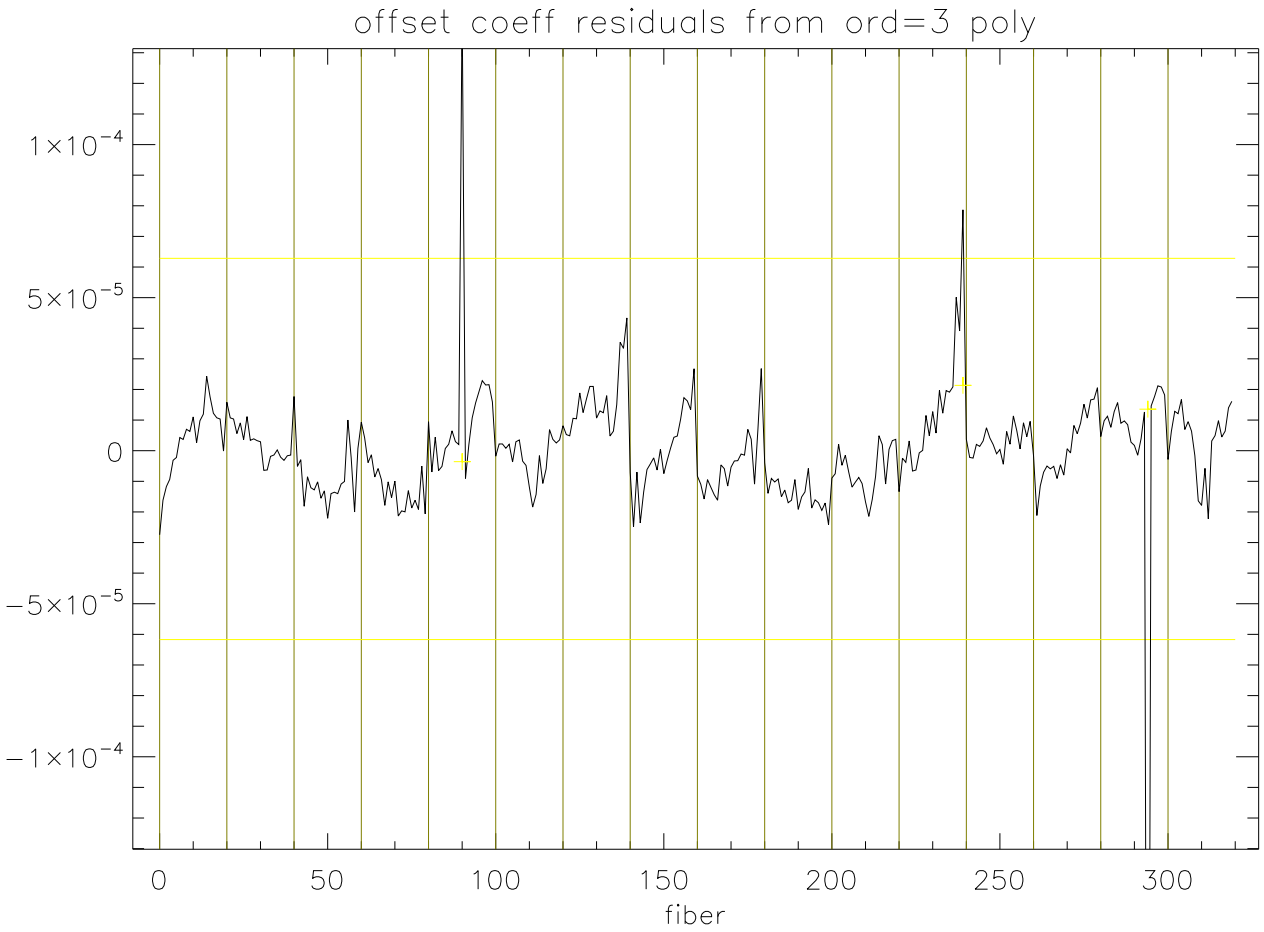
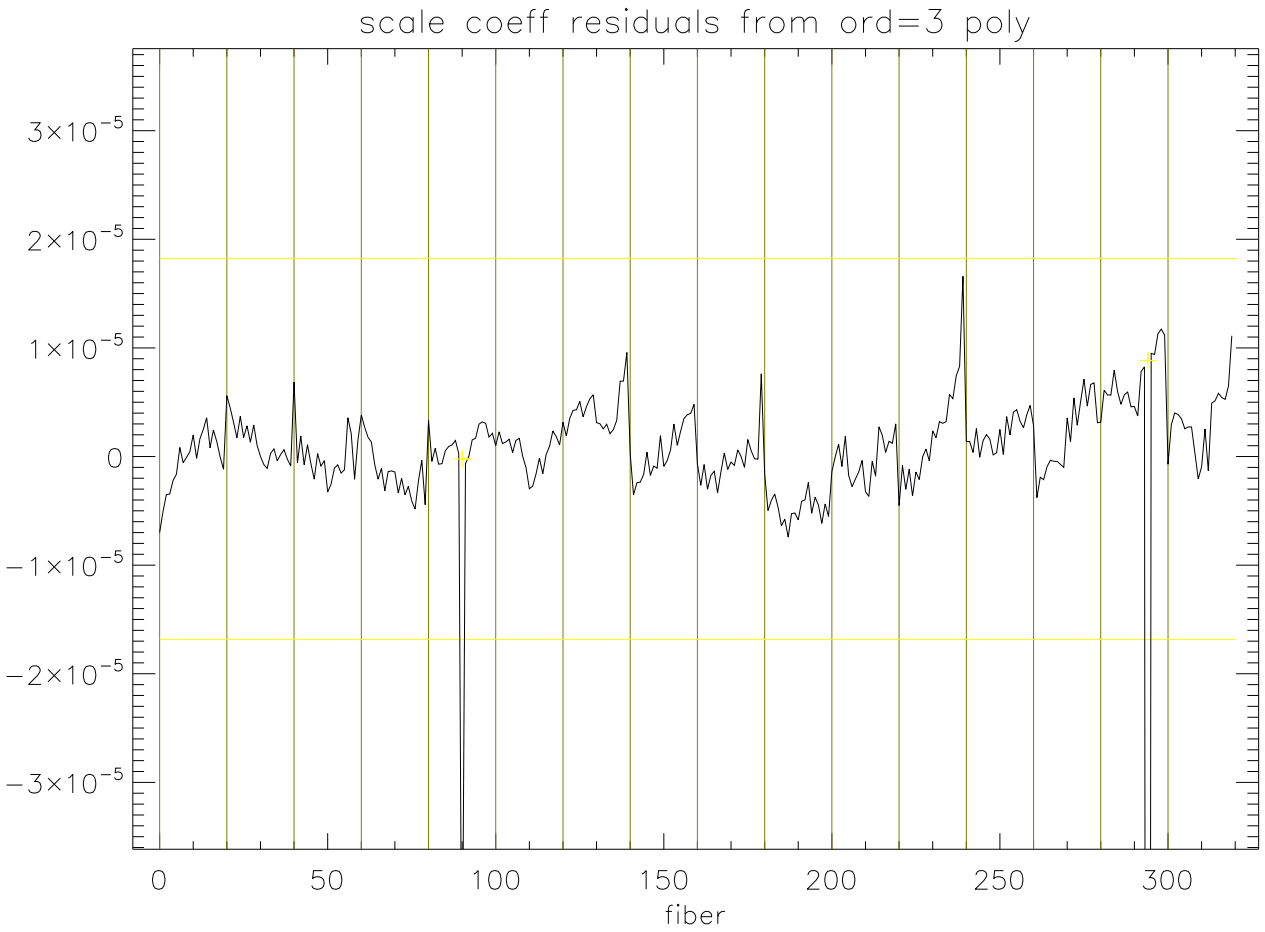
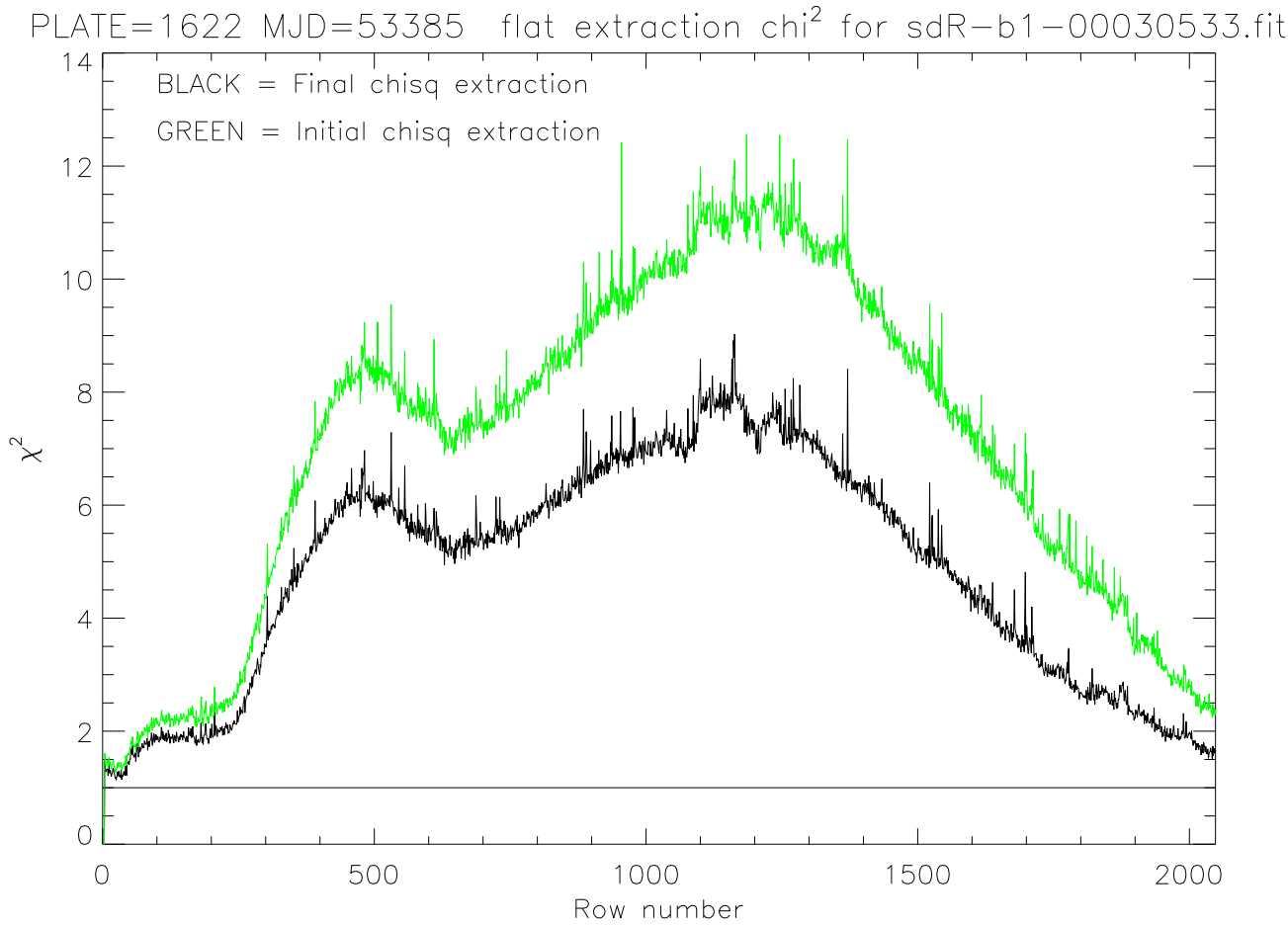
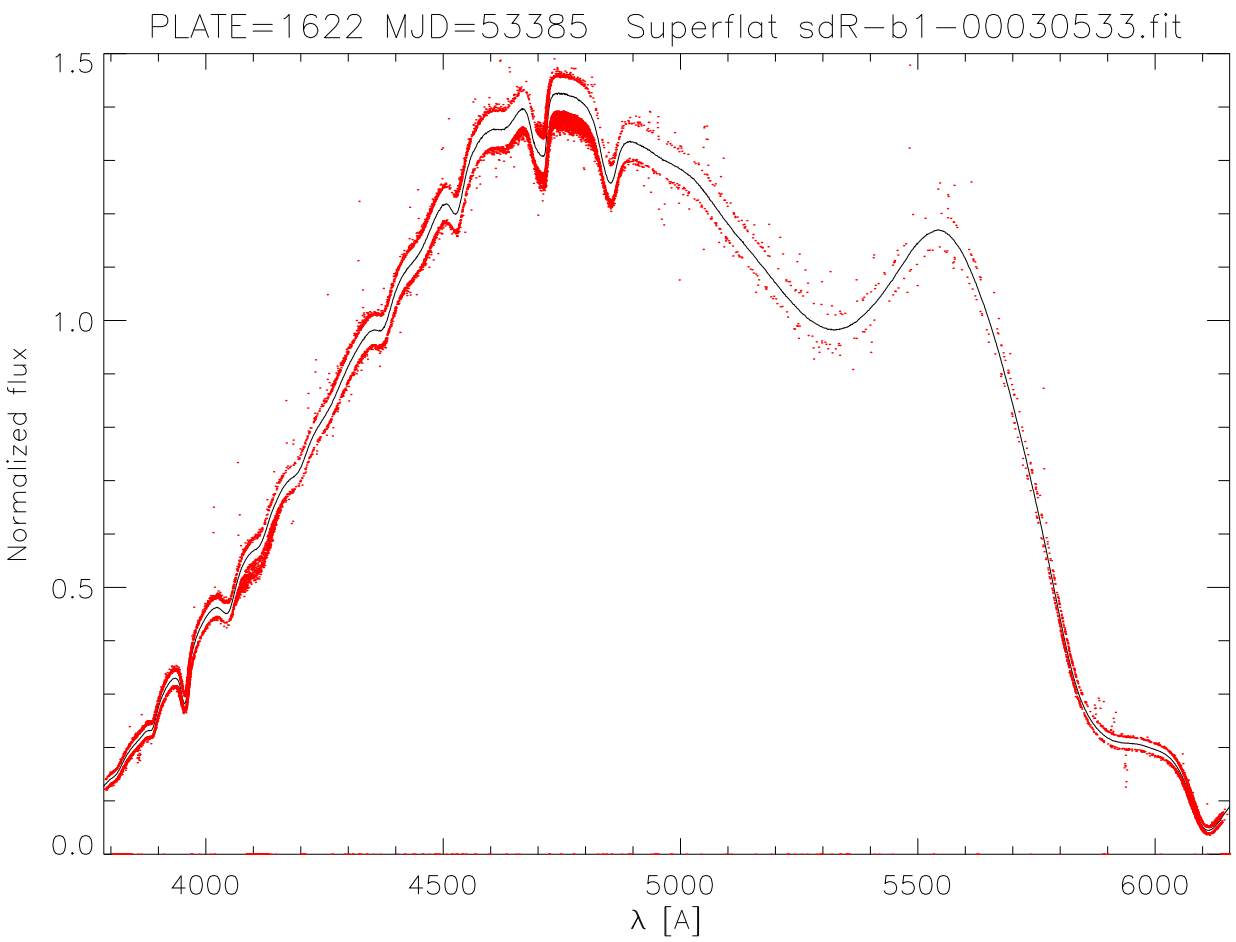
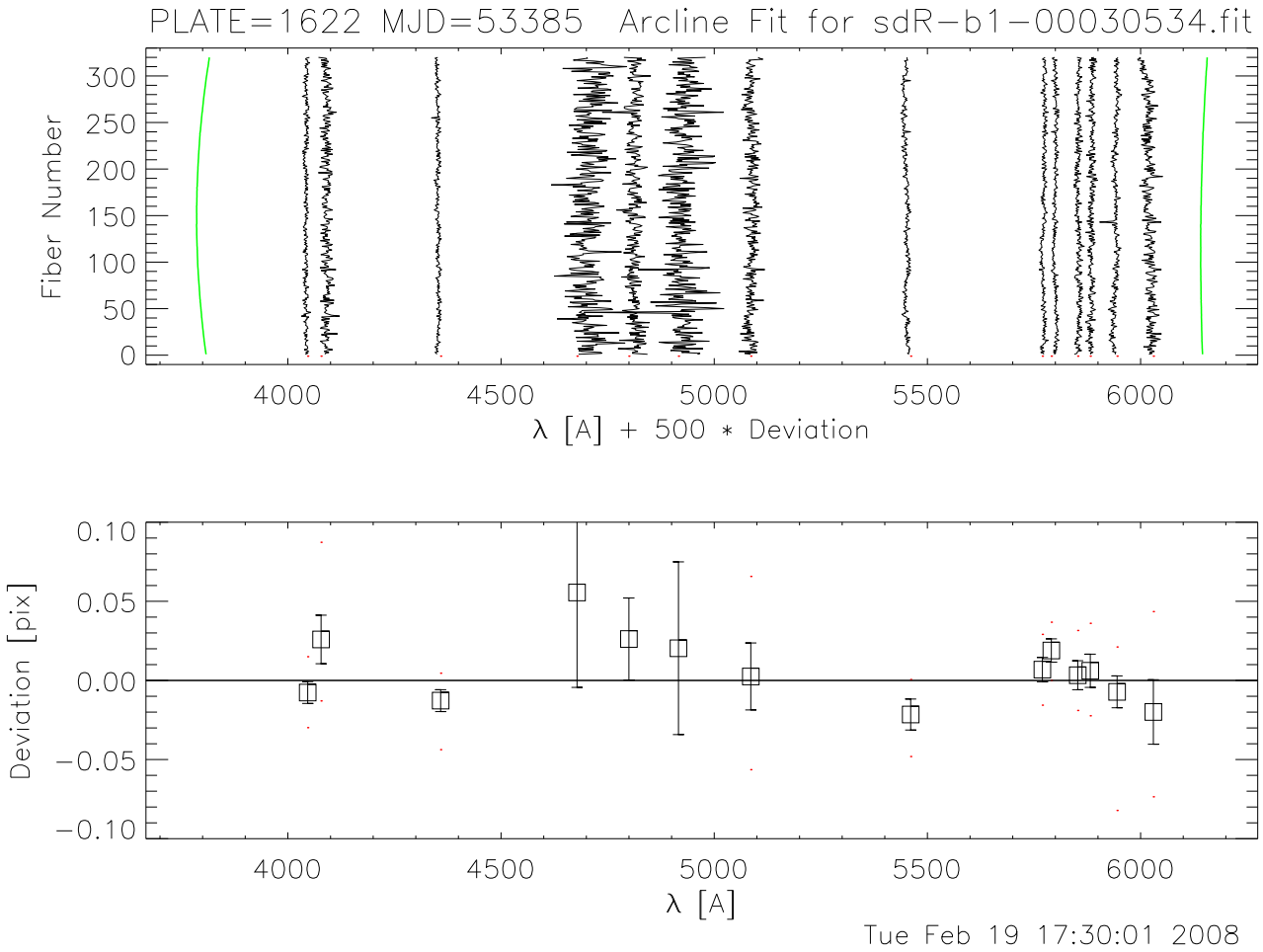
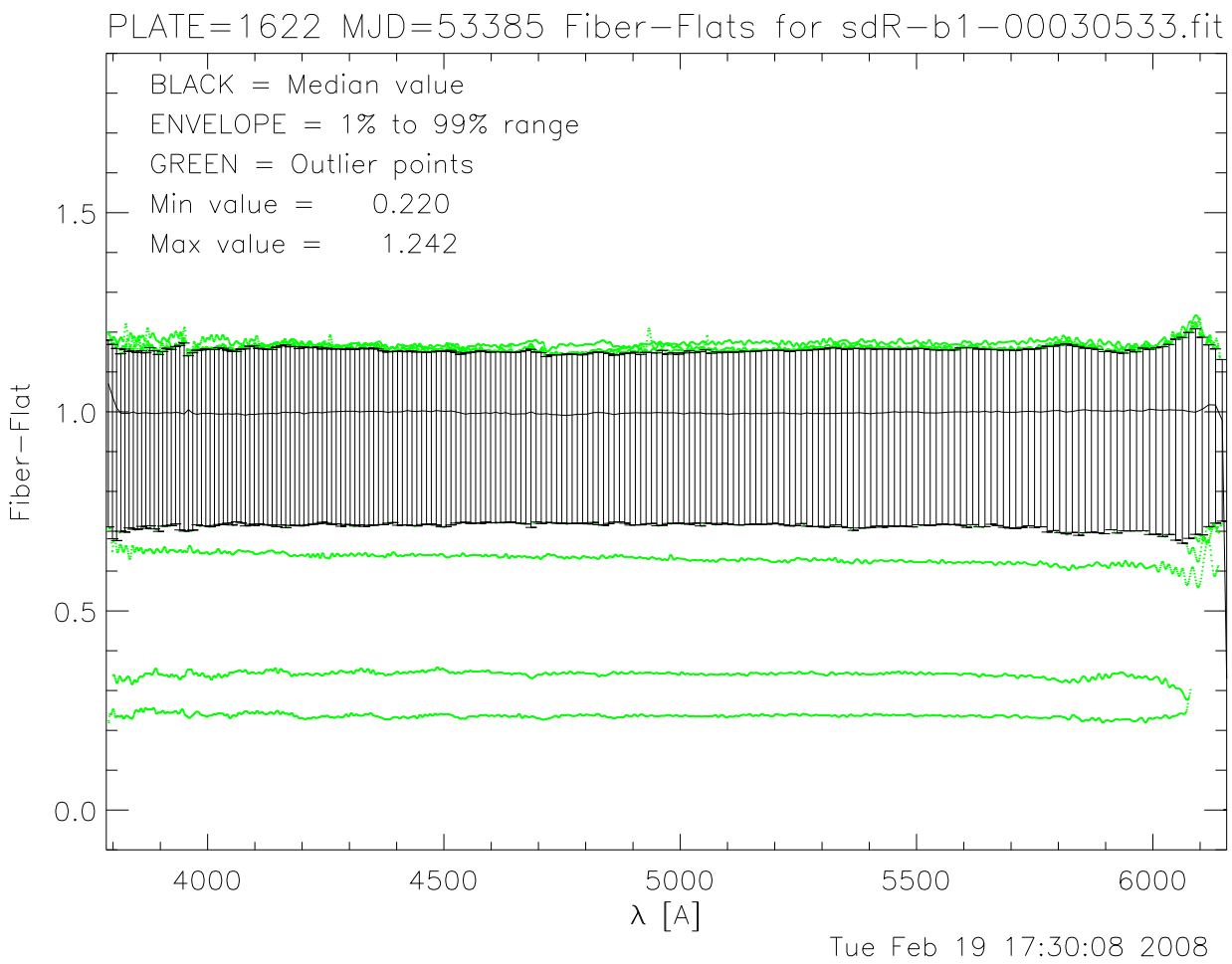

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

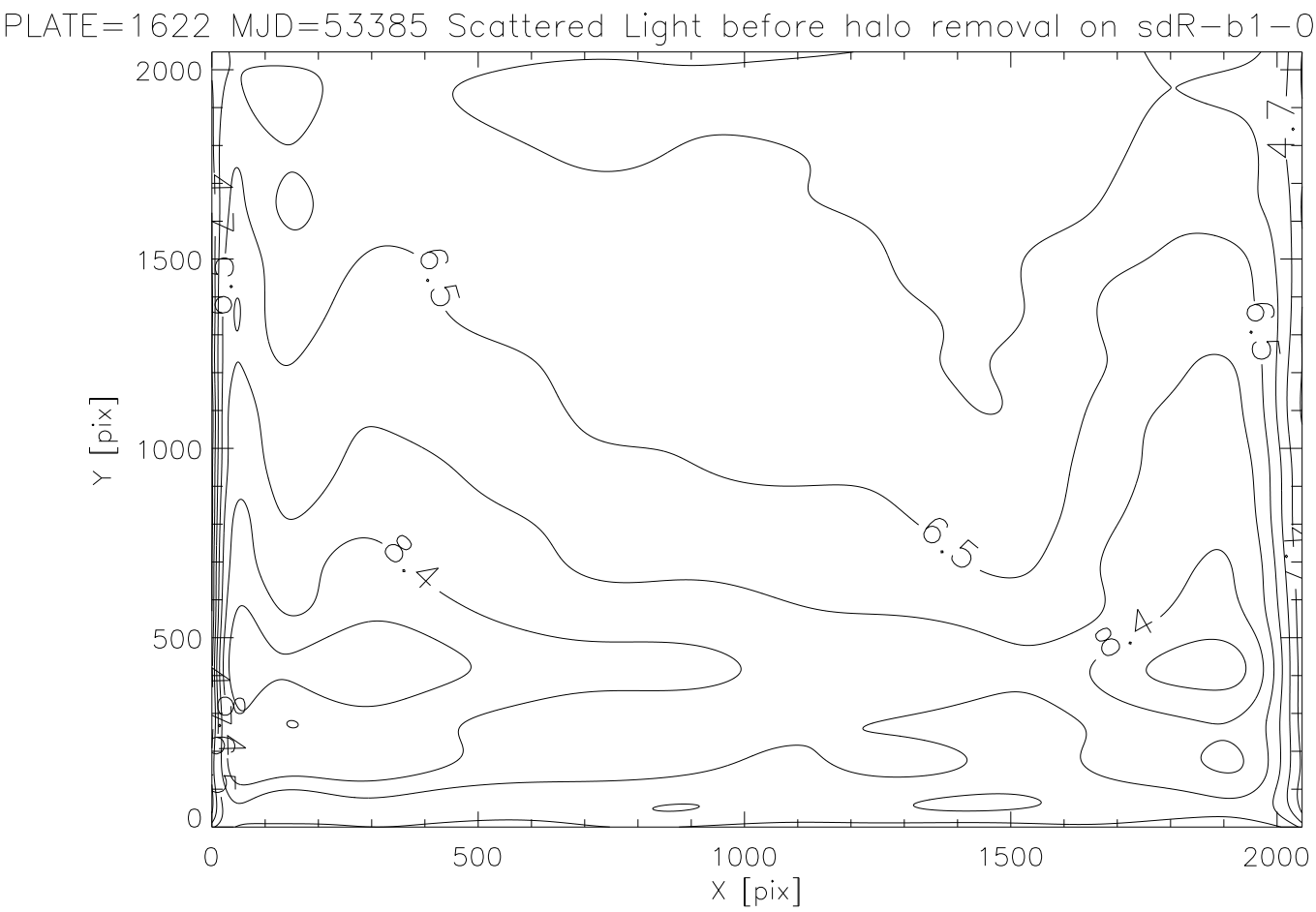

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

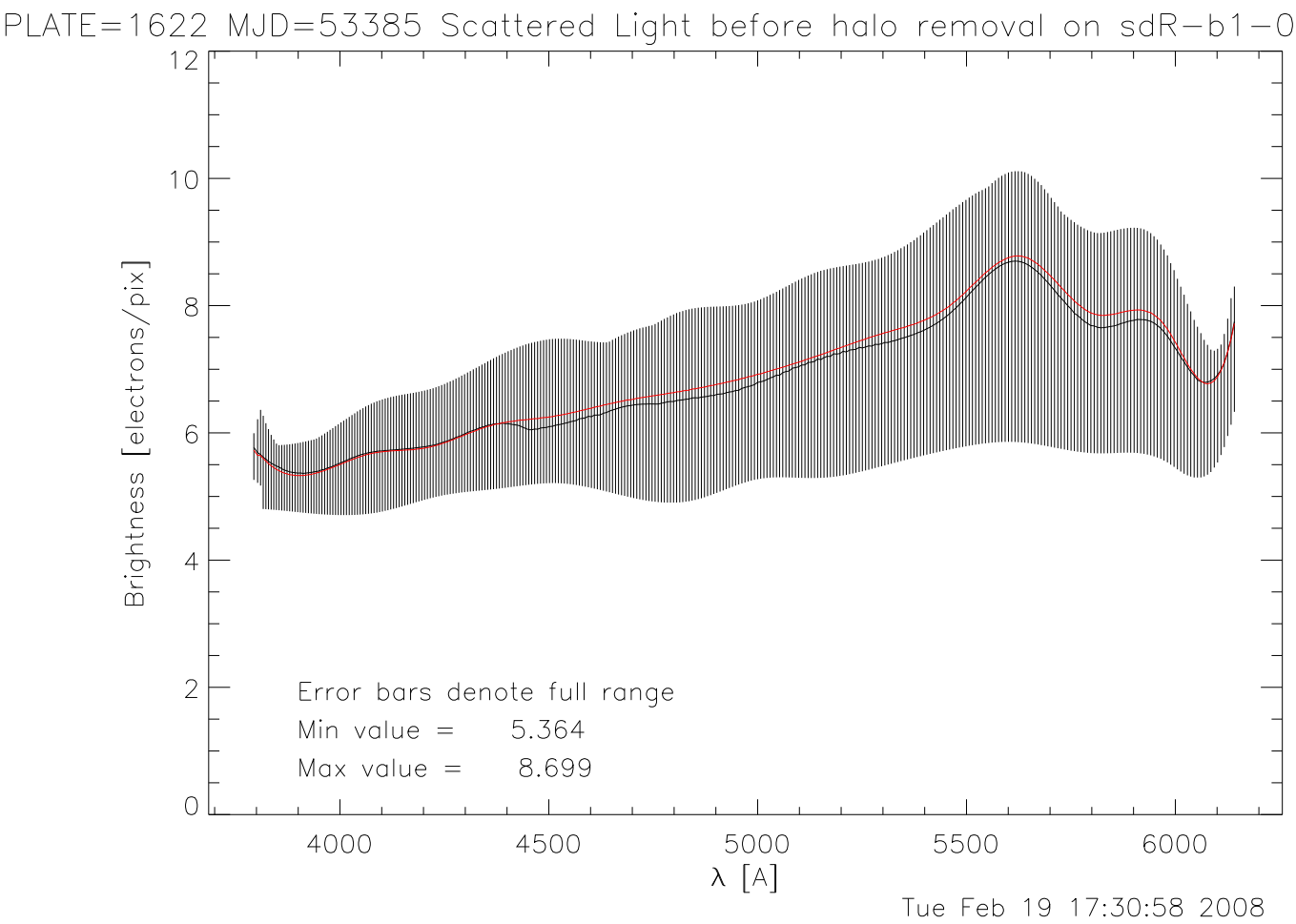

PLATE=1622 MJD=53385 flat extraction chi^2 for sdR−b1−00030533.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
14
0
500
1000
1500
2000

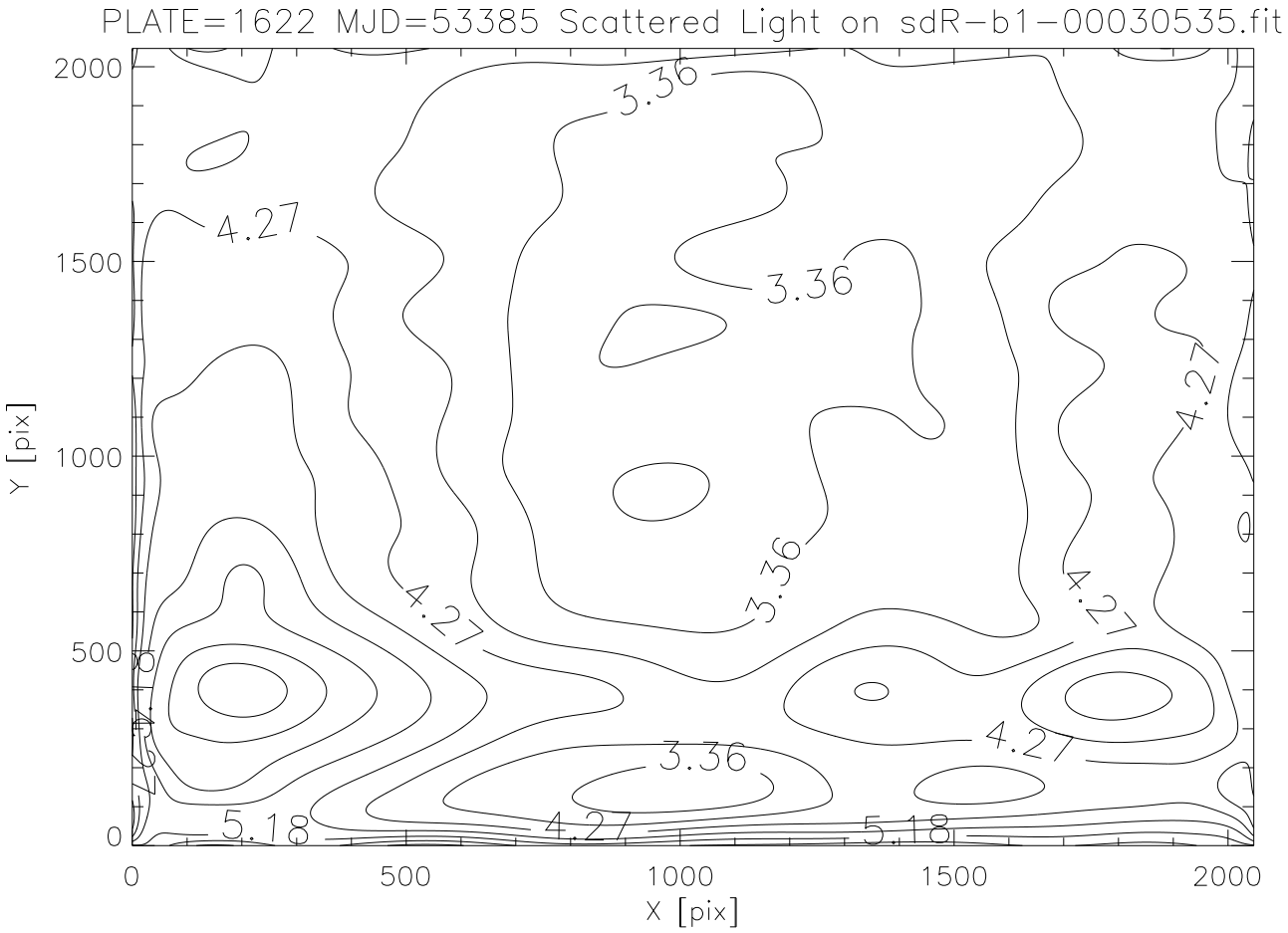

PLATE=1622 MJD=53385 Superflat sdR-b1-00030533.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

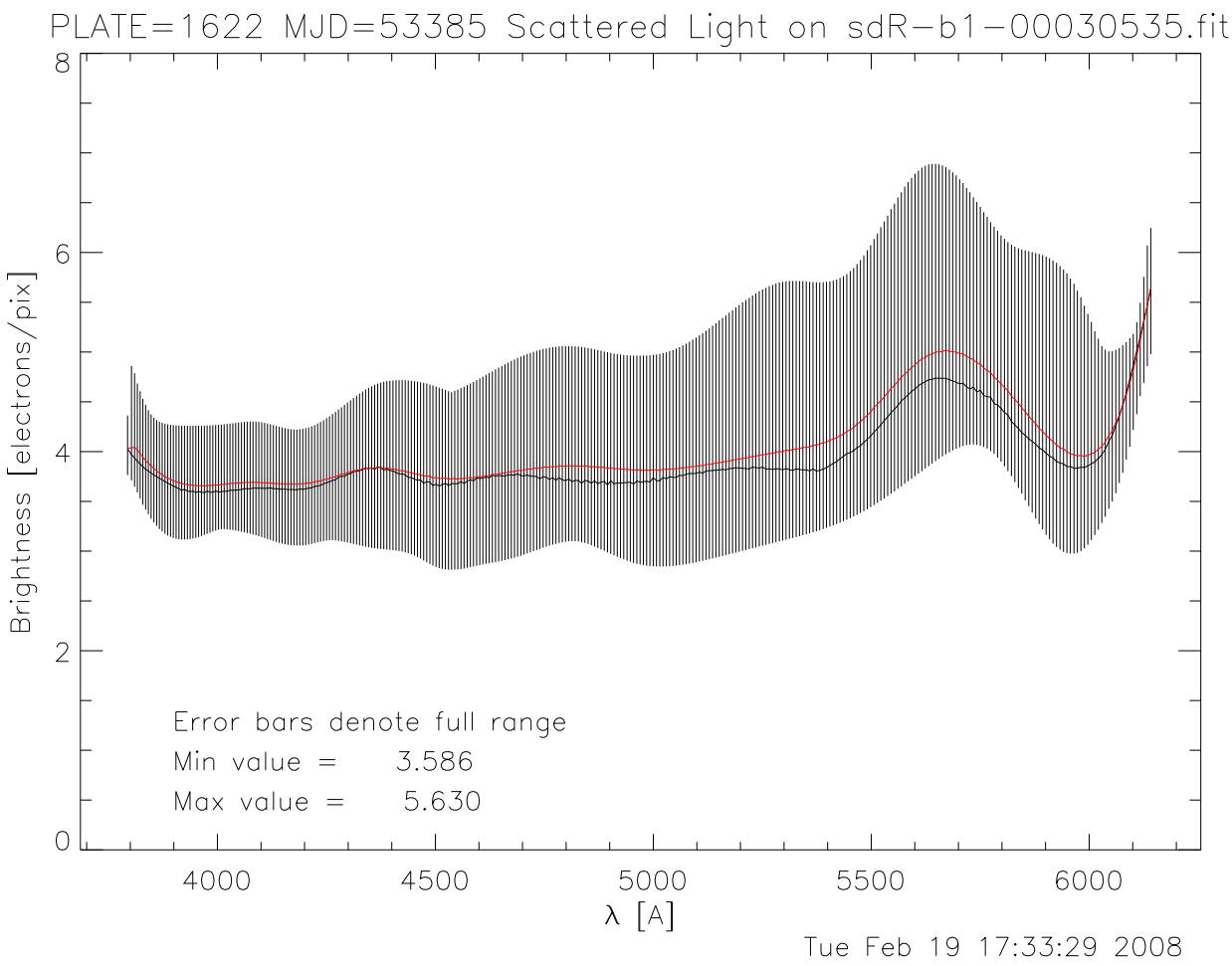

PLATE=1622 MJD=53385 Arcline Fit for sdR-b1-00030534.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:30:01 2008

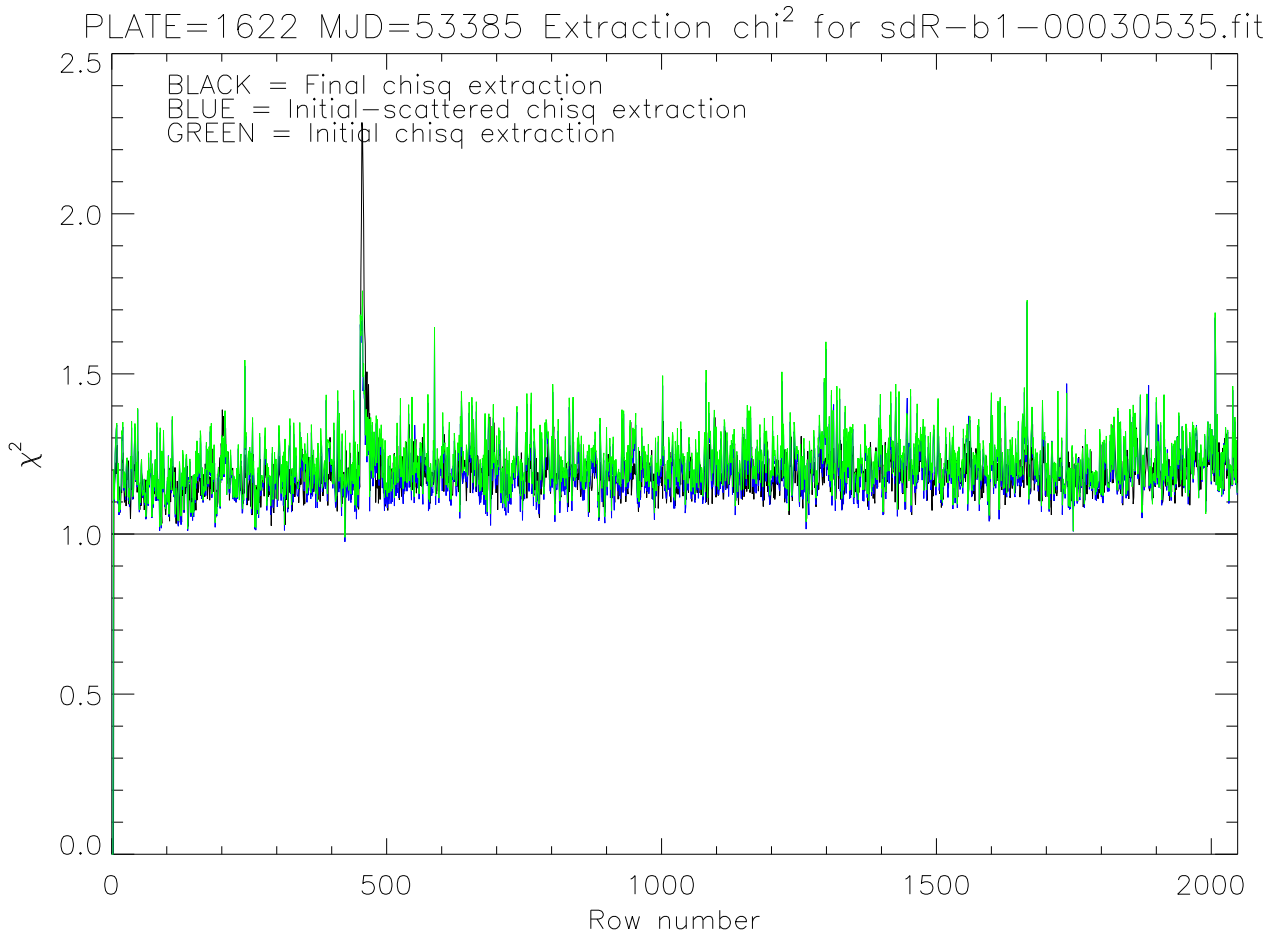

PLATE=1622 MJD=53385 Fiber−Flats for sdR−b1−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.220
Max value = 1.242
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:30:08 2008

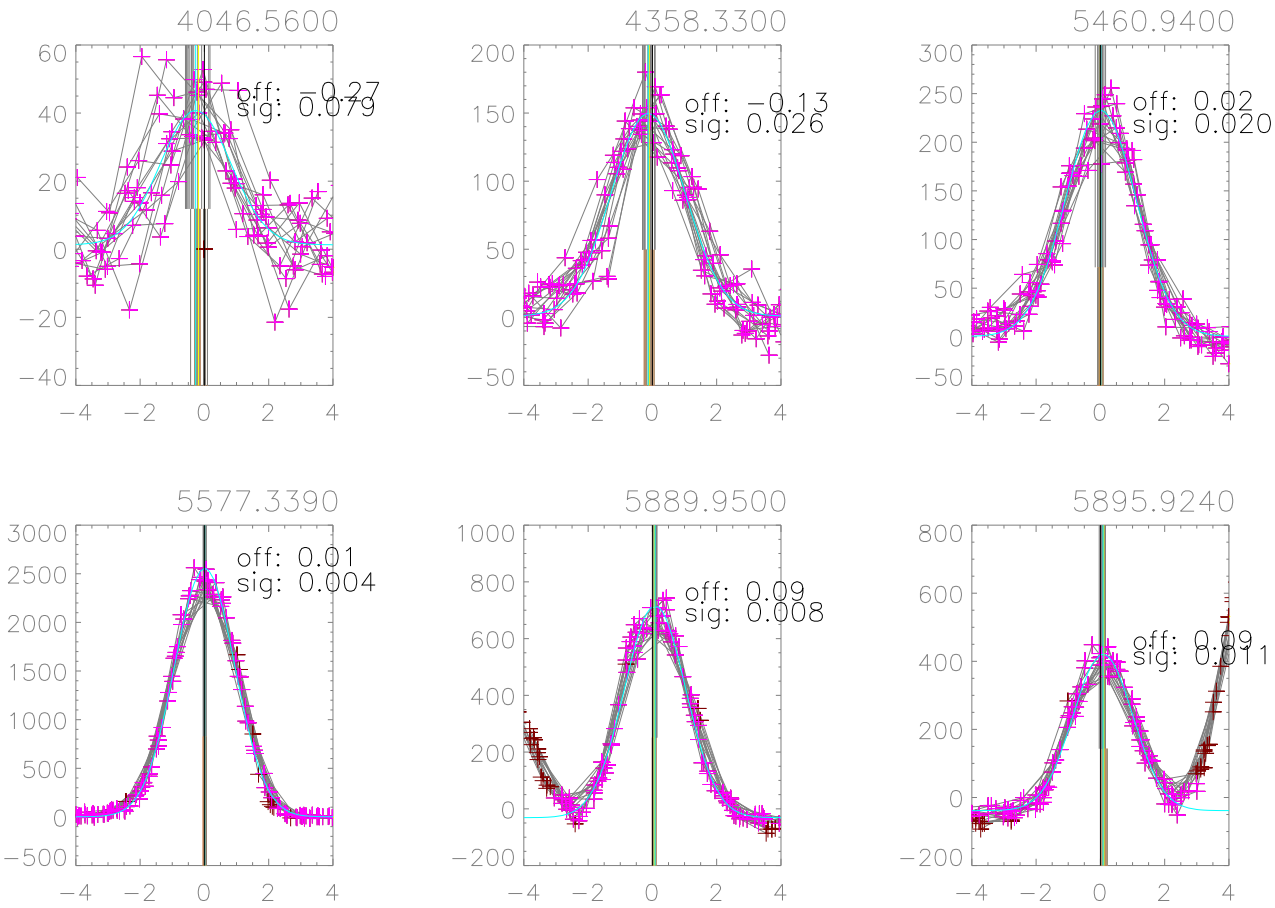

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR−b1−00030535.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
4.7
6.5
8.4

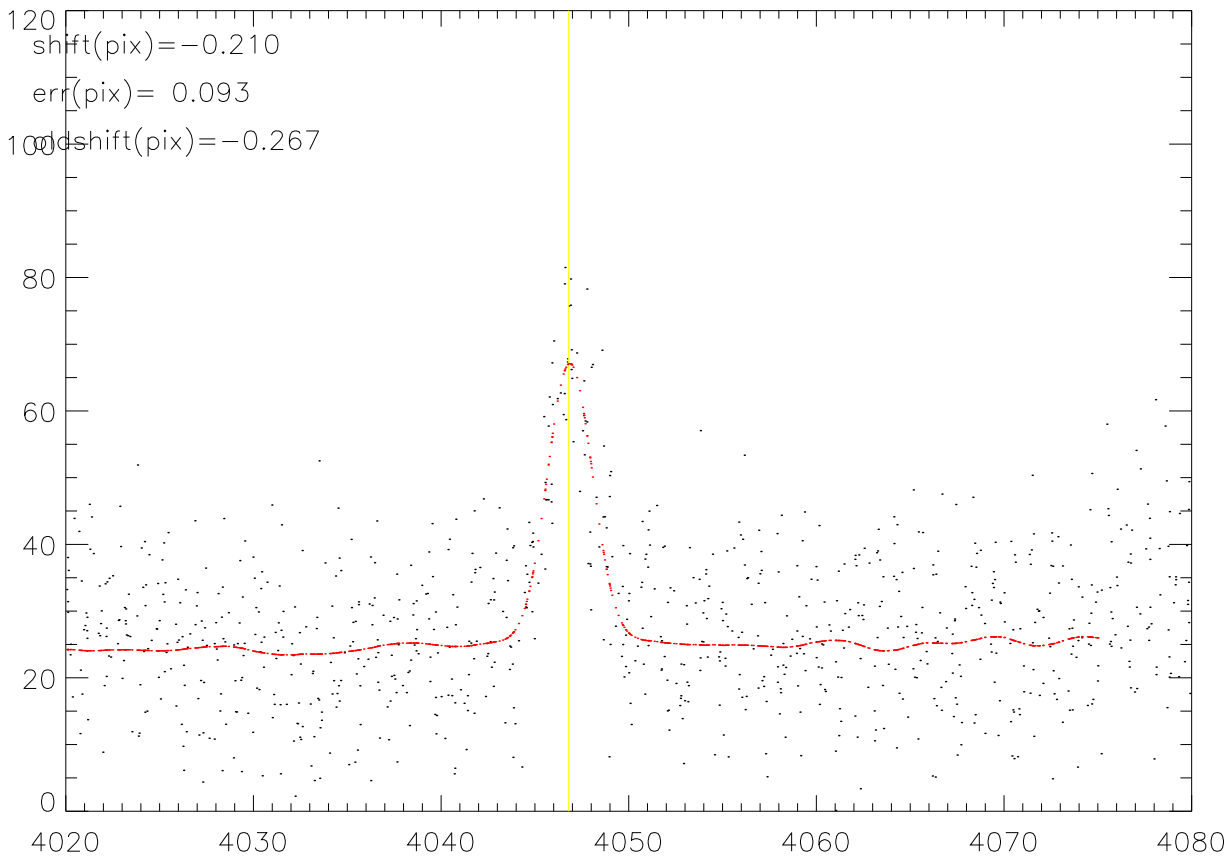

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b1-00030535.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.364
Max value = 8.699
Tue Feb 19 17:30:58 2008

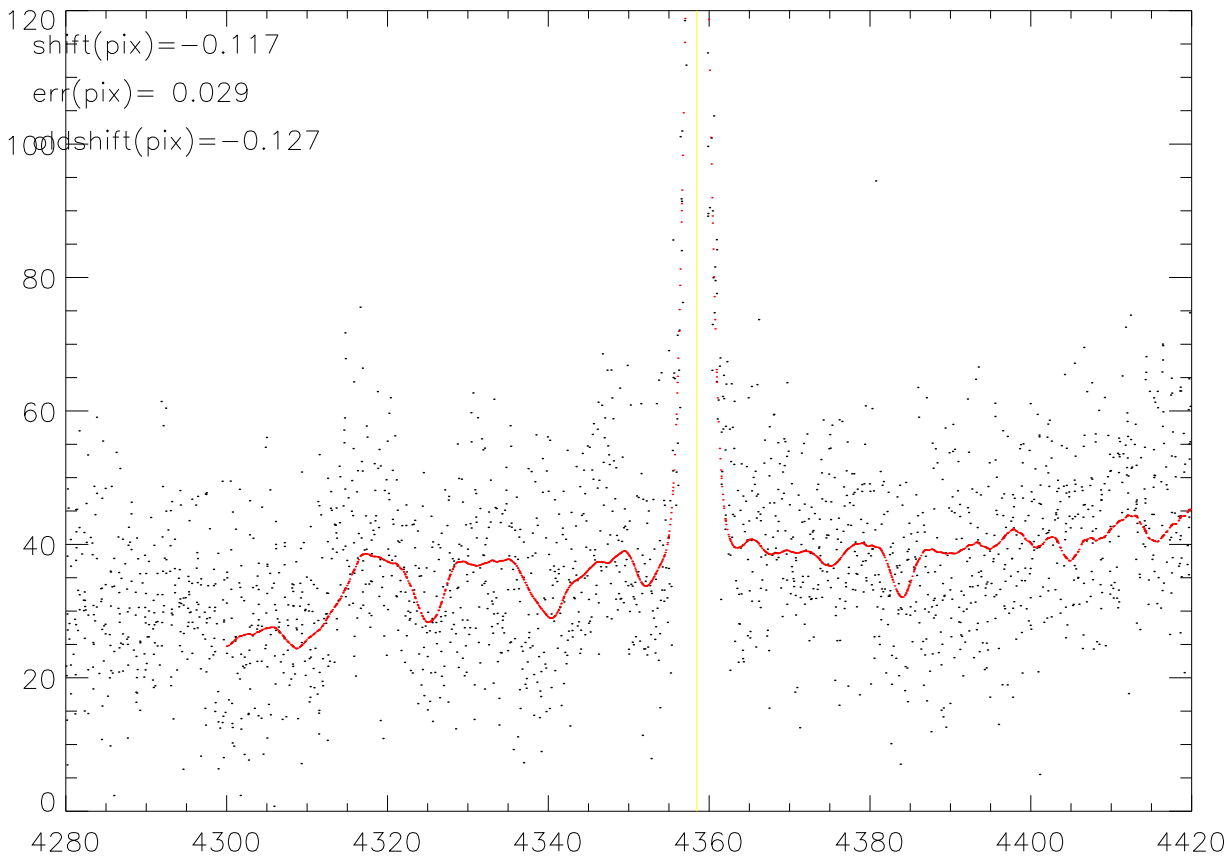

PLATE=1622 MJD=53385 Scattered Light on sdR-b1-00030535.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.36
4.27
5.18

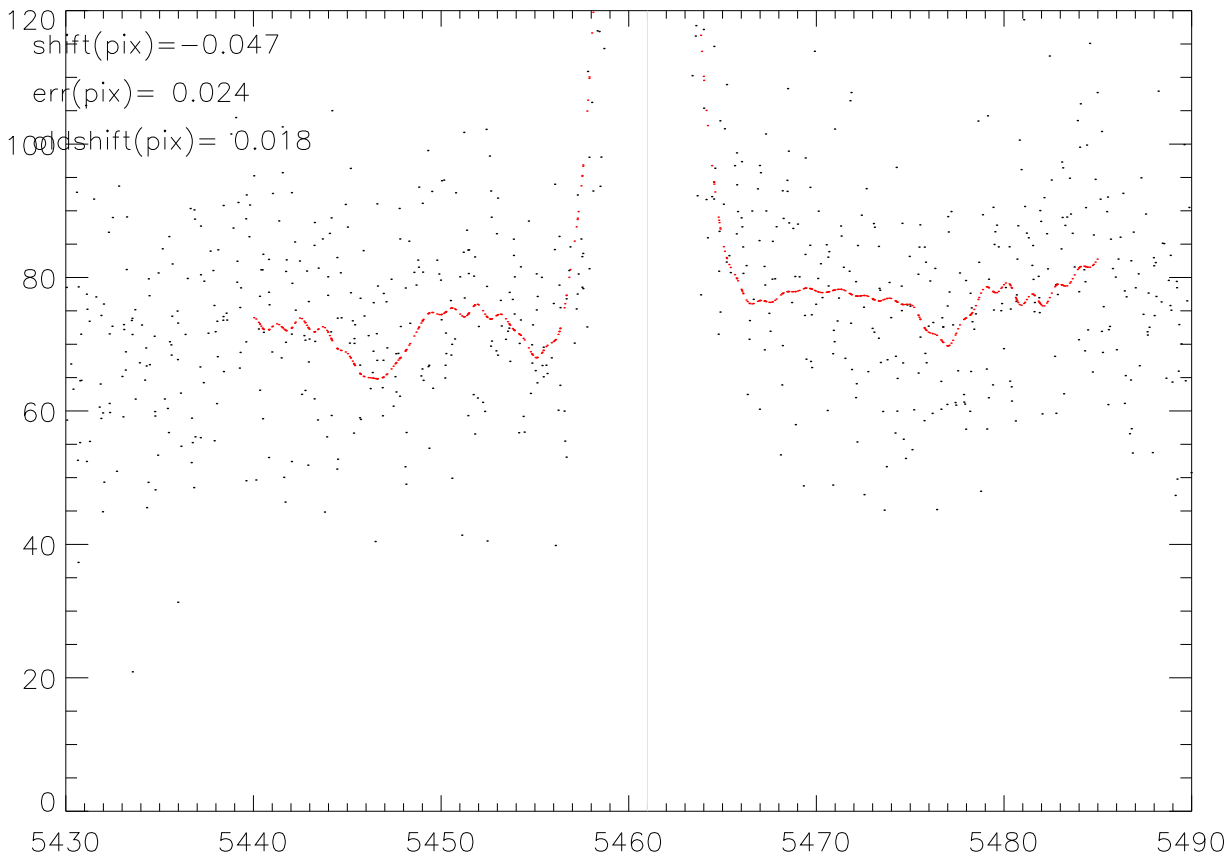

PLATE=1622 MJD=53385 Scattered Light on sdR-b1-00030535.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.586
Max value = 5.630
Tue Feb 19 17:33:29 2008

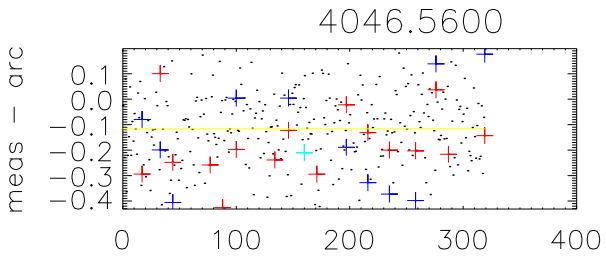

PLATE=1622 MJD=53385 Extraction chi^2 for sdR-b1-00030535.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

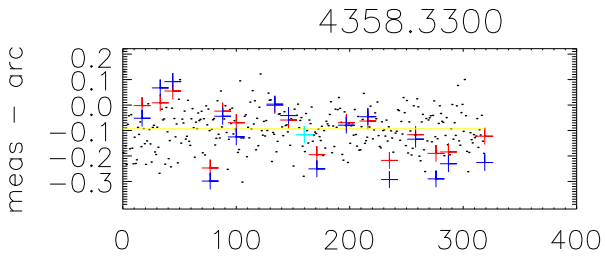

4046.5600
off: −0.27
sig: 0.079
4358.3300
off: −0.13
sig: 0.026
5460.9400
off: 0.02
sig: 0.020
5577.3390
off: 0.01
sig: 0.004
5889.9500
off: 0.09
sig: 0.008
5895.9240
off: 0.09
sig: 0.011

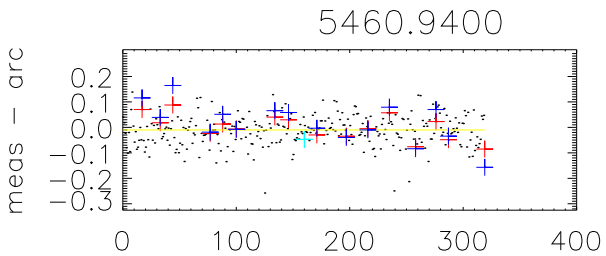

shift(pix)=−0.210
err(pix)= 0.093
oldshift(pix)=−0.267
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

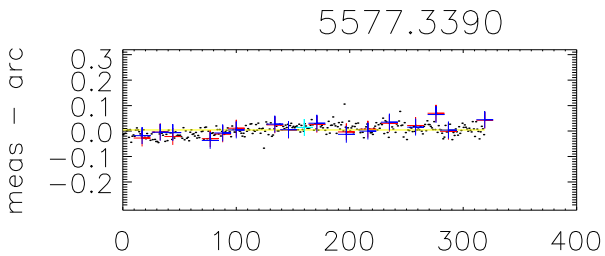

shift(pix)=−0.117
err(pix)= 0.029
oldshift(pix)=−0.127
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

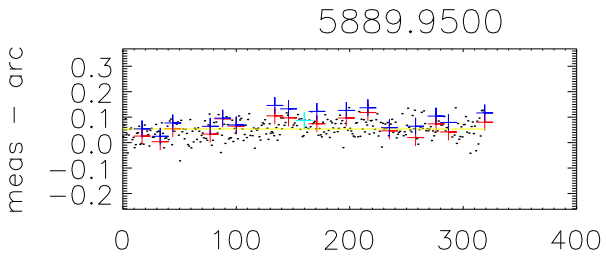

shift(pix)=−0.047
err(pix)= 0.024
oldshift(pix)= 0.018
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

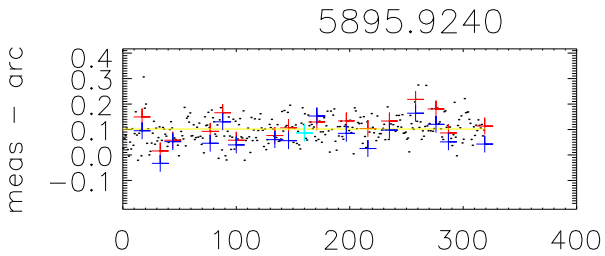

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

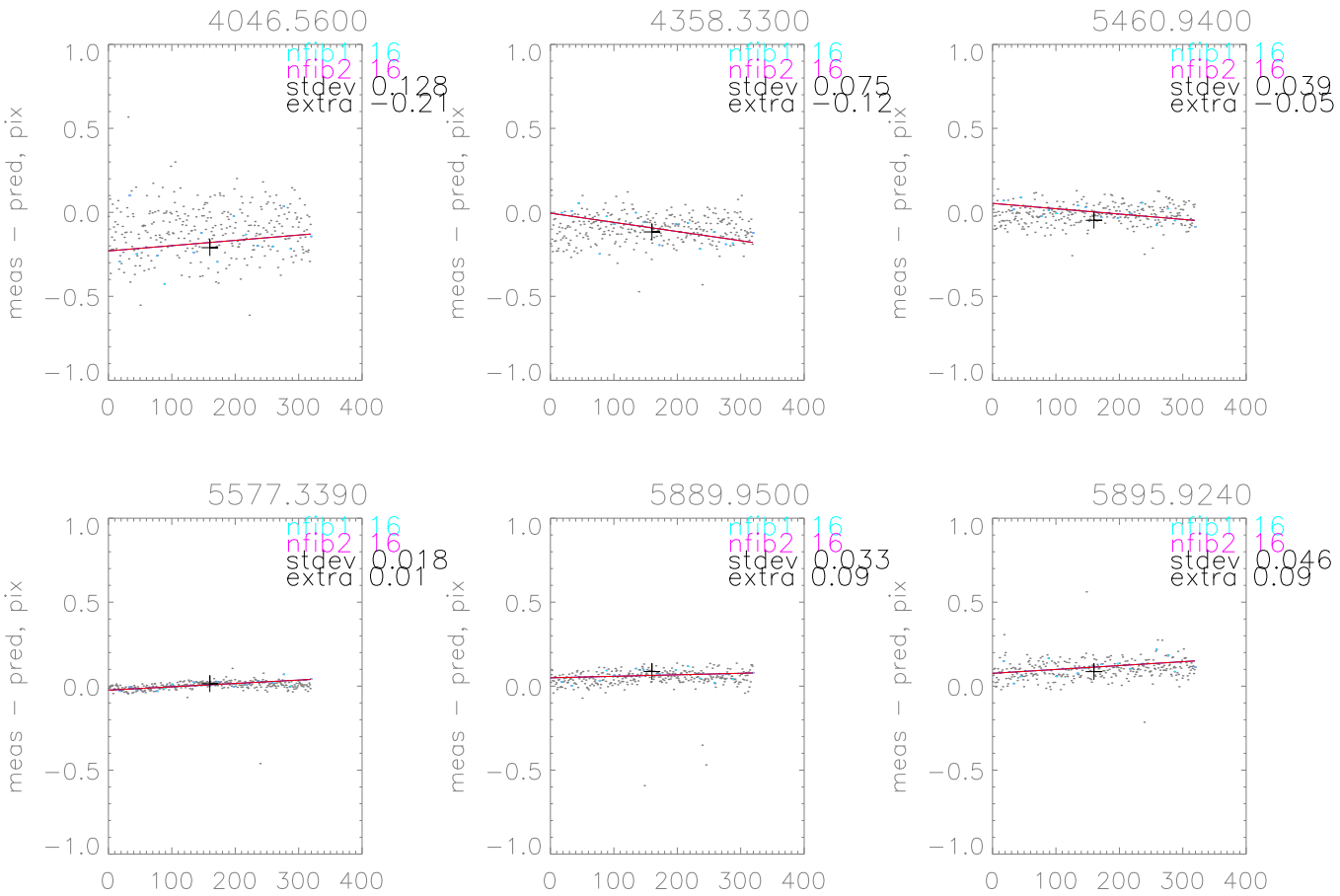

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

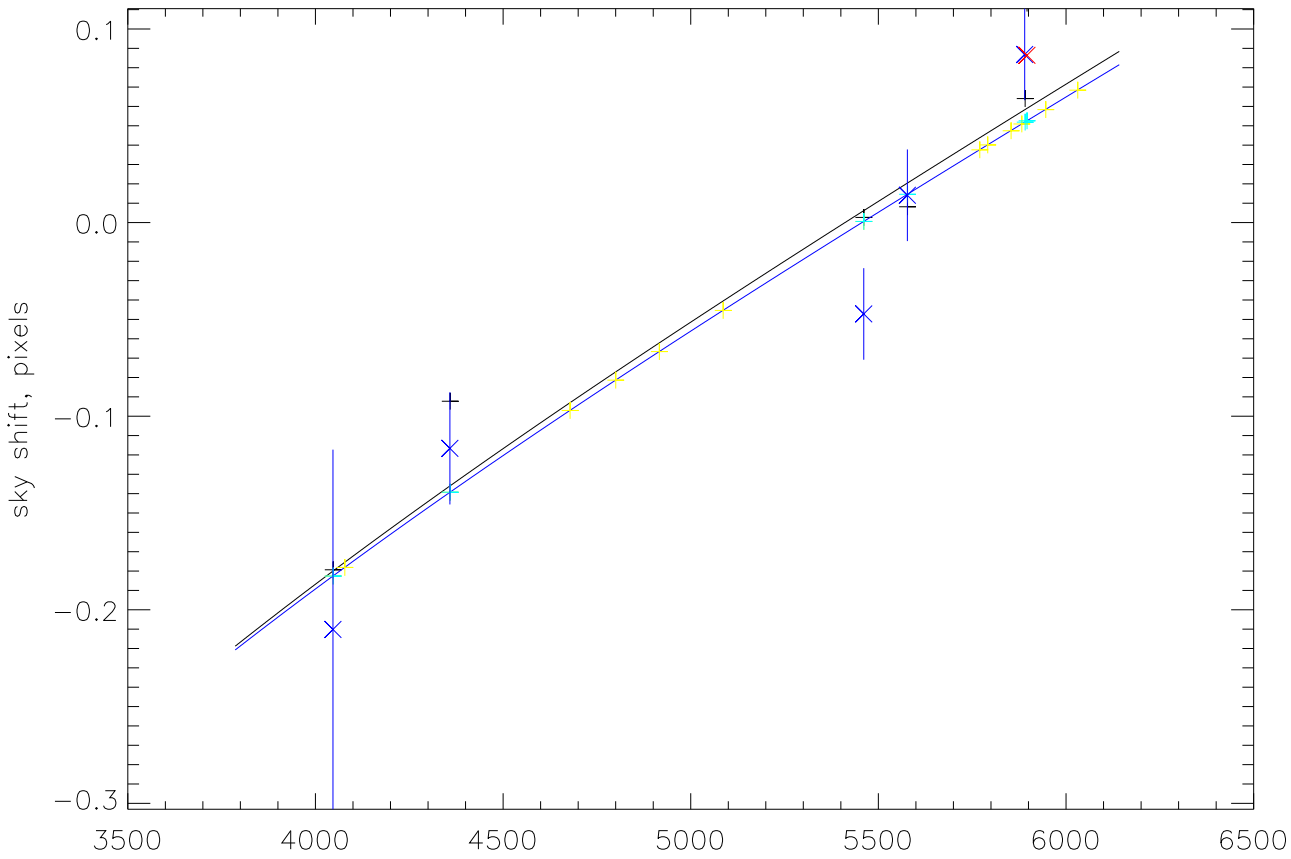

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

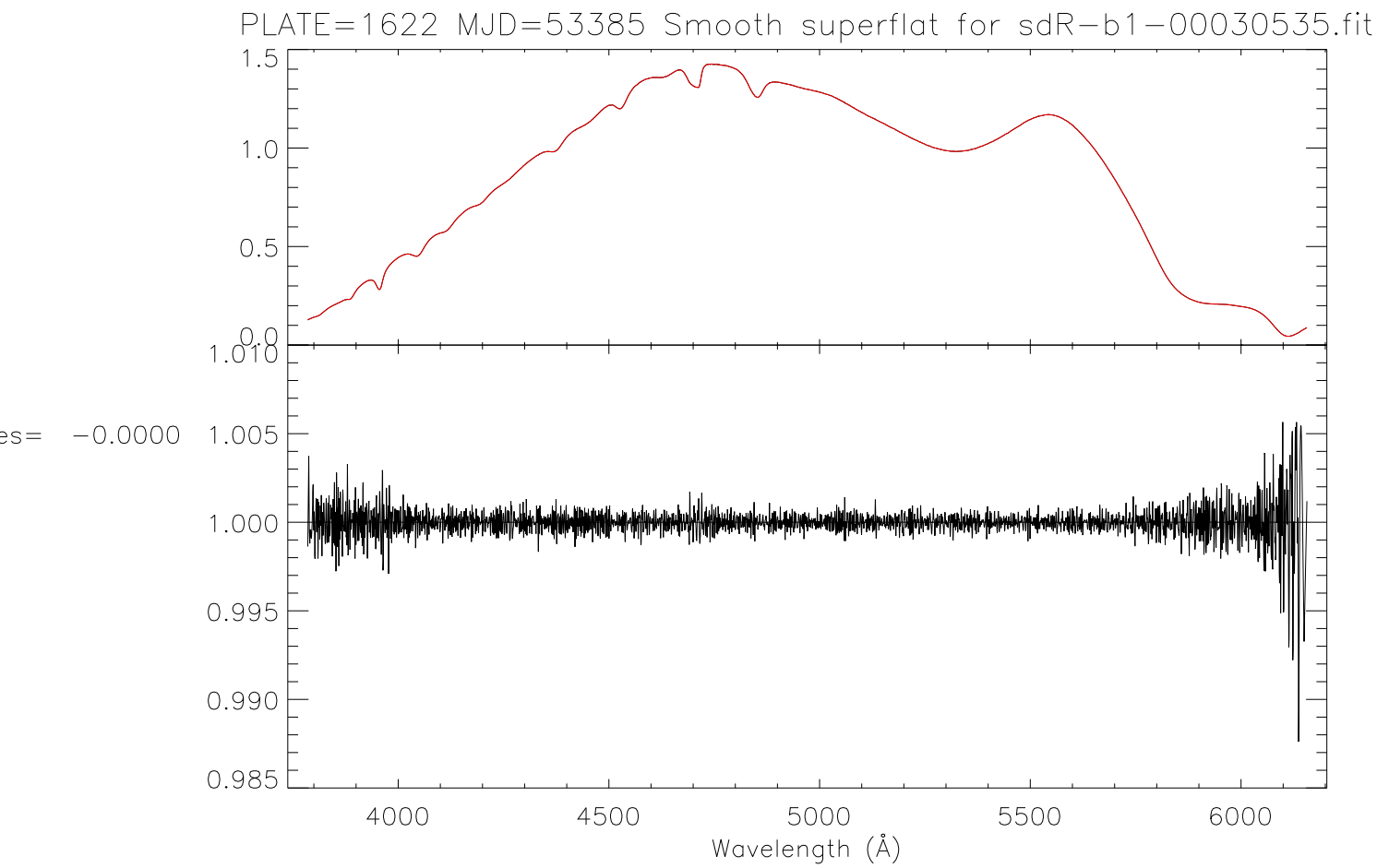

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

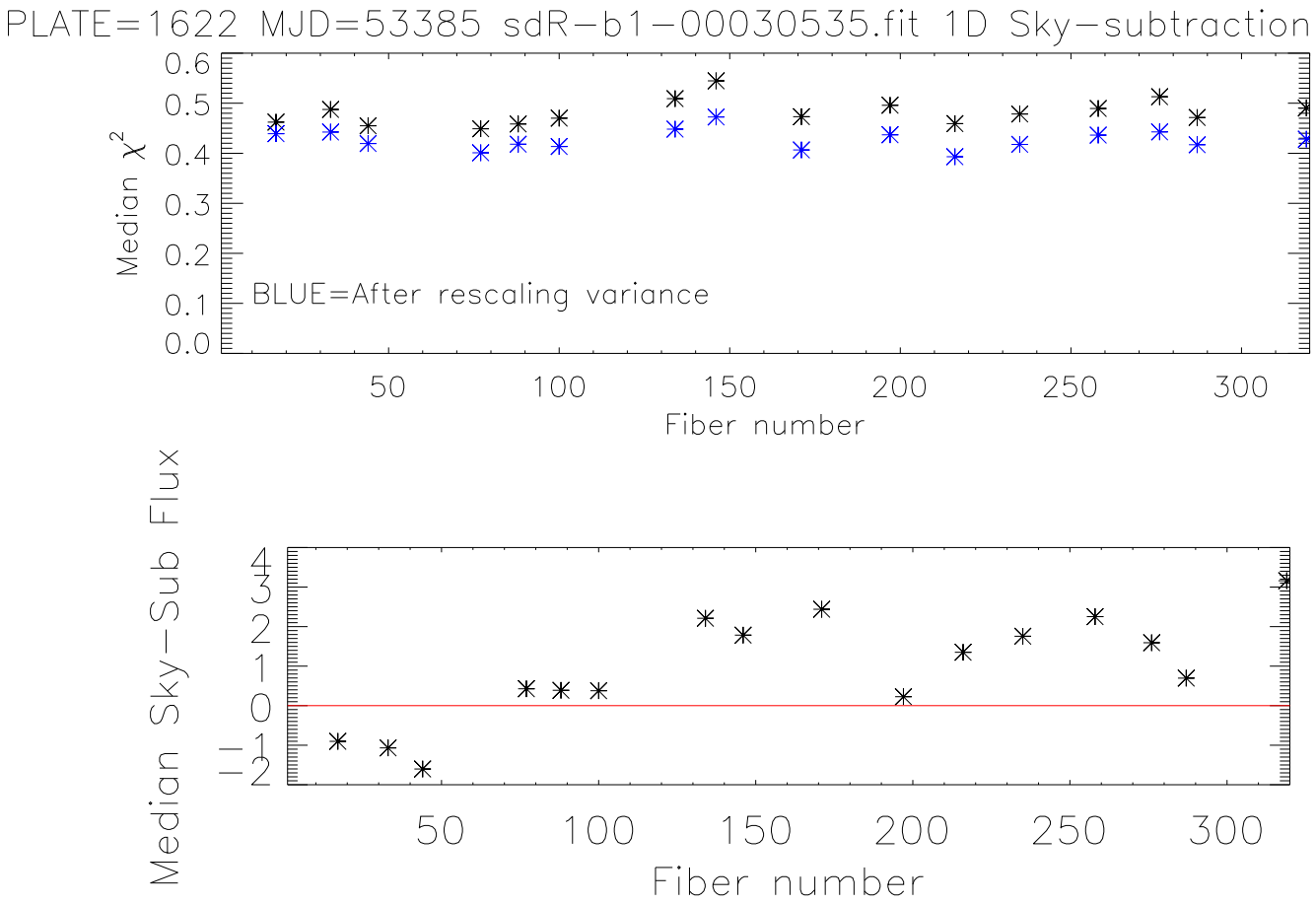

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

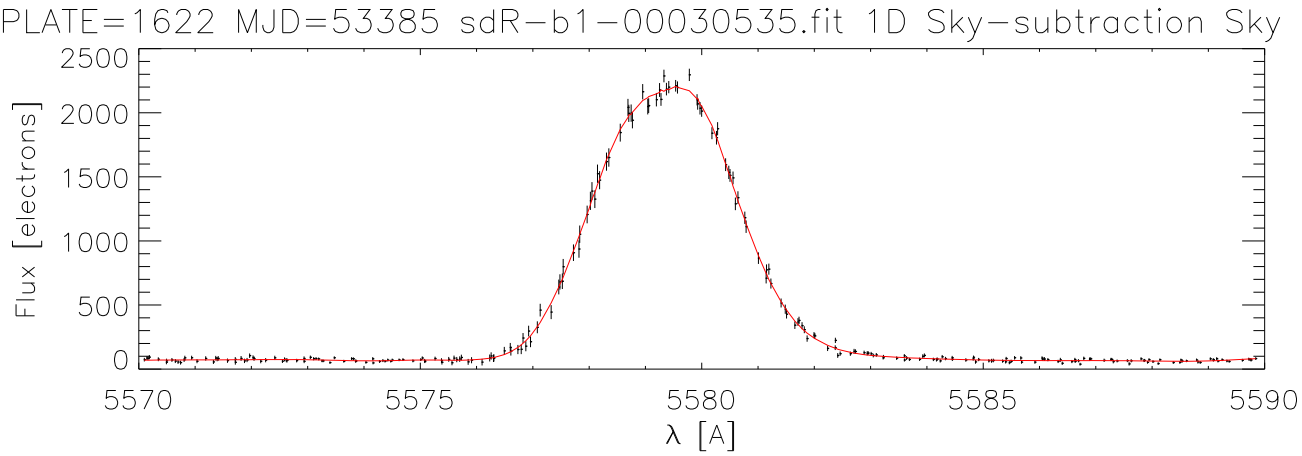

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

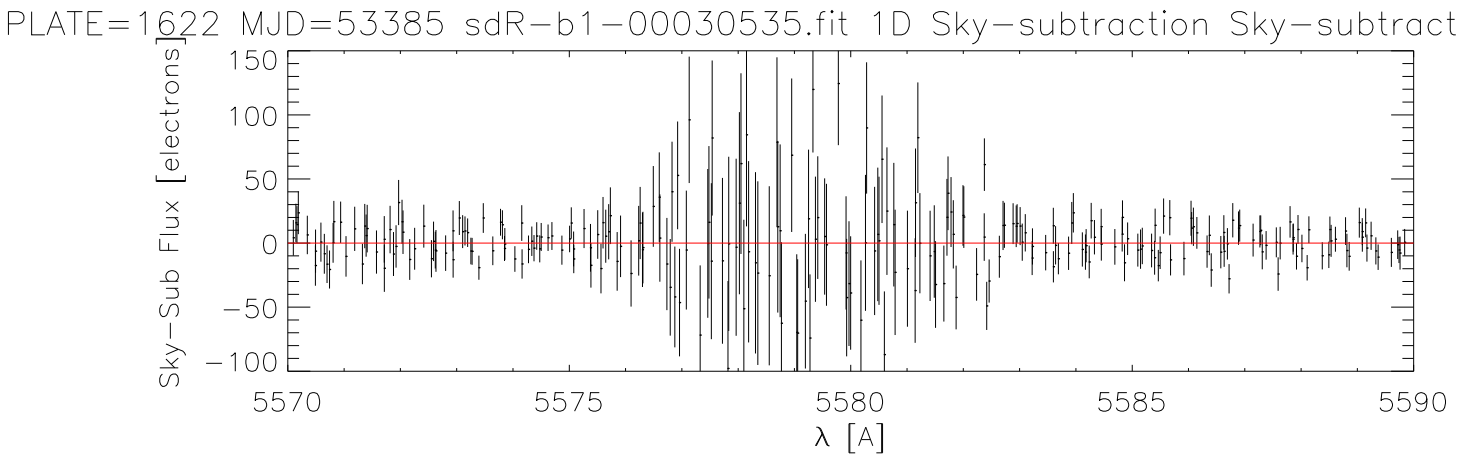

4046.5600
nfib1 16
nfib2 16
stdev 0.128
extra −0.21
4358.3300
nfib1 16
nfib2 16
stdev 0.075
extra −0.12
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.05
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra 0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.046
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

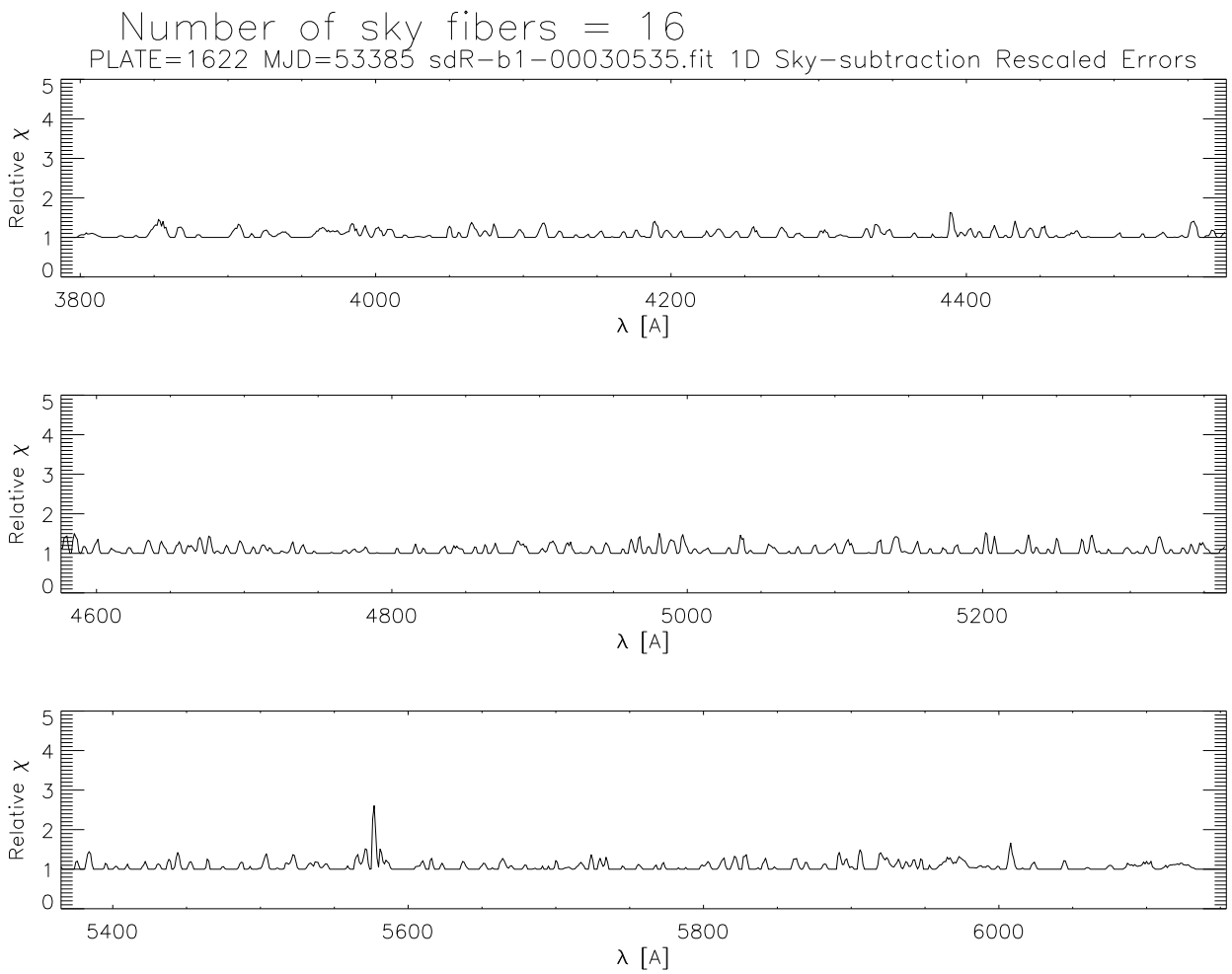

0.1
0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

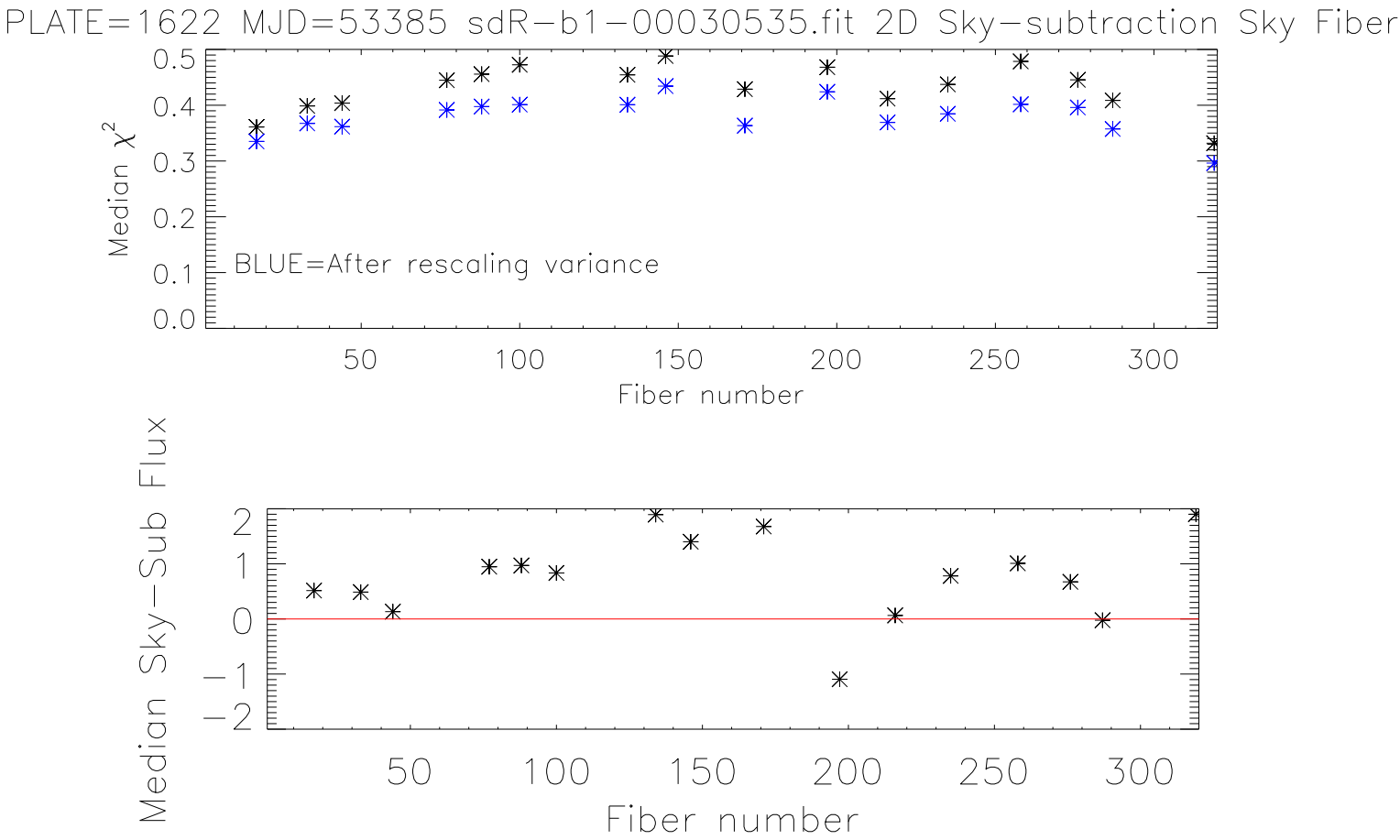

PLATE=1622 MJD=53385 Smooth superflat for sdR-b1-00030535.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

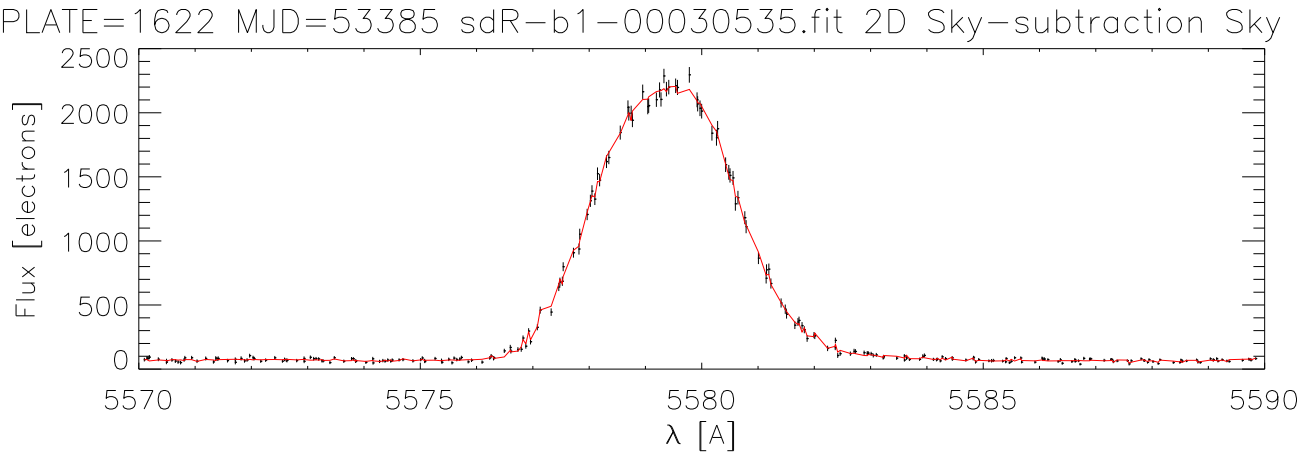

PLATE=1622 MJD=53385 sdR-b1-00030535.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

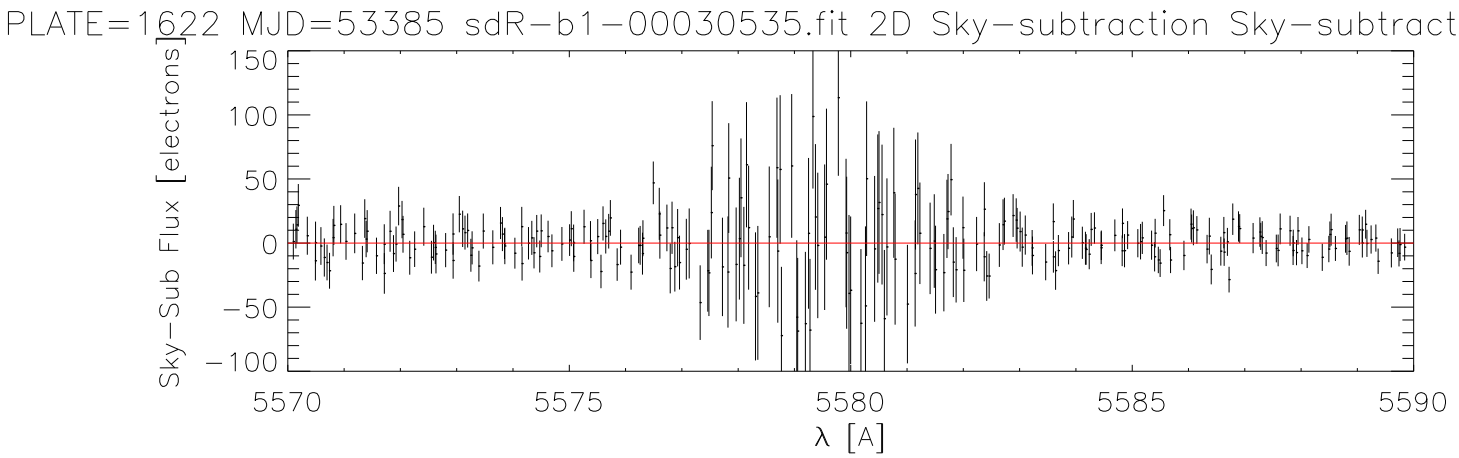

PLATE=1622 MJD=53385 sdR-b1-00030535.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

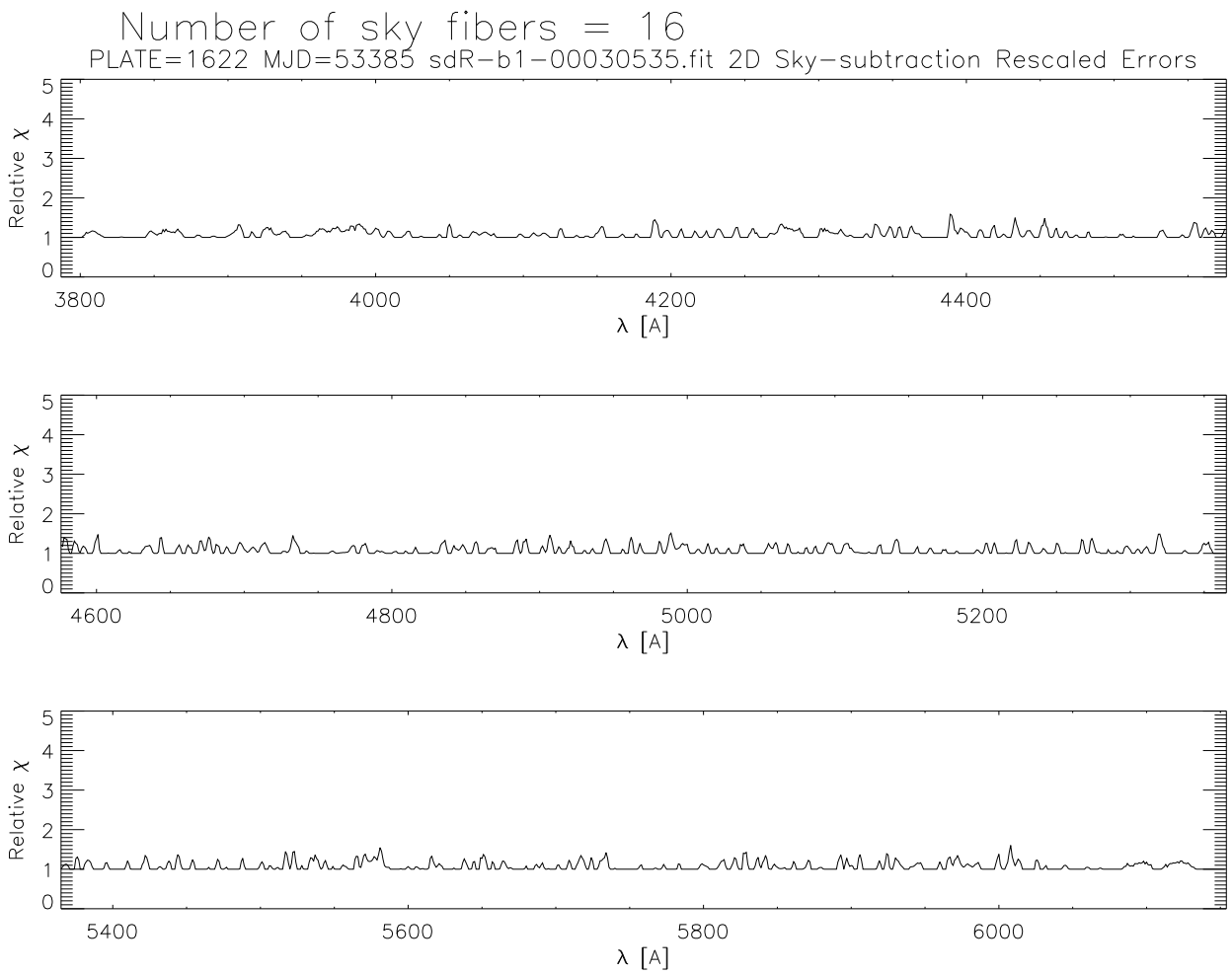

PLATE=1622 MJD=53385 sdR-b1-00030535.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

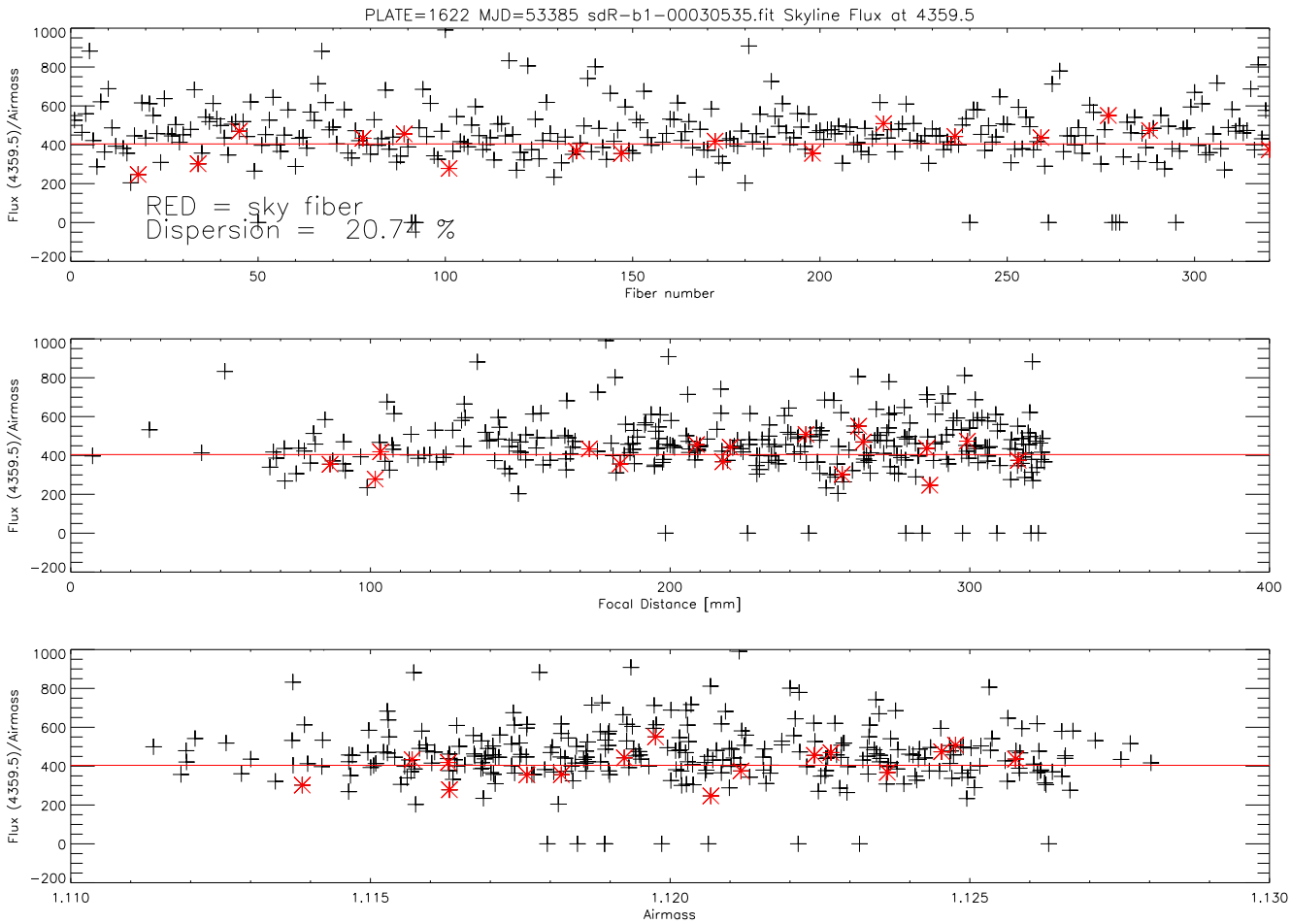

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b1-00030535.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

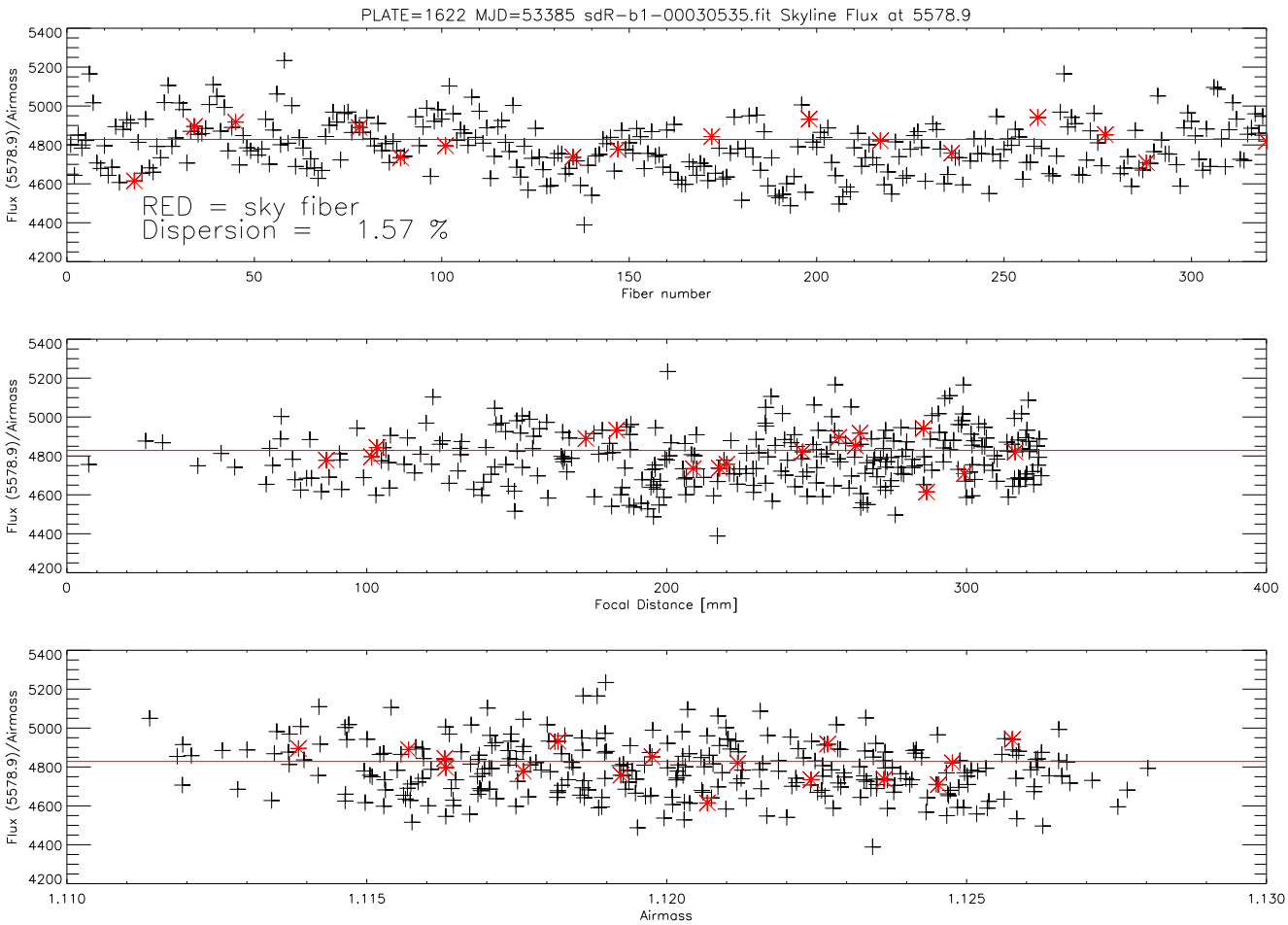

PLATE=1622 MJD=53385 sdR-b1-00030535.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2
1
0
−1
−2
50
100
150
200
250
300
Fiber number

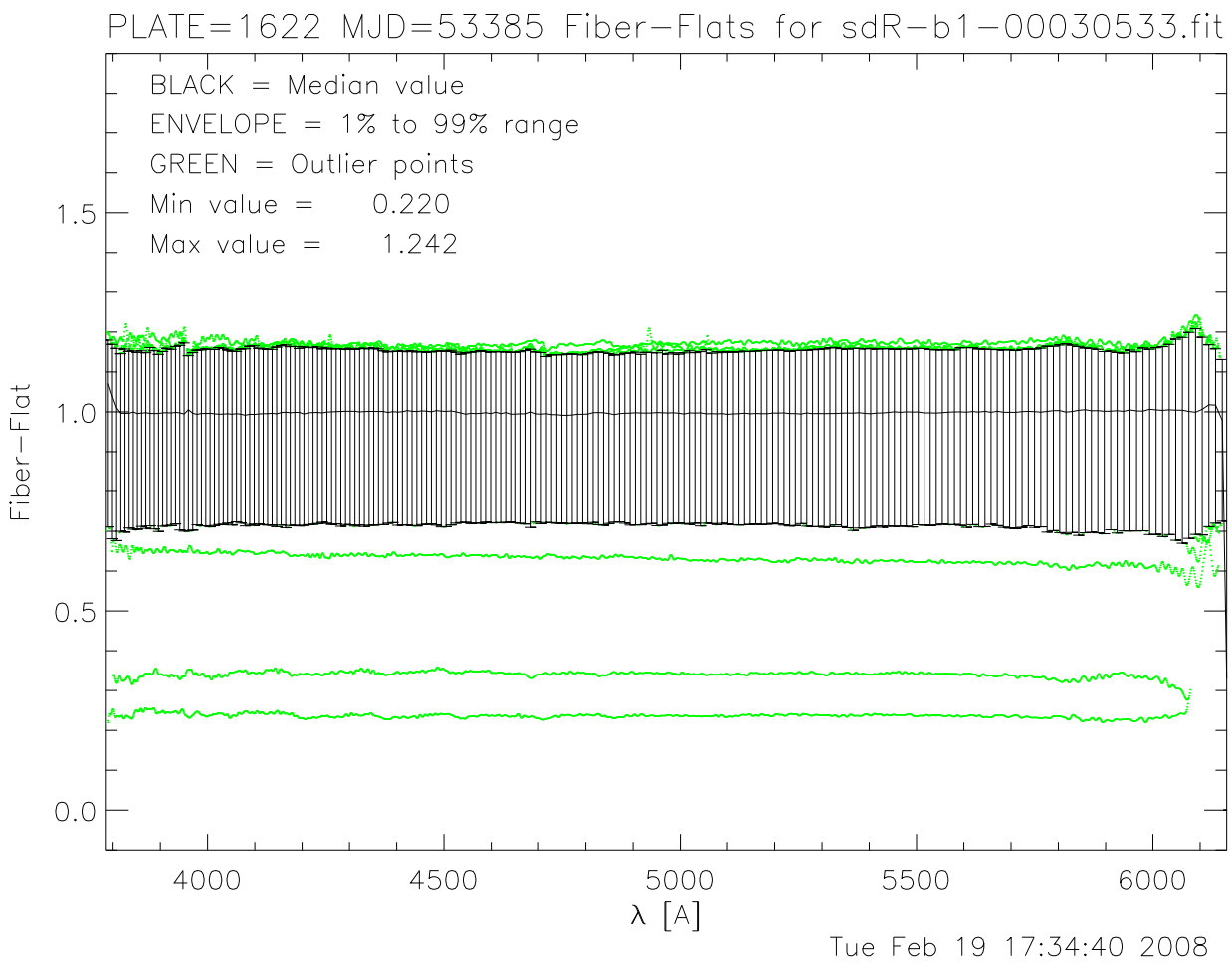

PLATE=1622 MJD=53385 sdR-b1-00030535.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

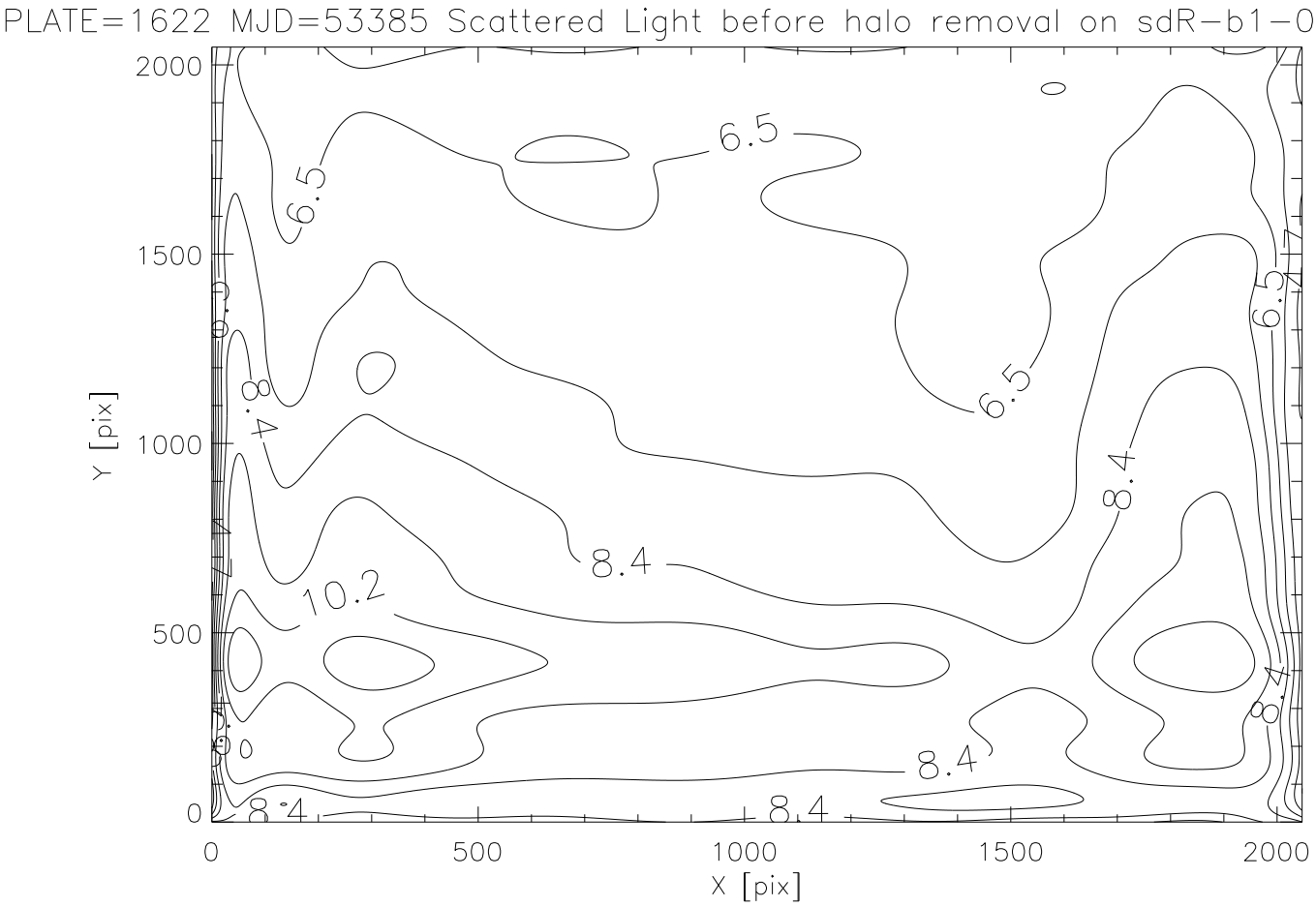

PLATE=1622 MJD=53385 sdR-b1-00030535.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

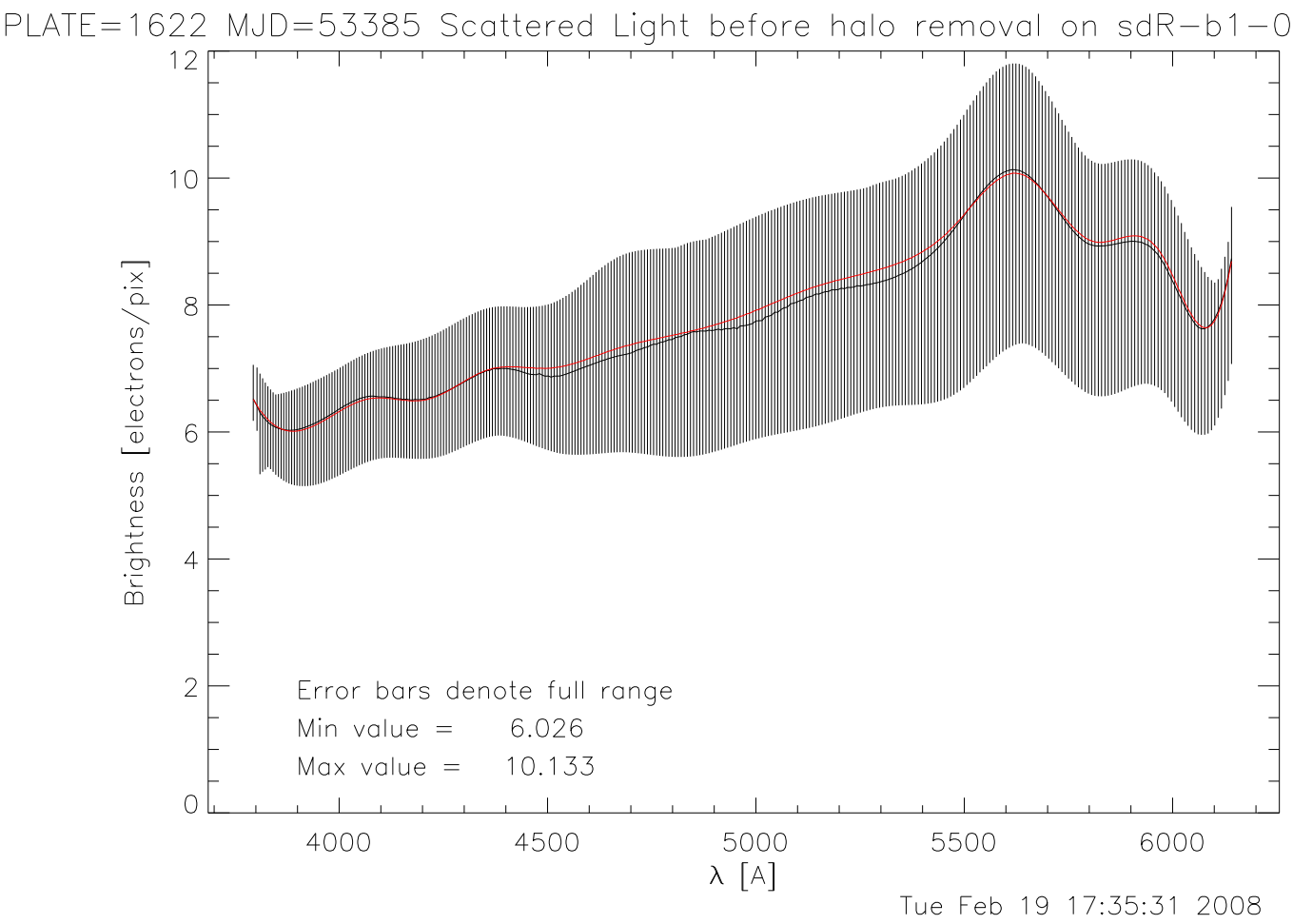

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b1-00030535.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

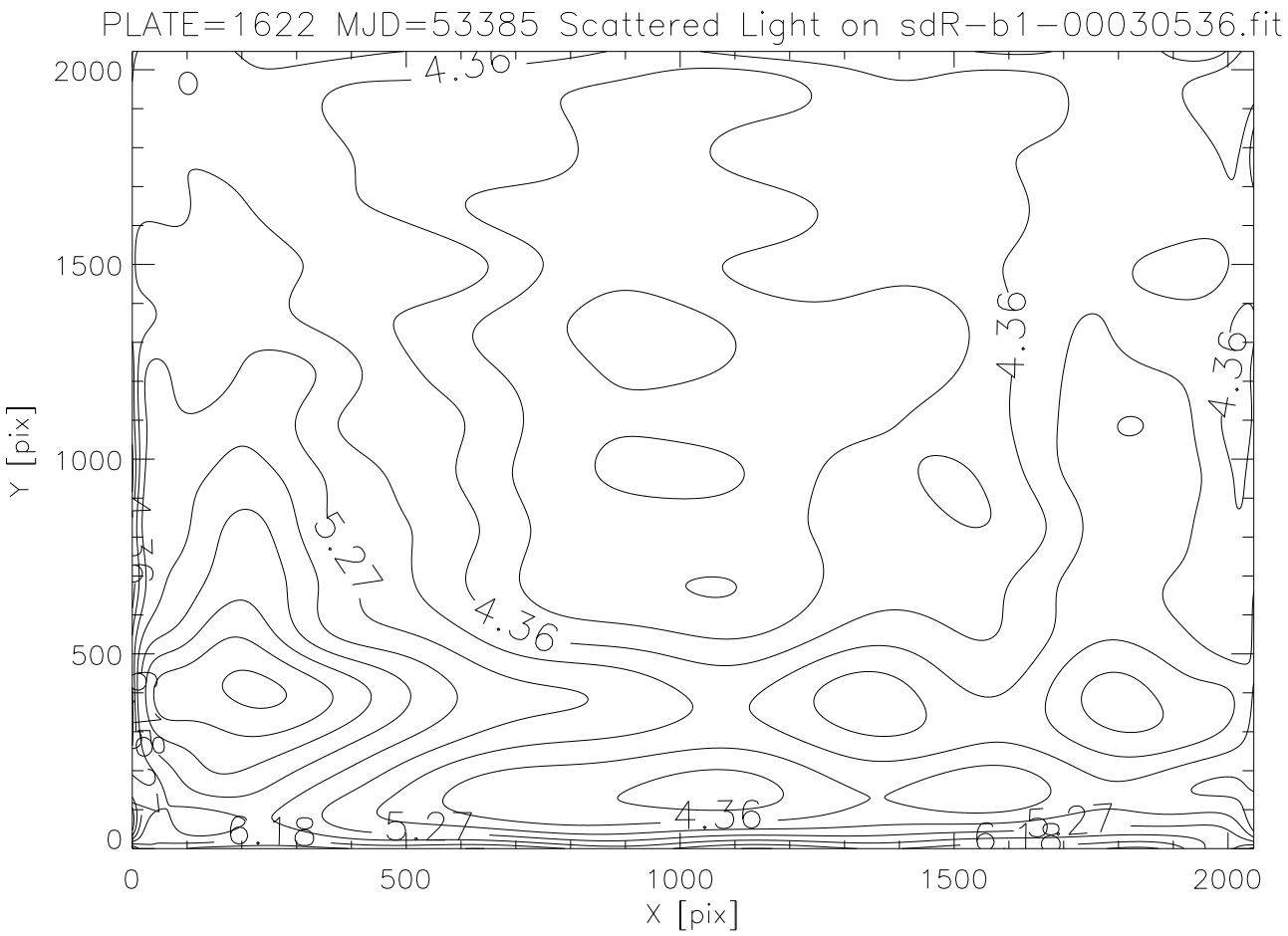

PLATE=1622 MJD=53385 sdR-b1-00030535.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 20.74 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

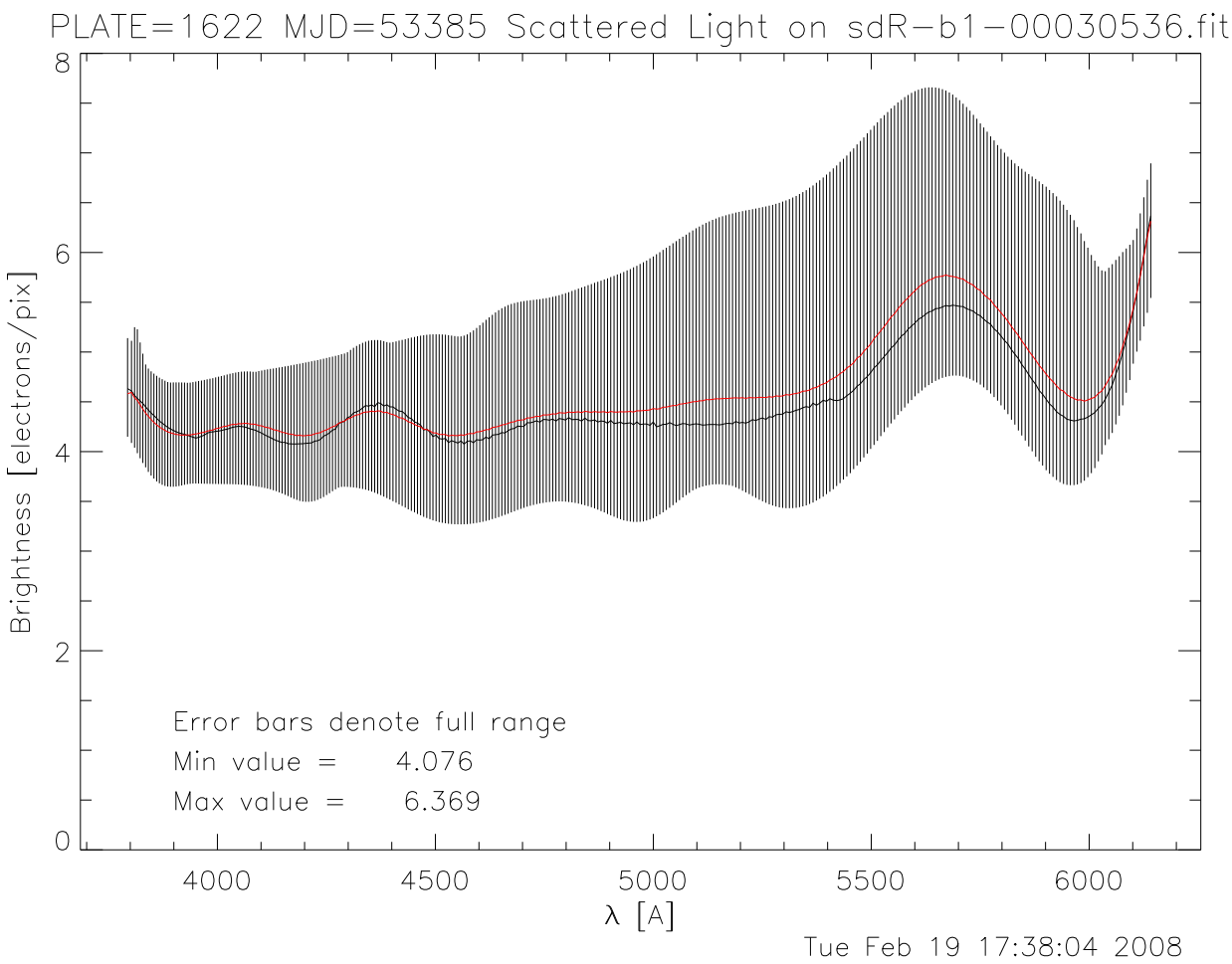

PLATE=1622 MJD=53385 sdR-b1-00030535.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.57 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

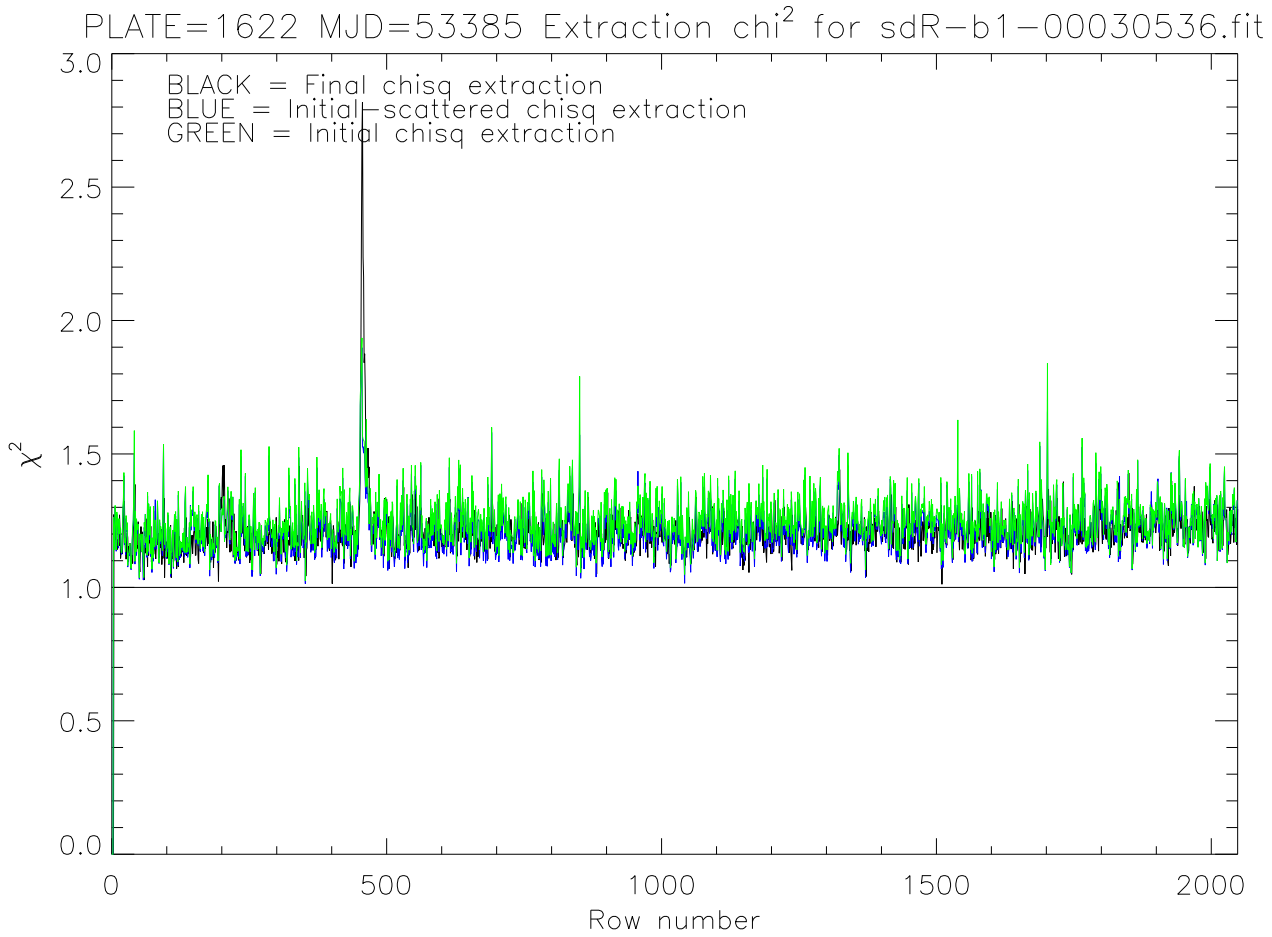

PLATE=1622 MJD=53385 Fiber-Flats for sdR-b1-00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.220
Max value = 1.242
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:34:40 2008

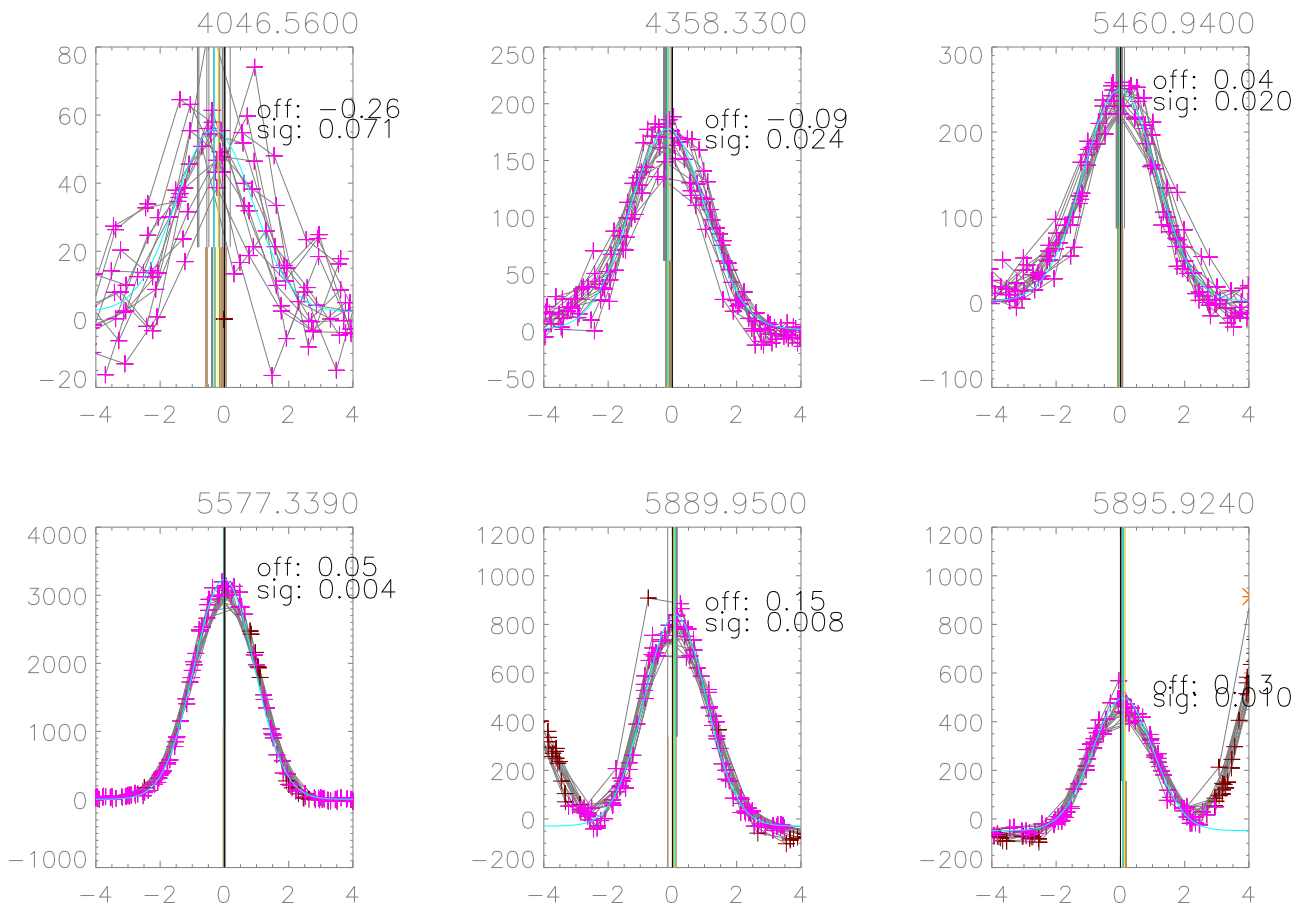

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b1-00030536.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.5
8.4
10.2

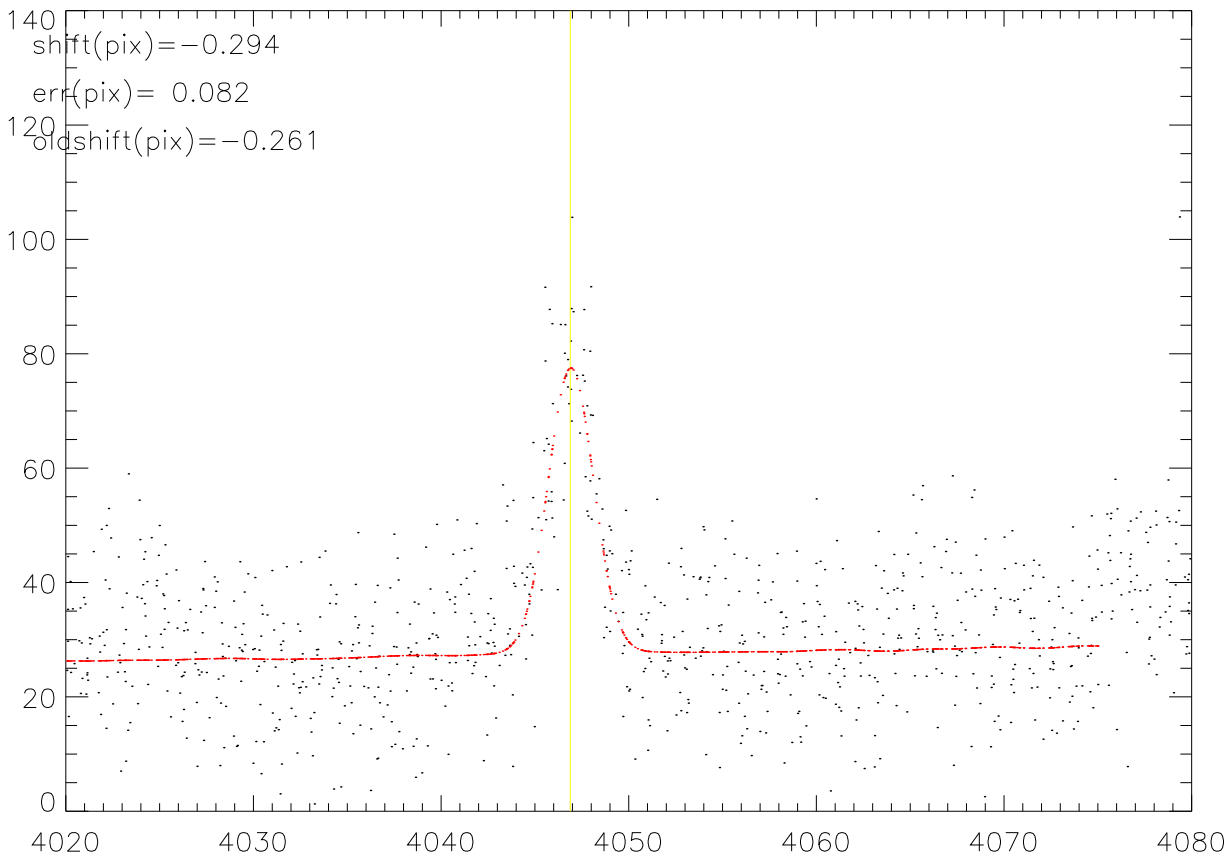

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b1-00030536.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.026
Max value = 10.133
Tue Feb 19 17:35:31 2008

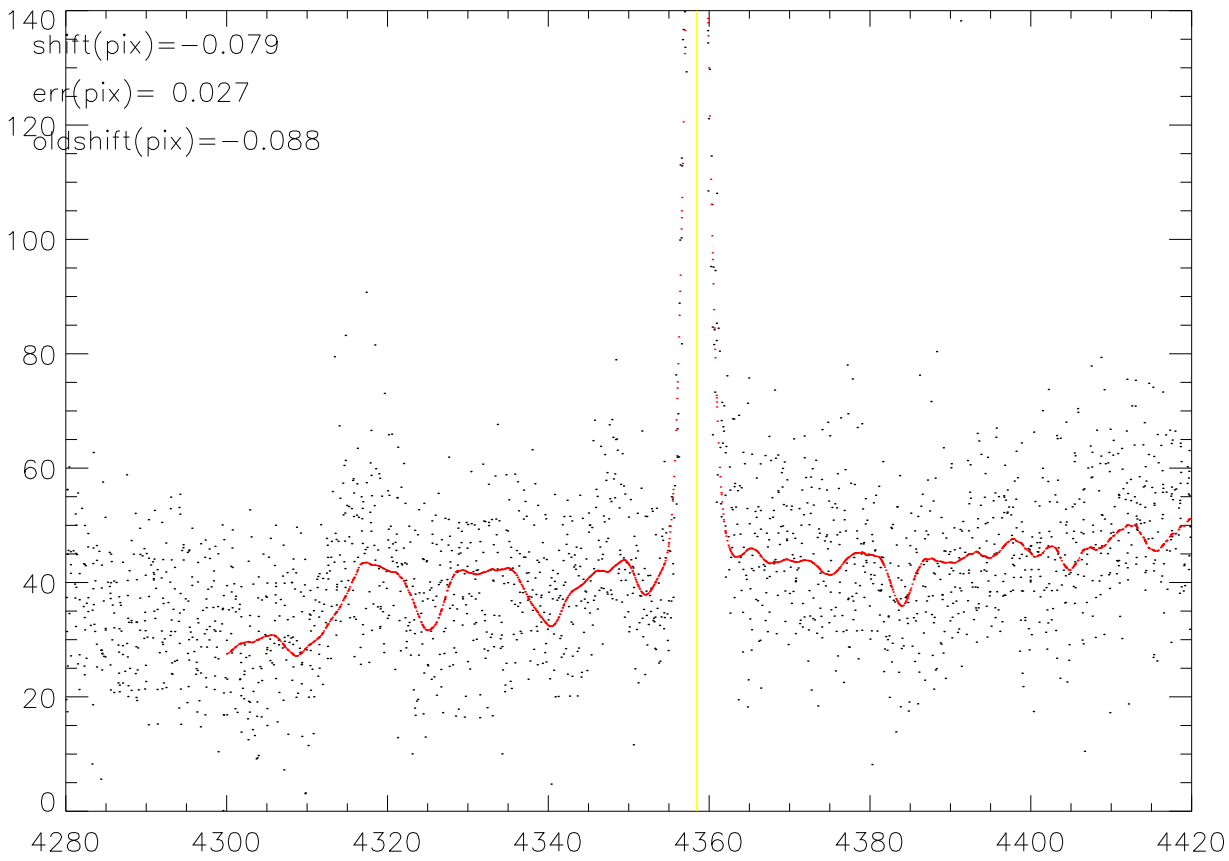

PLATE=1622 MJD=53385 Scattered Light on sdR-b1-00030536.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
4.36
4.36
4.36
5.27
4.36
6.18
5.27
4.36
6.18
5.27

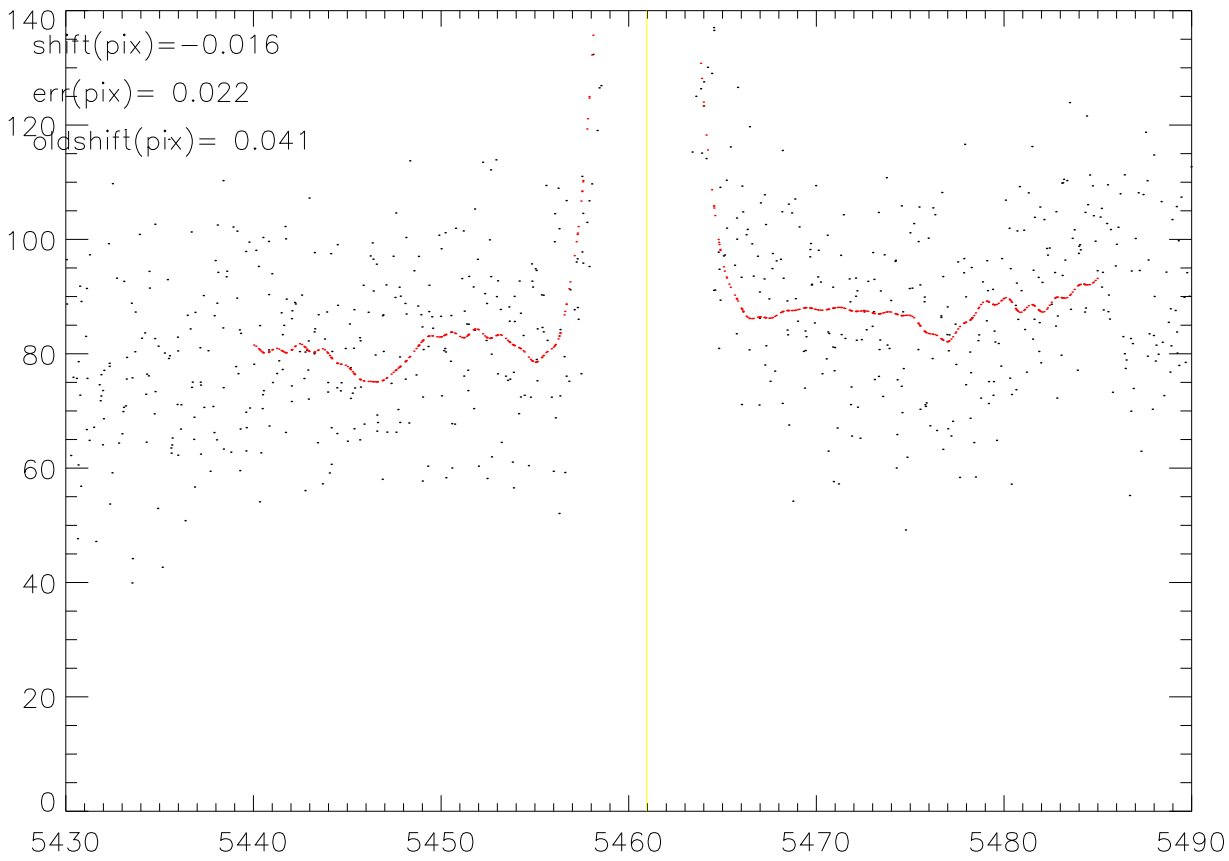

PLATE=1622 MJD=53385 Scattered Light on sdR-b1-00030536.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.076
Max value = 6.369
Tue Feb 19 17:38:04 2008

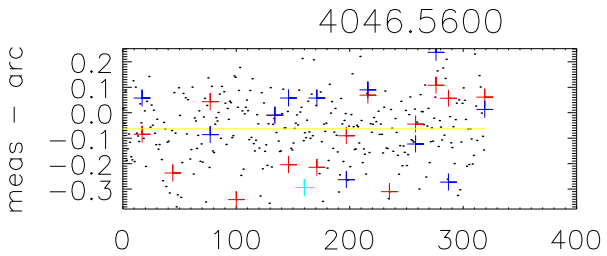

PLATE=1622 MJD=53385 Extraction chi^2 for sdR-b1-00030536.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

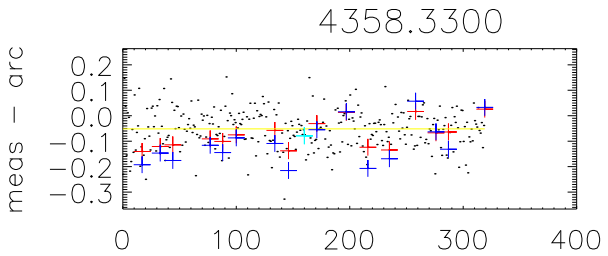

4046.5600
off: −0.26
sig: 0.071
4358.3300
off: −0.09
sig: 0.024
5460.9400
off: 0.04
sig: 0.020
5577.3390
off: 0.05
sig: 0.004
5889.9500
off: 0.15
sig: 0.008
5895.9240
off: 0.13
sig: 0.010

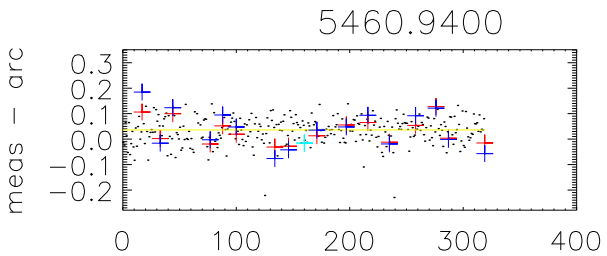

shift(pix)=−0.294
err(pix)= 0.082
oldshift(pix)=−0.261
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

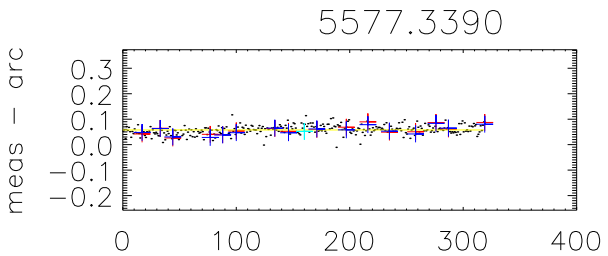

shift(pix)=−0.079
err(pix)= 0.027
oldshift(pix)=−0.088
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

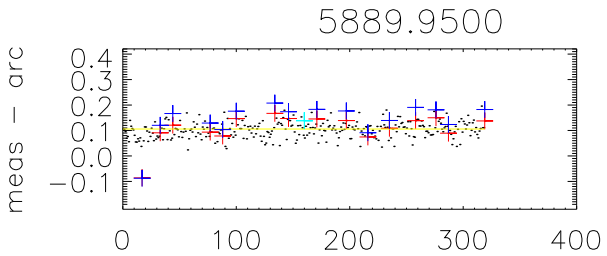

shift(pix)=−0.016
err(pix)= 0.022
oldshift(pix)= 0.041
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

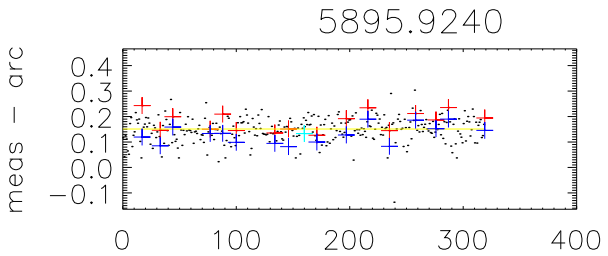

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

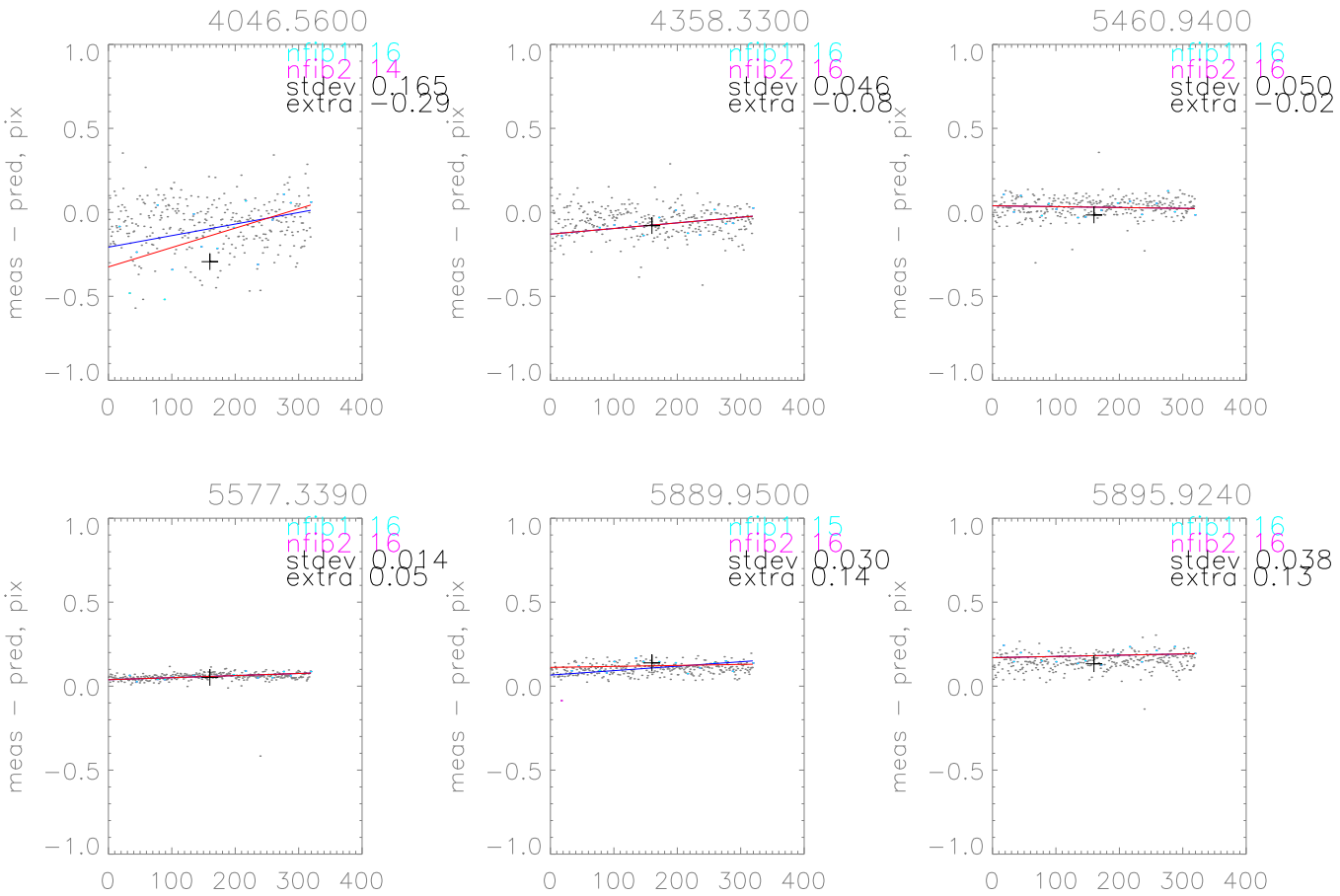

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

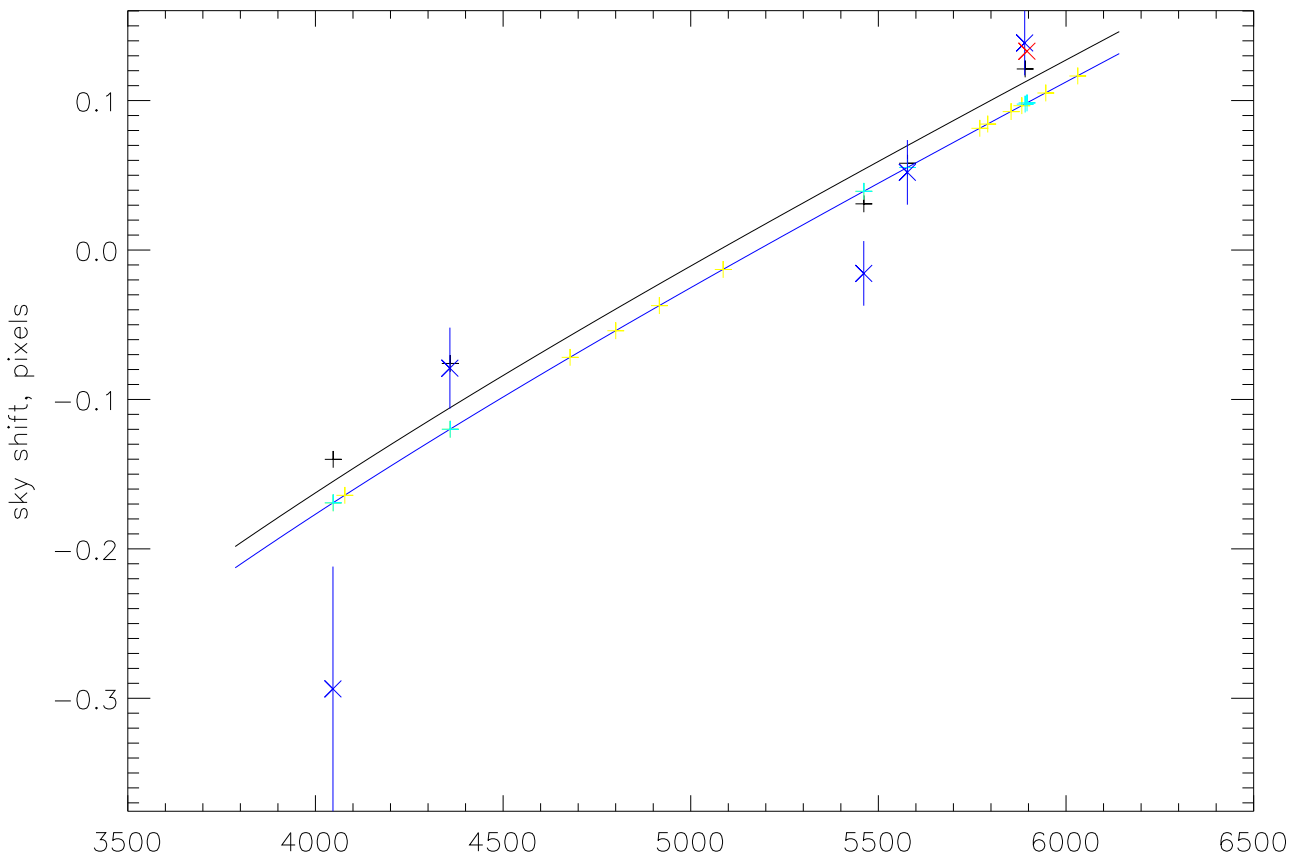

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

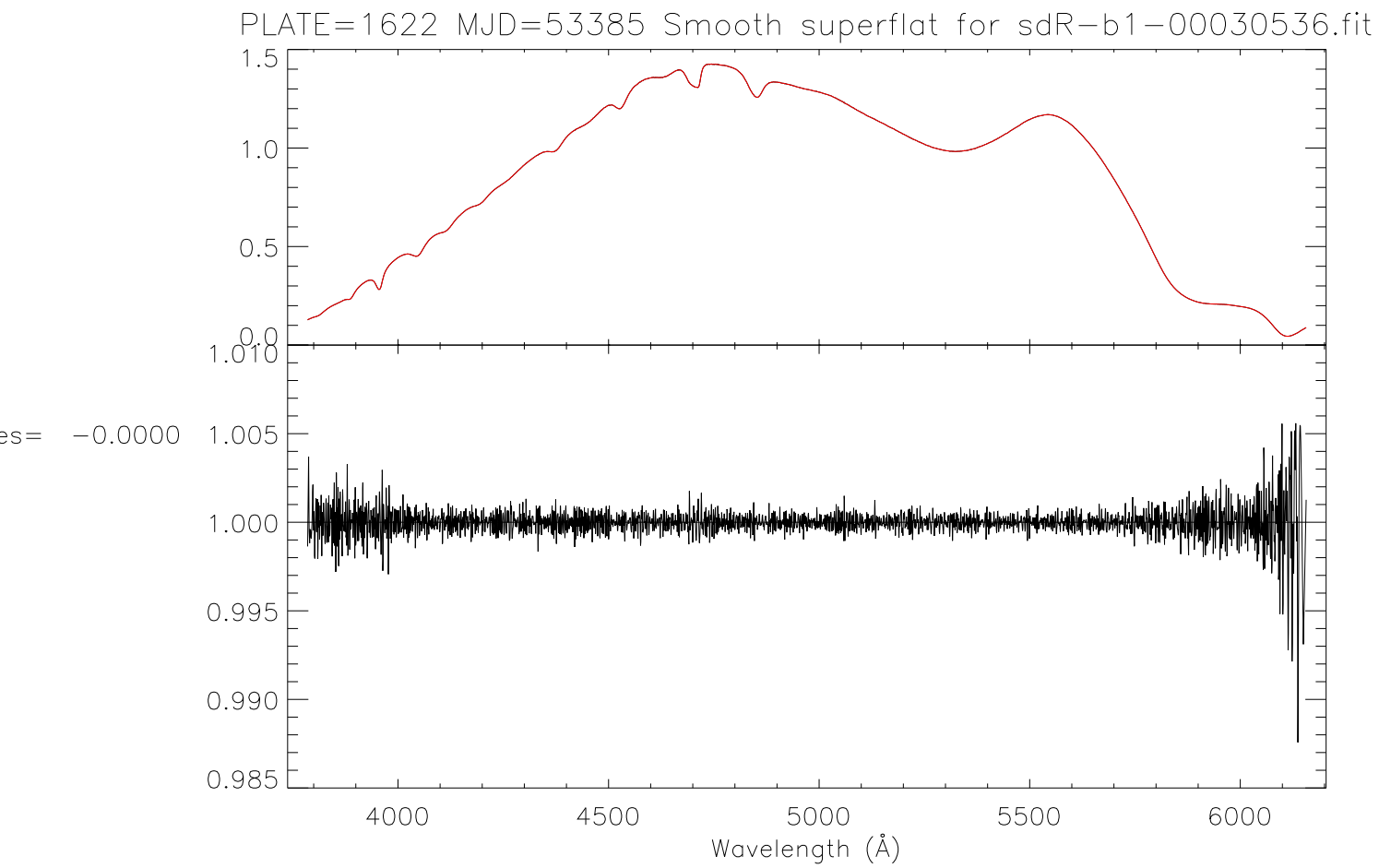

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

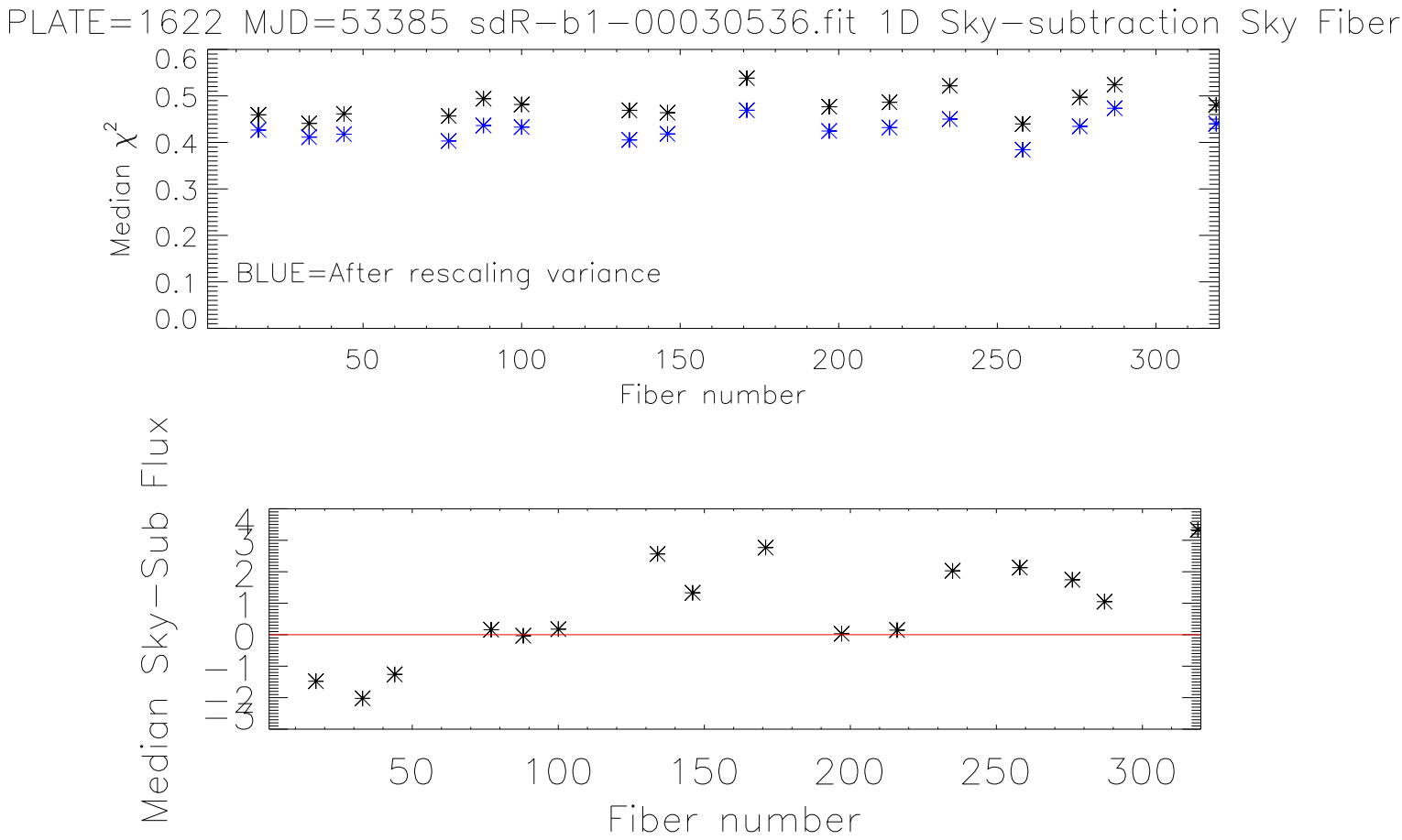

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

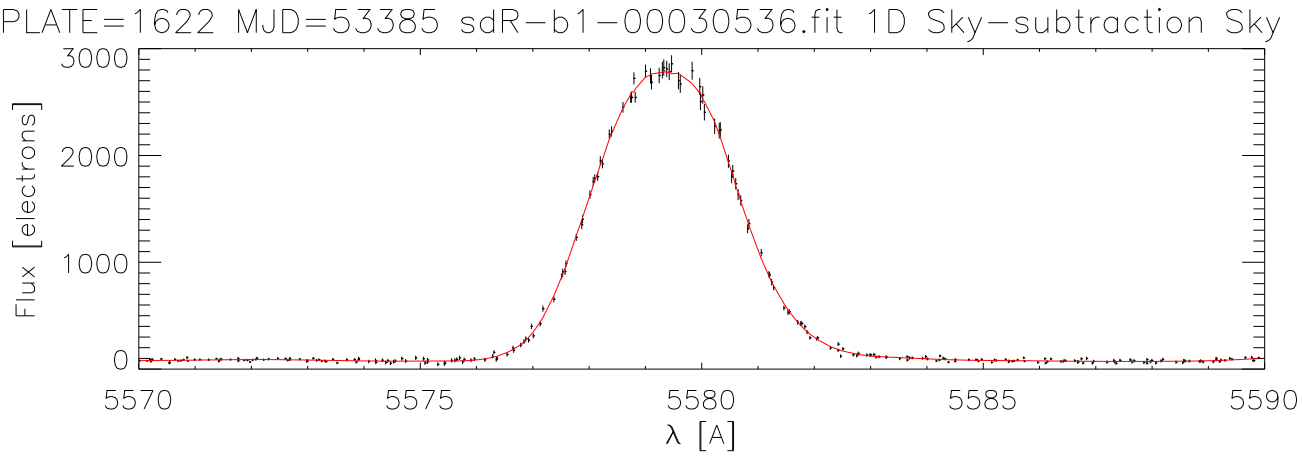

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

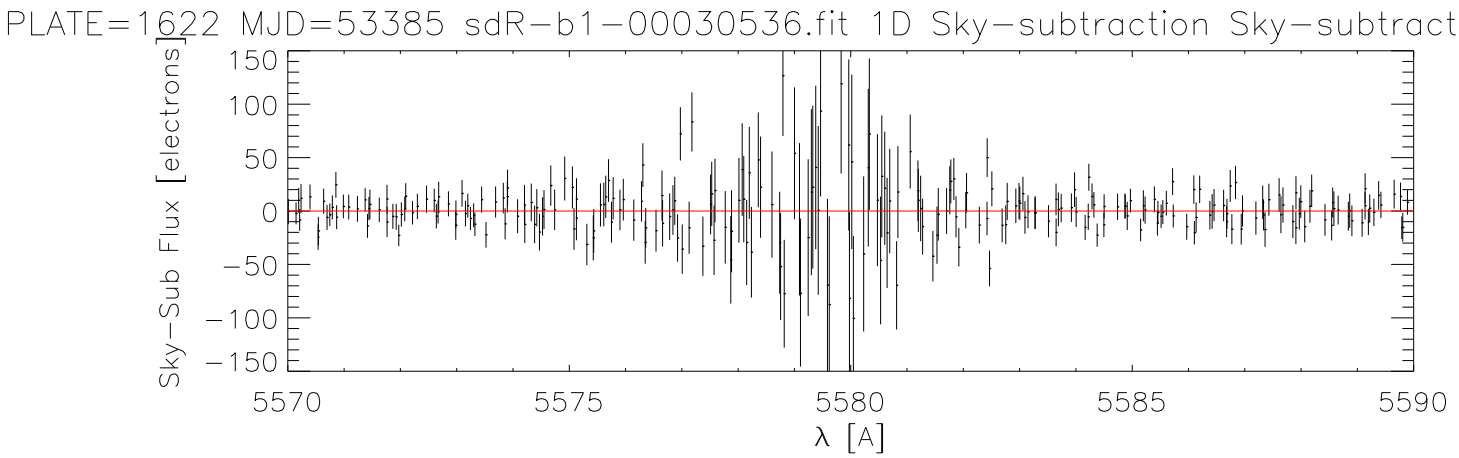

4046.5600
nfib1 16
nfib2 14
stdev 0.165
extra −0.29
4358.3300
nfib1 16
nfib2 16
stdev 0.046
extra −0.08
5460.9400
nfib1 16
nfib2 16
stdev 0.050
extra −0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.05
5889.9500
nfib1 15
nfib2 16
stdev 0.030
extra 0.14
5895.9240
nfib1 16
nfib2 16
stdev 0.038
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

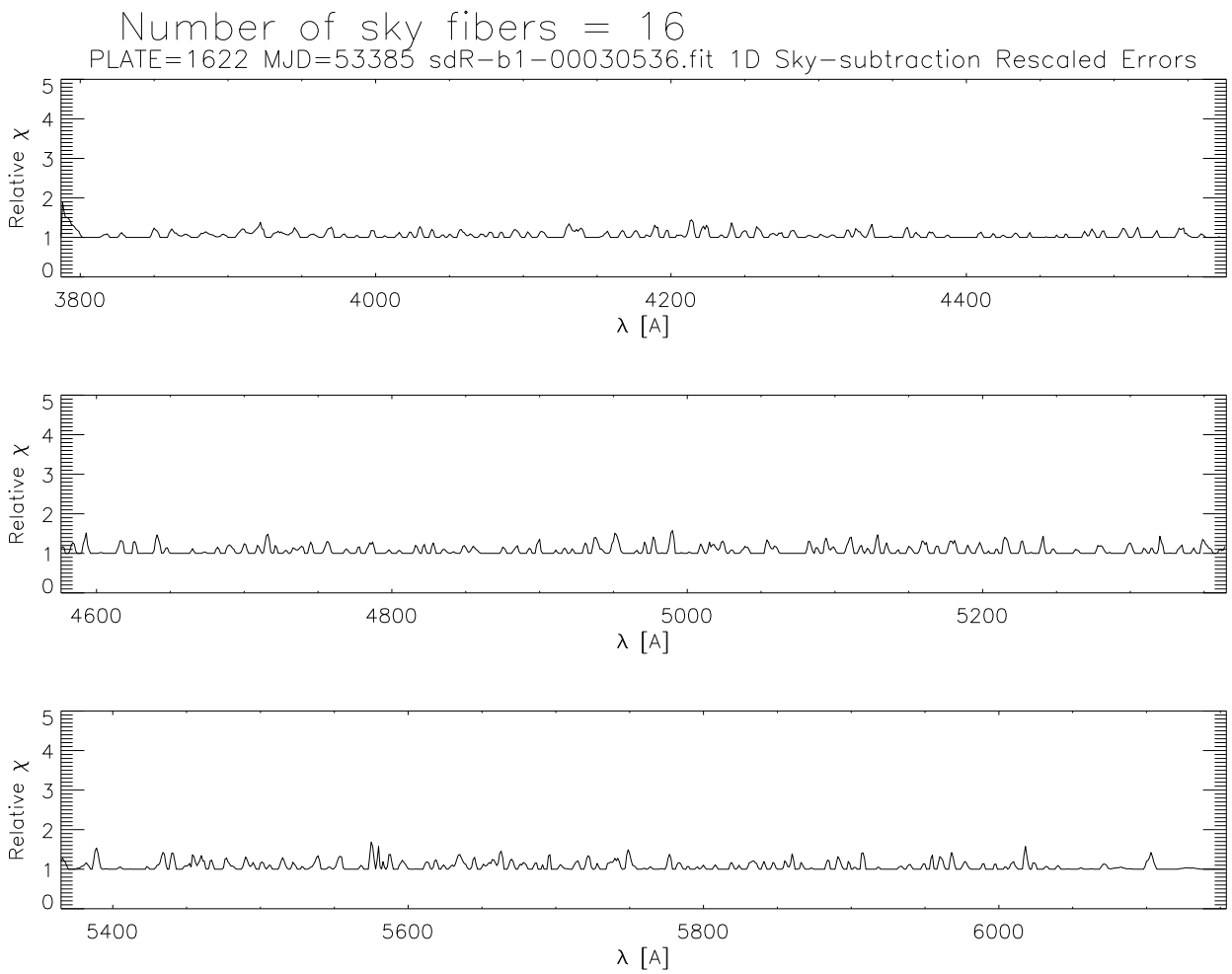

sky shift, pixels
0.1
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500

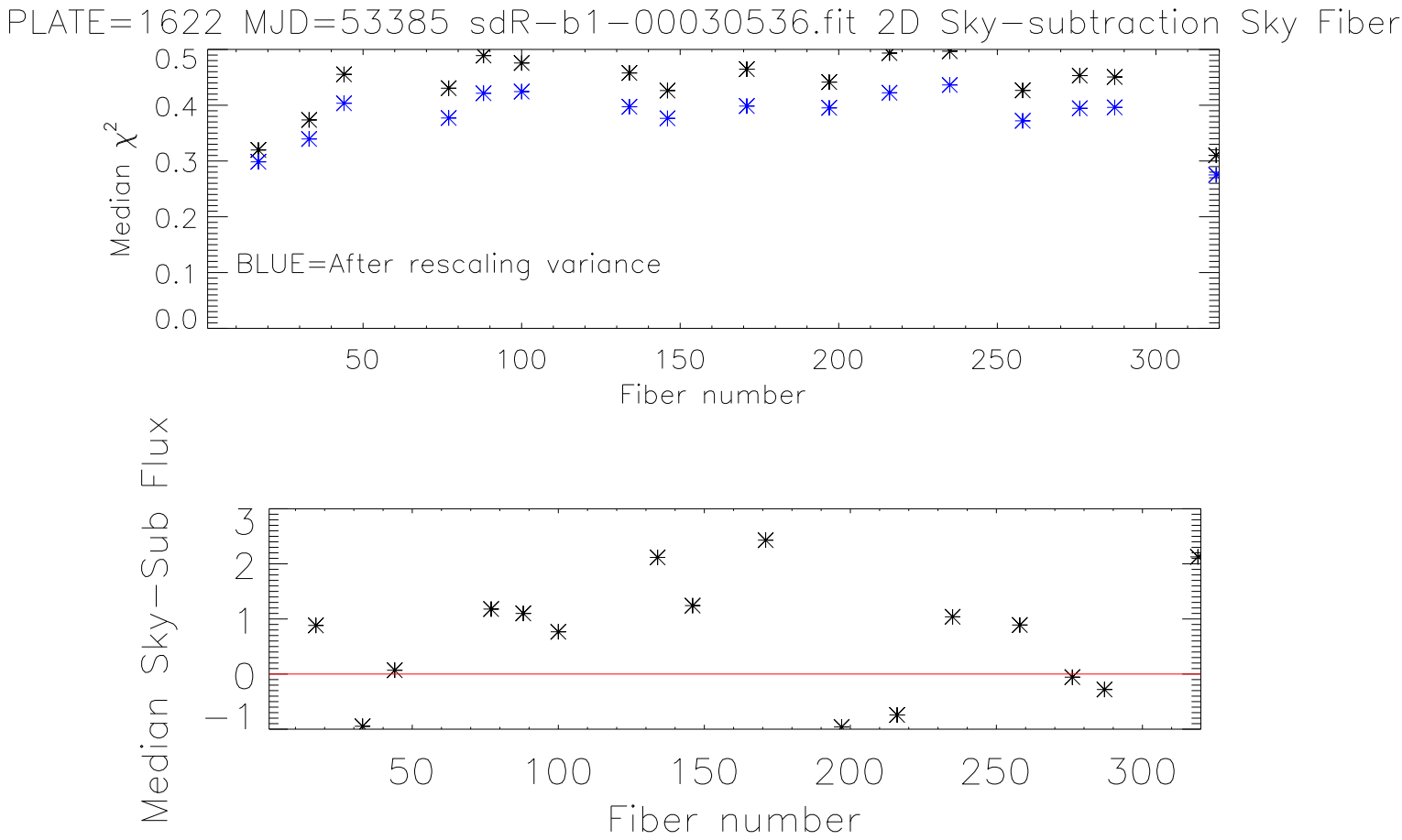

PLATE=1622 MJD=53385 Smooth superflat for sdR-b1-00030536.fit
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

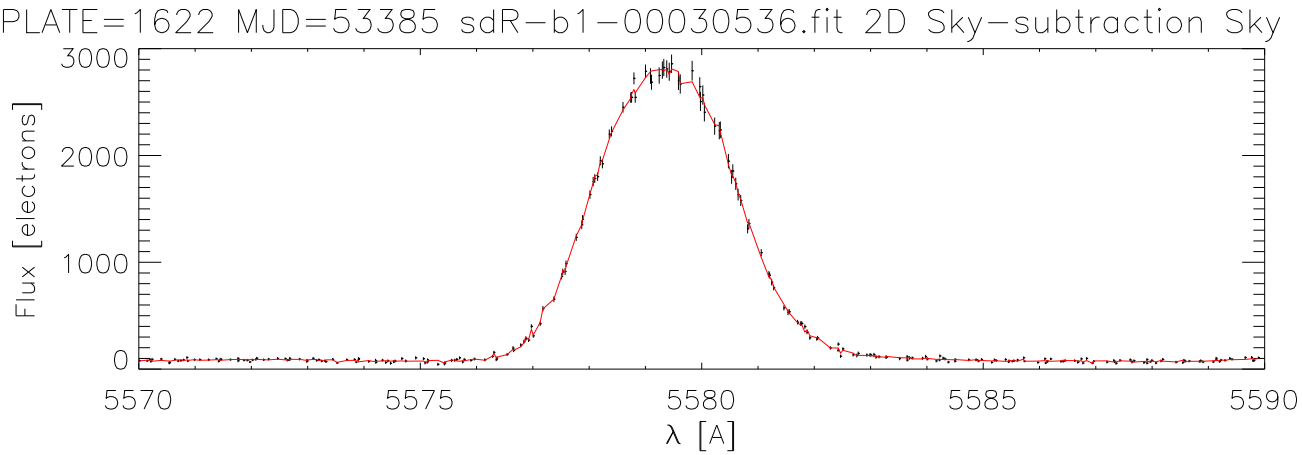

PLATE=1622 MJD=53385 sdR-b1-00030536.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

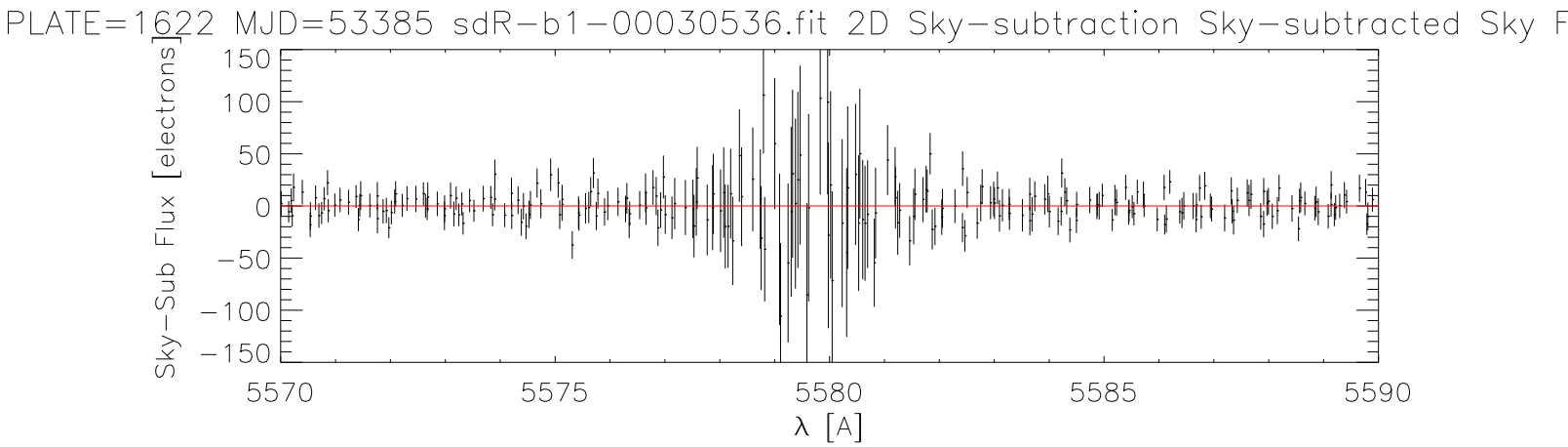

PLATE=1622 MJD=53385 sdR-b1-00030536.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

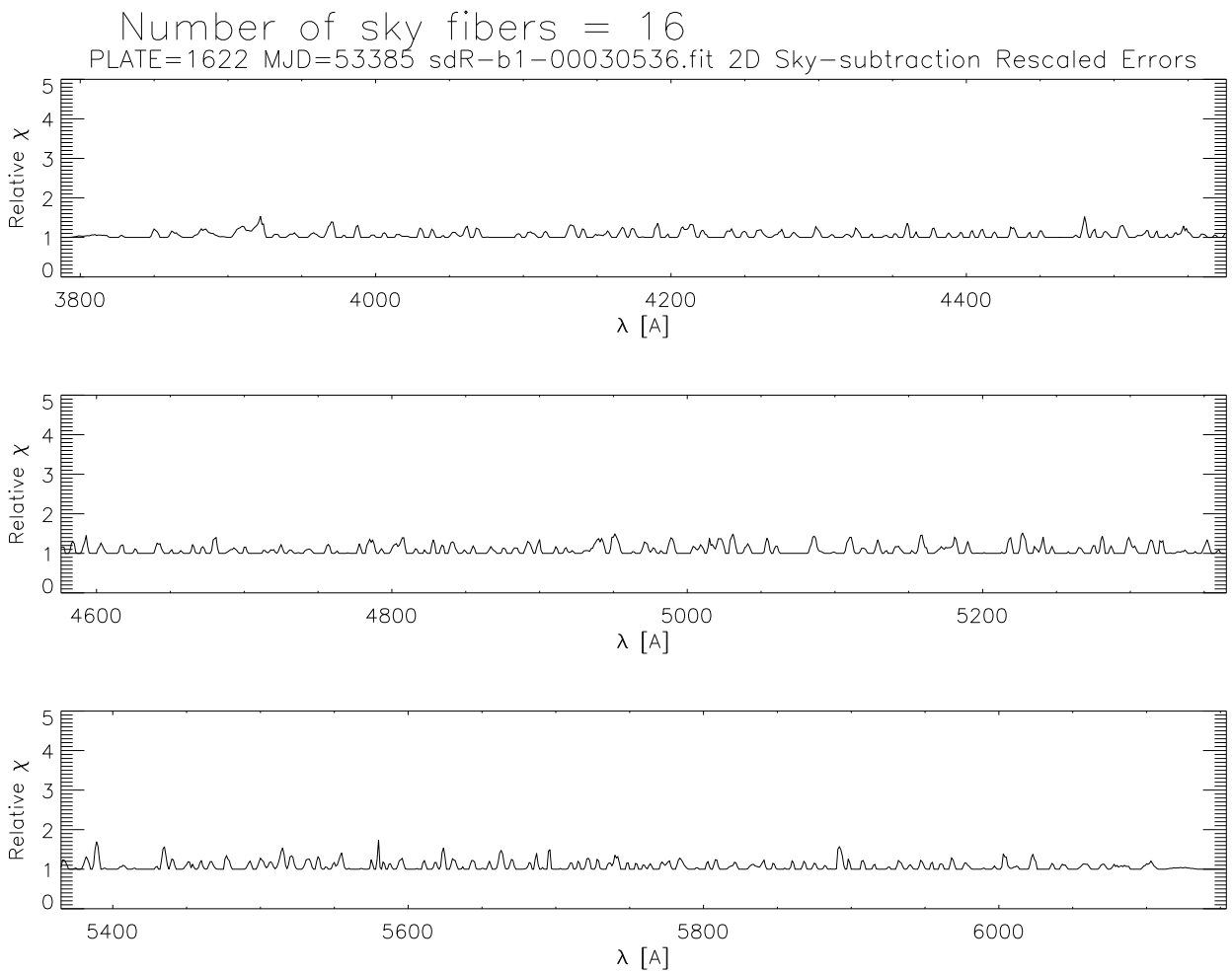

PLATE=1622 MJD=53385 sdR-b1-00030536.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

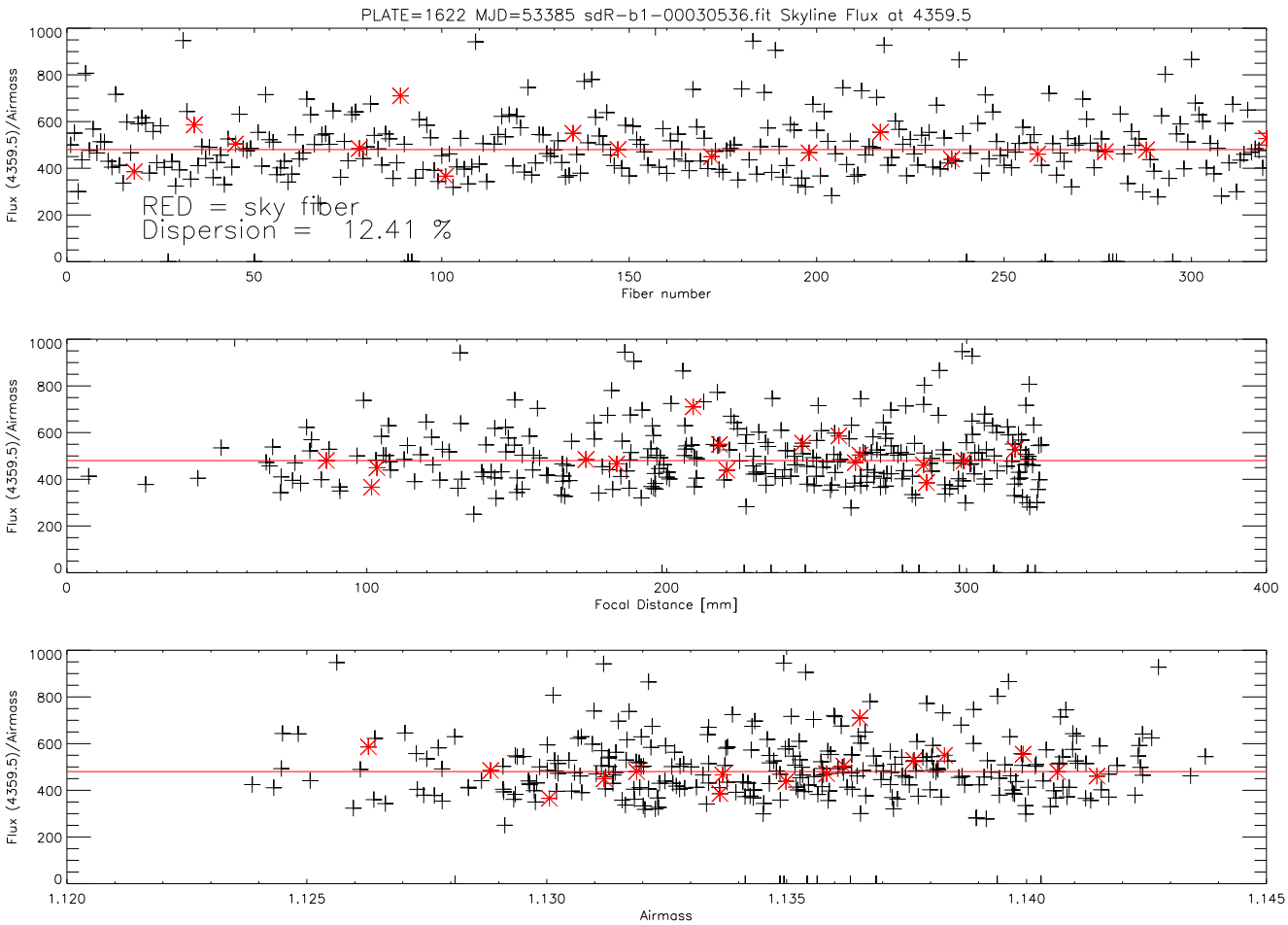

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b1-00030536.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

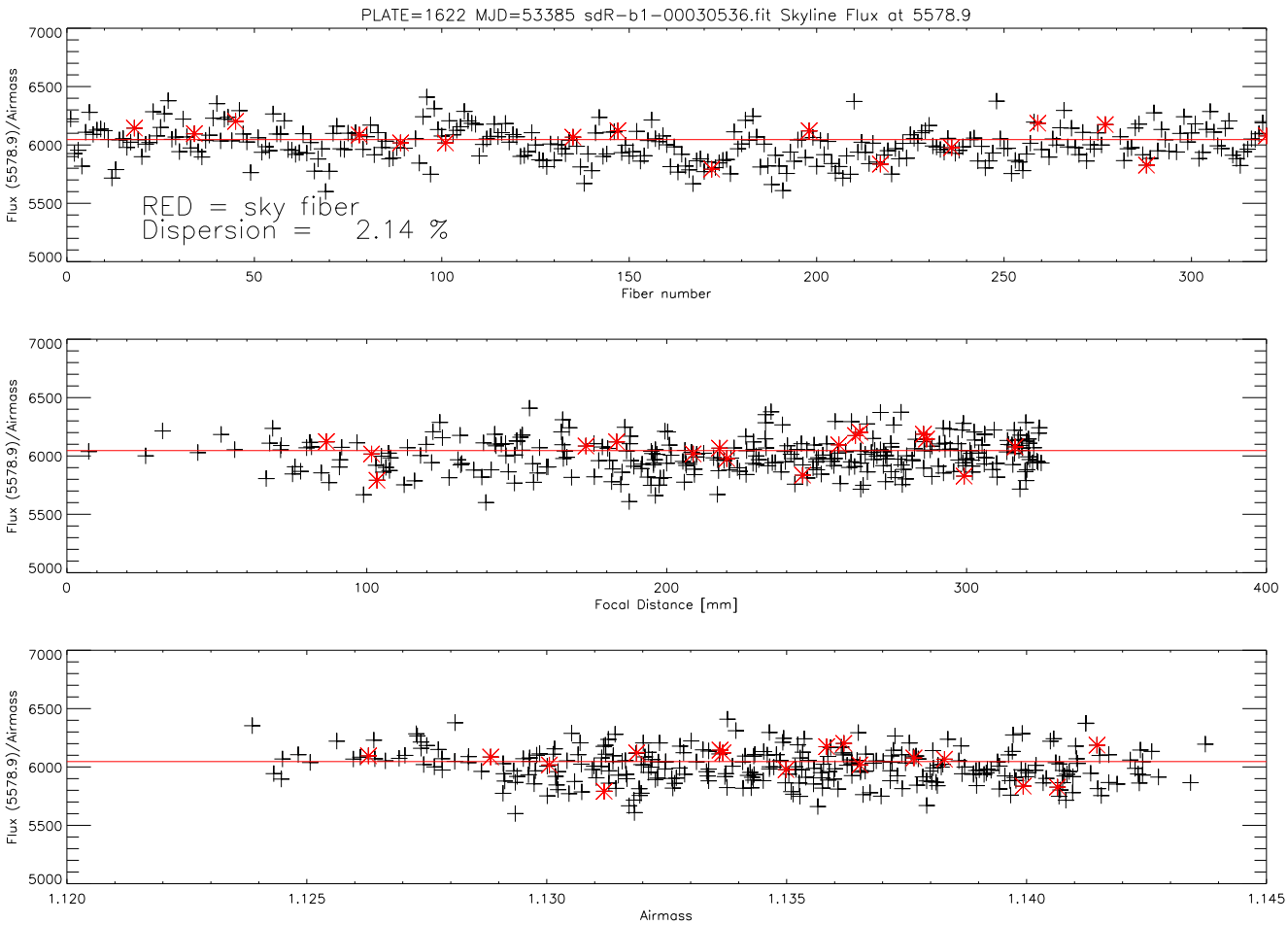

PLATE=1622 MJD=53385 sdR-b1-00030536.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

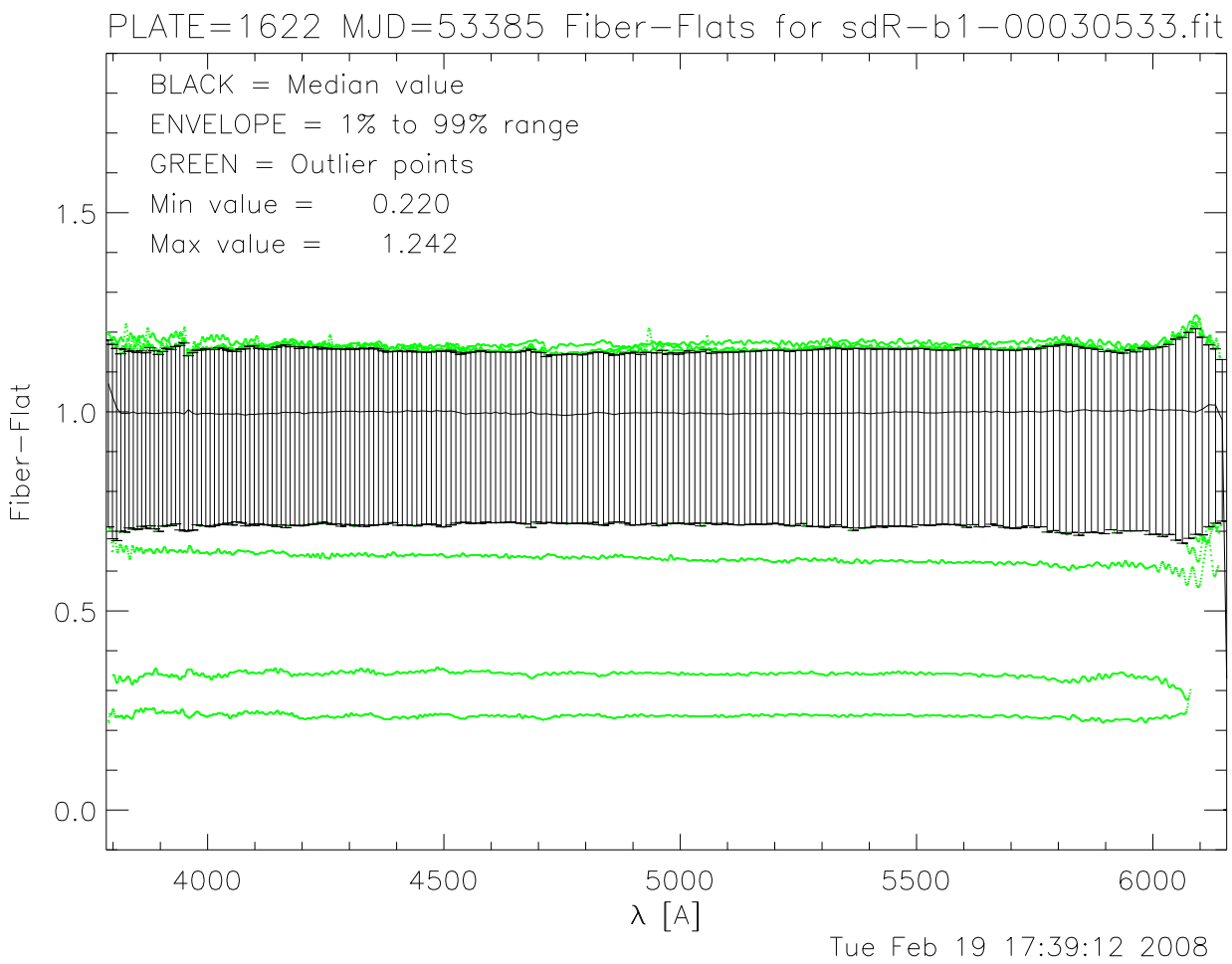

PLATE=1622 MJD=53385 sdR-b1-00030536.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

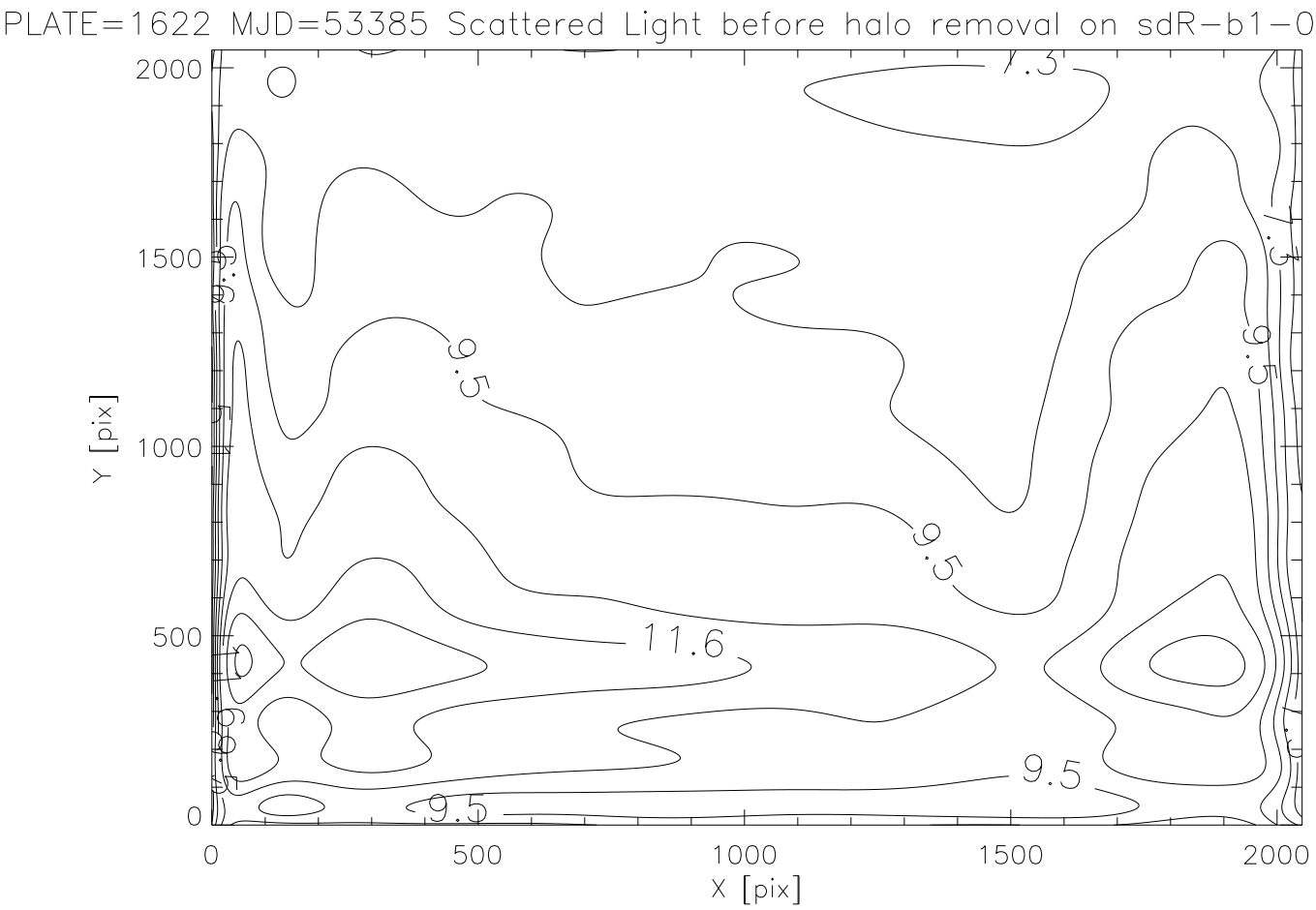

PLATE=1622 MJD=53385 sdR-b1-00030536.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

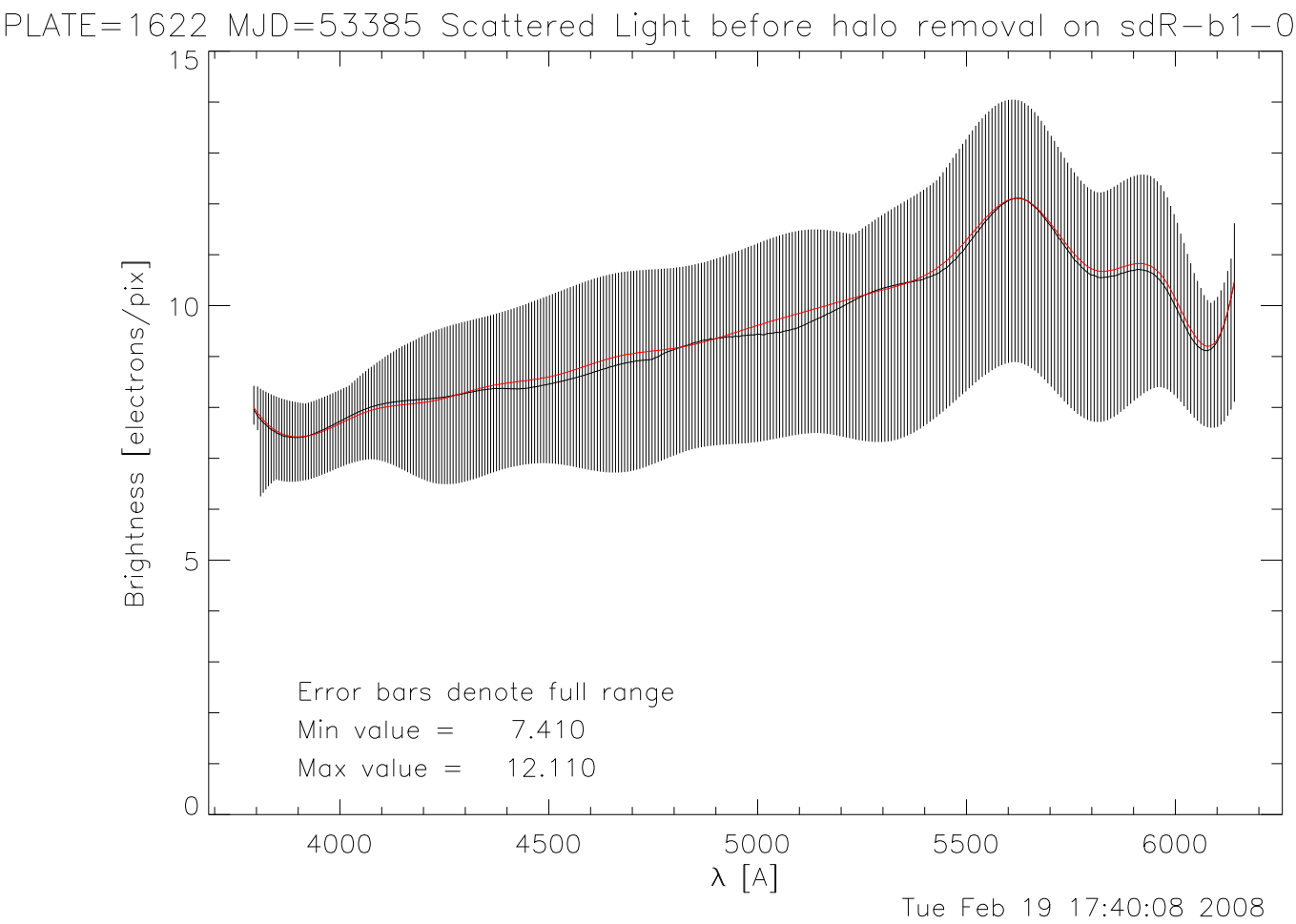

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b1-00030536.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

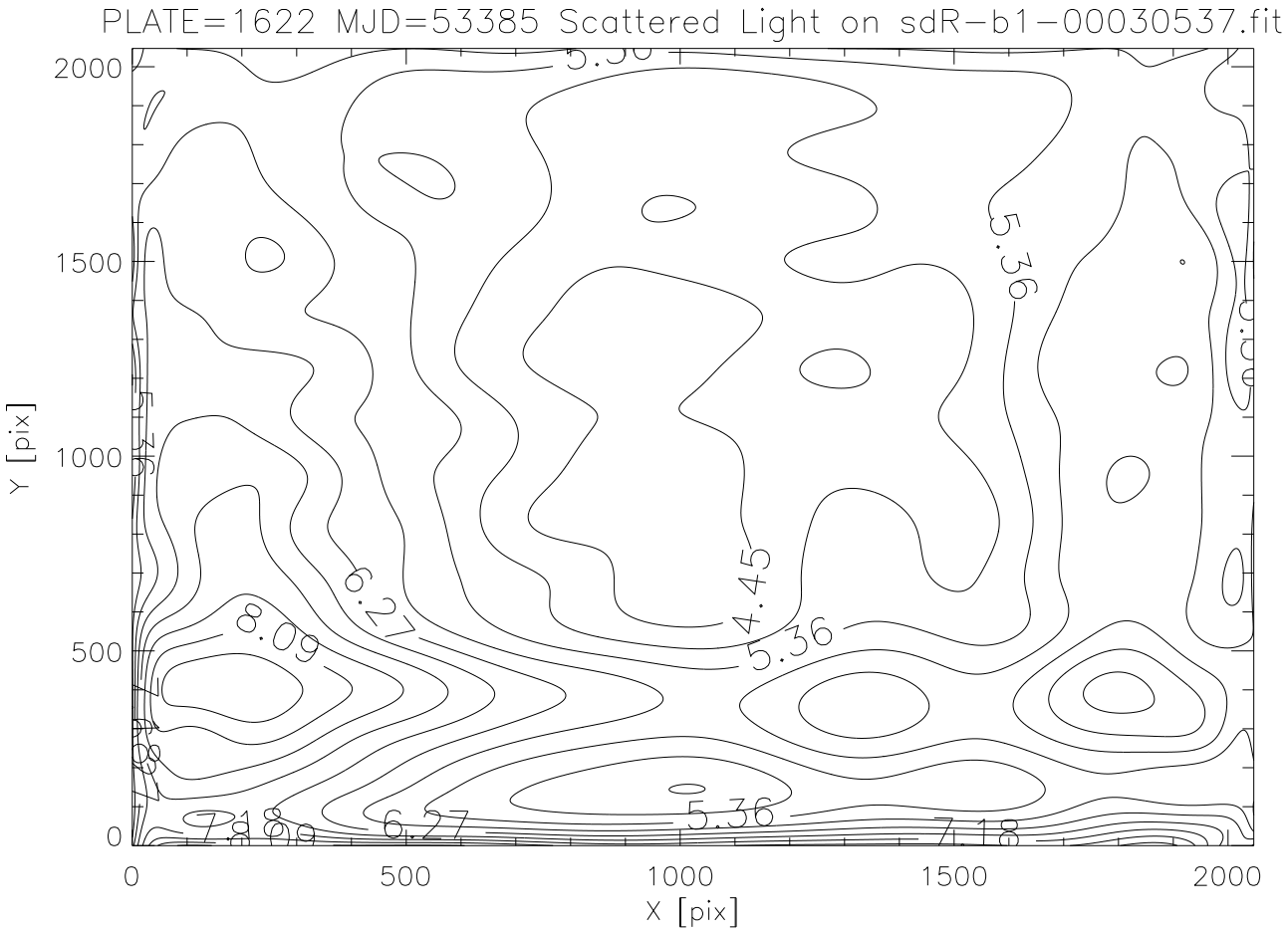

PLATE=1622 MJD=53385 sdR-b1-00030536.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.41 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

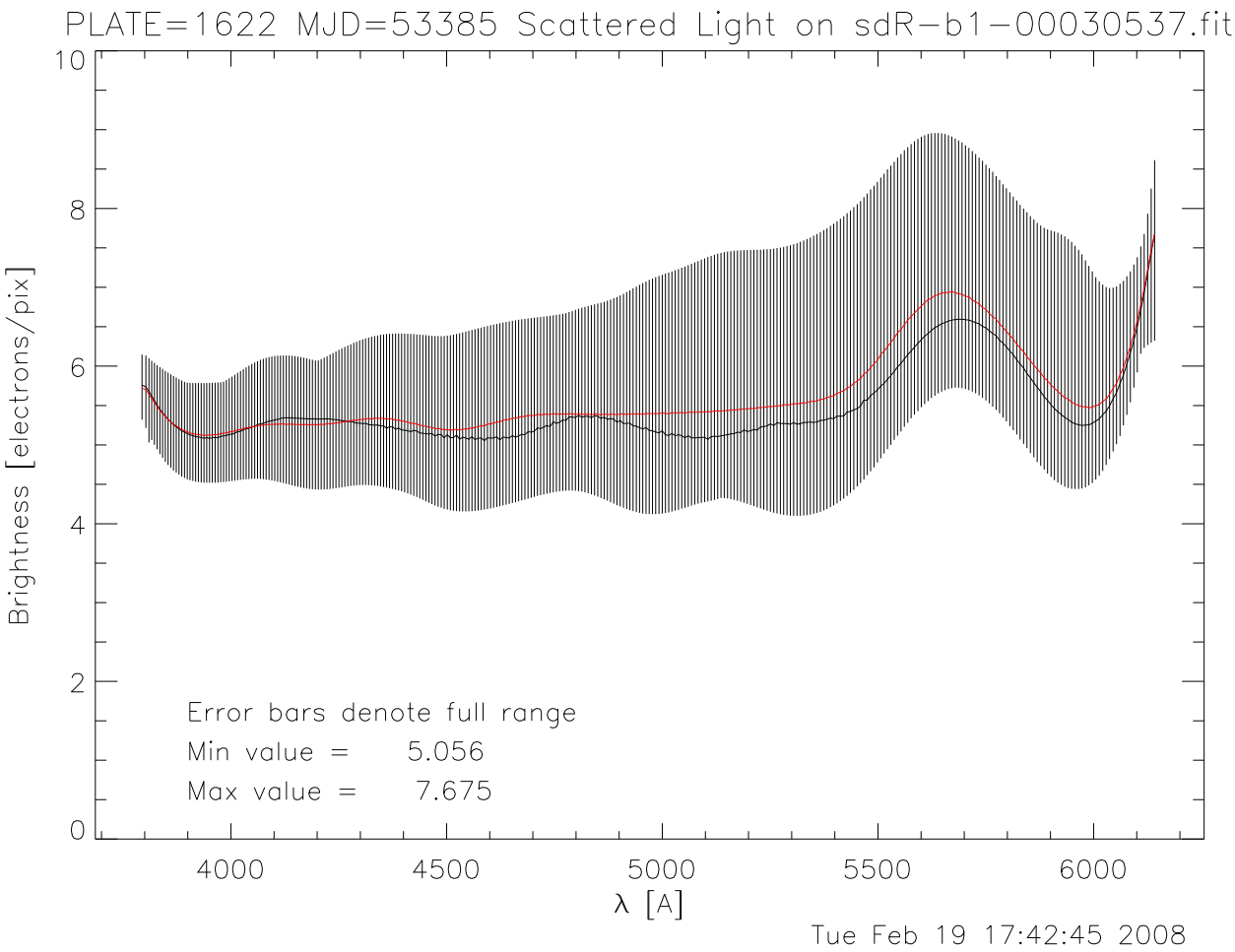

PLATE=1622 MJD=53385 sdR-b1-00030536.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.14 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

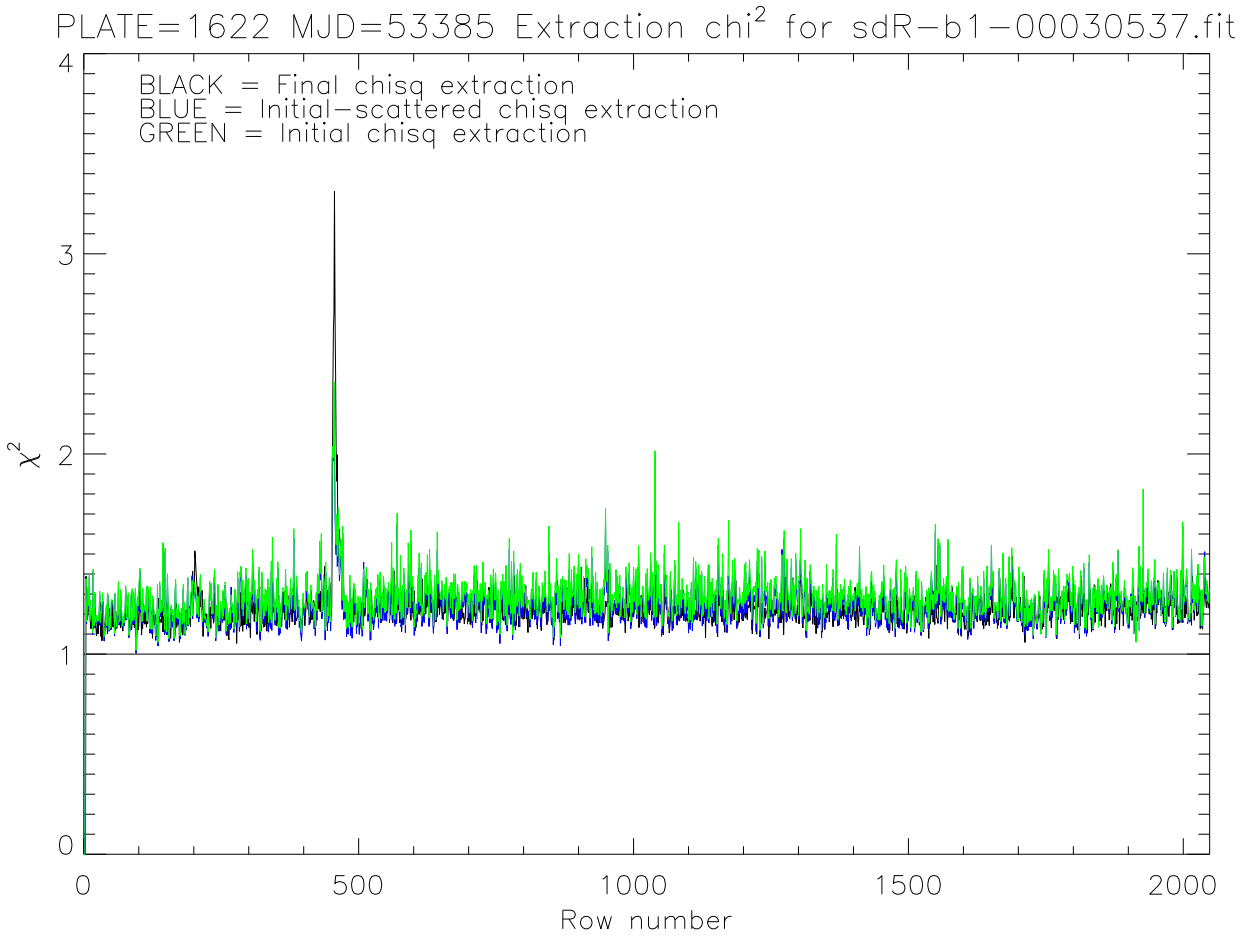

PLATE=1622 MJD=53385 Fiber−Flats for sdR−b1−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.220
Max value = 1.242
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:39:12 2008

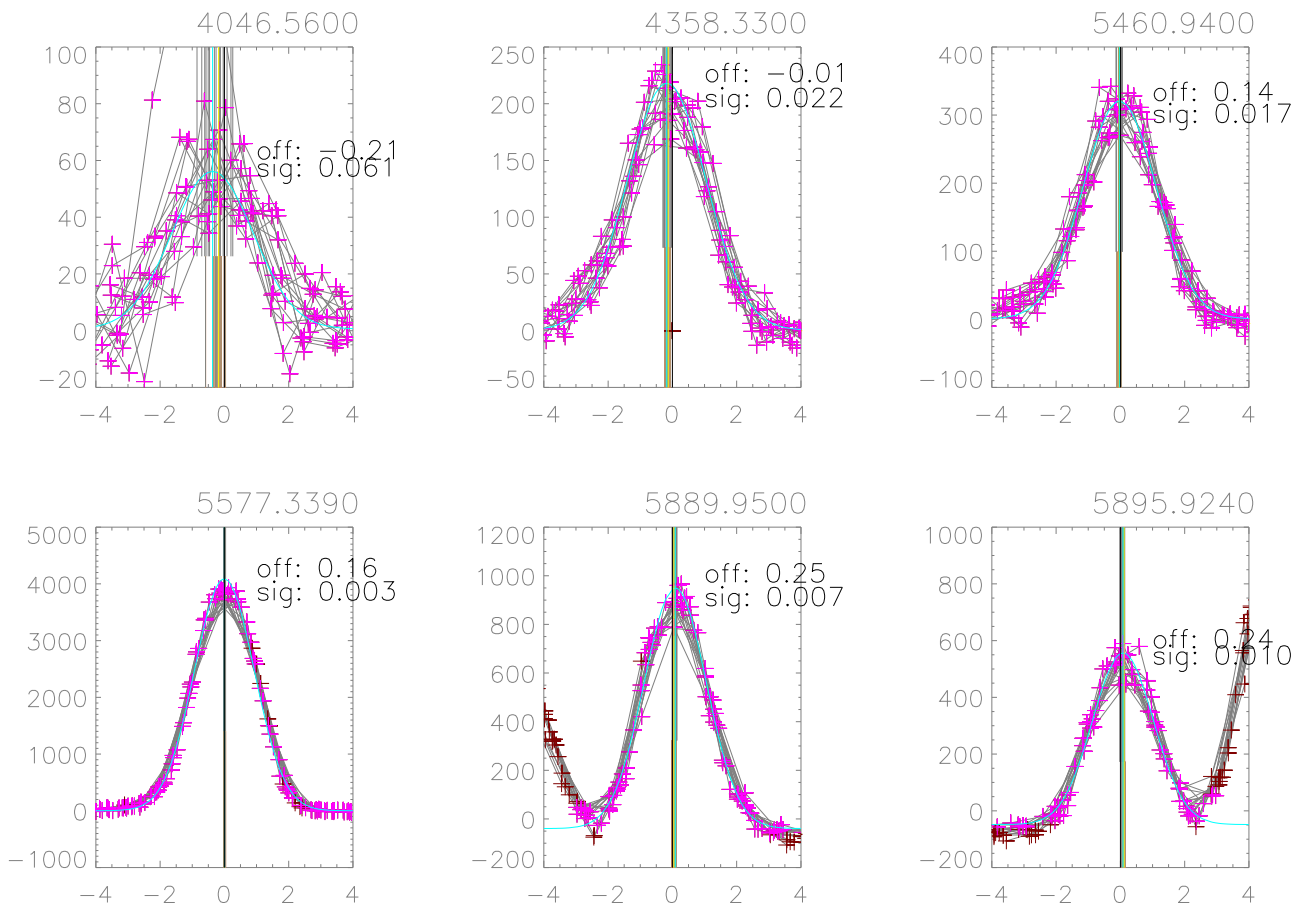

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR−b1−00030537.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
7.3
9.5
11.6

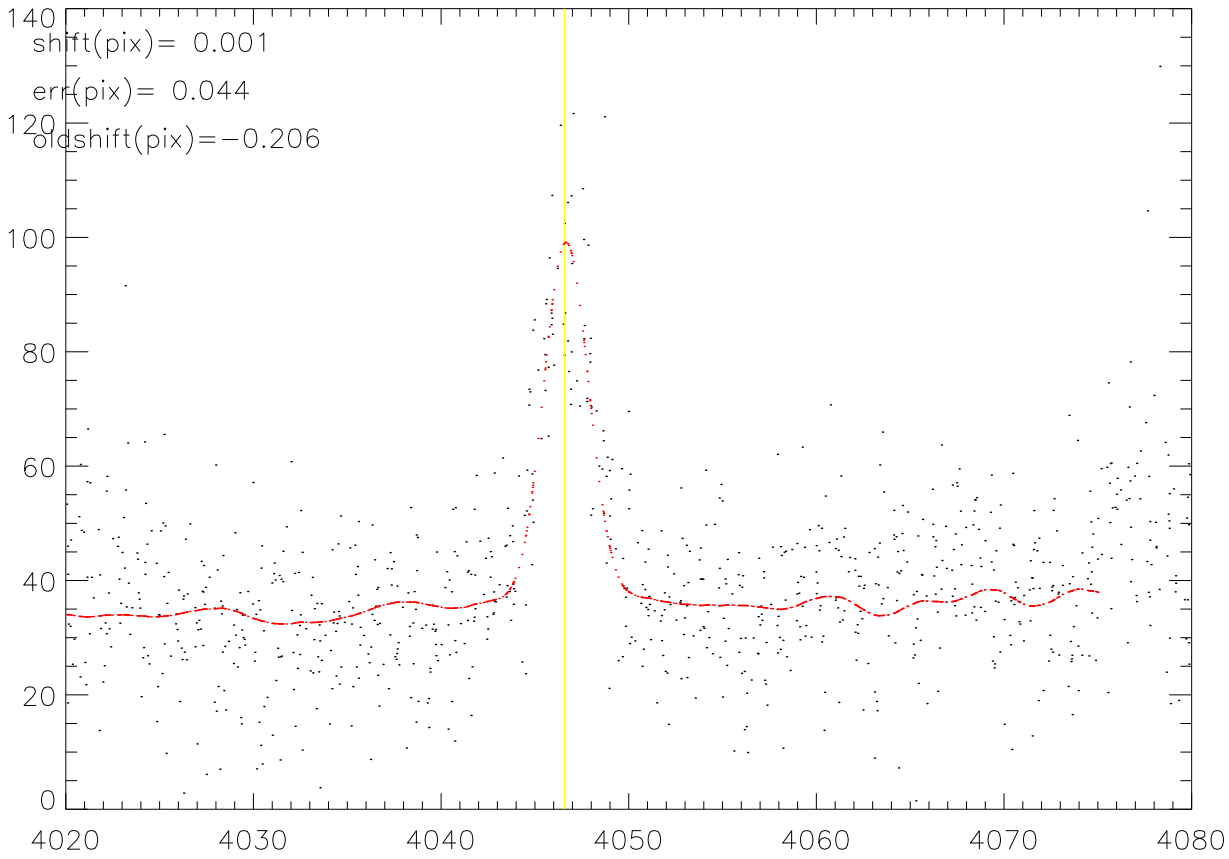

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b1-00030537.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.410
Max value = 12.110
Tue Feb 19 17:40:08 2008

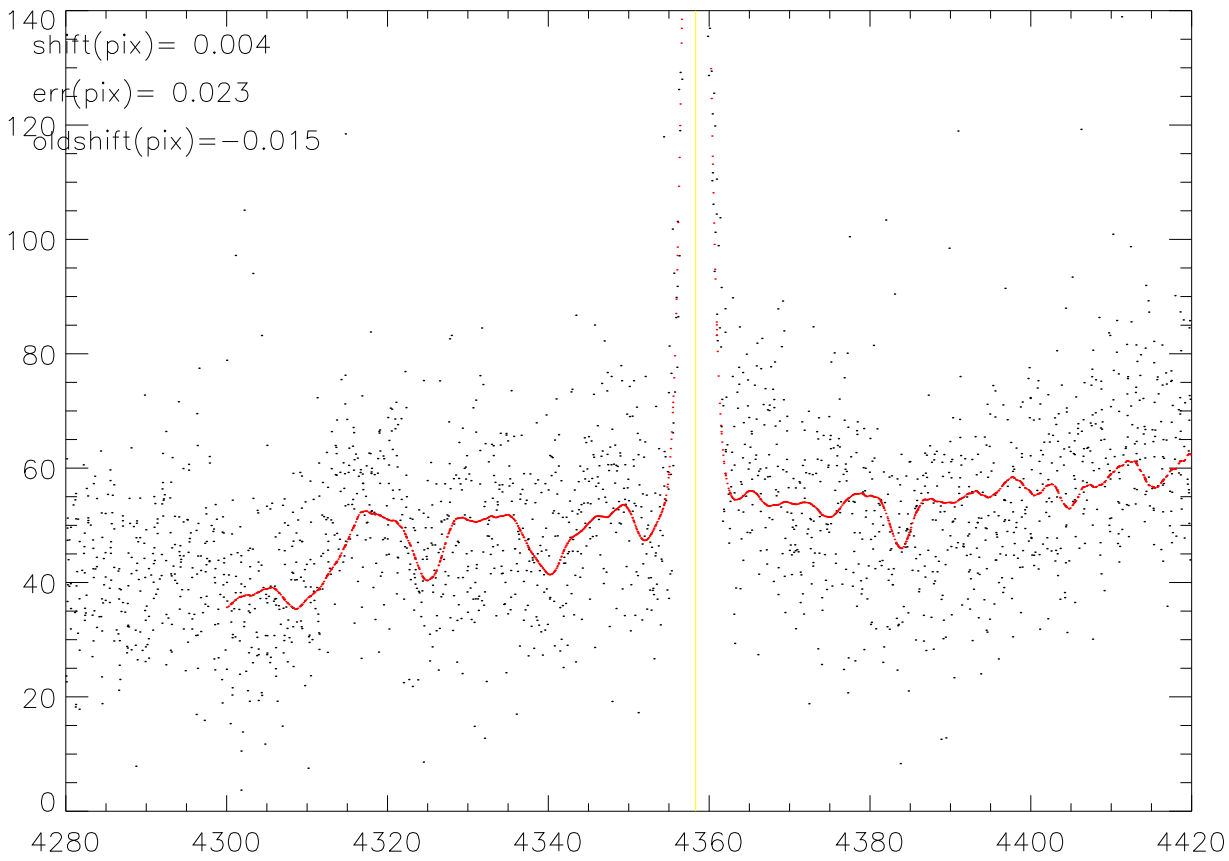

PLATE=1622 MJD=53385 Scattered Light on sdR-b1-00030537.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.36
6.27
8.09
4.45
7.18

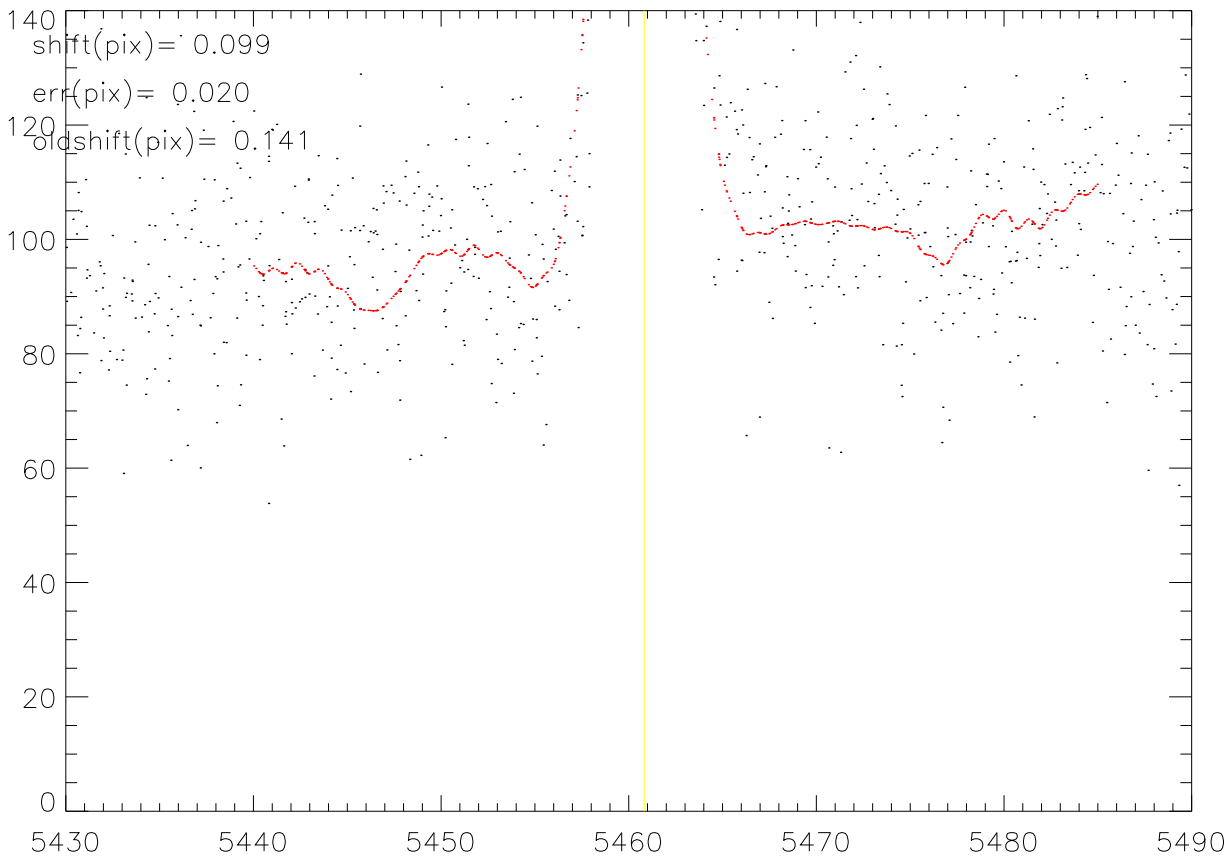

PLATE=1622 MJD=53385 Scattered Light on sdR-b1-00030537.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.056
Max value = 7.675
Tue Feb 19 17:42:45 2008

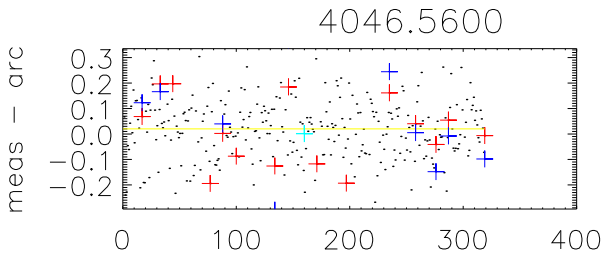

PLATE=1622 MJD=53385 Extraction chi^2 for sdR−b1−00030537.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

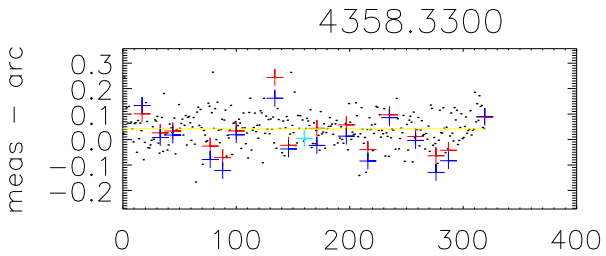

4046.5600
off: −0.21
sig: 0.061
4358.3300
off: −0.01
sig: 0.022
5460.9400
off: 0.14
sig: 0.017
5577.3390
off: 0.16
sig: 0.003
5889.9500
off: 0.25
sig: 0.007
5895.9240
off: 0.24
sig: 0.010

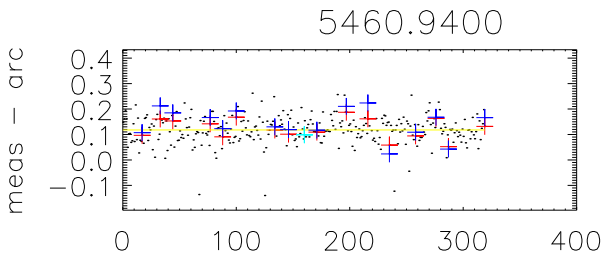

shift(pix)= 0.001
err(pix)= 0.044
oldshift(pix)=-0.206
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

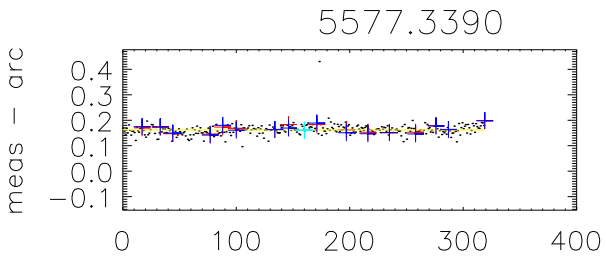

shift(pix)= 0.004
err(pix)= 0.023
oldshift(pix)=-0.015
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

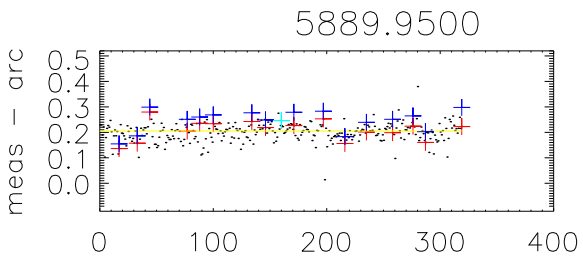

shift(pix)= 0.099
err(pix)= 0.020
oldshift(pix)= 0.141
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

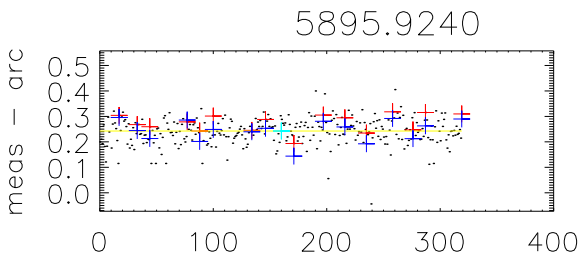

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

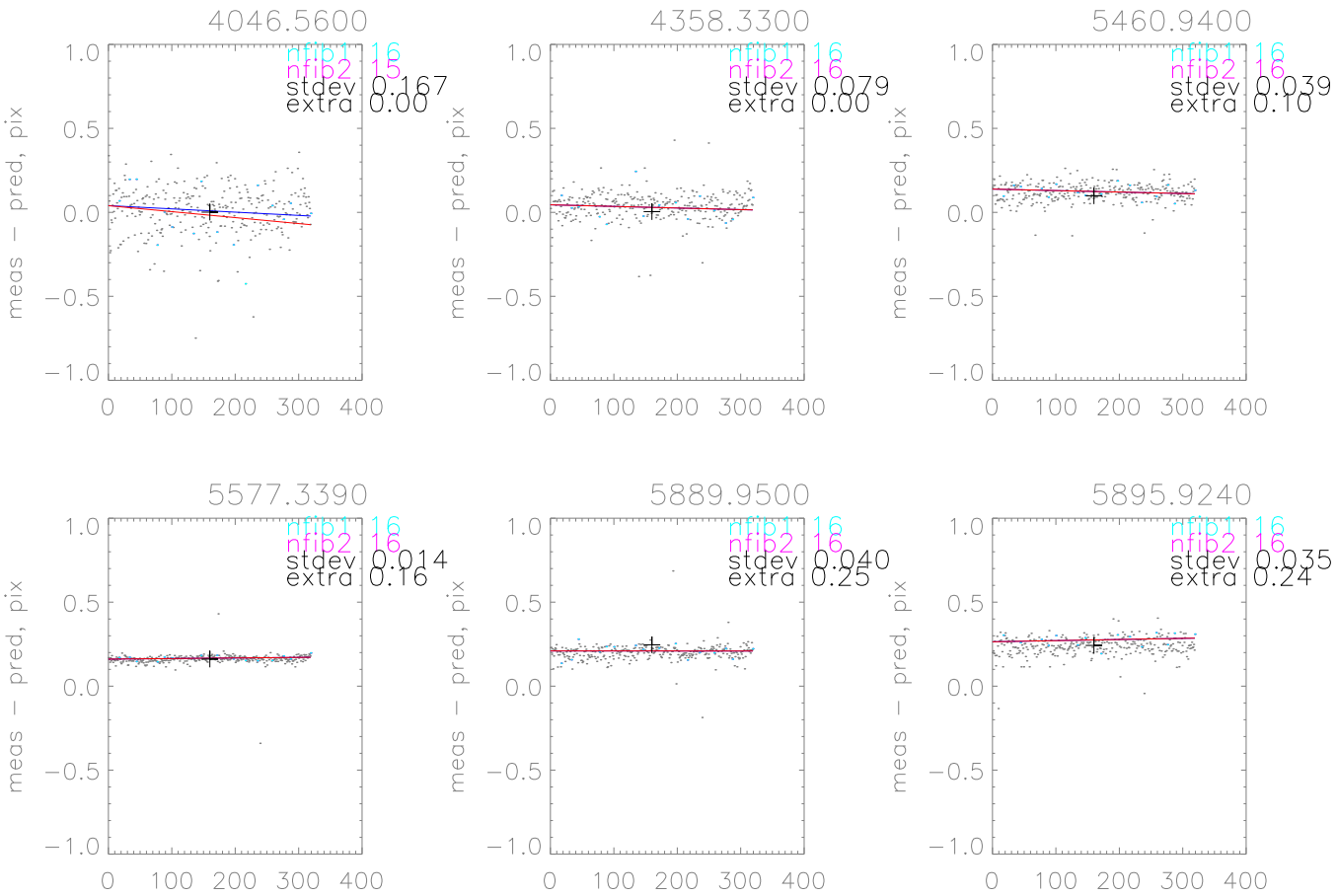

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

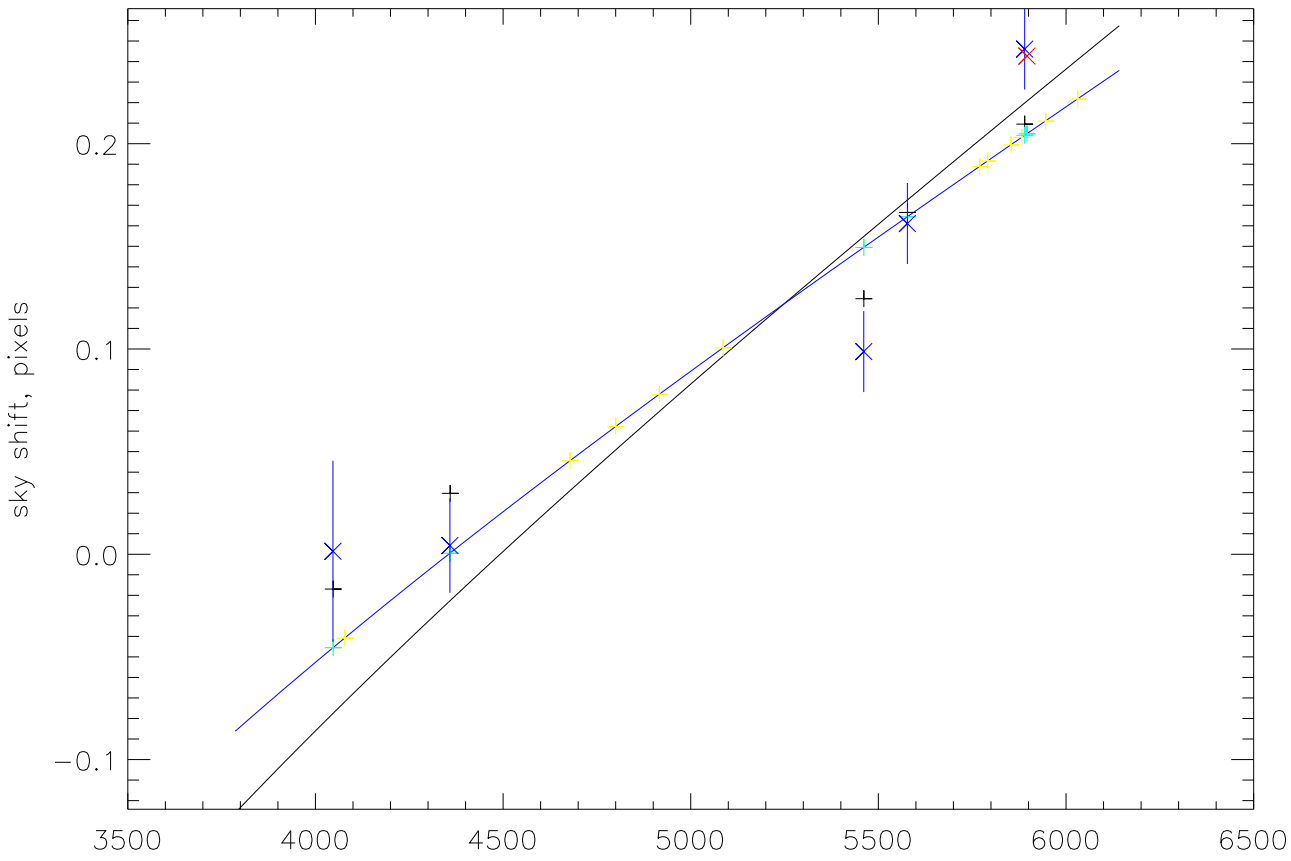

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

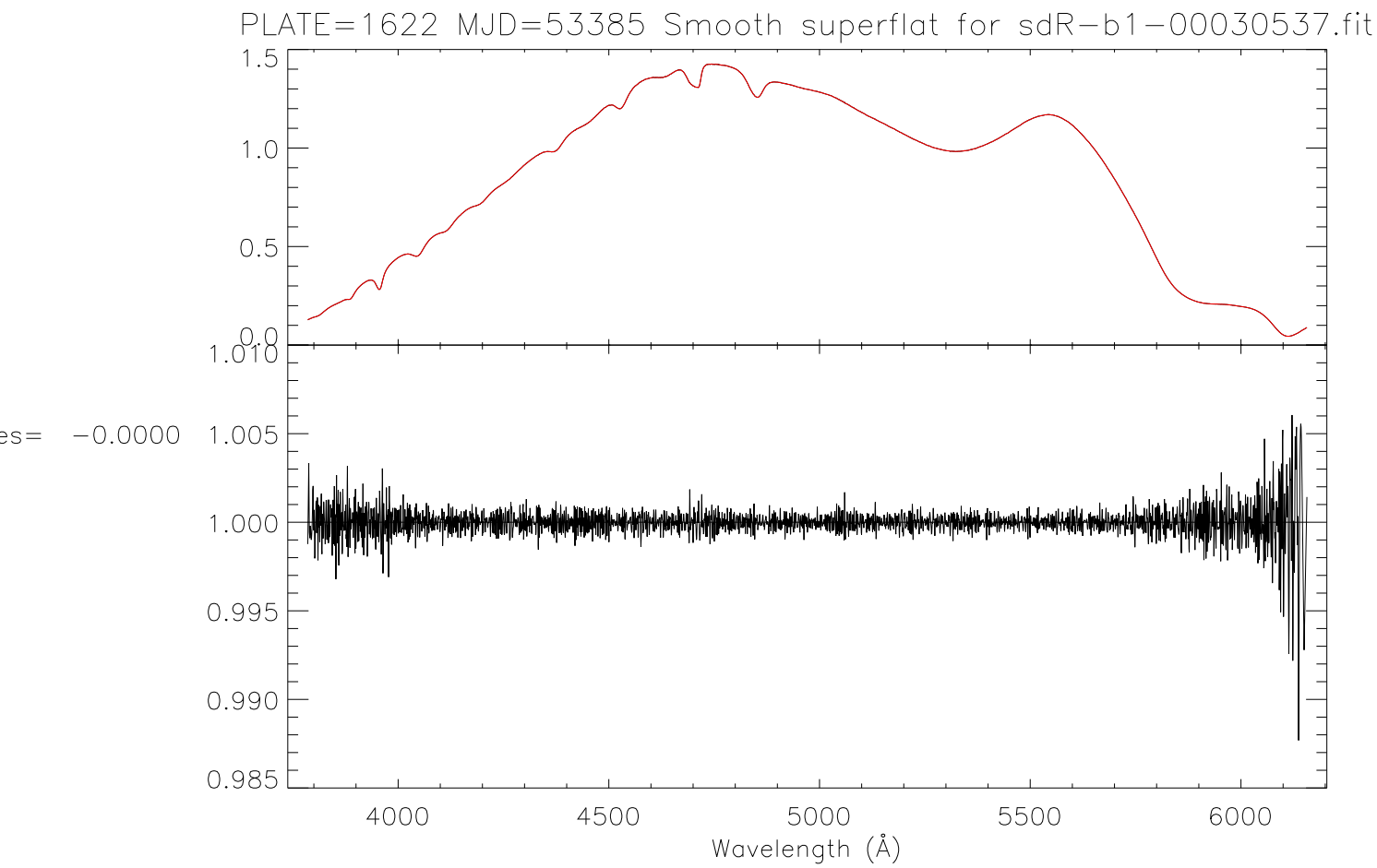

5577.3390
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

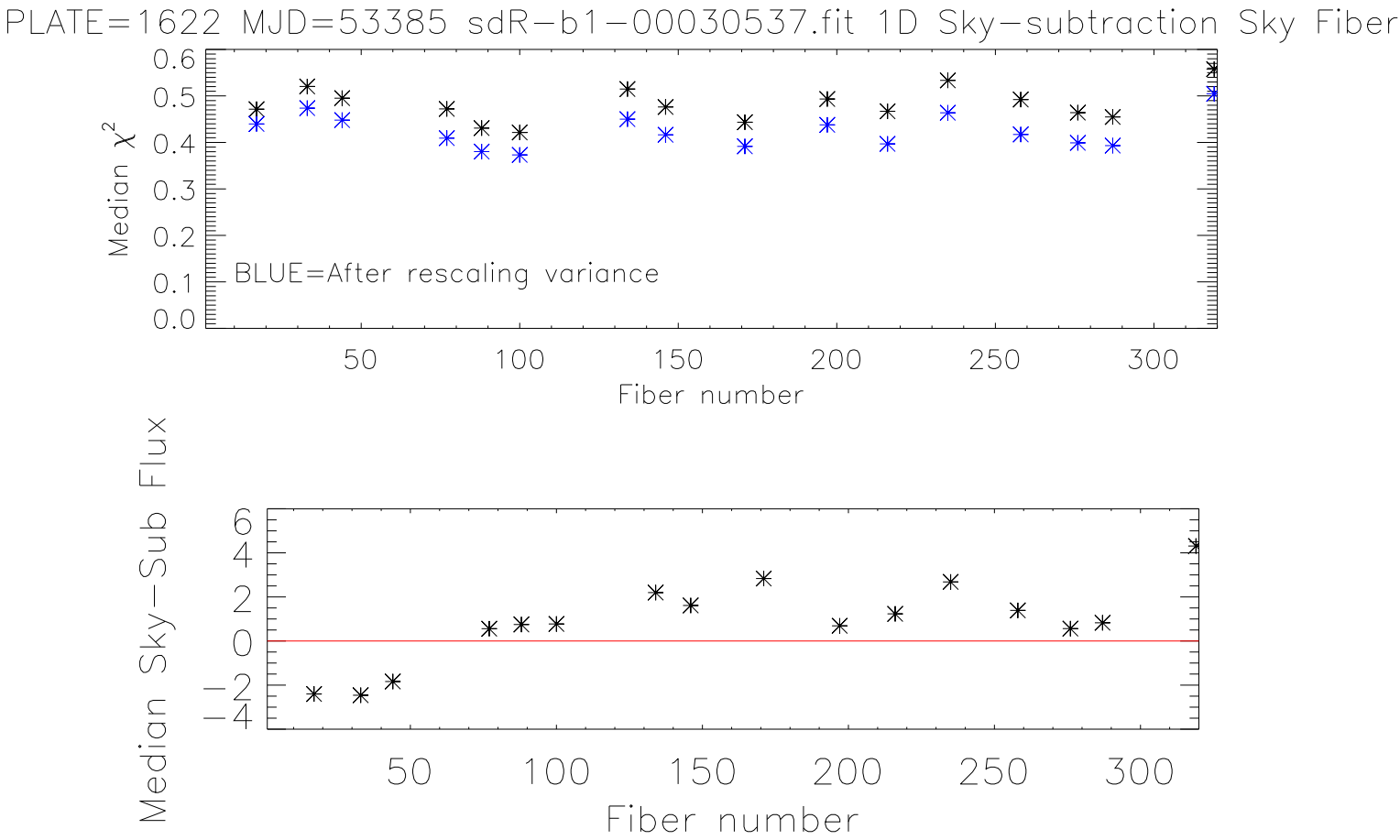

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

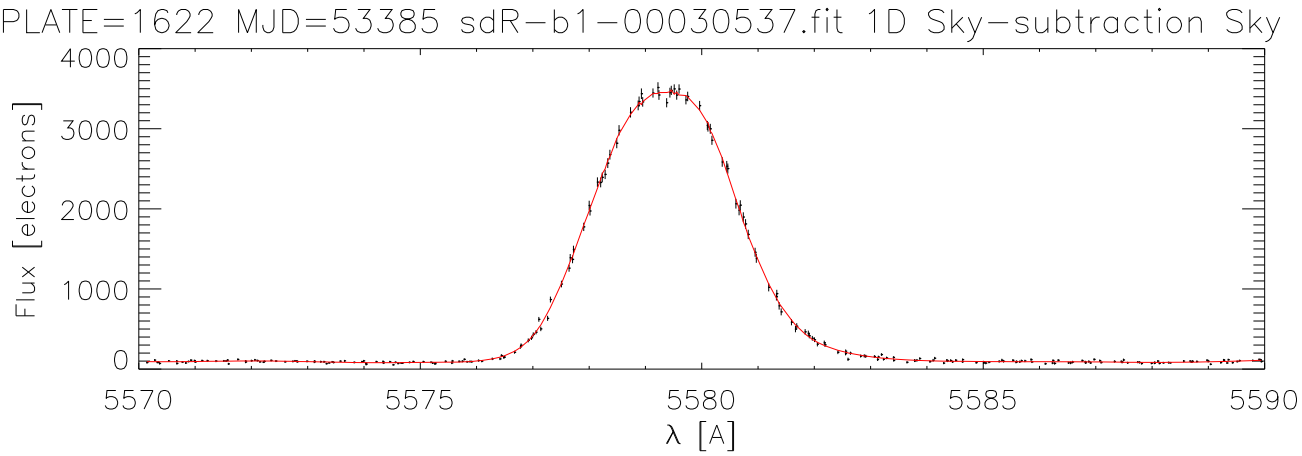

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

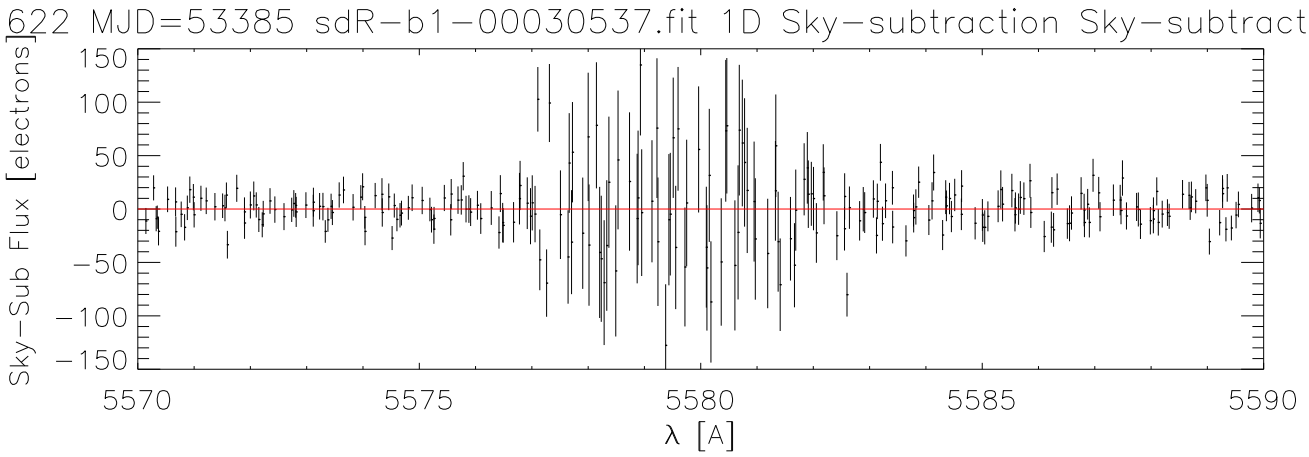

4046.5600
nfib1 16
nfib2 15
stdev 0.167
extra 0.00
4358.3300
nfib1 16
nfib2 16
stdev 0.079
extra 0.00
5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra 0.10
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.040
extra 0.25
5895.9240
nfib1 16
nfib2 16
stdev 0.035
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

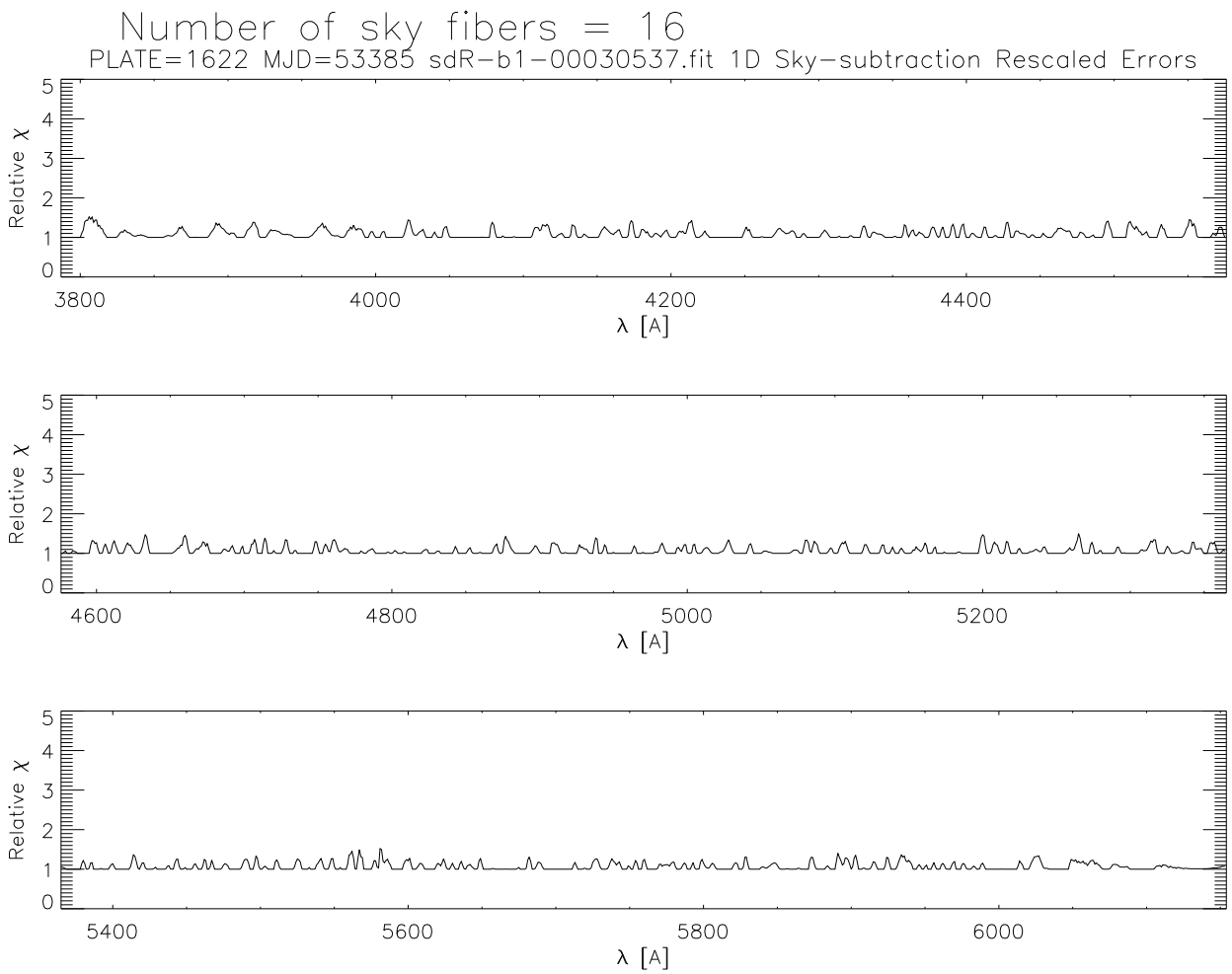

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500

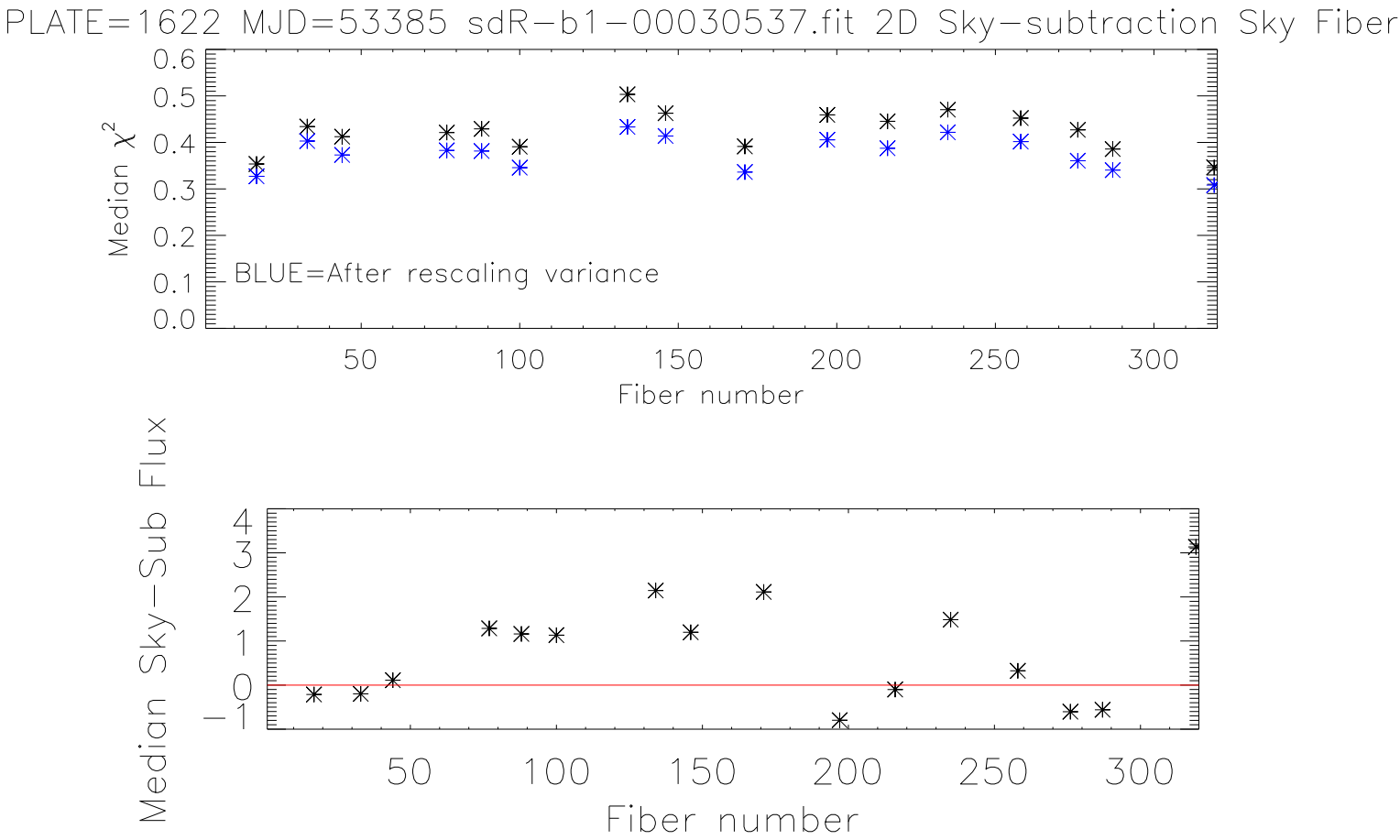

PLATE=1622 MJD=53385 Smooth superflat for sdR-b1-00030537.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

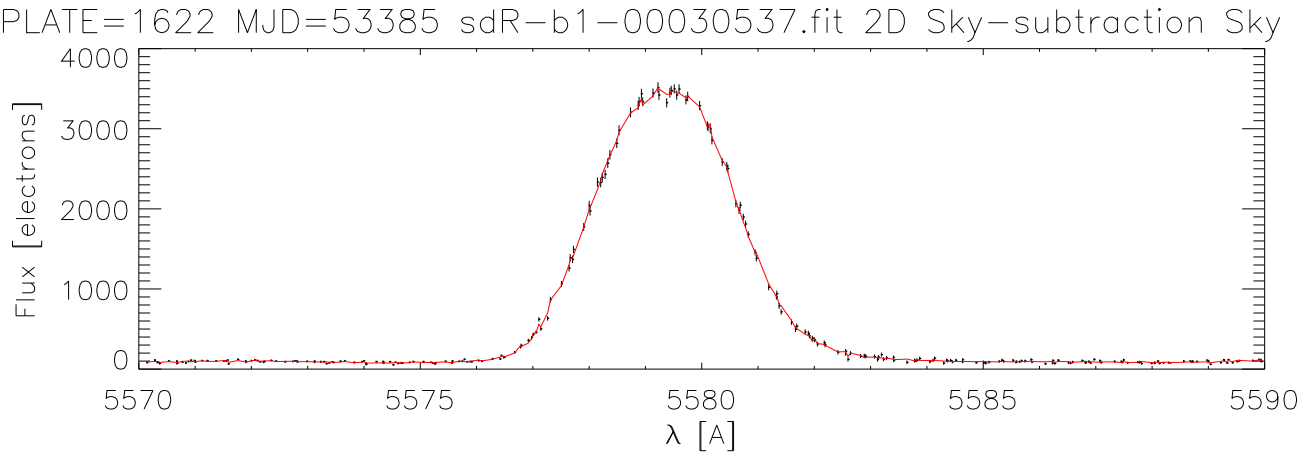

PLATE=1622 MJD=53385 sdR-b1-00030537.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

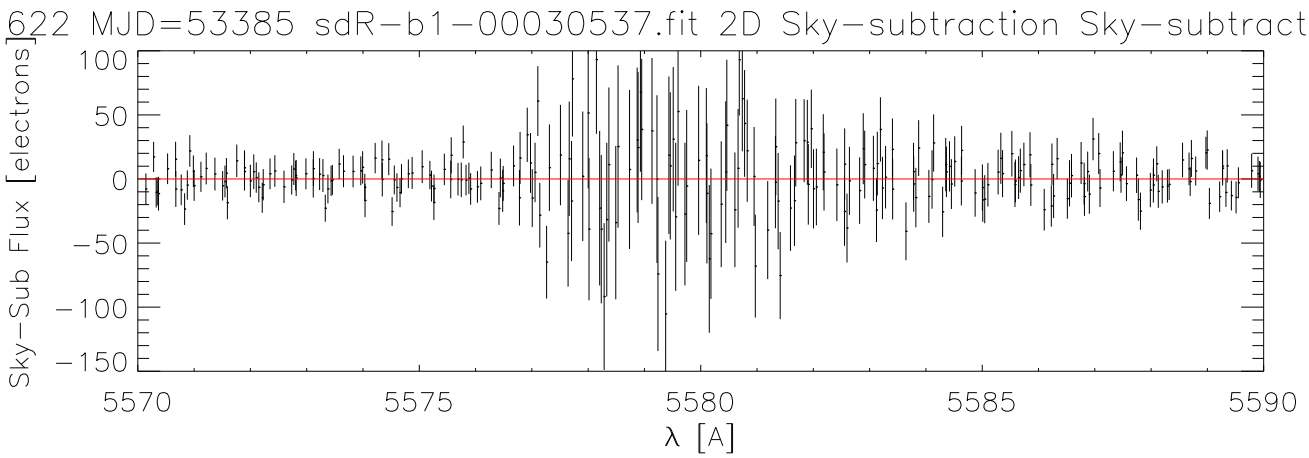

PLATE=1622 MJD=53385 sdR-b1-00030537.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

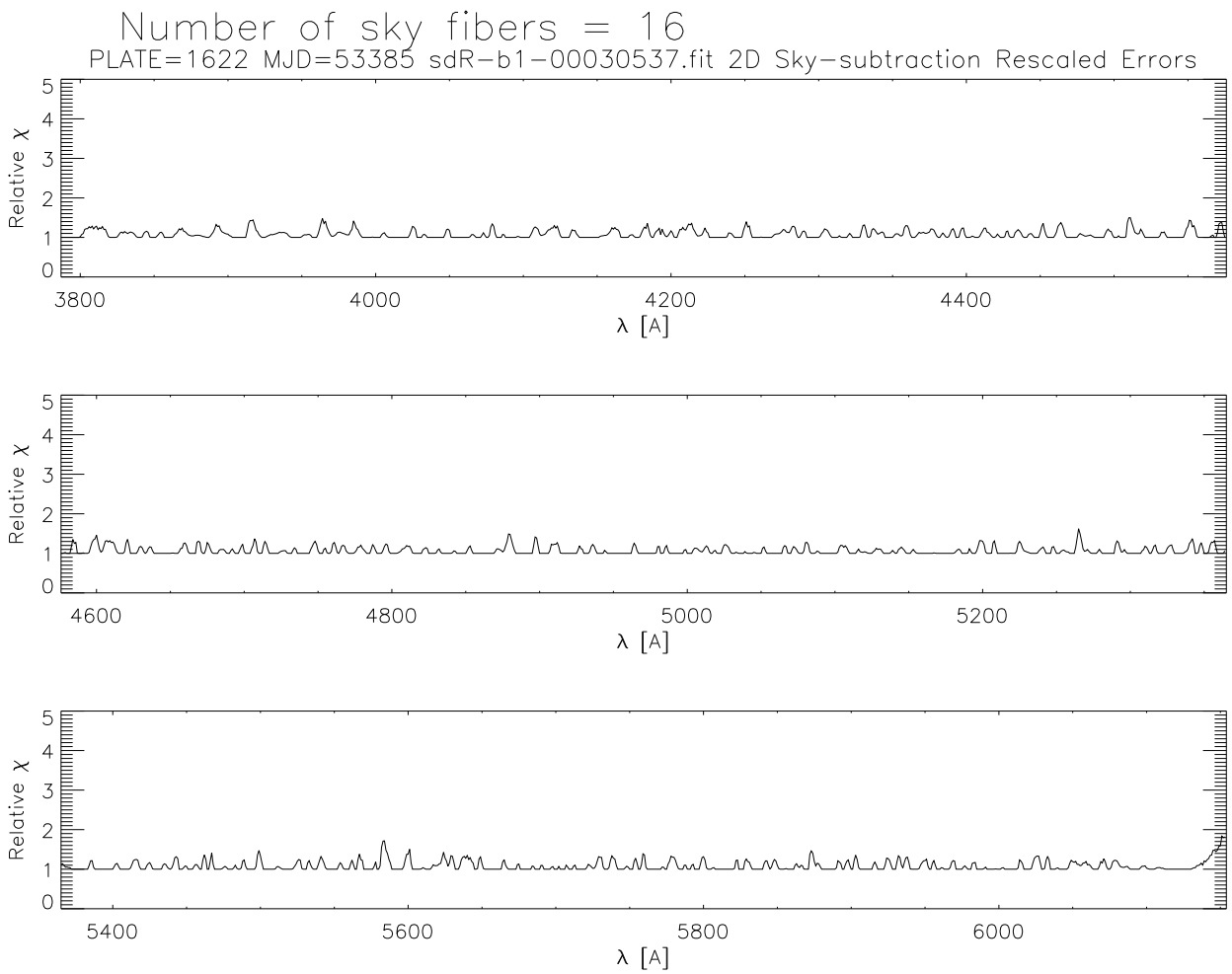

PLATE=1622 MJD=53385 sdR-b1-00030537.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

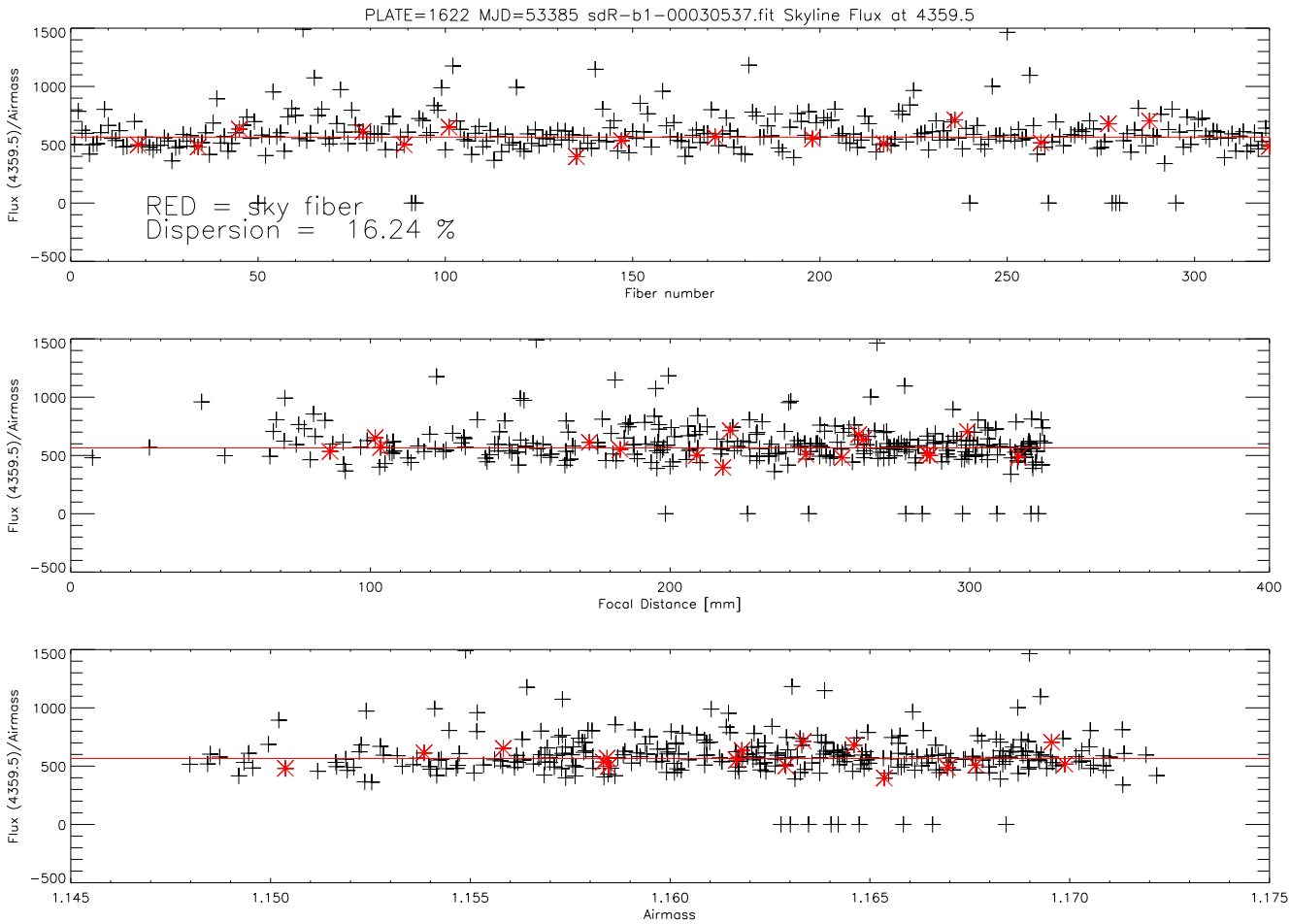

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b1-00030537.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

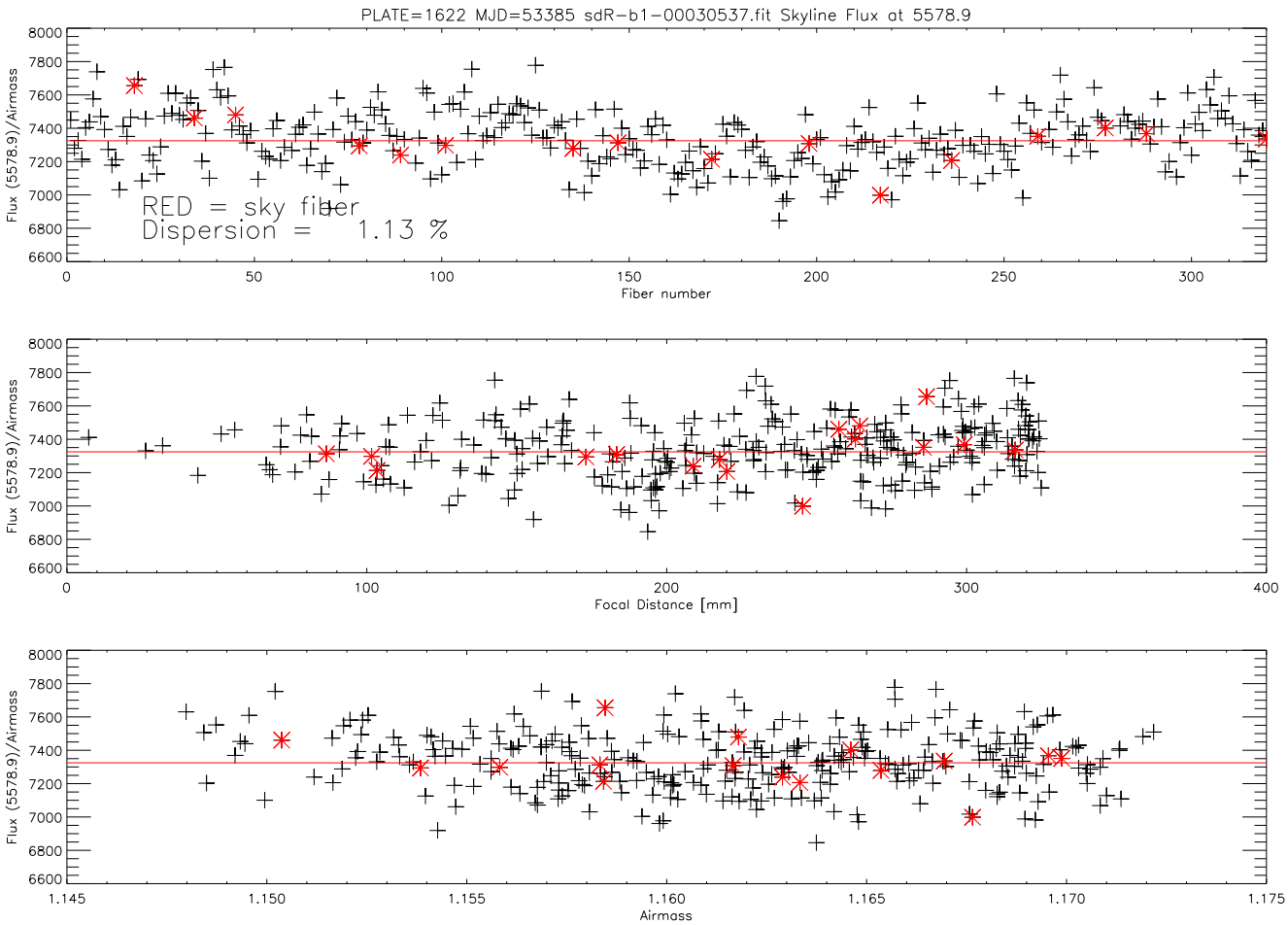

PLATE=1622 MJD=53385 sdR-b1-00030537.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

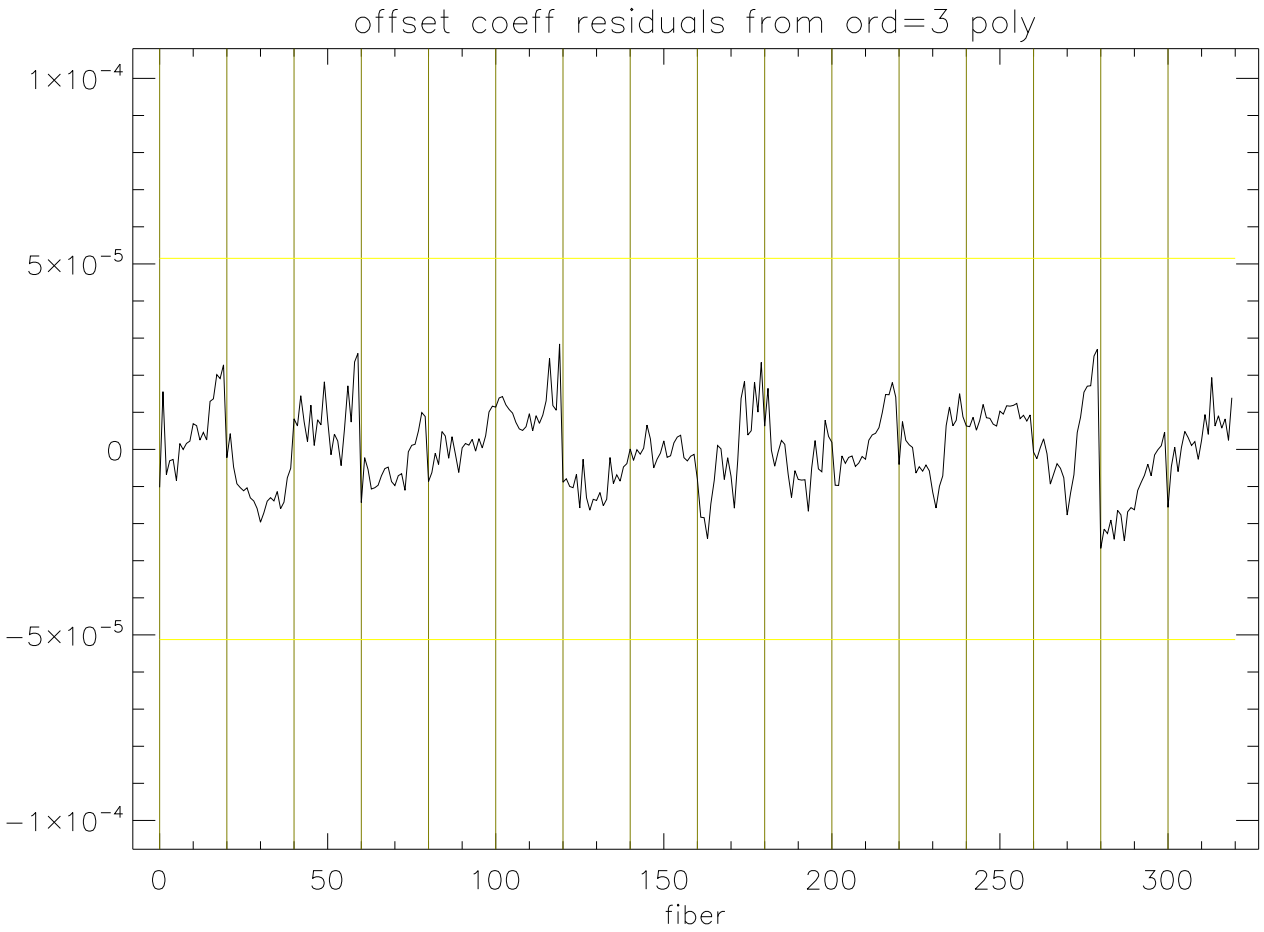

PLATE=1622 MJD=53385 sdR-b1-00030537.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

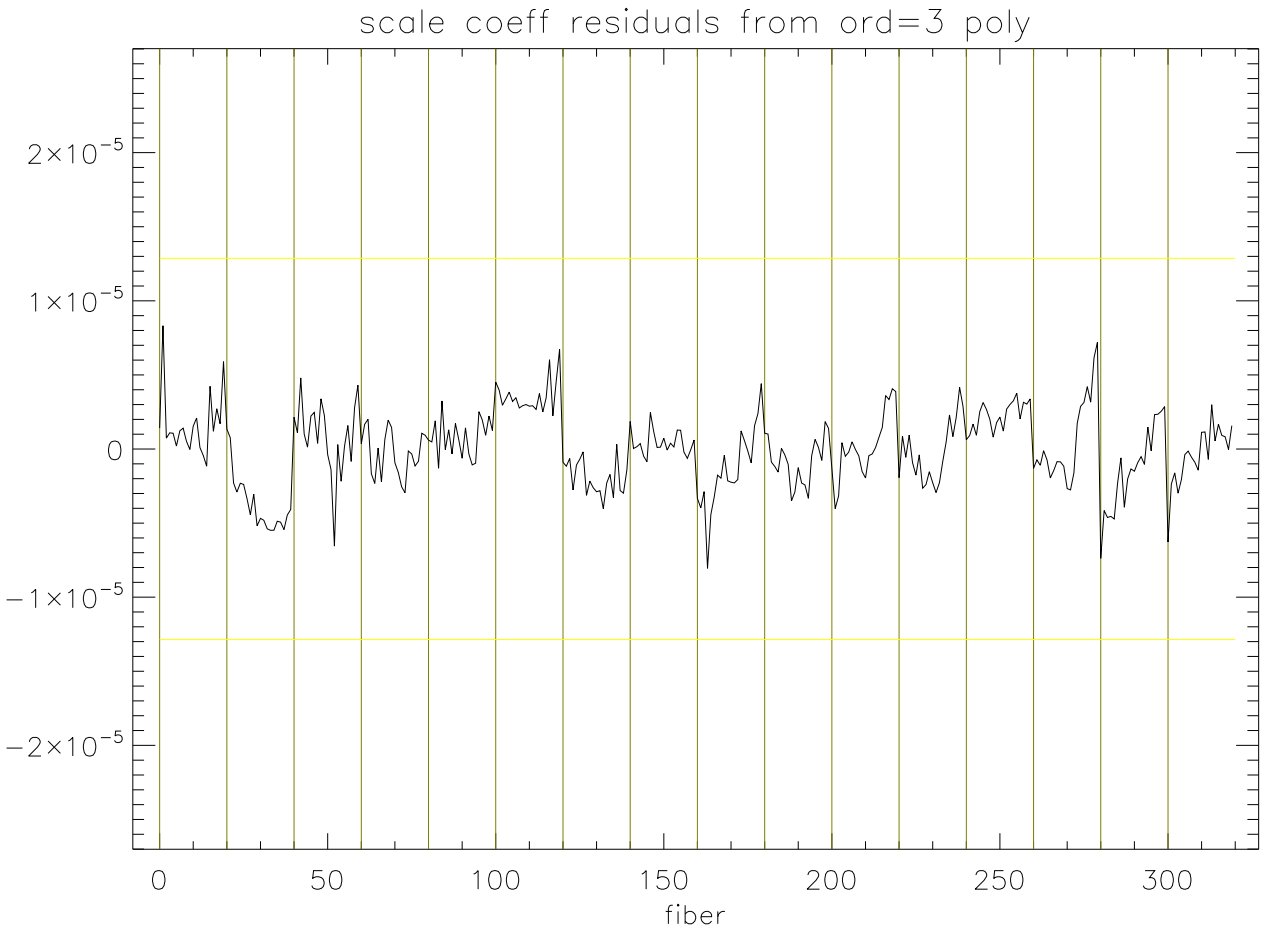

PLATE=1622 MJD=53385 sdR-b1-00030537.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

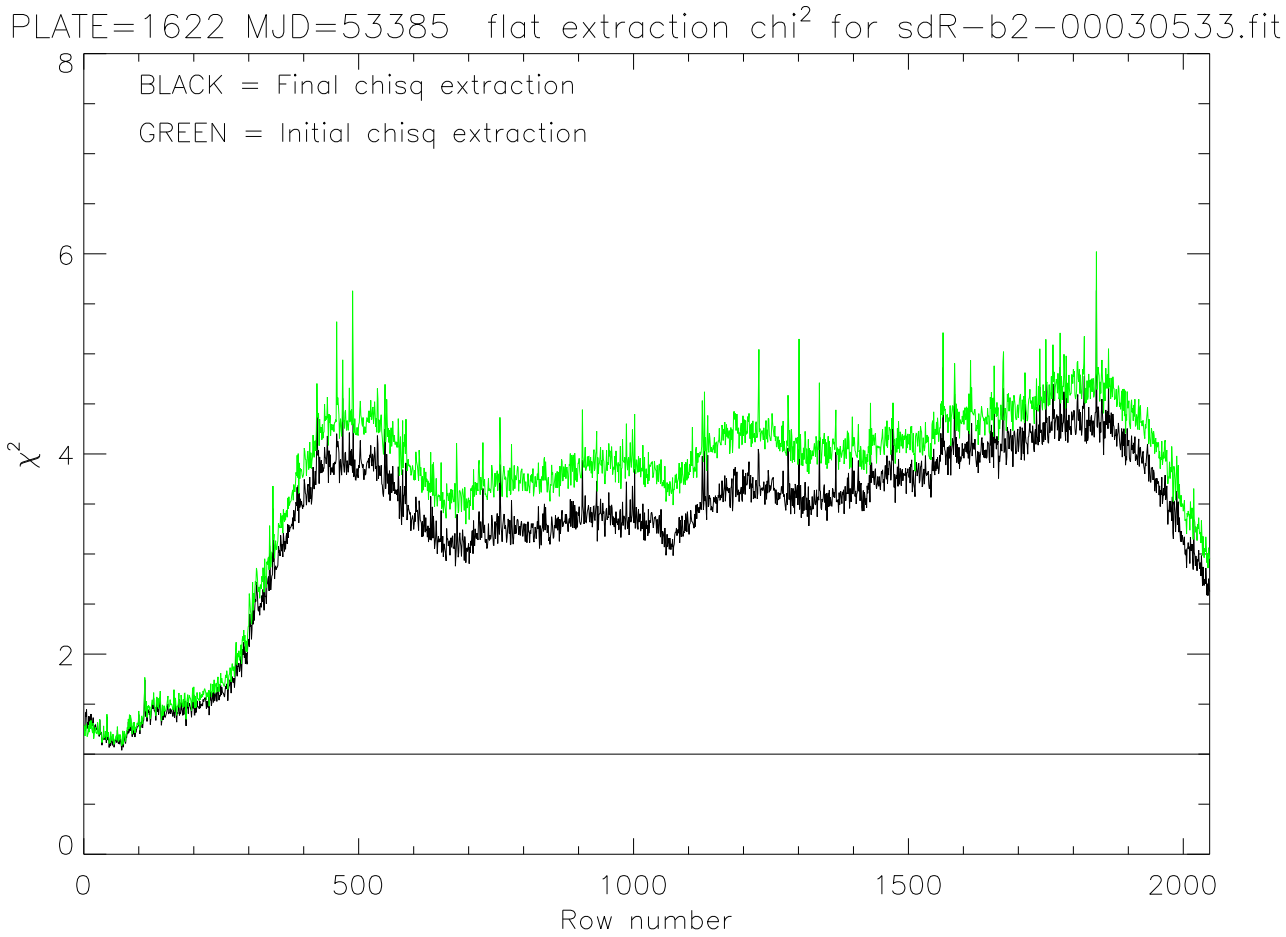

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b1-00030537.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

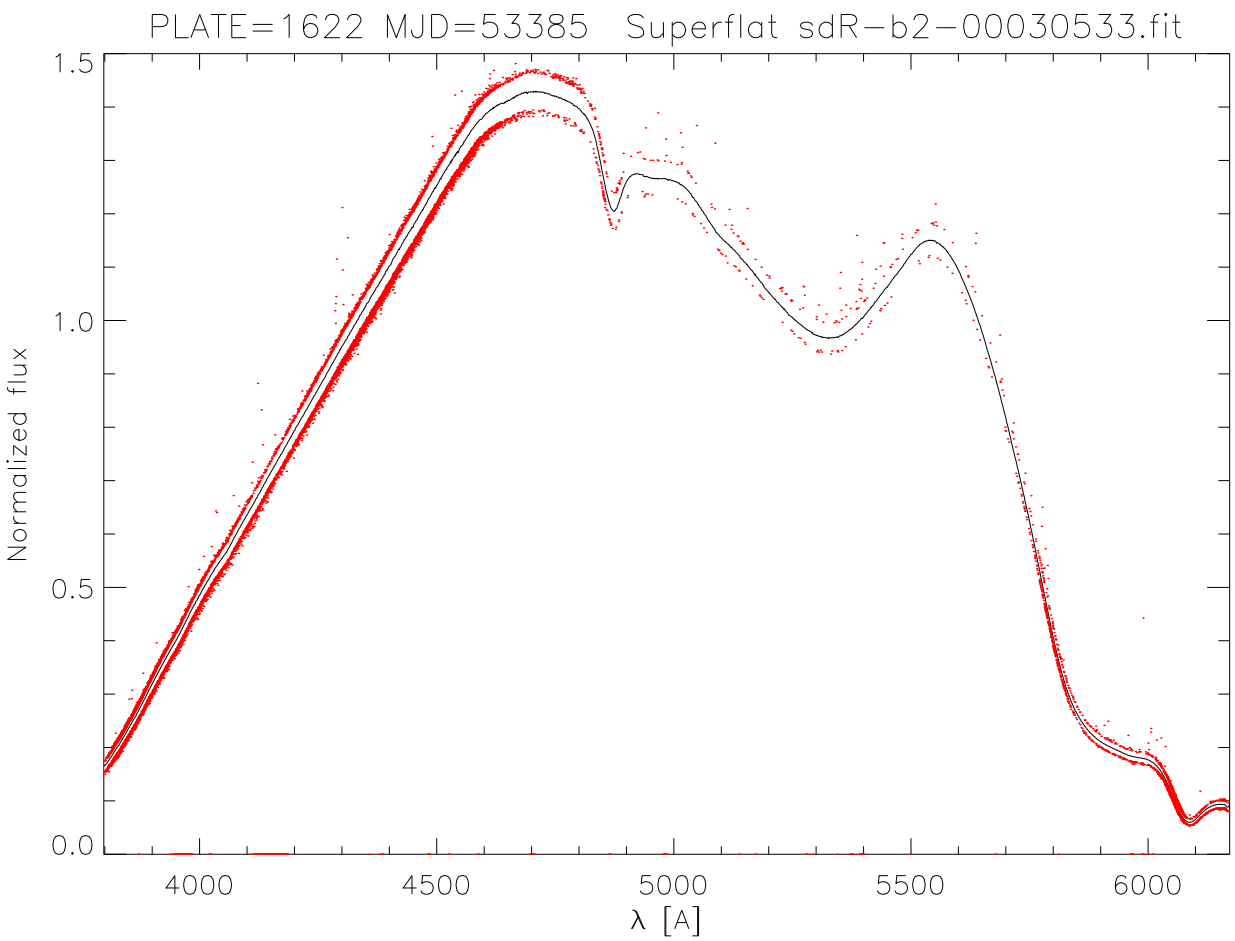

PLATE=1622 MJD=53385 sdR-b1-00030537.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 16.24 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

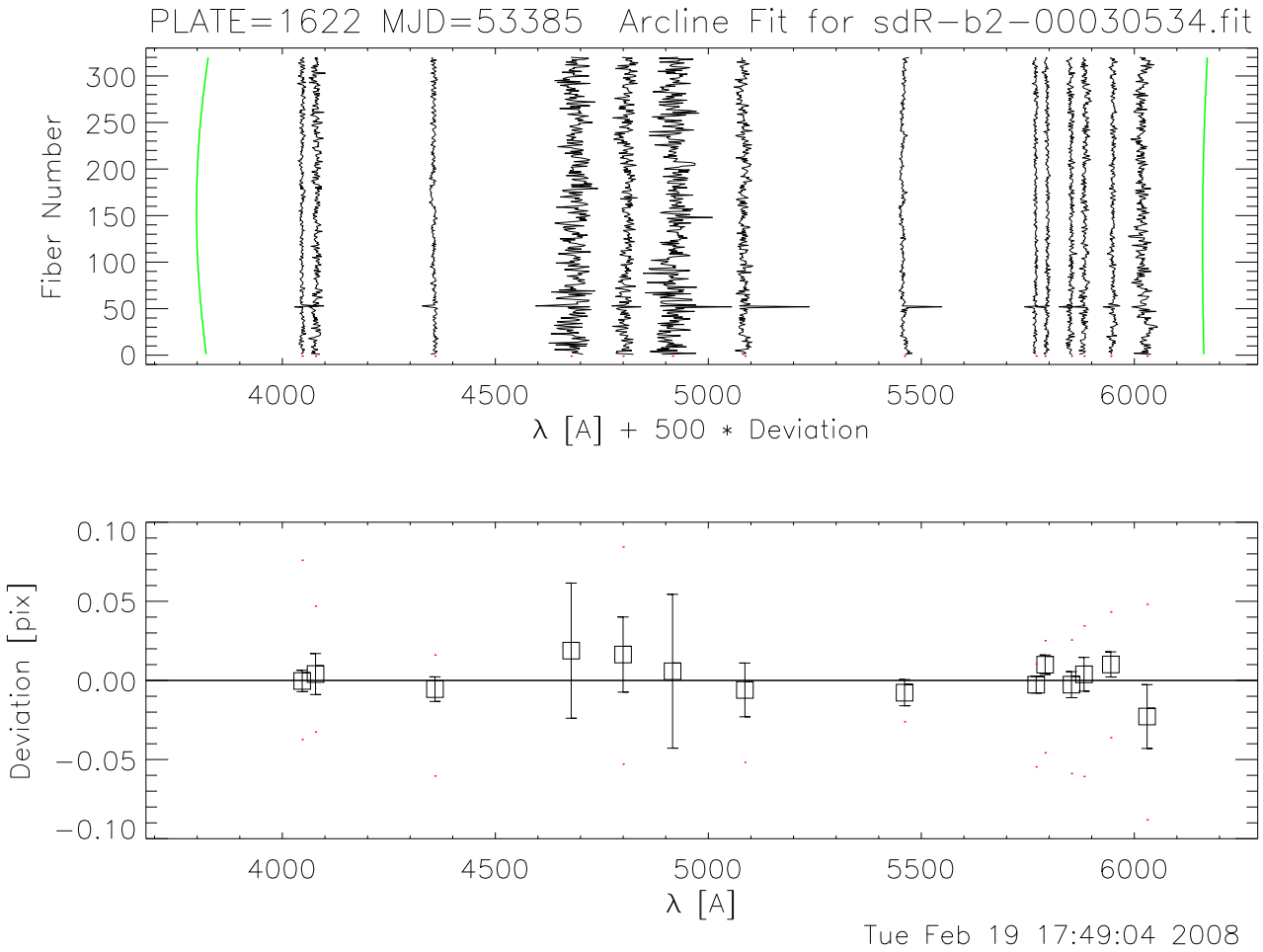

PLATE=1622 MJD=53385 sdR-b1-00030537.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.13 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

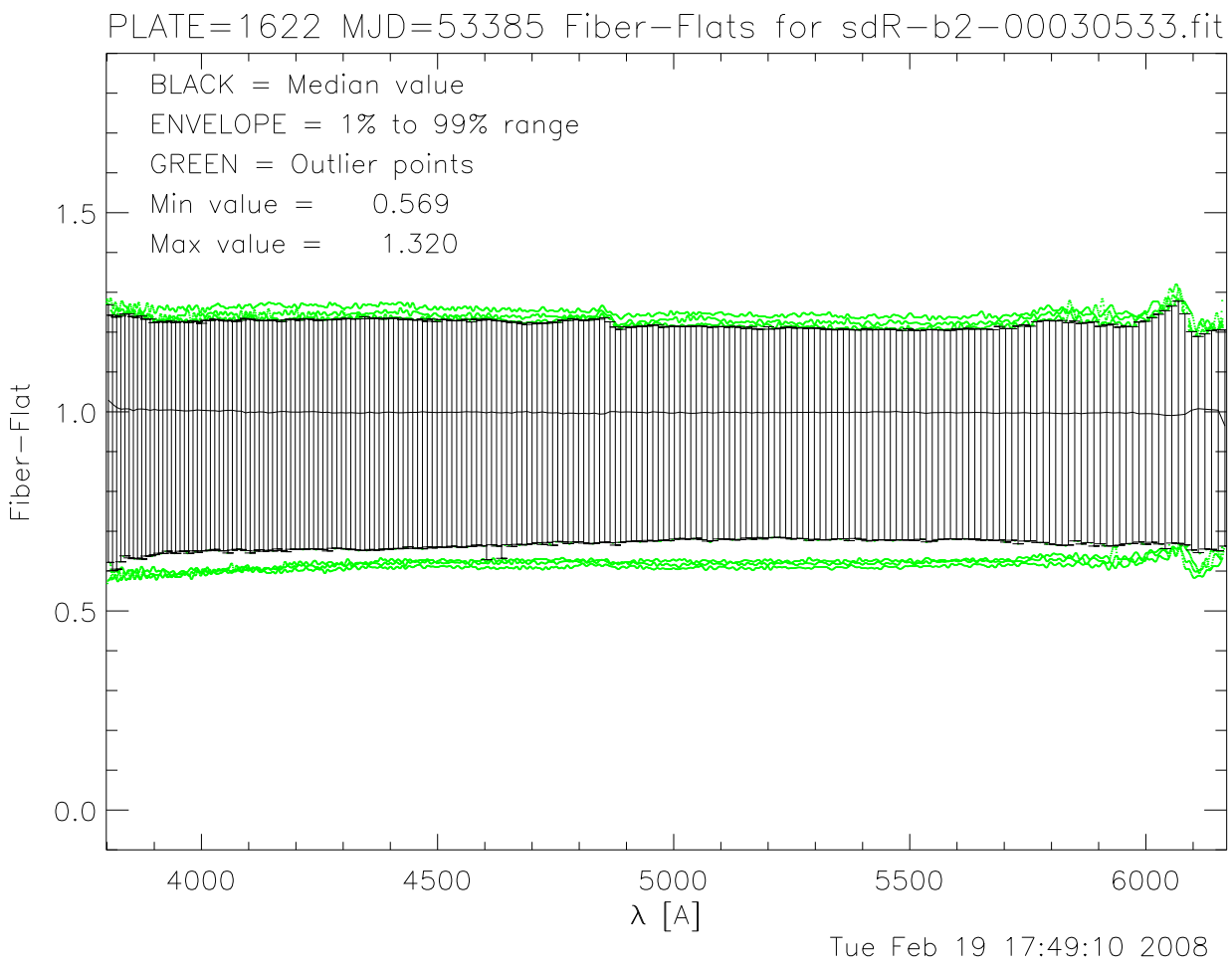

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

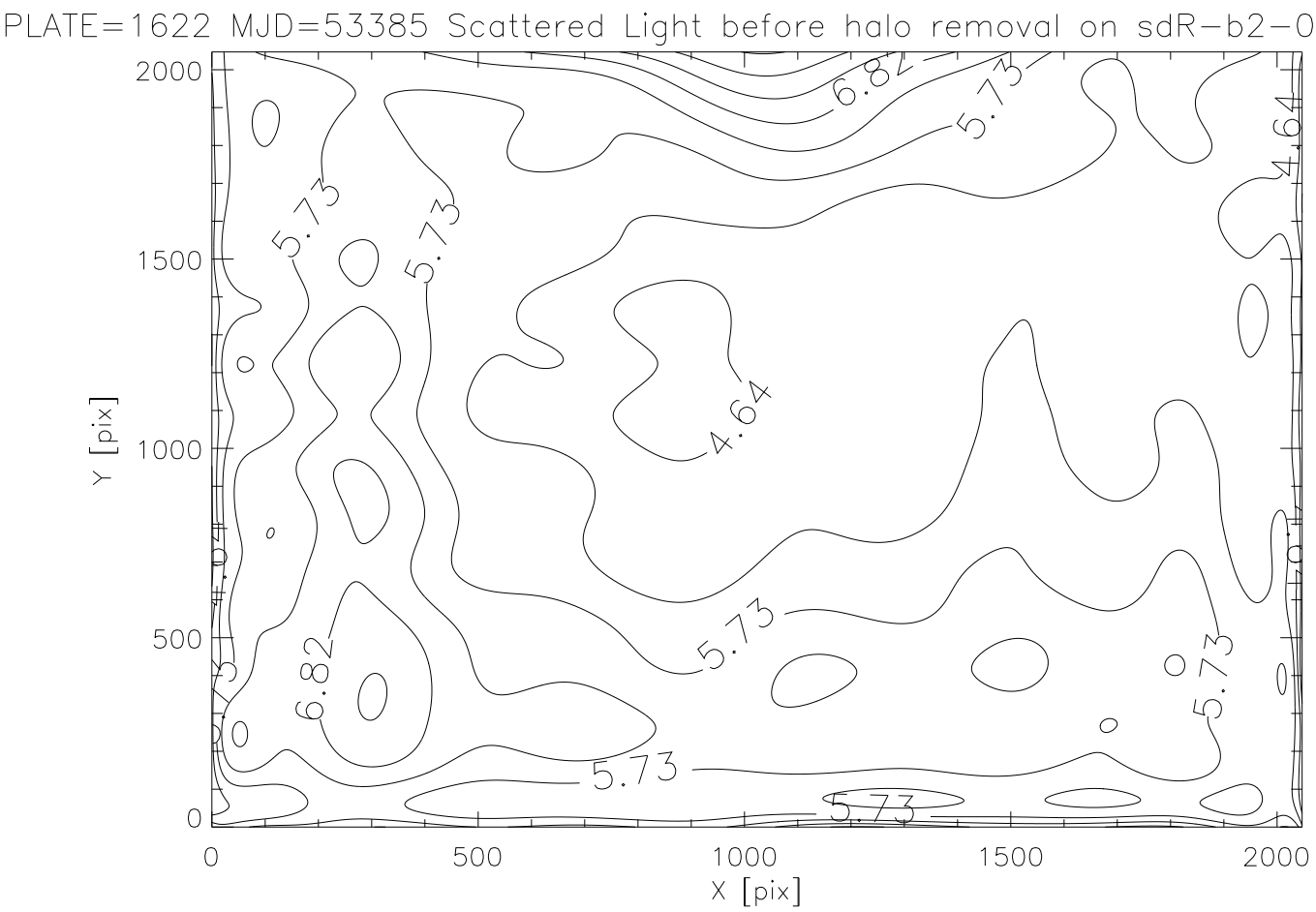

scale coeff residuals from ord=3 poly
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
0
50
100
150
200
250
300
fiber

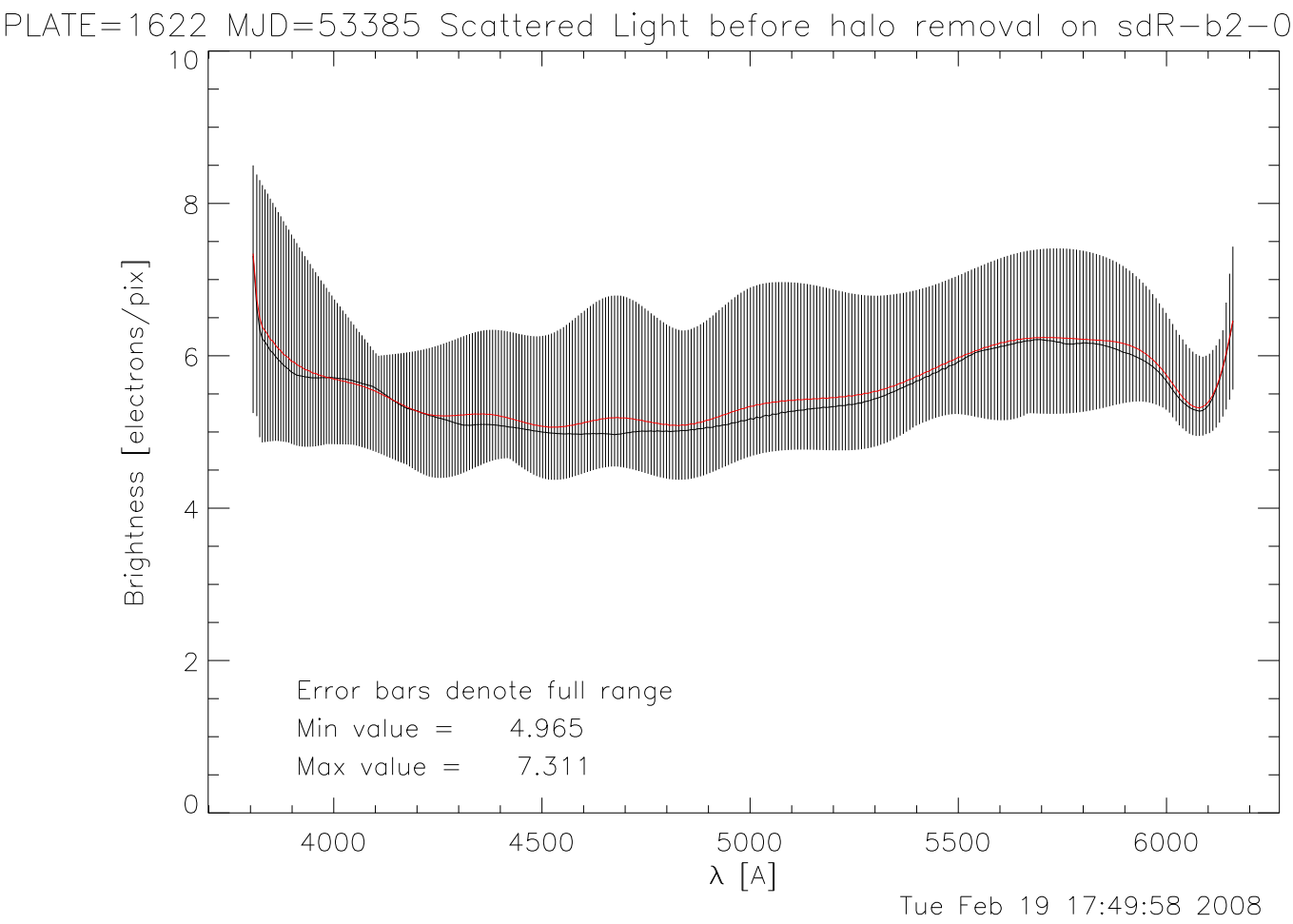

PLATE=1622 MJD=53385 flat extraction chi^2 for sdR−b2−00030533.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

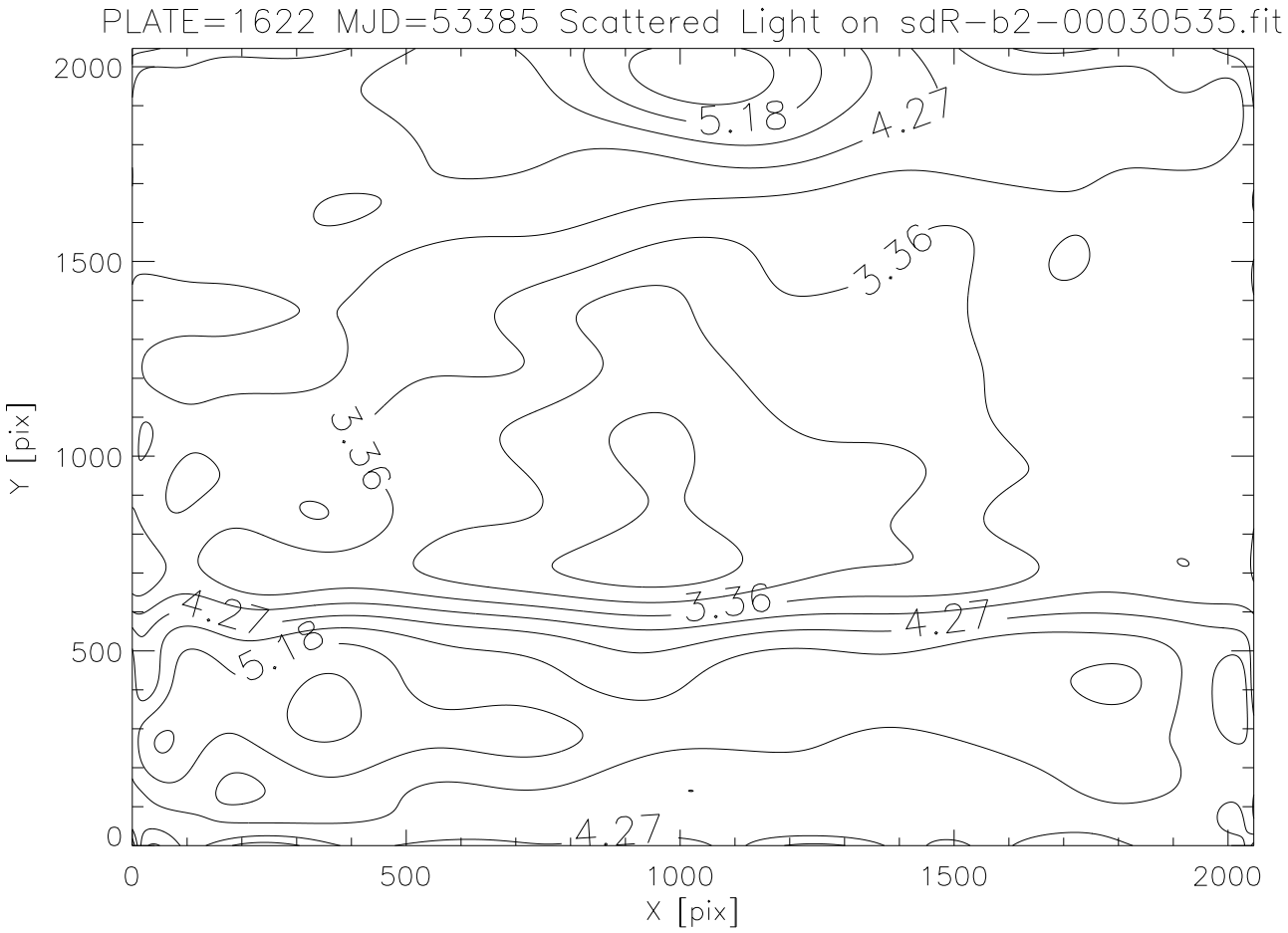

PLATE=1622 MJD=53385 Superflat sdR-b2-00030533.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

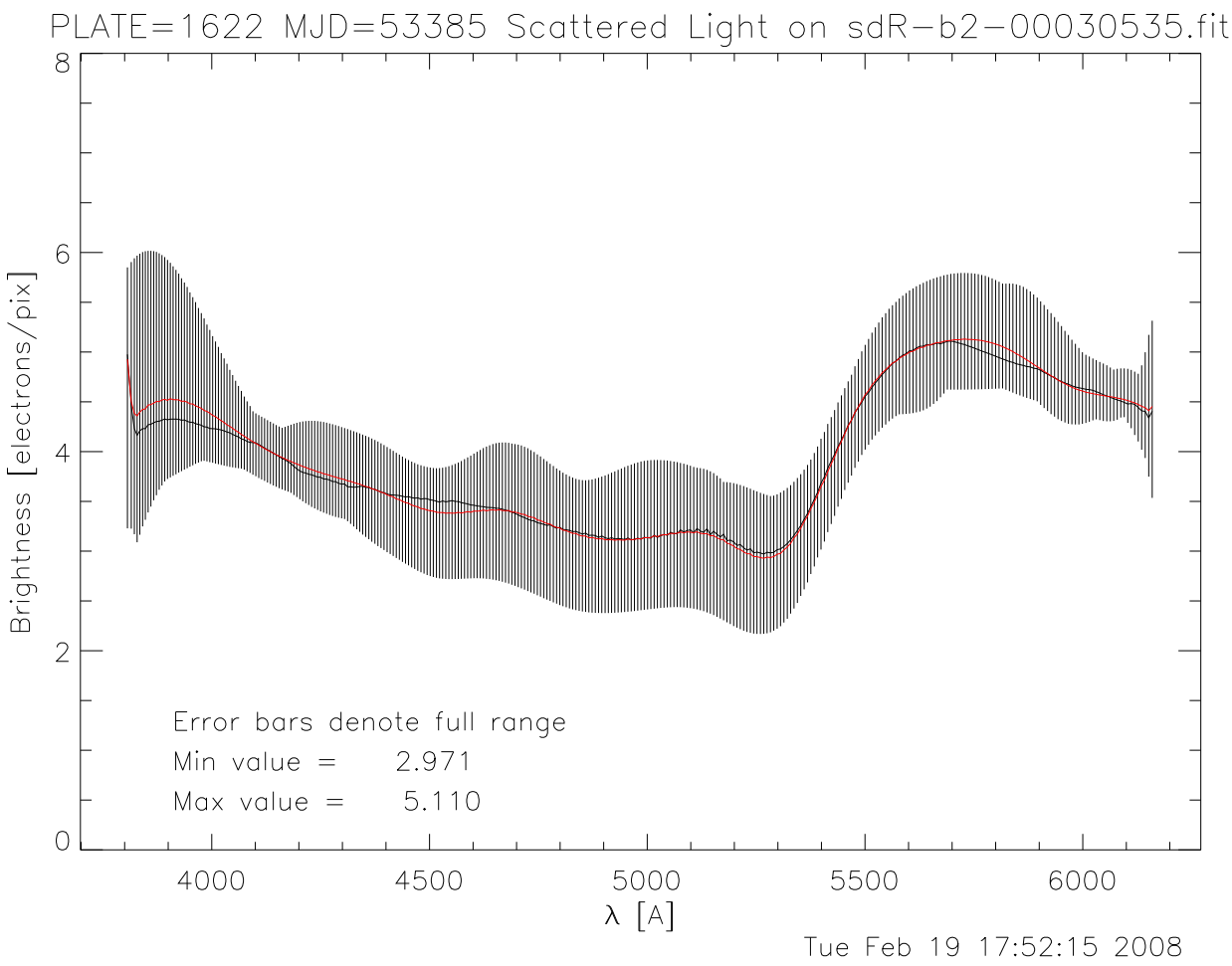

PLATE=1622 MJD=53385 Arcline Fit for sdR-b2-00030534.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:49:04 2008

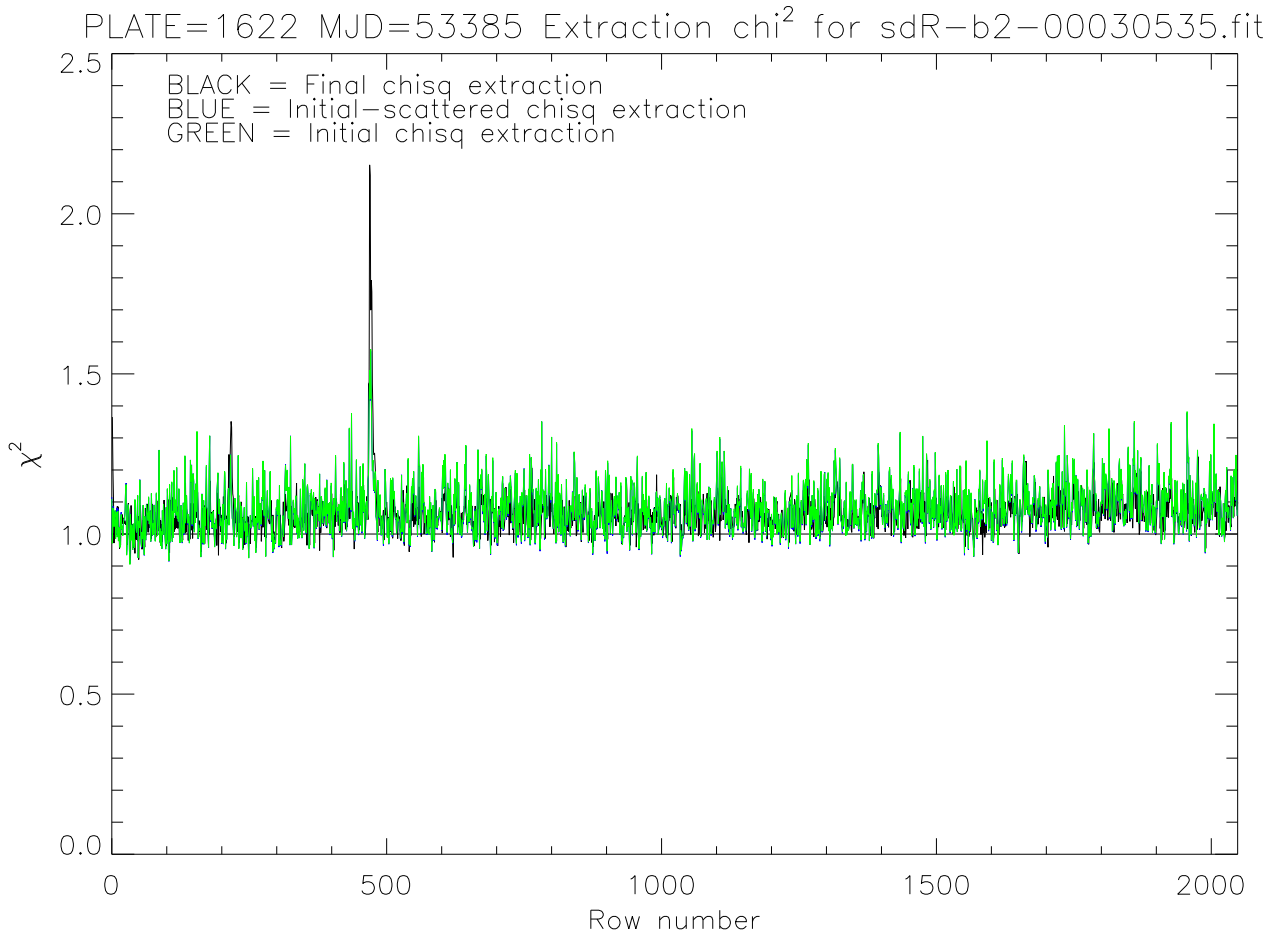

PLATE=1622 MJD=53385 Fiber-Flats for sdR-b2-00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.569
Max value = 1.320
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:49:10 2008

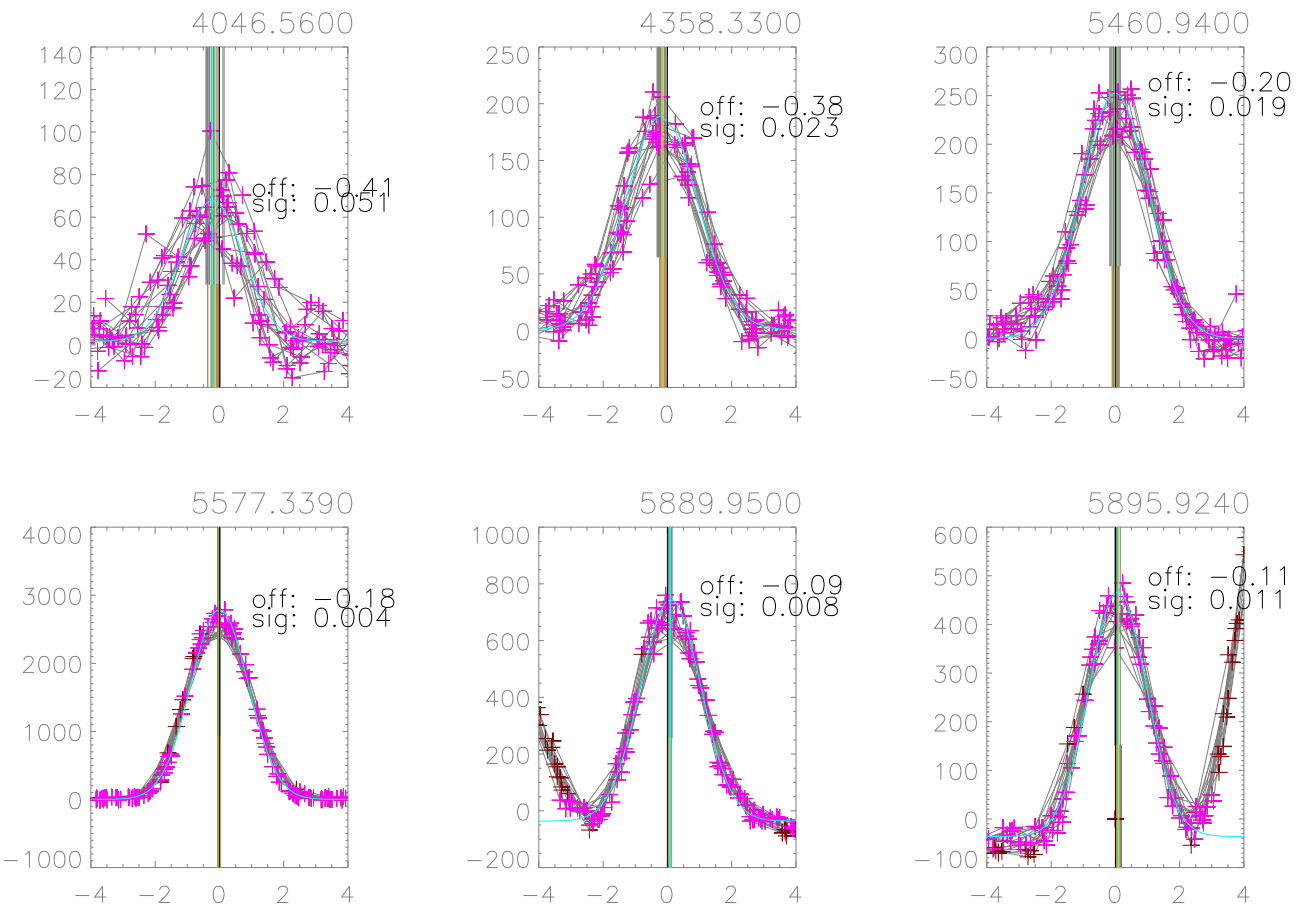

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b2-00030535.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
5.73
4.64

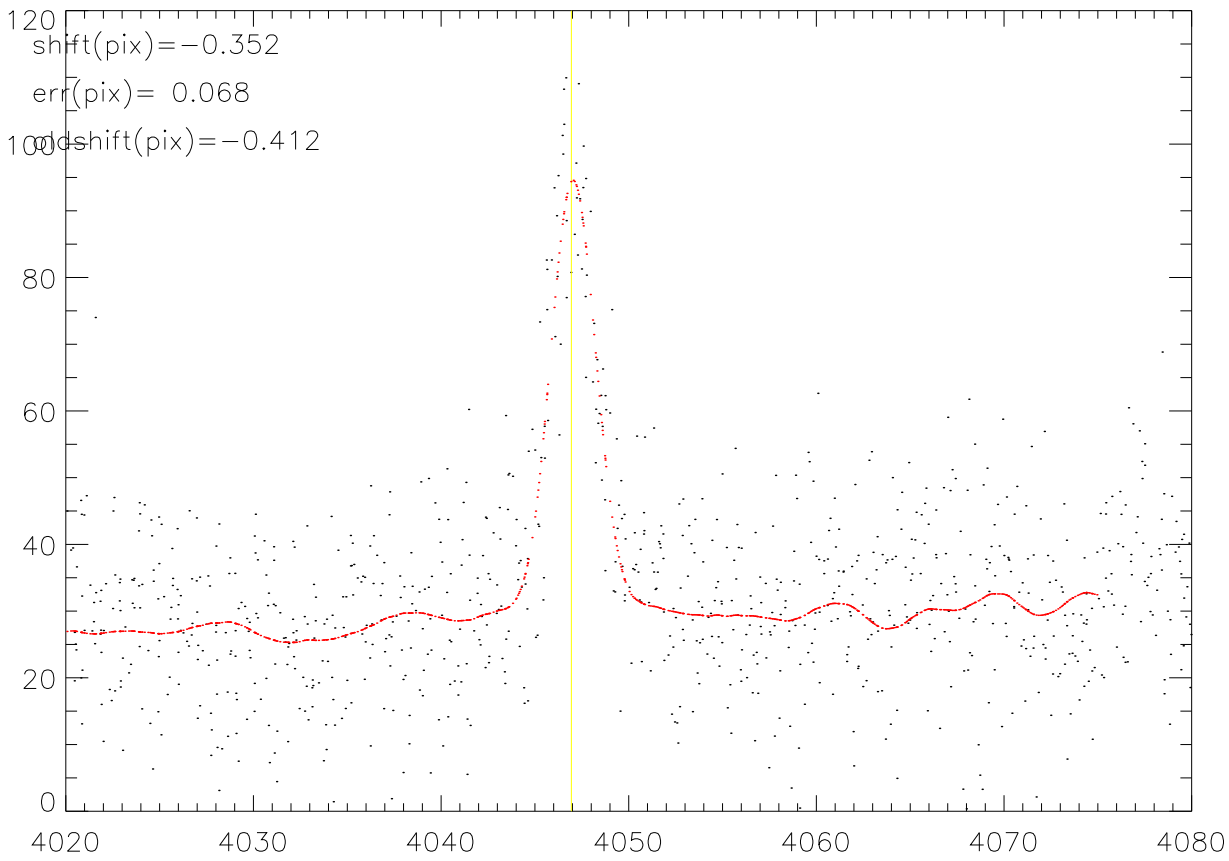

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b2-00030535.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.965
Max value = 7.311
Tue Feb 19 17:49:58 2008

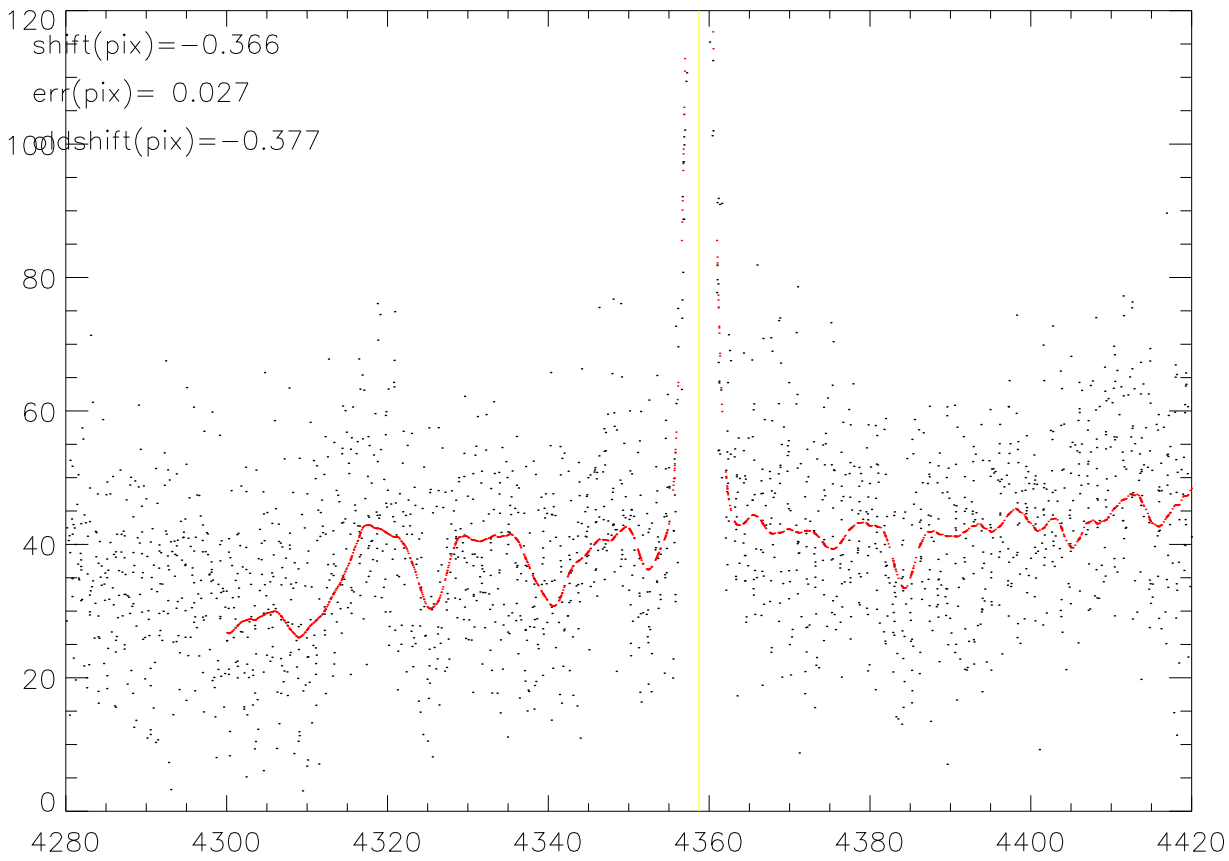

PLATE=1622 MJD=53385 Scattered Light on sdR-b2-00030535.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
5.18
4.27
3.36
3.36
3.36
4.27
4.27
5.18
4.27

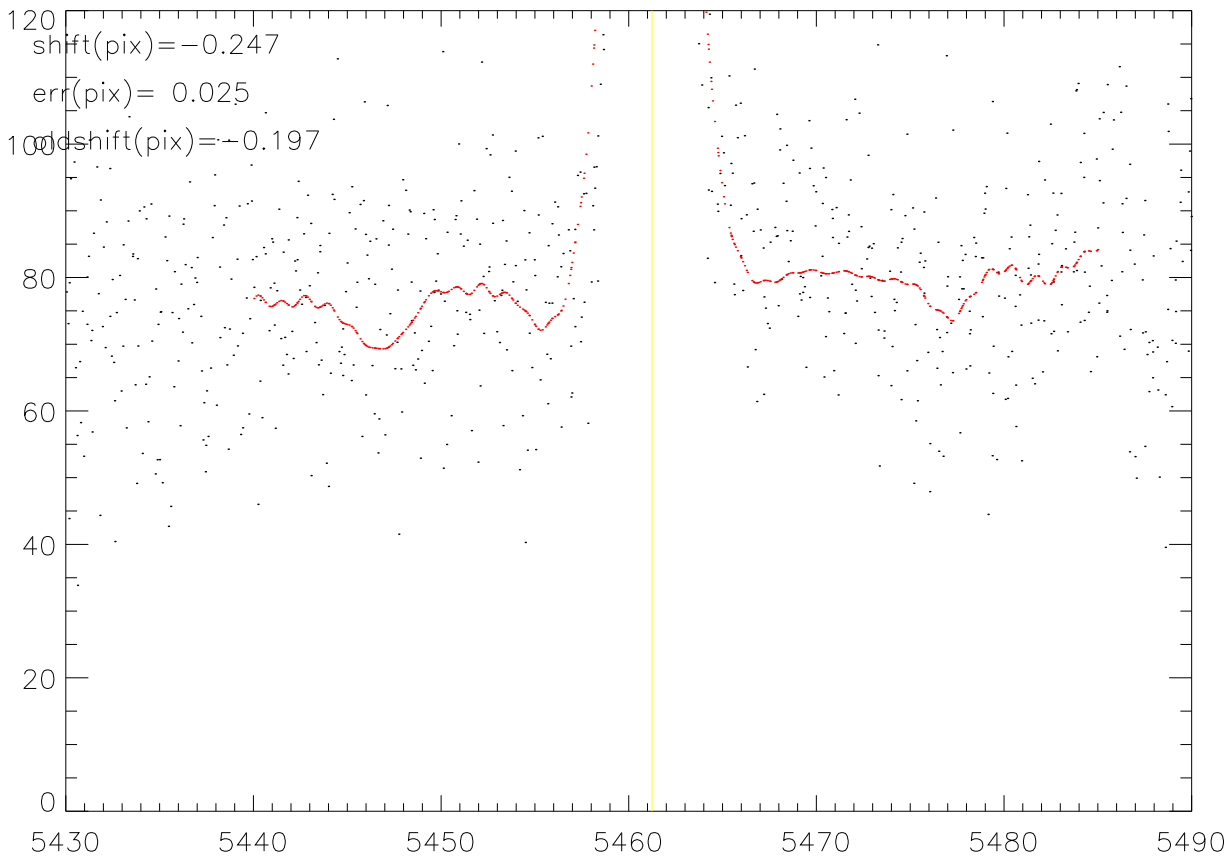

PLATE=1622 MJD=53385 Scattered Light on sdR-b2-00030535.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 2.971
Max value = 5.110
Tue Feb 19 17:52:15 2008

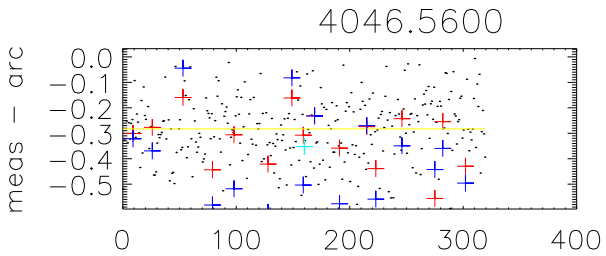

PLATE=1622 MJD=53385 Extraction chi^2 for sdR-b2-00030535.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

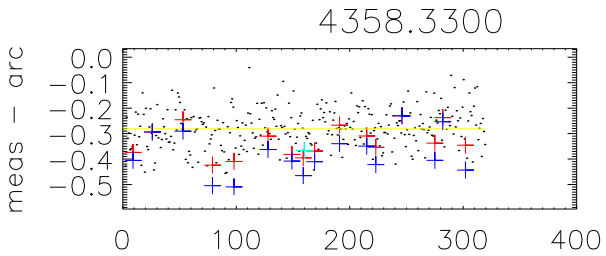

4046.5600
off: −0.41
sig: 0.051
4358.3300
off: −0.38
sig: 0.023
5460.9400
off: −0.20
sig: 0.019
5577.3390
off: −0.18
sig: 0.004
5889.9500
off: −0.09
sig: 0.008
5895.9240
off: −0.11
sig: 0.011

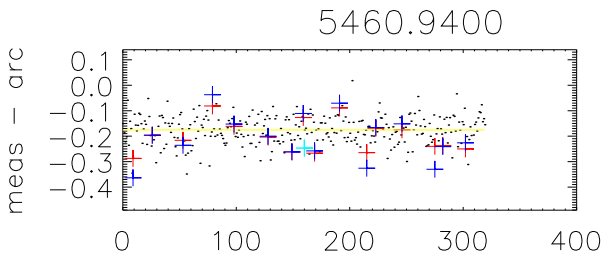

shift(pix)=−0.352
err(pix)= 0.068
oldshift(pix)=−0.412
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

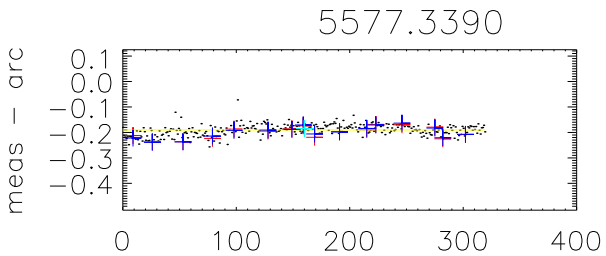

shift(pix)=−0.366
err(pix)= 0.027
oldshift(pix)=−0.377
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

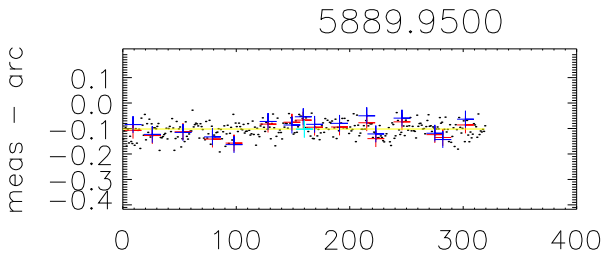

shift(pix)=−0.247
err(pix)= 0.025
oldshift(pix)=−0.197
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

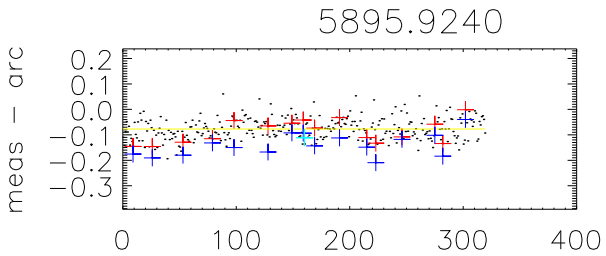

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

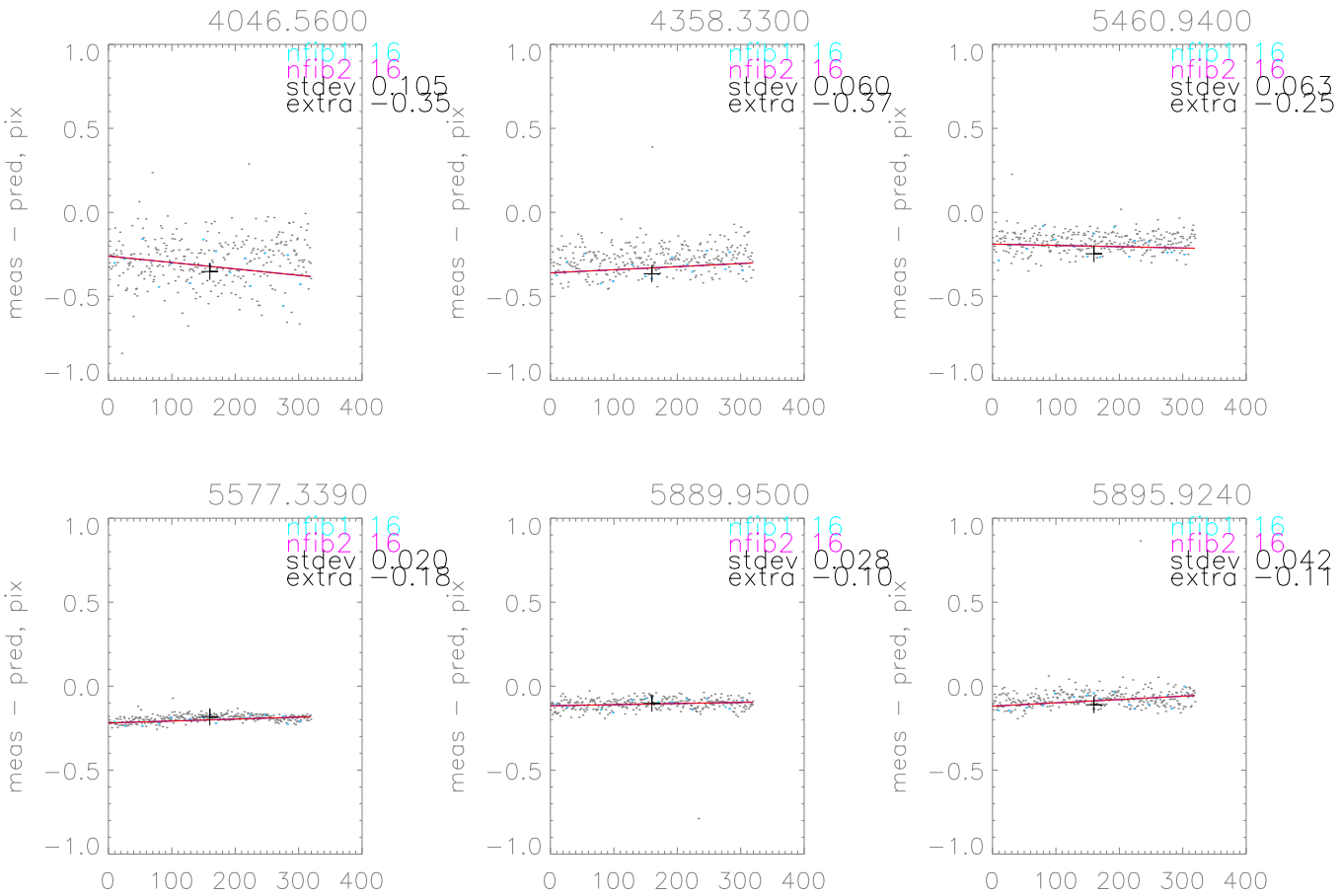

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

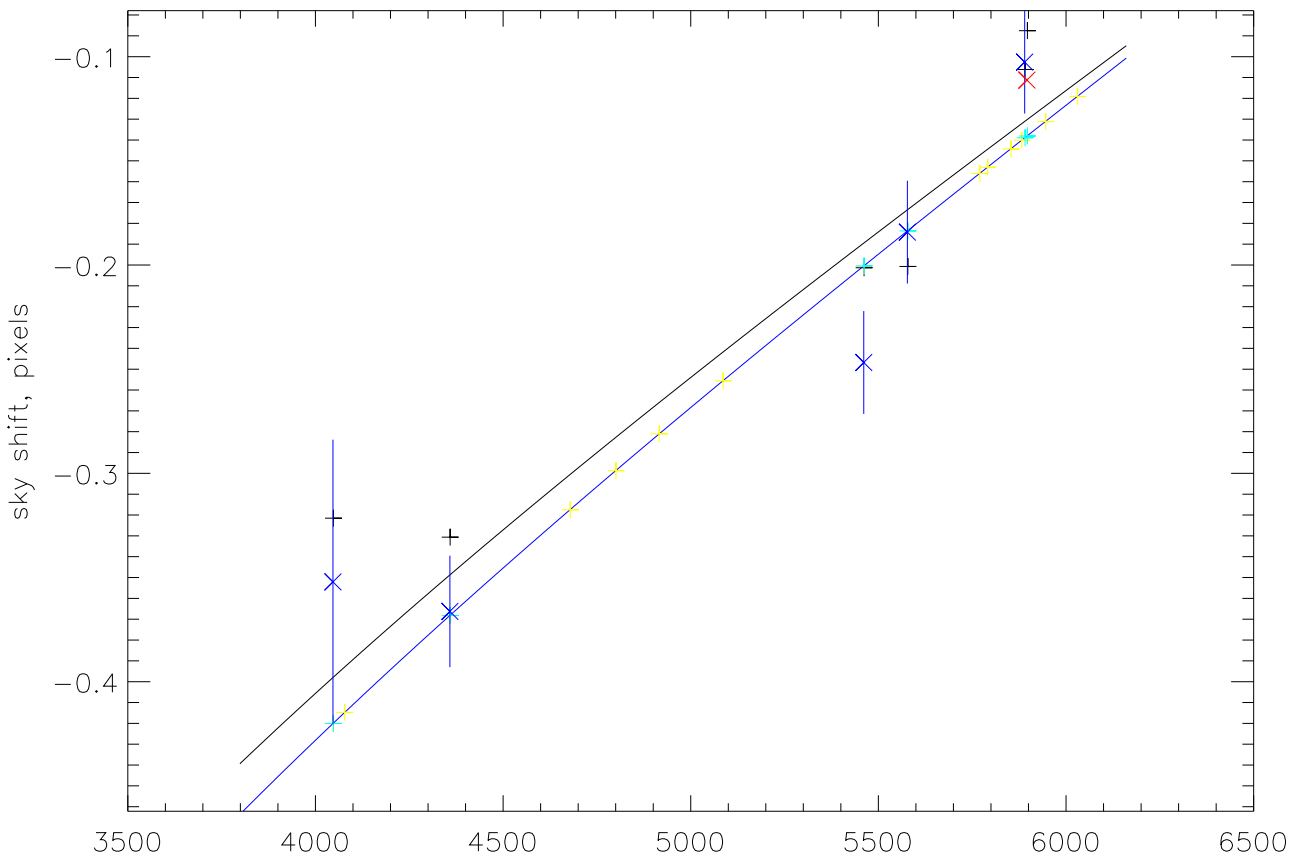

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

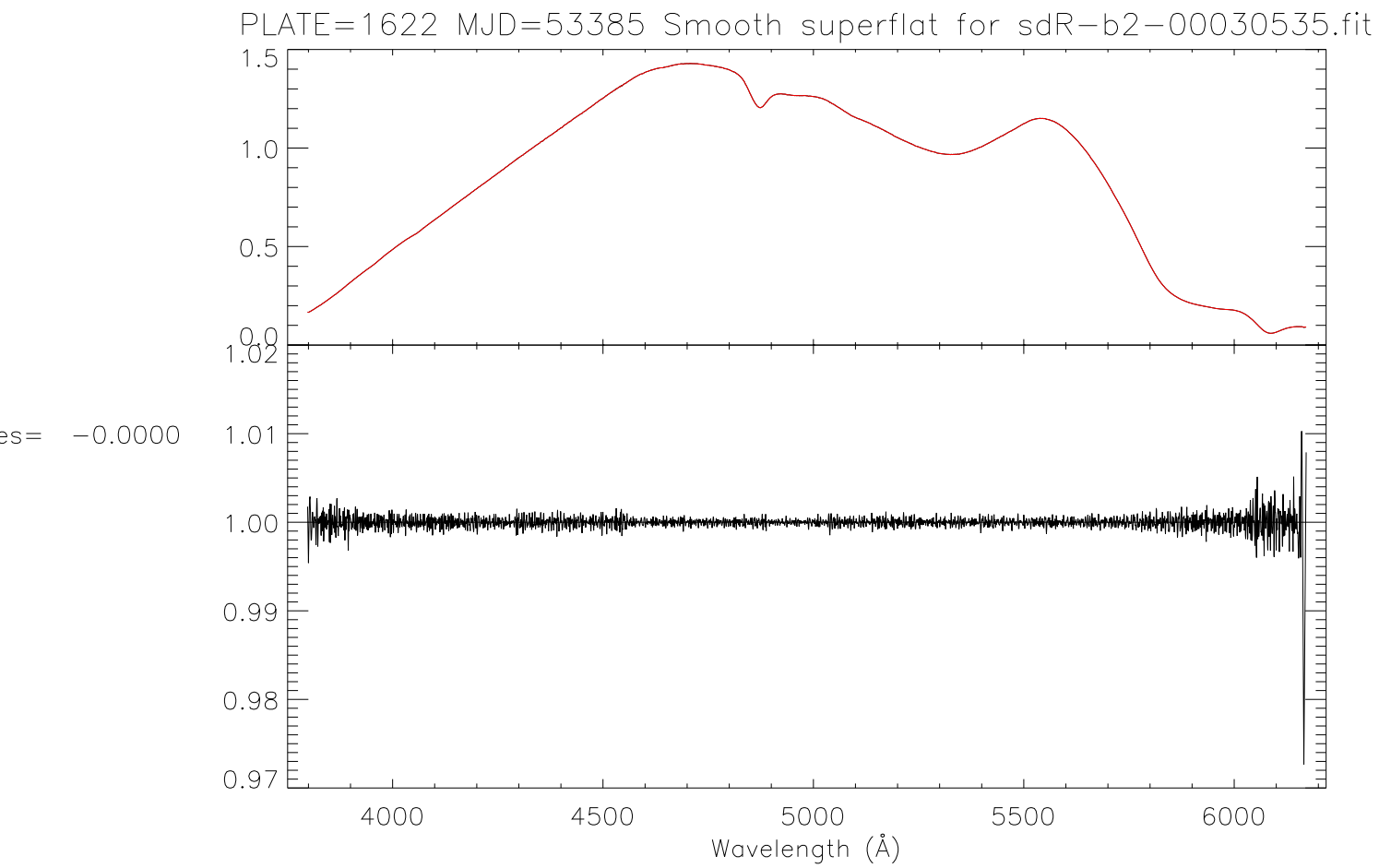

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

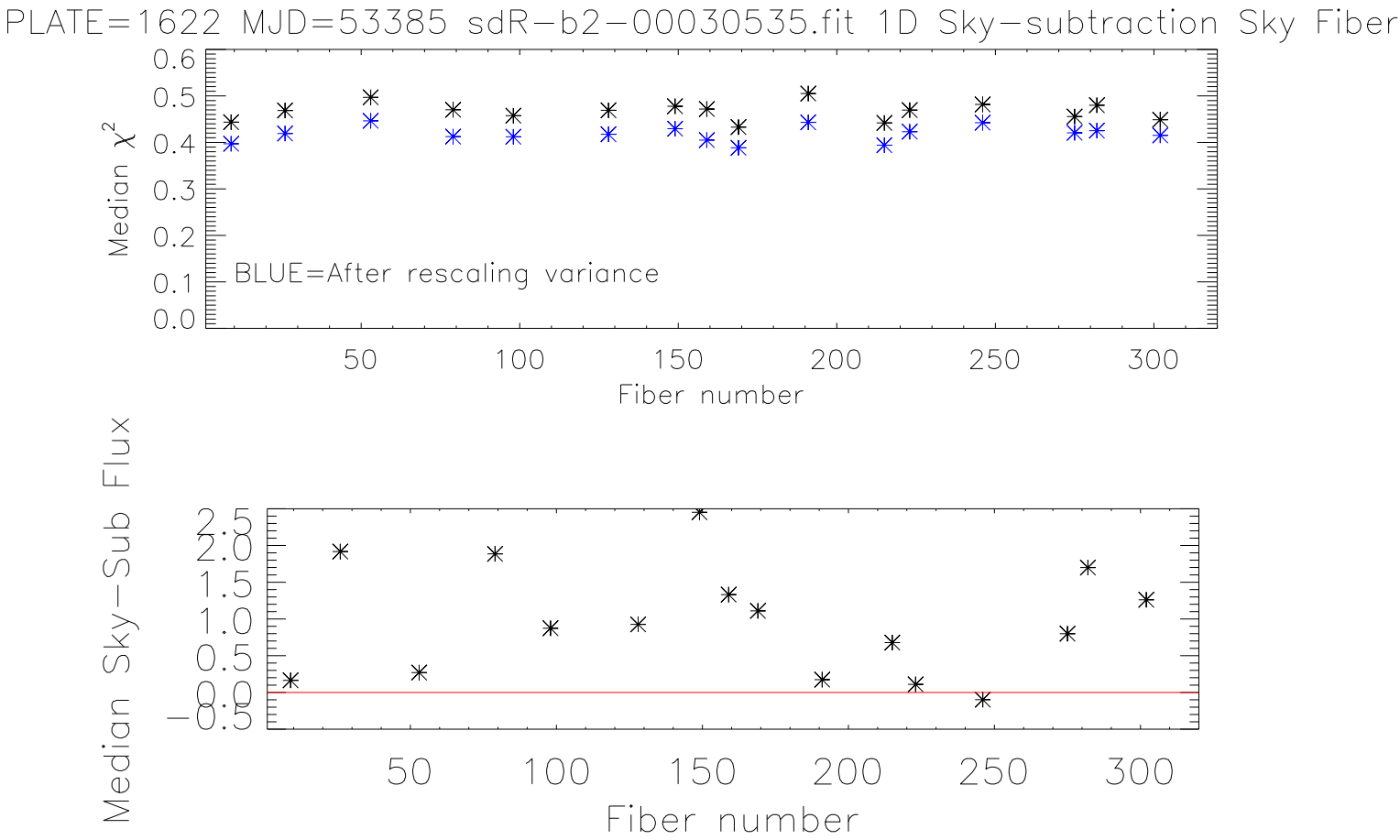

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

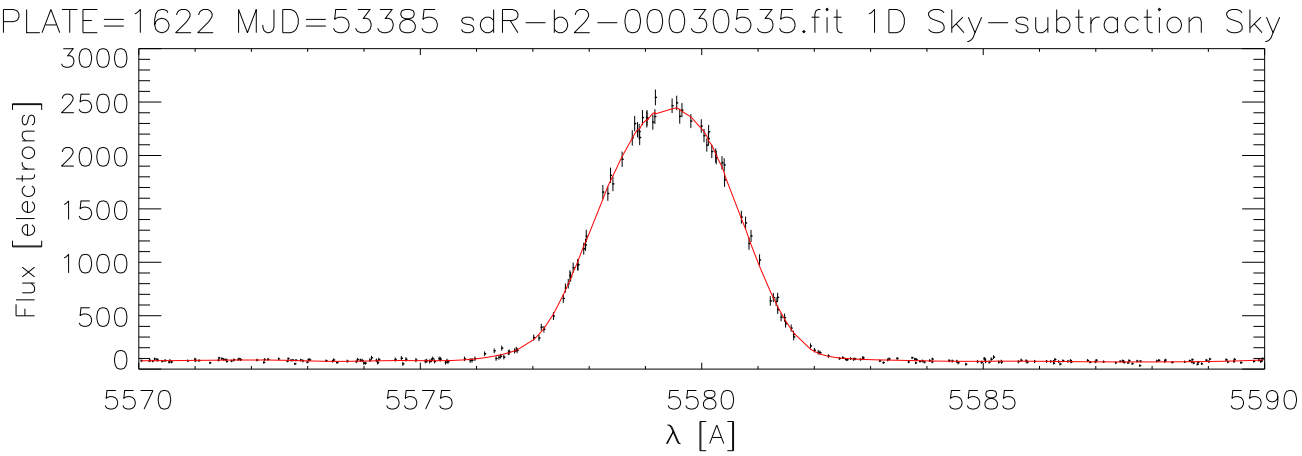

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

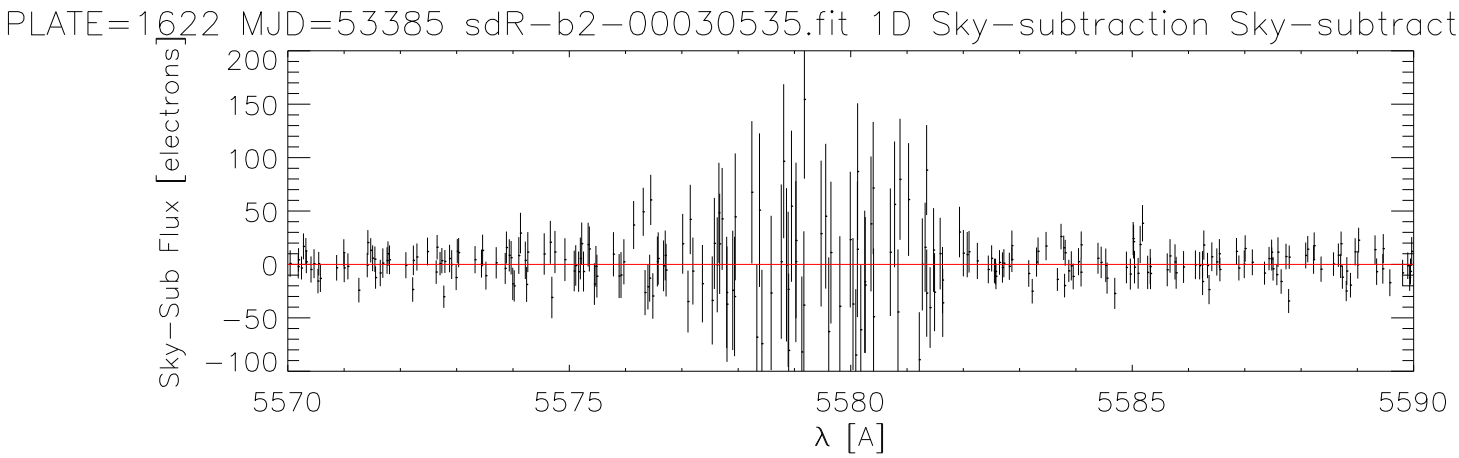

4046.5600
nfib1 16
nfib2 16
stdev 0.105
extra −0.35
4358.3300
nfib1 16
nfib2 16
stdev 0.060
extra −0.37
5460.9400
nfib1 16
nfib2 16
stdev 0.063
extra −0.25
5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.18
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extra −0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.042
extra −0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

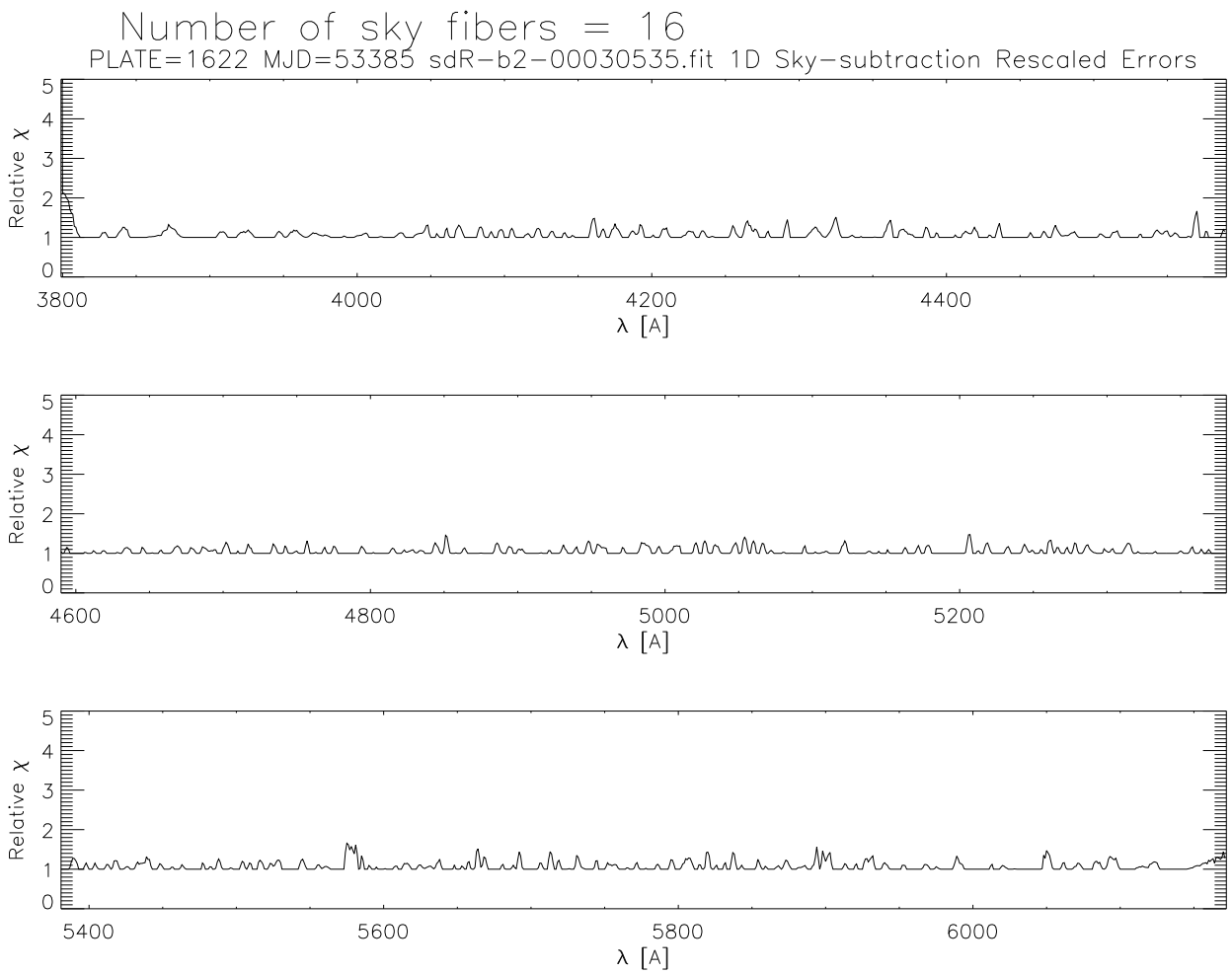

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

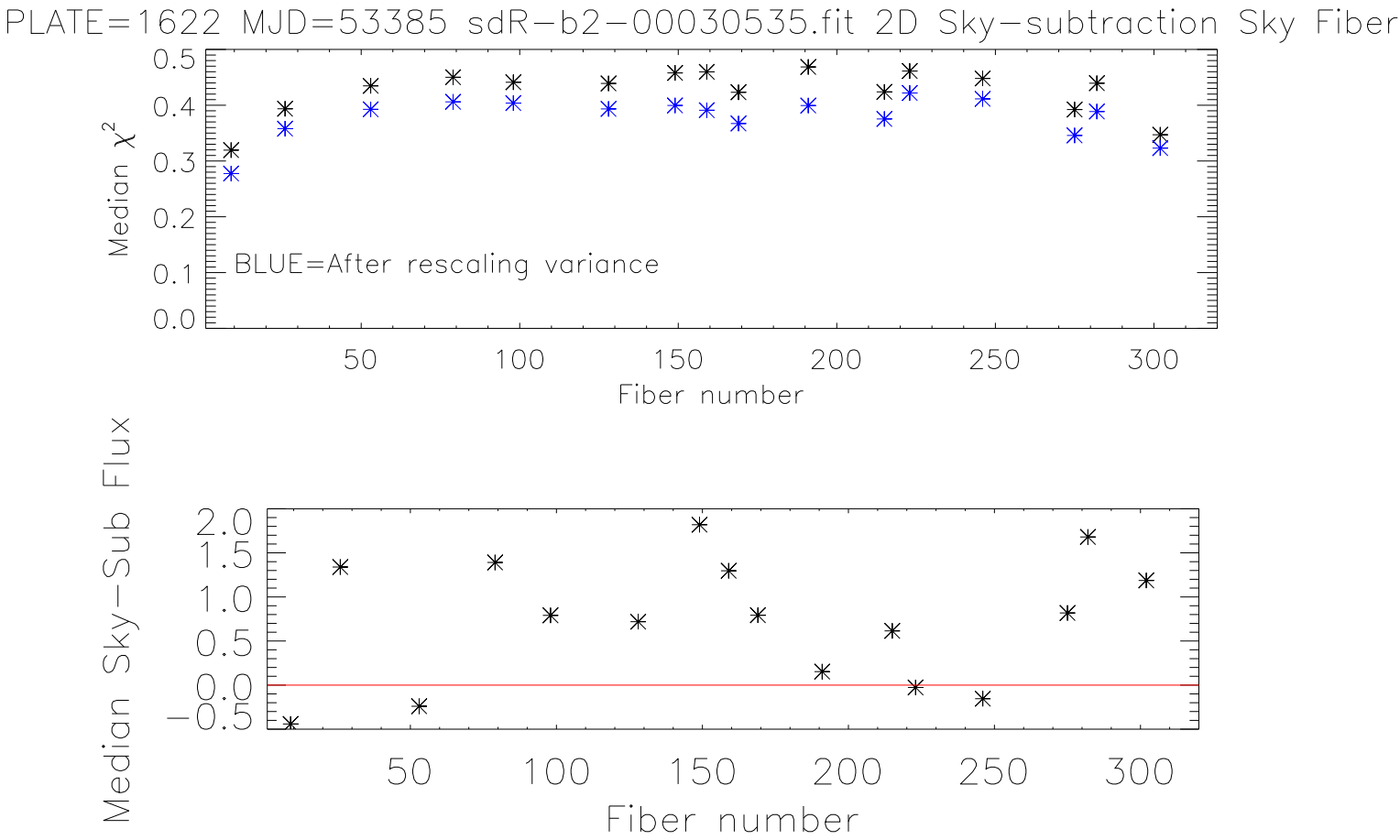

PLATE=1622 MJD=53385 Smooth superflat for sdR-b2-00030535.fit
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

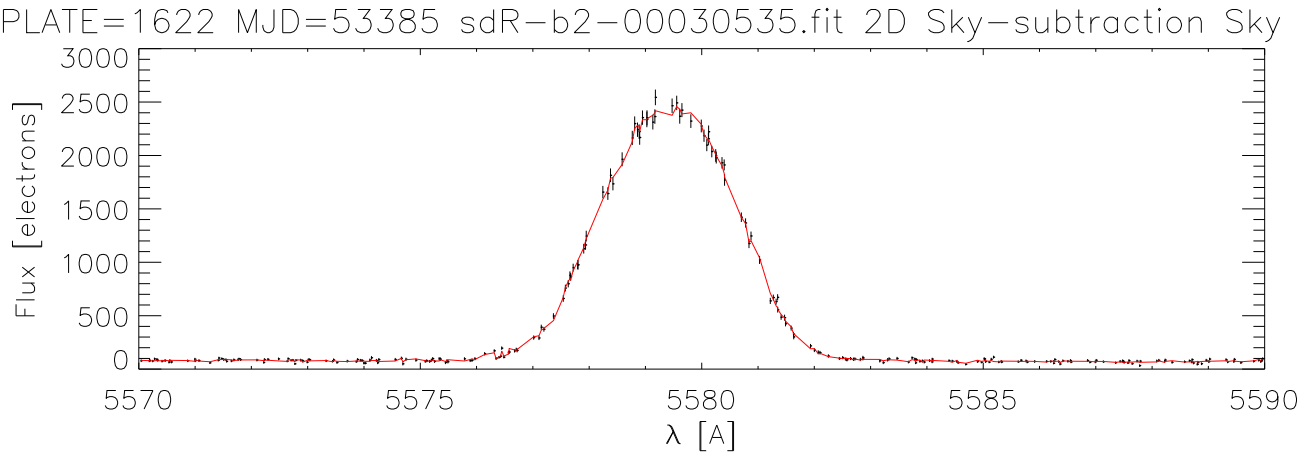

PLATE=1622 MJD=53385 sdR-b2-00030535.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

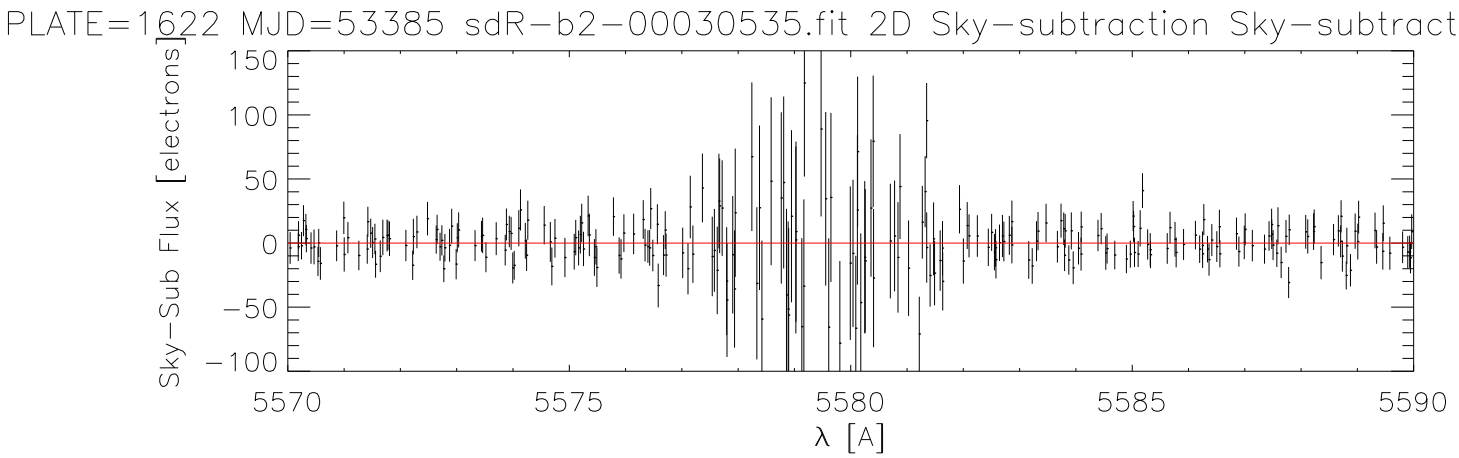

PLATE=1622 MJD=53385 sdR-b2-00030535.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

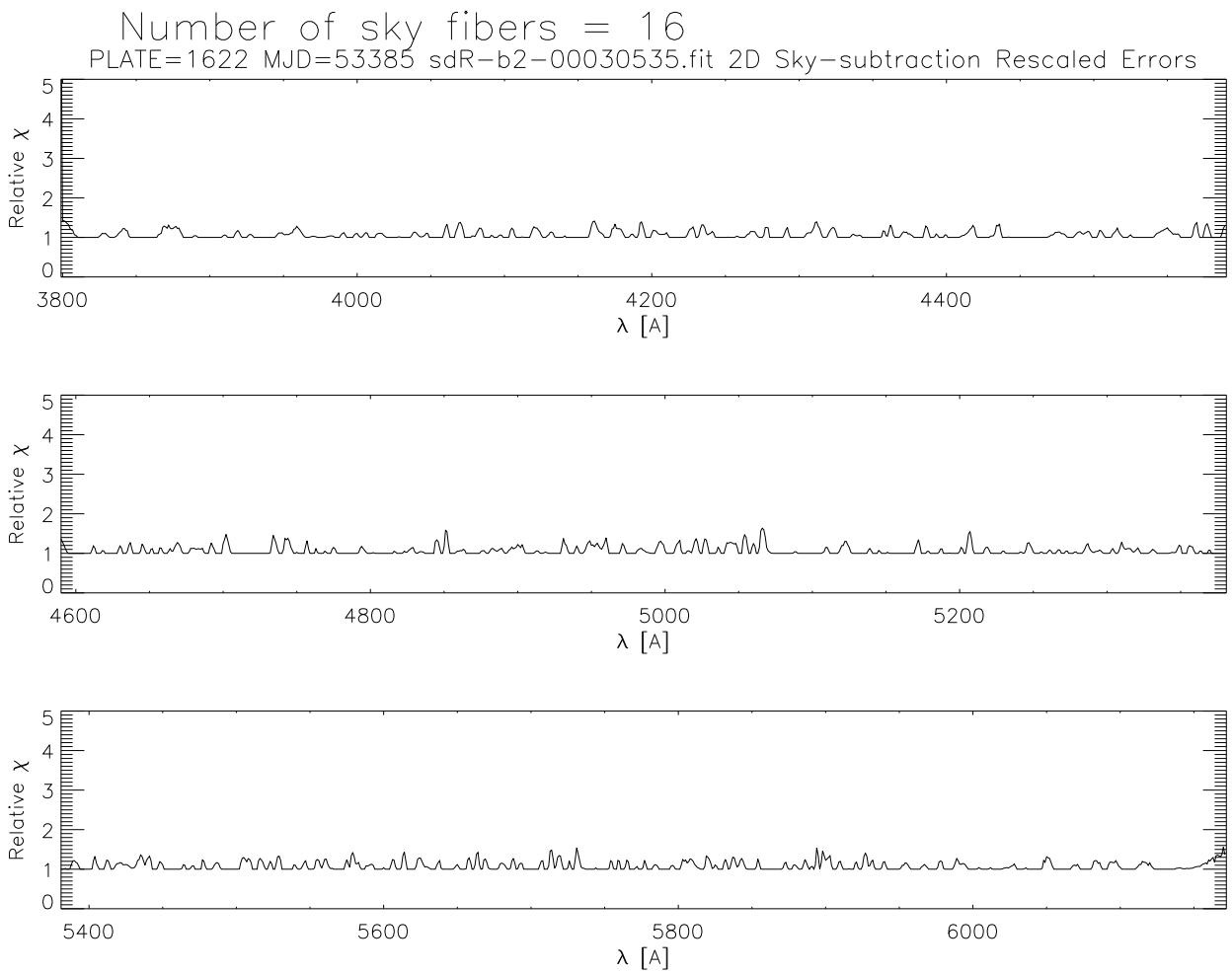

PLATE=1622 MJD=53385 sdR-b2-00030535.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

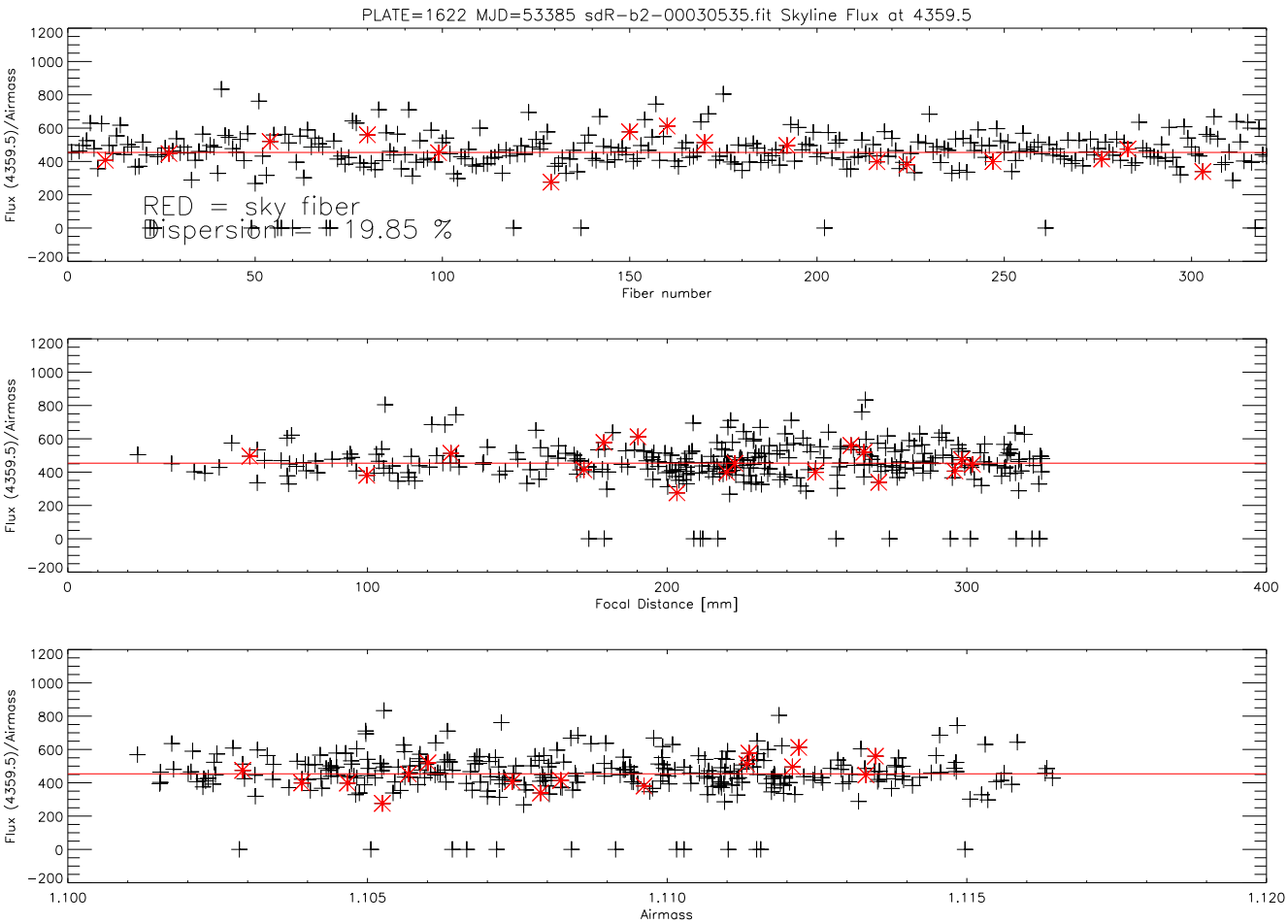

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b2-00030535.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

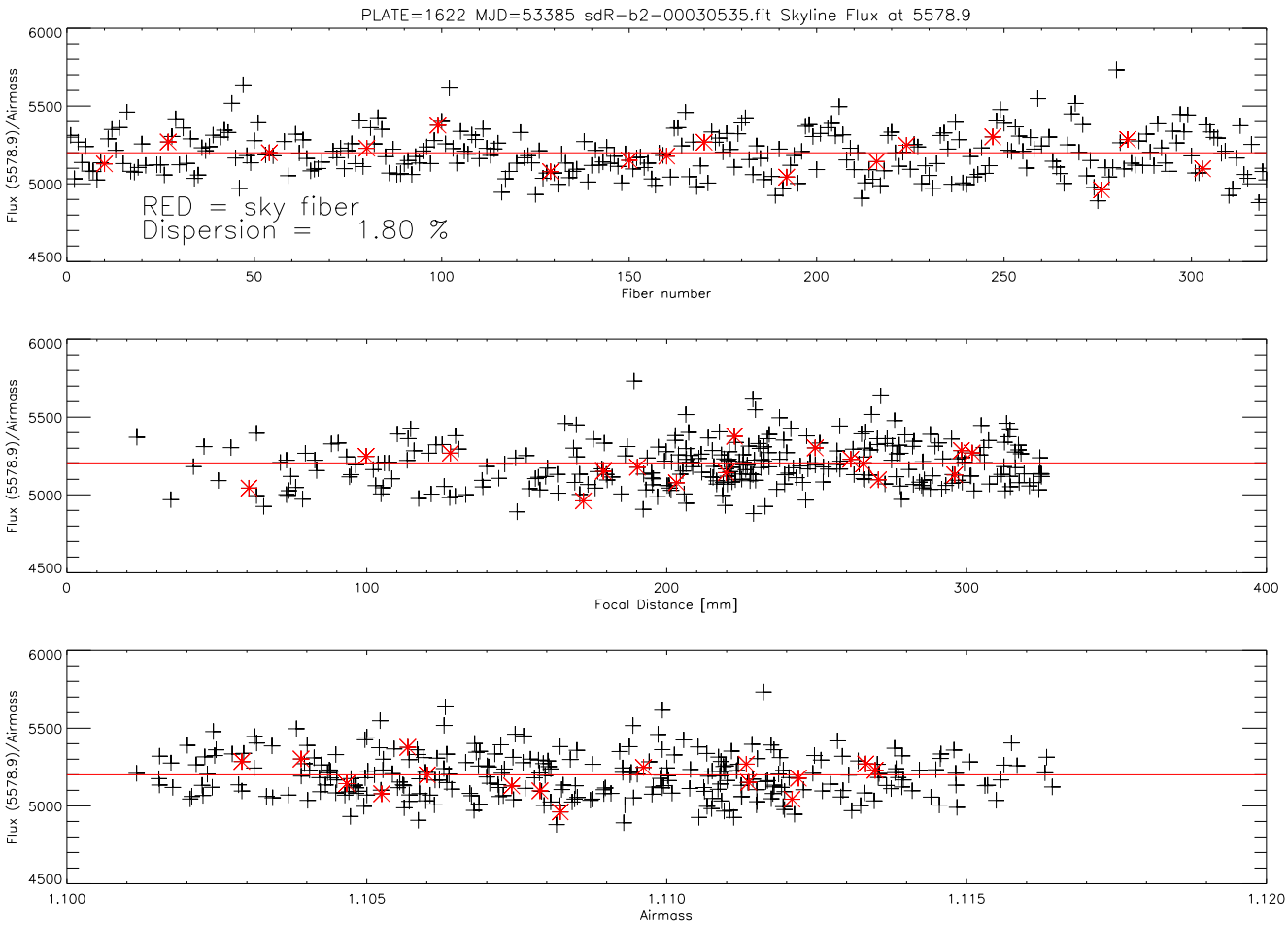

PLATE=1622 MJD=53385 sdR-b2-00030535.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

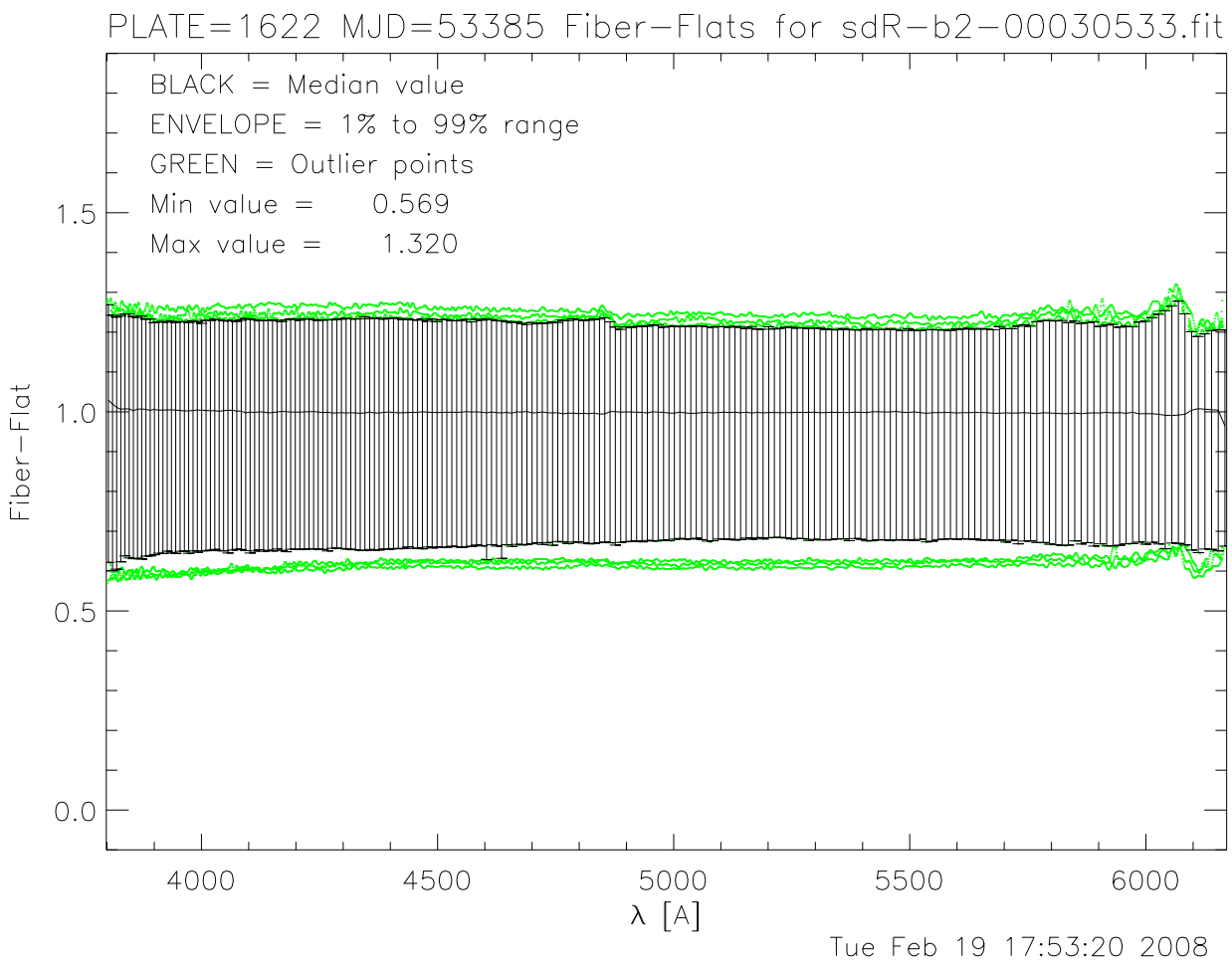

PLATE=1622 MJD=53385 sdR-b2-00030535.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

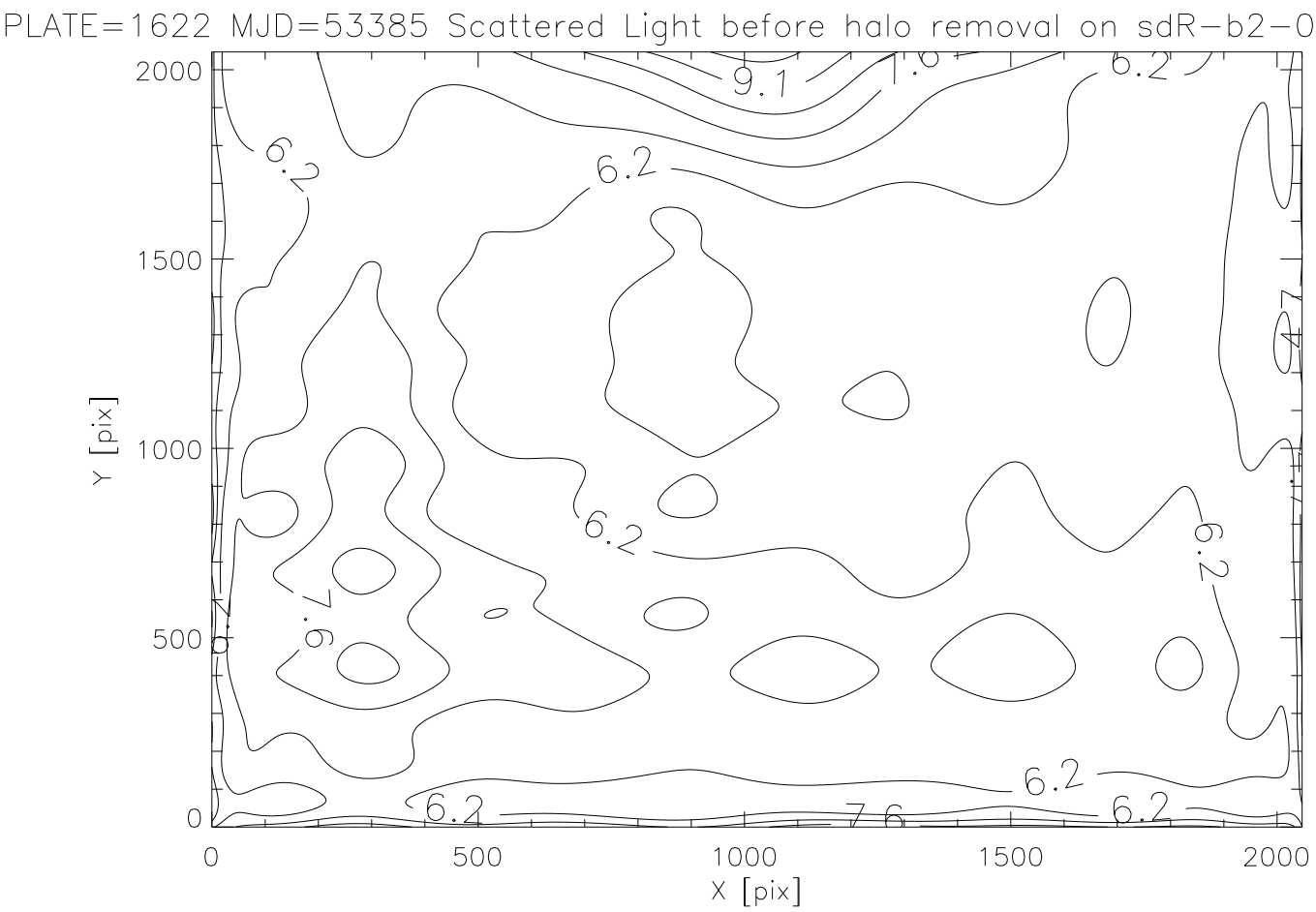

PLATE=1622 MJD=53385 sdR-b2-00030535.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

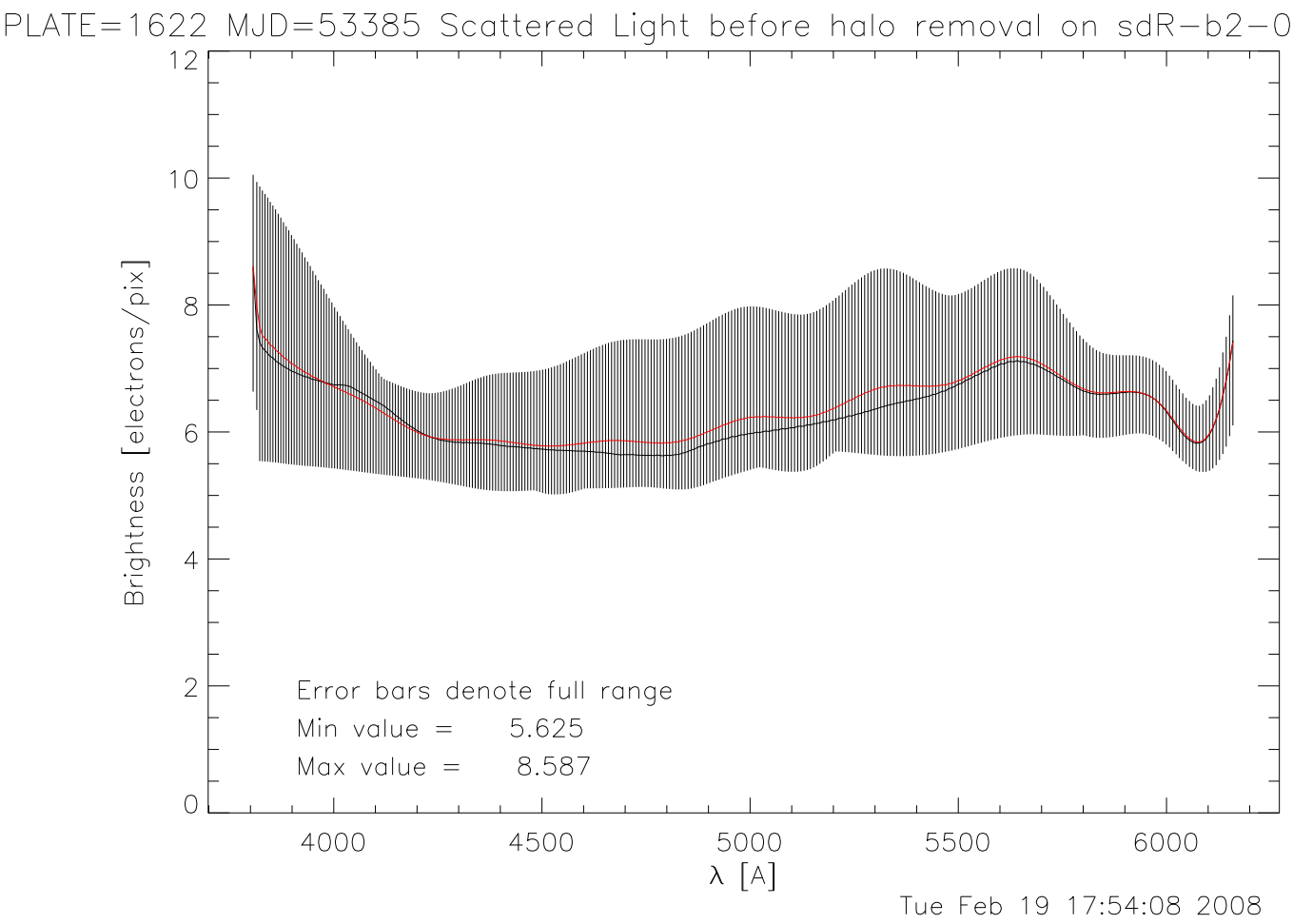

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b2-00030535.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

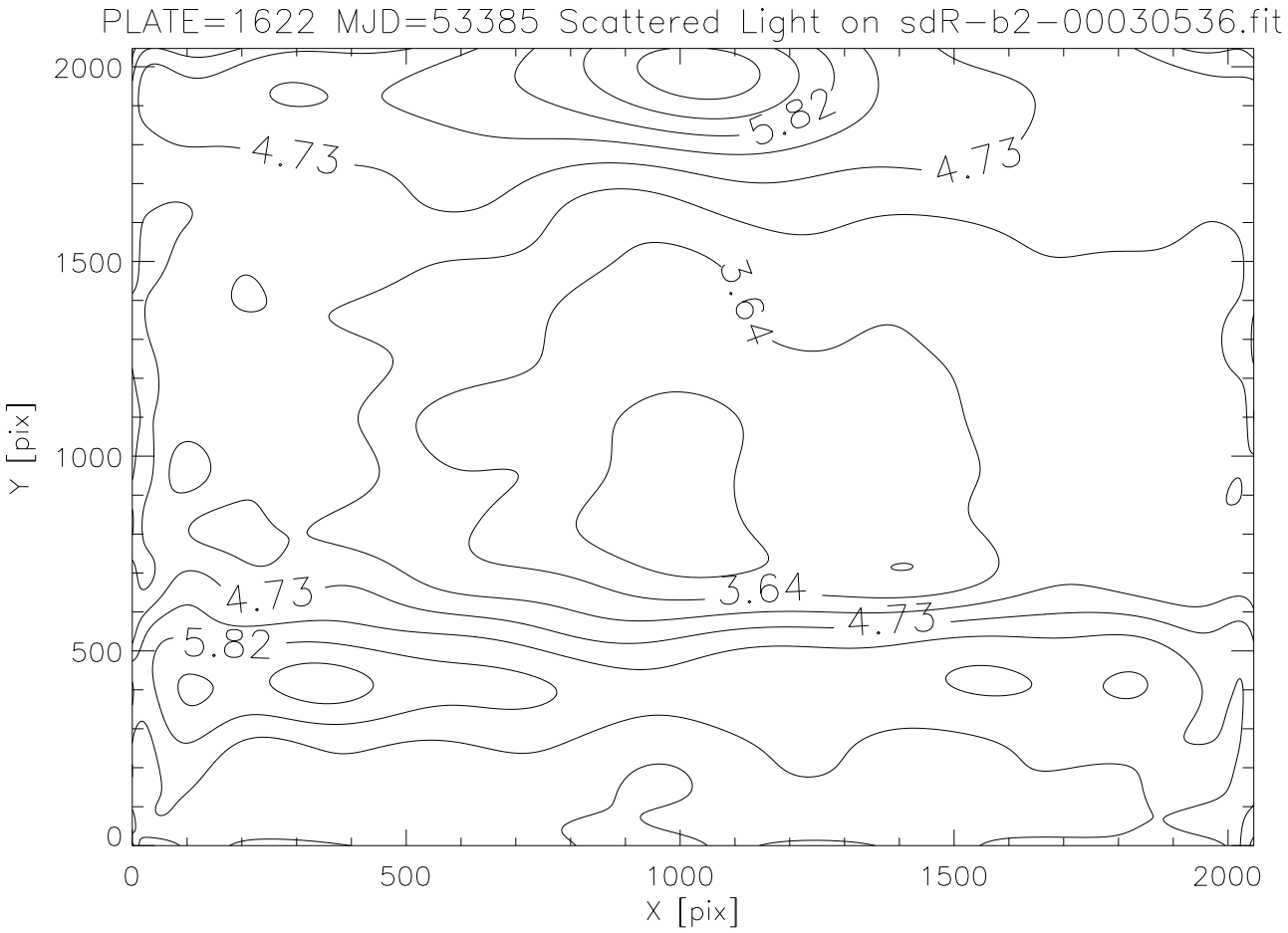

PLATE=1622 MJD=53385 sdR-b2-00030535.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 19.85 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

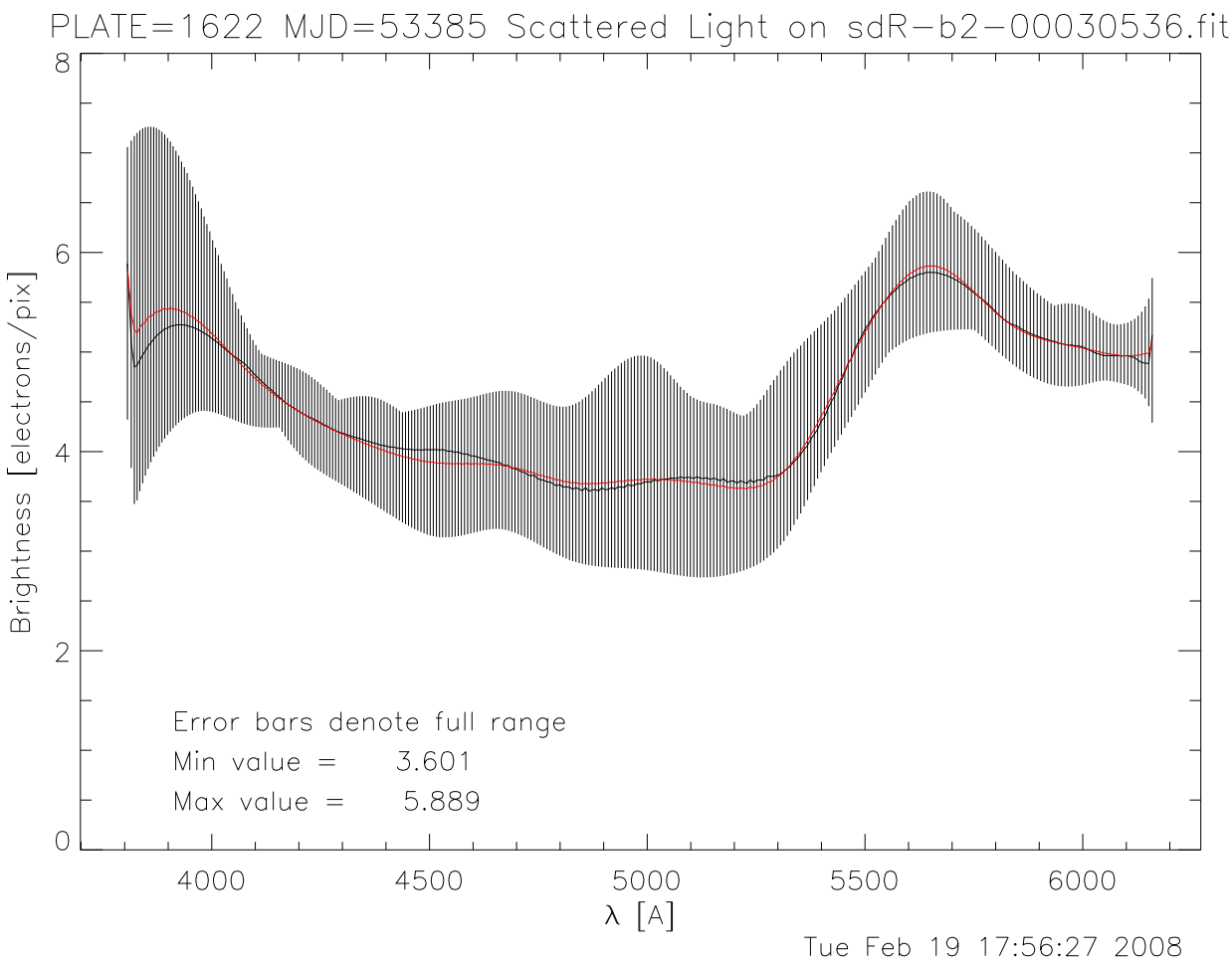

PLATE=1622 MJD=53385 sdR-b2-00030535.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.80 %
Fiber number
Focal Distance [mm]
Airmass

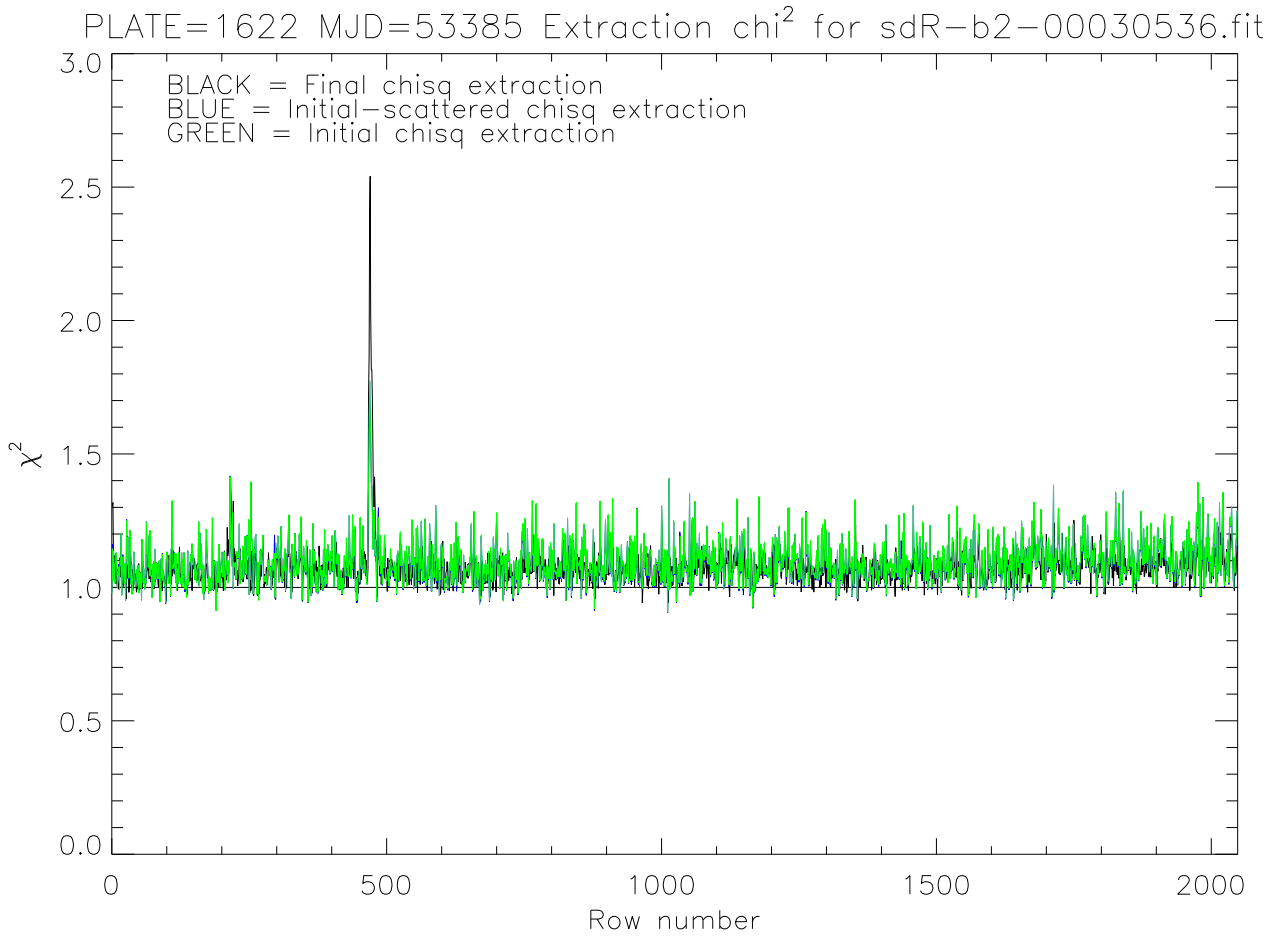

PLATE=1622 MJD=53385 Fiber-Flats for sdR-b2-00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.569
Max value = 1.320
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:53:20 2008

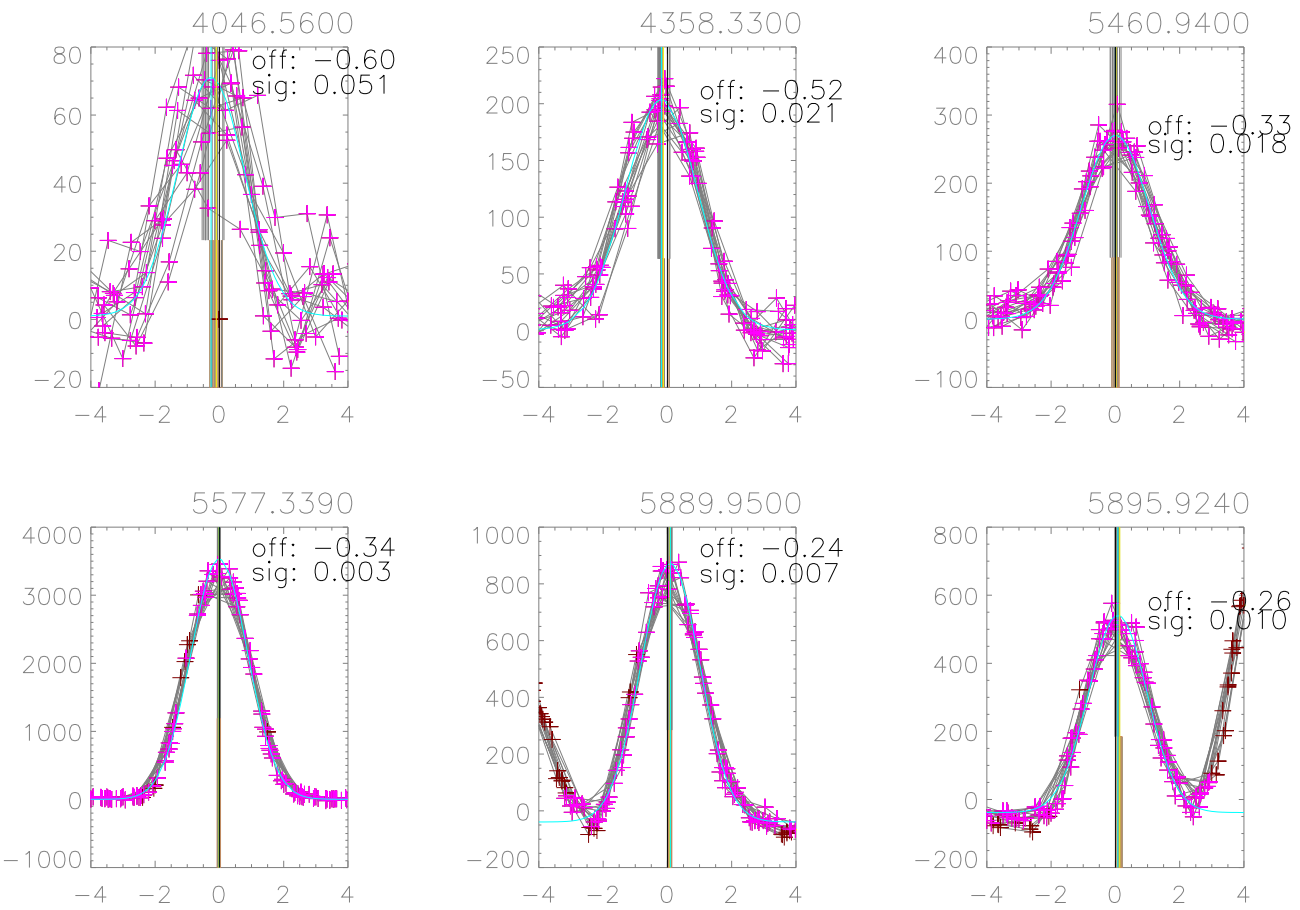

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b2-00030536.f
9.1
6.2
6.2
6.2
6.2
6.2
6.2
6.2
6.2
7.6
6.2
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

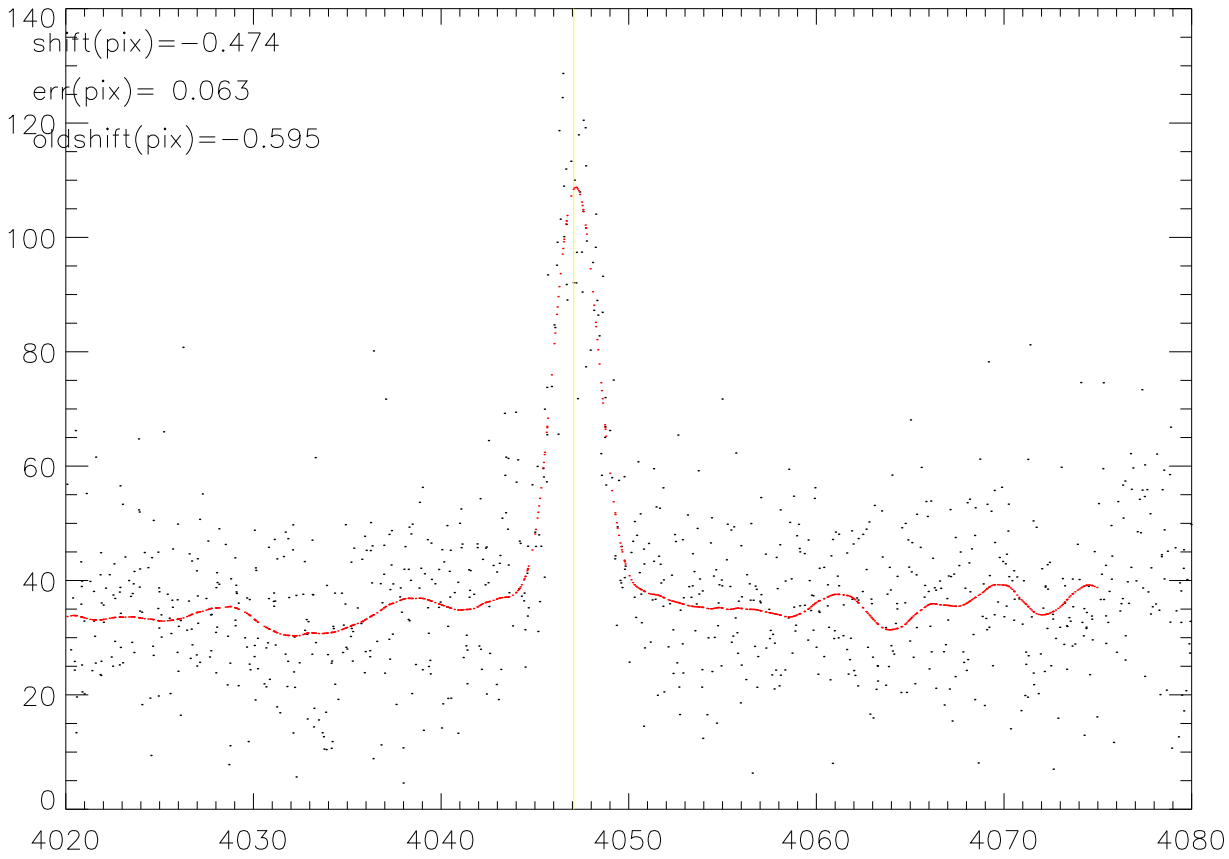

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b2-00030536.f
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 5.625
Max value = 8.587
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:54:08 2008

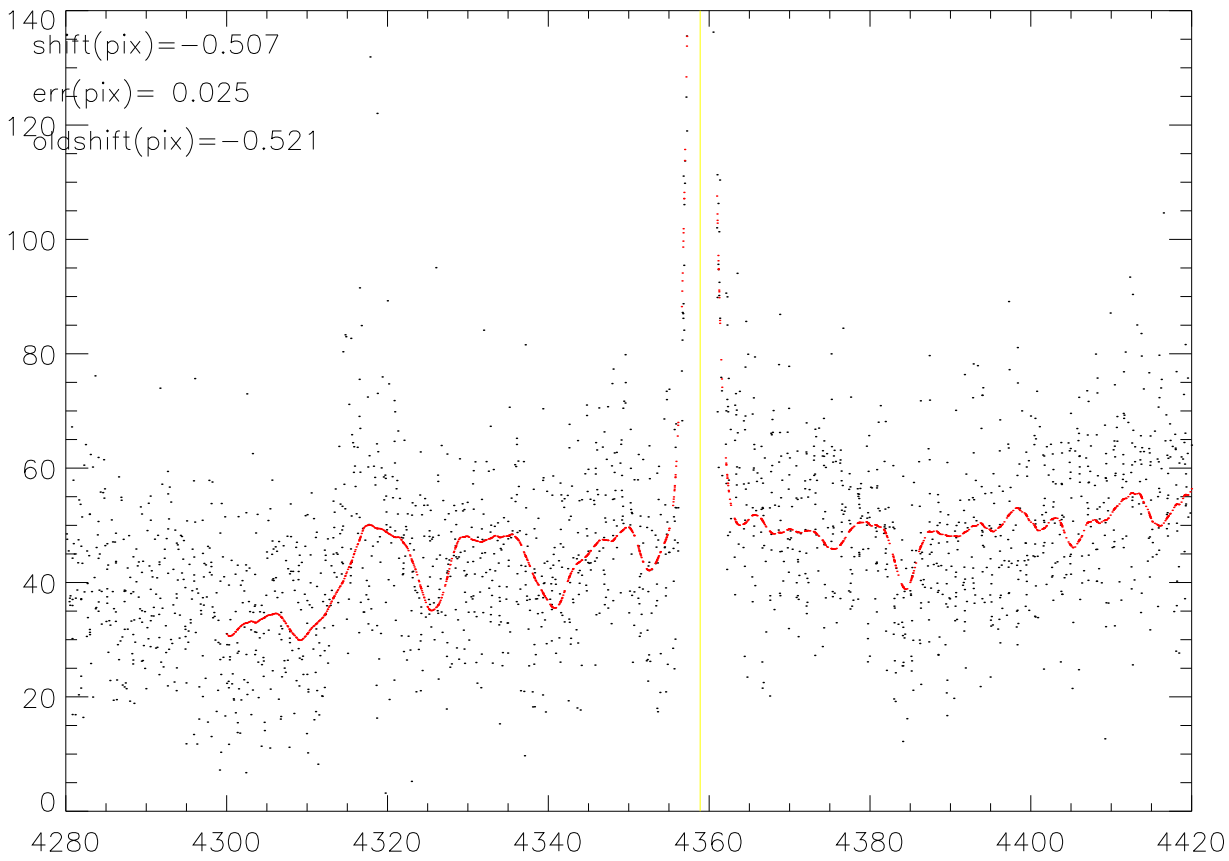

PLATE=1622 MJD=53385 Scattered Light on sdR−b2−00030536.fit
5.82
4.73
4.73
3.64
0
4.73
3.64
4.73
5.82
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

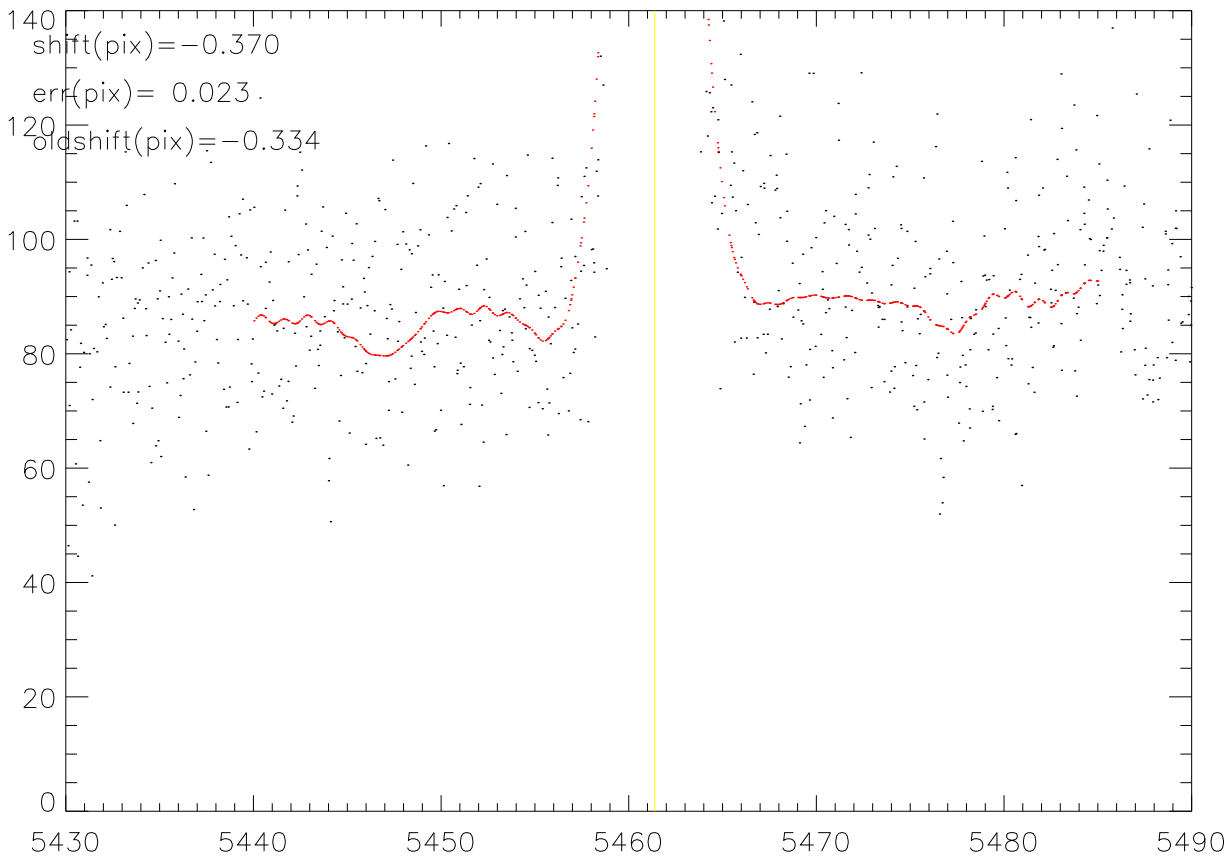

PLATE=1622 MJD=53385 Scattered Light on sdR-b2-00030536.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.601
Max value = 5.889
Tue Feb 19 17:56:27 2008

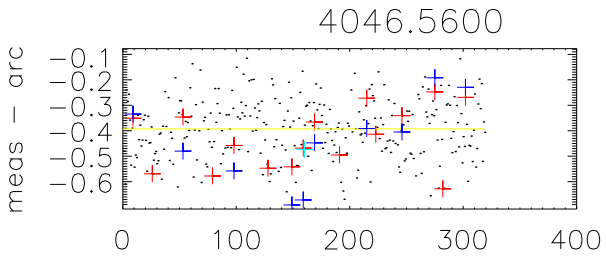

PLATE=1622 MJD=53385 Extraction chi^2 for sdR-b2-00030536.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

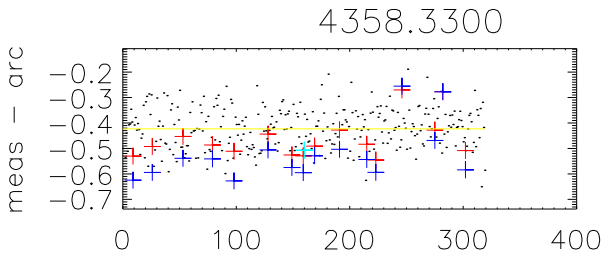

4046.5600
off: −0.60
sig: 0.051
4358.3300
off: −0.52
sig: 0.021
5460.9400
off: −0.33
sig: 0.018
5577.3390
off: −0.34
sig: 0.003
5889.9500
off: −0.24
sig: 0.007
5895.9240
off: −0.26
sig: 0.010

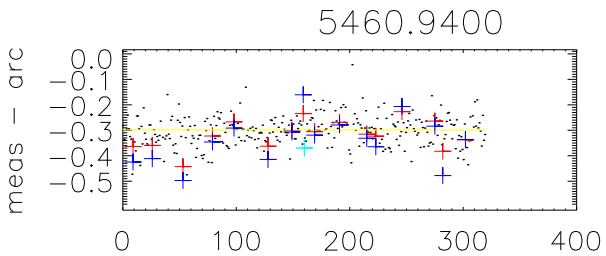

shift(pix)=−0.474
err(pix)= 0.063
oldshift(pix)=−0.595
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

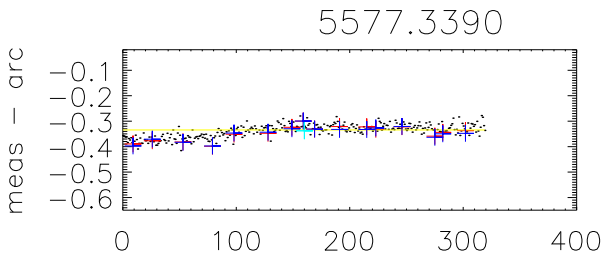

shift(pix)=−0.507
err(pix)= 0.025
oldshift(pix)=−0.521
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

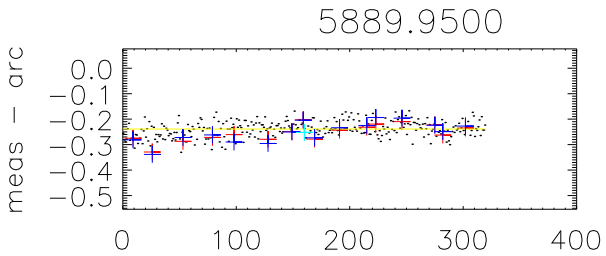

shift(pix)=−0.370
err(pix)= 0.023
oldshift(pix)=−0.334
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

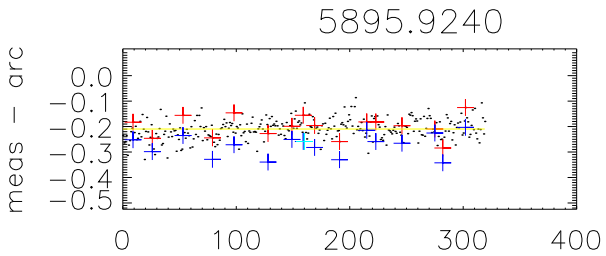

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

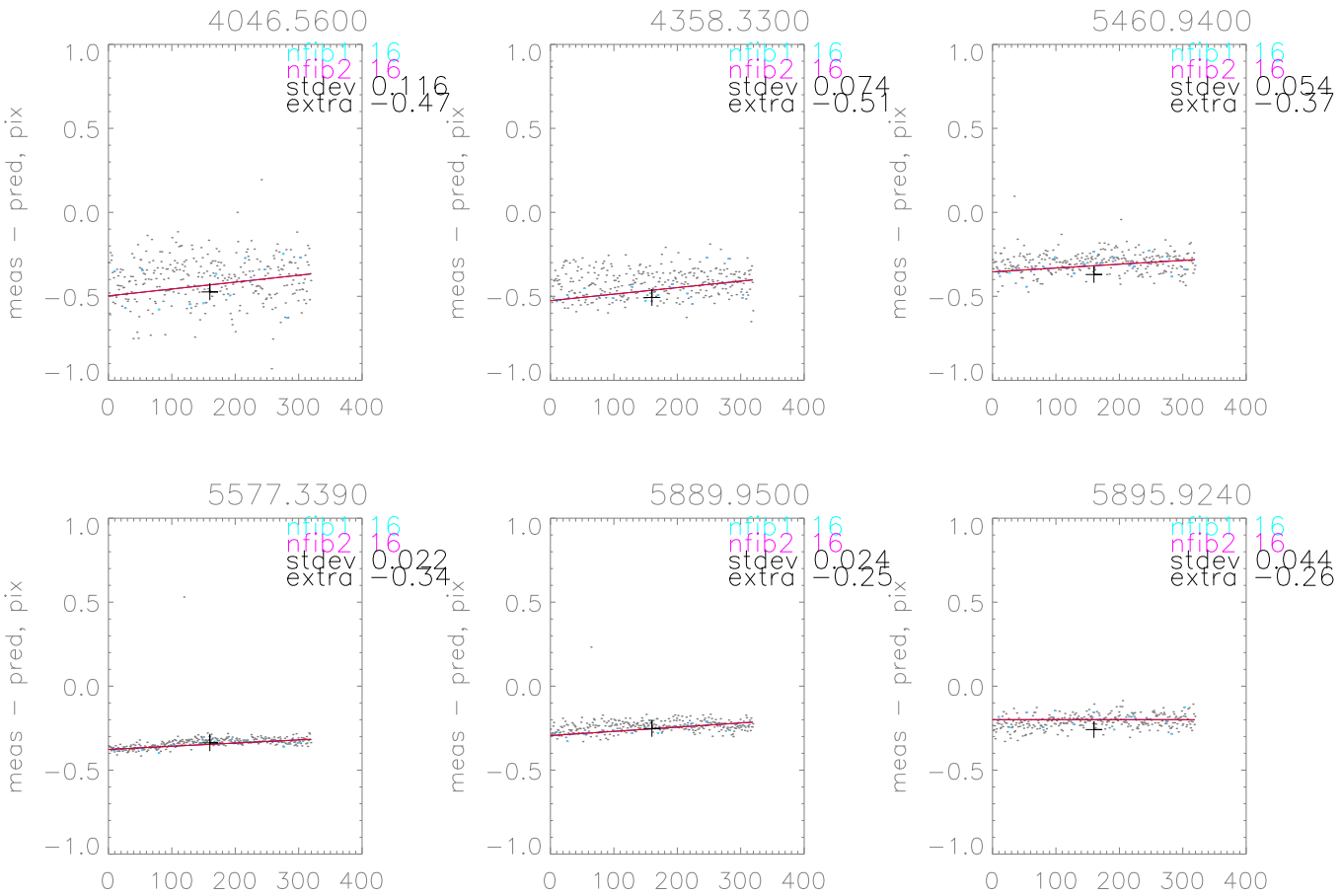

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

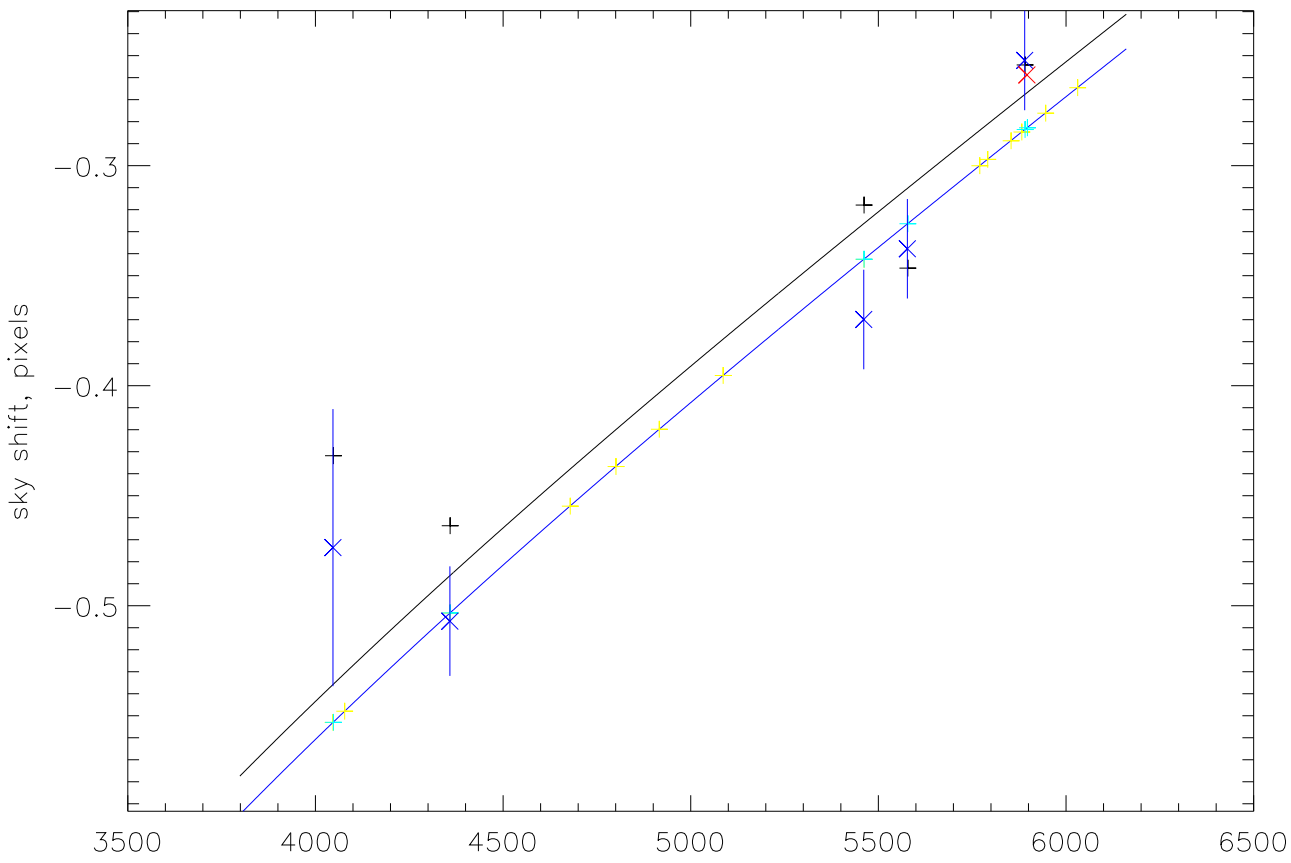

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

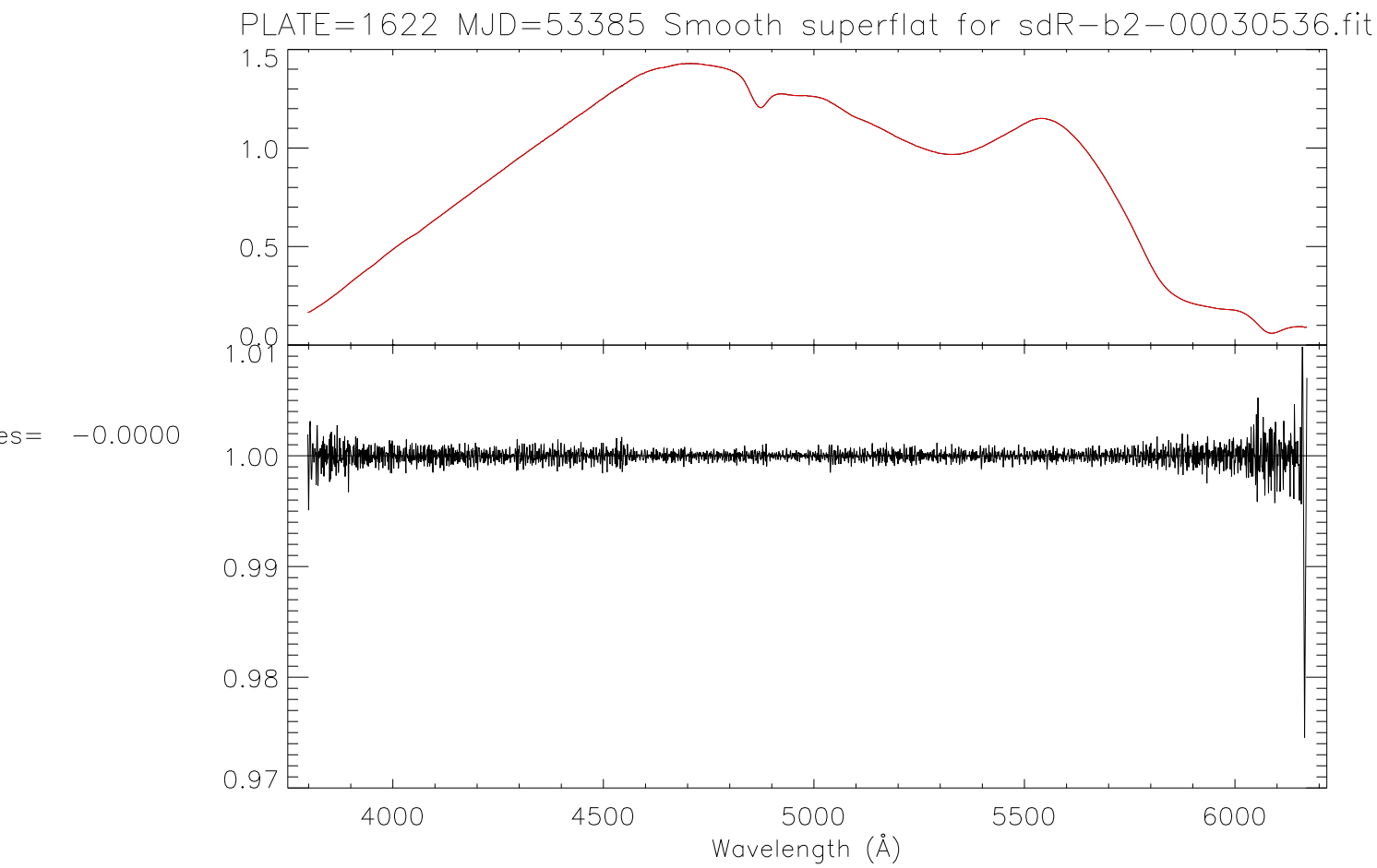

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

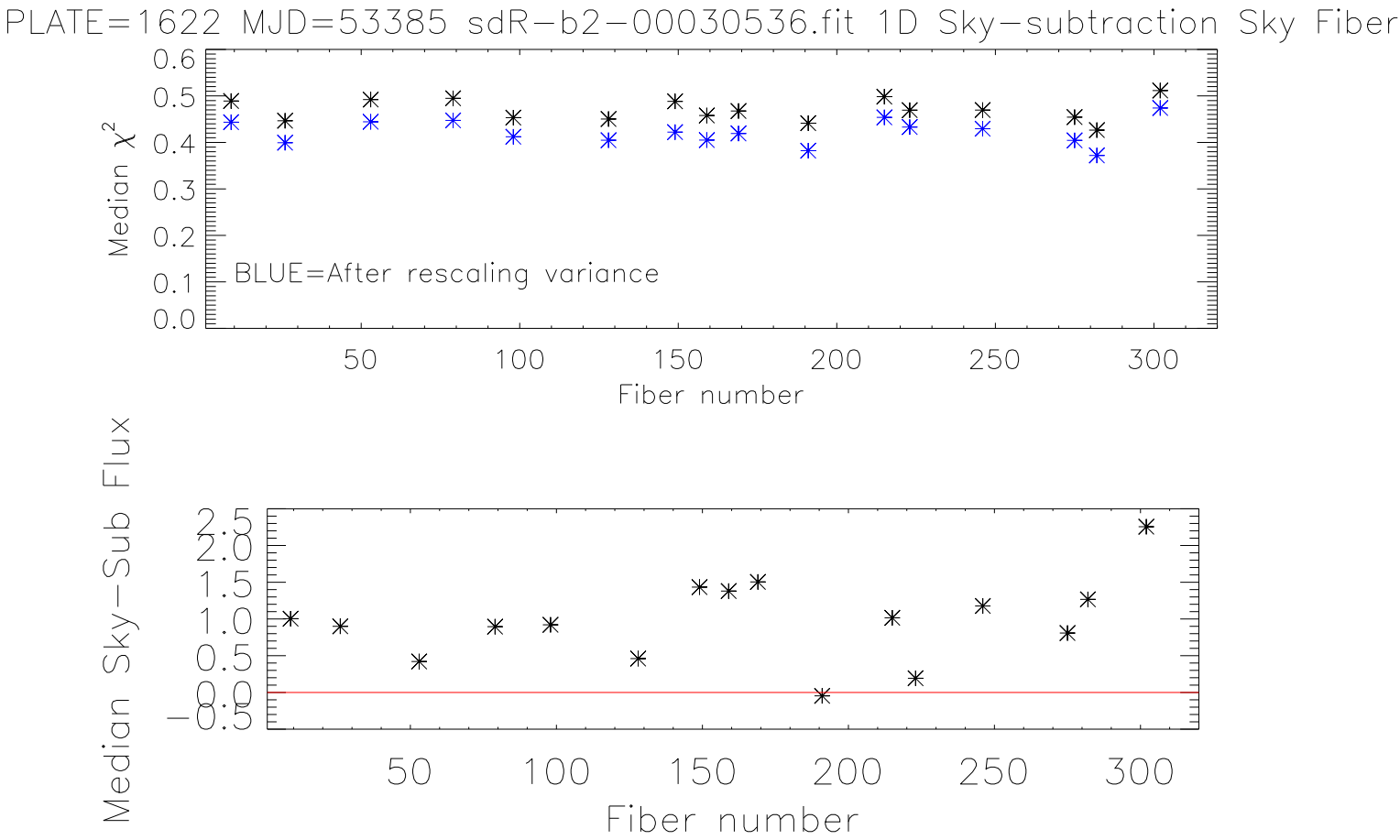

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

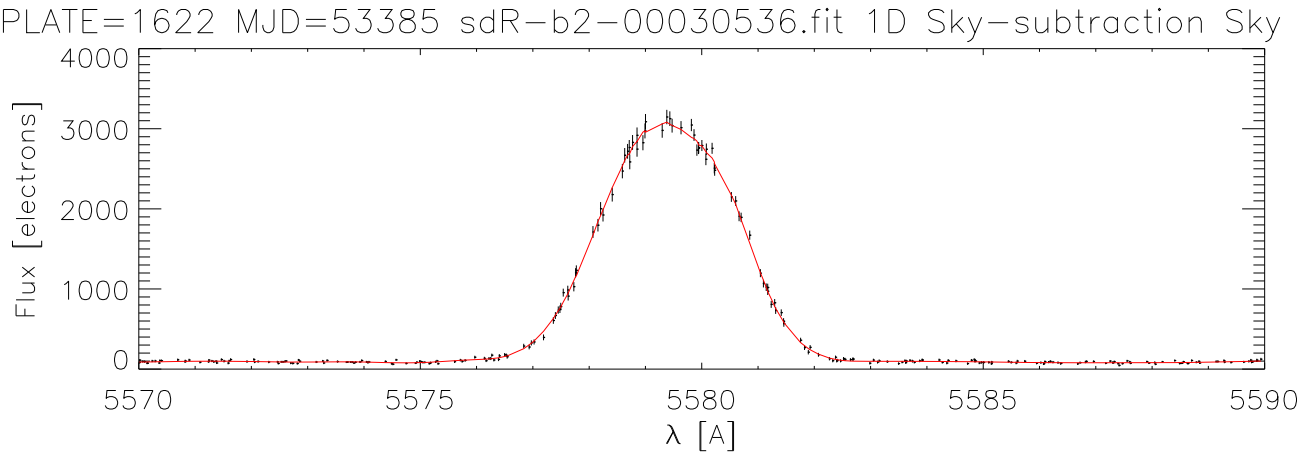

4046.5600
nfib1 16
nfib2 16
stdev 0.116
extra −0.47
4358.3300
nfib1 16
nfib2 16
stdev 0.074
extra −0.51
5460.9400
nfib1 16
nfib2 16
stdev 0.054
extra −0.37
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra −0.34
5889.9500
nfib1 16
nfib2 16
stdev 0.024
extra −0.25
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra −0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

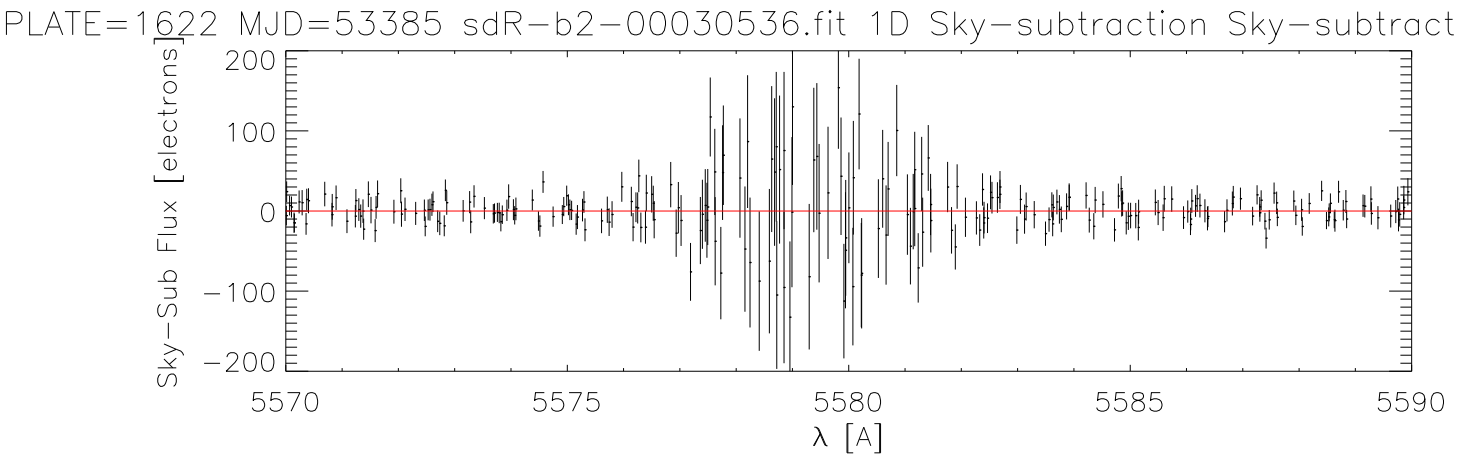

sky shift, pixels
−0.3
−0.4
−0.5
3500
4000
4500
5000
5500
6000
6500

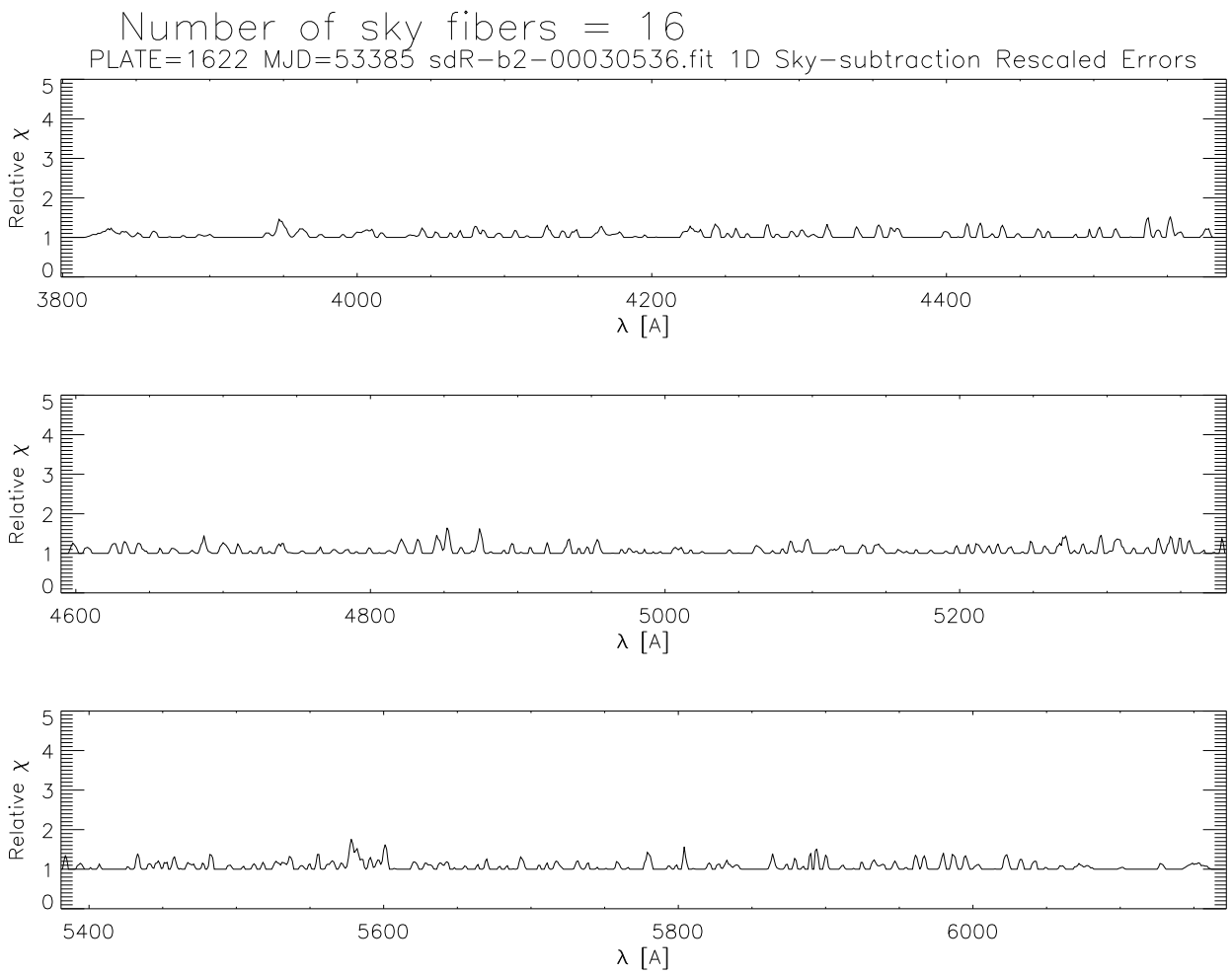

PLATE=1622 MJD=53385 Smooth superflat for sdR-b2-00030536.fit
1.5
1.0
0.5
0.0
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

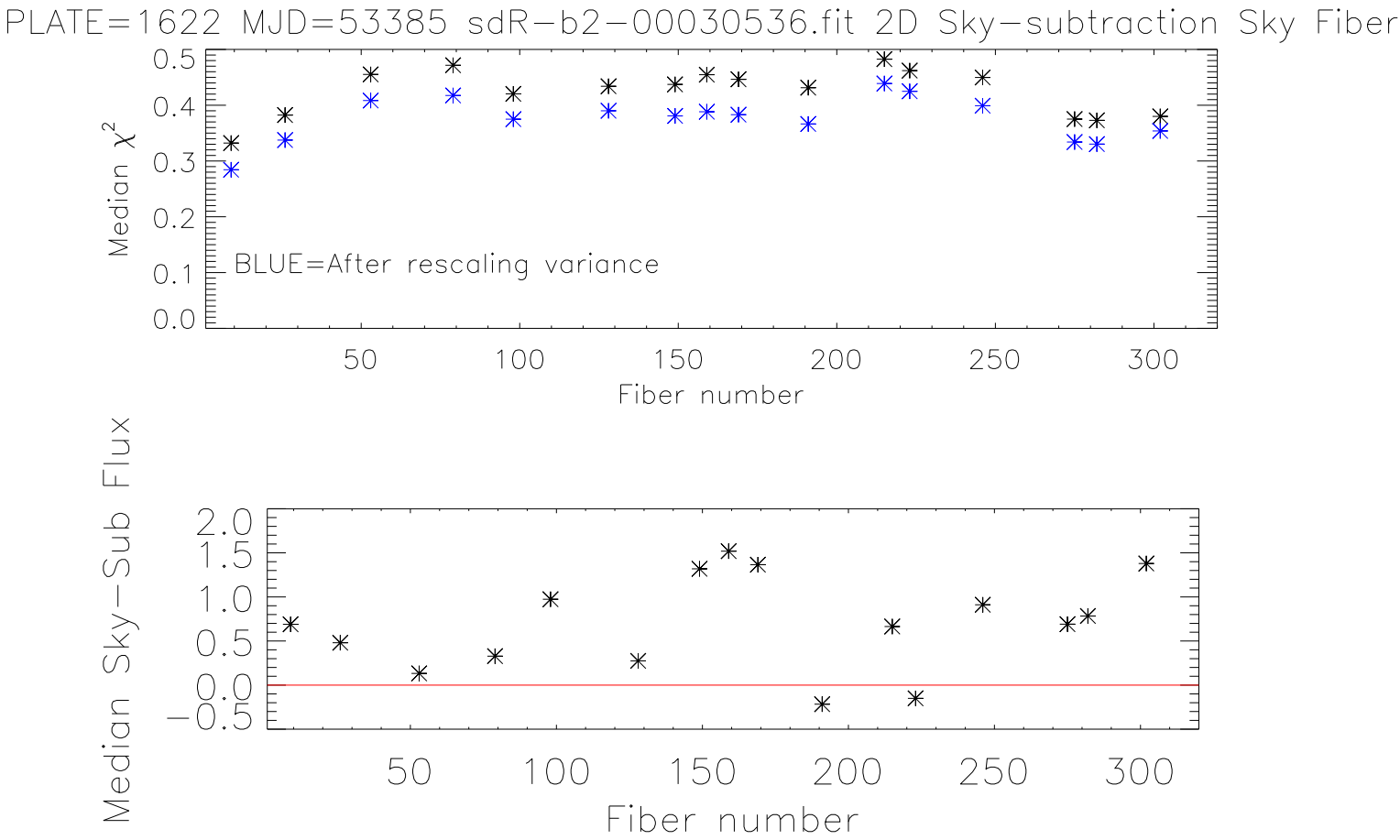
es= −0.0000

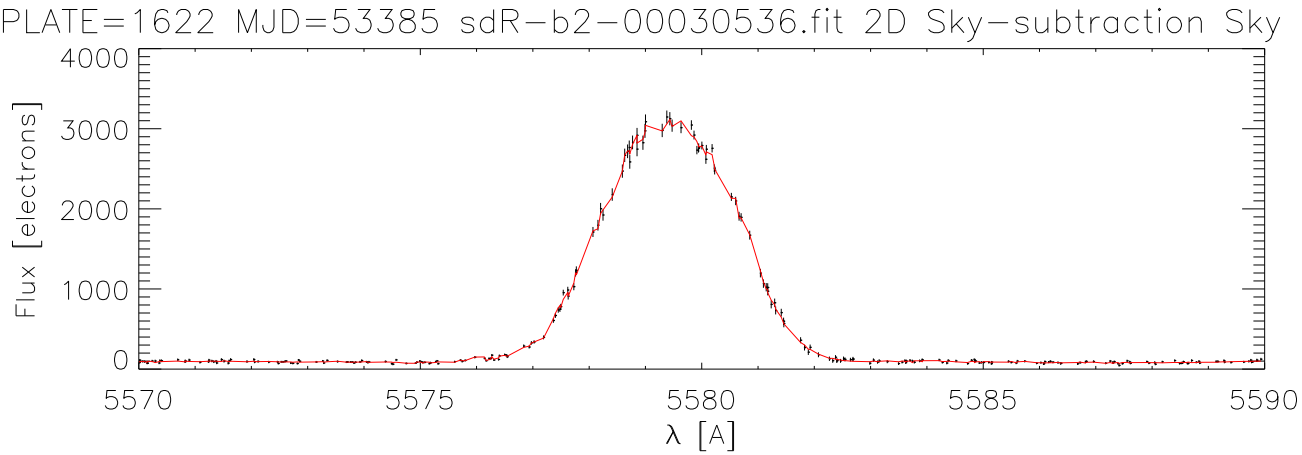

PLATE=1622 MJD=53385 sdR-b2-00030536.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

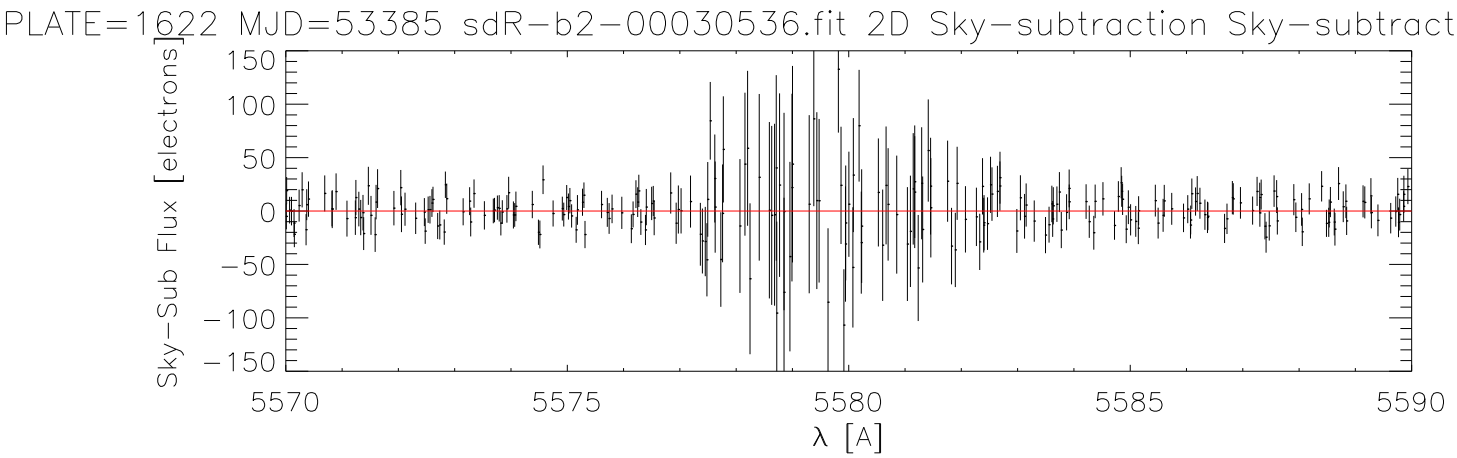

PLATE=1622 MJD=53385 sdR-b2-00030536.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

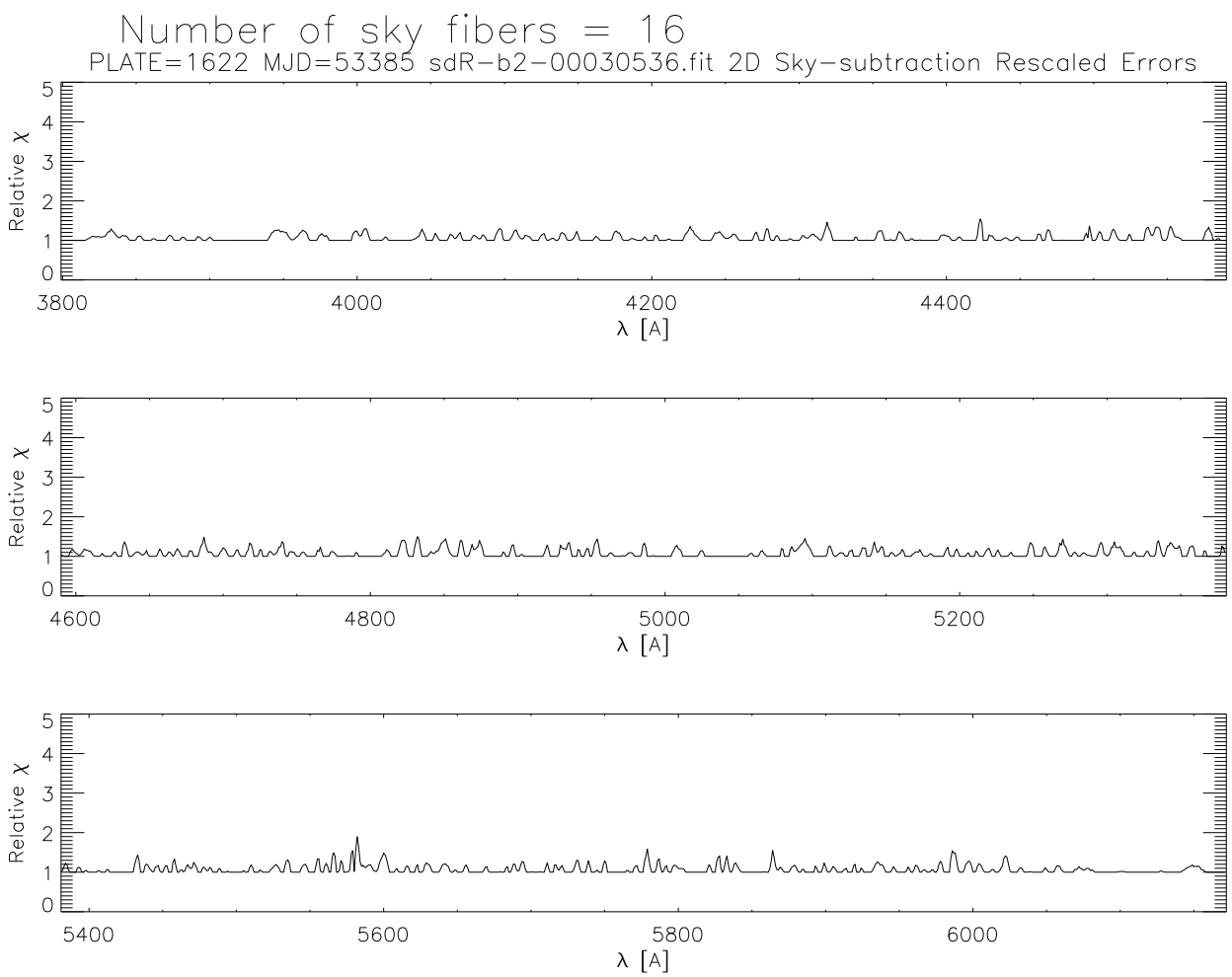

PLATE=1622 MJD=53385 sdR-b2-00030536.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

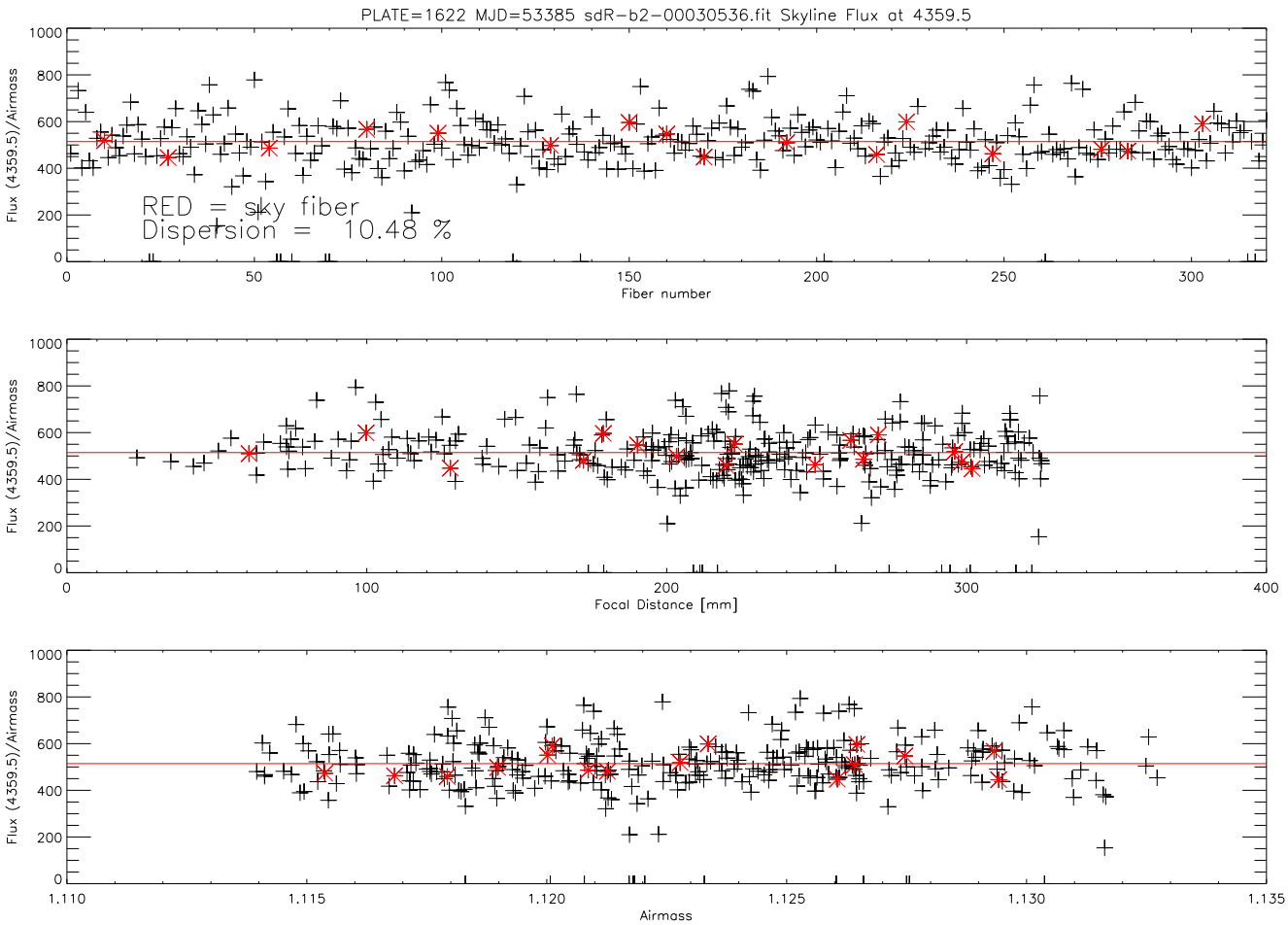

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b2-00030536.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

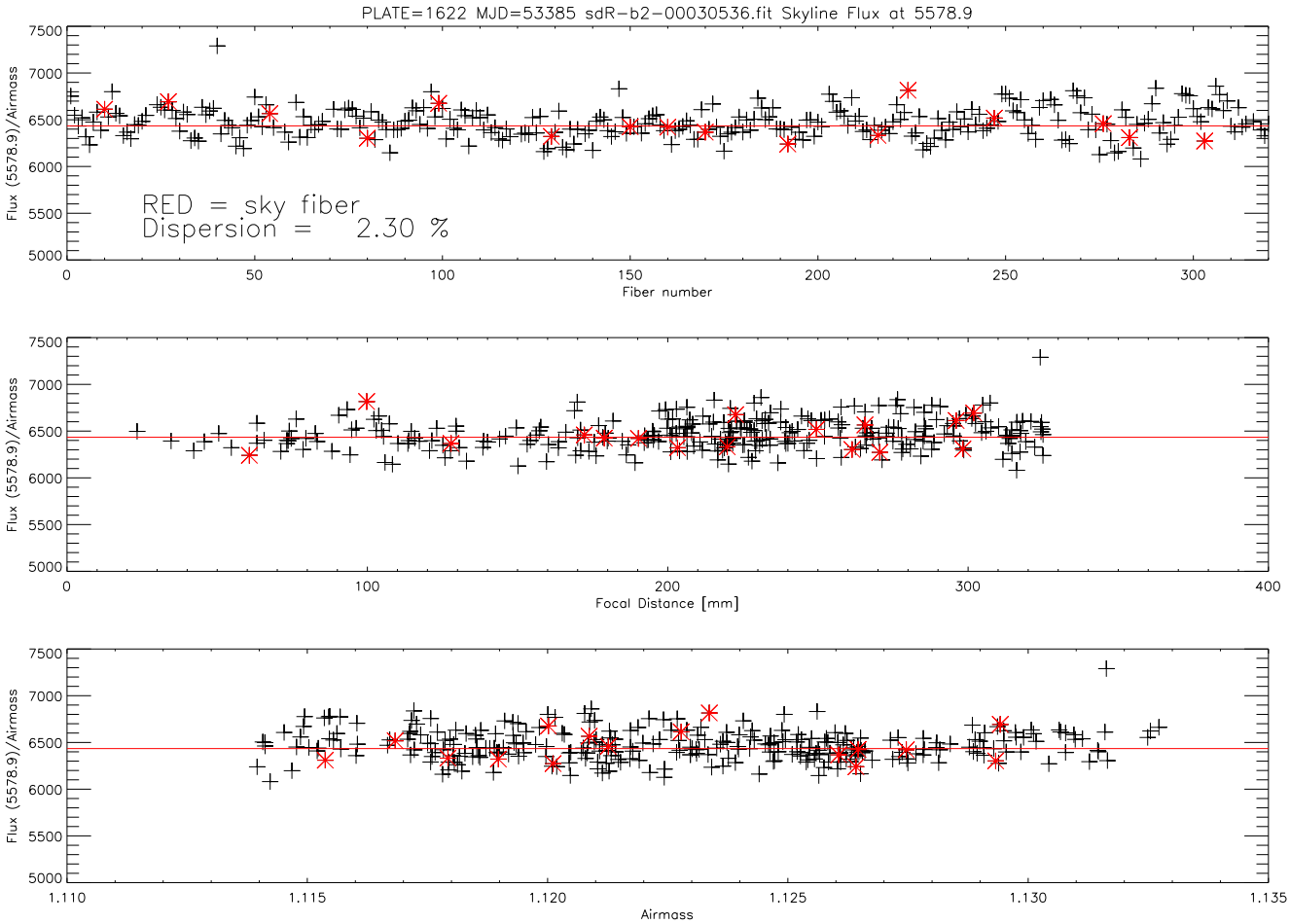

PLATE=1622 MJD=53385 sdR-b2-00030536.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

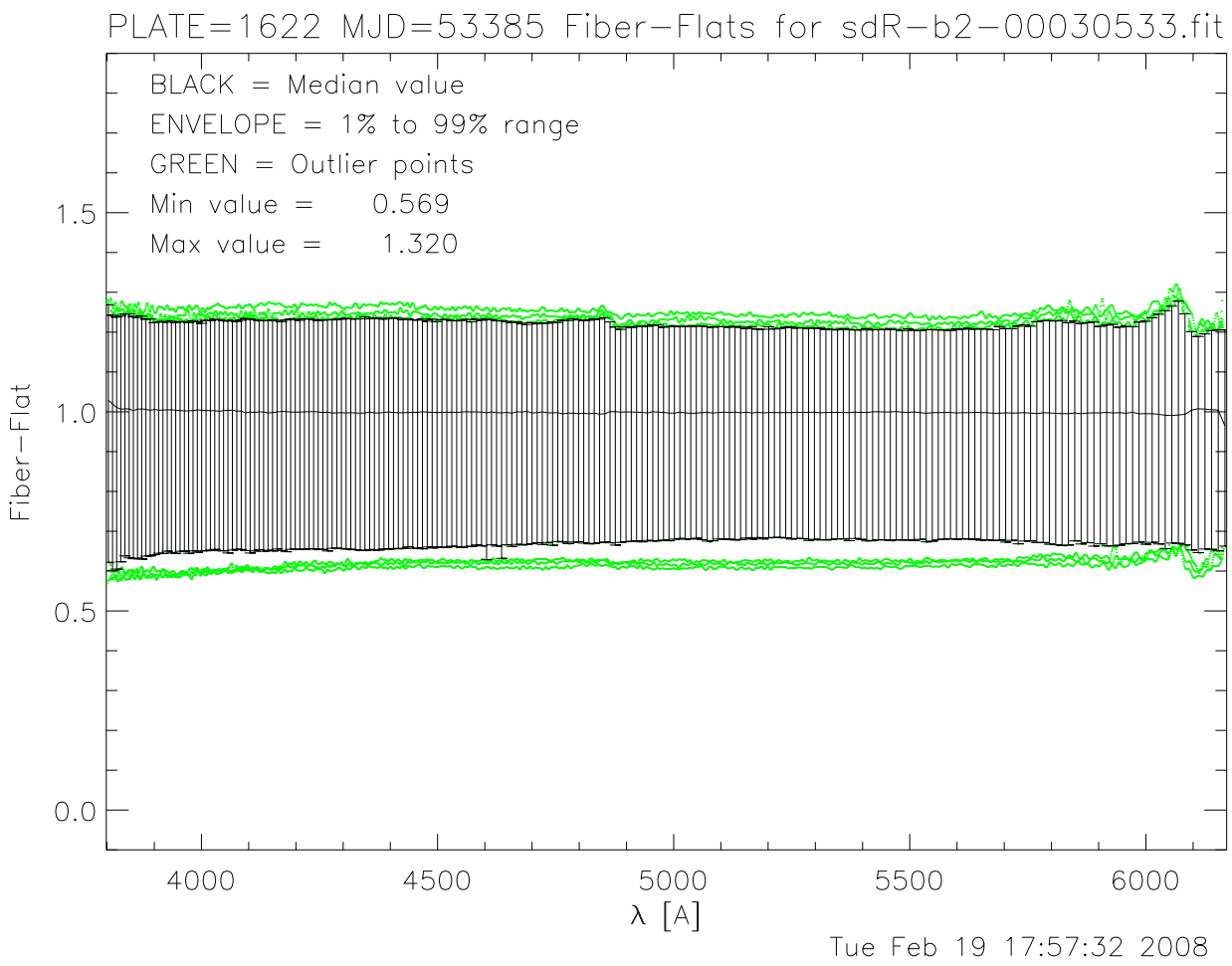

PLATE=1622 MJD=53385 sdR-b2-00030536.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

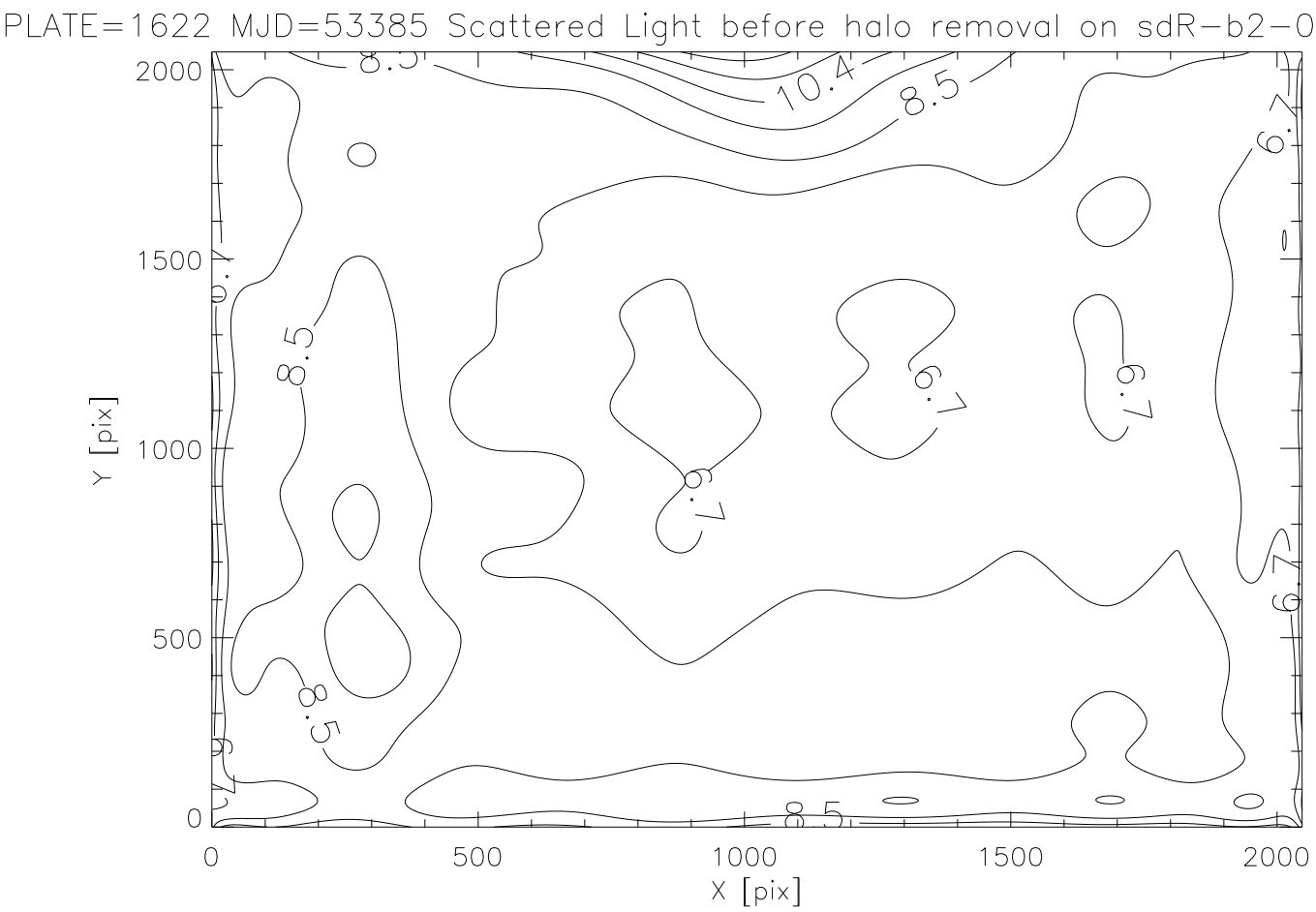

PLATE=1622 MJD=53385 sdR-b2-00030536.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

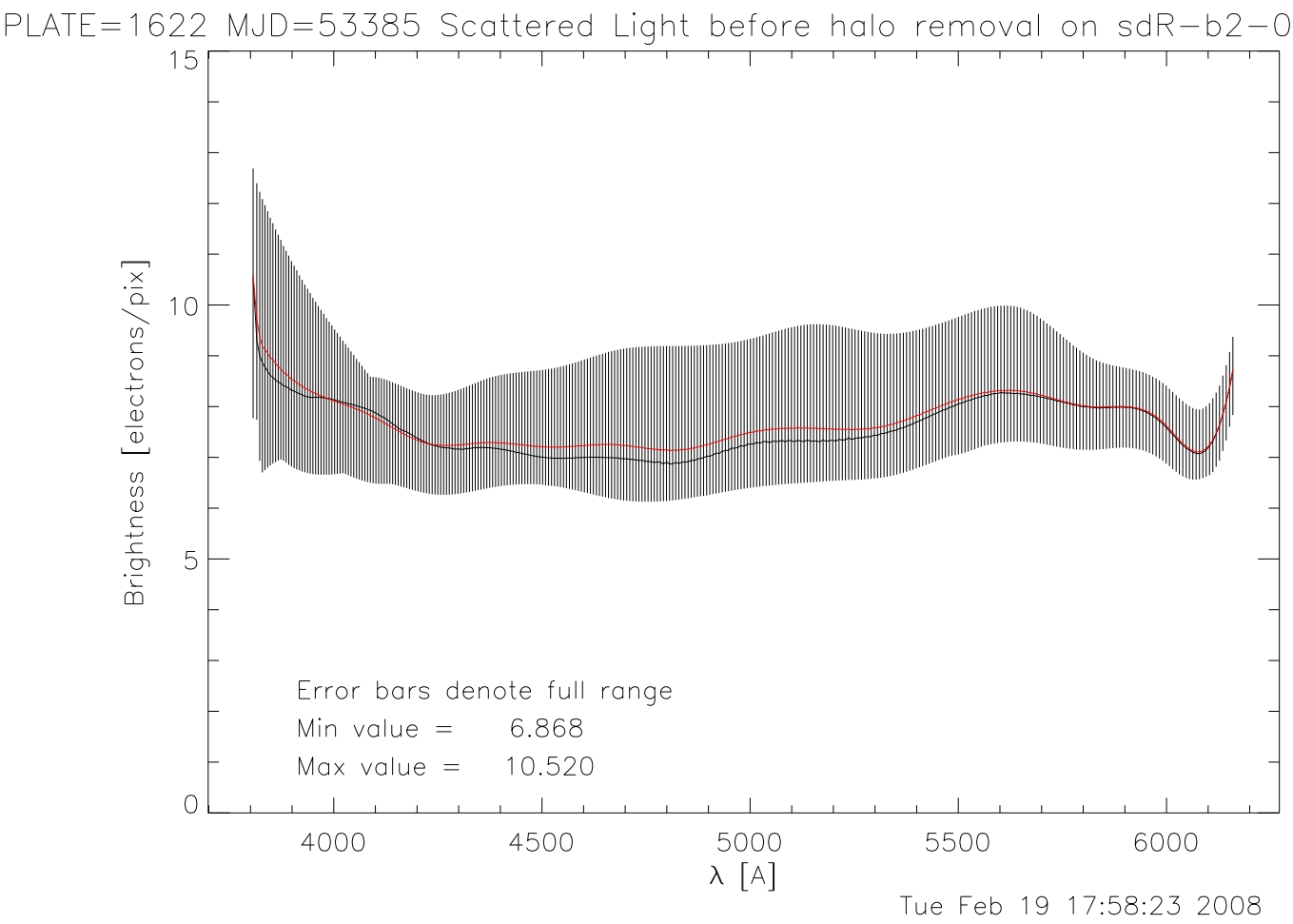

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b2-00030536.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

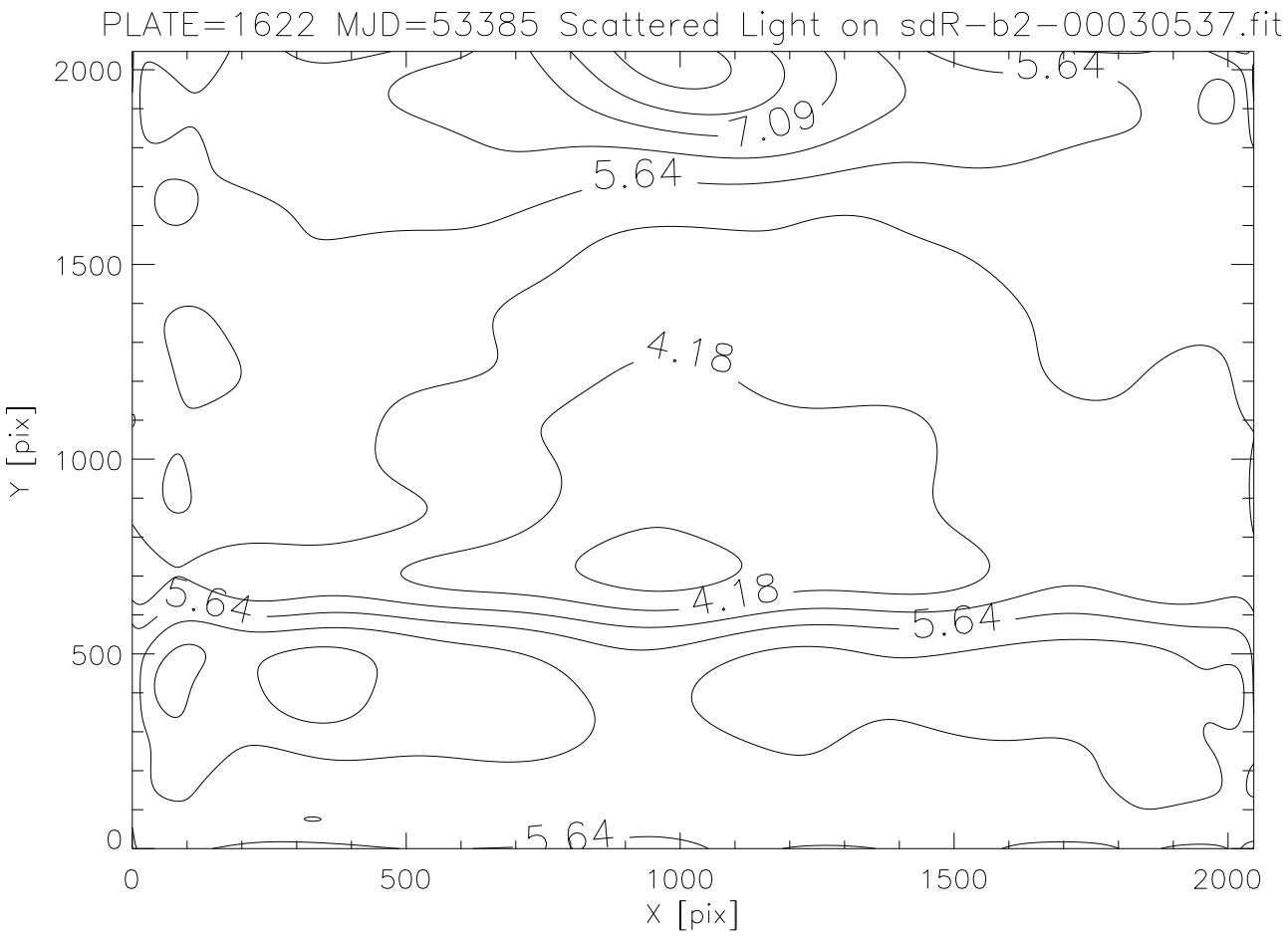

PLATE=1622 MJD=53385 sdR-b2-00030536.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 10.48 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

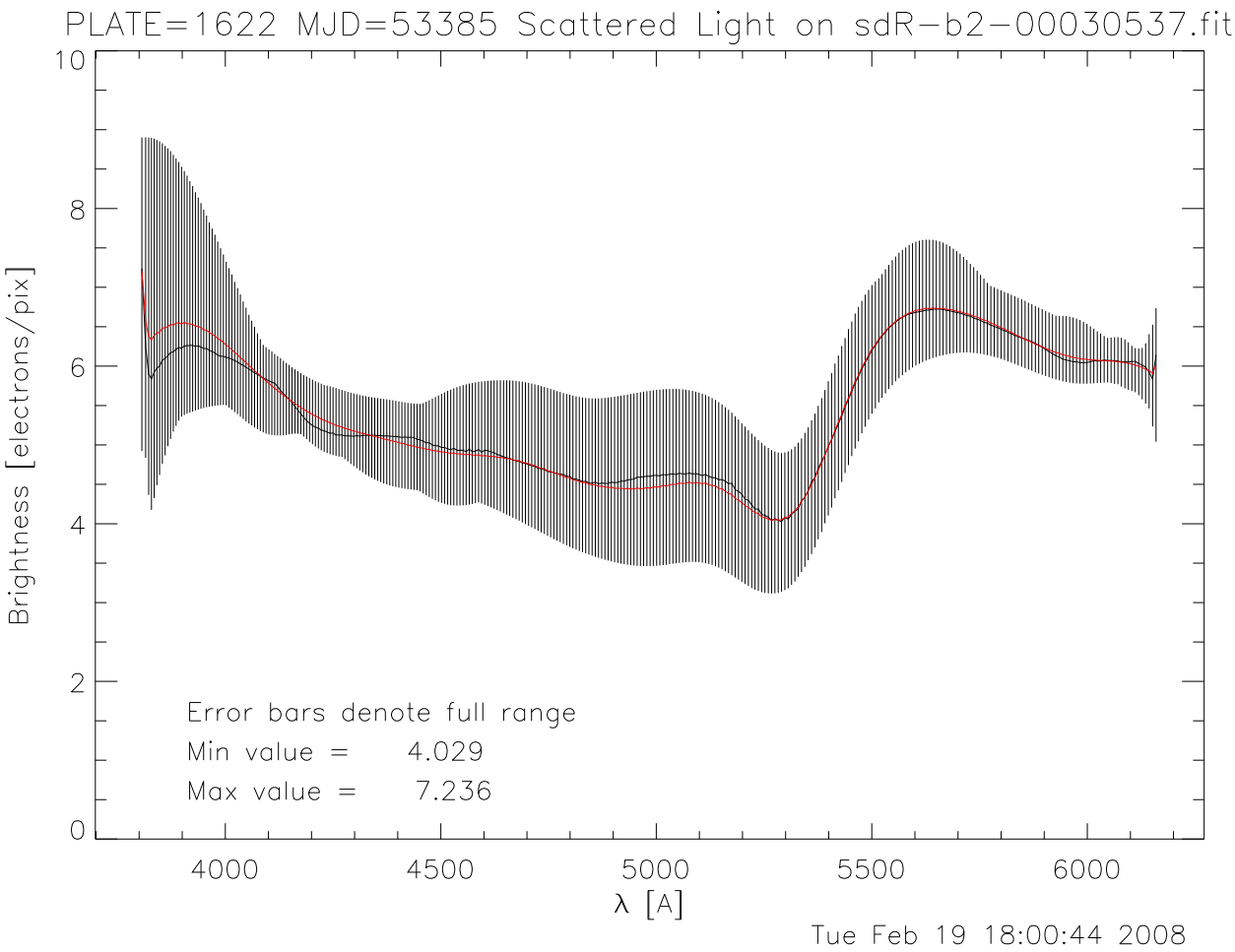

PLATE=1622 MJD=53385 sdR-b2-00030536.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.30 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

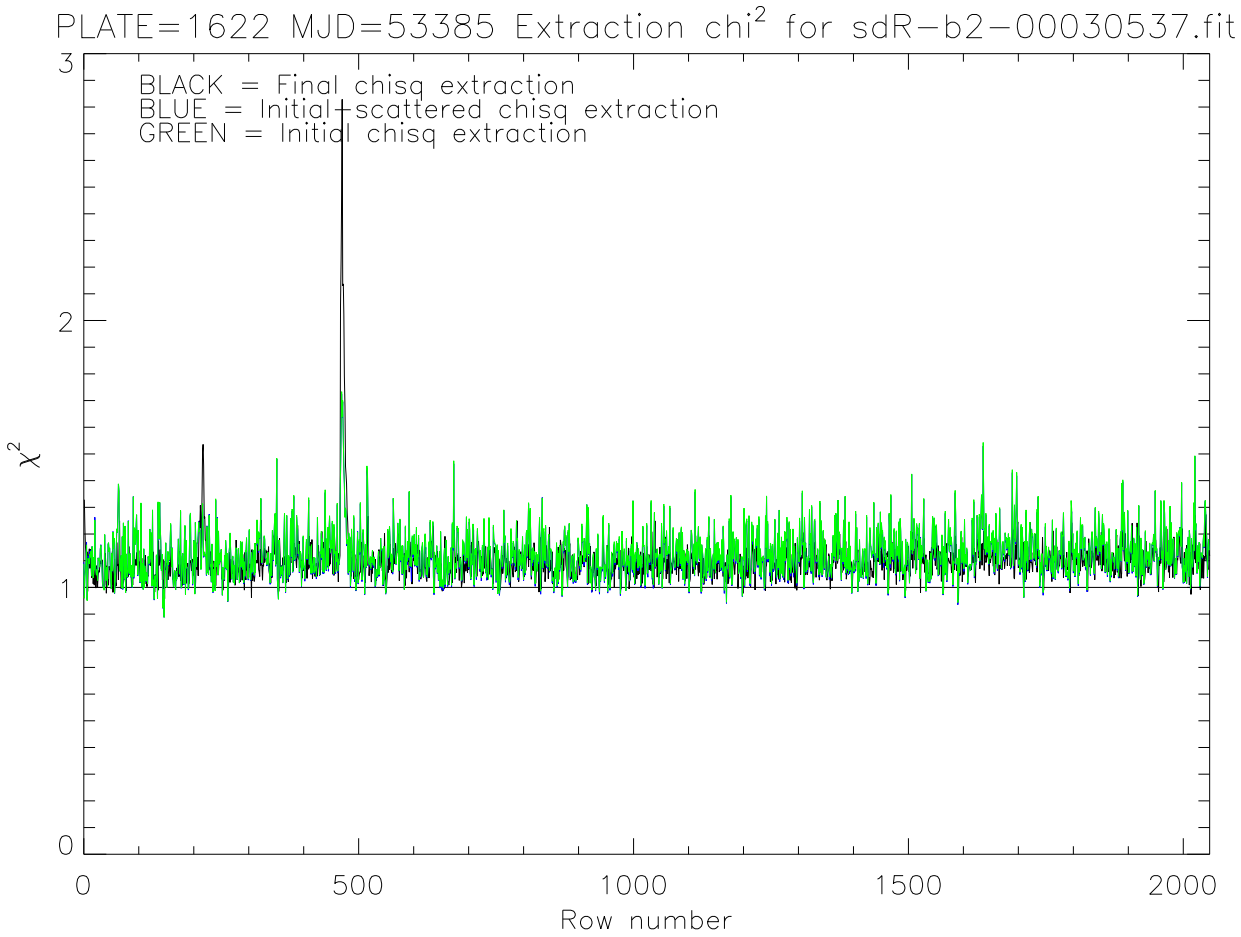

PLATE=1622 MJD=53385 Fiber-Flats for sdR-b2-00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.569
Max value = 1.320
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:57:32 2008

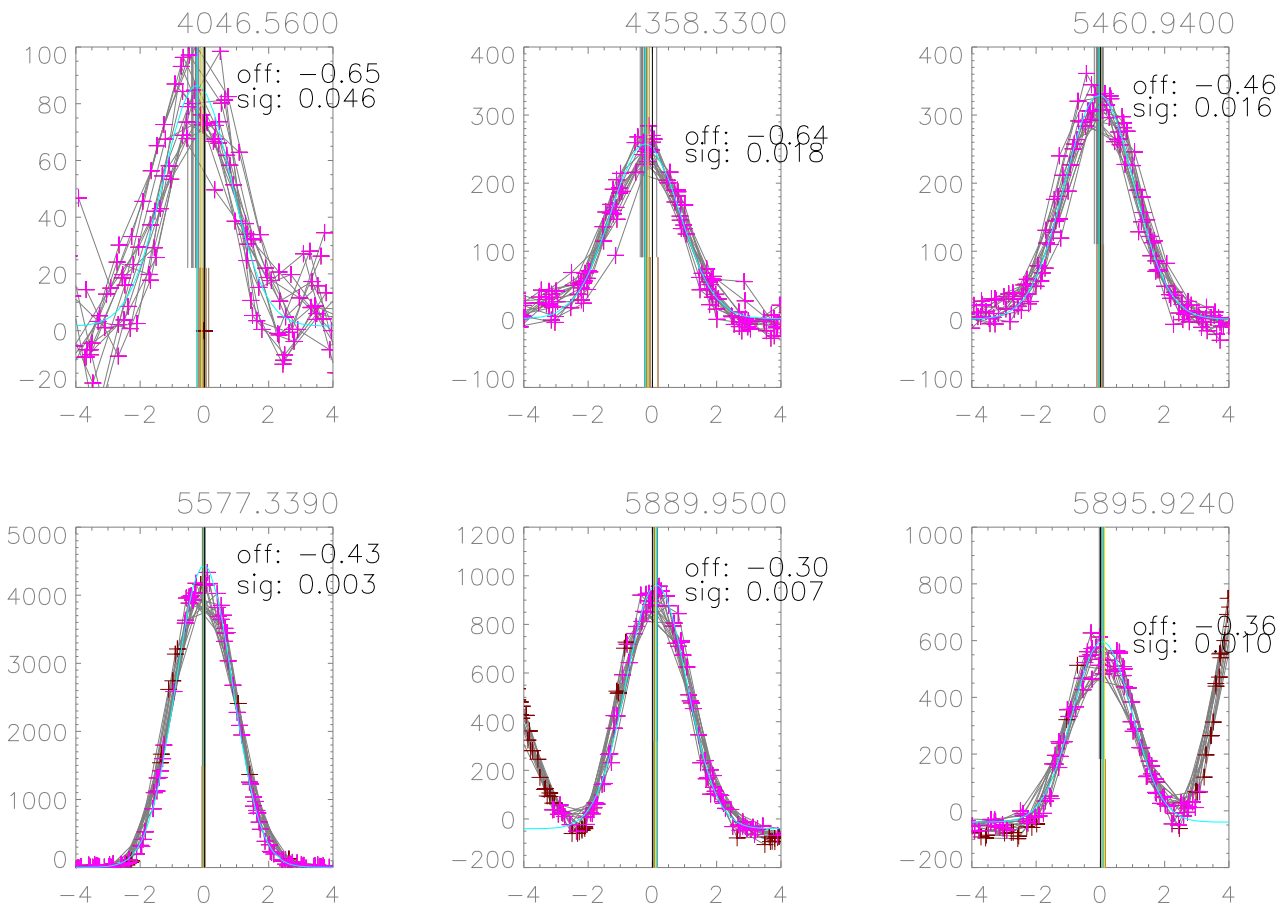

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b2-00030537.f
8.5
10.4
8.5
6.7
6.7
8.5
6.7
6.7
6.7
8.5
8.5
8.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

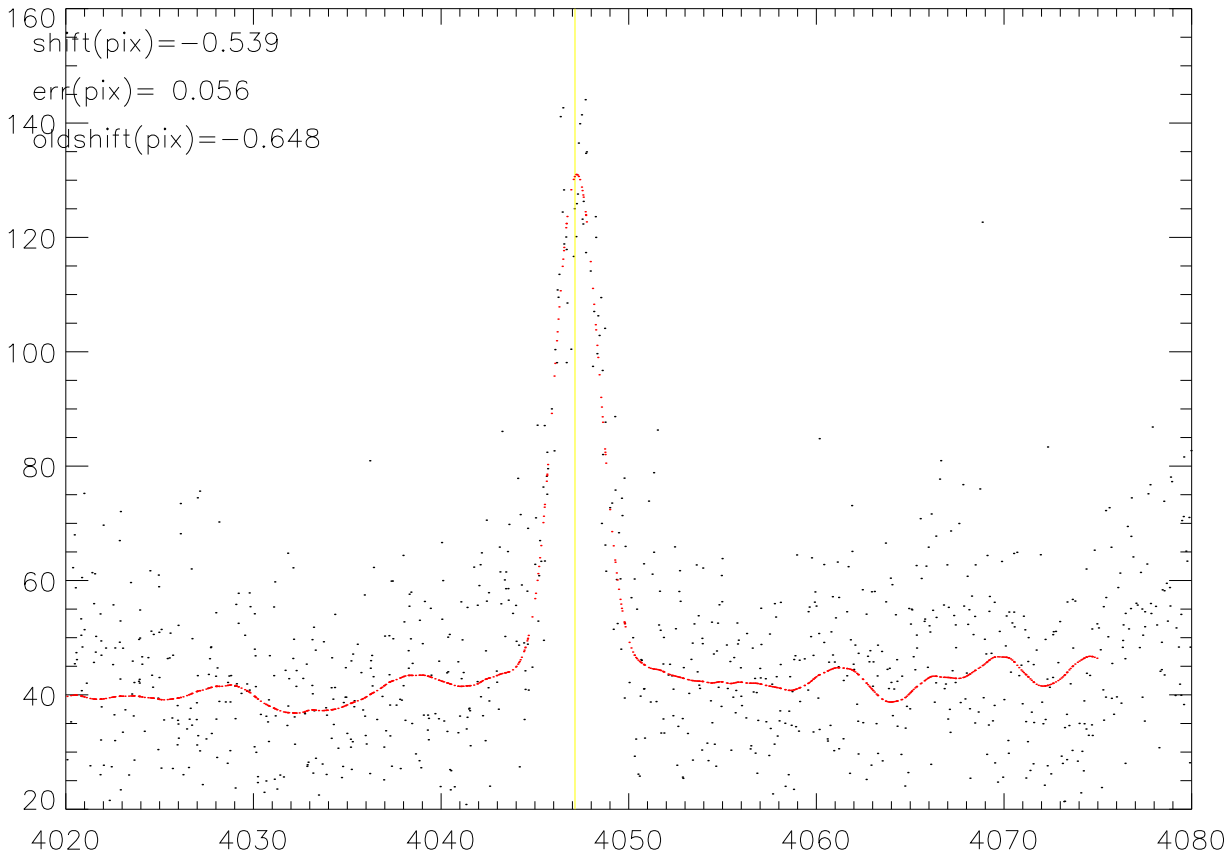

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-b2-00030537.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 6.868
Max value = 10.520
4000
4500
5000
5500
6000
λ [A]
Tue Feb 19 17:58:23 2008

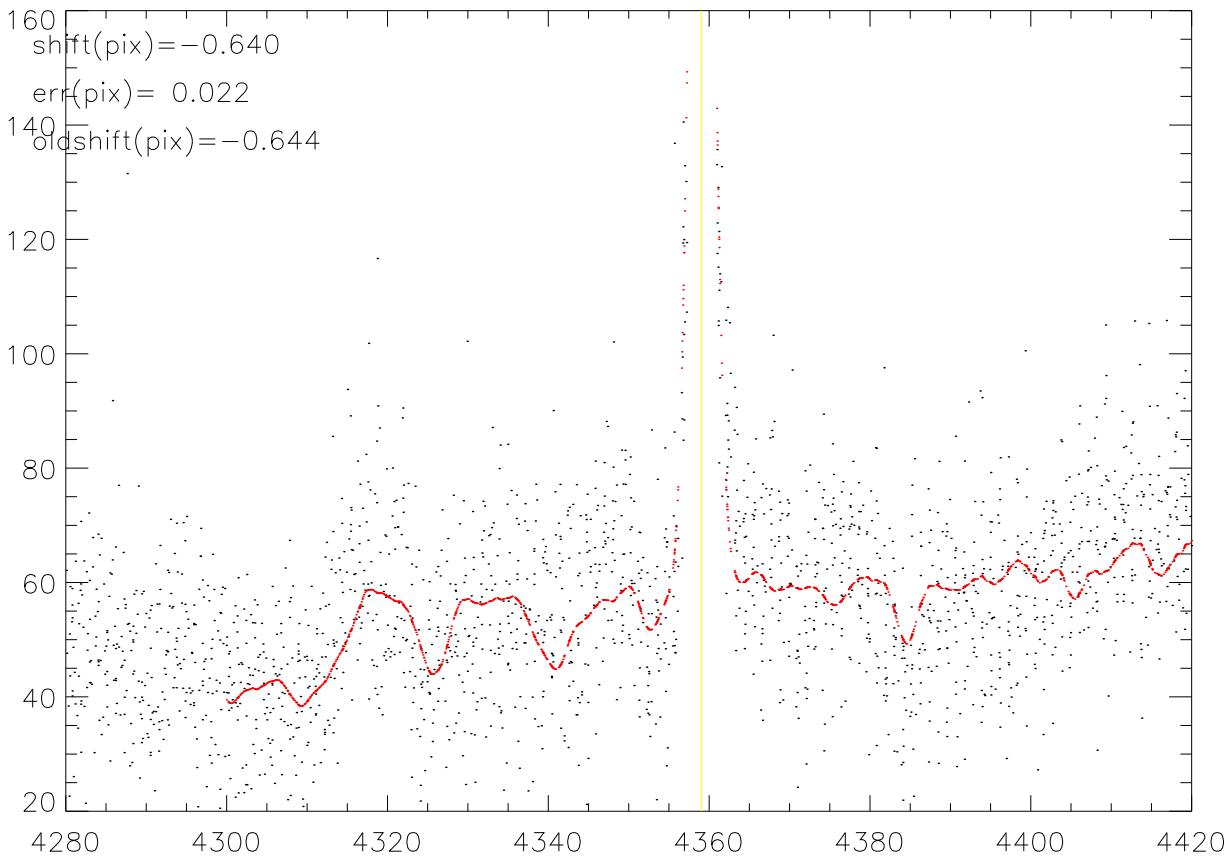

PLATE=1622 MJD=53385 Scattered Light on sdR-b2-00030537.fit
5.64
7.09
5.64
4.18
5.64
4.18
5.64
5.64
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

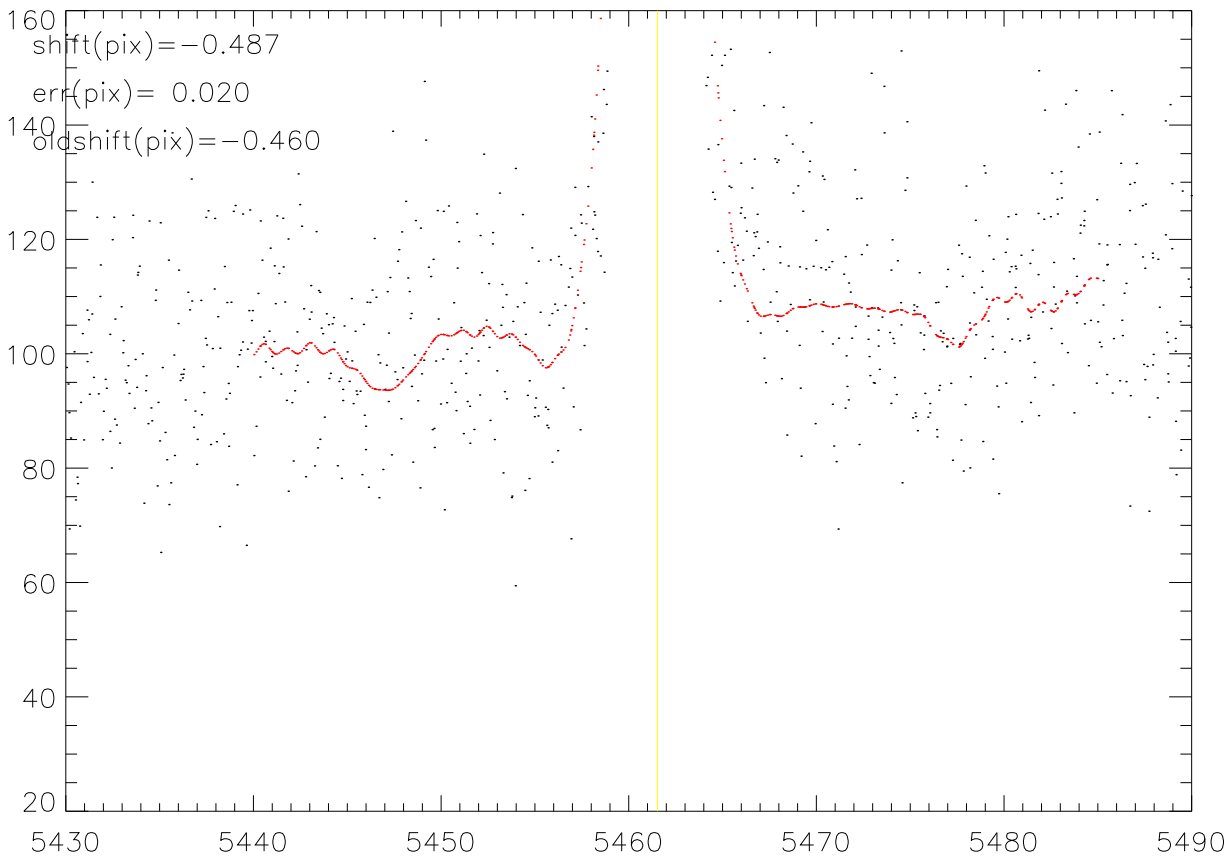

PLATE=1622 MJD=53385 Scattered Light on sdR-b2-00030537.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.029
Max value = 7.236
Tue Feb 19 18:00:44 2008

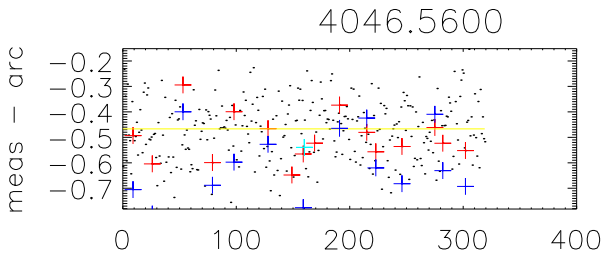

PLATE=1622 MJD=53385 Extraction chi^2 for sdR-b2-00030537.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
0
500
1000
1500
2000
Row number

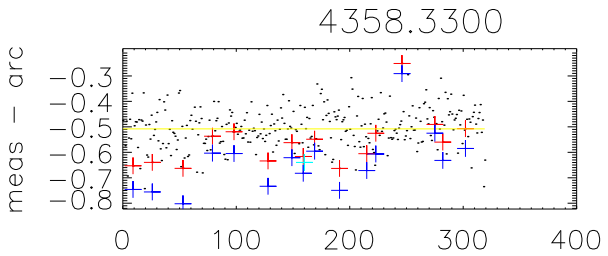

4046.5600
off: −0.65
sig: 0.046
4358.3300
off: −0.64
sig: 0.018
5460.9400
off: −0.46
sig: 0.016
5577.3390
off: −0.43
sig: 0.003
5889.9500
off: −0.30
sig: 0.007
5895.9240
off: −0.36
sig: 0.010

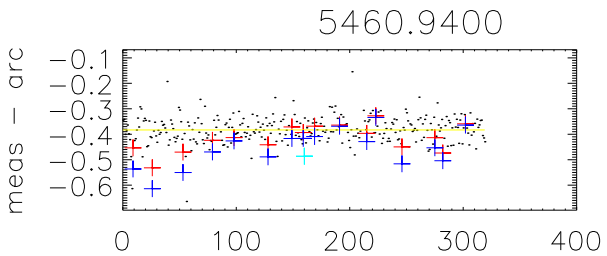

shift(pix)=−0.539
err(pix)= 0.056
oldshift(pix)=−0.648
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

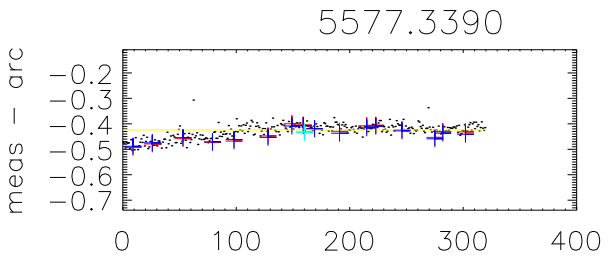

shift(pix)=−0.640
err(pix)= 0.022
oldshift(pix)=−0.644
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

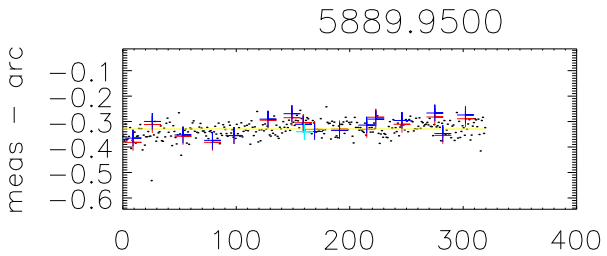

shift(pix)=−0.487
err(pix)= 0.020
oldshift(pix)=−0.460
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

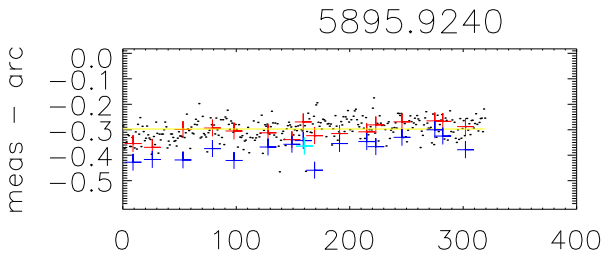

4046.5600
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

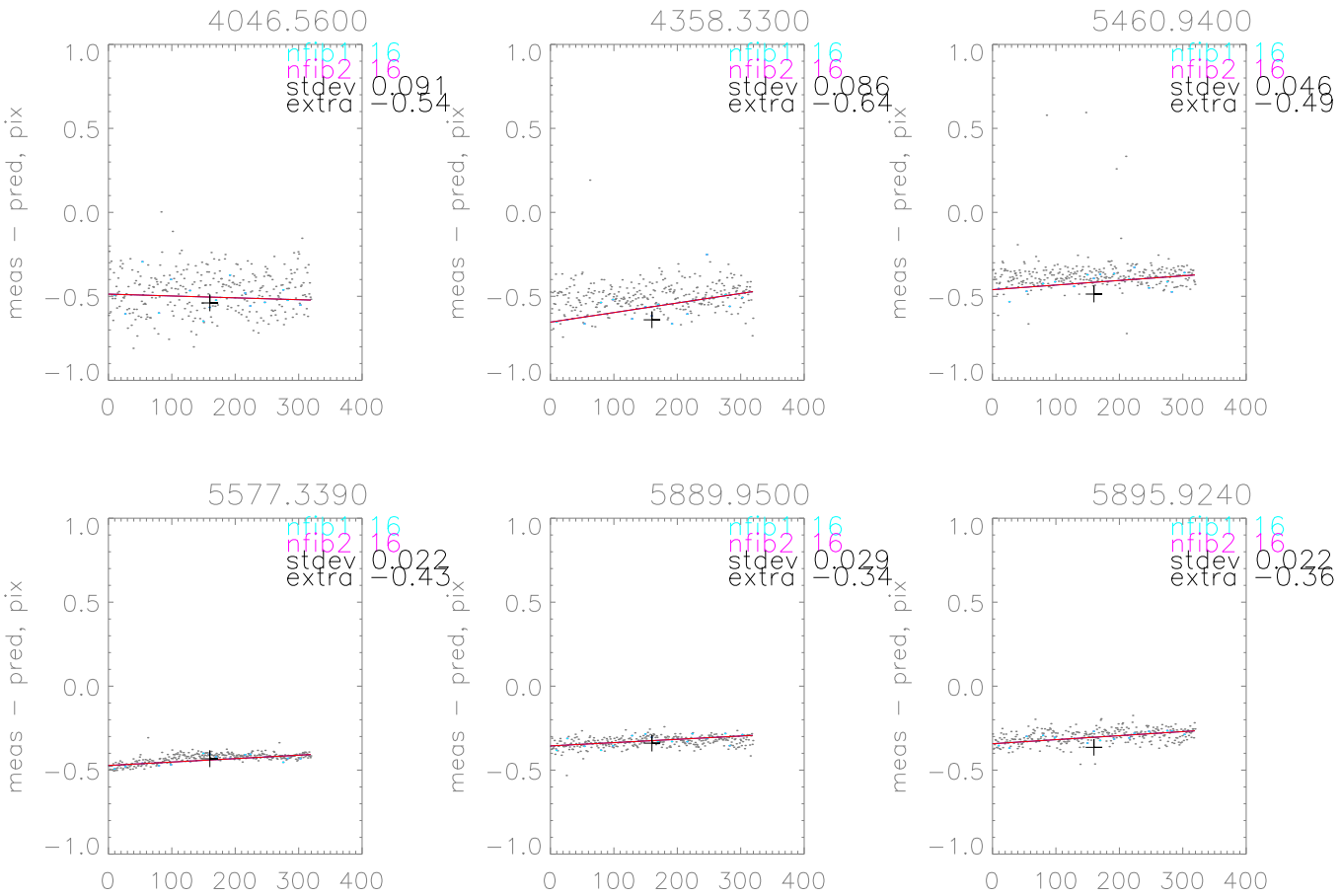

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

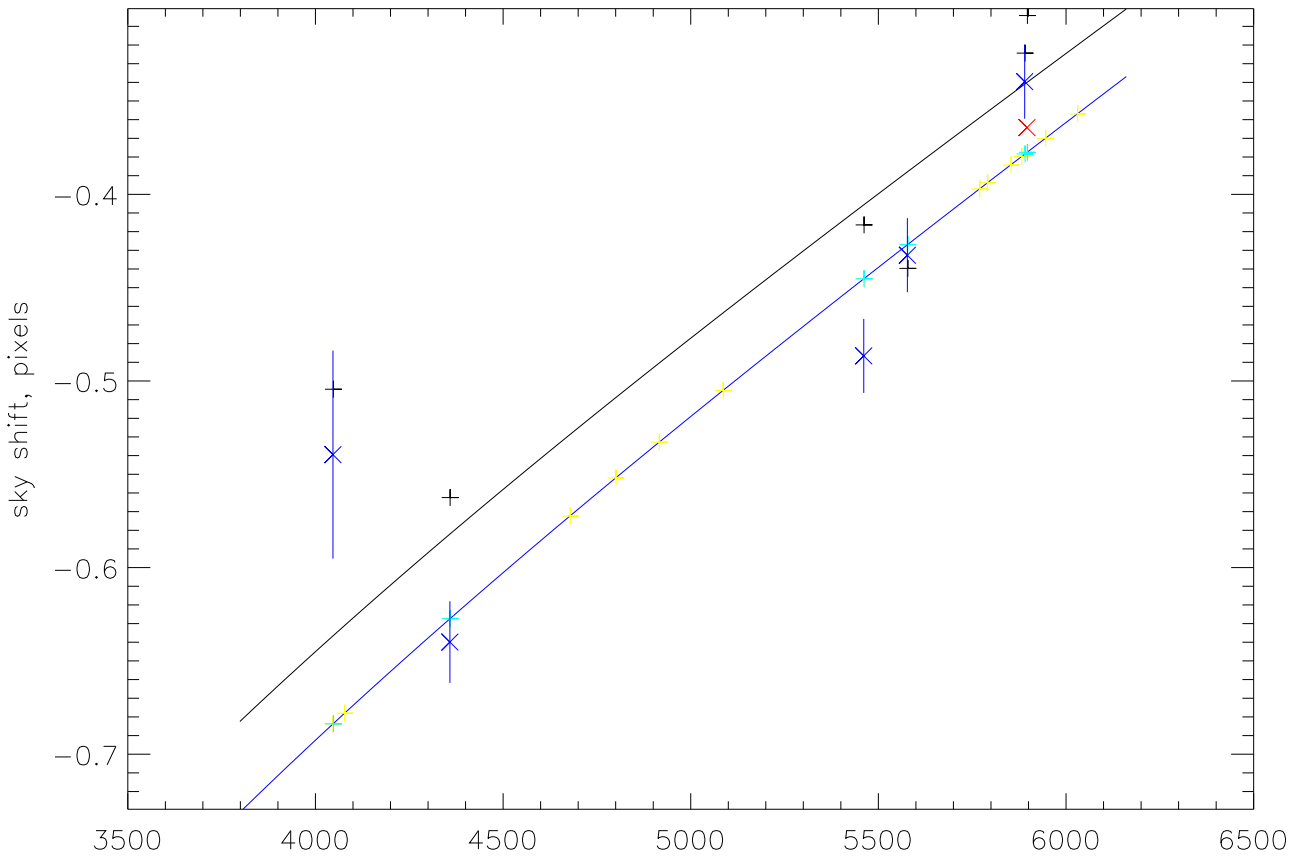

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

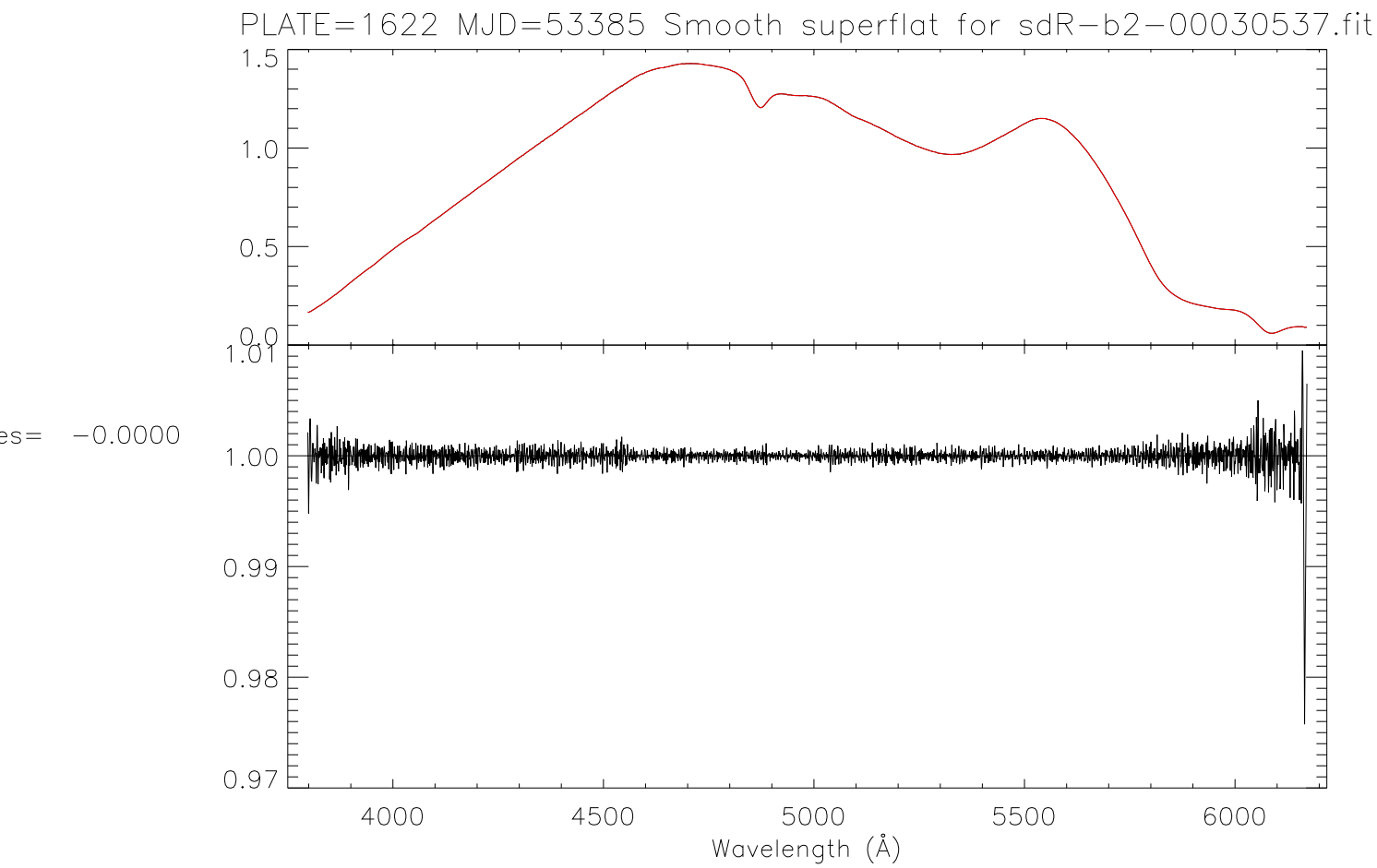

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400


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

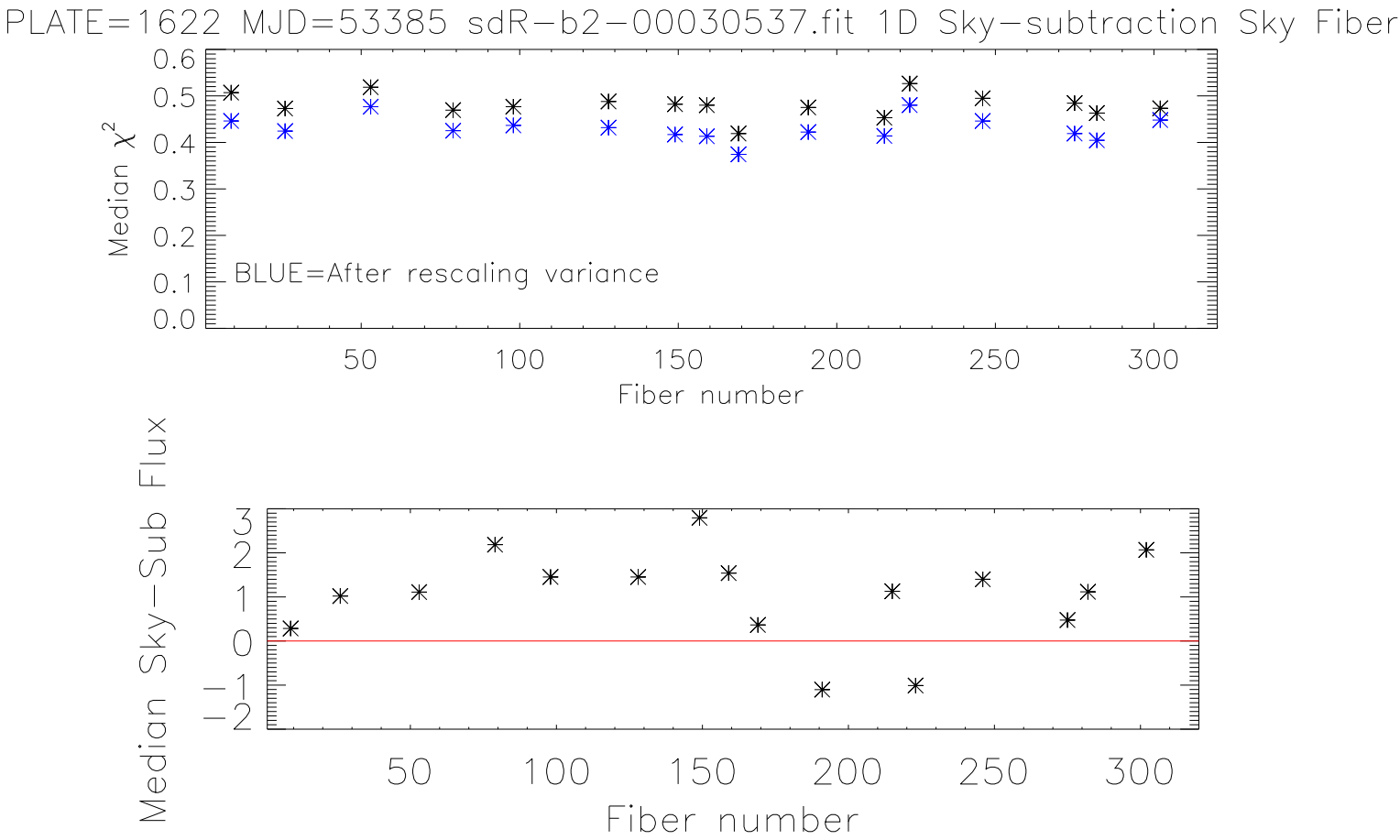

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

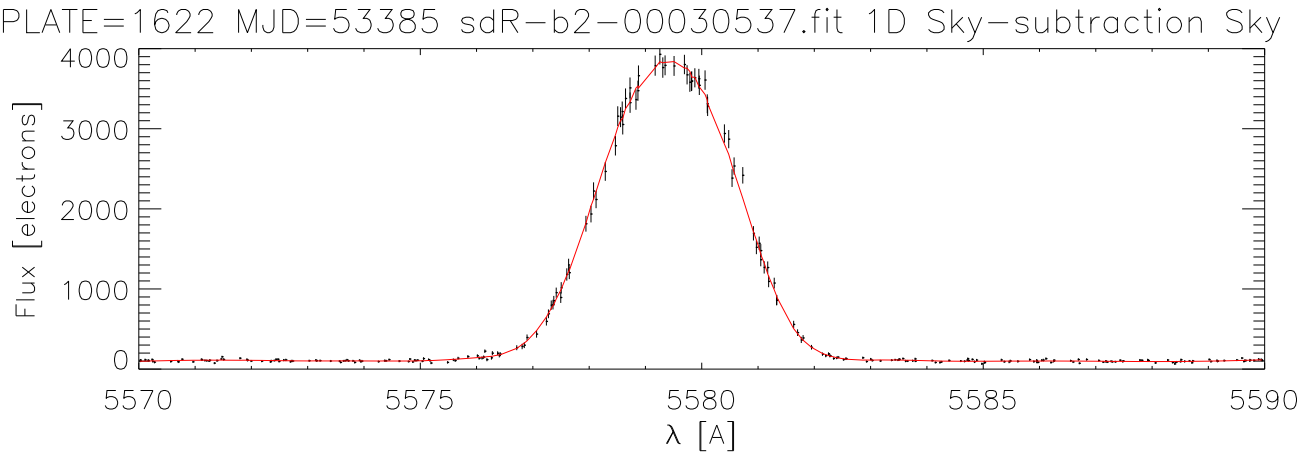

4046.5600
nfib1 16
nfib2 16
stdev 0.091
extra −0.54
4358.3300
nfib1 16
nfib2 16
stdev 0.086
extra −0.64
5460.9400
nfib1 16
nfib2 16
stdev 0.046
extra −0.49
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra −0.43
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra −0.34
5895.9240
nfib1 16
nfib2 16
stdev 0.022
extra −0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

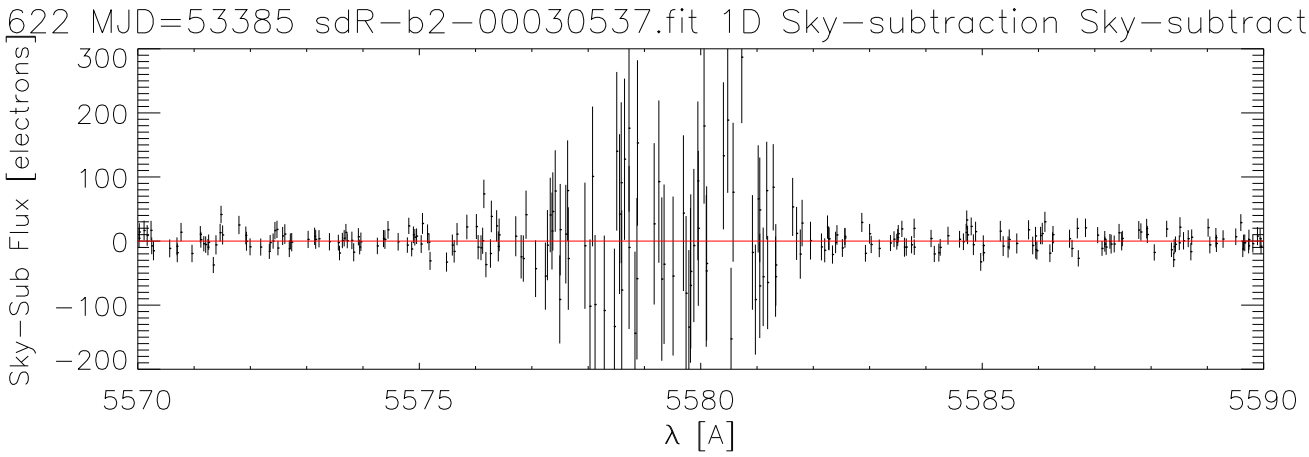

sky shift, pixels
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500

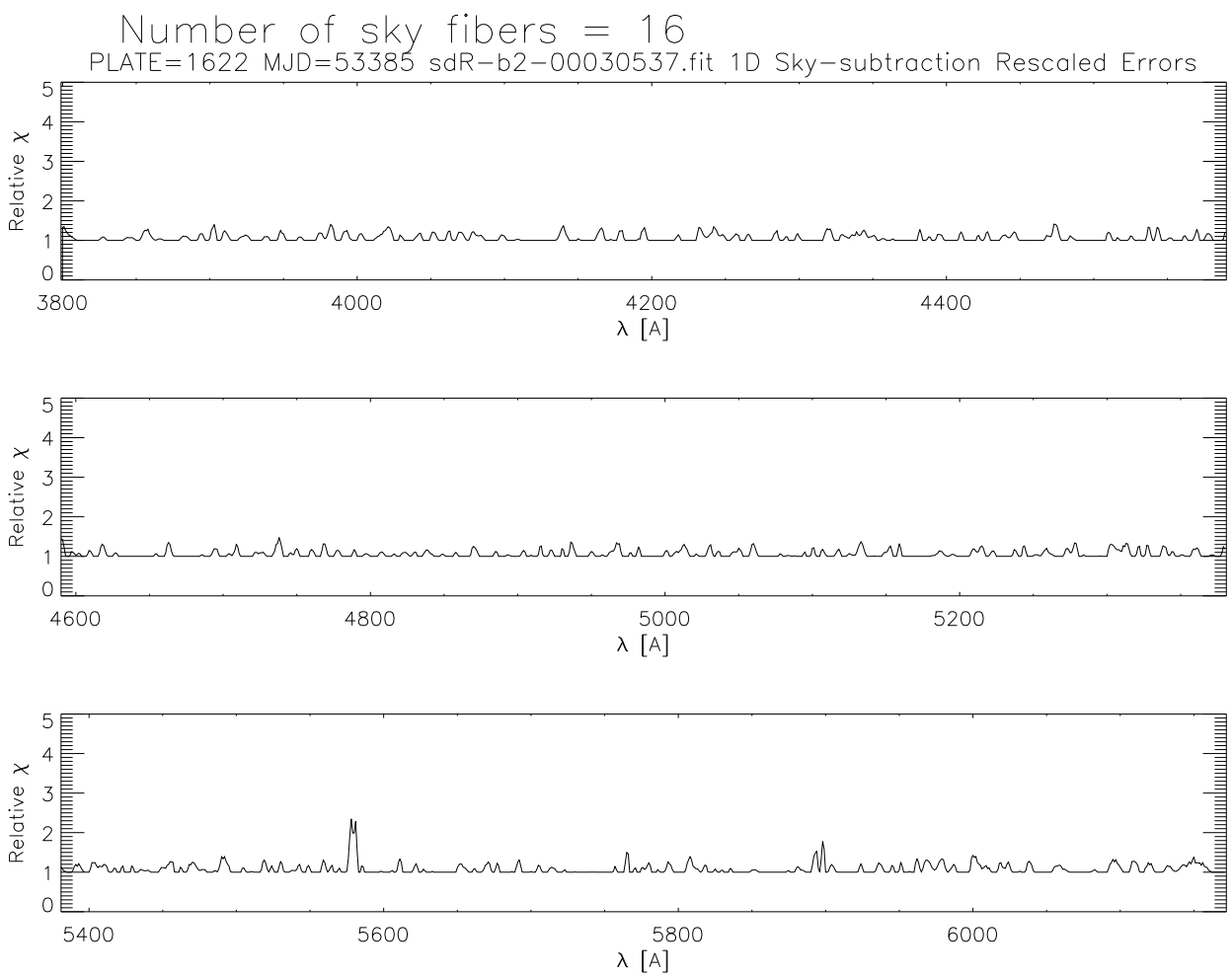

PLATE=1622 MJD=53385 Smooth superflat for sdR-b2-00030537.fit
1.5
1.0
0.5
0.0
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

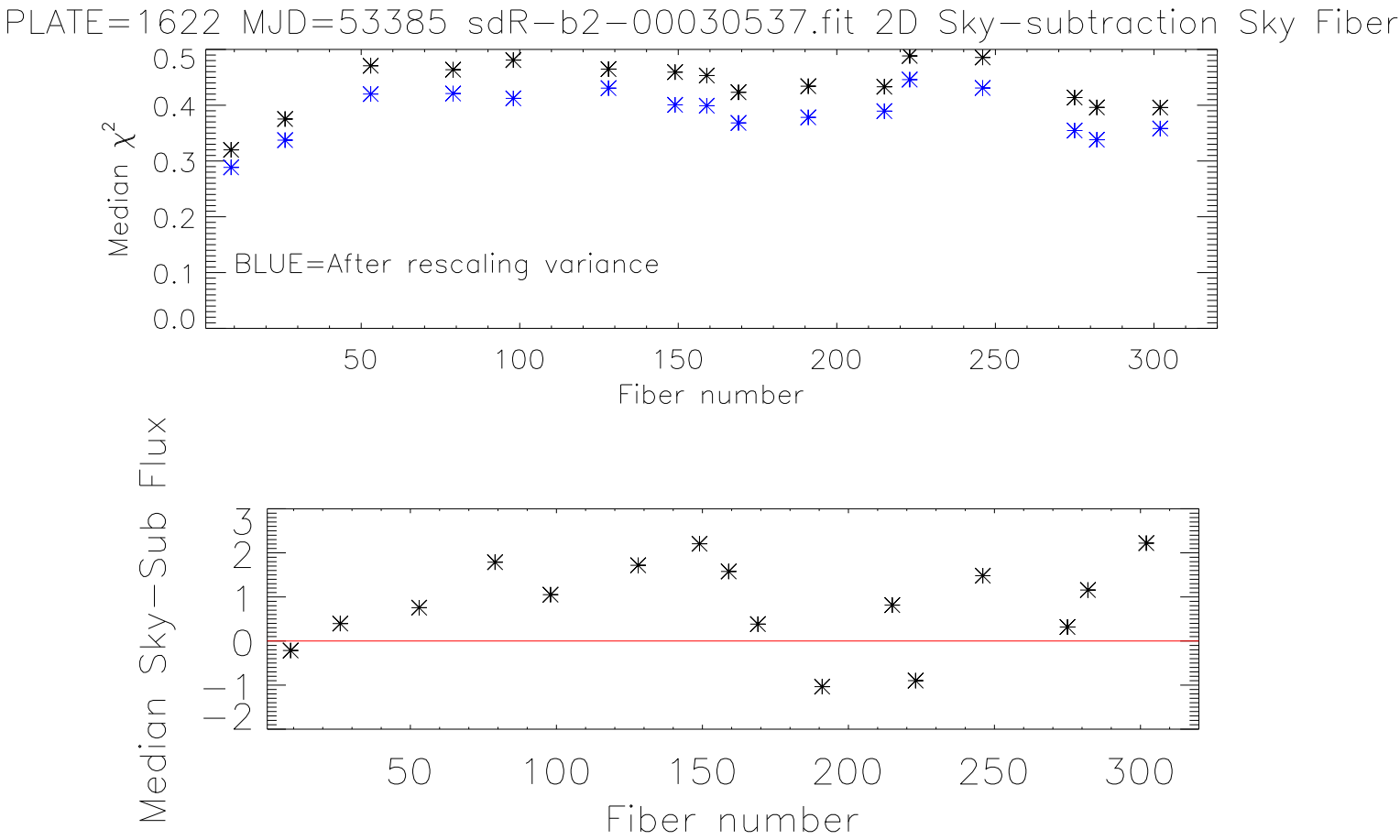
es= −0.0000

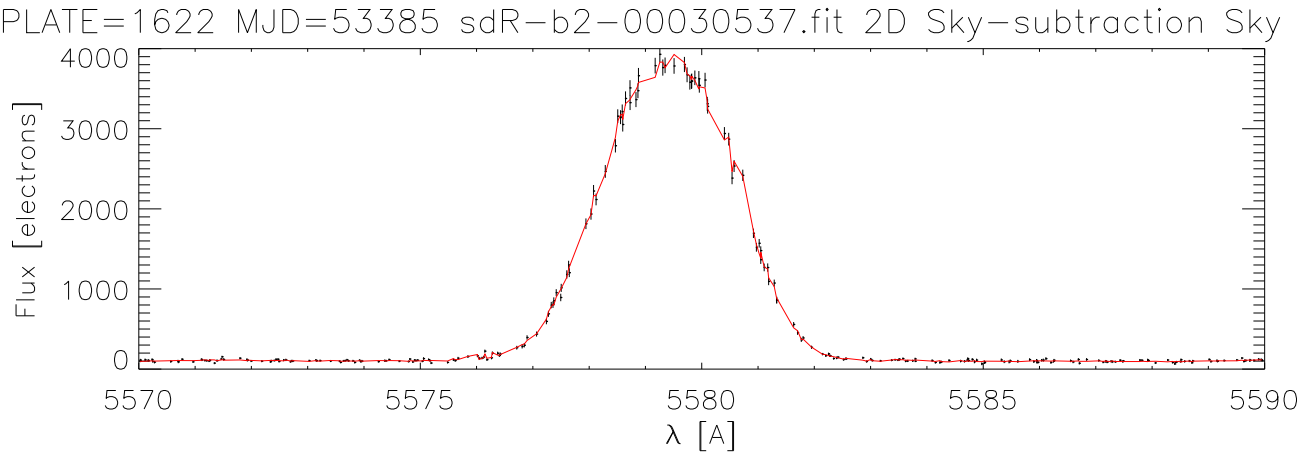

PLATE=1622 MJD=53385 sdR-b2-00030537.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

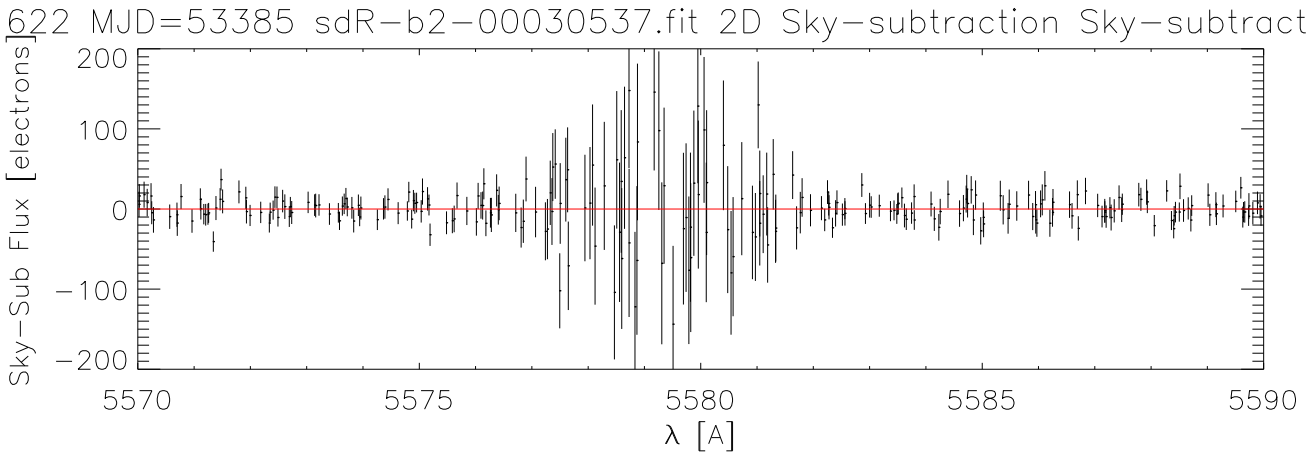

PLATE=1622 MJD=53385 sdR-b2-00030537.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

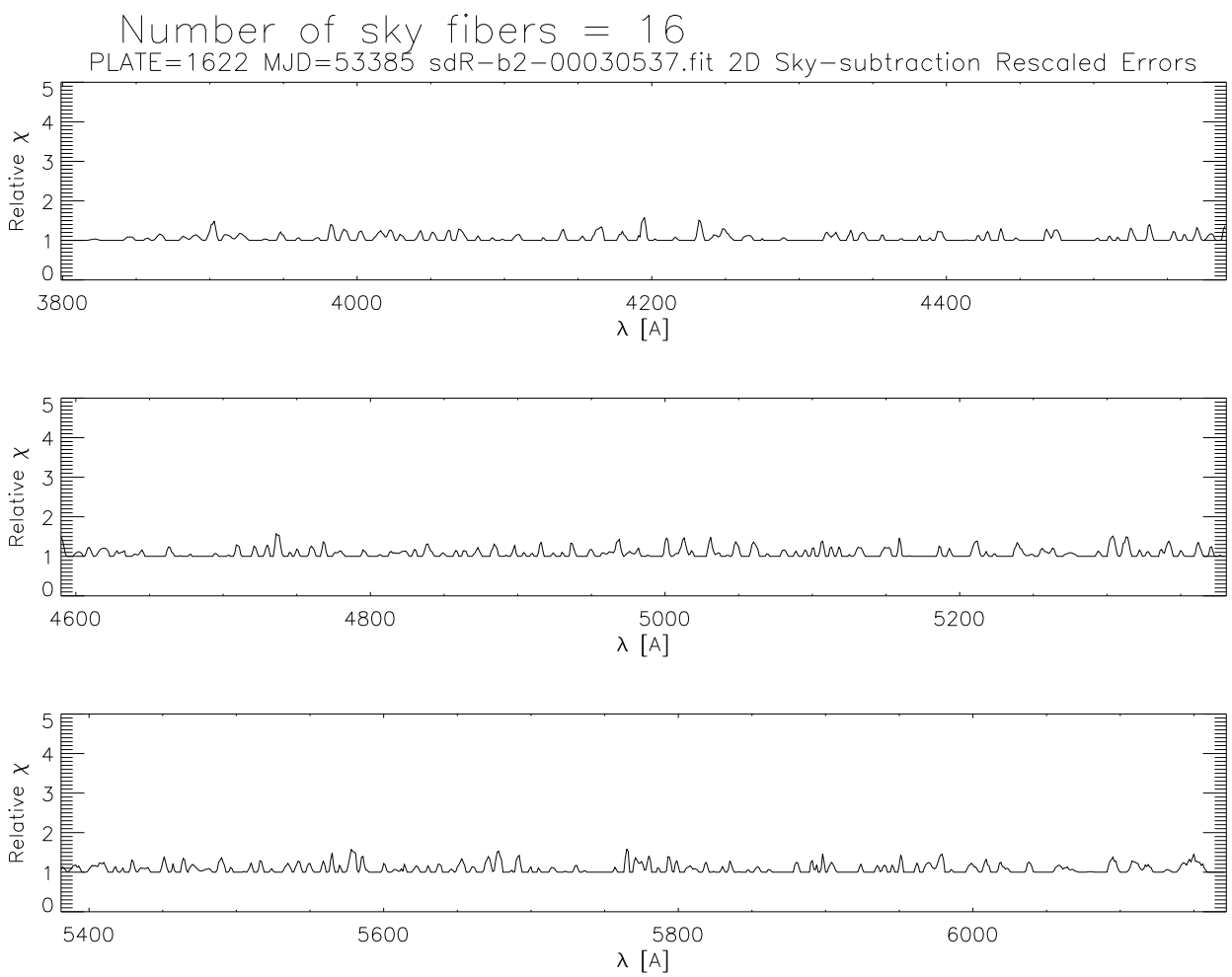

PLATE=1622 MJD=53385 sdR-b2-00030537.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

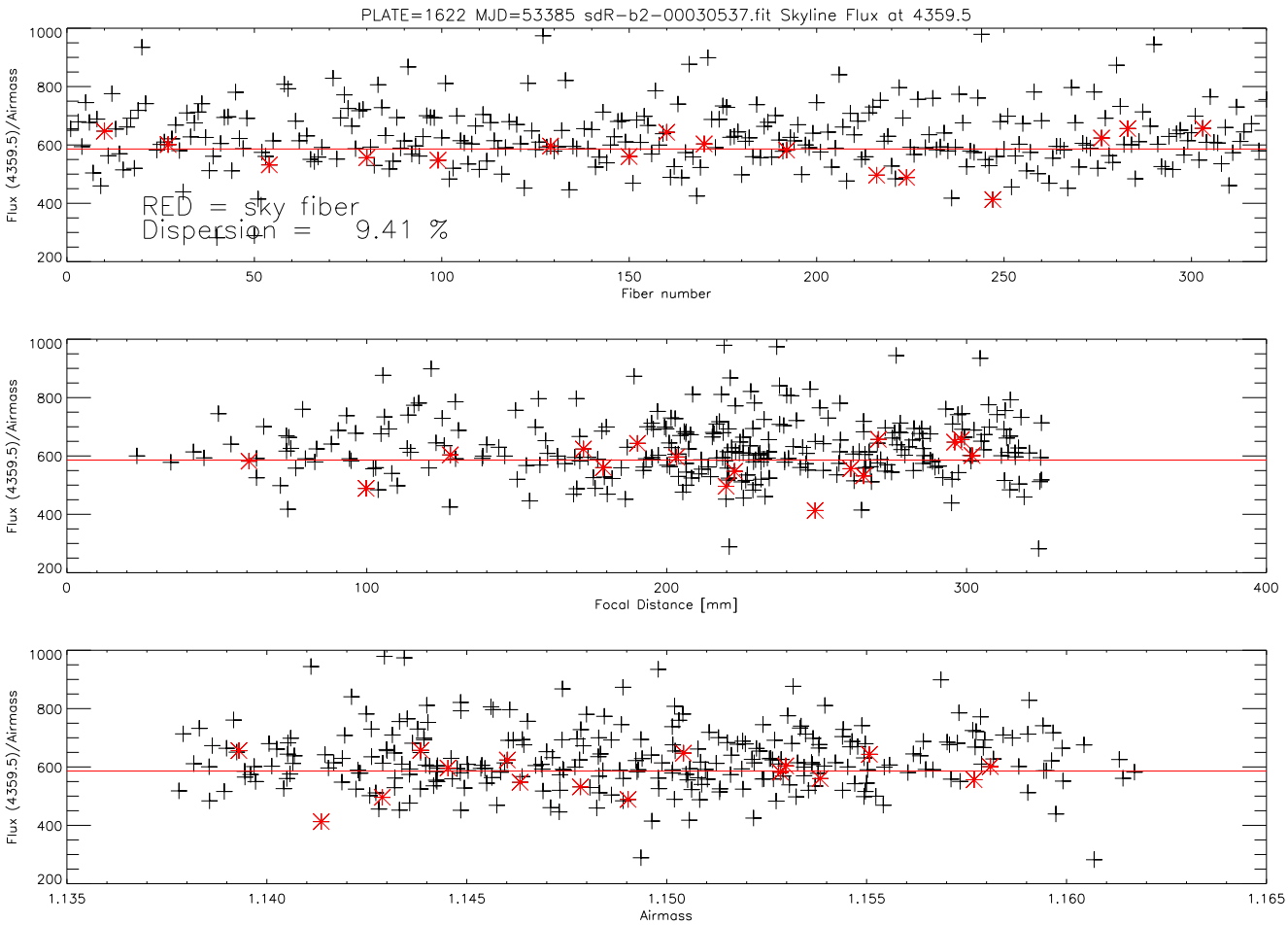

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b2-00030537.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

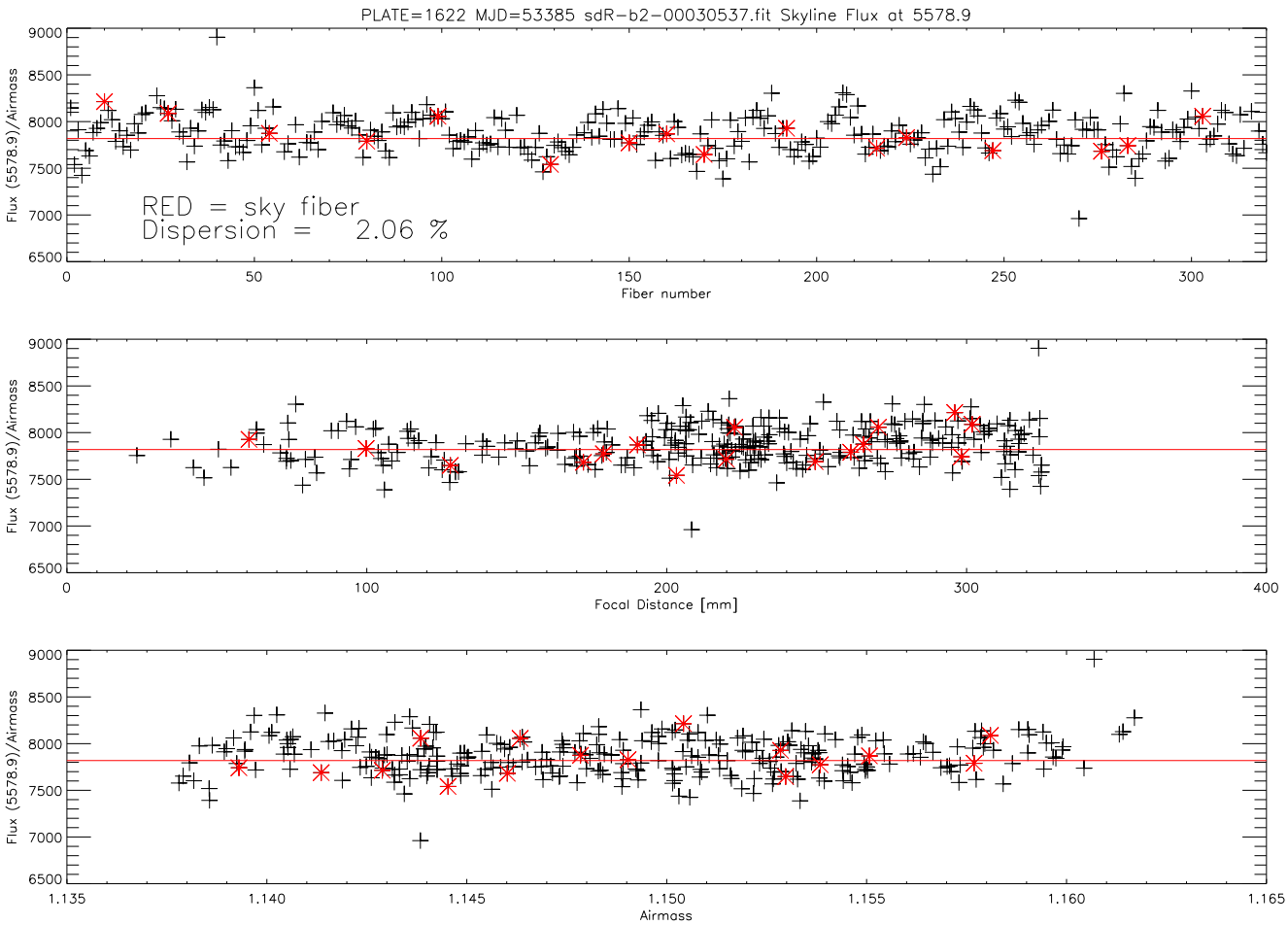

PLATE=1622 MJD=53385 sdR-b2-00030537.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

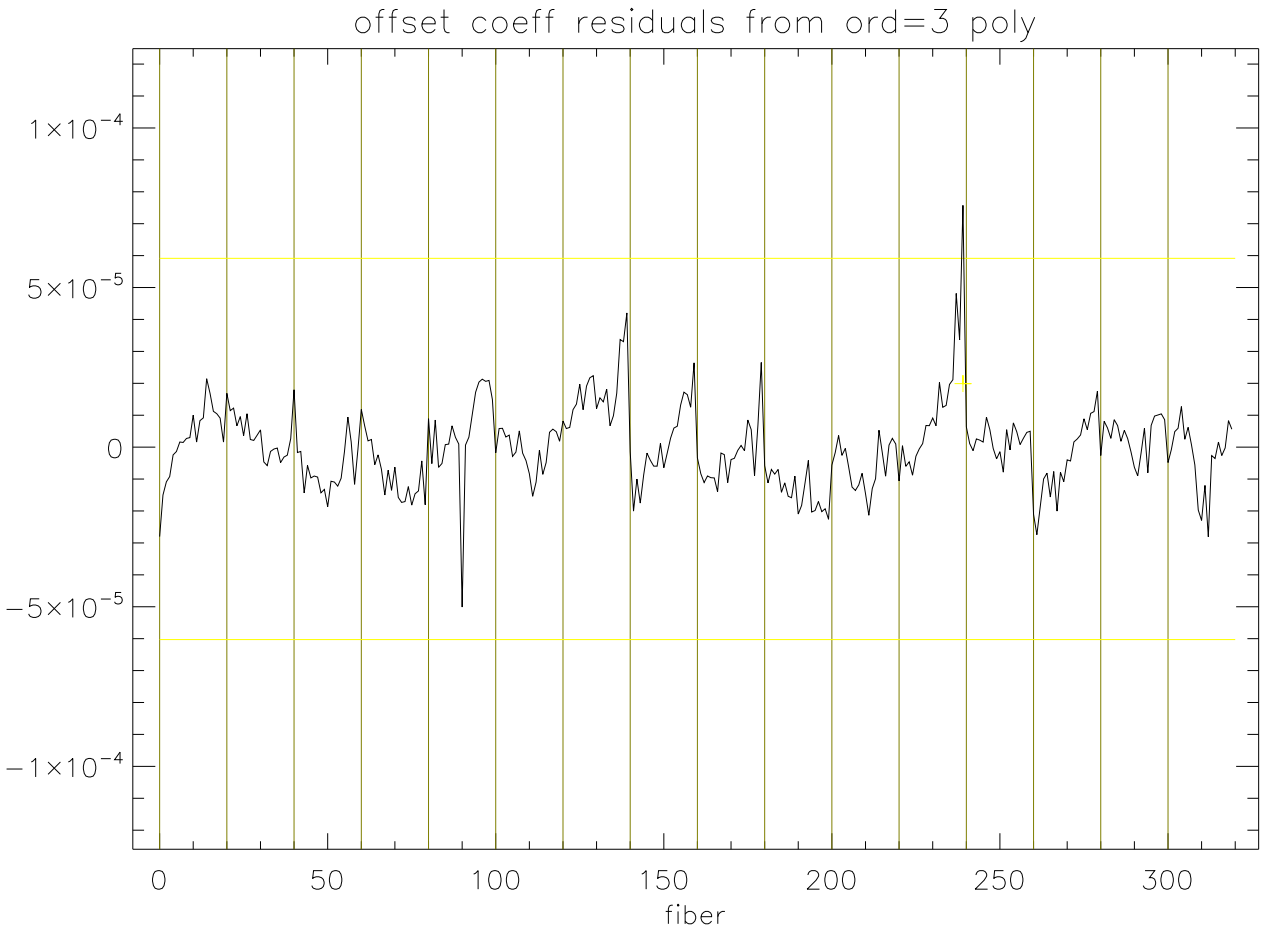

PLATE=1622 MJD=53385 sdR-b2-00030537.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

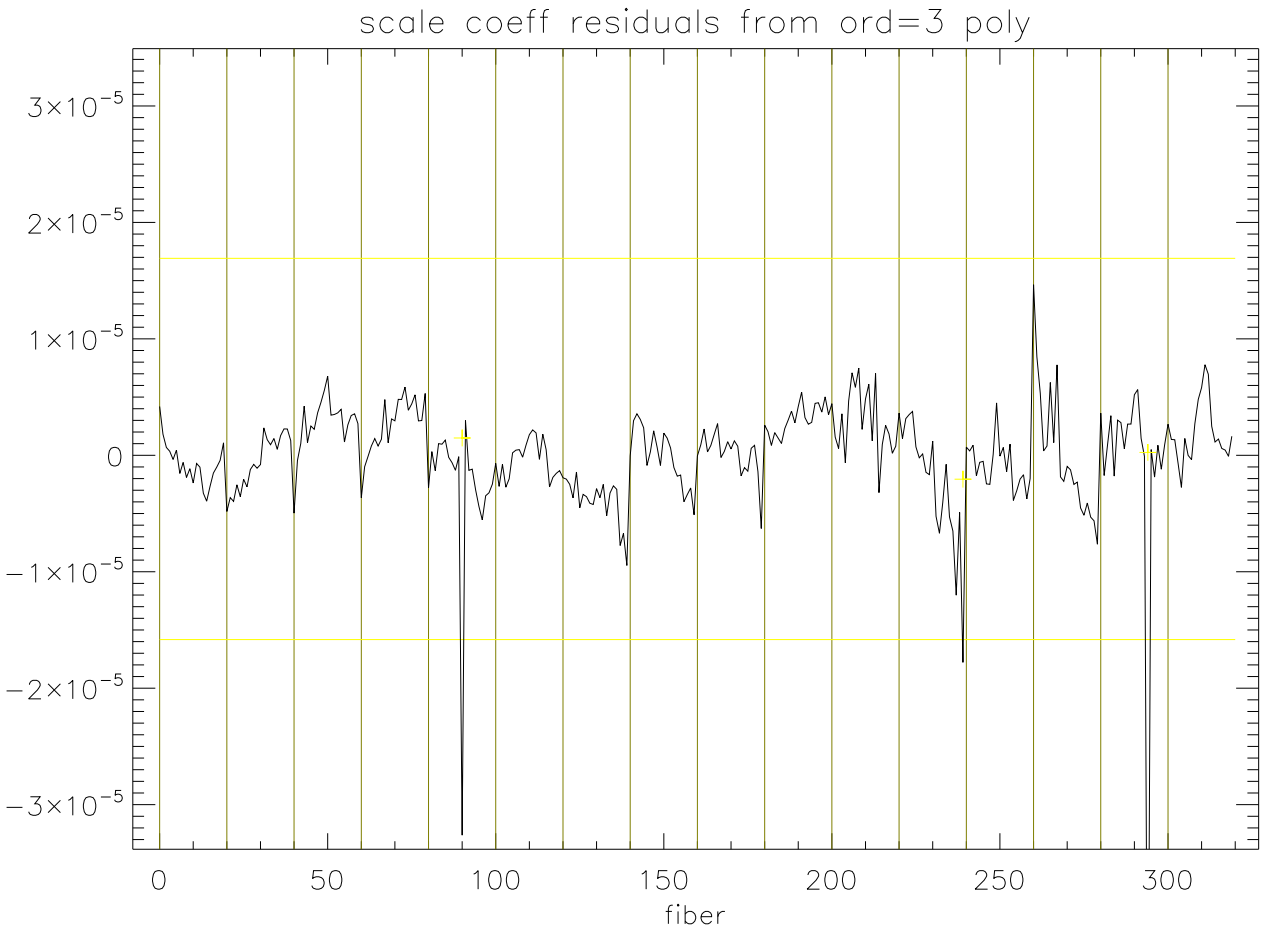

PLATE=1622 MJD=53385 sdR-b2-00030537.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

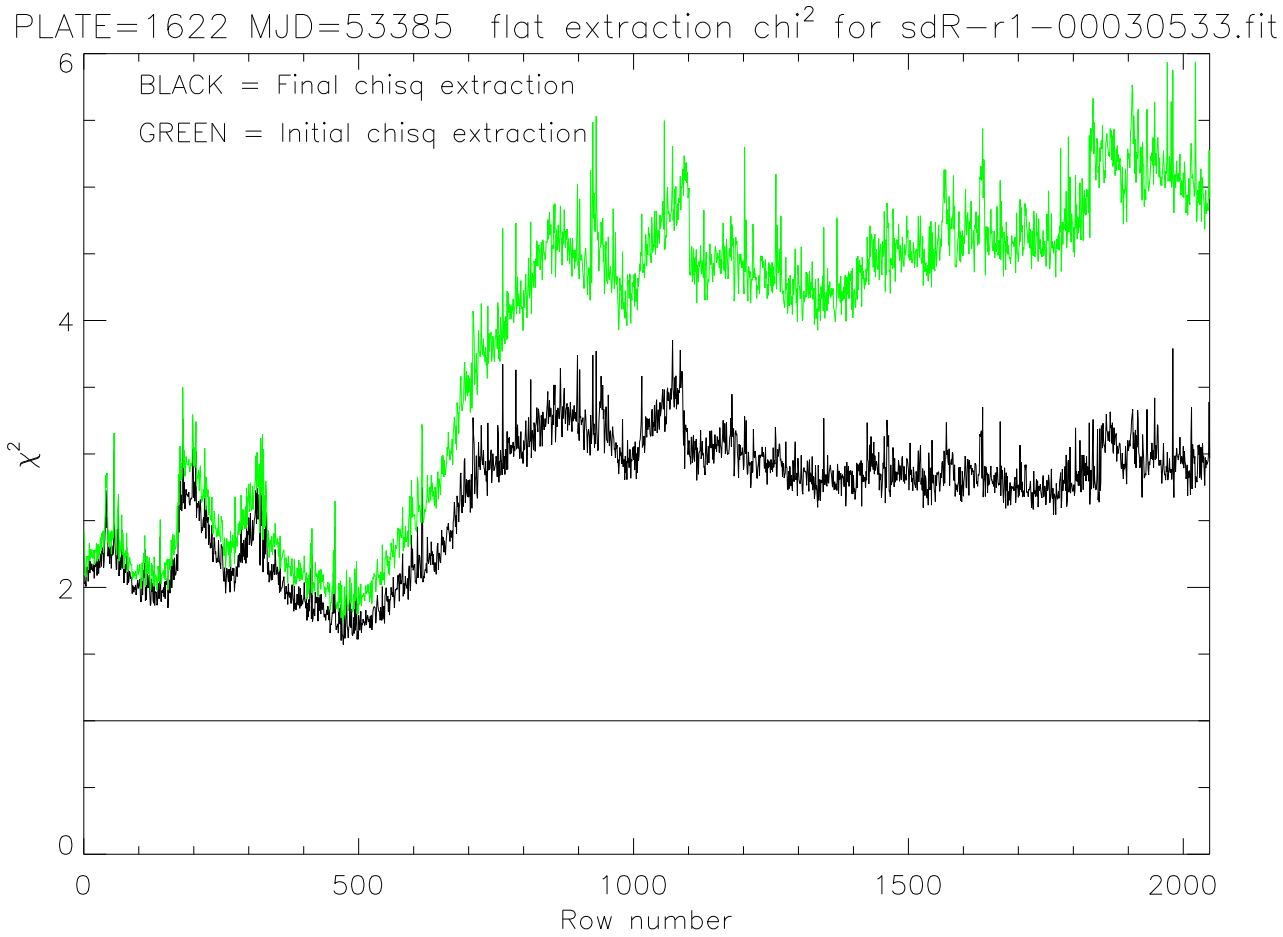

Number of sky fibers = 16
PLATE=1622 MJD=53385 sdR-b2-00030537.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

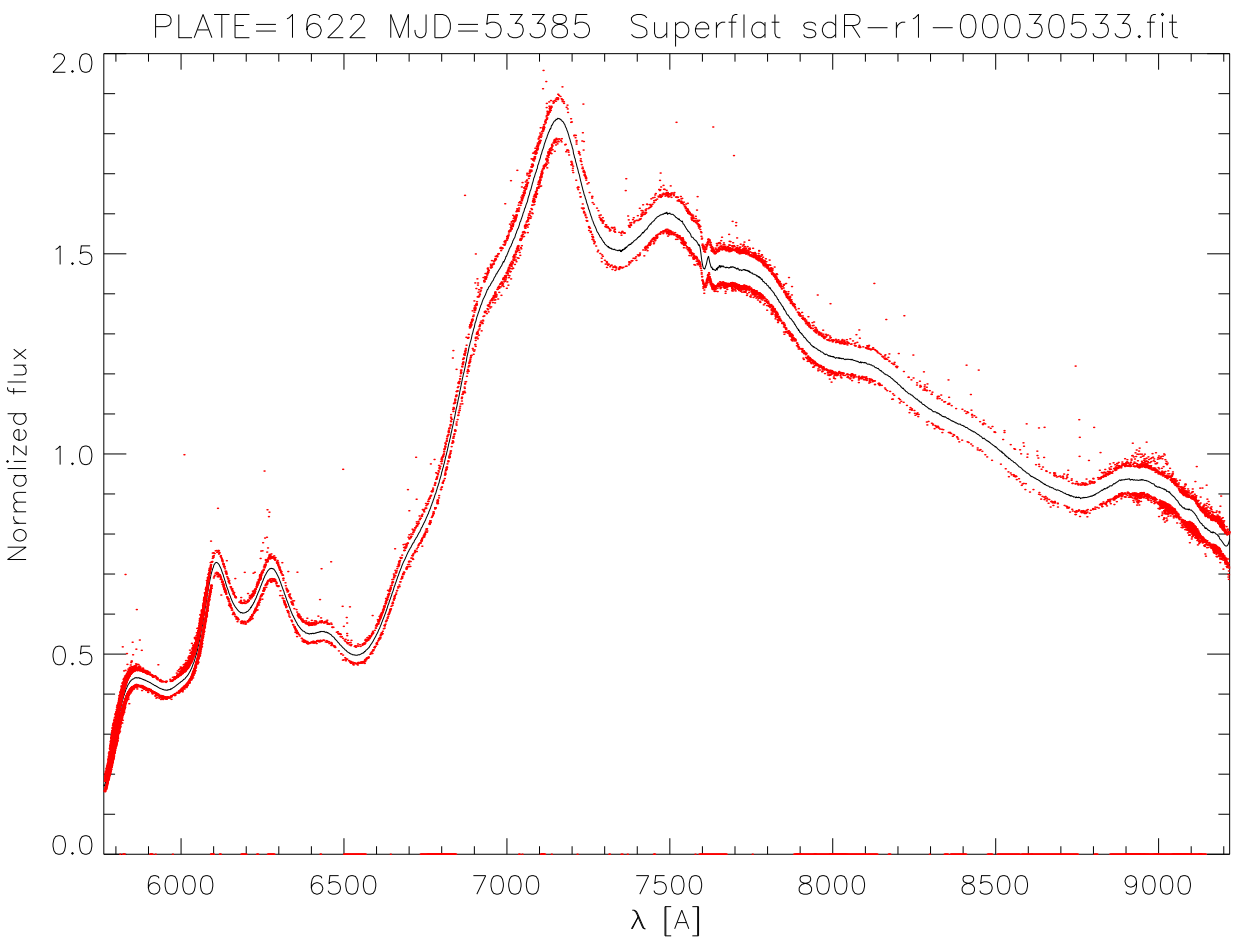

PLATE=1622 MJD=53385 sdR-b2-00030537.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 9.41 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

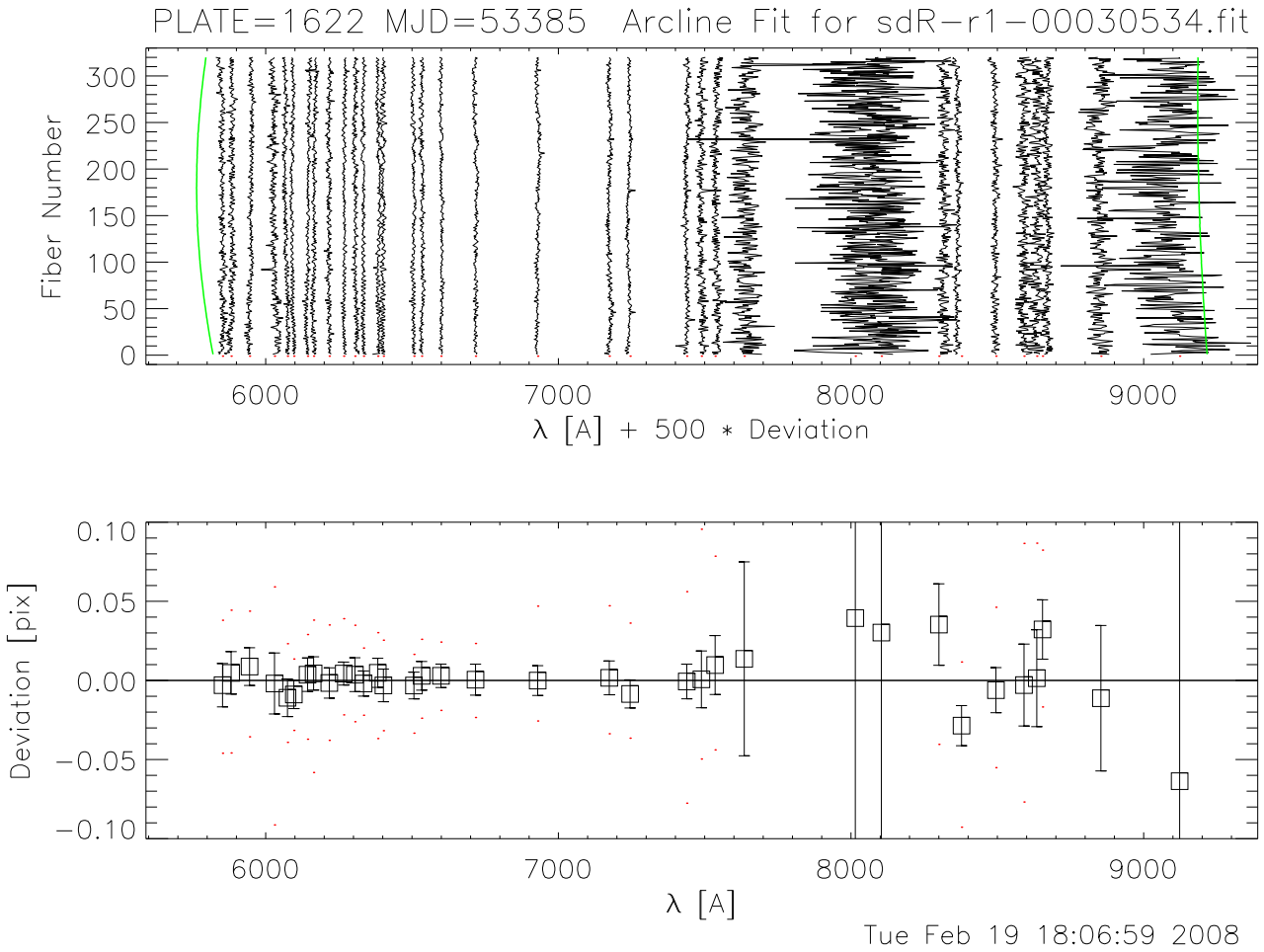

PLATE=1622 MJD=53385 sdR-b2-00030537.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.06 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

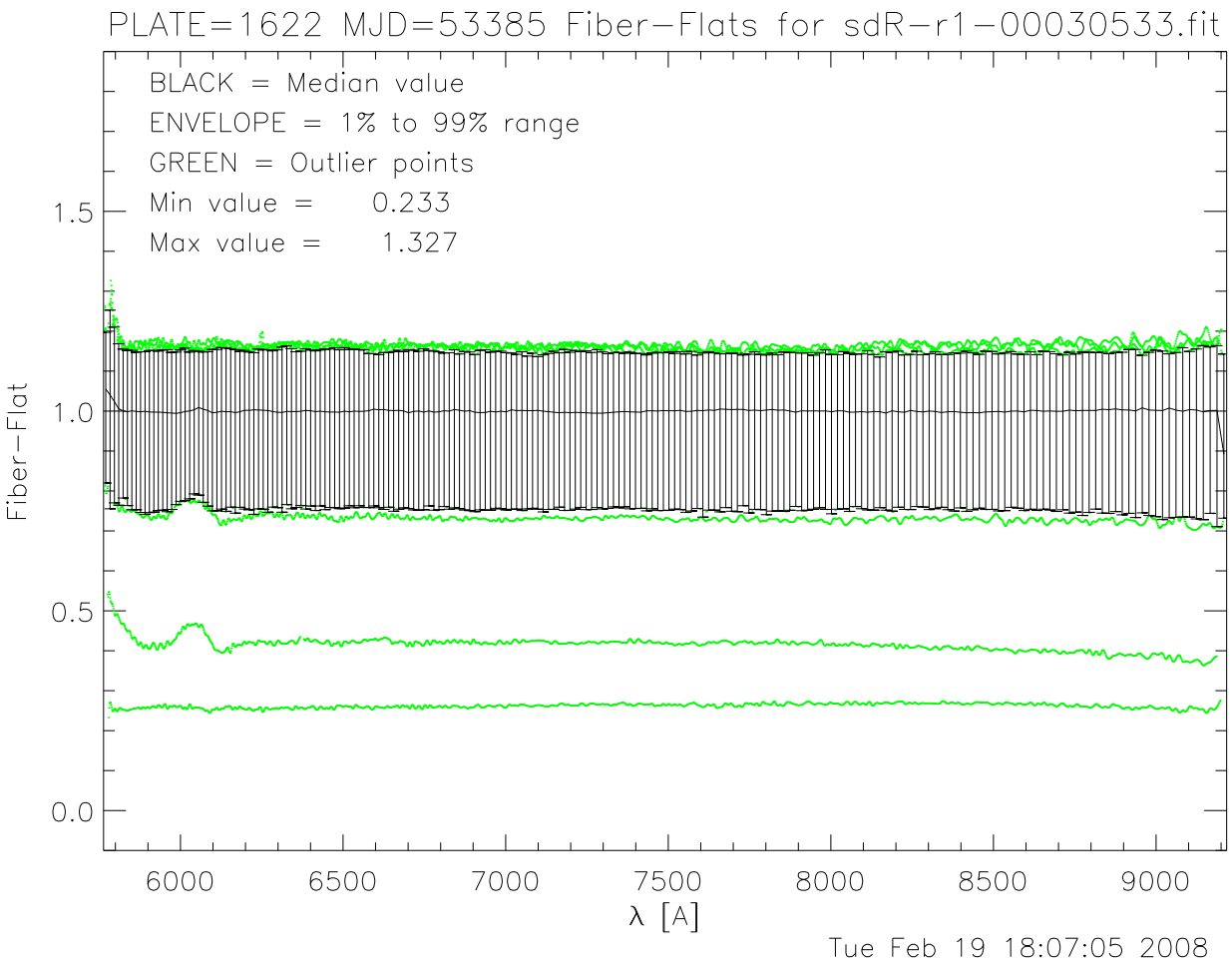

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

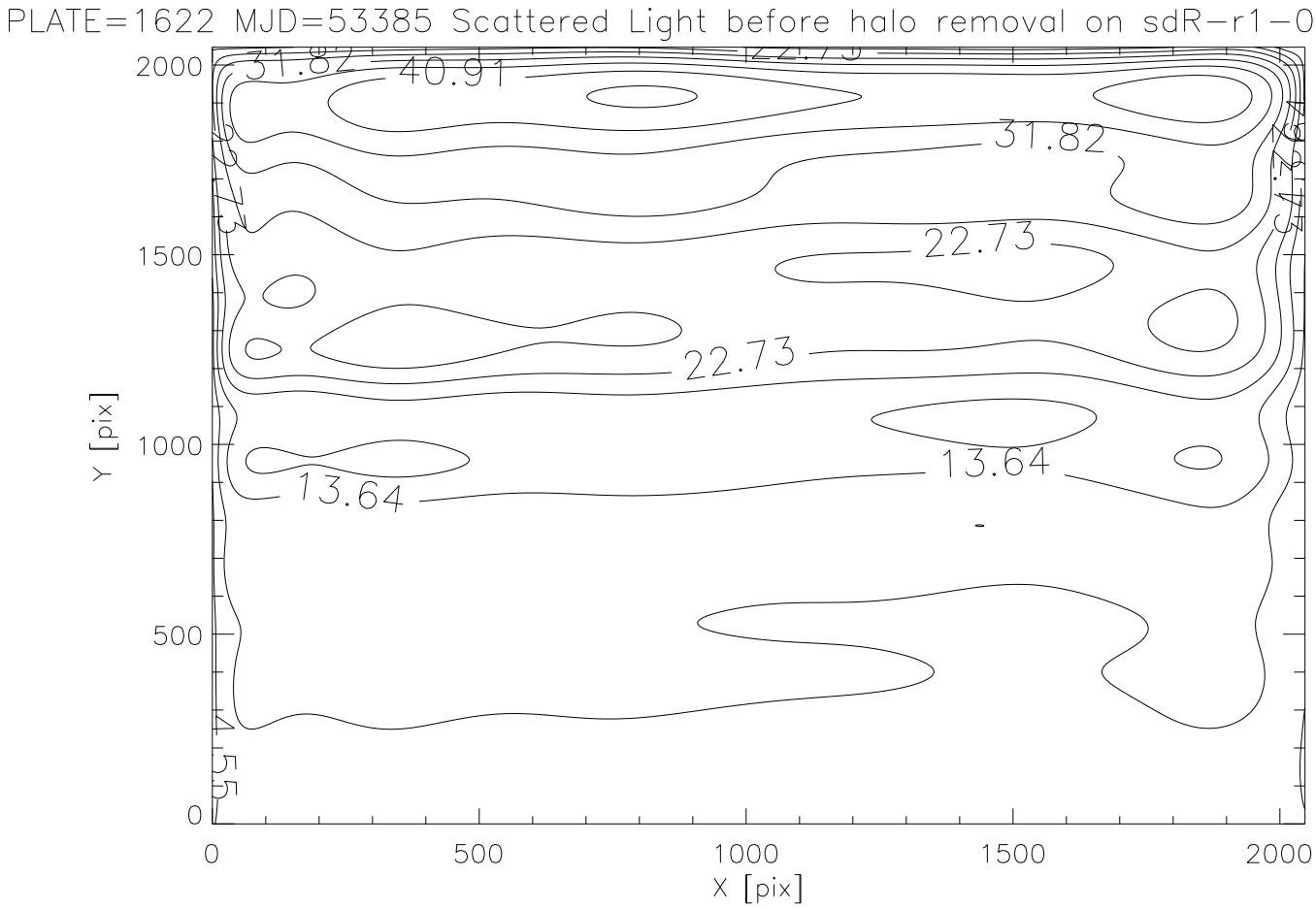

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

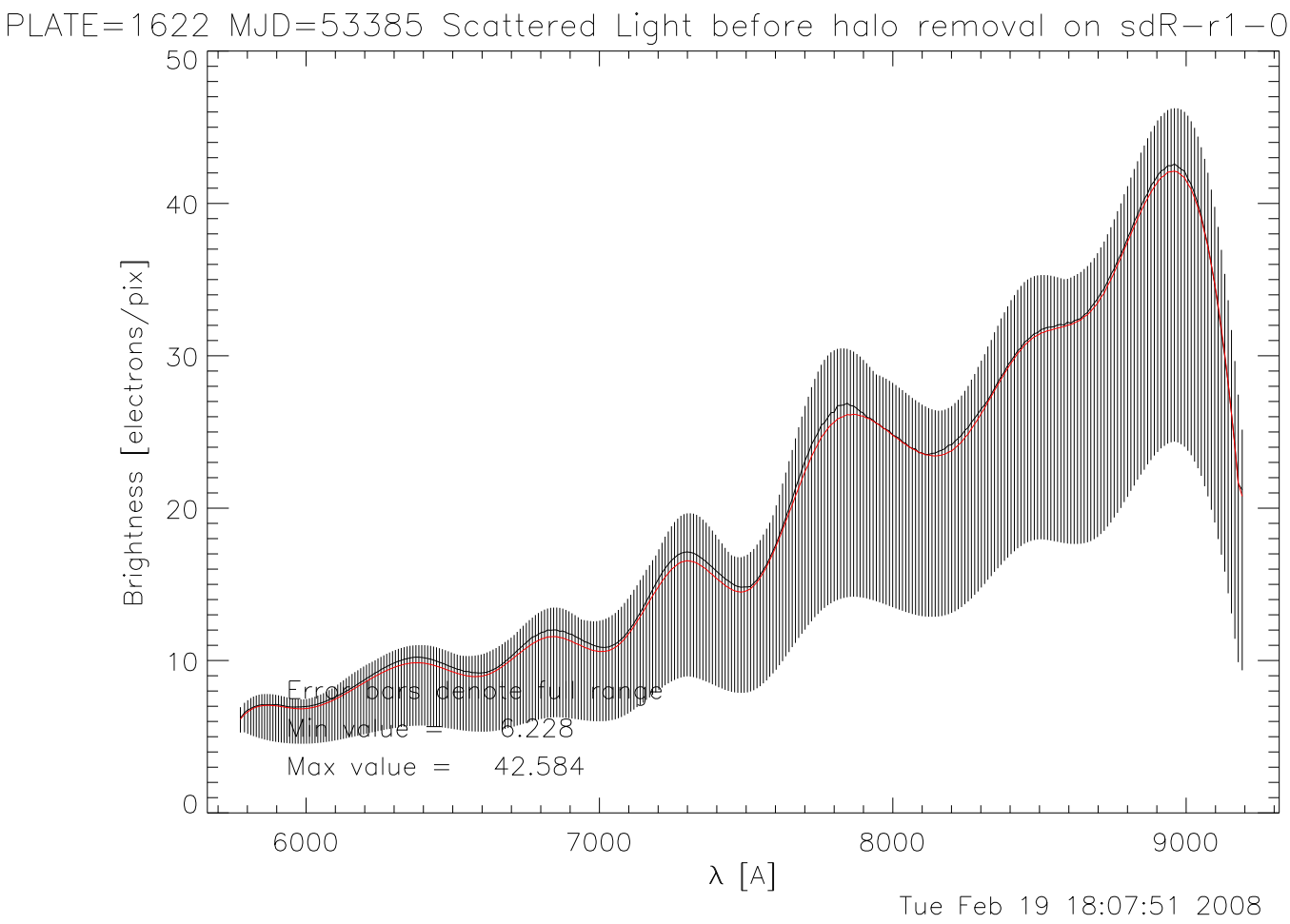

PLATE=1622 MJD=53385 flat extraction chi^2 for sdR−r1−00030533.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

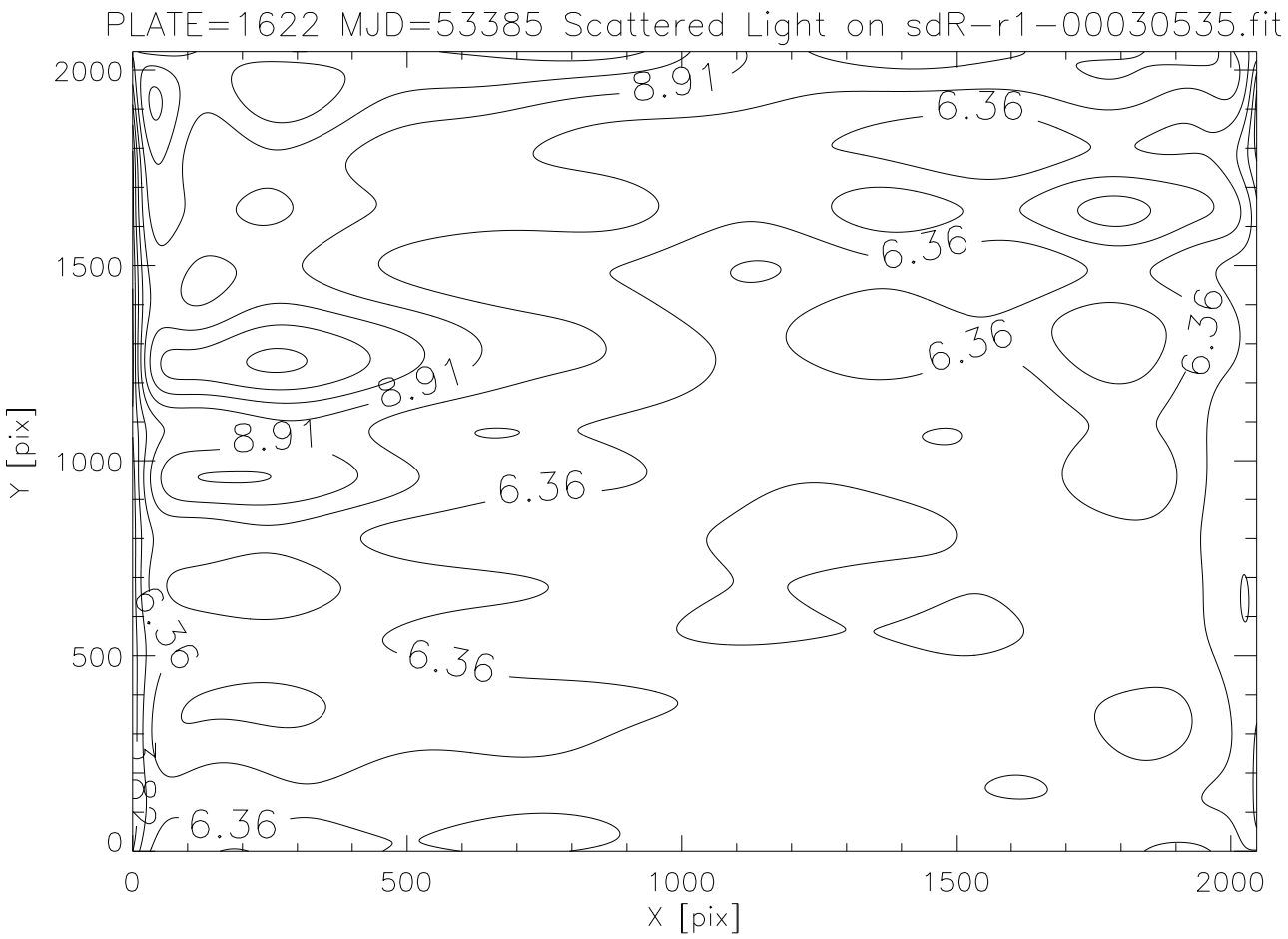

PLATE=1622 MJD=53385 Superflat sdR-r1-00030533.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

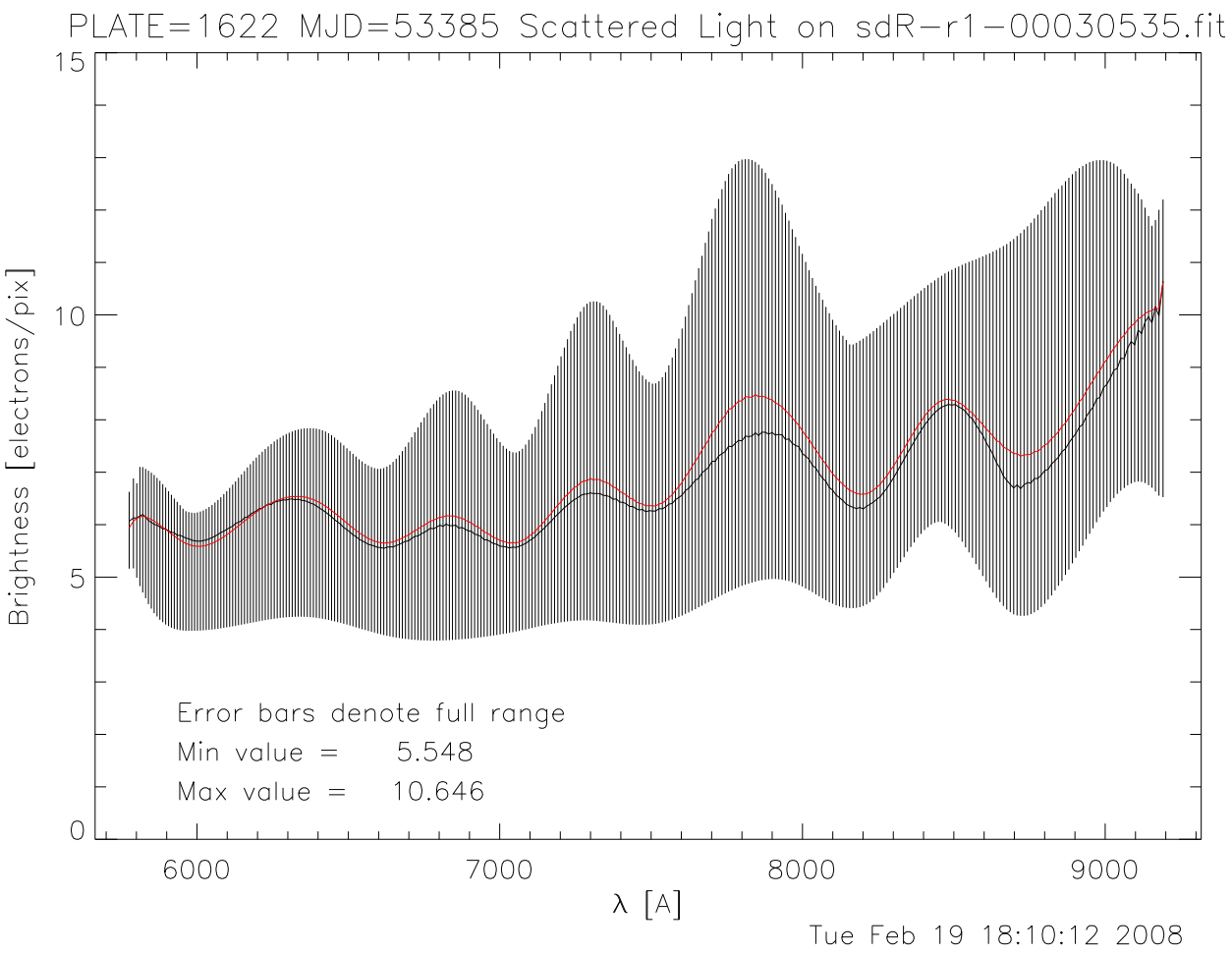

PLATE=1622 MJD=53385 Arcline Fit for sdR-r1-00030534.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 19 18:06:59 2008

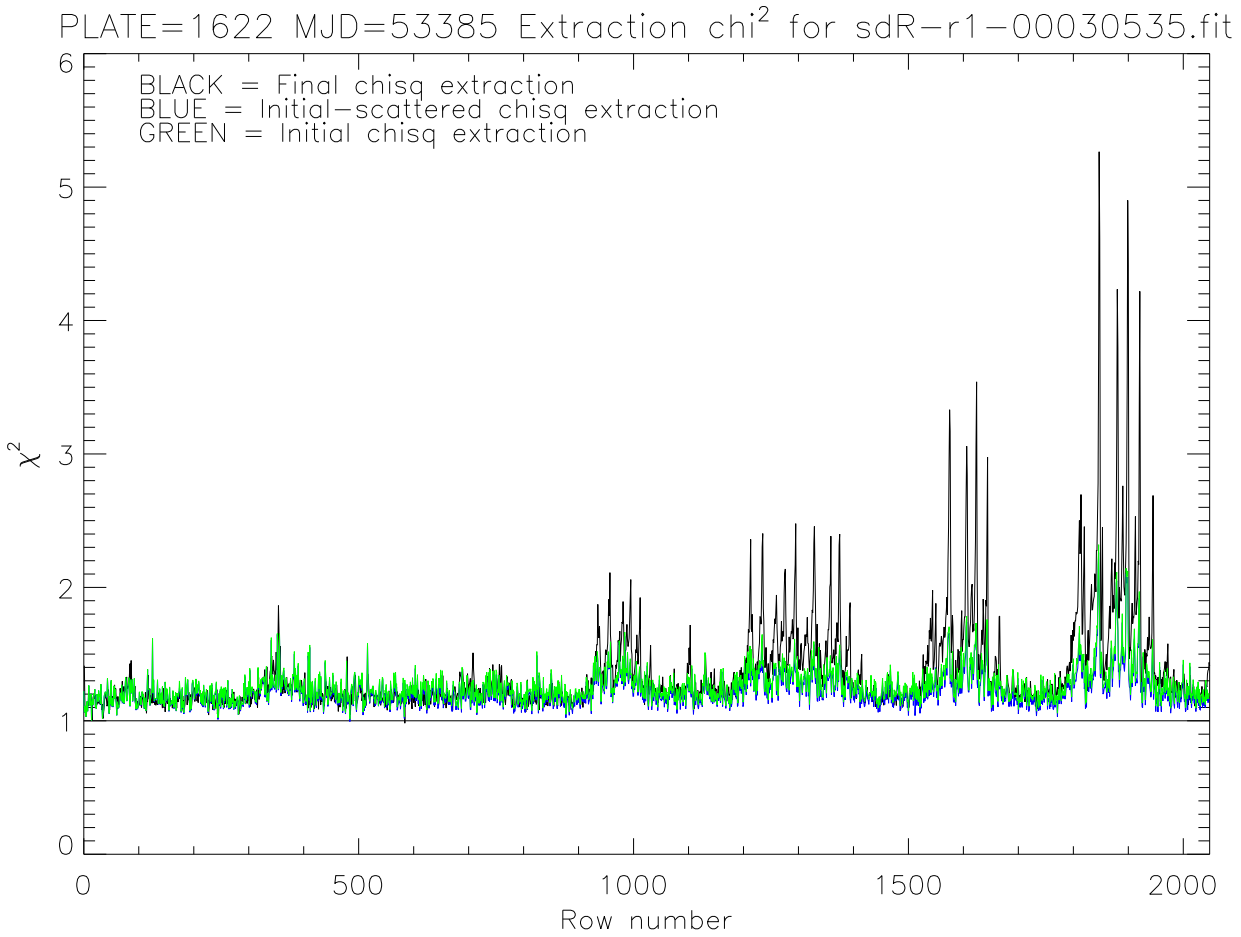

PLATE=1622 MJD=53385 Fiber−Flats for sdR−r1−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.233
Max value = 1.327
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 18:07:05 2008

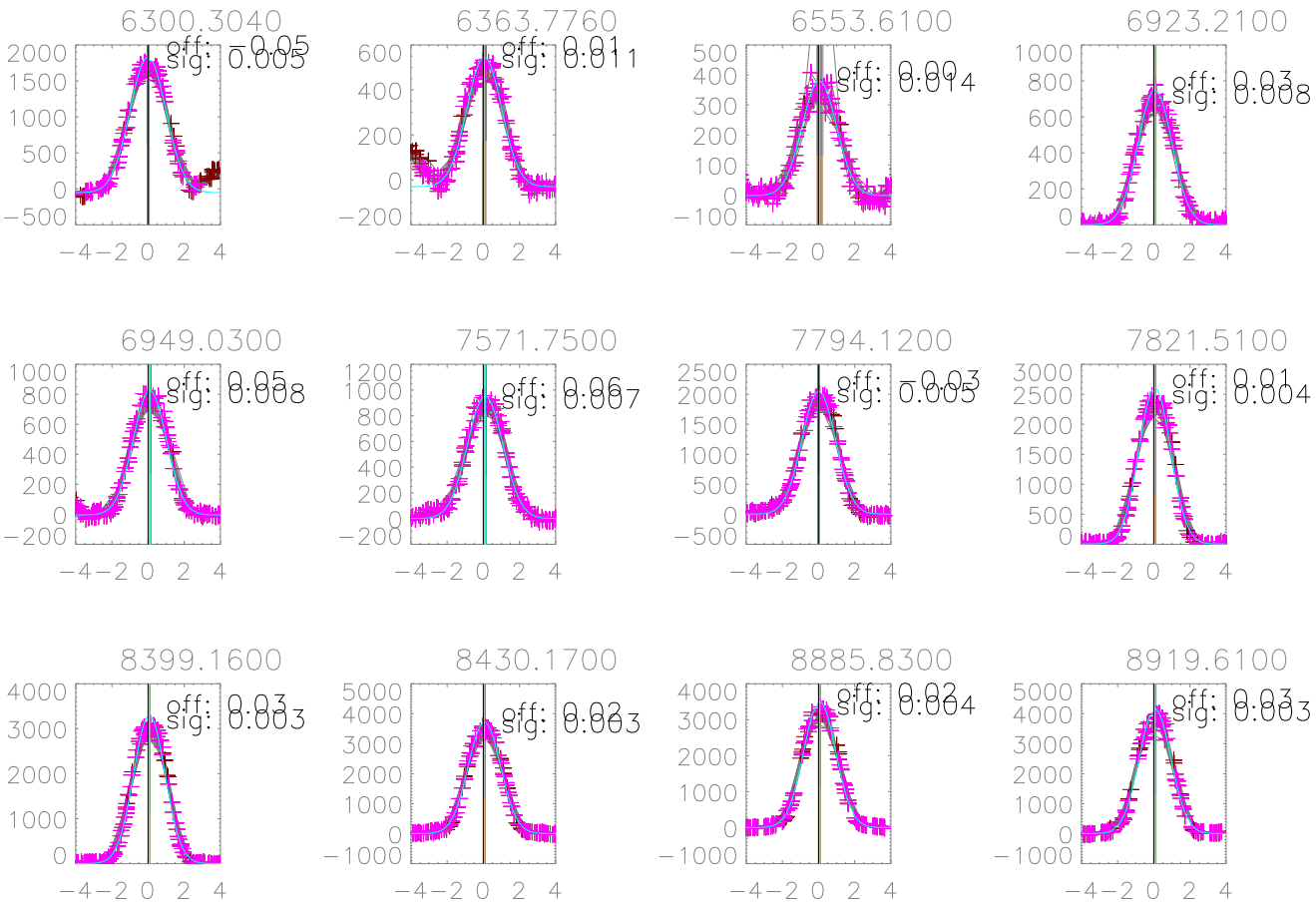

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r1-00030535.fi
31.82
40.91
31.82
22.73
22.73
13.64
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

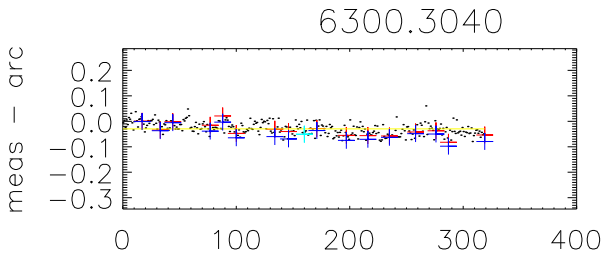

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r1-00030535.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.228
Max value = 42.584
Tue Feb 19 18:07:51 2008

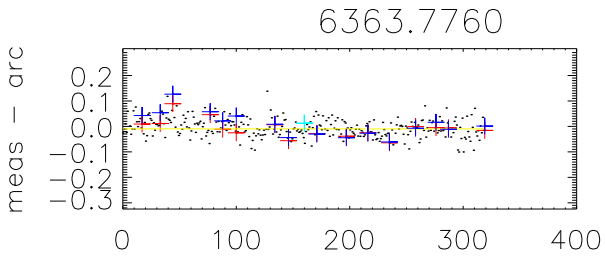

PLATE=1622 MJD=53385 Scattered Light on sdR−r1−00030535.fit
8.91
6.36
6.36
6.36
6.36
8.91
8.91
6.36
6.36
6.36
6.36
6.36
Y [pix]
X [pix]
0
500
1000
1500
2000

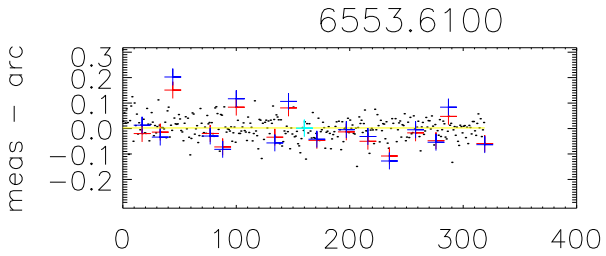

PLATE=1622 MJD=53385 Scattered Light on sdR-r1-00030535.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.548
Max value = 10.646
Tue Feb 19 18:10:12 2008

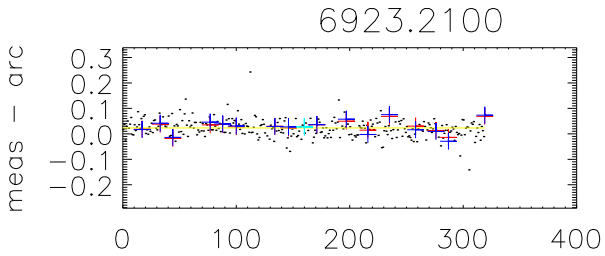

PLATE=1622 MJD=53385 Extraction chi^2 for sdR−r1−00030535.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

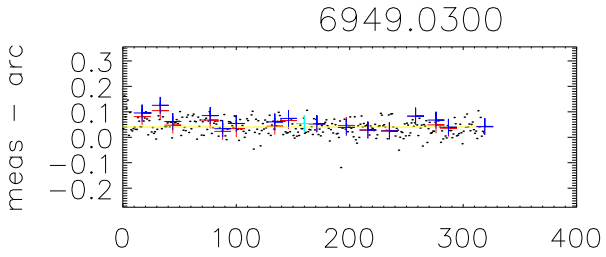

6300.3040
off: −0.05
sig: 0.005
6363.7760
off: 0.01
sig: 0.011
6553.6100
off: 0.00
sig: 0.014
6923.2100
off: 0.03
sig: 0.008
6949.0300
off: 0.05
sig: 0.008
7571.7500
off: 0.06
sig: 0.007
7794.1200
off: −0.03
sig: 0.005
7821.5100
off: 0.01
sig: 0.004
8399.1600
off: 0.03
sig: 0.003
8430.1700
off: 0.02
sig: 0.003
8885.8300
off: 0.02
sig: 0.004
8919.6100
off: 0.03
sig: 0.003

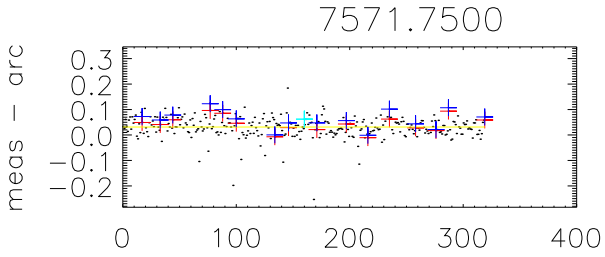

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

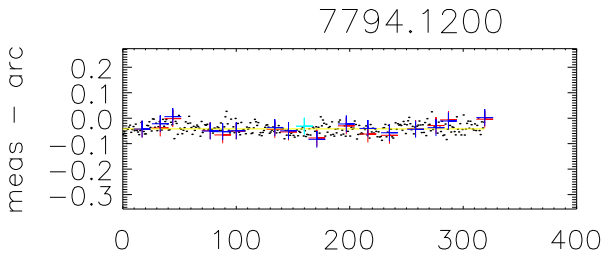

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

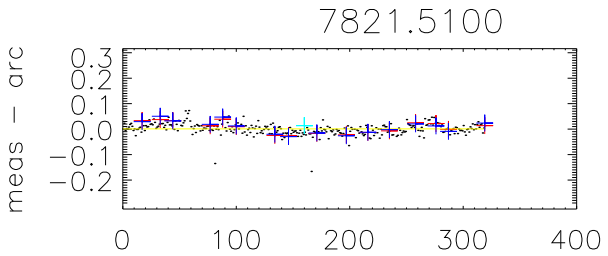

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

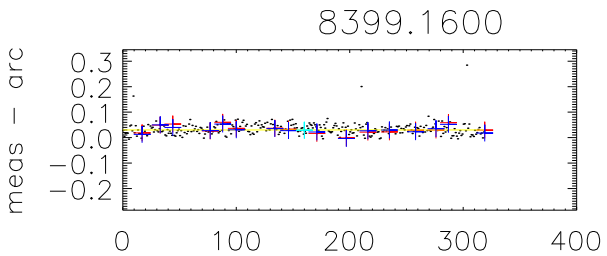

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

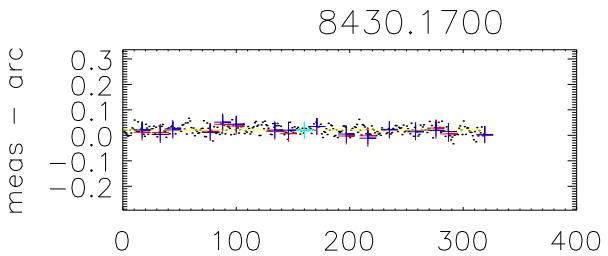

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

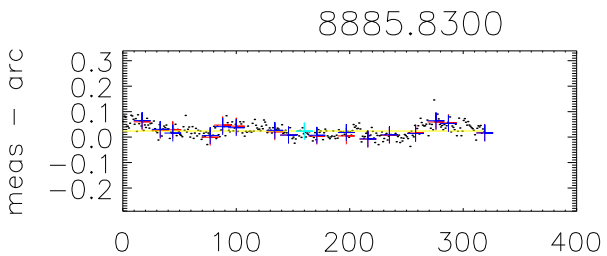

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

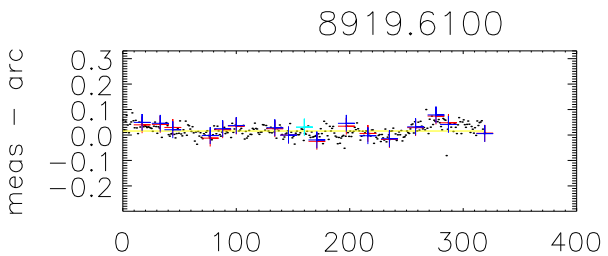

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

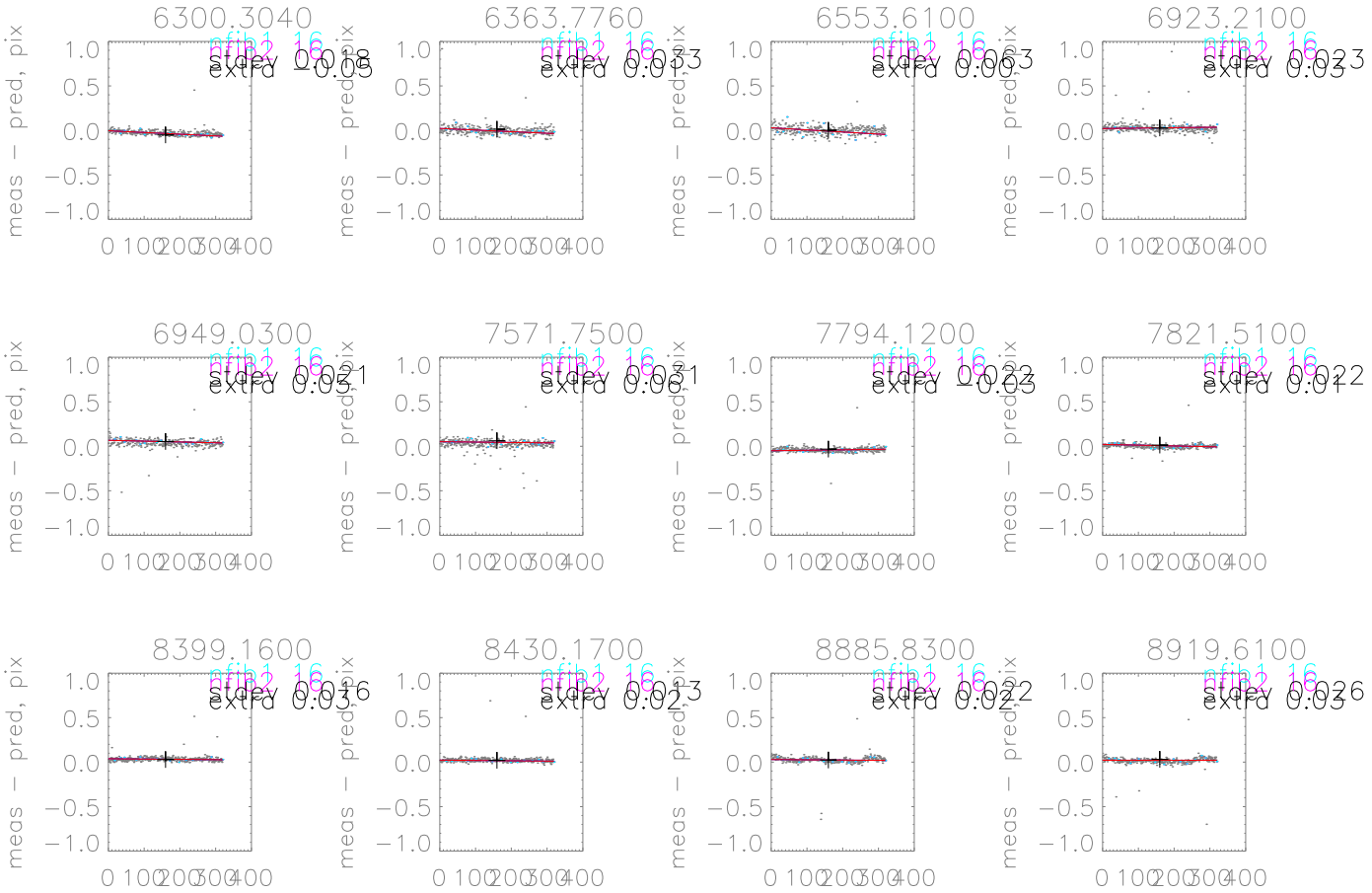

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

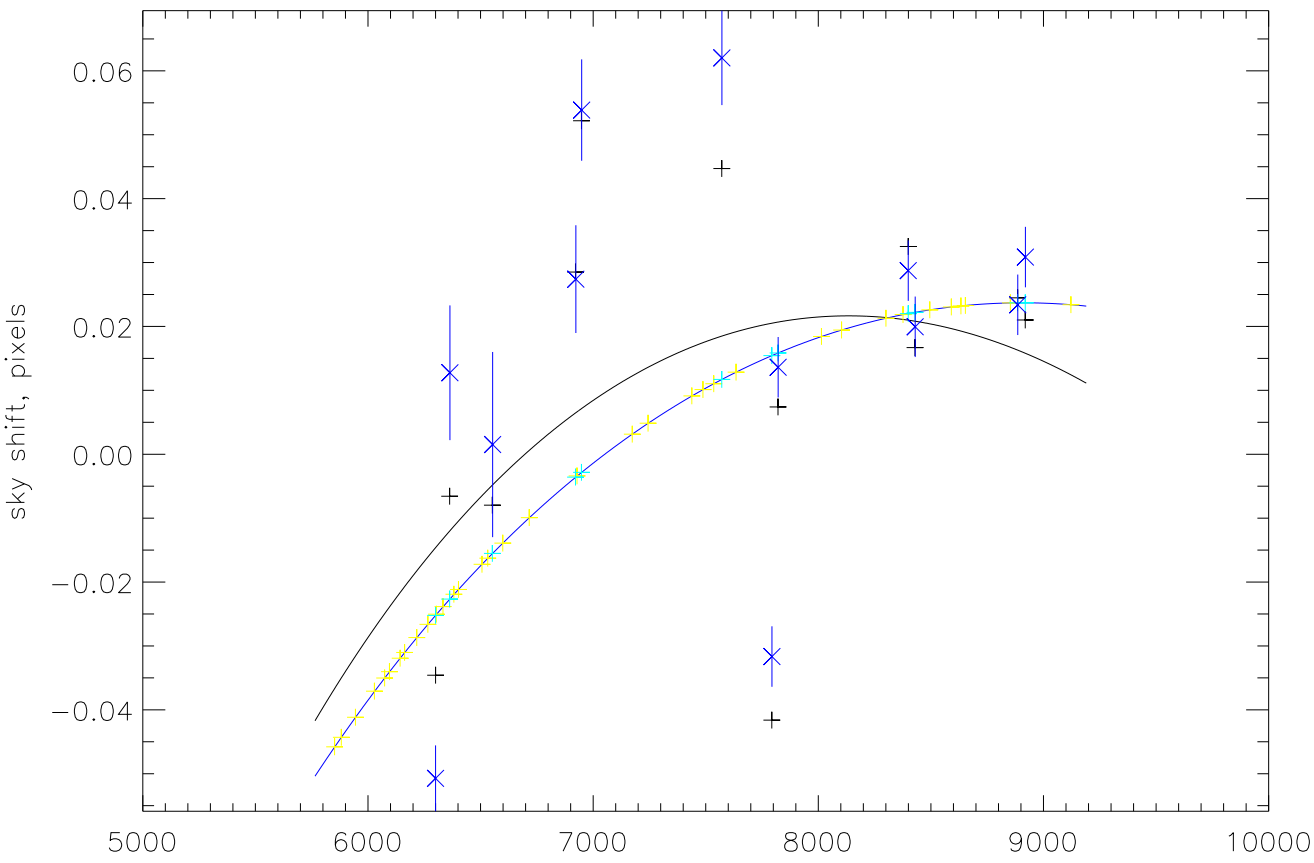

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

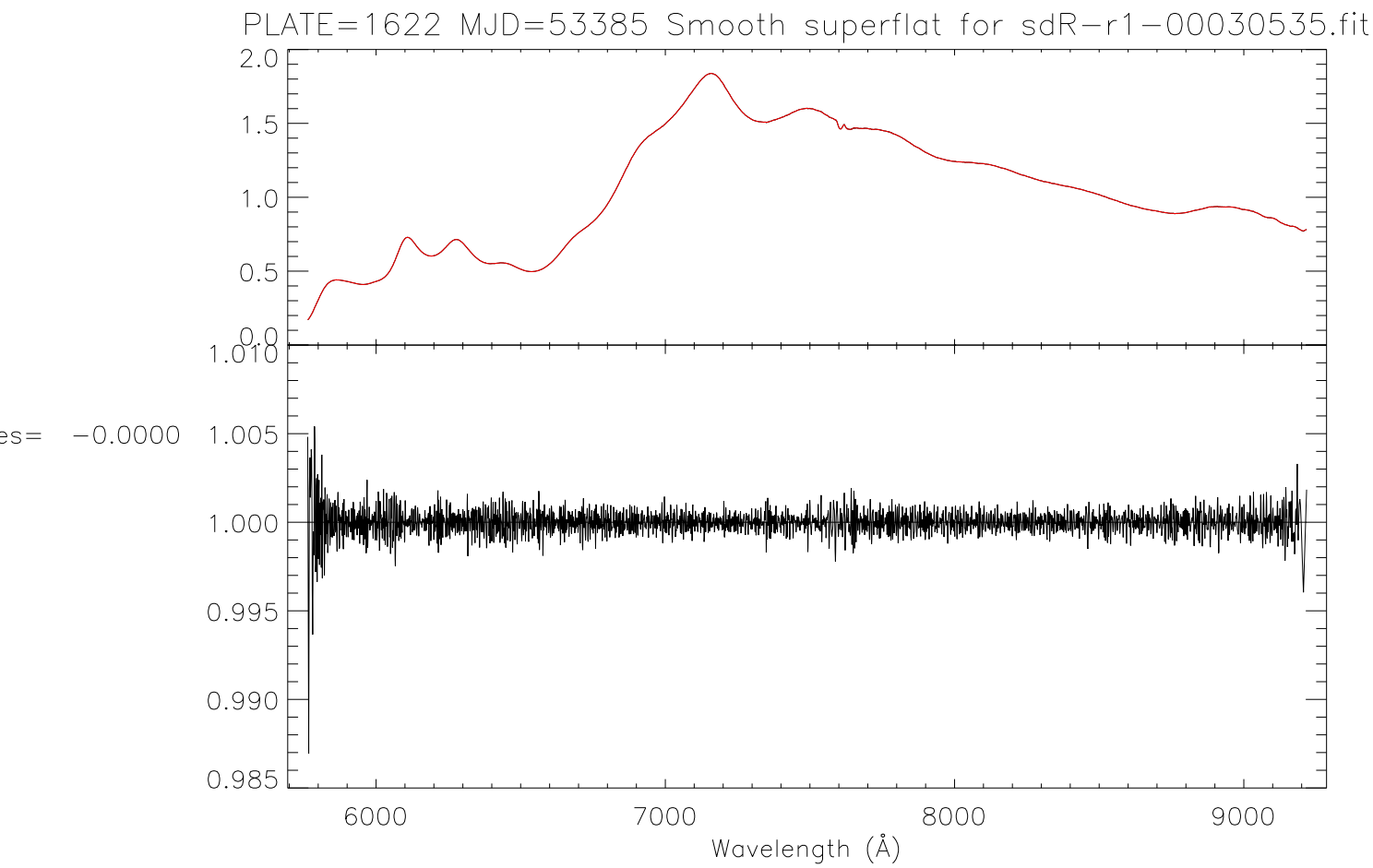

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

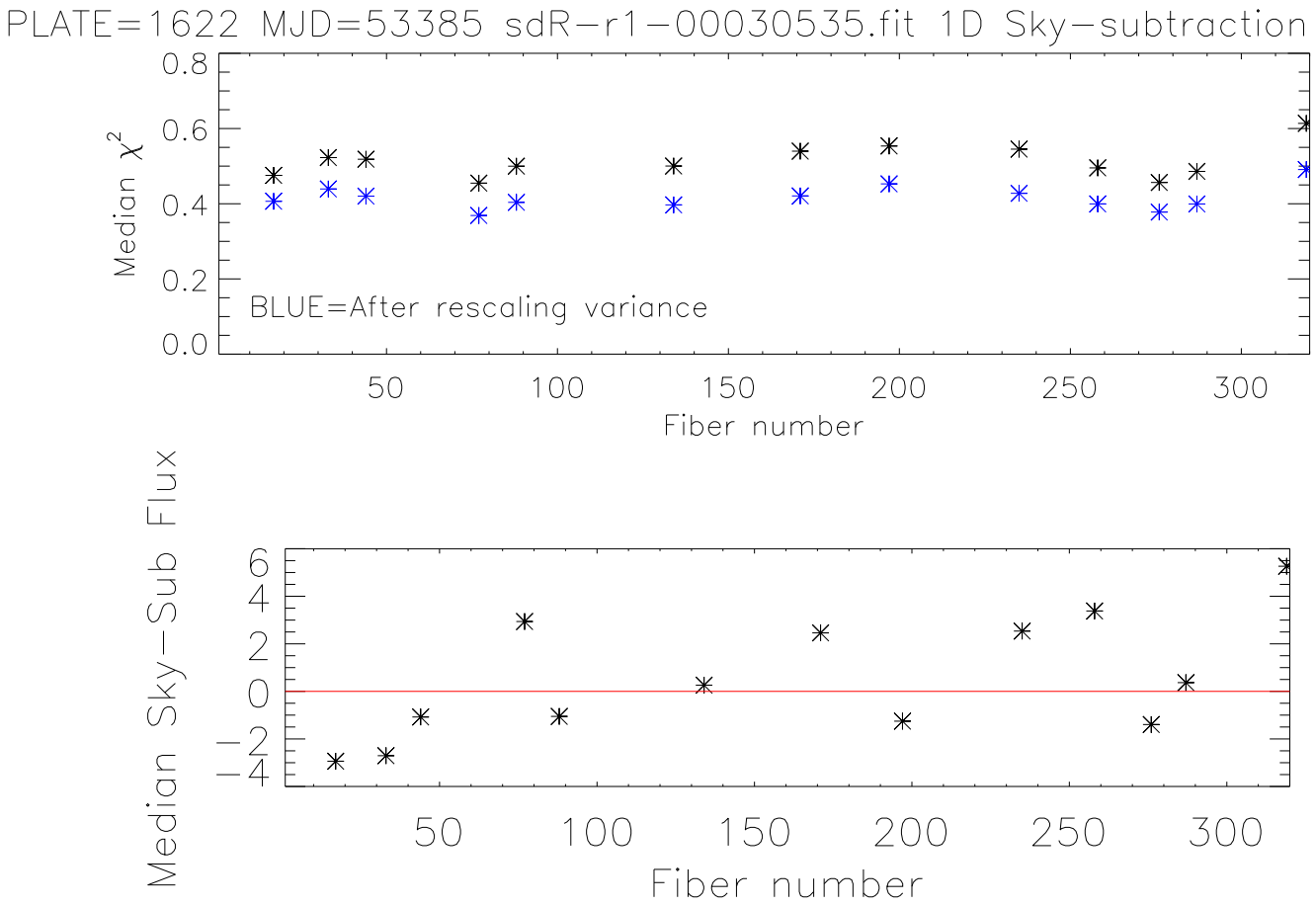

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

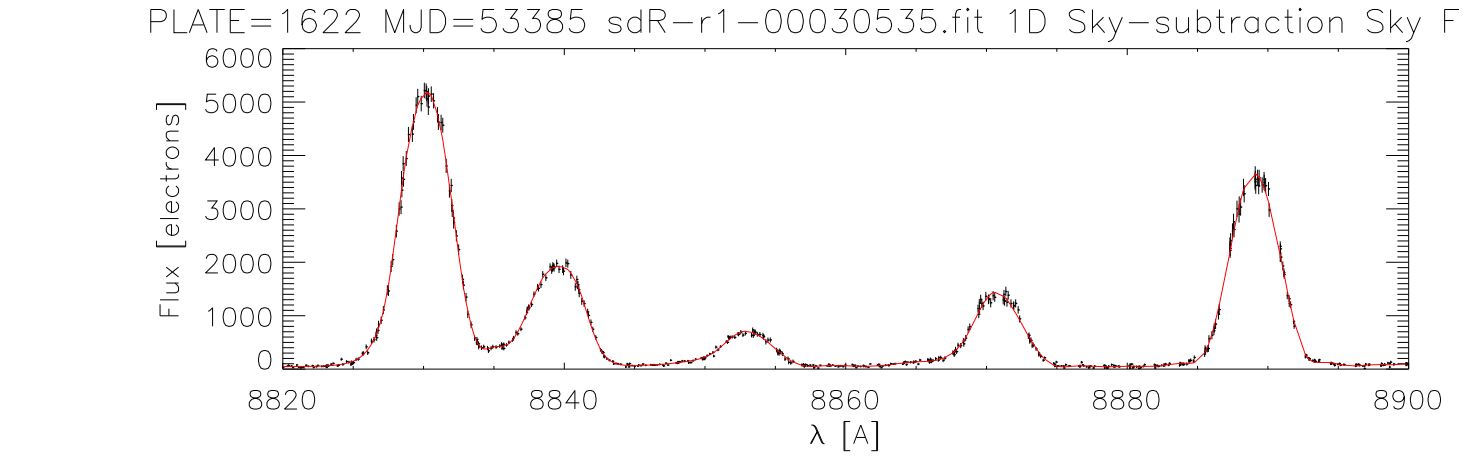

6300.3040
stdev 0.018
extra −0.05
6363.7760
stdev 0.013
extra 0.01
6553.6100
stdev 0.013
extra 0.00
6923.2100
stdev 0.023
extra 0.03
6949.0300
stdev 0.021
extra 0.03
7571.7500
stdev 0.031
extra 0.06
7794.1200
stdev 0.022
extra −0.03
7821.5100
stdev 0.022
extra 0.01
8399.1600
stdev 0.026
extra 0.03
8430.1700
stdev 0.013
extra 0.02
8885.8300
stdev 0.022
extra 0.02
8919.6100
stdev 0.026
extra 0.03
meas − pred, pix
mfbx1 16
mfbx2 16

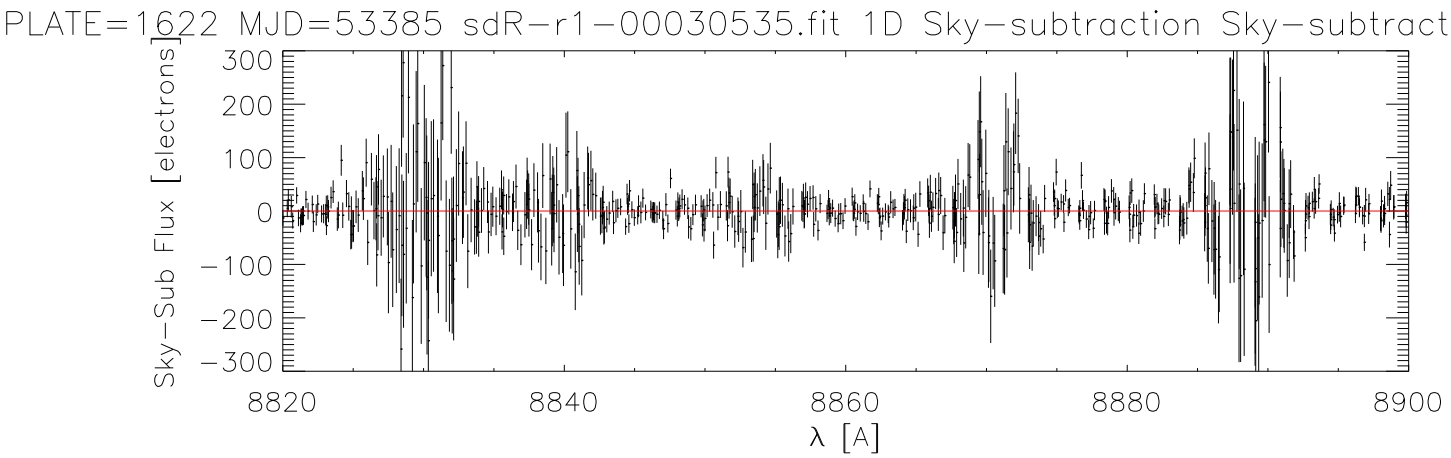

sky shift, pixels
0.06
0.04
0.02
0.00
−0.02
−0.04
5000
6000
7000
8000
9000
10000

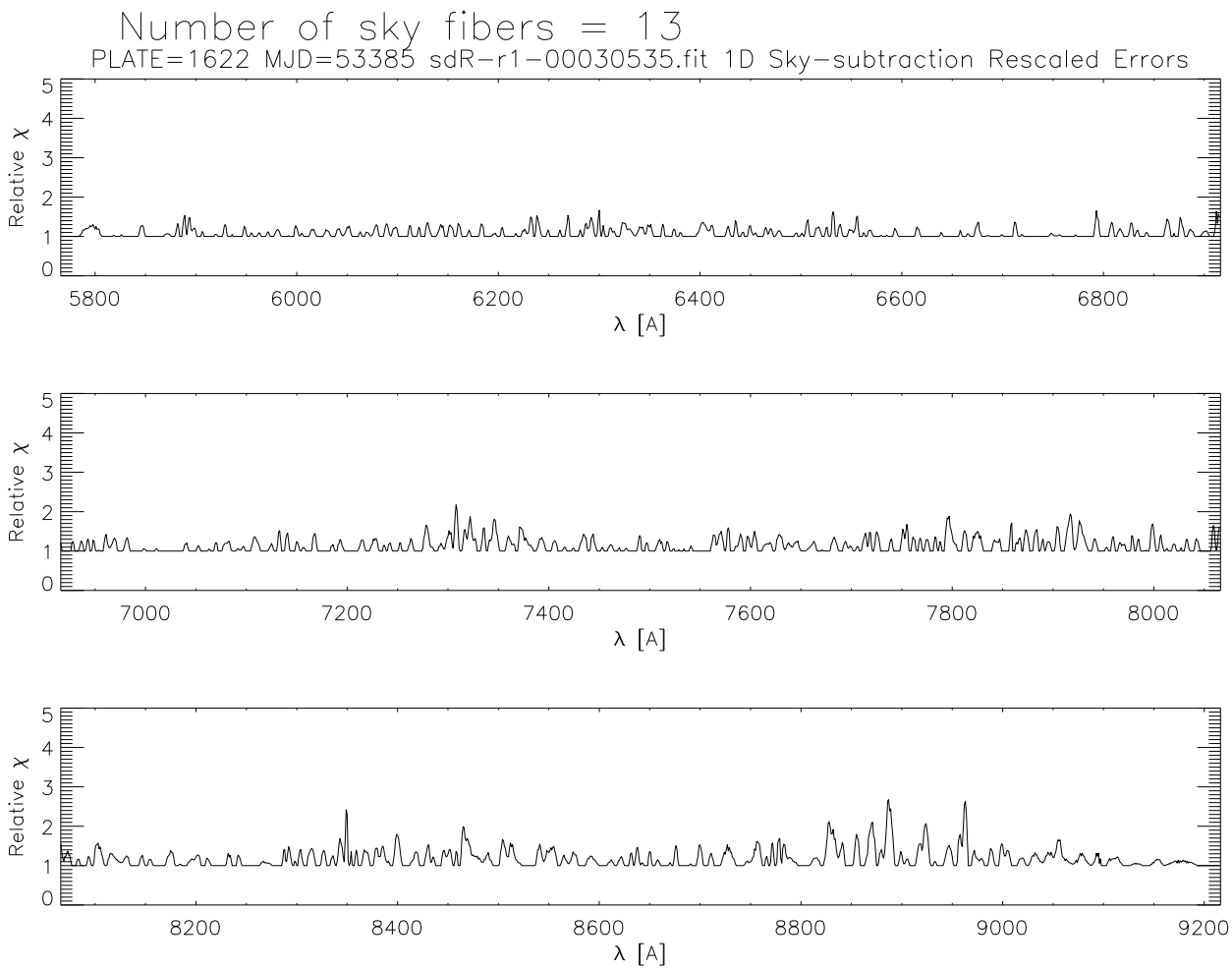

PLATE=1622 MJD=53385 Smooth superflat for sdR-r1-00030535.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

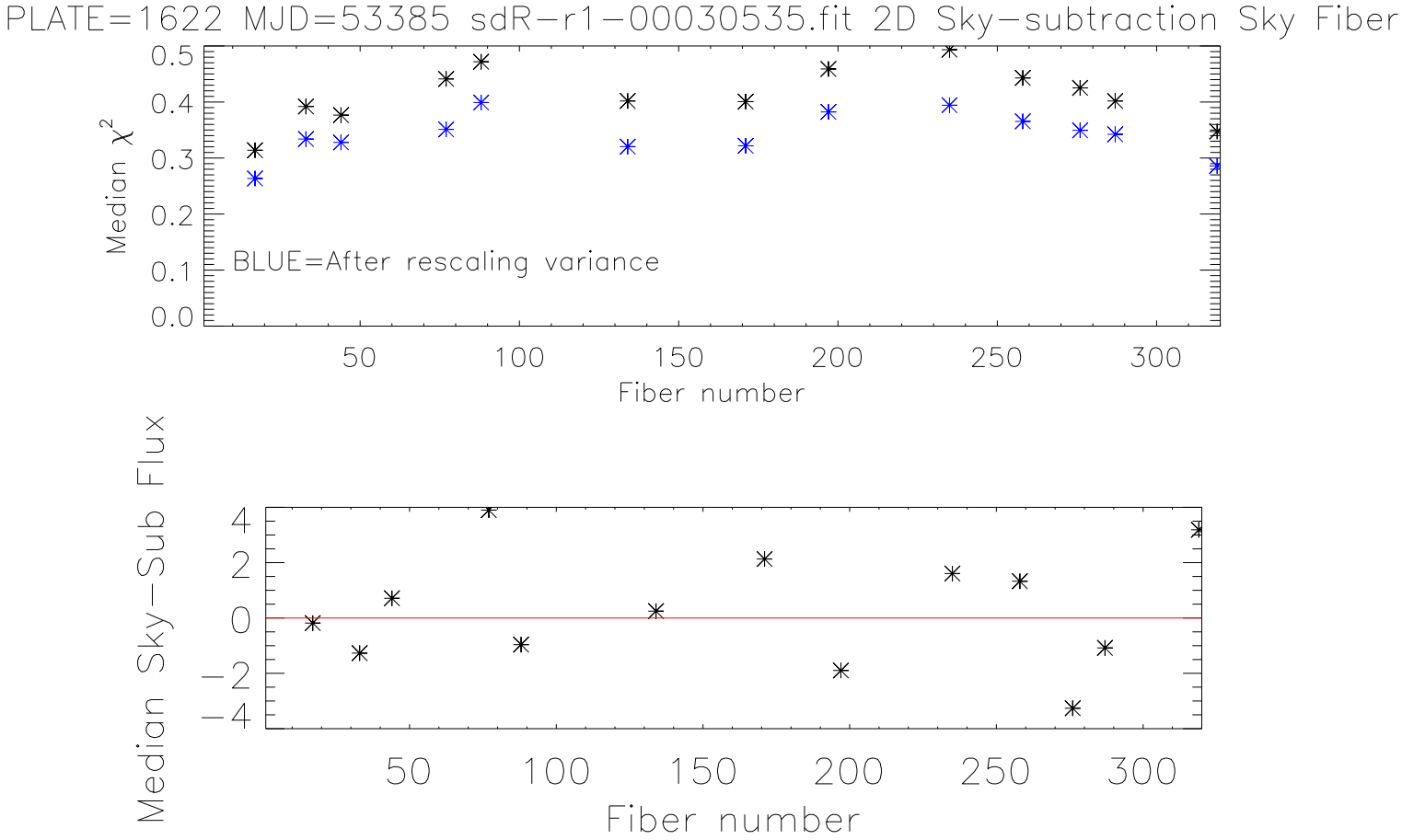

PLATE=1622 MJD=53385 sdR-r1-00030535.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

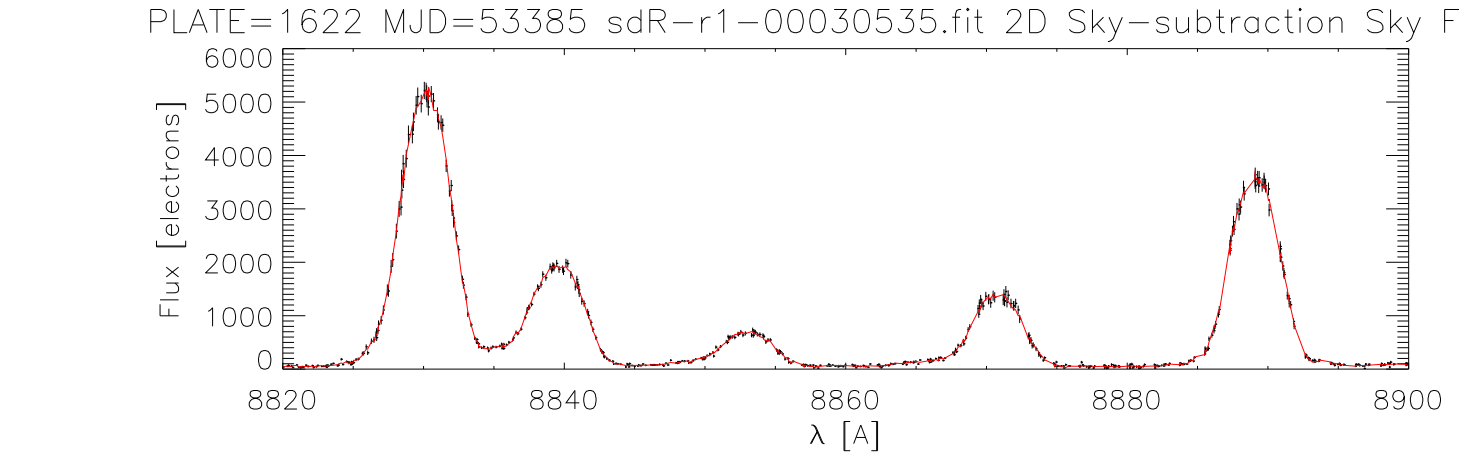
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

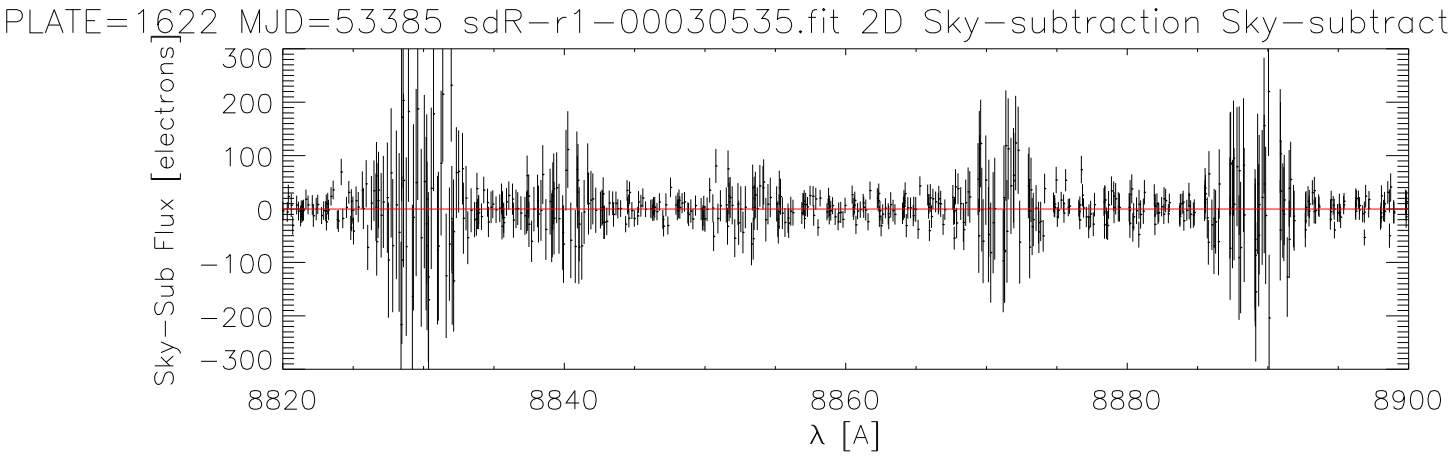

PLATE=1622 MJD=53385 sdR-r1-00030535.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

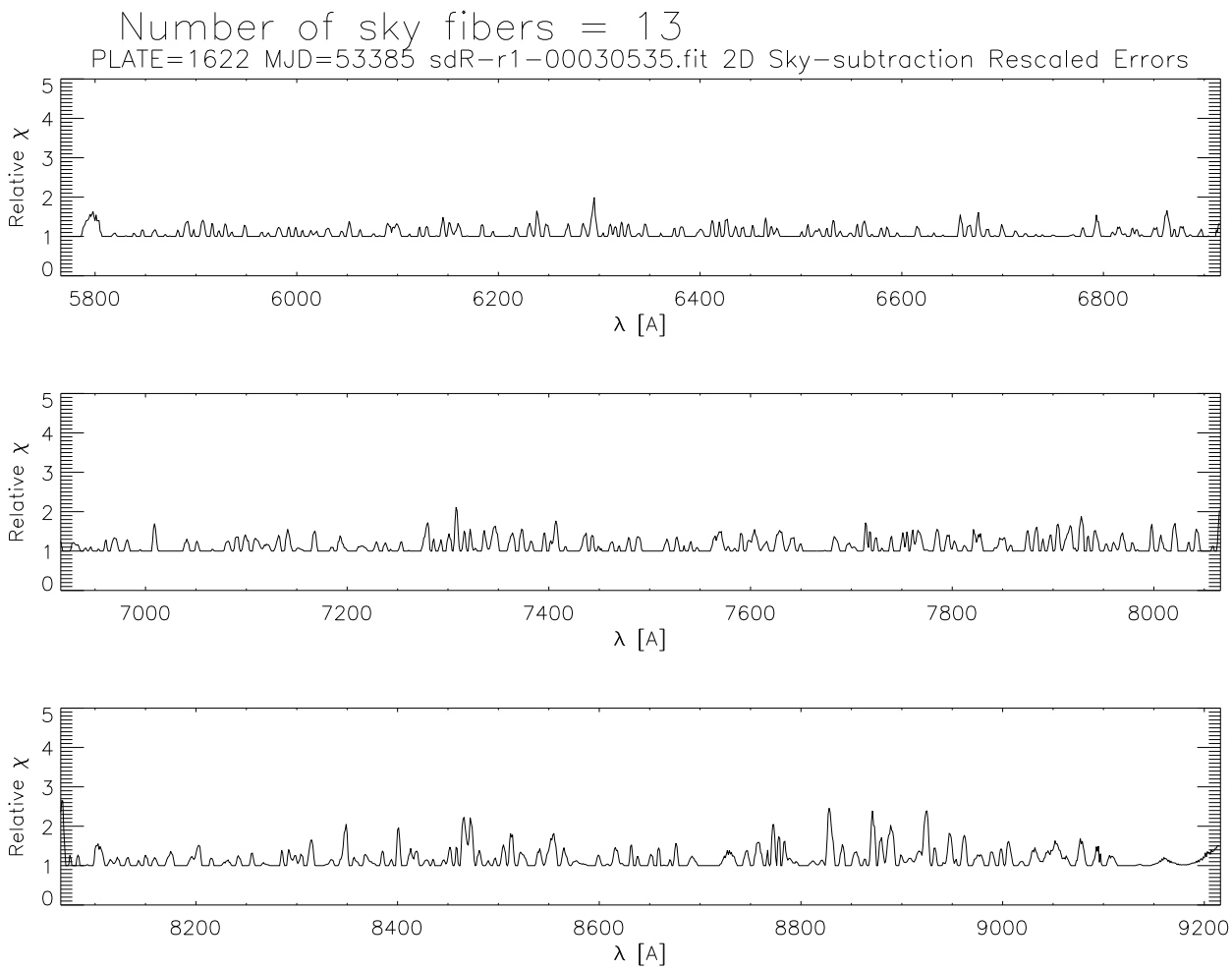

PLATE=1622 MJD=53385 sdR-r1-00030535.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

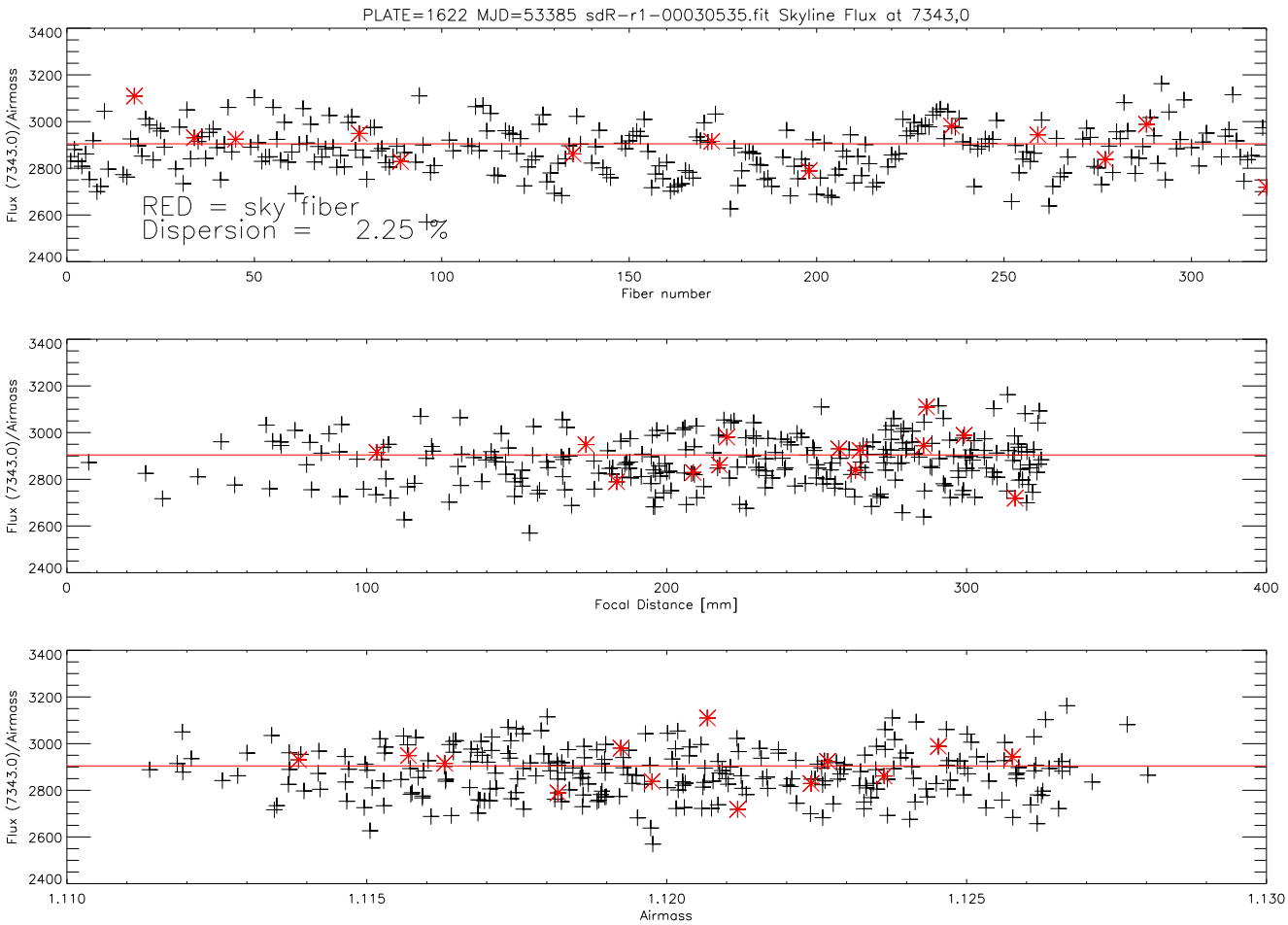

Number of sky fibers = 13
PLATE=1622 MJD=53385 sdR-r1-00030535.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

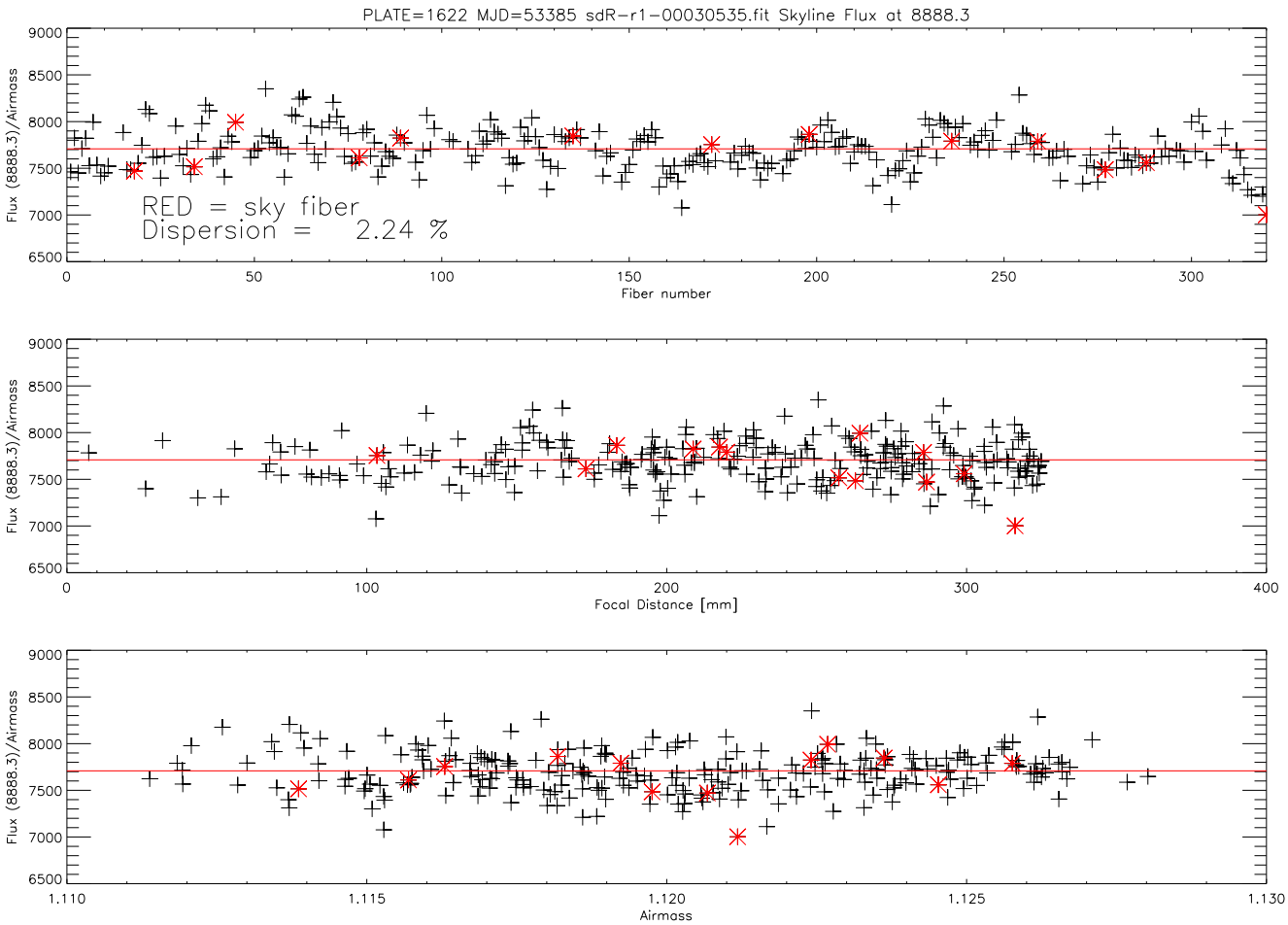

PLATE=1622 MJD=53385 sdR-r1-00030535.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

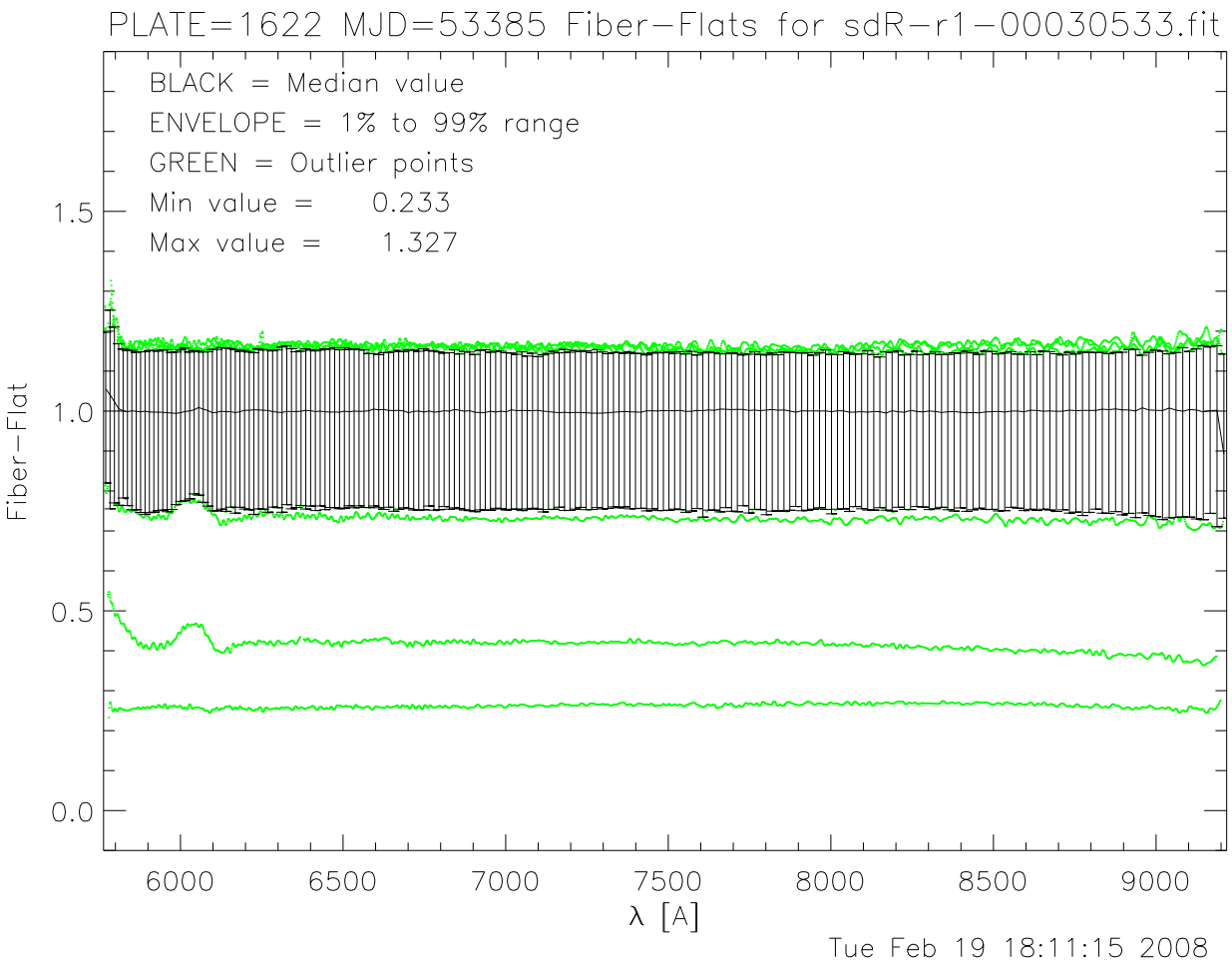

PLATE=1622 MJD=53385 sdR-r1-00030535.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

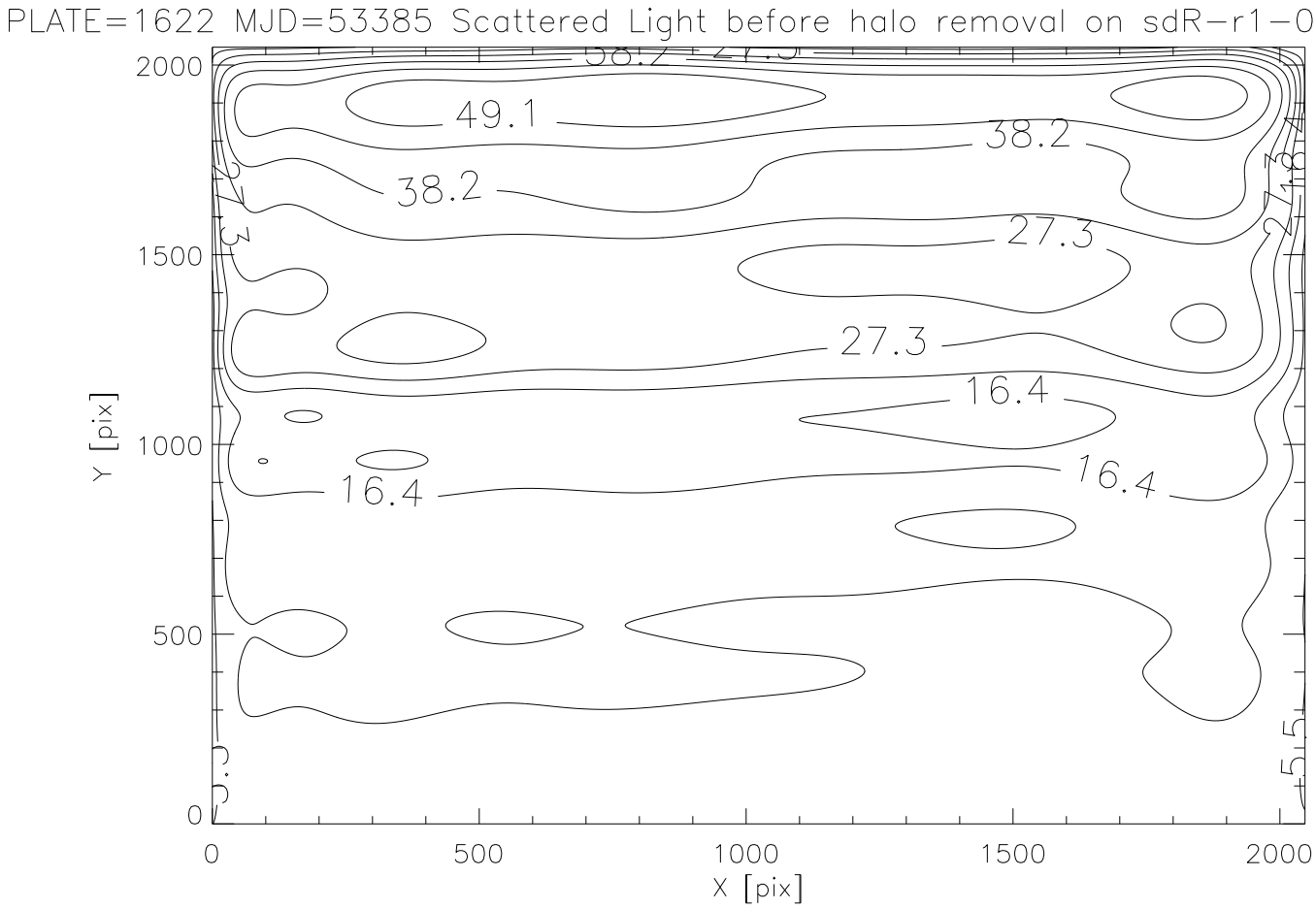

PLATE=1622 MJD=53385 sdR-r1-00030535.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

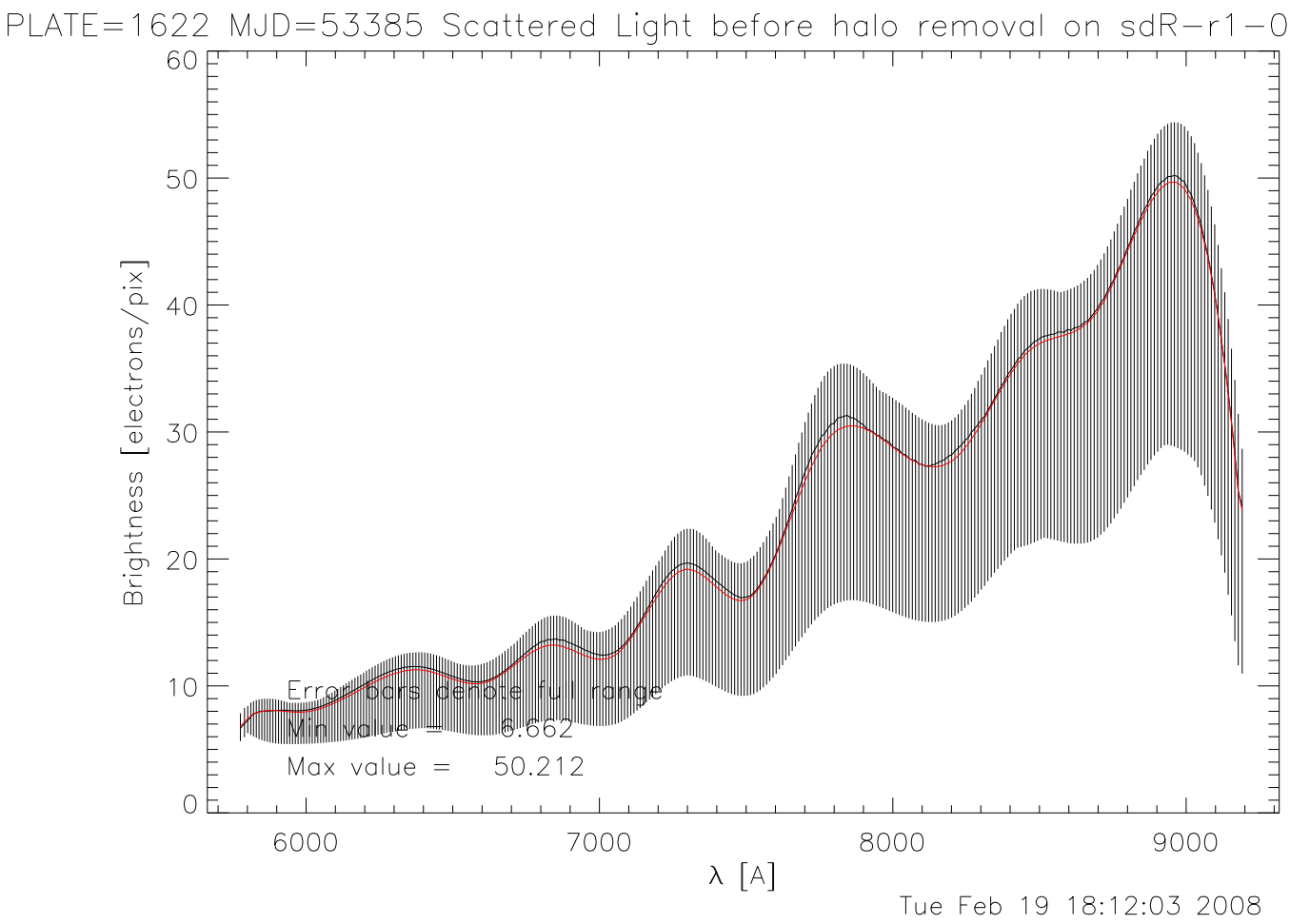

Number of sky fibers = 13
PLATE=1622 MJD=53385 sdR-r1-00030535.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

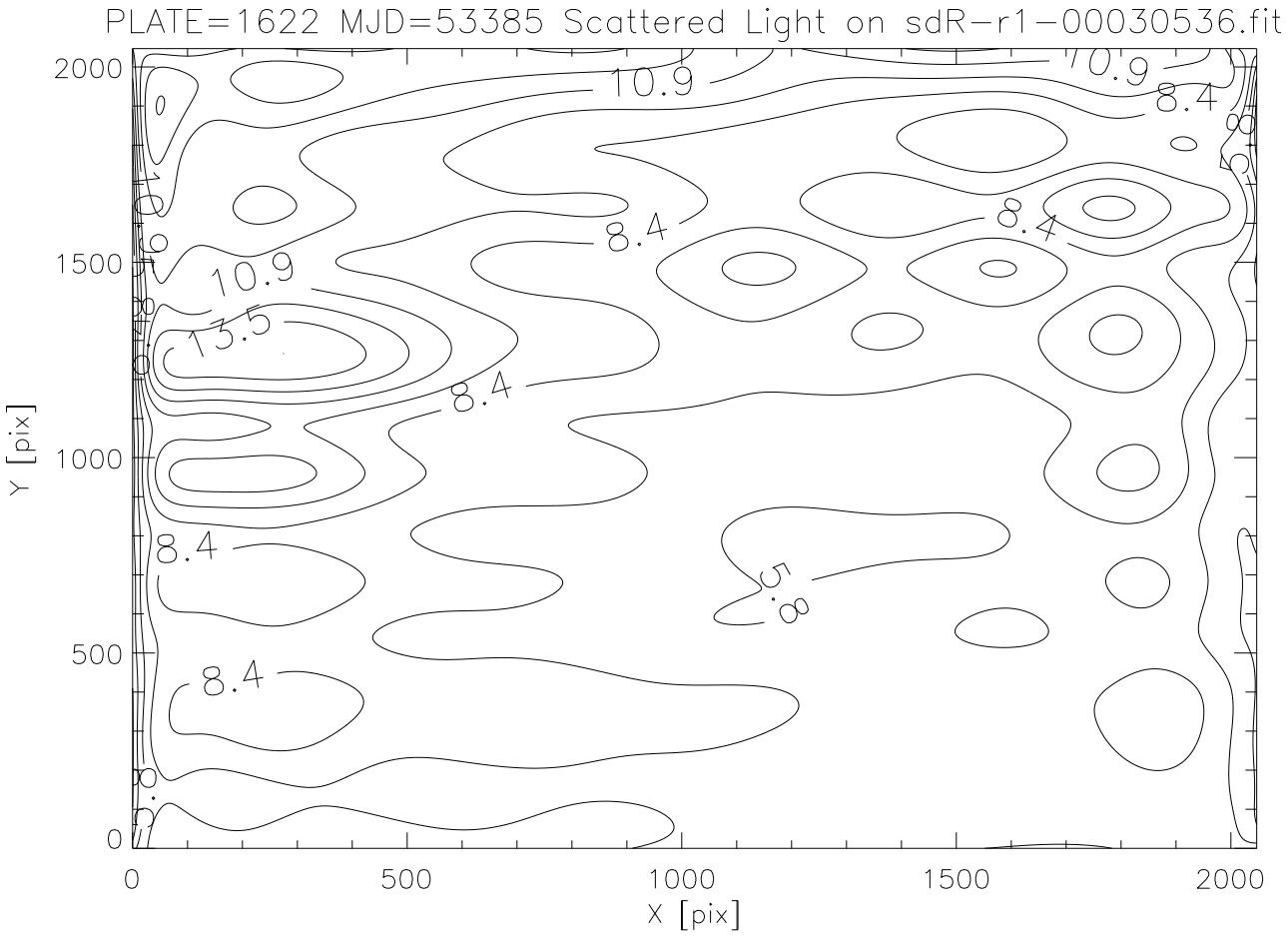

PLATE=1622 MJD=53385 sdR-r1-00030535.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.25 %
Fiber number
Focal Distance [mm]
Airmass

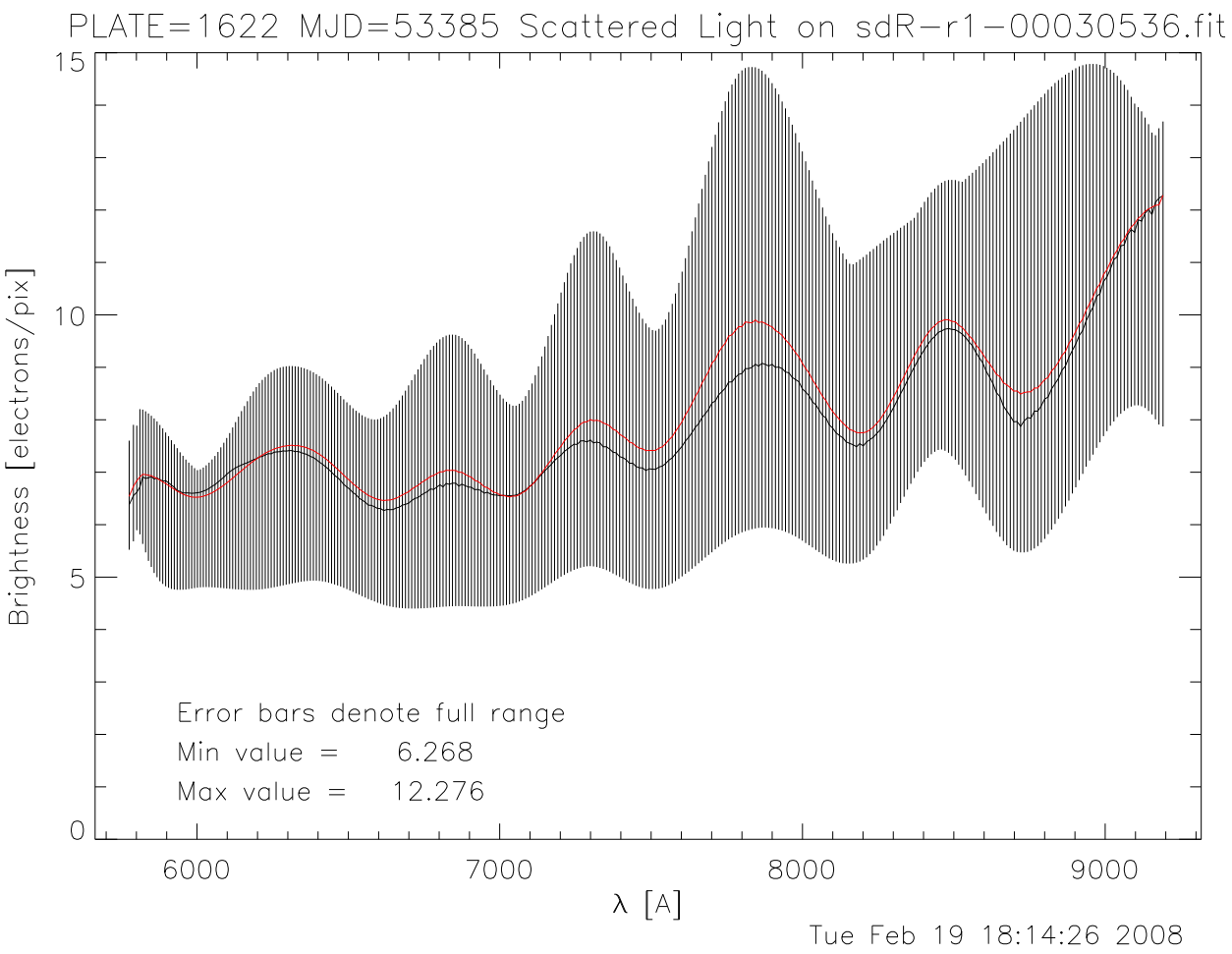

PLATE=1622 MJD=53385 sdR-r1-00030535.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.24 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

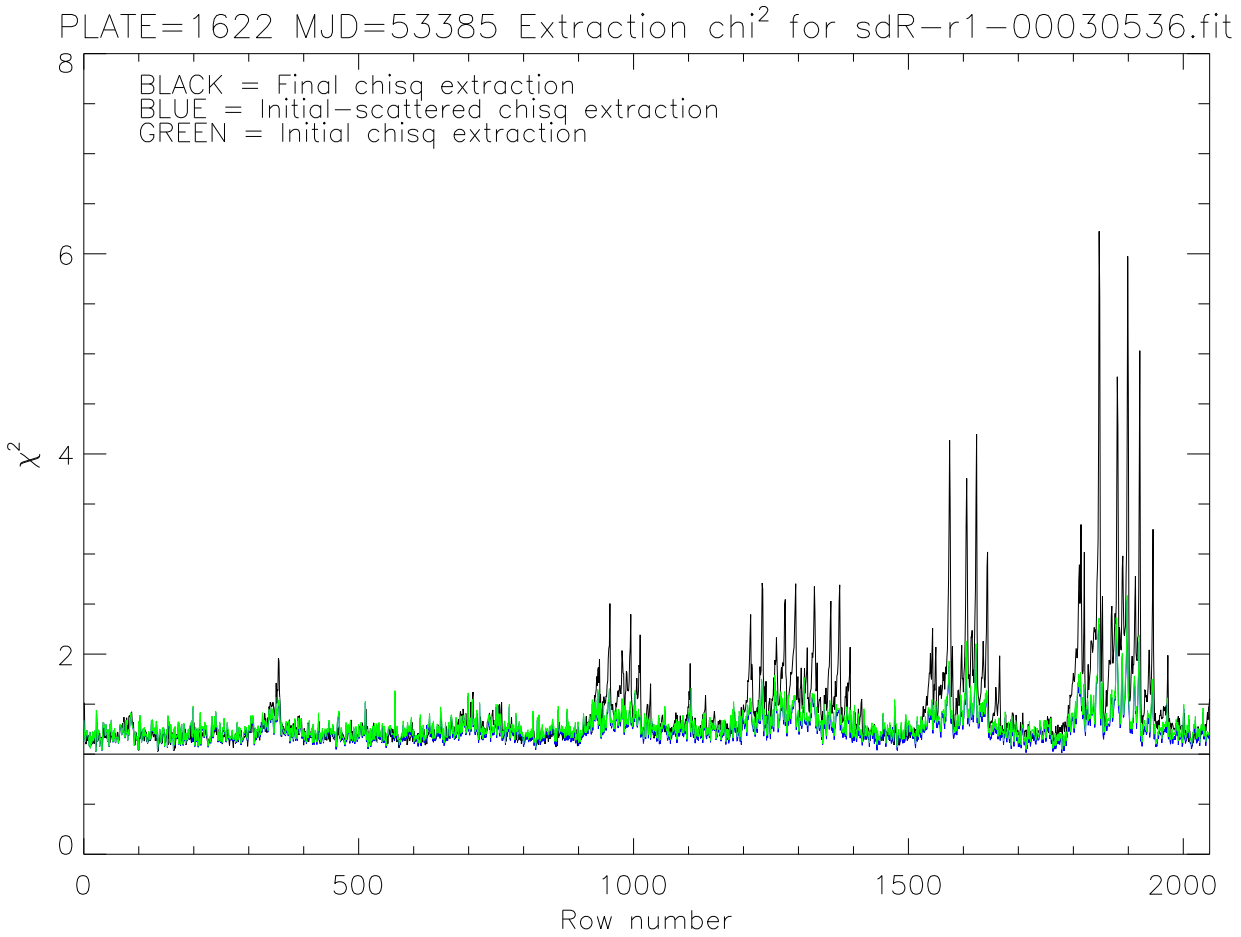

PLATE=1622 MJD=53385 Fiber−Flats for sdR−r1−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.233
Max value = 1.327
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 18:11:15 2008

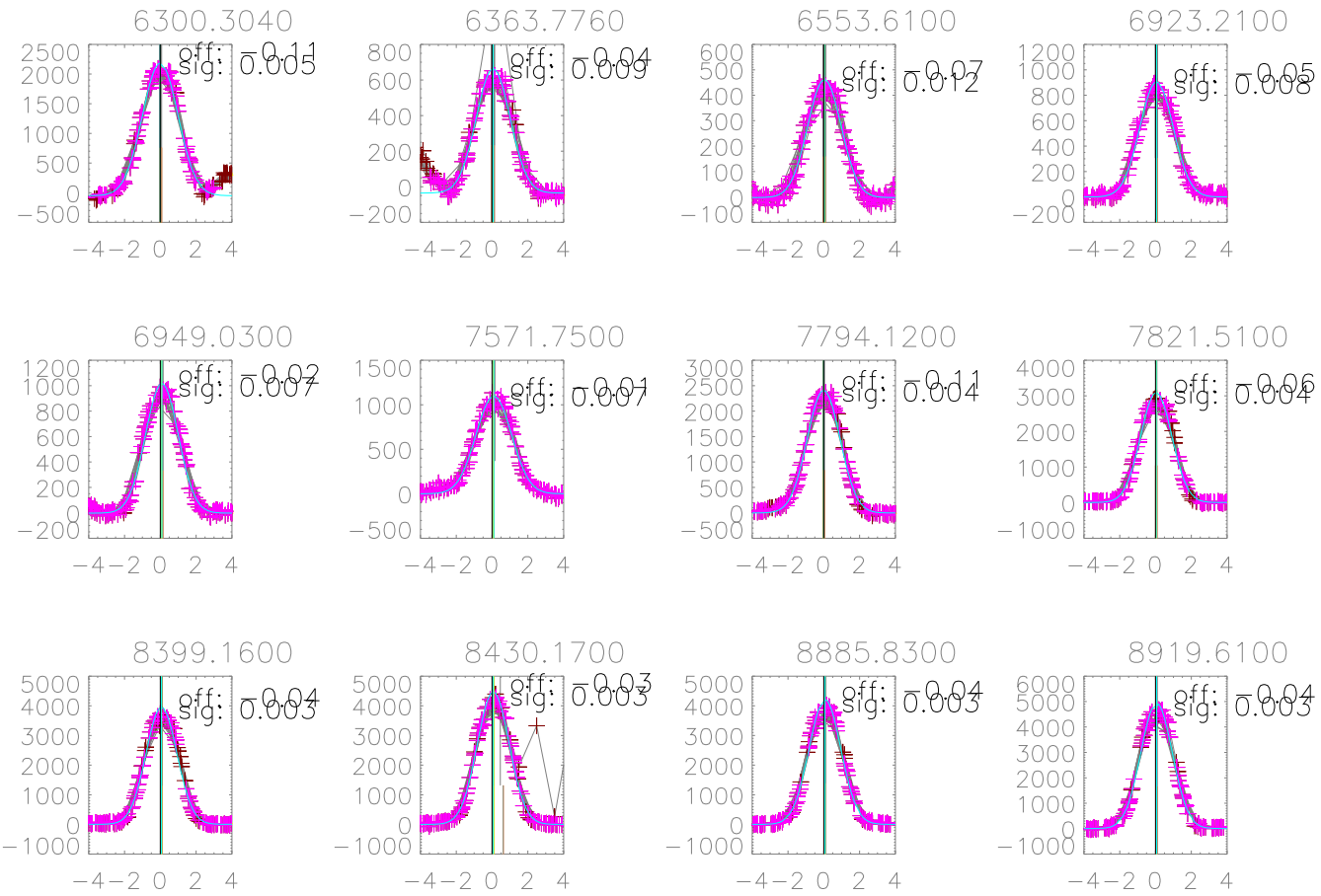

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r1-00030536.fi
49.1
38.2
38.2
27.3
27.3
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

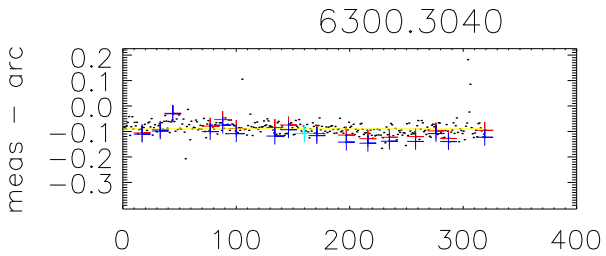

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r1-00030536.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.662
Max value = 50.212
Tue Feb 19 18:12:03 2008

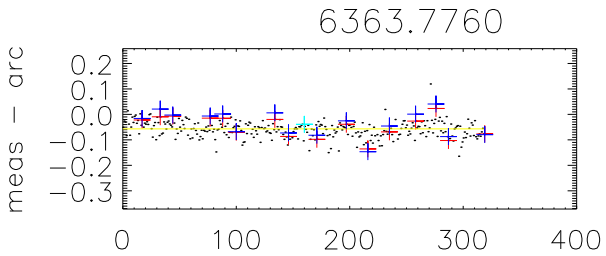

PLATE=1622 MJD=53385 Scattered Light on sdR−r1−00030536.fit
10.9
8.4
13.5
Y [pix]
X [pix]
0
500
1000
1500
2000

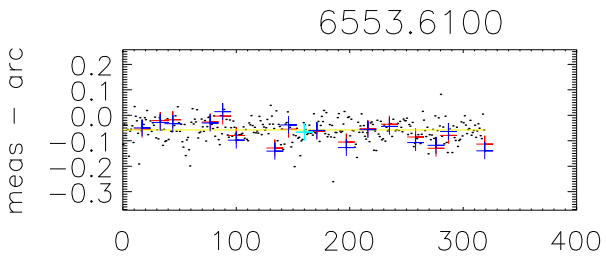

PLATE=1622 MJD=53385 Scattered Light on sdR-r1-00030536.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.268
Max value = 12.276
Tue Feb 19 18:14:26 2008

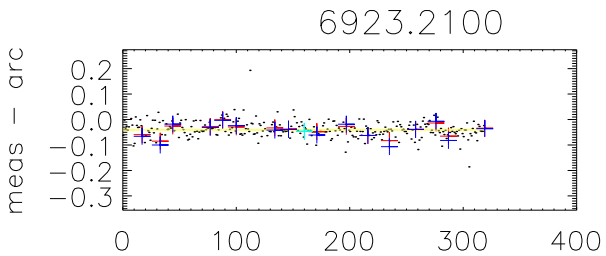

PLATE=1622 MJD=53385 Extraction chi^2 for sdR−r1−00030536.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

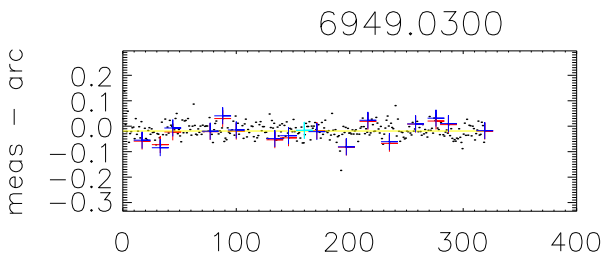

6300.3040
off: −0.11
sig: 0.005
6363.7760
off: −0.04
sig: 0.009
6553.6100
off: −0.07
sig: 0.012
6923.2100
off: −0.05
sig: 0.008
6949.0300
off: −0.02
sig: 0.007
7571.7500
off: −0.01
sig: 0.007
7794.1200
off: −0.11
sig: 0.004
7821.5100
off: −0.06
sig: 0.004
8399.1600
off: −0.04
sig: 0.003
8430.1700
off: −0.03
sig: 0.003
8885.8300
off: −0.04
sig: 0.003
8919.6100
off: −0.04
sig: 0.003

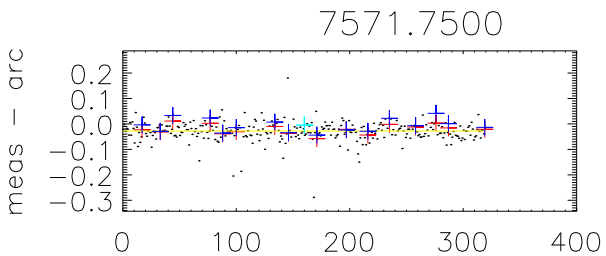

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

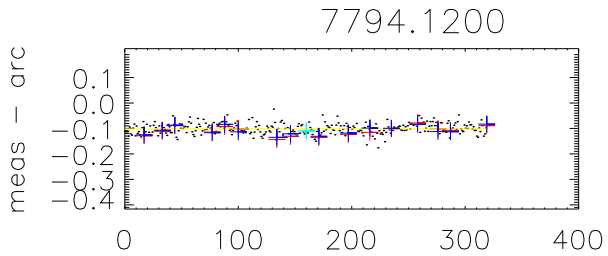

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

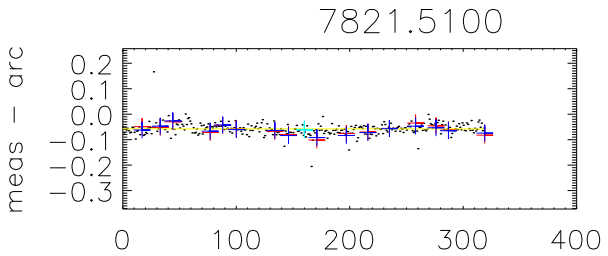

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

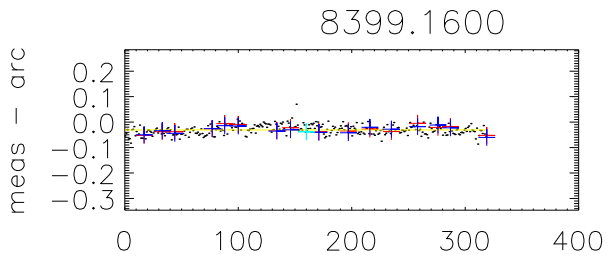

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

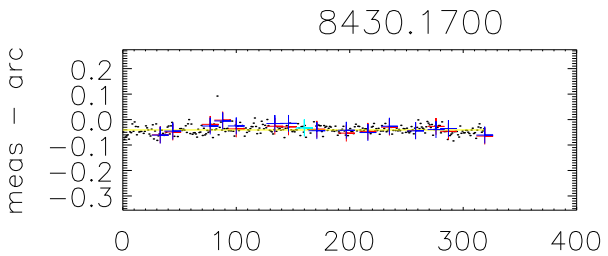

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

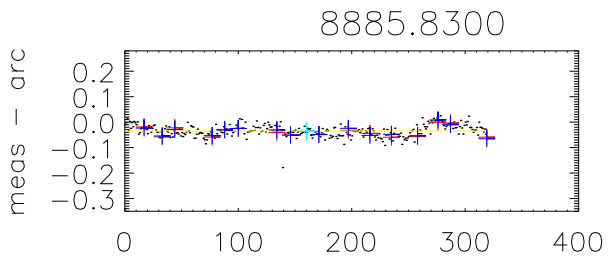

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

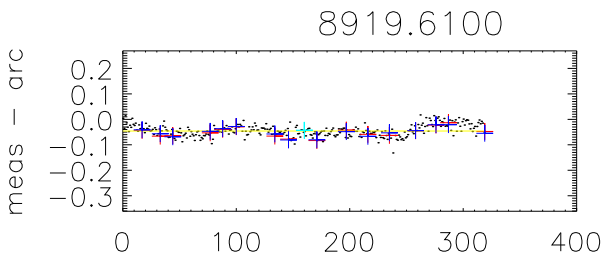

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

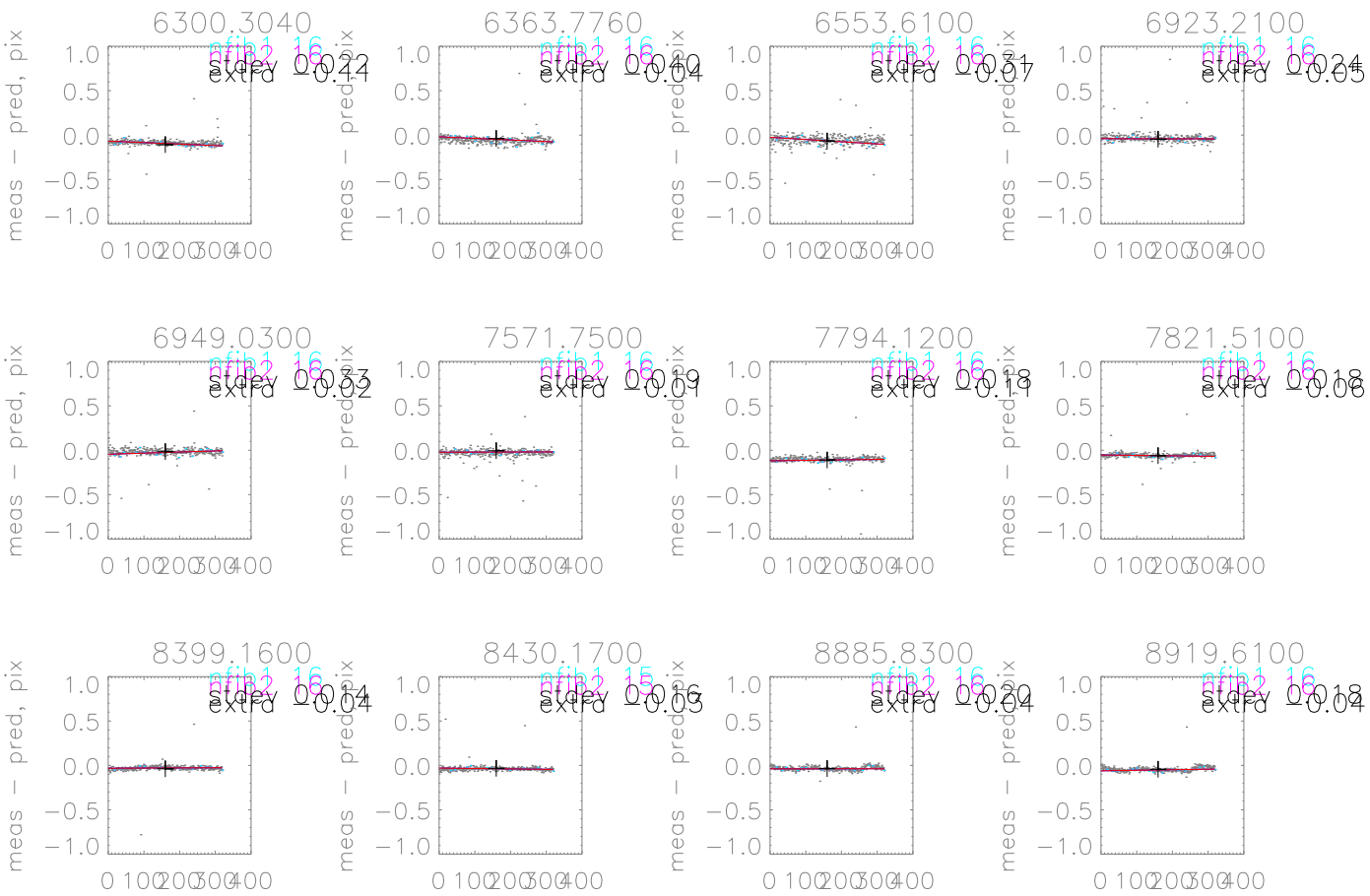

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

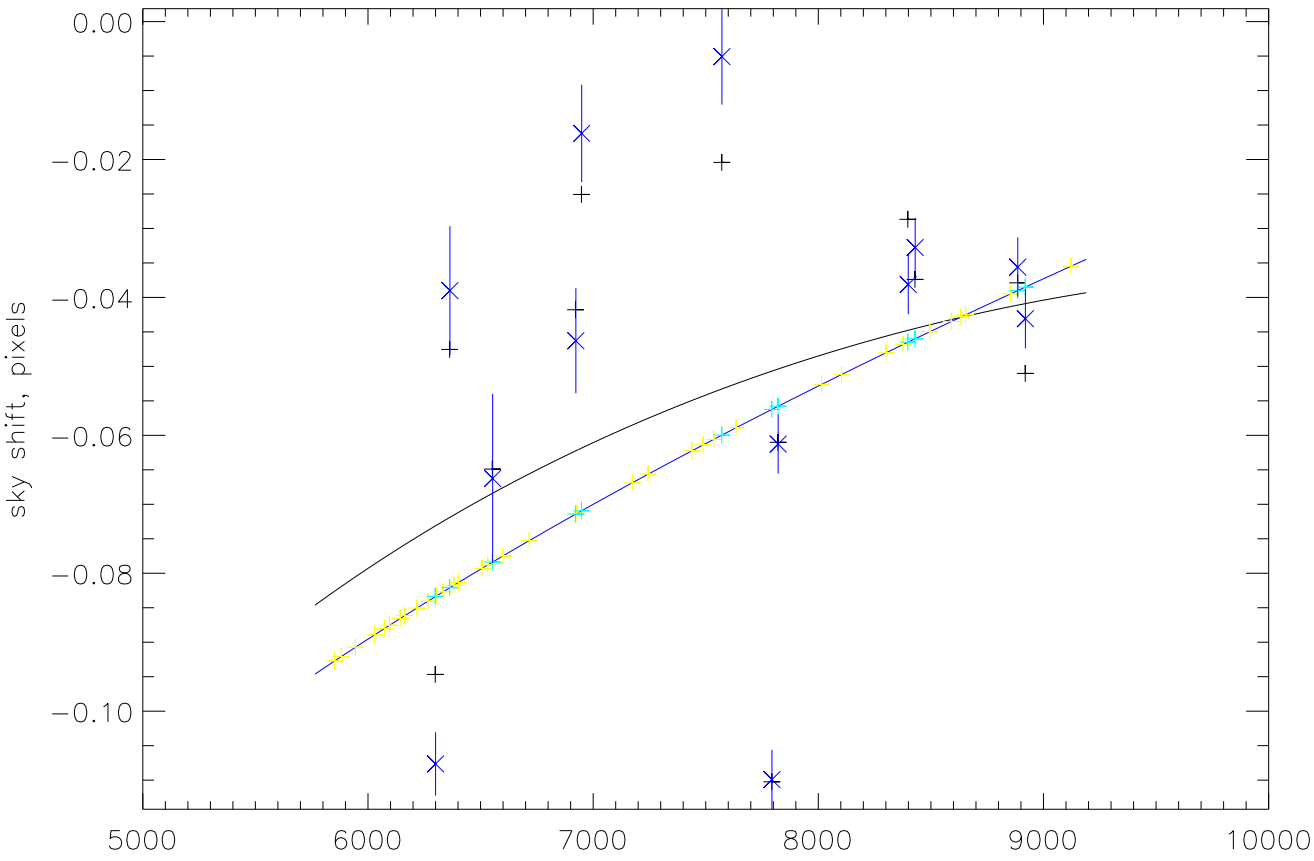

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

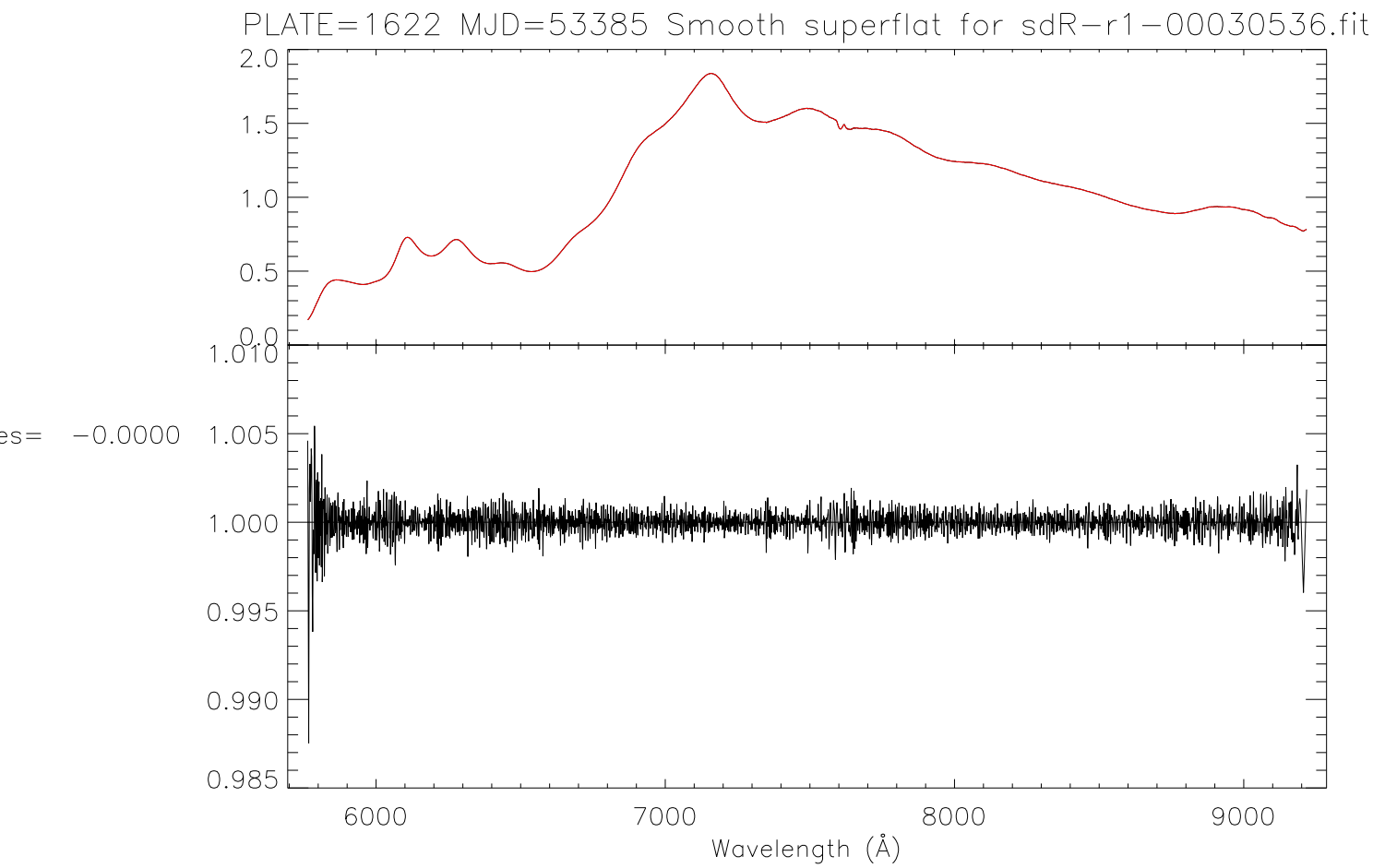

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

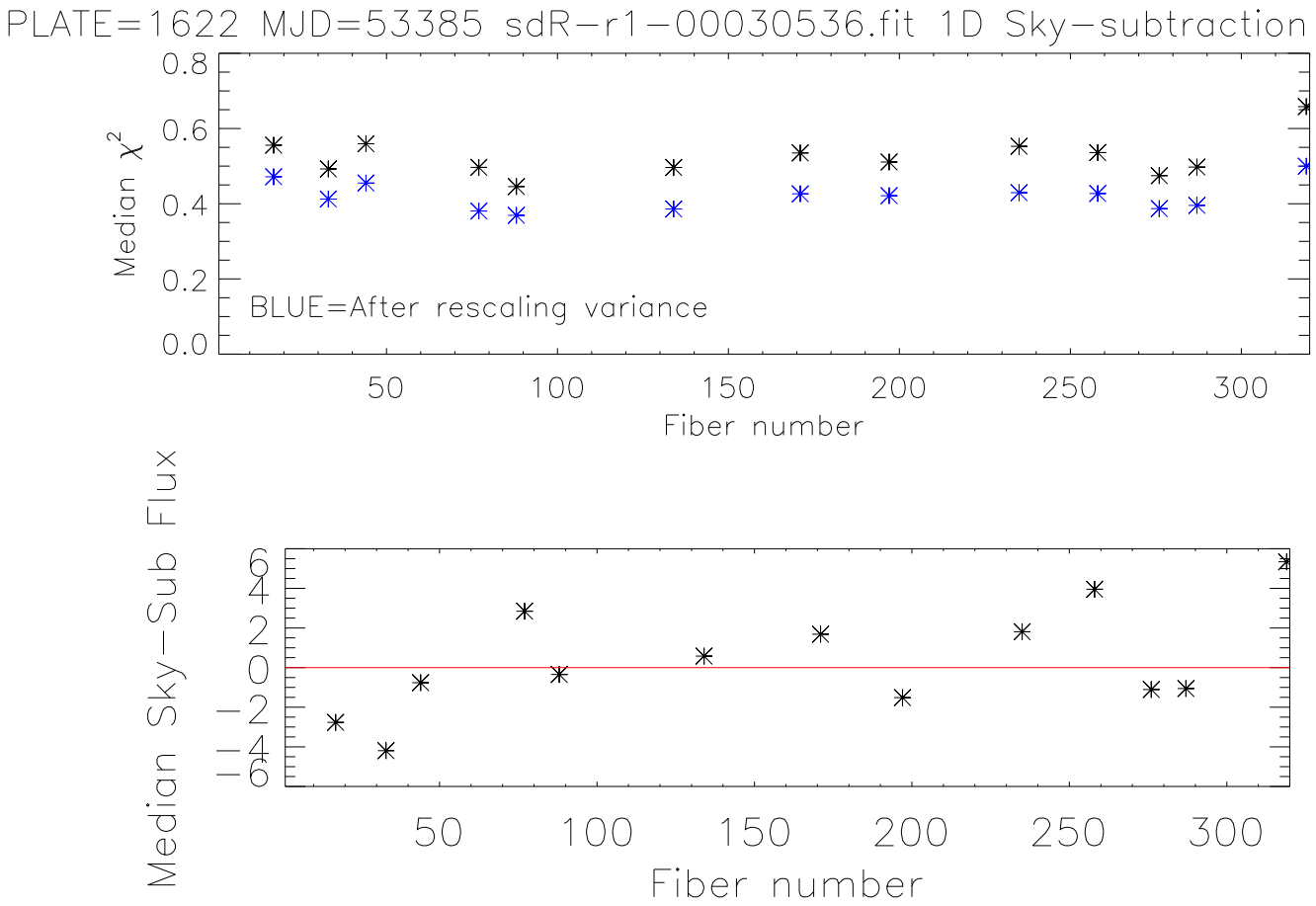

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

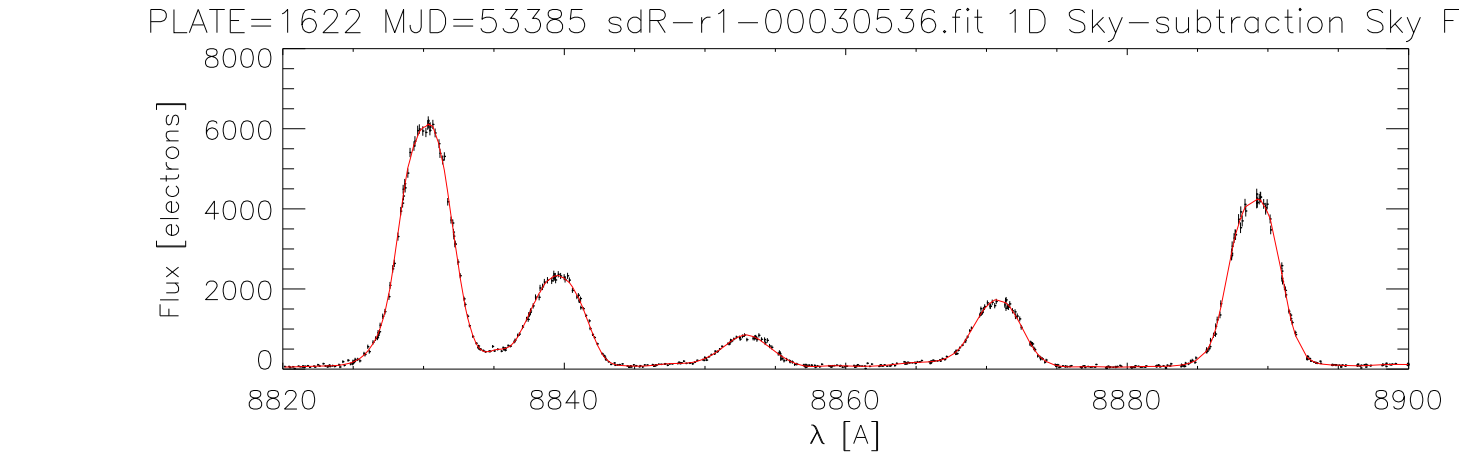

6300.3040
mfhd1 16
mfhd2 16
stdev 0.022
extrd 0.44
6363.7760
mfhd1 16
mfhd2 16
stdev 0.040
extrd 0.04
6553.6100
mfhd1 16
mfhd2 16
stdev 0.031
extrd 0.07
6923.2100
mfhd1 16
mfhd2 16
stdev 0.024
extrd 0.05
6949.0300
mfhd1 16
mfhd2 16
stdev 0.033
extrd 0.02
7571.7500
mfhd1 16
mfhd2 16
stdev 0.019
extrd 0.01
7794.1200
mfhd1 16
mfhd2 16
stdev 0.018
extrd 0.14
7821.5100
mfhd1 16
mfhd2 16
stdev 0.018
extrd 0.06
8399.1600
mfhd1 16
mfhd2 16
stdev 0.014
extrd 0.04
8430.1700
mfhd1 15
mfhd2 16
stdev 0.016
extrd 0.03
8885.8300
mfhd1 16
mfhd2 16
stdev 0.020
extrd 0.04
8919.6100
mfhd1 16
mfhd2 16
stdev 0.018
extrd 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

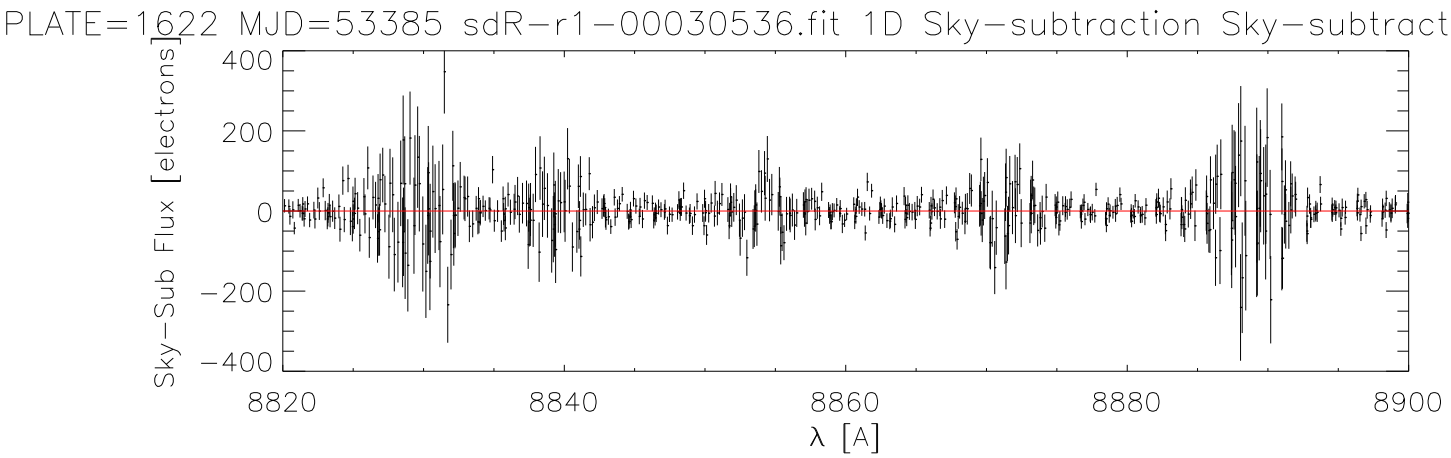

0.00
−0.02
−0.04
−0.06
−0.08
−0.10
sky shift, pixels
5000
6000
7000
8000
9000
10000

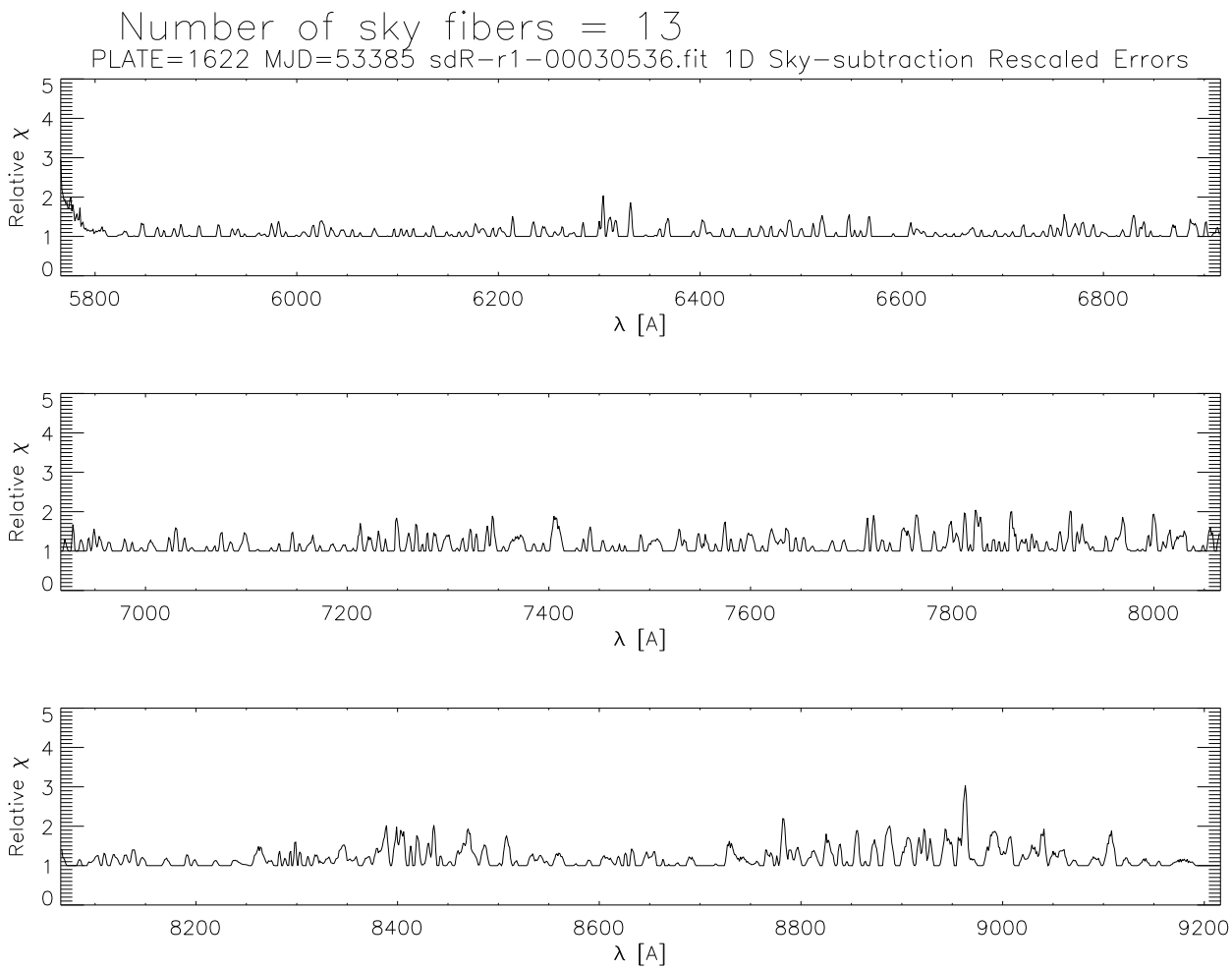

PLATE=1622 MJD=53385 Smooth superflat for sdR-r1-00030536.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

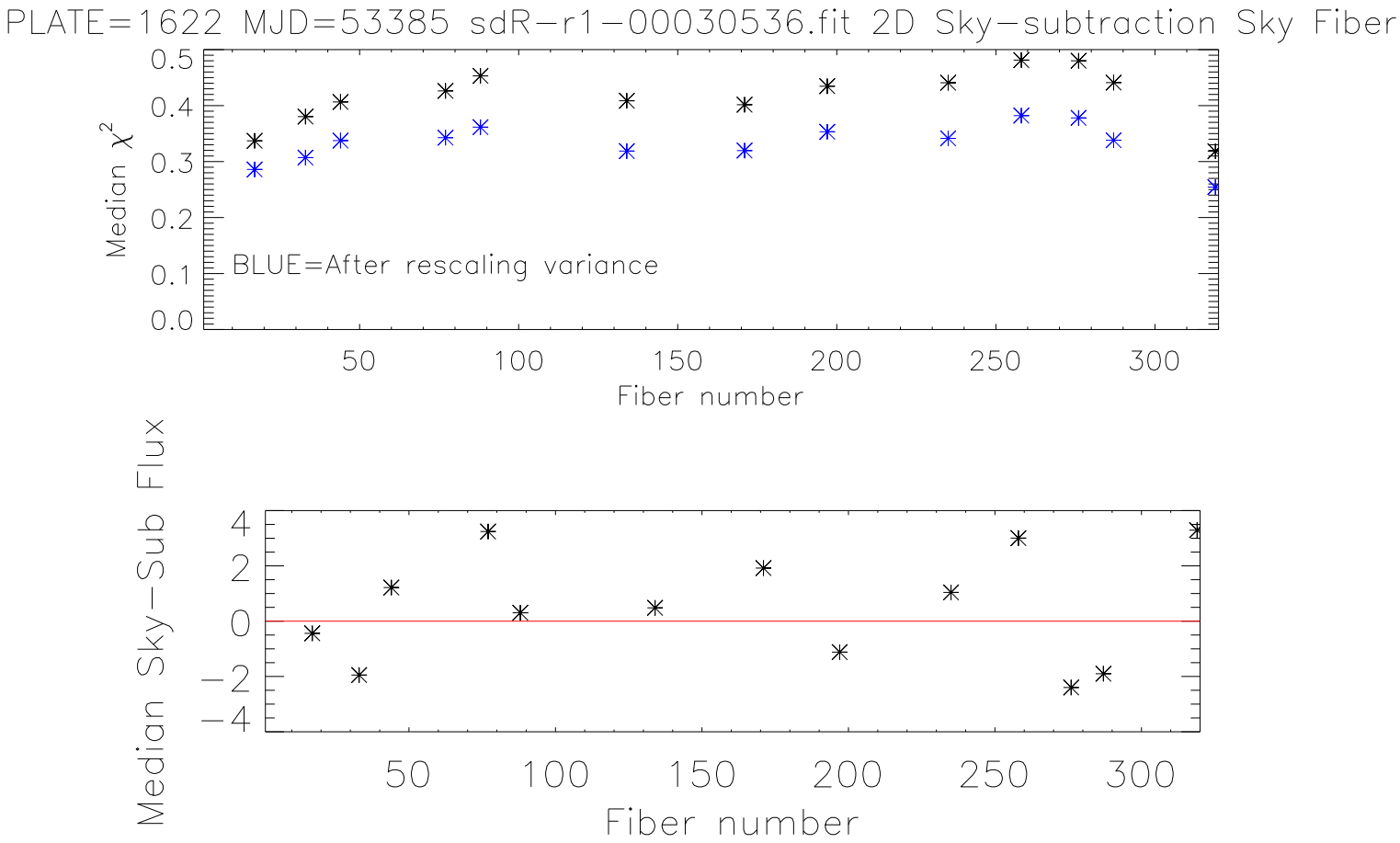

PLATE=1622 MJD=53385 sdR-r1-00030536.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

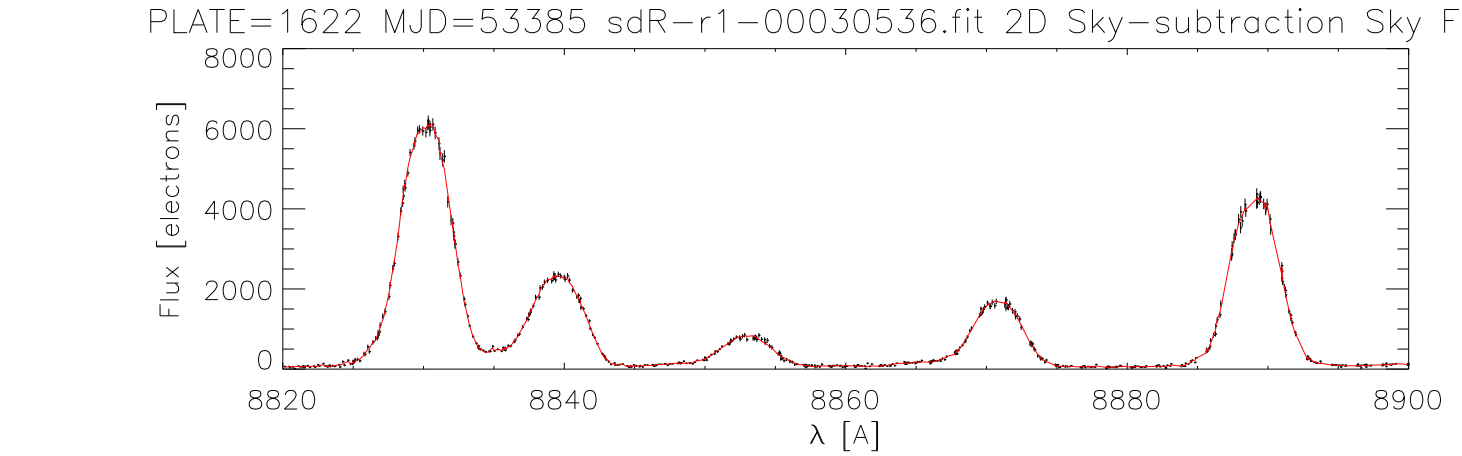
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

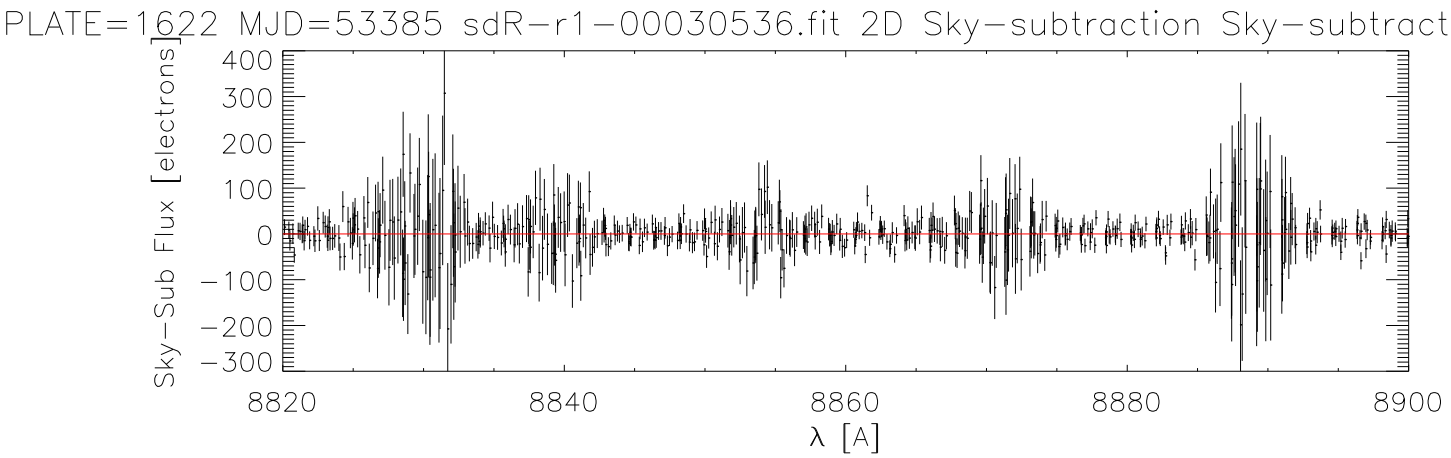

PLATE=1622 MJD=53385 sdR-r1-00030536.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

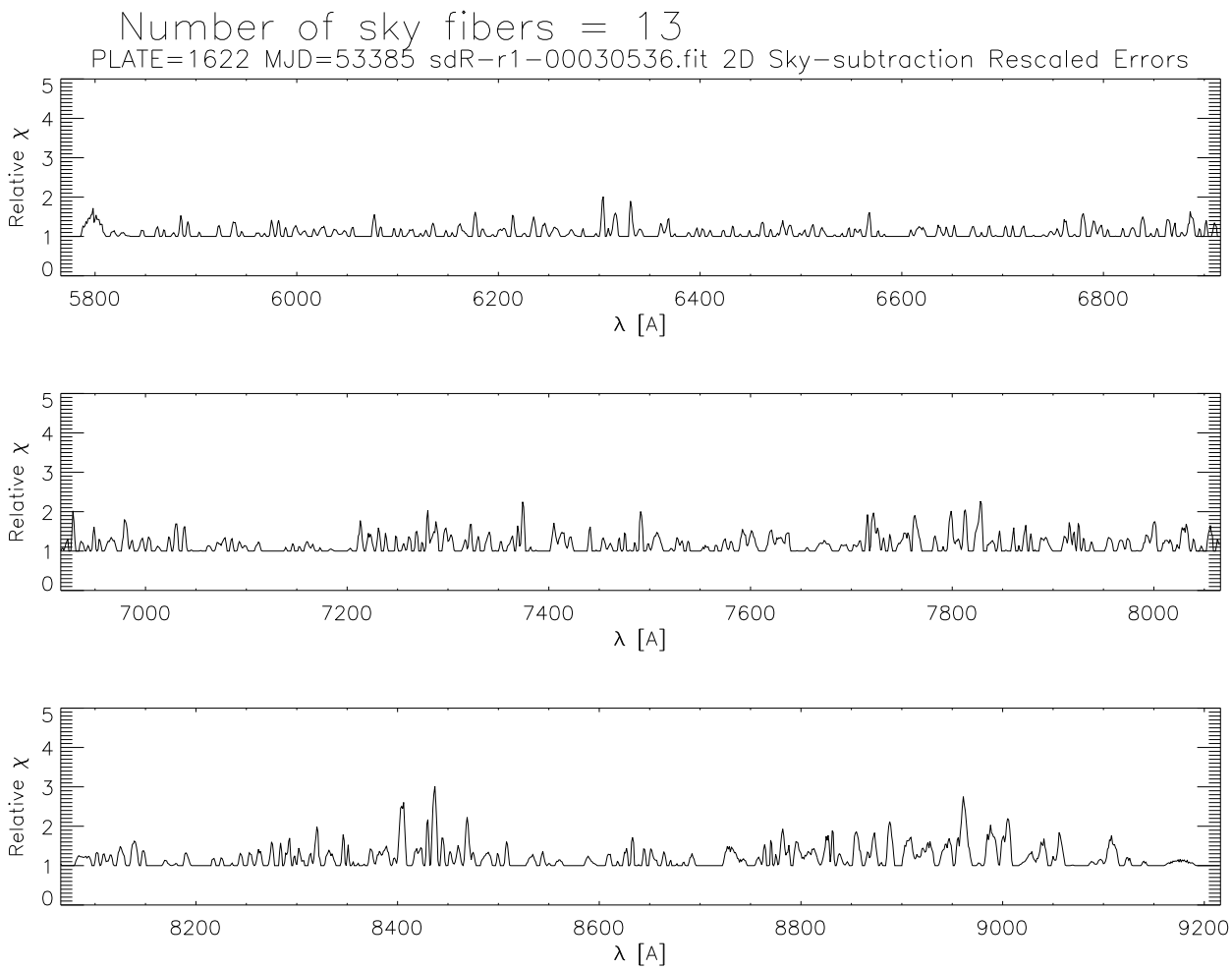

PLATE=1622 MJD=53385 sdR-r1-00030536.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

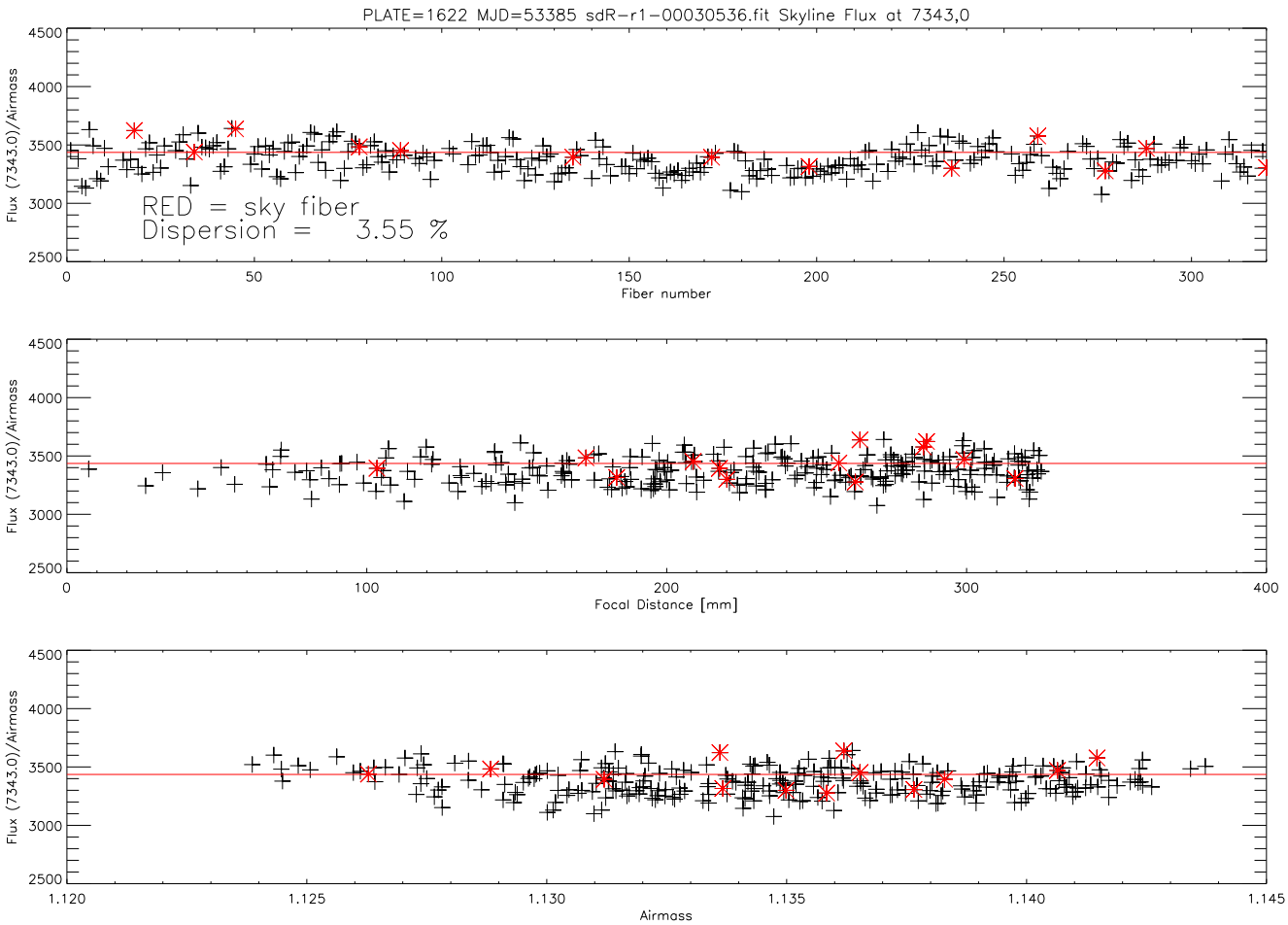

Number of sky fibers = 13
PLATE=1622 MJD=53385 sdR-r1-00030536.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

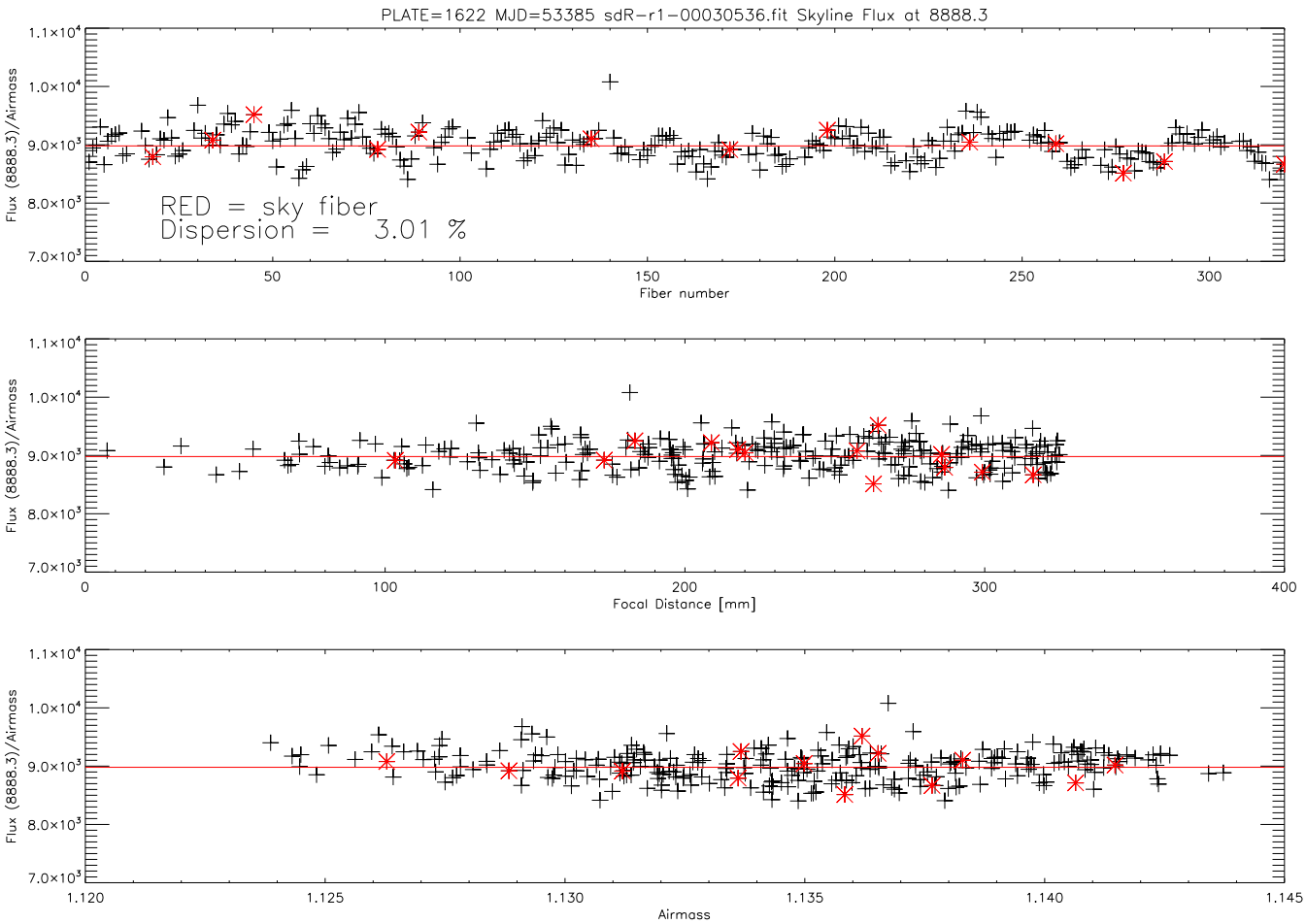

PLATE=1622 MJD=53385 sdR-r1-00030536.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

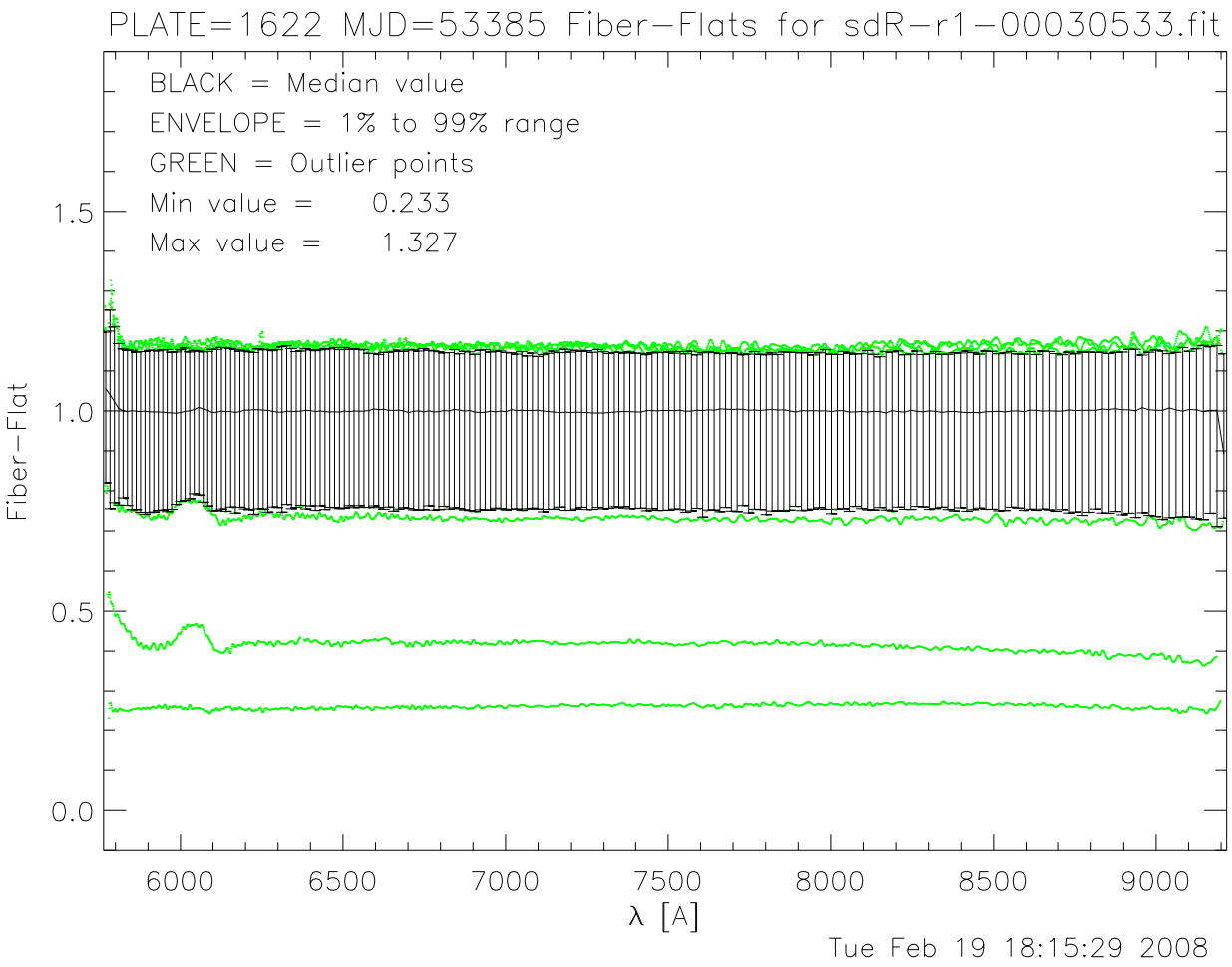

PLATE=1622 MJD=53385 sdR-r1-00030536.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

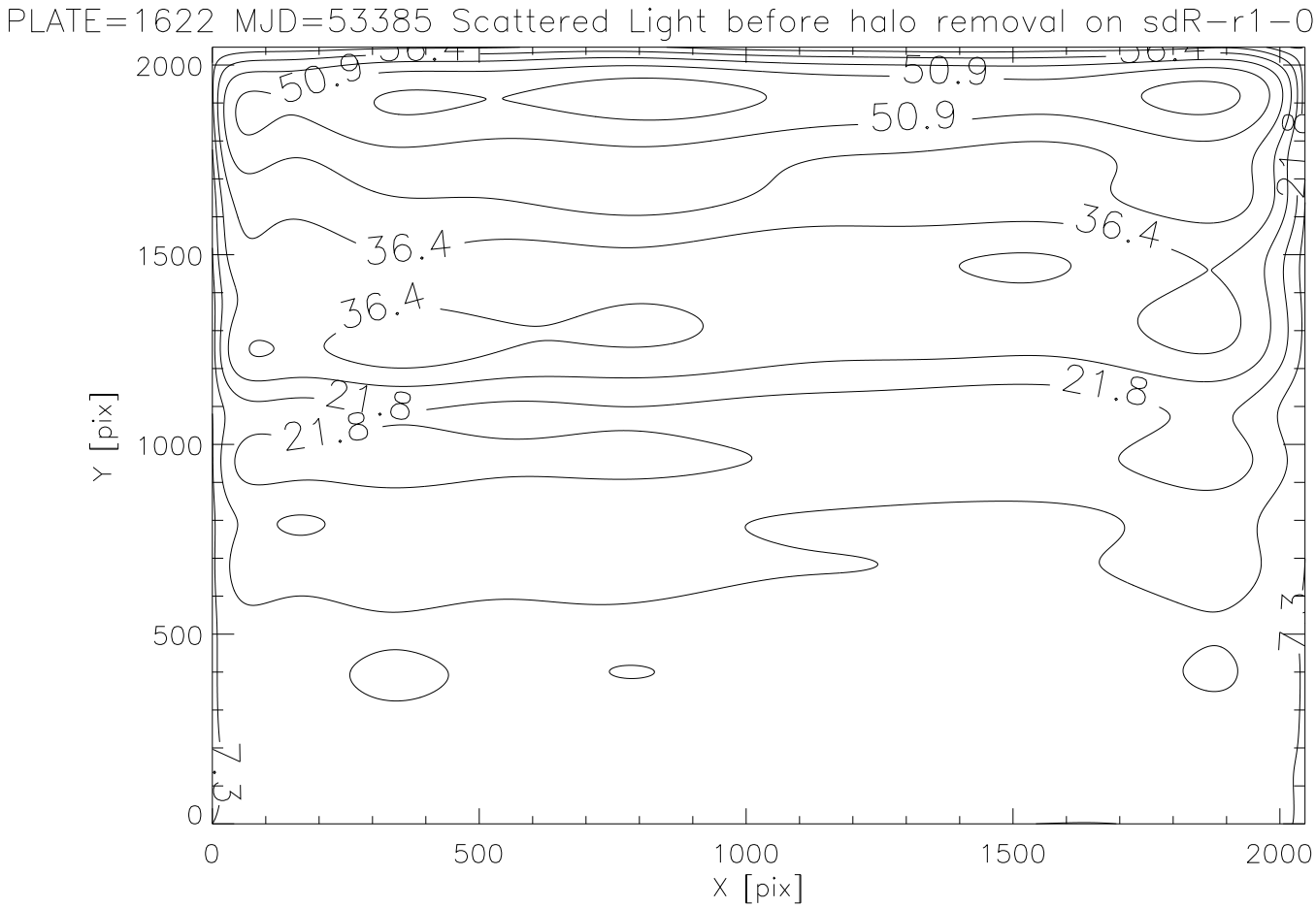

PLATE=1622 MJD=53385 sdR-r1-00030536.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

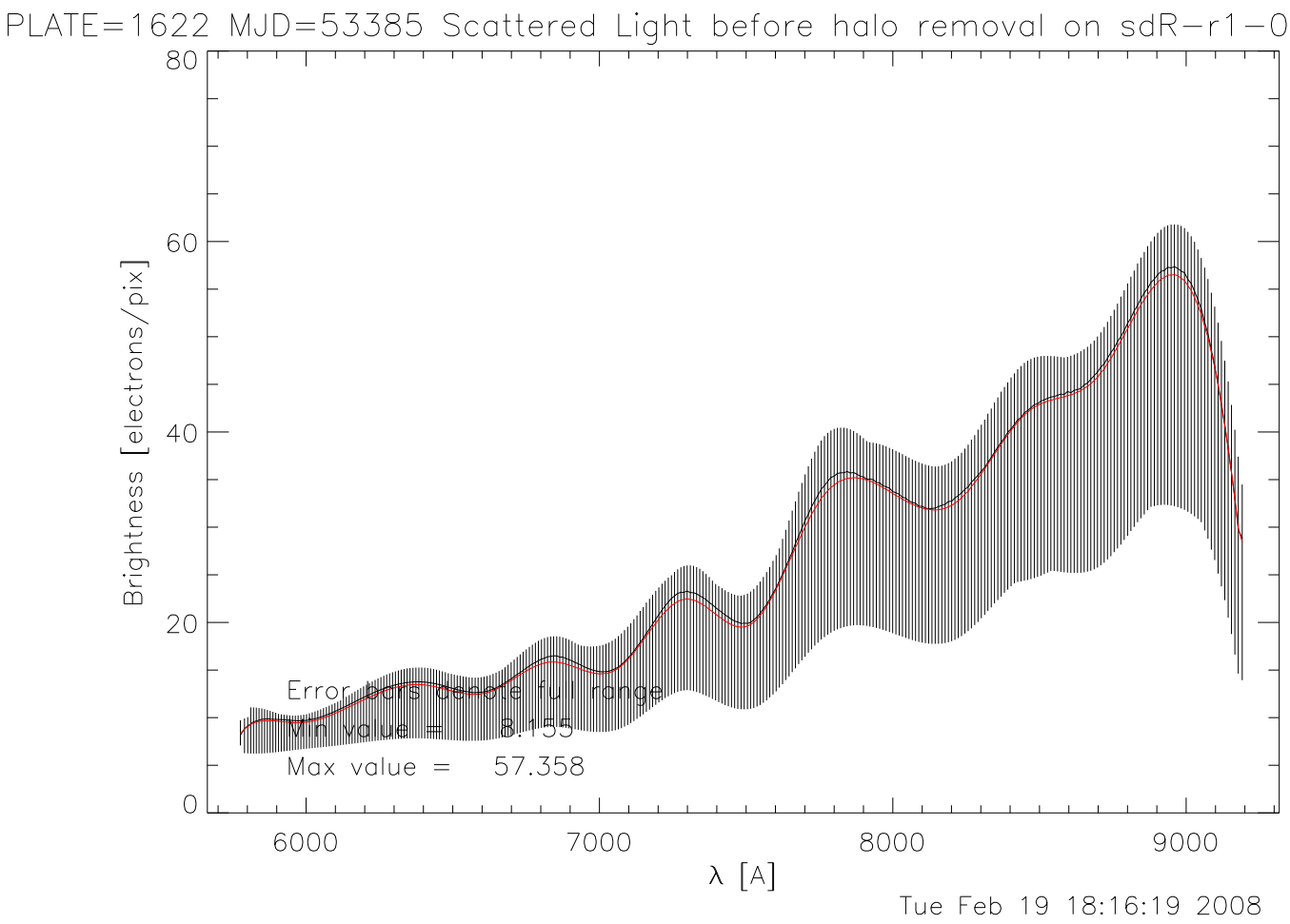

Number of sky fibers = 13
PLATE=1622 MJD=53385 sdR-r1-00030536.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

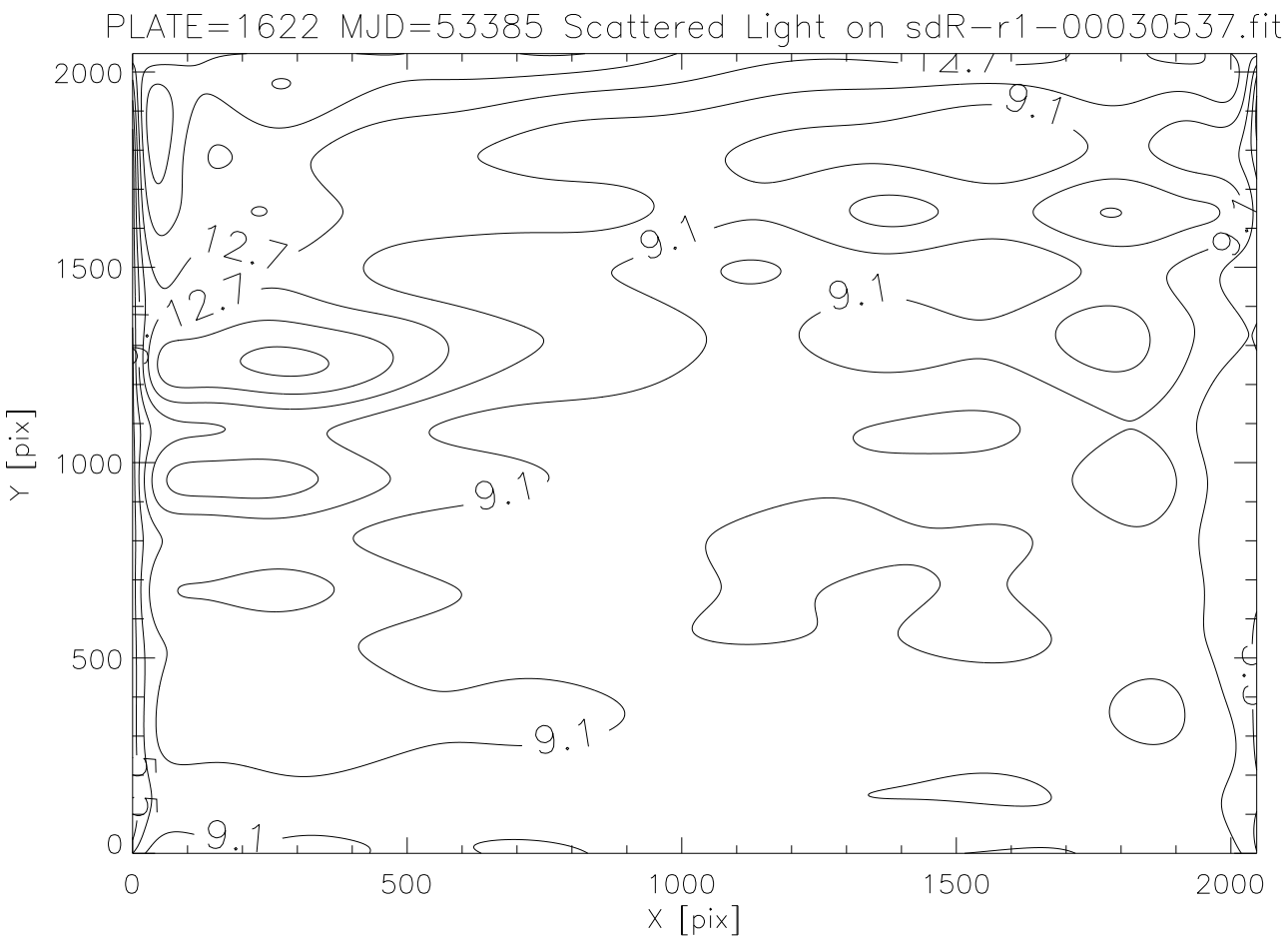

PLATE=1622 MJD=53385 sdR-r1-00030536.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.55 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

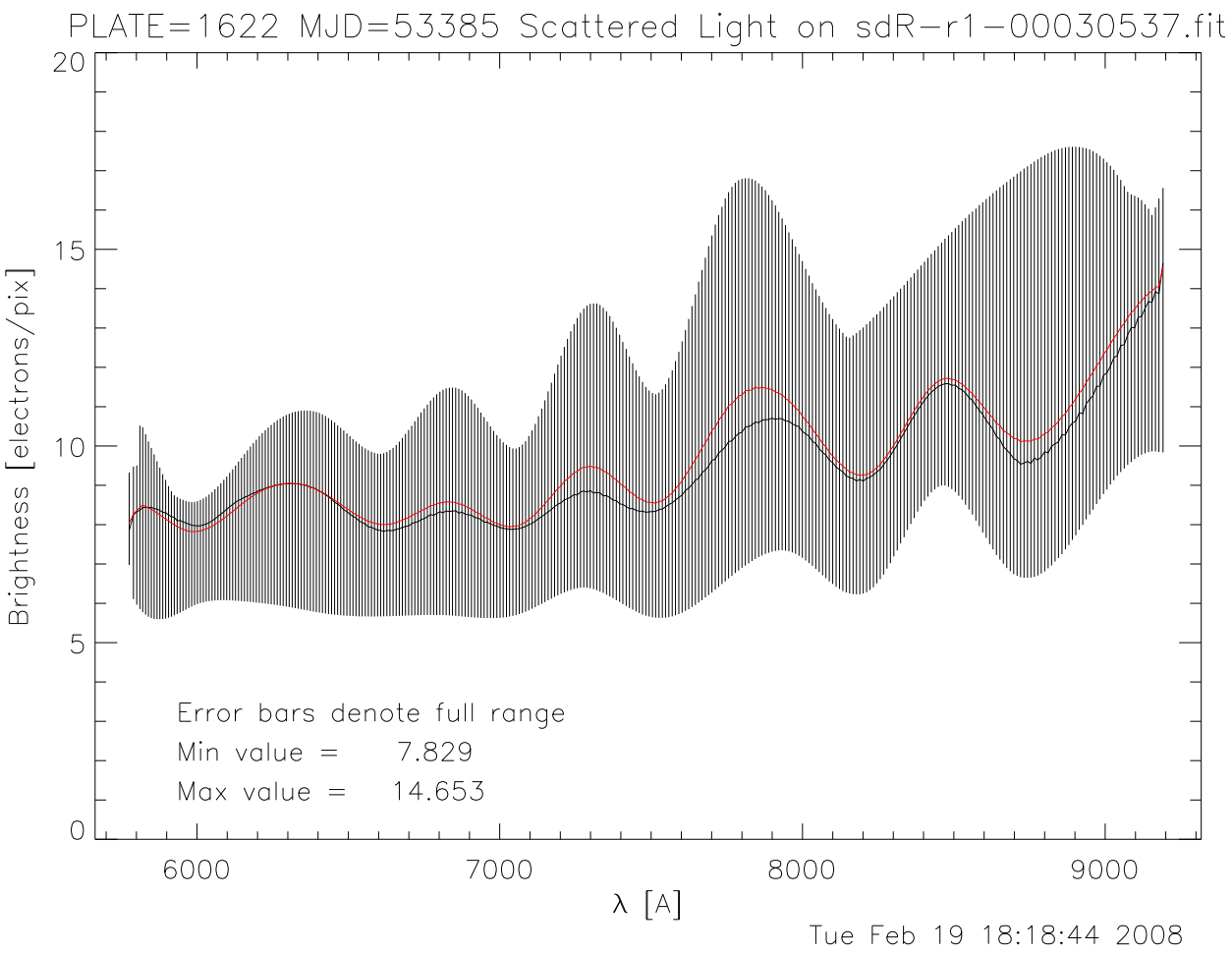

PLATE=1622 MJD=53385 sdR-r1-00030536.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.01 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

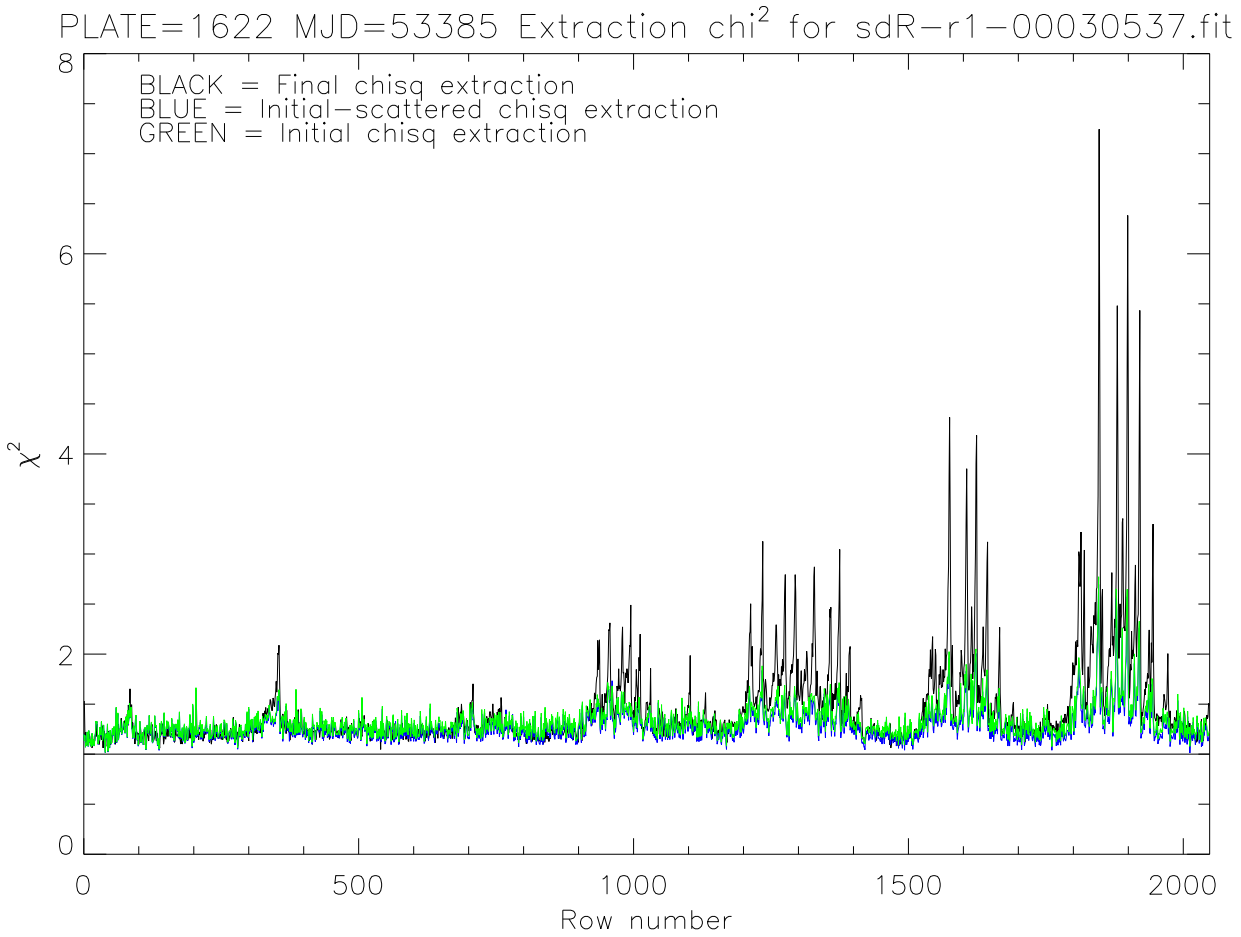

PLATE=1622 MJD=53385 Fiber−Flats for sdR−r1−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.233
Max value = 1.327
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 18:15:29 2008

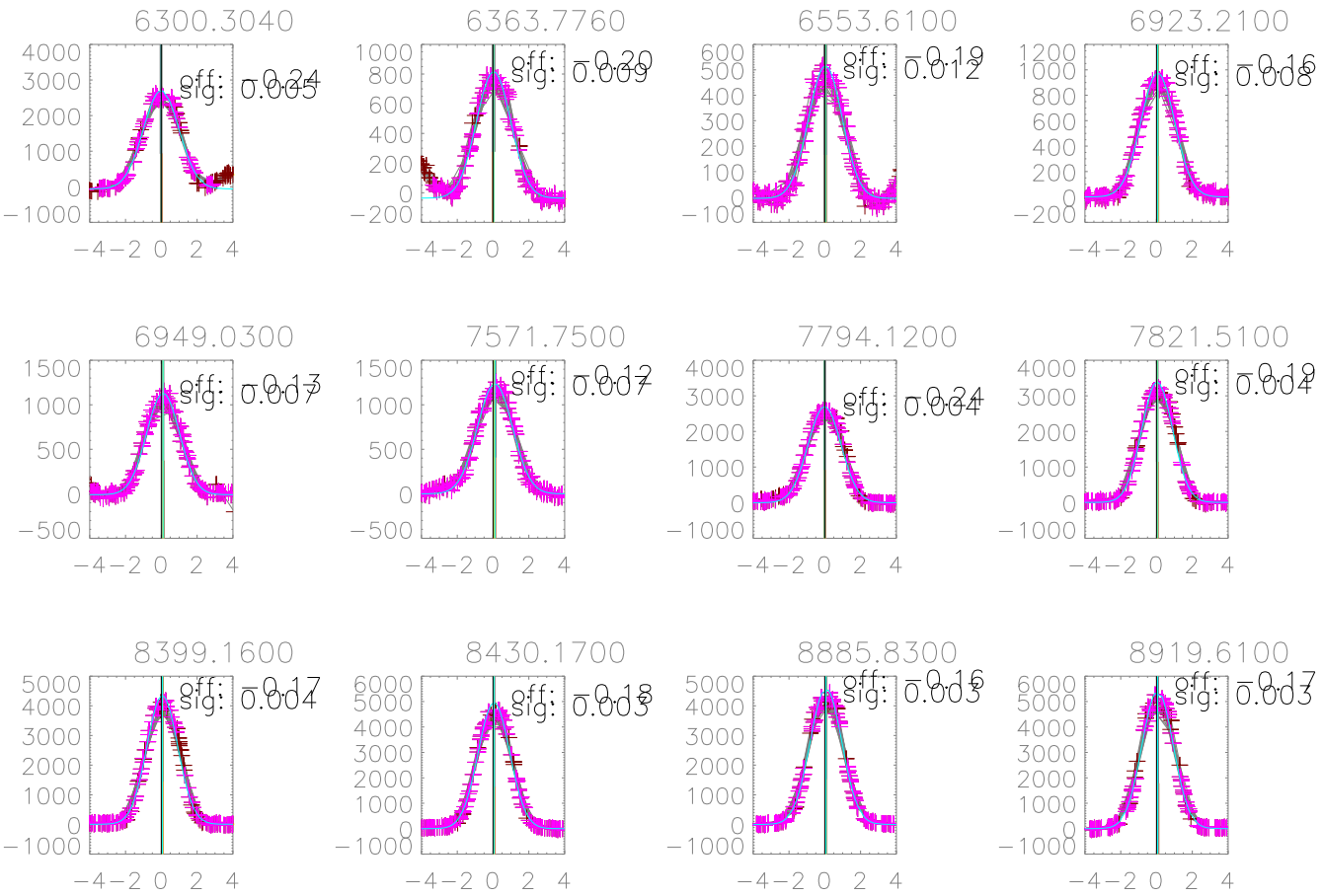

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r1-00030537.fi
50.9
50.9
50.9
36.4
36.4
36.4
21.8
21.8
21.8
27.3
27.3
Y [pix]
X [pix]
0
500
1000
1500
2000

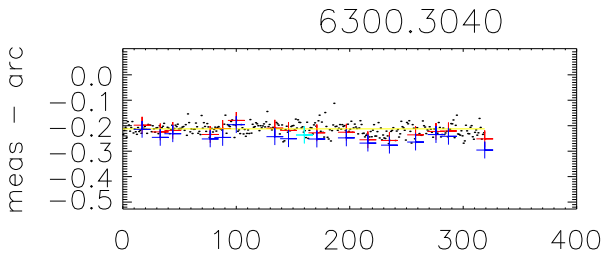

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r1-00030537.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.155
Max value = 57.358
Tue Feb 19 18:16:19 2008

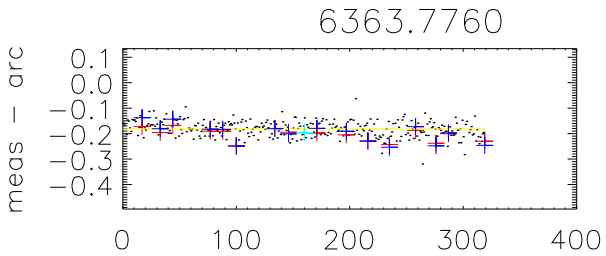

PLATE=1622 MJD=53385 Scattered Light on sdR-r1-00030537.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.1
12.7

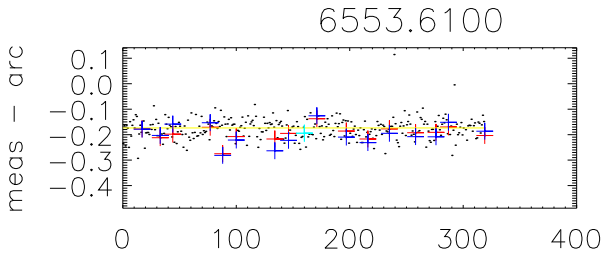

PLATE=1622 MJD=53385 Scattered Light on sdR-r1-00030537.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.829
Max value = 14.653
Tue Feb 19 18:18:44 2008

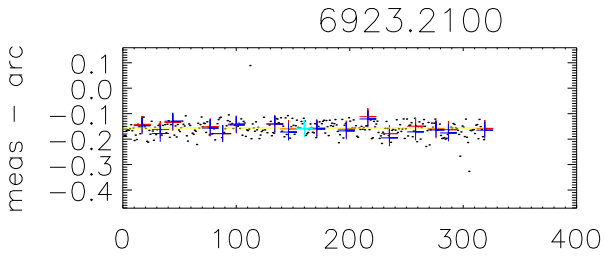

PLATE=1622 MJD=53385 Extraction chi^2 for sdR−r1−00030537.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

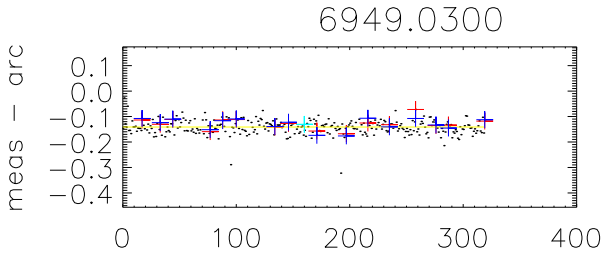

6300.3040
off: −0.24
sig: 0.005
6363.7760
off: −0.20
sig: 0.009
6553.6100
off: −0.19
sig: 0.012
6923.2100
off: −0.16
sig: 0.008
6949.0300
off: −0.13
sig: 0.007
7571.7500
off: −0.12
sig: 0.007
7794.1200
off: −0.24
sig: 0.004
7821.5100
off: −0.19
sig: 0.004
8399.1600
off: −0.17
sig: 0.004
8430.1700
off: −0.18
sig: 0.003
8885.8300
off: −0.16
sig: 0.003
8919.6100
off: −0.17
sig: 0.003

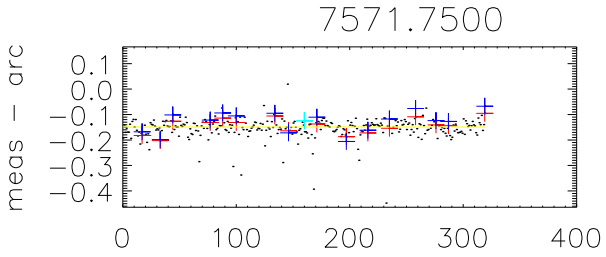

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

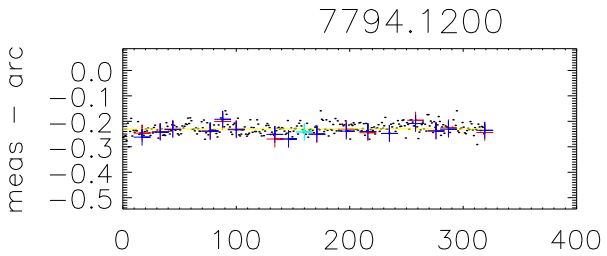

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

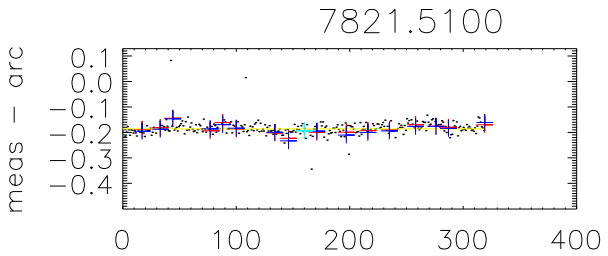

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

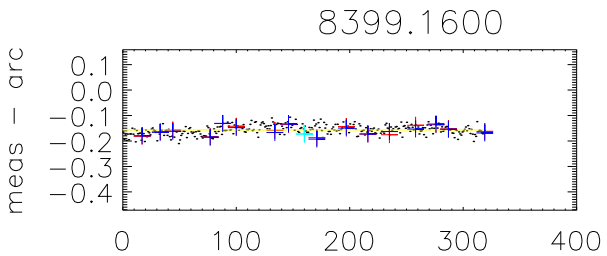

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

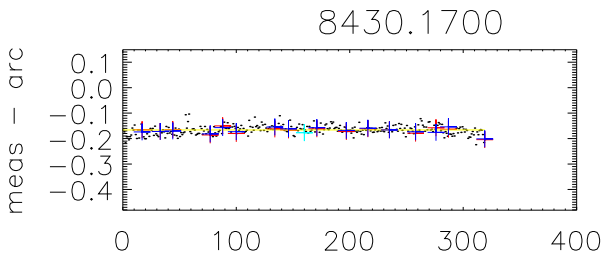

6949.0300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

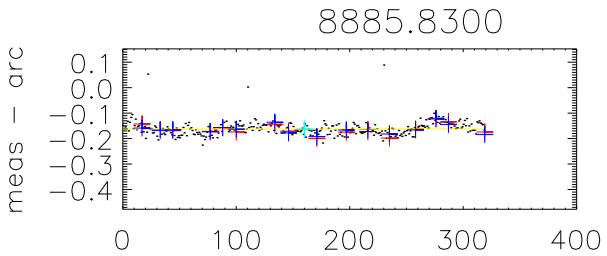

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

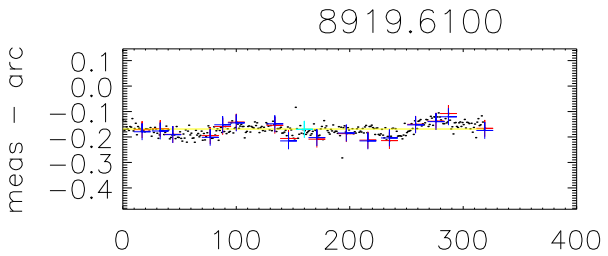

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

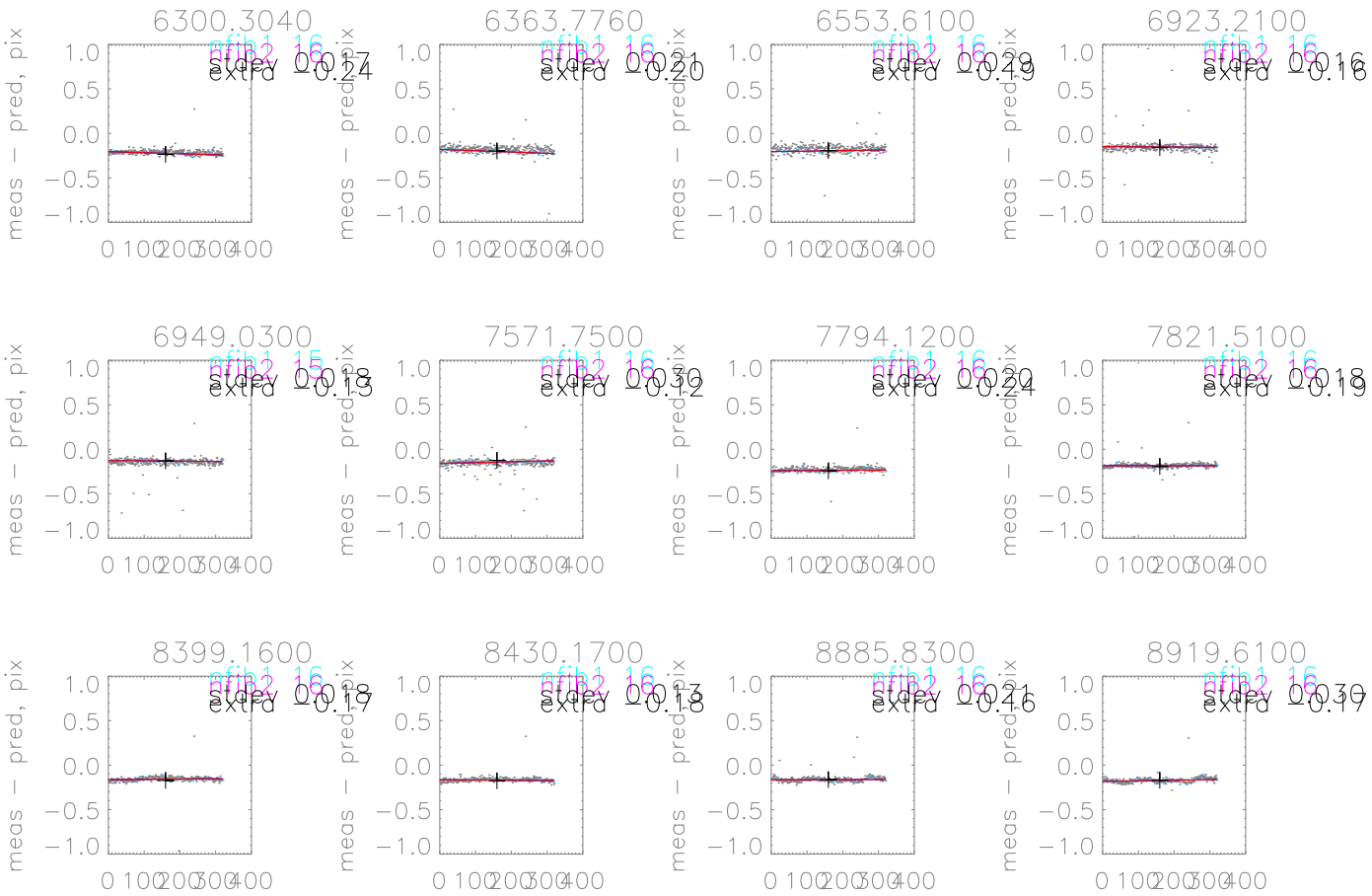

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

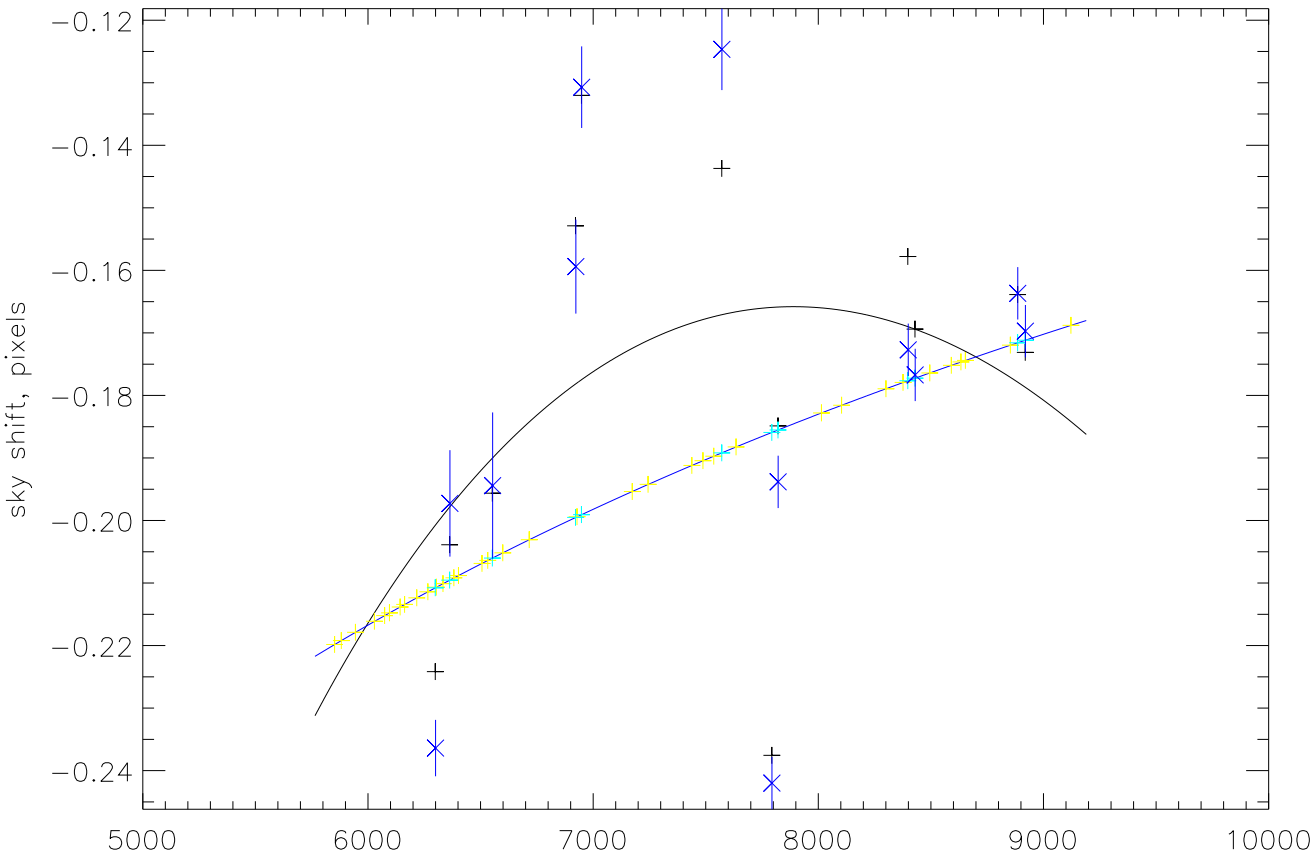

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

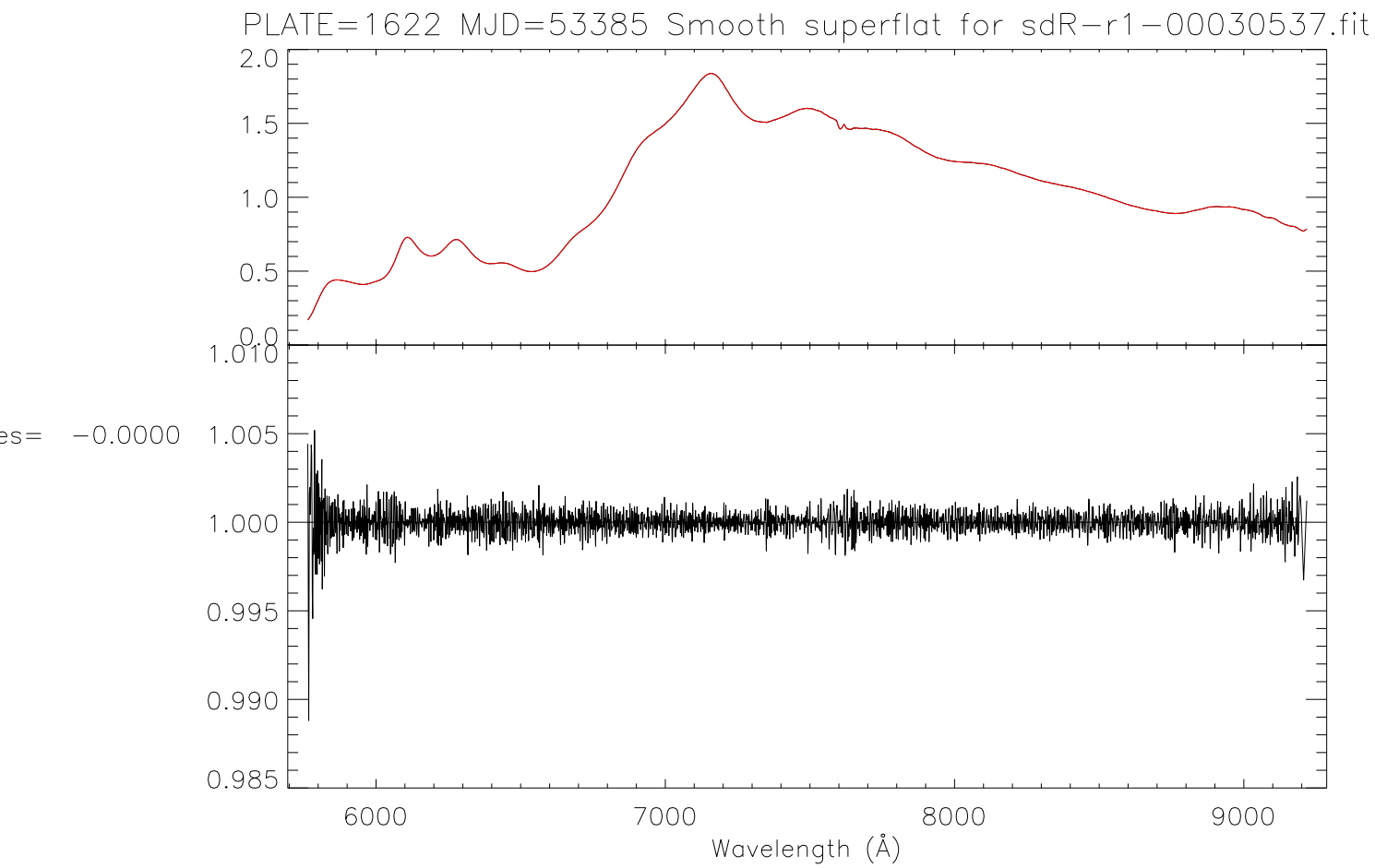

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

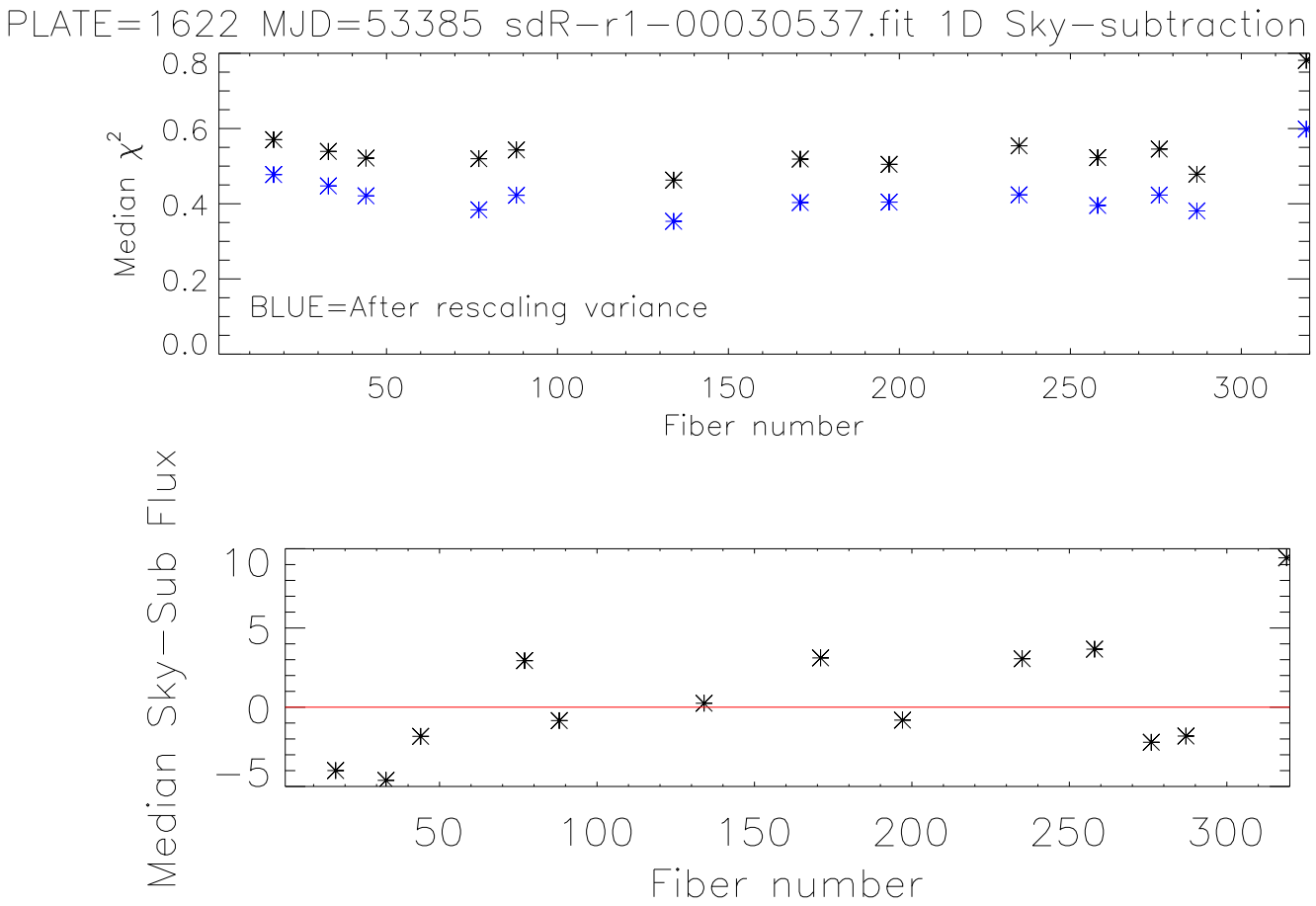

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

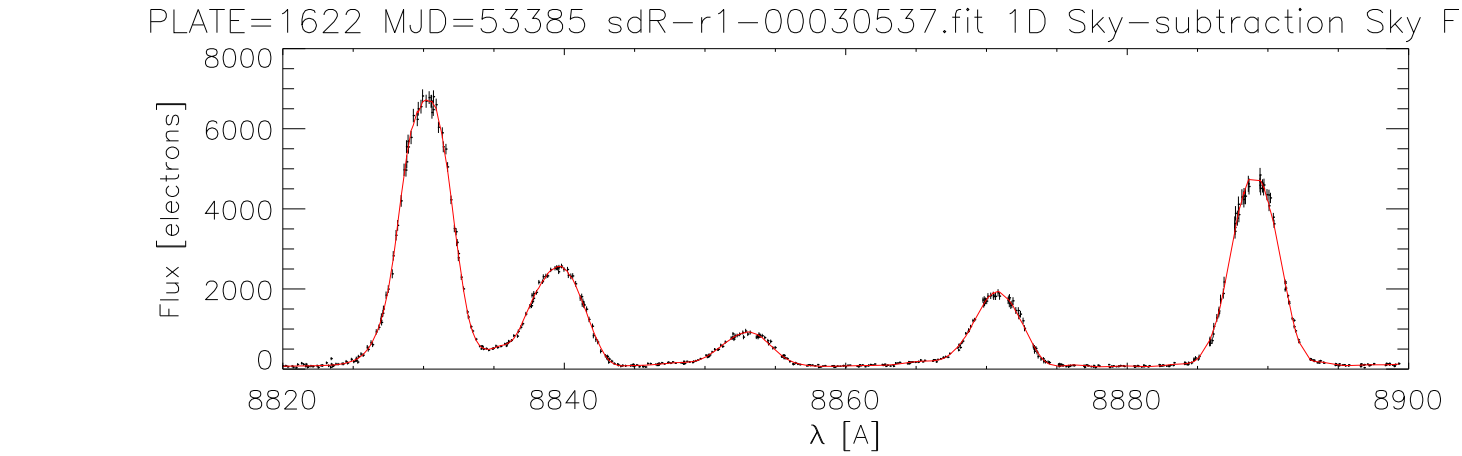

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhd2 16
stdev 0.17
extrd 0.24
stdev 0.21
extrd 0.20
stdev 0.29
extrd 0.49
stdev 0.16
extrd 0.16
mfhd2 15
stdev 0.18
extrd 0.13
stdev 0.30
extrd 0.32
stdev 0.20
extrd 0.24
stdev 0.18
extrd 0.19
stdev 0.18
extrd 0.17
stdev 0.13
extrd 0.18
stdev 0.21
extrd 0.46
stdev 0.30
extrd 0.17

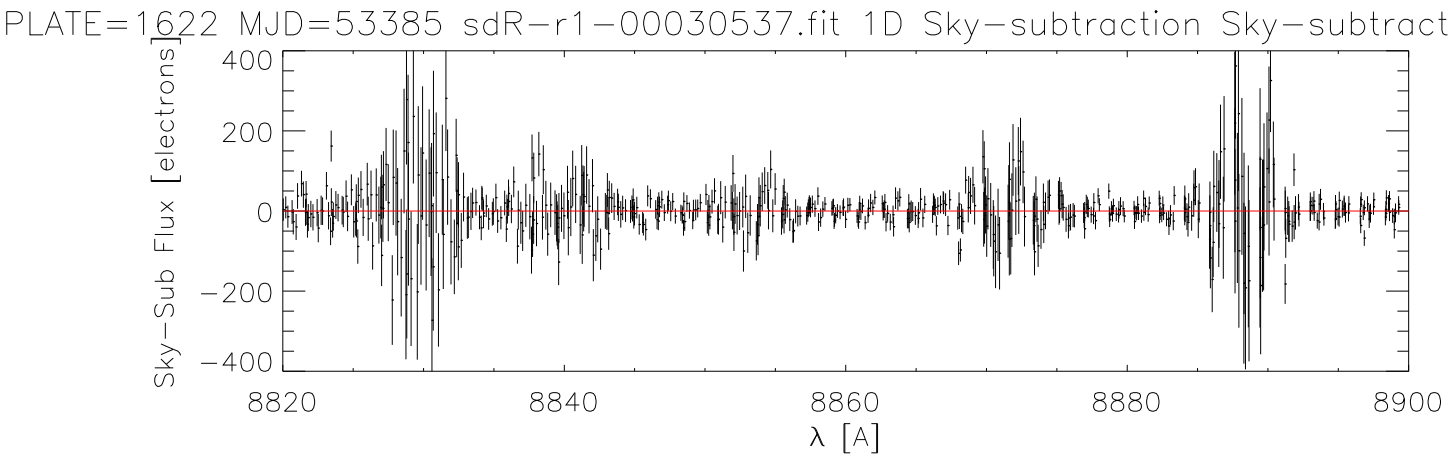

−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
−0.24
sky shift, pixels
5000
6000
7000
8000
9000
10000

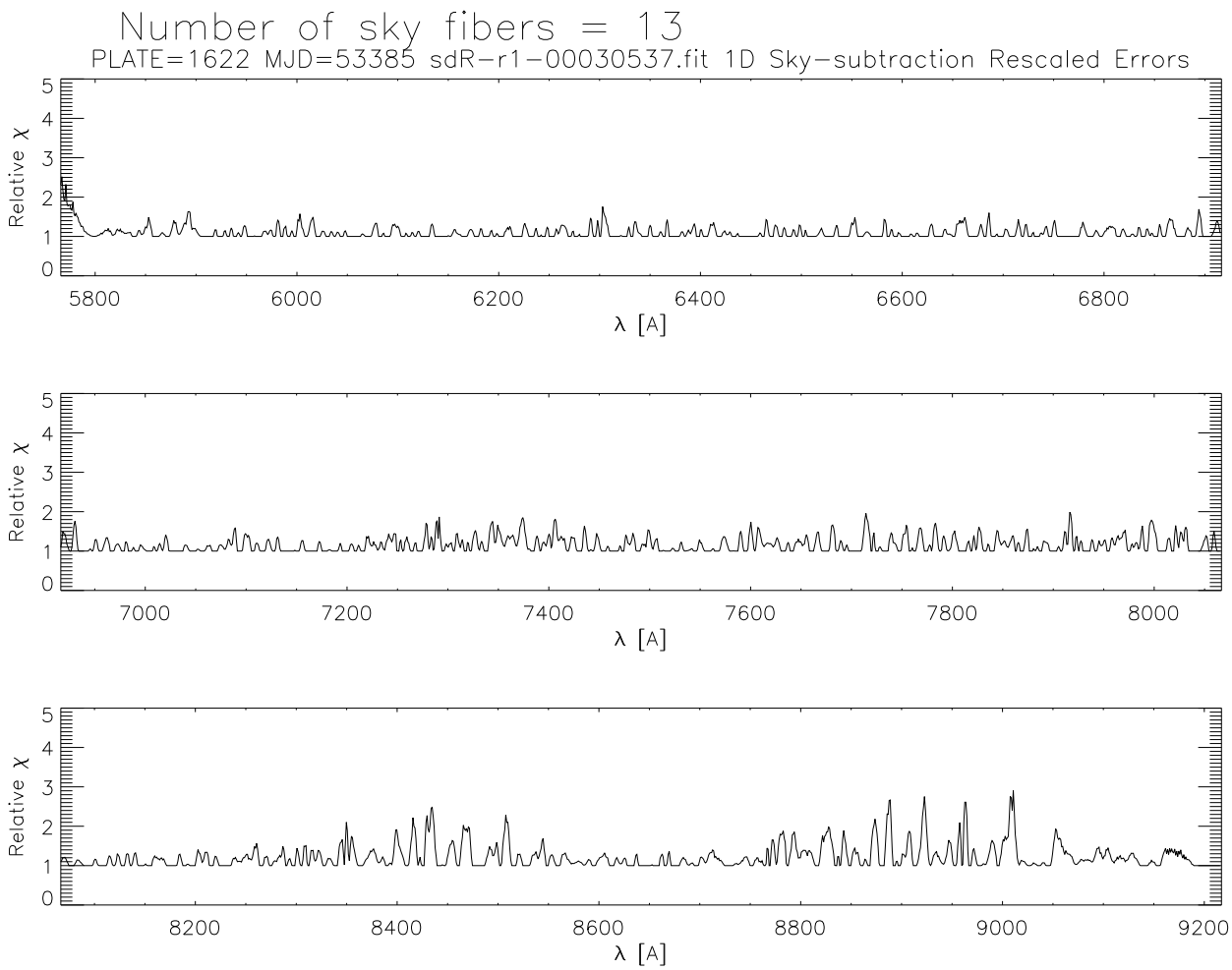

PLATE=1622 MJD=53385 Smooth superflat for sdR-r1-00030537.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

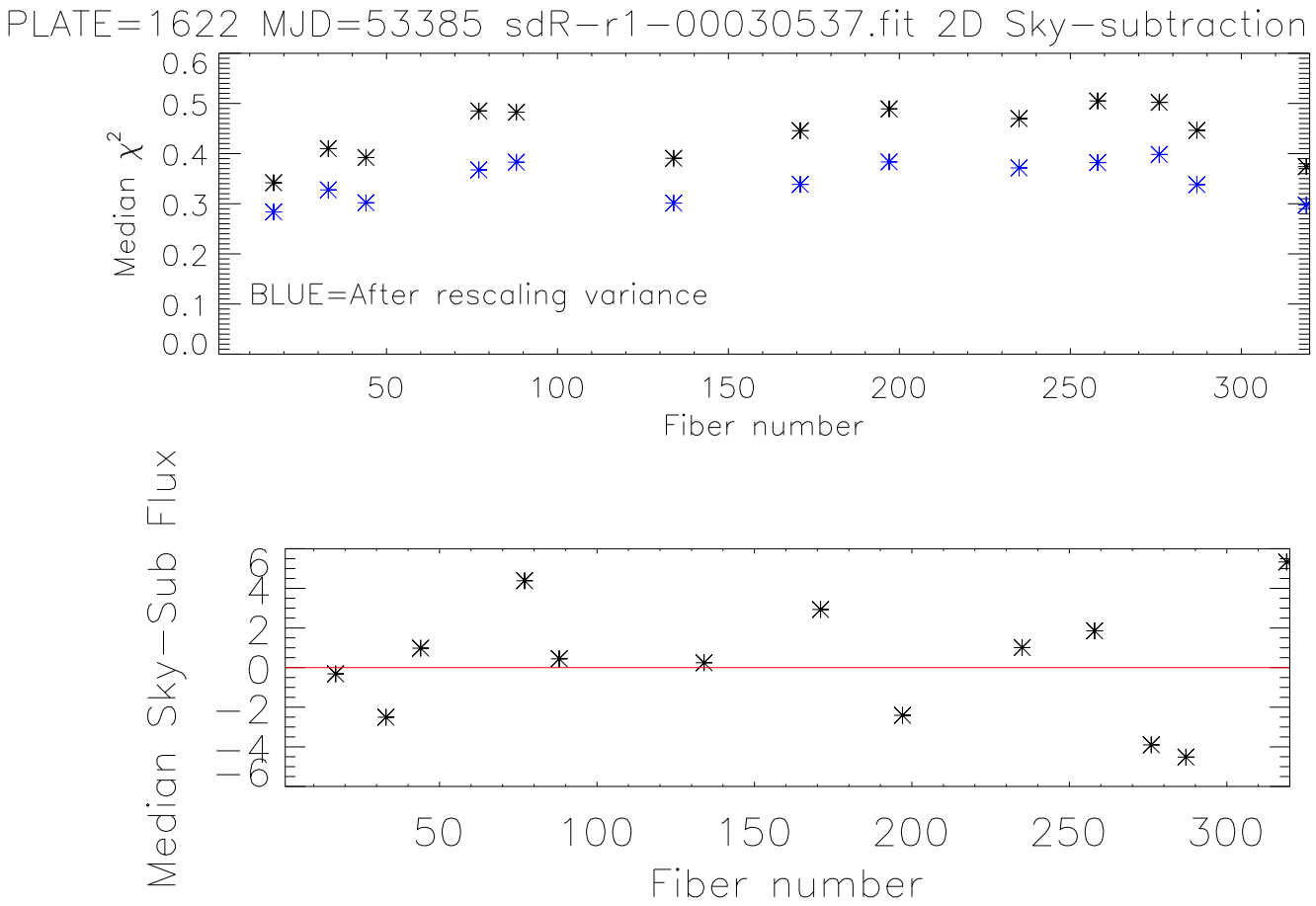

PLATE=1622 MJD=53385 sdR-r1-00030537.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

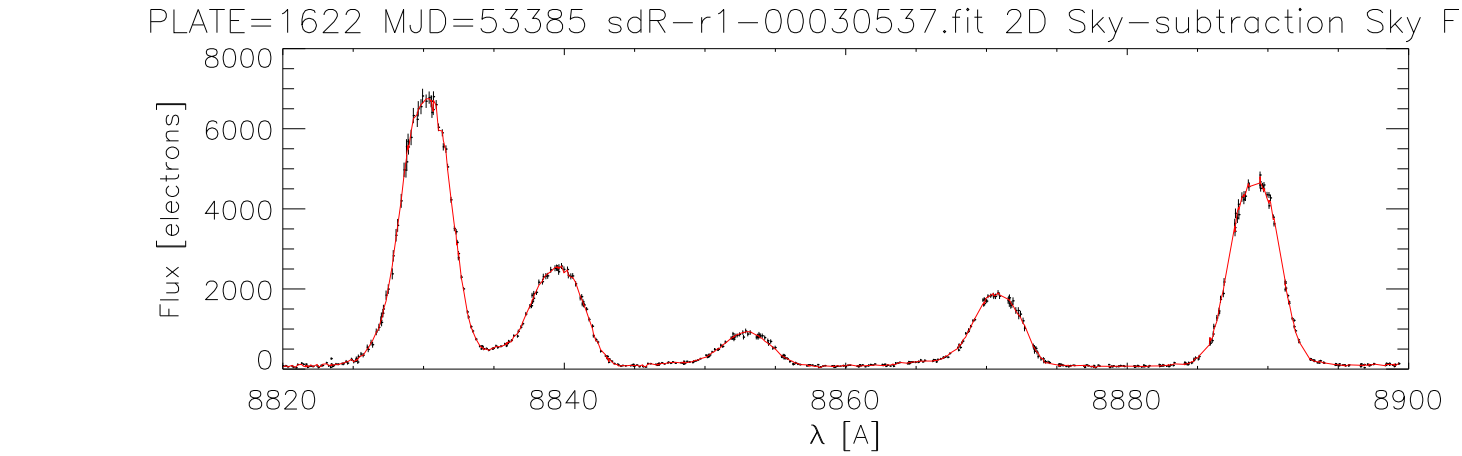
Median Sky-Sub Flux
10
5
0
-5
50
100
150
200
250
300
Fiber number

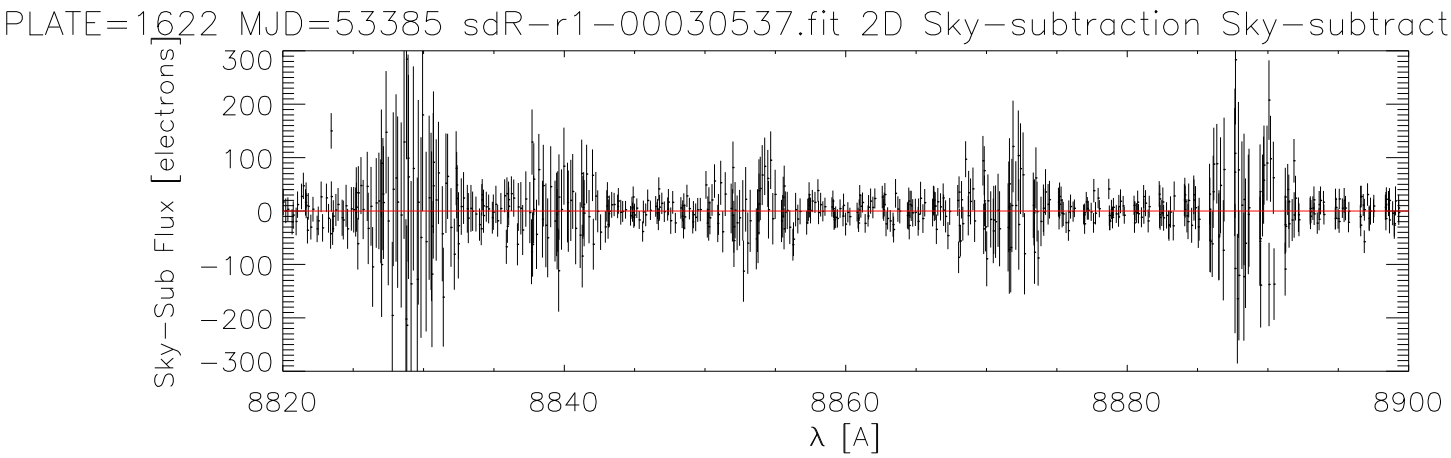

PLATE=1622 MJD=53385 sdR-r1-00030537.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

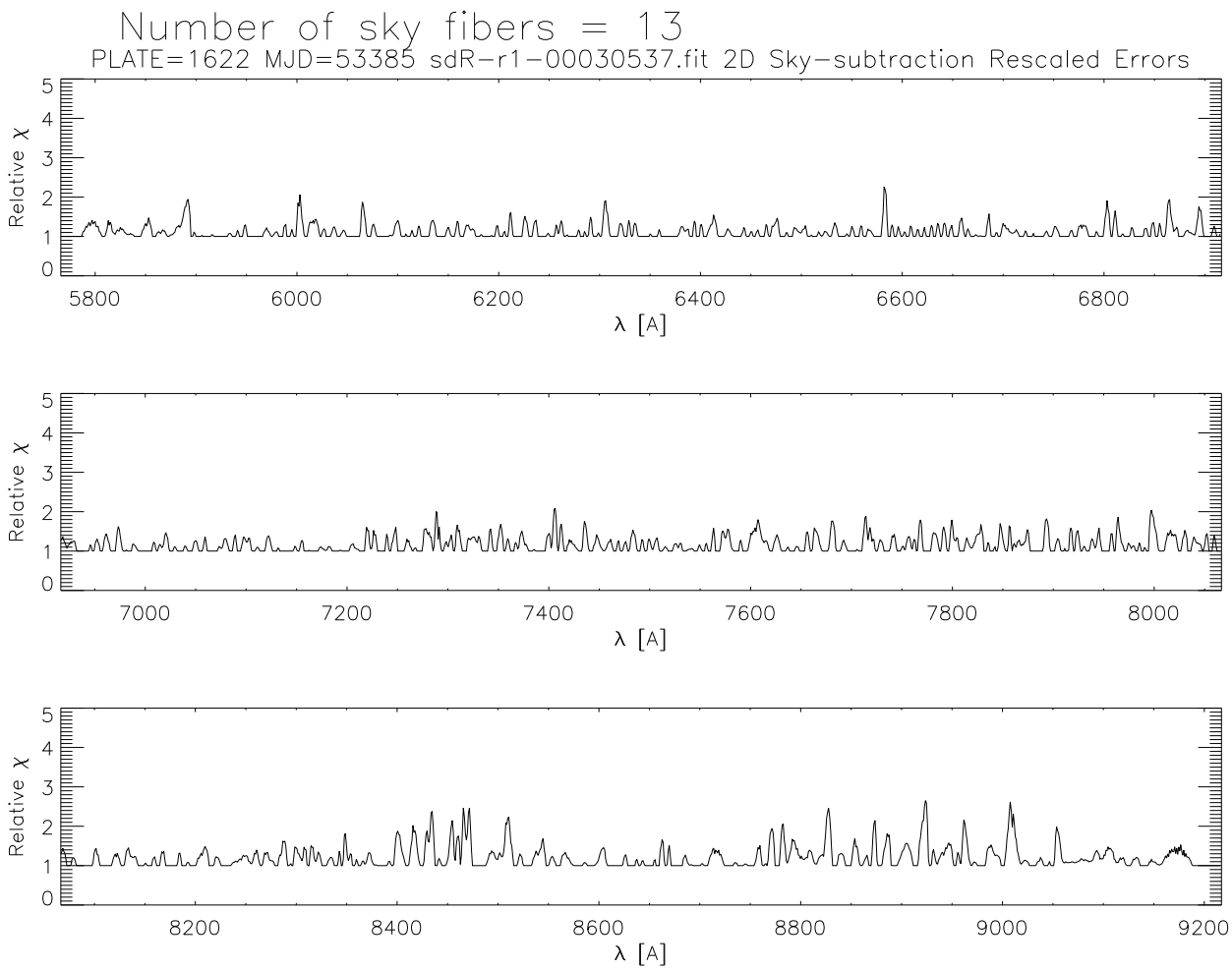

PLATE=1622 MJD=53385 sdR-r1-00030537.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

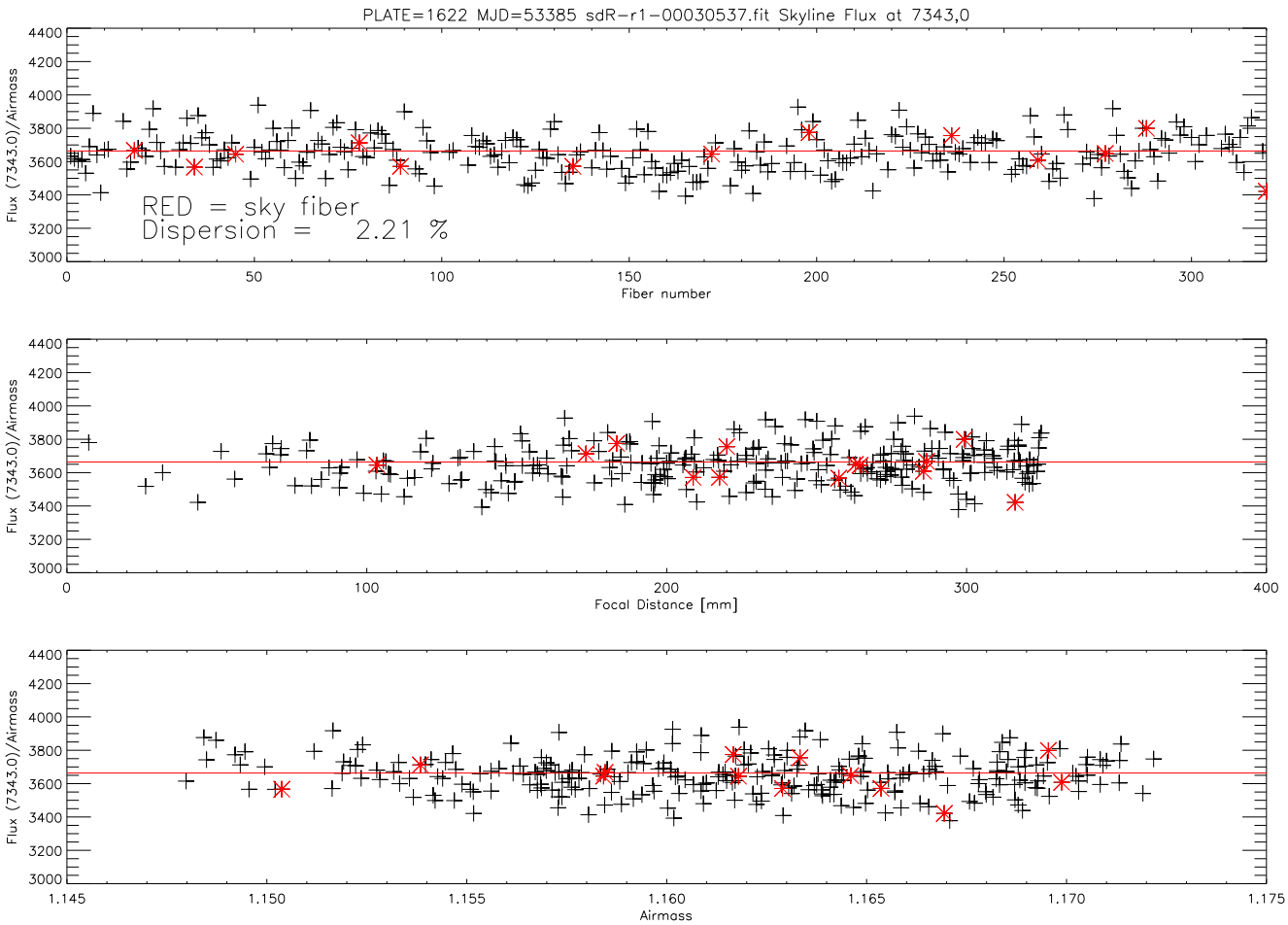

Number of sky fibers = 13
PLATE=1622 MJD=53385 sdR-r1-00030537.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

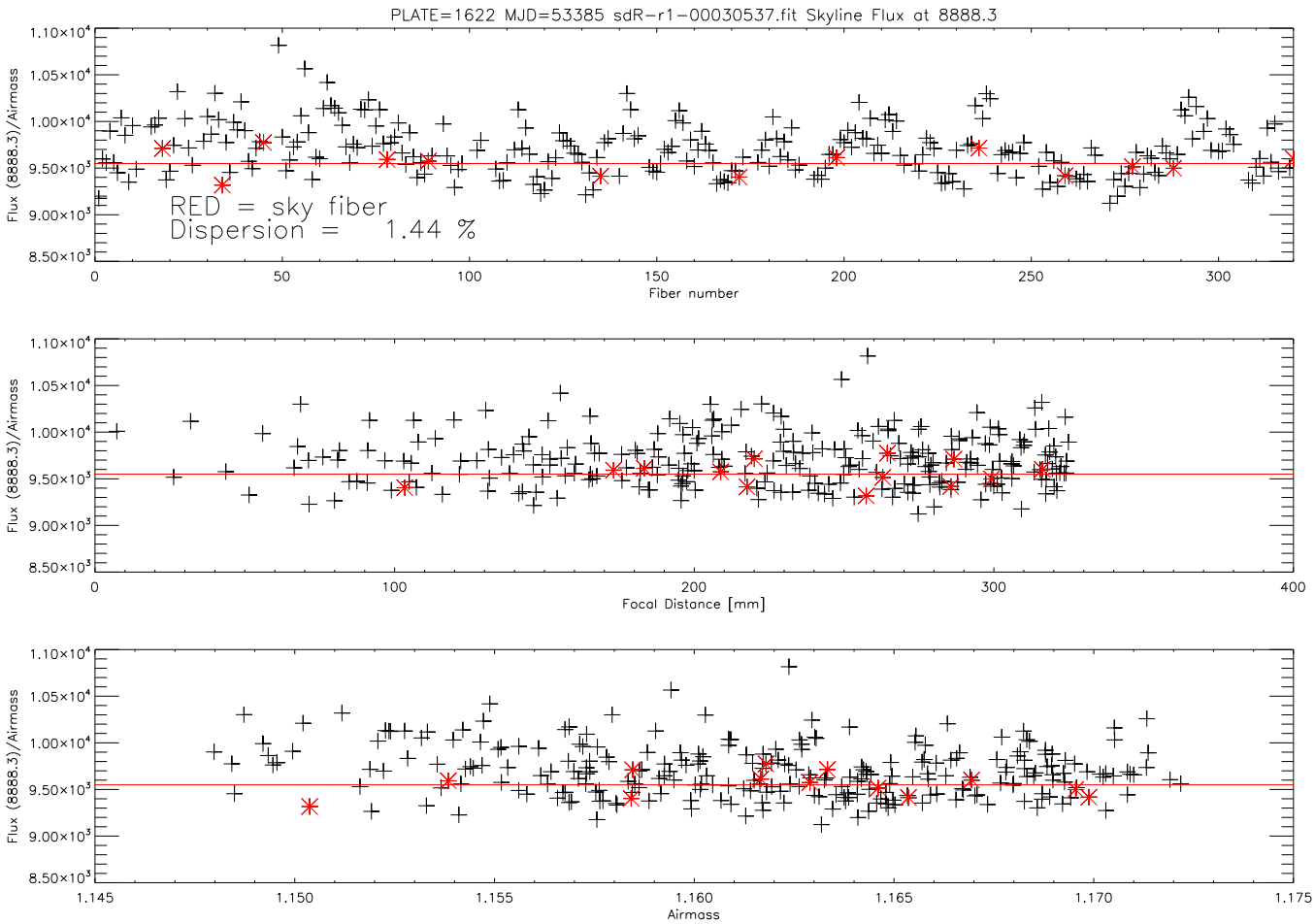

PLATE=1622 MJD=53385 sdR-r1-00030537.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

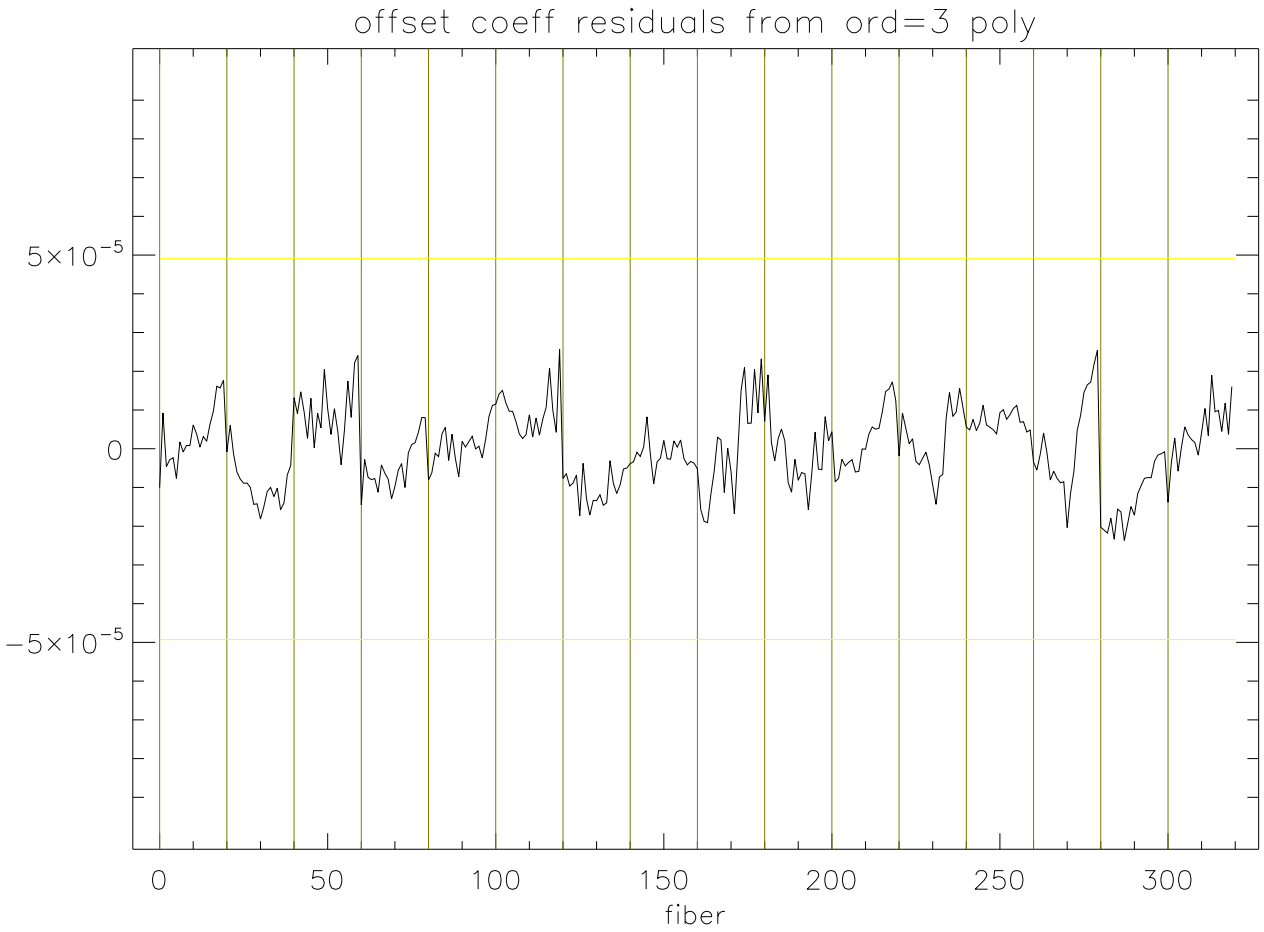

PLATE=1622 MJD=53385 sdR-r1-00030537.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

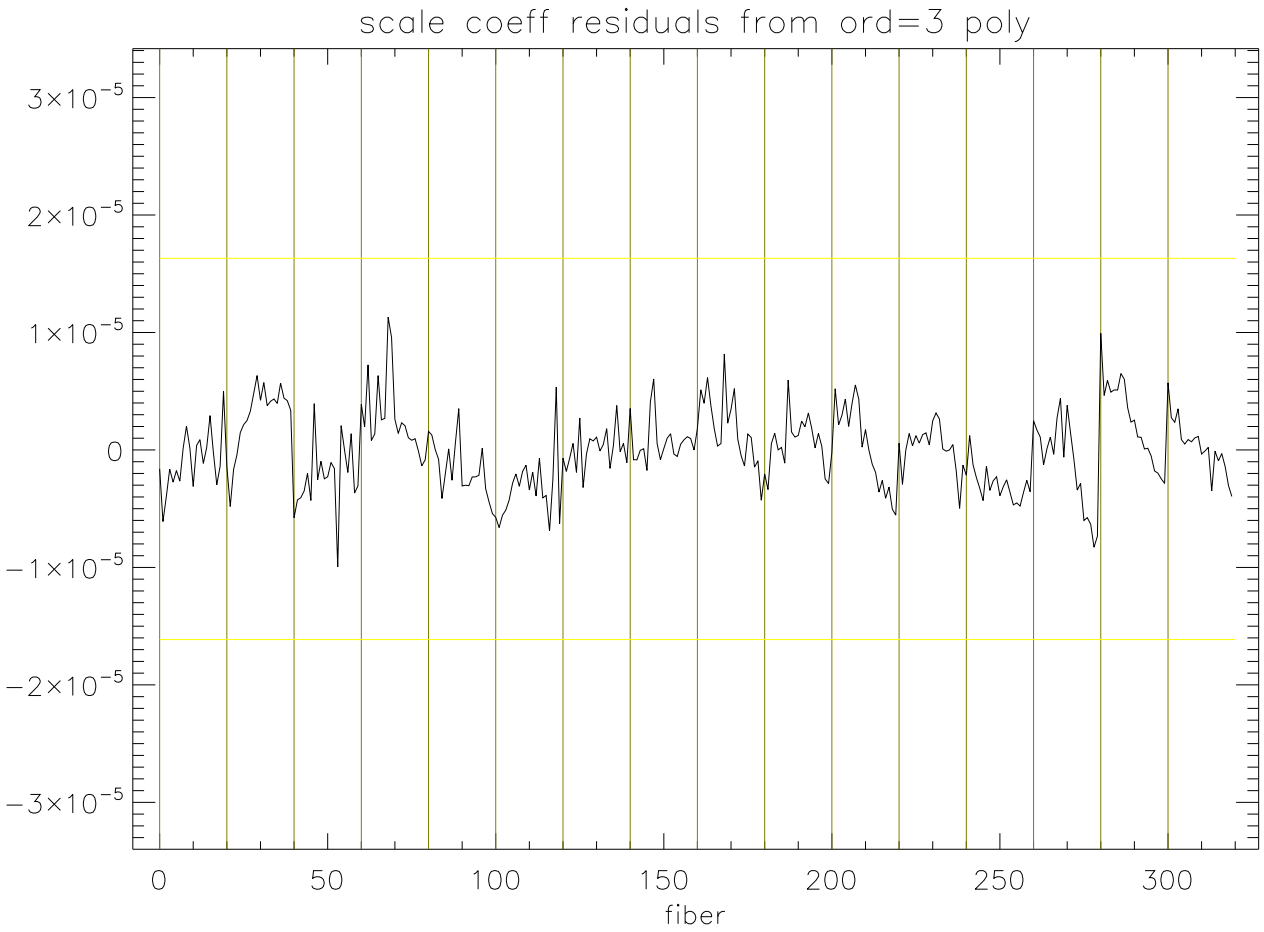

PLATE=1622 MJD=53385 sdR-r1-00030537.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

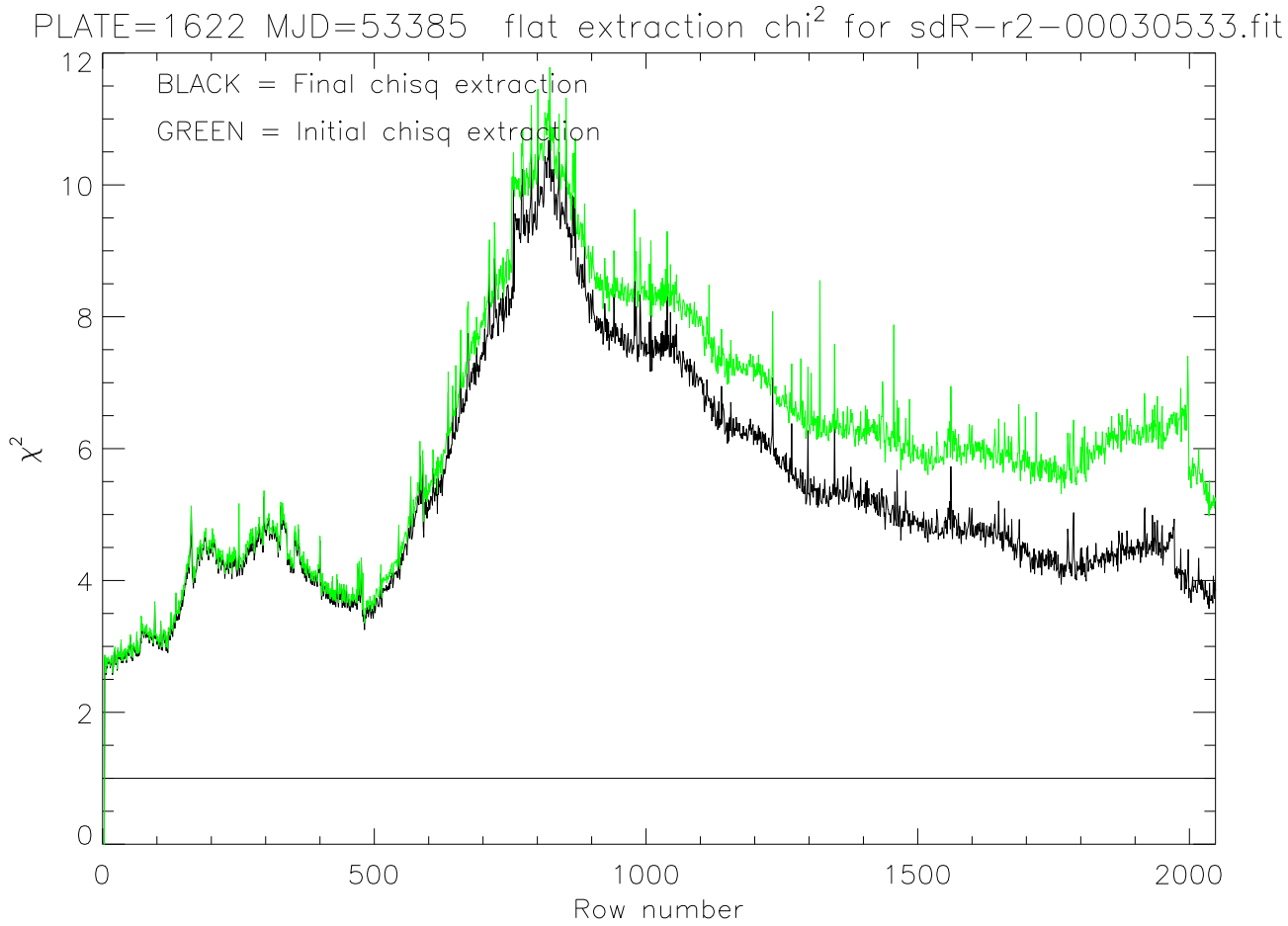

Number of sky fibers = 13
PLATE=1622 MJD=53385 sdR-r1-00030537.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

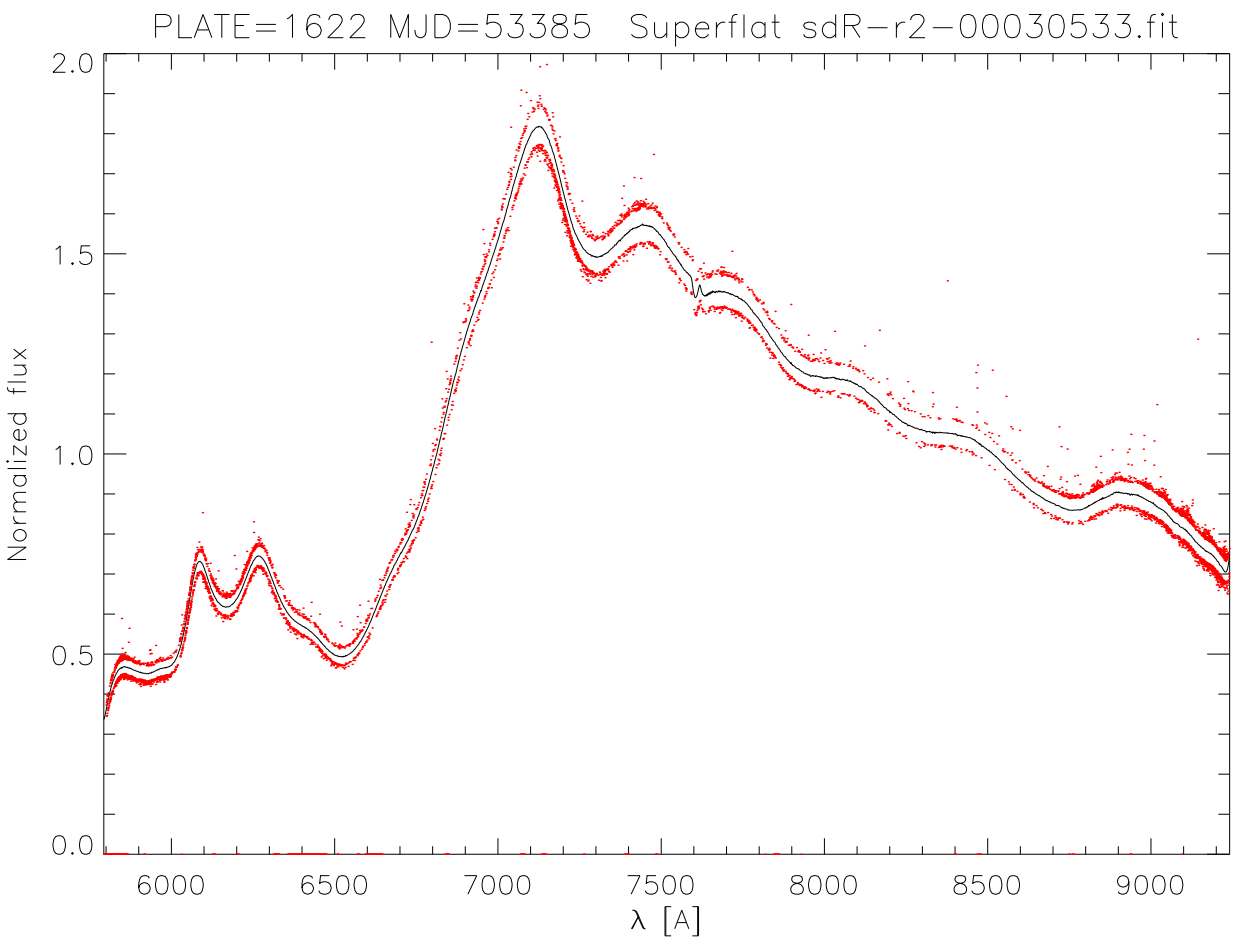

PLATE=1622 MJD=53385 sdR-r1-00030537.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

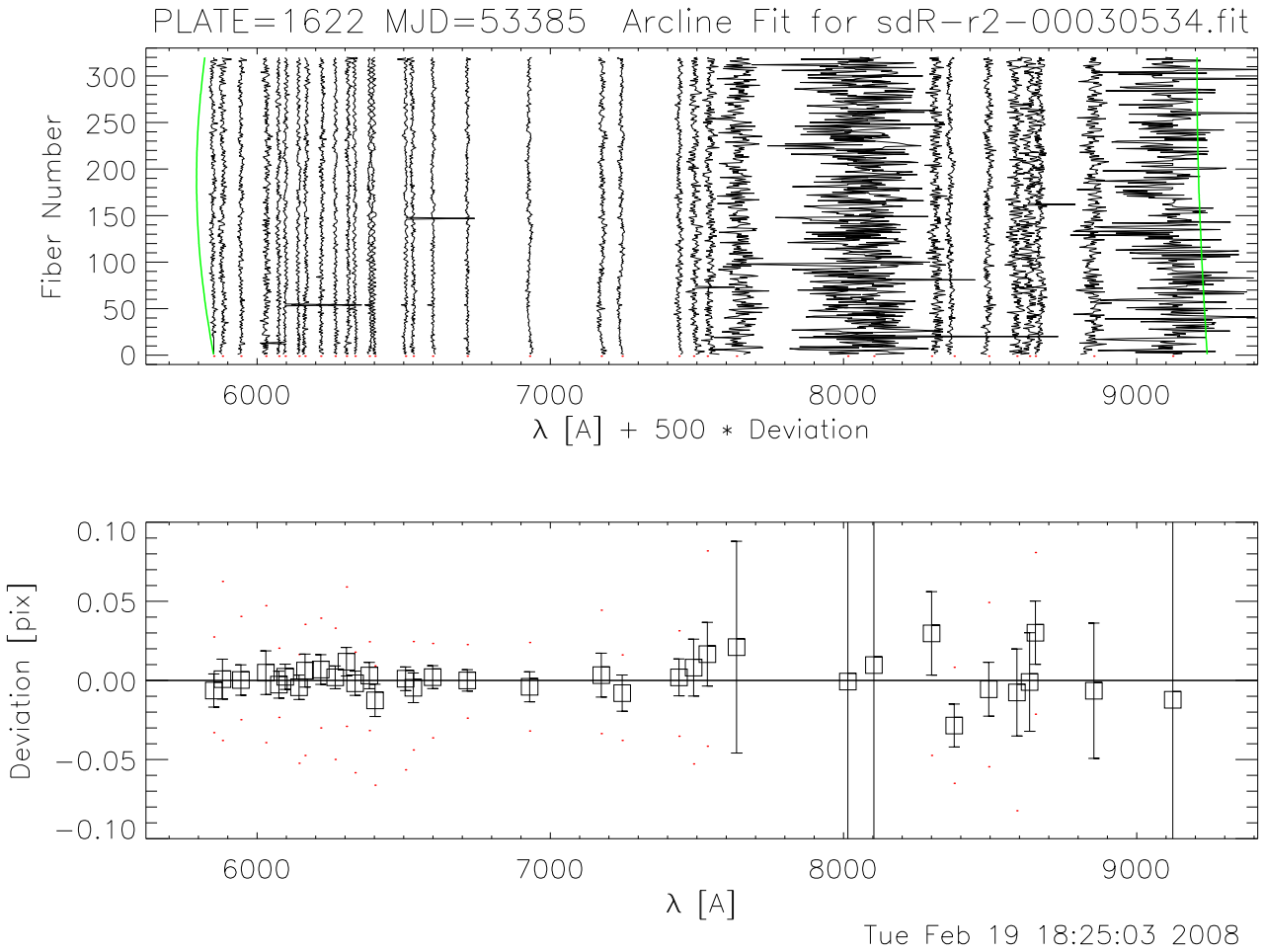

PLATE=1622 MJD=53385 sdR-r1-00030537.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.44 %
Fiber number
Focal Distance [mm]
Airmass

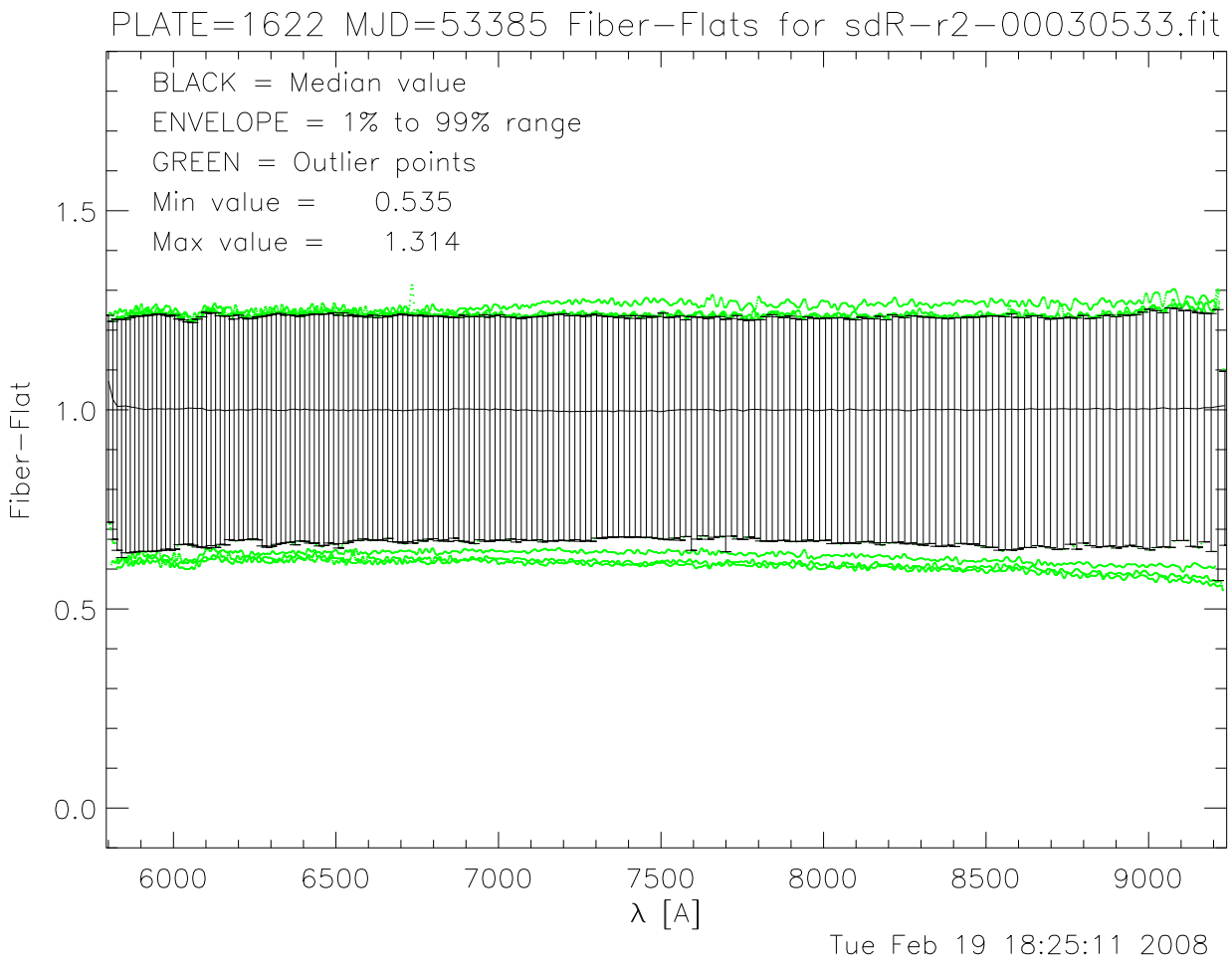

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

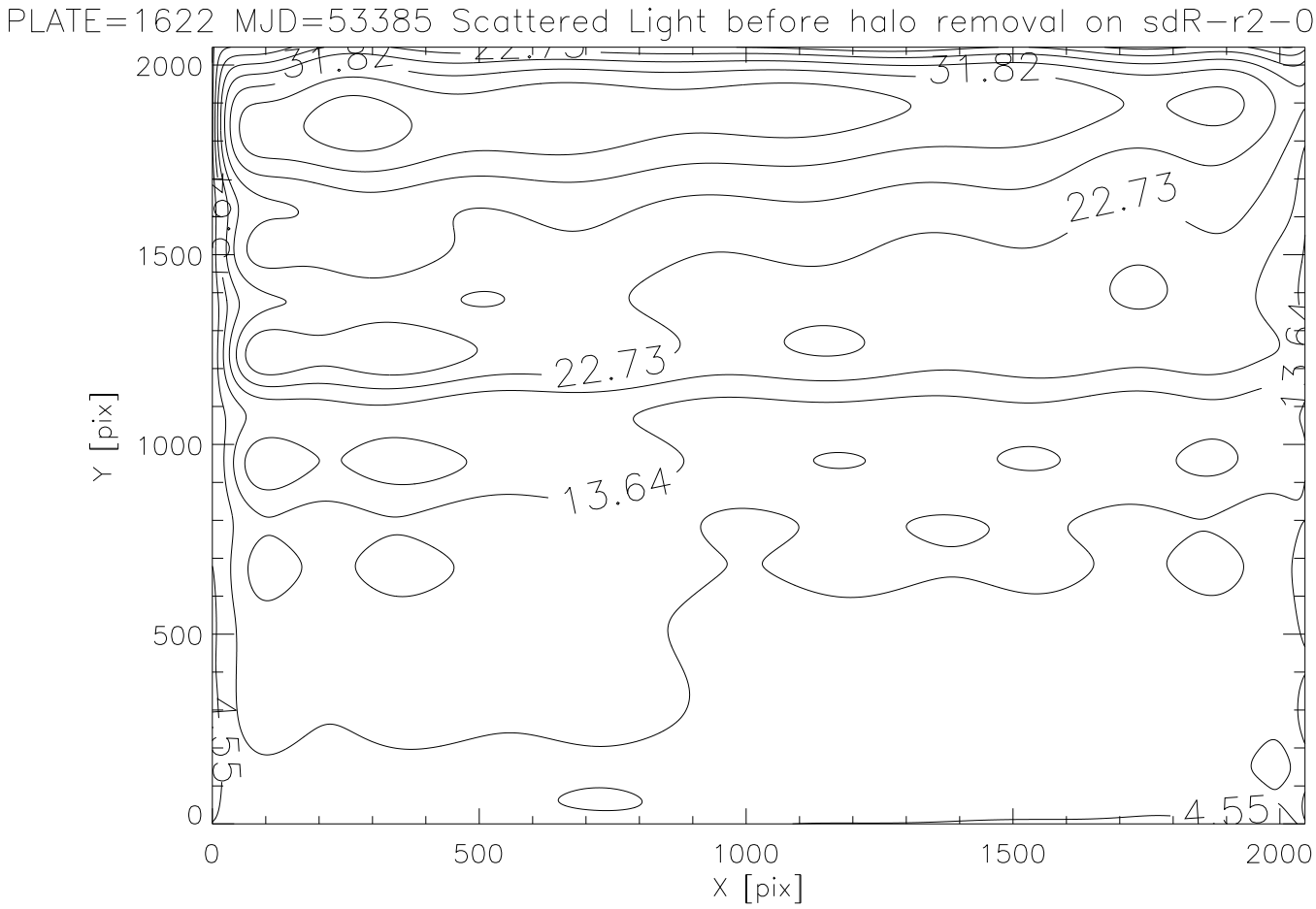

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

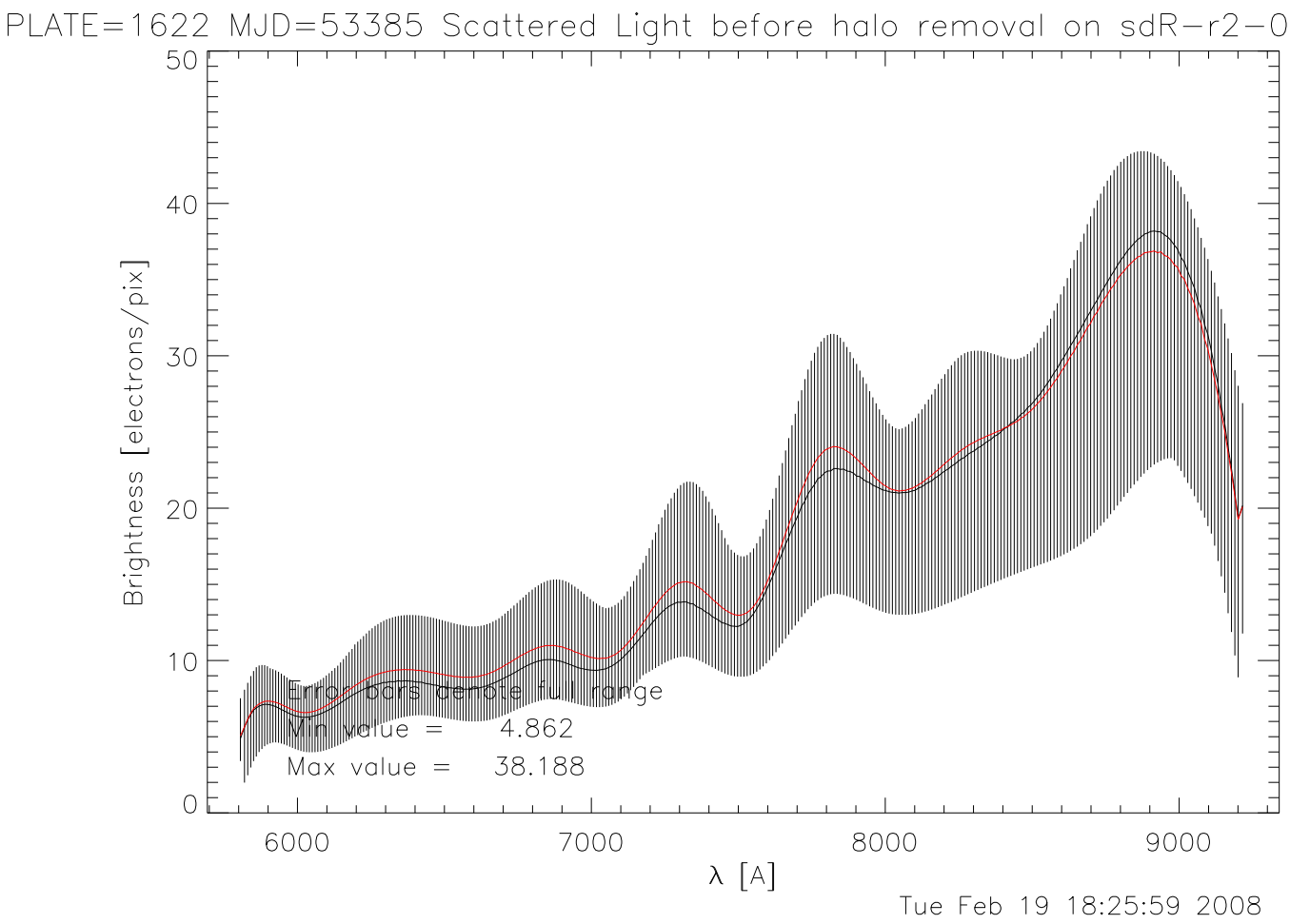

PLATE=1622 MJD=53385 flat extraction chi^2 for sdR−r2−00030533.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

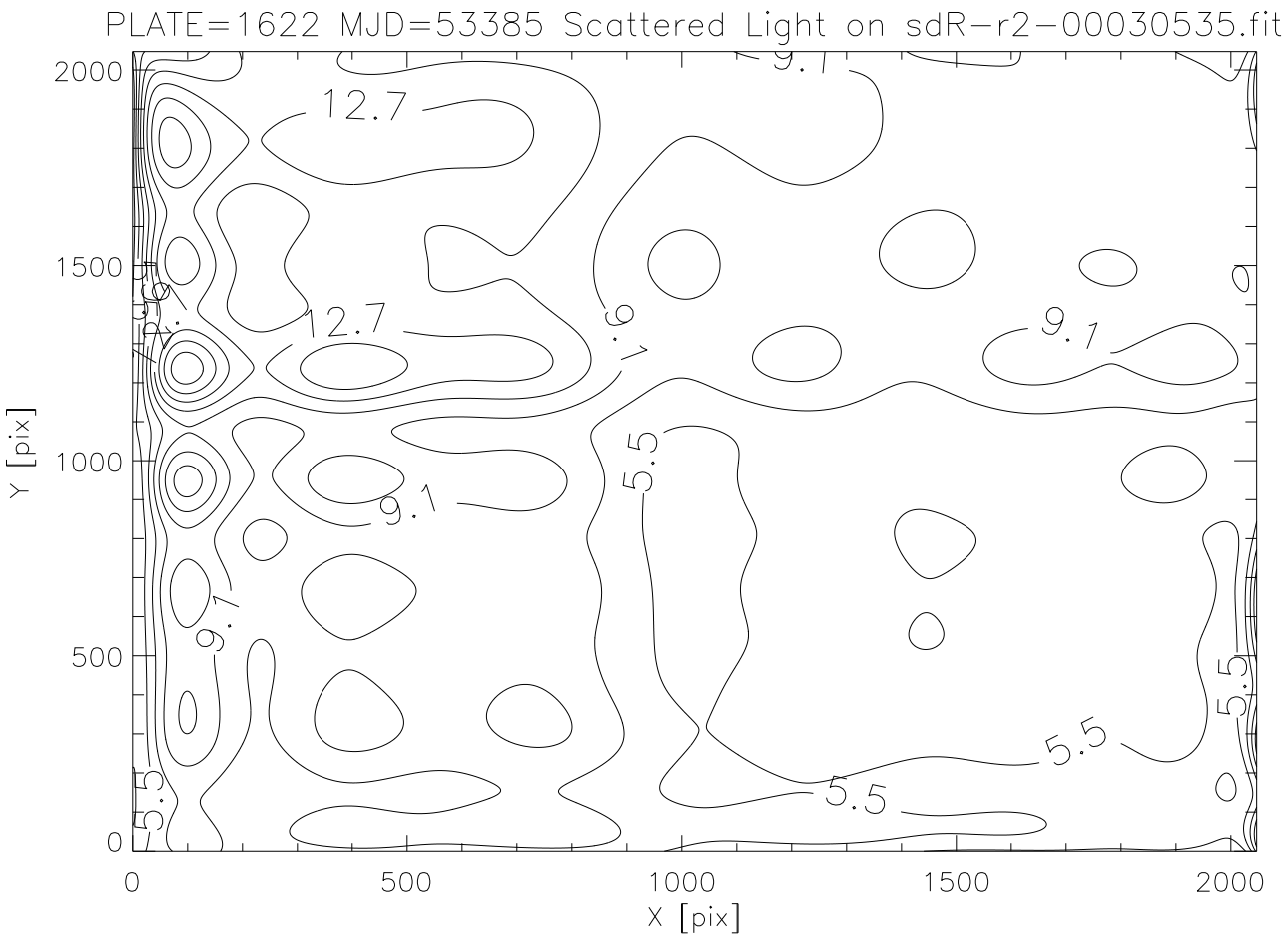

PLATE=1622 MJD=53385 Superflat sdR-r2-00030533.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

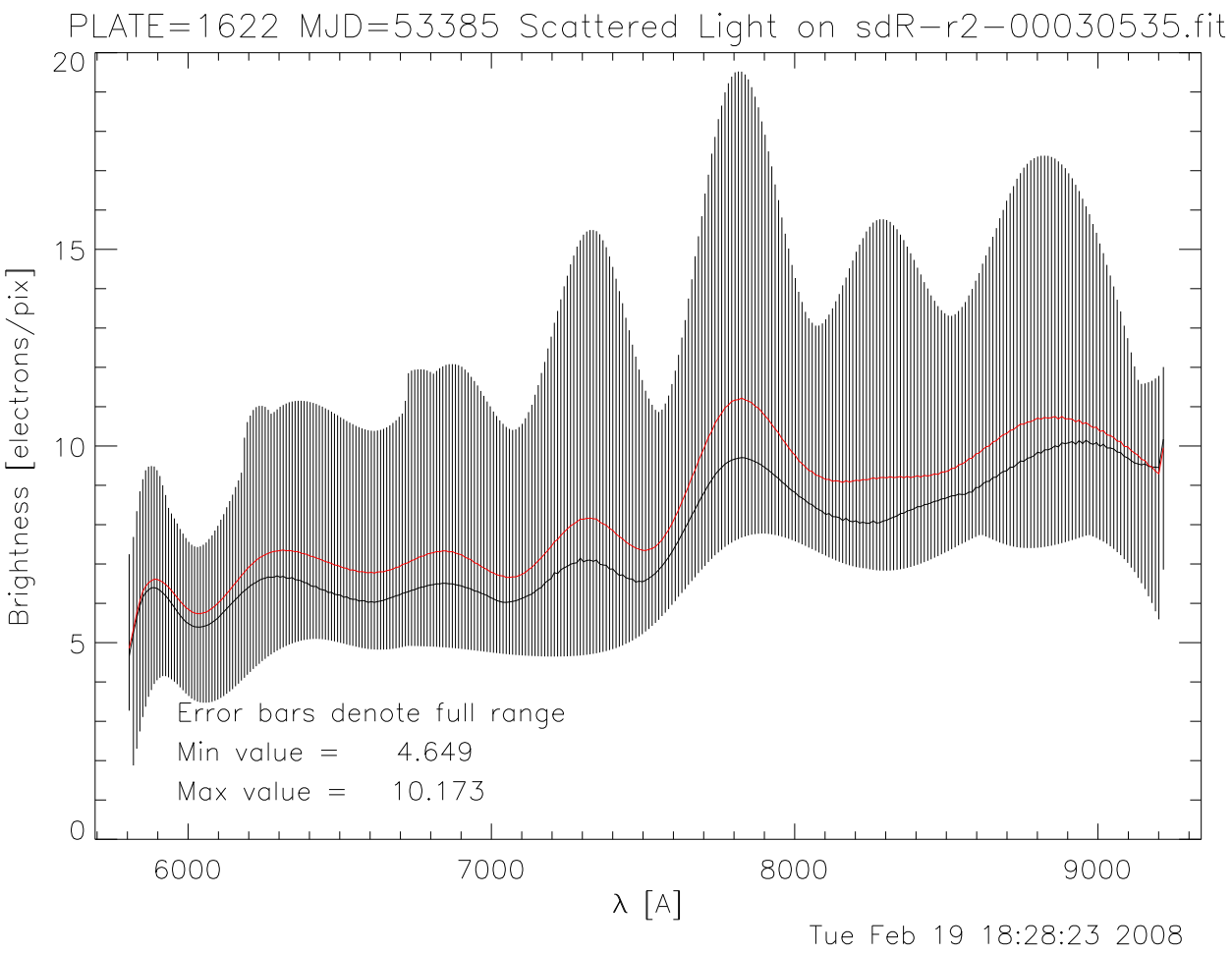

PLATE=1622 MJD=53385 Arcline Fit for sdR-r2-00030534.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 19 18:25:03 2008

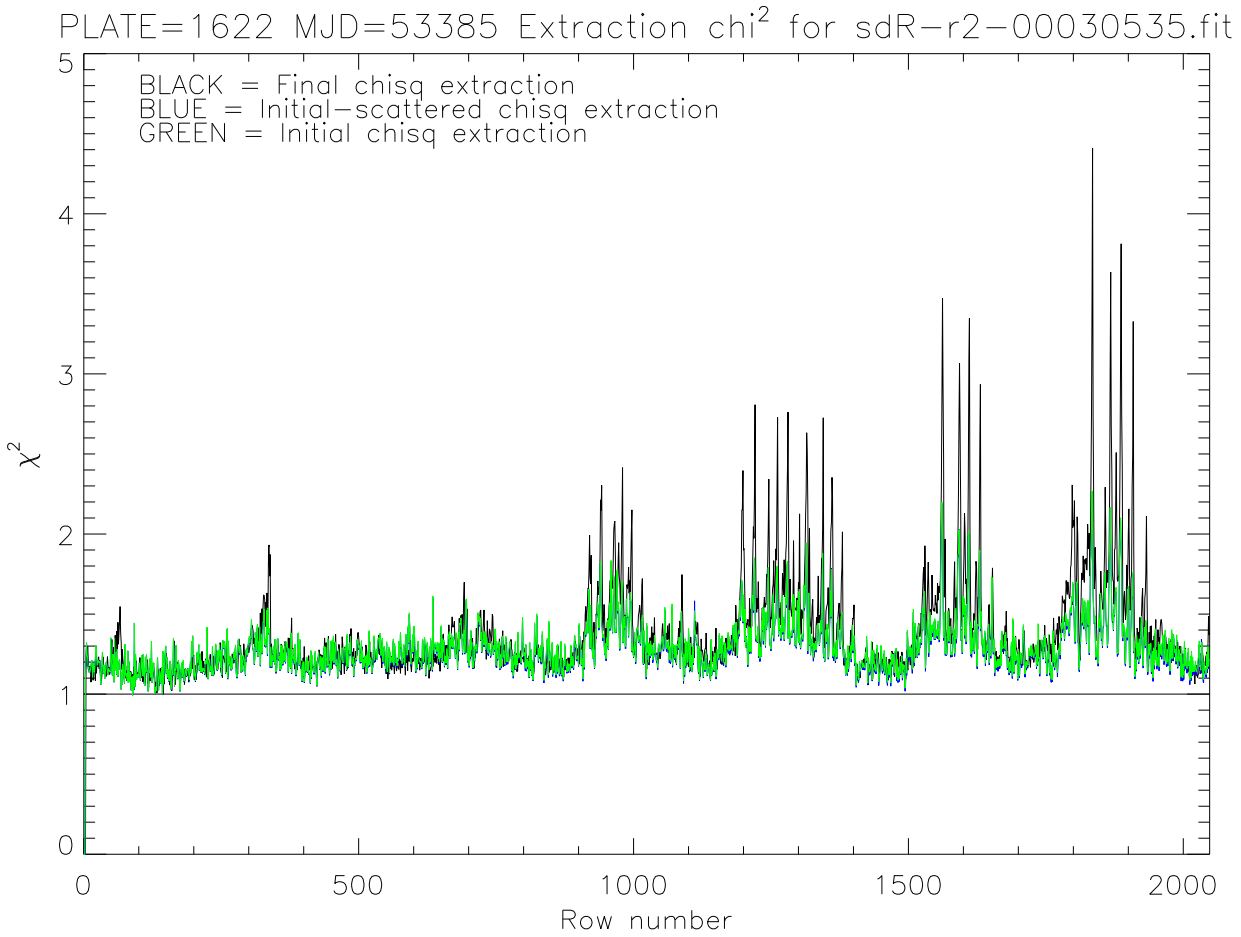

PLATE=1622 MJD=53385 Fiber−Flats for sdR−r2−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.535
Max value = 1.314
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 18:25:11 2008

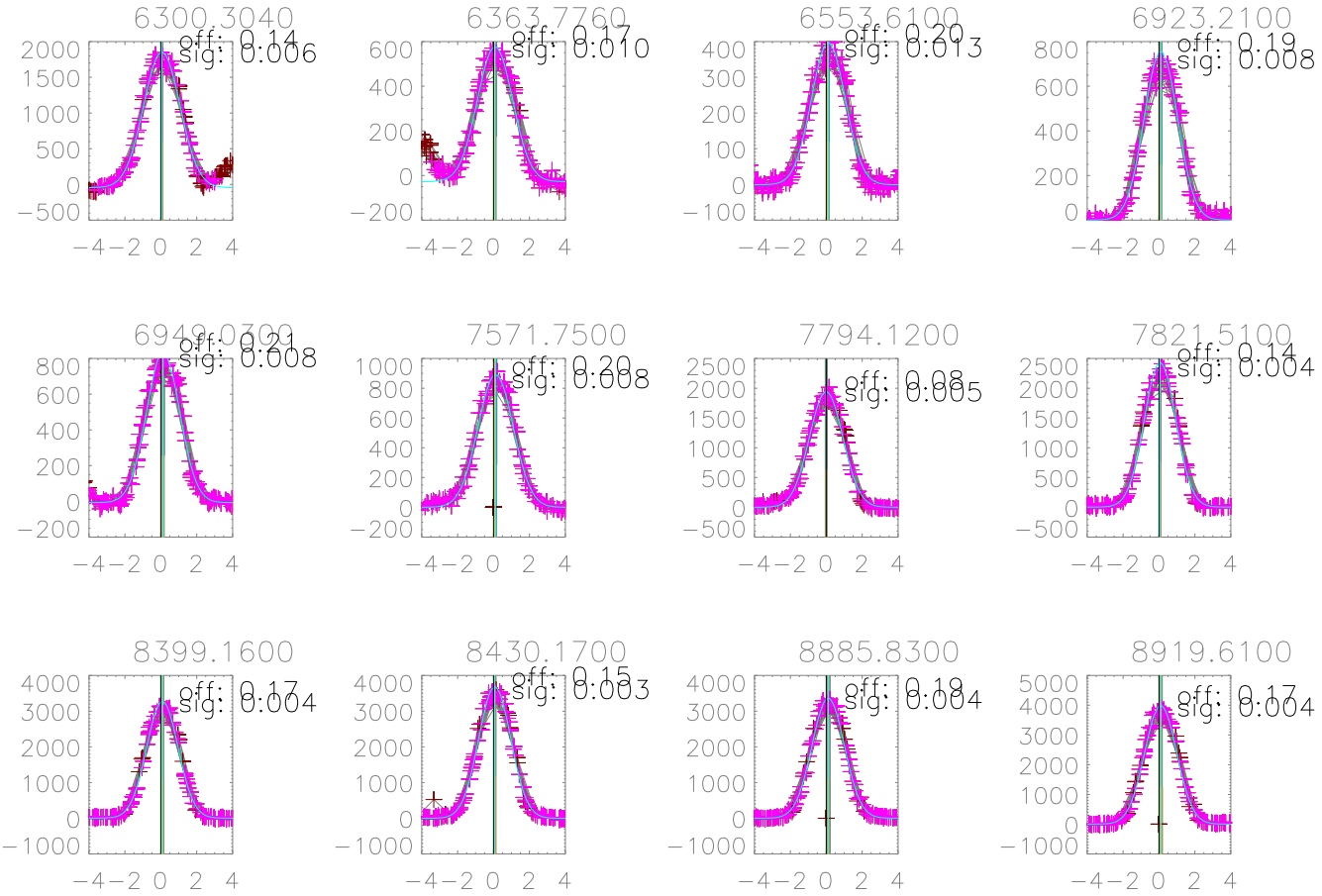

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r2-00030535.fi
31.82
22.73
13.64
4.55
Y [pix]
X [pix]
0
500
1000
1500
2000

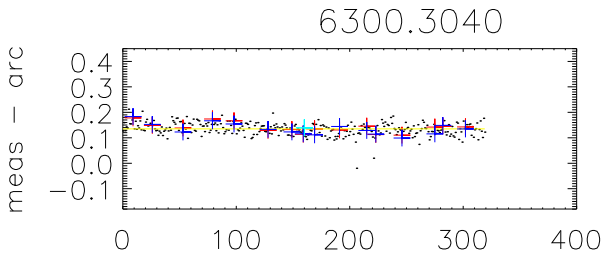

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r2-00030535.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.862
Max value = 38.188
Tue Feb 19 18:25:59 2008

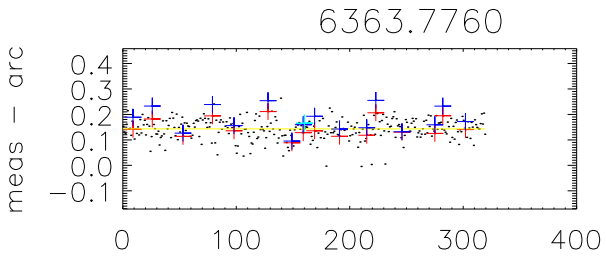

PLATE=1622 MJD=53385 Scattered Light on sdR-r2-00030535.fit
12.7
9.1
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

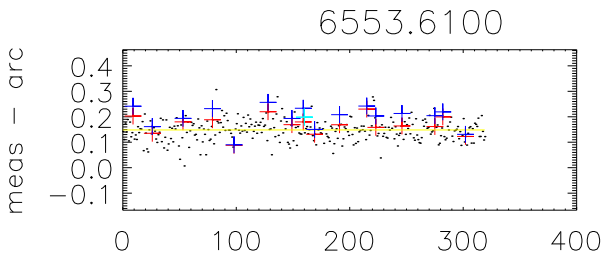

PLATE=1622 MJD=53385 Scattered Light on sdR-r2-00030535.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.649
Max value = 10.173
Tue Feb 19 18:28:23 2008

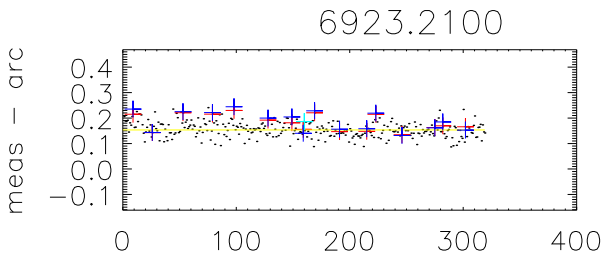

PLATE=1622 MJD=53385 Extraction chi^2 for sdR−r2−00030535.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

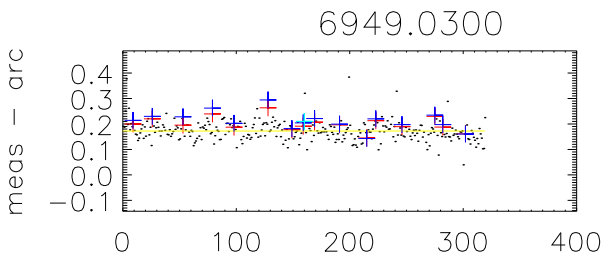

6300.3040
off: 0.14
sig: 0.006
6363.7760
off: 0.17
sig: 0.010
6553.6100
off: 0.20
sig: 0.013
6923.2100
off: 0.19
sig: 0.008
6949.0300
off: 0.21
sig: 0.008
7571.7500
off: 0.20
sig: 0.008
7794.1200
off: 0.08
sig: 0.005
7821.5100
off: 0.14
sig: 0.004
8399.1600
off: 0.17
sig: 0.004
8430.1700
off: 0.15
sig: 0.003
8885.8300
off: 0.18
sig: 0.004
8919.6100
off: 0.17
sig: 0.004

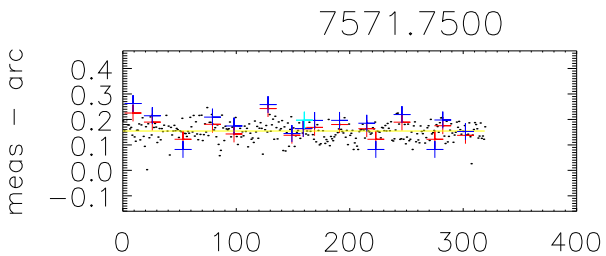

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

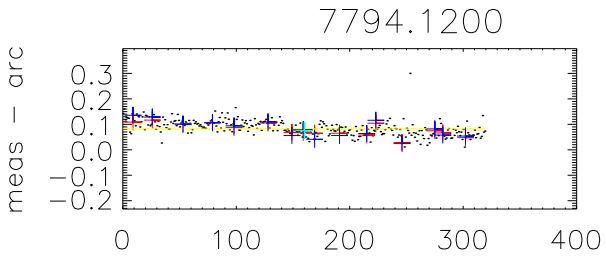

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

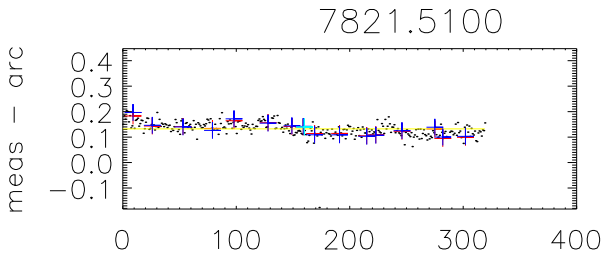

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

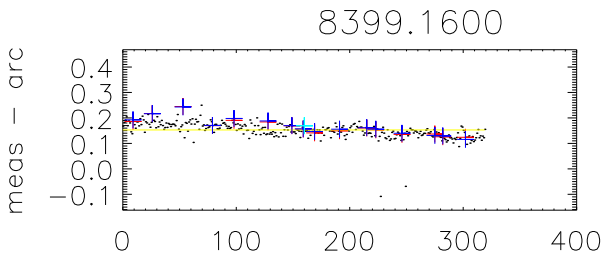

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

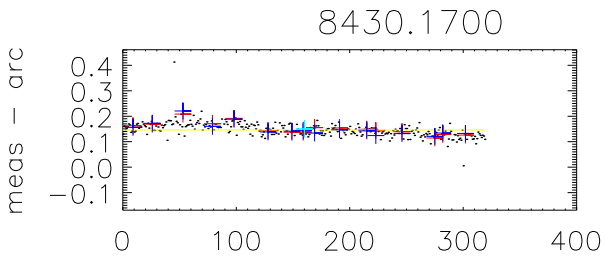

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

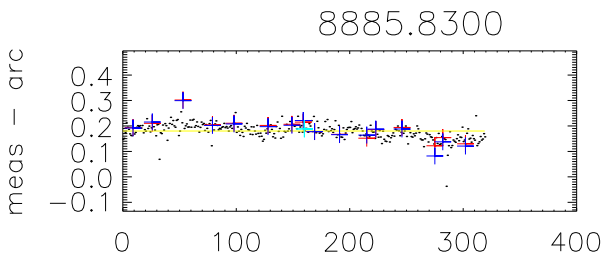

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

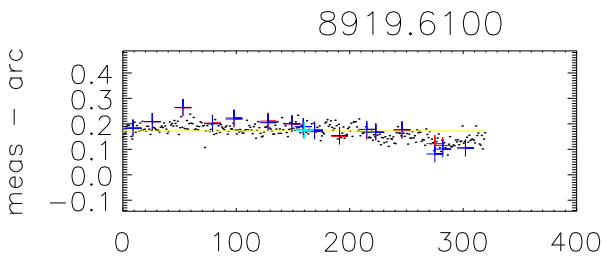

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

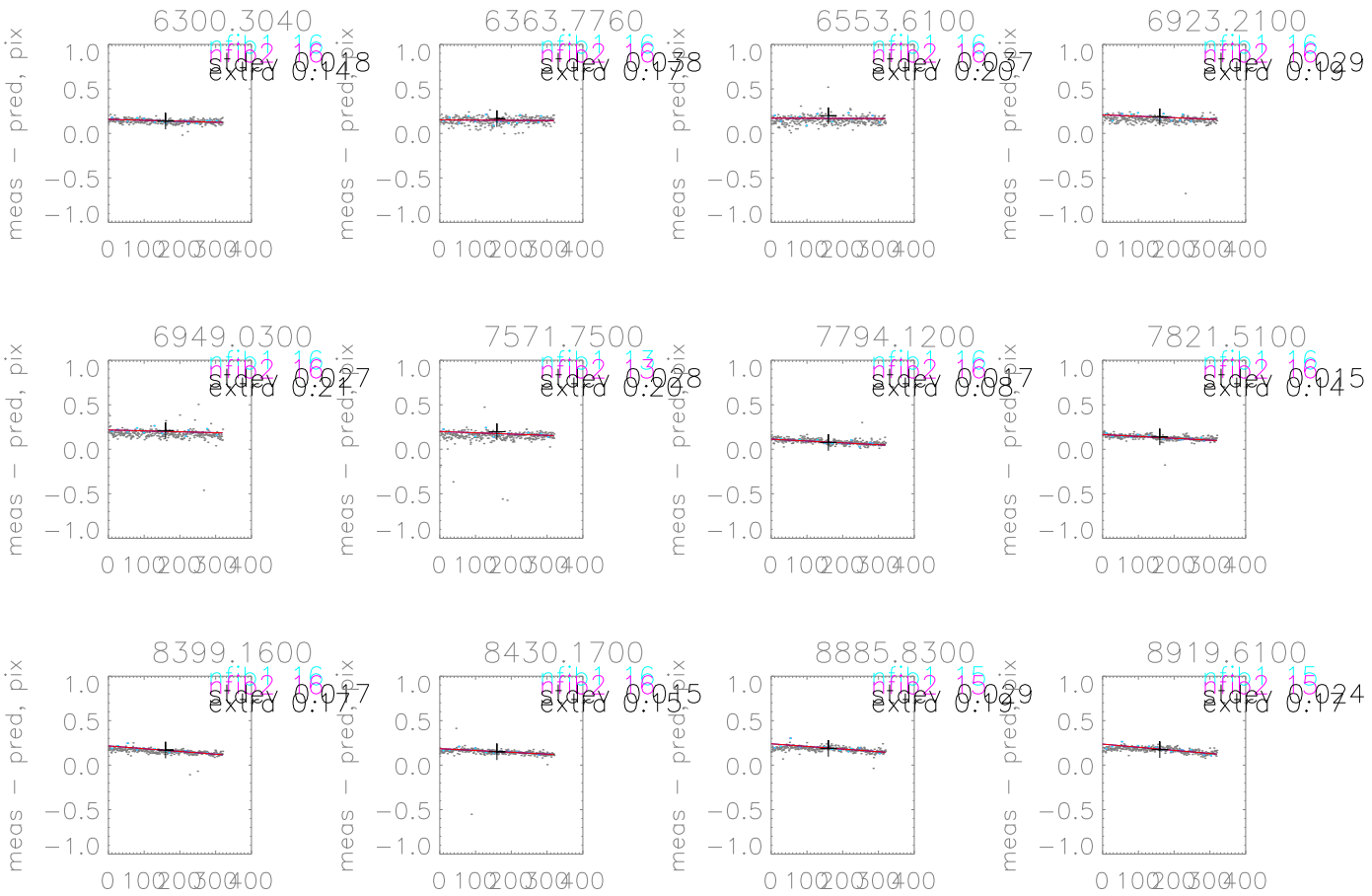

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

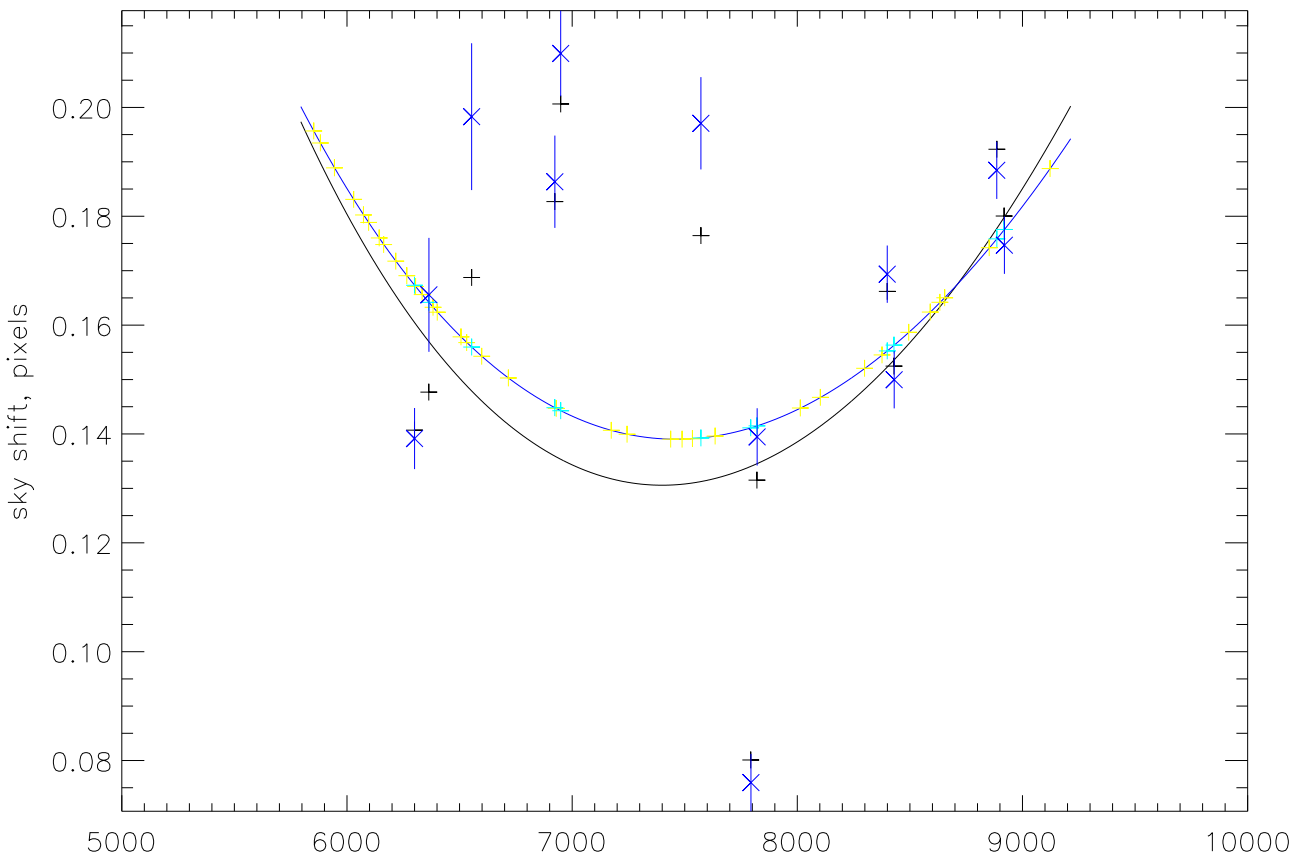

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

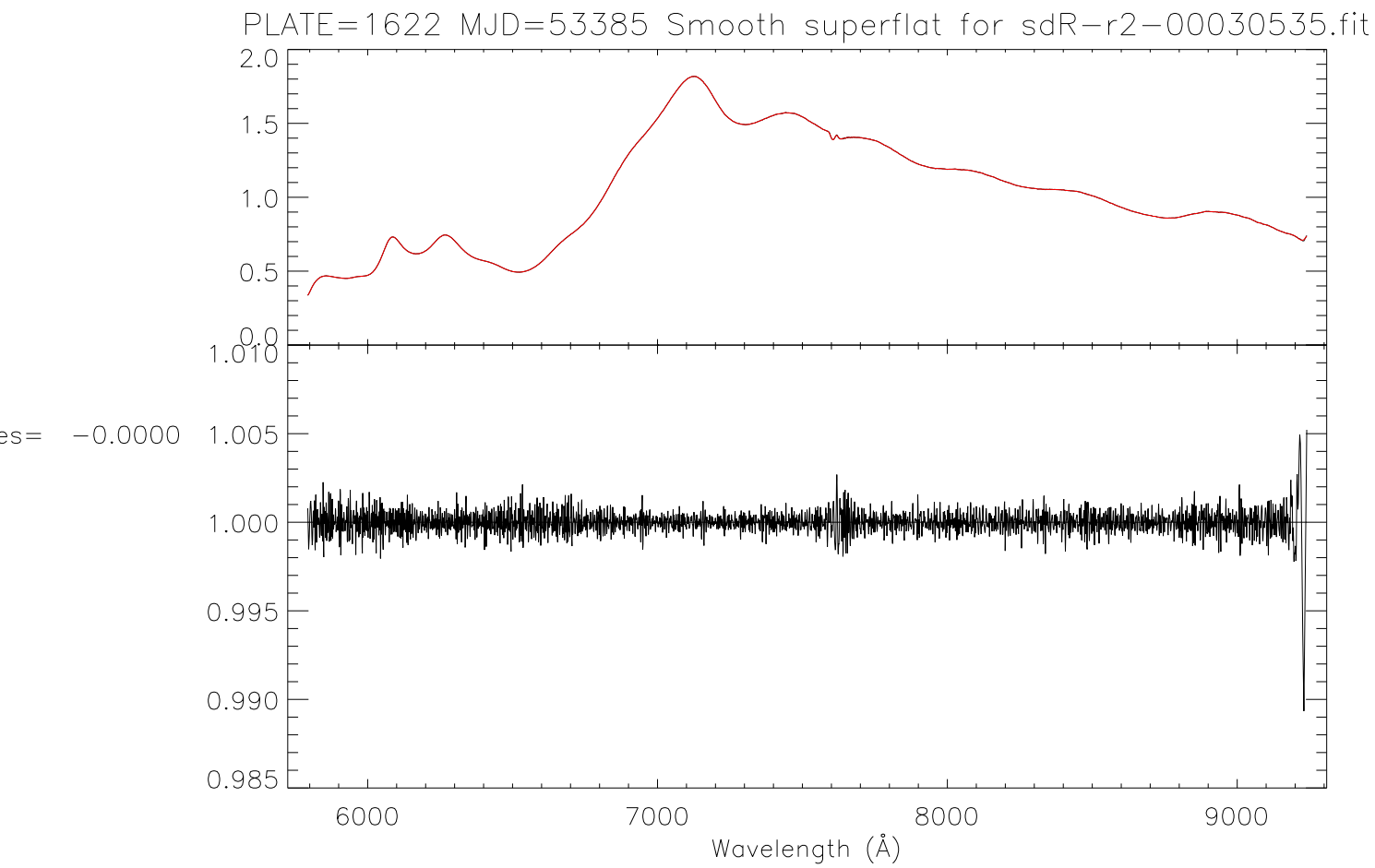

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

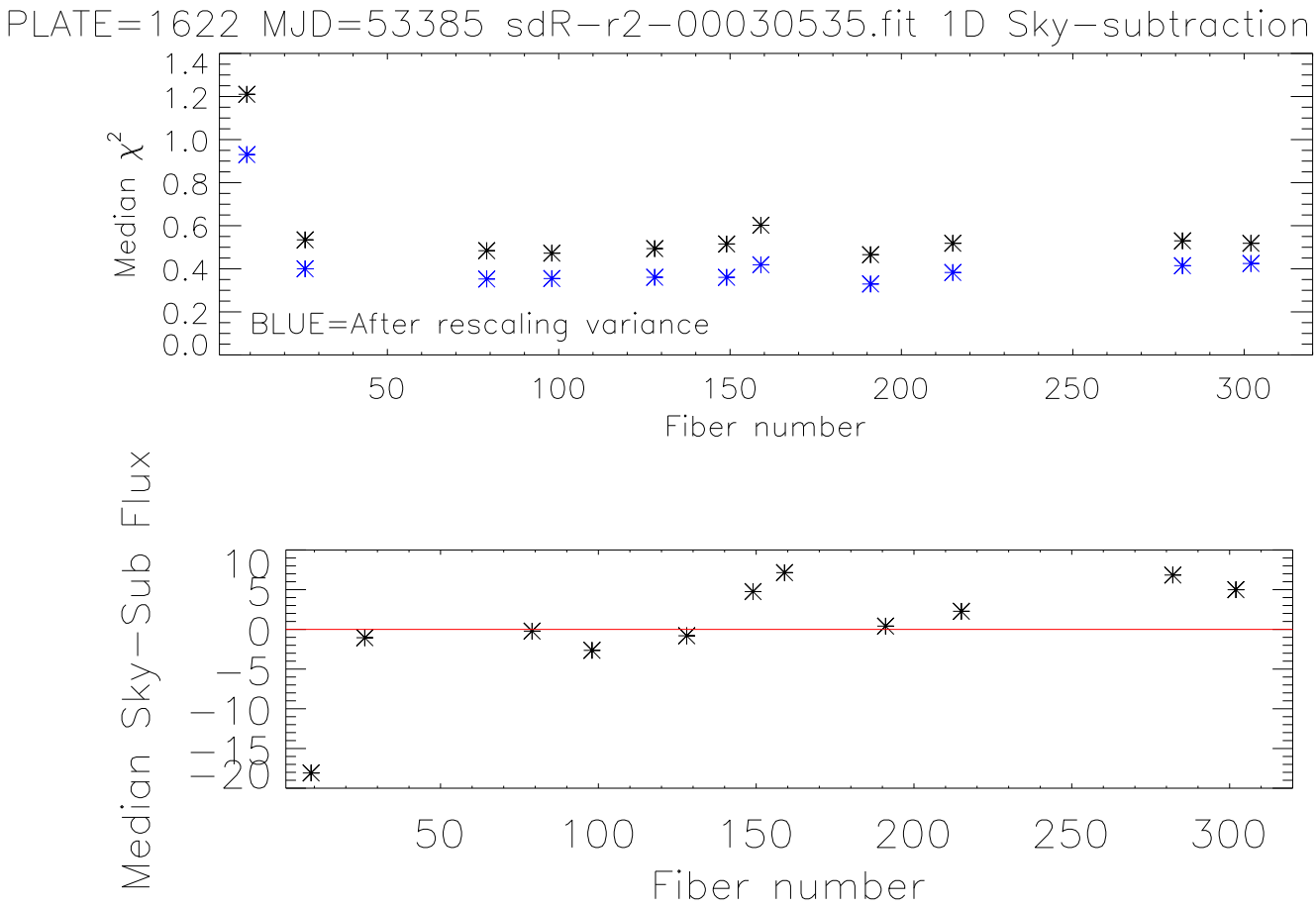

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

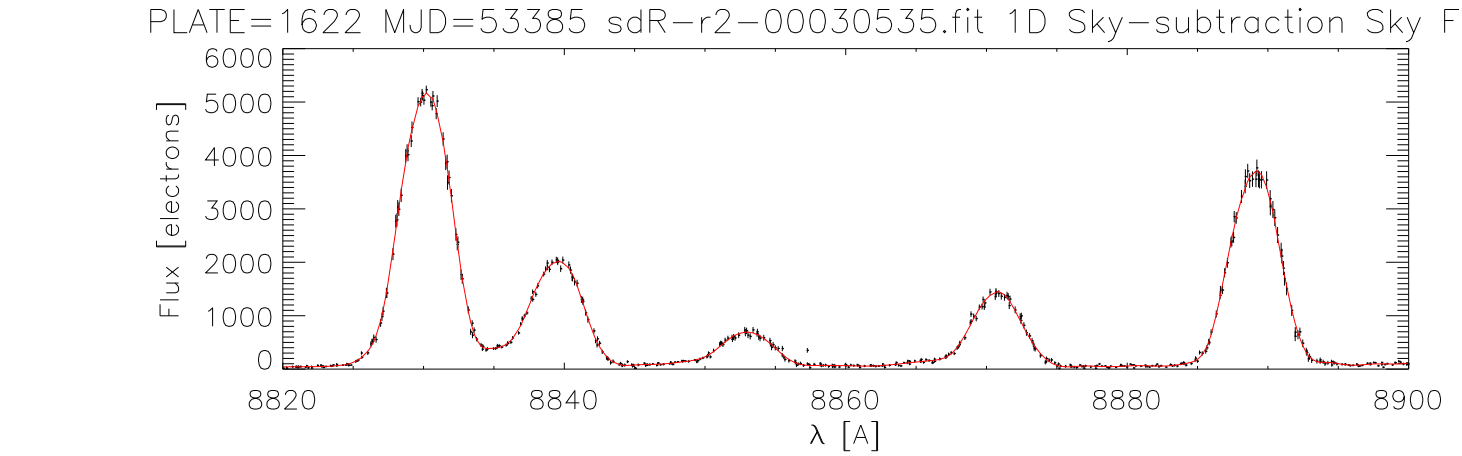

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

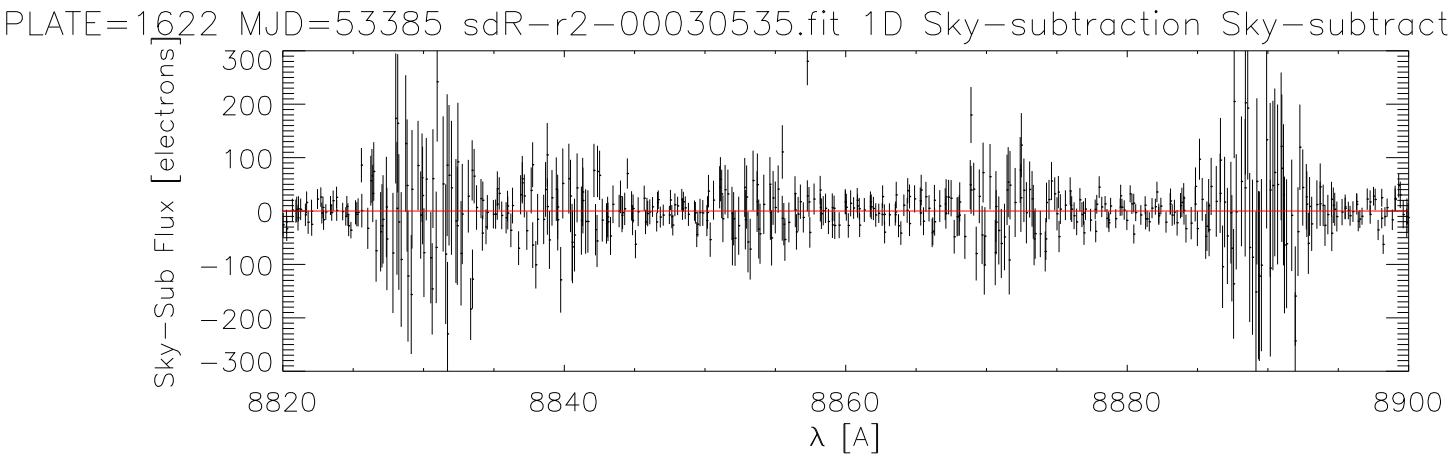

6300.3040
mfhd1 16
mfhd2 16
stdev 0.018
extra 0.148
6363.7760
mfhd1 16
mfhd2 16
stdev 0.038
extra 0.178
6553.6100
mfhd1 16
mfhd2 16
stdev 0.037
extra 0.207
6923.2100
mfhd1 16
mfhd2 16
stdev 0.029
extra 0.159
6949.0300
mfhd1 16
mfhd2 16
stdev 0.027
extra 0.217
7571.7500
mfhd1 13
mfhd2 16
stdev 0.028
extra 0.266
7794.1200
mfhd1 16
mfhd2 16
stdev 0.017
extra 0.088
7821.5100
mfhd1 16
mfhd2 16
stdev 0.015
extra 0.144
8399.1600
mfhd1 16
mfhd2 16
stdev 0.017
extra 0.177
8430.1700
mfhd1 16
mfhd2 16
stdev 0.015
extra 0.155
8885.8300
mfhd1 15
mfhd2 16
stdev 0.029
extra 0.199
8919.6100
mfhd1 15
mfhd2 16
stdev 0.024
extra 0.177
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

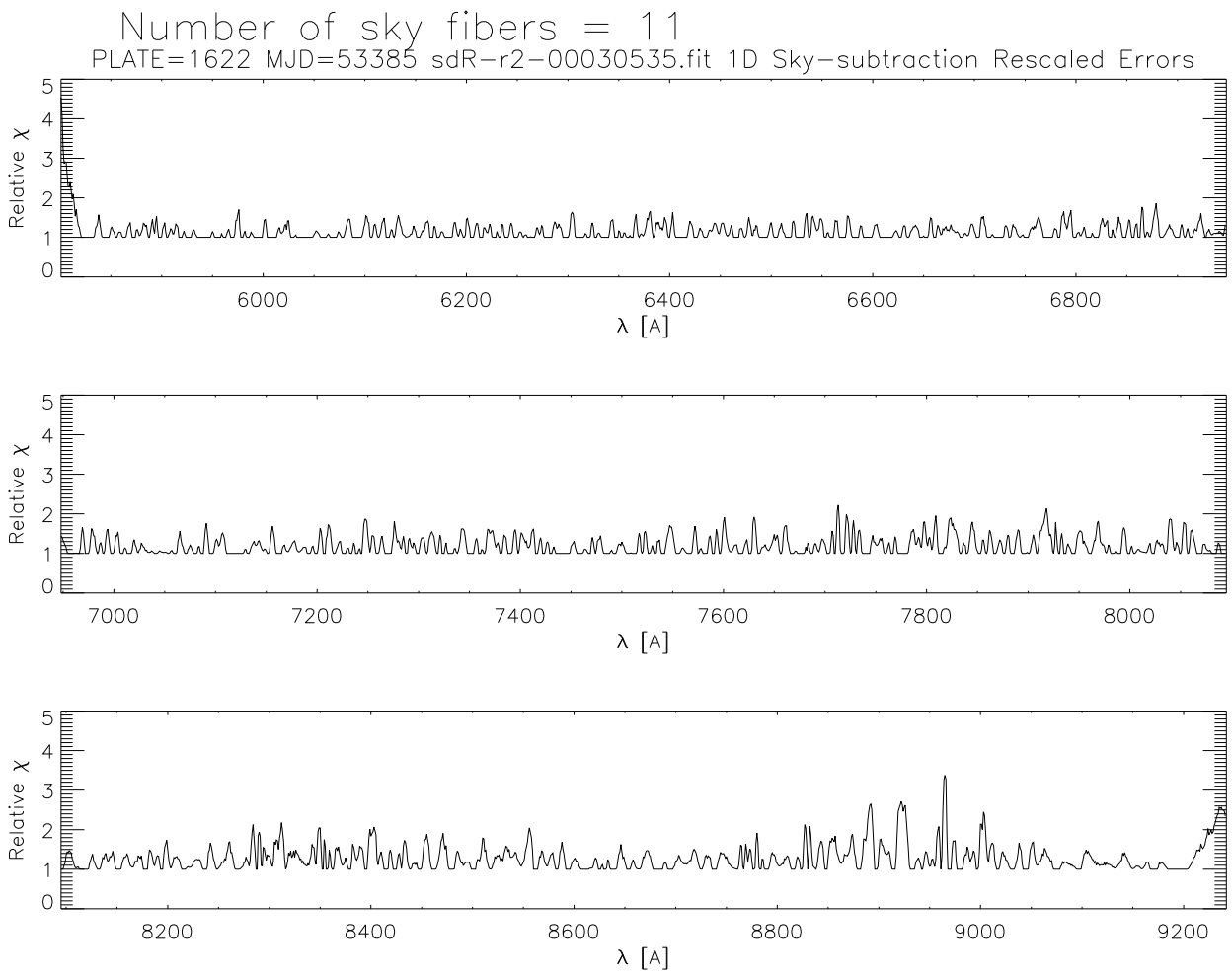

sky shift, pixels
0.20
0.18
0.16
0.14
0.12
0.10
0.08
5000
6000
7000
8000
9000
10000

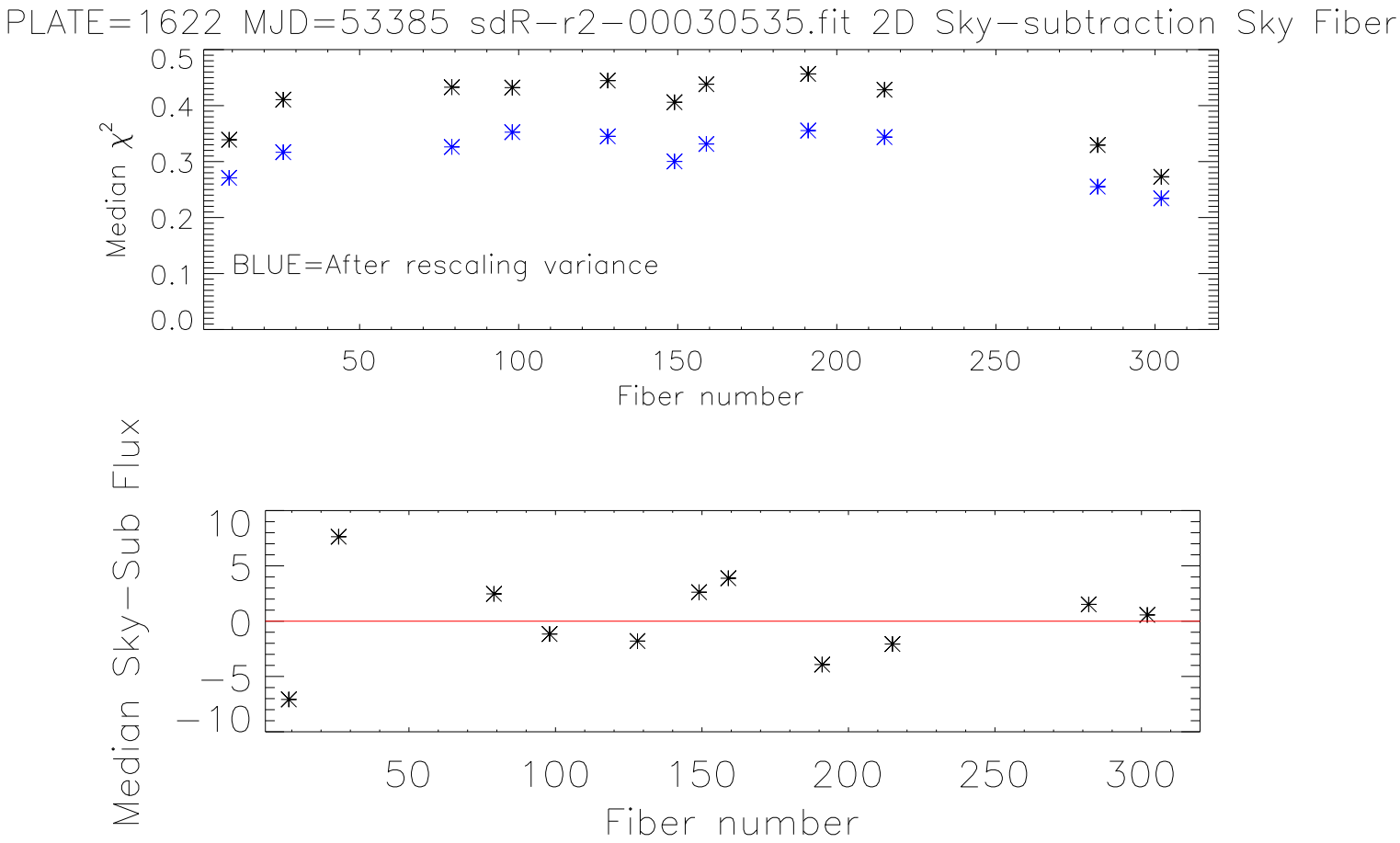

PLATE=1622 MJD=53385 Smooth superflat for sdR-r2-00030535.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

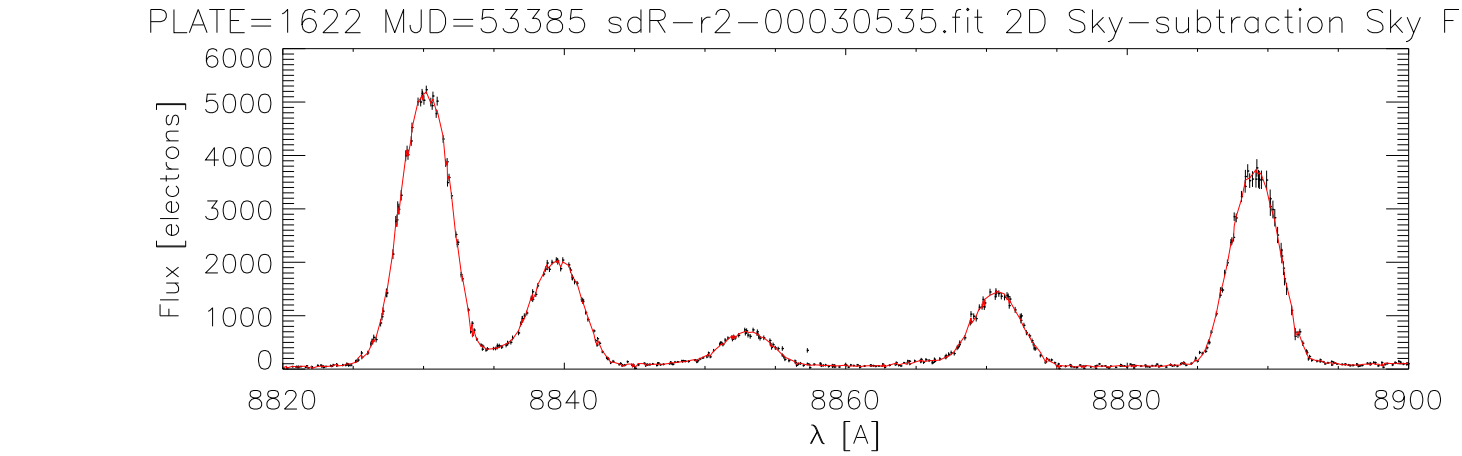

PLATE=1622 MJD=53385 sdR-r2-00030535.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

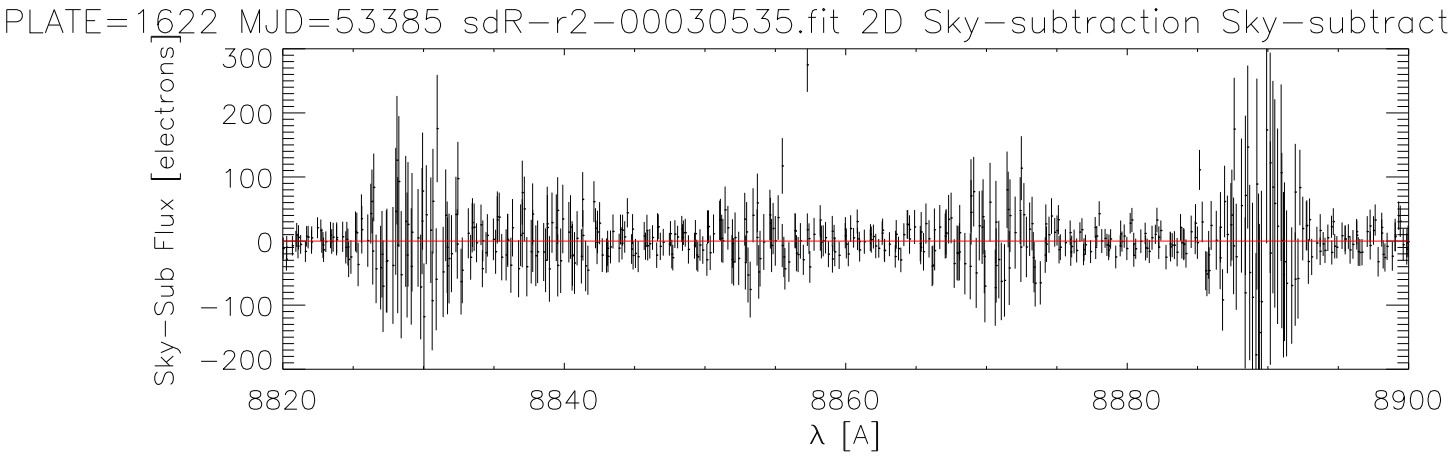

PLATE=1622 MJD=53385 sdR-r2-00030535.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

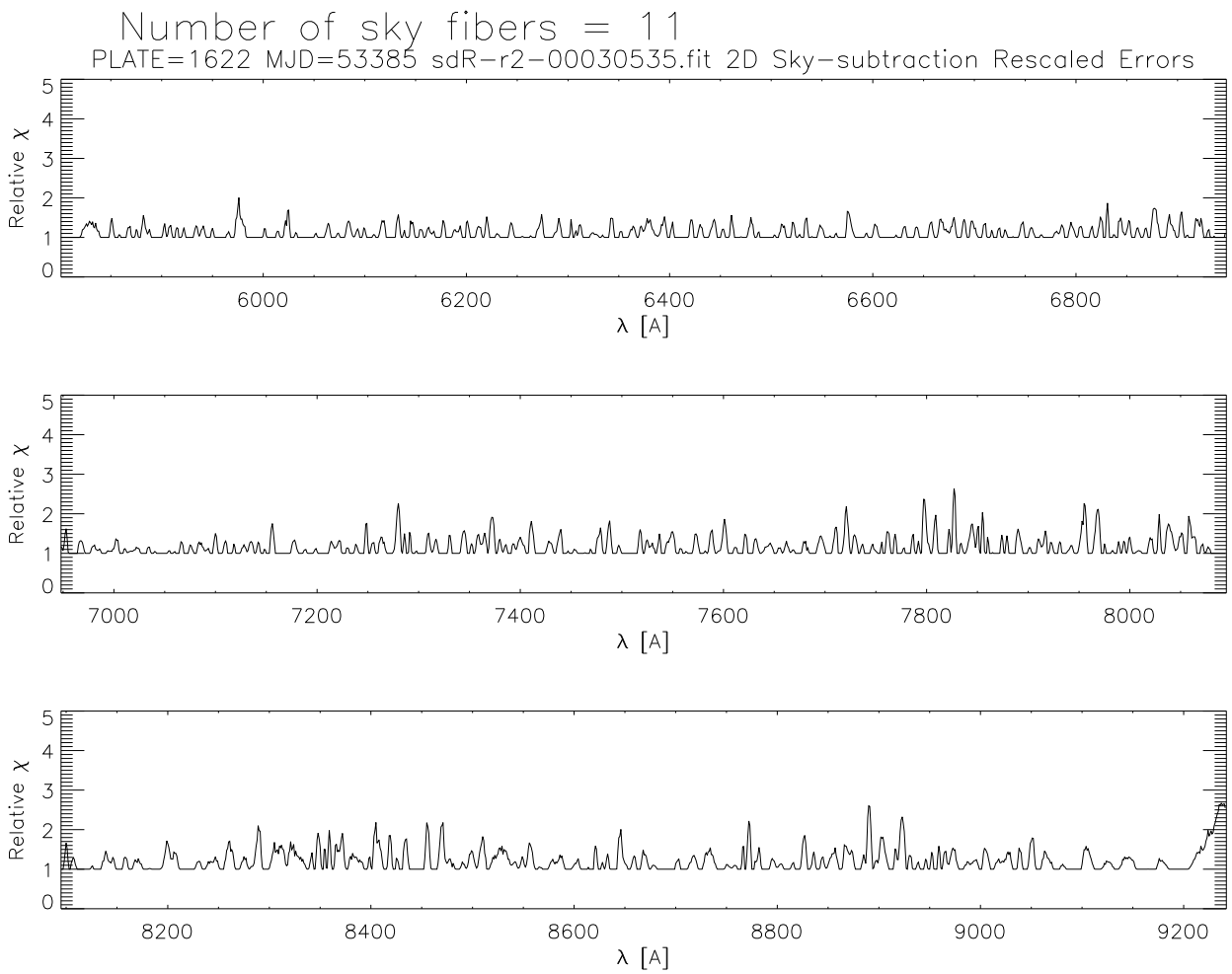

PLATE=1622 MJD=53385 sdR-r2-00030535.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

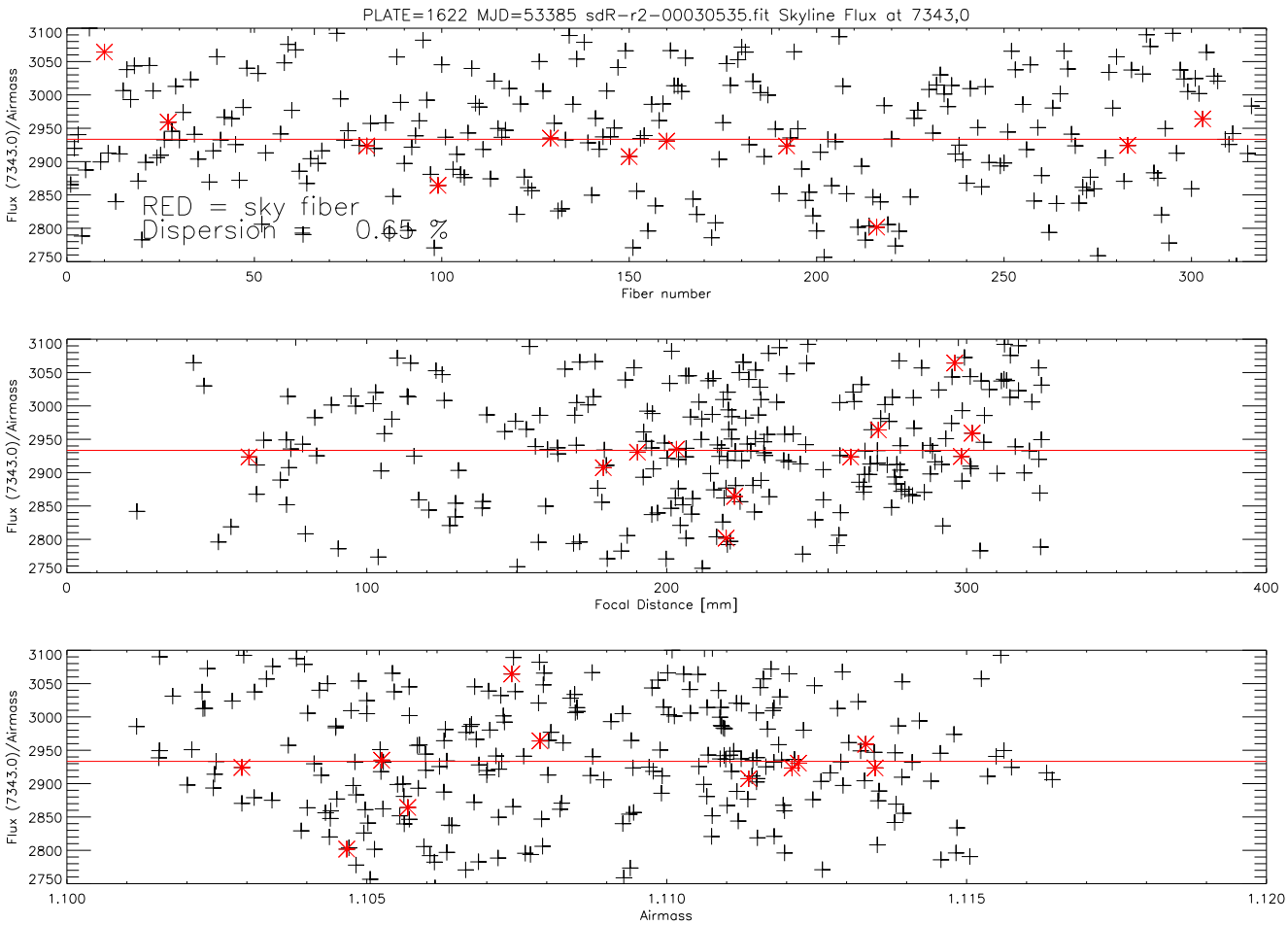

Number of sky fibers = 11
PLATE=1622 MJD=53385 sdR-r2-00030535.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

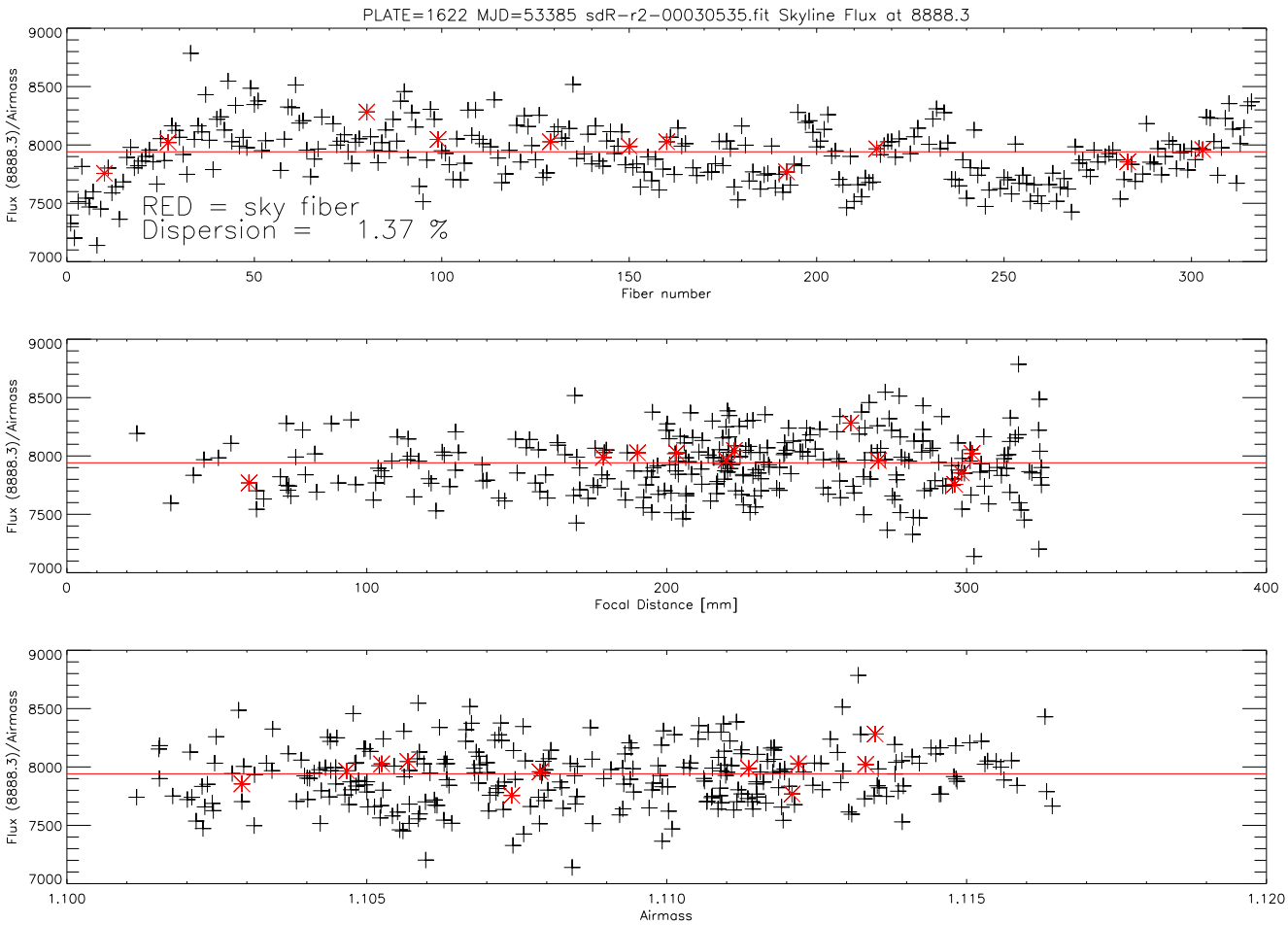

PLATE=1622 MJD=53385 sdR-r2-00030535.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

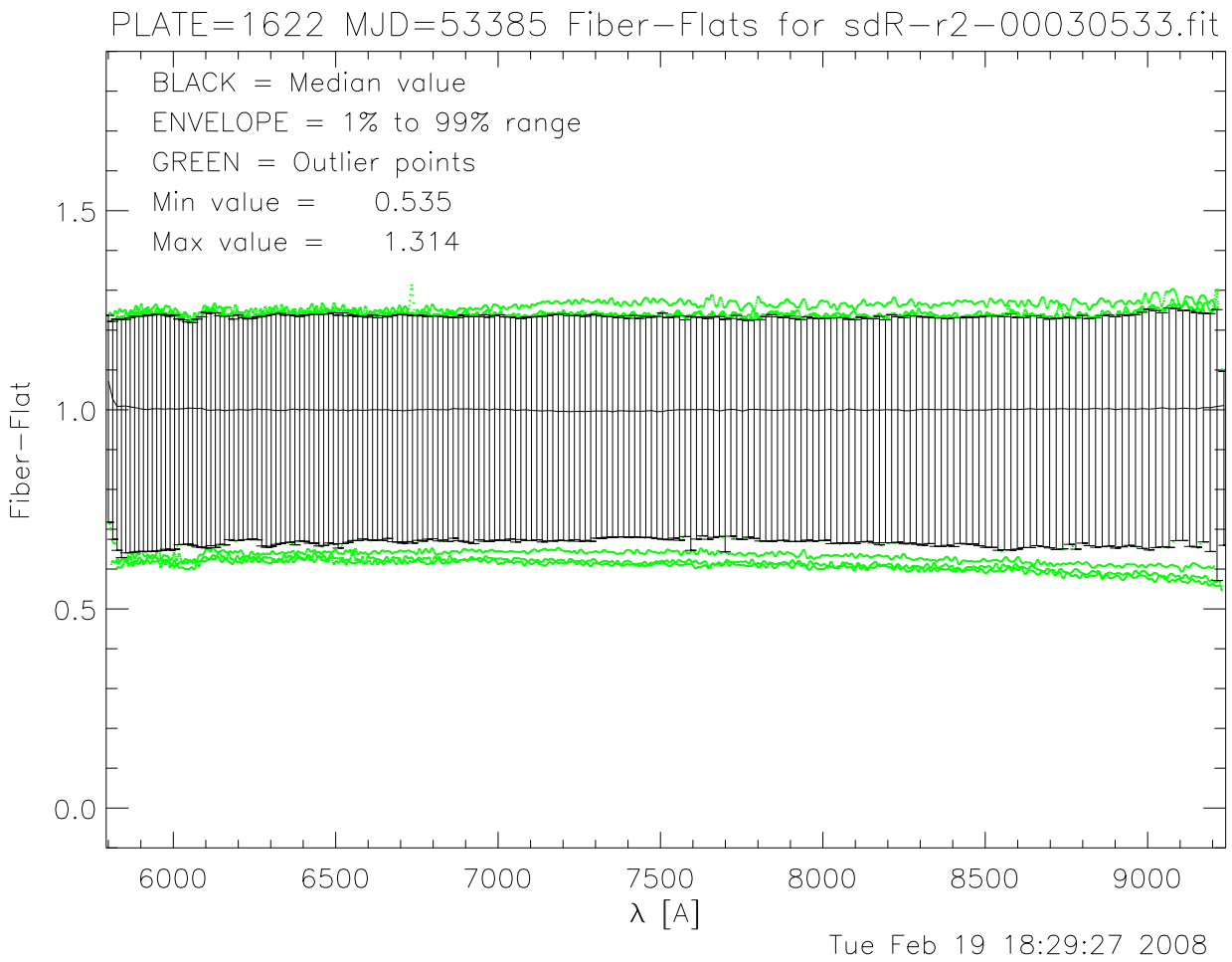

PLATE=1622 MJD=53385 sdR-r2-00030535.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

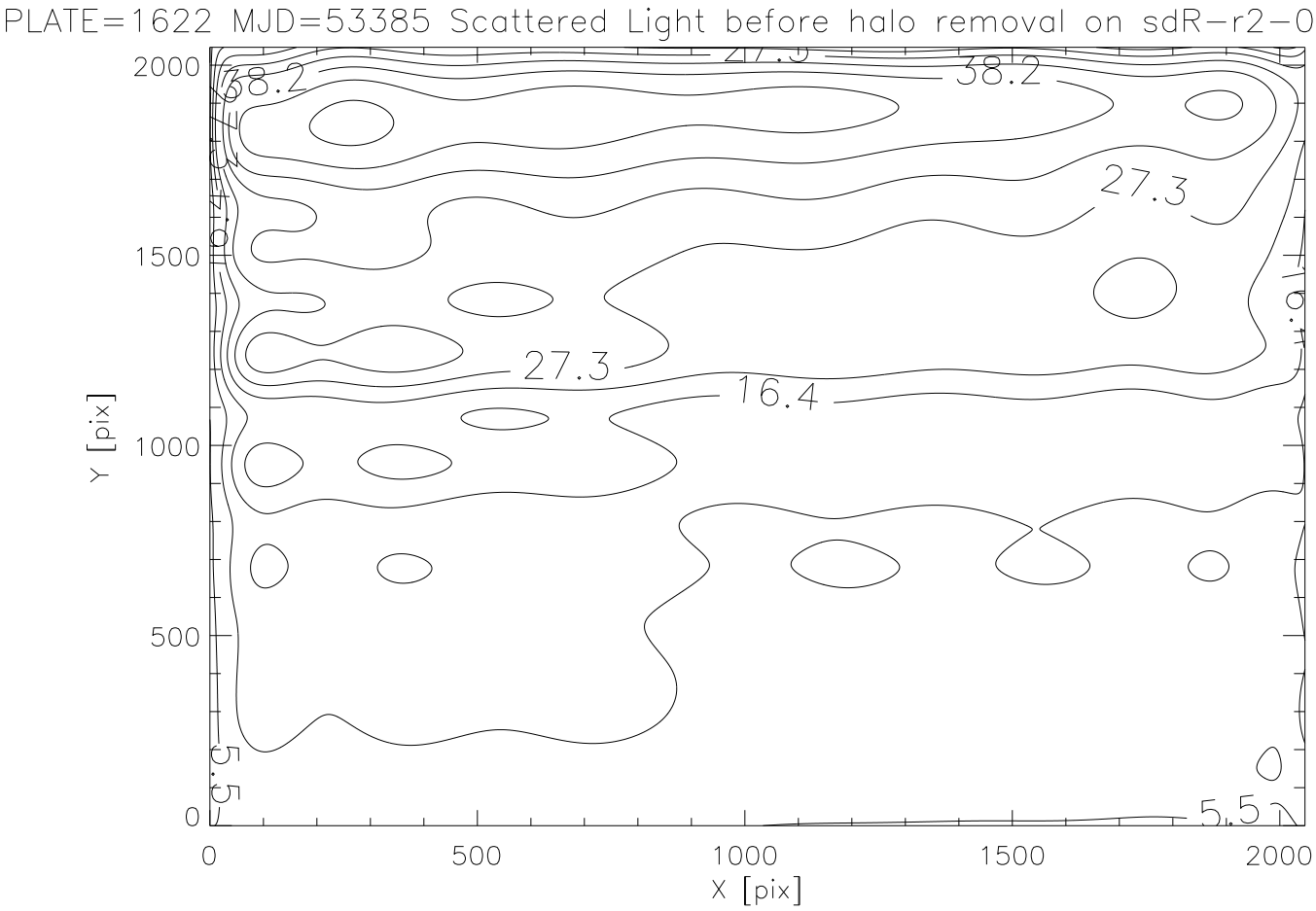

PLATE=1622 MJD=53385 sdR-r2-00030535.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

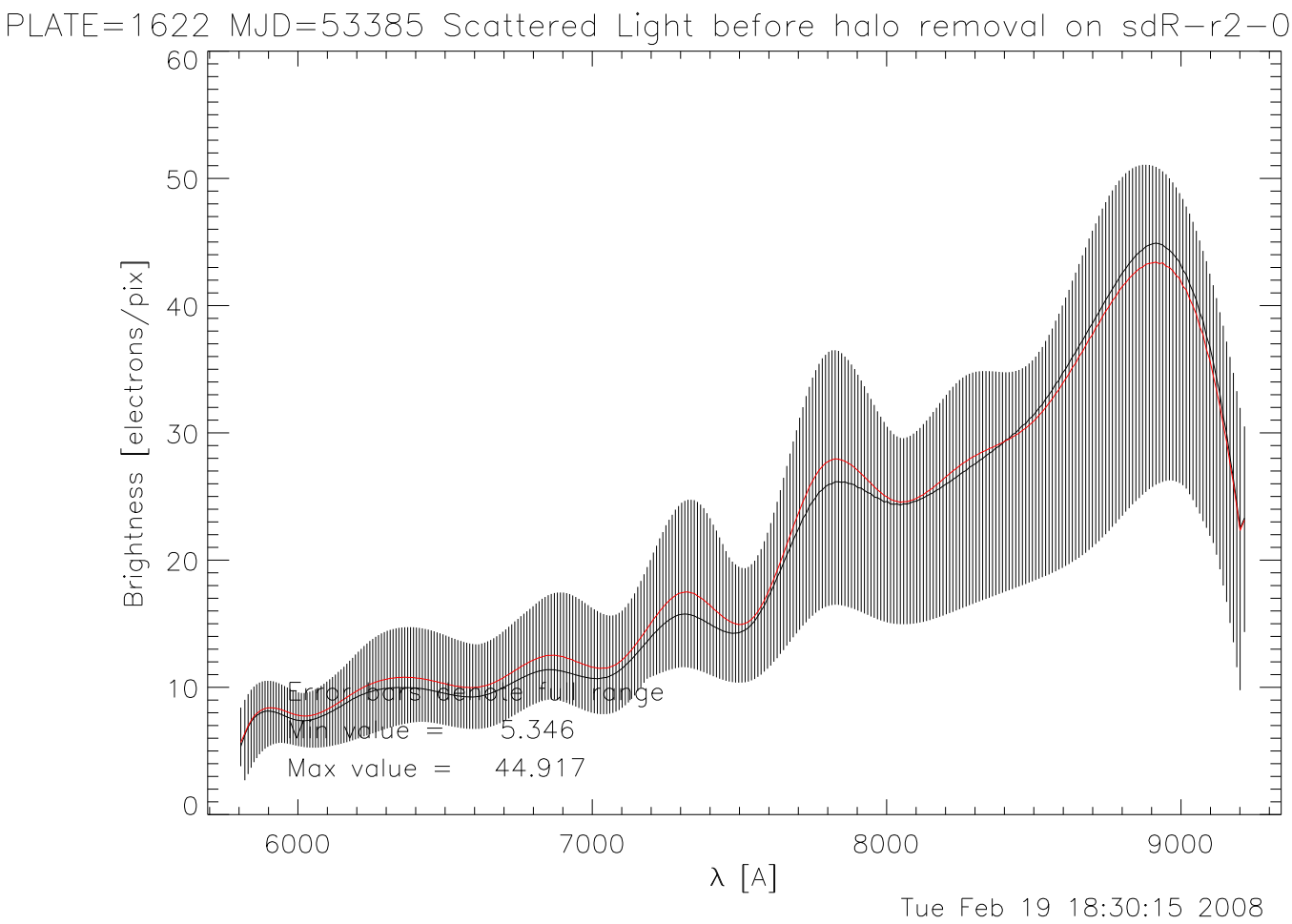

Number of sky fibers = 11
PLATE=1622 MJD=53385 sdR-r2-00030535.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

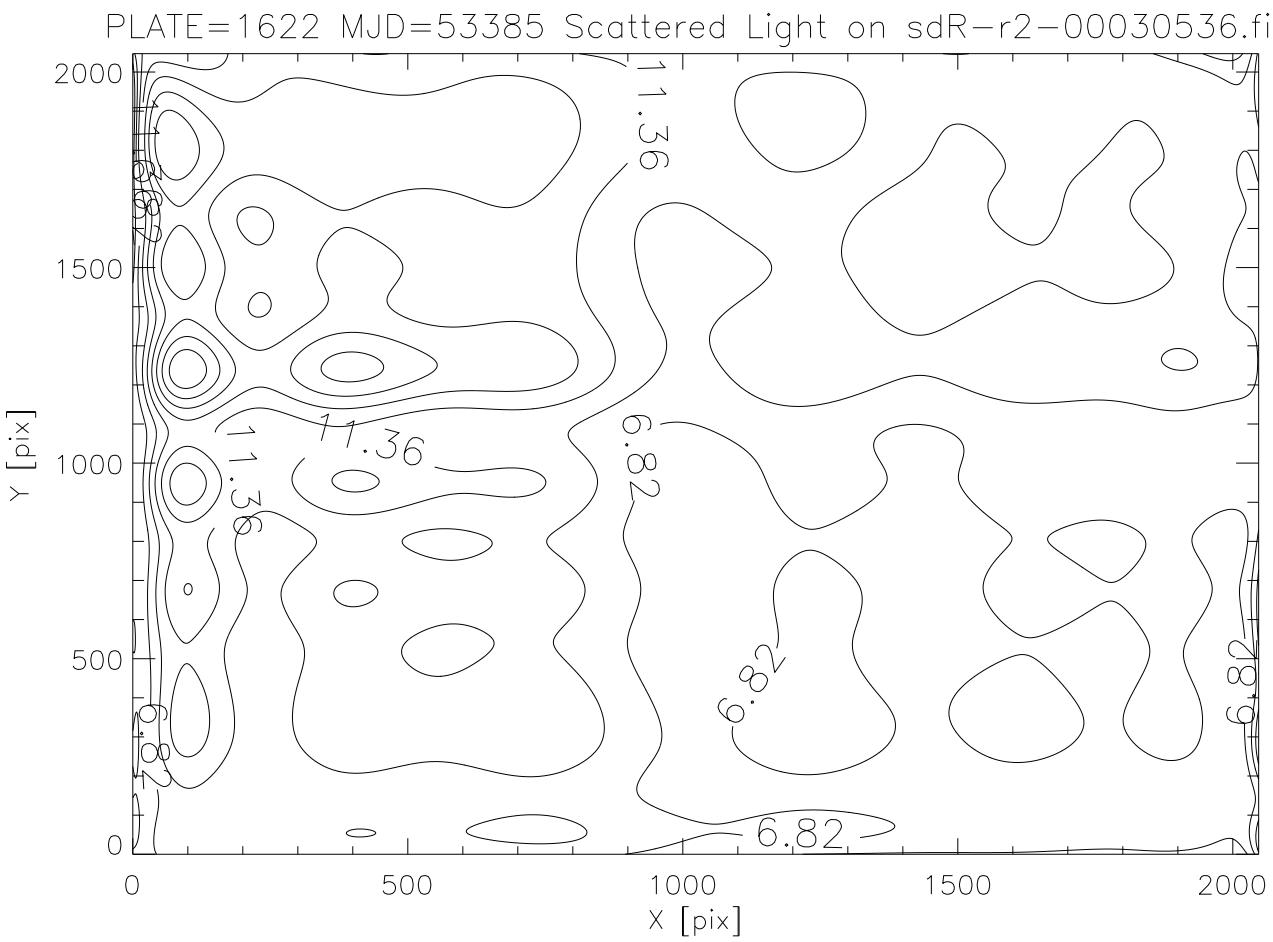

PLATE=1622 MJD=53385 sdR-r2-00030535.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 0.65 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

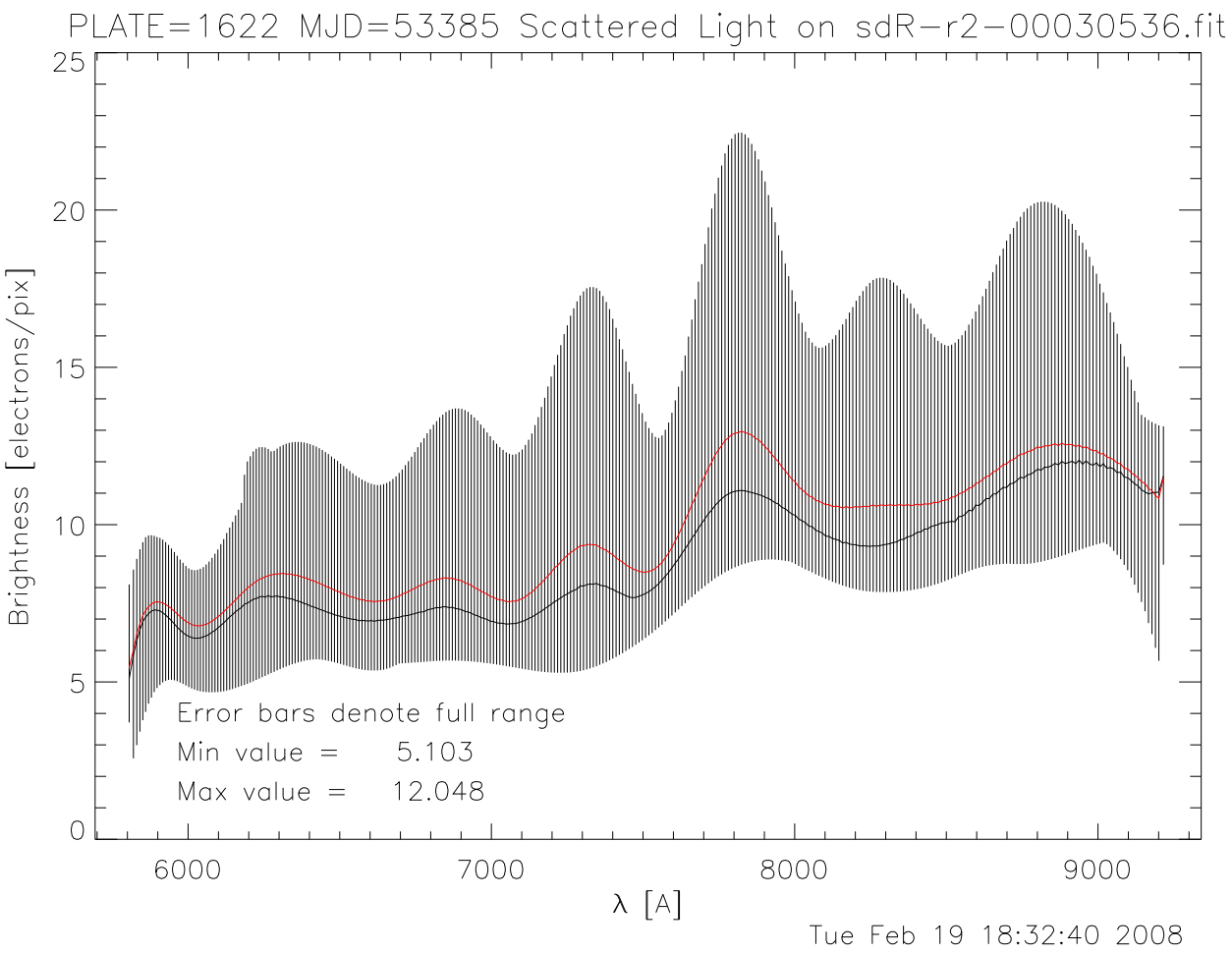

PLATE=1622 MJD=53385 sdR-r2-00030535.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.37 %
Fiber number
Focal Distance [mm]
Airmass

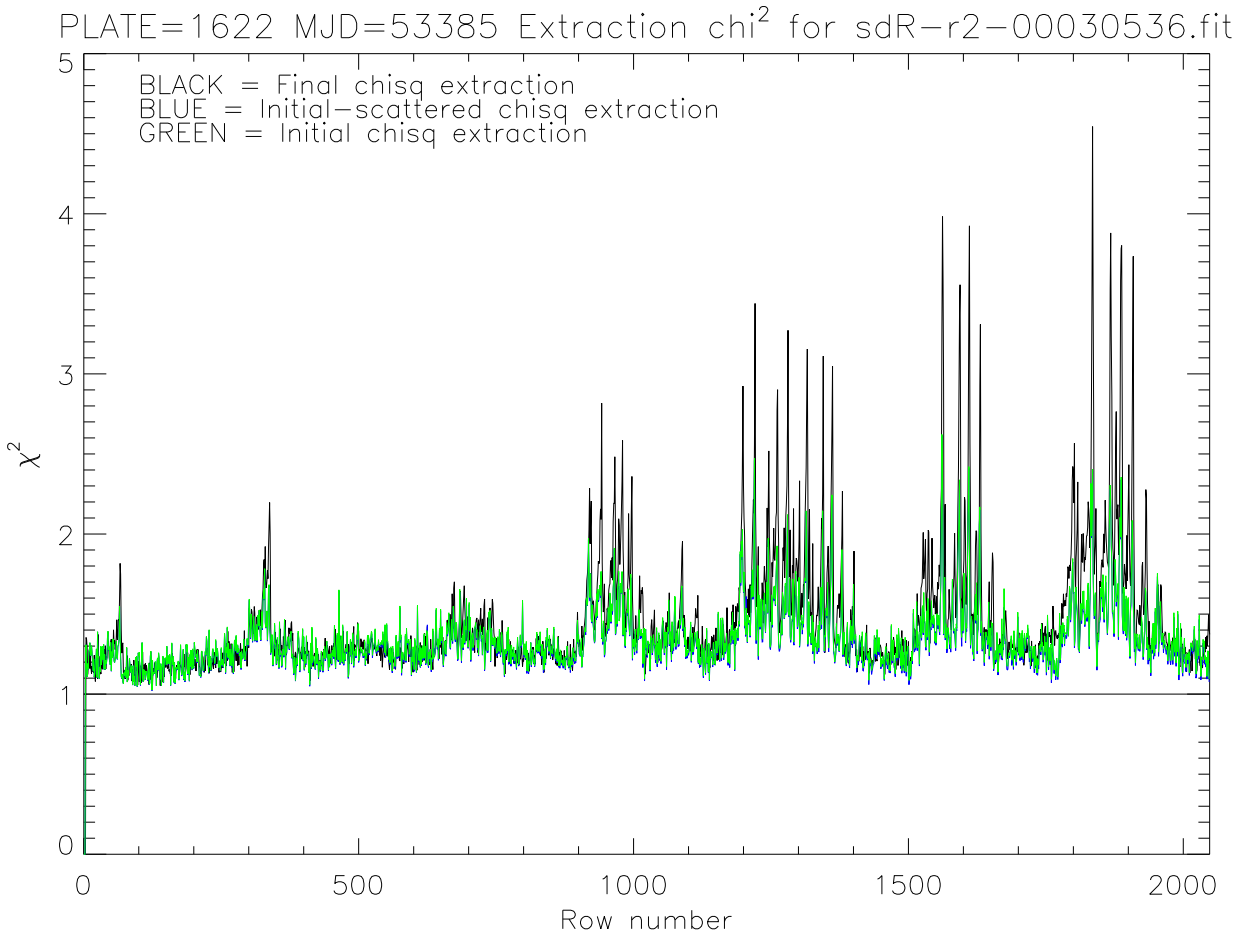

PLATE=1622 MJD=53385 Fiber−Flats for sdR−r2−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.535
Max value = 1.314
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 18:29:27 2008

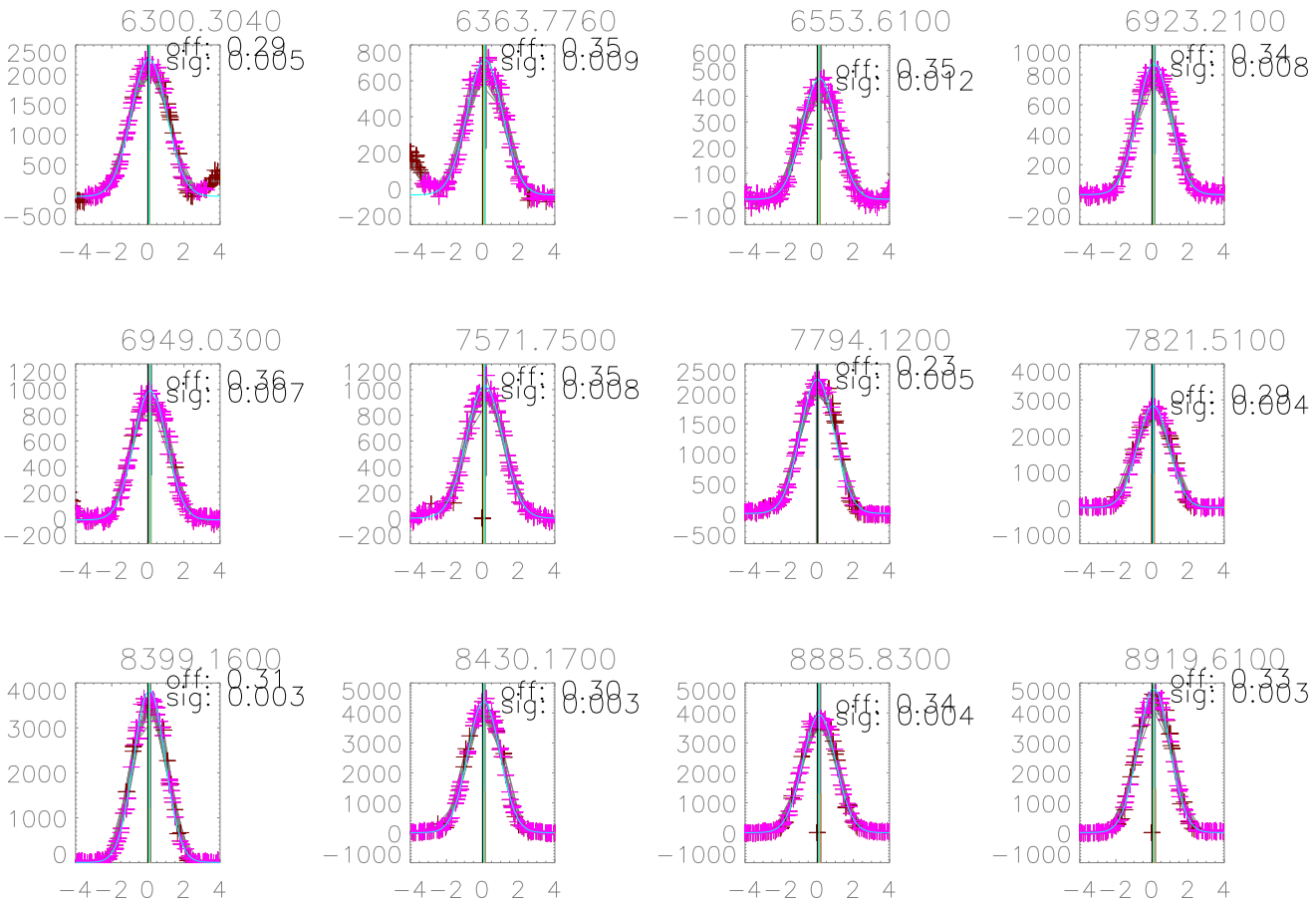

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r2-00030536.fi
38.2
27.3
16.4
5.5
Y [pix]
X [pix]
0
500
1000
1500
2000

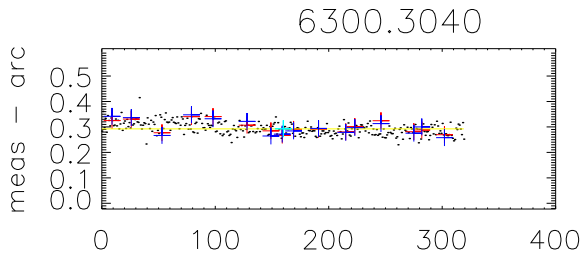

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r2-00030536.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.346
Max value = 44.917
Tue Feb 19 18:30:15 2008

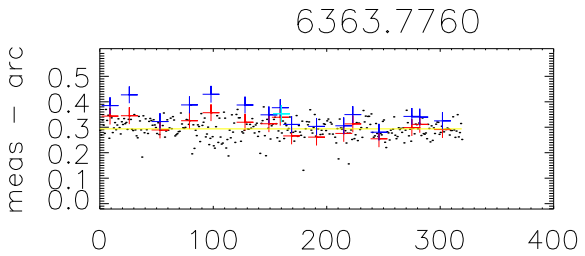

PLATE=1622 MJD=53385 Scattered Light on sdR-r2-00030536.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
6.82

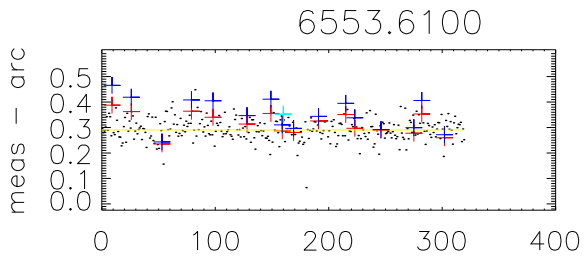

PLATE=1622 MJD=53385 Scattered Light on sdR-r2-00030536.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.103
Max value = 12.048
Tue Feb 19 18:32:40 2008

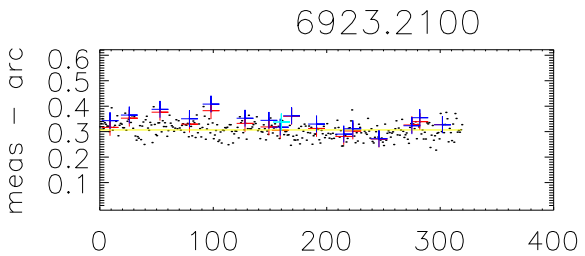

PLATE=1622 MJD=53385 Extraction chi^2 for sdR−r2−00030536.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

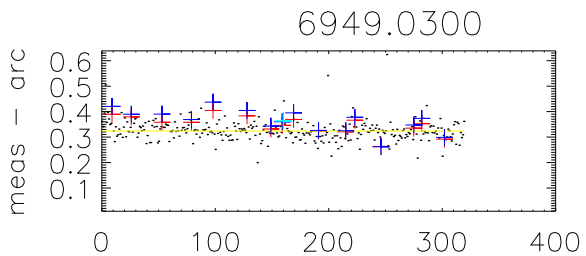

6300.3040
off: 0.29
sig: 0.005
6363.7760
off: 0.35
sig: 0.009
6553.6100
off: 0.35
sig: 0.012
6923.2100
off: 0.34
sig: 0.008
6949.0300
off: 0.36
sig: 0.007
7571.7500
off: 0.35
sig: 0.008
7794.1200
off: 0.23
sig: 0.005
7821.5100
off: 0.28
sig: 0.004
8399.1600
off: 0.31
sig: 0.003
8430.1700
off: 0.30
sig: 0.003
8885.8300
off: 0.34
sig: 0.004
8919.6100
off: 0.33
sig: 0.003

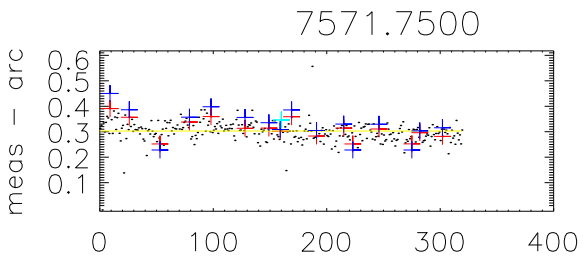

6300.3040
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

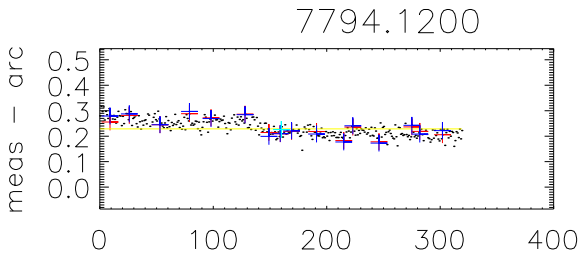

6363.7760
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

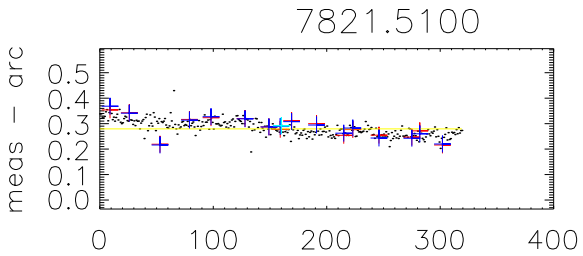

6553.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

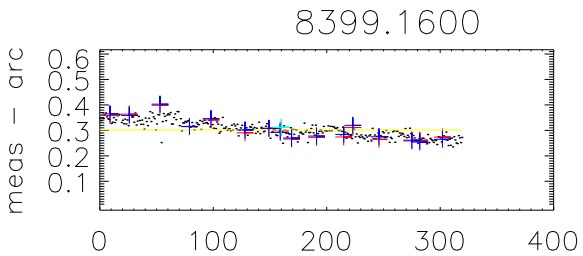

6923.2100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

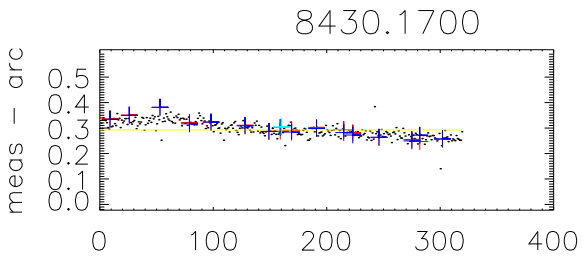

6949.0300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

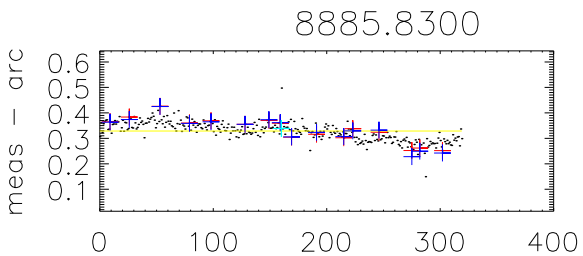

7571.7500
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

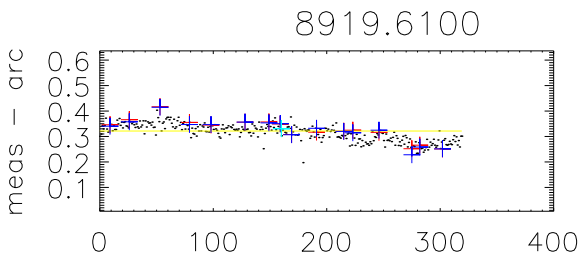

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

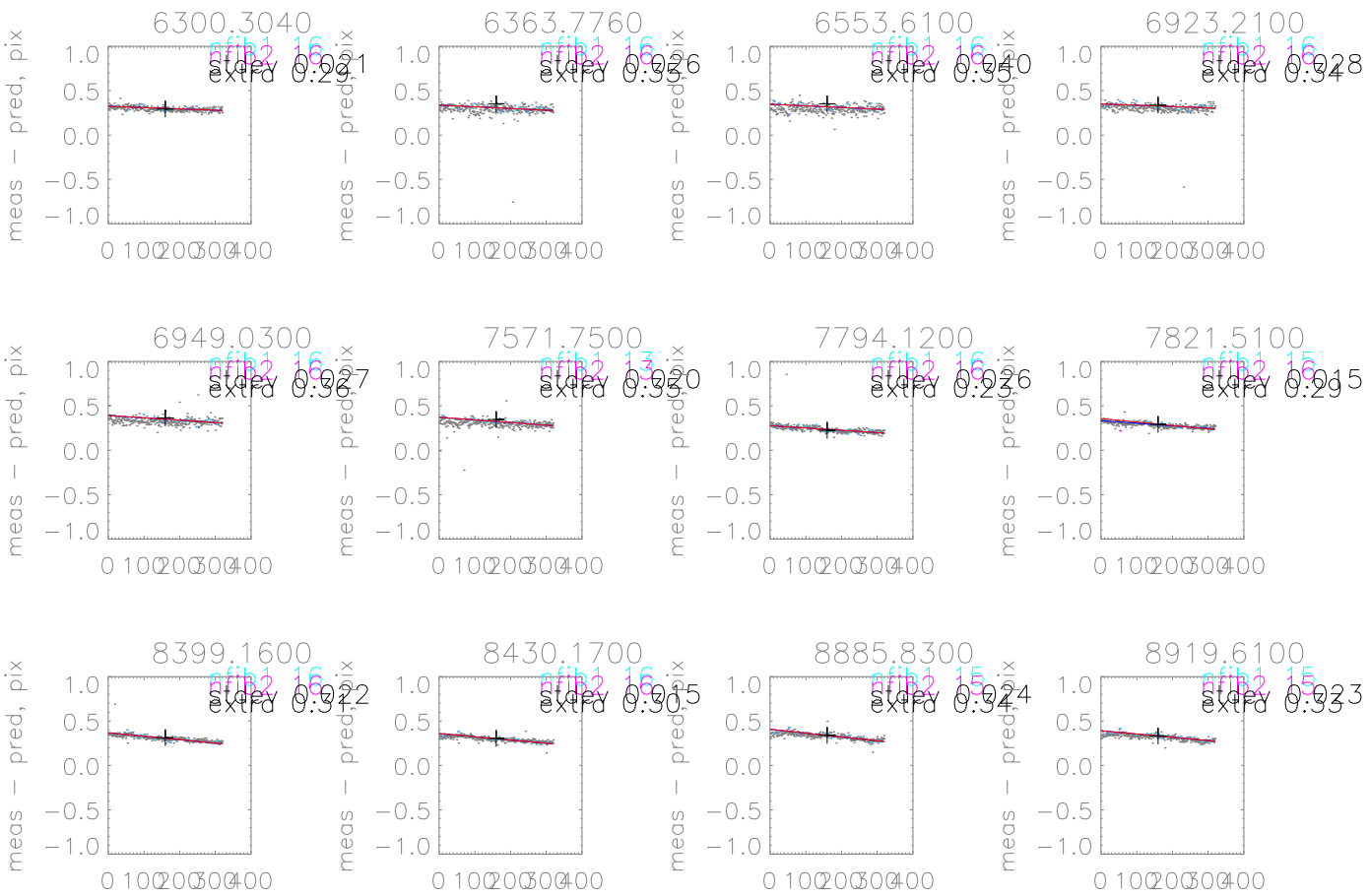

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

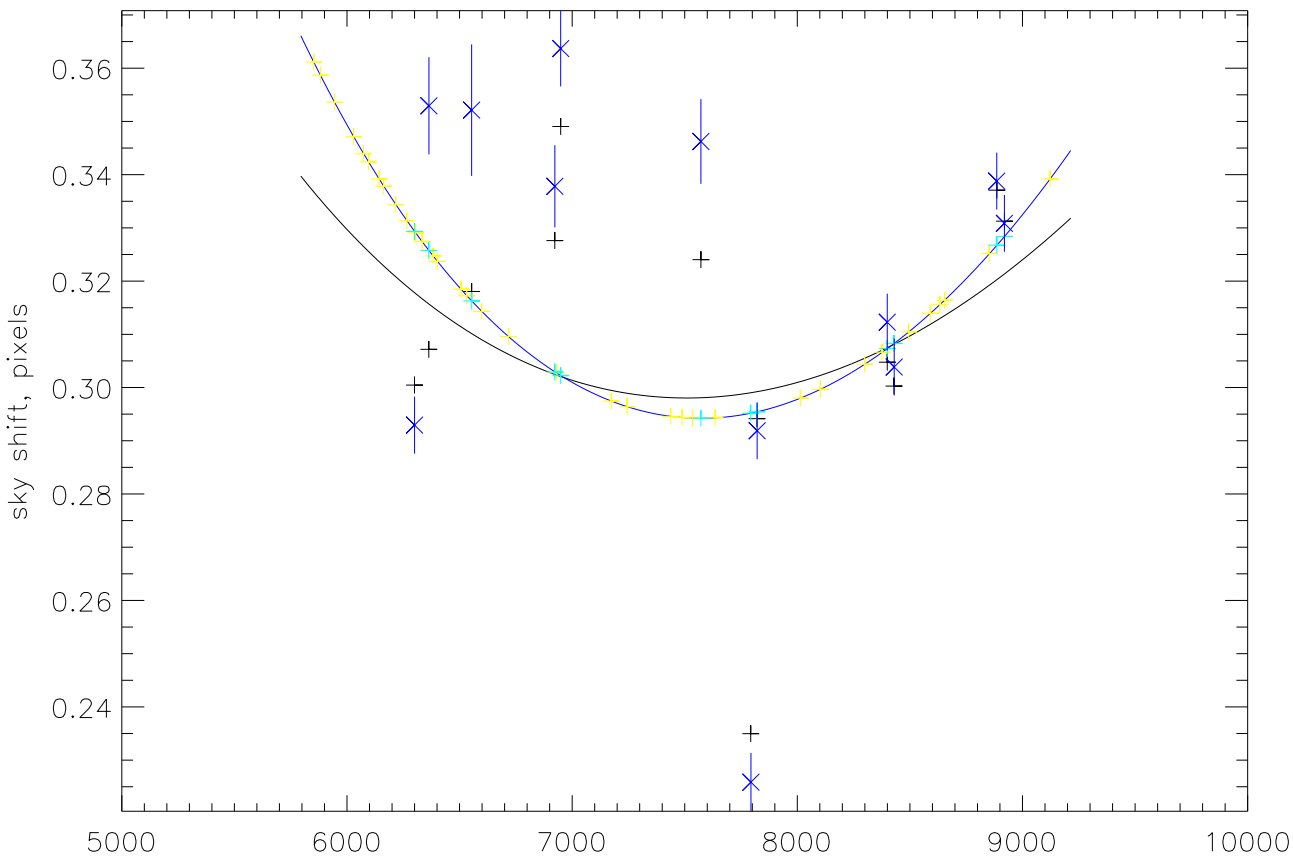

8399.1600
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

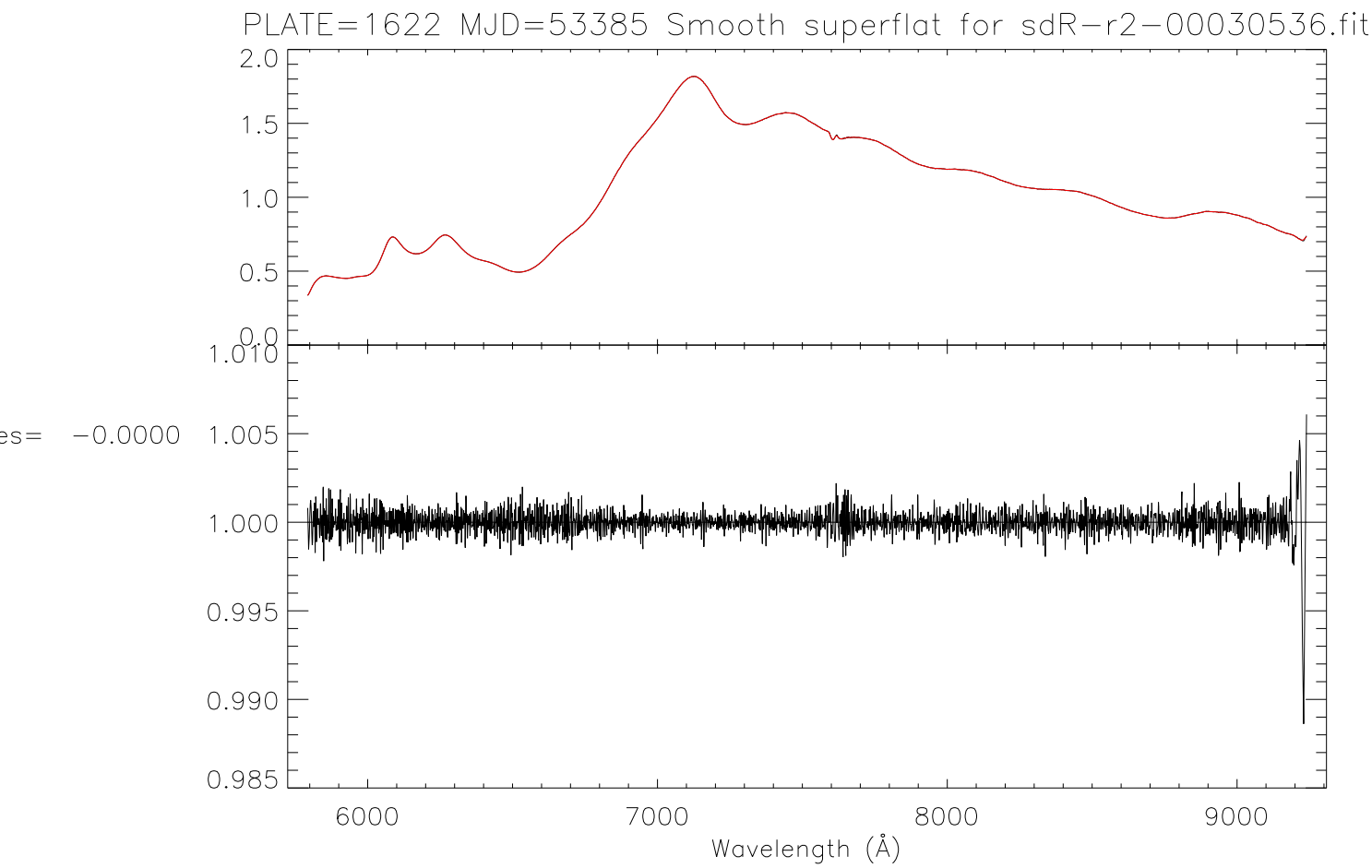

8430.1700
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

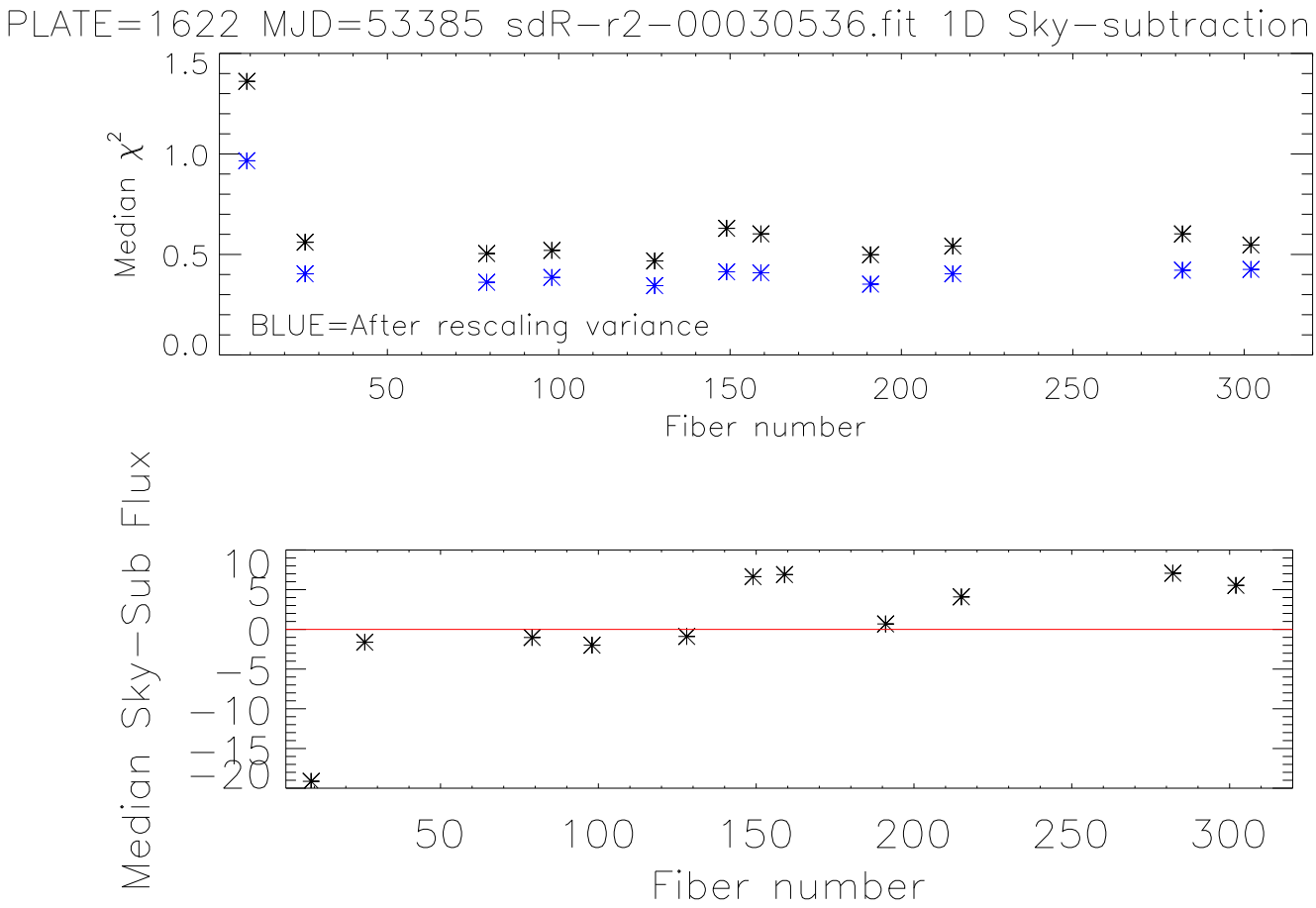

8885.8300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

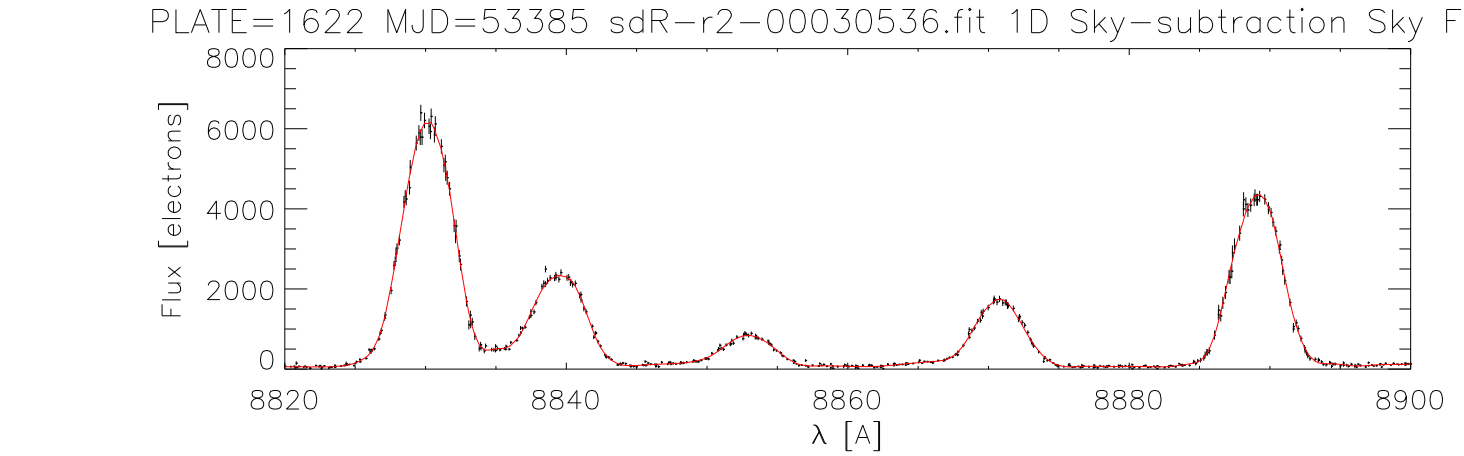

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

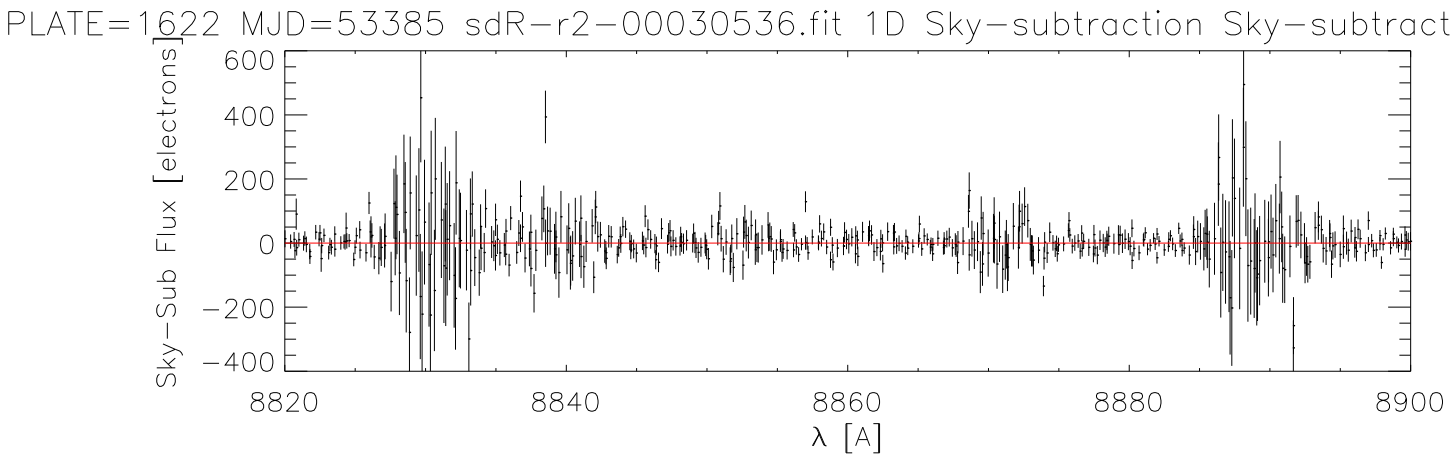

6300.3040
mfib1 16
mfib2 16
stdev 0.021
extra 0.29
6363.7760
mfib1 16
mfib2 16
stdev 0.026
extra 0.35
6553.6100
mfib1 16
mfib2 16
stdev 0.040
extra 0.35
6923.2100
mfib1 16
mfib2 16
stdev 0.028
extra 0.34
6949.0300
mfib1 16
mfib2 16
stdev 0.027
extra 0.36
7571.7500
mfib1 13
mfib2 16
stdev 0.020
extra 0.35
7794.1200
mfib1 16
mfib2 16
stdev 0.026
extra 0.23
7821.5100
mfib1 15
mfib2 16
stdev 0.015
extra 0.29
8399.1600
mfib1 16
mfib2 16
stdev 0.022
extra 0.31
8430.1700
mfib1 16
mfib2 16
stdev 0.015
extra 0.30
8885.8300
mfib1 15
mfib2 16
stdev 0.024
extra 0.34
8919.6100
mfib1 15
mfib2 16
stdev 0.023
extra 0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

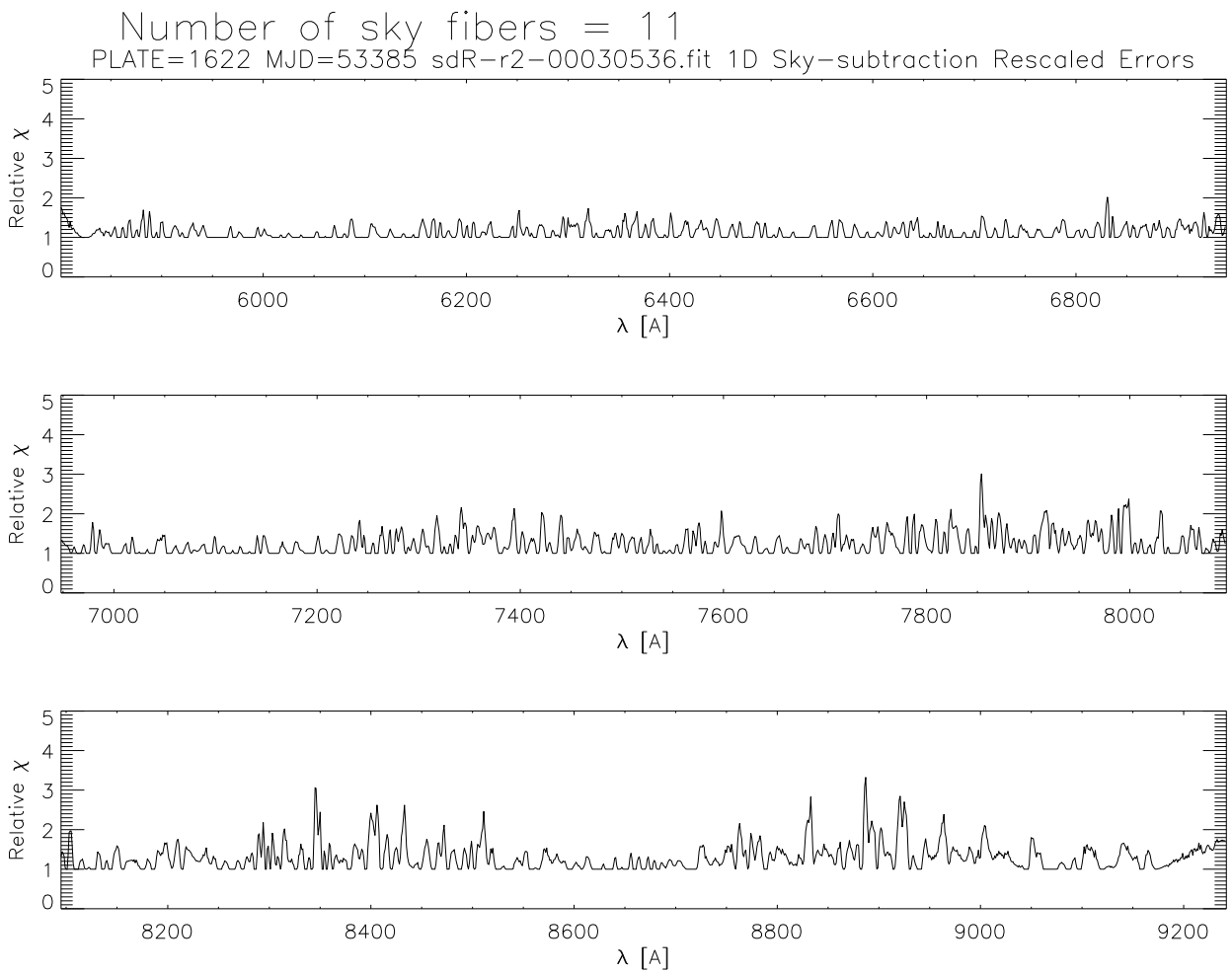

sky shift, pixels
0.36
0.34
0.32
0.30
0.28
0.26
0.24
5000
6000
7000
8000
9000
10000

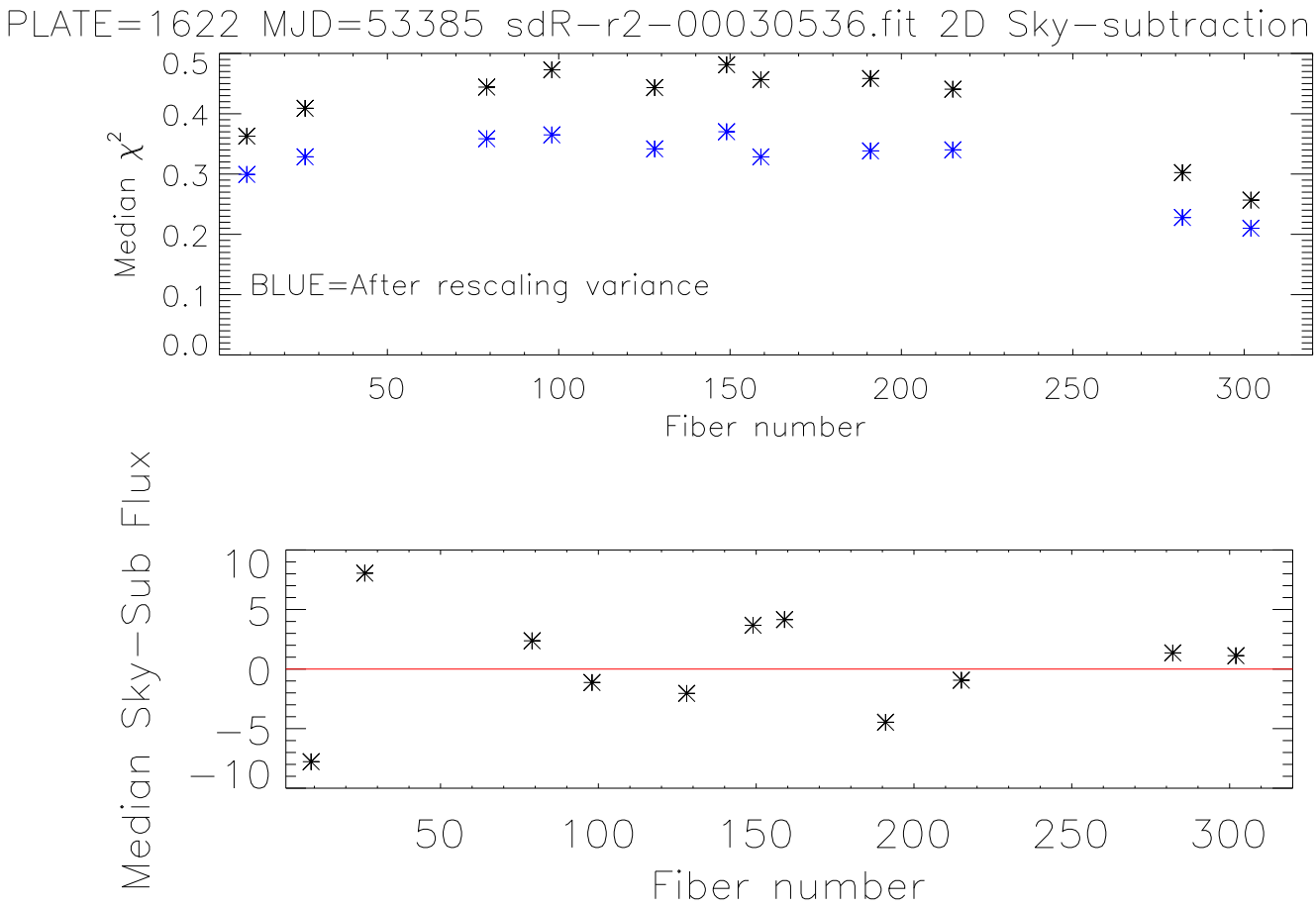

PLATE=1622 MJD=53385 Smooth superflat for sdR-r2-00030536.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

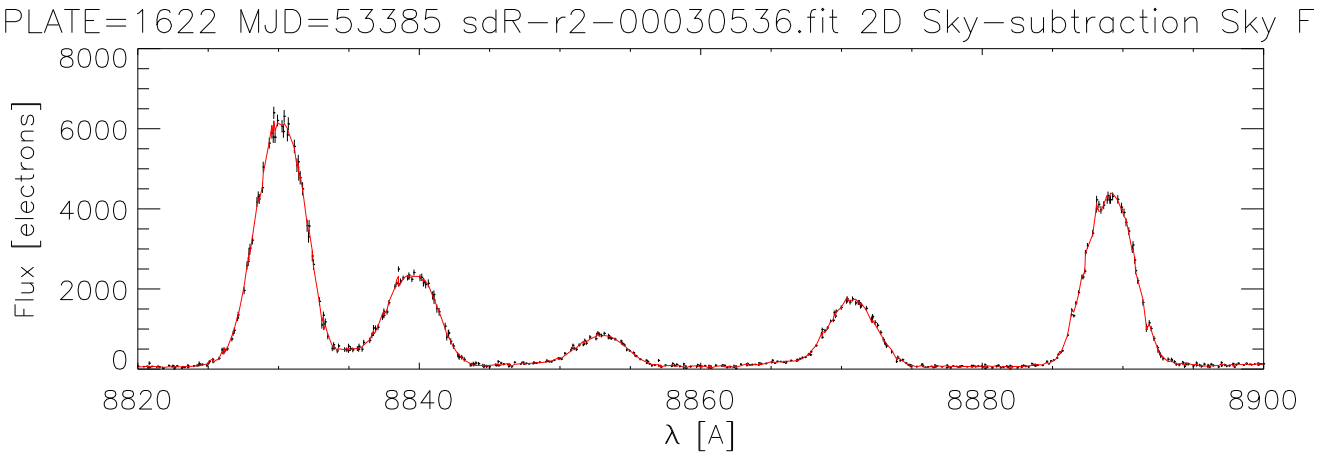

PLATE=1622 MJD=53385 sdR-r2-00030536.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

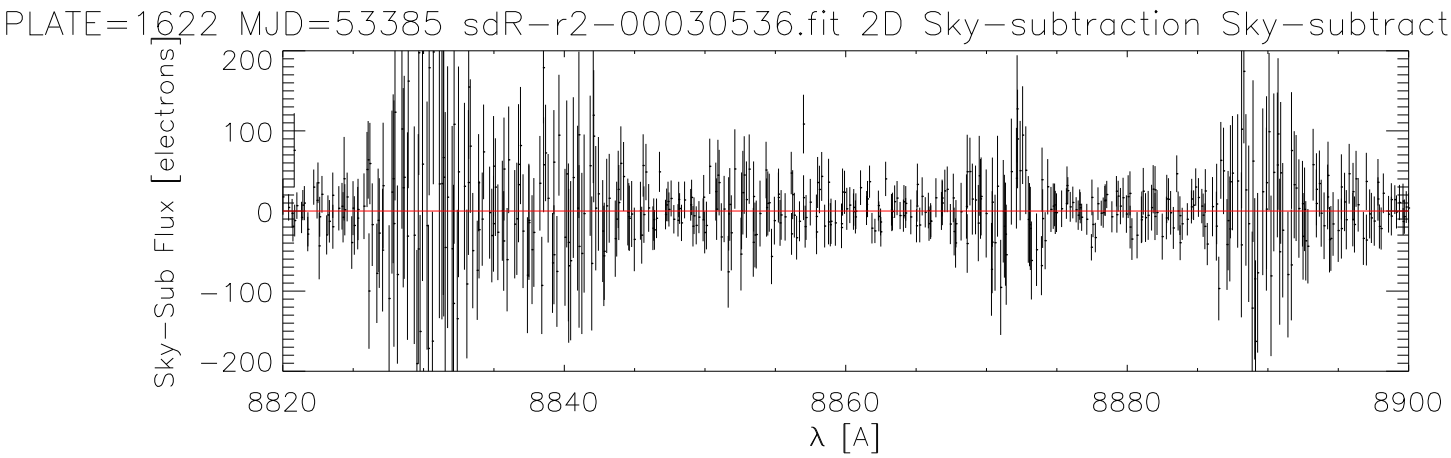

PLATE=1622 MJD=53385 sdR-r2-00030536.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

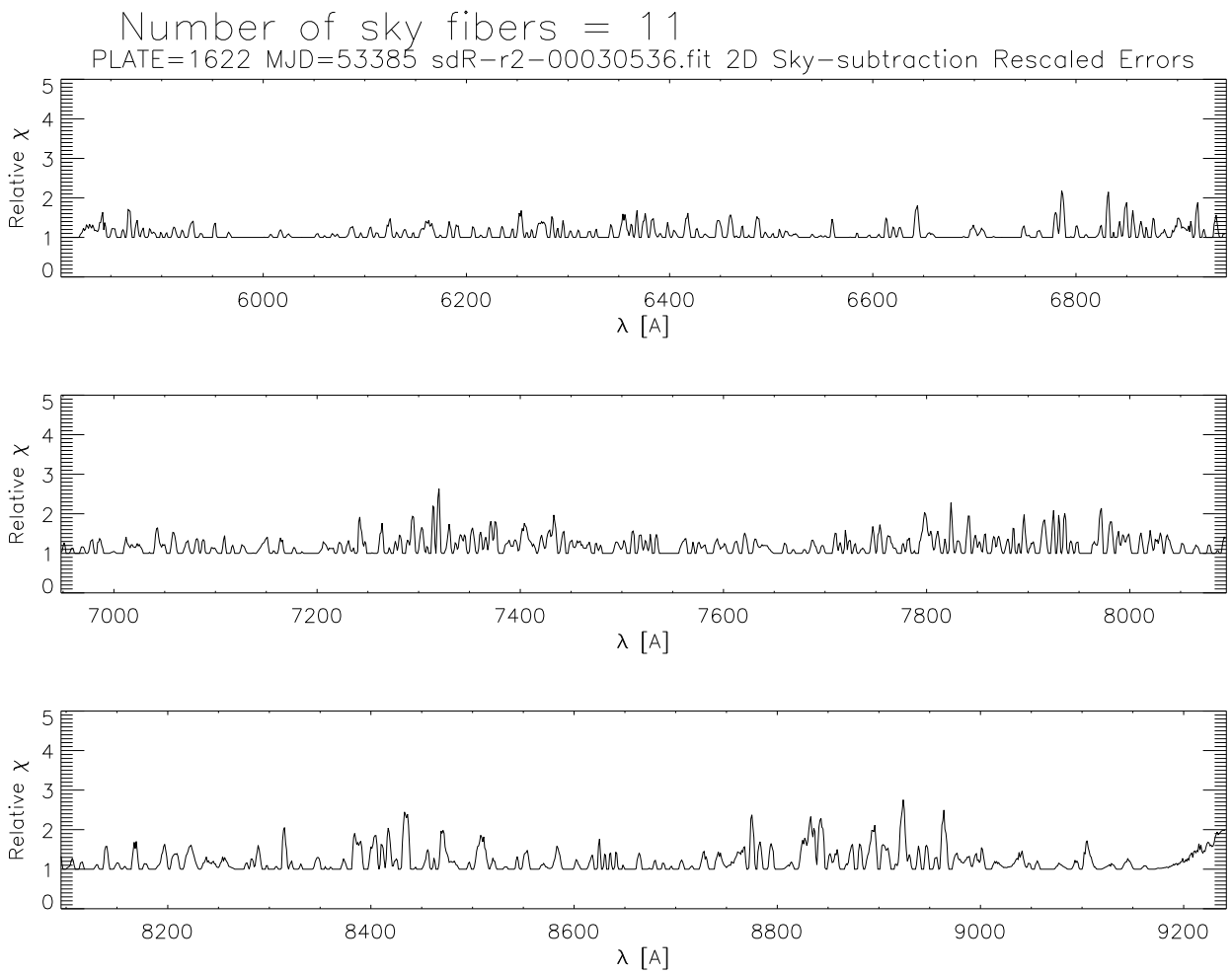

PLATE=1622 MJD=53385 sdR-r2-00030536.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

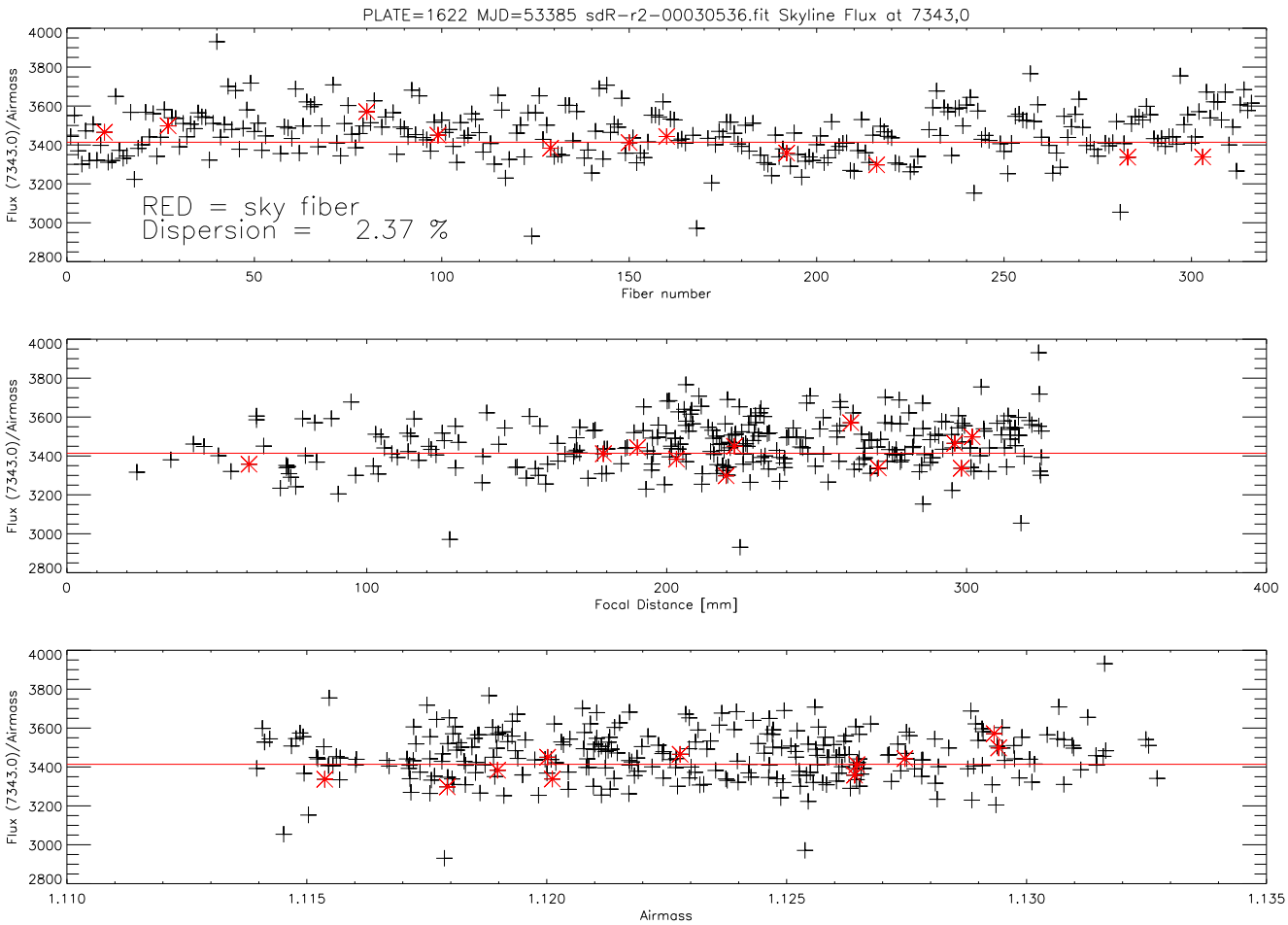

Number of sky fibers = 11
PLATE=1622 MJD=53385 sdR-r2-00030536.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

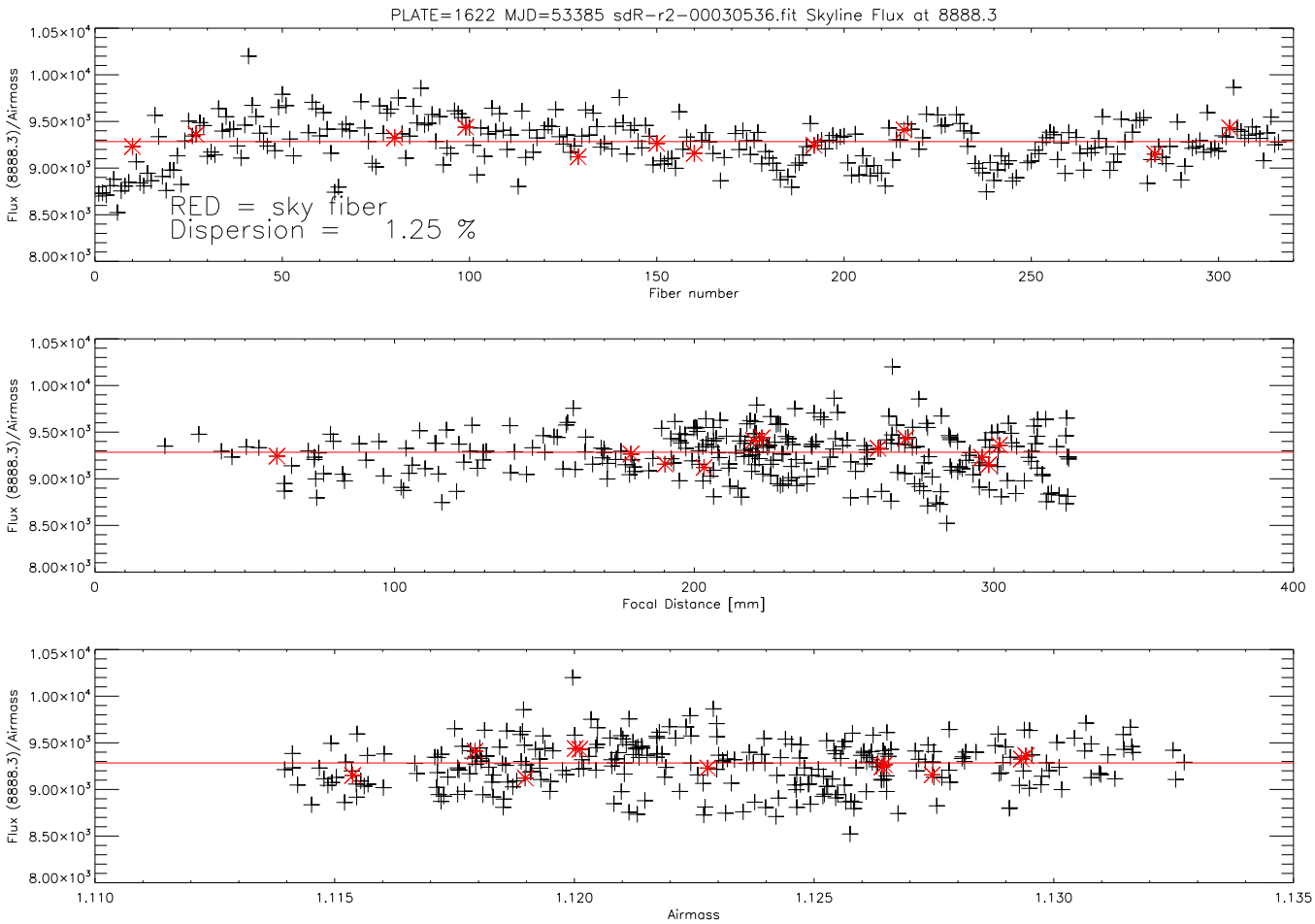

PLATE=1622 MJD=53385 sdR-r2-00030536.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

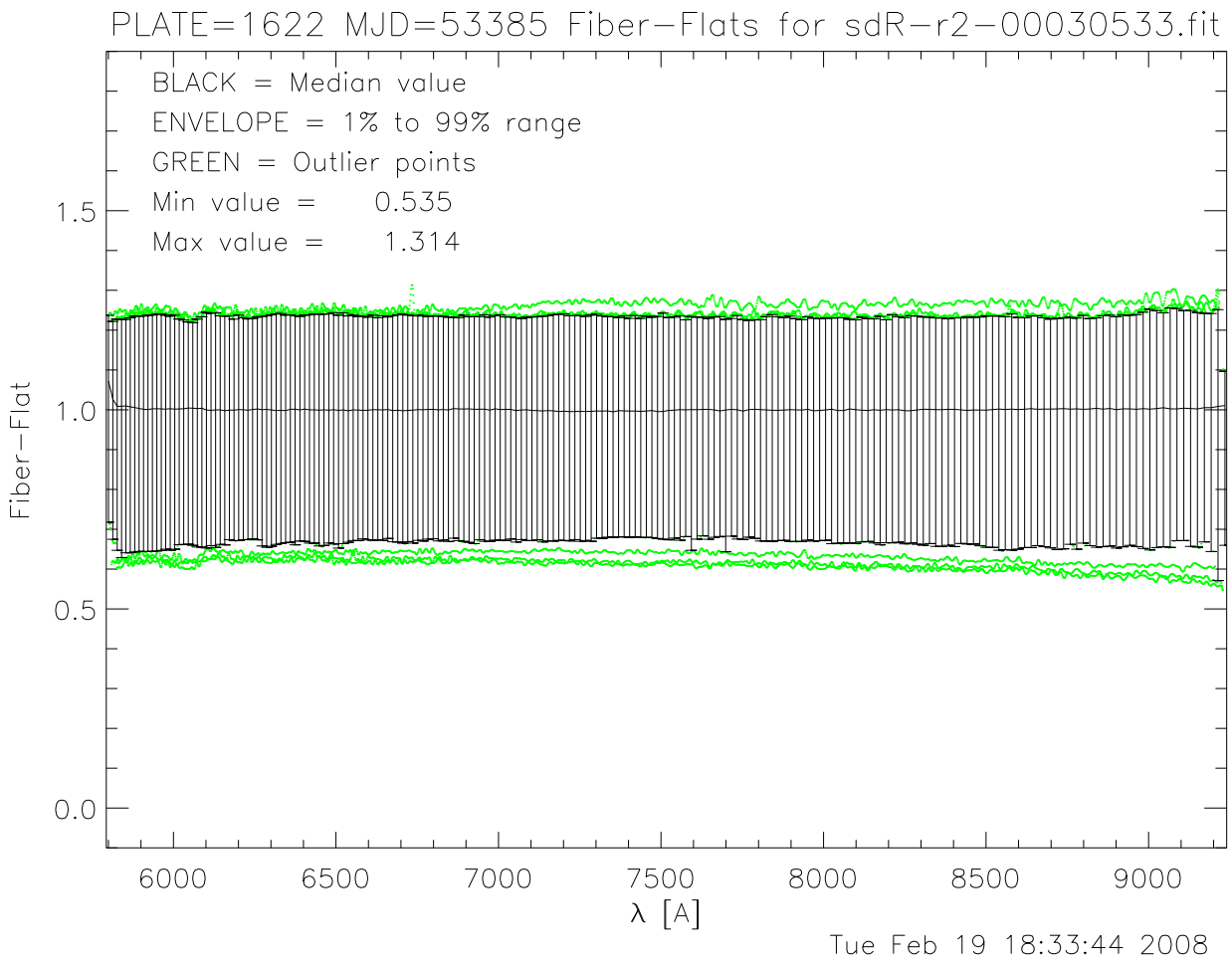

PLATE=1622 MJD=53385 sdR-r2-00030536.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

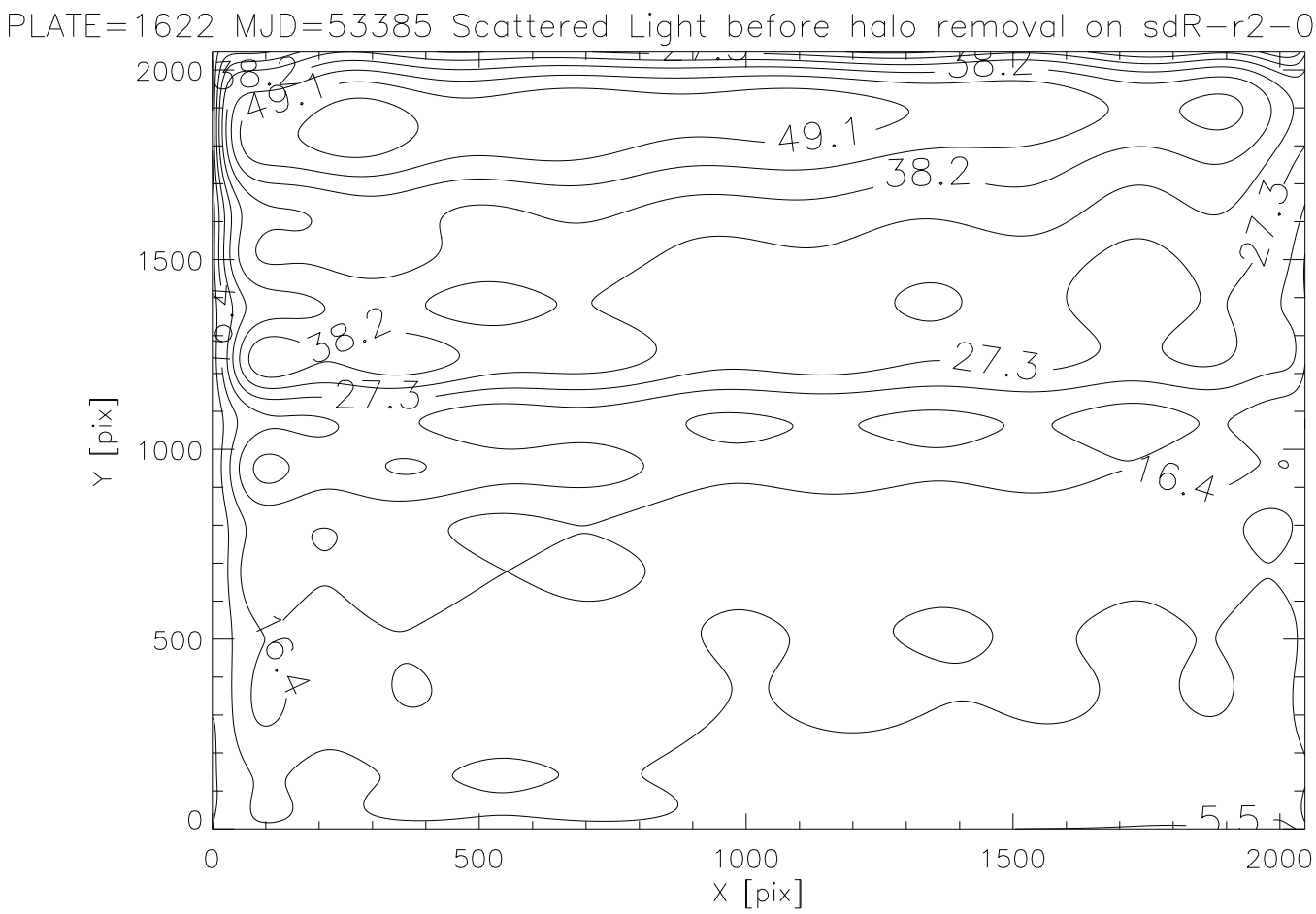

PLATE=1622 MJD=53385 sdR-r2-00030536.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

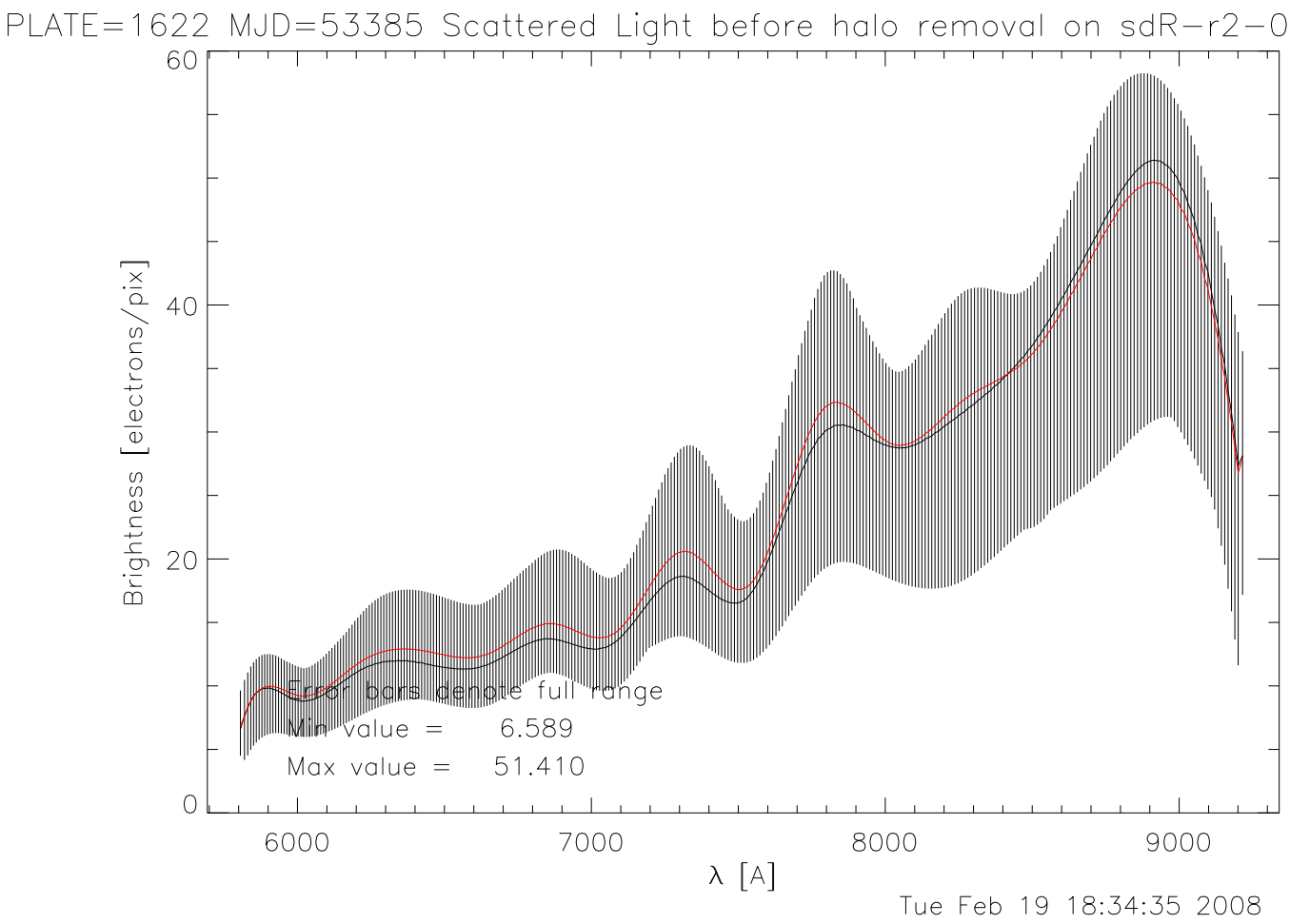

Number of sky fibers = 11
PLATE=1622 MJD=53385 sdR-r2-00030536.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

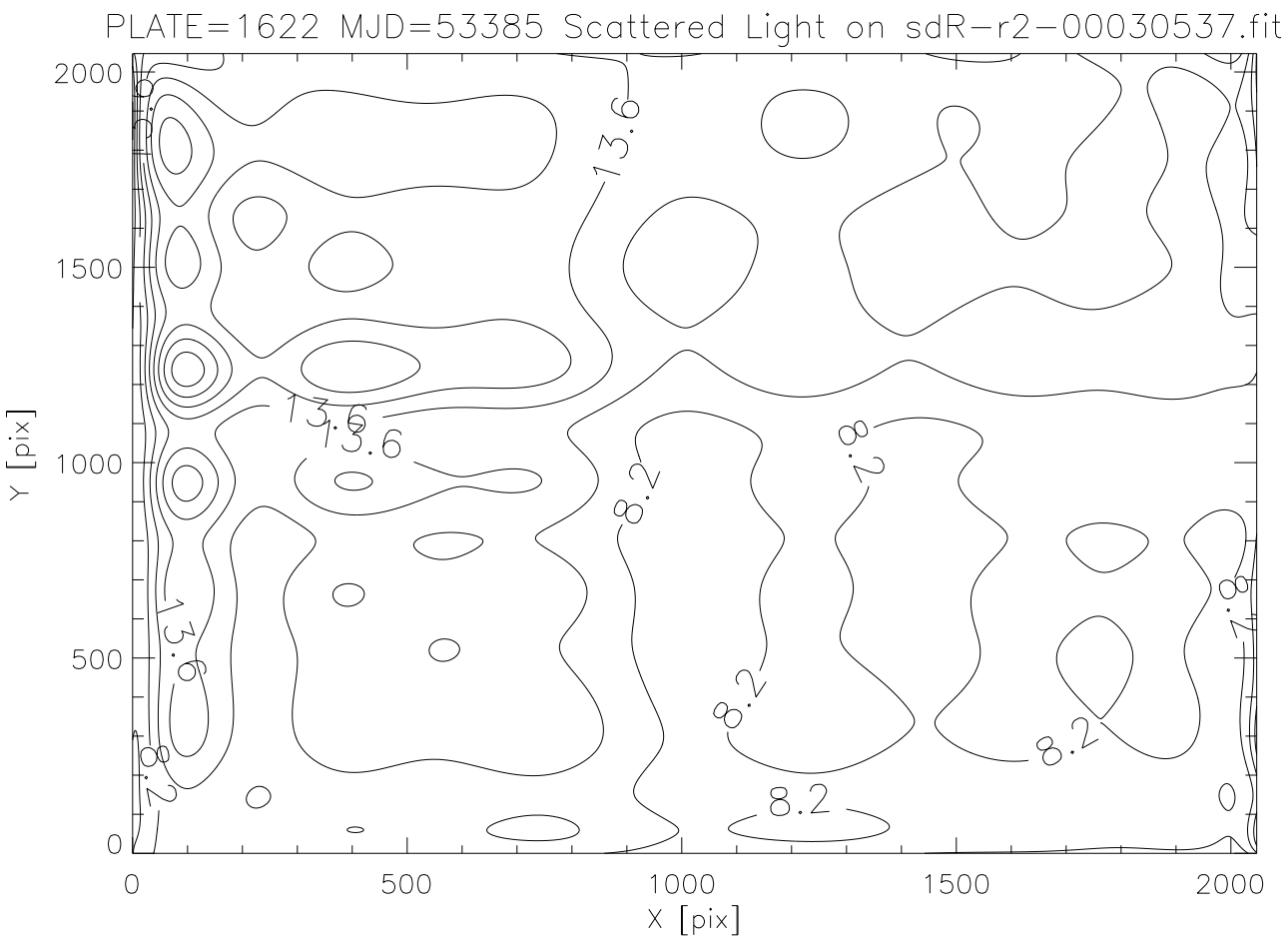

PLATE=1622 MJD=53385 sdR-r2-00030536.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.37 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

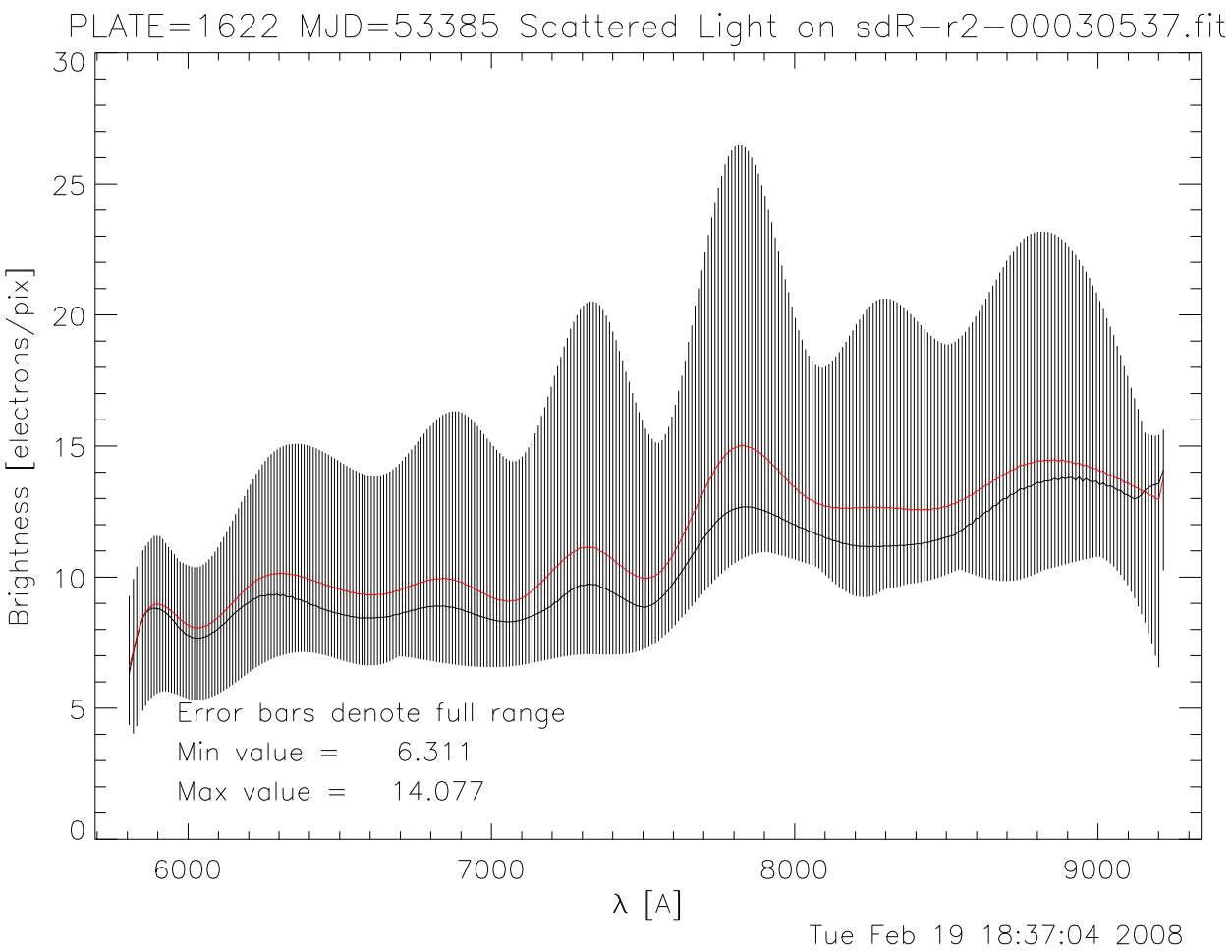

PLATE=1622 MJD=53385 sdR-r2-00030536.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.25 %
Fiber number
Focal Distance [mm]
Airmass

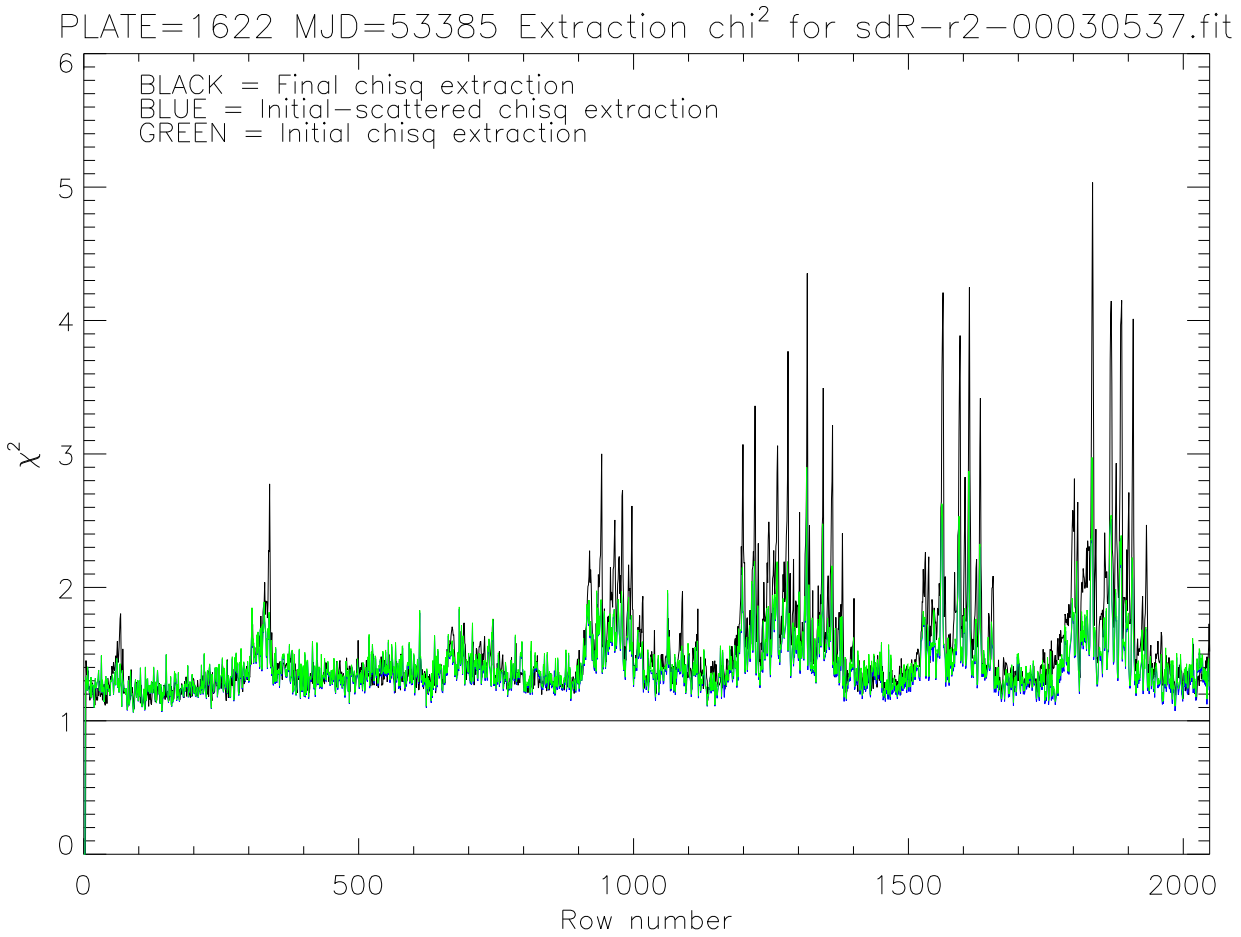

PLATE=1622 MJD=53385 Fiber−Flats for sdR−r2−00030533.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.535
Max value = 1.314
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 19 18:33:44 2008

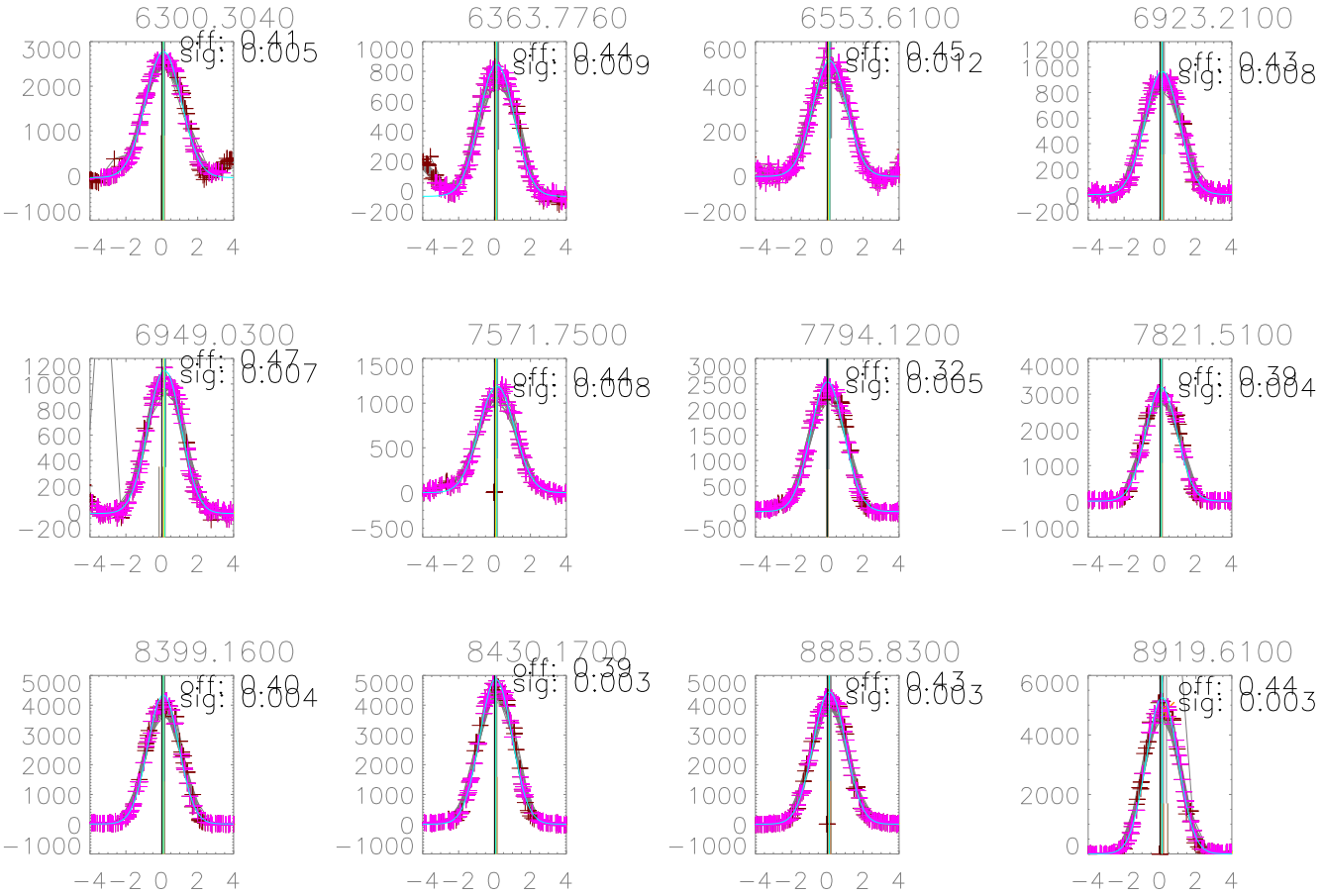

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r2-00030537.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
49.1
38.2
27.3
16.4
5.5

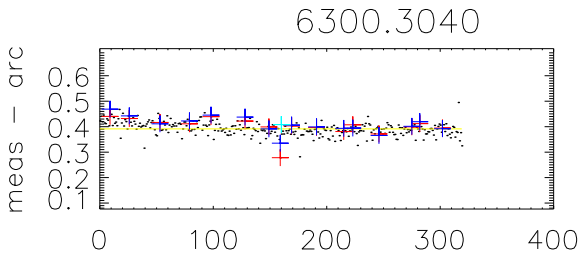

PLATE=1622 MJD=53385 Scattered Light before halo removal on sdR-r2-00030537.fi
Brightness [electrons/pix]
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.589
Max value = 51.410
Tue Feb 19 18:34:35 2008

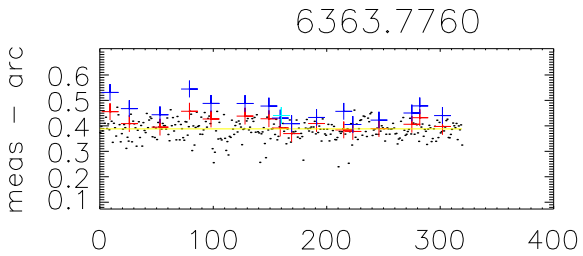

PLATE=1622 MJD=53385 Scattered Light on sdR-r2-00030537.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
13.6
8.2
1.8
0

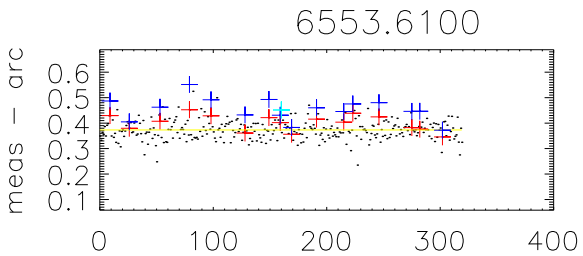

PLATE=1622 MJD=53385 Scattered Light on sdR-r2-00030537.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.311
Max value = 14.077
Tue Feb 19 18:37:04 2008

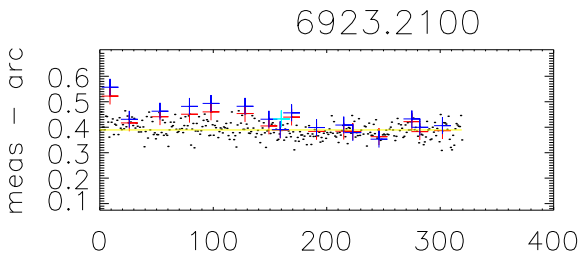

PLATE=1622 MJD=53385 Extraction chi^2 for sdR−r2−00030537.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

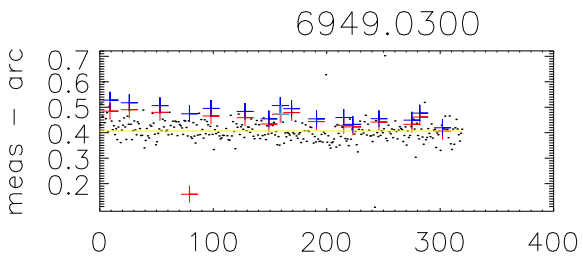

6300.3040
off: 0.41
sig: 0.005
6363.7760
off: 0.44
sig: 0.009
6553.6100
off: 0.45
sig: 0.012
6923.2100
off: 0.43
sig: 0.008
6949.0300
off: 0.47
sig: 0.007
7571.7500
off: 0.44
sig: 0.008
7794.1200
off: 0.32
sig: 0.005
7821.5100
off: 0.39
sig: 0.004
8399.1600
off: 0.40
sig: 0.004
8430.1700
off: 0.39
sig: 0.003
8885.8300
off: 0.43
sig: 0.003
8919.6100
off: 0.44
sig: 0.003

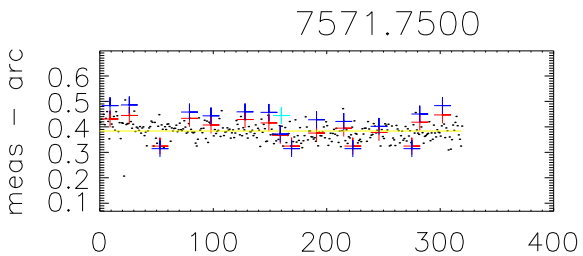

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

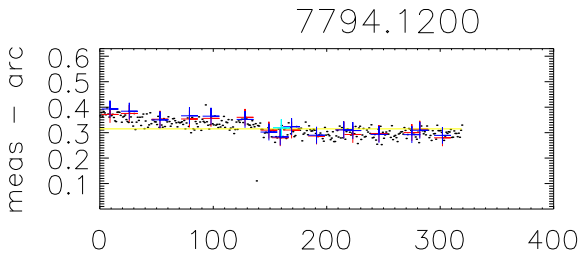

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

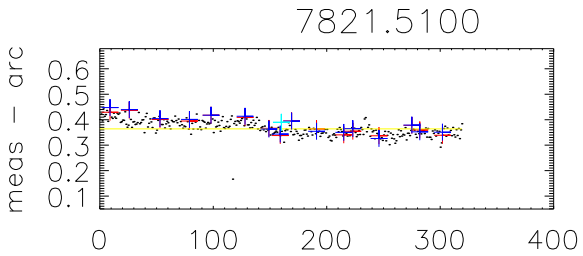

6553.6100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

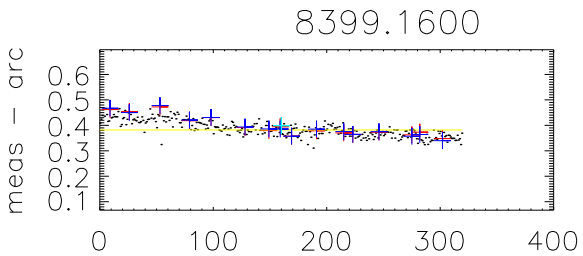

6923.2100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

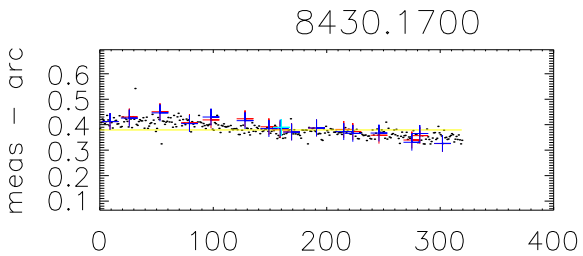

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

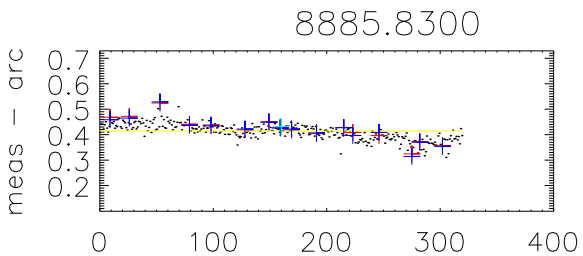

7571.7500
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

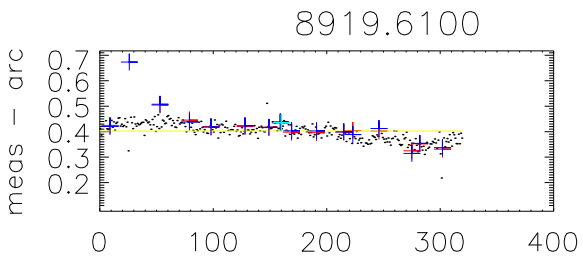

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

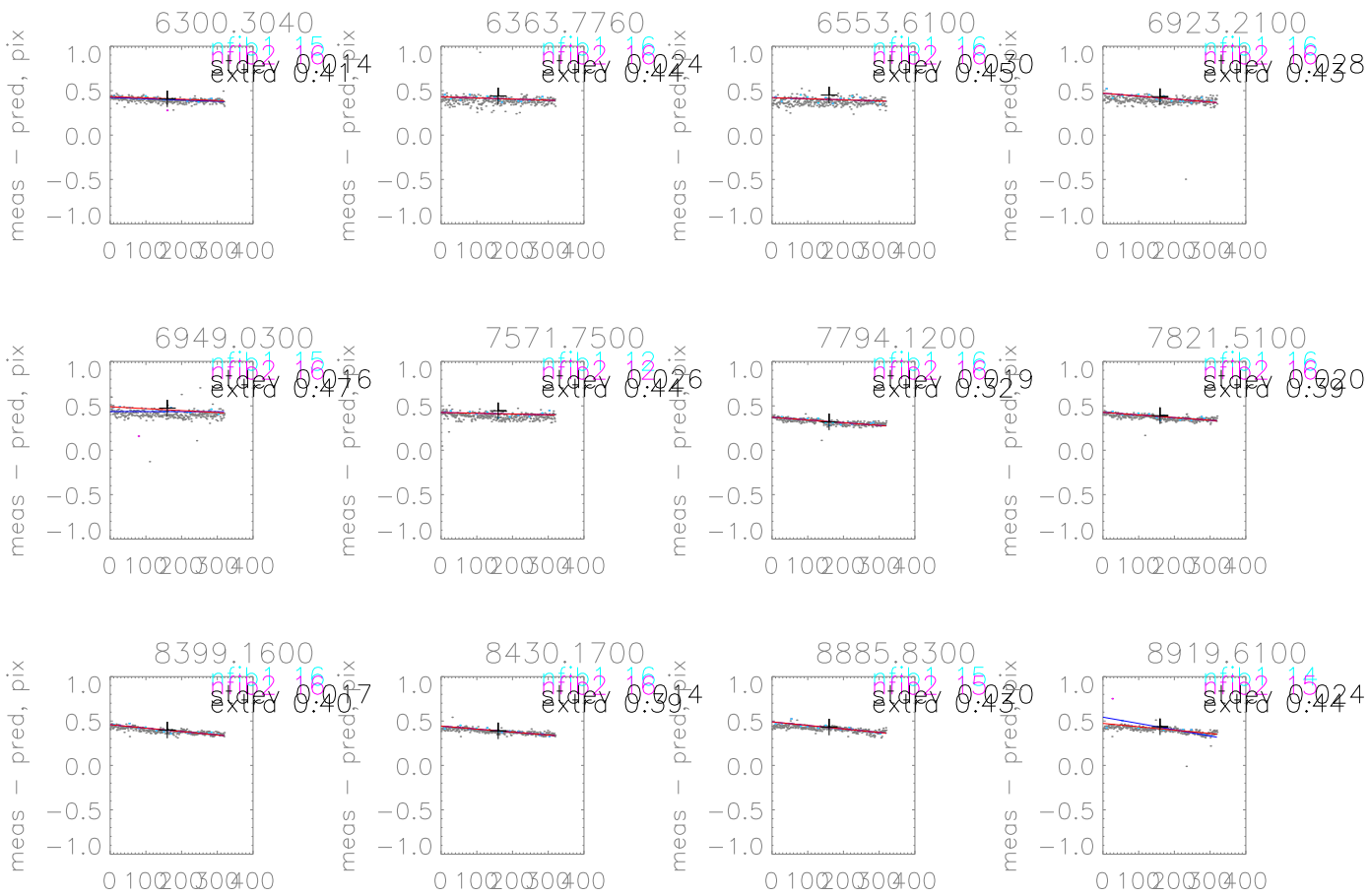

7821.5100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

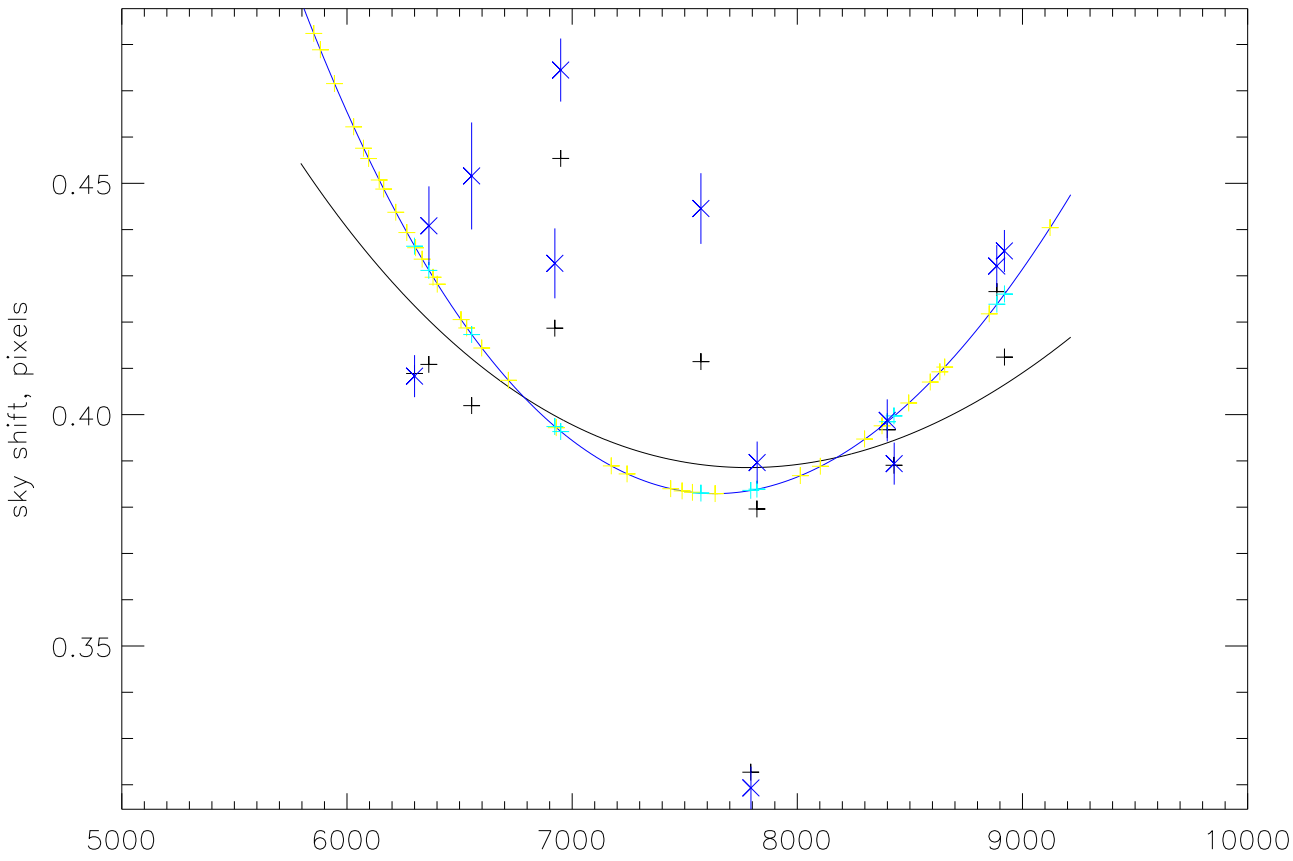

8399.1600
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

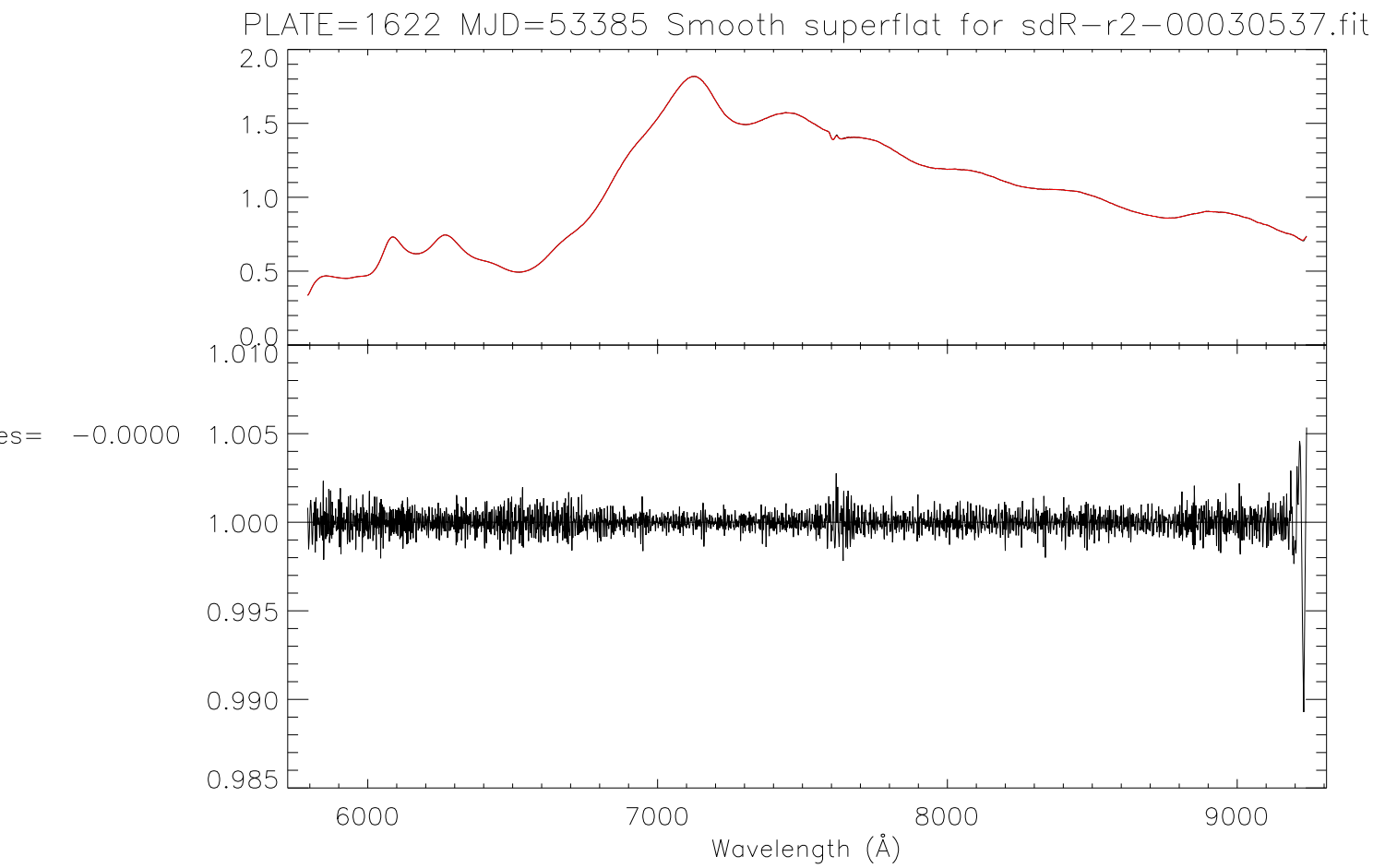

8430.1700
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

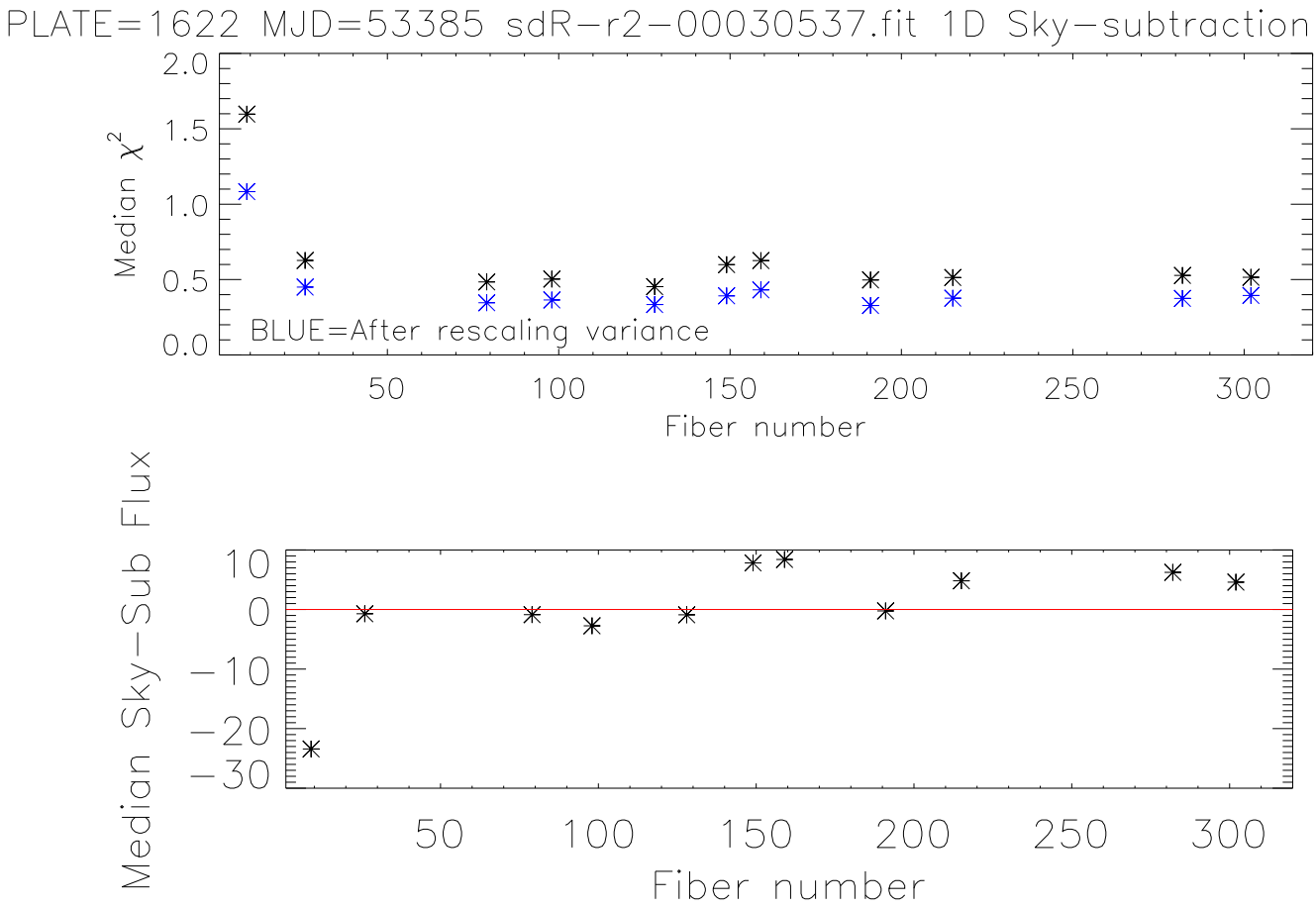

8885.8300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

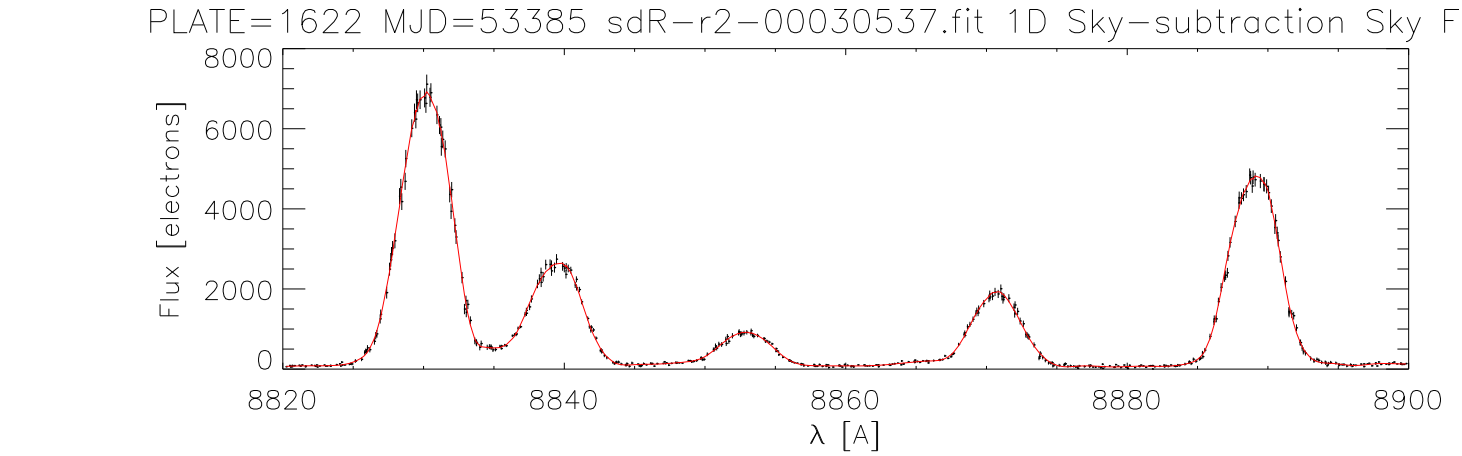

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

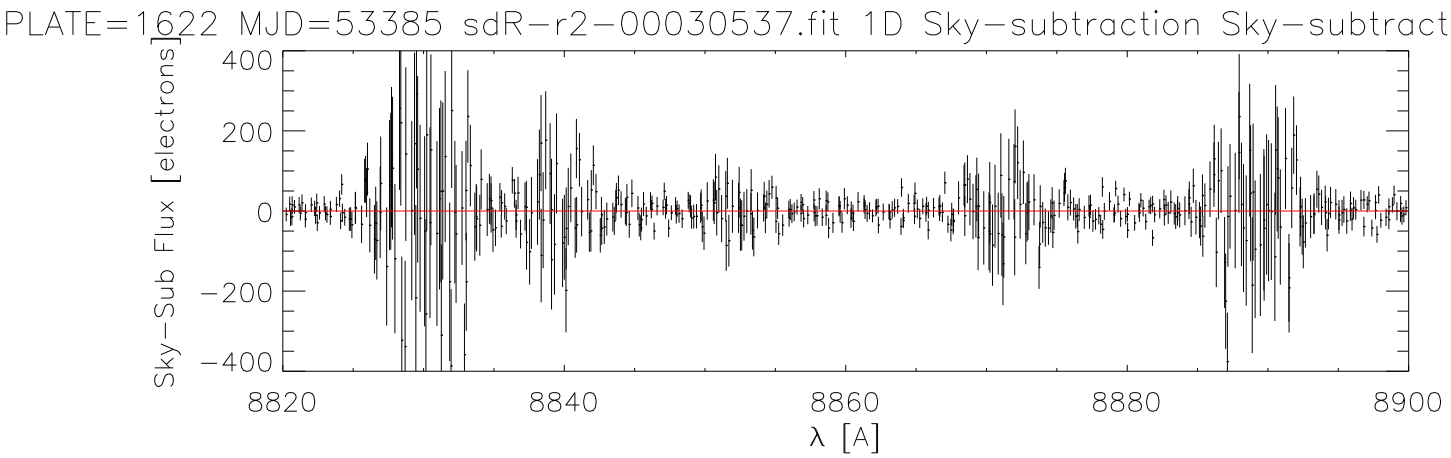

6300.3040
stdev 0.014
extra 0.41
6363.7760
stdev 0.024
extra 0.44
6553.6100
stdev 0.030
extra 0.45
6923.2100
stdev 0.028
extra 0.43
6949.0300
stdev 0.046
extra 0.47
7571.7500
stdev 0.026
extra 0.44
7794.1200
stdev 0.029
extra 0.32
7821.5100
stdev 0.020
extra 0.39
8399.1600
stdev 0.017
extra 0.40
8430.1700
stdev 0.014
extra 0.39
8885.8300
stdev 0.020
extra 0.43
8919.6100
stdev 0.024
extra 0.44
meas − pred, pix

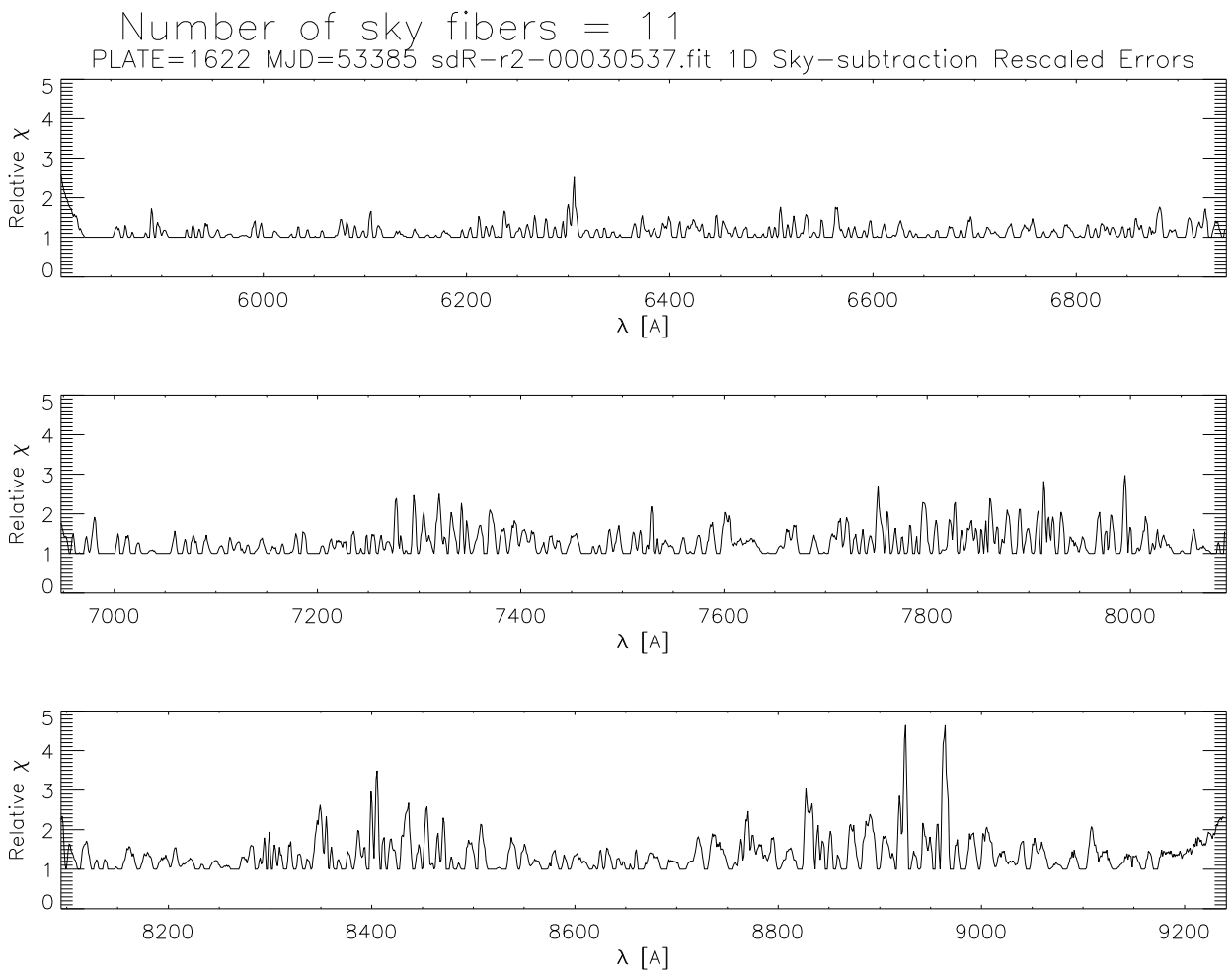

sky shift, pixels
0.45
0.40
0.35
5000
6000
7000
8000
9000
10000

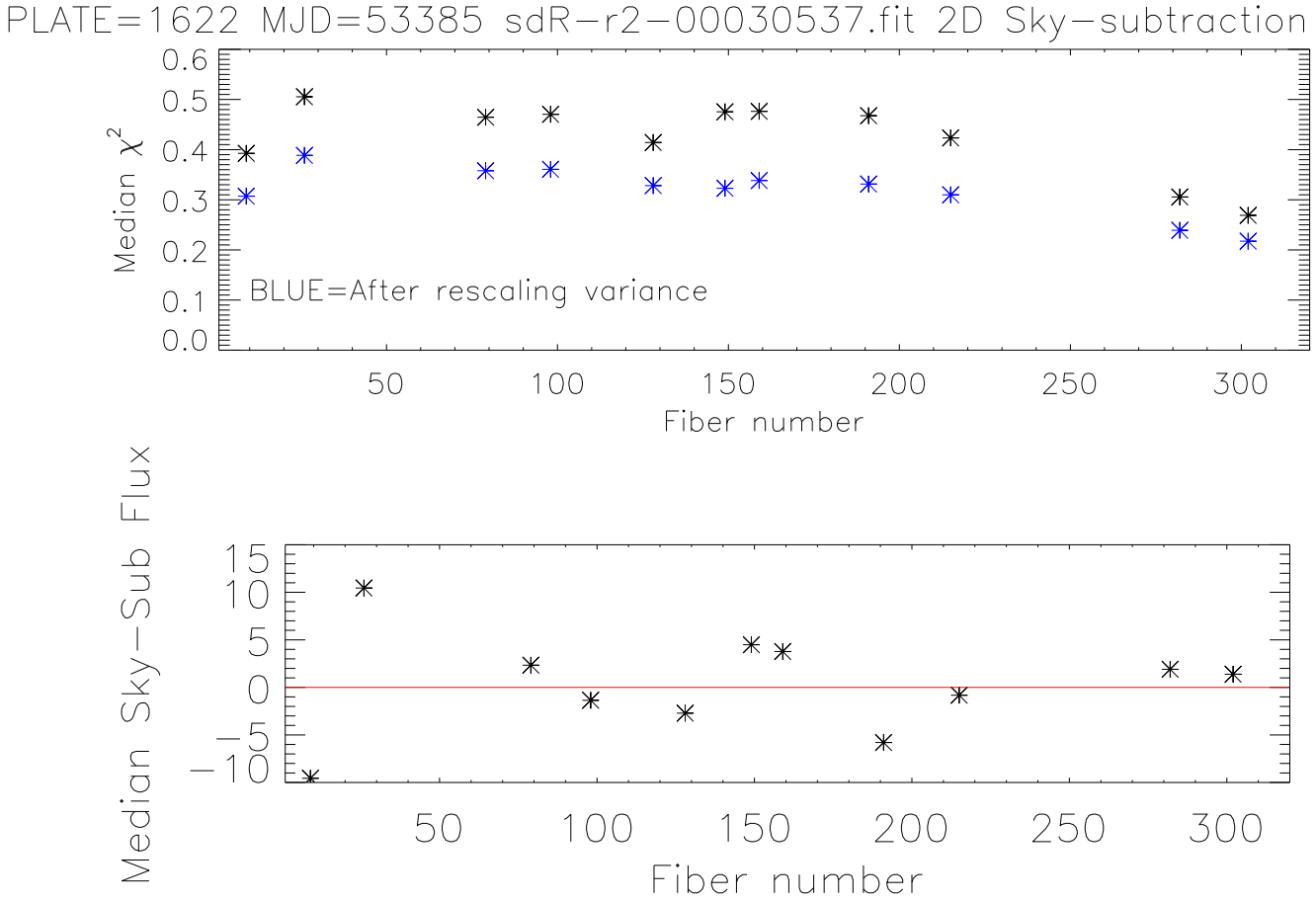

PLATE=1622 MJD=53385 Smooth superflat for sdR-r2-00030537.fit
2.0
1.5
1.0
0.5
0.0
es= -0.0000
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

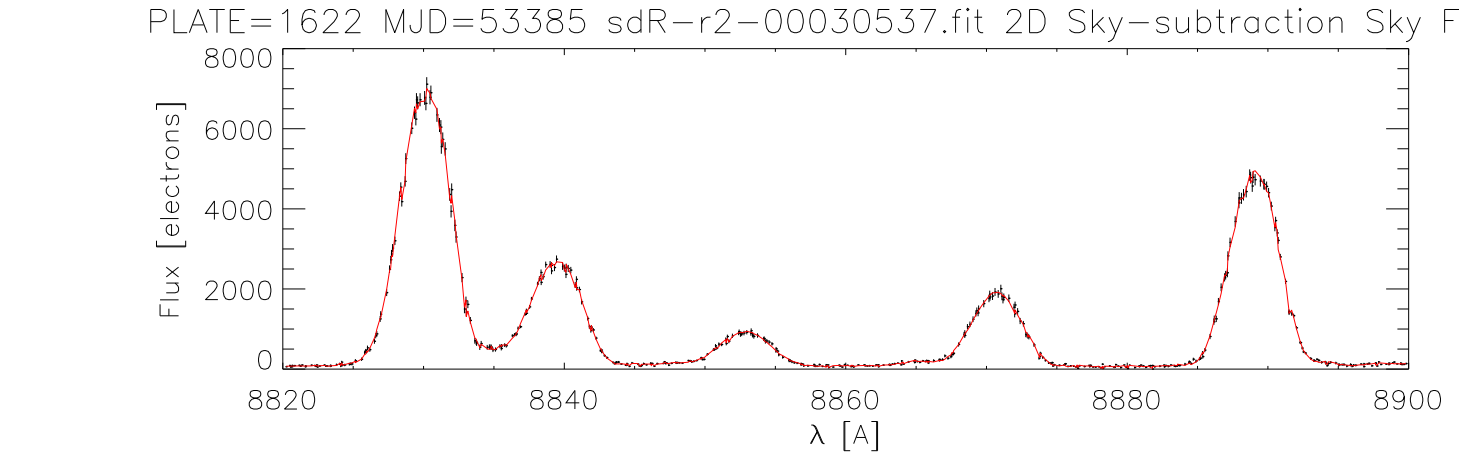

PLATE=1622 MJD=53385 sdR-r2-00030537.fit 1D Sky-subtraction Sky Fibers
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

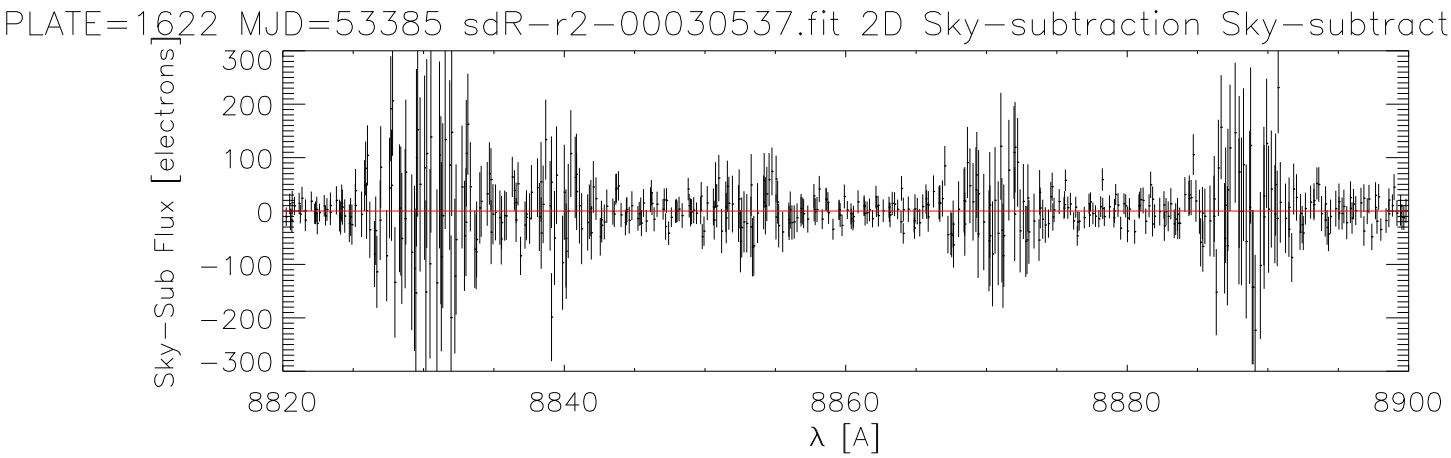

PLATE=1622 MJD=53385 sdR-r2-00030537.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

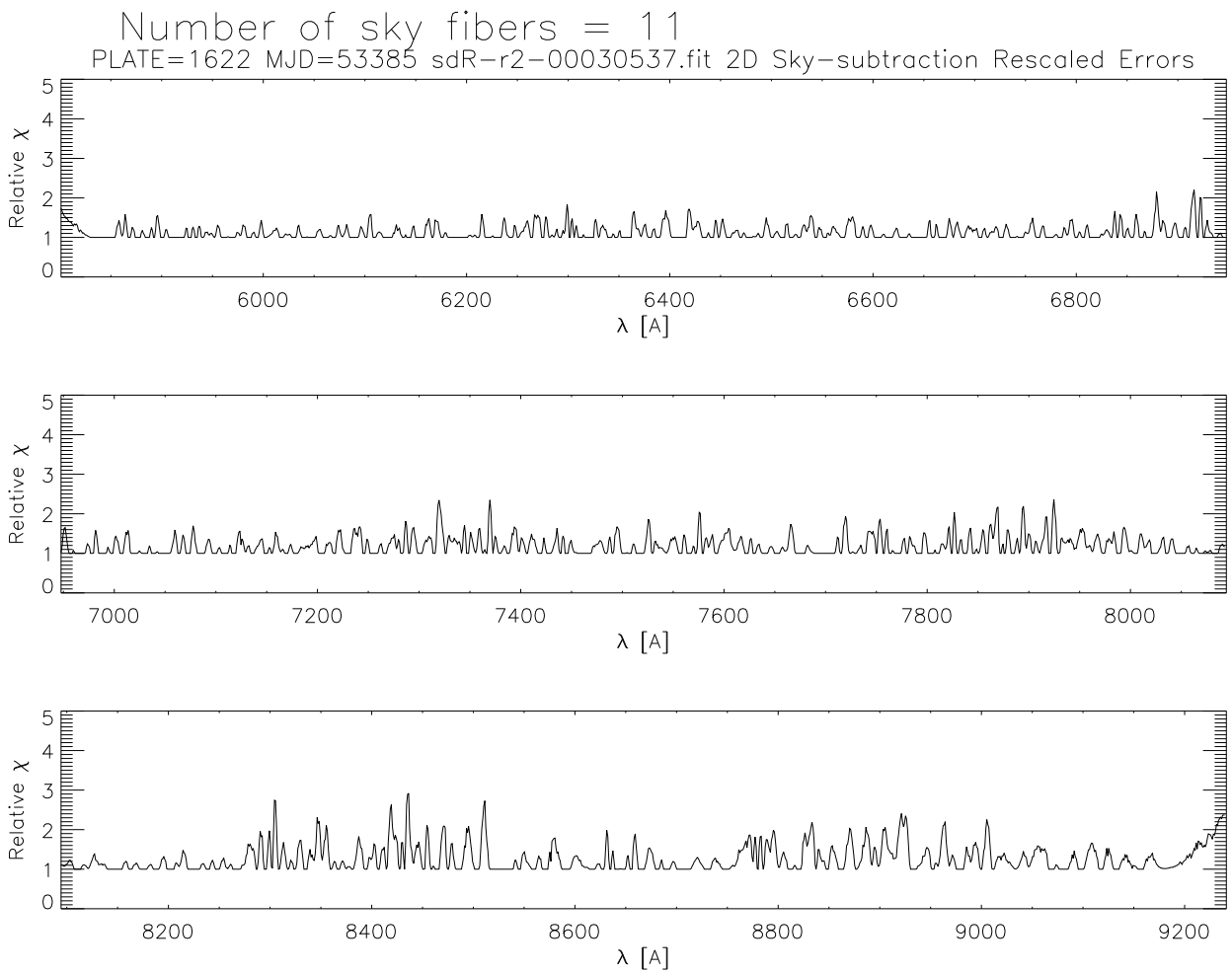

PLATE=1622 MJD=53385 sdR-r2-00030537.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

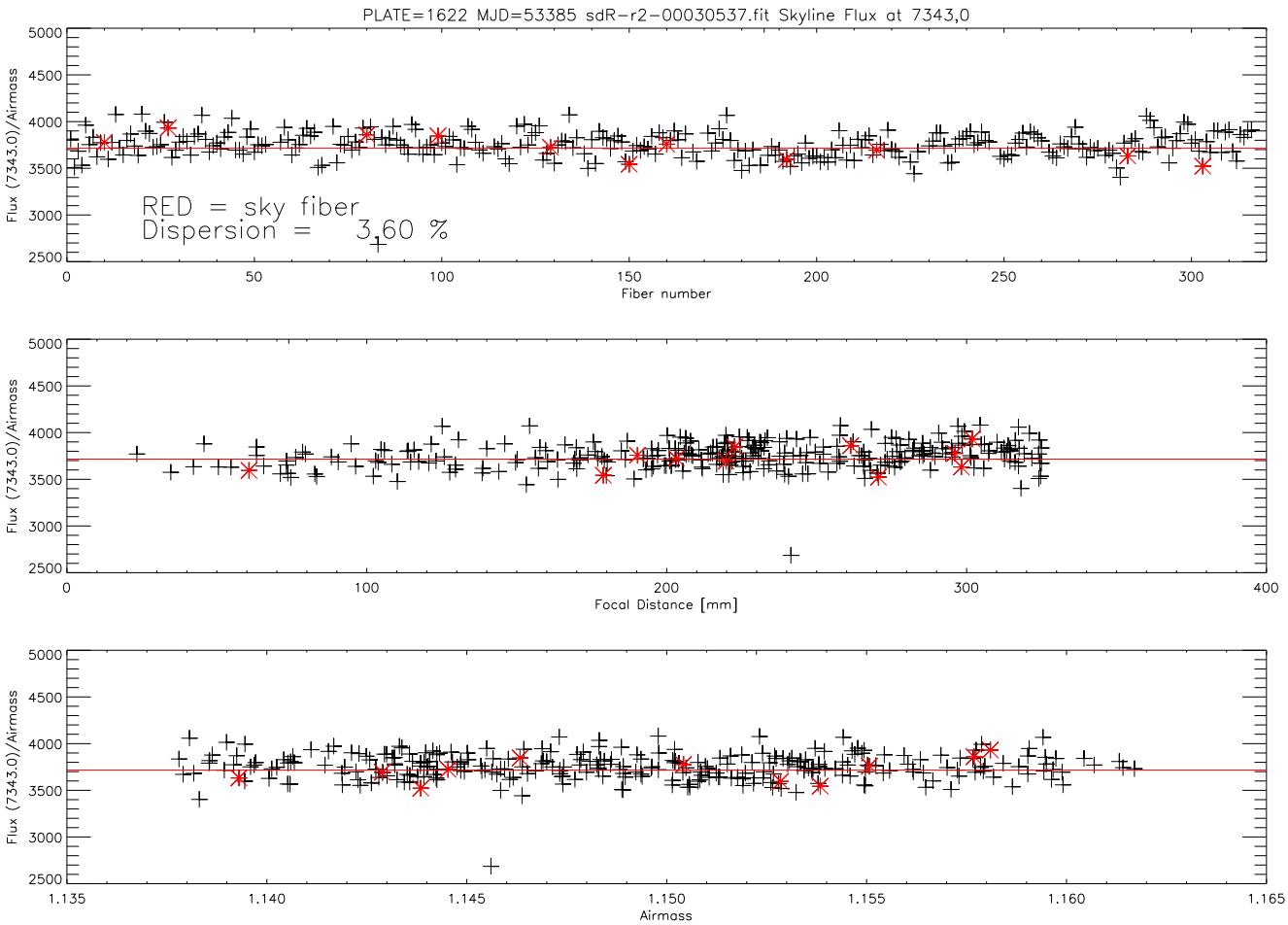

Number of sky fibers = 11
PLATE=1622 MJD=53385 sdR-r2-00030537.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

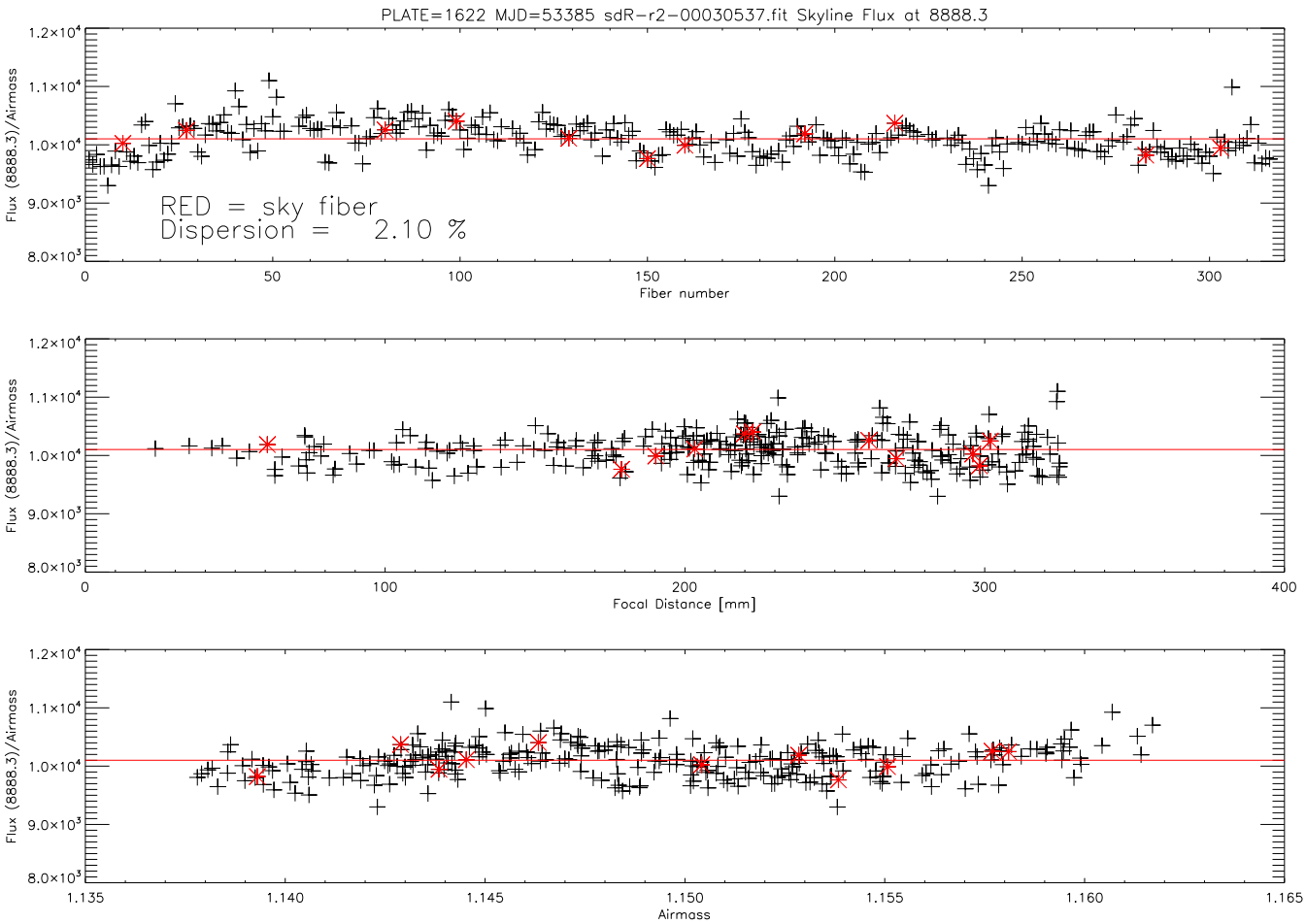

PLATE=1622 MJD=53385 sdR-r2-00030537.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=1622 MJD=53385 sdR-r2-00030537.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1622 MJD=53385 sdR-r2-00030537.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 11
PLATE=1622 MJD=53385 sdR-r2-00030537.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=1622 MJD=53385 sdR-r2-00030537.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.60 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=1622 MJD=53385 sdR-r2-00030537.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.10 %
Fiber number
Focal Distance [mm]
Airmass