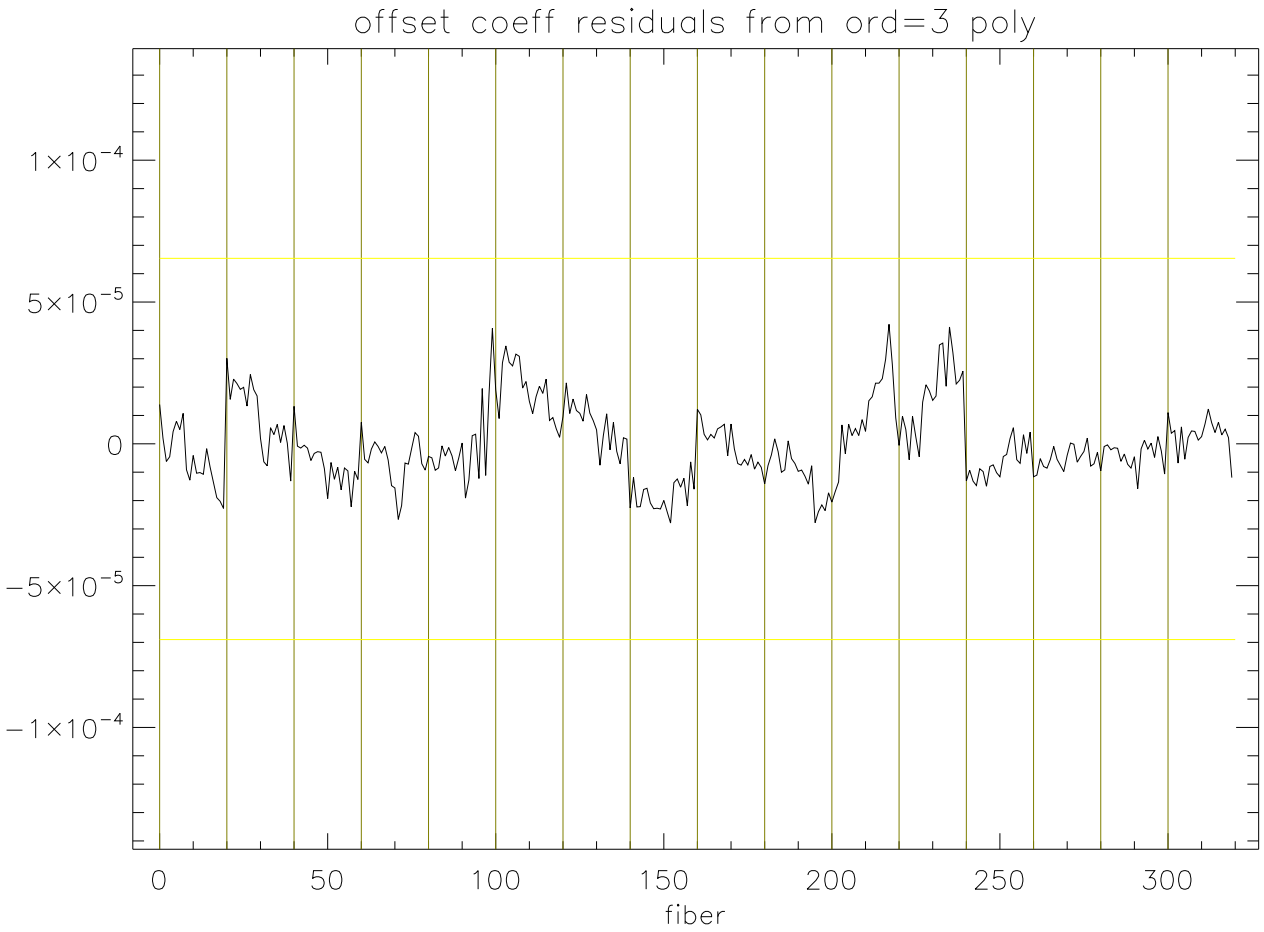
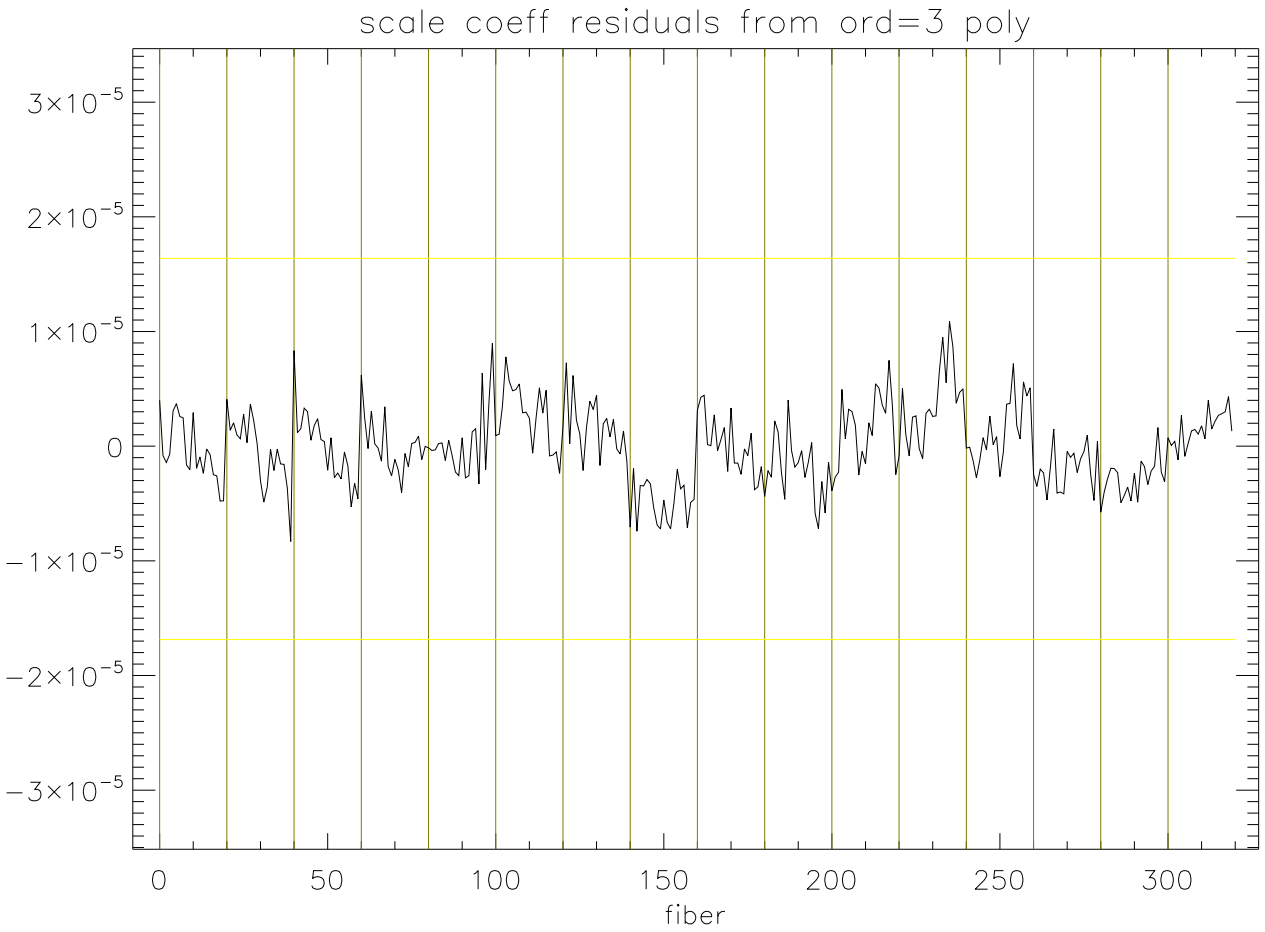
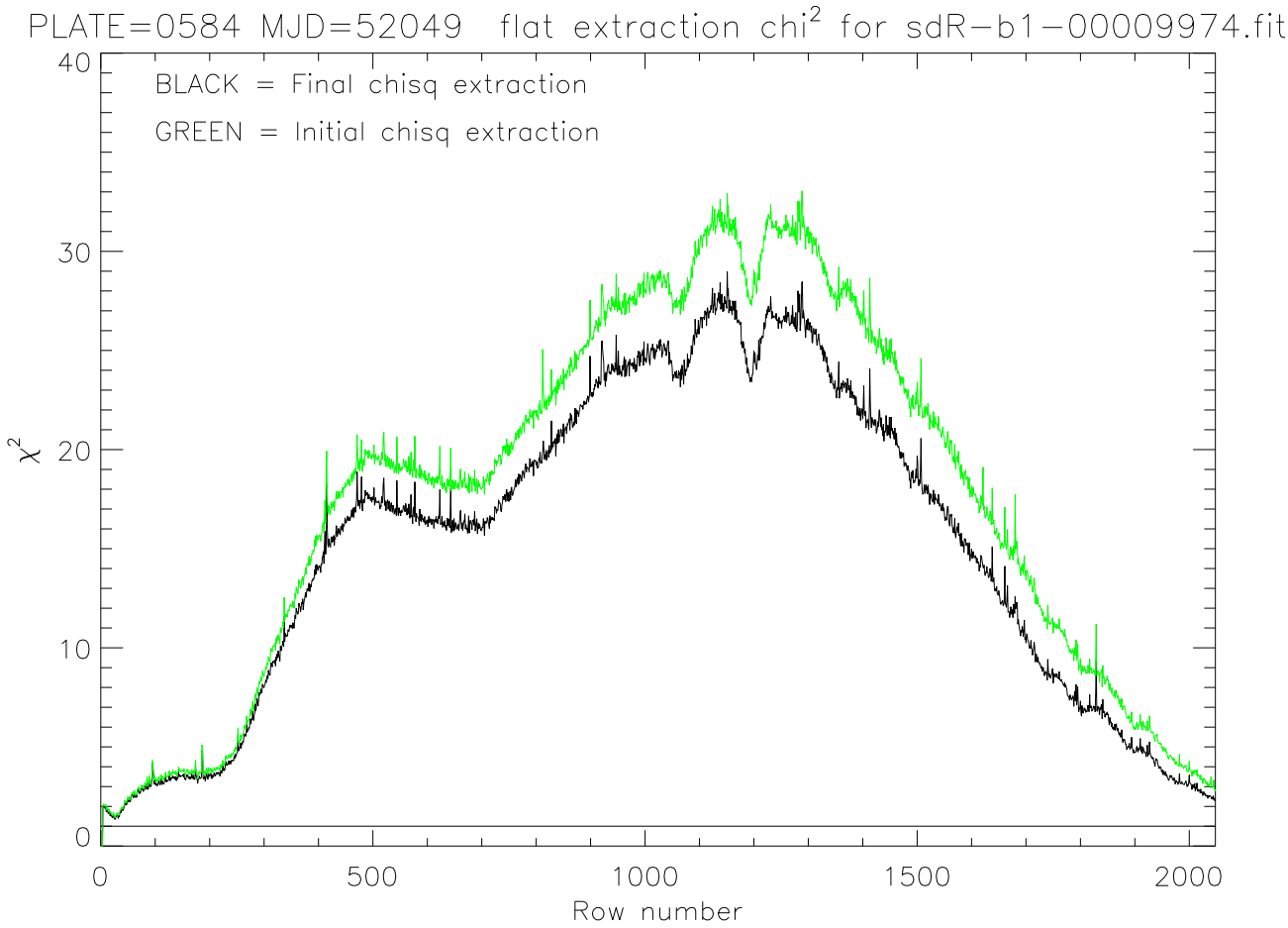
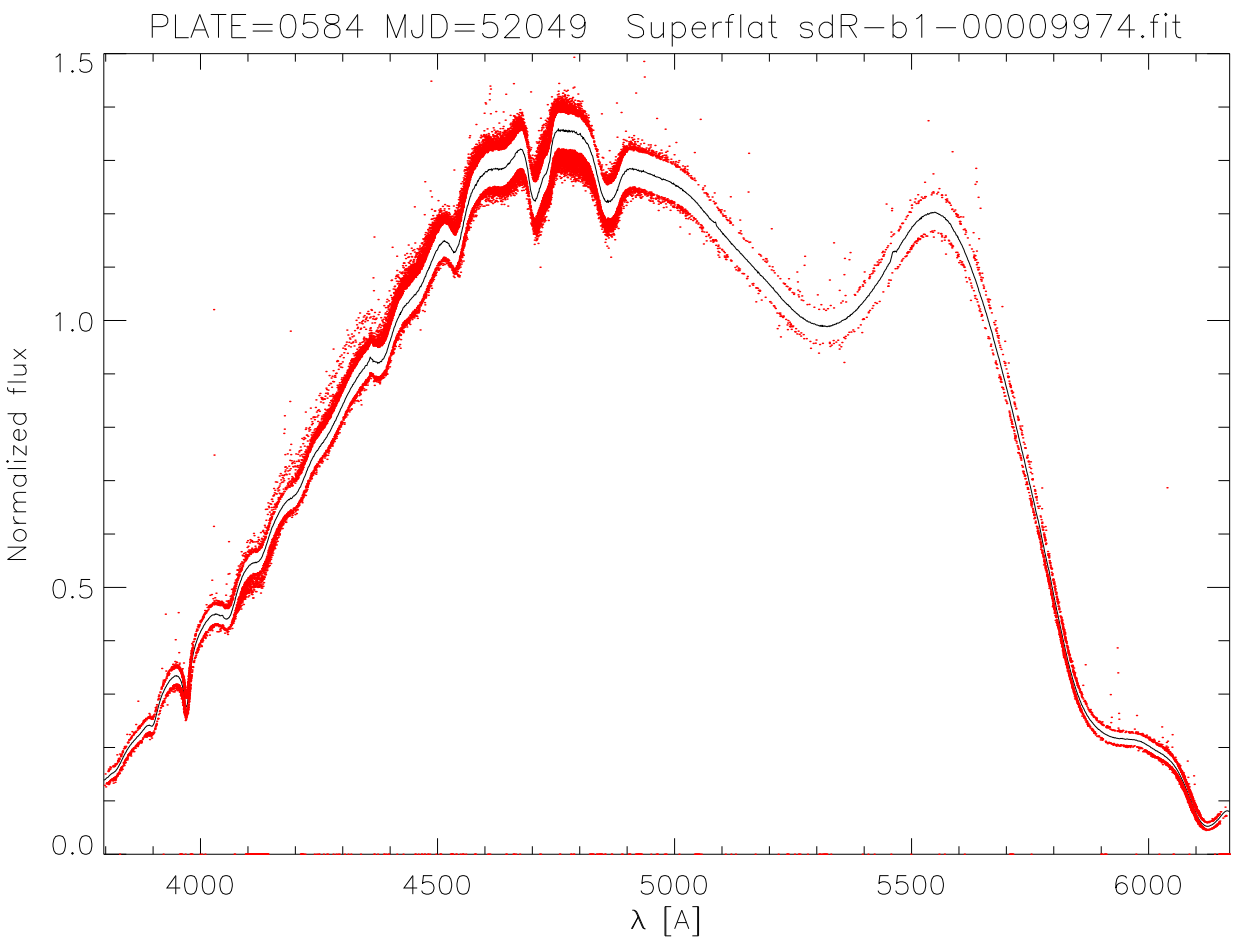
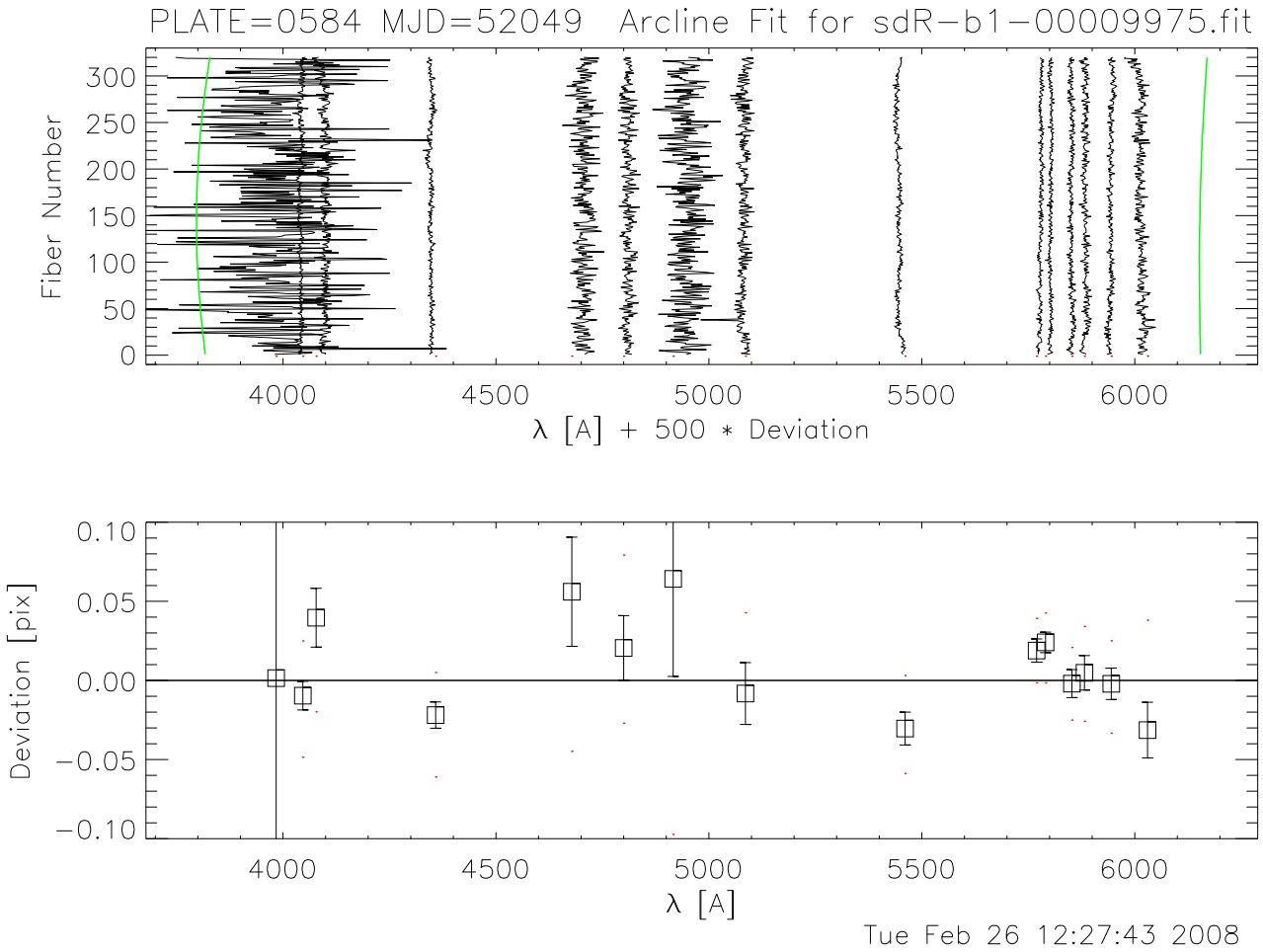

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber


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=0584 MJD=52049 flat extraction chi^2 for sdR−b1−00009974.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
10
20
30
40
0
500
1000
1500
2000
Row number


PLATE=0584 MJD=52049 Superflat sdR-b1-00009974.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]


PLATE=0584 MJD=52049 Arcline Fit for sdR-b1-00009975.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]
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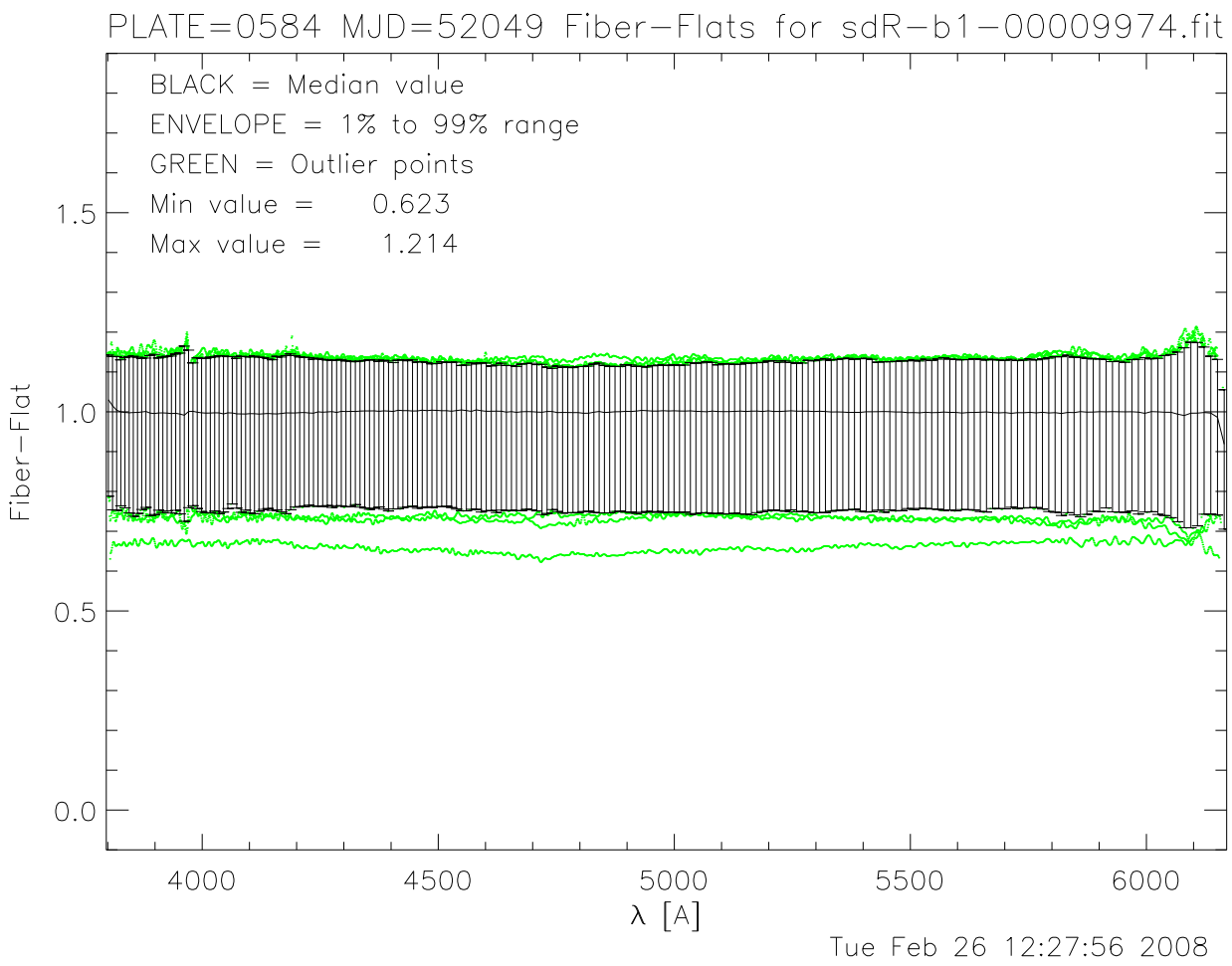
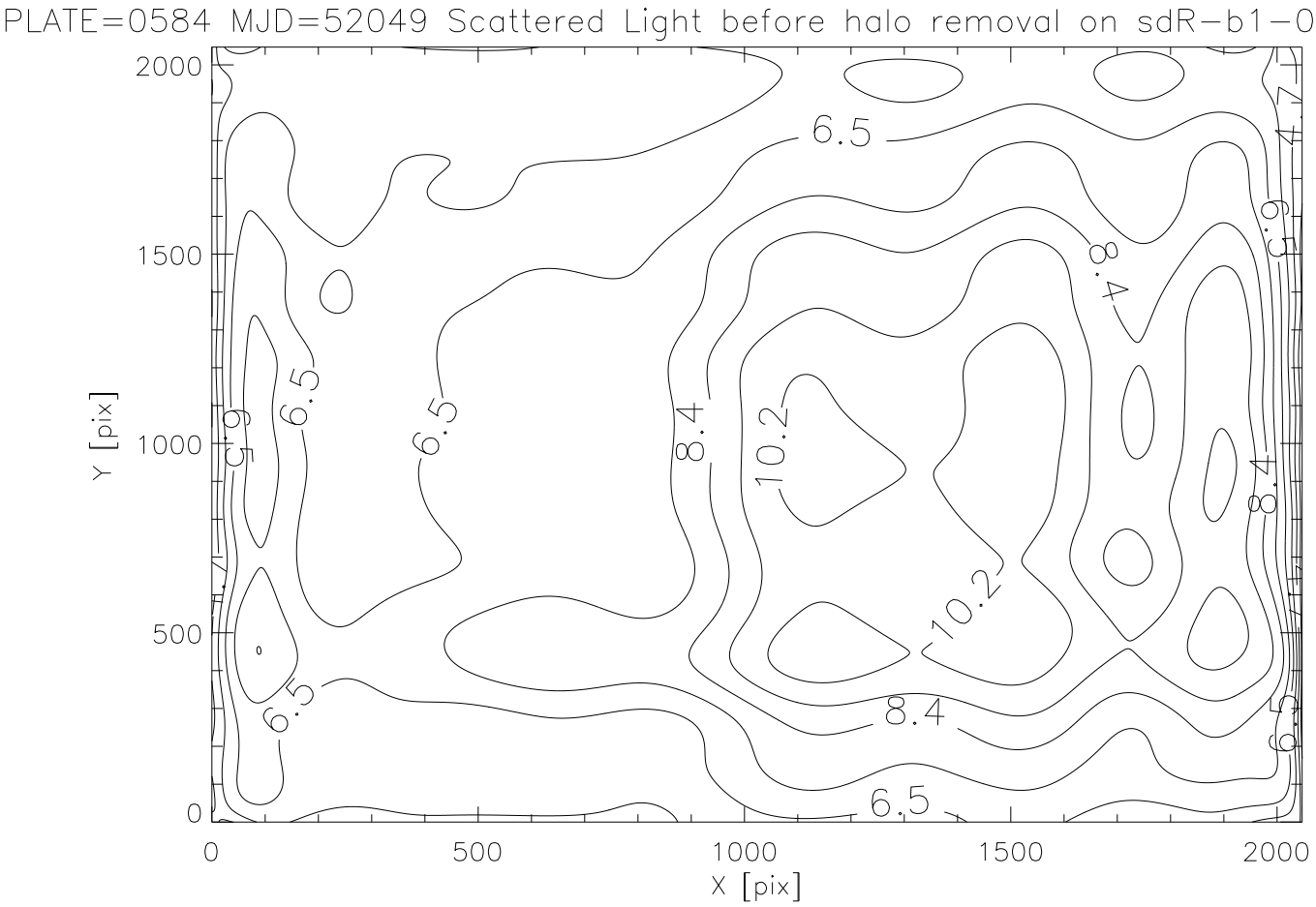
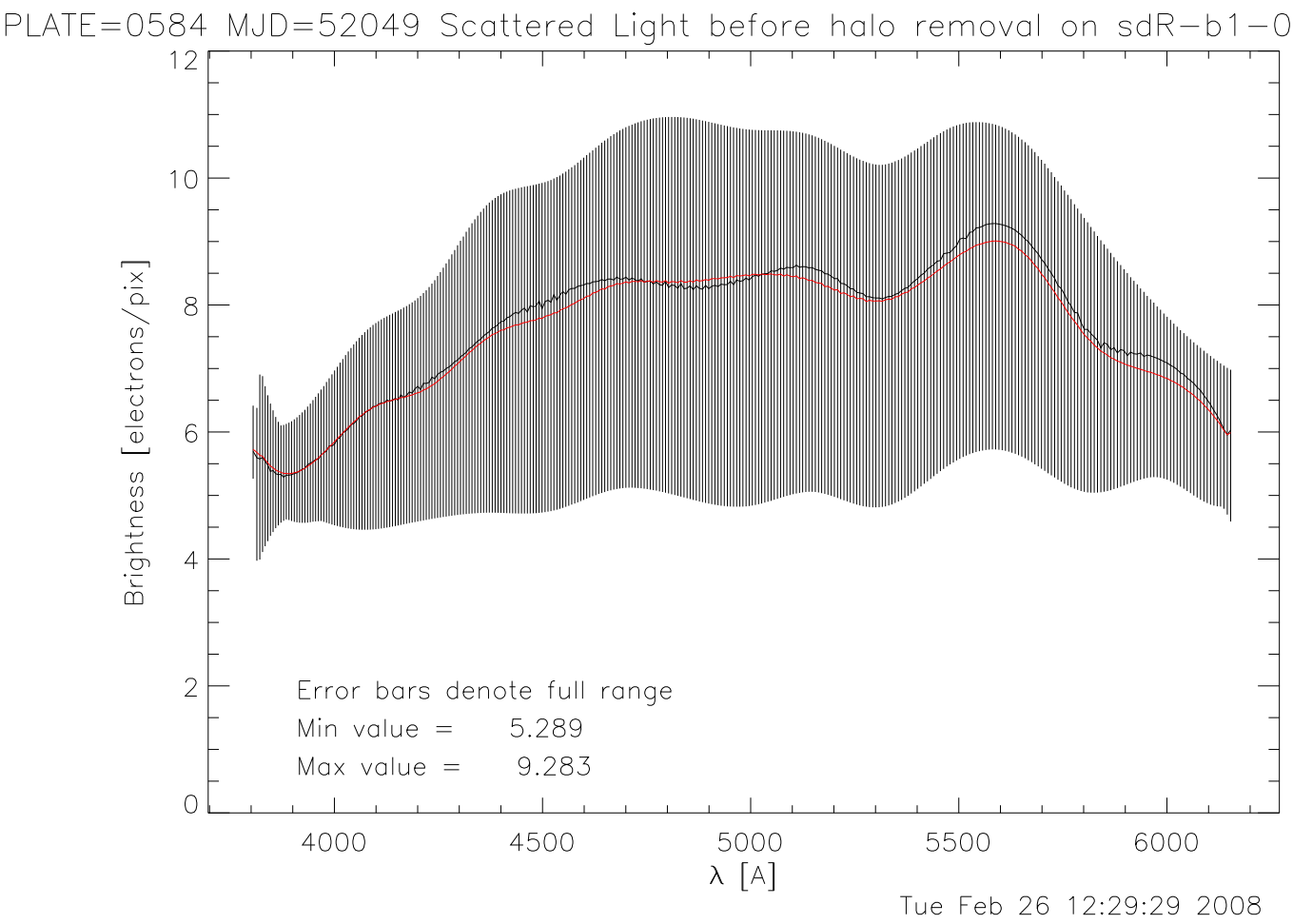
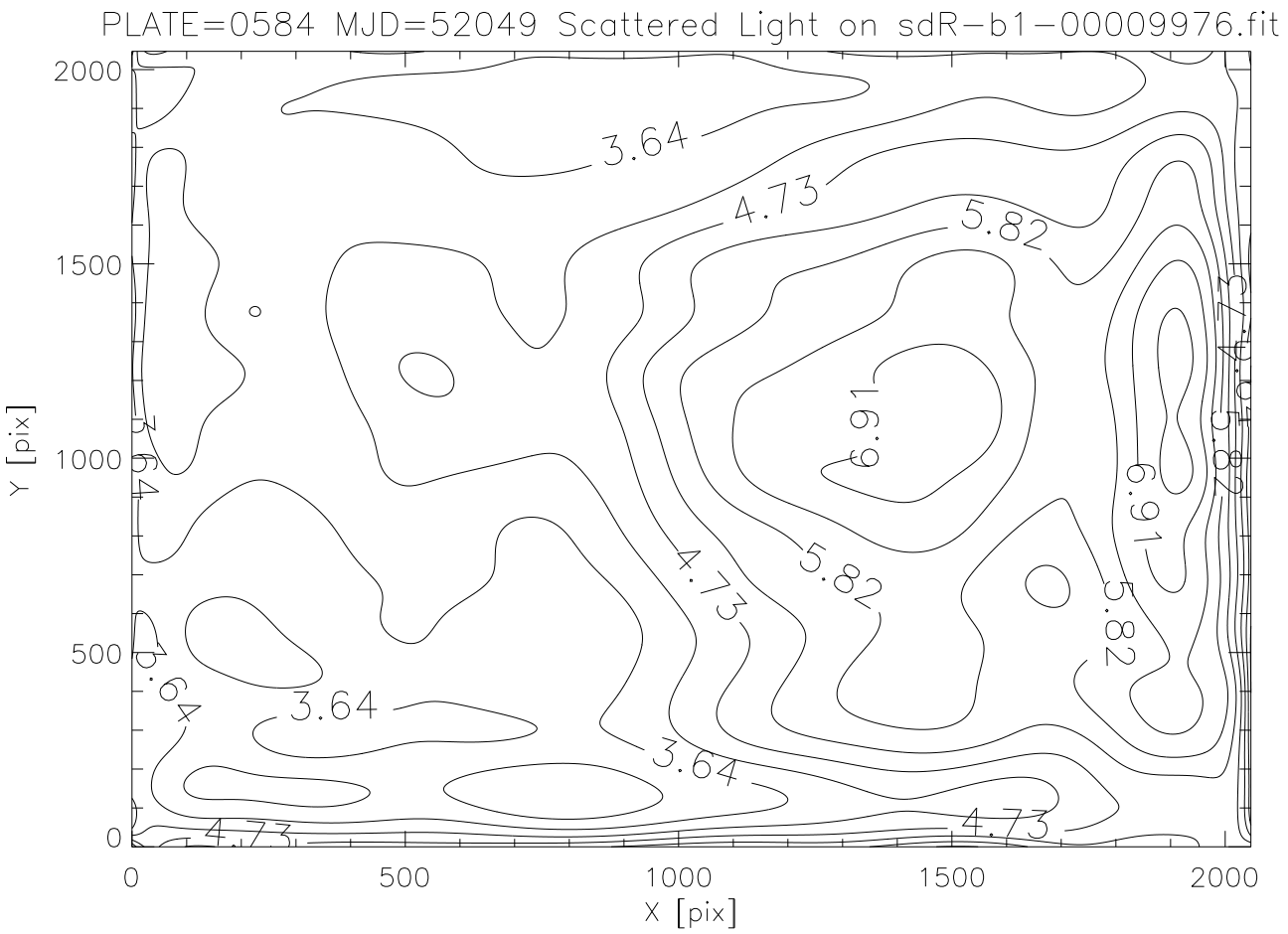
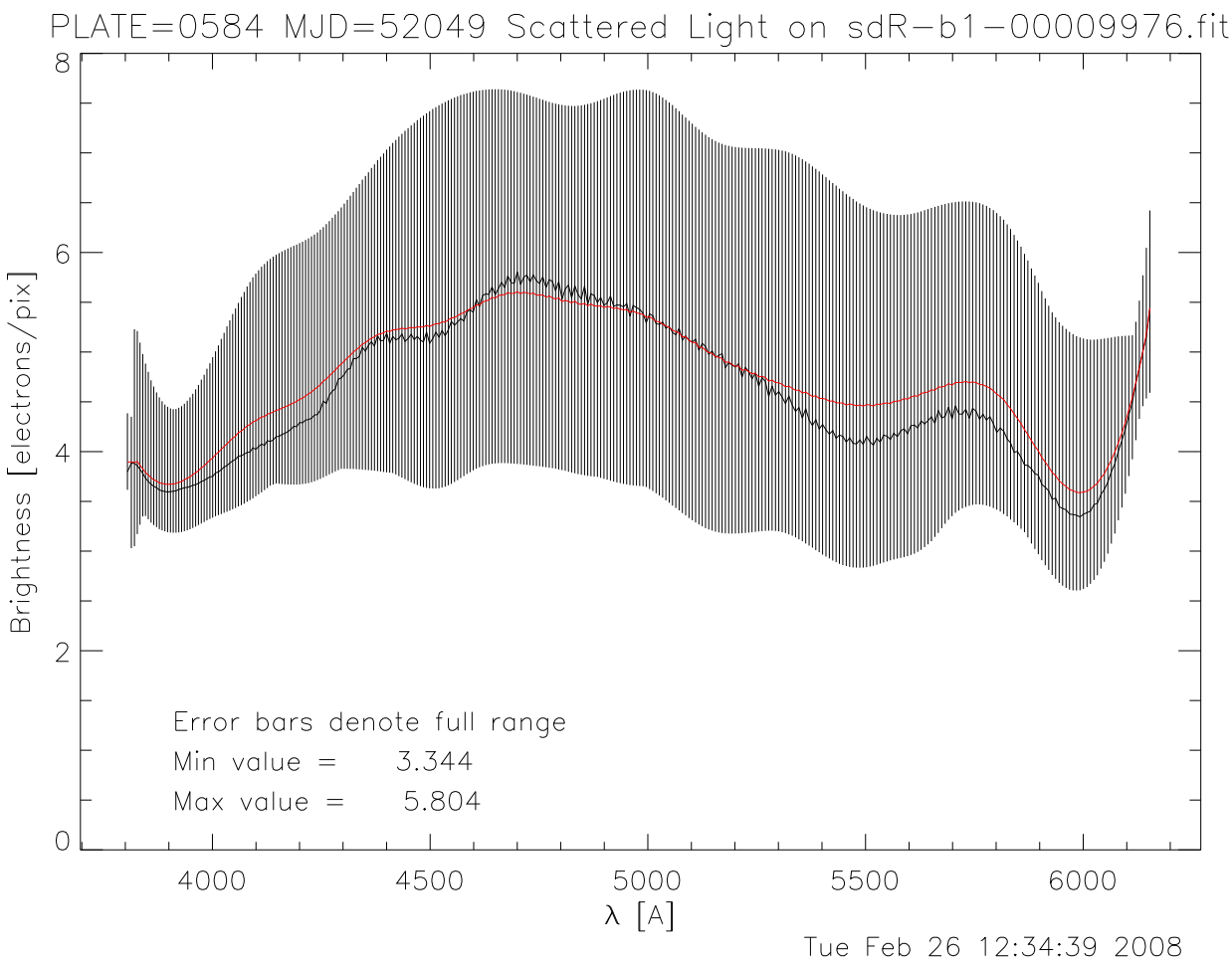
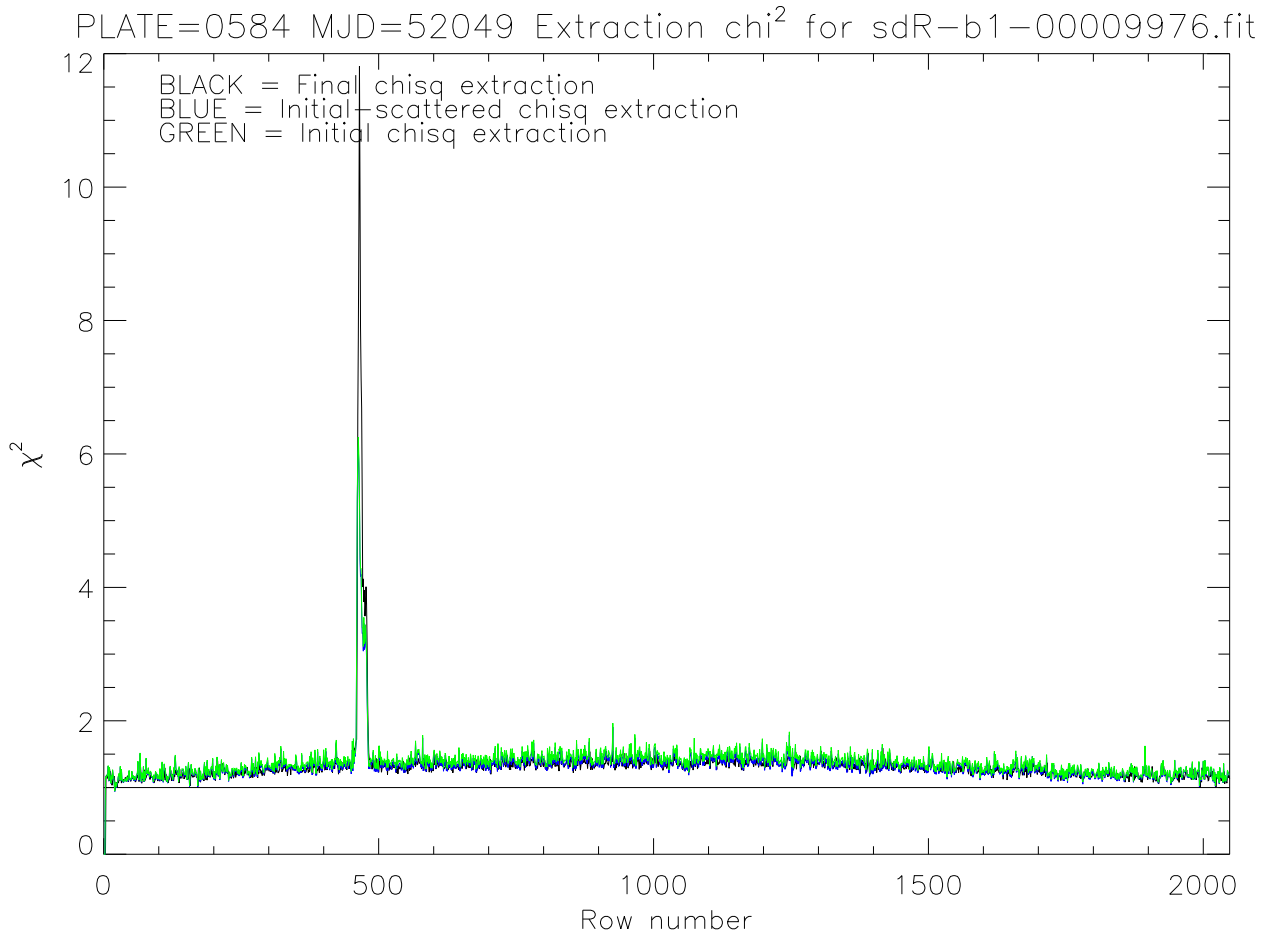

PLATE=0584 MJD=52049 Fiber-Flats for sdR-b1-00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.623
Max value = 1.214
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 12:27:56 2008

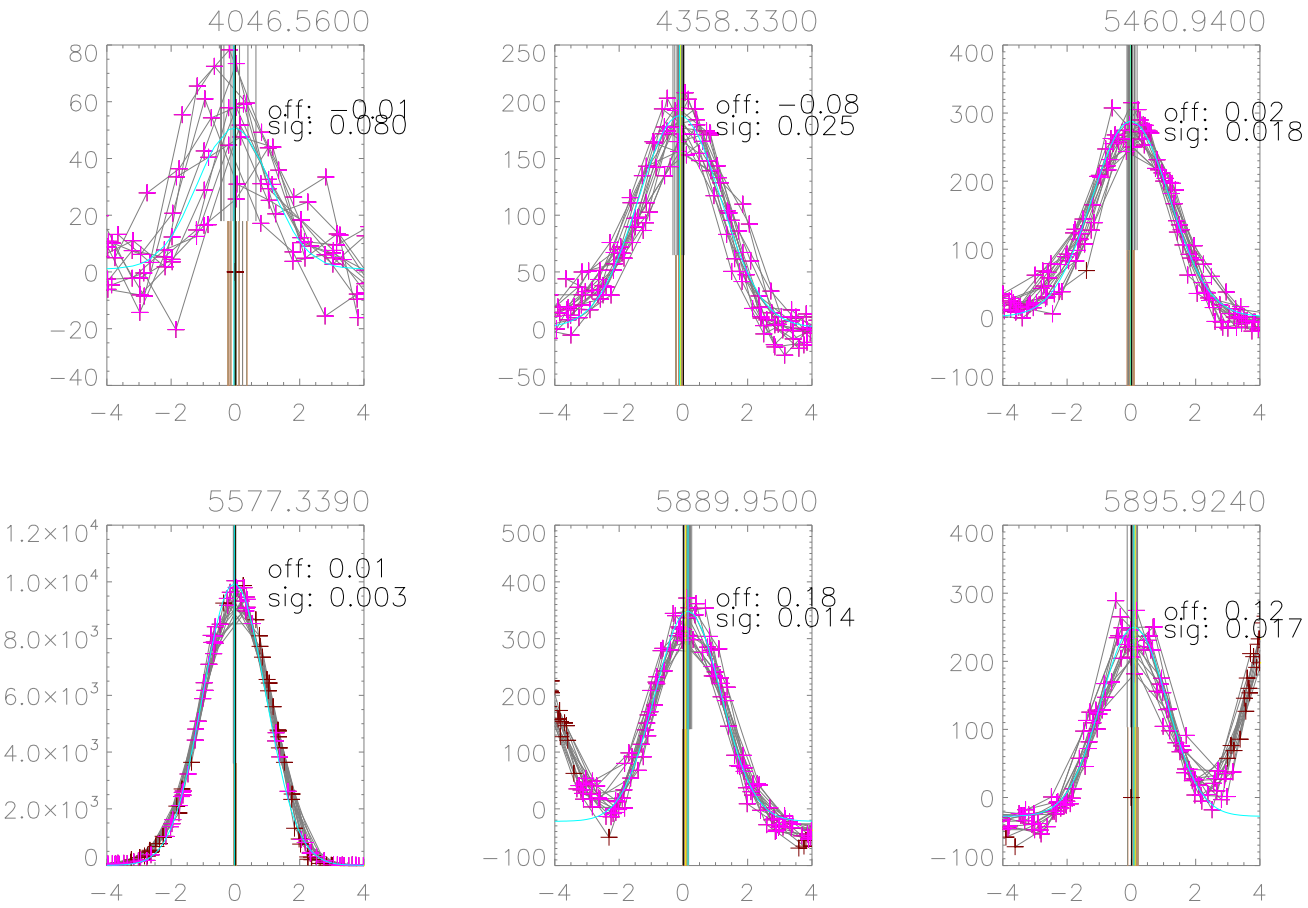

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR−b1−00009976.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4
10.2

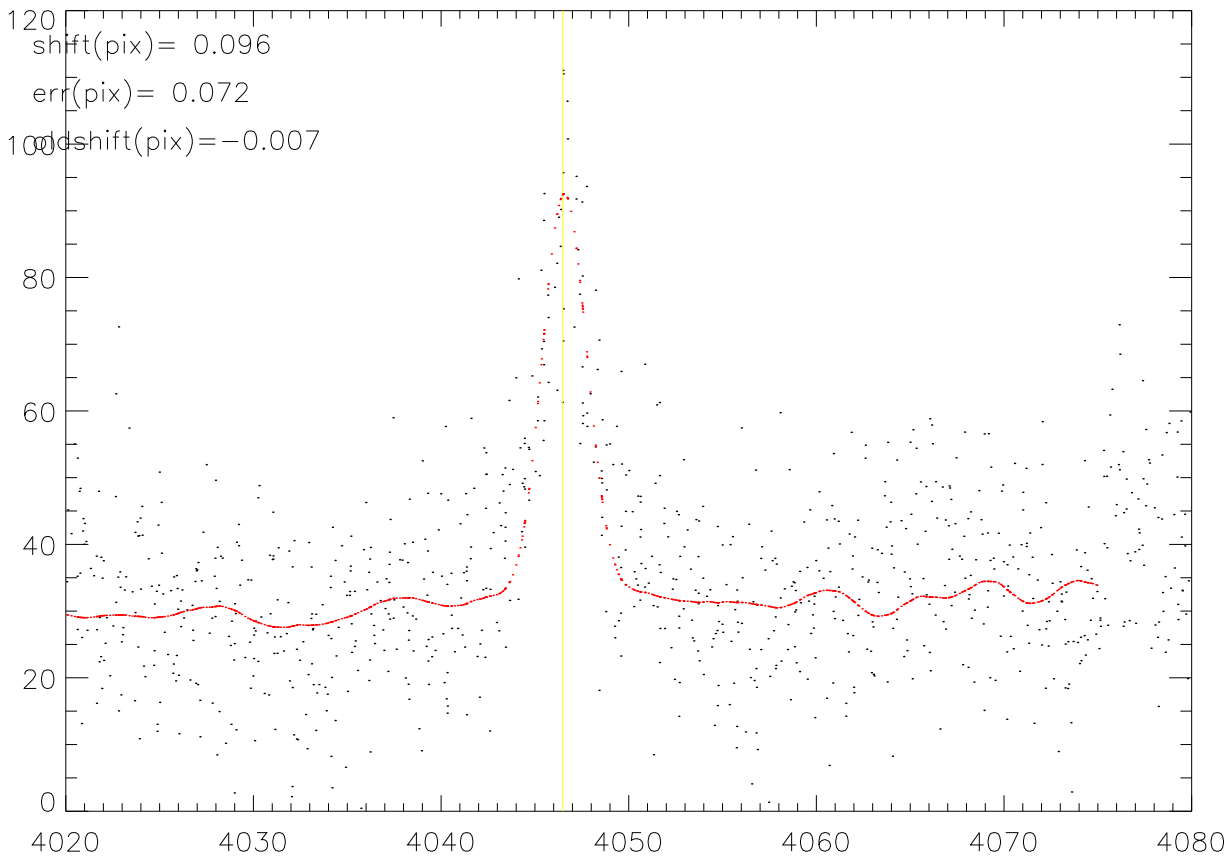

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b1-00009976.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.289
Max value = 9.283
Tue Feb 26 12:29:29 2008

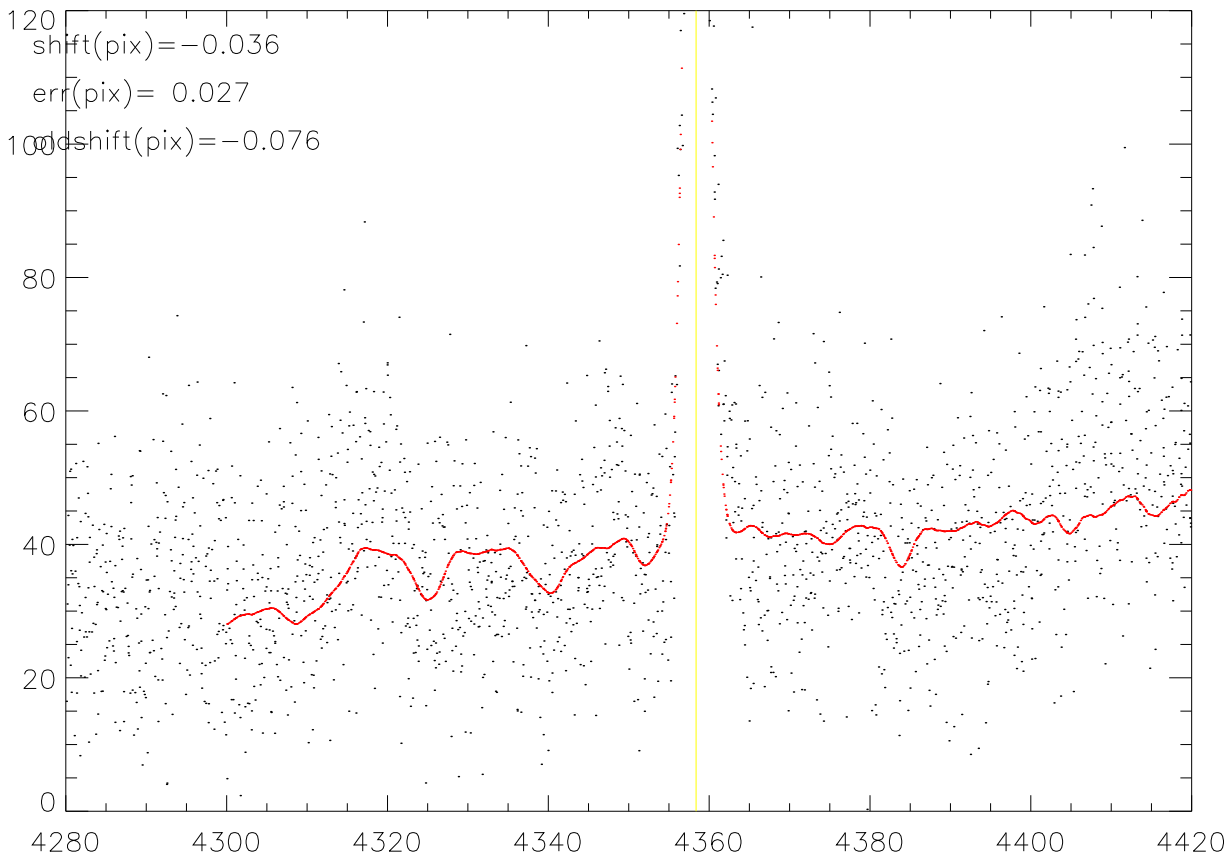

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009976.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.64
4.73
5.82
6.91

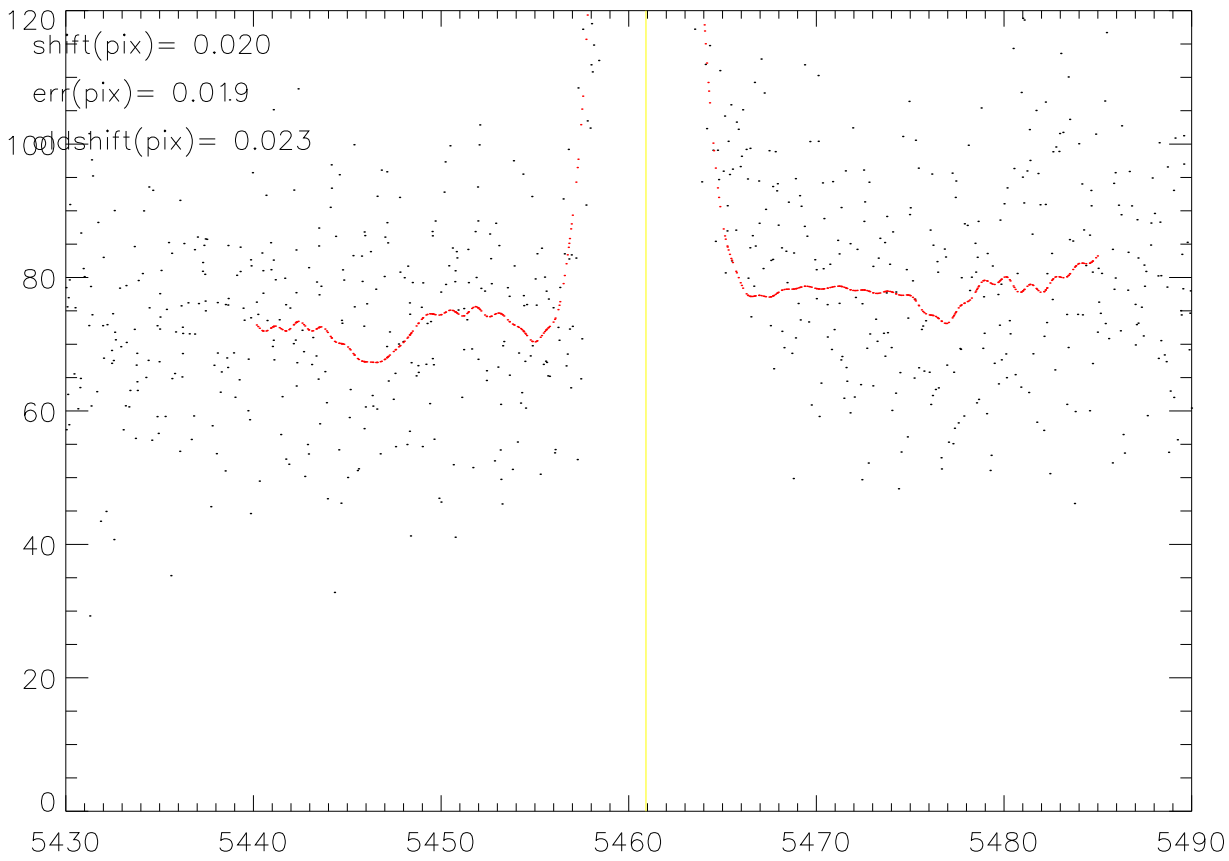

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009976.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.344
Max value = 5.804
Tue Feb 26 12:34:39 2008

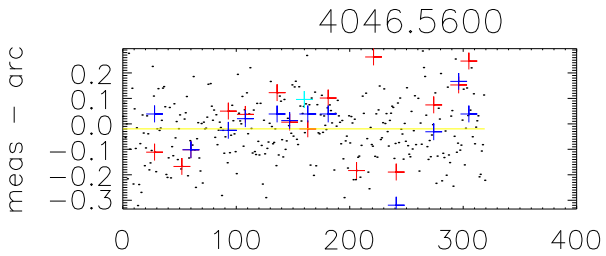

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-b1-00009976.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

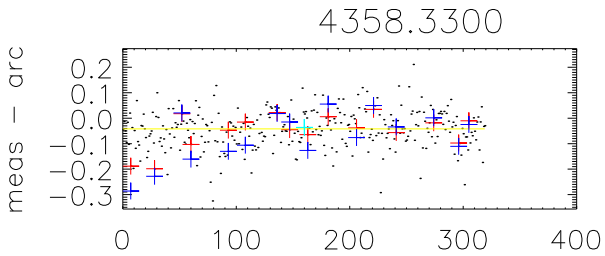

4046.5600
off: −0.01
sig: 0.080
4358.3300
off: −0.08
sig: 0.025
5460.9400
off: 0.02
sig: 0.018
5577.3390
off: 0.01
sig: 0.003
5889.9500
off: 0.18
sig: 0.014
5895.9240
off: 0.12
sig: 0.017

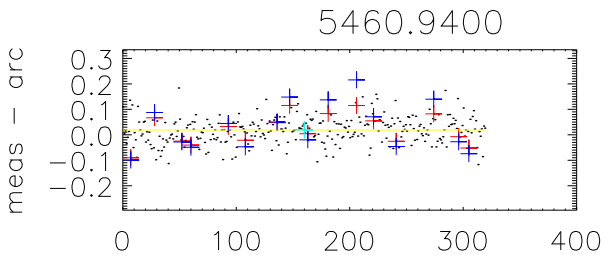

shift(pix)= 0.096
err(pix)= 0.072
oldshift(pix)=−0.007
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

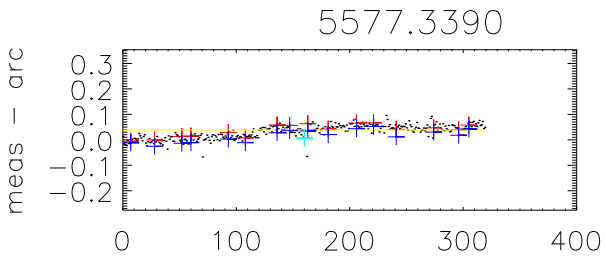

shift(pix)=−0.036
err(pix)= 0.027
oldshift(pix)=−0.076
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

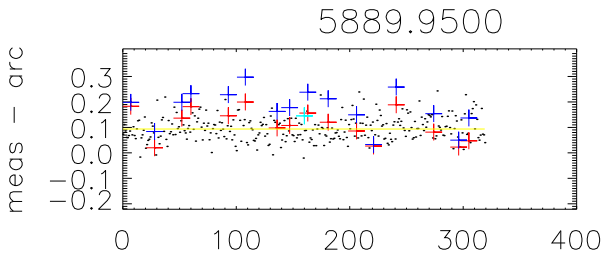

shift(pix)= 0.020
err(pix)= 0.019
oldshift(pix)= 0.023
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

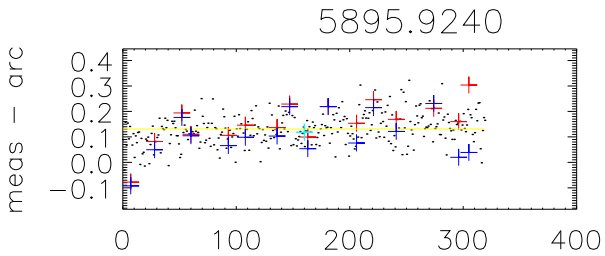

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

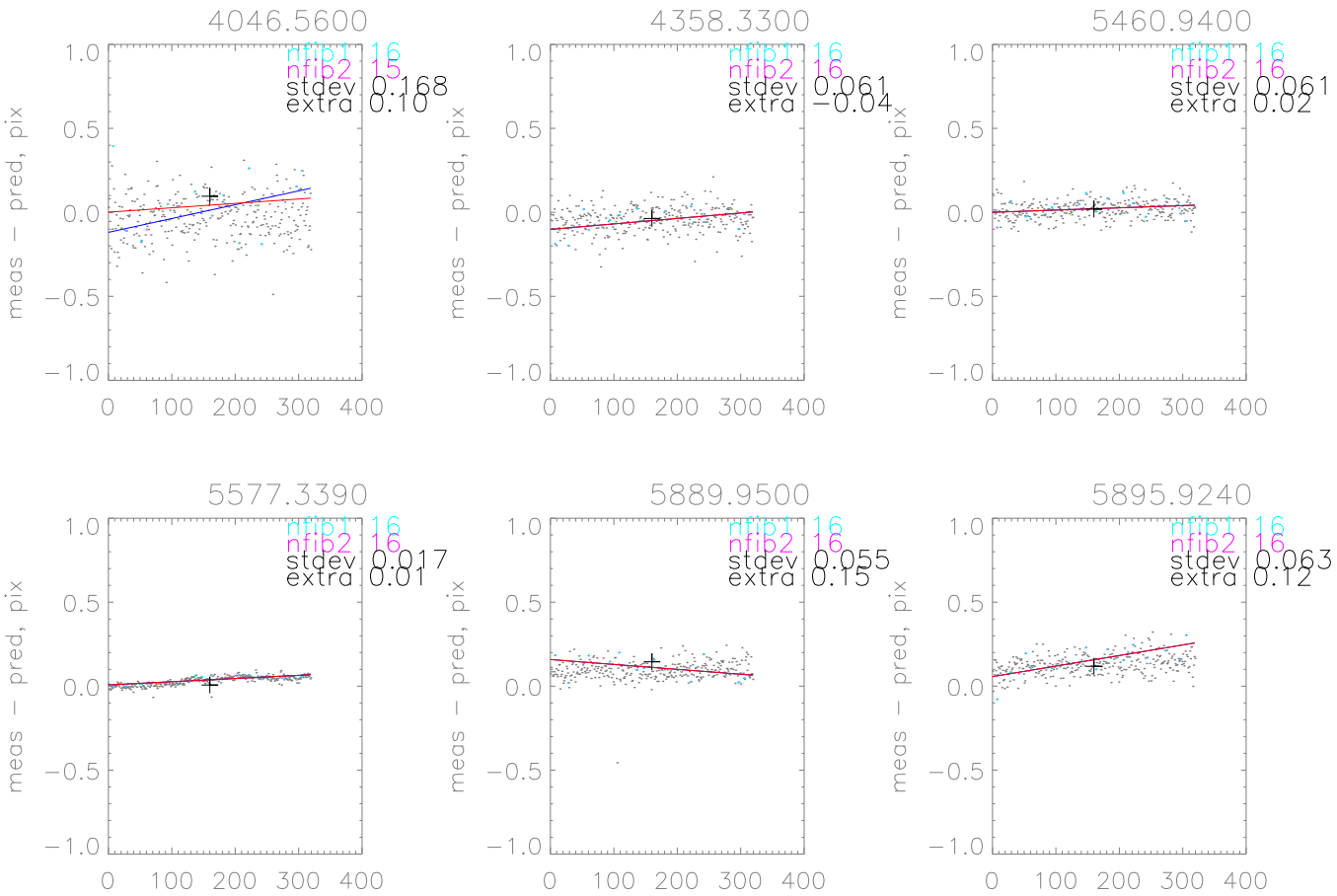

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

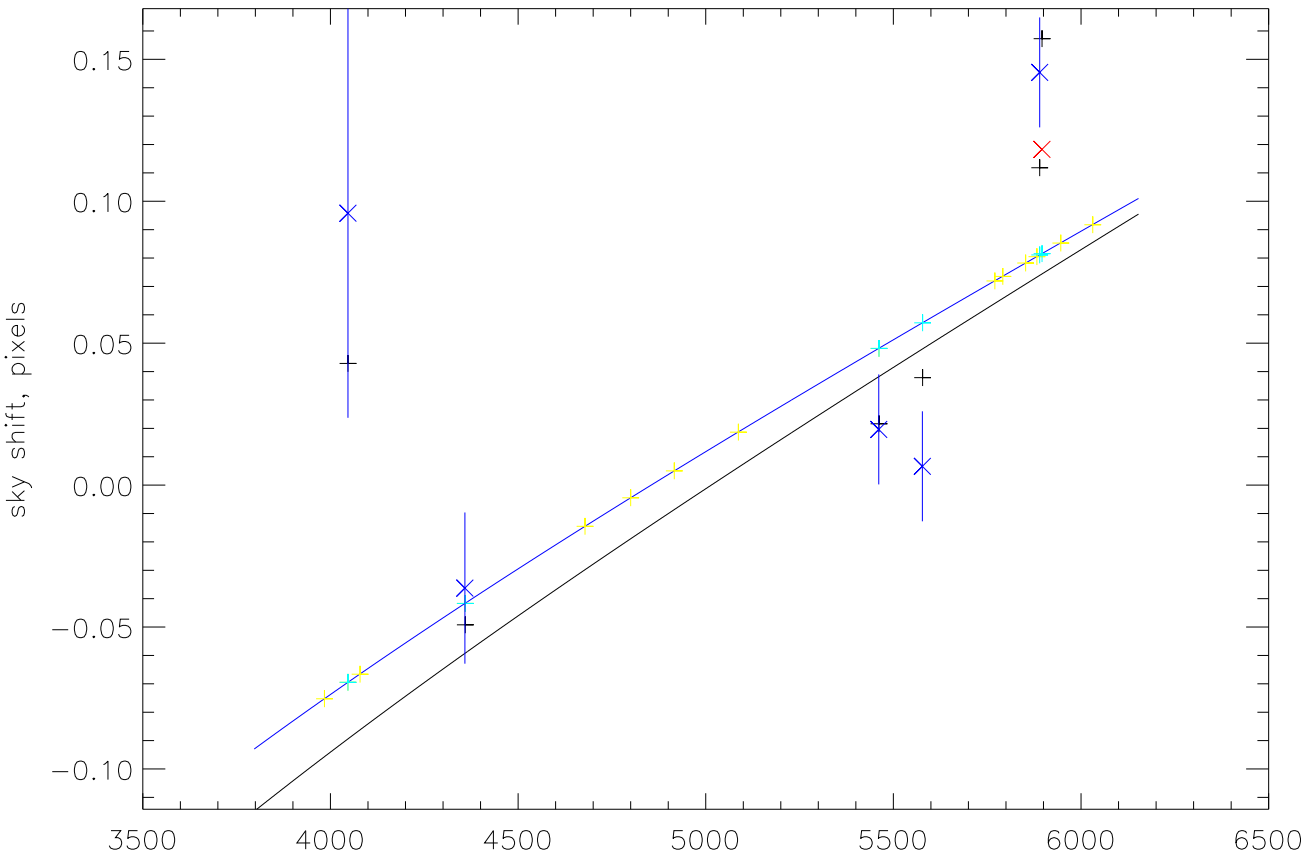

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

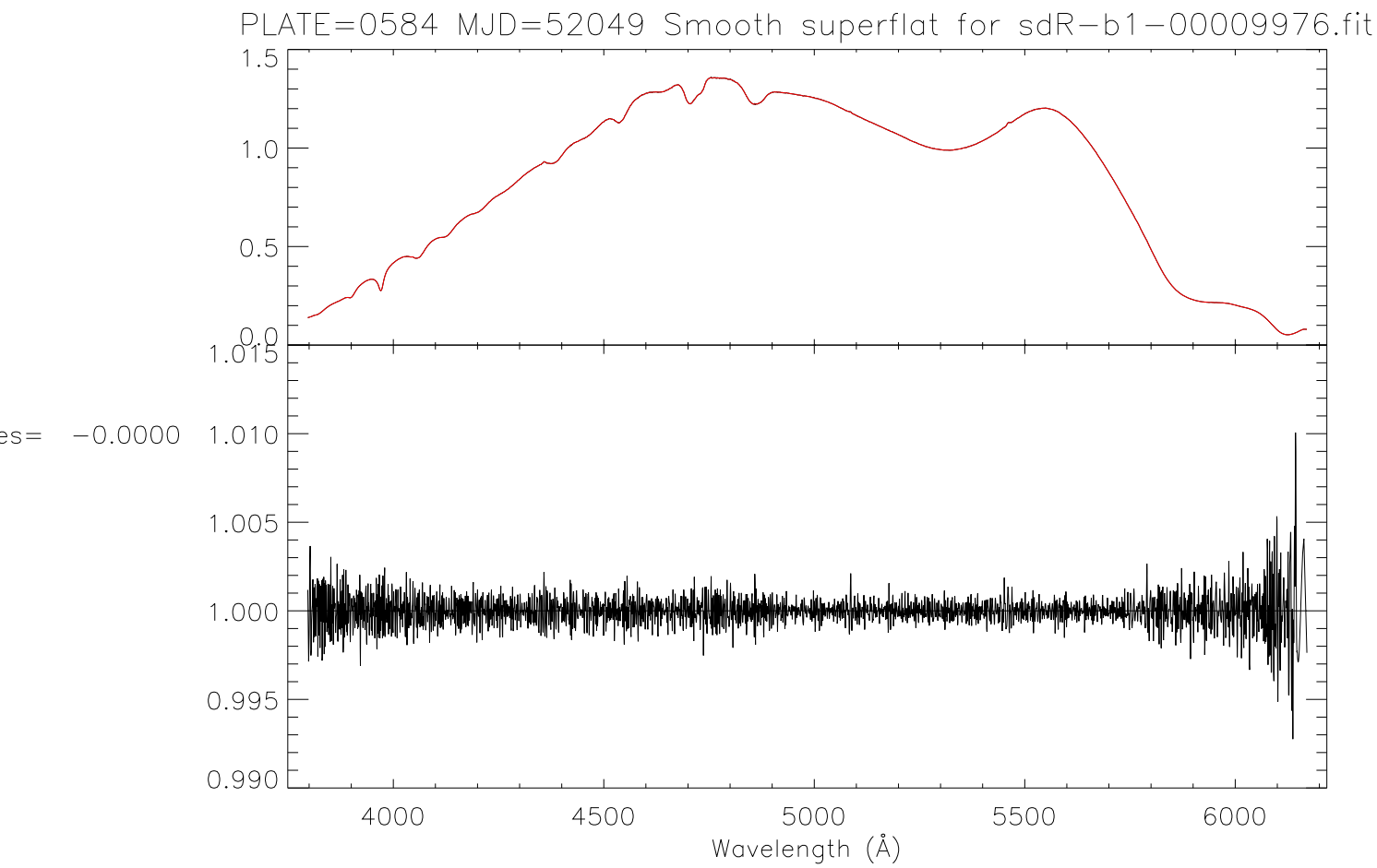

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

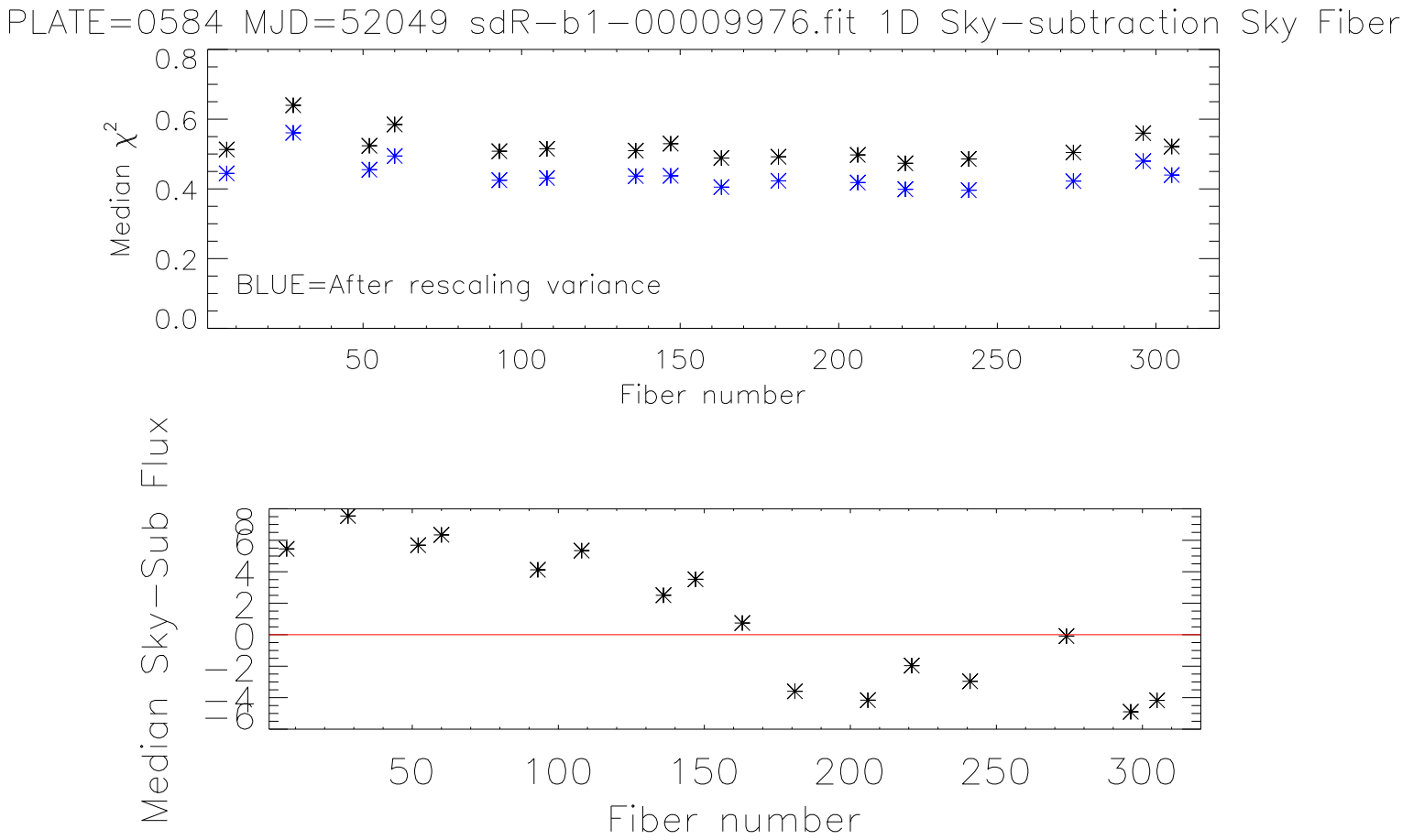

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

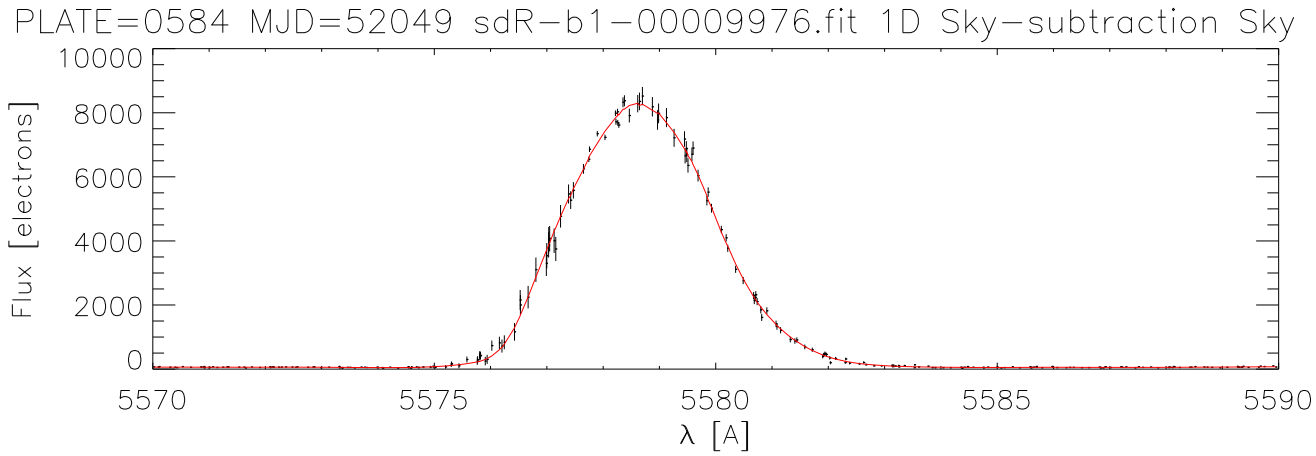

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

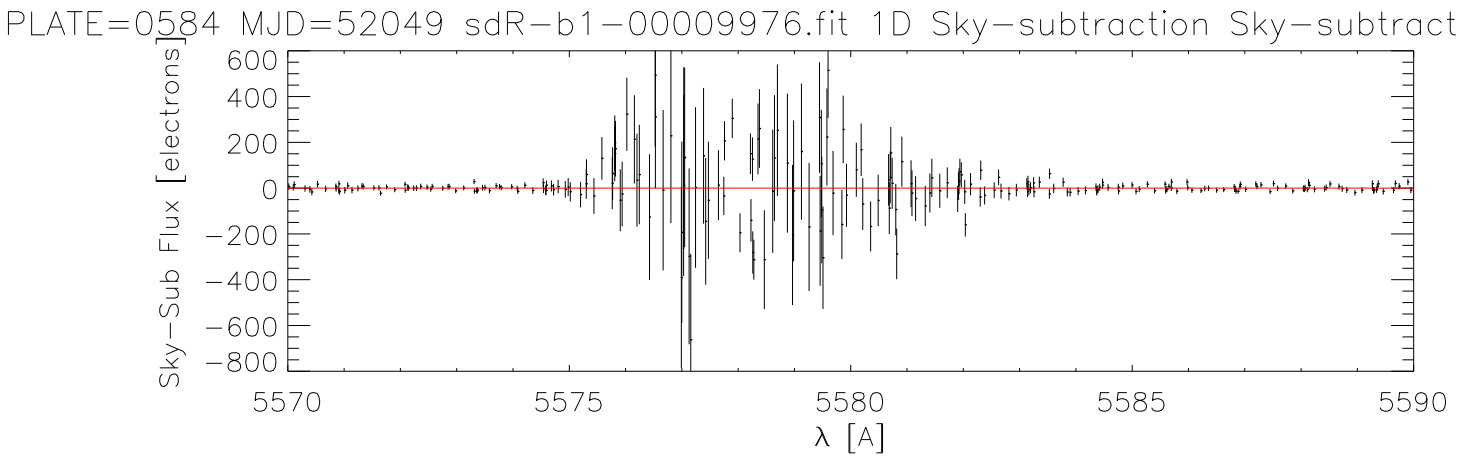

4046.5600
nfib1 16
nfib2 15
stdev 0.168
extra 0.10
4358.3300
nfib1 16
nfib2 16
stdev 0.061
extra −0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.061
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.055
extra 0.15
5895.9240
nfib1 16
nfib2 16
stdev 0.063
extra 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

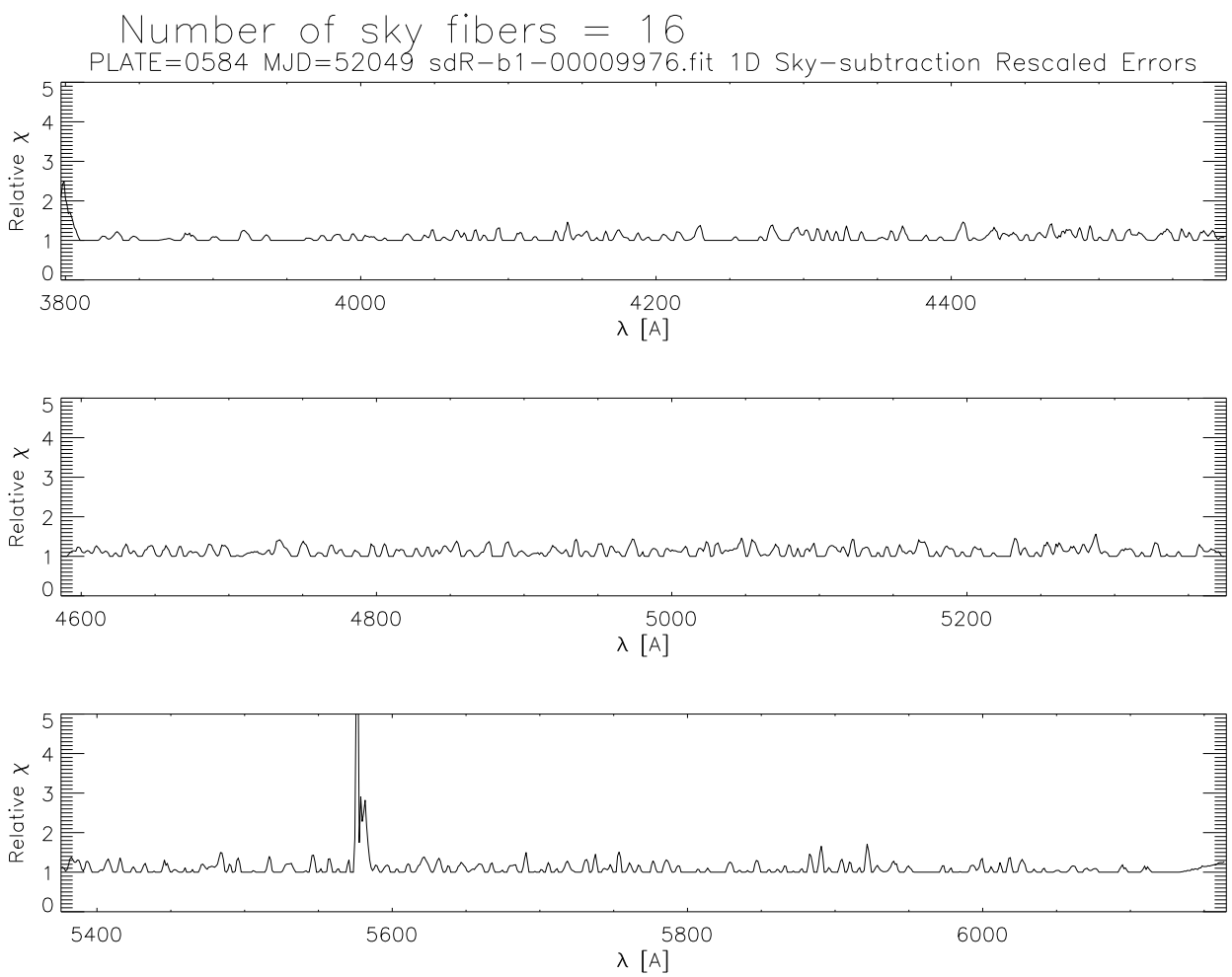

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

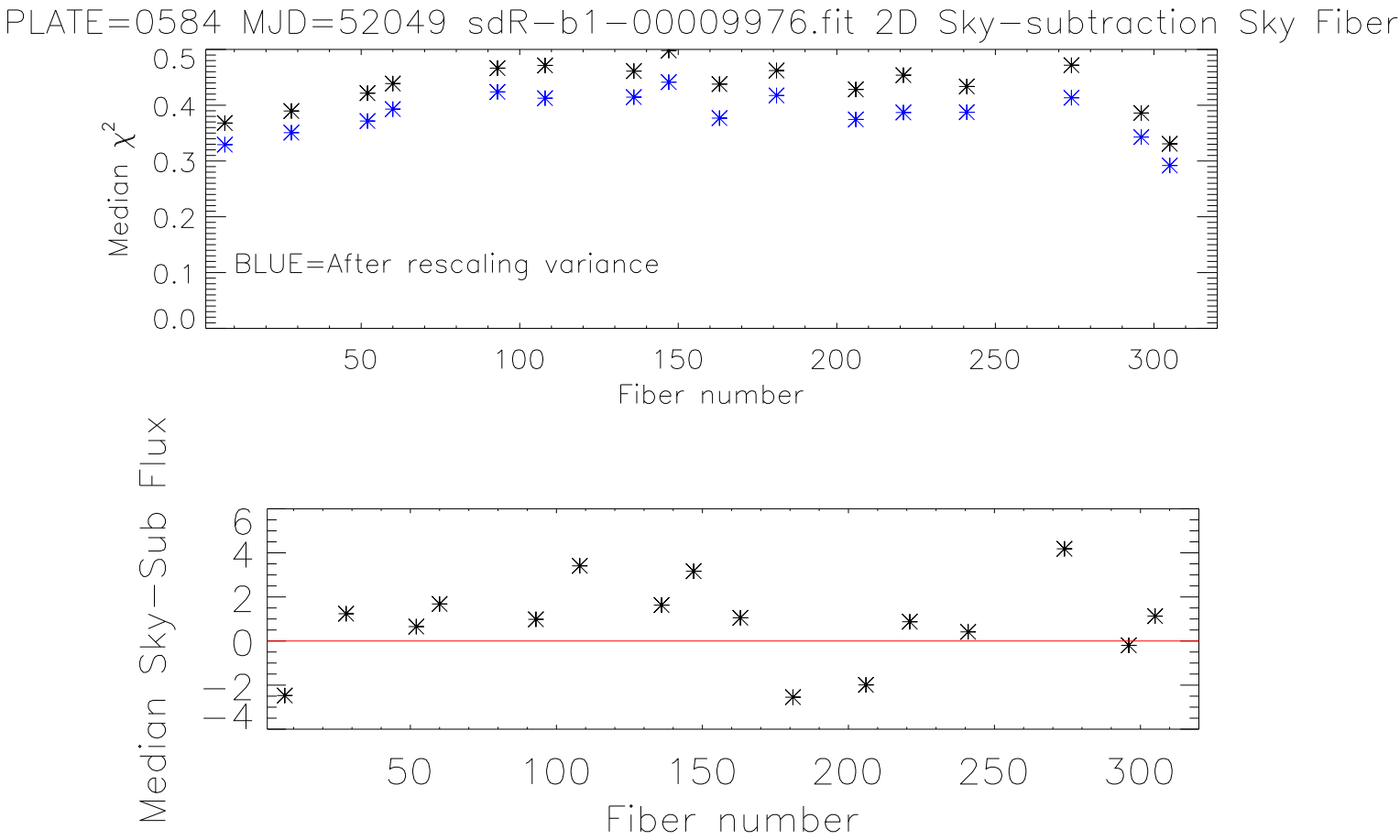

PLATE=0584 MJD=52049 Smooth superflat for sdR-b1-00009976.fit
1.5
1.0
0.5
0.0
es= −0.0000
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

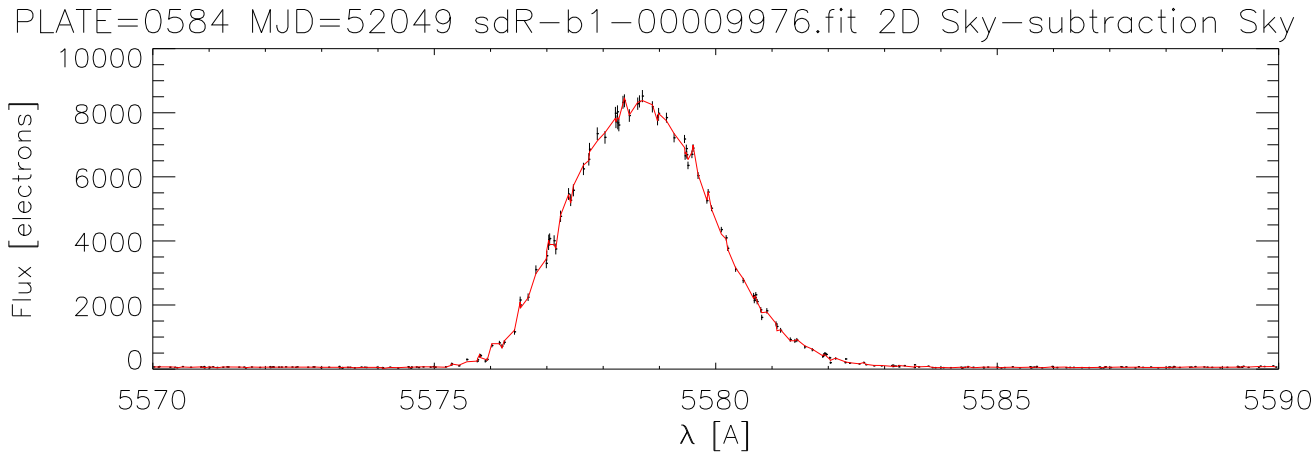

PLATE=0584 MJD=52049 sdR-b1-00009976.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

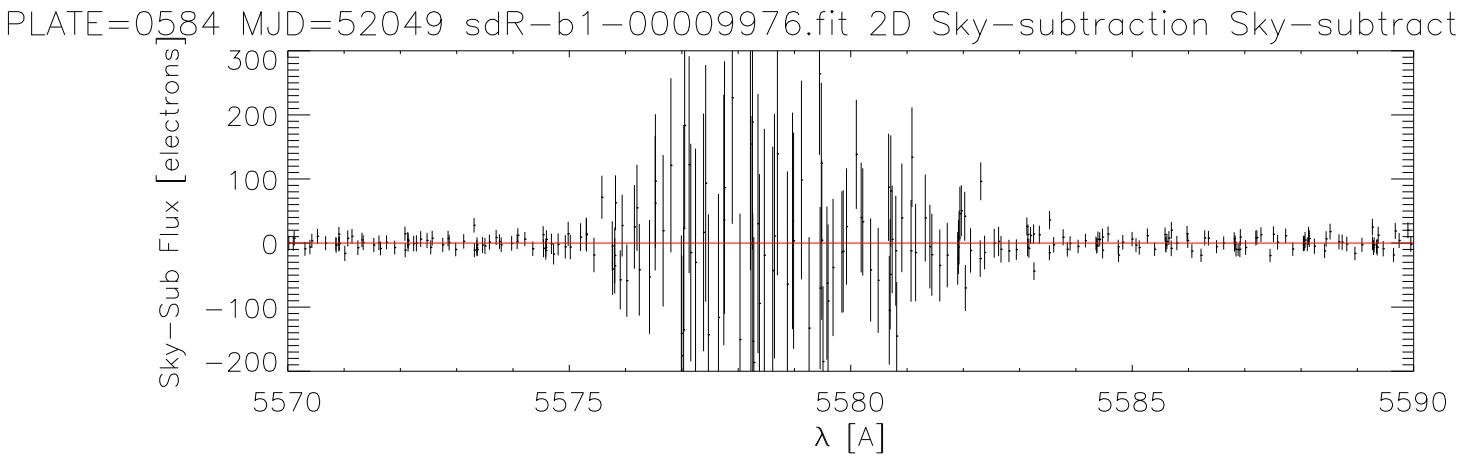

PLATE=0584 MJD=52049 sdR-b1-00009976.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

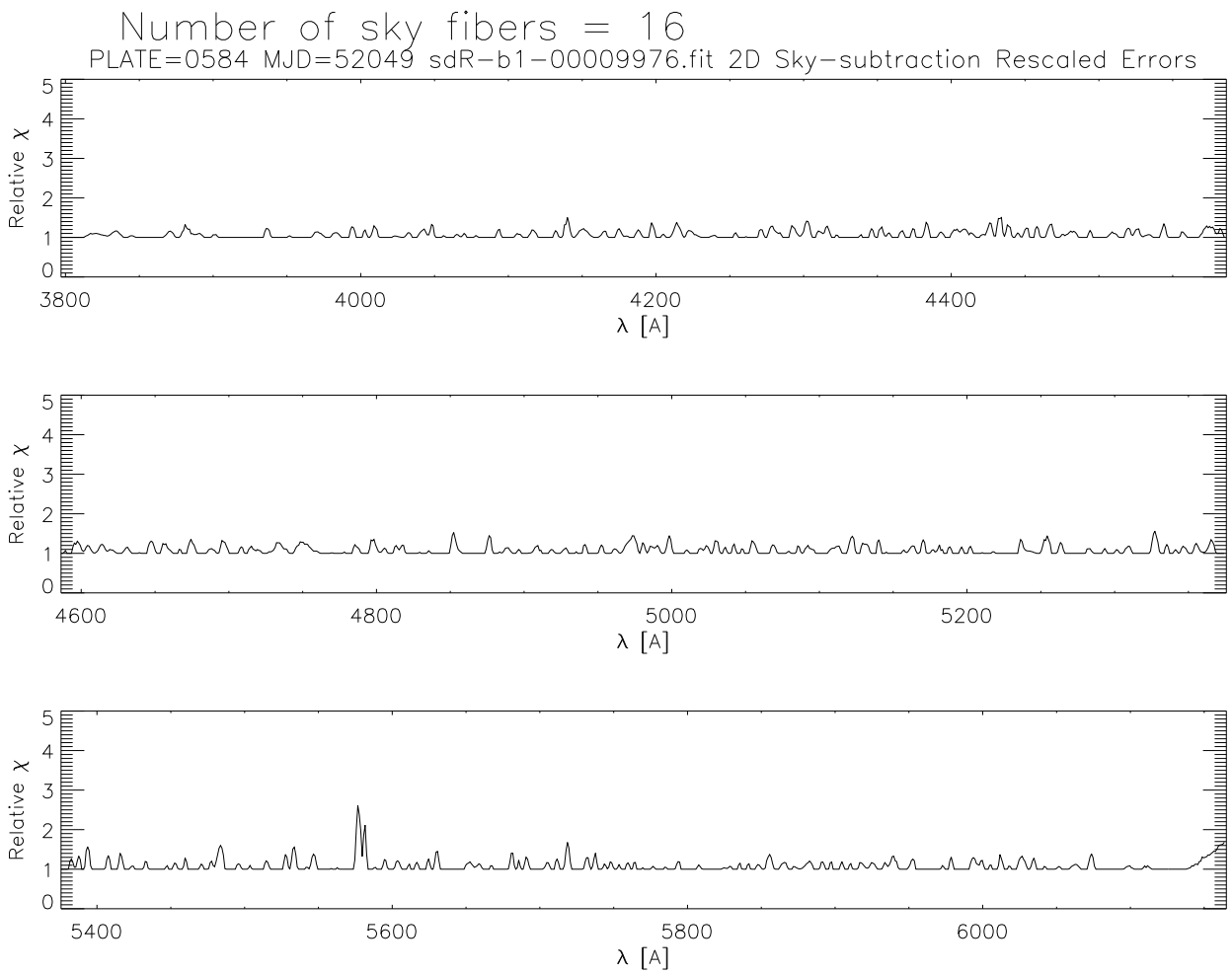

PLATE=0584 MJD=52049 sdR-b1-00009976.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
-800
5570
5575
5580
5585
5590
λ [A]

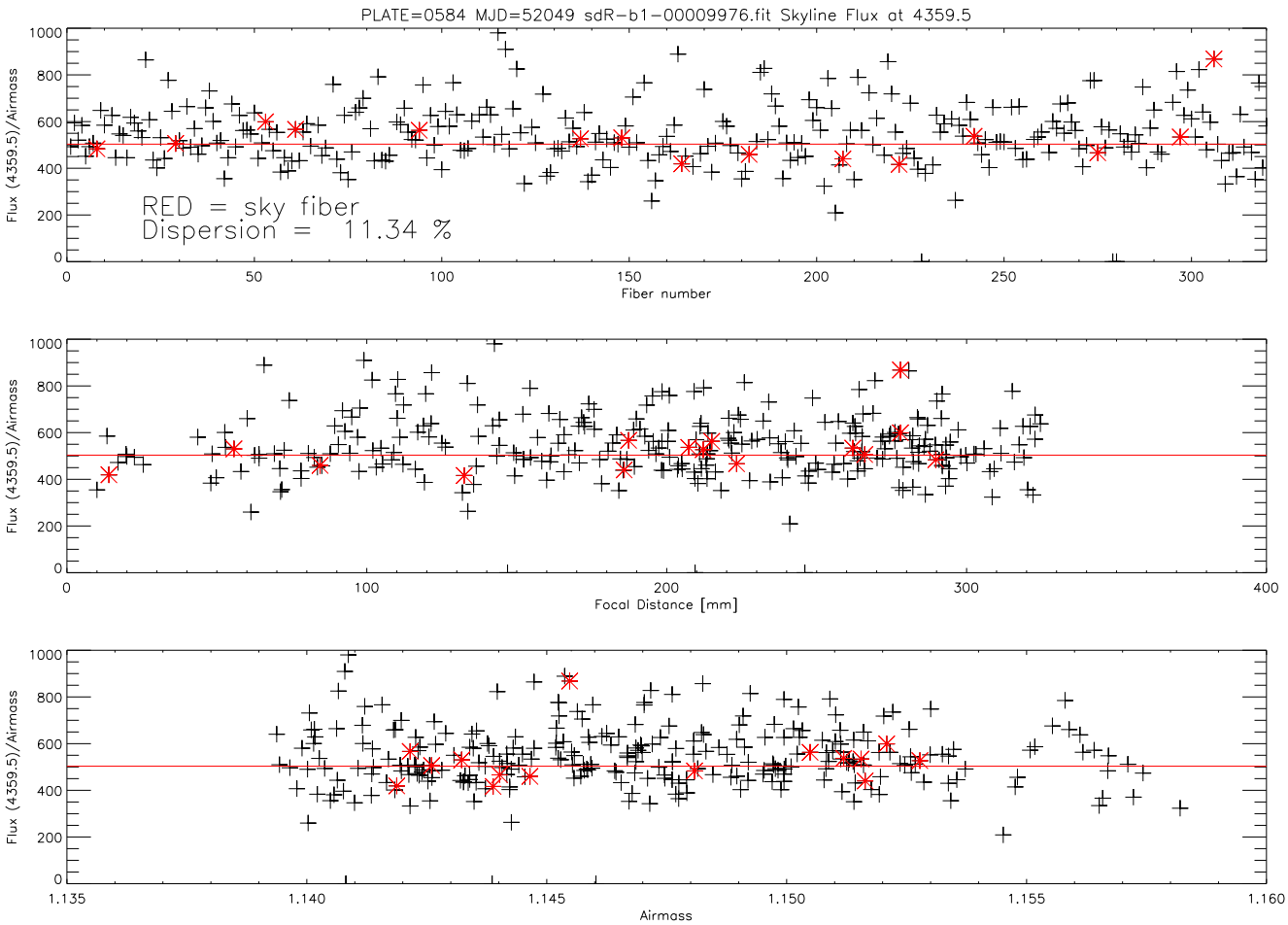

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009976.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

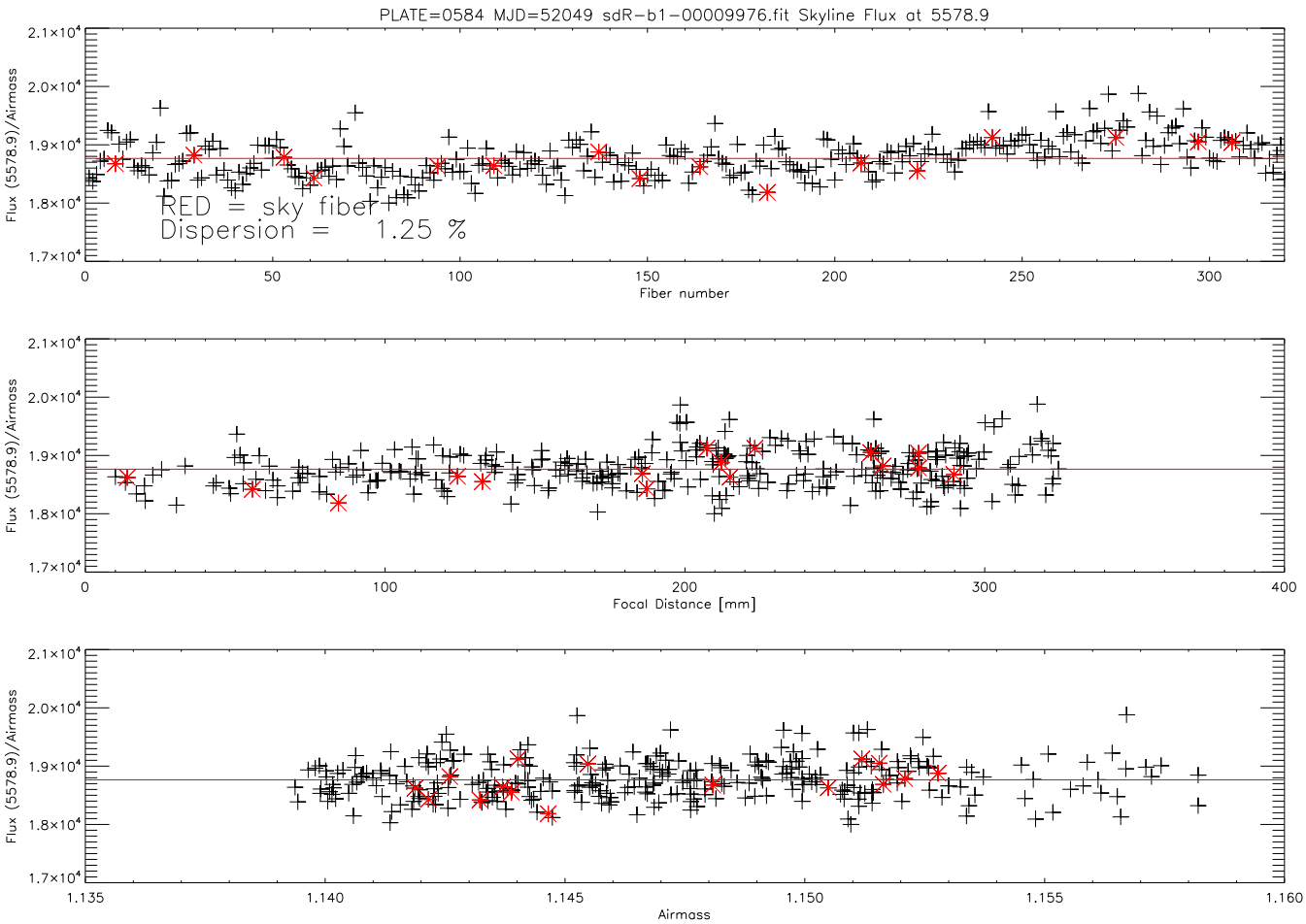

PLATE=0584 MJD=52049 sdR-b1-00009976.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

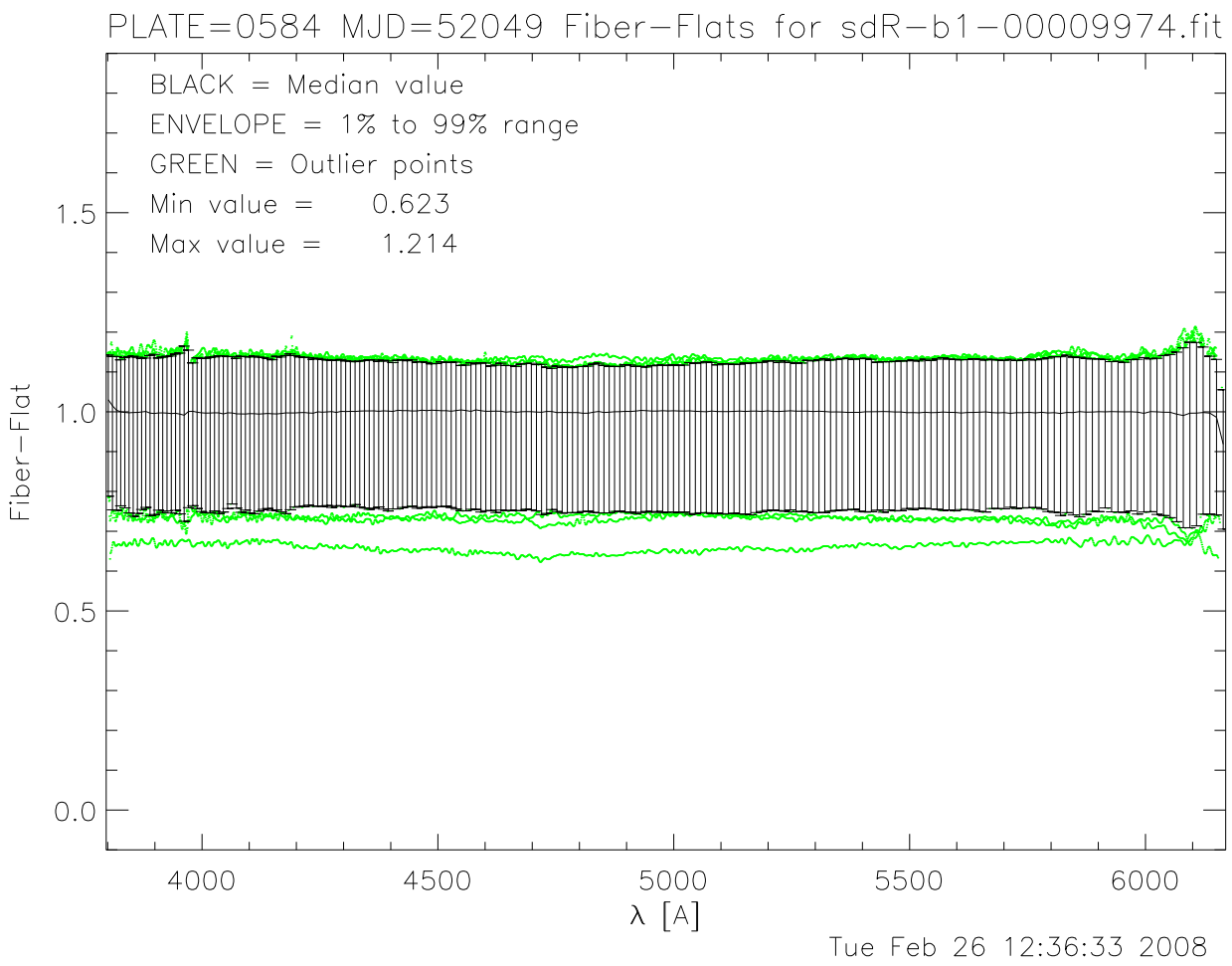

PLATE=0584 MJD=52049 sdR-b1-00009976.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

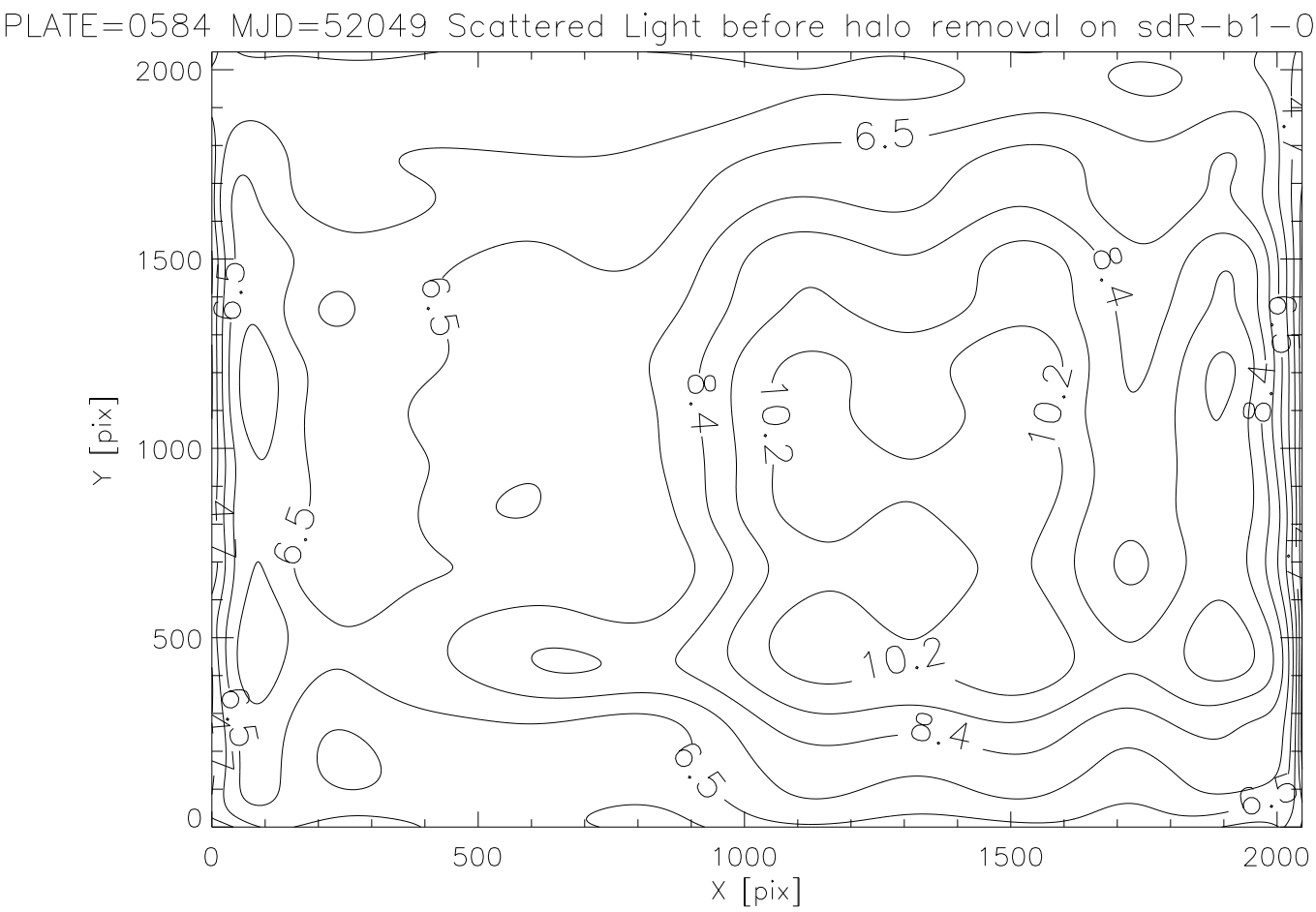

PLATE=0584 MJD=52049 sdR-b1-00009976.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

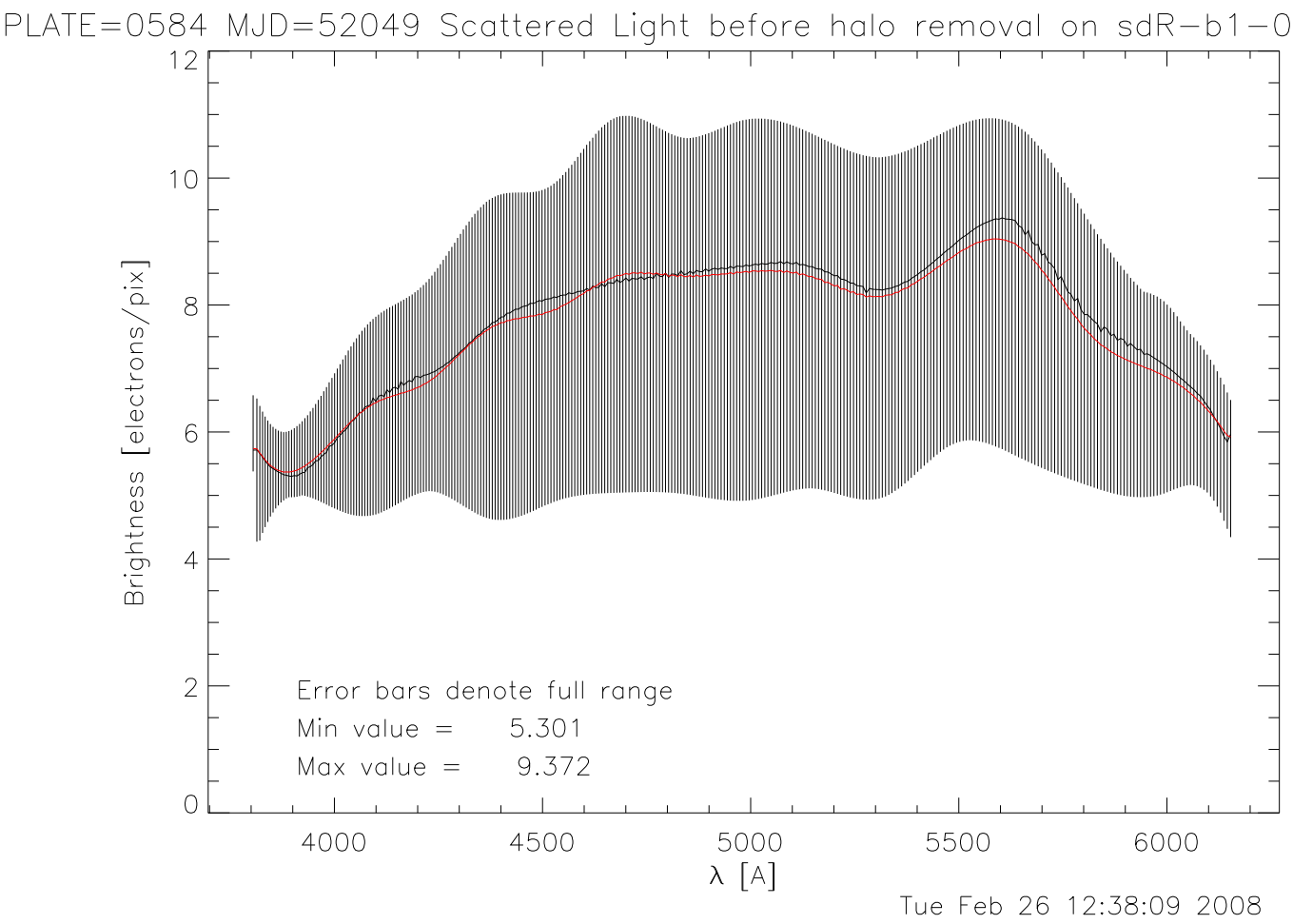

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009976.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

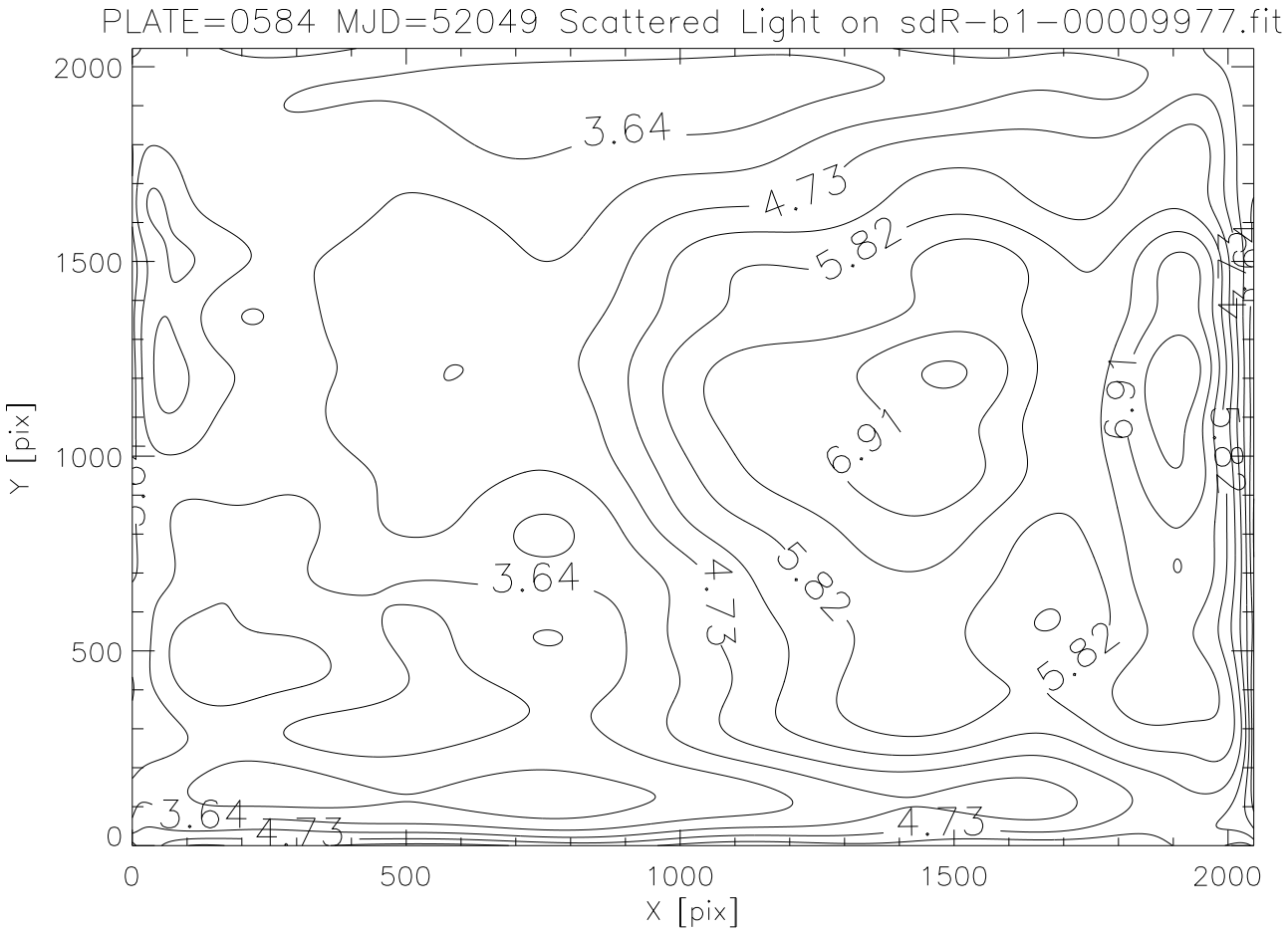

PLATE=0584 MJD=52049 sdR-b1-00009976.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.34 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

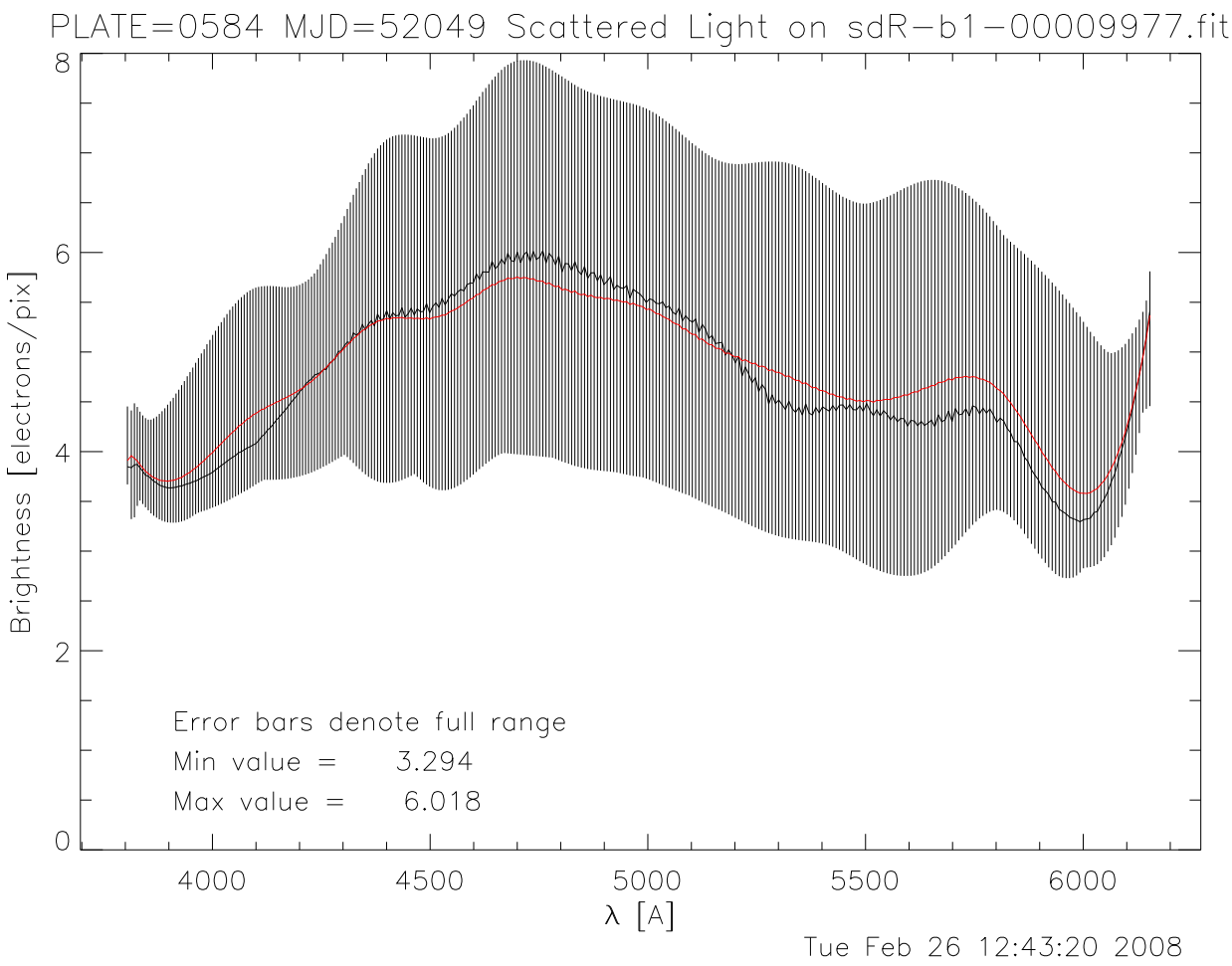

PLATE=0584 MJD=52049 sdR-b1-00009976.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.1×10^4
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
RED = sky fiber
Dispersion = 1.25 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
2.1×10^4
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
2.1×10^4
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.135
1.140
1.145
1.150
1.155
1.160
Airmass

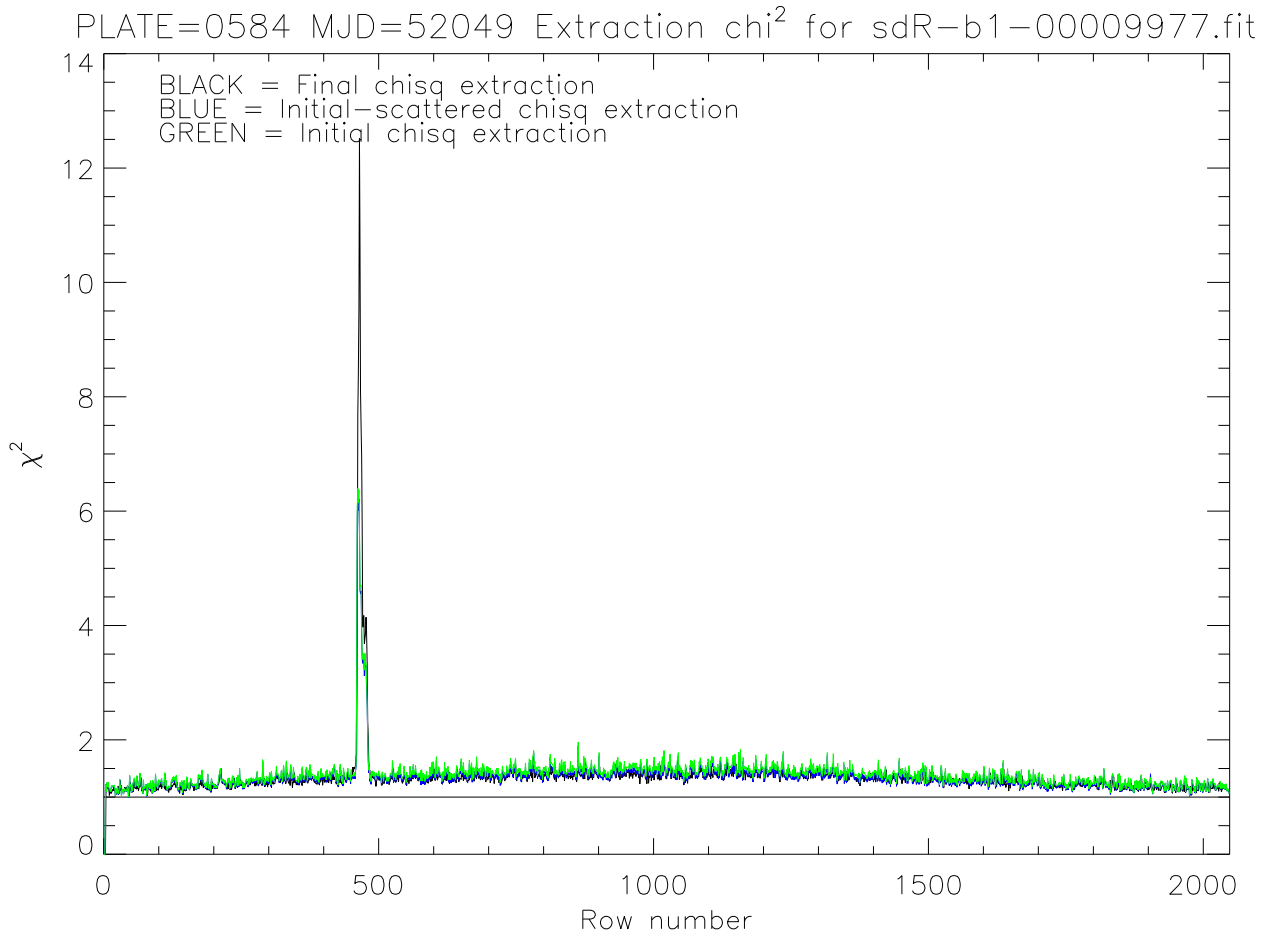

PLATE=0584 MJD=52049 Fiber−Flats for sdR−b1−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.623
Max value = 1.214
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 12:36:33 2008

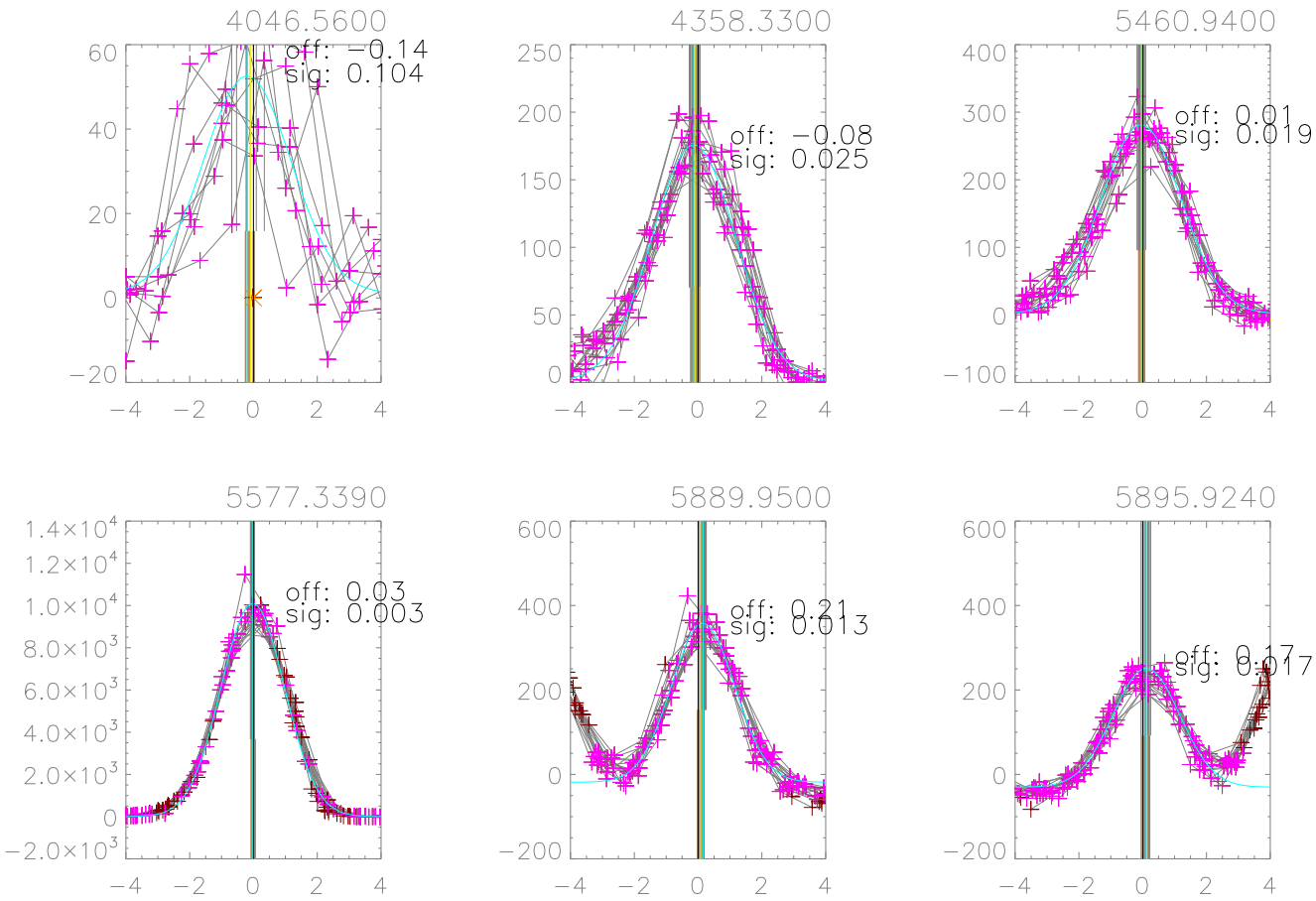

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR−b1−00009977.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.5
8.4
10.2

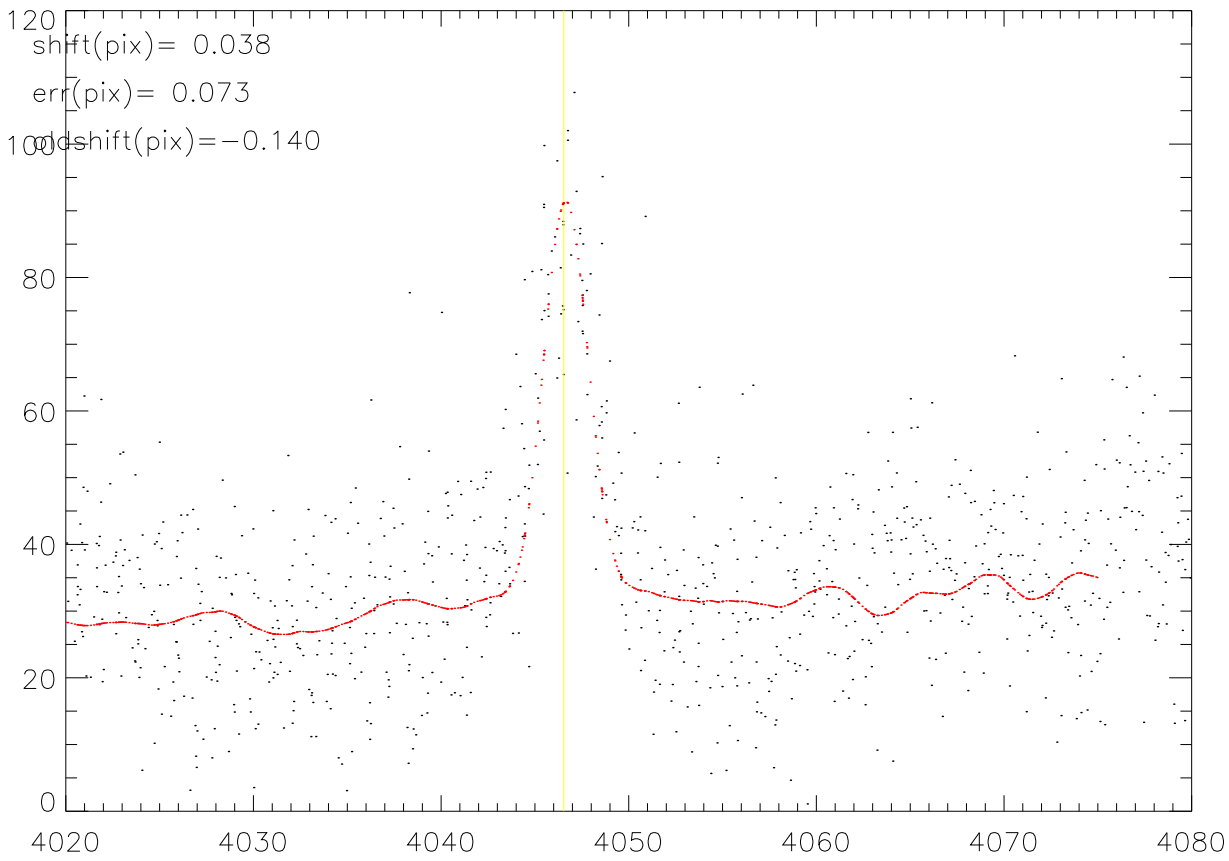

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b1-00009977.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.301
Max value = 9.372
Tue Feb 26 12:38:09 2008

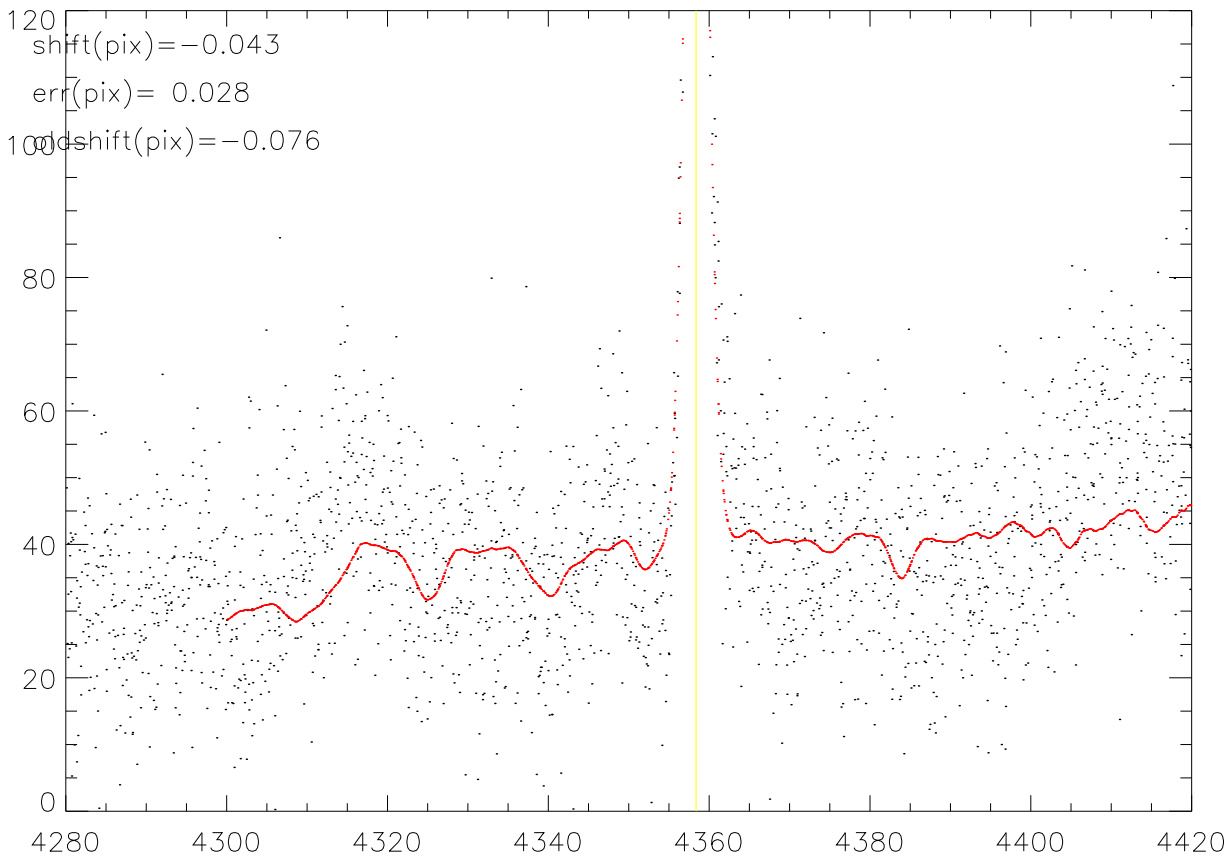

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009977.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.64
4.73
5.82
6.91
0

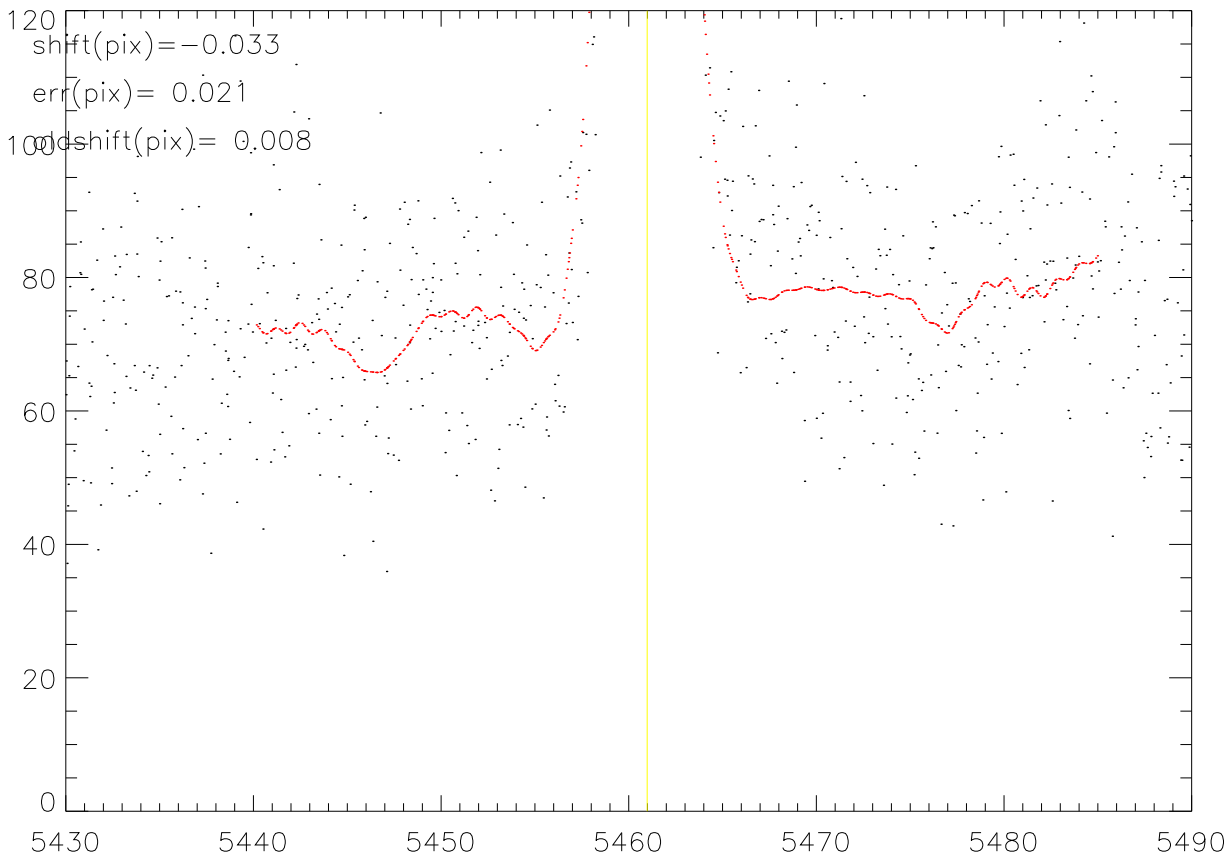

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009977.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.294
Max value = 6.018
Tue Feb 26 12:43:20 2008

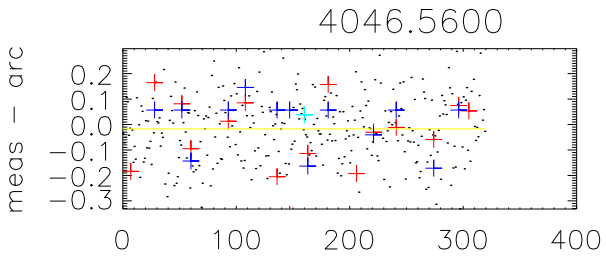

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-b1-00009977.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

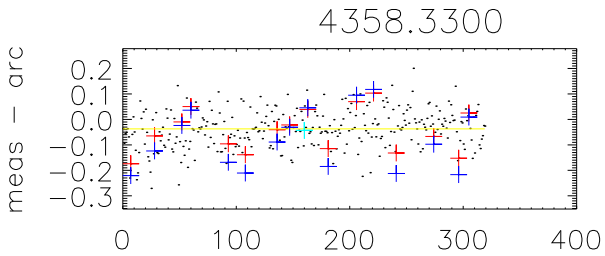

4046.5600
off: −0.14
sig: 0.104
4358.3300
off: −0.08
sig: 0.025
5460.9400
off: 0.01
sig: 0.019
5577.3390
off: 0.03
sig: 0.003
5889.9500
off: 0.21
sig: 0.013
5895.9240
off: 0.17
sig: 0.017

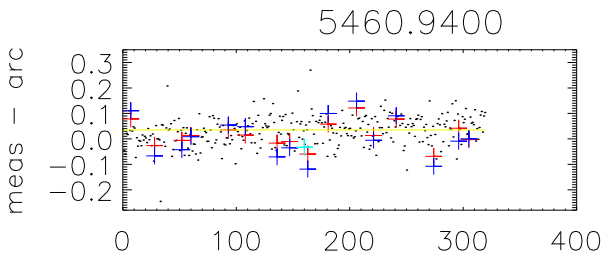

shift(pix)= 0.038
err(pix)= 0.073
oldshift(pix)=−0.140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

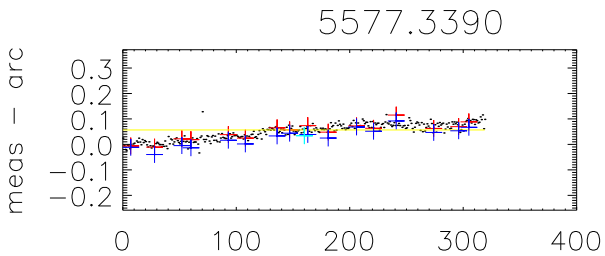

shift(pix)=−0.043
err(pix)= 0.028
oldshift(pix)=−0.076
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

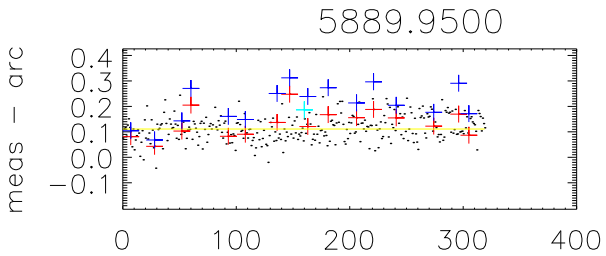

shift(pix)=−0.033
err(pix)= 0.021
oldshift(pix)= 0.008
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

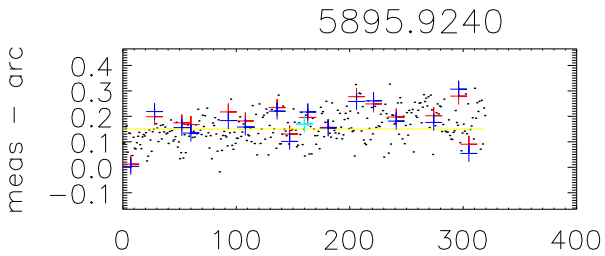

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

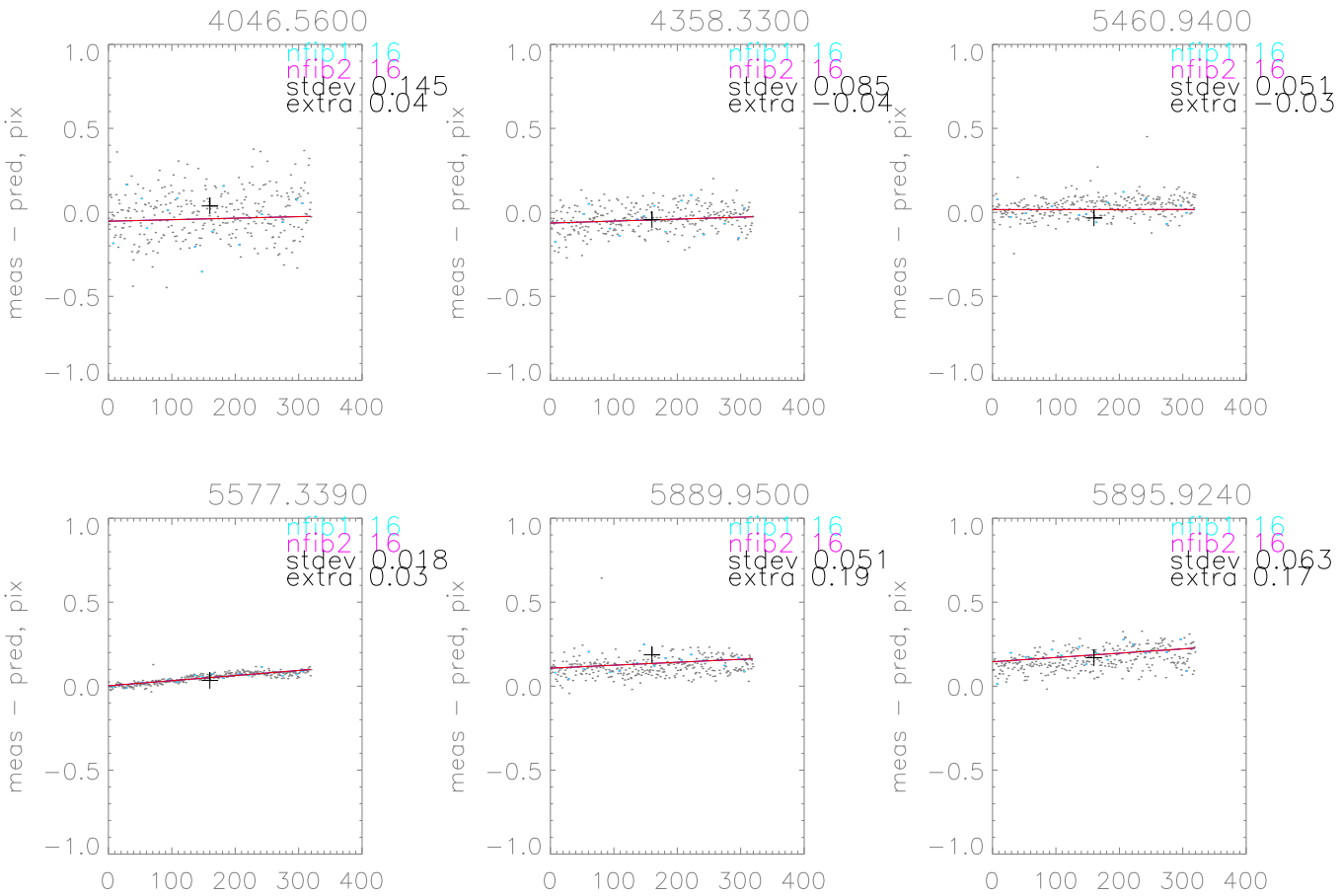

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

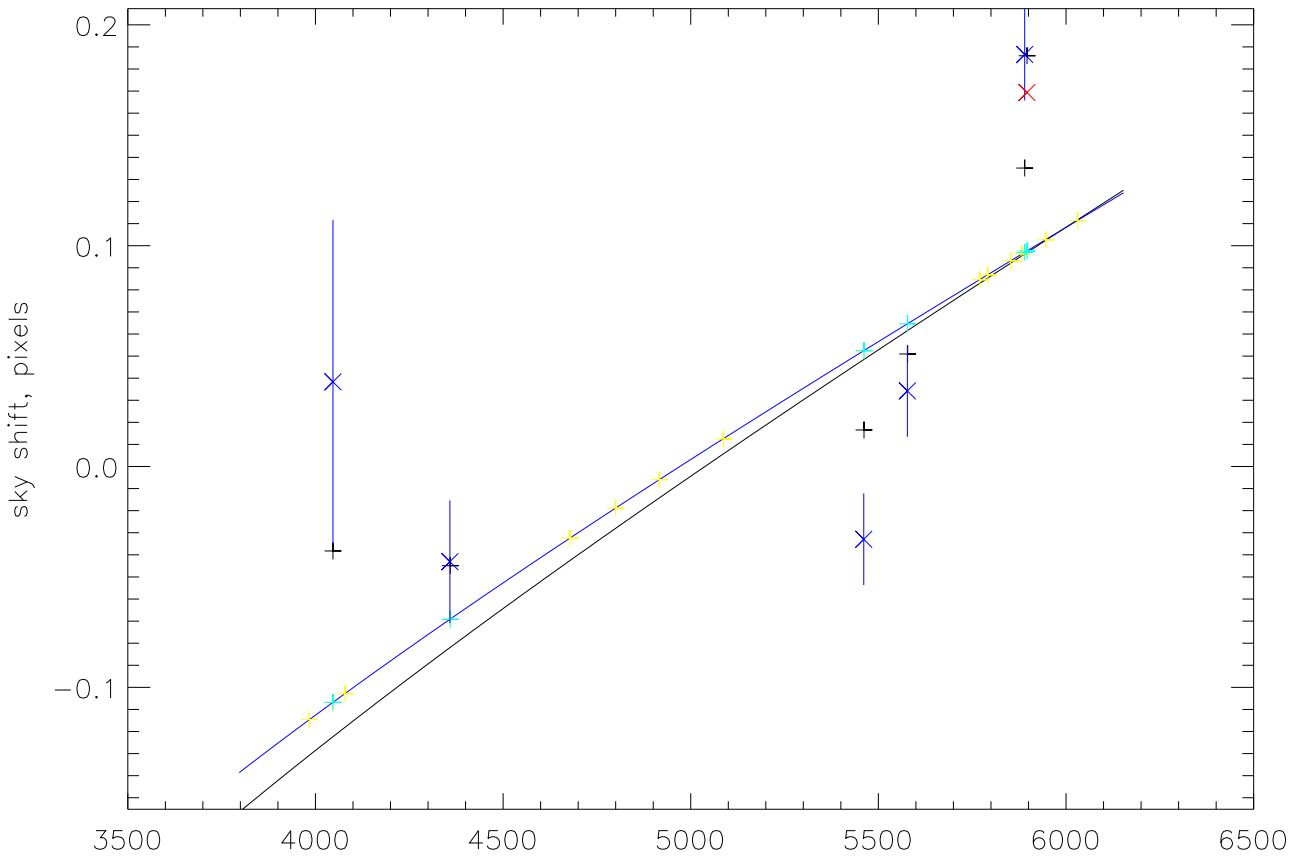

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

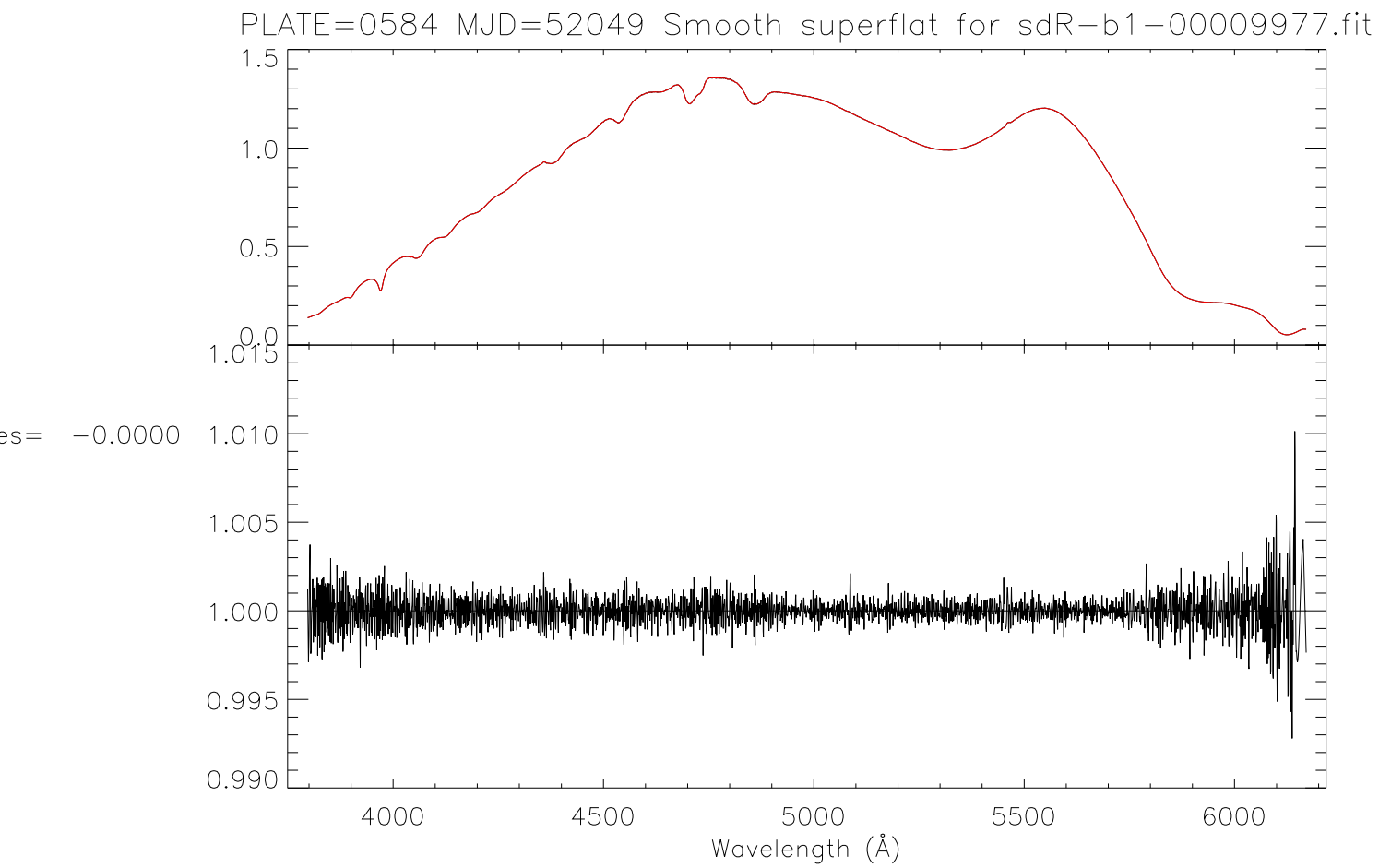

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

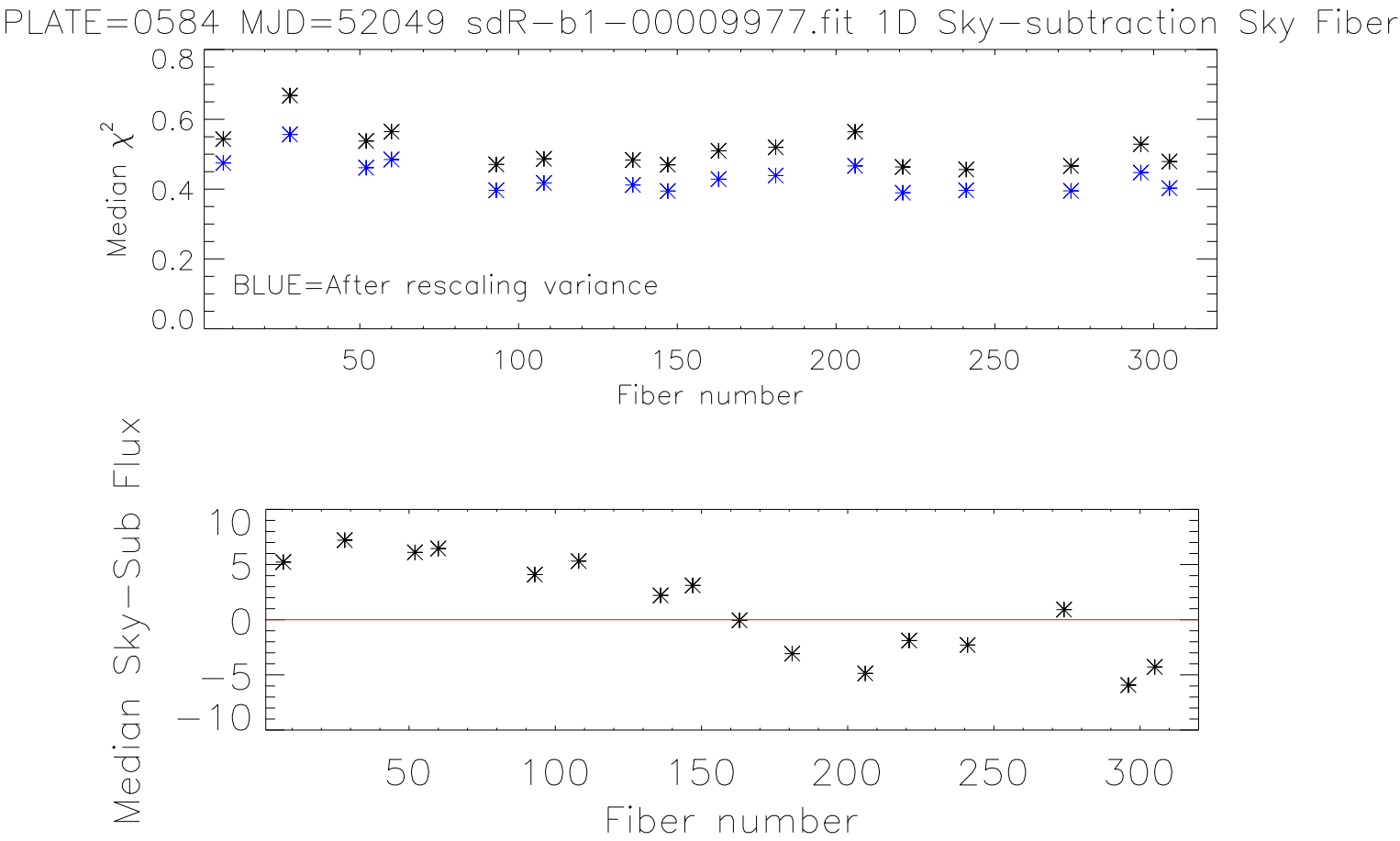

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

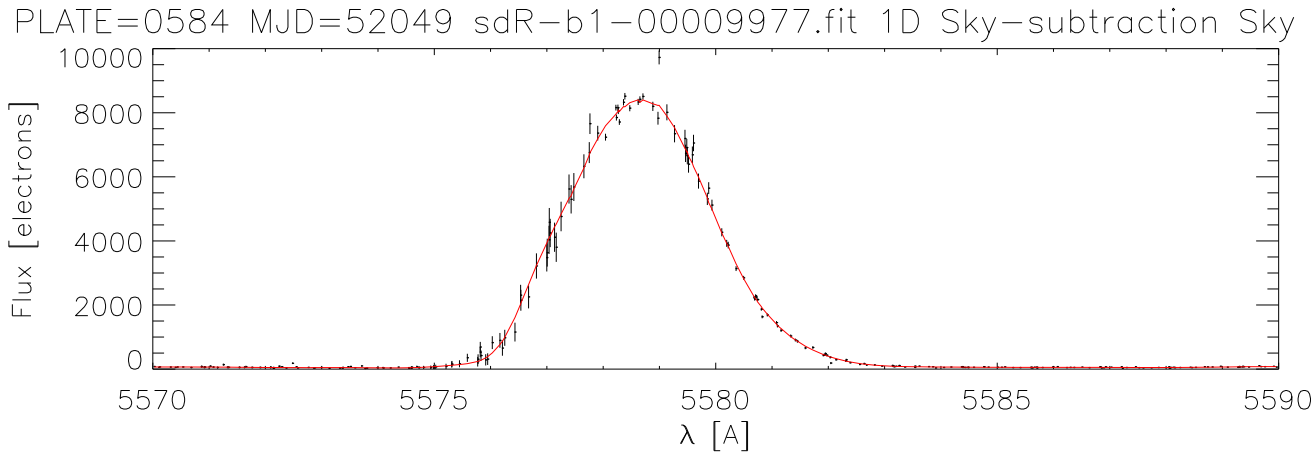

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

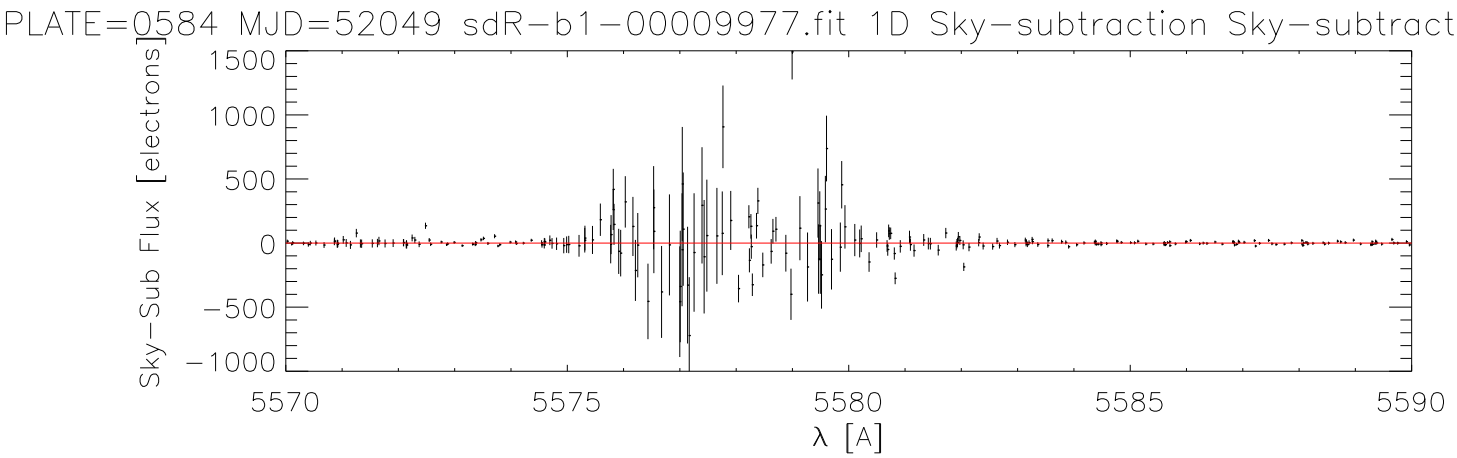

4046.5600
nfib1 16
nfib2 16
stdev 0.145
extra 0.04
4358.3300
nfib1 16
nfib2 16
stdev 0.085
extra −0.04
5460.9400
nfib1 16
nfib2 16
stdev 0.051
extra −0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra 0.03
5889.9500
nfib1 16
nfib2 16
stdev 0.051
extra 0.19
5895.9240
nfib1 16
nfib2 16
stdev 0.063
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

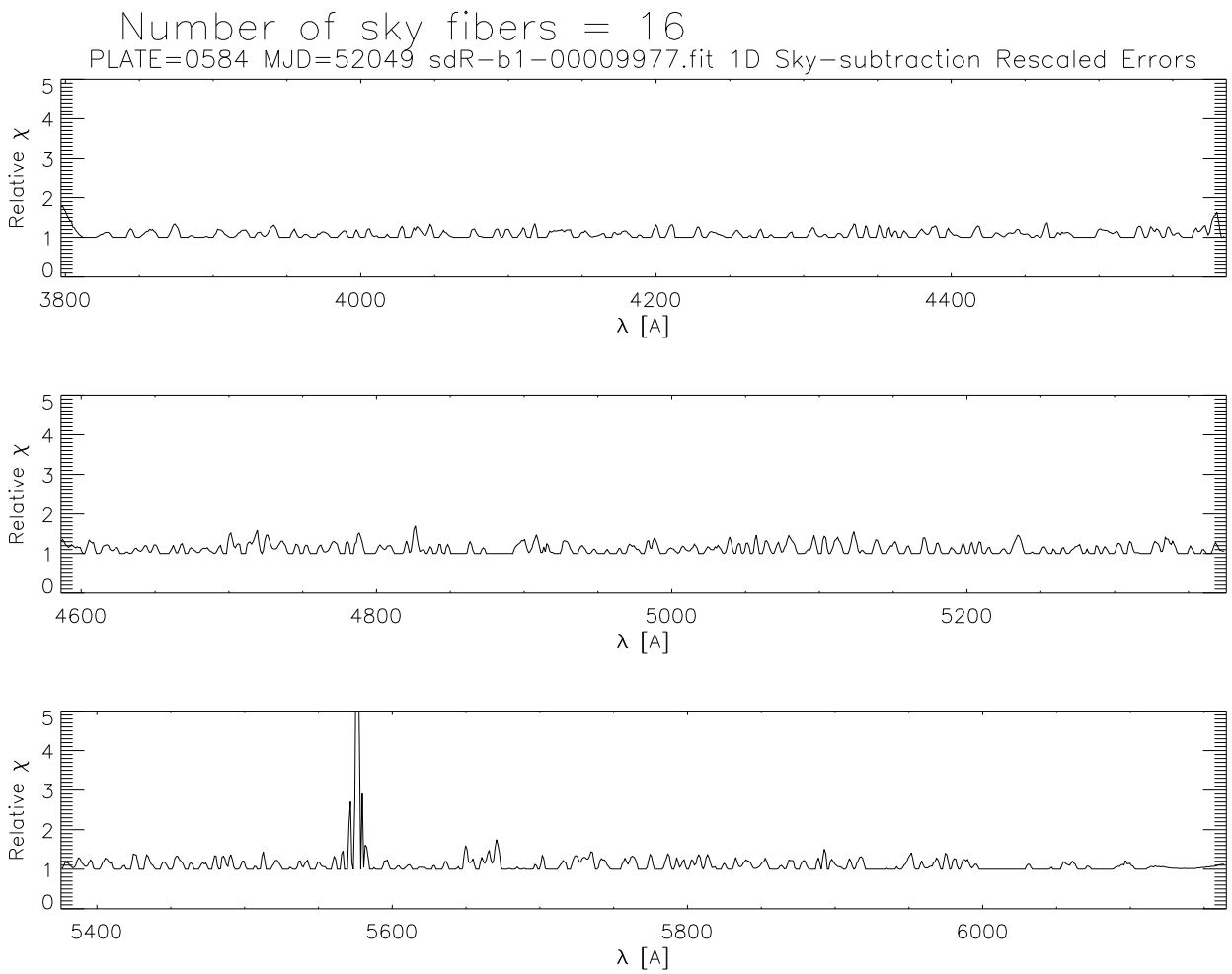

0.2
0.1
0.0
−0.1
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

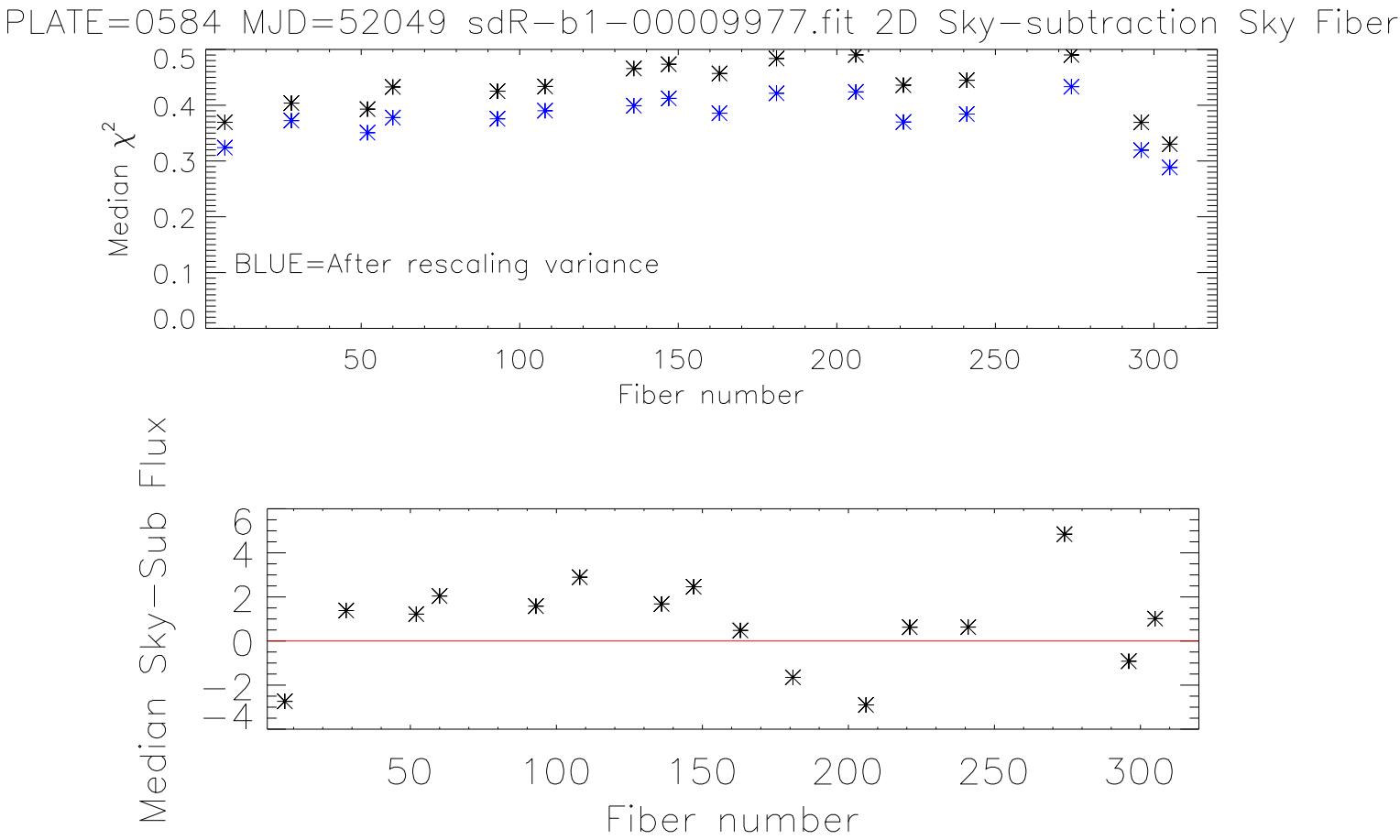

PLATE=0584 MJD=52049 Smooth superflat for sdR-b1-00009977.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

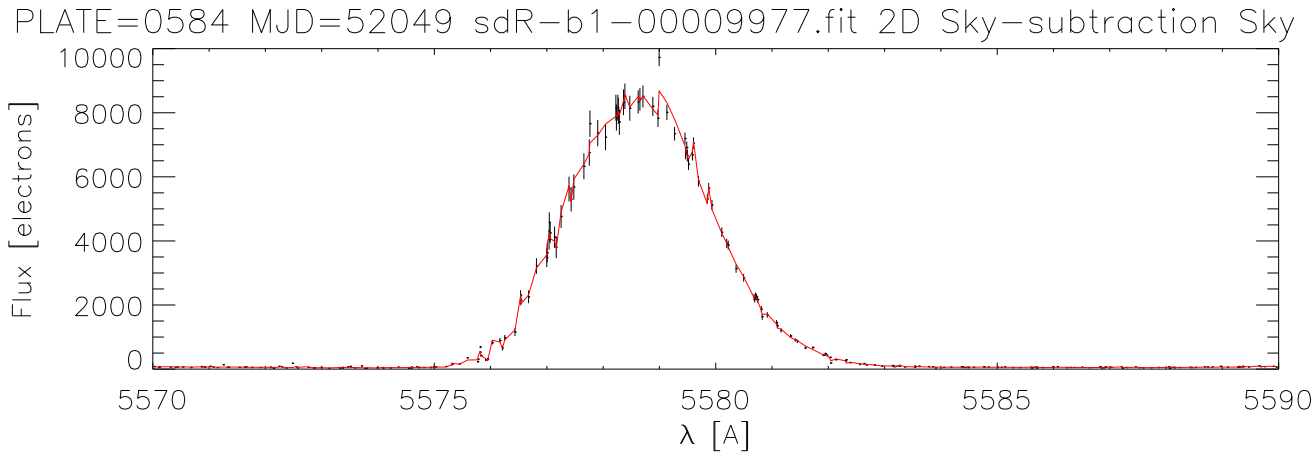

PLATE=0584 MJD=52049 sdR-b1-00009977.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

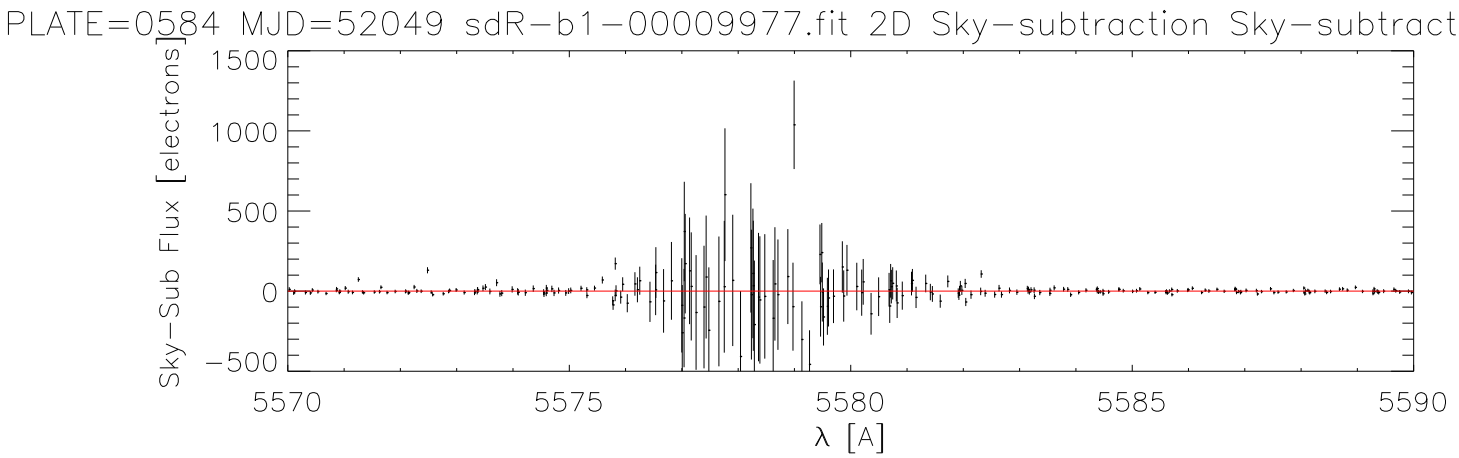

PLATE=0584 MJD=52049 sdR-b1-00009977.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

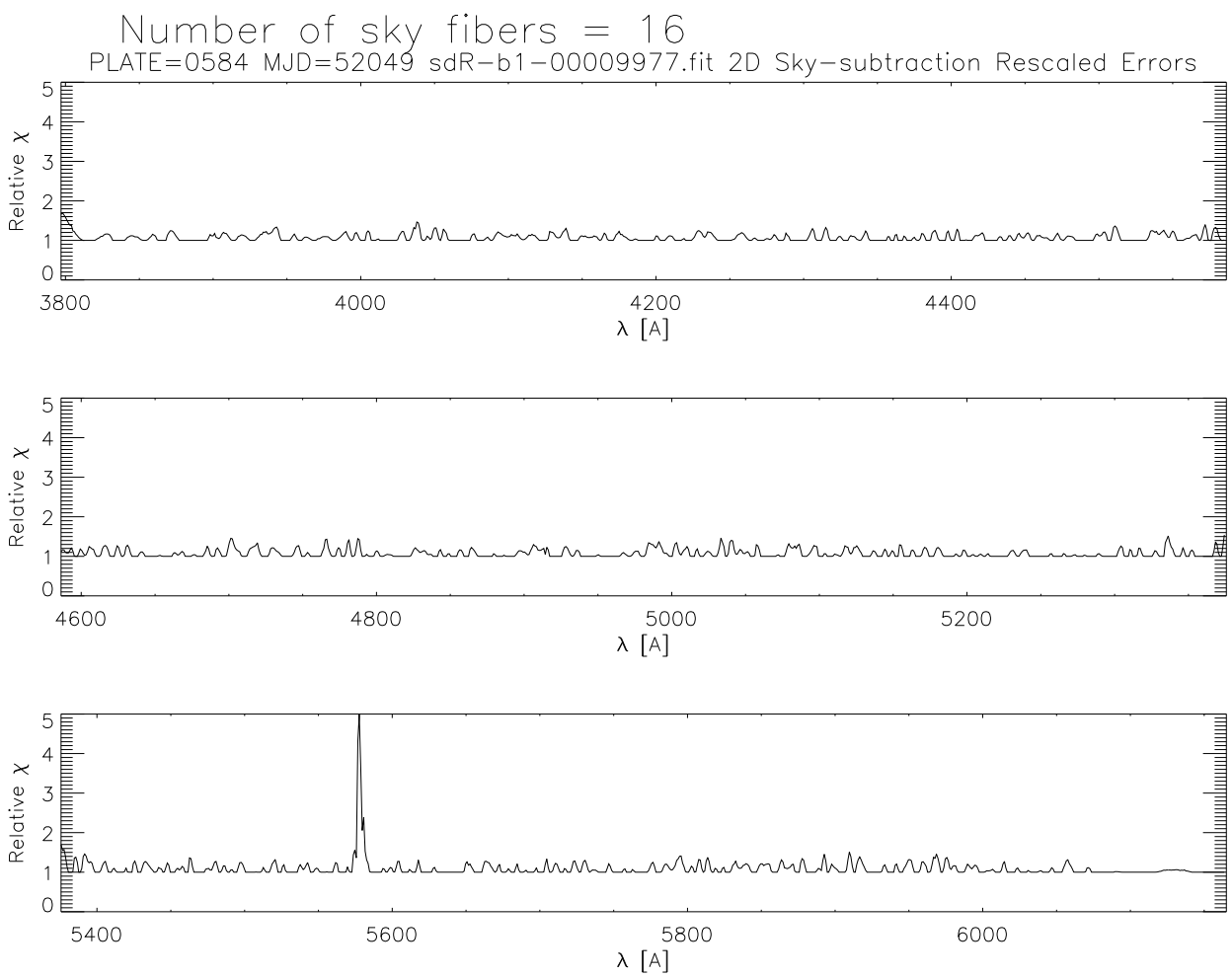

PLATE=0584 MJD=52049 sdR-b1-00009977.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

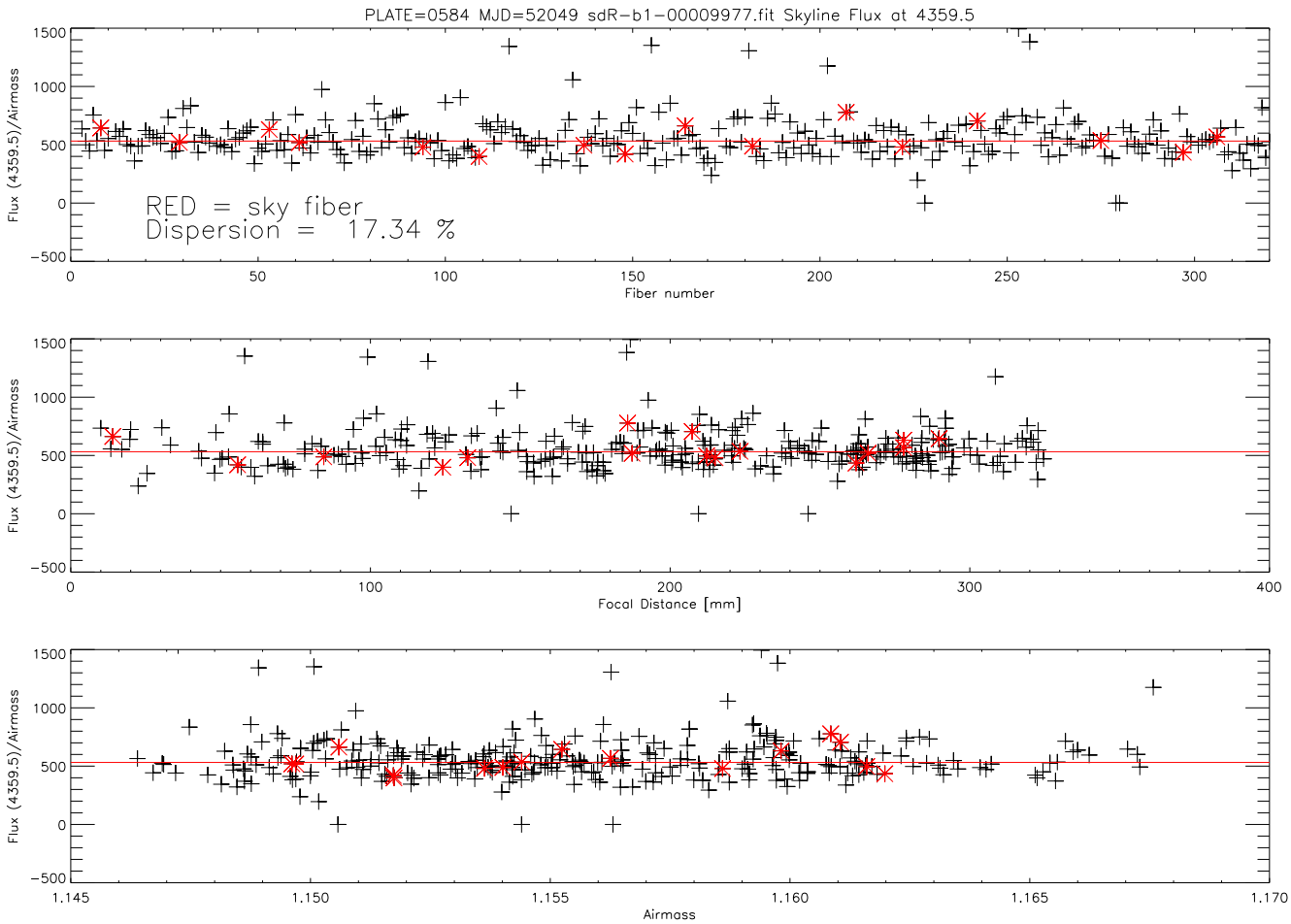

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009977.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

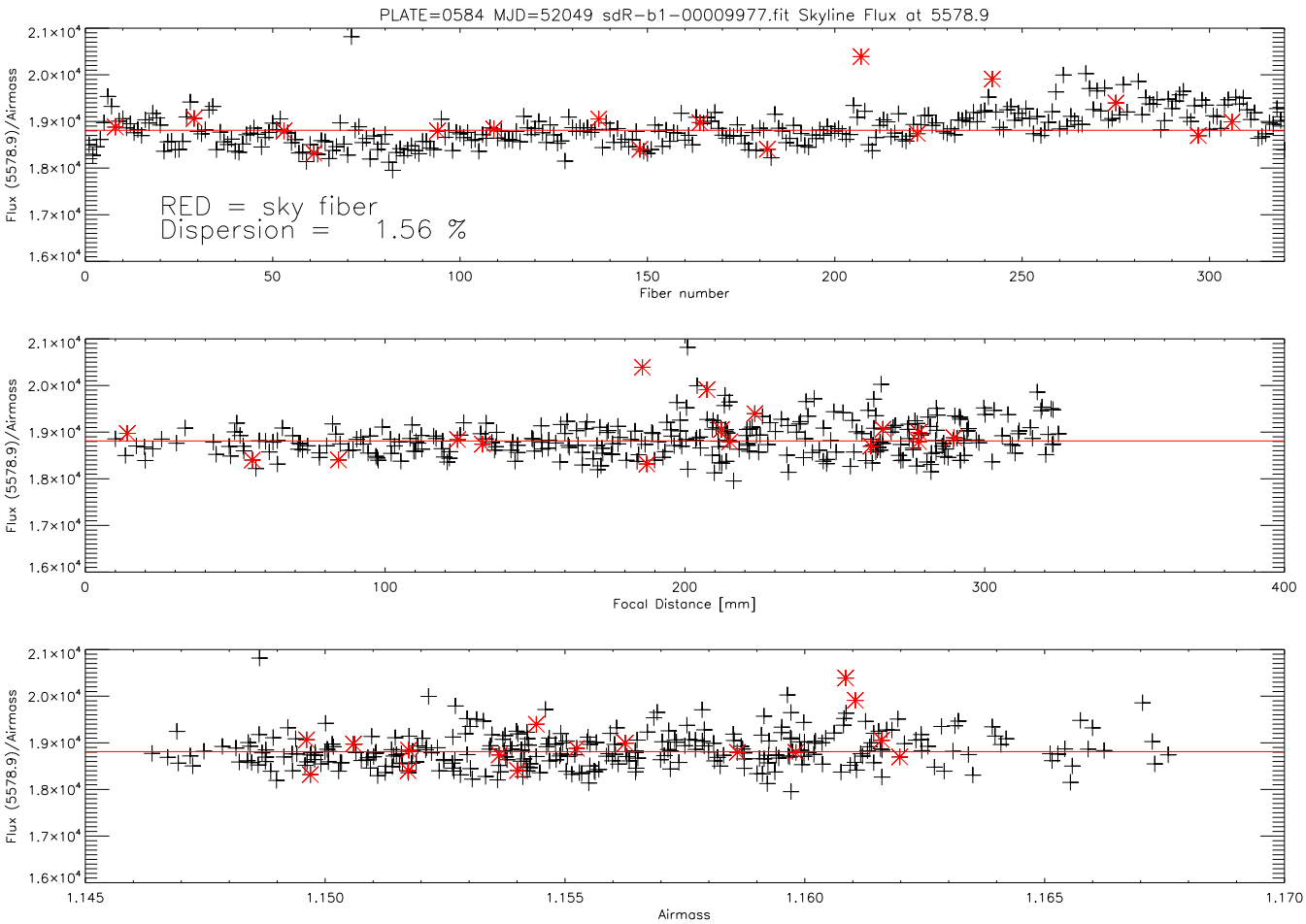

PLATE=0584 MJD=52049 sdR-b1-00009977.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

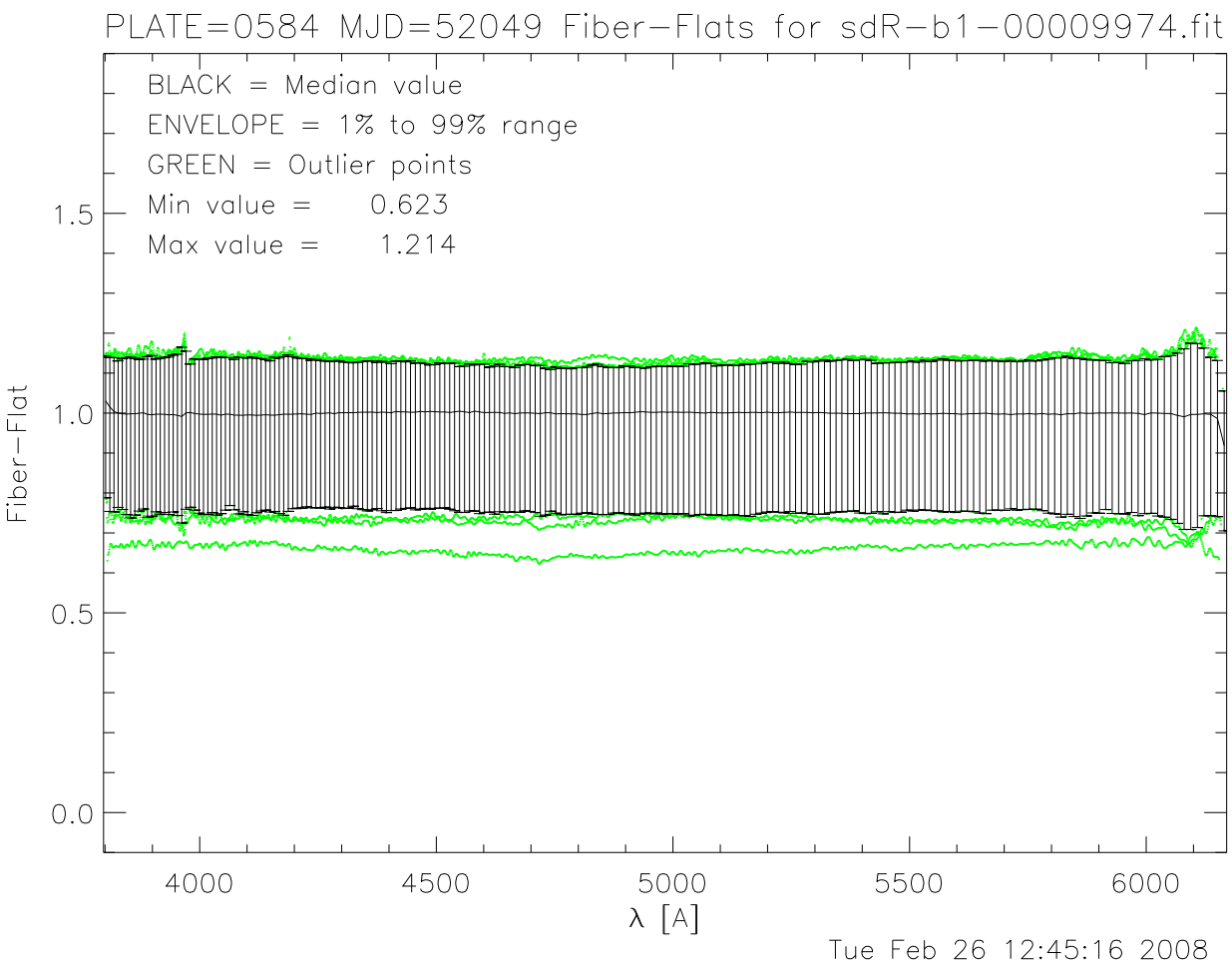

PLATE=0584 MJD=52049 sdR-b1-00009977.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

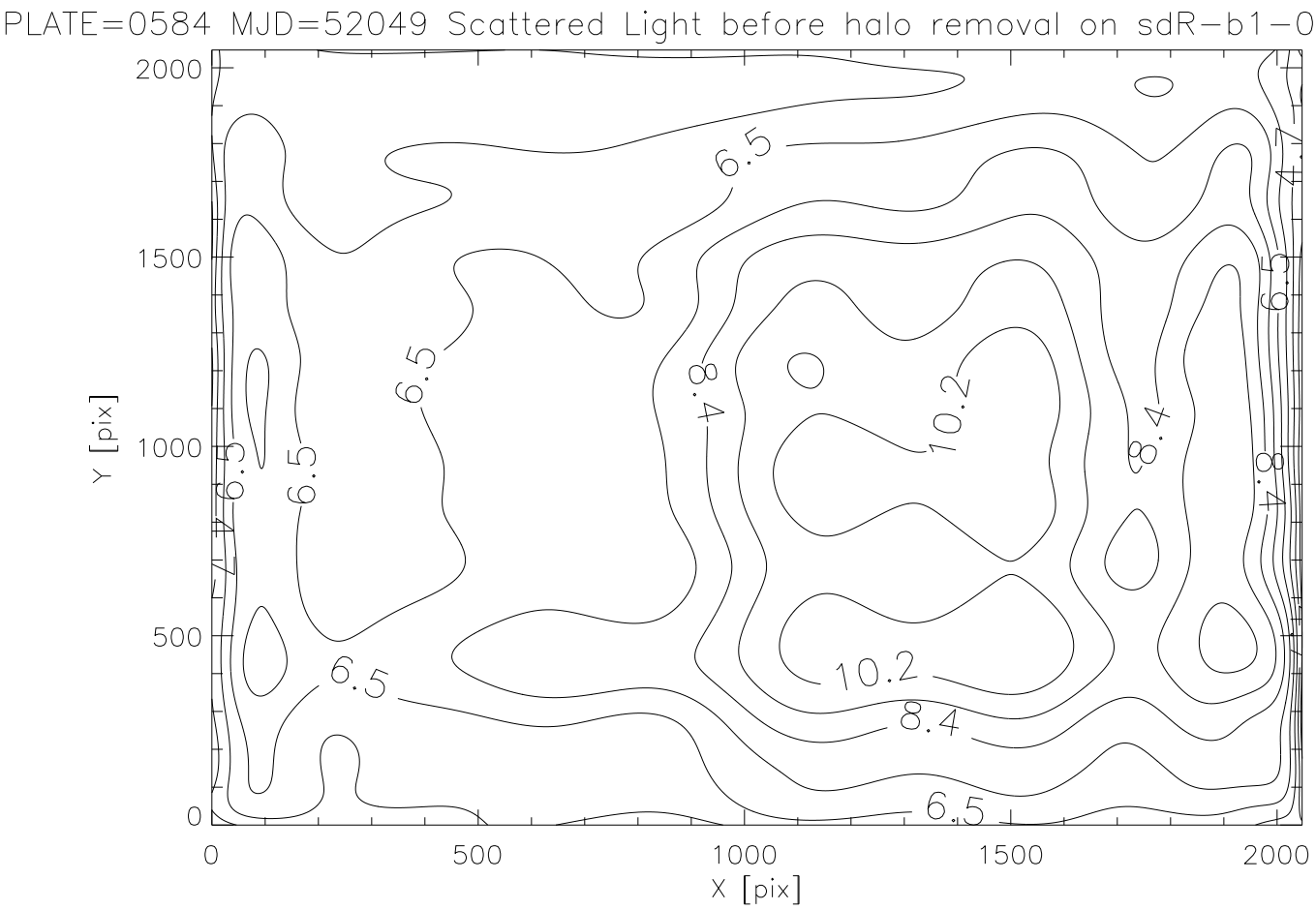

PLATE=0584 MJD=52049 sdR-b1-00009977.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

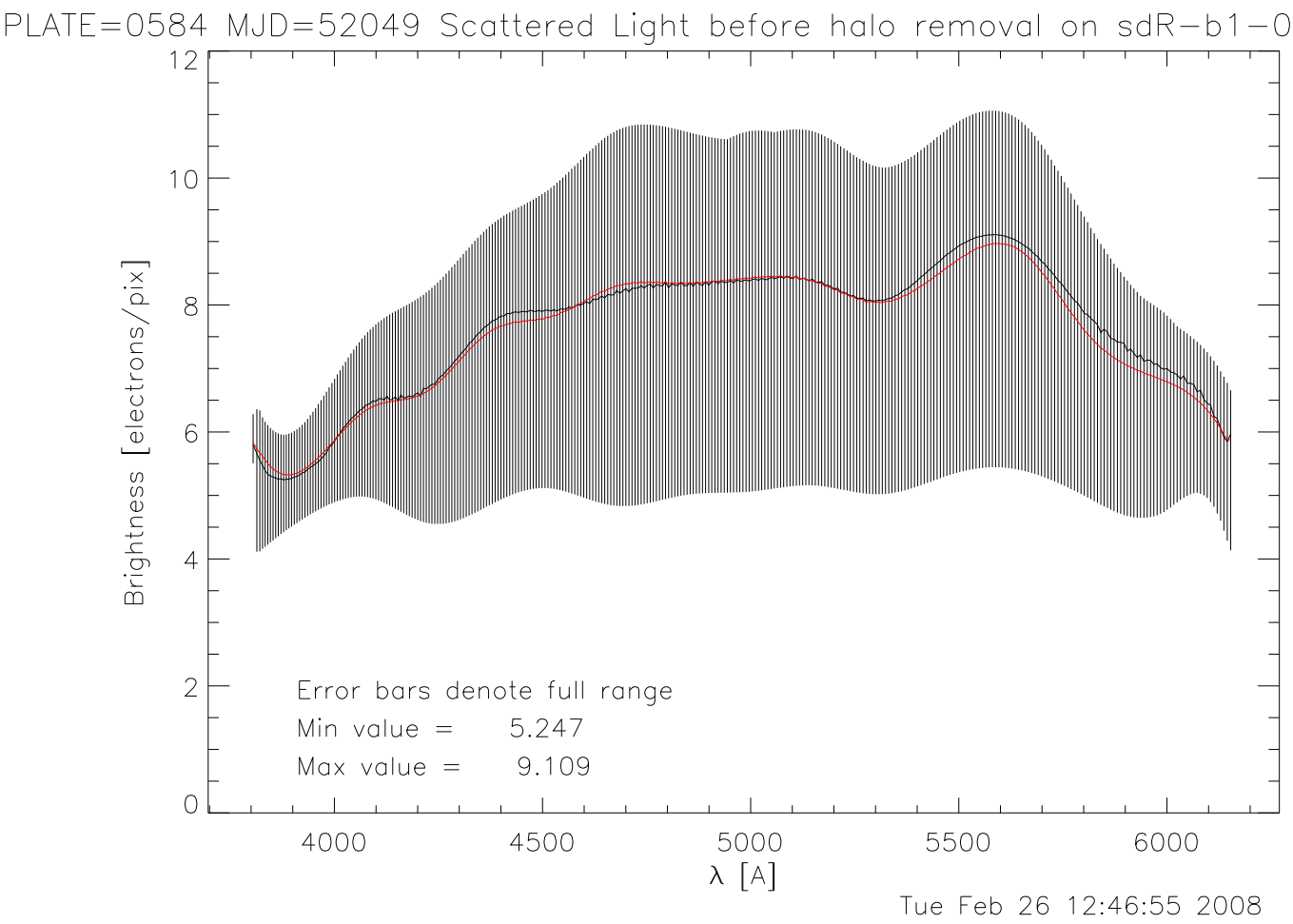

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009977.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

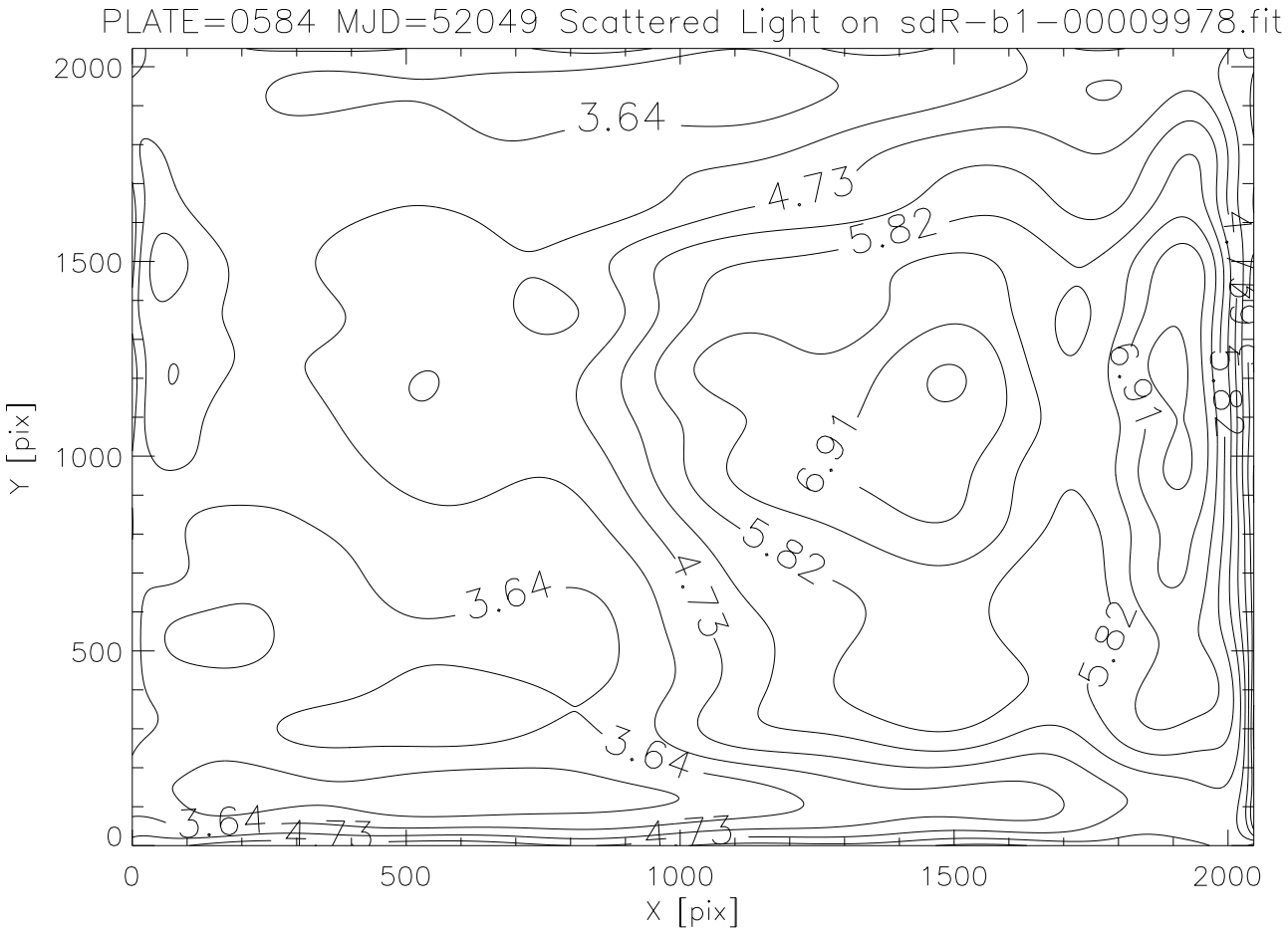

PLATE=0584 MJD=52049 sdR-b1-00009977.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 17.34 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

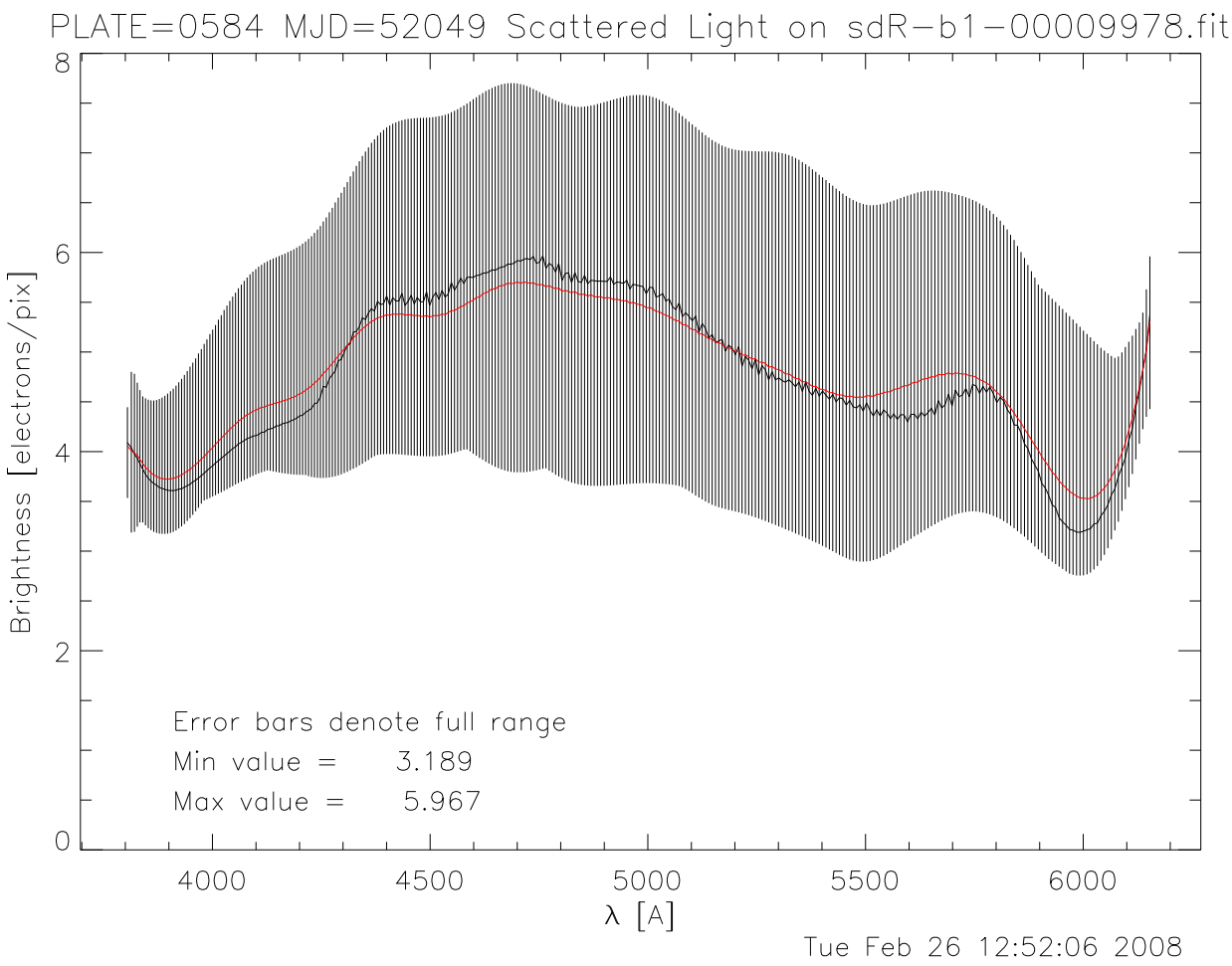

PLATE=0584 MJD=52049 sdR-b1-00009977.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.56 %
Fiber number
Focal Distance [mm]
Airmass

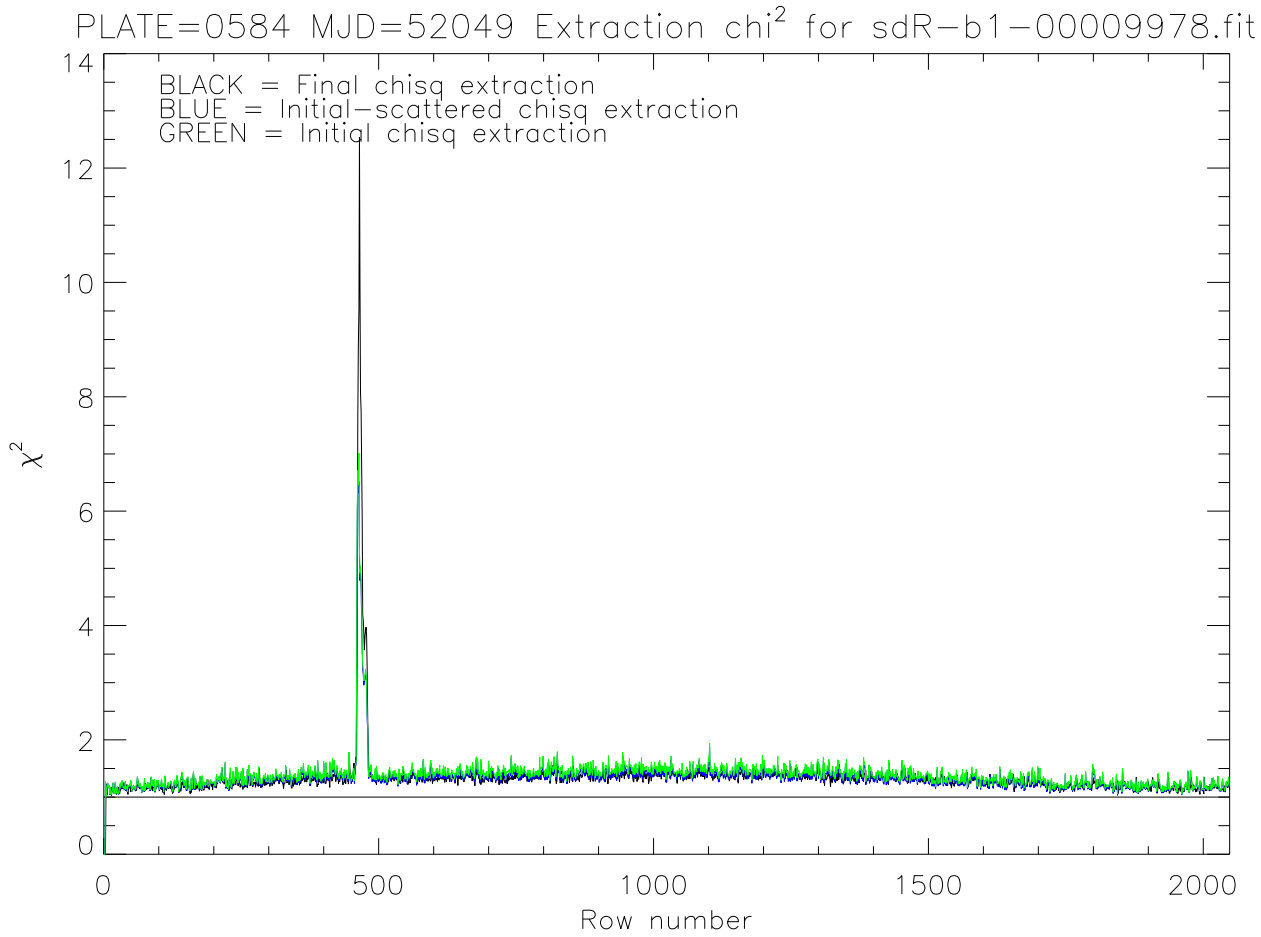

PLATE=0584 MJD=52049 Fiber-Flats for sdR-b1-00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.623
Max value = 1.214
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 12:45:16 2008

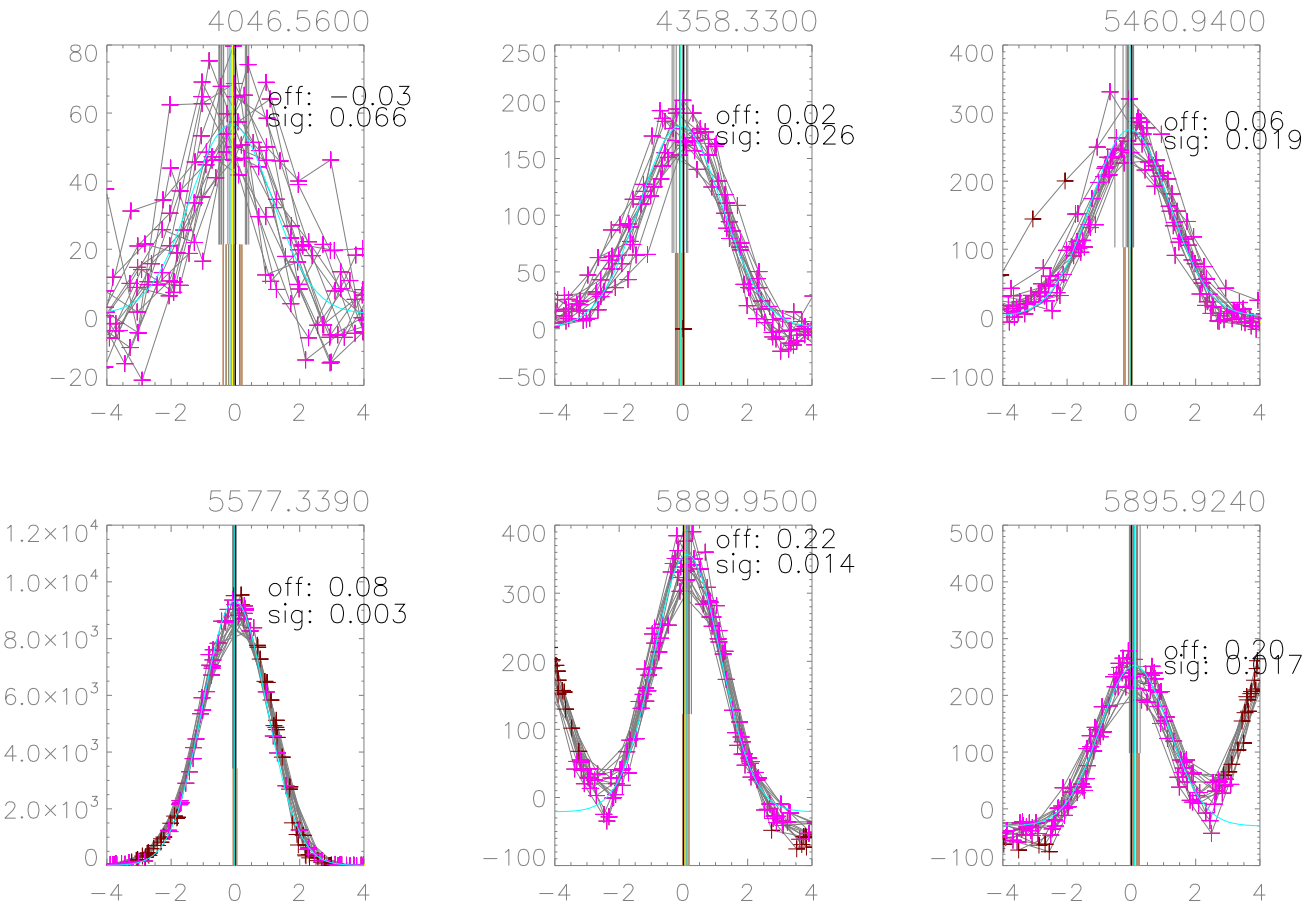

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR−b1−00009978.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4
10.2

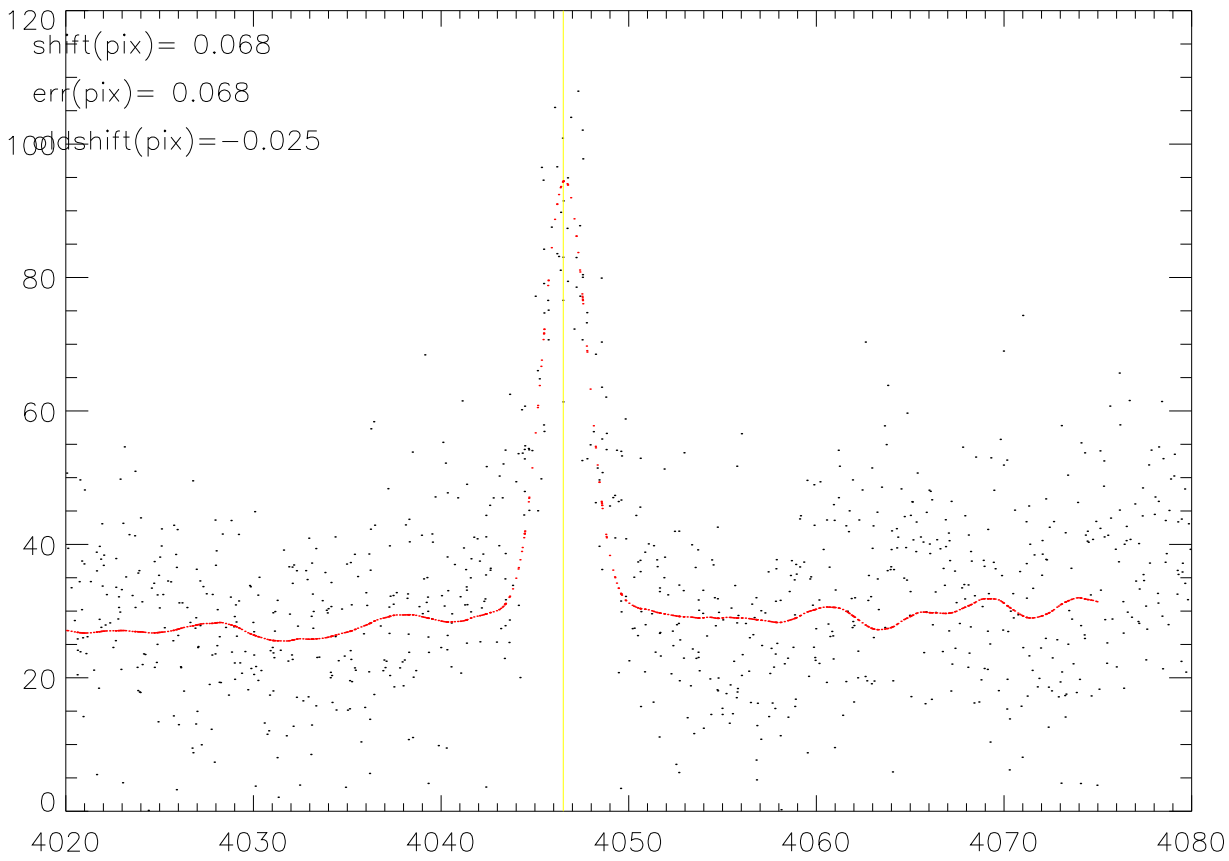

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b1-00009978.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.247
Max value = 9.109
Tue Feb 26 12:46:55 2008

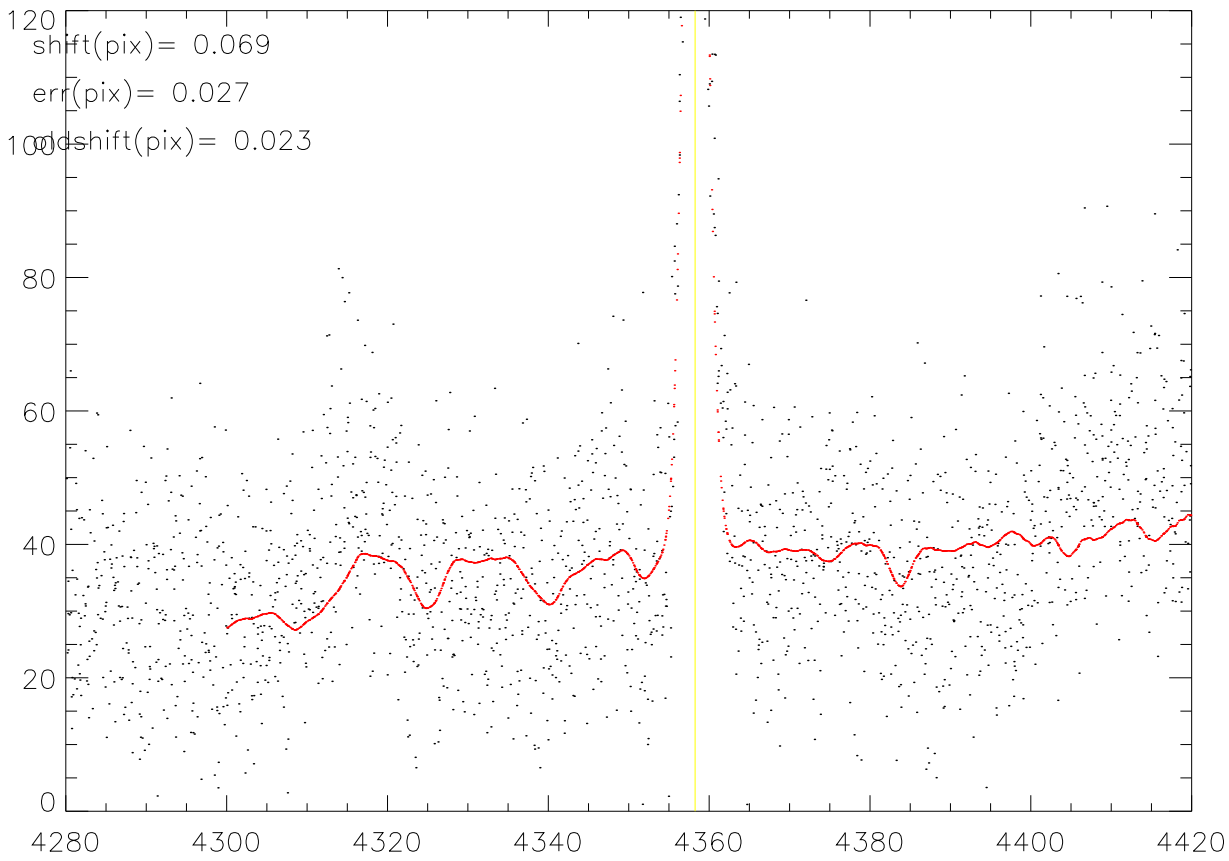

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009978.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.64
4.73
5.82
6.91
7.99
9.08
10.17
11.26
12.35
13.43
14.52
15.61
16.70
17.79
18.87
19.96
21.05
22.14
23.23
24.31
25.40
26.49
27.58
28.67
29.75
30.84
31.93
33.02
34.11
35.19
36.28
37.37
38.46
39.55
40.63
41.72
42.81
43.90
44.99
46.07

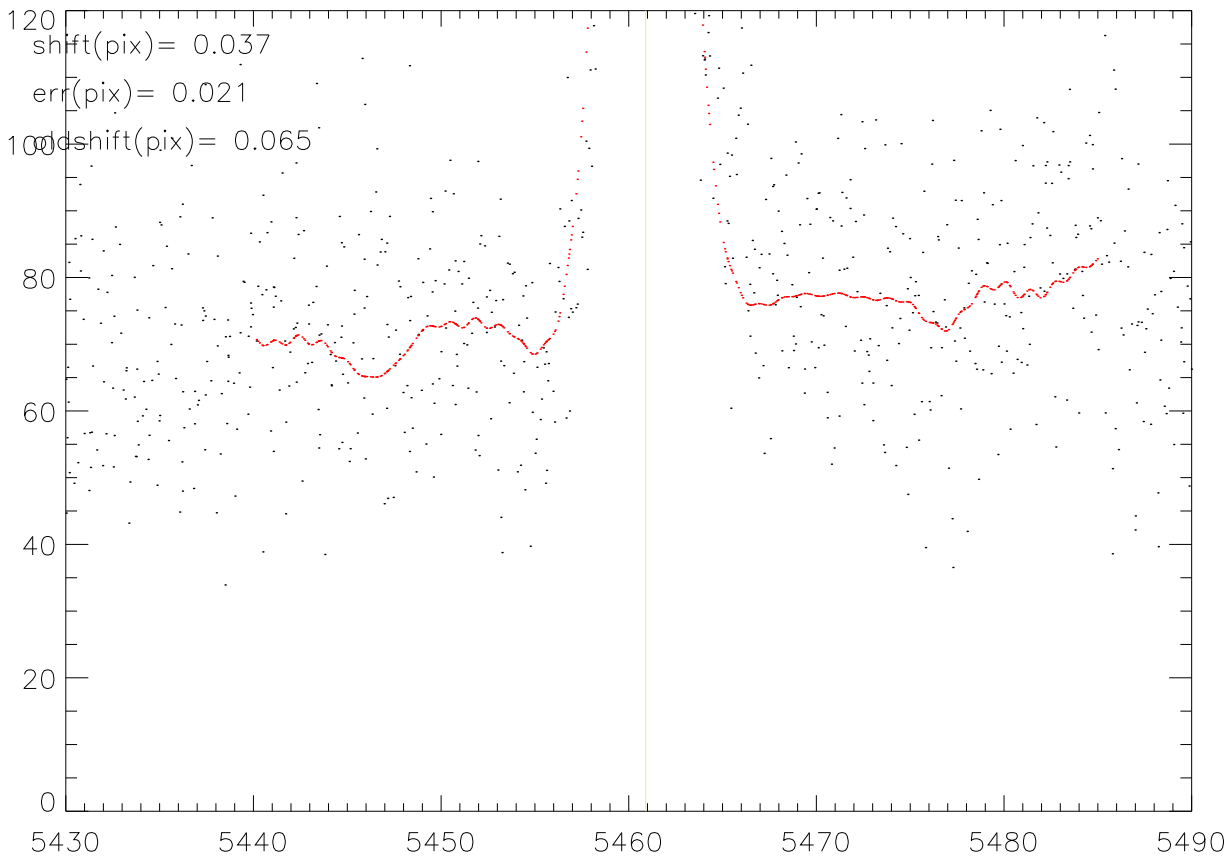

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009978.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.189
Max value = 5.967
Tue Feb 26 12:52:06 2008

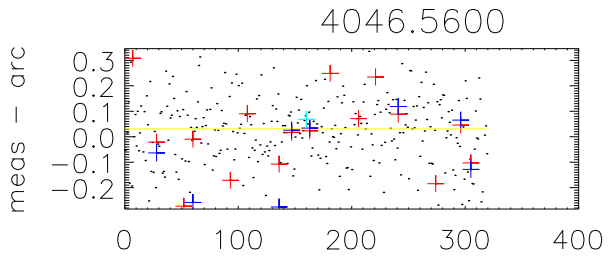

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-b1-00009978.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

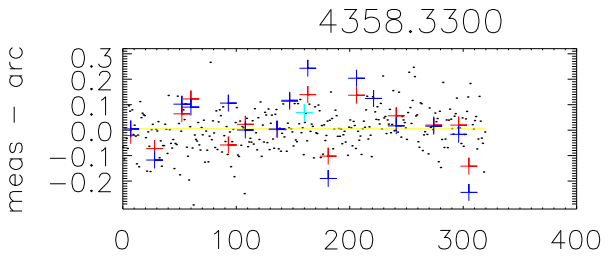

4046.5600
off: −0.03
sig: 0.066
4358.3300
off: 0.02
sig: 0.026
5460.9400
off: 0.06
sig: 0.019
5577.3390
off: 0.08
sig: 0.003
5889.9500
off: 0.22
sig: 0.014
5895.9240
off: 0.20
sig: 0.017

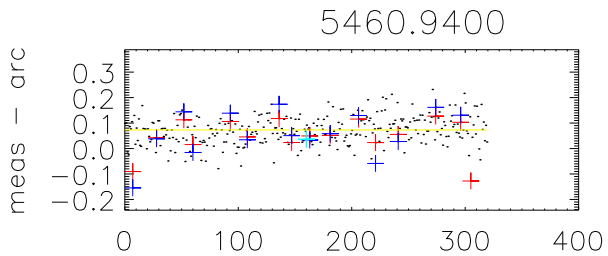

shift(pix)= 0.068
err(pix)= 0.068
oldshift(pix)=-0.025
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

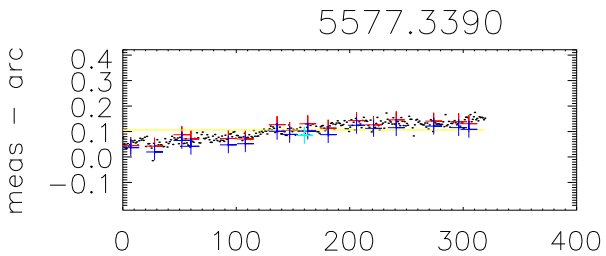

shift(pix)= 0.069
err(pix)= 0.027
oldshift(pix)= 0.023
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

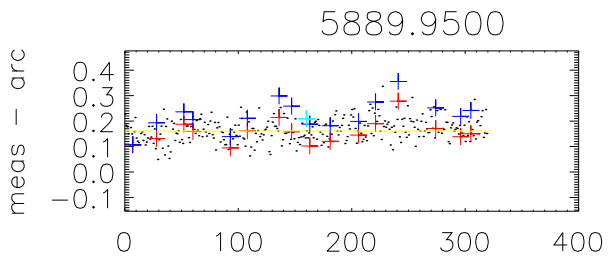

shift(pix)= 0.037
err(pix)= 0.021
oldshift(pix)= 0.065
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

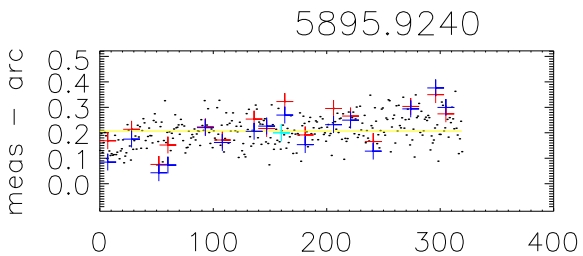

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

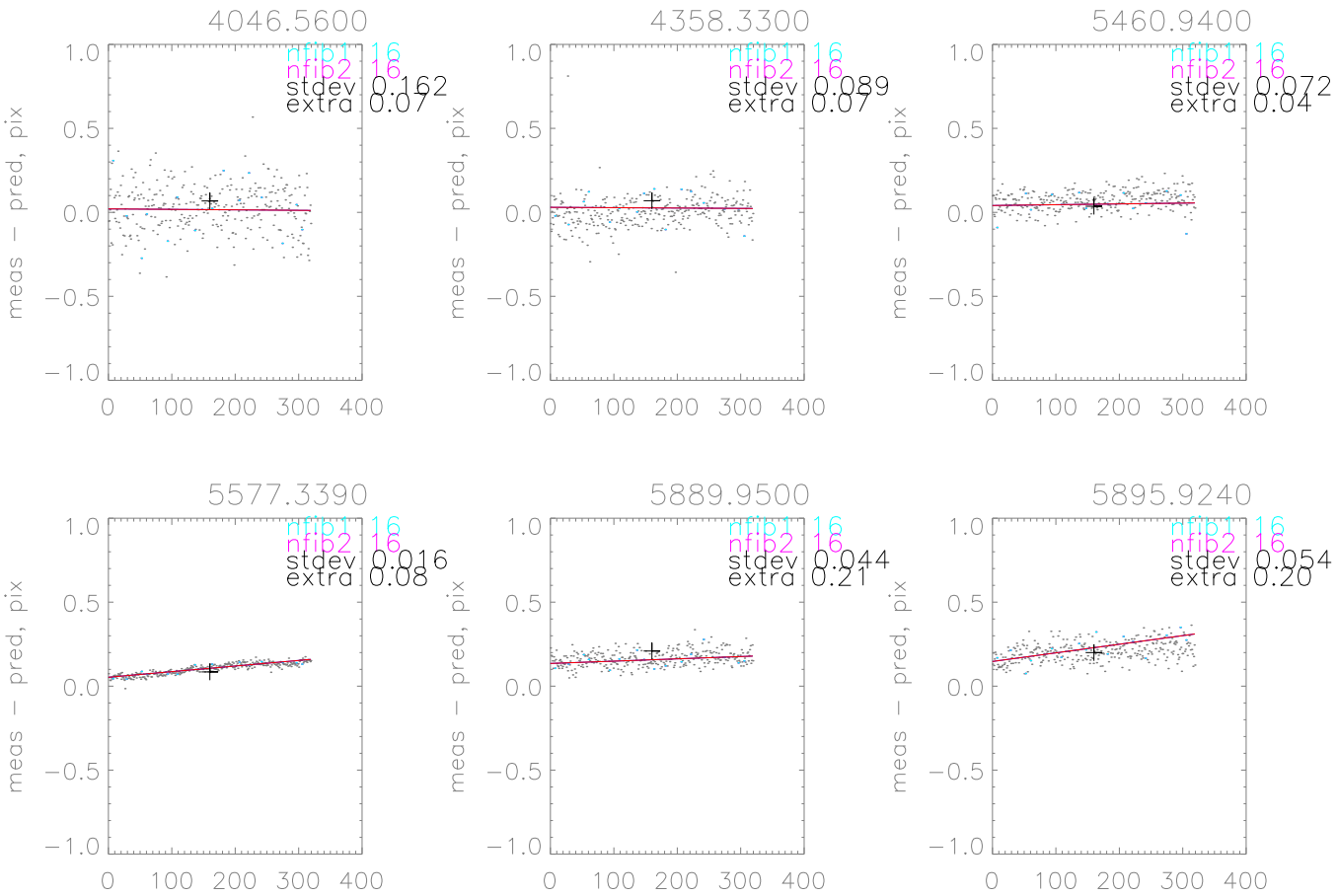

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

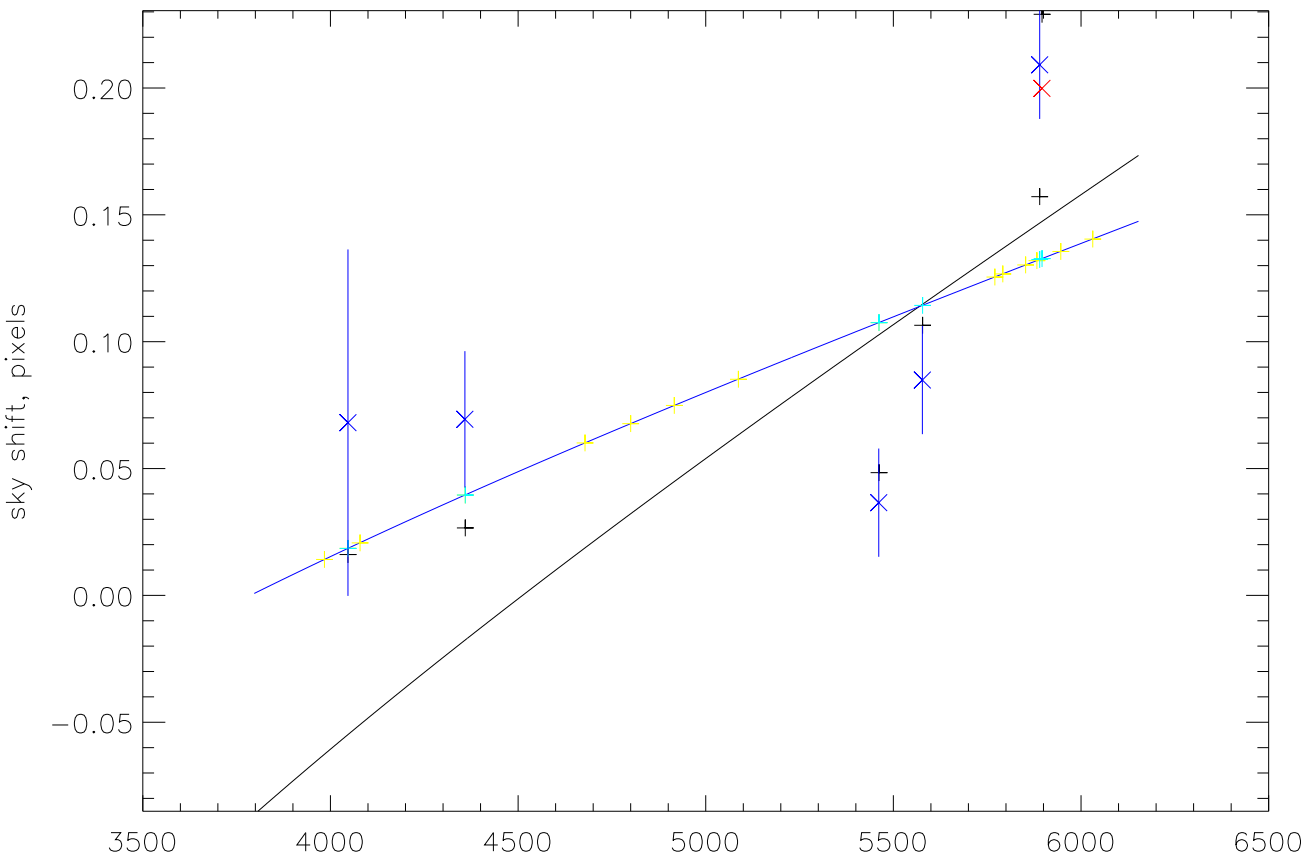

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

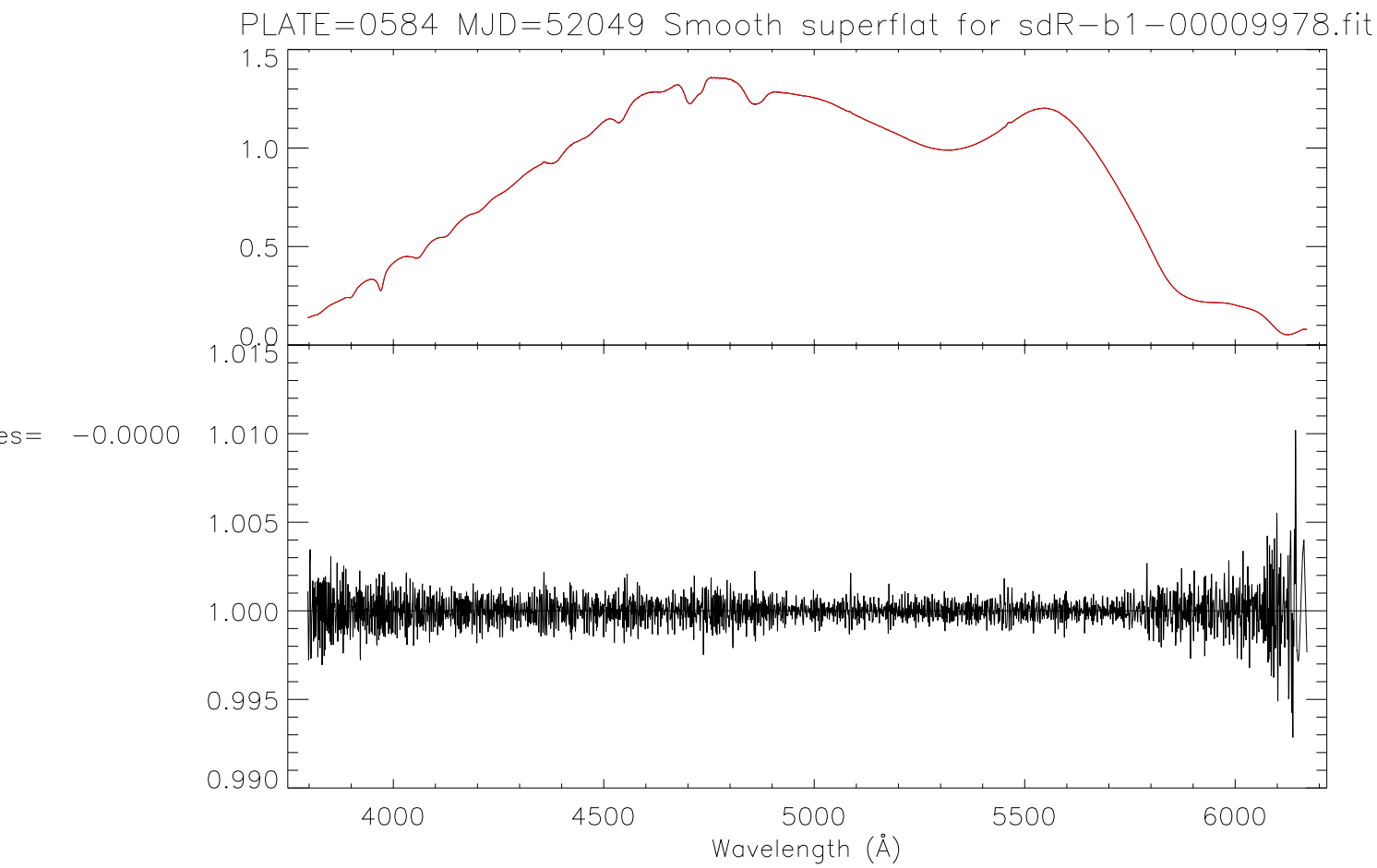

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

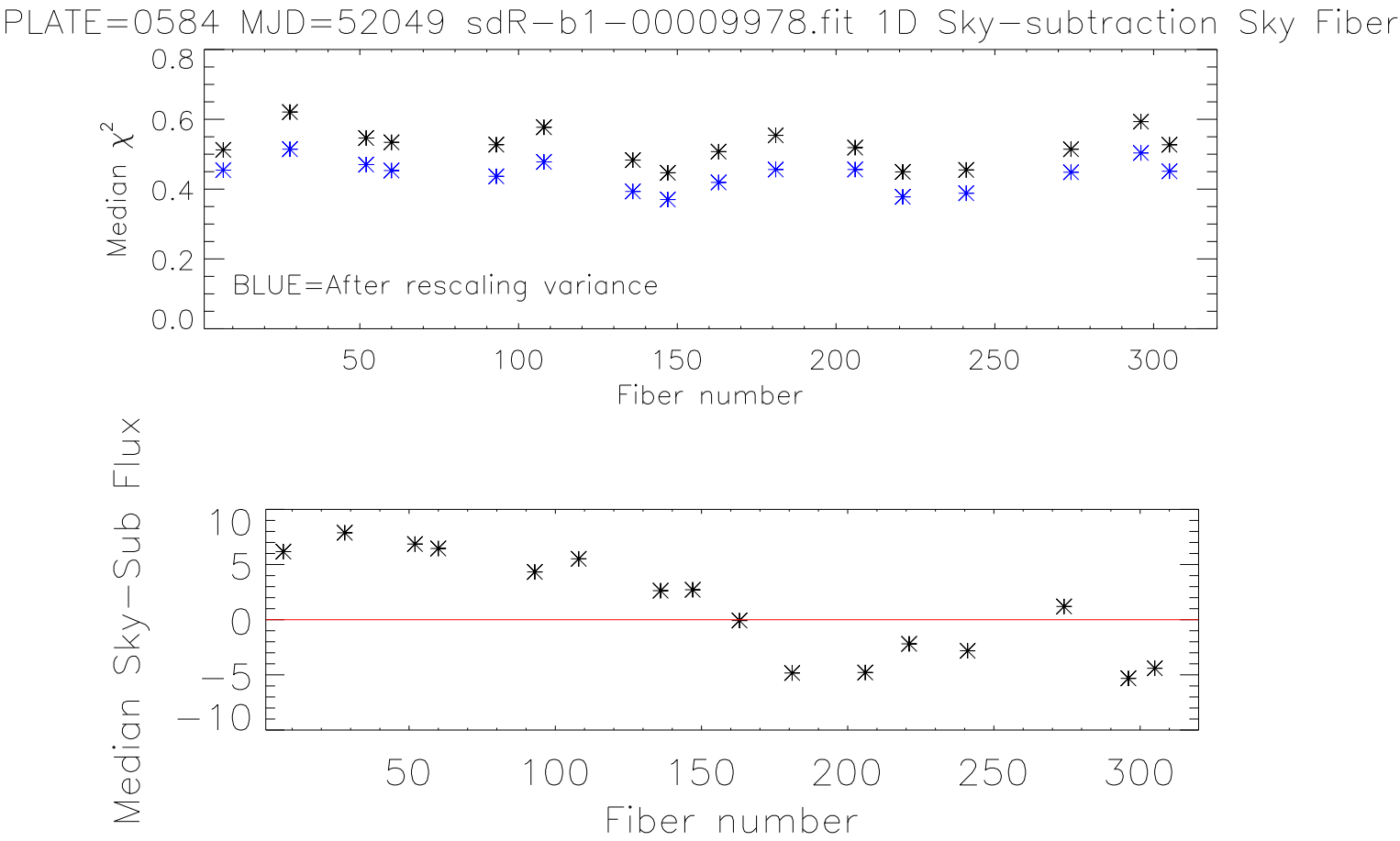

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

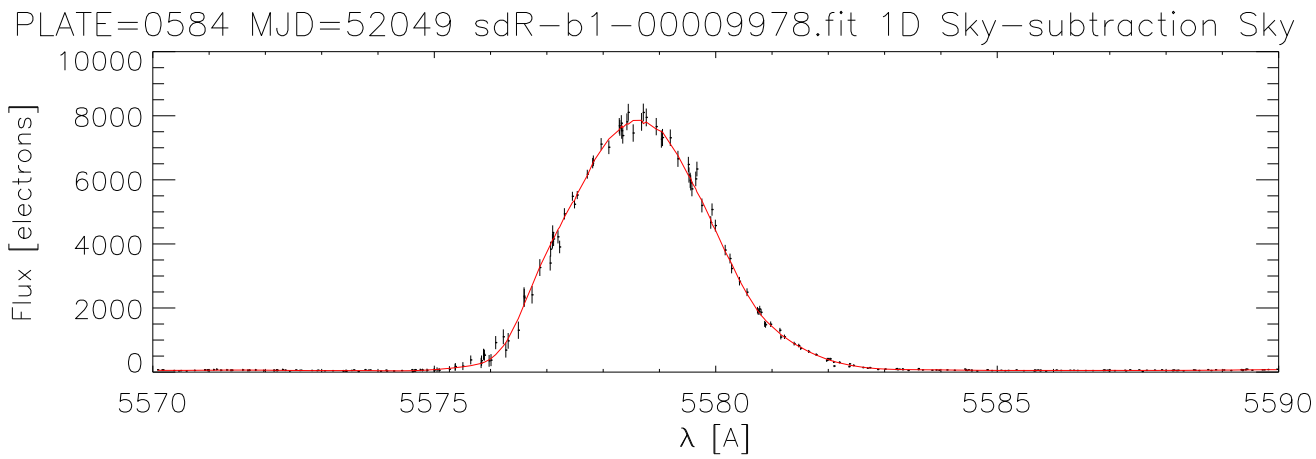

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

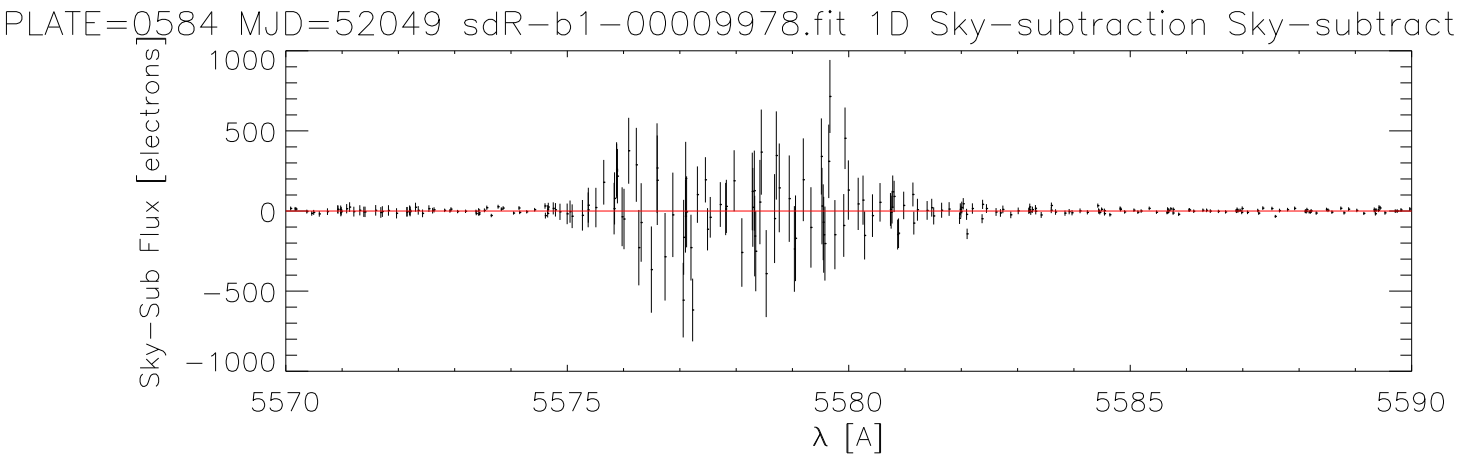

4046.5600
nfib1 16
nfib2 16
stdev 0.162
extra 0.07
4358.3300
nfib1 16
nfib2 16
stdev 0.089
extra 0.07
5460.9400
nfib1 16
nfib2 16
stdev 0.072
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.044
extra 0.21
5895.9240
nfib1 16
nfib2 16
stdev 0.054
extra 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

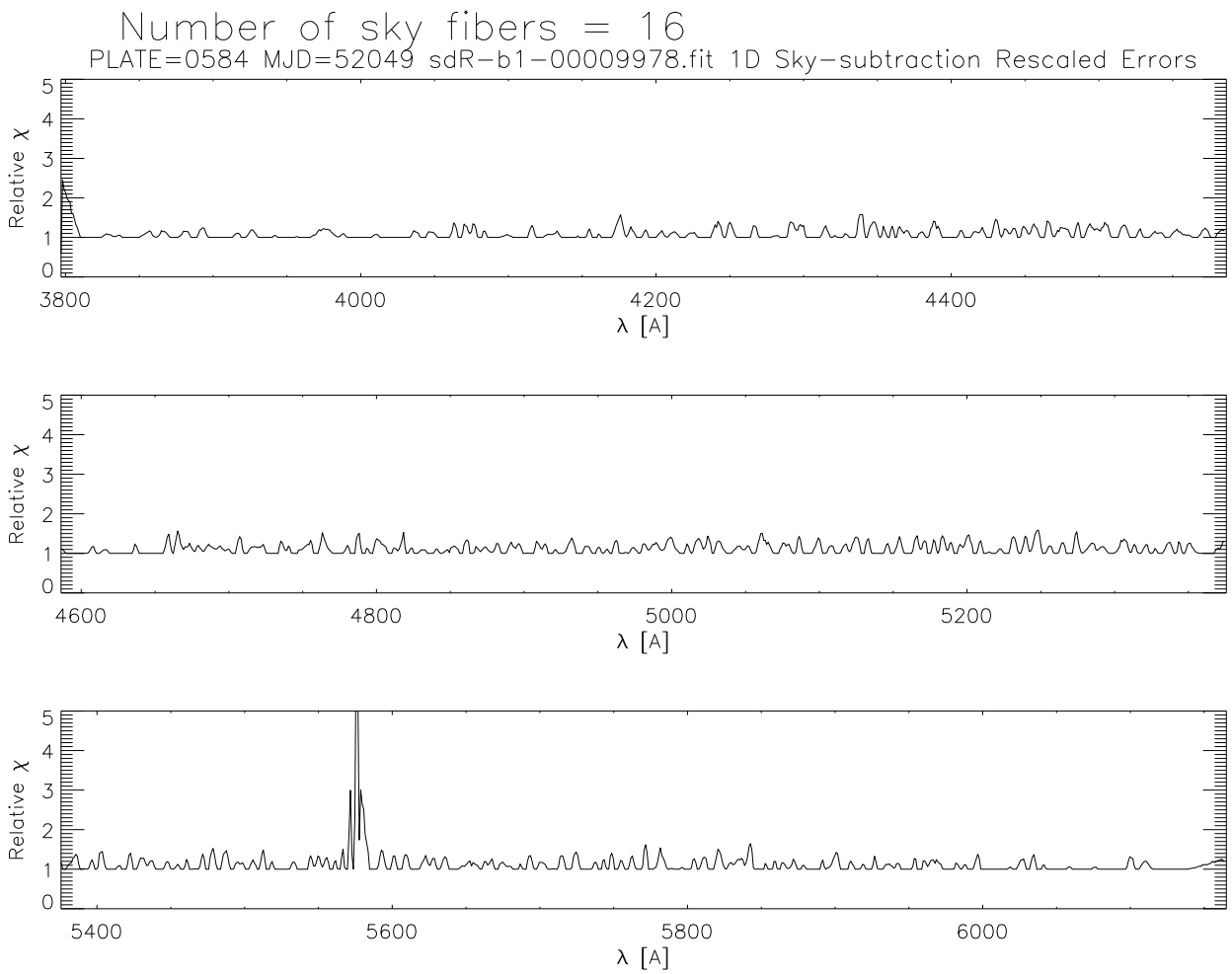

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

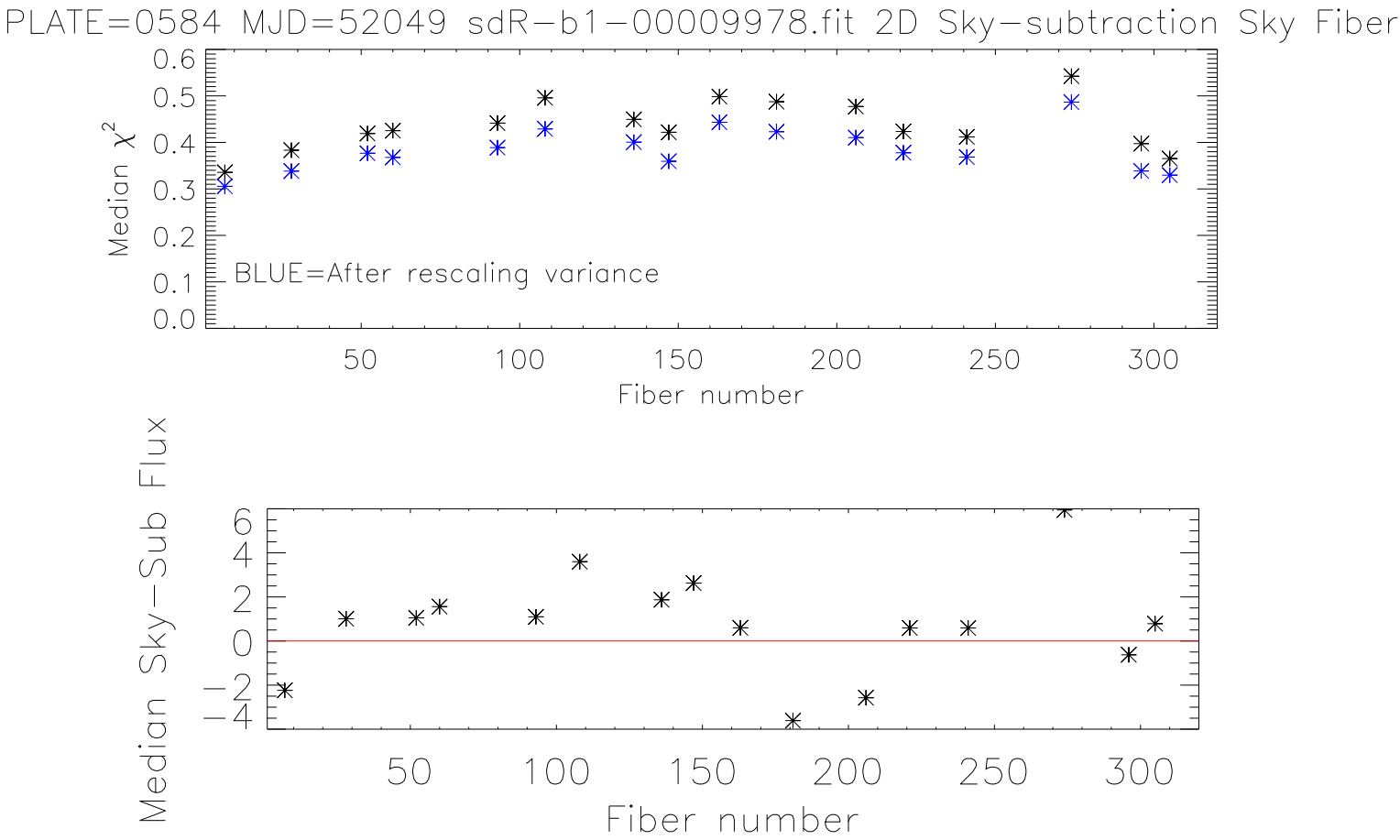

PLATE=0584 MJD=52049 Smooth superflat for sdR-b1-00009978.fit
1.5
1.0
0.5
0.0
es= −0.0000
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

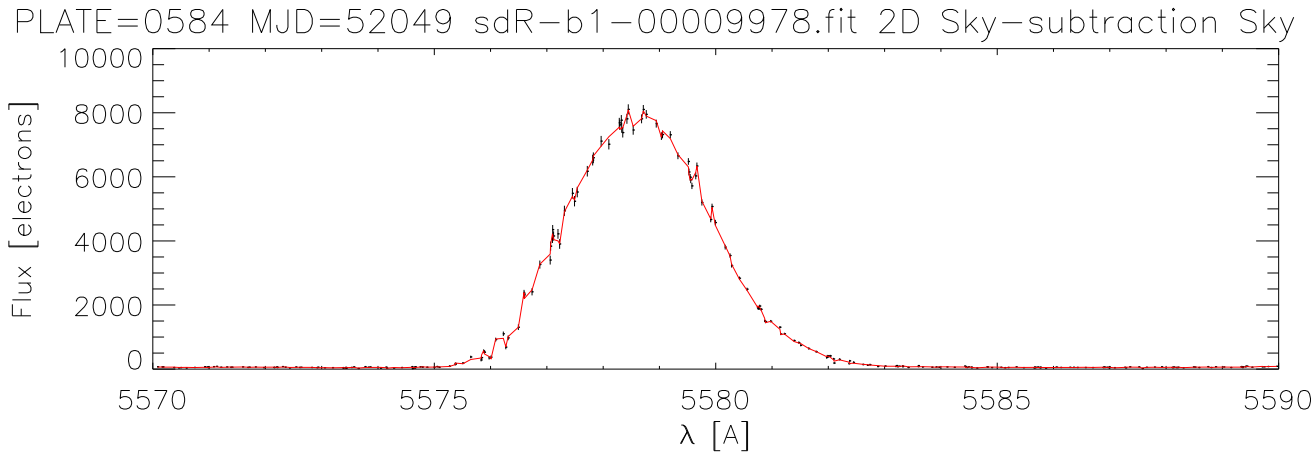

PLATE=0584 MJD=52049 sdR-b1-00009978.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

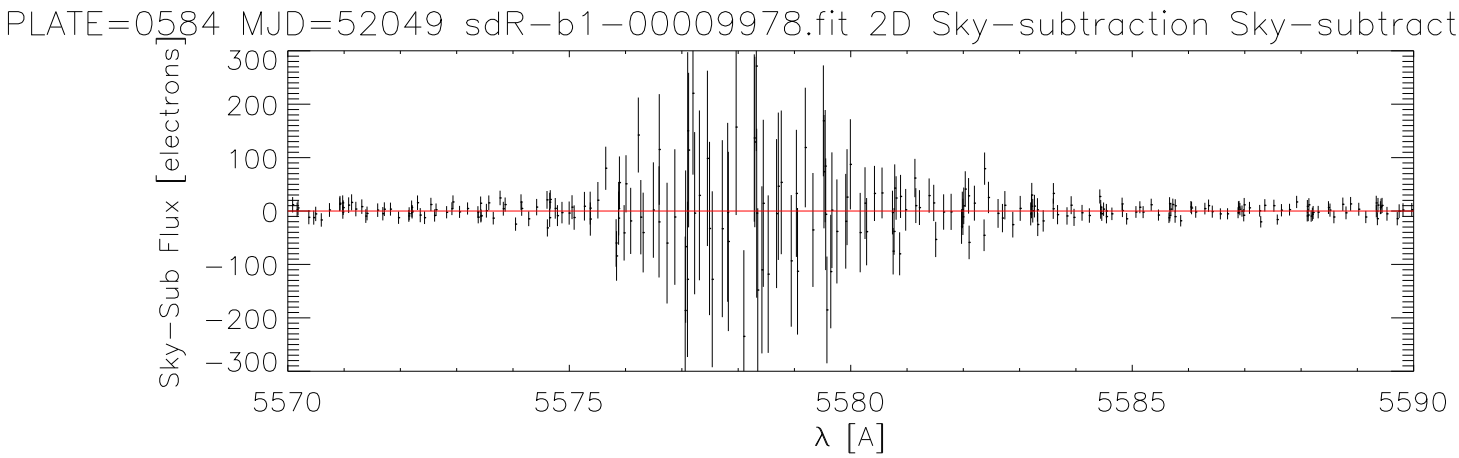

PLATE=0584 MJD=52049 sdR-b1-00009978.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

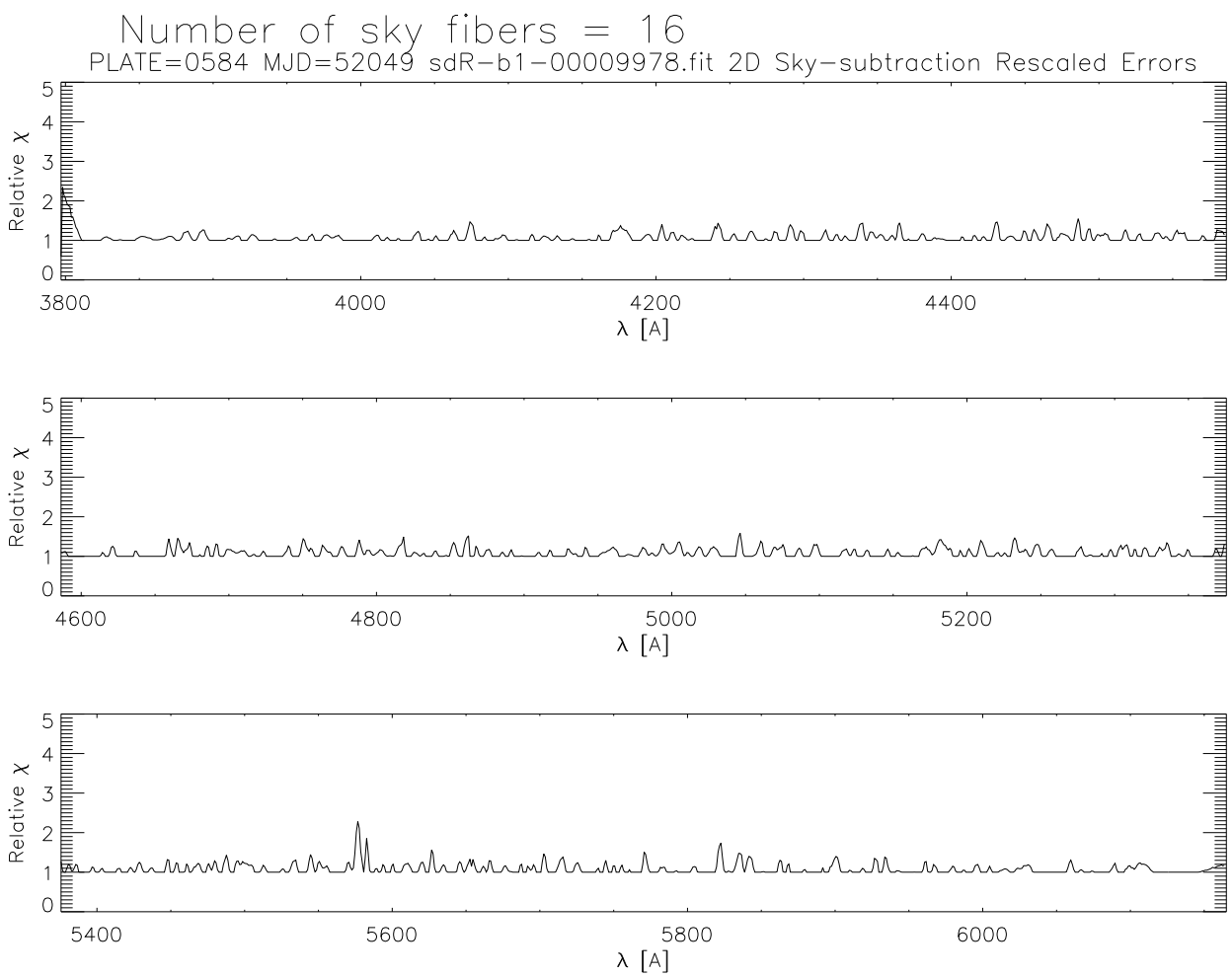

PLATE=0584 MJD=52049 sdR-b1-00009978.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

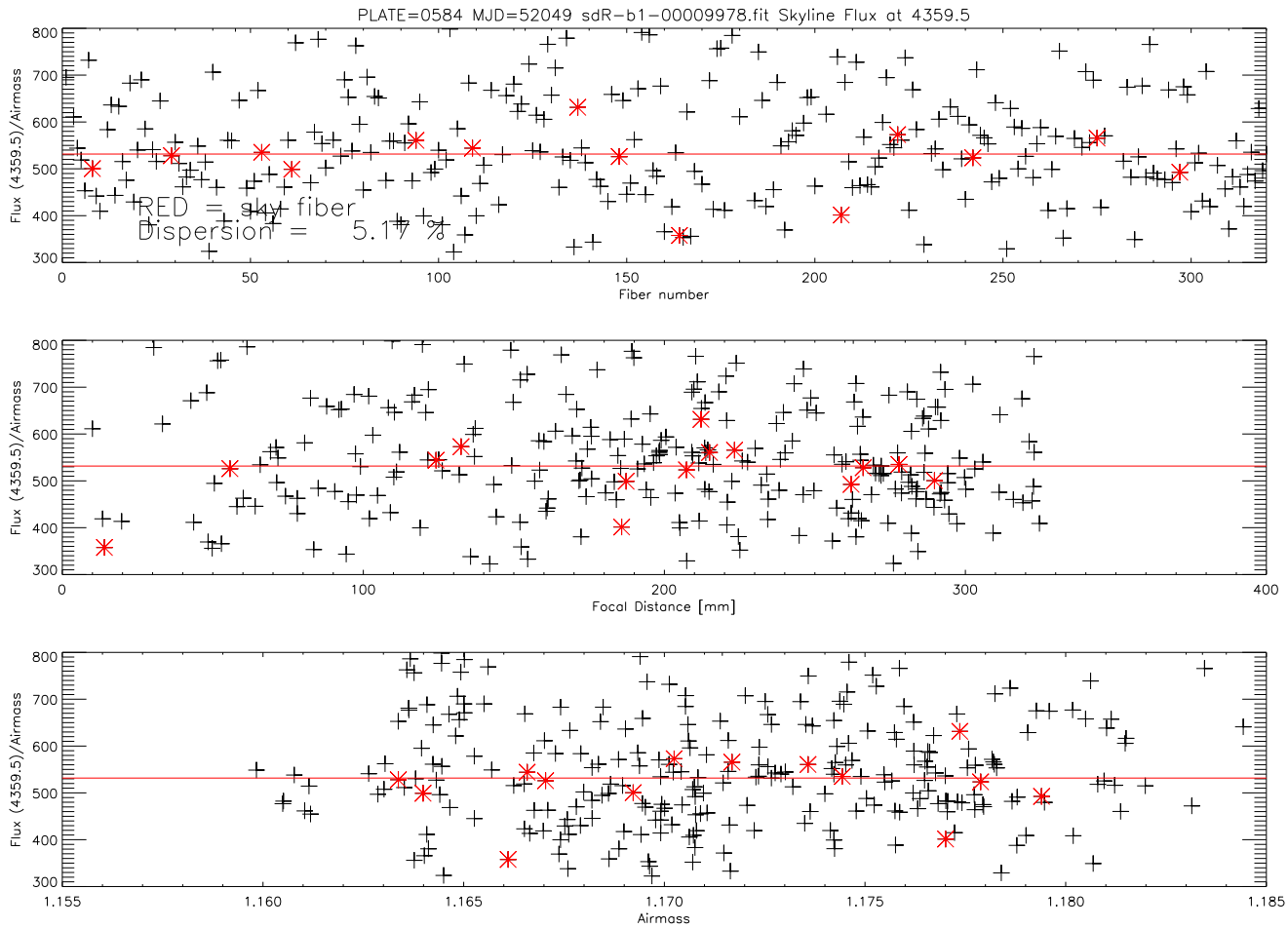

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009978.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

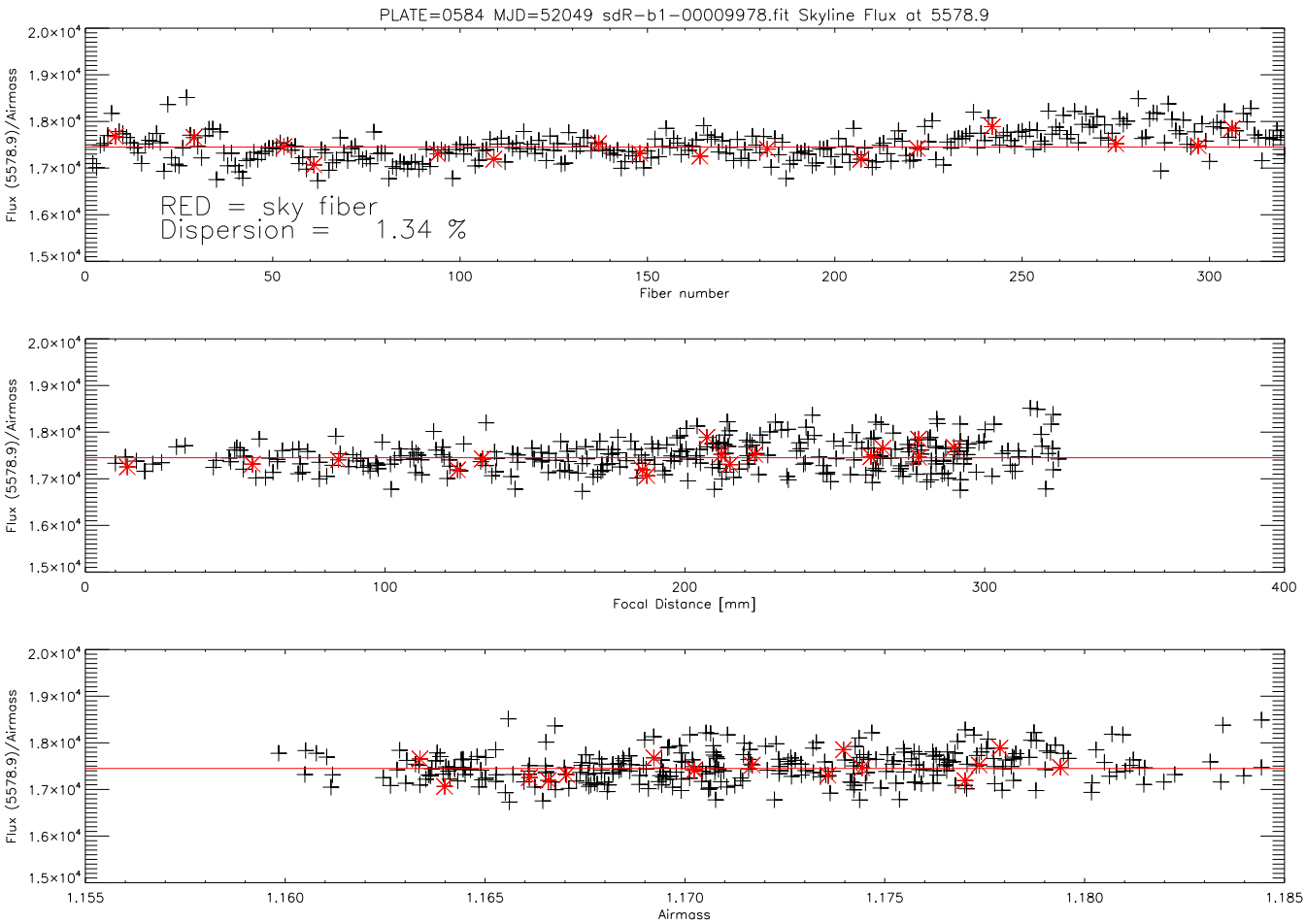

PLATE=0584 MJD=52049 sdR-b1-00009978.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

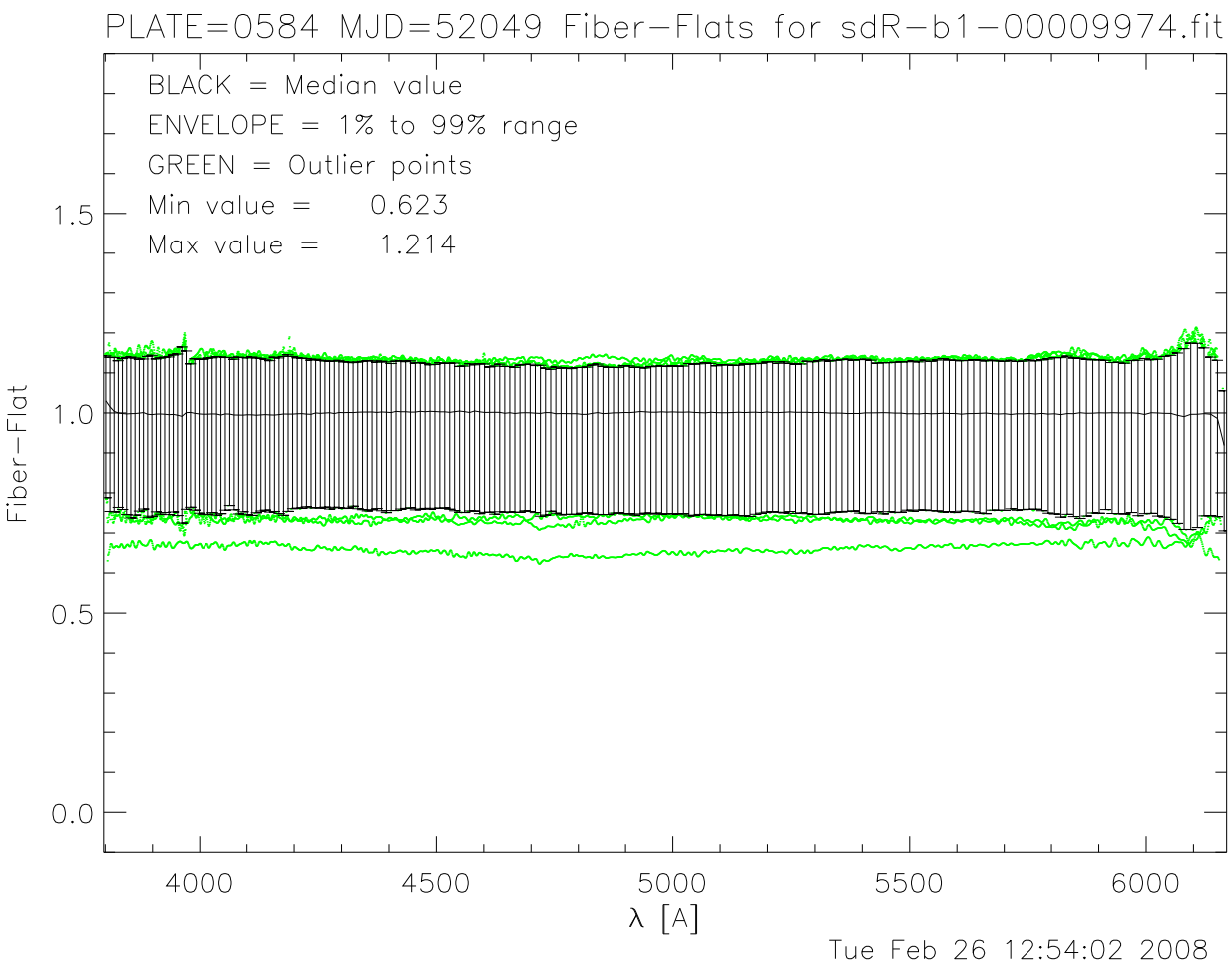

PLATE=0584 MJD=52049 sdR-b1-00009978.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

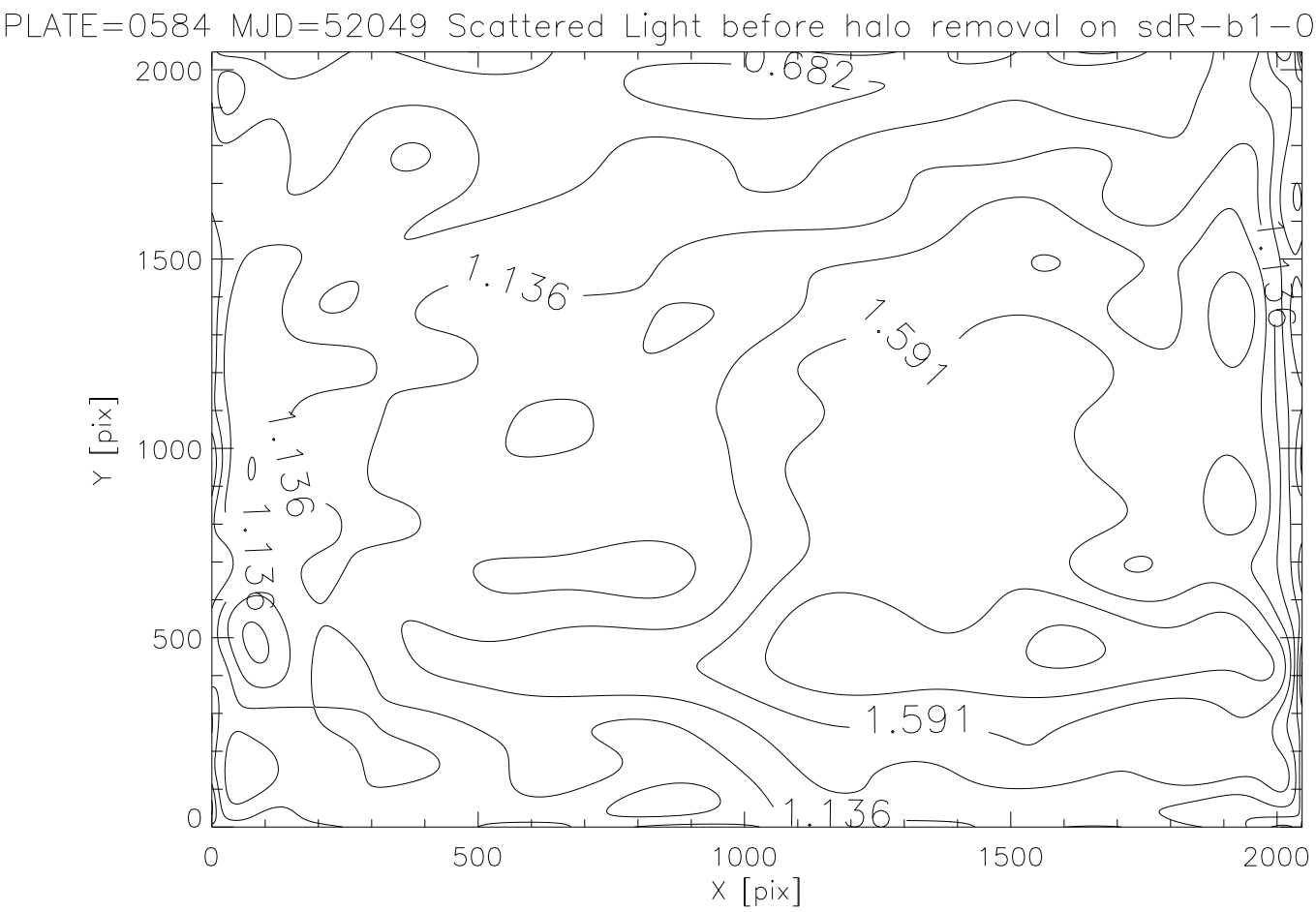

PLATE=0584 MJD=52049 sdR-b1-00009978.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

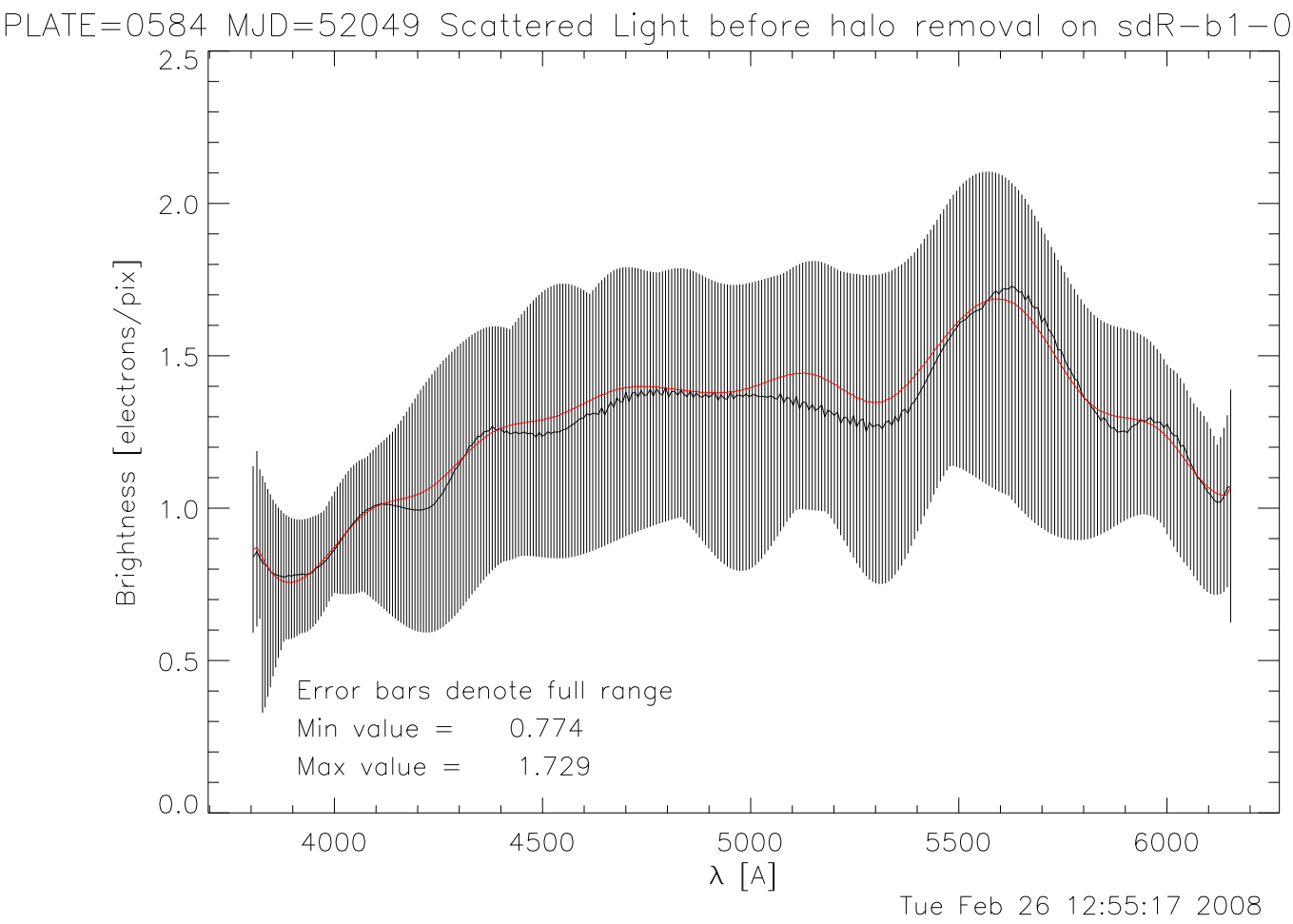

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009978.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

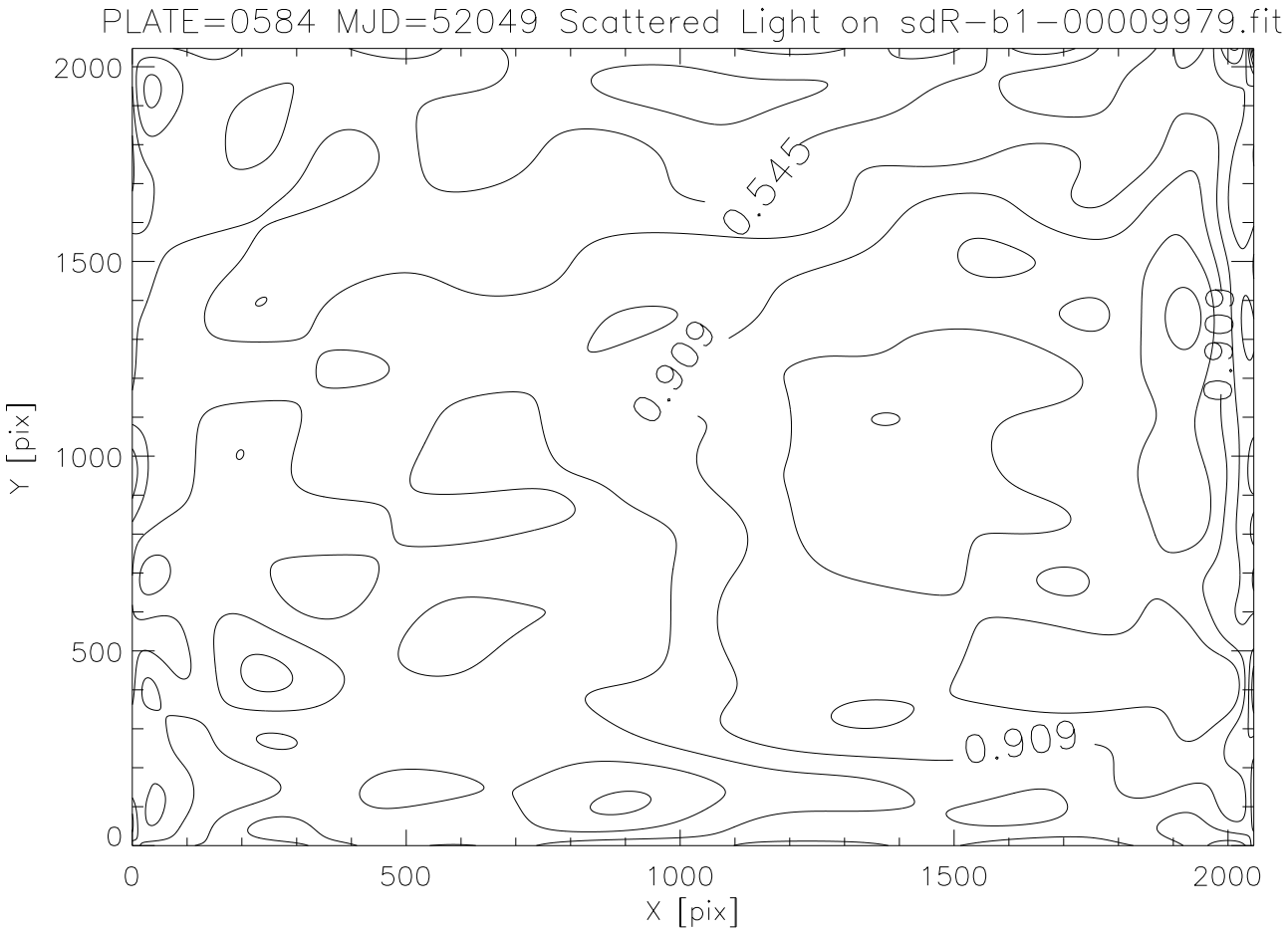

PLATE=0584 MJD=52049 sdR-b1-00009978.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 5.17 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

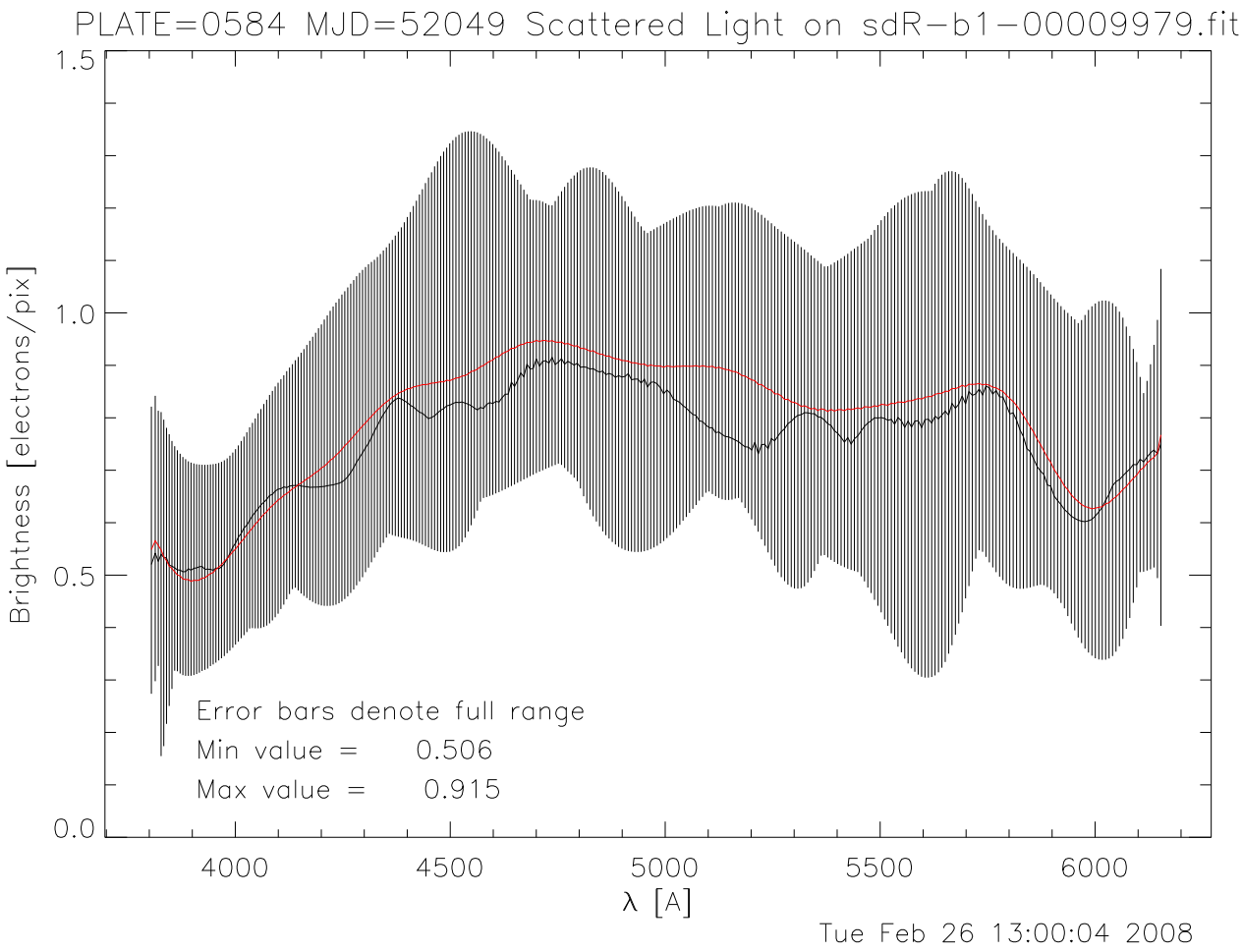

PLATE=0584 MJD=52049 sdR-b1-00009978.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.34 %
Fiber number
Focal Distance [mm]
Airmass

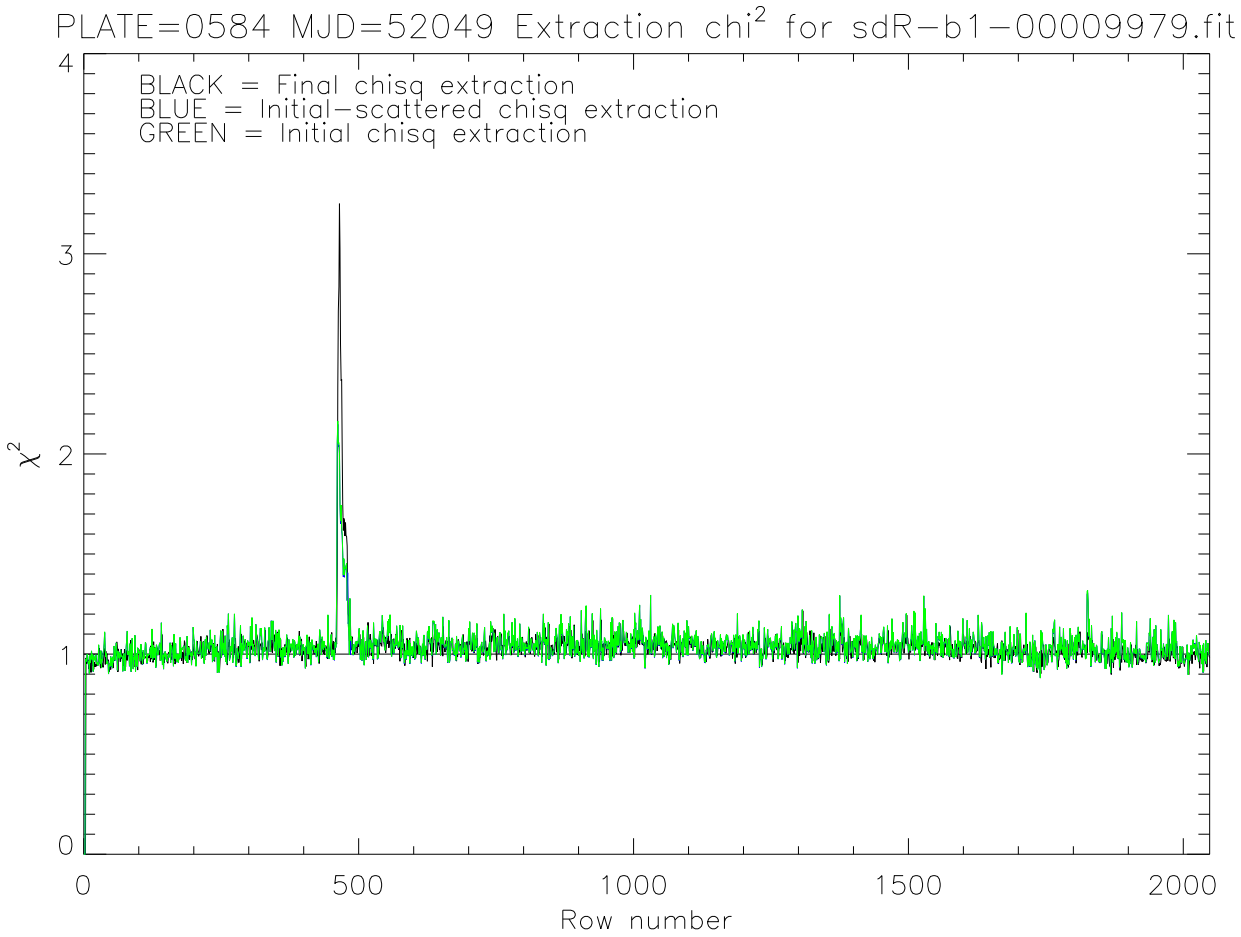

PLATE=0584 MJD=52049 Fiber-Flats for sdR-b1-00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.623
Max value = 1.214
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 12:54:02 2008

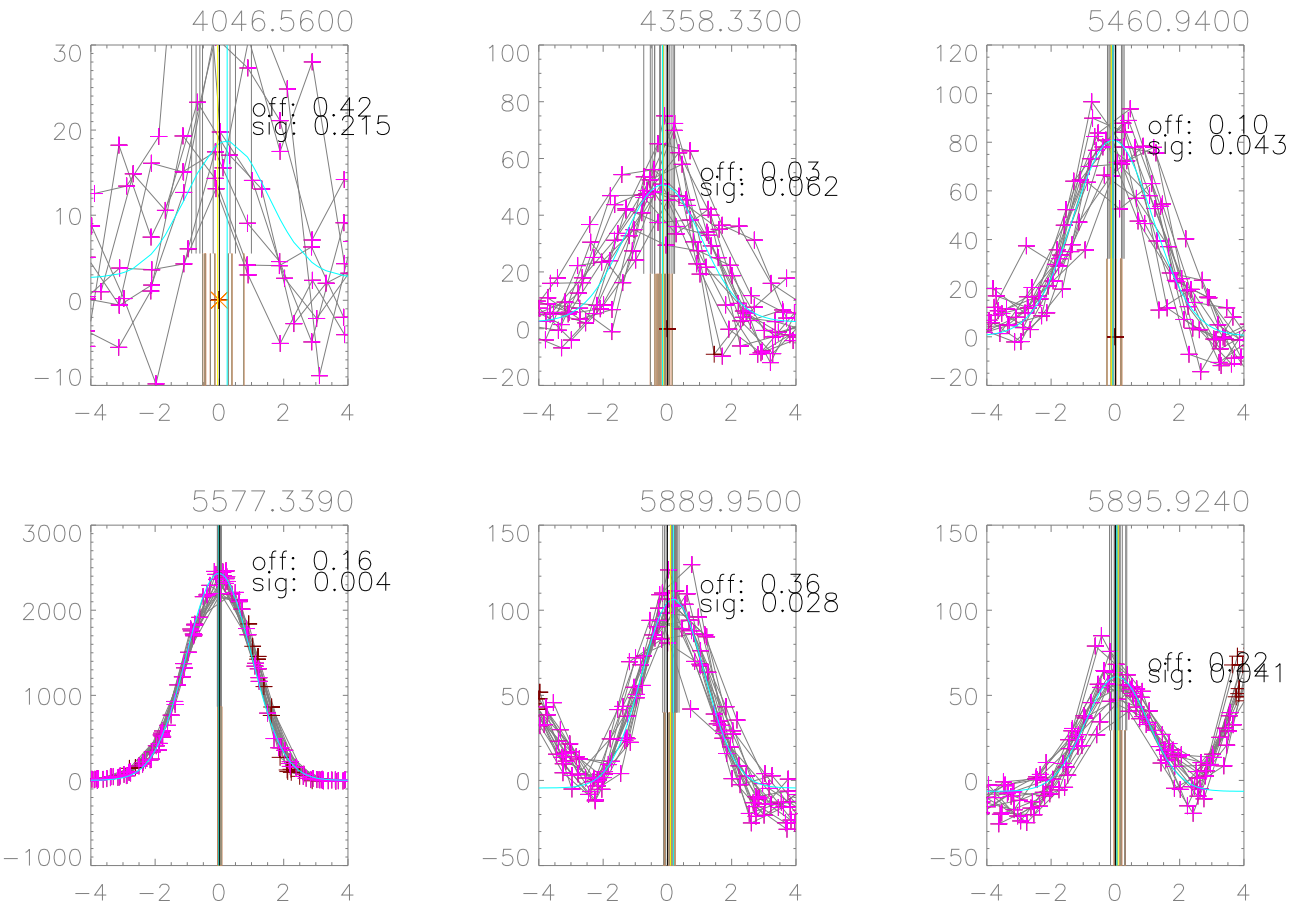

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR−b1−00009979.f
0.682
1.136
1.591
1.136
1.136
1.136
1.591
1.136
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

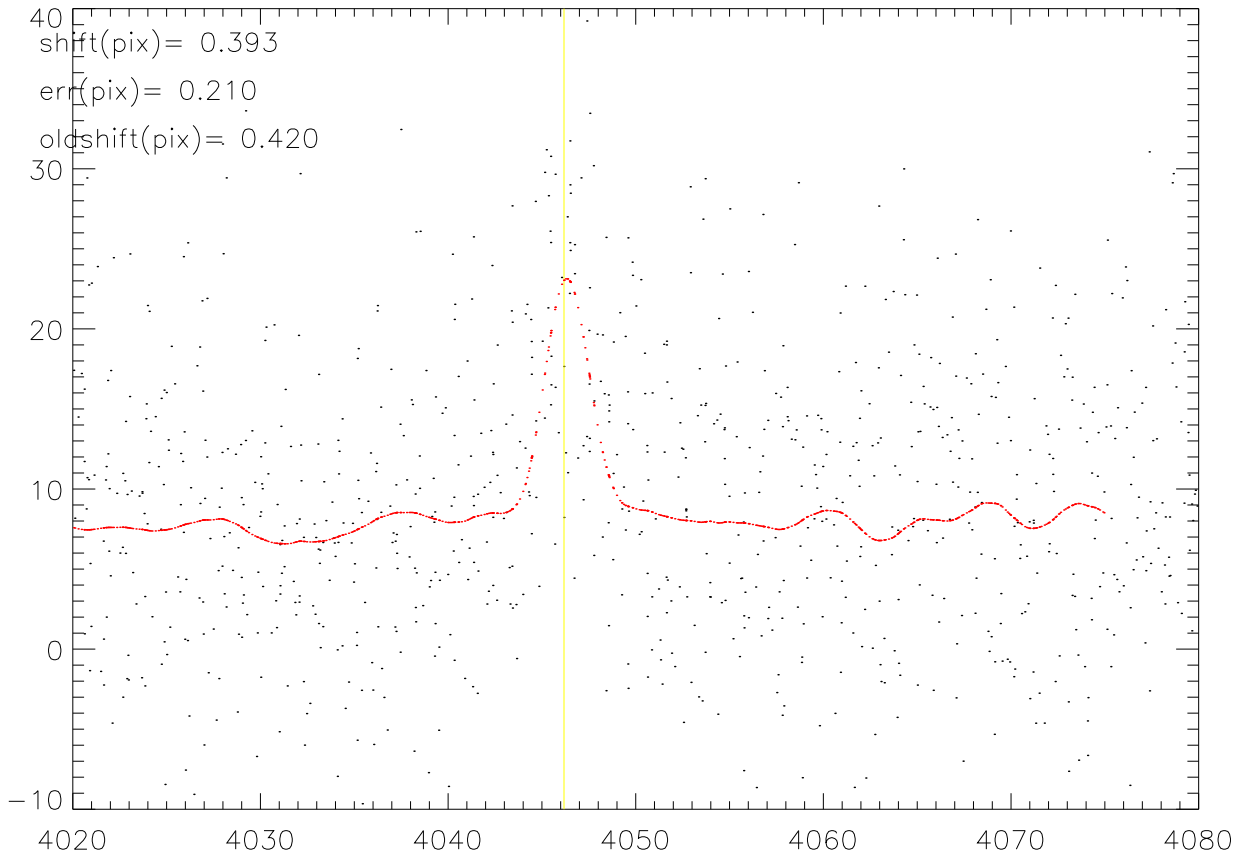

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b1-00009979.f
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.774
Max value = 1.729
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 12:55:17 2008

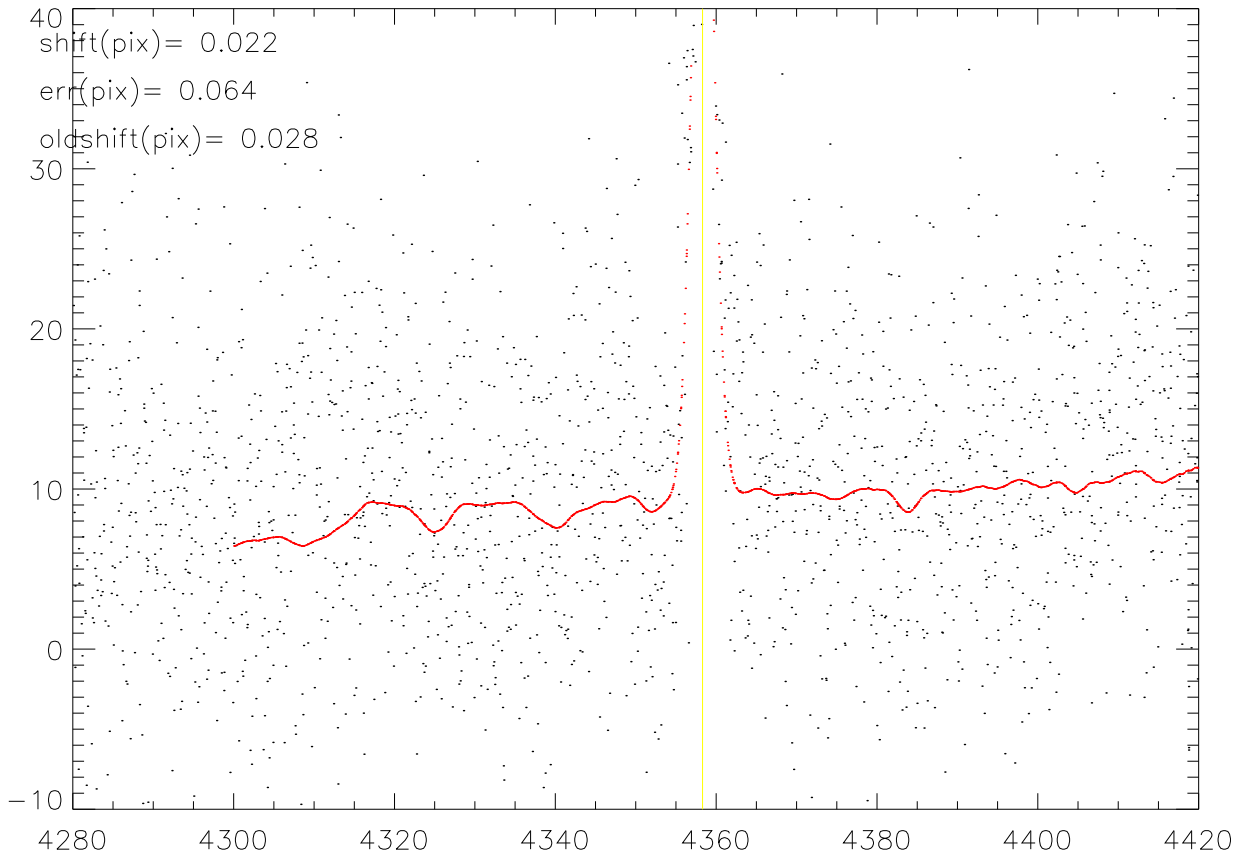

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009979.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
0.545
0.909
0.909
0.909

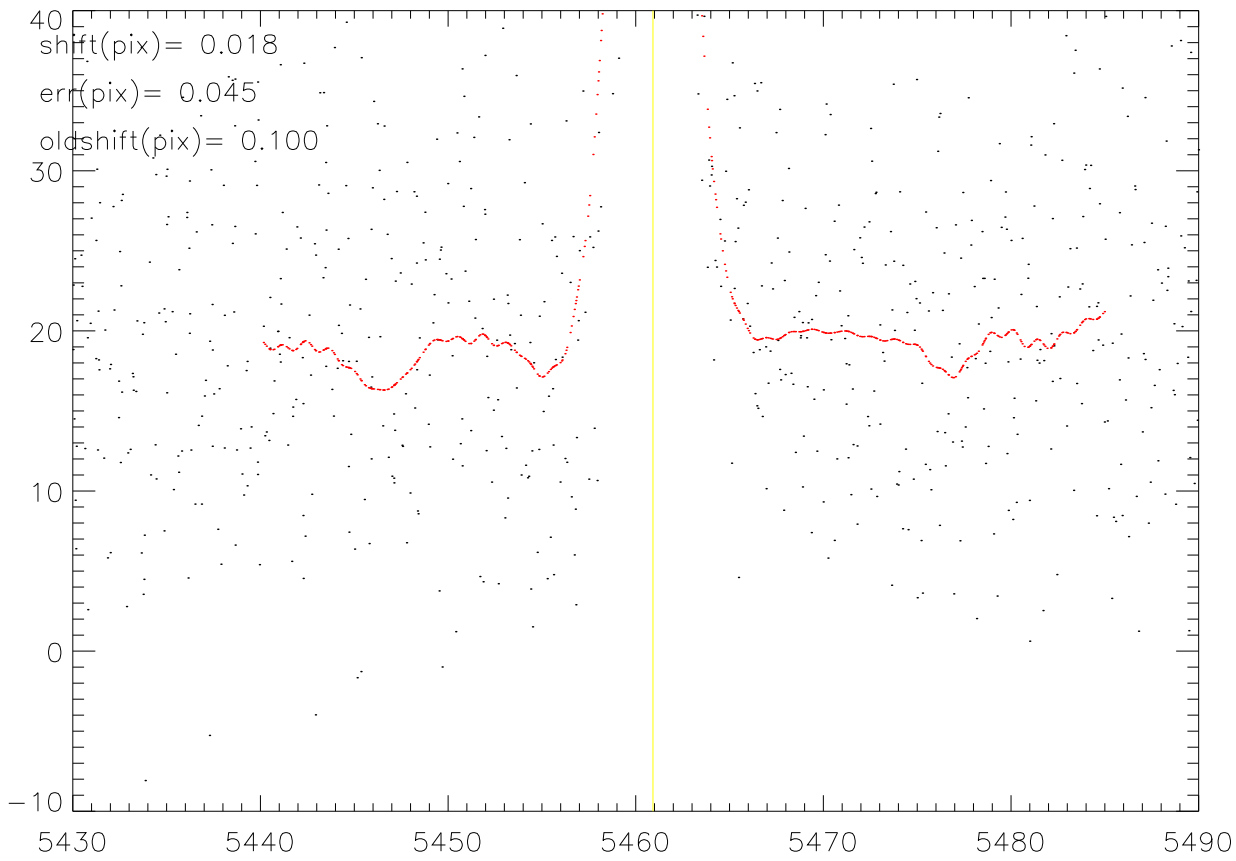

PLATE=0584 MJD=52049 Scattered Light on sdR-b1-00009979.fit
Brightness [electrons/pix]
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.506
Max value = 0.915
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:00:04 2008

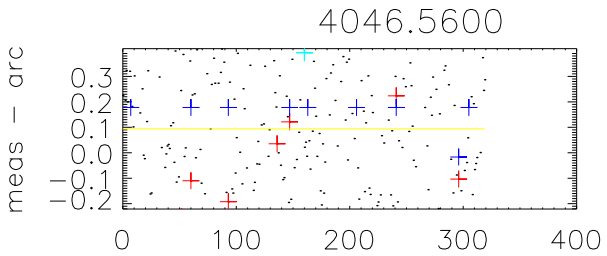

PLATE=0584 MJD=52049 Extraction chi^2 for sdR−b1−00009979.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

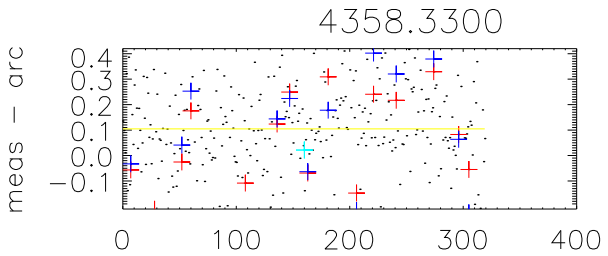

4046.5600
off: 0.42
sig: 0.215
4358.3300
off: 0.03
sig: 0.062
5460.9400
off: 0.10
sig: 0.043
5577.3390
off: 0.16
sig: 0.004
5889.9500
off: 0.36
sig: 0.028
5895.9240
off: 0.32
sig: 0.041

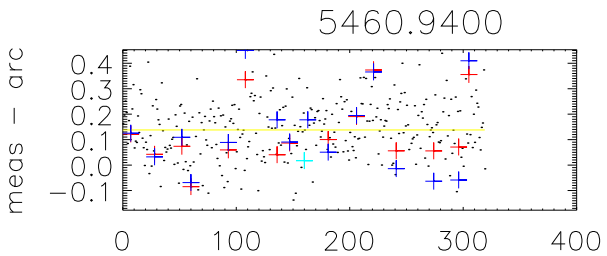

shift(pix)= 0.393
err(pix)= 0.210
oldshift(pix)= 0.420
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

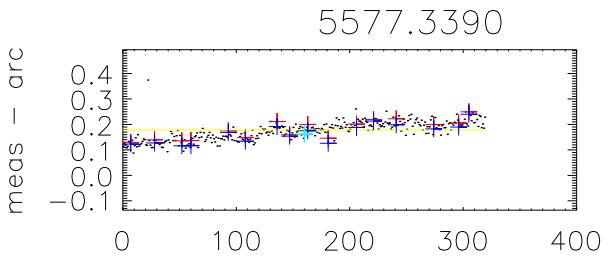

shift(pix)= 0.022
err(pix)= 0.064
oldshift(pix)= 0.028
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

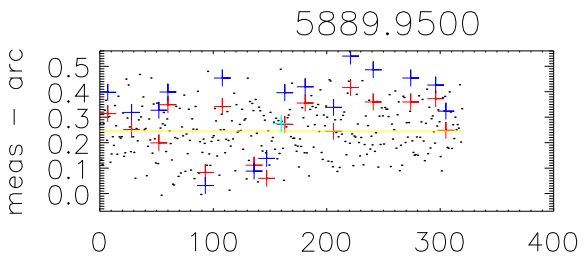

shift(pix)= 0.018
err(pix)= 0.045
oldshift(pix)= 0.100
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

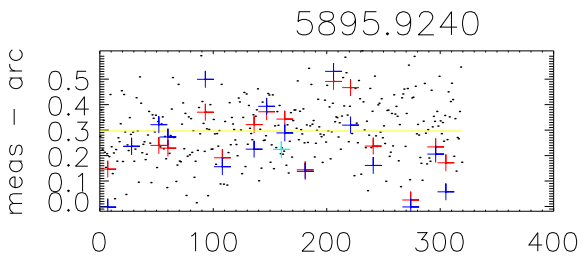

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

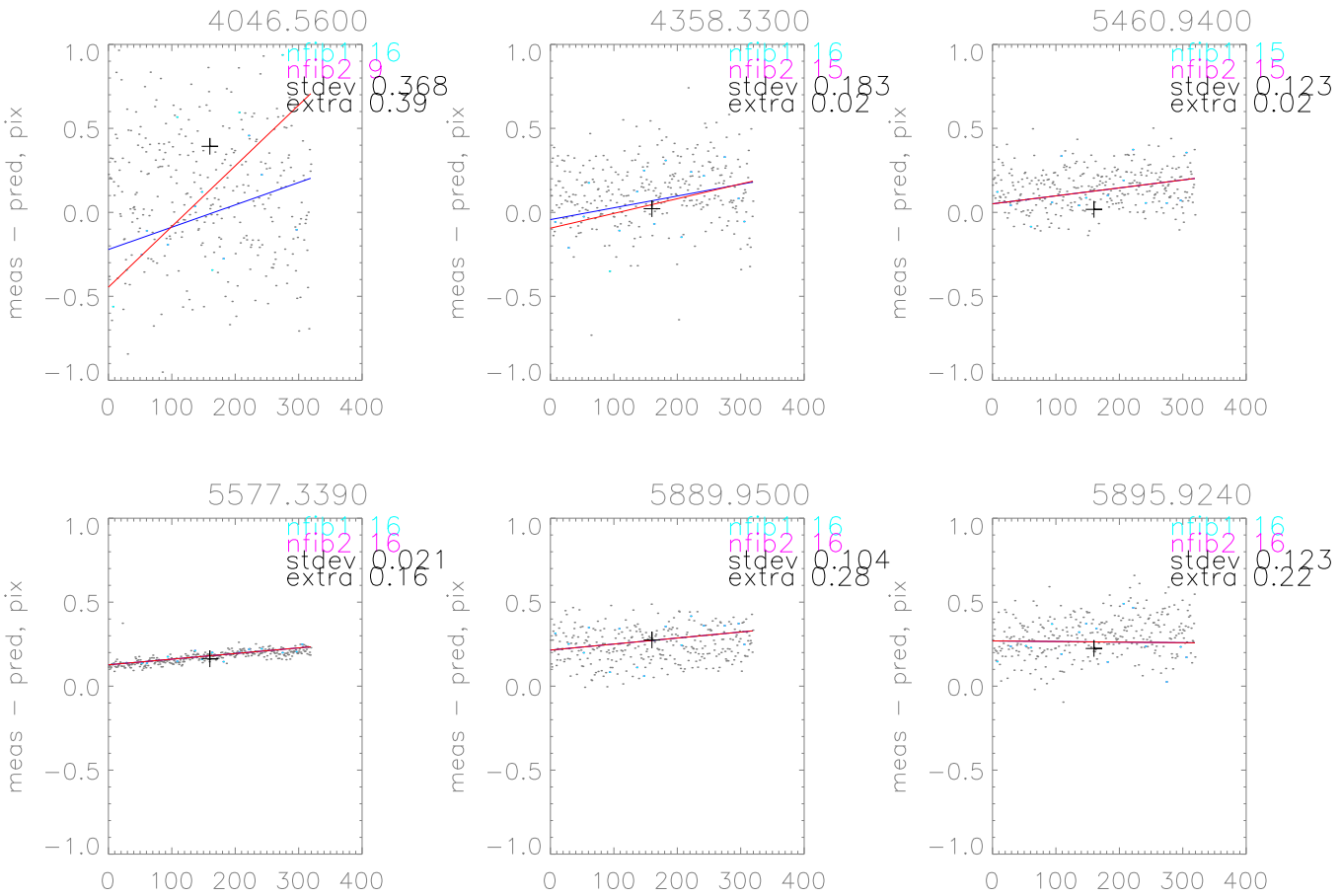

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

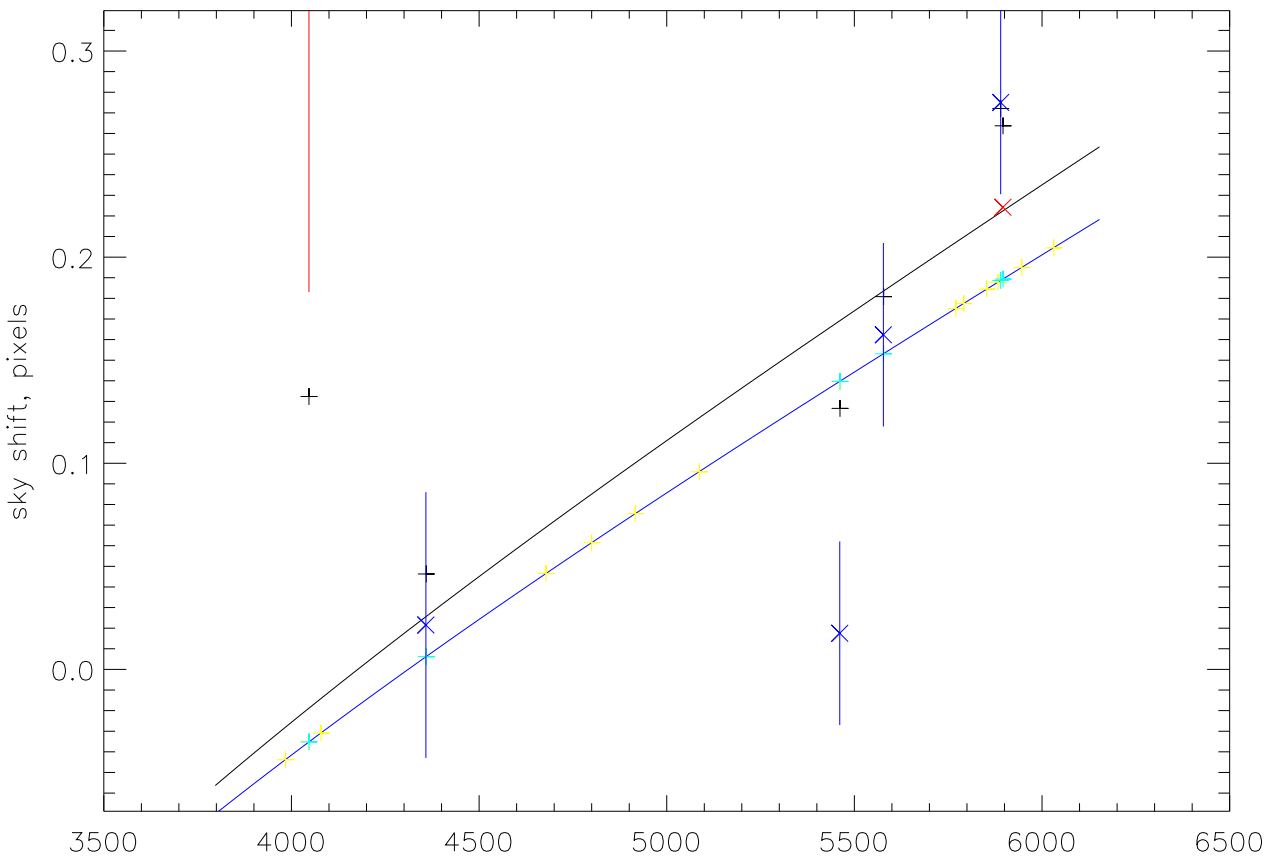

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

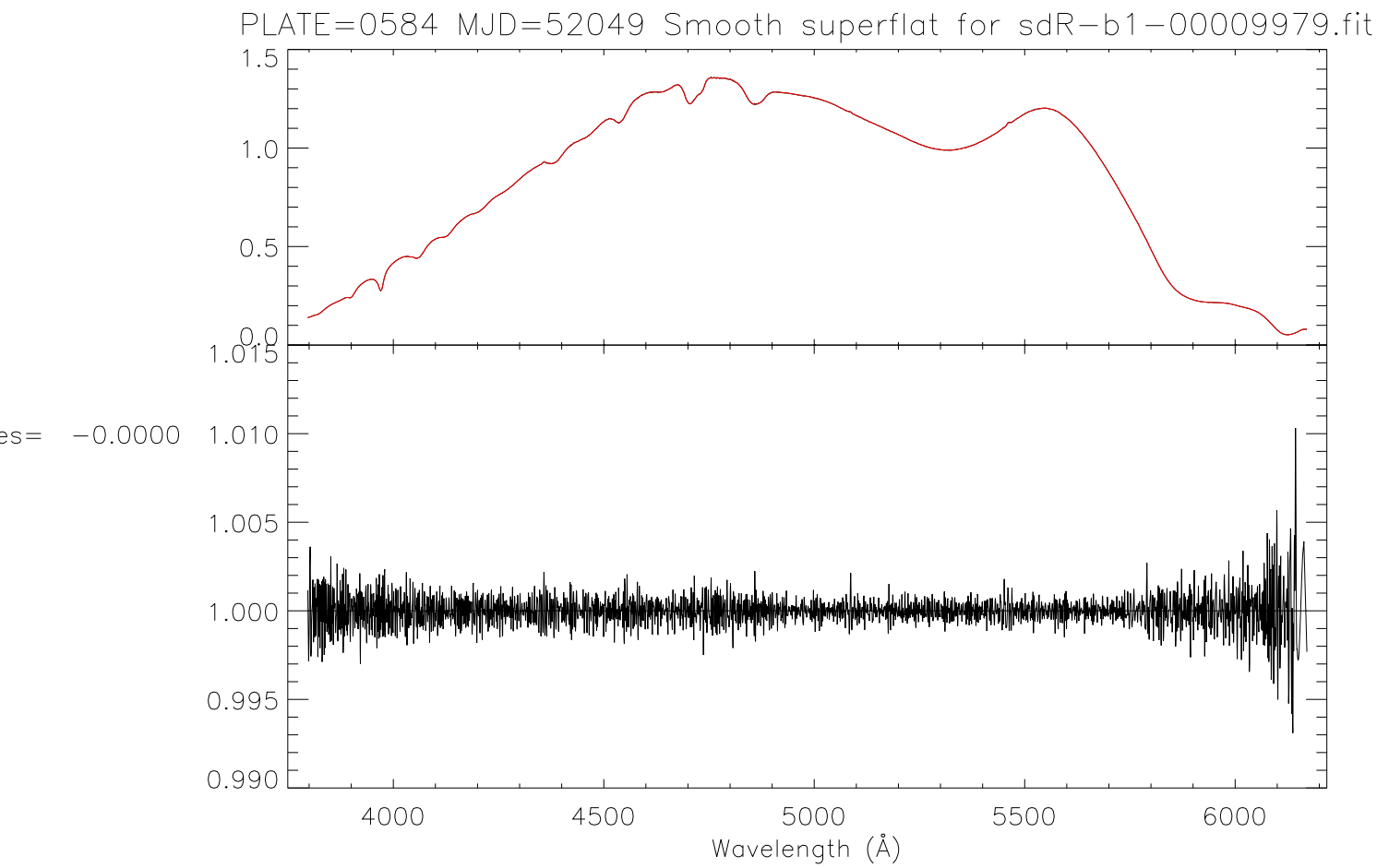

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

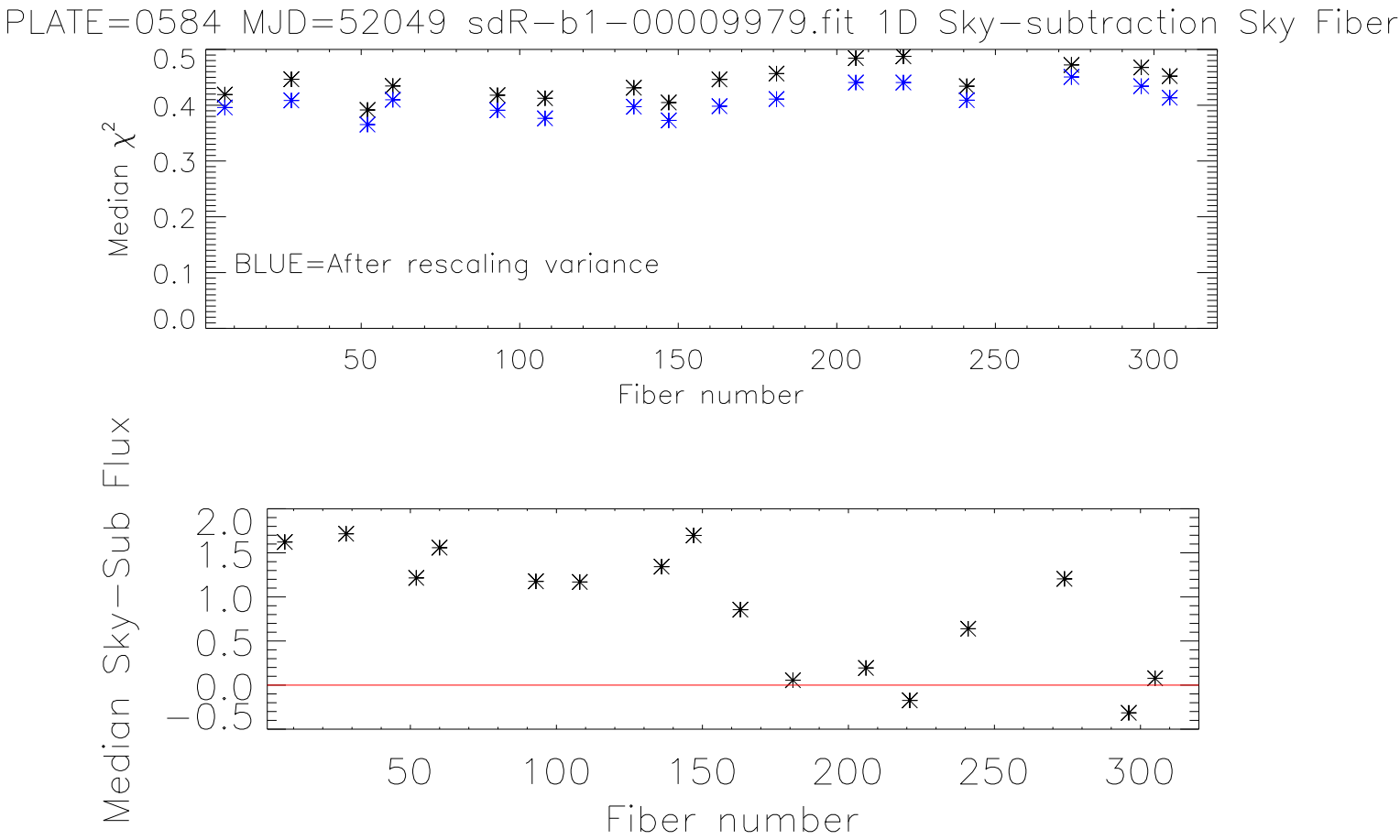

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

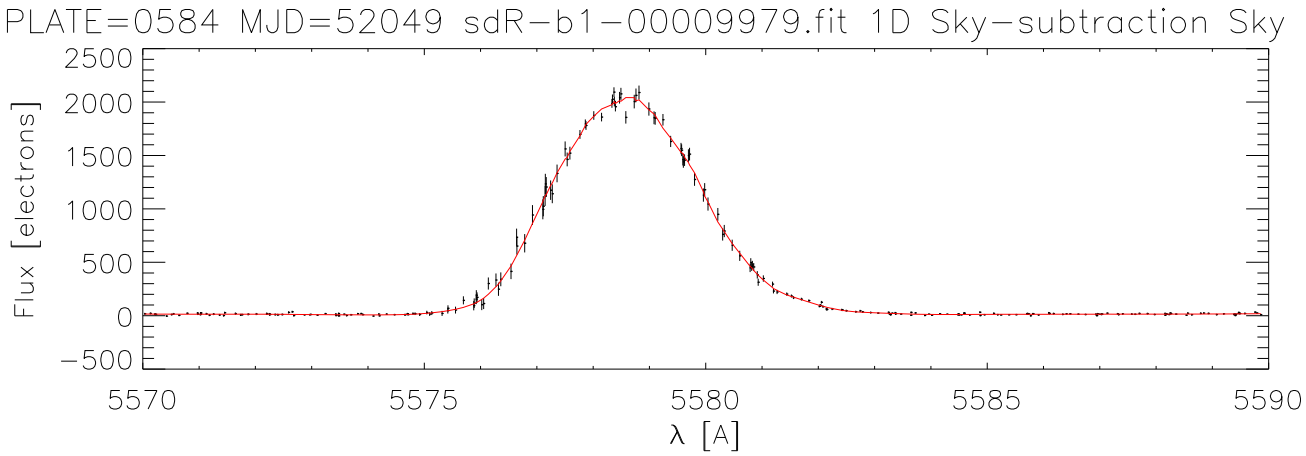

4046.5600
nfib1 16
nfib2 9
stdev 0.368
extra 0.39
4358.3300
nfib1 16
nfib2 15
stdev 0.183
extra 0.02
5460.9400
nfib1 15
nfib2 15
stdev 0.123
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.104
extra 0.28
5895.9240
nfib1 16
nfib2 16
stdev 0.123
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

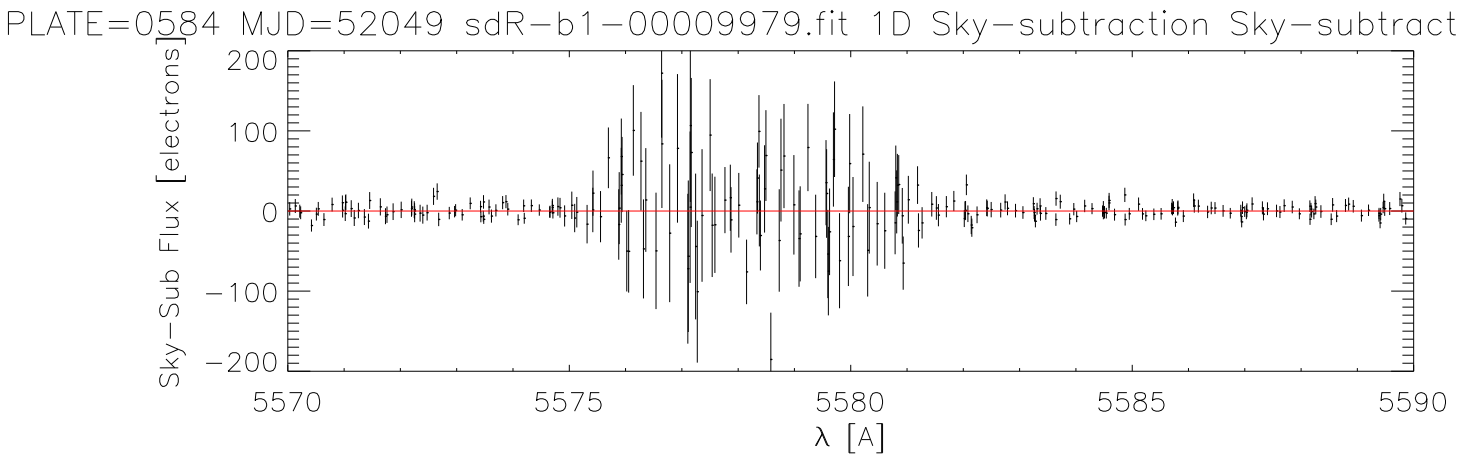

0.3
0.2
0.1
0.0
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

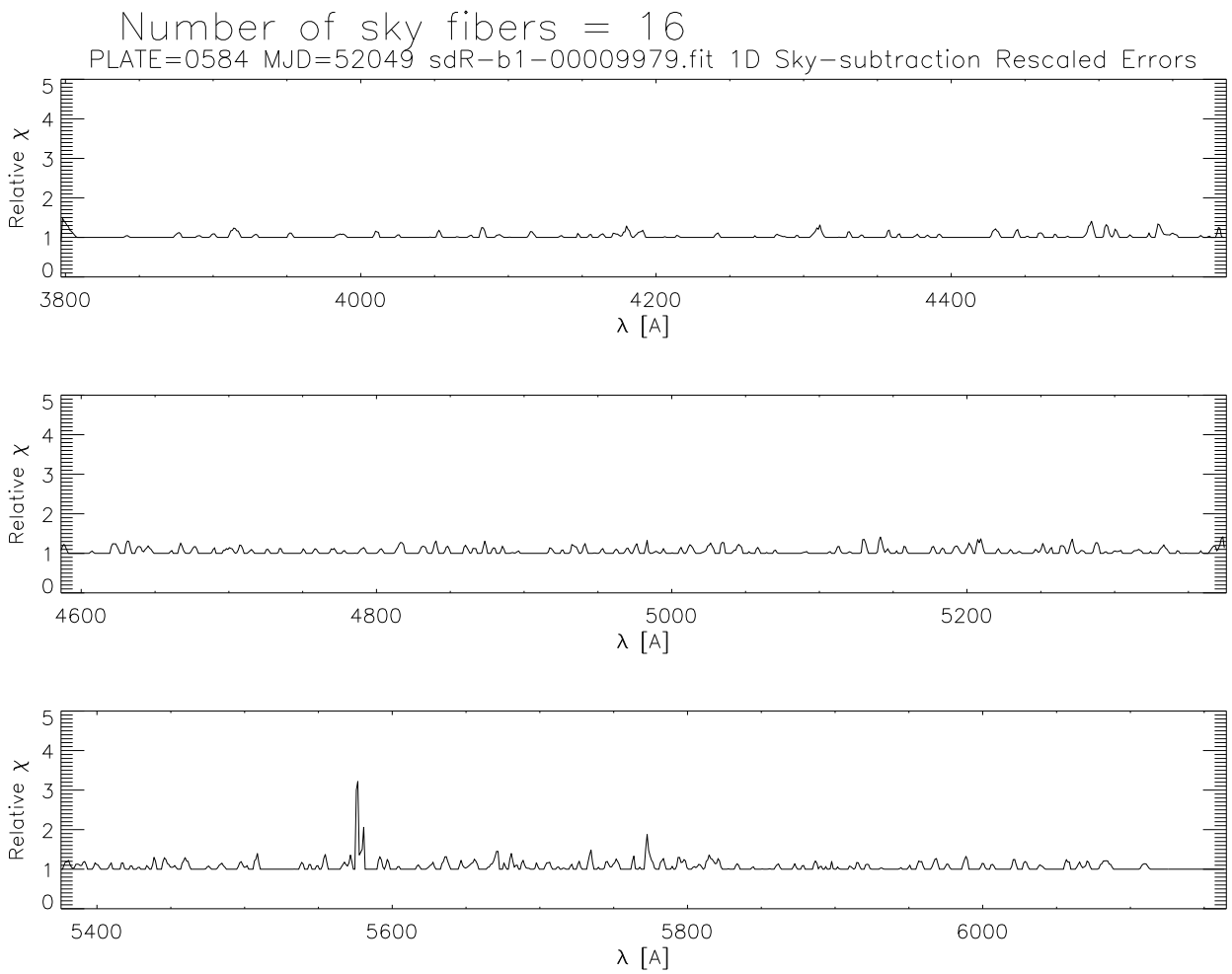

PLATE=0584 MJD=52049 Smooth superflat for sdR-b1-00009979.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

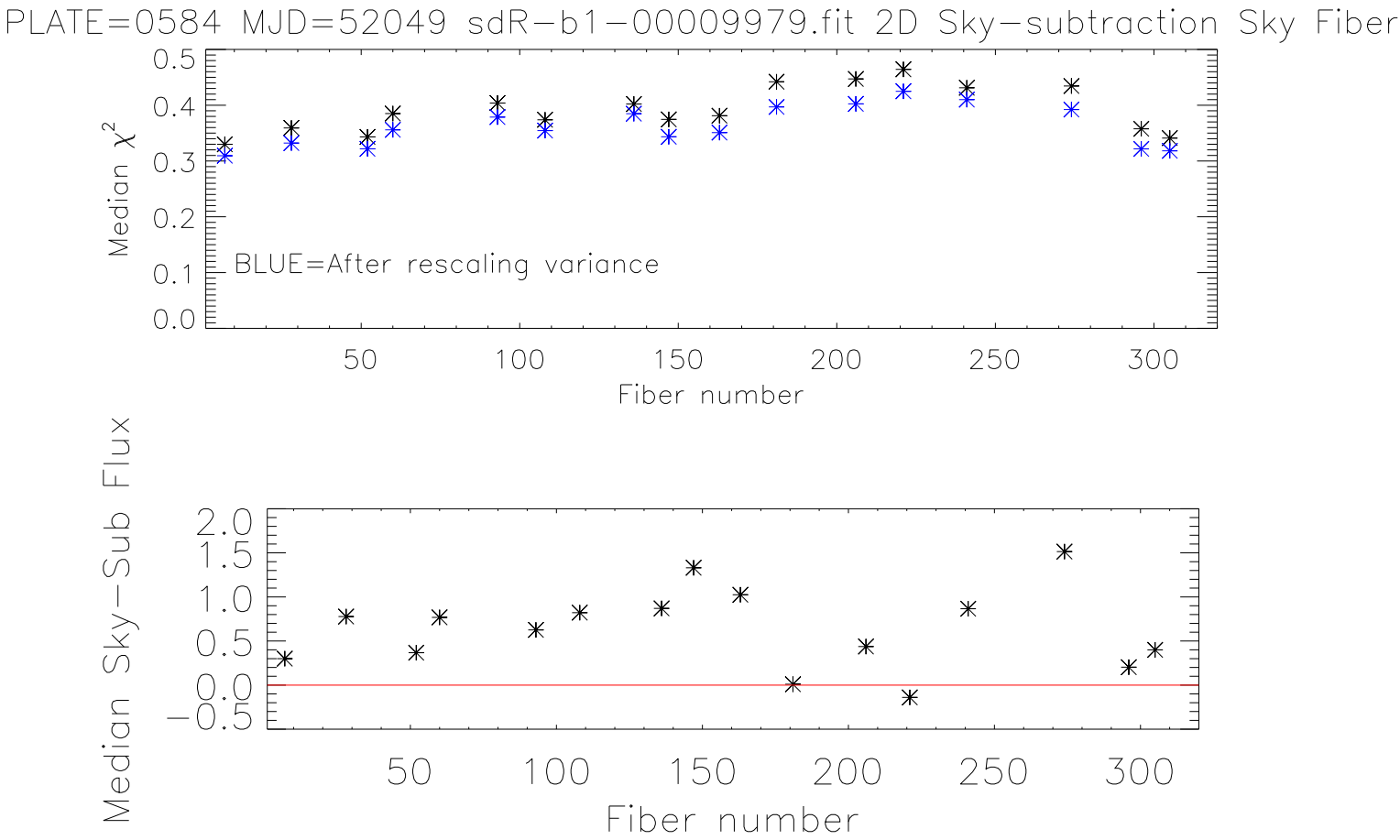
es= −0.0000

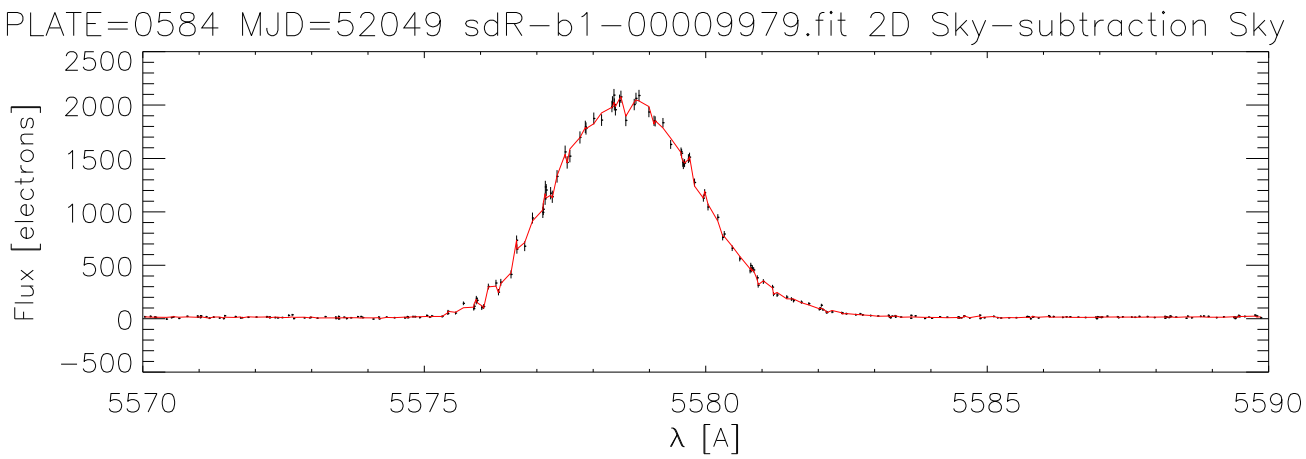

PLATE=0584 MJD=52049 sdR-b1-00009979.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

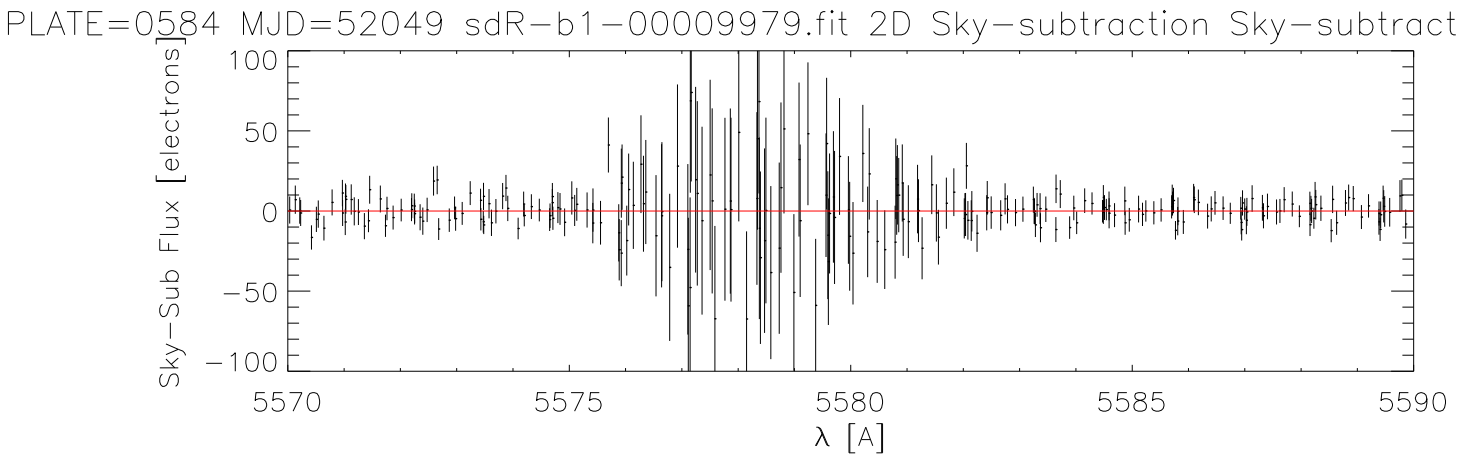

PLATE=0584 MJD=52049 sdR-b1-00009979.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

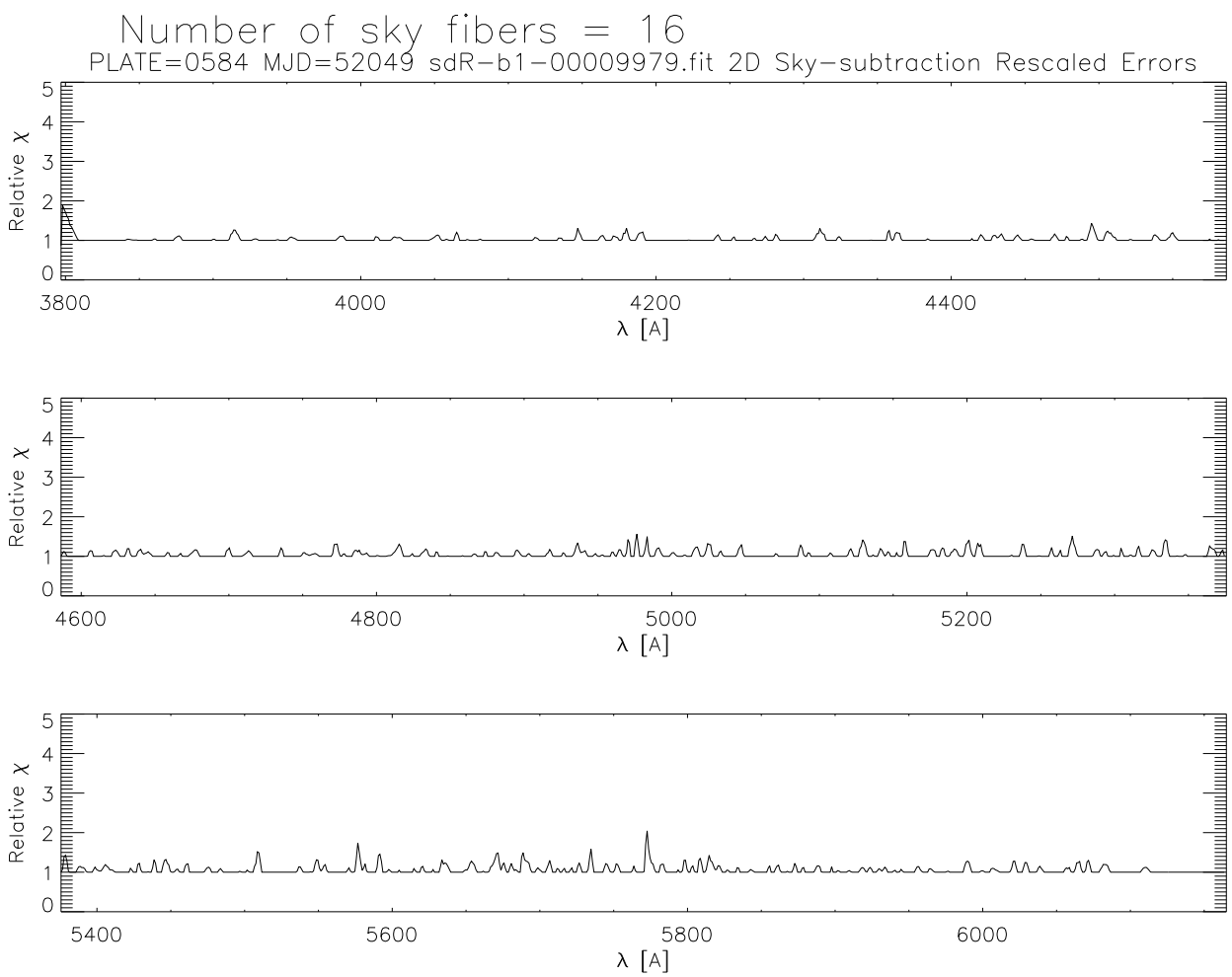

PLATE=0584 MJD=52049 sdR-b1-00009979.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

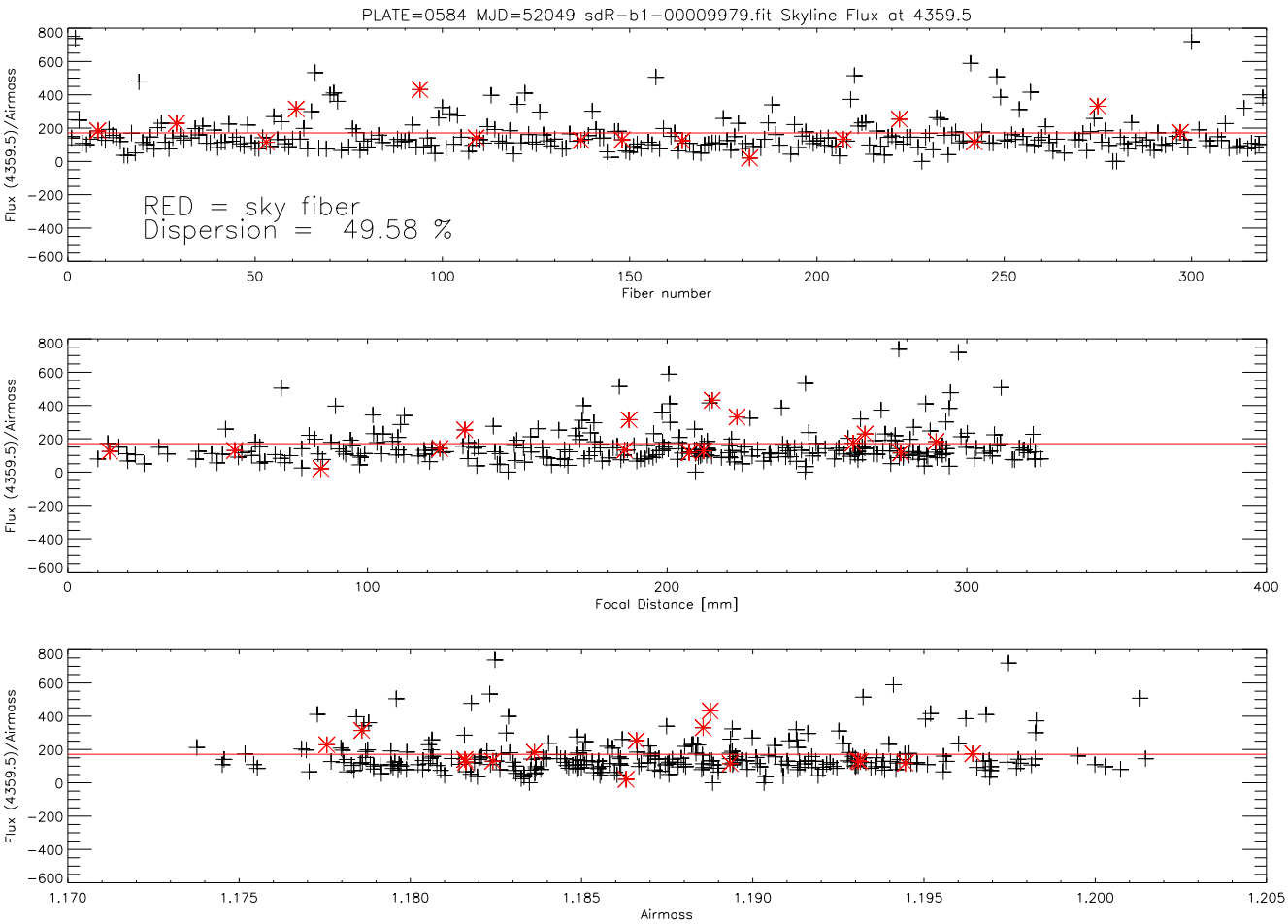

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009979.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

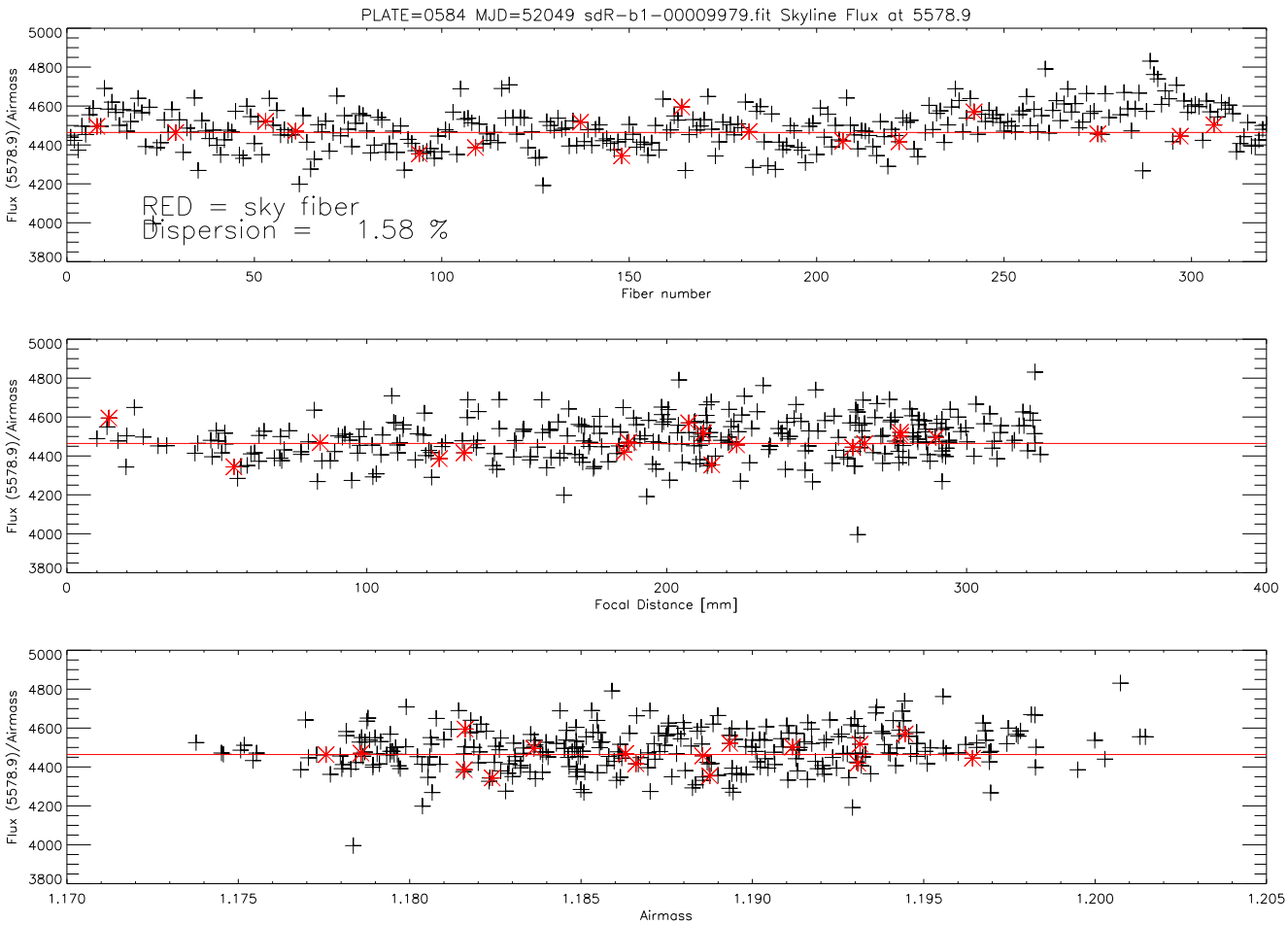

PLATE=0584 MJD=52049 sdR-b1-00009979.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

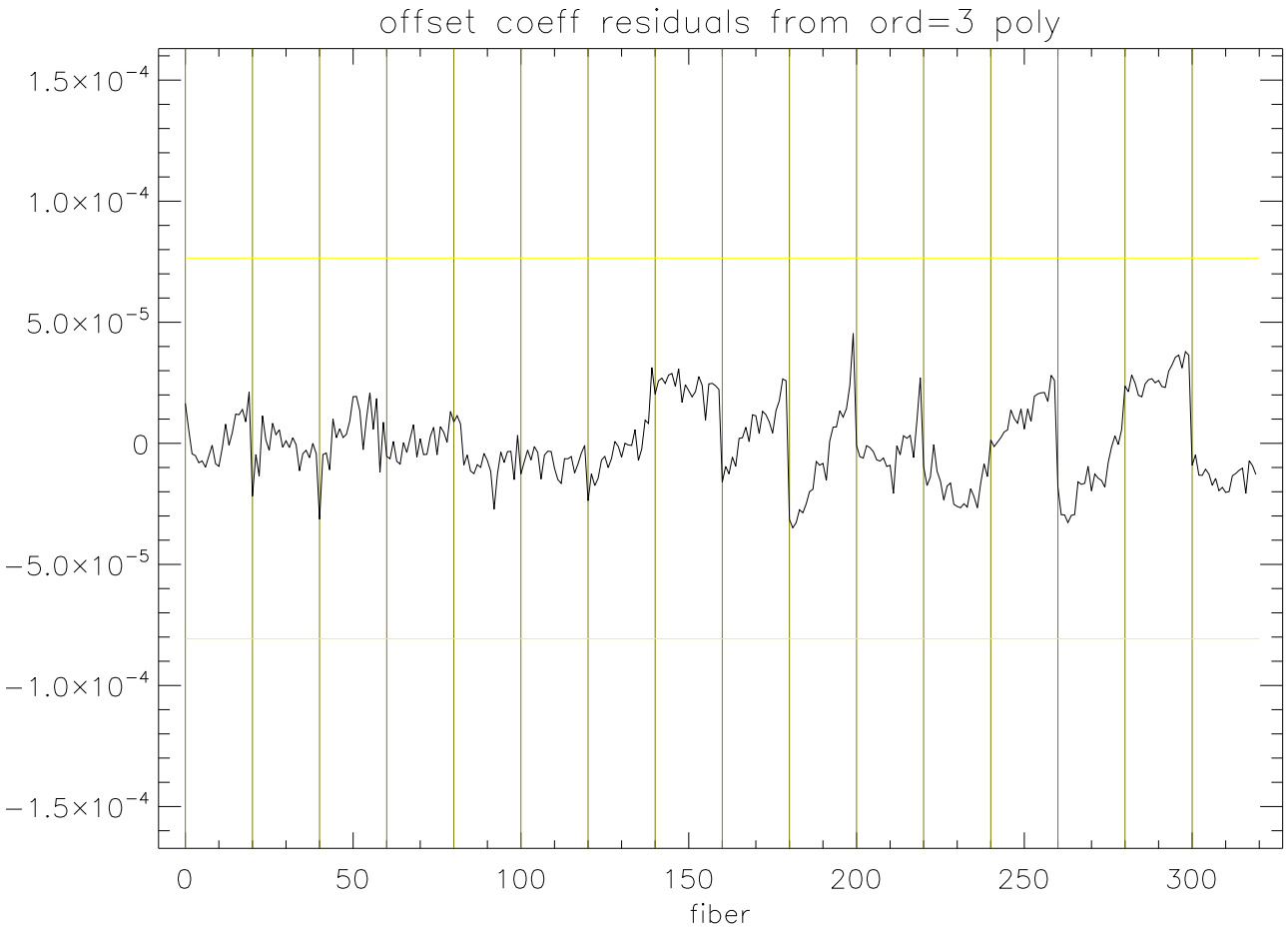

PLATE=0584 MJD=52049 sdR-b1-00009979.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

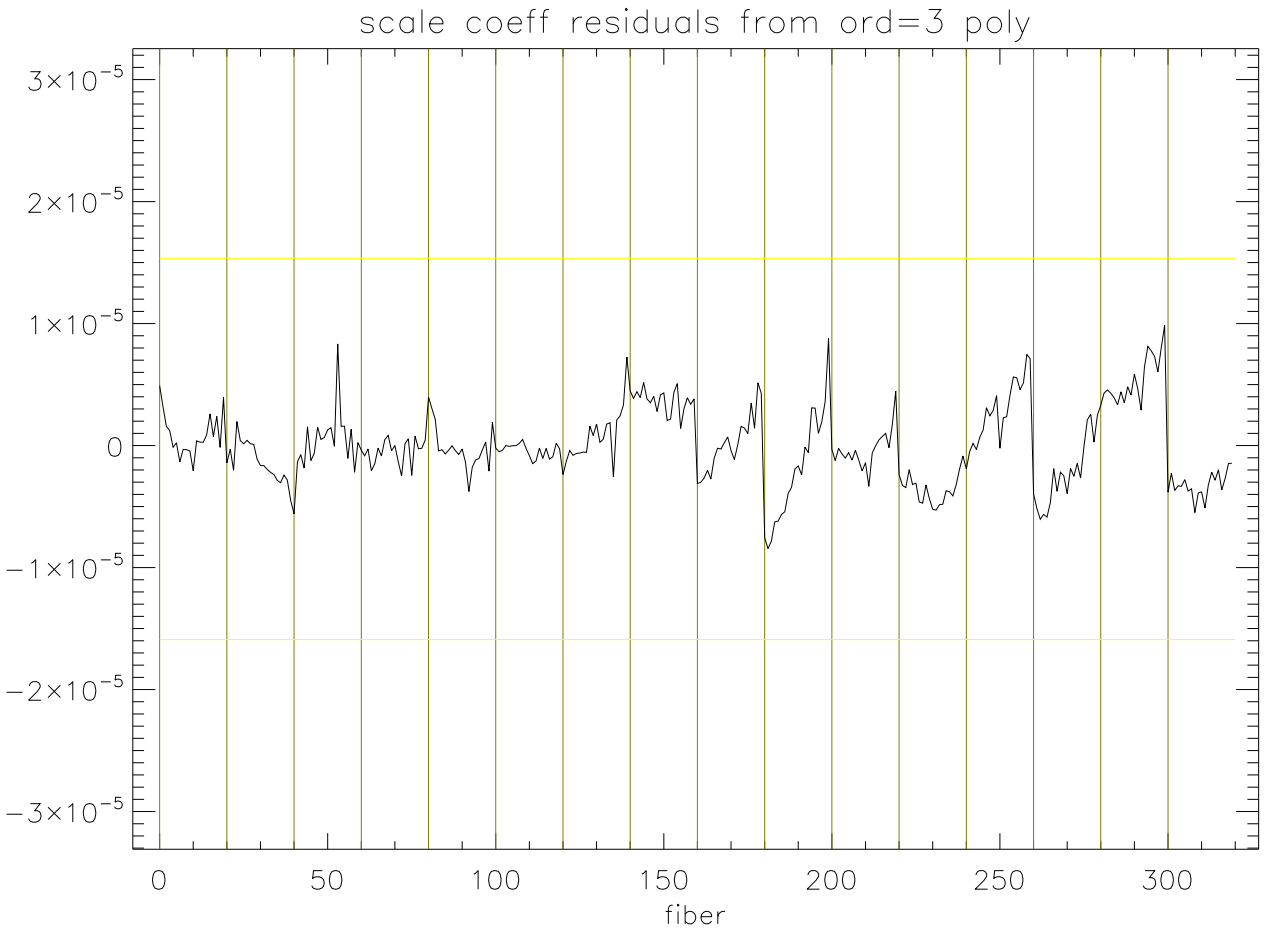

PLATE=0584 MJD=52049 sdR-b1-00009979.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

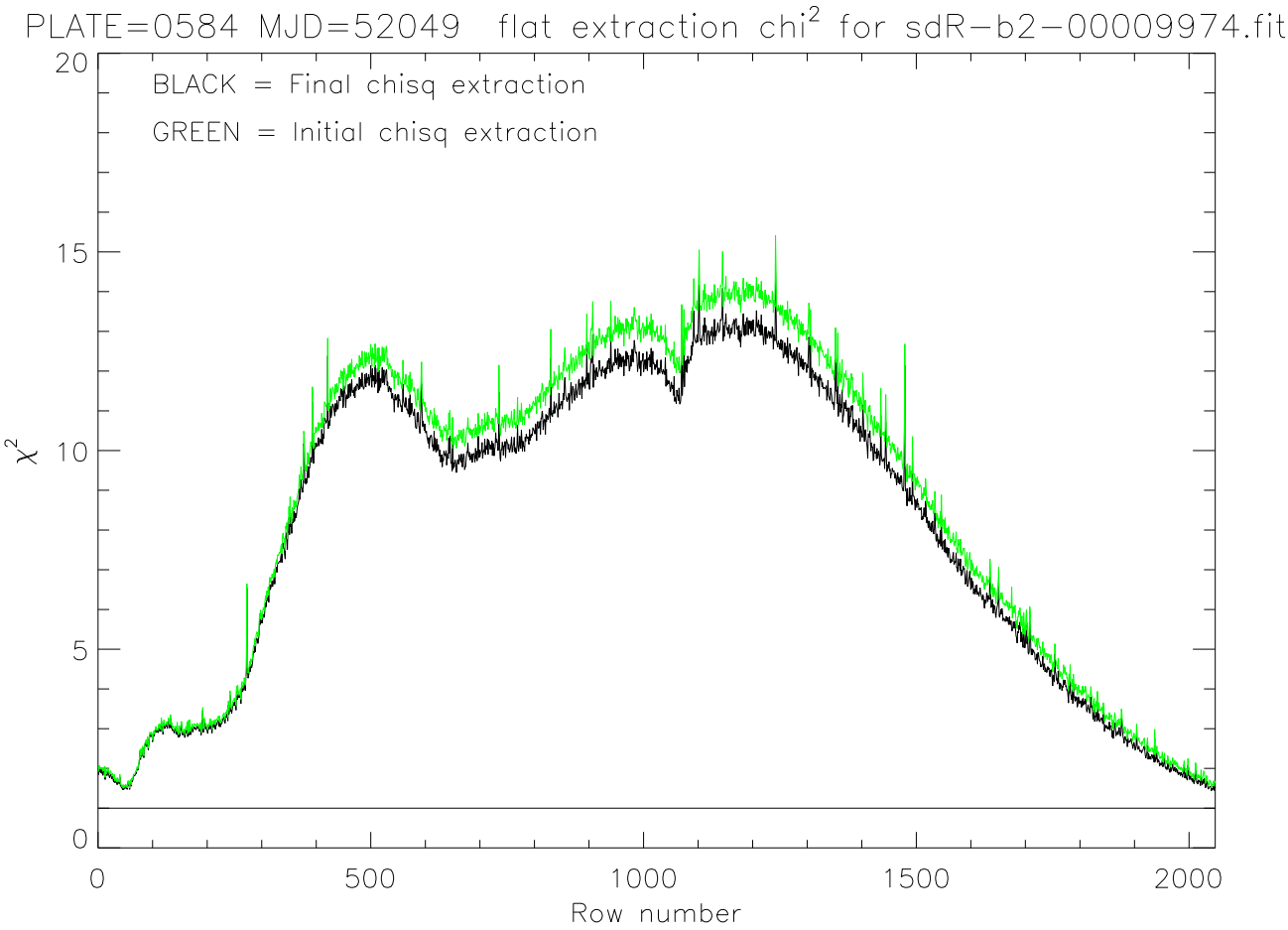

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b1-00009979.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

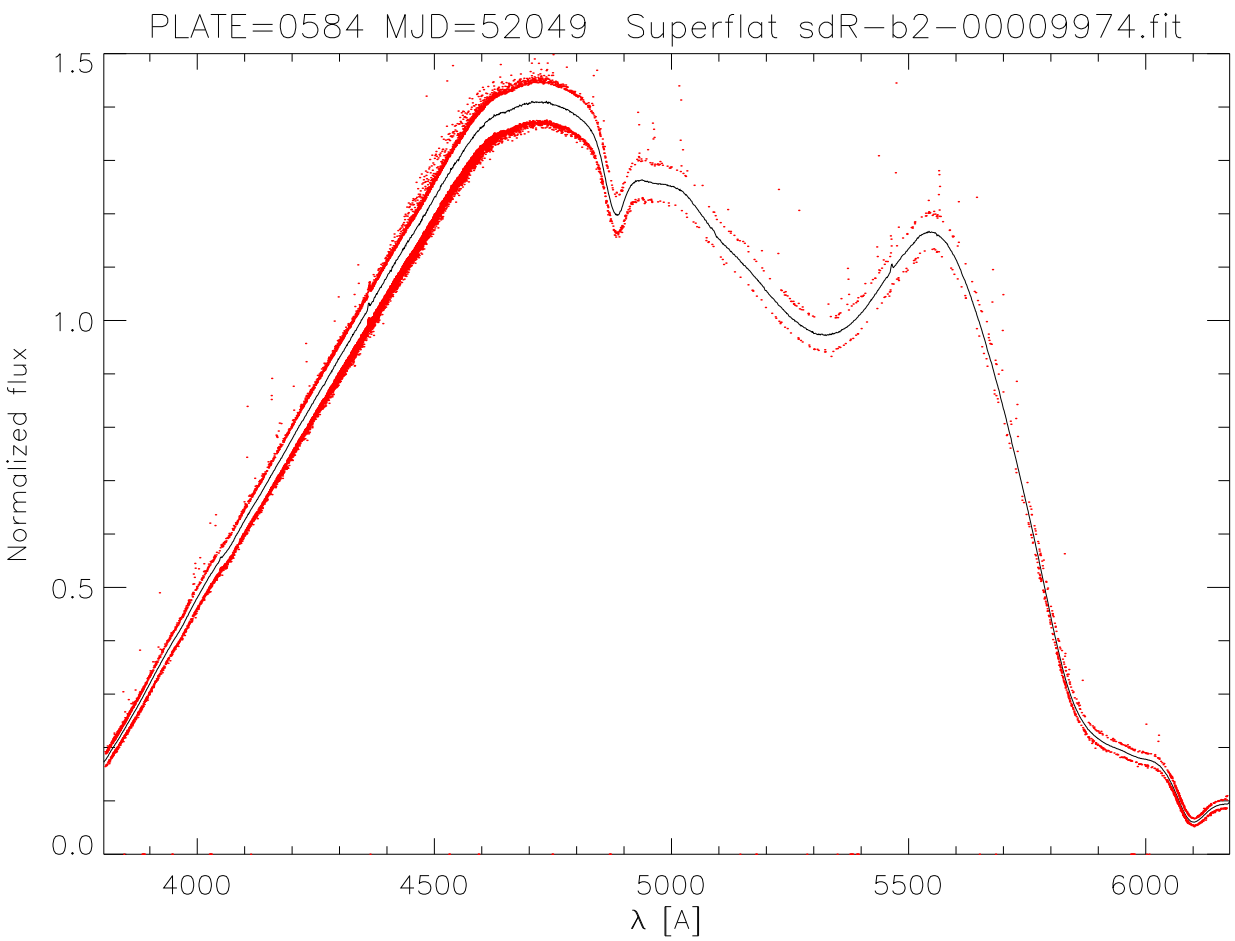

PLATE=0584 MJD=52049 sdR-b1-00009979.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 49.58 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

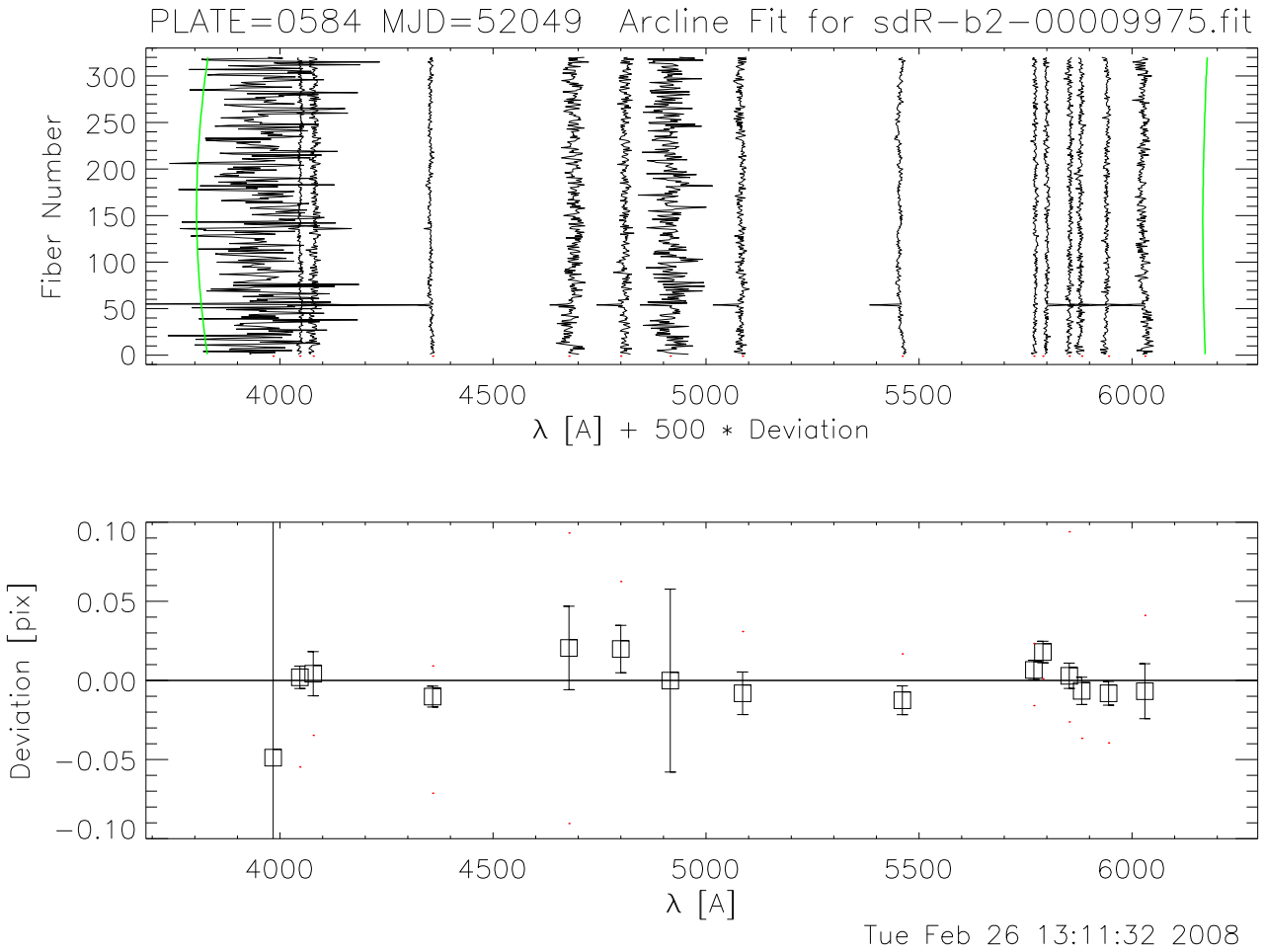

PLATE=0584 MJD=52049 sdR-b1-00009979.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.58 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

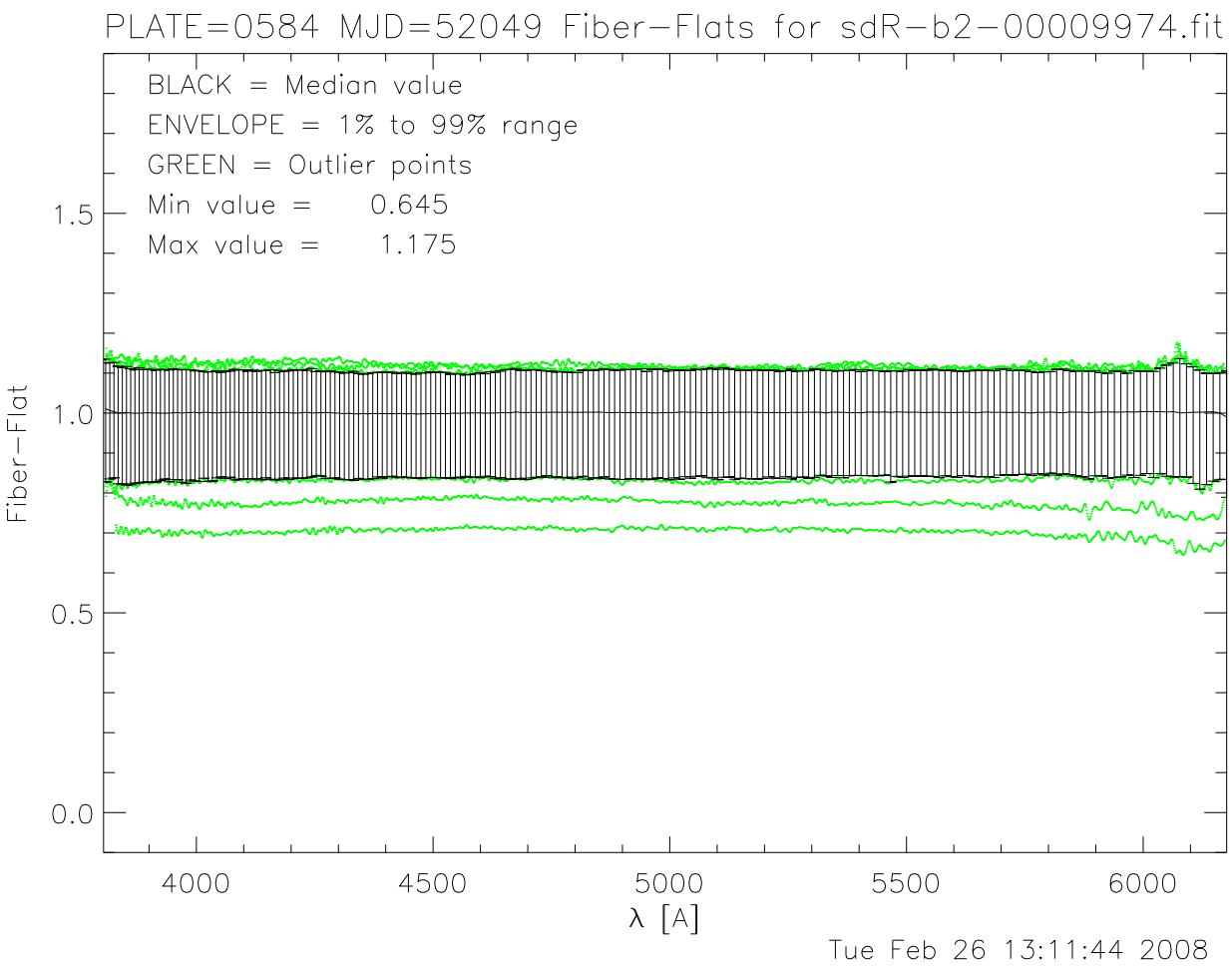

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

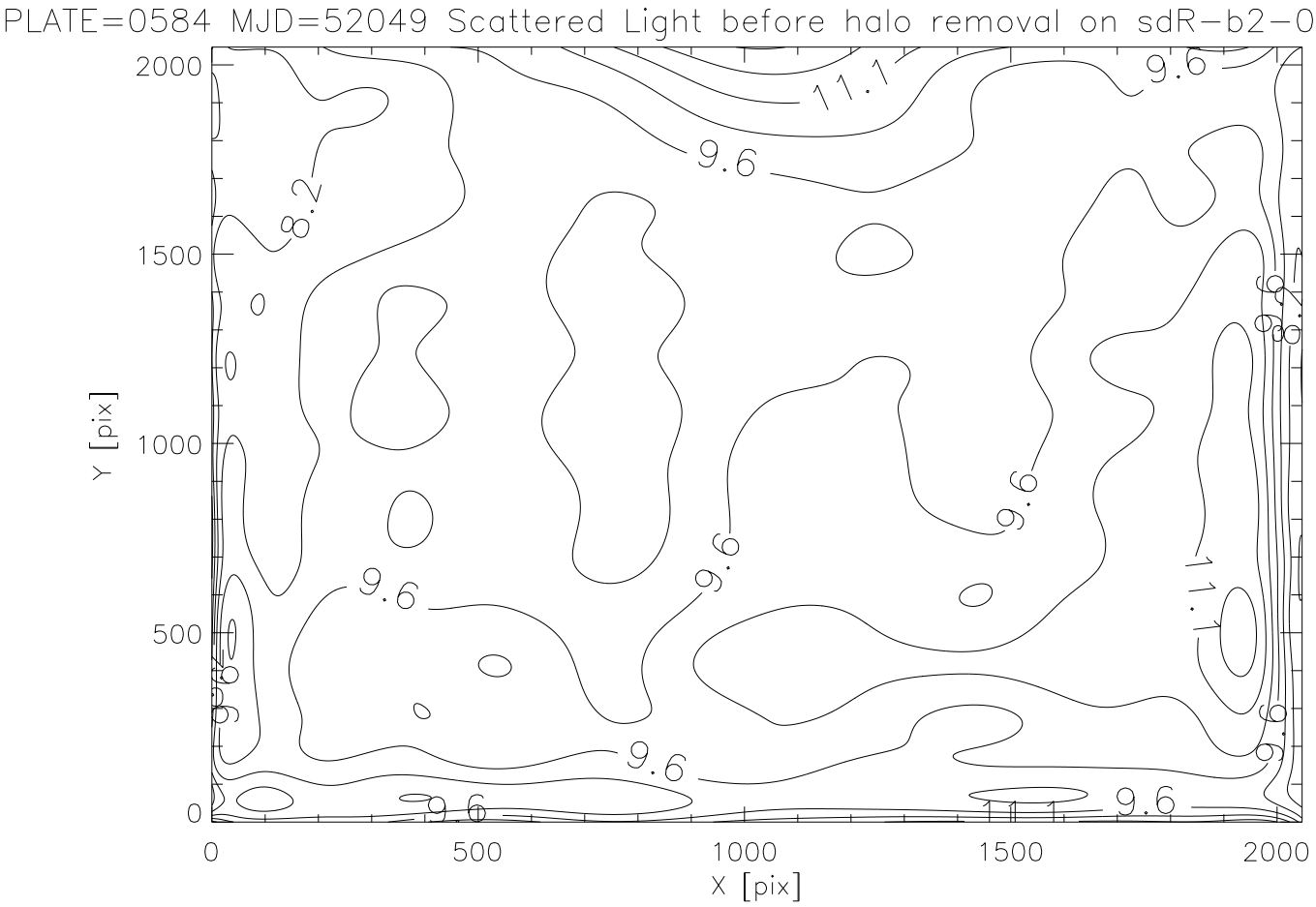

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

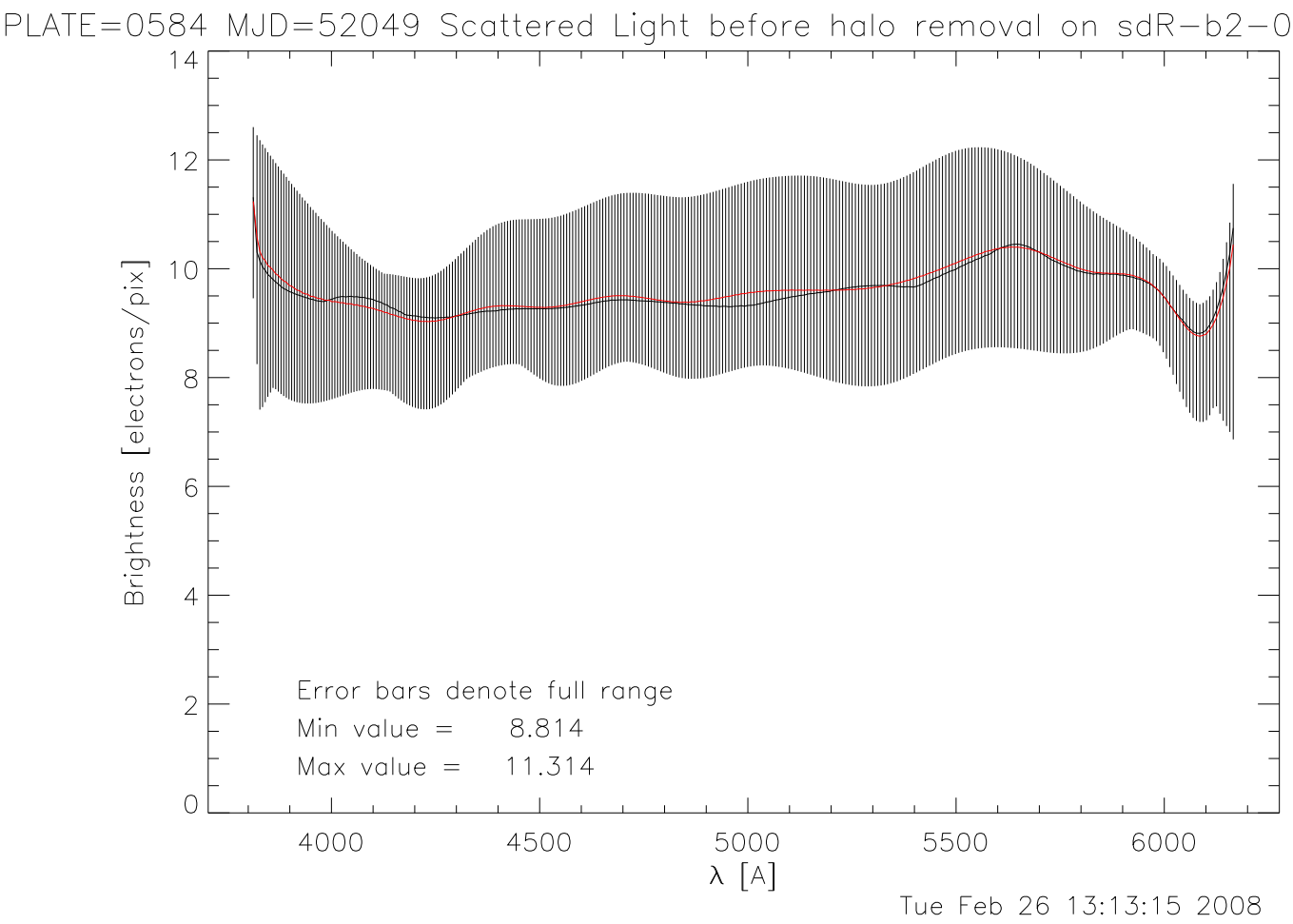

PLATE=0584 MJD=52049 flat extraction chi^2 for sdR−b2−00009974.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

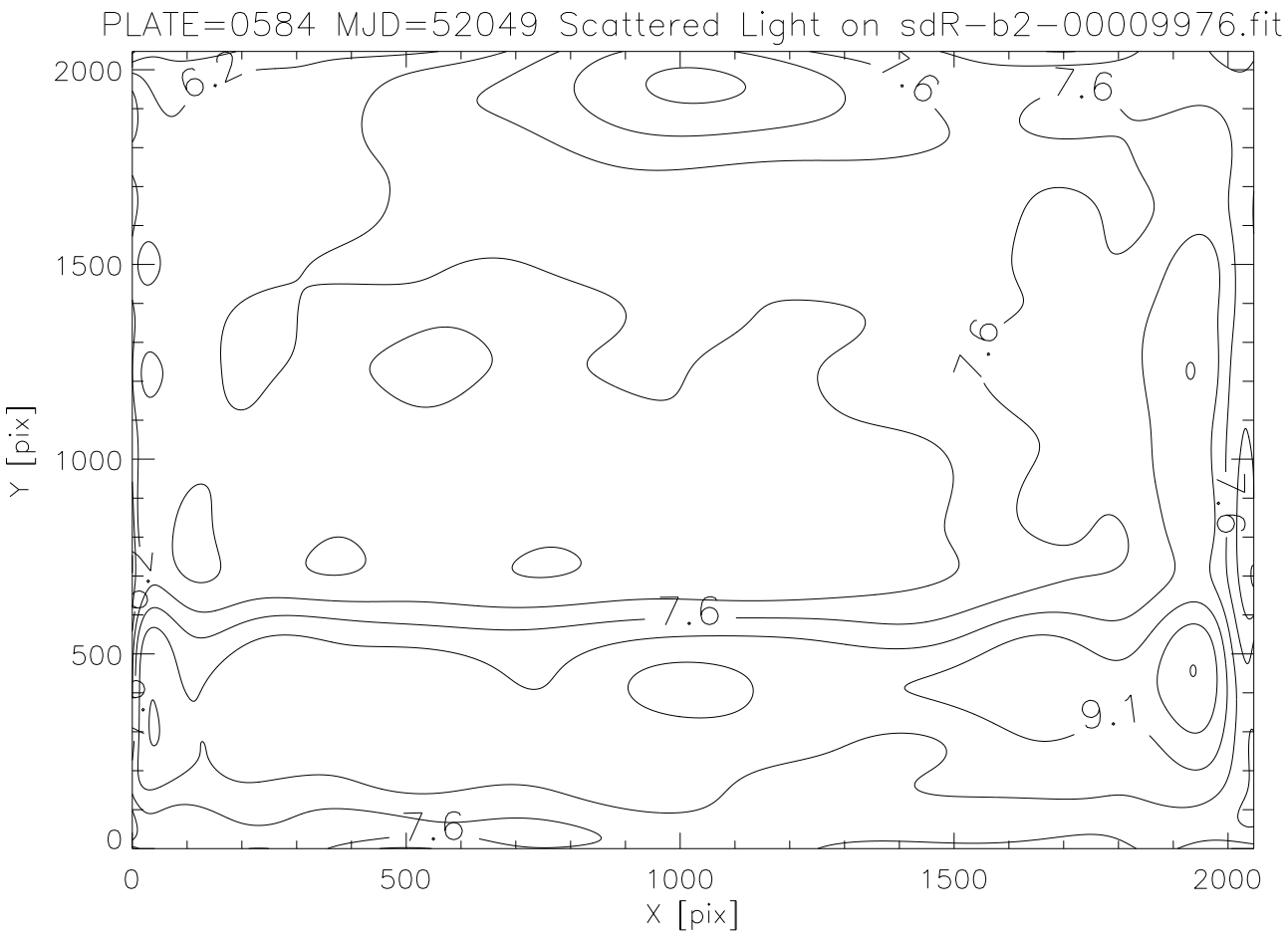

PLATE=0584 MJD=52049 Superflat sdR-b2-00009974.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

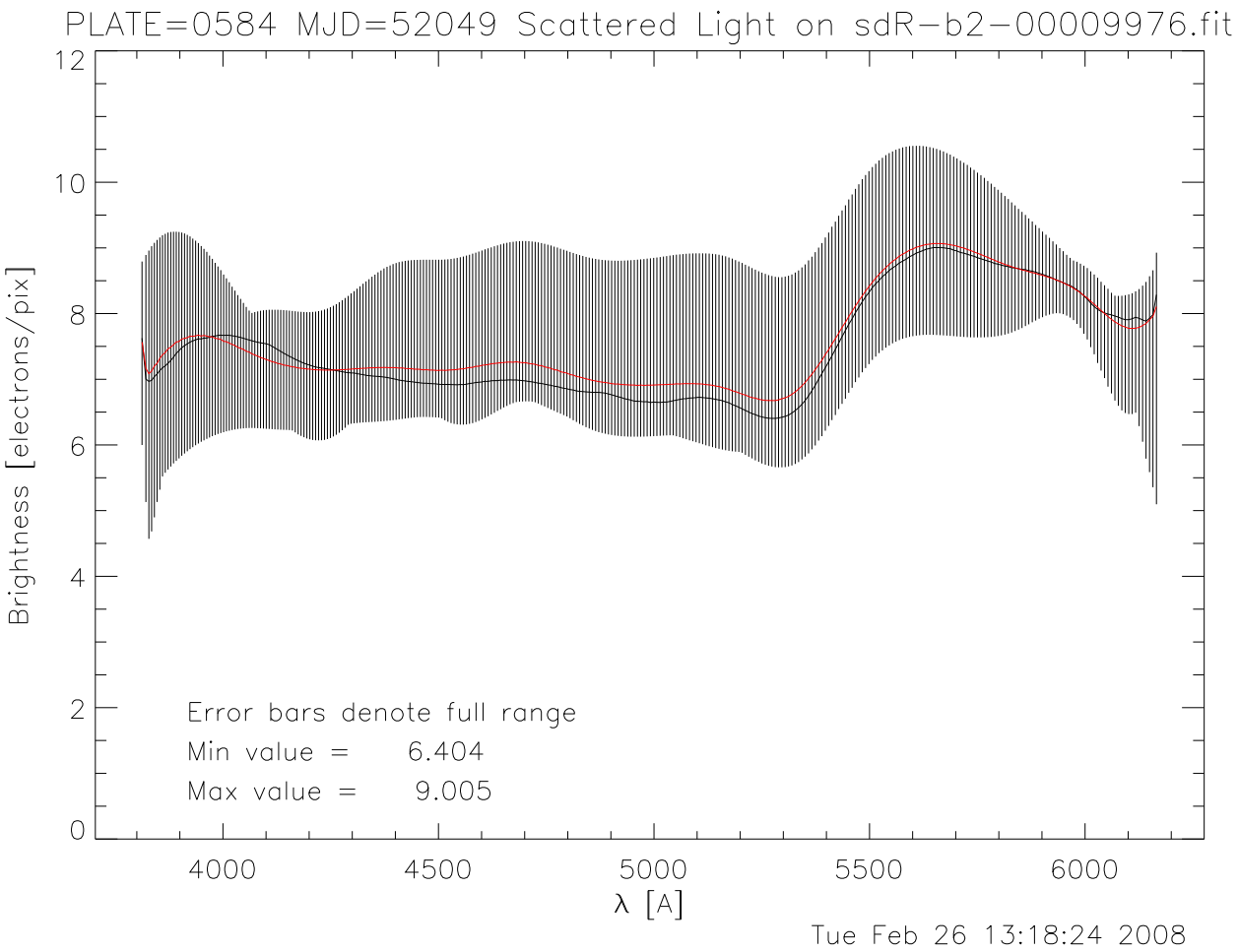

PLATE=0584 MJD=52049 Arcline Fit for sdR-b2-00009975.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:11:32 2008

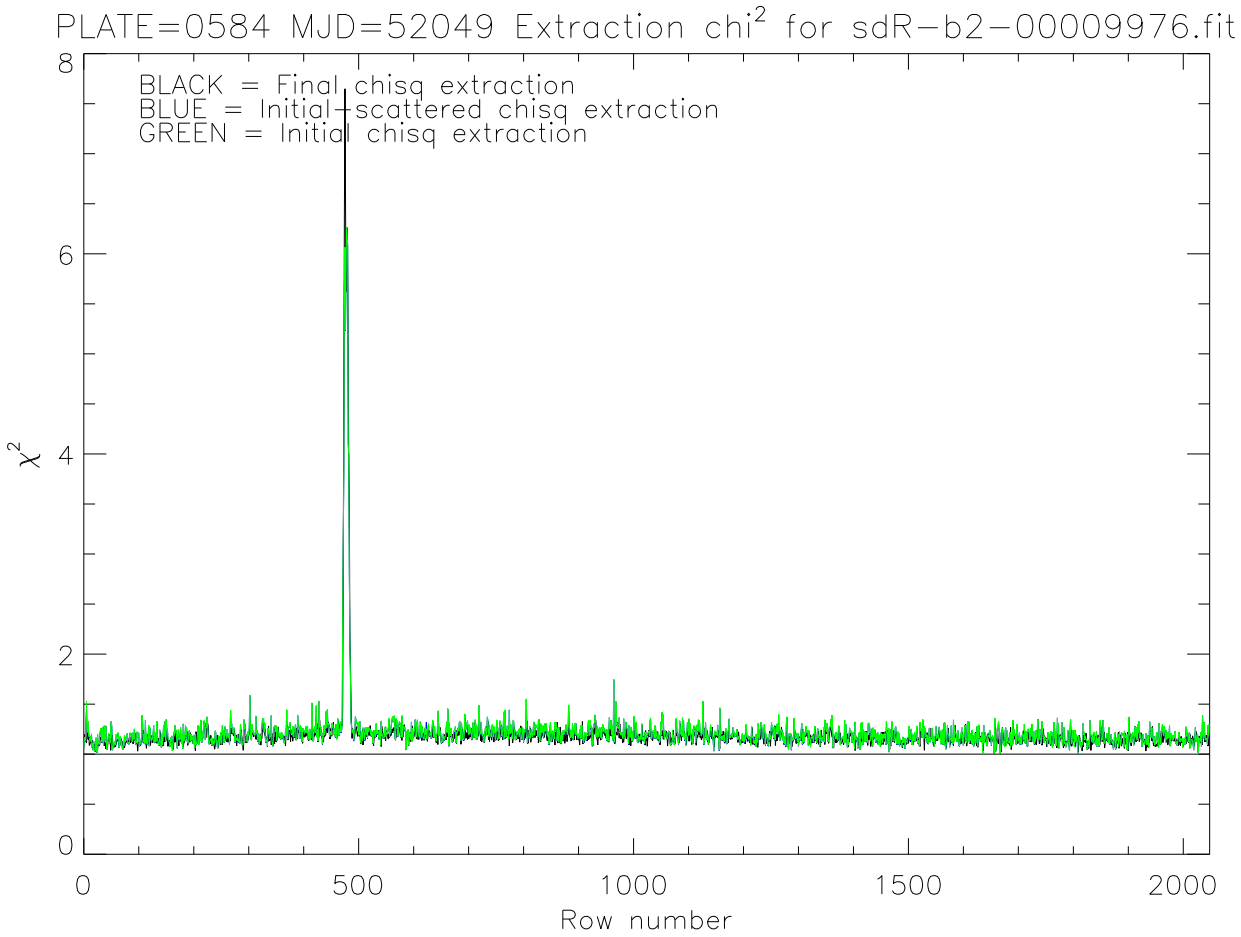

PLATE=0584 MJD=52049 Fiber−Flats for sdR−b2−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.645
Max value = 1.175
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:11:44 2008

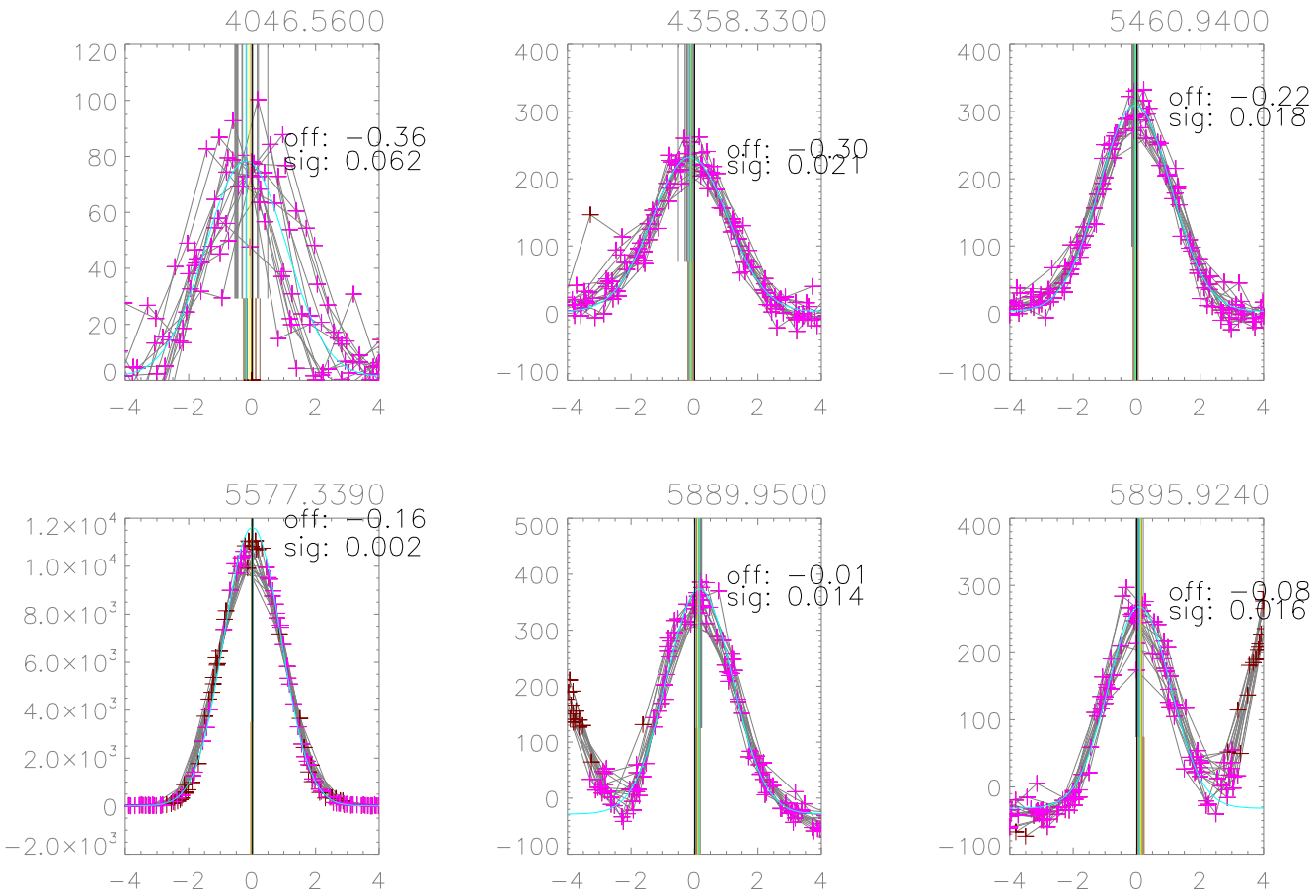

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b2-00009976.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
11.1
9.6
8.2
0

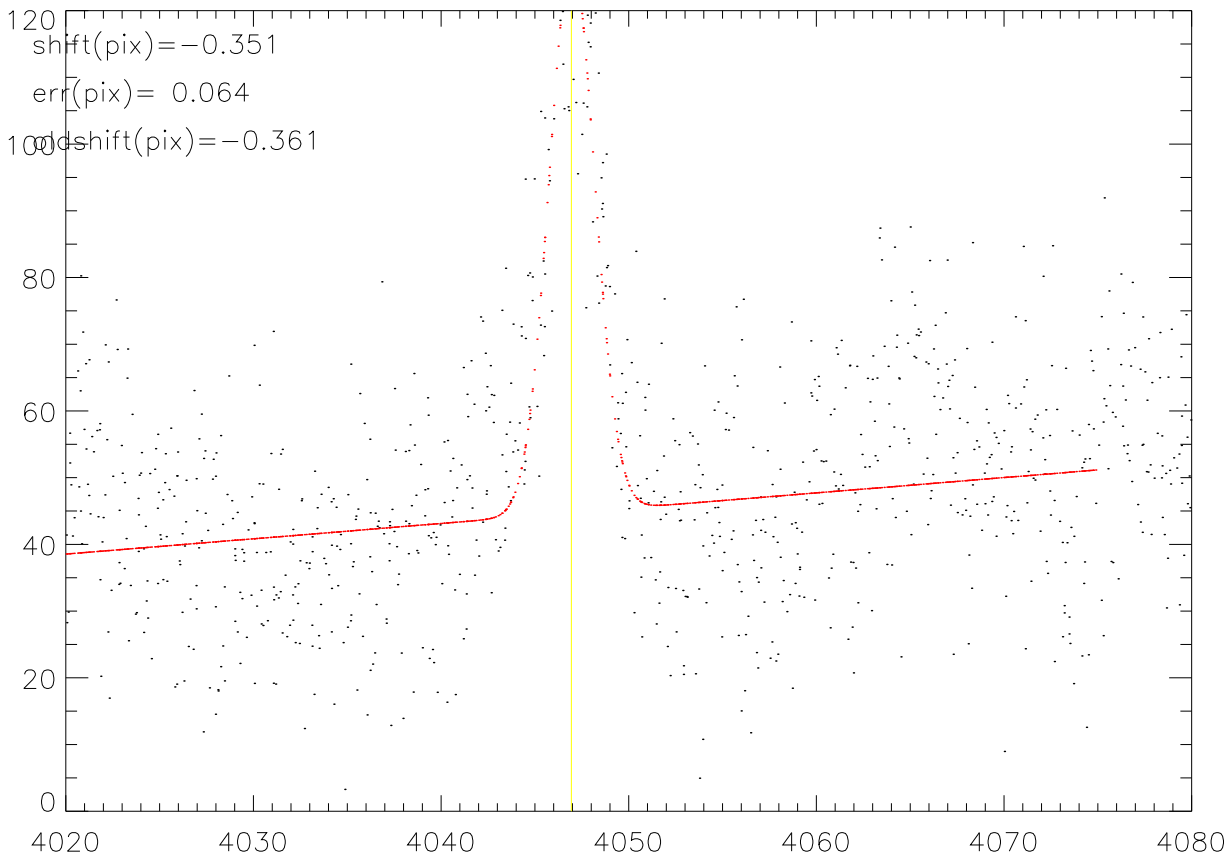

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b2-00009976.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.814
Max value = 11.314
Tue Feb 26 13:13:15 2008

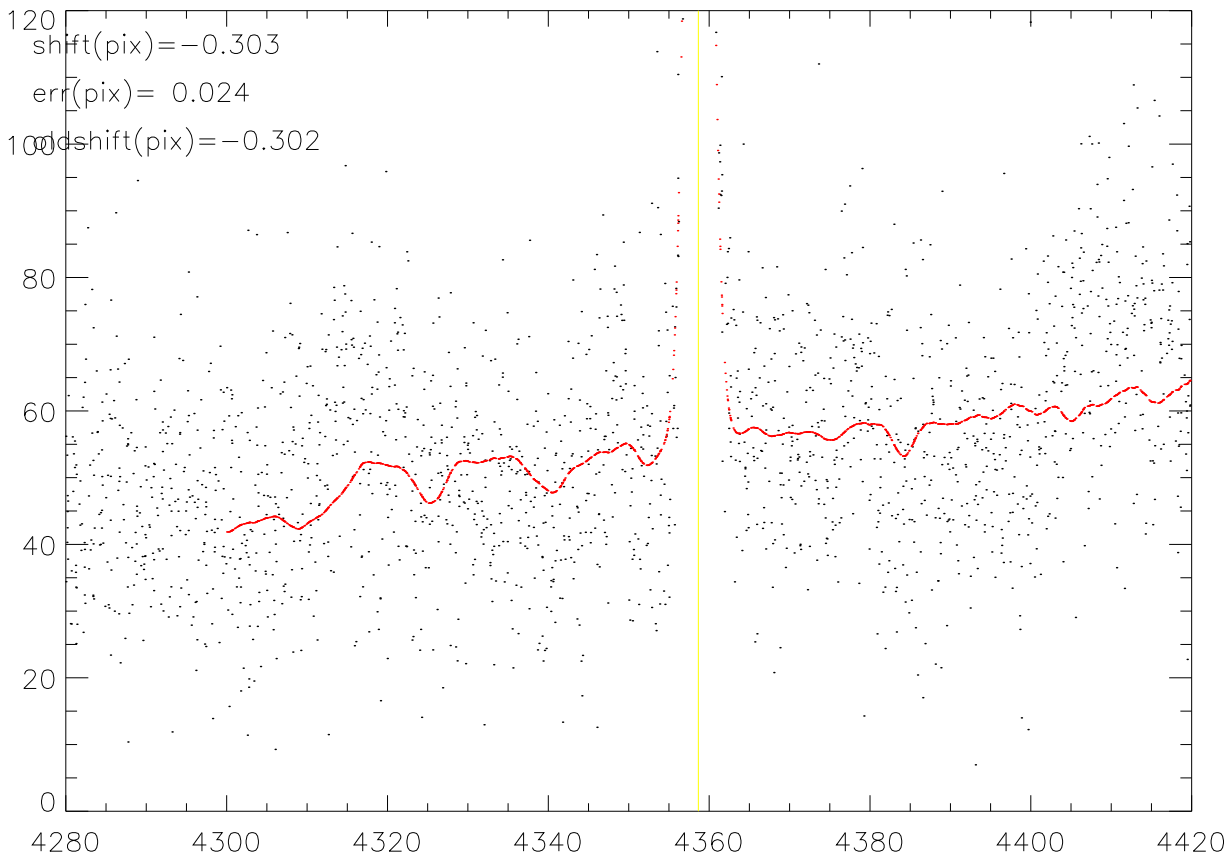

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009976.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.2
7.6
9.1
0

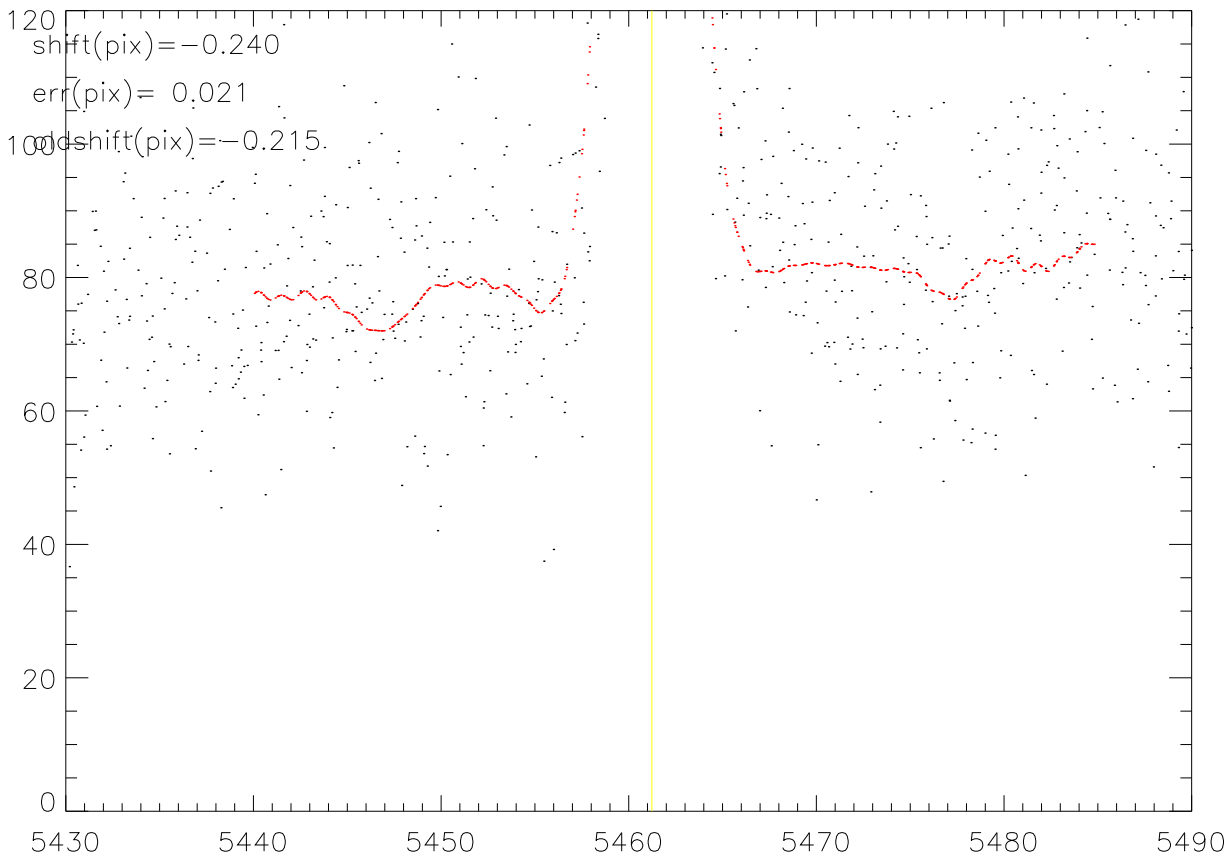

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009976.fit
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 6.404
Max value = 9.005
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:18:24 2008

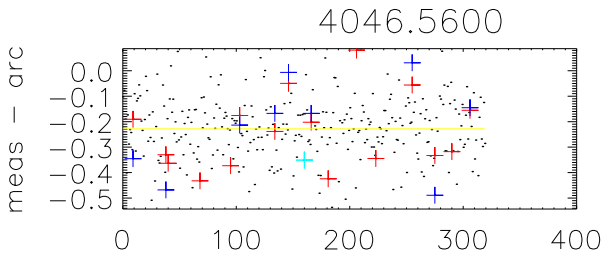

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-b2-00009976.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

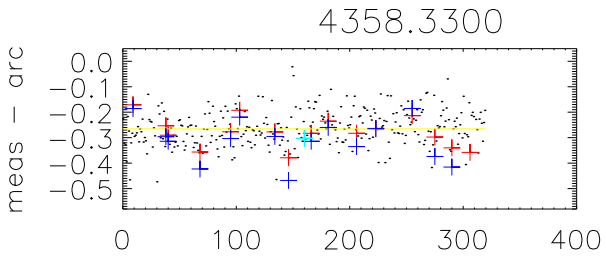

4046.5600
off: −0.36
sig: 0.062
4358.3300
off: −0.30
sig: 0.021
5460.9400
off: −0.22
sig: 0.018
5577.3390
off: −0.16
sig: 0.002
5889.9500
off: −0.01
sig: 0.014
5895.9240
off: −0.08
sig: 0.016

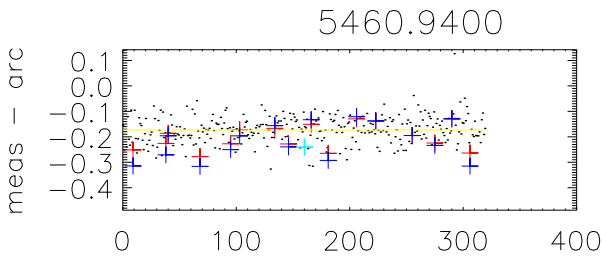

shift(pix)=−0.351
err(pix)= 0.064
oldshift(pix)=−0.361
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

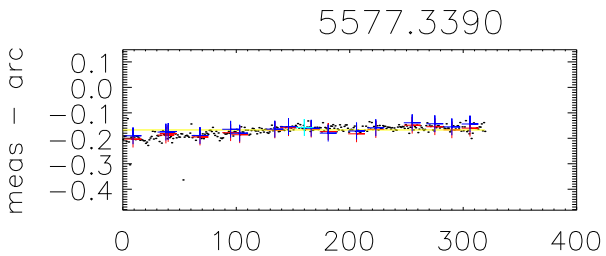

shift(pix)=−0.303
err(pix)= 0.024
oldshift(pix)=−0.302
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

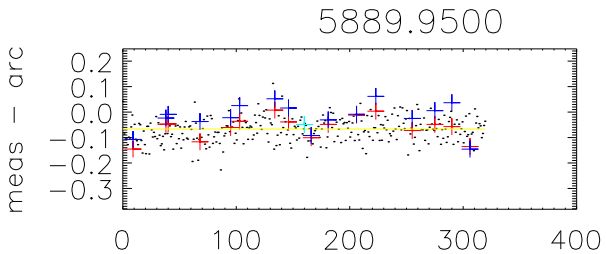

shift(pix)=−0.240
err(pix)= 0.021
oldshift(pix)=−0.215
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

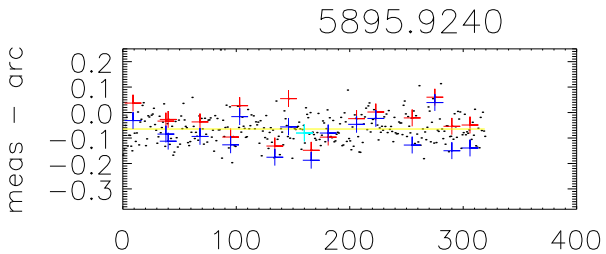

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

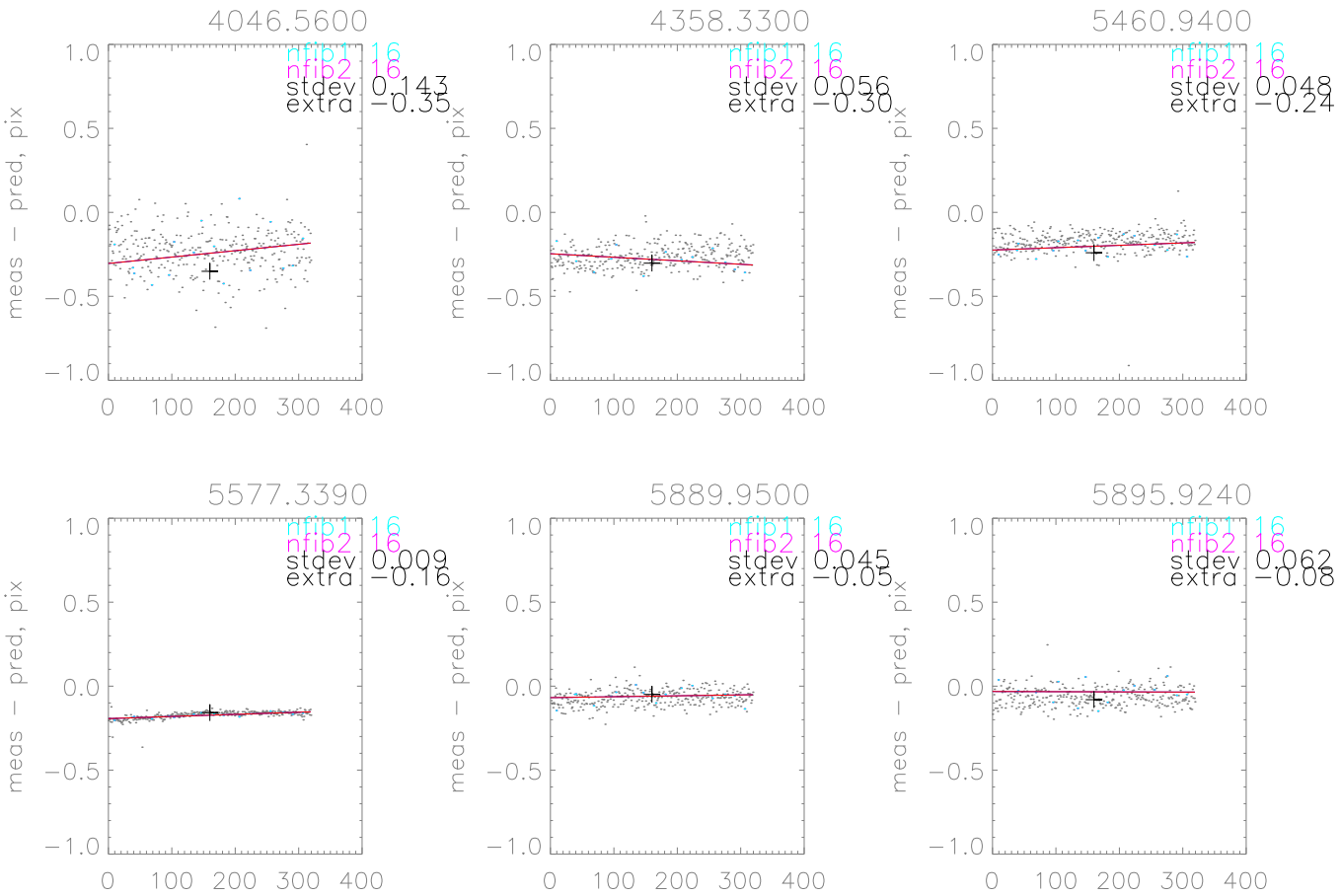

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

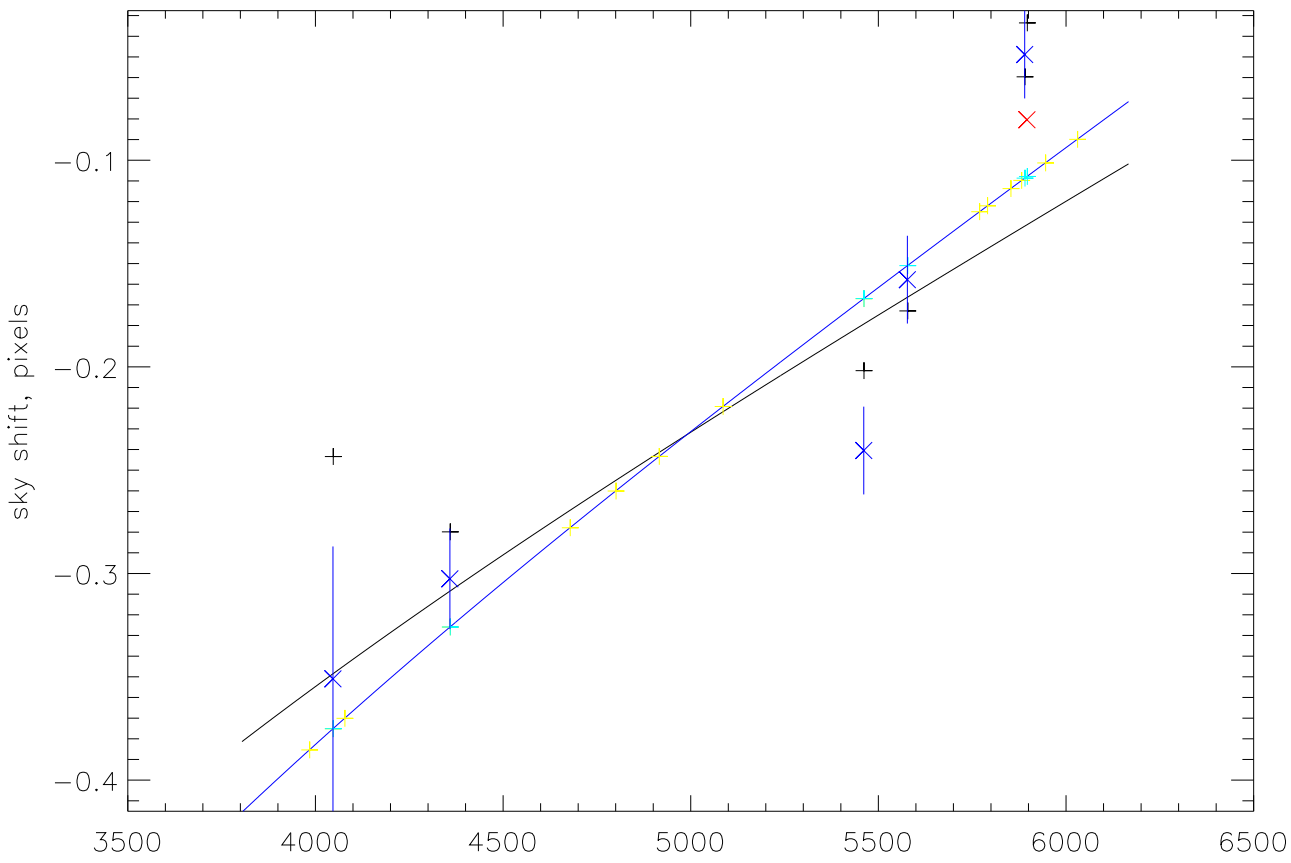

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

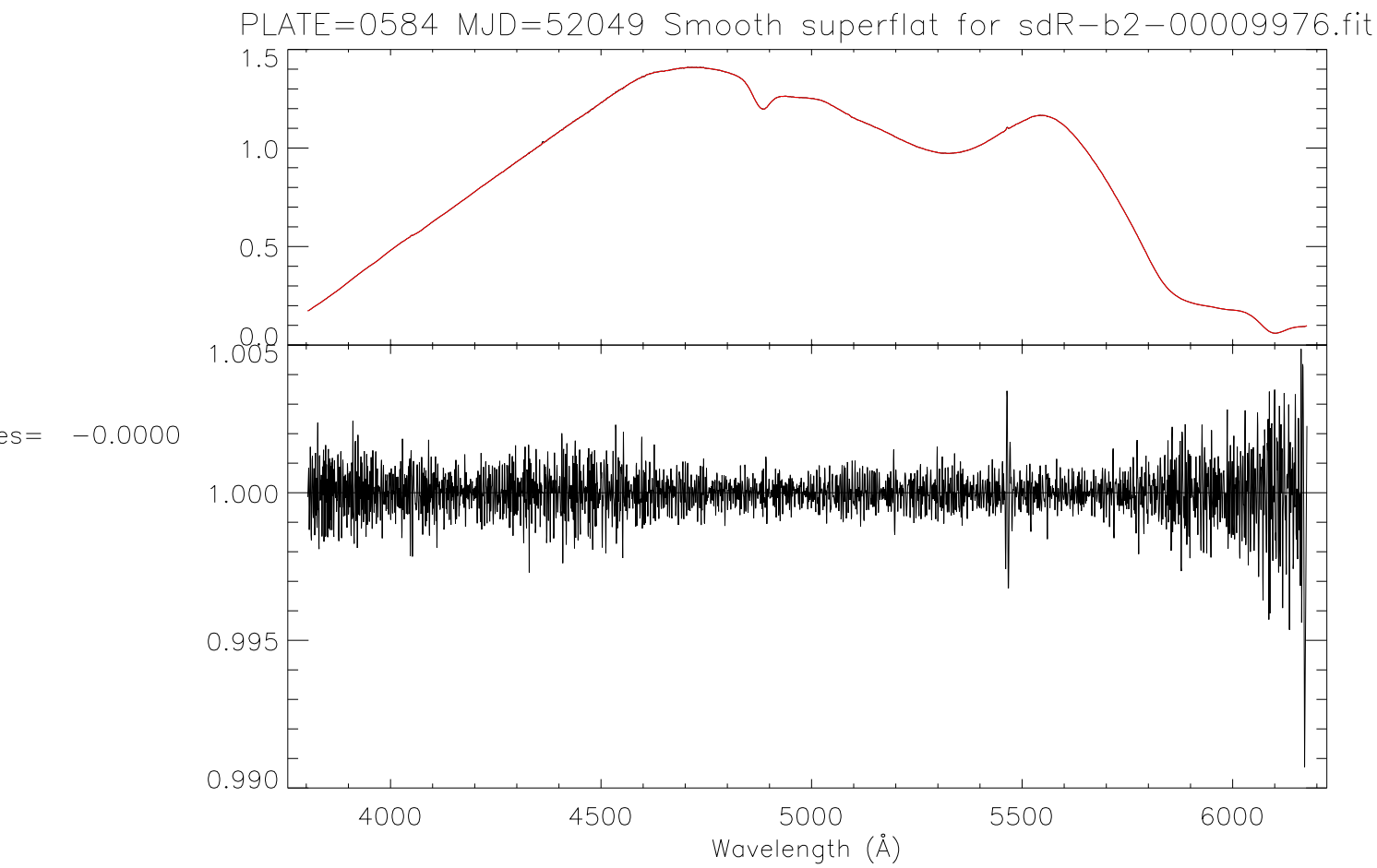

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

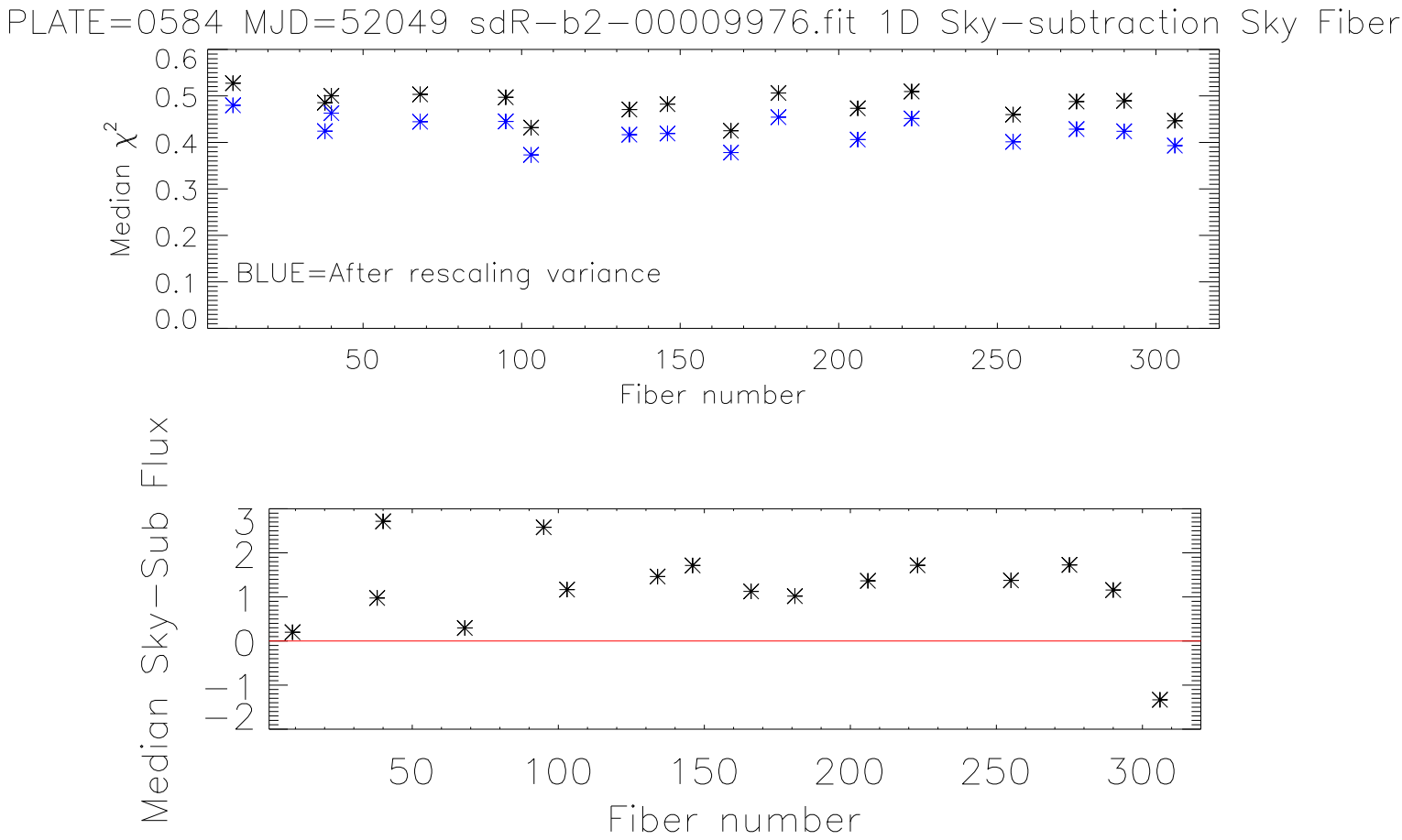

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

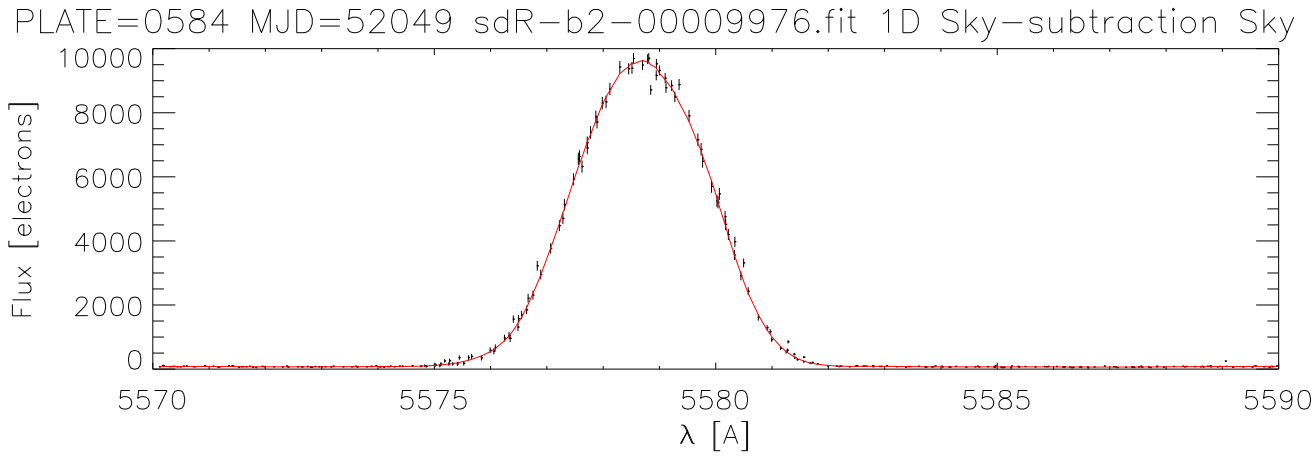

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

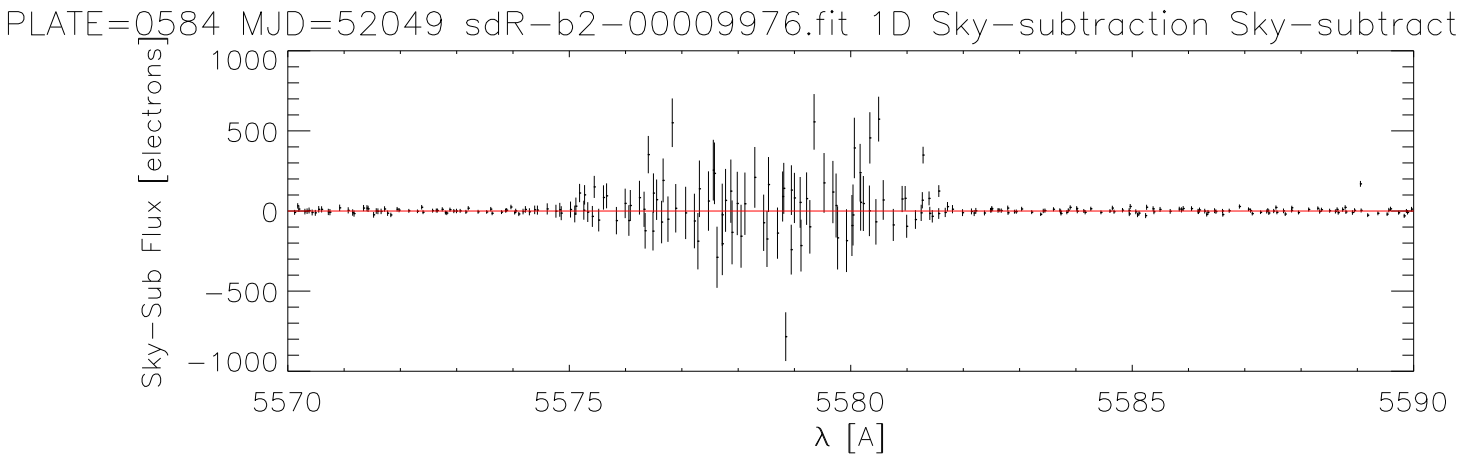

4046.5600
nfib1 16
nfib2 16
stdev 0.143
extra −0.35
4358.3300
nfib1 16
nfib2 16
stdev 0.056
extra −0.30
5460.9400
nfib1 16
nfib2 16
stdev 0.048
extra −0.24
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.045
extra −0.05
5895.9240
nfib1 16
nfib2 16
stdev 0.062
extra −0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

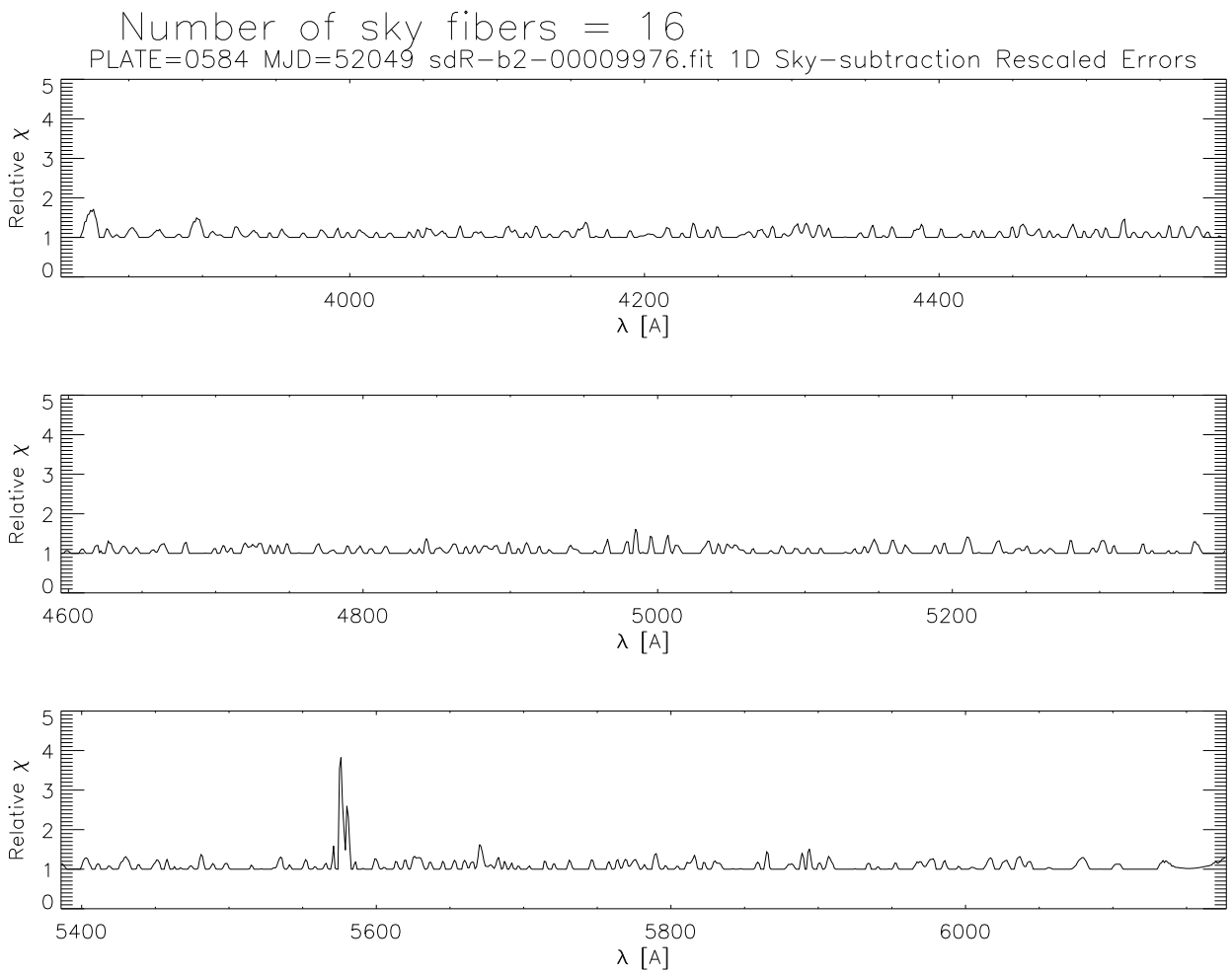

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

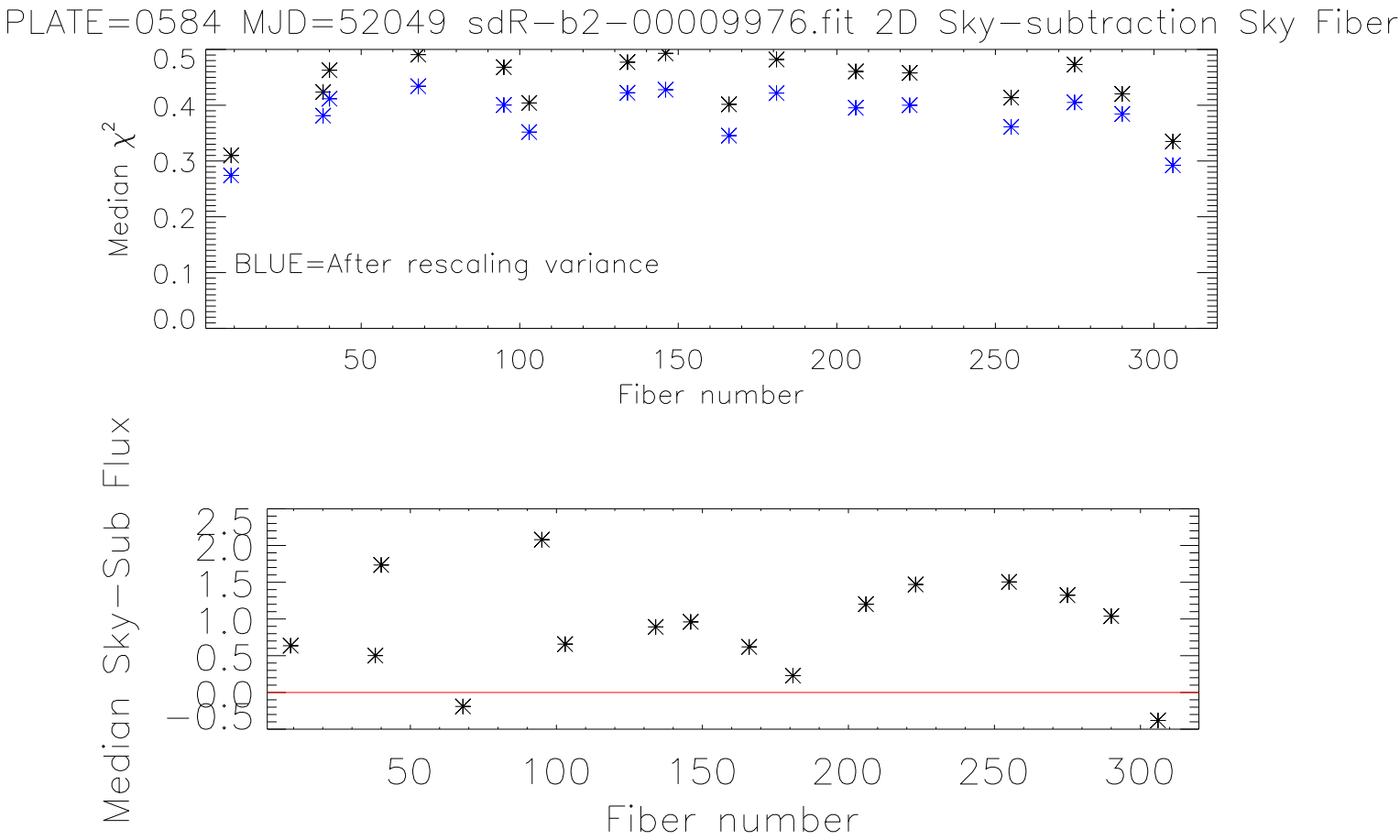

PLATE=0584 MJD=52049 Smooth superflat for sdR-b2-00009976.fit
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

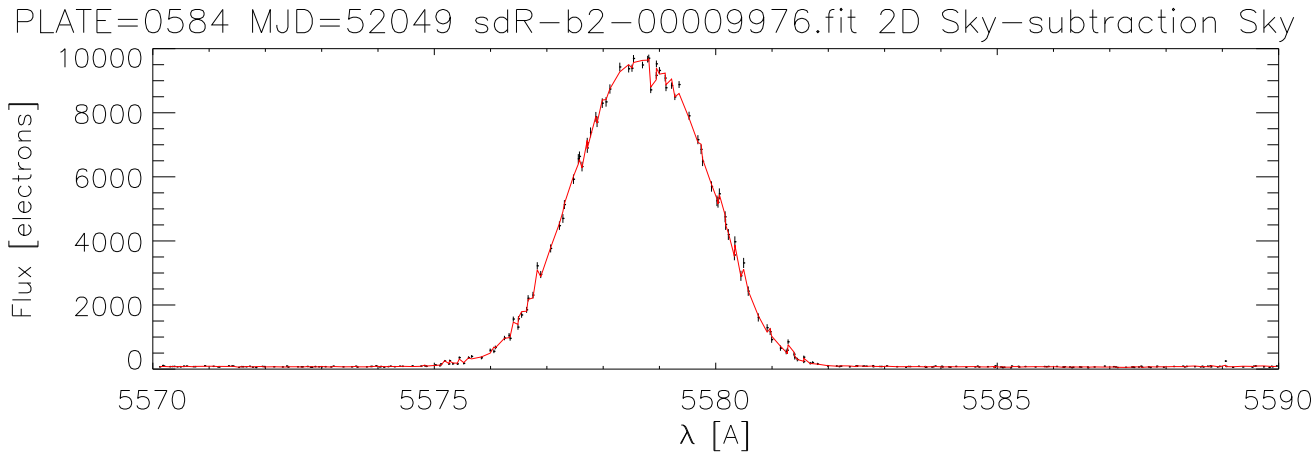

PLATE=0584 MJD=52049 sdR-b2-00009976.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

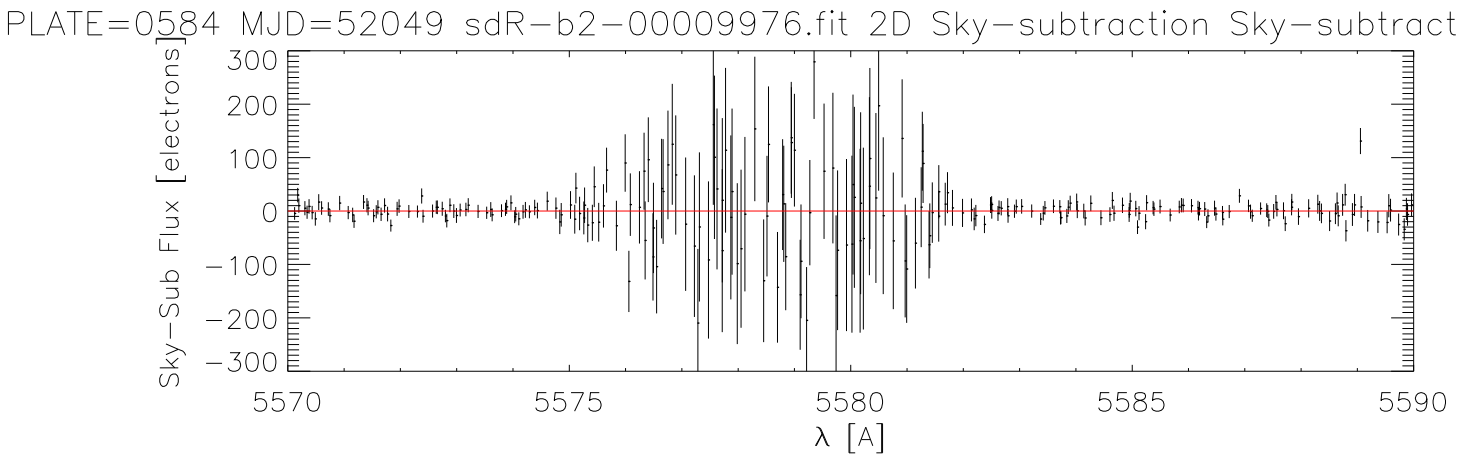

PLATE=0584 MJD=52049 sdR-b2-00009976.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

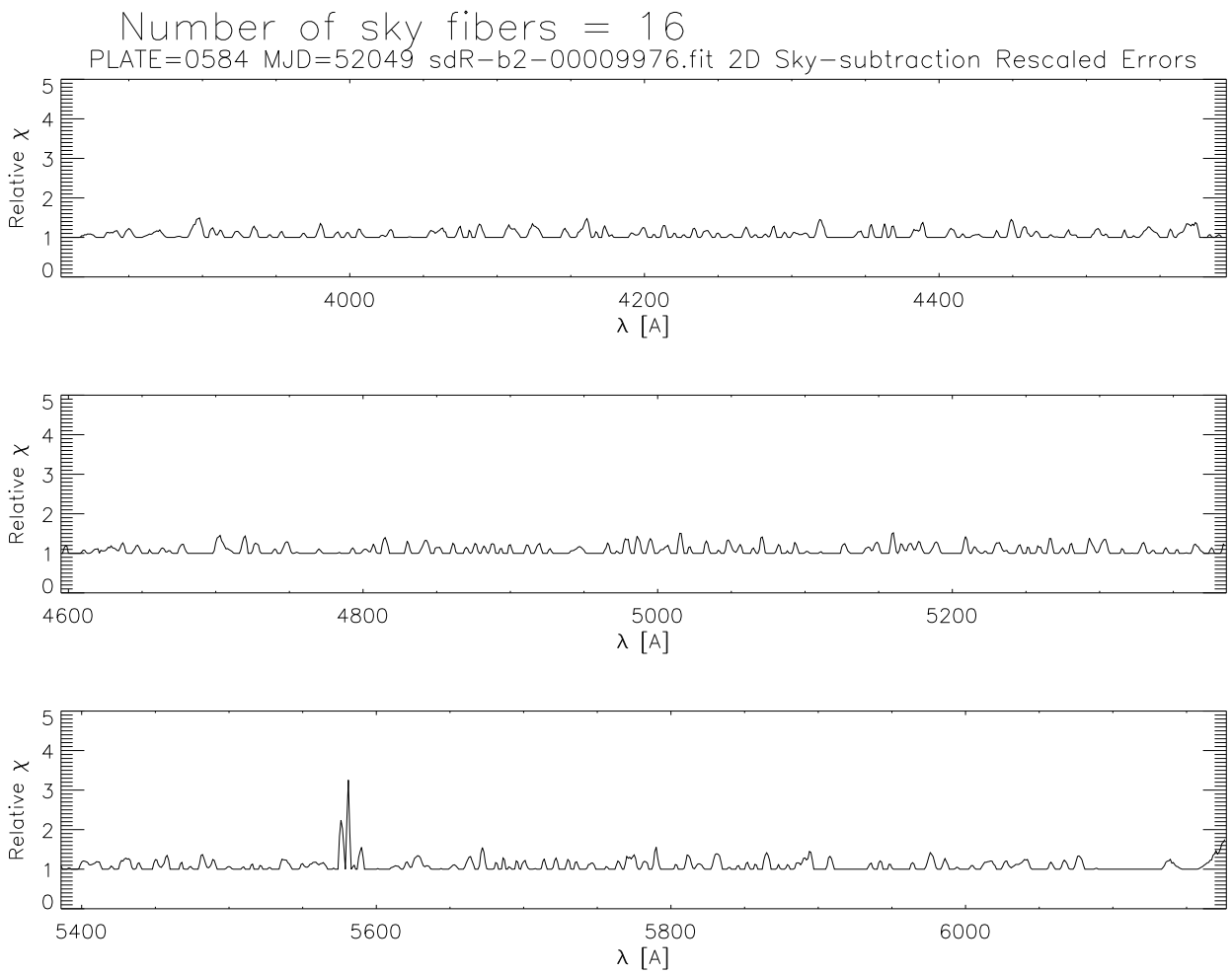

PLATE=0584 MJD=52049 sdR-b2-00009976.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

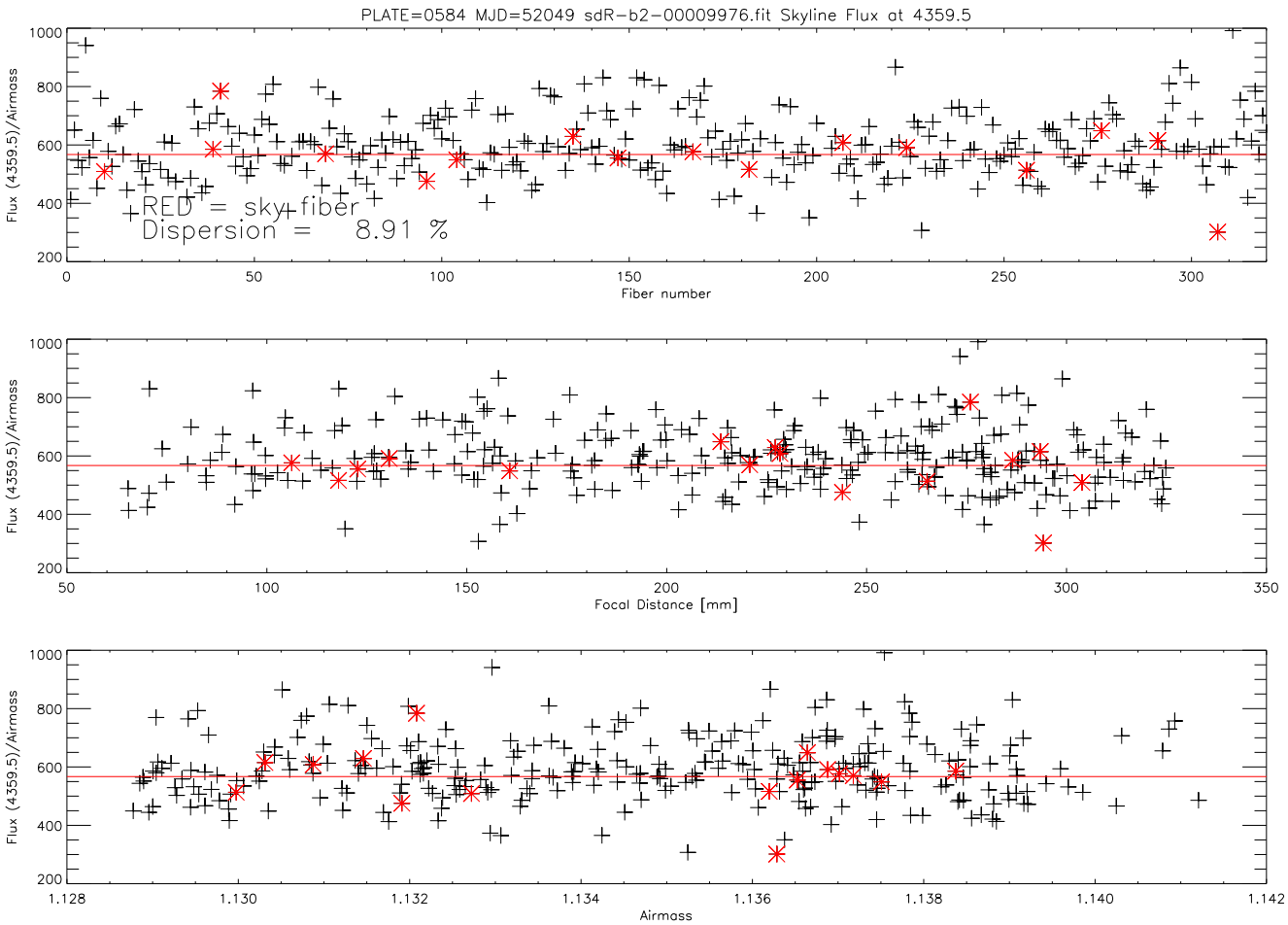

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009976.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

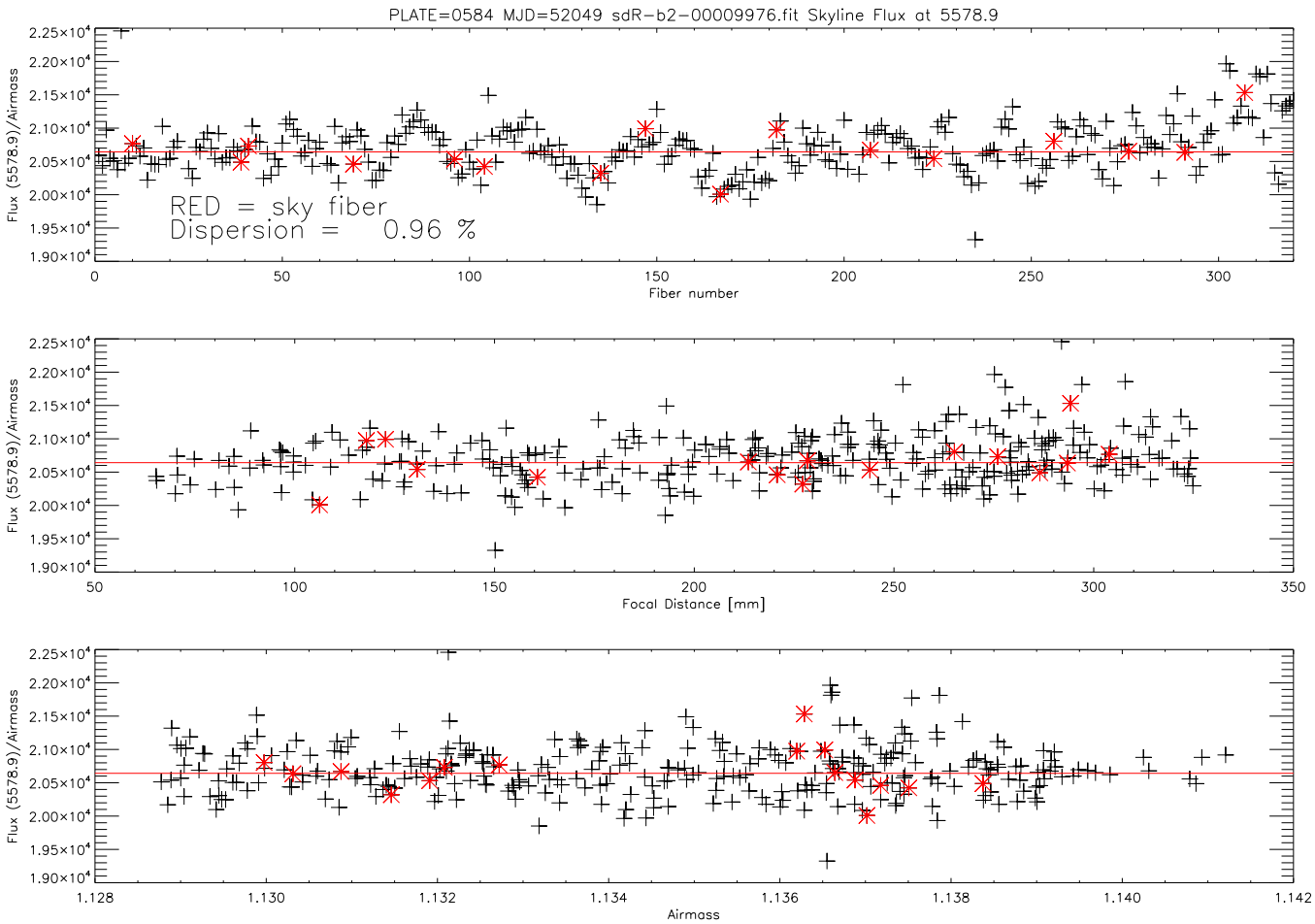

PLATE=0584 MJD=52049 sdR-b2-00009976.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

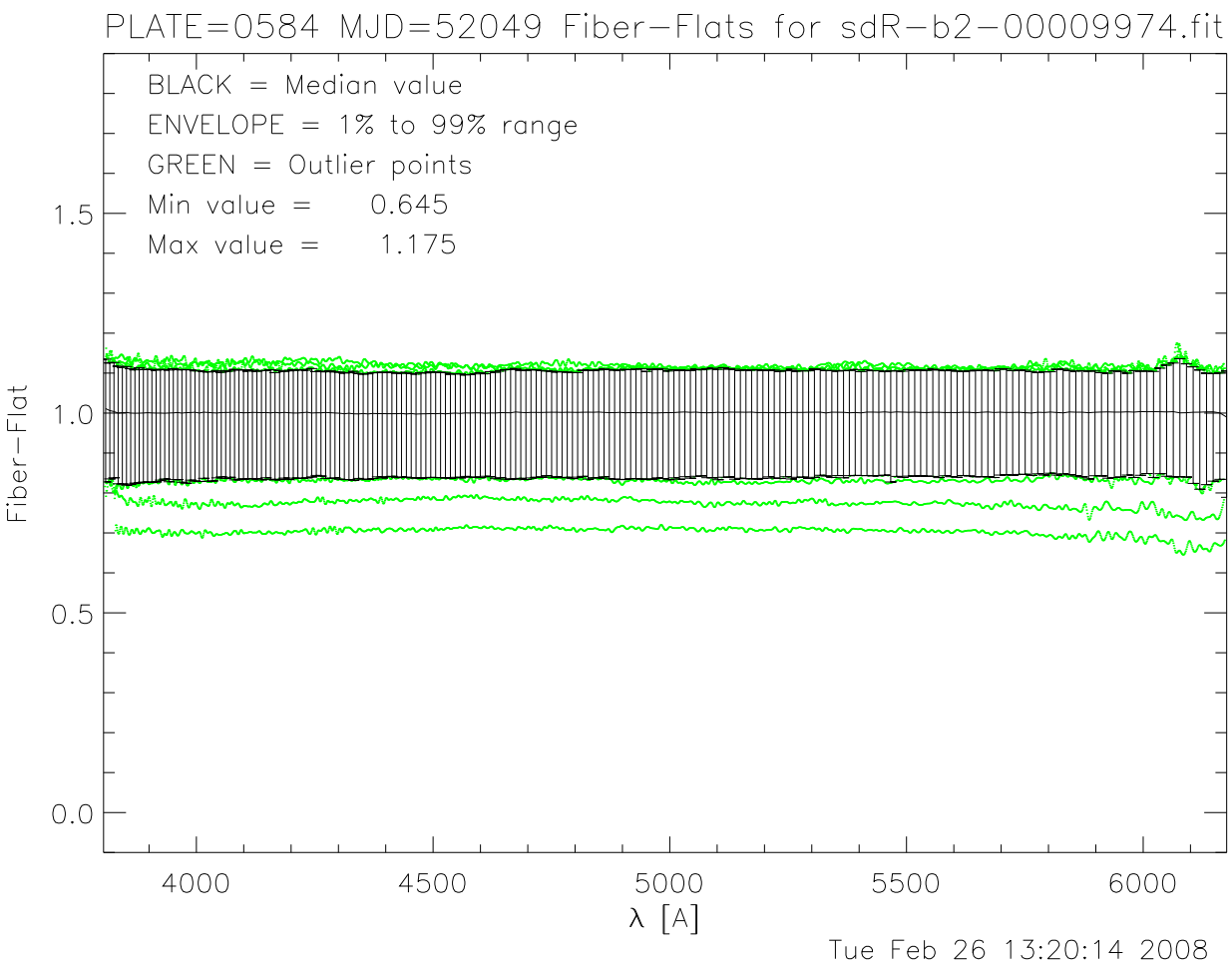

PLATE=0584 MJD=52049 sdR-b2-00009976.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

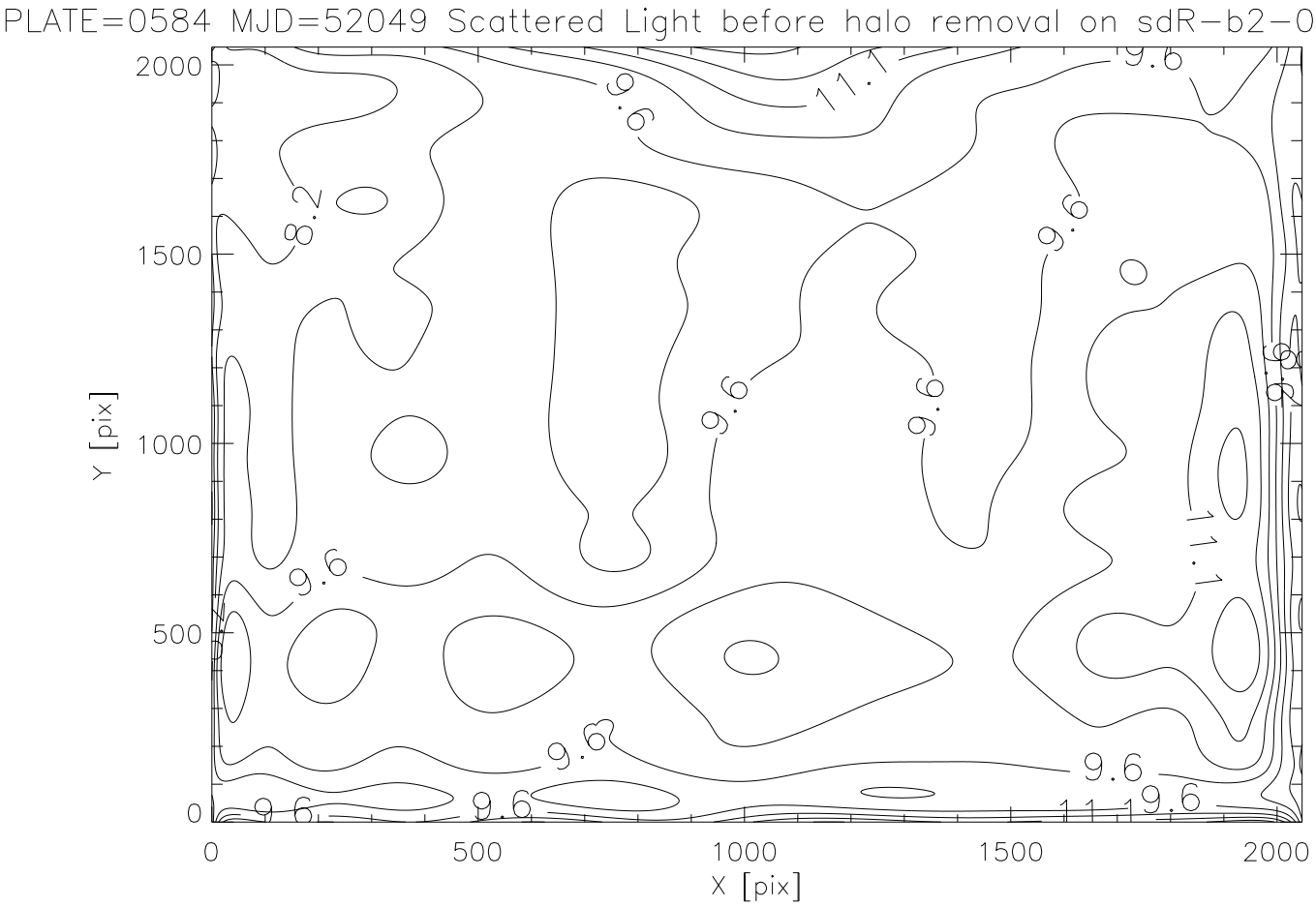

PLATE=0584 MJD=52049 sdR-b2-00009976.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

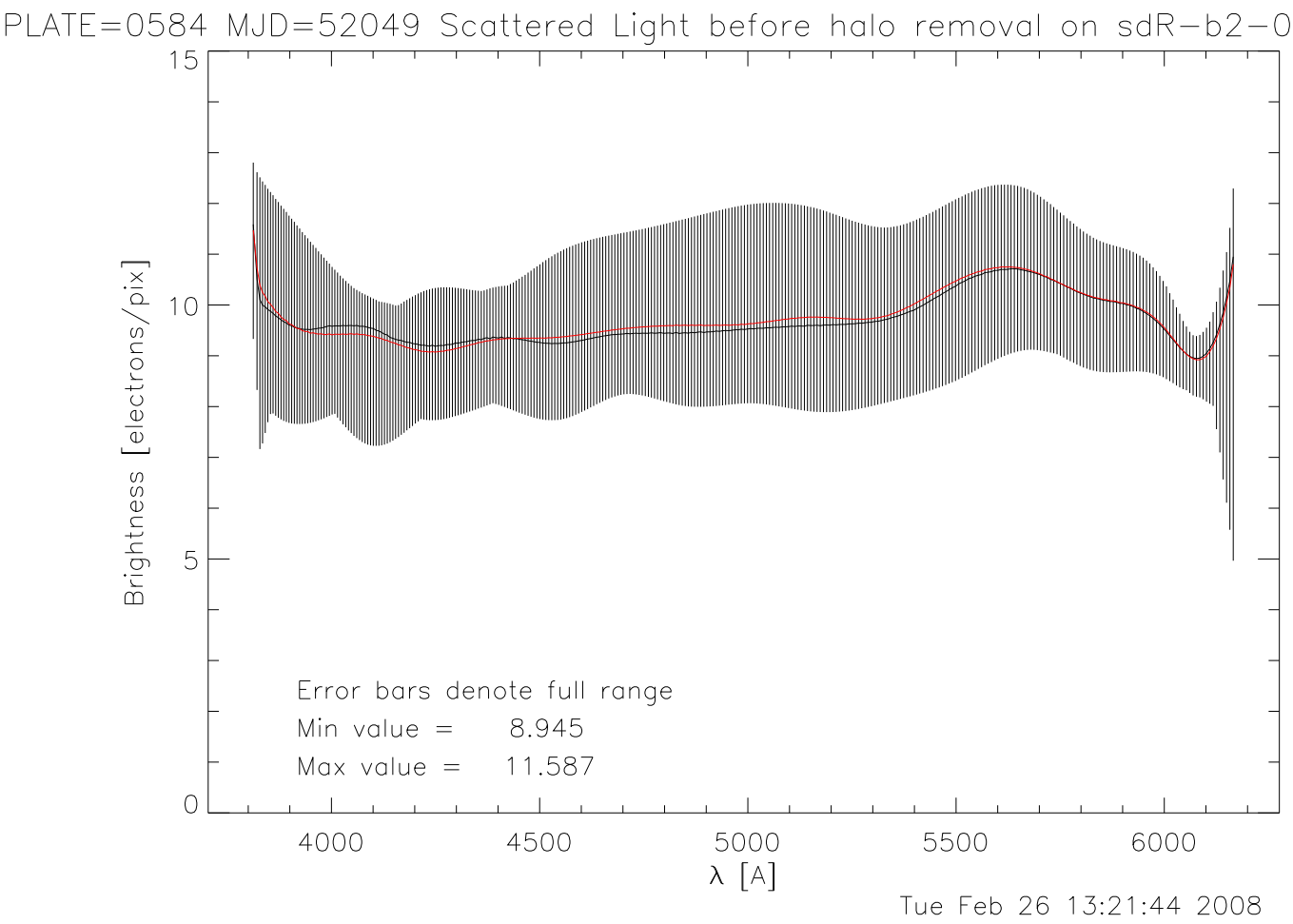

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009976.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

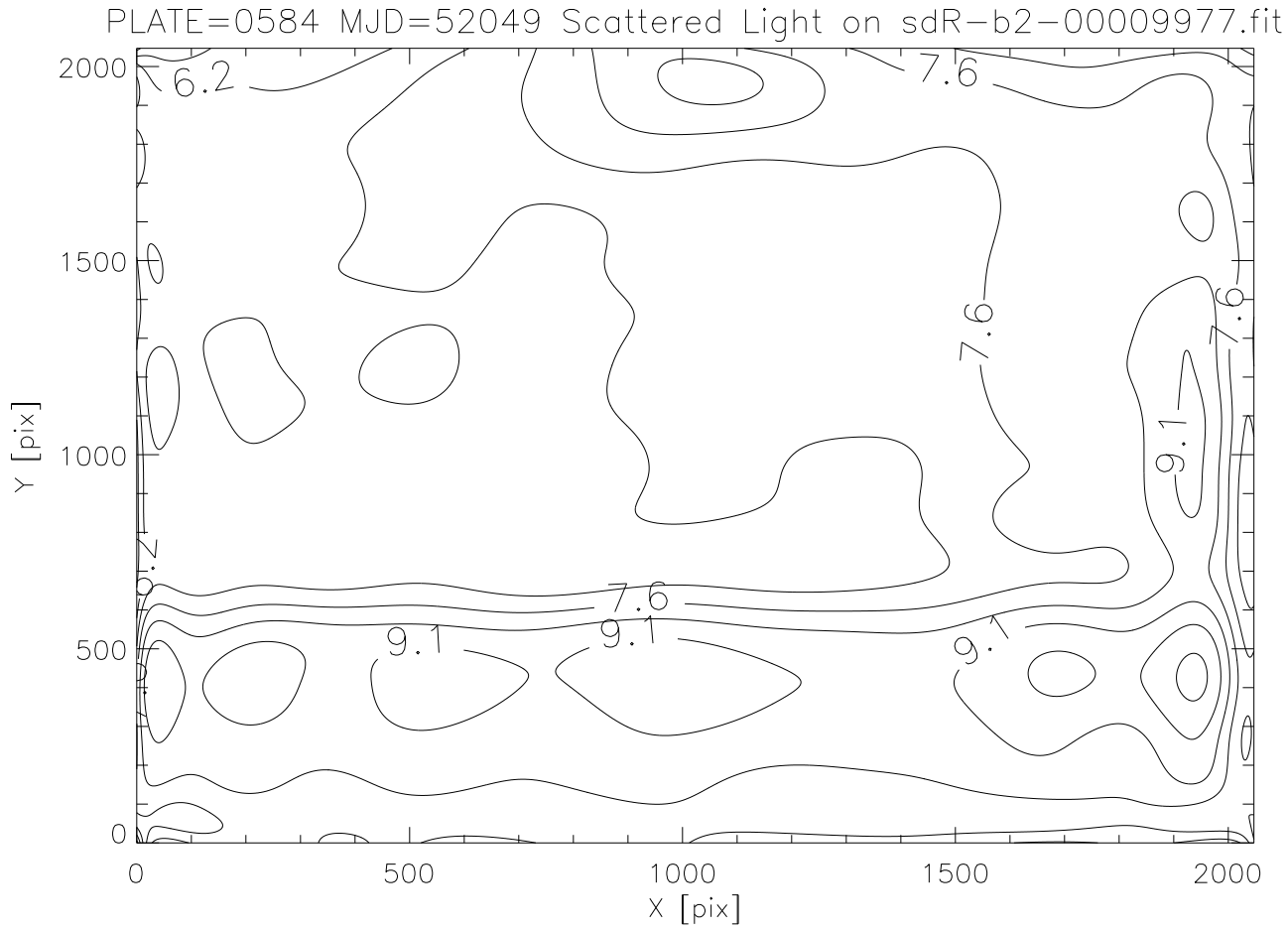

PLATE=0584 MJD=52049 sdR-b2-00009976.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.91 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

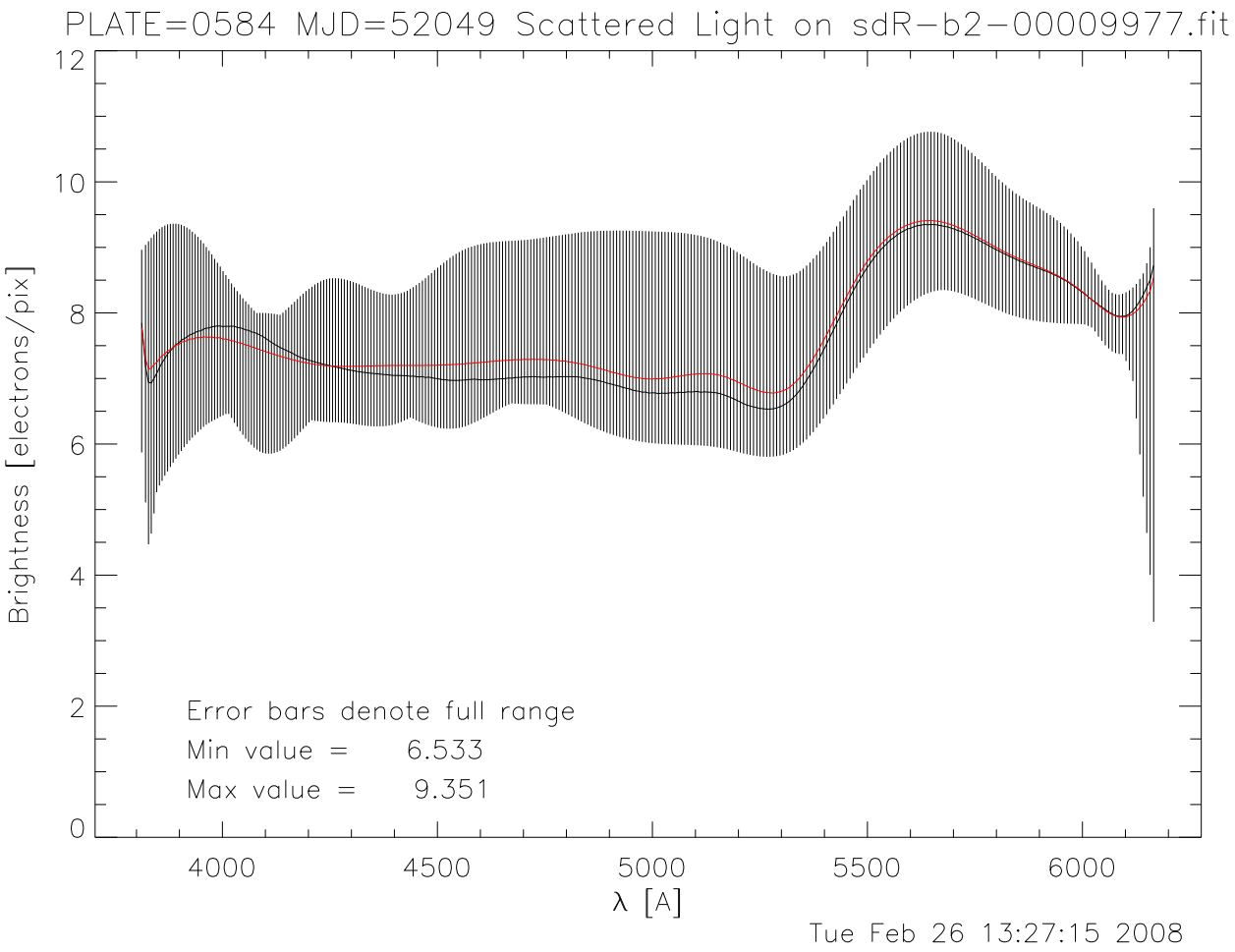

PLATE=0584 MJD=52049 sdR-b2-00009976.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 0.96 %
Fiber number
Focal Distance [mm]
Airmass

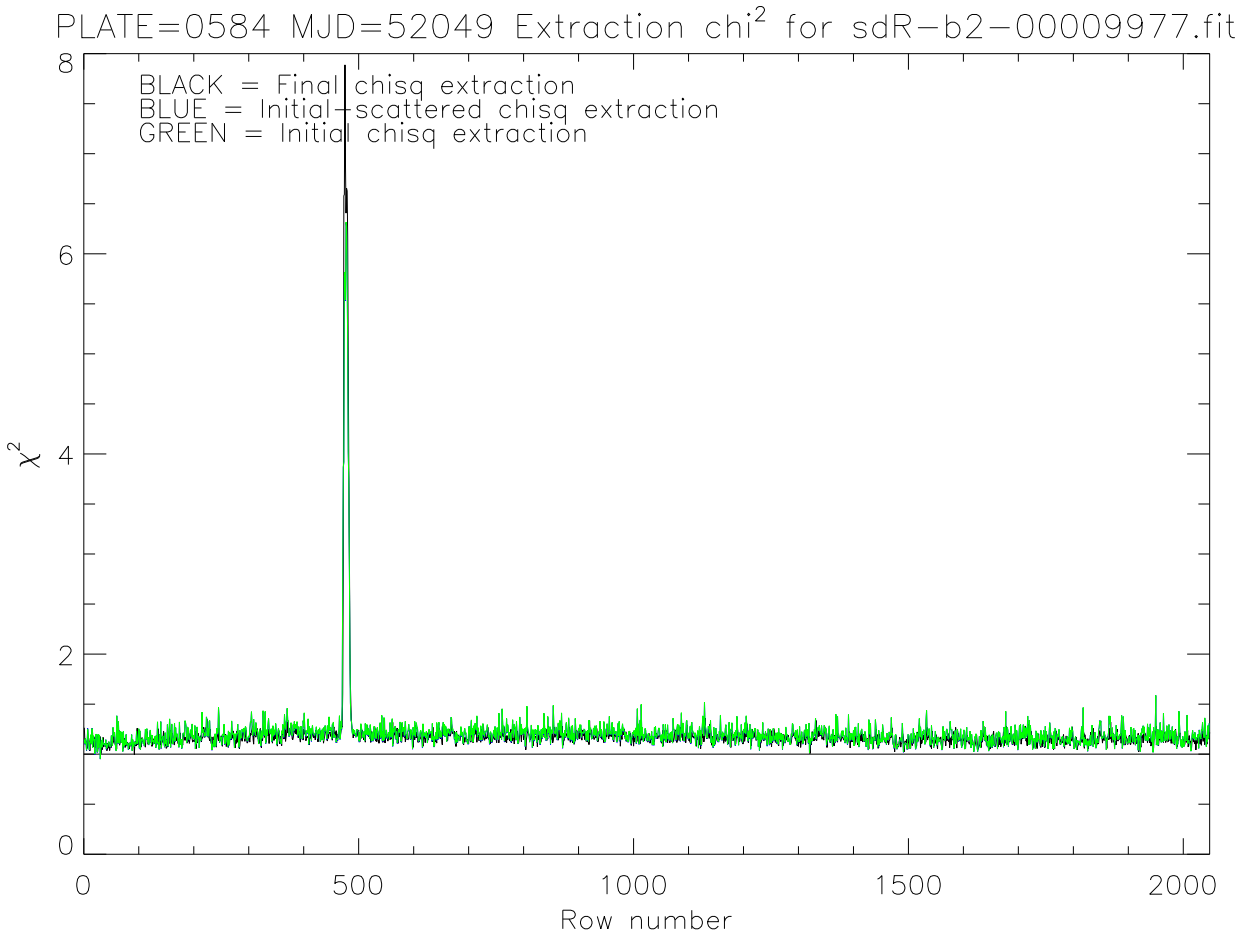

PLATE=0584 MJD=52049 Fiber−Flats for sdR−b2−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.645
Max value = 1.175
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:20:14 2008

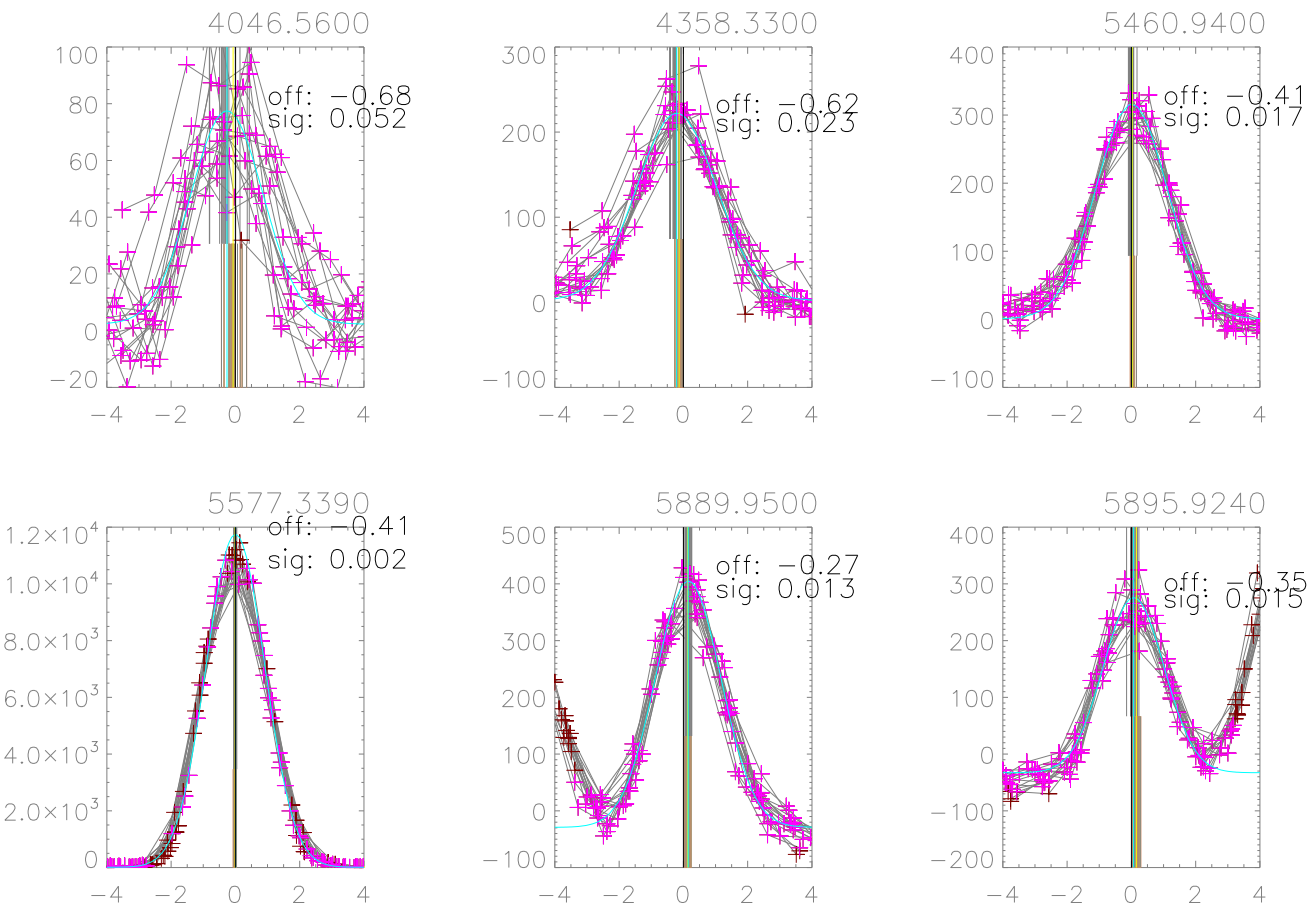

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR−b2−00009977.f
Y [pix]
X [pix]
0
500
1000
1500
2000
9.6
11.1
8.2

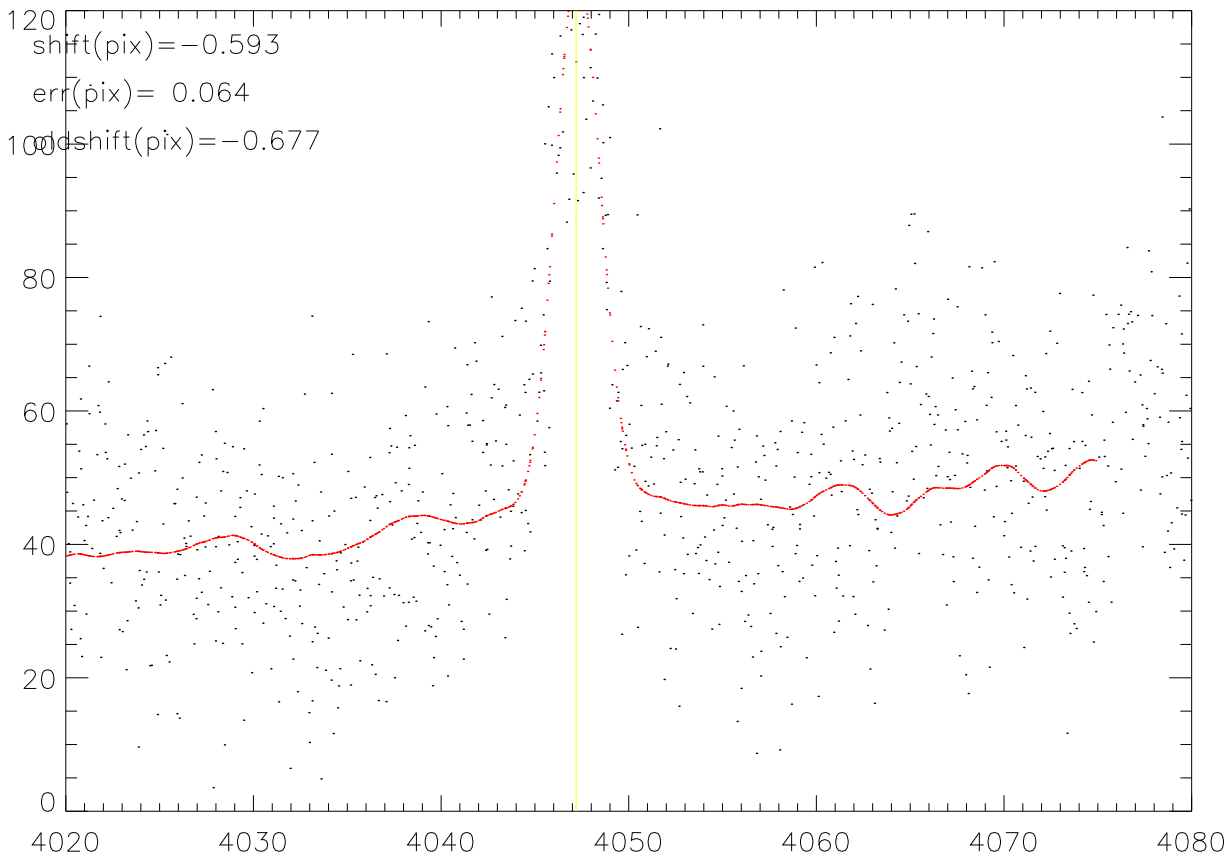

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b2-00009977.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.945
Max value = 11.587
Tue Feb 26 13:21:44 2008

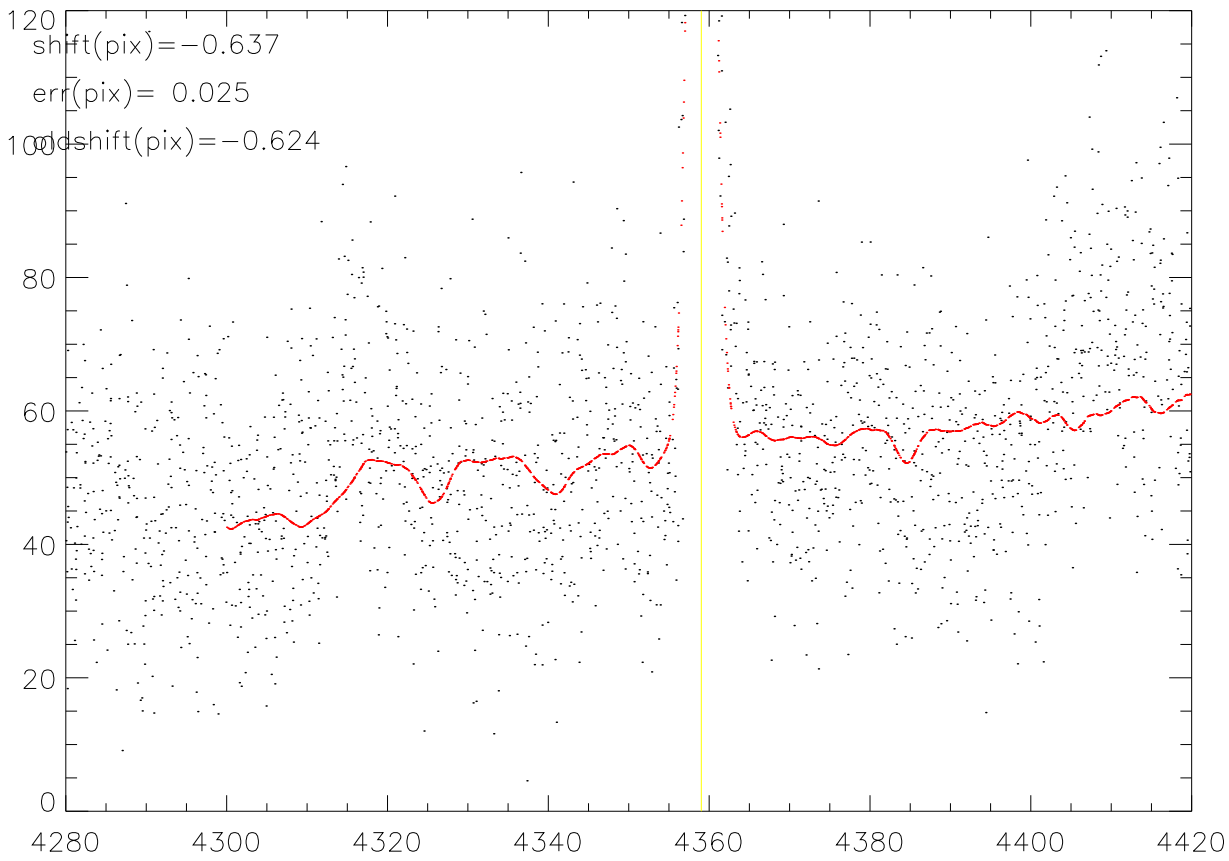

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009977.fit
6.2
7.6
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

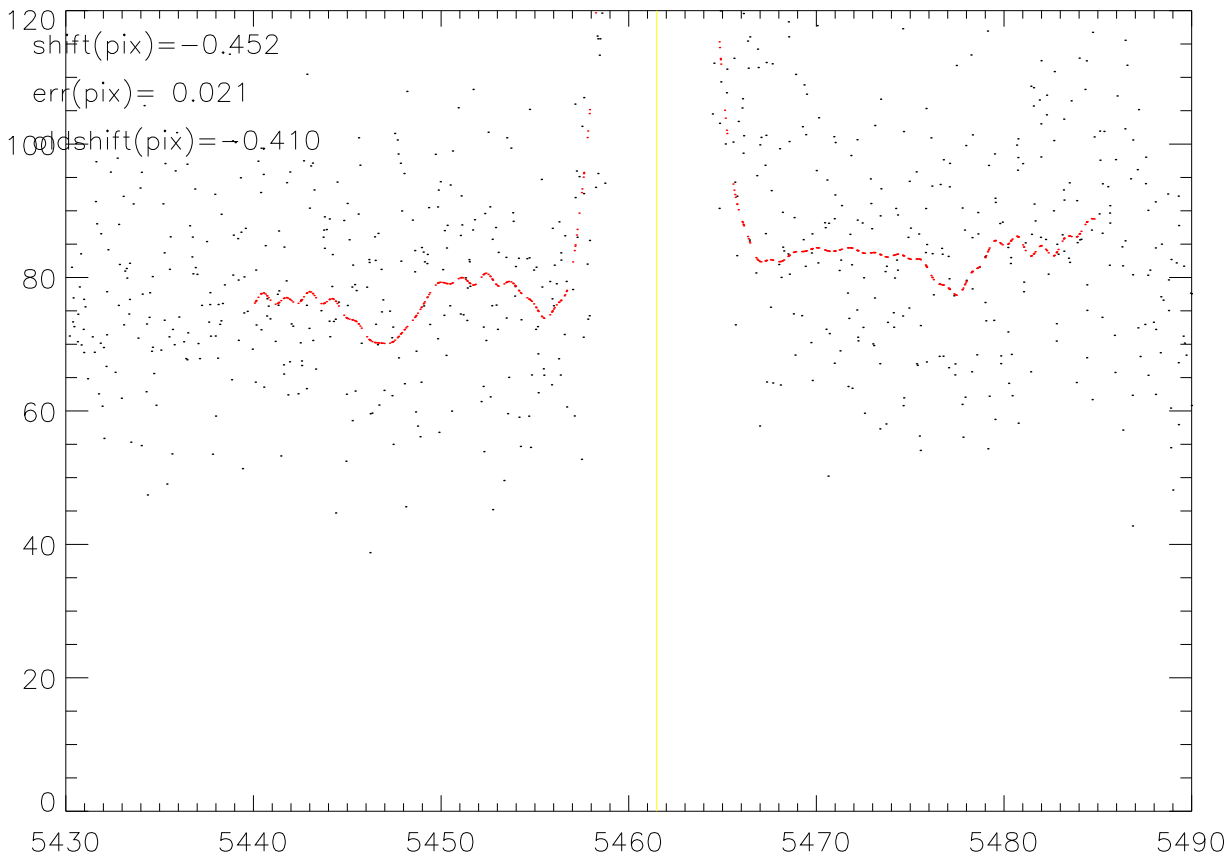

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009977.fit
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 6.533
Max value = 9.351
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:27:15 2008

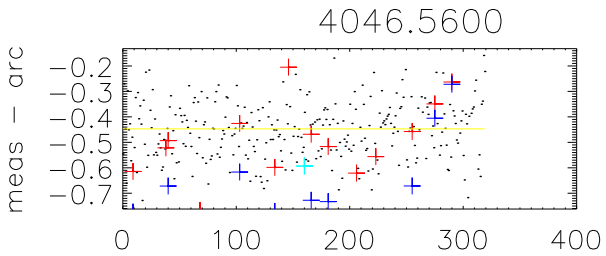

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-b2-00009977.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

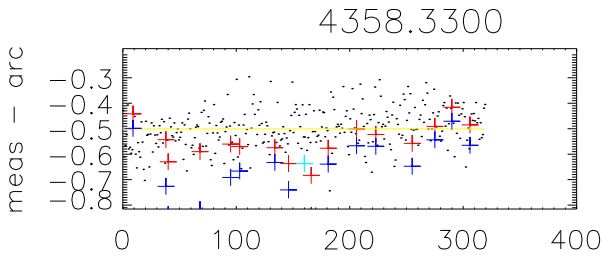

4046.5600
off: −0.68
sig: 0.052
4358.3300
off: −0.62
sig: 0.023
5460.9400
off: −0.41
sig: 0.017
5577.3390
off: −0.41
sig: 0.002
5889.9500
off: −0.27
sig: 0.013
5895.9240
off: −0.35
sig: 0.015

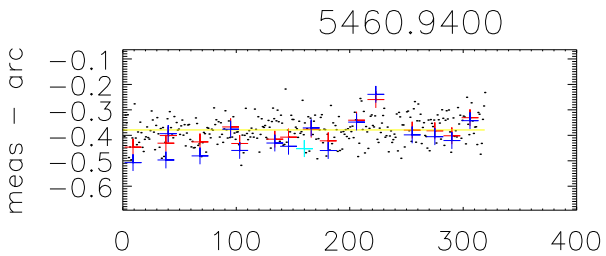

shift(pix)=−0.593
err(pix)= 0.064
oldshift(pix)=−0.677
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

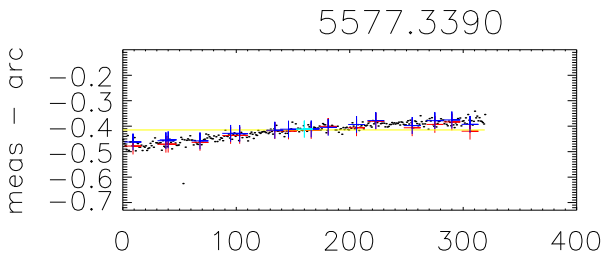

shift(pix)=−0.637
err(pix)= 0.025
oldshift(pix)=−0.624
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

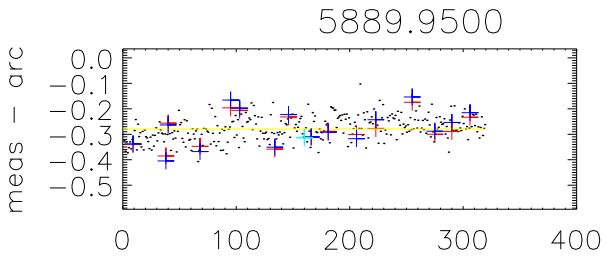

shift(pix)=−0.452
err(pix)= 0.021
oldshift(pix)=−0.410
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

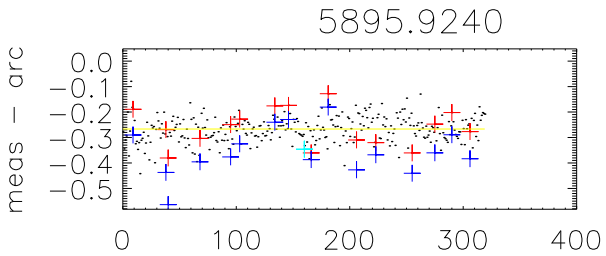

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

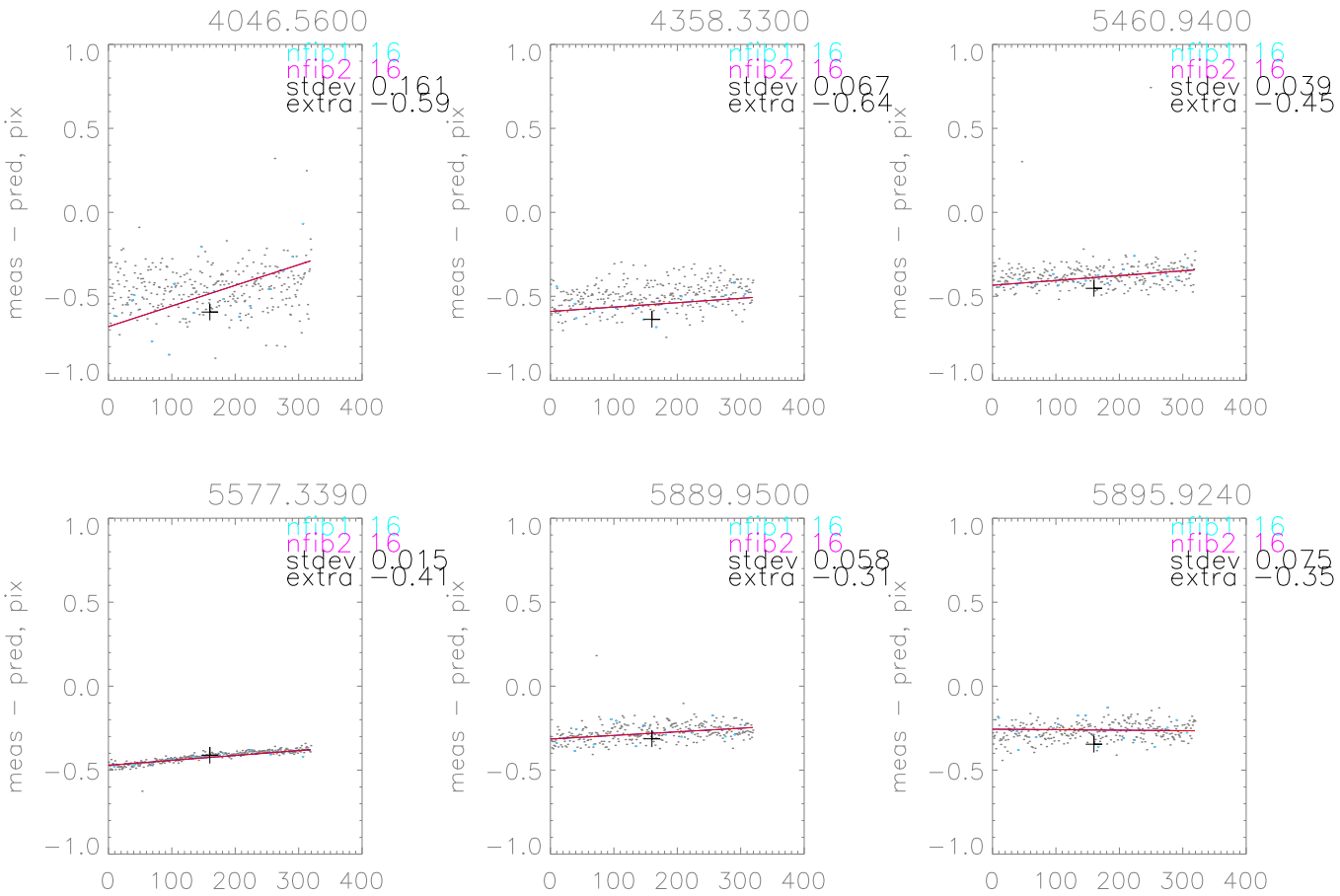

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

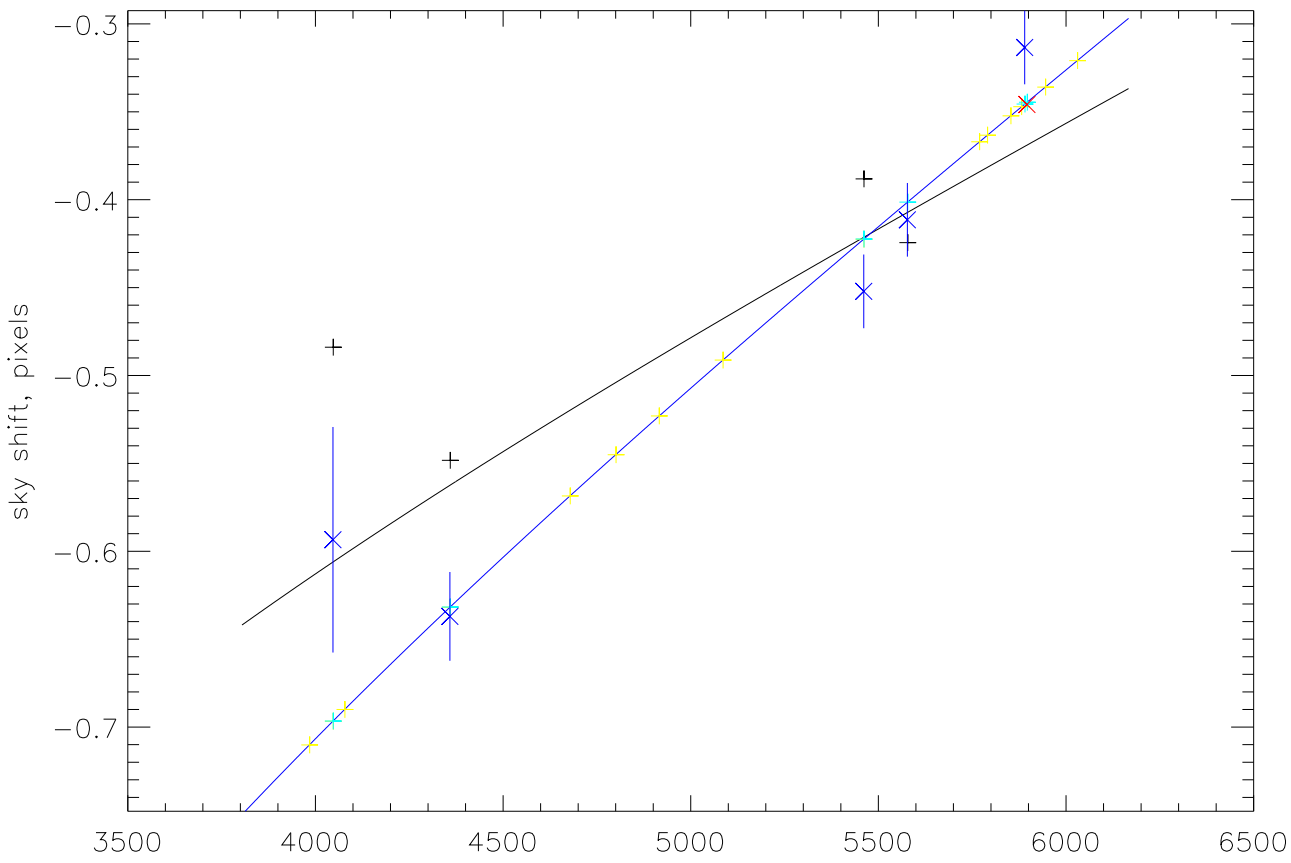

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

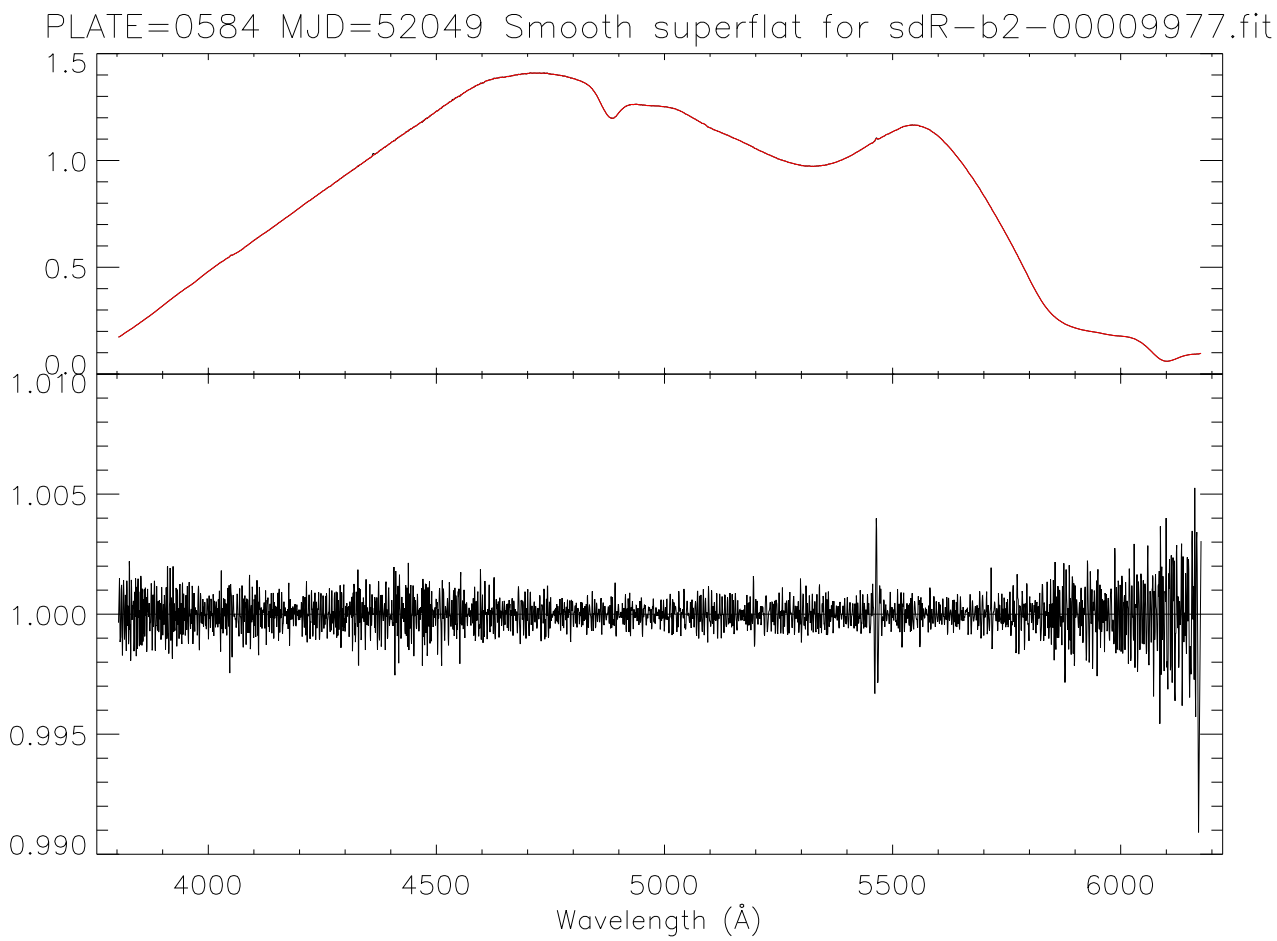

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

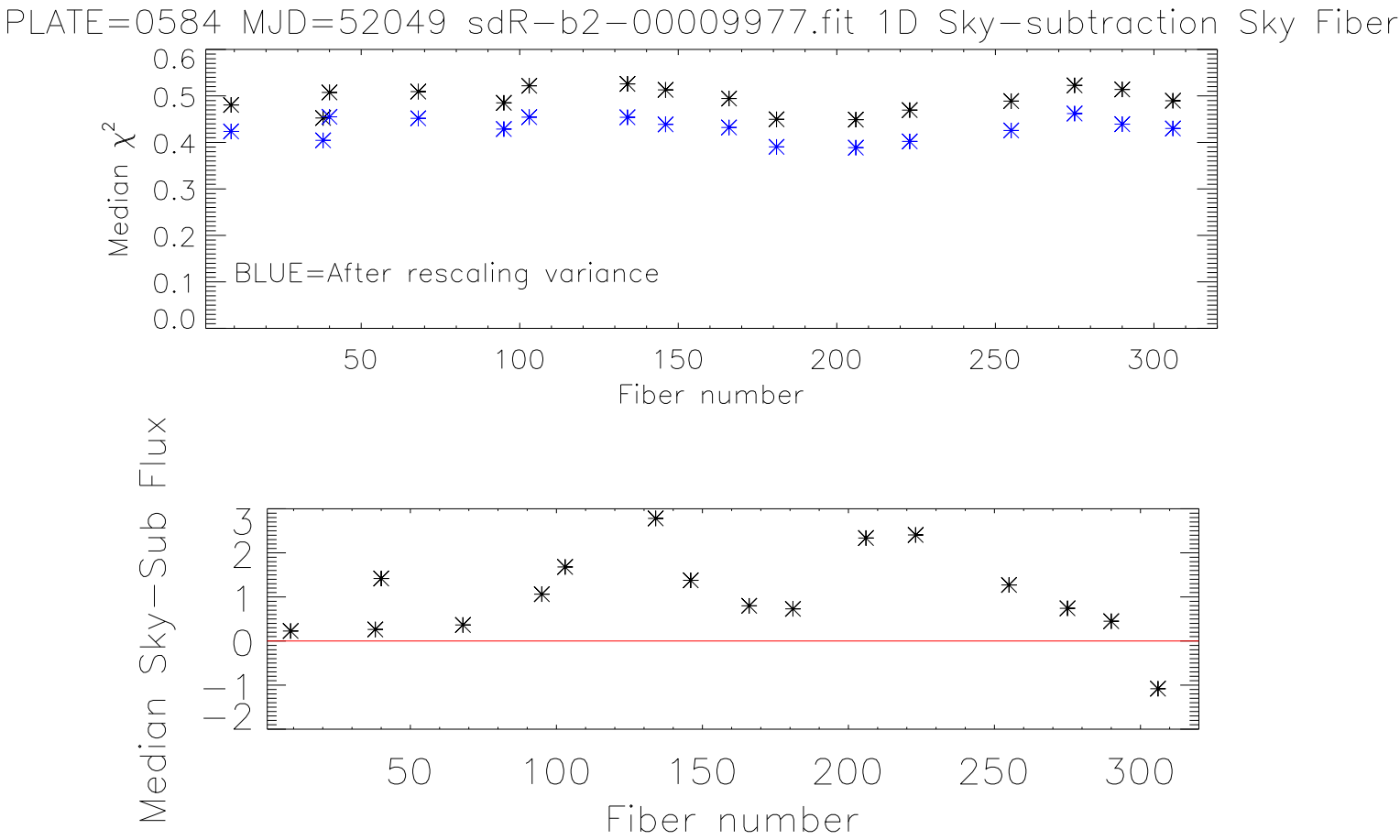

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

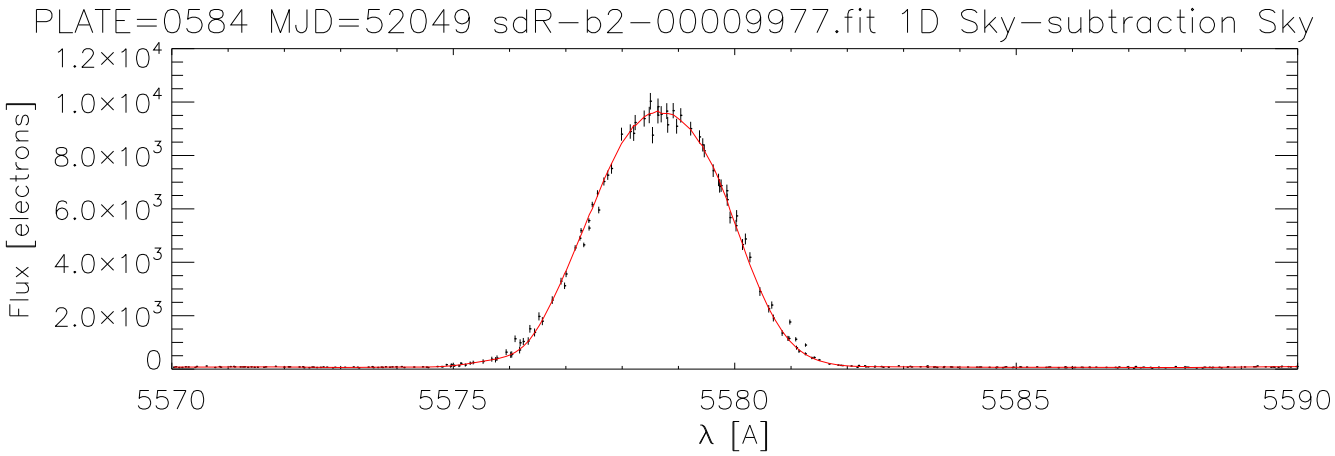

4046.5600
nfib1 16
nfib2 16
stdev 0.161
extra −0.59
4358.3300
nfib1 16
nfib2 16
stdev 0.067
extra −0.64
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.45
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.41
5889.9500
nfib1 16
nfib2 16
stdev 0.058
extra −0.31
5895.9240
nfib1 16
nfib2 16
stdev 0.075
extra −0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

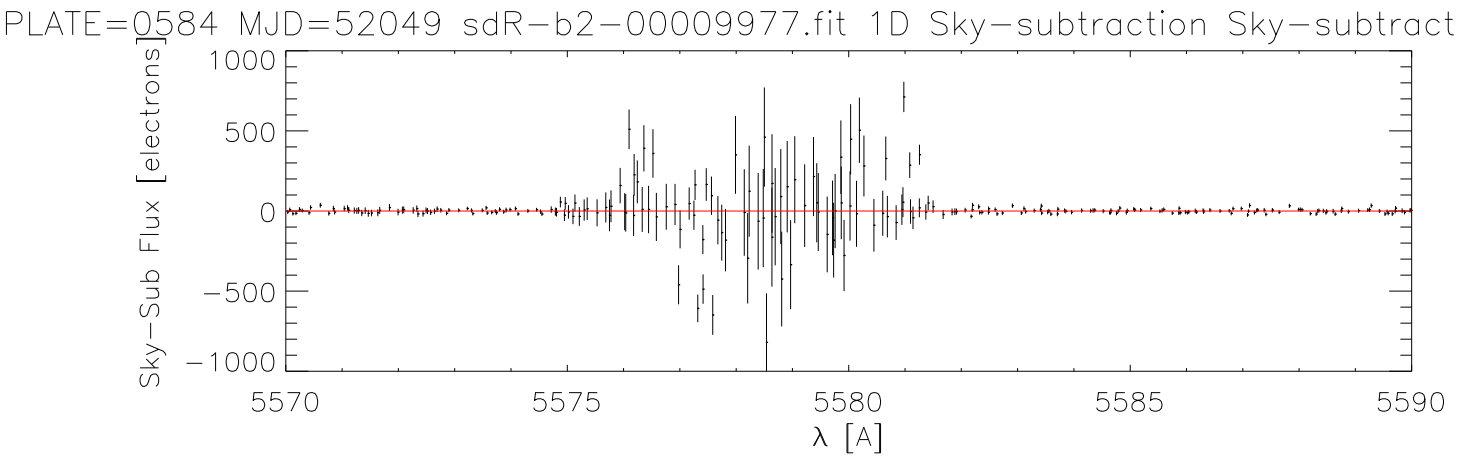

−0.3
−0.4
−0.5
−0.6
−0.7
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

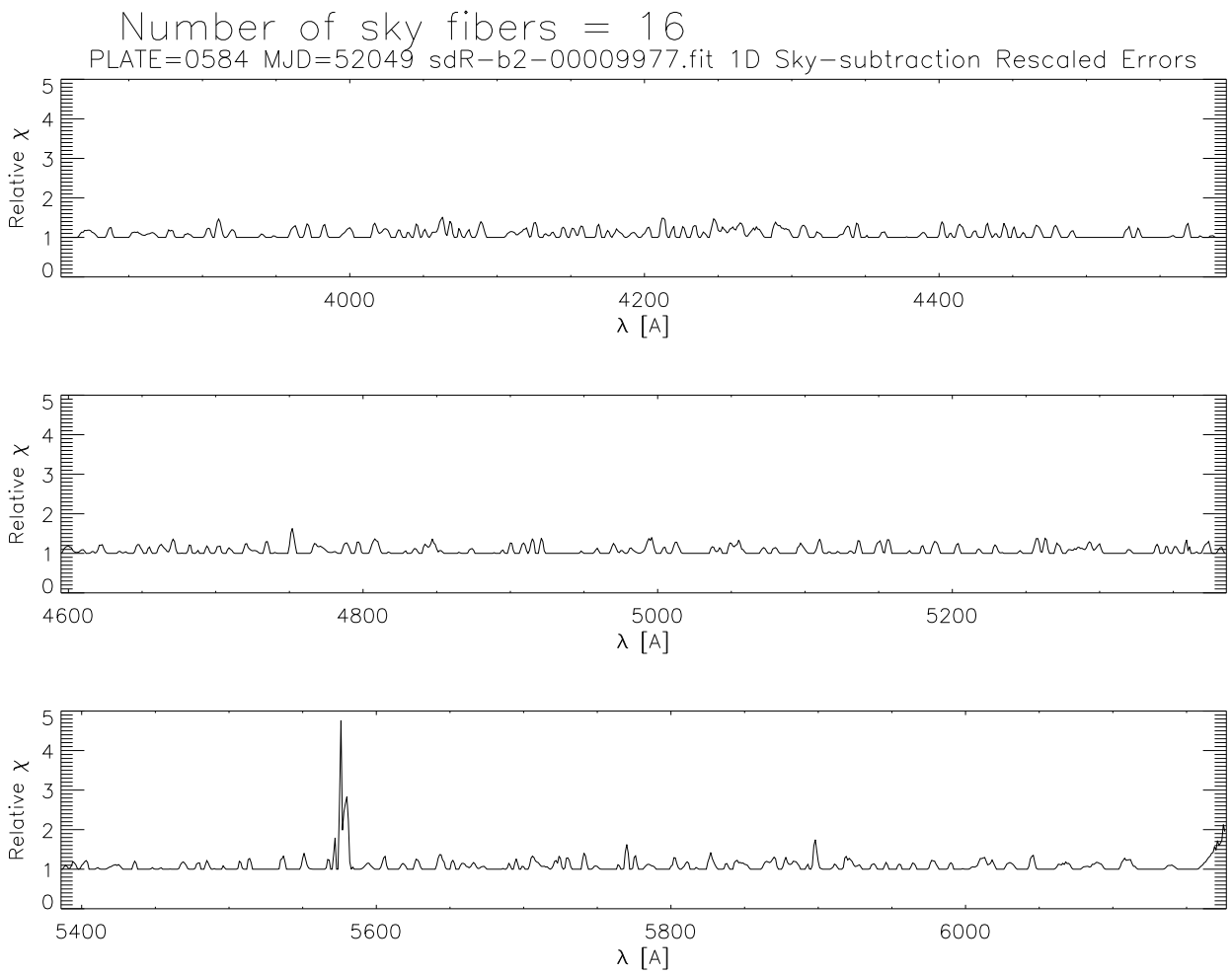
es= 0.0000

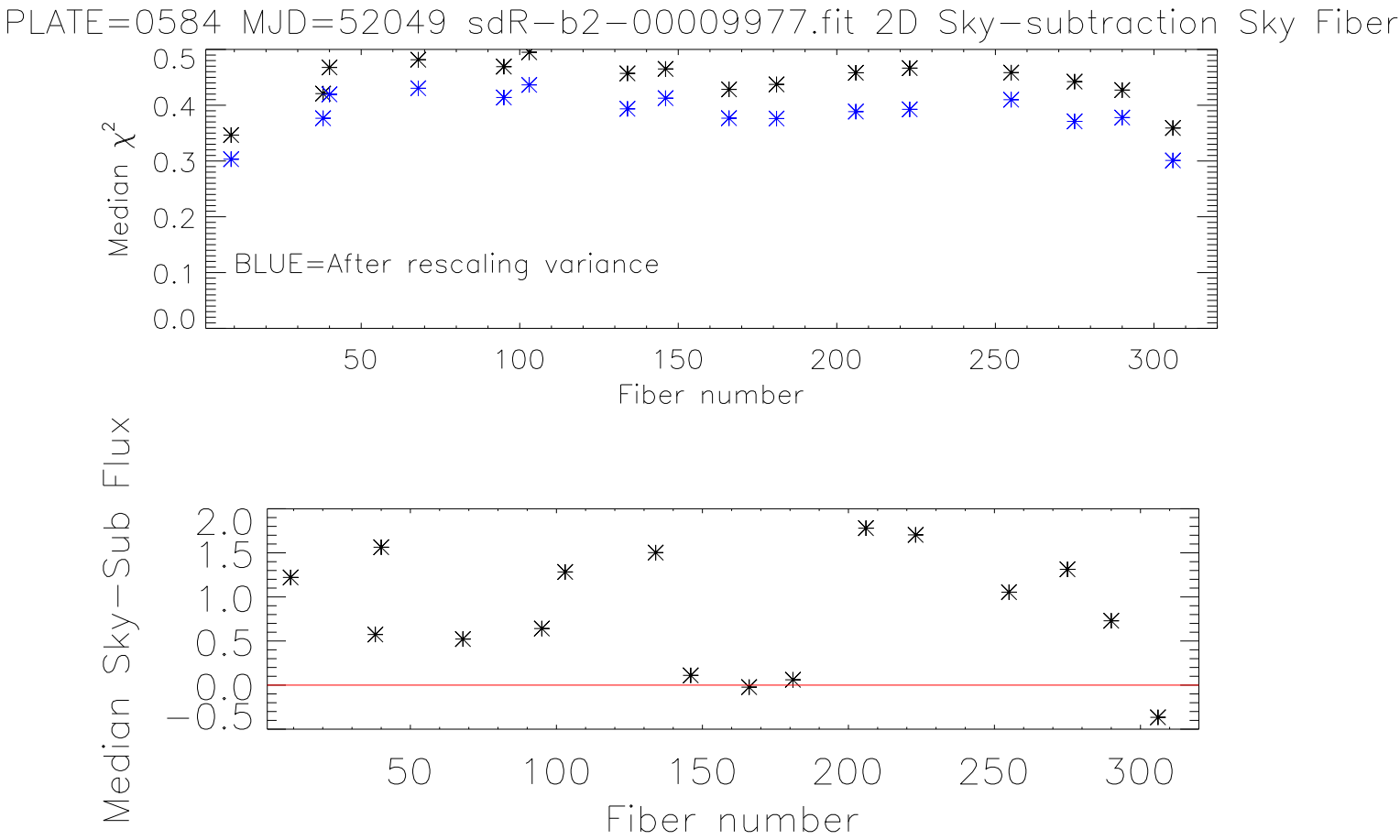

PLATE=0584 MJD=52049 Smooth superflat for sdR-b2-00009977.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

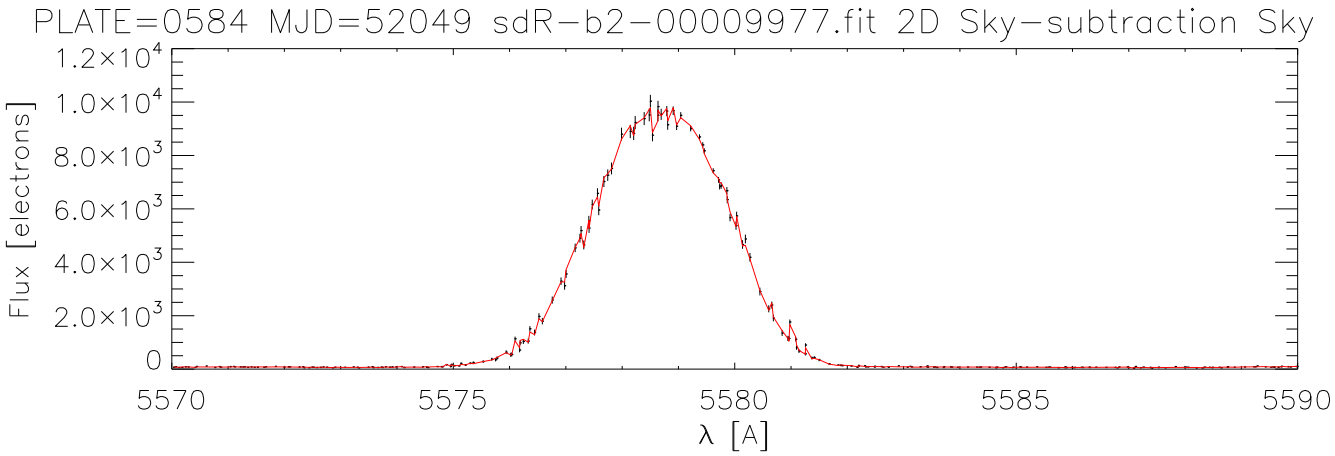

PLATE=0584 MJD=52049 sdR-b2-00009977.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

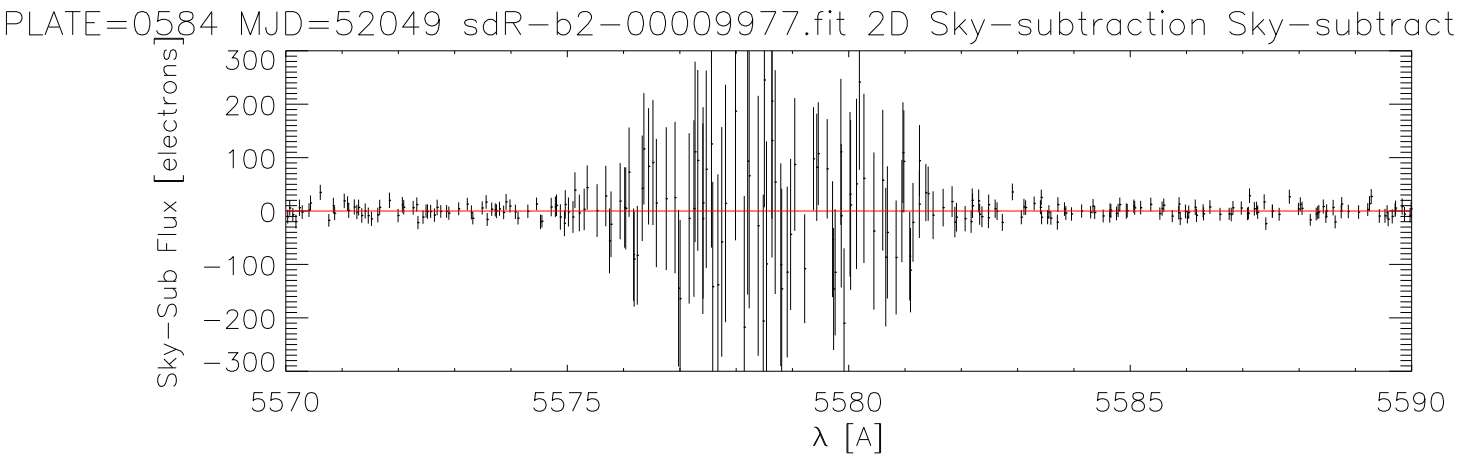

PLATE=0584 MJD=52049 sdR-b2-00009977.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

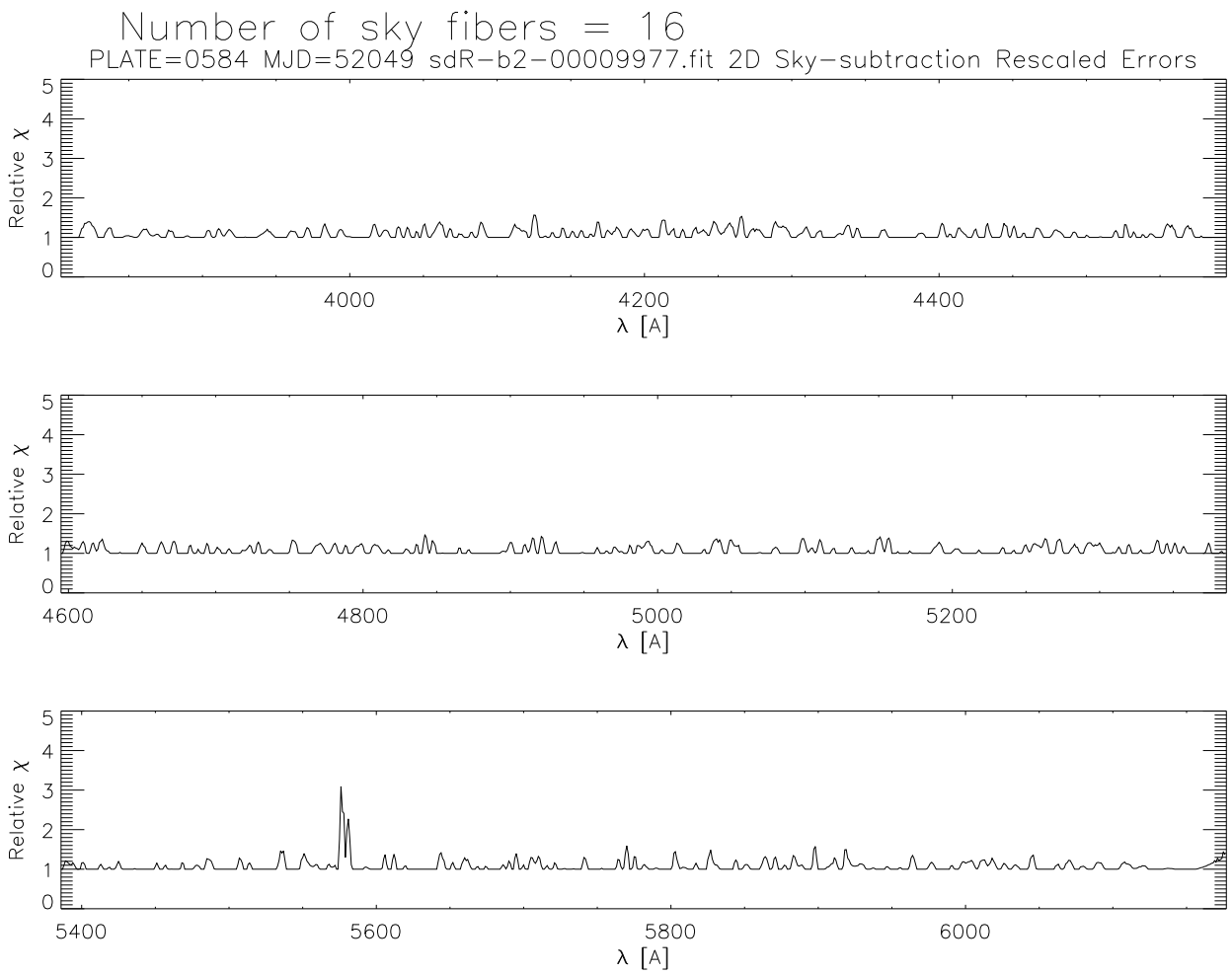

PLATE=0584 MJD=52049 sdR-b2-00009977.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

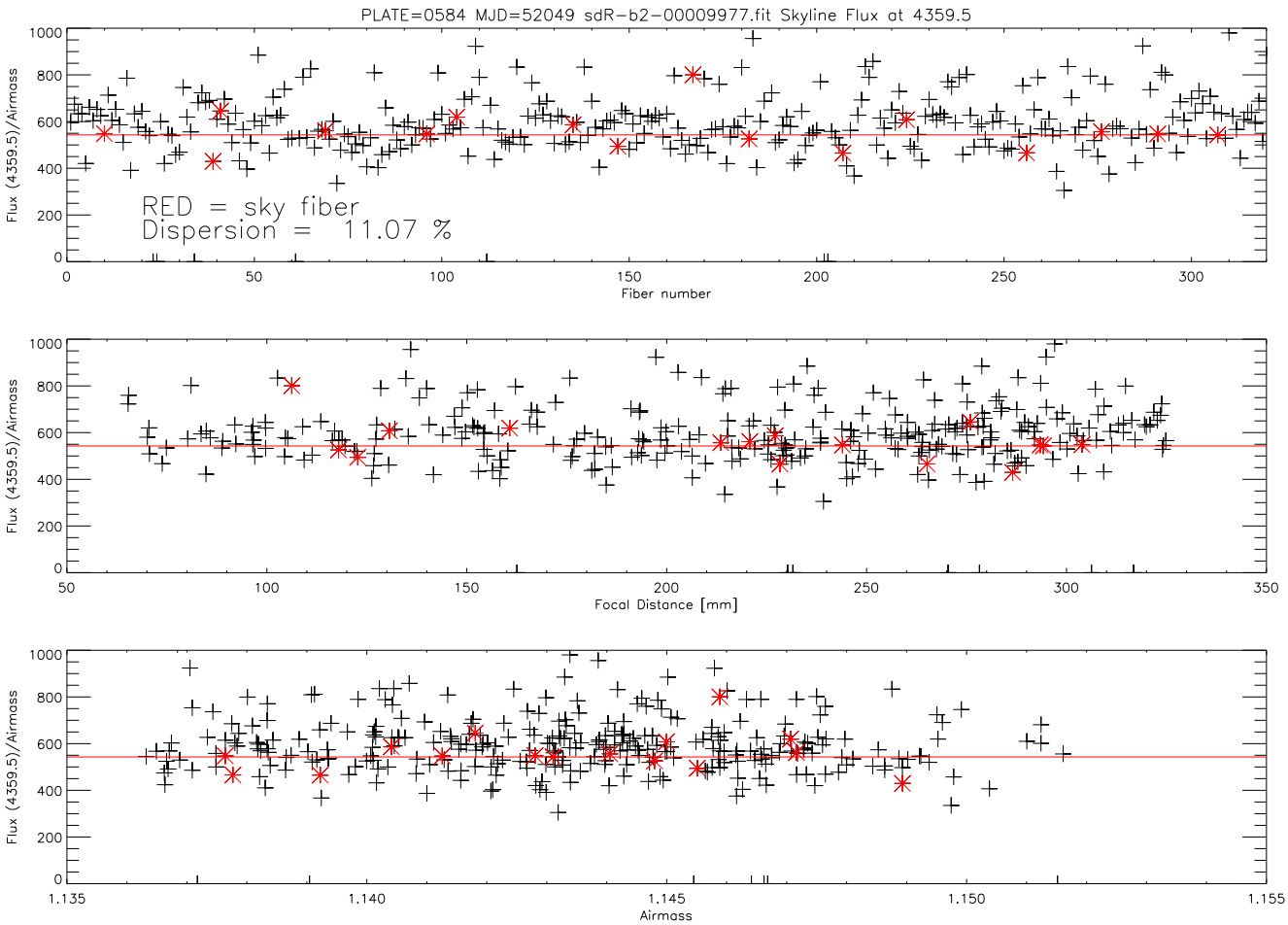

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009977.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

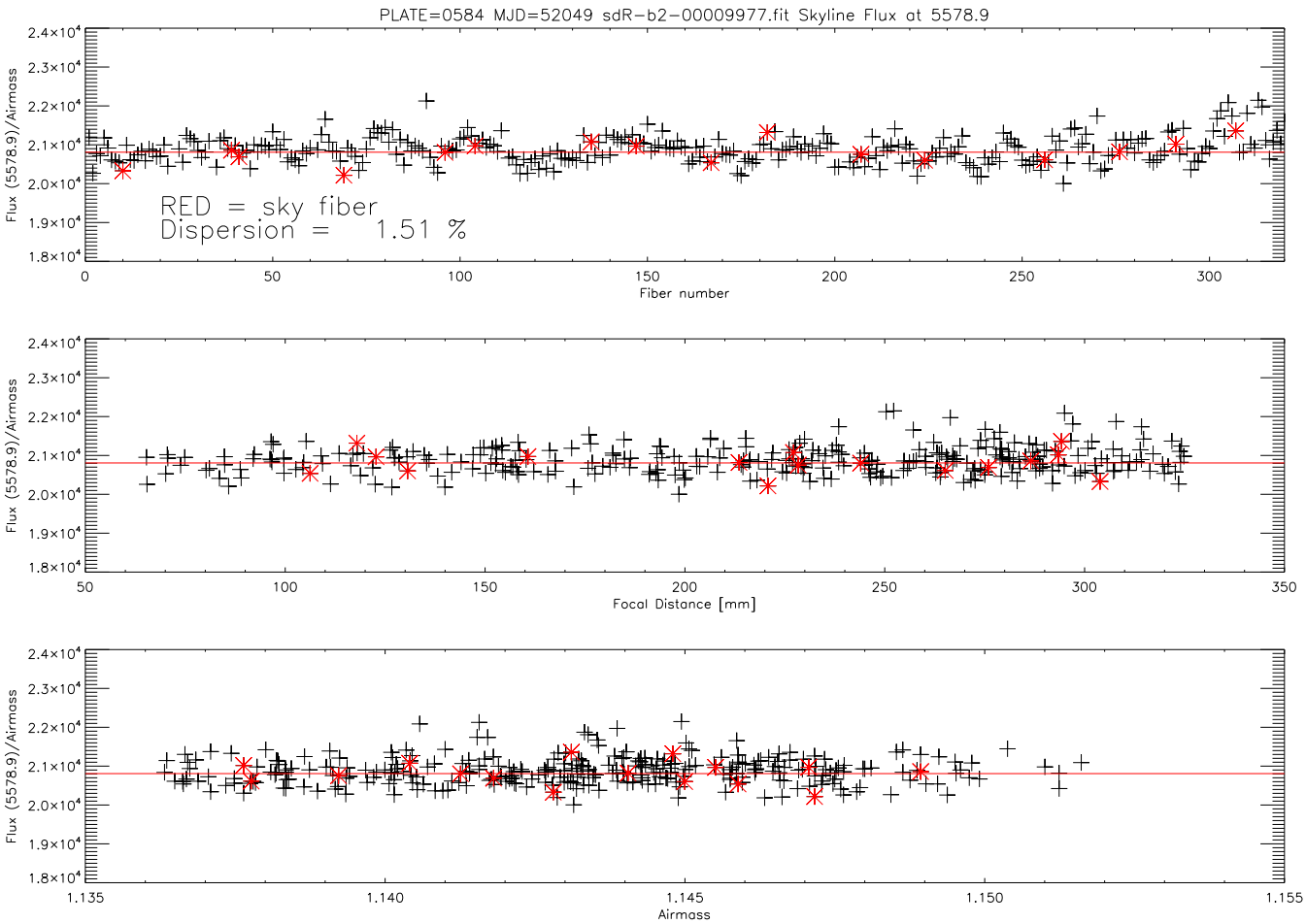

PLATE=0584 MJD=52049 sdR-b2-00009977.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

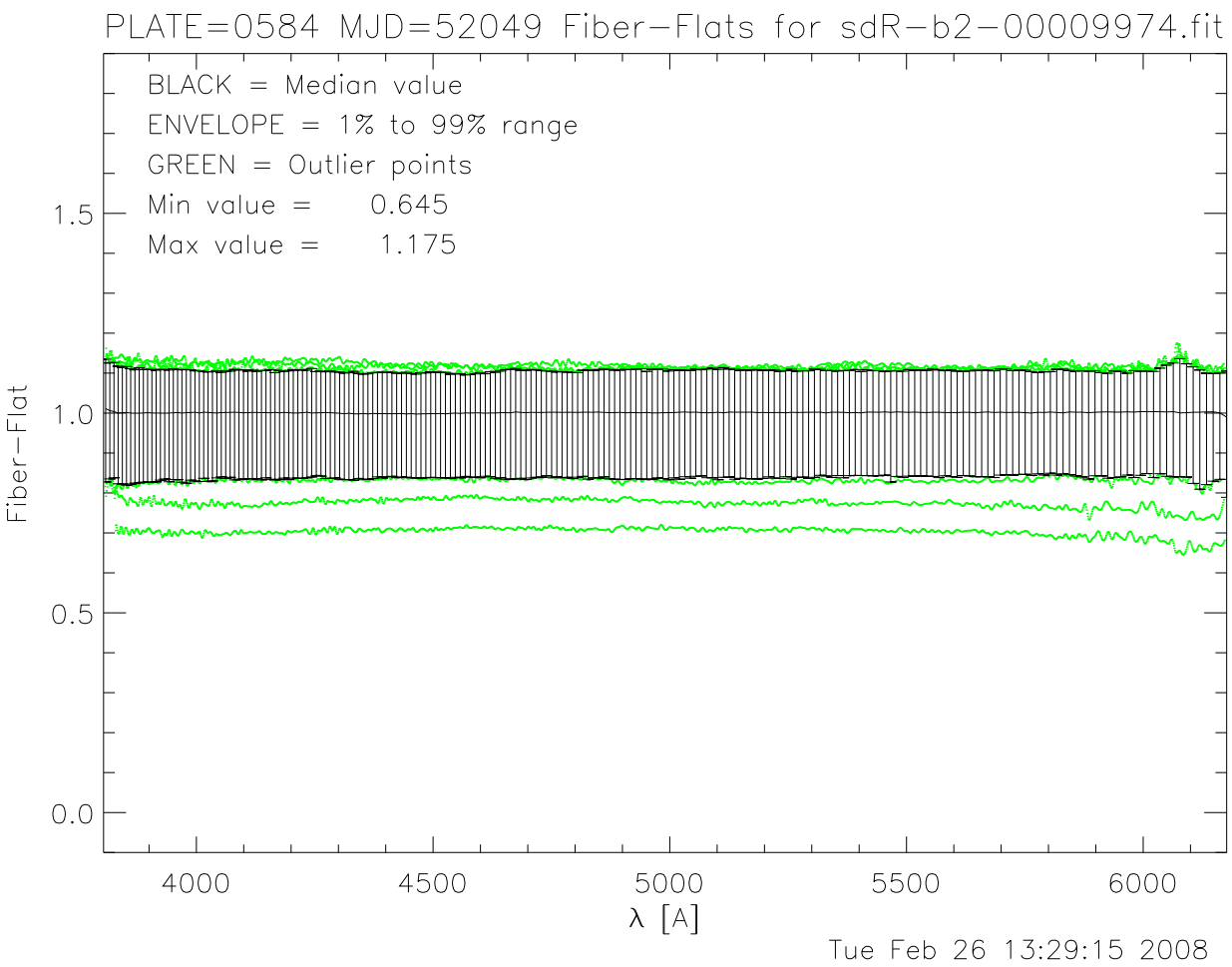

PLATE=0584 MJD=52049 sdR-b2-00009977.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

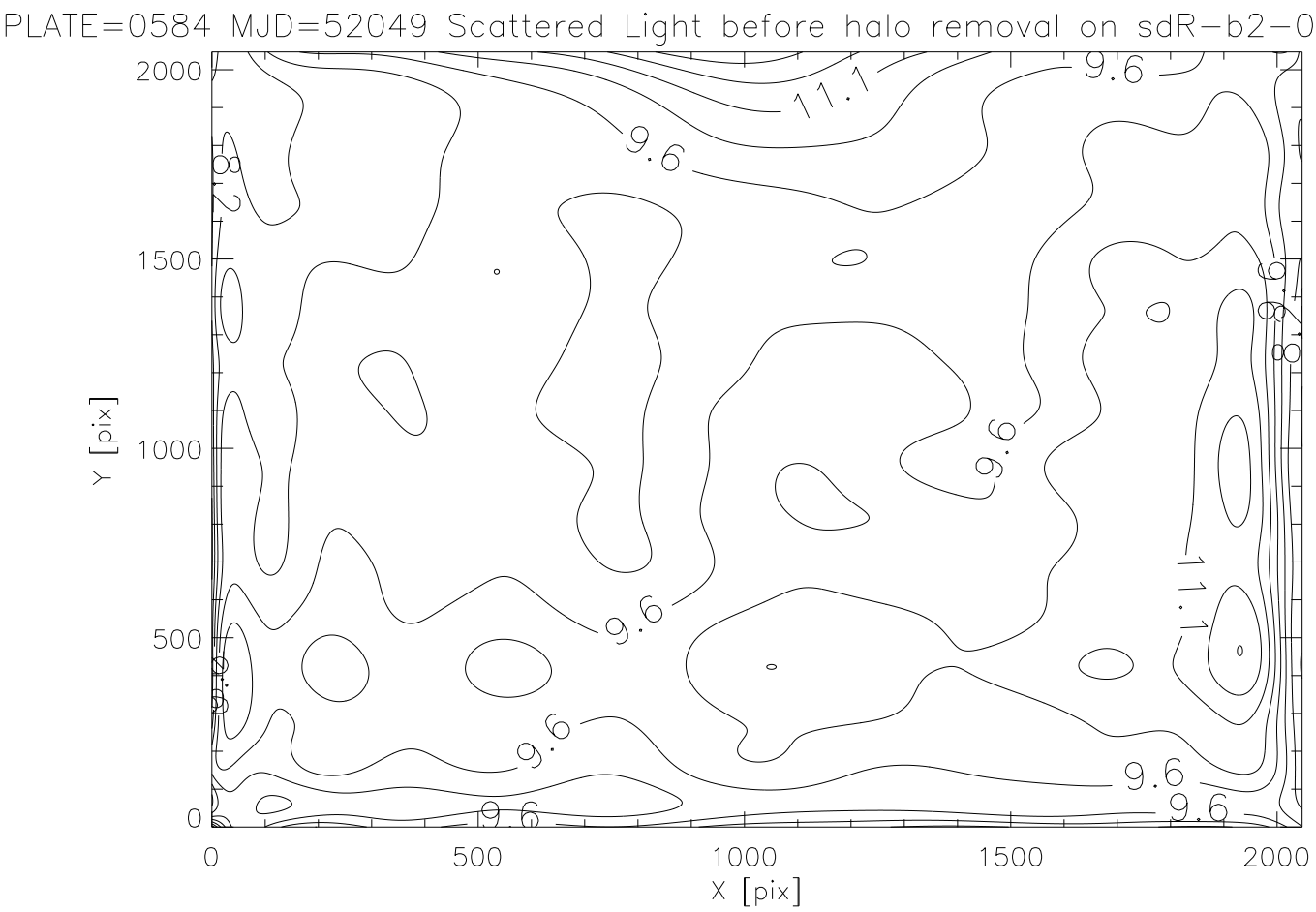

PLATE=0584 MJD=52049 sdR-b2-00009977.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

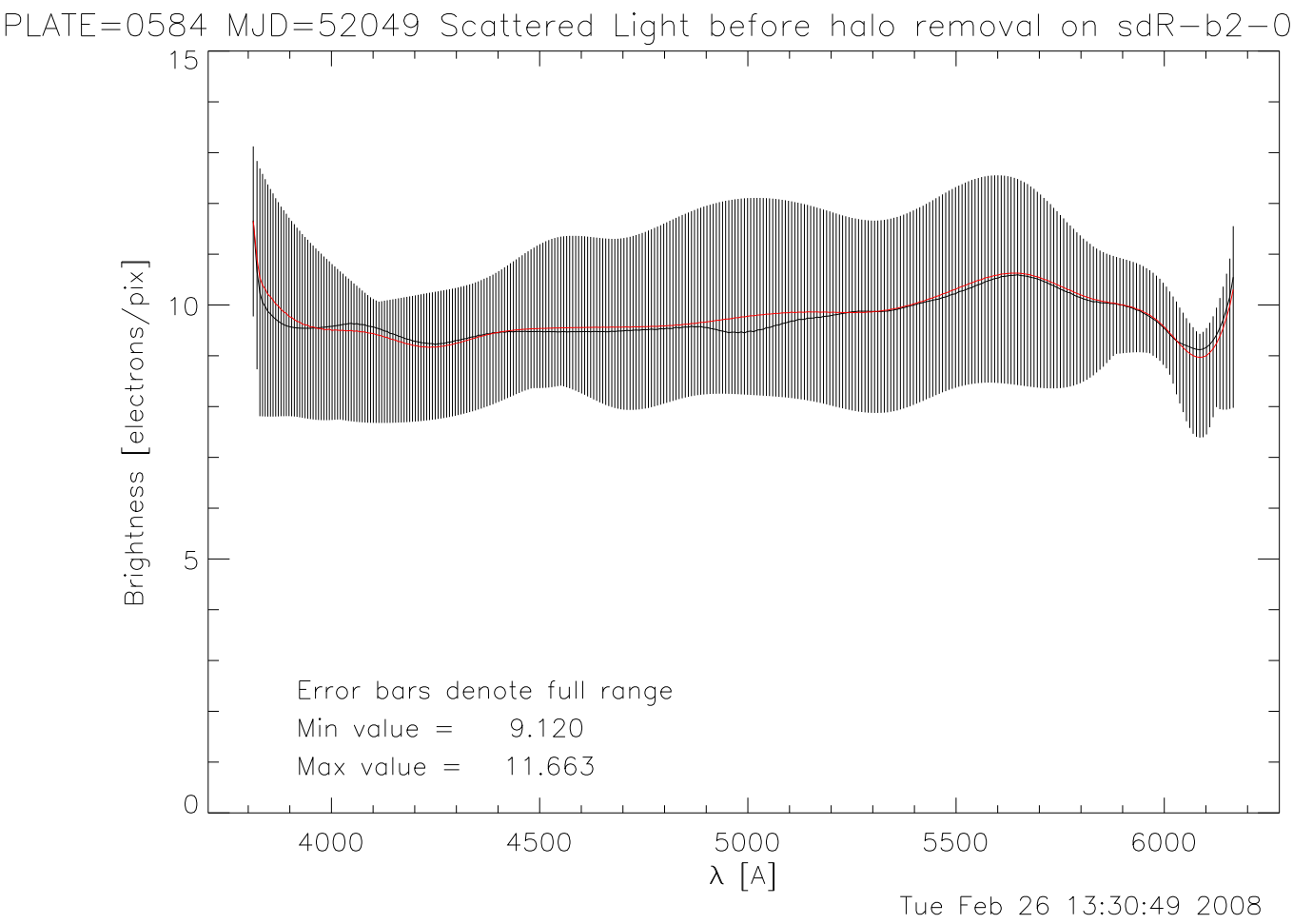

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009977.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

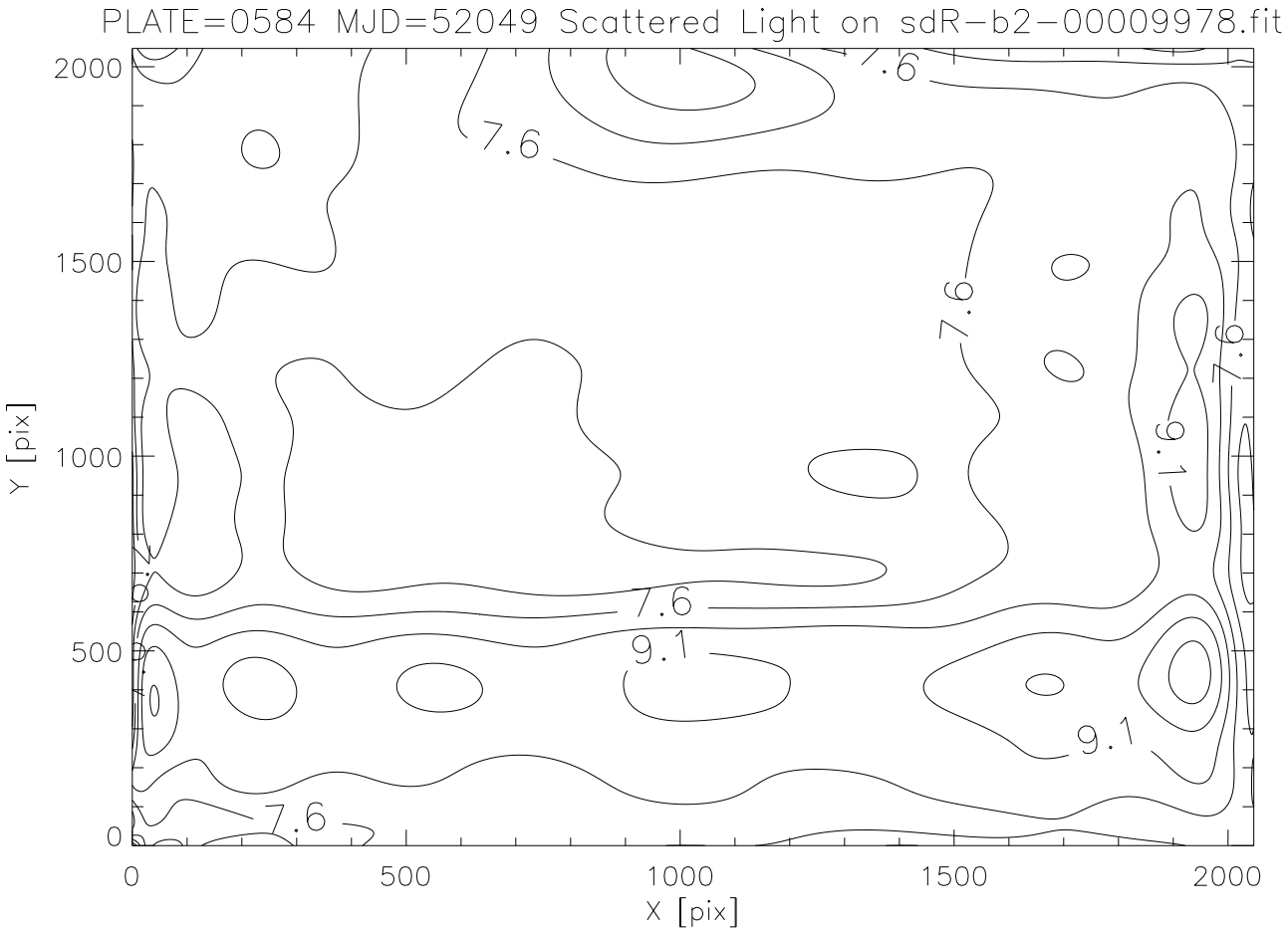

PLATE=0584 MJD=52049 sdR-b2-00009977.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.07 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

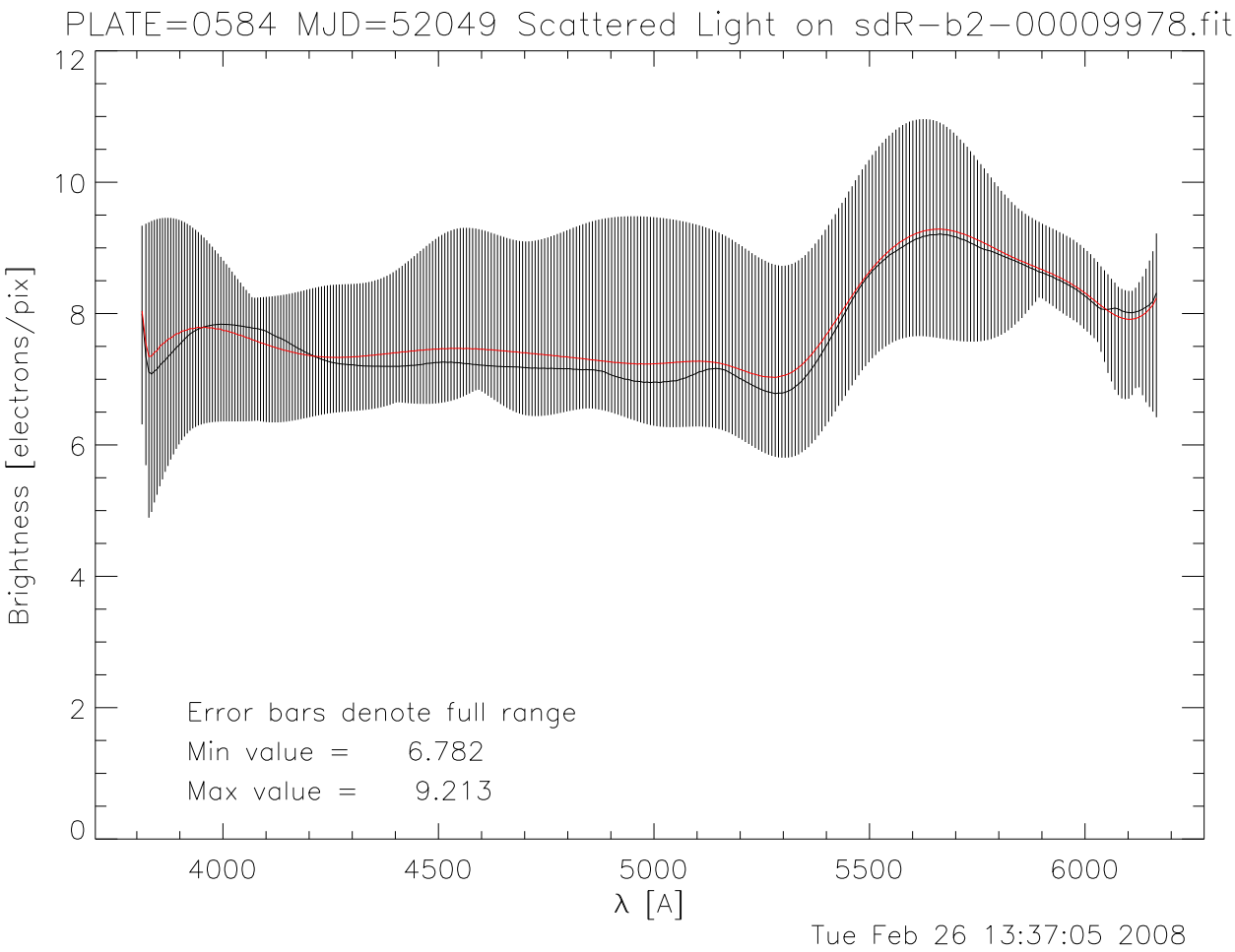

PLATE=0584 MJD=52049 sdR-b2-00009977.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.51 %
Fiber number
Focal Distance [mm]
Airmass

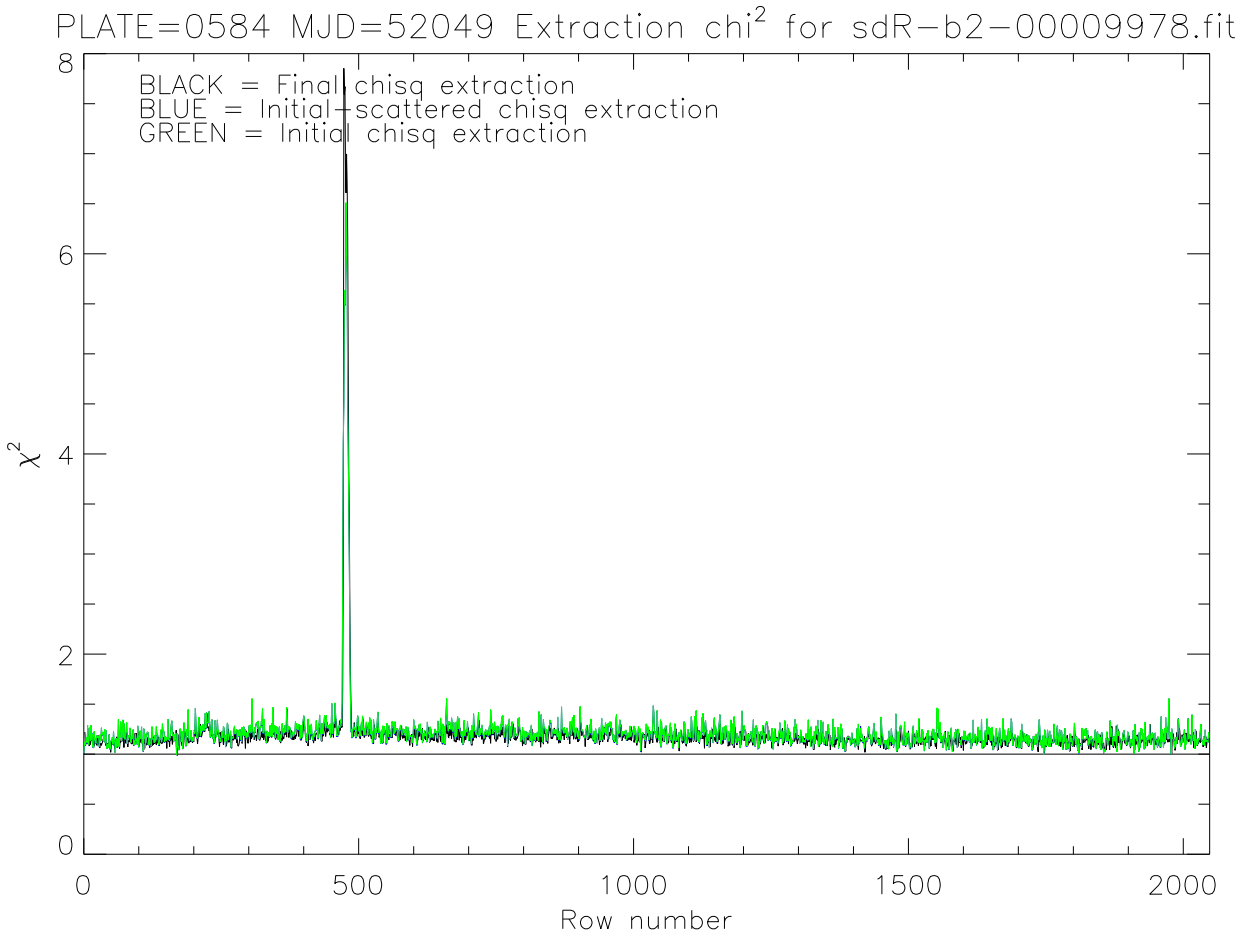

PLATE=0584 MJD=52049 Fiber-Flats for sdR-b2-00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.645
Max value = 1.175
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:29:15 2008

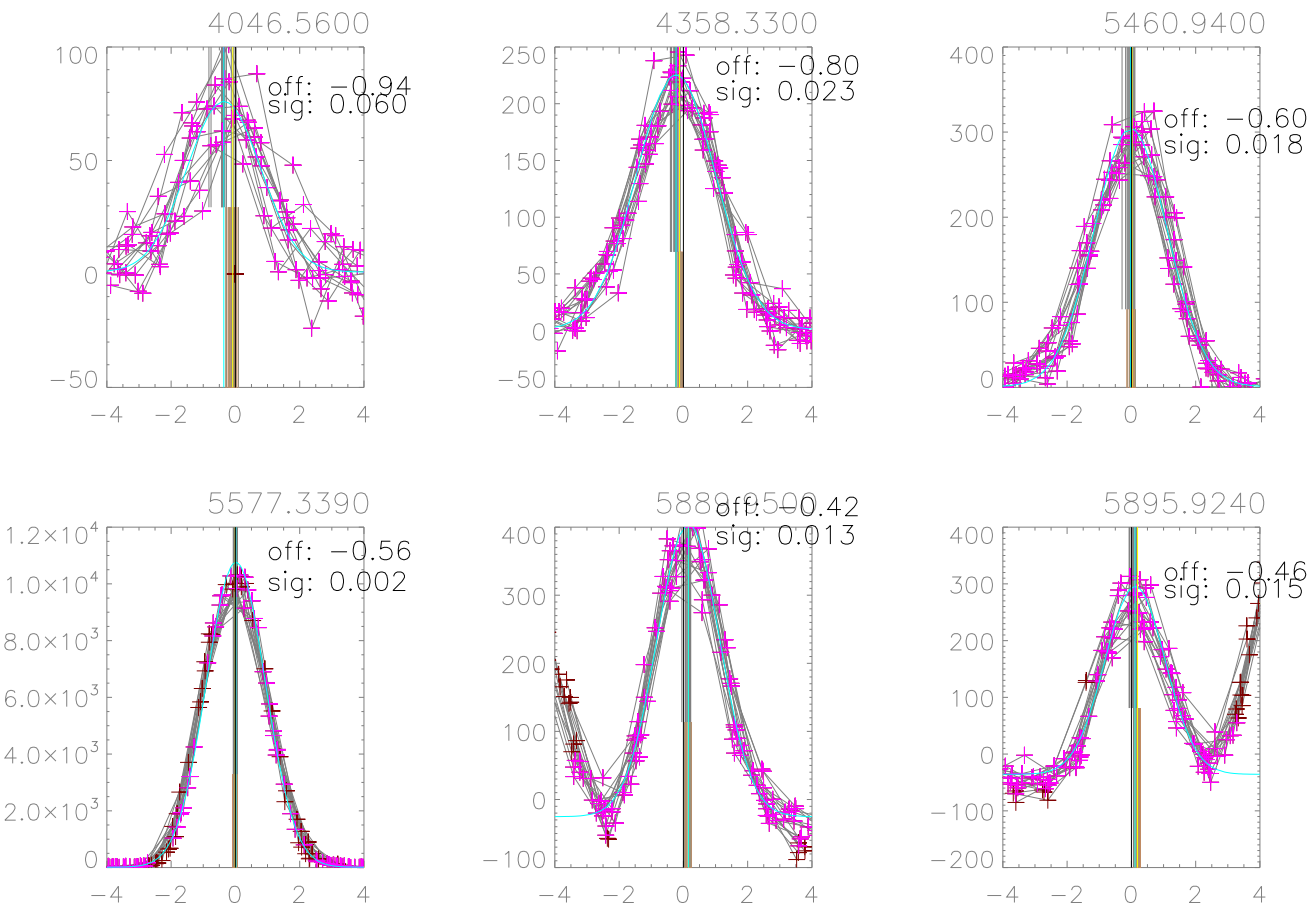

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b2-00009978.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.6
11.1

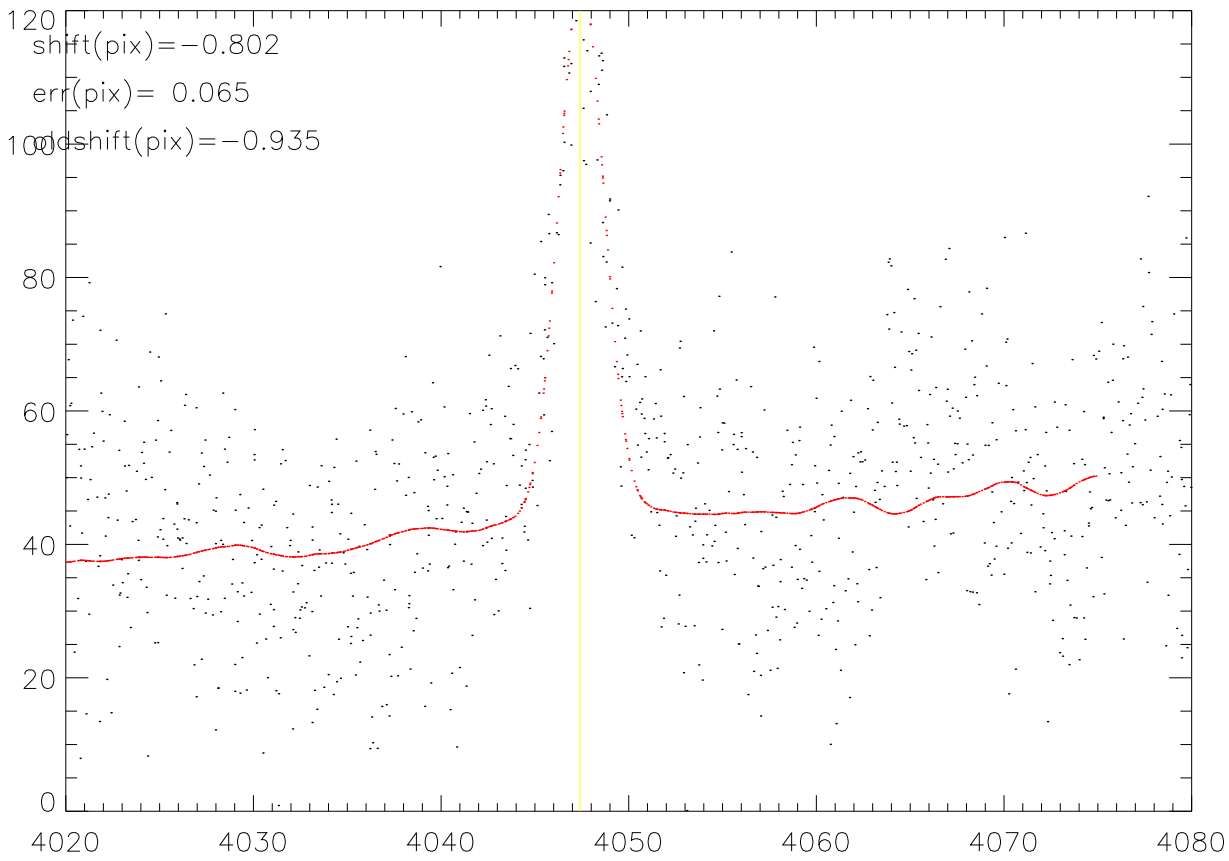

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b2-00009978.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 9.120
Max value = 11.663
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:30:49 2008

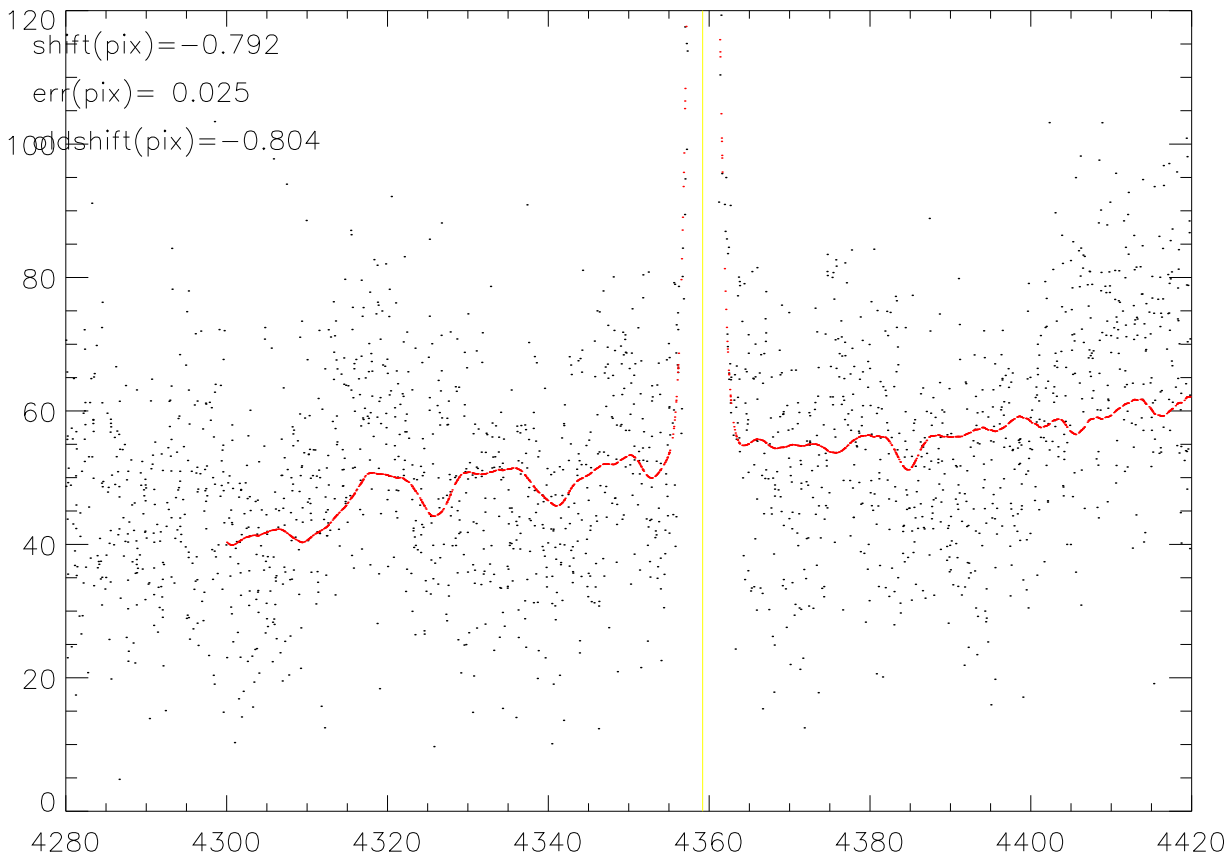

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009978.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.6
9.1

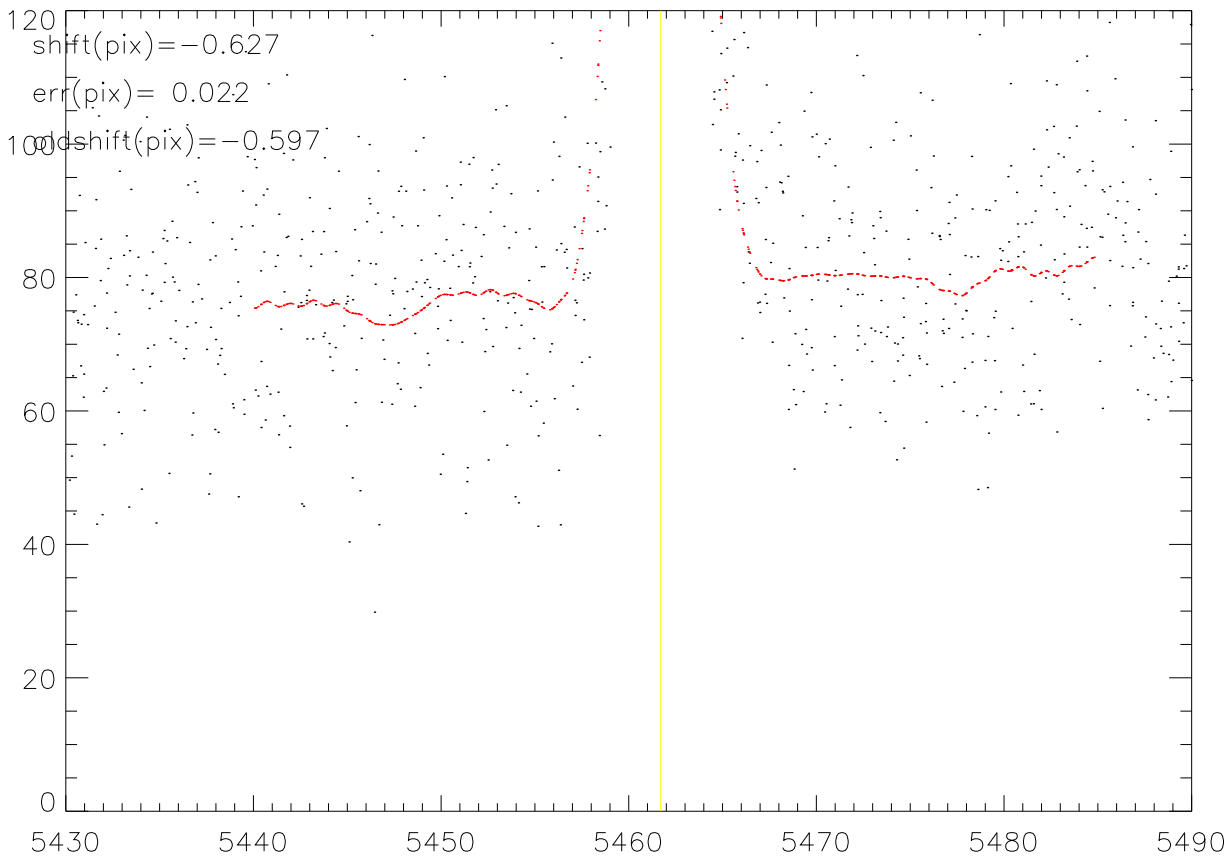

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009978.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.782
Max value = 9.213
Tue Feb 26 13:37:05 2008

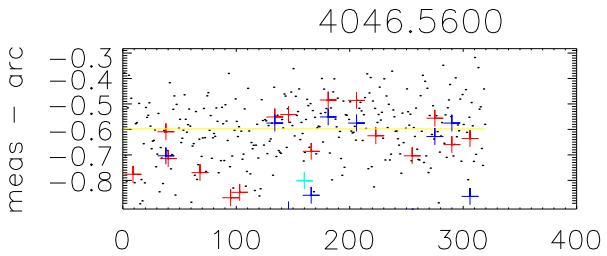

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-b2-00009978.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

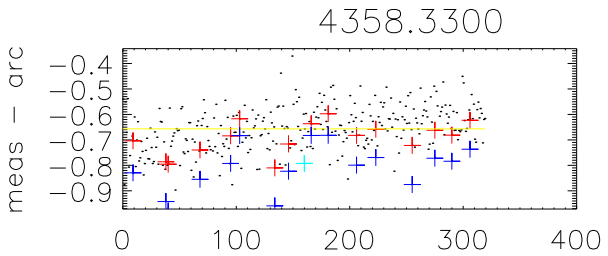

4046.5600
off: −0.94
sig: 0.060
4358.3300
off: −0.80
sig: 0.023
5460.9400
off: −0.60
sig: 0.018
5577.3390
off: −0.56
sig: 0.002
5888.0500
off: −0.42
sig: 0.013
5895.9240
off: −0.46
sig: 0.015

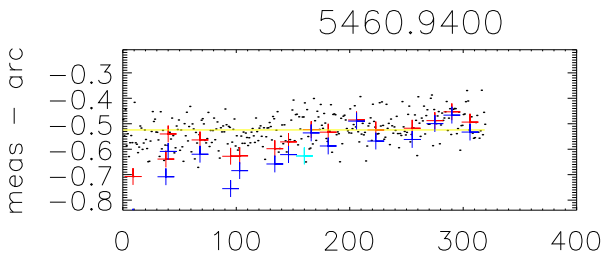

shift(pix)=−0.802
err(pix)= 0.065
oldshift(pix)=−0.935
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

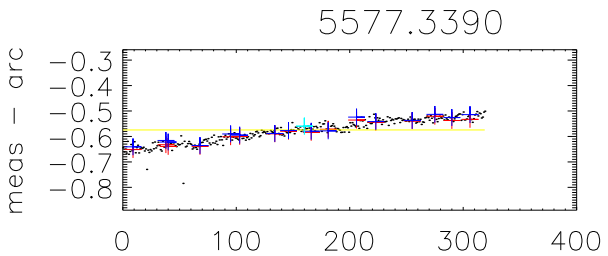

shift(pix)=−0.792
err(pix)= 0.025
oldshift(pix)=−0.804
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

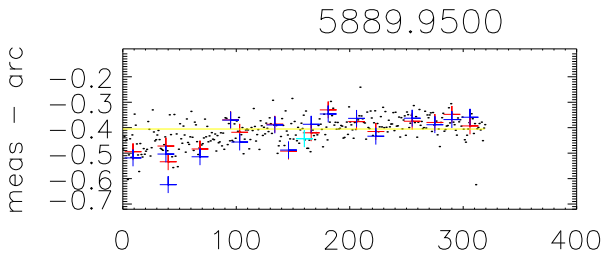

shift(pix)=−0.627
err(pix)= 0.022
oldshift(pix)=−0.597
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

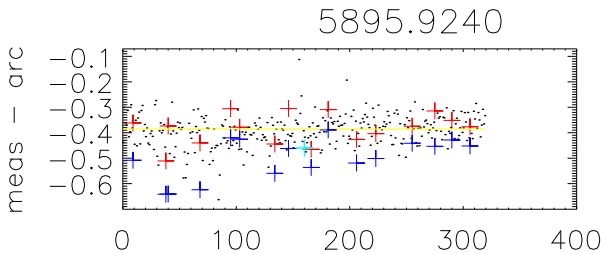

4046.5600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

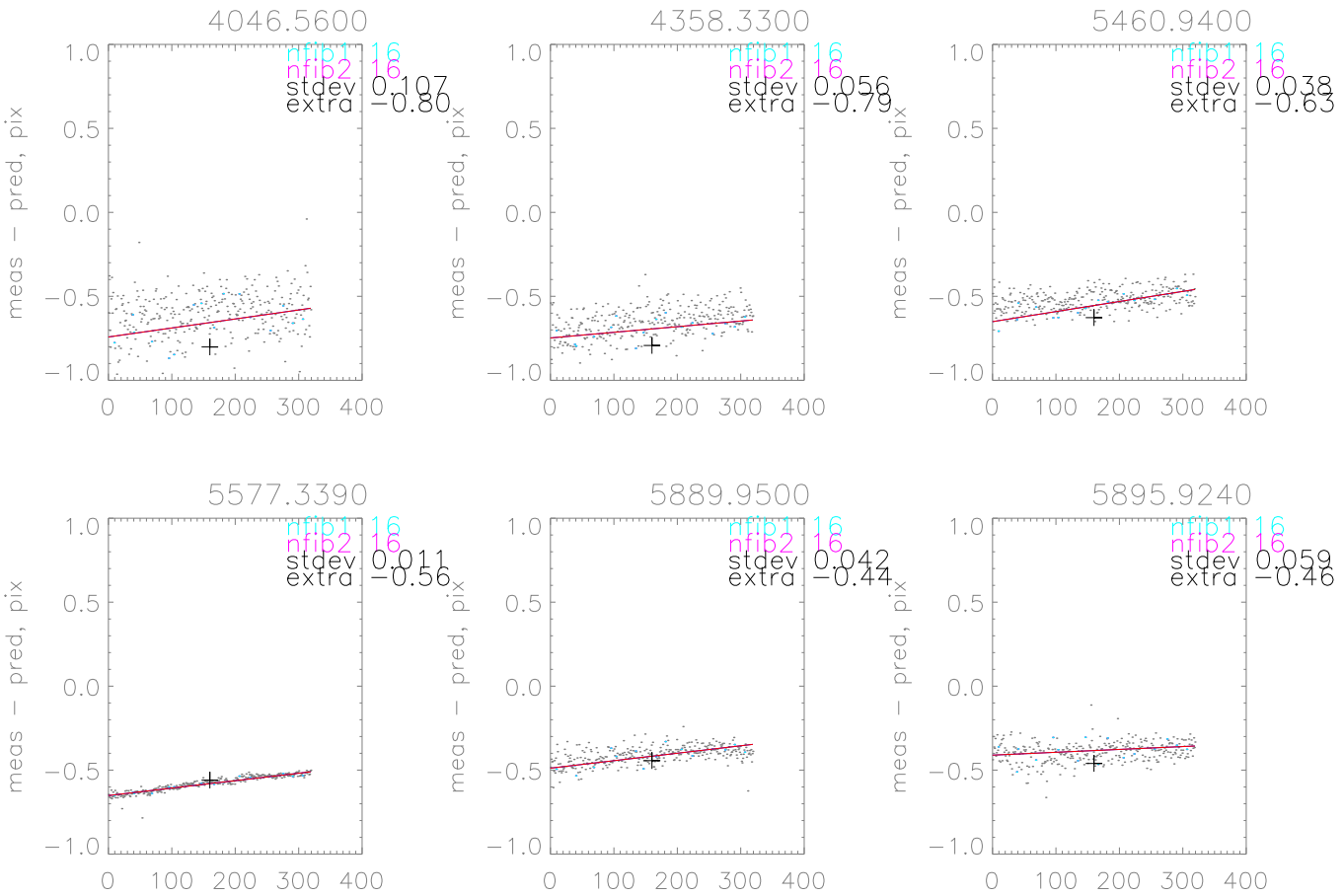

4358.3300
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

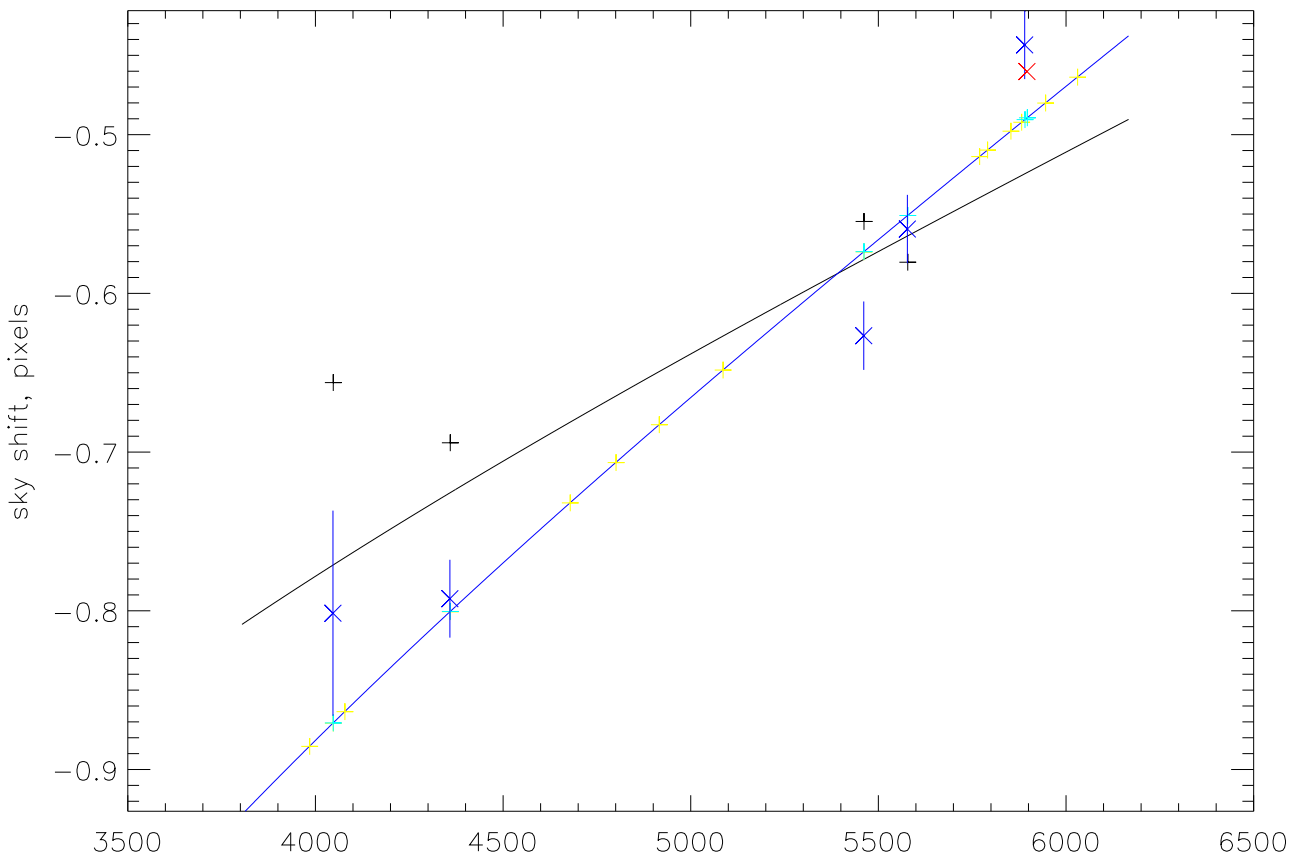

5460.9400
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400


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

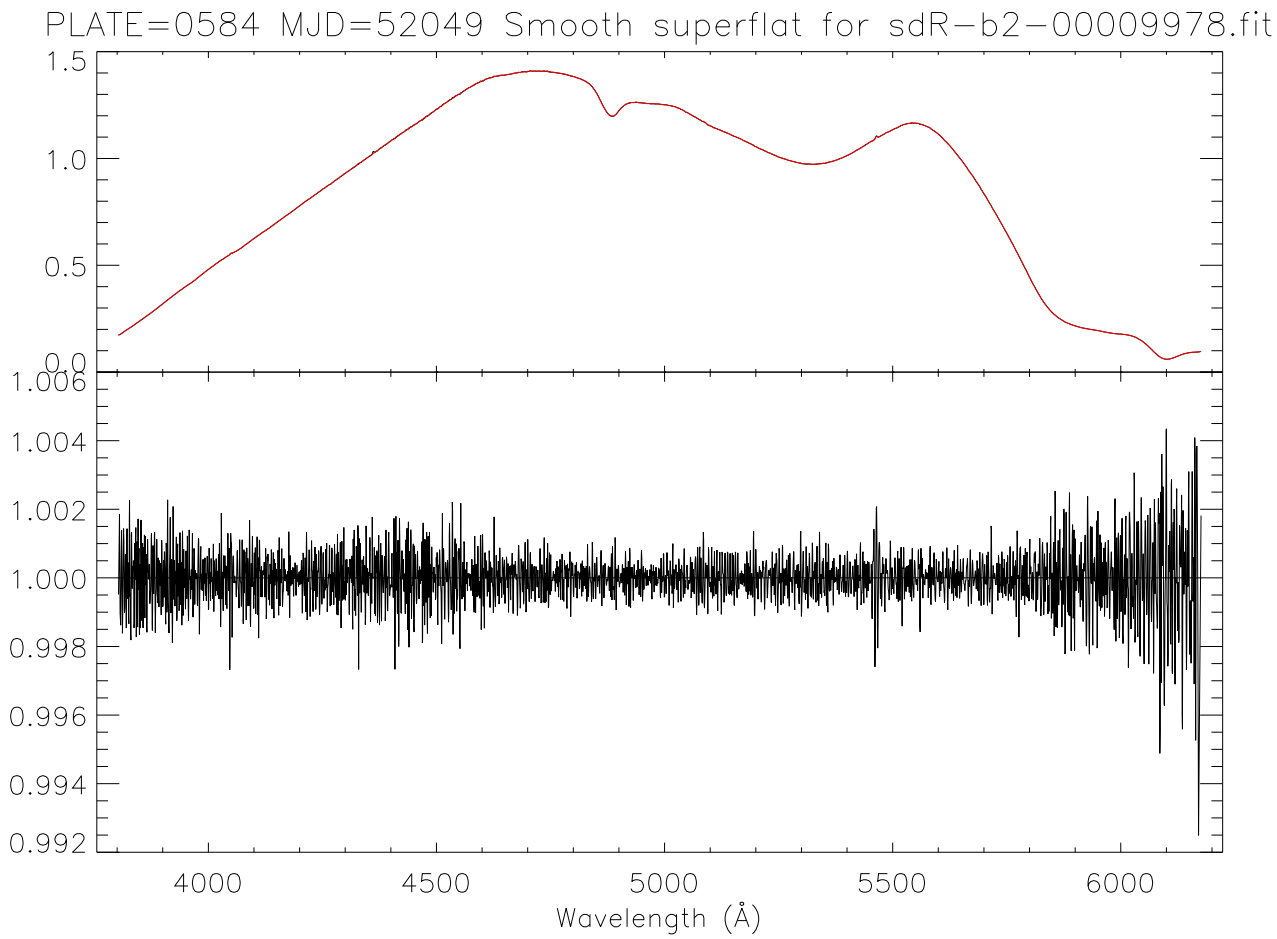

5889.9500
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

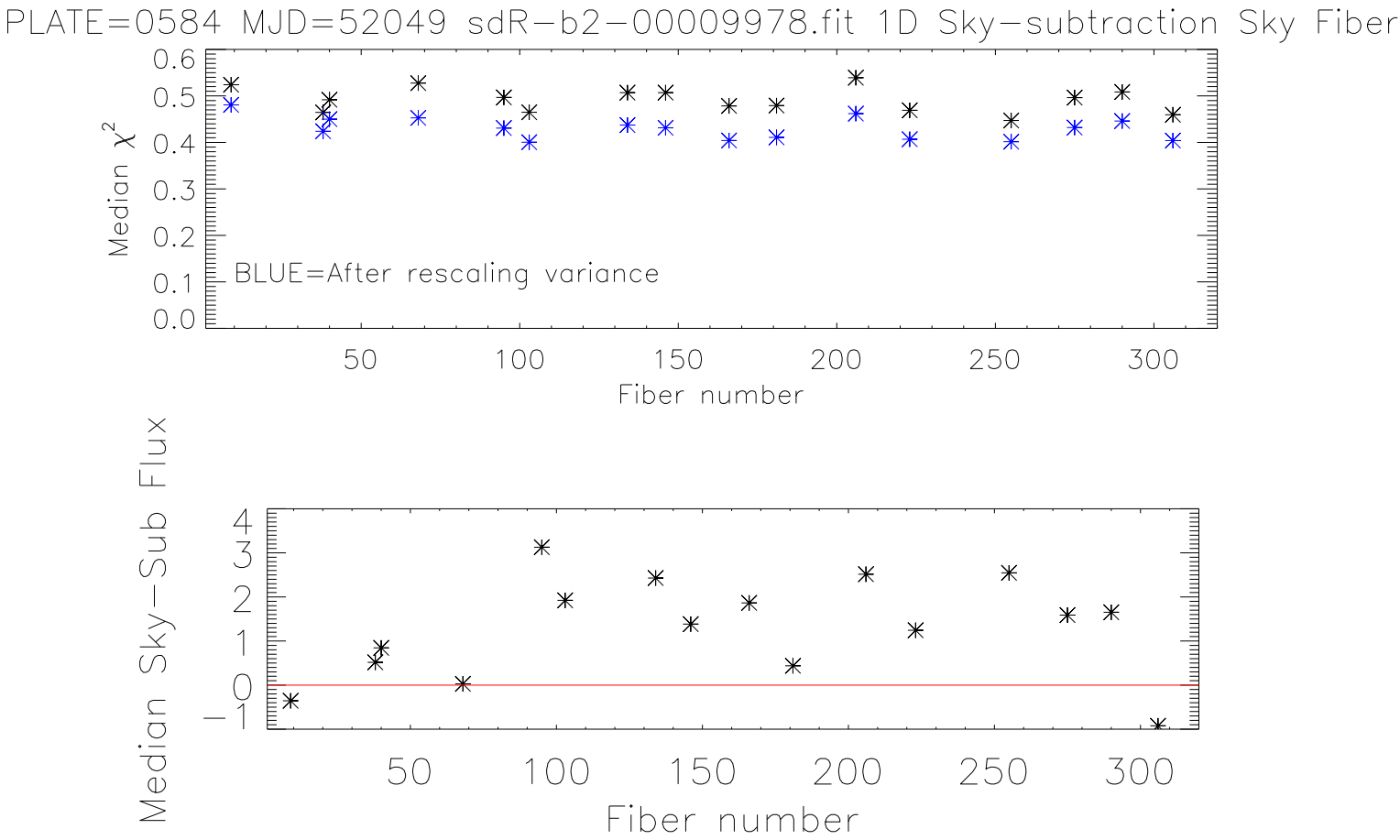

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

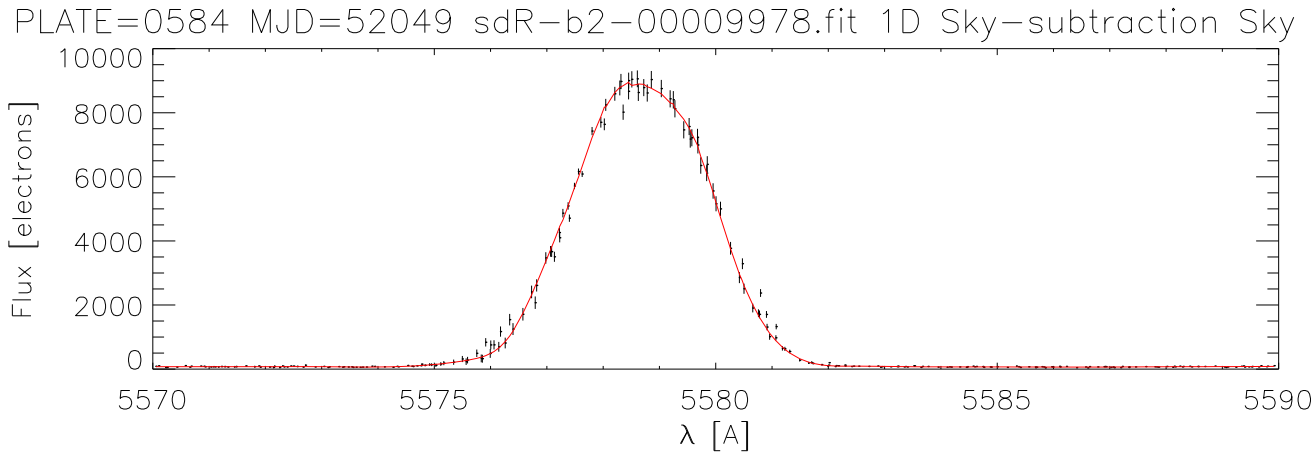

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
nfib1 16
nfib2 16
stdev 0.107
extra −0.80
stdev 0.056
extra −0.79
stdev 0.038
extra −0.63
stdev 0.011
extra −0.56
stdev 0.042
extra −0.44
stdev 0.059
extra −0.46
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

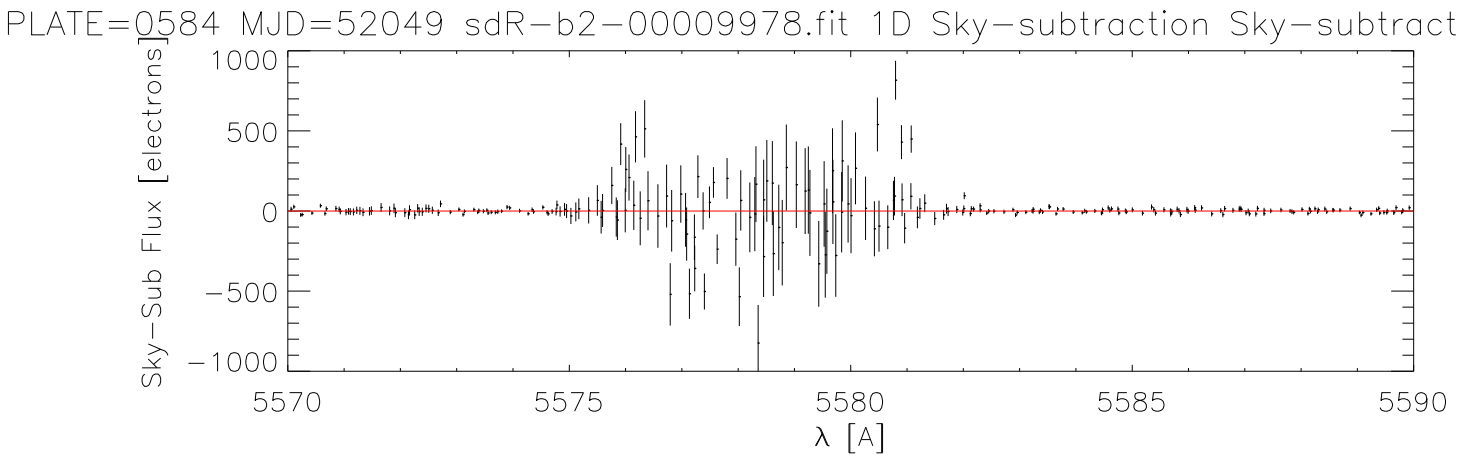

sky shift, pixels
−0.5
−0.6
−0.7
−0.8
−0.9
3500
4000
4500
5000
5500
6000
6500

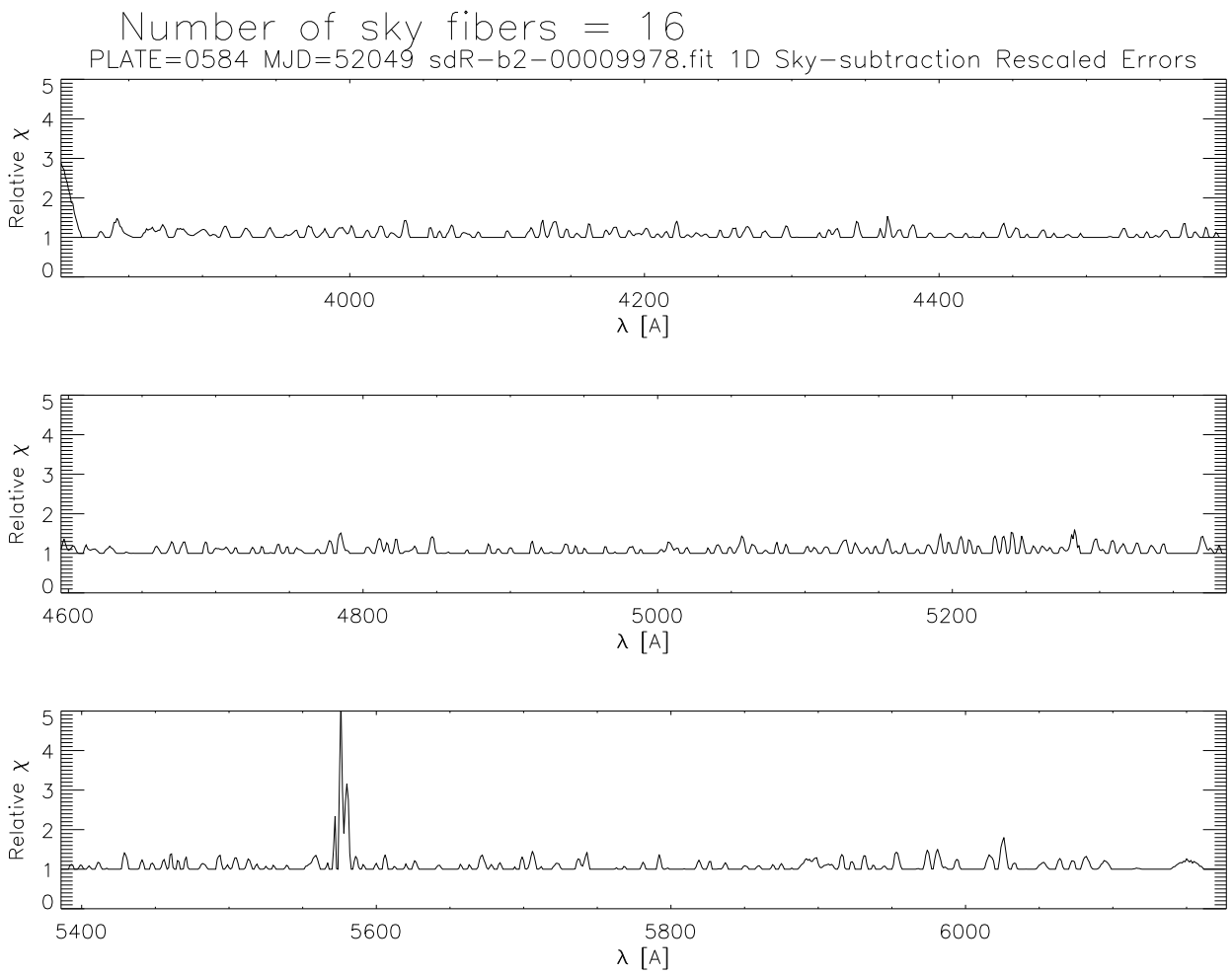
es= 0.0000

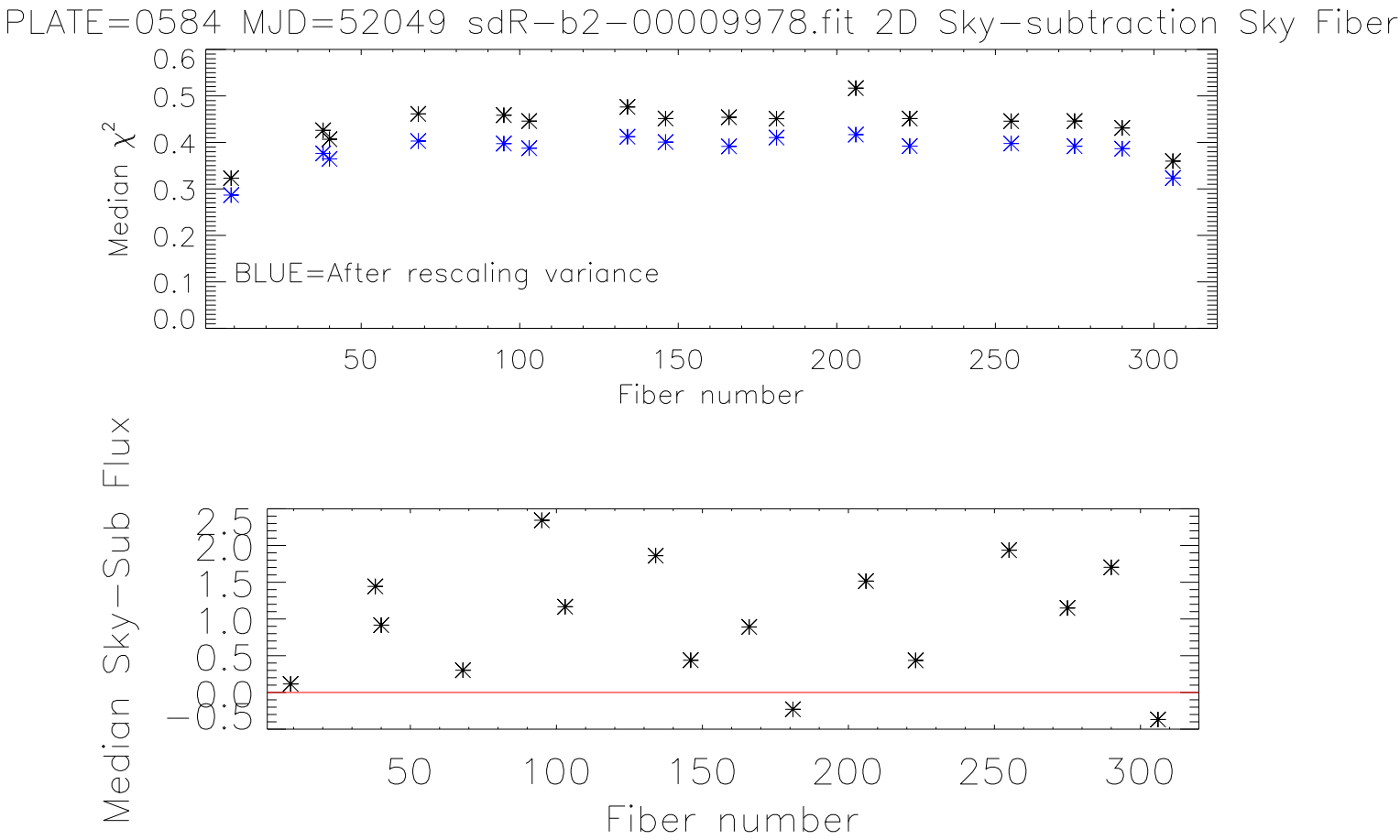

PLATE=0584 MJD=52049 Smooth superflat for sdR-b2-00009978.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

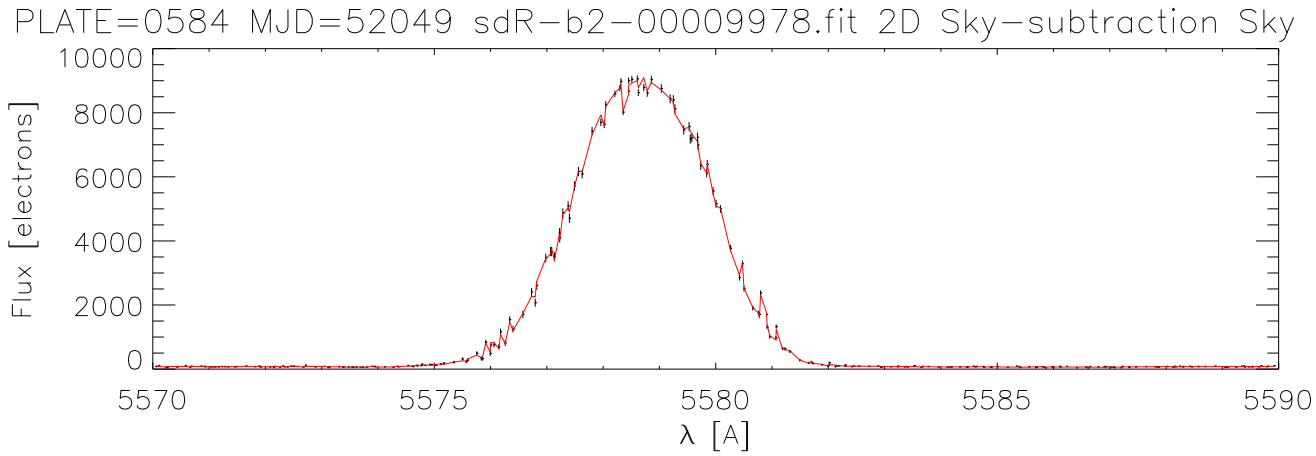

PLATE=0584 MJD=52049 sdR-b2-00009978.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

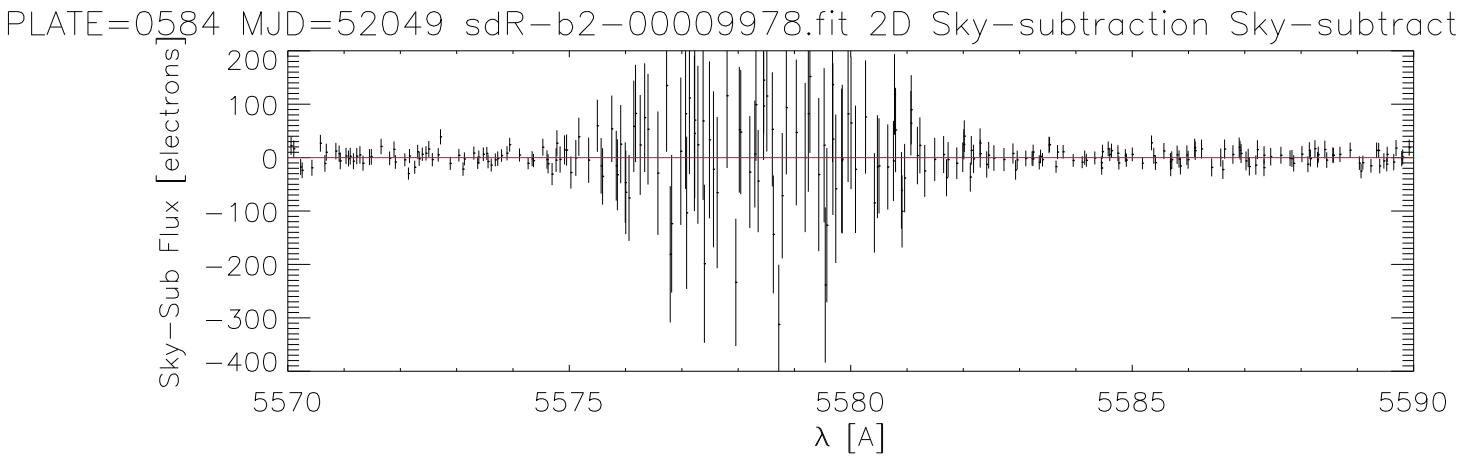

PLATE=0584 MJD=52049 sdR-b2-00009978.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

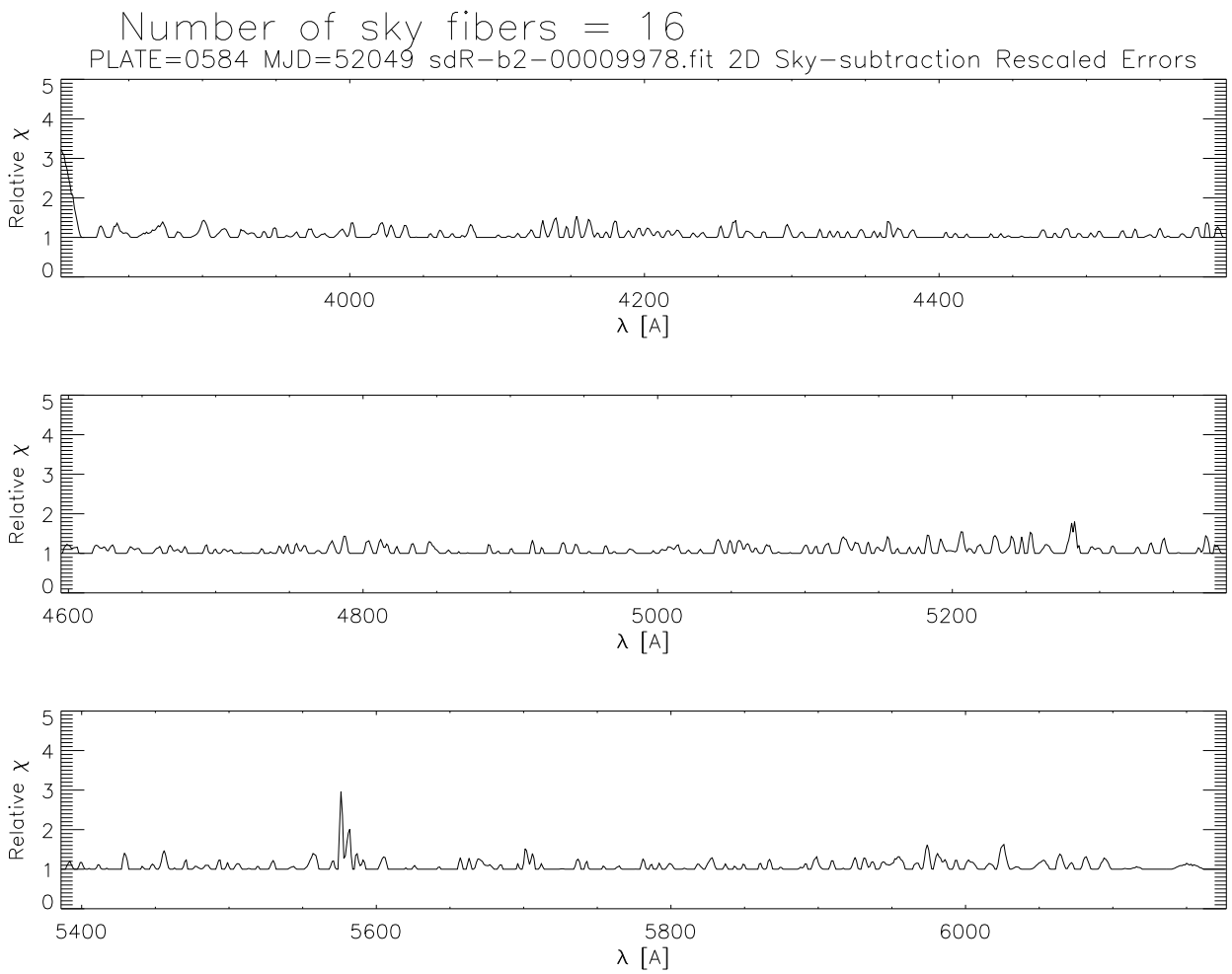

PLATE=0584 MJD=52049 sdR-b2-00009978.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

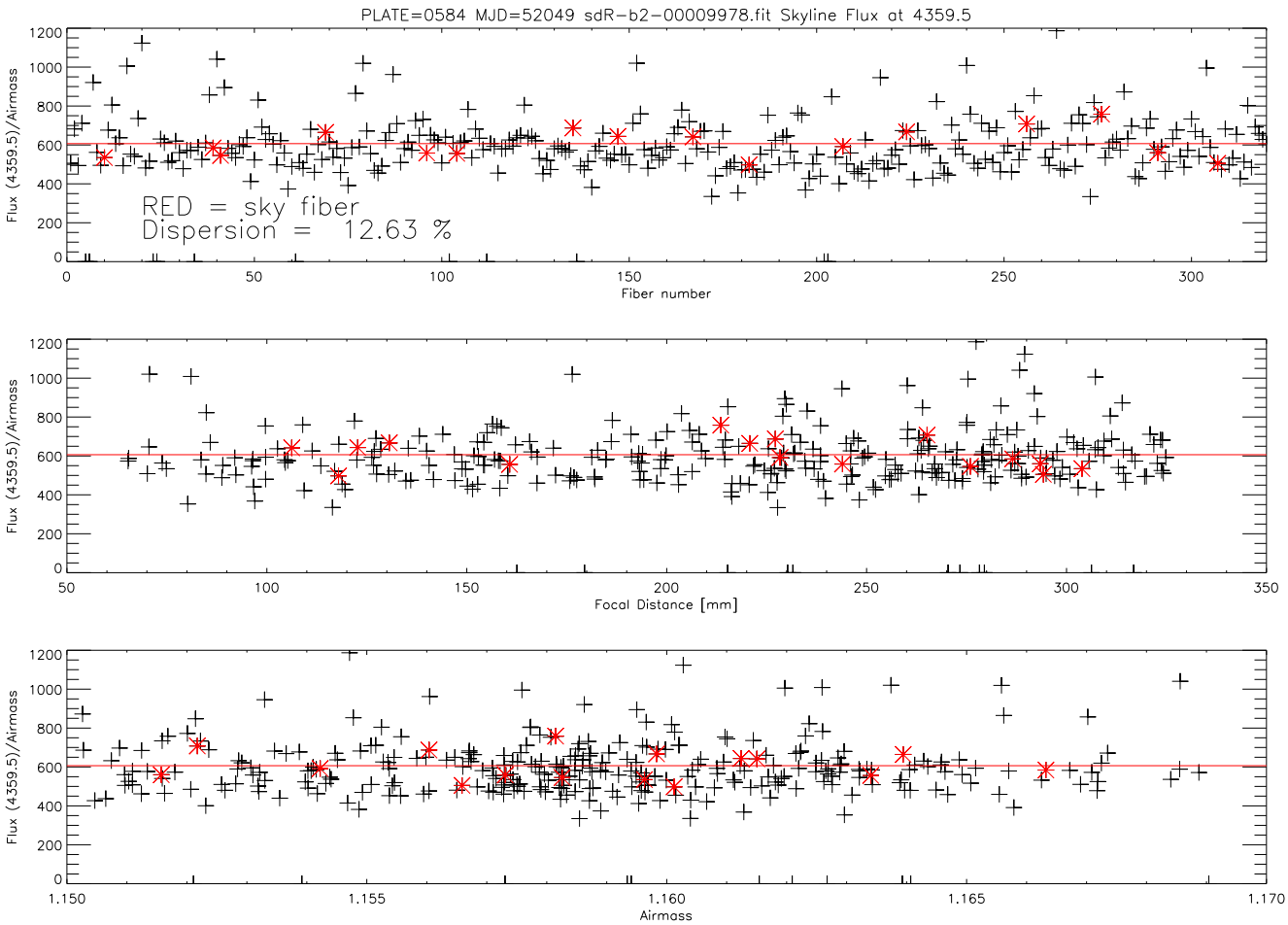

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009978.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

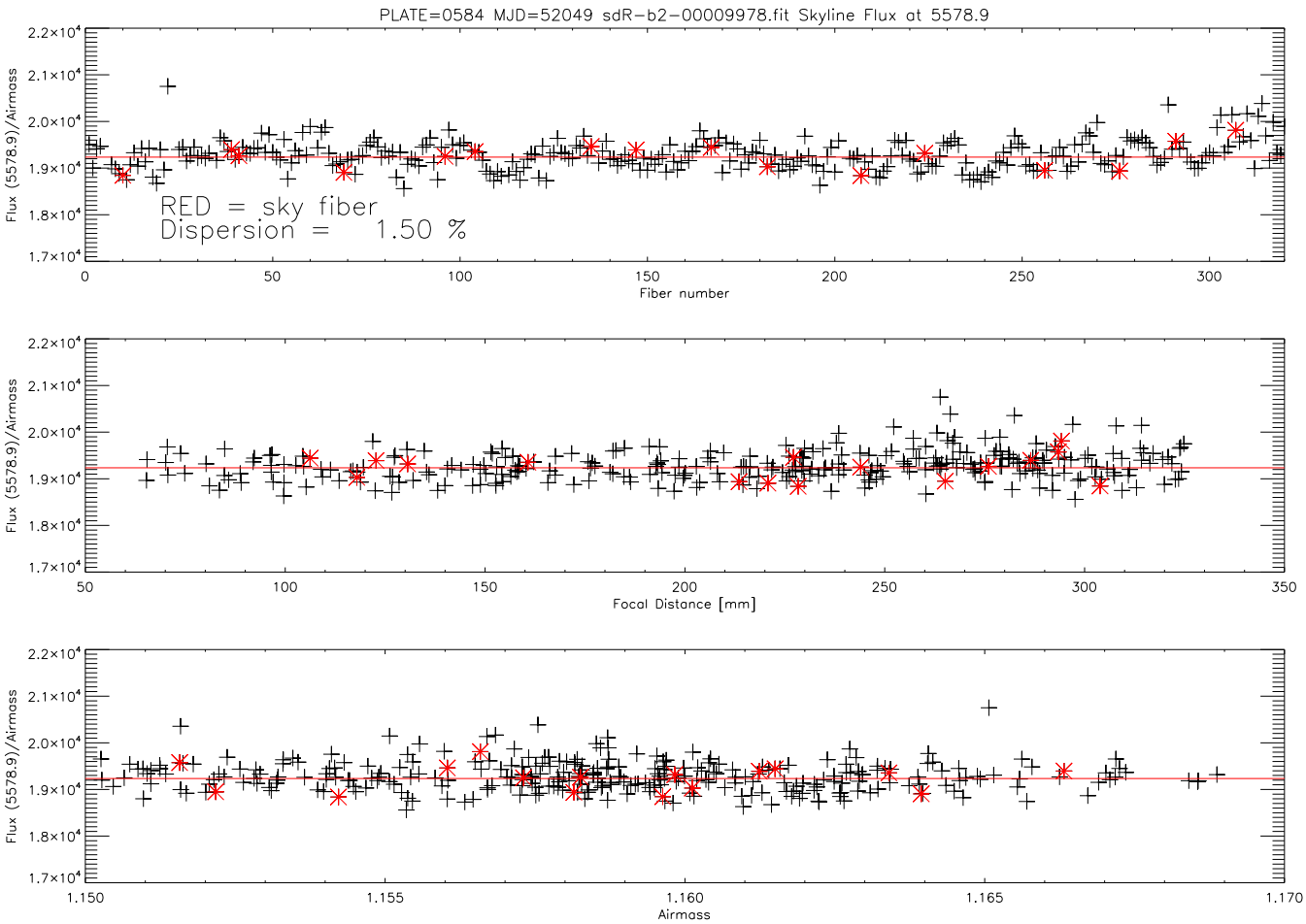

PLATE=0584 MJD=52049 sdR-b2-00009978.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

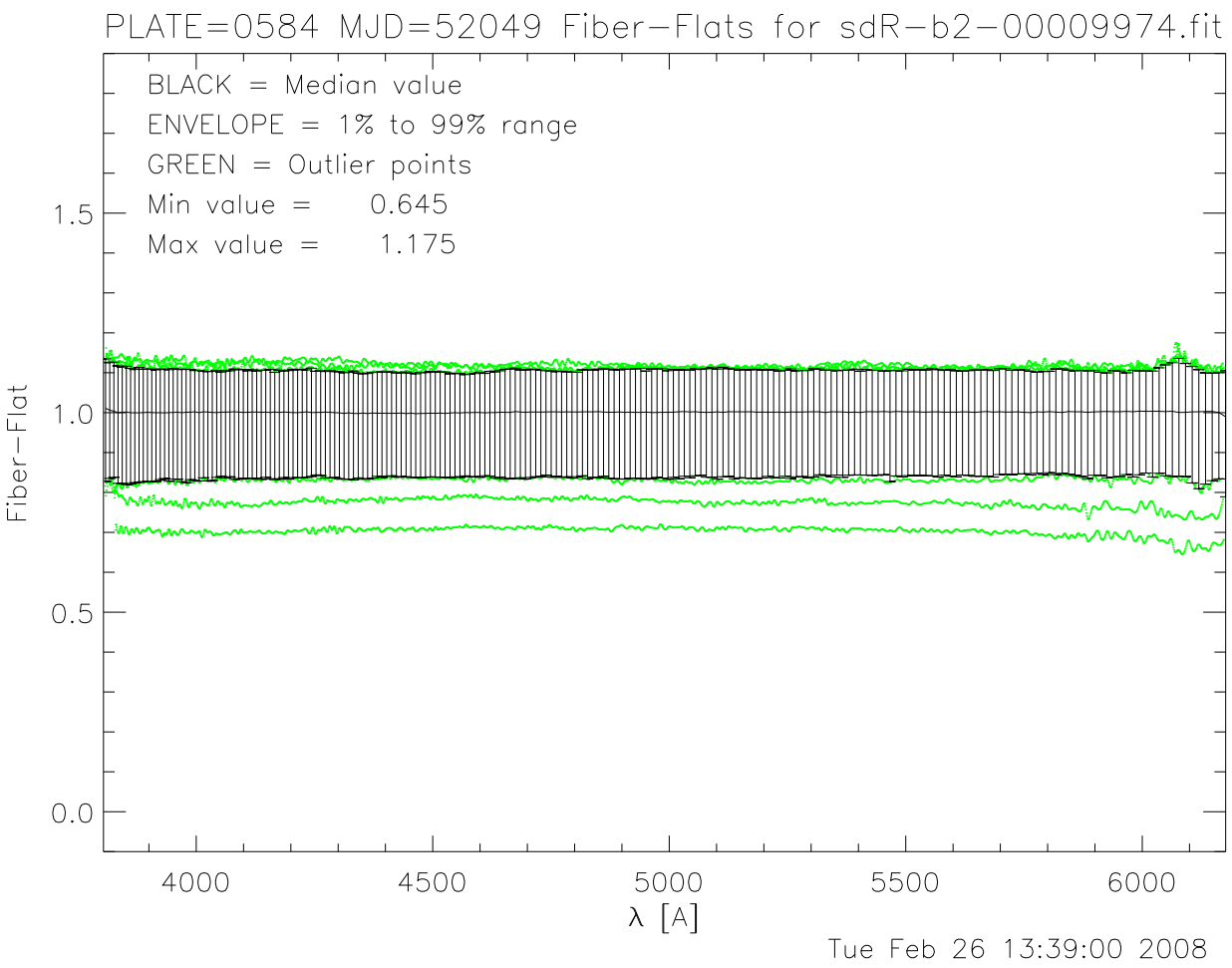

PLATE=0584 MJD=52049 sdR-b2-00009978.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

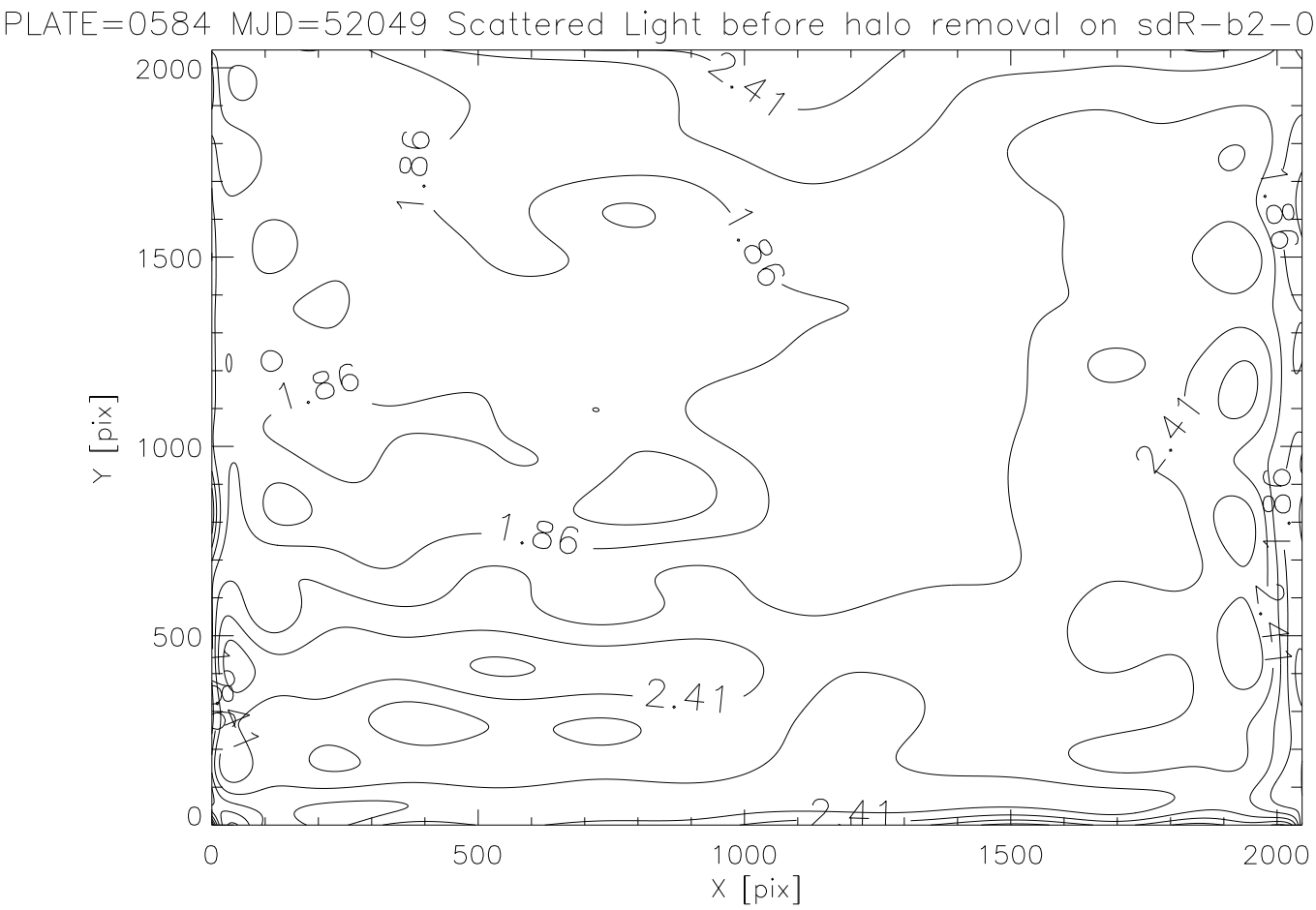

PLATE=0584 MJD=52049 sdR-b2-00009978.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
-400
5570
5575
5580
5585
5590
λ [A]

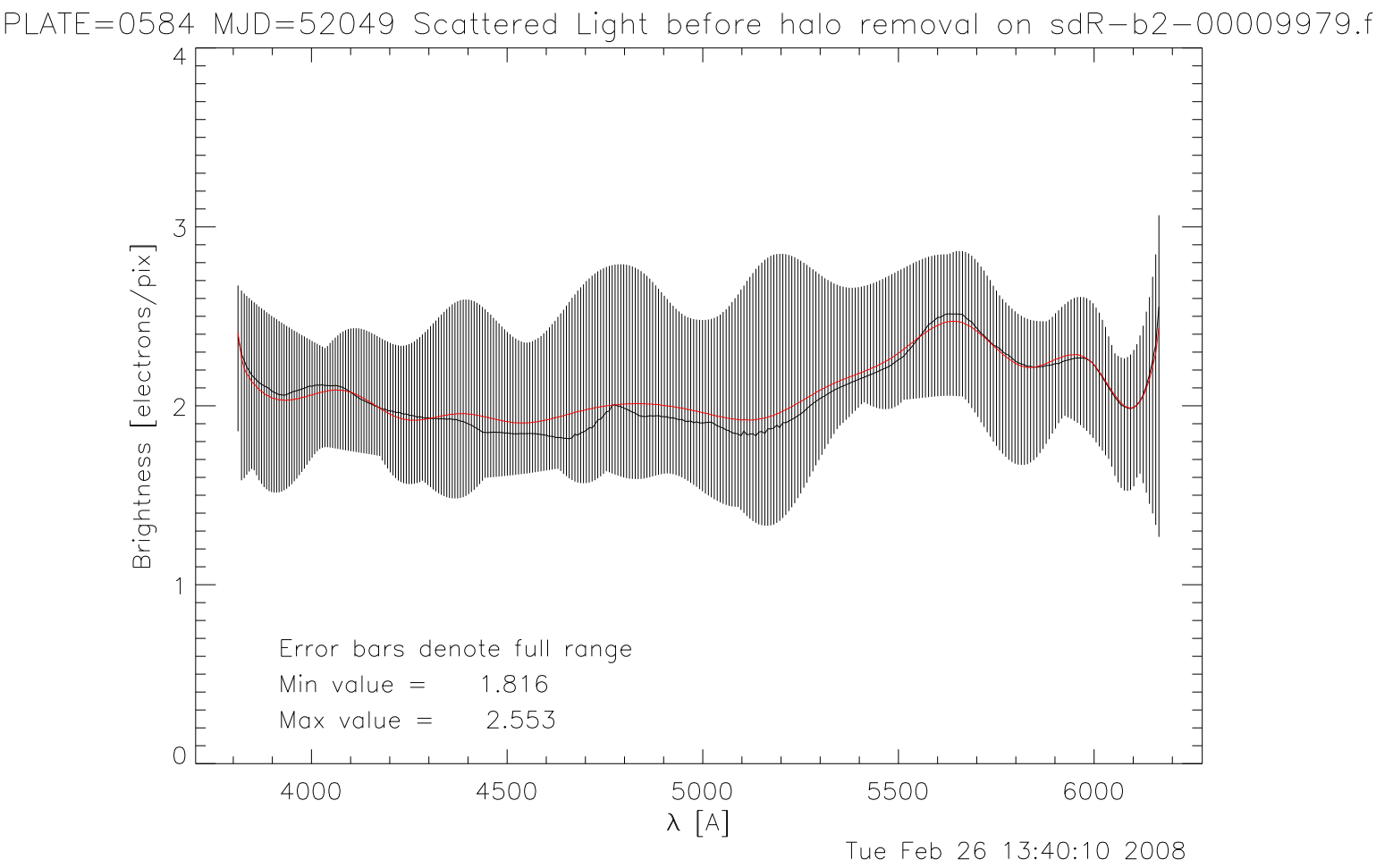

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009978.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

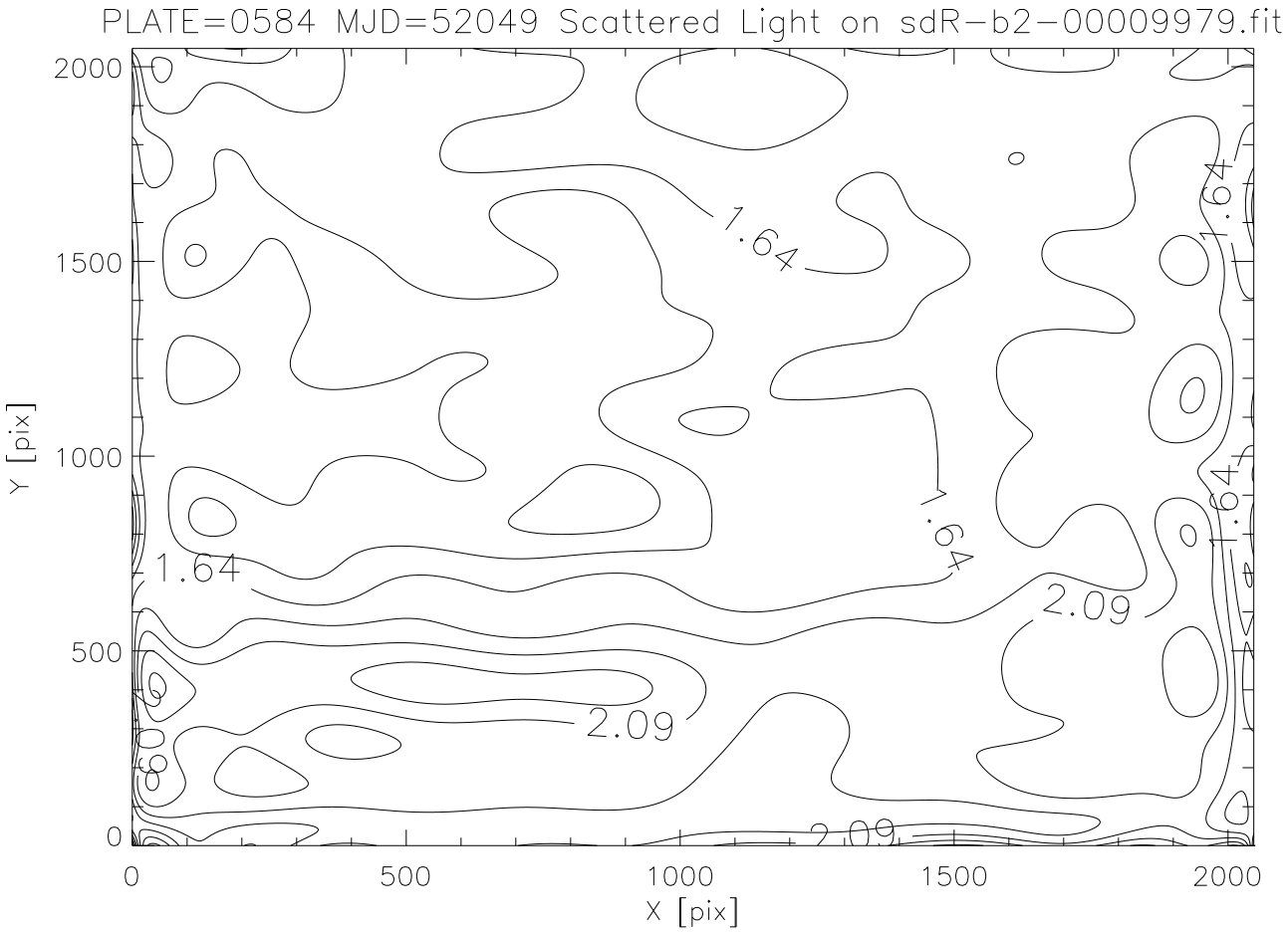

PLATE=0584 MJD=52049 sdR-b2-00009978.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.63 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

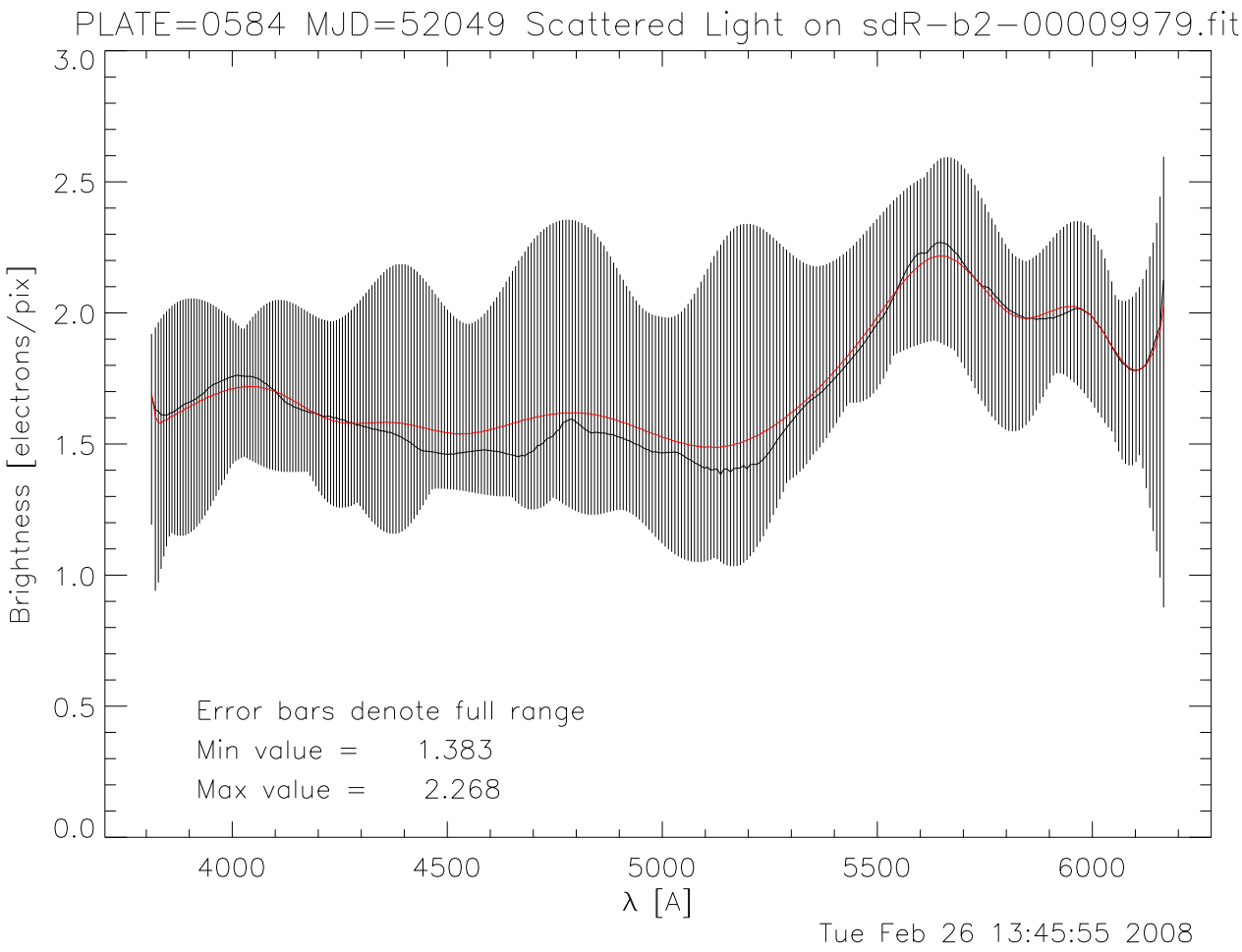

PLATE=0584 MJD=52049 sdR-b2-00009978.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.50 %
Fiber number
Focal Distance [mm]
Airmass

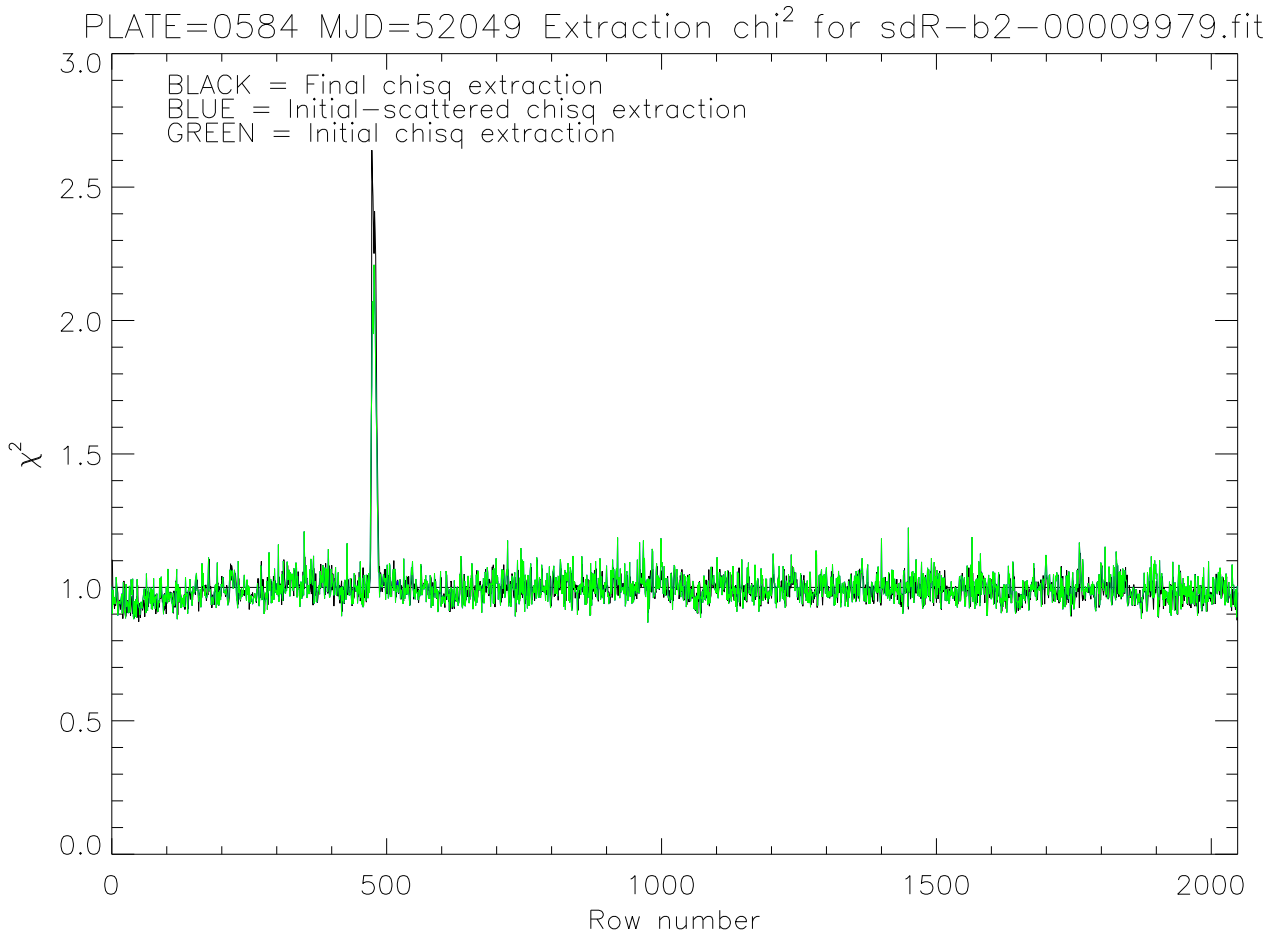

PLATE=0584 MJD=52049 Fiber−Flats for sdR−b2−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.645
Max value = 1.175
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:39:00 2008

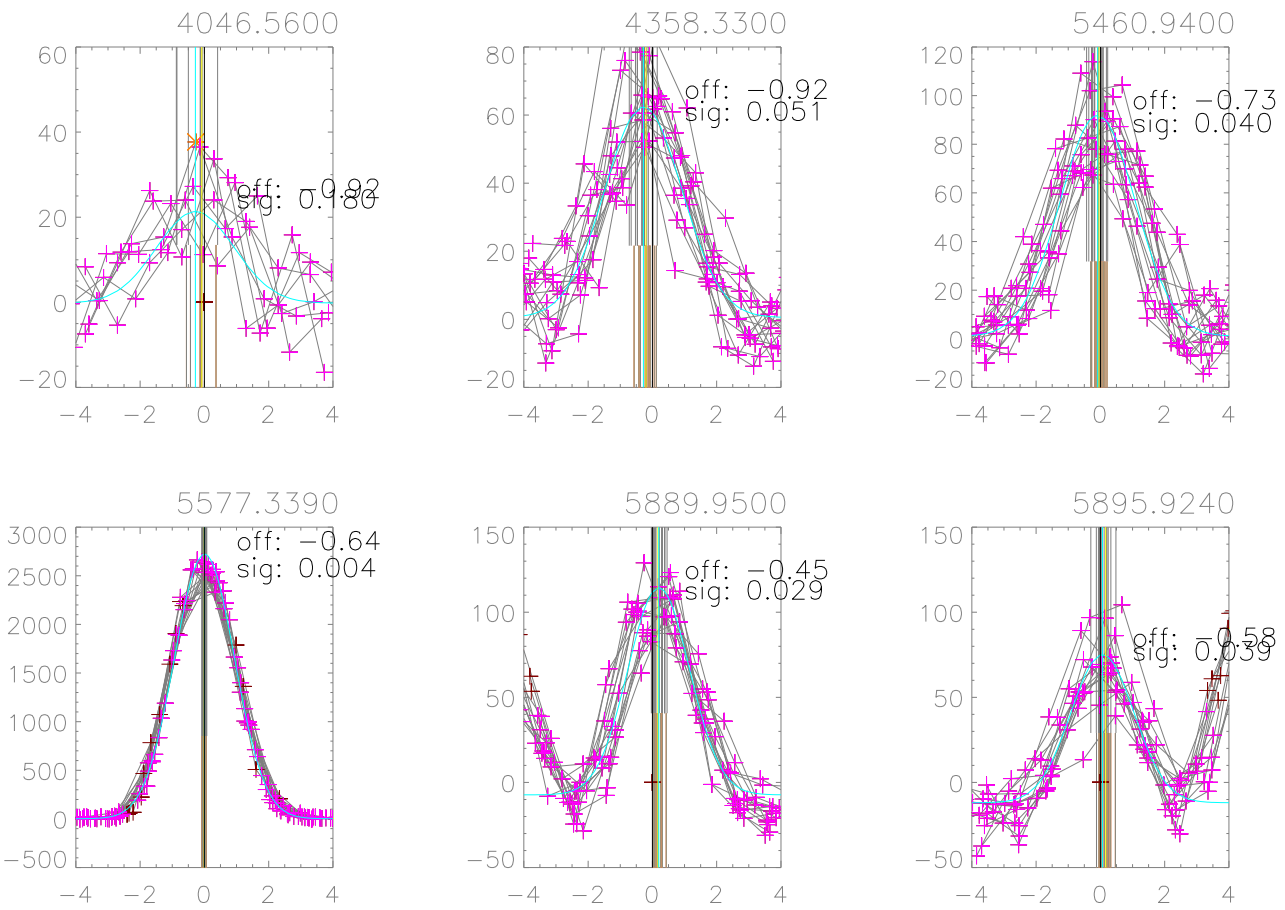

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR−b2−00009979.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.41
1.86
1.86
1.86
2.41
1.86
2.41
2.41

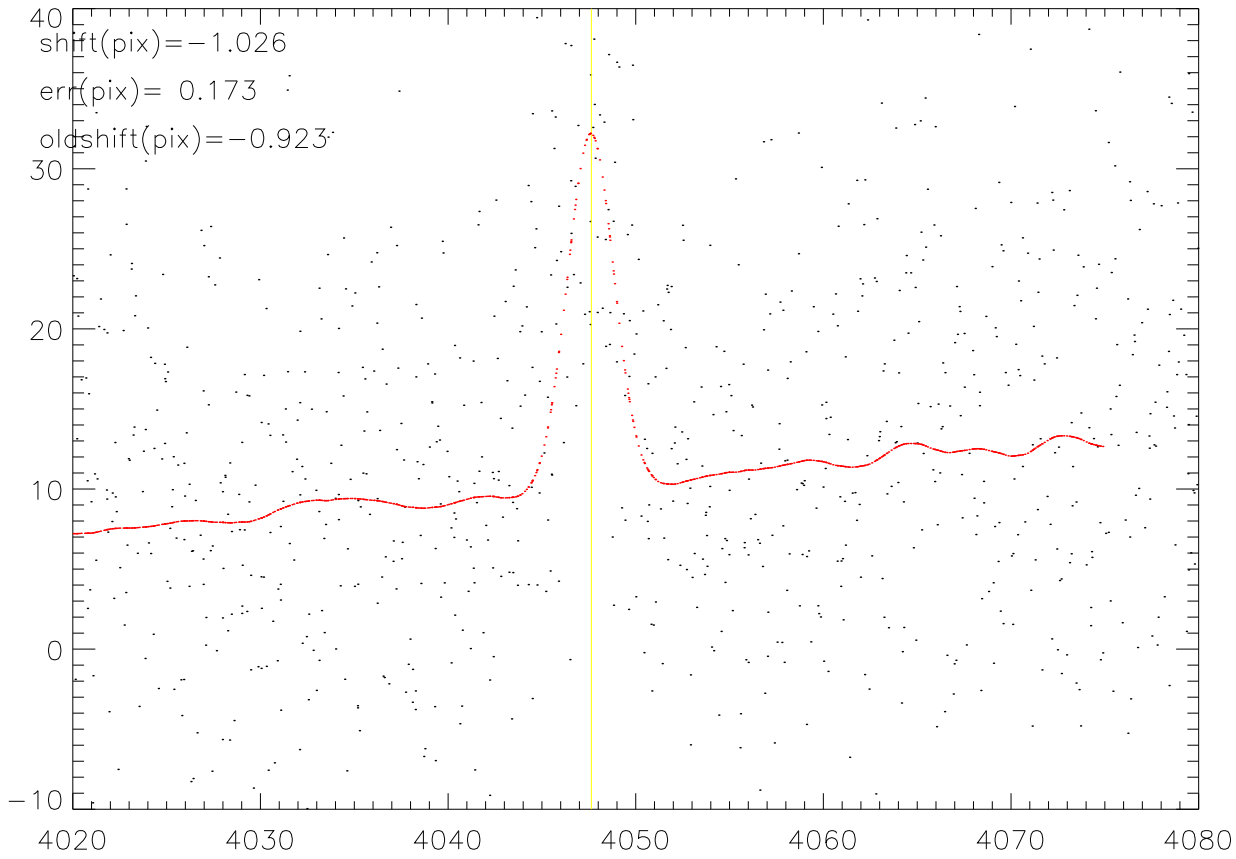

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-b2-00009979.f
Brightness [electrons/pix]
0
1
2
3
4
Error bars denote full range
Min value = 1.816
Max value = 2.553
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:40:10 2008

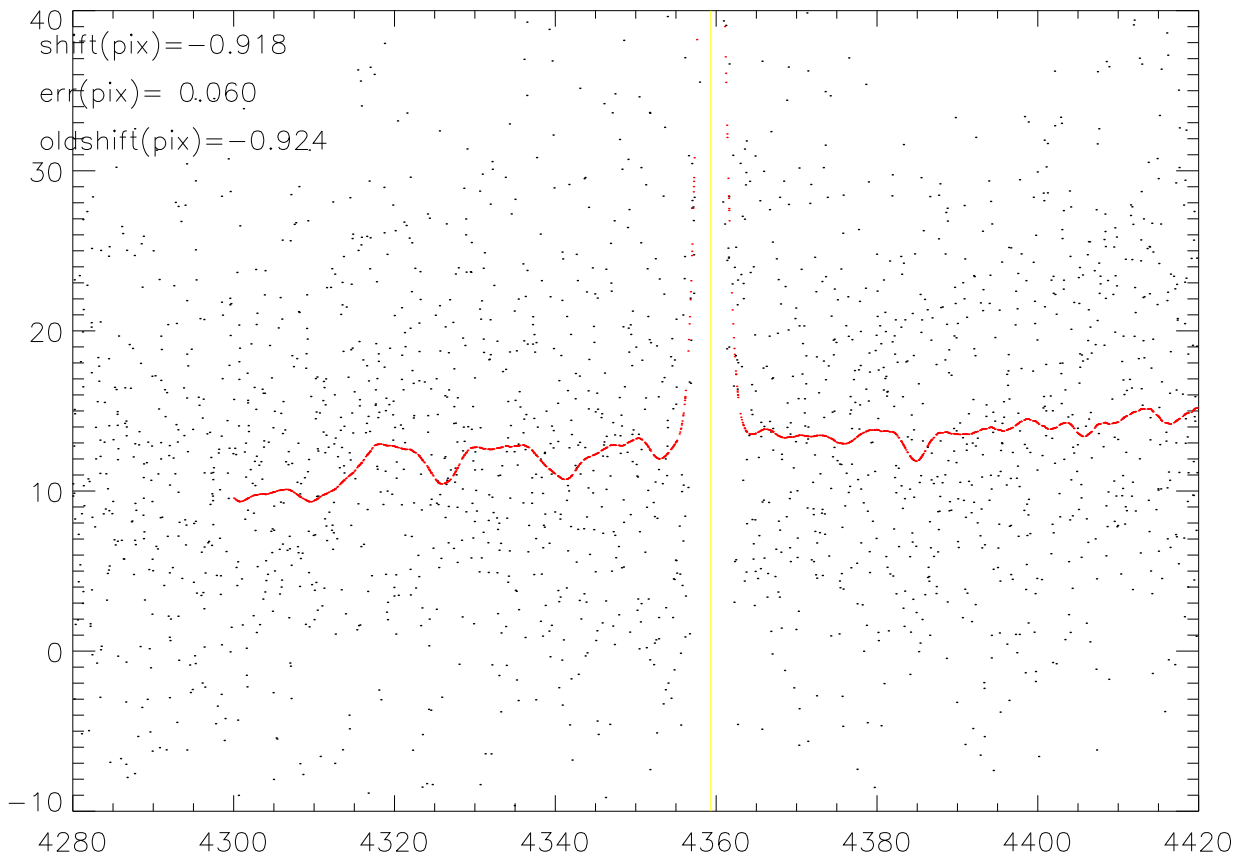

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009979.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
1.64
2.09

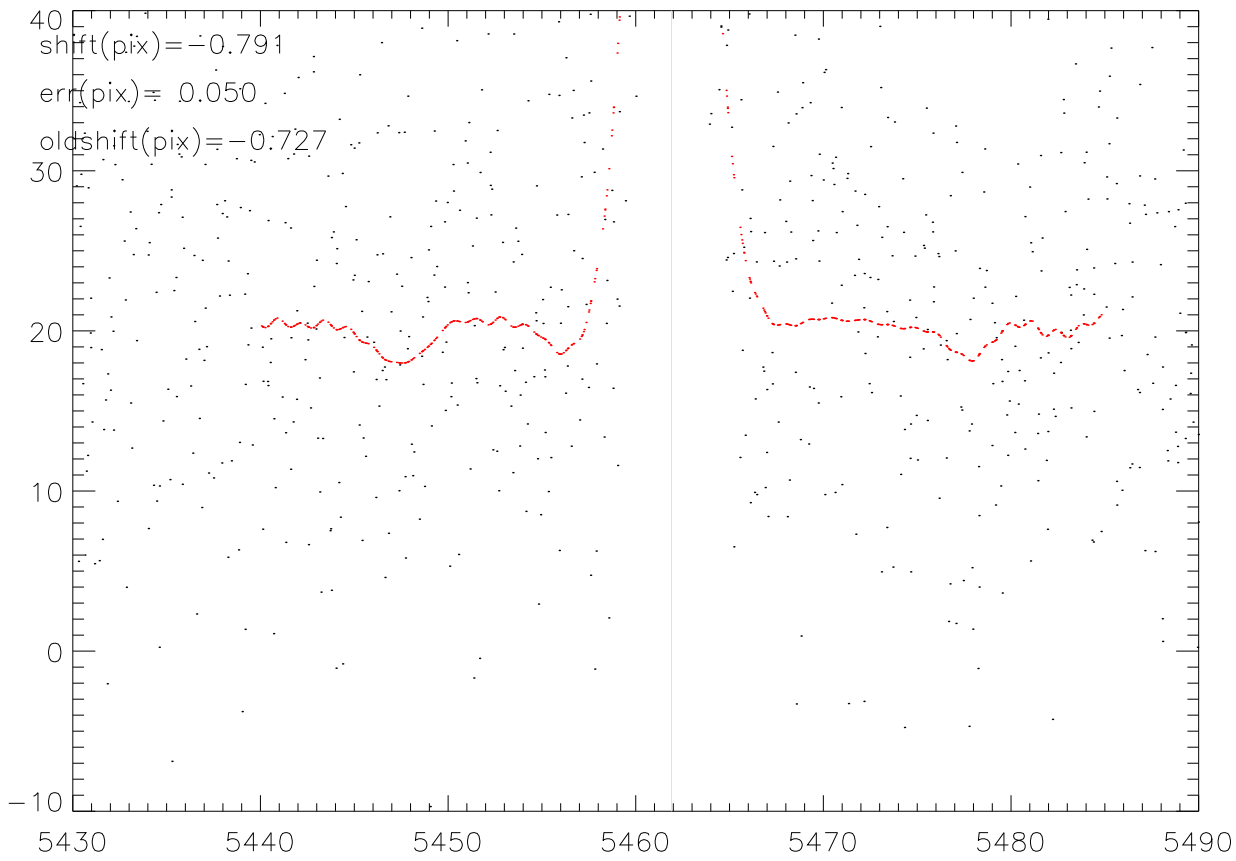

PLATE=0584 MJD=52049 Scattered Light on sdR-b2-00009979.fit
Brightness [electrons/pix]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.383
Max value = 2.268
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 13:45:55 2008

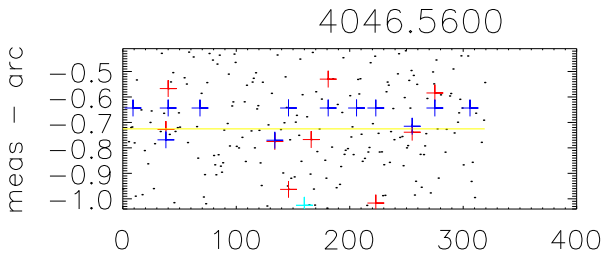

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-b2-00009979.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

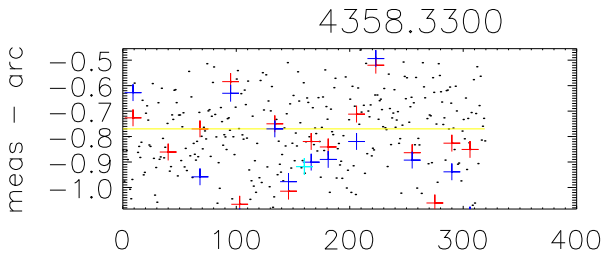

4046.5600
off: −0.92
sig: 0.180
4358.3300
off: −0.92
sig: 0.051
5460.9400
off: −0.73
sig: 0.040
5577.3390
off: −0.64
sig: 0.004
5889.9500
off: −0.45
sig: 0.029
5895.9240
off: −0.58
sig: 0.039

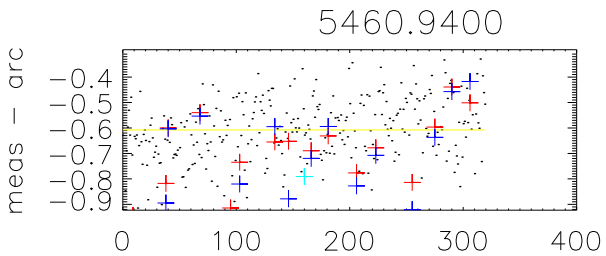

shift(pix)=−1.026
err(pix)= 0.173
oldshift(pix)=−0.923
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

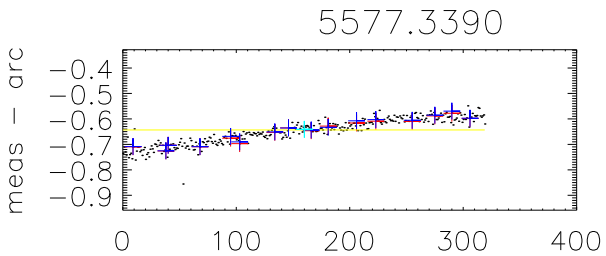

shift(pix)=−0.918
err(pix)= 0.060
oldshift(pix)=−0.924
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

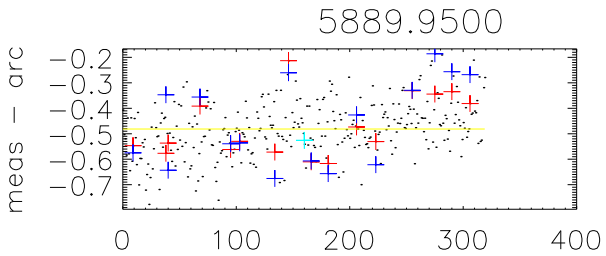

shift(pix)=−0.791
err(pix)= 0.050
oldshift(pix)=−0.727
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

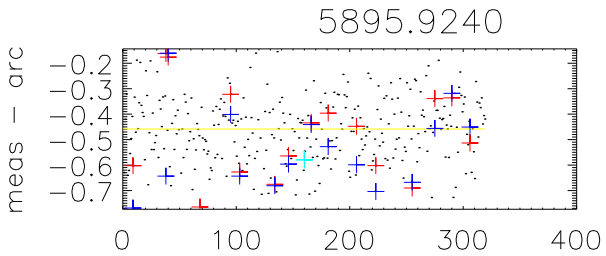

4046.5600
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

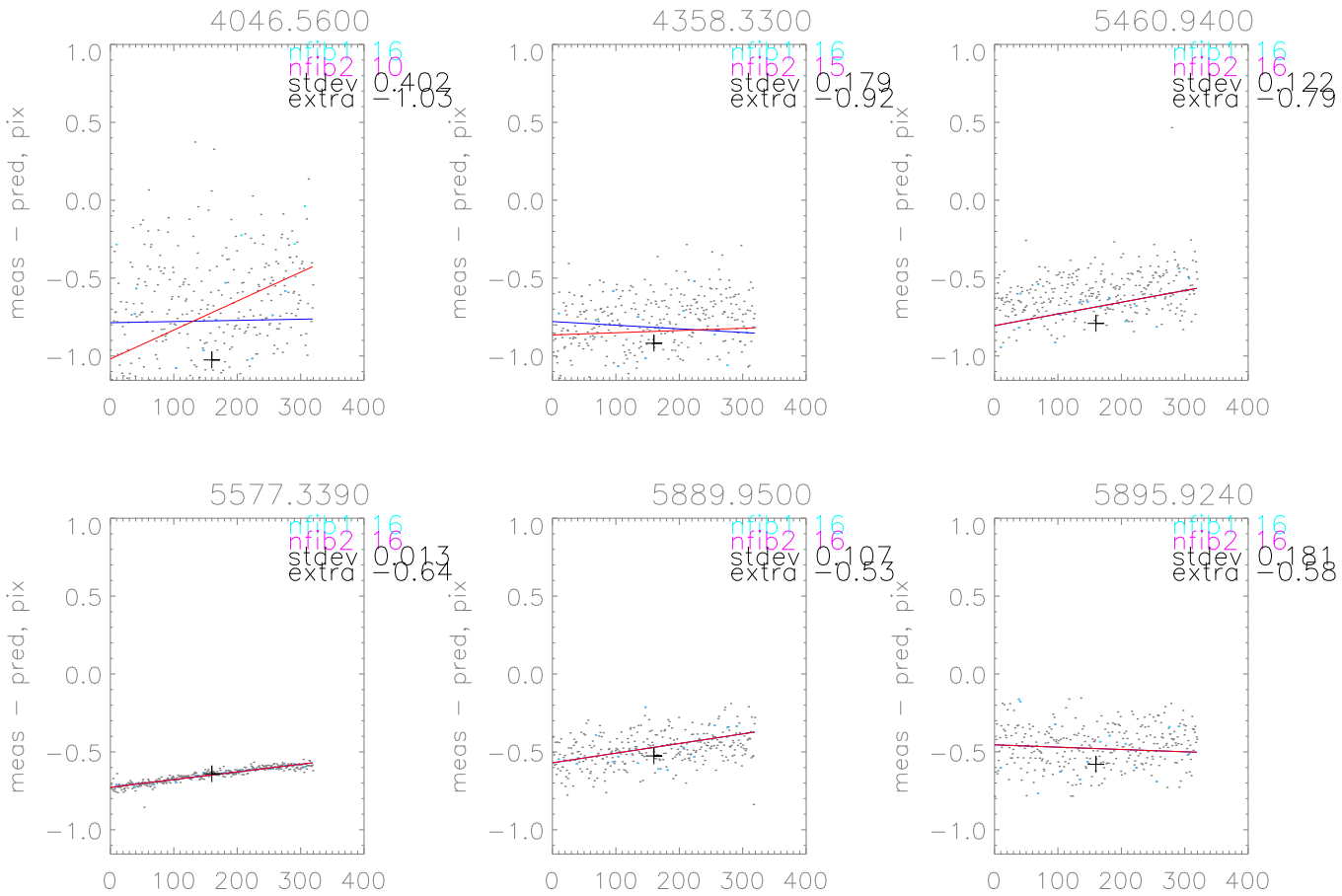

4358.3300
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

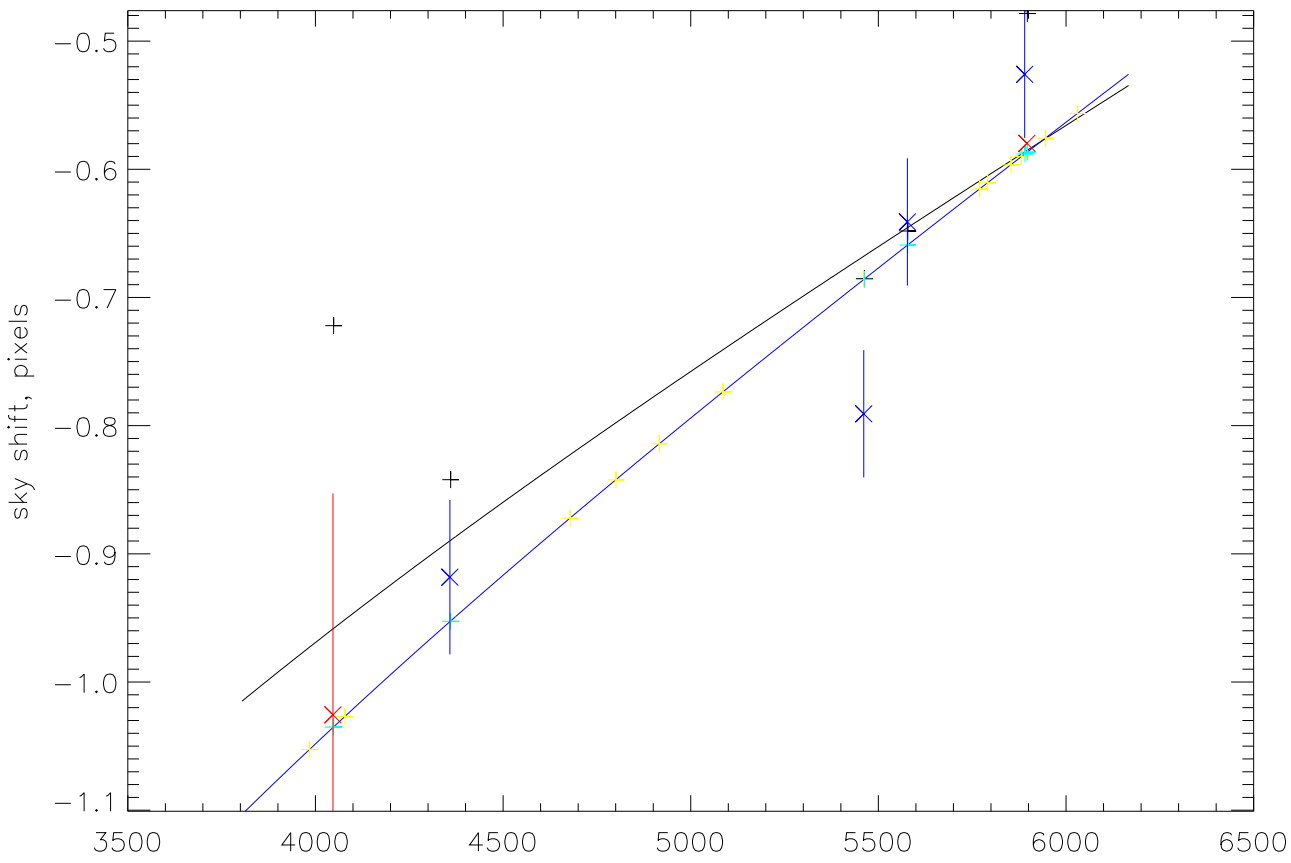

5460.9400
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

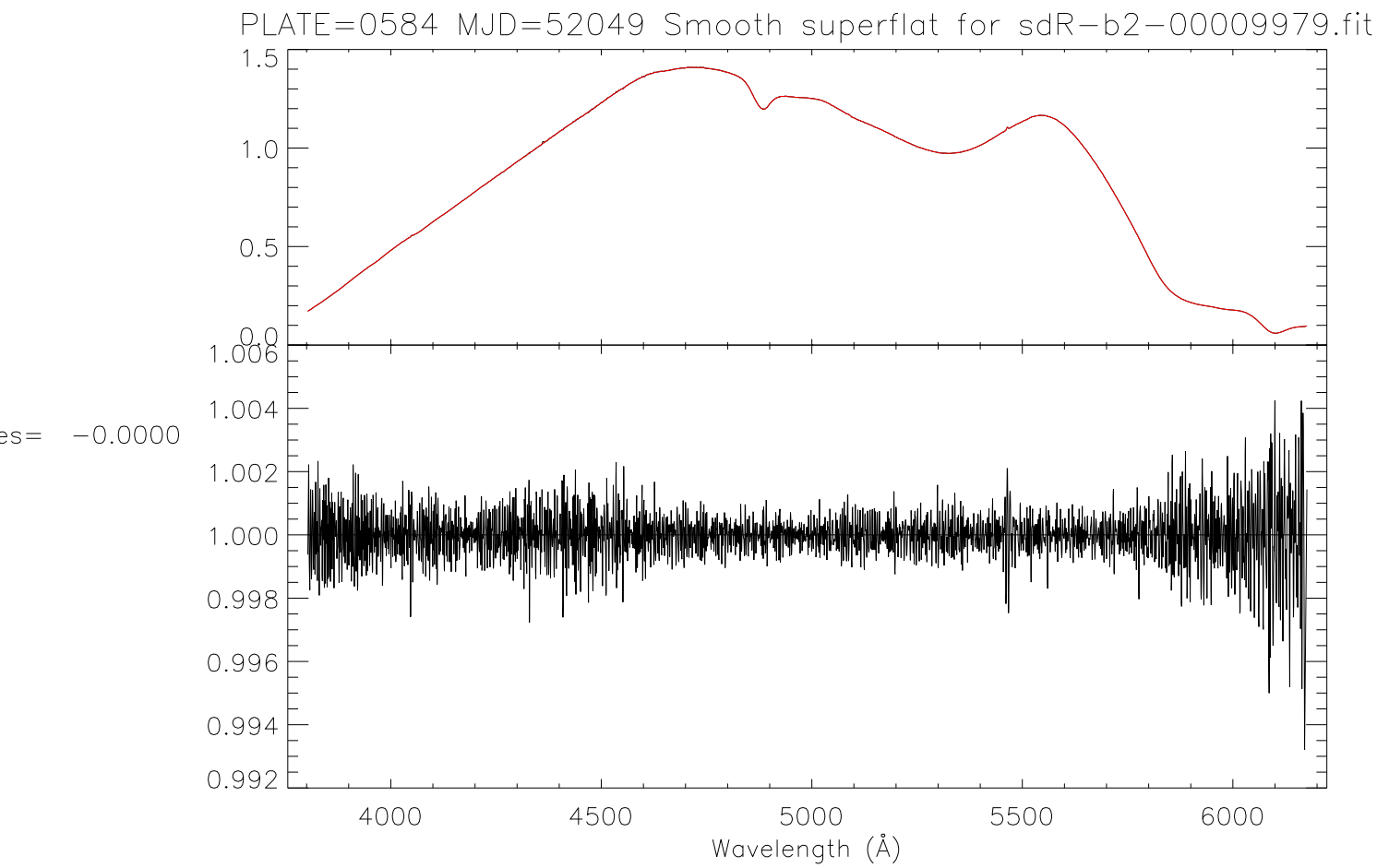

5577.3390
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400


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

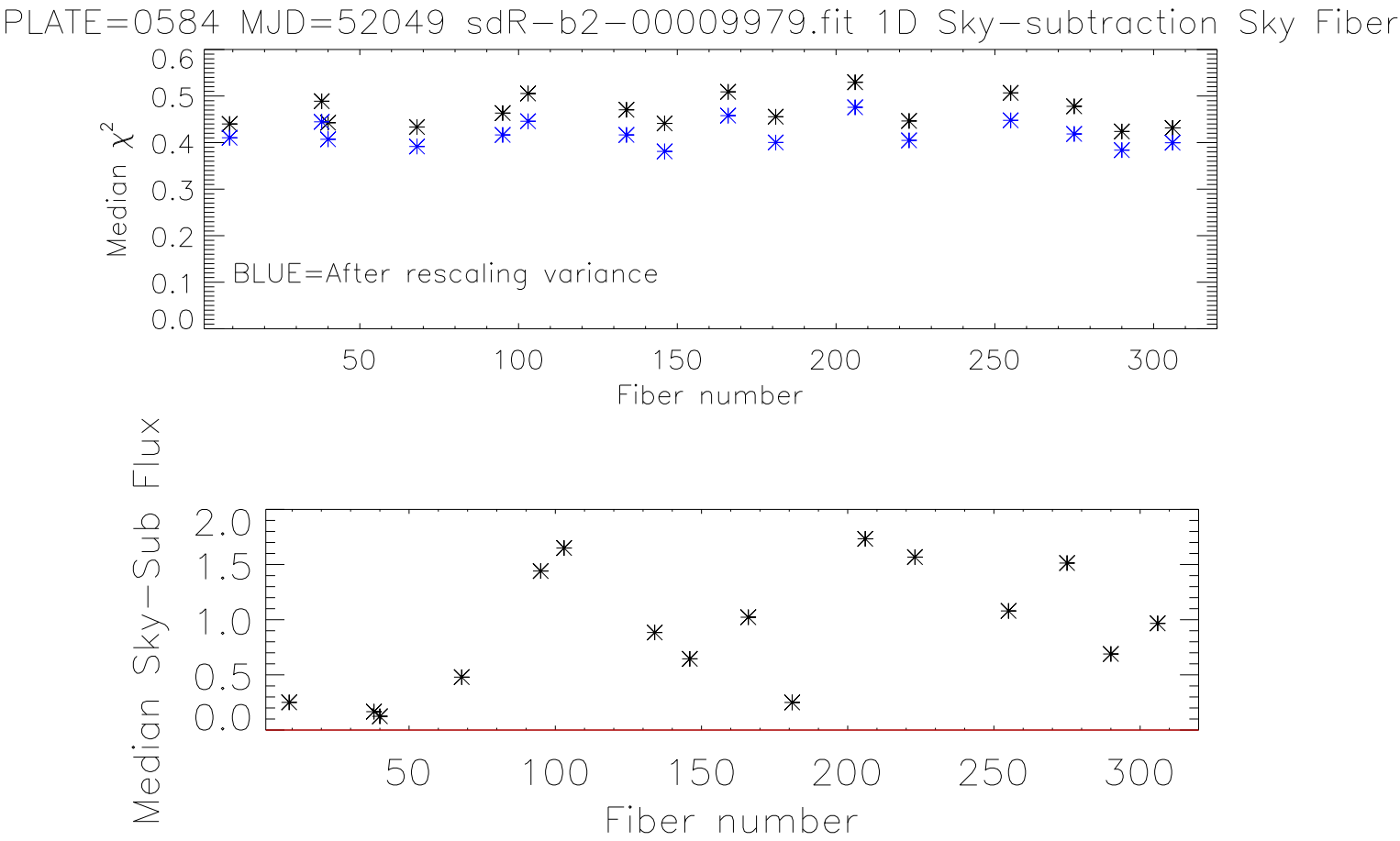

5895.9240
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

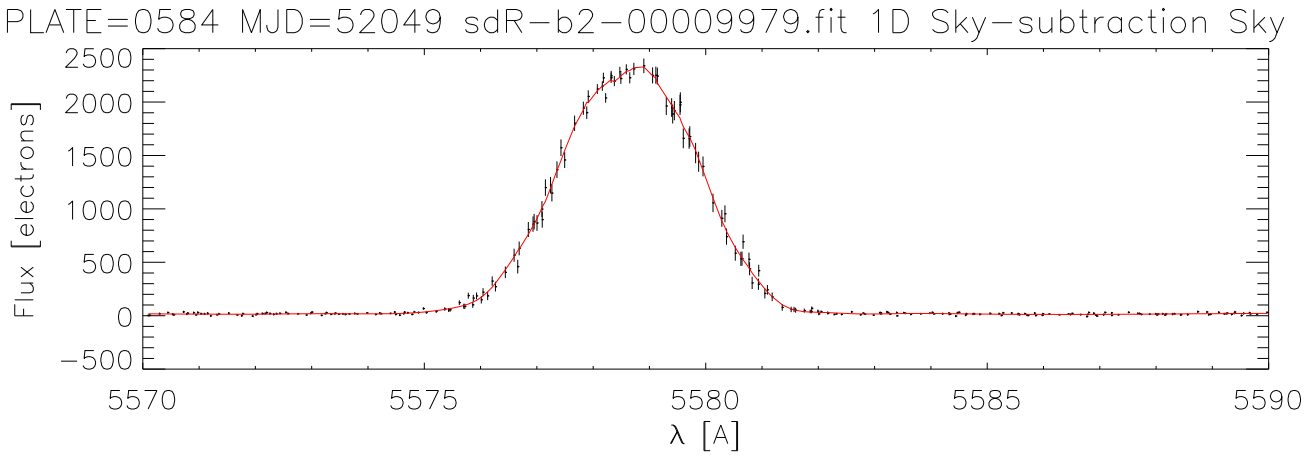

4046.5600
nfib1 16
nfib2 10
stdev 0.402
extra −1.03
4358.3300
nfib1 16
nfib2 15
stdev 0.179
extra −0.92
5460.9400
nfib1 16
nfib2 16
stdev 0.122
extra −0.79
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra −0.64
5889.9500
nfib1 16
nfib2 16
stdev 0.107
extra −0.53
5895.9240
nfib1 16
nfib2 16
stdev 0.181
extra −0.58
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

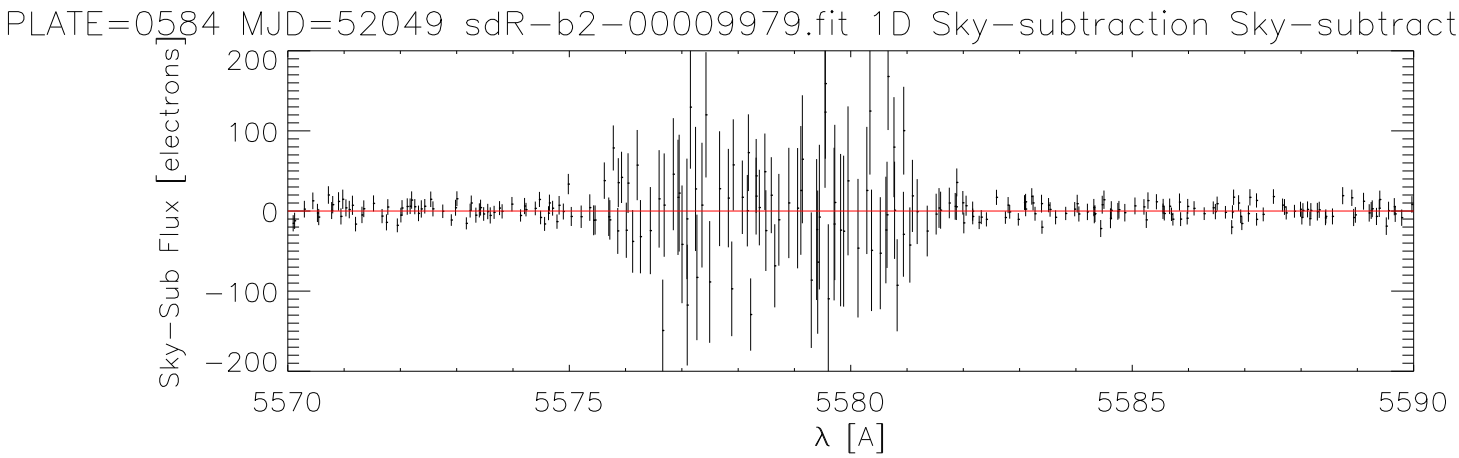

sky shift, pixels
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
3500
4000
4500
5000
5500
6000
6500

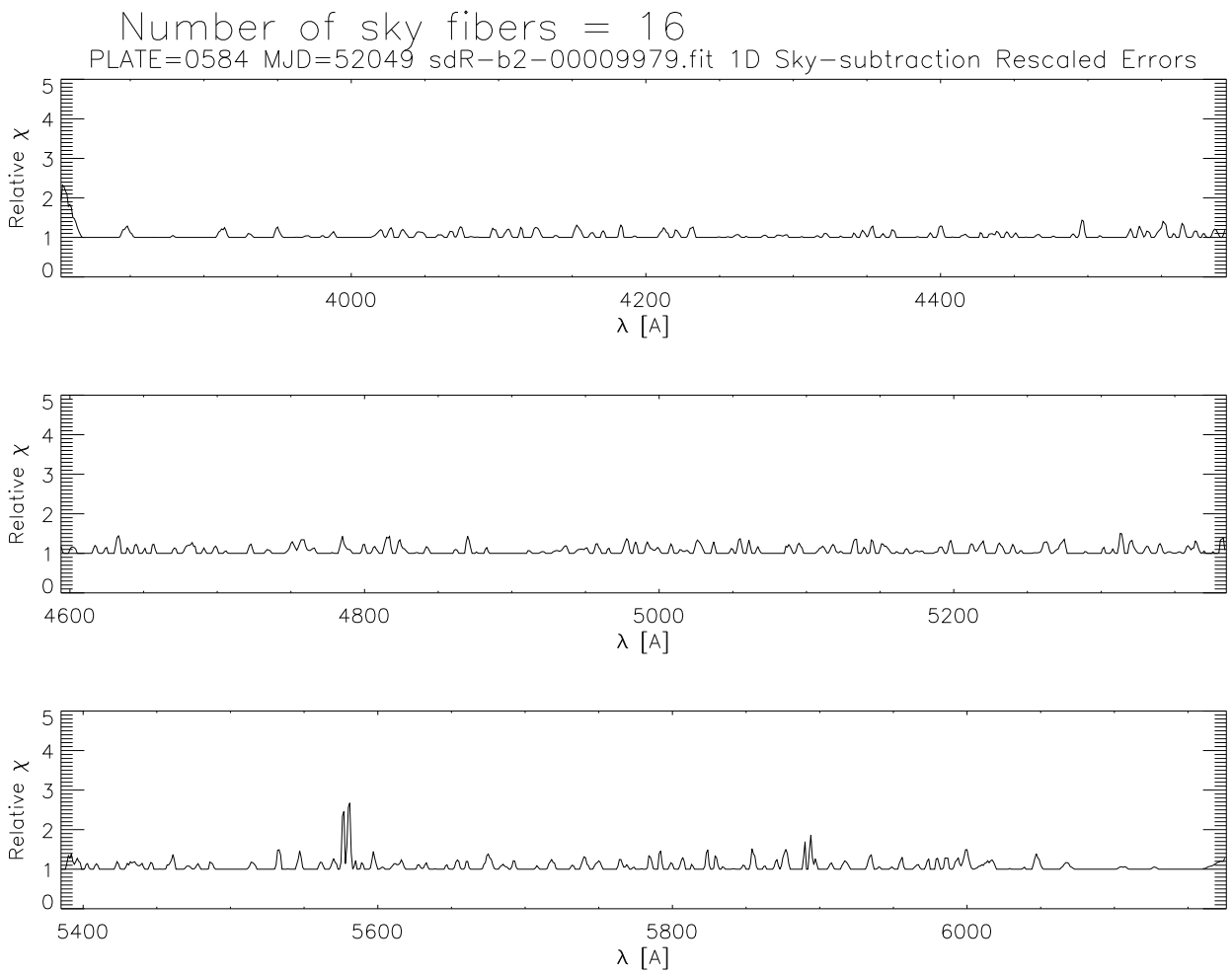

PLATE=0584 MJD=52049 Smooth superflat for sdR-b2-00009979.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
4000
4500
5000
5500
6000
Wavelength (Å)

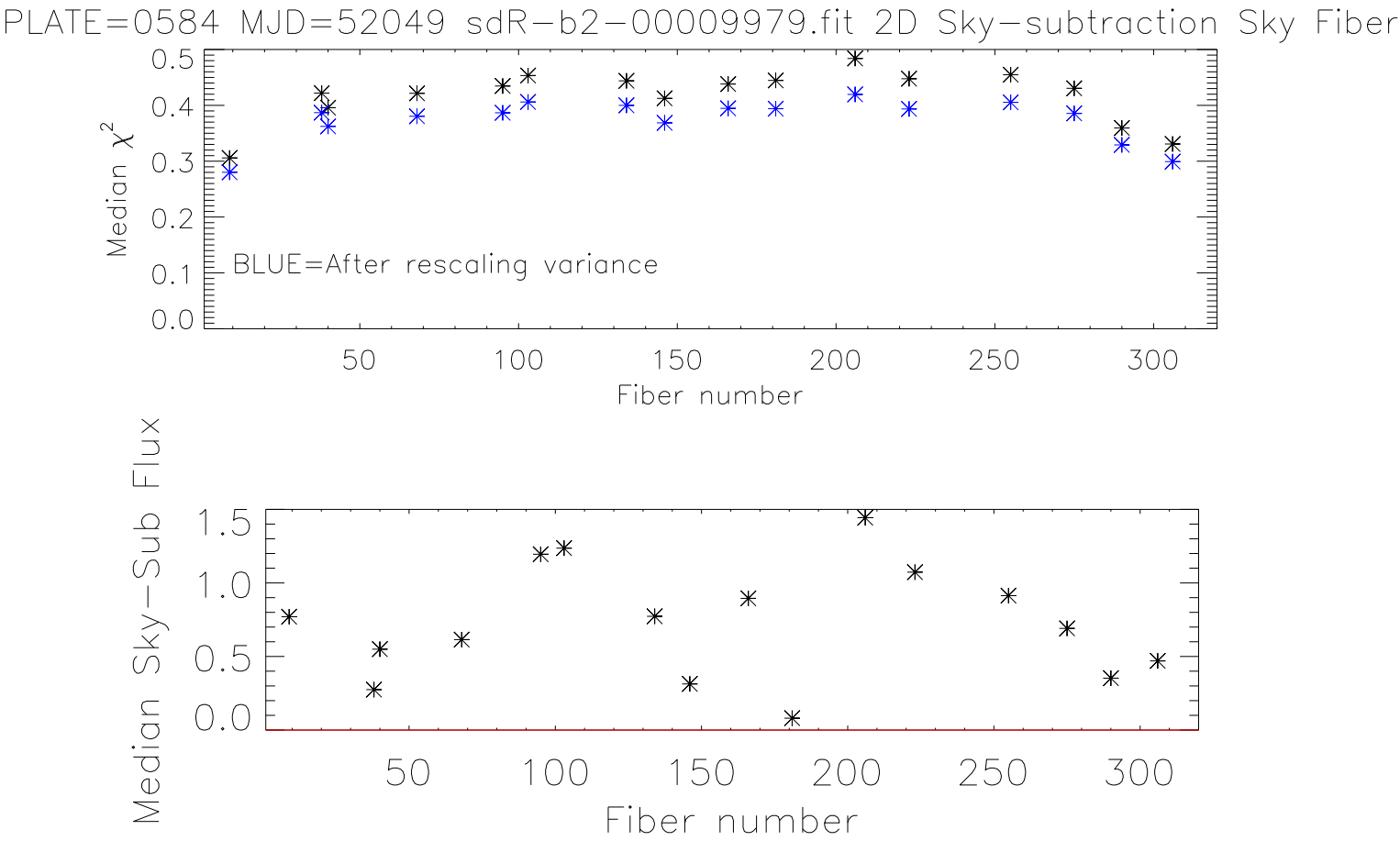
es= −0.0000

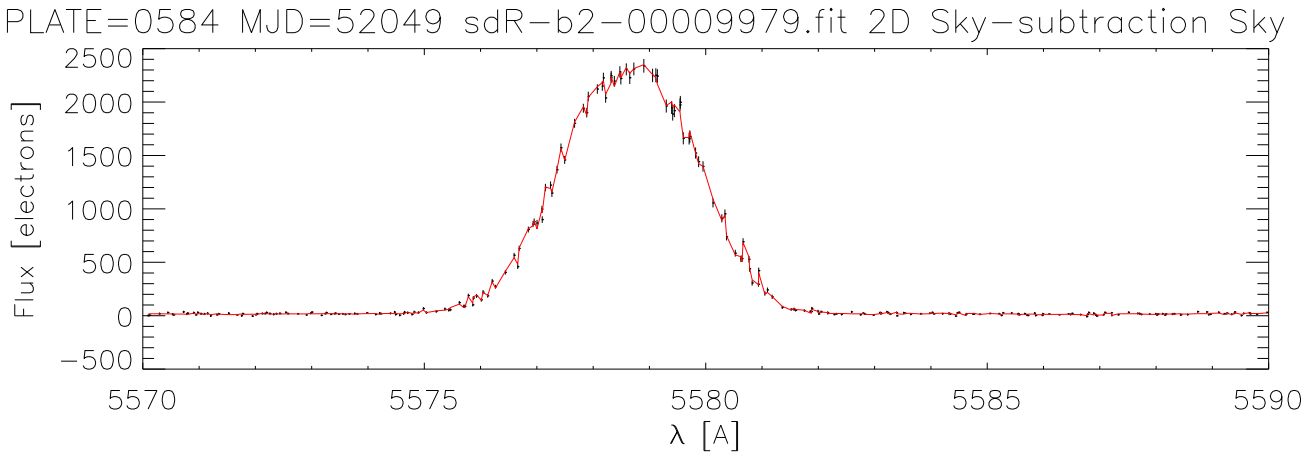

PLATE=0584 MJD=52049 sdR-b2-00009979.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0.0
0.5
1.0
1.5
2.0
50
100
150
200
250
300
Fiber number

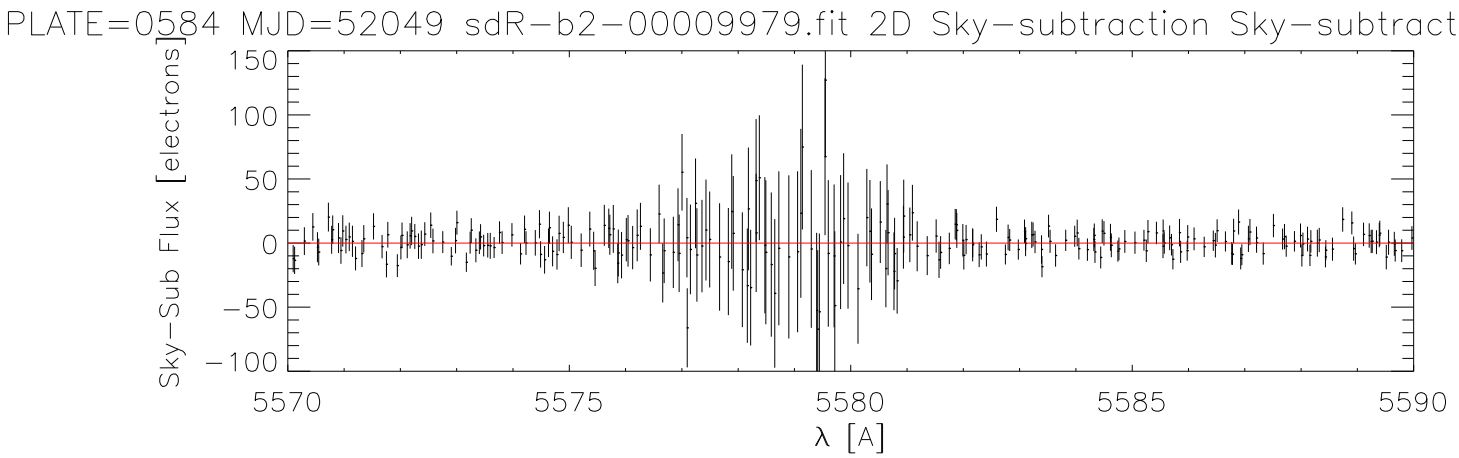

PLATE=0584 MJD=52049 sdR-b2-00009979.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

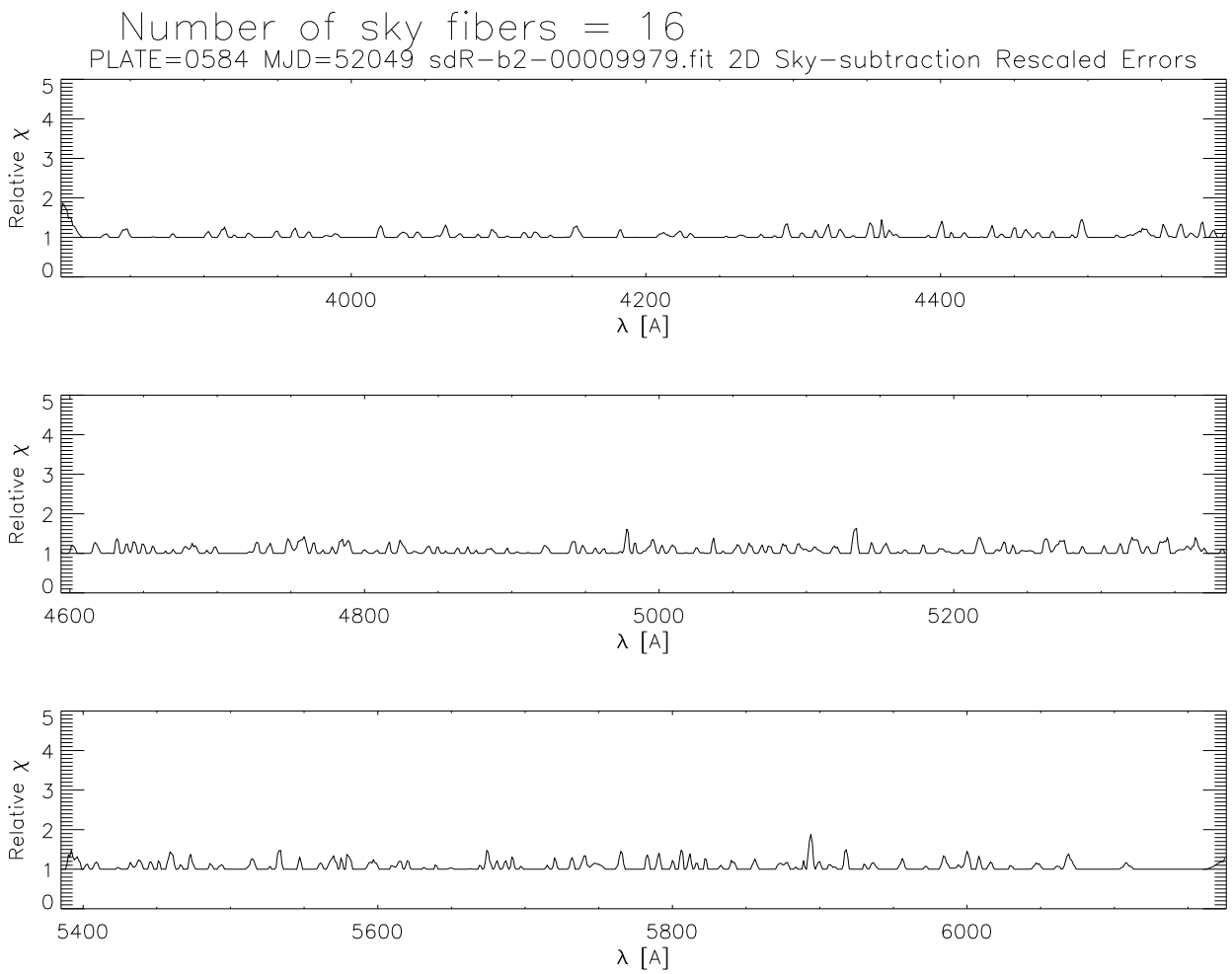

PLATE=0584 MJD=52049 sdR-b2-00009979.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

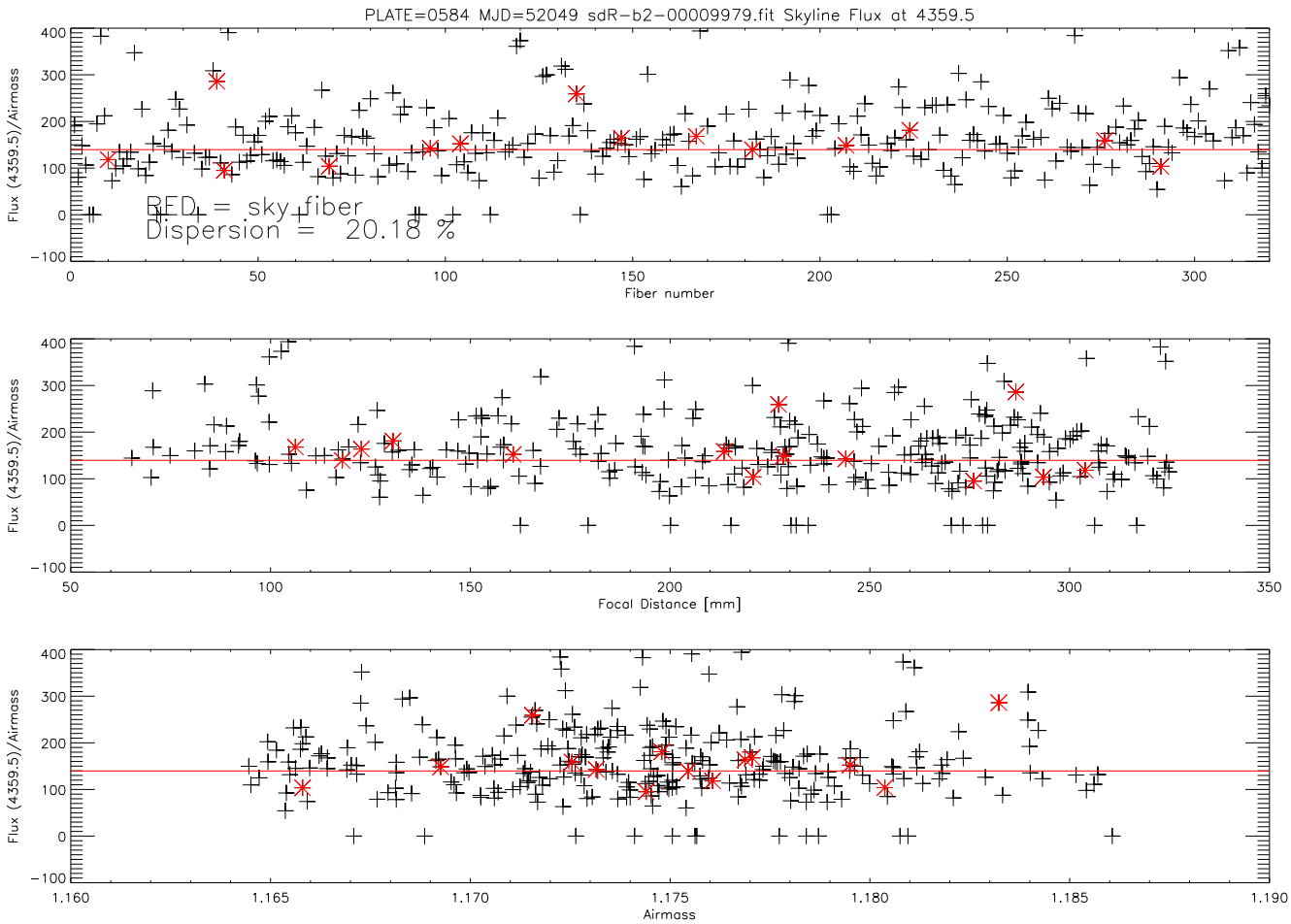

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009979.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

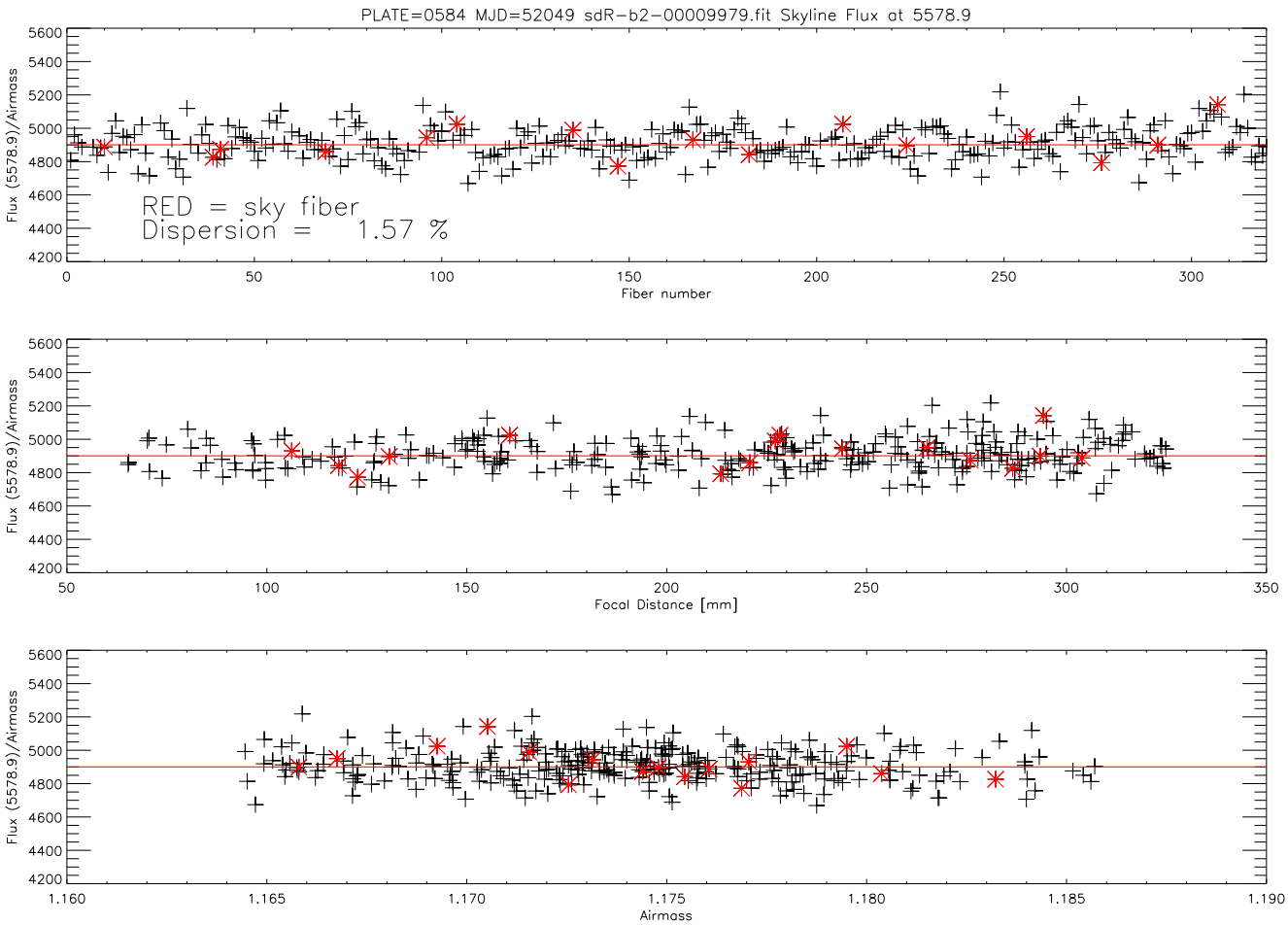

PLATE=0584 MJD=52049 sdR-b2-00009979.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

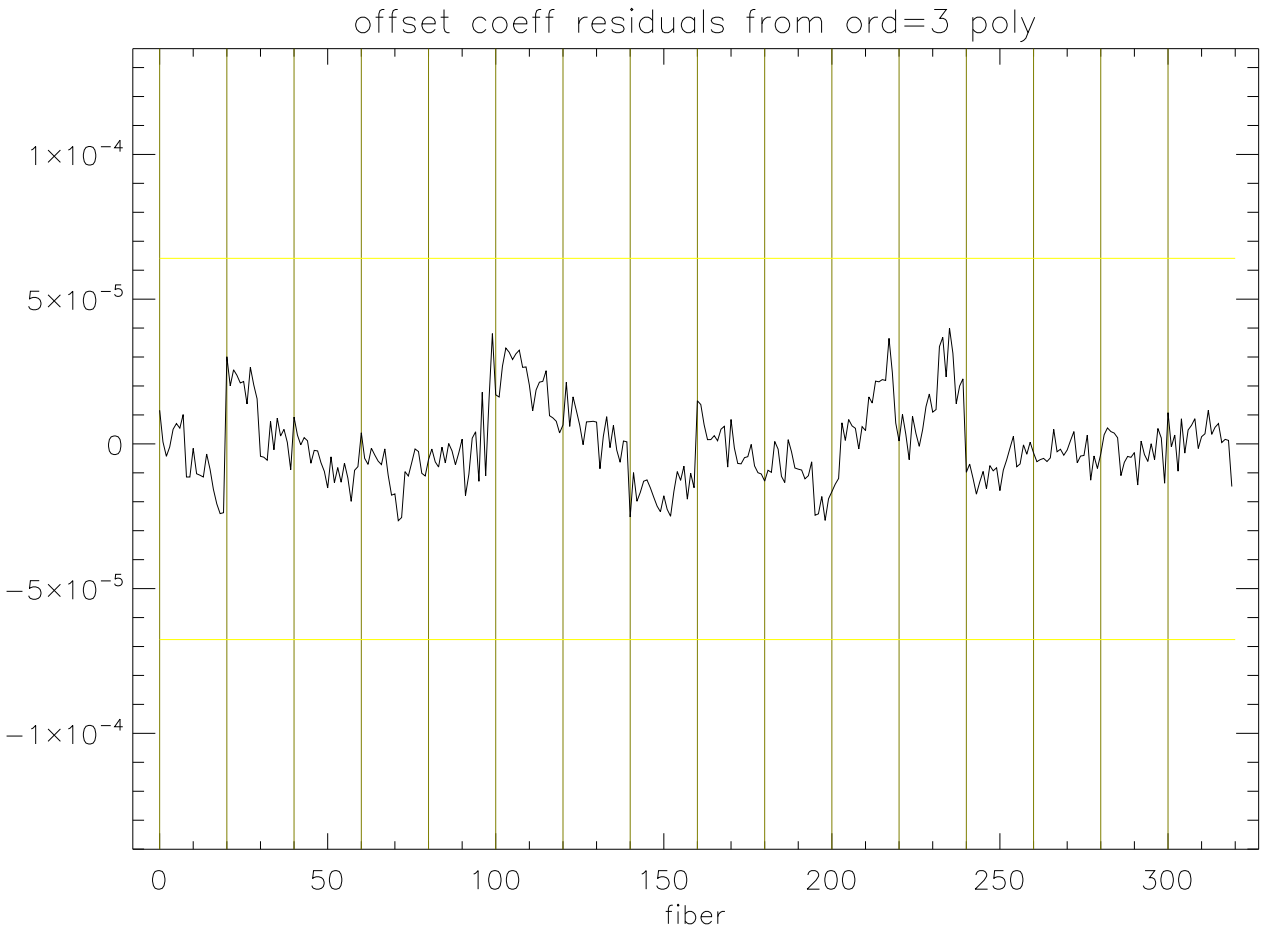

PLATE=0584 MJD=52049 sdR-b2-00009979.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

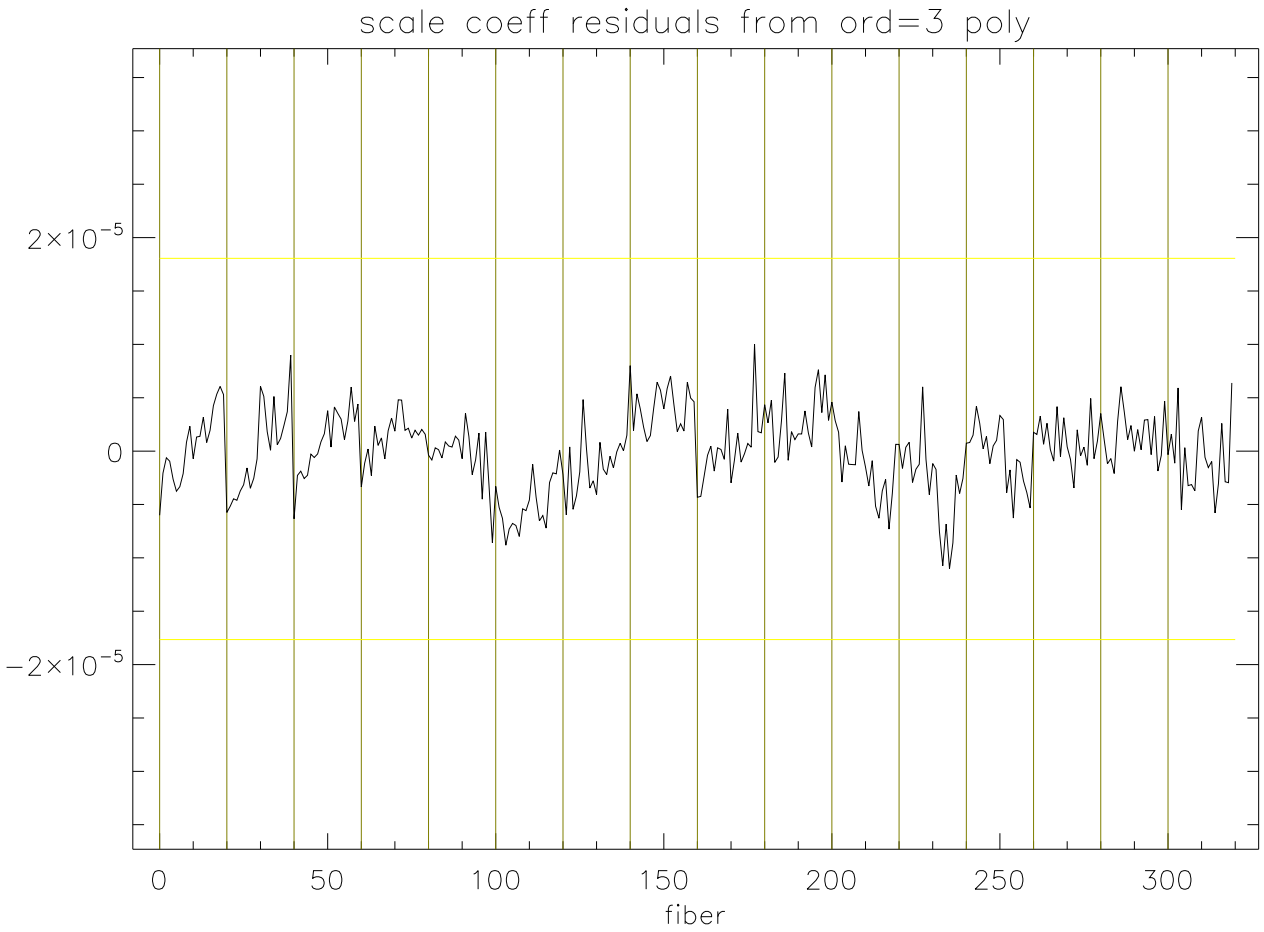

PLATE=0584 MJD=52049 sdR-b2-00009979.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

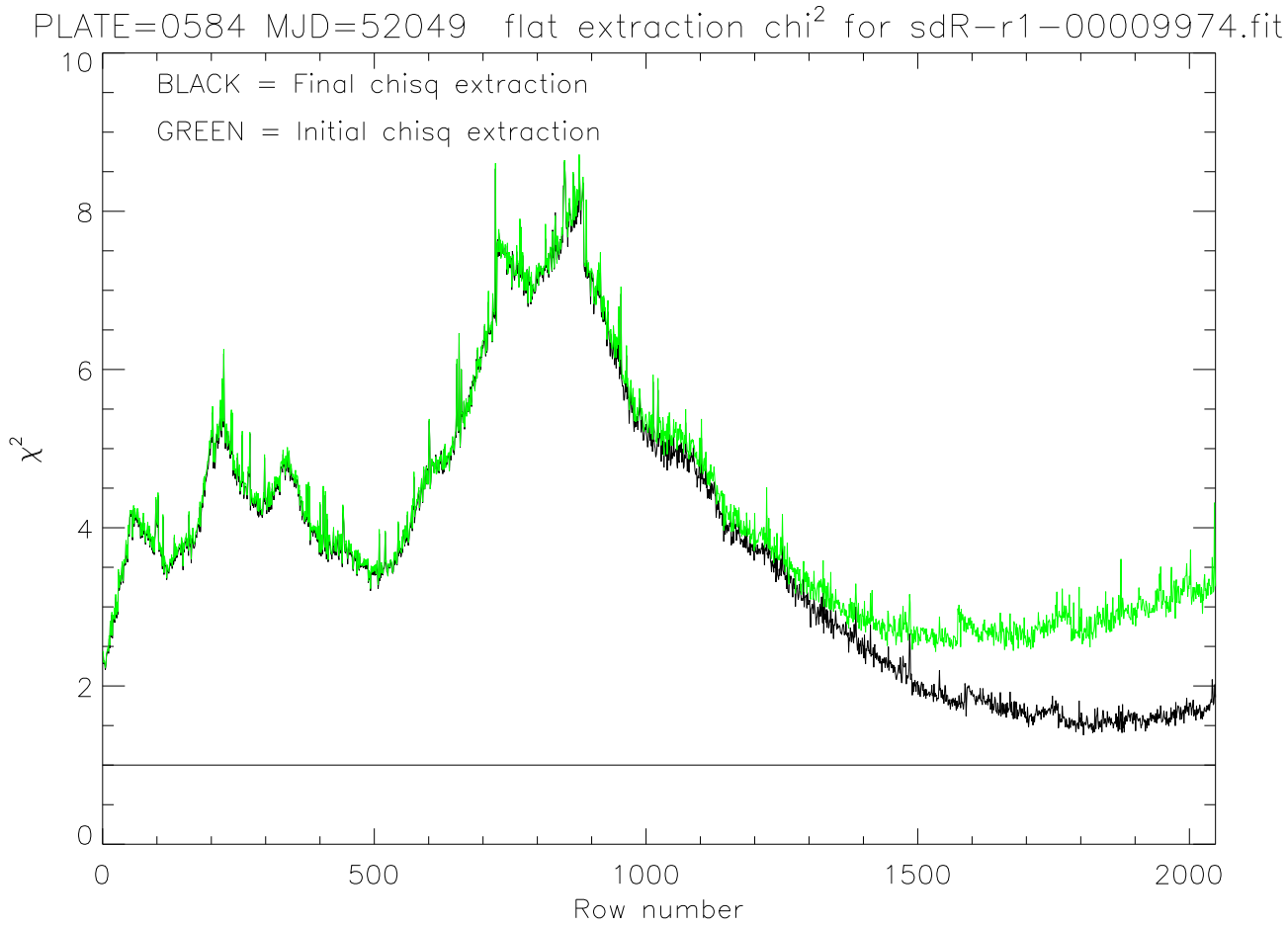

Number of sky fibers = 16
PLATE=0584 MJD=52049 sdR-b2-00009979.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

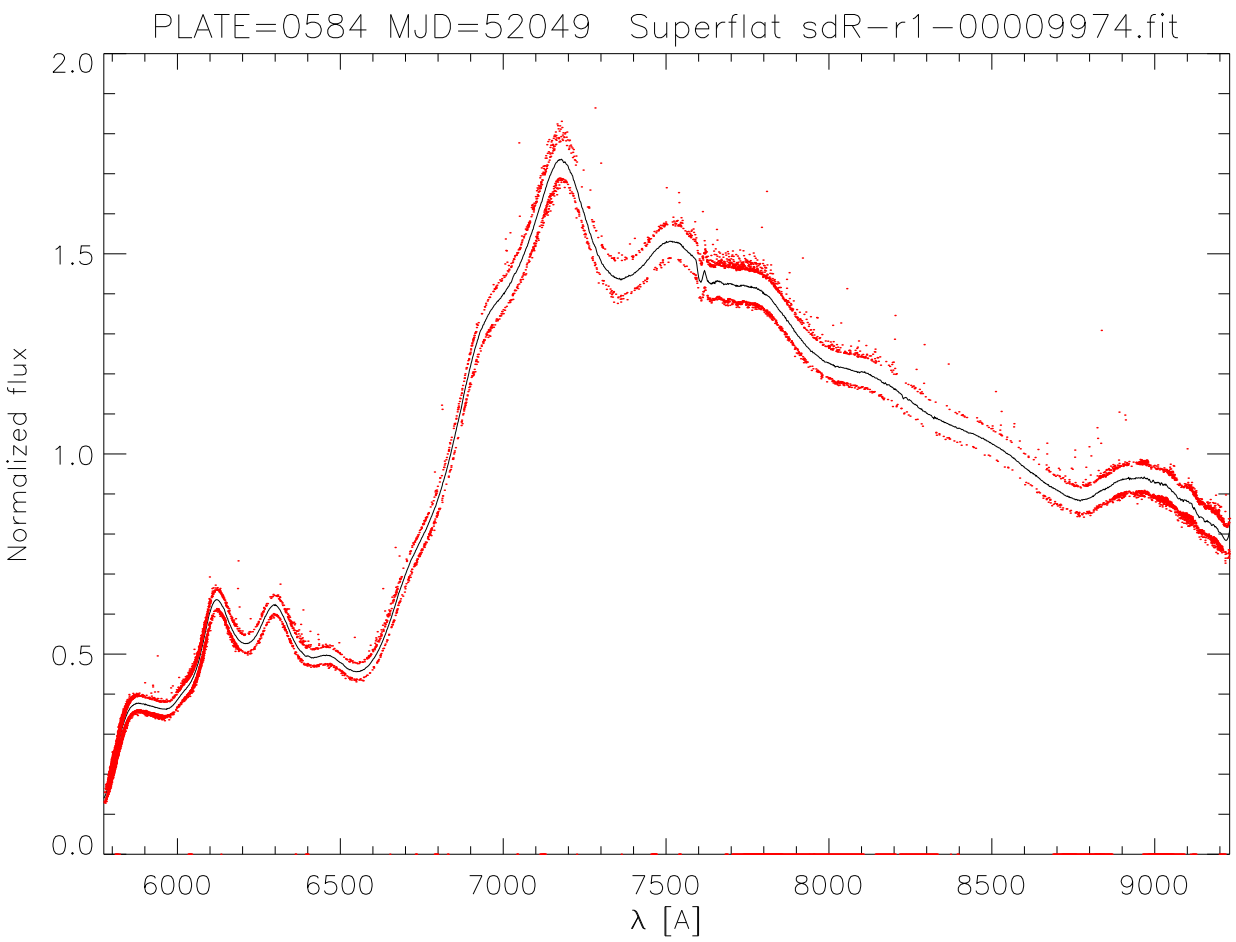

PLATE=0584 MJD=52049 sdR-b2-00009979.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 20.18 %
Fiber number
Focal Distance [mm]
Airmass

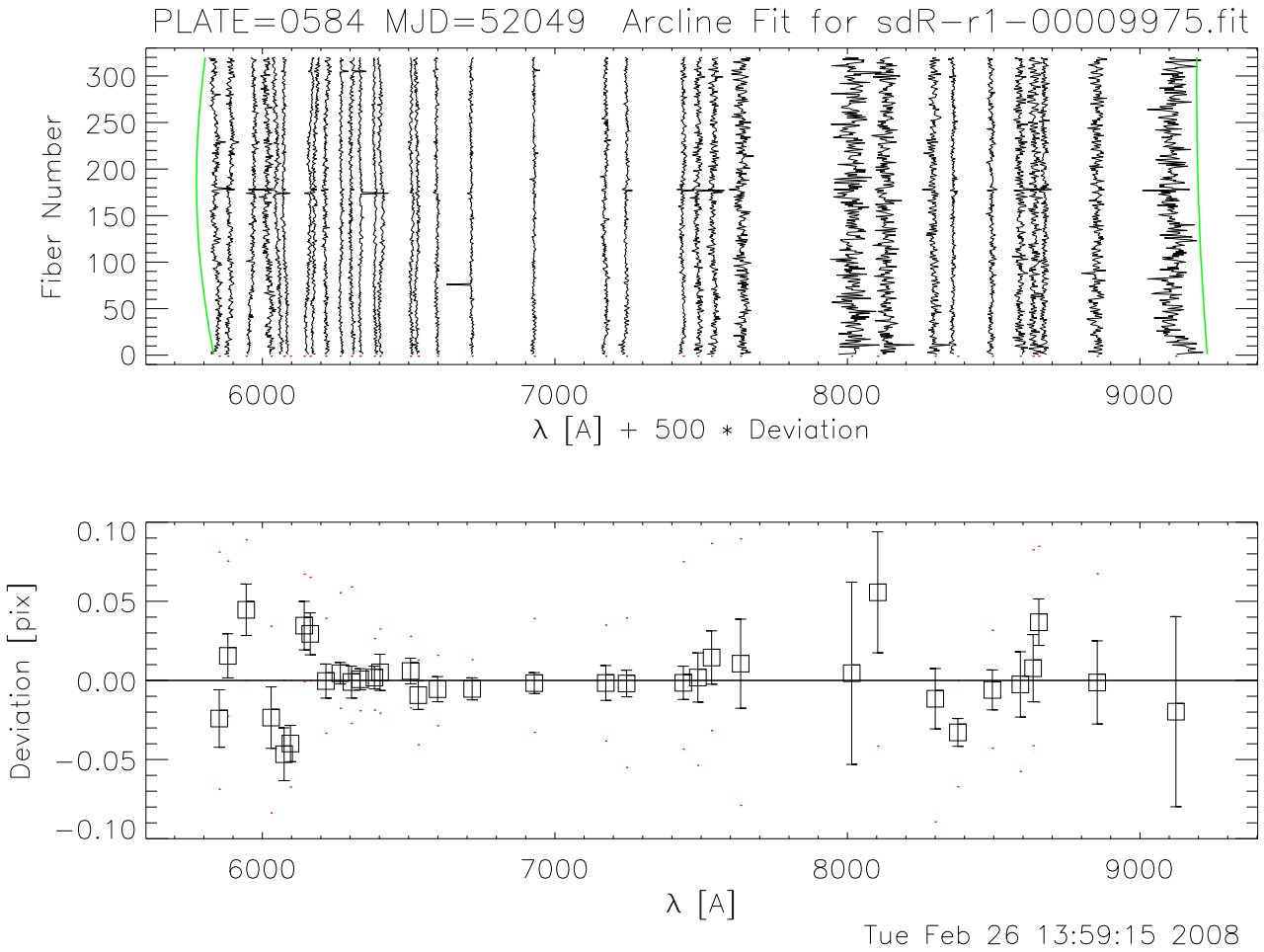

PLATE=0584 MJD=52049 sdR-b2-00009979.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.57 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

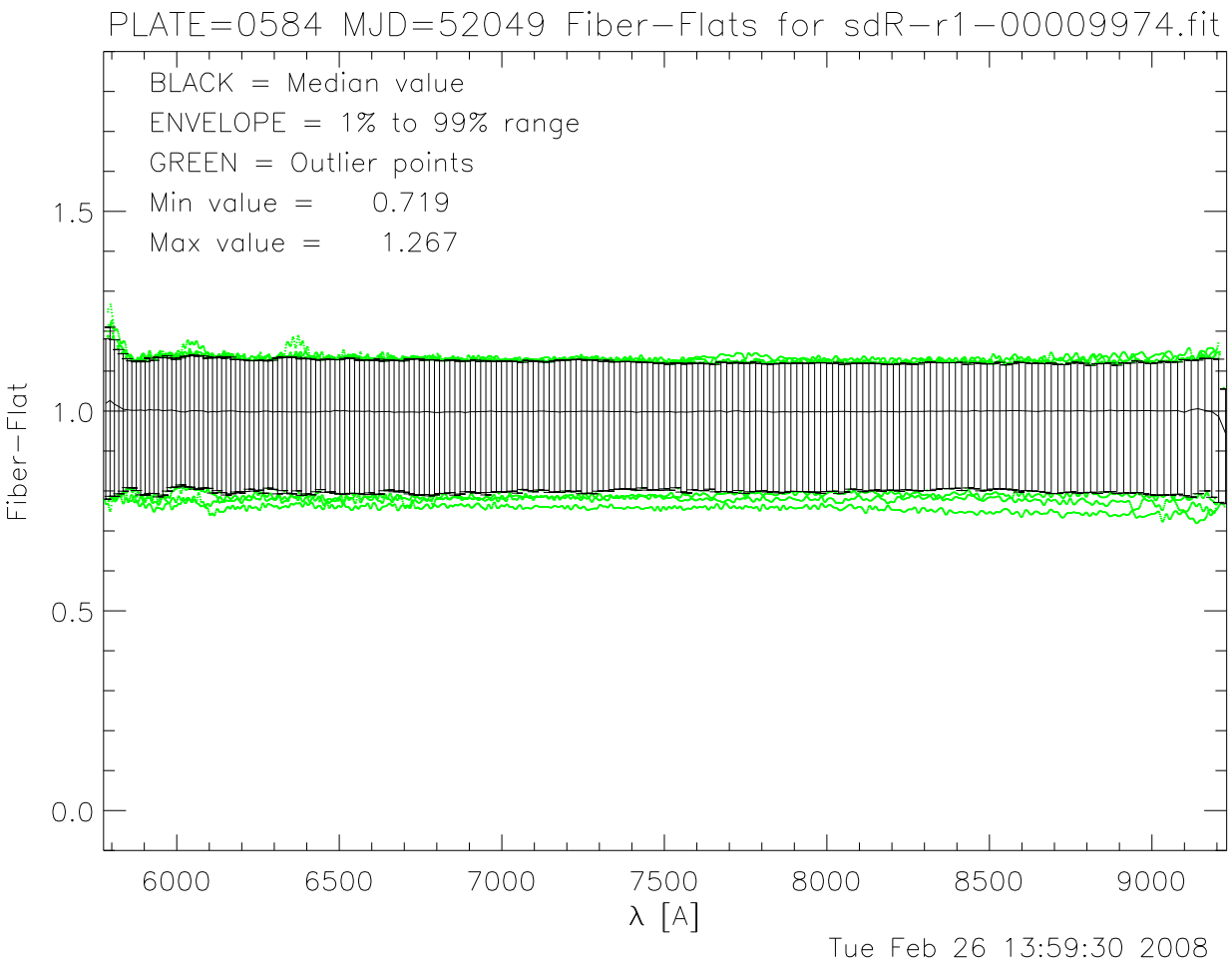

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

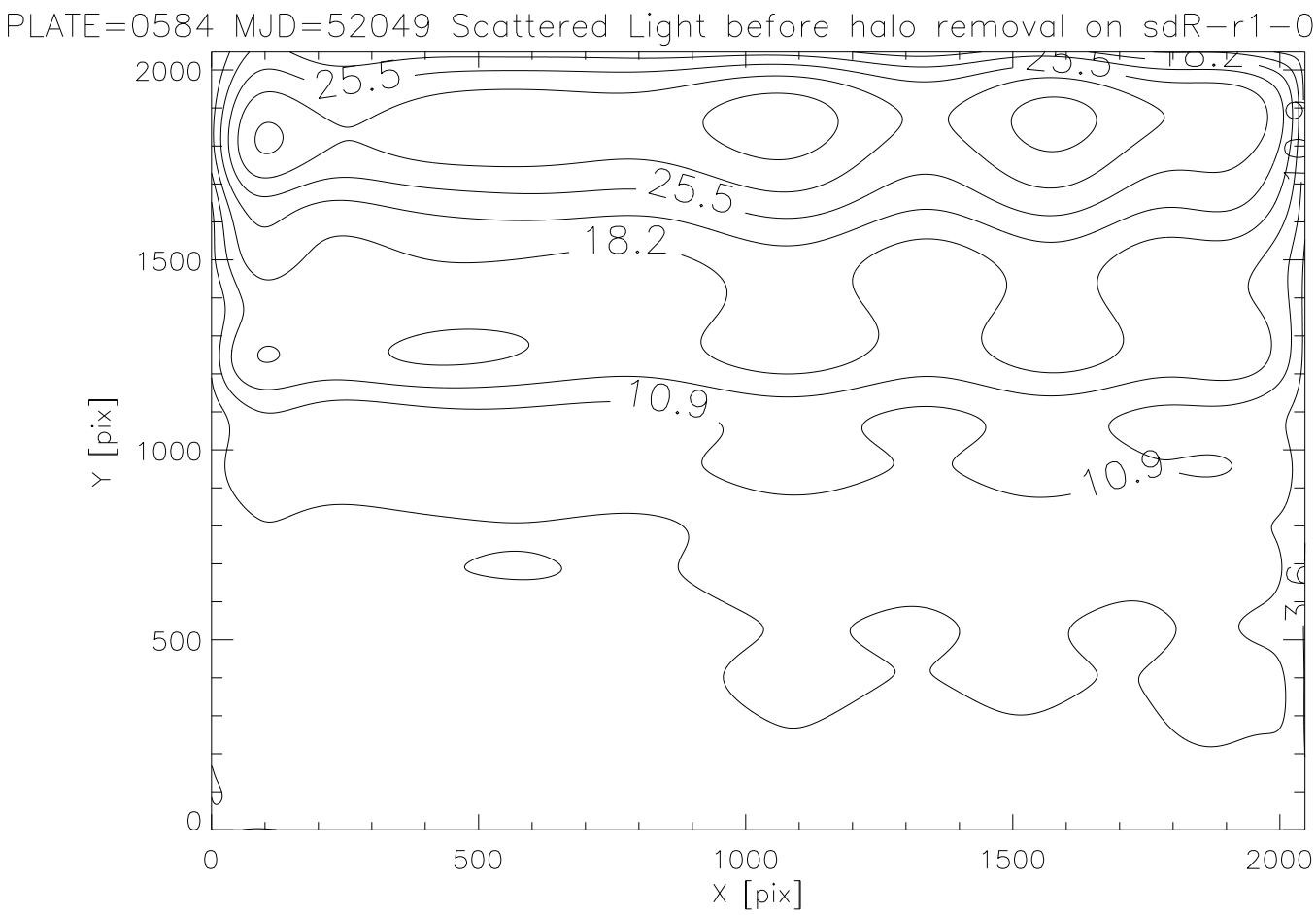

scale coeff residuals from ord=3 poly
2×10^-5
0
−2×10^-5
0
50
100
150
200
250
300
fiber

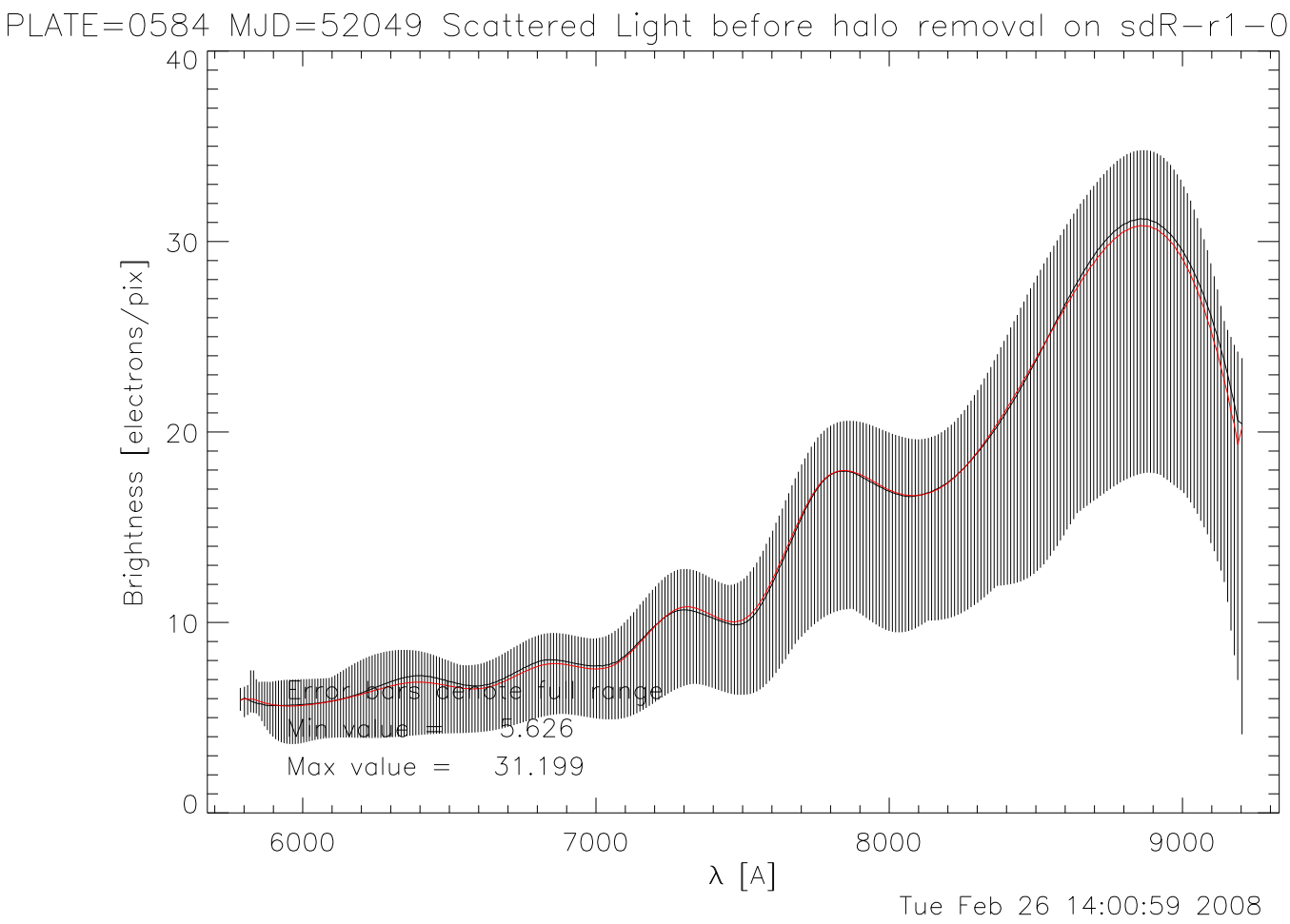

PLATE=0584 MJD=52049 flat extraction chi^2 for sdR−r1−00009974.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

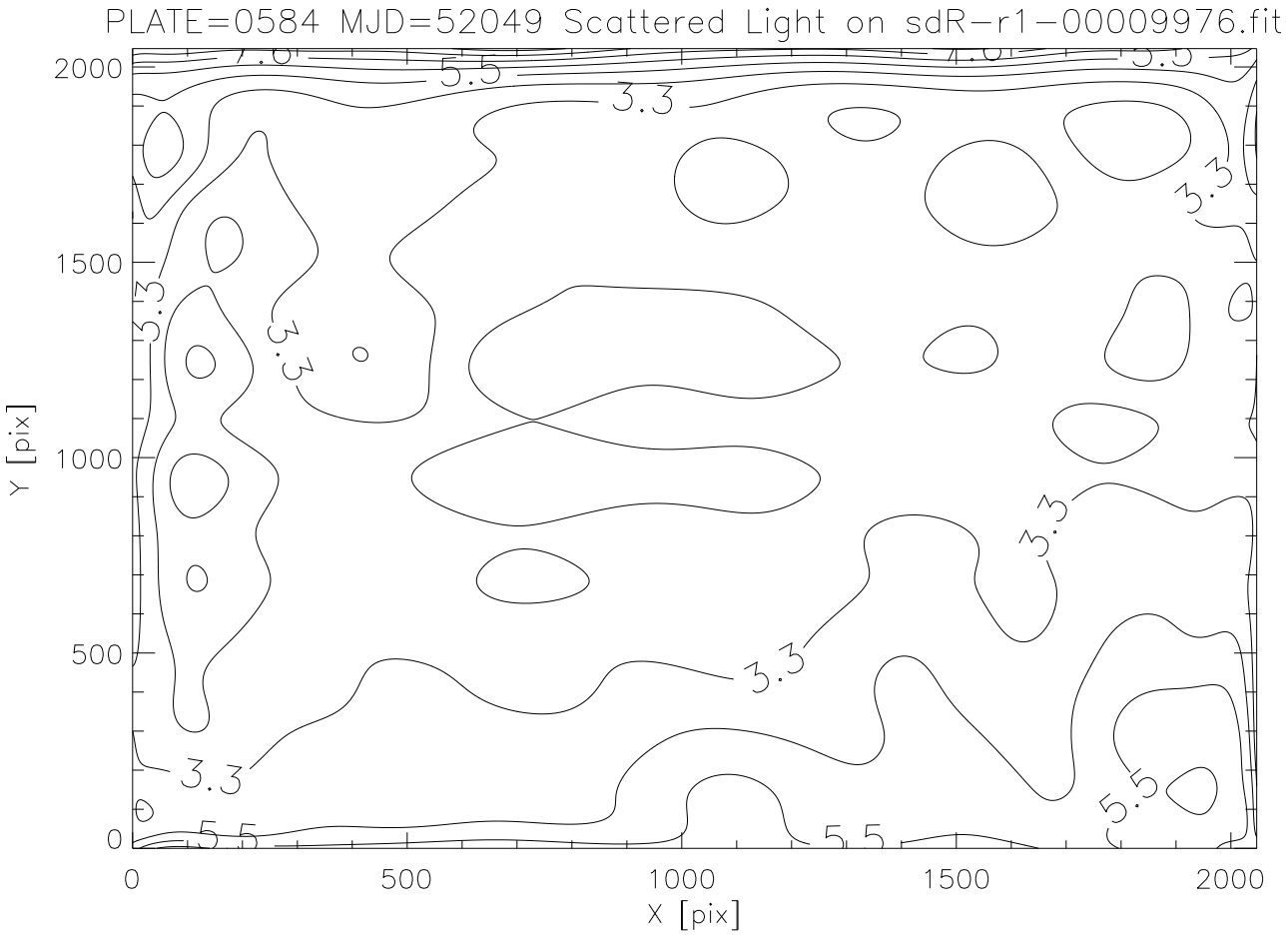

PLATE=0584 MJD=52049 Superflat sdR-r1-00009974.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

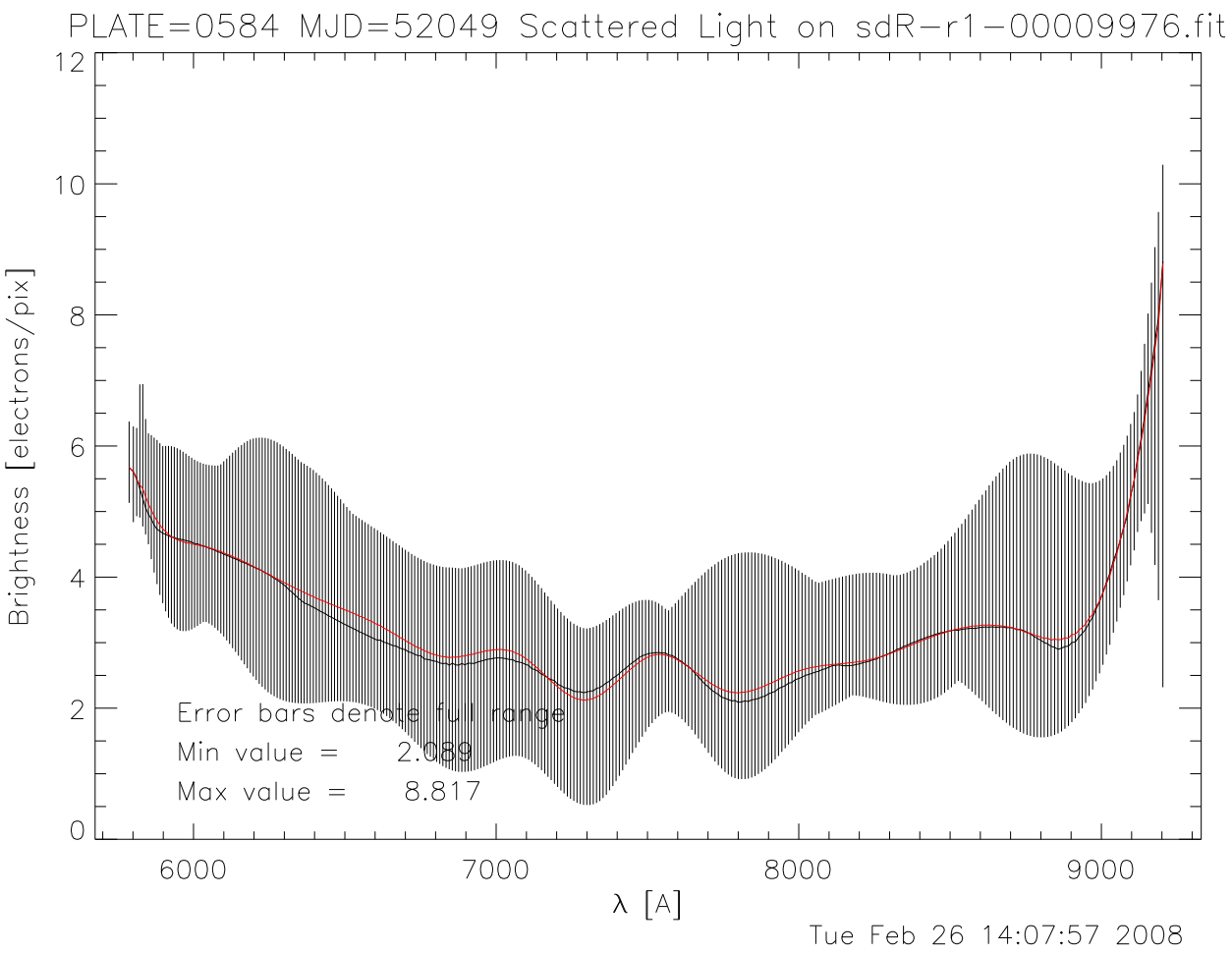

PLATE=0584 MJD=52049 Arcline Fit for sdR-r1-00009975.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 26 13:59:15 2008

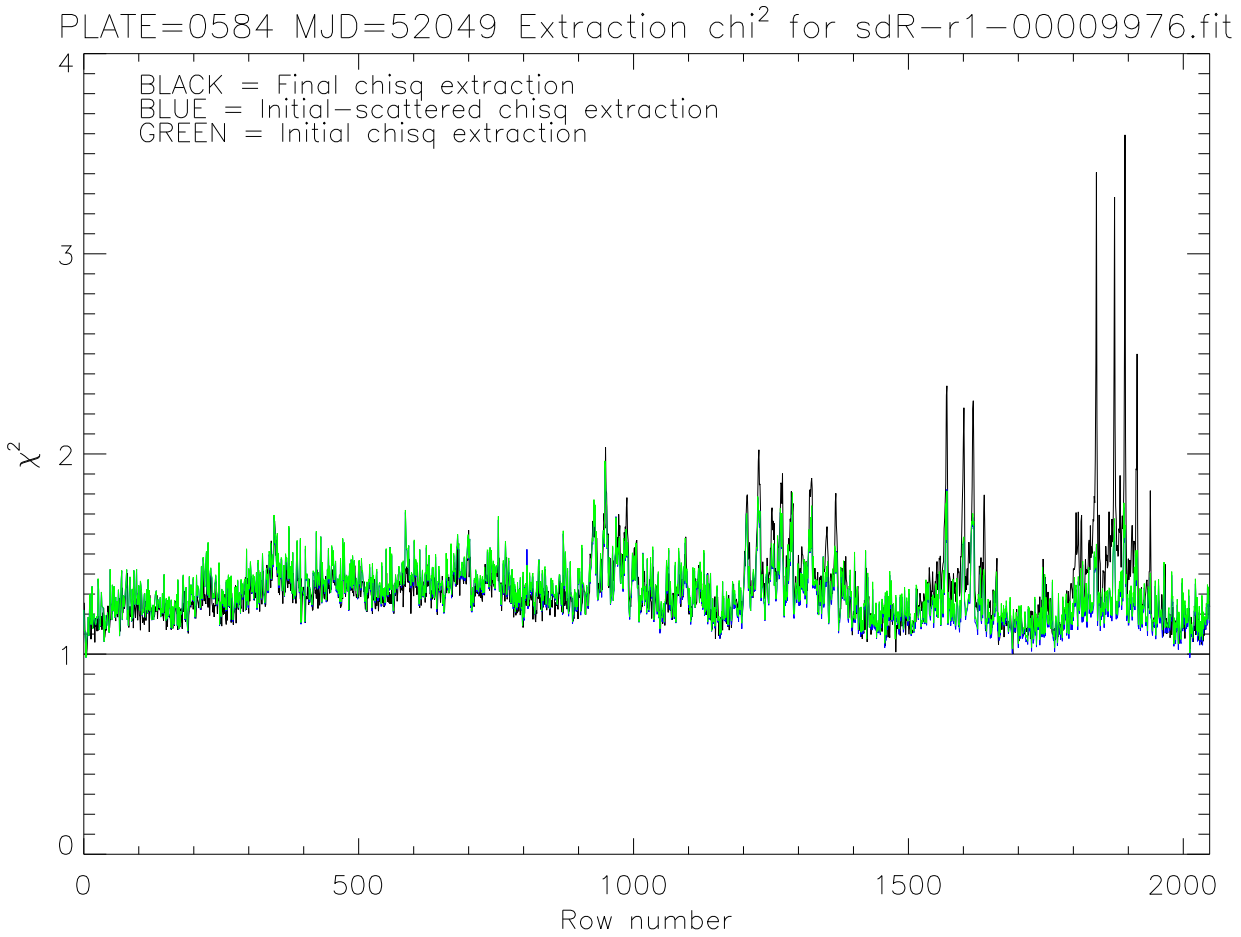

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r1−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.719
Max value = 1.267
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 13:59:30 2008

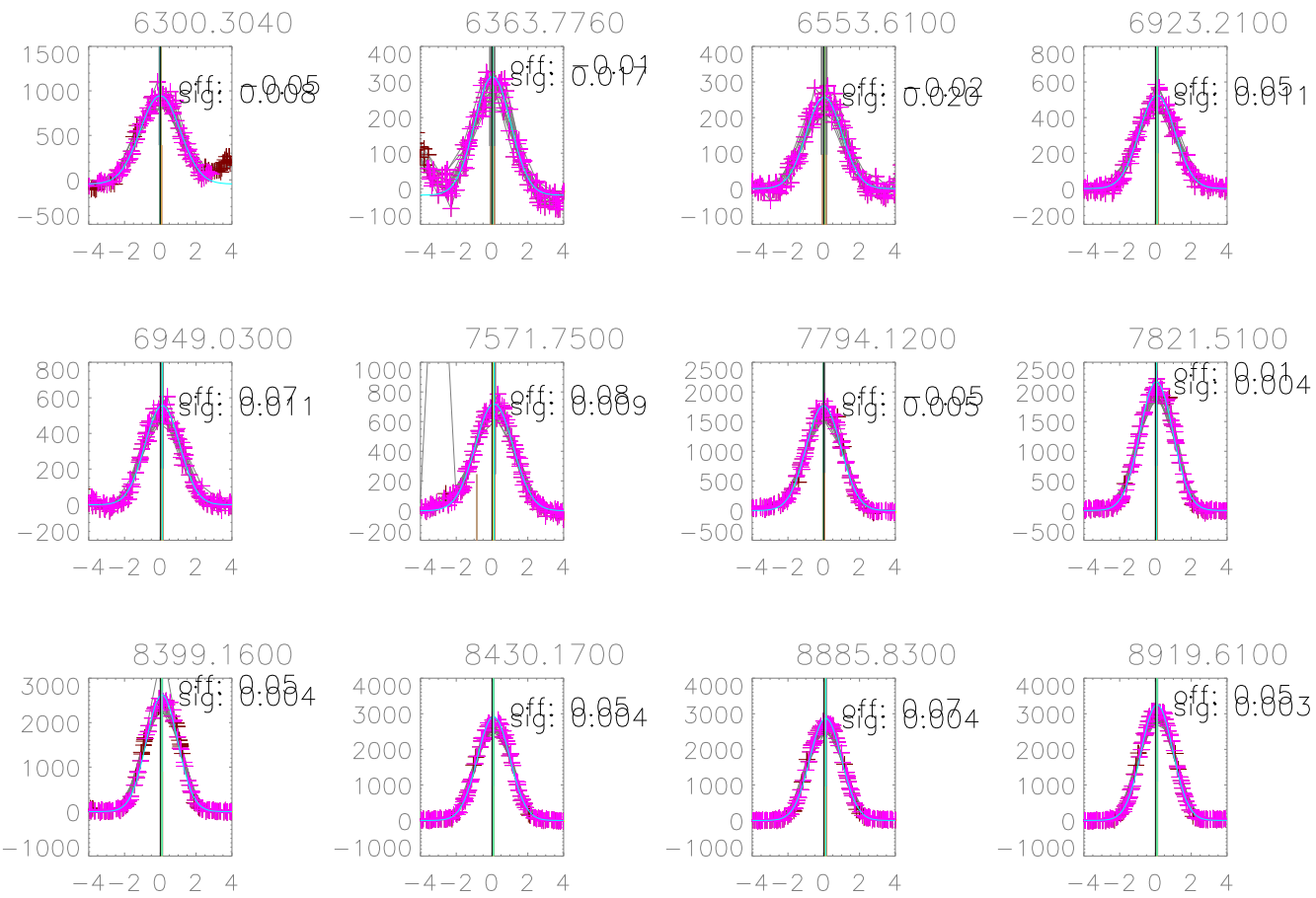

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009976.fi
25.5
25.5
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

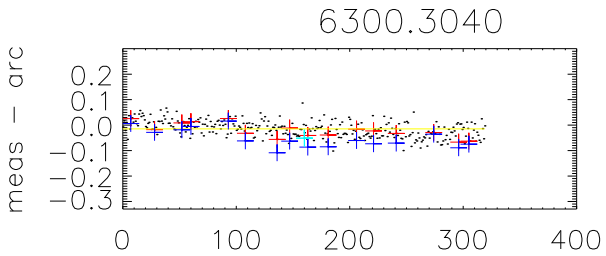

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009976.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.626
Max value = 31.199
Tue Feb 26 14:00:59 2008

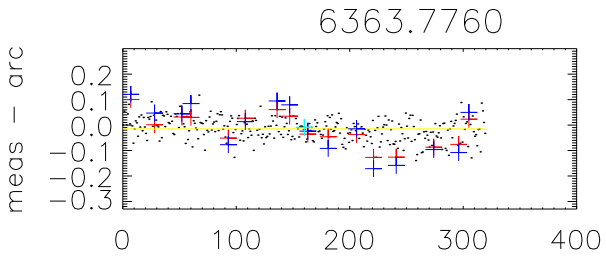

PLATE=0584 MJD=52049 Scattered Light on sdR−r1−00009976.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3

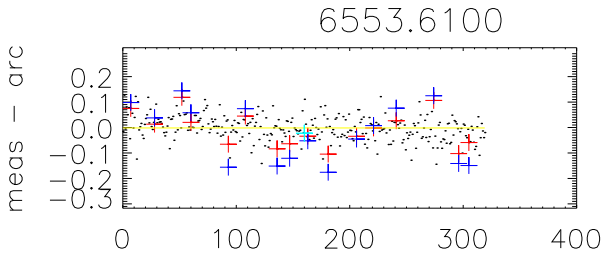

PLATE=0584 MJD=52049 Scattered Light on sdR-r1-00009976.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.089
Max value = 8.817
Tue Feb 26 14:07:57 2008

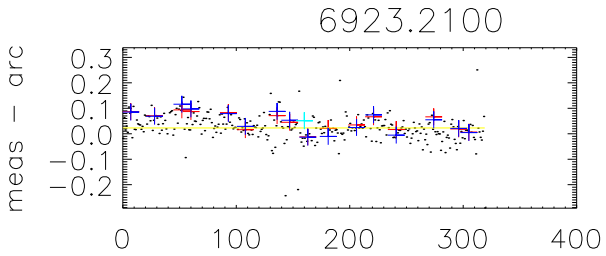

PLATE=0584 MJD=52049 Extraction chi^2 for sdR−r1−00009976.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

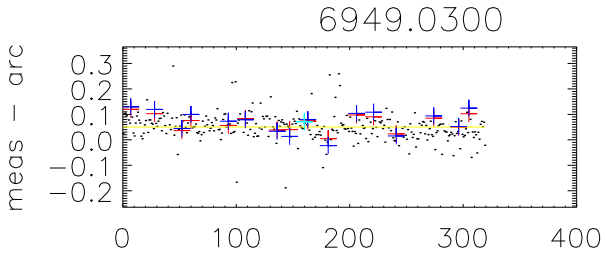

6300.3040
off: −0.05
sig: 0.008
6363.7760
off: −0.01
sig: 0.017
6553.6100
off: −0.02
sig: 0.020
6923.2100
off: 0.05
sig: 0.011
6949.0300
off: 0.07
sig: 0.011
7571.7500
off: 0.08
sig: 0.009
7794.1200
off: −0.05
sig: 0.005
7821.5100
off: 0.01
sig: 0.004
8399.1600
off: 0.05
sig: 0.004
8430.1700
off: 0.05
sig: 0.004
8885.8300
off: 0.07
sig: 0.004
8919.6100
off: 0.05
sig: 0.003

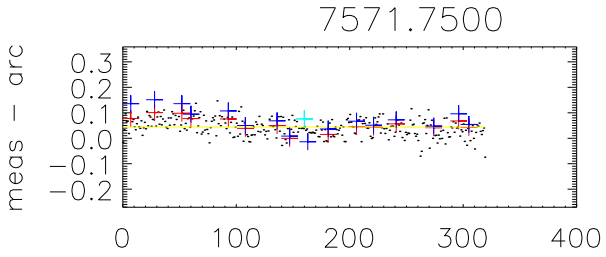

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

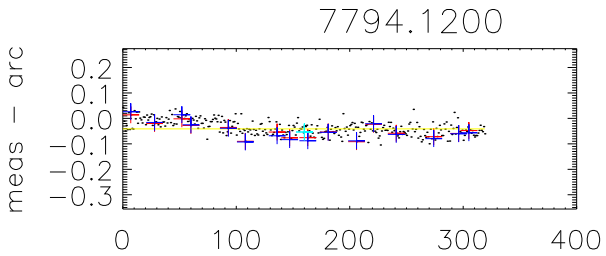

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

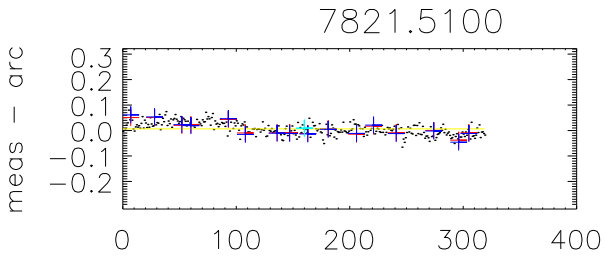

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

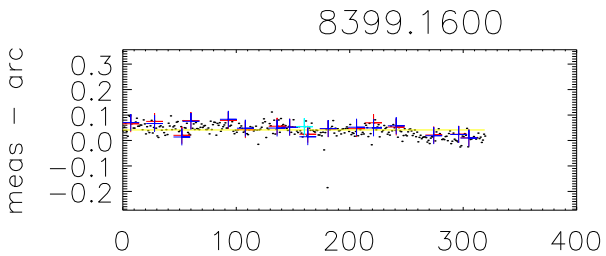

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

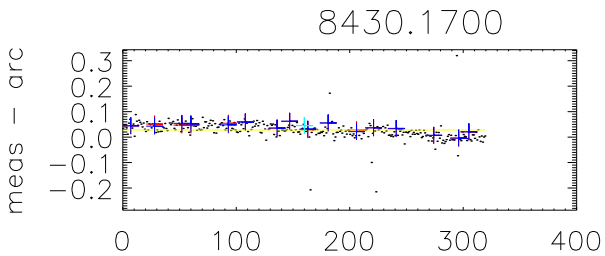

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

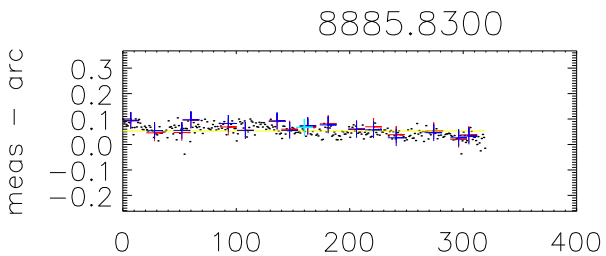

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

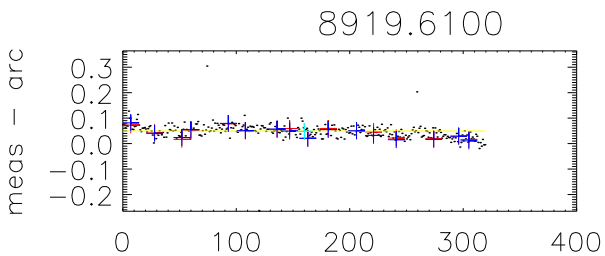

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

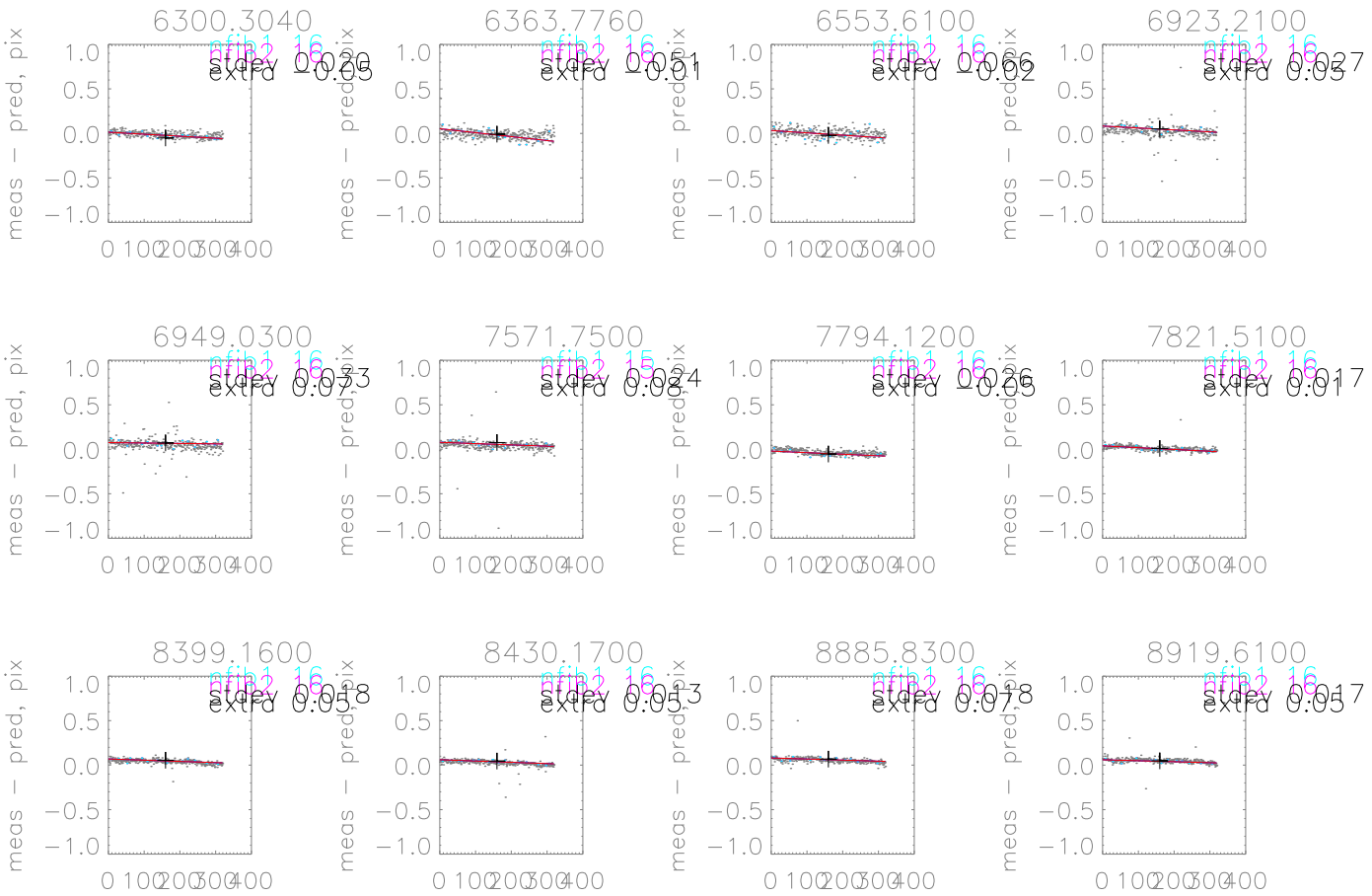

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

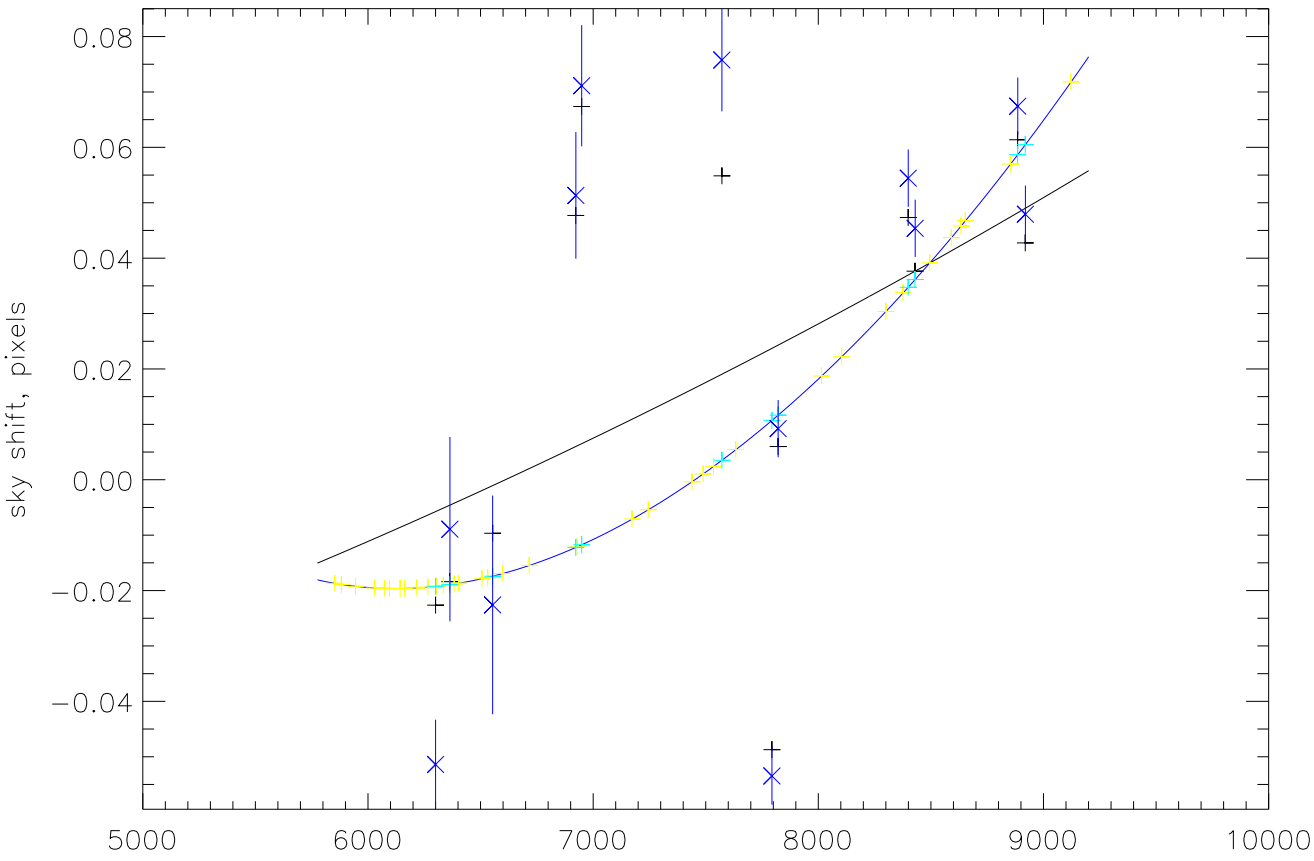

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

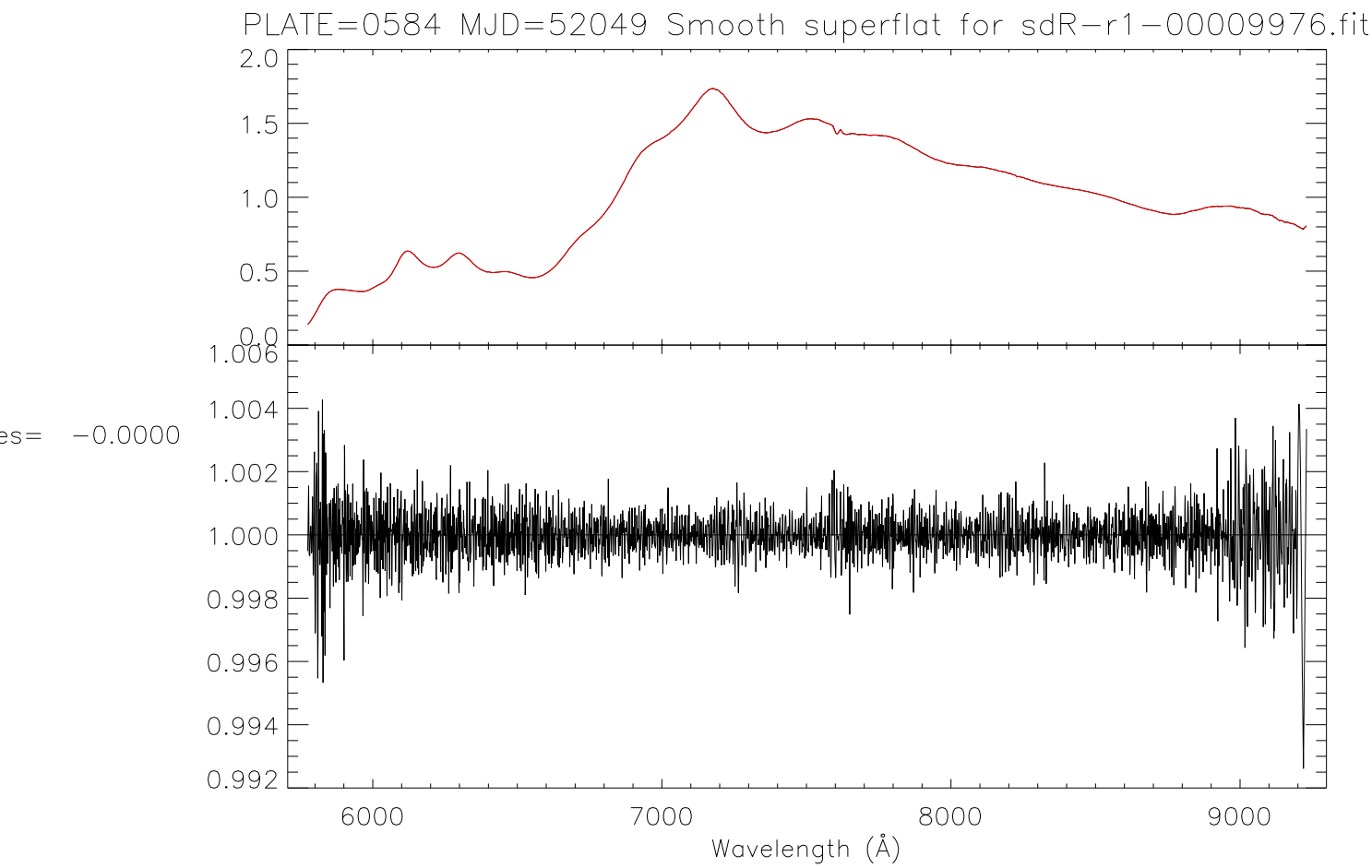

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

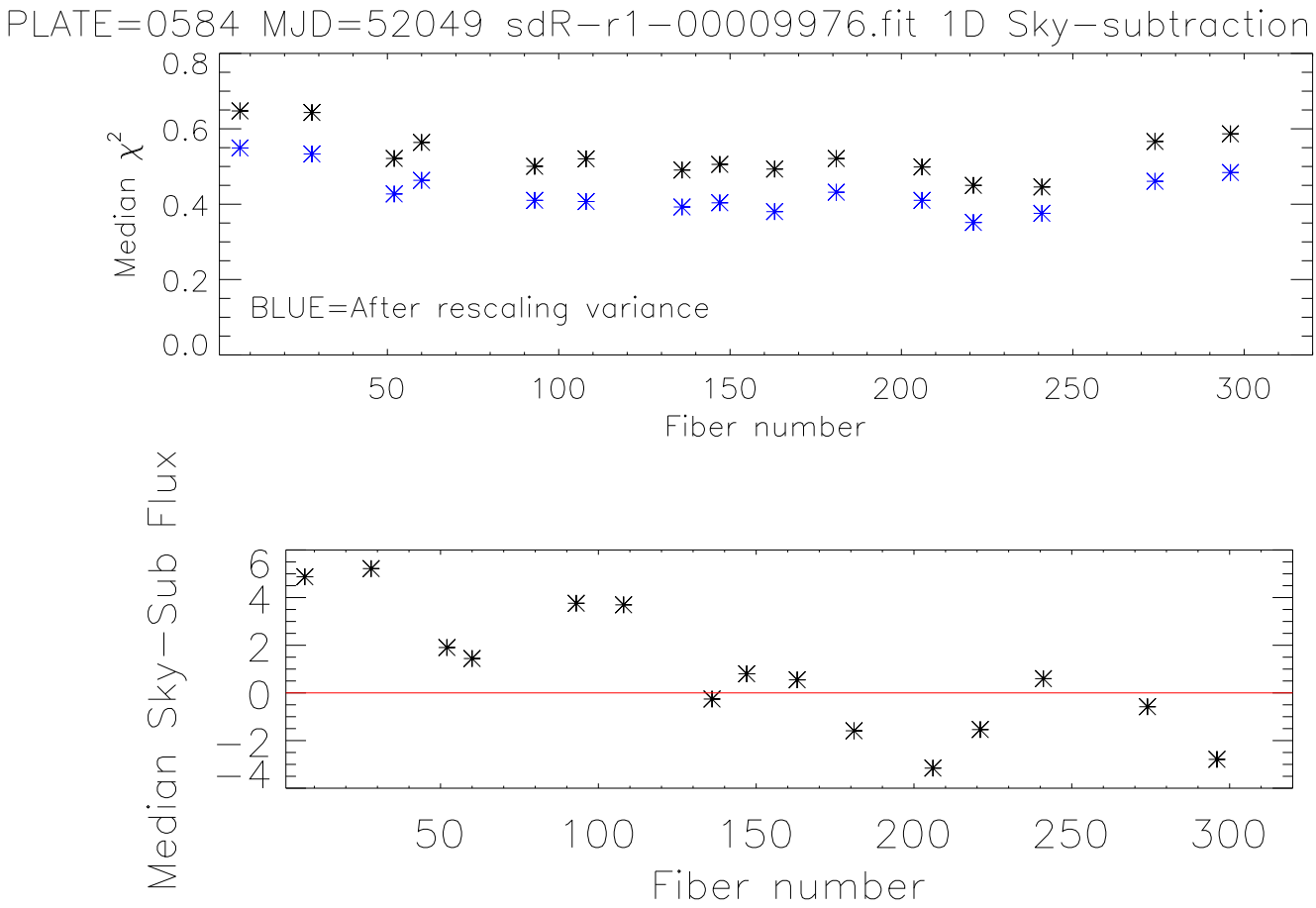

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
stdev 0.020
extra −0.05
6363.7760
stdev 0.051
extra −0.01
6553.6100
stdev 0.066
extra −0.02
6923.2100
stdev 0.027
extra 0.05
6949.0300
stdev 0.033
extra 0.07
7571.7500
stdev 0.024
extra 0.08
7794.1200
stdev 0.026
extra −0.05
7821.5100
stdev 0.017
extra 0.01
8399.1600
stdev 0.058
extra 0.05
8430.1700
stdev 0.053
extra 0.05
8885.8300
stdev 0.078
extra 0.07
8919.6100
stdev 0.047
extra 0.05
meas − pred, pix

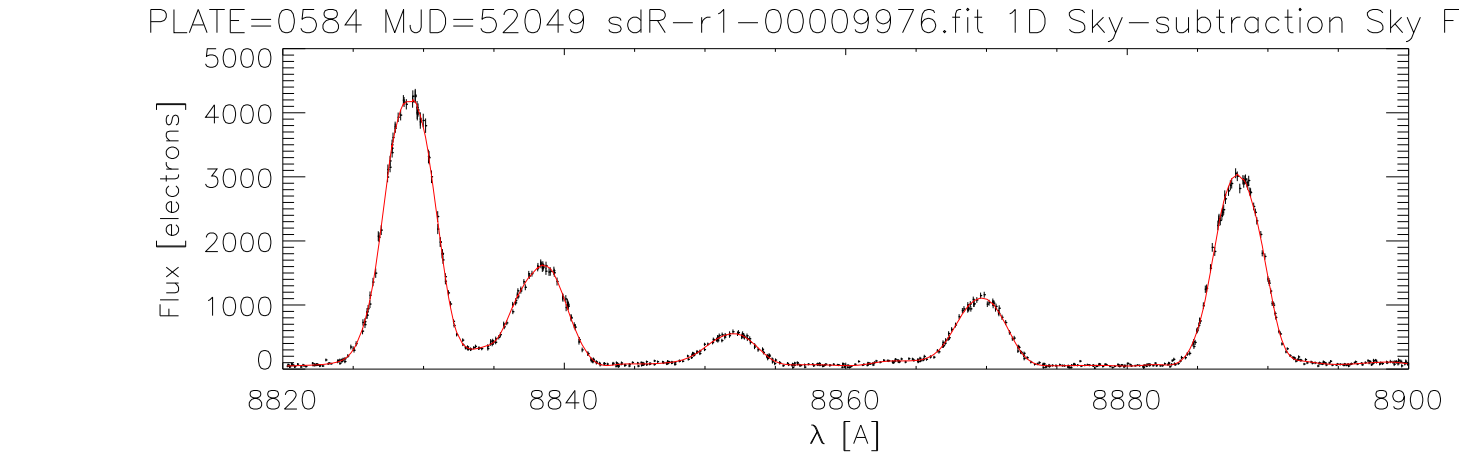

0.08
0.06
0.04
0.02
0.00
−0.02
−0.04
sky shift, pixels
5000
6000
7000
8000
9000
10000

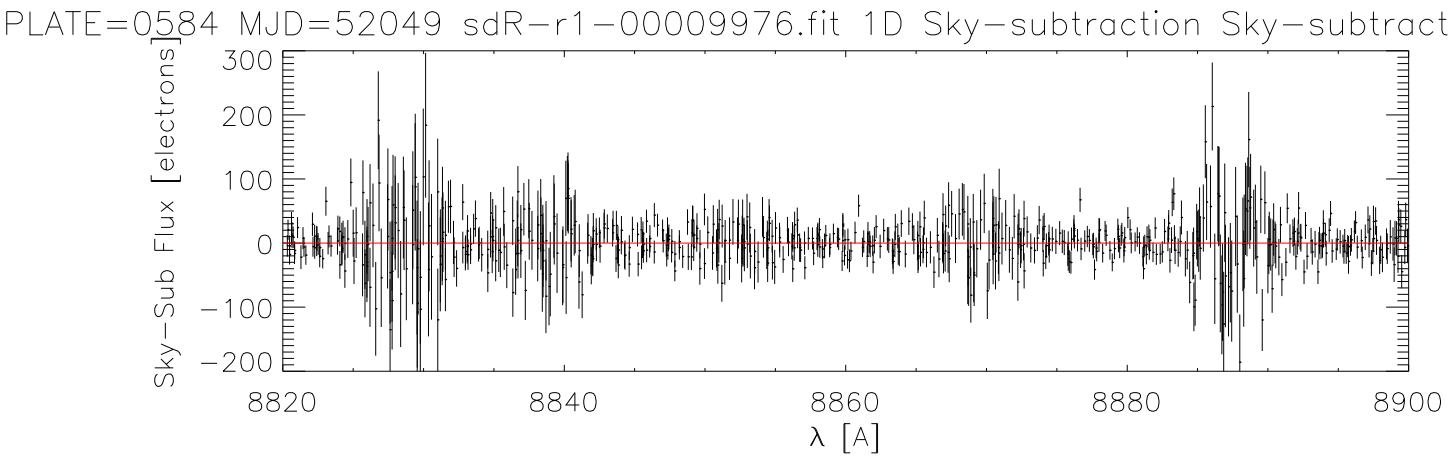

PLATE=0584 MJD=52049 Smooth superflat for sdR-r1-00009976.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

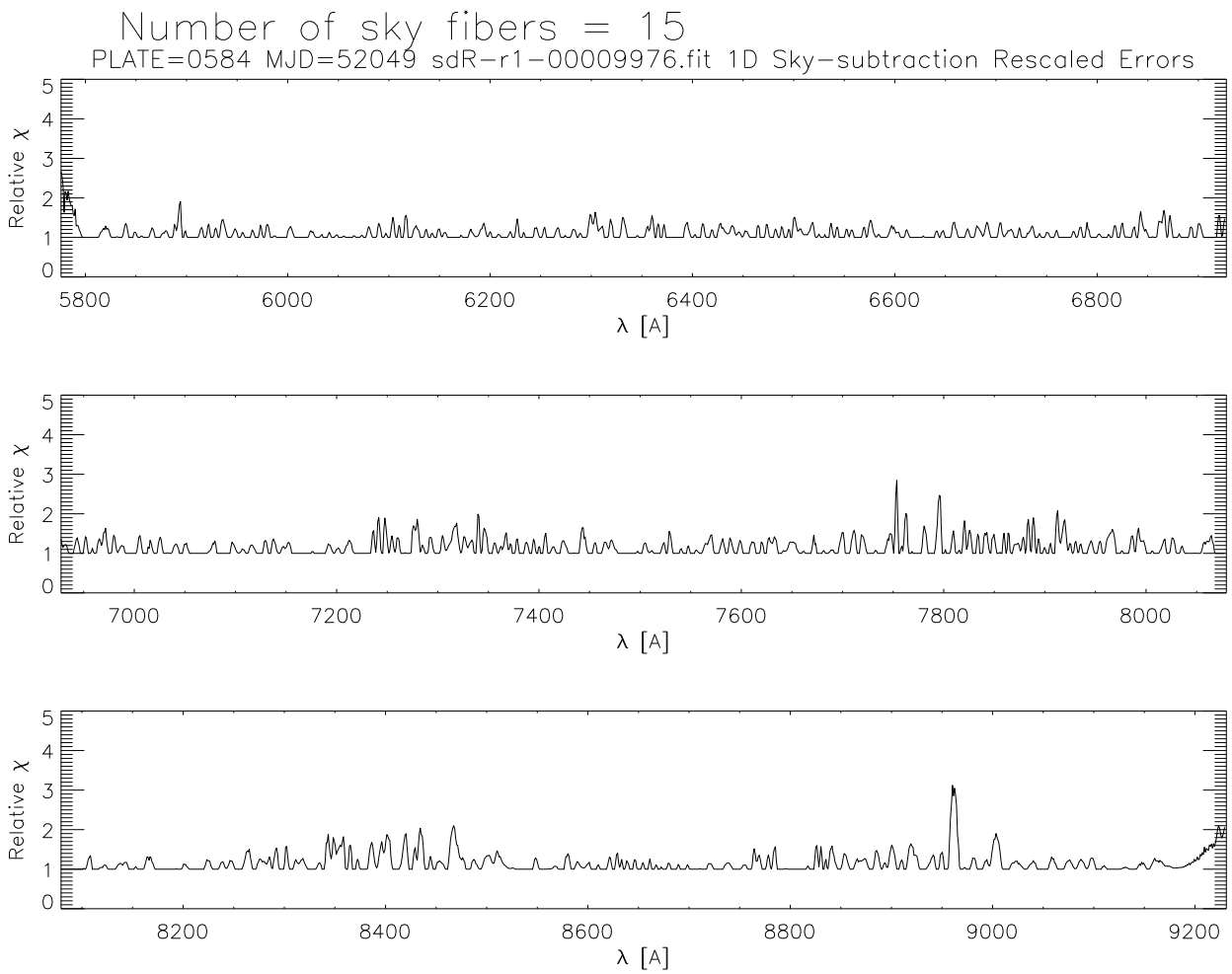
es= −0.0000

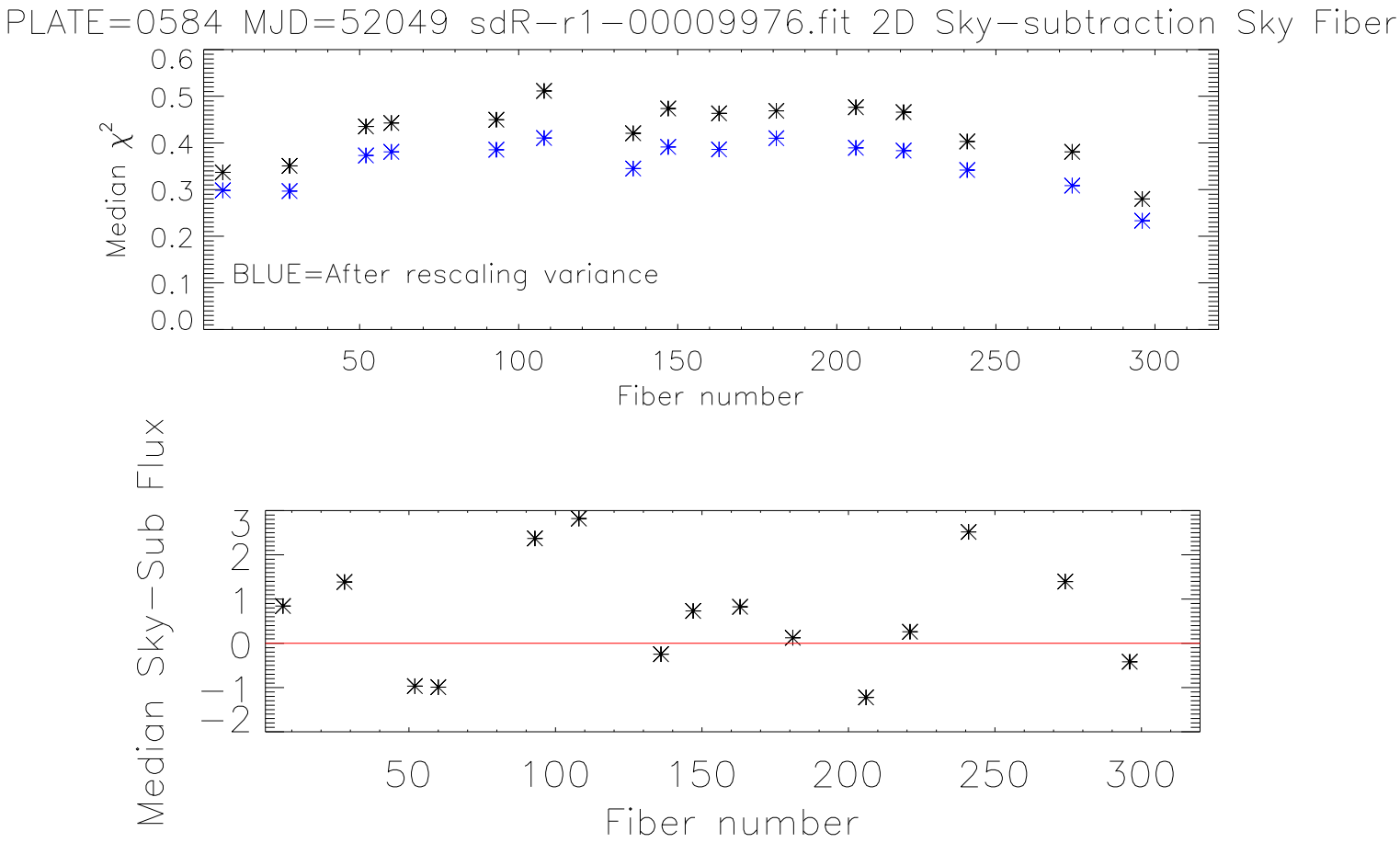

PLATE=0584 MJD=52049 sdR-r1-00009976.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

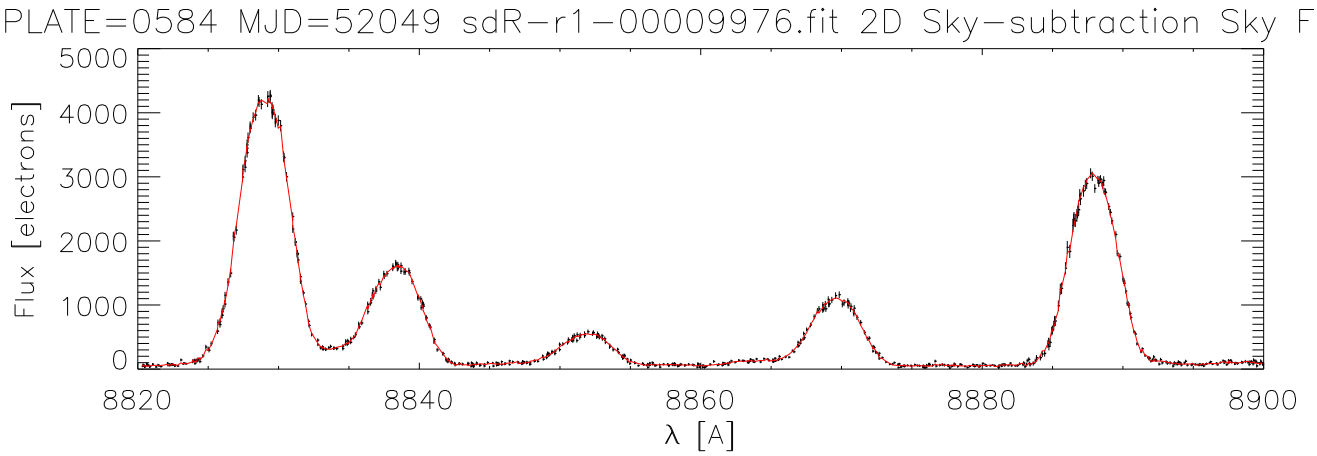
Median Sky-Sub Flux
6
4
2
0
-2
-4
50
100
150
200
250
300
Fiber number

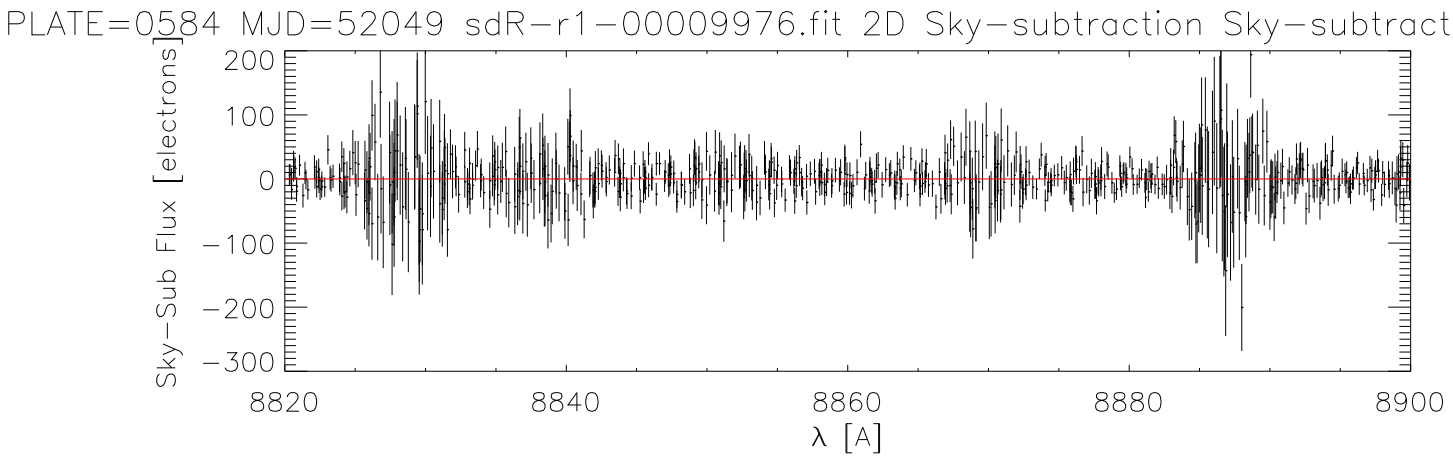

PLATE=0584 MJD=52049 sdR-r1-00009976.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

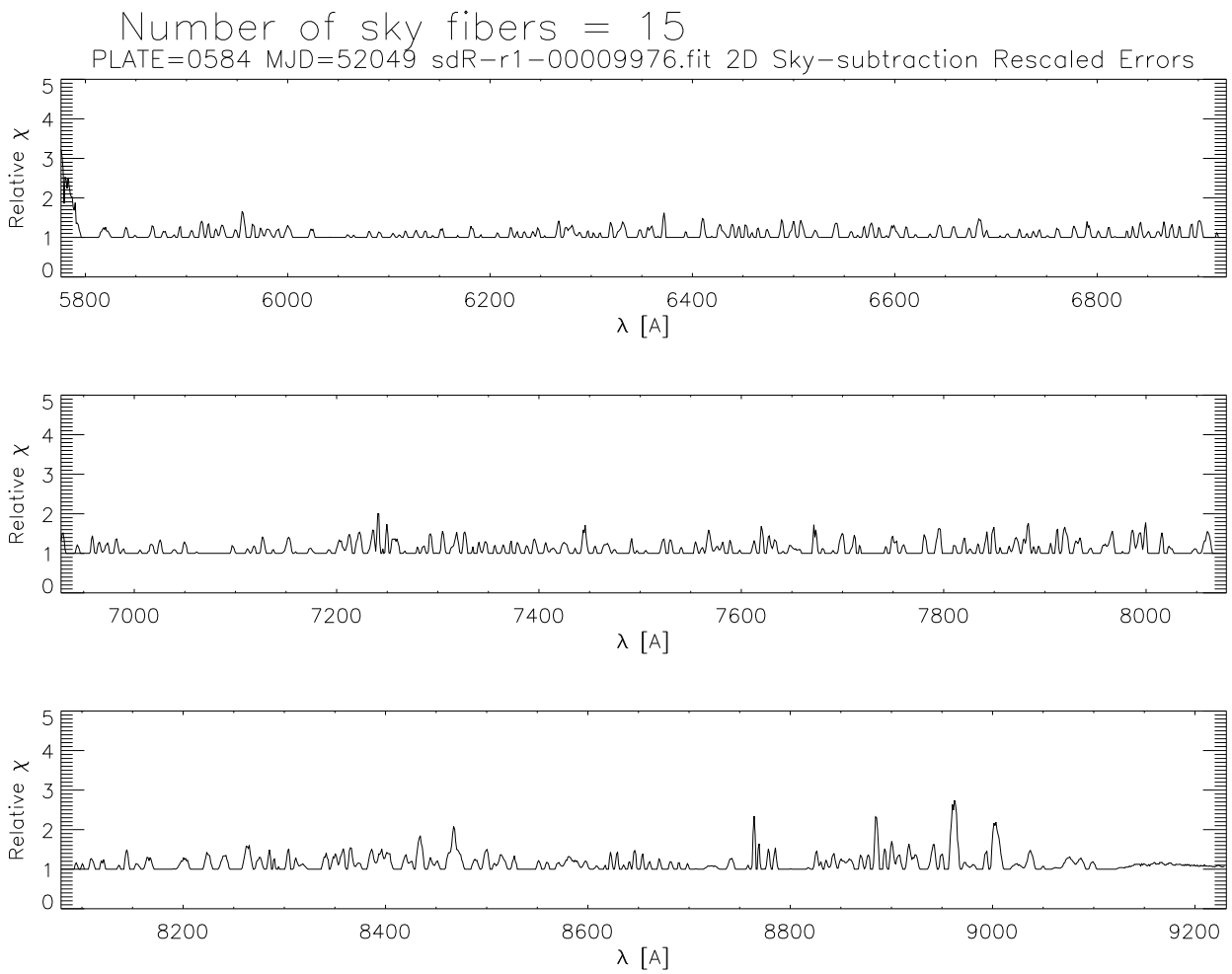

PLATE=0584 MJD=52049 sdR-r1-00009976.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

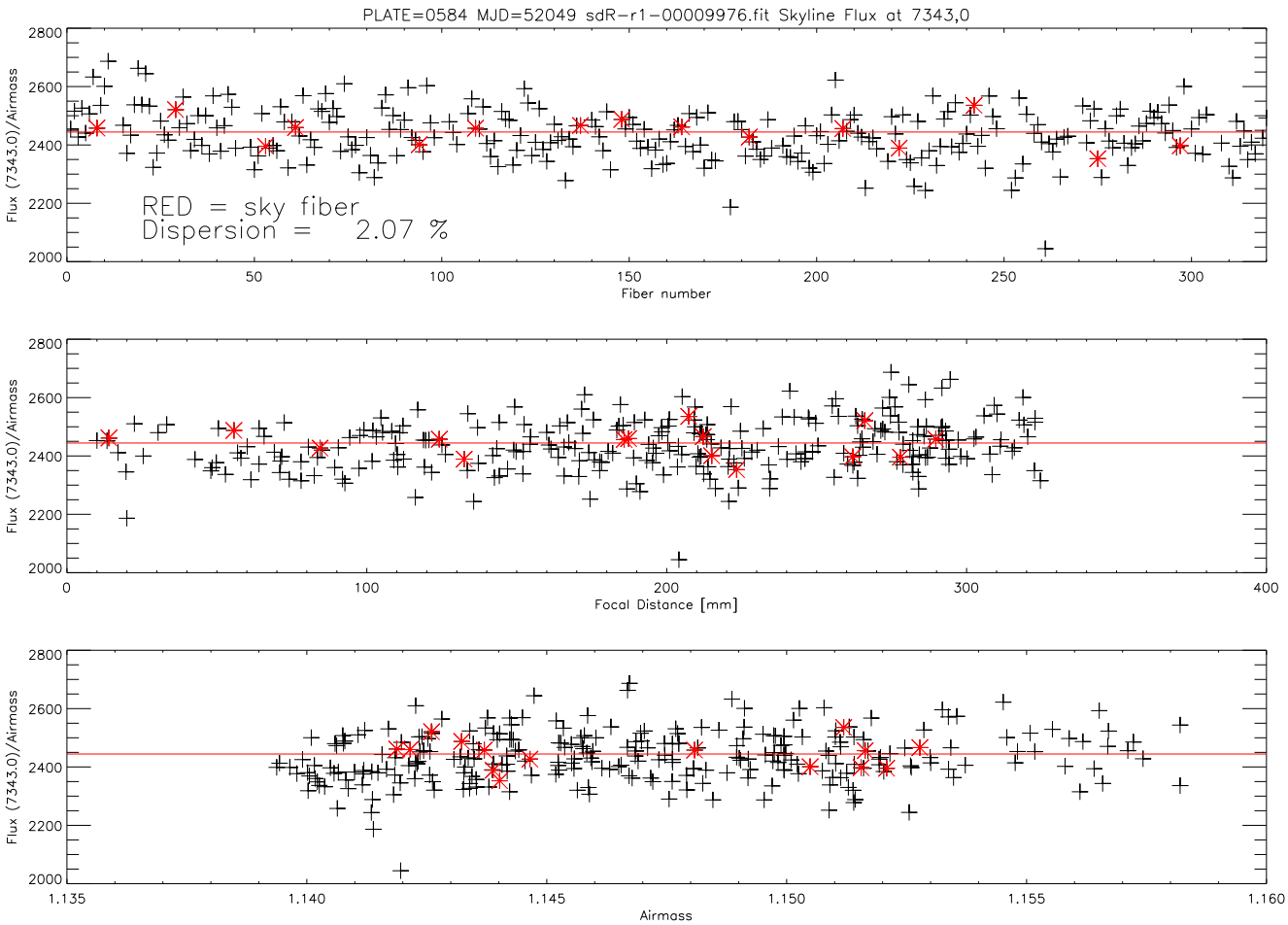

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009976.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

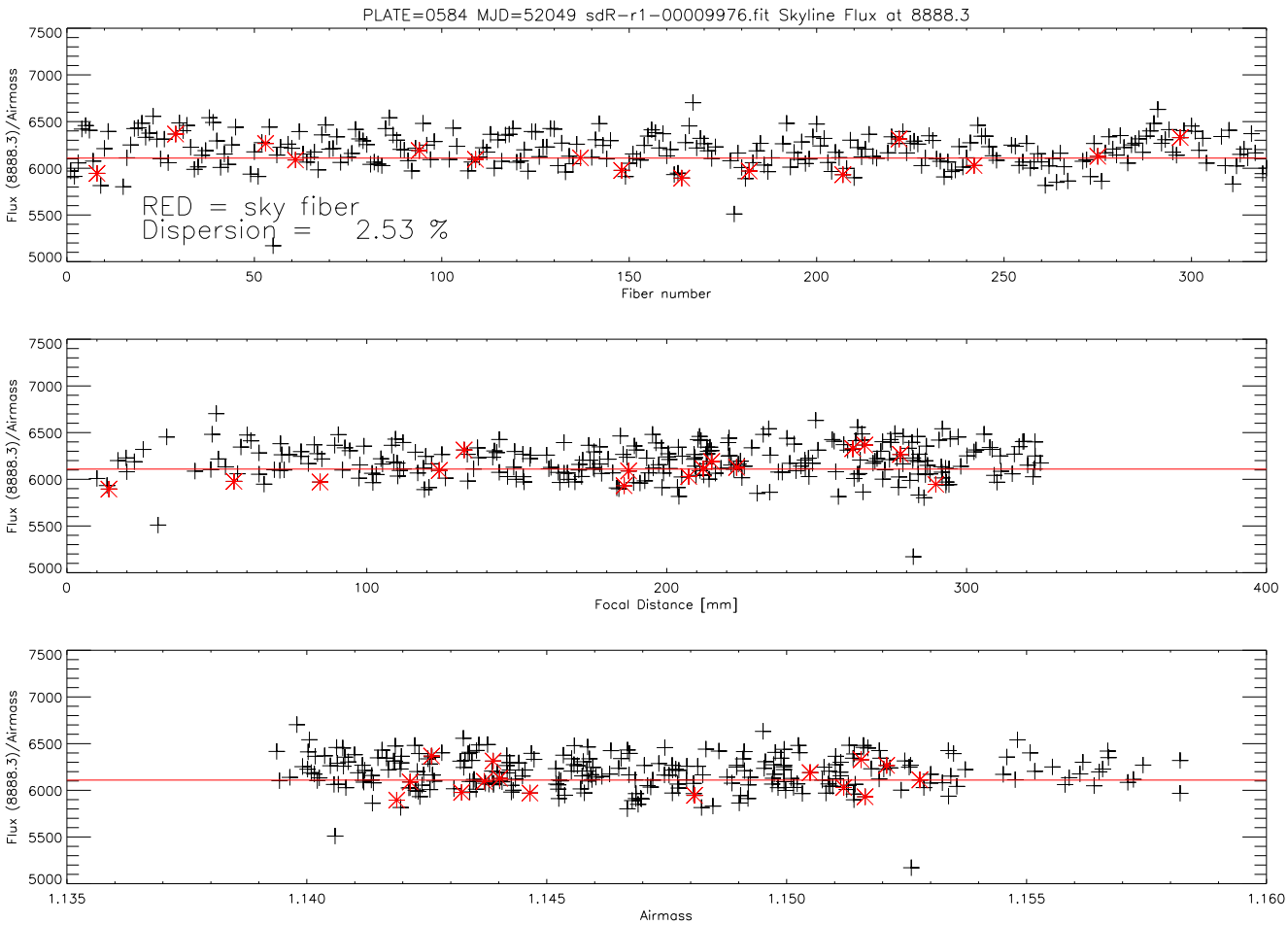

PLATE=0584 MJD=52049 sdR-r1-00009976.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

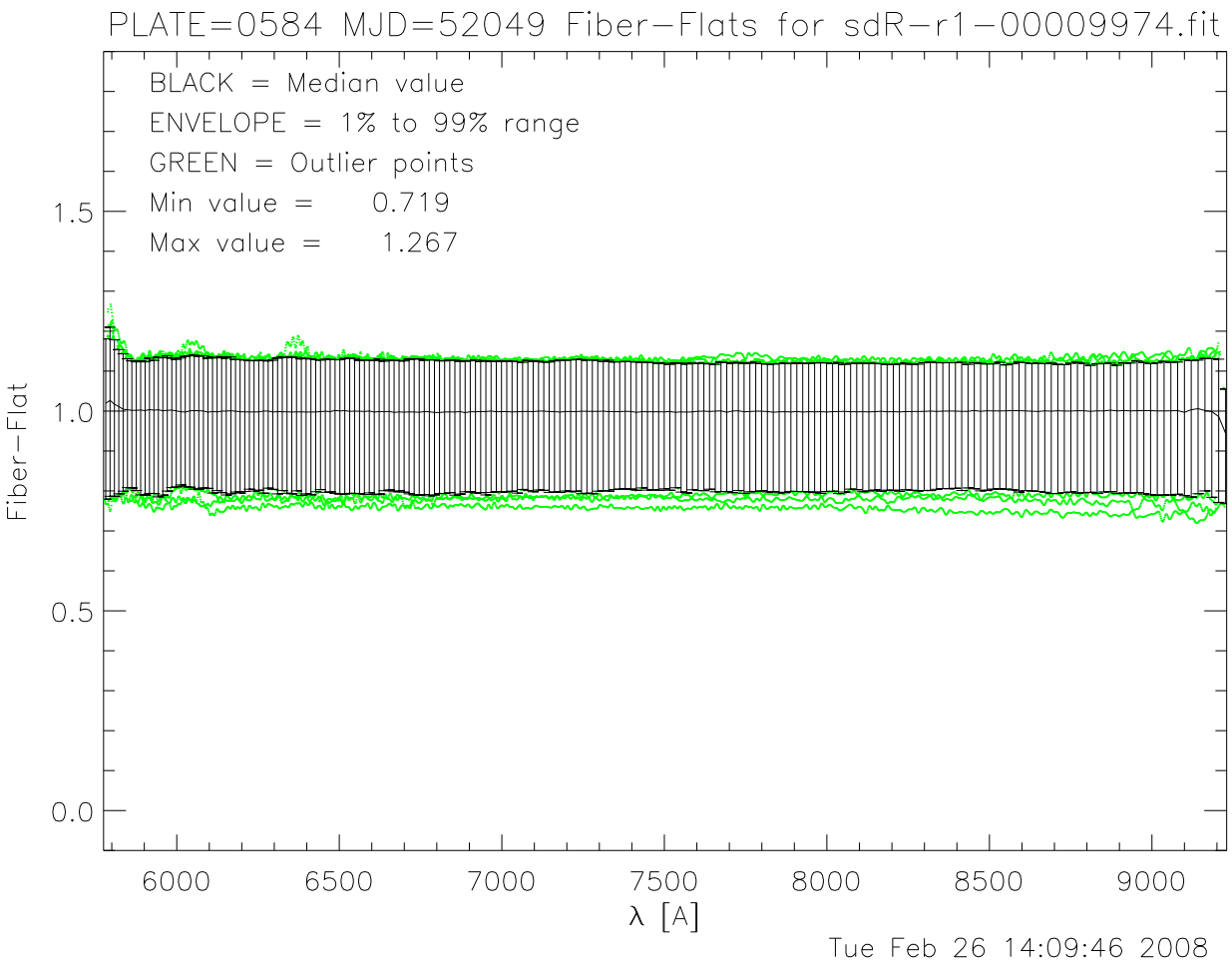

PLATE=0584 MJD=52049 sdR-r1-00009976.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

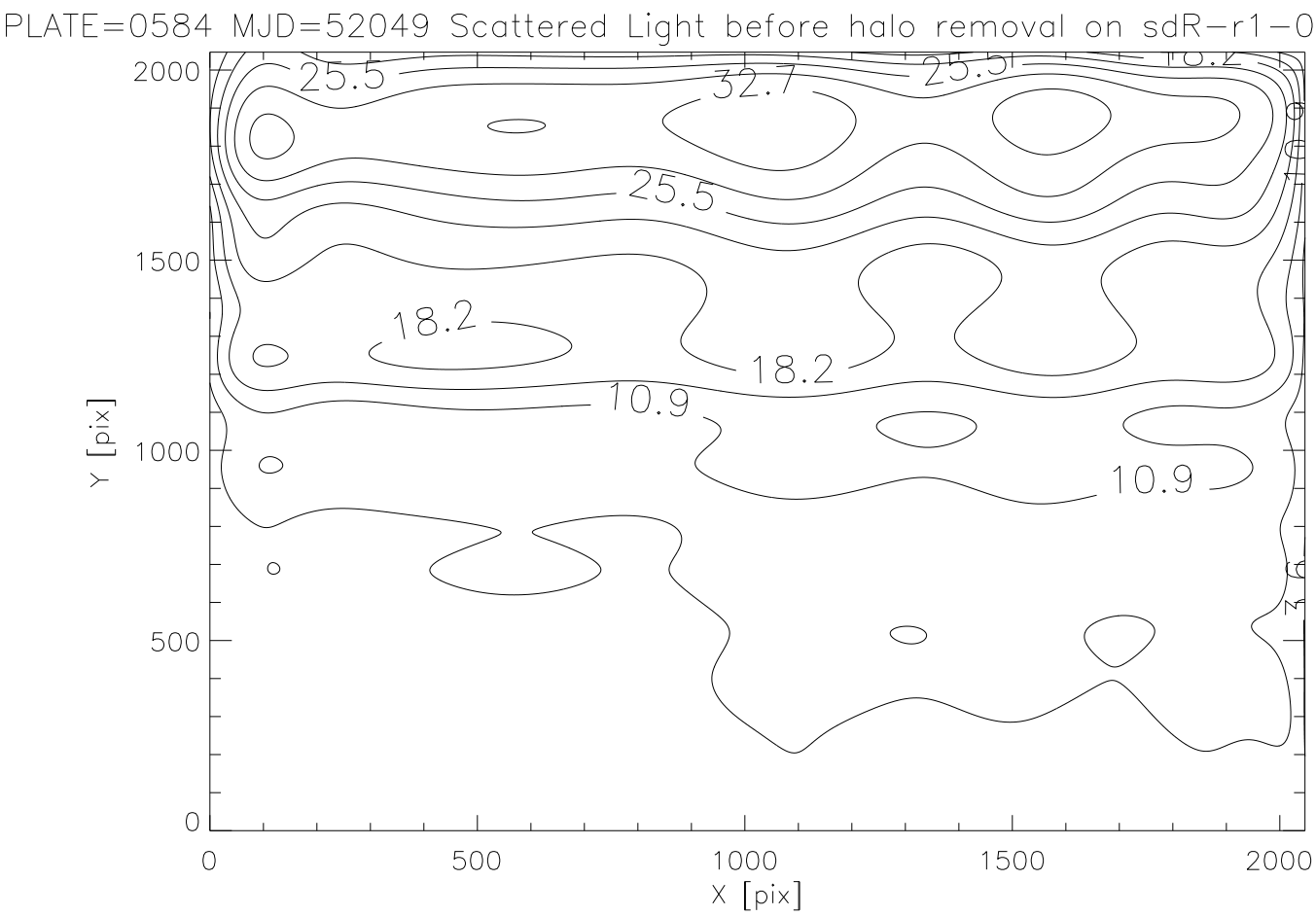

PLATE=0584 MJD=52049 sdR-r1-00009976.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

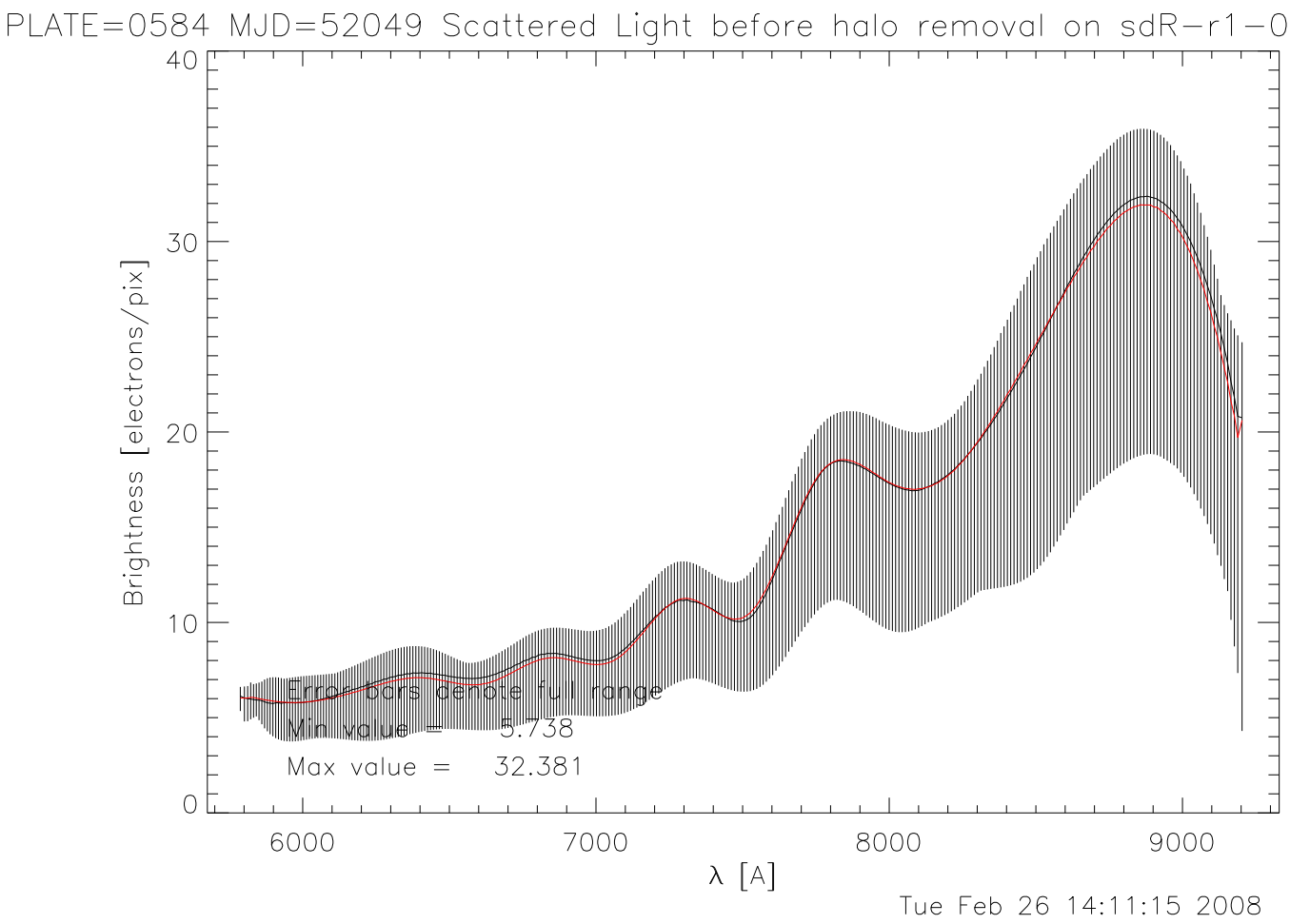

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009976.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

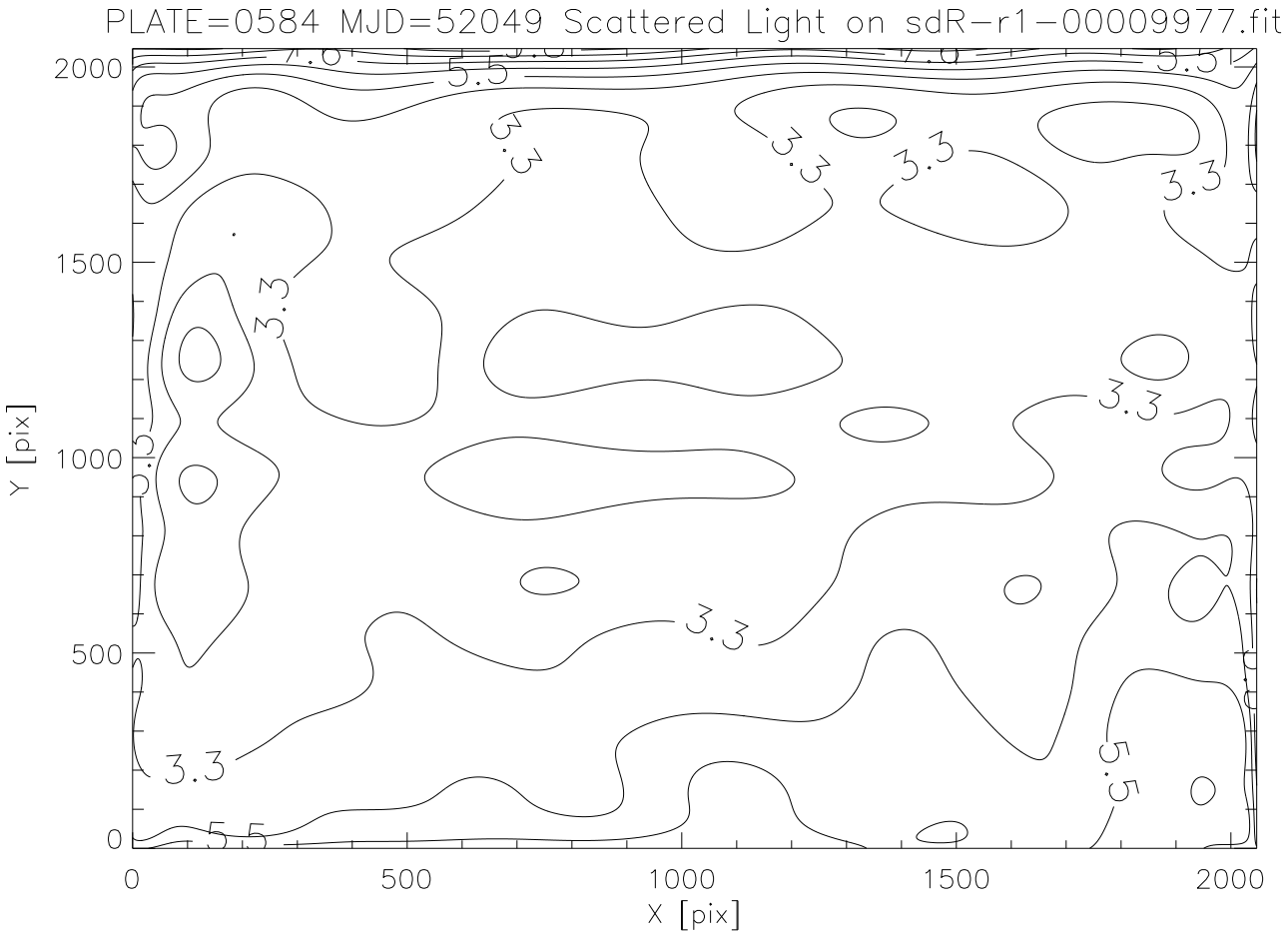

PLATE=0584 MJD=52049 sdR-r1-00009976.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.07 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

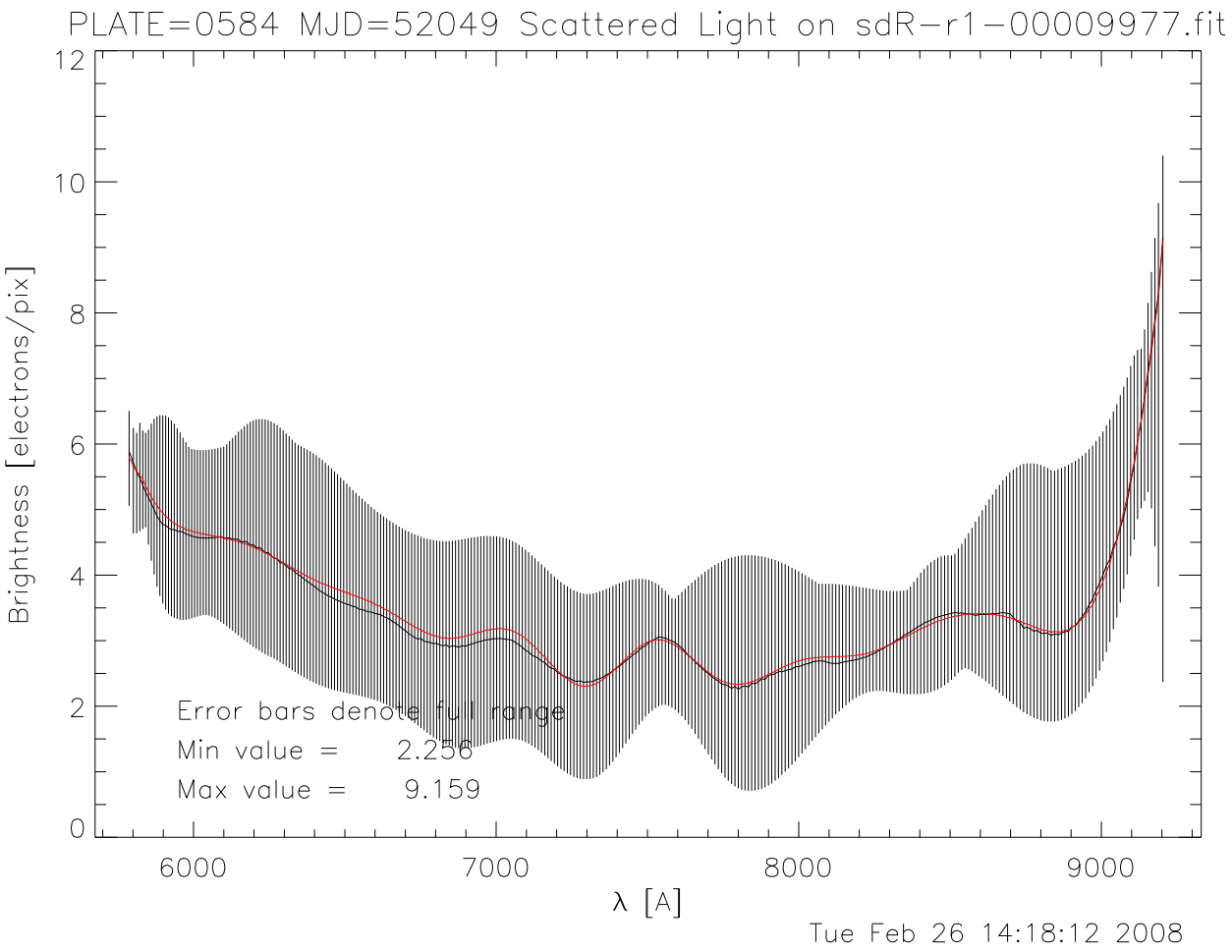

PLATE=0584 MJD=52049 sdR-r1-00009976.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.53 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

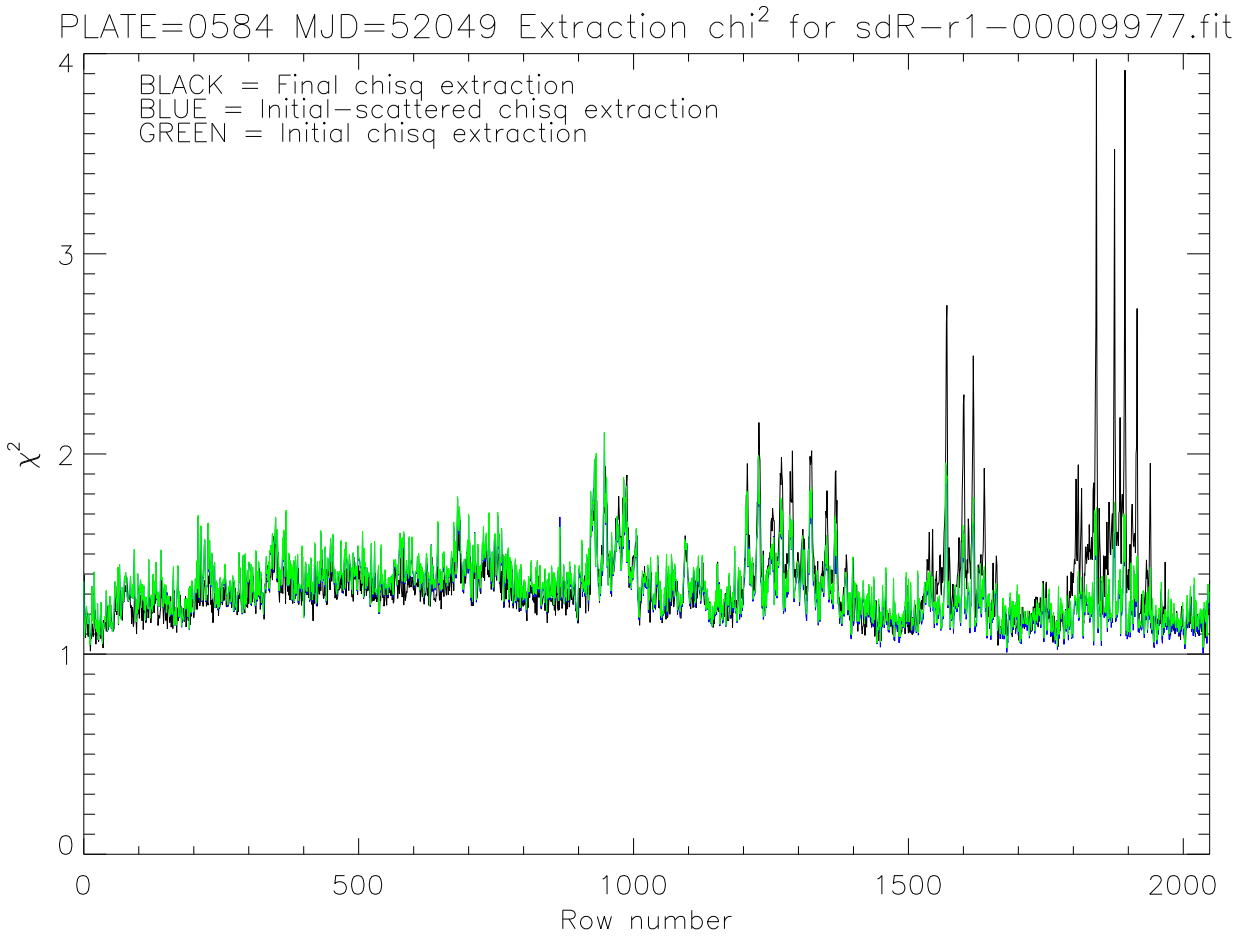

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r1−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.719
Max value = 1.267
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 14:09:46 2008

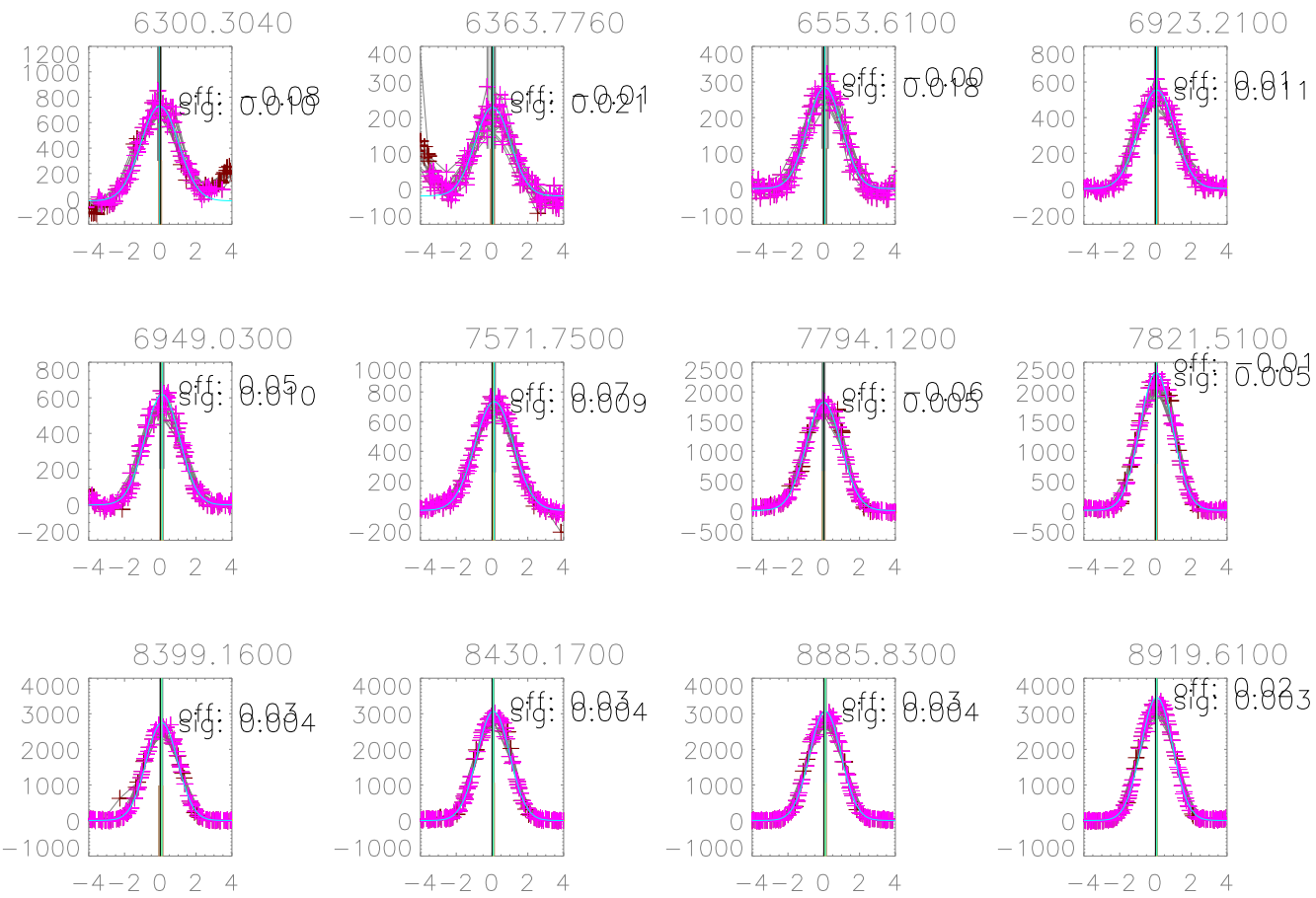

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009977.fi
25.5
32.7
25.5
25.5
18.2
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

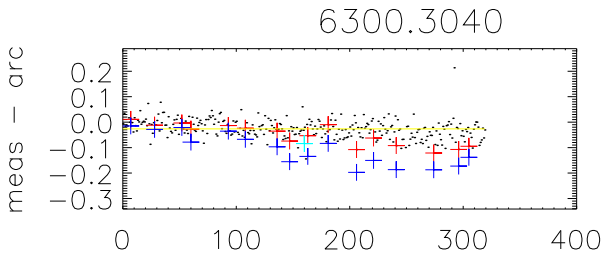

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009977.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.738
Max value = 32.381
Tue Feb 26 14:11:15 2008

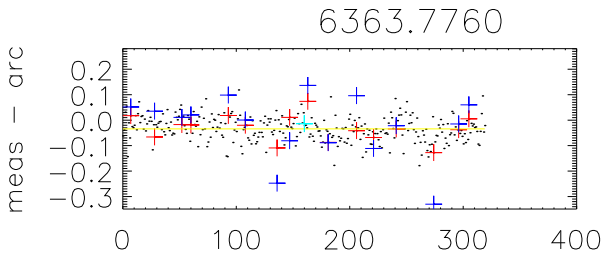

PLATE=0584 MJD=52049 Scattered Light on sdR-r1-00009977.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.3
5.5

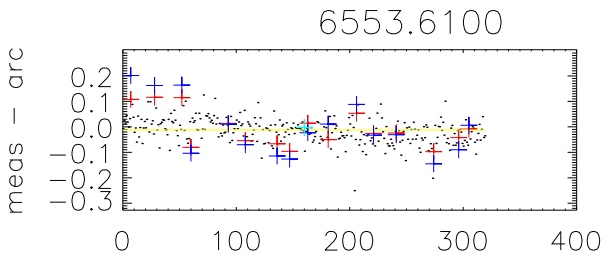

PLATE=0584 MJD=52049 Scattered Light on sdR-r1-00009977.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.256
Max value = 9.159
Tue Feb 26 14:18:12 2008

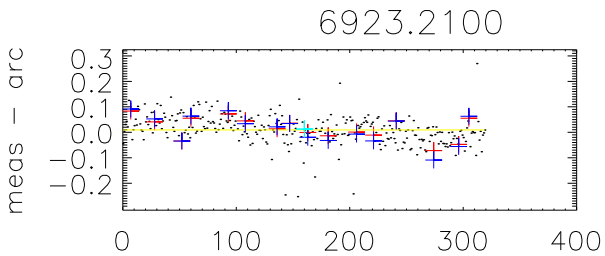

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-r1-00009977.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

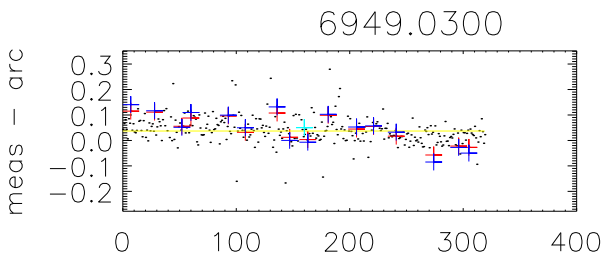

6300.3040
off: −0.08
sig: 0.010
6363.7760
off: −0.01
sig: 0.021
6553.6100
off: −0.00
sig: 0.018
6923.2100
off: 0.01
sig: 0.011
6949.0300
off: 0.05
sig: 0.010
7571.7500
off: 0.07
sig: 0.009
7794.1200
off: −0.06
sig: 0.005
7821.5100
off: −0.01
sig: 0.005
8399.1600
off: 0.03
sig: 0.004
8430.1700
off: 0.03
sig: 0.004
8885.8300
off: 0.03
sig: 0.004
8919.6100
off: 0.02
sig: 0.003

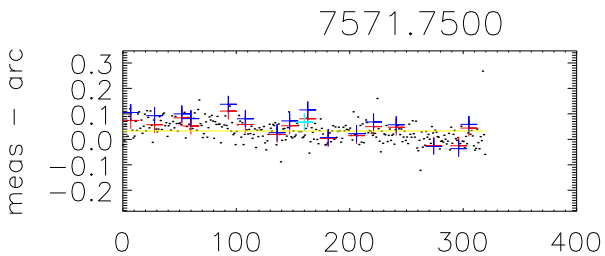

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

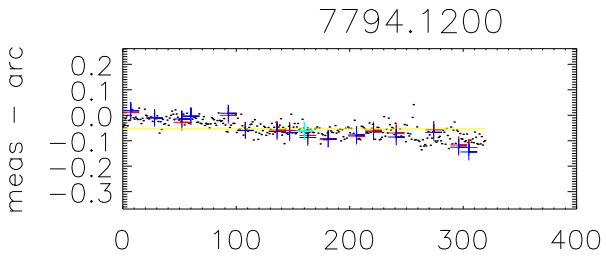

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

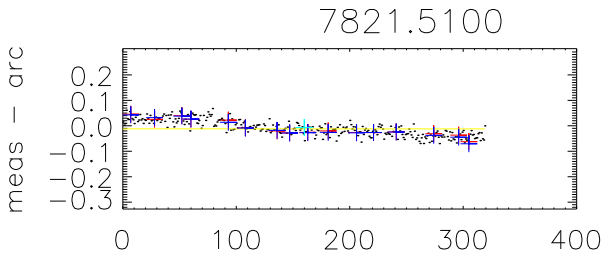

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

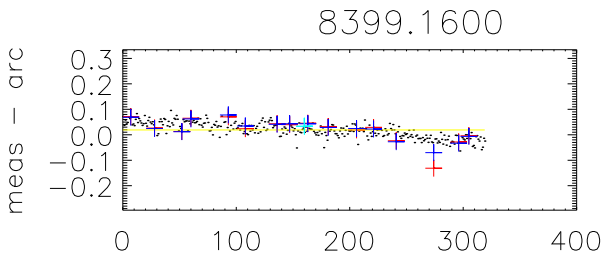

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

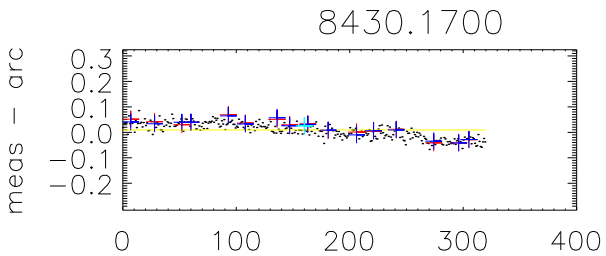

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

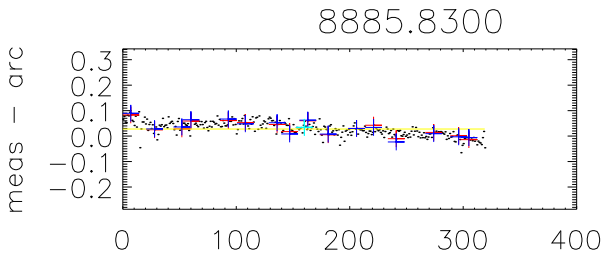

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

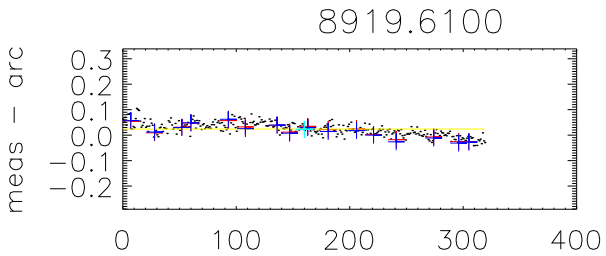

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

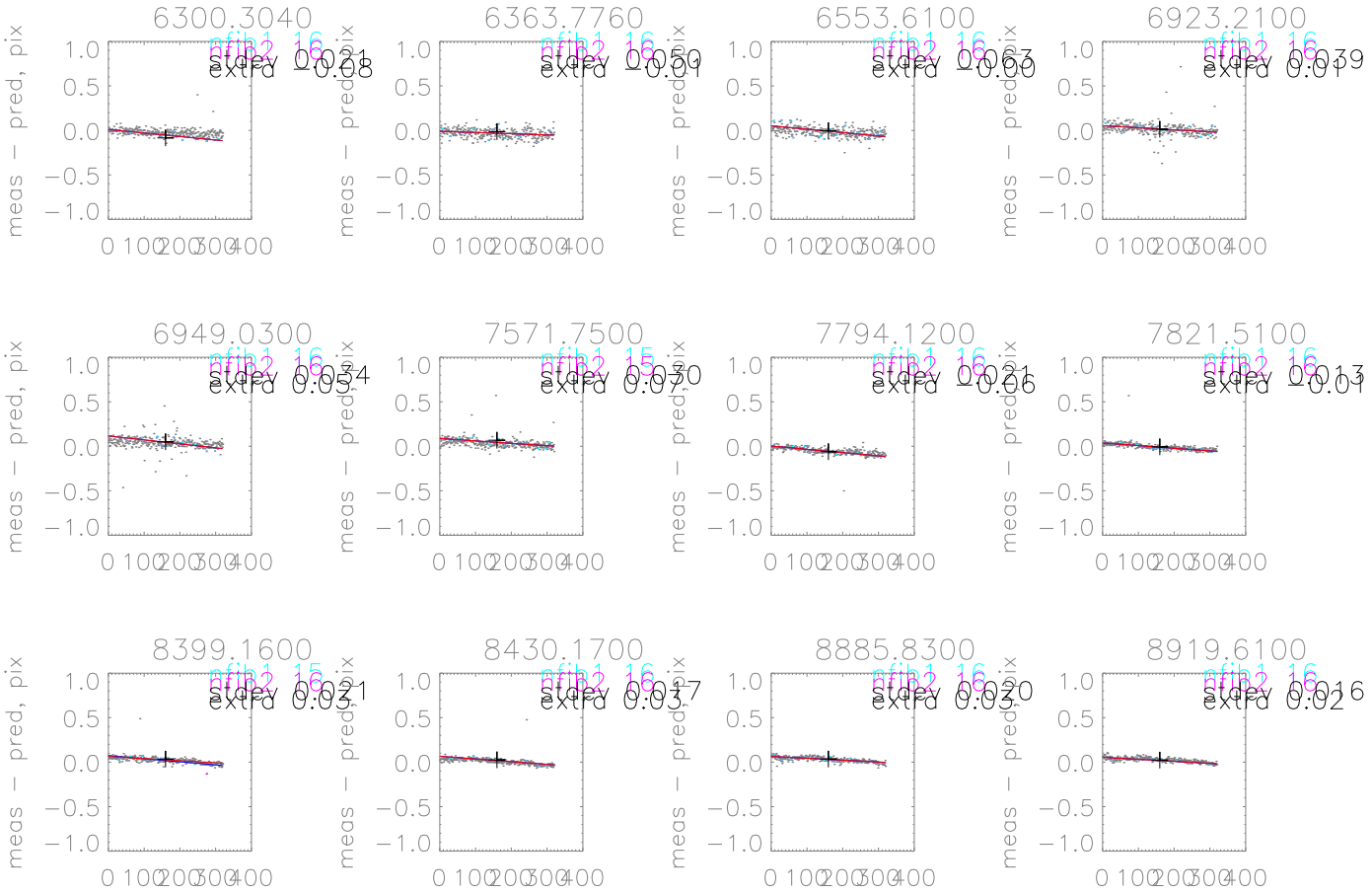

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

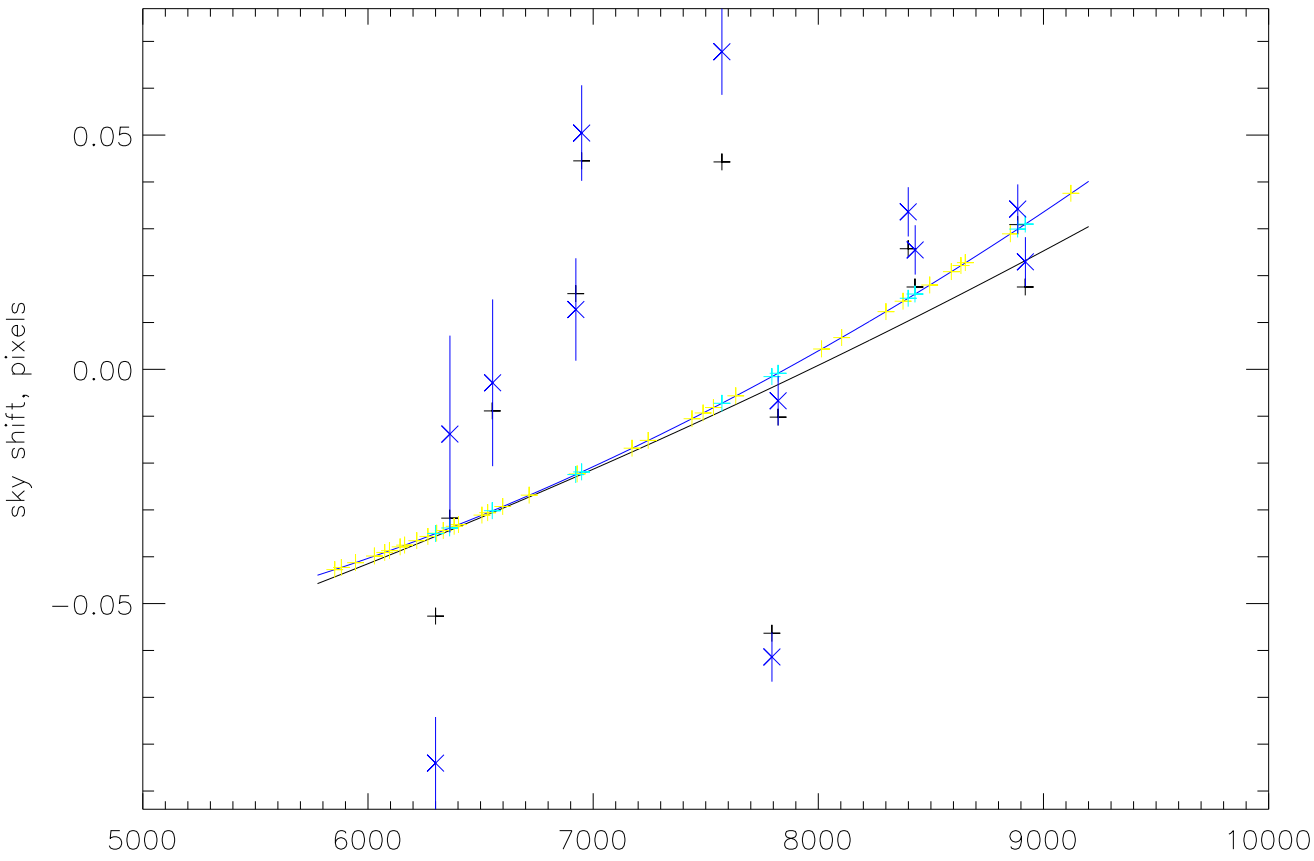

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

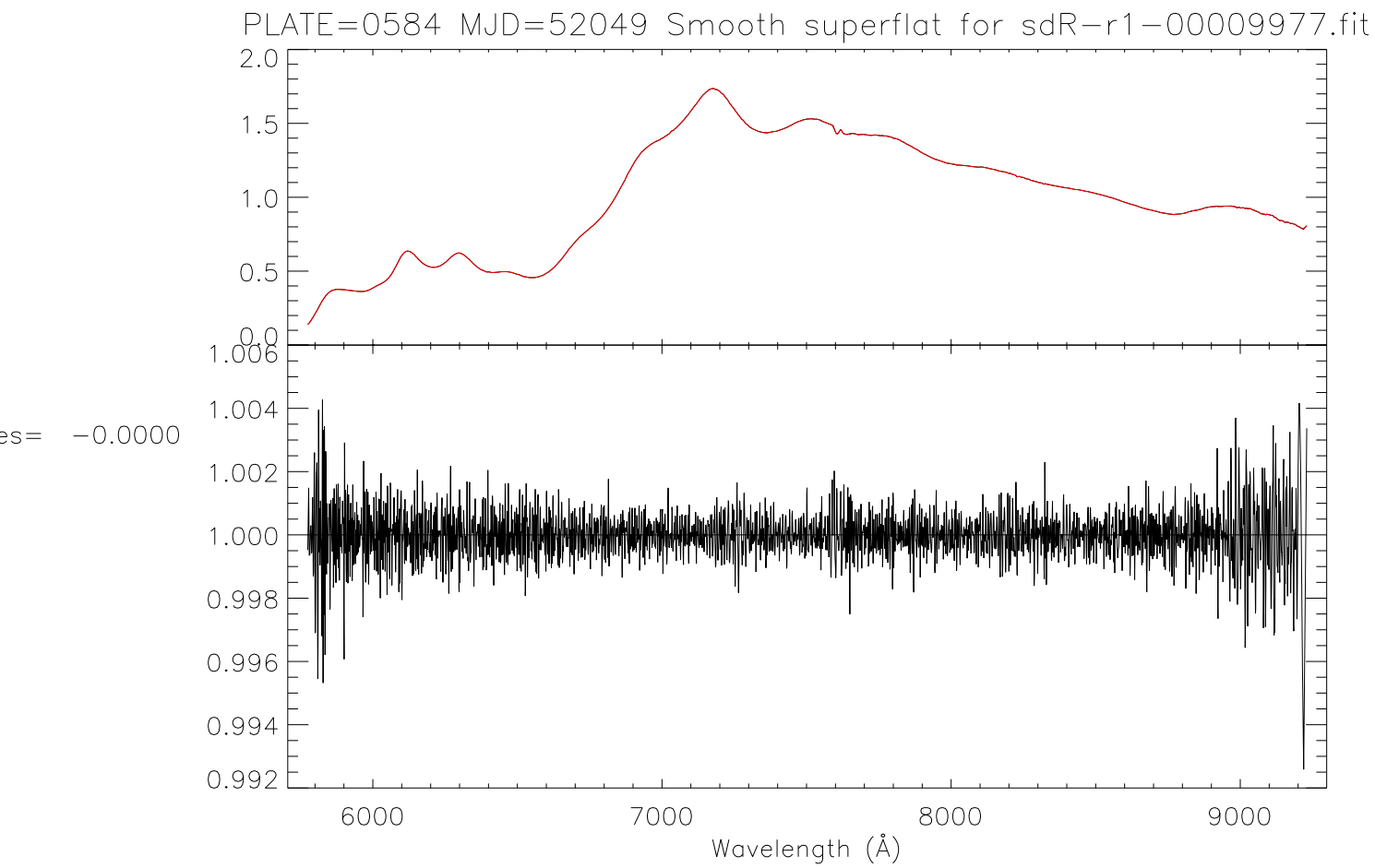

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

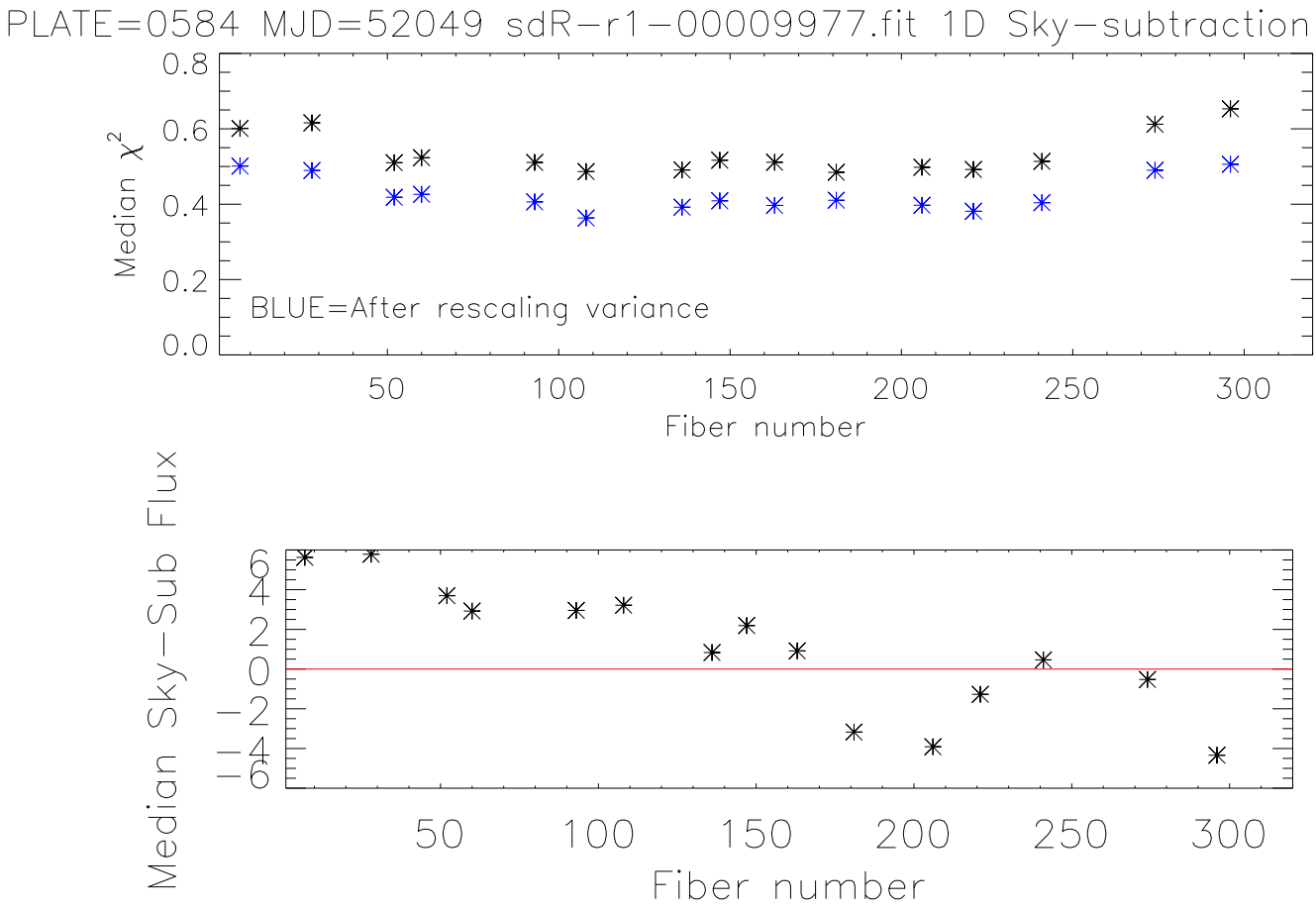

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
stdev 0.021
extra −0.08
6363.7760
stdev 0.050
extra −0.01
6553.6100
stdev 0.063
extra −0.00
6923.2100
stdev 0.039
extra 0.01
6949.0300
stdev 0.054
extra 0.05
7571.7500
stdev 0.030
extra 0.07
7794.1200
stdev 0.021
extra −0.06
7821.5100
stdev 0.013
extra −0.01
8399.1600
stdev 0.021
extra 0.03
8430.1700
stdev 0.017
extra 0.03
8885.8300
stdev 0.020
extra 0.03
8919.6100
stdev 0.016
extra 0.02
meas − pred, pix
meas − pred, pix

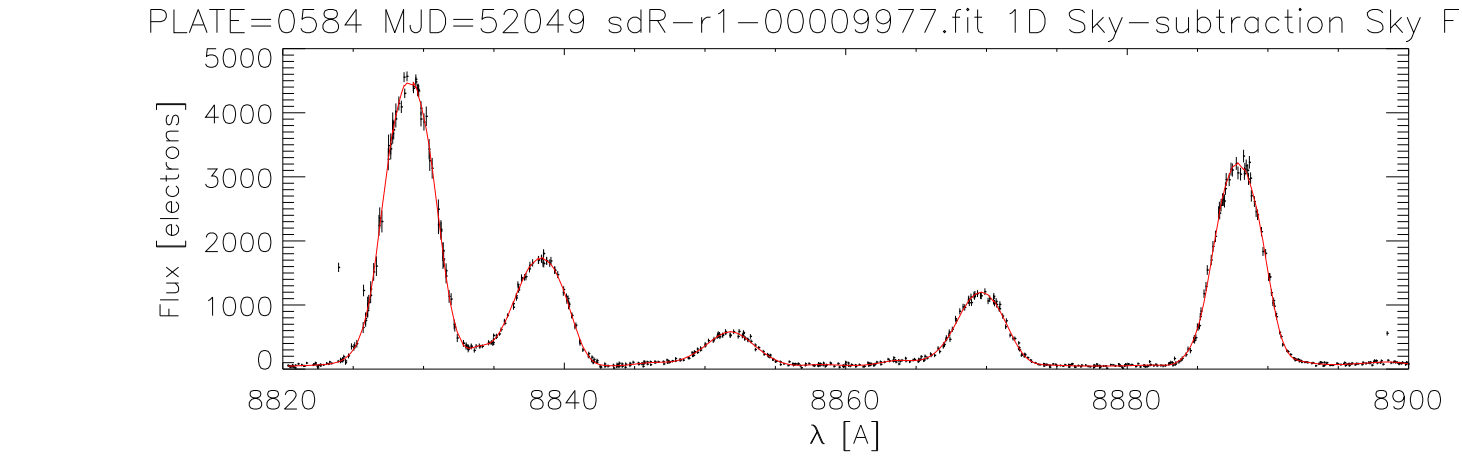

0.05
0.00
−0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

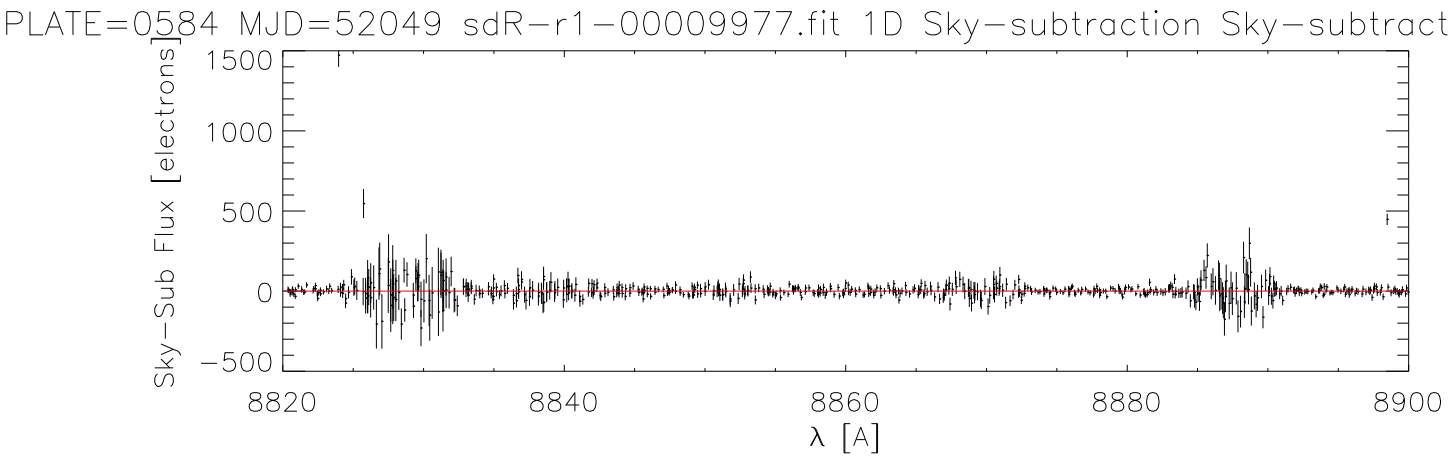

PLATE=0584 MJD=52049 Smooth superflat for sdR-r1-00009977.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

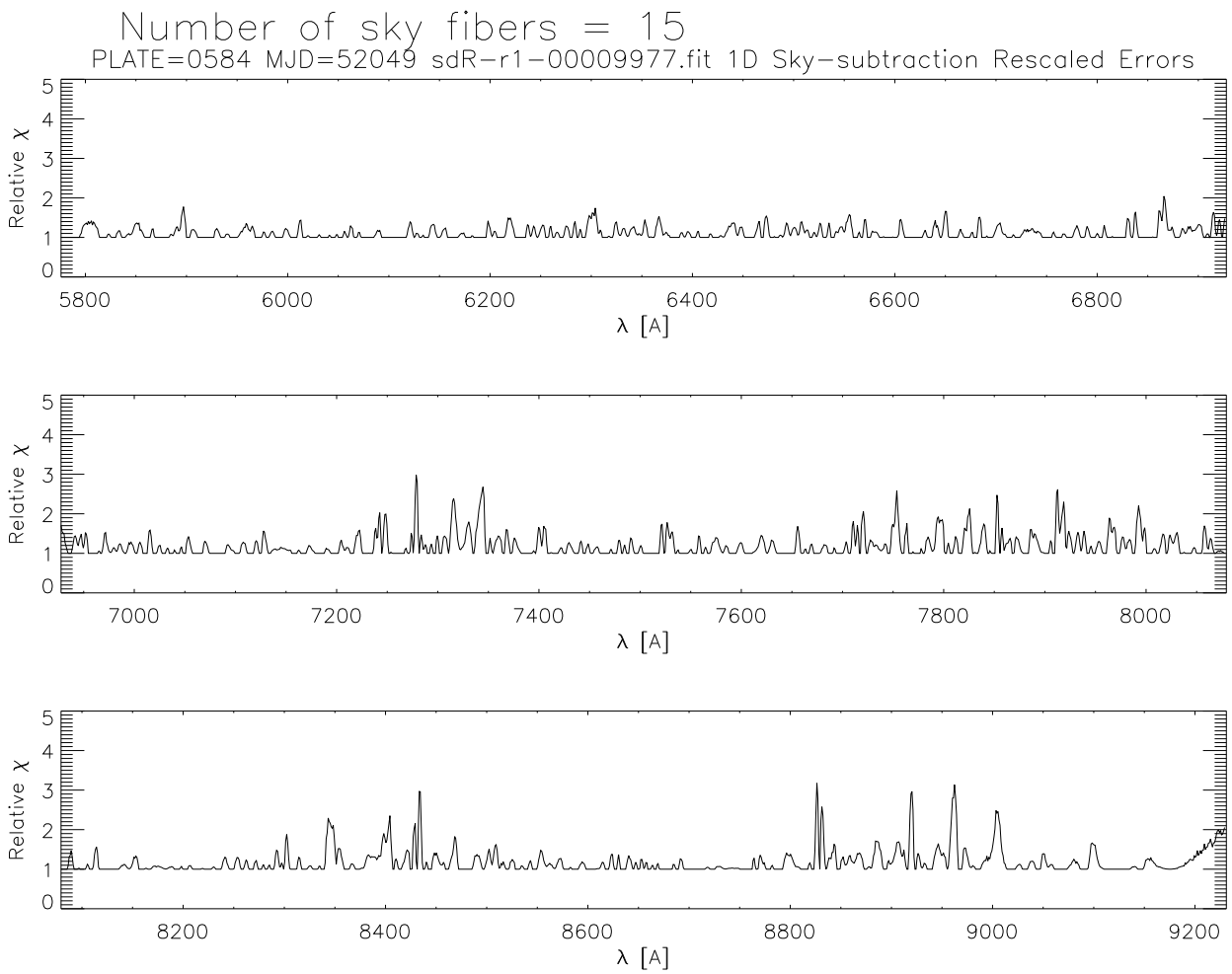
es= −0.0000

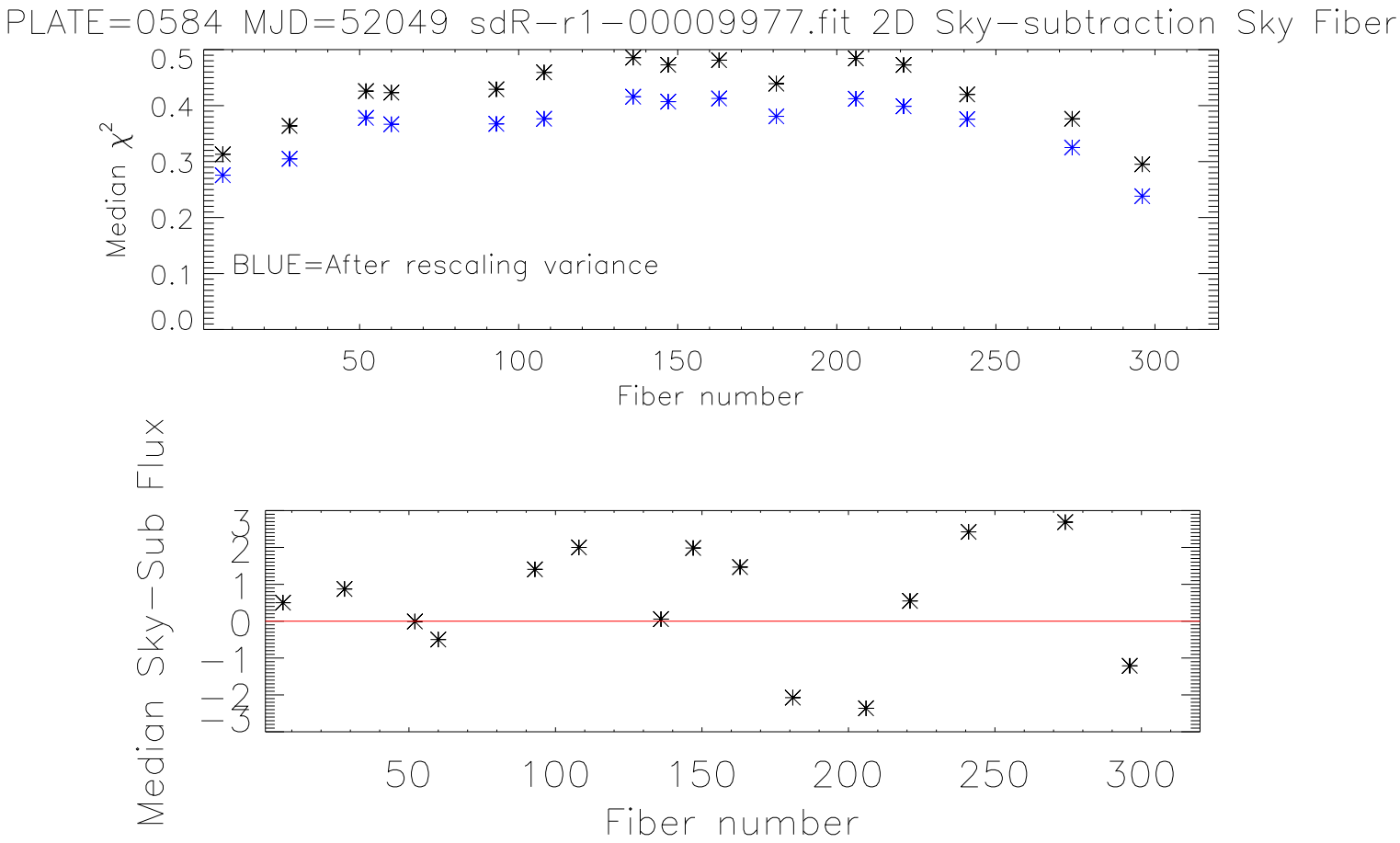

PLATE=0584 MJD=52049 sdR-r1-00009977.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

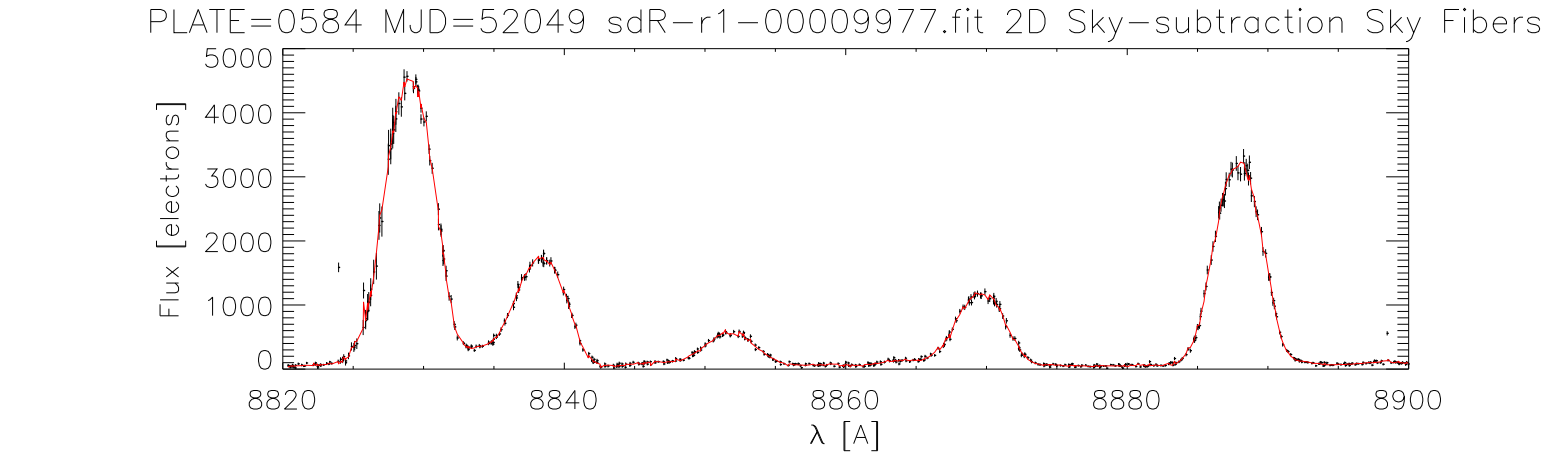
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

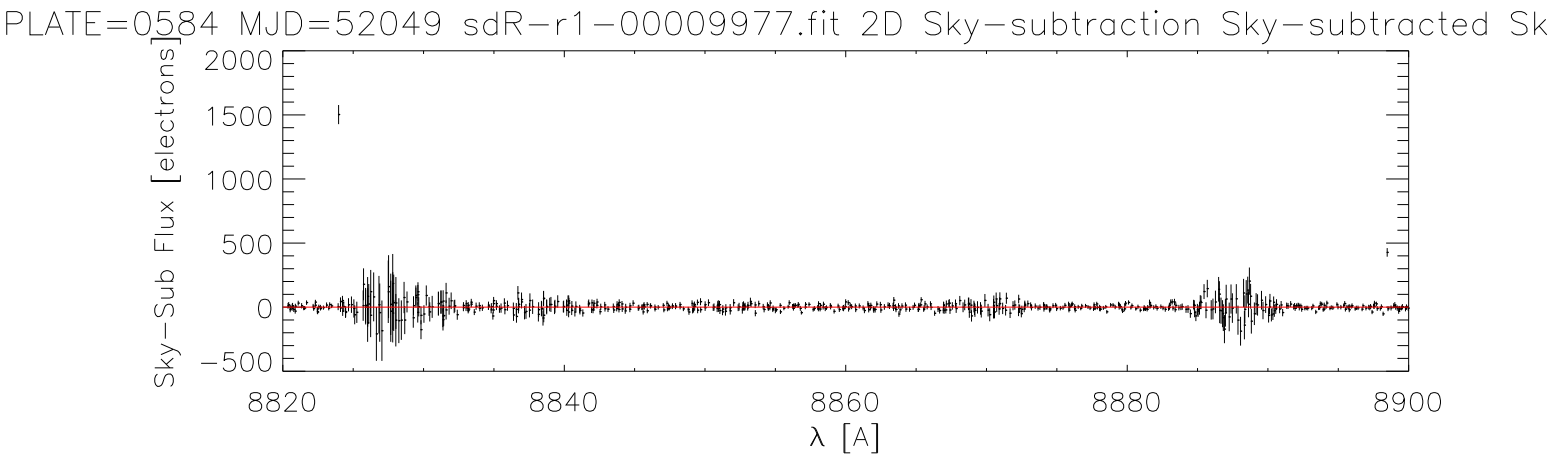

PLATE=0584 MJD=52049 sdR-r1-00009977.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

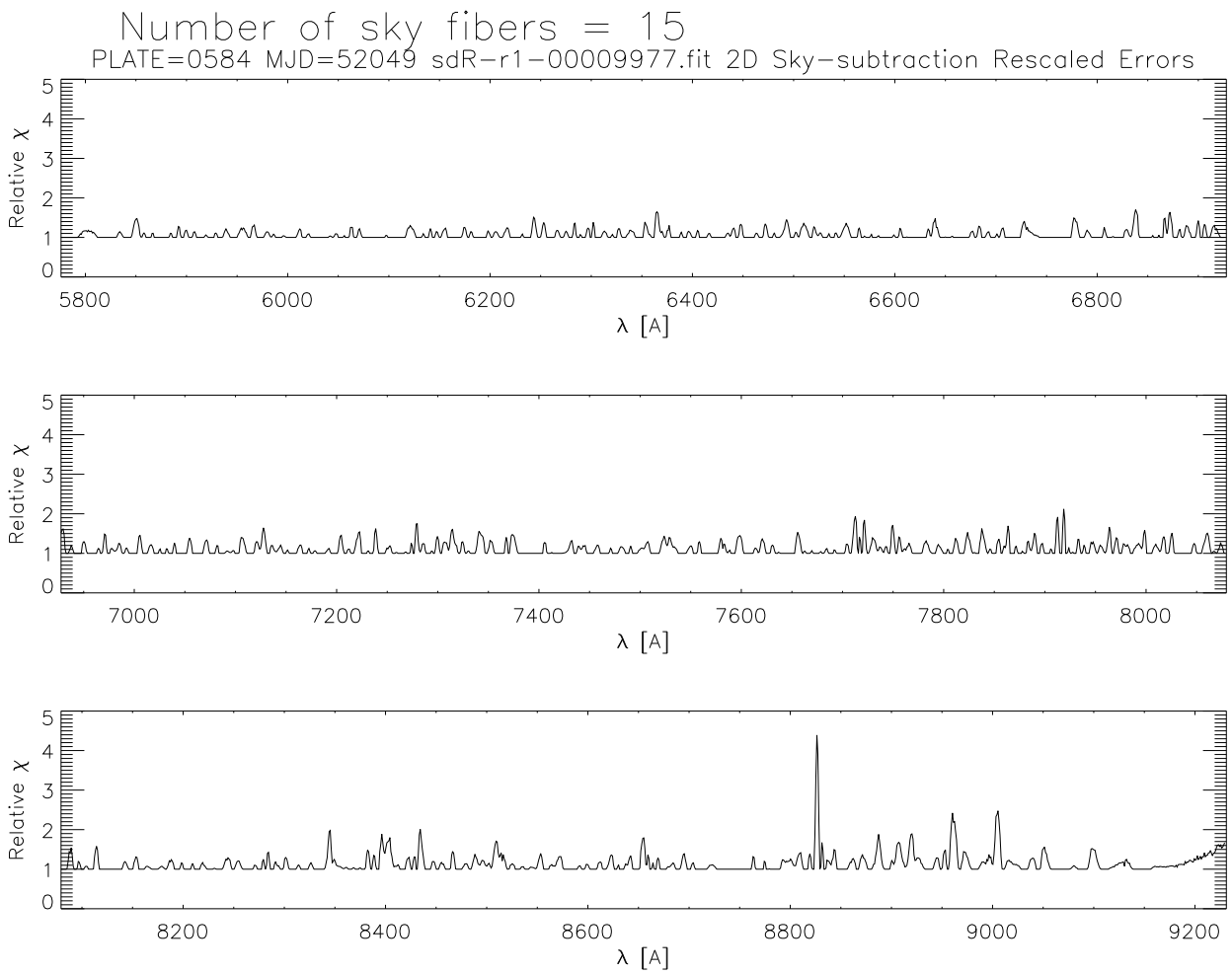

PLATE=0584 MJD=52049 sdR-r1-00009977.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

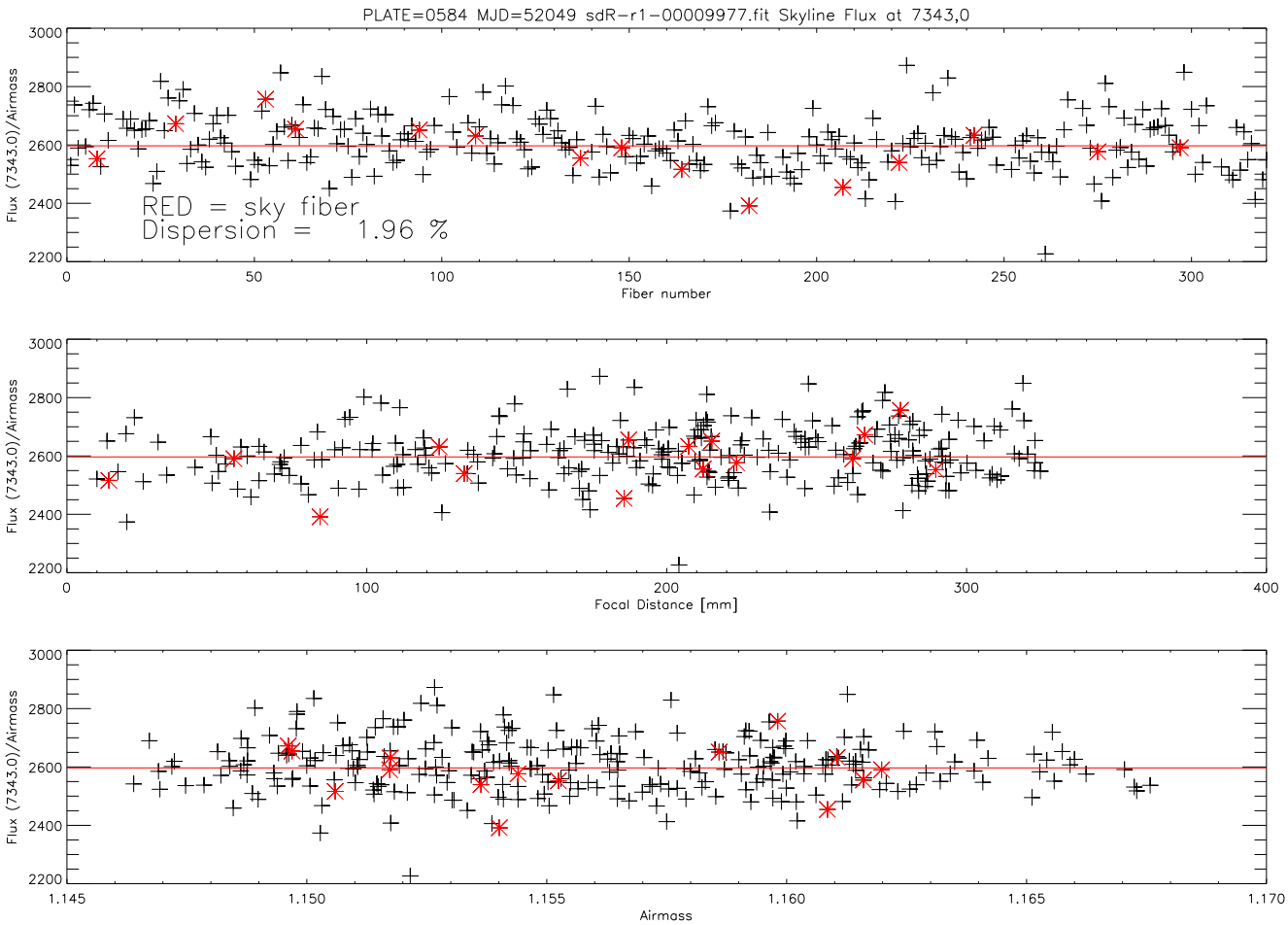

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009977.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

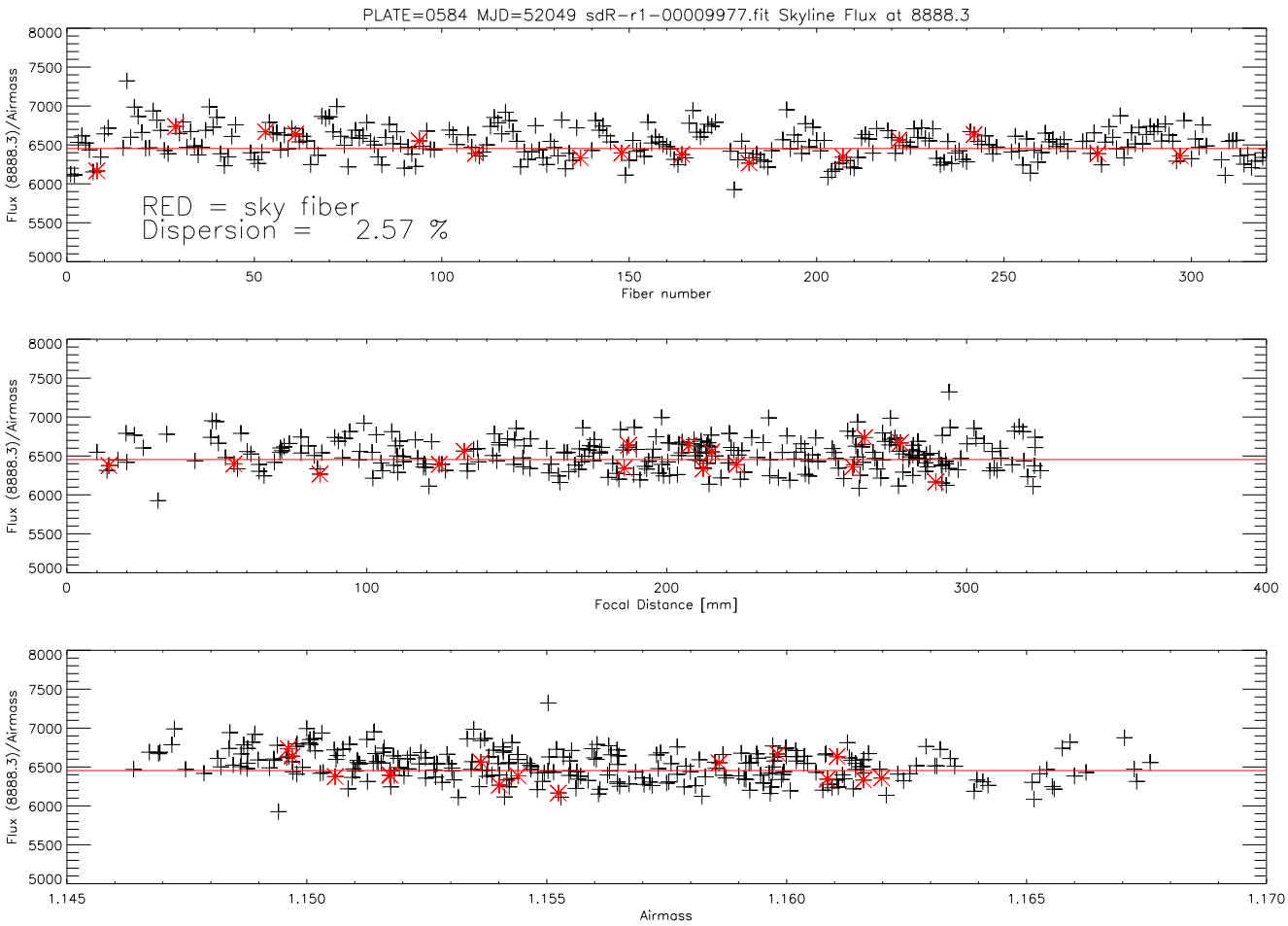

PLATE=0584 MJD=52049 sdR-r1-00009977.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

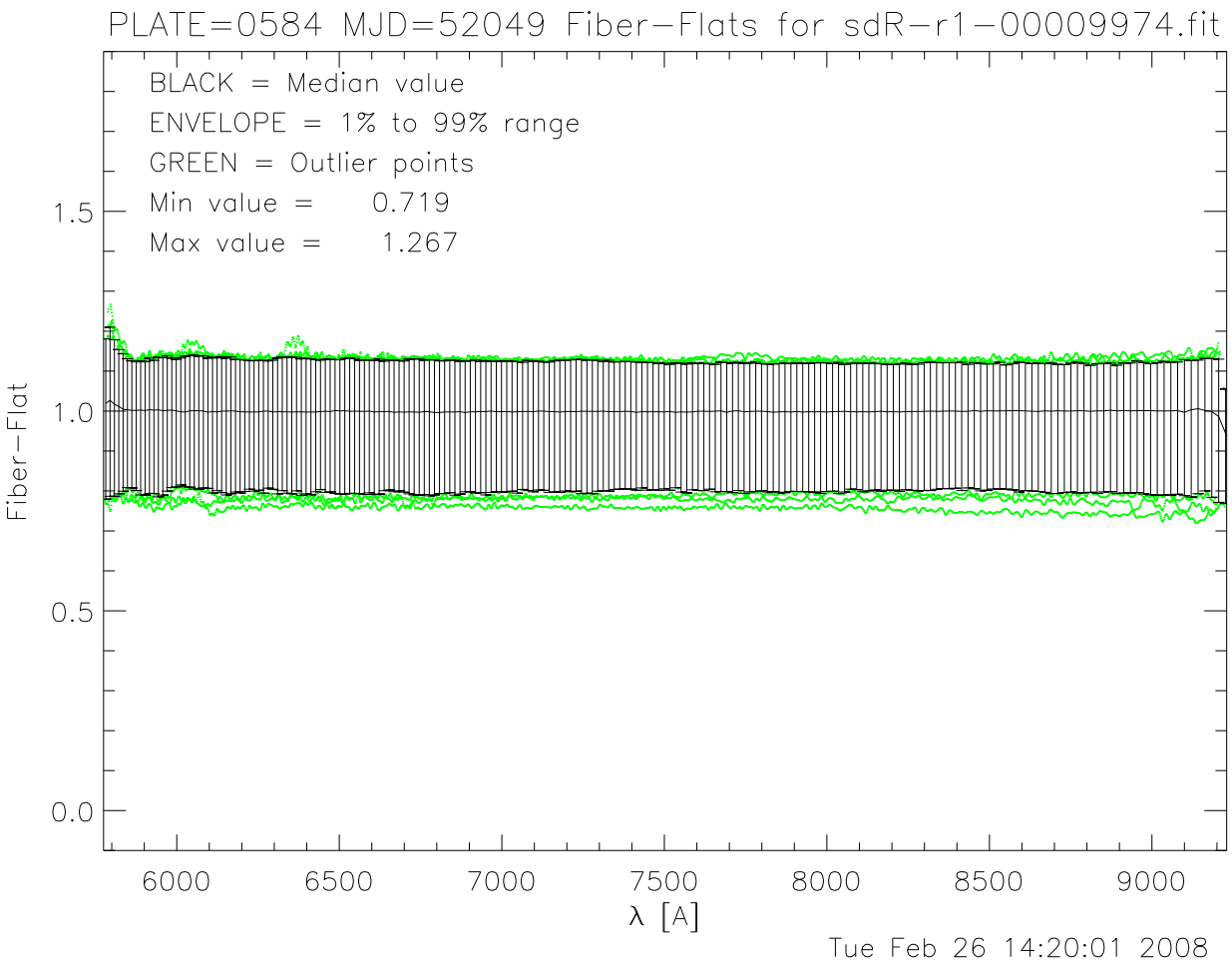

PLATE=0584 MJD=52049 sdR-r1-00009977.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

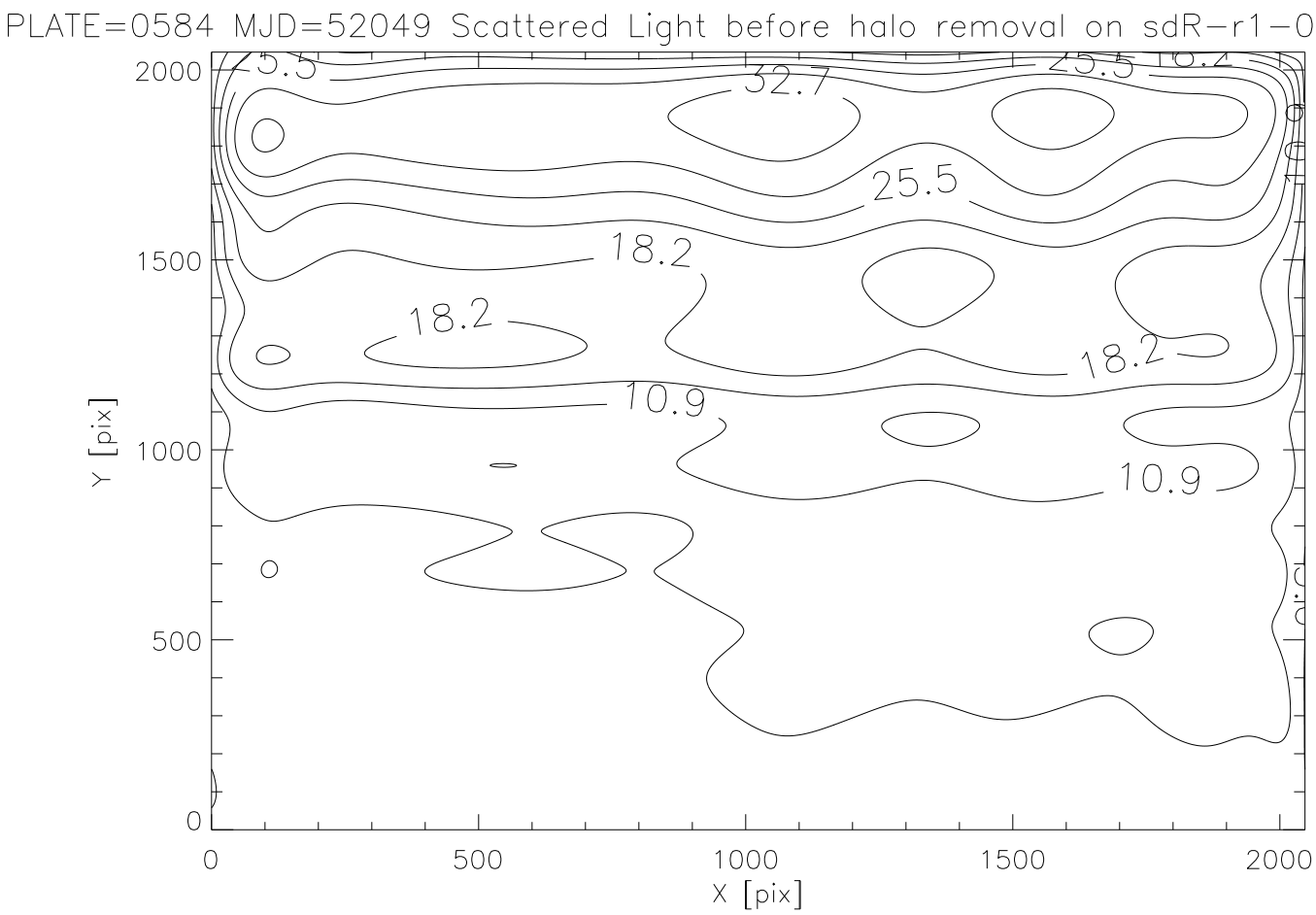

PLATE=0584 MJD=52049 sdR-r1-00009977.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

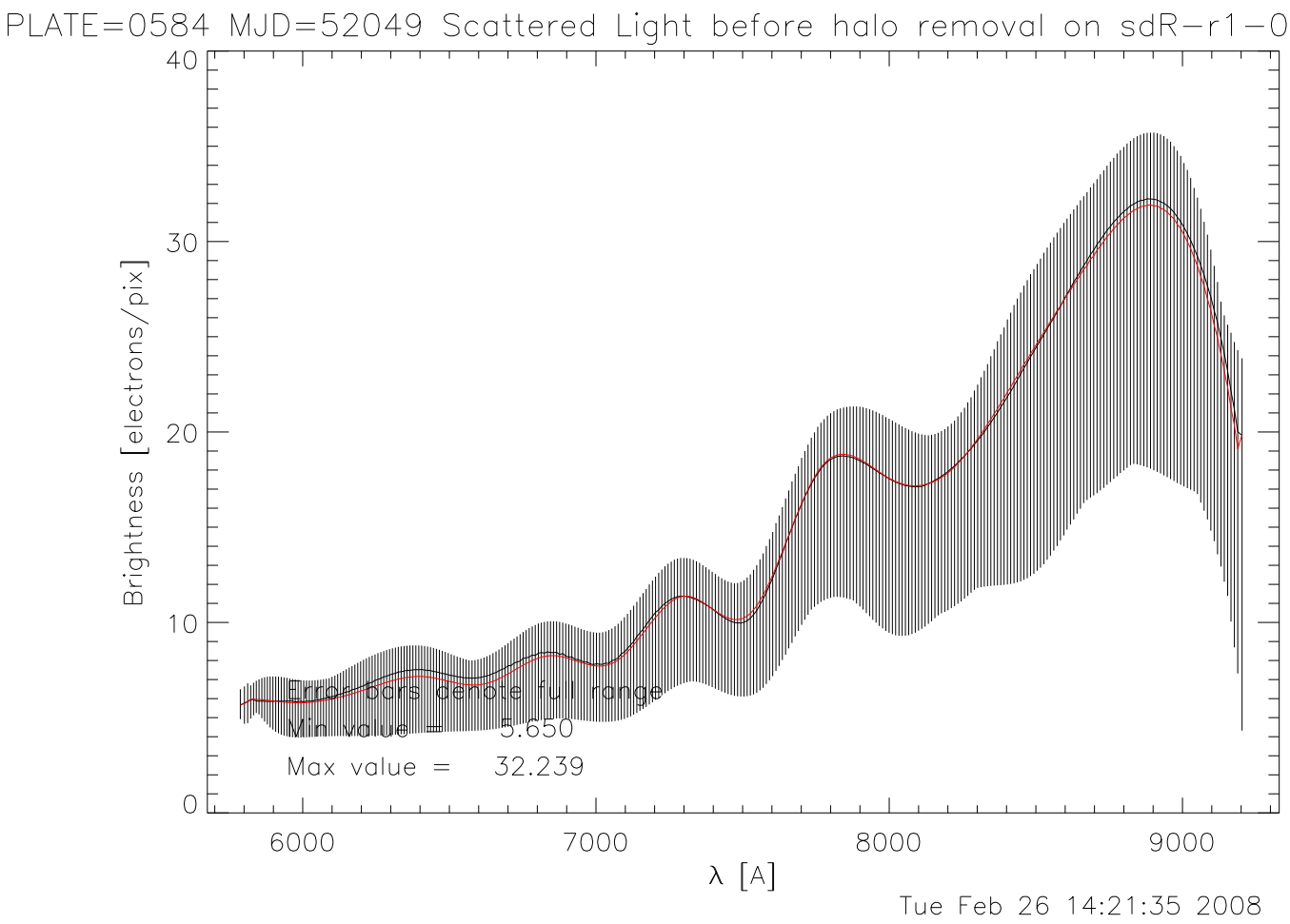

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009977.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

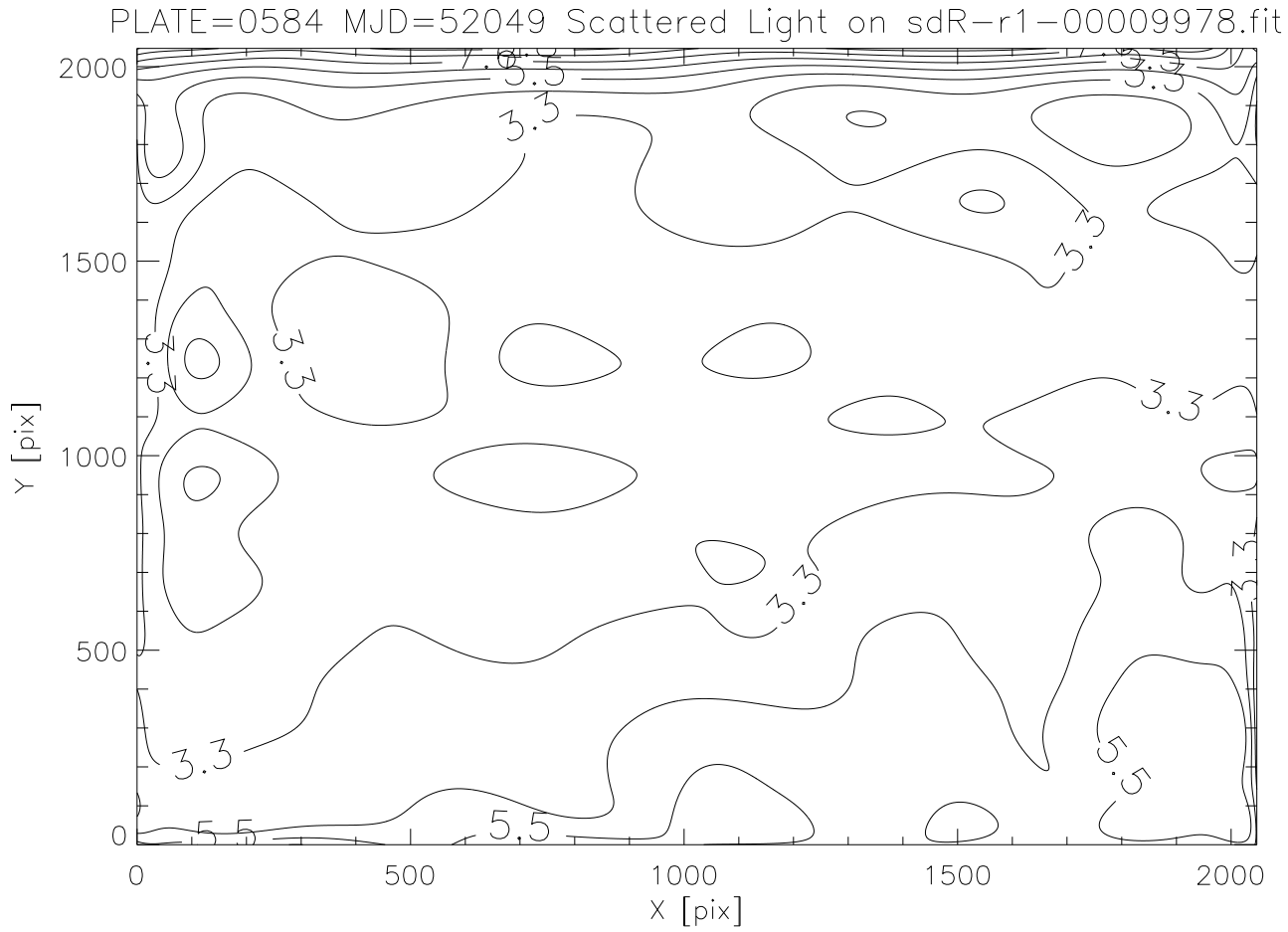

PLATE=0584 MJD=52049 sdR-r1-00009977.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.96 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

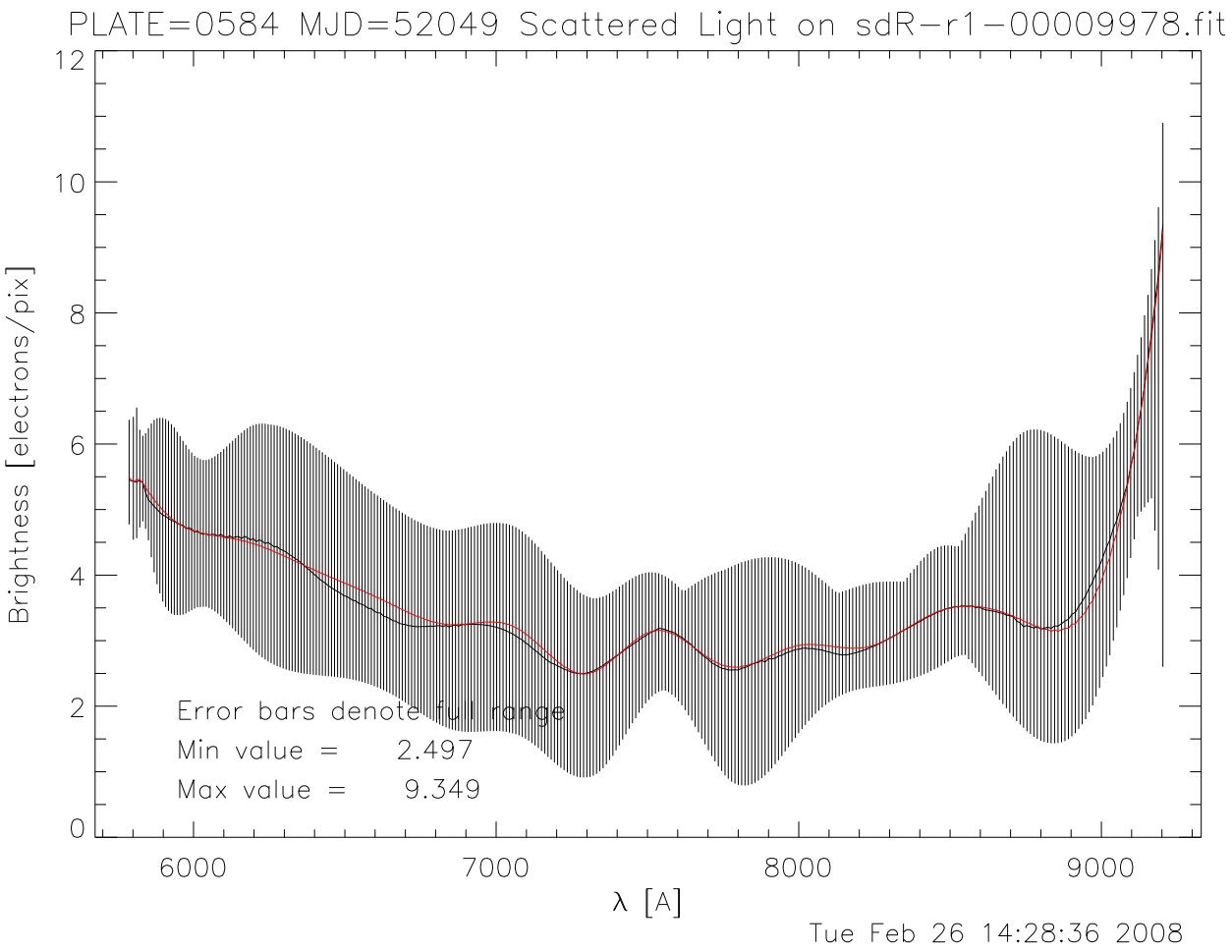

PLATE=0584 MJD=52049 sdR-r1-00009977.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.57 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

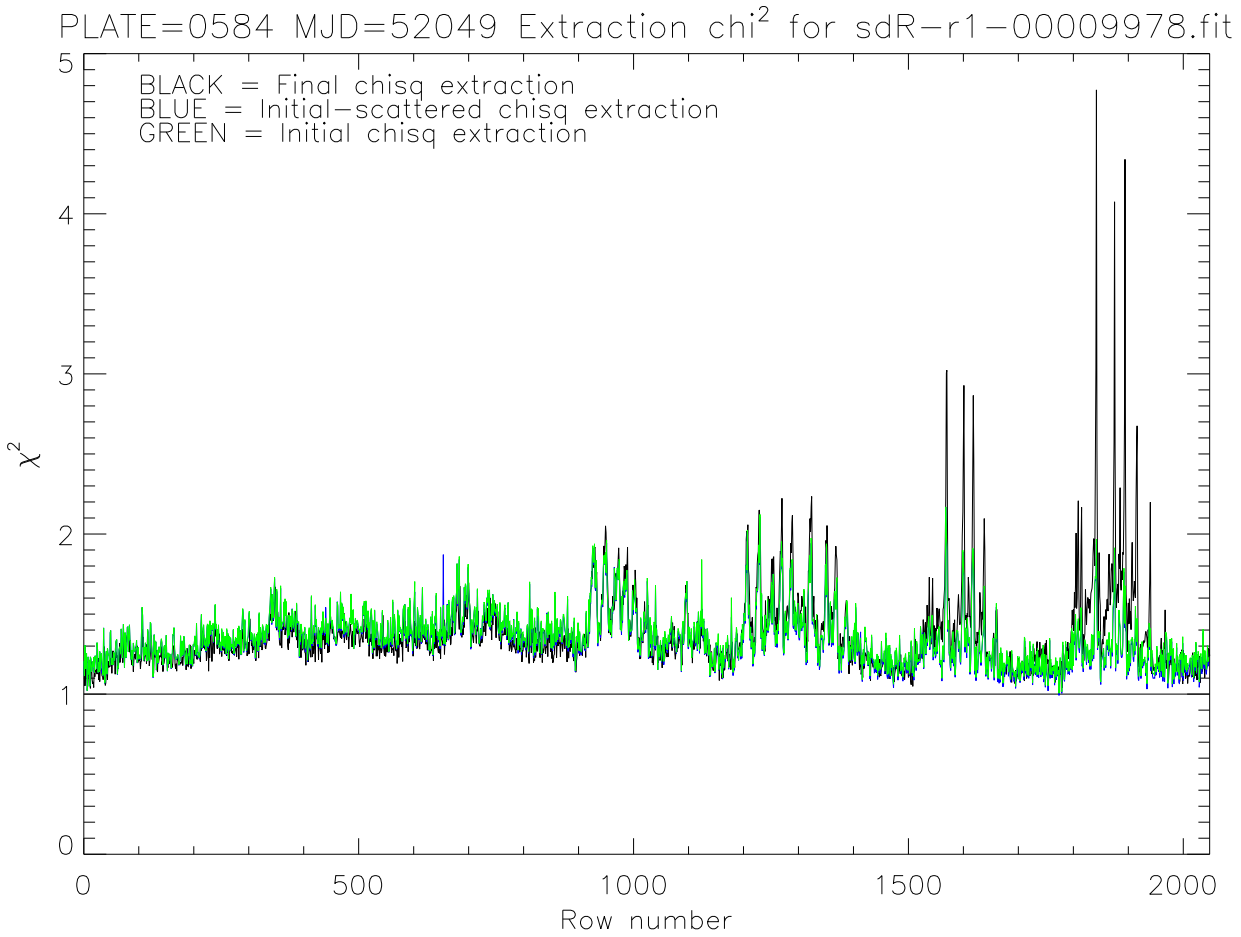

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r1−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.719
Max value = 1.267
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 14:20:01 2008

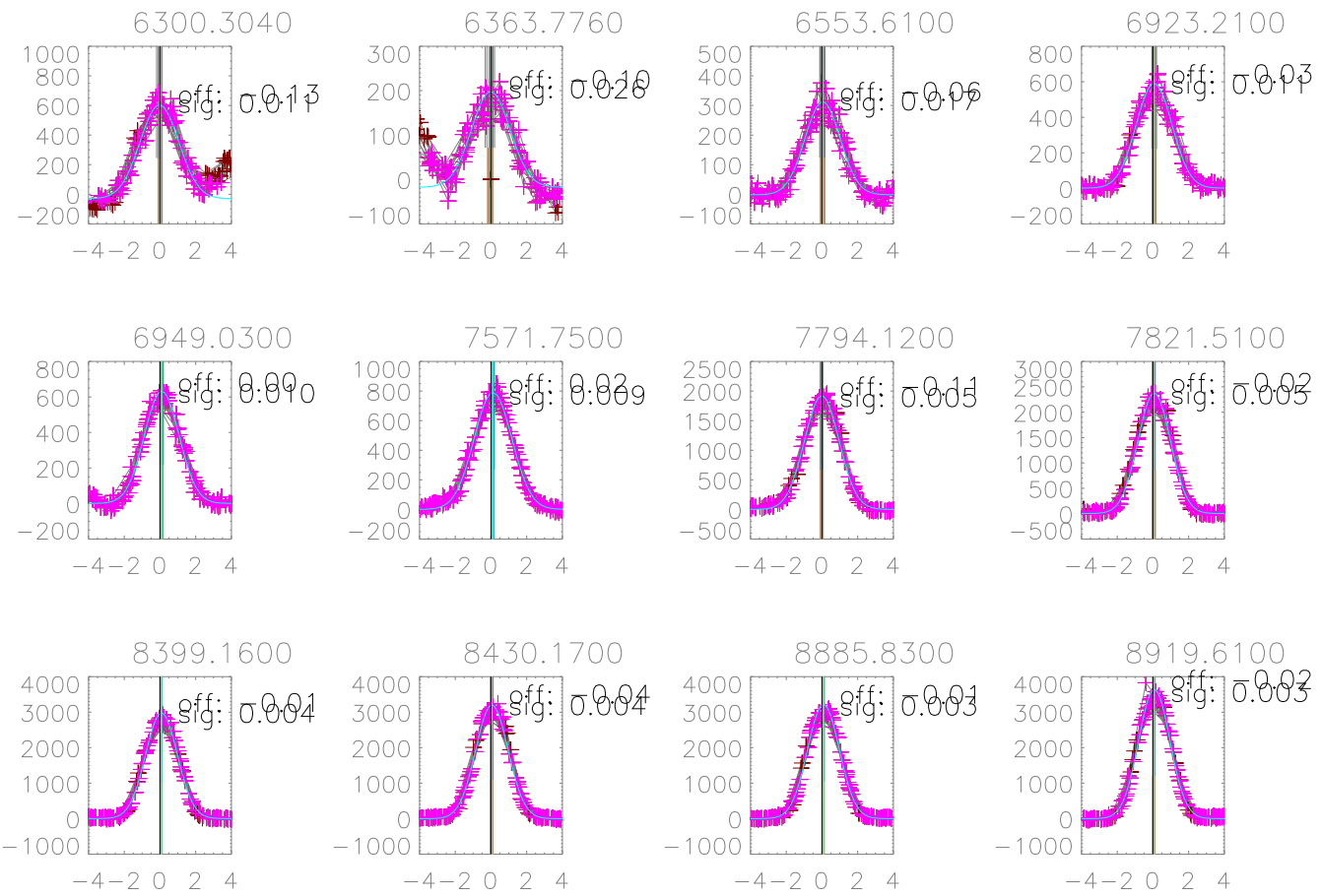

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009978.fi
5.5
32.7
25.5
25.5
18.2
18.2
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

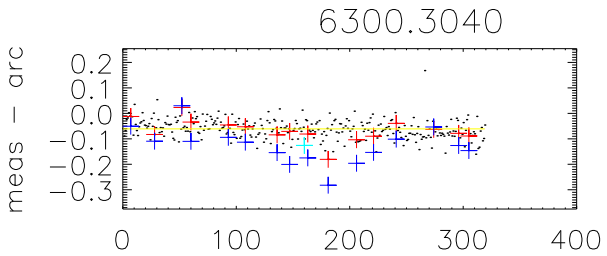

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009978.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.650
Max value = 32.239
Tue Feb 26 14:21:35 2008

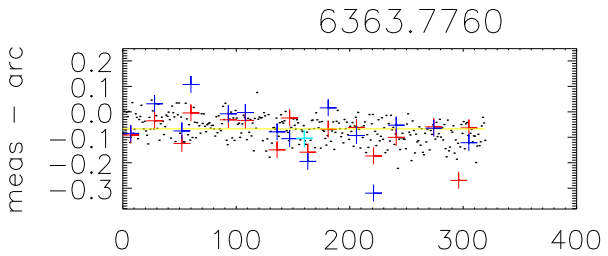

PLATE=0584 MJD=52049 Scattered Light on sdR-r1-00009978.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.3
5.5

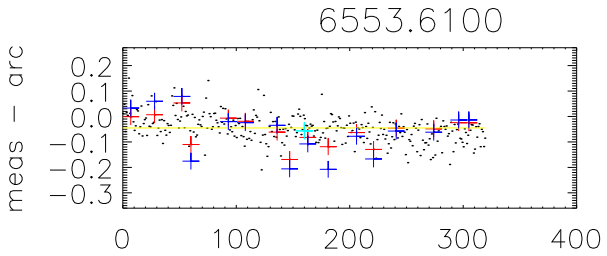

PLATE=0584 MJD=52049 Scattered Light on sdR-r1-00009978.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.497
Max value = 9.349
Tue Feb 26 14:28:36 2008

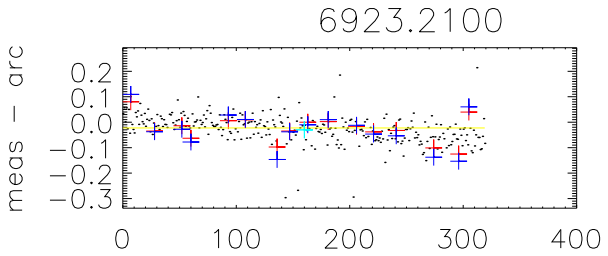

PLATE=0584 MJD=52049 Extraction chi^2 for sdR−r1−00009978.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

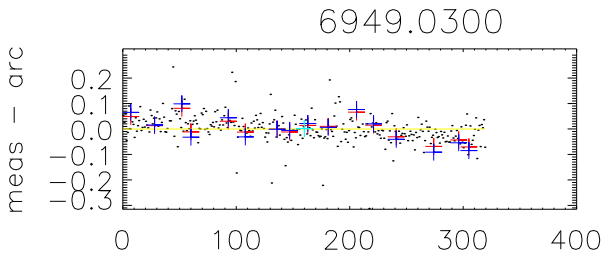

6300.3040
off: -0.13
sig: 0.011
6363.7760
off: -0.10
sig: 0.026
6553.6100
off: -0.06
sig: 0.017
6923.2100
off: -0.03
sig: 0.011
6949.0300
off: 0.00
sig: 0.010
7571.7500
off: 0.02
sig: 0.009
7794.1200
off: -0.11
sig: 0.005
7821.5100
off: -0.02
sig: 0.005
8399.1600
off: -0.01
sig: 0.004
8430.1700
off: -0.04
sig: 0.004
8885.8300
off: -0.01
sig: 0.003
8919.6100
off: -0.02
sig: 0.003

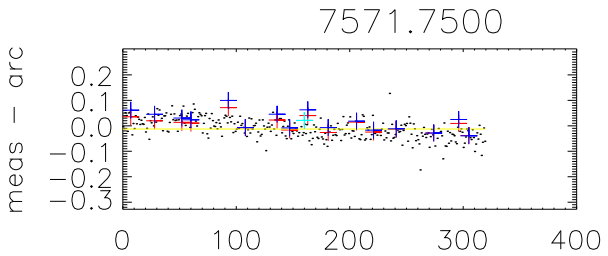

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

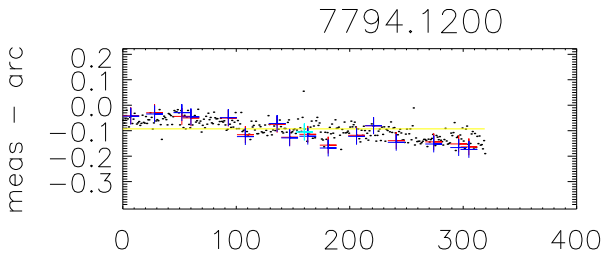

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

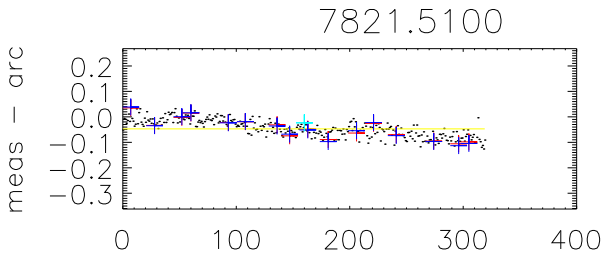

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

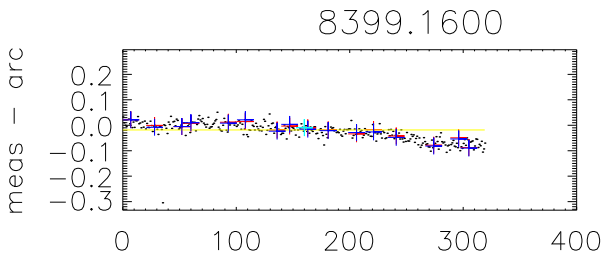

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

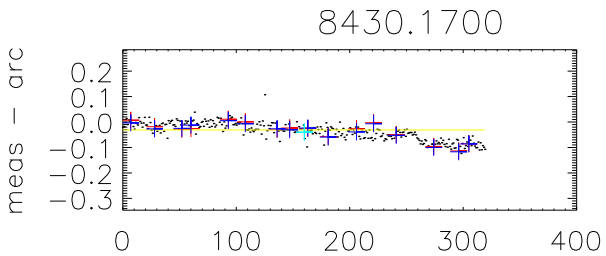

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

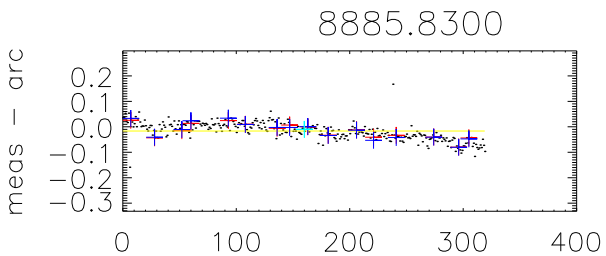

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

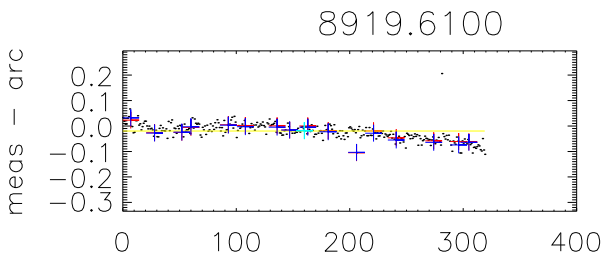

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

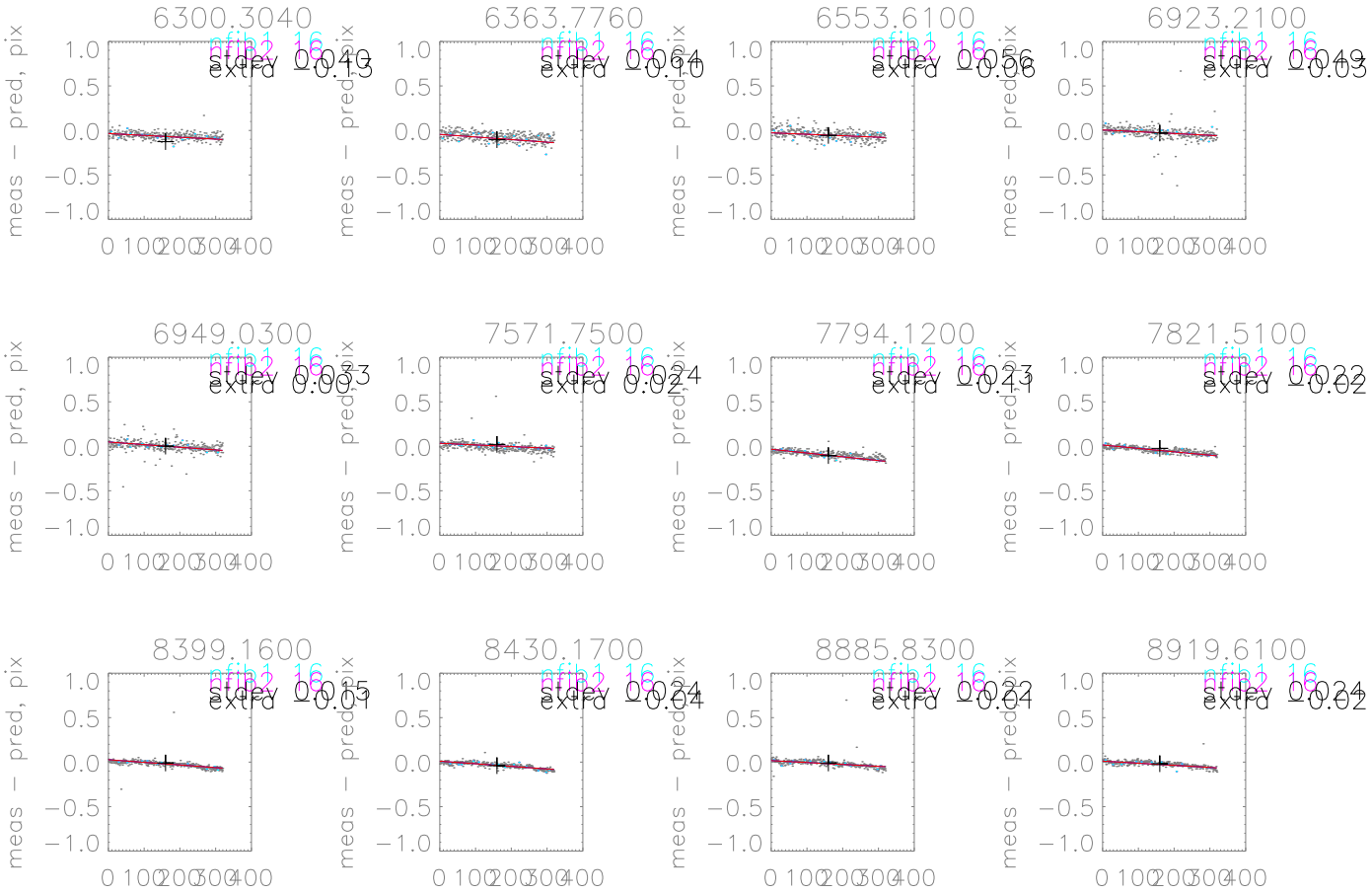

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

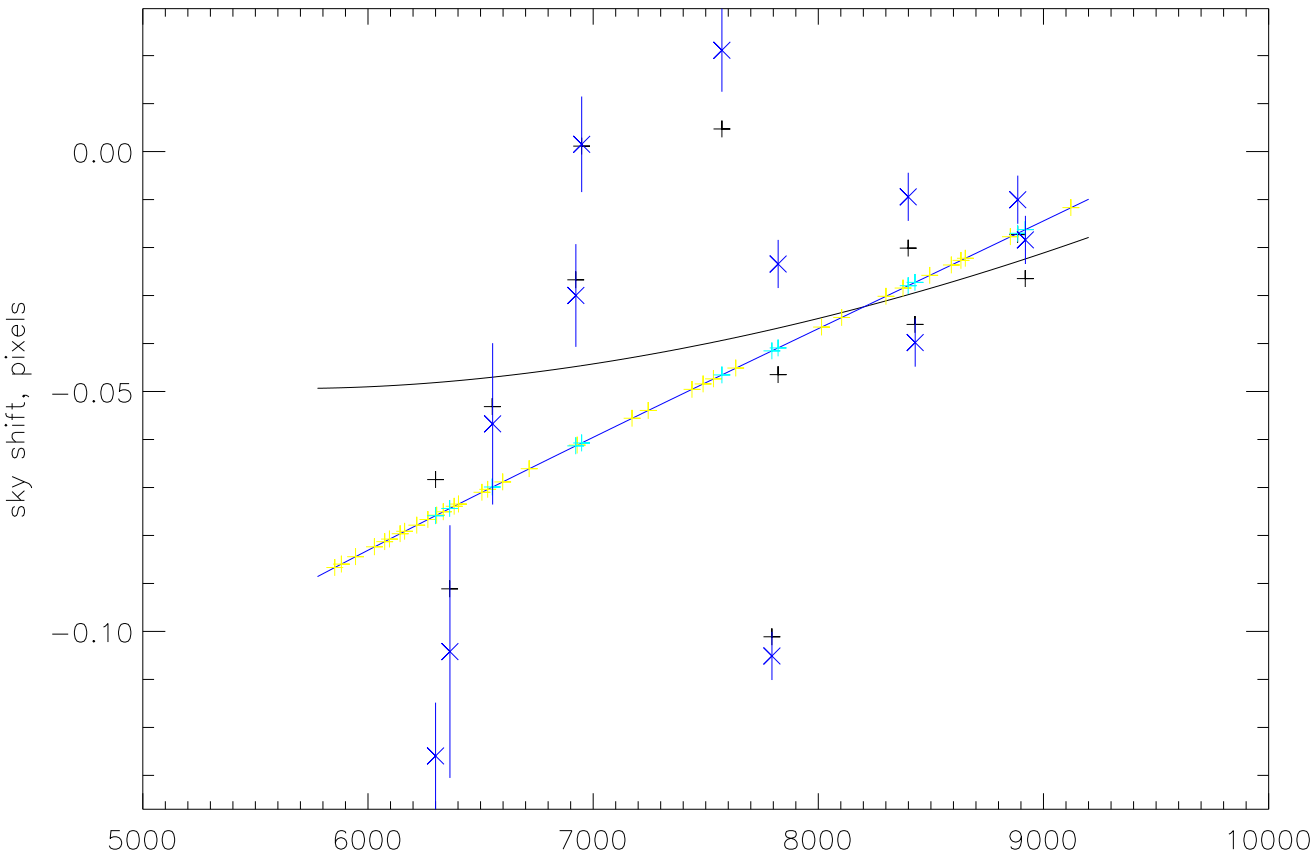

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

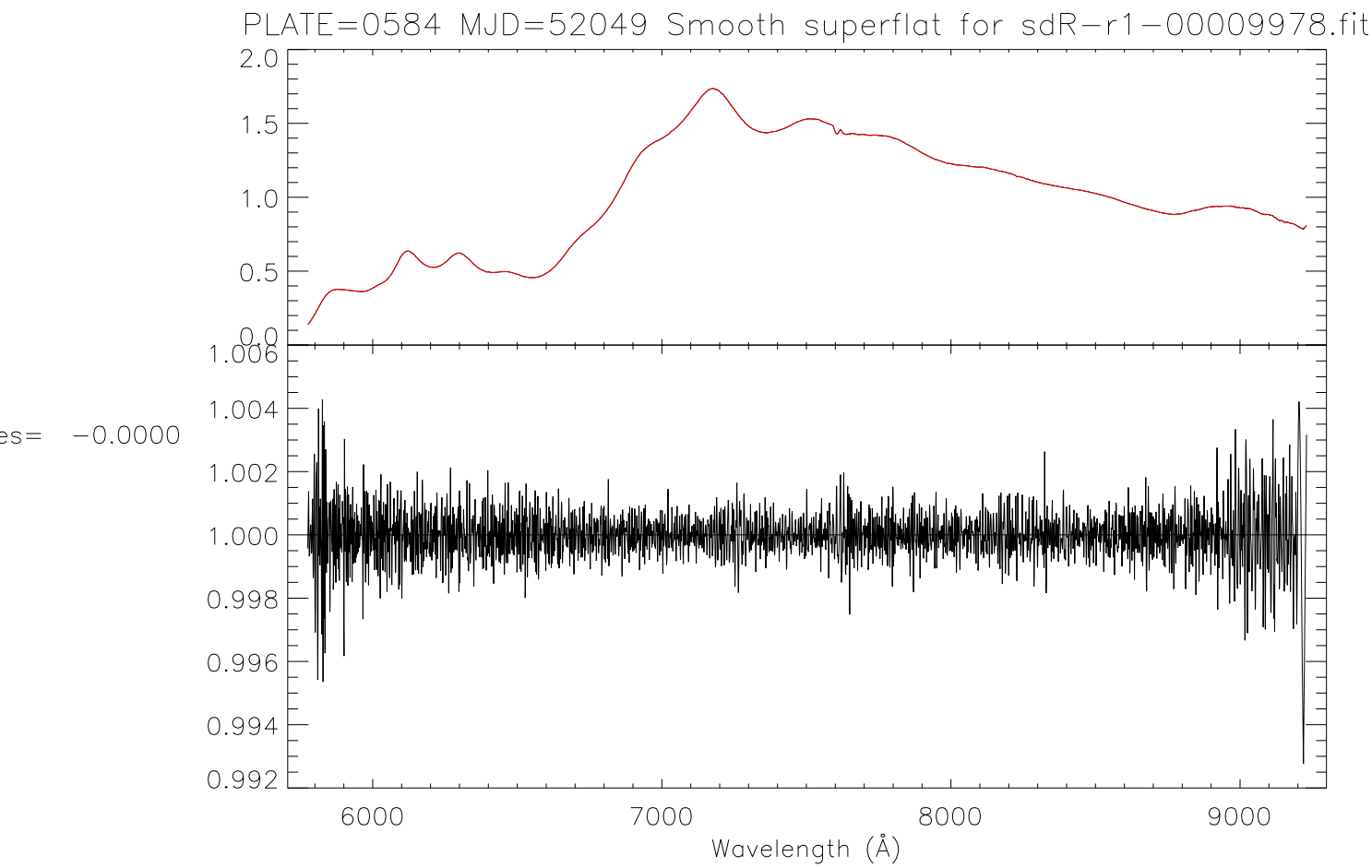

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

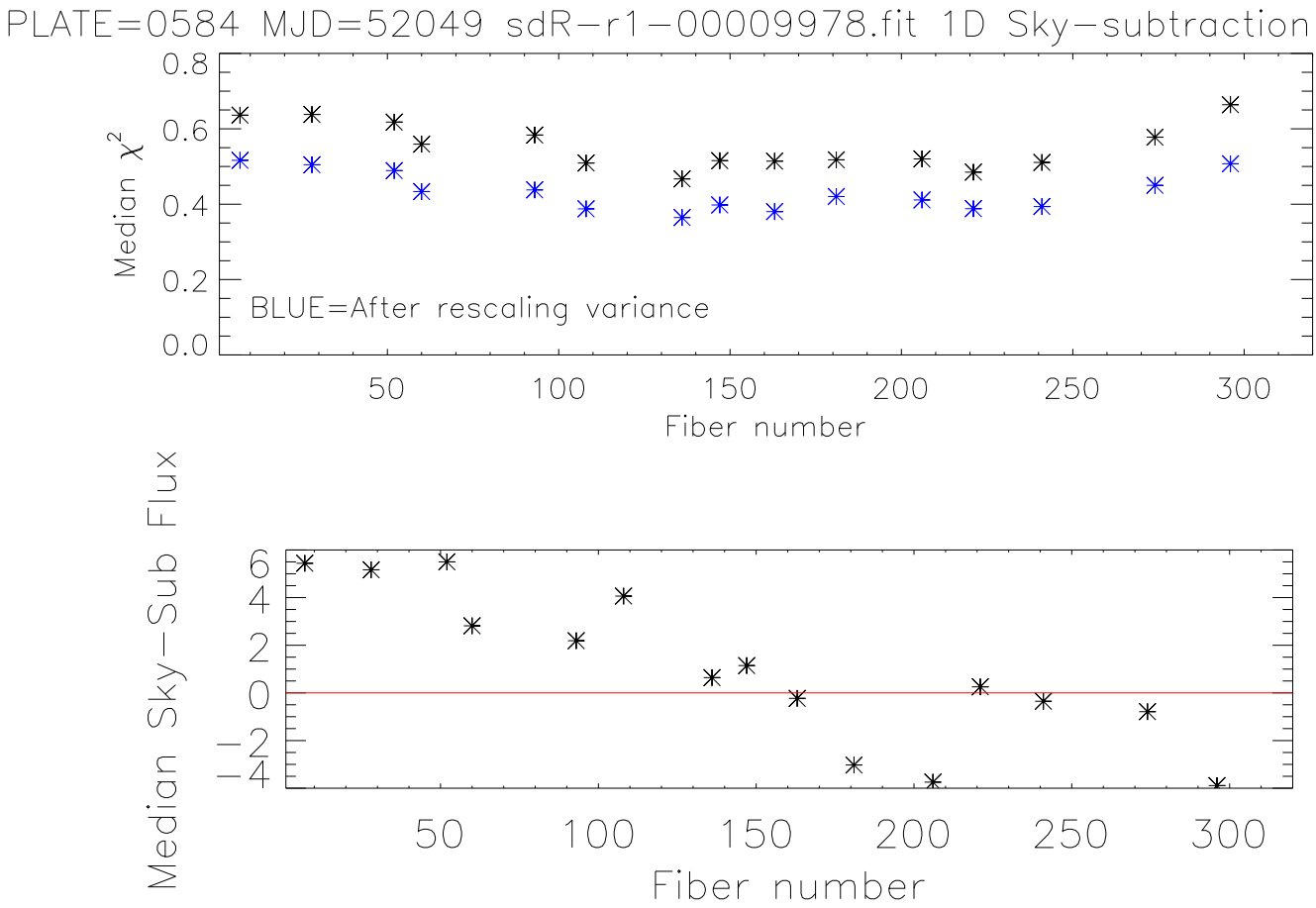

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

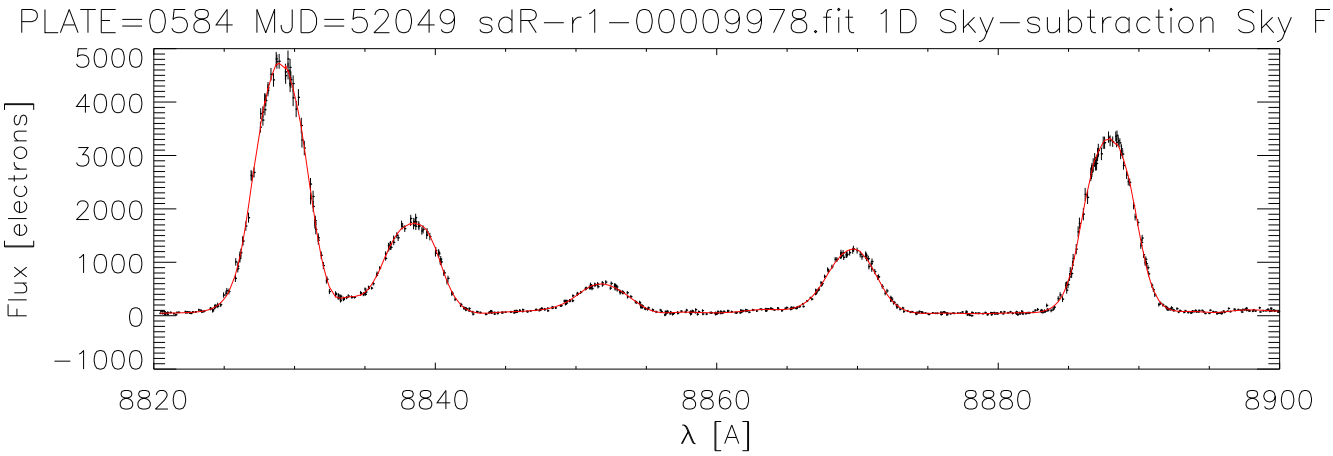

6300.3040
stdev 0.040
extra −0.13
6363.7760
stdev 0.064
extra −0.11
6553.6100
stdev 0.056
extra −0.06
6923.2100
stdev 0.049
extra −0.03
6949.0300
stdev 0.033
extra 0.00
7571.7500
stdev 0.024
extra 0.02
7794.1200
stdev 0.023
extra −0.01
7821.5100
stdev 0.022
extra −0.02
8399.1600
stdev 0.015
extra −0.01
8430.1700
stdev 0.024
extra −0.04
8885.8300
stdev 0.022
extra −0.04
8919.6100
stdev 0.024
extra −0.02
meas − pred, pix
mfhd2 16

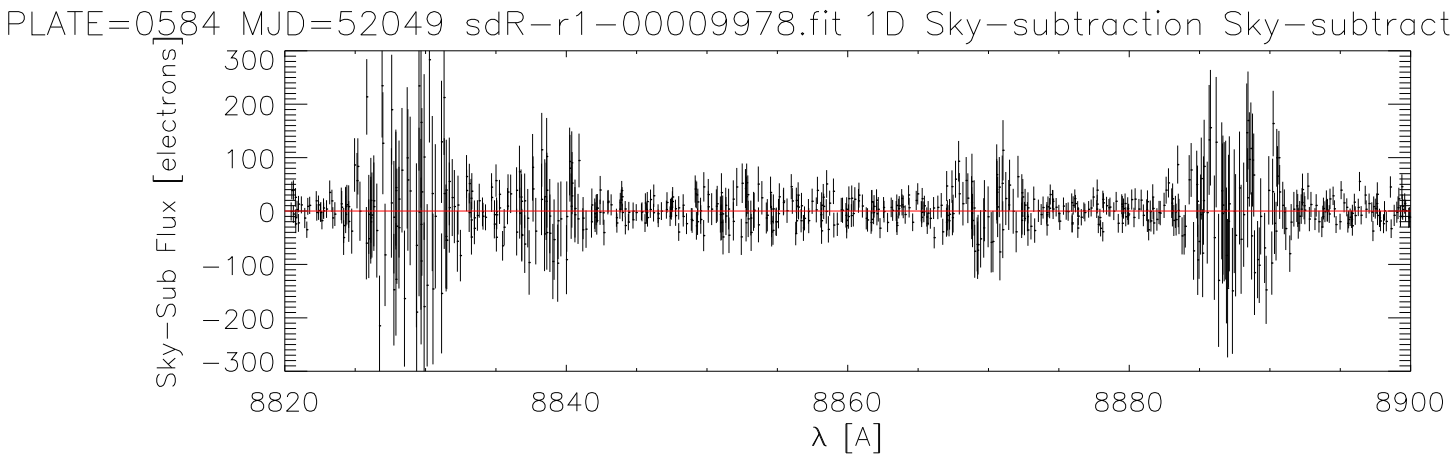

0.00
−0.05
−0.10
sky shift, pixels
5000
6000
7000
8000
9000
10000

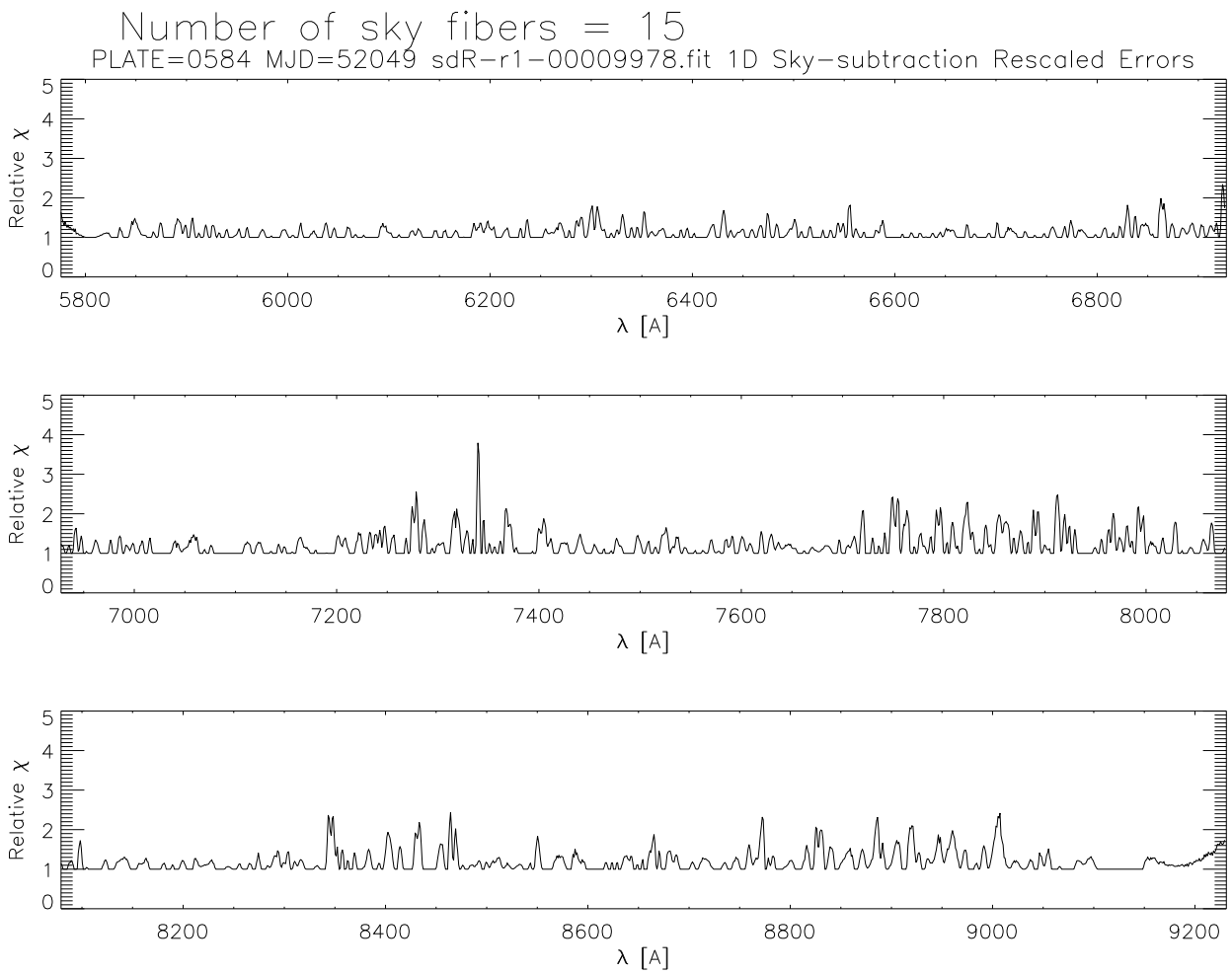

PLATE=0584 MJD=52049 Smooth superflat for sdR-r1-00009978.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

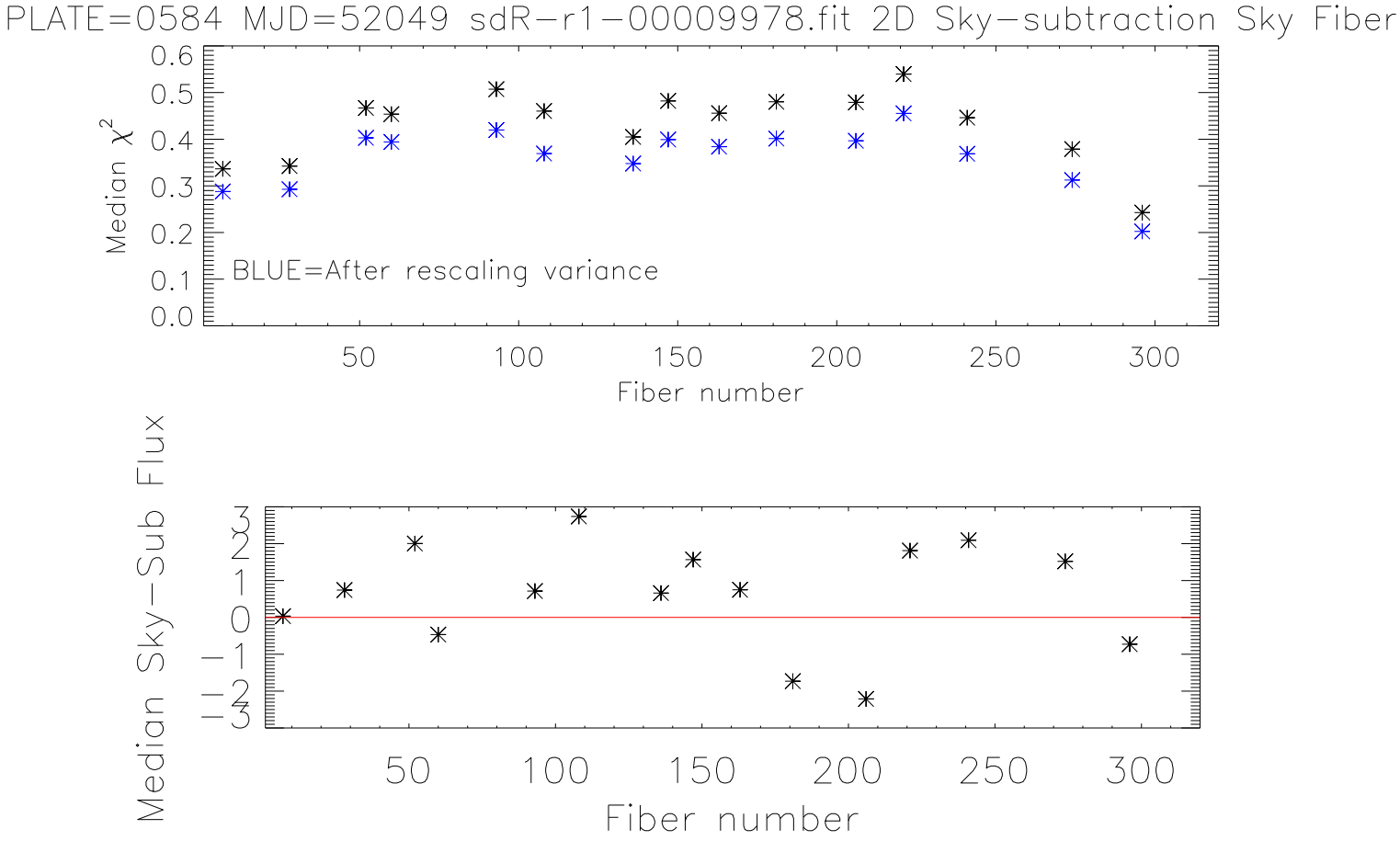
es= −0.0000

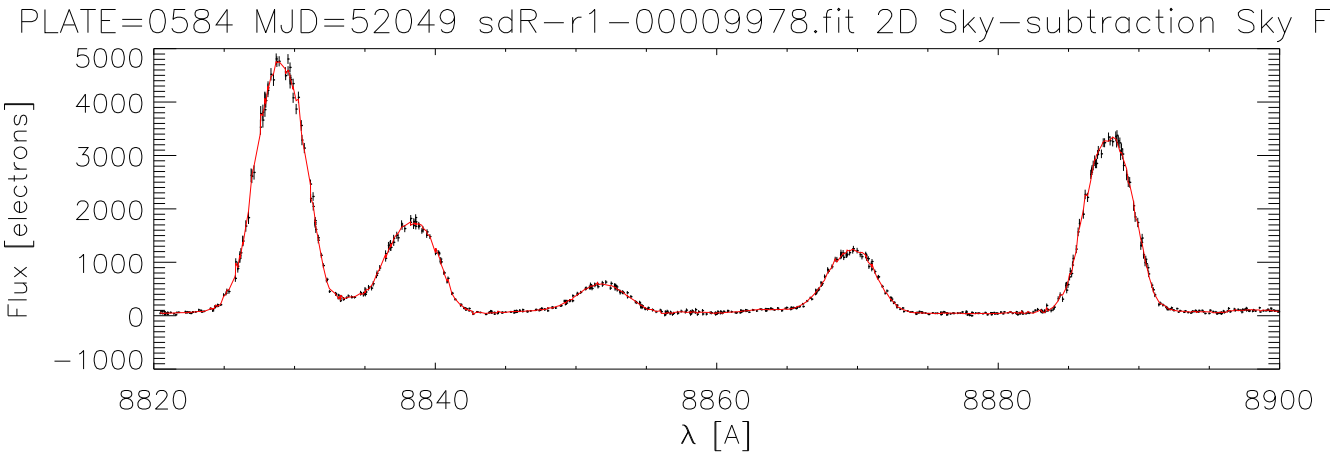

PLATE=0584 MJD=52049 sdR-r1-00009978.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

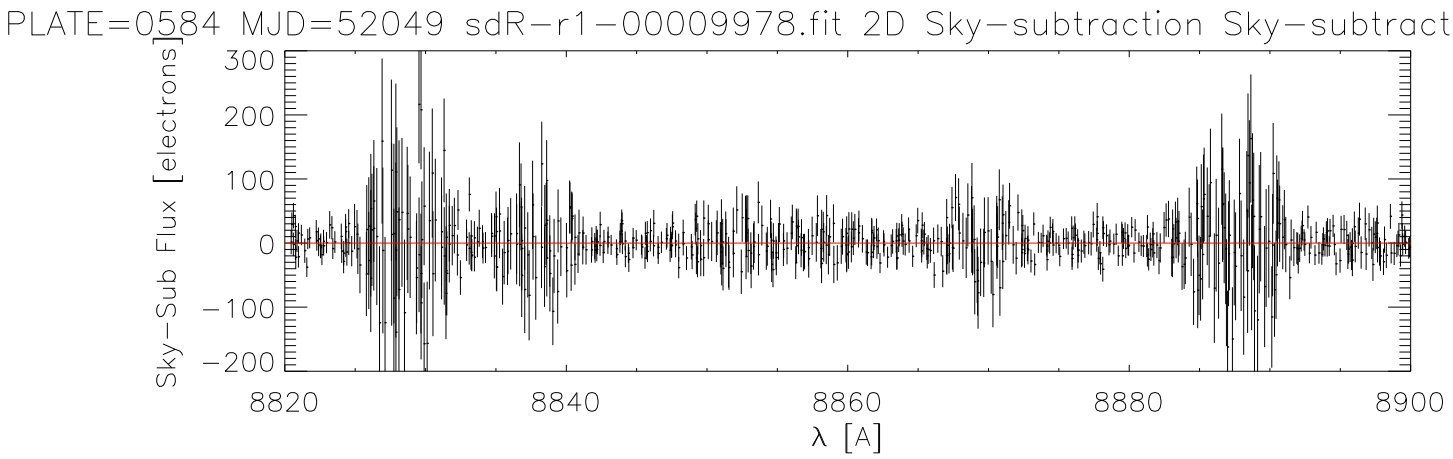

PLATE=0584 MJD=52049 sdR-r1-00009978.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

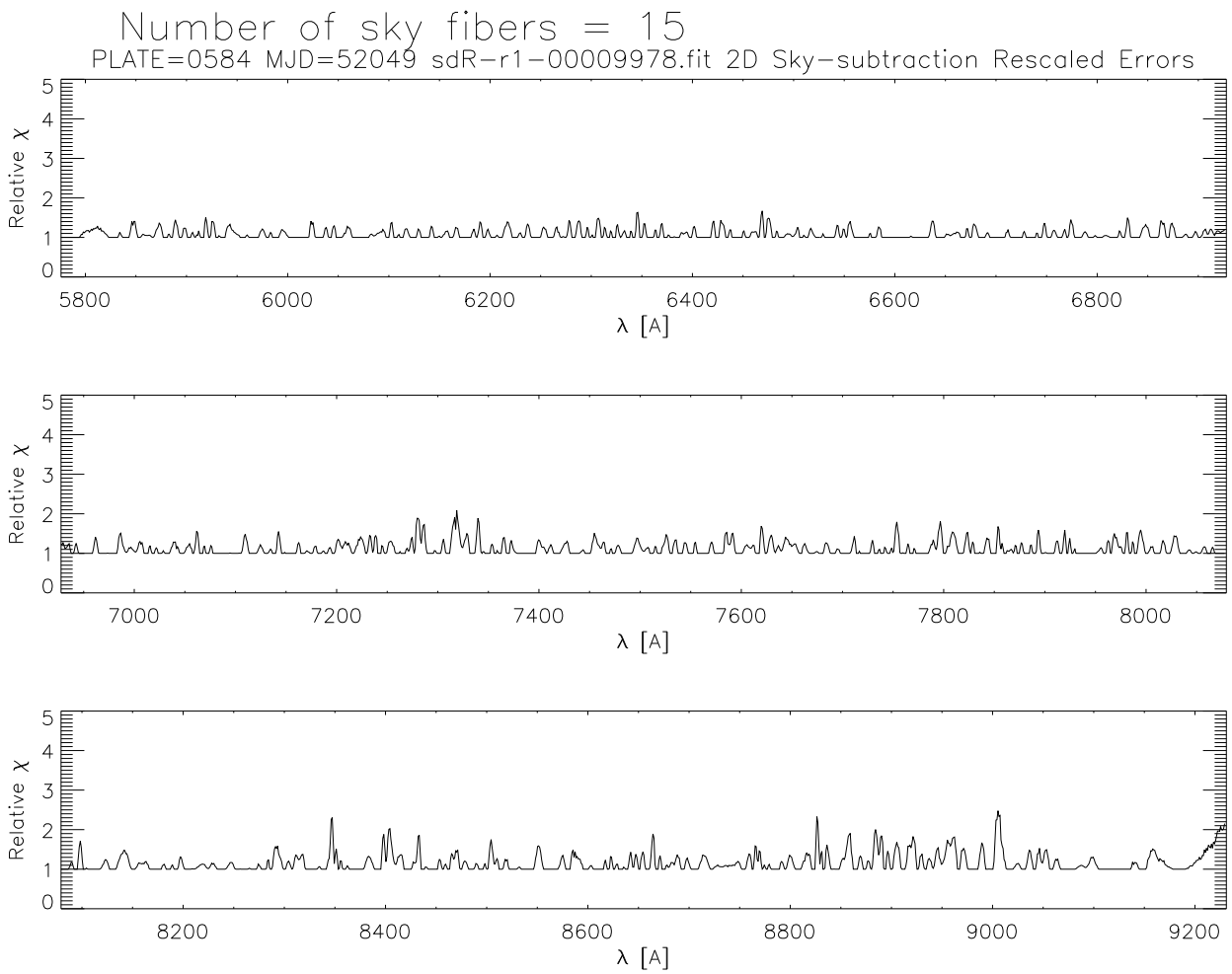

PLATE=0584 MJD=52049 sdR-r1-00009978.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

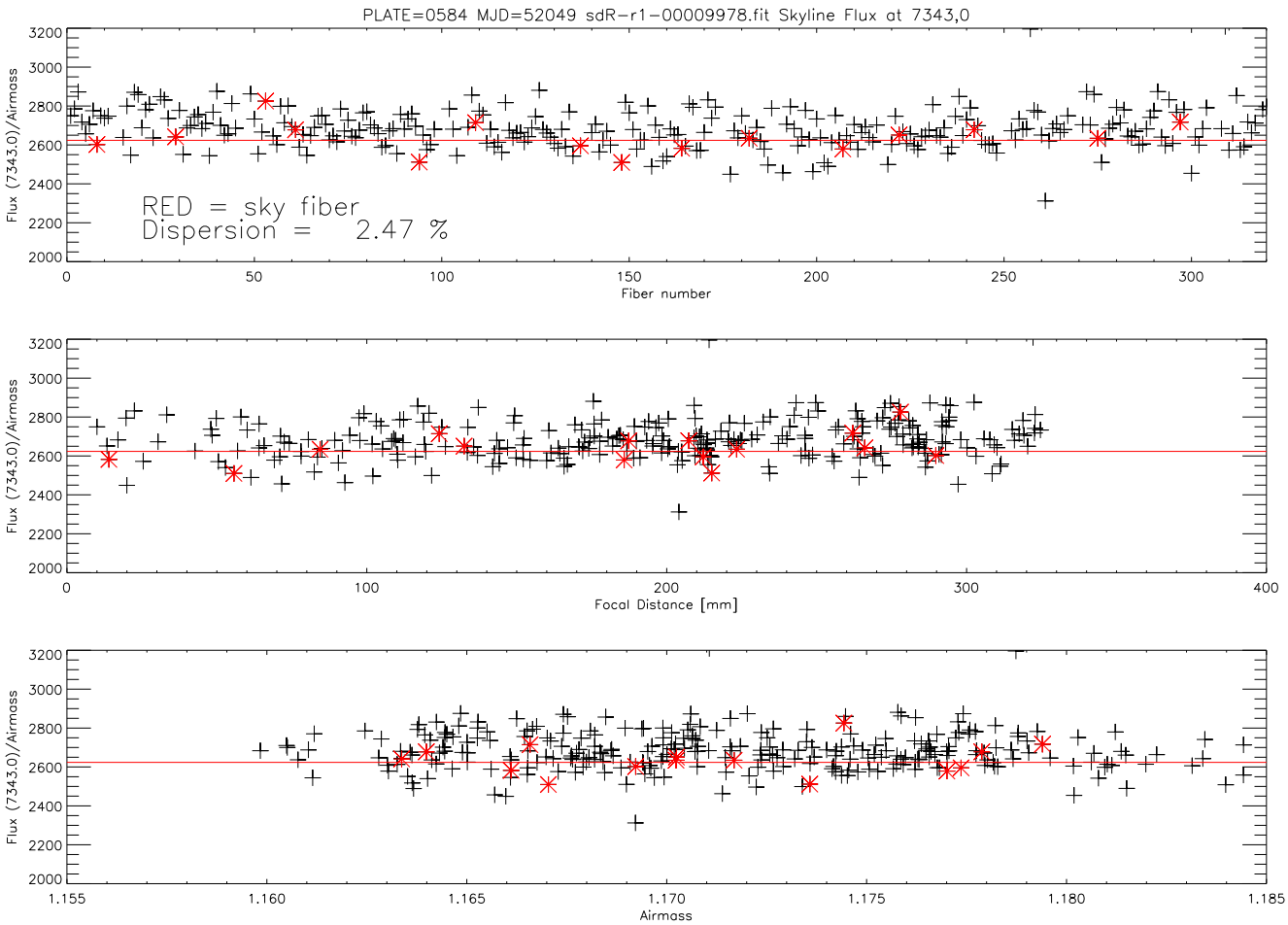

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009978.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

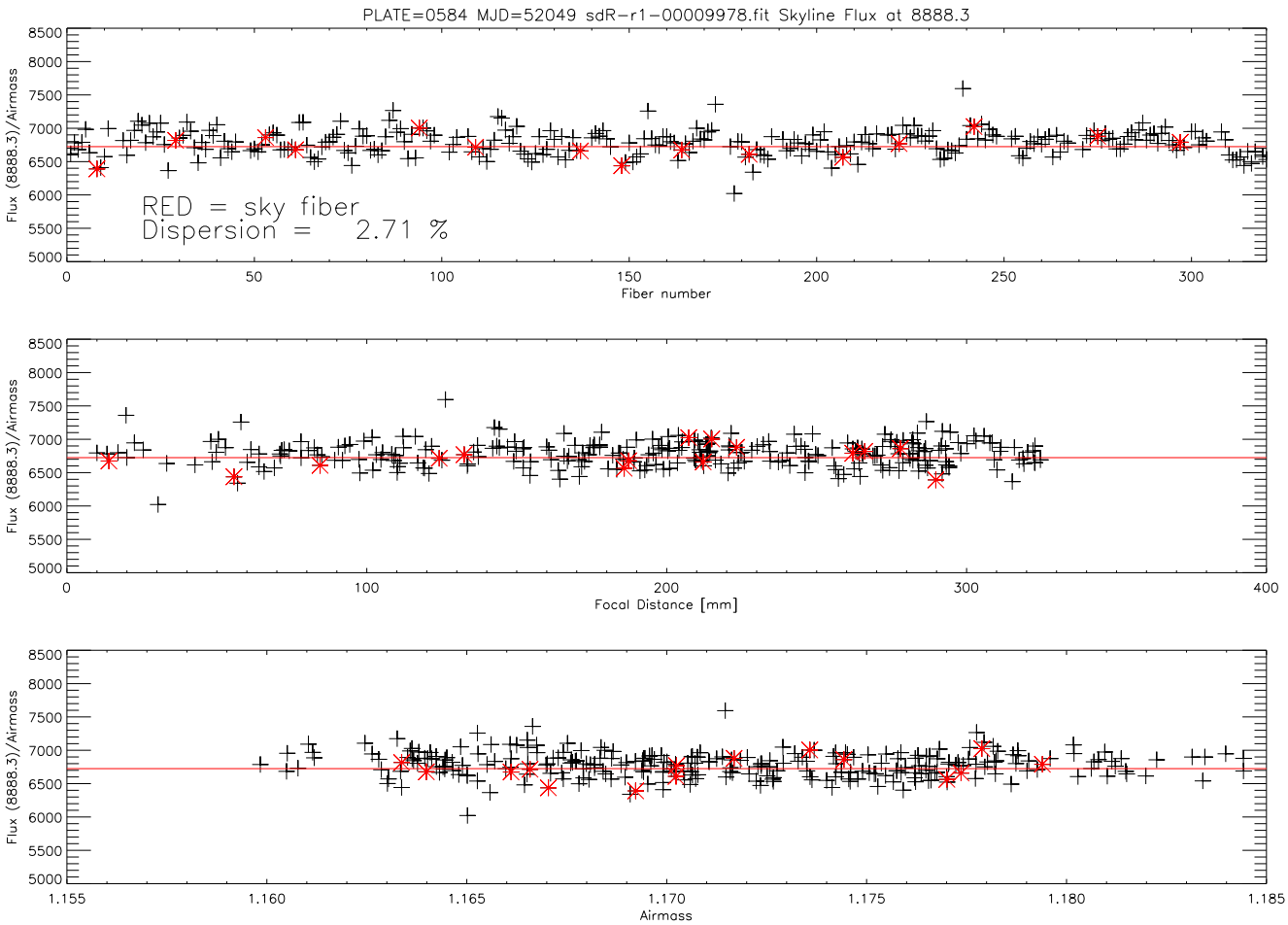

PLATE=0584 MJD=52049 sdR-r1-00009978.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

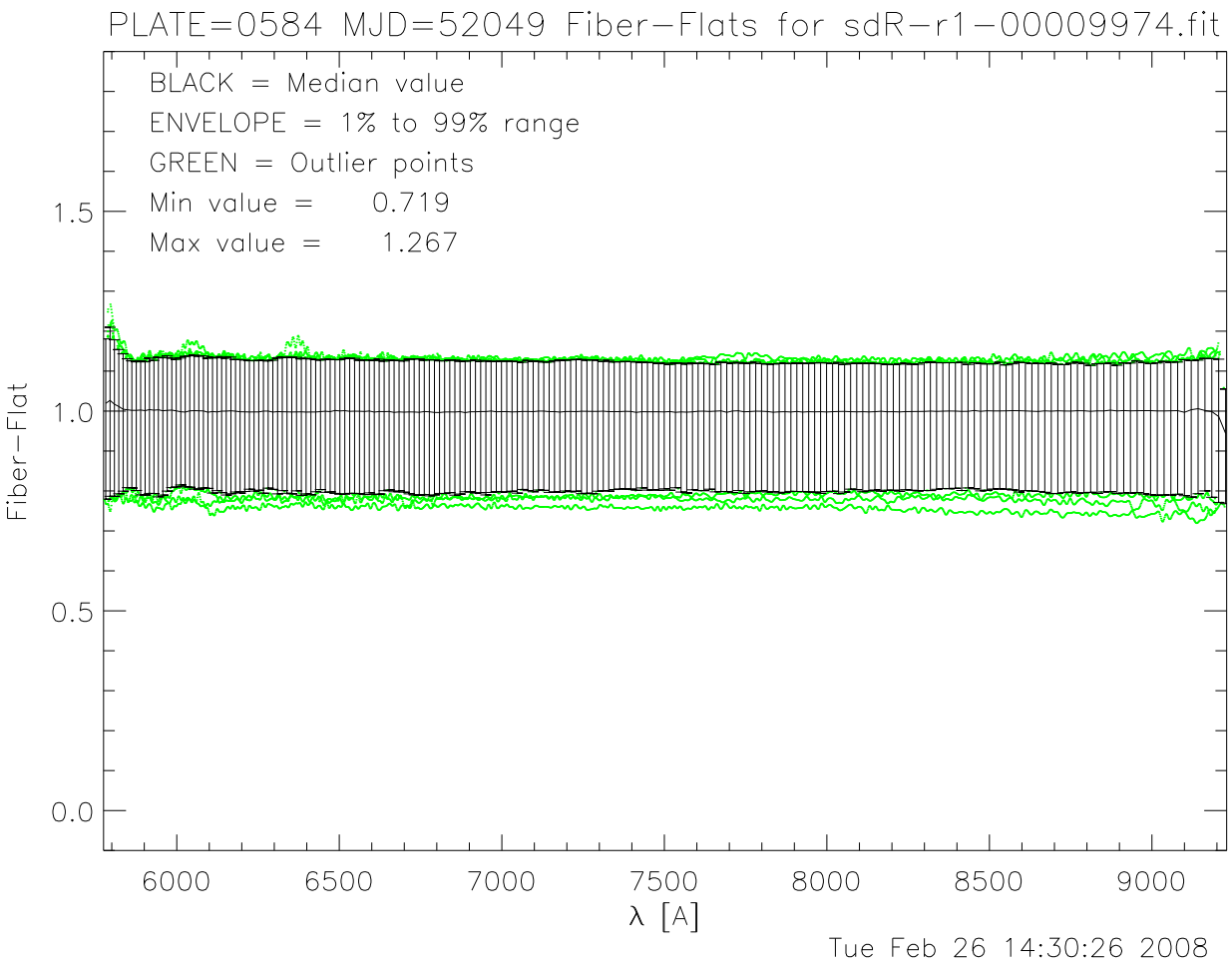

PLATE=0584 MJD=52049 sdR-r1-00009978.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

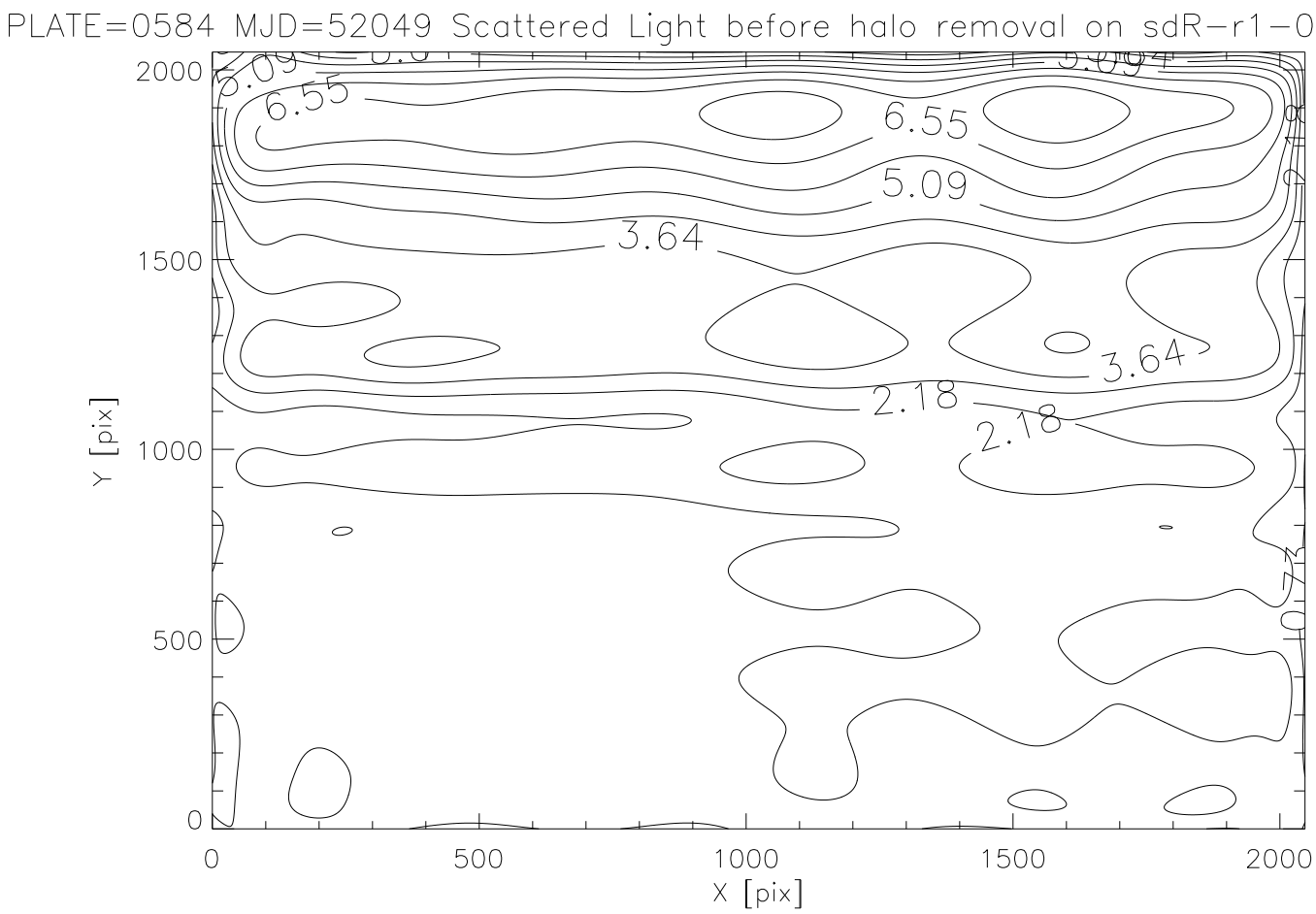

PLATE=0584 MJD=52049 sdR-r1-00009978.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

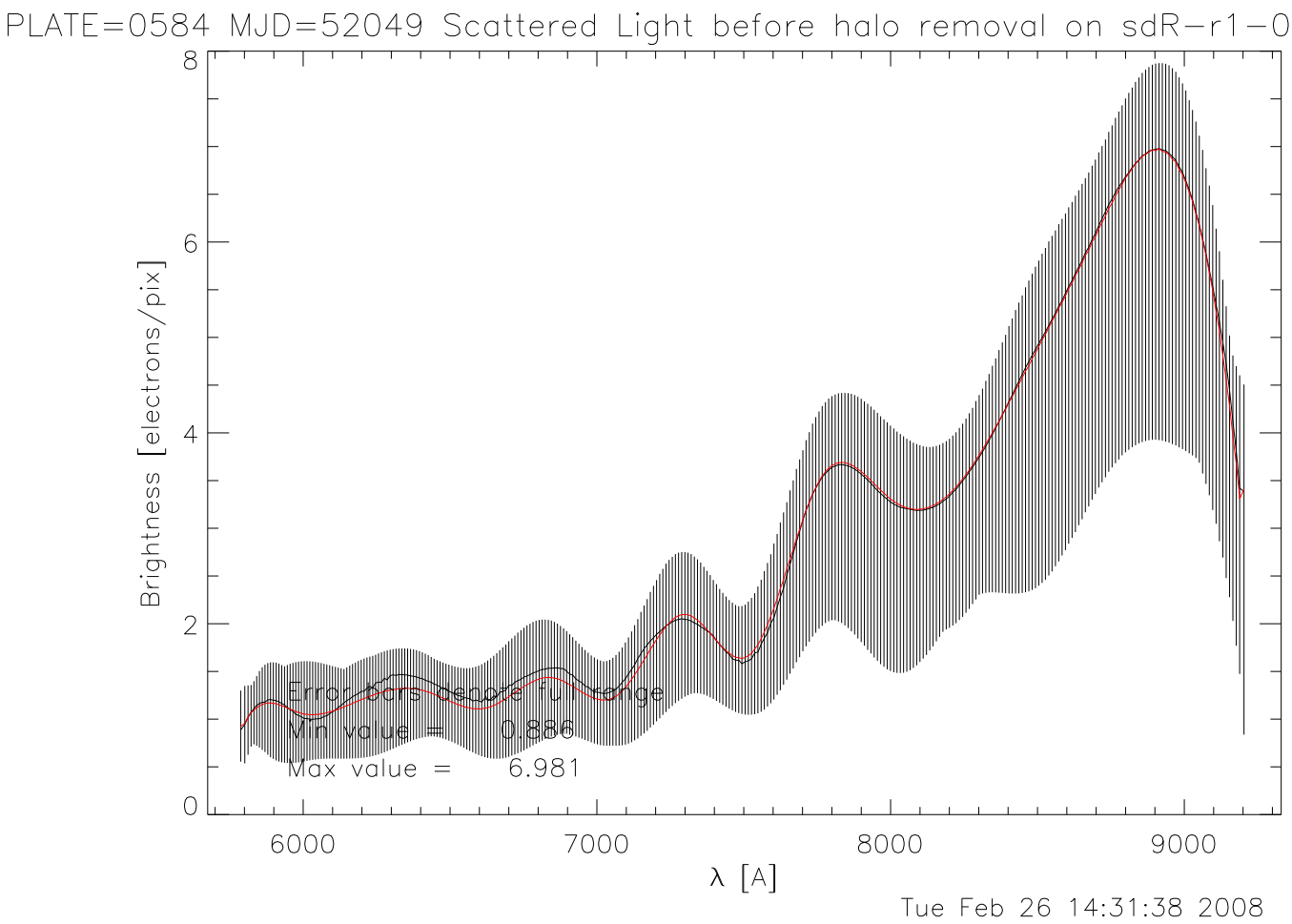

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009978.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

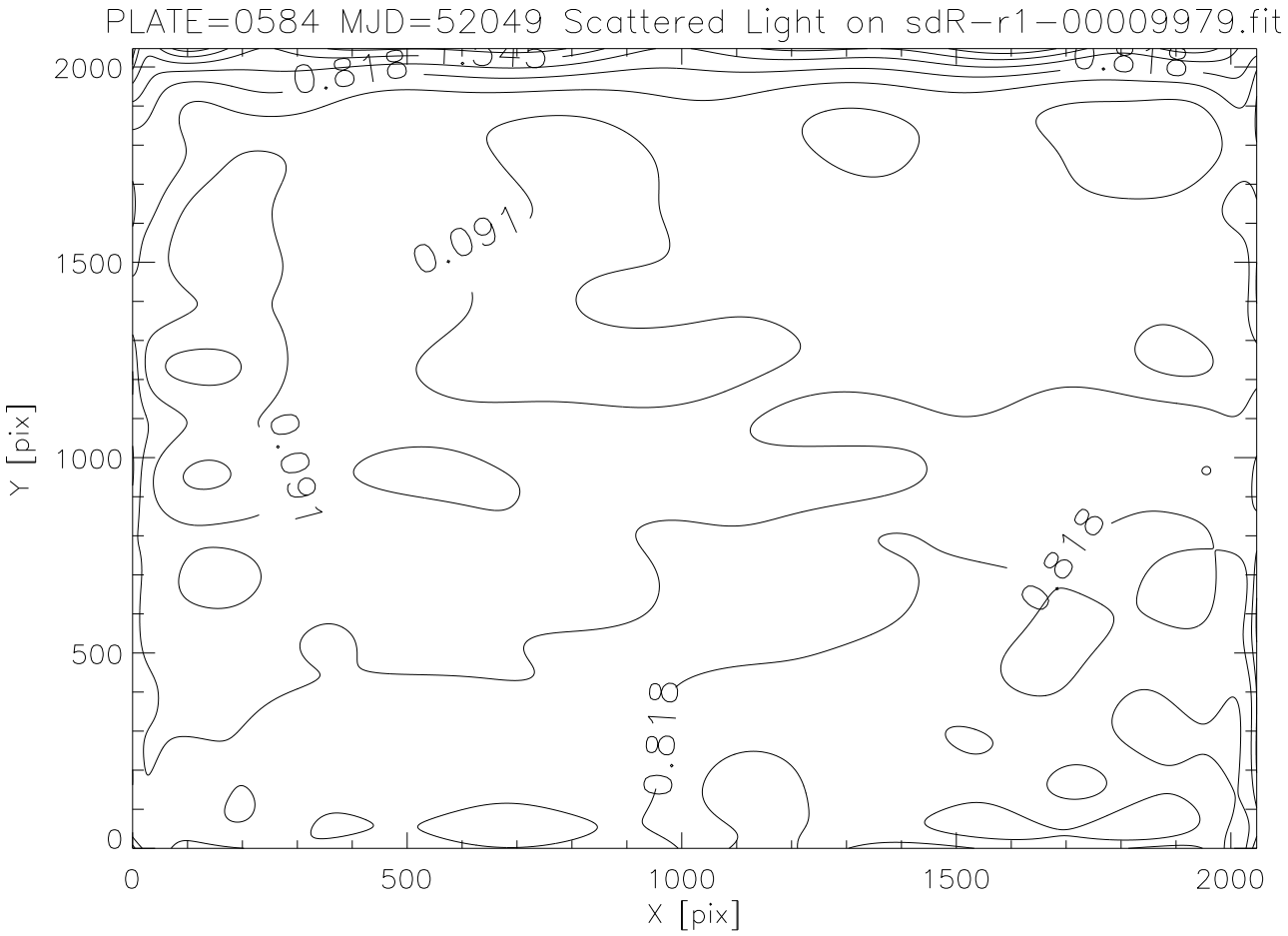

PLATE=0584 MJD=52049 sdR-r1-00009978.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.47 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

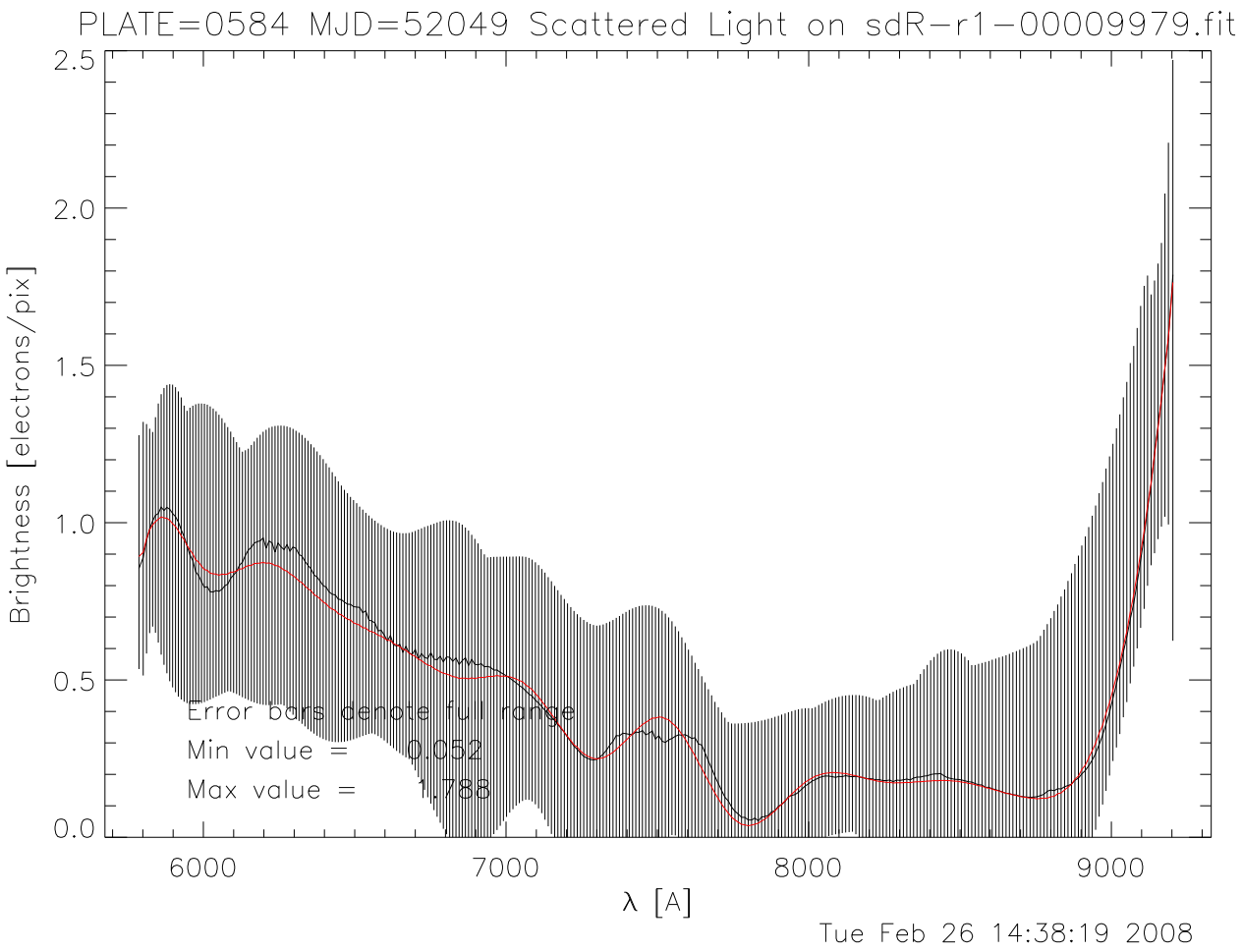

PLATE=0584 MJD=52049 sdR-r1-00009978.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.71 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

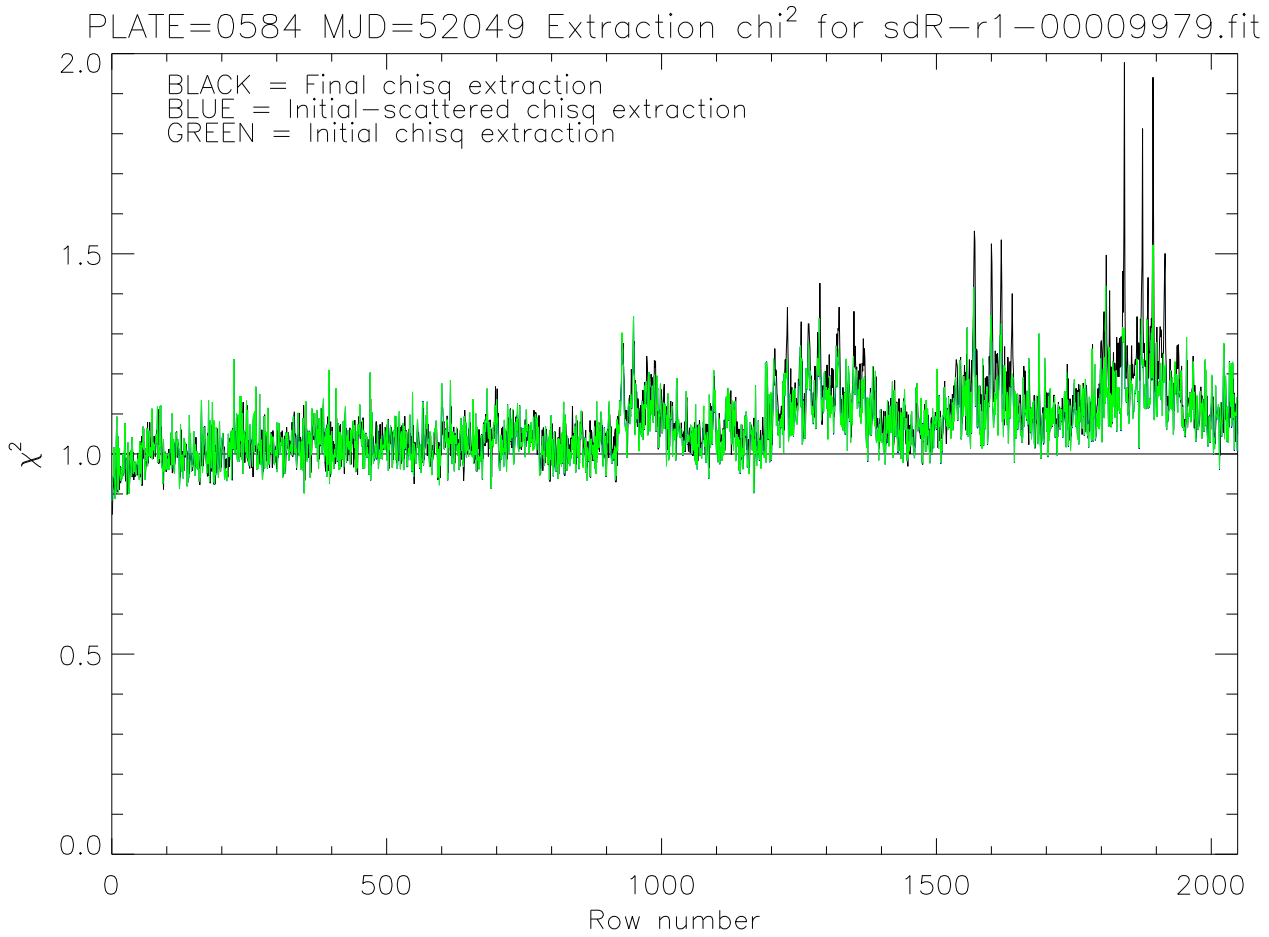

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r1−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.719
Max value = 1.267
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 14:30:26 2008

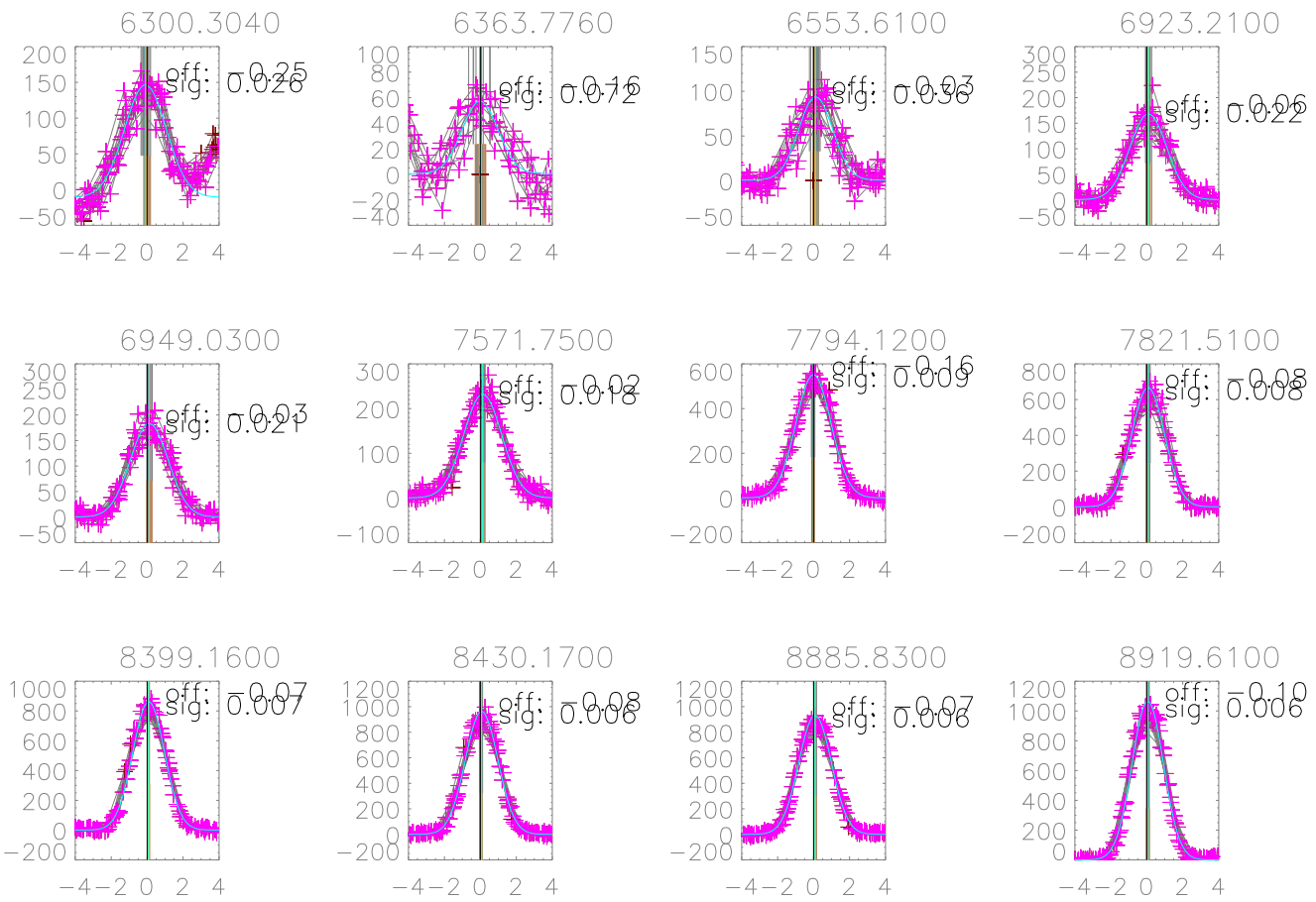

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009979.fi
6.55
5.09
3.64
2.18
2.18
Y [pix]
X [pix]
0
500
1000
1500
2000

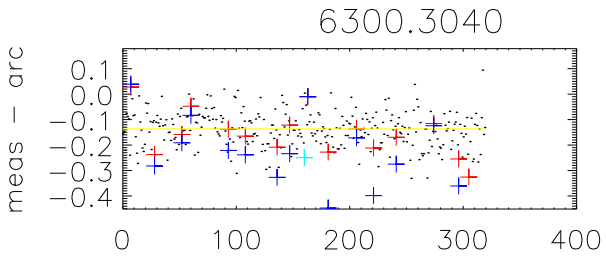

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r1-00009979.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 0.886
Max value = 6.981
Tue Feb 26 14:31:38 2008

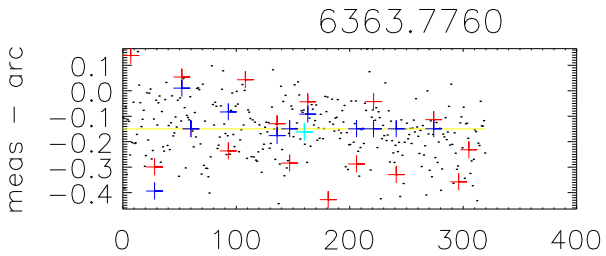

PLATE=0584 MJD=52049 Scattered Light on sdR-r1-00009979.fit
0.818
1.545
0.818
0.091
0.091
0.818
0.818
0.818
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

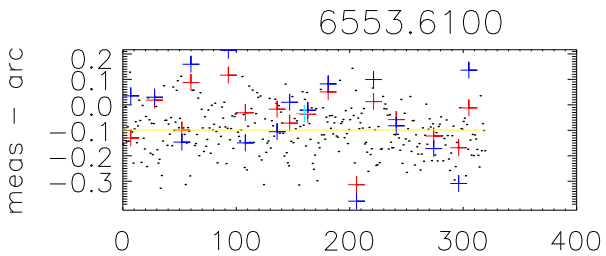

PLATE=0584 MJD=52049 Scattered Light on sdR-r1-00009979.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.052
Max value = 1.788
Tue Feb 26 14:38:19 2008

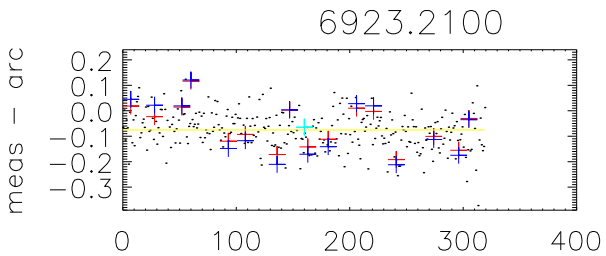

PLATE=0584 MJD=52049 Extraction chi^2 for sdR−r1−00009979.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

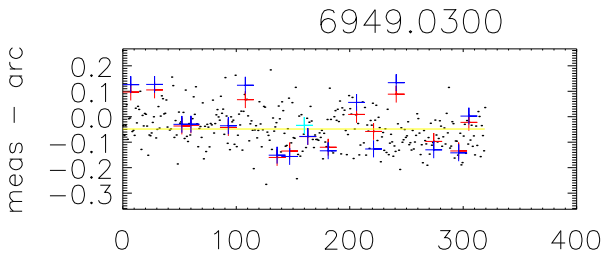

6300.3040
off: −0.25
sig: 0.026
6363.7760
off: −0.16
sig: 0.072
6553.6100
off: −0.03
sig: 0.036
6923.2100
off: −0.06
sig: 0.022
6949.0300
off: −0.03
sig: 0.021
7571.7500
off: −0.02
sig: 0.018
7794.1200
off: −0.16
sig: 0.009
7821.5100
off: −0.08
sig: 0.008
8399.1600
off: −0.07
sig: 0.007
8430.1700
off: −0.08
sig: 0.006
8885.8300
off: −0.07
sig: 0.006
8919.6100
off: −0.10
sig: 0.006

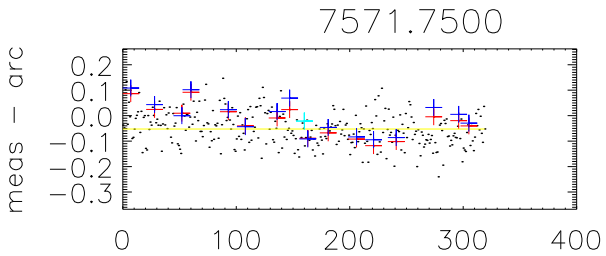

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

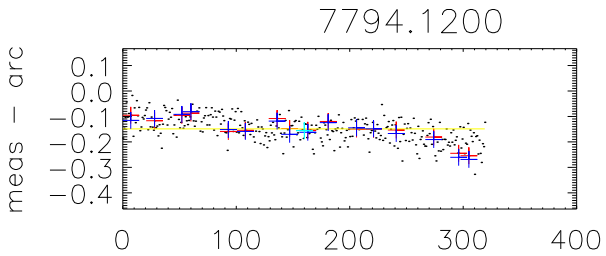

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

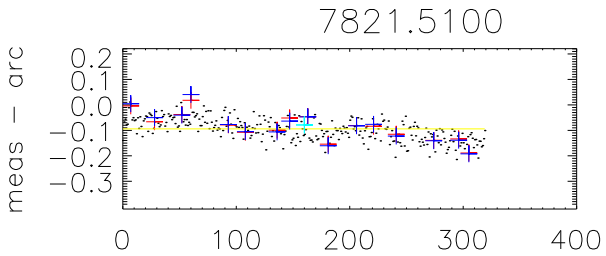

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

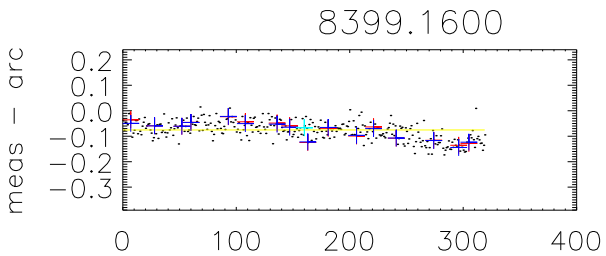

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

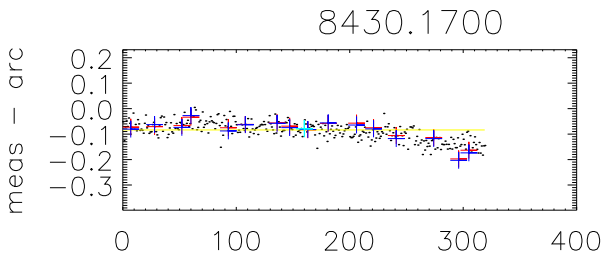

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

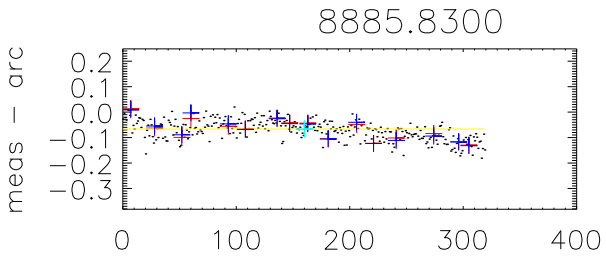

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

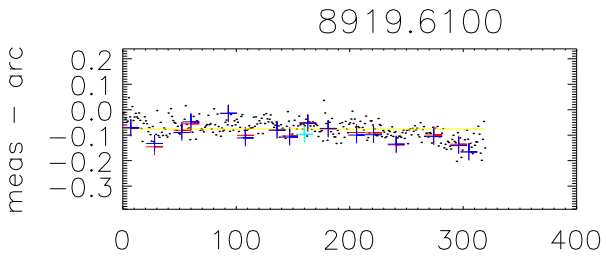

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

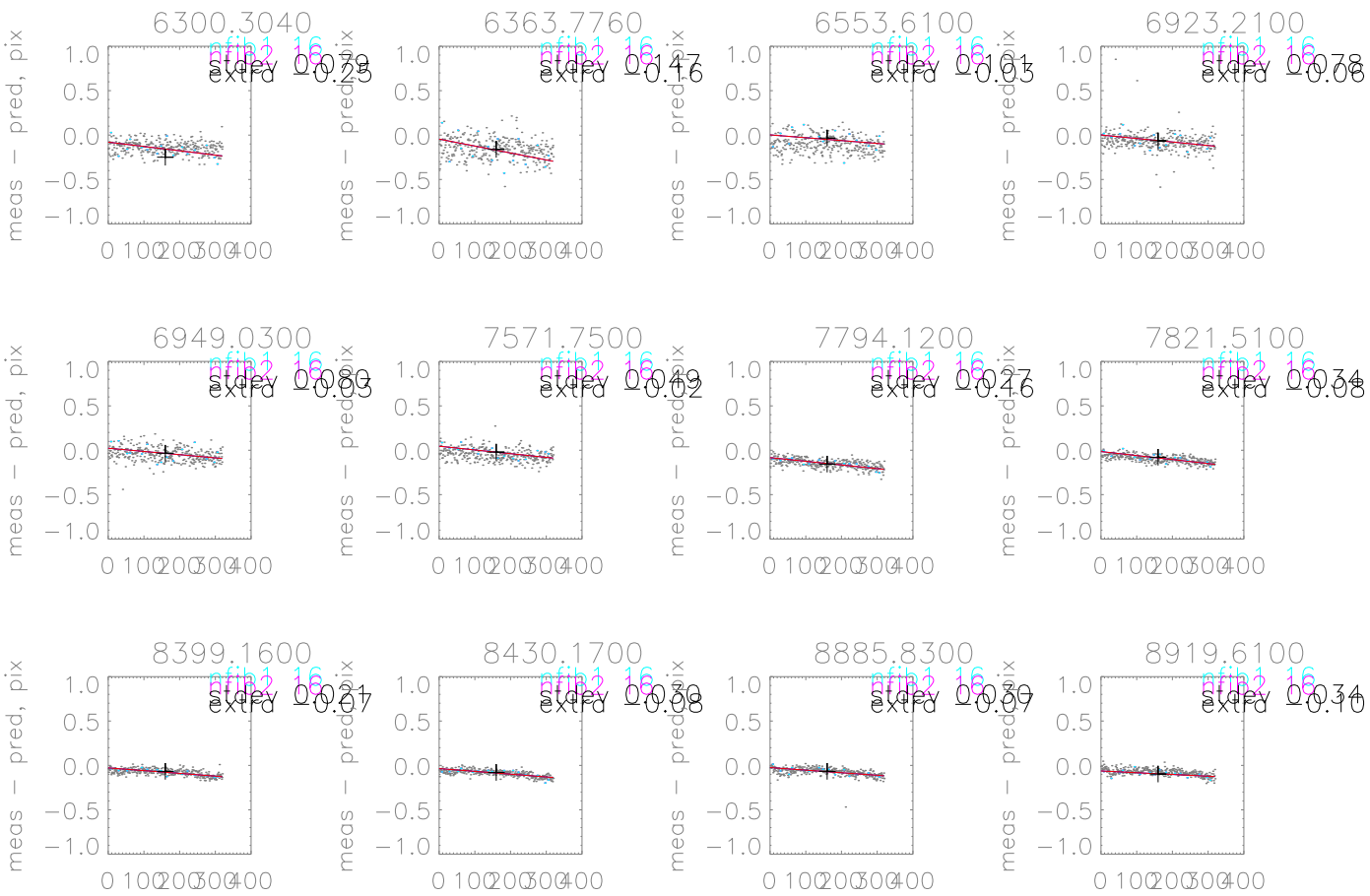

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

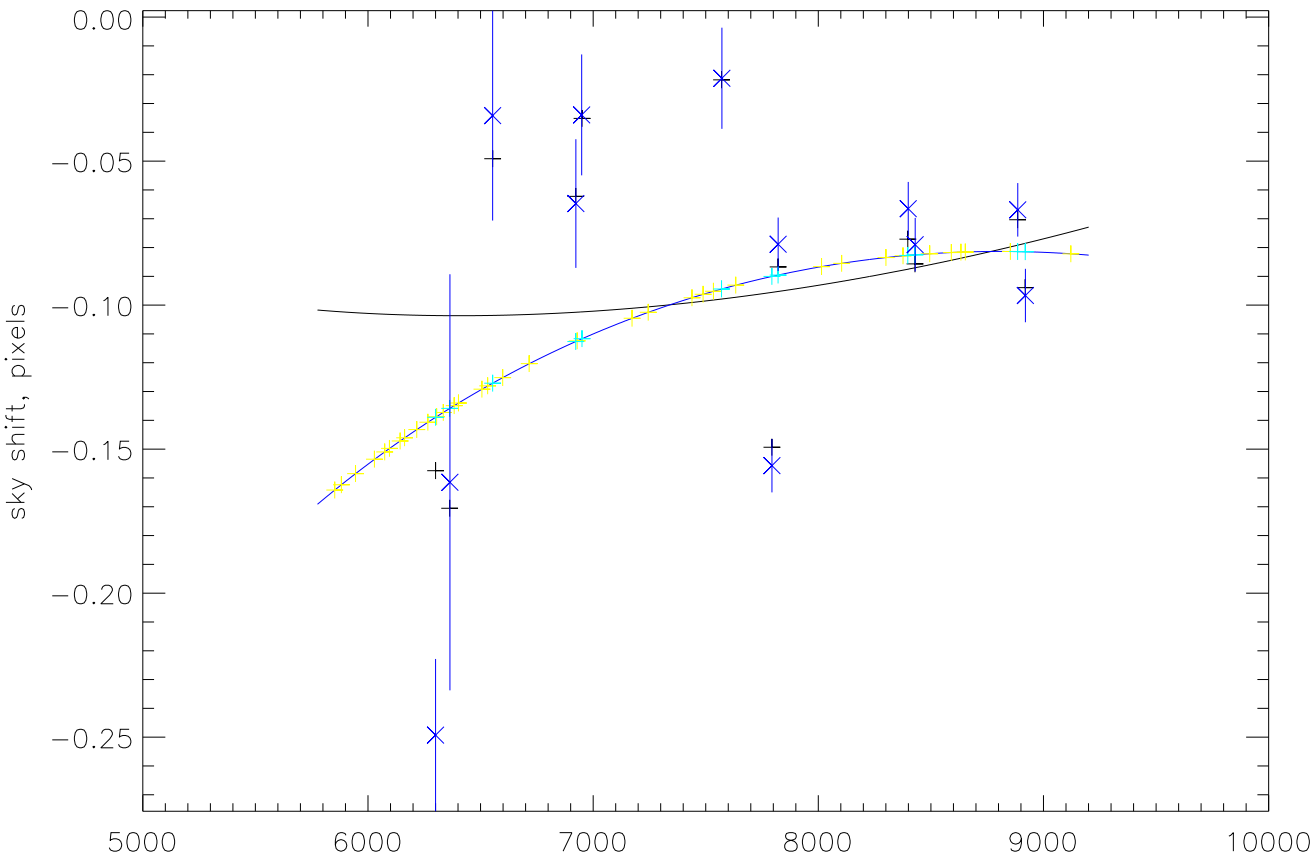

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

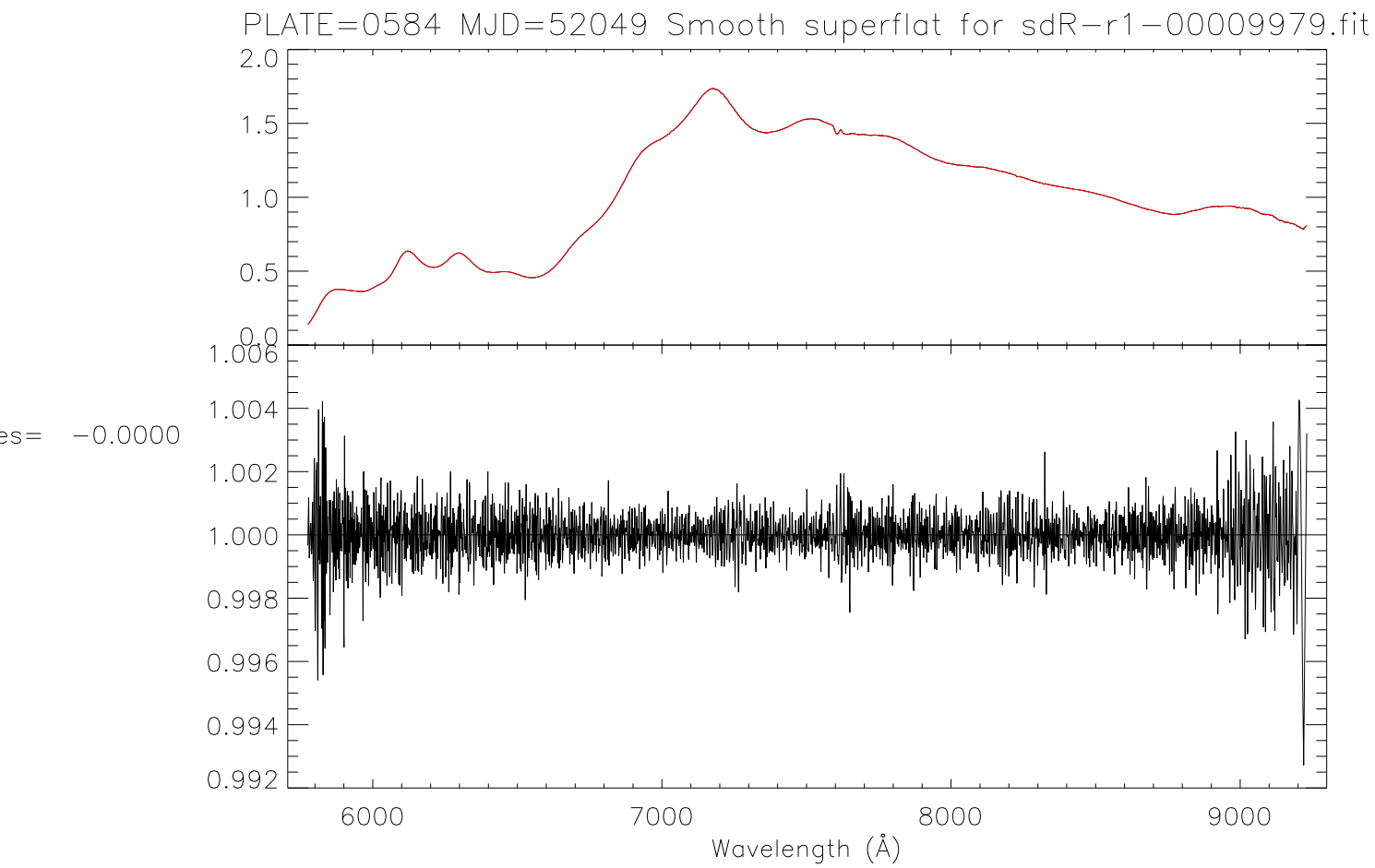

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

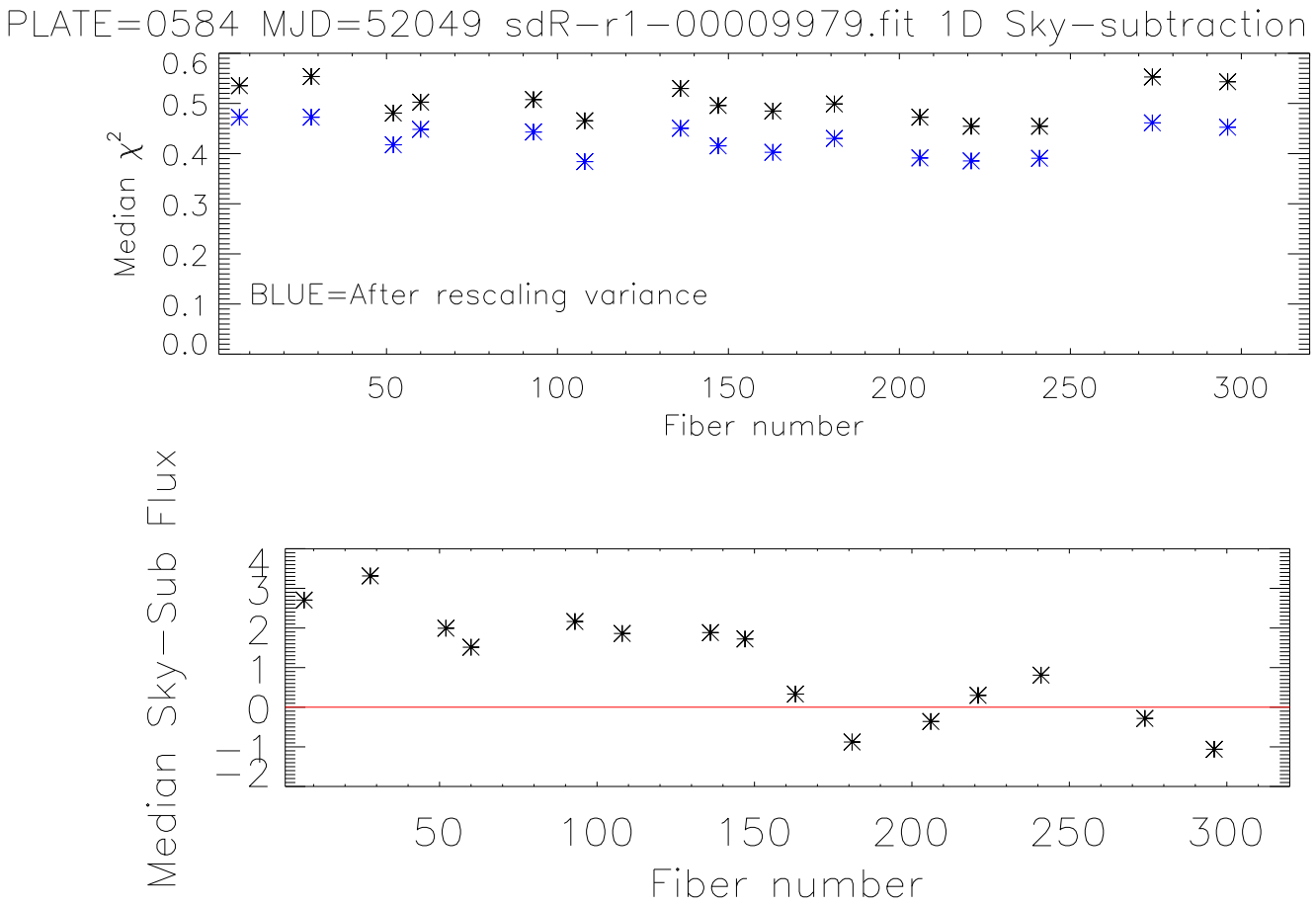

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

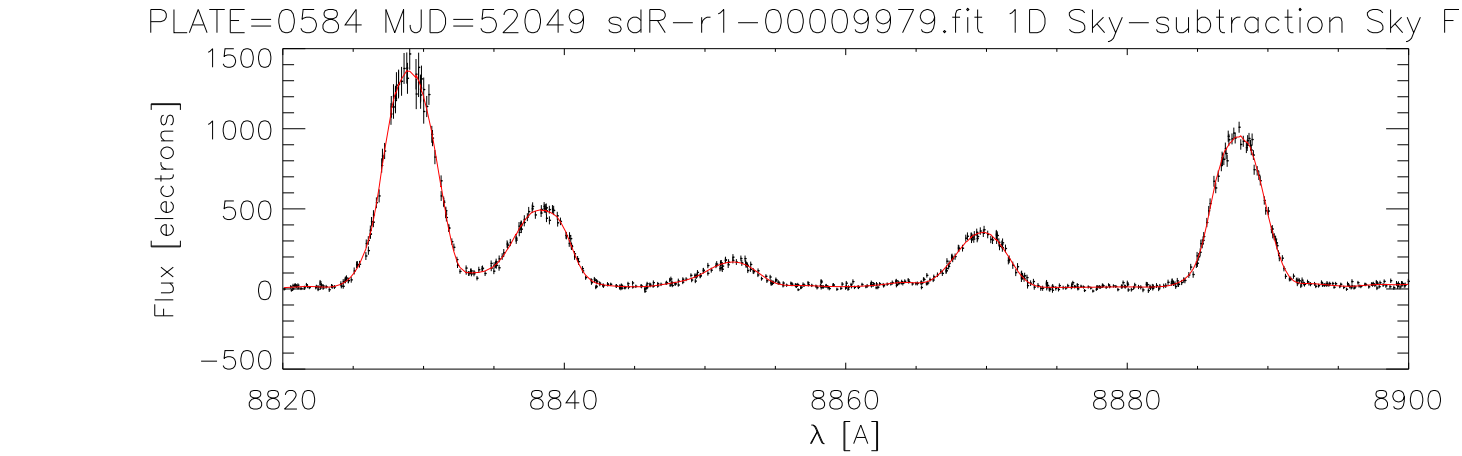

6300.3040
stdev 0.079
extra 0.25
6363.7760
stdev 0.147
extra 0.16
6553.6100
stdev 0.101
extra 0.03
6923.2100
stdev 0.078
extra 0.06
6949.0300
stdev 0.080
extra 0.03
7571.7500
stdev 0.049
extra 0.02
7794.1200
stdev 0.027
extra 0.46
7821.5100
stdev 0.034
extra 0.08
8399.1600
stdev 0.021
extra 0.07
8430.1700
stdev 0.030
extra 0.08
8885.8300
stdev 0.030
extra 0.07
8919.6100
stdev 0.034
extra 0.10
meas − pred, pix
meas − pred, pix

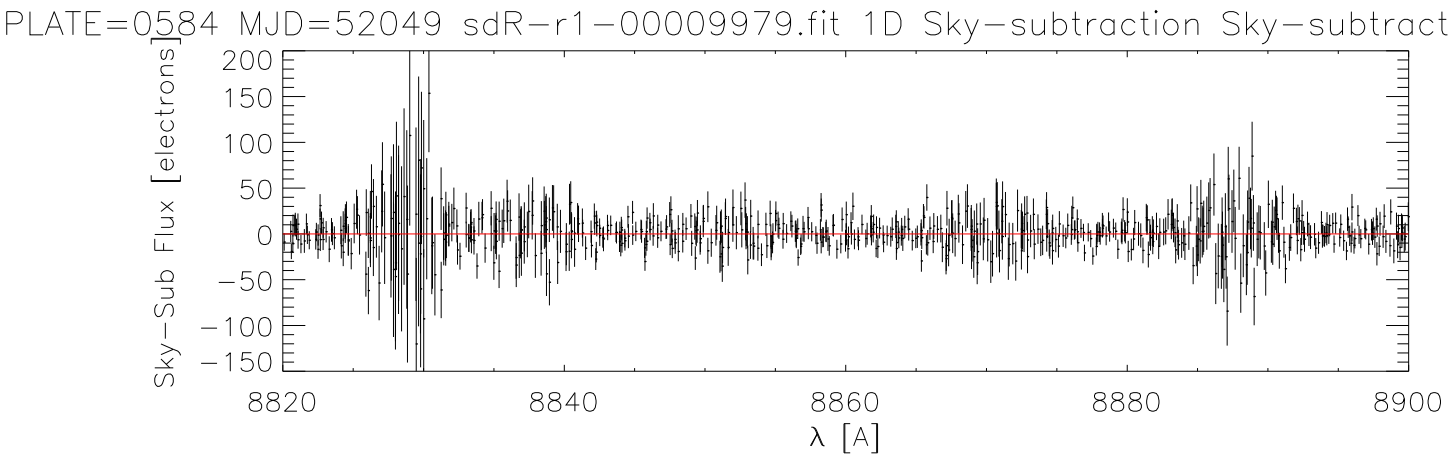

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
5000
6000
7000
8000
9000
10000

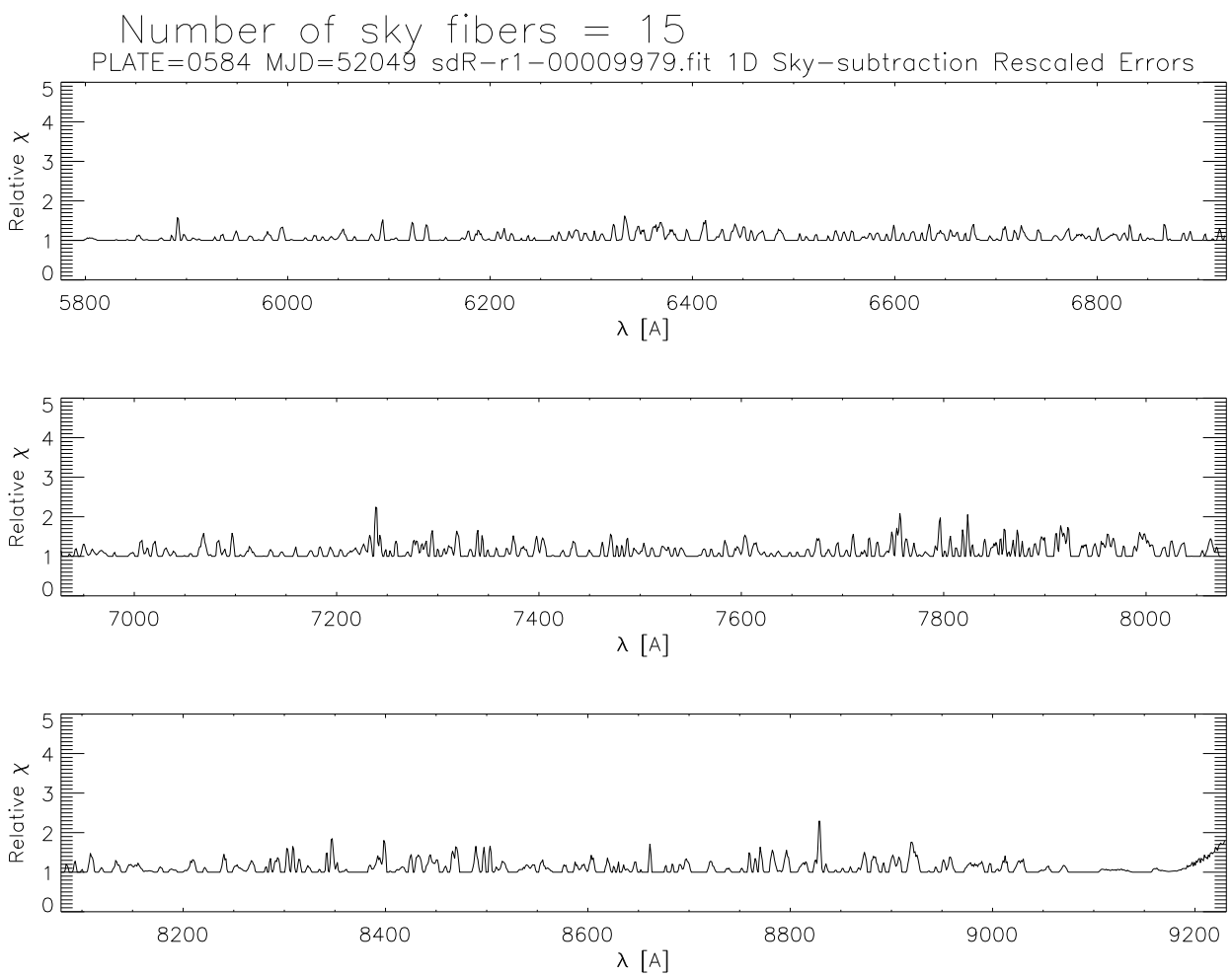

PLATE=0584 MJD=52049 Smooth superflat for sdR-r1-00009979.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

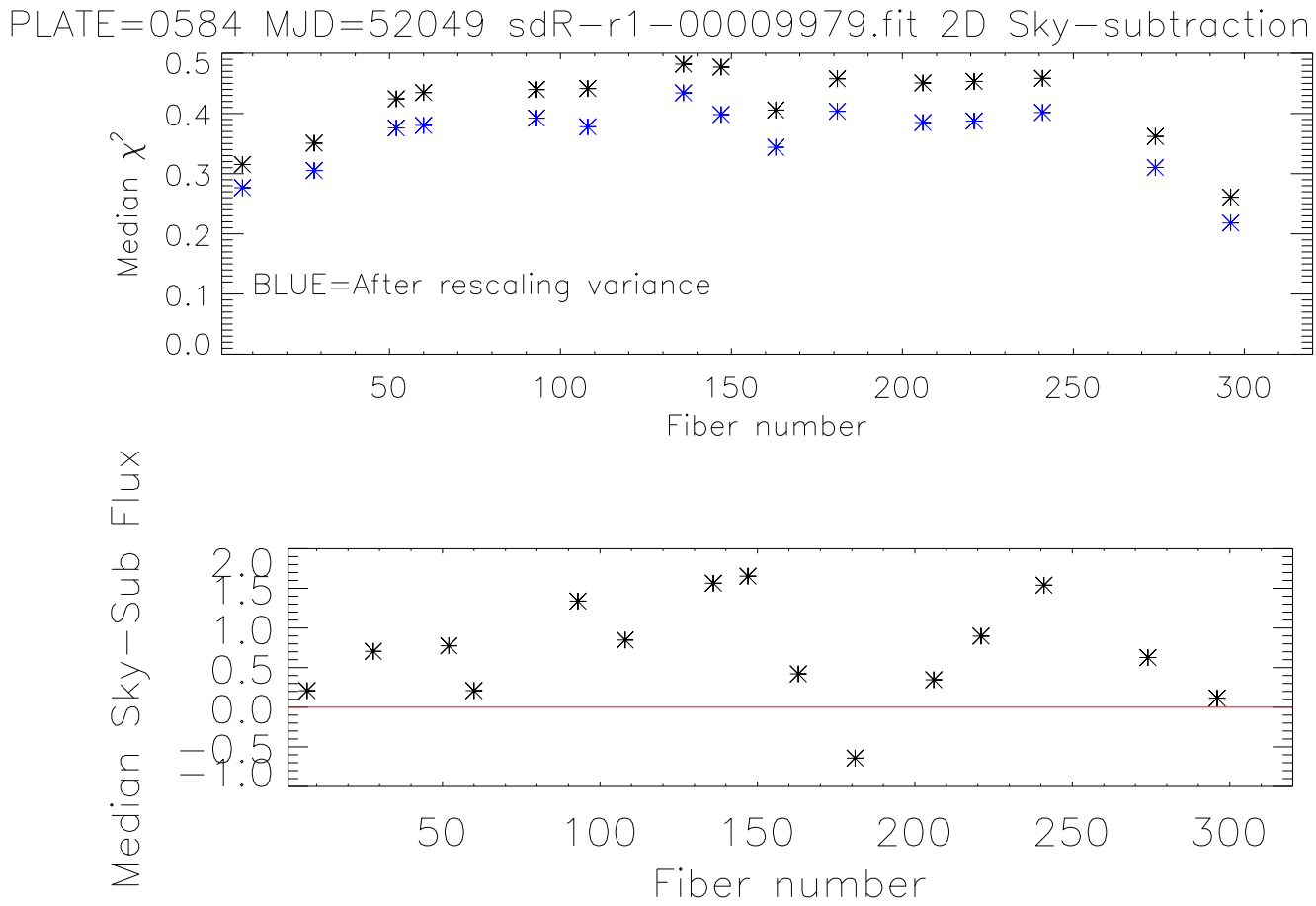
es= −0.0000

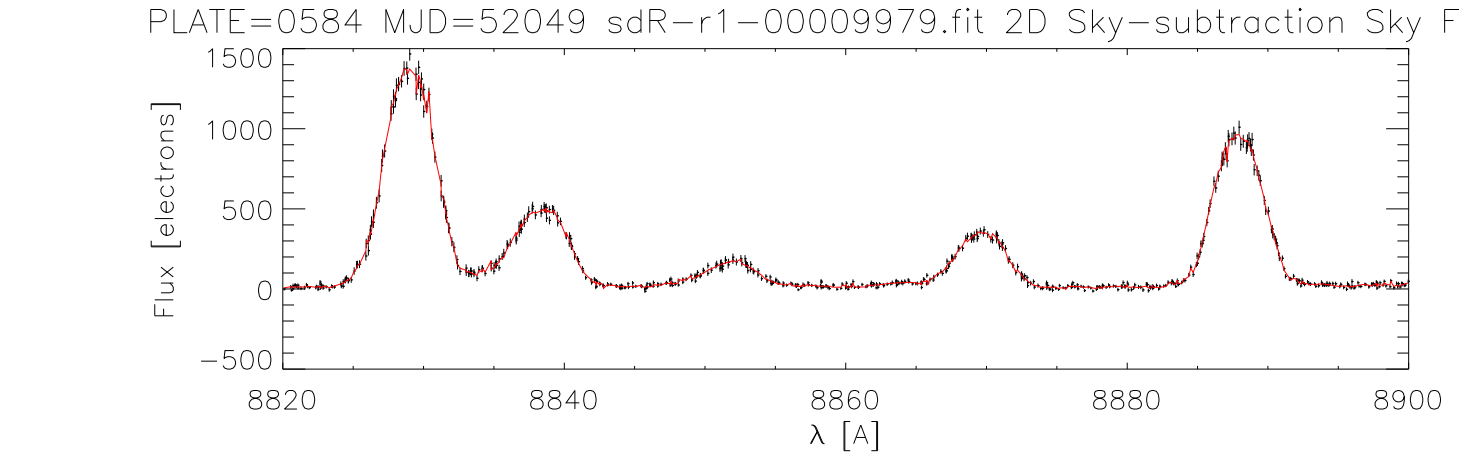

PLATE=0584 MJD=52049 sdR-r1-00009979.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

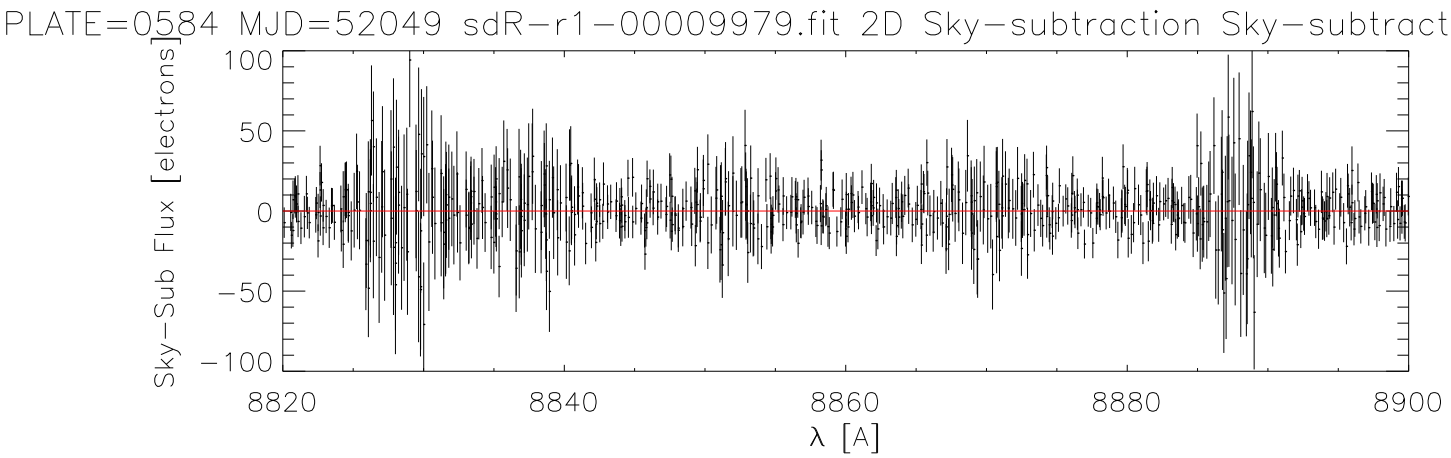

PLATE=0584 MJD=52049 sdR-r1-00009979.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

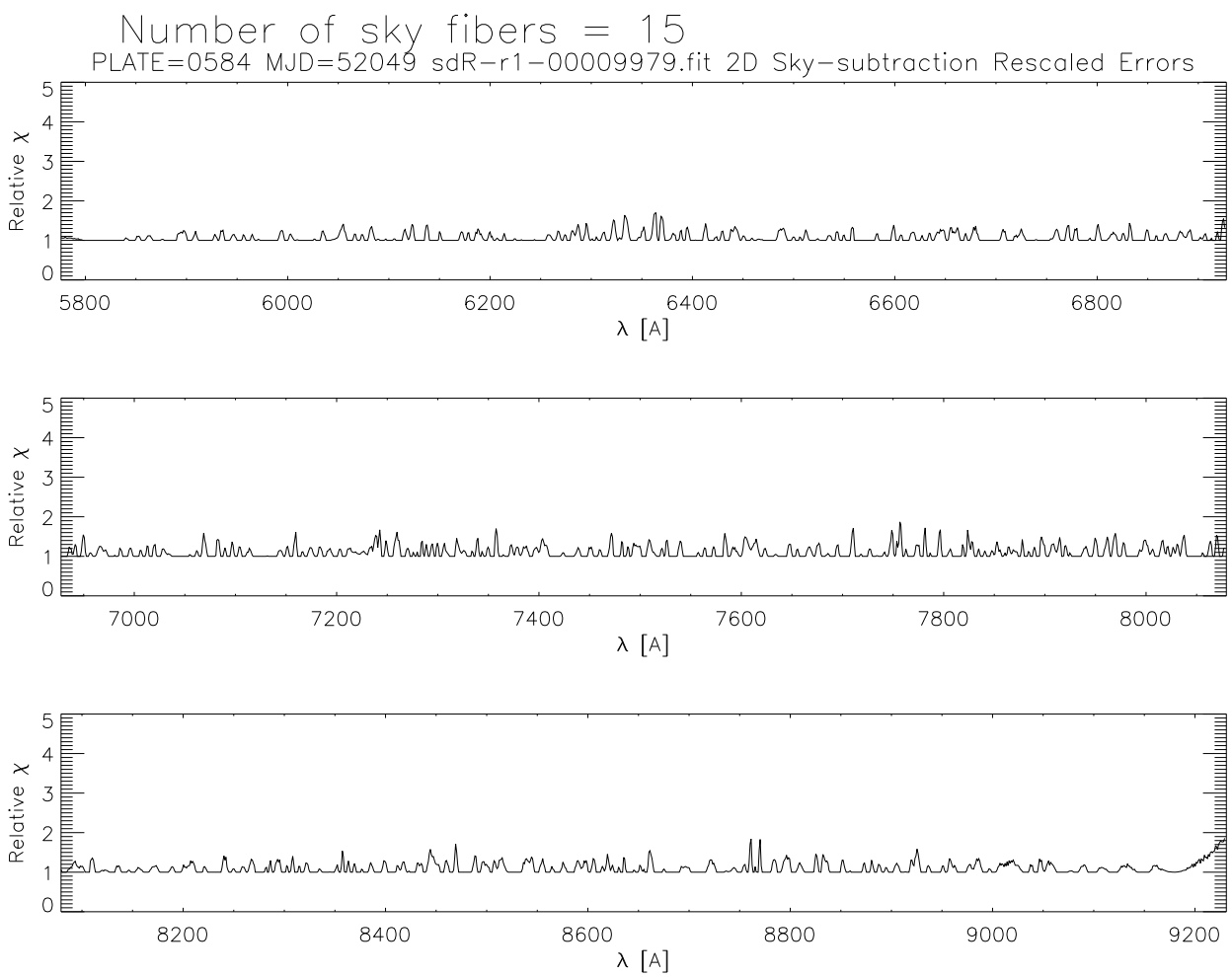

PLATE=0584 MJD=52049 sdR-r1-00009979.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

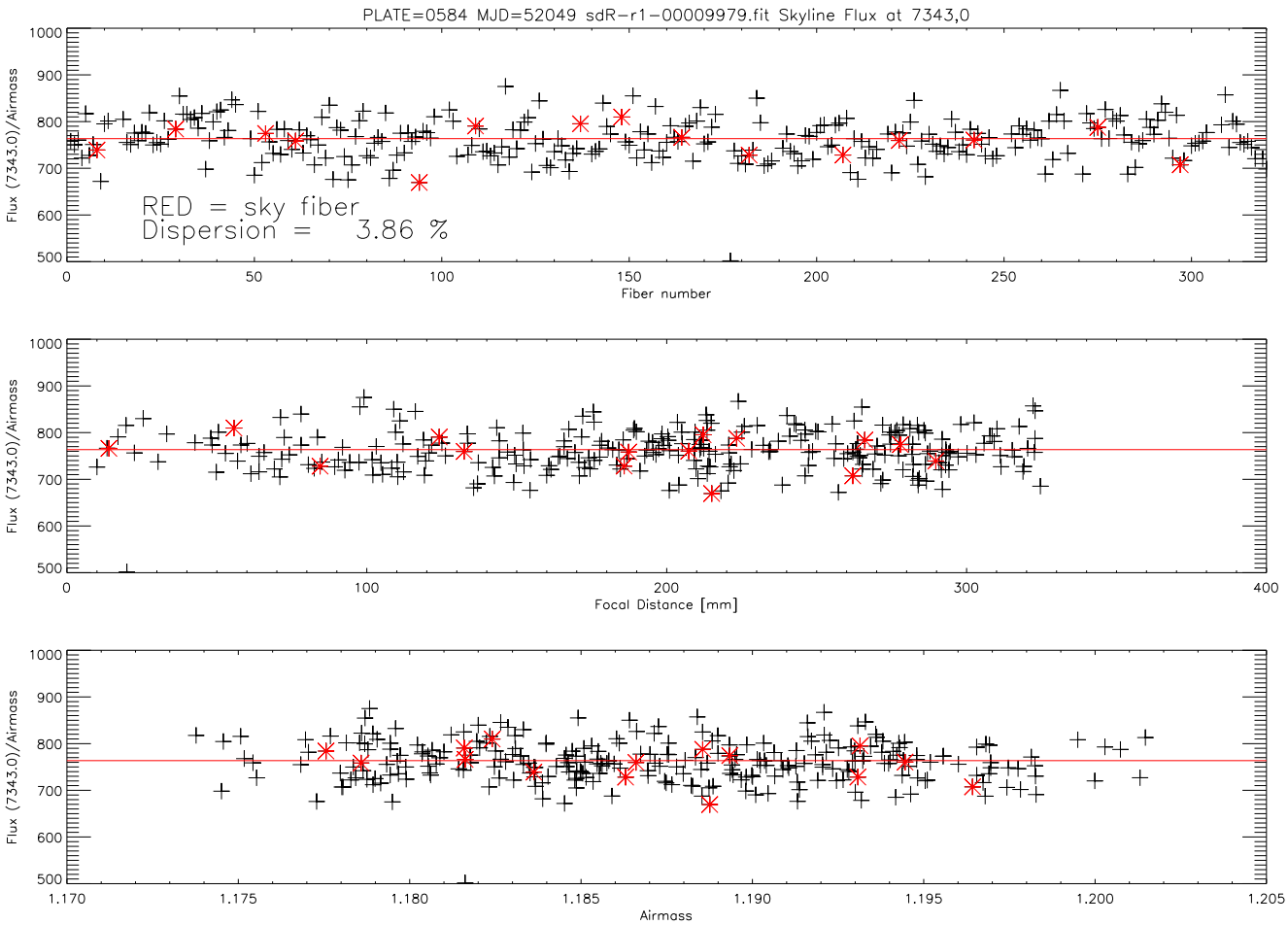

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009979.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

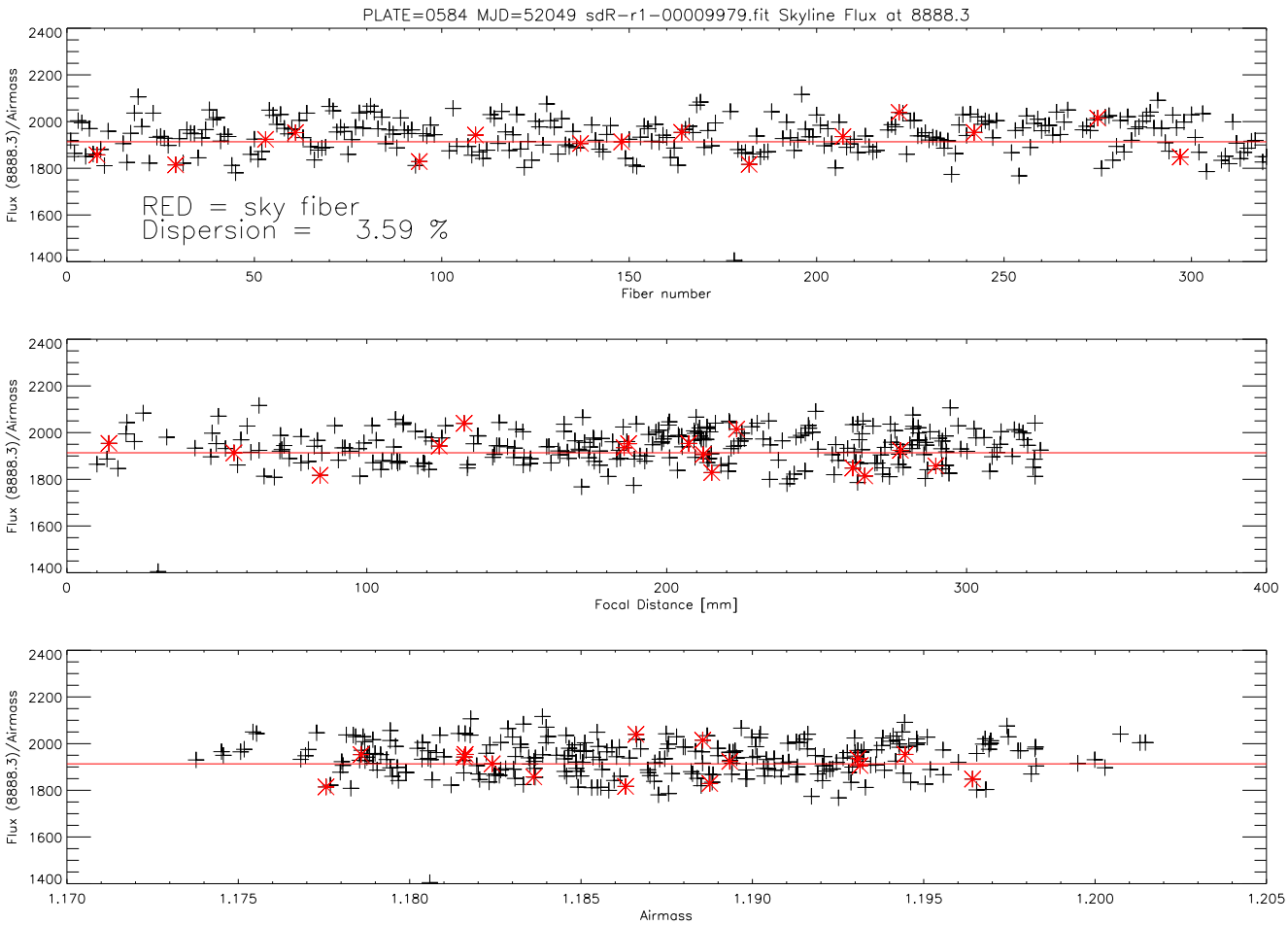

PLATE=0584 MJD=52049 sdR-r1-00009979.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

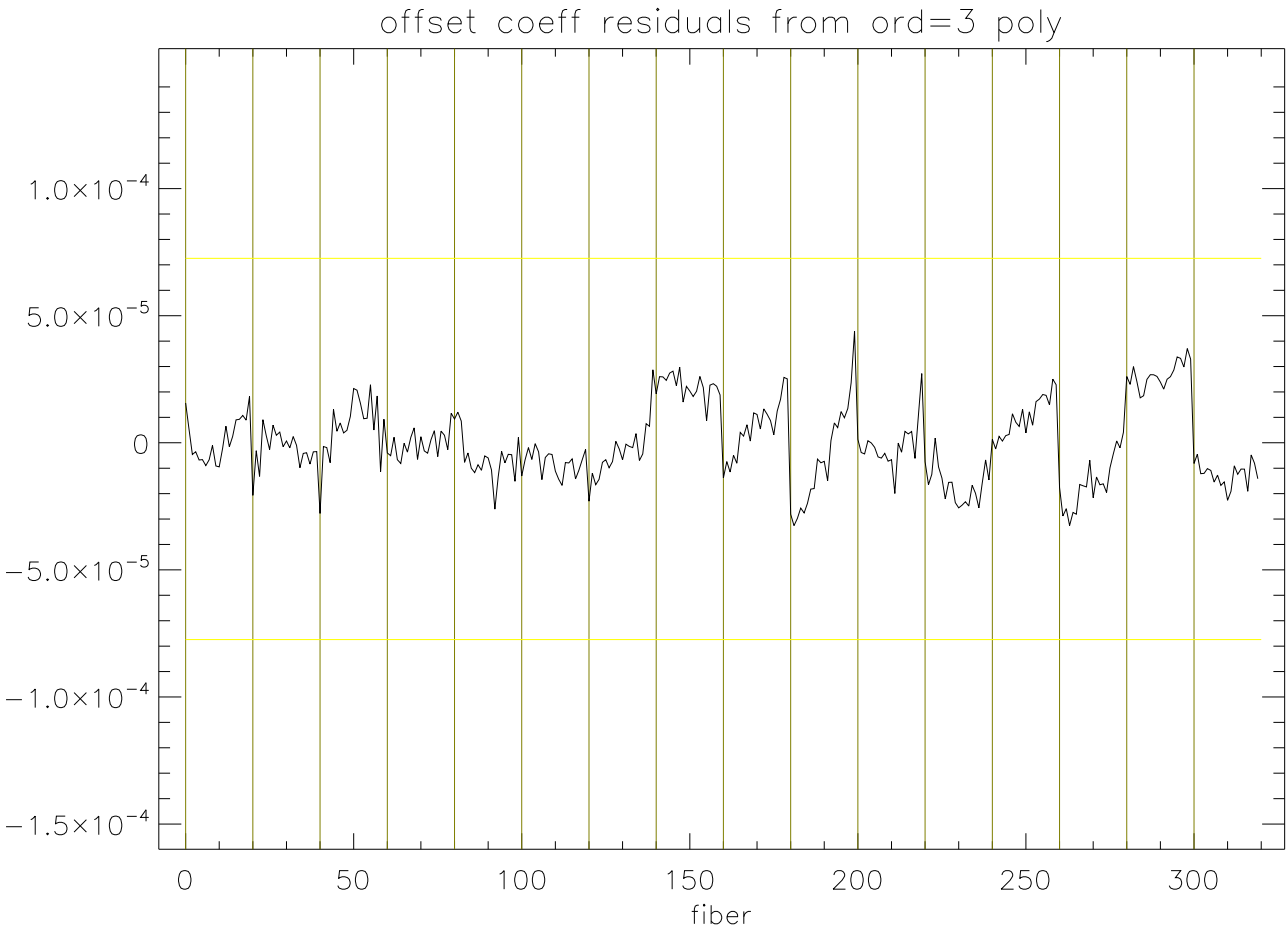

PLATE=0584 MJD=52049 sdR-r1-00009979.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

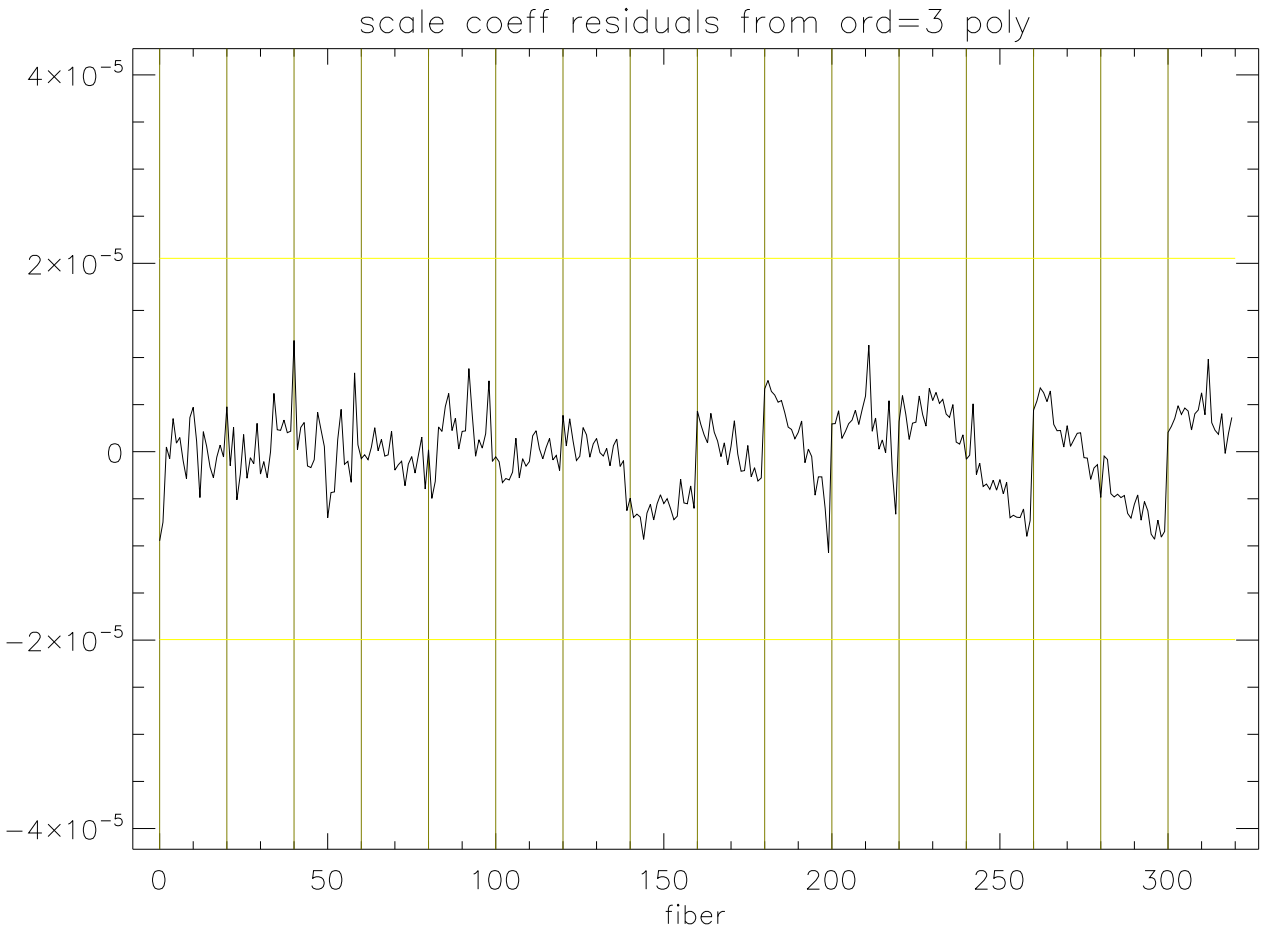

PLATE=0584 MJD=52049 sdR-r1-00009979.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

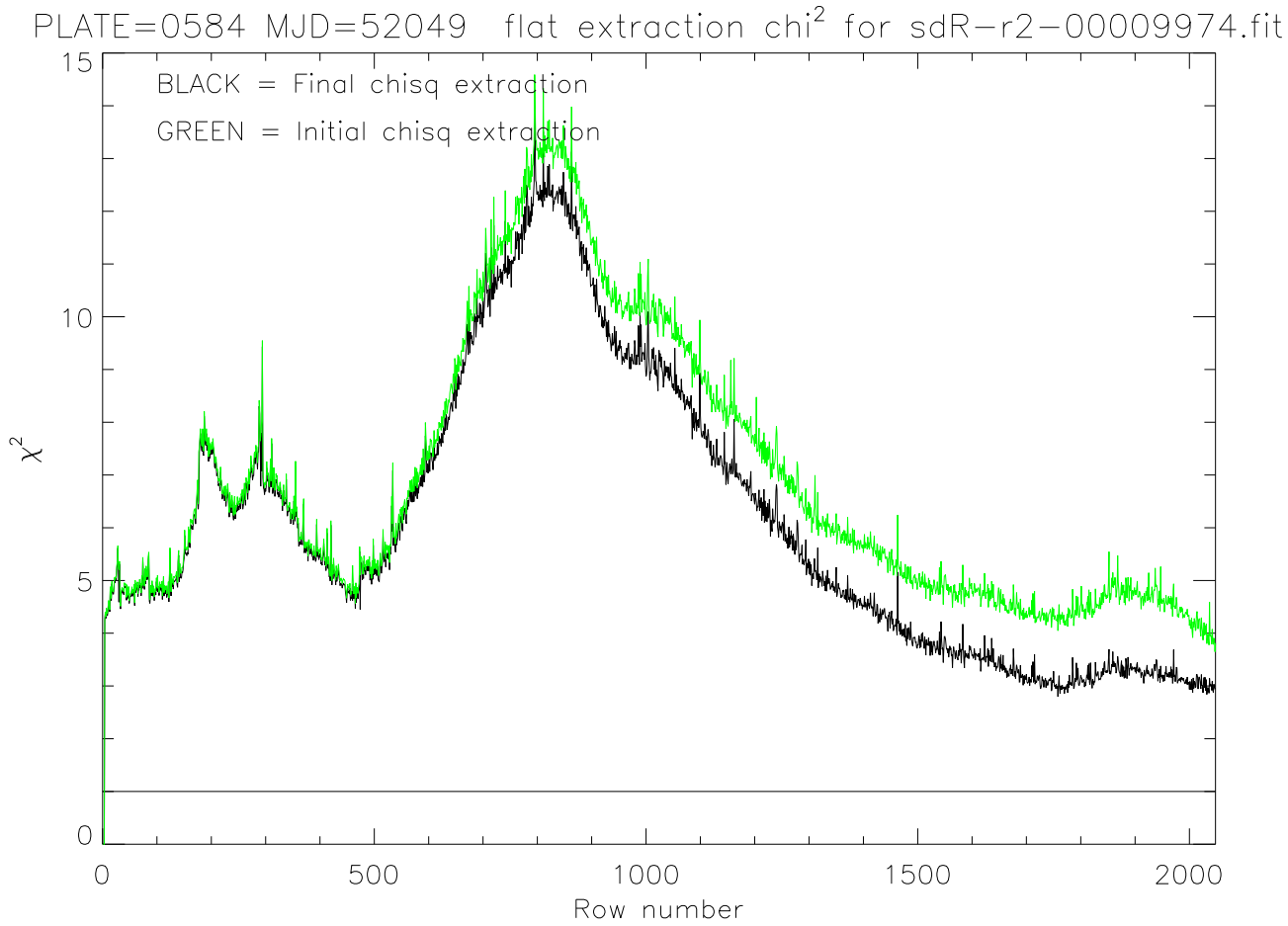

Number of sky fibers = 15
PLATE=0584 MJD=52049 sdR-r1-00009979.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

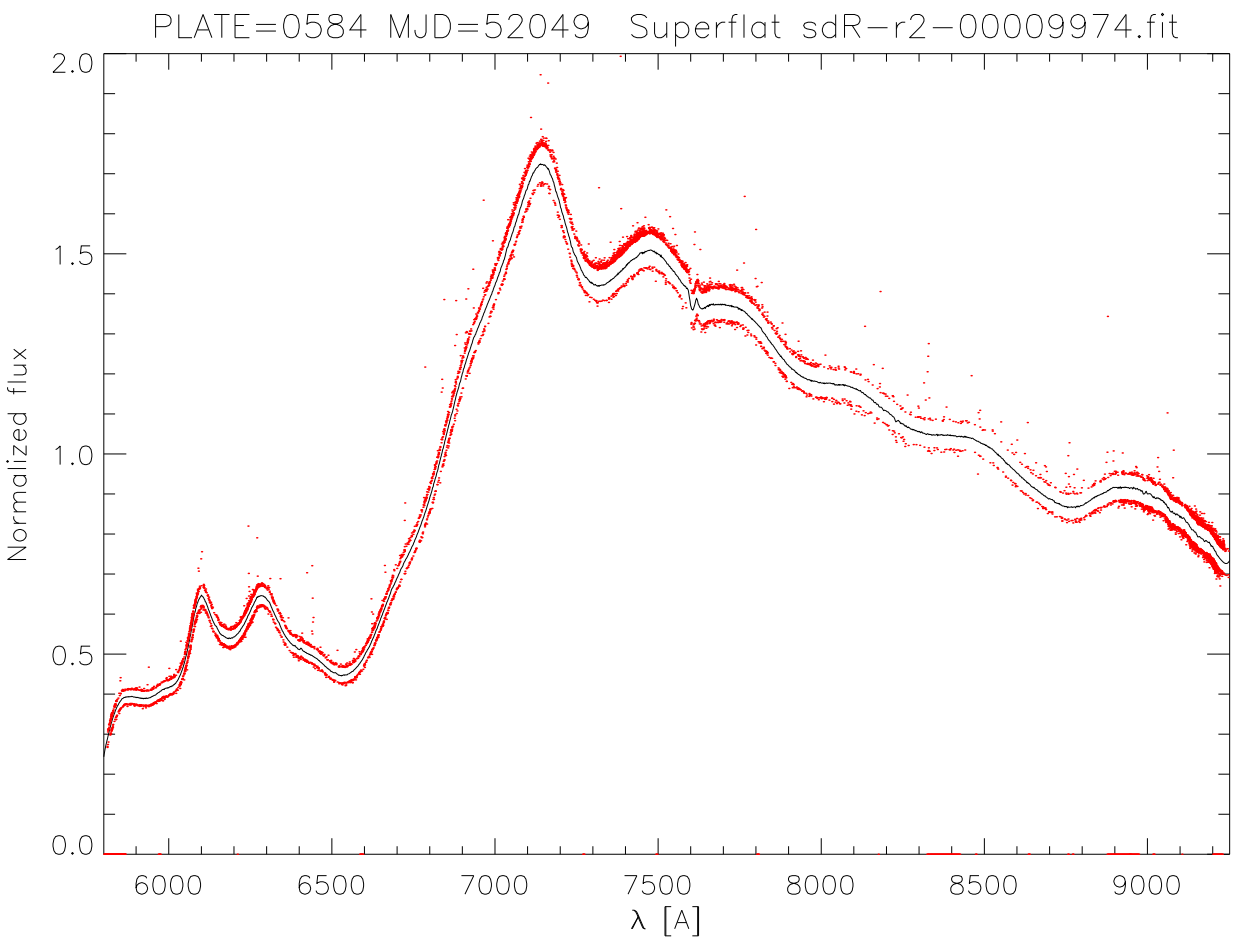

PLATE=0584 MJD=52049 sdR-r1-00009979.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.86 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

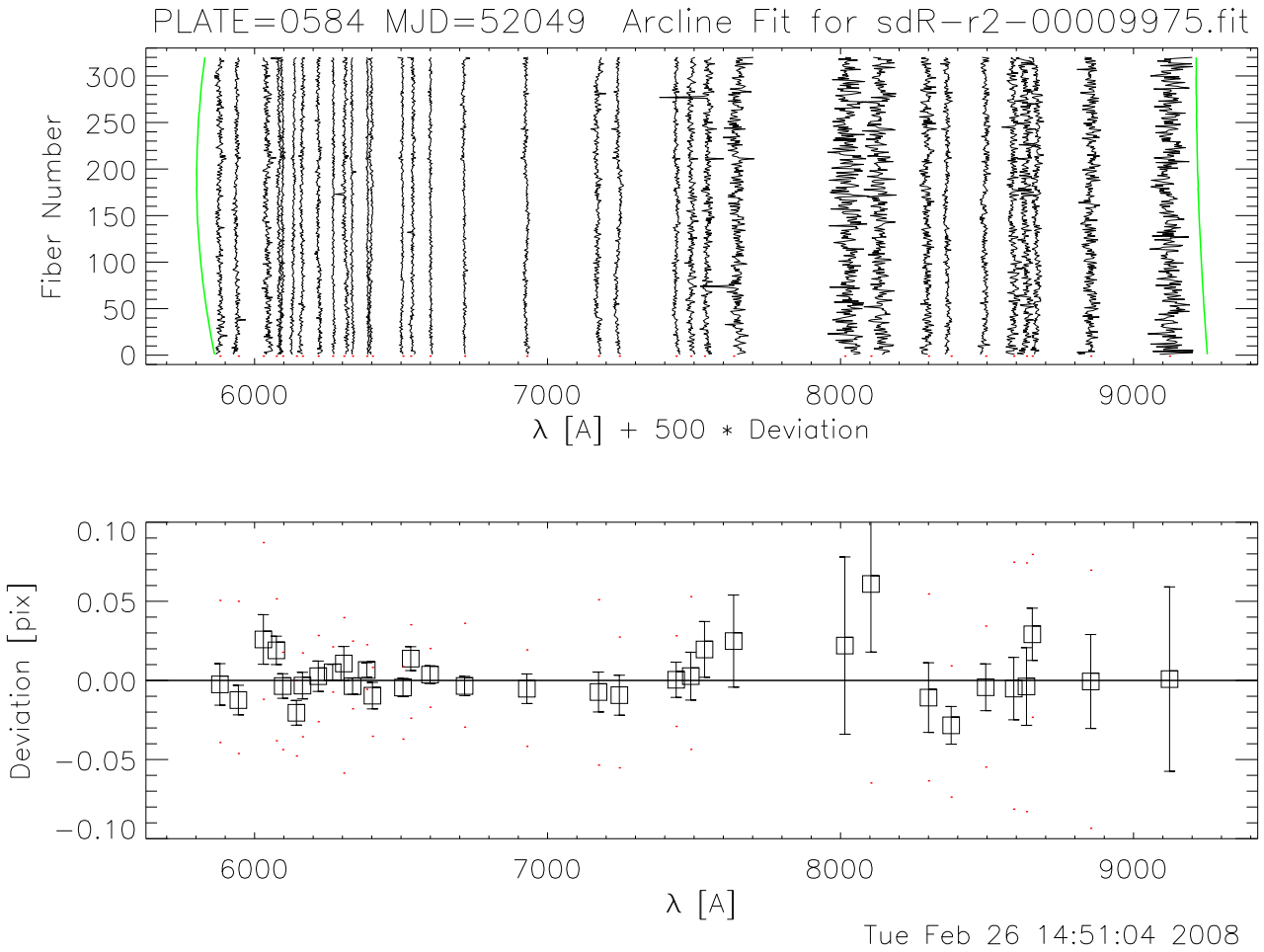

PLATE=0584 MJD=52049 sdR-r1-00009979.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.59 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

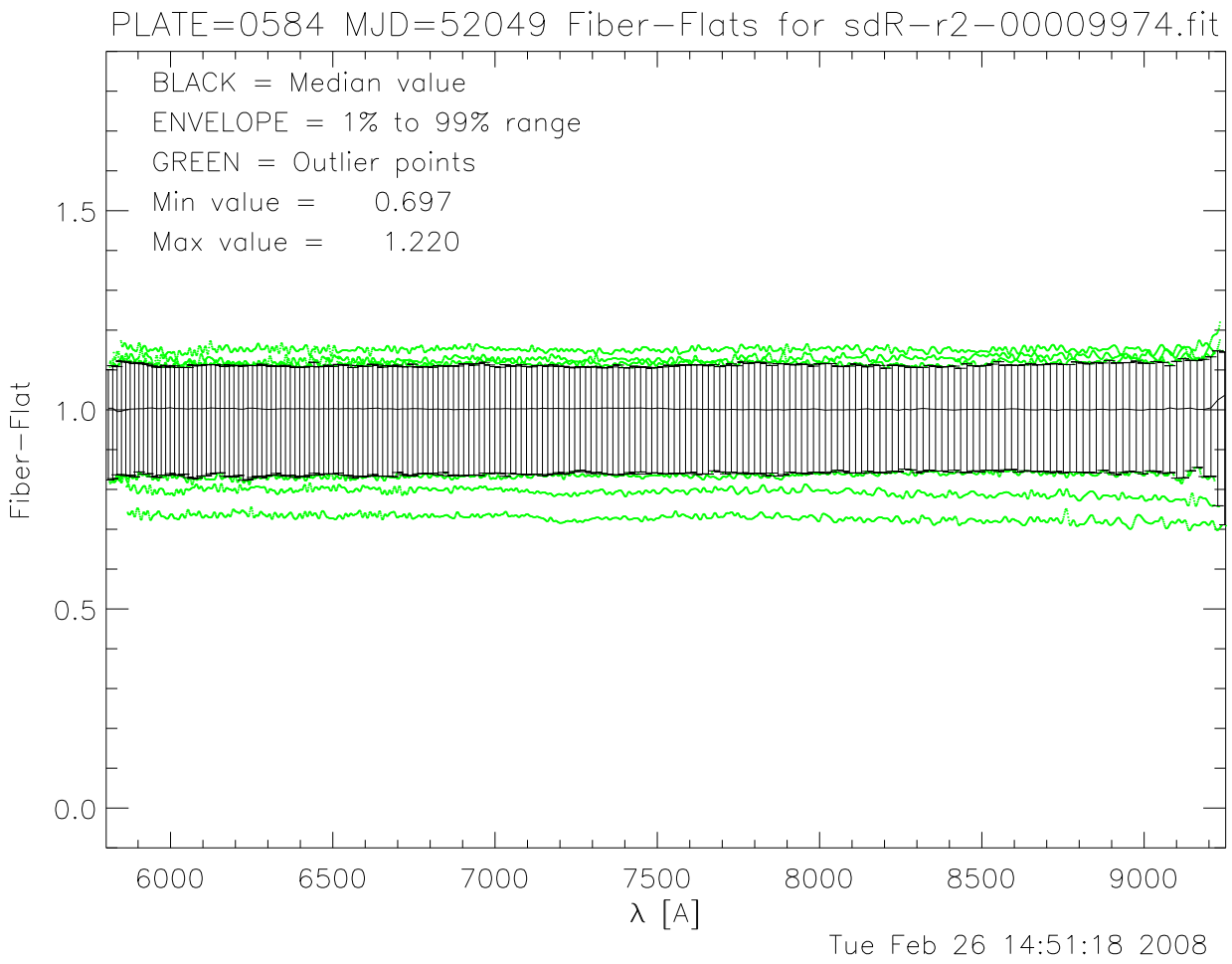

offset coeff residuals from ord=3 poly
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

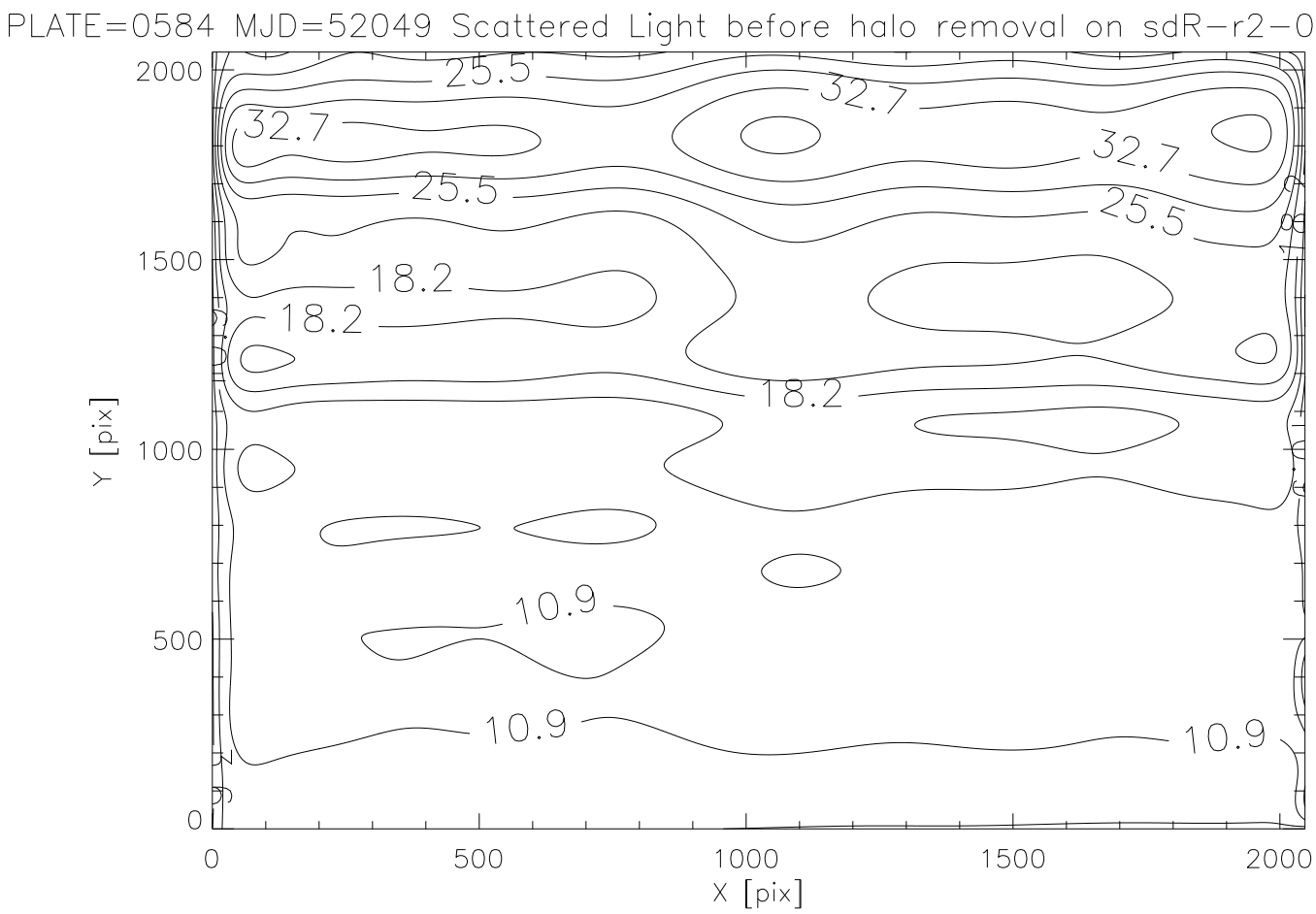

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

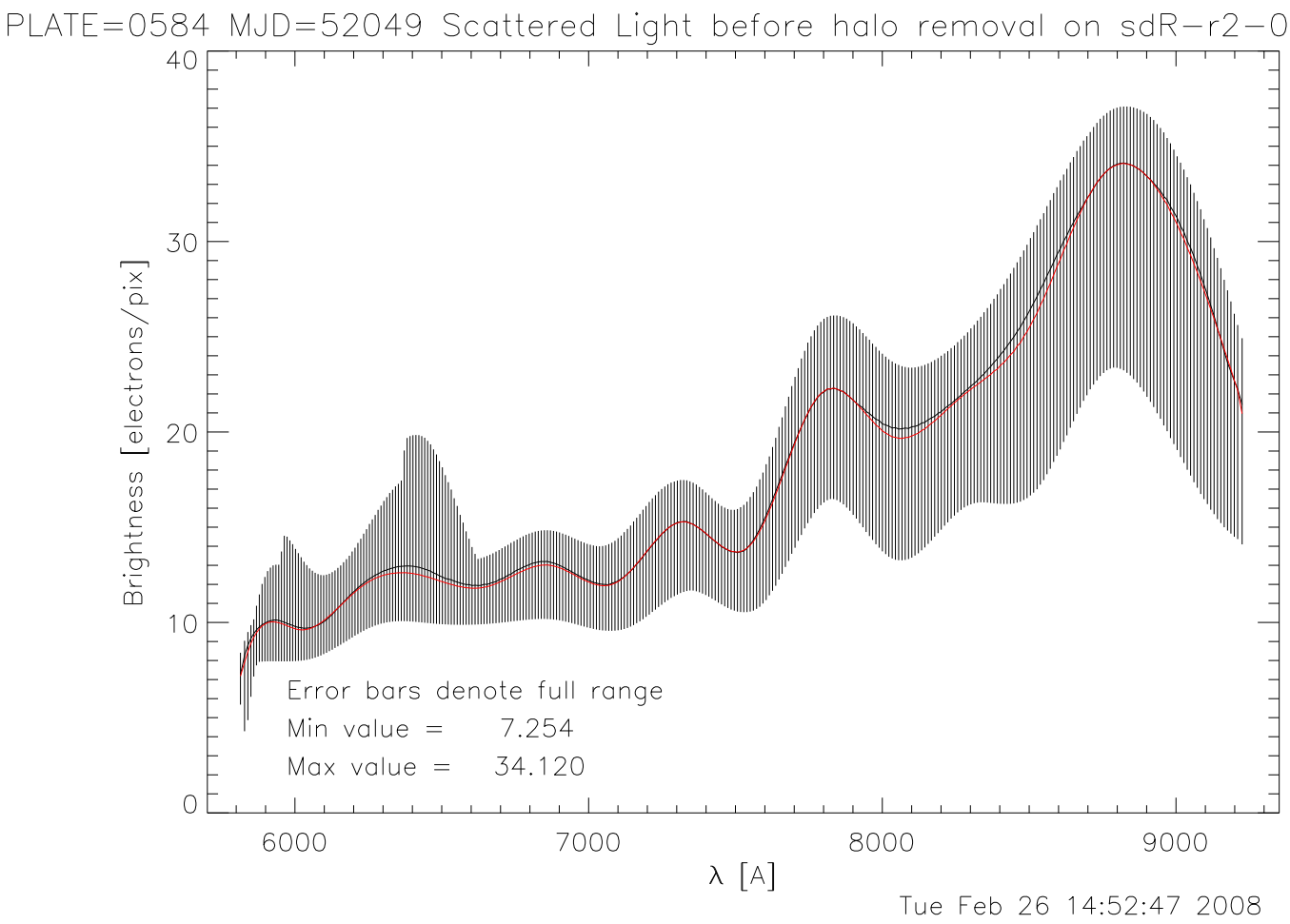

PLATE=0584 MJD=52049 flat extraction chi^2 for sdR−r2−00009974.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
0
500
1000
1500
2000

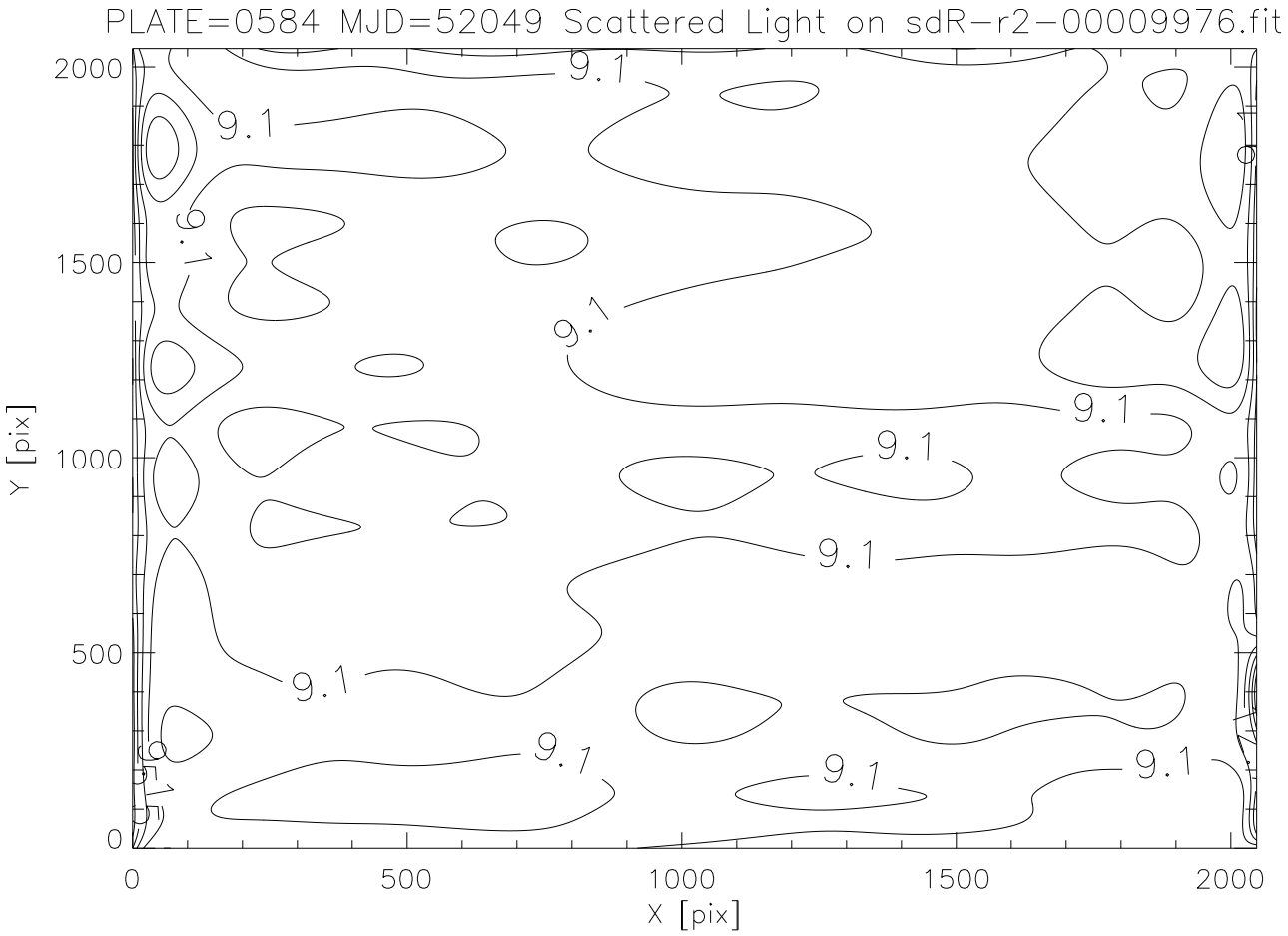

PLATE=0584 MJD=52049 Superflat sdR-r2-00009974.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

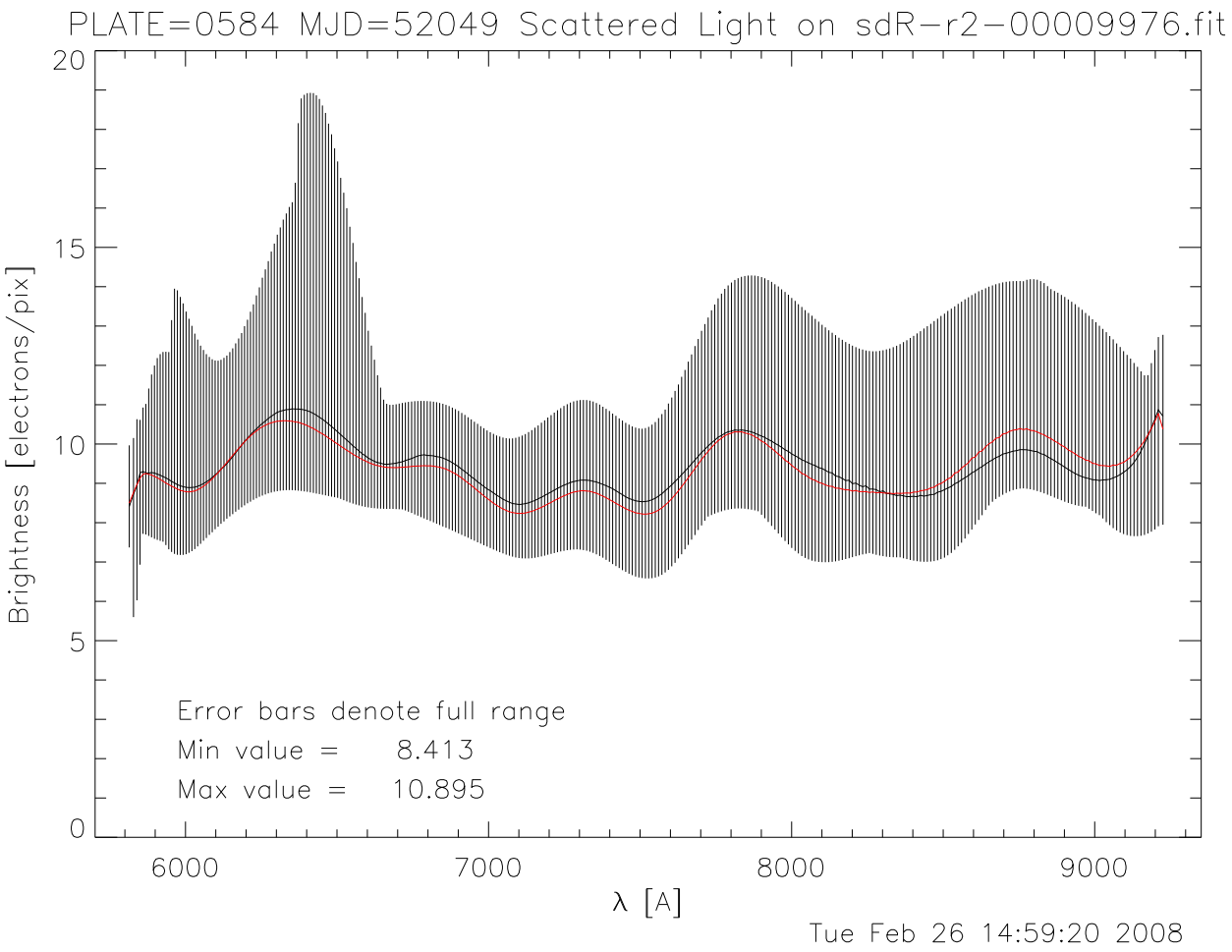

PLATE=0584 MJD=52049 Arcline Fit for sdR-r2-00009975.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 26 14:51:04 2008

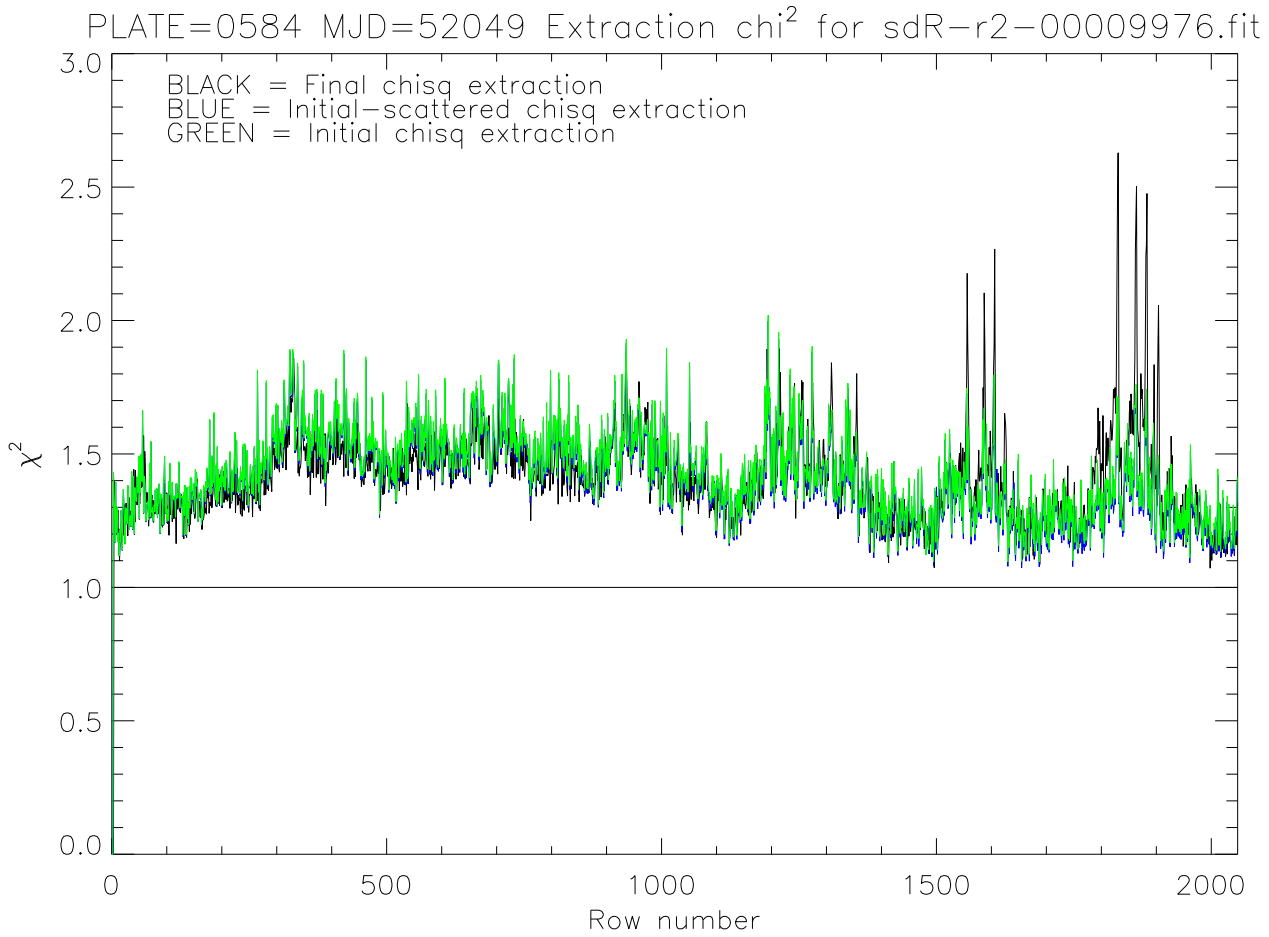

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r2−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.697
Max value = 1.220
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 14:51:18 2008

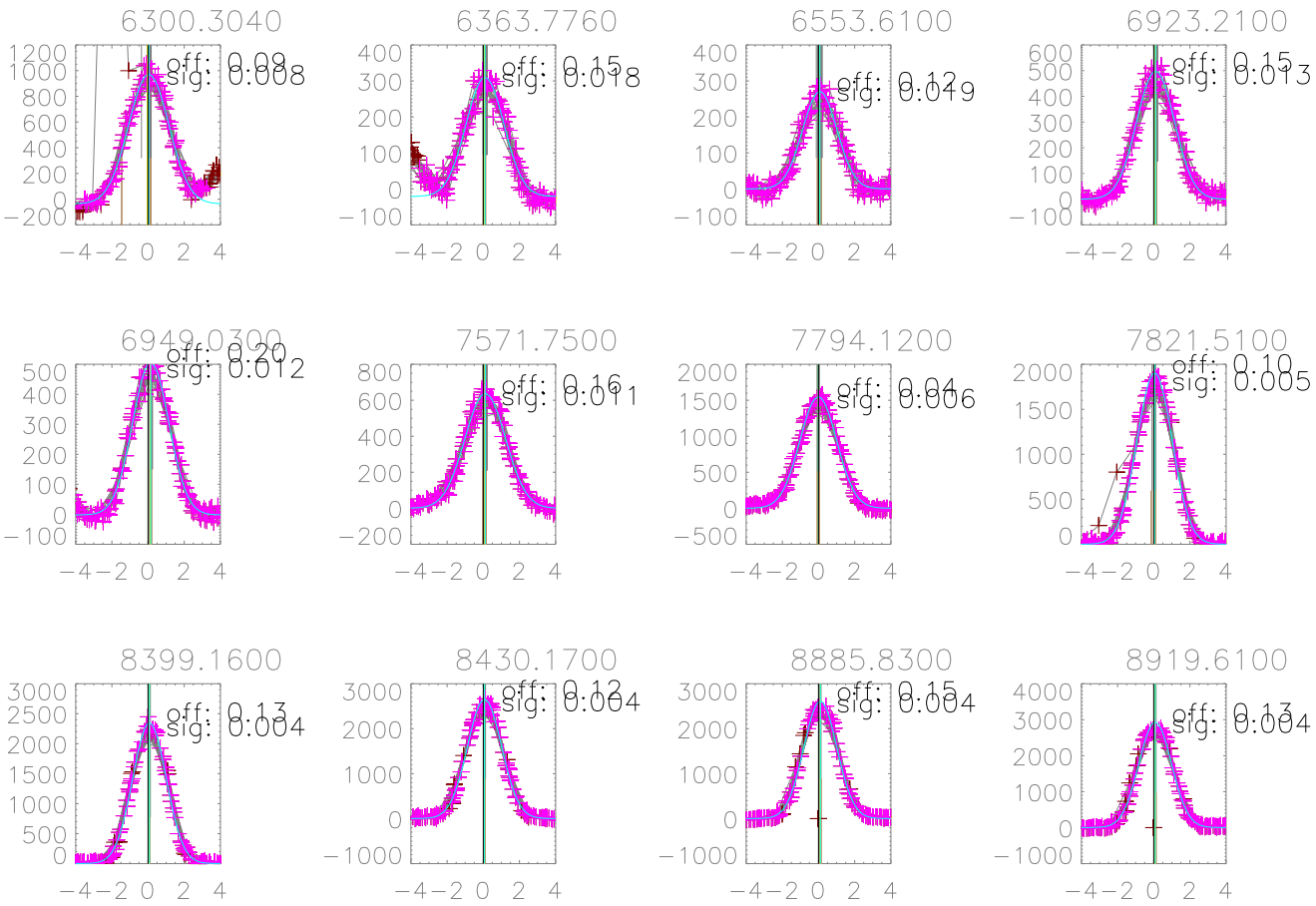

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009976.fi
25.5
32.7
32.7
32.7
25.5
25.5
18.2
18.2
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

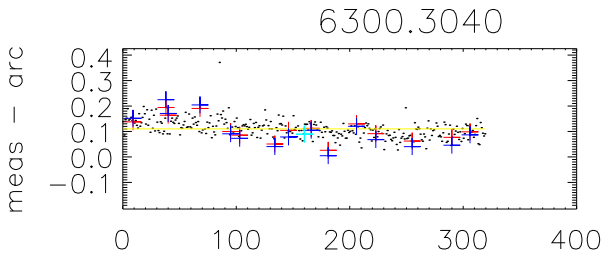

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009976.fi
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.254
Max value = 34.120
Tue Feb 26 14:52:47 2008

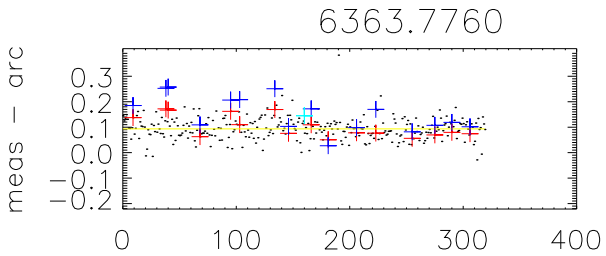

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009976.fit
9.1
9.1
9.1

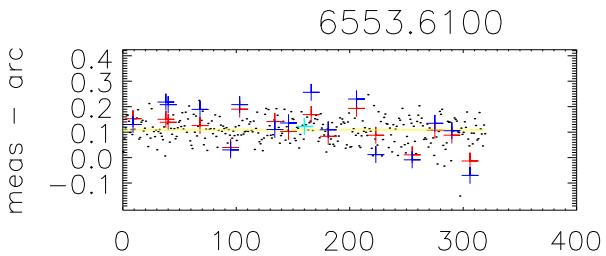

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009976.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.413
Max value = 10.895
Tue Feb 26 14:59:20 2008

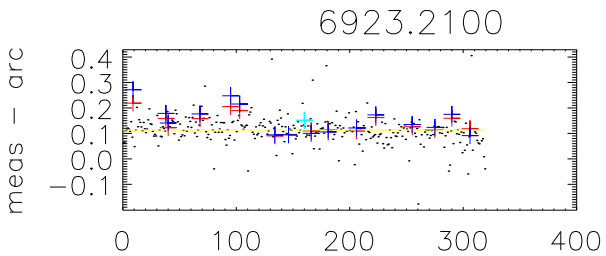

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-r2-00009976.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

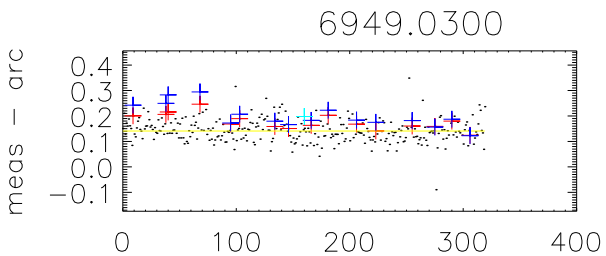

6300.3040
off: 0.09
sig: 0.008
6363.7760
off: 0.15
sig: 0.018
6553.6100
off: 0.12
sig: 0.049
6923.2100
off: 0.15
sig: 0.013
6949.0300
off: 0.20
sig: 0.012
7571.7500
off: 0.16
sig: 0.011
7794.1200
off: 0.04
sig: 0.006
7821.5100
off: 0.10
sig: 0.005
8399.1600
off: 0.13
sig: 0.004
8430.1700
off: 0.12
sig: 0.004
8885.8300
off: 0.15
sig: 0.004
8919.6100
off: 0.13
sig: 0.004

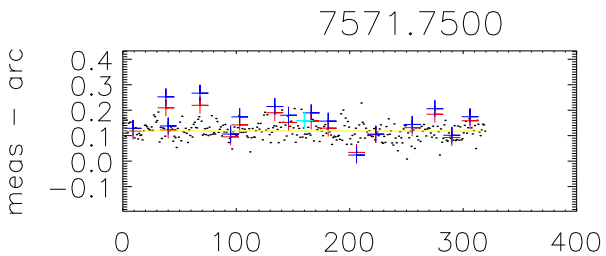

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

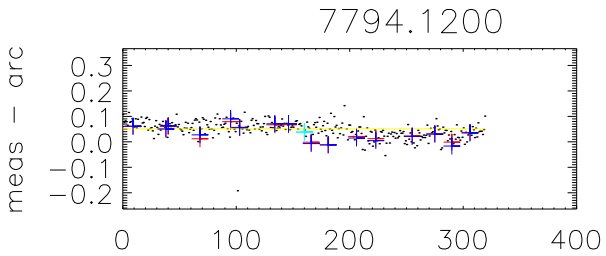

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

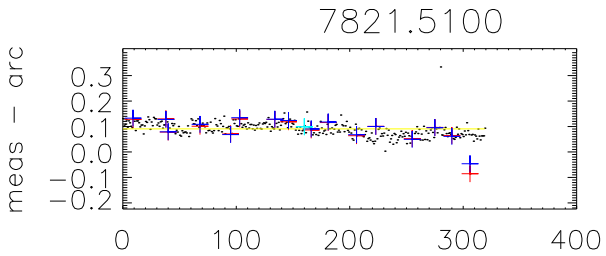

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

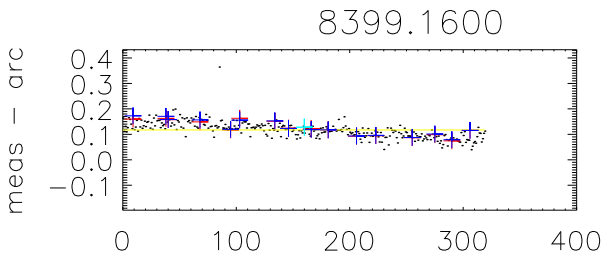

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

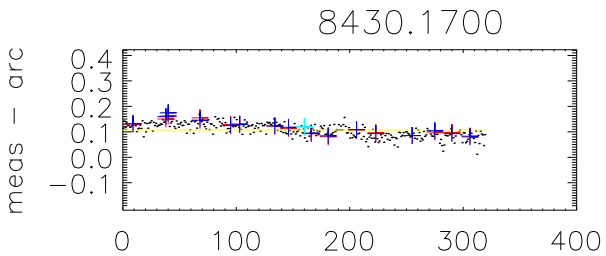

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

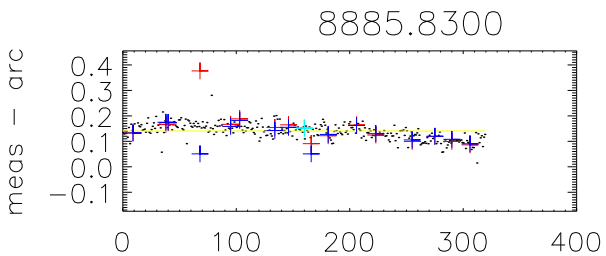

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

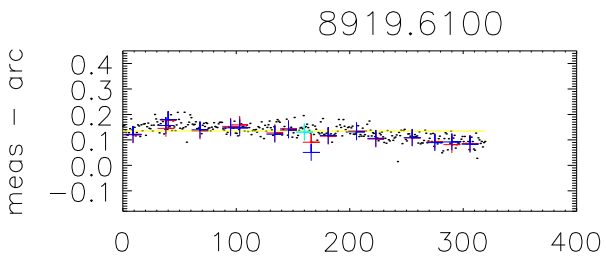

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

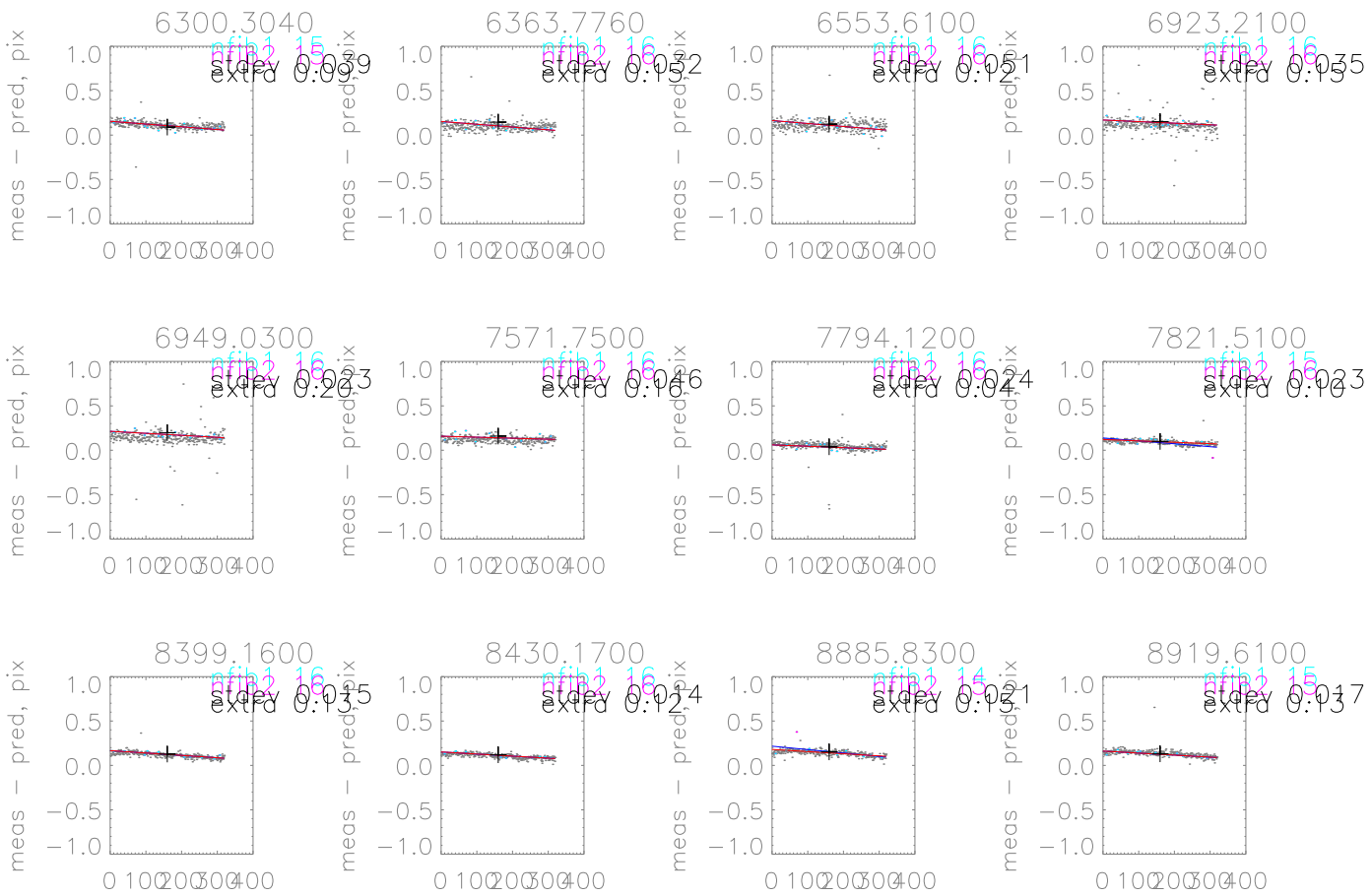

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

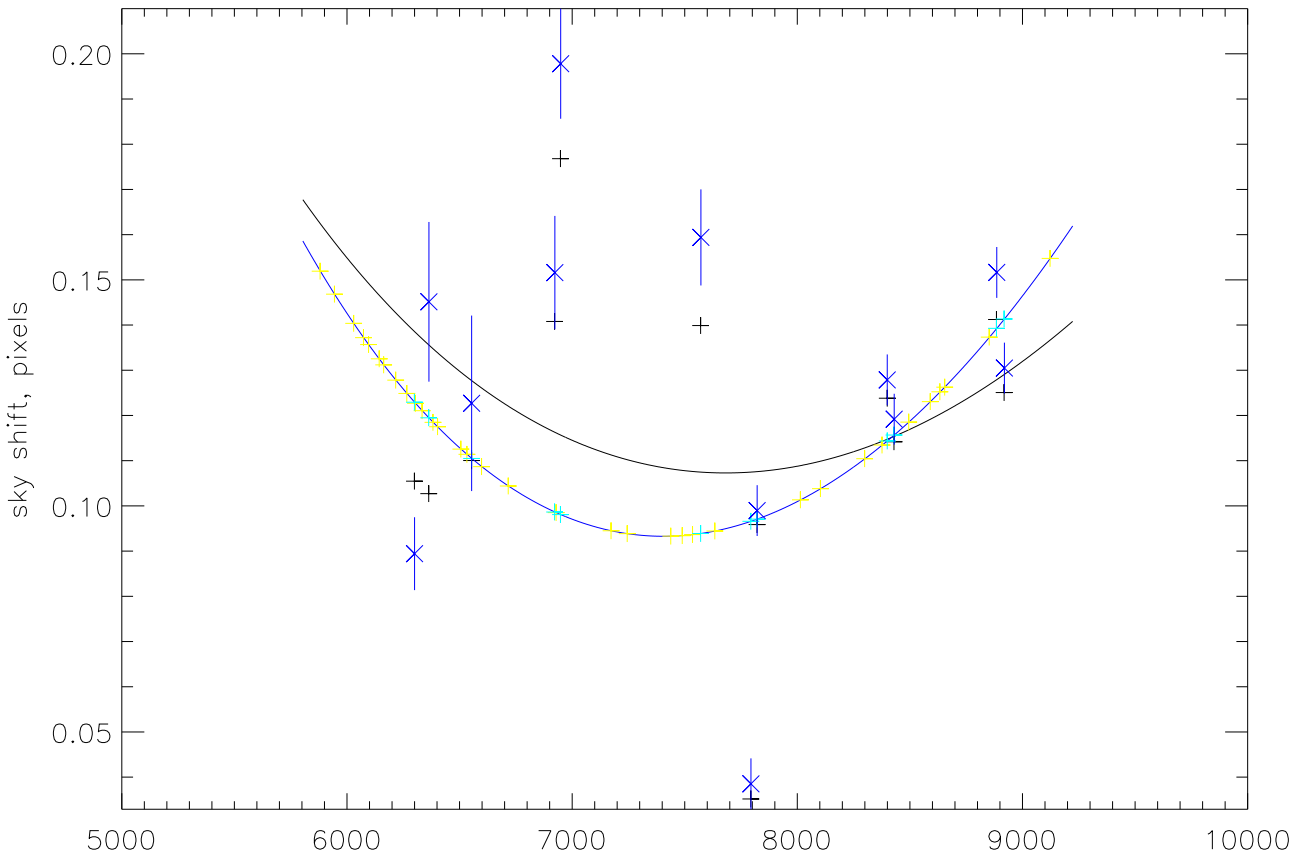

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

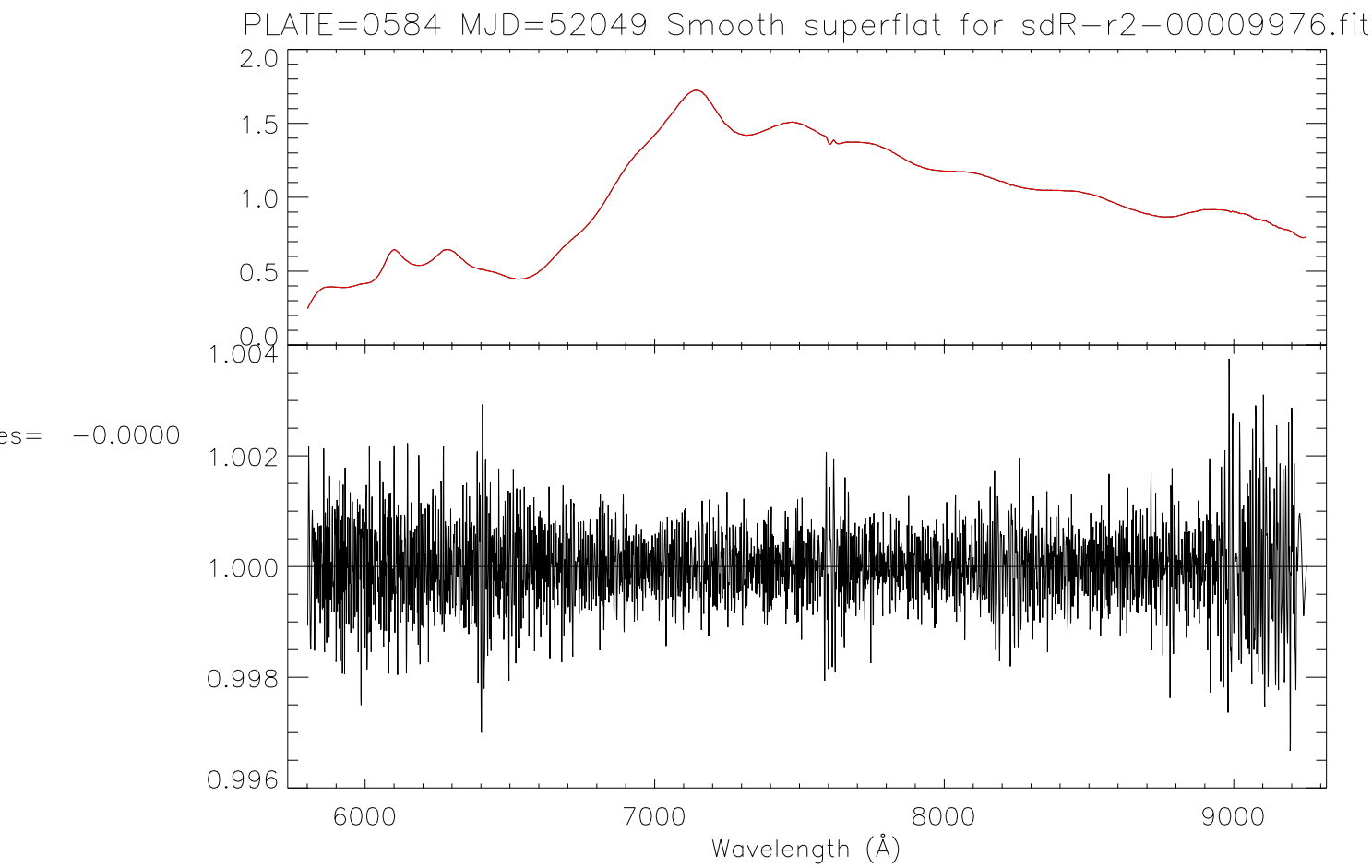

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

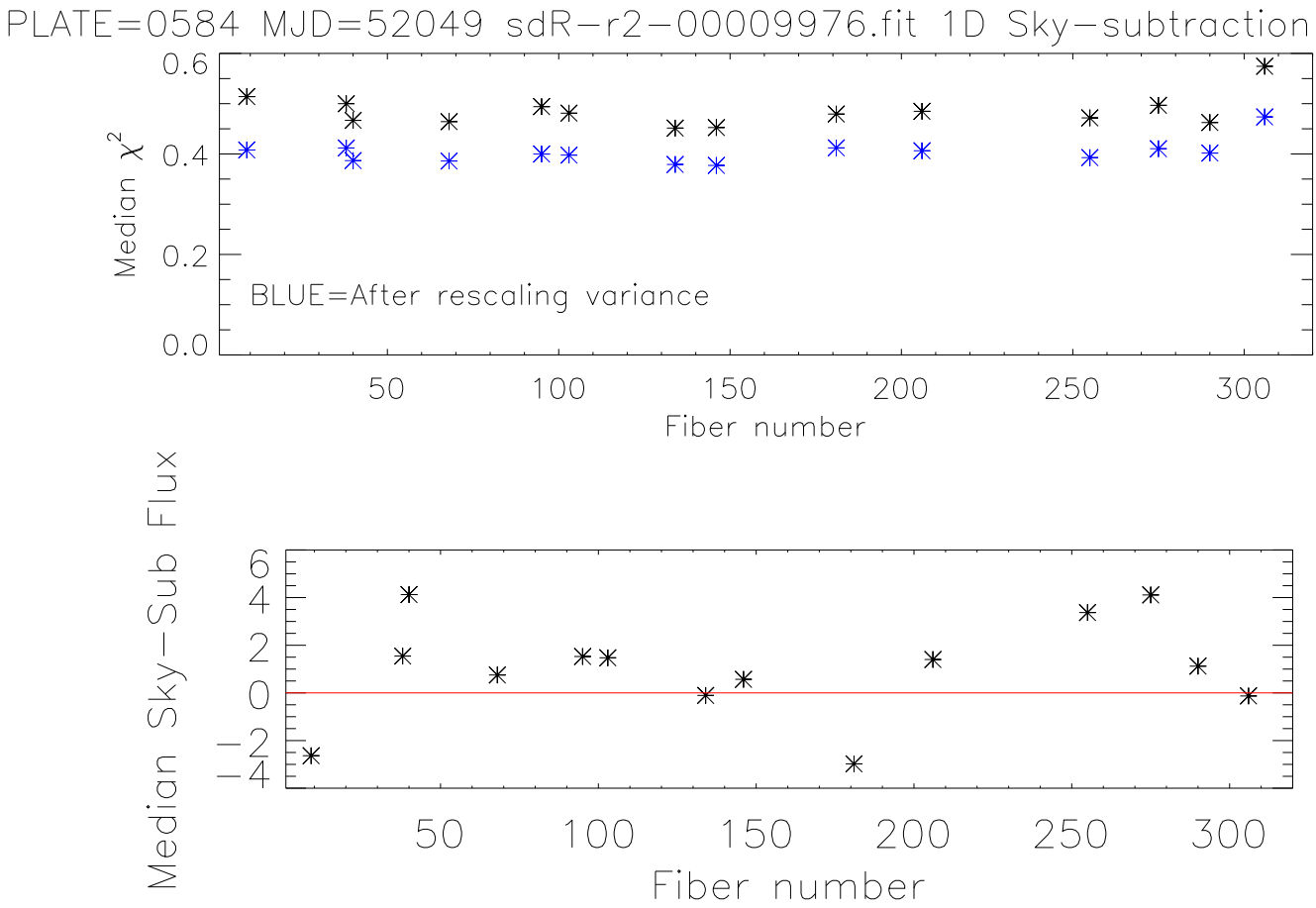

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

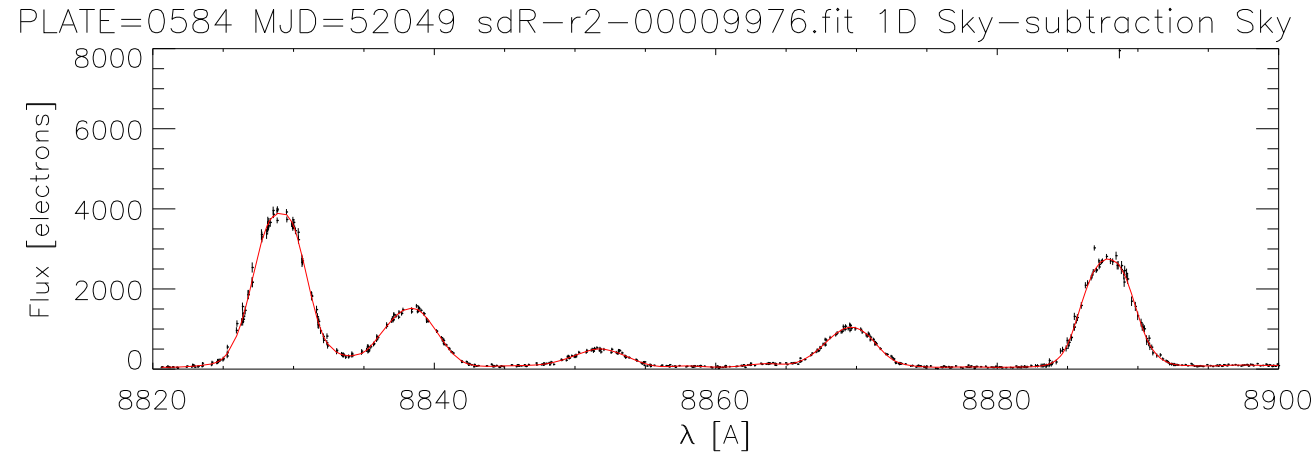

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

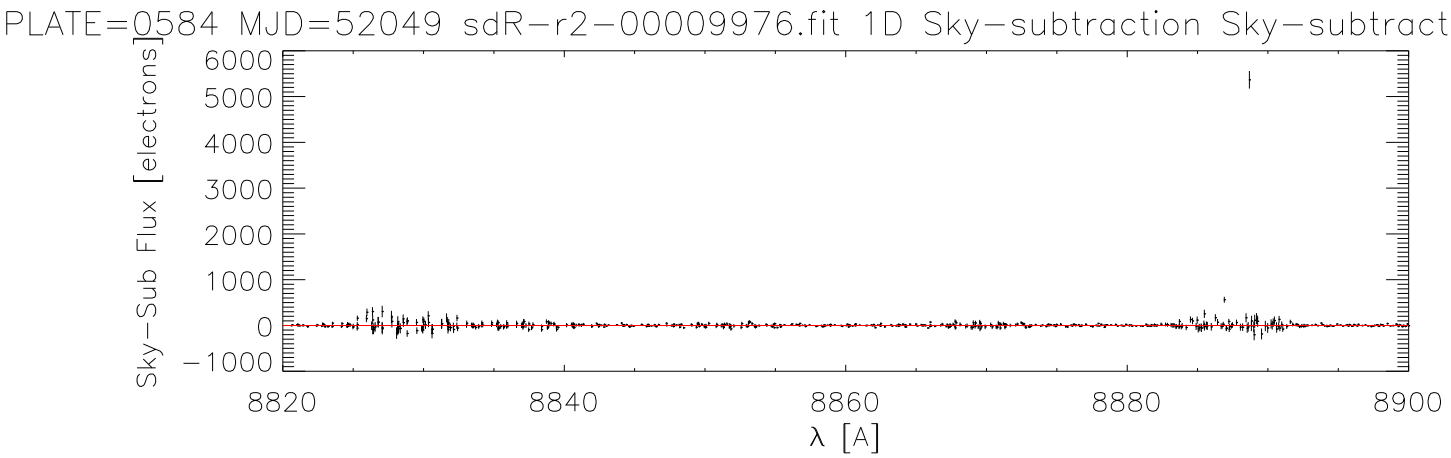

6300.3040
mfhi2 15
stdev 0.039
extra 0.099
6363.7760
mfhi2 16
stdev 0.052
extra 0.152
6553.6100
mfhi2 16
stdev 0.051
extra 0.121
6923.2100
mfhi2 16
stdev 0.035
extra 0.15
6949.0300
mfhi2 16
stdev 0.023
extra 0.26
7571.7500
mfhi2 16
stdev 0.046
extra 0.16
7794.1200
mfhi2 16
stdev 0.024
extra 0.04
7821.5100
mfhi2 15
stdev 0.023
extra 0.16
8399.1600
mfhi2 16
stdev 0.015
extra 0.13
8430.1700
mfhi2 16
stdev 0.014
extra 0.12
8885.8300
mfhi2 14
stdev 0.021
extra 0.13
8919.6100
mfhi2 15
stdev 0.017
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

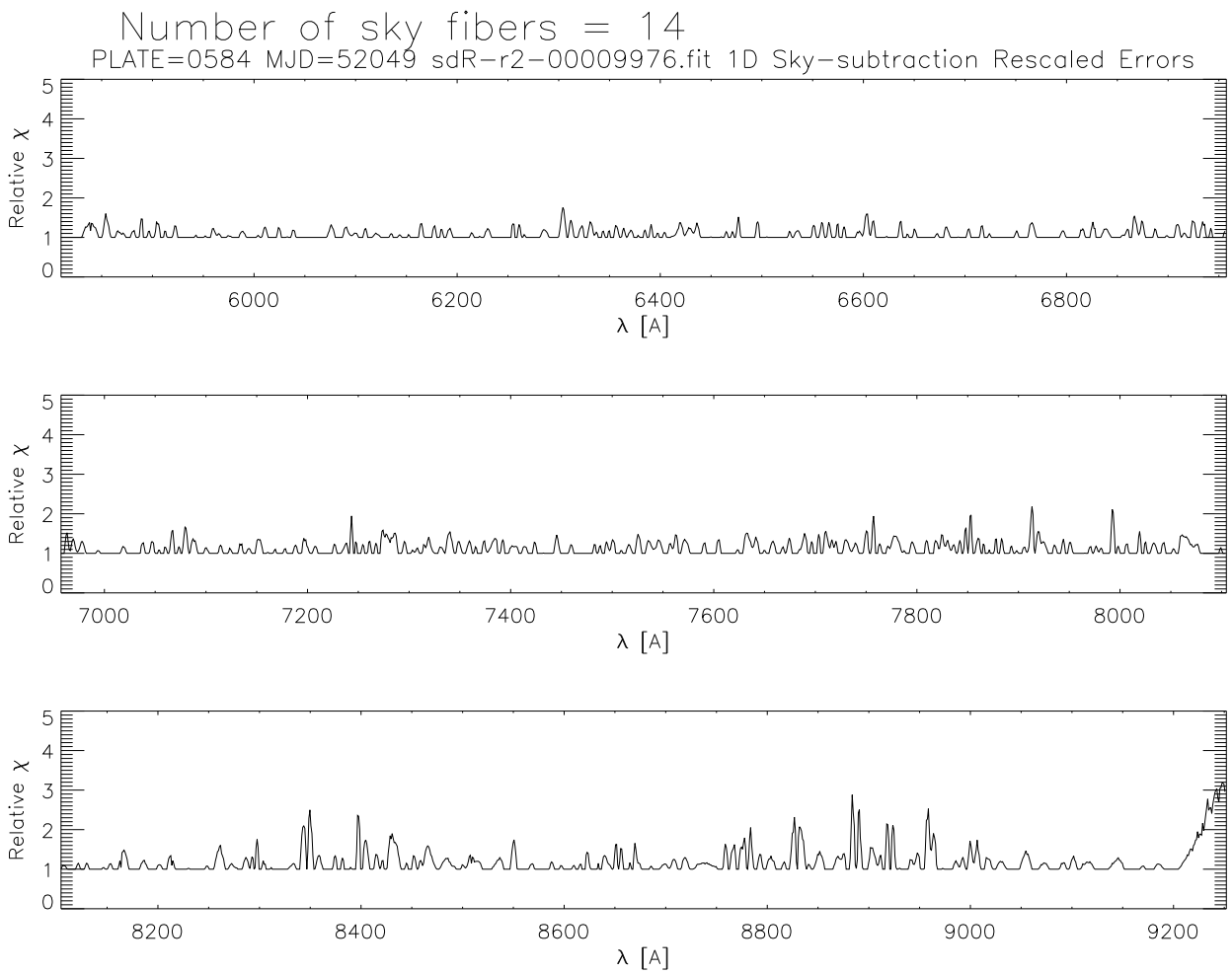

0.20
0.15
0.10
0.05
sky shift, pixels
5000
6000
7000
8000
9000
10000

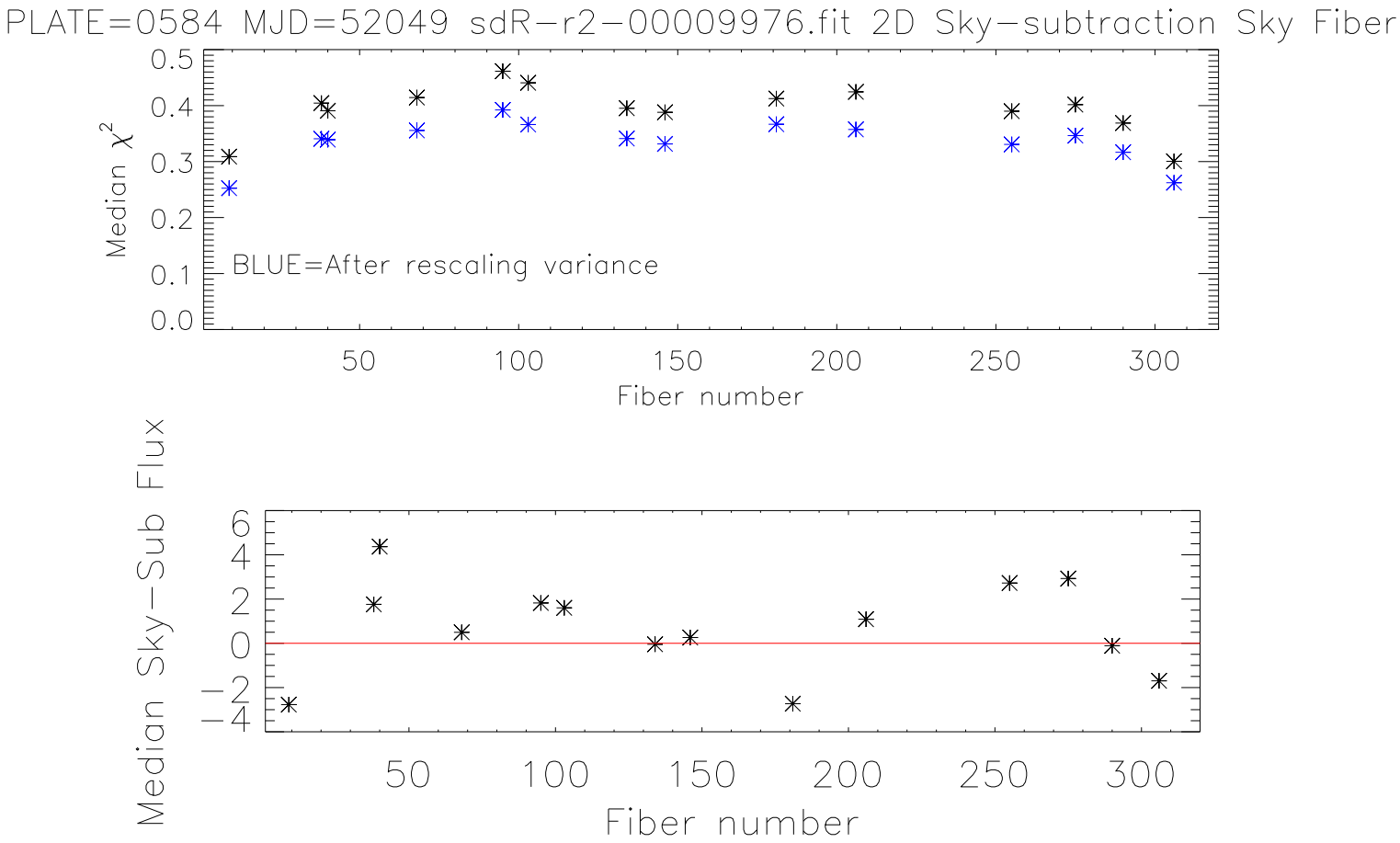

PLATE=0584 MJD=52049 Smooth superflat for sdR-r2-00009976.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

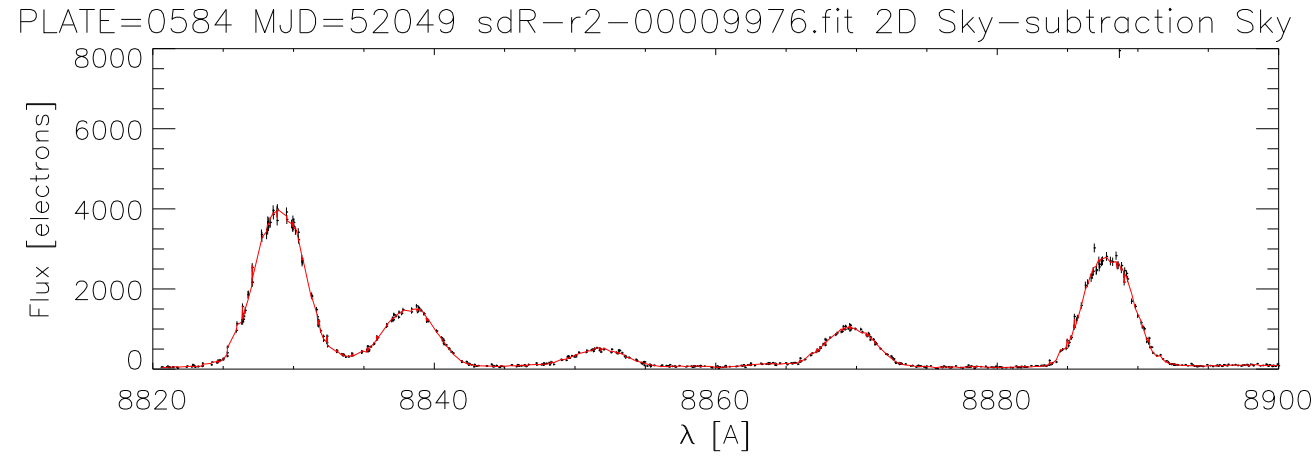

PLATE=0584 MJD=52049 sdR-r2-00009976.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

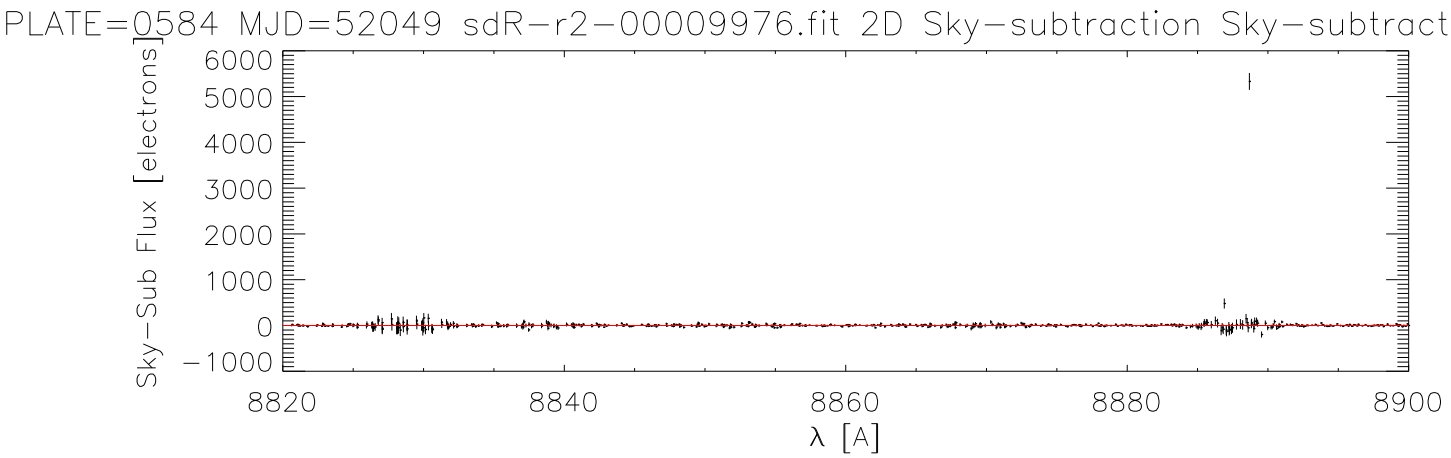

PLATE=0584 MJD=52049 sdR-r2-00009976.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

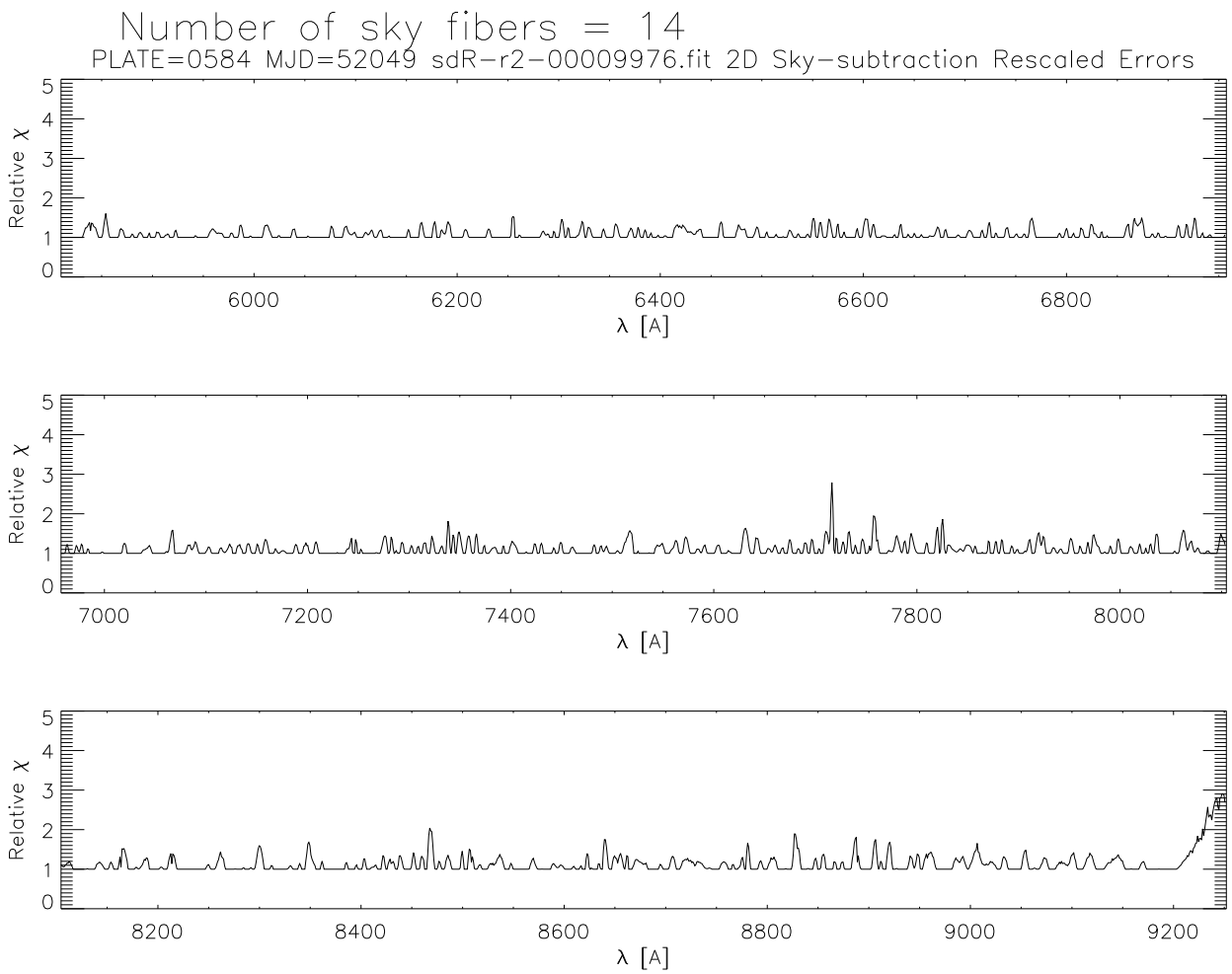

PLATE=0584 MJD=52049 sdR-r2-00009976.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

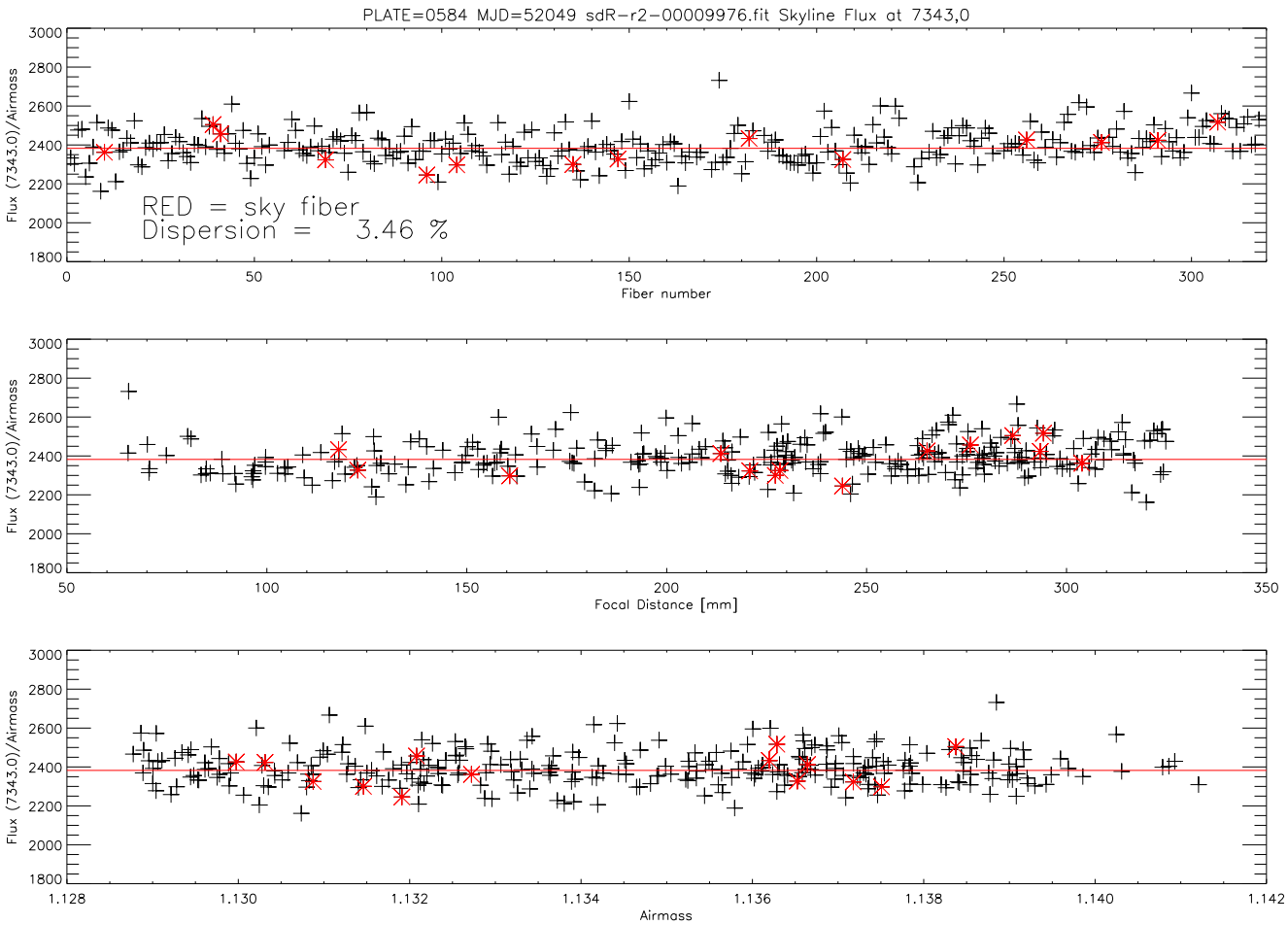

Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009976.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

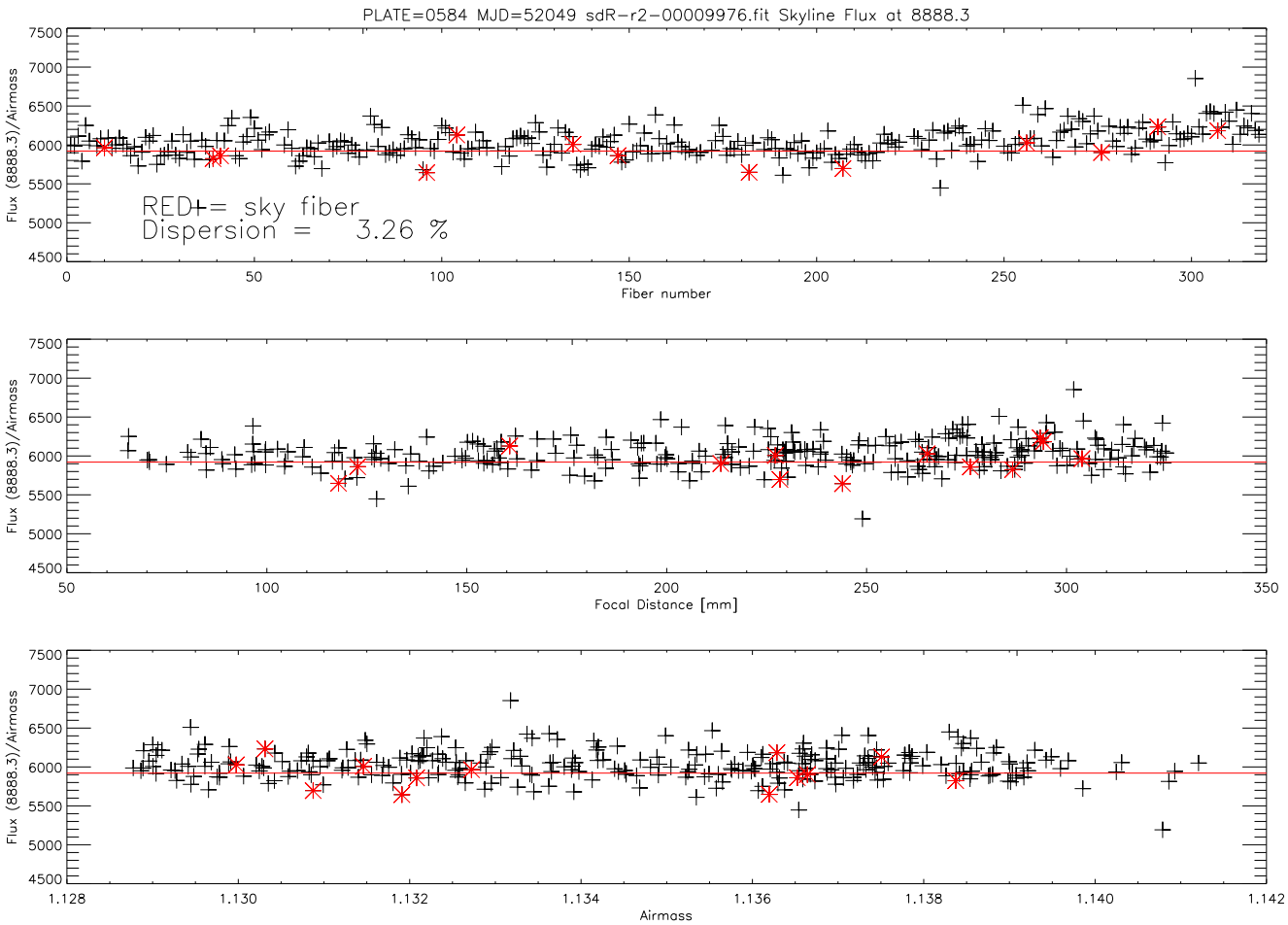

PLATE=0584 MJD=52049 sdR-r2-00009976.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

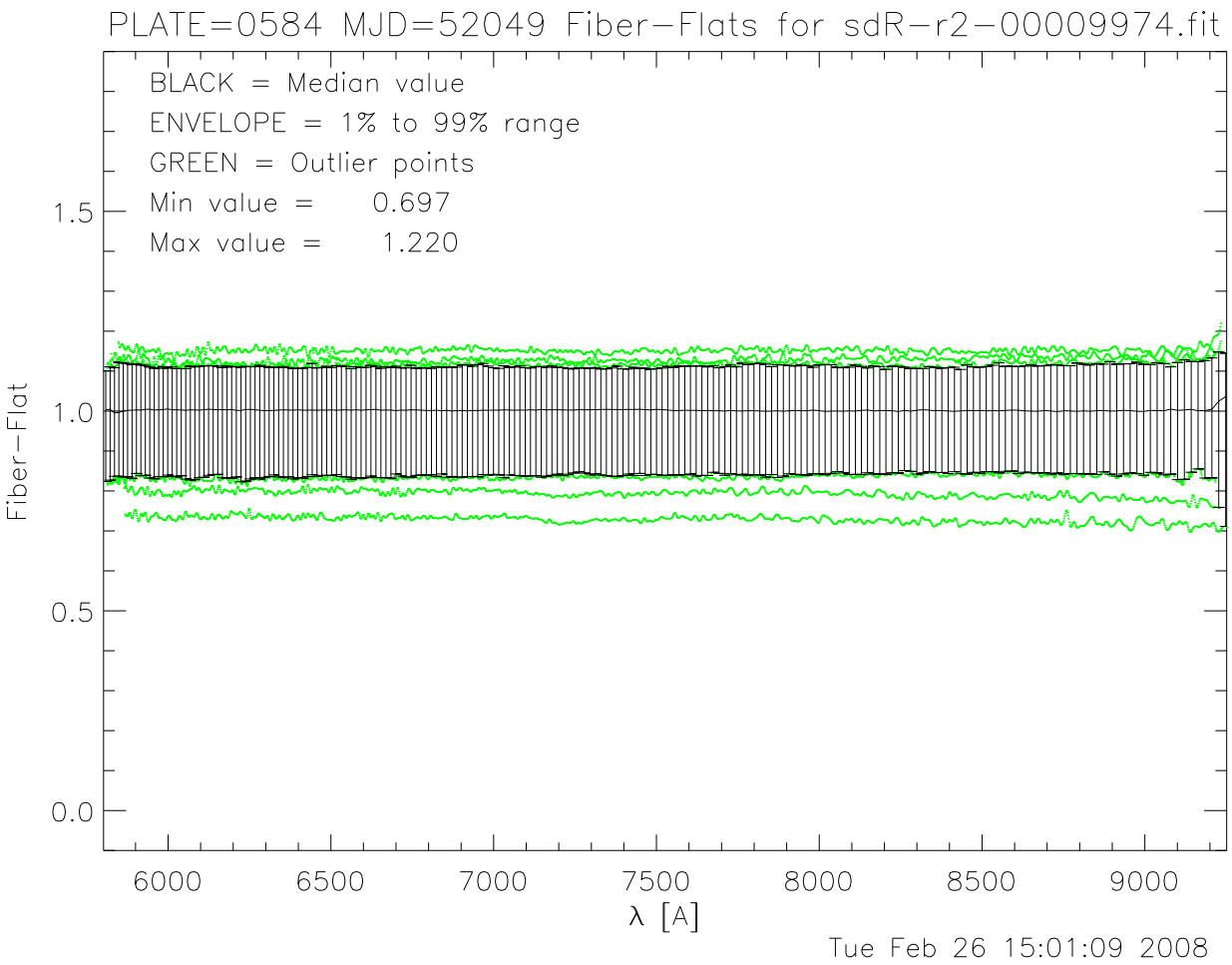

PLATE=0584 MJD=52049 sdR-r2-00009976.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

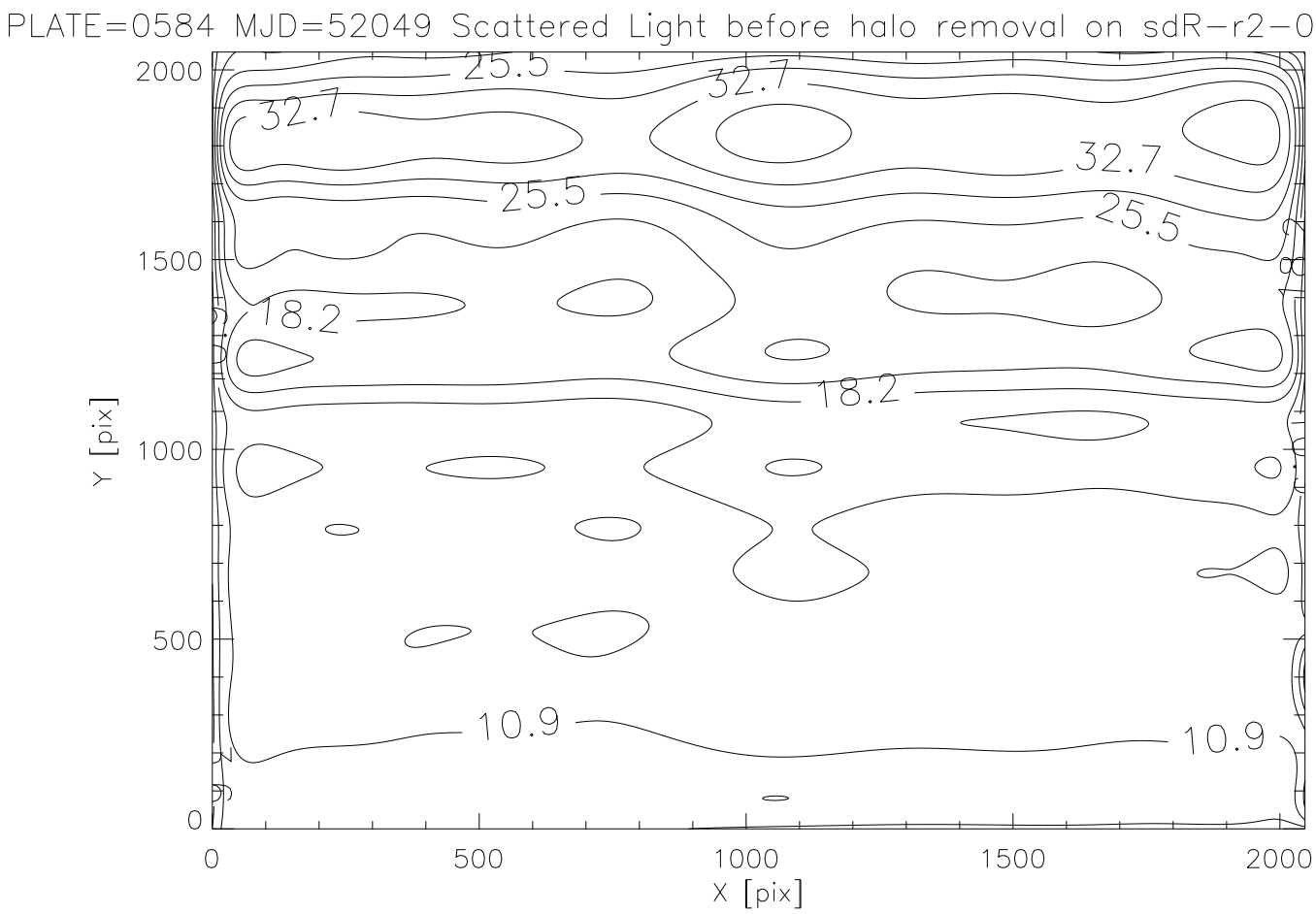

PLATE=0584 MJD=52049 sdR-r2-00009976.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

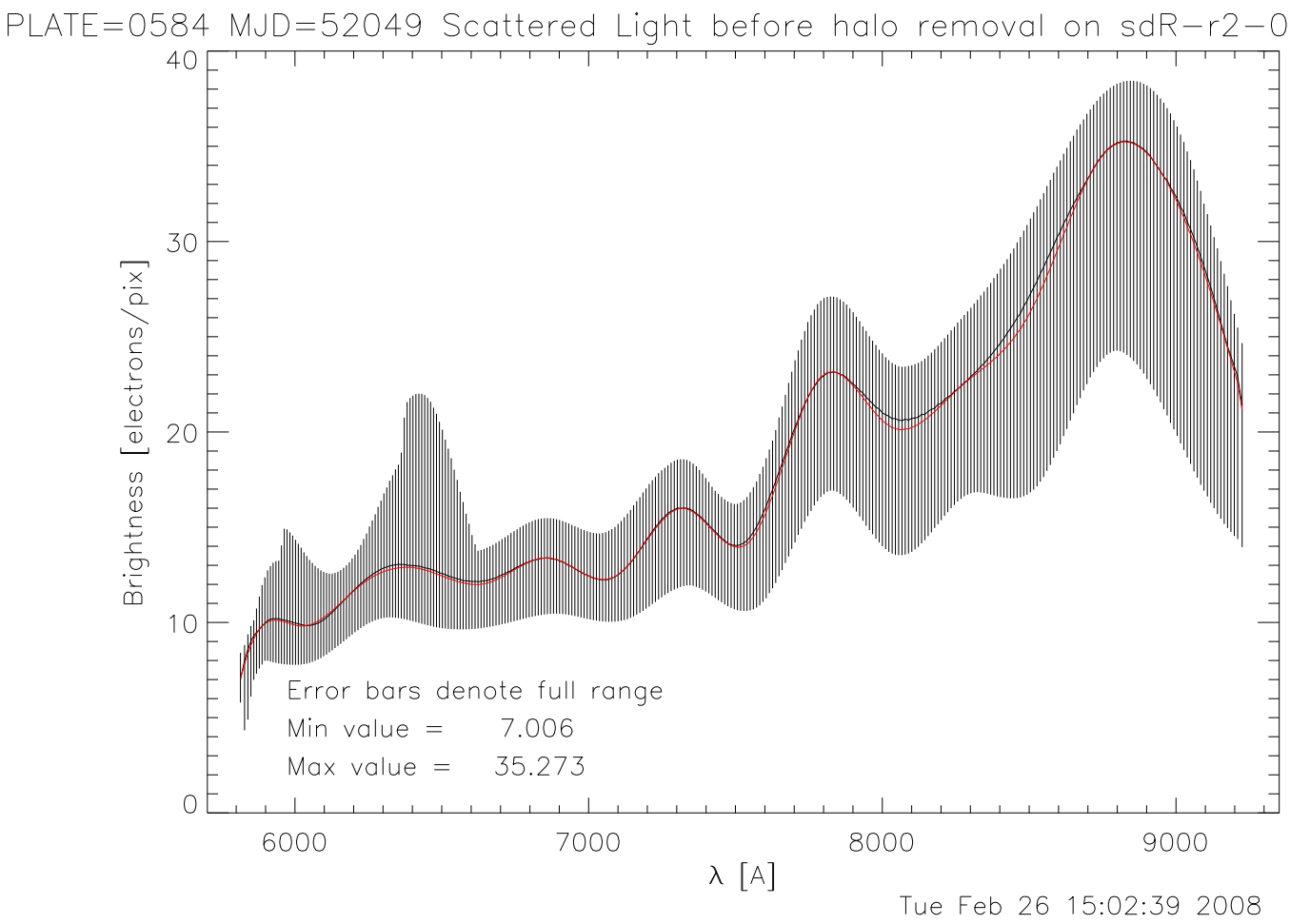

Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009976.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

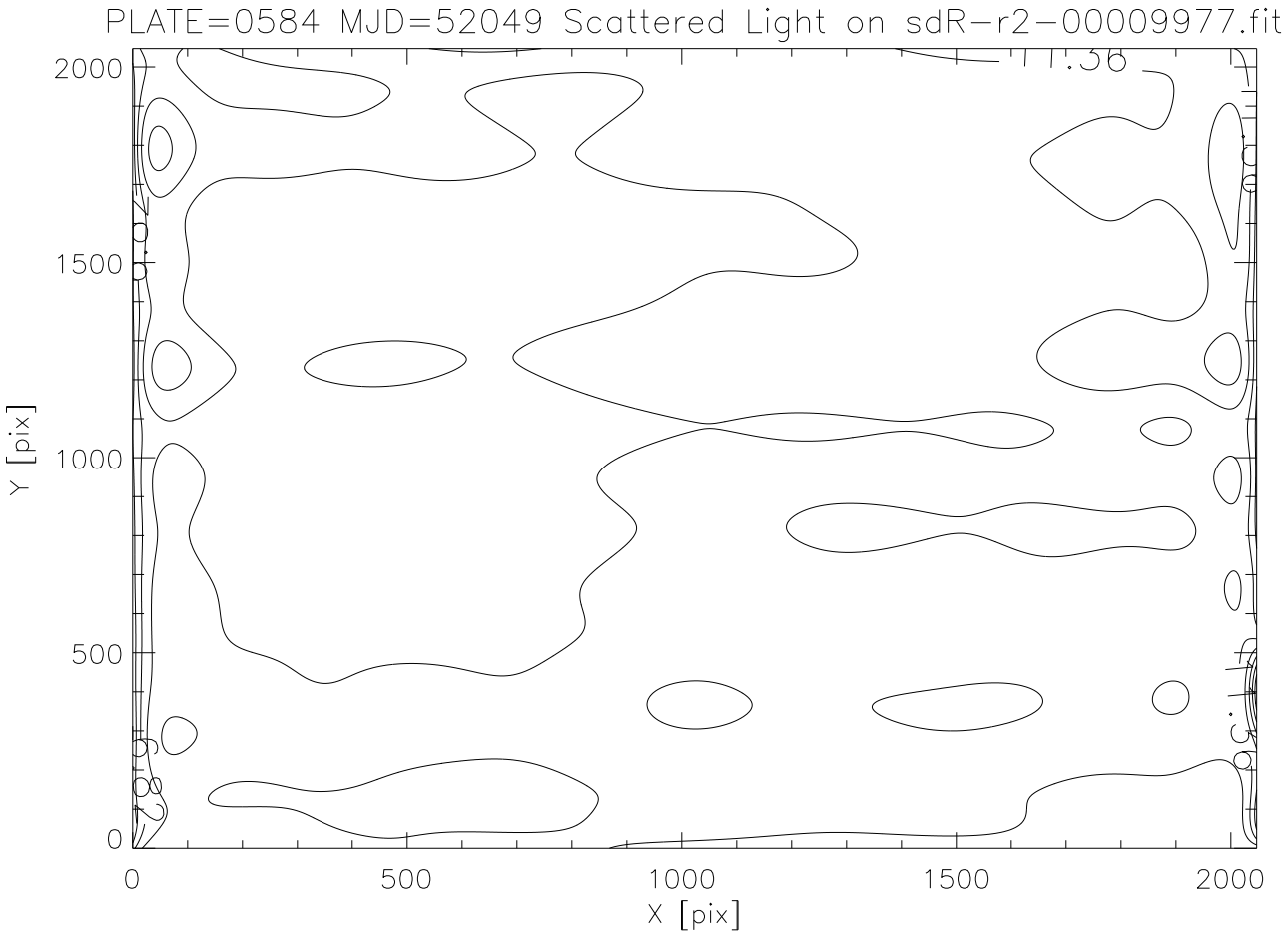

PLATE=0584 MJD=52049 sdR-r2-00009976.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.46 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

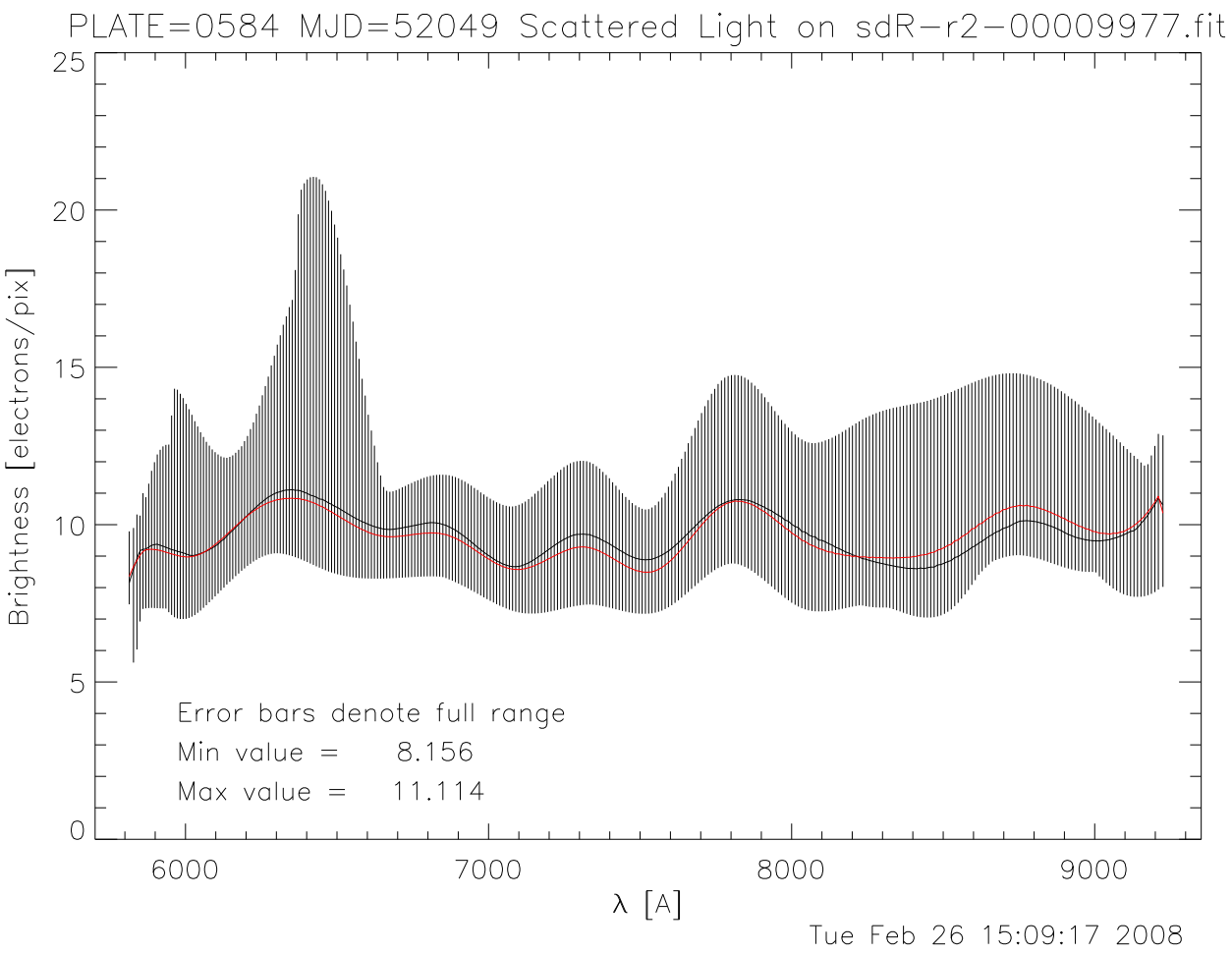

PLATE=0584 MJD=52049 sdR-r2-00009976.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED+= sky fiber
Dispersion = 3.26 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

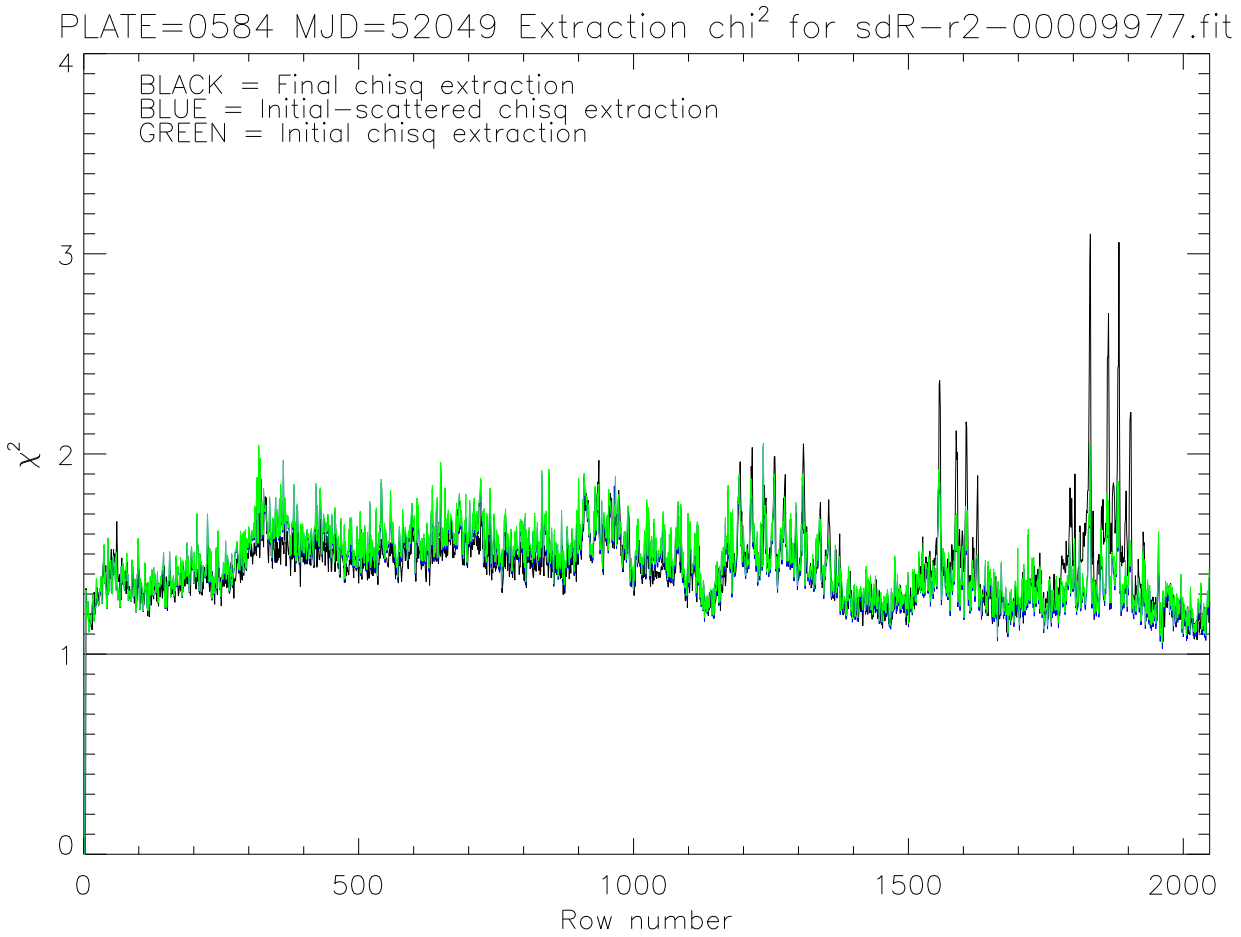

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r2−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.697
Max value = 1.220
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 15:01:09 2008

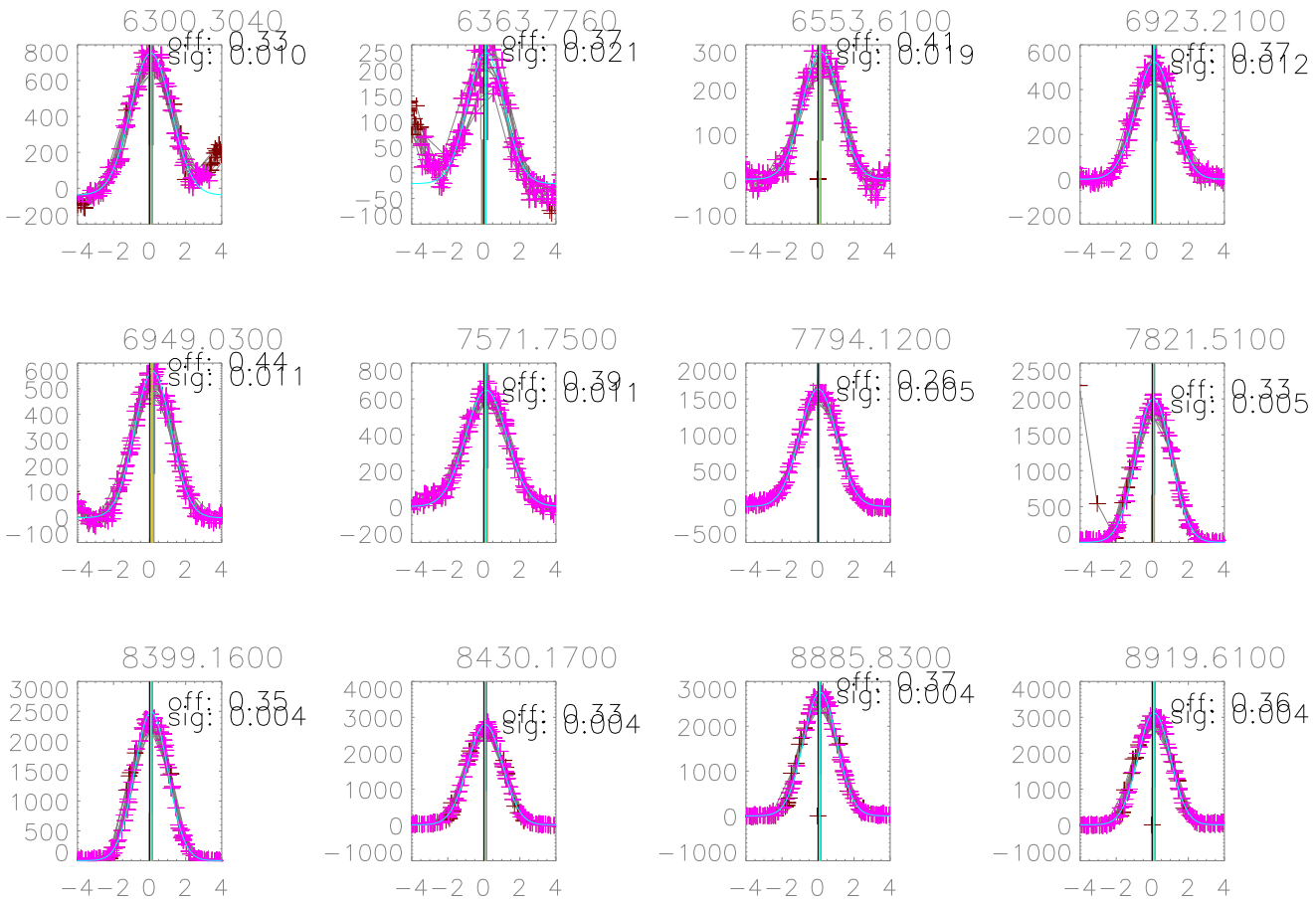

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009977.fi
25.5
32.7
32.7
32.7
25.5
25.5
18.2
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

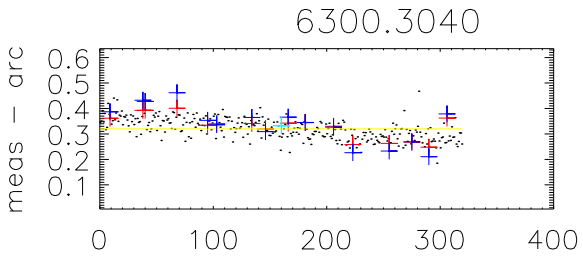

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009977.fi
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.006
Max value = 35.273
Tue Feb 26 15:02:39 2008

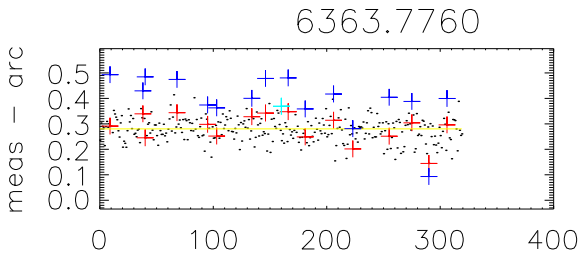

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009977.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

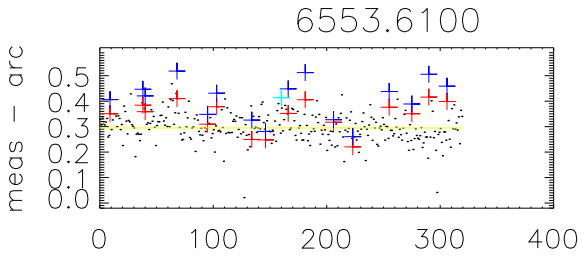

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009977.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.156
Max value = 11.114
Tue Feb 26 15:09:17 2008

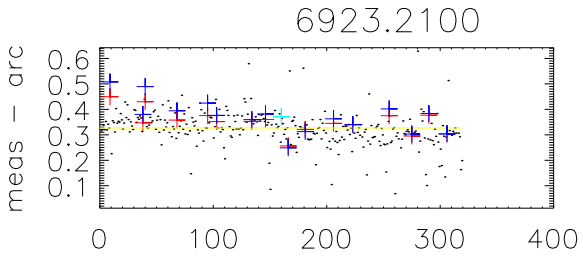

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-r2-00009977.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

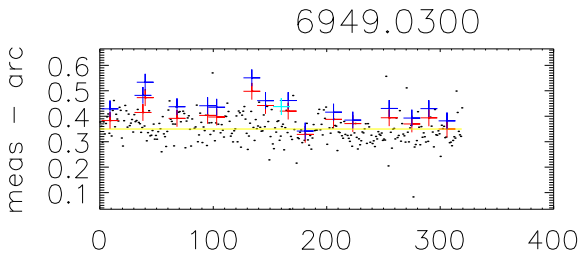

6300.3040
off: 0.33
sig: 0.010
6363.7760
off: 0.37
sig: 0.021
6553.6100
off: 0.41
sig: 0.019
6923.2100
off: 0.37
sig: 0.012
6949.0300
off: 0.44
sig: 0.011
7571.7500
off: 0.39
sig: 0.011
7794.1200
off: 0.26
sig: 0.005
7821.5100
off: 0.33
sig: 0.005
8399.1600
off: 0.35
sig: 0.004
8430.1700
off: 0.33
sig: 0.004
8885.8300
off: 0.37
sig: 0.004
8919.6100
off: 0.36
sig: 0.004

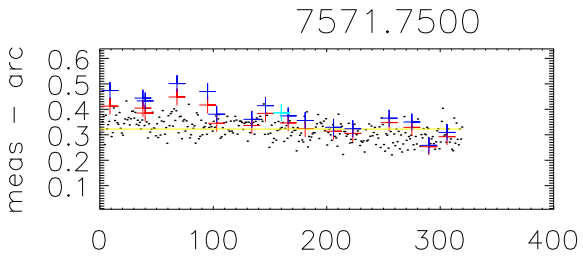

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

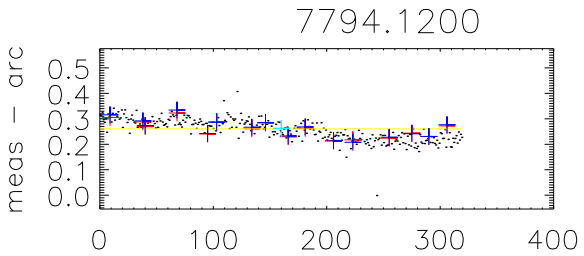

6363.7760
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

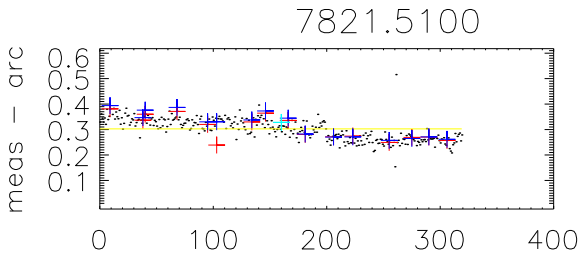

6553.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

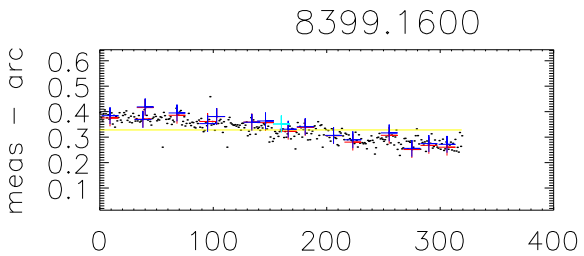

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

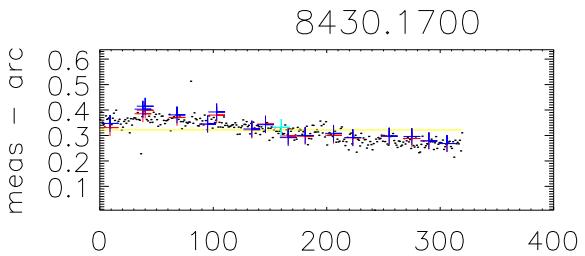

6949.0300
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

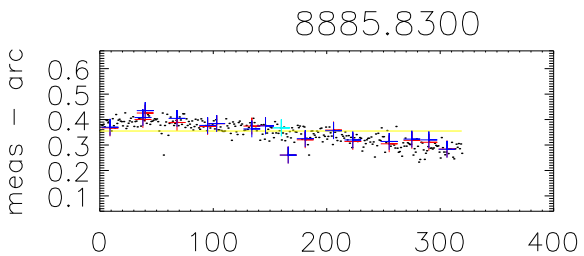

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

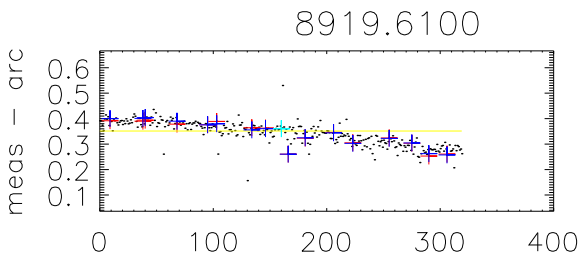

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

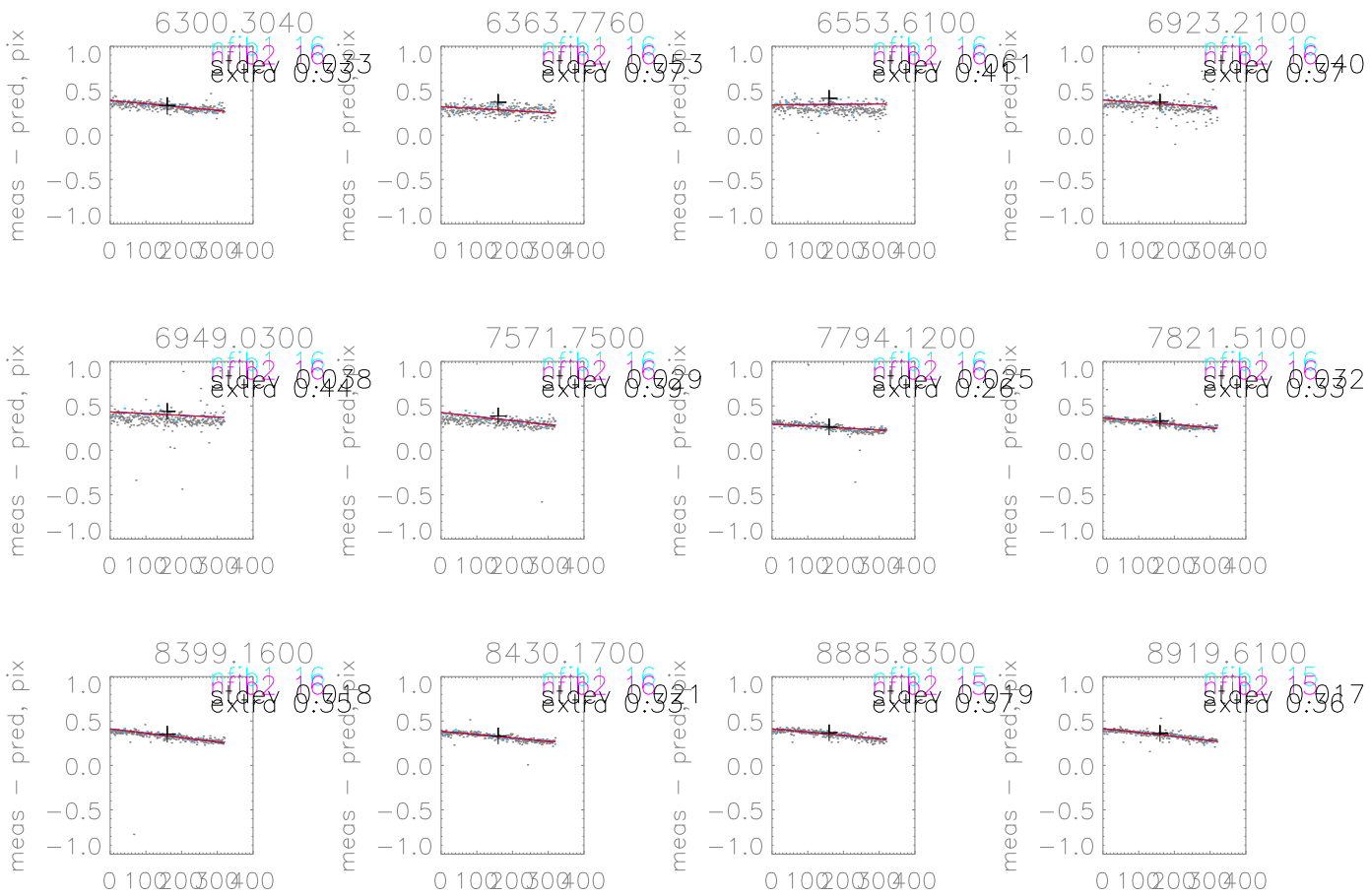

7821.5100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

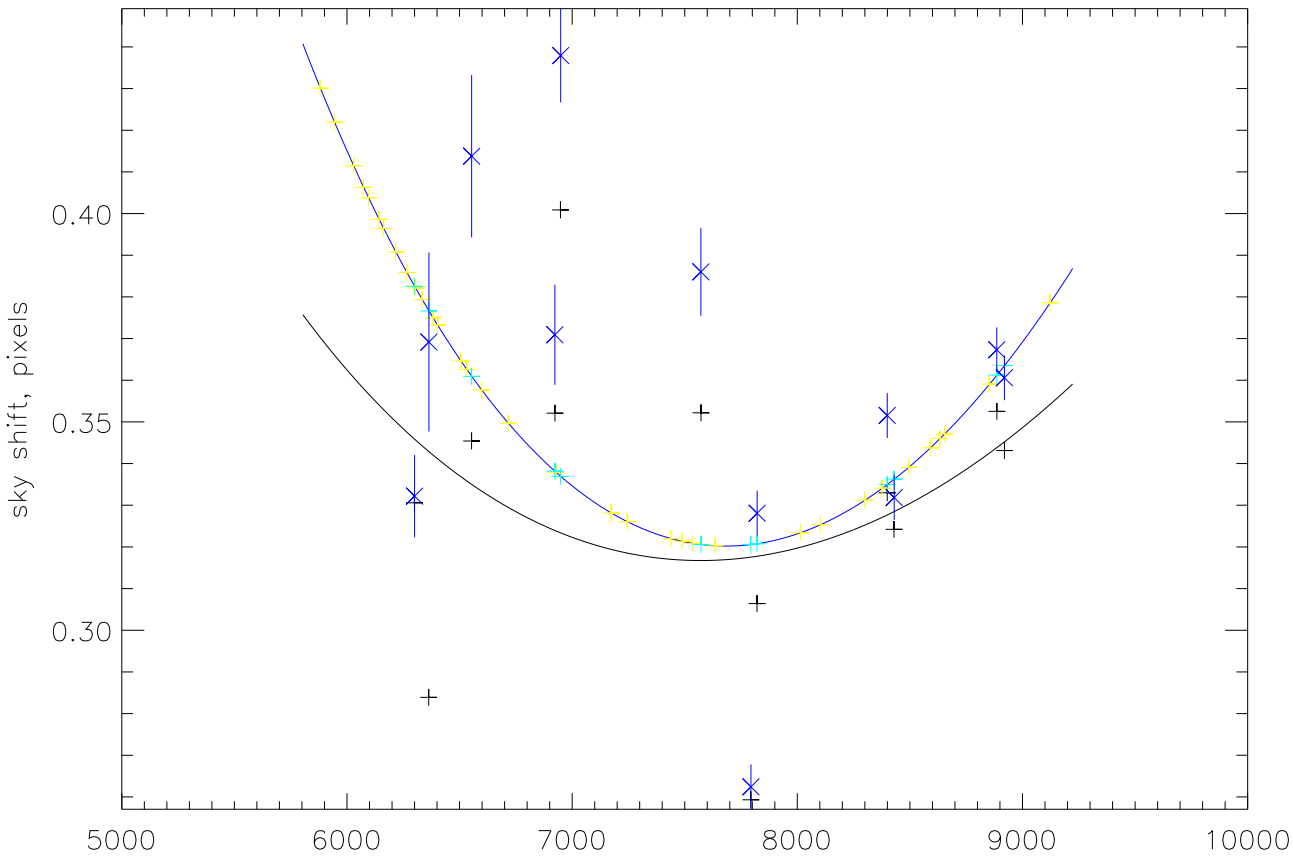

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

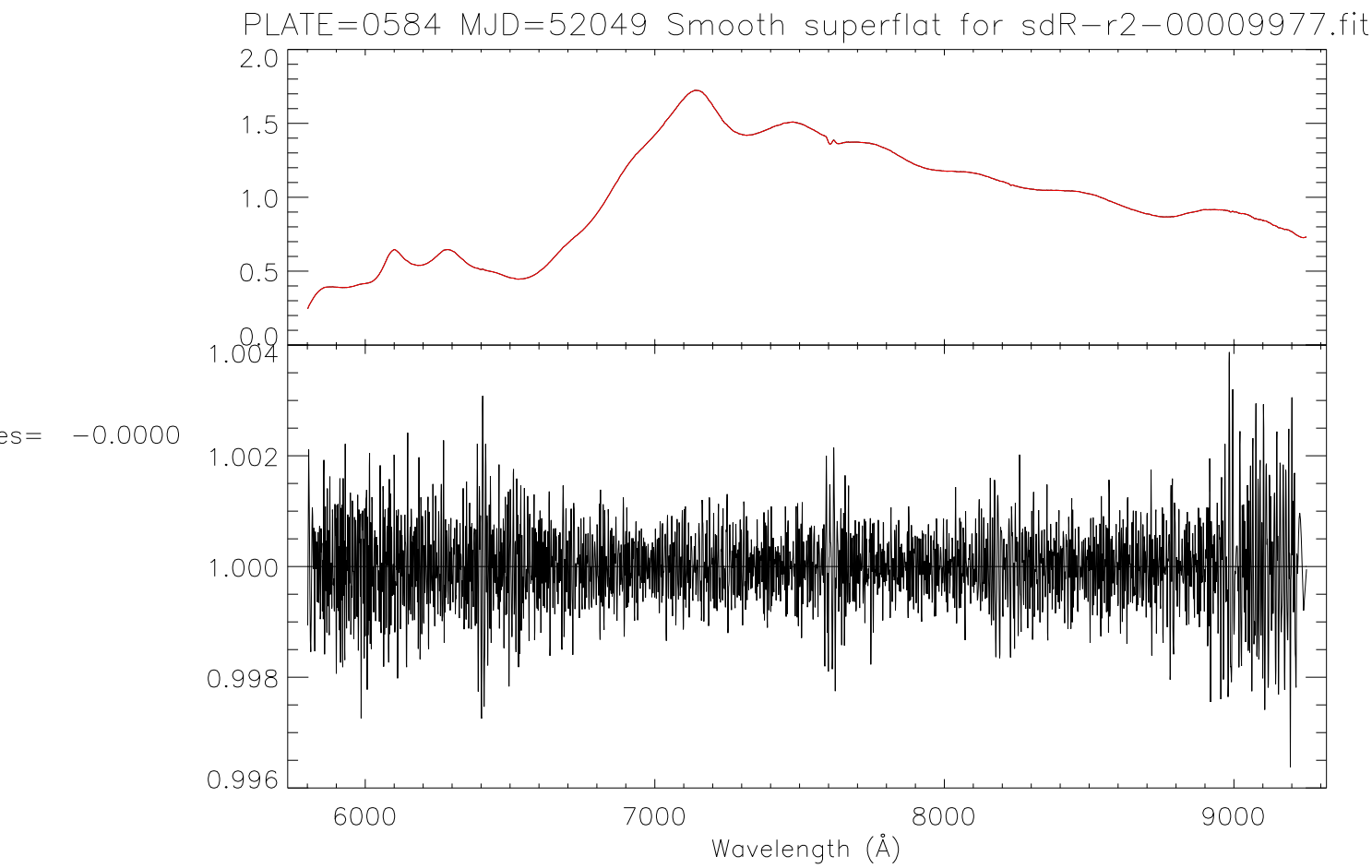

8430.1700
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

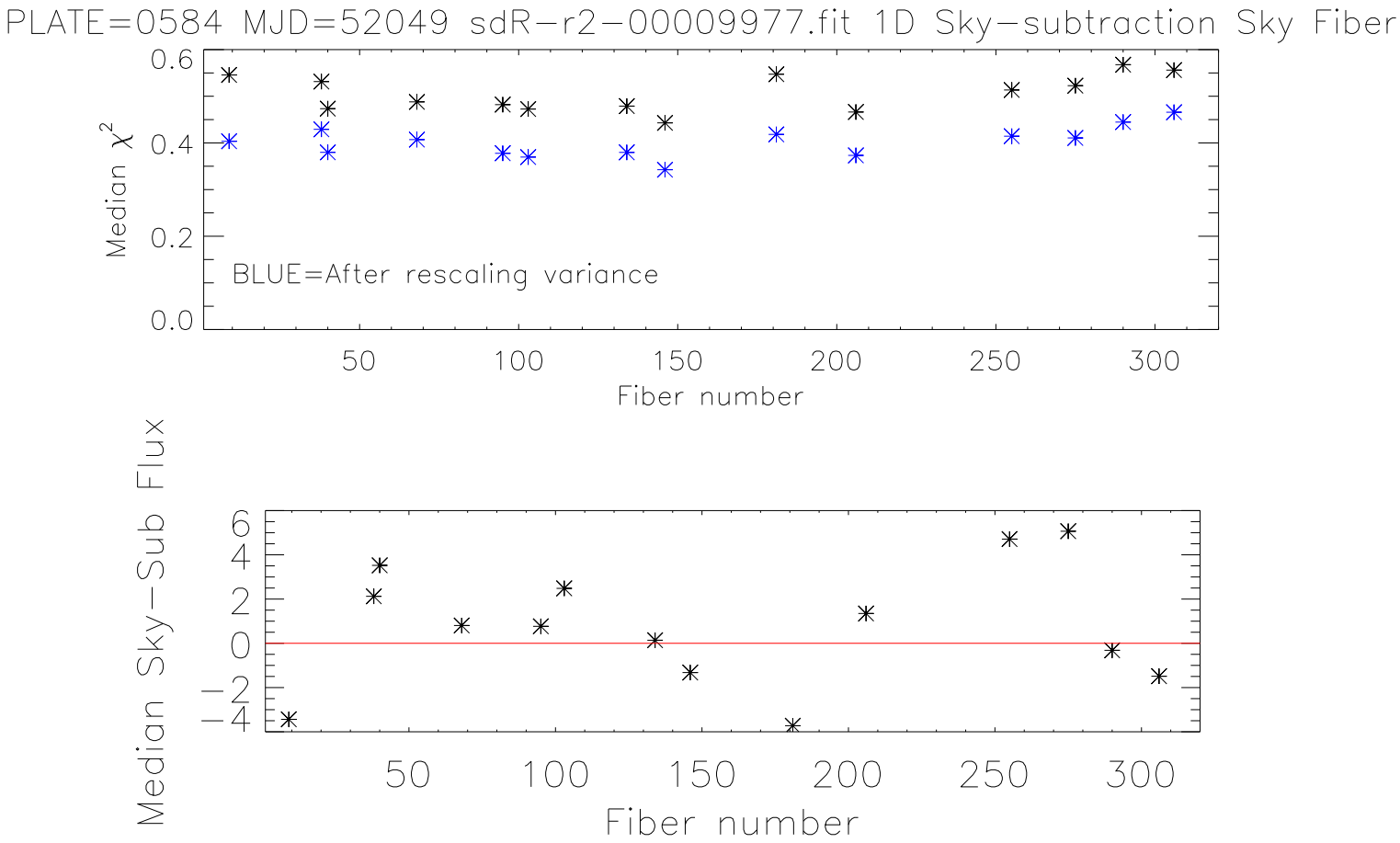

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

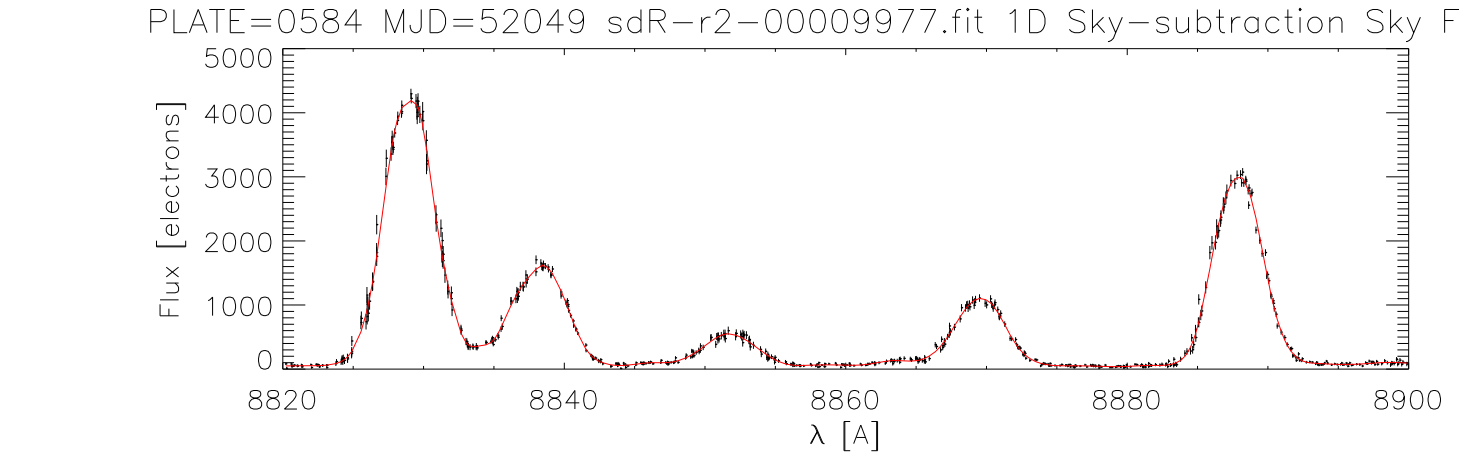

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

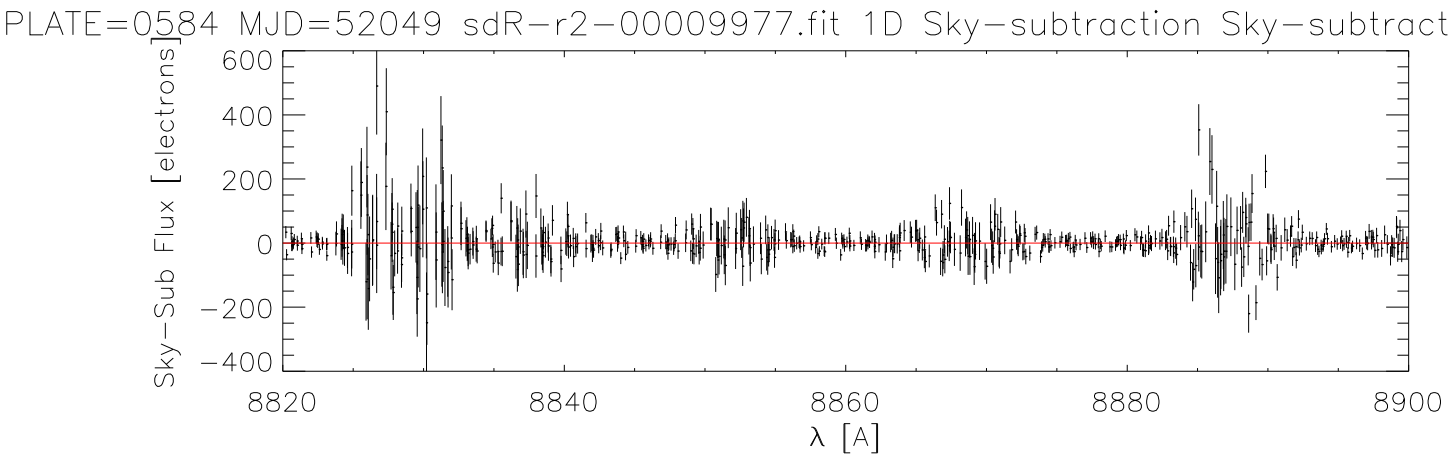

6300.3040
stdev 0.033
extra 0.33
6363.7760
stdev 0.053
extra 0.37
6553.6100
stdev 0.061
extra 0.41
6923.2100
stdev 0.040
extra 0.37
6949.0300
stdev 0.038
extra 0.44
7571.7500
stdev 0.029
extra 0.34
7794.1200
stdev 0.025
extra 0.26
7821.5100
stdev 0.032
extra 0.33
8399.1600
stdev 0.028
extra 0.35
8430.1700
stdev 0.021
extra 0.33
8885.8300
stdev 0.079
extra 0.37
8919.6100
stdev 0.017
extra 0.36
meas − pred, pix

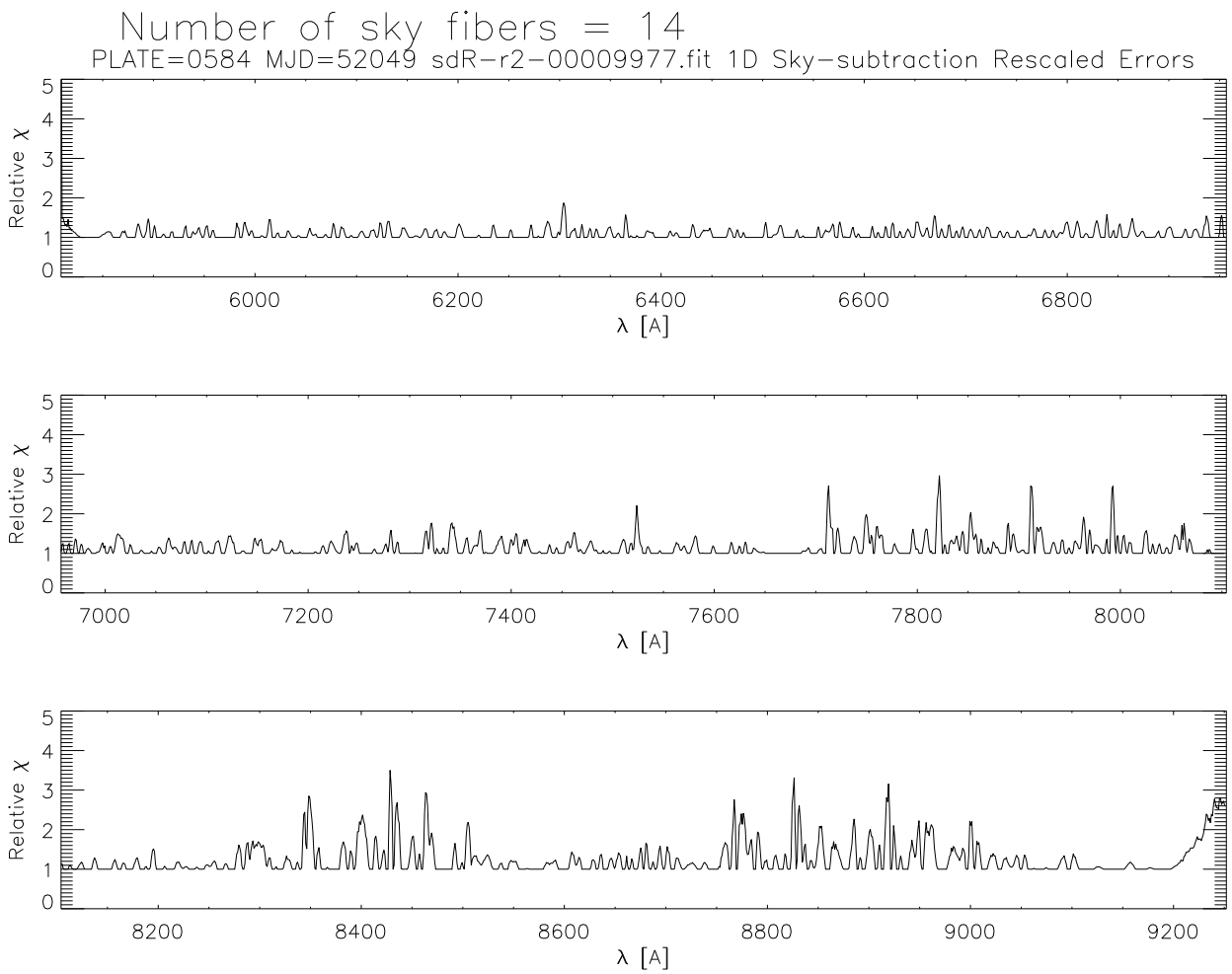

sky shift, pixels
0.40
0.35
0.30
5000
6000
7000
8000
9000
10000

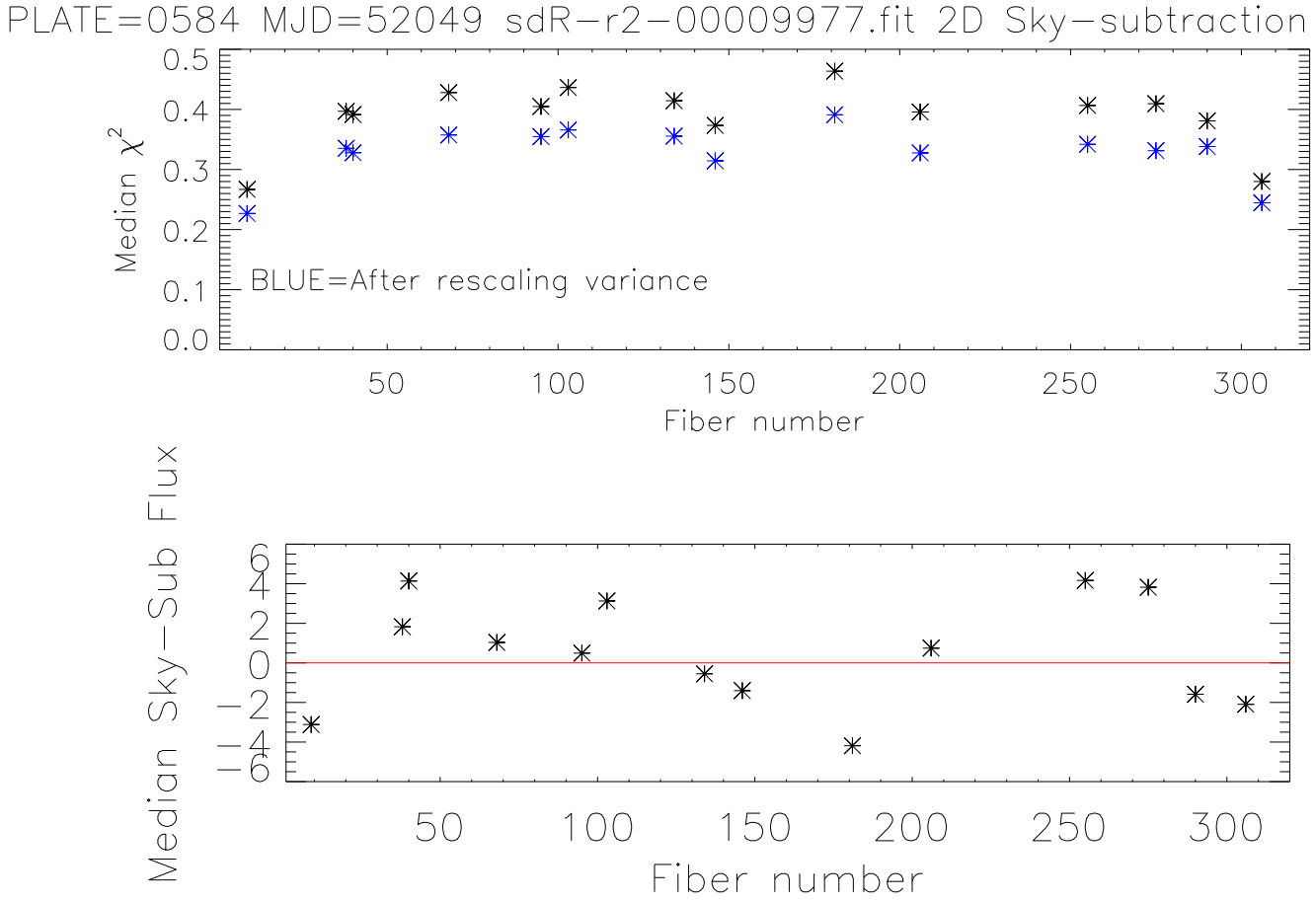

PLATE=0584 MJD=52049 Smooth superflat for sdR-r2-00009977.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

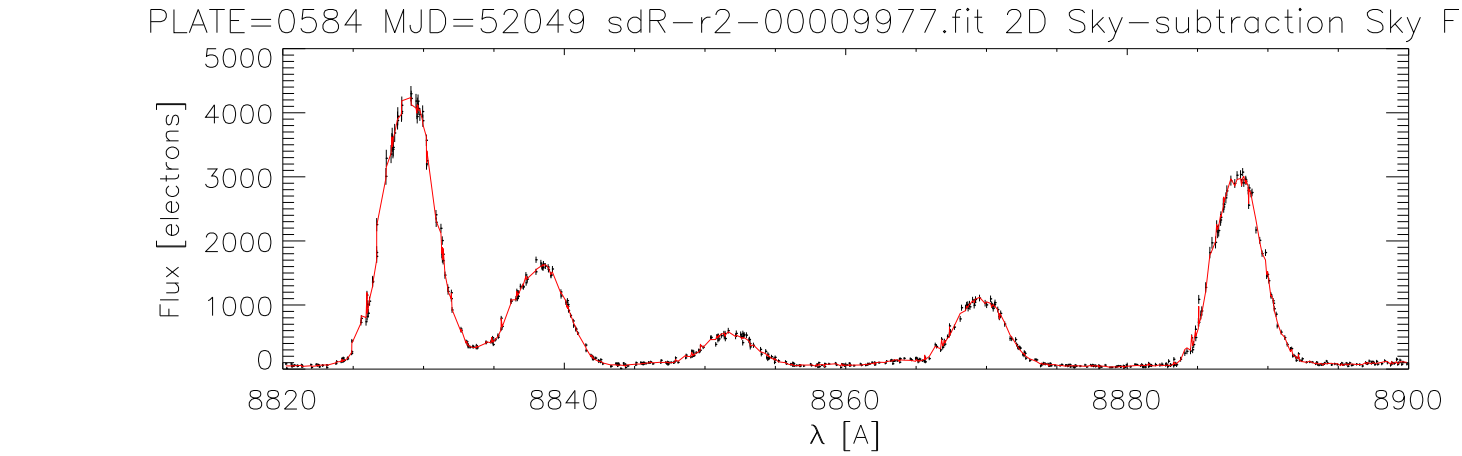

PLATE=0584 MJD=52049 sdR-r2-00009977.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

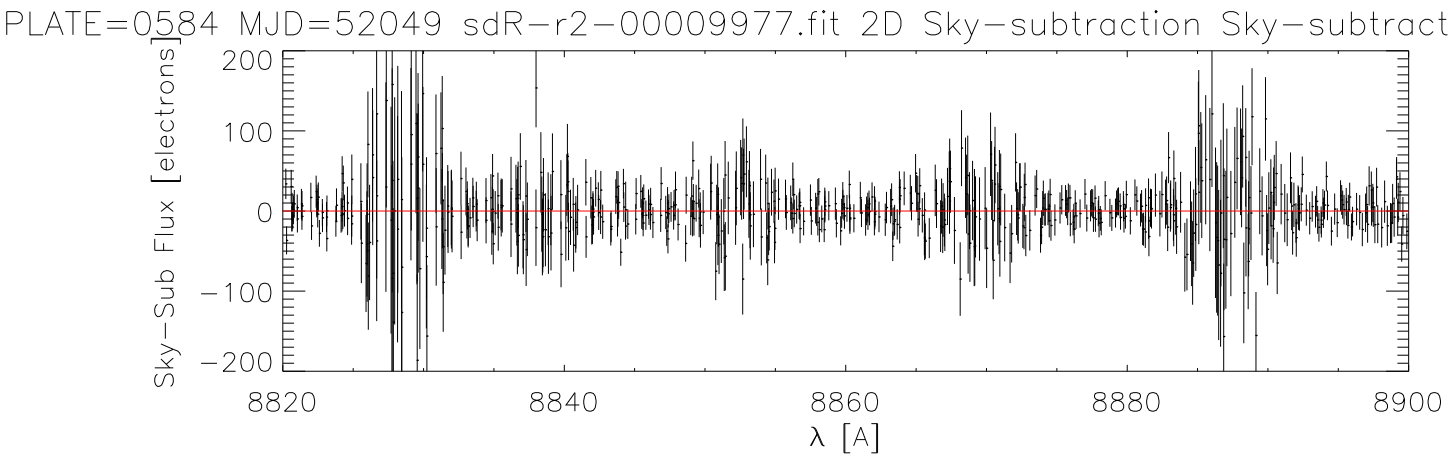

PLATE=0584 MJD=52049 sdR-r2-00009977.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

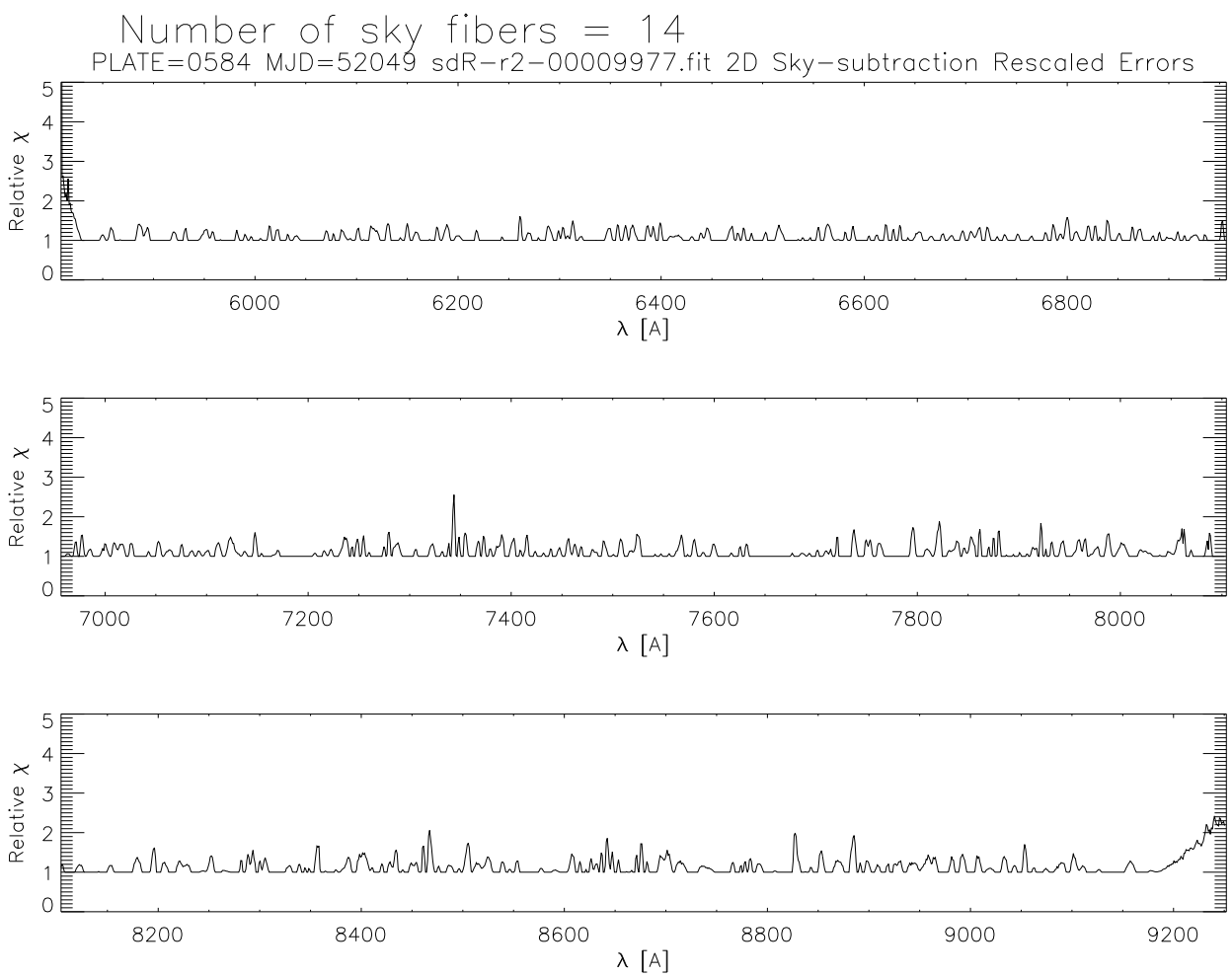

PLATE=0584 MJD=52049 sdR-r2-00009977.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

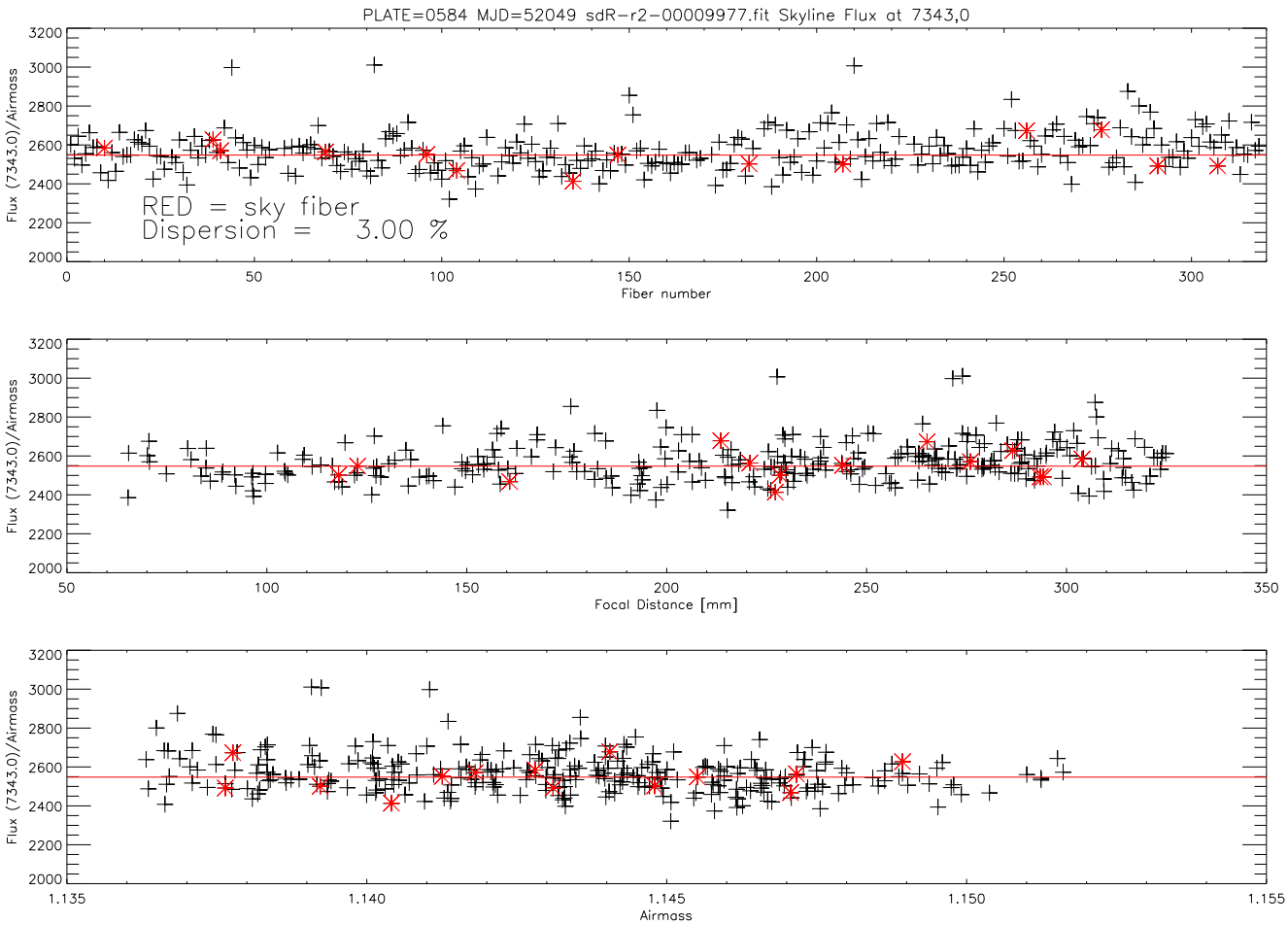

Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009977.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

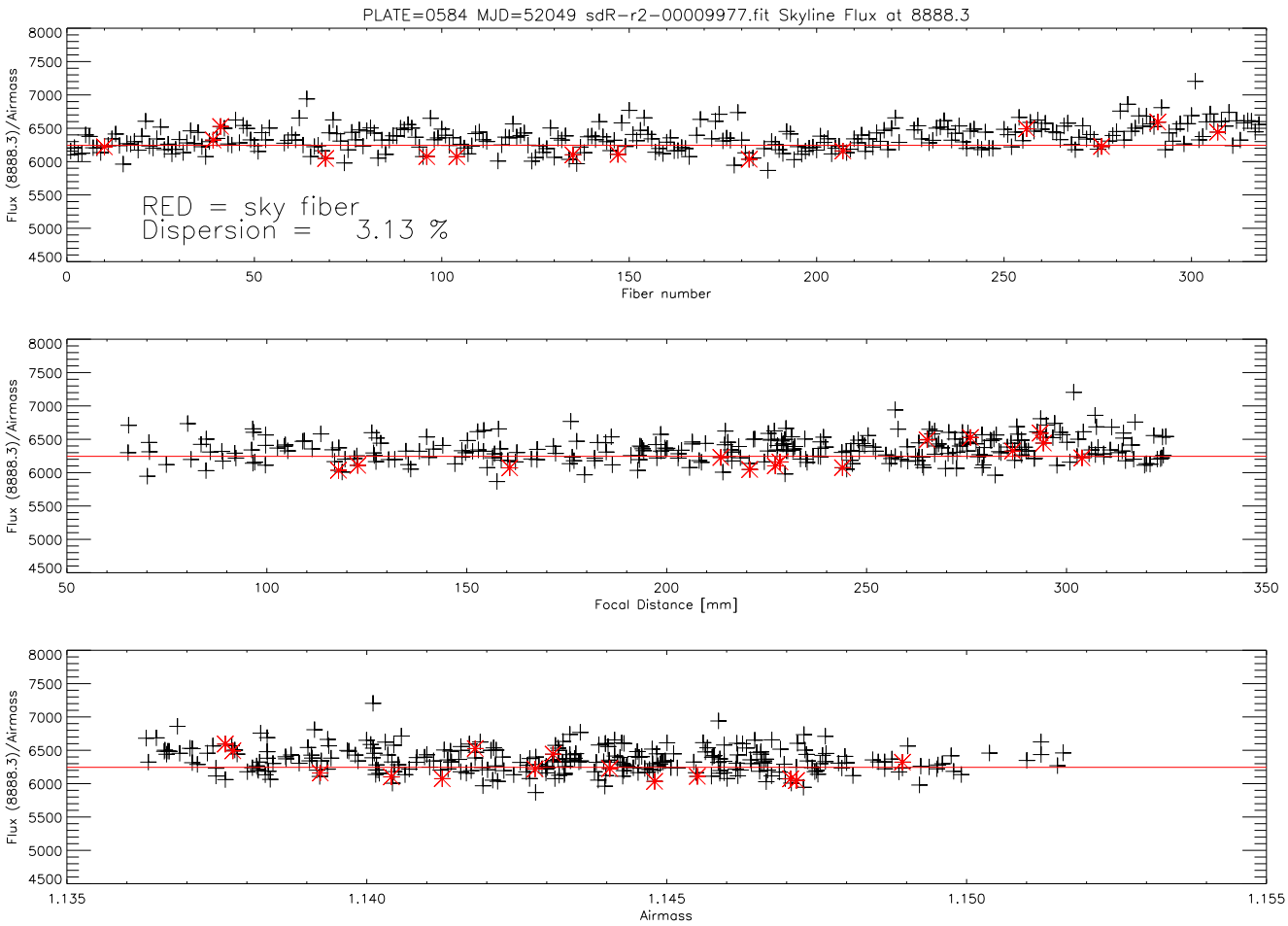

PLATE=0584 MJD=52049 sdR-r2-00009977.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

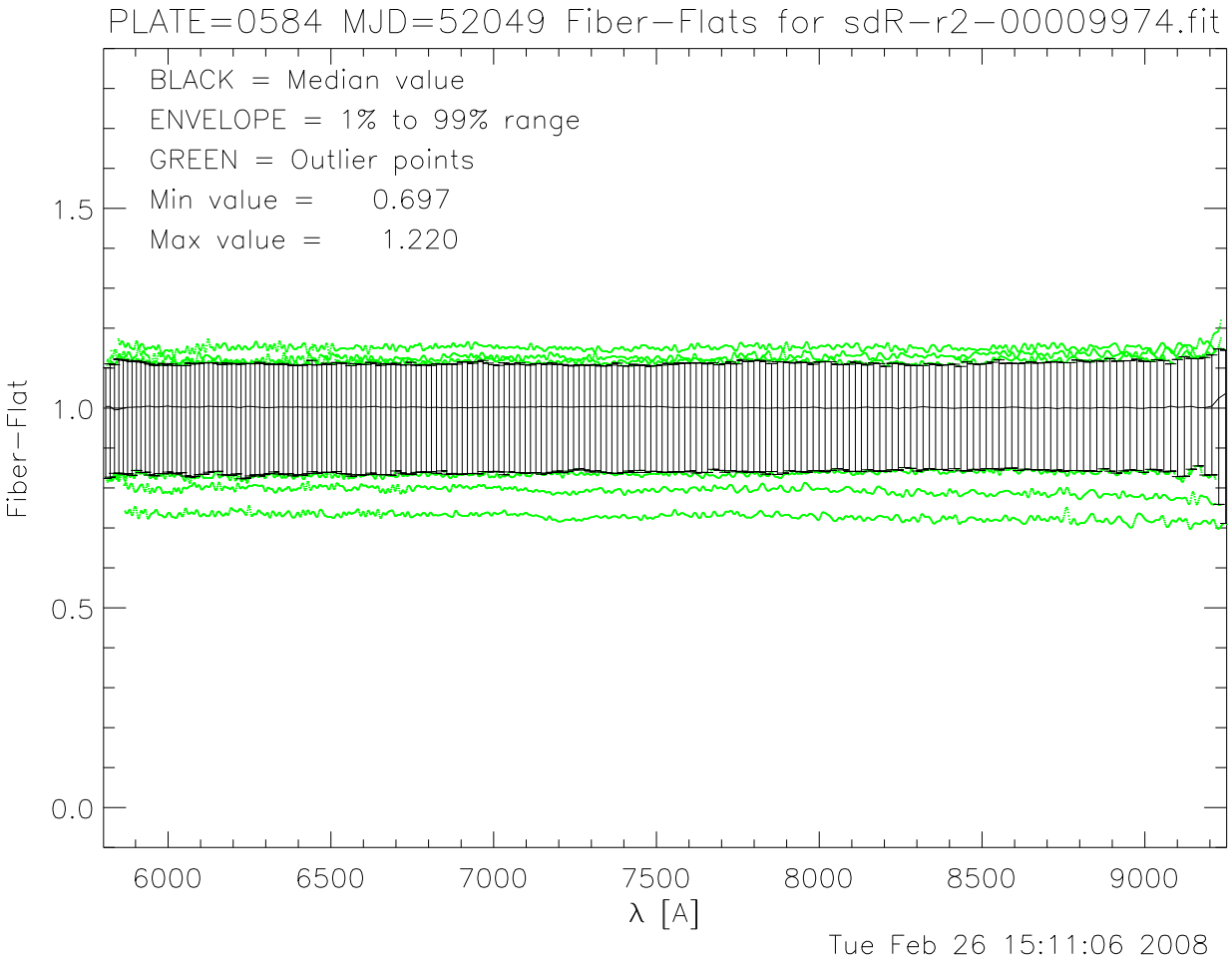

PLATE=0584 MJD=52049 sdR-r2-00009977.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

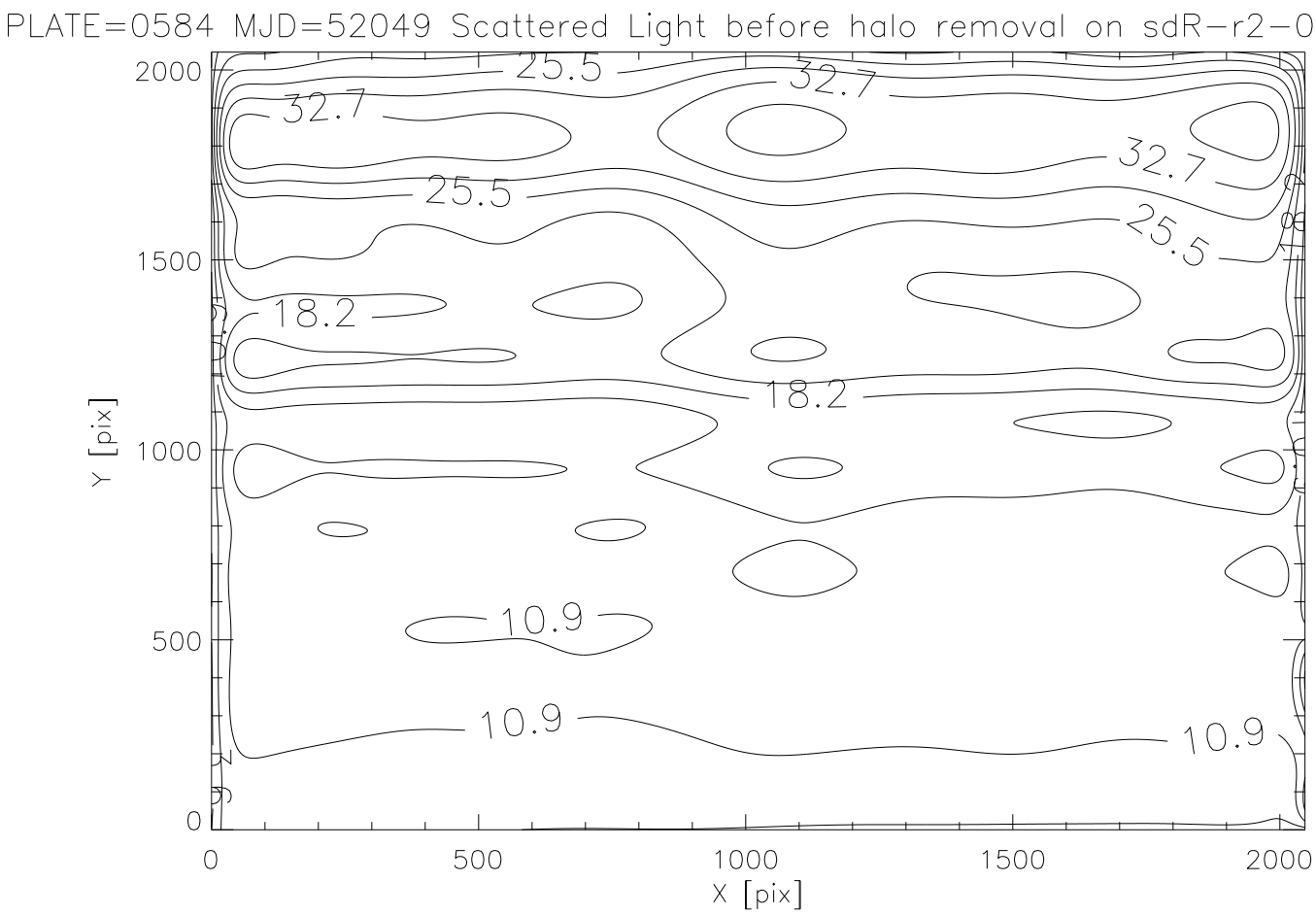

PLATE=0584 MJD=52049 sdR-r2-00009977.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

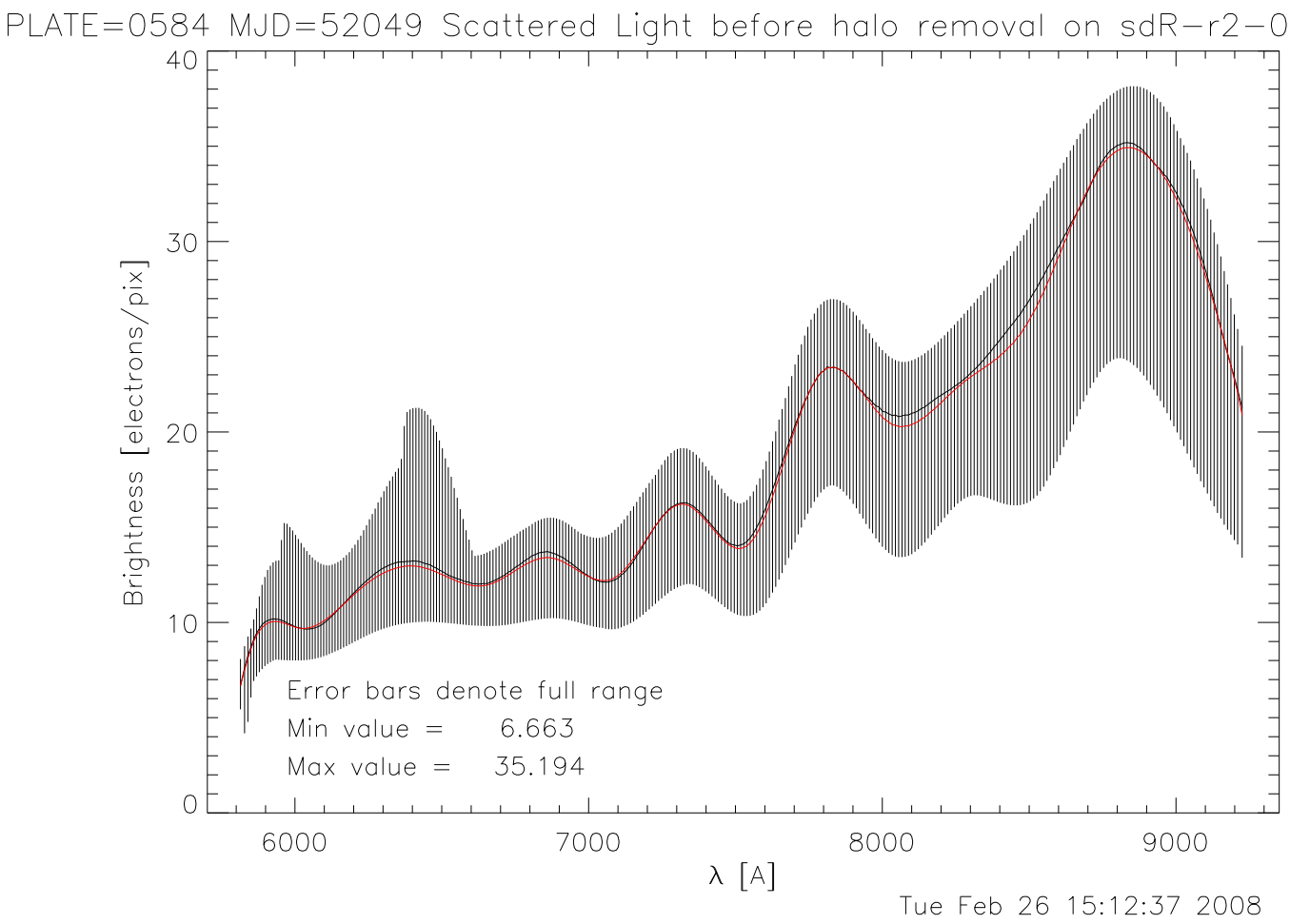

Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009977.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

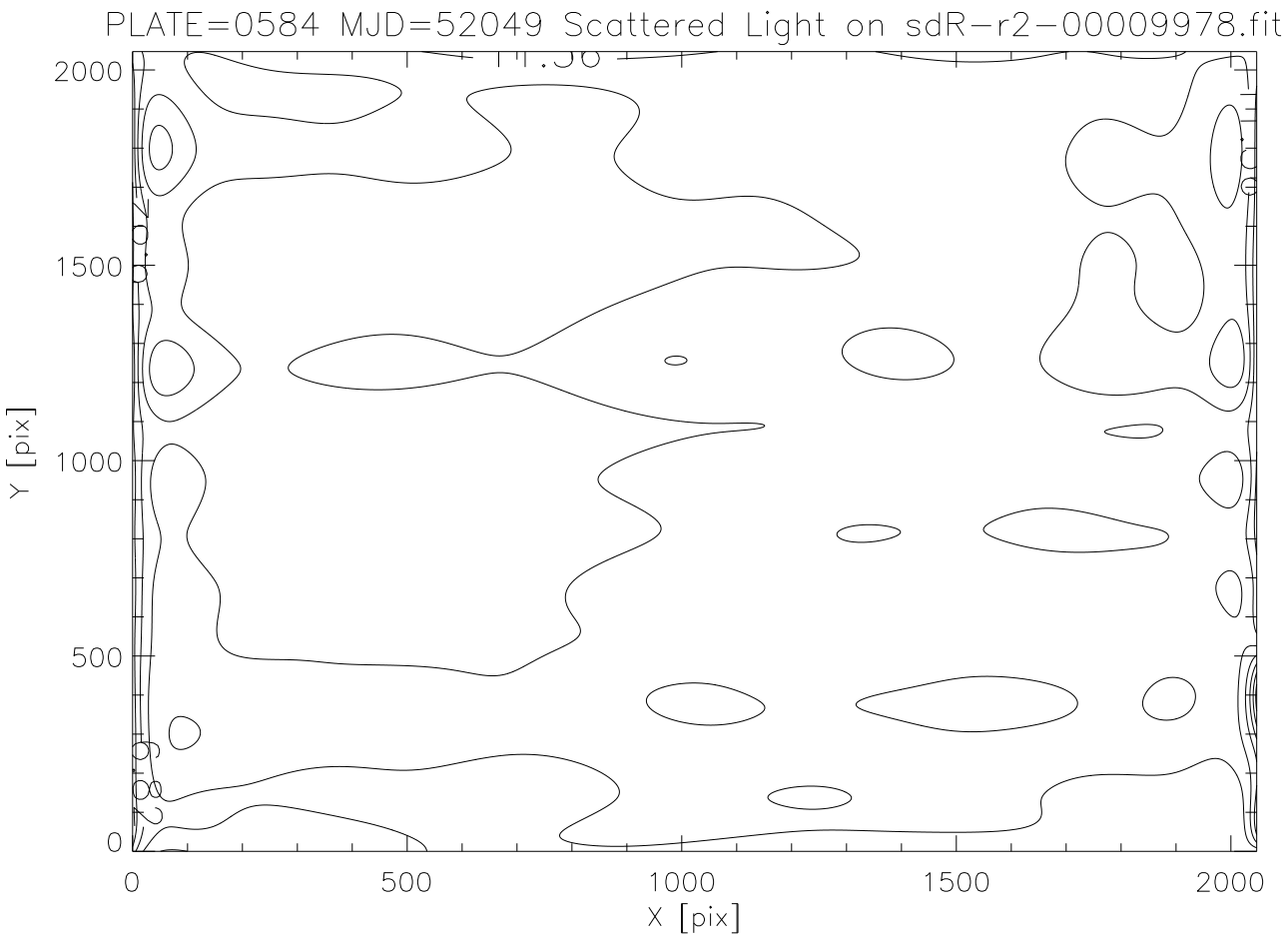

PLATE=0584 MJD=52049 sdR-r2-00009977.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.00 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

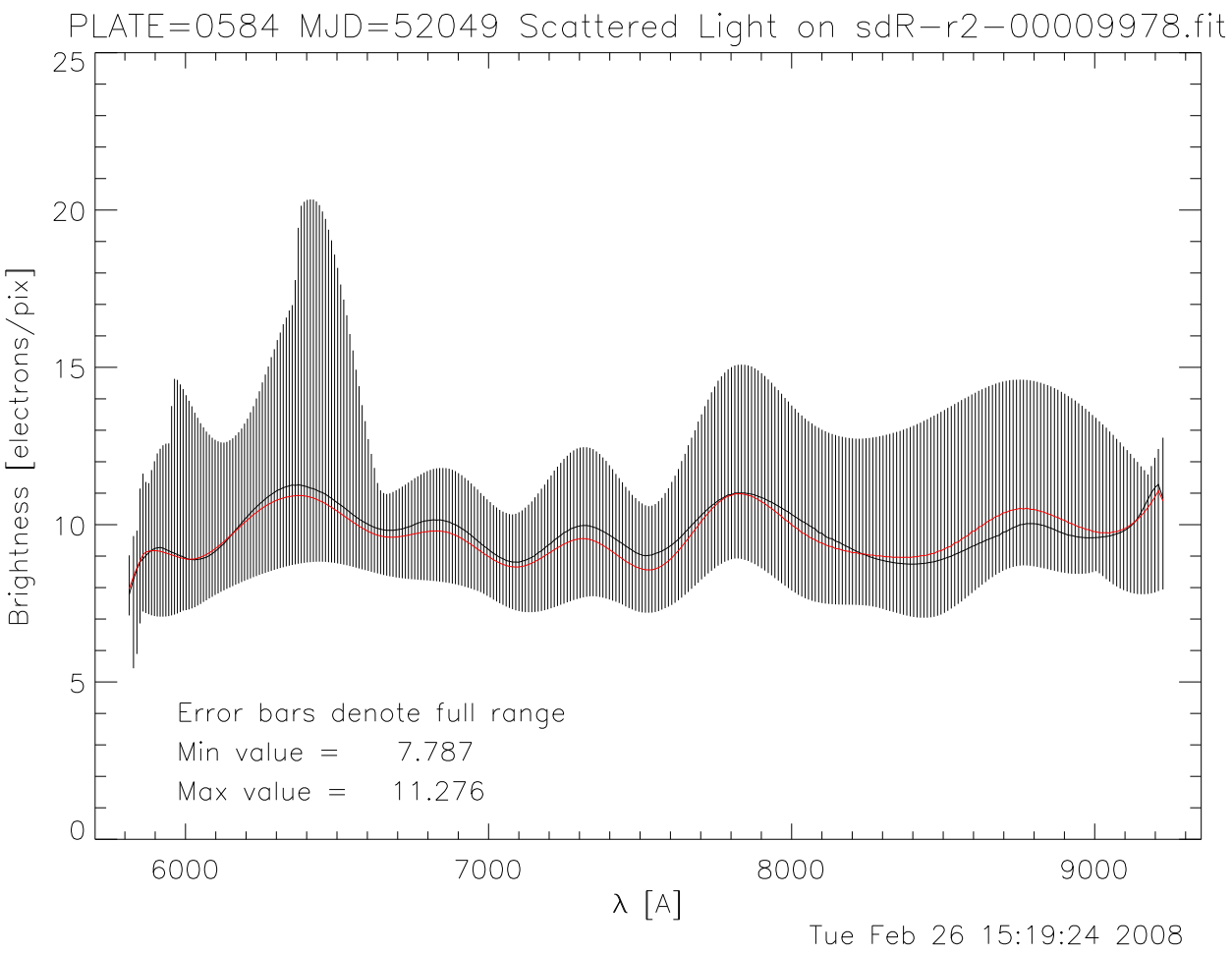

PLATE=0584 MJD=52049 sdR-r2-00009977.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.13 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

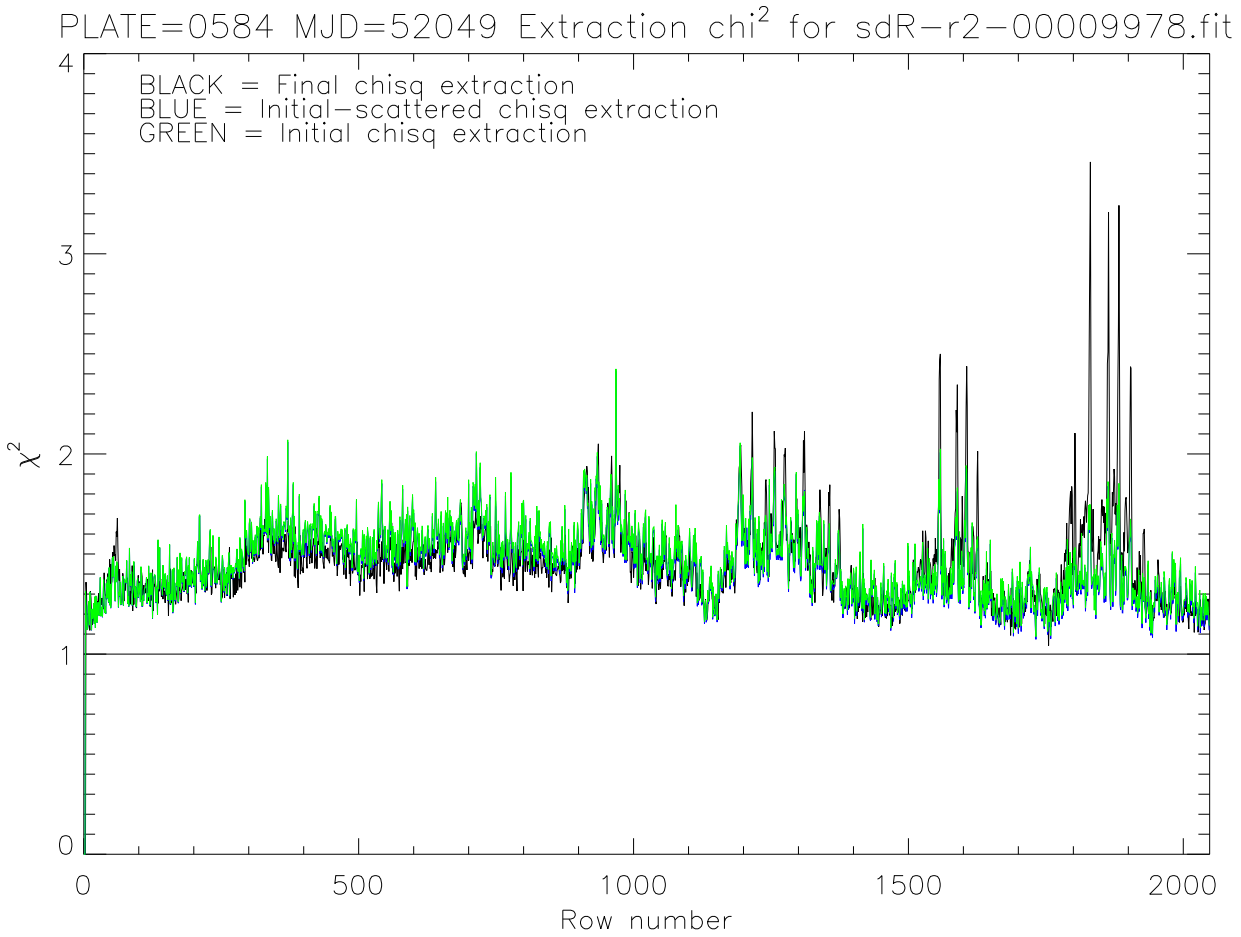

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r2−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.697
Max value = 1.220
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 15:11:06 2008

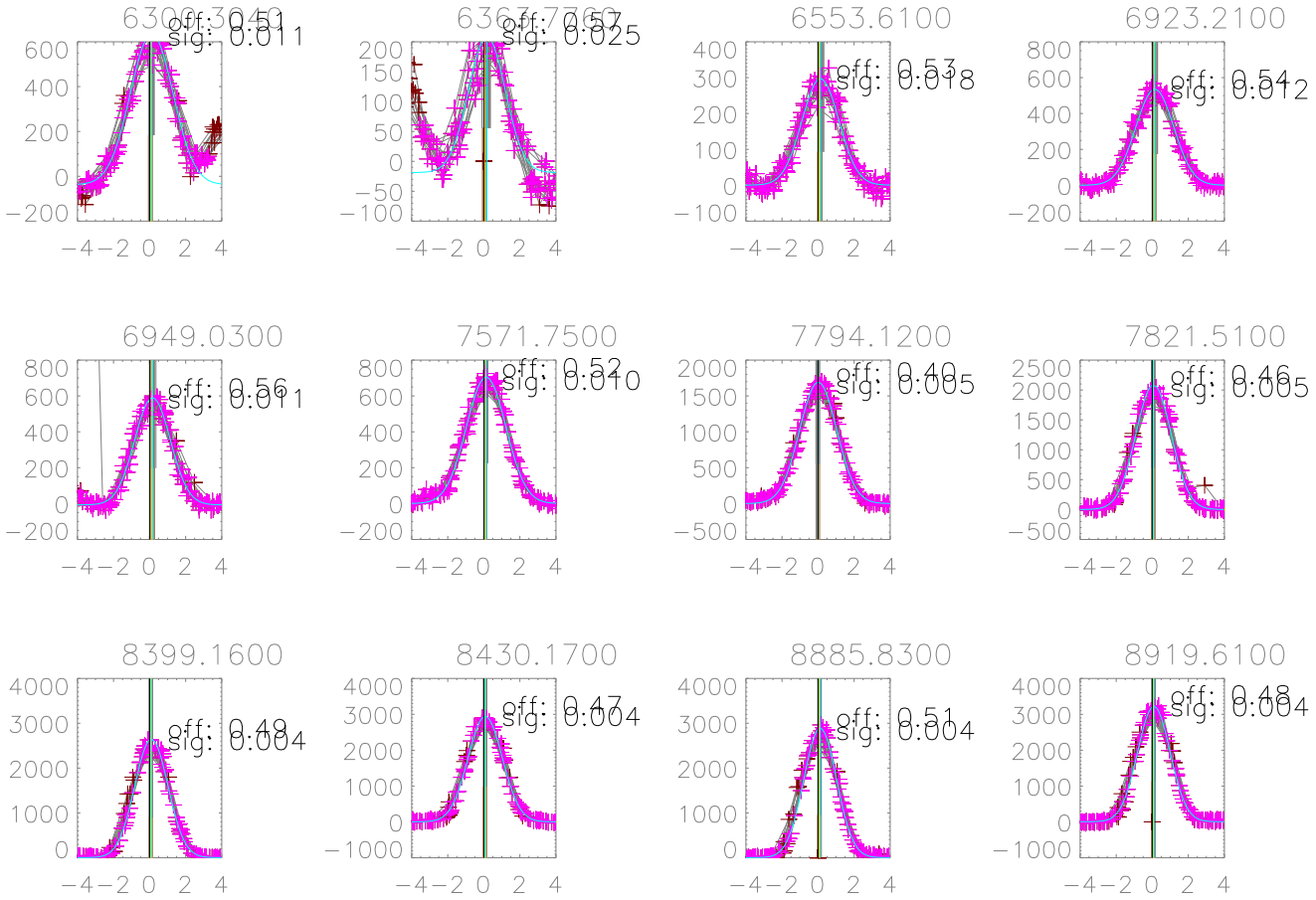

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009978.fi
25.5
32.7
32.7
32.7
25.5
25.5
18.2
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

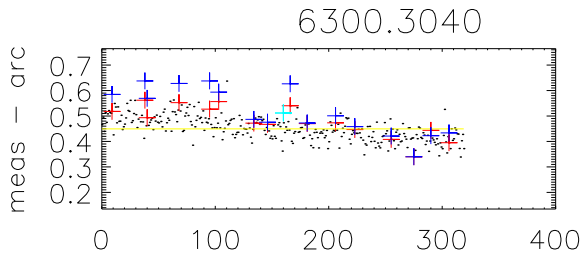

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009978.fi
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.663
Max value = 35.194
Tue Feb 26 15:12:37 2008

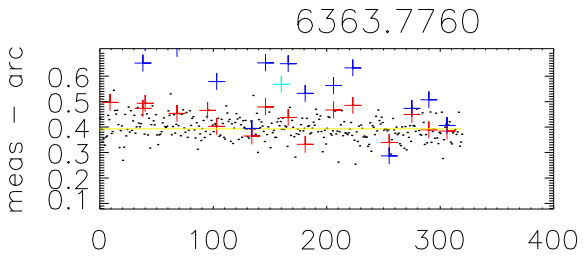

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009978.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

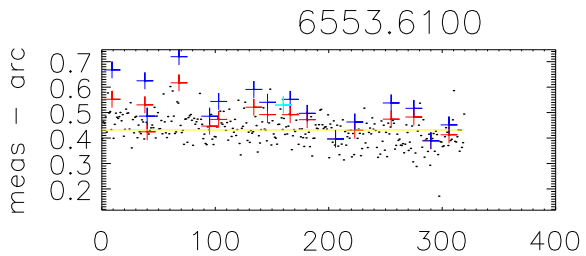

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009978.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.787
Max value = 11.276
Tue Feb 26 15:19:24 2008

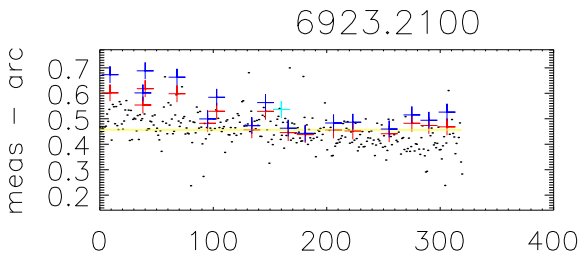

PLATE=0584 MJD=52049 Extraction chi^2 for sdR-r2-00009978.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

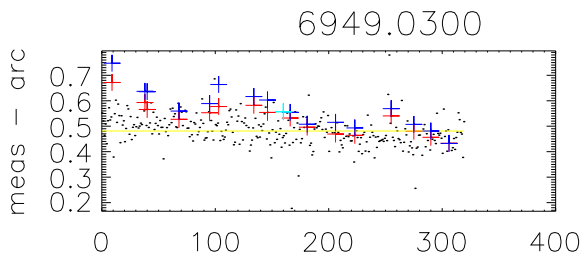

6306.3050
off: 0.51
sig: 0.011
6363.7750
off: 0.37
sig: 0.025
6553.6100
off: 0.53
sig: 0.018
6923.2100
off: 0.54
sig: 0.012
6949.0300
off: 0.56
sig: 0.011
7571.7500
off: 0.52
sig: 0.010
7794.1200
off: 0.40
sig: 0.005
7821.5100
off: 0.46
sig: 0.005
8399.1600
off: 0.48
sig: 0.004
8430.1700
off: 0.47
sig: 0.004
8885.8300
off: 0.51
sig: 0.004
8919.6100
off: 0.48
sig: 0.004

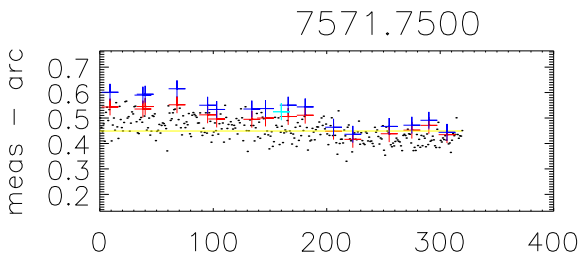

6300.3040
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

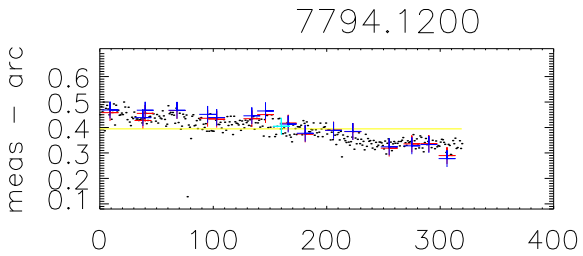

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

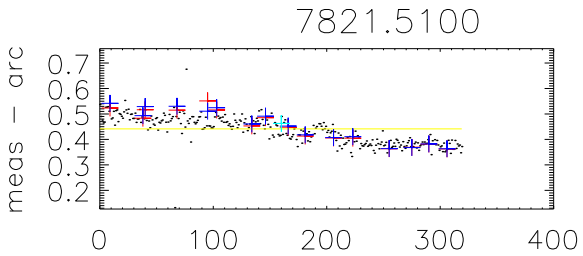

6553.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

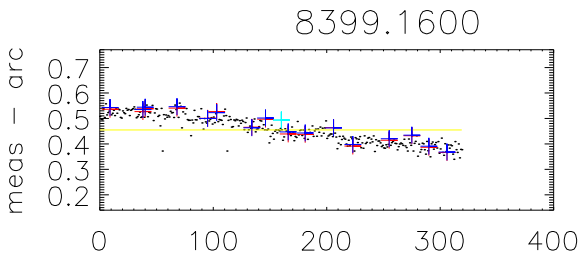

6923.2100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

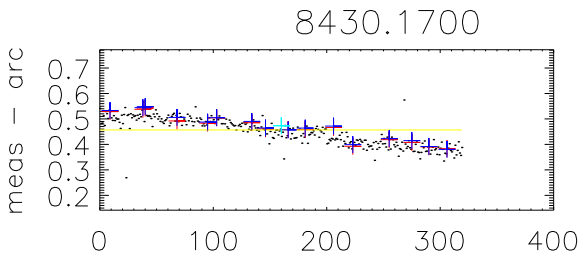

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

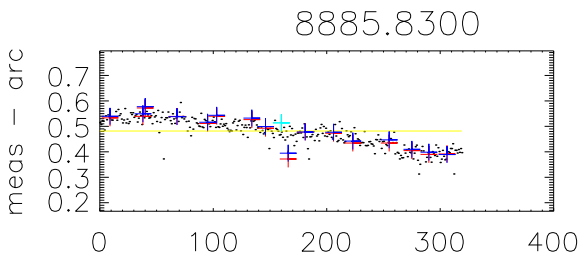

7571.7500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

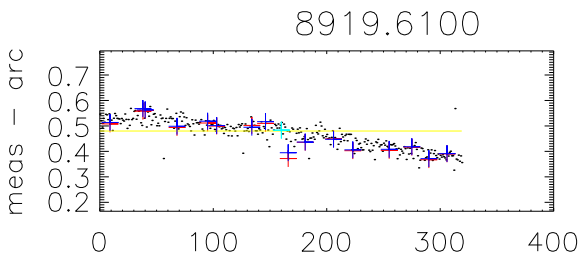

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

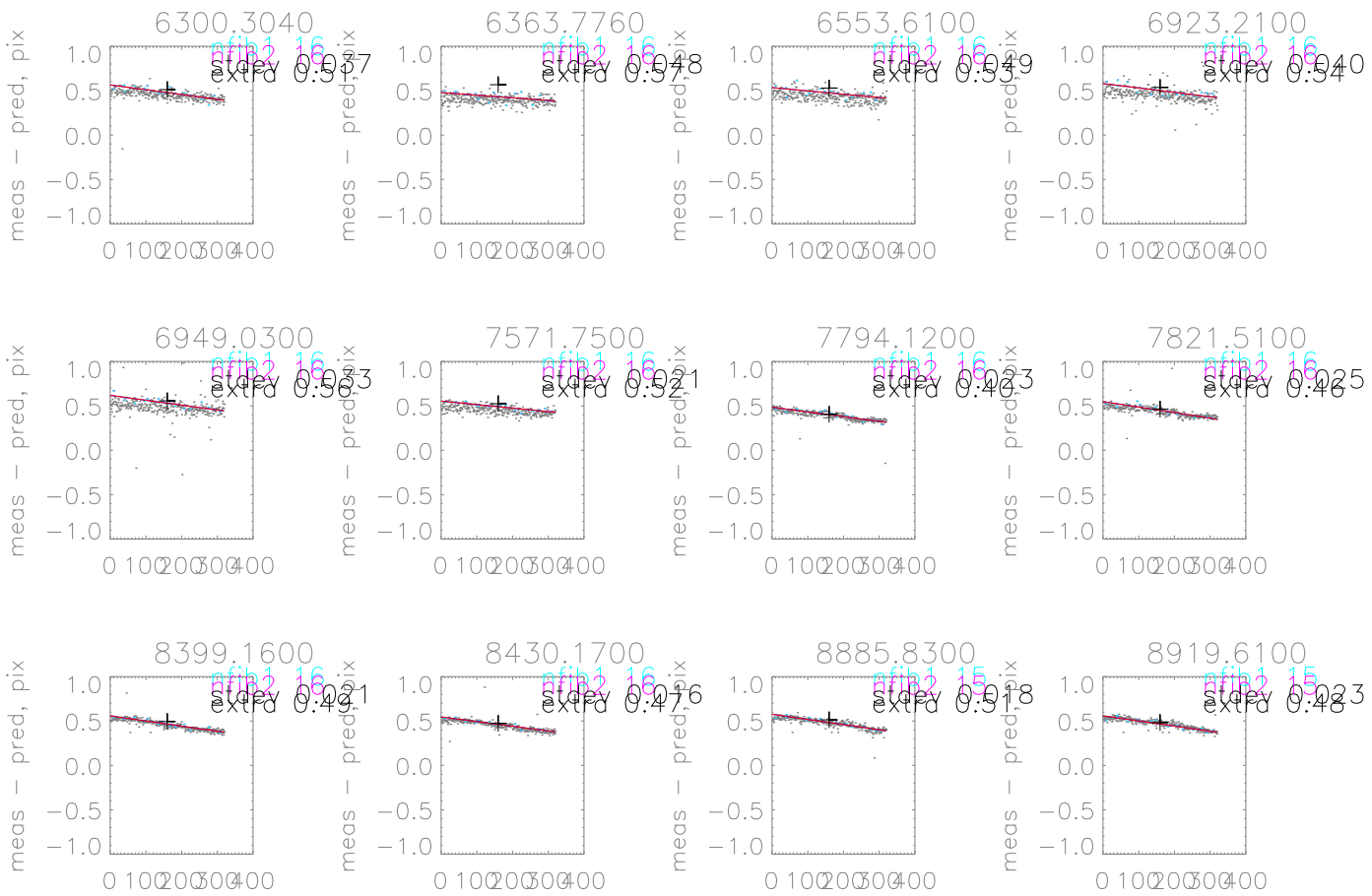

7821.5100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

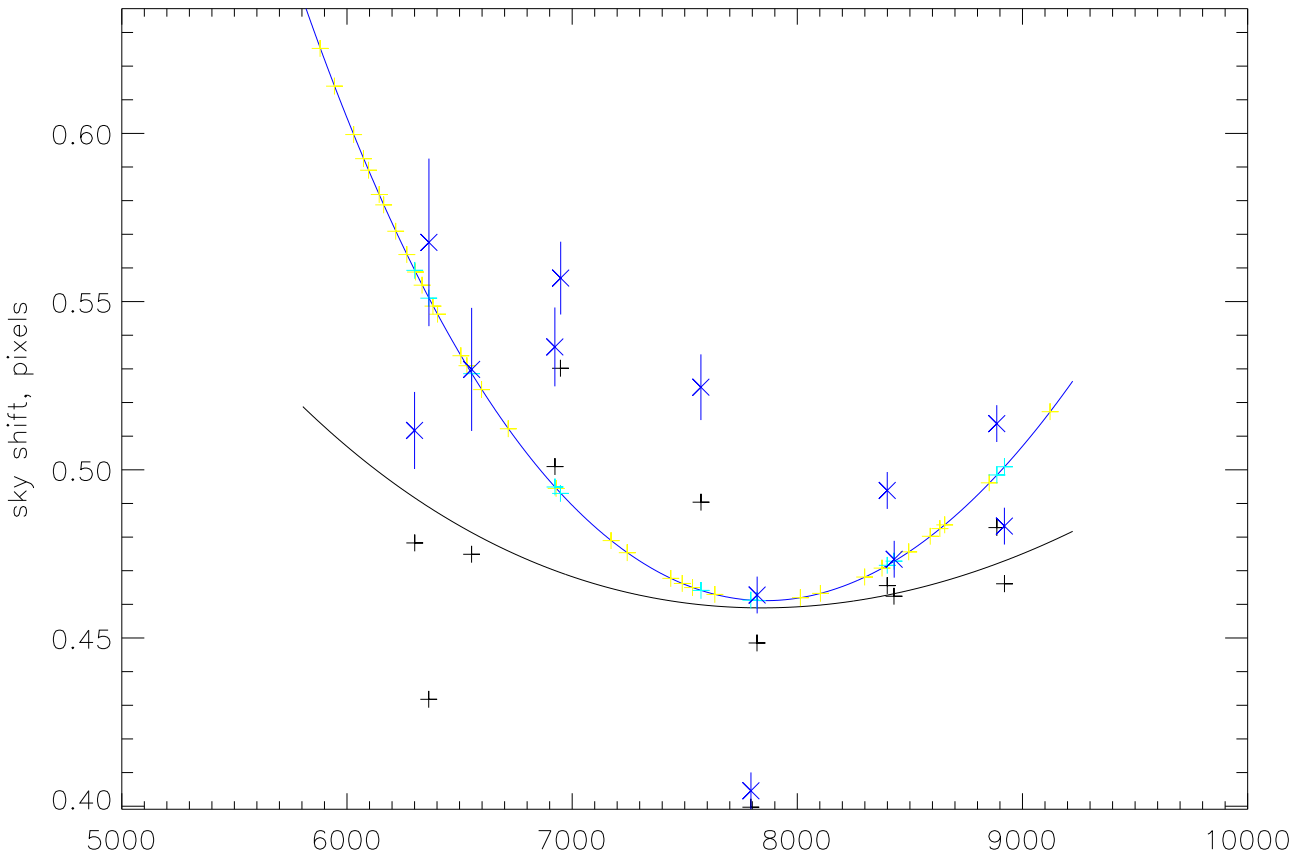

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

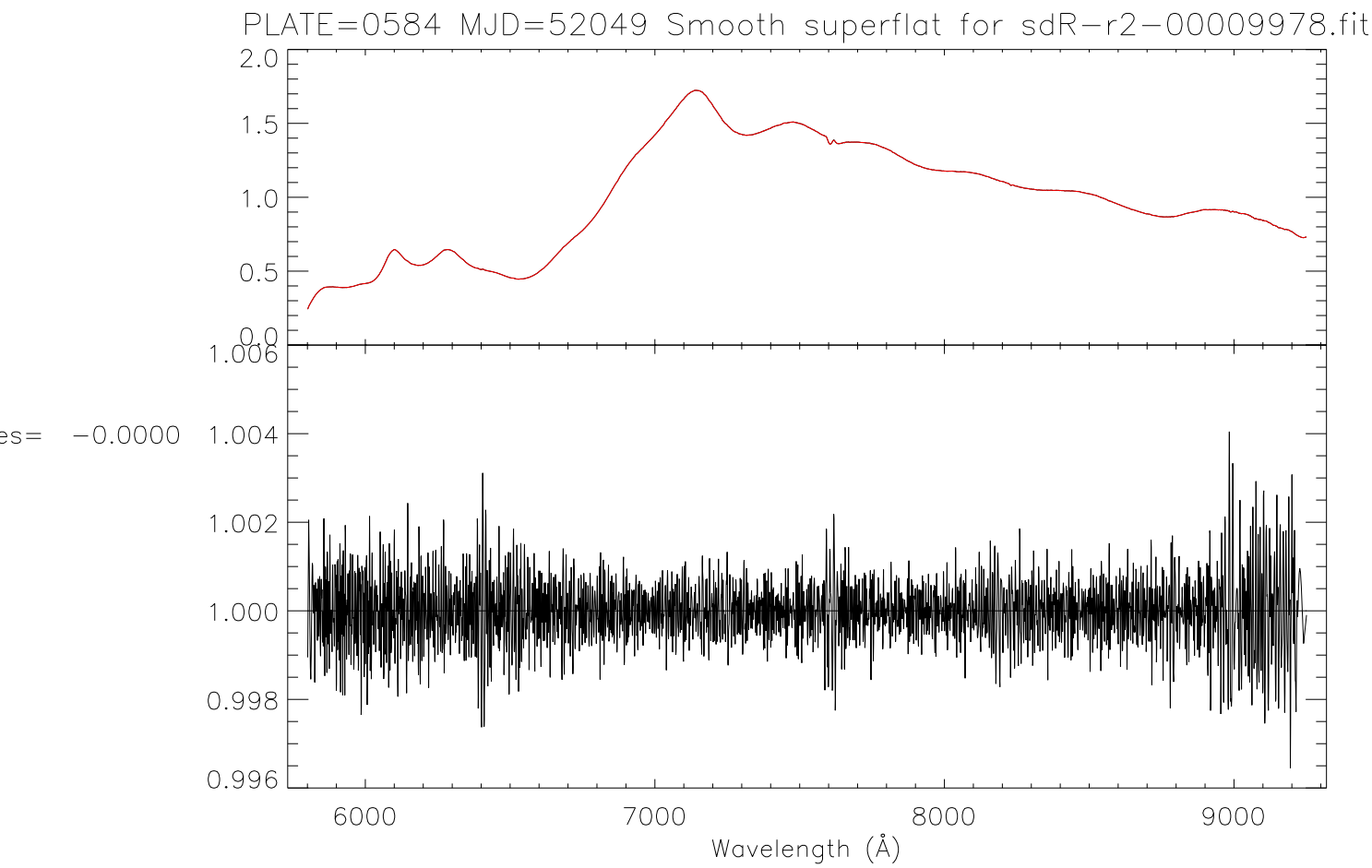

8430.1700
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

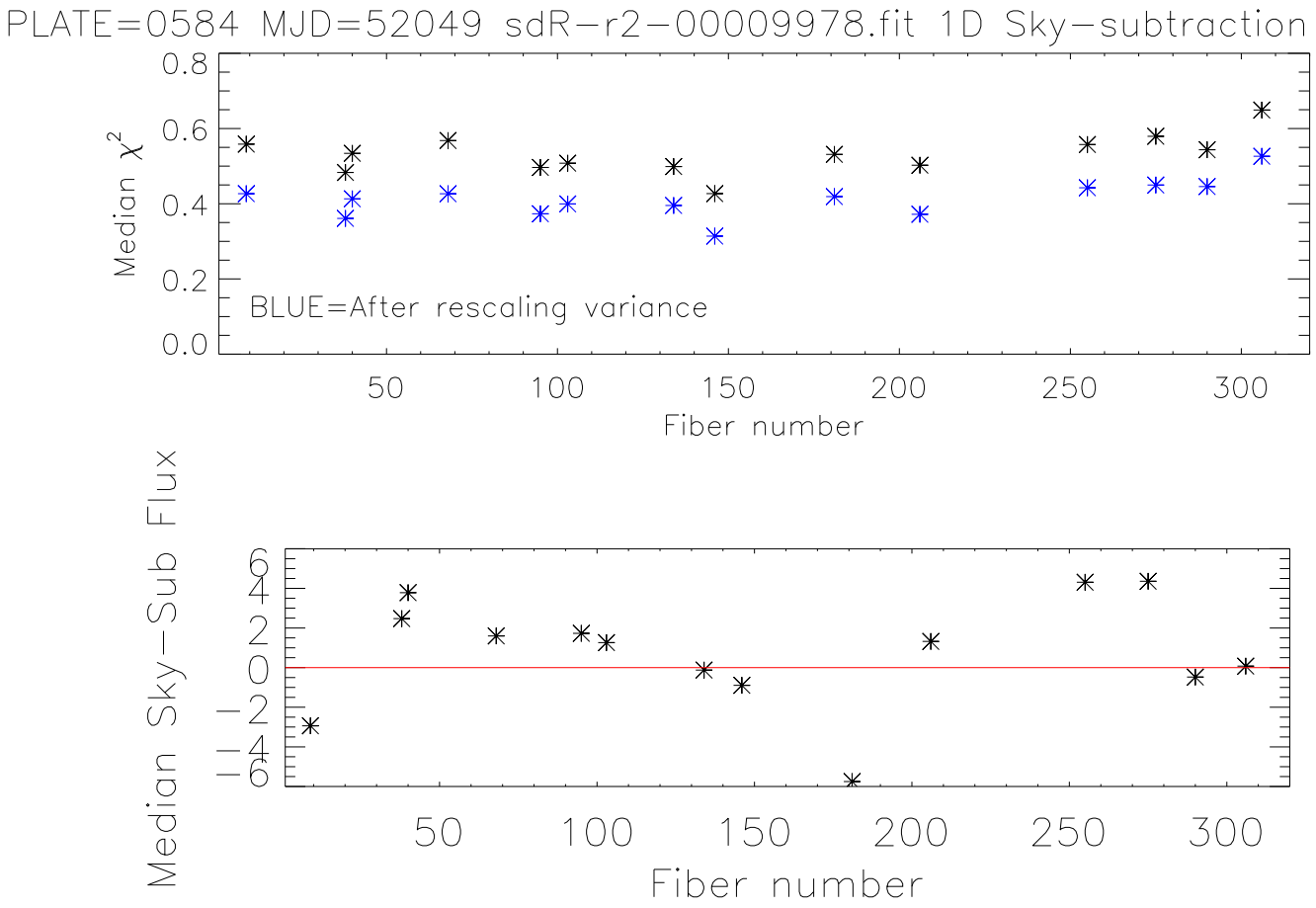

8885.8300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


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

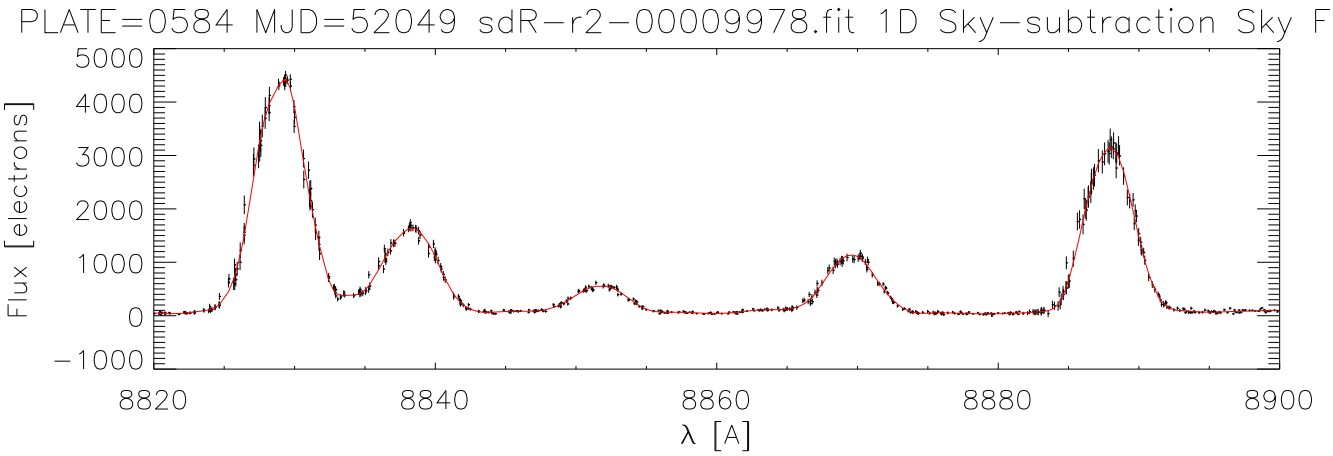

6300.3040
mfhd2 16
stdev 0.037
extra 0.51
6363.7760
mfhd2 16
stdev 0.048
extra 0.57
6553.6100
mfhd2 16
stdev 0.049
extra 0.53
6923.2100
mfhd2 16
stdev 0.040
extra 0.54
6949.0300
mfhd2 16
stdev 0.033
extra 0.56
7571.7500
mfhd2 16
stdev 0.021
extra 0.52
7794.1200
mfhd2 16
stdev 0.023
extra 0.46
7821.5100
mfhd2 16
stdev 0.025
extra 0.46
8399.1600
mfhd2 16
stdev 0.021
extra 0.49
8430.1700
mfhd2 16
stdev 0.076
extra 0.47
8885.8300
mfhd2 15
stdev 0.018
extra 0.51
8919.6100
mfhd2 15
stdev 0.023
extra 0.48
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

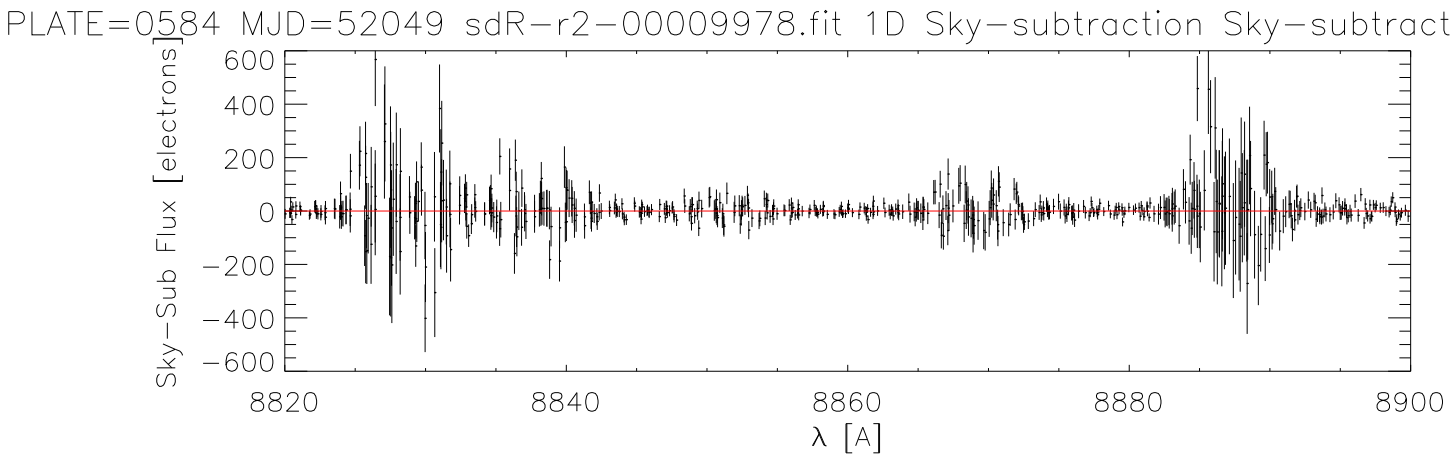

sky shift, pixels
0.60
0.55
0.50
0.45
0.40
5000
6000
7000
8000
9000
10000

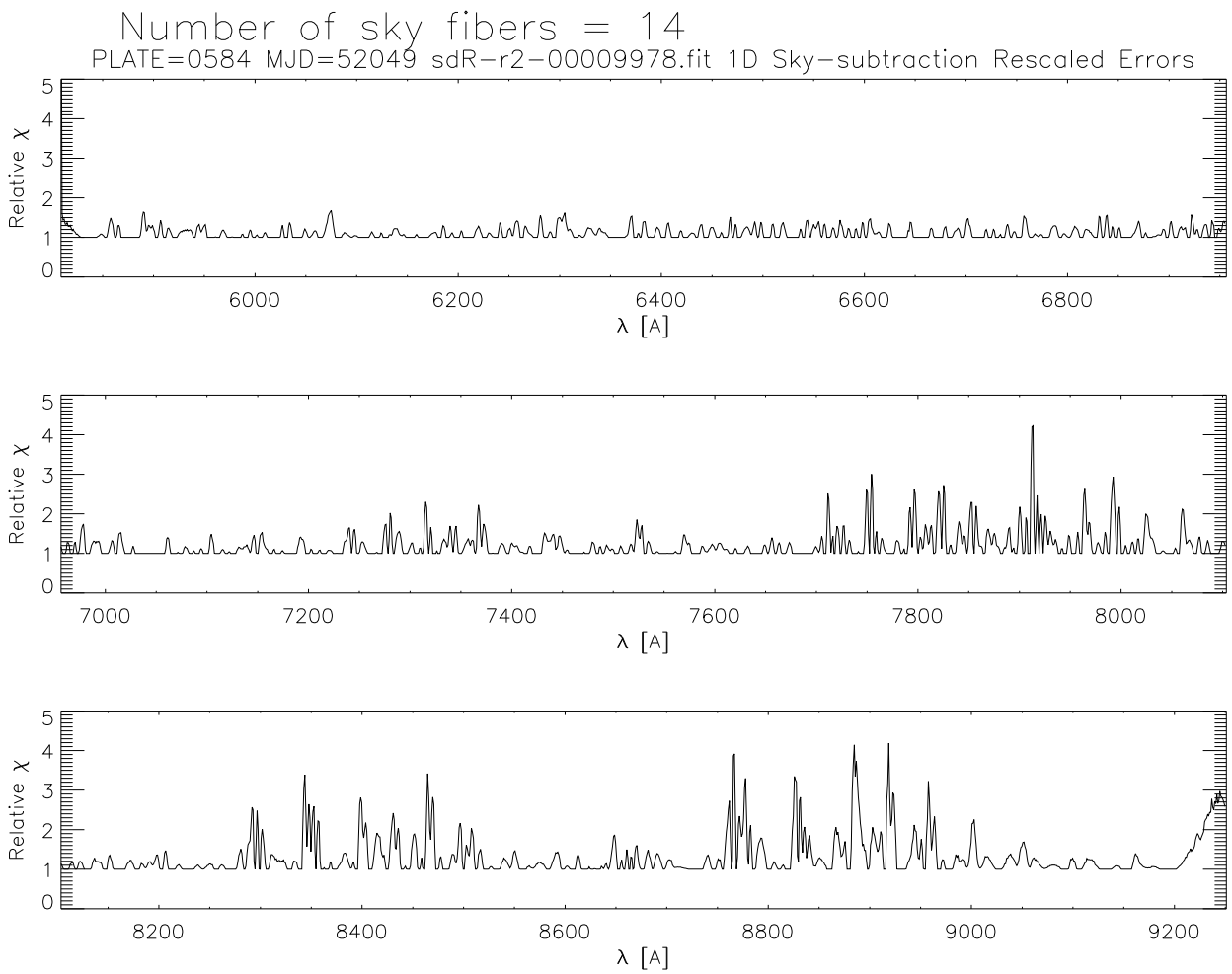

PLATE=0584 MJD=52049 Smooth superflat for sdR-r2-00009978.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.006
1.004
1.002
1.000
0.998
0.996
6000
7000
8000
9000
Wavelength (Å)

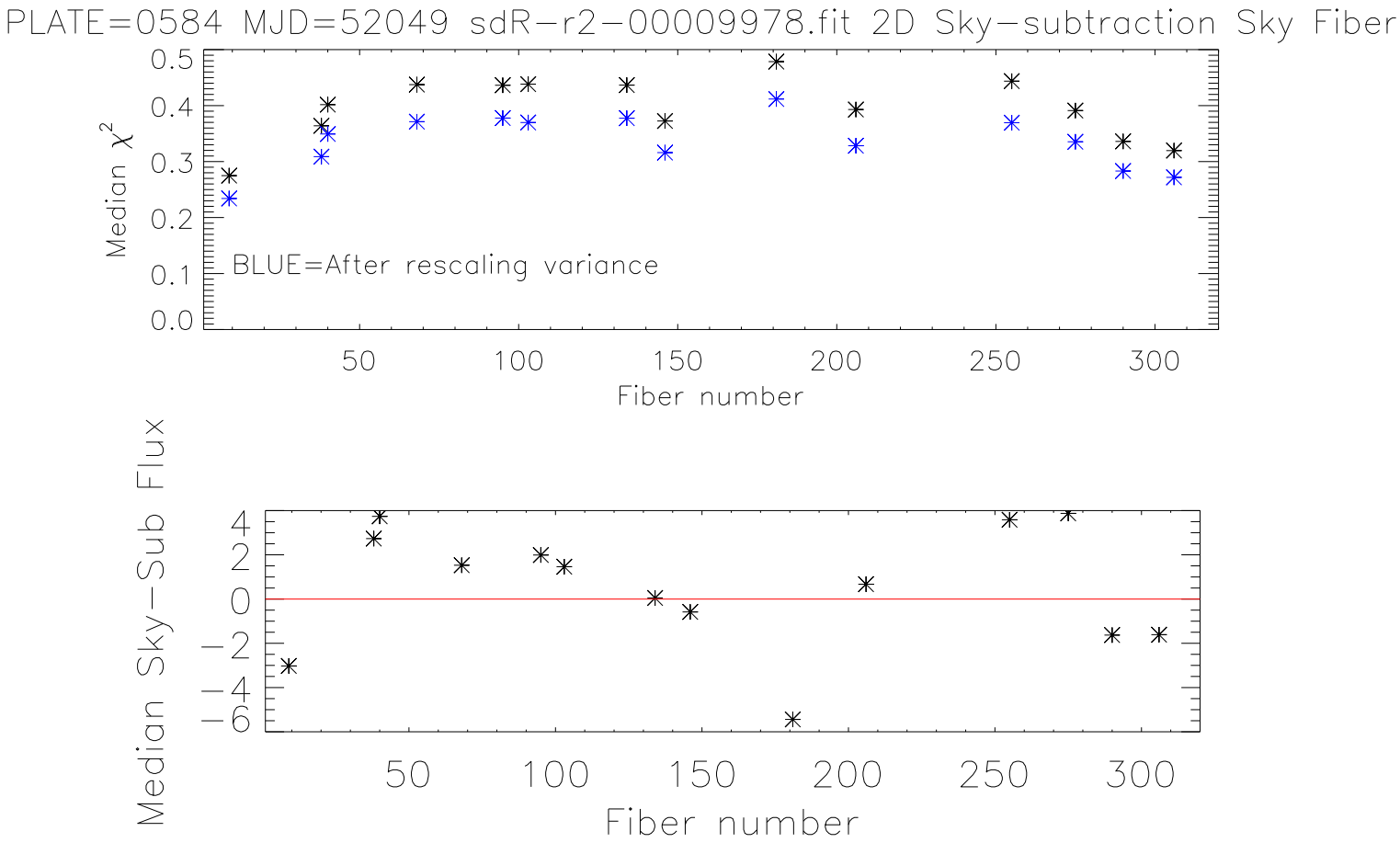

PLATE=0584 MJD=52049 sdR-r2-00009978.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

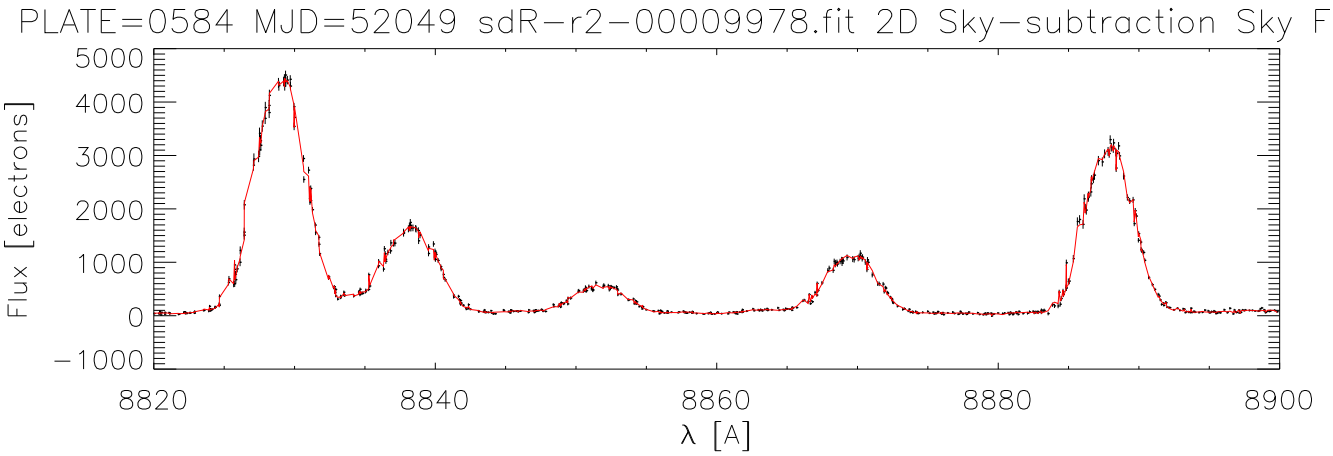
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

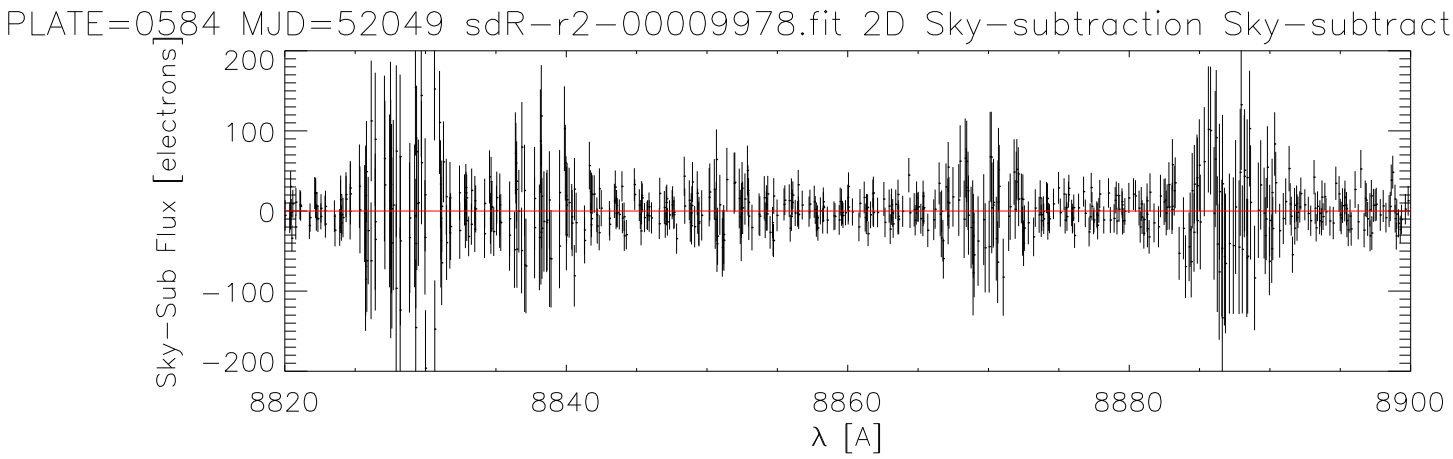

PLATE=0584 MJD=52049 sdR-r2-00009978.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

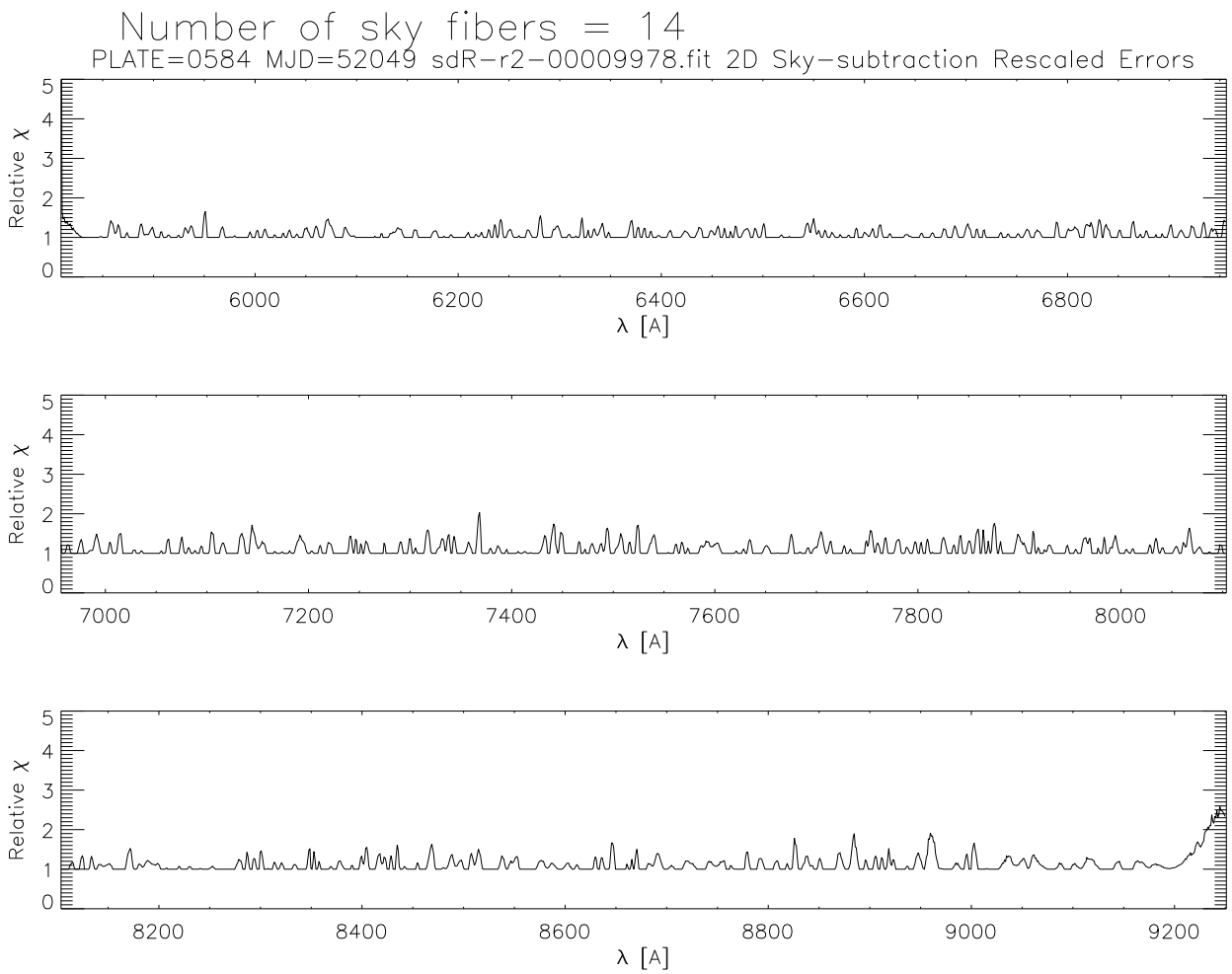

PLATE=0584 MJD=52049 sdR-r2-00009978.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
8820
8840
8860
8880
8900
λ [A]

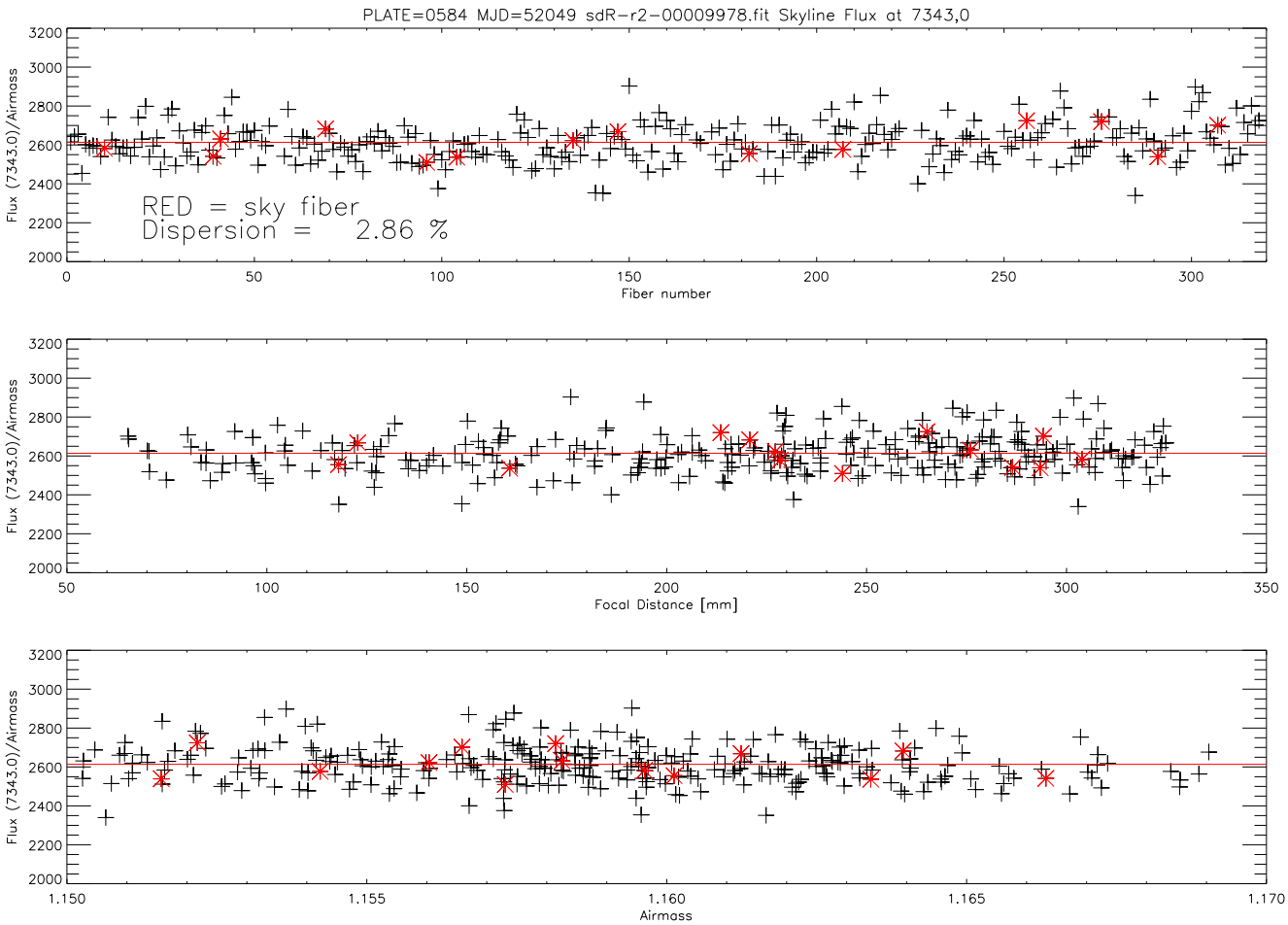

Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009978.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

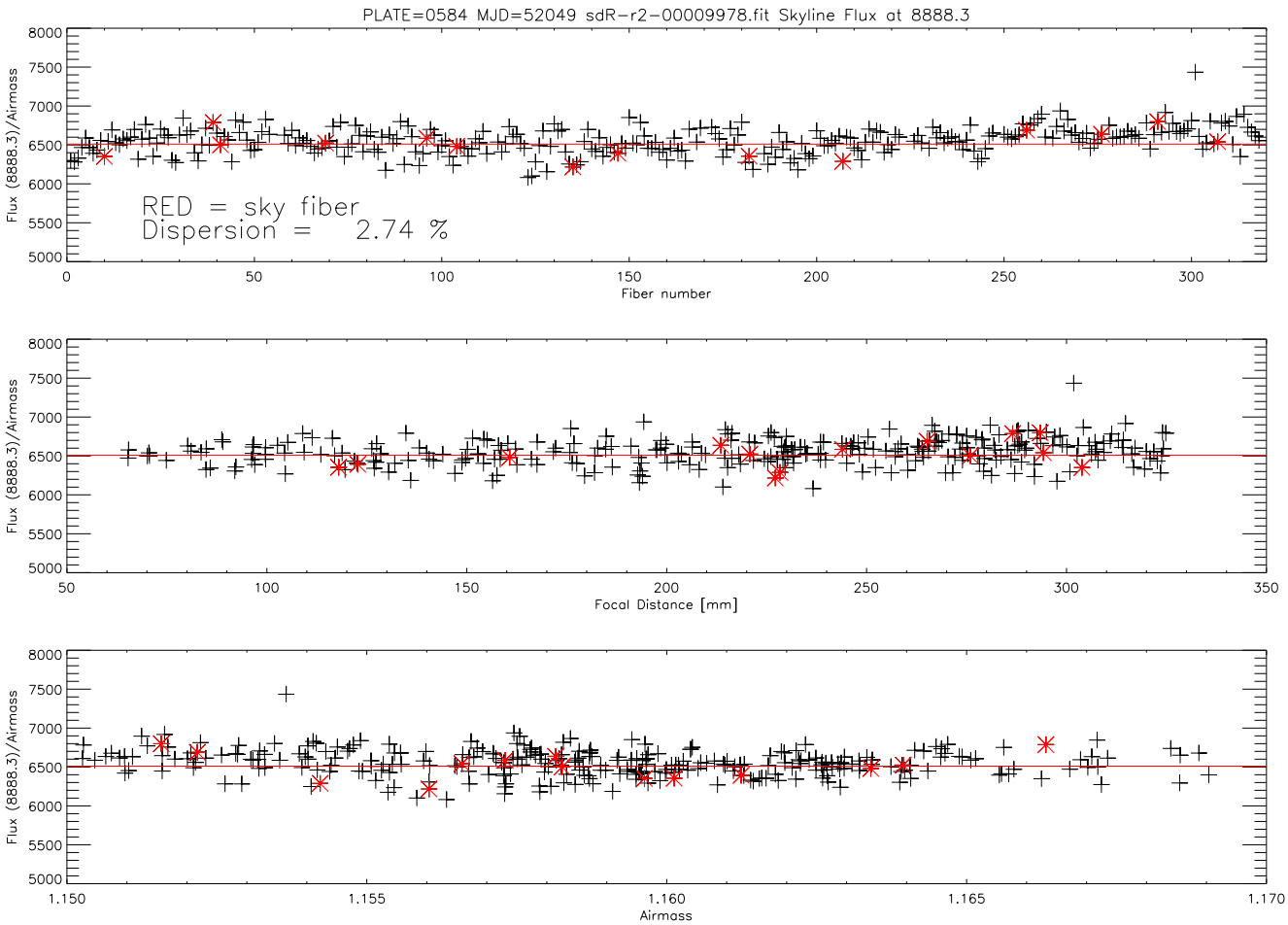

PLATE=0584 MJD=52049 sdR-r2-00009978.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

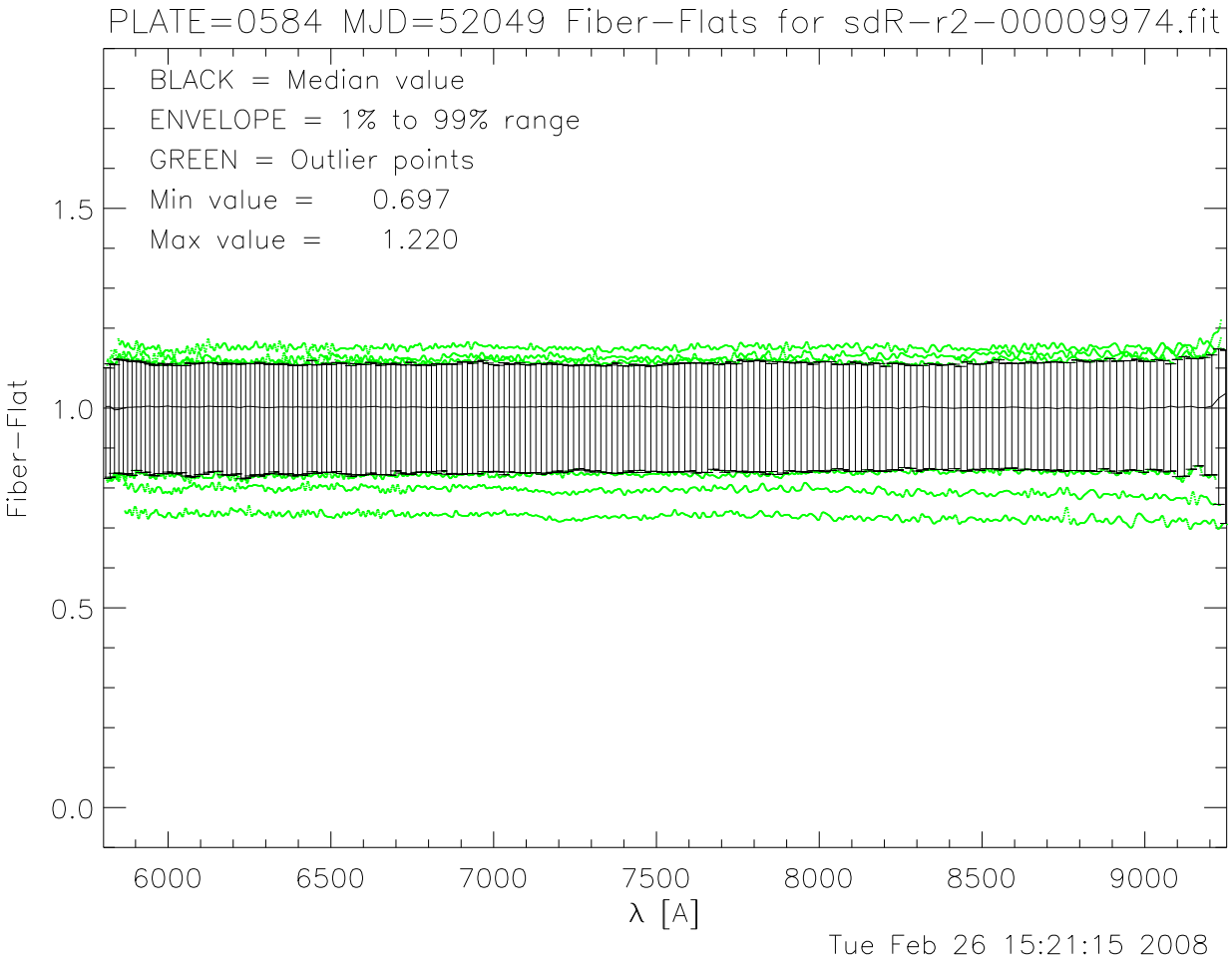

PLATE=0584 MJD=52049 sdR-r2-00009978.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

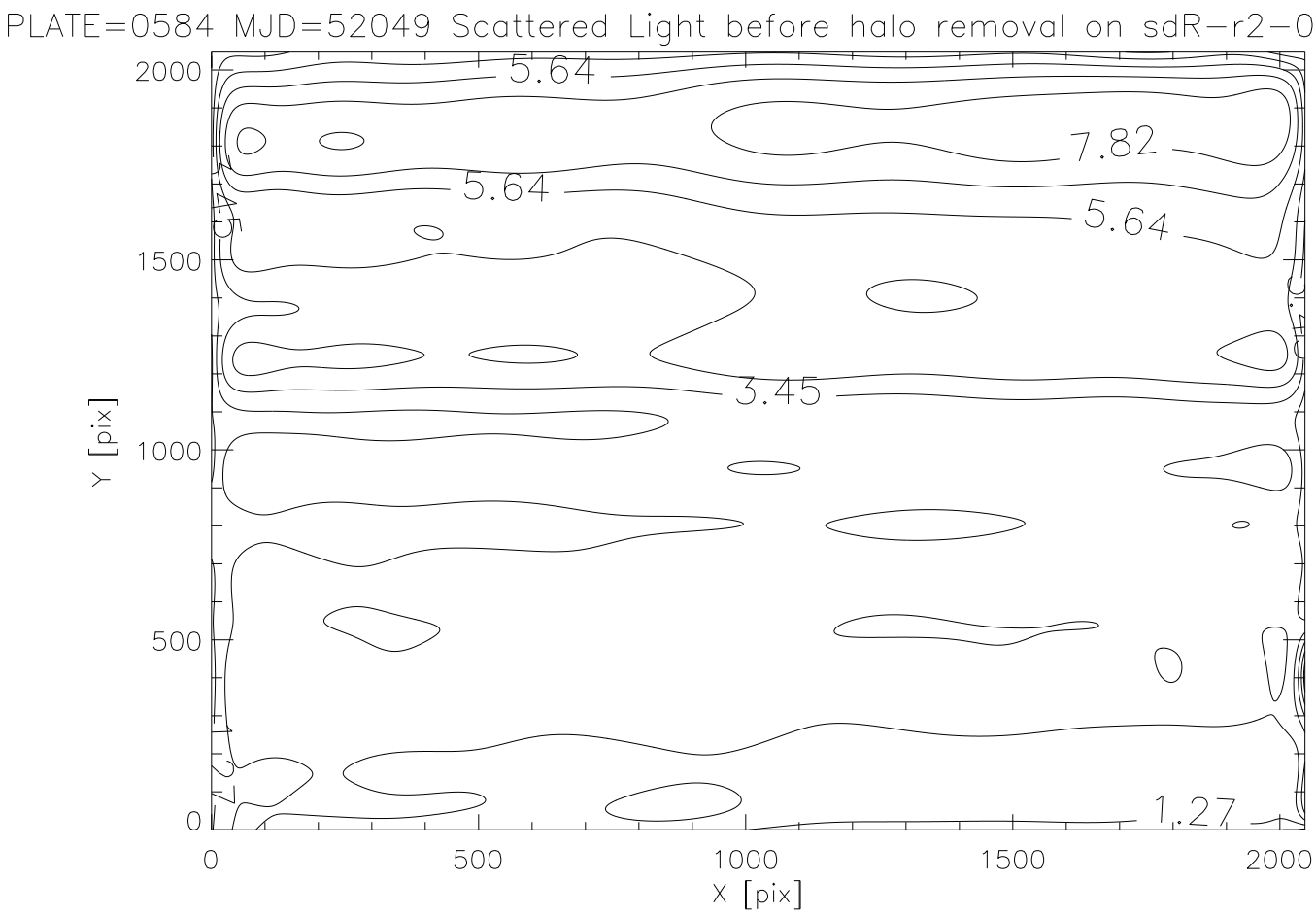

PLATE=0584 MJD=52049 sdR-r2-00009978.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

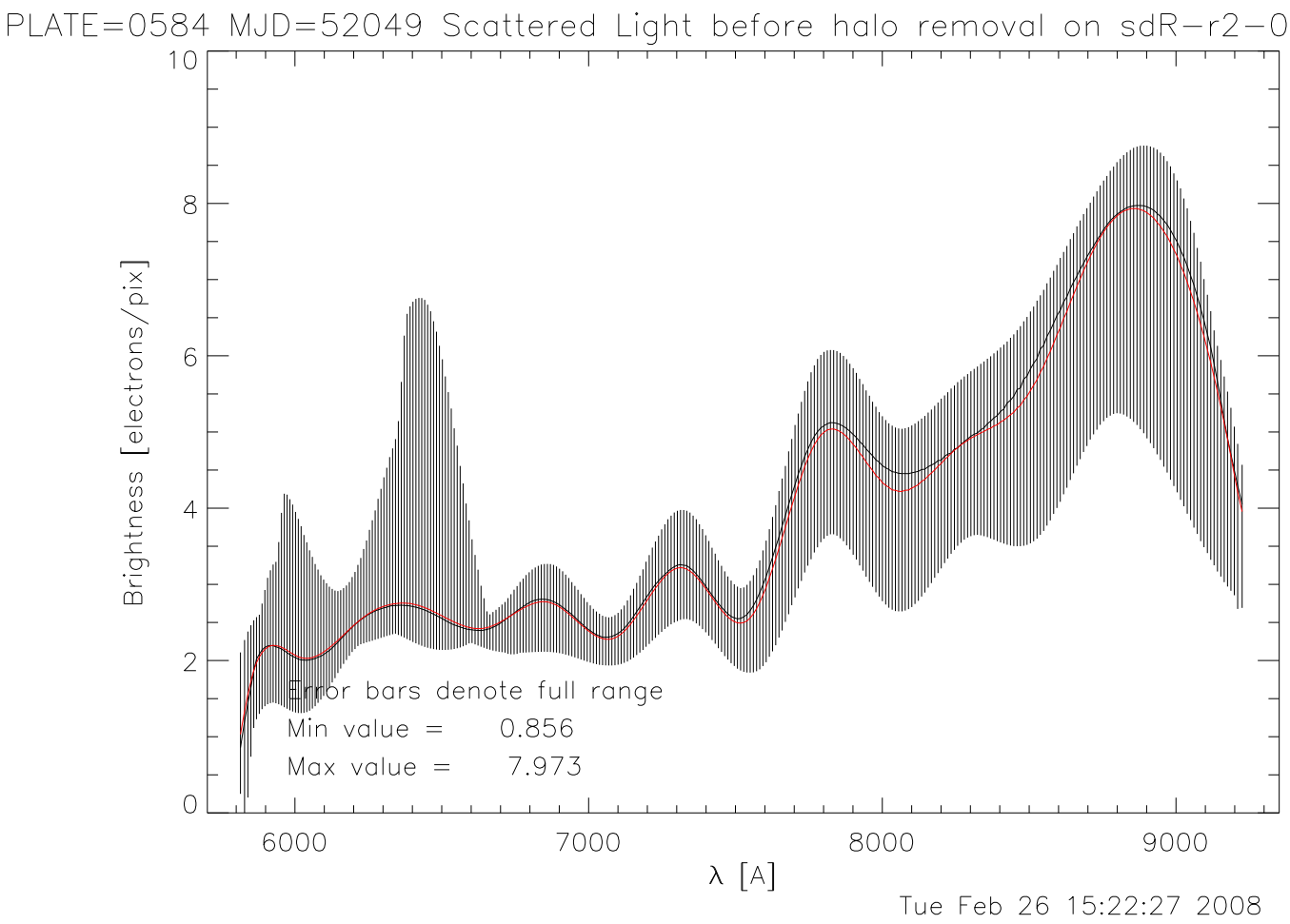

Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009978.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

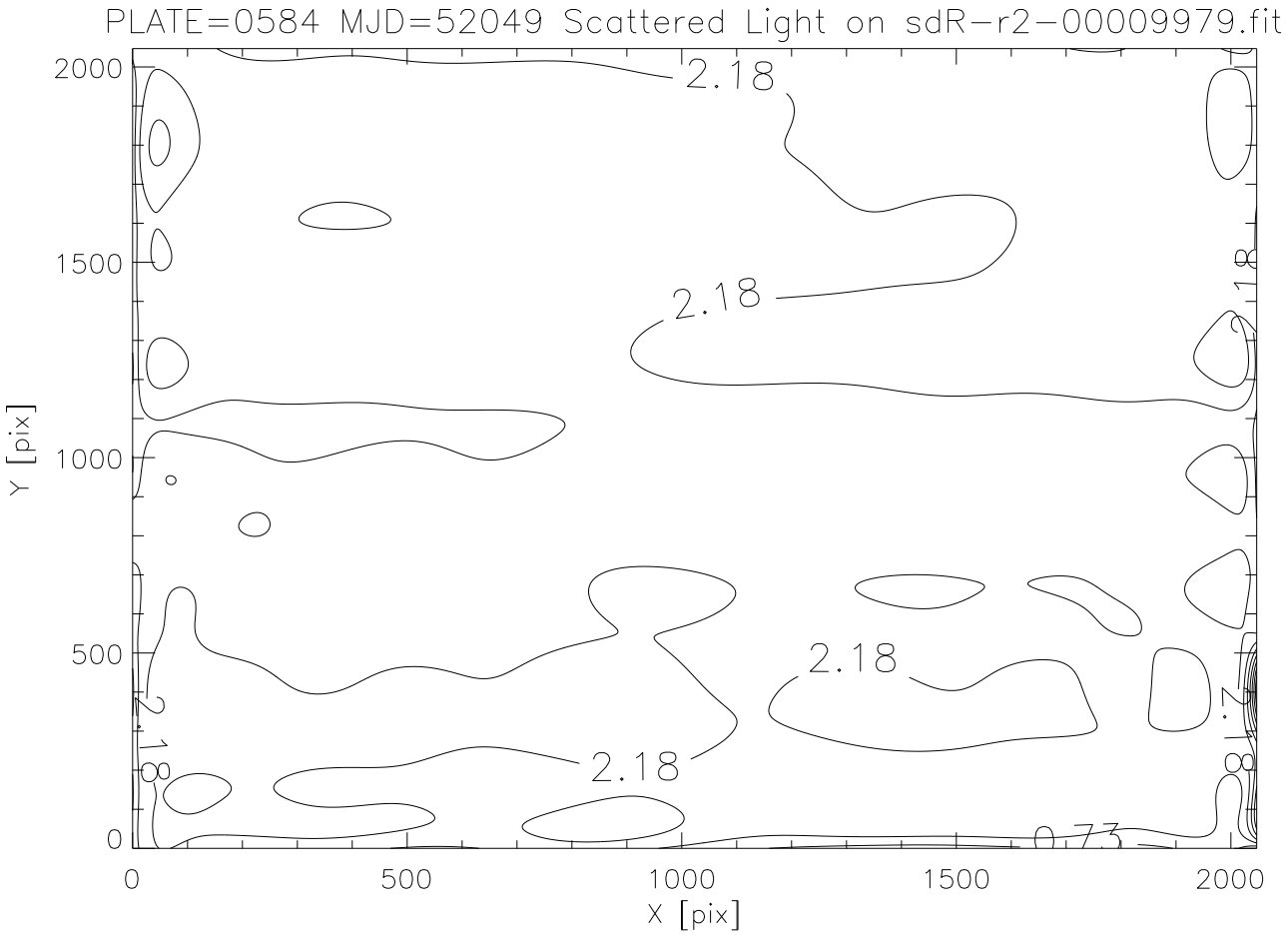

PLATE=0584 MJD=52049 sdR-r2-00009978.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.86 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

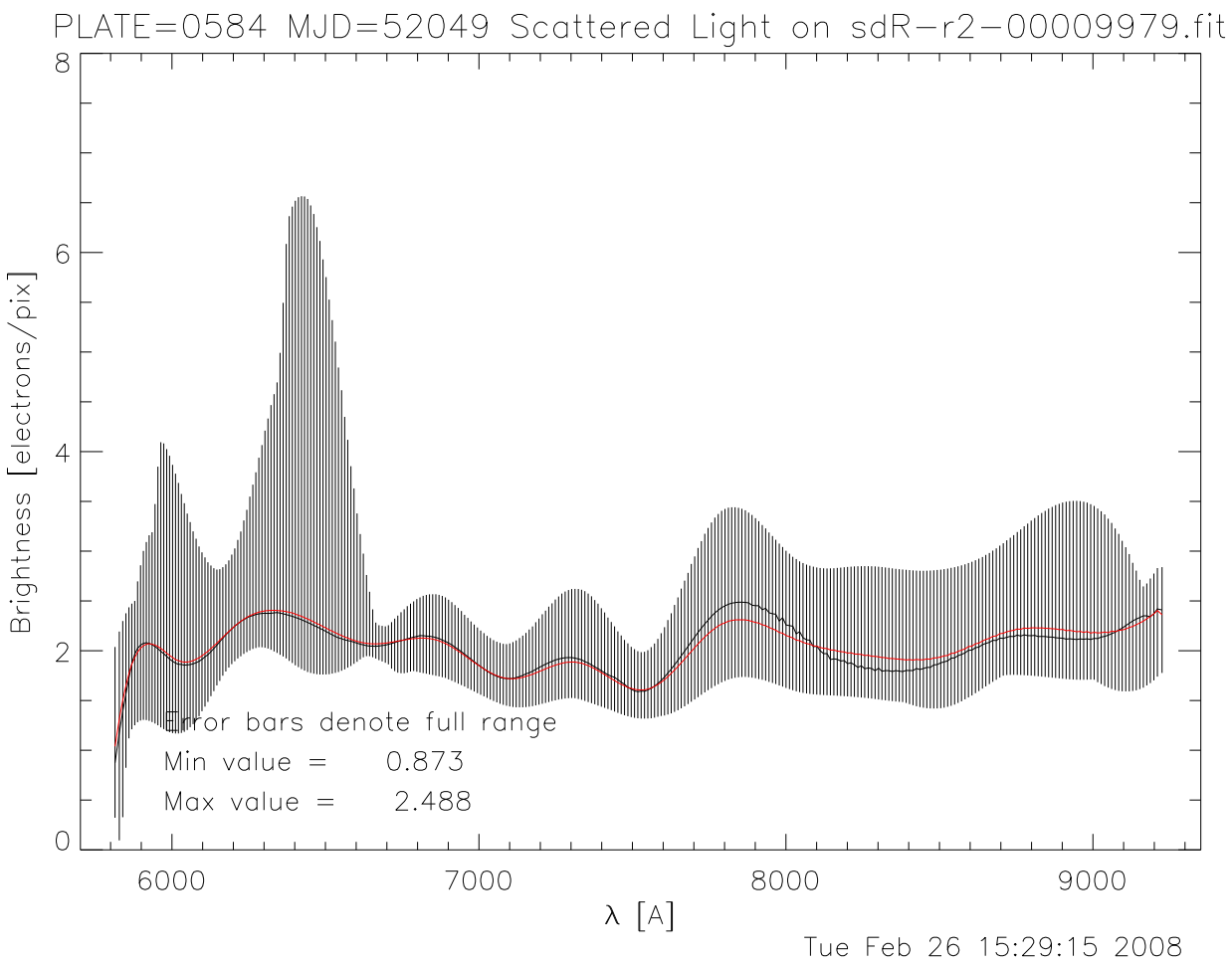

PLATE=0584 MJD=52049 sdR-r2-00009978.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.74 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

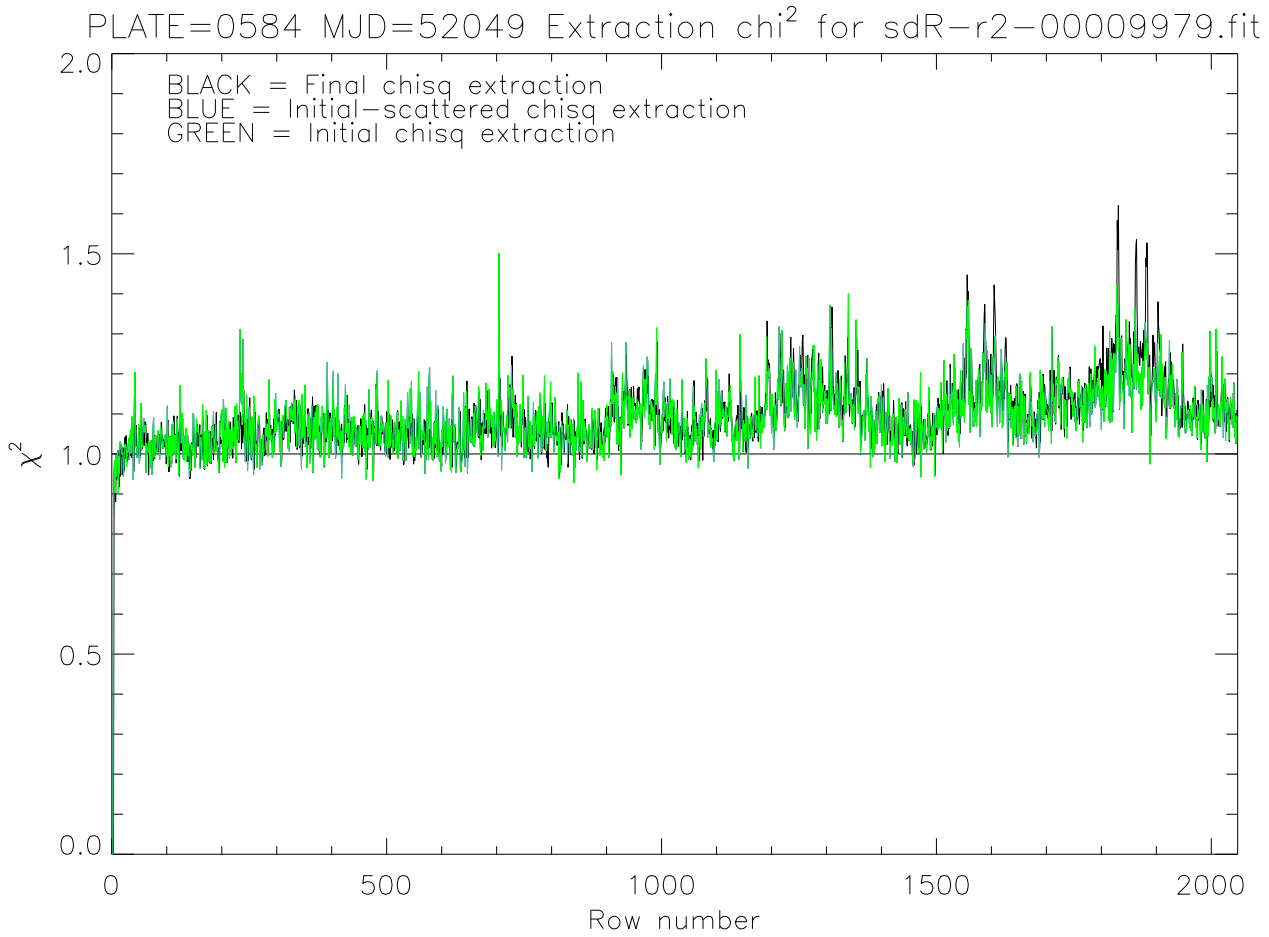

PLATE=0584 MJD=52049 Fiber−Flats for sdR−r2−00009974.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.697
Max value = 1.220
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 15:21:15 2008

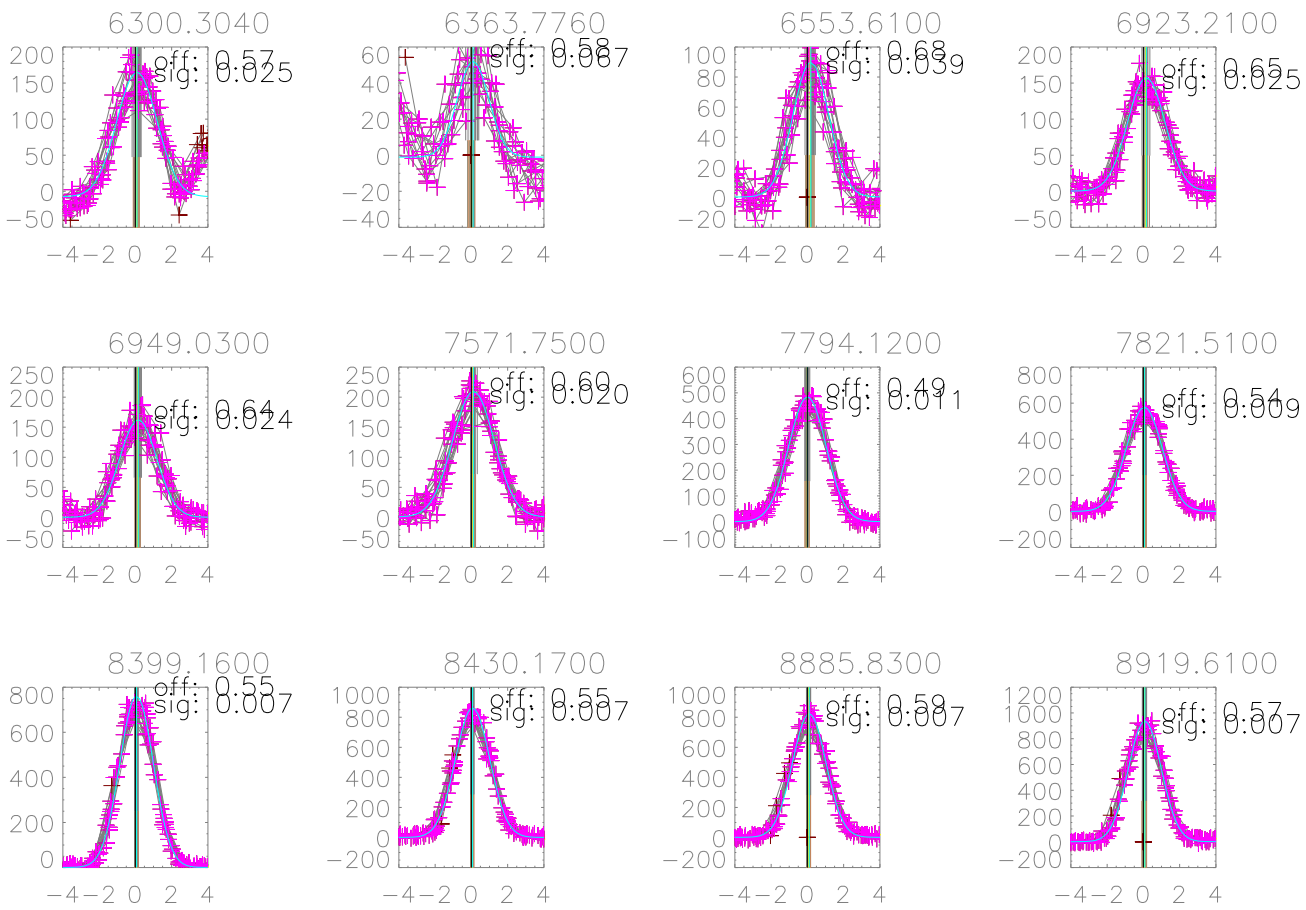

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009979.fi
5.64
7.82
5.64
5.64
3.45
3.45
1.27
Y [pix]
X [pix]
0
500
1000
1500
2000

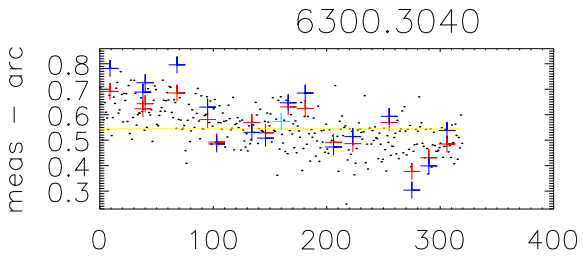

PLATE=0584 MJD=52049 Scattered Light before halo removal on sdR-r2-00009979.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.856
Max value = 7.973
Tue Feb 26 15:22:27 2008

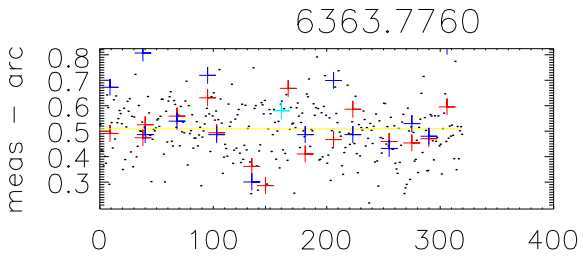

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009979.fit
2.18
2.18
2.18
2.18
0.73
Y [pix]
X [pix]
0
500
1000
1500
2000

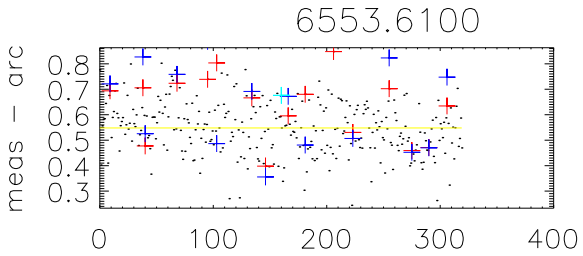

PLATE=0584 MJD=52049 Scattered Light on sdR-r2-00009979.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 0.873
Max value = 2.488
Tue Feb 26 15:29:15 2008

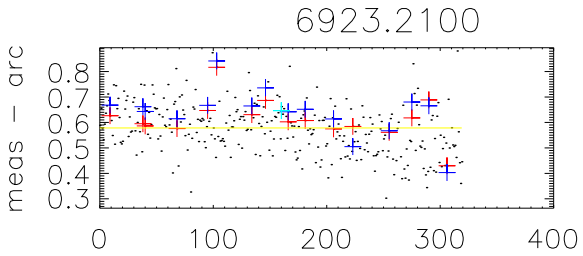

PLATE=0584 MJD=52049 Extraction chi^2 for sdR−r2−00009979.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

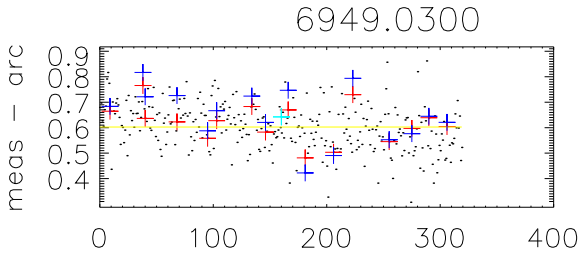

6300.3040
off: 0.57
sig: 0.025
6363.7760
off: 0.58
sig: 0.087
6553.6100
off: 0.68
sig: 0.039
6923.2100
off: 0.65
sig: 0.025
6949.0300
off: 0.64
sig: 0.024
7571.7500
off: 0.60
sig: 0.020
7794.1200
off: 0.49
sig: 0.011
7821.5100
off: 0.54
sig: 0.009
8399.1600
off: 0.55
sig: 0.007
8430.1700
off: 0.55
sig: 0.007
8885.8300
off: 0.58
sig: 0.007
8919.6100
off: 0.57
sig: 0.007

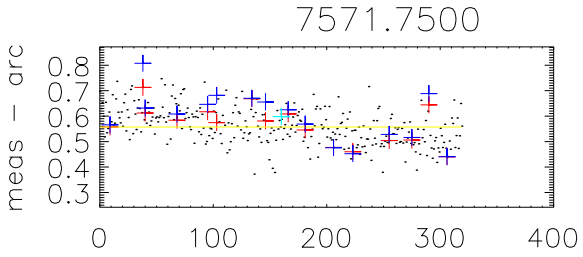

6300.3040
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

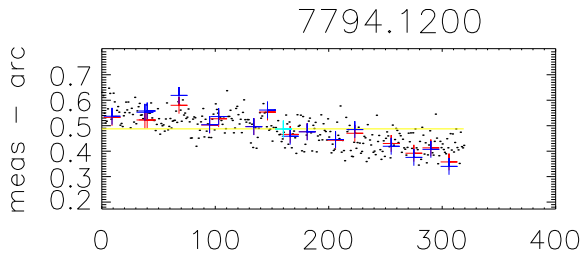

6363.7760
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

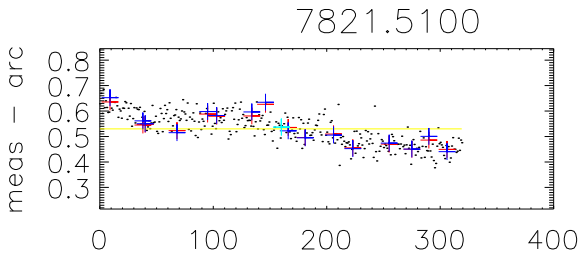

6553.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

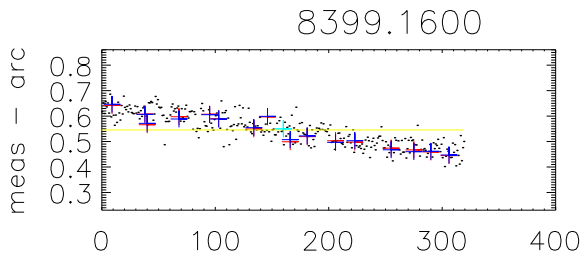

6923.2100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

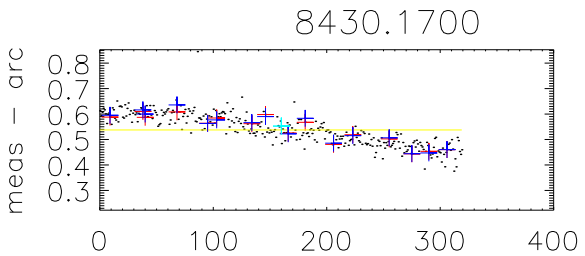

6949.0300
meas − arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

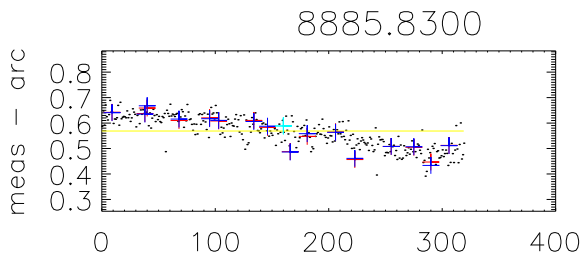

7571.7500
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

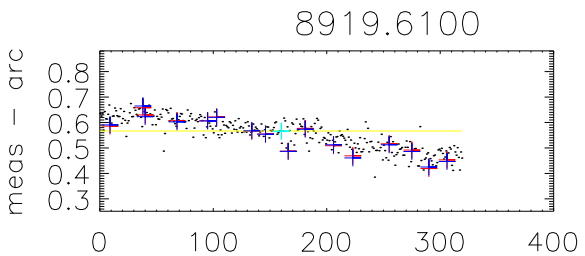

7794.1200
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

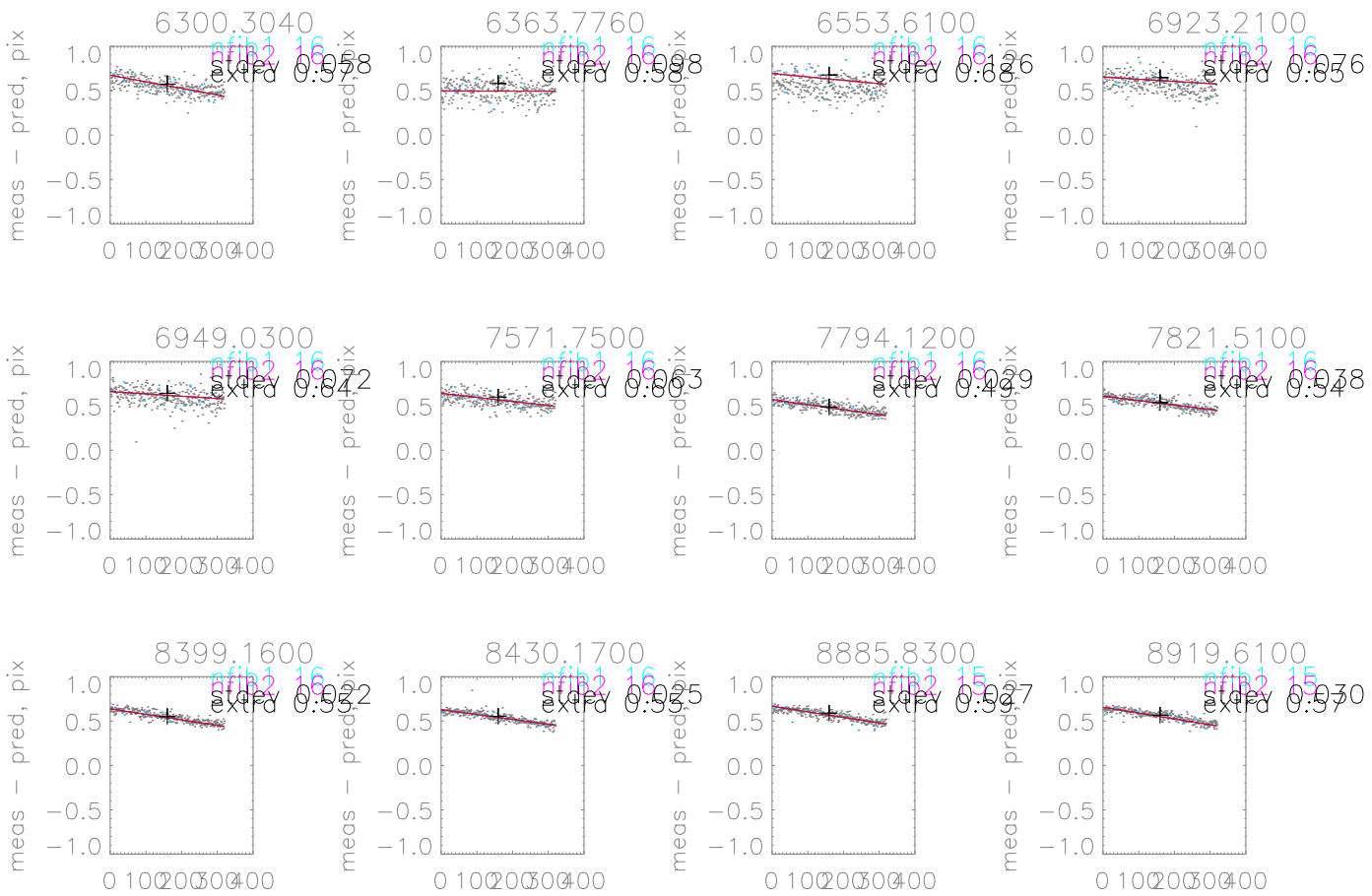

7821.5100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

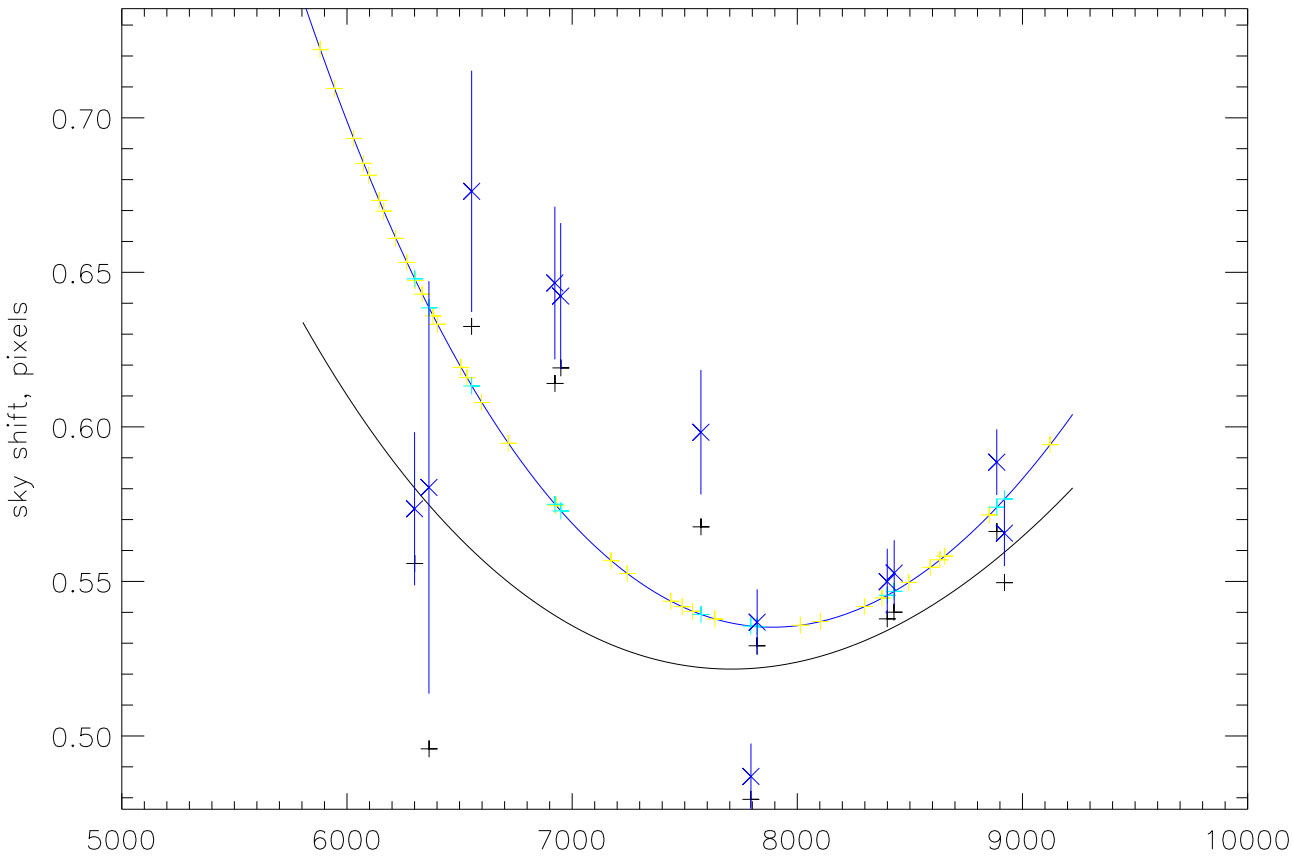

8399.1600
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

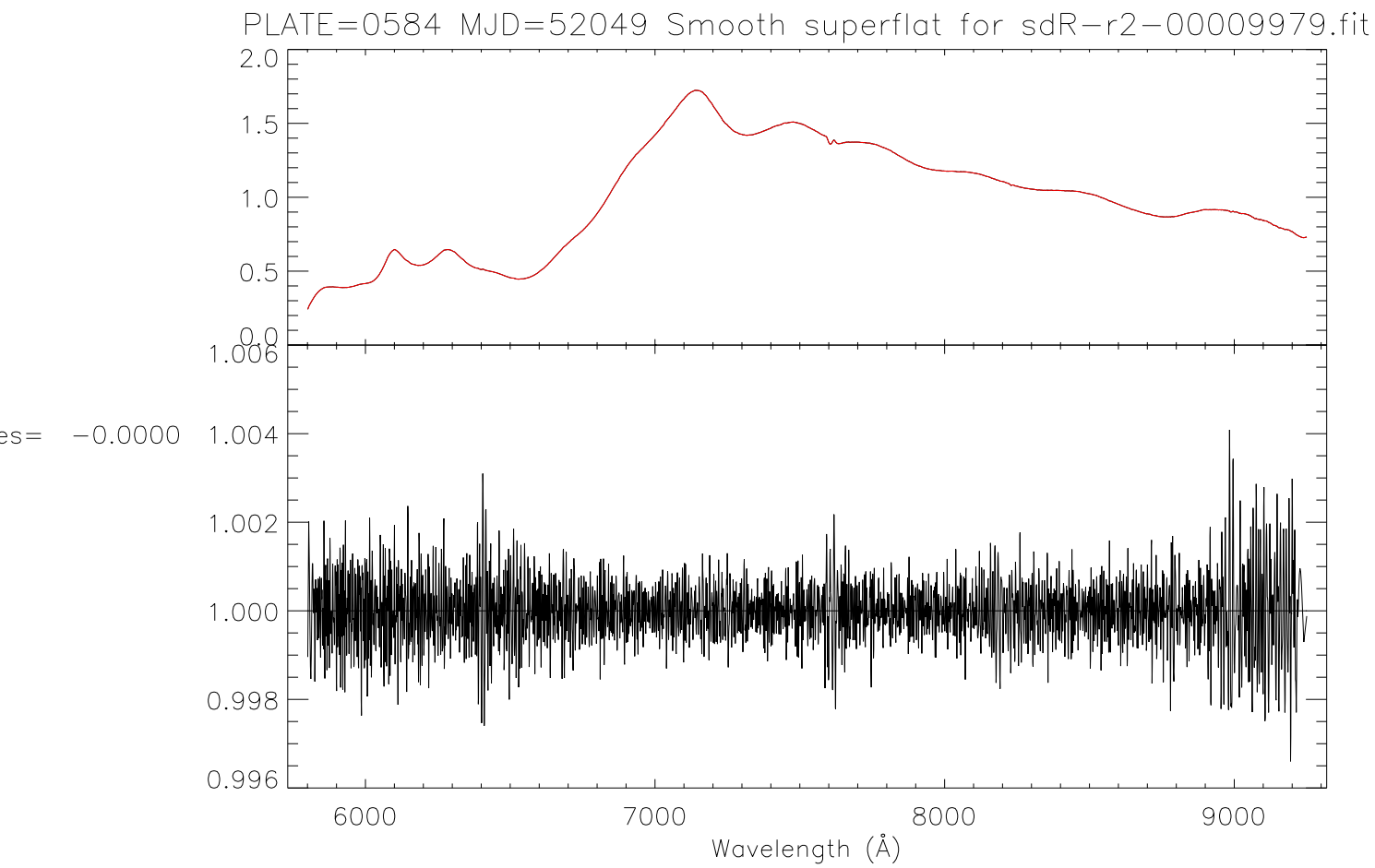

8430.1700
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

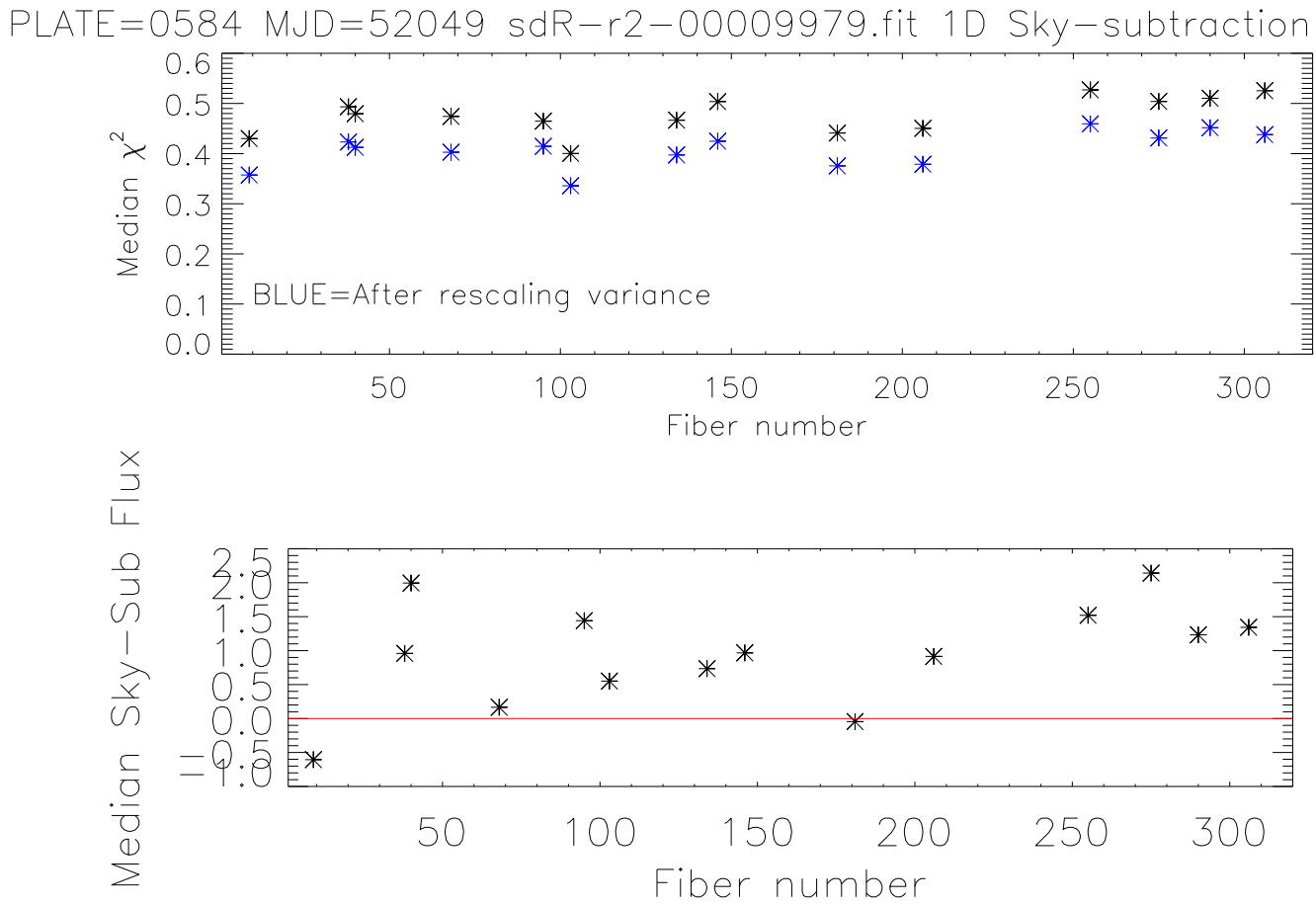

8885.8300
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

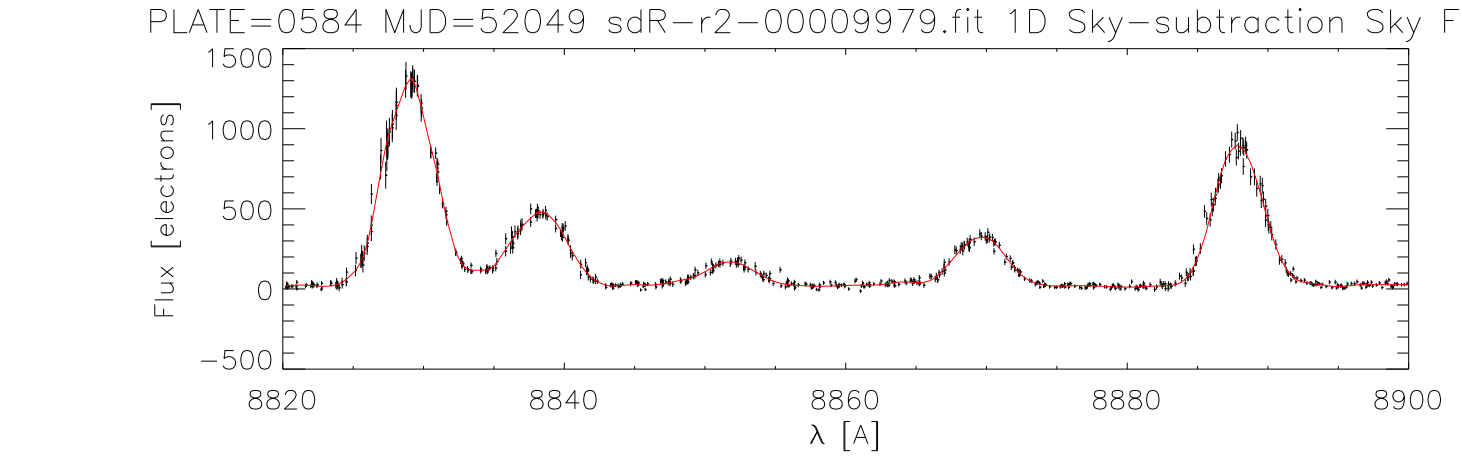

8919.6100
meas − arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

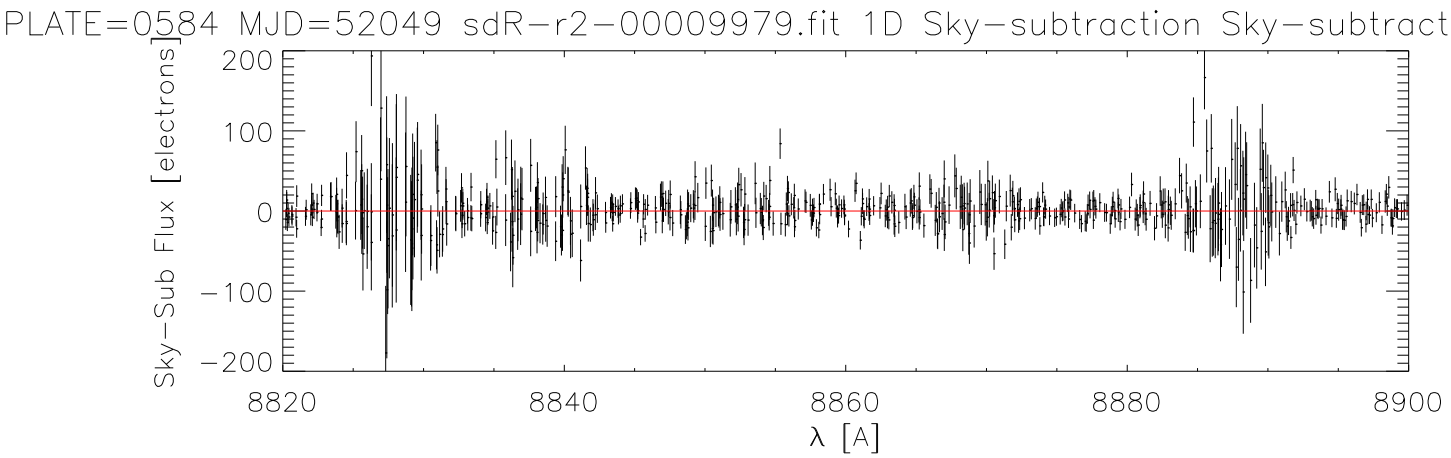

6300.3040
stdev 0.058
extra 0.57
6363.7760
stdev 0.058
extra 0.58
6553.6100
stdev 0.126
extra 0.68
6923.2100
stdev 0.076
extra 0.65
6949.0300
stdev 0.072
extra 0.64
7571.7500
stdev 0.063
extra 0.60
7794.1200
stdev 0.029
extra 0.49
7821.5100
stdev 0.078
extra 0.54
8399.1600
stdev 0.022
extra 0.53
8430.1700
stdev 0.025
extra 0.53
8885.8300
stdev 0.027
extra 0.59
8919.6100
stdev 0.030
extra 0.57
meas − pred, pix
mfib2 16
mfib1 16
mfib2 15
mfib1 15

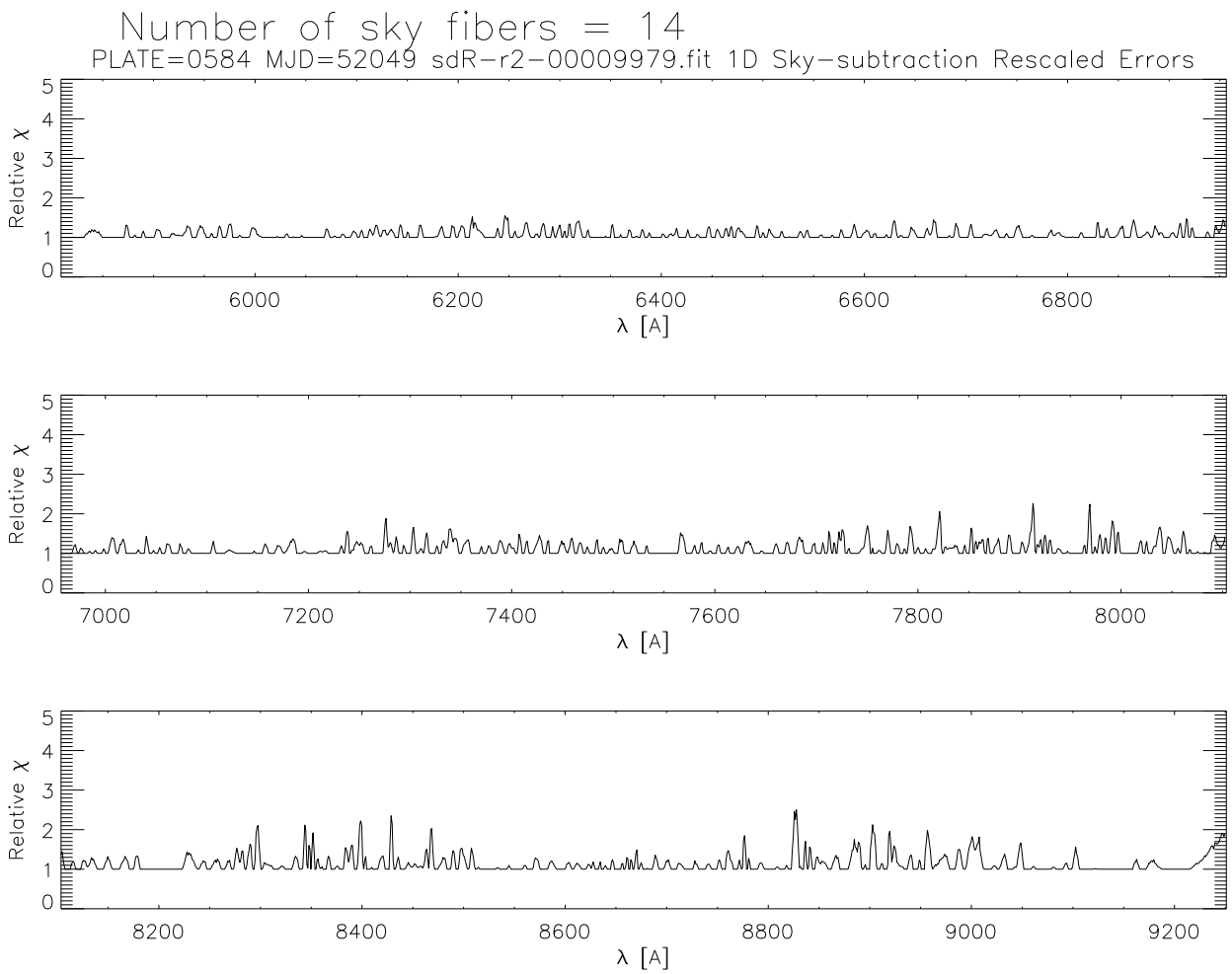

sky shift, pixels
0.70
0.65
0.60
0.55
0.50
5000
6000
7000
8000
9000
10000

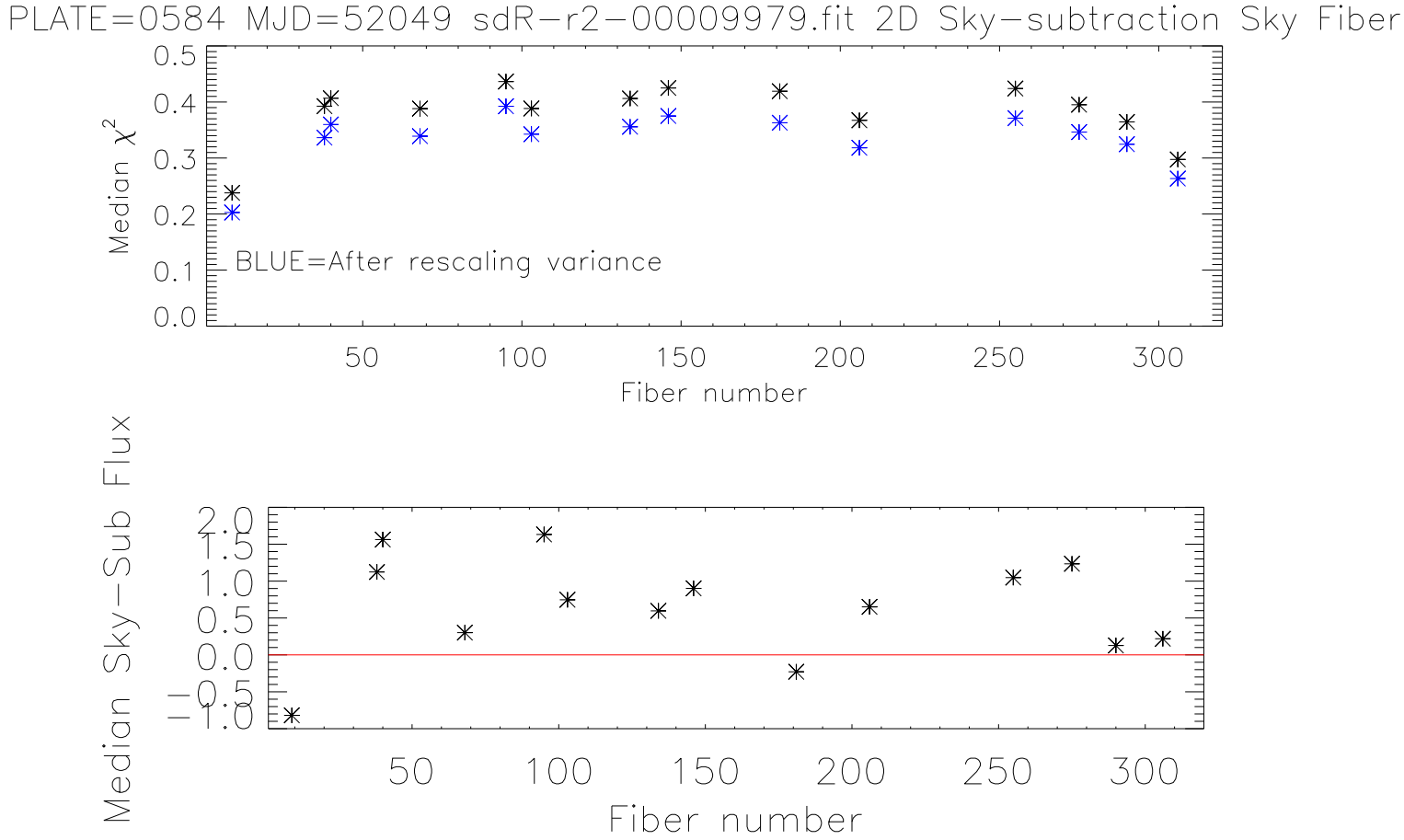

PLATE=0584 MJD=52049 Smooth superflat for sdR-r2-00009979.fit
2.0
1.5
1.0
0.5
0.0
es= −0.0000
1.006
1.004
1.002
1.000
0.998
0.996
6000
7000
8000
9000
Wavelength (Å)

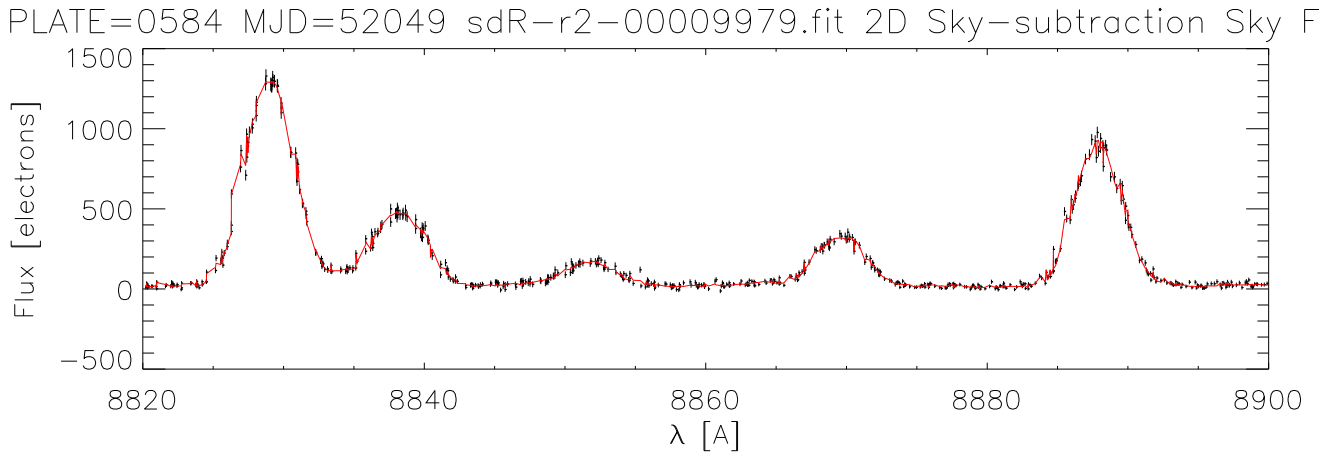

PLATE=0584 MJD=52049 sdR-r2-00009979.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

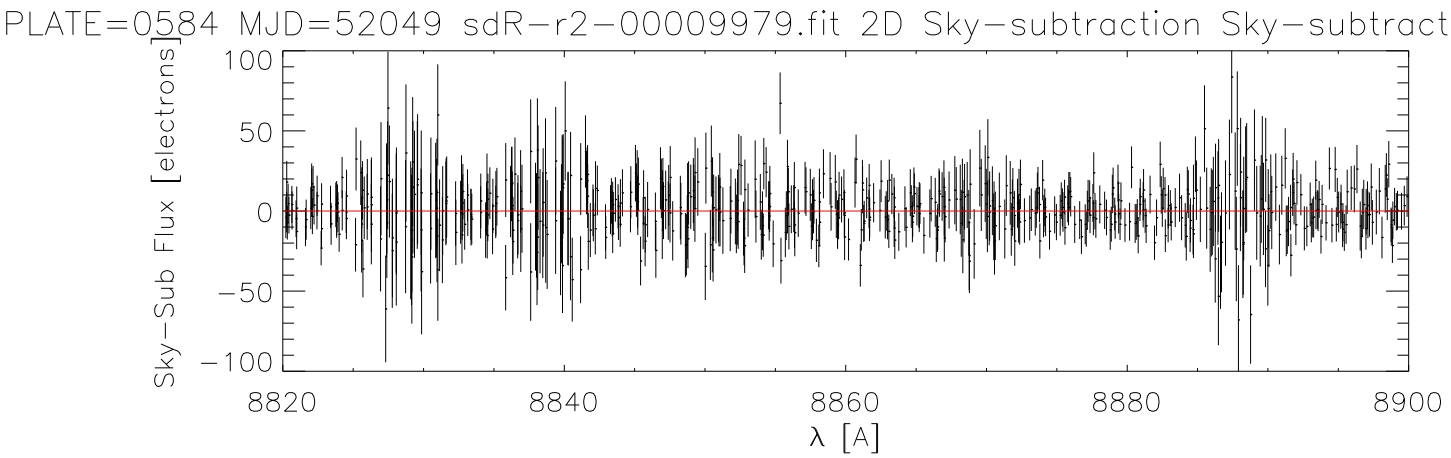

PLATE=0584 MJD=52049 sdR-r2-00009979.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

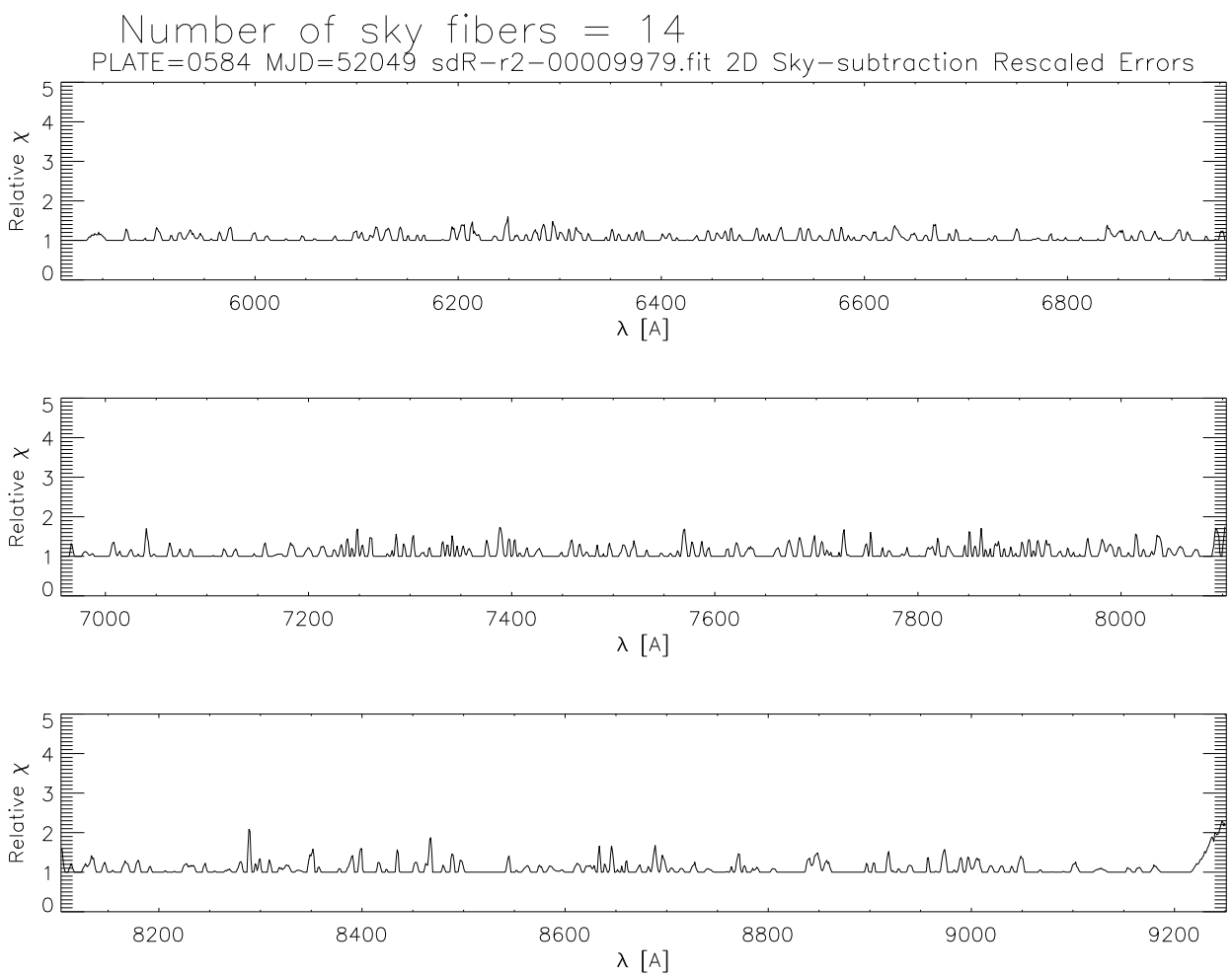

PLATE=0584 MJD=52049 sdR-r2-00009979.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

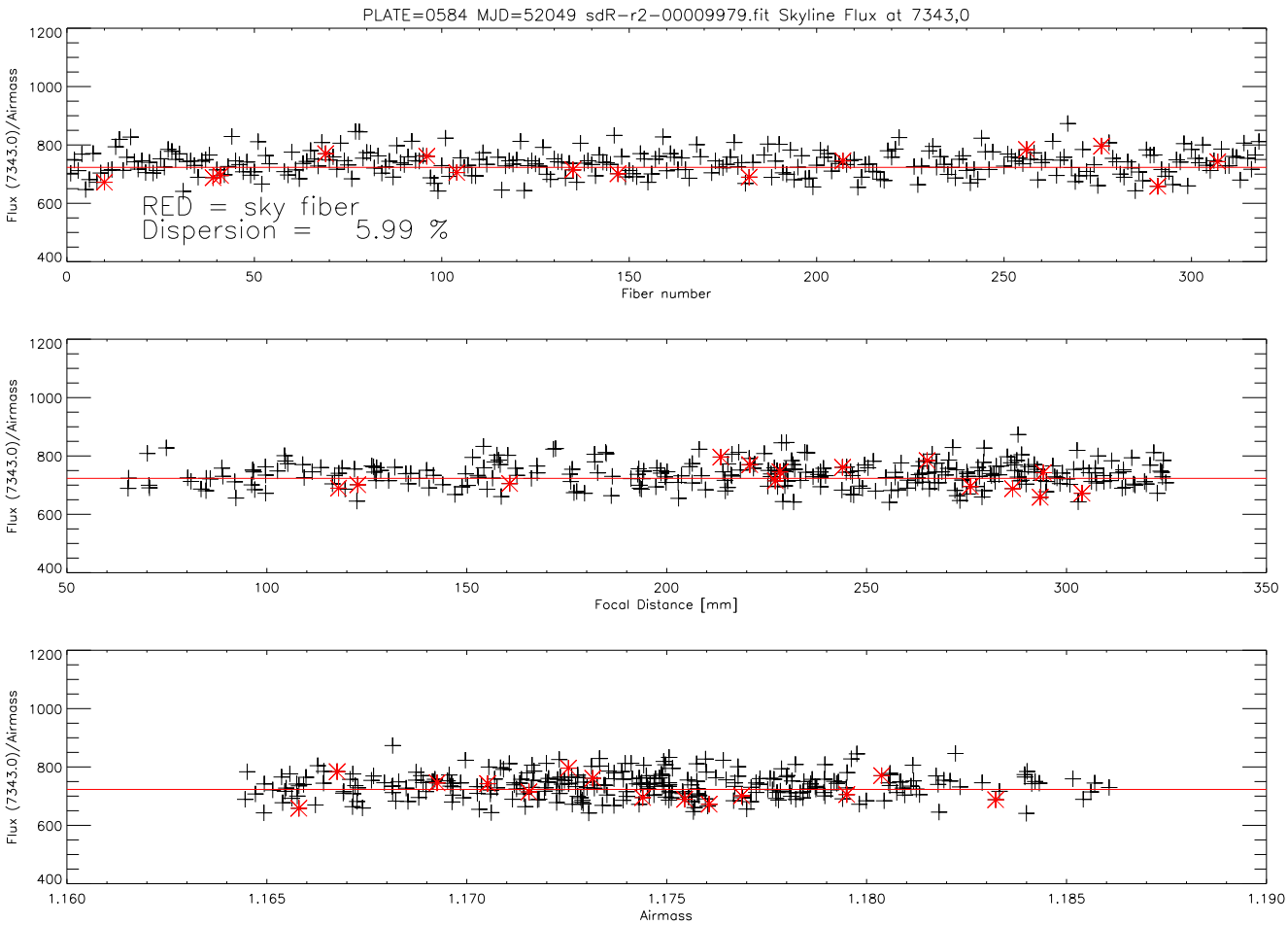

Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009979.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

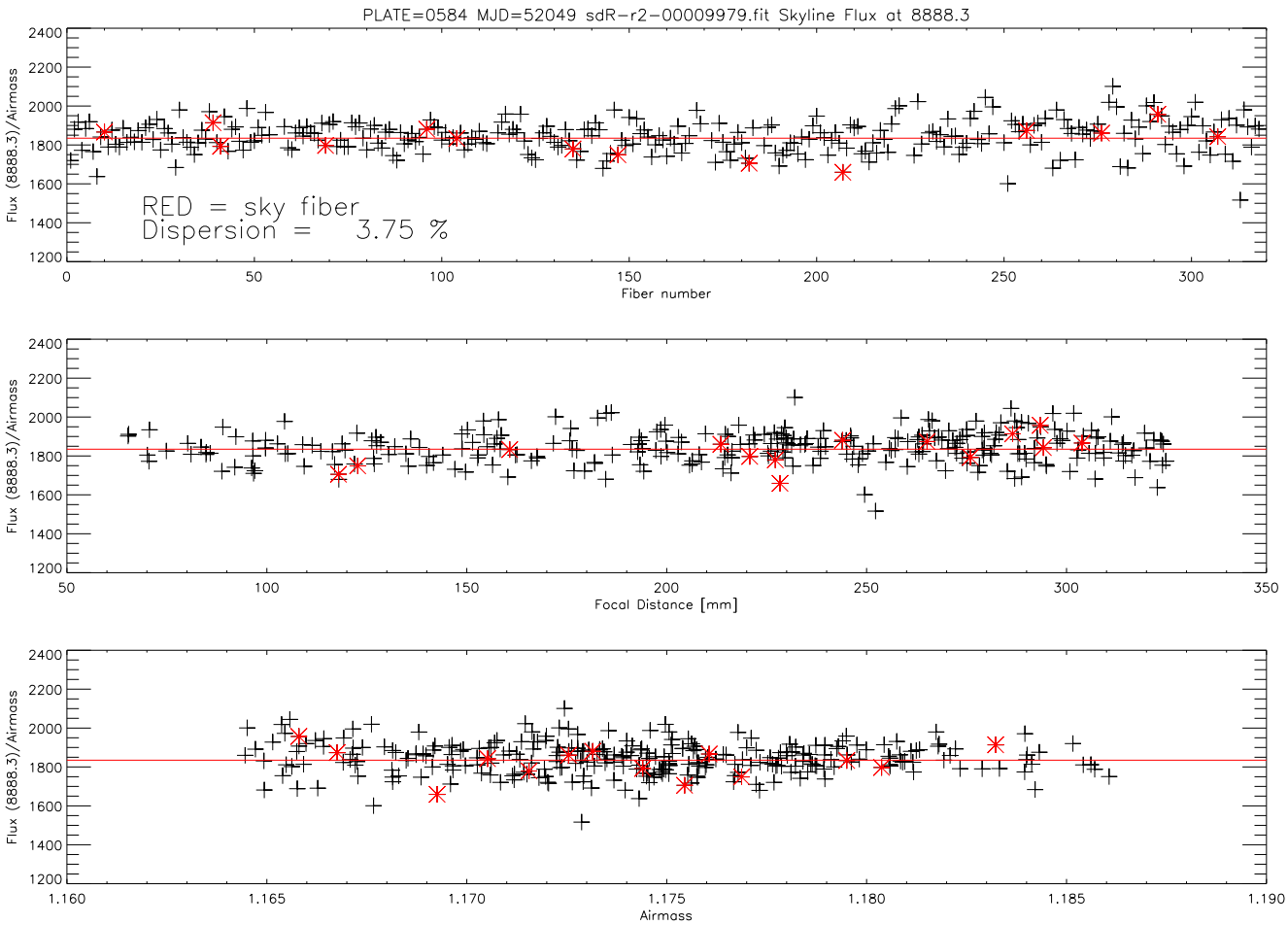

PLATE=0584 MJD=52049 sdR-r2-00009979.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0584 MJD=52049 sdR-r2-00009979.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]


PLATE=0584 MJD=52049 sdR-r2-00009979.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=0584 MJD=52049 sdR-r2-00009979.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=0584 MJD=52049 sdR-r2-00009979.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.99 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0584 MJD=52049 sdR-r2-00009979.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.75 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass