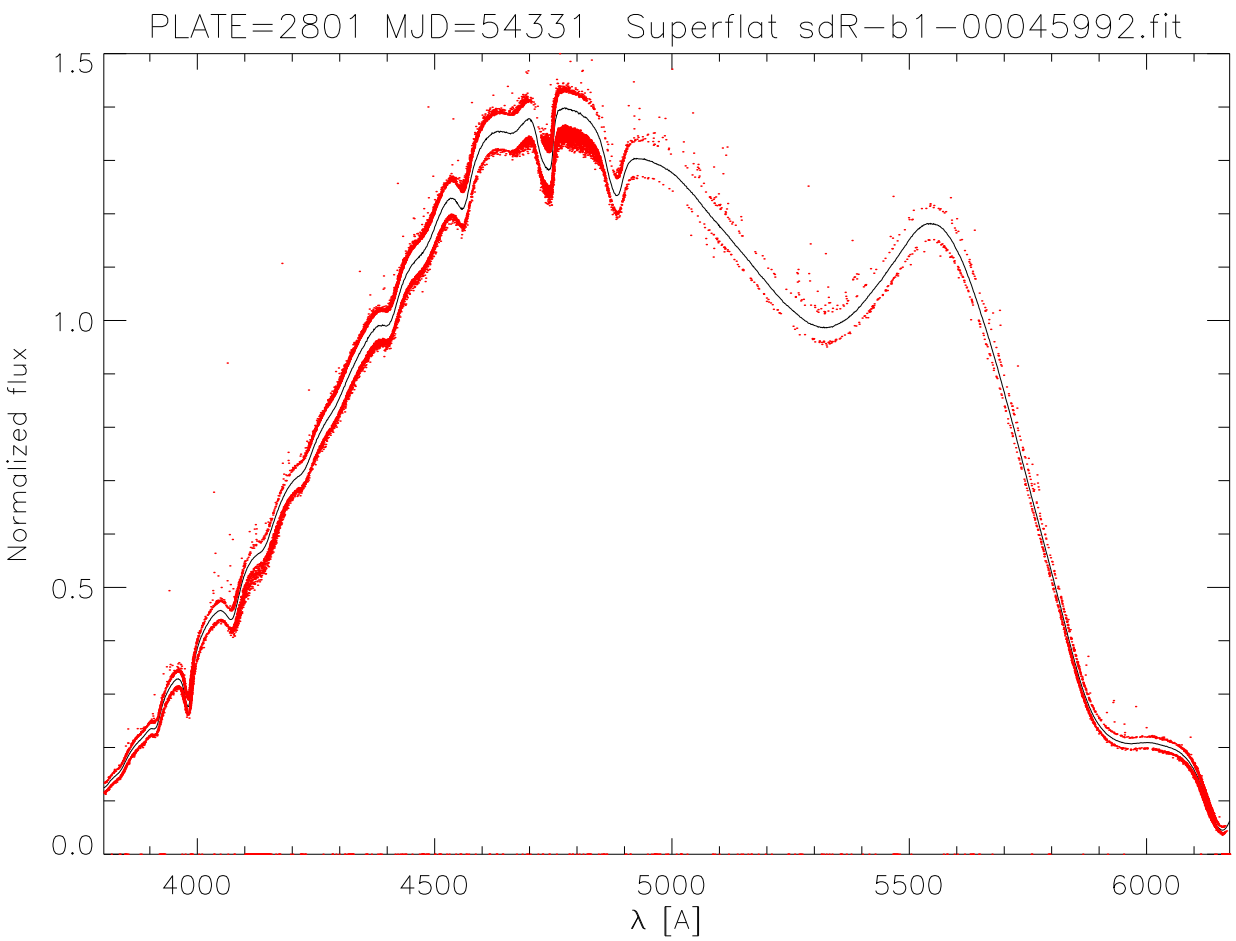

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

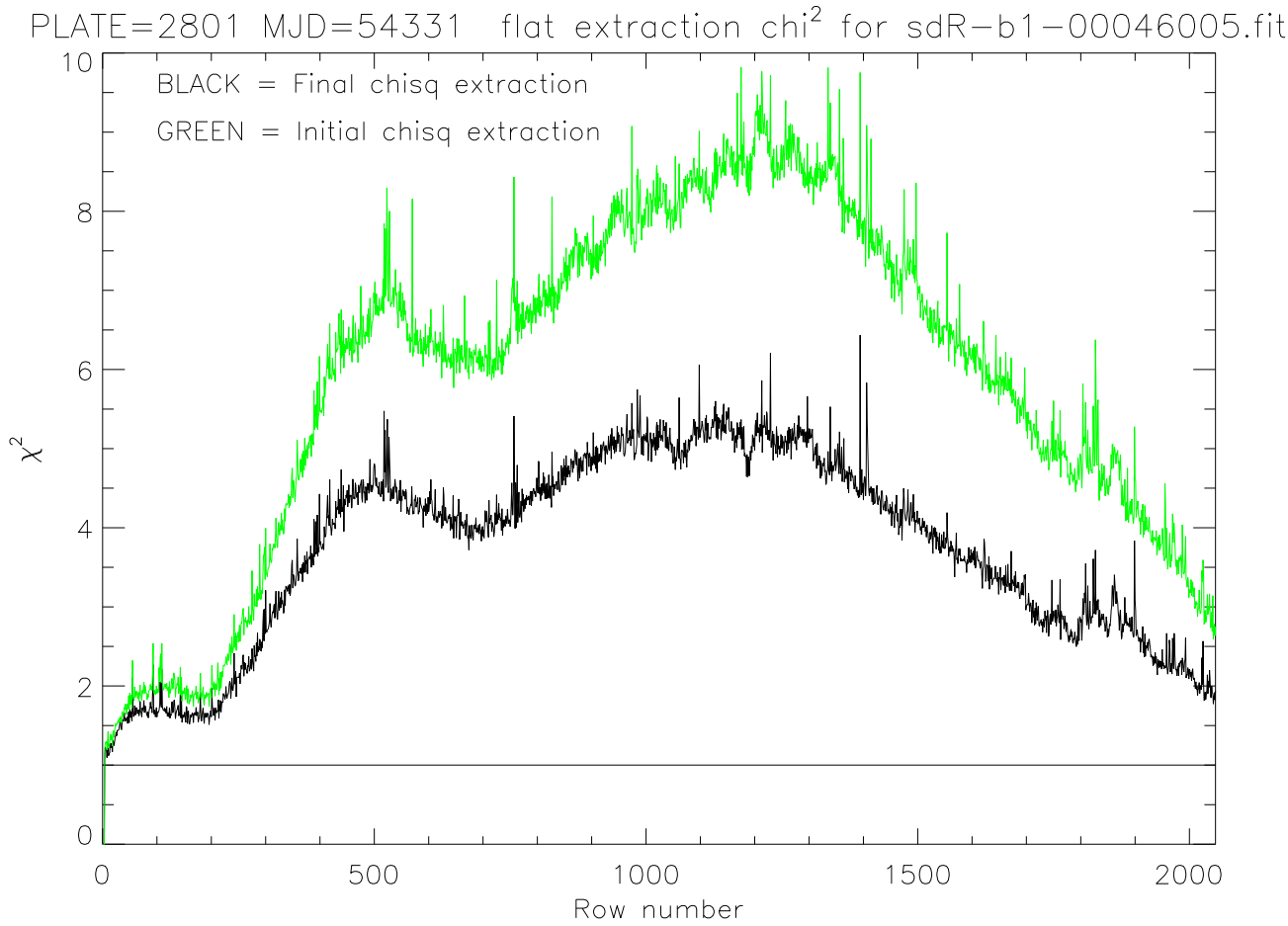

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

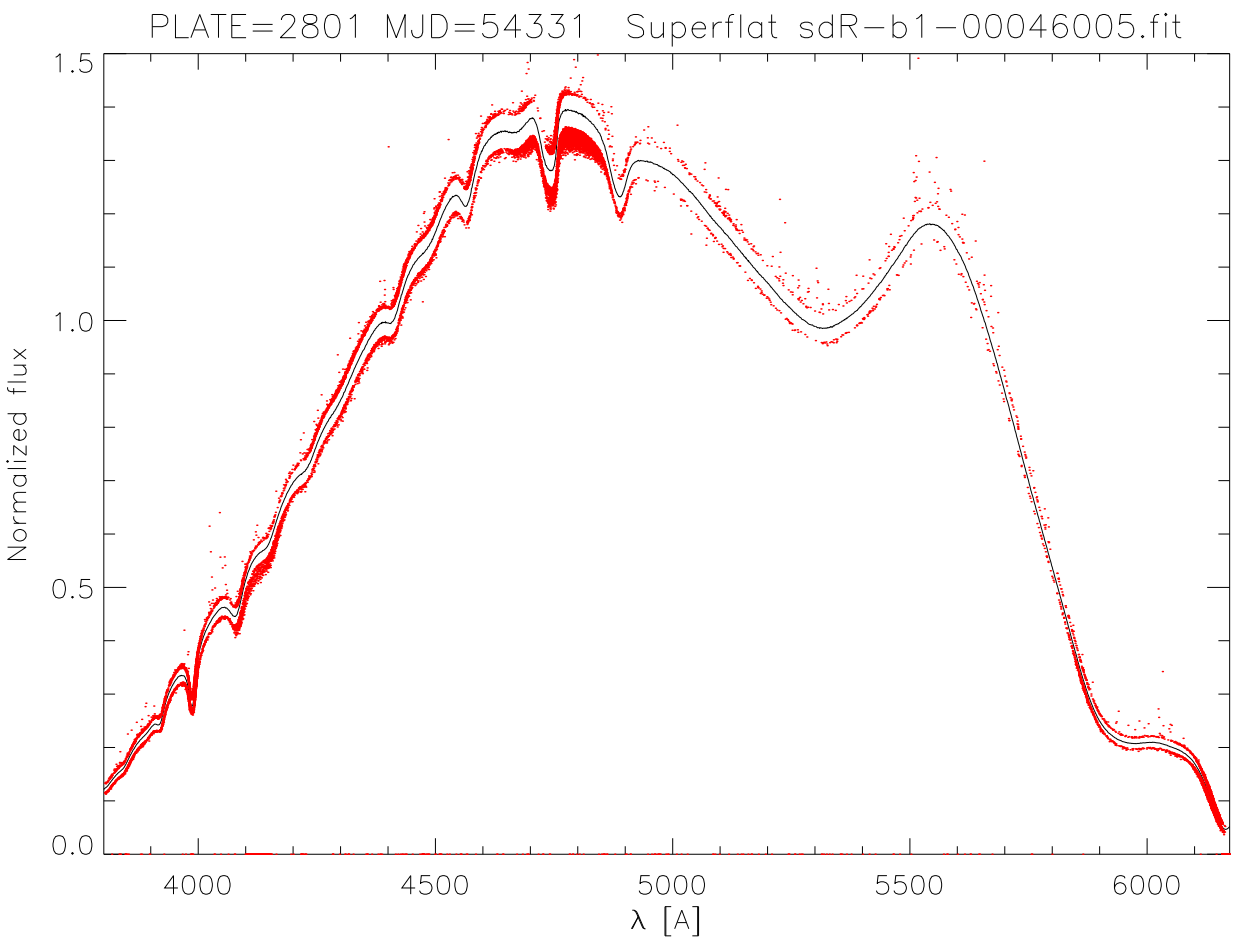

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

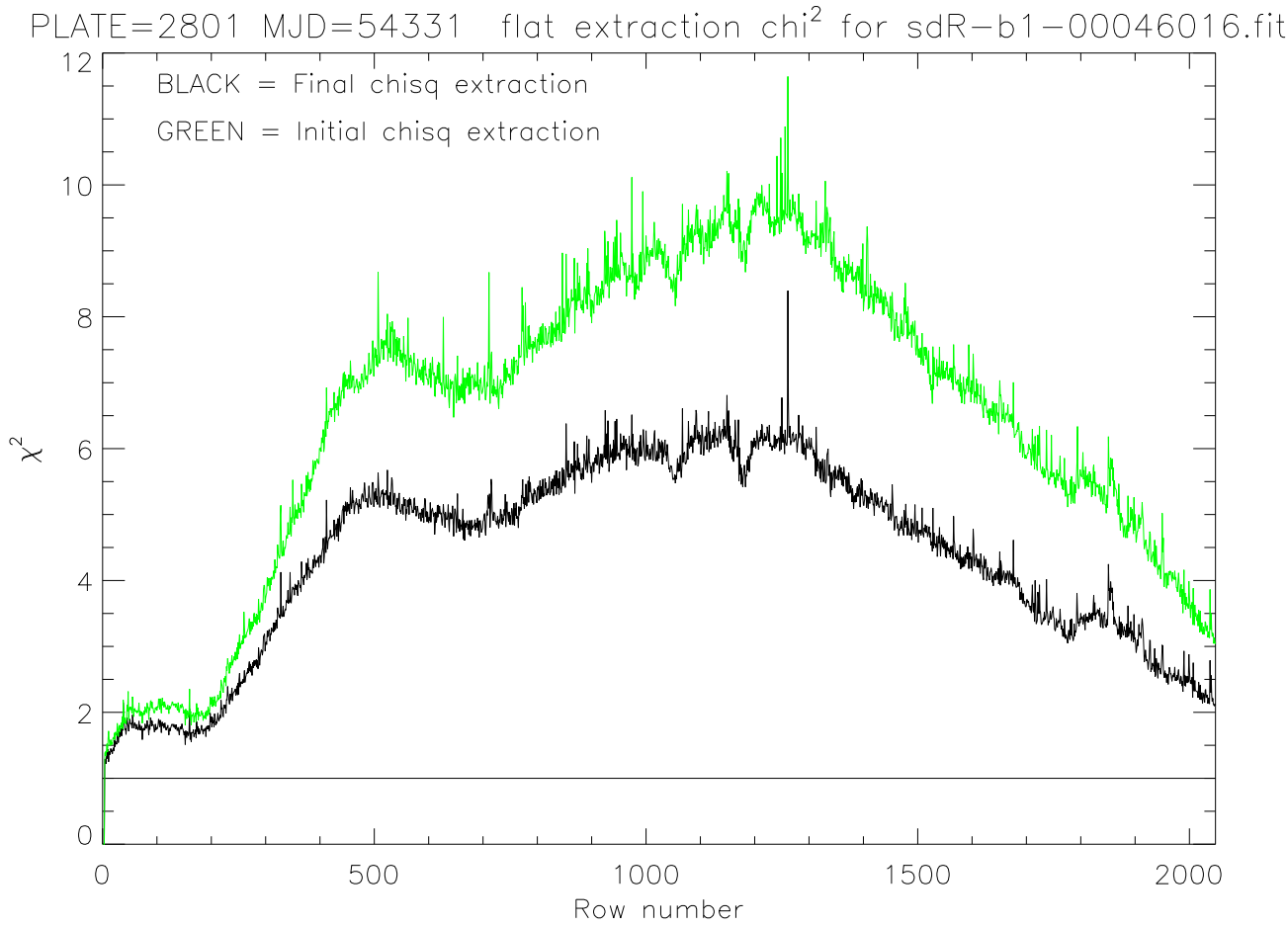

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

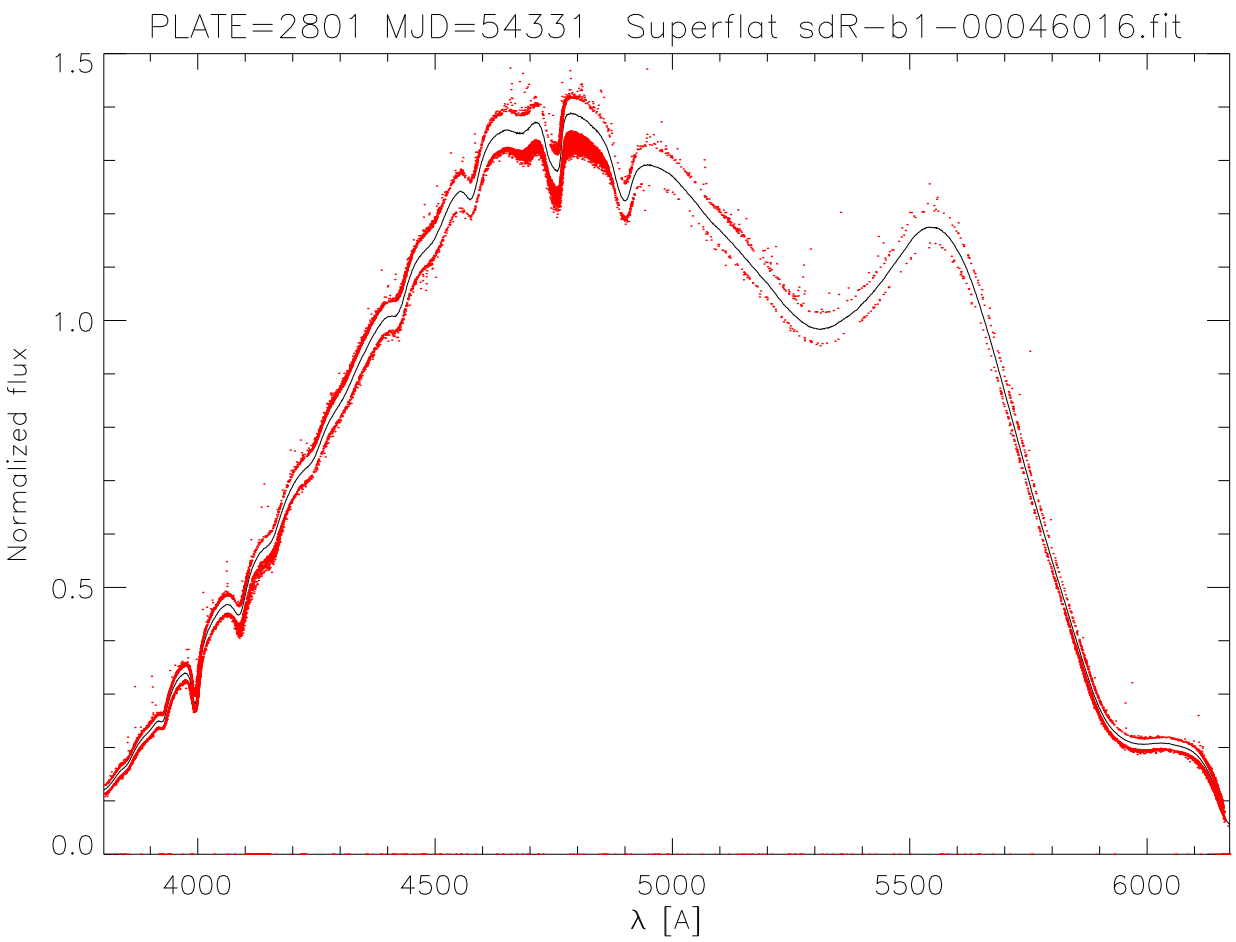

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR−b1−00045992.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

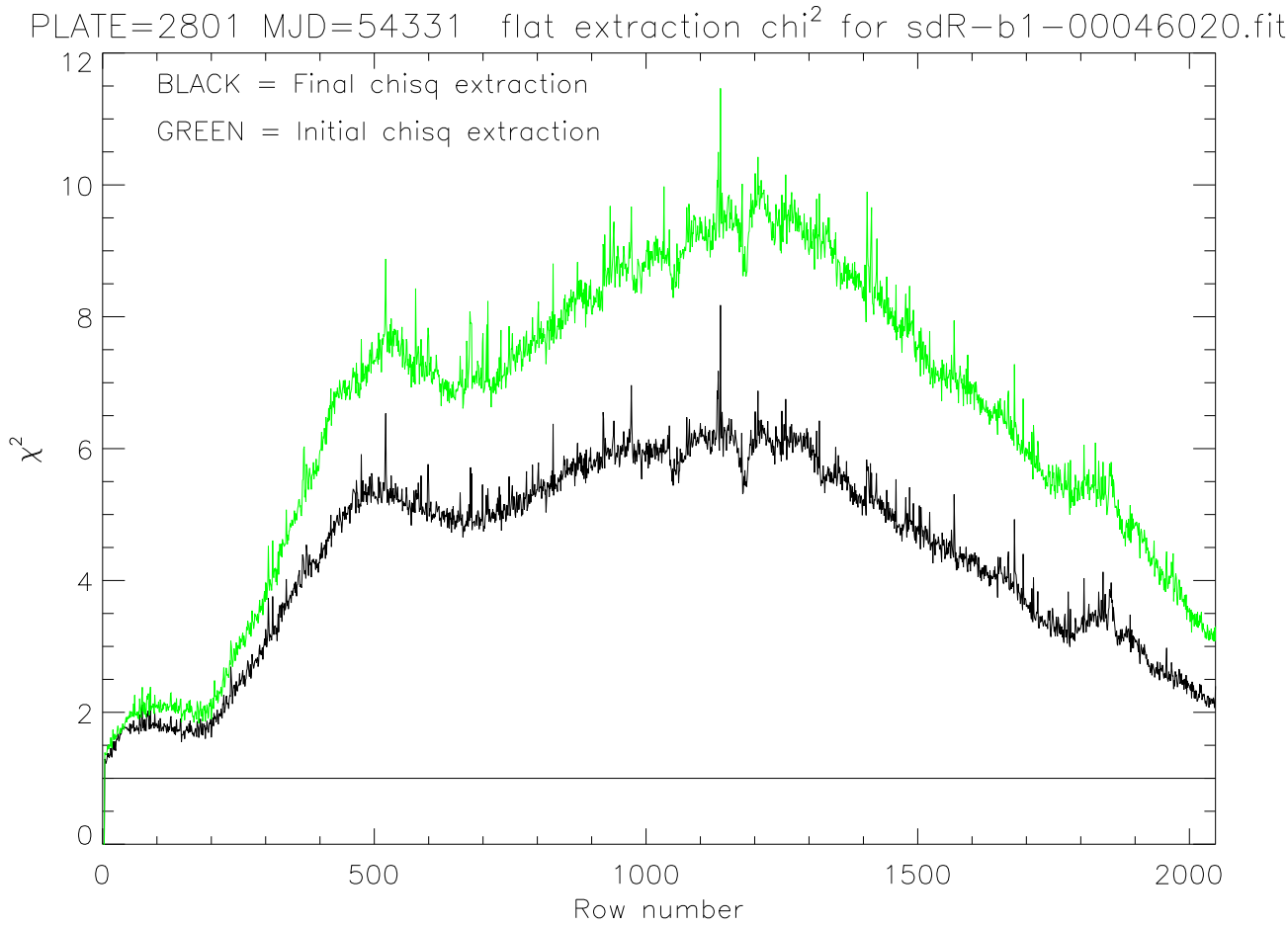

PLATE=2801 MJD=54331 Superflat sdR-b1-00045992.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

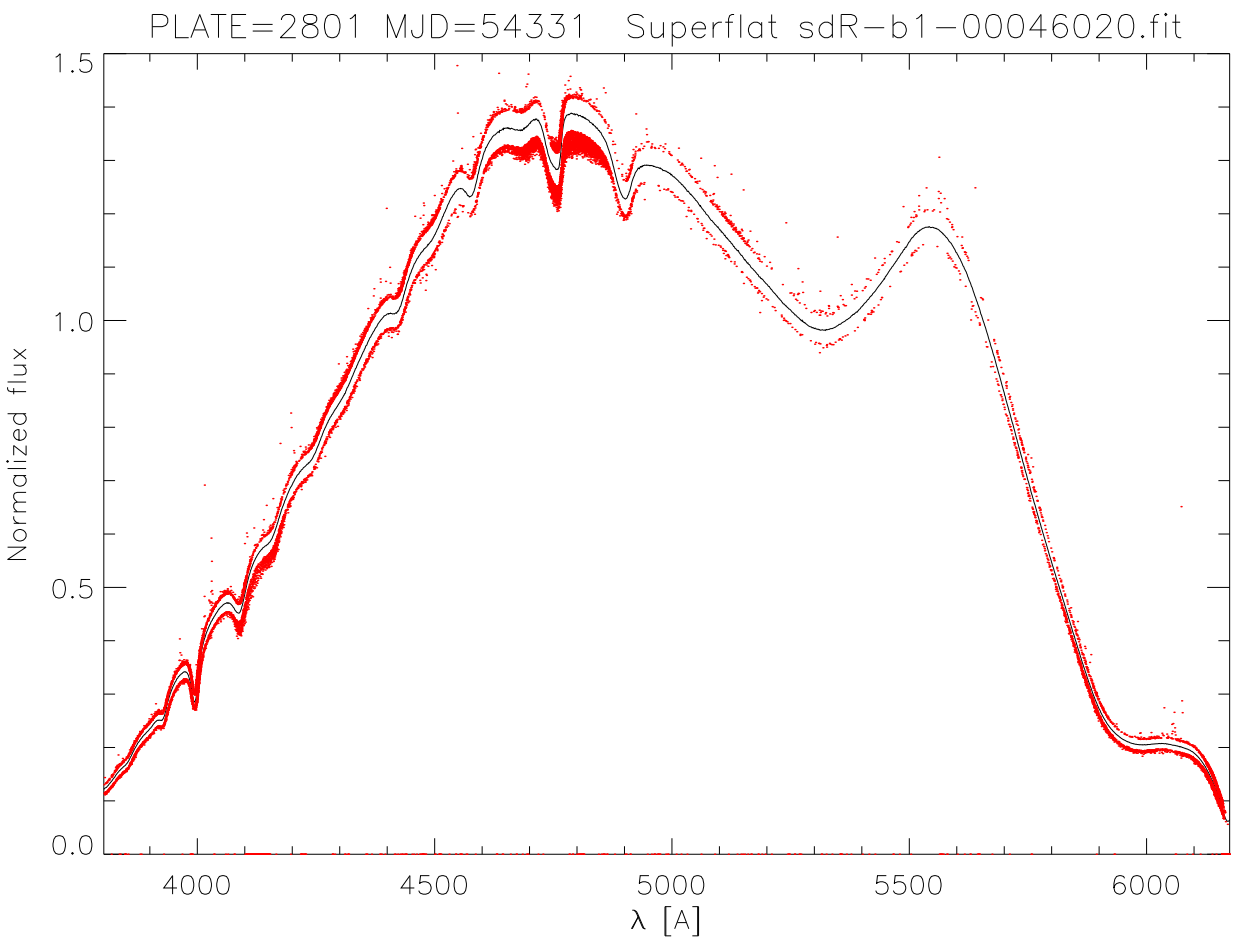

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR−b1−00046005.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

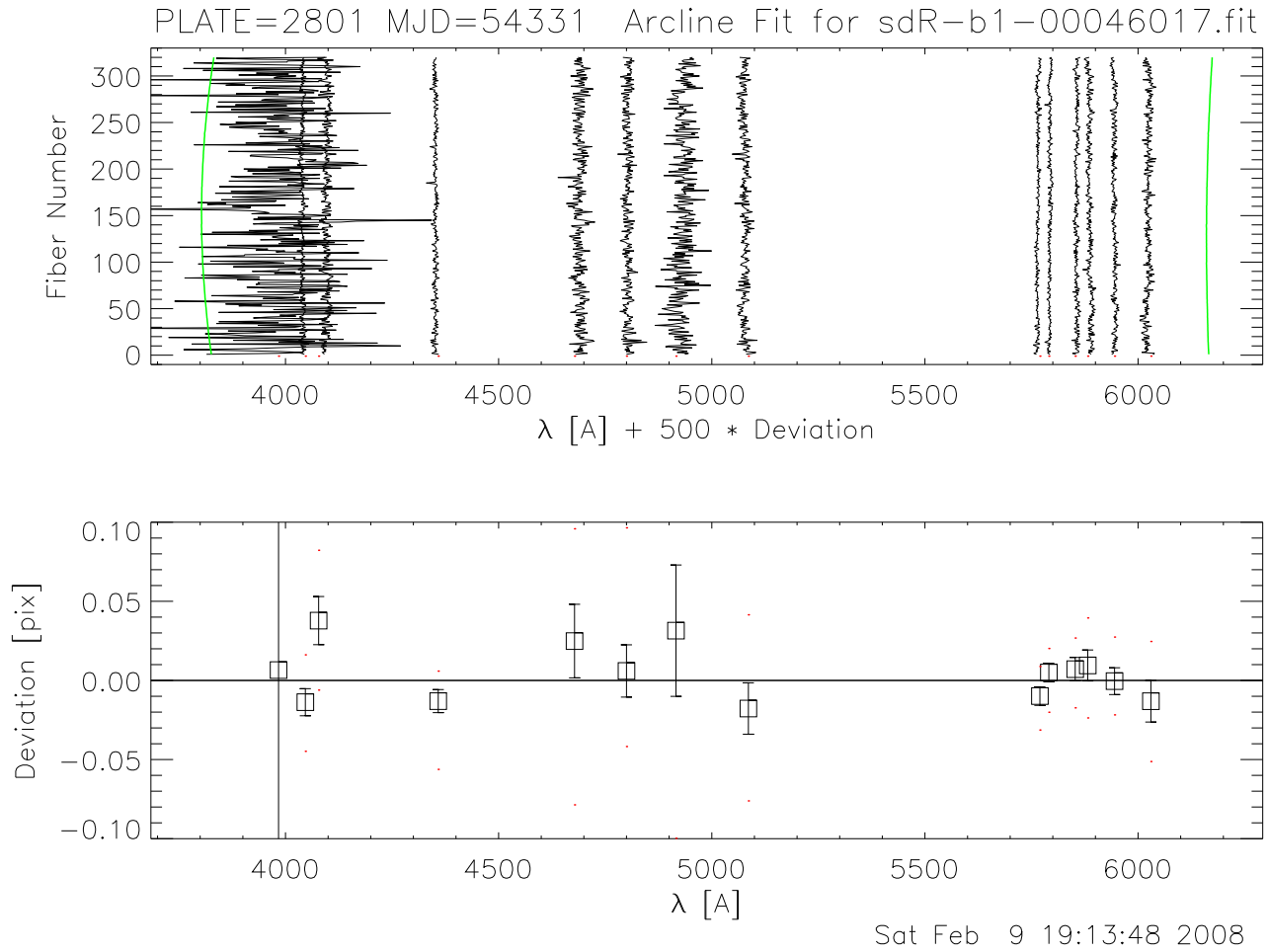

PLATE=2801 MJD=54331 Superflat sdR-b1-00046005.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

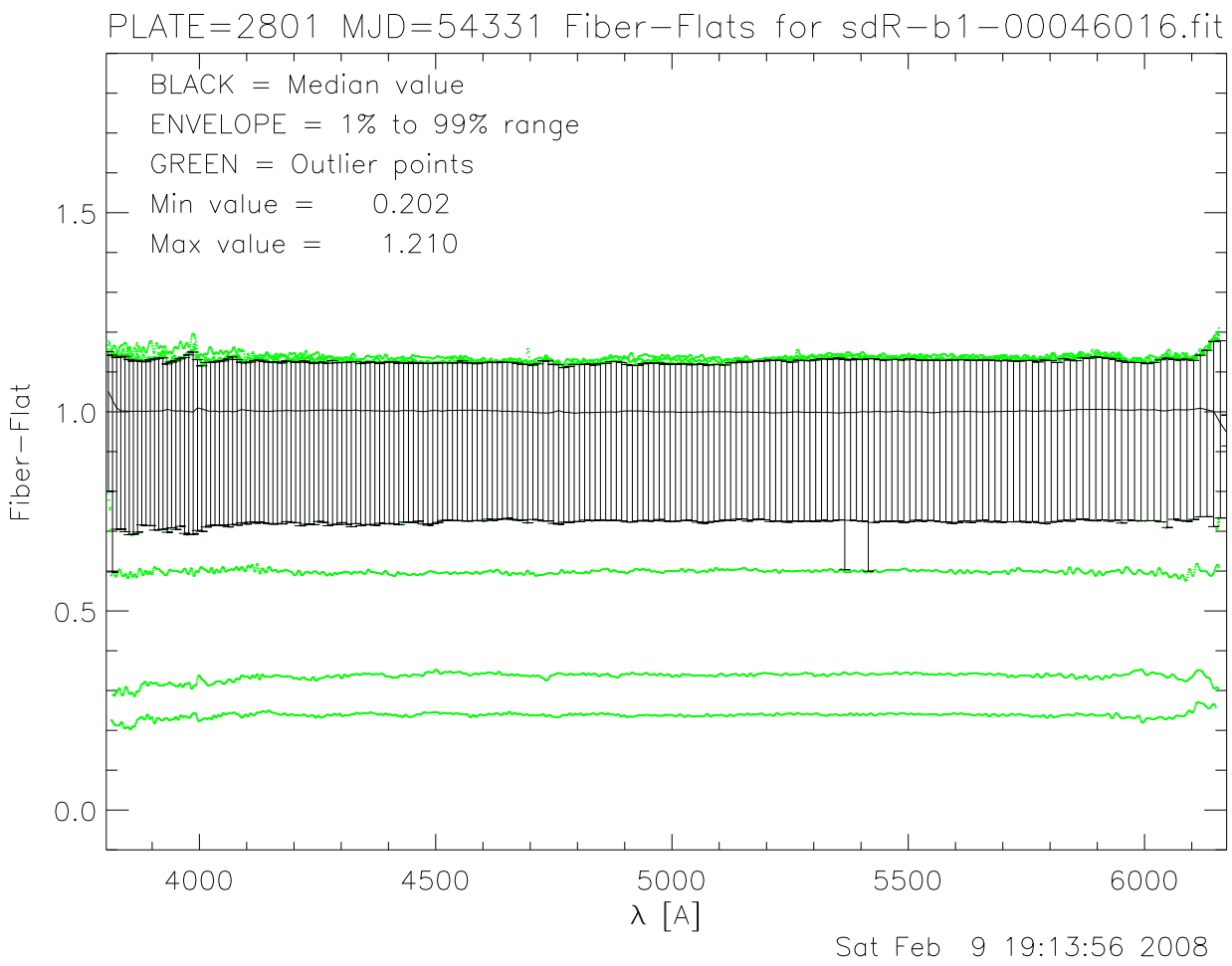

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR-b1-00046016.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

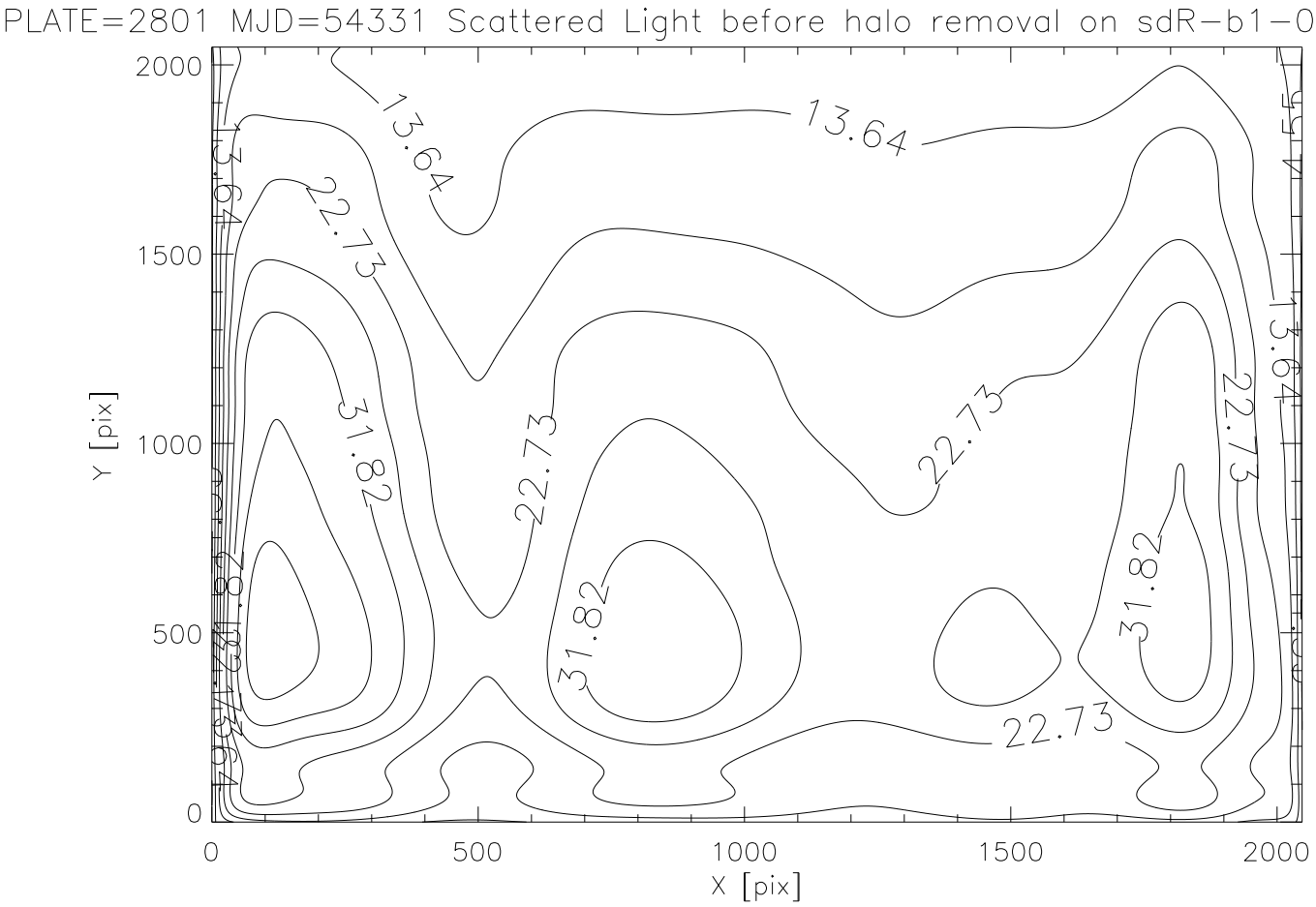

PLATE=2801 MJD=54331 Superflat sdR-b1-00046016.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

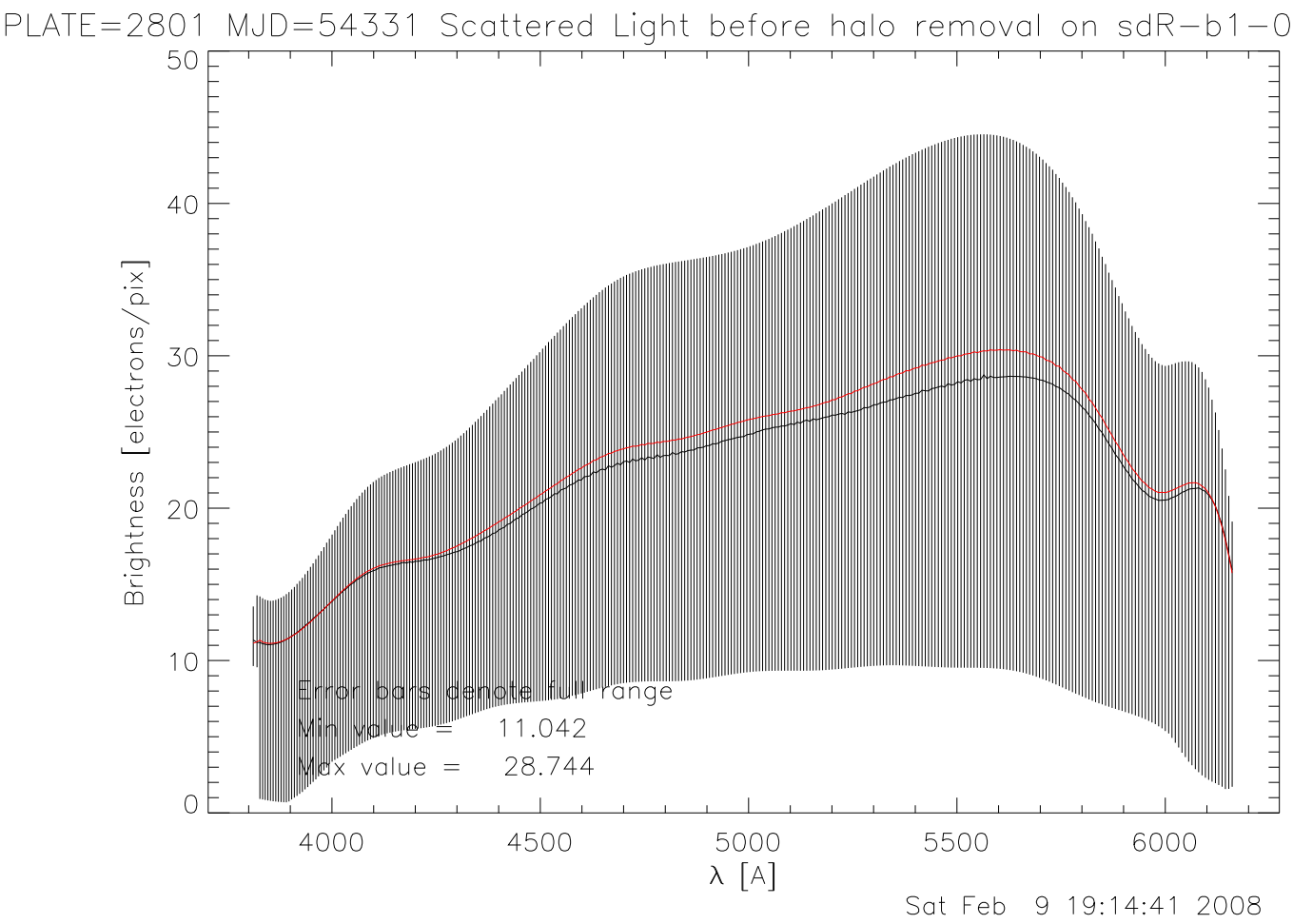

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR-b1-00046020.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

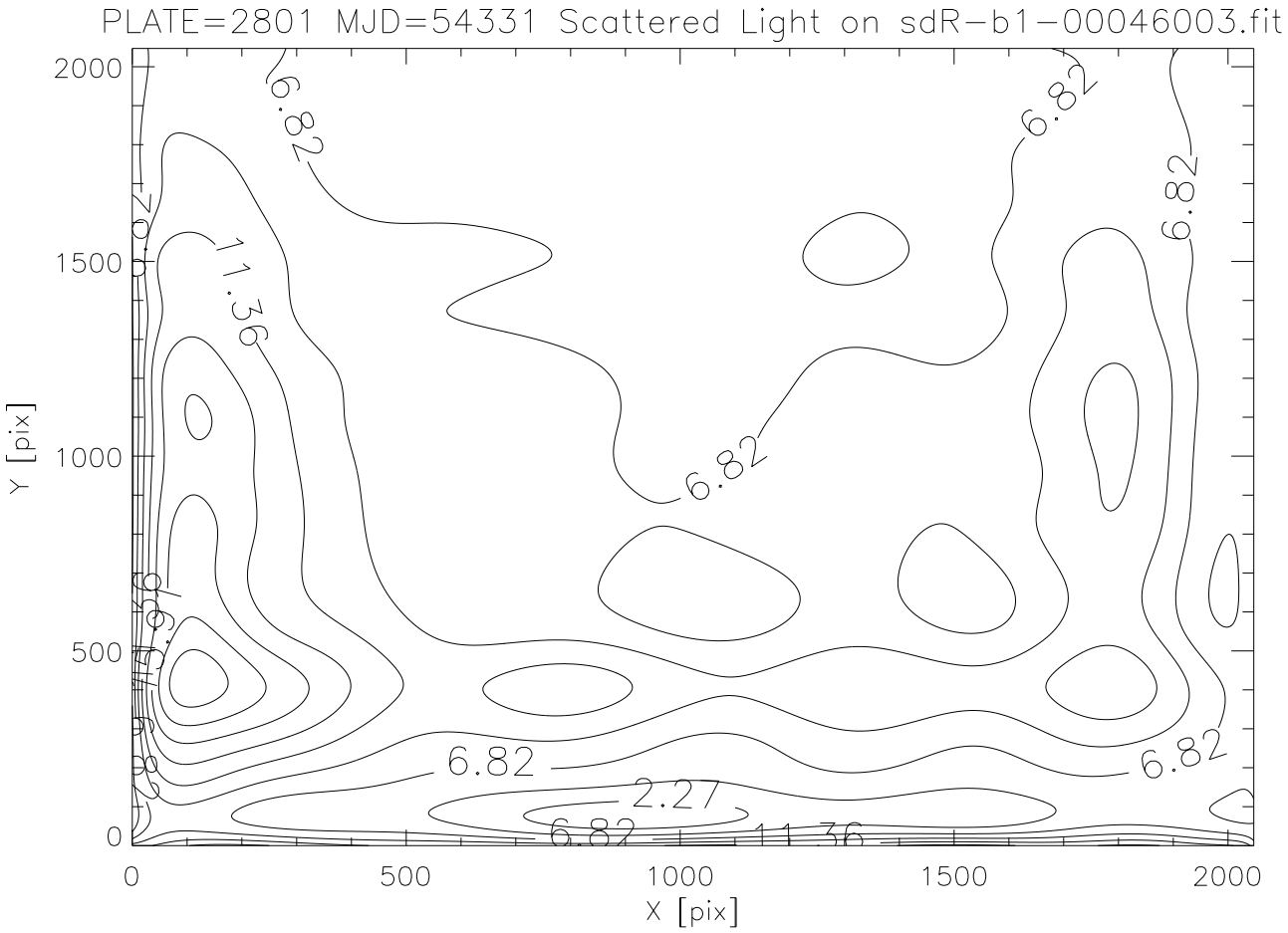

PLATE=2801 MJD=54331 Superflat sdR-b1-00046020.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

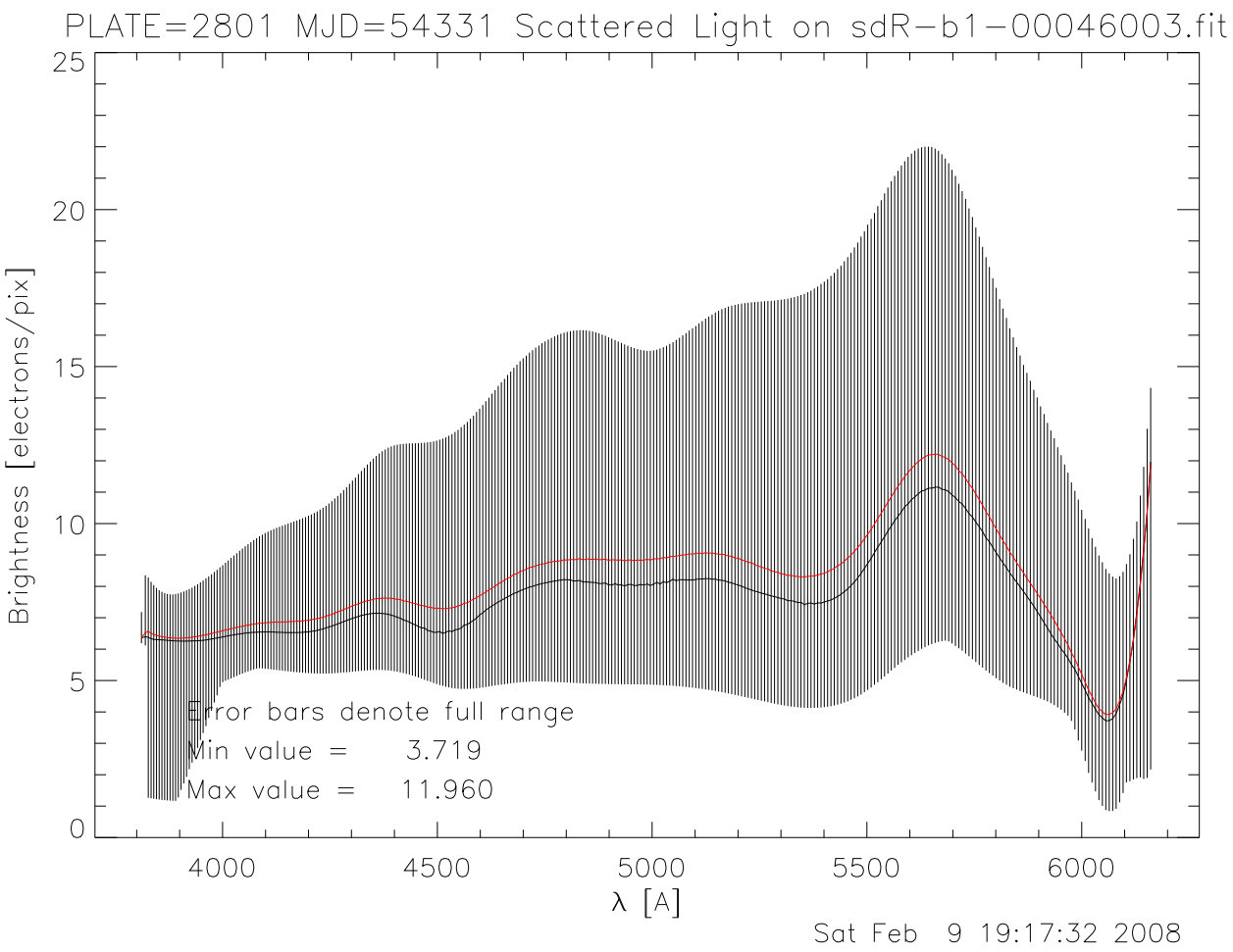

PLATE=2801 MJD=54331 Arcline Fit for sdR-b1-00046017.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 19:13:48 2008

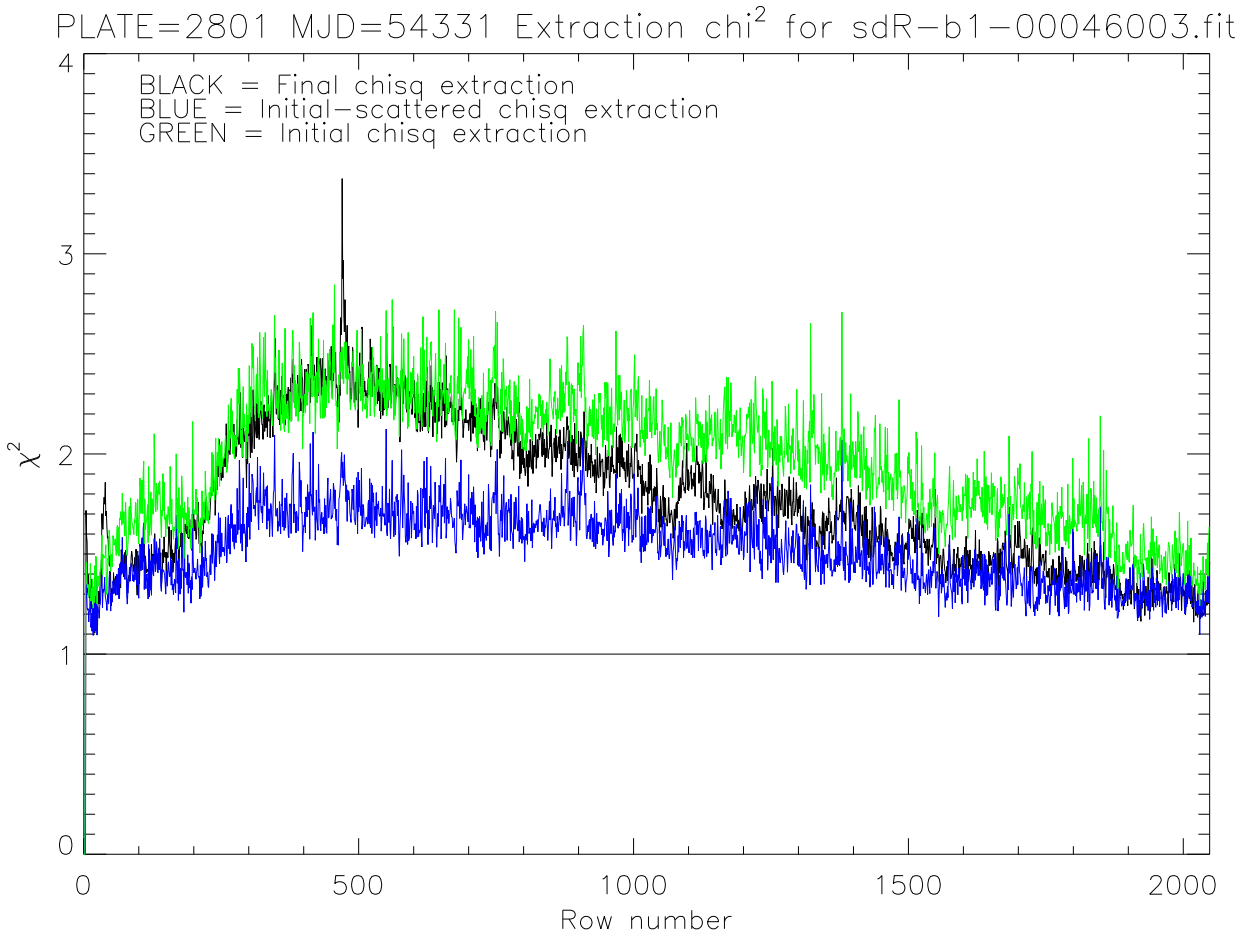

PLATE=2801 MJD=54331 Fiber-Flats for sdR-b1-00046016.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.210
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 19:13:56 2008

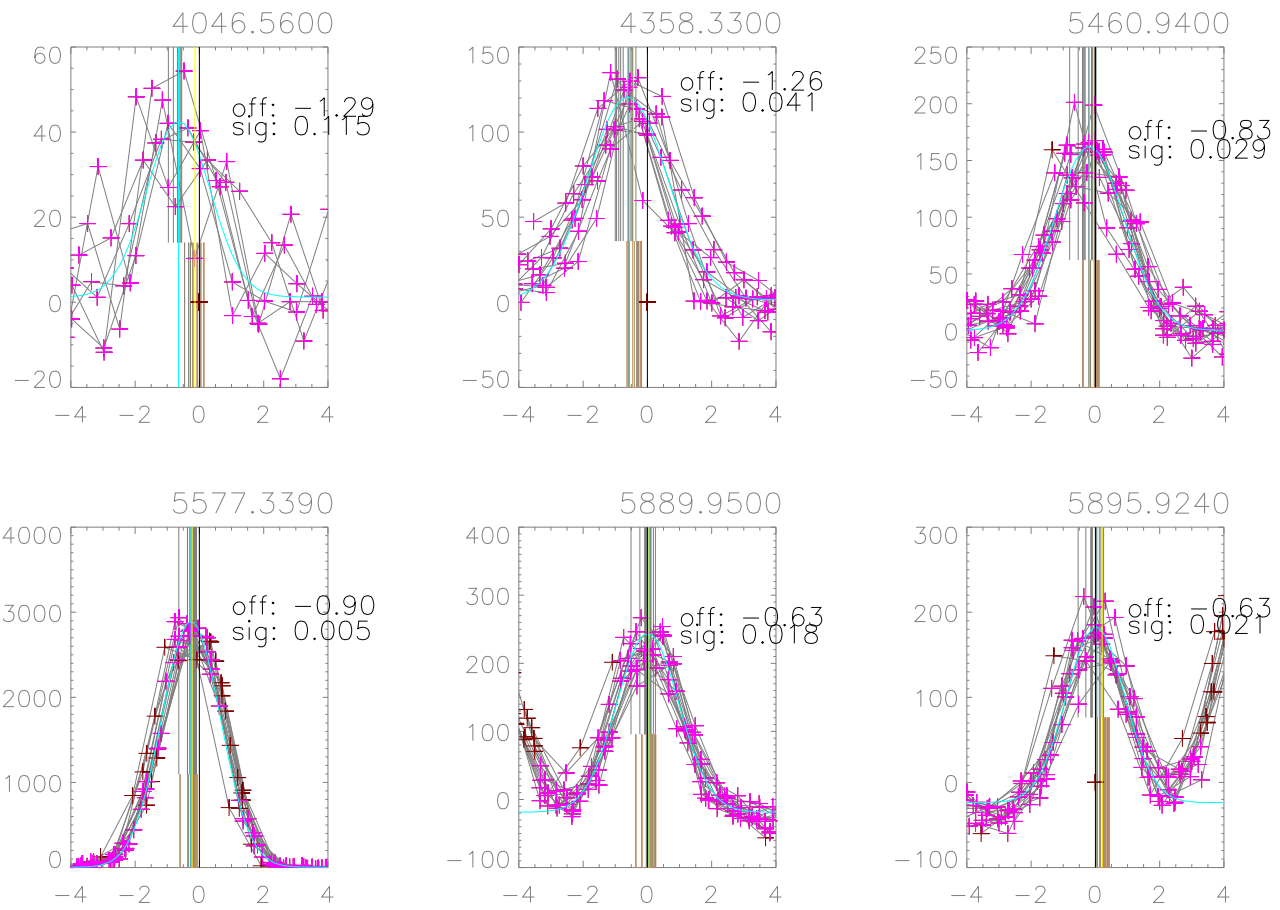

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR−b1−00046003.f
13.64
22.73
31.82
Y [pix]
X [pix]
0
500
1000
1500
2000

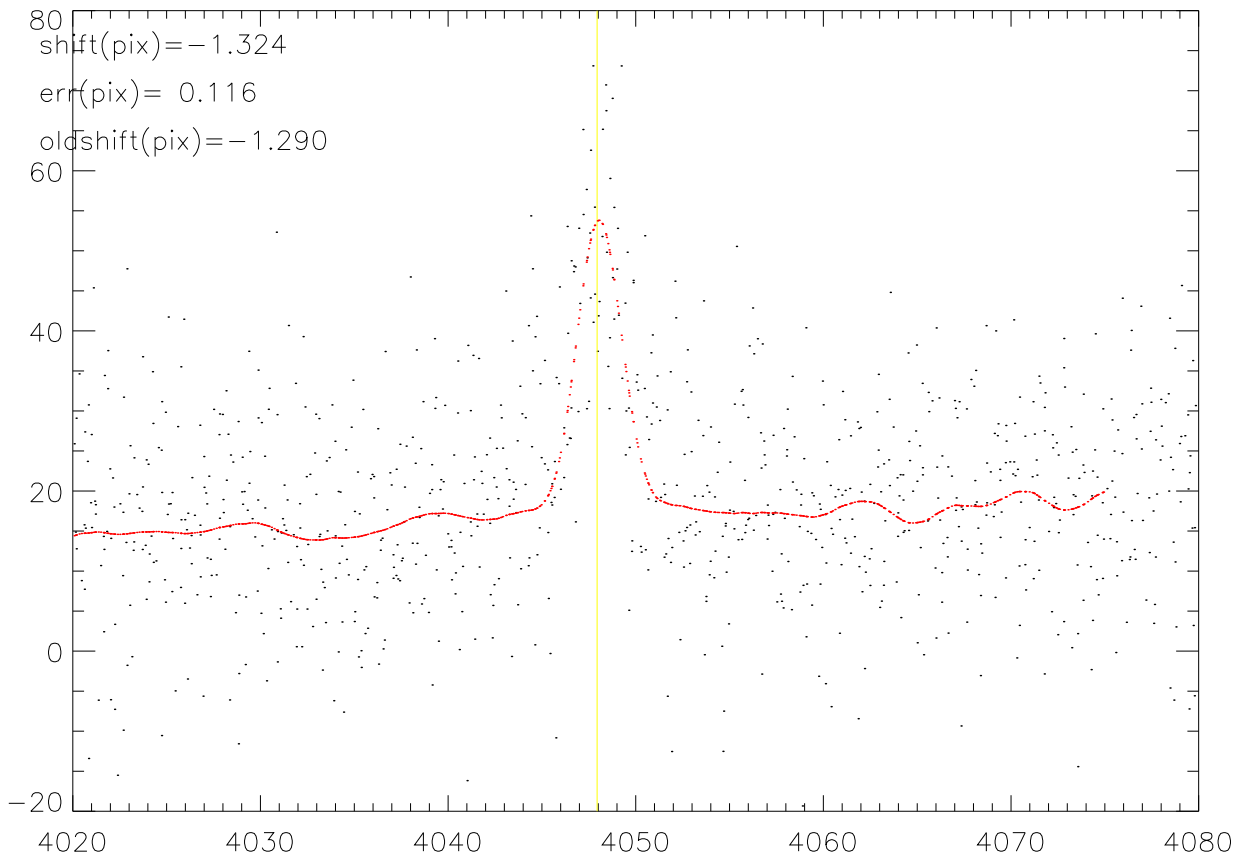

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR−b1−00046003.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.042
Max value = 28.744
Sat Feb 9 19:14:41 2008

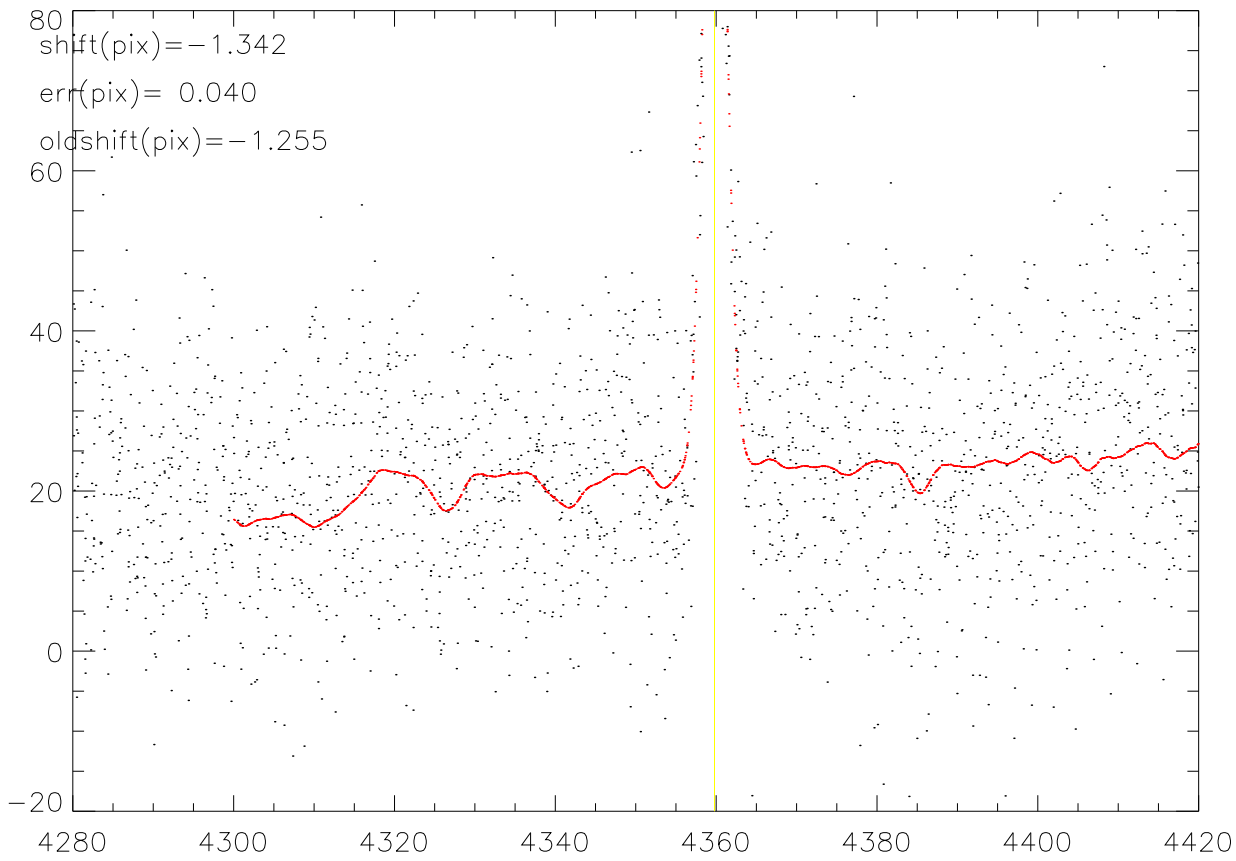

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046003.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
11.36
2.27

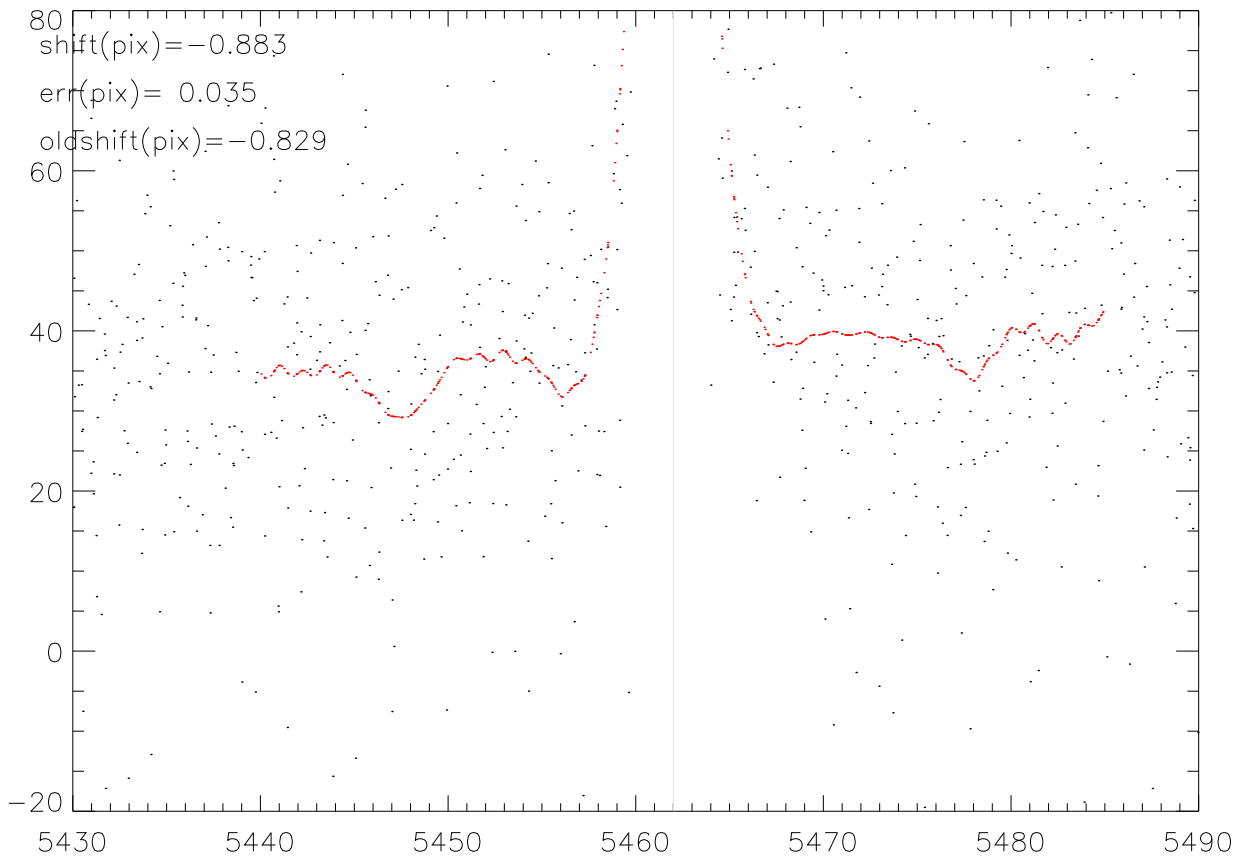

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046003.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.719
Max value = 11.960
Sat Feb 9 19:17:32 2008

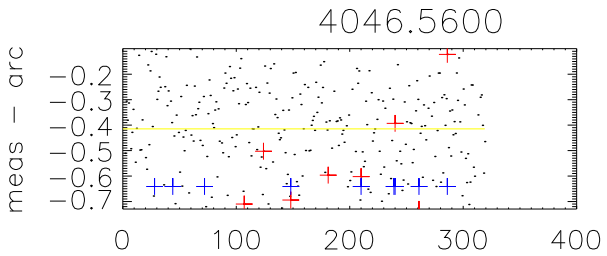

PLATE=2801 MJD=54331 Extraction chi^2 for sdR-b1-00046003.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

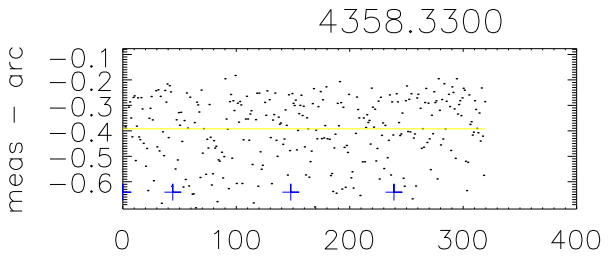

4046.5600
off: −1.29
sig: 0.115
4358.3300
off: −1.26
sig: 0.041
5460.9400
off: −0.83
sig: 0.029
5577.3390
off: −0.90
sig: 0.005
5889.9500
off: −0.63
sig: 0.018
5895.9240
off: −0.63
sig: 0.021

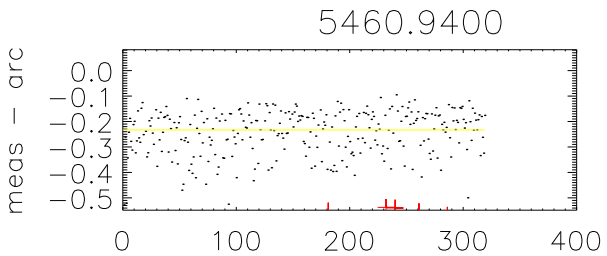

shift(pix)=−1.324
err(pix)= 0.116
oldshift(pix)=−1.290
80
60
40
20
0
−20
4020
4030
4040
4050
4060
4070
4080

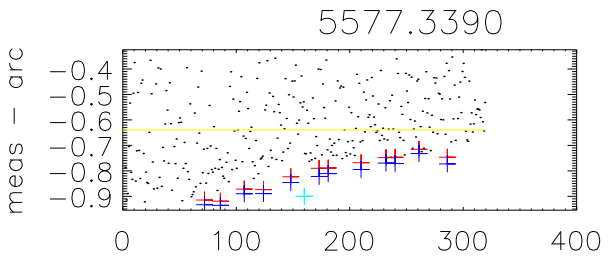

shift(pix)=−1.342
err(pix)= 0.040
oldshift(pix)=−1.255
80
60
40
20
0
−20
4280
4300
4320
4340
4360
4380
4400
4420

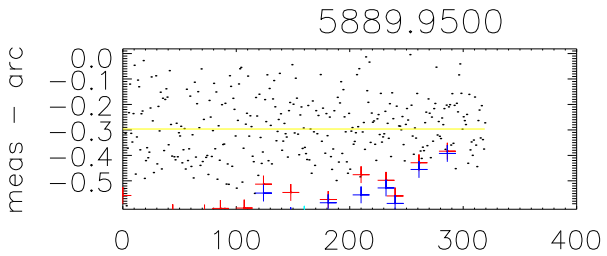

shift(pix)=−0.883
err(pix)= 0.035
oldshift(pix)=−0.829
80
60
40
20
0
−20
5430
5440
5450
5460
5470
5480
5490

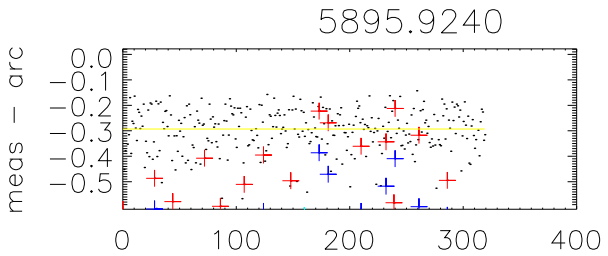

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

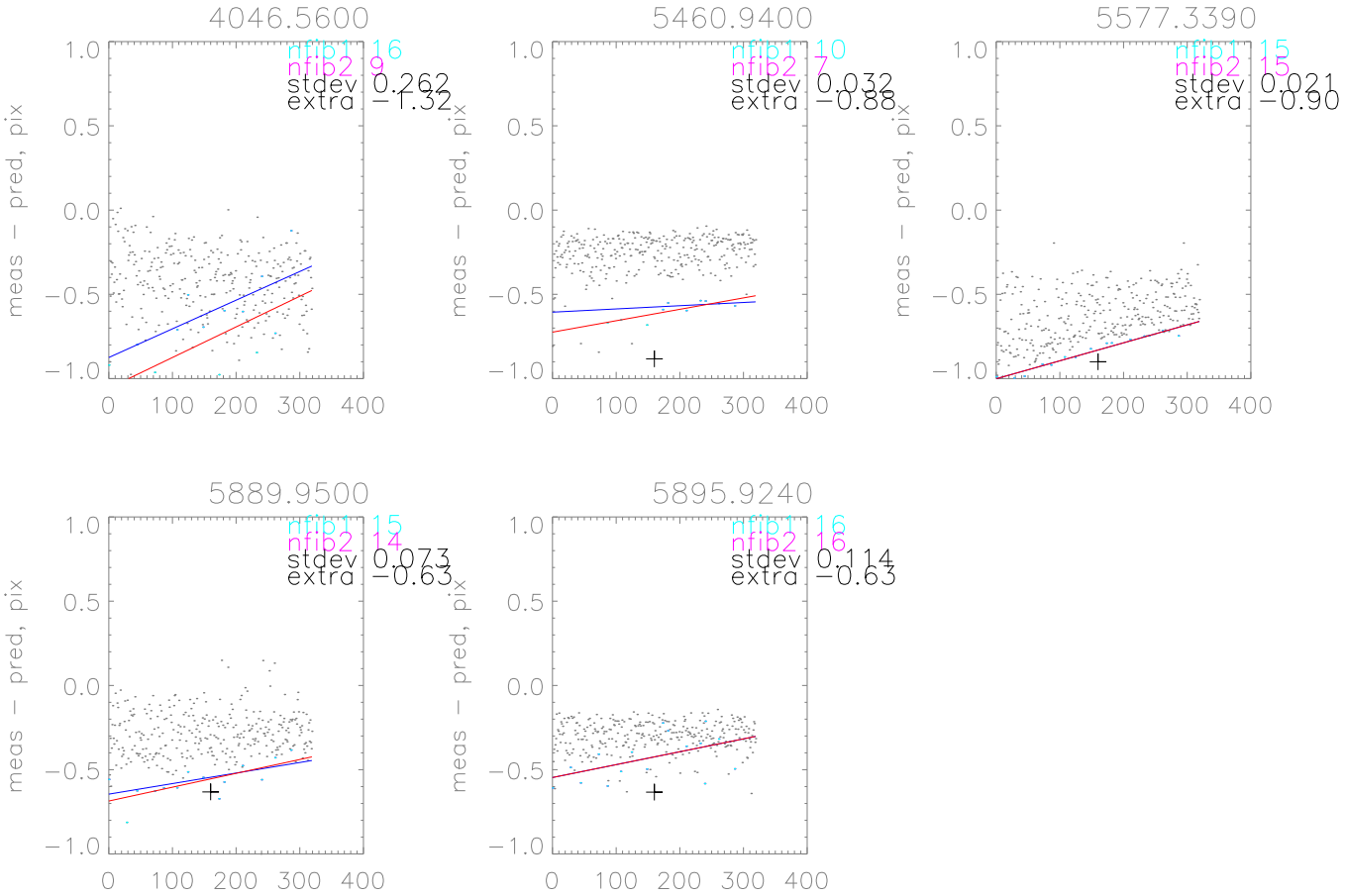

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

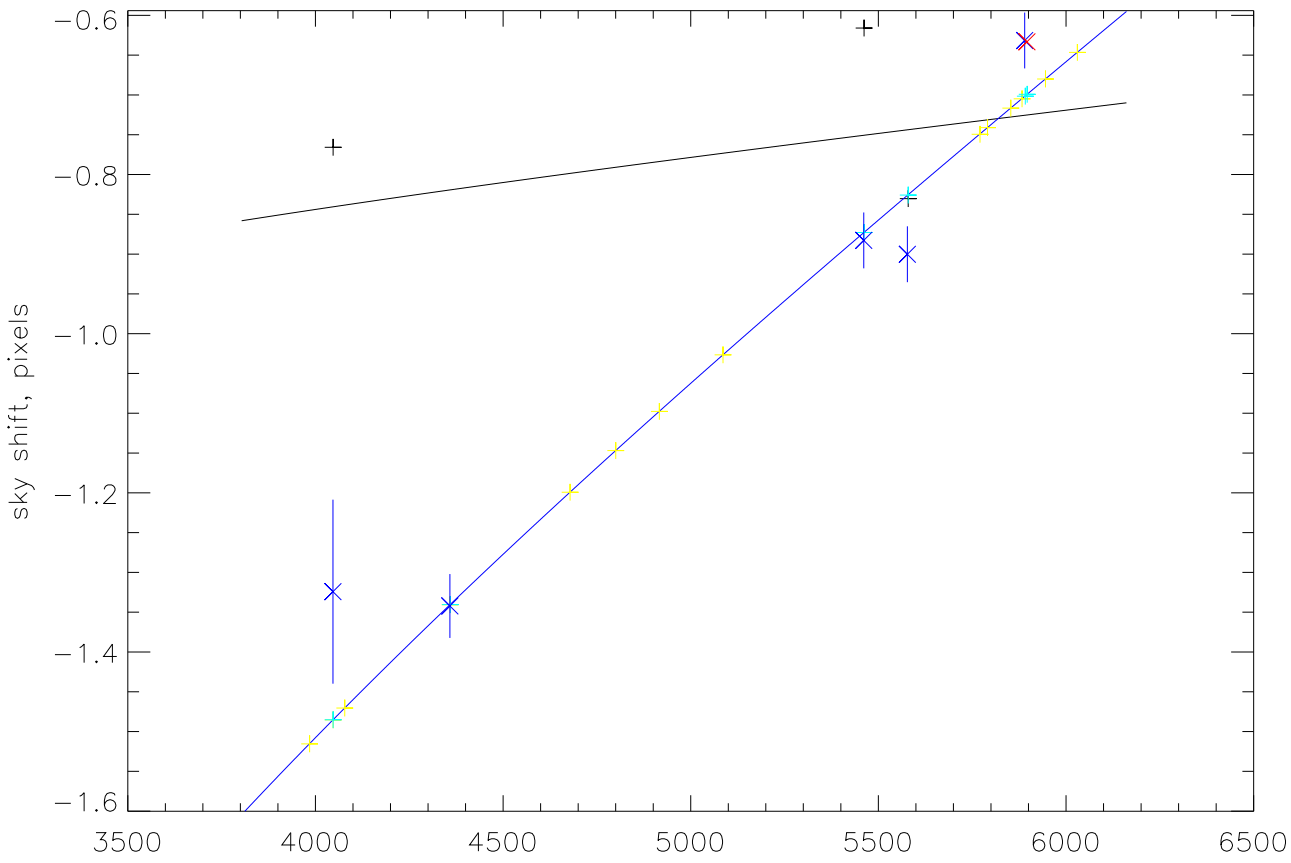

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

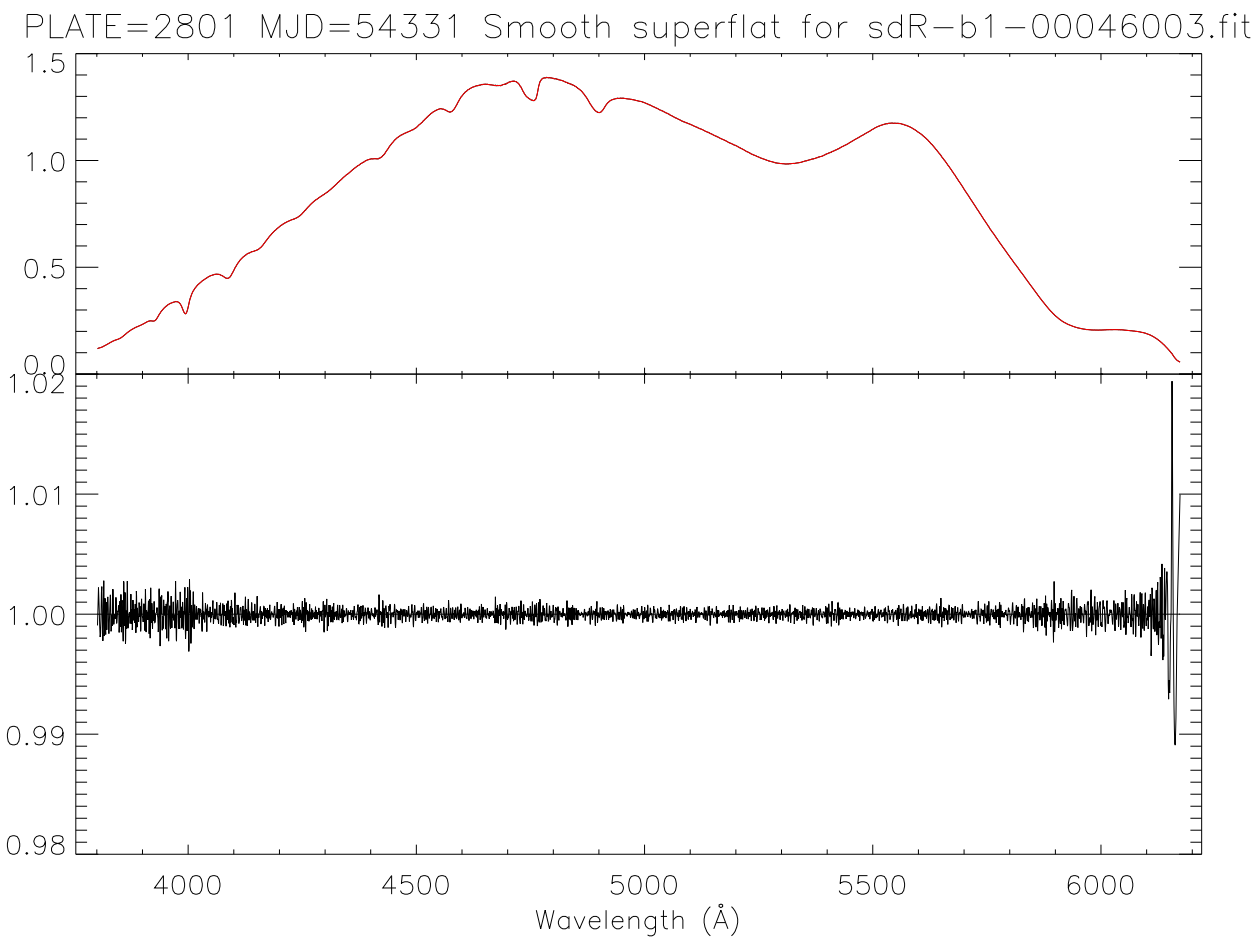

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

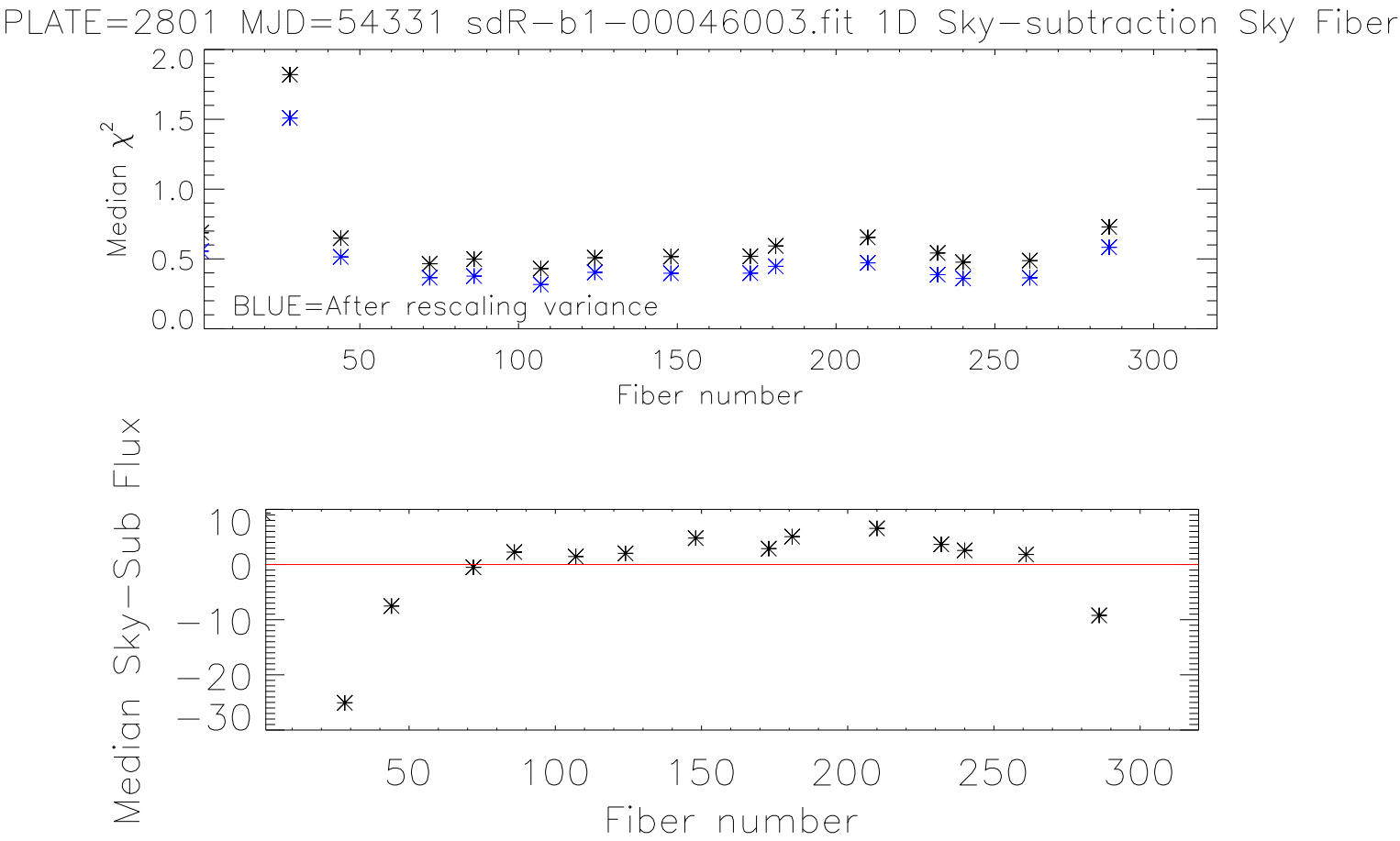

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

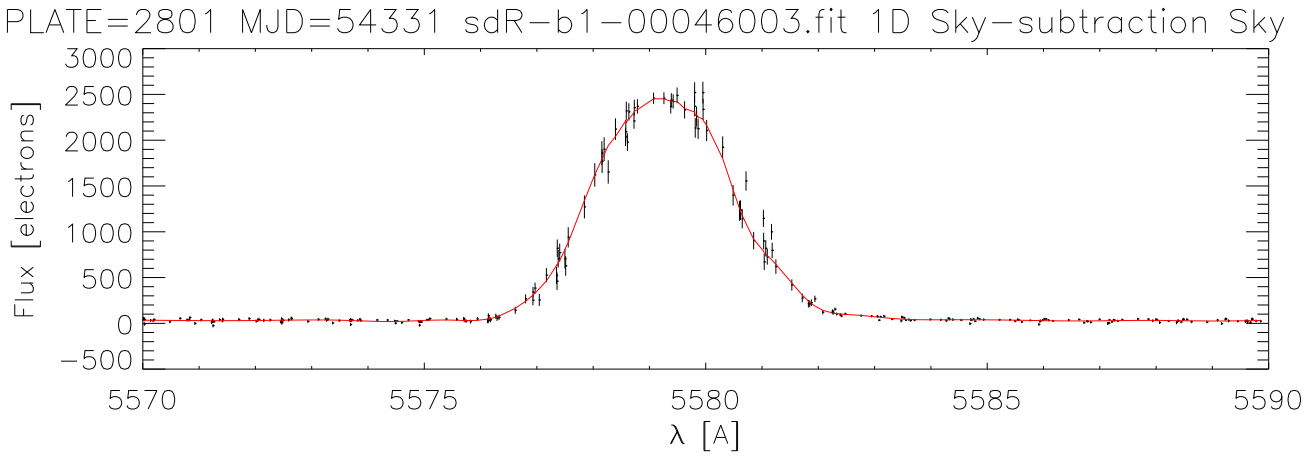

4046.5600
nfib1 16
nfib2 9
stdev 0.262
extra −1.32
5460.9400
nfib1 10
nfib2 7
stdev 0.032
extra −0.88
5577.3390
nfib1 15
nfib2 15
stdev 0.021
extra −0.90
5889.9500
nfib1 15
nfib2 14
stdev 0.073
extra −0.63
5895.9240
nfib1 16
nfib2 16
stdev 0.114
extra −0.63
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

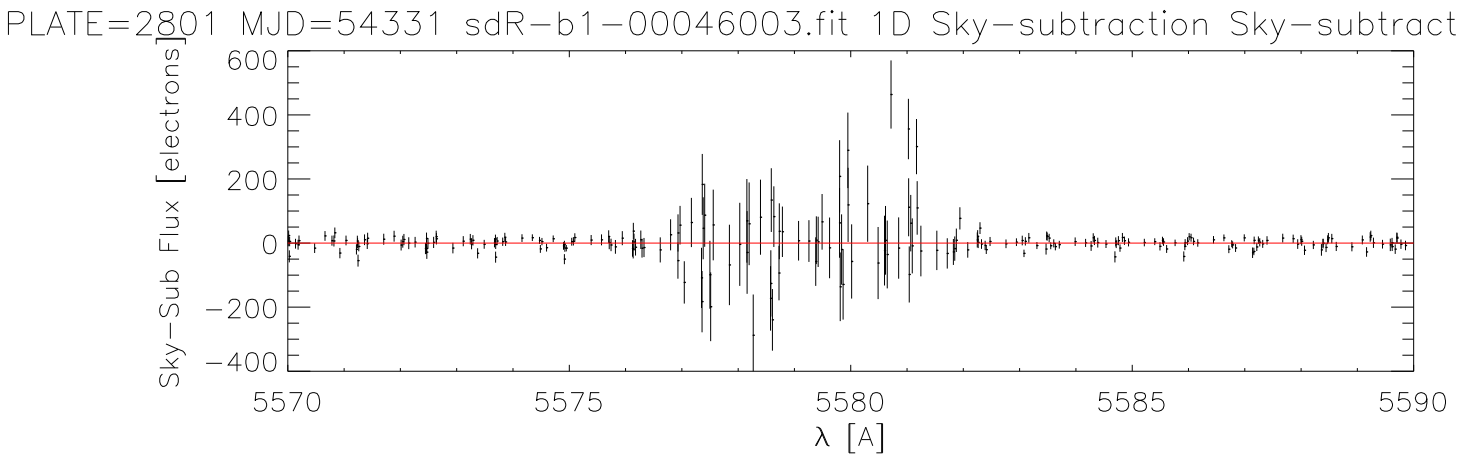

−0.6
−0.8
−1.0
−1.2
−1.4
−1.6
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

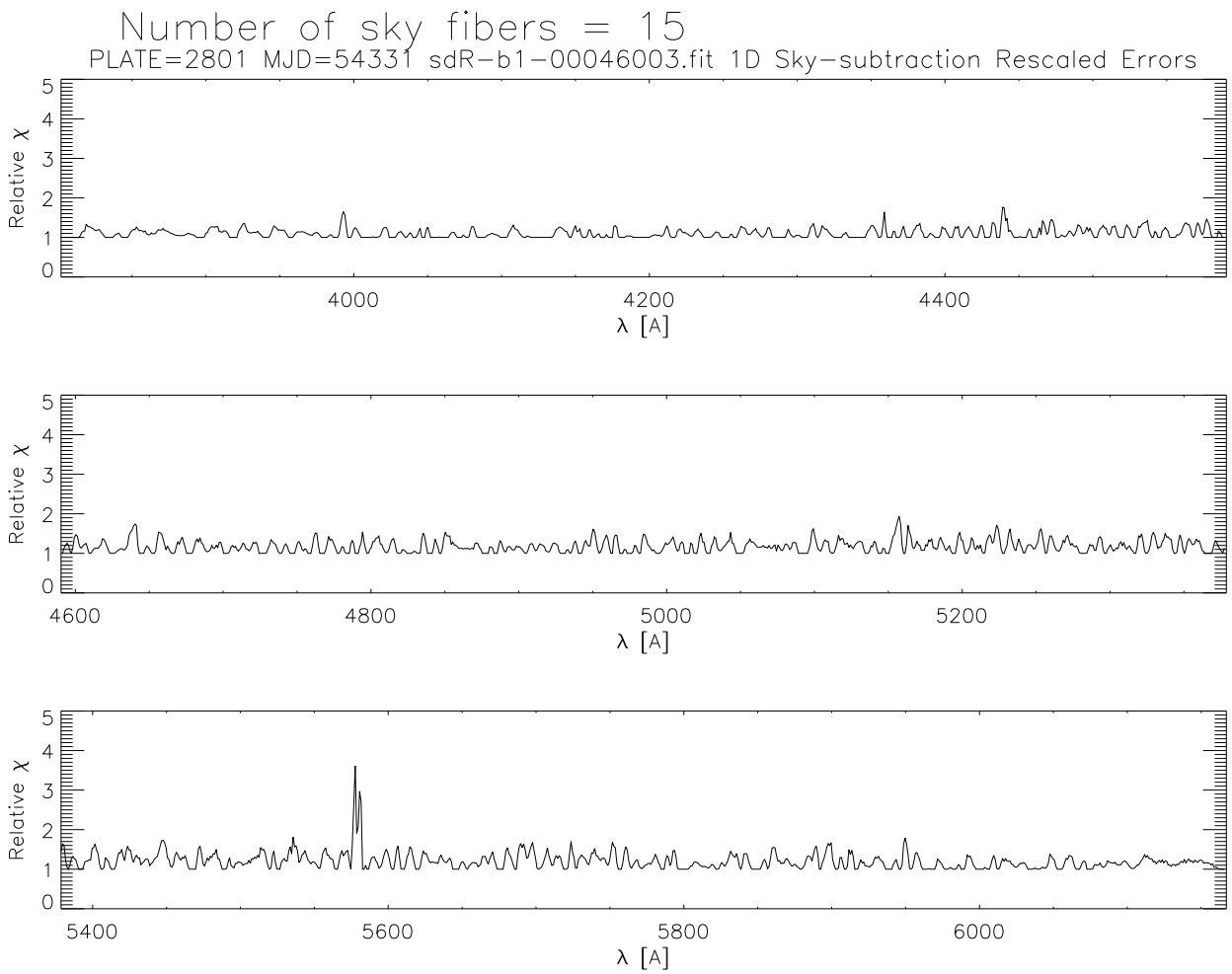
es= −0.0001

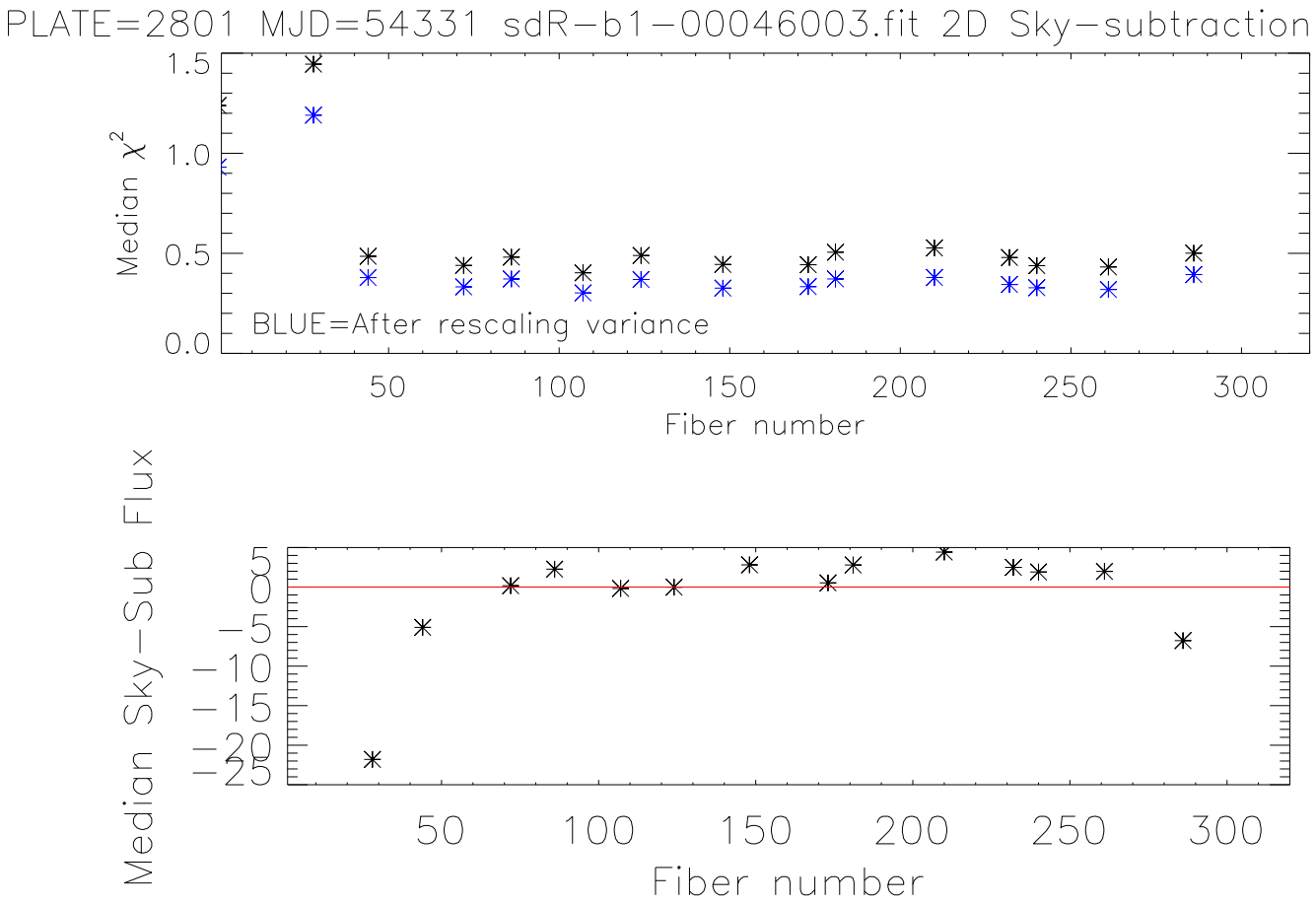

PLATE=2801 MJD=54331 Smooth superflat for sdR−b1−00046003.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

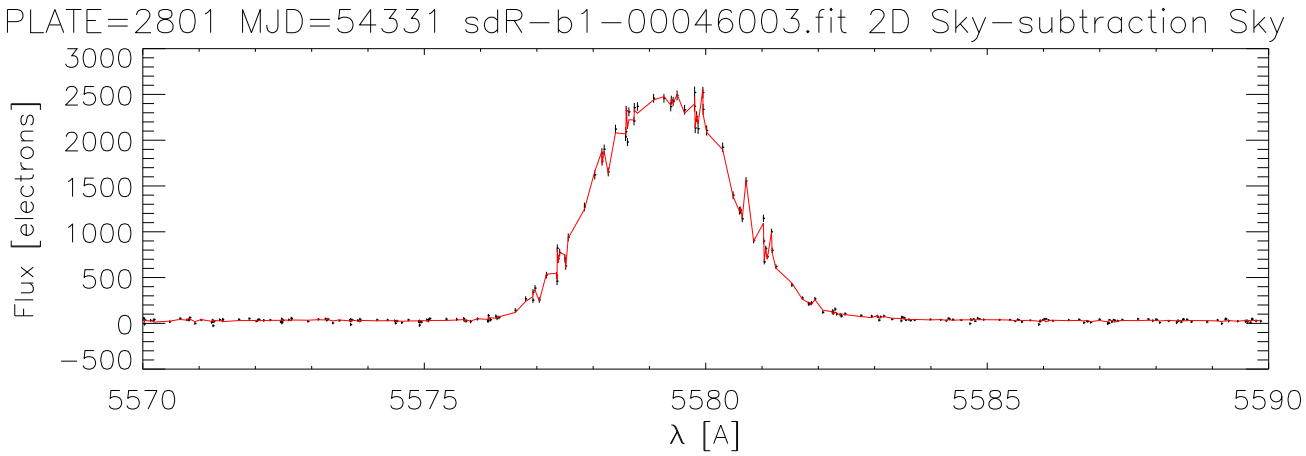

PLATE=2801 MJD=54331 sdR-b1-00046003.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

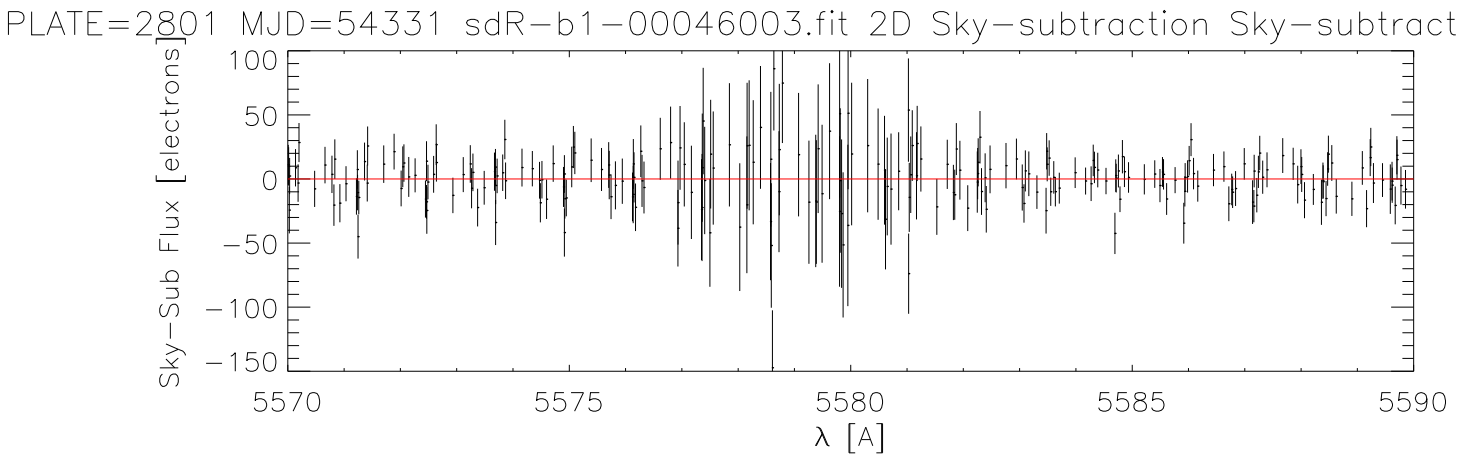

PLATE=2801 MJD=54331 sdR-b1-00046003.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

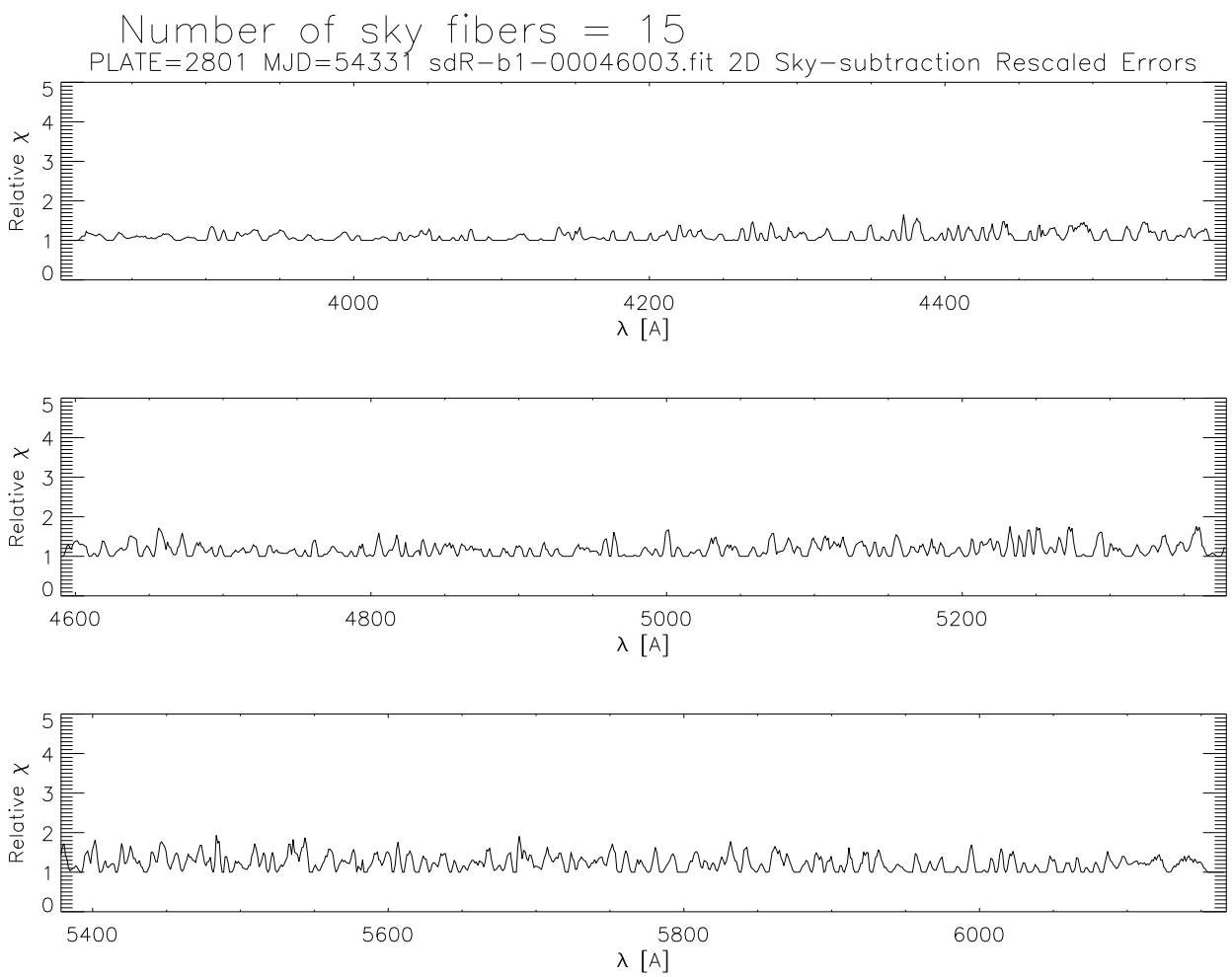

PLATE=2801 MJD=54331 sdR-b1-00046003.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

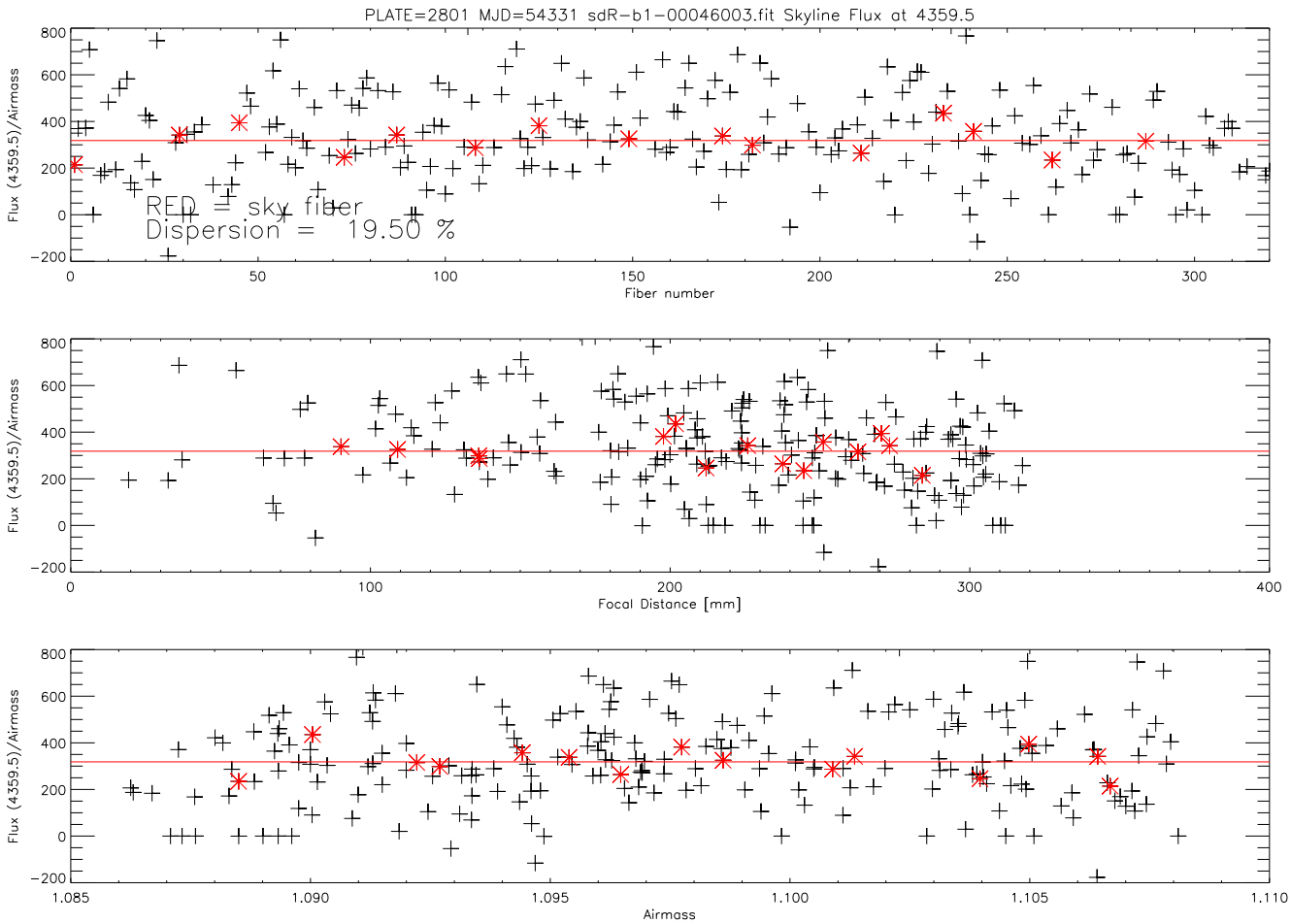

Number of sky fibers = 15
PLATE=2801 MJD=54331 sdR-b1-00046003.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

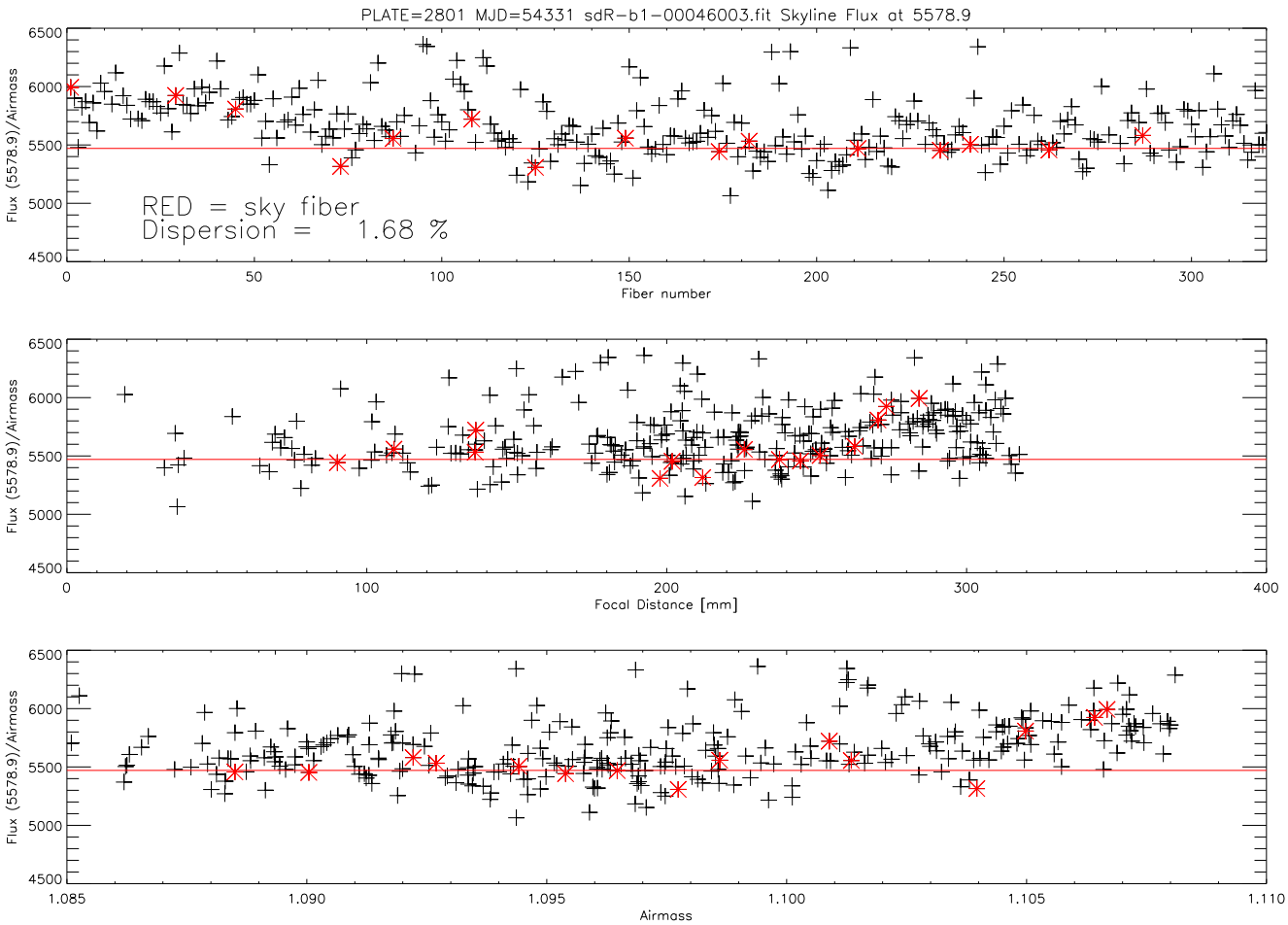

PLATE=2801 MJD=54331 sdR-b1-00046003.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
-5
-10
-15
-20
-25
50
100
150
200
250
300
Fiber number

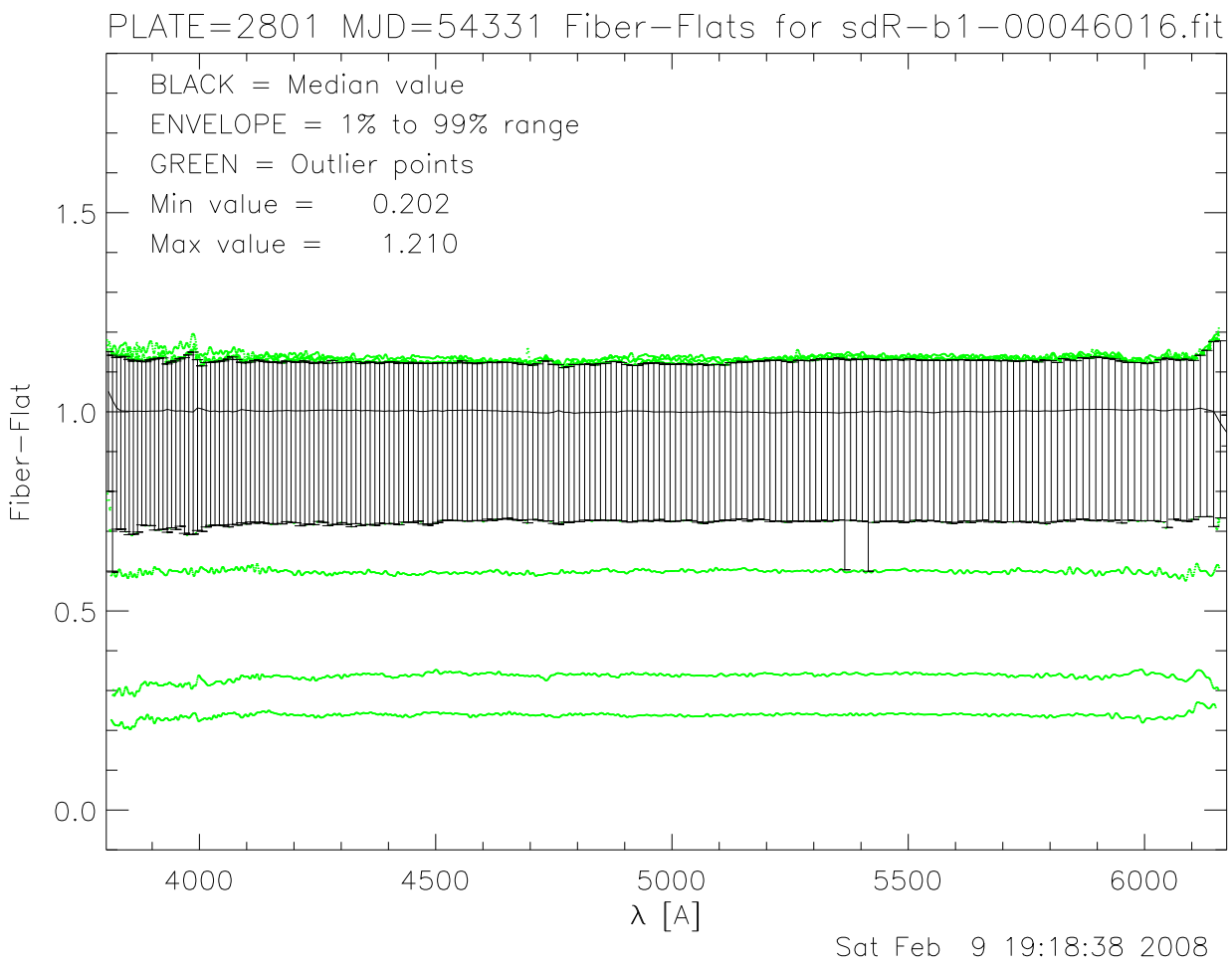

PLATE=2801 MJD=54331 sdR-b1-00046003.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

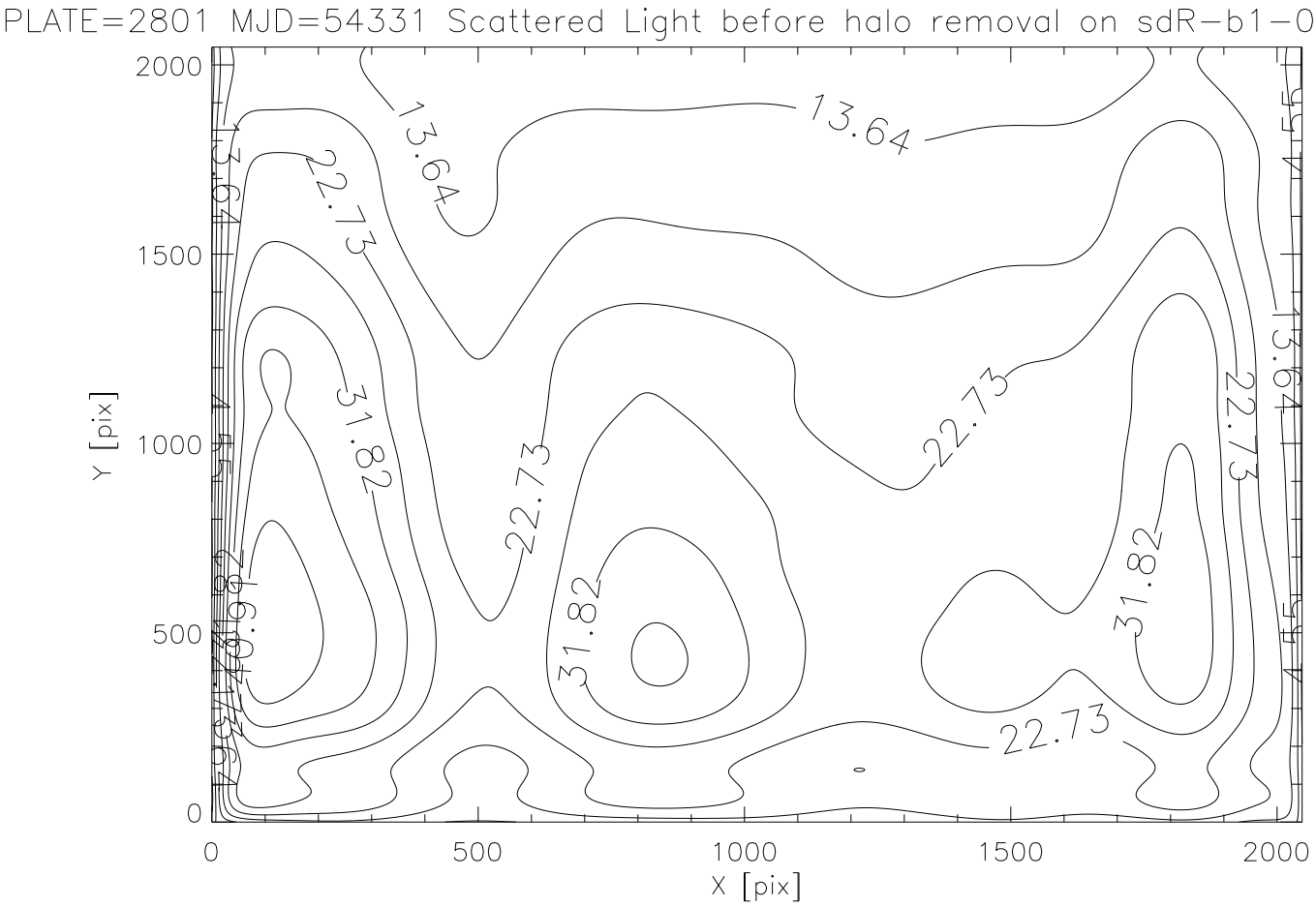

PLATE=2801 MJD=54331 sdR-b1-00046003.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

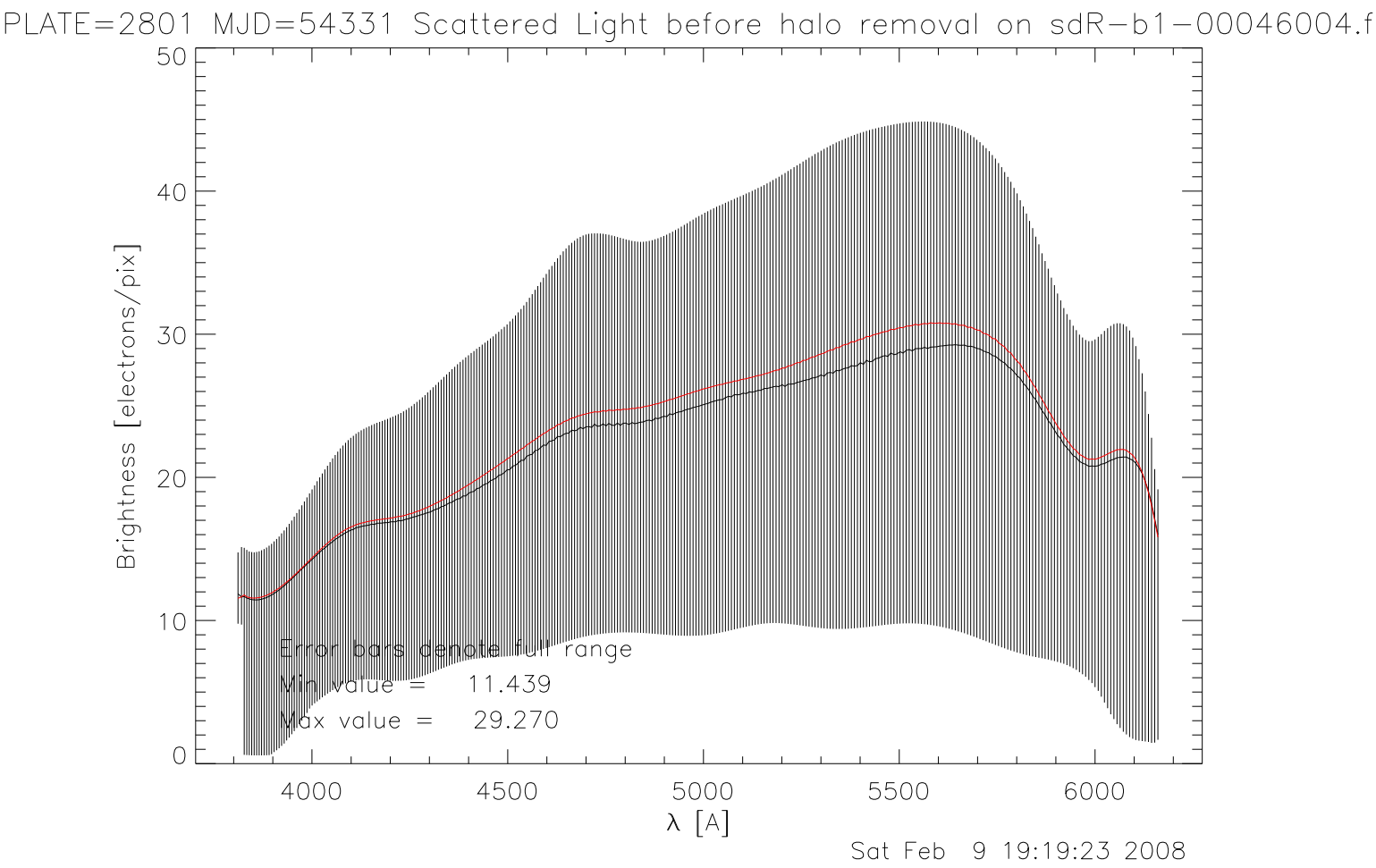

Number of sky fibers = 15
PLATE=2801 MJD=54331 sdR-b1-00046003.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

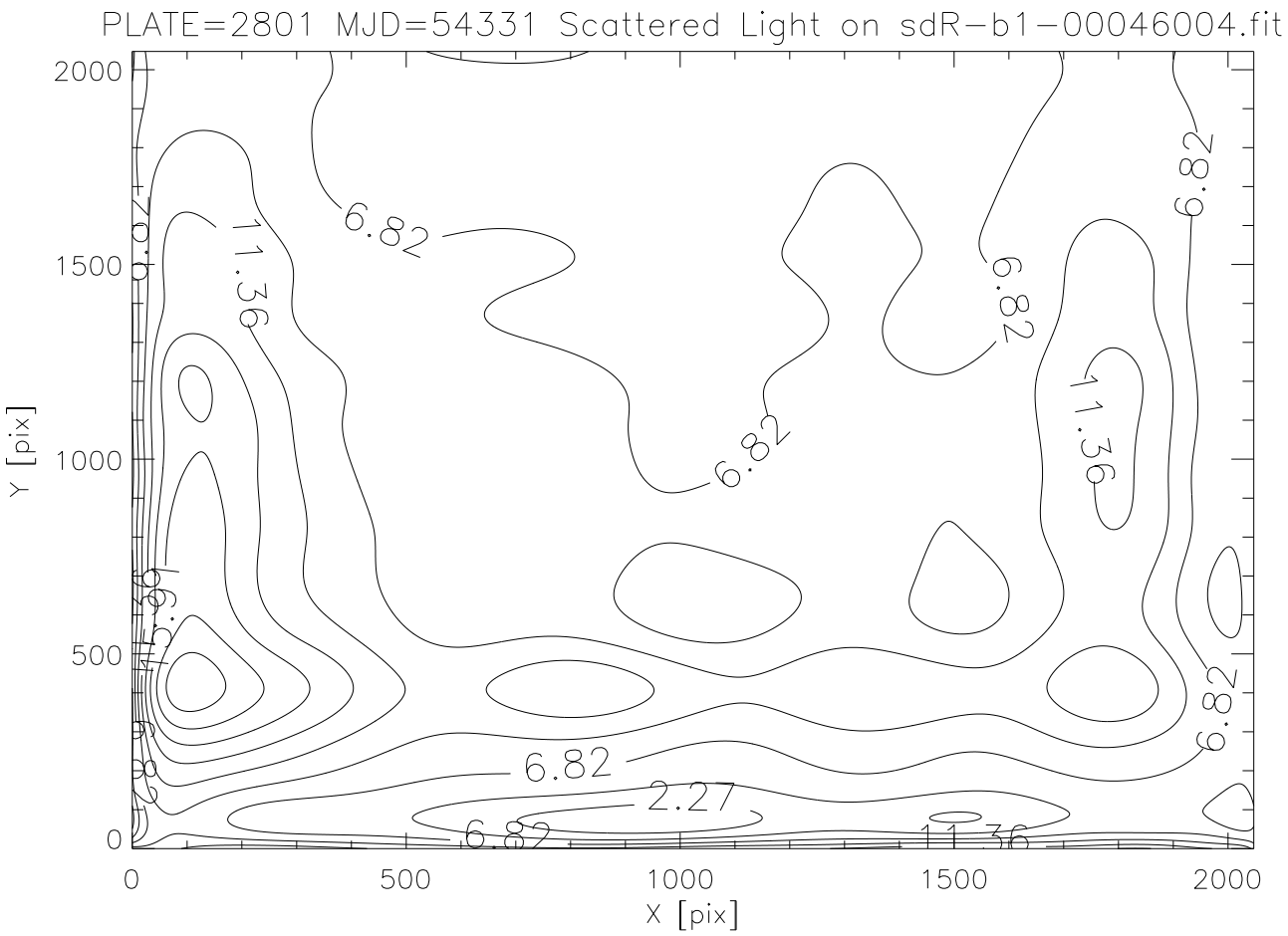

PLATE=2801 MJD=54331 sdR-b1-00046003.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 19.50 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

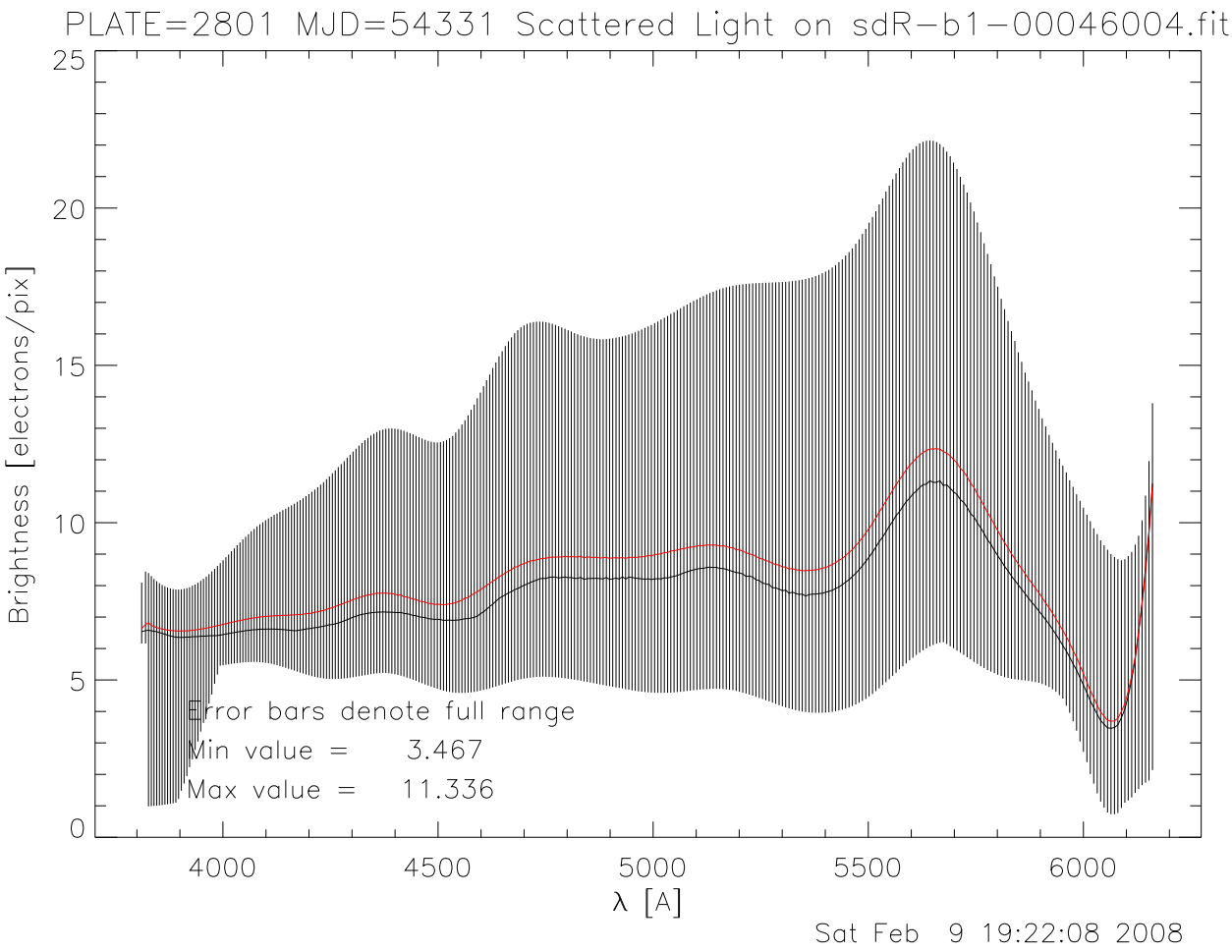

PLATE=2801 MJD=54331 sdR-b1-00046003.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.68 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

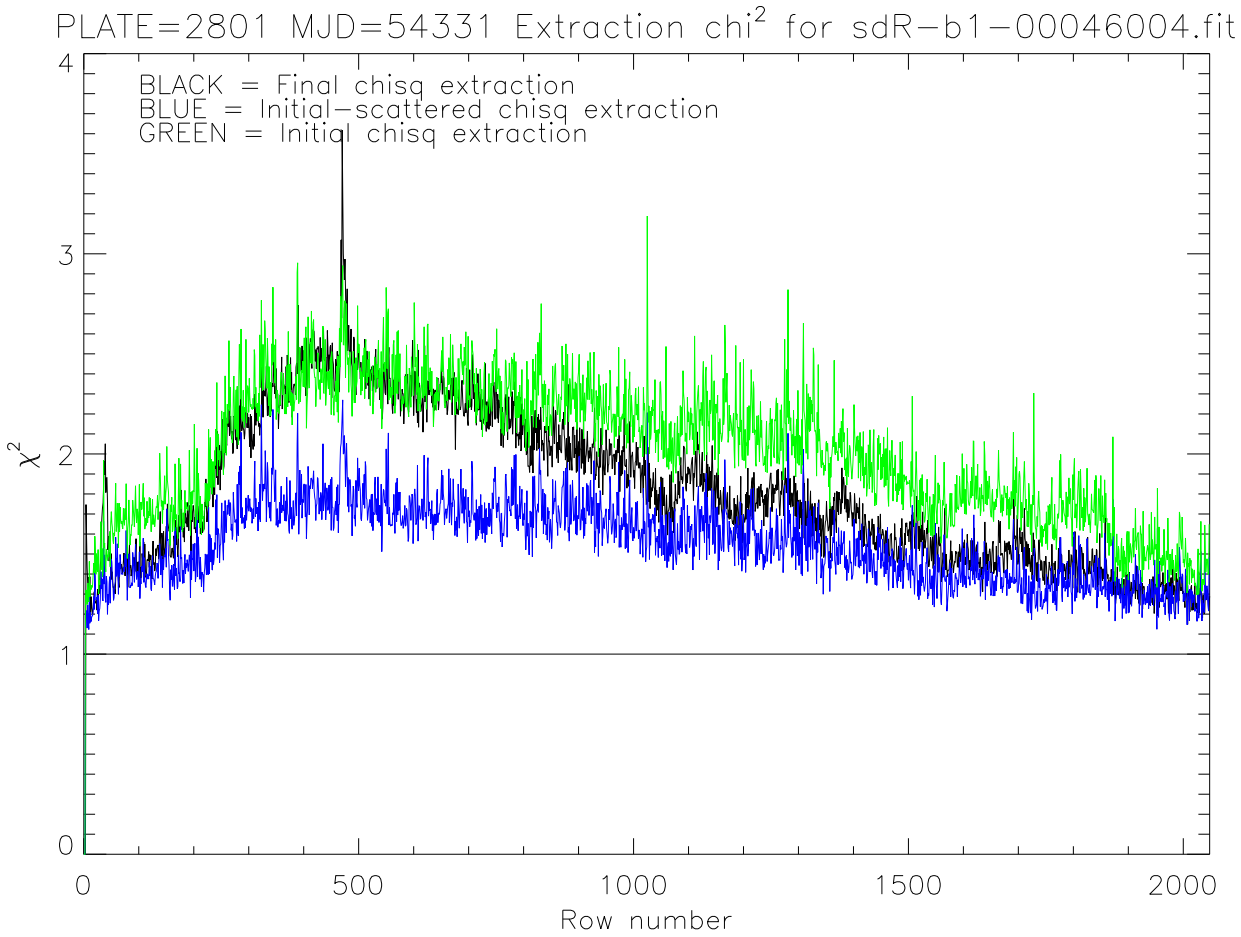

PLATE=2801 MJD=54331 Fiber-Flats for sdR-b1-00046016.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.210
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 19:18:38 2008

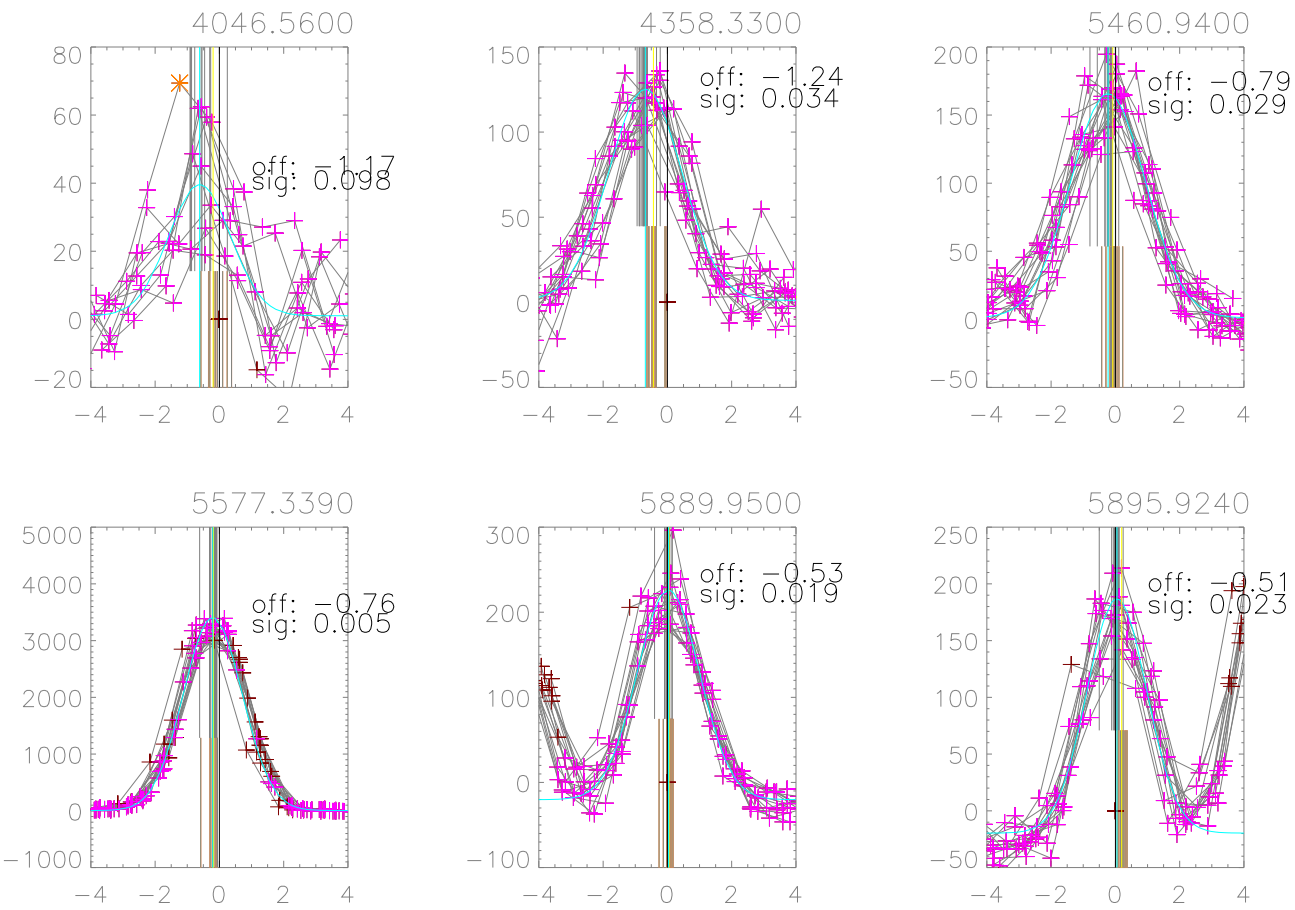

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR-b1-00046004.f
13.64
22.73
31.82
Y [pix]
X [pix]
0
500
1000
1500
2000

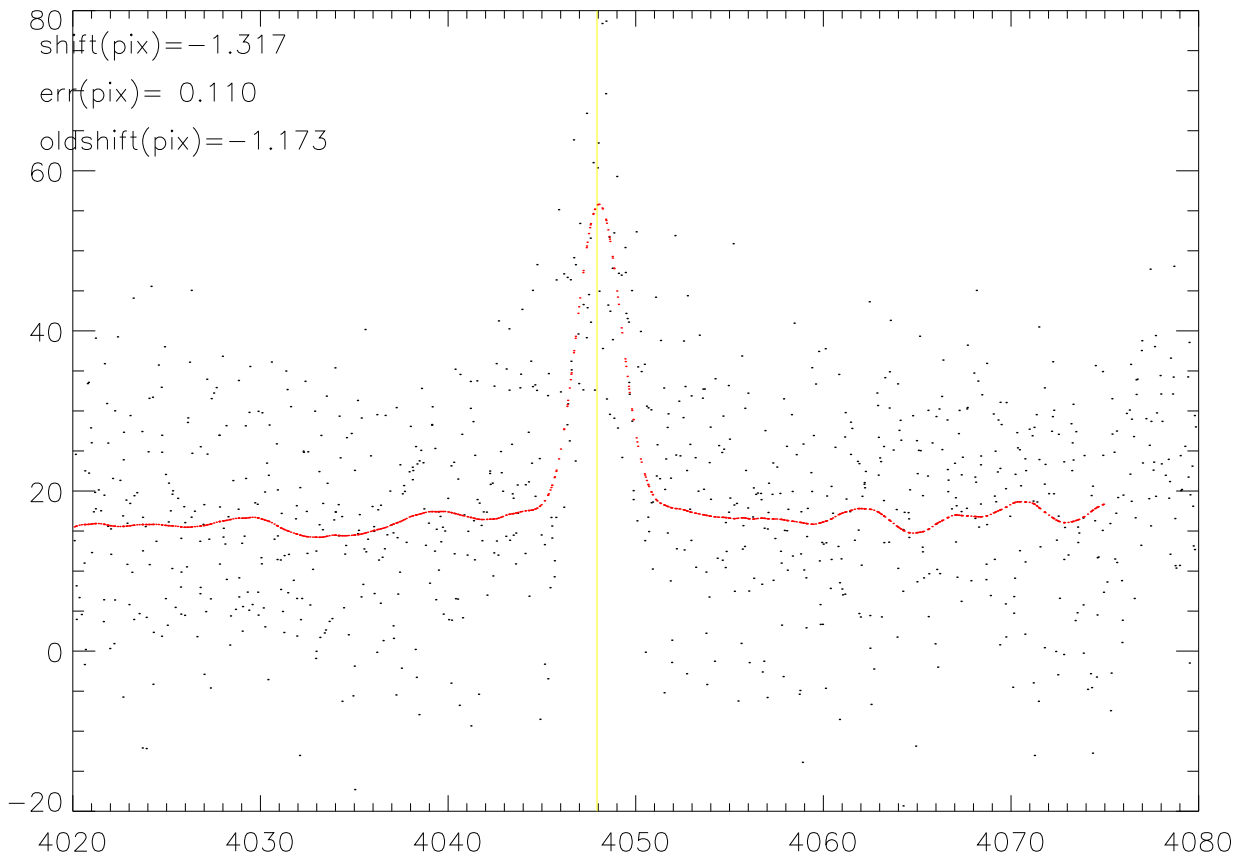

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR-b1-00046004.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.439
Max value = 29.270
Sat Feb 9 19:19:23 2008

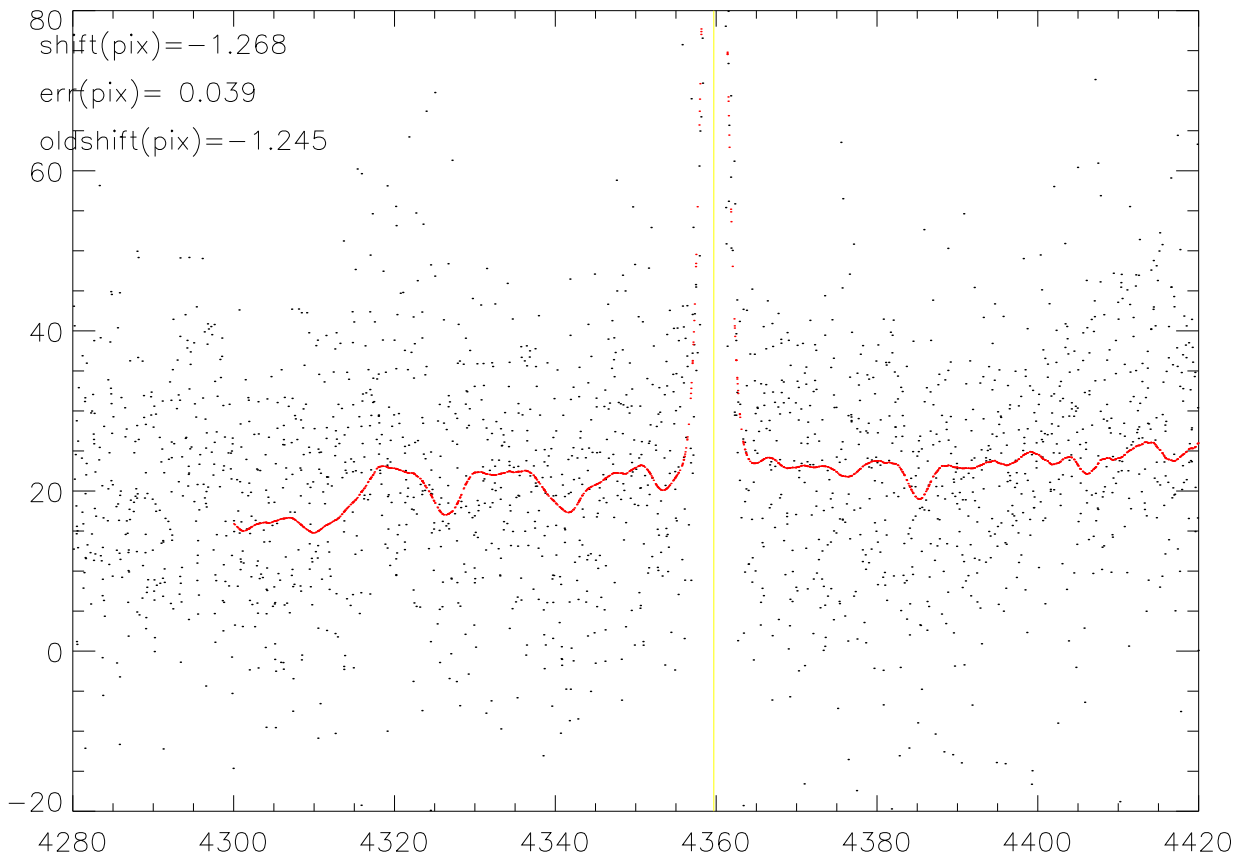

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046004.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
11.36
2.27

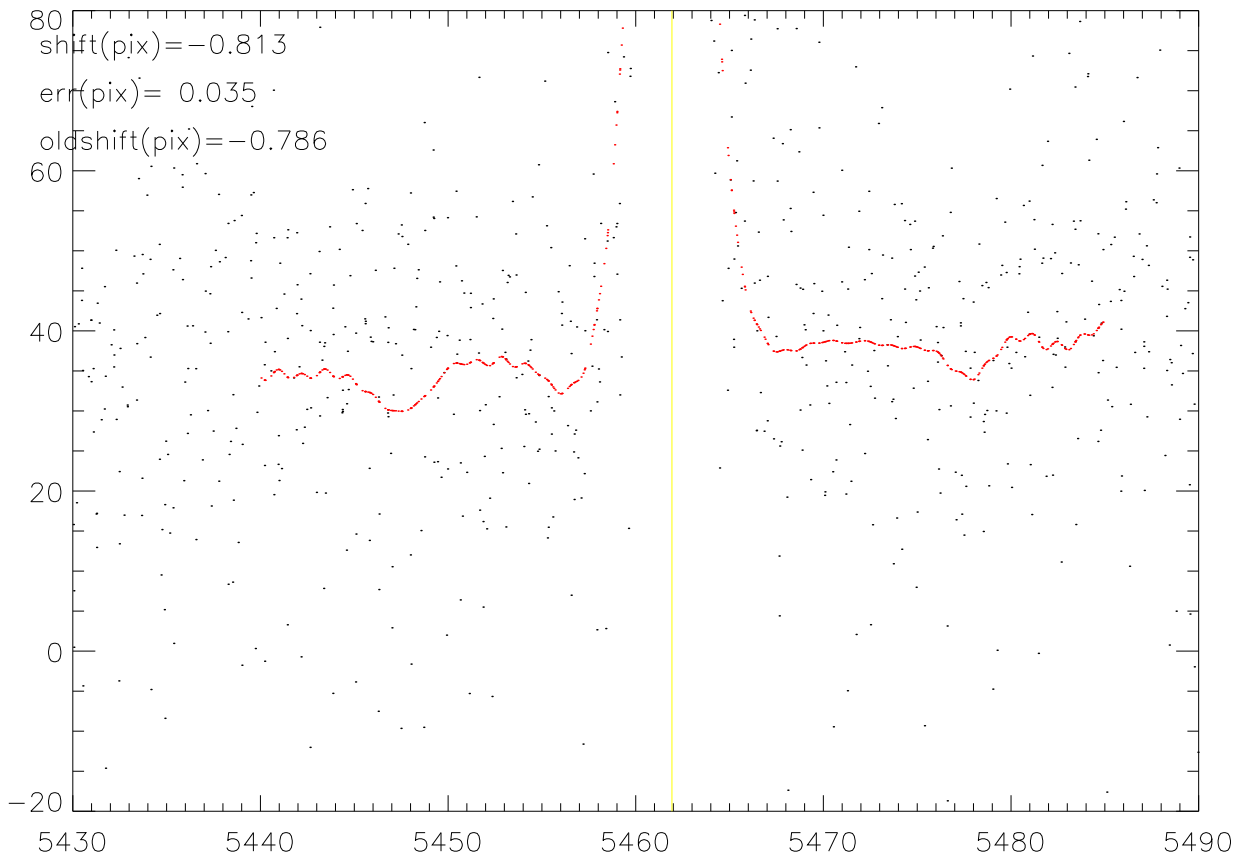

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046004.fit
Brightness [electrons/pix]
25
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.467
Max value = 11.336
Sat Feb 9 19:22:08 2008

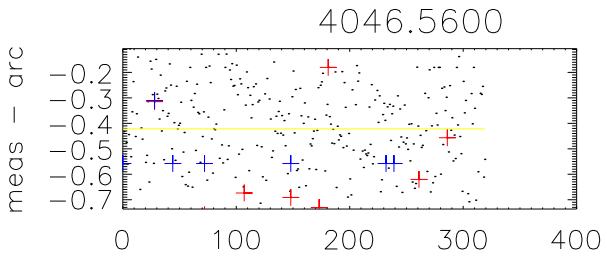

PLATE=2801 MJD=54331 Extraction chi^2 for sdR-b1-00046004.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

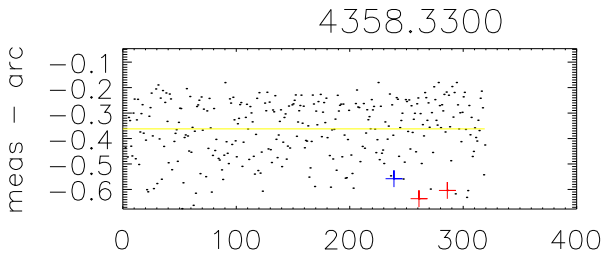

4046.5600
off: −1.17
sig: 0.098
4358.3300
off: −1.24
sig: 0.034
5460.9400
off: −0.79
sig: 0.029
5577.3390
off: −0.76
sig: 0.005
5889.9500
off: −0.53
sig: 0.019
5895.9240
off: −0.51
sig: 0.023

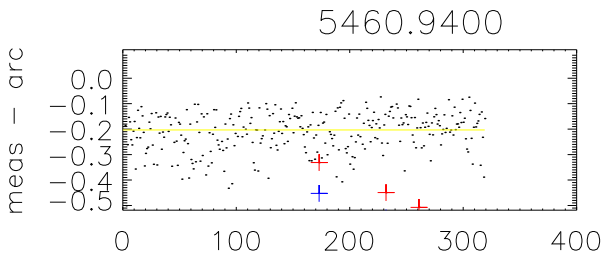

shift(pix)=−1.317
err(pix)= 0.110
oldshift(pix)=−1.173
80
60
40
20
0
−20
4020
4030
4040
4050
4060
4070
4080

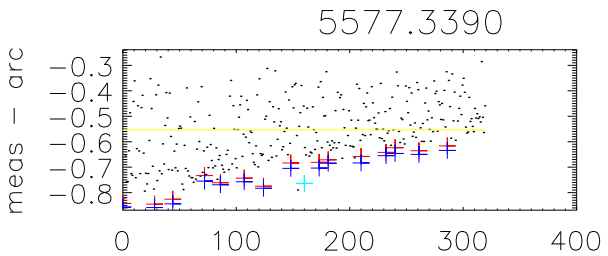

shift(pix)=−1.268
err(pix)= 0.039
oldshift(pix)=−1.245
80
60
40
20
0
−20
4280
4300
4320
4340
4360
4380
4400
4420

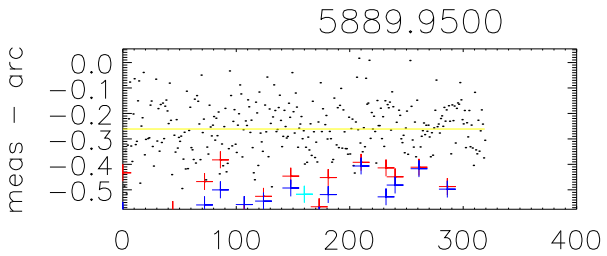

shift(pix)=−0.813
err(pix)= 0.035
oldshift(pix)=−0.786
80
60
40
20
0
−20
5430
5440
5450
5460
5470
5480
5490

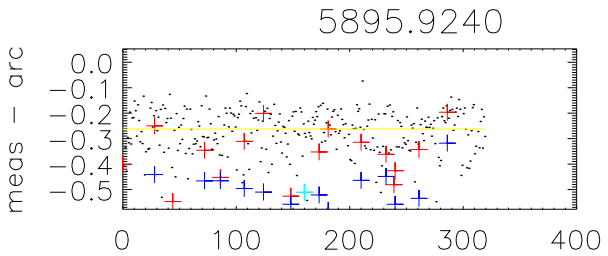

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

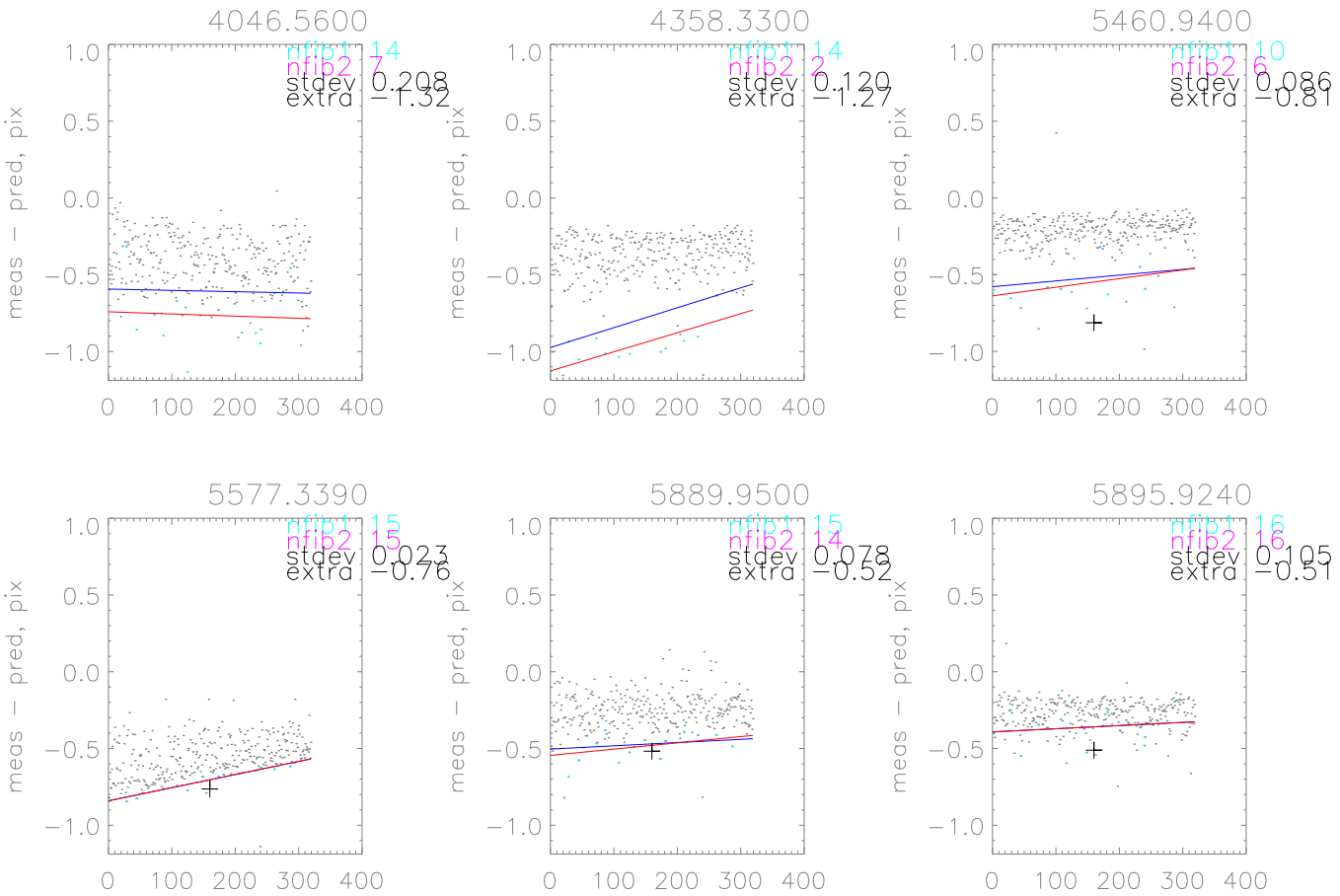

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

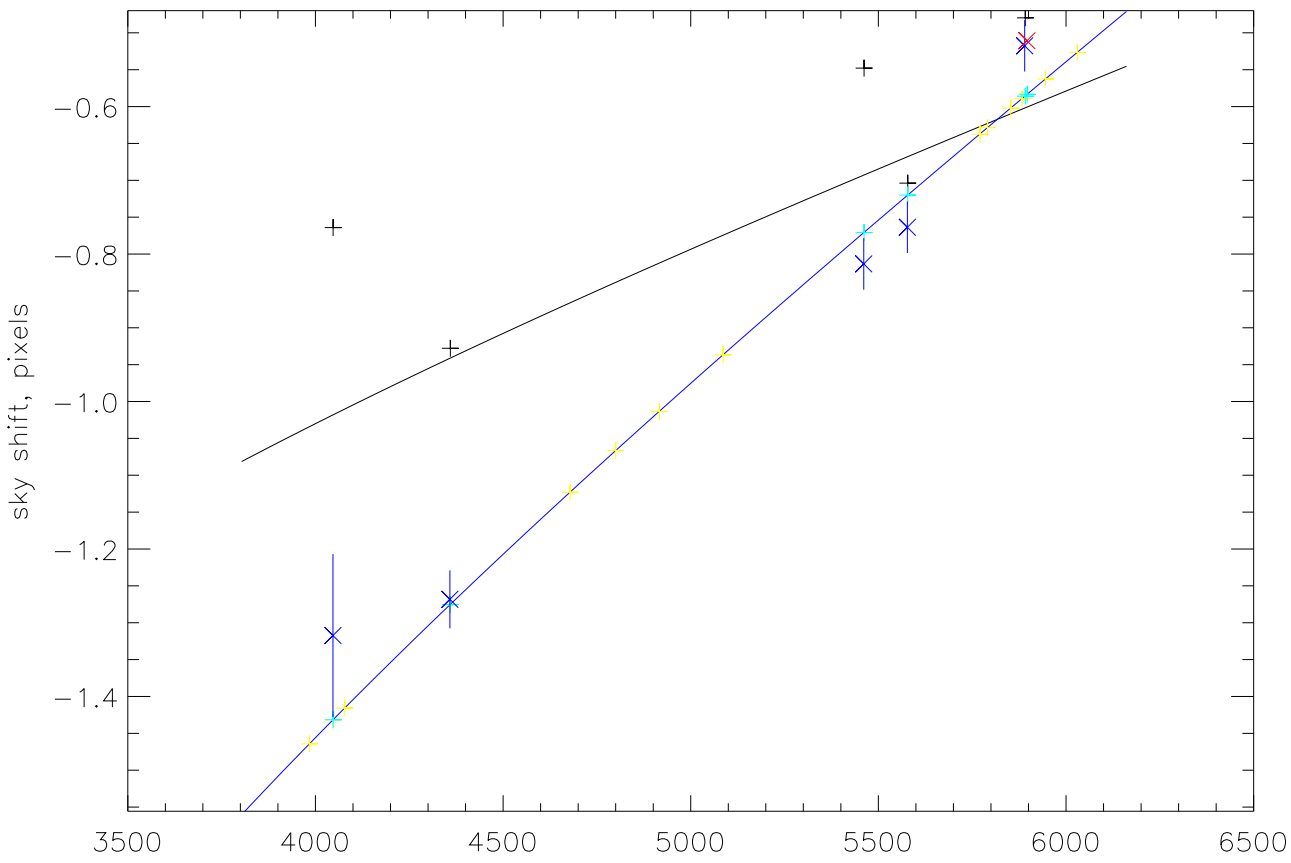

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400


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

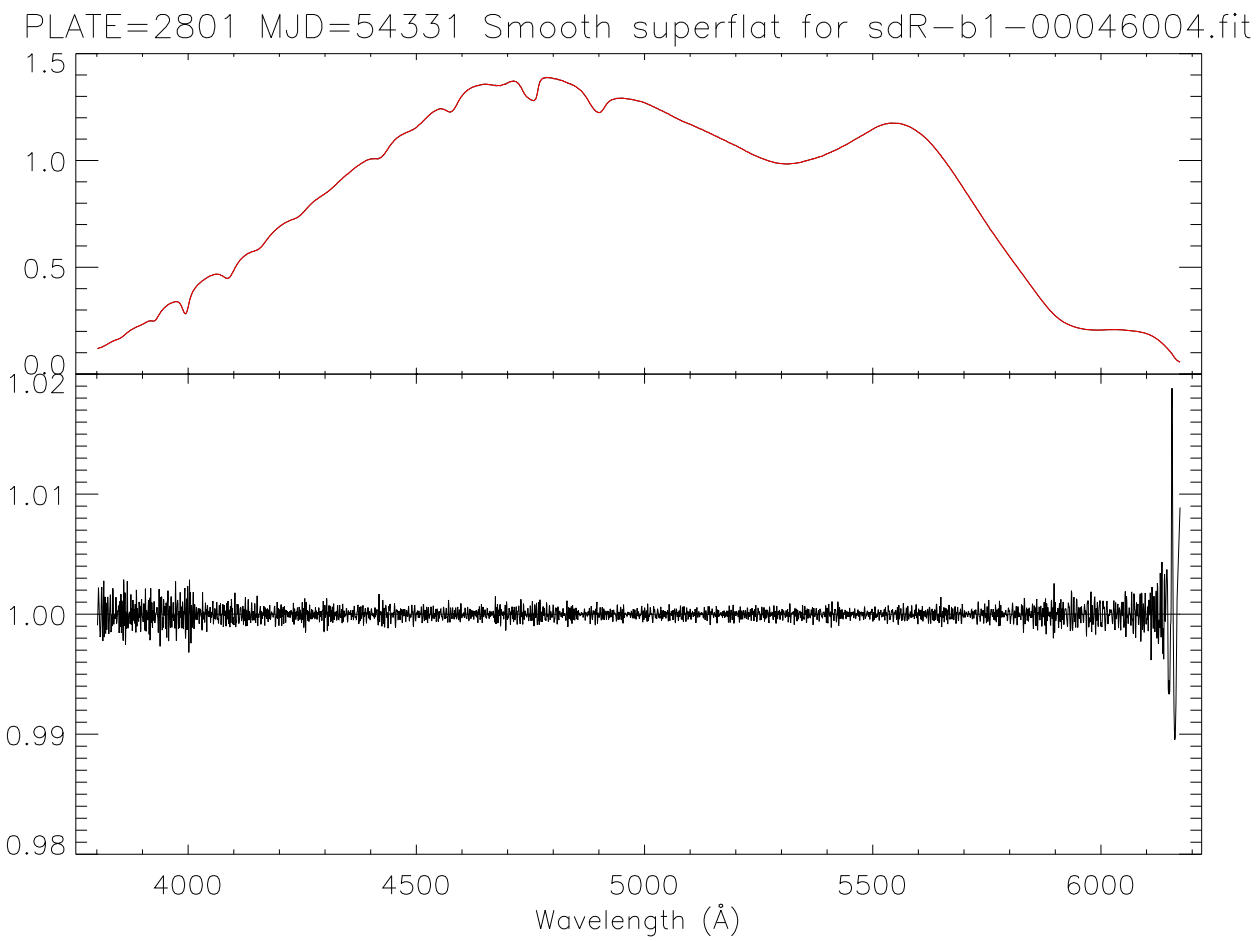

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

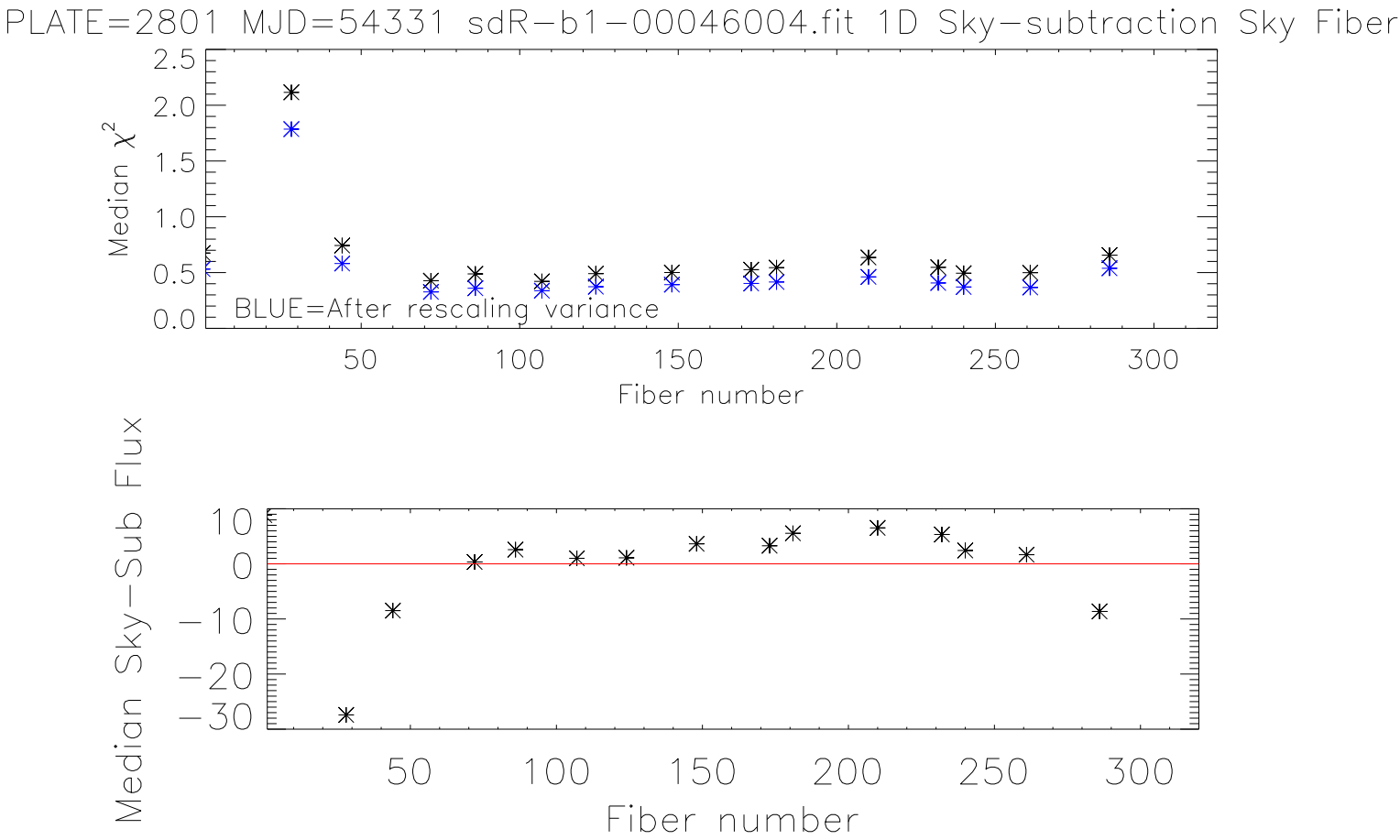

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

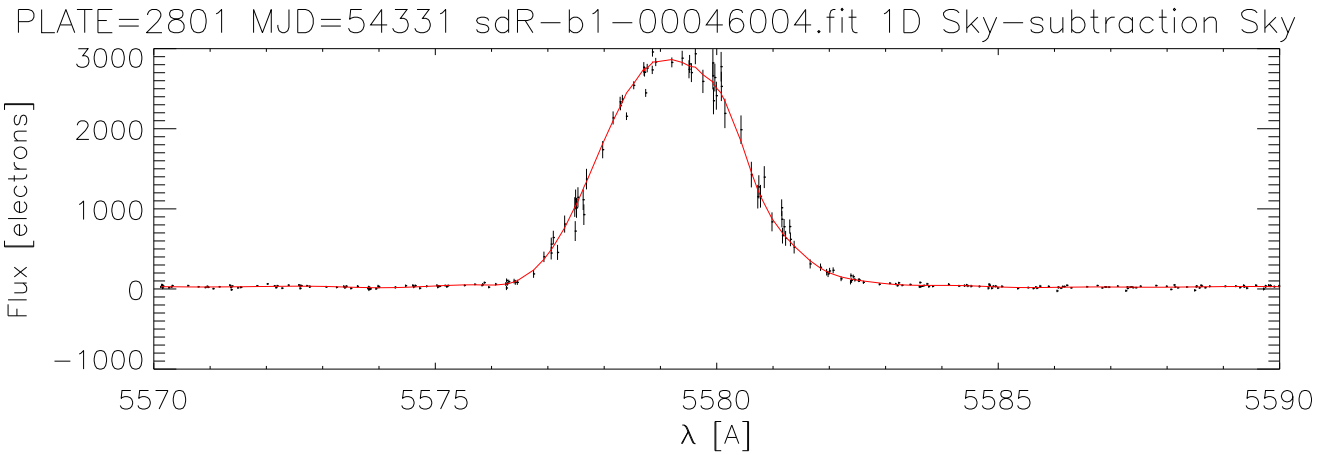

4046.5600
nfib1 14
nfib2 7
stdev 0.208
extra −1.32
4358.3300
nfib1 14
nfib2 12
stdev 0.120
extra −1.27
5460.9400
nfib1 10
nfib2 6
stdev 0.086
extra −0.81
5577.3390
nfib1 15
nfib2 15
stdev 0.023
extra −0.76
5889.9500
nfib1 15
nfib2 14
stdev 0.078
extra −0.52
5895.9240
nfib1 16
nfib2 16
stdev 0.105
extra −0.51
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

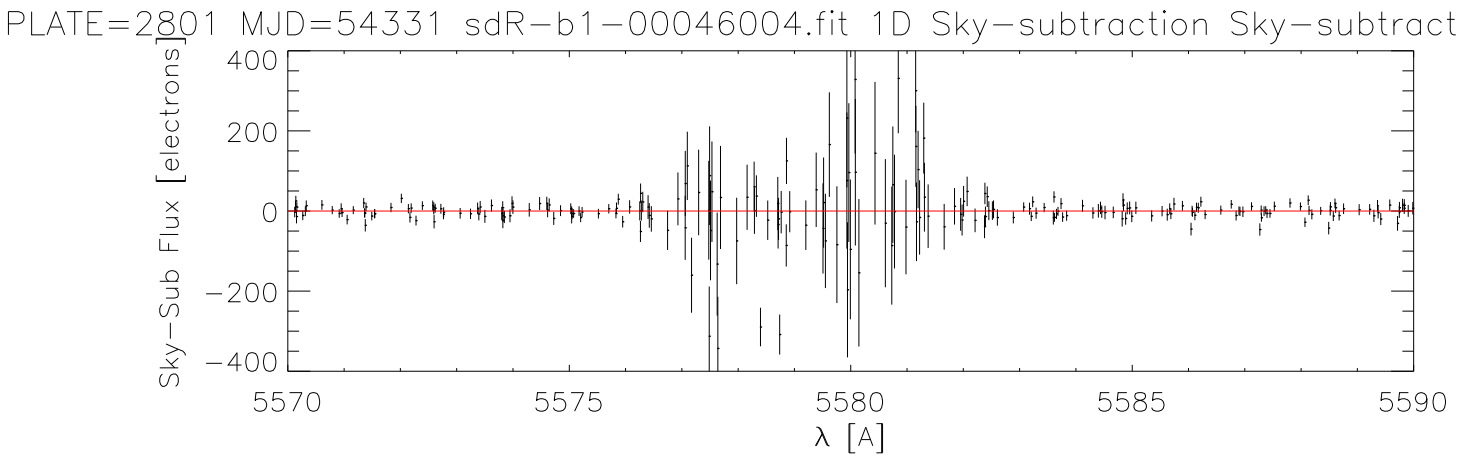

sky shift, pixels
−0.6
−0.8
−1.0
−1.2
−1.4
3500
4000
4500
5000
5500
6000
6500

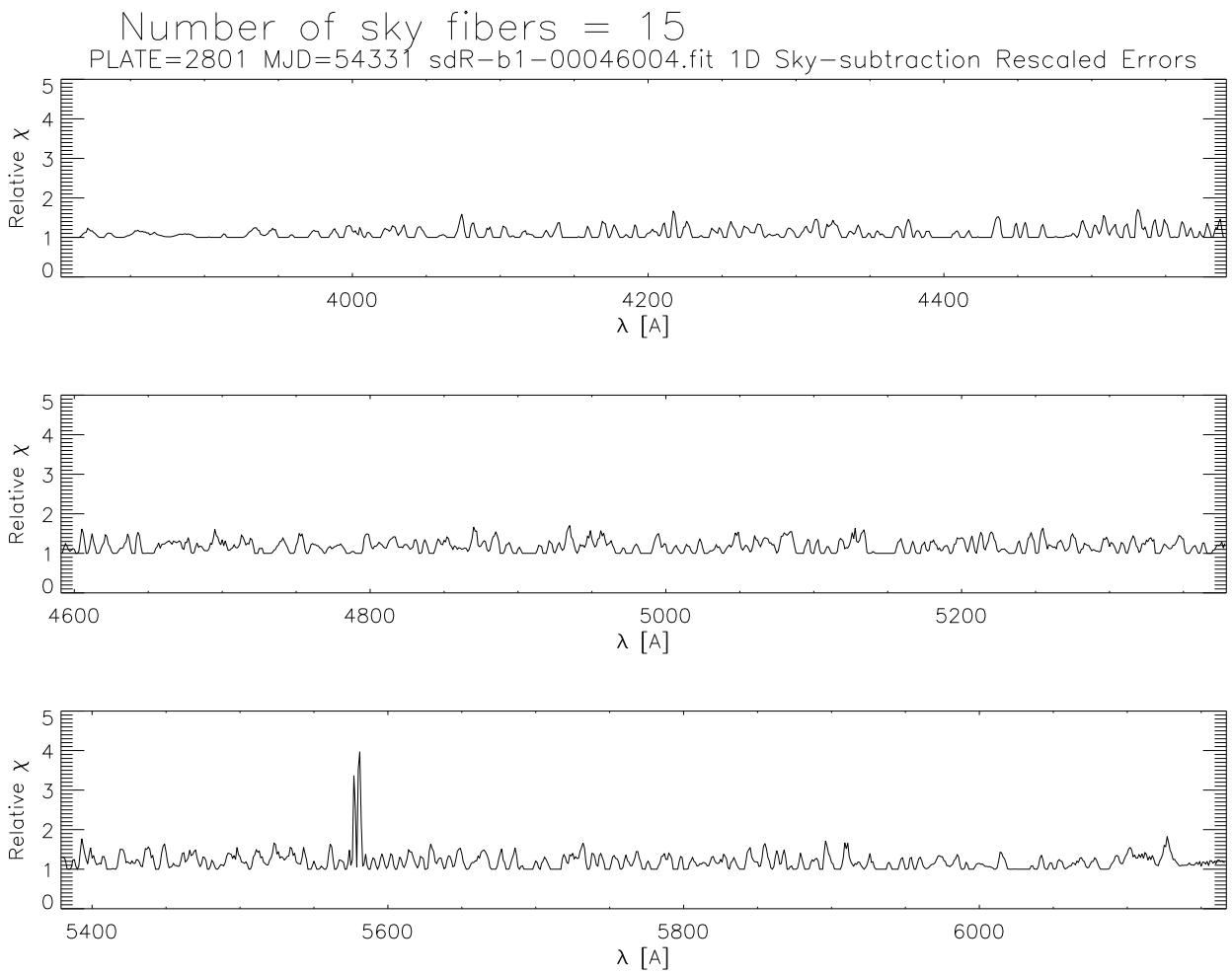
es= −0.0001

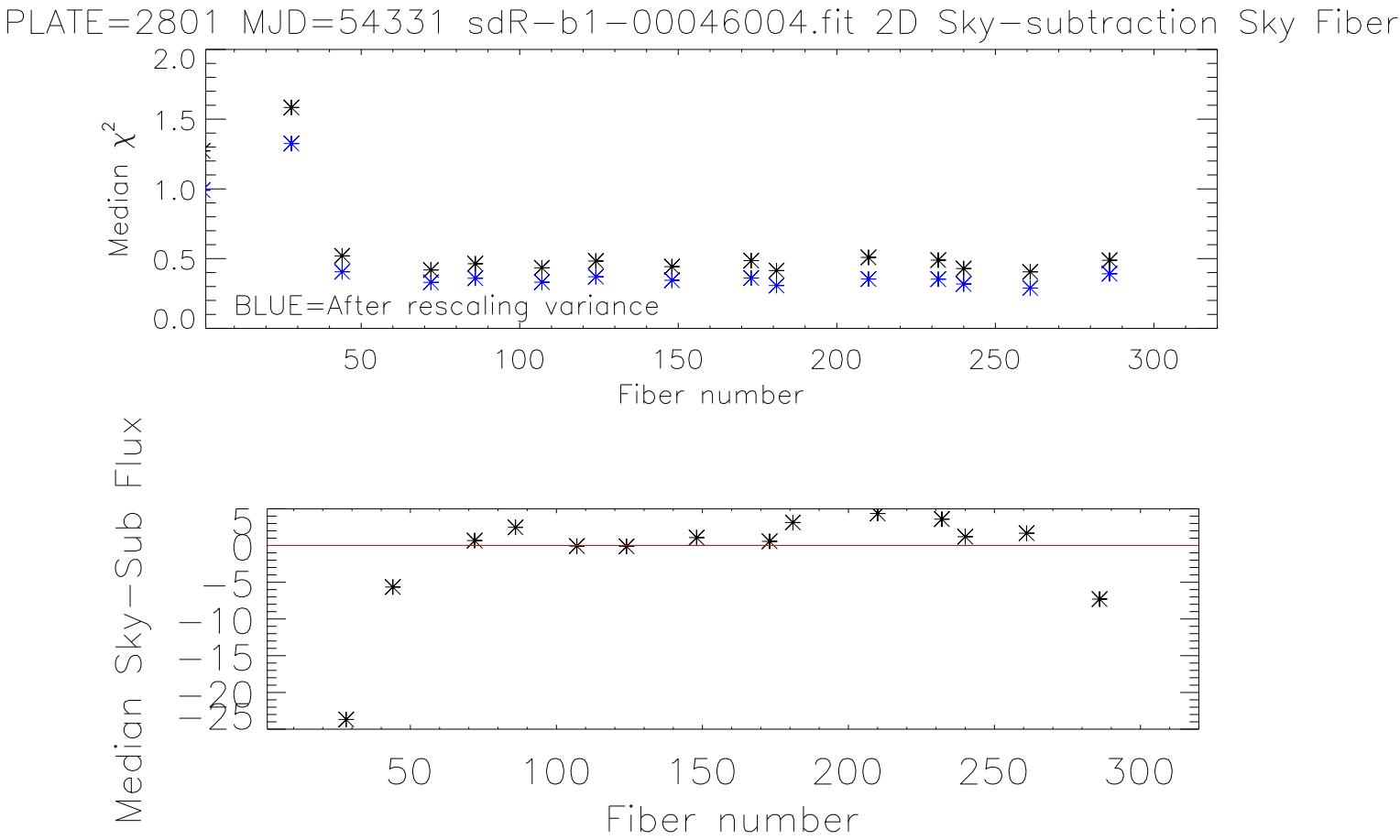

PLATE=2801 MJD=54331 Smooth superflat for sdR−b1−00046004.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
4000
4500
5000
5500
6000
Wavelength (Å)

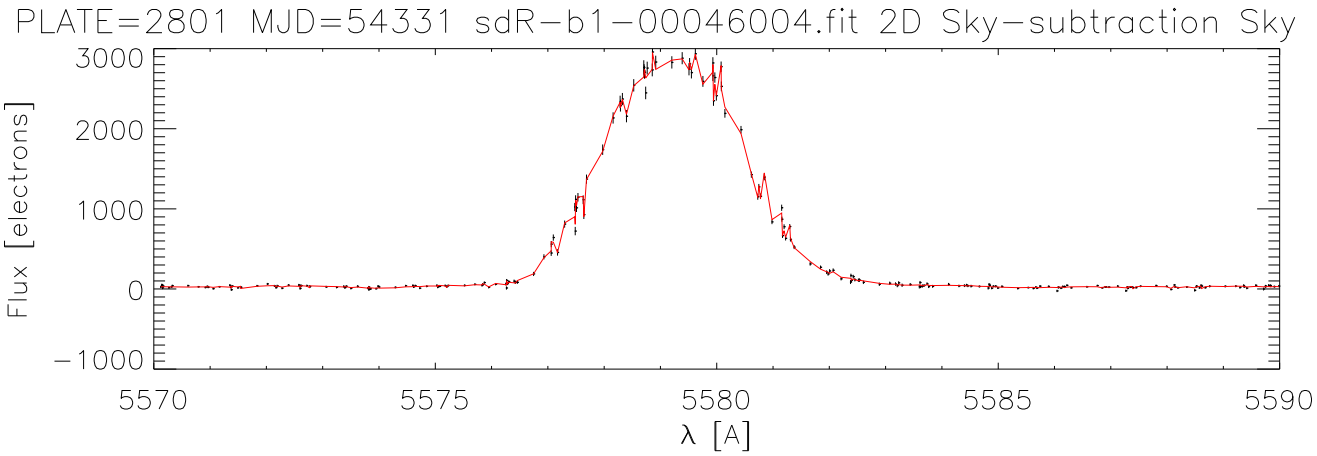

PLATE=2801 MJD=54331 sdR-b1-00046004.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

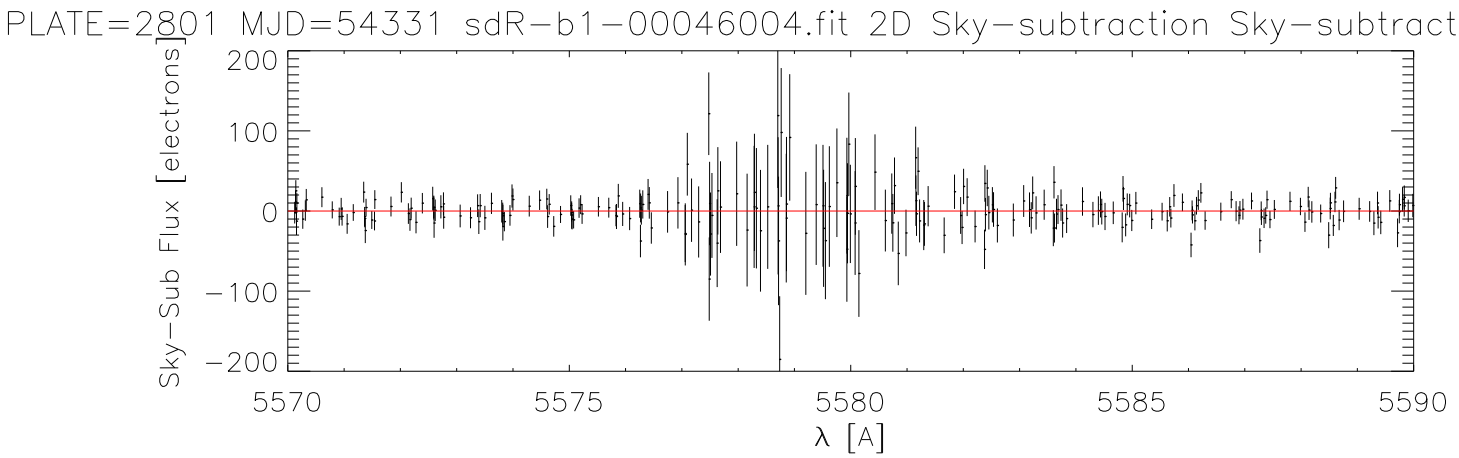

PLATE=2801 MJD=54331 sdR-b1-00046004.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
−1000
5570
5575
5580
5585
5590
λ [A]

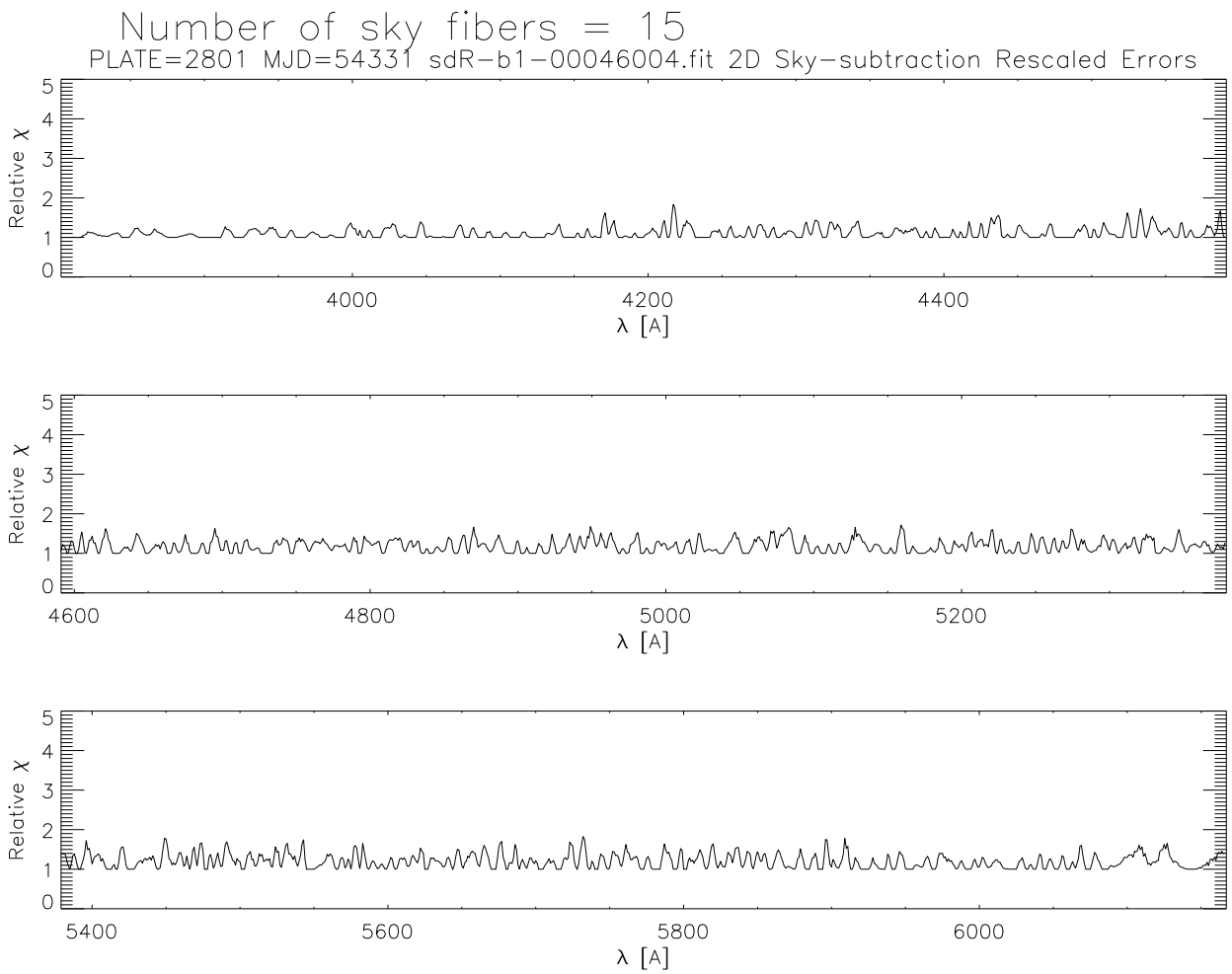

PLATE=2801 MJD=54331 sdR-b1-00046004.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

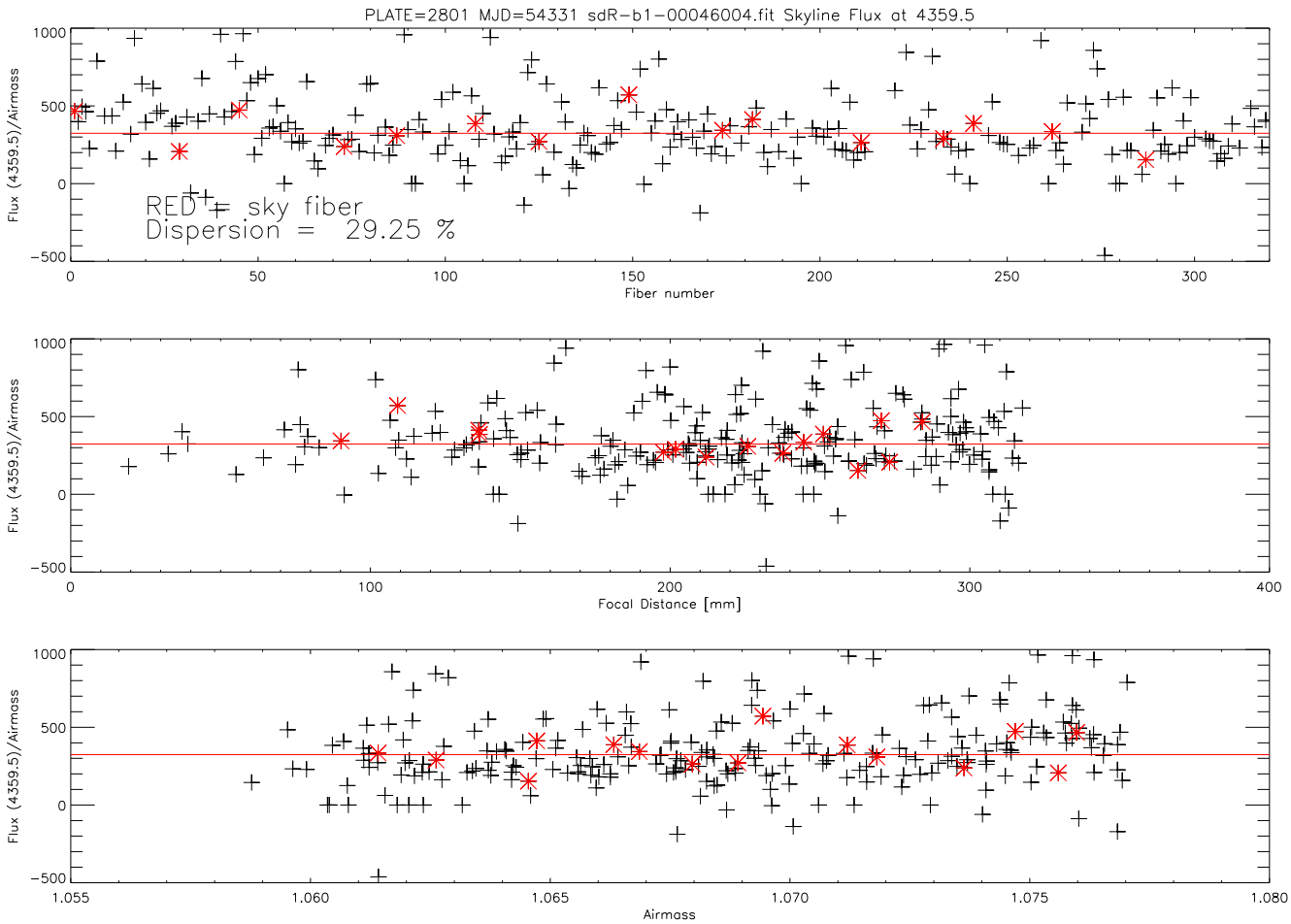

Number of sky fibers = 15
PLATE=2801 MJD=54331 sdR-b1-00046004.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

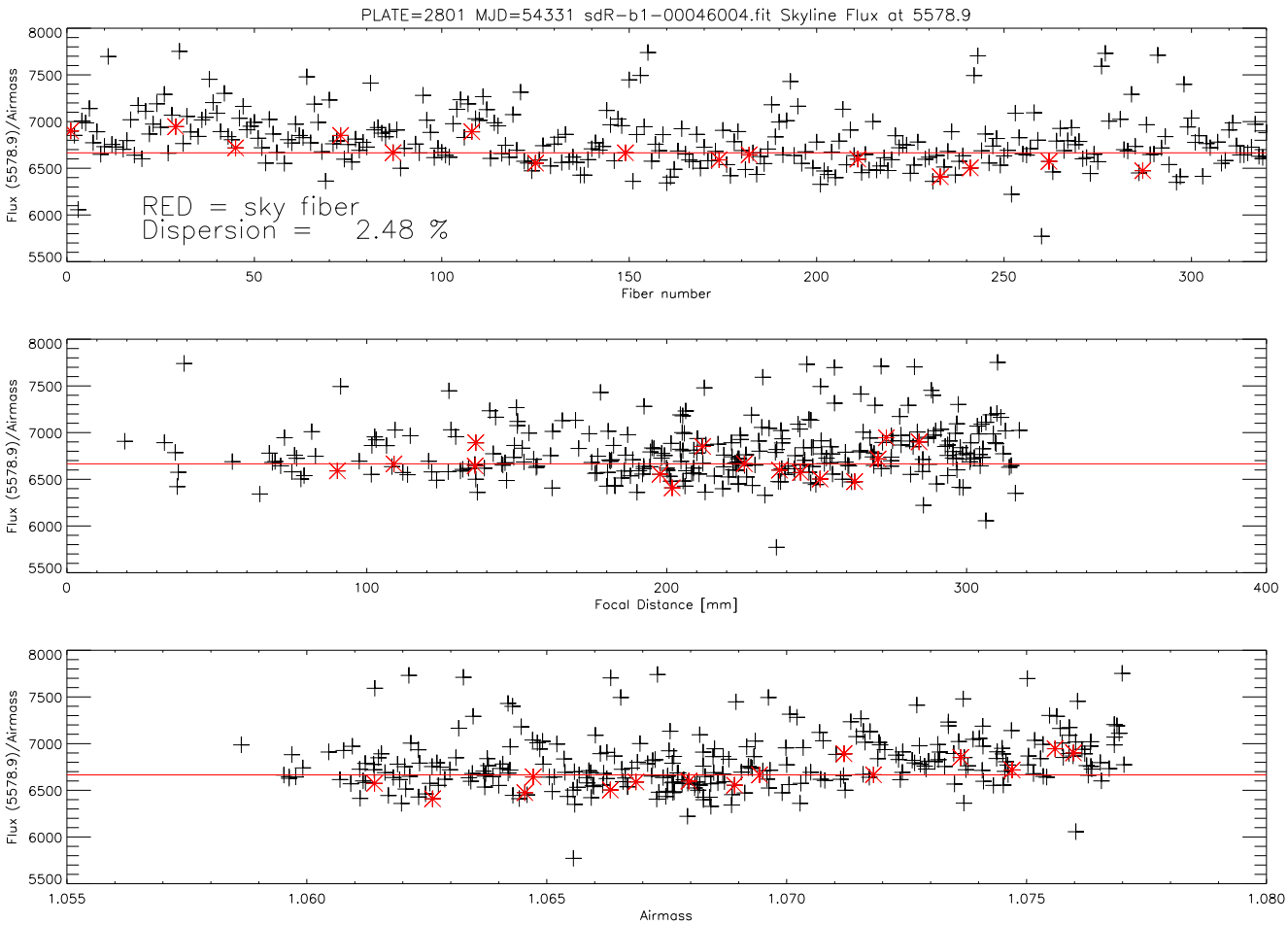

PLATE=2801 MJD=54331 sdR-b1-00046004.fit 2D Sky-subtraction Sky Fiber
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
-5
-10
-15
-20
-25
50
100
150
200
250
300
Fiber number

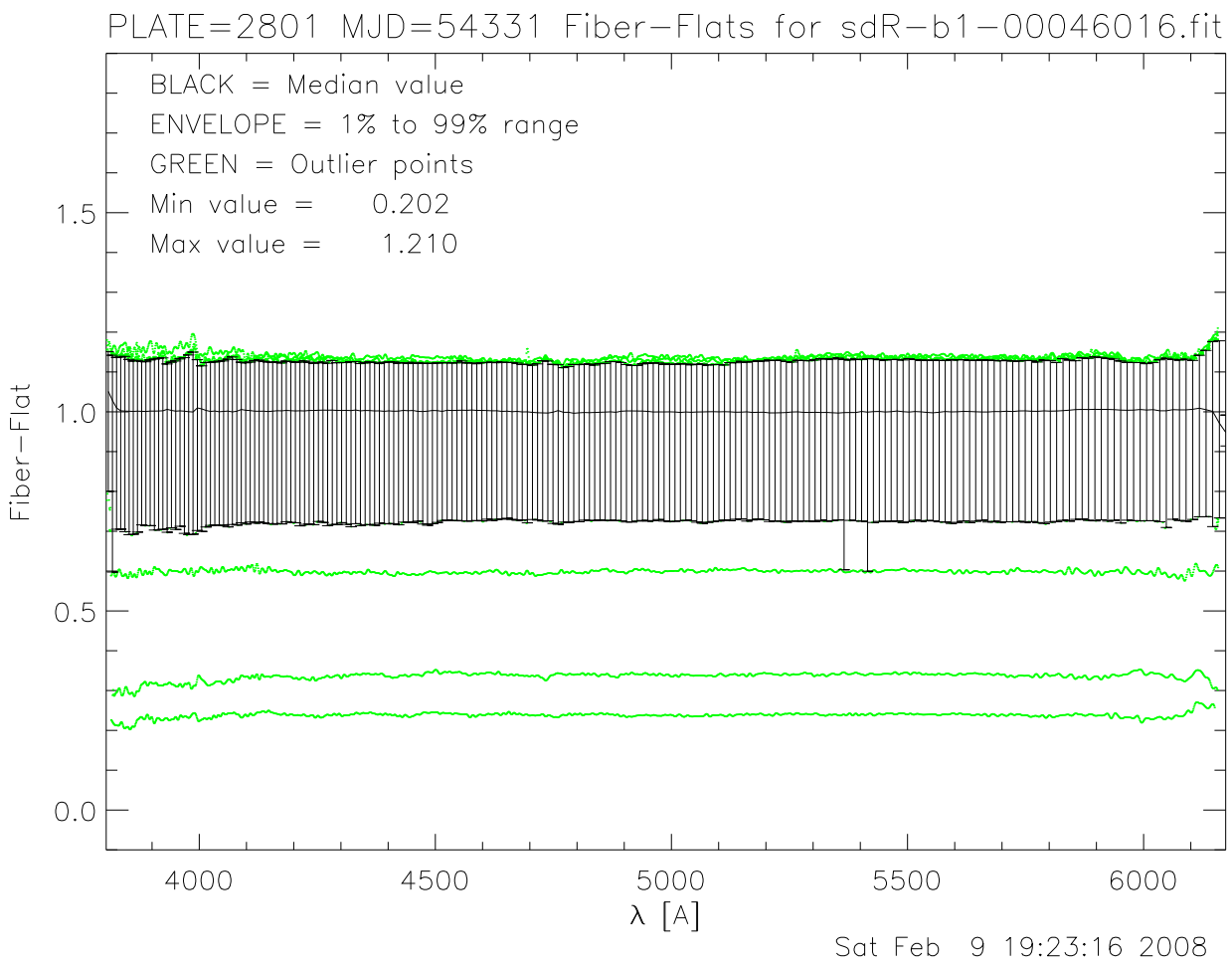

PLATE=2801 MJD=54331 sdR-b1-00046004.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

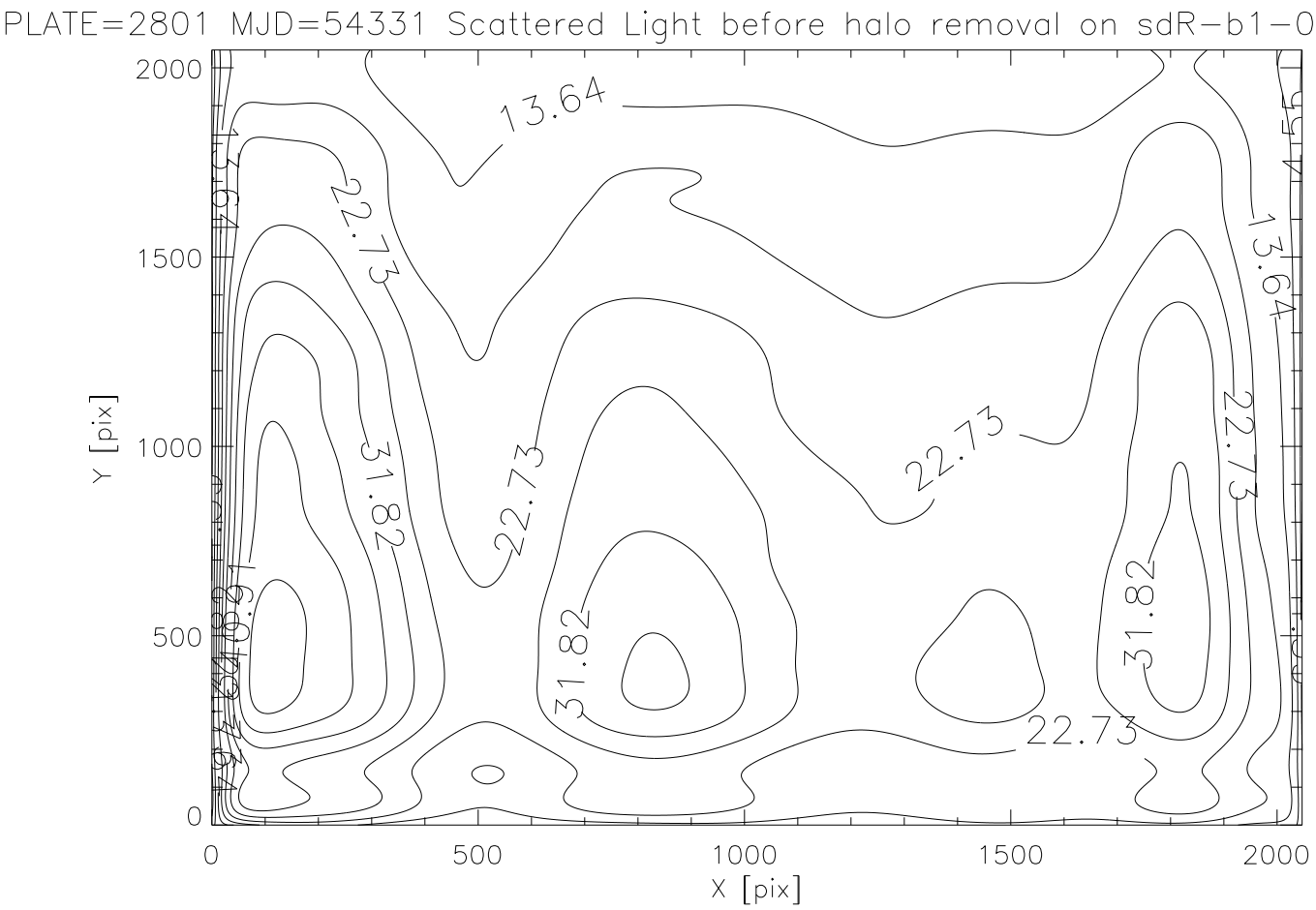

PLATE=2801 MJD=54331 sdR-b1-00046004.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

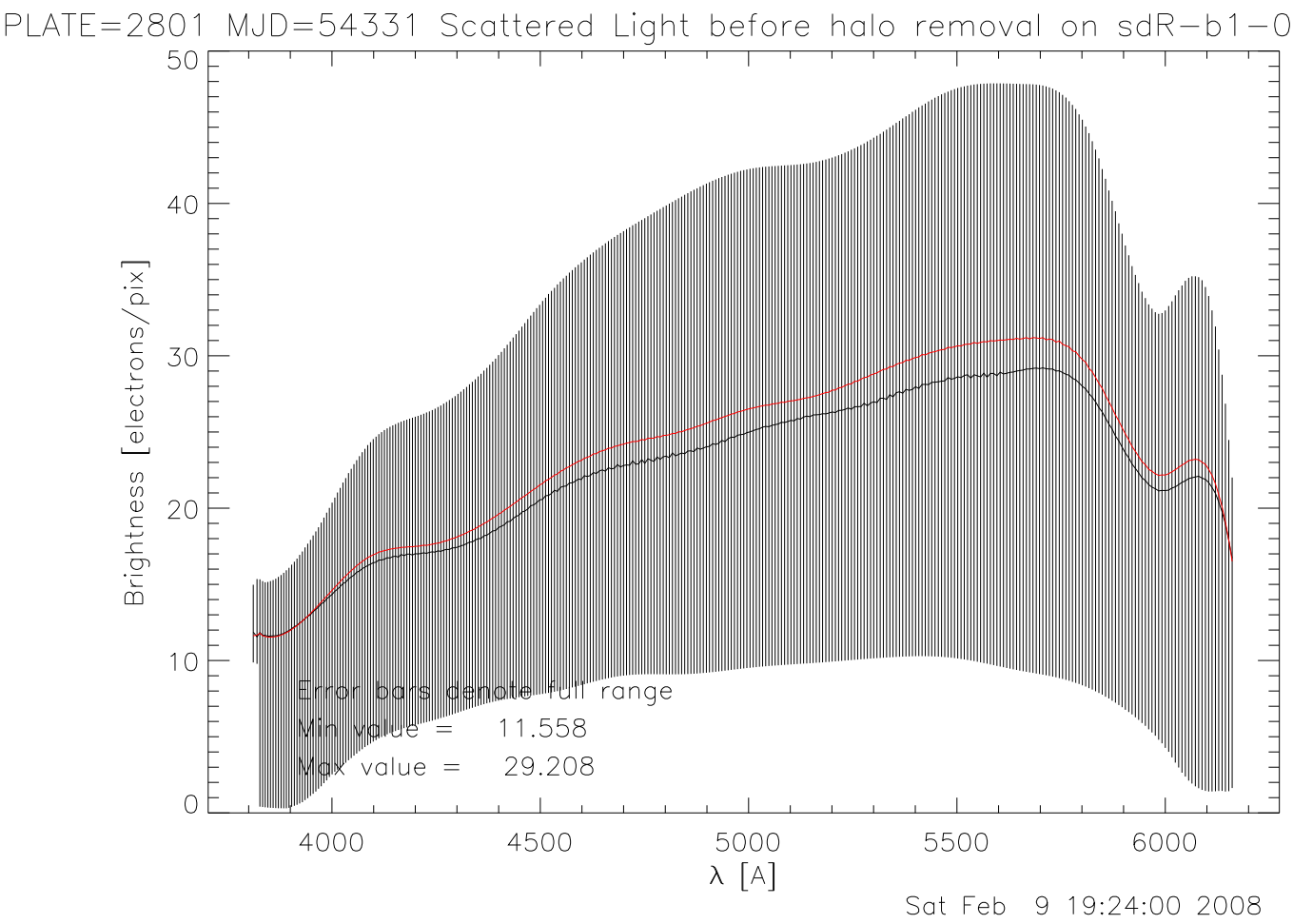

Number of sky fibers = 15
PLATE=2801 MJD=54331 sdR-b1-00046004.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

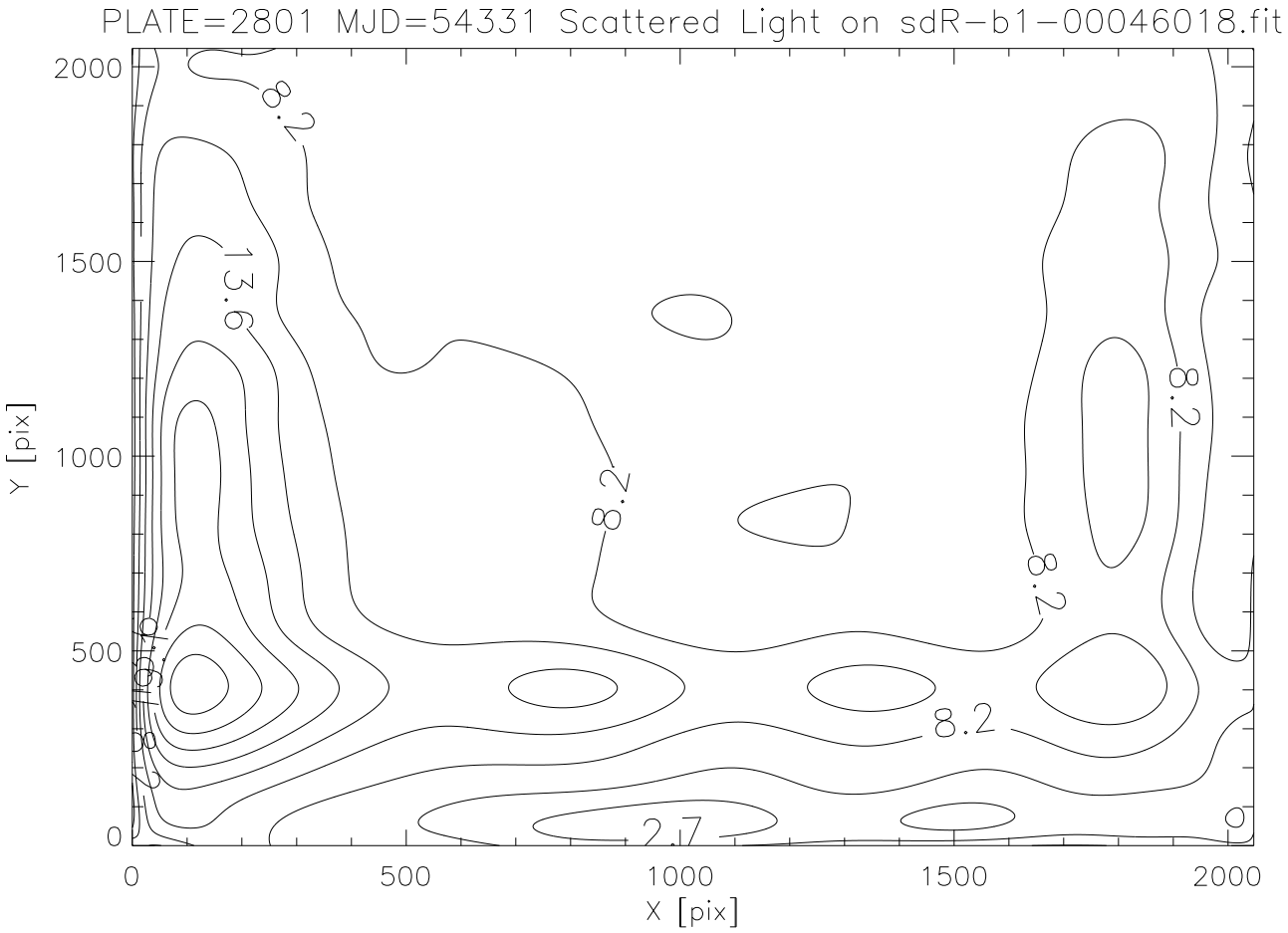

PLATE=2801 MJD=54331 sdR-b1-00046004.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 29.25 %
Fiber number
Focal Distance [mm]
Airmass

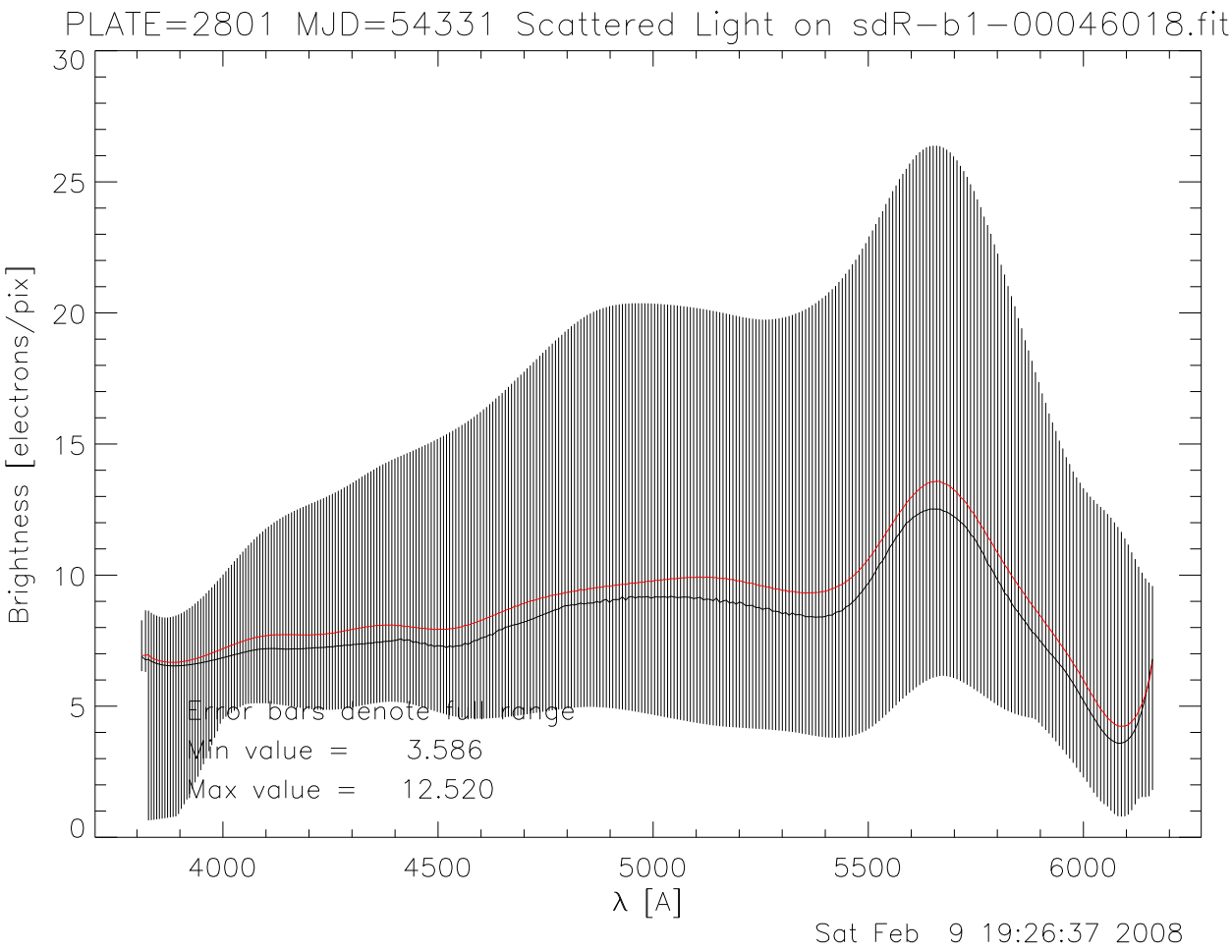

PLATE=2801 MJD=54331 sdR-b1-00046004.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.48 %
Fiber number
Focal Distance [mm]
Airmass

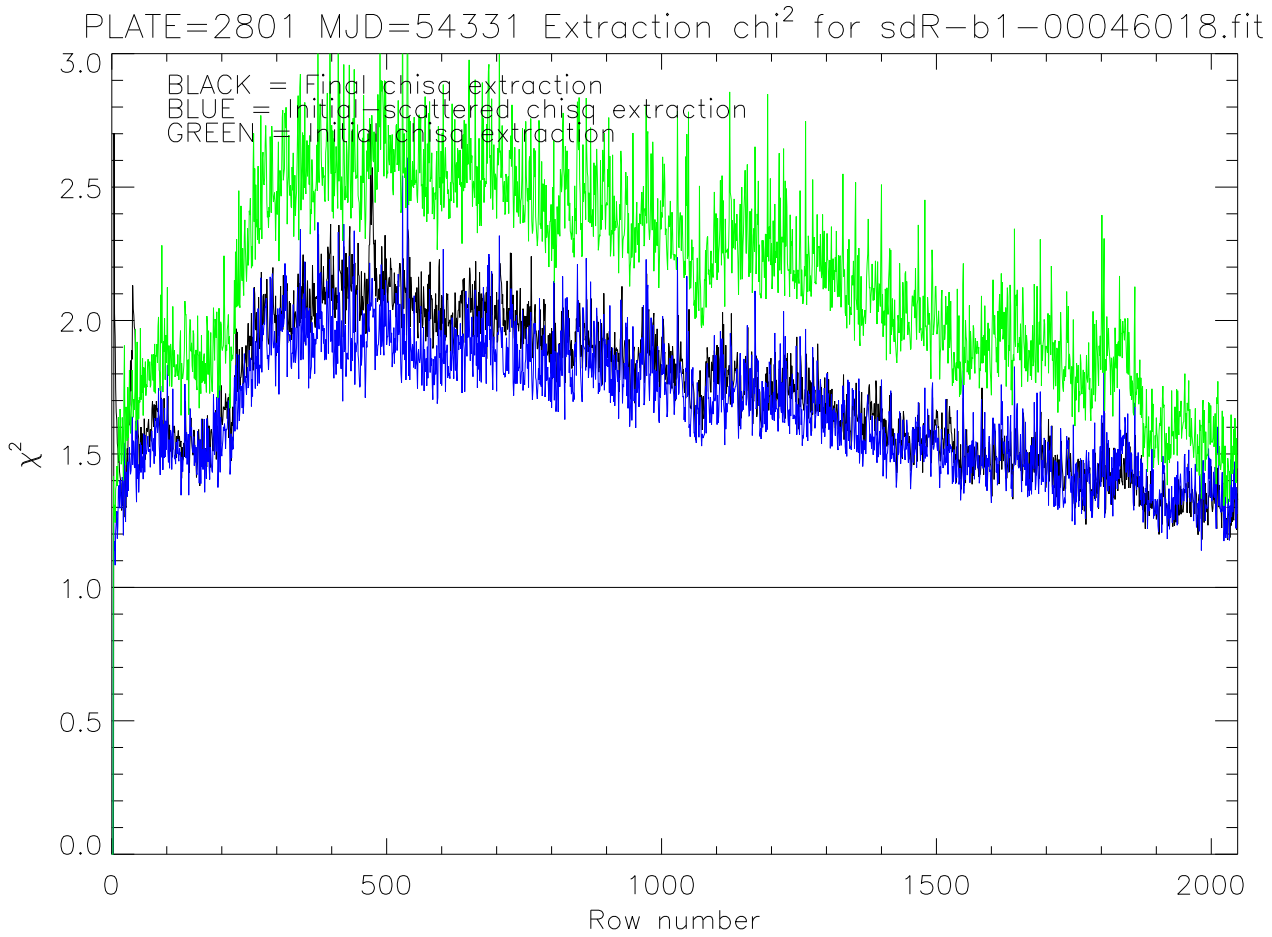

PLATE=2801 MJD=54331 Fiber-Flats for sdR-b1-00046016.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.210
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 19:23:16 2008

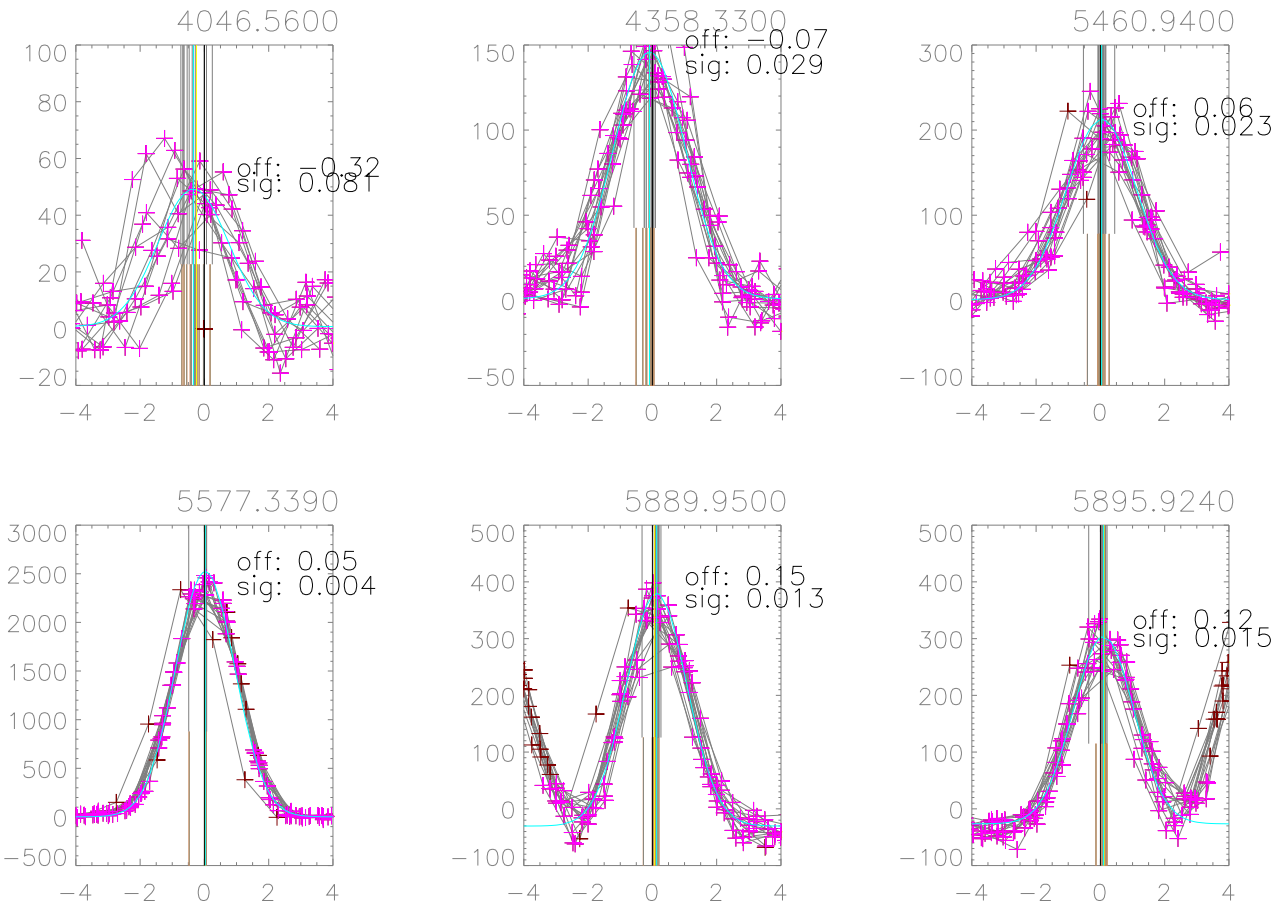

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR-b1-00046018.f
13.64
22.73
31.82
13.64
22.73
22.73
22.73
31.82
31.82
22.73
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

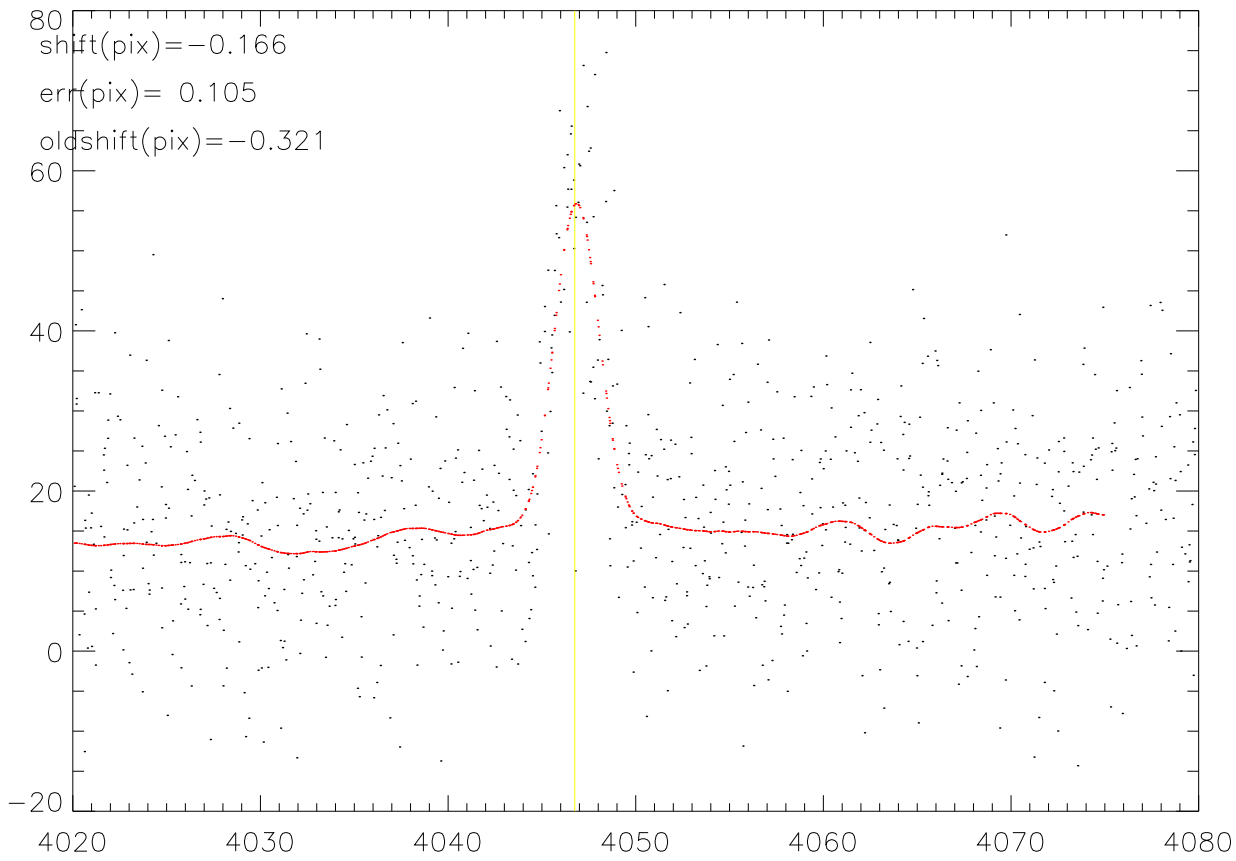

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR-b1-00046018.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.558
Max value = 29.208
Sat Feb 9 19:24:00 2008

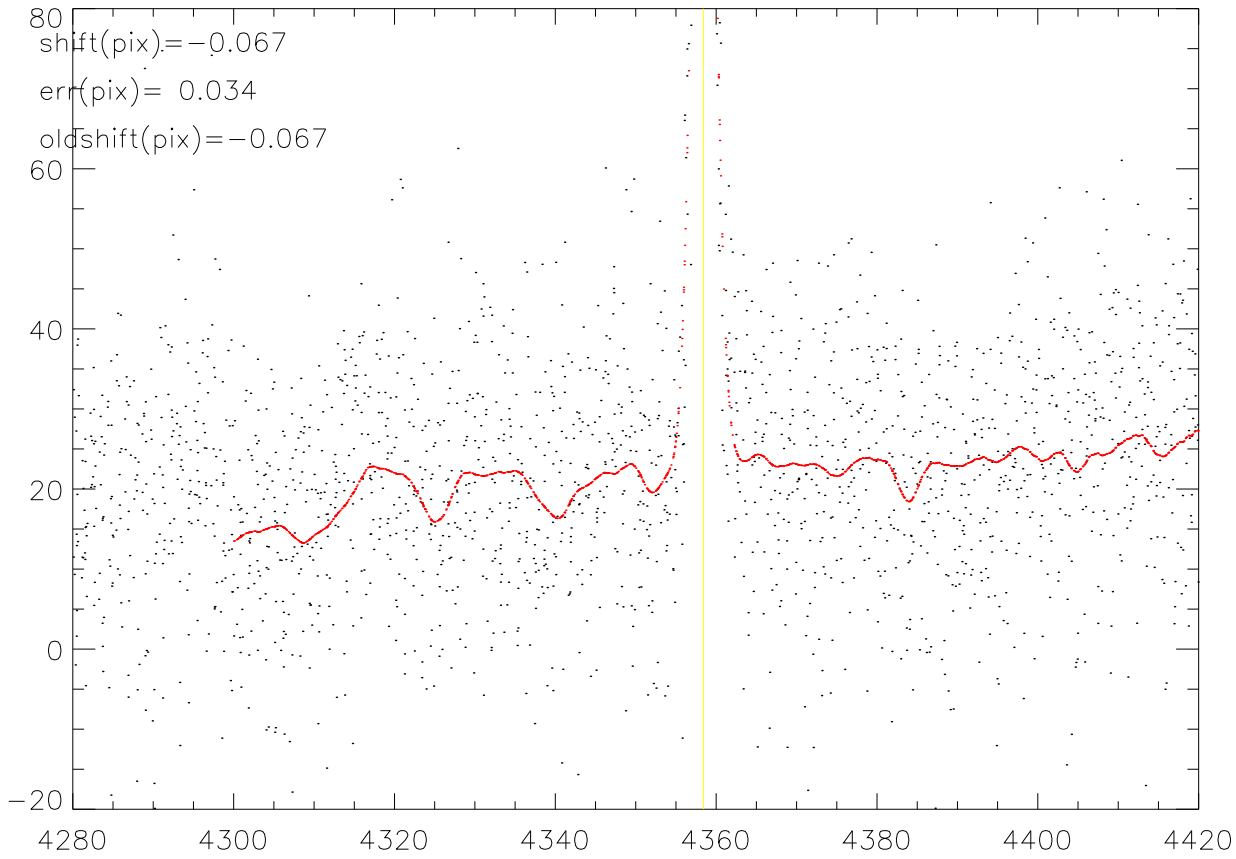

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046018.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
13.6
2.7

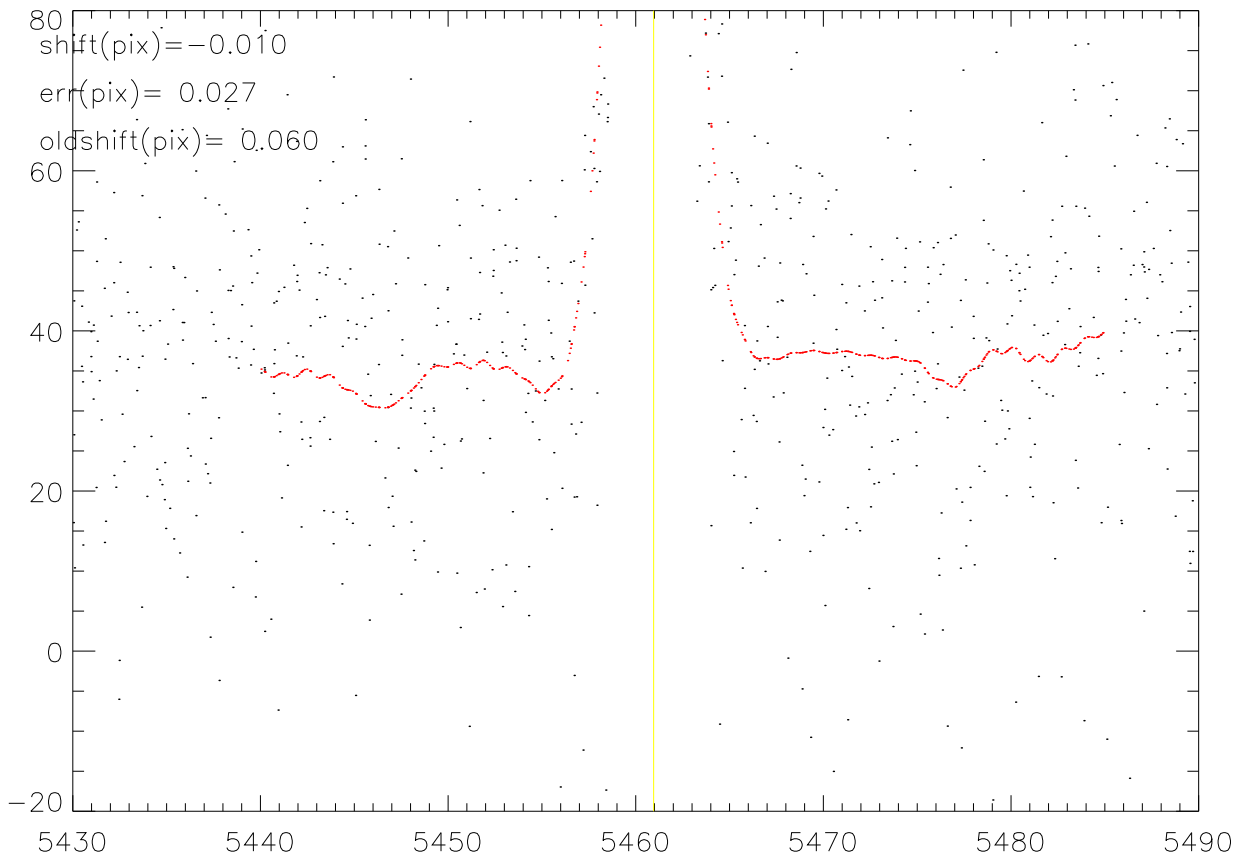

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046018.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.586
Max value = 12.520
Sat Feb 9 19:26:37 2008

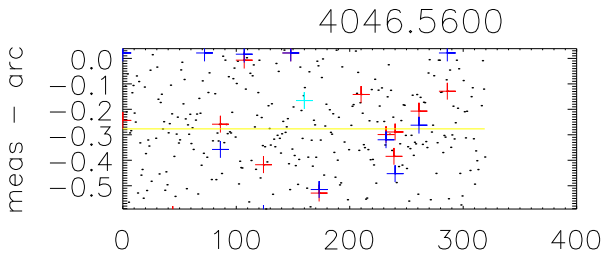

PLATE=2801 MJD=54331 Extraction chi^2 for sdR-b1-00046018.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

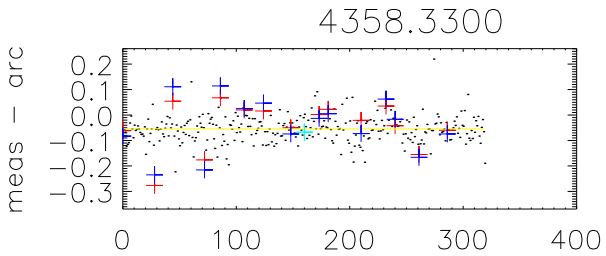

4046.5600
off: −0.32
sig: 0.081
4358.3300
off: −0.07
sig: 0.029
5460.9400
off: 0.06
sig: 0.023
5577.3390
off: 0.05
sig: 0.004
5889.9500
off: 0.15
sig: 0.013
5895.9240
off: 0.12
sig: 0.015

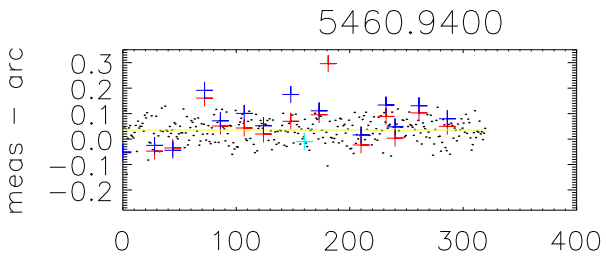

shift(pix)=−0.166
err(pix)= 0.105
oldshift(pix)=−0.321
80
60
40
20
0
−20
4020
4030
4040
4050
4060
4070
4080

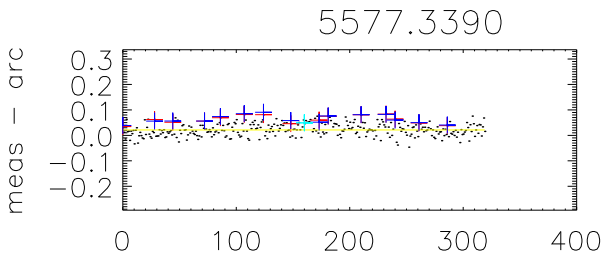

shift(pix)=−0.067
err(pix)= 0.034
oldshift(pix)=−0.067
80
60
40
20
0
−20
4280
4300
4320
4340
4360
4380
4400
4420

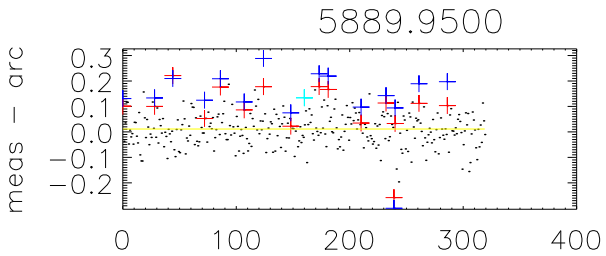

shift(pix)=−0.010
err(pix)= 0.027
oldshift(pix)= 0.060
80
60
40
20
0
−20
5430
5440
5450
5460
5470
5480
5490

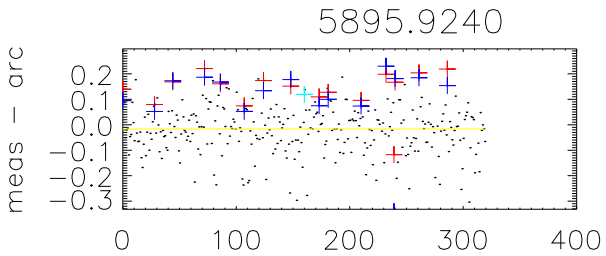

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

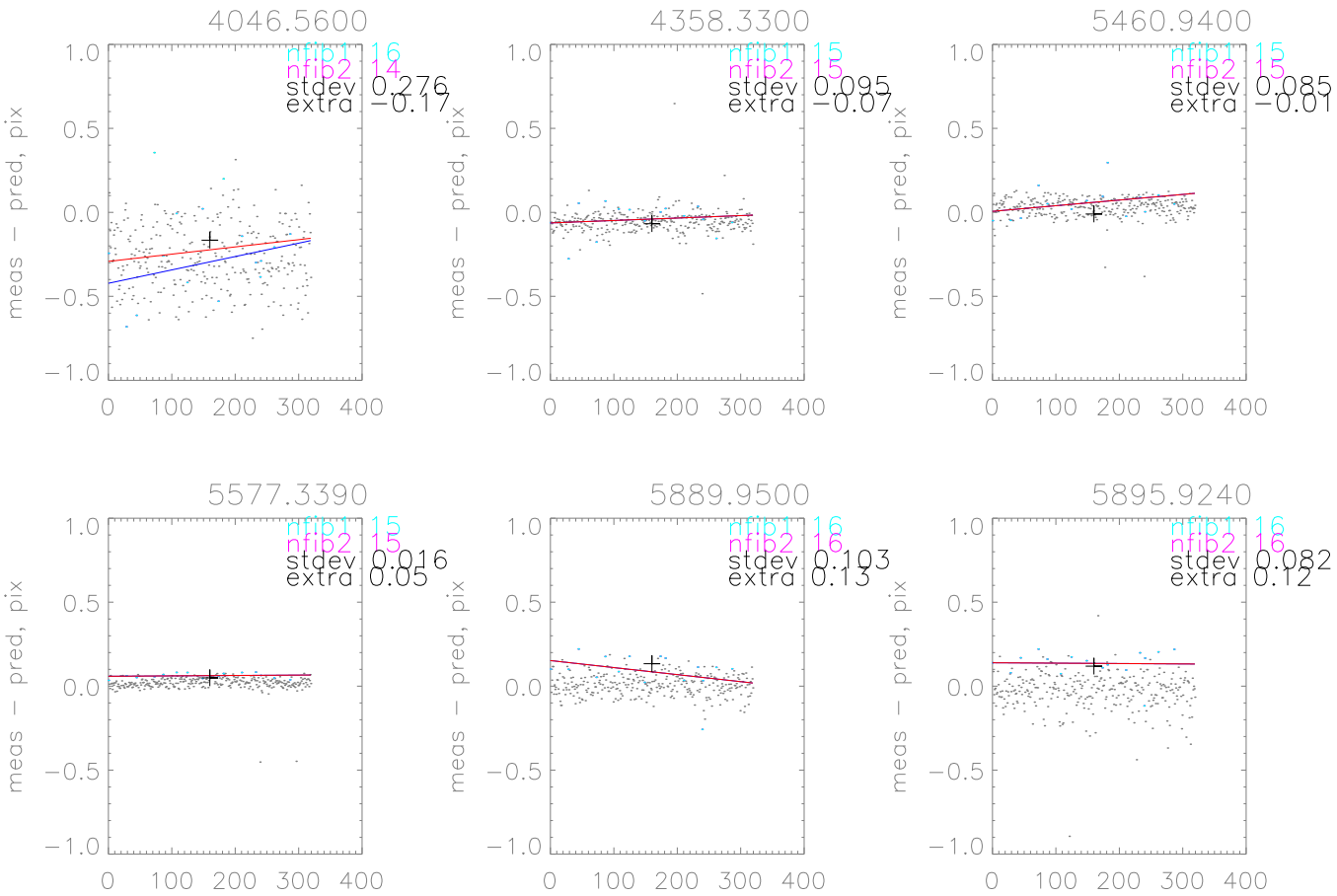

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

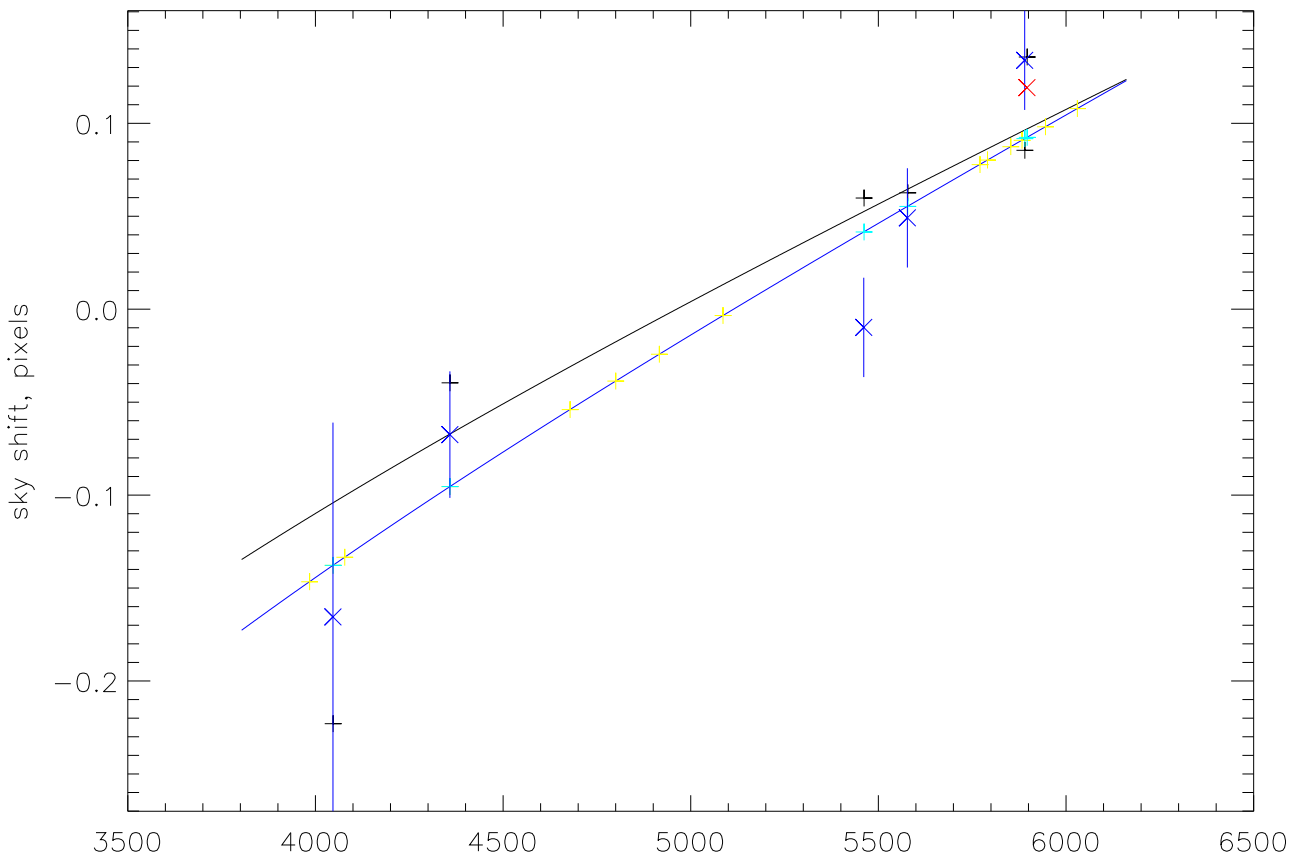

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

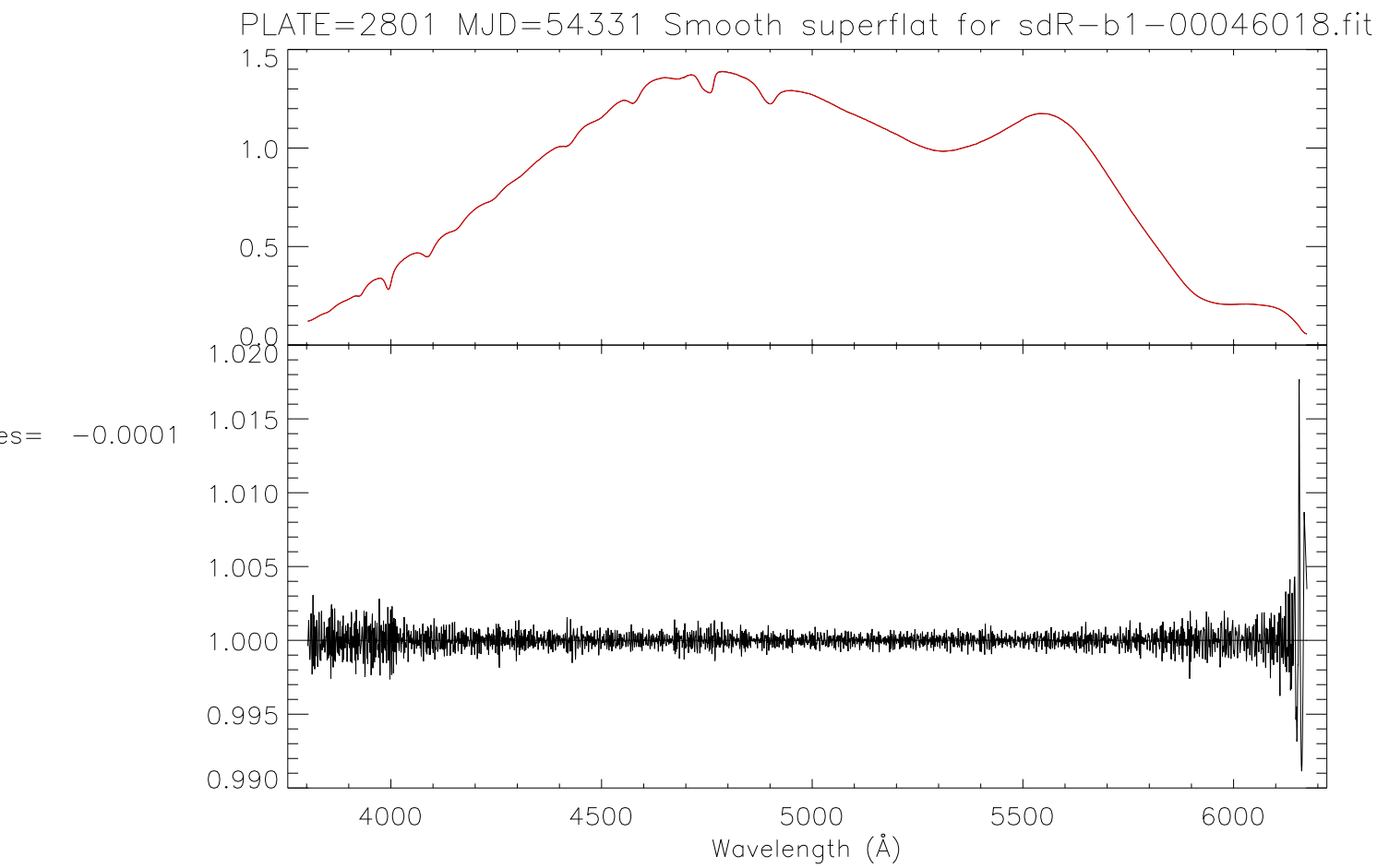

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

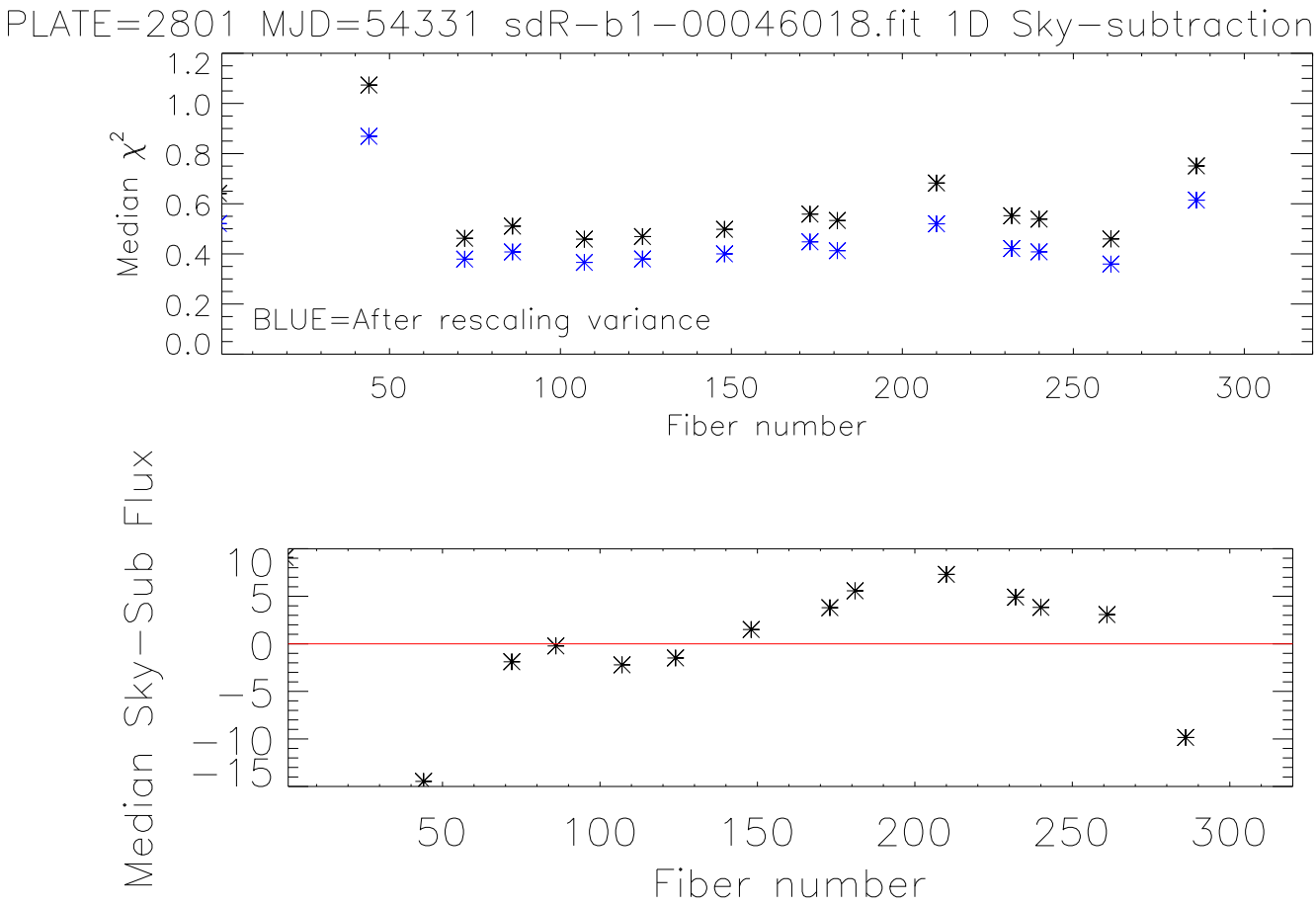

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

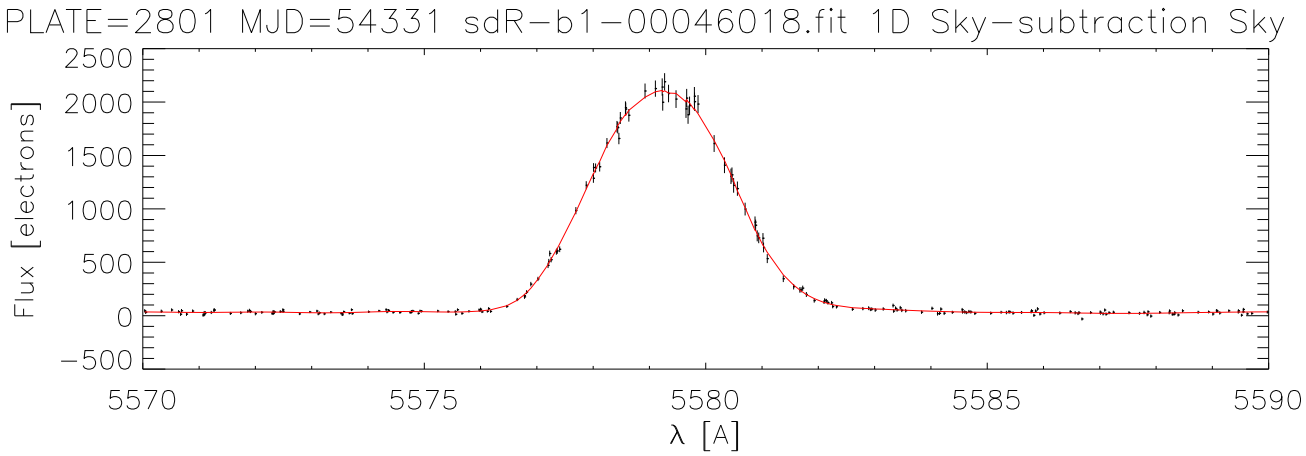

4046.5600
nfib1 16
nfib2 14
stdev 0.276
extra −0.17
4358.3300
nfib1 15
nfib2 15
stdev 0.095
extra −0.07
5460.9400
nfib1 15
nfib2 15
stdev 0.085
extra −0.01
5577.3390
nfib1 15
nfib2 15
stdev 0.016
extra 0.05
5889.9500
nfib1 16
nfib2 16
stdev 0.103
extra 0.13
5895.9240
nfib1 16
nfib2 16
stdev 0.082
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

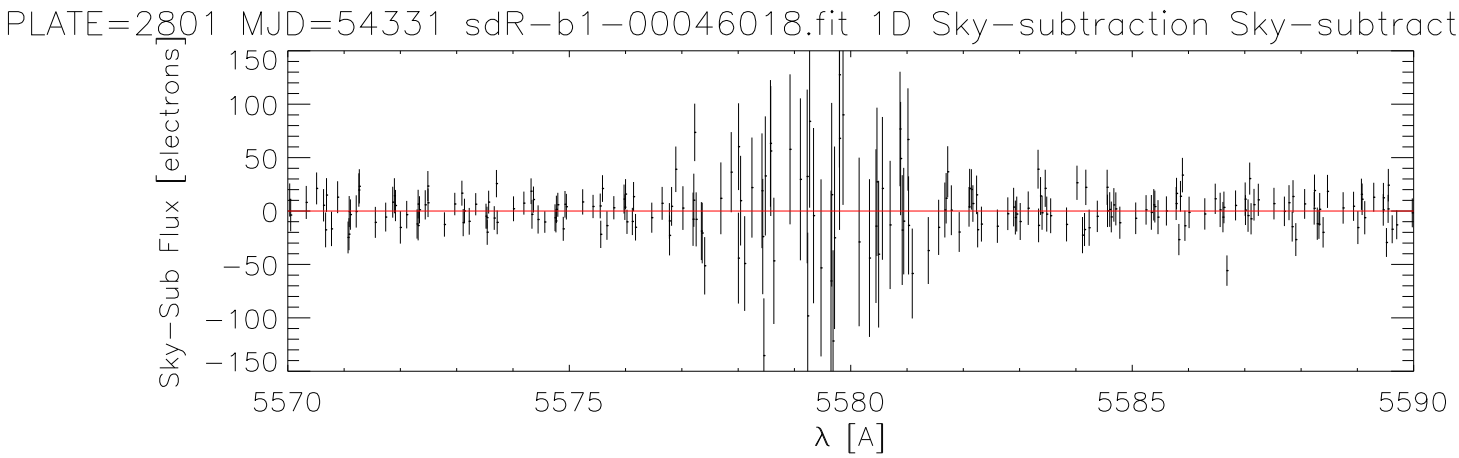

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

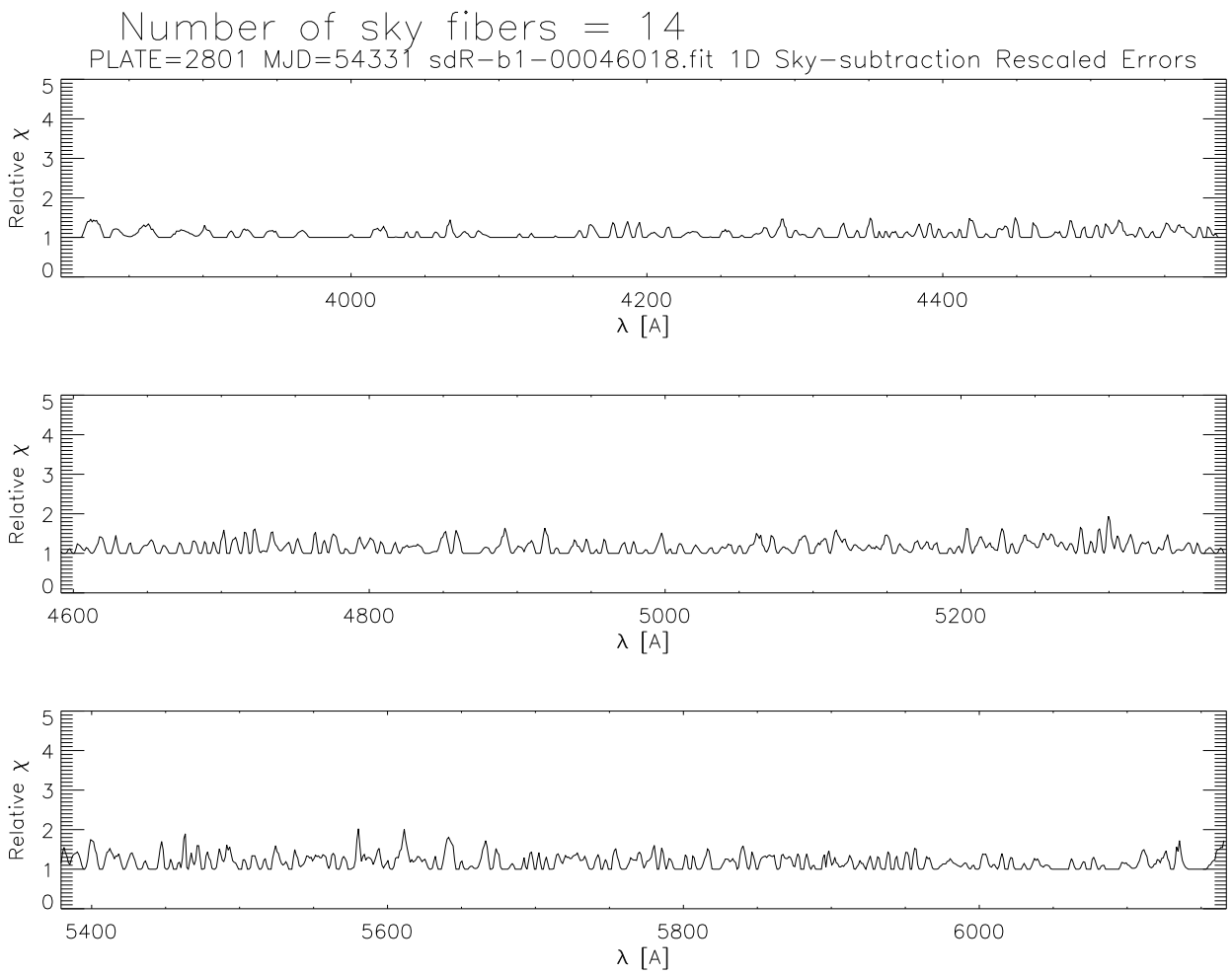

PLATE=2801 MJD=54331 Smooth superflat for sdR-b1-00046018.fit
1.5
1.0
0.5
0.0
1.020
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

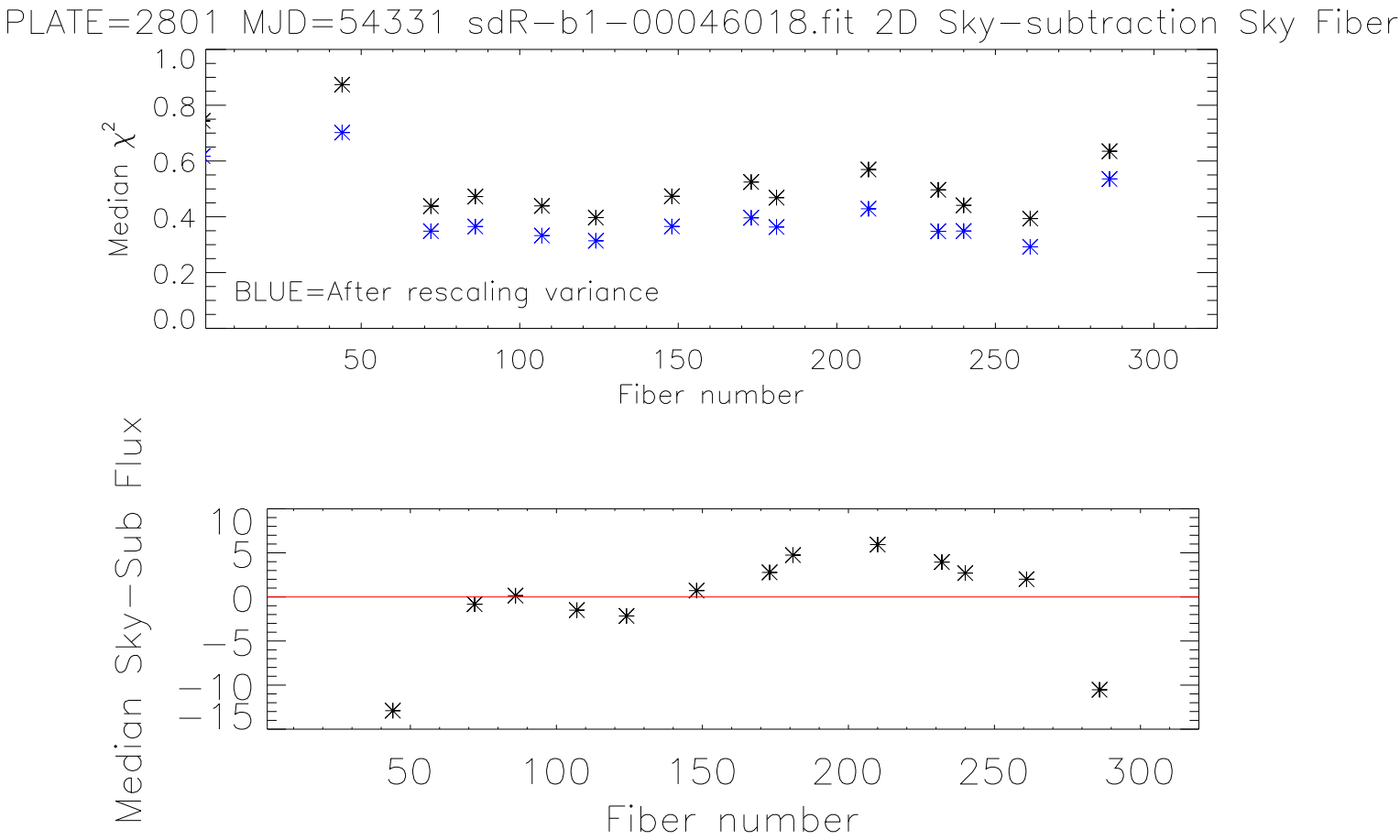
es= −0.0001

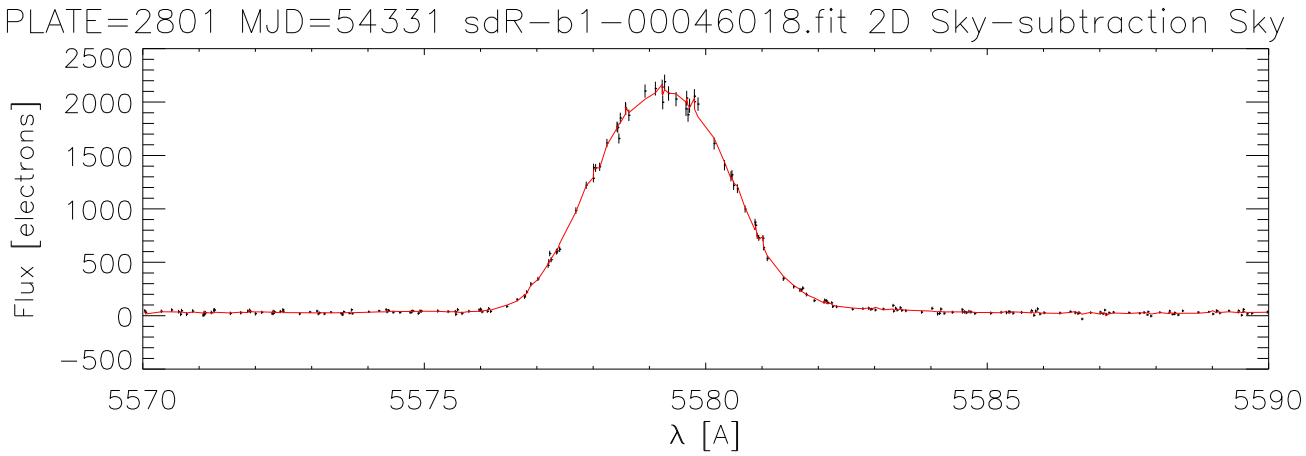

PLATE=2801 MJD=54331 sdR-b1-00046018.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

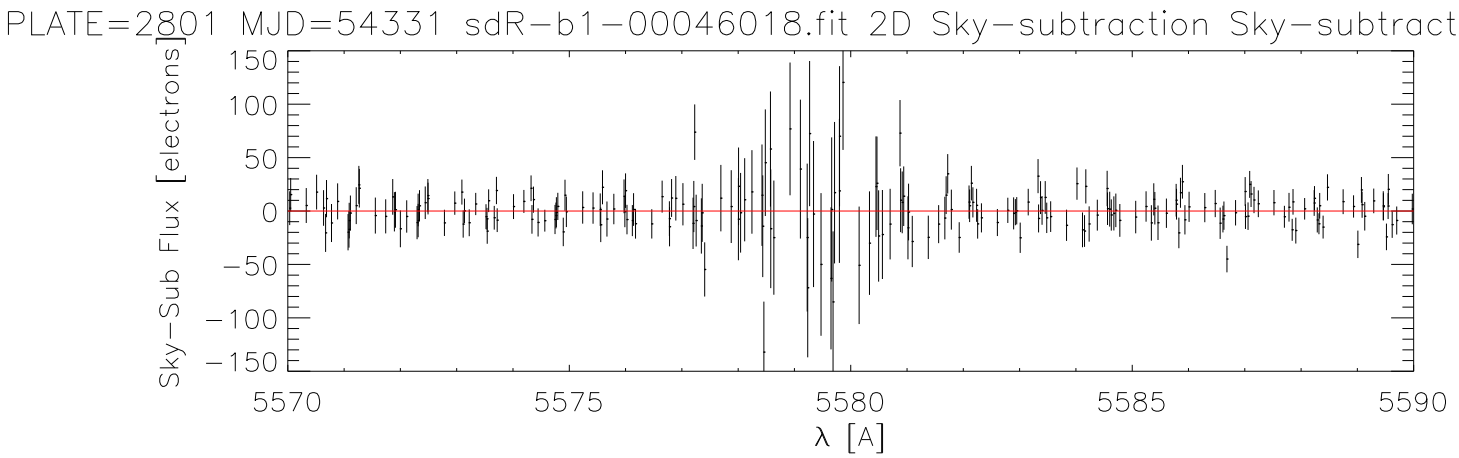

PLATE=2801 MJD=54331 sdR-b1-00046018.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

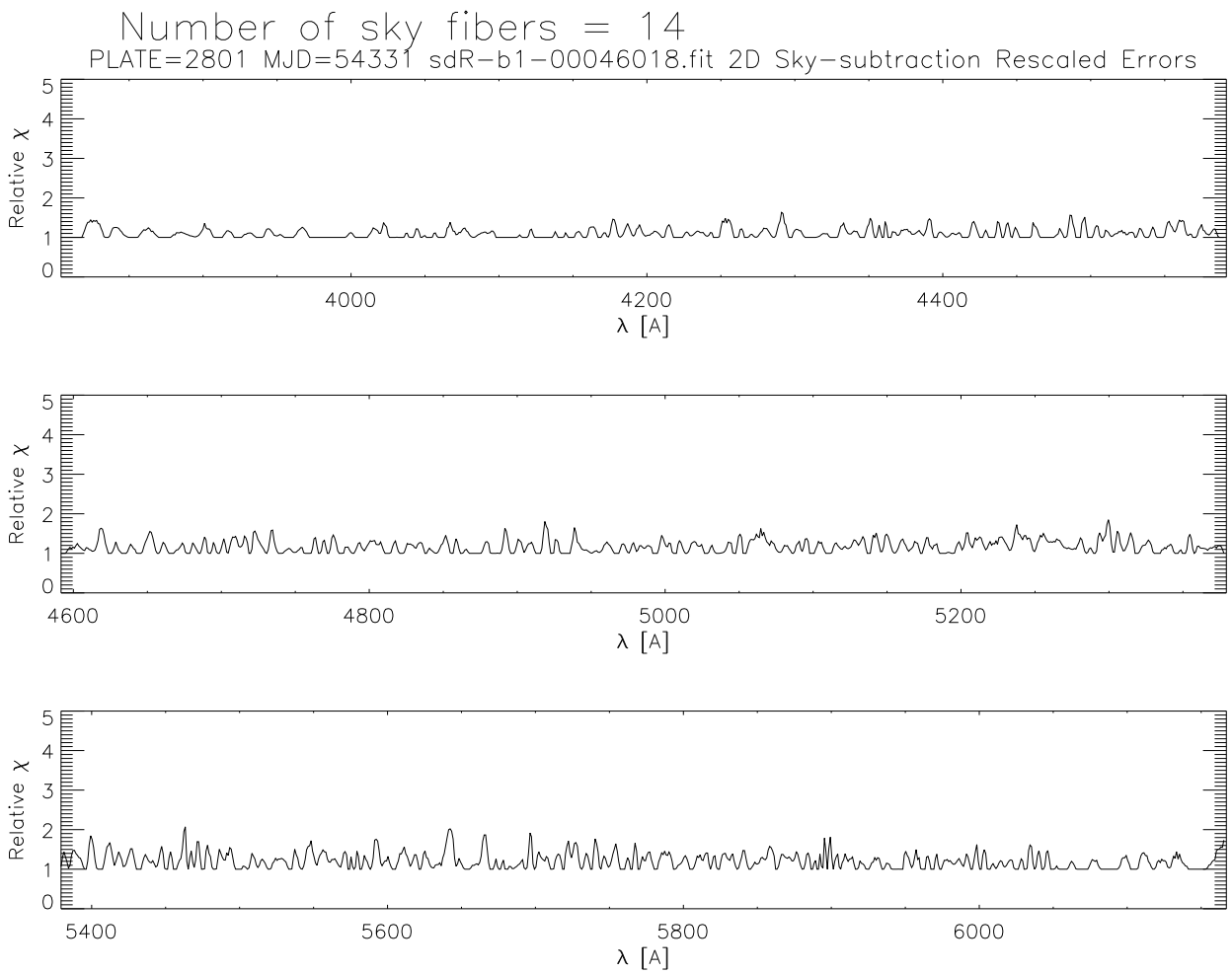

PLATE=2801 MJD=54331 sdR-b1-00046018.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

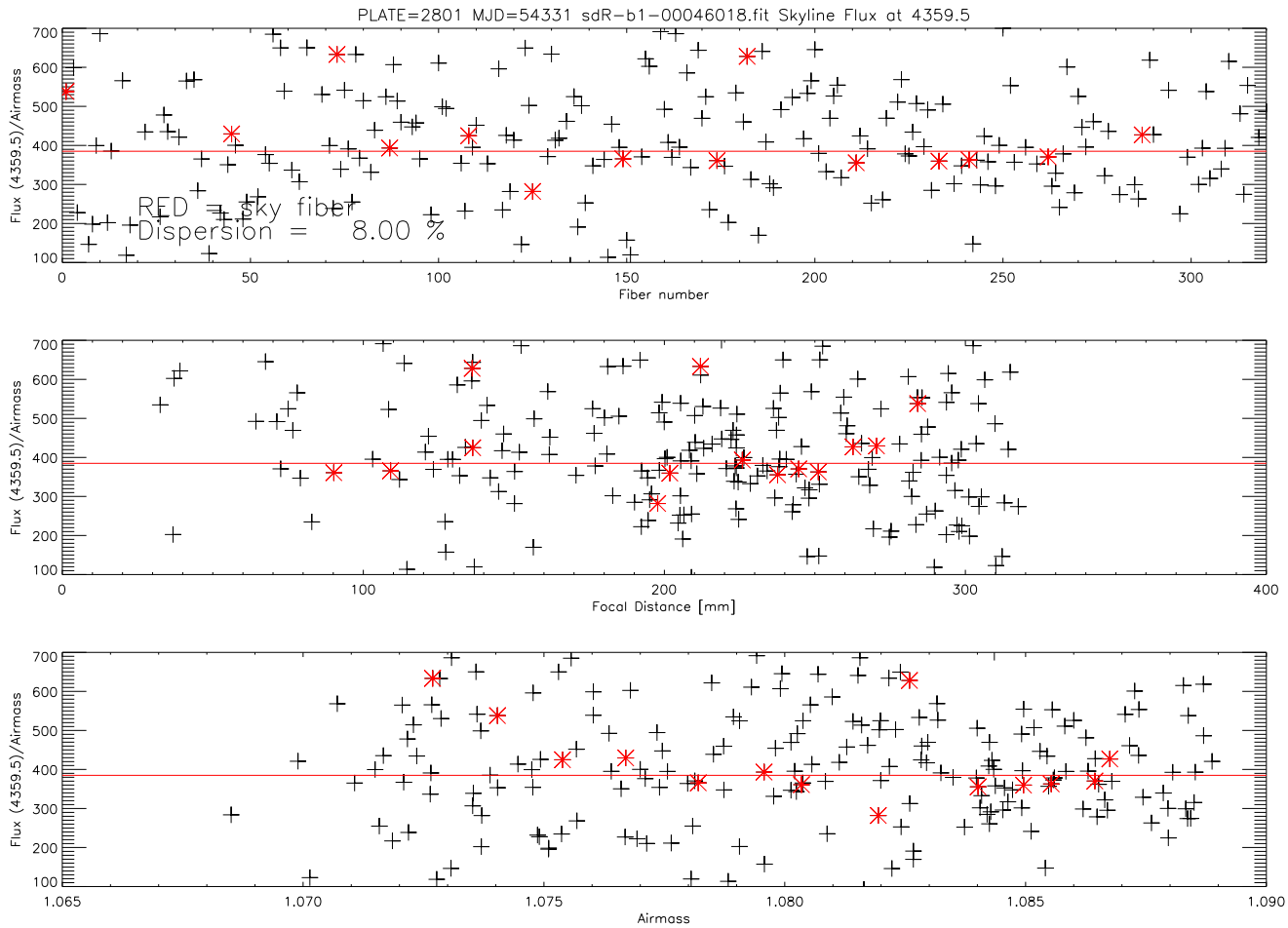

Number of sky fibers = 14
PLATE=2801 MJD=54331 sdR-b1-00046018.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

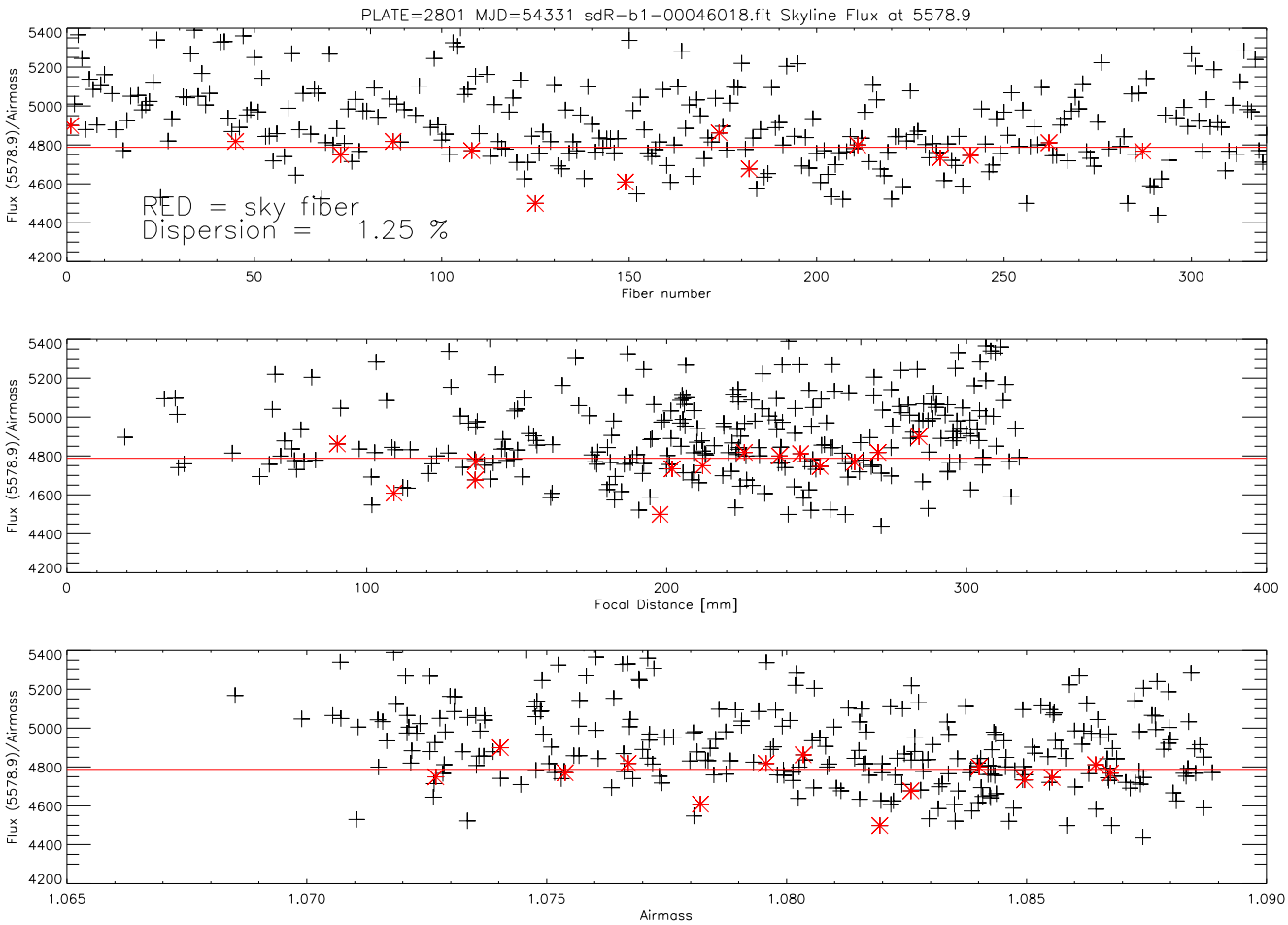

PLATE=2801 MJD=54331 sdR-b1-00046018.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

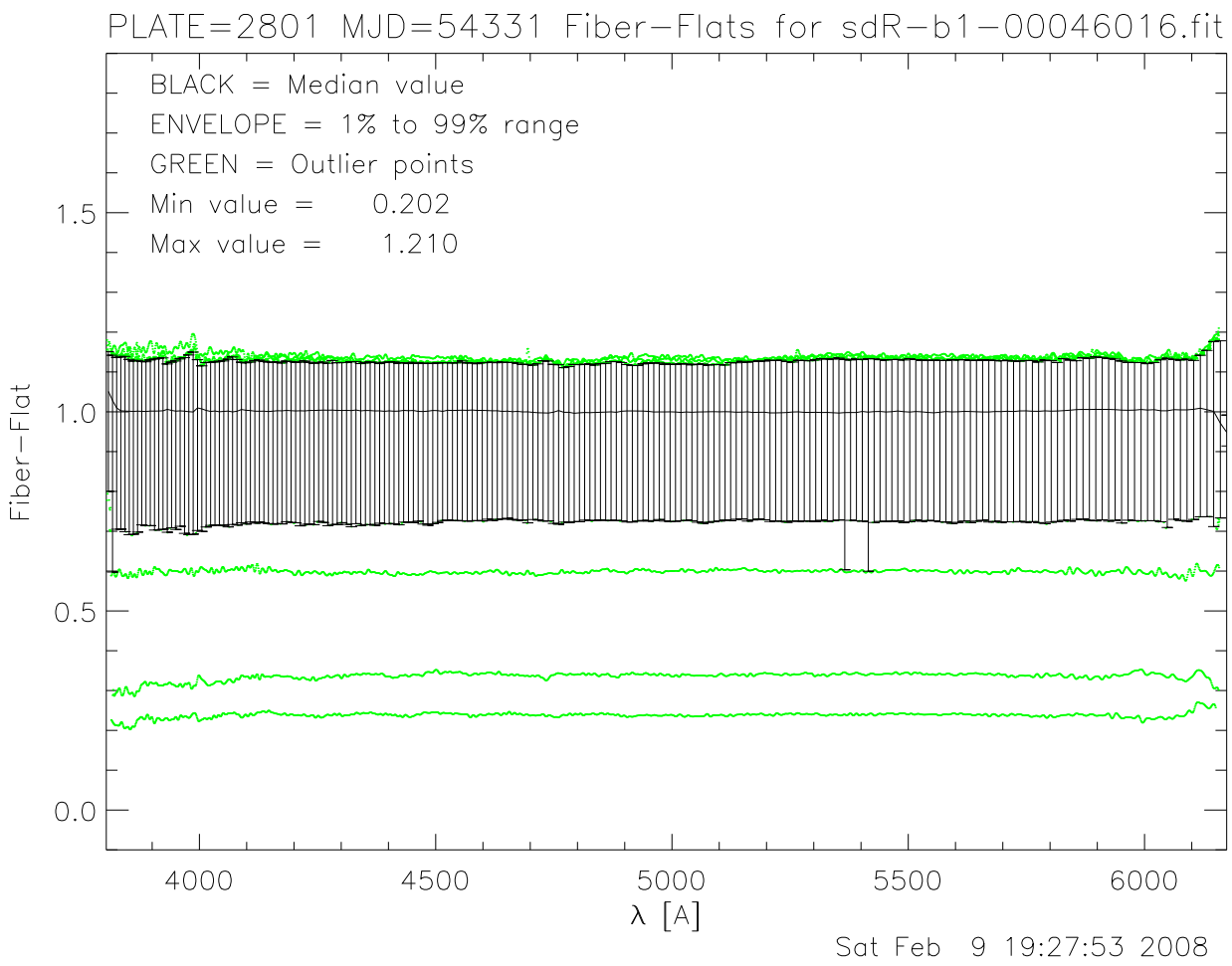

PLATE=2801 MJD=54331 sdR-b1-00046018.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

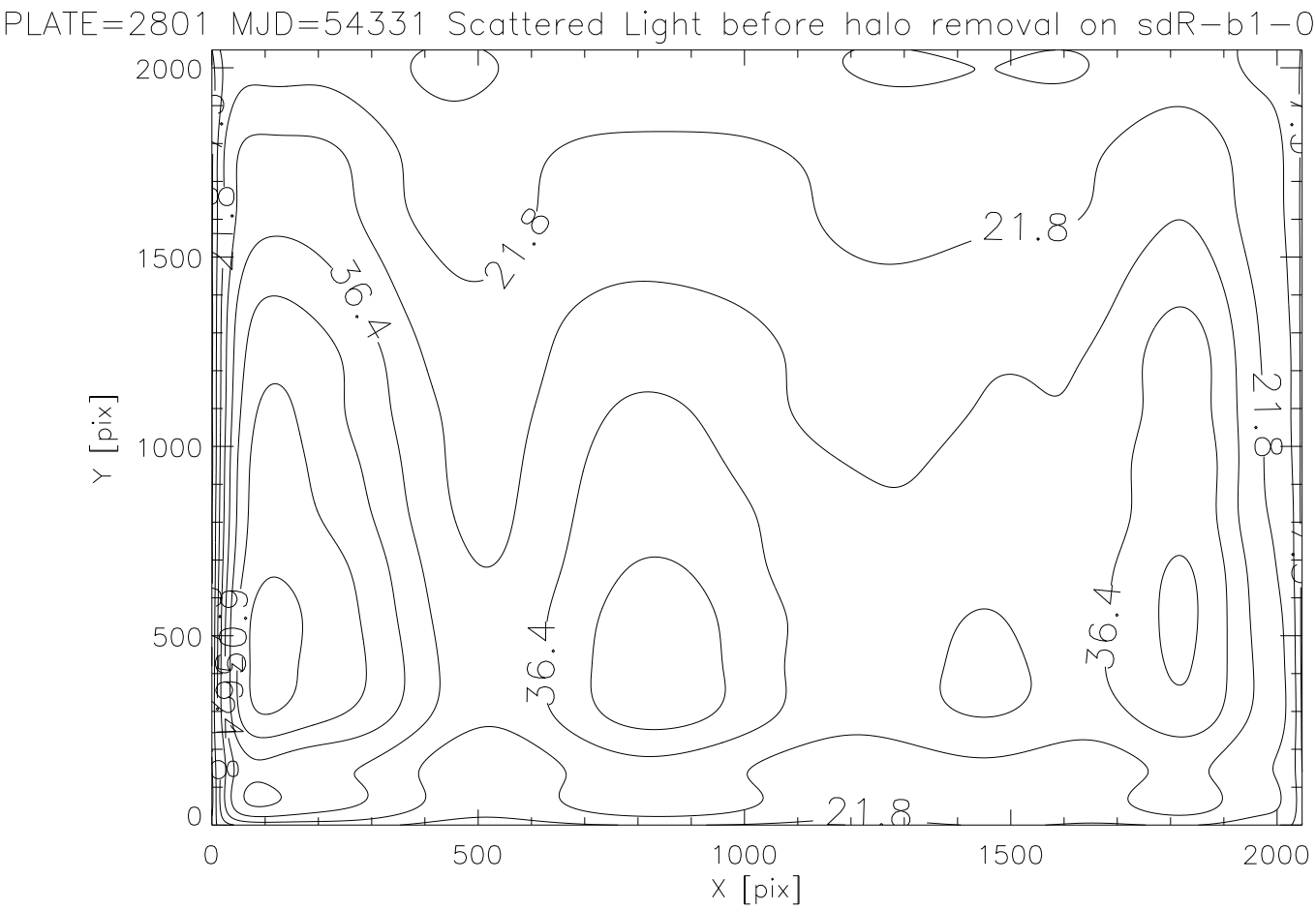

PLATE=2801 MJD=54331 sdR-b1-00046018.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

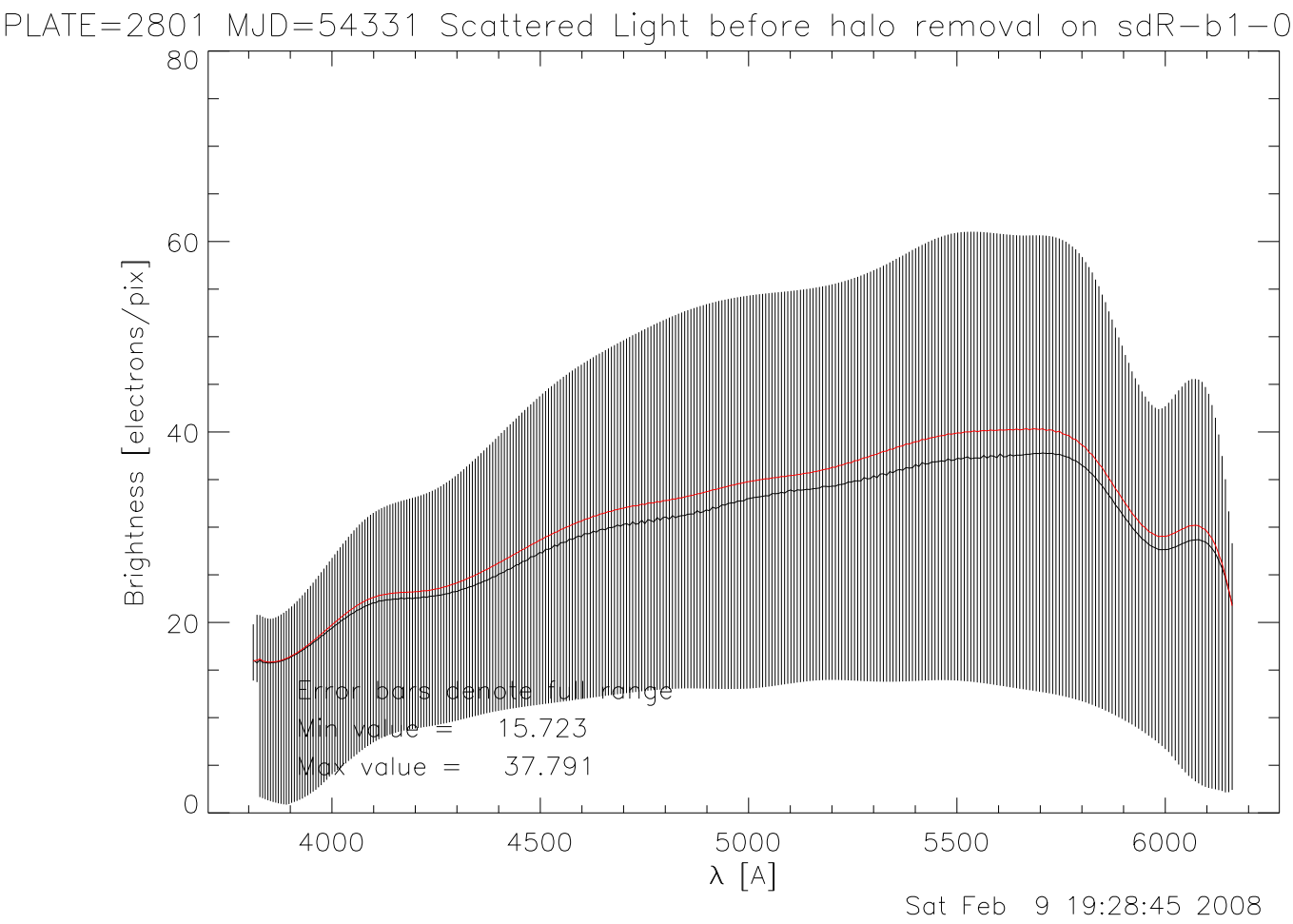

Number of sky fibers = 14
PLATE=2801 MJD=54331 sdR-b1-00046018.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

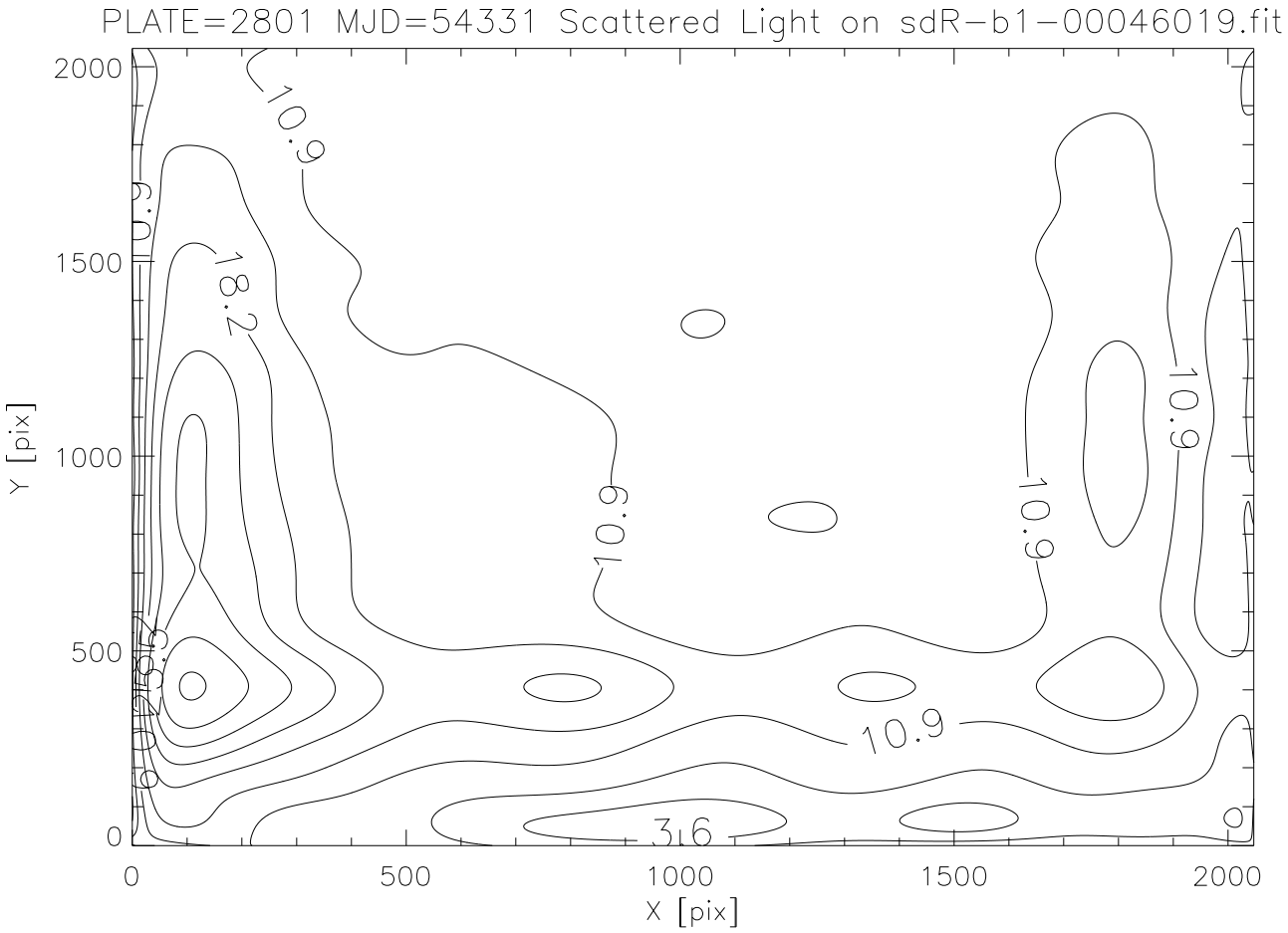

PLATE=2801 MJD=54331 sdR-b1-00046018.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.00 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

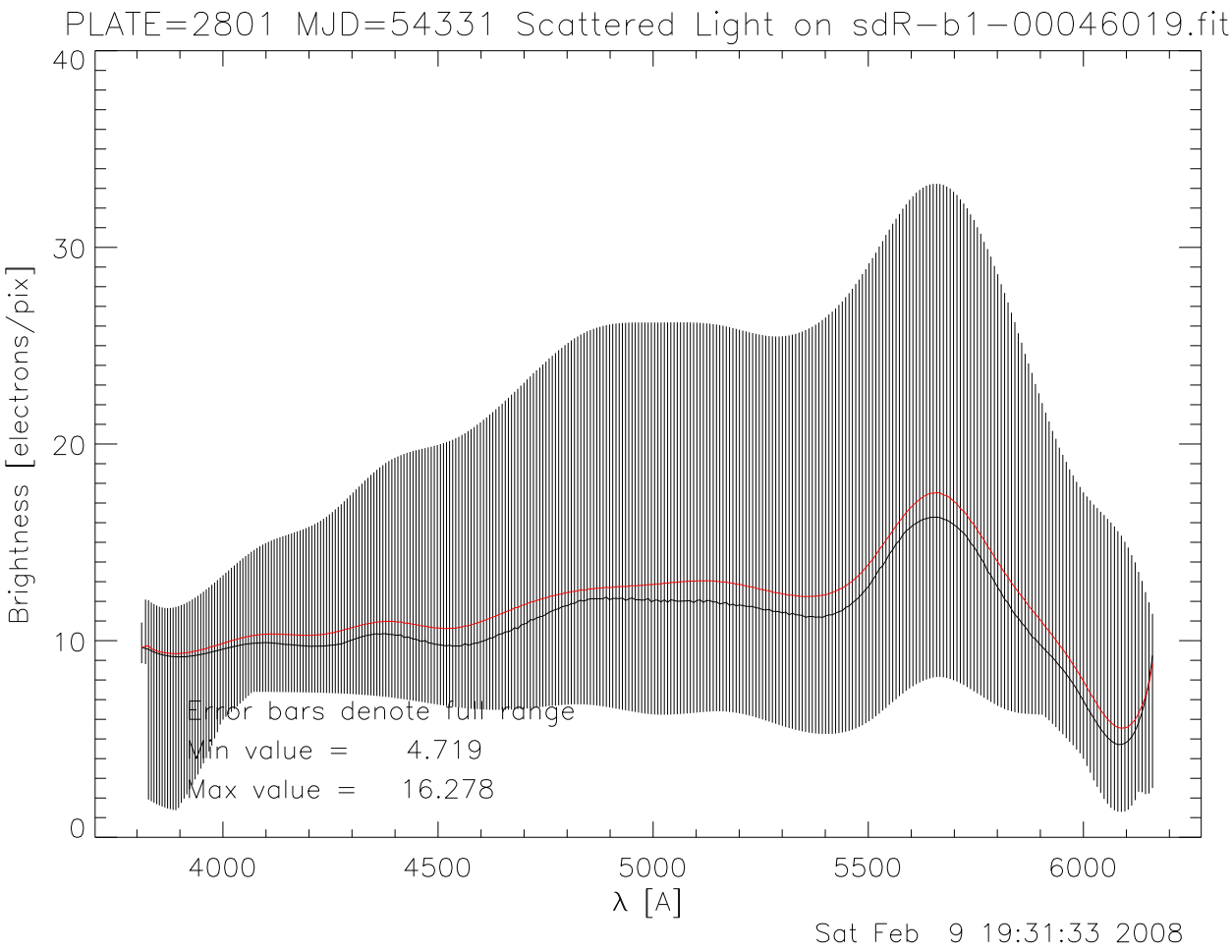

PLATE=2801 MJD=54331 sdR-b1-00046018.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.25 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

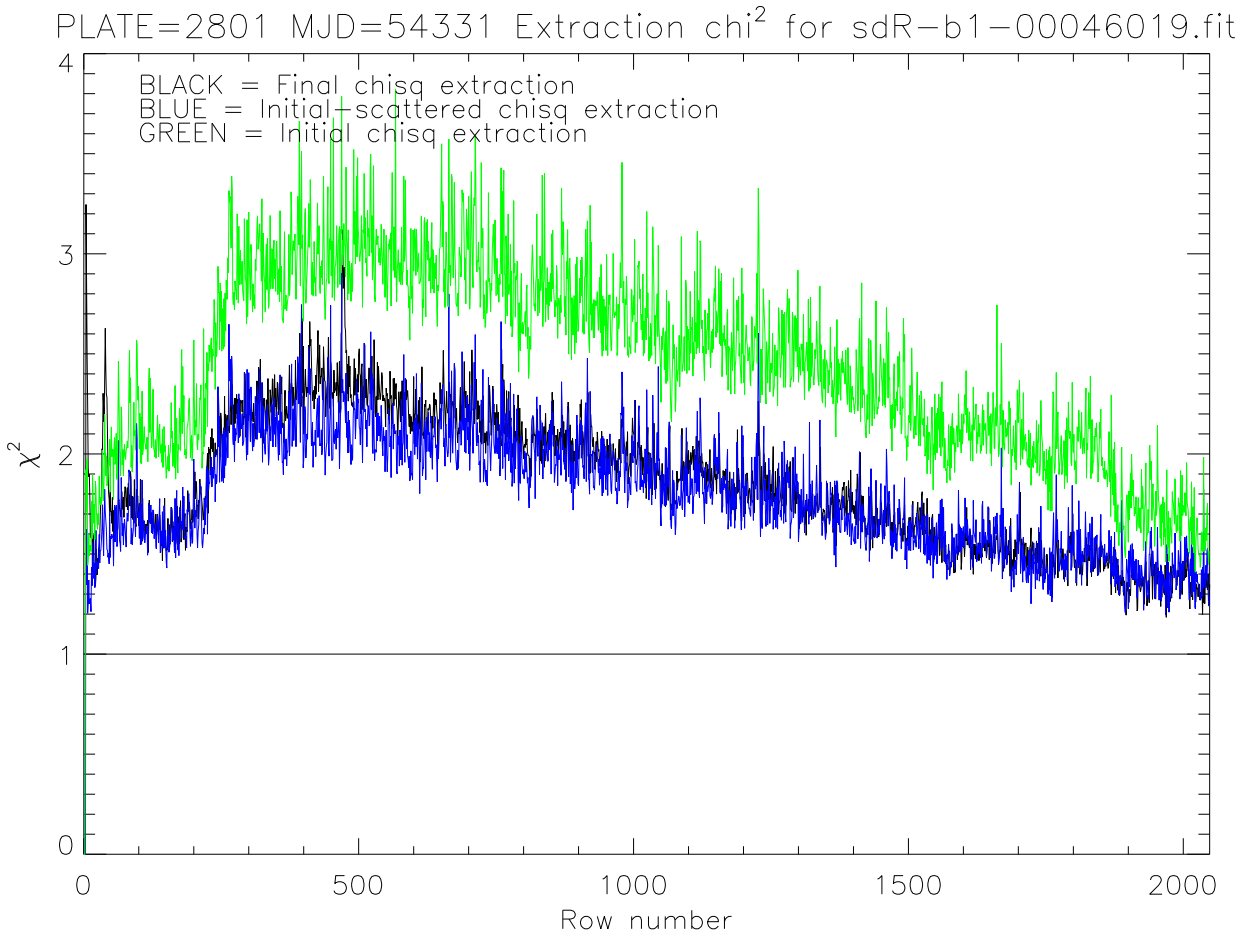

PLATE=2801 MJD=54331 Fiber-Flats for sdR-b1-00046016.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.202
Max value = 1.210
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 19:27:53 2008

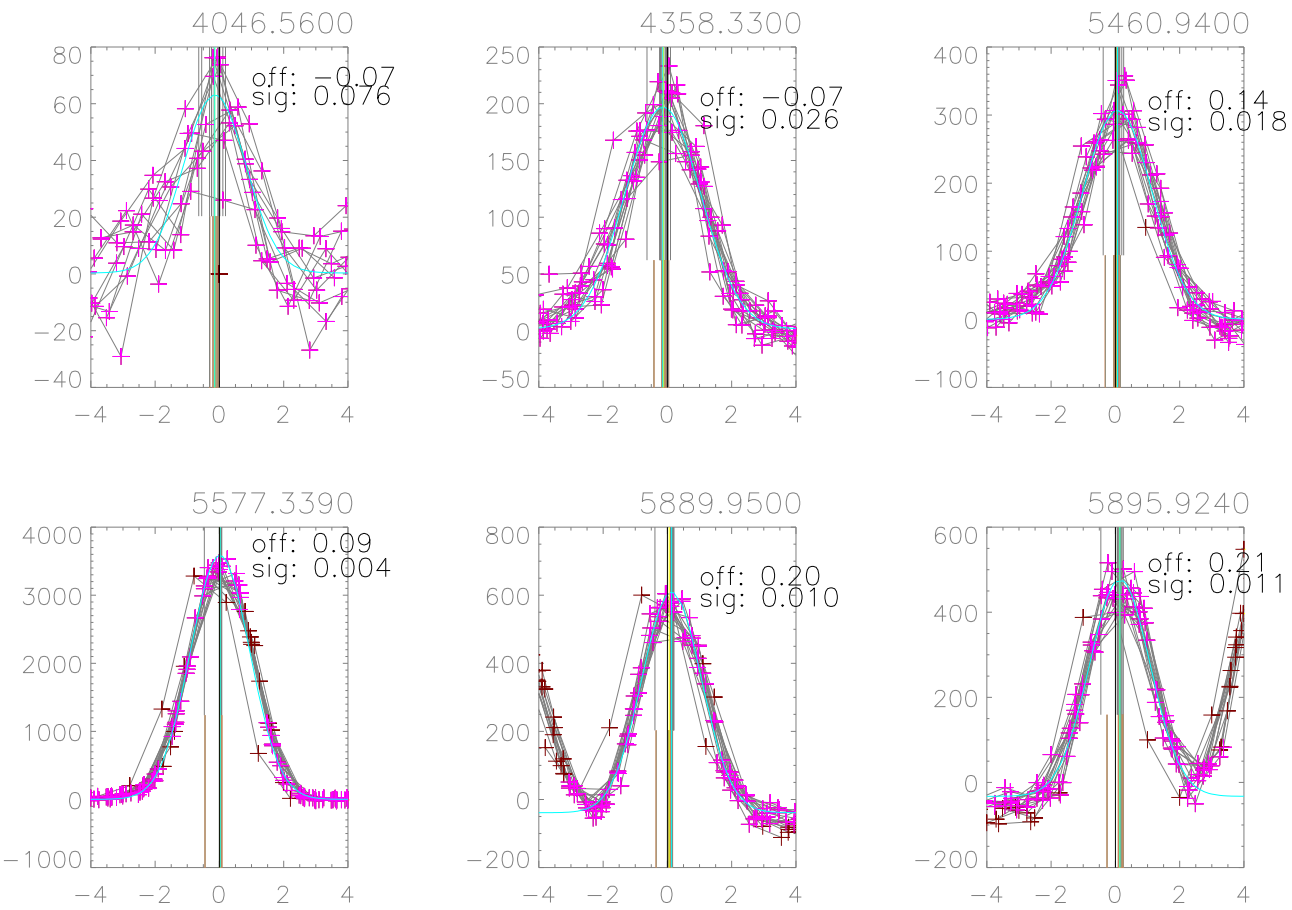

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR−b1−00046019.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
21.8
36.4
21.8
21.8
36.4
36.4
21.8

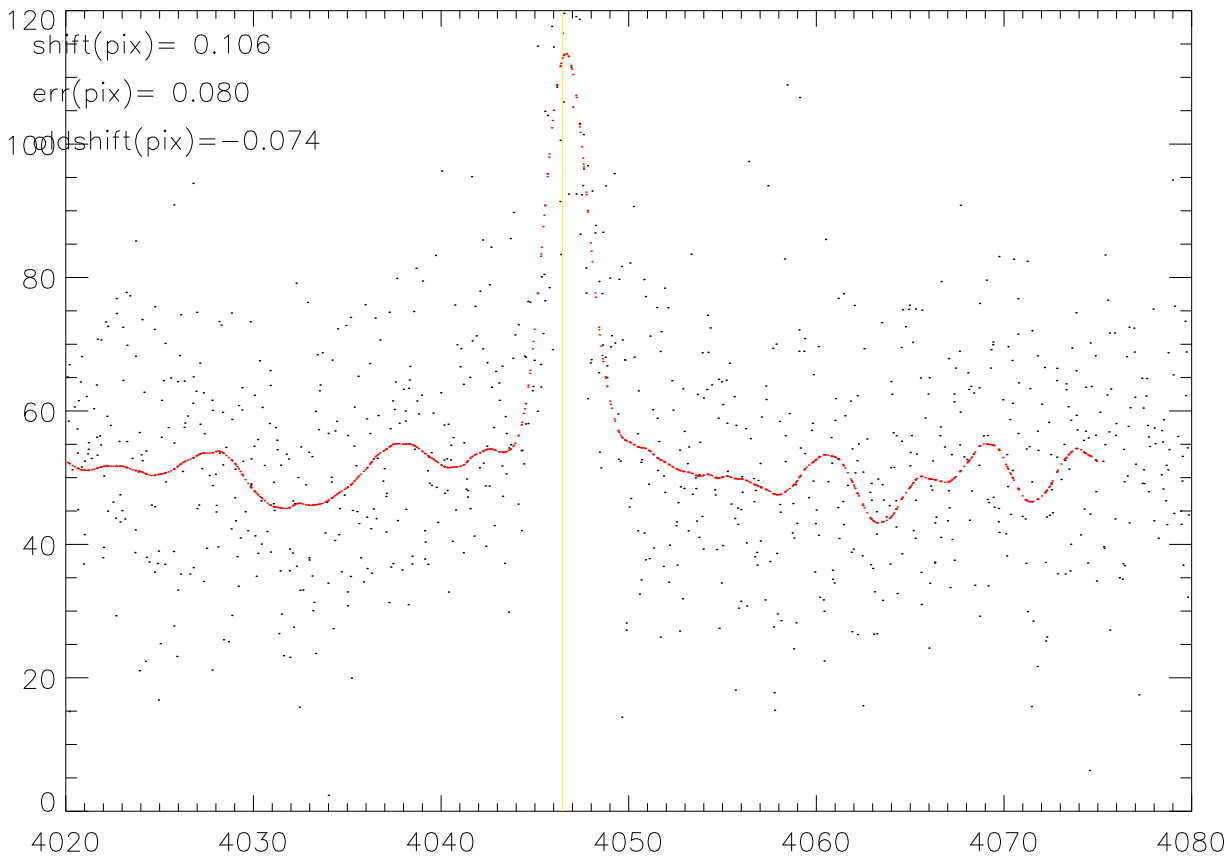

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR−b1−00046019.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 15.723
Max value = 37.791
Sat Feb 9 19:28:45 2008

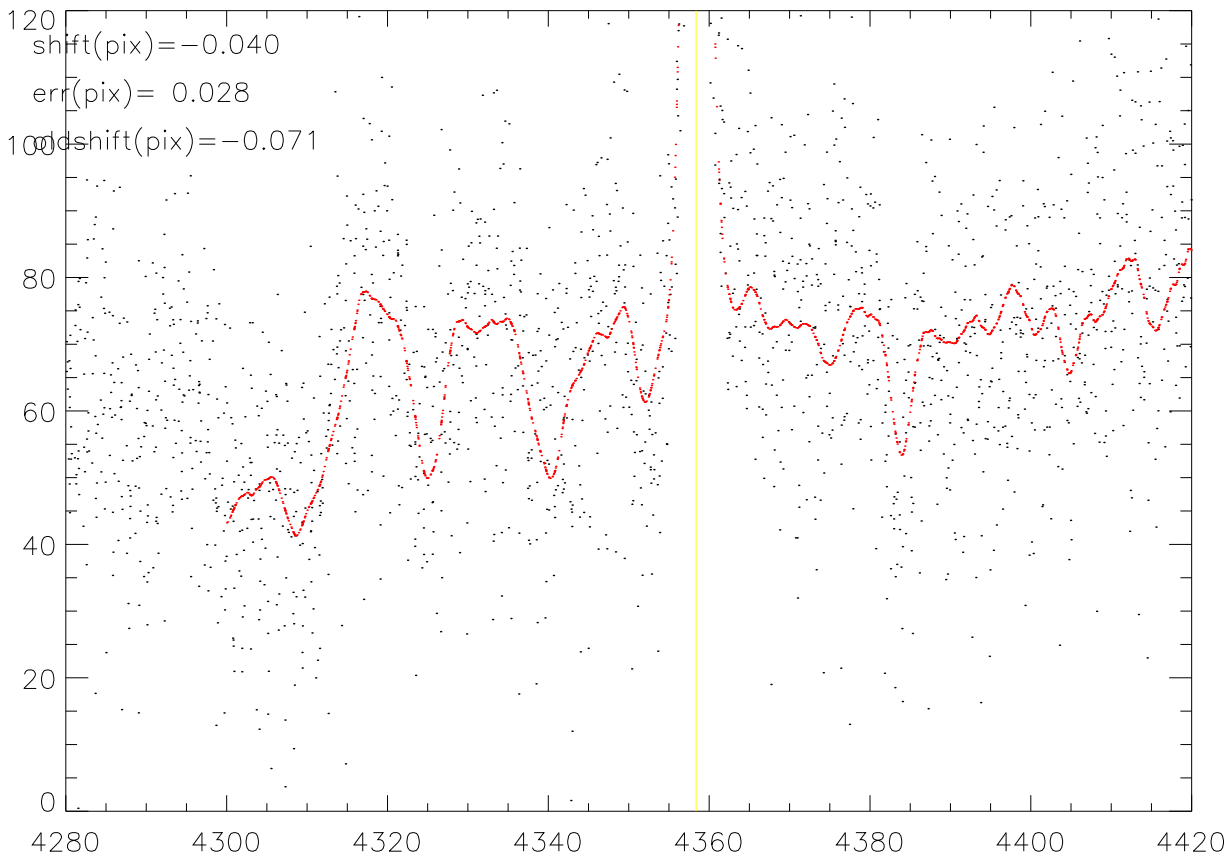

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046019.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.9
18.2
3.6

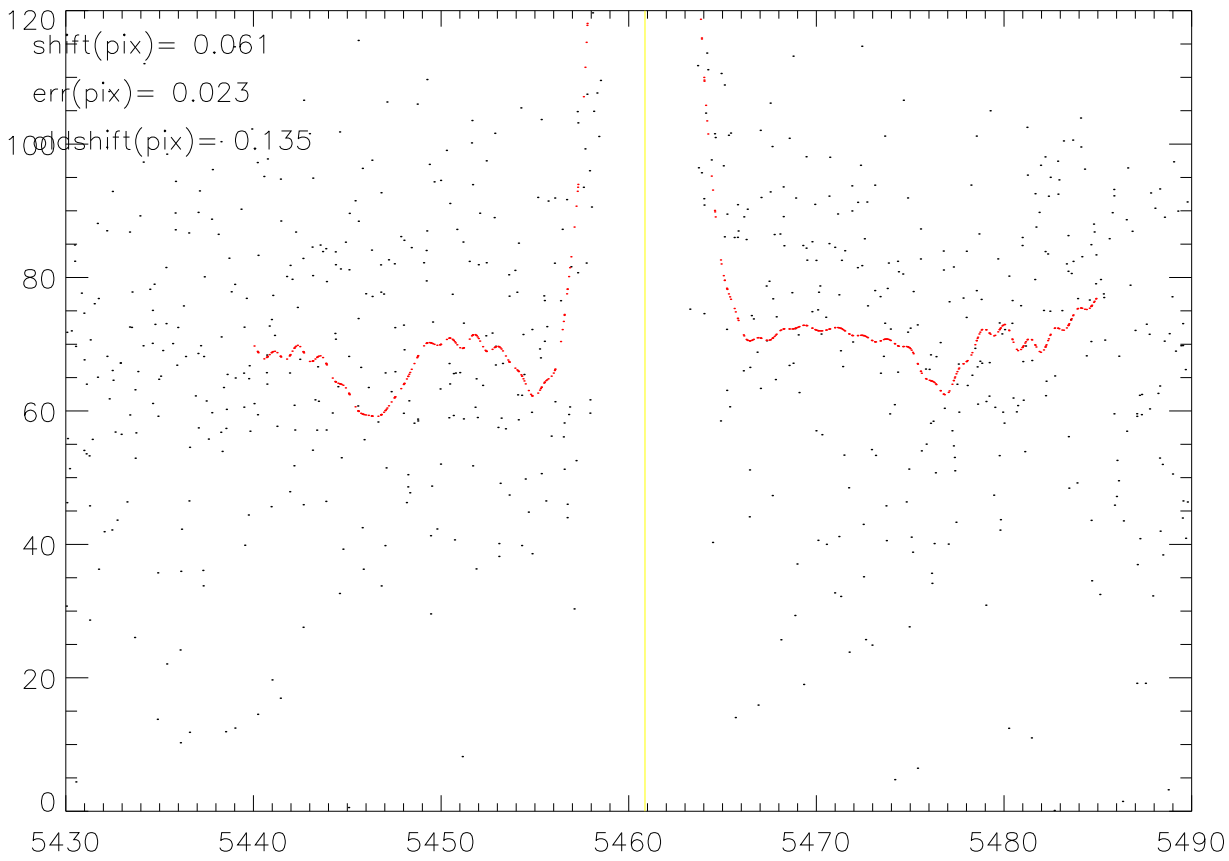

PLATE=2801 MJD=54331 Scattered Light on sdR-b1-00046019.fit
Brightness [electrons/pix]
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.719
Max value = 16.278
Sat Feb 9 19:31:33 2008

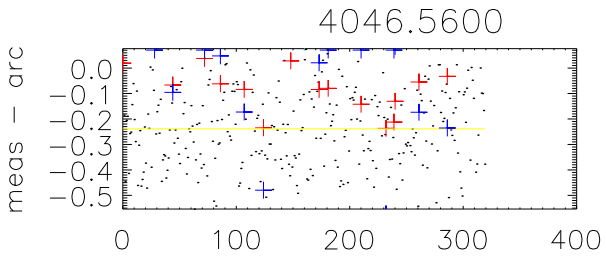

PLATE=2801 MJD=54331 Extraction chi^2 for sdR-b1-00046019.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

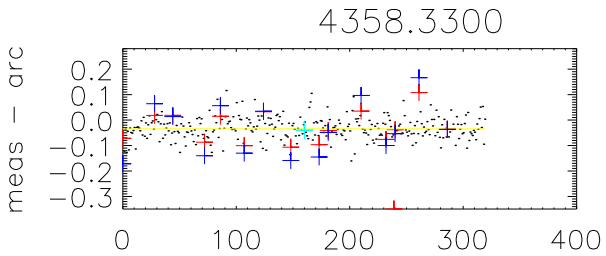

4046.5600
off: −0.07
sig: 0.076
4358.3300
off: −0.07
sig: 0.026
5460.9400
off: 0.14
sig: 0.018
5577.3390
off: 0.09
sig: 0.004
5889.9500
off: 0.20
sig: 0.010
5895.9240
off: 0.21
sig: 0.011

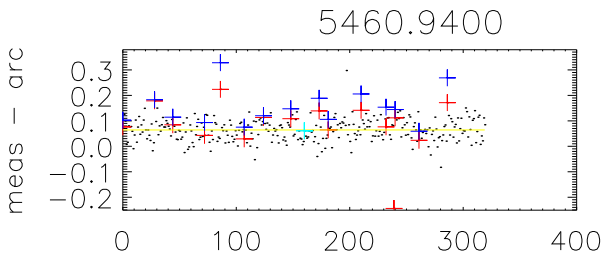

shift(pix)= 0.106
err(pix)= 0.080
oldshift(pix)=−0.074
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

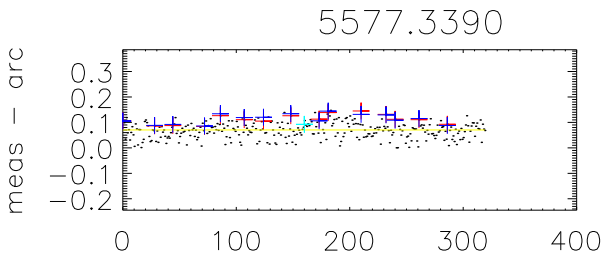

shift(pix)=−0.040
err(pix)= 0.028
oldshift(pix)=−0.071
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

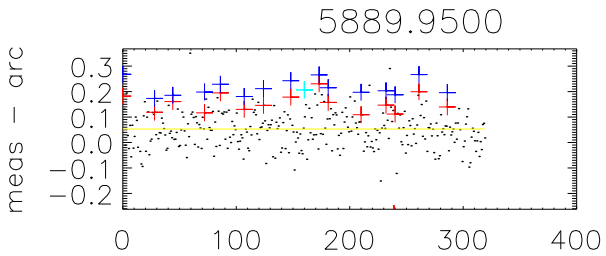

shift(pix)= 0.061
err(pix)= 0.023
oldshift(pix)= 0.135
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

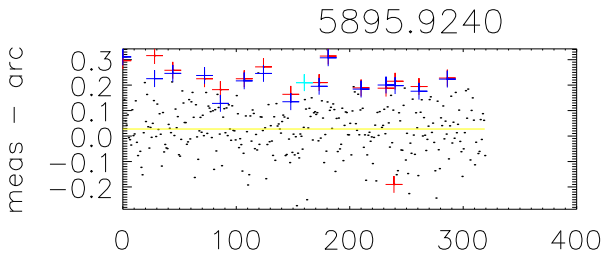

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

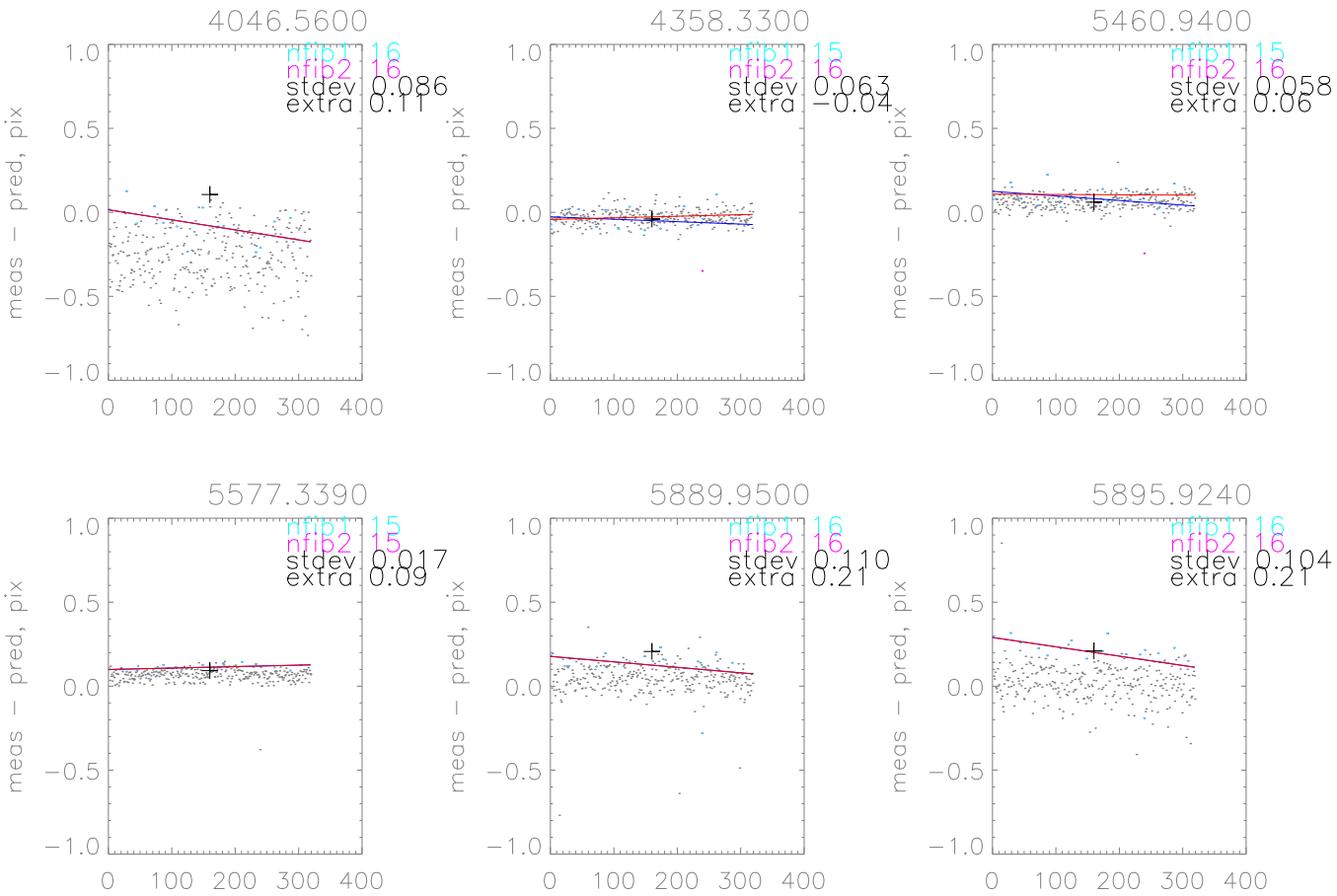

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

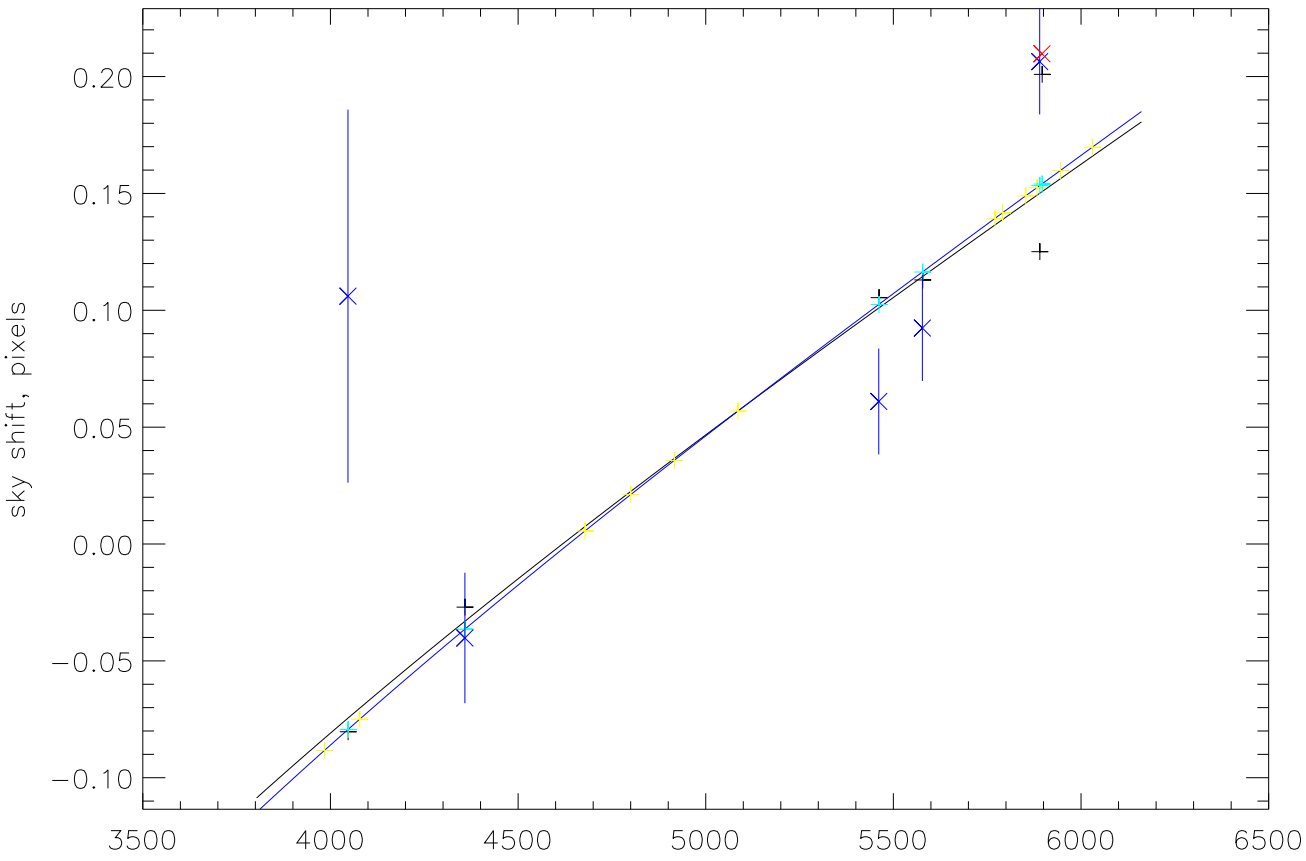

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

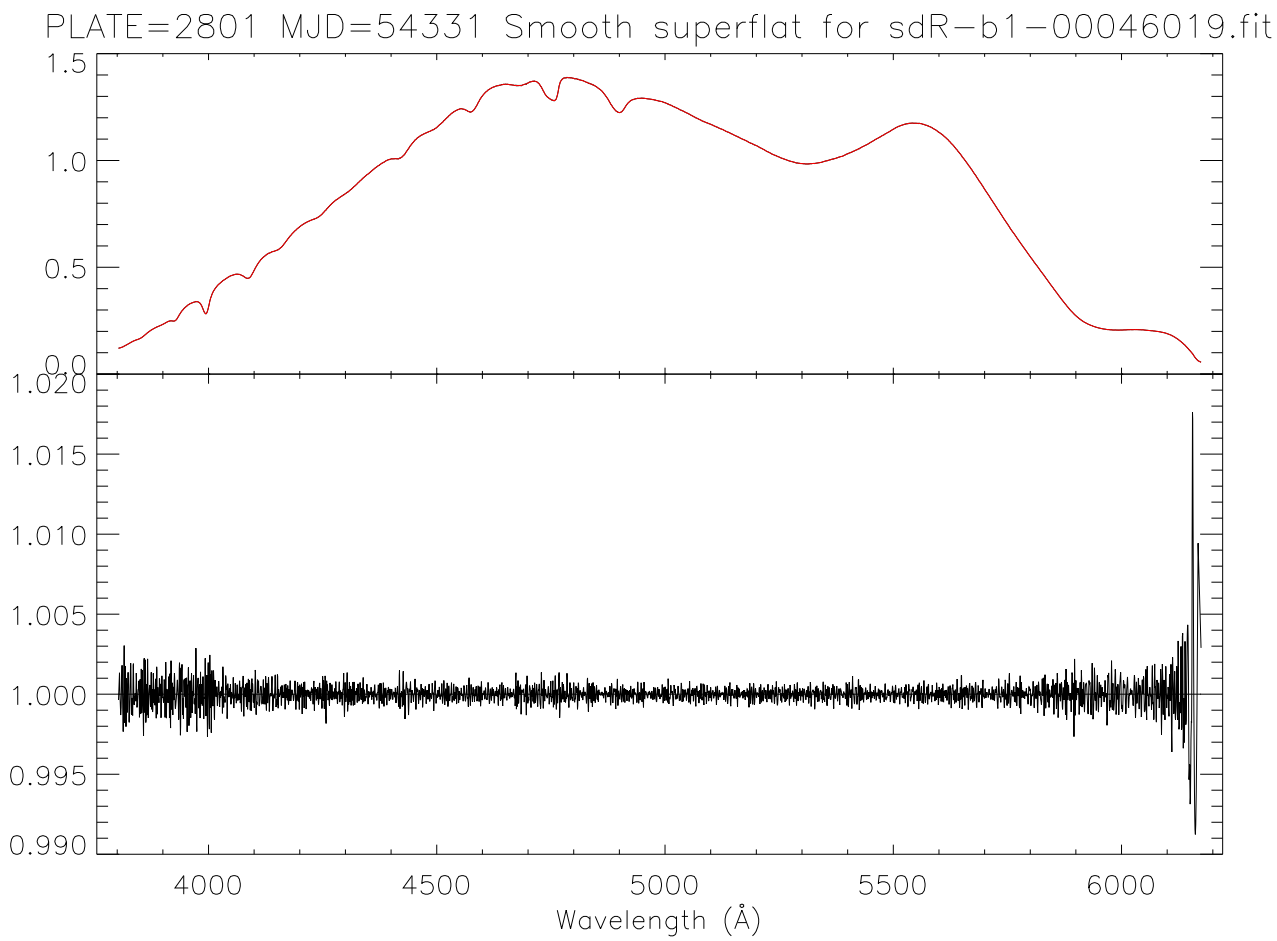

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

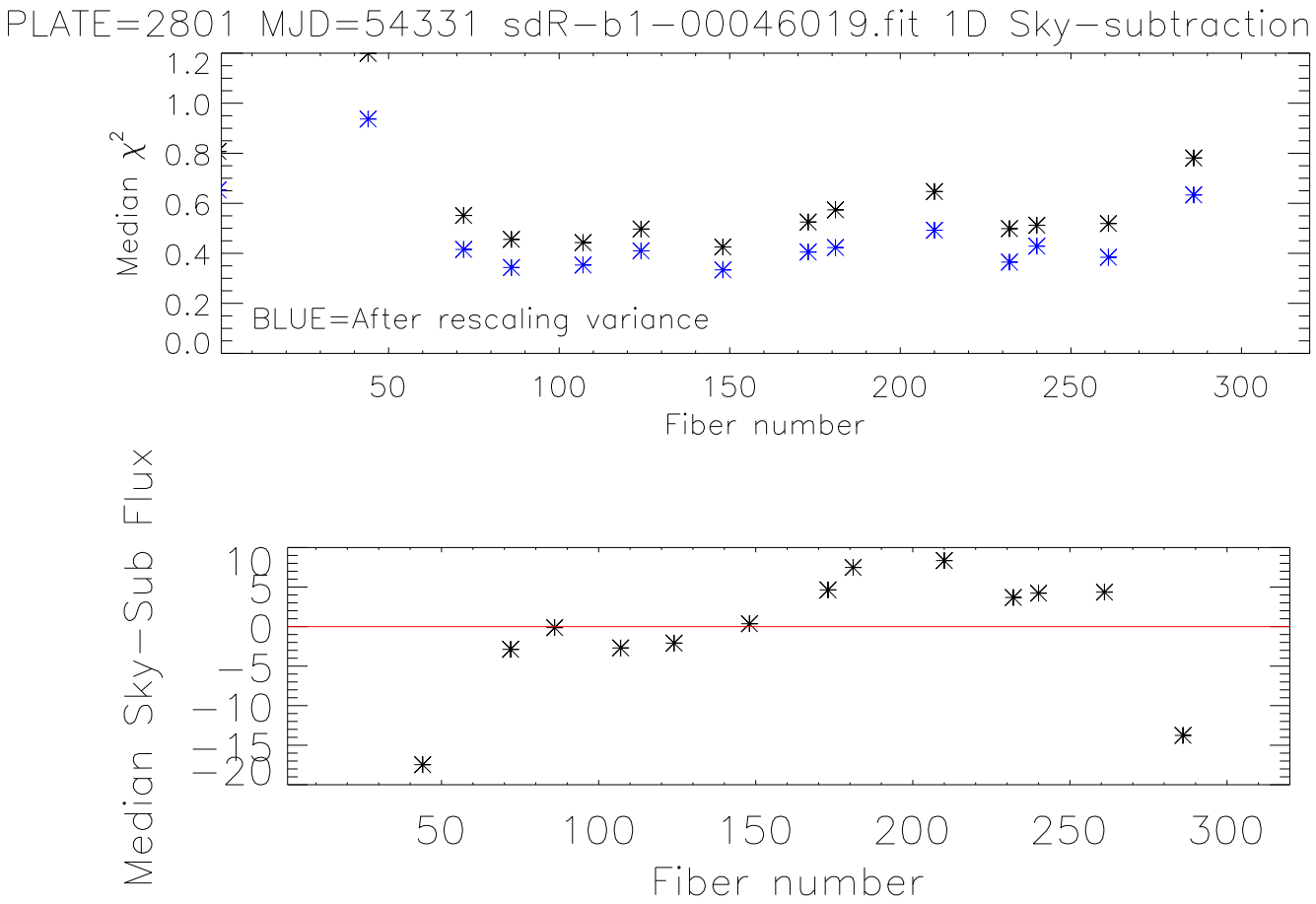

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

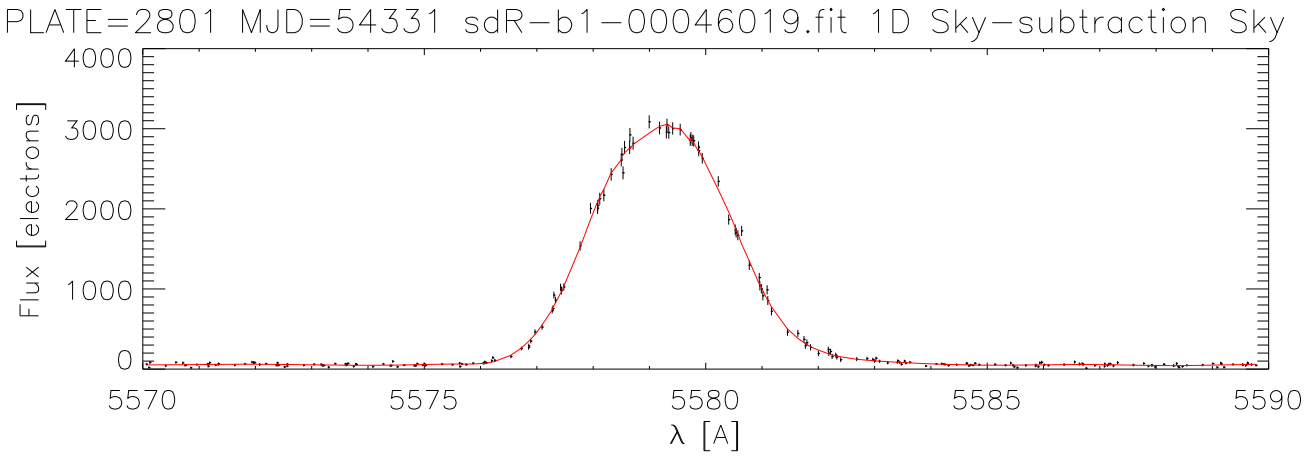

4046.5600
nfib1 16
nfib2 16
stdev 0.086
extra 0.11
4358.3300
nfib1 15
nfib2 16
stdev 0.063
extra −0.04
5460.9400
nfib1 15
nfib2 16
stdev 0.058
extra 0.06
5577.3390
nfib1 15
nfib2 15
stdev 0.017
extra 0.09
5889.9500
nfib1 16
nfib2 16
stdev 0.110
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.104
extra 0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

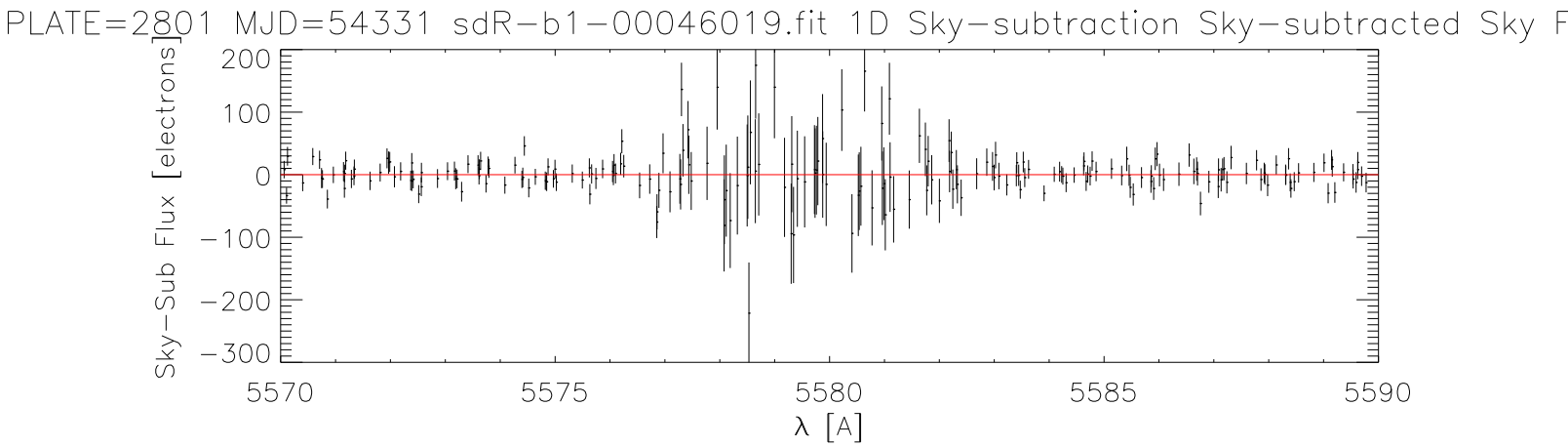

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

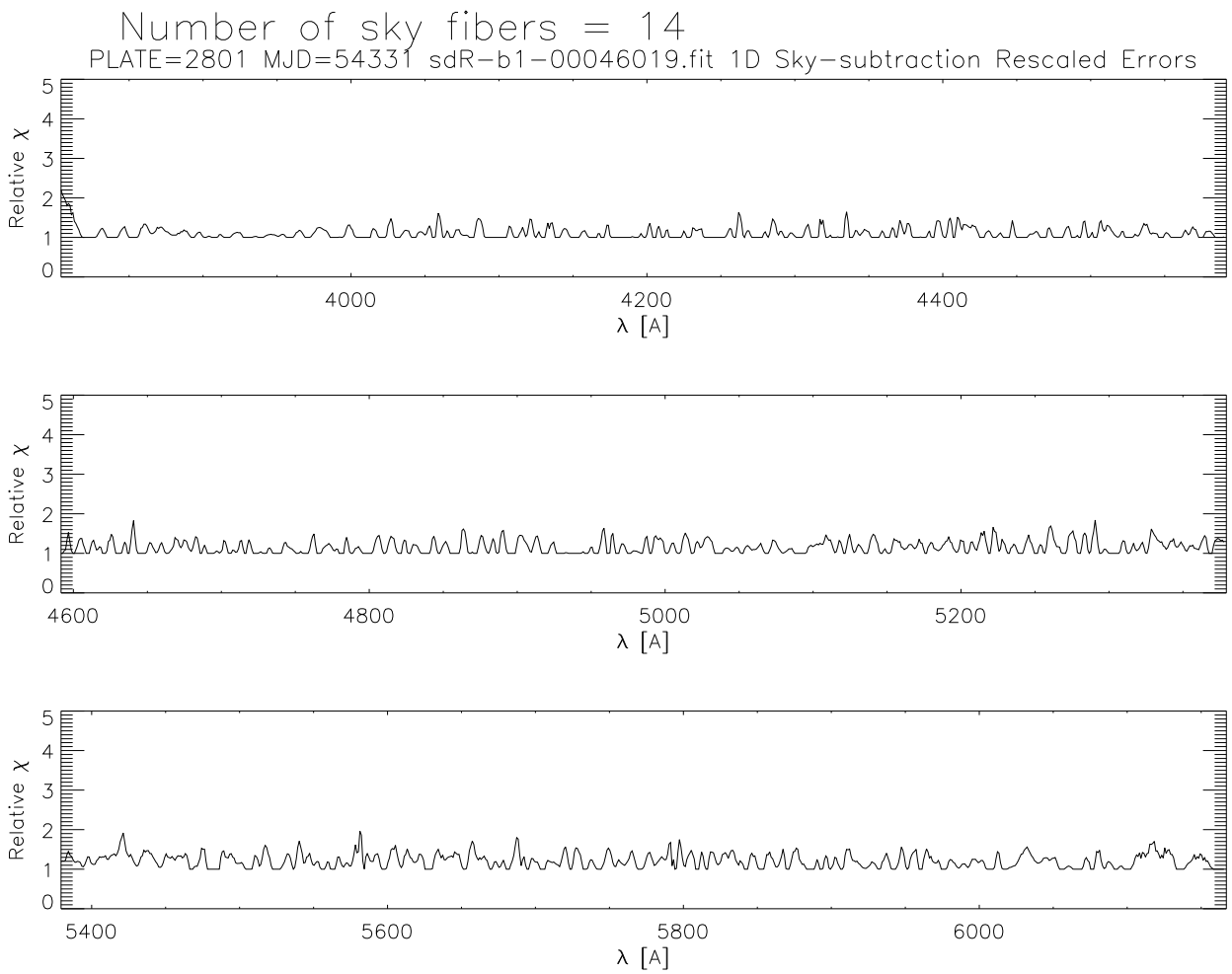
es= −0.0001

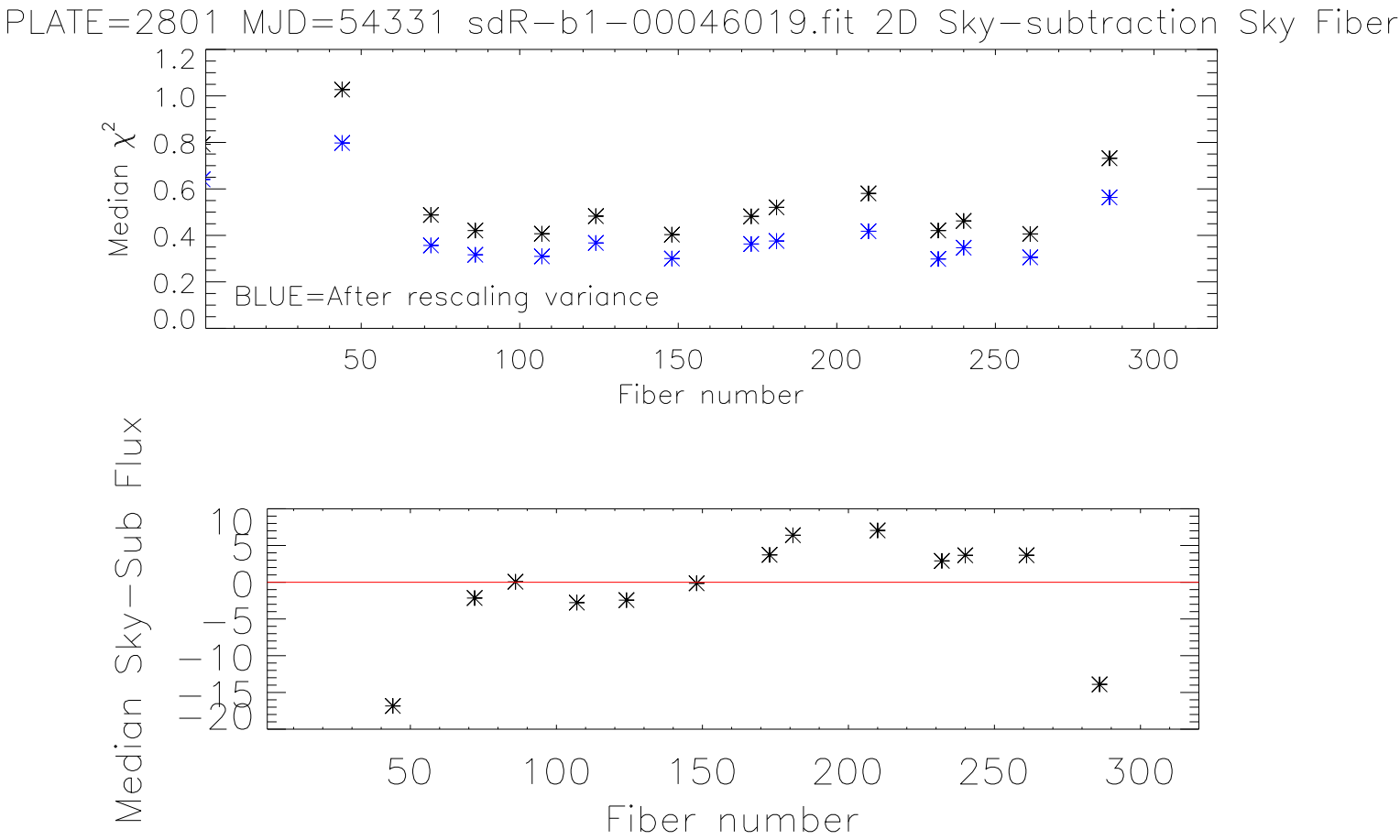

PLATE=2801 MJD=54331 Smooth superflat for sdR−b1−00046019.fit
1.5
1.0
0.5
0.0
1.020
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

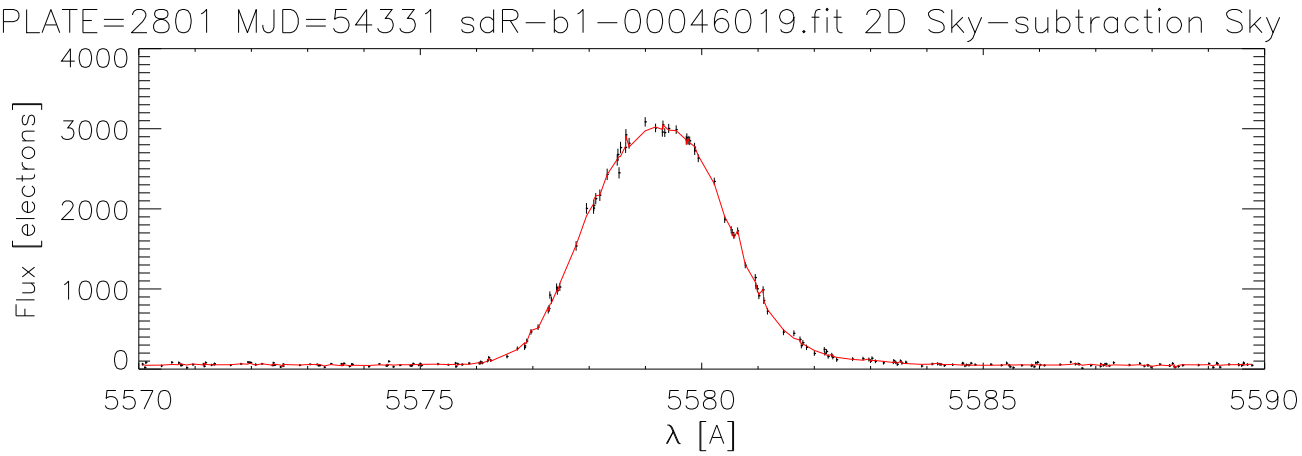

PLATE=2801 MJD=54331 sdR-b1-00046019.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

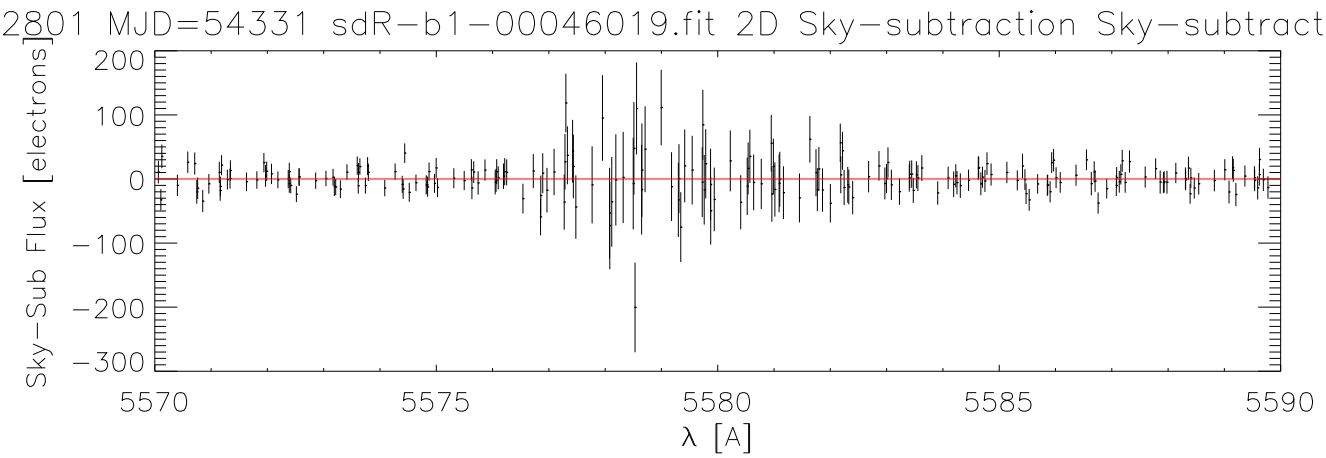

PLATE=2801 MJD=54331 sdR-b1-00046019.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

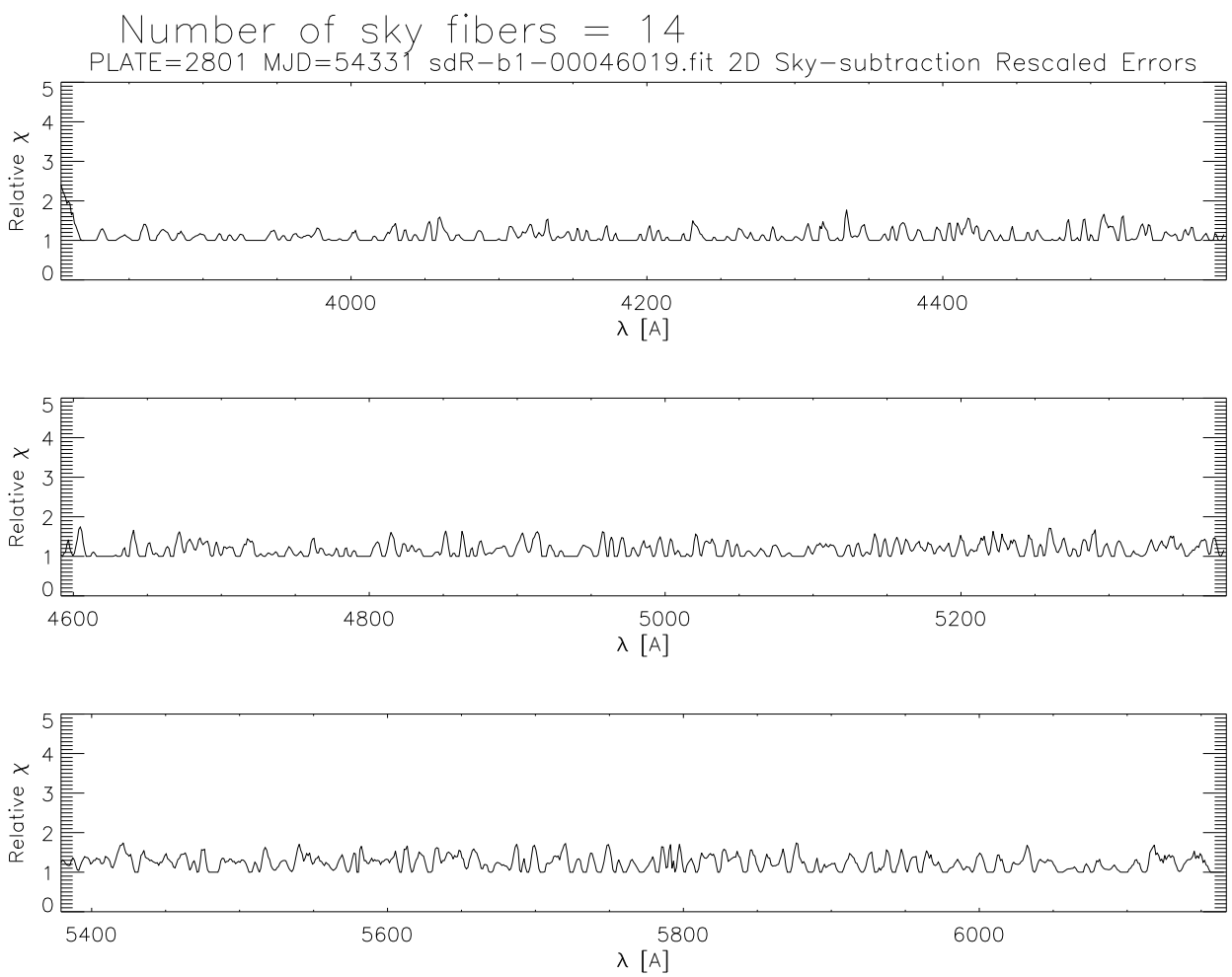

PLATE=2801 MJD=54331 sdR-b1-00046019.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

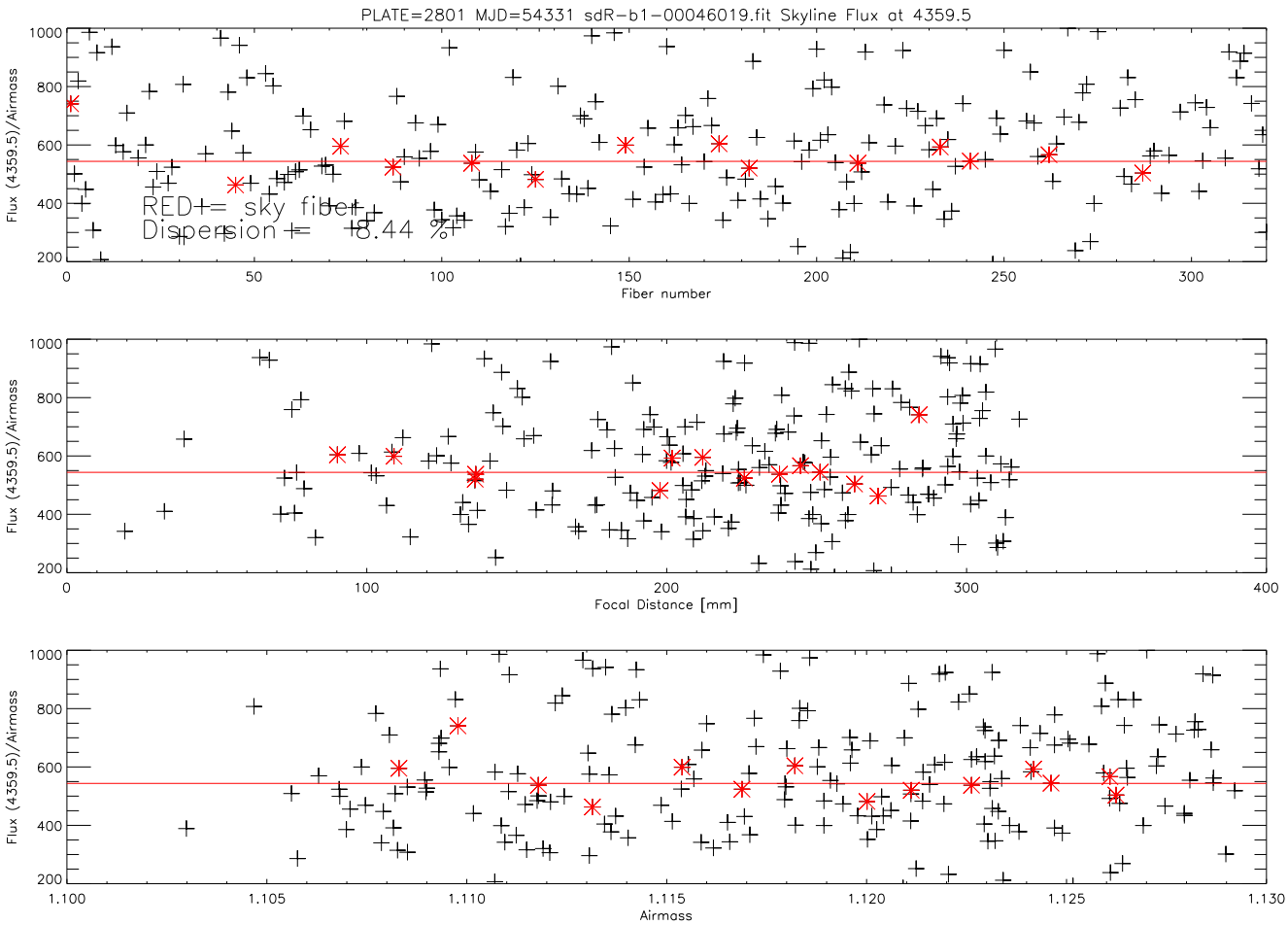

Number of sky fibers = 14
PLATE=2801 MJD=54331 sdR-b1-00046019.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

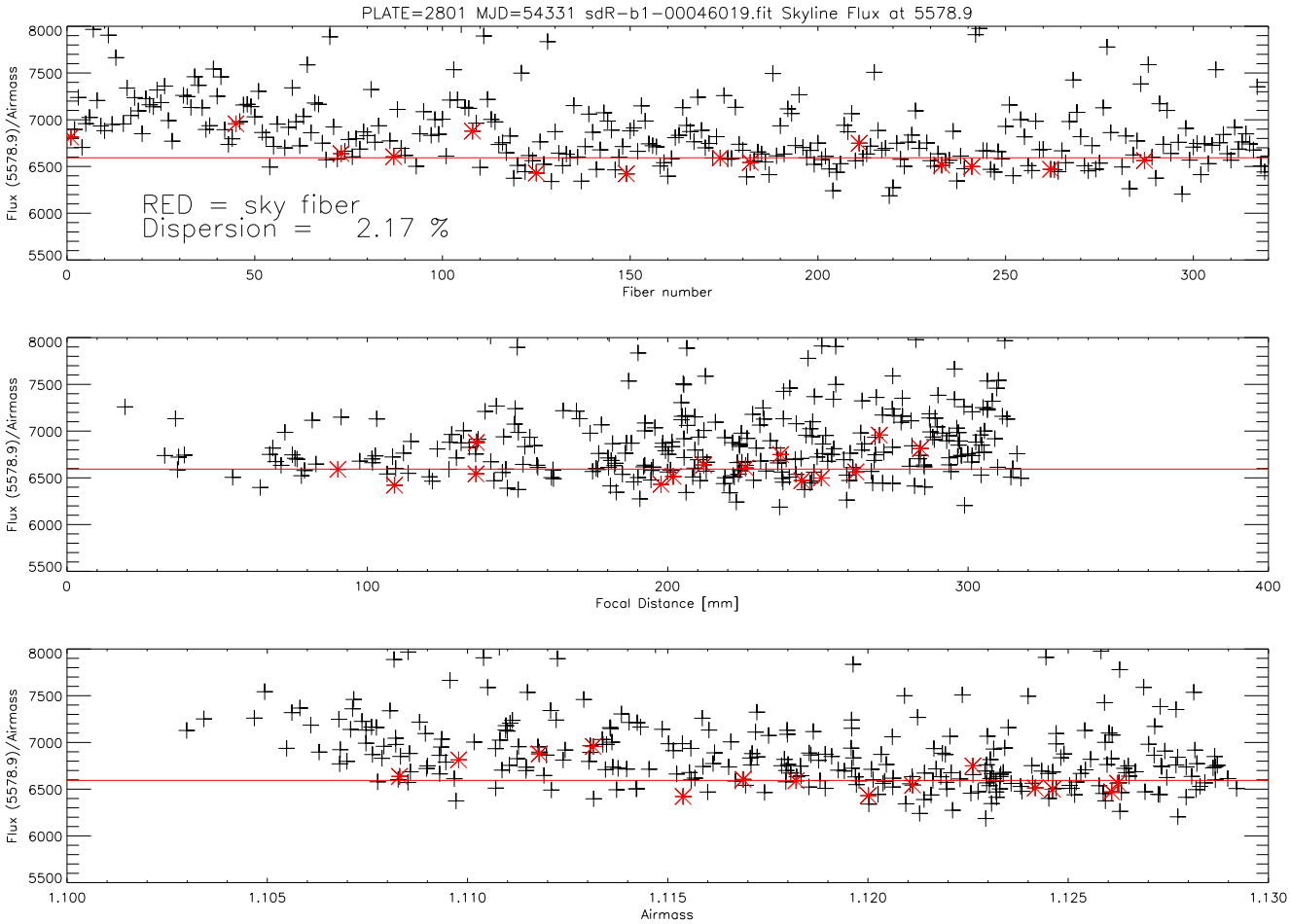

PLATE=2801 MJD=54331 sdR-b1-00046019.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

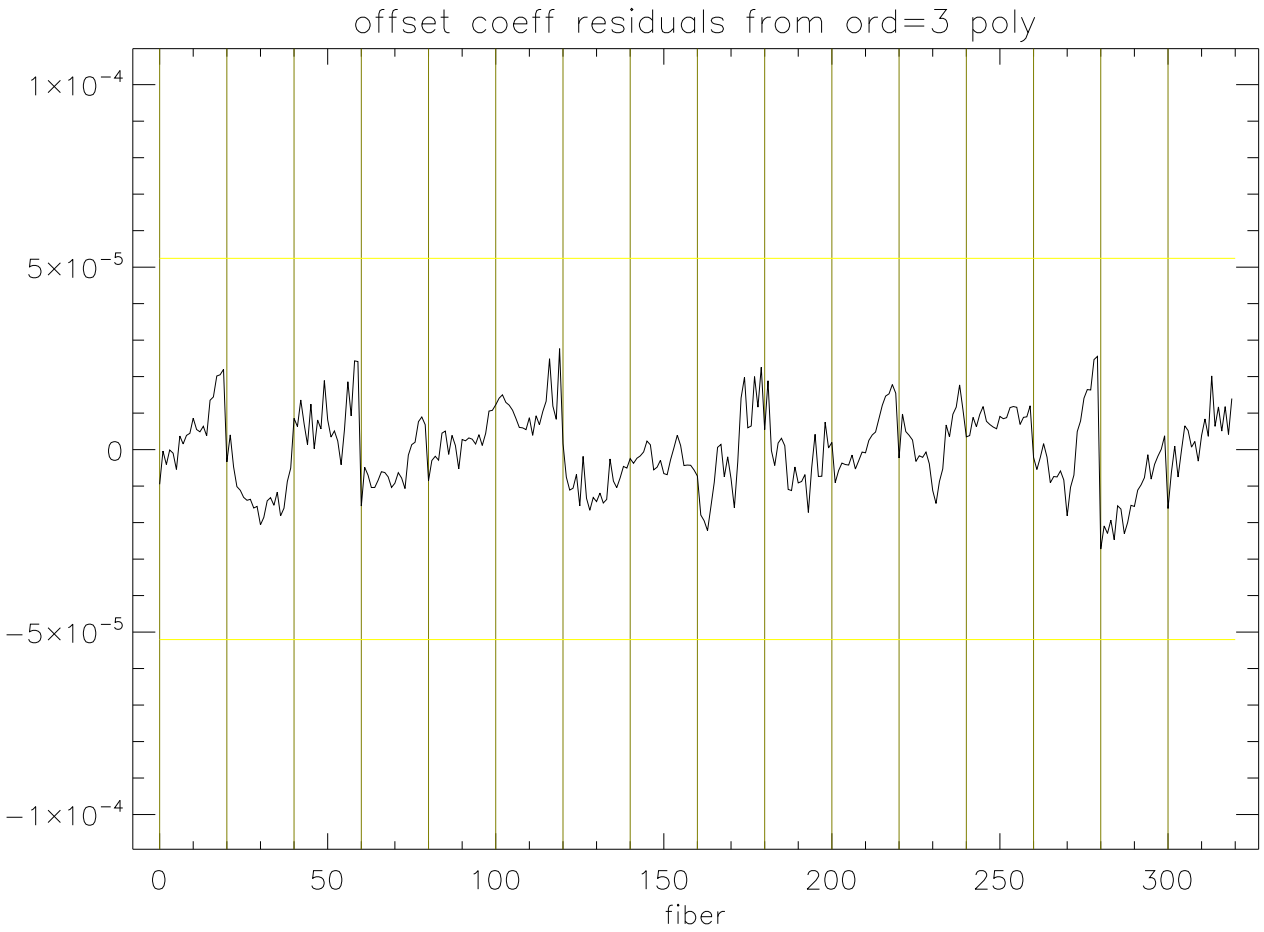

PLATE=2801 MJD=54331 sdR-b1-00046019.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

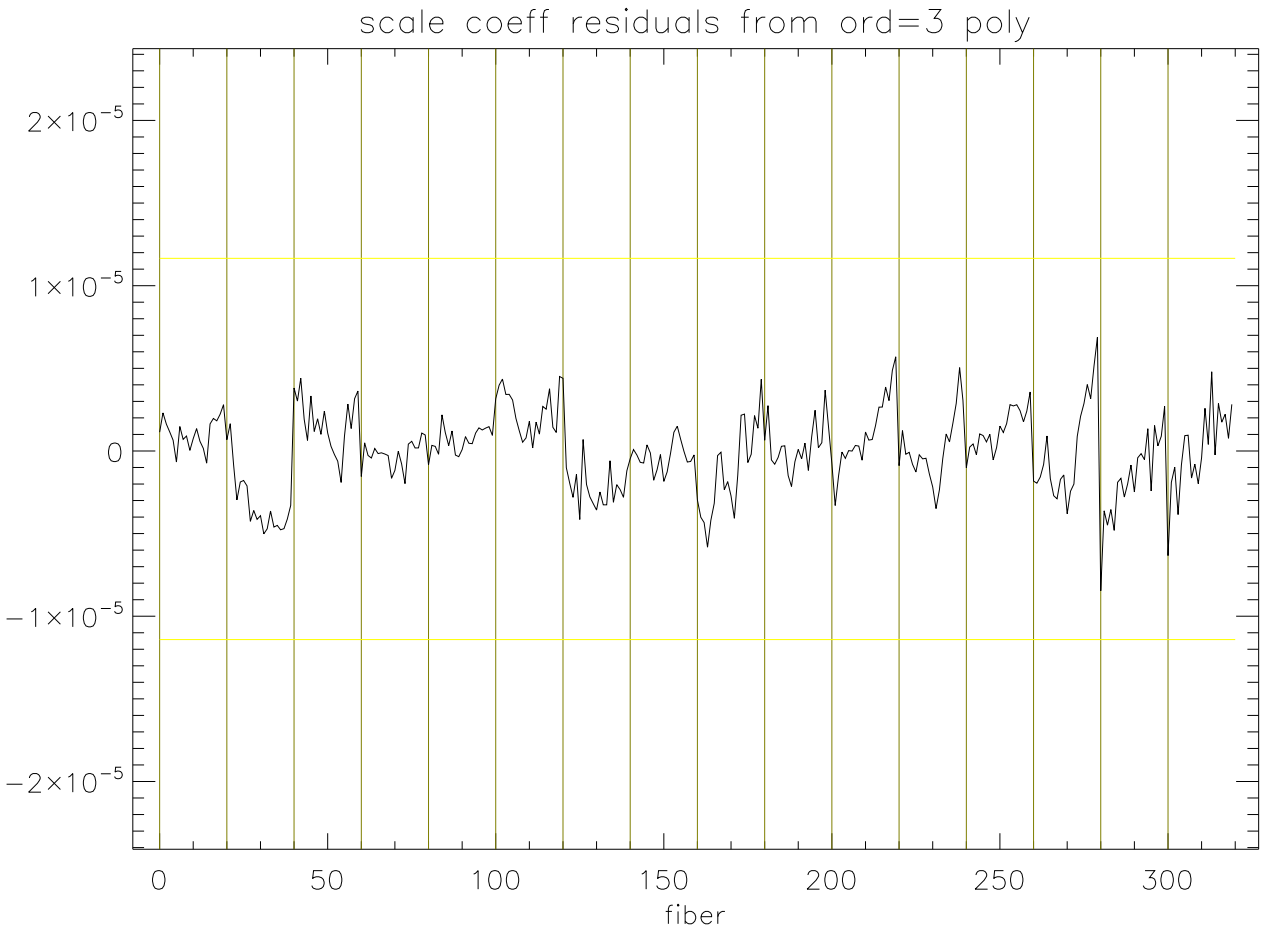

PLATE=2801 MJD=54331 sdR-b1-00046019.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

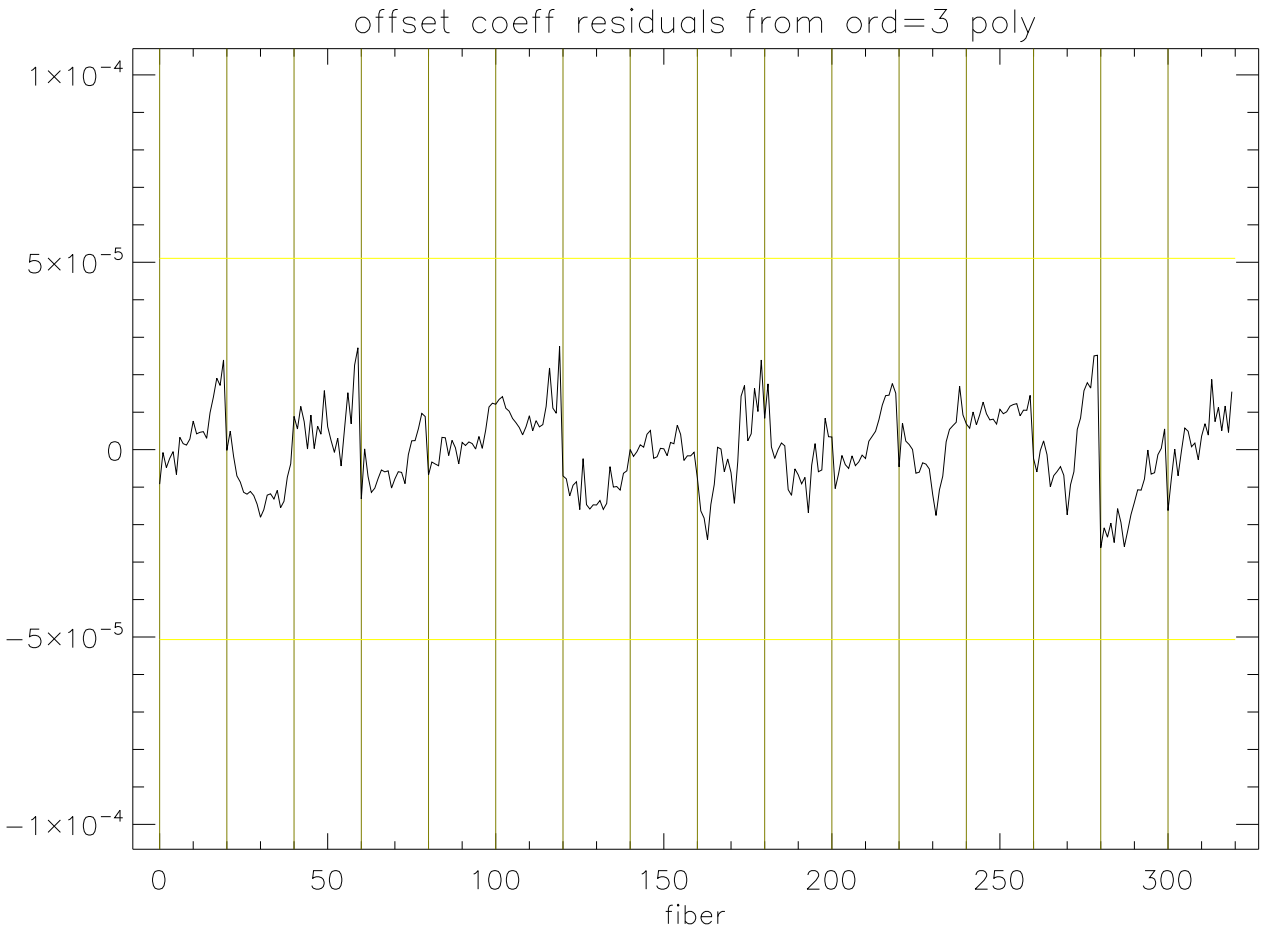

Number of sky fibers = 14
PLATE=2801 MJD=54331 sdR-b1-00046019.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

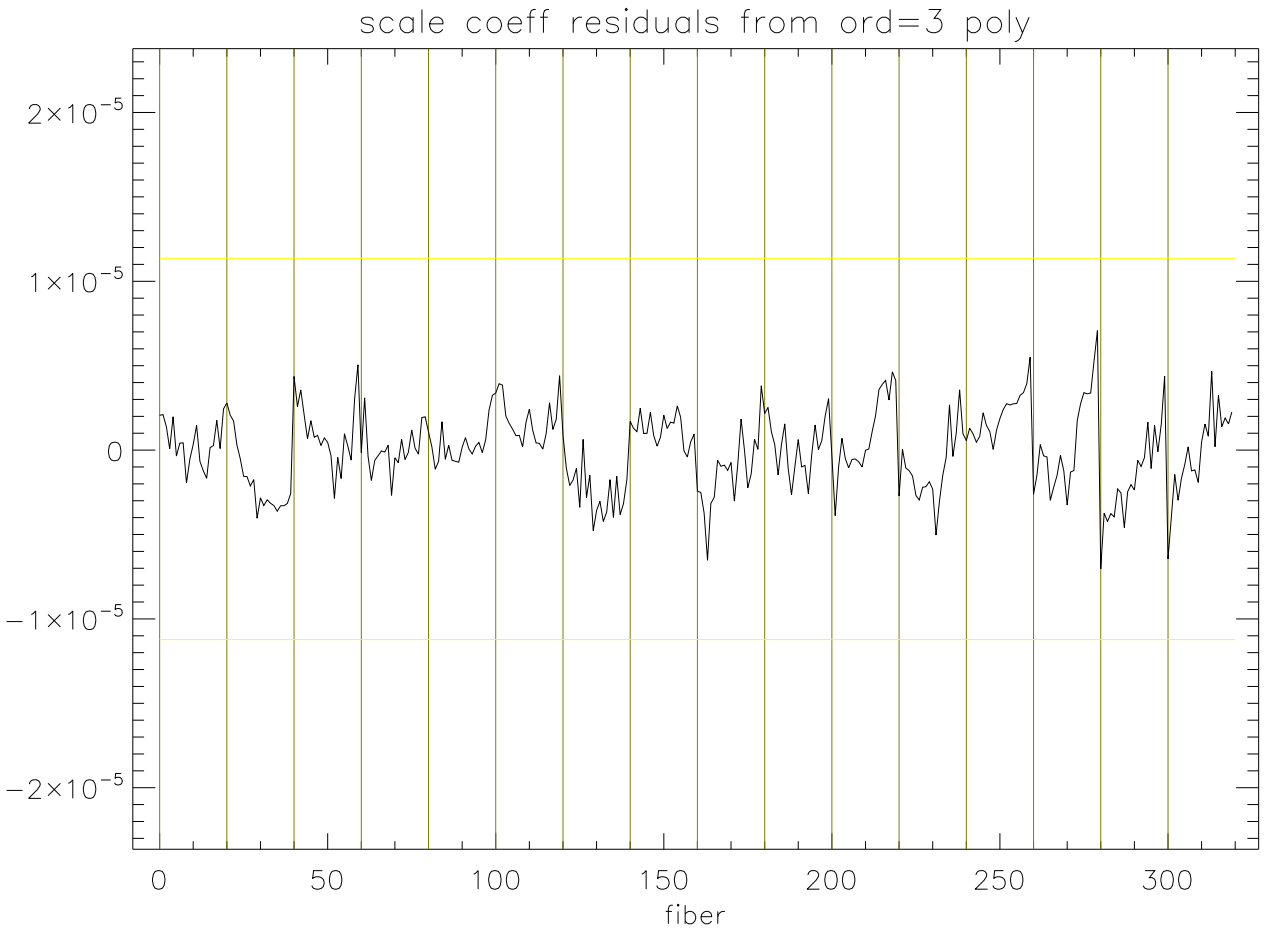

PLATE=2801 MJD=54331 sdR-b1-00046019.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED+= sky fiber
Dispersion = 8.44 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

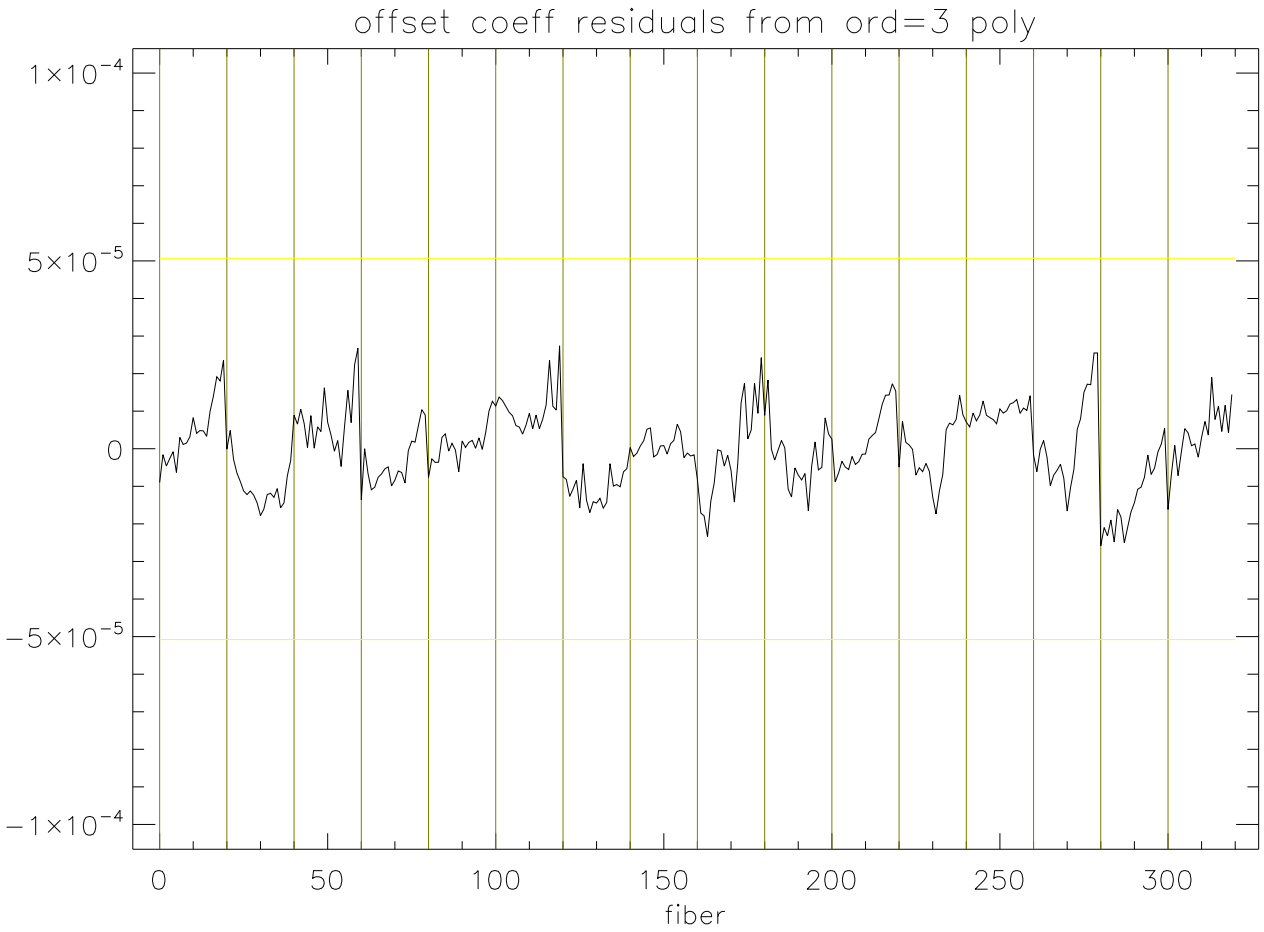

PLATE=2801 MJD=54331 sdR-b1-00046019.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.17 %
Fiber number
Focal Distance [mm]
Airmass

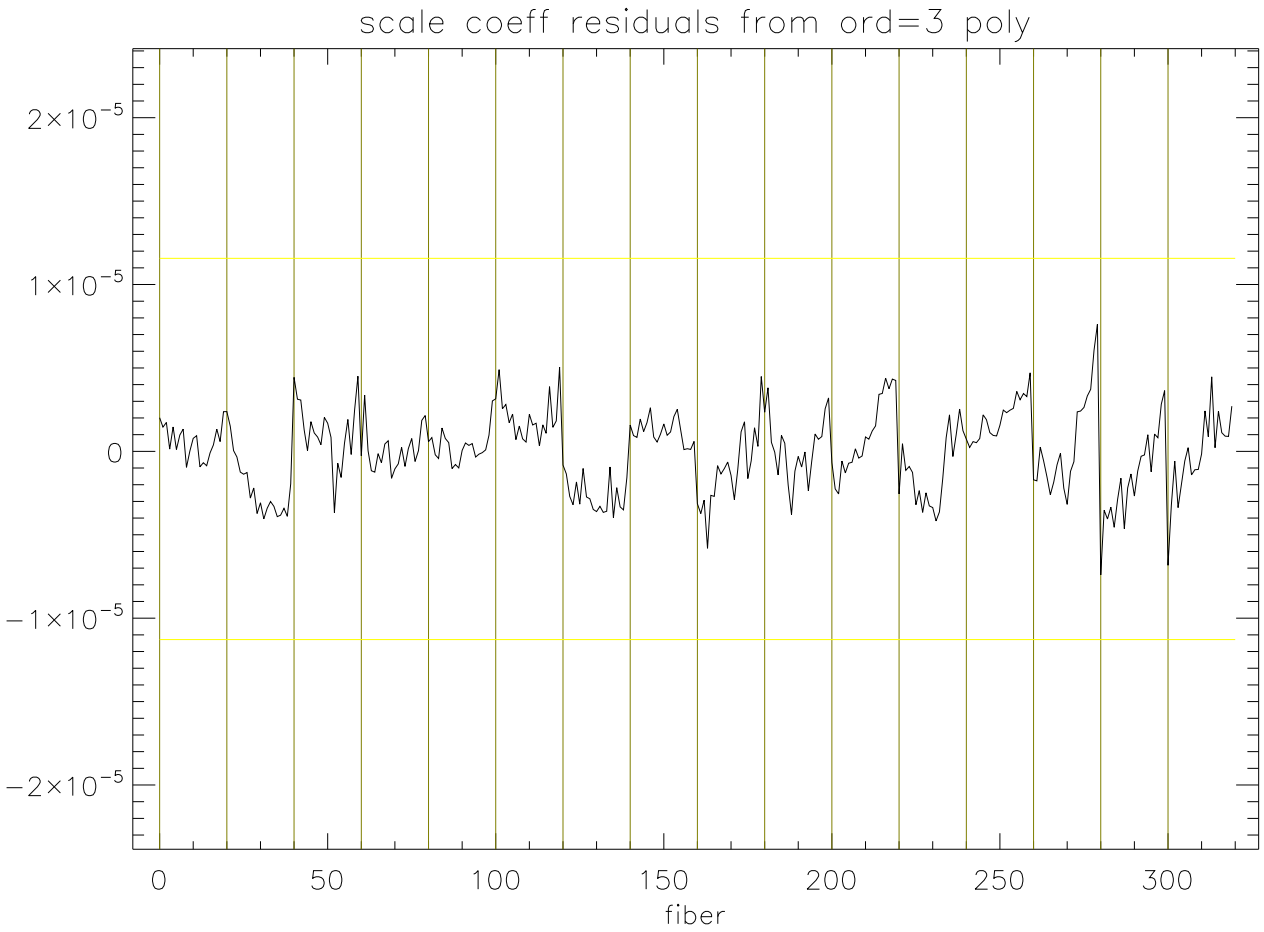

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

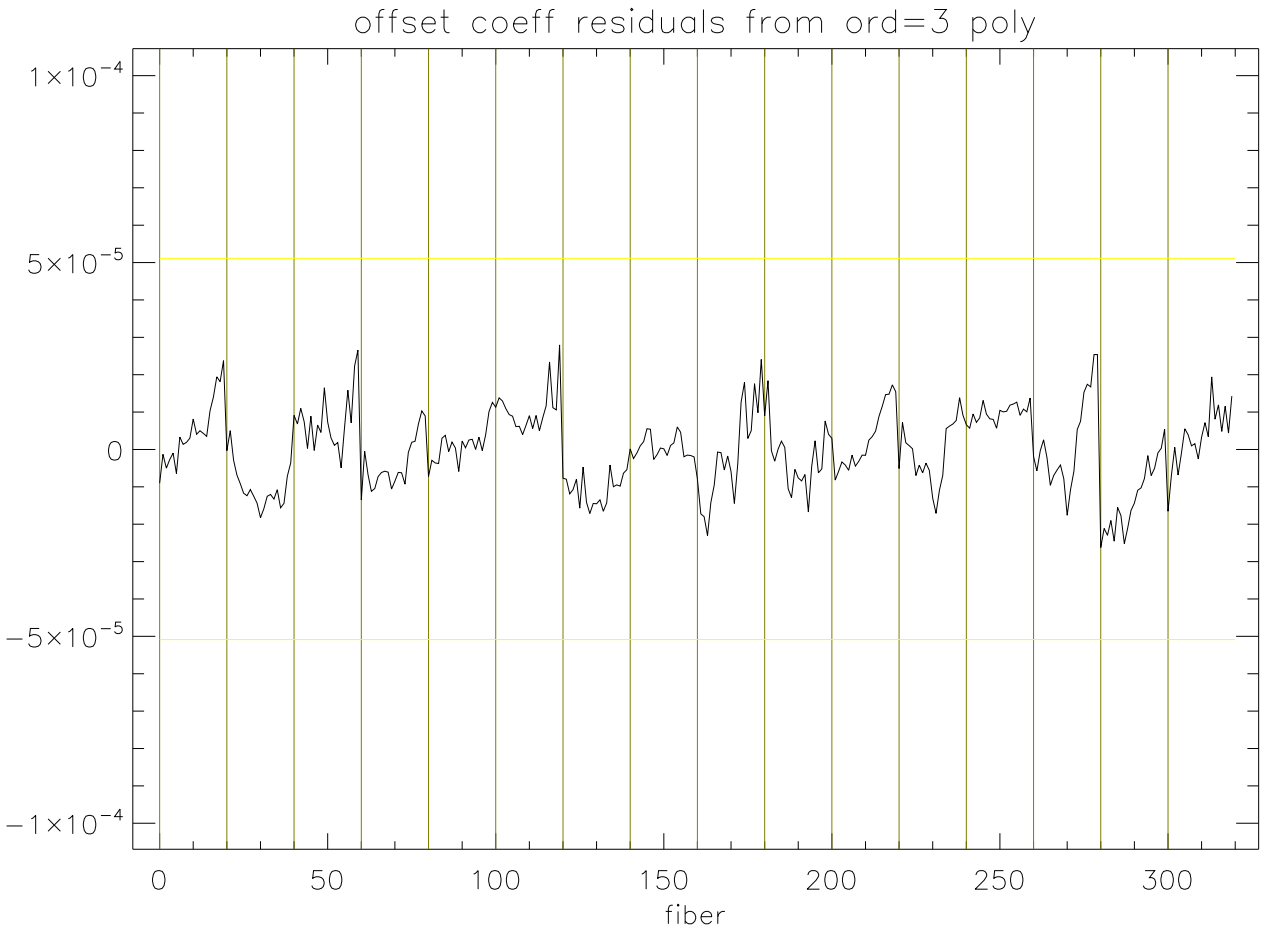

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

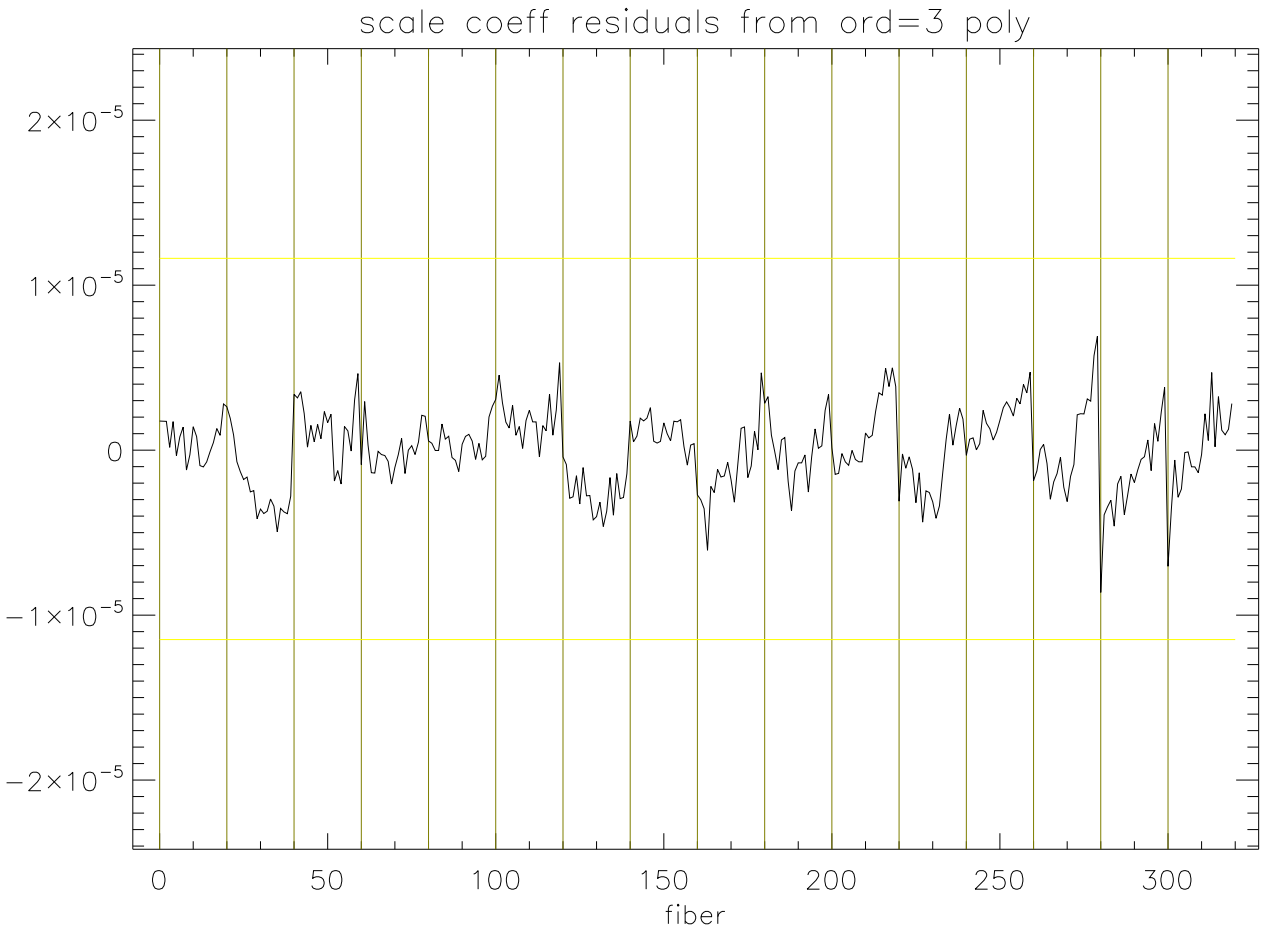

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

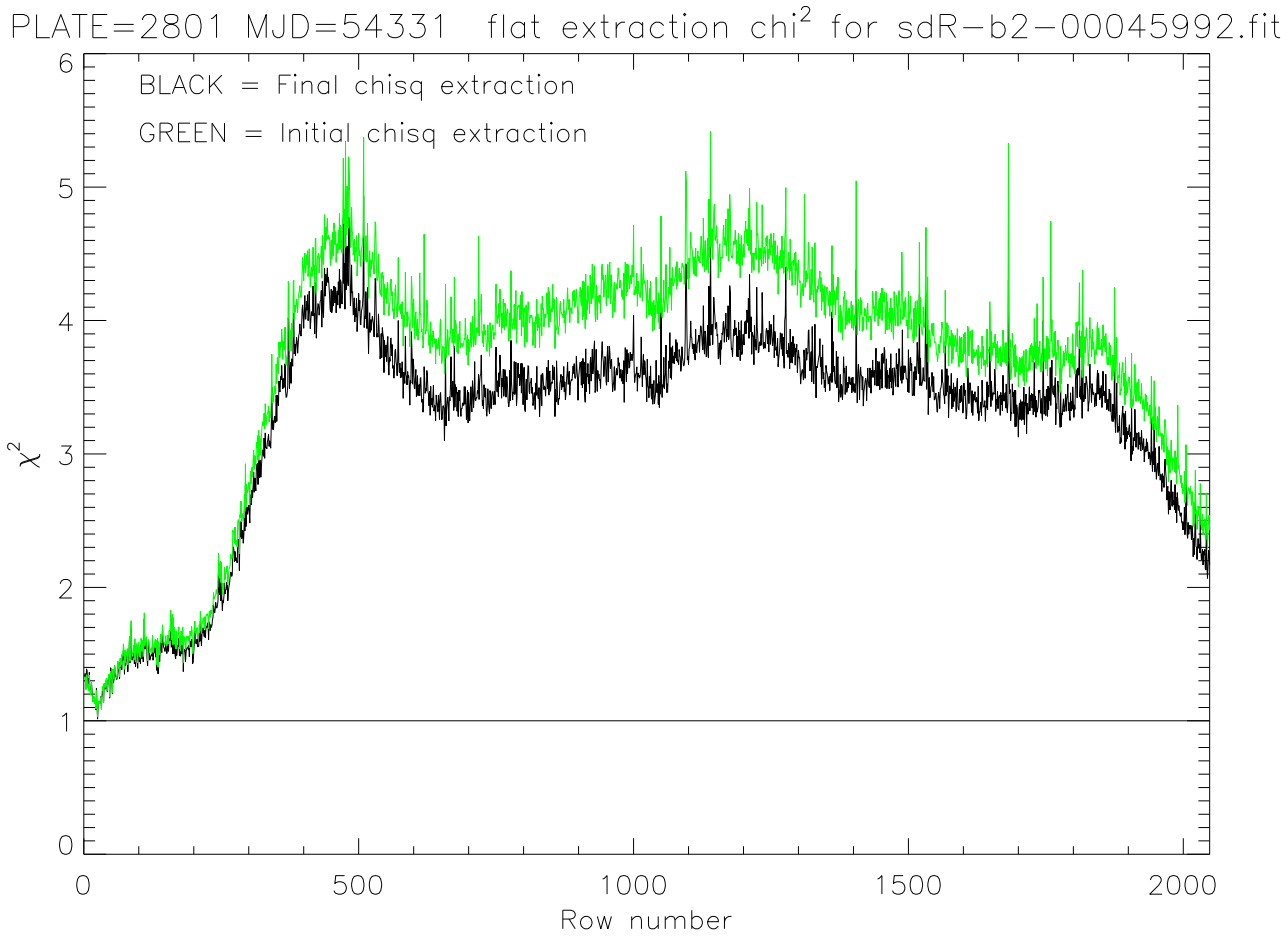

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

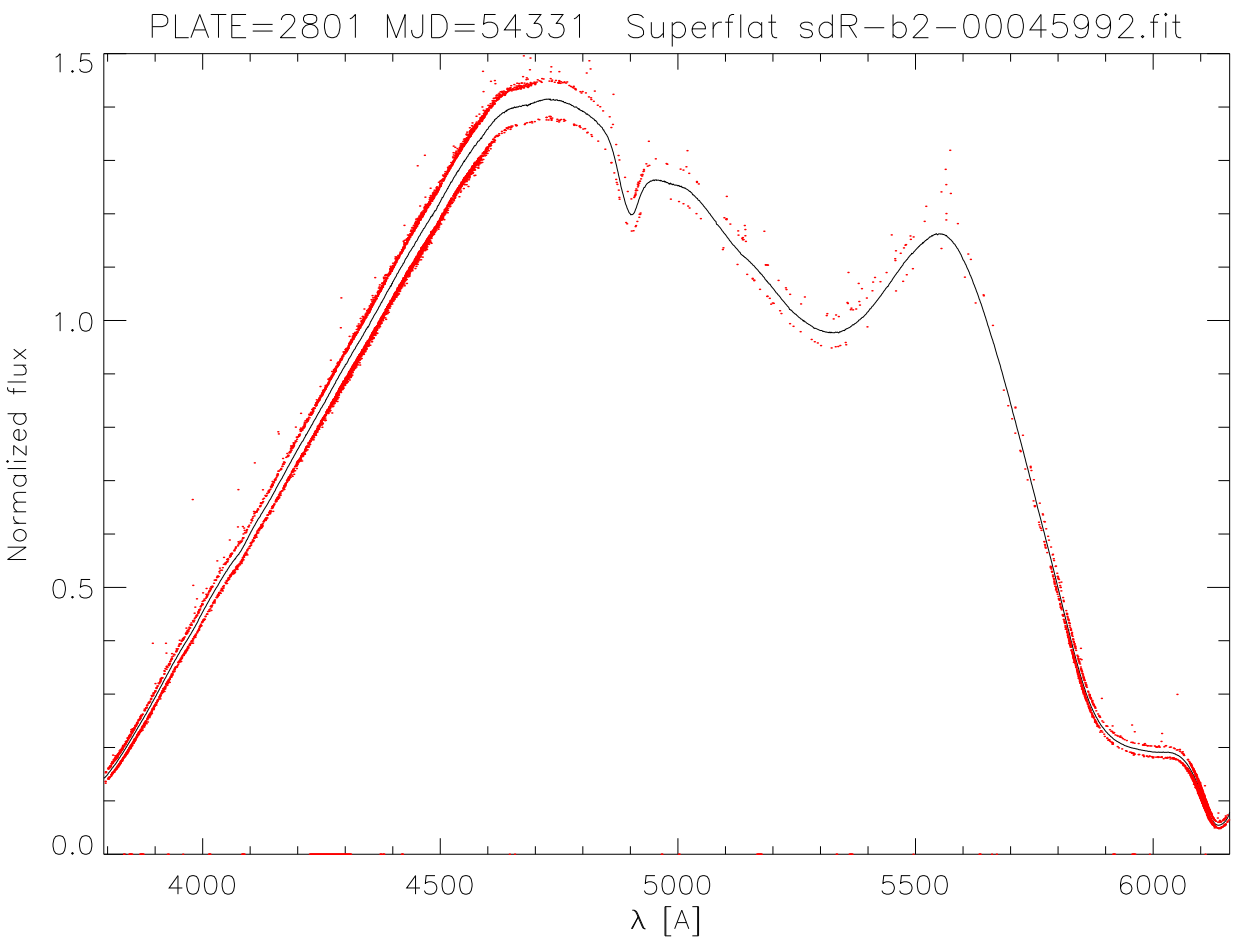

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

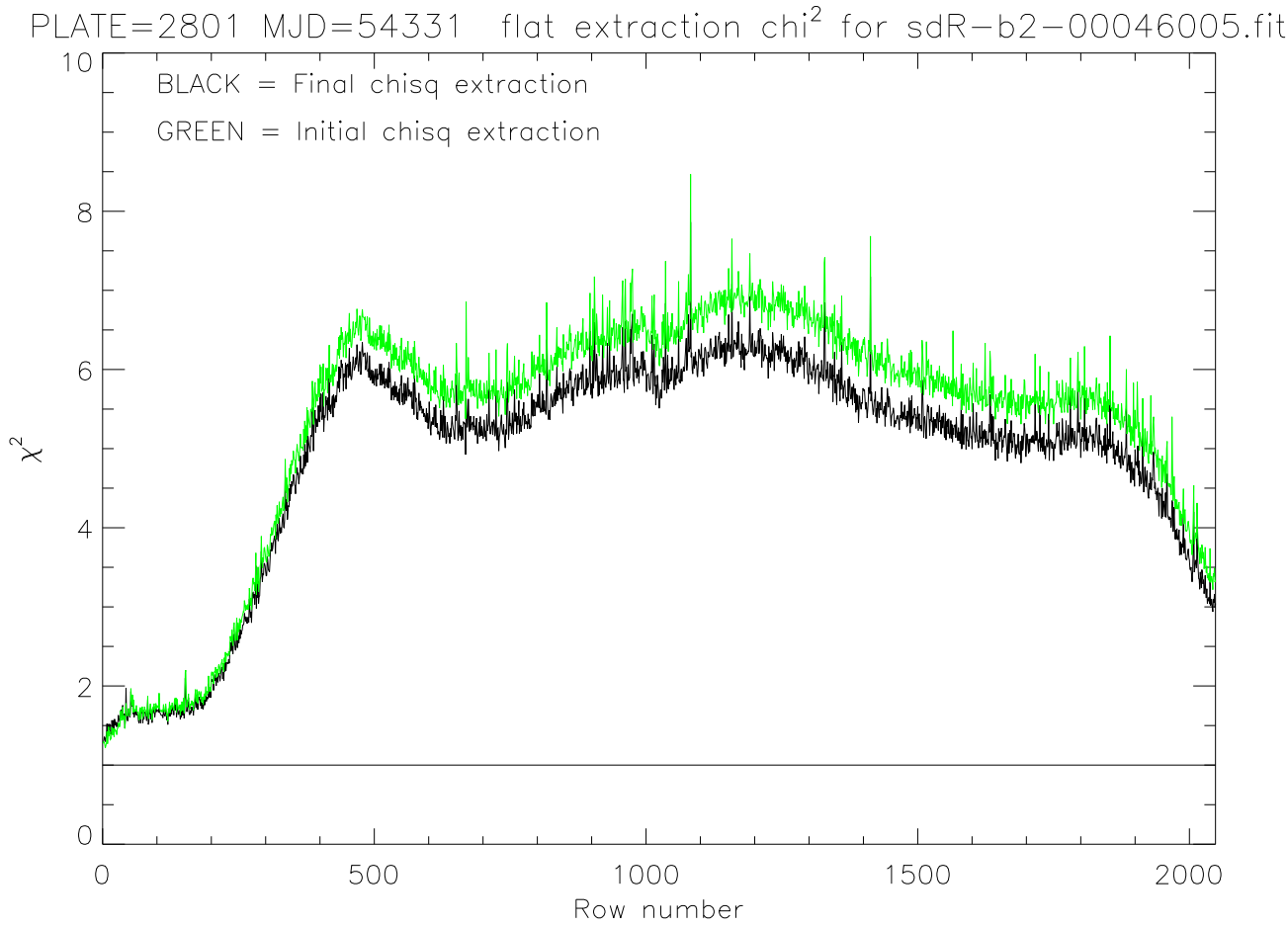

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

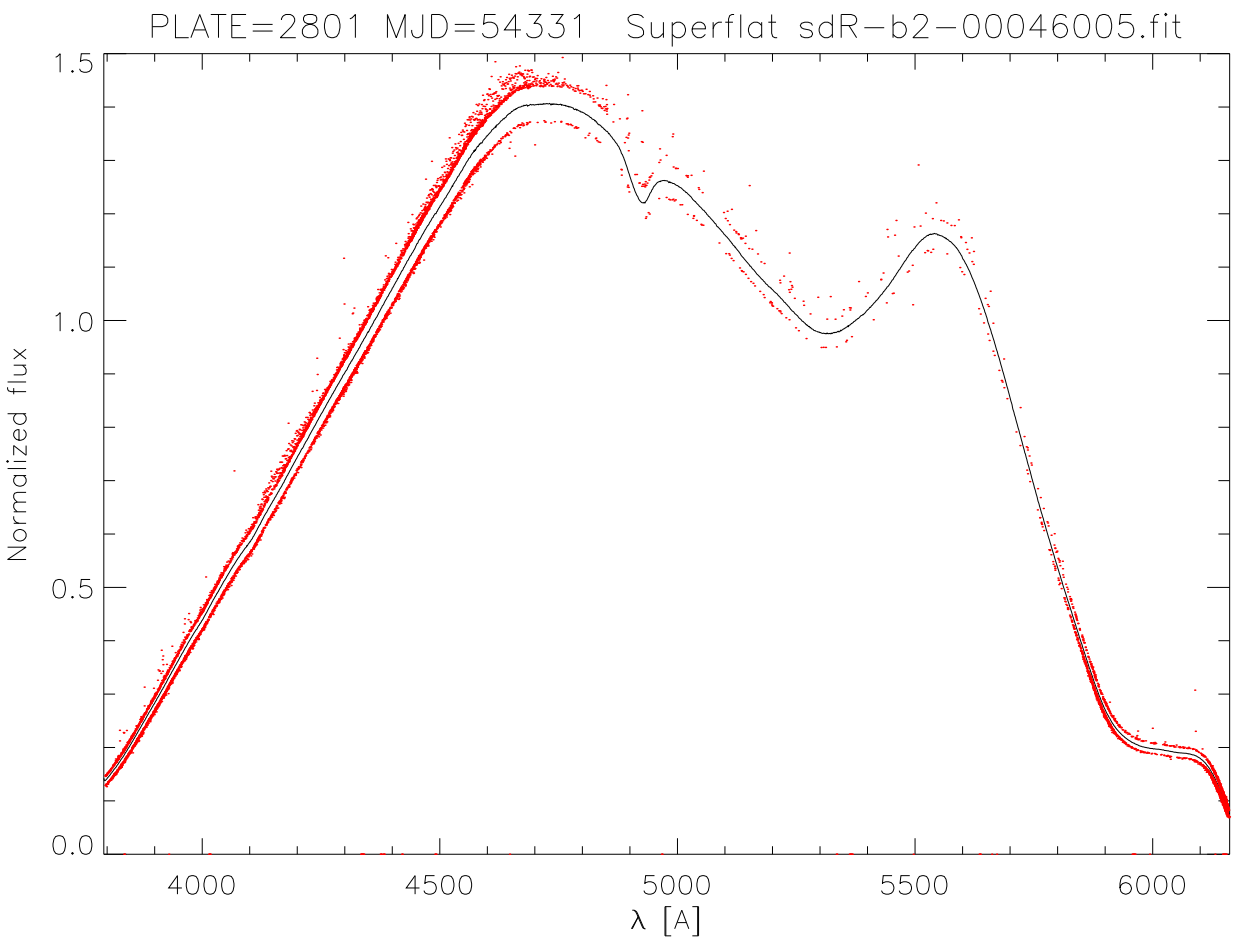

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

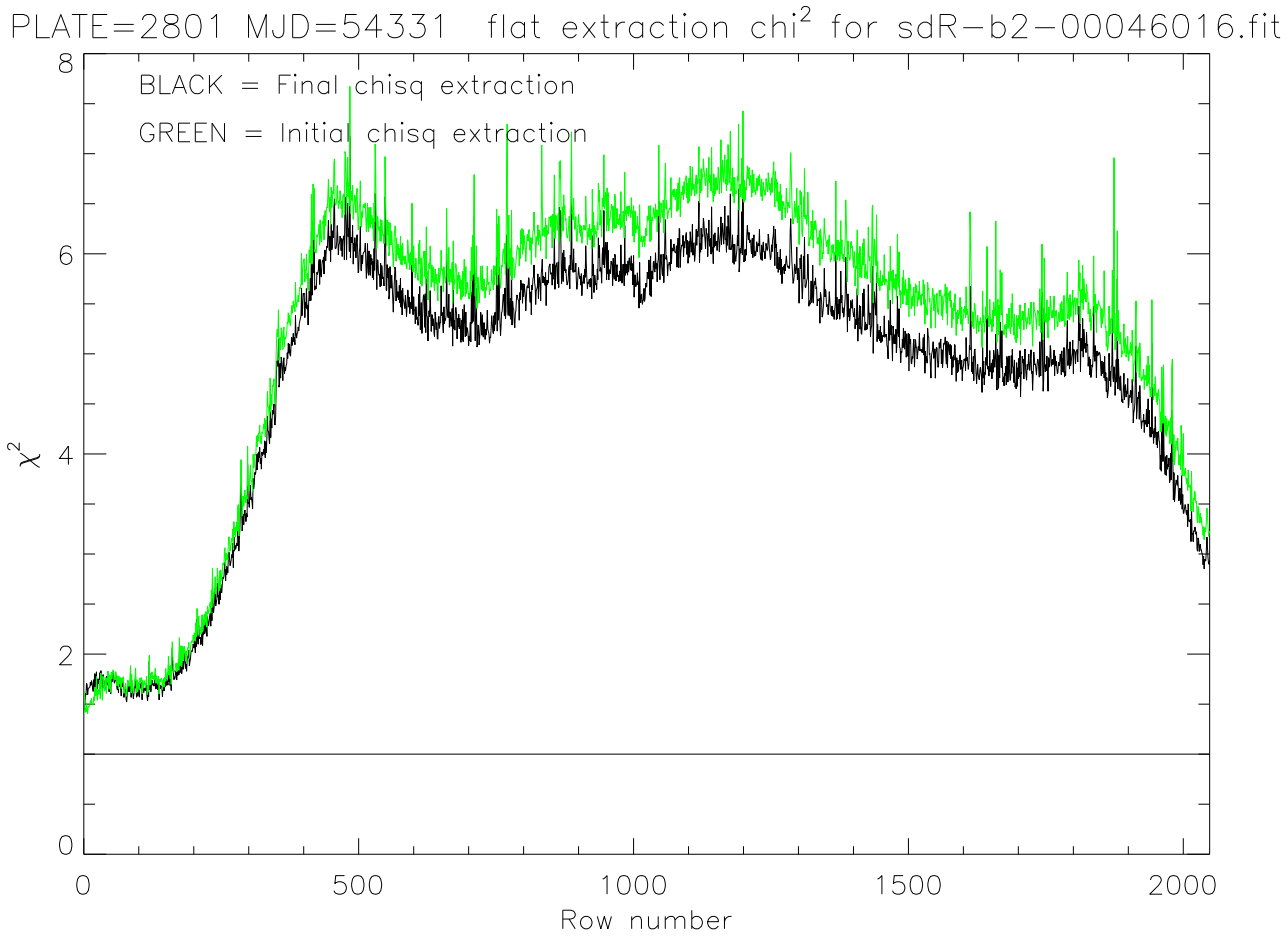

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

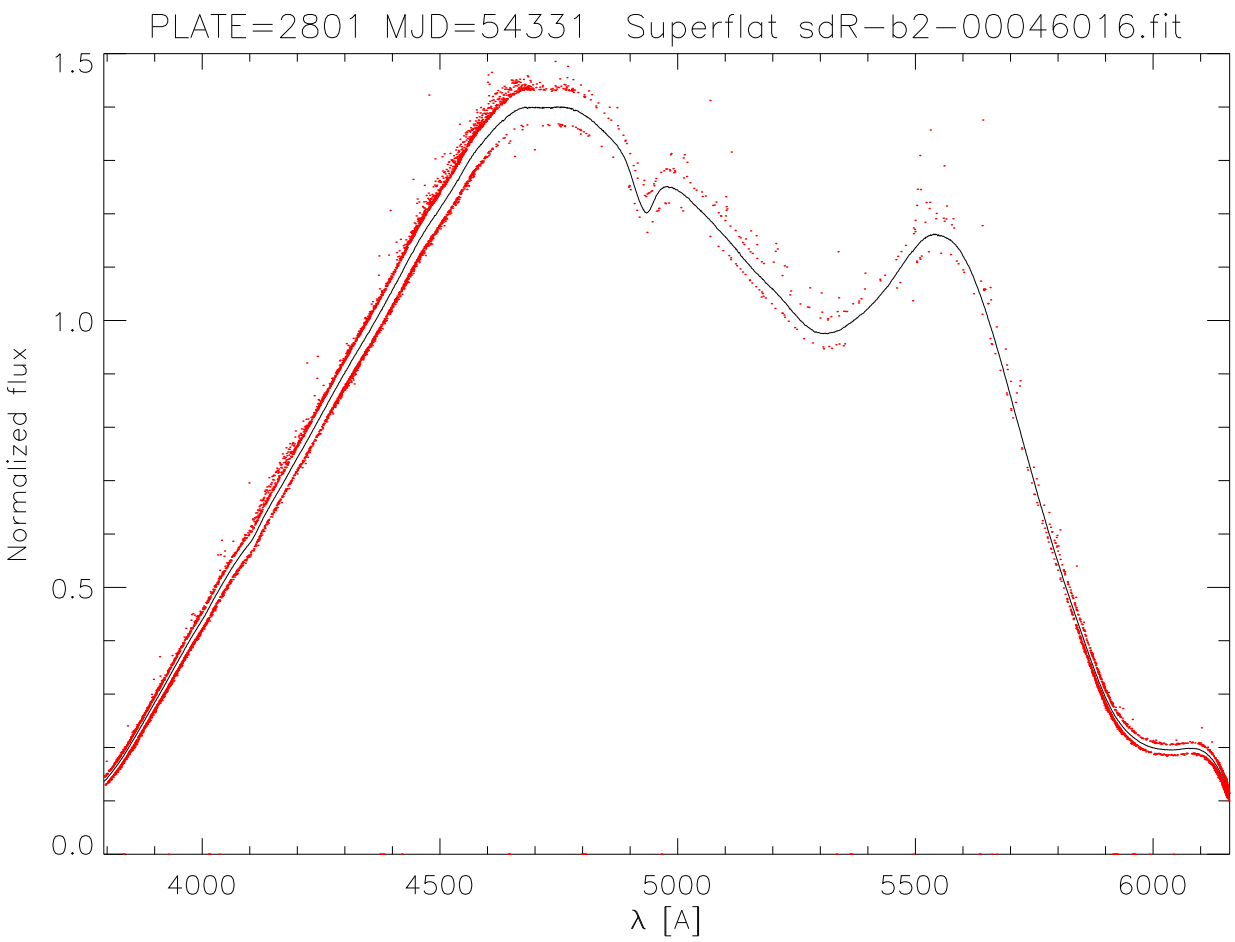

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR−b2−00045992.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000

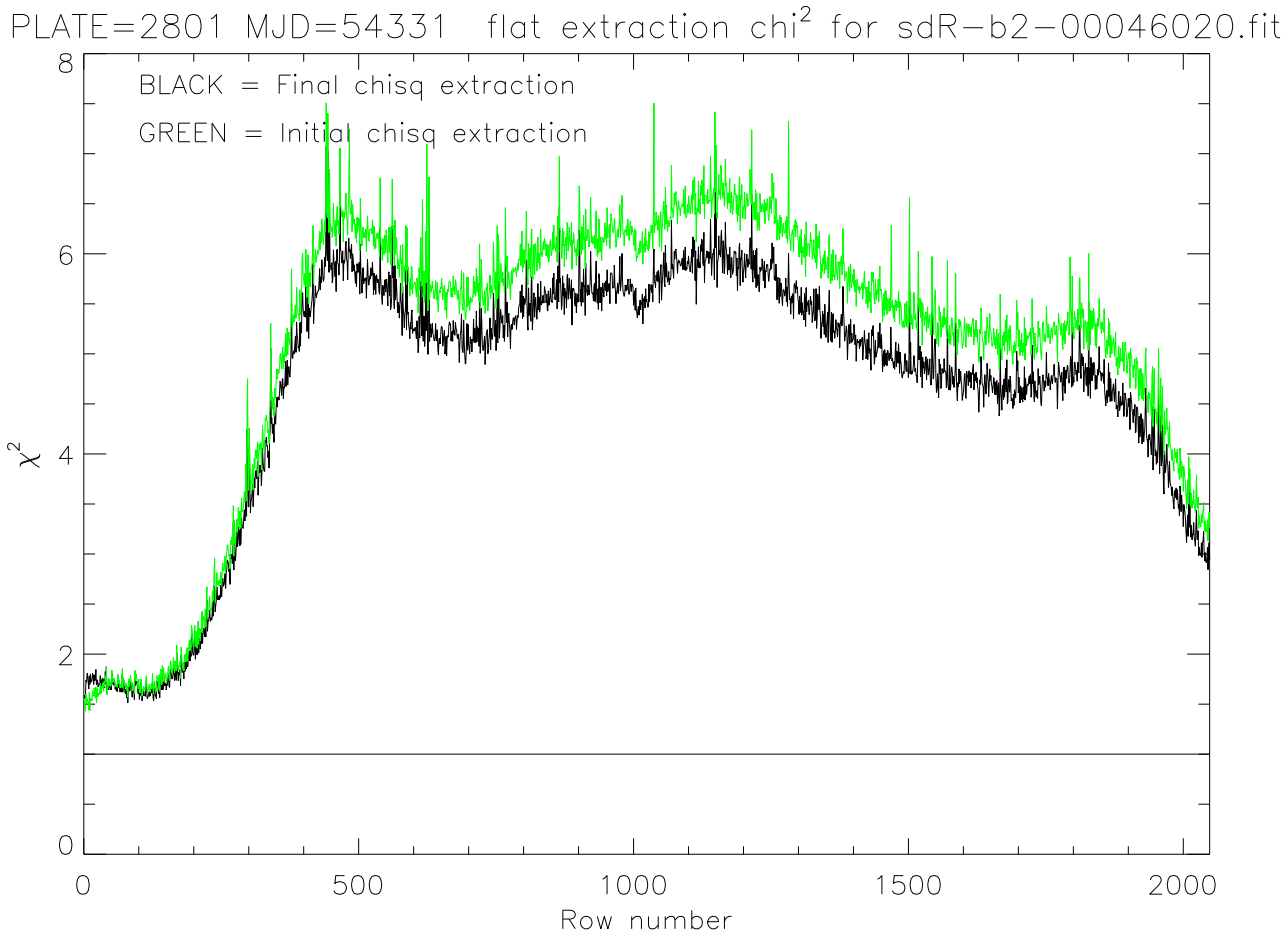

PLATE=2801 MJD=54331 Superflat sdR-b2-00045992.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

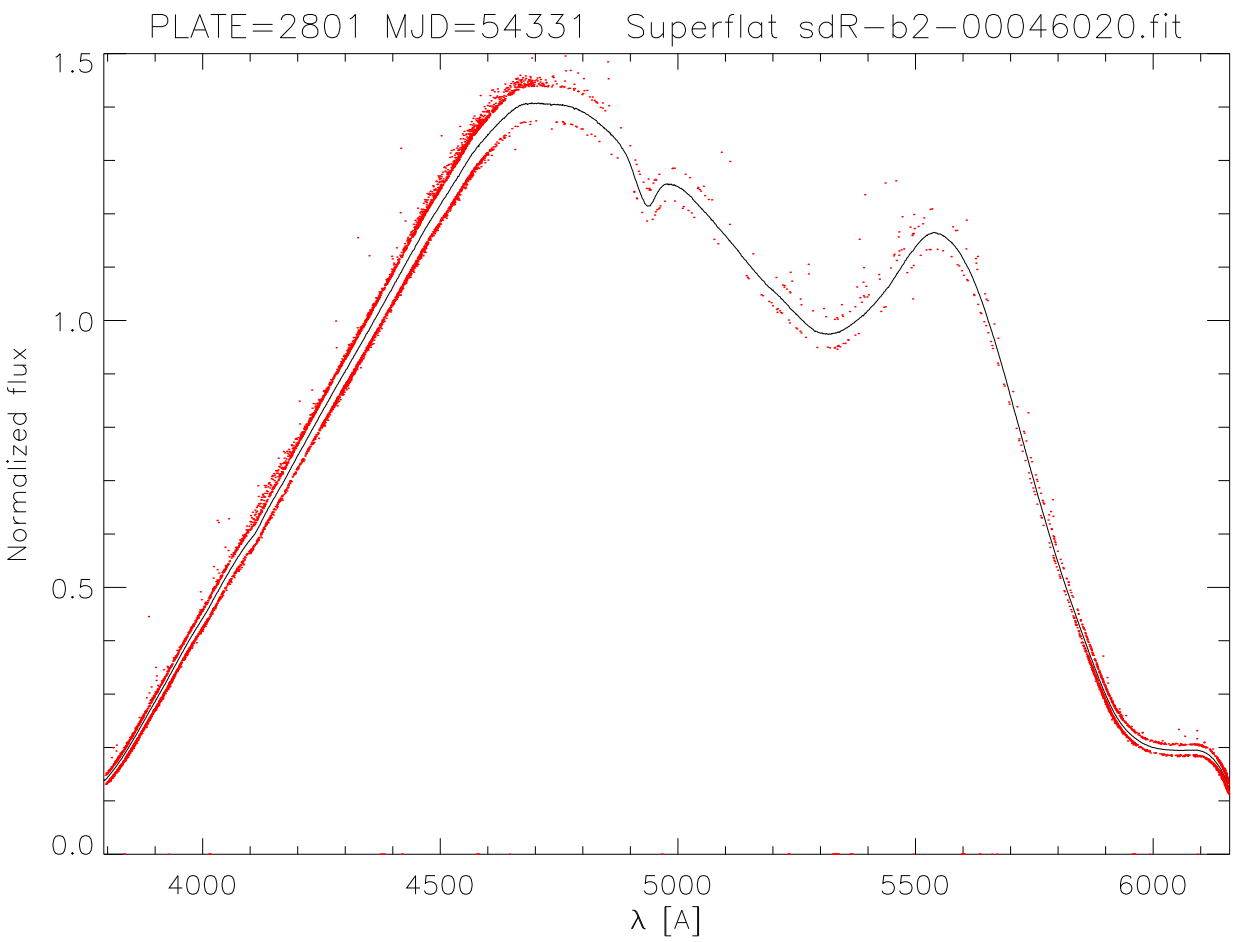

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR−b2−00046005.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

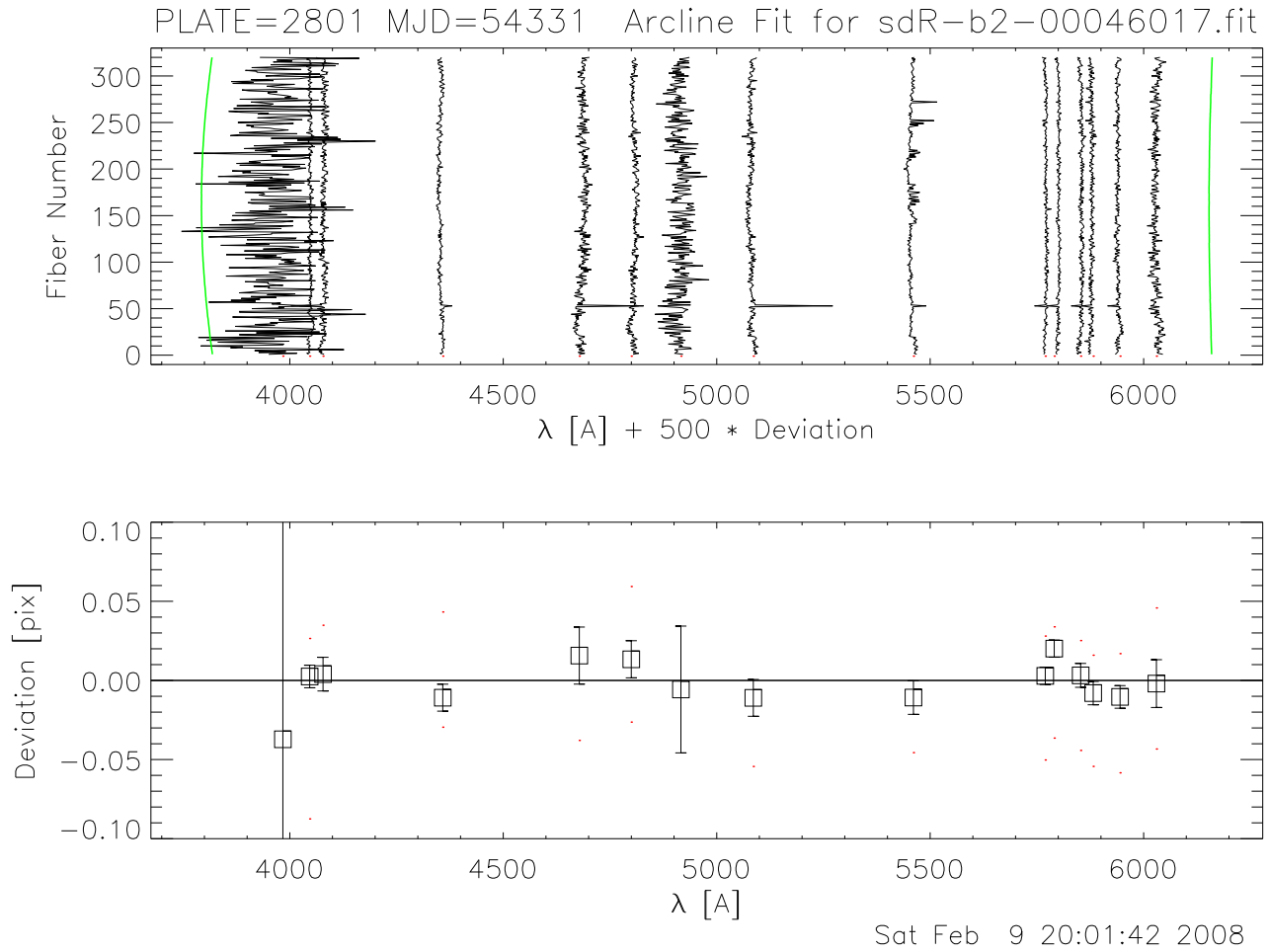

PLATE=2801 MJD=54331 Superflat sdR-b2-00046005.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

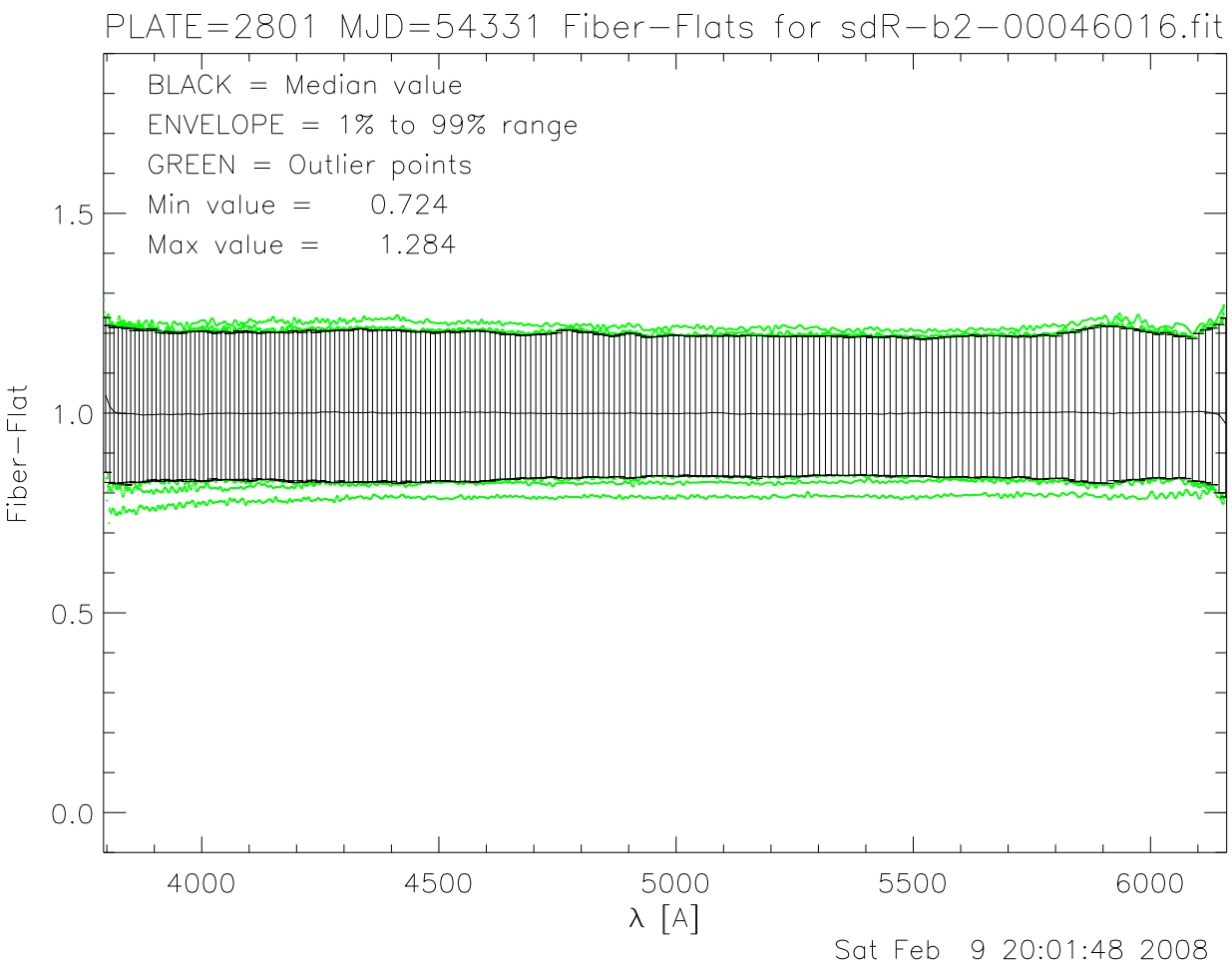

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR−b2−00046016.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

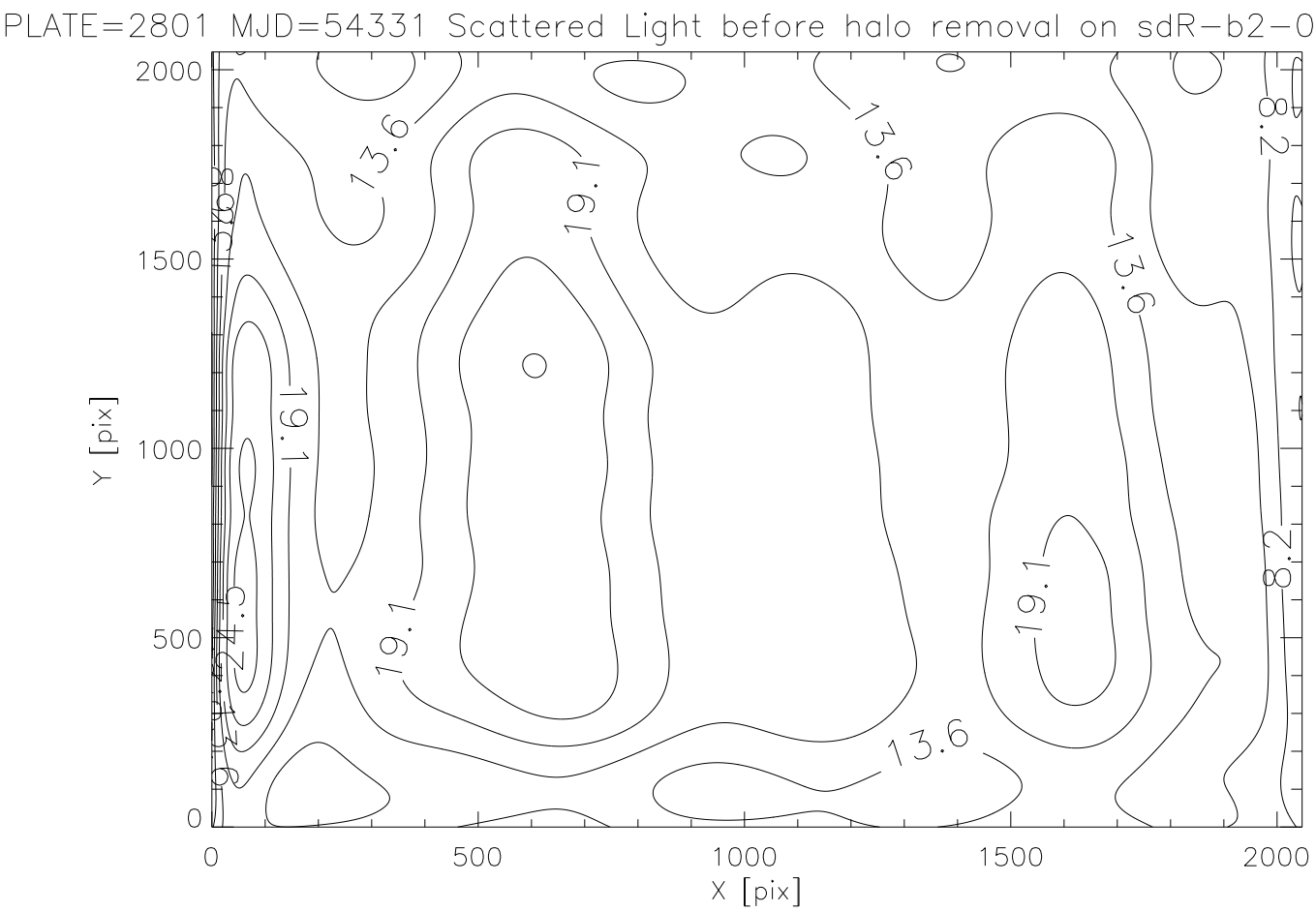

PLATE=2801 MJD=54331 Superflat sdR-b2-00046016.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

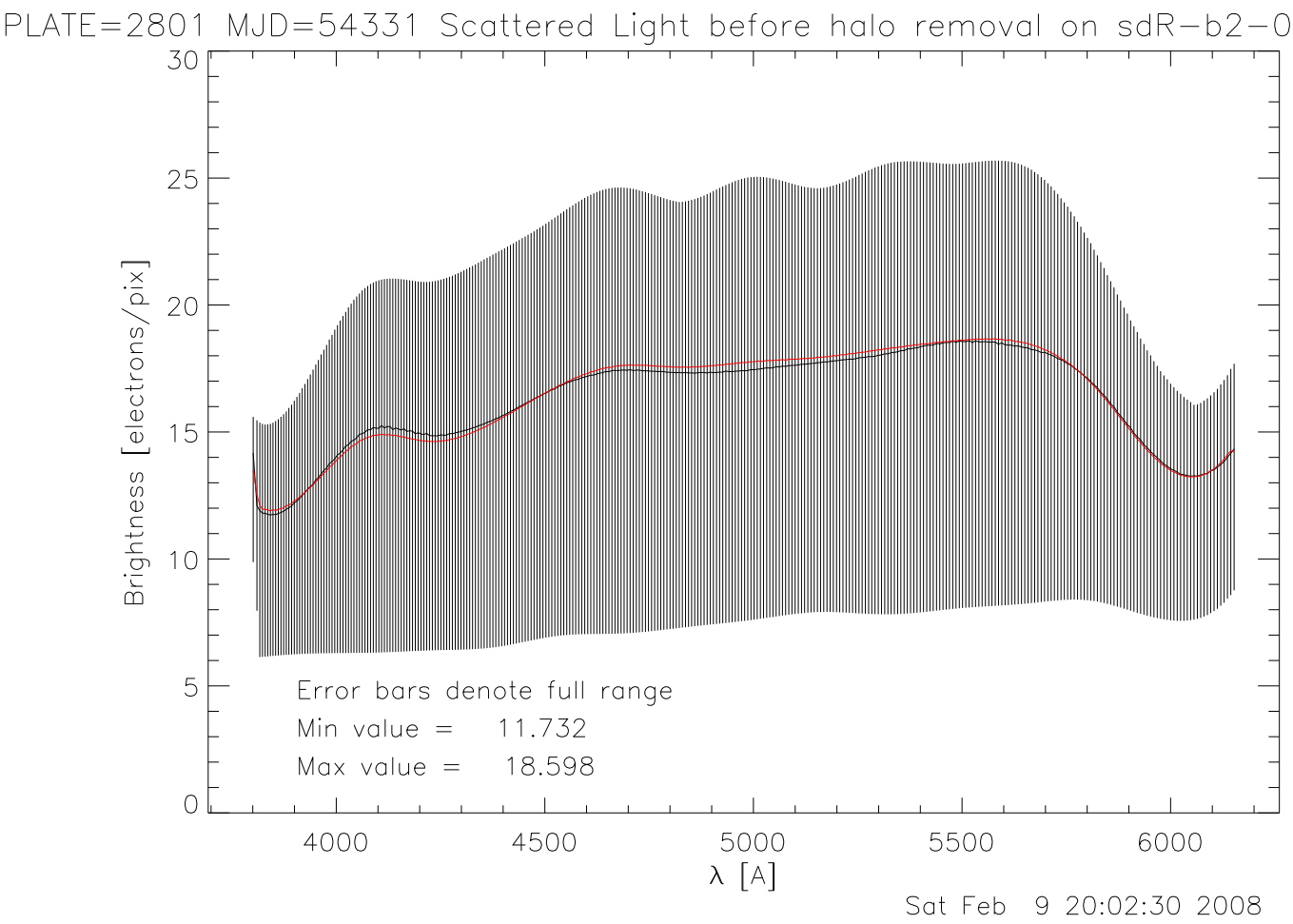

PLATE=2801 MJD=54331 flat extraction chi^2 for sdR−b2−00046020.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

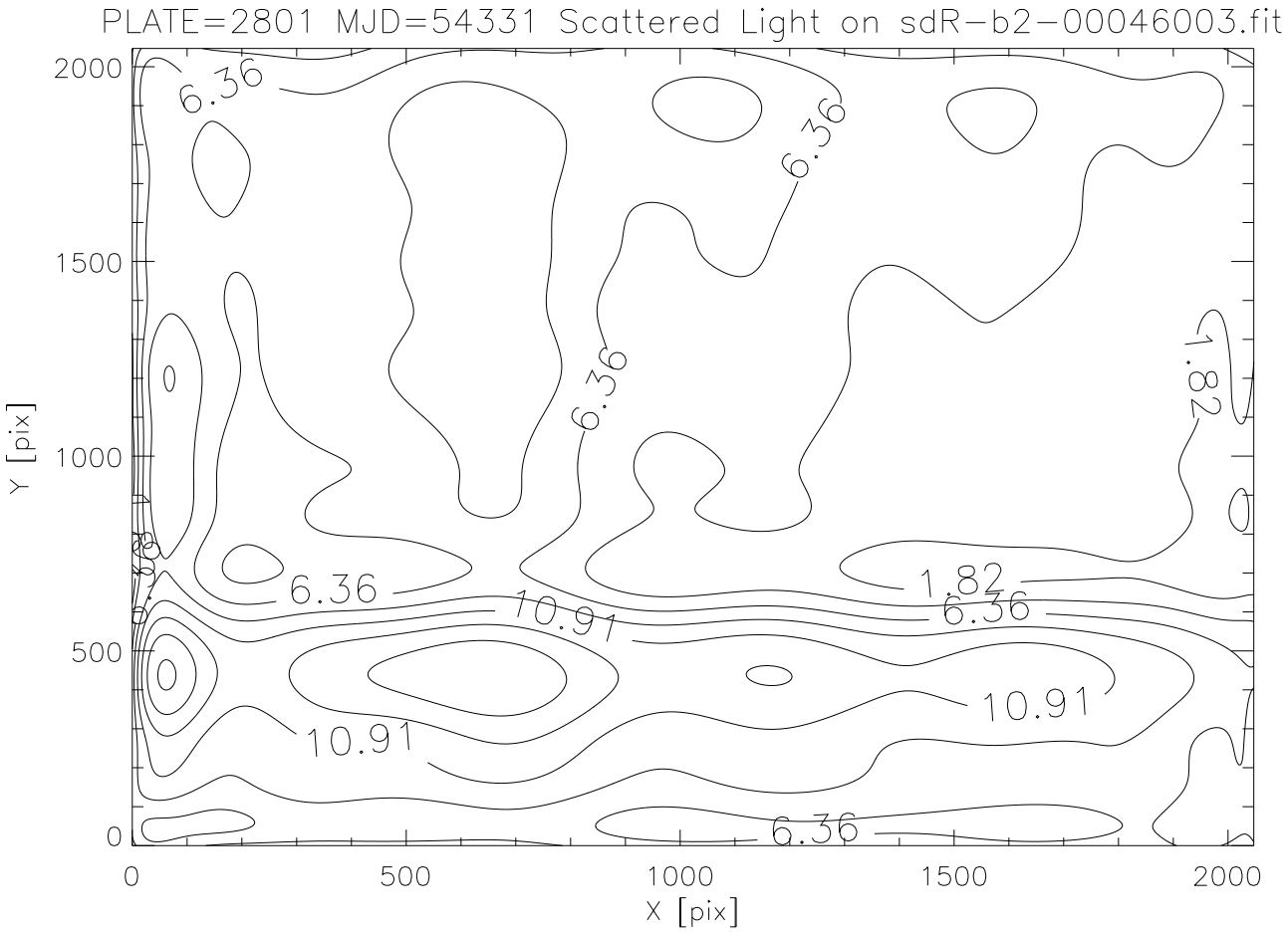

PLATE=2801 MJD=54331 Superflat sdR-b2-00046020.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

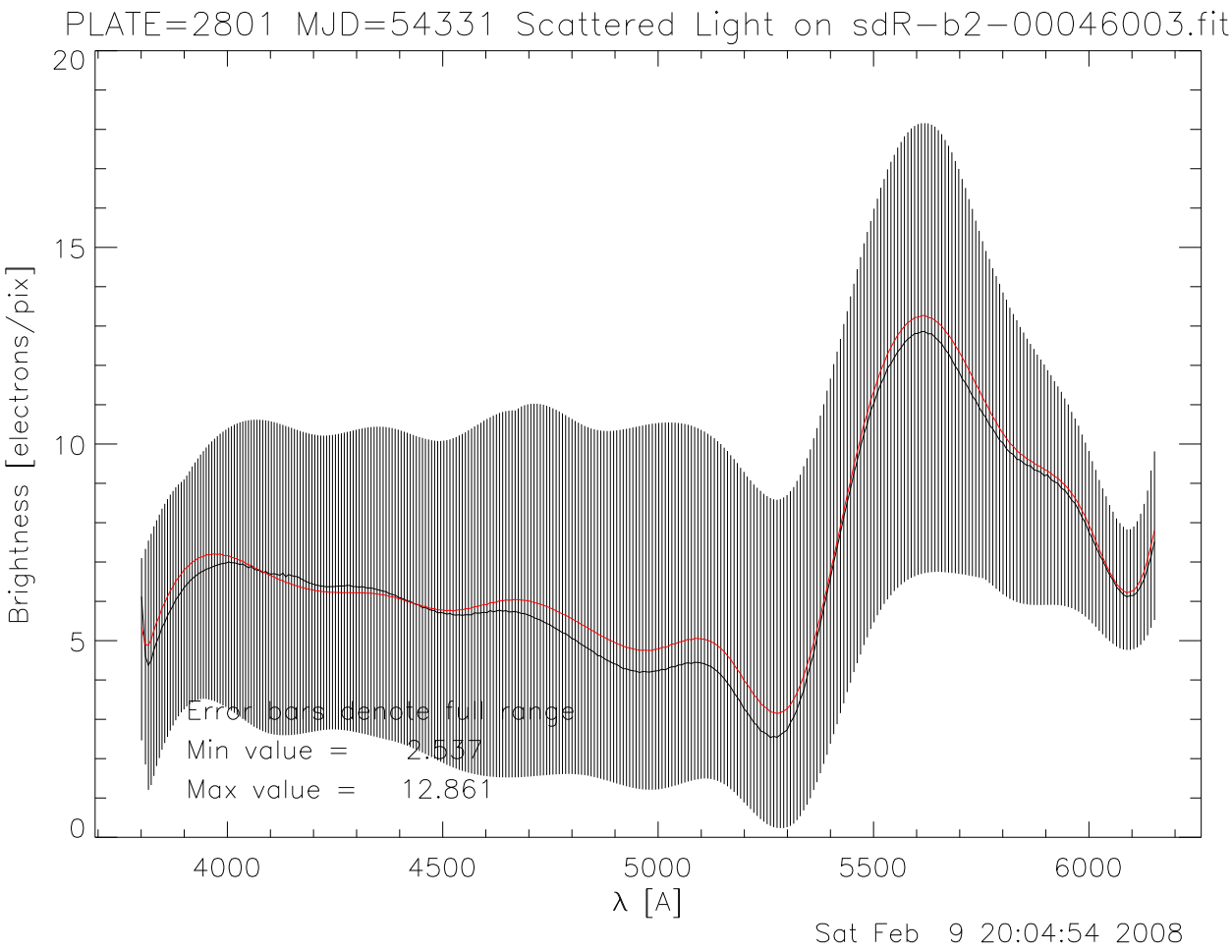

PLATE=2801 MJD=54331 Arcline Fit for sdR-b2-00046017.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 20:01:42 2008

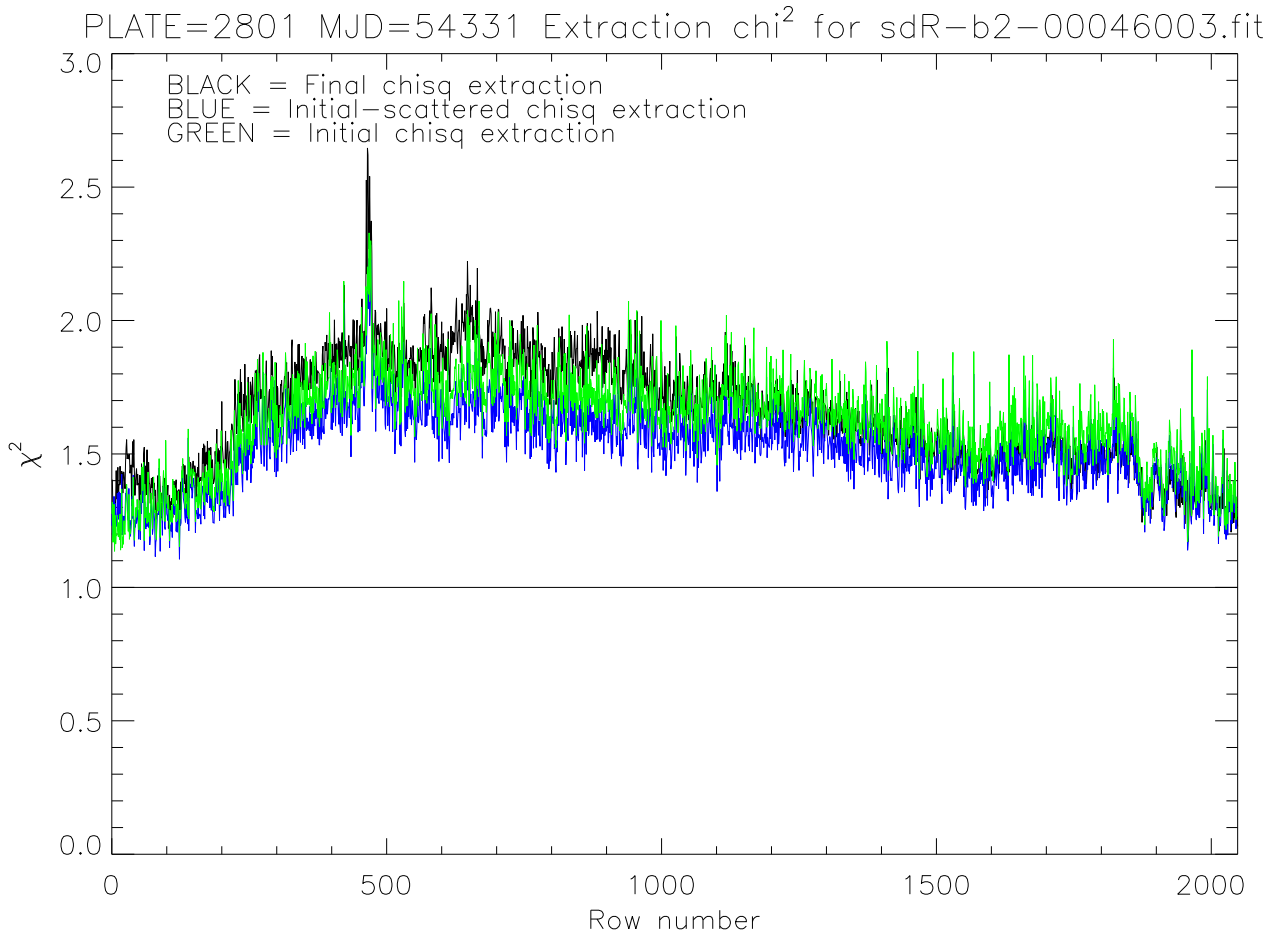

PLATE=2801 MJD=54331 Fiber-Flats for sdR-b2-00046016.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.724
Max value = 1.284
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 20:01:48 2008

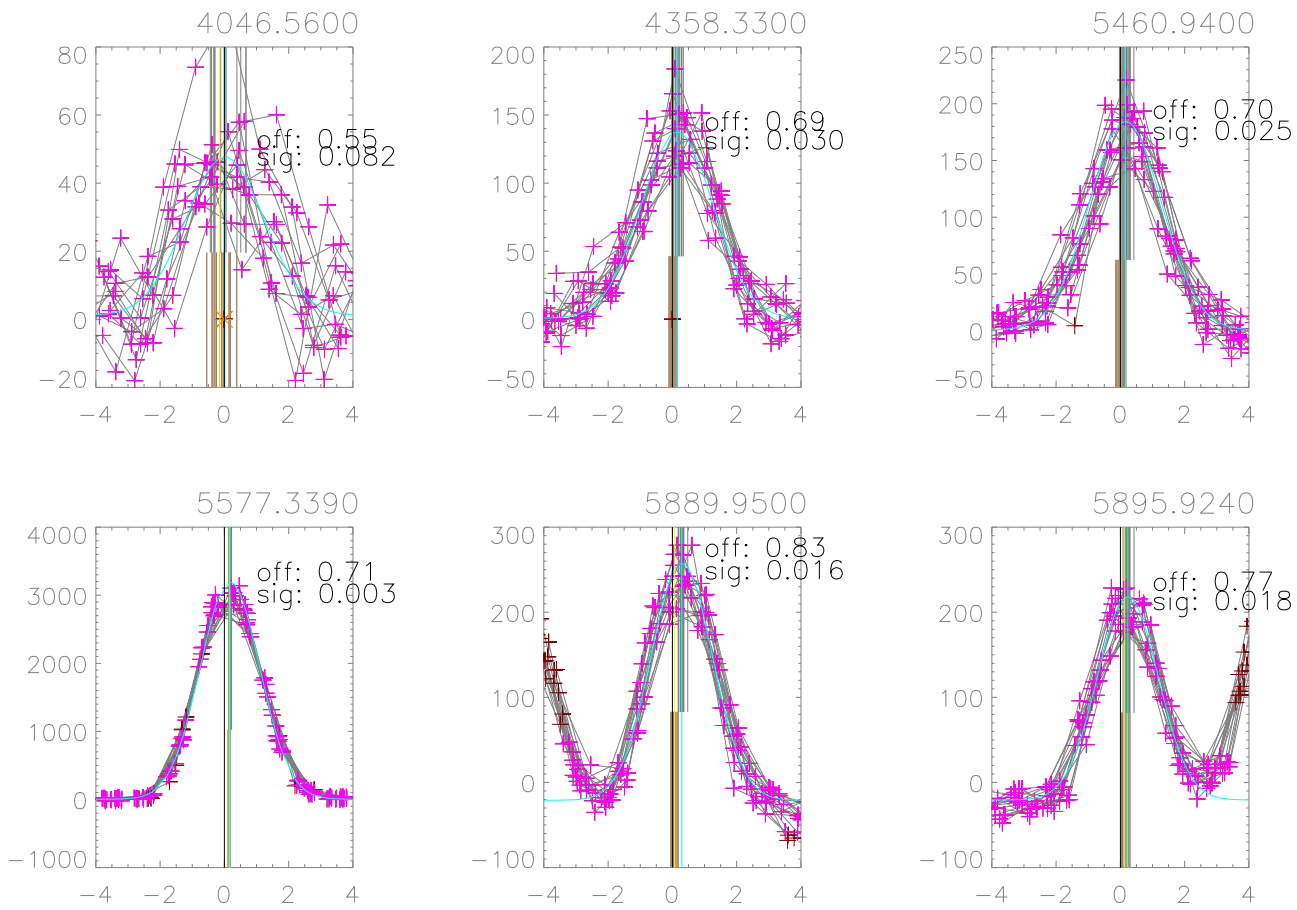

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR−b2−00046003.f
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
19.1
8.2

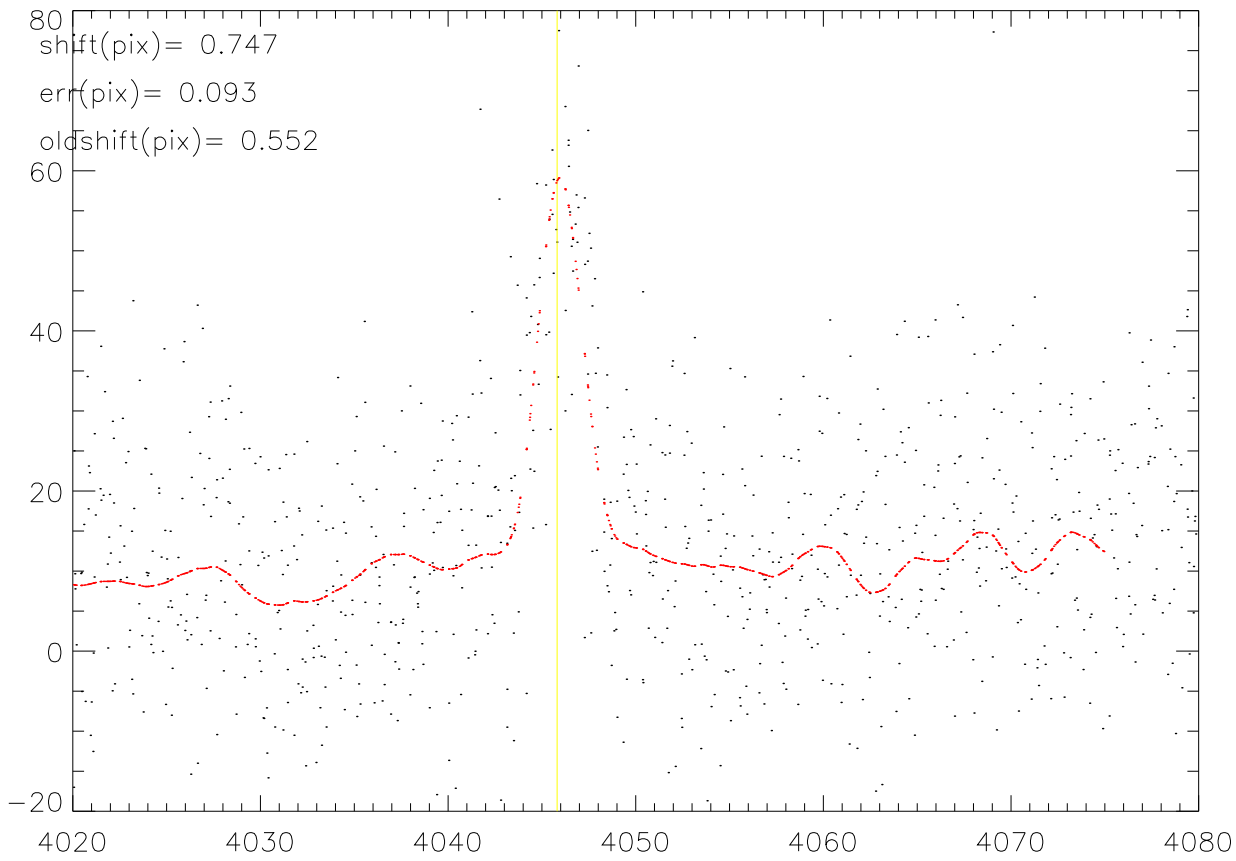

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR-b2-00046003.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 11.732
Max value = 18.598
Sat Feb 9 20:02:30 2008

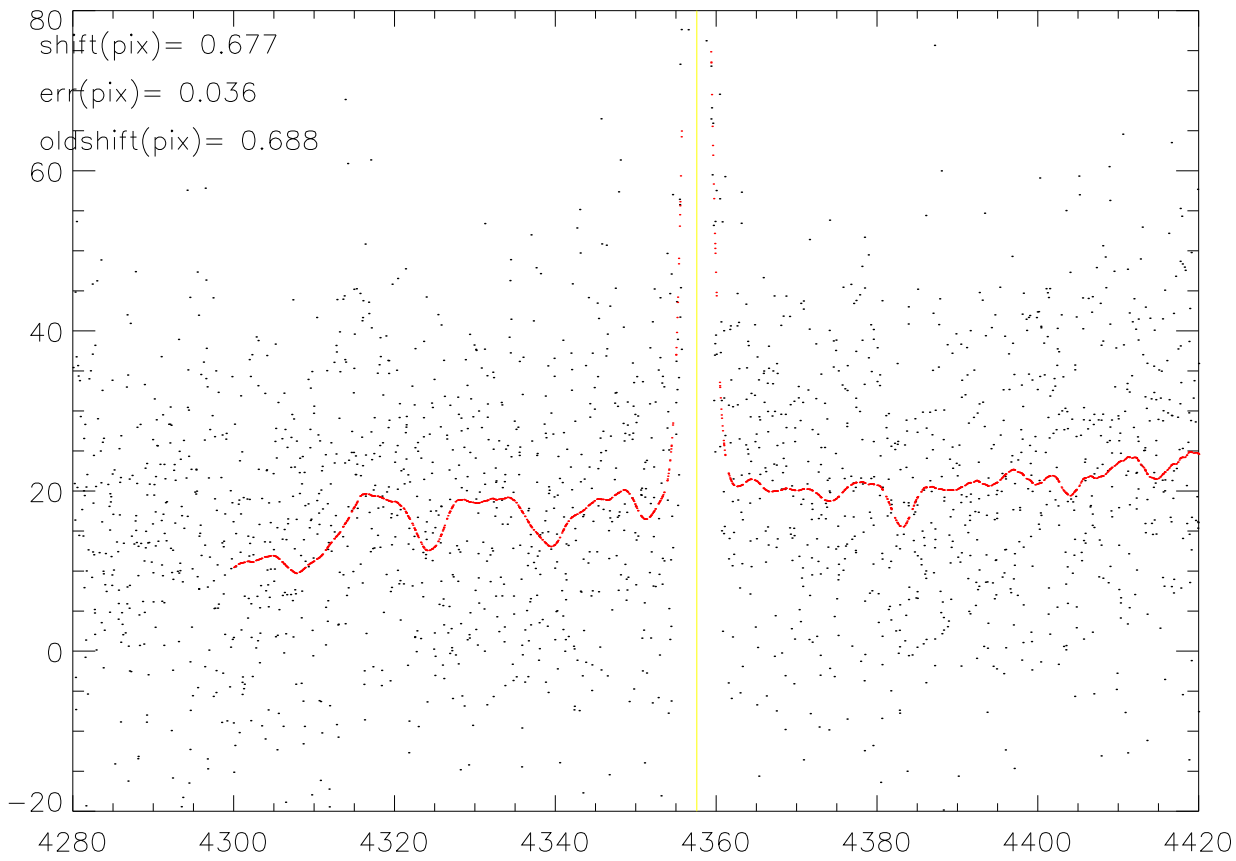

PLATE=2801 MJD=54331 Scattered Light on sdR-b2-00046003.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.36
10.91
1.82
0

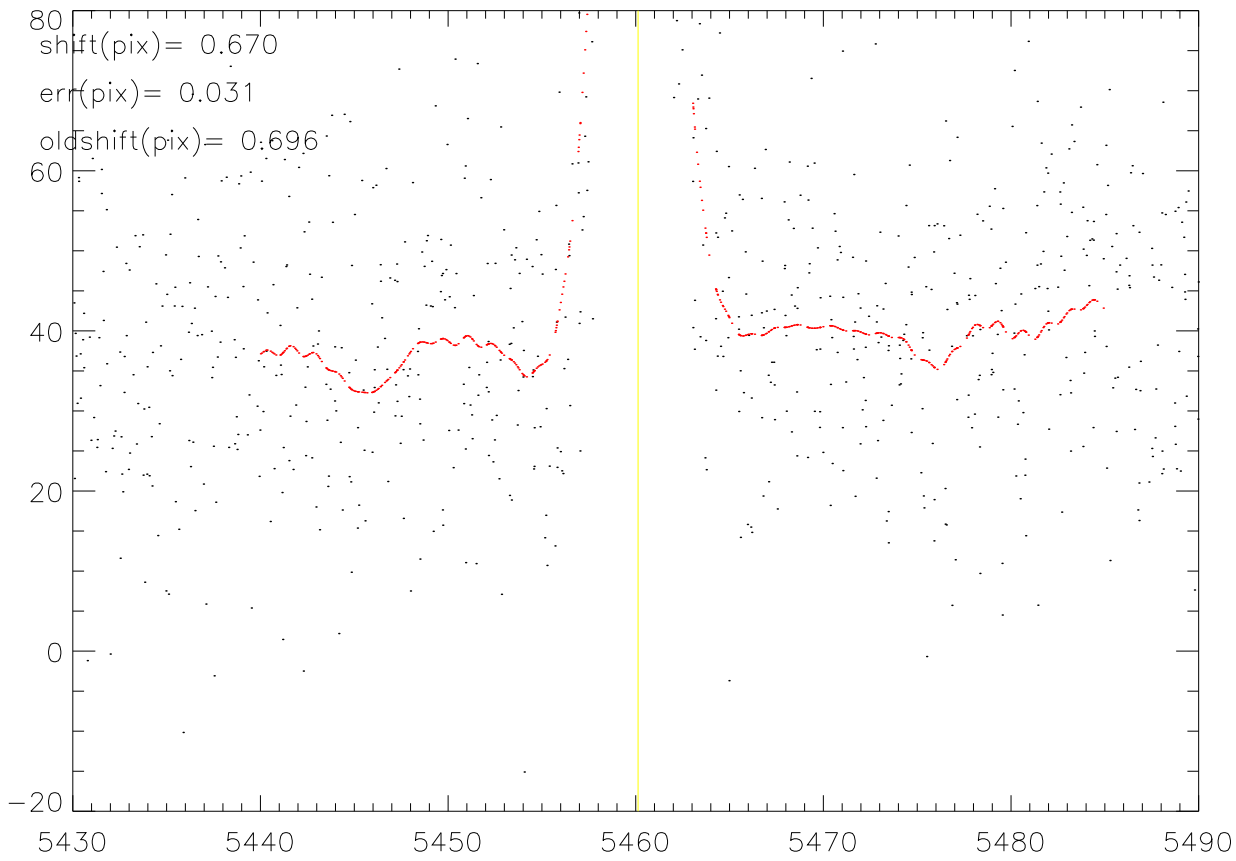

PLATE=2801 MJD=54331 Scattered Light on sdR-b2-00046003.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.537
Max value = 12.861
Sat Feb 9 20:04:54 2008

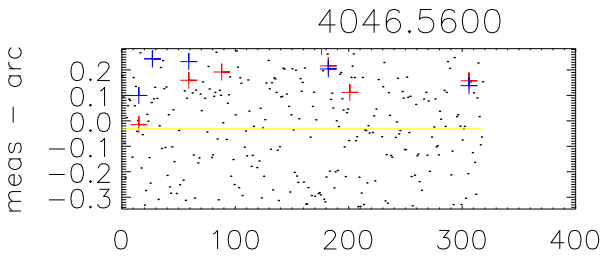

PLATE=2801 MJD=54331 Extraction chi^2 for sdR-b2-00046003.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

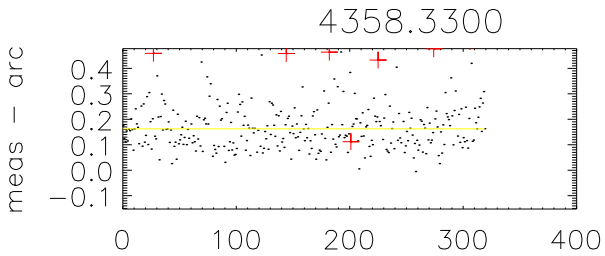

4046.5600
off: 0.55
sig: 0.082
4358.3300
off: 0.69
sig: 0.030
5460.9400
off: 0.70
sig: 0.025
5577.3390
off: 0.71
sig: 0.003
5889.9500
off: 0.83
sig: 0.016
5895.9240
off: 0.77
sig: 0.018

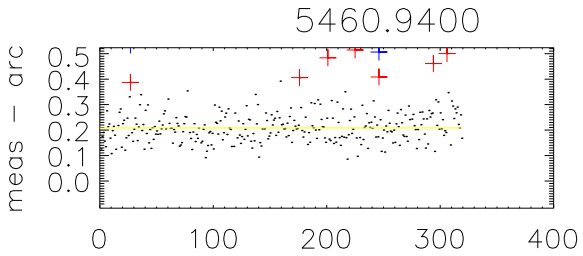

shift(pix)= 0.747
err(pix)= 0.093
oldshift(pix)= 0.552
80
60
40
20
0
−20
4020
4030
4040
4050
4060
4070
4080

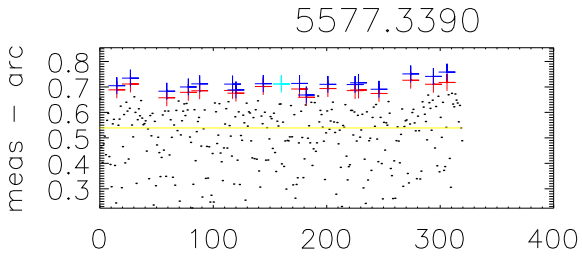

shift(pix)= 0.677
err(pix)= 0.036
oldshift(pix)= 0.688
80
60
40
20
0
−20
4280
4300
4320
4340
4360
4380
4400
4420

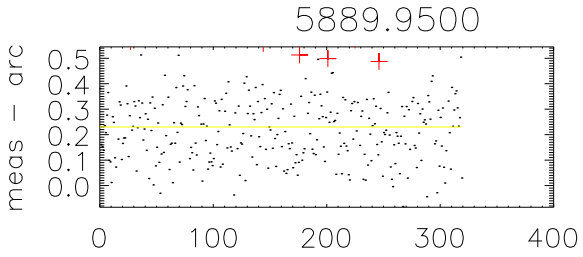

shift(pix)= 0.670
err(pix)= 0.031
oldshift(pix)= 0.696
80
60
40
20
0
−20
5430
5440
5450
5460
5470
5480
5490

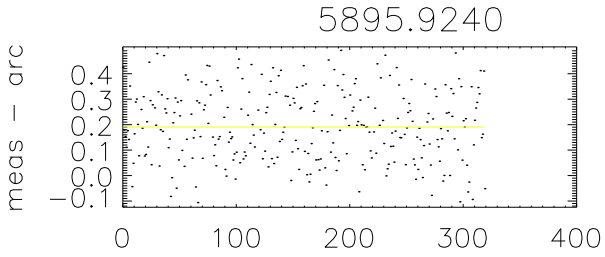

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

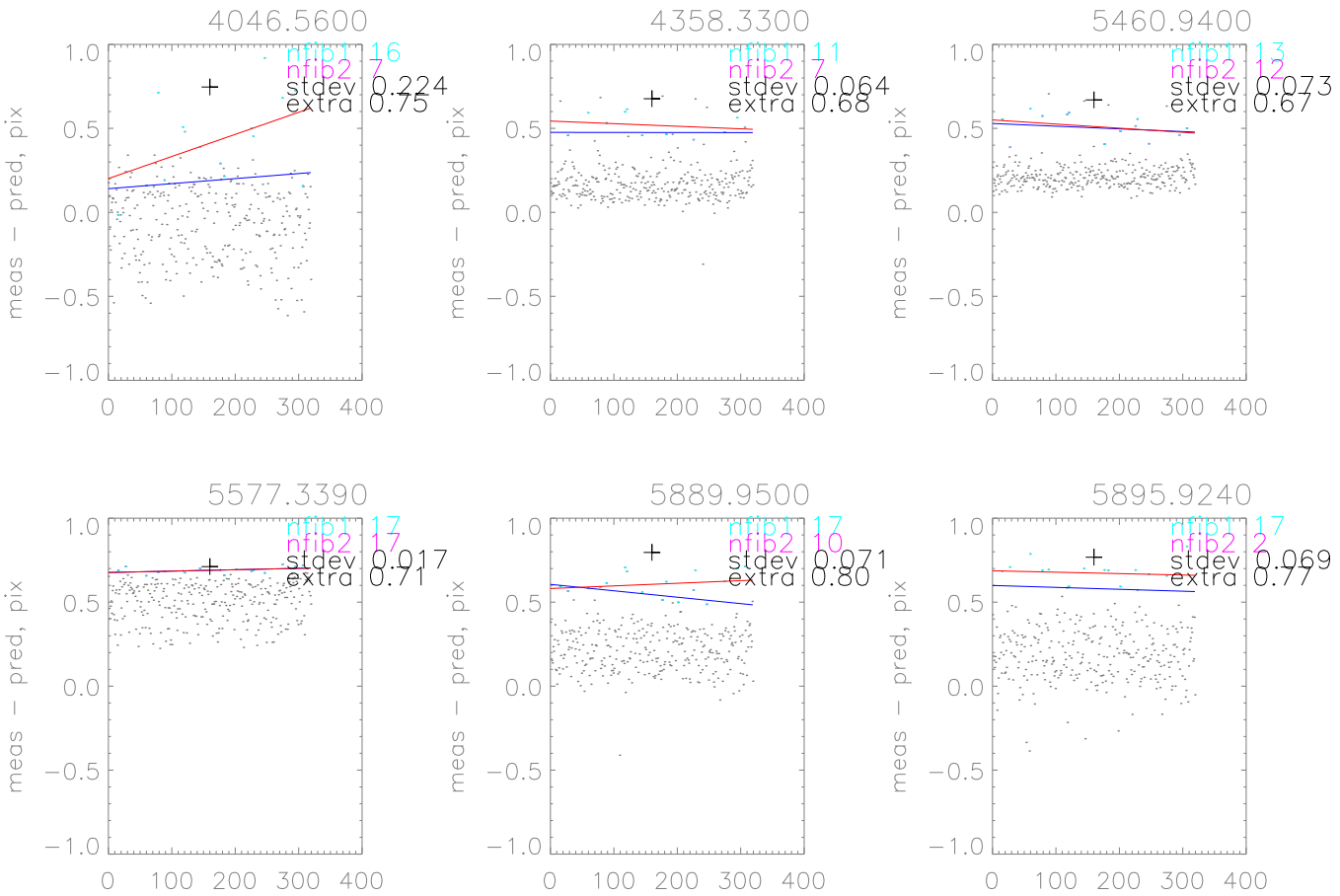

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

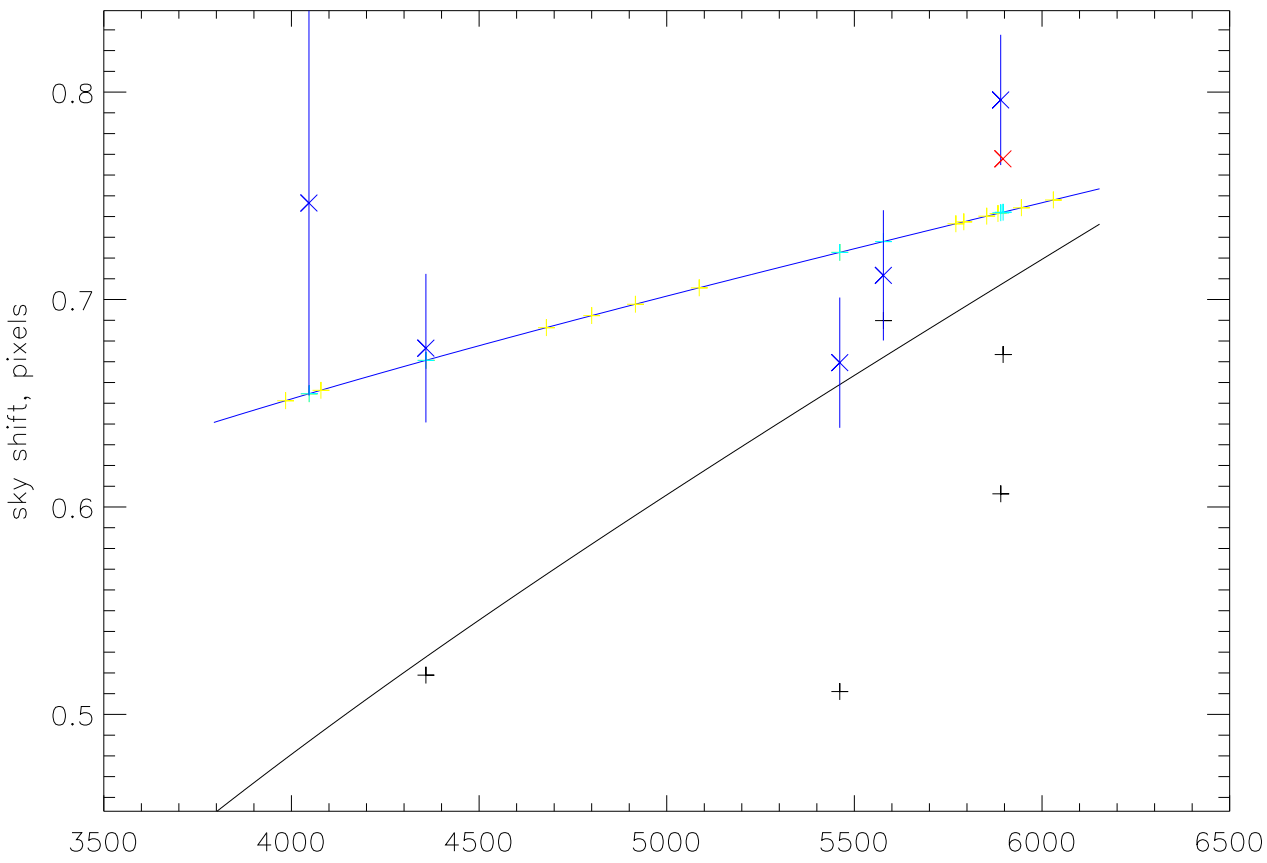

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

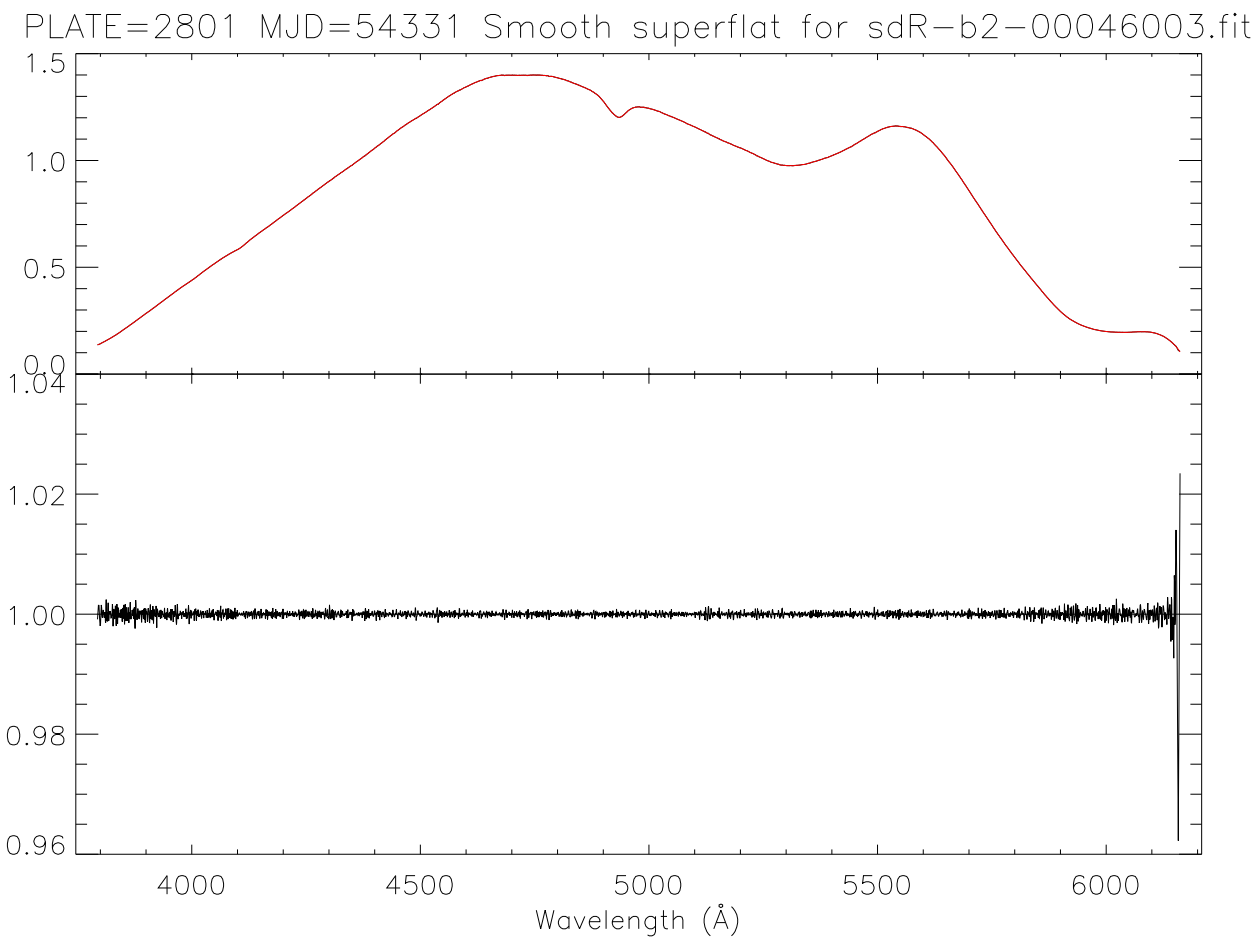

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

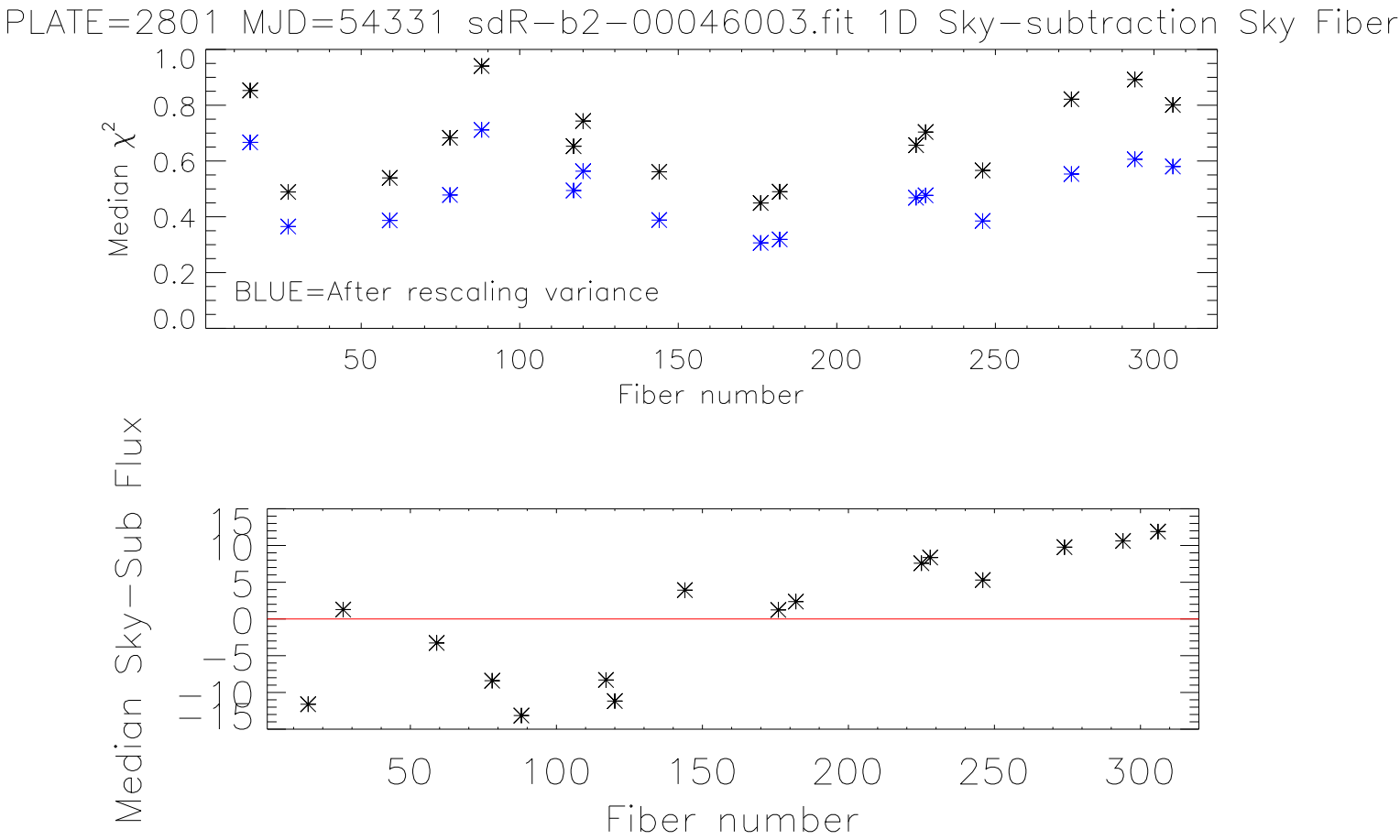

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

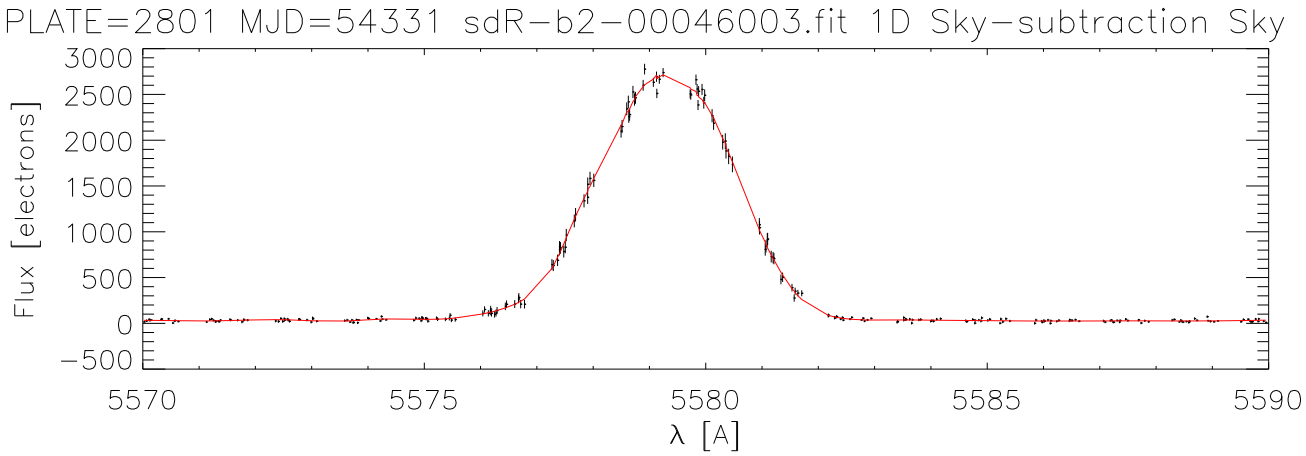

4046.5600
nfib1 16
nfib2 7
stdev 0.224
extra 0.75
4358.3300
nfib1 11
nfib2 7
stdev 0.064
extra 0.68
5460.9400
nfib1 13
nfib2 12
stdev 0.073
extra 0.67
5577.3390
nfib1 17
nfib2 17
stdev 0.017
extra 0.71
5889.9500
nfib1 17
nfib2 10
stdev 0.071
extra 0.80
5895.9240
nfib1 17
nfib2 2
stdev 0.069
extra 0.77
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

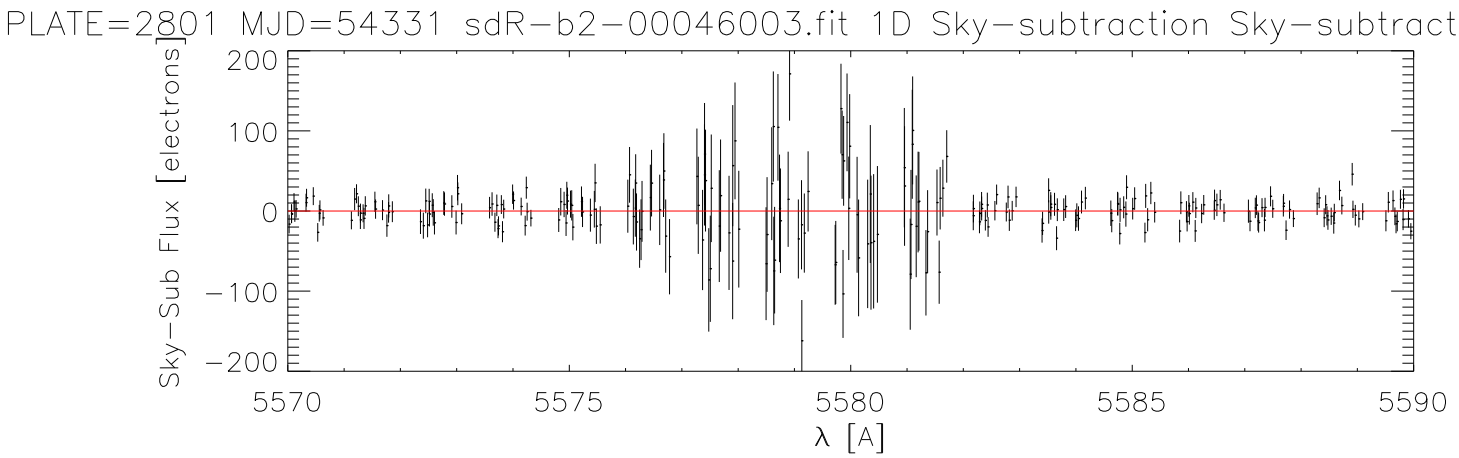

sky shift, pixels
0.8
0.7
0.6
0.5
3500
4000
4500
5000
5500
6000
6500

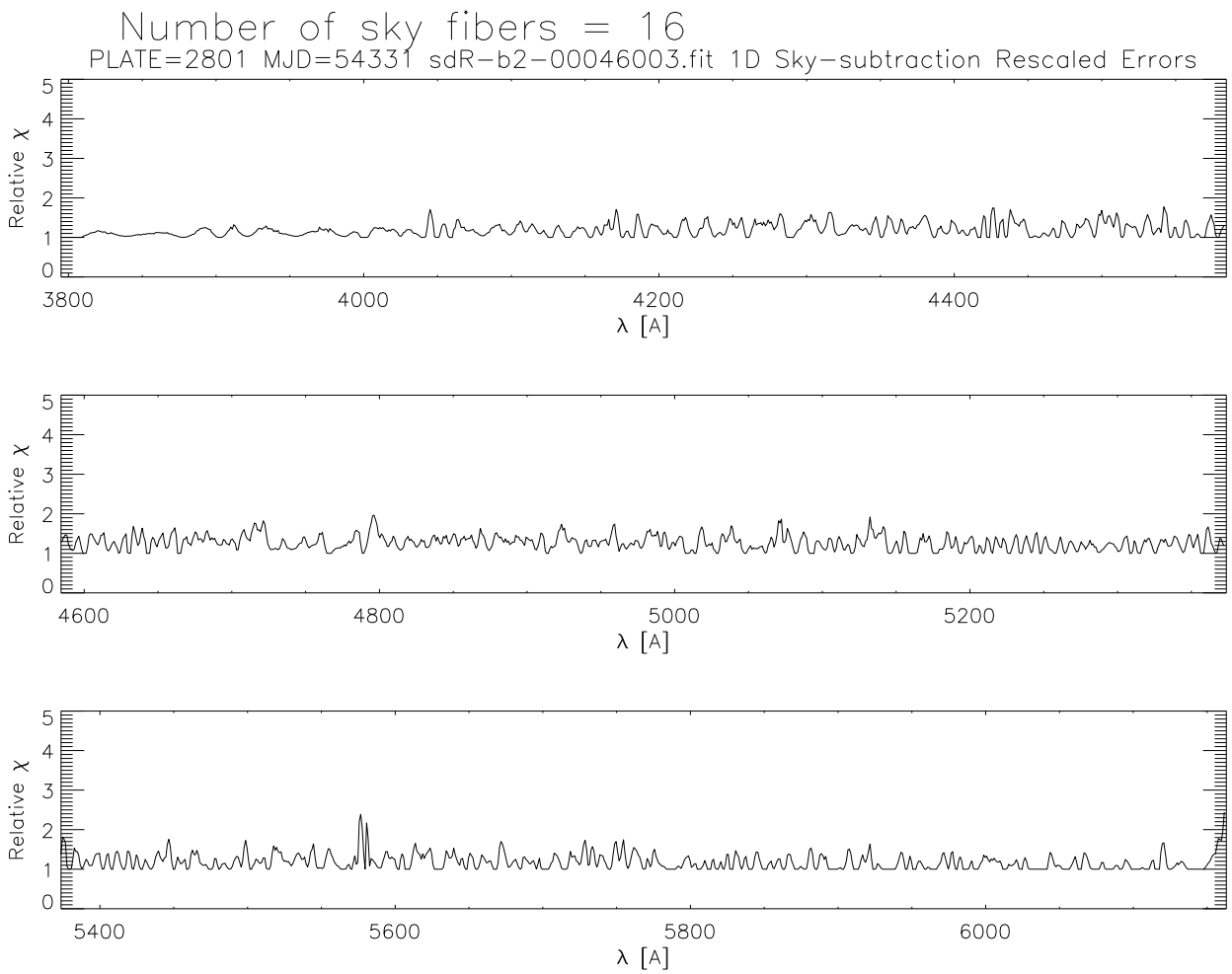
es= −0.0001

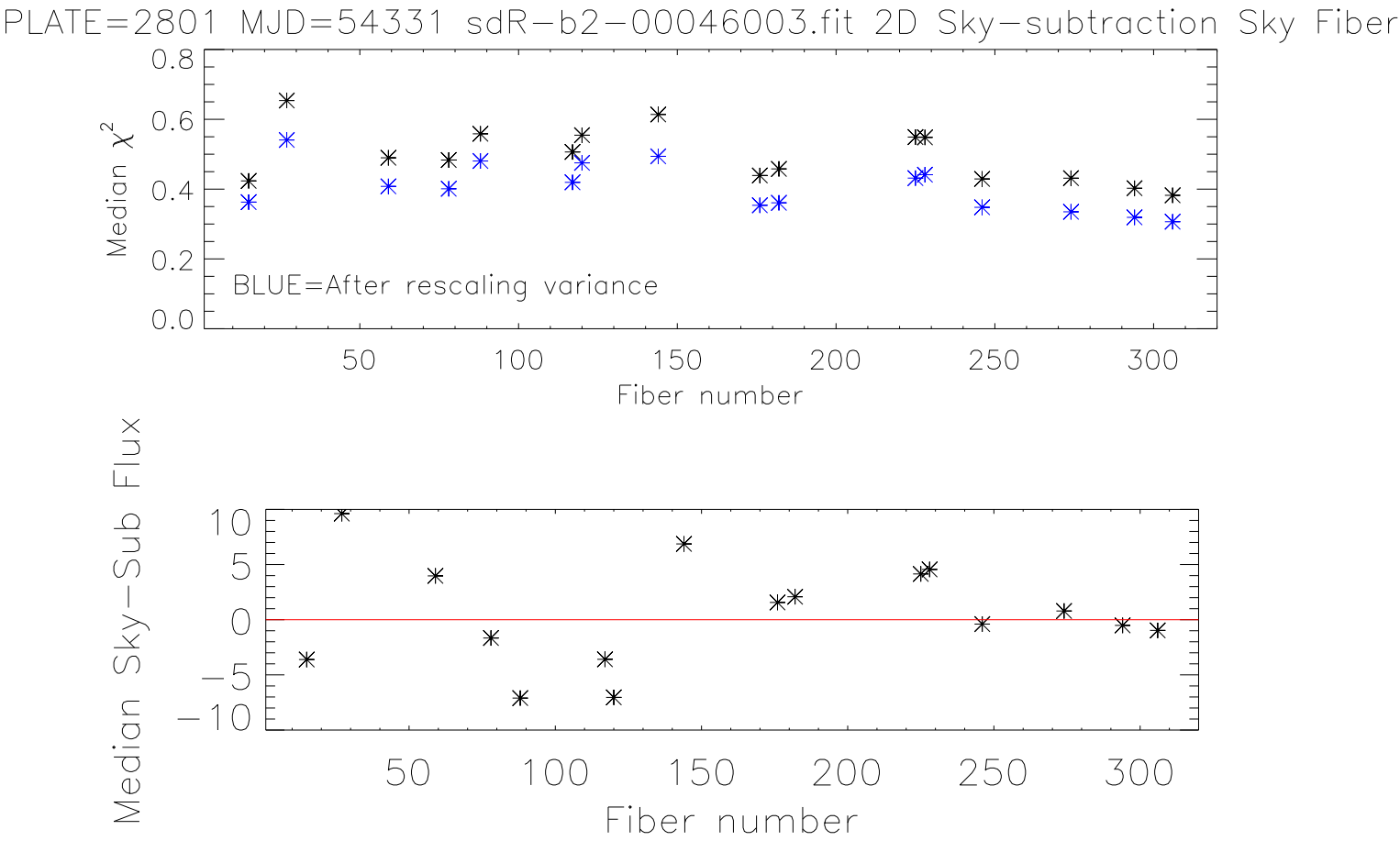

PLATE=2801 MJD=54331 Smooth superflat for sdR−b2−00046003.fit
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

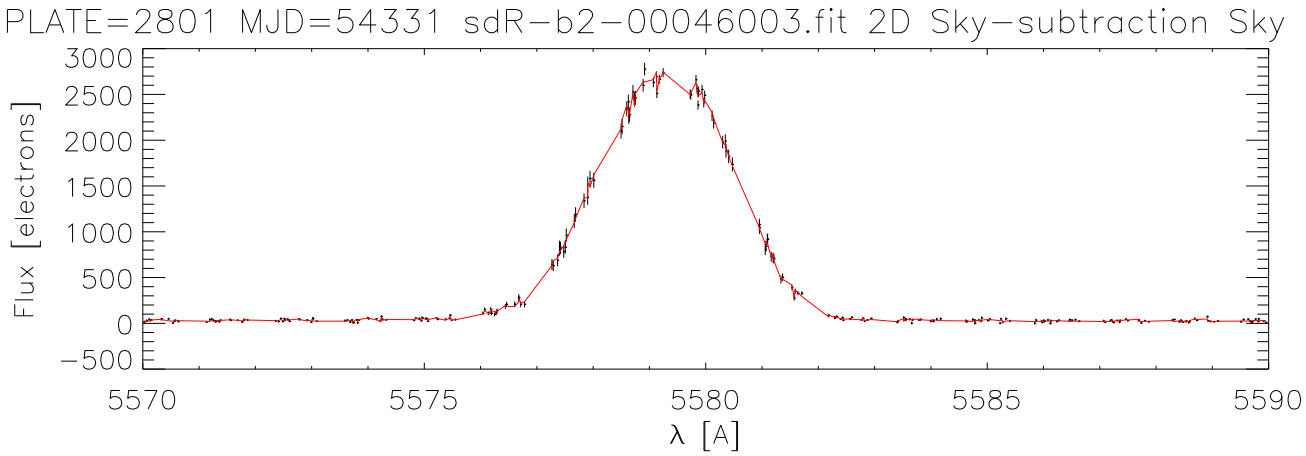

PLATE=2801 MJD=54331 sdR-b2-00046003.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

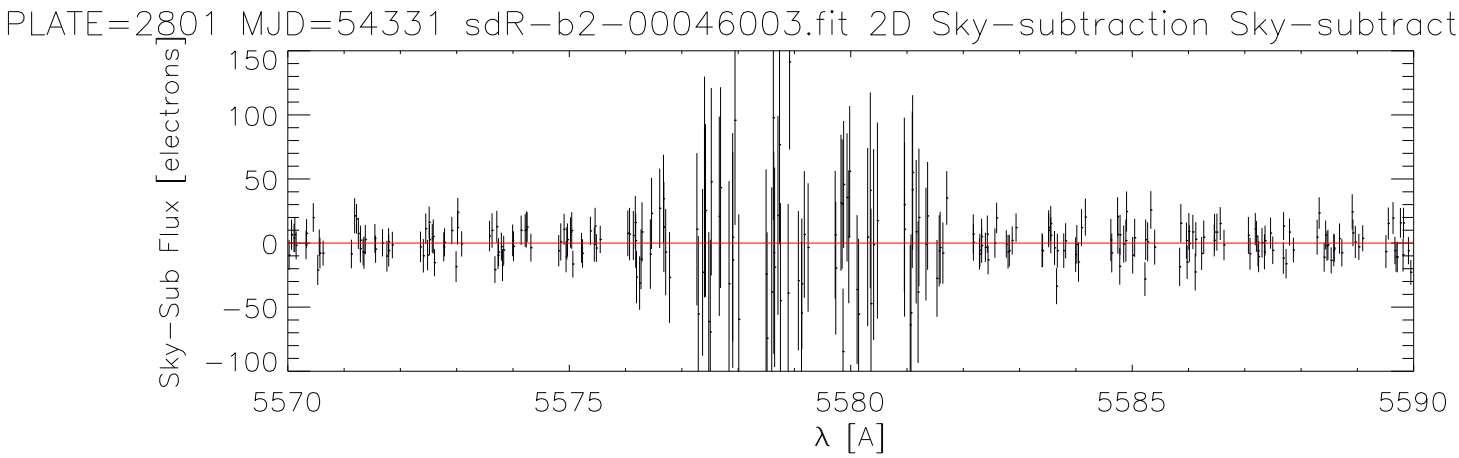

PLATE=2801 MJD=54331 sdR-b2-00046003.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

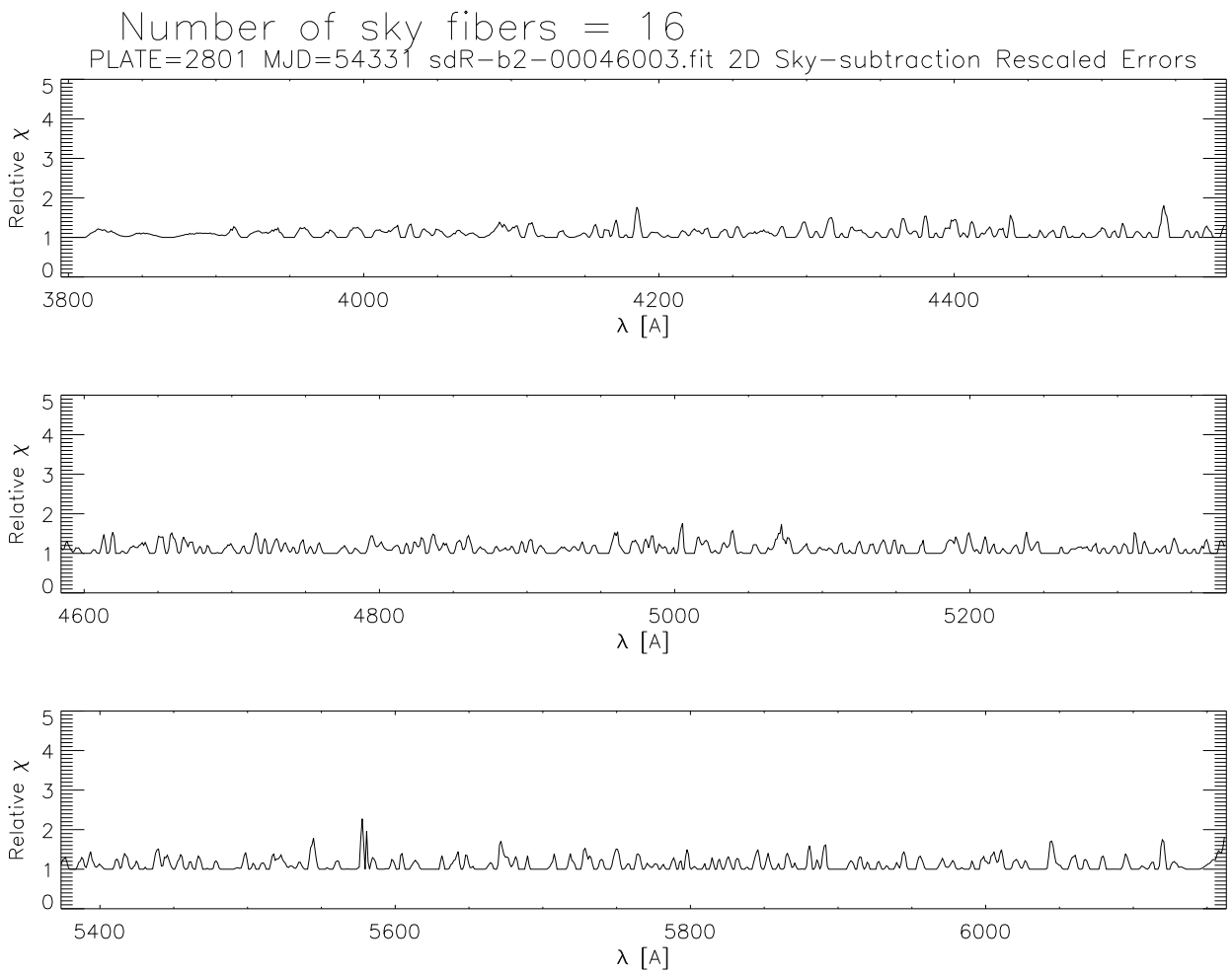

PLATE=2801 MJD=54331 sdR-b2-00046003.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

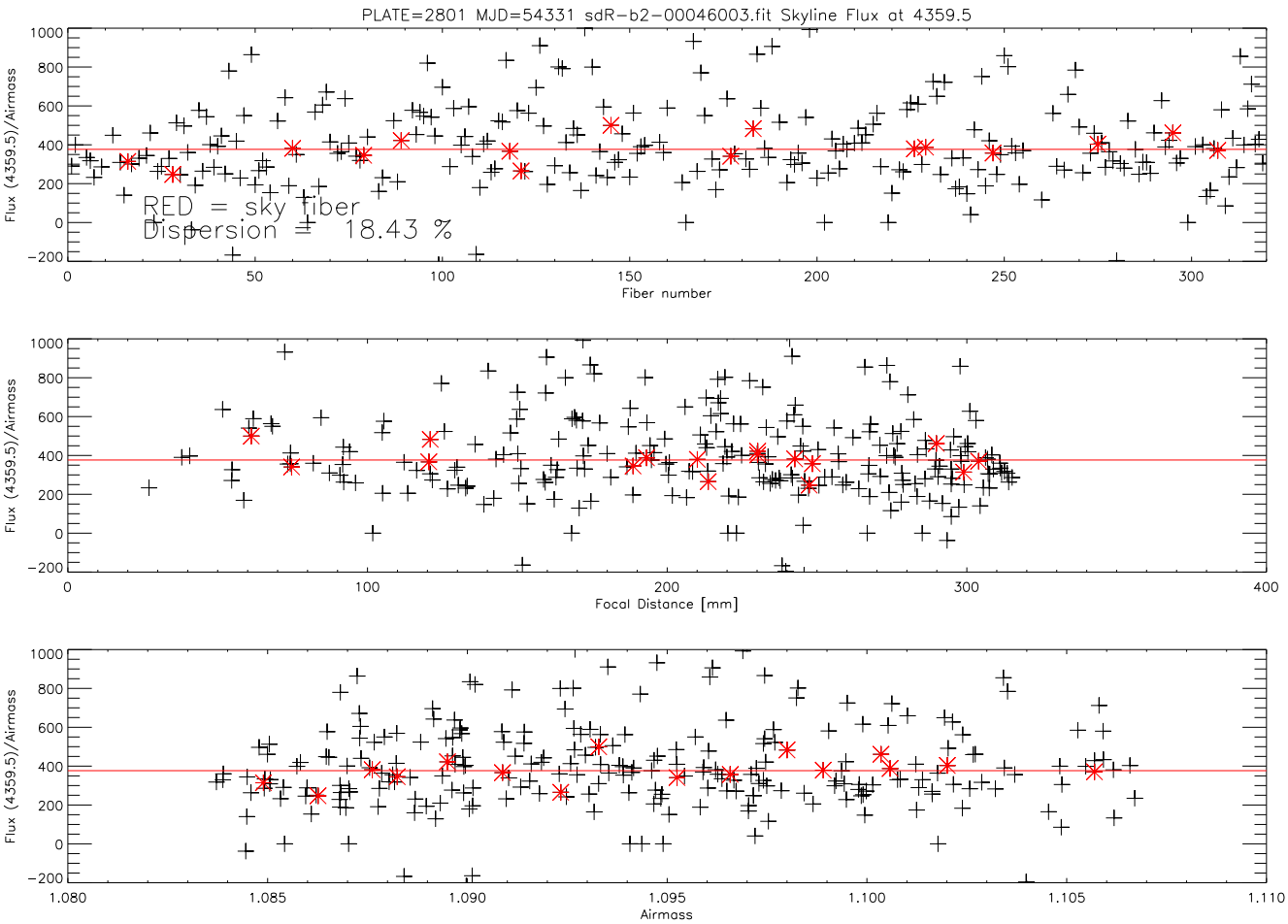

Number of sky fibers = 16
PLATE=2801 MJD=54331 sdR-b2-00046003.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

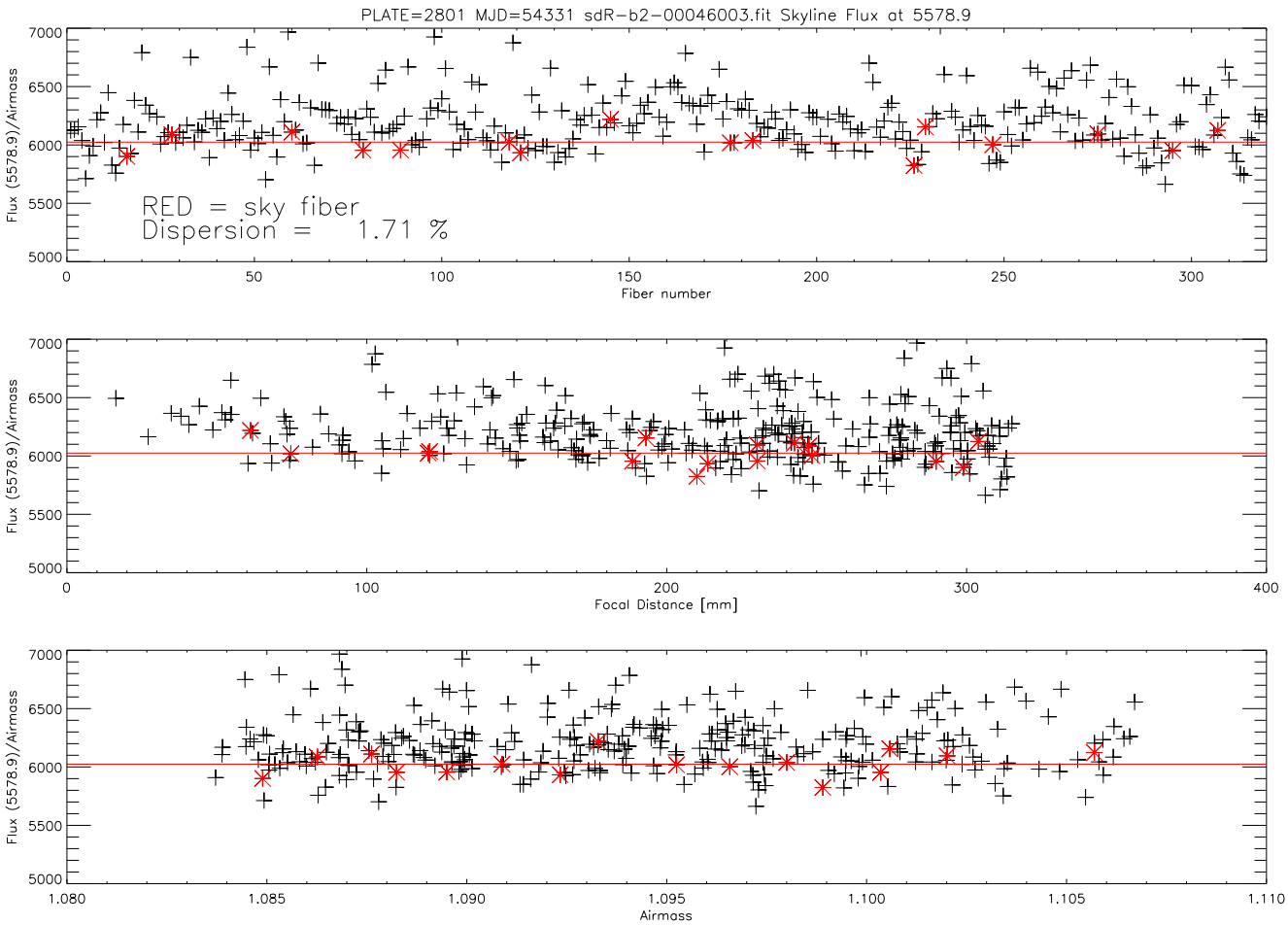

PLATE=2801 MJD=54331 sdR-b2-00046003.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

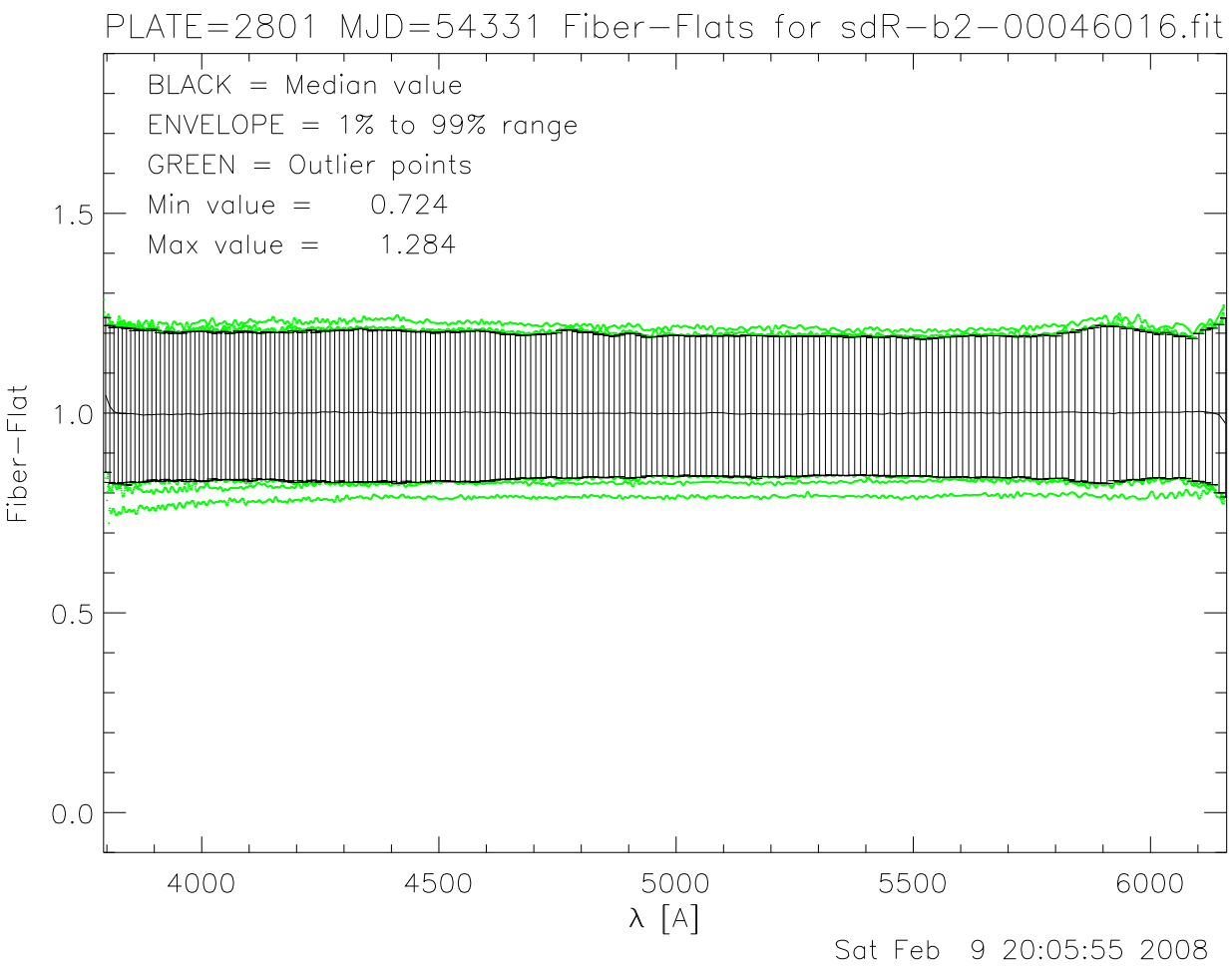

PLATE=2801 MJD=54331 sdR-b2-00046003.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

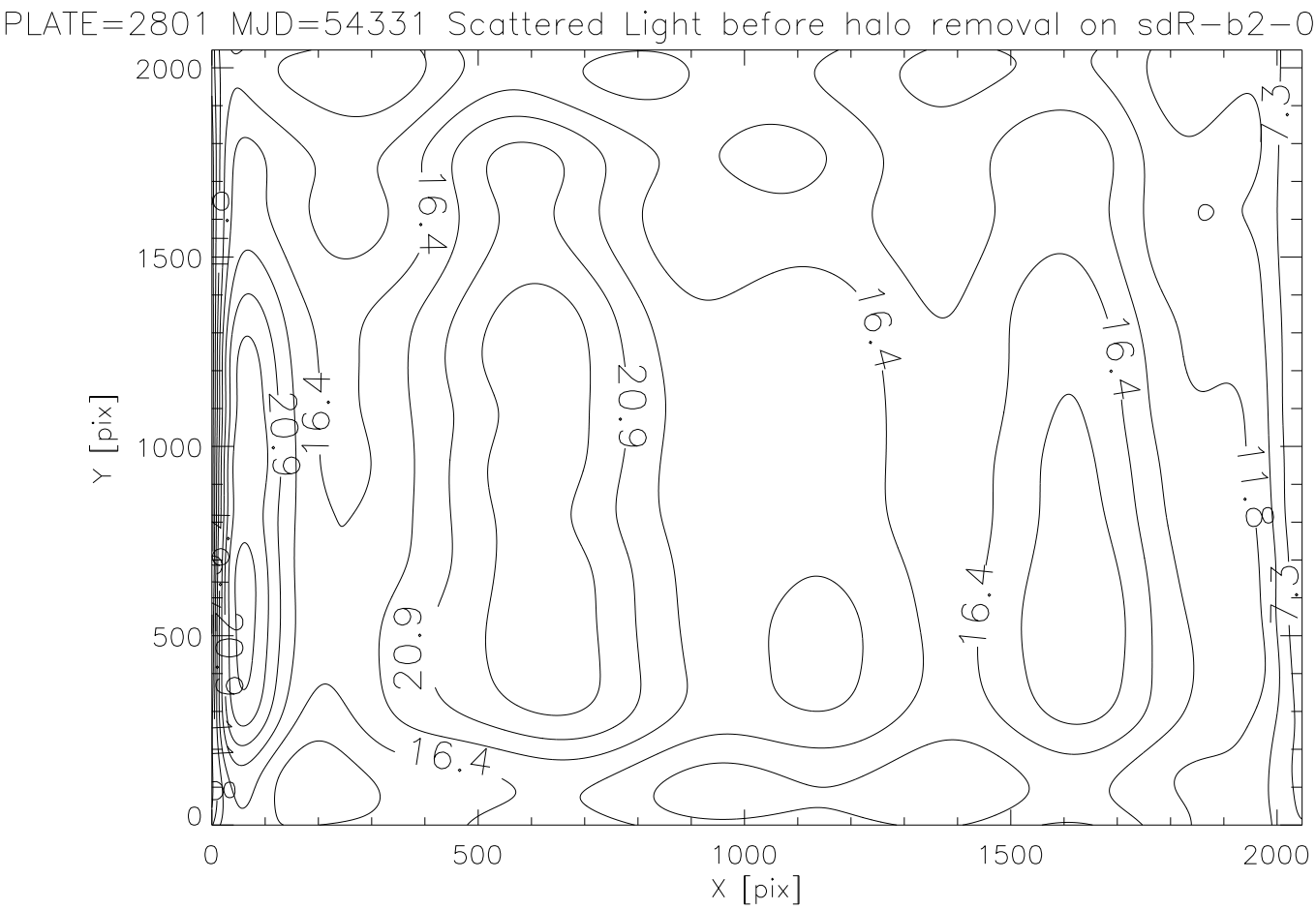

PLATE=2801 MJD=54331 sdR-b2-00046003.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

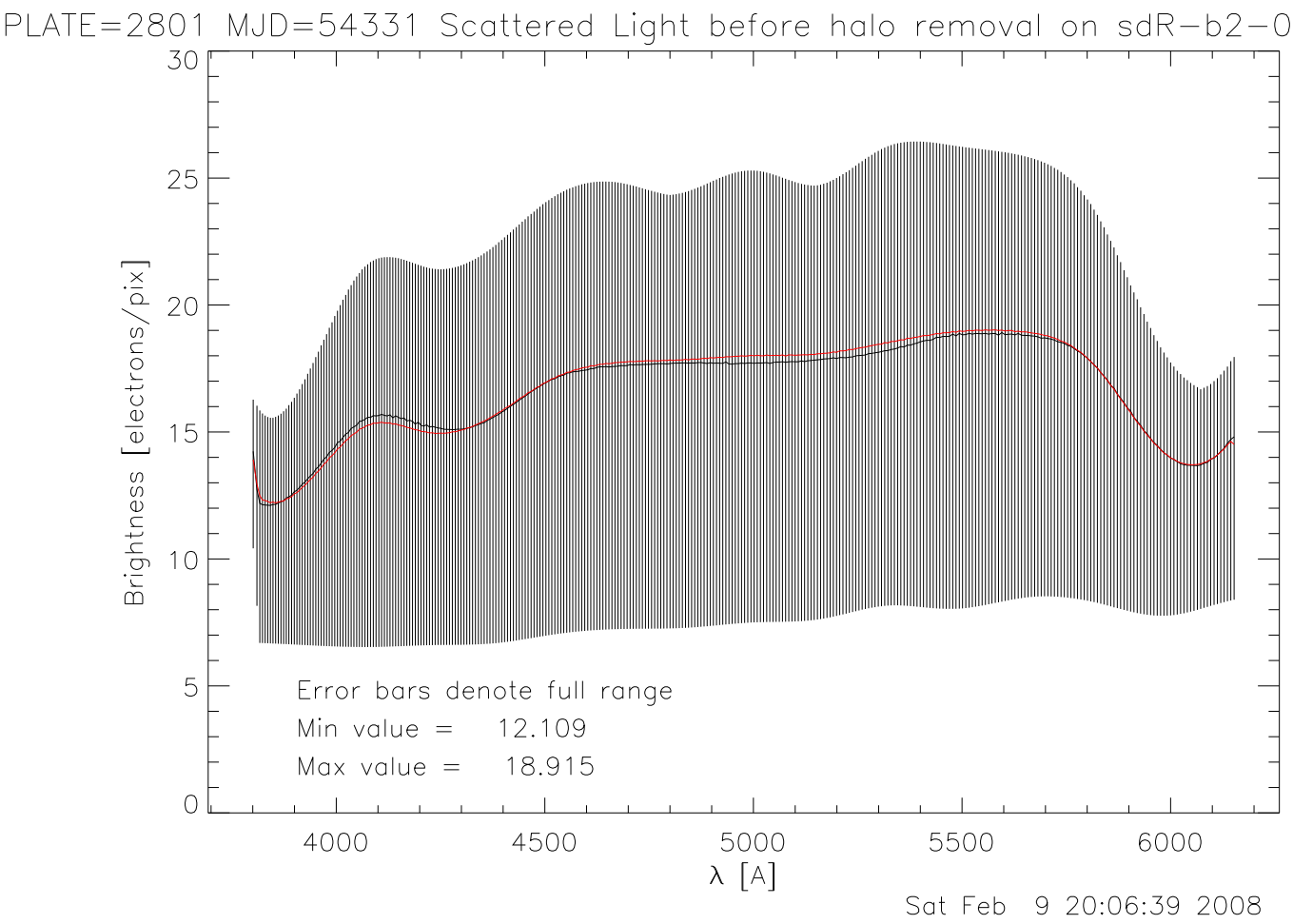

Number of sky fibers = 16
PLATE=2801 MJD=54331 sdR-b2-00046003.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

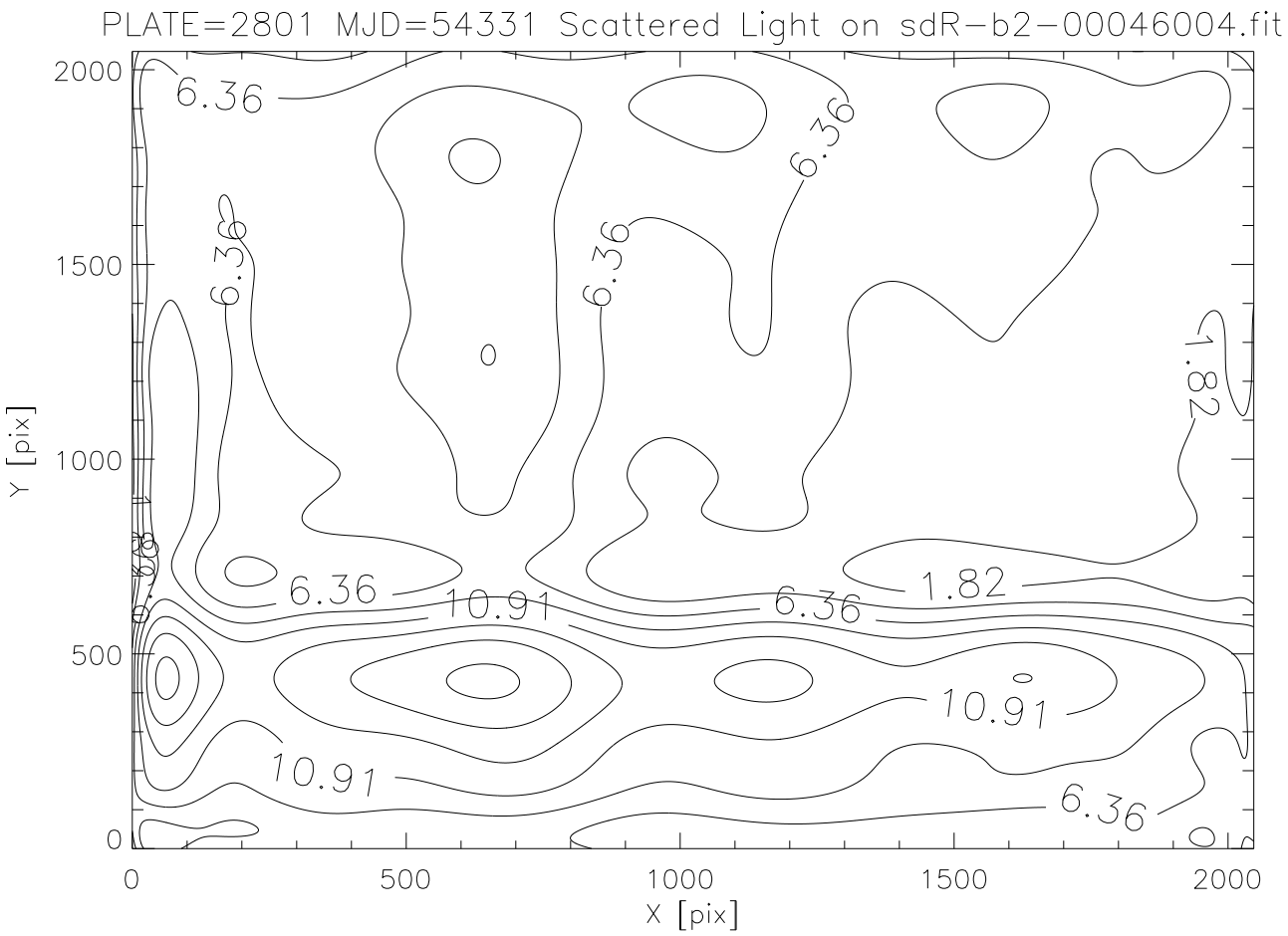

PLATE=2801 MJD=54331 sdR-b2-00046003.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 18.43 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

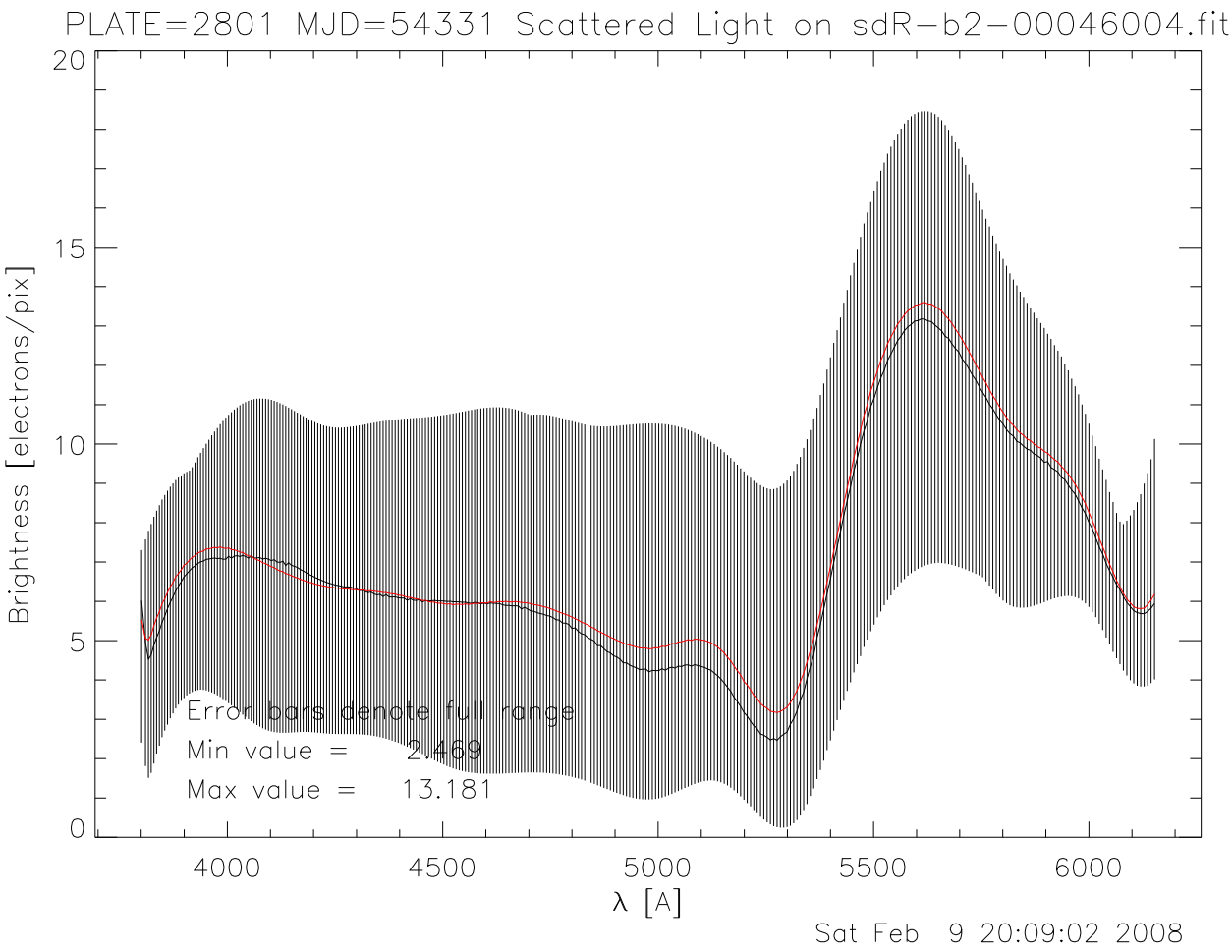

PLATE=2801 MJD=54331 sdR-b2-00046003.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.71 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

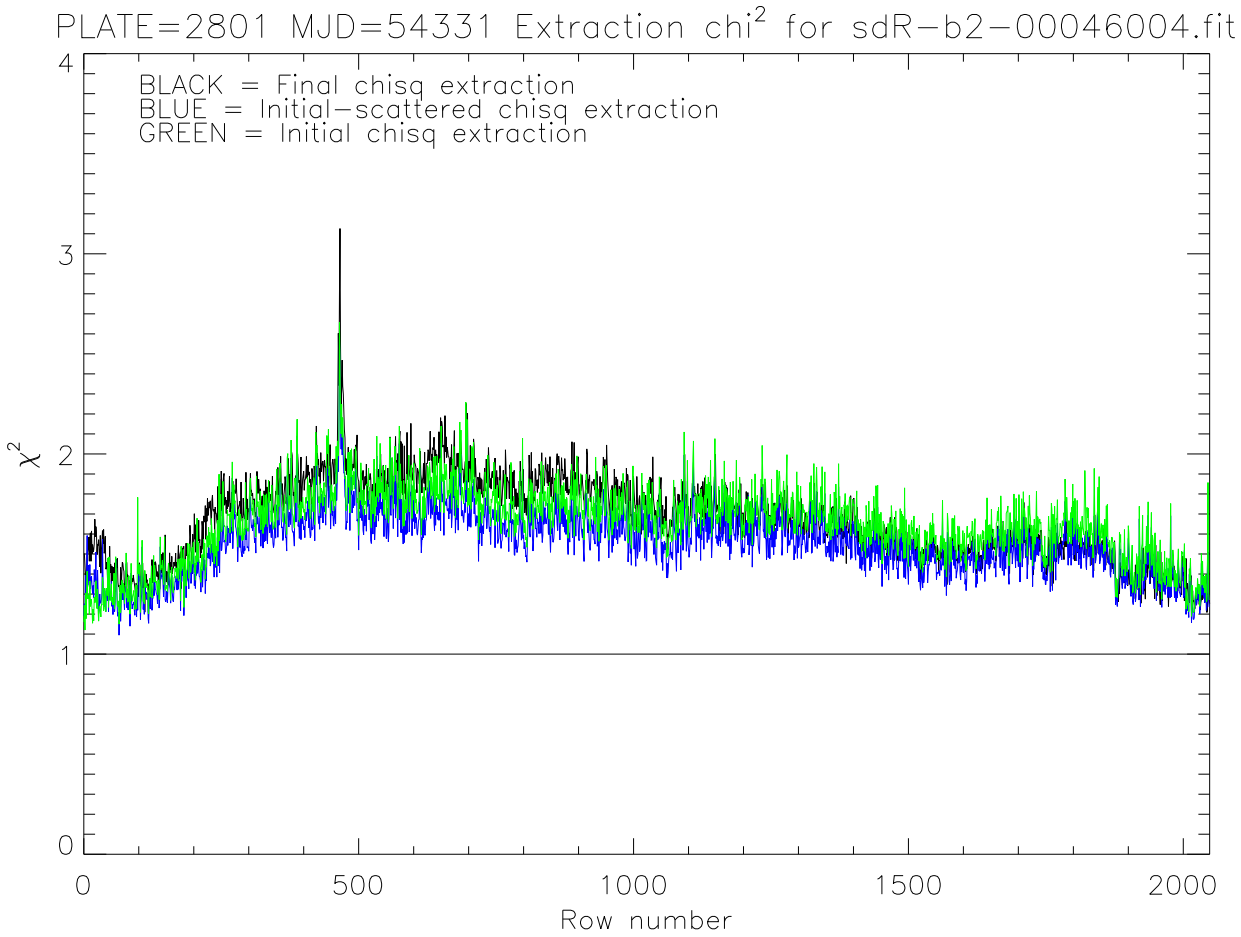

PLATE=2801 MJD=54331 Fiber−Flats for sdR−b2−00046016.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.724
Max value = 1.284
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 20:05:55 2008

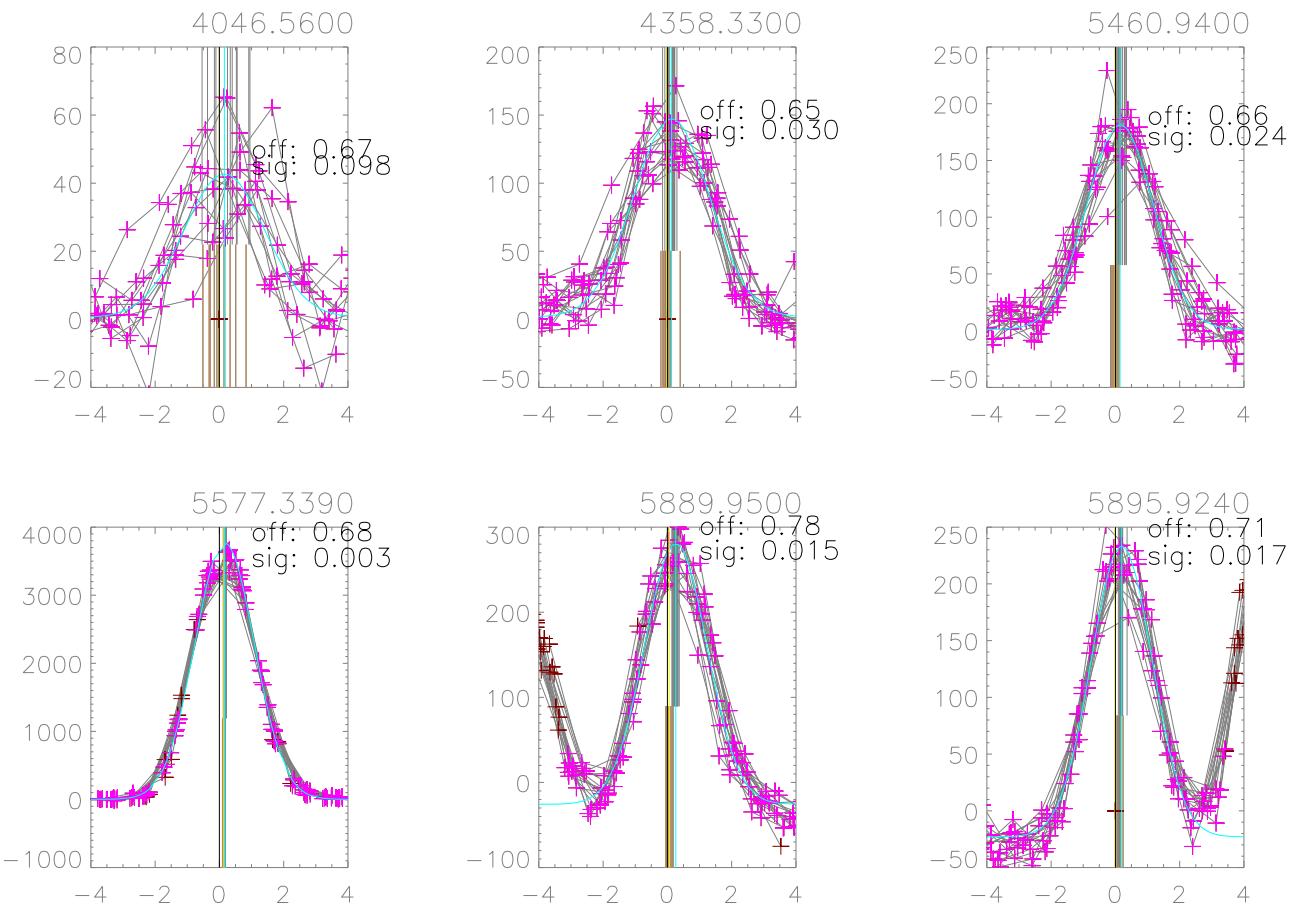

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR−b2−00046004.f
Y [pix]
X [pix]
0
500
1000
1500
2000
16.4
20.9
7.3
11.8

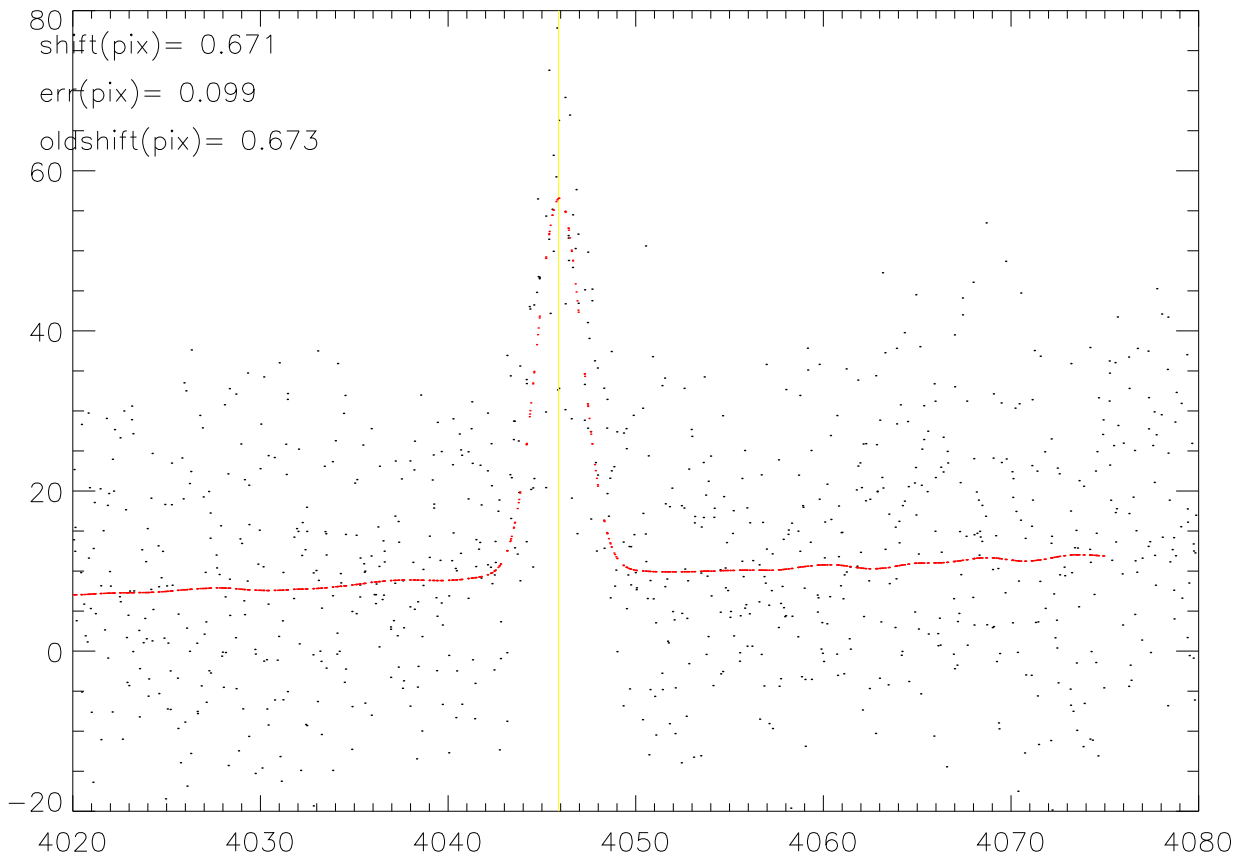

PLATE=2801 MJD=54331 Scattered Light before halo removal on sdR-b2-00046004.f
Brightness [electrons/pix]
30
25
20
15
10
5
0
Error bars denote full range
Min value = 12.109
Max value = 18.915
4000
4500
5000
5500
6000
λ [A]
Sat Feb 9 20:06:39 2008

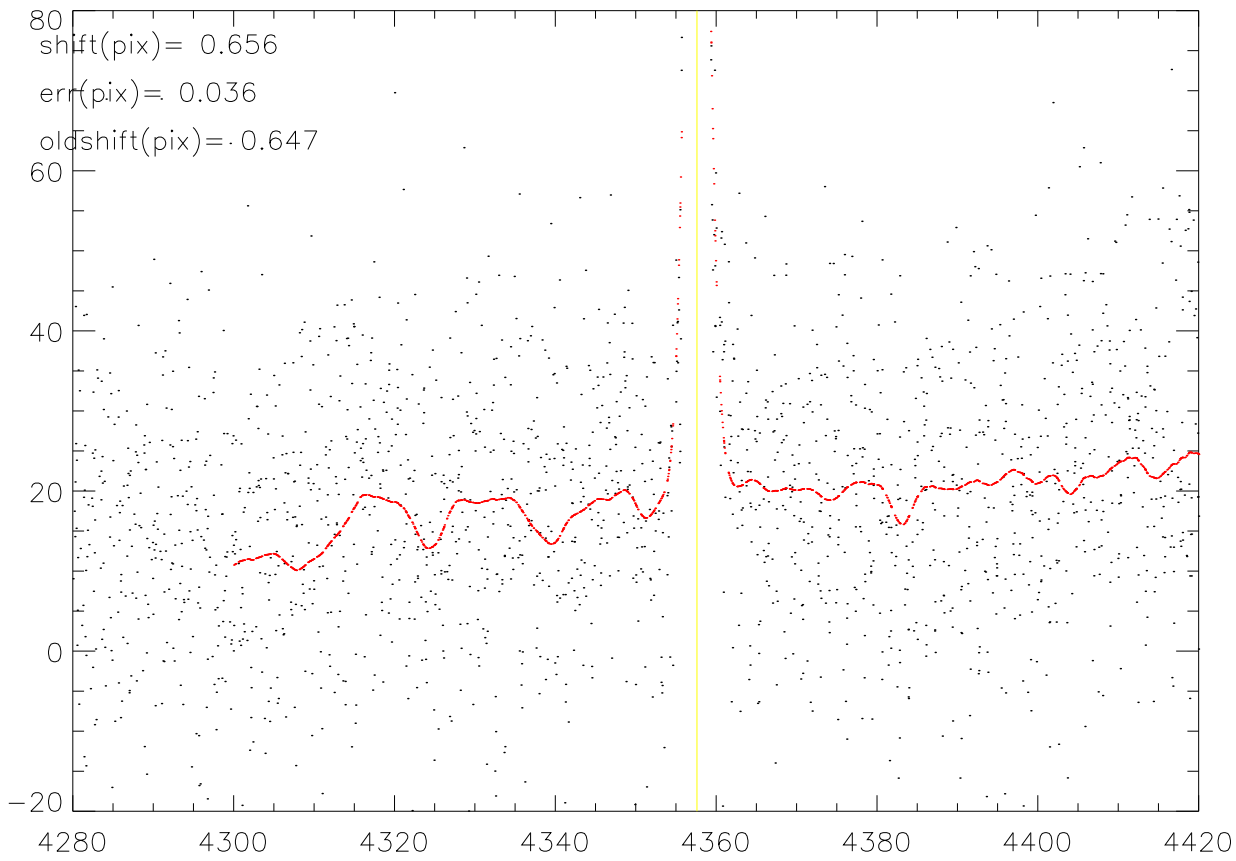

PLATE=2801 MJD=54331 Scattered Light on sdR-b2-00046004.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.36
10.91
1.82
0

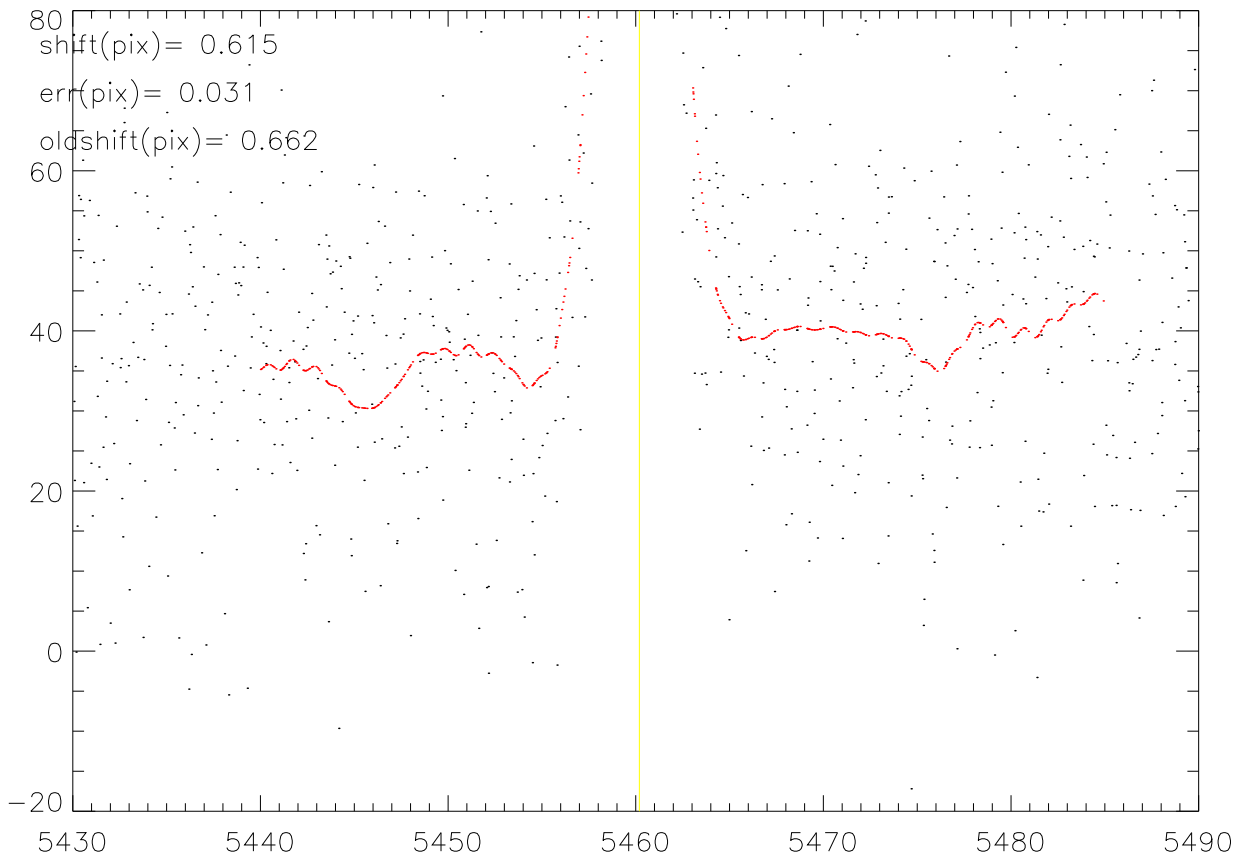

PLATE=2801 MJD=54331 Scattered Light on sdR-b2-00046004.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.469
Max value = 13.181
Sat Feb 9 20:09:02 2008

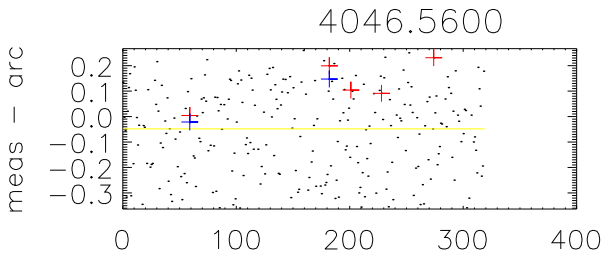

PLATE=2801 MJD=54331 Extraction chi^2 for sdR-b2-00046004.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

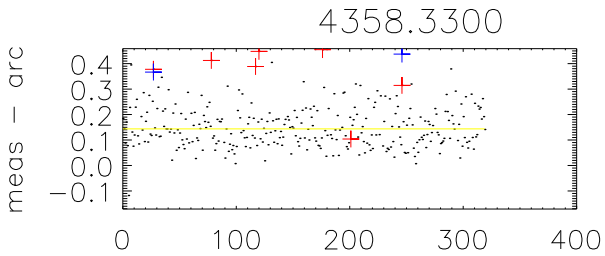

4046.5600
off: 0.67
sig: 0.098
4358.3300
off: 0.65
sig: 0.030
5460.9400
off: 0.66
sig: 0.024
5577.3390
off: 0.68
sig: 0.003
5889.9500
off: 0.78
sig: 0.015
5895.9240
off: 0.71
sig: 0.017

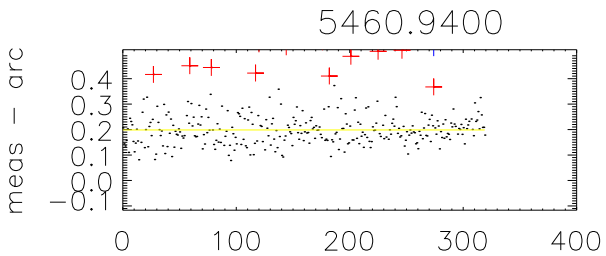

shift(pix)= 0.671
err(pix)= 0.099
oldshift(pix)= 0.673
80
60
40
20
0
−20
4020
4030
4040
4050
4060
4070
4080

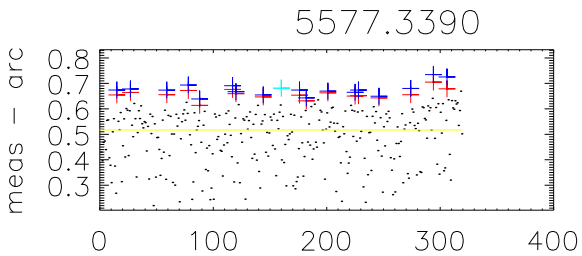

shift(pix)= 0.656
err(pix)= 0.036
oldshift(pix)= 0.647
80
60
40
20
0
−20
4280
4300
4320
4340
4360
4380
4400
4420

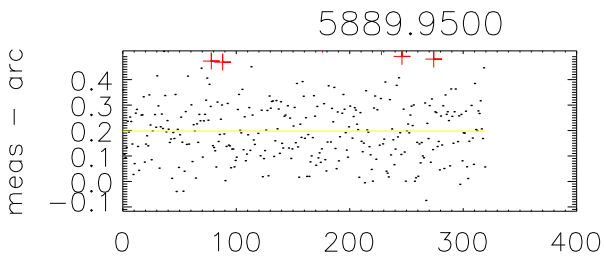

shift(pix)= 0.615
err(pix)= 0.031
oldshift(pix)= 0.662
80
60
40
20
0
−20
5430
5440
5450
5460
5470
5480
5490

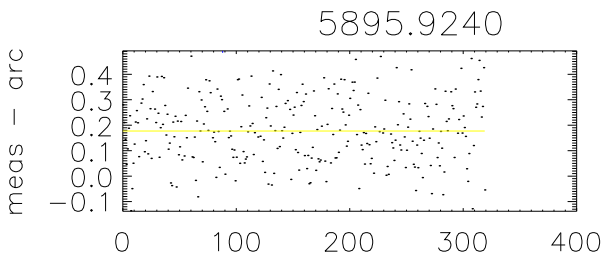

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

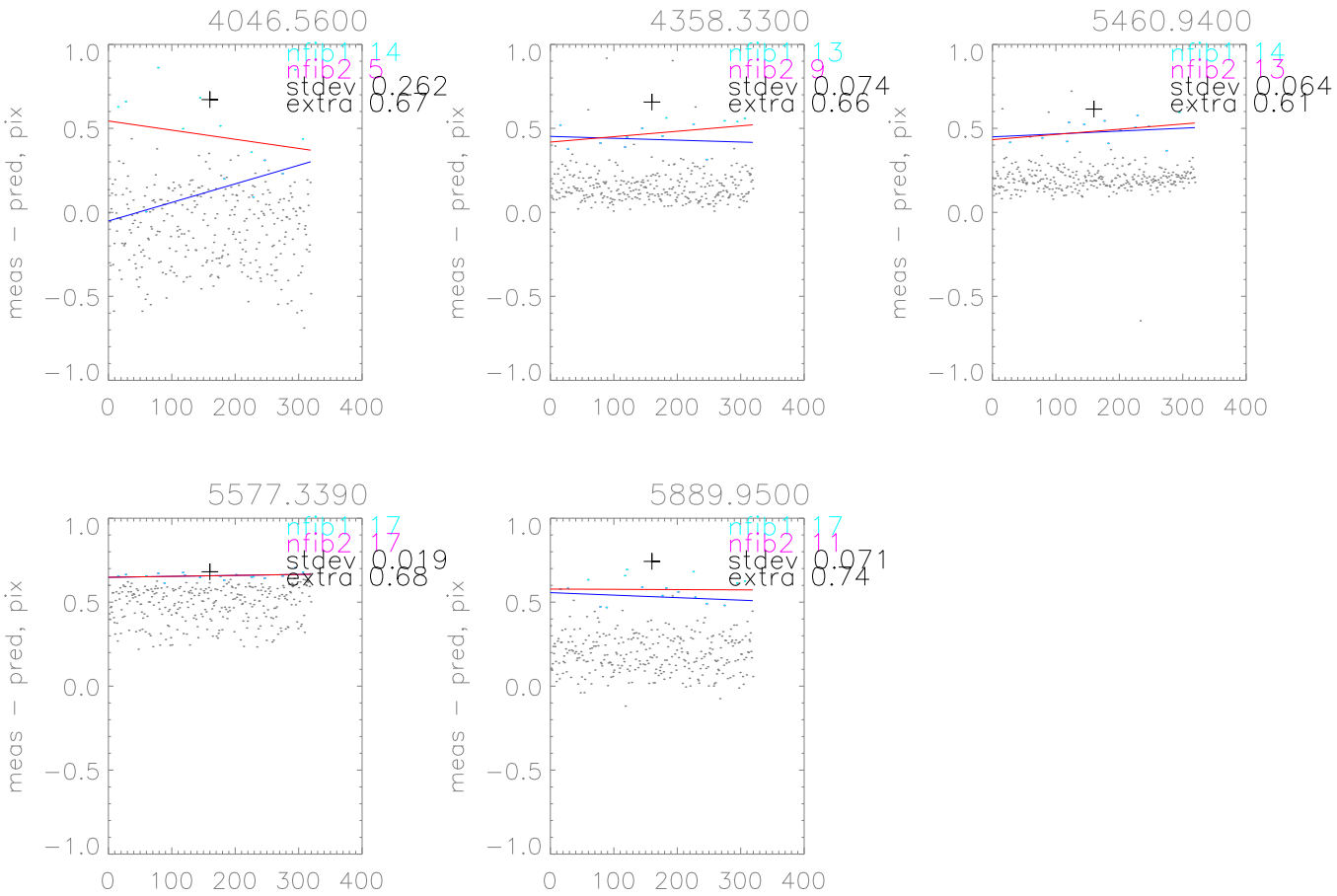

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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
0.8
0.7
0.6
0.5
0.4
0.3
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 14
nfib2 5
stdev 0.262
extra 0.67
4358.3300
nfib1 13
nfib2 9
stdev 0.074
extra 0.66
5460.9400
nfib1 14
nfib2 13
stdev 0.064
extra 0.61
5577.3390
nfib1 17
nfib2 17
stdev 0.019
extra 0.68
5889.9500
nfib1 17
nfib2 11
stdev 0.071
extra 0.74
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400