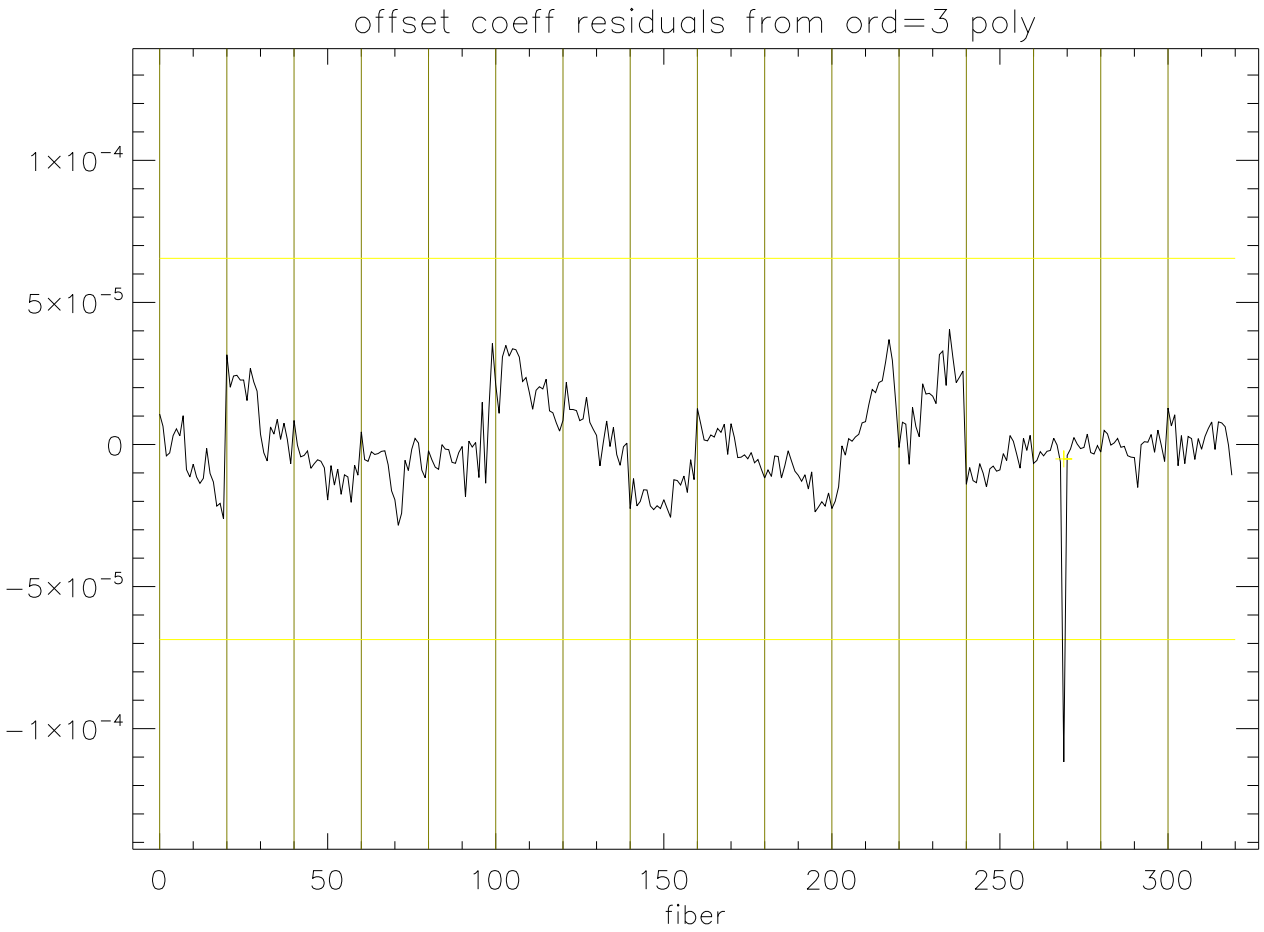
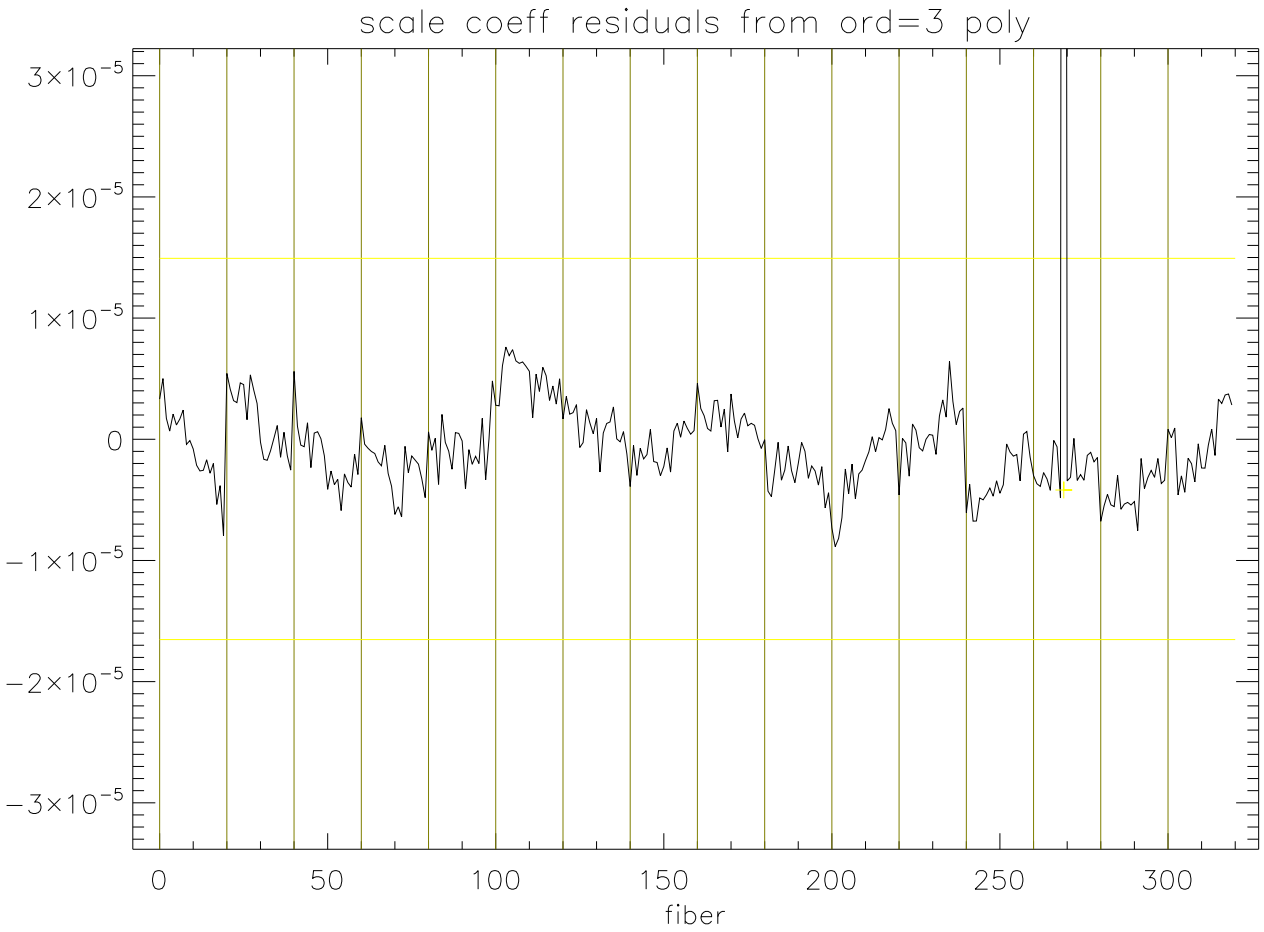
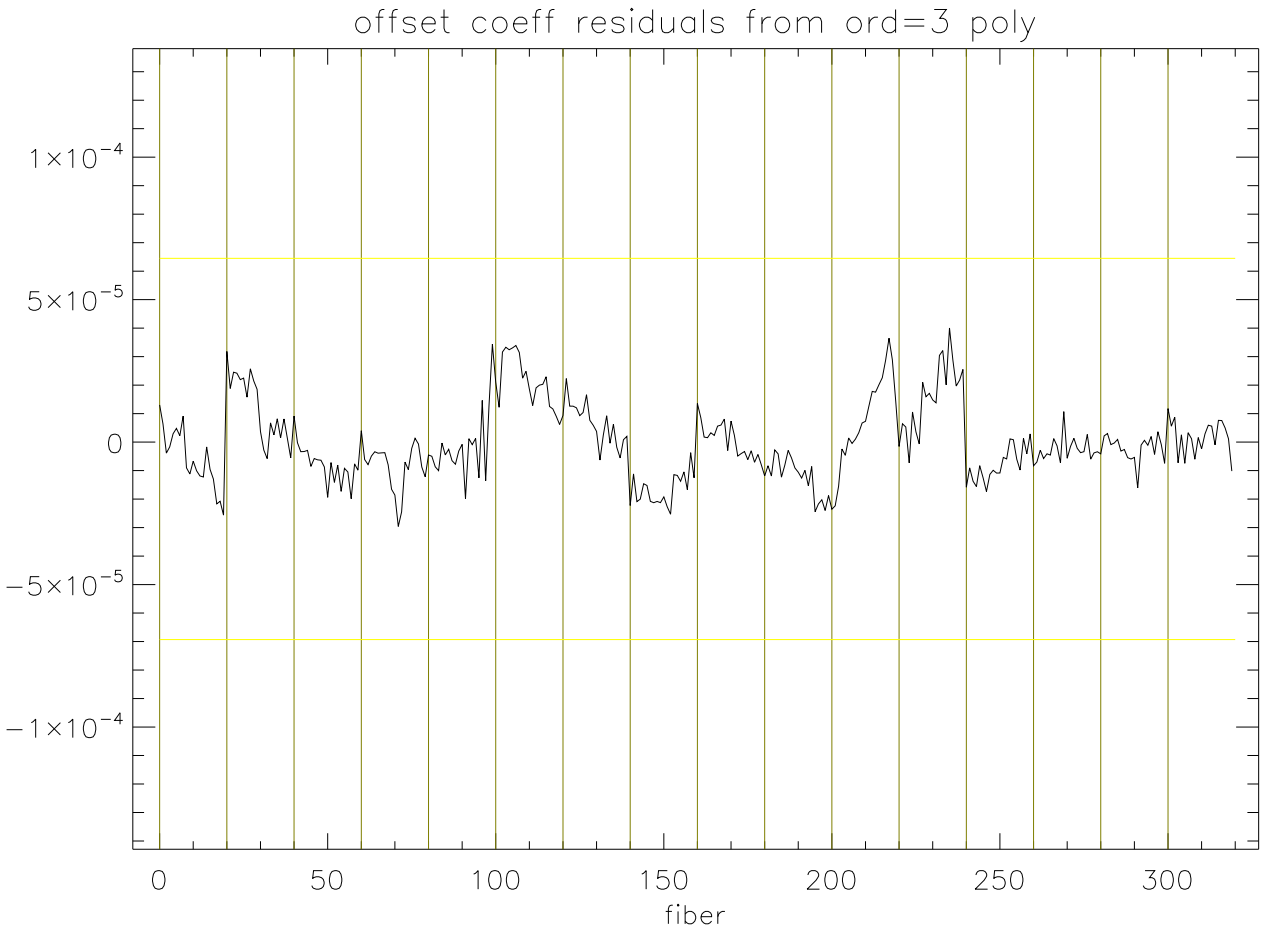
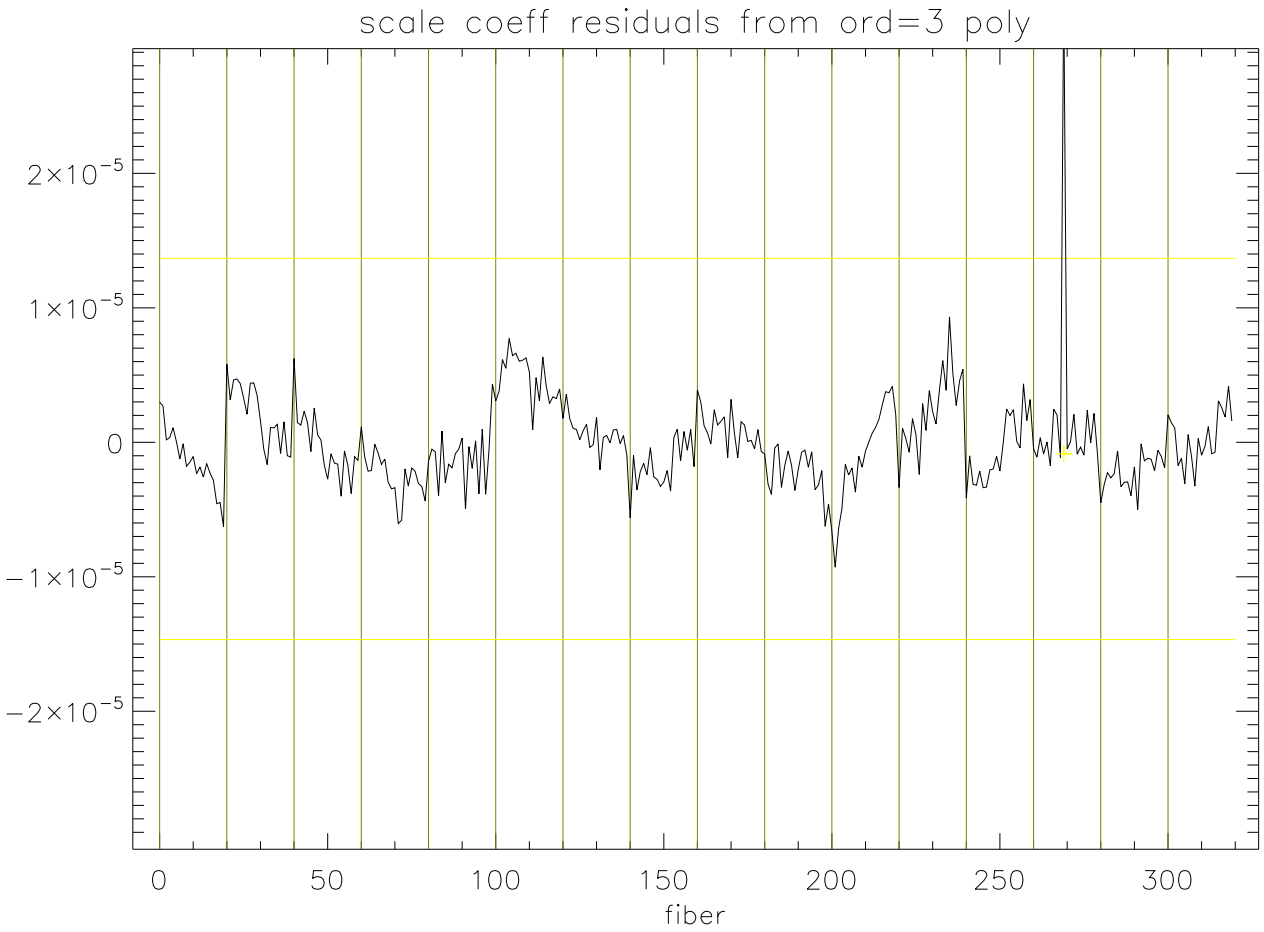
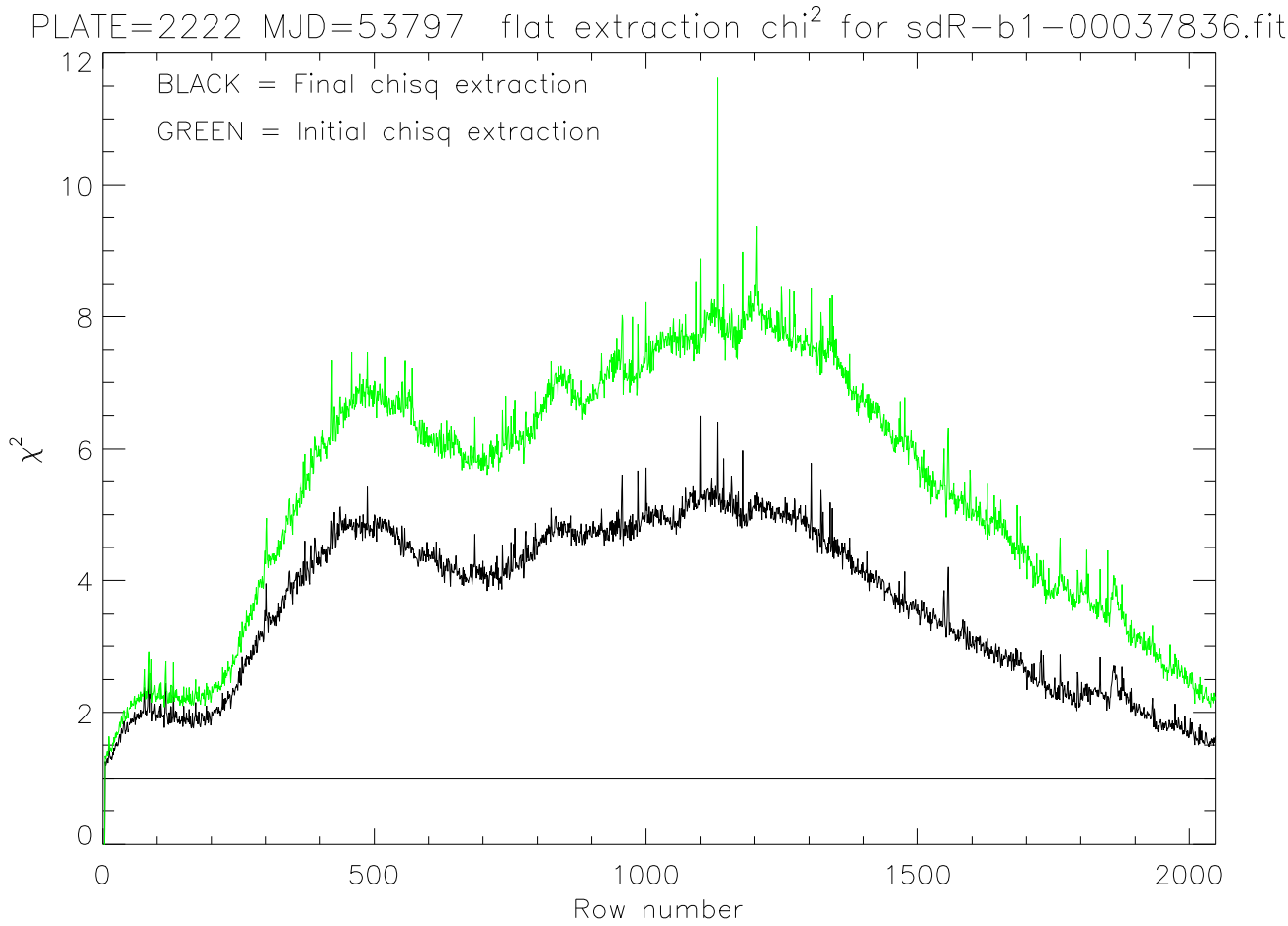
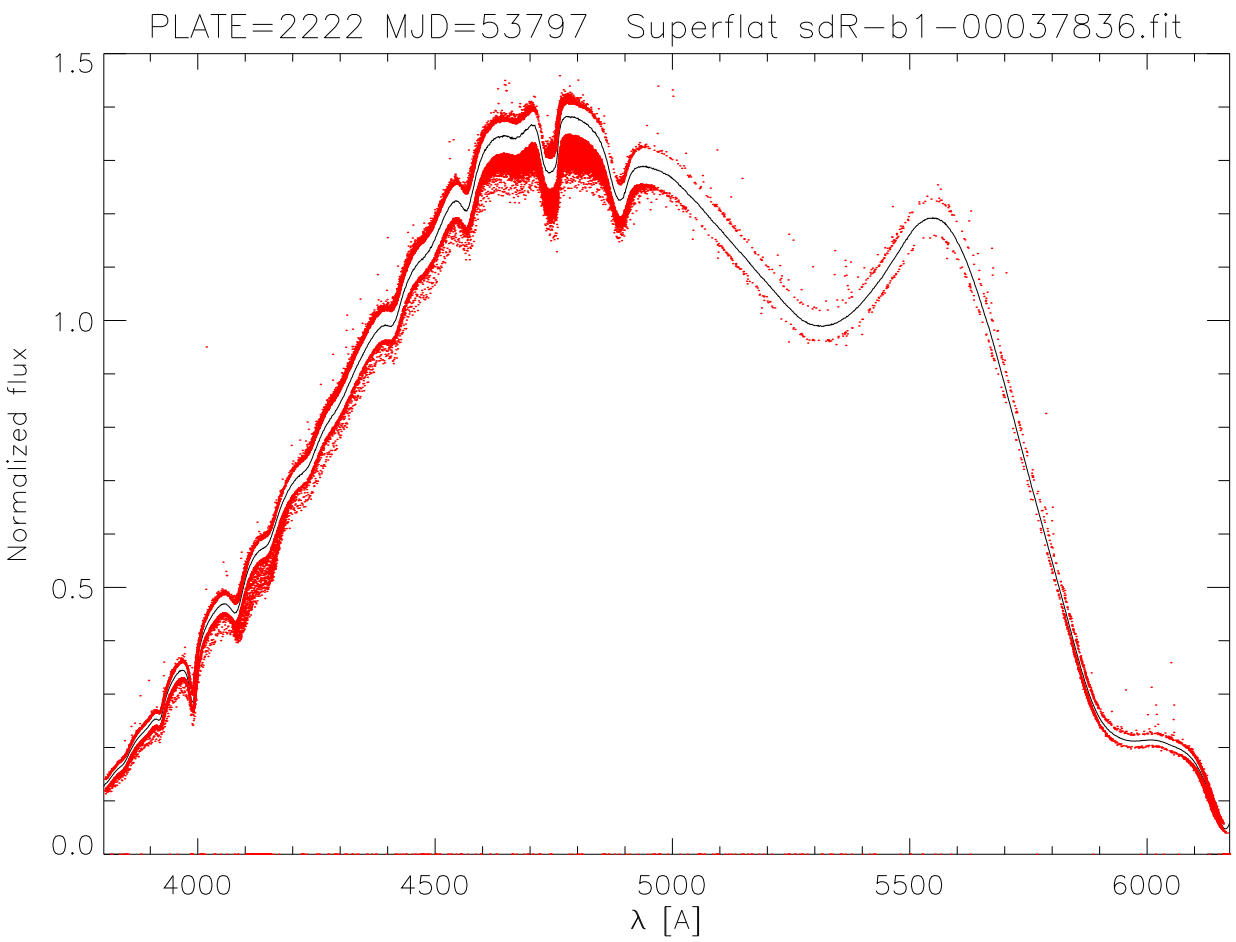

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

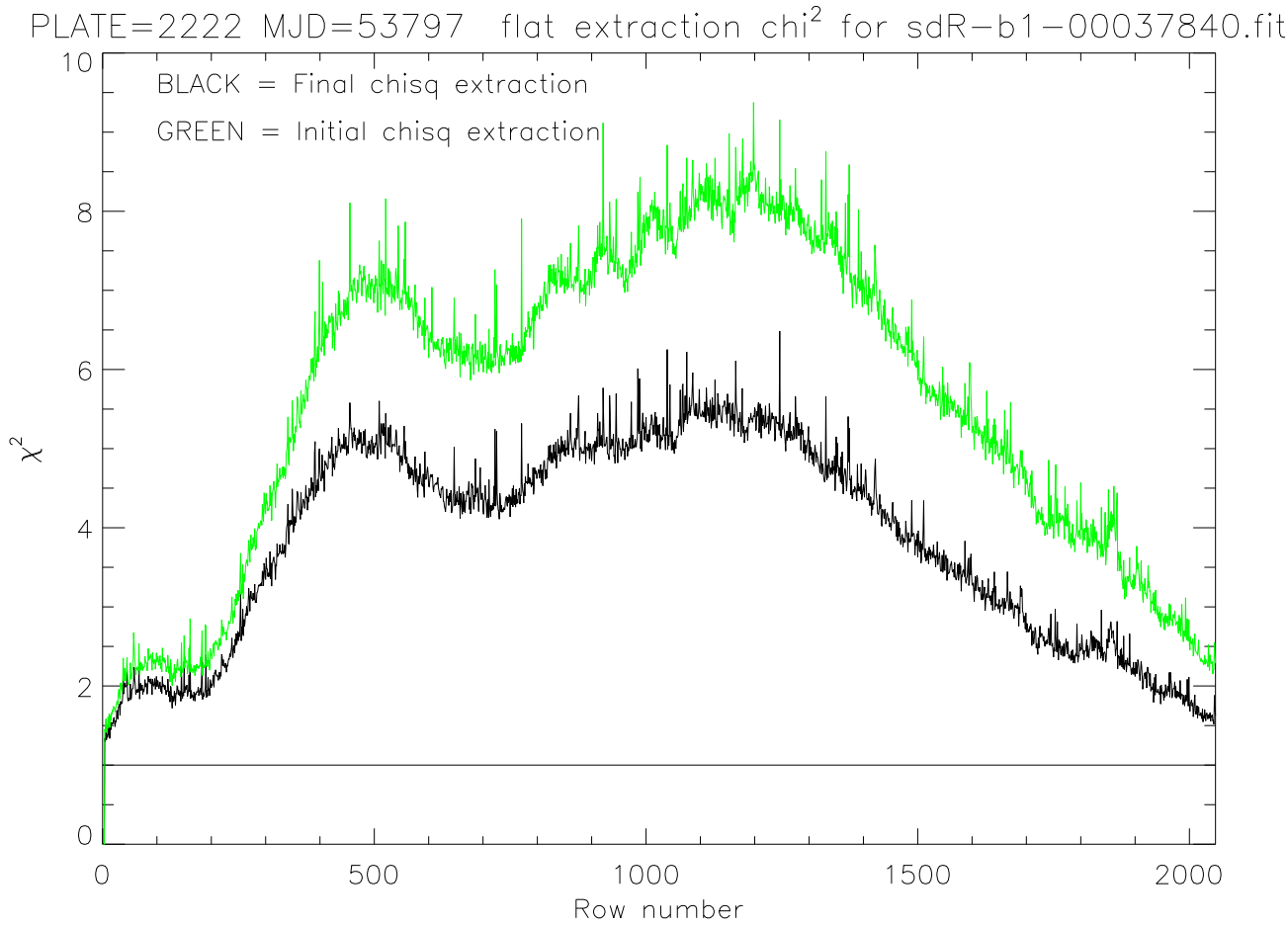

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

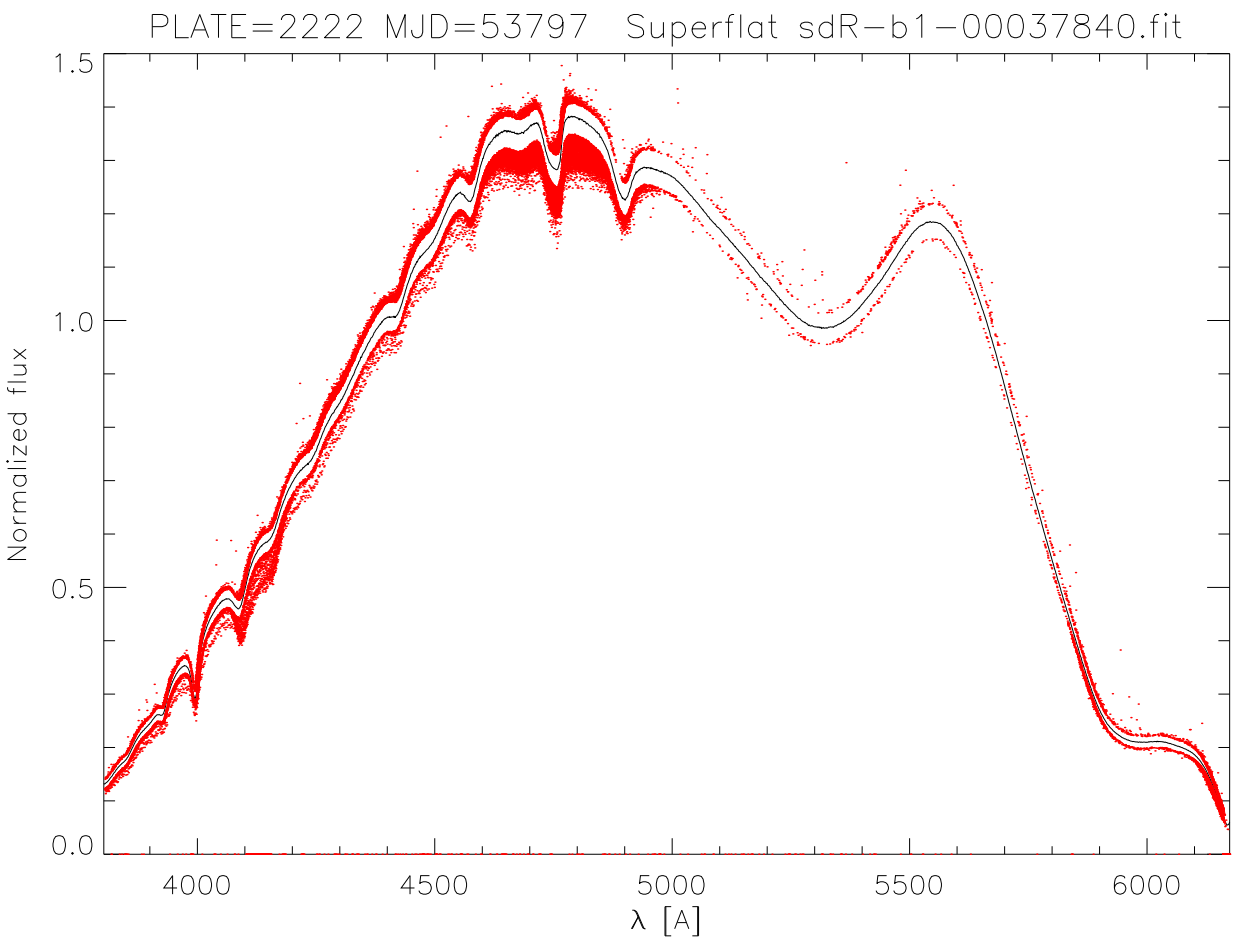

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

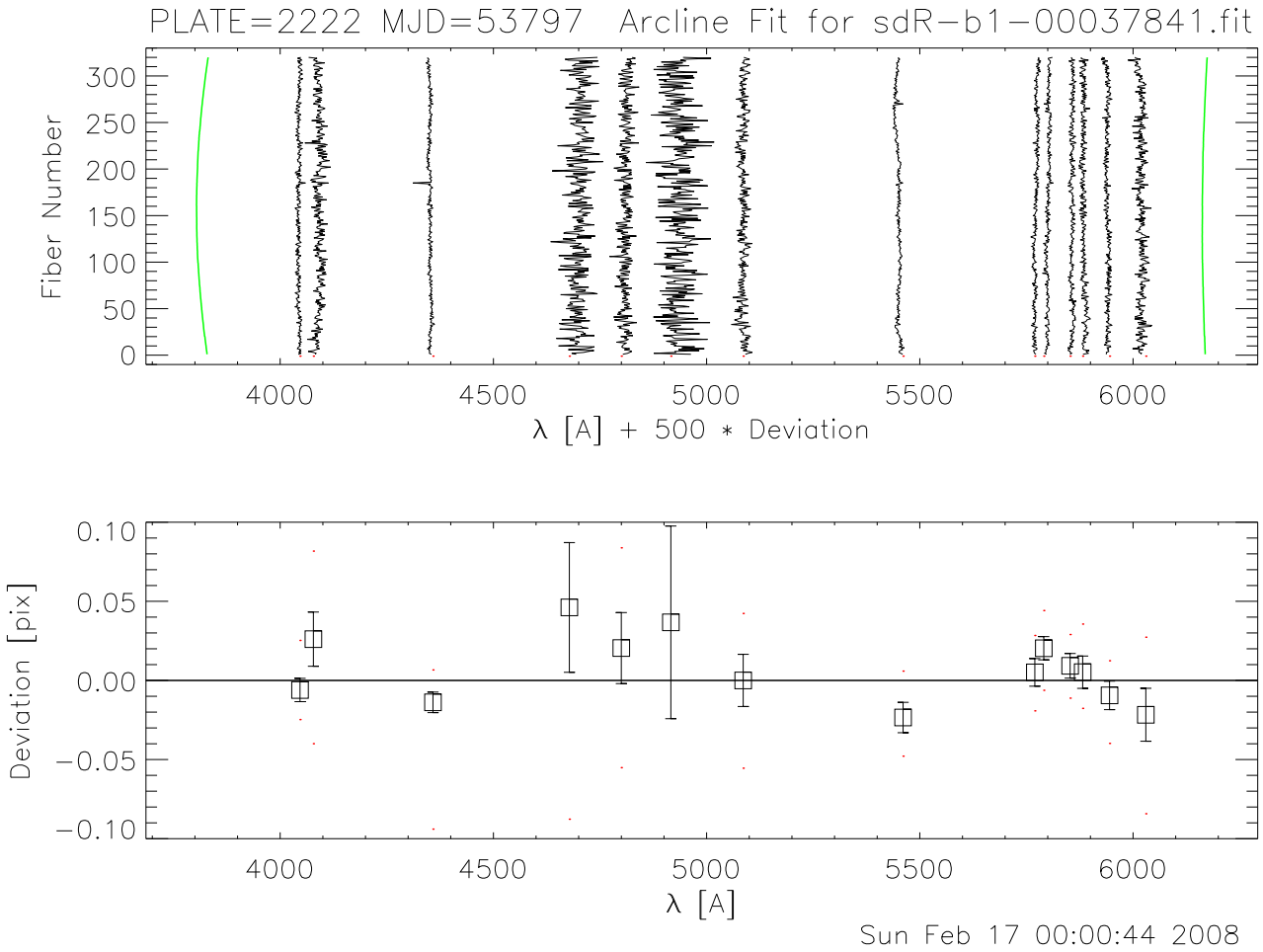

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

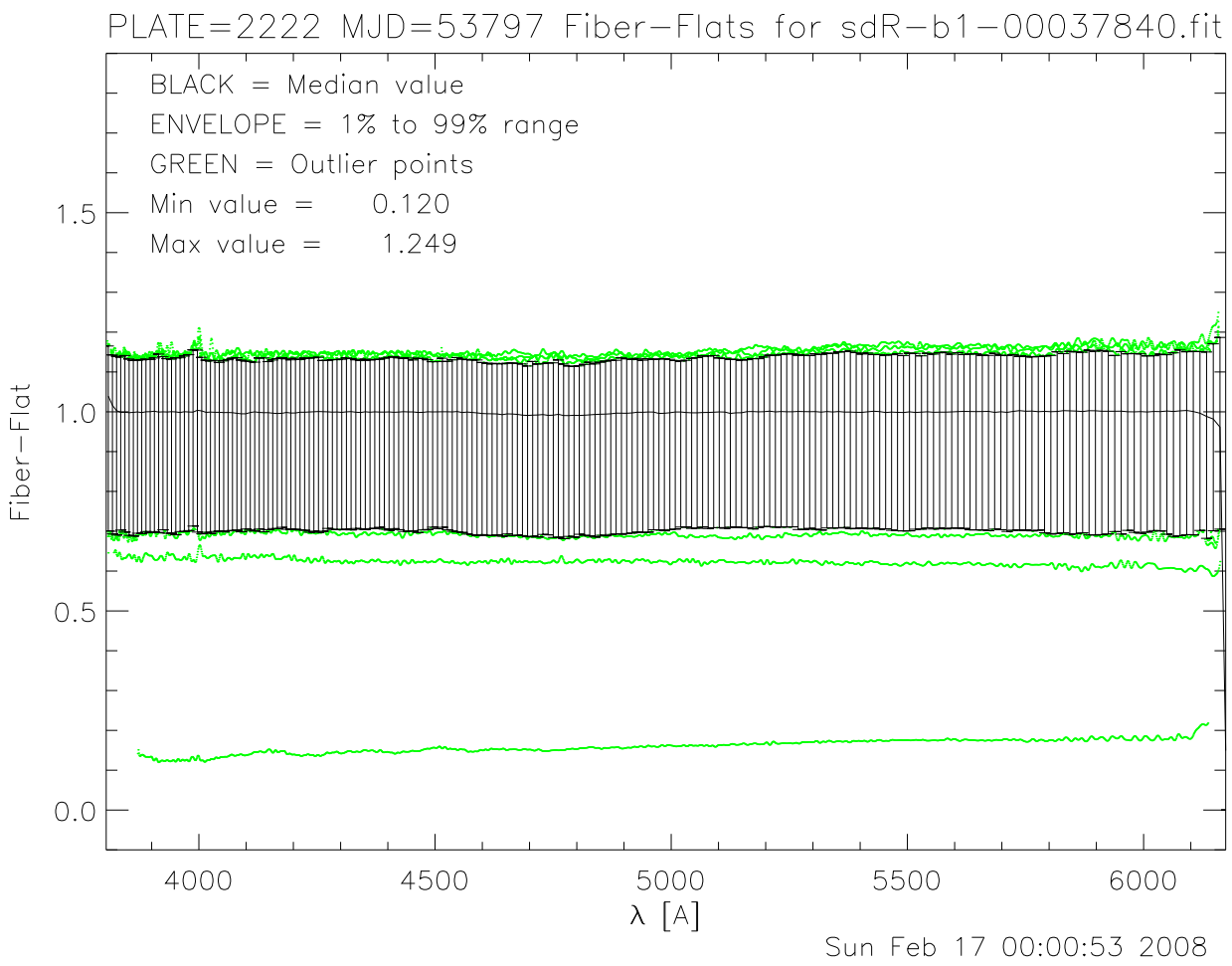

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR−b1−00037836.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

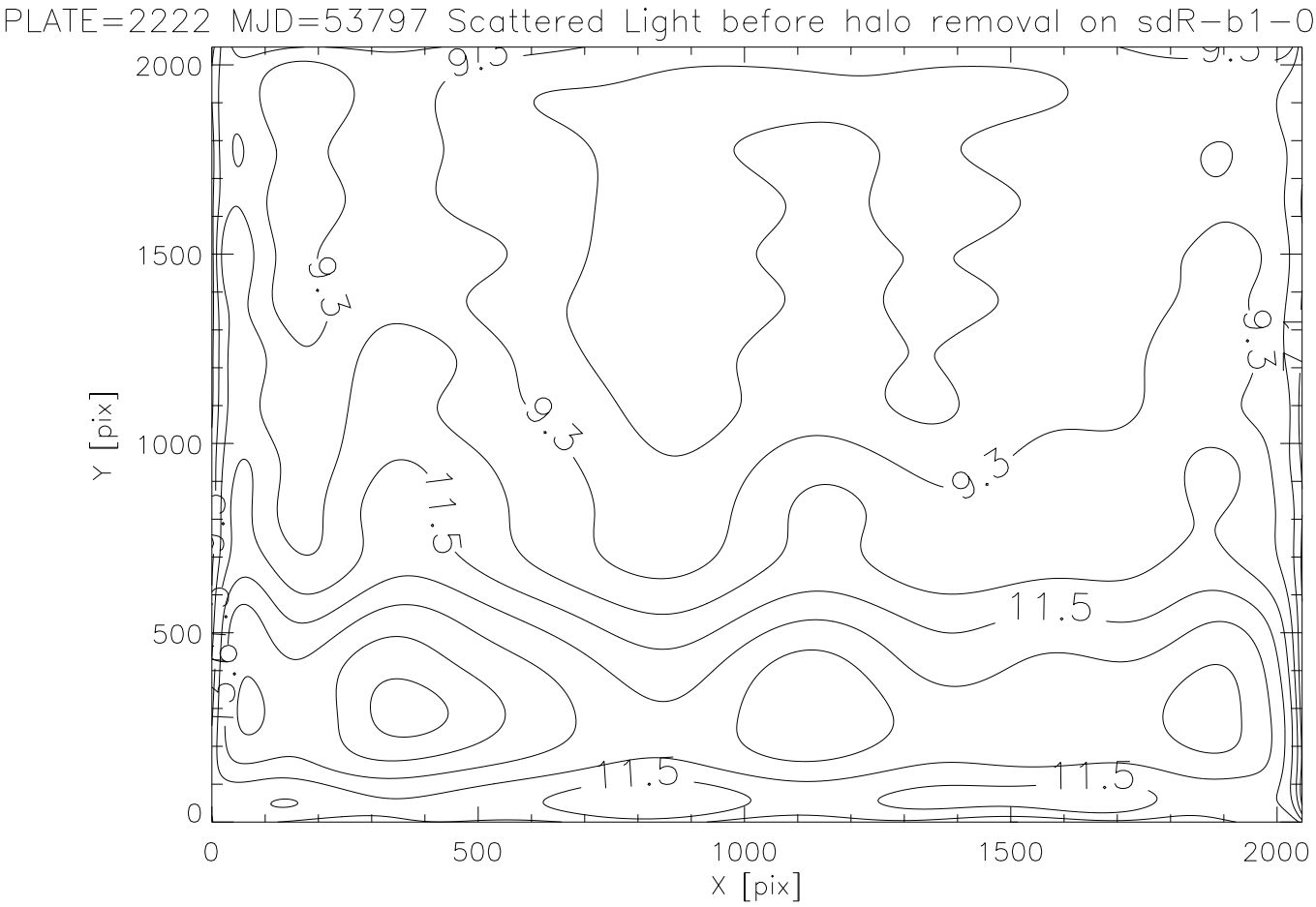

PLATE=2222 MJD=53797 Superflat sdR-b1-00037836.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

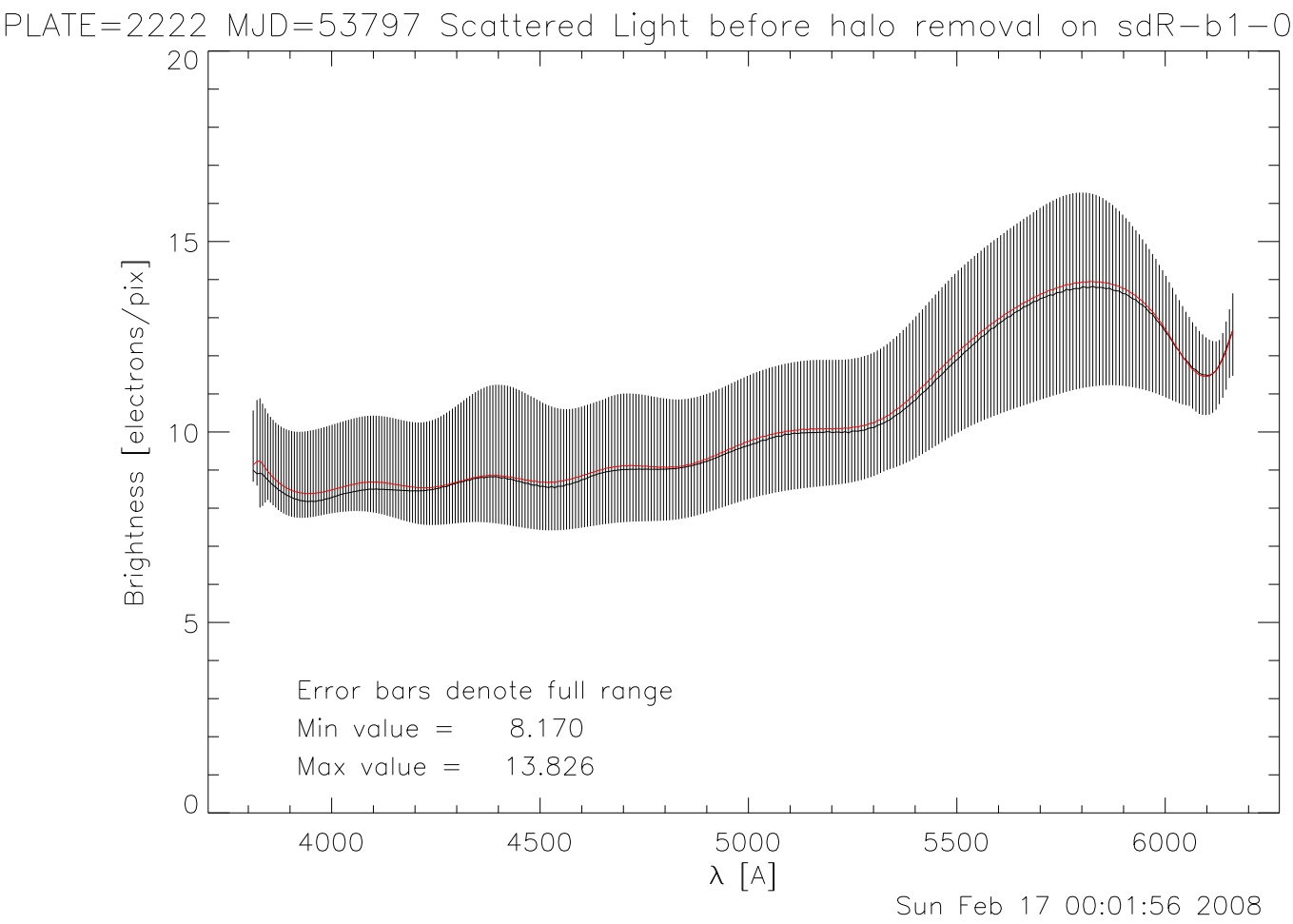

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR-b1-00037840.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

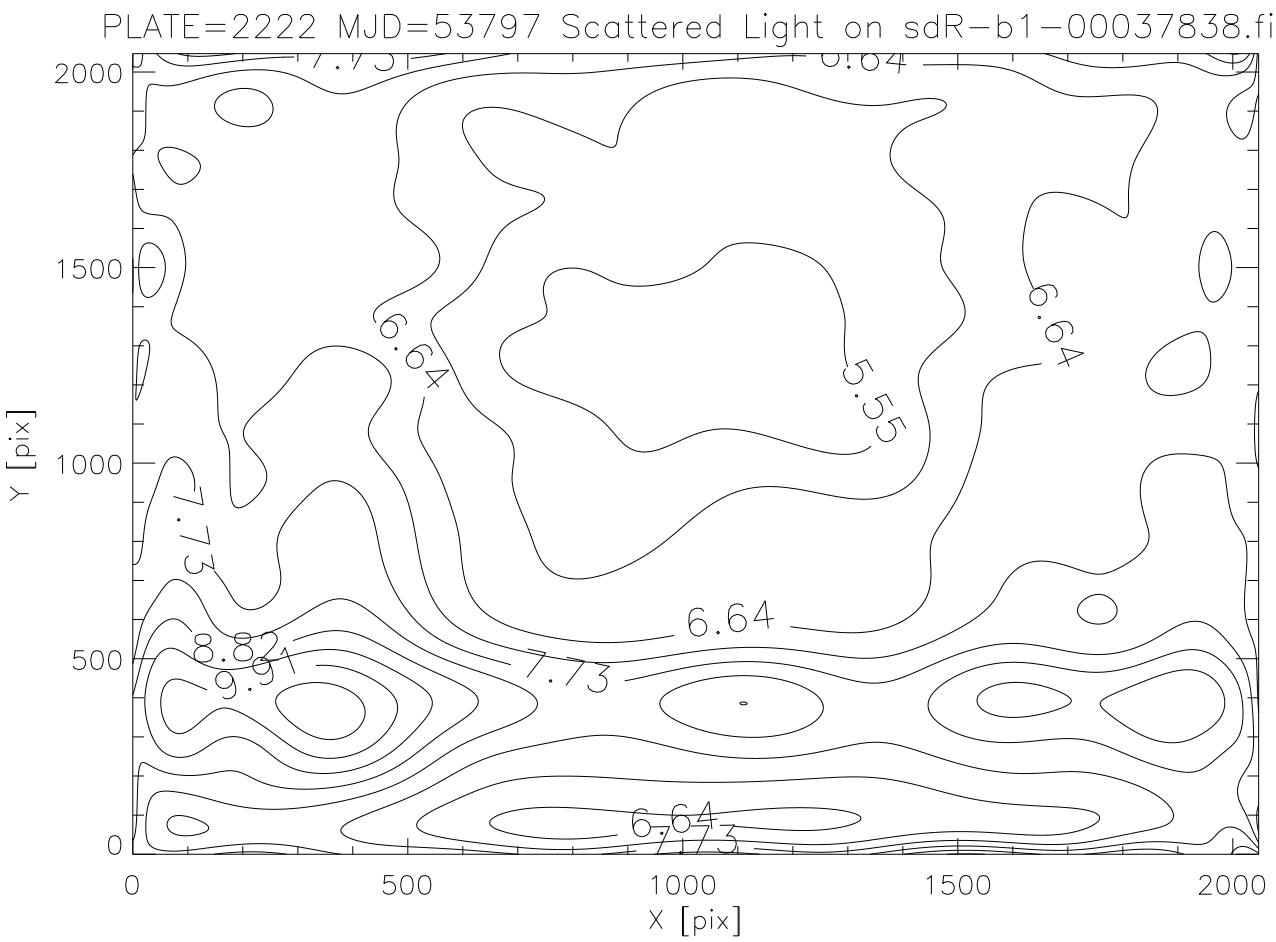

PLATE=2222 MJD=53797 Superflat sdR-b1-00037840.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

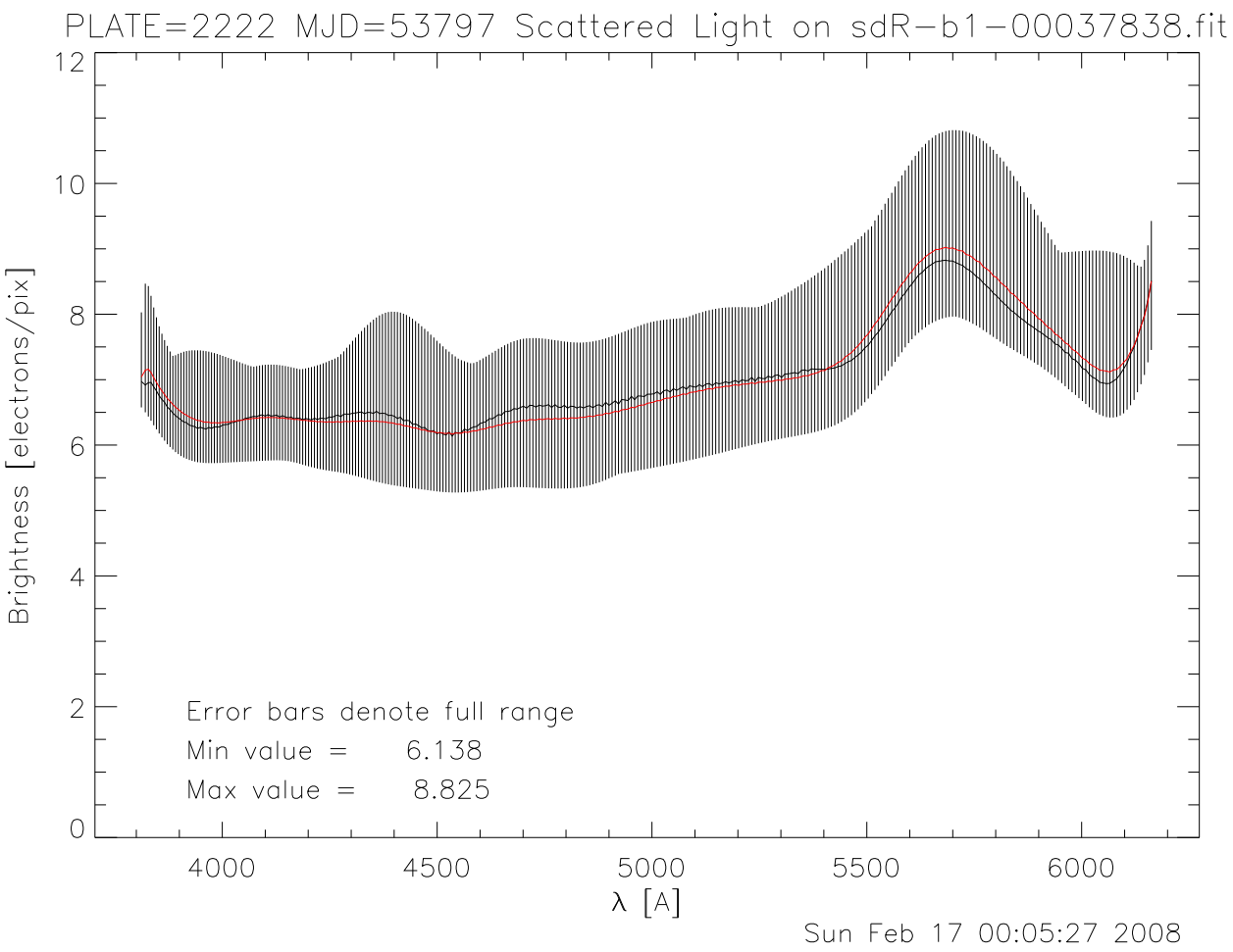

PLATE=2222 MJD=53797 Arcline Fit for sdR-b1-00037841.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:00:44 2008

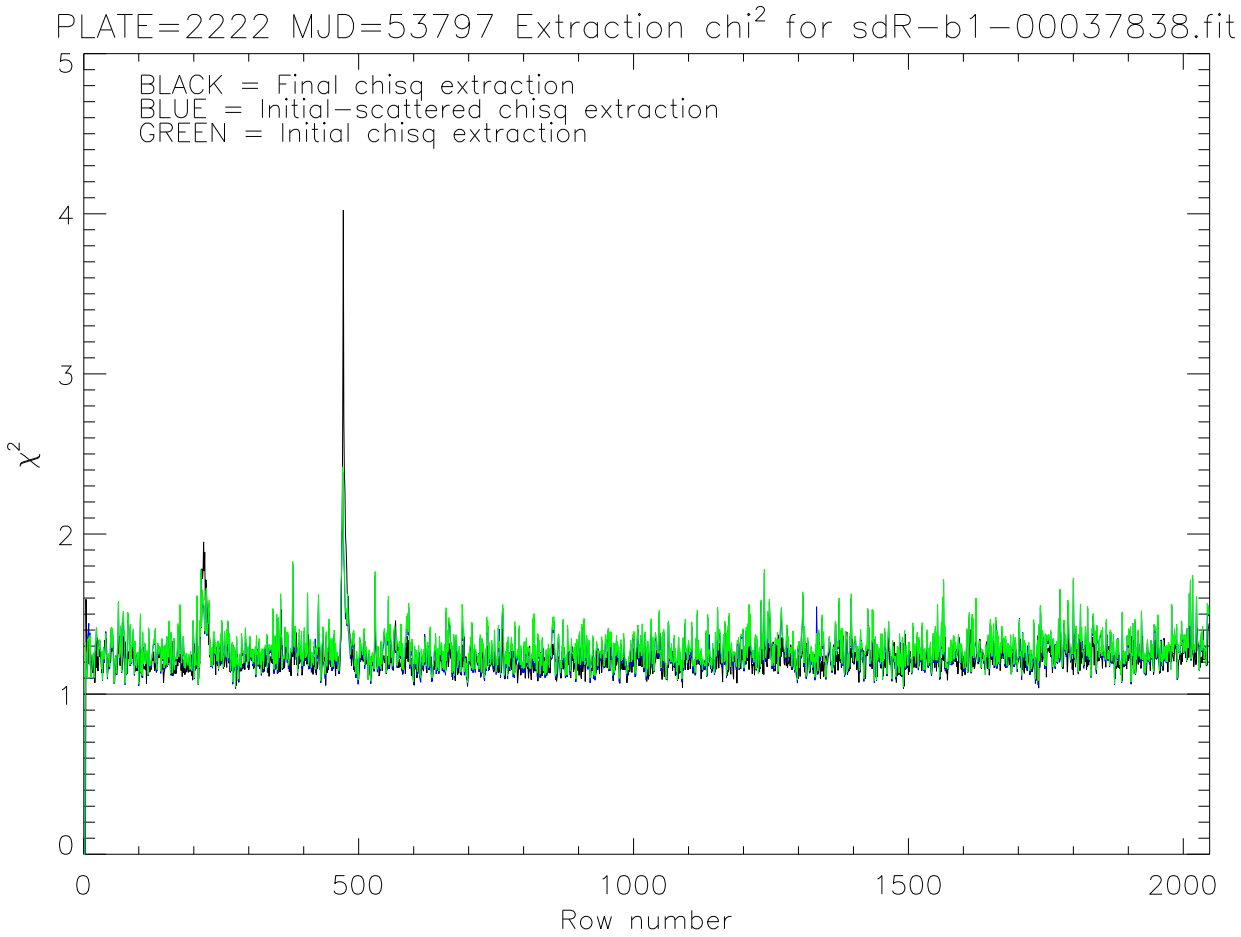

PLATE=2222 MJD=53797 Fiber-Flats for sdR-b1-00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.120
Max value = 1.249
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:00:53 2008

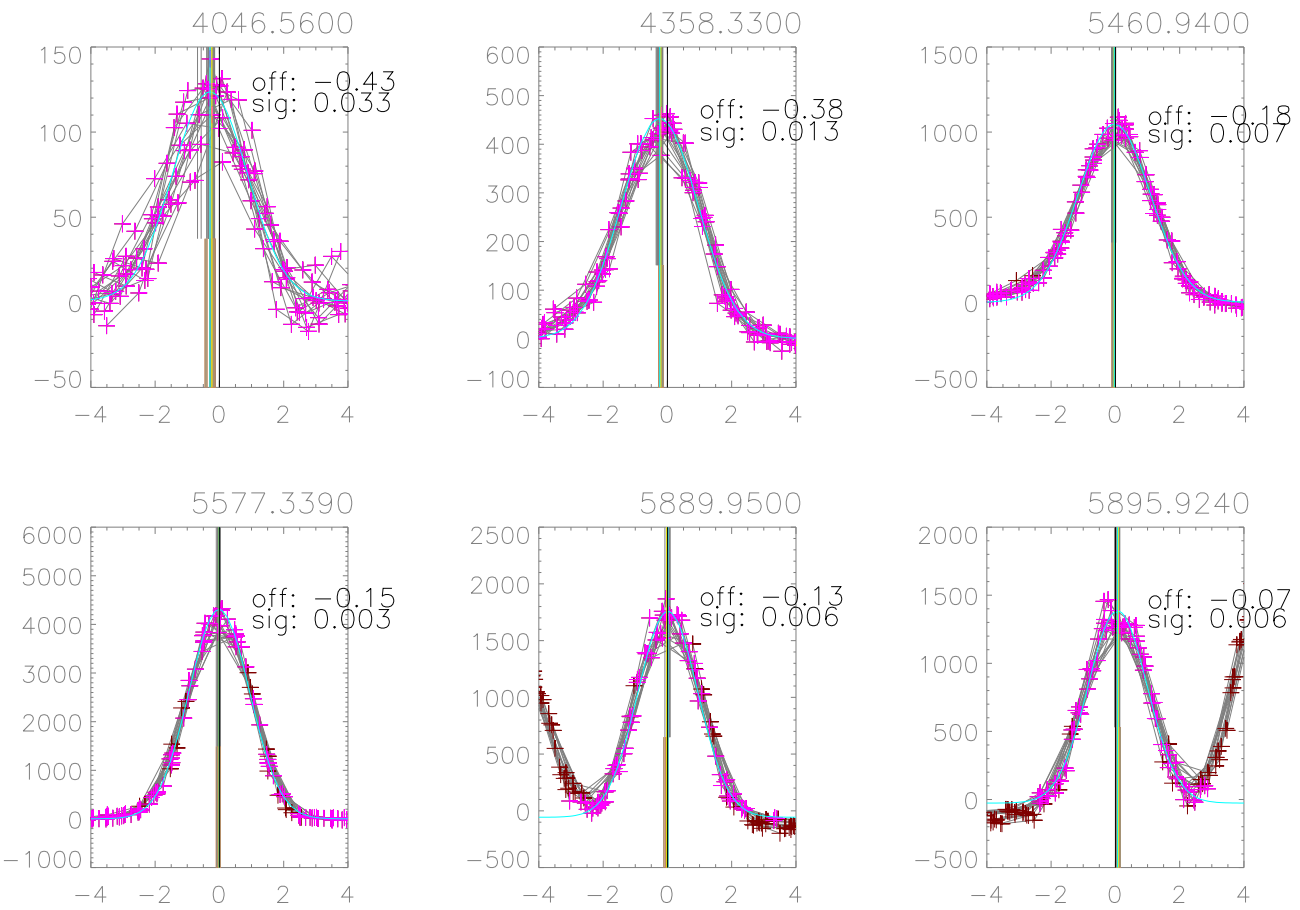

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR−b1−00037838.f
9.3
11.5
Y [pix]
X [pix]
0
500
1000
1500
2000

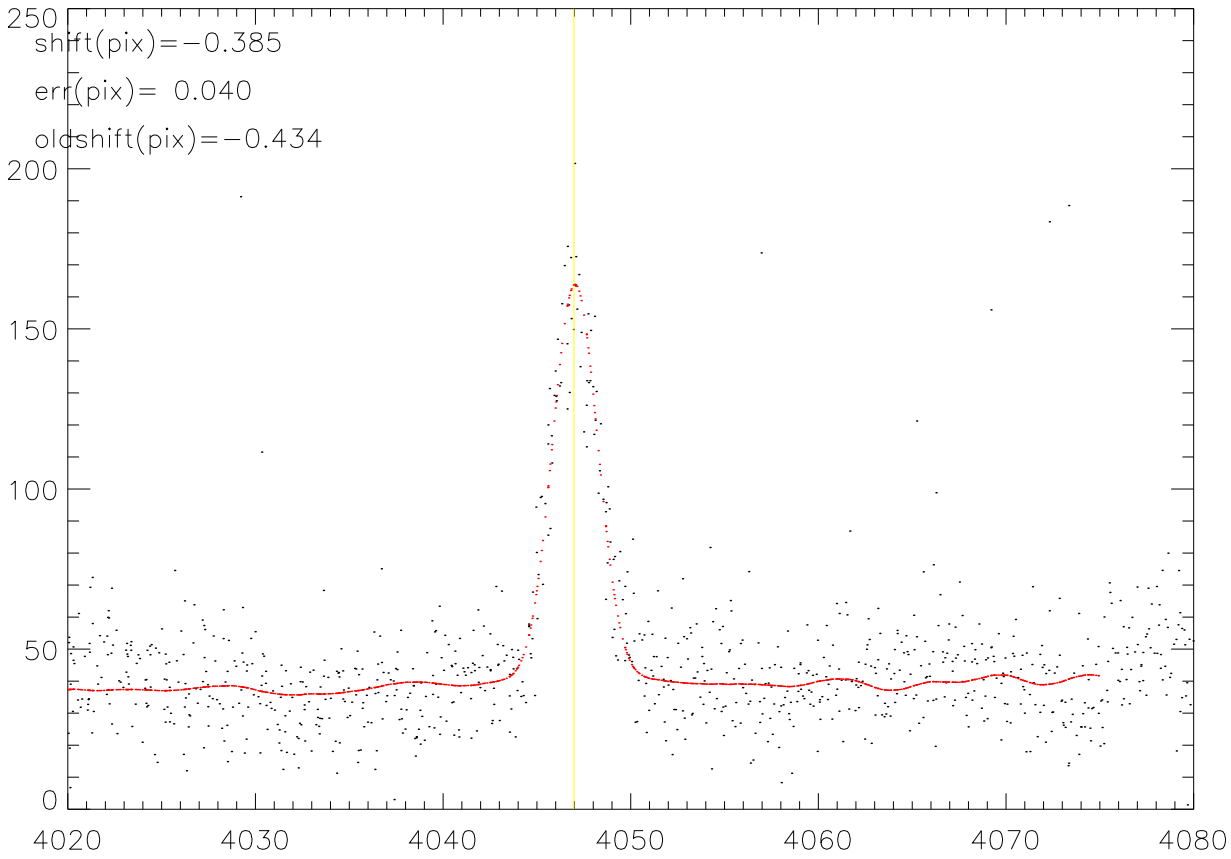

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-b1-00037838.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 8.170
Max value = 13.826
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:01:56 2008

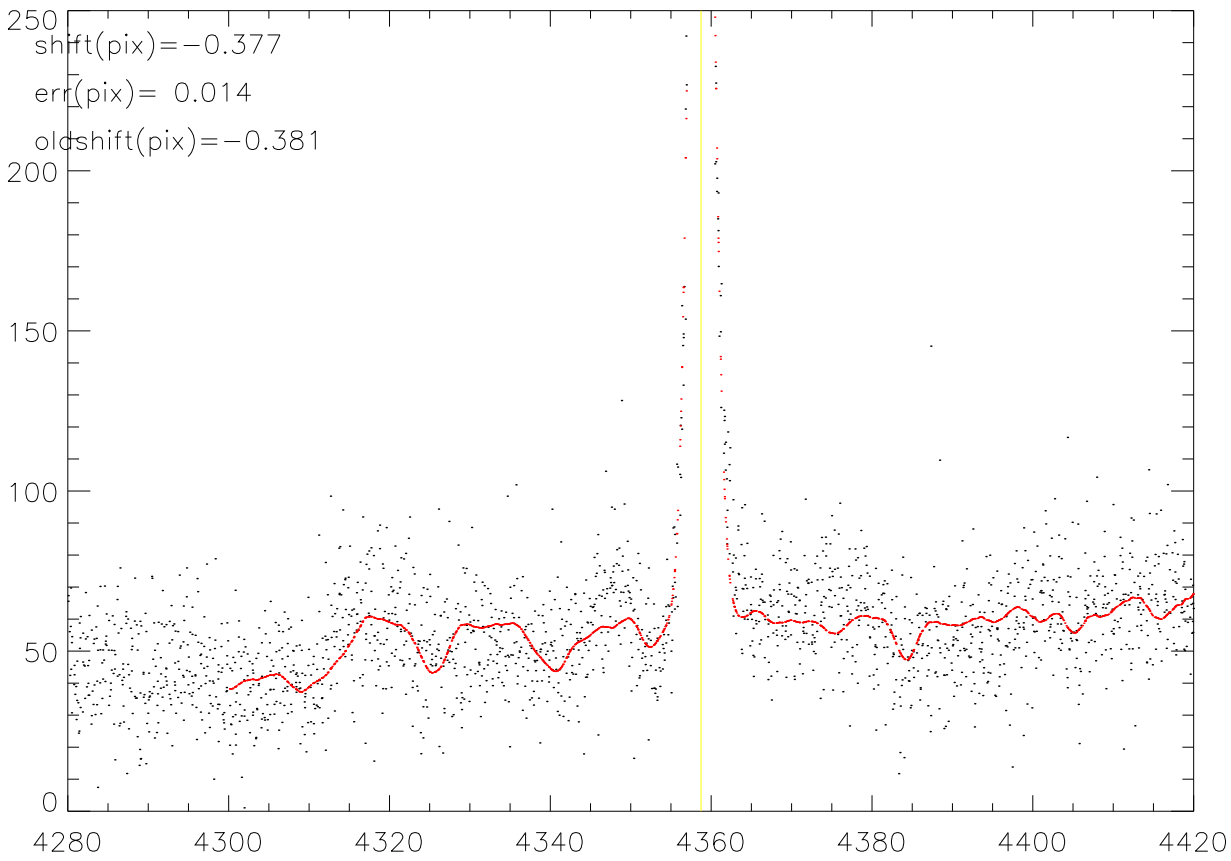

PLATE=2222 MJD=53797 Scattered Light on sdR-b1-00037838.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.64
5.55
6.64
6.64
7.73
8.82
9.91
7.73
6.64
6.64
7.73

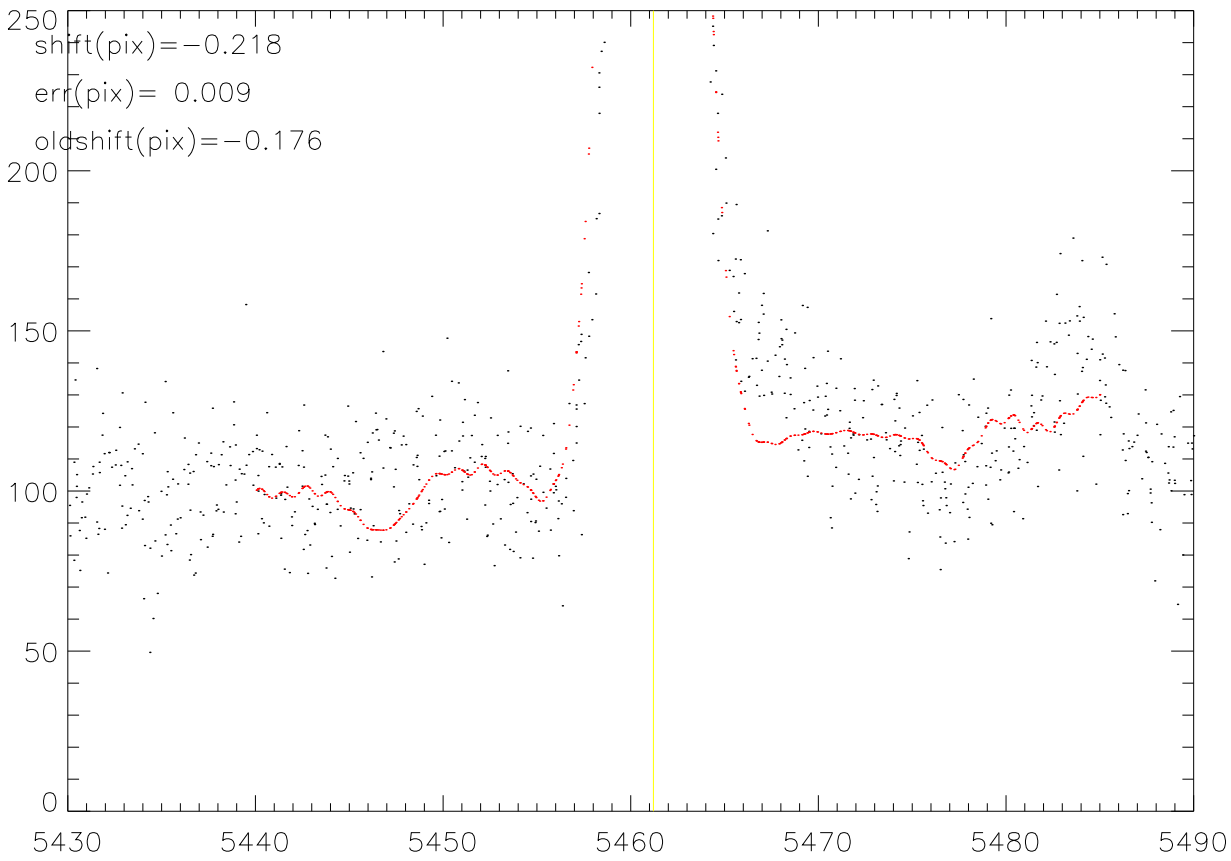

PLATE=2222 MJD=53797 Scattered Light on sdR-b1-00037838.fit
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 6.138
Max value = 8.825
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:05:27 2008

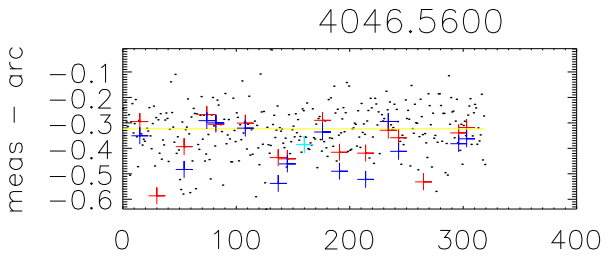

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−b1−00037838.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

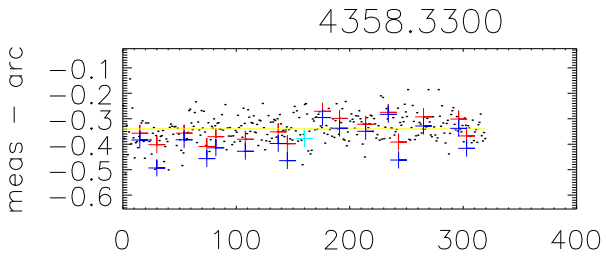

4046.5600
off: −0.43
sig: 0.033
4358.3300
off: −0.38
sig: 0.013
5460.9400
off: −0.18
sig: 0.007
5577.3390
off: −0.15
sig: 0.003
5889.9500
off: −0.13
sig: 0.006
5895.9240
off: −0.07
sig: 0.006

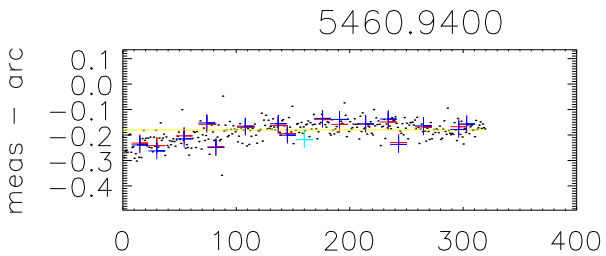

shift(pix)=−0.385
err(pix)= 0.040
oldshift(pix)=−0.434
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

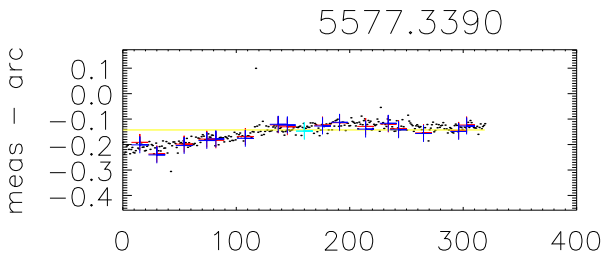

shift(pix)=−0.377
err(pix)= 0.014
oldshift(pix)=−0.381
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

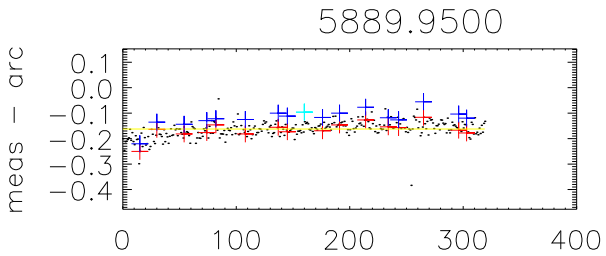

shift(pix)=−0.218
err(pix)= 0.009
oldshift(pix)=−0.176
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

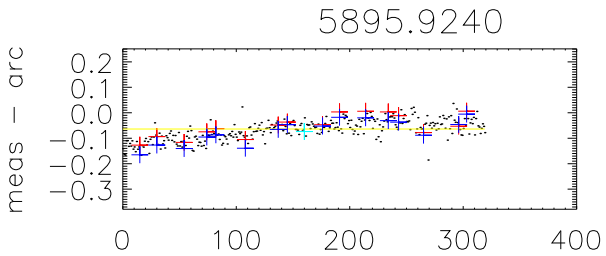

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

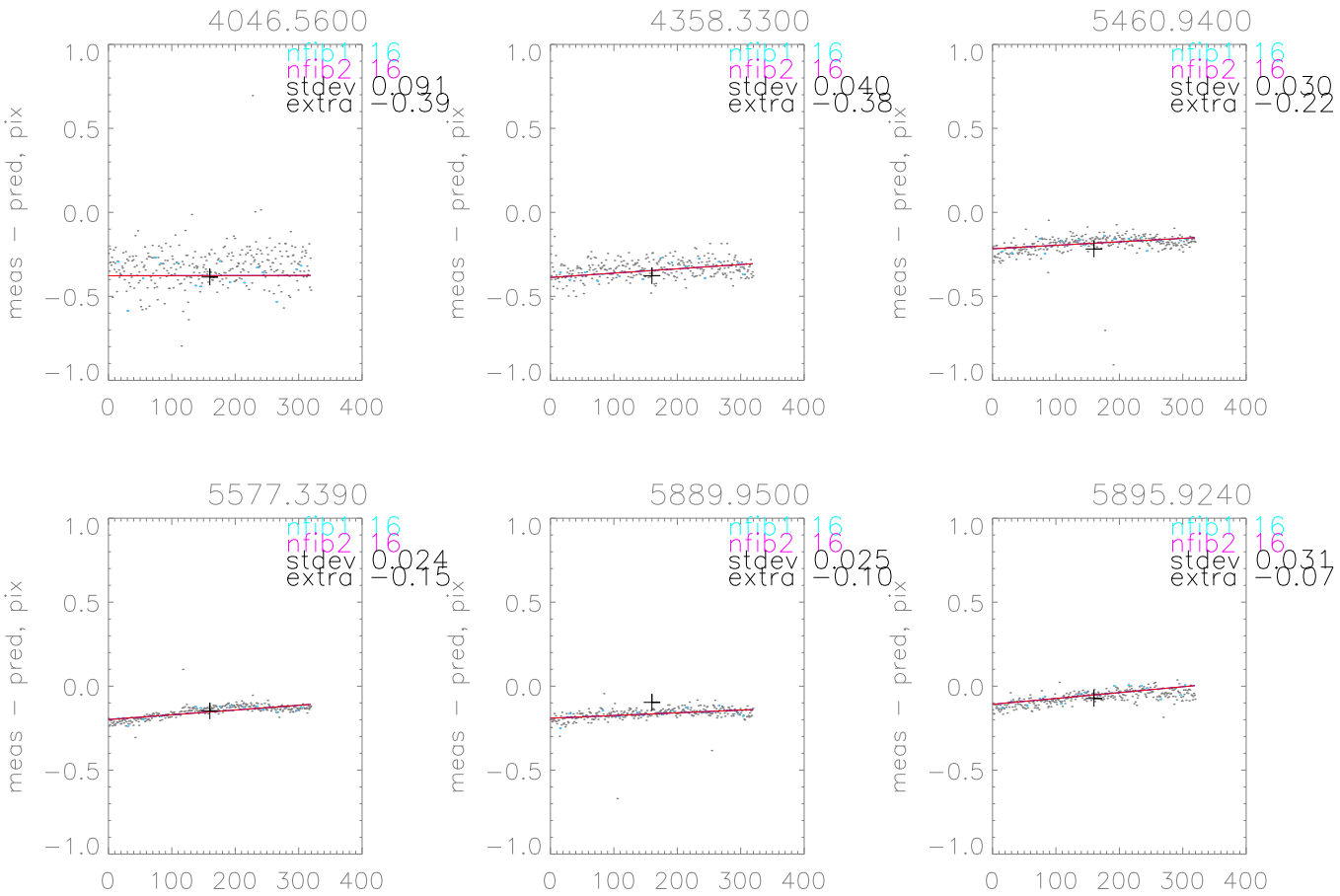

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

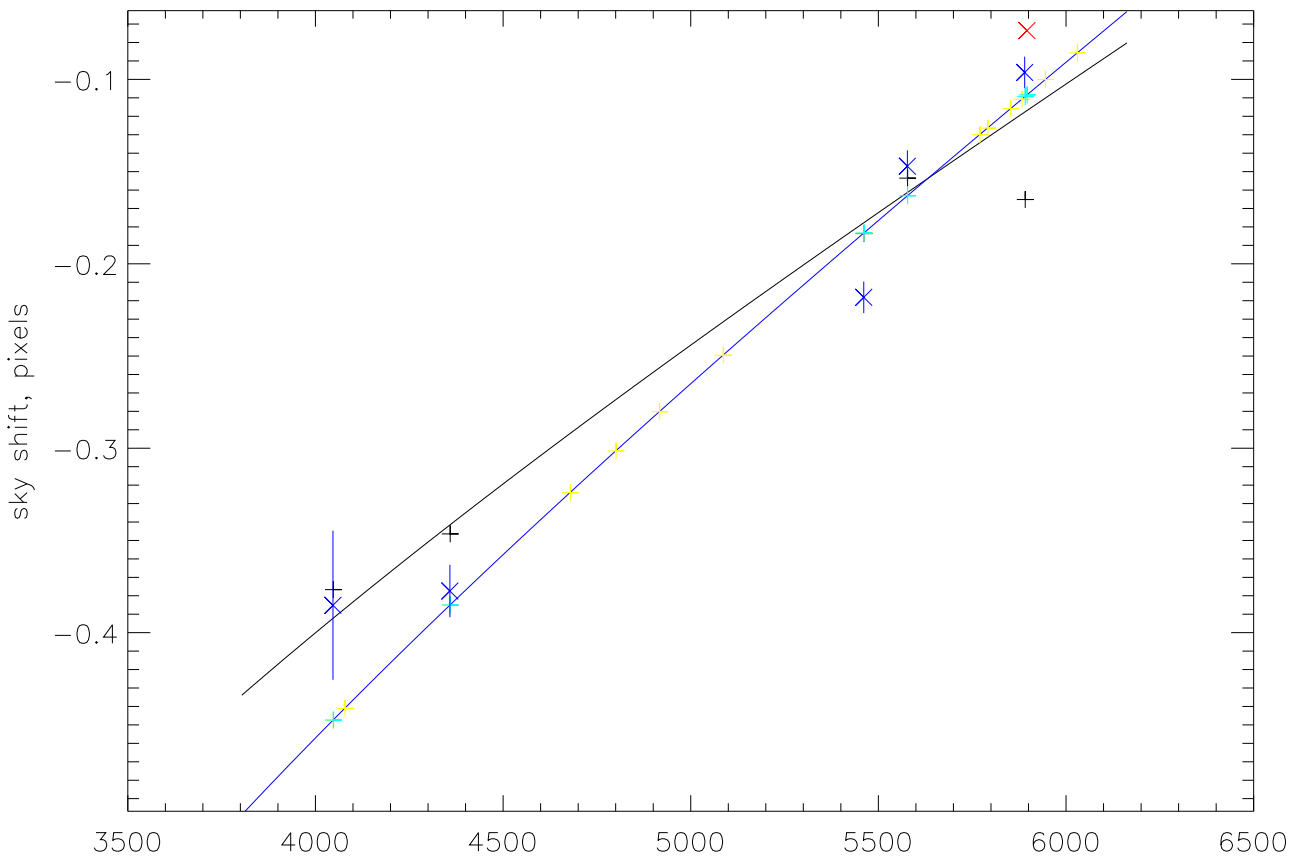

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

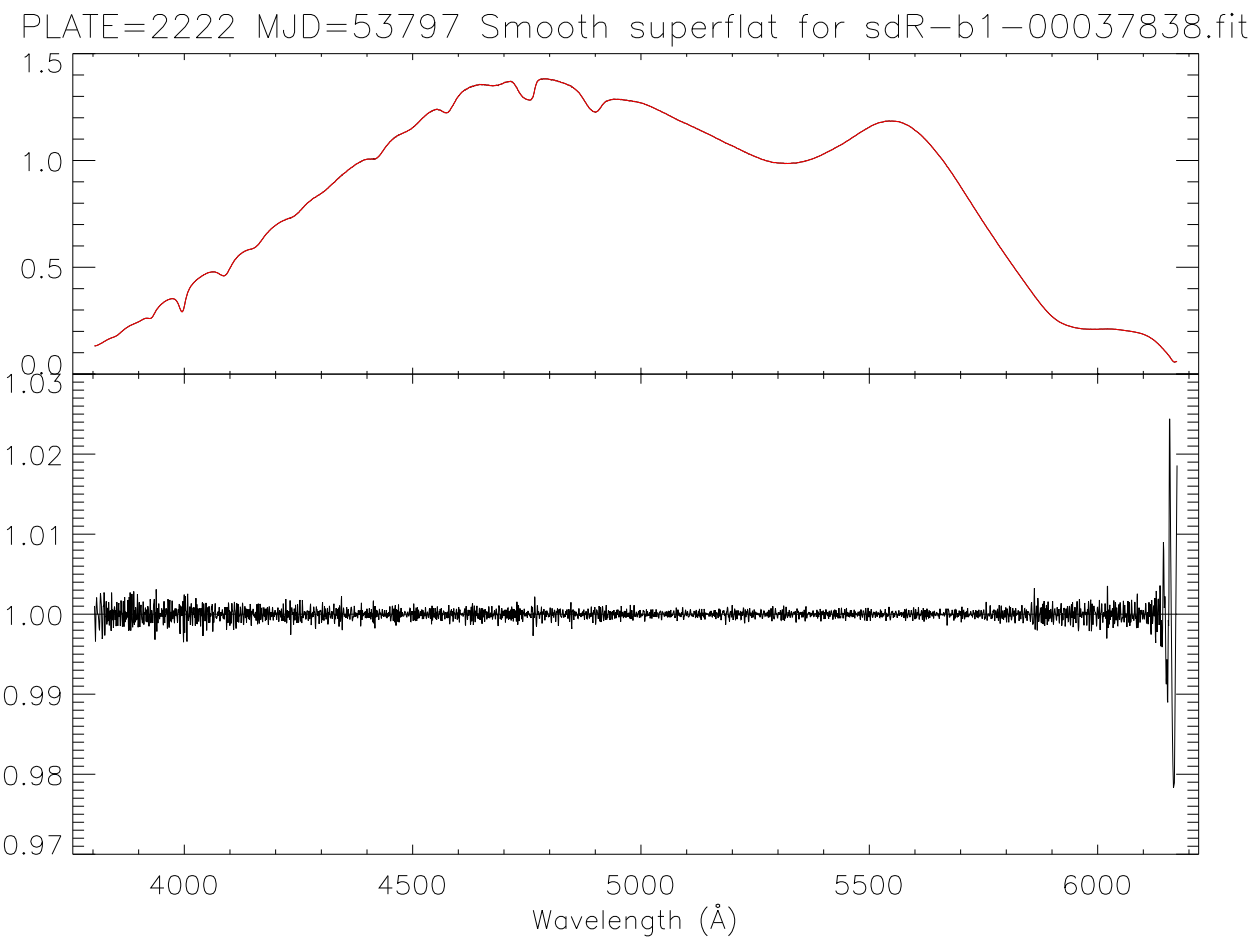

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

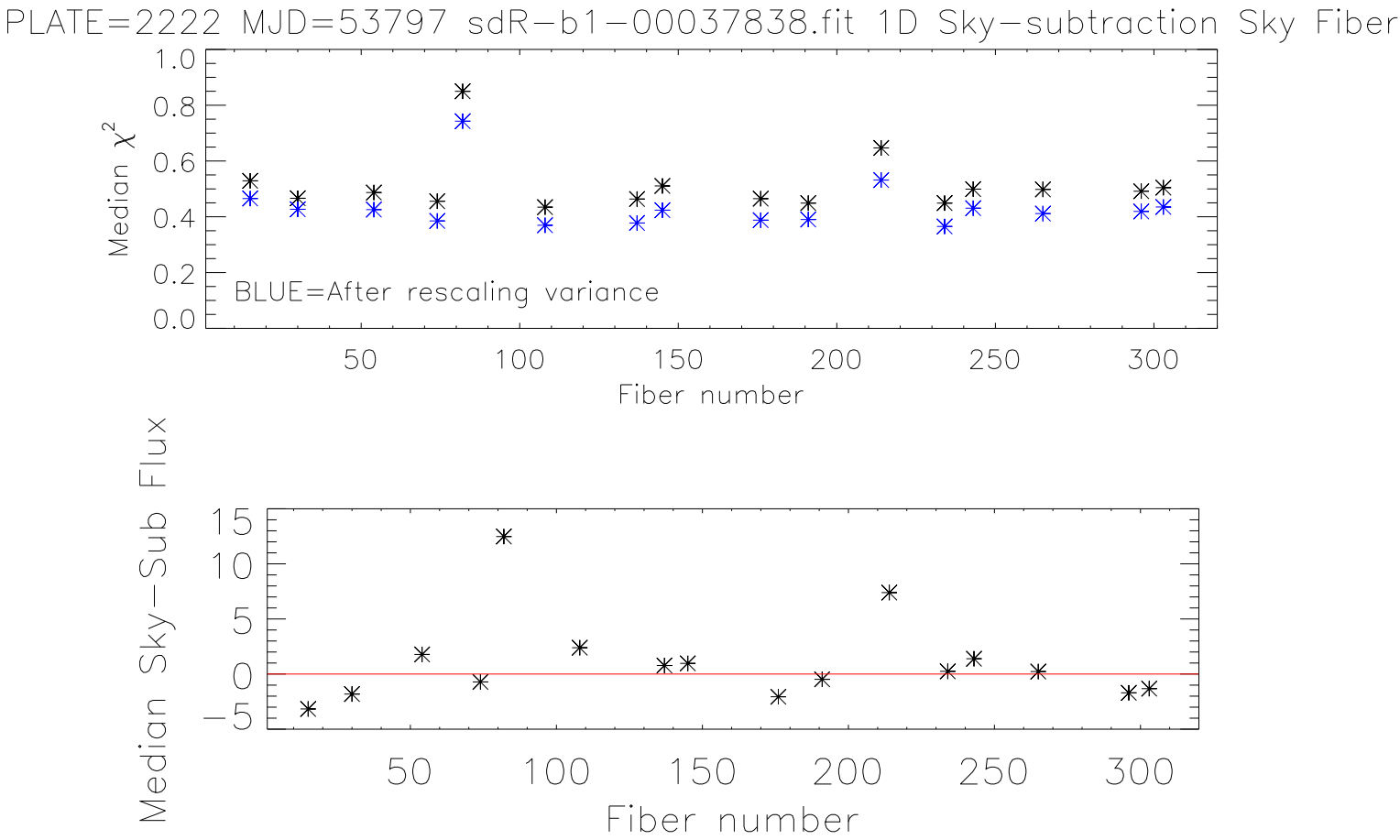

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

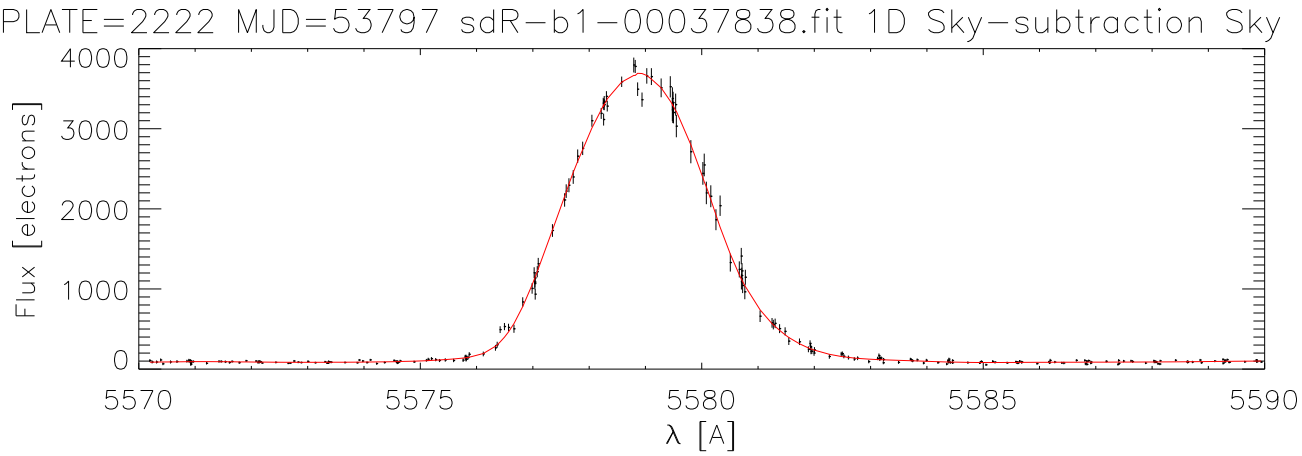

4046.5600
nfib1 16
nfib2 16
stdev 0.091
extra −0.39
4358.3300
nfib1 16
nfib2 16
stdev 0.040
extra −0.38
5460.9400
nfib1 16
nfib2 16
stdev 0.030
extra −0.22
5577.3390
nfib1 16
nfib2 16
stdev 0.024
extra −0.15
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra −0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra −0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

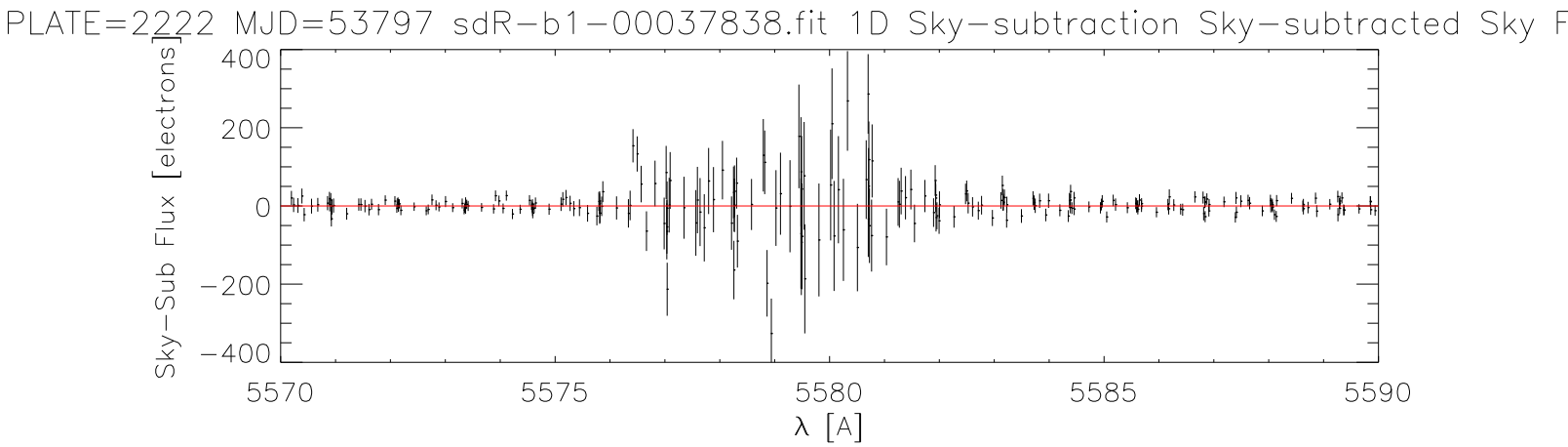

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500

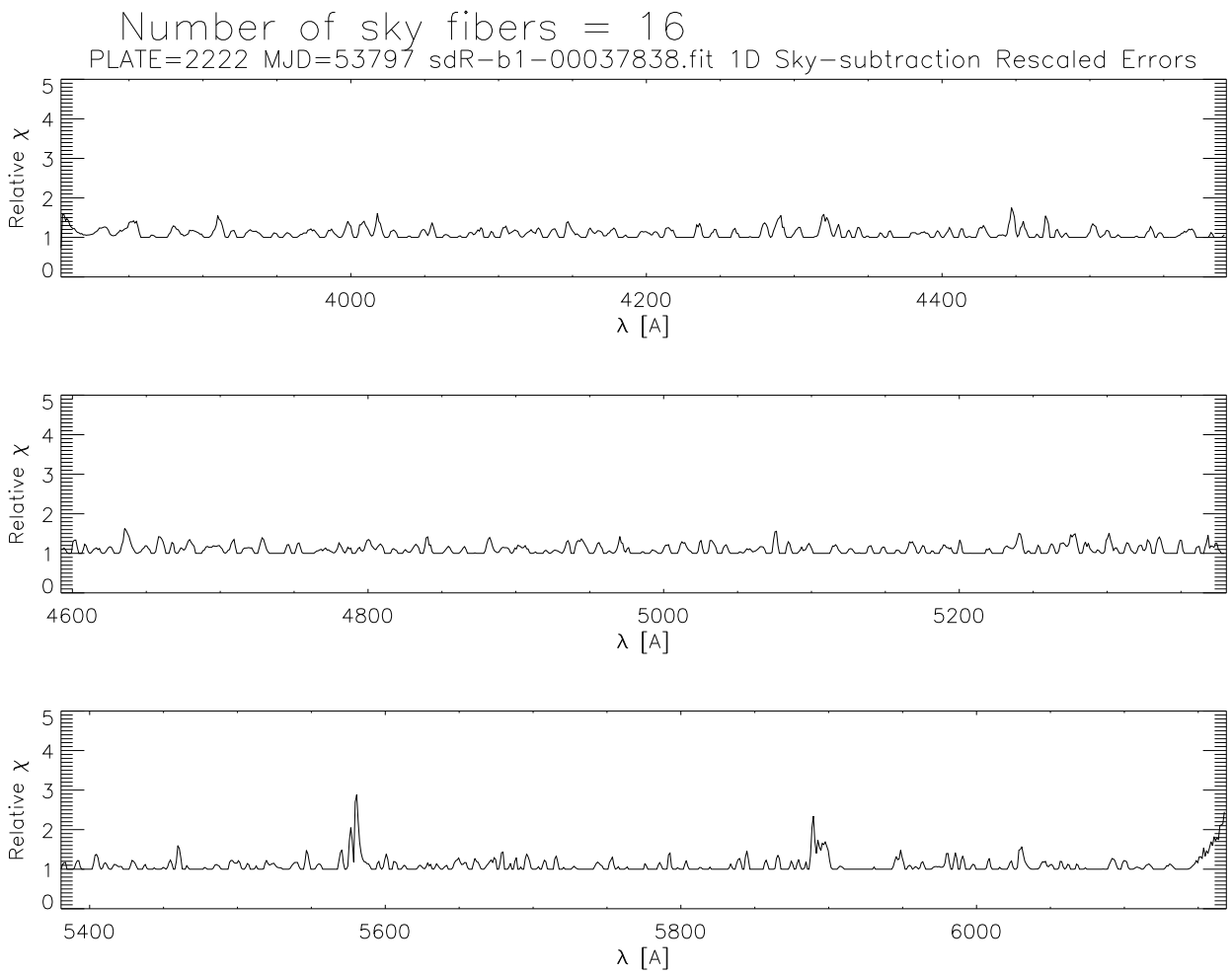
es= −0.0003

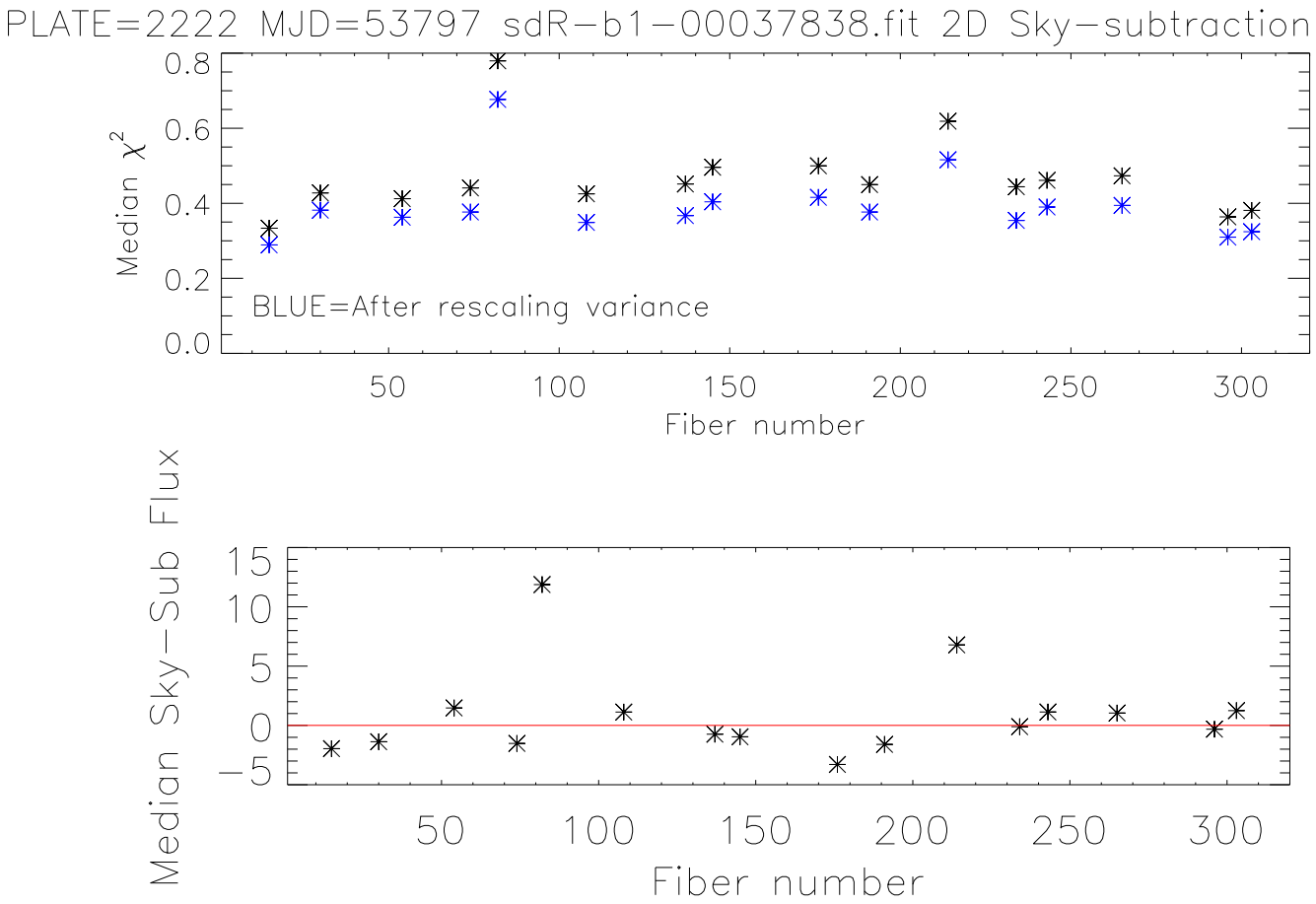

PLATE=2222 MJD=53797 Smooth superflat for sdR−b1−00037838.fit
1.5
1.0
0.5
0.0
1.03
1.02
1.01
1.00
0.99
0.98
0.97
4000
4500
5000
5500
6000
Wavelength (Å)

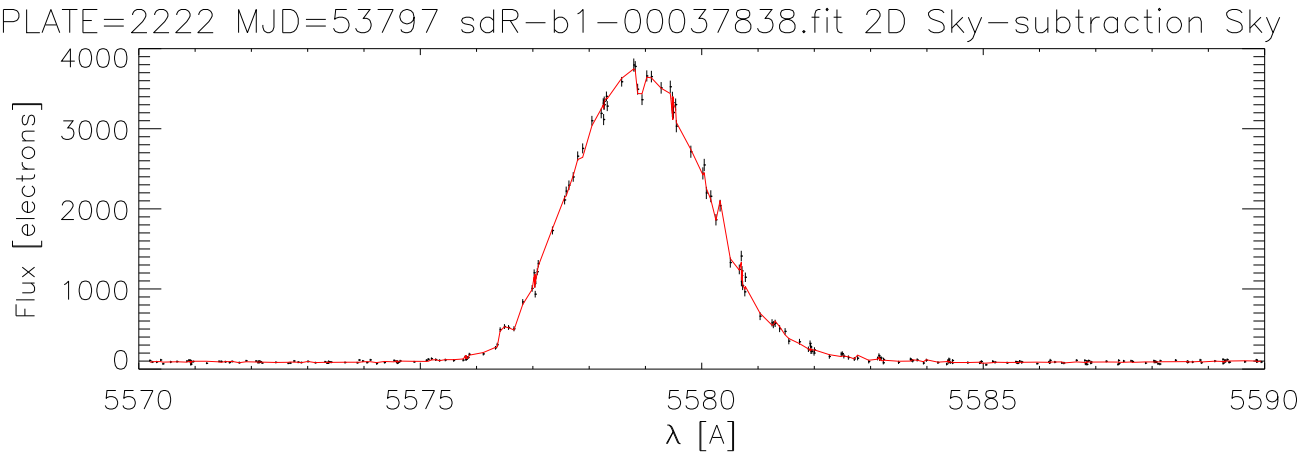

PLATE=2222 MJD=53797 sdR-b1-00037838.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

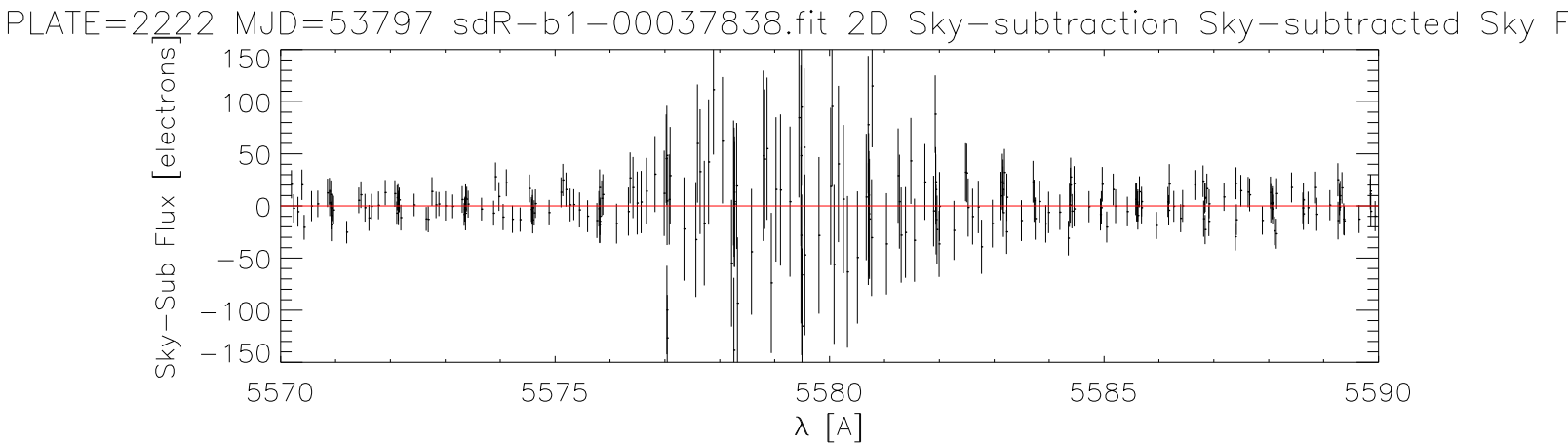

PLATE=2222 MJD=53797 sdR-b1-00037838.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

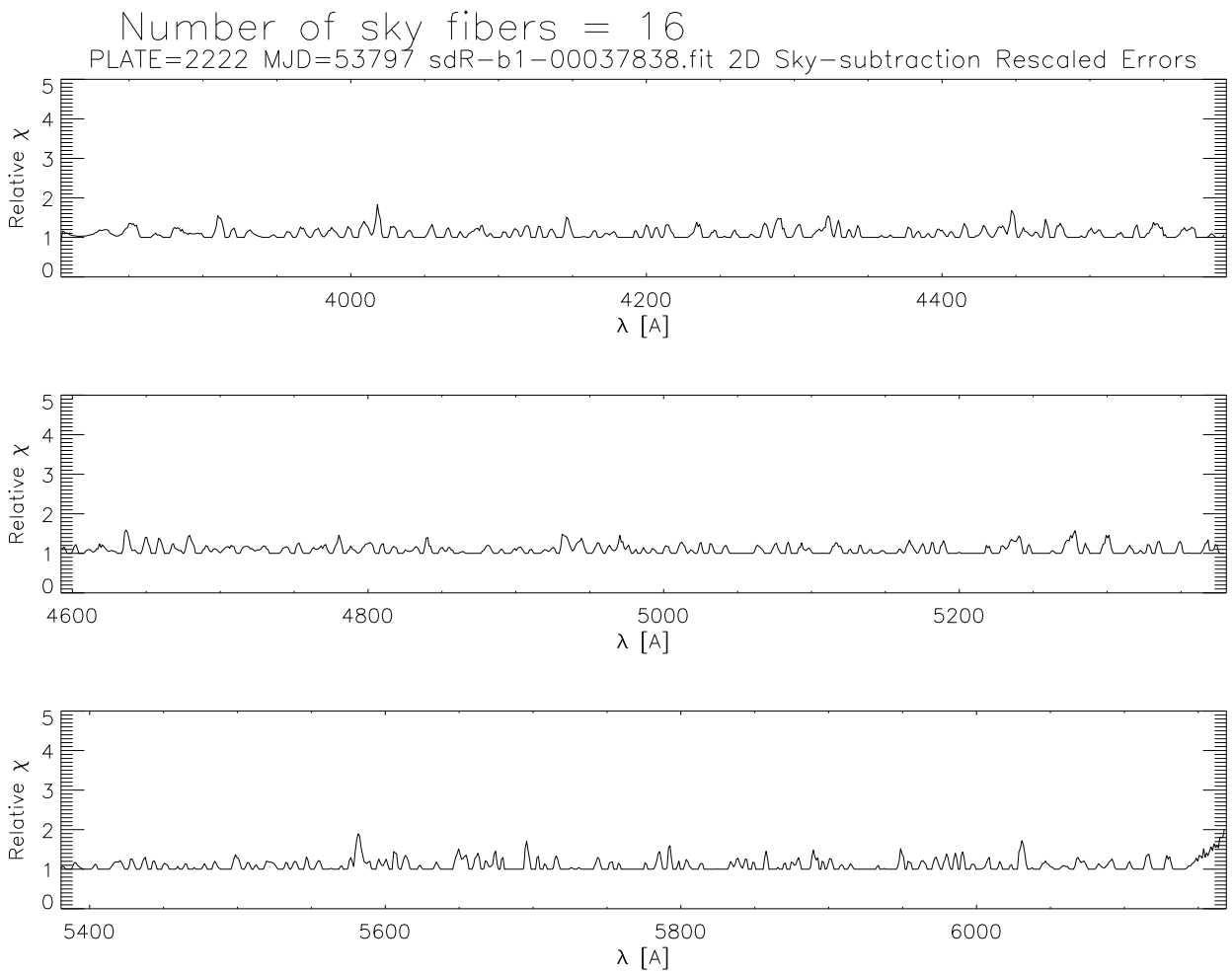

PLATE=2222 MJD=53797 sdR-b1-00037838.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

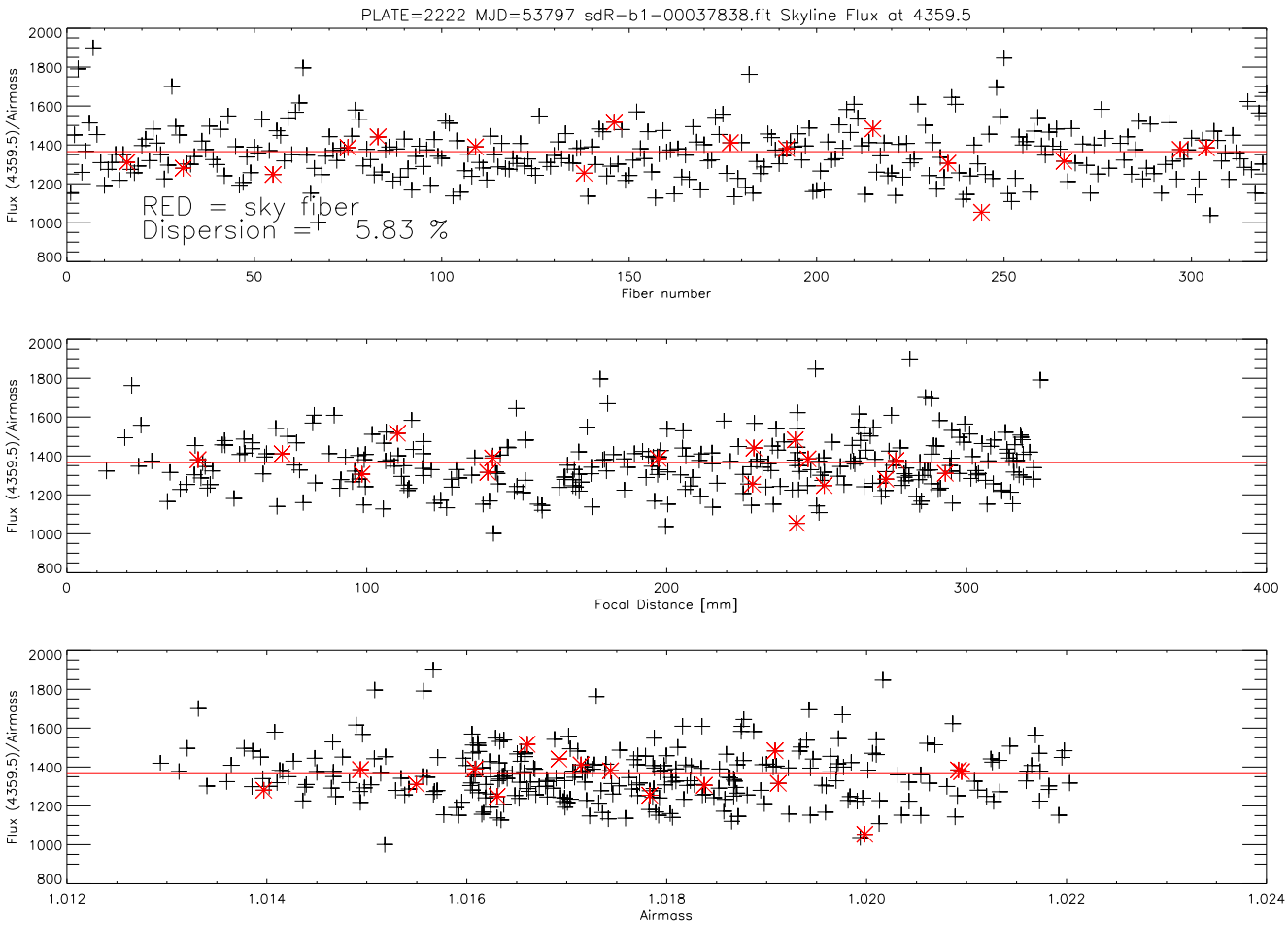

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b1-00037838.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

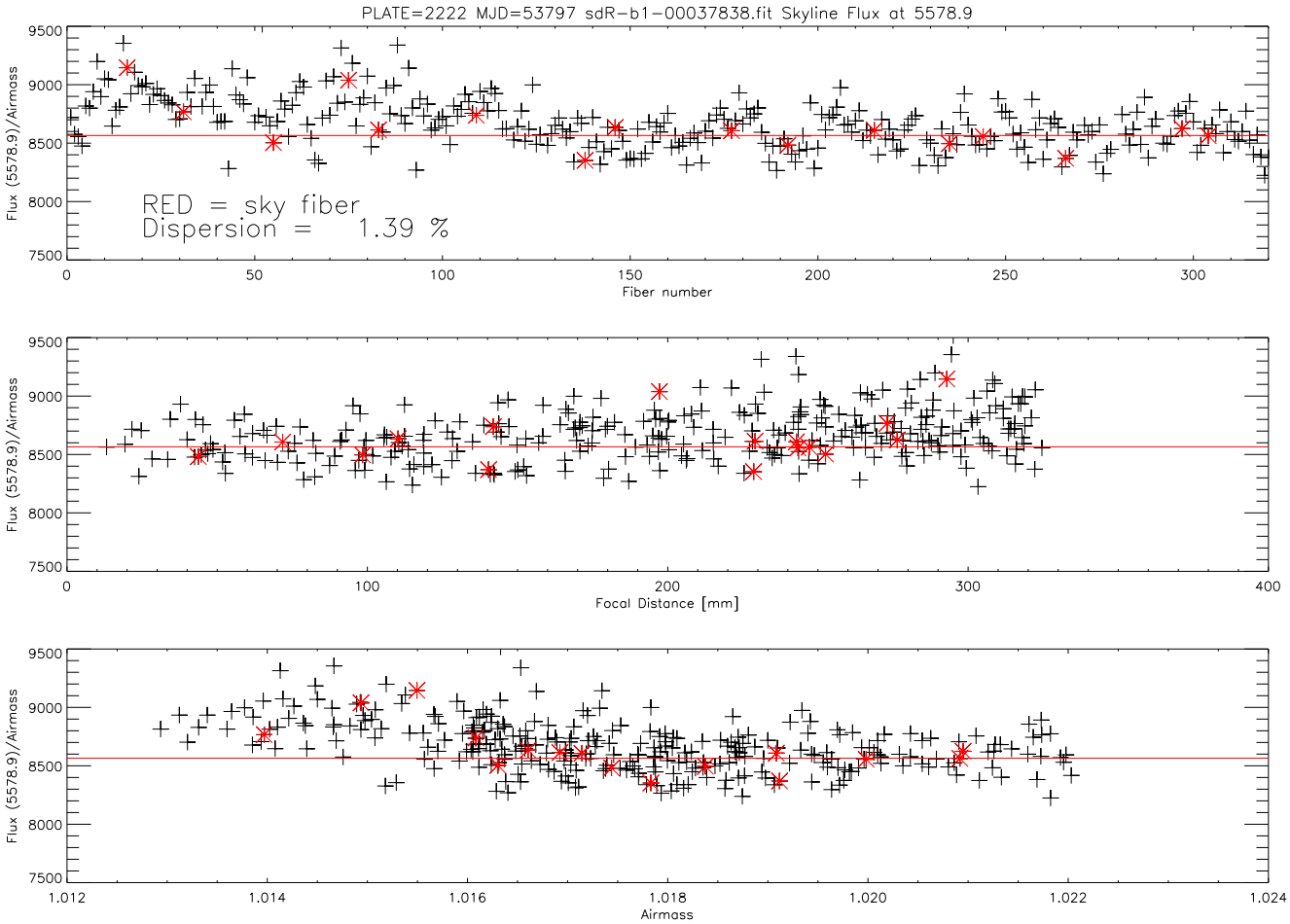

PLATE=2222 MJD=53797 sdR-b1-00037838.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
50
100
150
200
250
300
Fiber number

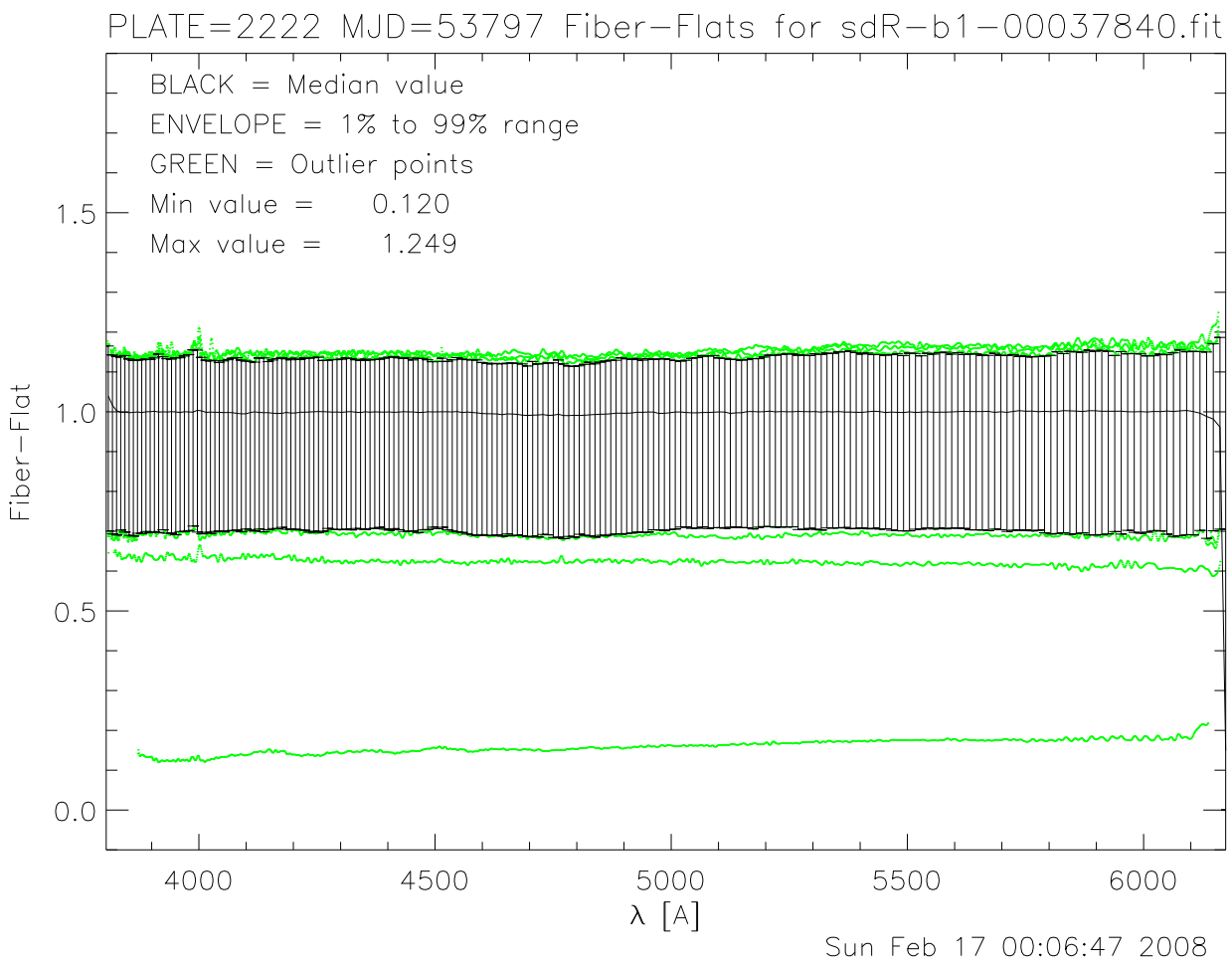

PLATE=2222 MJD=53797 sdR-b1-00037838.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

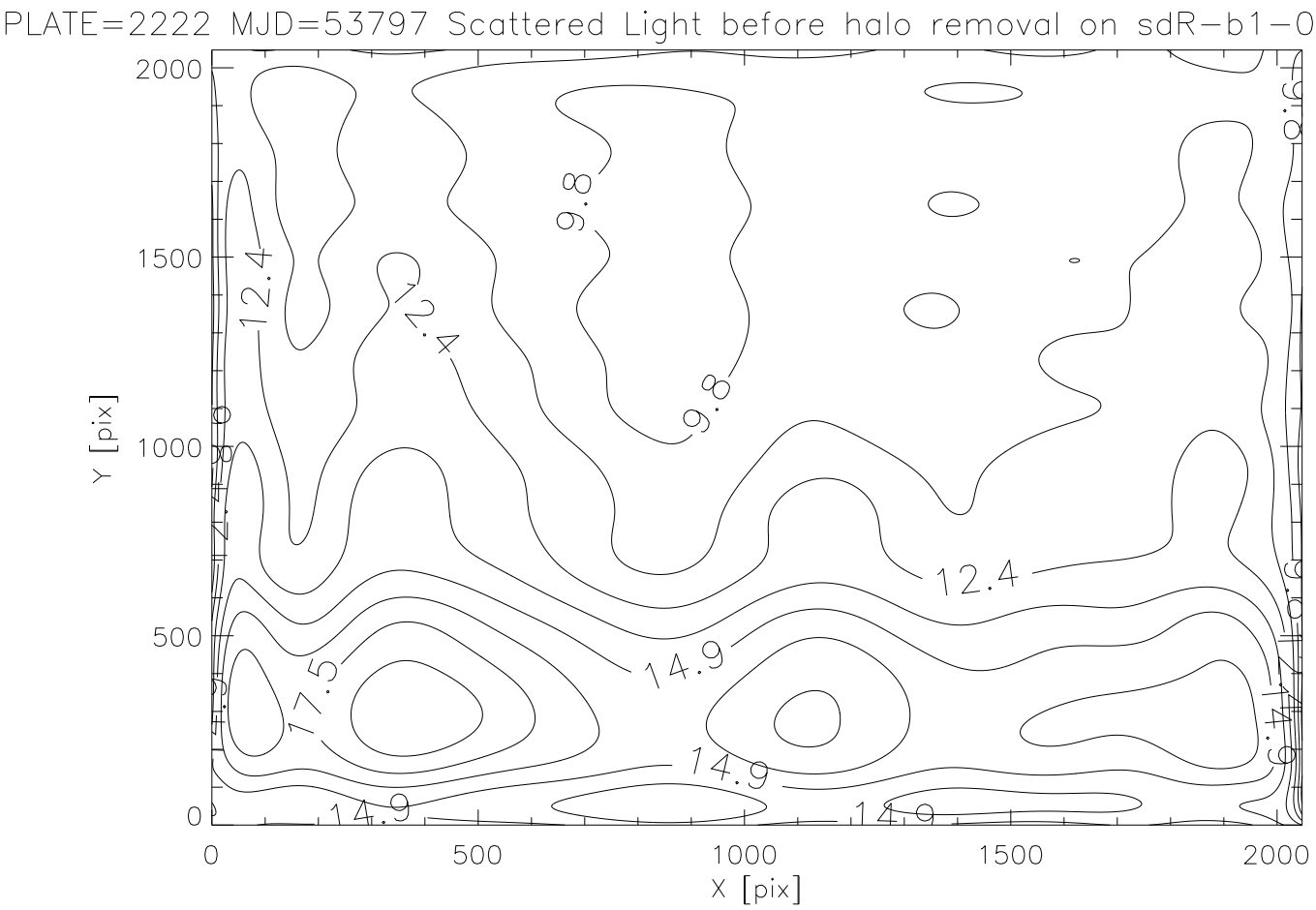

PLATE=2222 MJD=53797 sdR-b1-00037838.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

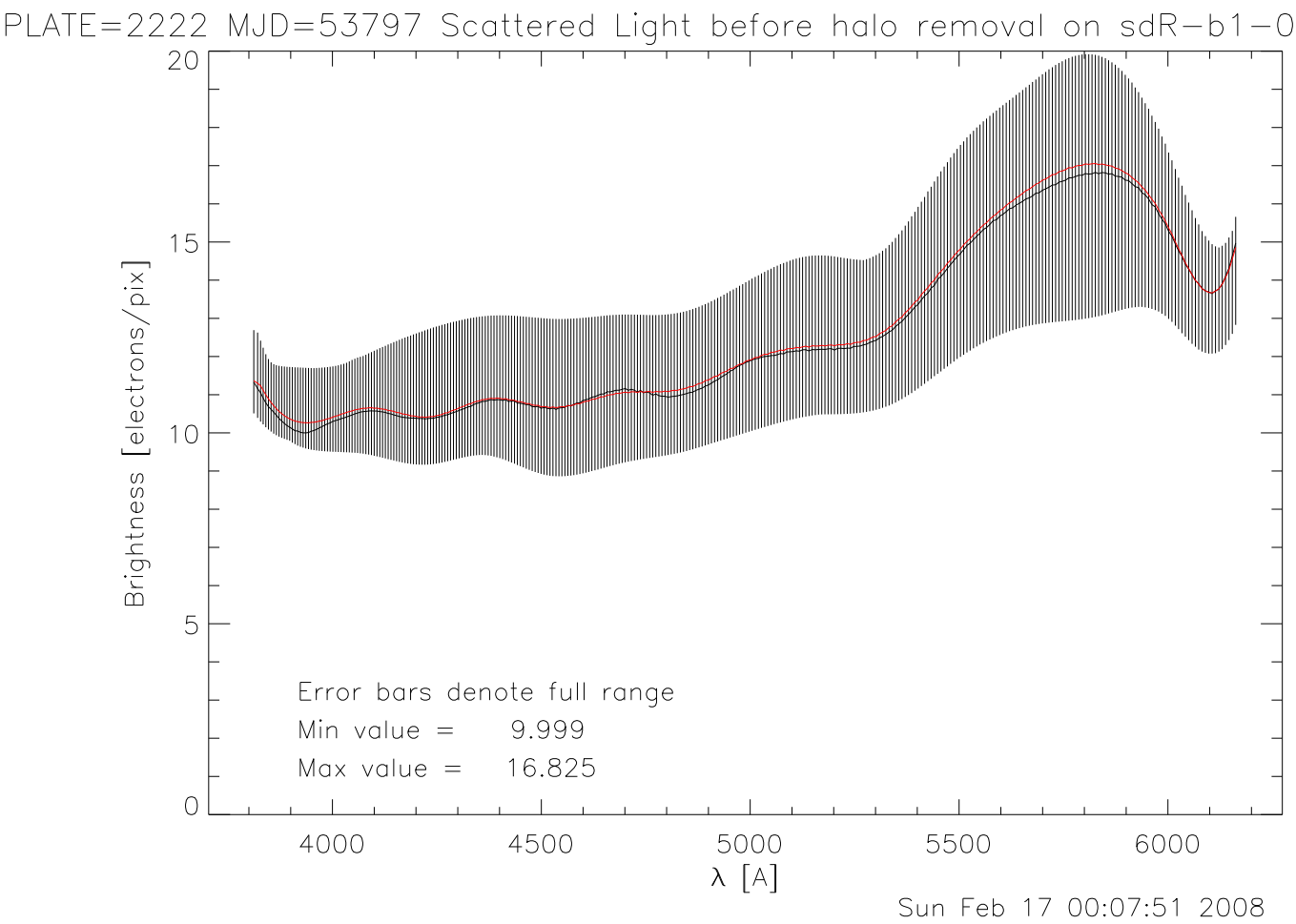

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b1-00037838.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

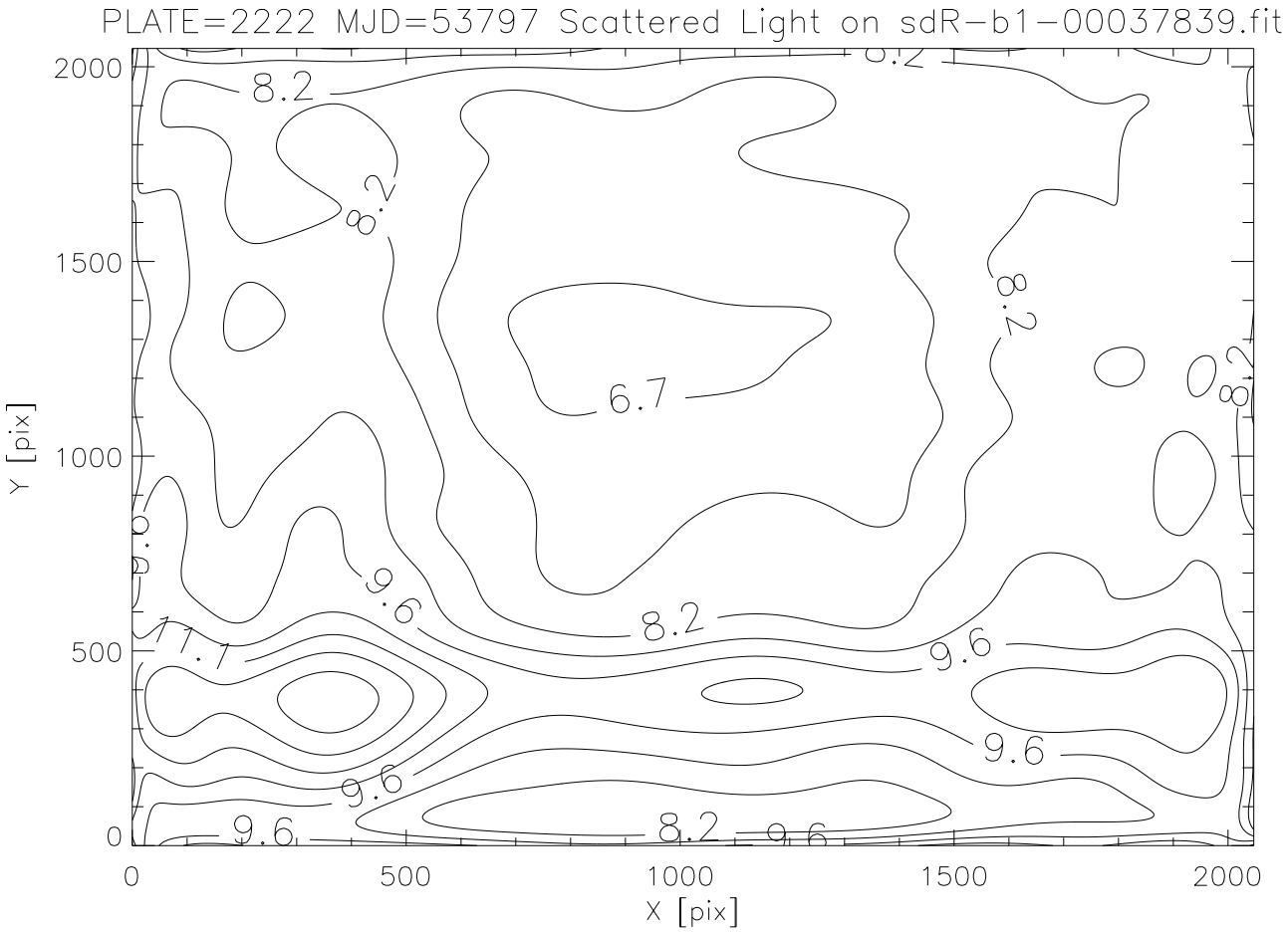

PLATE=2222 MJD=53797 sdR-b1-00037838.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.83 %
Fiber number
Focal Distance [mm]
Airmass

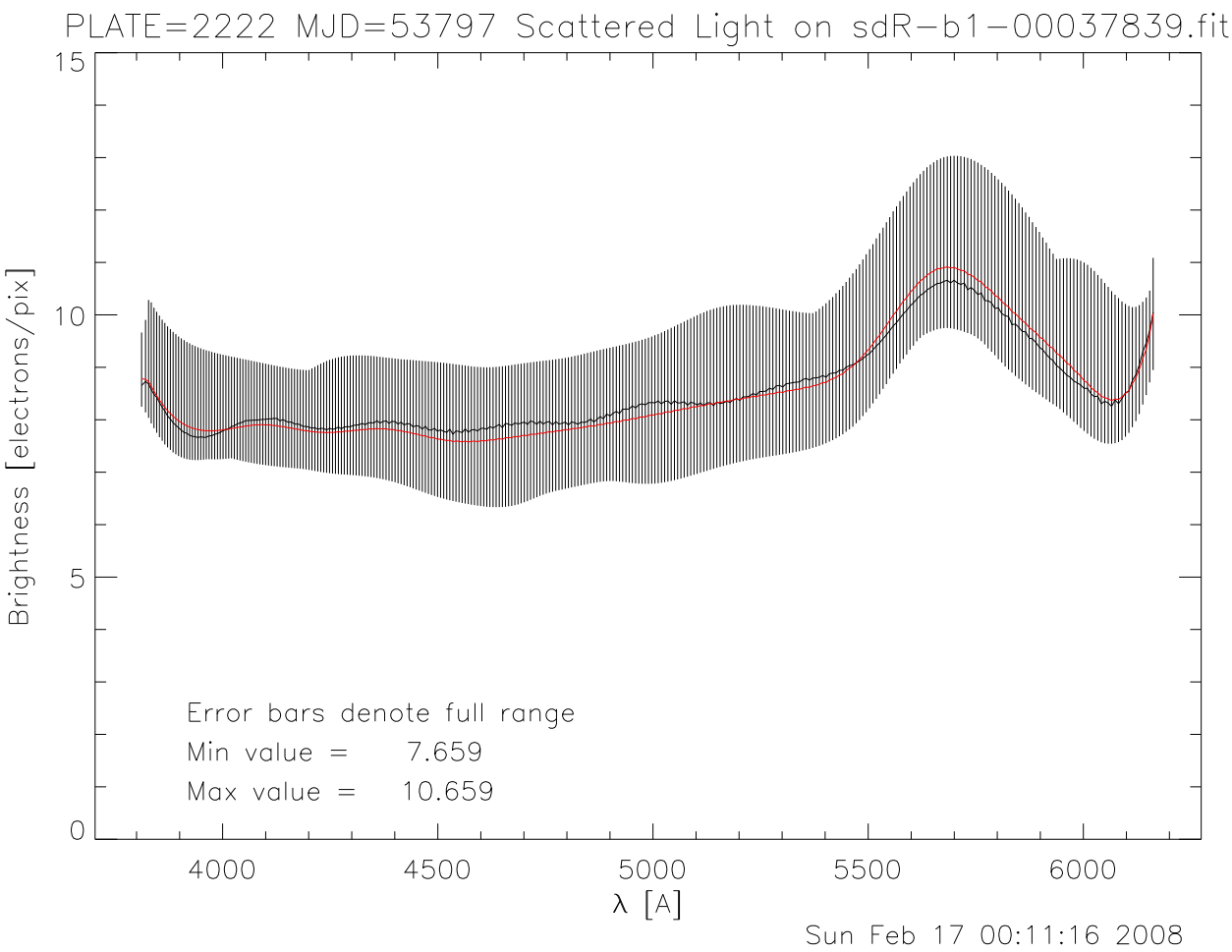

PLATE=2222 MJD=53797 sdR-b1-00037838.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.39 %
Fiber number
Focal Distance [mm]
Airmass

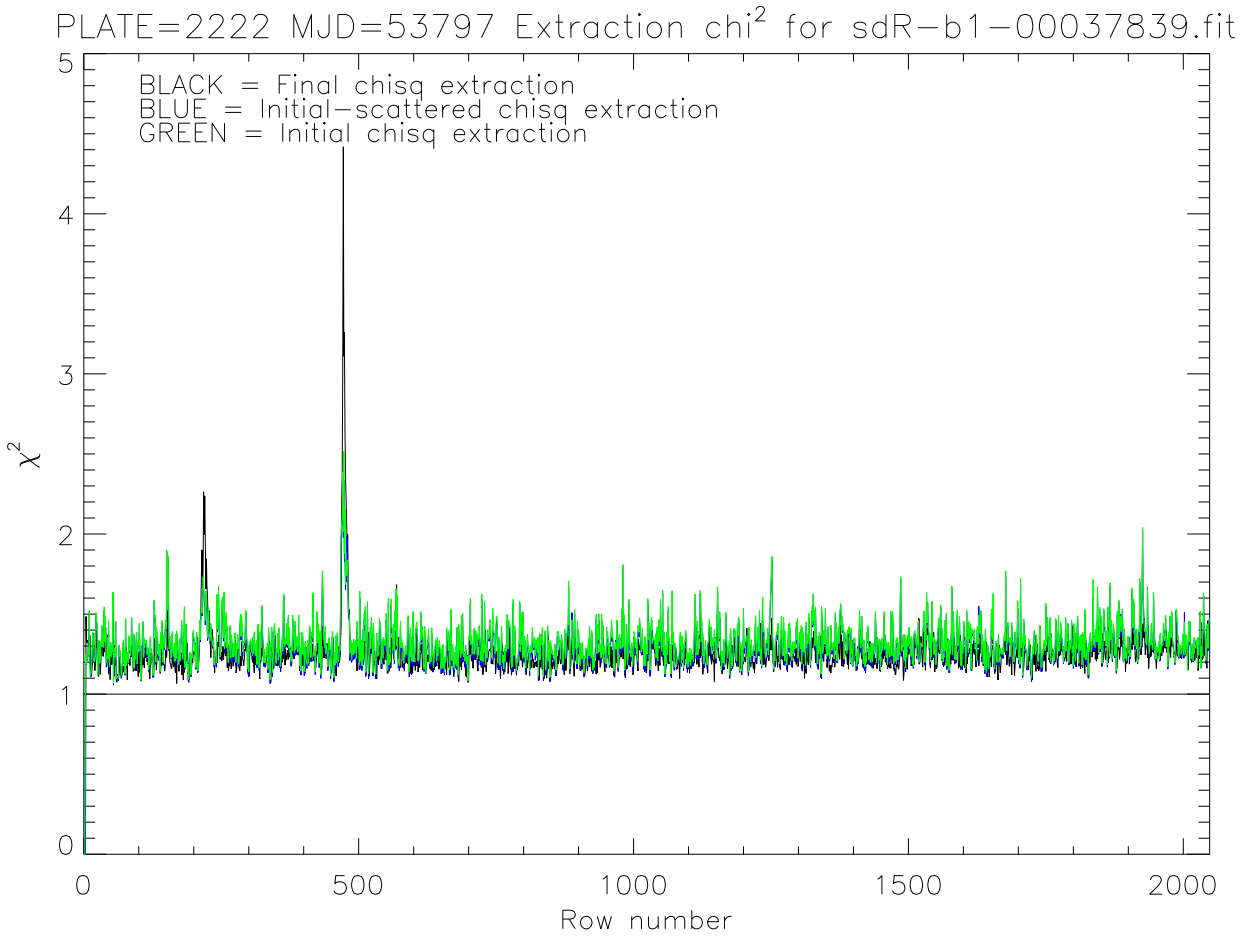

PLATE=2222 MJD=53797 Fiber−Flats for sdR−b1−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.120
Max value = 1.249
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:06:47 2008

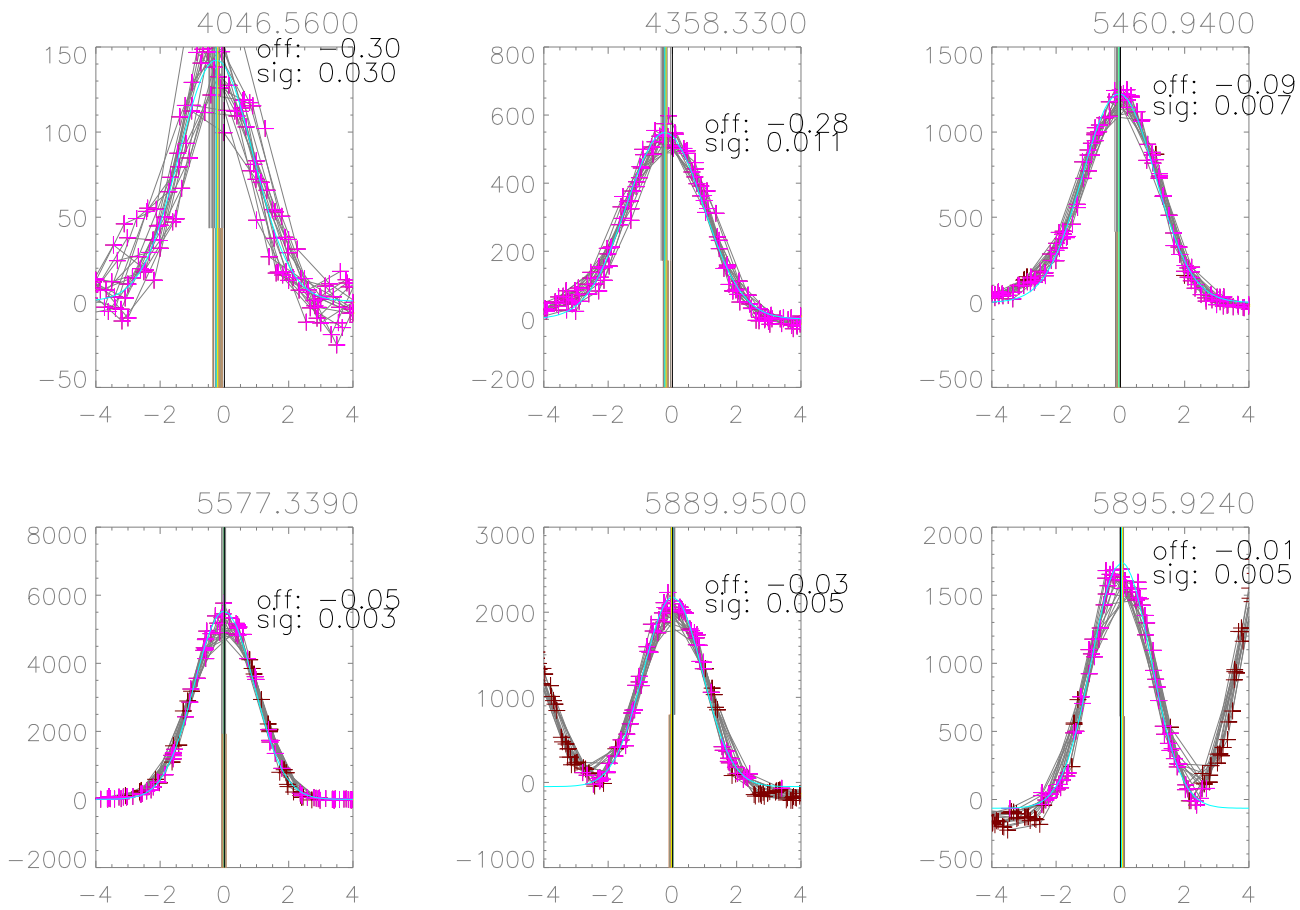

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR−b1−00037839.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.8
12.4
14.9
17.5

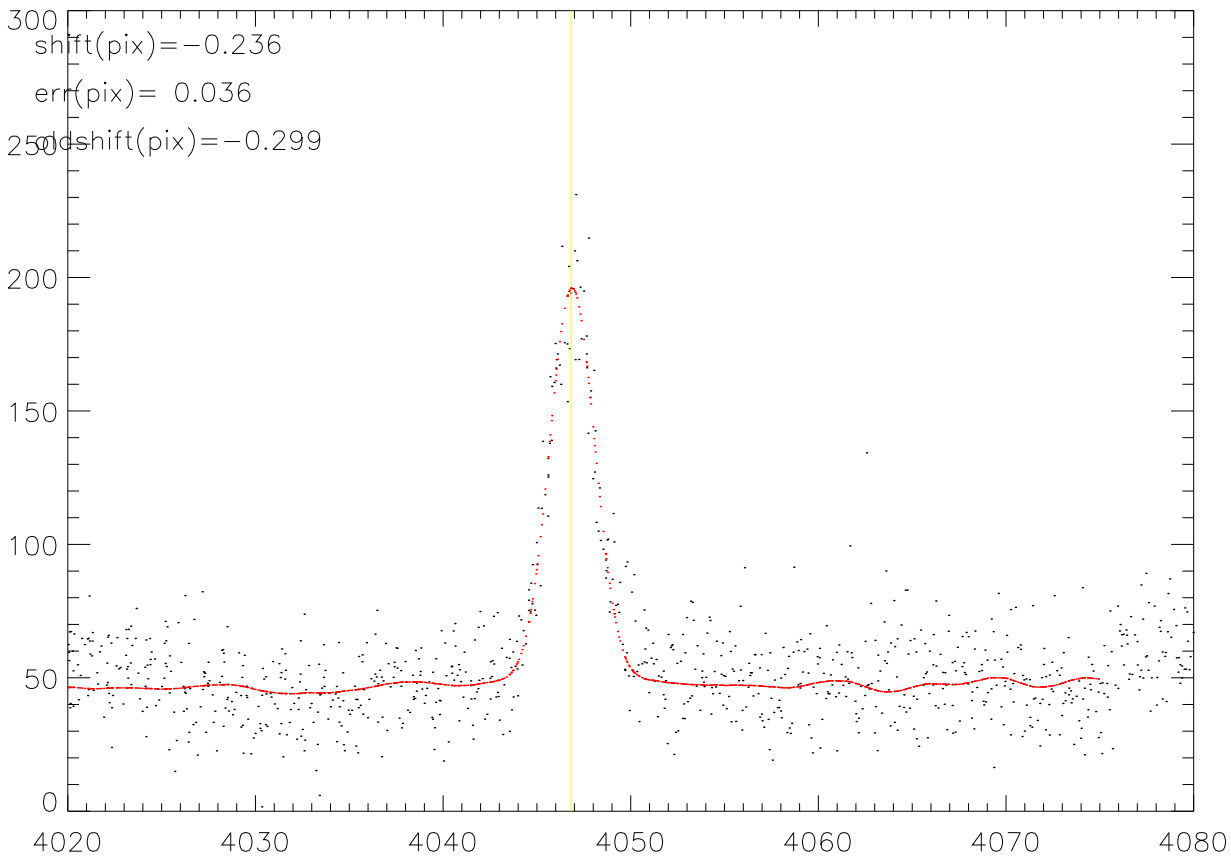

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-b1-00037839.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.999
Max value = 16.825
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:07:51 2008

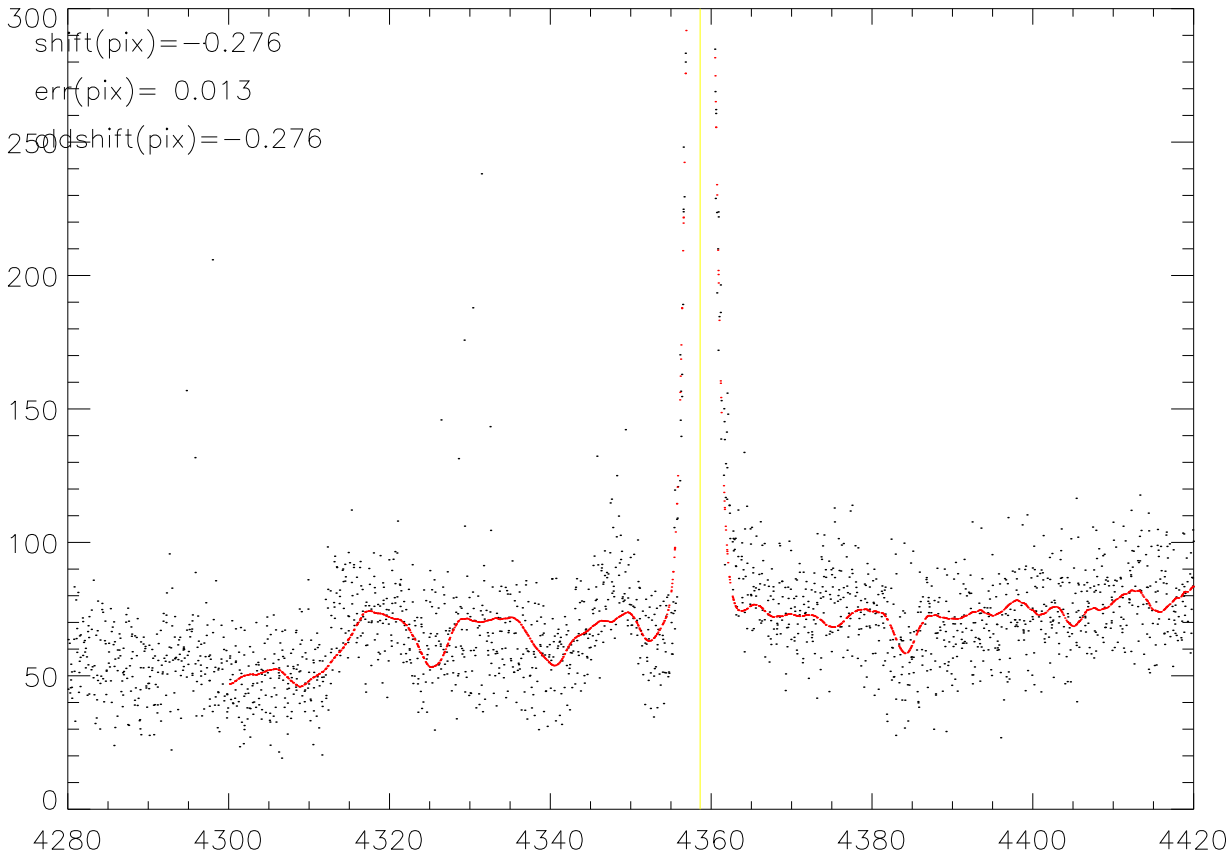

PLATE=2222 MJD=53797 Scattered Light on sdR-b1-00037839.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
6.7
9.6
11.1

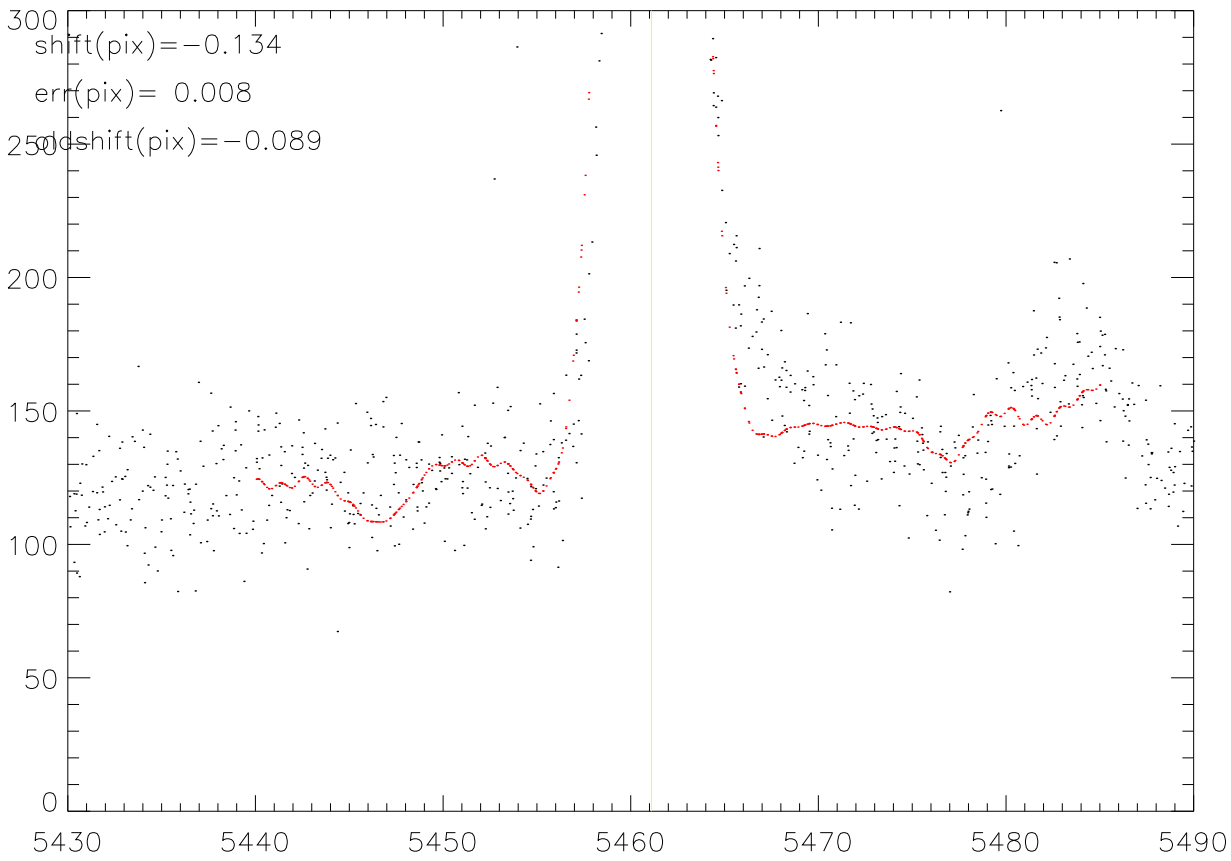

PLATE=2222 MJD=53797 Scattered Light on sdR-b1-00037839.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.659
Max value = 10.659
Sun Feb 17 00:11:16 2008

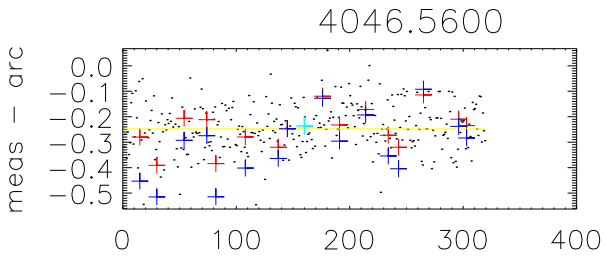

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−b1−00037839.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

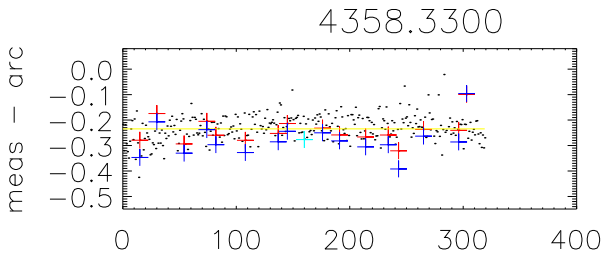

4046.5600
off: −0.30
sig: 0.030
4358.3300
off: −0.28
sig: 0.011
5460.9400
off: −0.09
sig: 0.007
5577.3390
off: −0.05
sig: 0.003
5889.9500
off: −0.03
sig: 0.005
5895.9240
off: −0.01
sig: 0.005

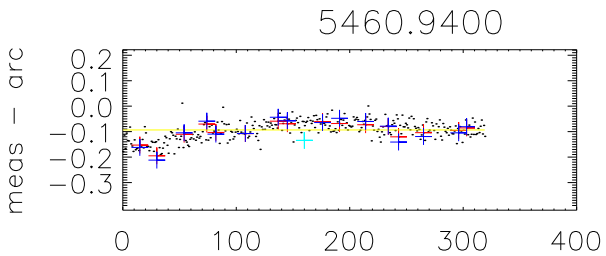

shift(pix)=−0.236
err(pix)= 0.036
oldshift(pix)=−0.299
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

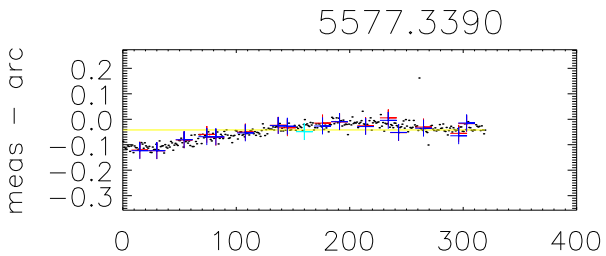

shift(pix)=−0.276
err(pix)= 0.013
oldshift(pix)=−0.276
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

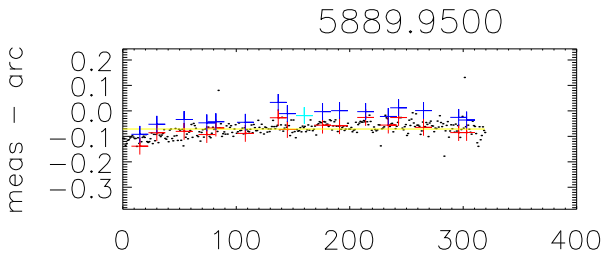

shift(pix)=−0.134
err(pix)= 0.008
oldshift(pix)=−0.089
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

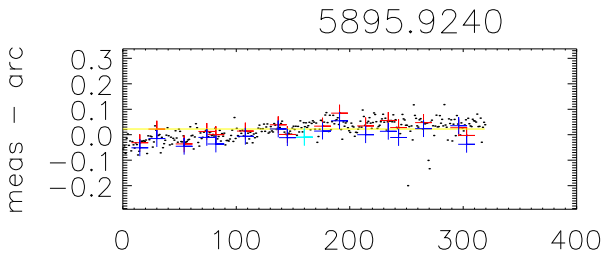

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

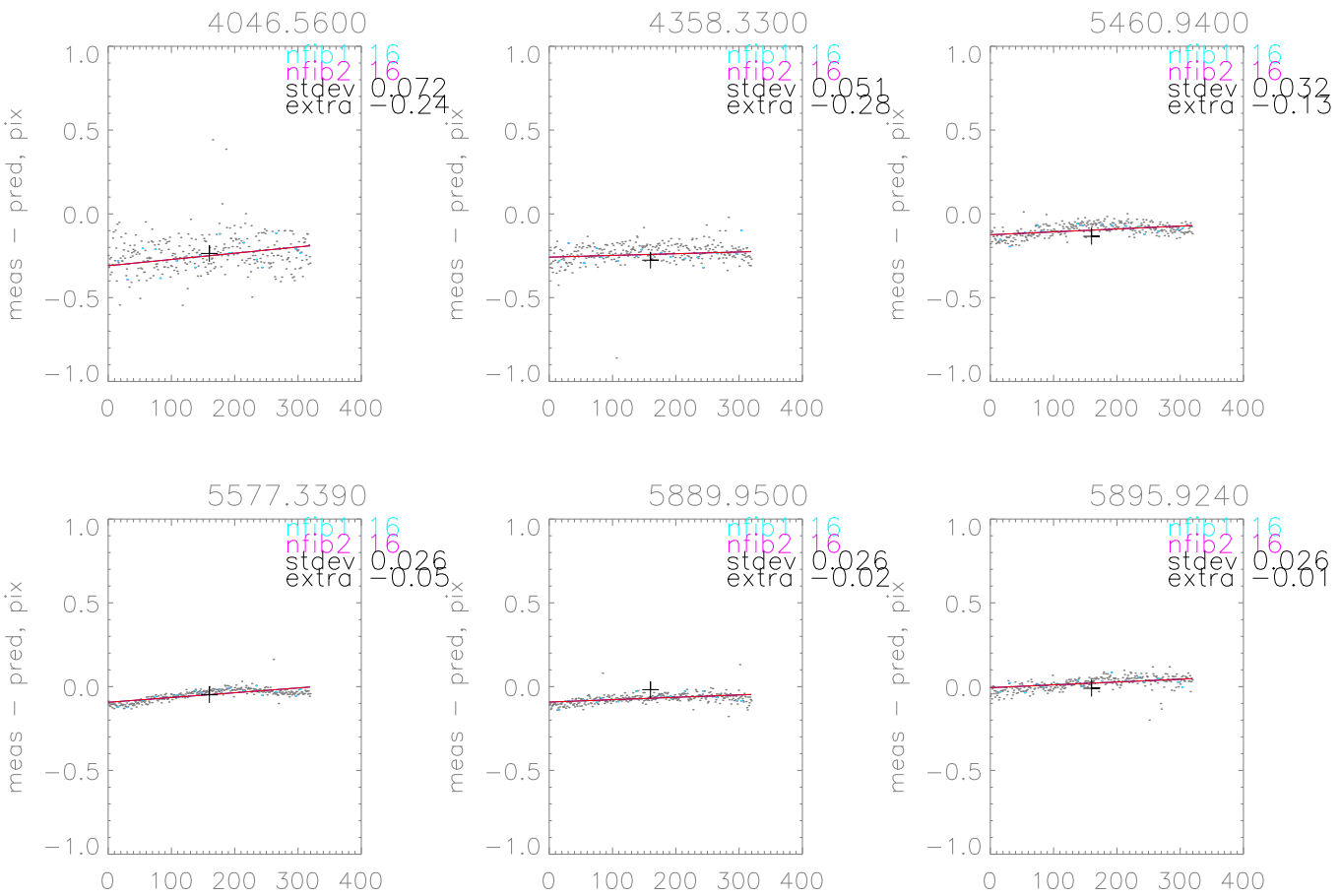

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

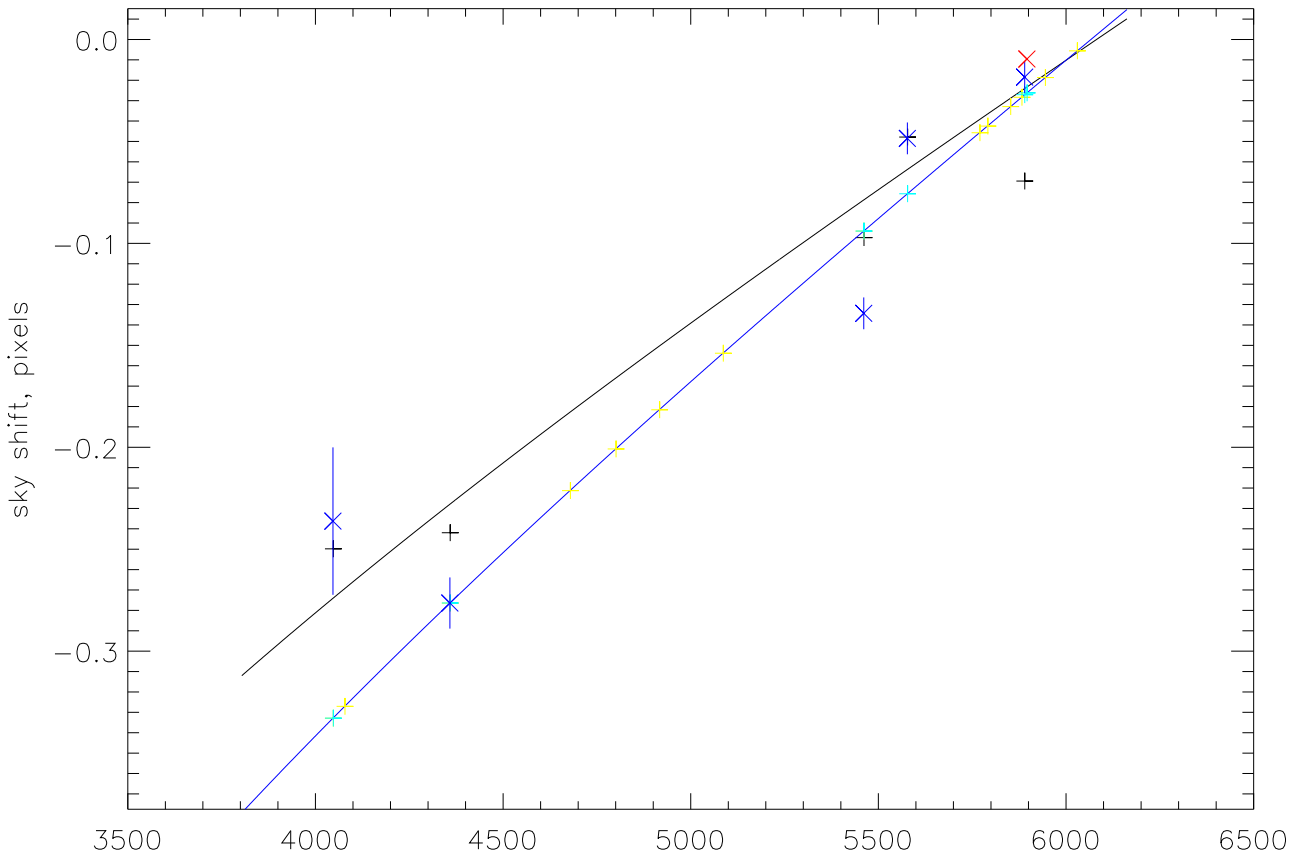

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

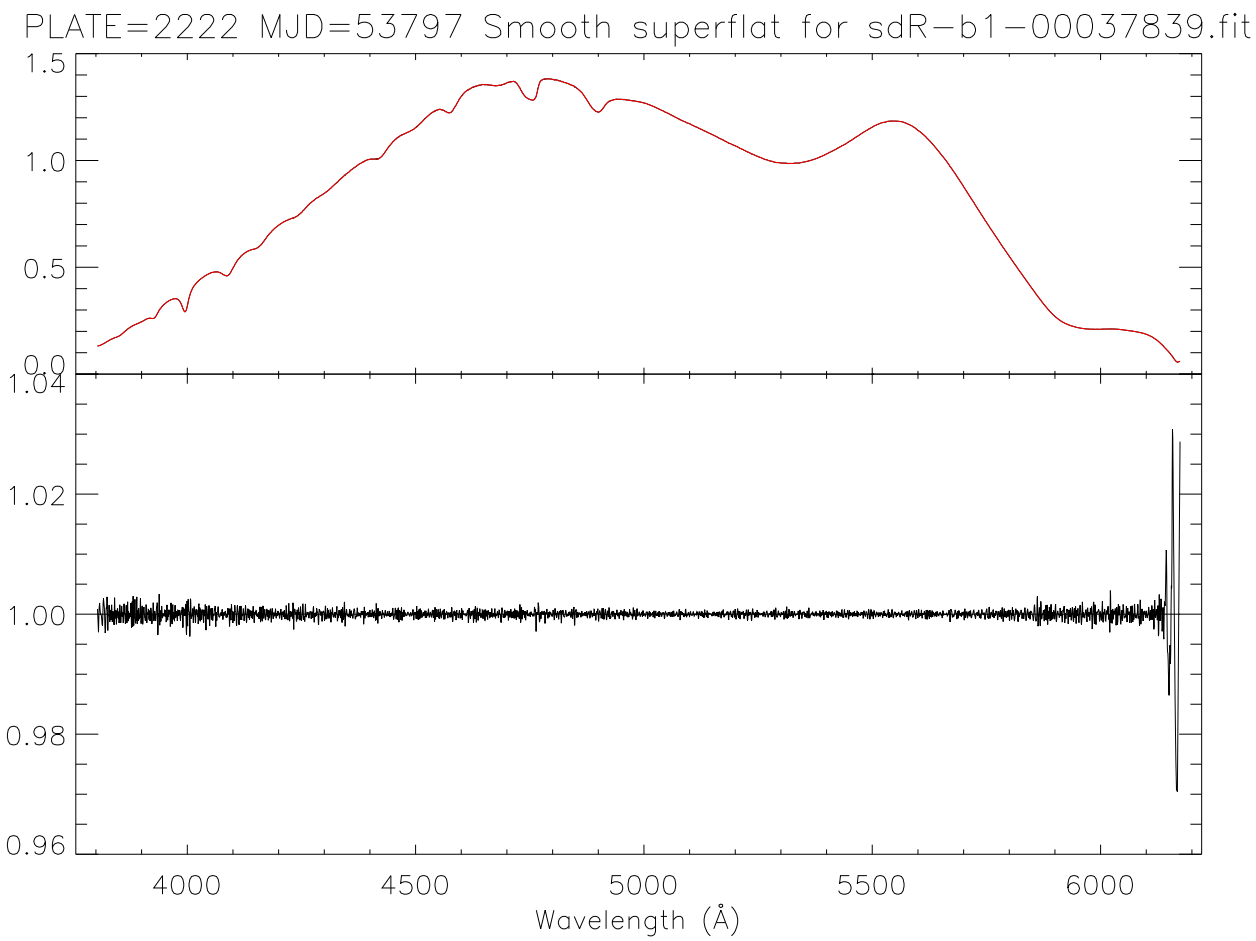

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

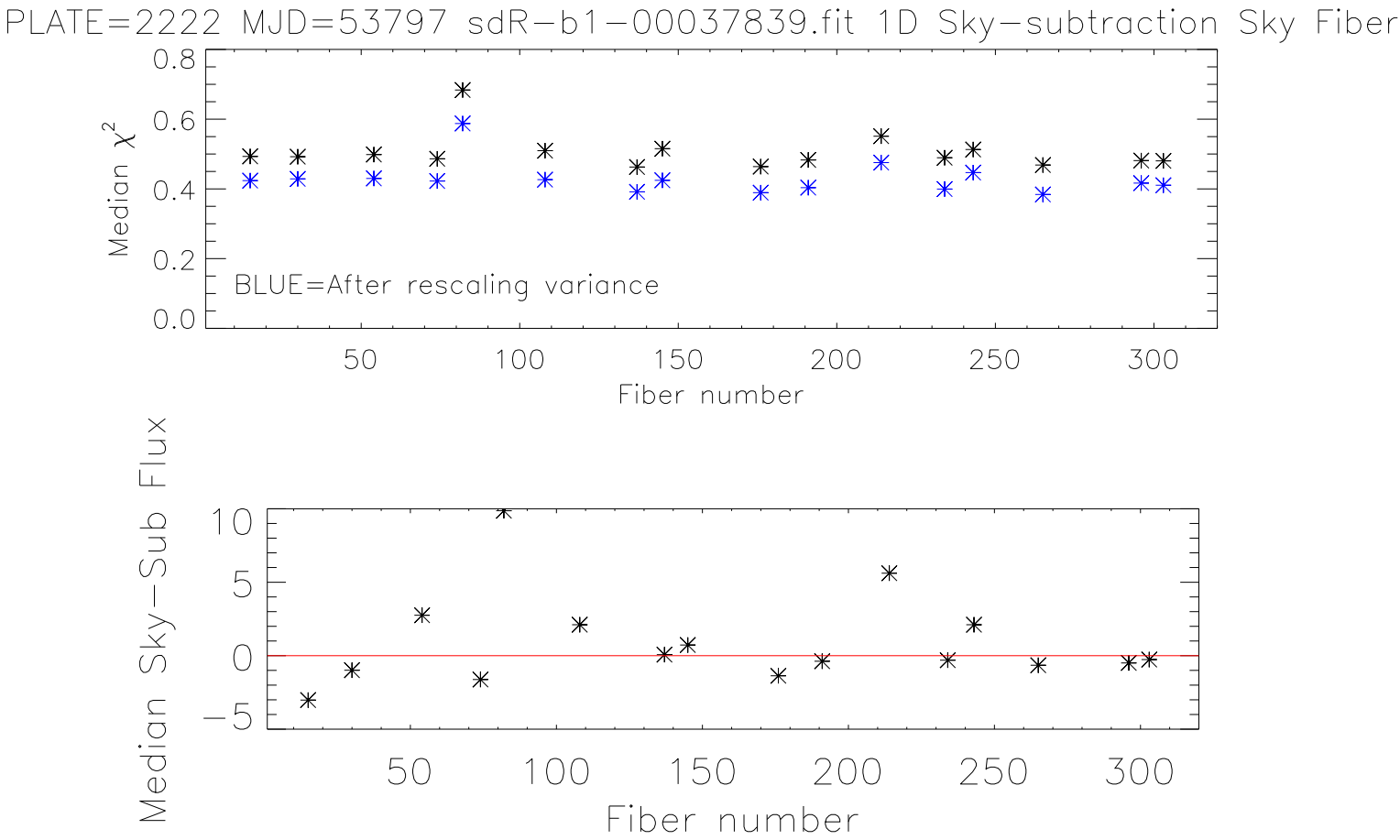

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

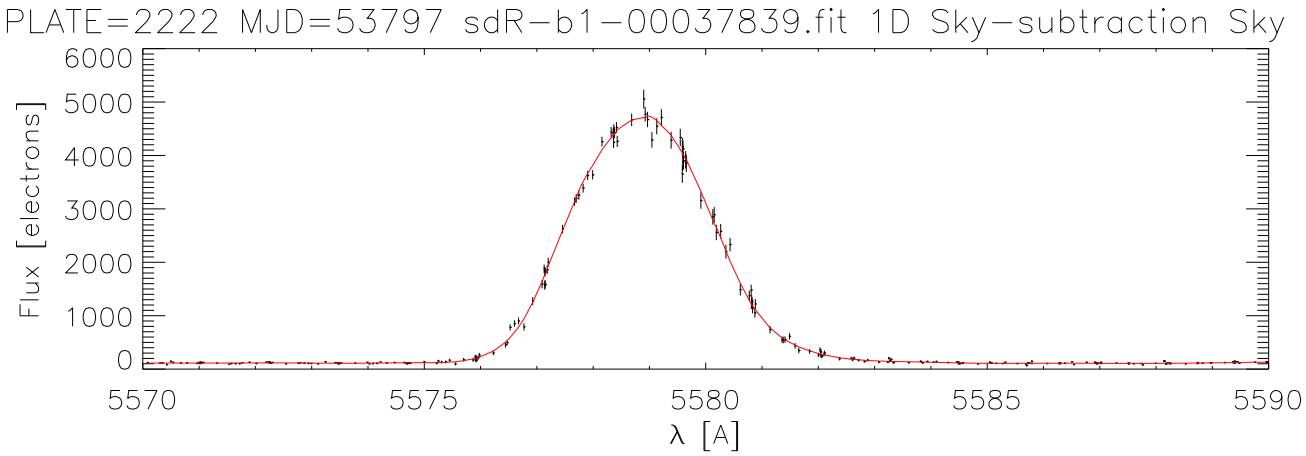

4046.5600
nfib1 16
nfib2 16
stdev 0.072
extra −0.24
4358.3300
nfib1 16
nfib2 16
stdev 0.051
extra −0.28
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra −0.13
5577.3390
nfib1 16
nfib2 16
stdev 0.026
extra −0.05
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra −0.02
5895.9240
nfib1 16
nfib2 16
stdev 0.026
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

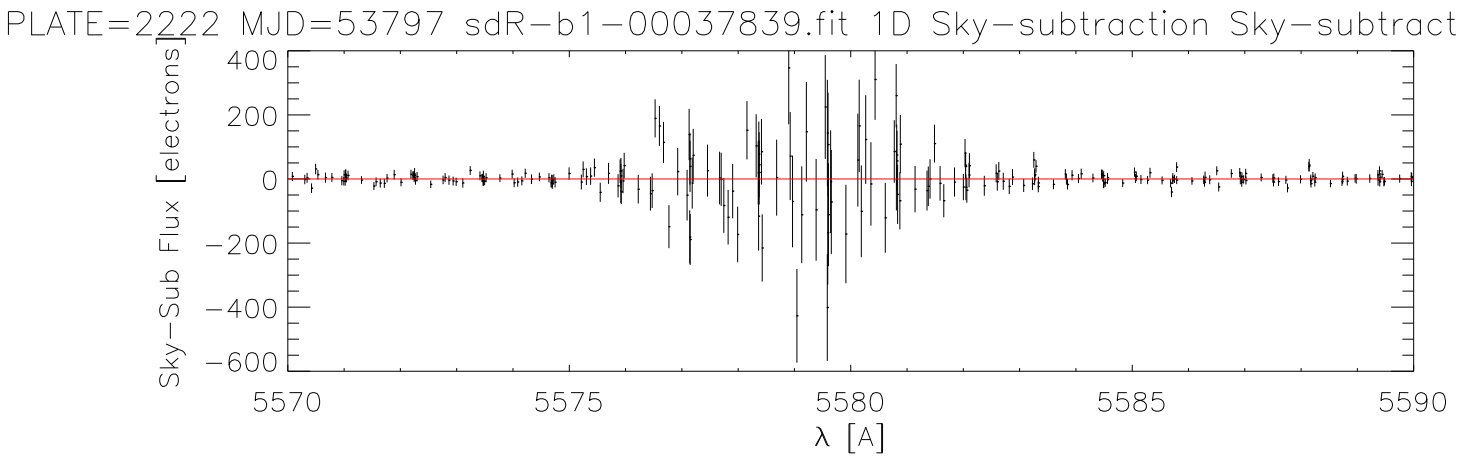

0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

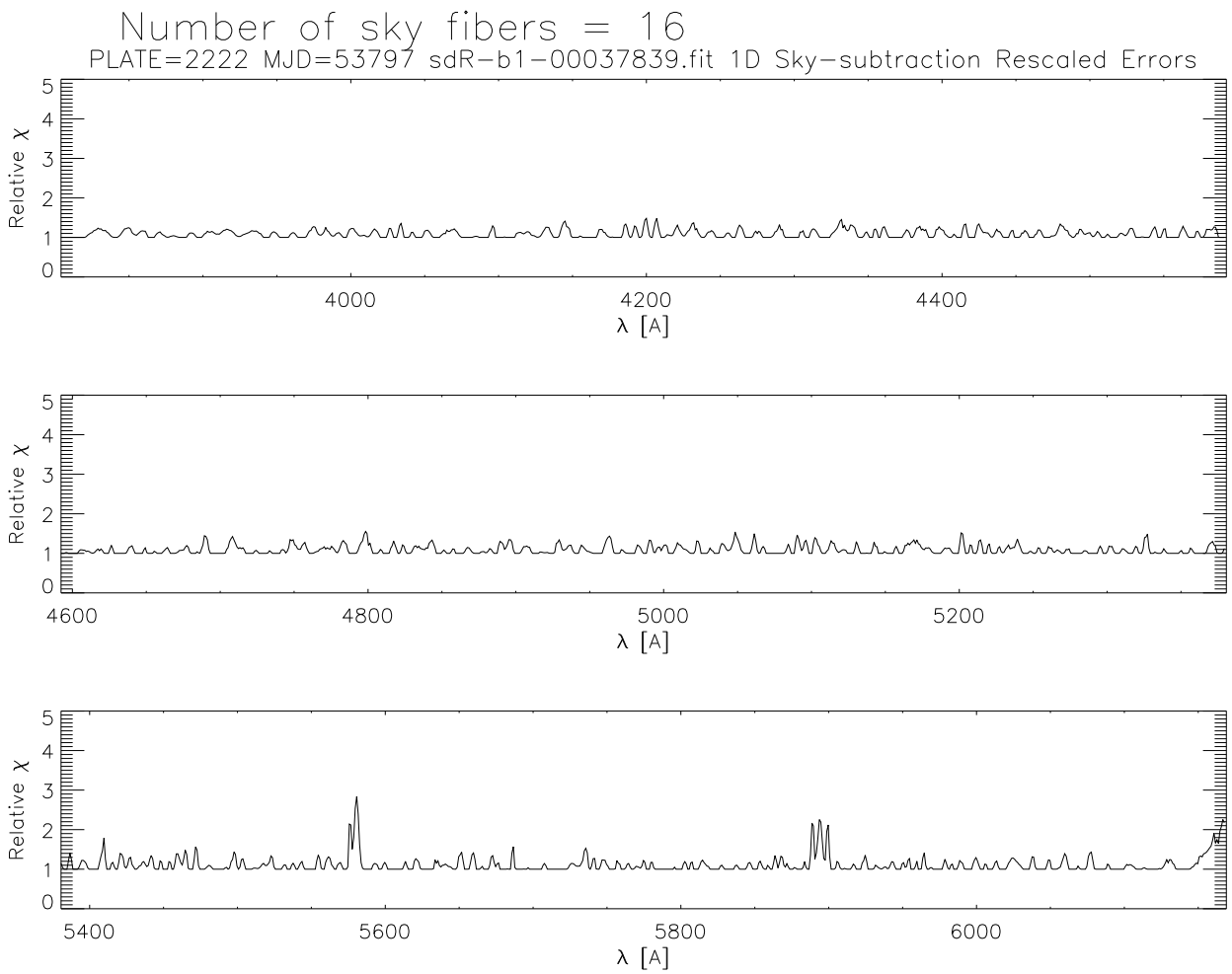
es= −0.0001

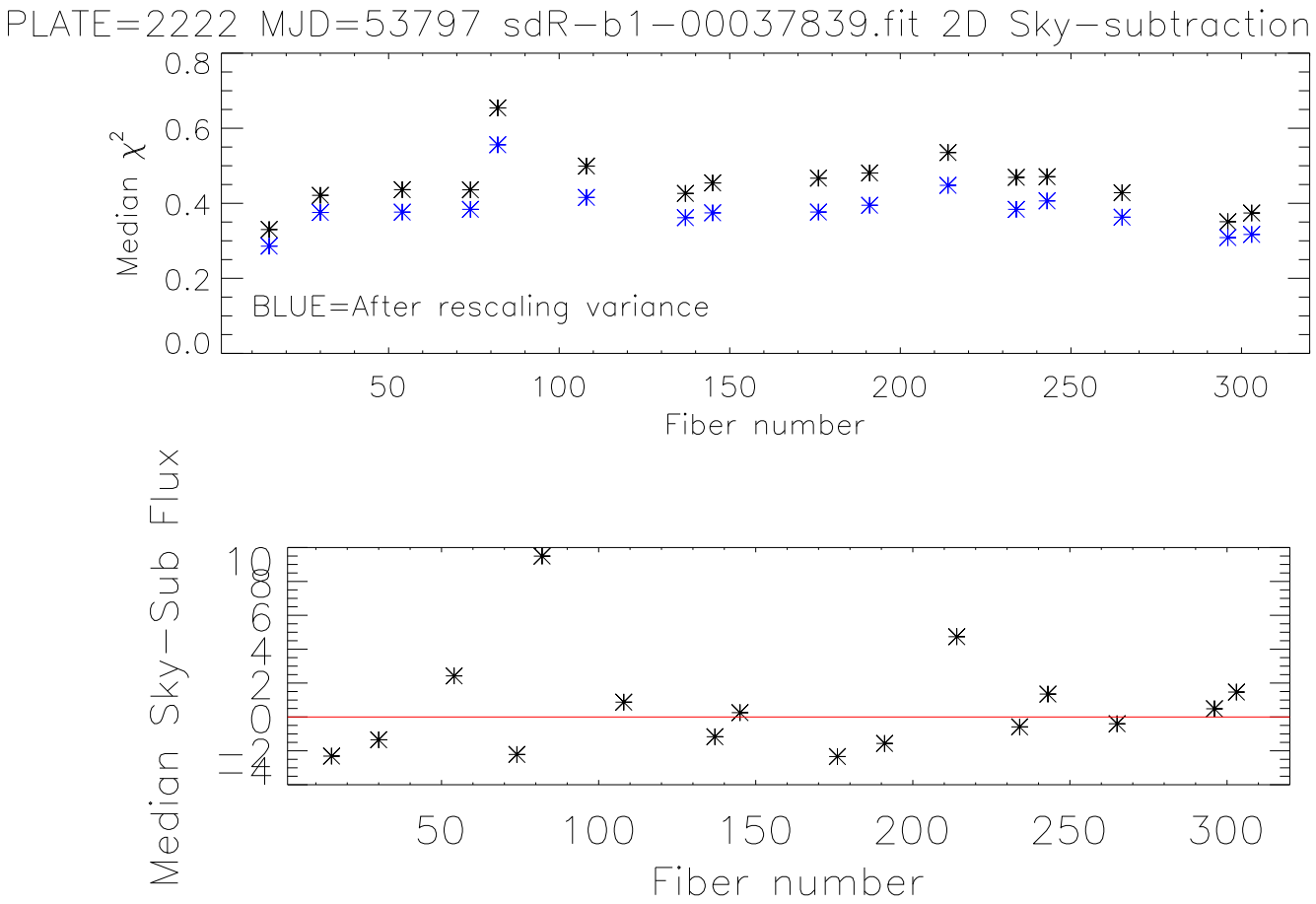

PLATE=2222 MJD=53797 Smooth superflat for sdR−b1−00037839.fit
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

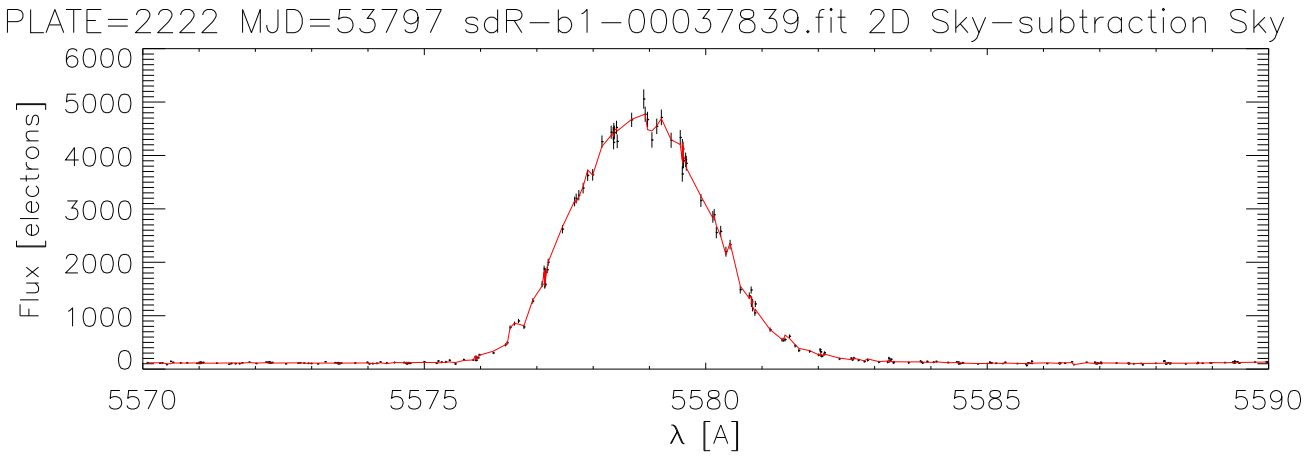

PLATE=2222 MJD=53797 sdR-b1-00037839.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
50
100
150
200
250
300
Fiber number

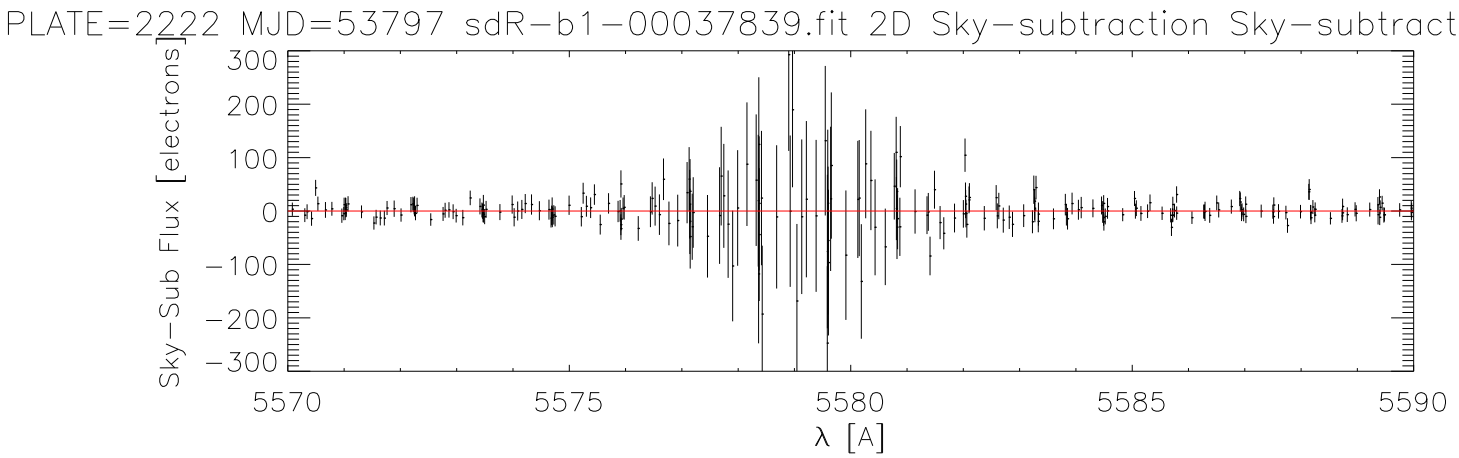

PLATE=2222 MJD=53797 sdR-b1-00037839.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

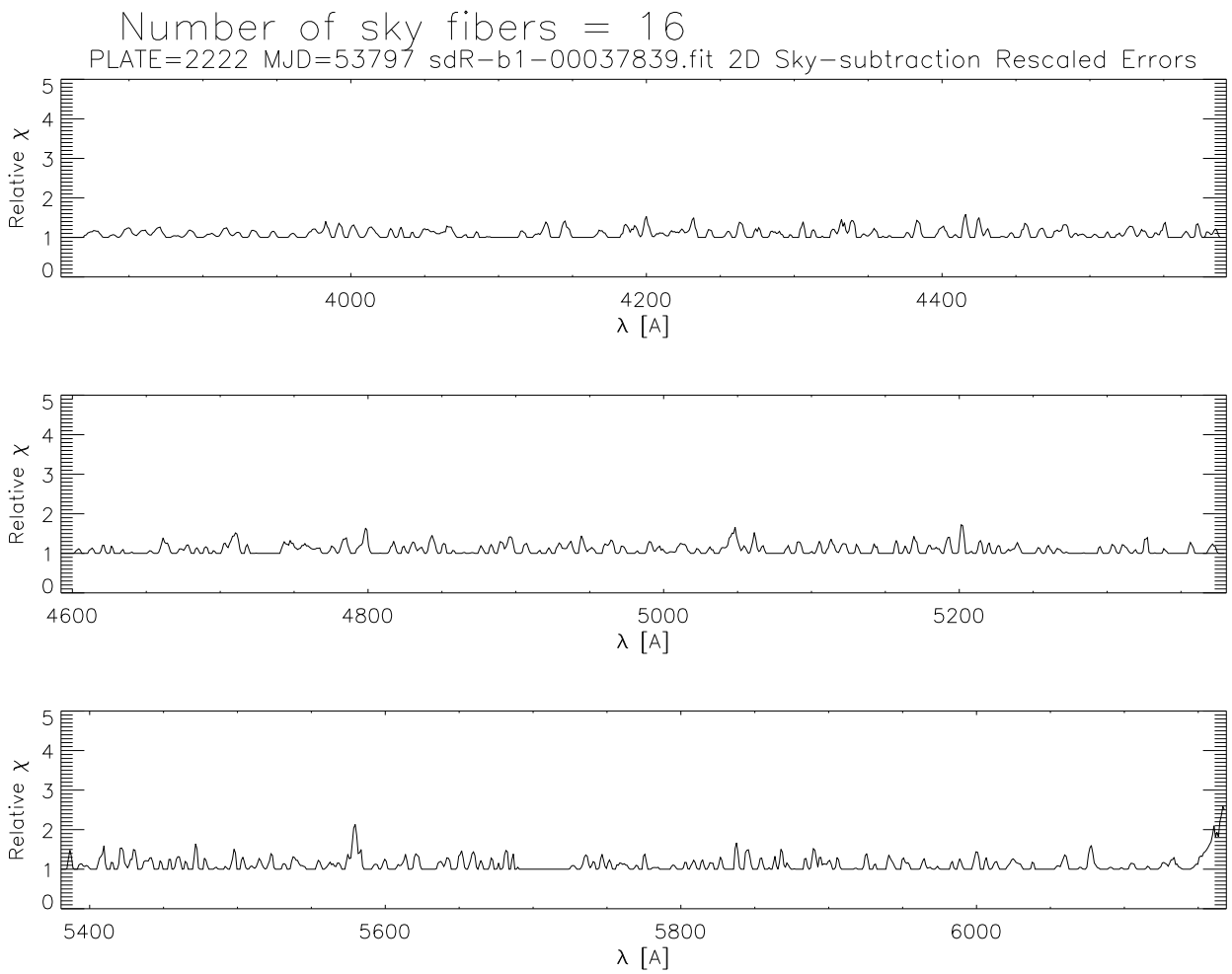

PLATE=2222 MJD=53797 sdR-b1-00037839.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

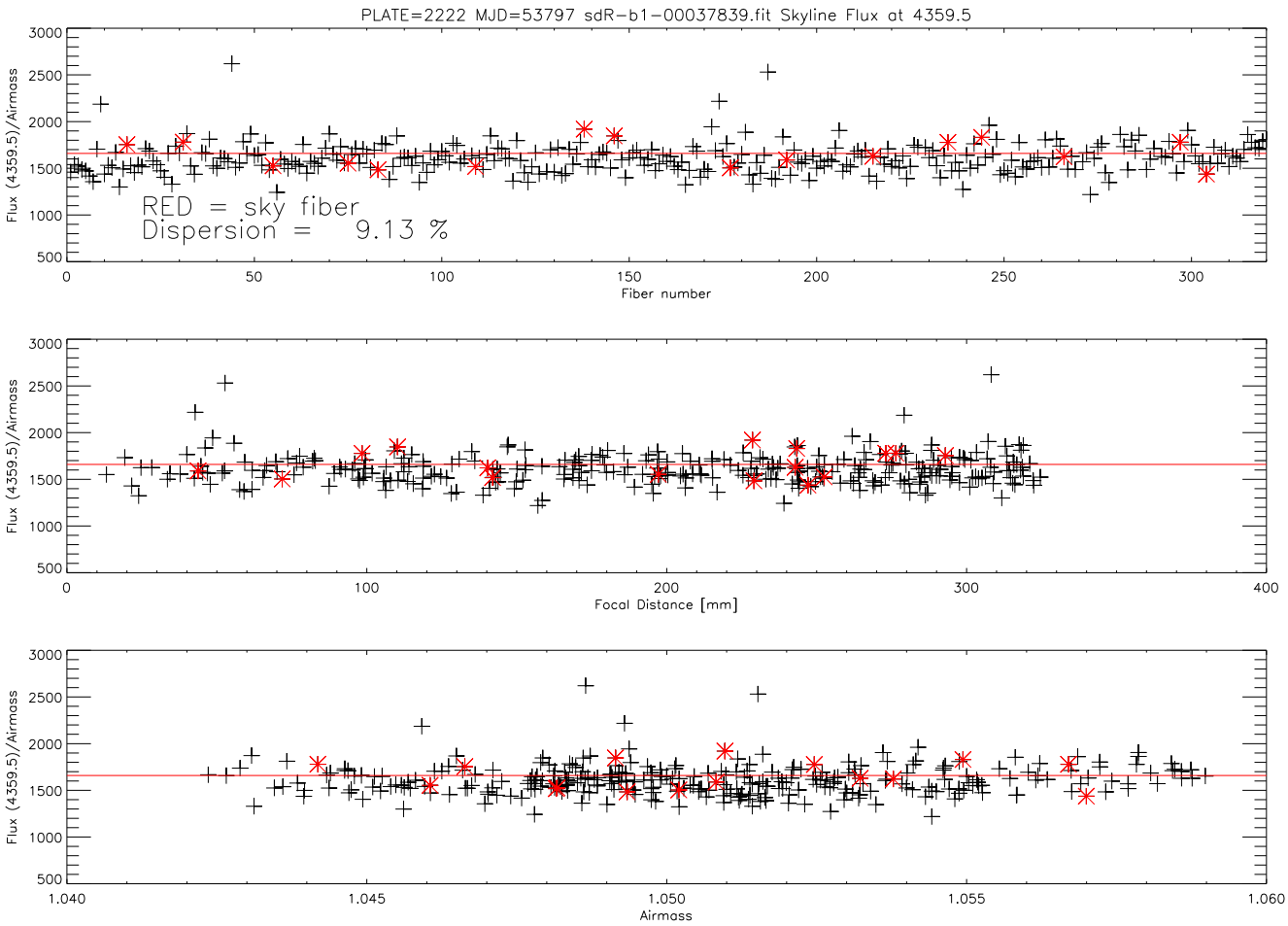

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b1-00037839.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

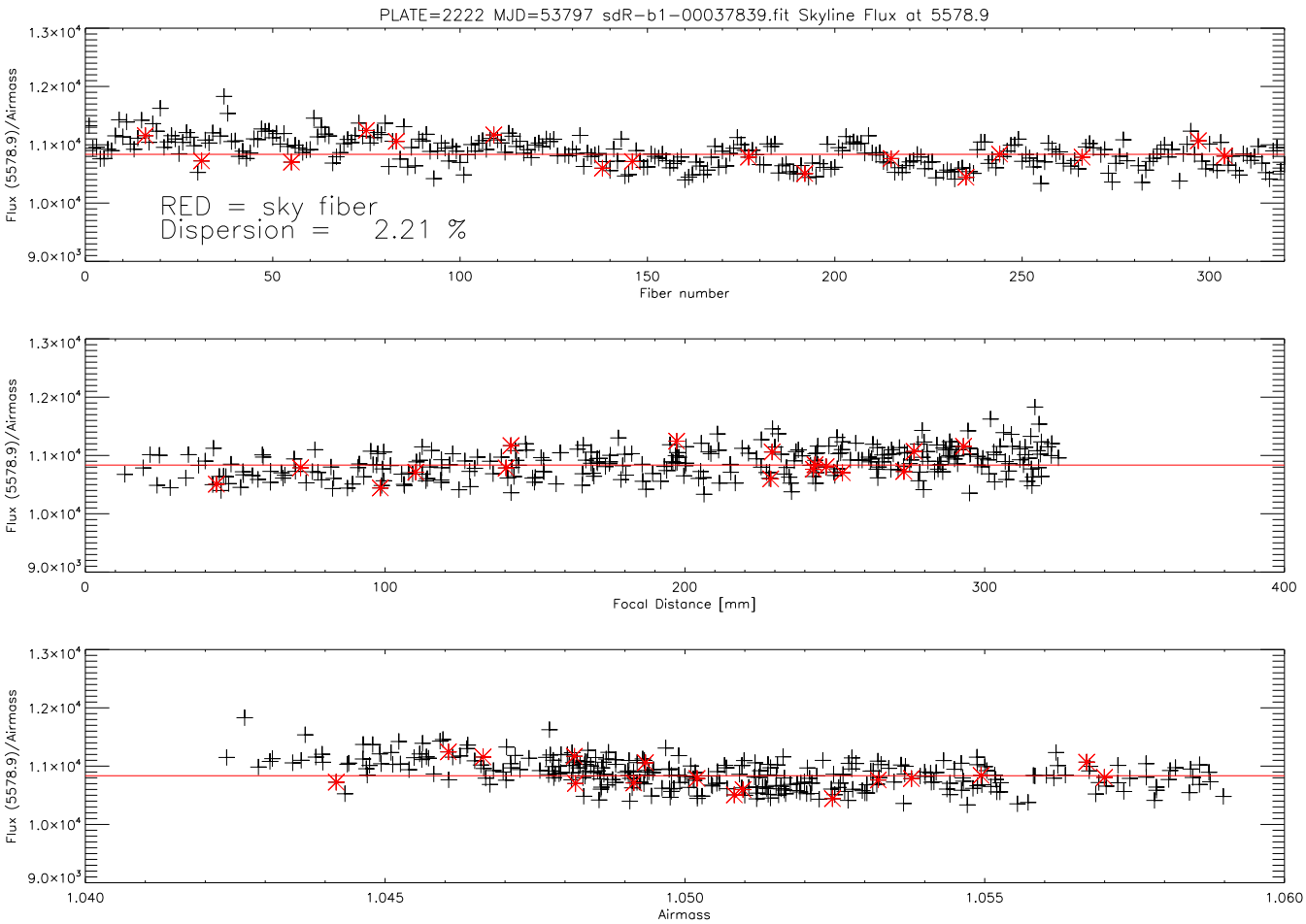

PLATE=2222 MJD=53797 sdR-b1-00037839.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-10
-8
-6
-4
-2
0
2
4
6
8
10
50
100
150
200
250
300
Fiber number

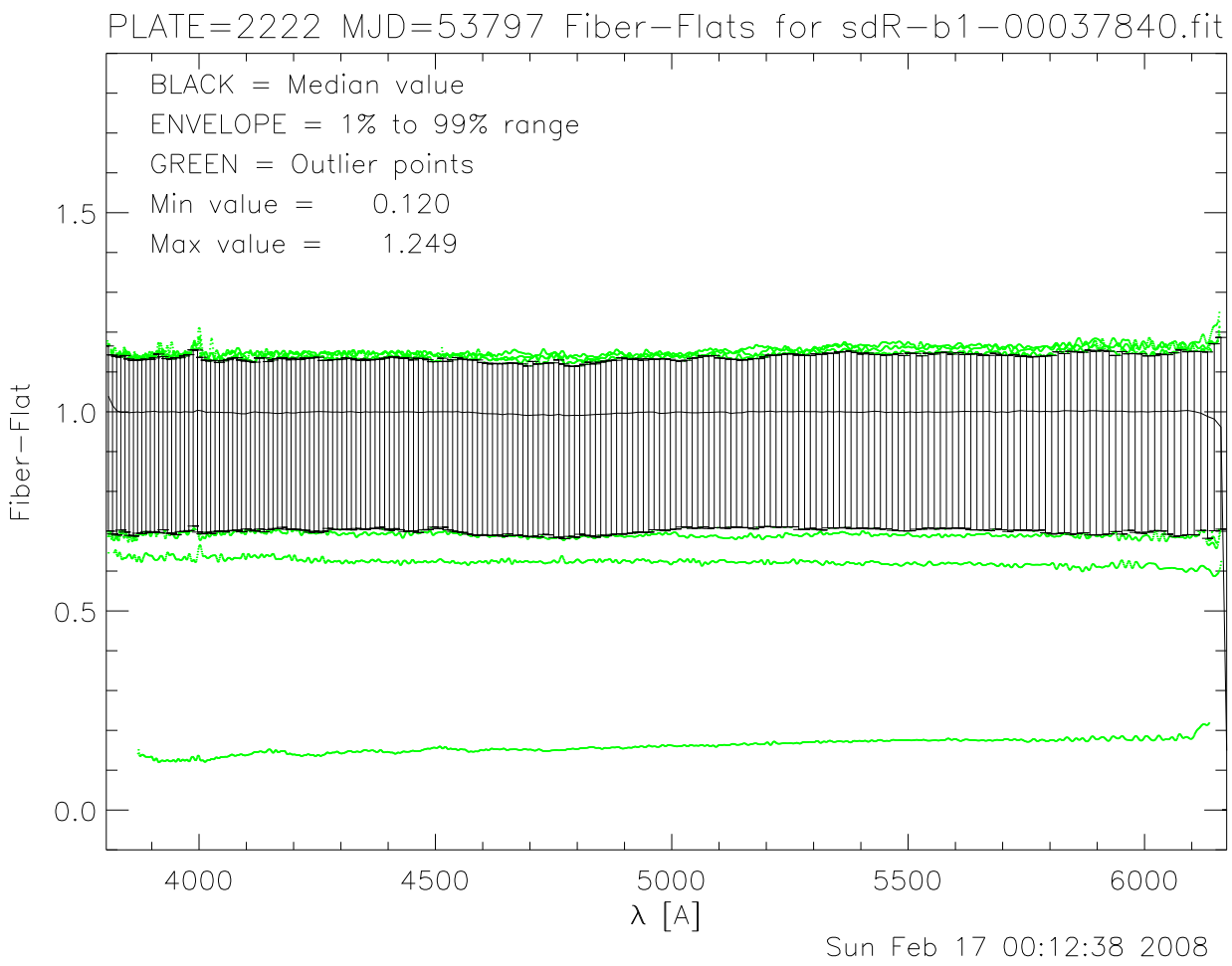

PLATE=2222 MJD=53797 sdR-b1-00037839.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

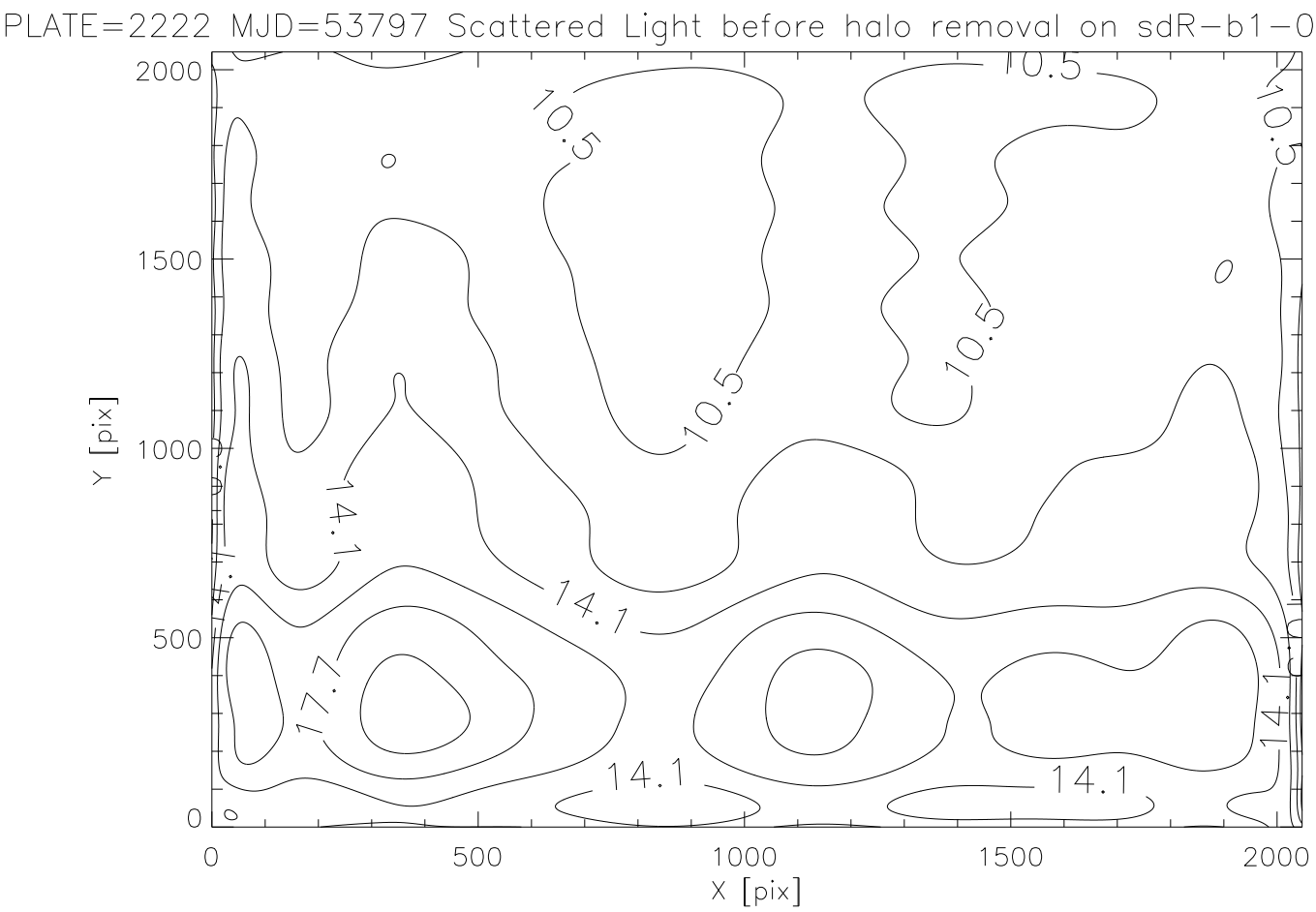

PLATE=2222 MJD=53797 sdR-b1-00037839.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

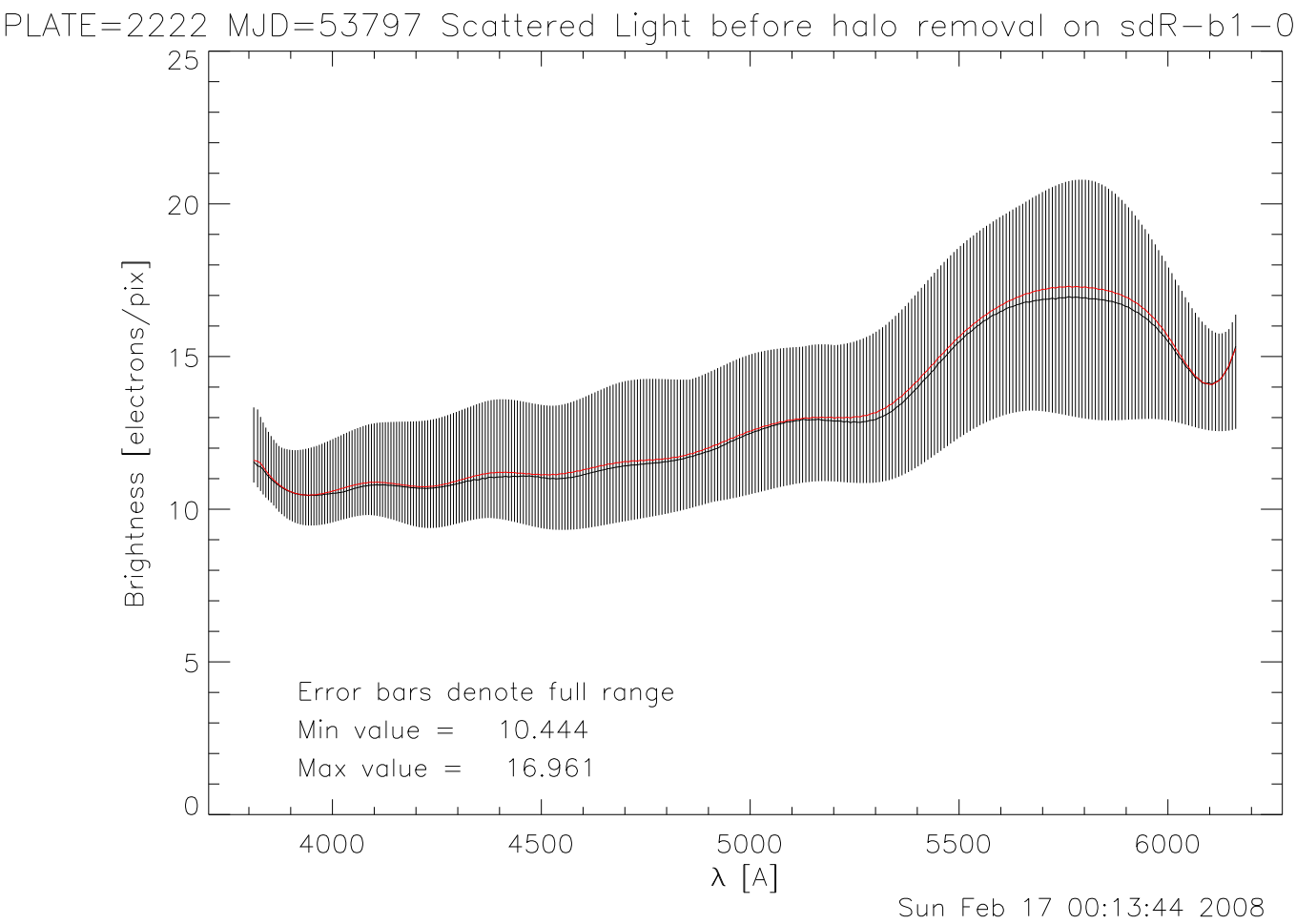

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b1-00037839.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

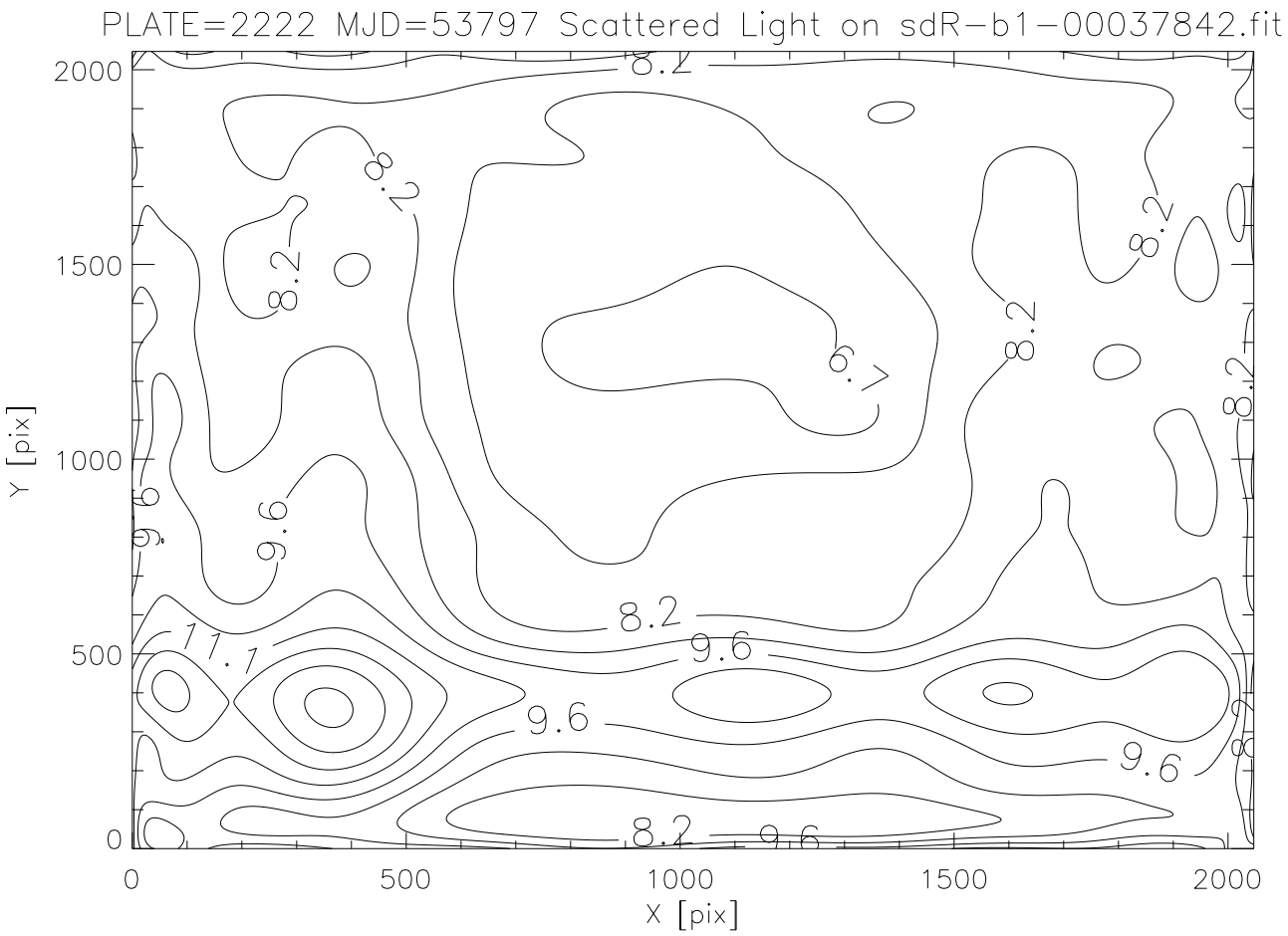

PLATE=2222 MJD=53797 sdR-b1-00037839.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.13 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

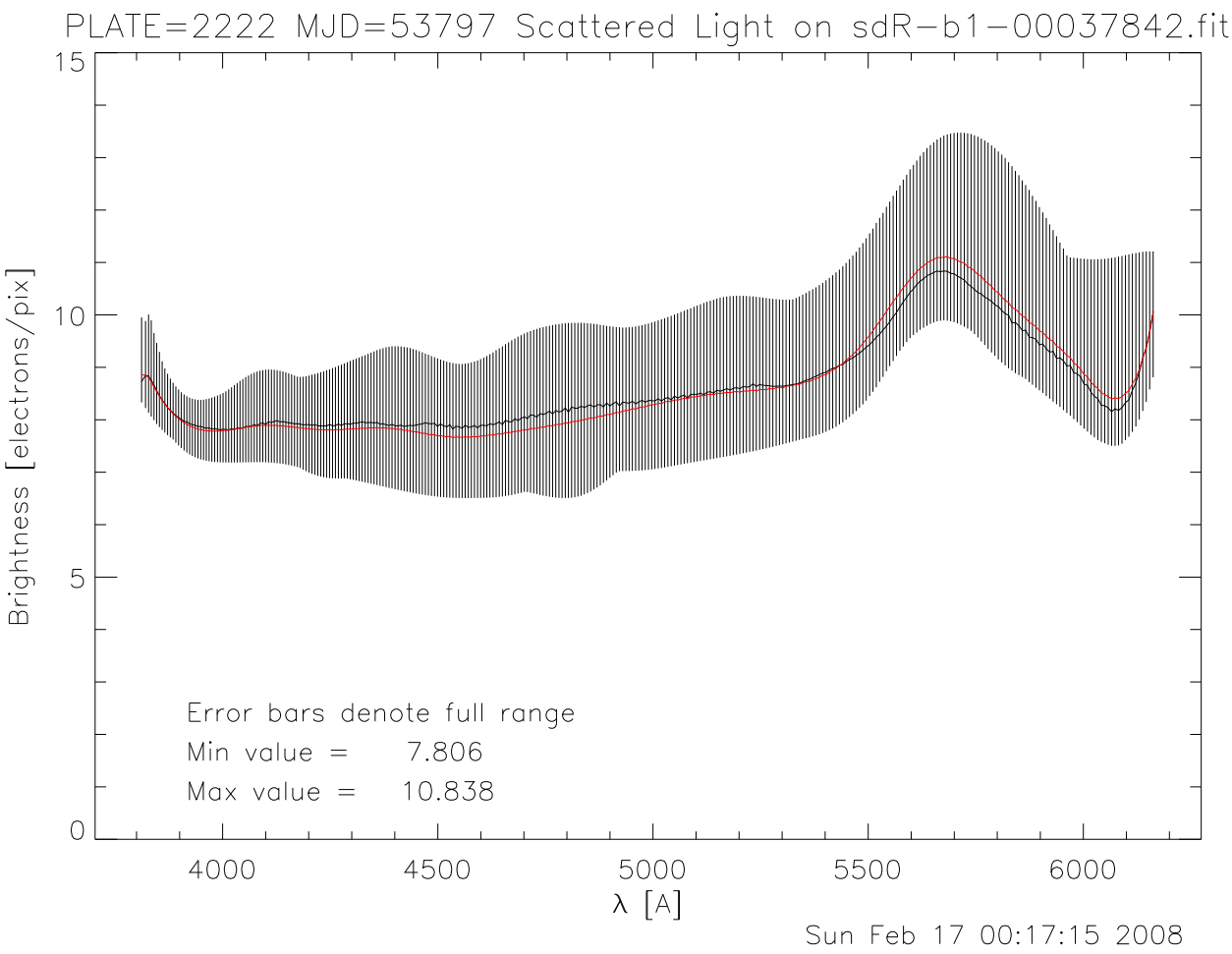

PLATE=2222 MJD=53797 sdR-b1-00037839.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.21 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=2222 MJD=53797 Fiber-Flats for sdR-b1-00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.120
Max value = 1.249
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:12:38 2008


PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR−b1−00037842.f
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
14.1
17.7


PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-b1-00037842.f
Brightness [electrons/pix]
25
20
15
10
5
0
Error bars denote full range
Min value = 10.444
Max value = 16.961
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:13:44 2008


PLATE=2222 MJD=53797 Scattered Light on sdR-b1-00037842.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.2
9.6
11.1
6.7


PLATE=2222 MJD=53797 Scattered Light on sdR-b1-00037842.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 7.806
Max value = 10.838
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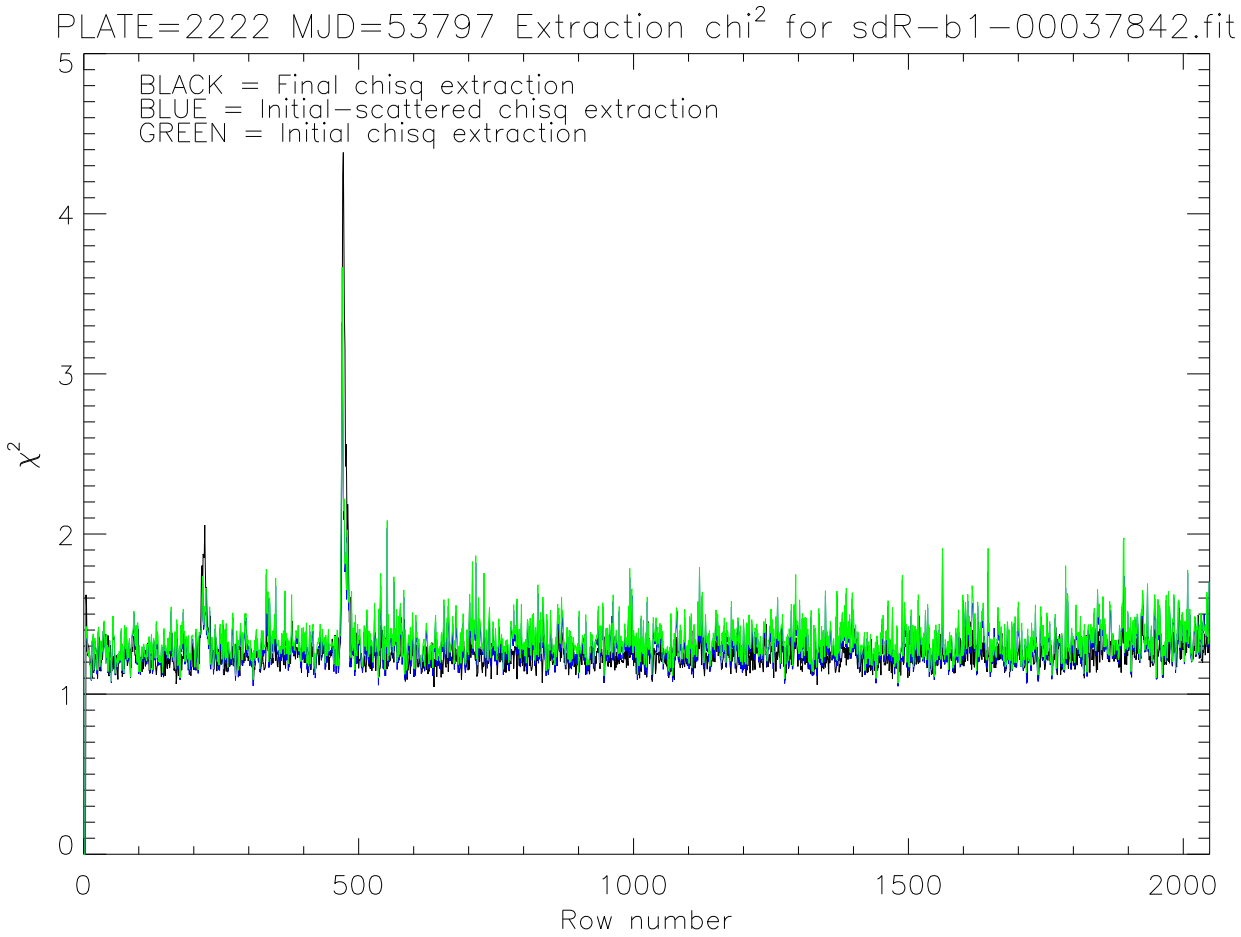
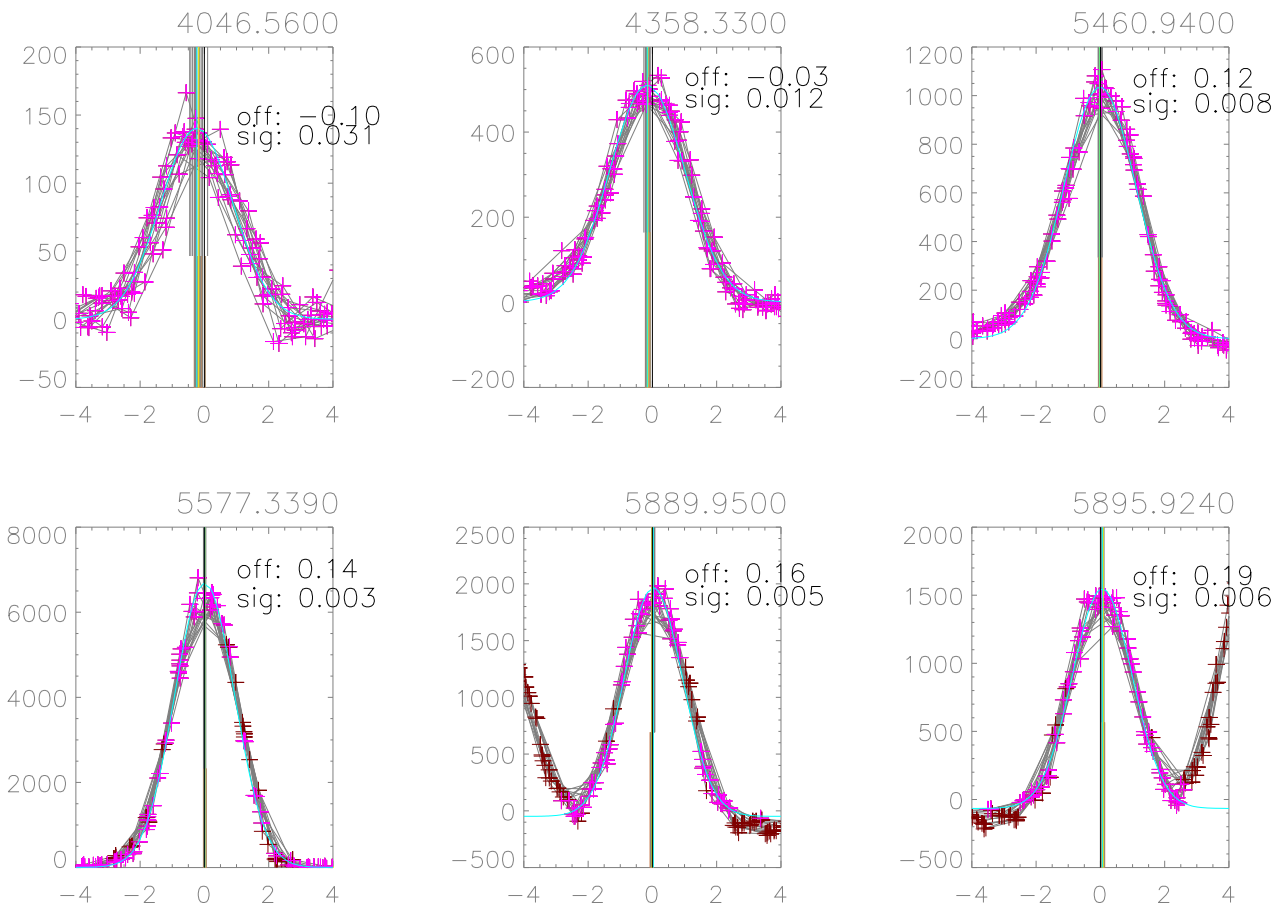
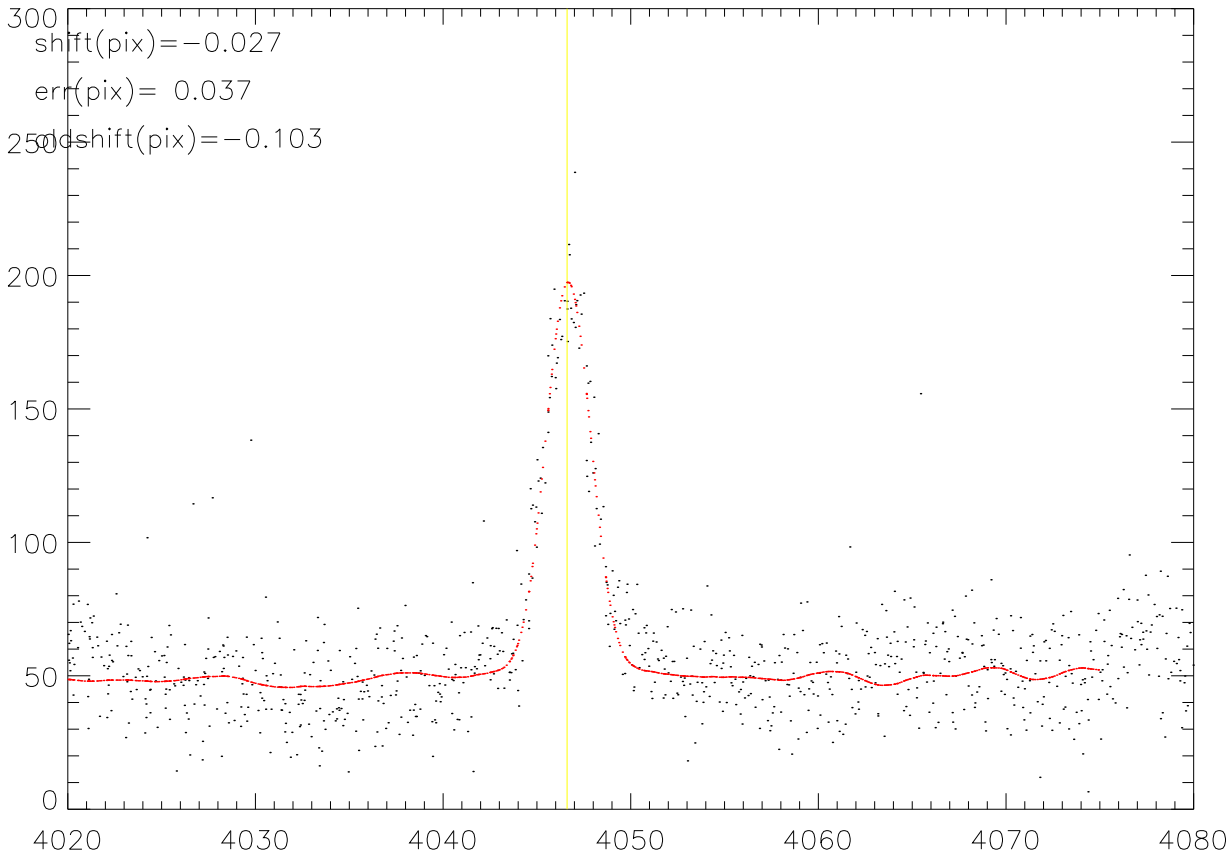
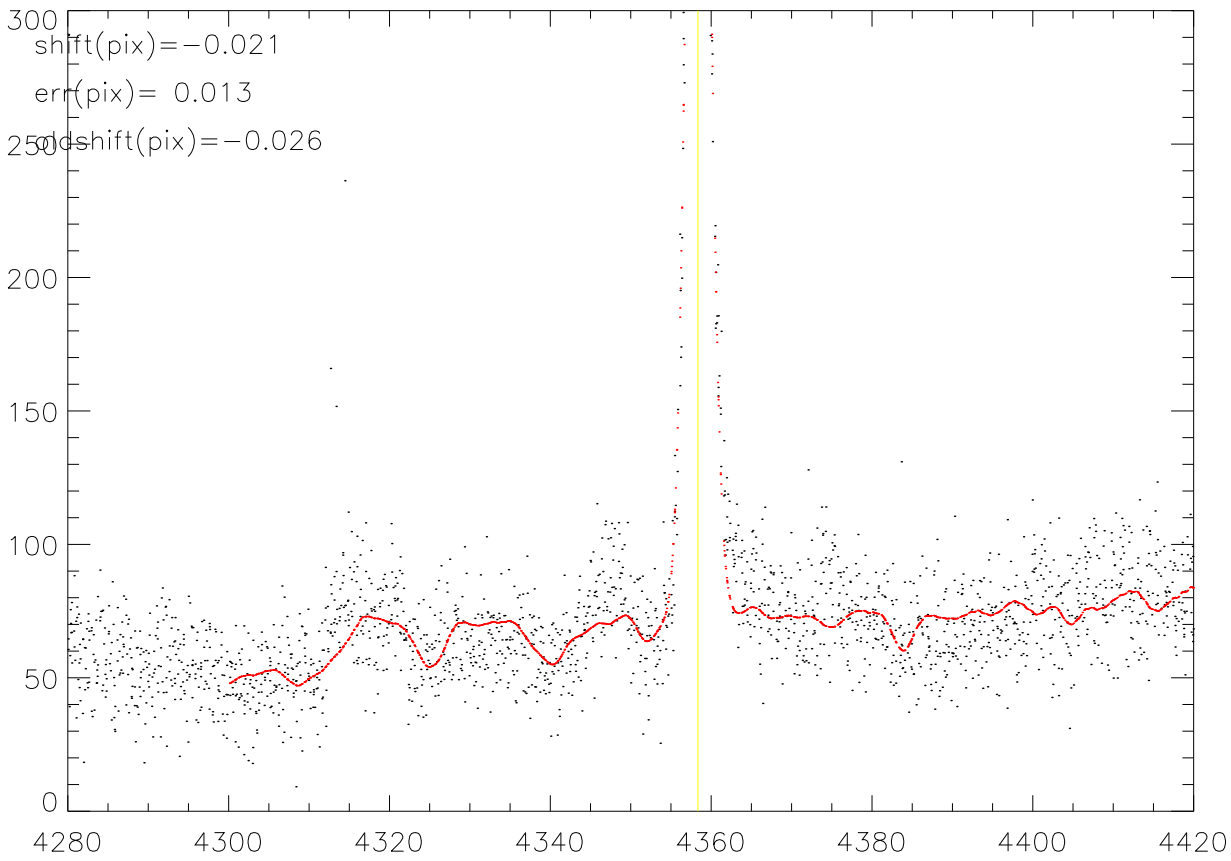
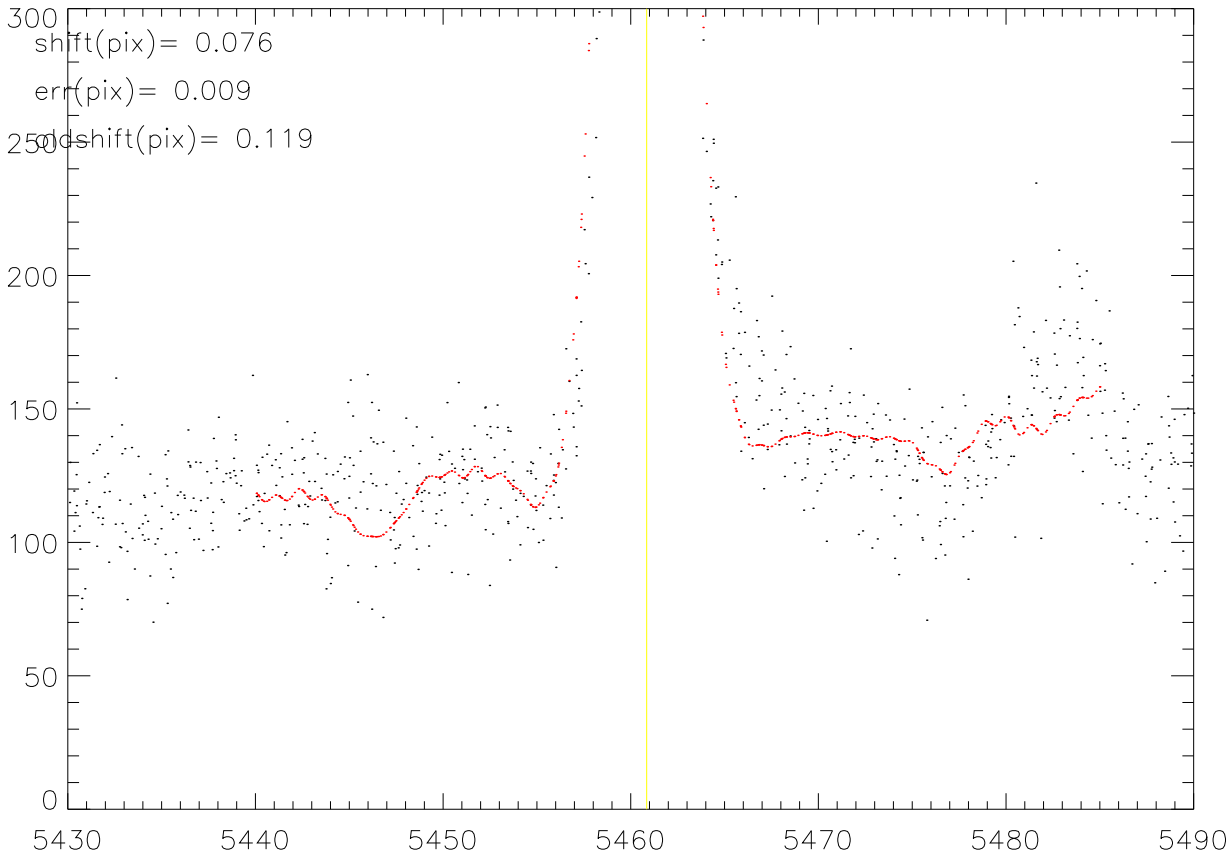
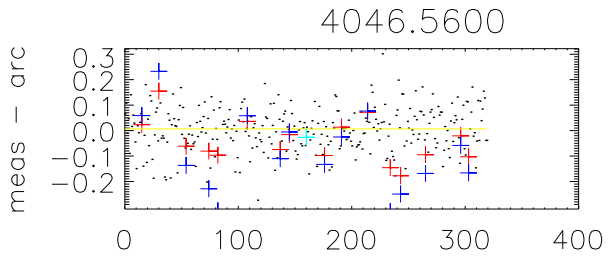

PLATE=2222 MJD=53797 Extraction chi^2 for sdR-b1-00037842.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

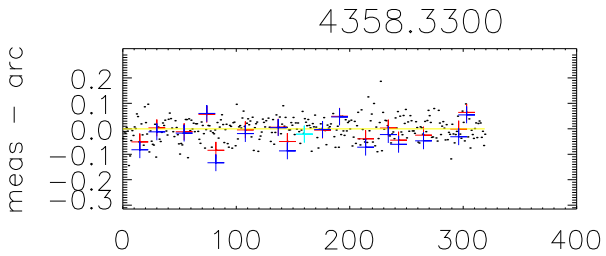

4046.5600
off: −0.10
sig: 0.031
4358.3300
off: −0.03
sig: 0.012
5460.9400
off: 0.12
sig: 0.008
5577.3390
off: 0.14
sig: 0.003
5889.9500
off: 0.16
sig: 0.005
5895.9240
off: 0.19
sig: 0.006

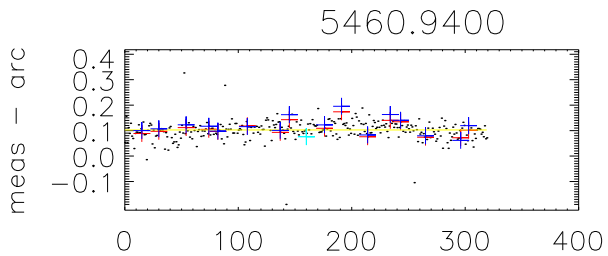

shift(pix)=−0.027
err(pix)= 0.037
oldshift(pix)=−0.103
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

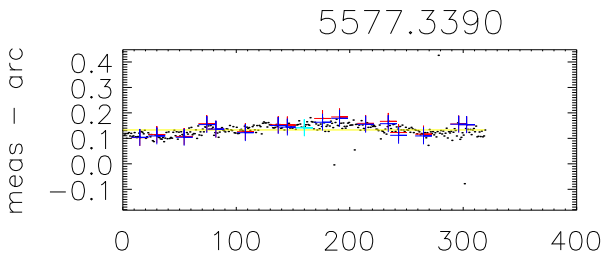

shift(pix)=−0.021
err(pix)= 0.013
oldshift(pix)=−0.026
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

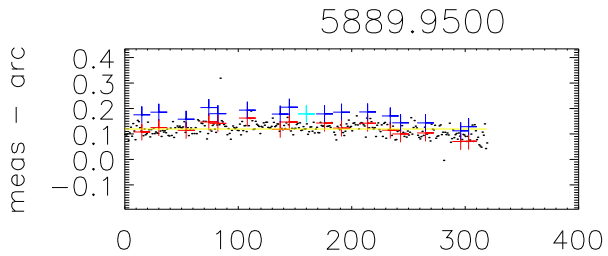

shift(pix)= 0.076
err(pix)= 0.009
oldshift(pix)= 0.119
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

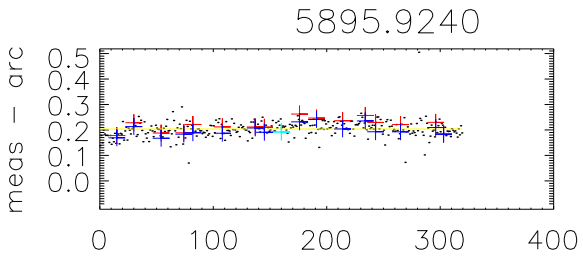

4046.5600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

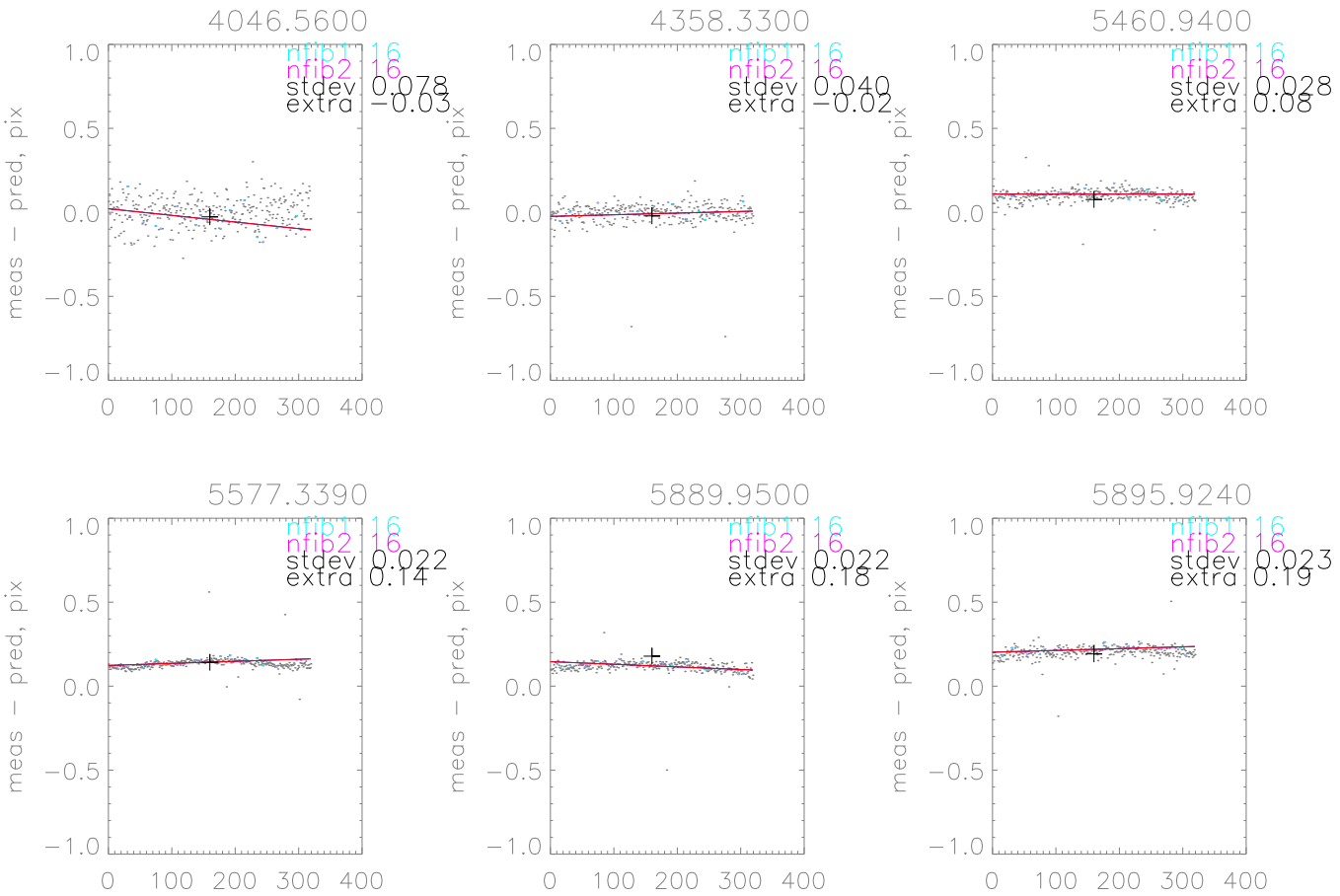

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

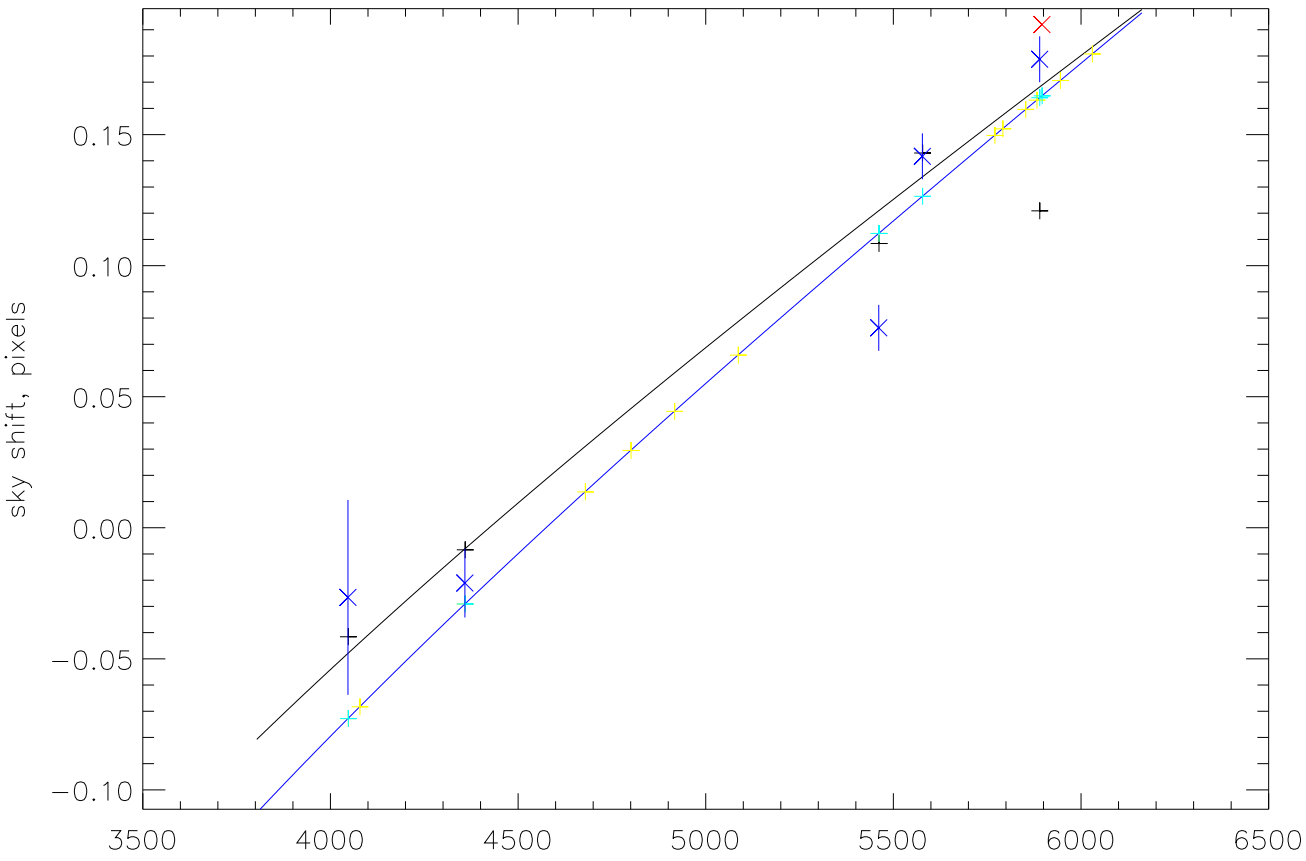

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

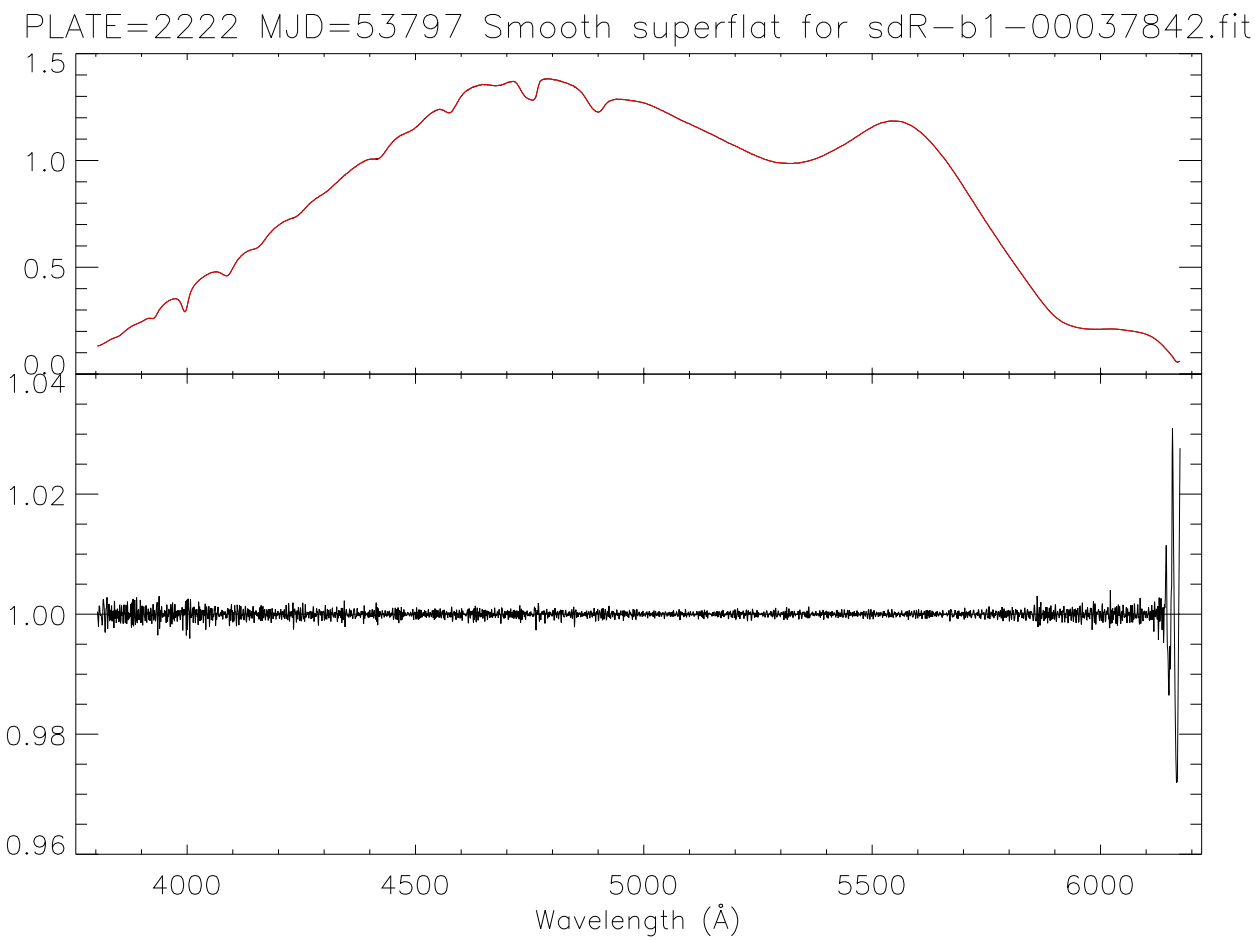

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

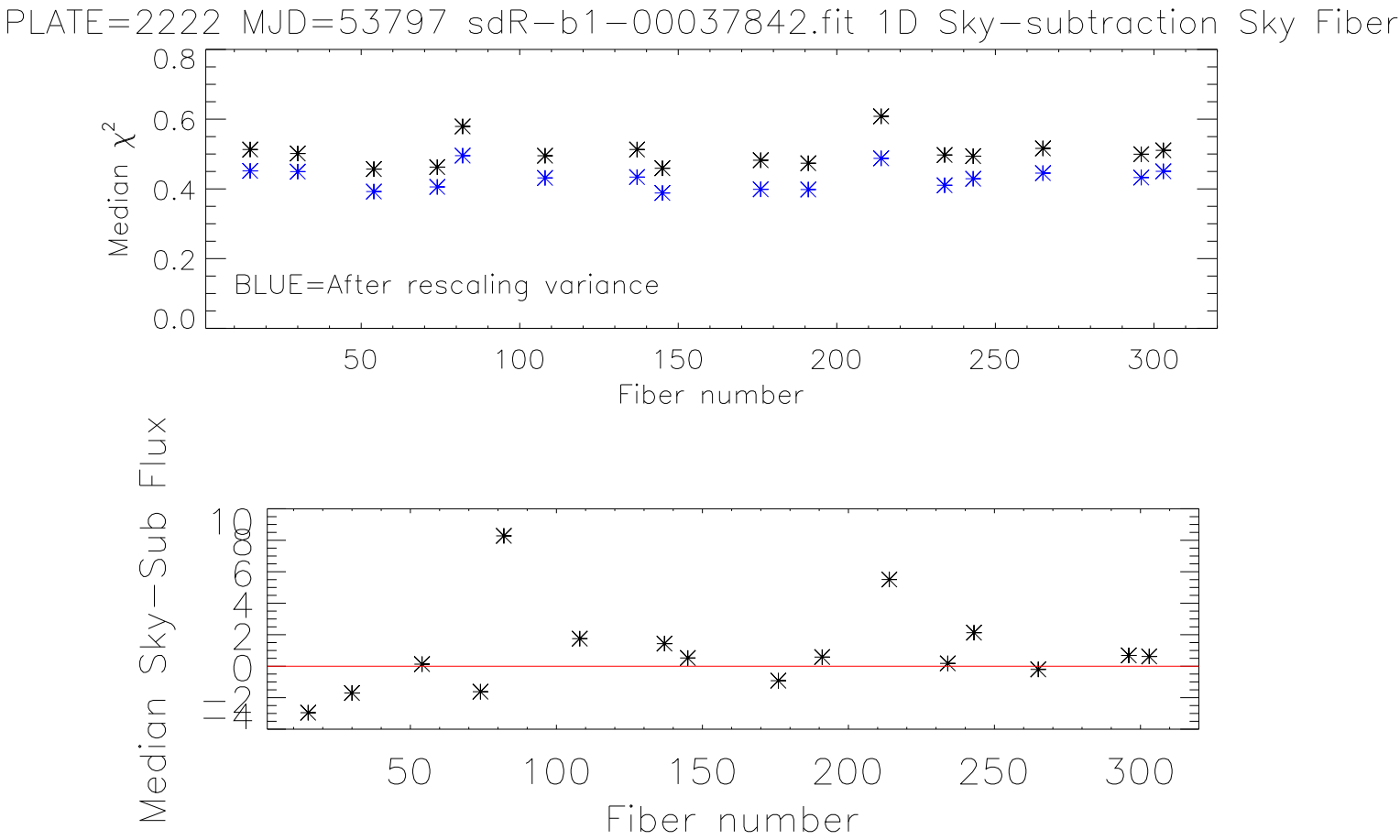

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

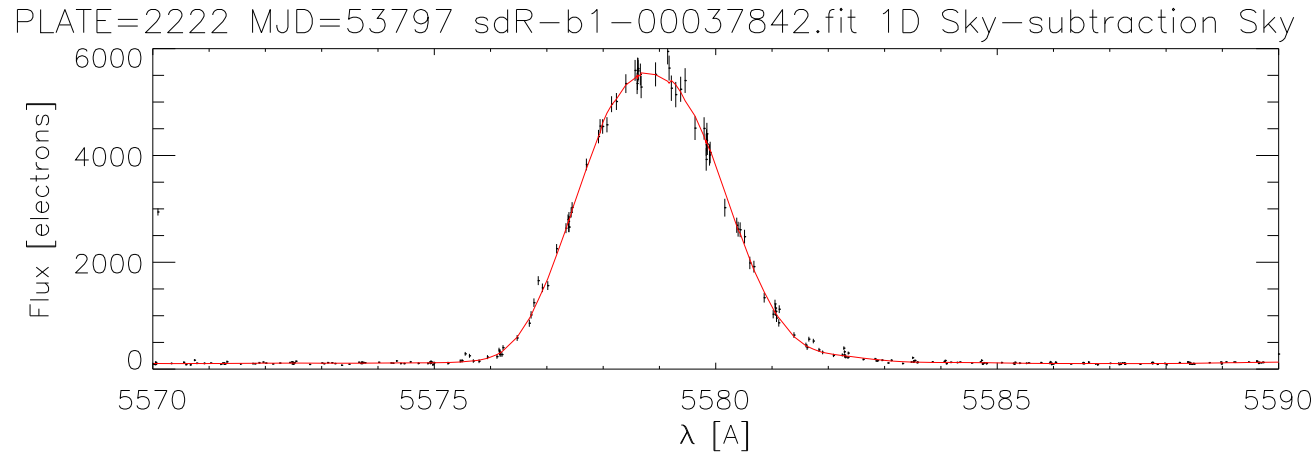

4046.5600
nfib1 16
nfib2 16
stdev 0.078
extra −0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.040
extra −0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.028
extra 0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra 0.14
5889.9500
nfib1 16
nfib2 16
stdev 0.022
extra 0.18
5895.9240
nfib1 16
nfib2 16
stdev 0.023
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

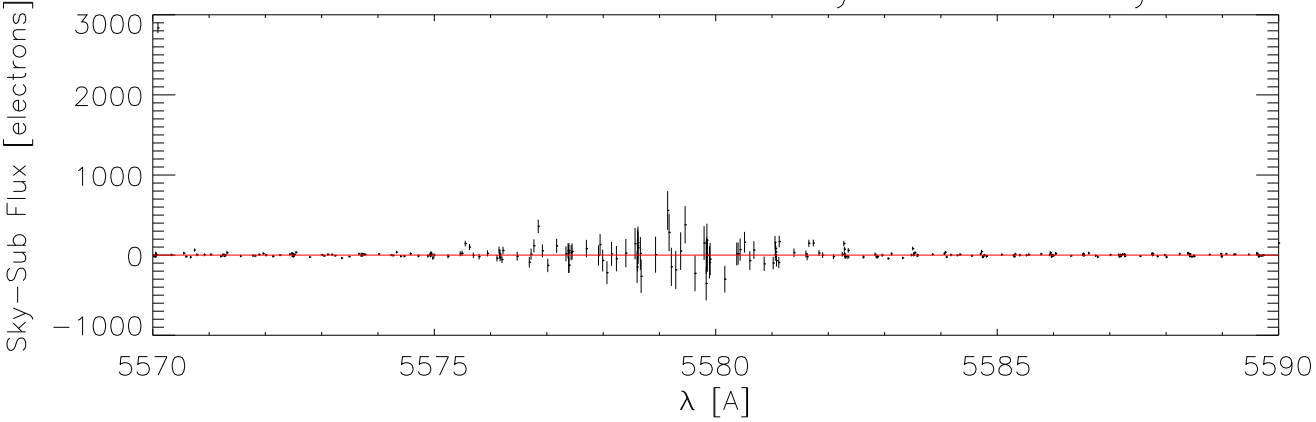

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
3500
4000
4500
5000
5500
6000
6500

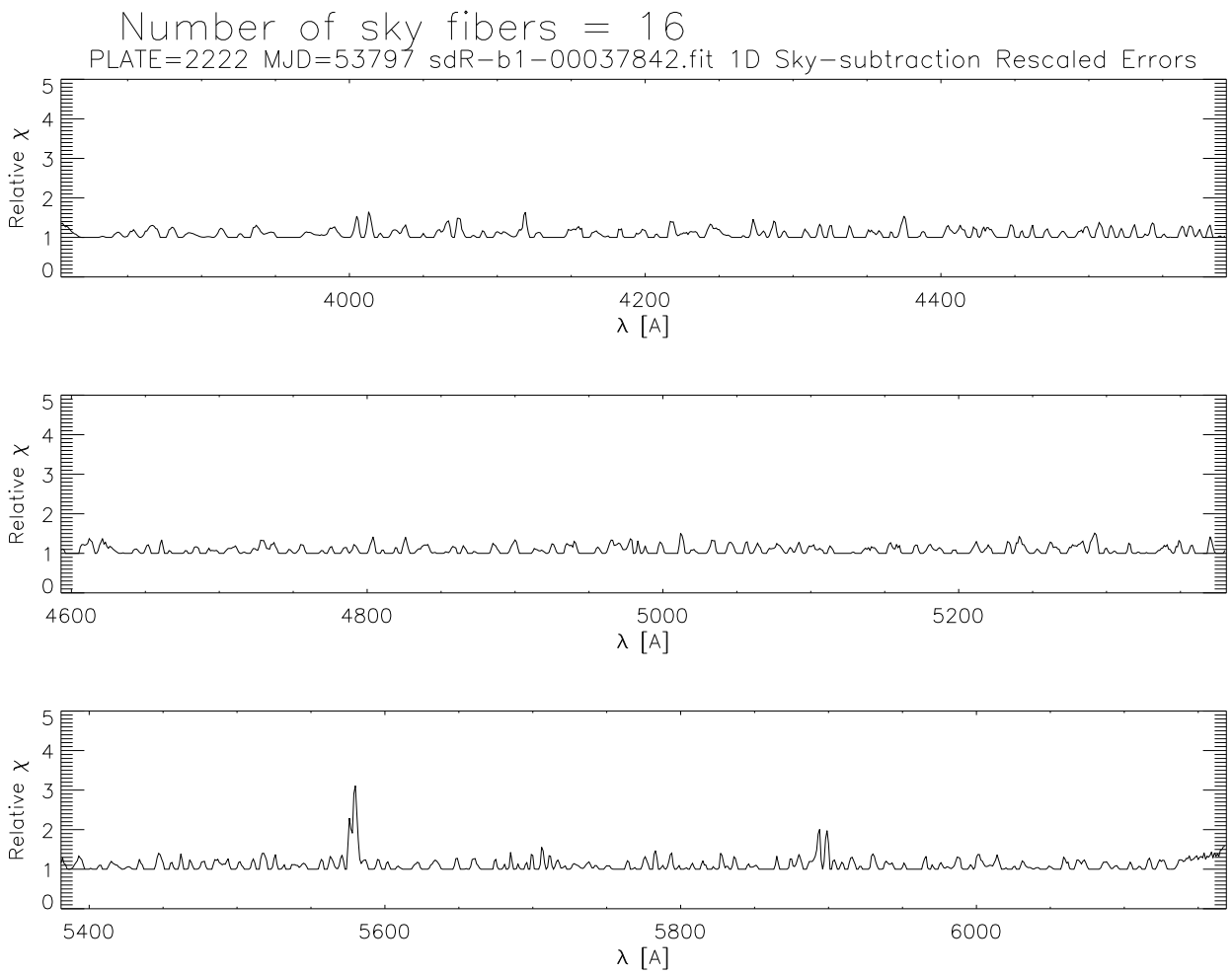
es= −0.0001

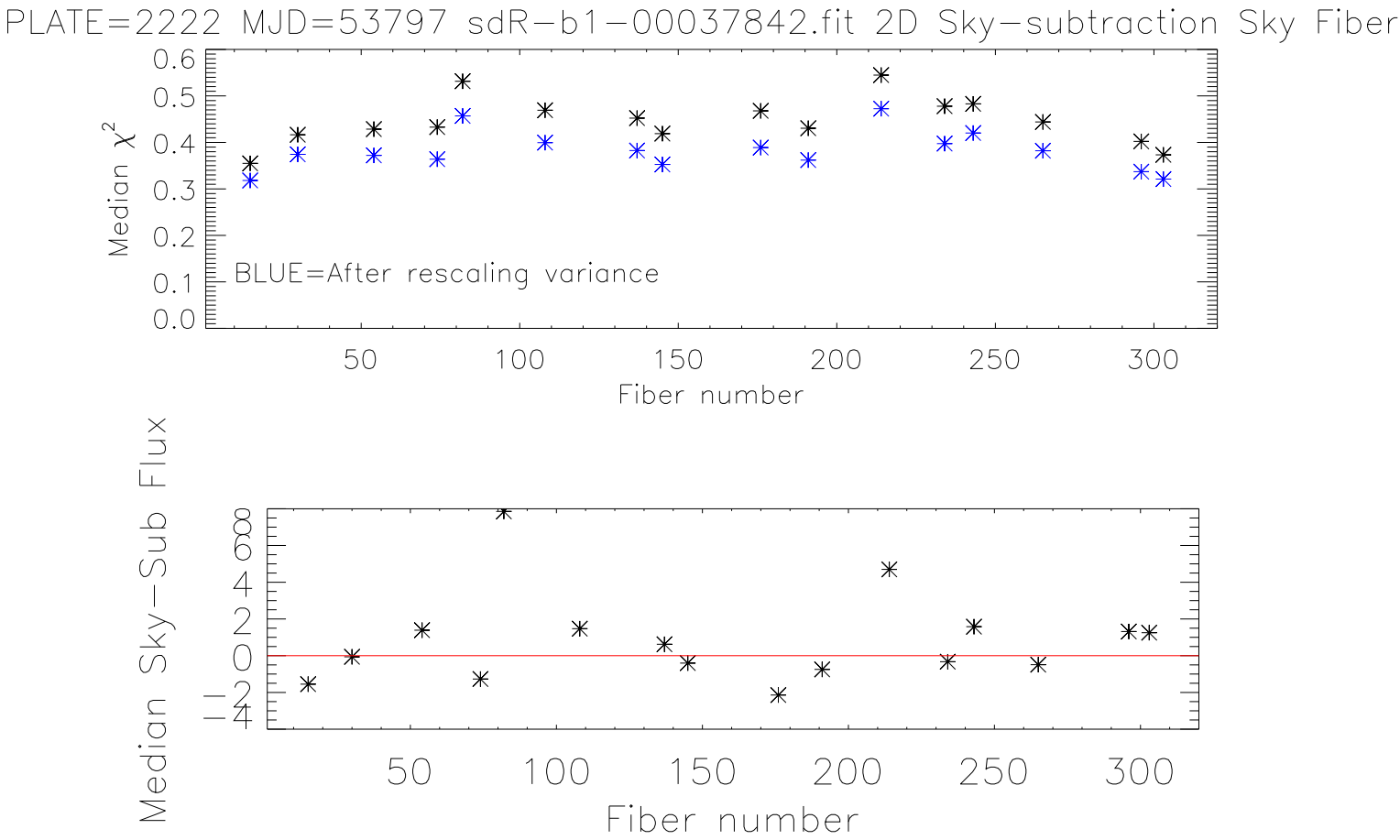

PLATE=2222 MJD=53797 Smooth superflat for sdR−b1−00037842.fit
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
4000
4500
5000
5500
6000
Wavelength (Å)

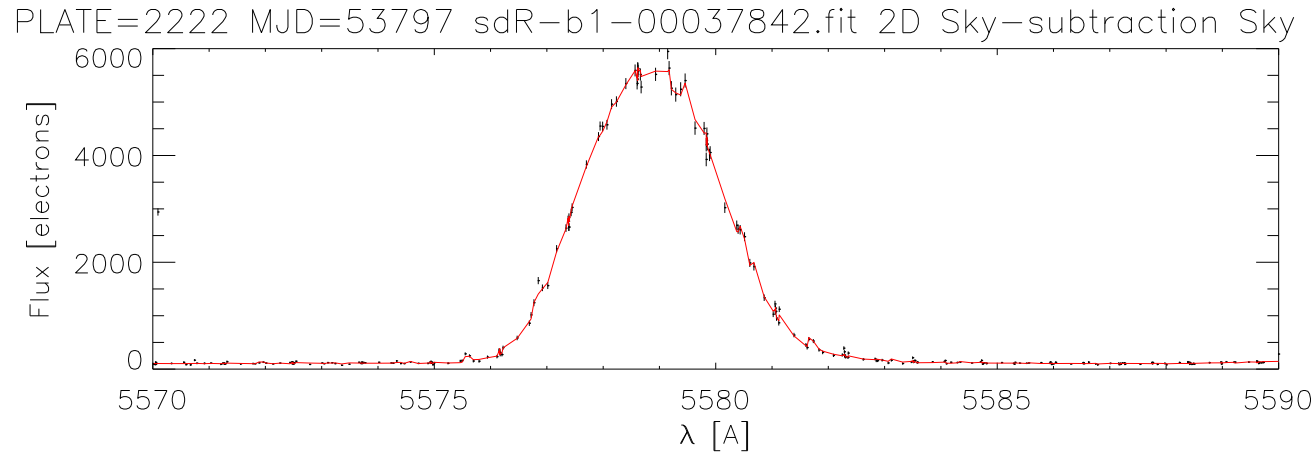

PLATE=2222 MJD=53797 sdR-b1-00037842.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-10
-8
-6
-4
-2
0
2
4
6
8
10
50
100
150
200
250
300
Fiber number

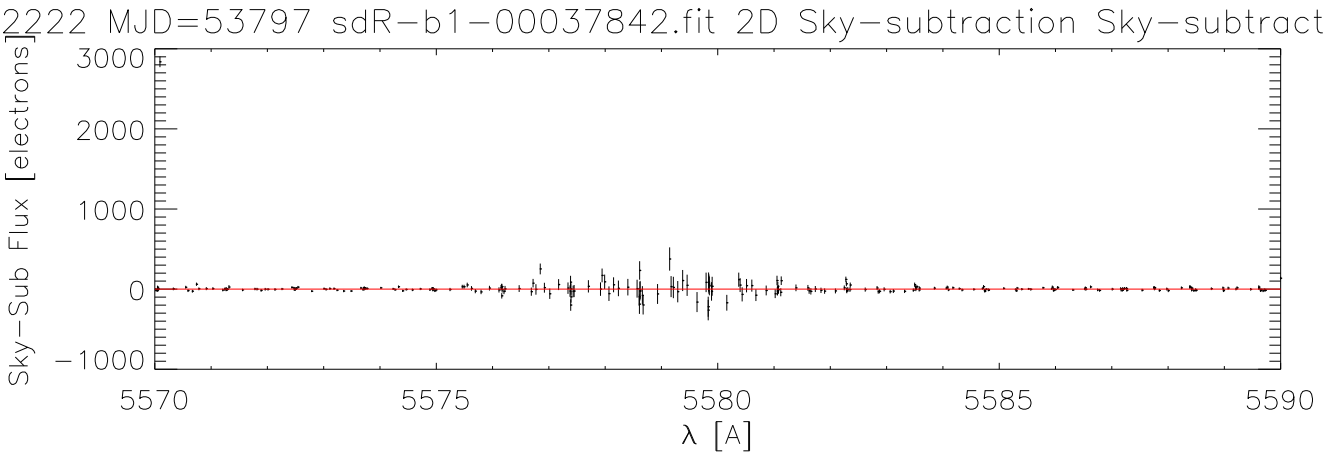

PLATE=2222 MJD=53797 sdR-b1-00037842.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

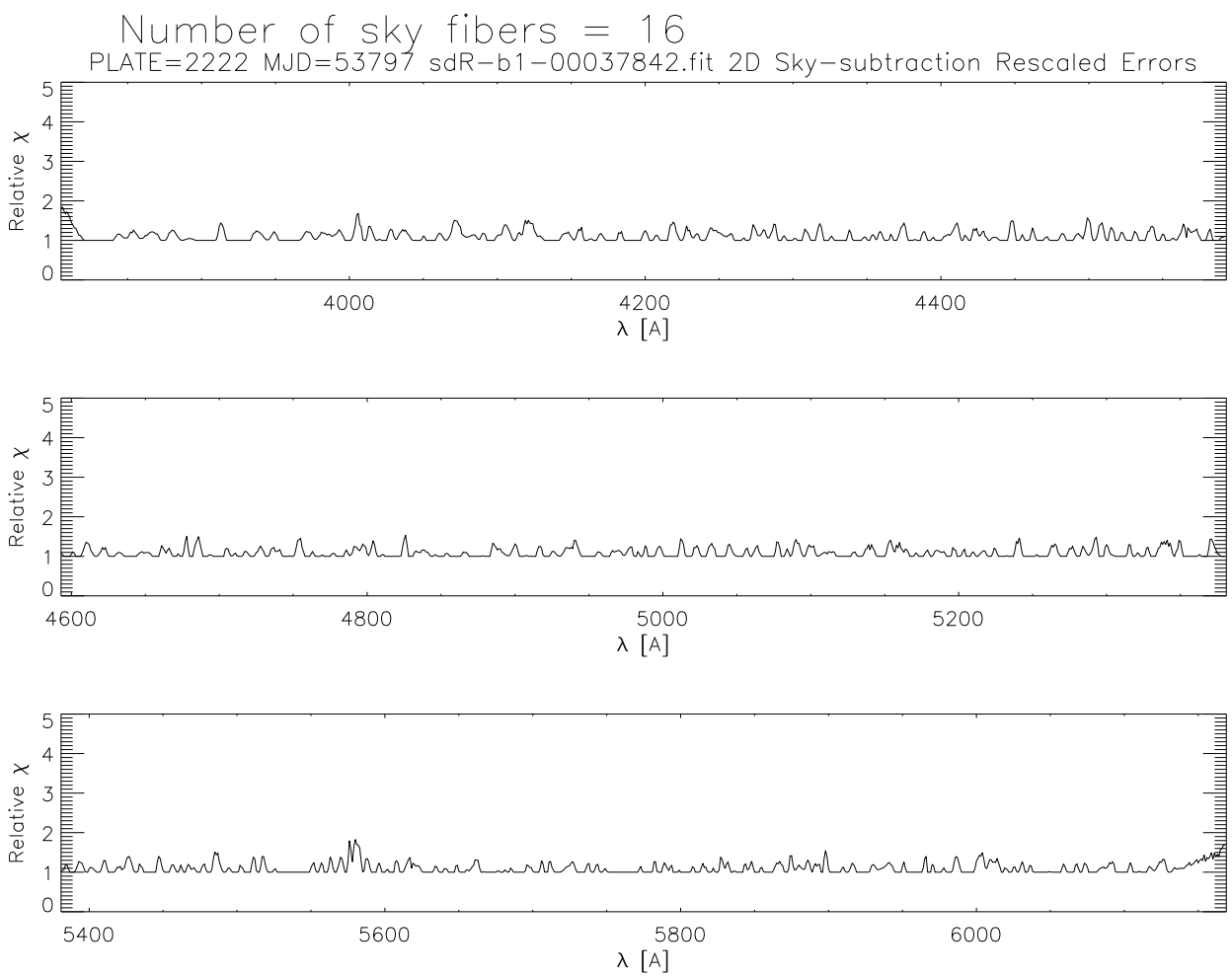

PLATE=2222 MJD=53797 sdR-b1-00037842.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

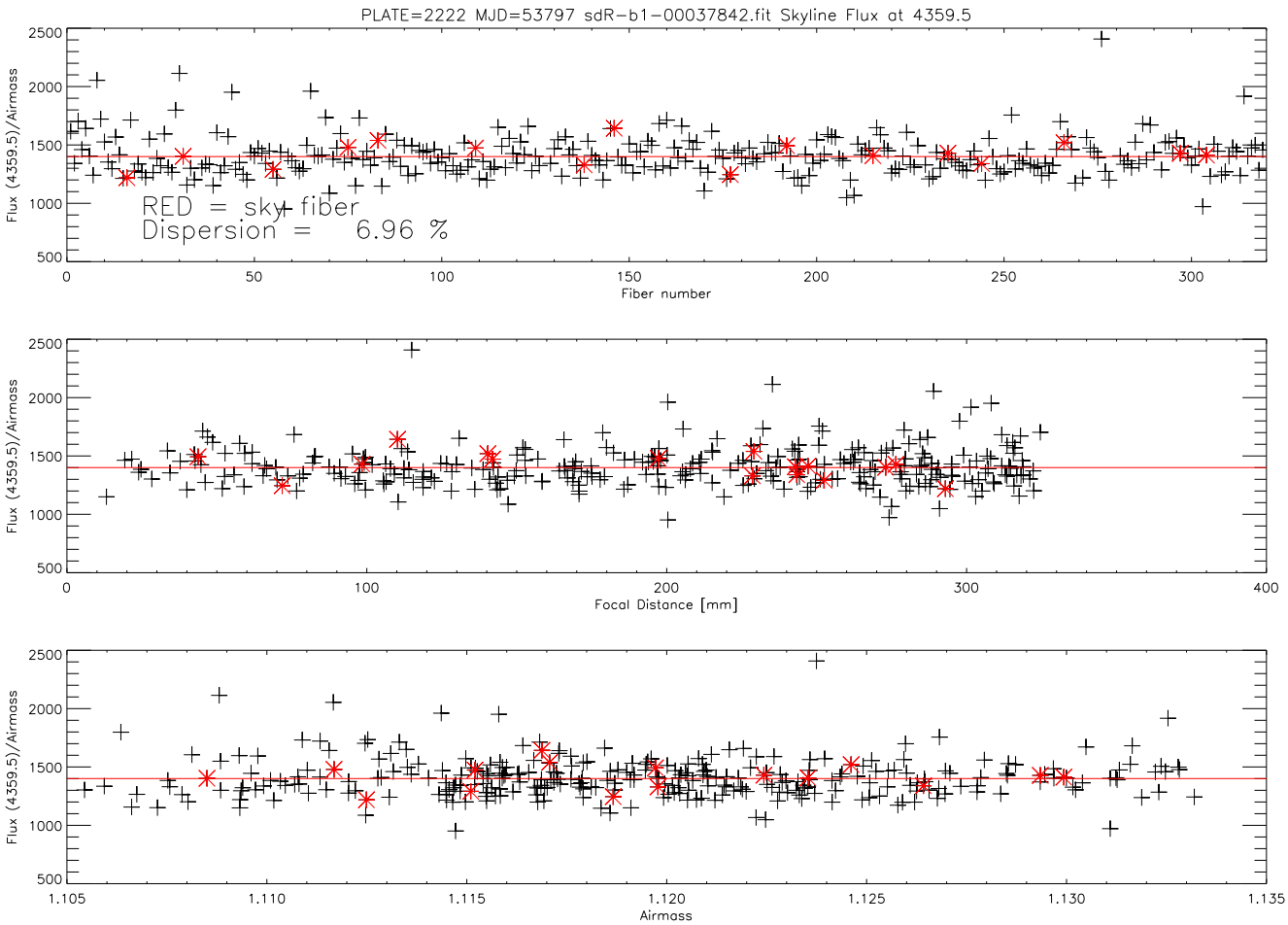

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b1-00037842.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

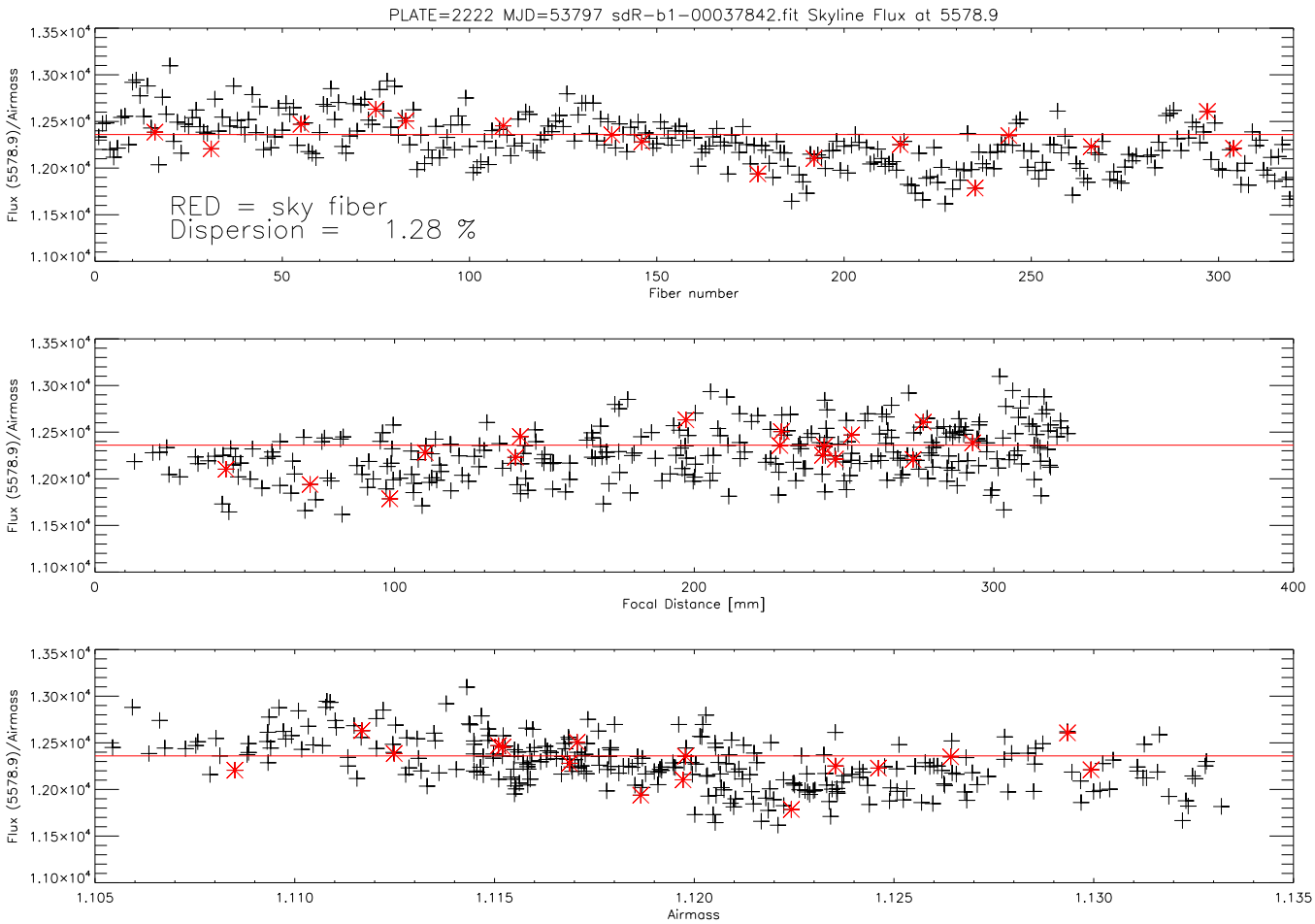

PLATE=2222 MJD=53797 sdR-b1-00037842.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

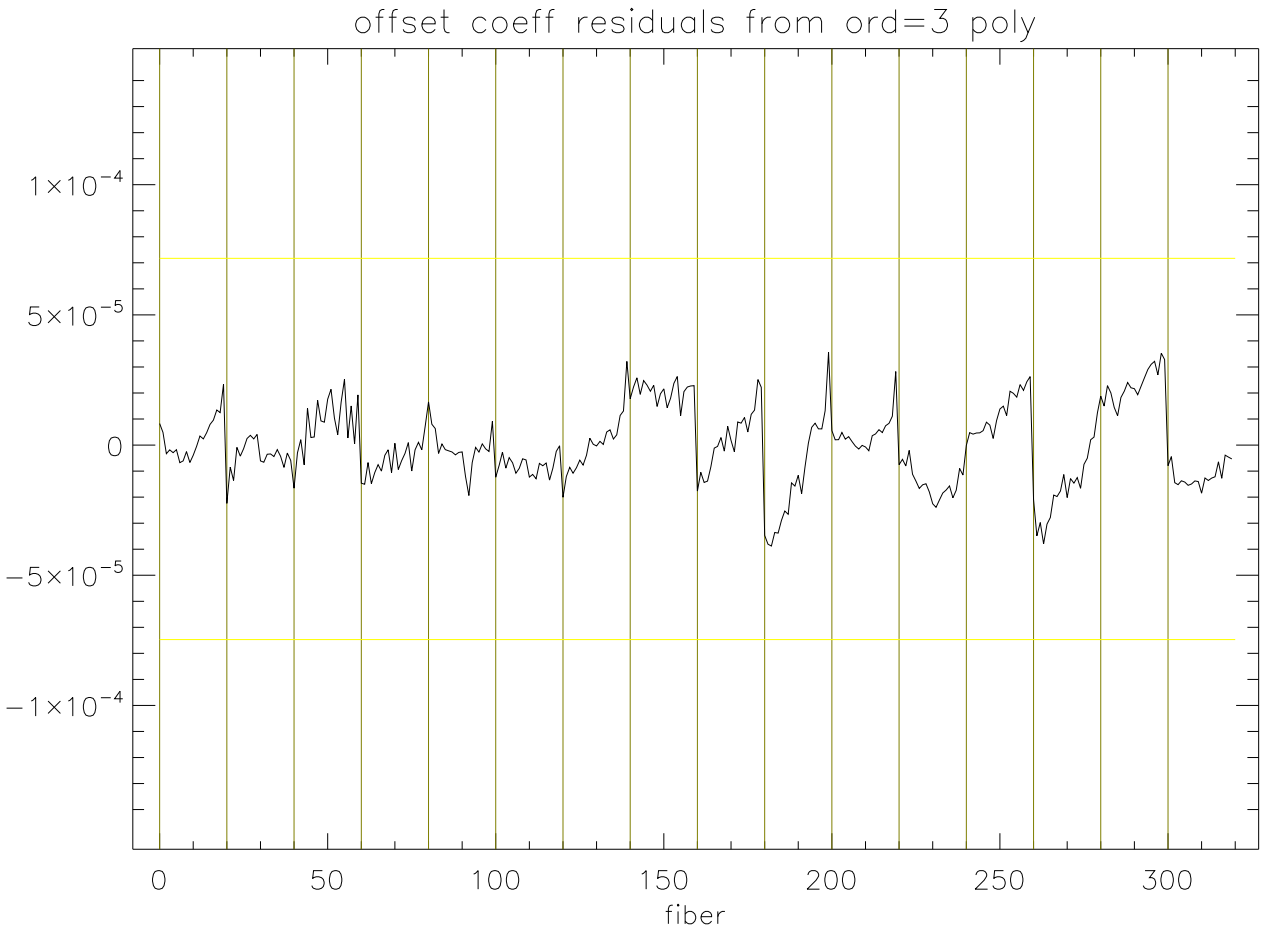

PLATE=2222 MJD=53797 sdR-b1-00037842.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

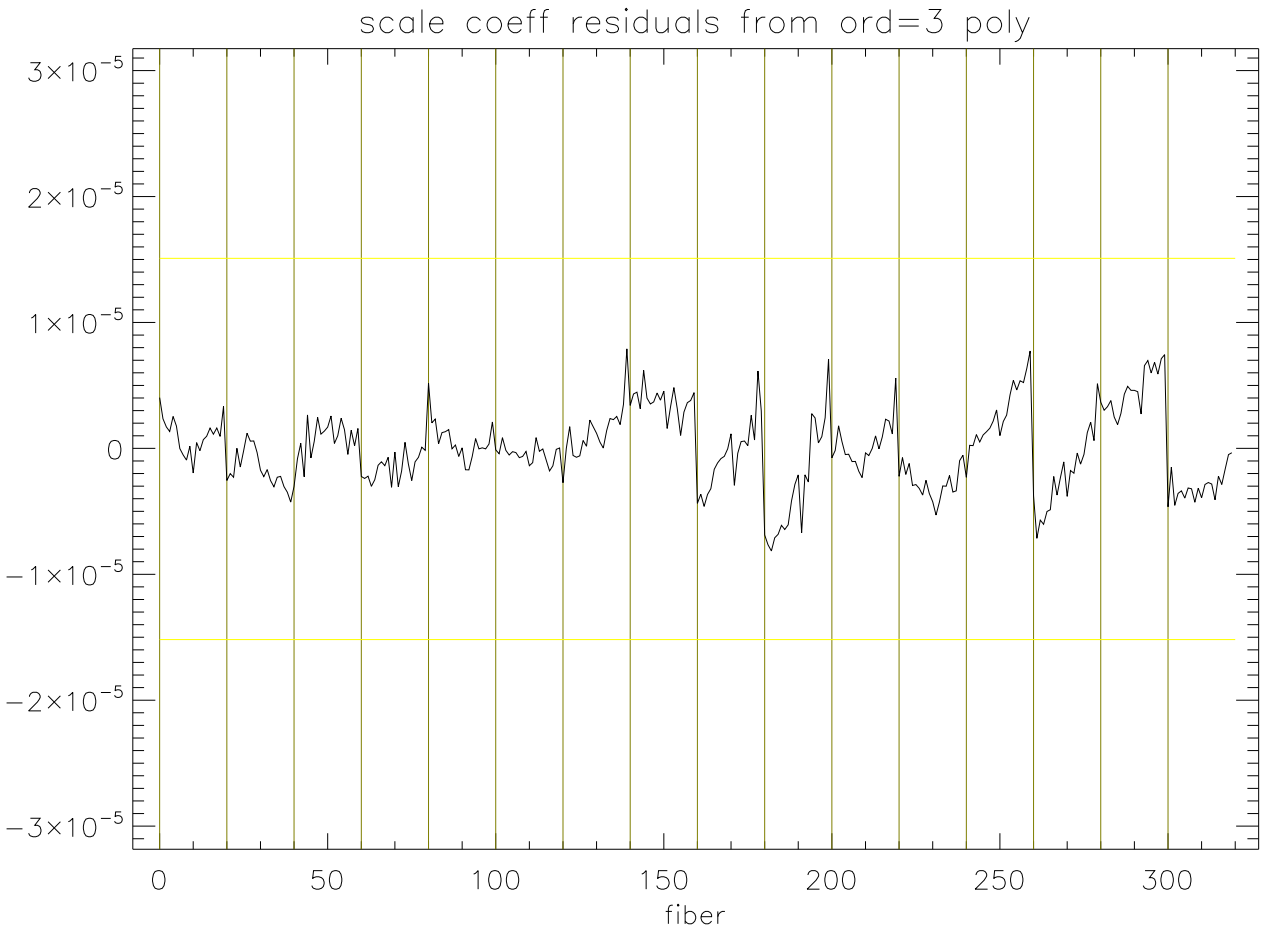

PLATE=2222 MJD=53797 sdR-b1-00037842.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

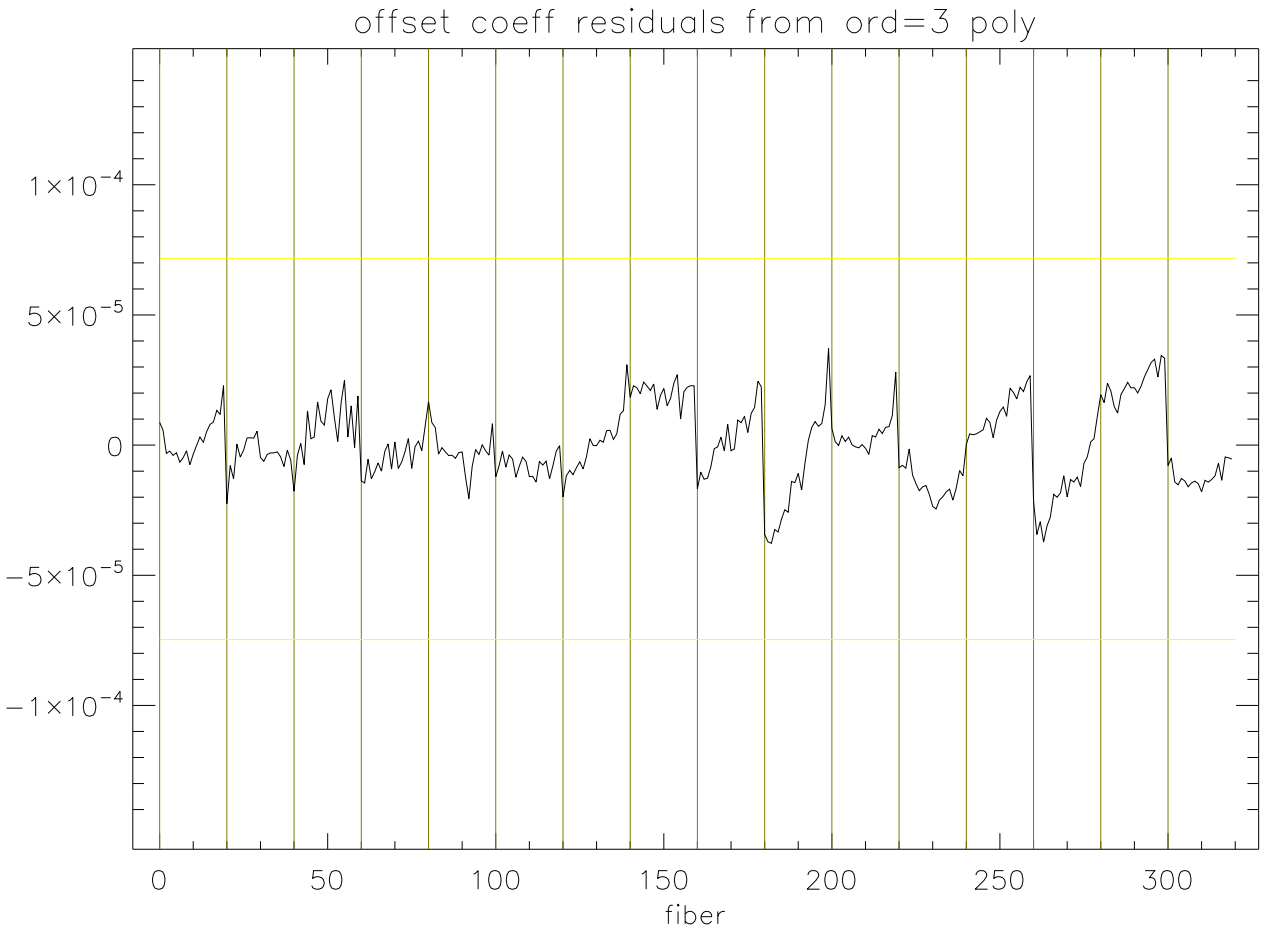

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b1-00037842.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

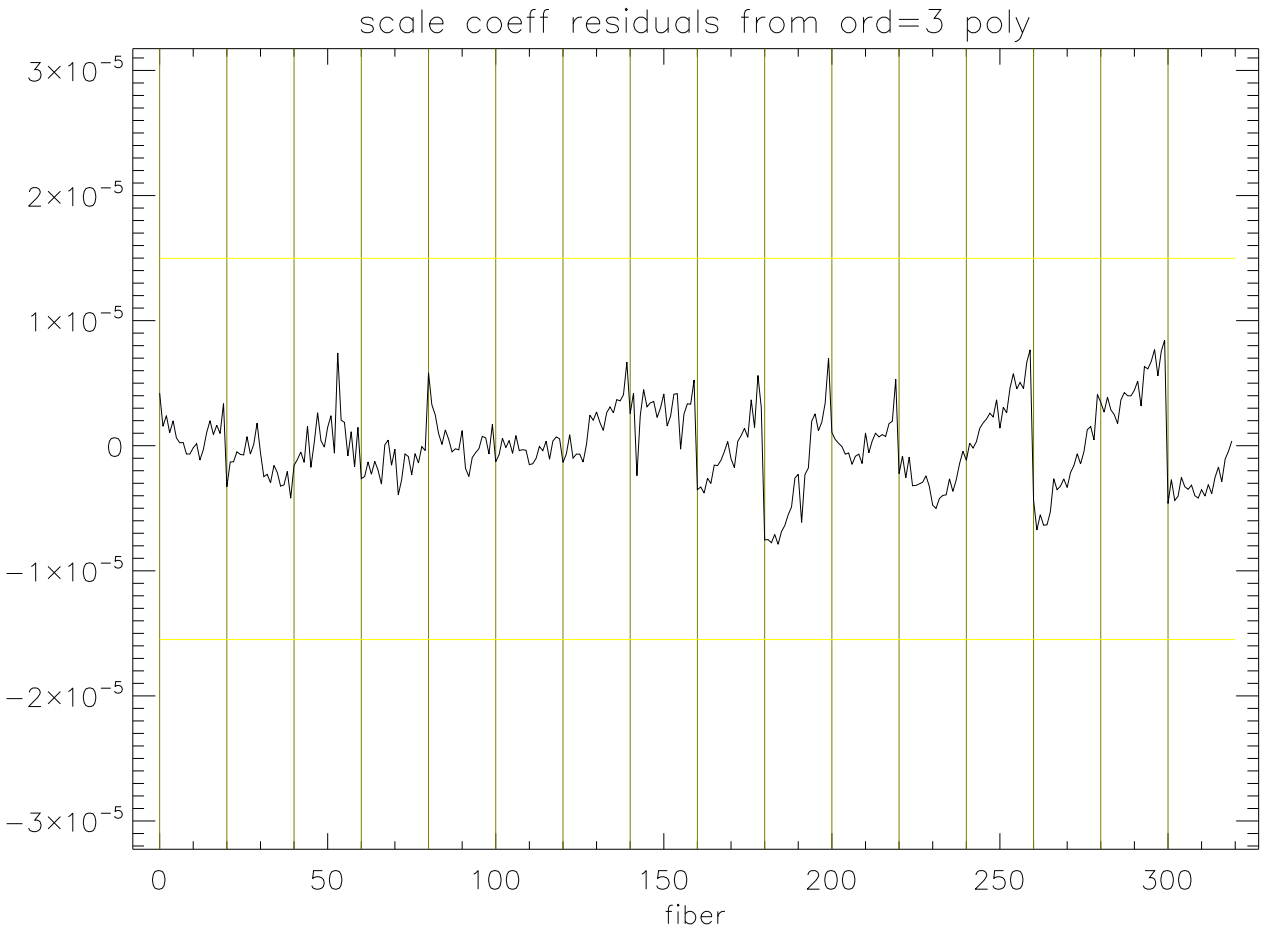

PLATE=2222 MJD=53797 sdR-b1-00037842.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.96 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

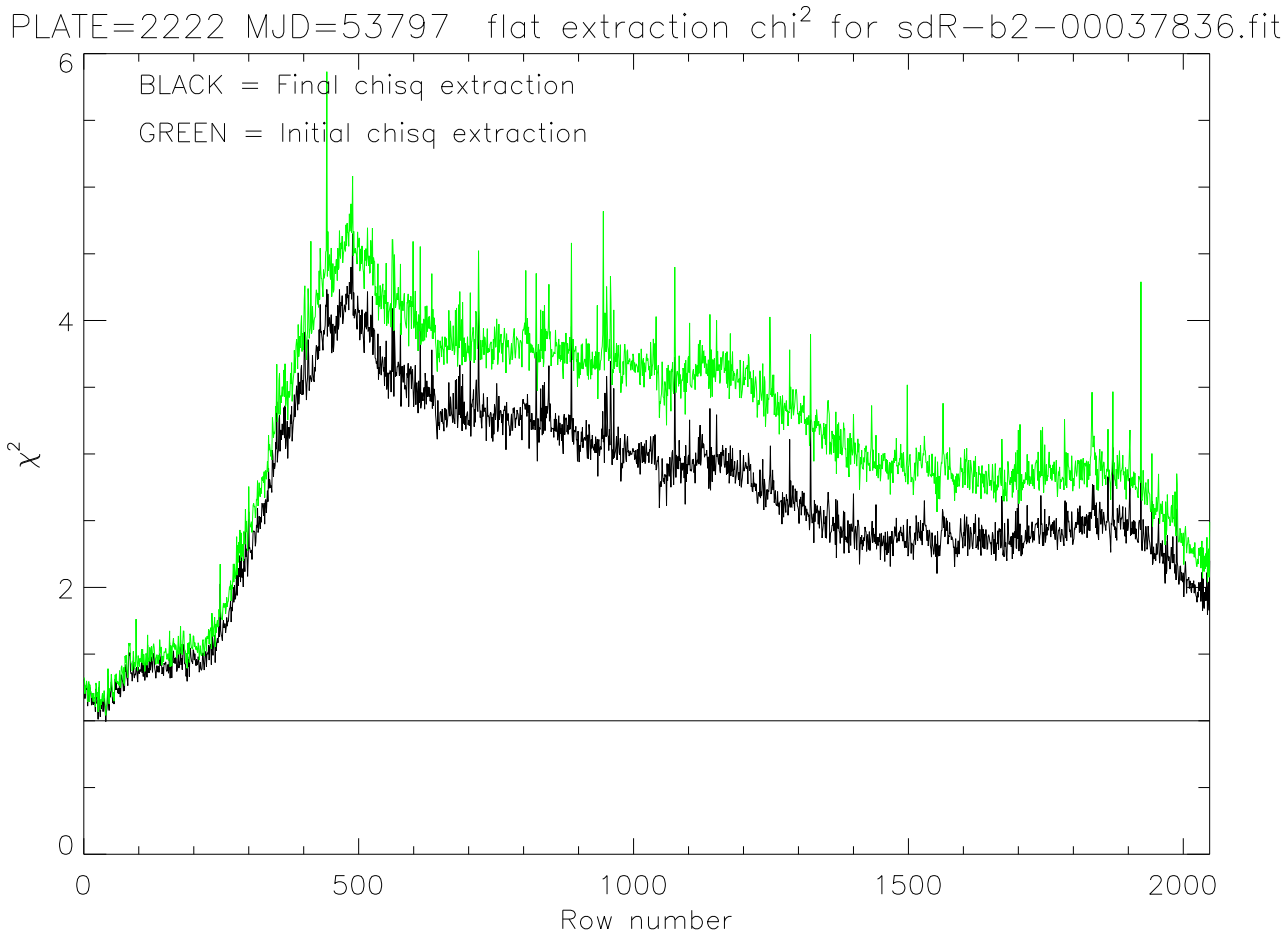

PLATE=2222 MJD=53797 sdR-b1-00037842.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.28 %
Flux (5578.9)/Airmass
Fiber number
Focal Distance [mm]
Airmass

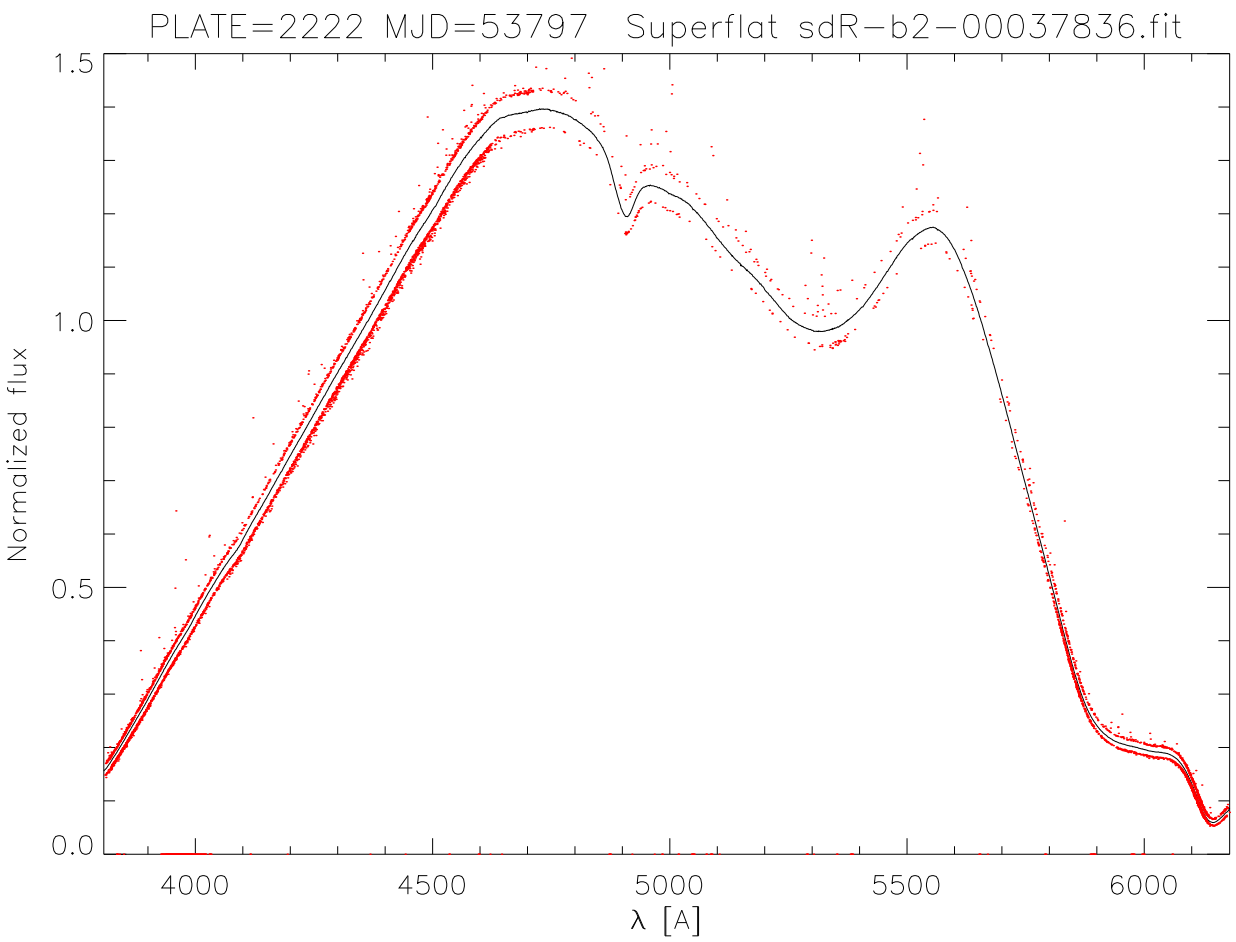

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

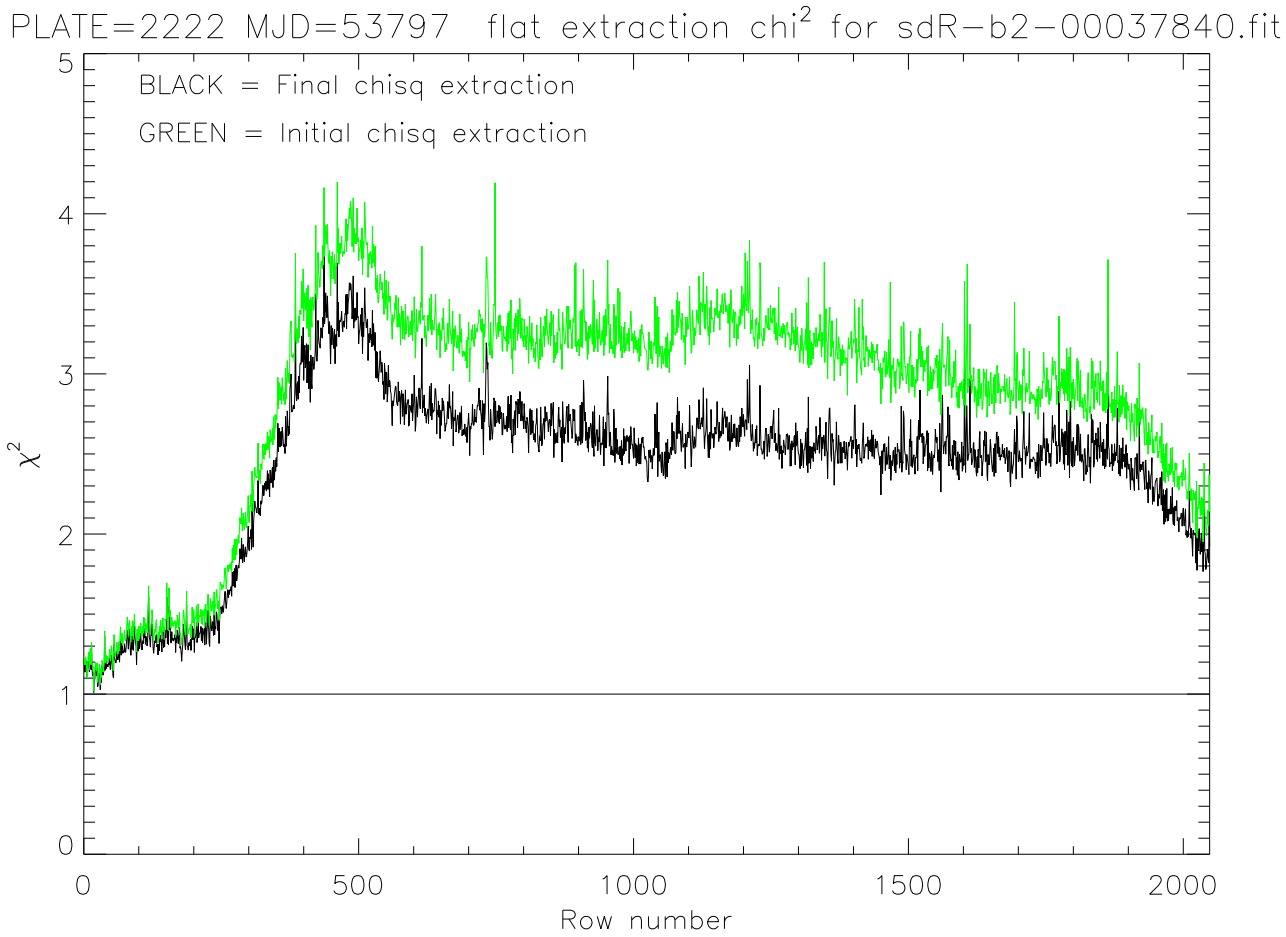

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

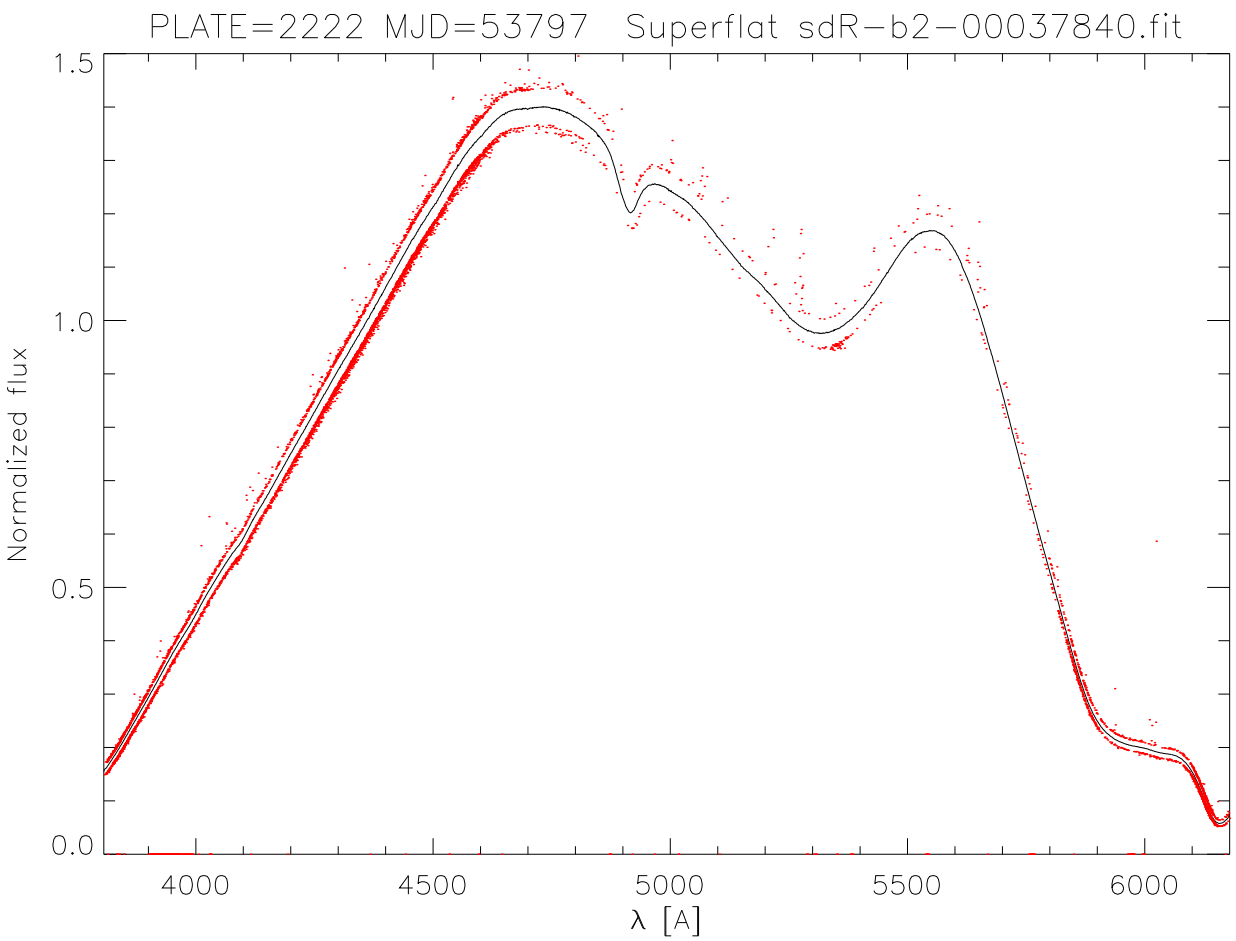

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

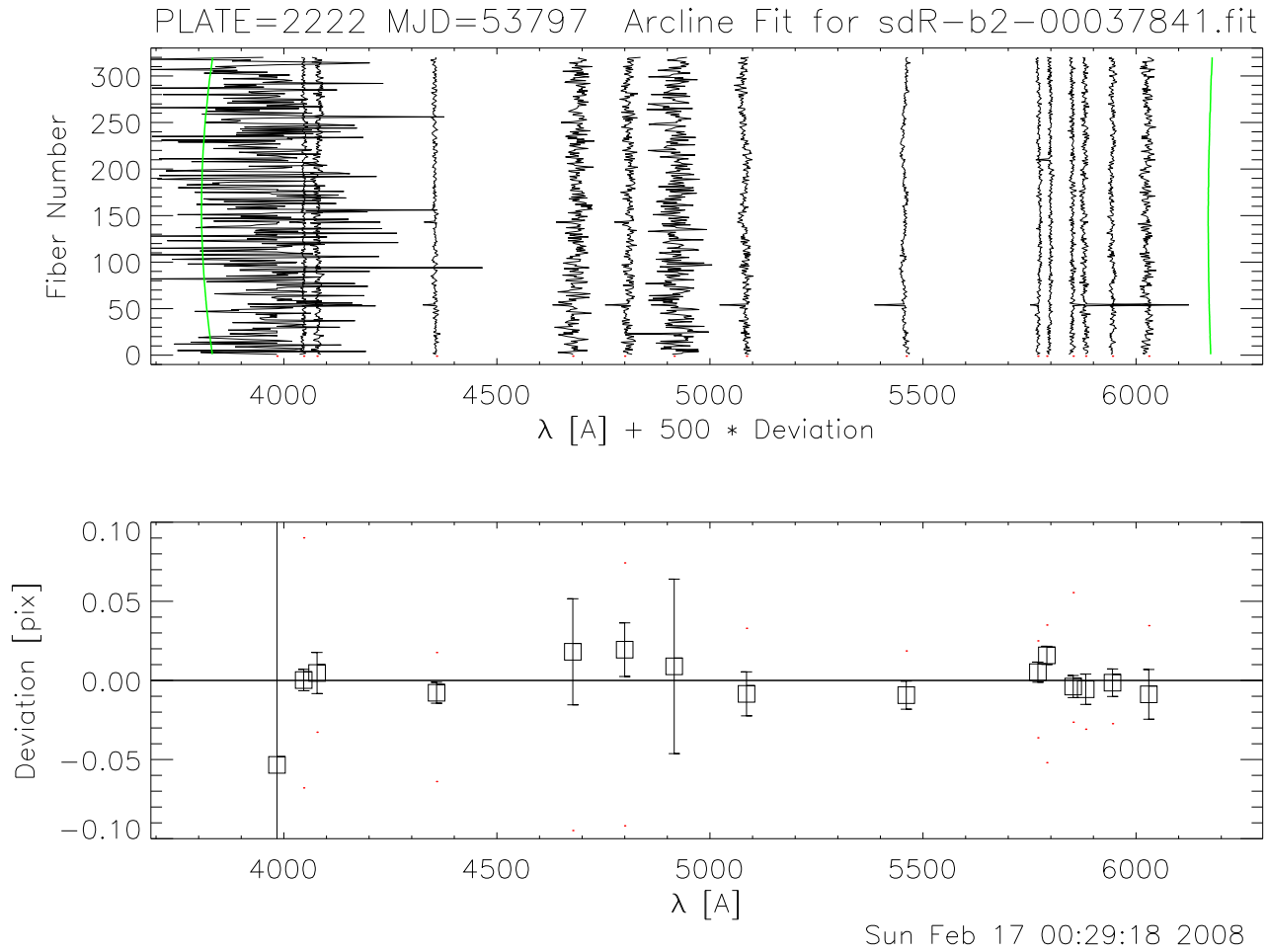

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

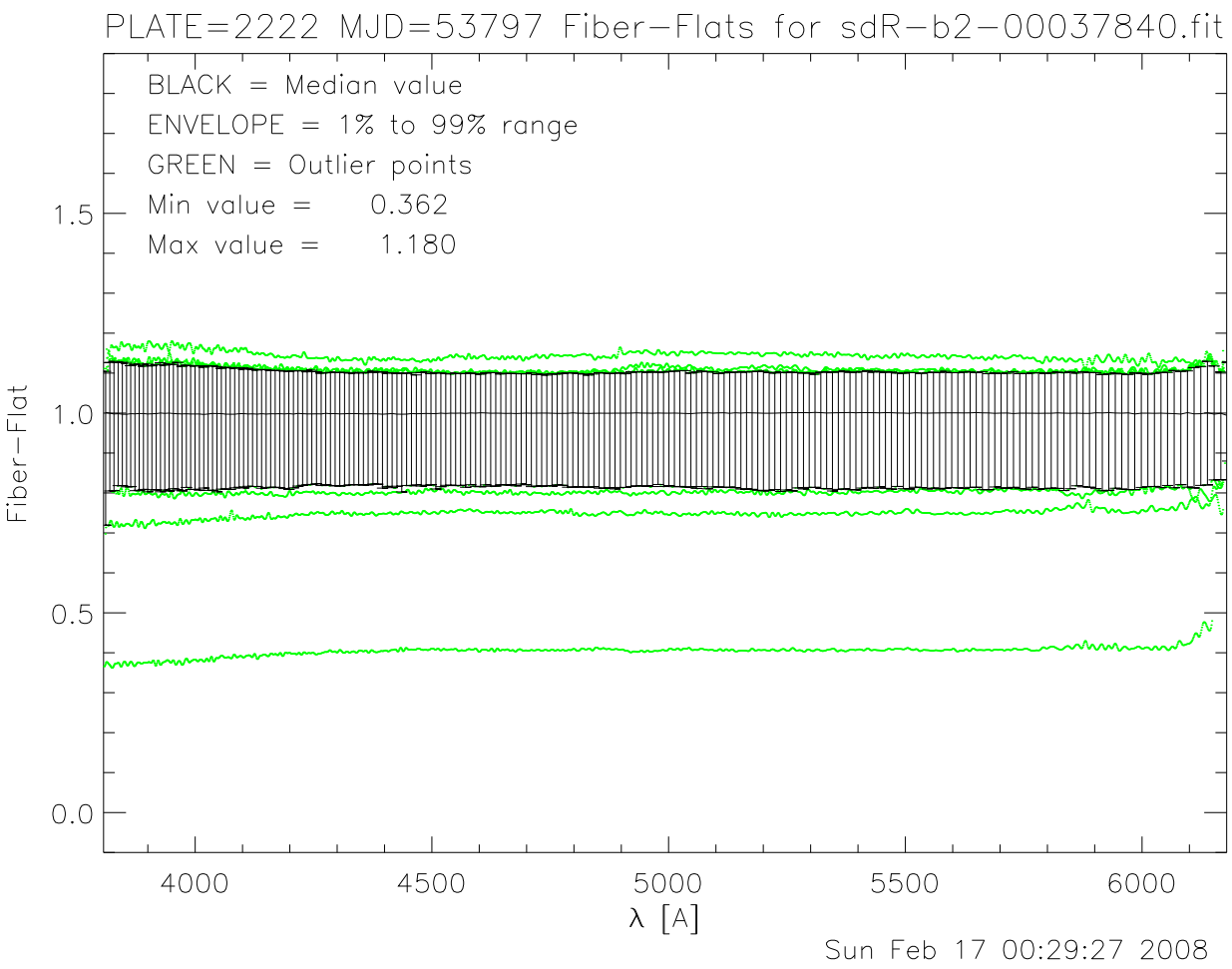

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR−b2−00037836.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

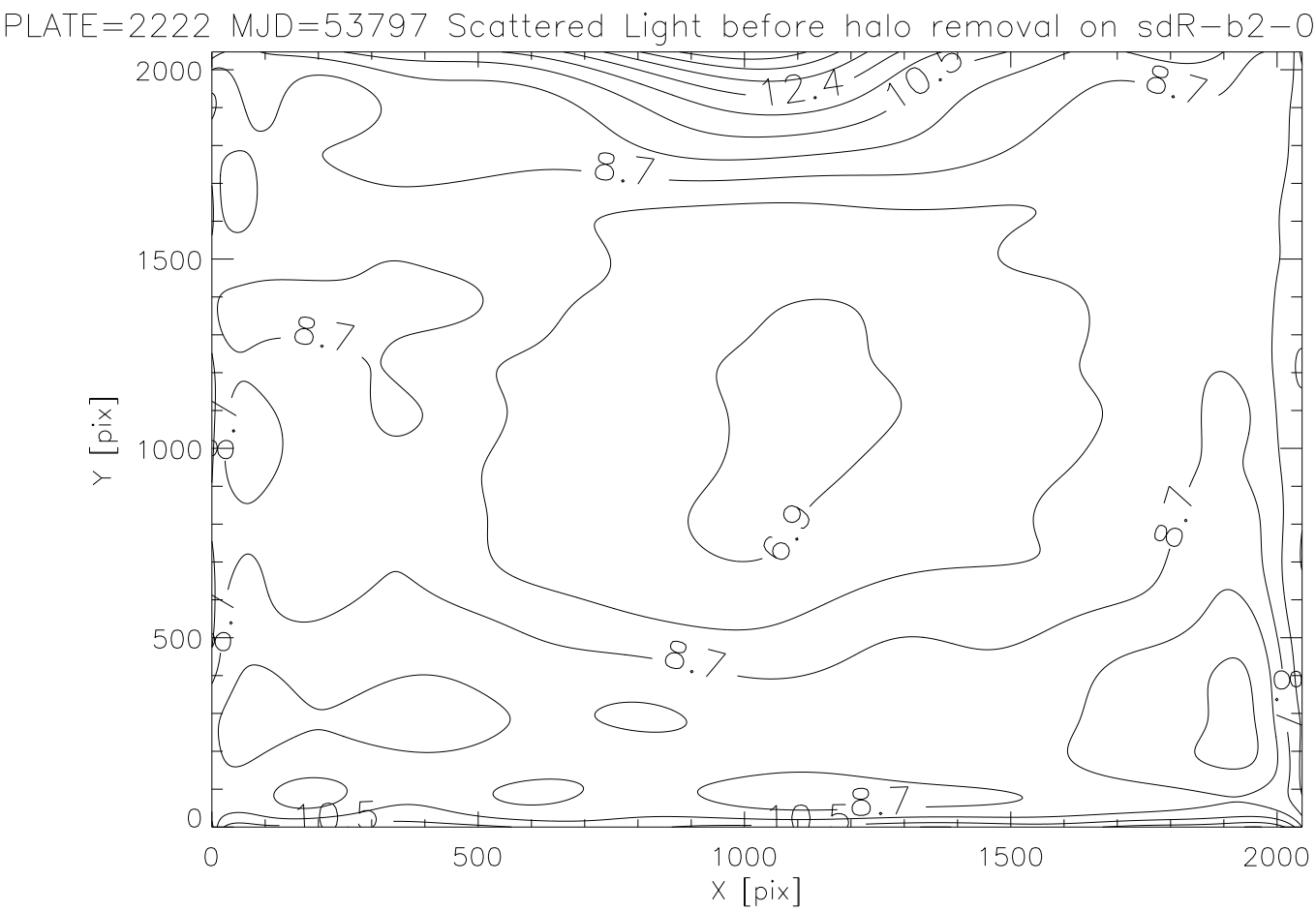

PLATE=2222 MJD=53797 Superflat sdR-b2-00037836.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

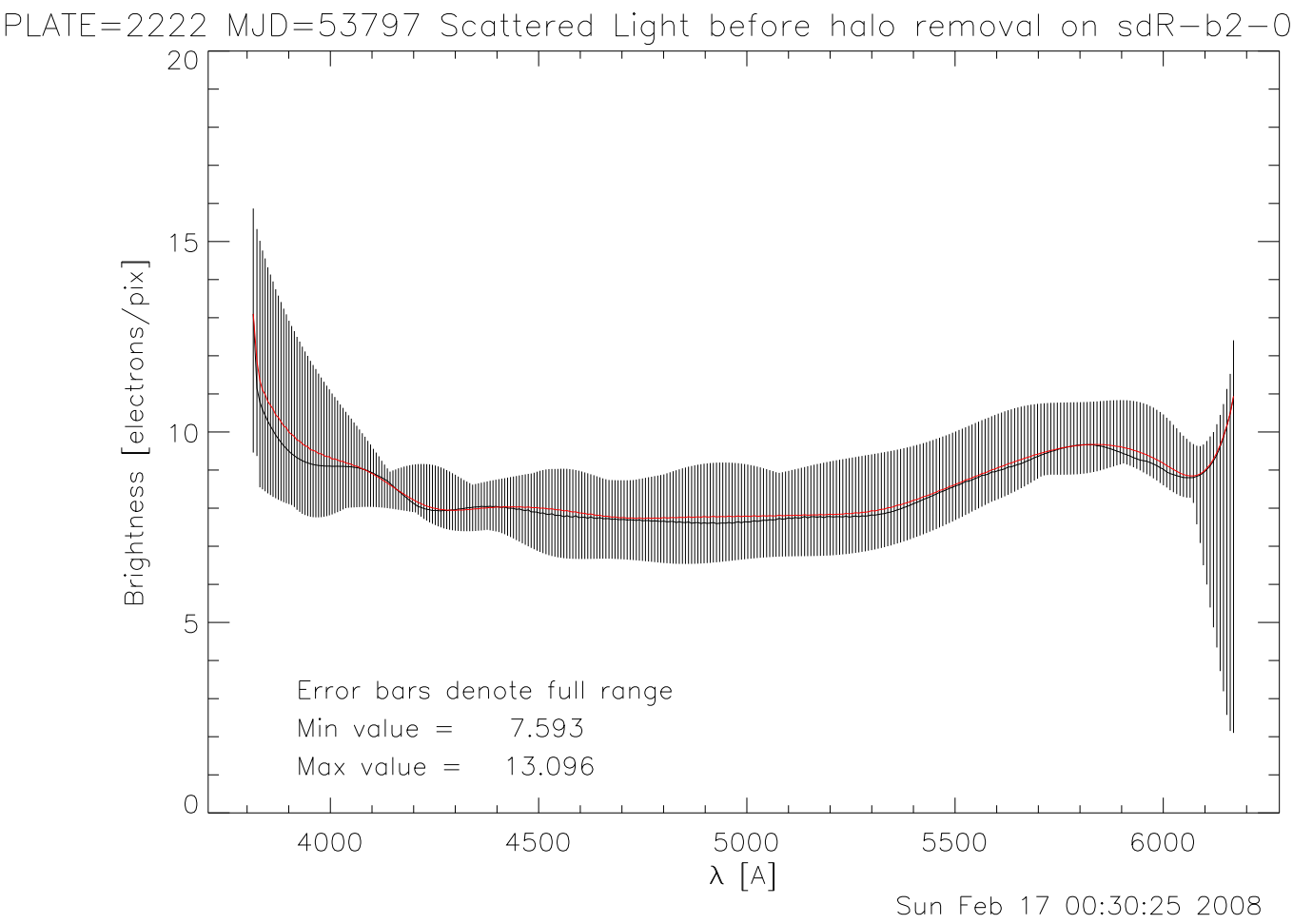

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR−b2−00037840.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
500
1000
1500
2000
1
2
3
4
5

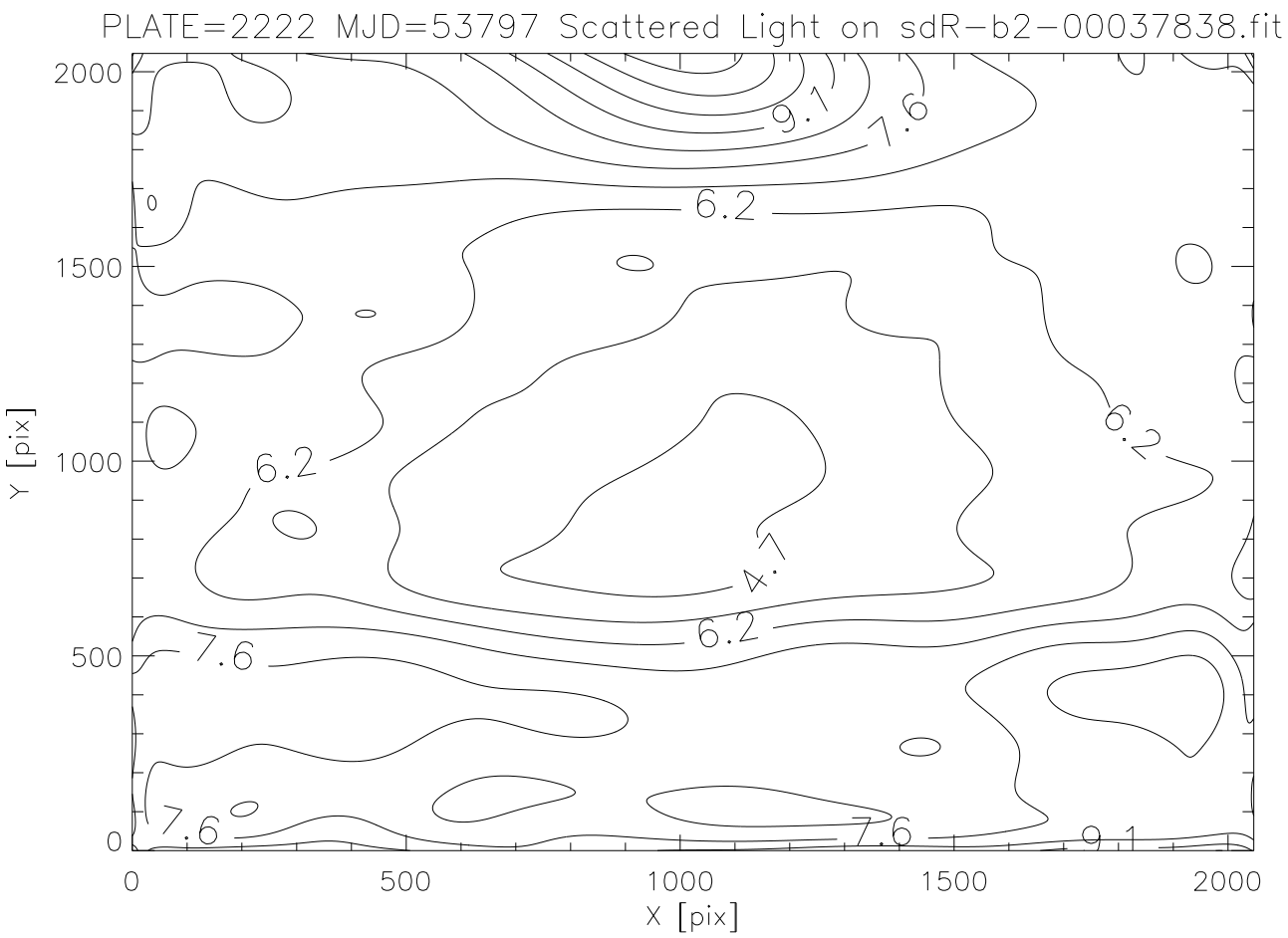

PLATE=2222 MJD=53797 Superflat sdR-b2-00037840.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

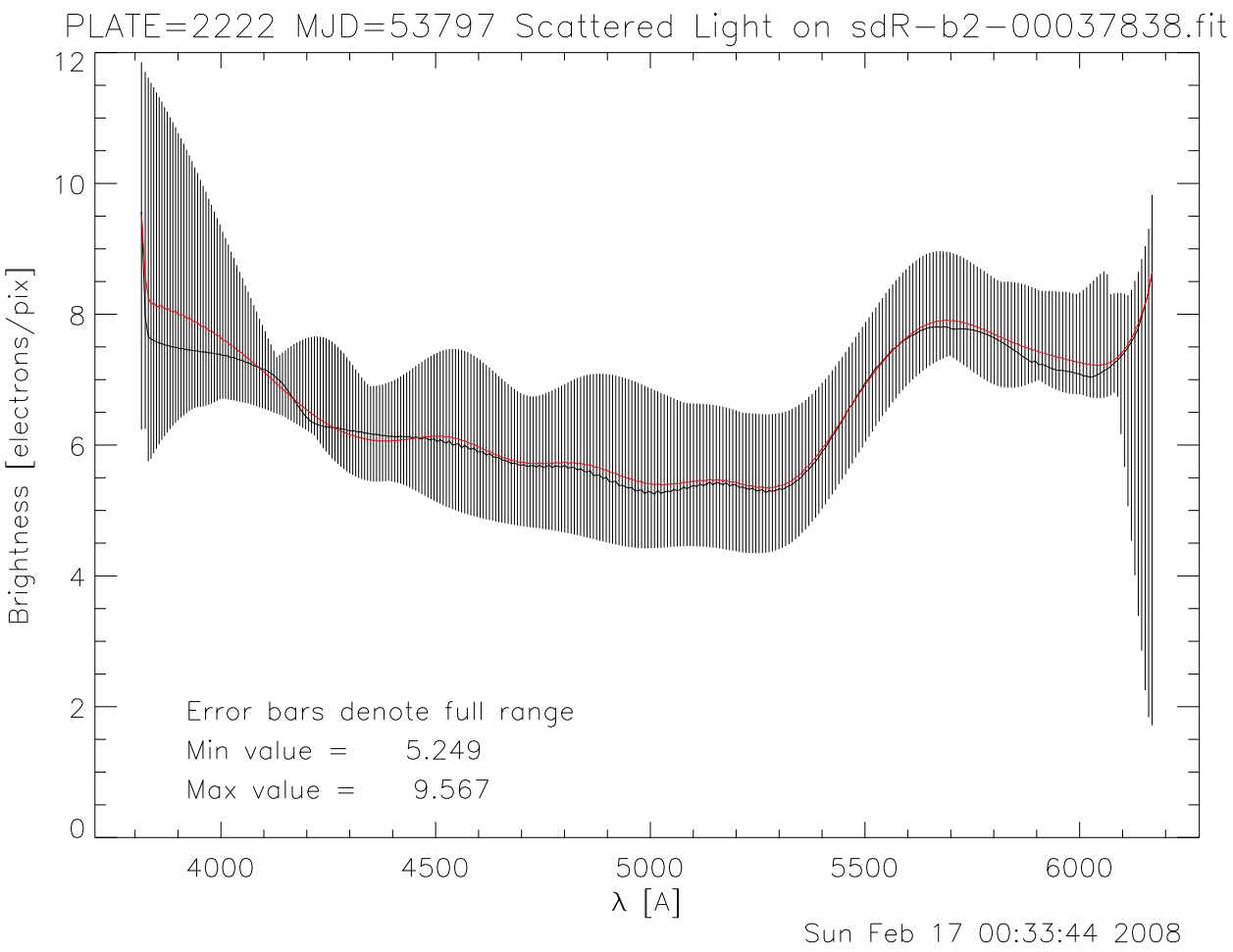

PLATE=2222 MJD=53797 Arcline Fit for sdR-b2-00037841.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:29:18 2008

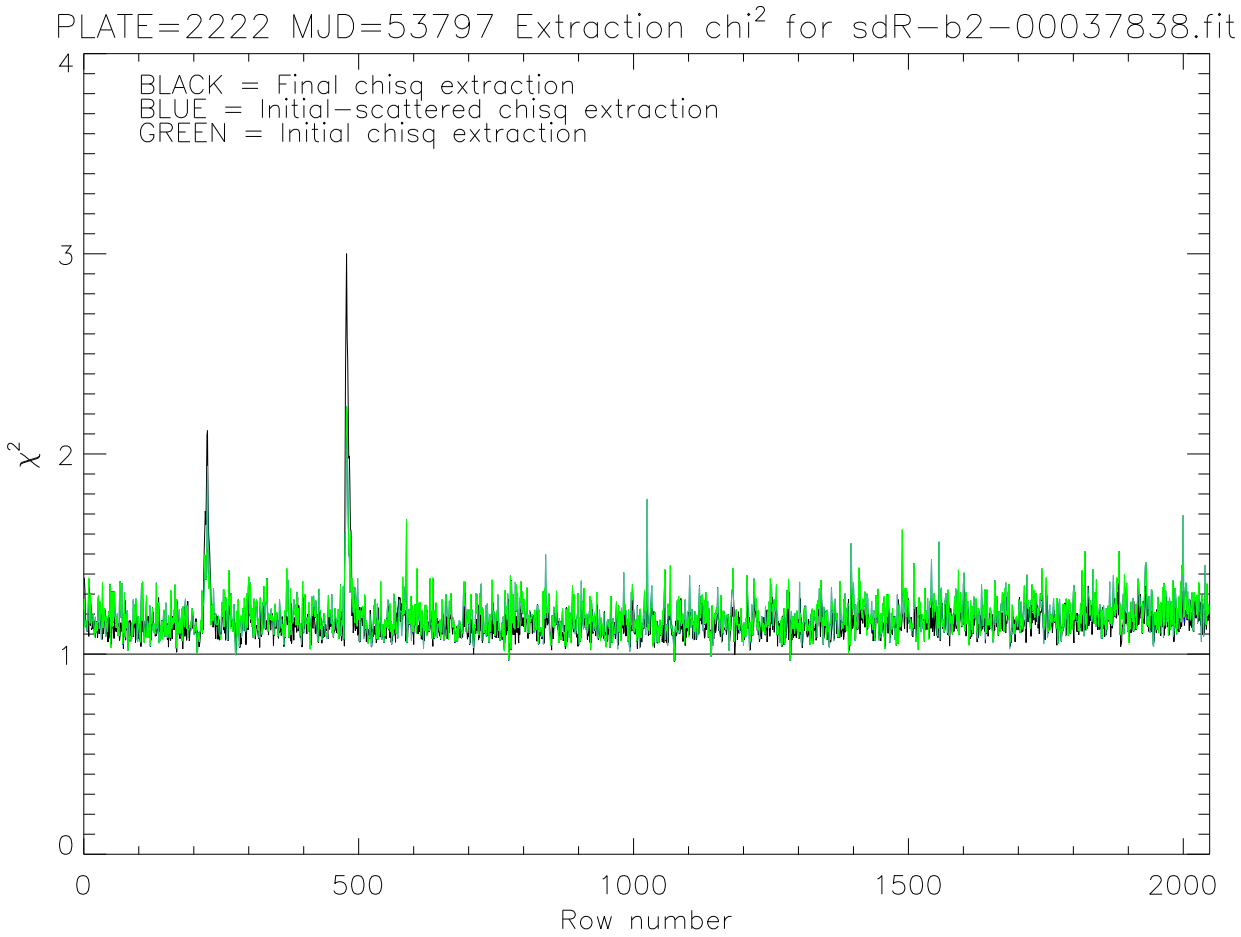

PLATE=2222 MJD=53797 Fiber−Flats for sdR−b2−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.362
Max value = 1.180
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:29:27 2008

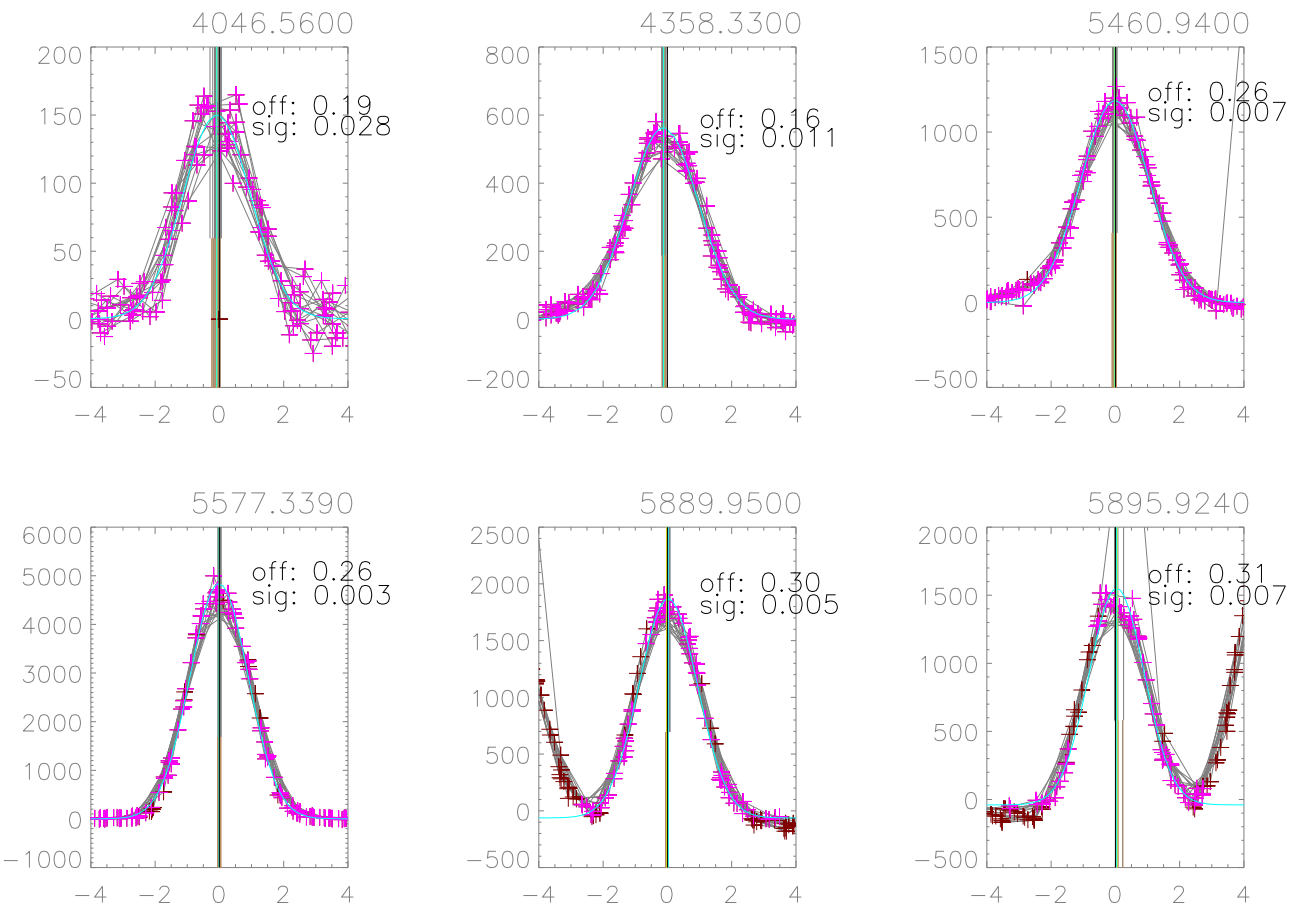

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR−b2−00037838.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
12.4
10.5
8.7
8.7
8.7
6.9
8.7
8.7
10.5
10.5
8.7

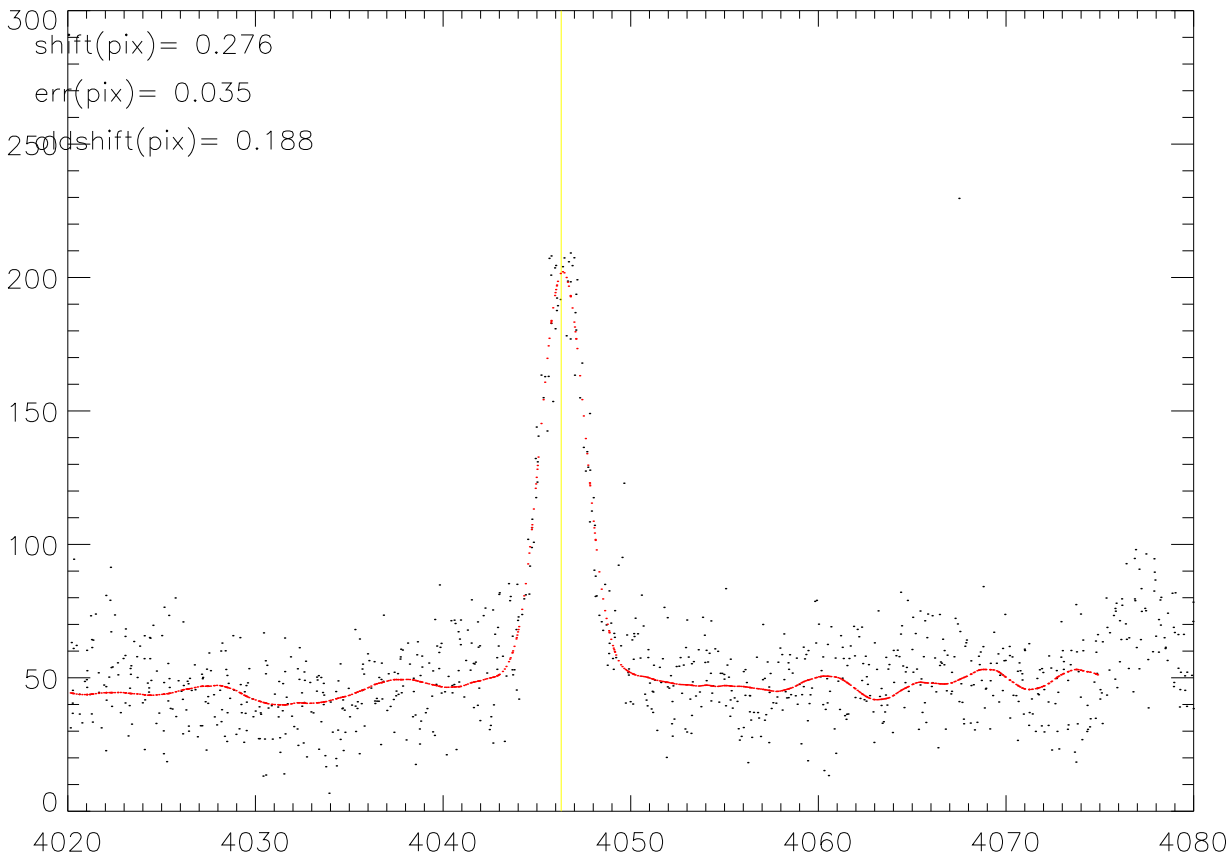

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR−b2−00037838.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 7.593
Max value = 13.096
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:30:25 2008

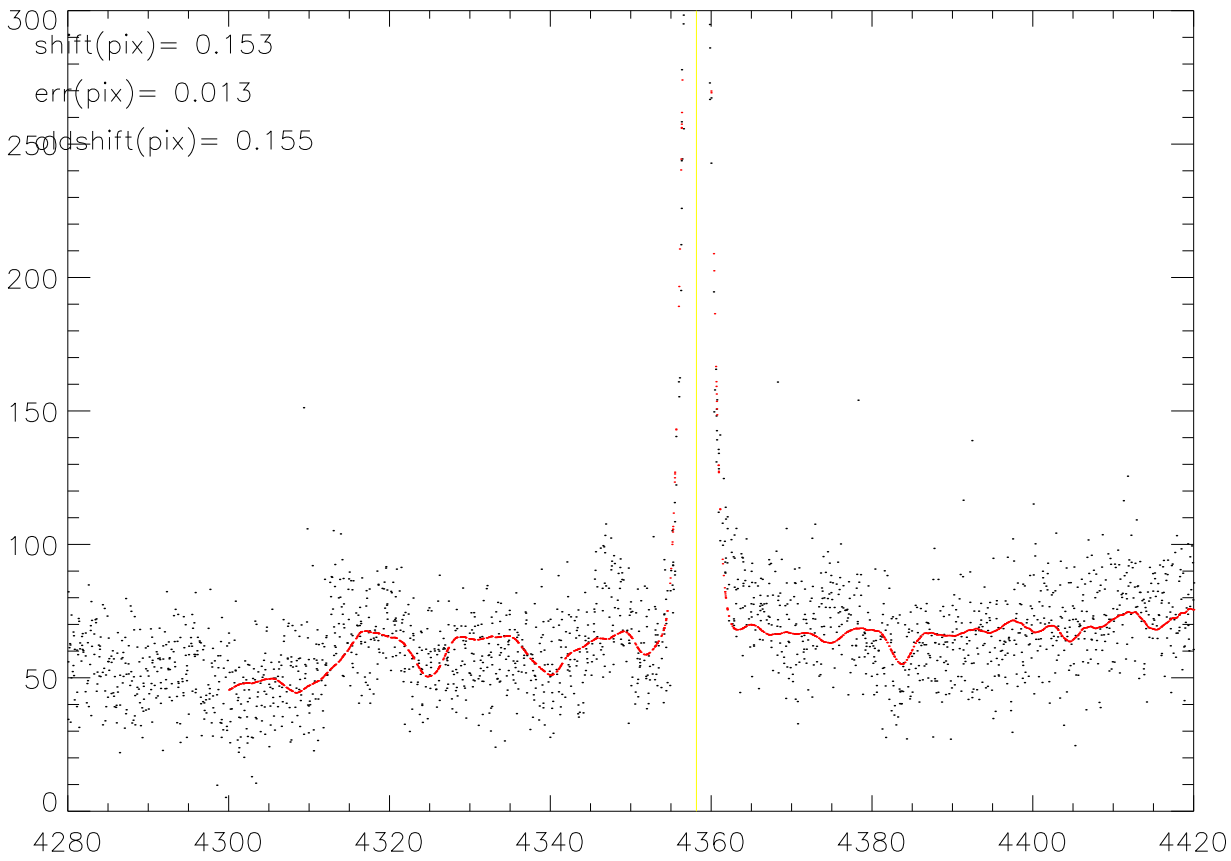

PLATE=2222 MJD=53797 Scattered Light on sdR-b2-00037838.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
7.6
6.2
6.2
6.2
4.7
6.2
7.6
7.6
7.6
9.1

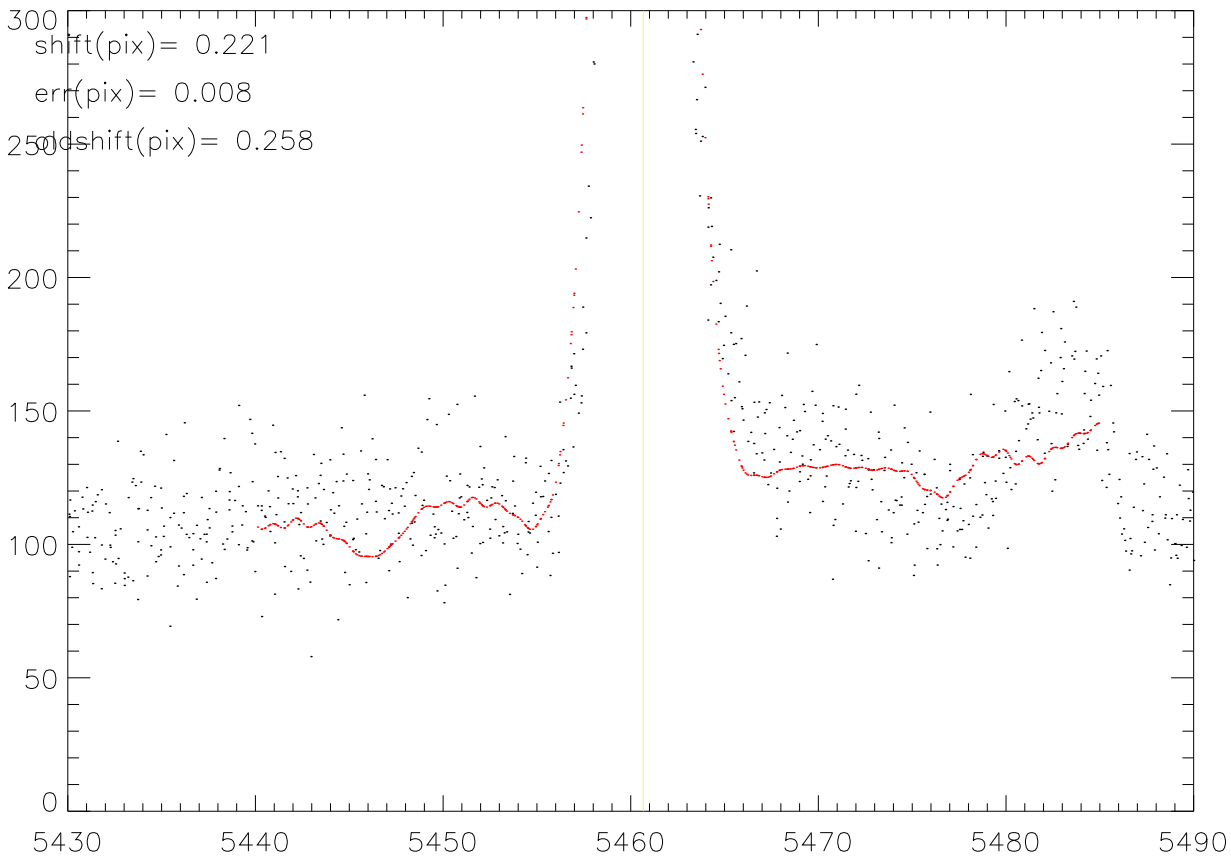

PLATE=2222 MJD=53797 Scattered Light on sdR-b2-00037838.fit
Brightness [electrons/pix]
12
10
8
6
4
2
0
Error bars denote full range
Min value = 5.249
Max value = 9.567
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:33:44 2008

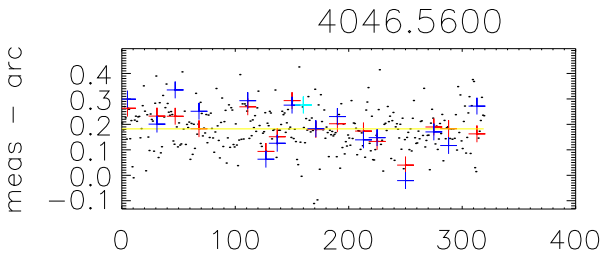

PLATE=2222 MJD=53797 Extraction chi^2 for sdR-b2-00037838.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

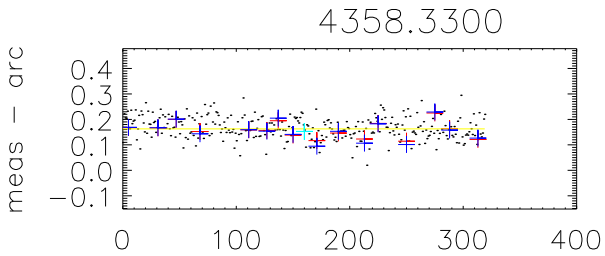

4046.5600
off: 0.19
sig: 0.028
4358.3300
off: 0.16
sig: 0.011
5460.9400
off: 0.26
sig: 0.007
5577.3390
off: 0.26
sig: 0.003
5889.9500
off: 0.30
sig: 0.005
5895.9240
off: 0.31
sig: 0.007

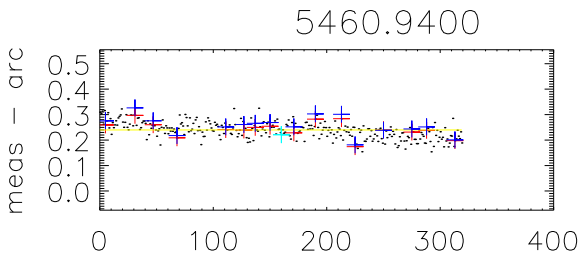

shift(pix)= 0.276
err(pix)= 0.035
oldshift(pix)= 0.188
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

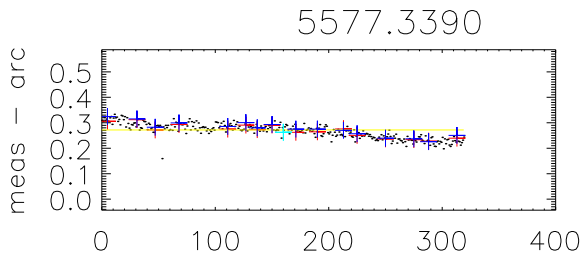

shift(pix)= 0.153
err(pix)= 0.013
oldshift(pix)= 0.155
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

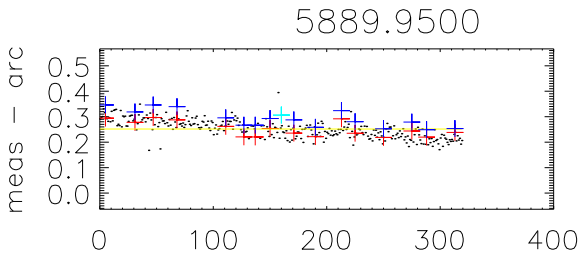

shift(pix)= 0.221
err(pix)= 0.008
oldshift(pix)= 0.258
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

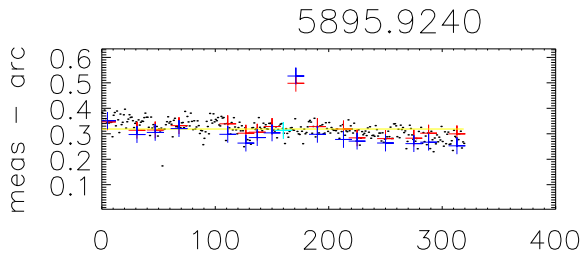

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

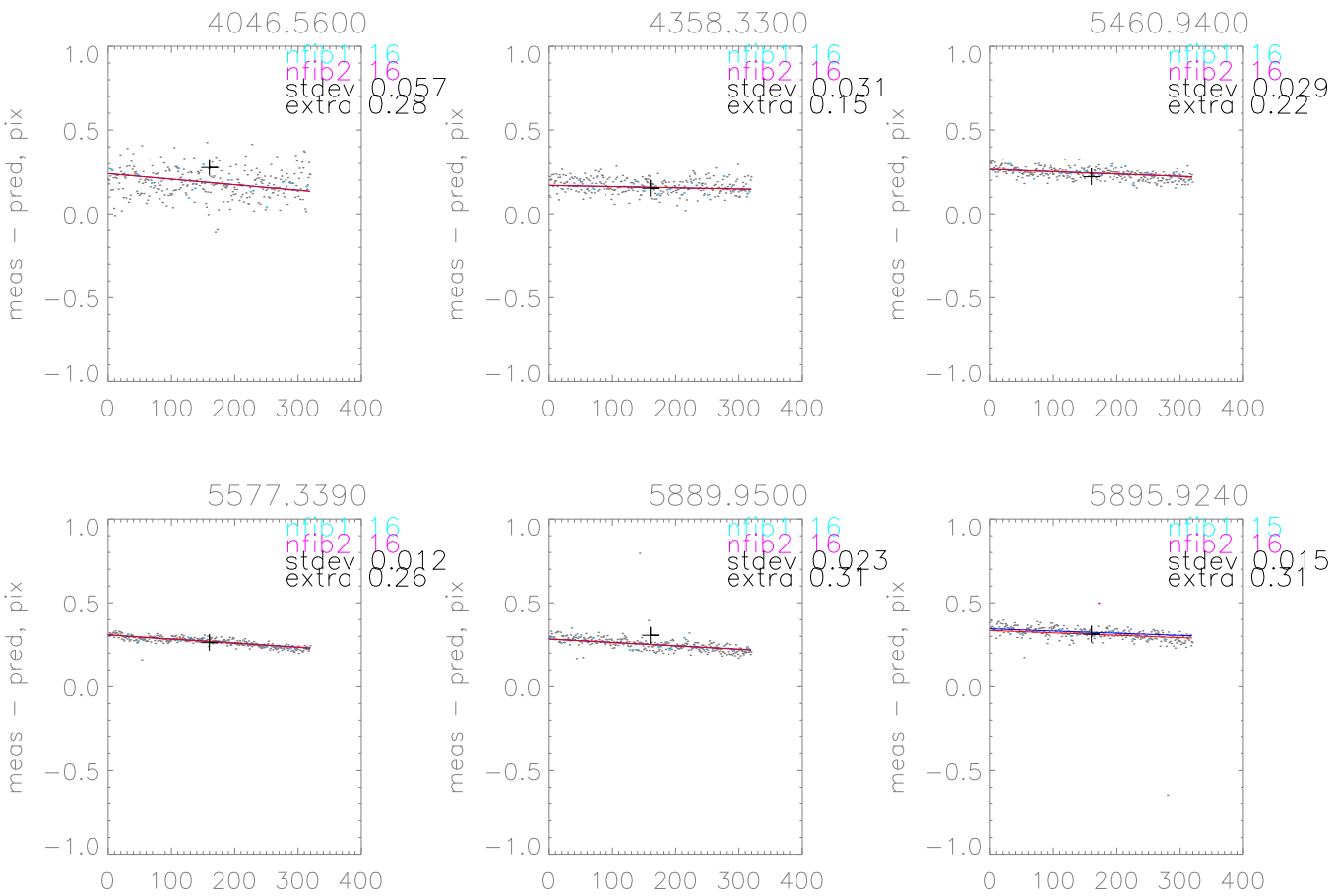

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

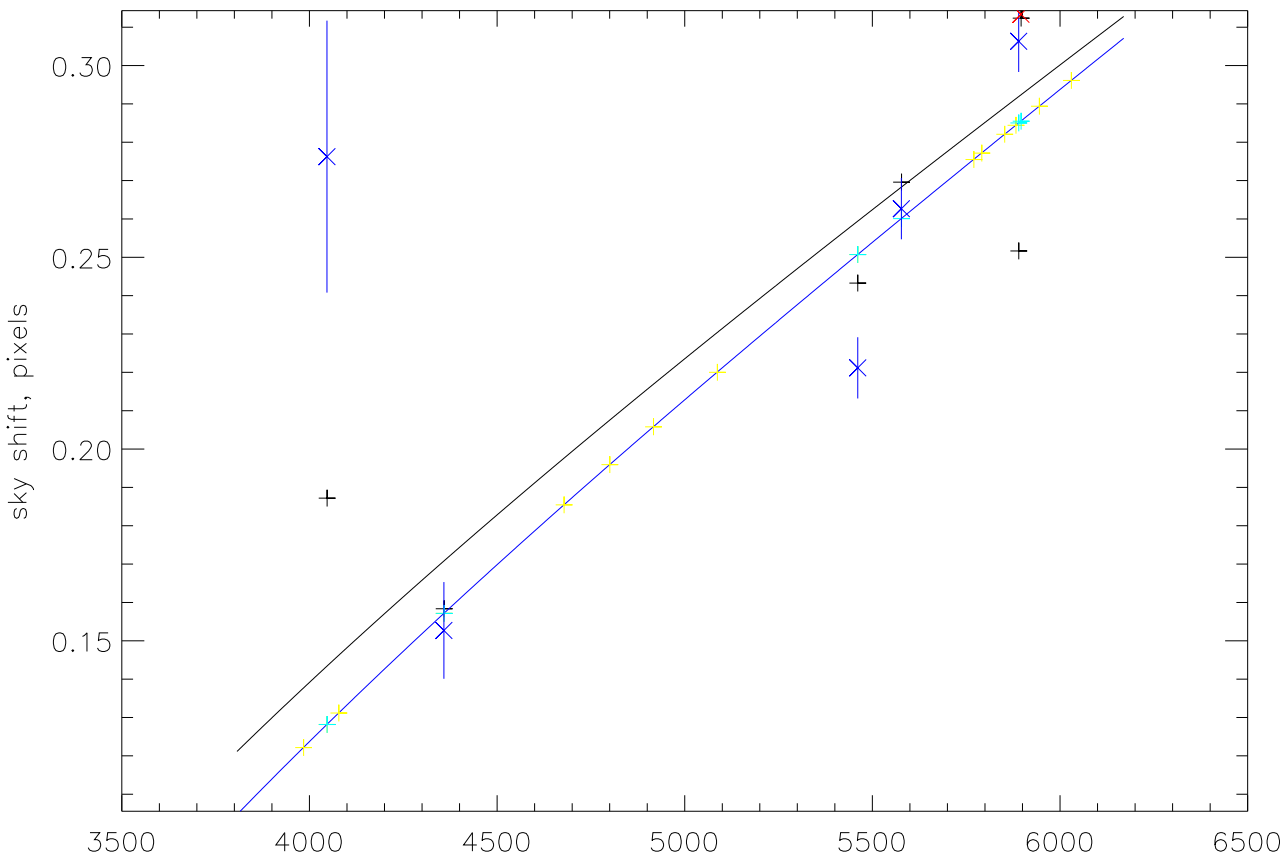

5460.9400
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

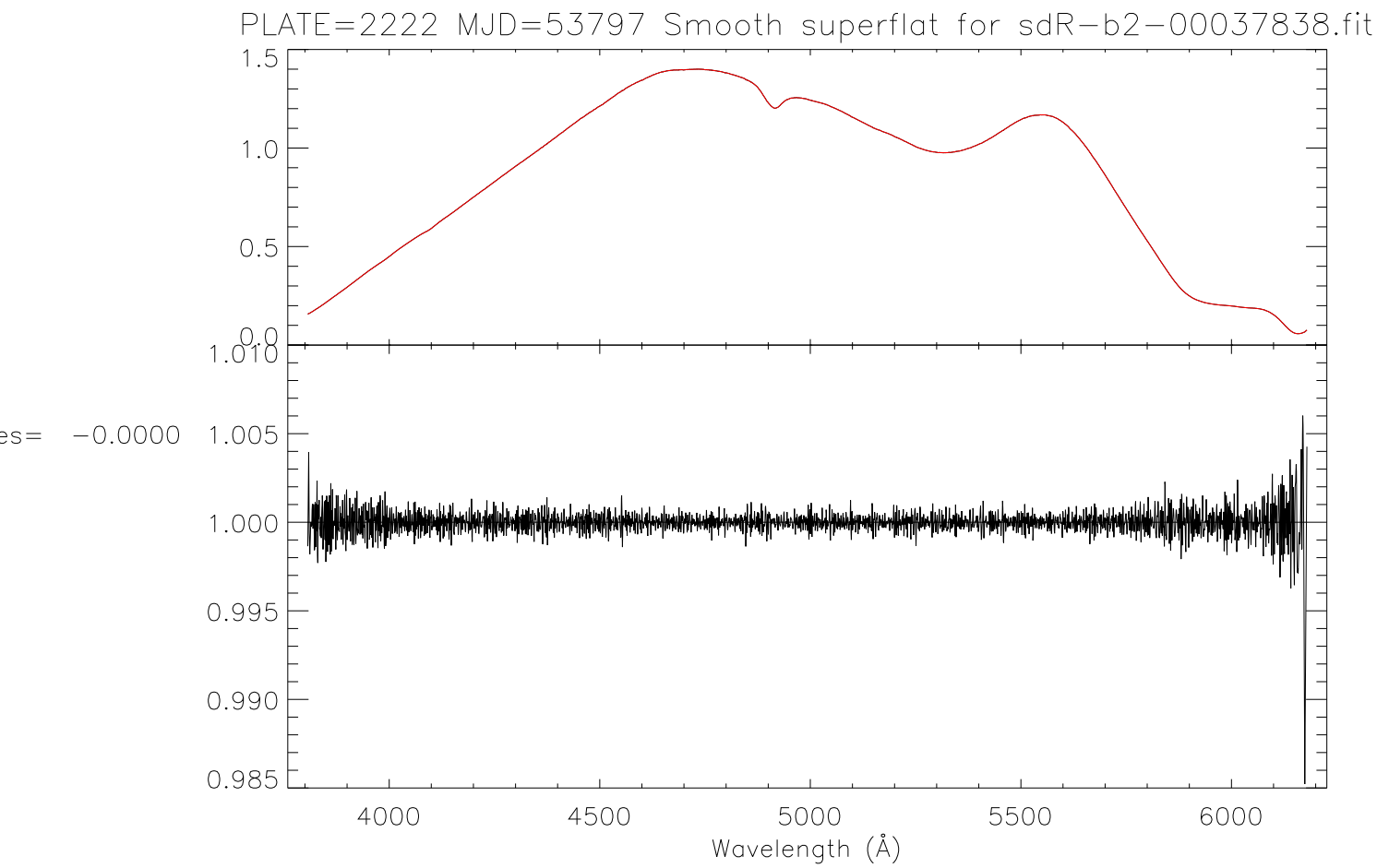

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

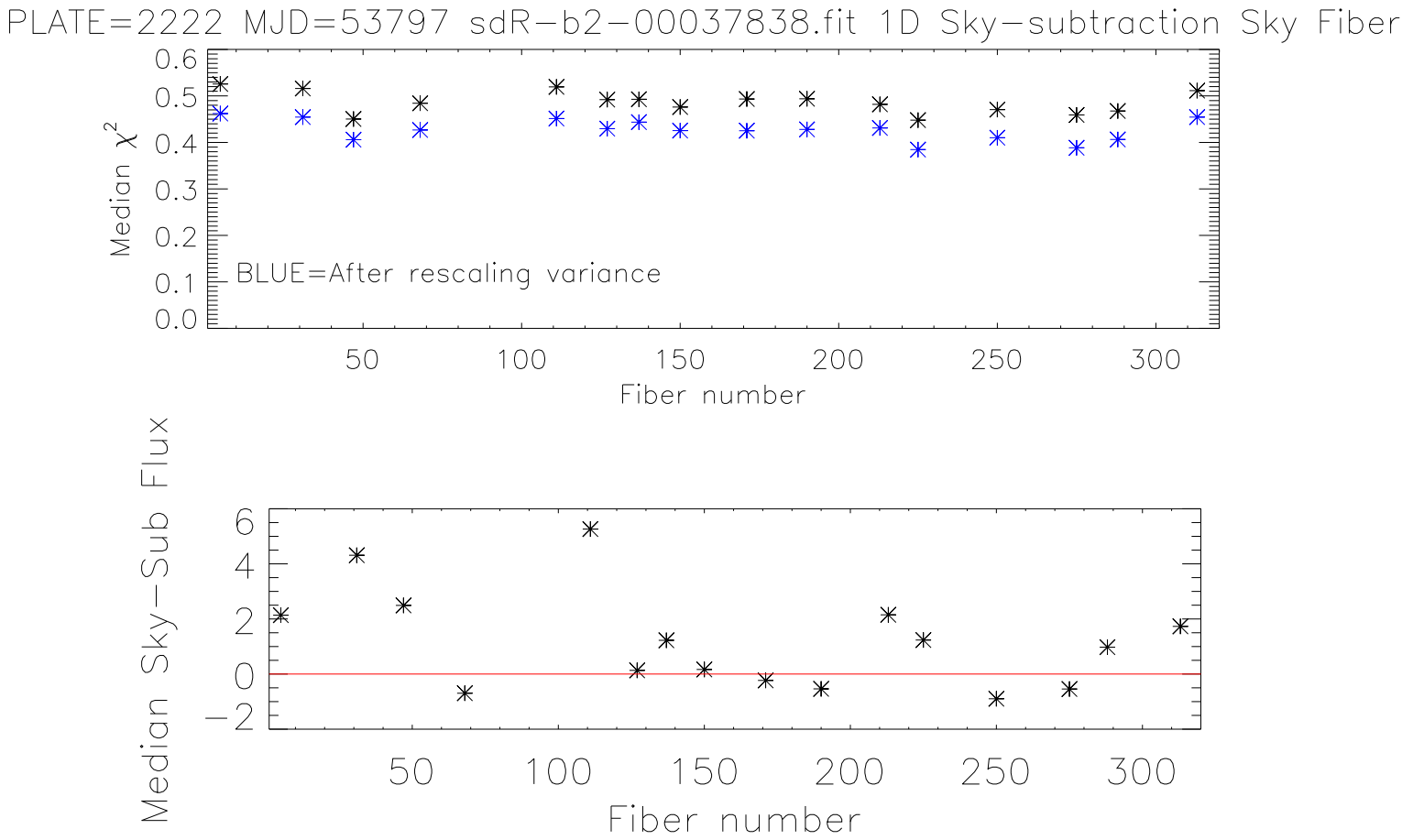

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

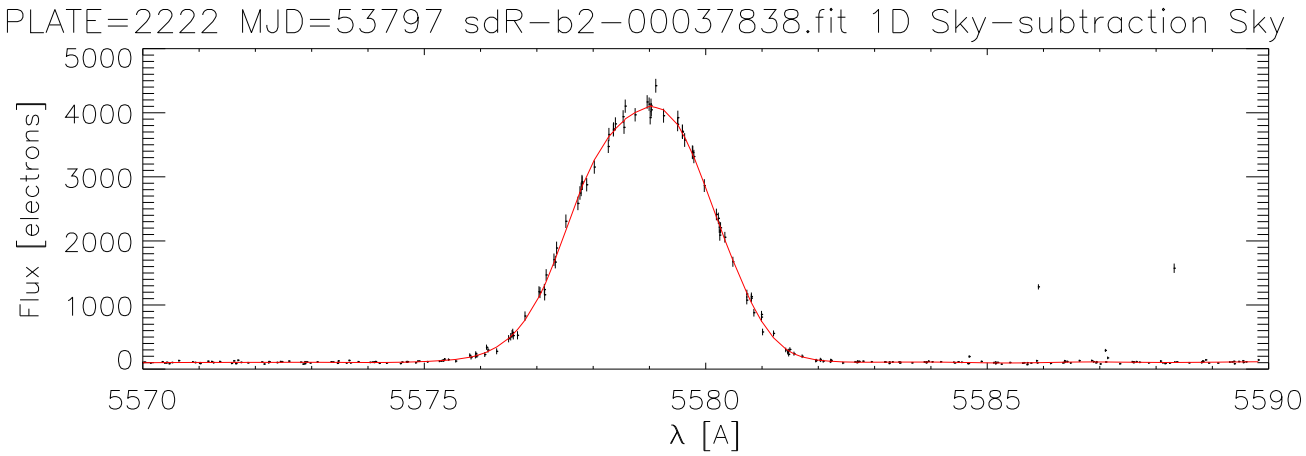

5895.9240
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

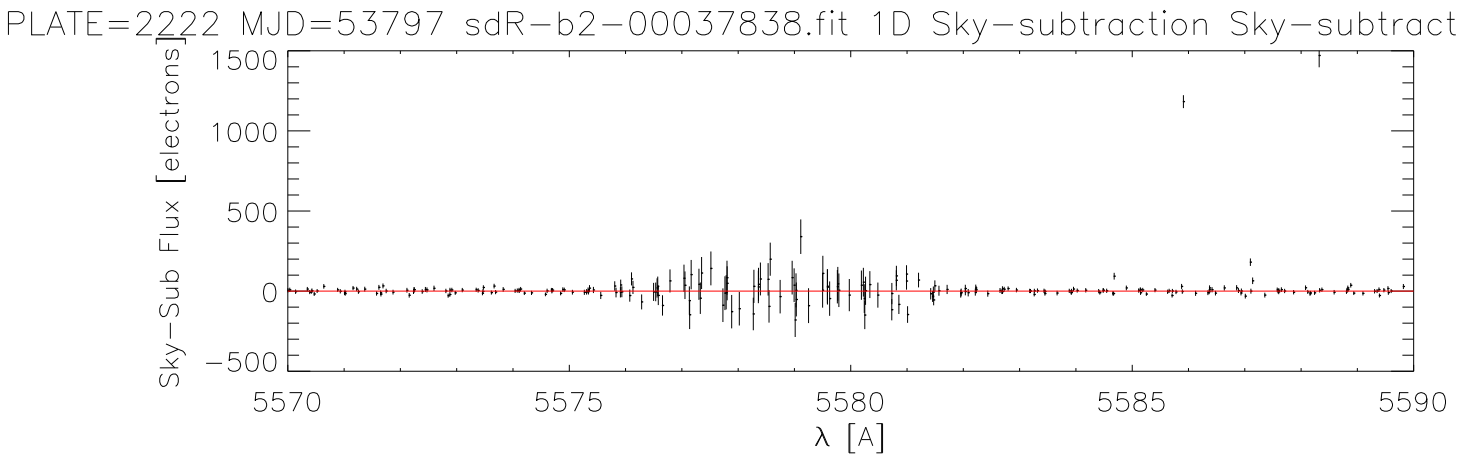

4046.5600
nfib1 16
nfib2 16
stdev 0.057
extra 0.28
4358.3300
nfib1 16
nfib2 16
stdev 0.031
extra 0.15
5460.9400
nfib1 16
nfib2 16
stdev 0.029
extra 0.22
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.26
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.31
5895.9240
nfib1 15
nfib2 16
stdev 0.015
extra 0.31
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

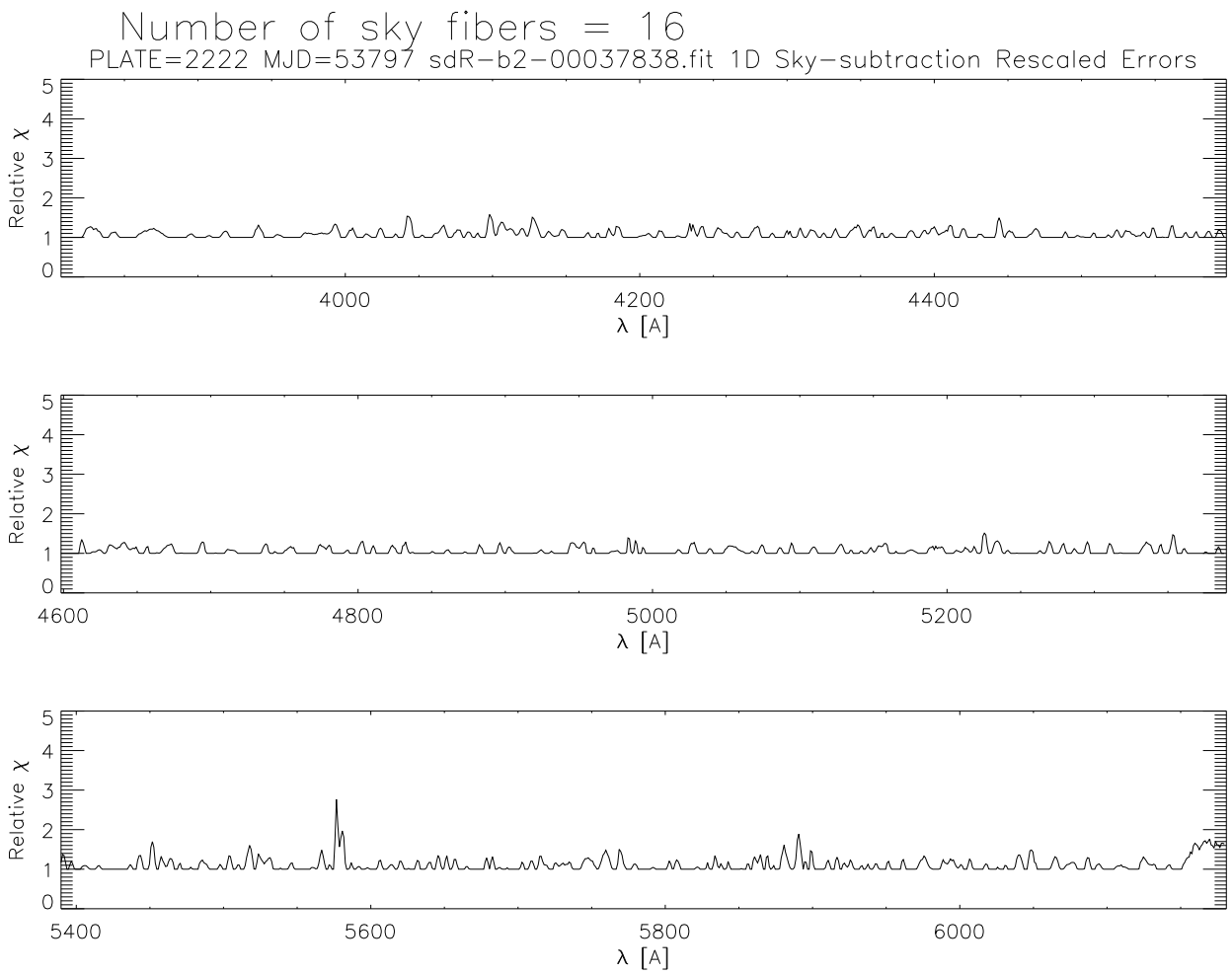

sky shift, pixels
0.30
0.25
0.20
0.15
3500
4000
4500
5000
5500
6000
6500

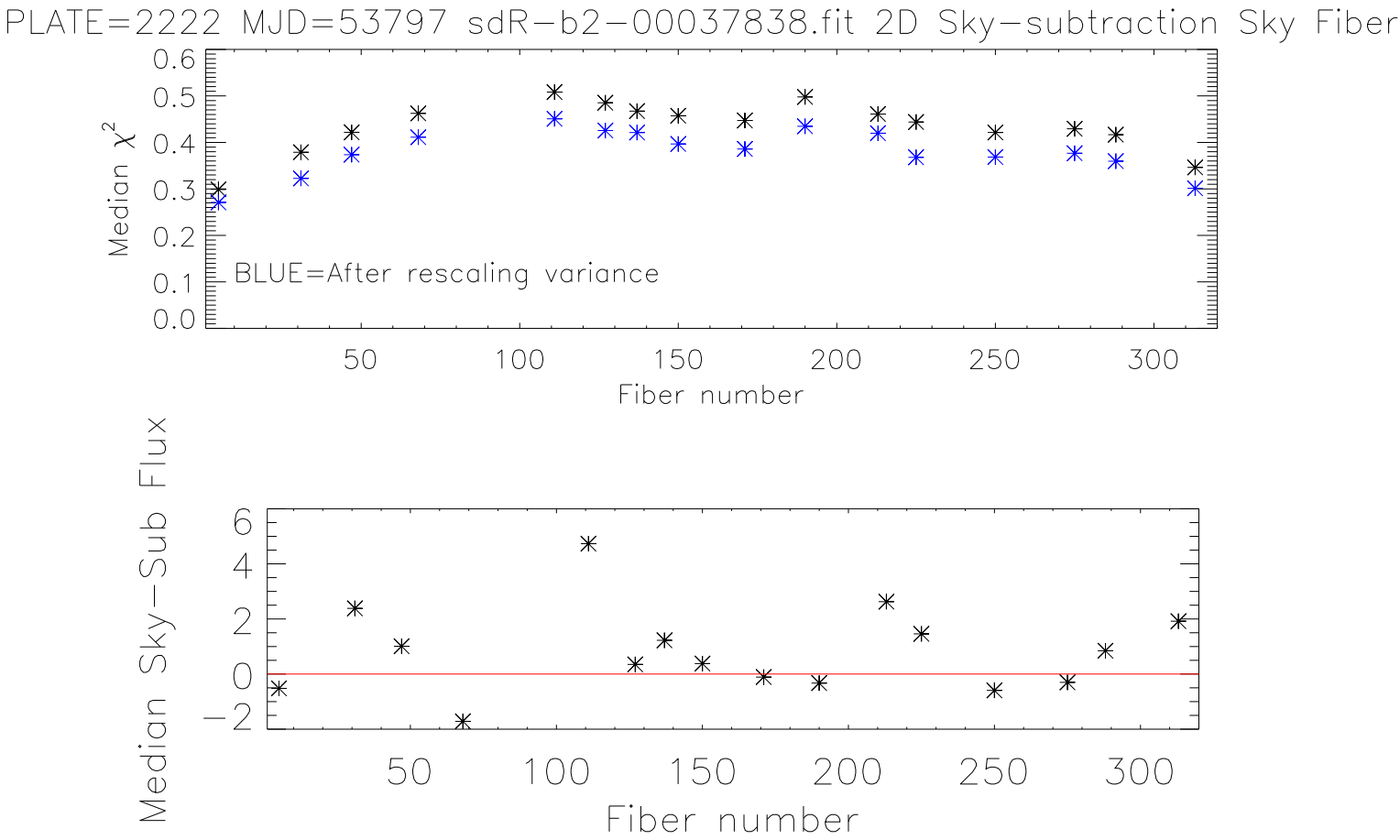

PLATE=2222 MJD=53797 Smooth superflat for sdR-b2-00037838.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

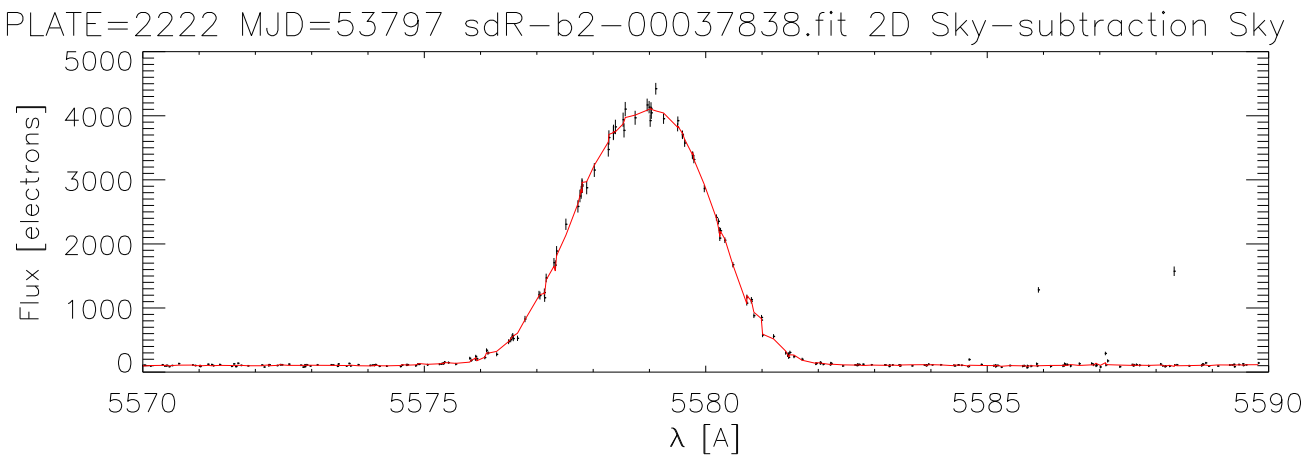

PLATE=2222 MJD=53797 sdR-b2-00037838.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

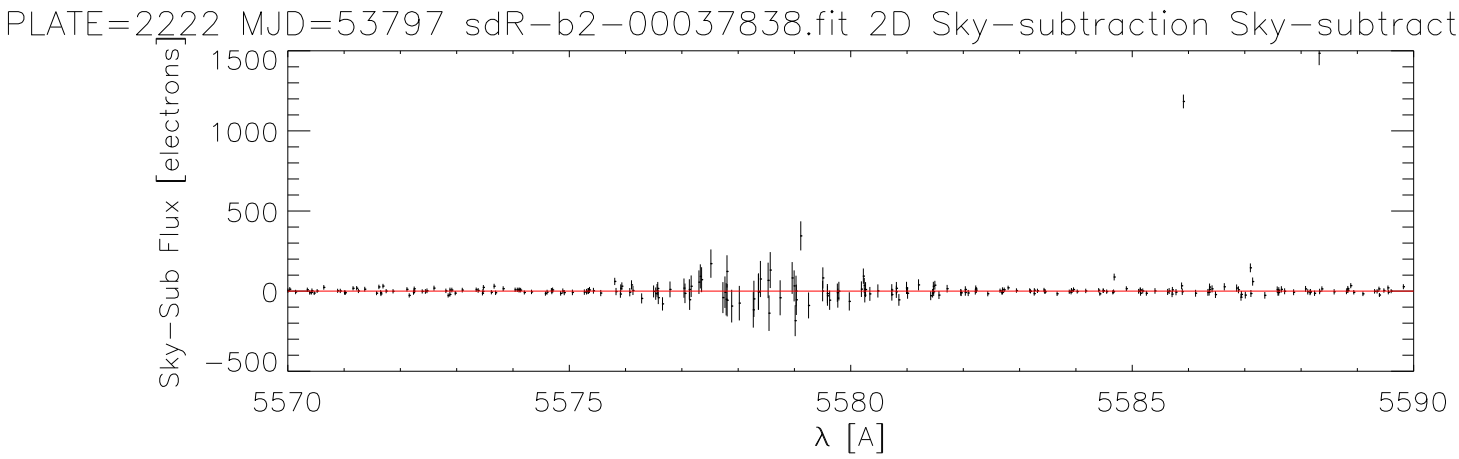

PLATE=2222 MJD=53797 sdR-b2-00037838.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

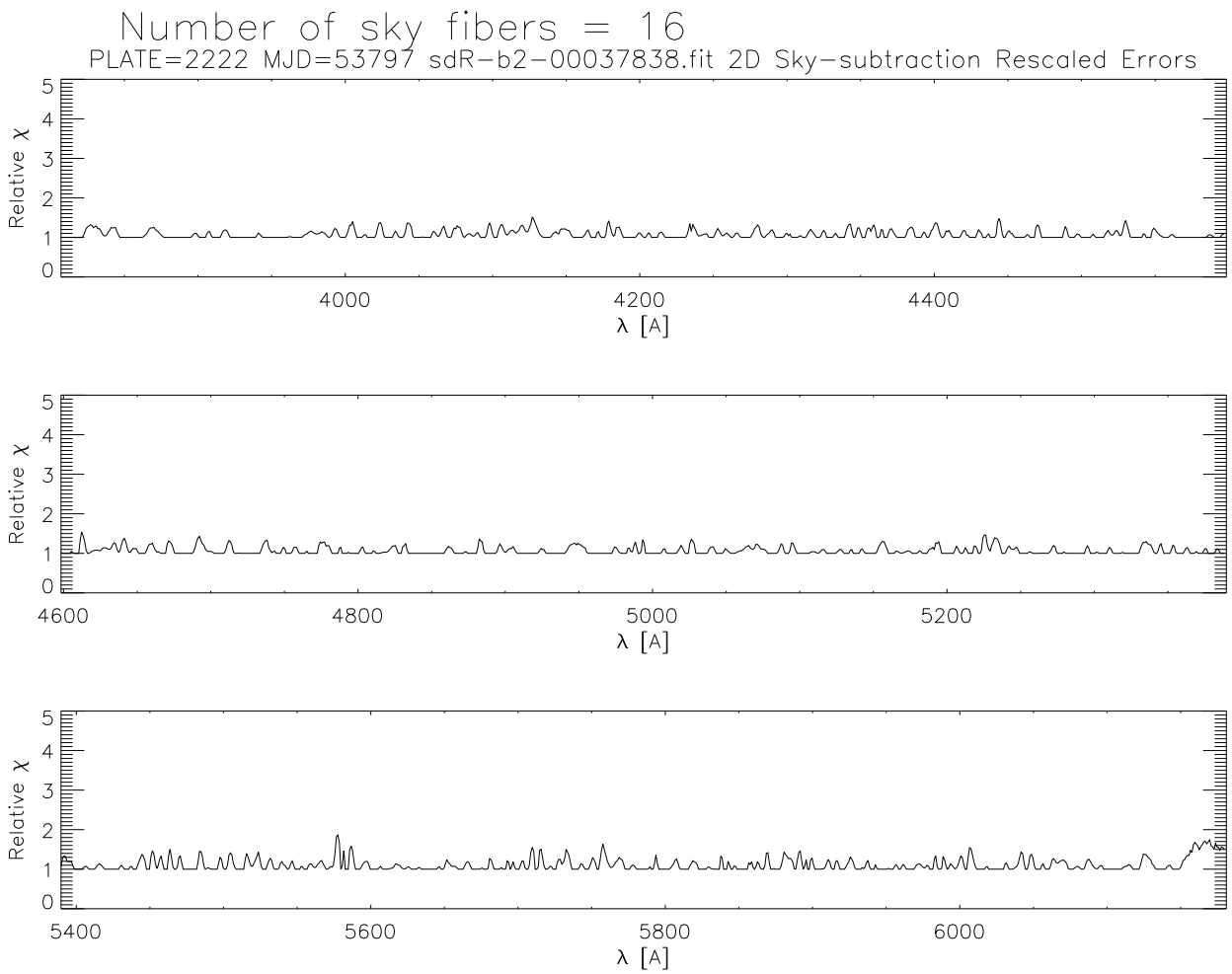

PLATE=2222 MJD=53797 sdR-b2-00037838.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

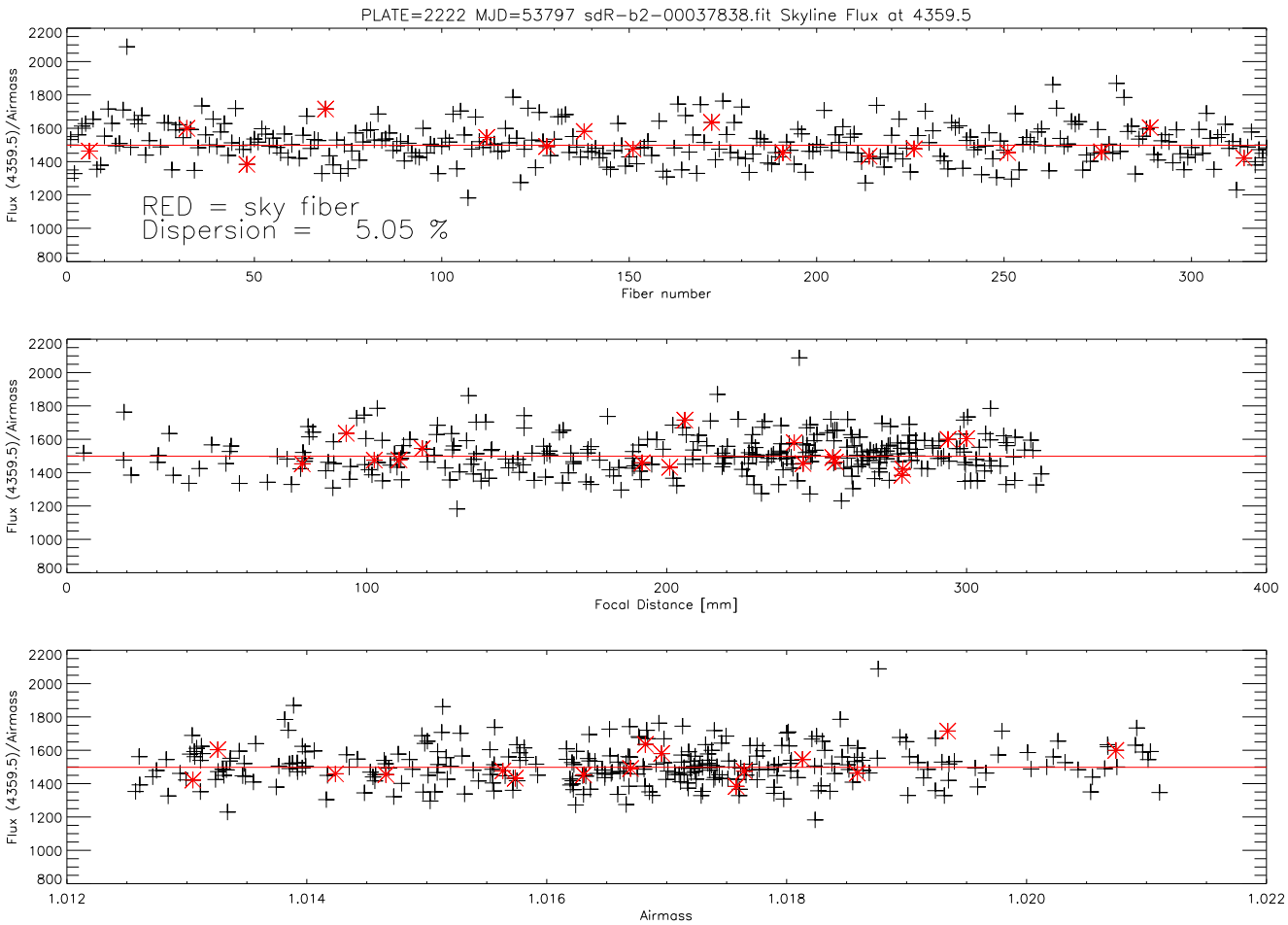

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b2-00037838.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

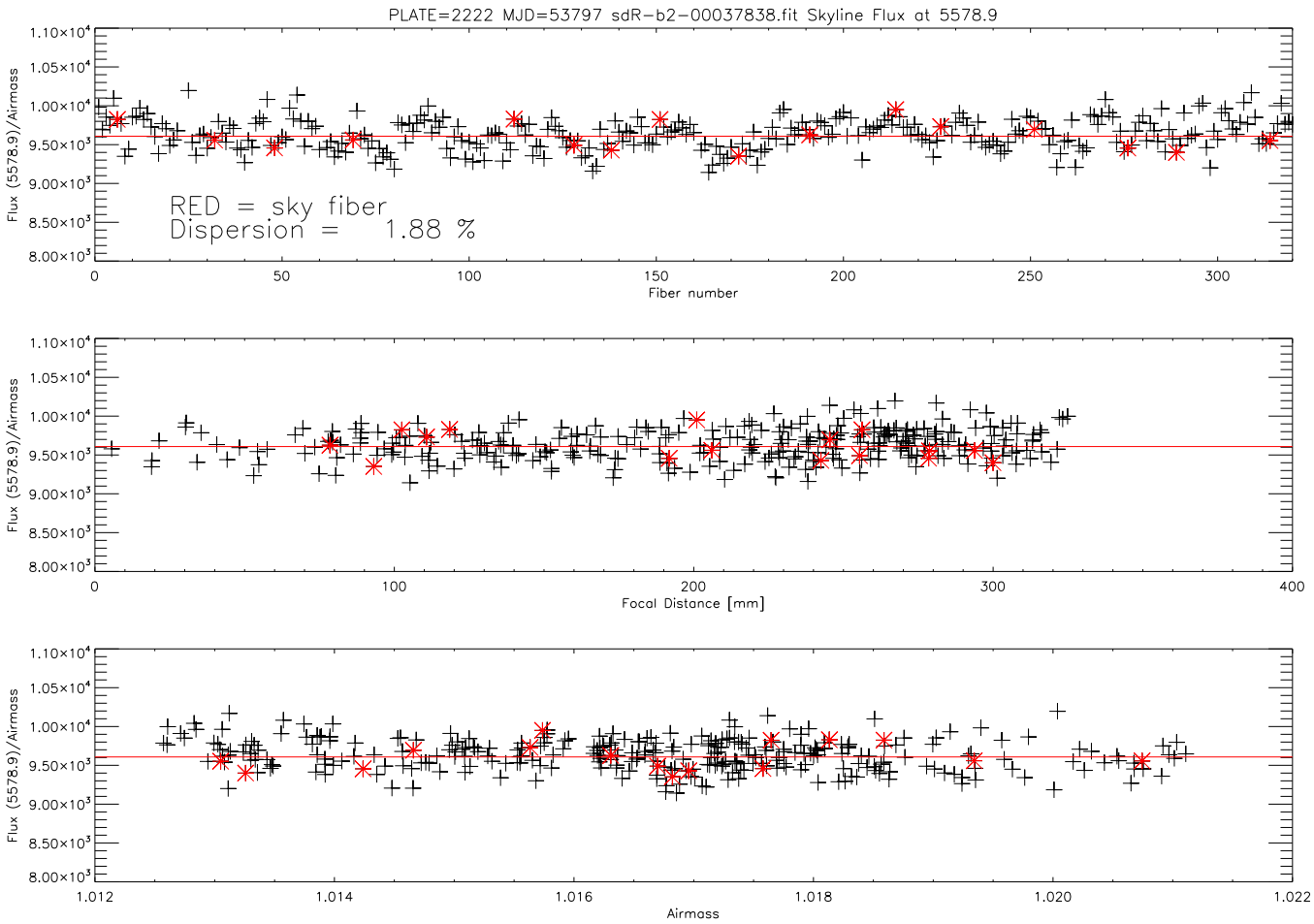

PLATE=2222 MJD=53797 sdR-b2-00037838.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

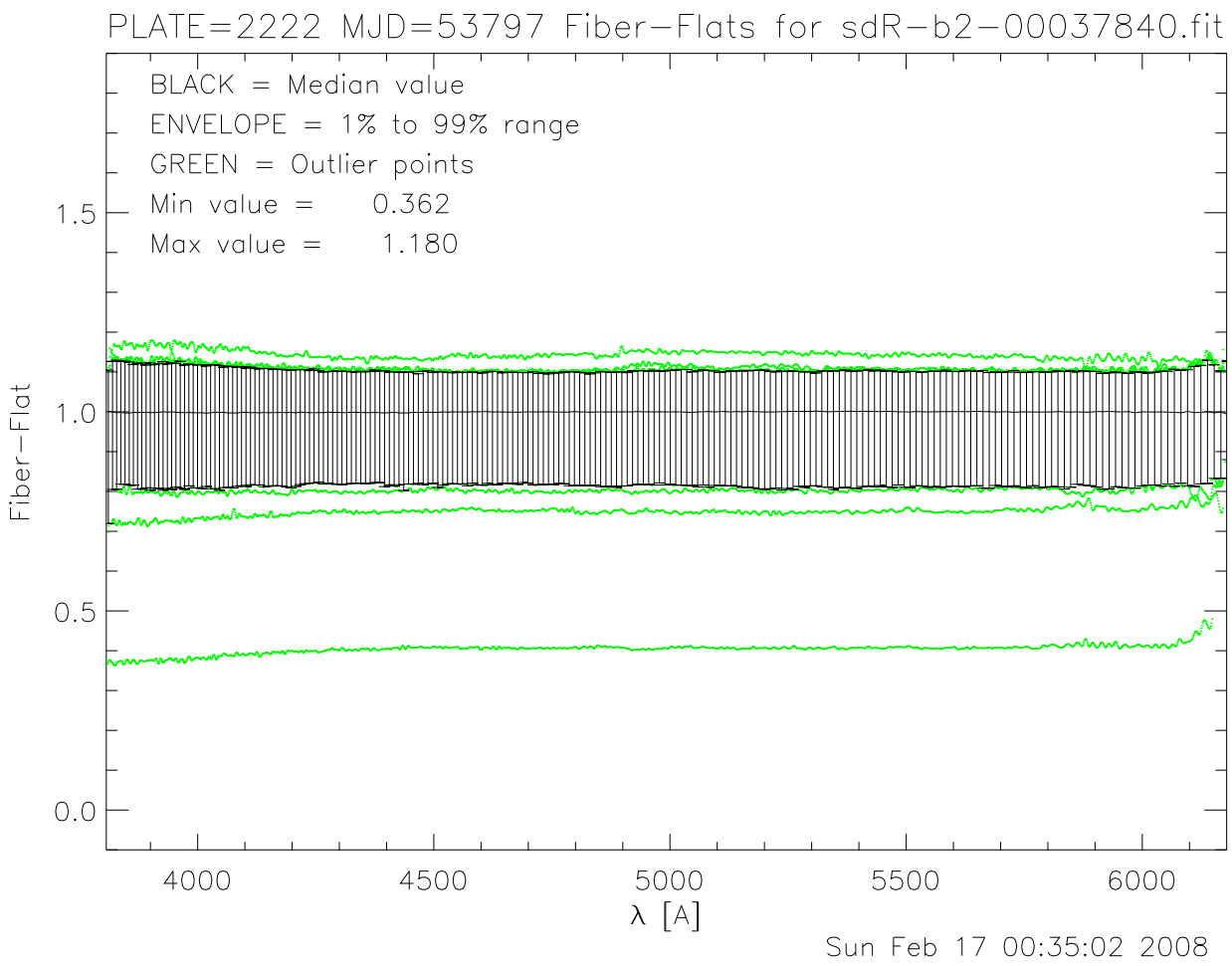

PLATE=2222 MJD=53797 sdR-b2-00037838.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

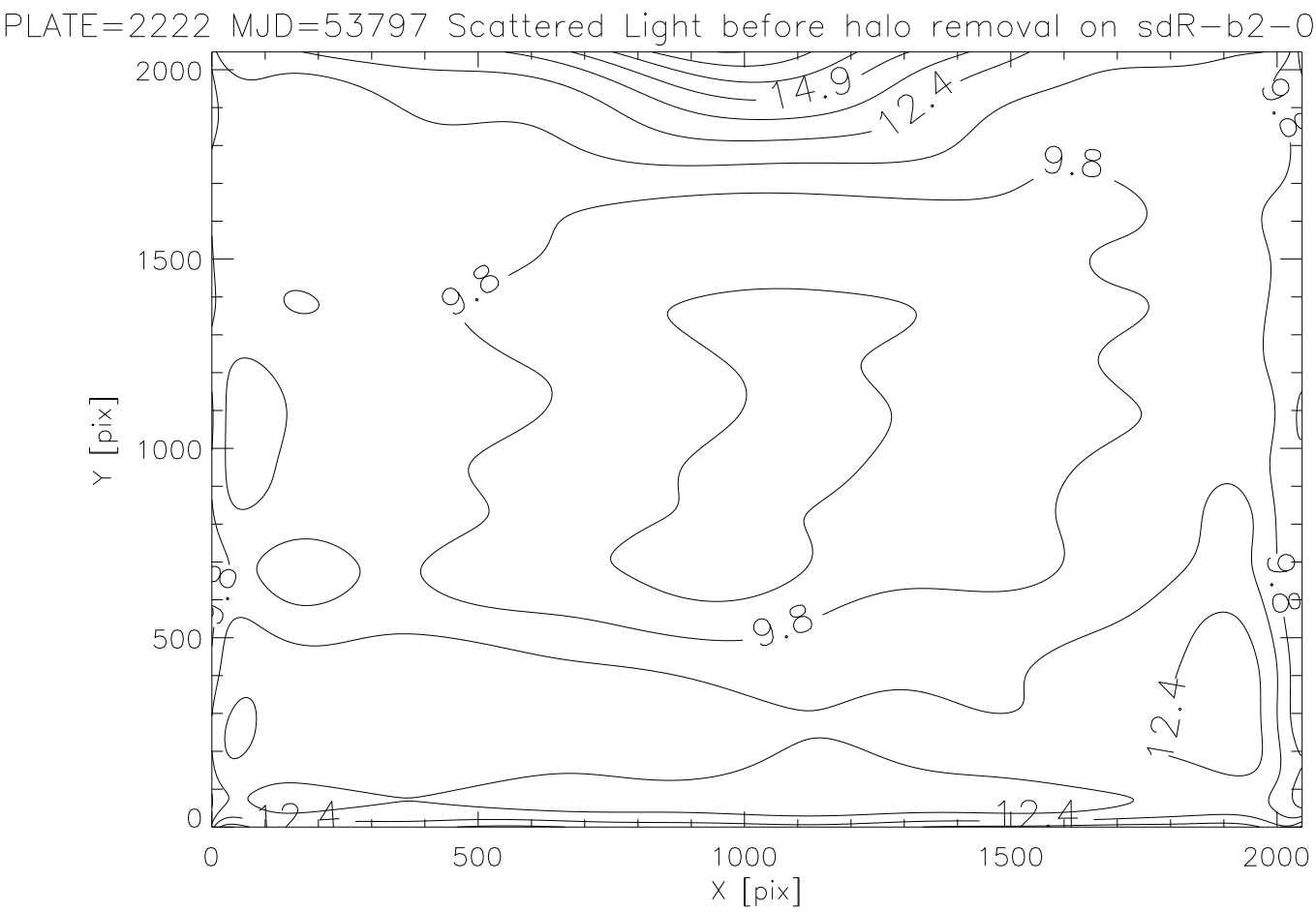

PLATE=2222 MJD=53797 sdR-b2-00037838.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

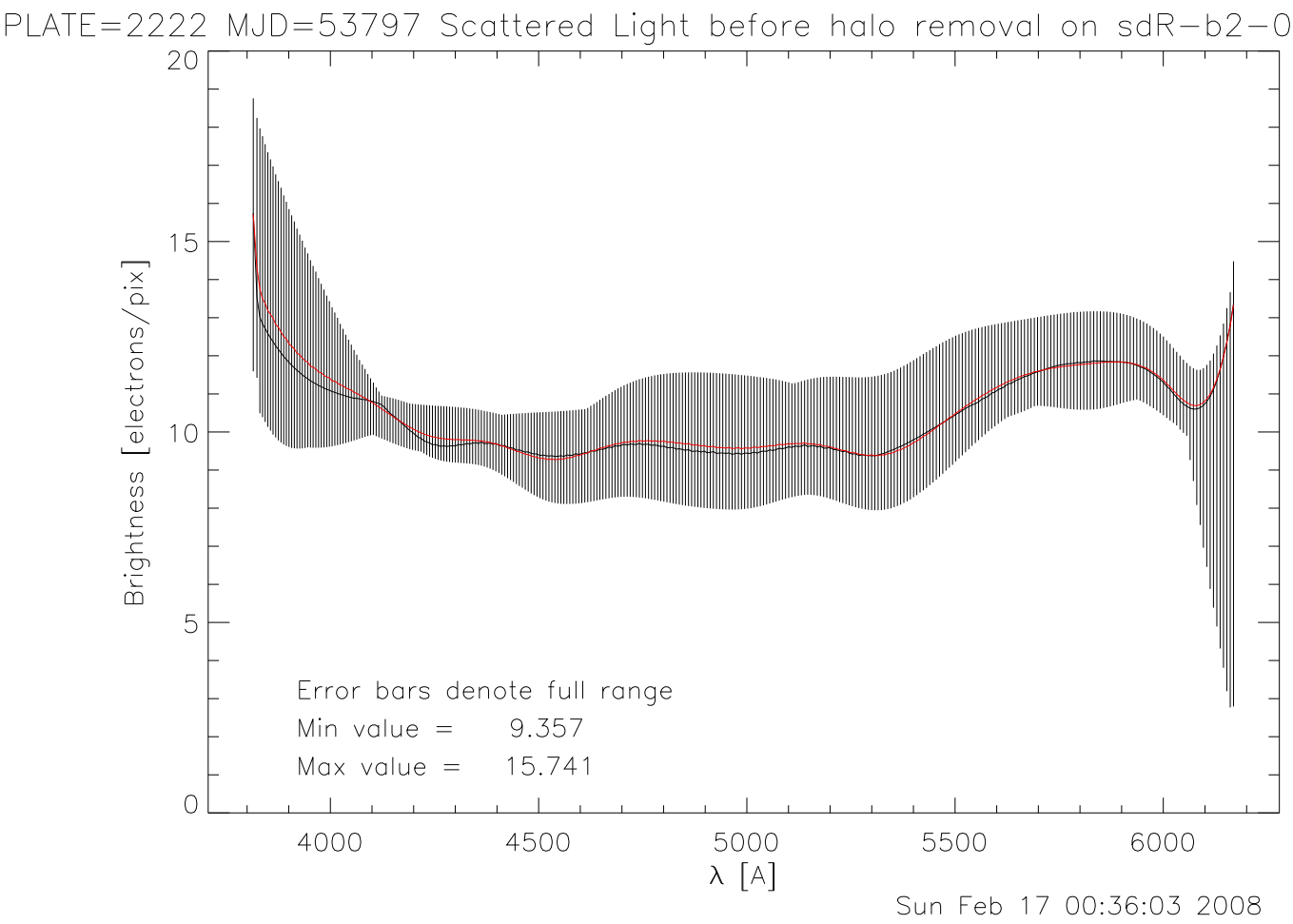

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b2-00037838.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

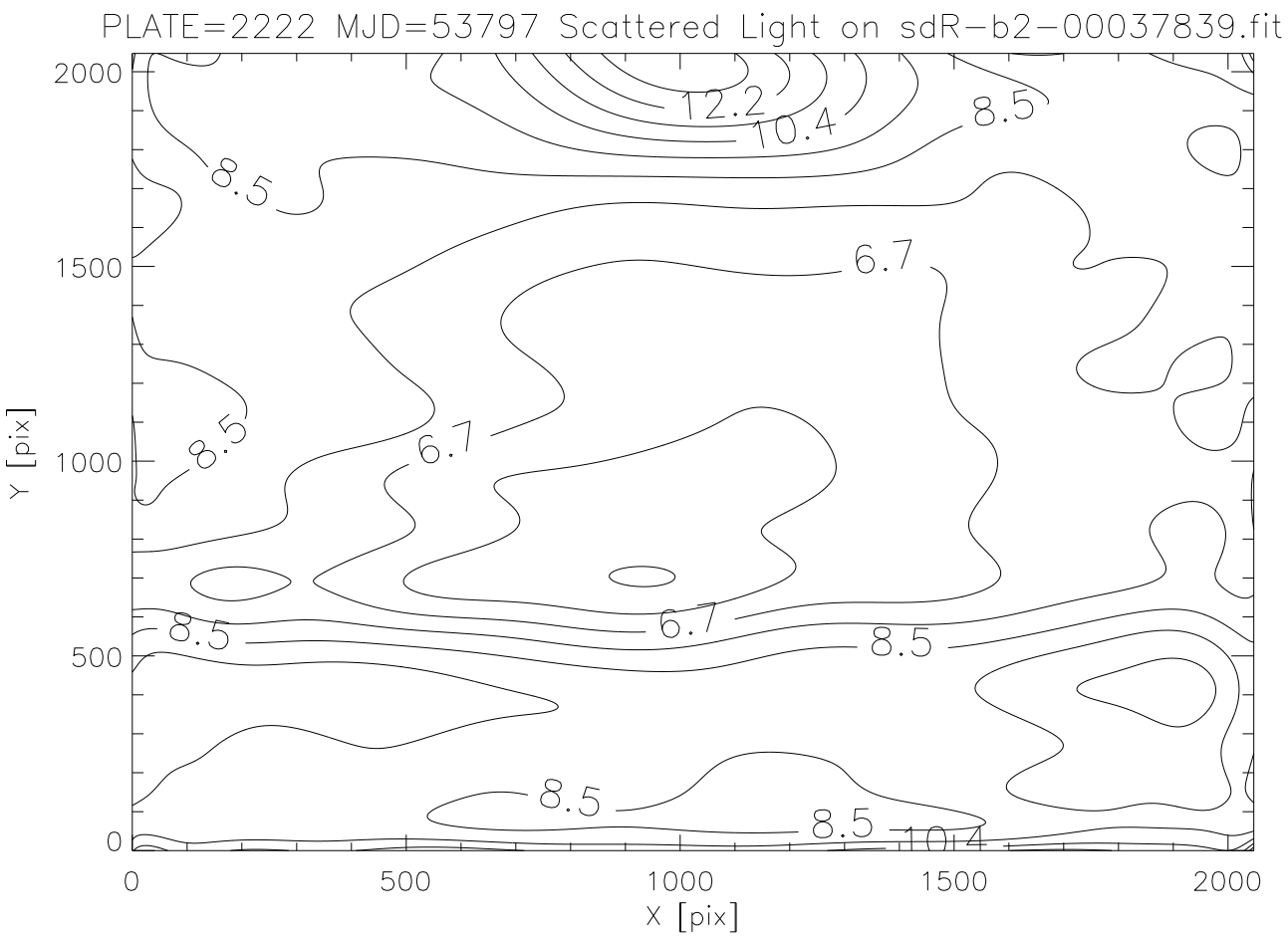

PLATE=2222 MJD=53797 sdR-b2-00037838.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 5.05 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

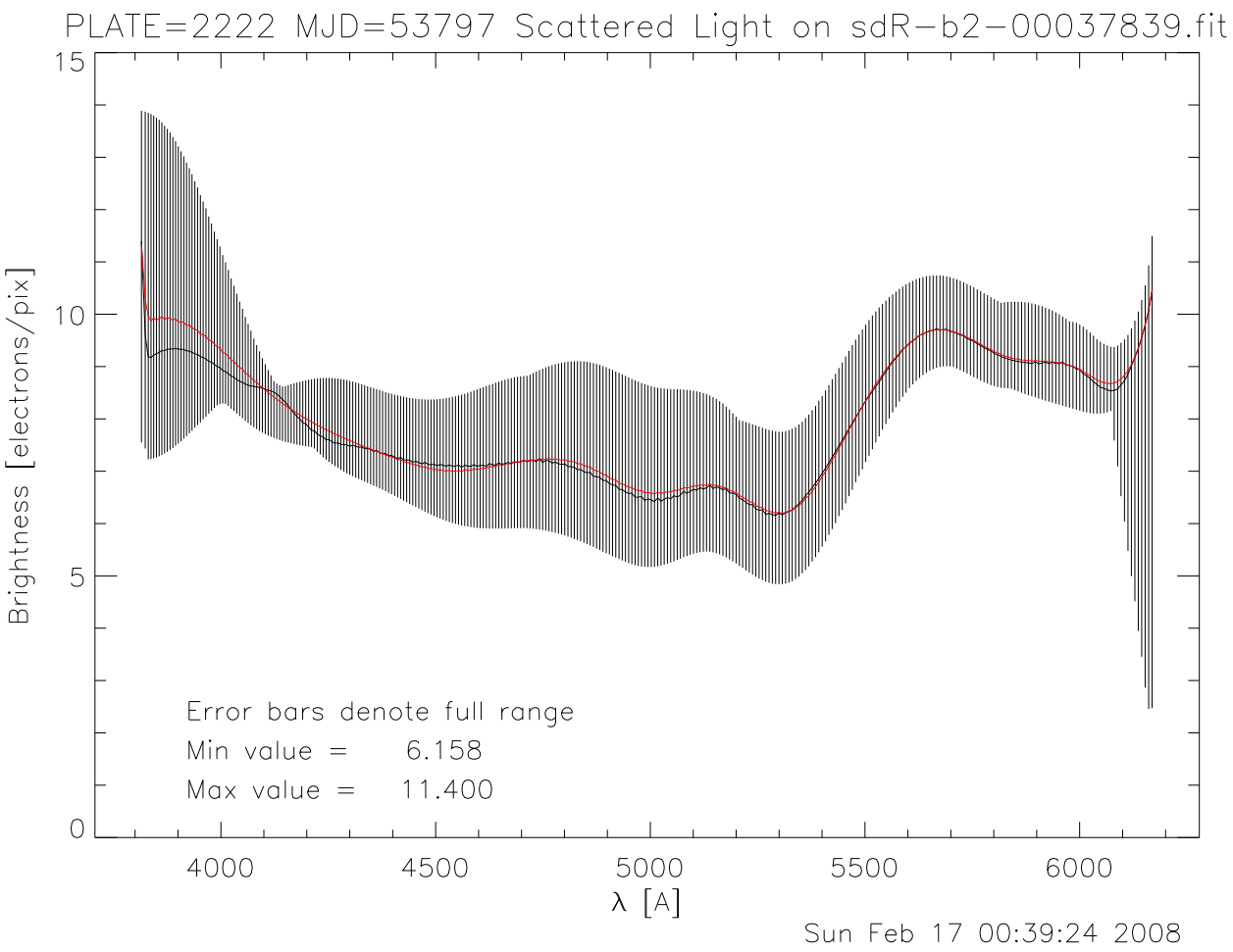

PLATE=2222 MJD=53797 sdR-b2-00037838.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.88 %
Fiber number
Focal Distance [mm]
Airmass

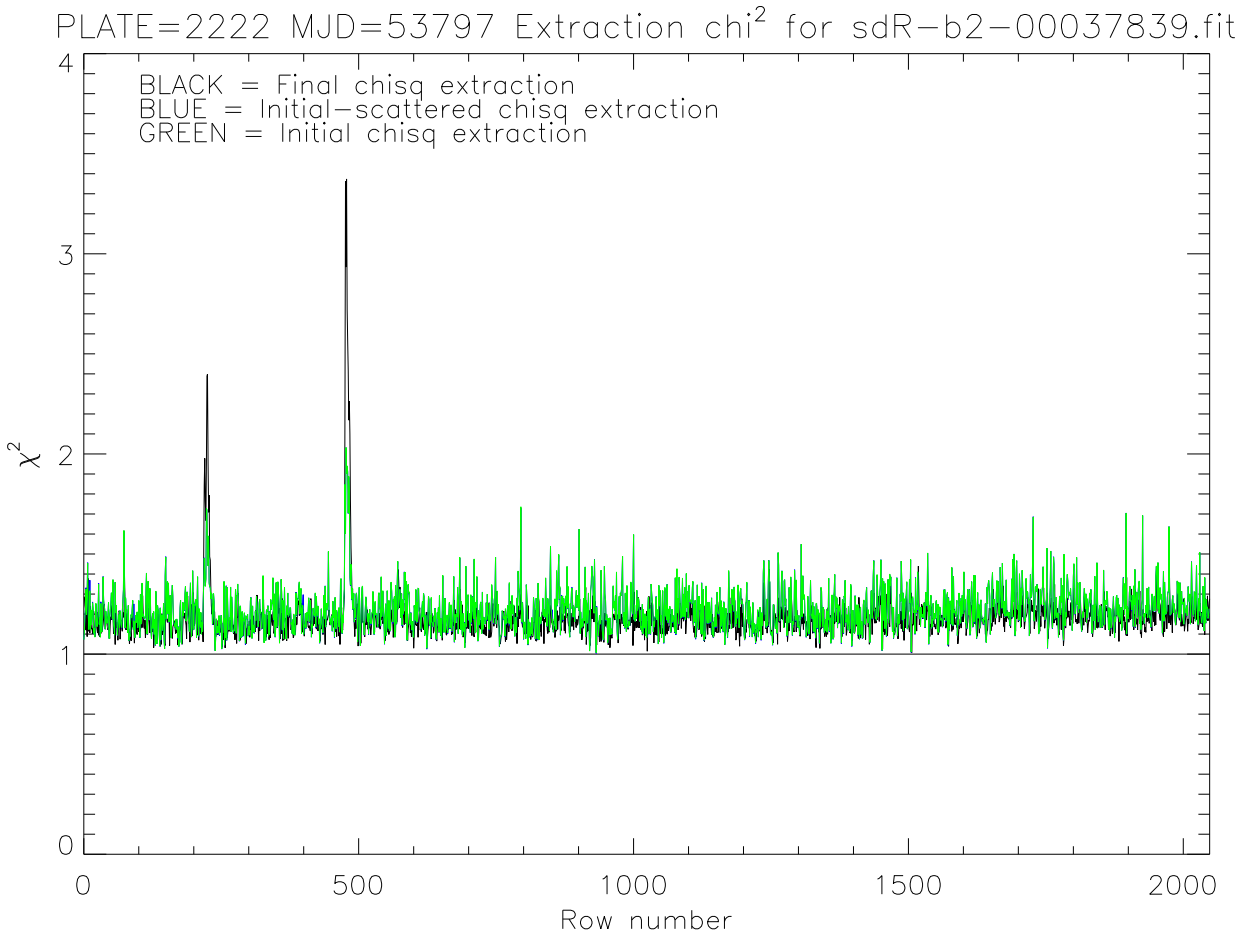

PLATE=2222 MJD=53797 Fiber-Flats for sdR-b2-00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.362
Max value = 1.180
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:35:02 2008

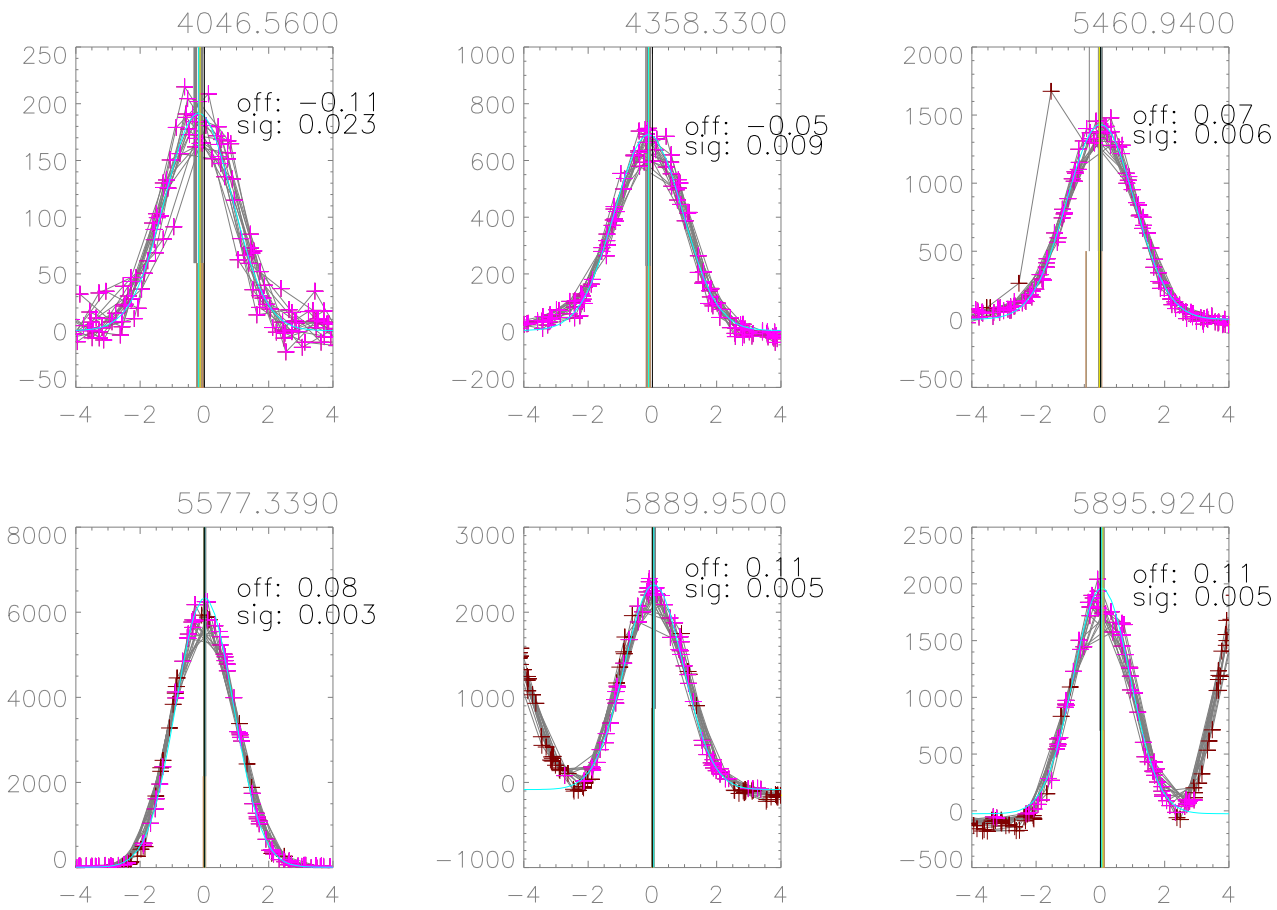

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-b2-00037839.f
14.9
12.4
9.8
9.8
9.8
12.4
12.4
12.4
Y [pix]
X [pix]
0
500
1000
1500
2000

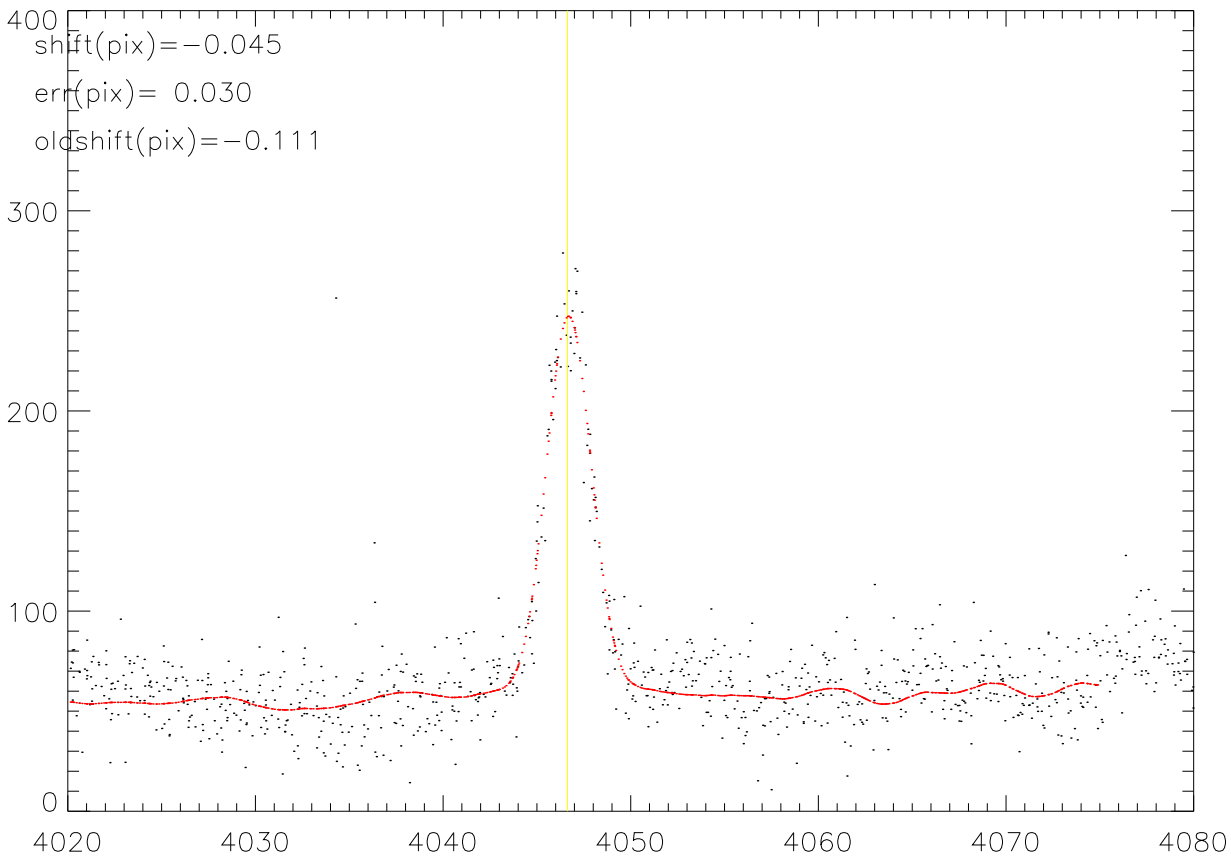

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR−b2−00037839.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.357
Max value = 15.741
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:36:03 2008

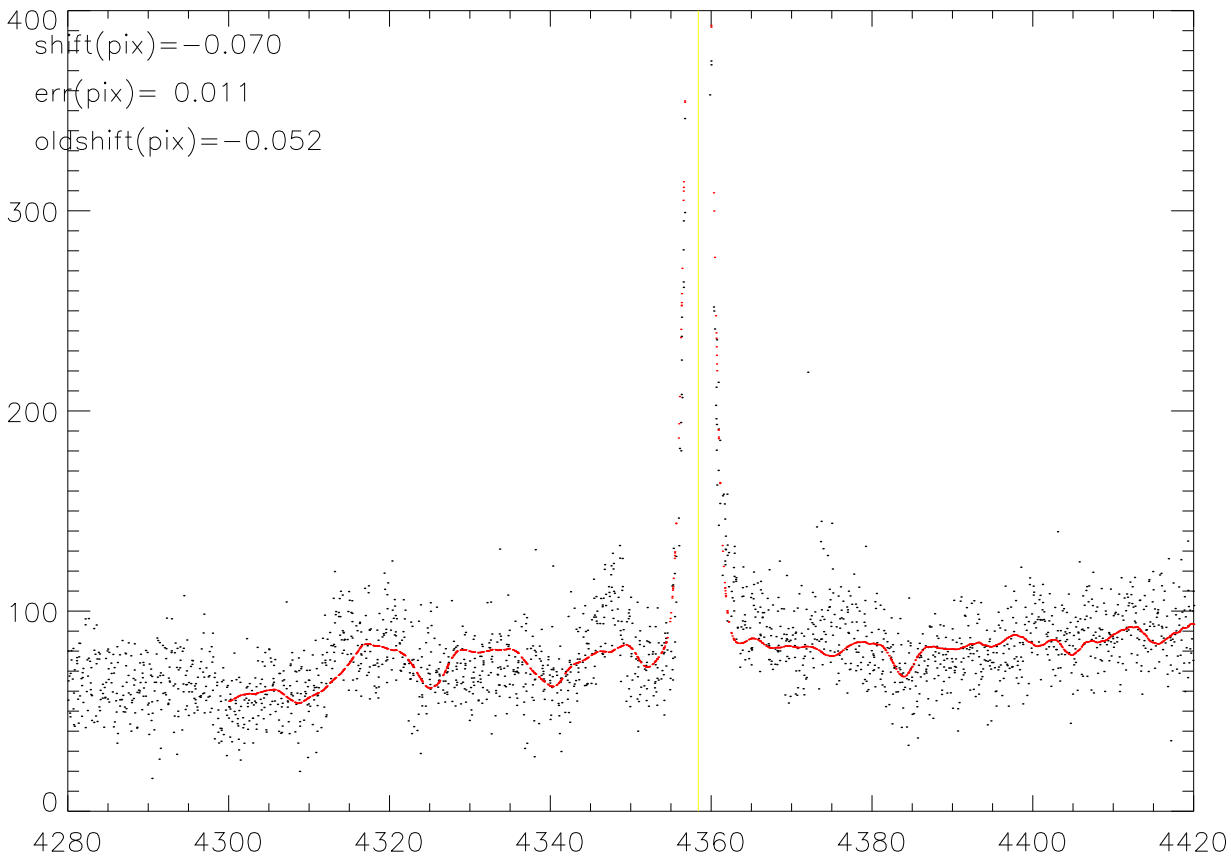

PLATE=2222 MJD=53797 Scattered Light on sdR-b2-00037839.fit
12.2
10.4
8.5
8.5
6.7
8.5
6.7
6.7
8.5
8.5
8.5
10.4
Y [pix]
X [pix]
0
500
1000
1500
2000

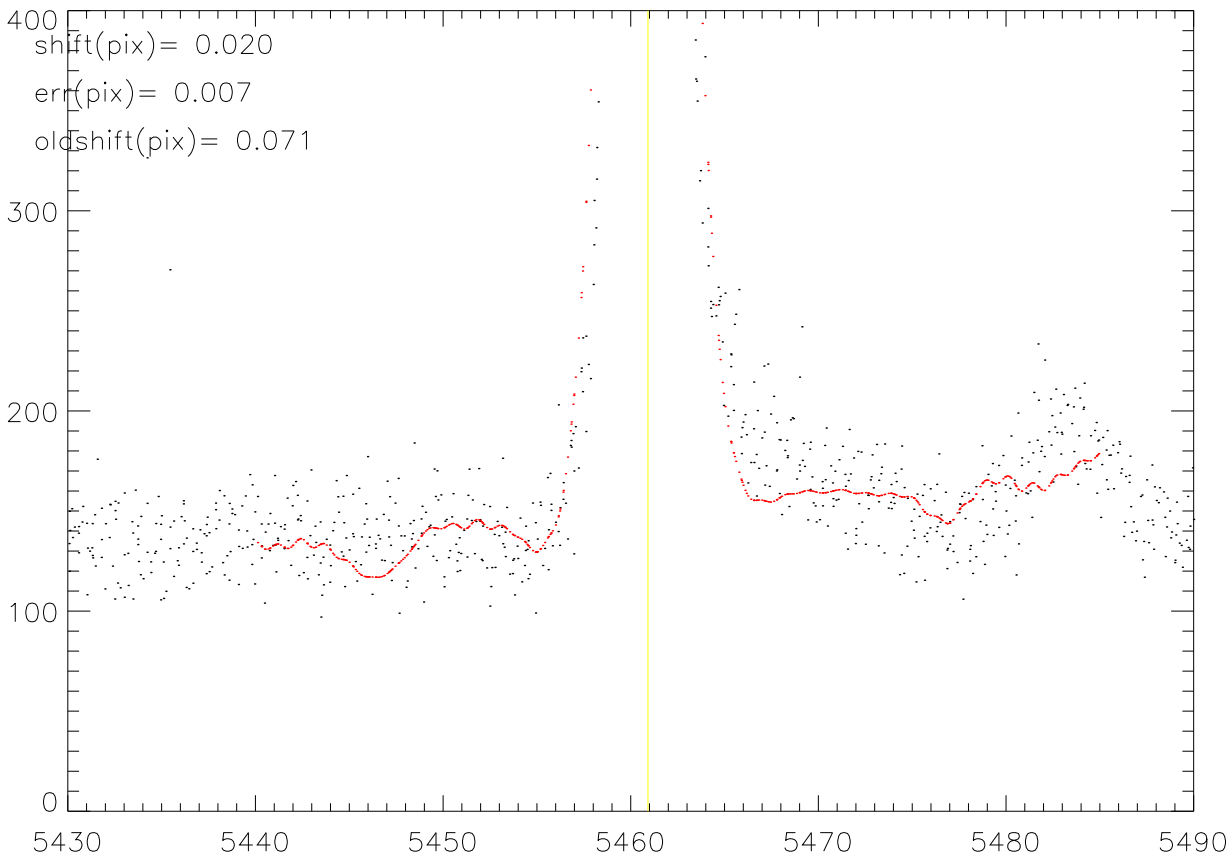

PLATE=2222 MJD=53797 Scattered Light on sdR-b2-00037839.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.158
Max value = 11.400
Sun Feb 17 00:39:24 2008

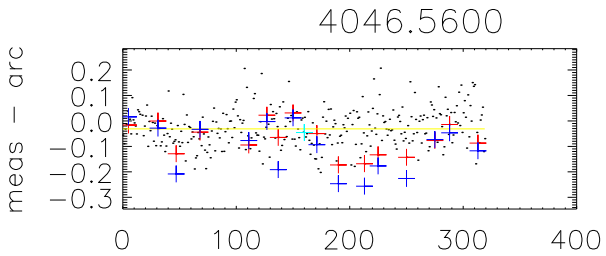

PLATE=2222 MJD=53797 Extraction chi^2 for sdR-b2-00037839.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

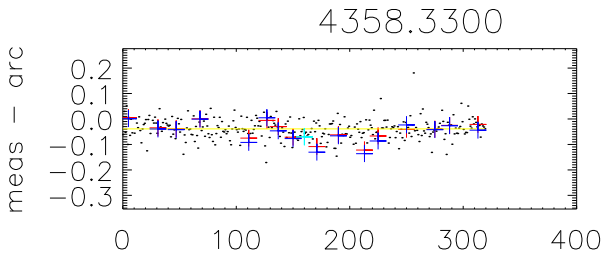

4046.5600
off: −0.11
sig: 0.023
4358.3300
off: −0.05
sig: 0.009
5460.9400
off: 0.07
sig: 0.006
5577.3390
off: 0.08
sig: 0.003
5889.9500
off: 0.11
sig: 0.005
5895.9240
off: 0.11
sig: 0.005

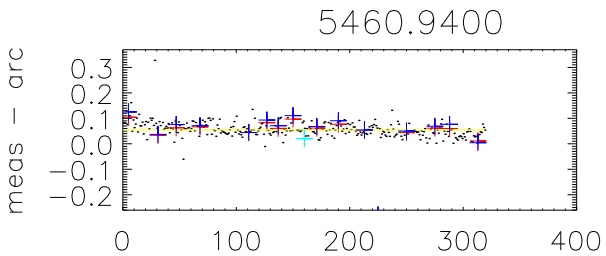

shift(pix)=−0.045
err(pix)= 0.030
oldshift(pix)=−0.111
400
300
200
100
0
4020
4030
4040
4050
4060
4070
4080

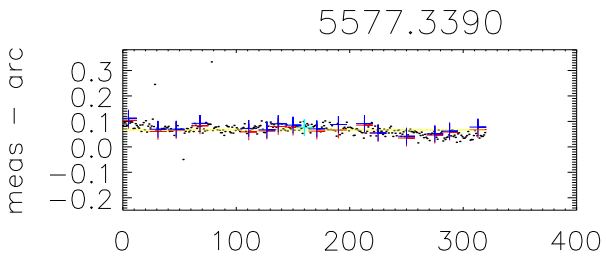

shift(pix)=−0.070
err(pix)= 0.011
oldshift(pix)=−0.052
400
300
200
100
0
4280
4300
4320
4340
4360
4380
4400
4420

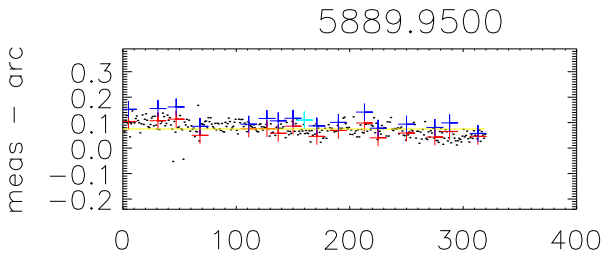

shift(pix)= 0.020
err(pix)= 0.007
oldshift(pix)= 0.071
400
300
200
100
0
5430
5440
5450
5460
5470
5480
5490

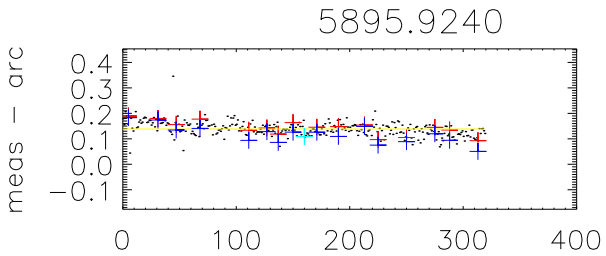

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

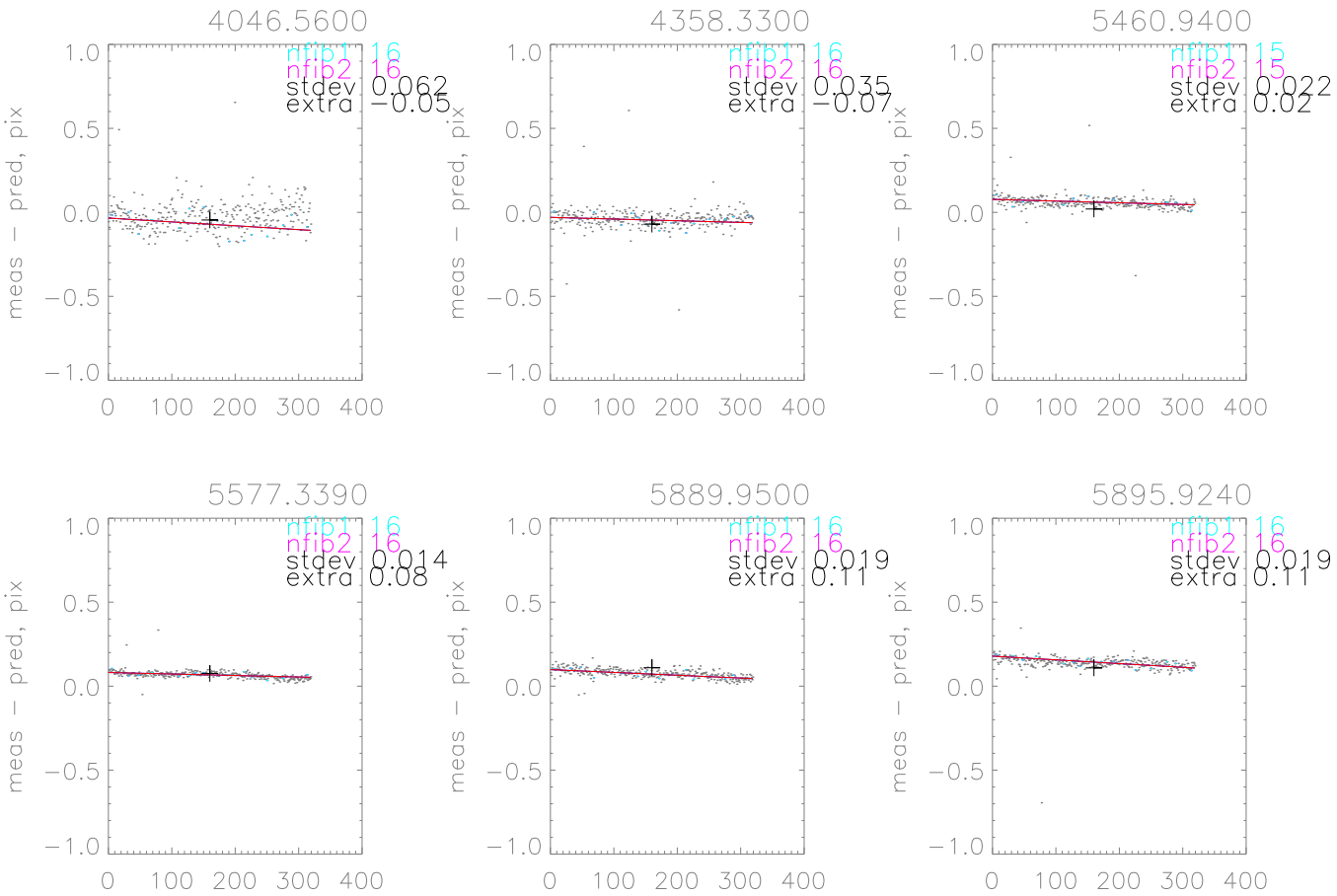

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

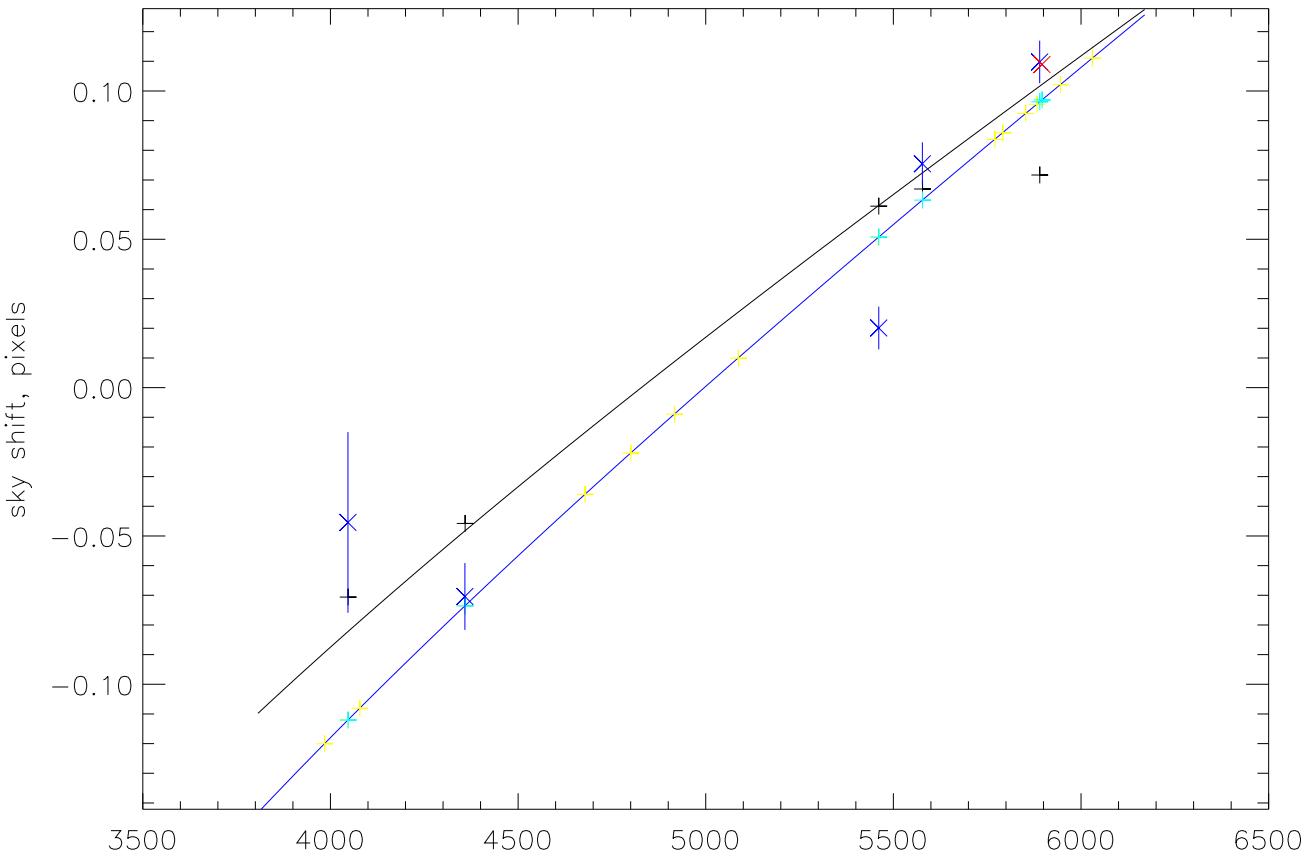

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

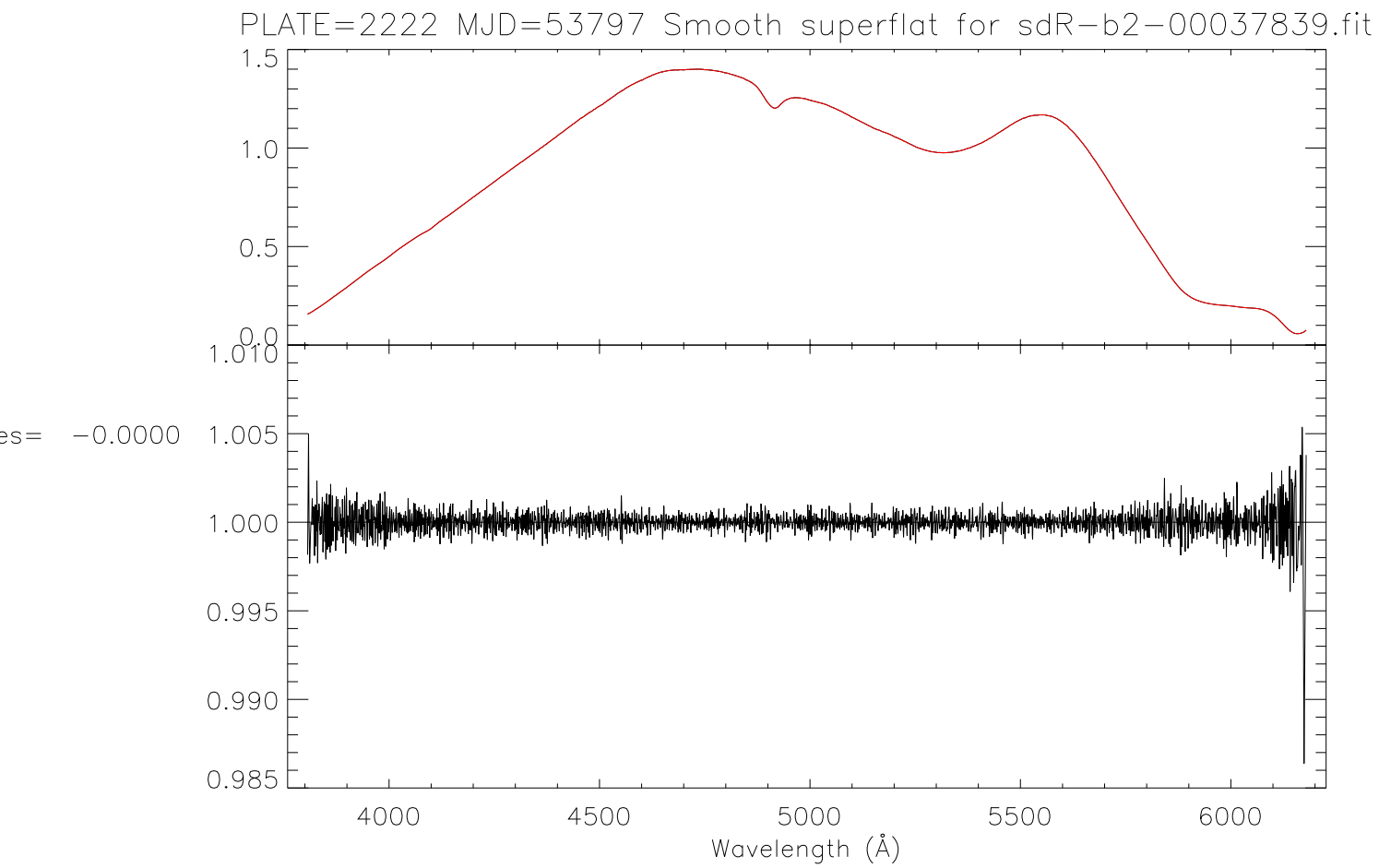

5577.3390
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

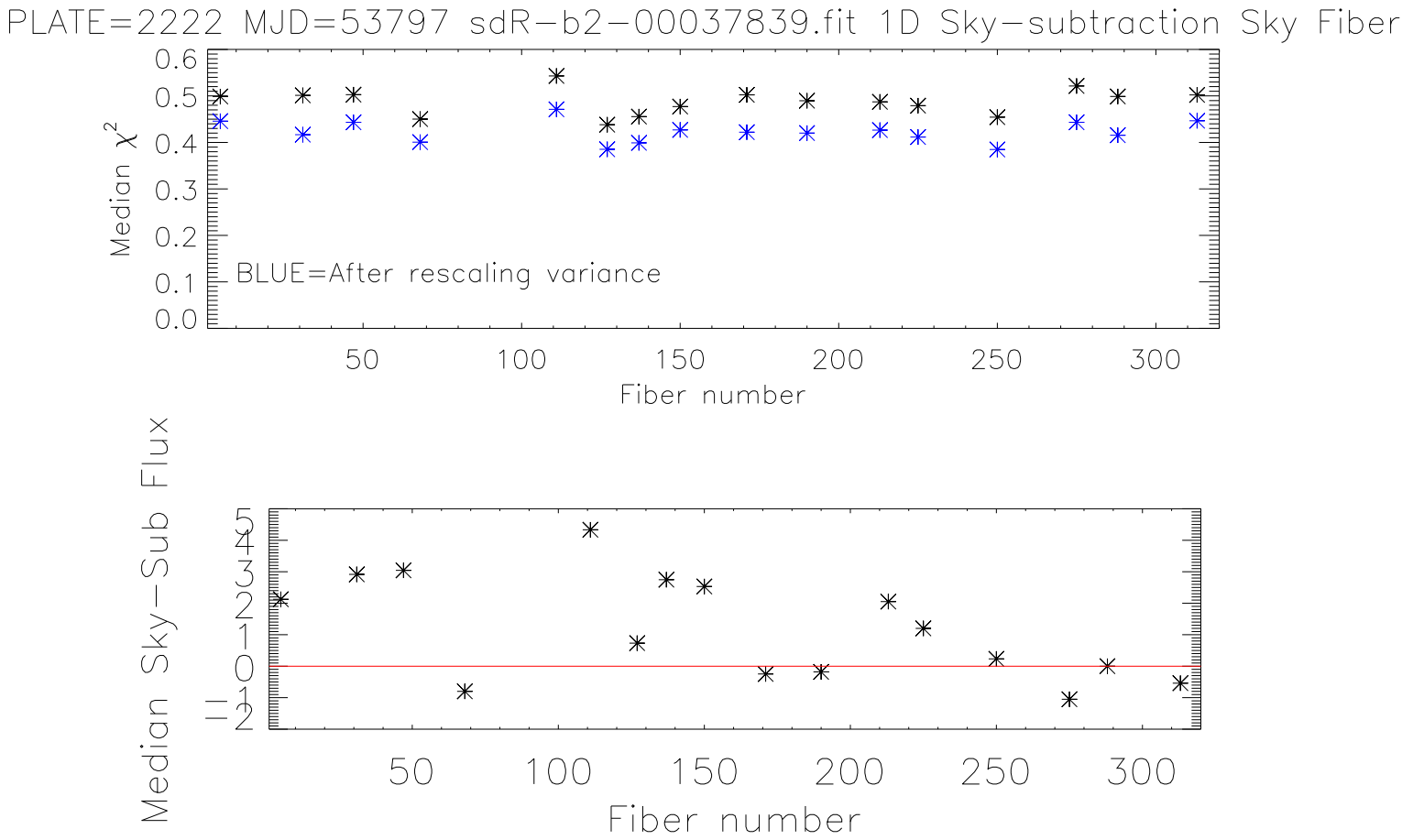

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

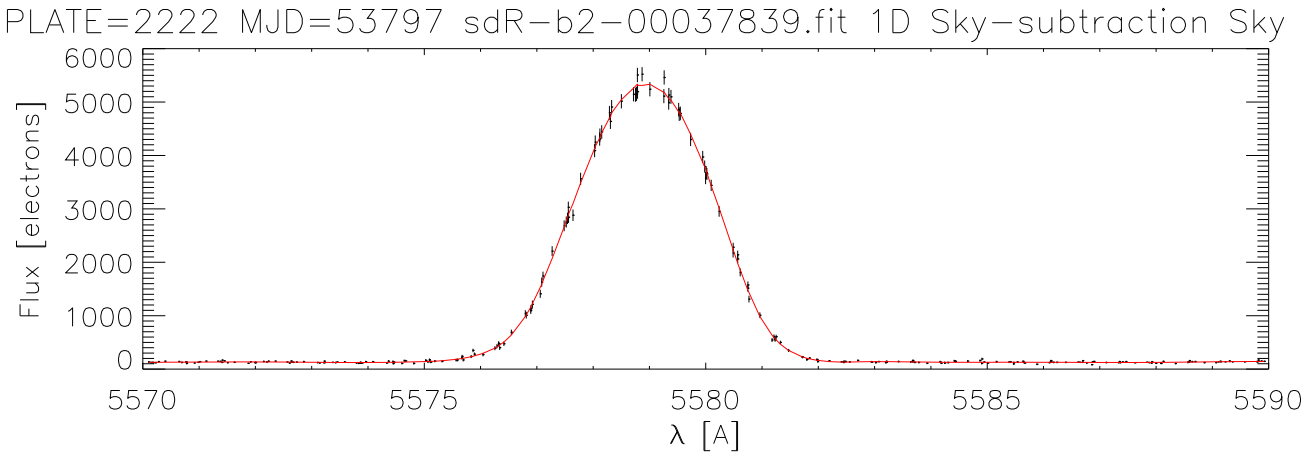

5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

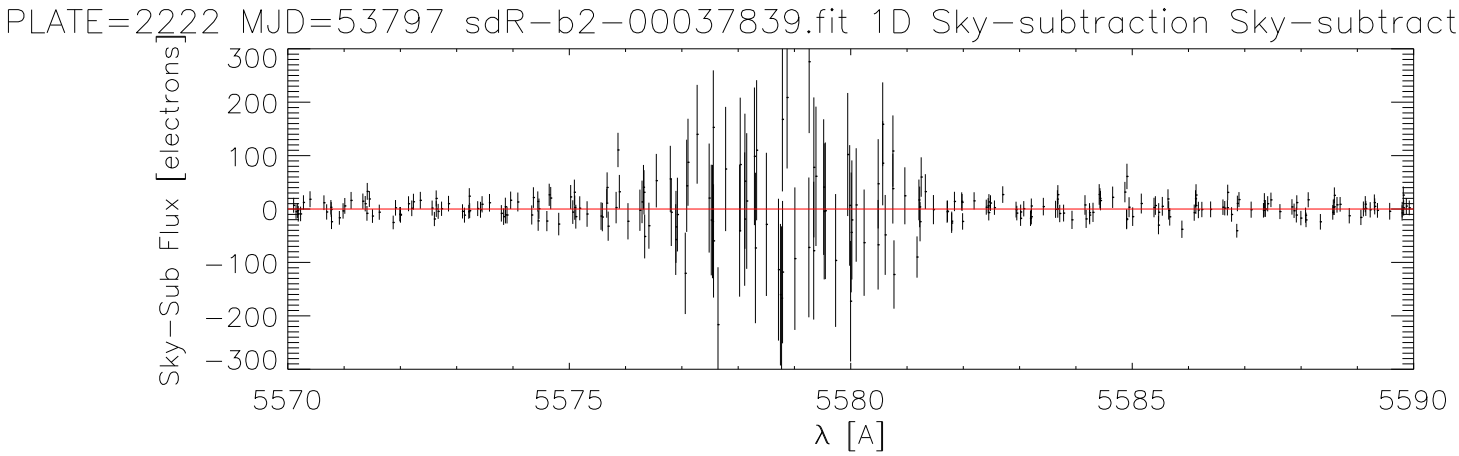

4046.5600
nfib1 16
nfib2 16
stdev 0.062
extra −0.05
4358.3300
nfib1 16
nfib2 16
stdev 0.035
extra −0.07
5460.9400
nfib1 15
nfib2 15
stdev 0.022
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.014
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.019
extra 0.11
5895.9240
nfib1 16
nfib2 16
stdev 0.019
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

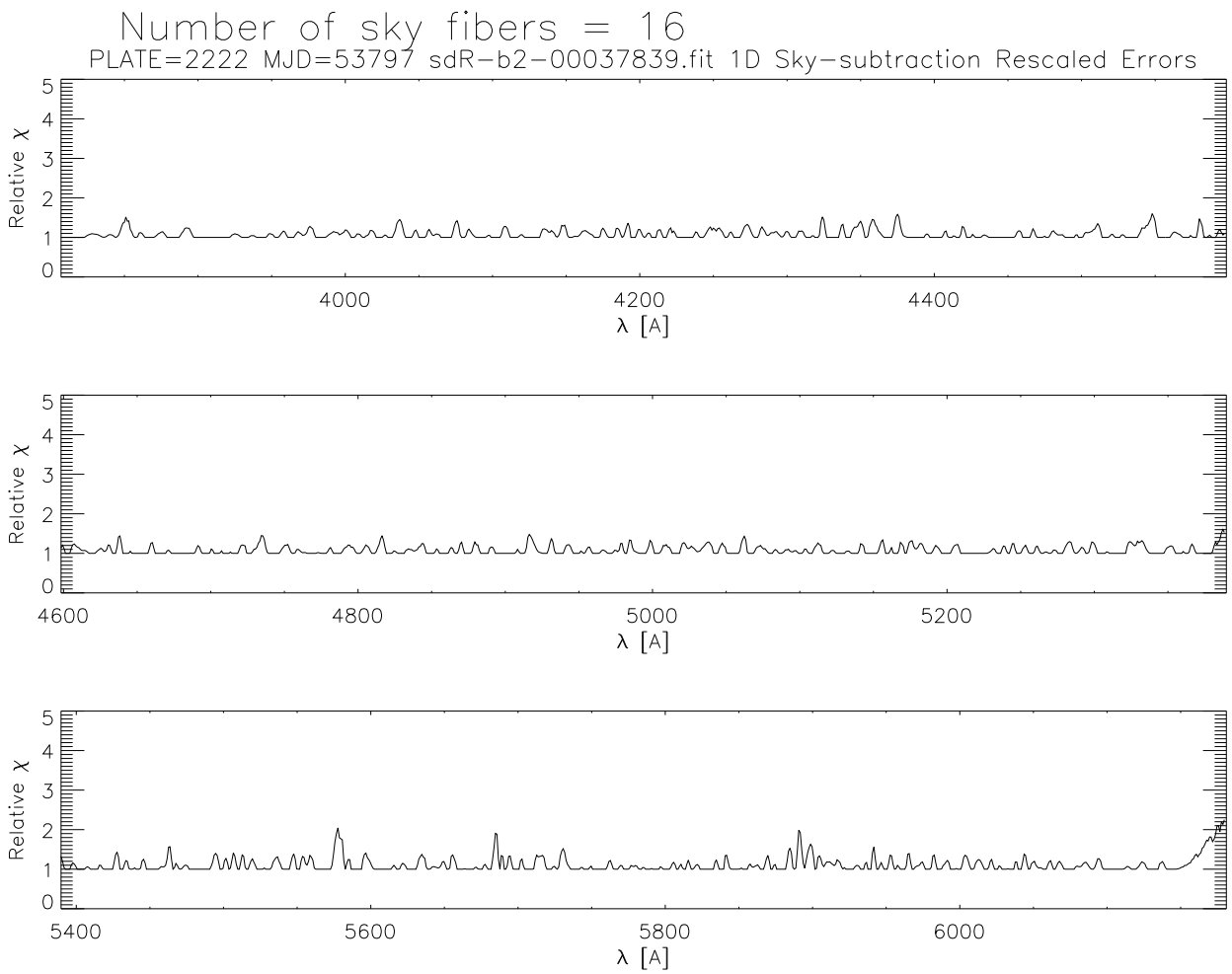

0.10
0.05
0.00
−0.05
−0.10
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

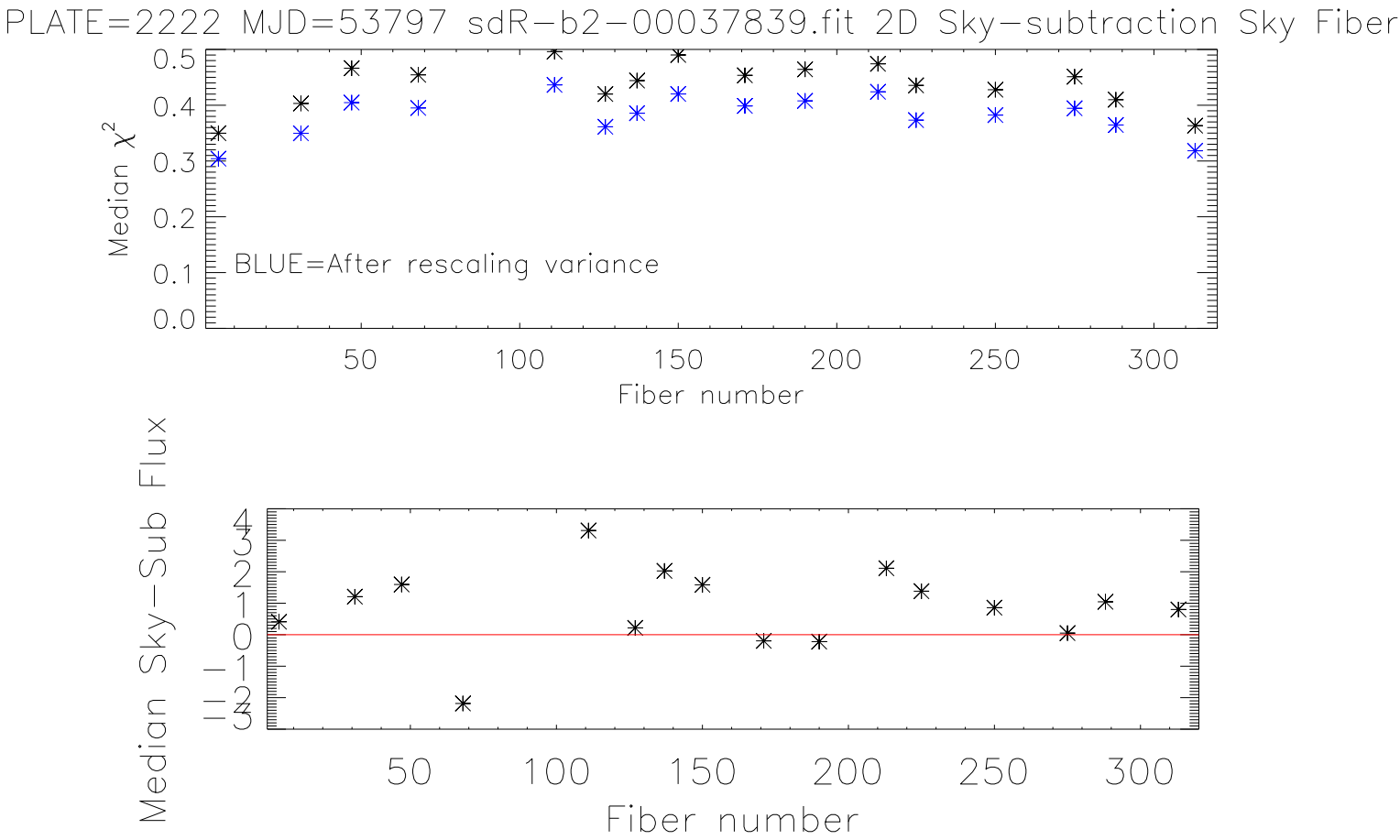

PLATE=2222 MJD=53797 Smooth superflat for sdR-b2-00037839.fit
1.5
1.0
0.5
0.0
1.010
es= -0.0000
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)

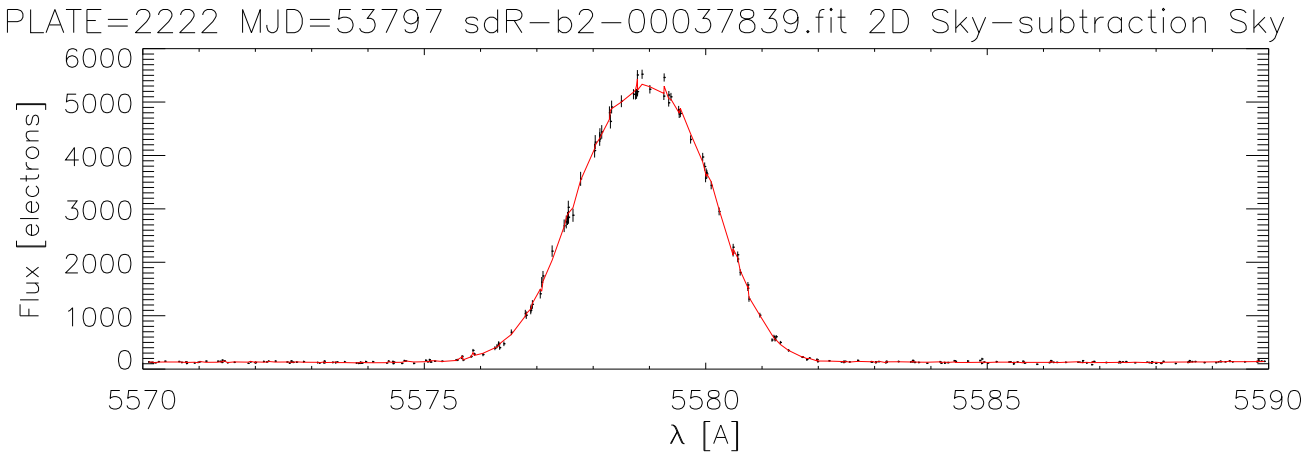

PLATE=2222 MJD=53797 sdR-b2-00037839.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
5
50
100
150
200
250
300
Fiber number

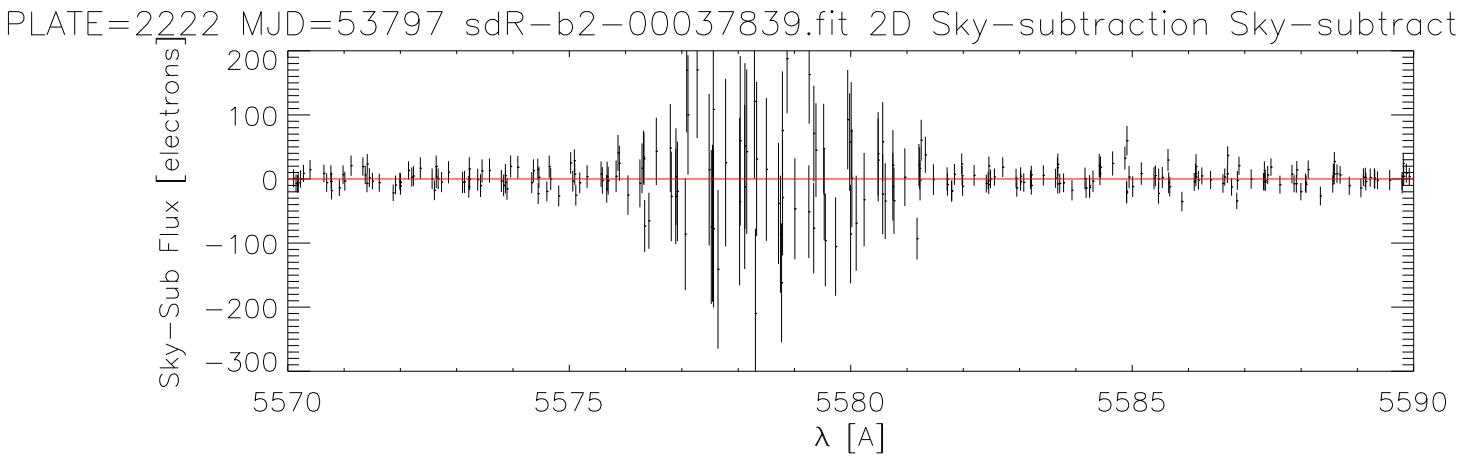

PLATE=2222 MJD=53797 sdR-b2-00037839.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

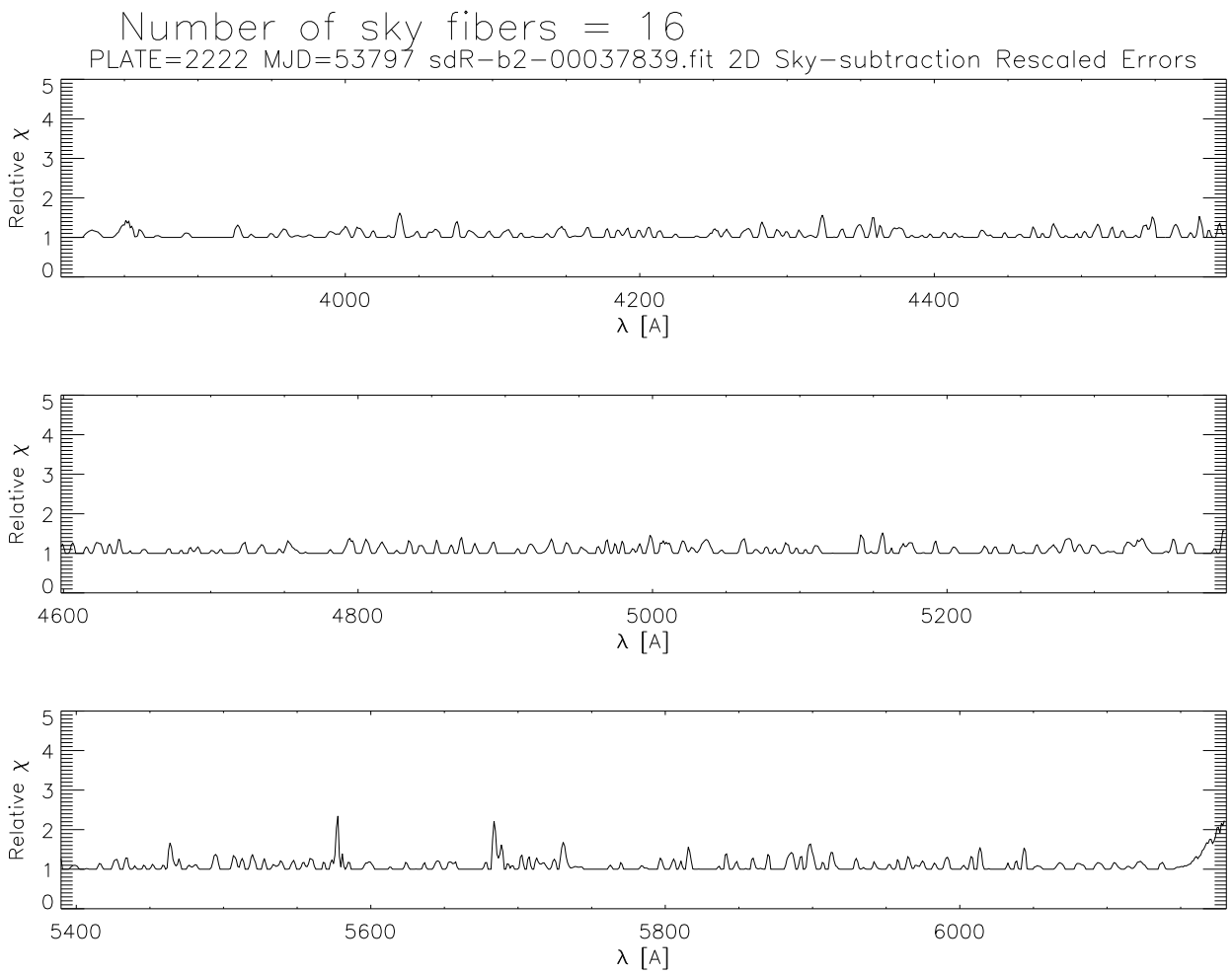

PLATE=2222 MJD=53797 sdR-b2-00037839.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

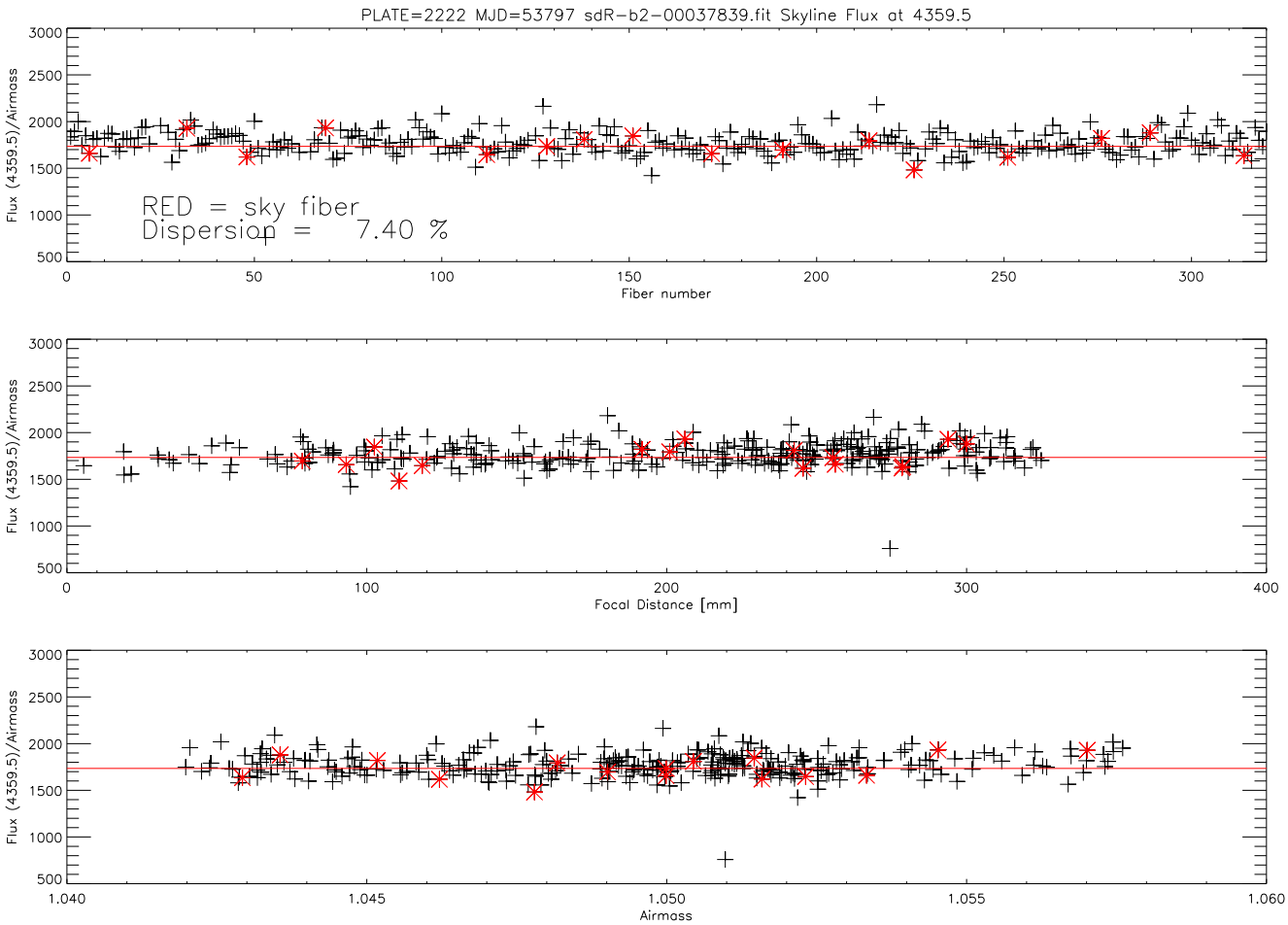

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b2-00037839.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

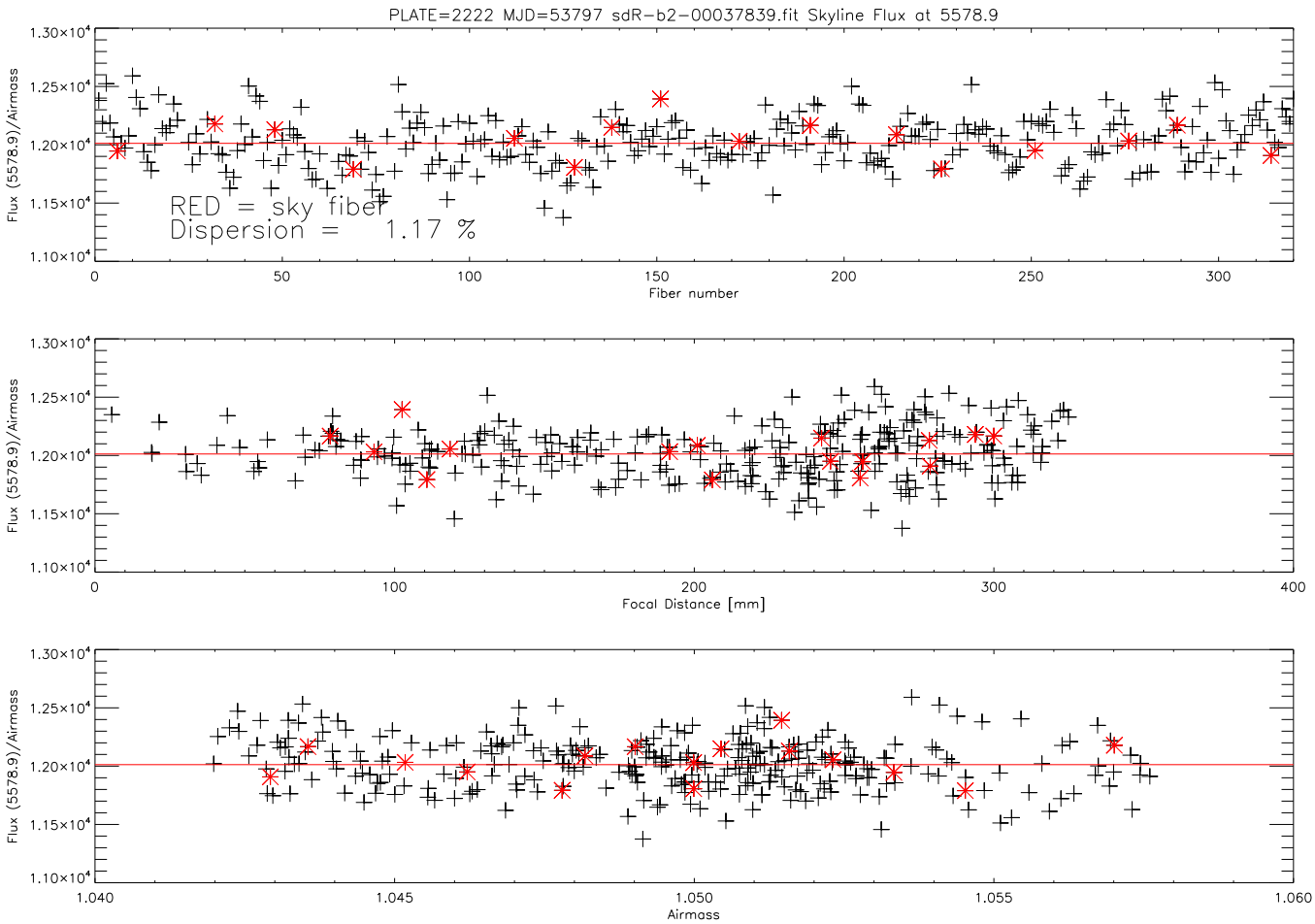

PLATE=2222 MJD=53797 sdR-b2-00037839.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

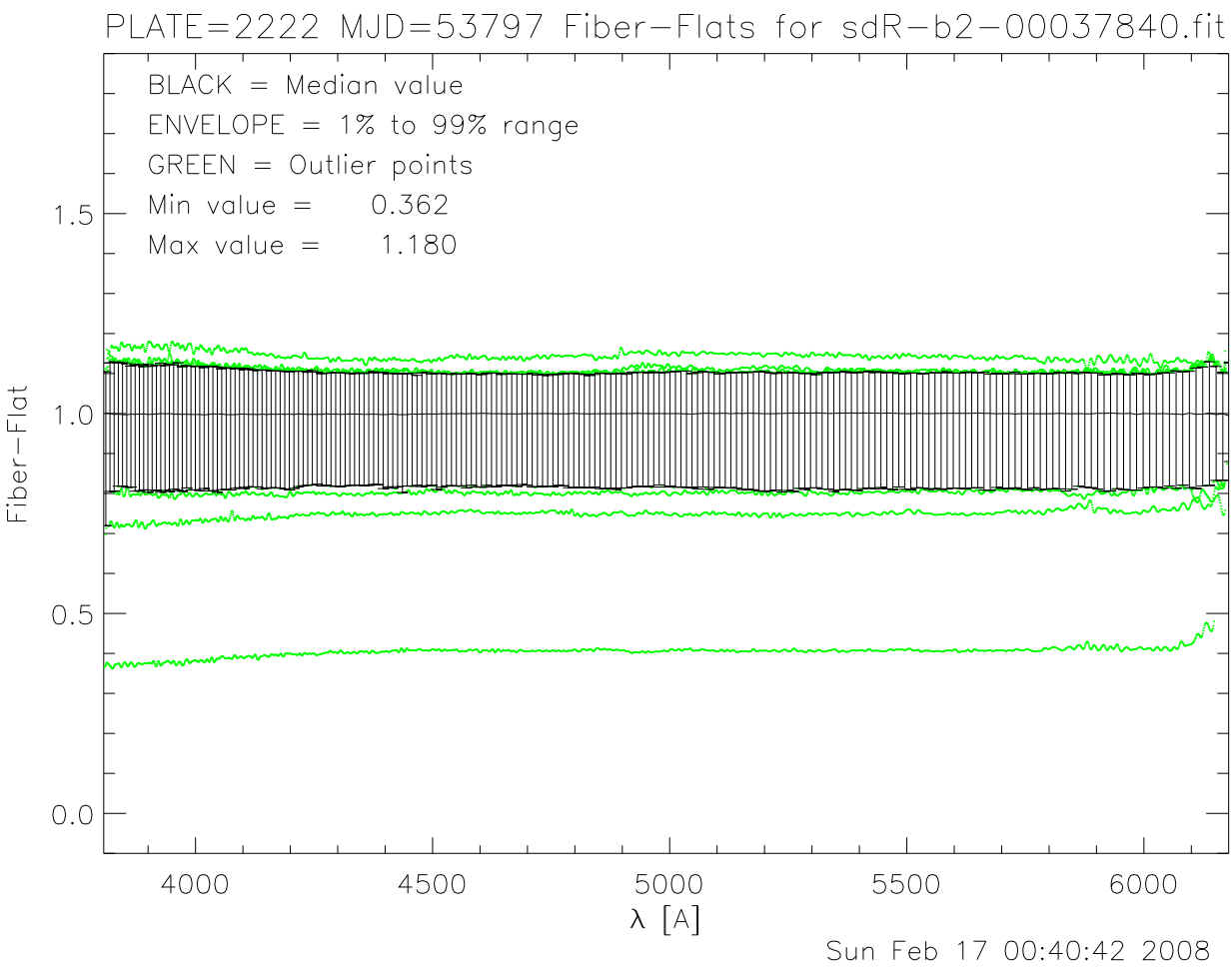

PLATE=2222 MJD=53797 sdR-b2-00037839.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

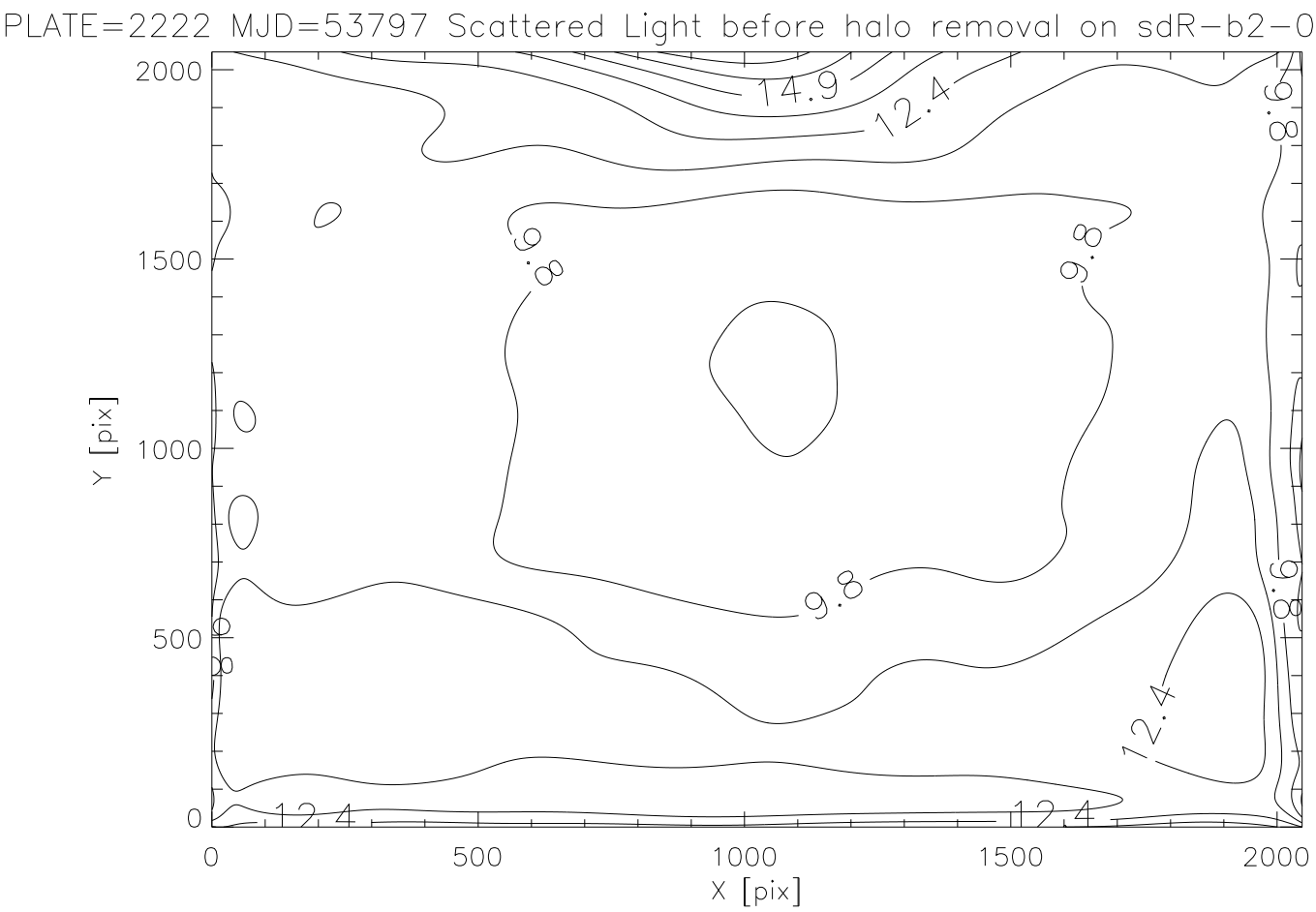

PLATE=2222 MJD=53797 sdR-b2-00037839.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

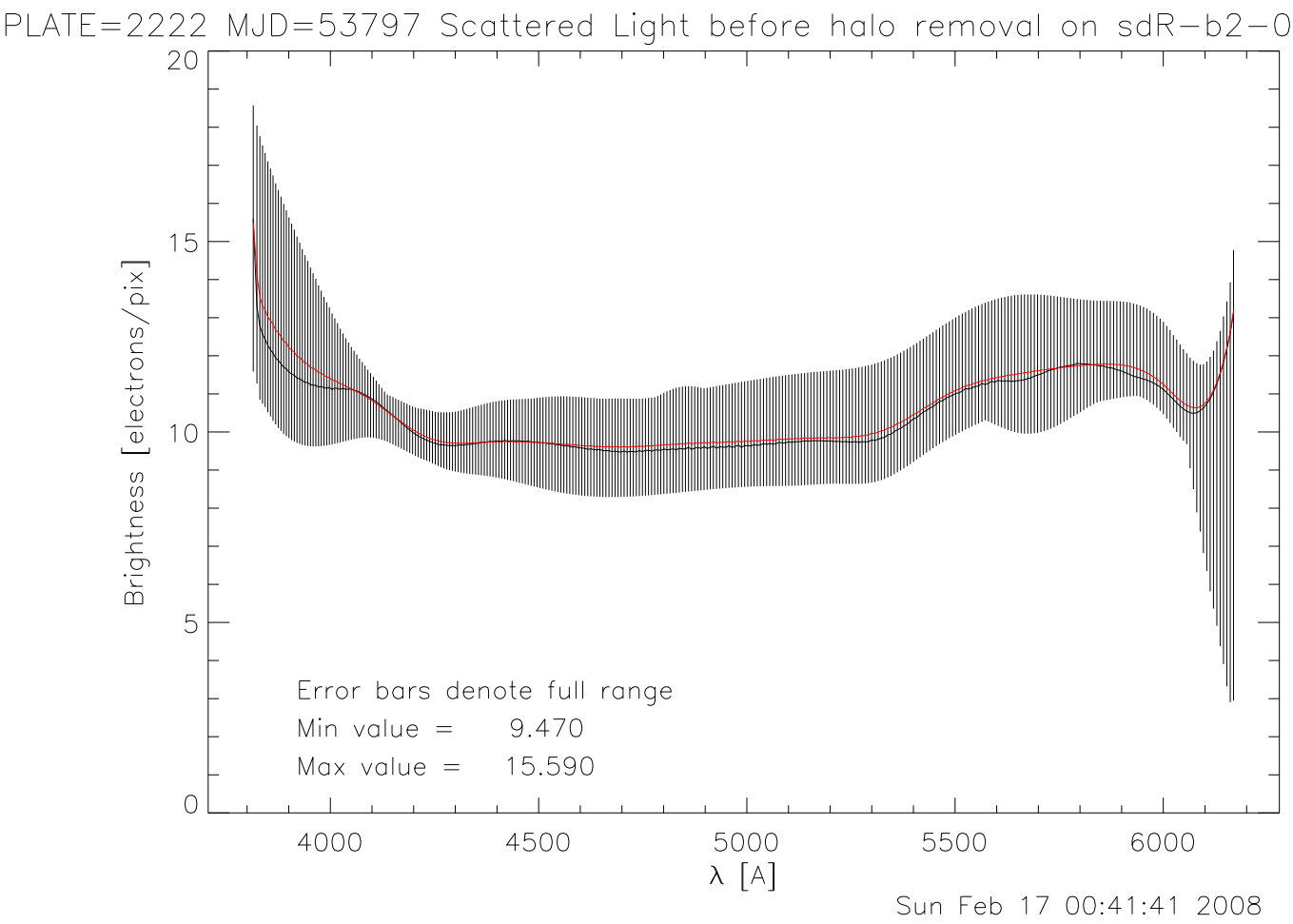

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b2-00037839.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

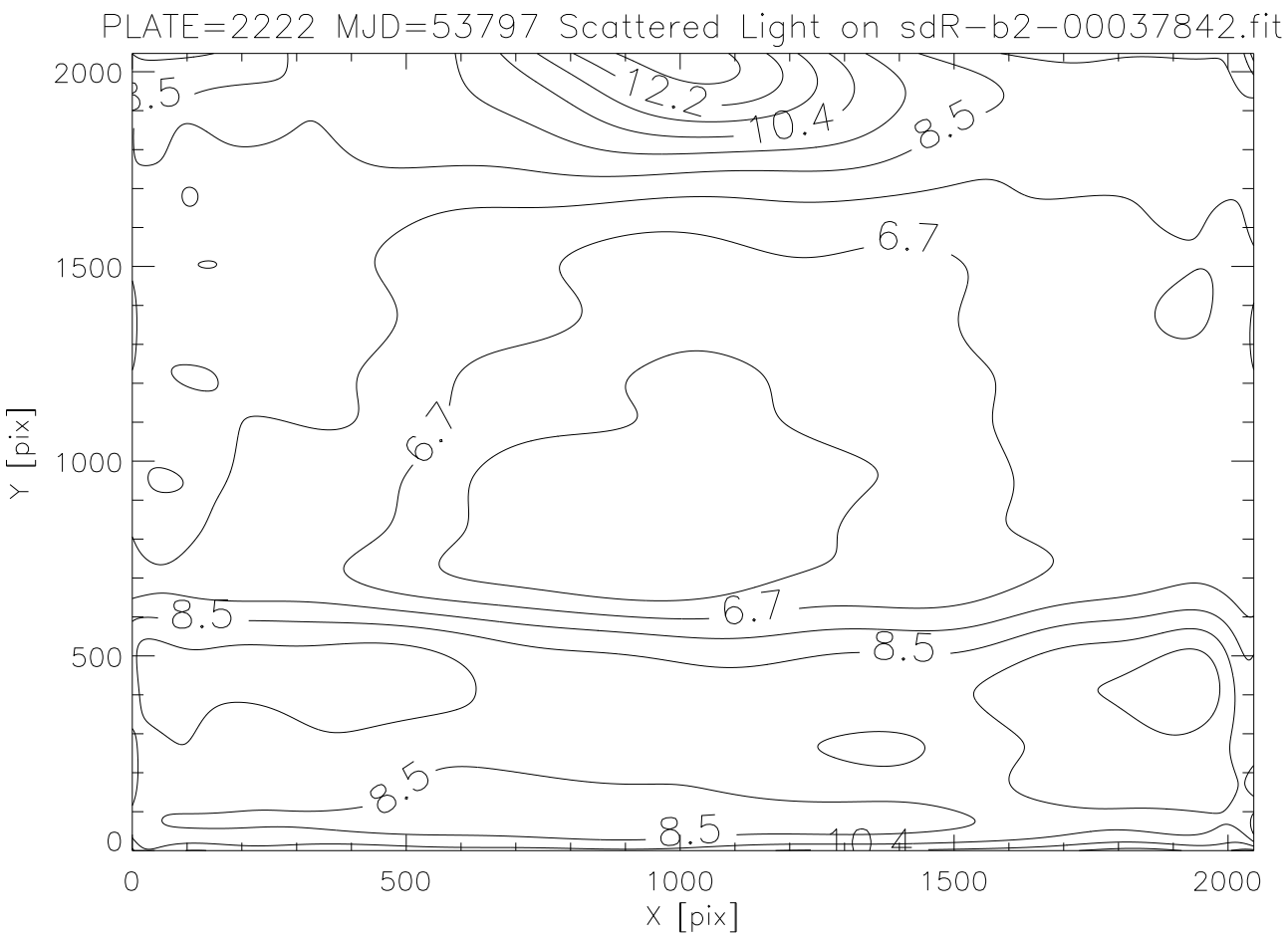

PLATE=2222 MJD=53797 sdR-b2-00037839.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.40 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

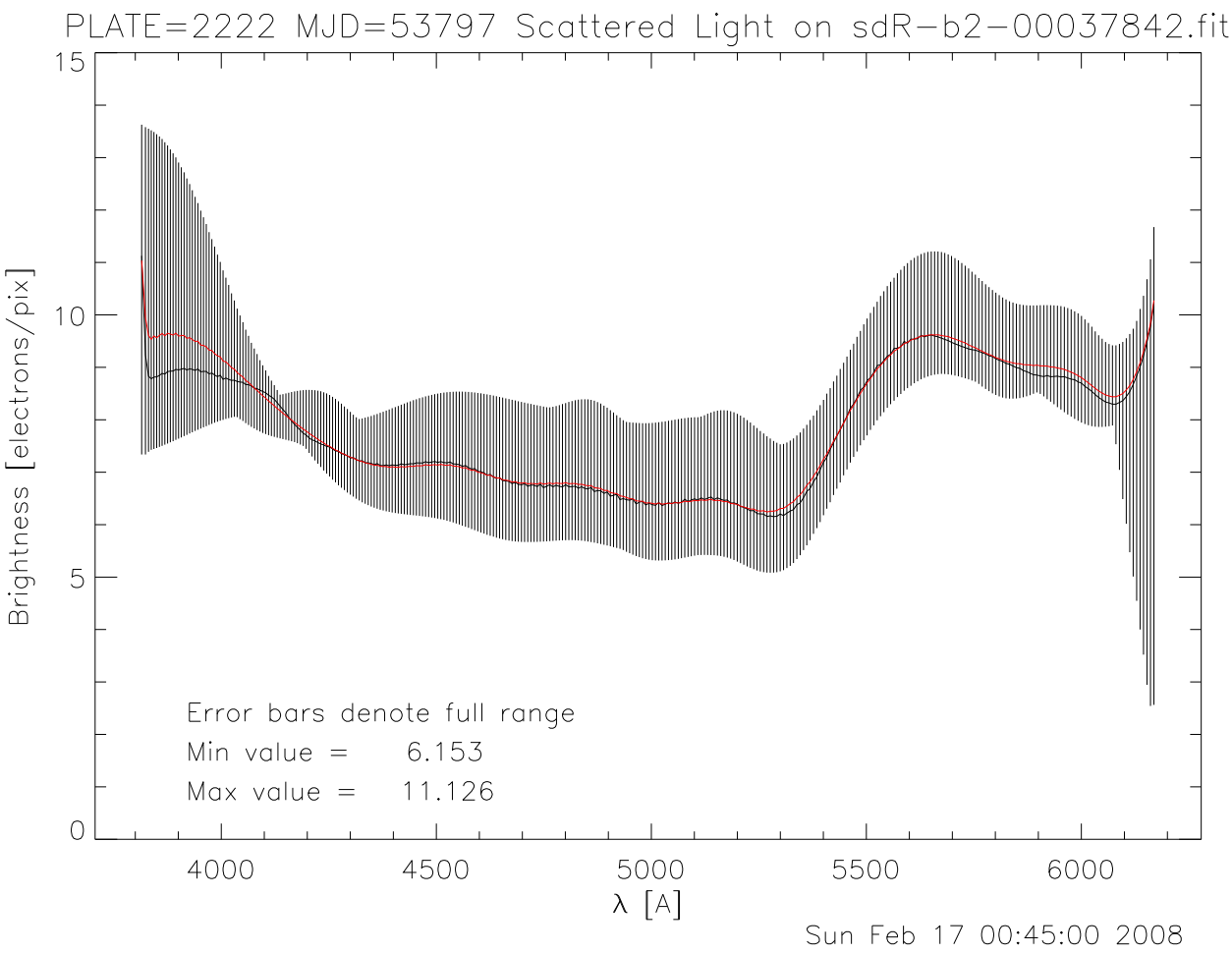

PLATE=2222 MJD=53797 sdR-b2-00037839.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.17 %
Fiber number
Focal Distance [mm]
Airmass

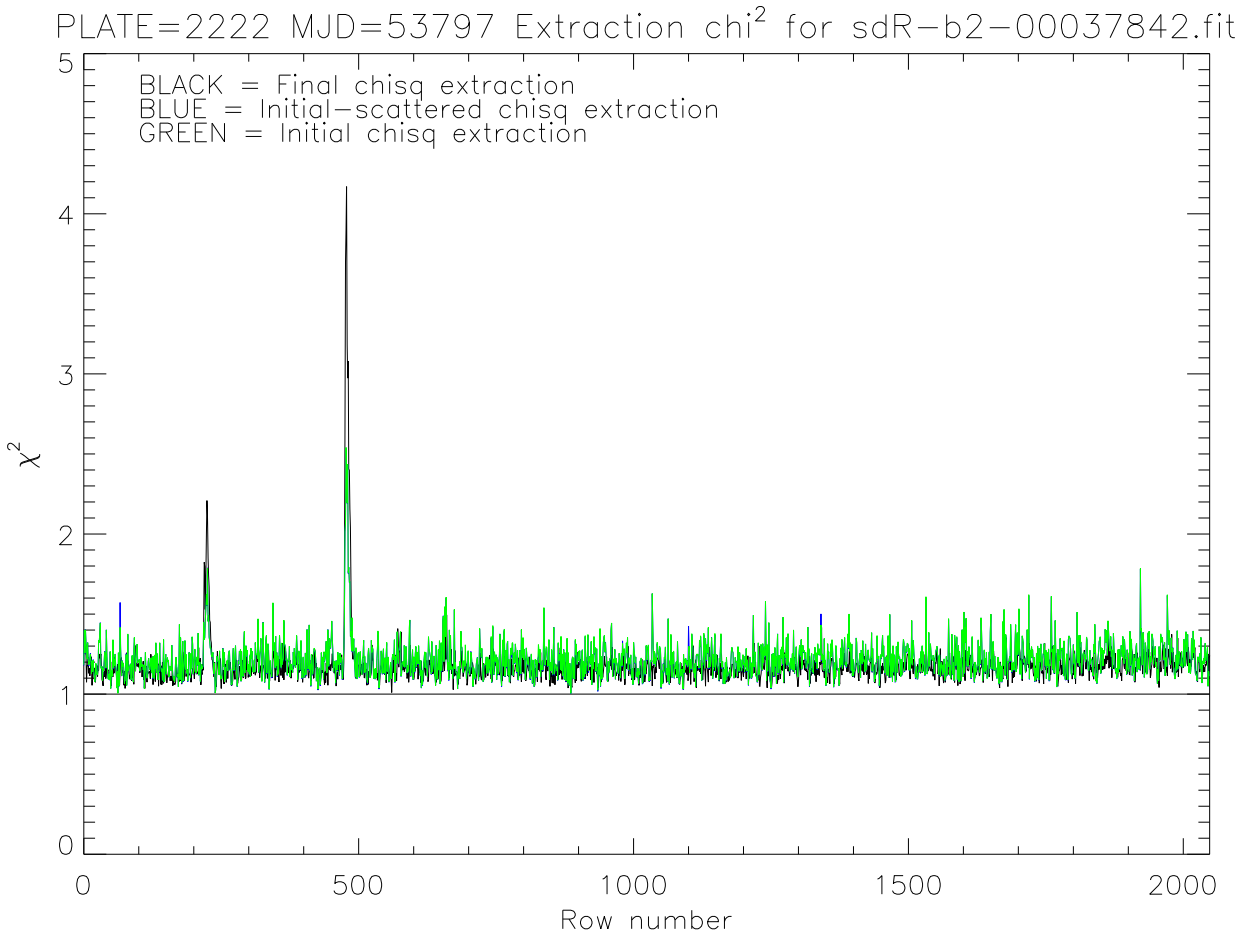

PLATE=2222 MJD=53797 Fiber-Flats for sdR-b2-00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.362
Max value = 1.180
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:40:42 2008

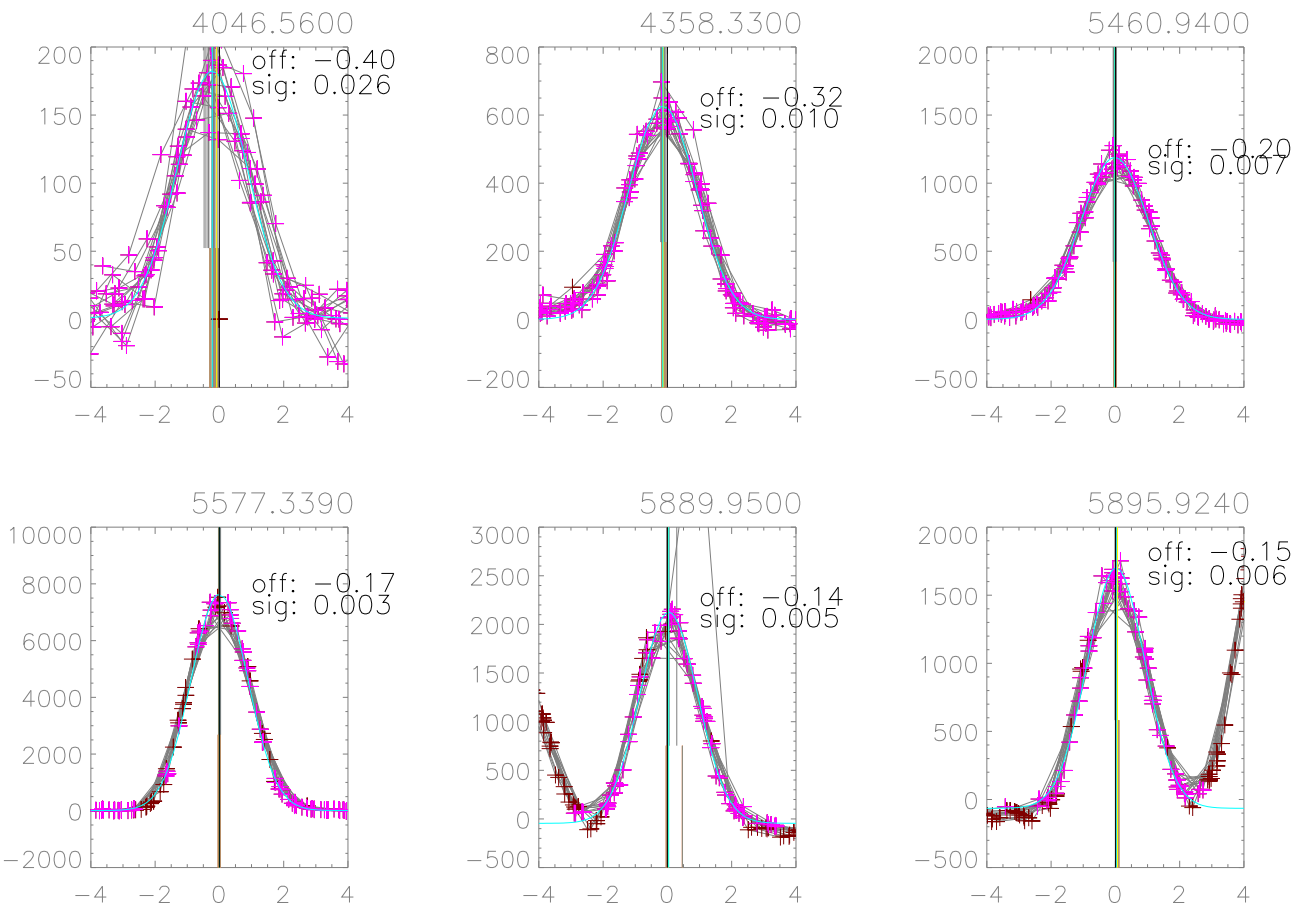

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR−b2−00037842.f
14.9
12.4
9.8
9.8
9.8
9.8
9.8
12.4
12.4
12.4
0
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

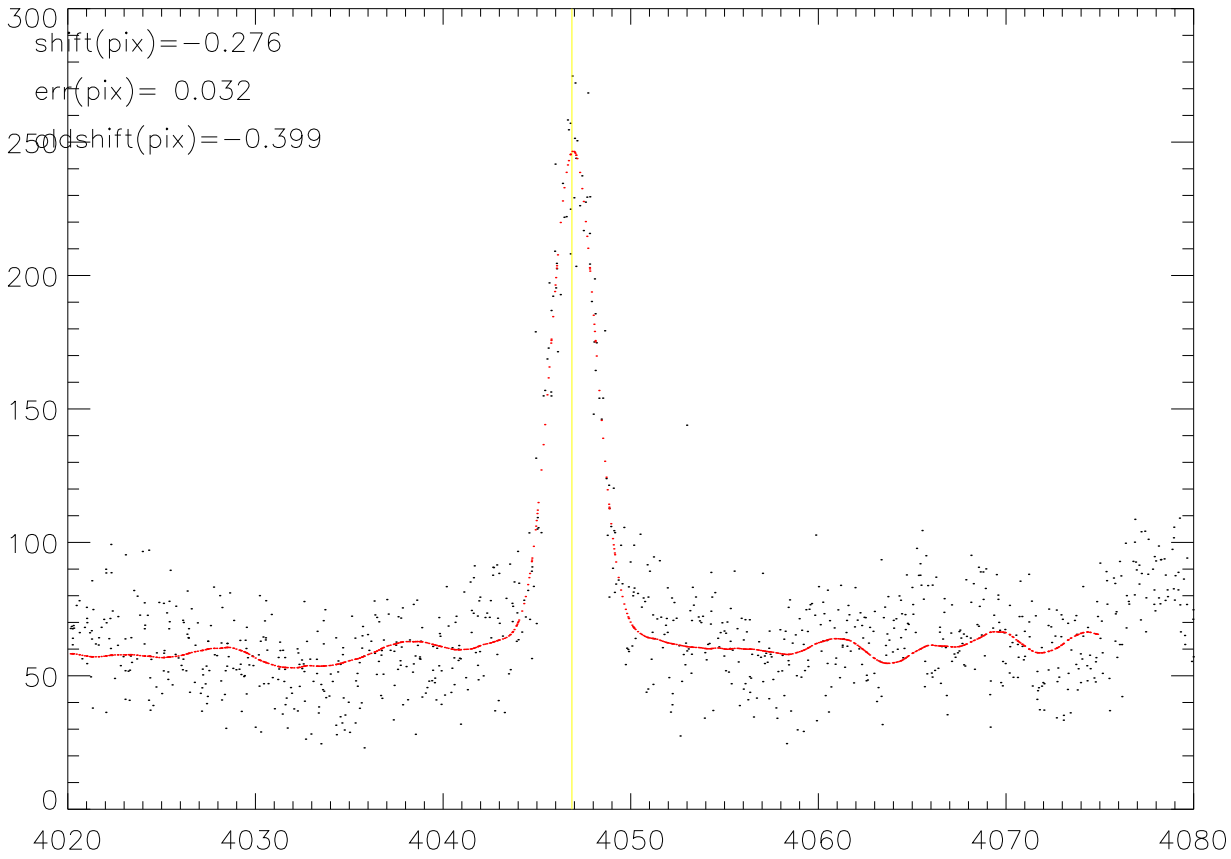

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-b2-00037842.f
Brightness [electrons/pix]
20
15
10
5
0
Error bars denote full range
Min value = 9.470
Max value = 15.590
4000
4500
5000
5500
6000
λ [A]
Sun Feb 17 00:41:41 2008

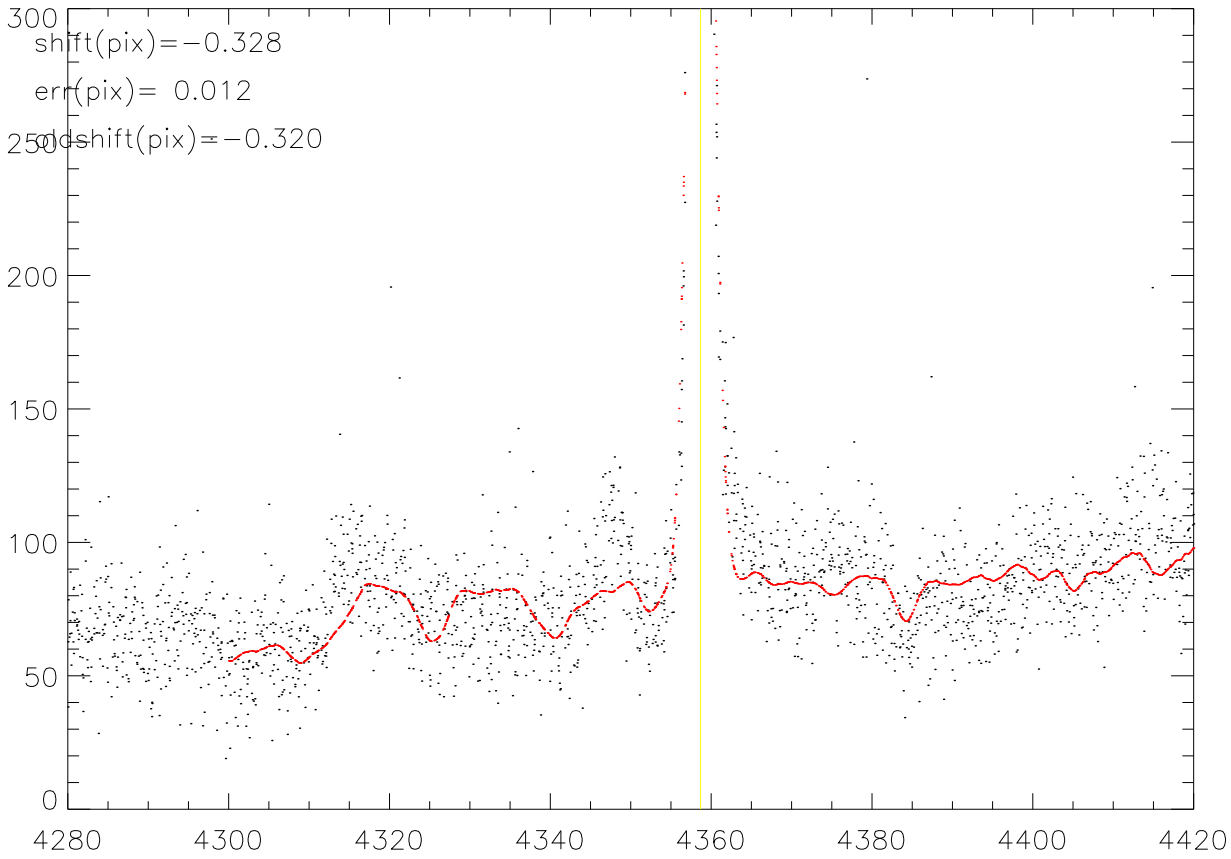

PLATE=2222 MJD=53797 Scattered Light on sdR-b2-00037842.fit
12.2
10.4
8.5
6.7
6.7
6.7
8.5
8.5
8.5
8.5
10.4
0
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

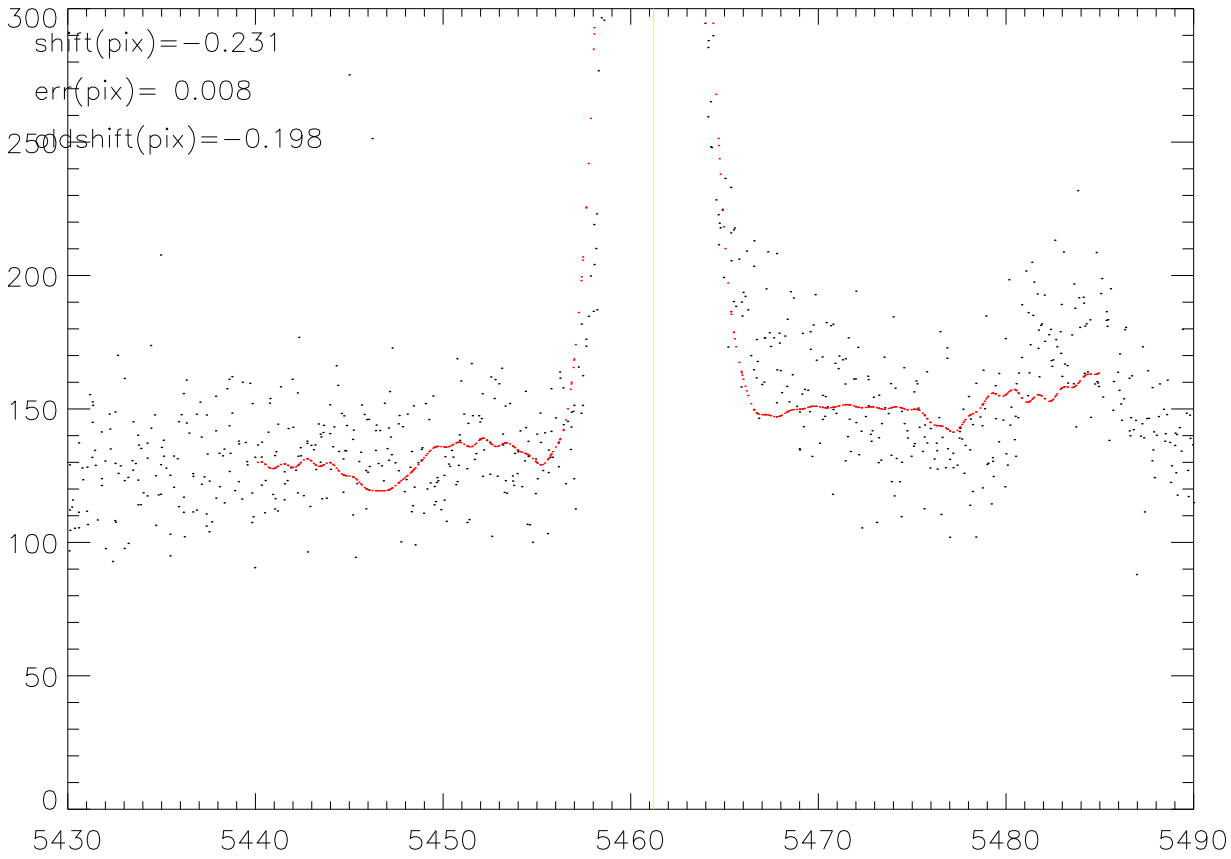

PLATE=2222 MJD=53797 Scattered Light on sdR-b2-00037842.fit
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.153
Max value = 11.126
Sun Feb 17 00:45:00 2008

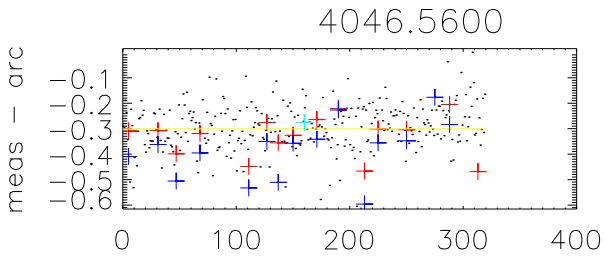

PLATE=2222 MJD=53797 Extraction chi^2 for sdR-b2-00037842.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

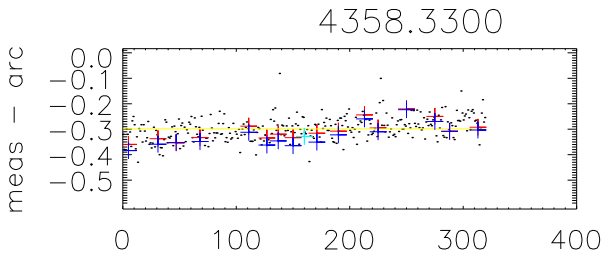

4046.5600
off: −0.40
sig: 0.026
4358.3300
off: −0.32
sig: 0.010
5460.9400
off: −0.20
sig: 0.007
5577.3390
off: −0.17
sig: 0.003
5889.9500
off: −0.14
sig: 0.005
5895.9240
off: −0.15
sig: 0.006

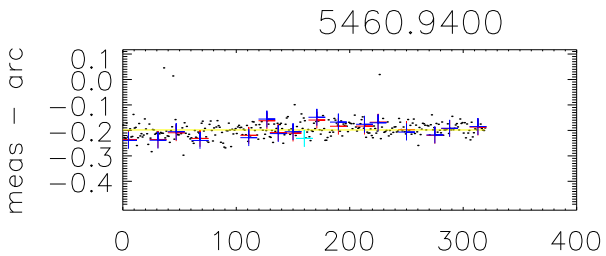

shift(pix)=−0.276
err(pix)= 0.032
oldshift(pix)=−0.399
300
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

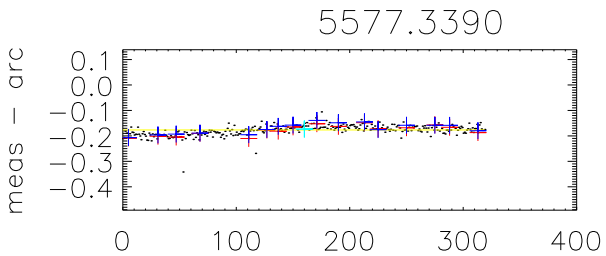

shift(pix)=−0.328
err(pix)= 0.012
oldshift(pix)=−0.320
300
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

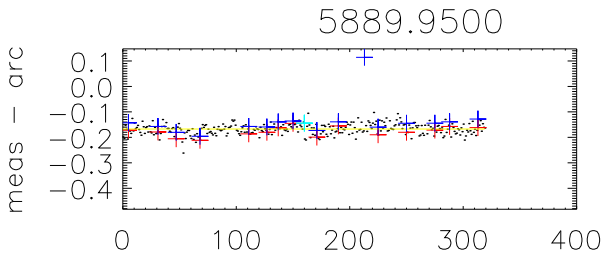

shift(pix)=−0.231
err(pix)= 0.008
oldshift(pix)=−0.198
300
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

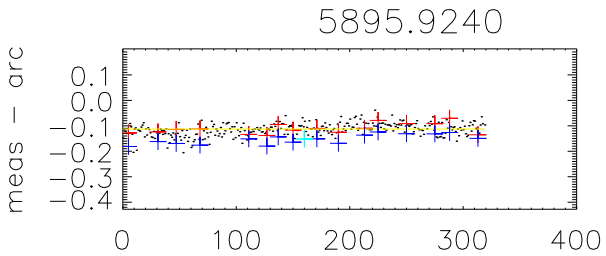

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

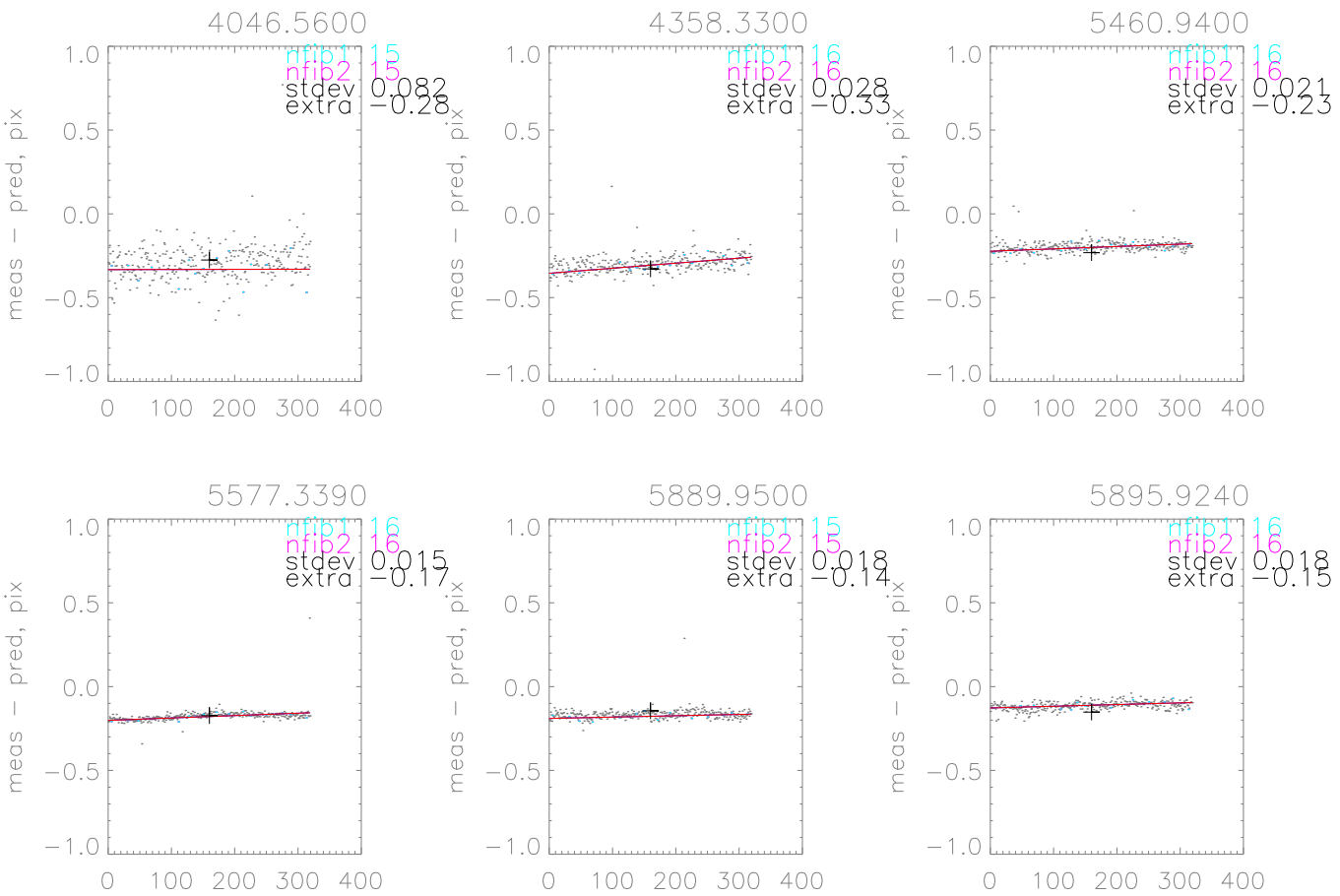

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

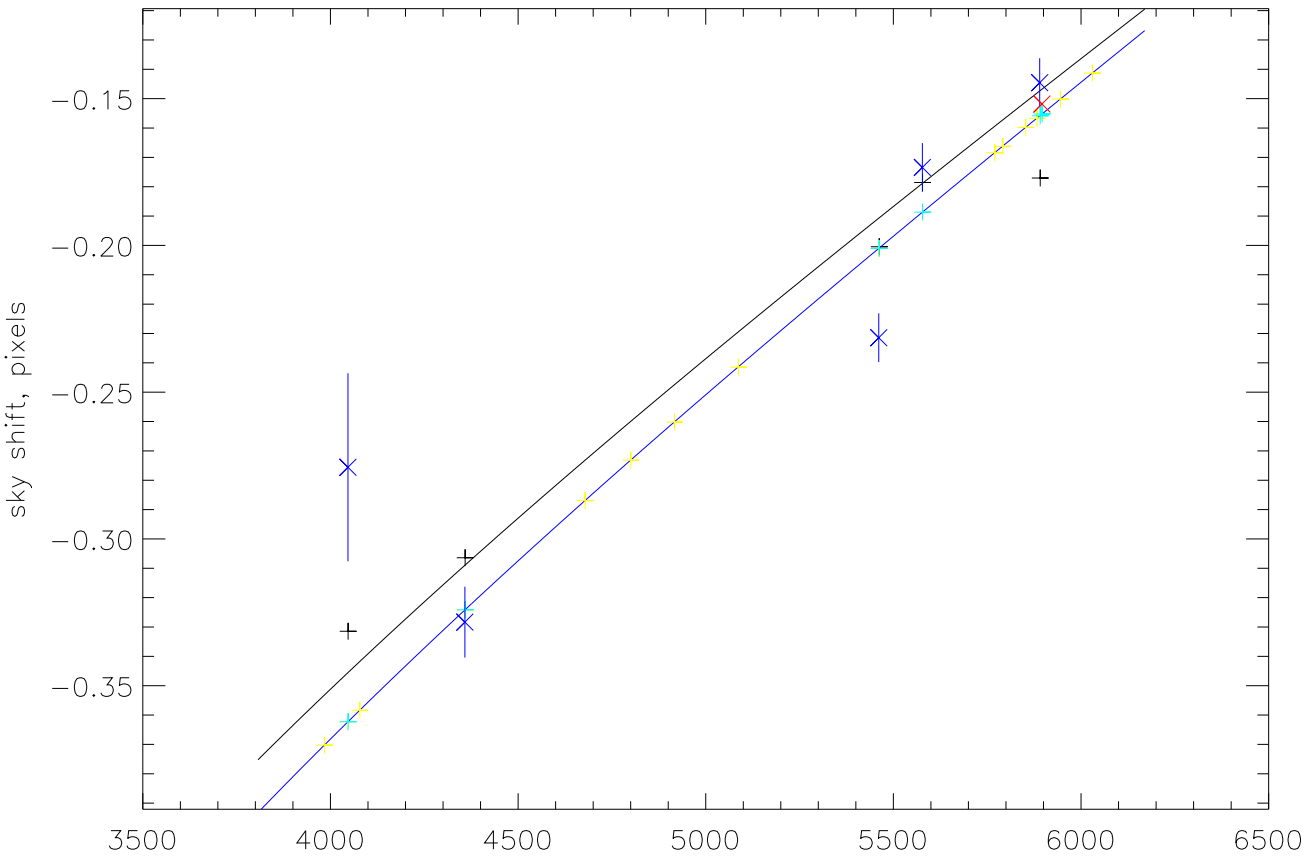

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

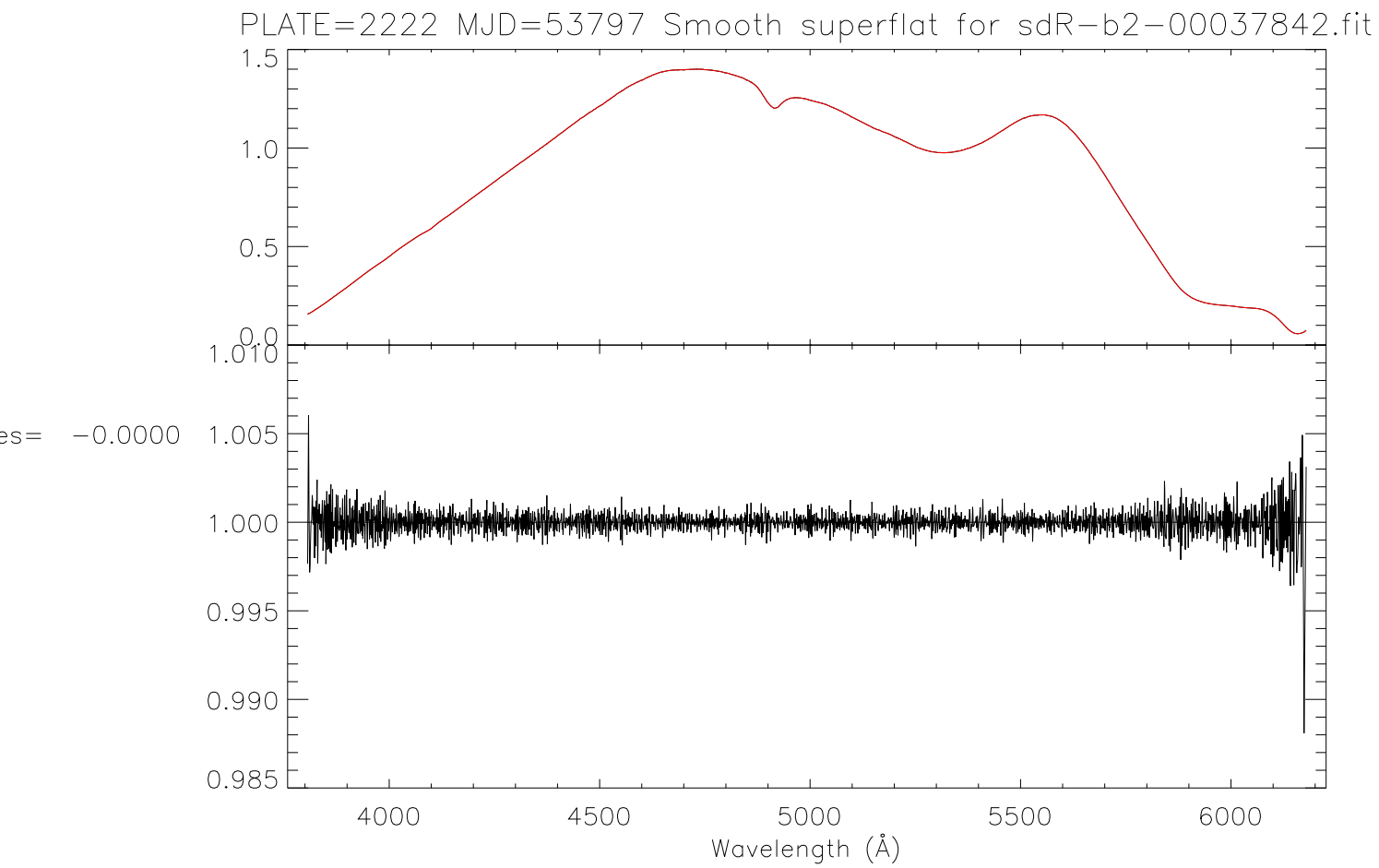

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

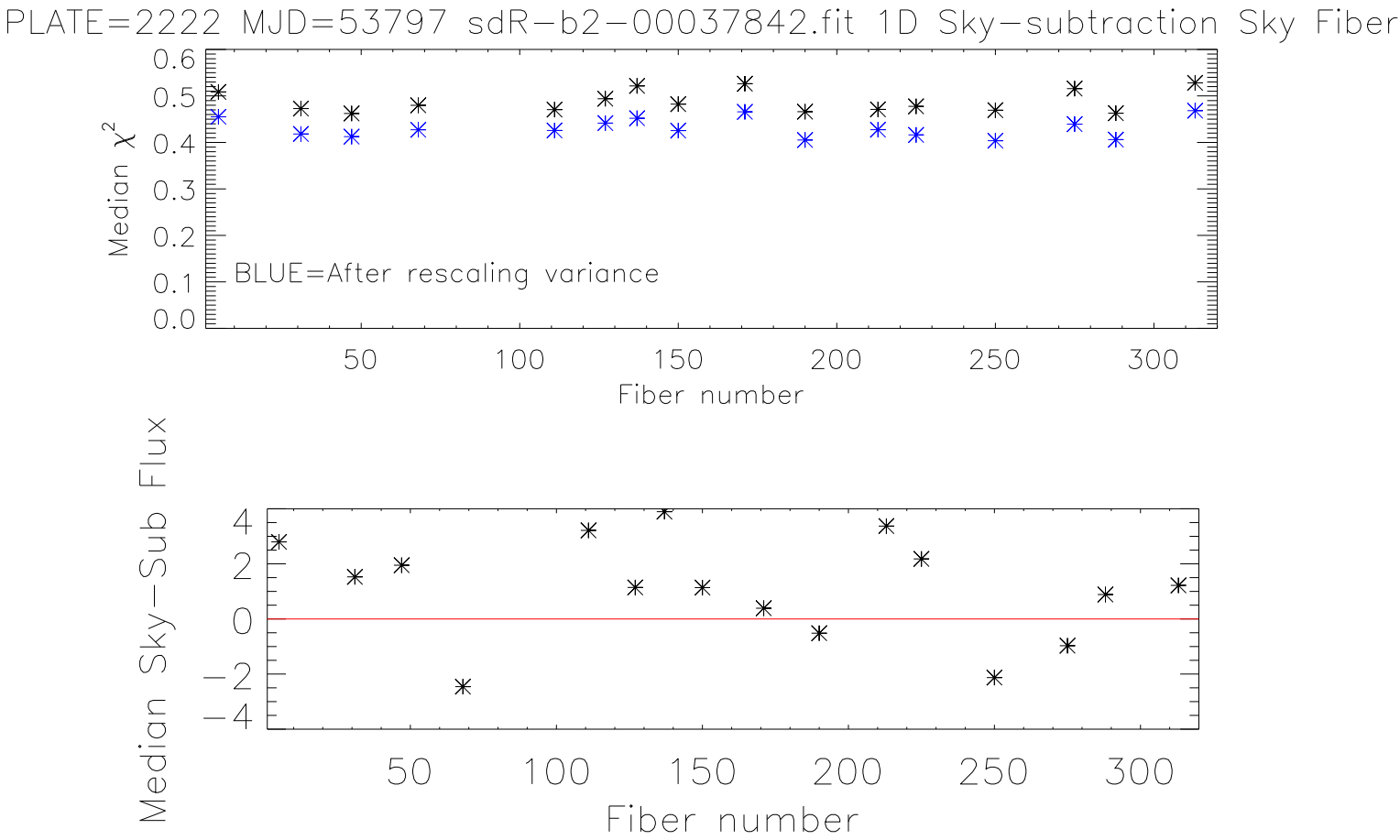

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

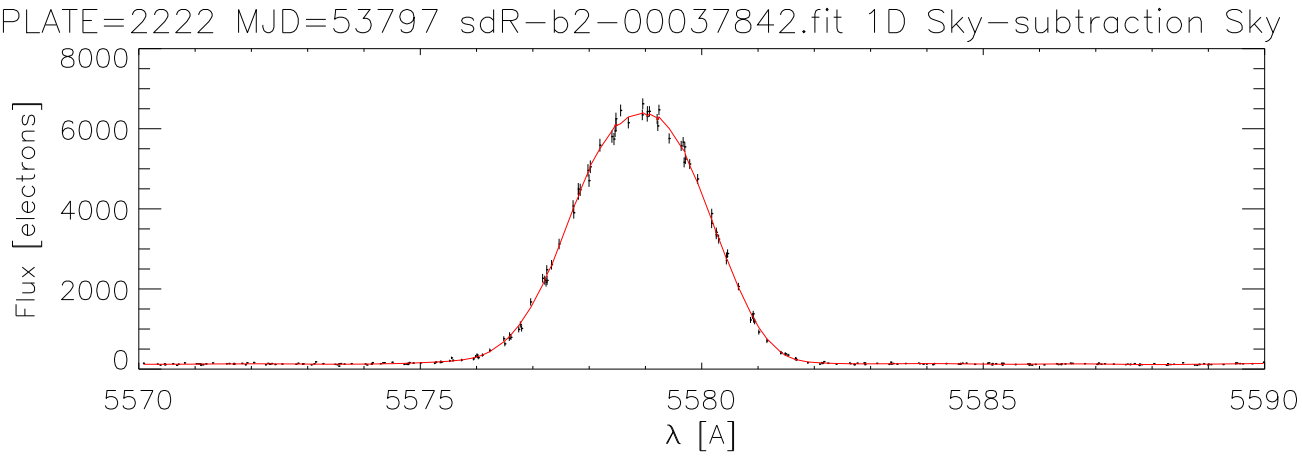

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

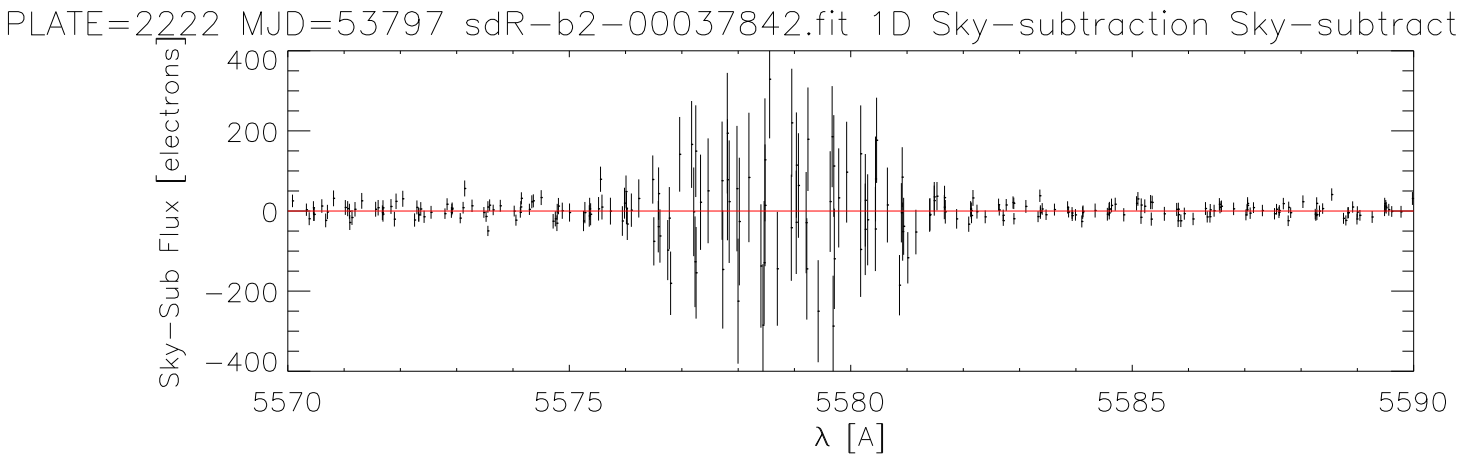

4046.5600
nfib1 15
nfib2 15
stdev 0.082
extra −0.28
4358.3300
nfib1 16
nfib2 16
stdev 0.028
extra −0.33
5460.9400
nfib1 16
nfib2 16
stdev 0.021
extra −0.23
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.17
5889.9500
nfib1 15
nfib2 15
stdev 0.018
extra −0.14
5895.9240
nfib1 16
nfib2 16
stdev 0.018
extra −0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

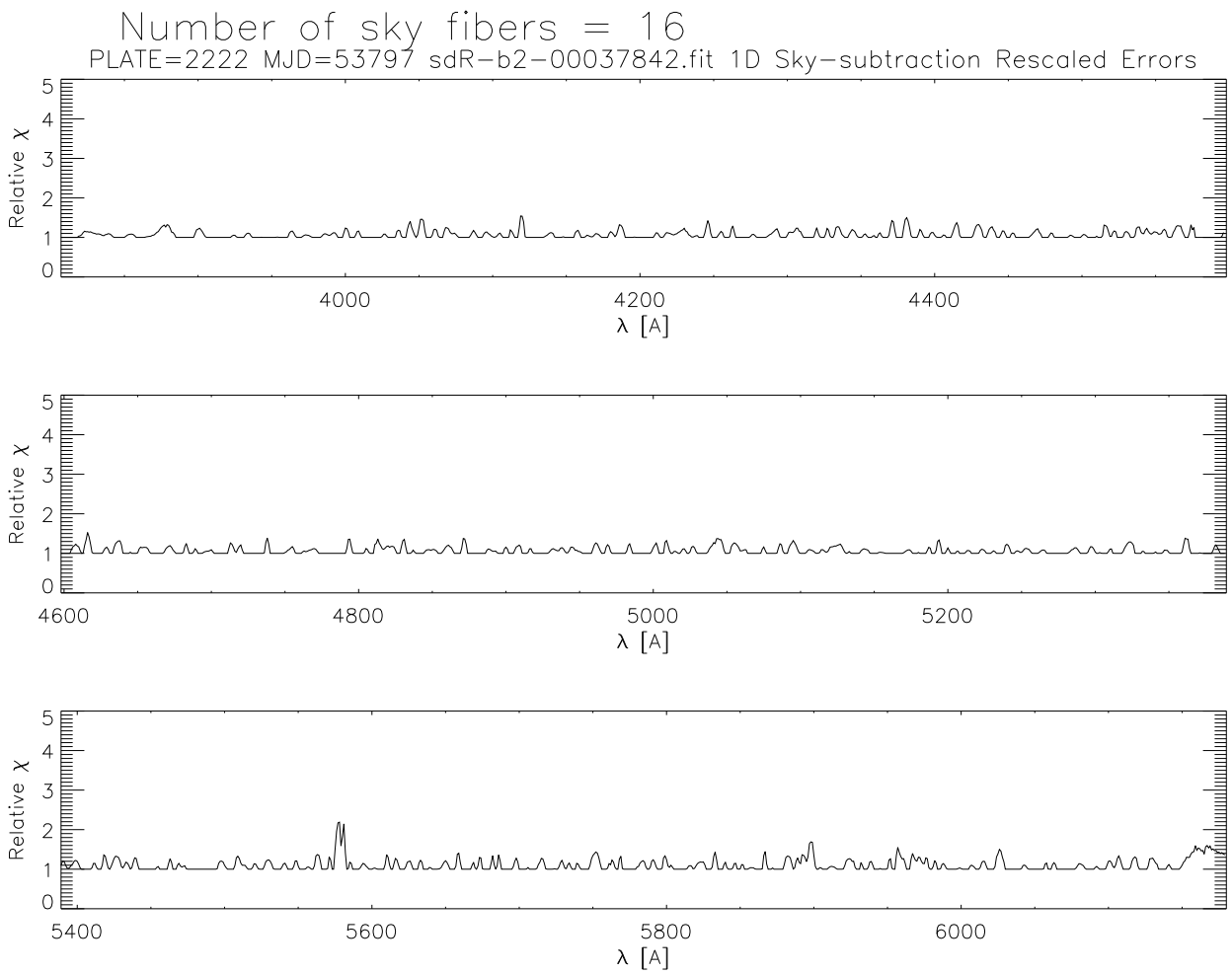

sky shift, pixels
−0.15
−0.20
−0.25
−0.30
−0.35
3500
4000
4500
5000
5500
6000
6500

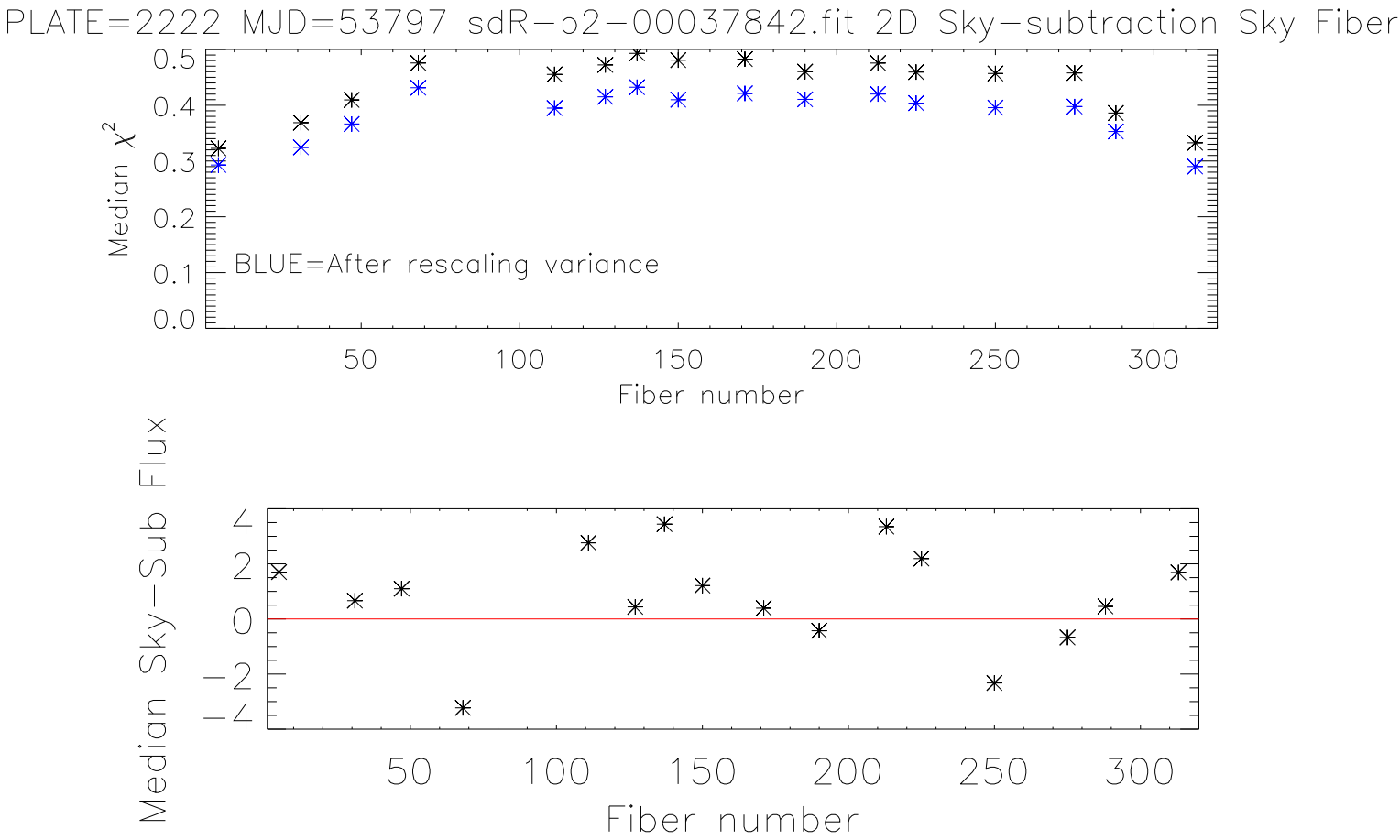

PLATE=2222 MJD=53797 Smooth superflat for sdR-b2-00037842.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

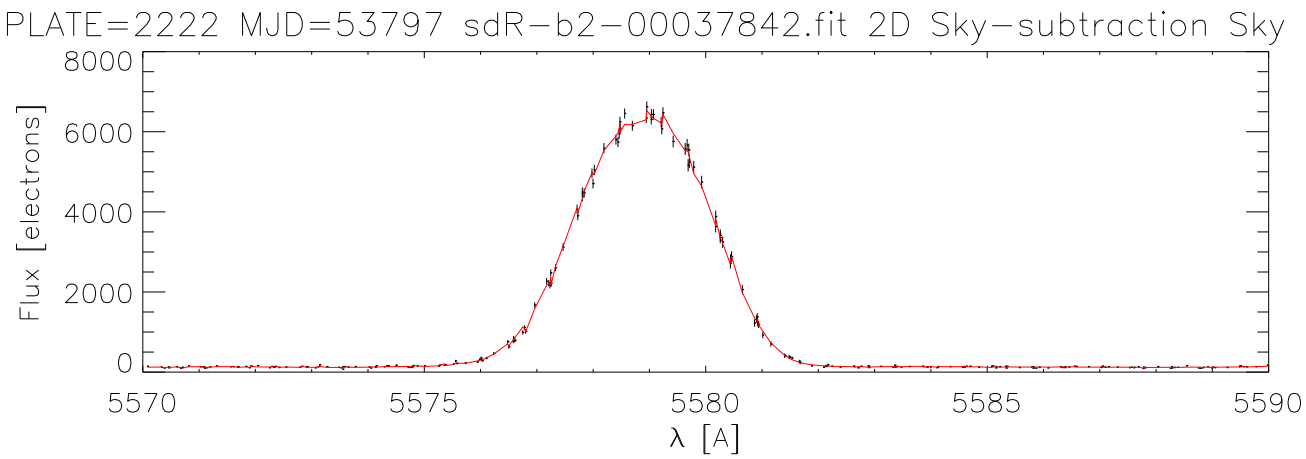

PLATE=2222 MJD=53797 sdR-b2-00037842.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

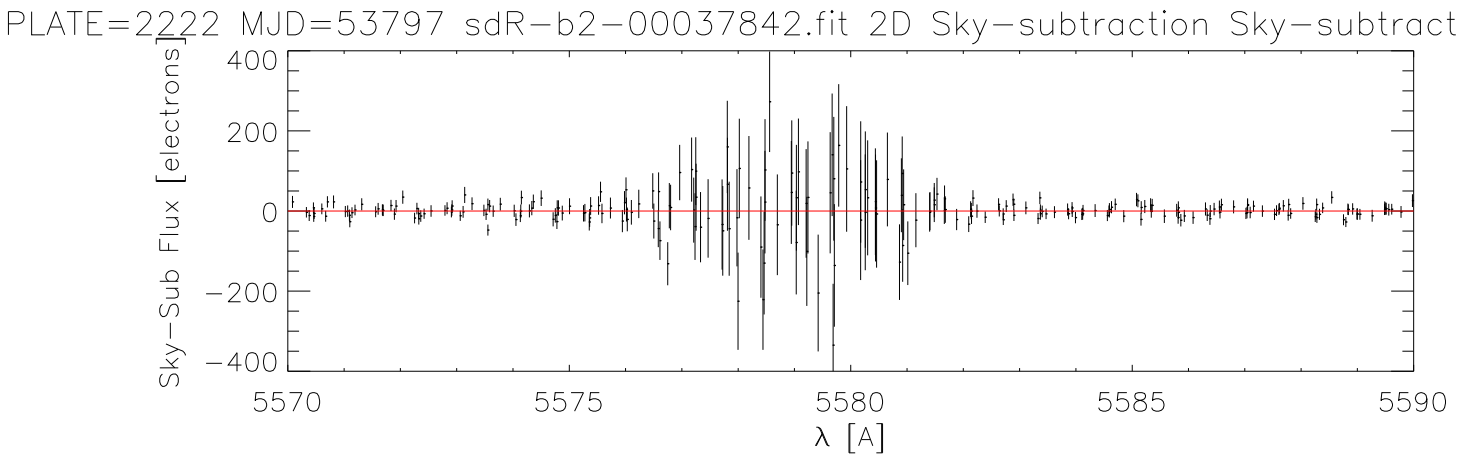

PLATE=2222 MJD=53797 sdR-b2-00037842.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

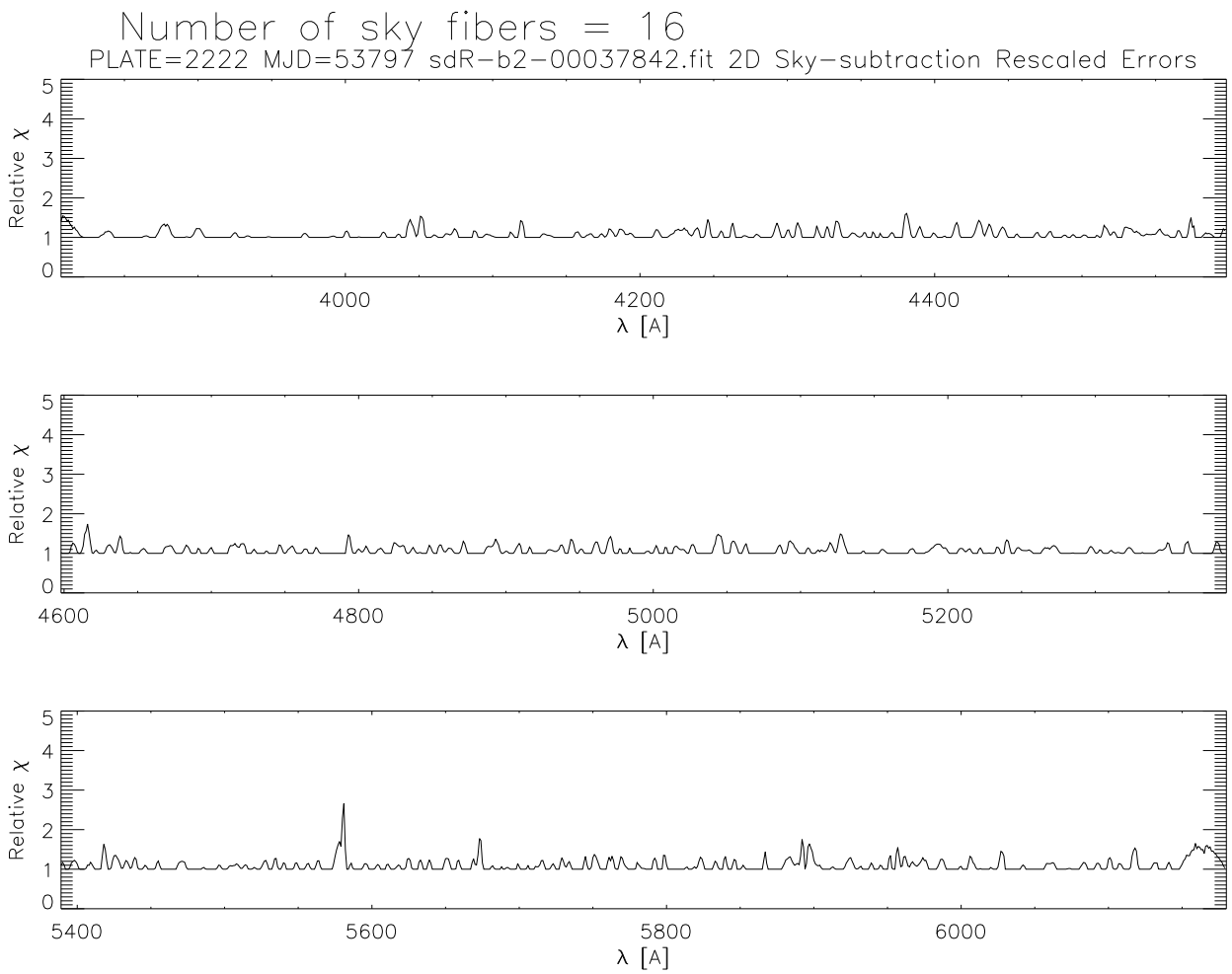

PLATE=2222 MJD=53797 sdR-b2-00037842.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

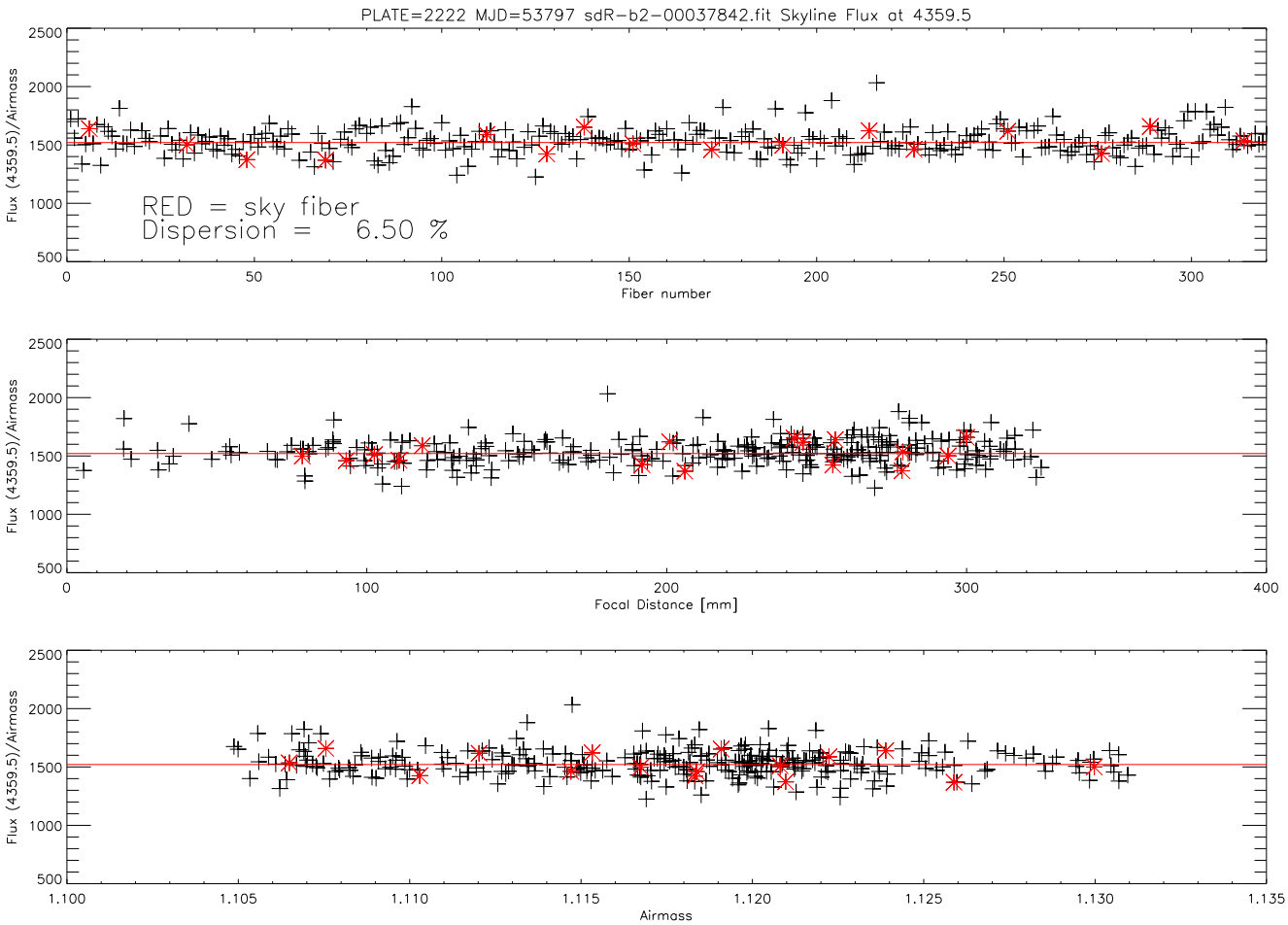

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b2-00037842.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

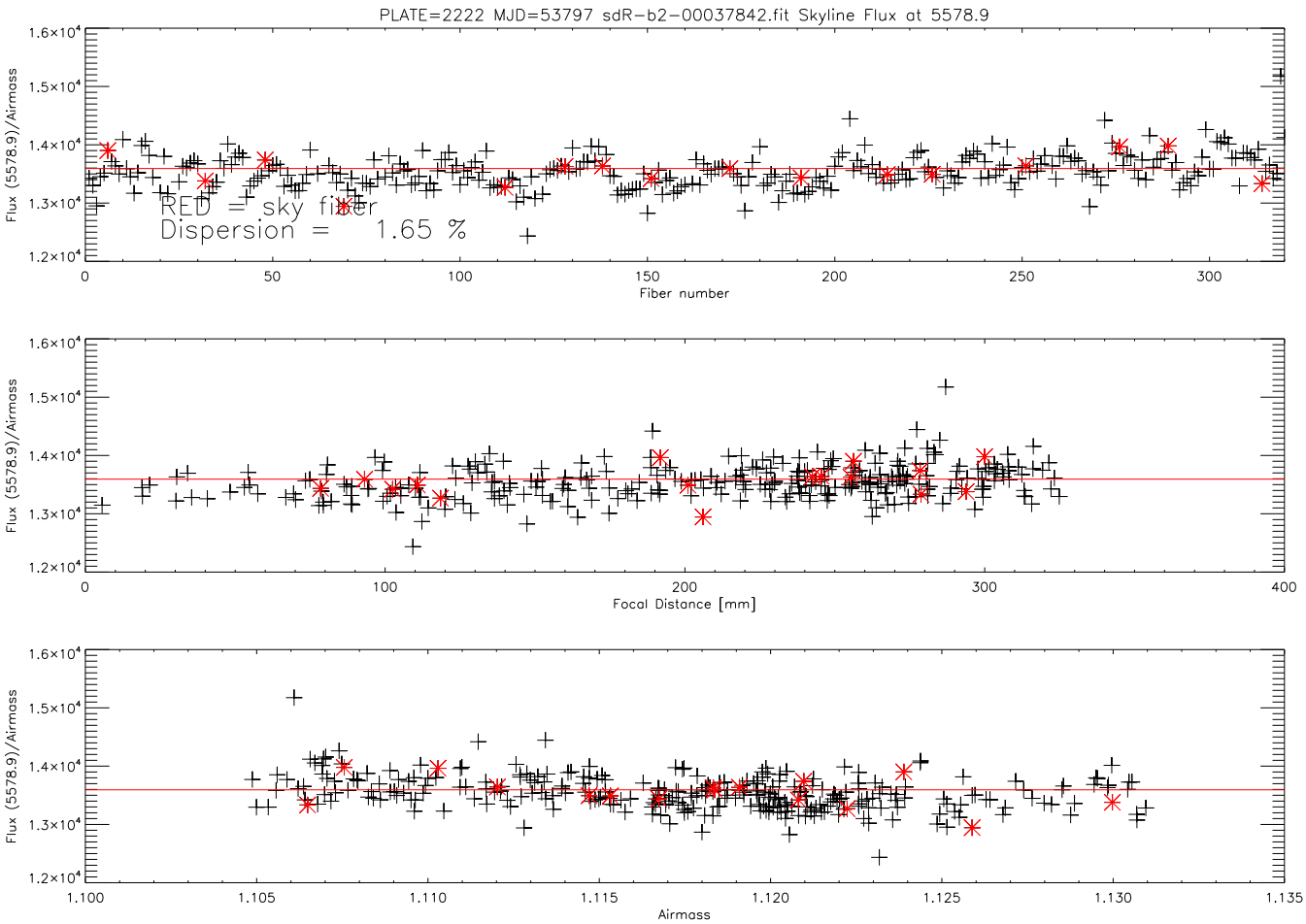

PLATE=2222 MJD=53797 sdR-b2-00037842.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

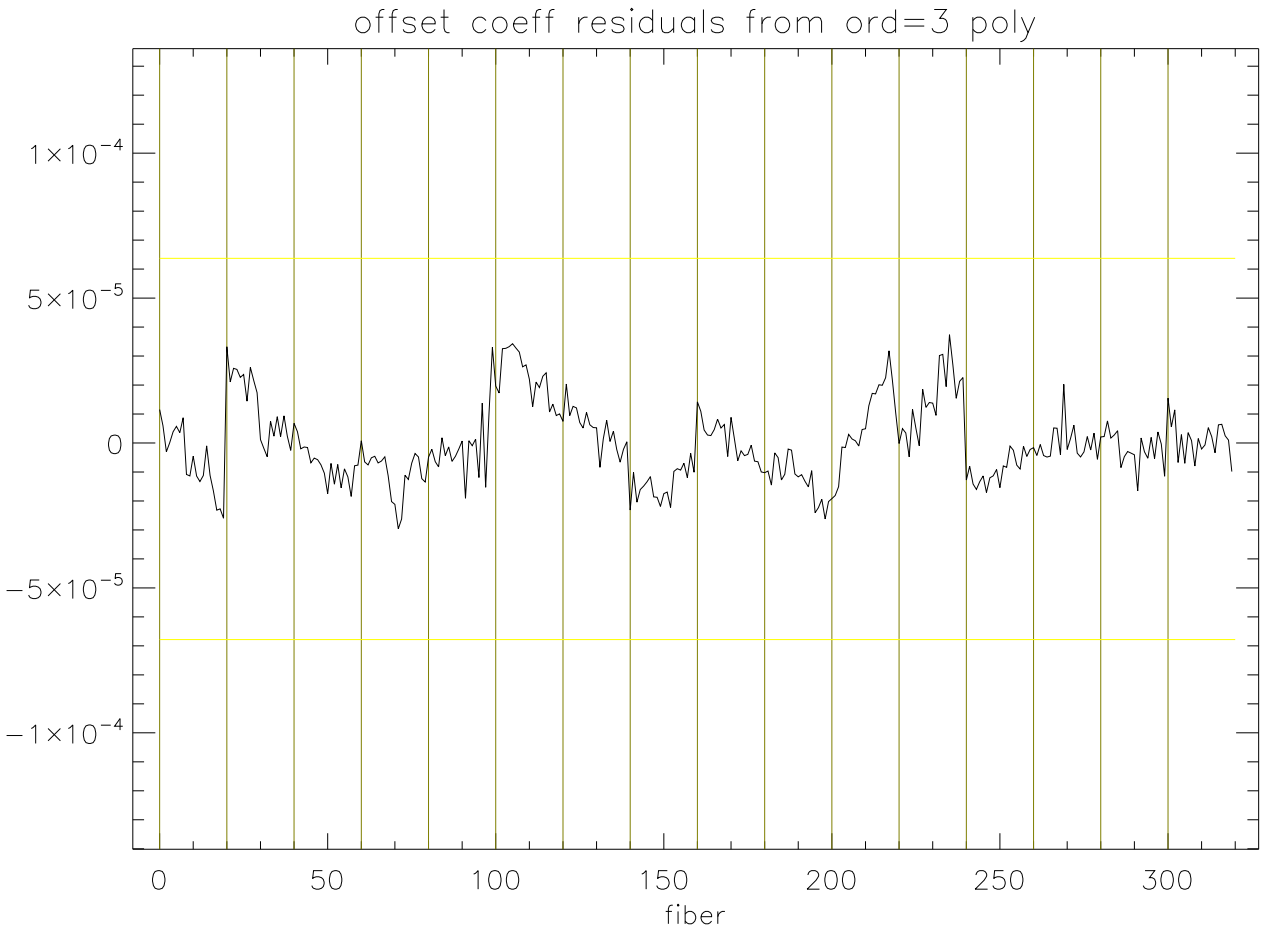

PLATE=2222 MJD=53797 sdR-b2-00037842.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

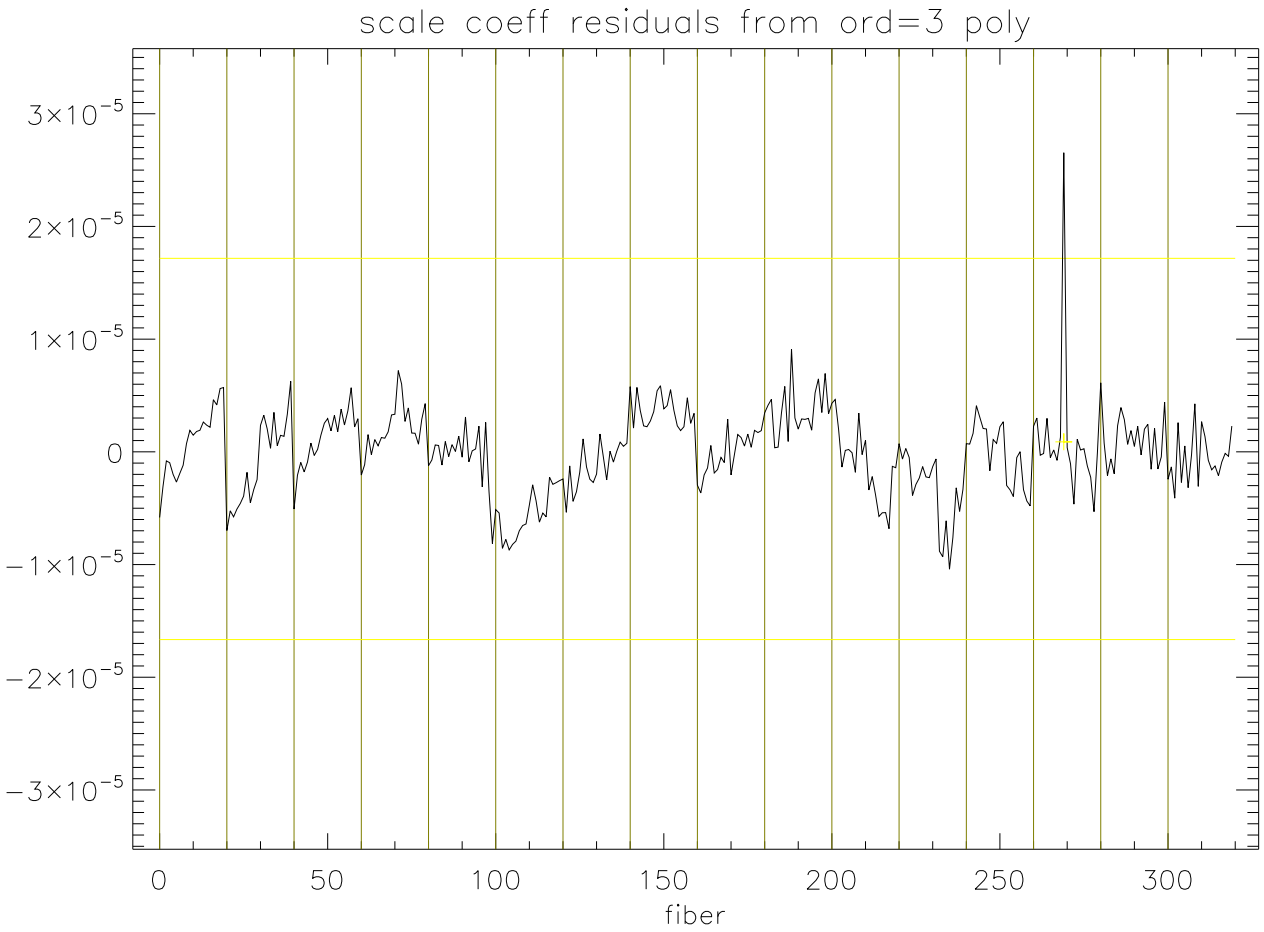

PLATE=2222 MJD=53797 sdR-b2-00037842.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

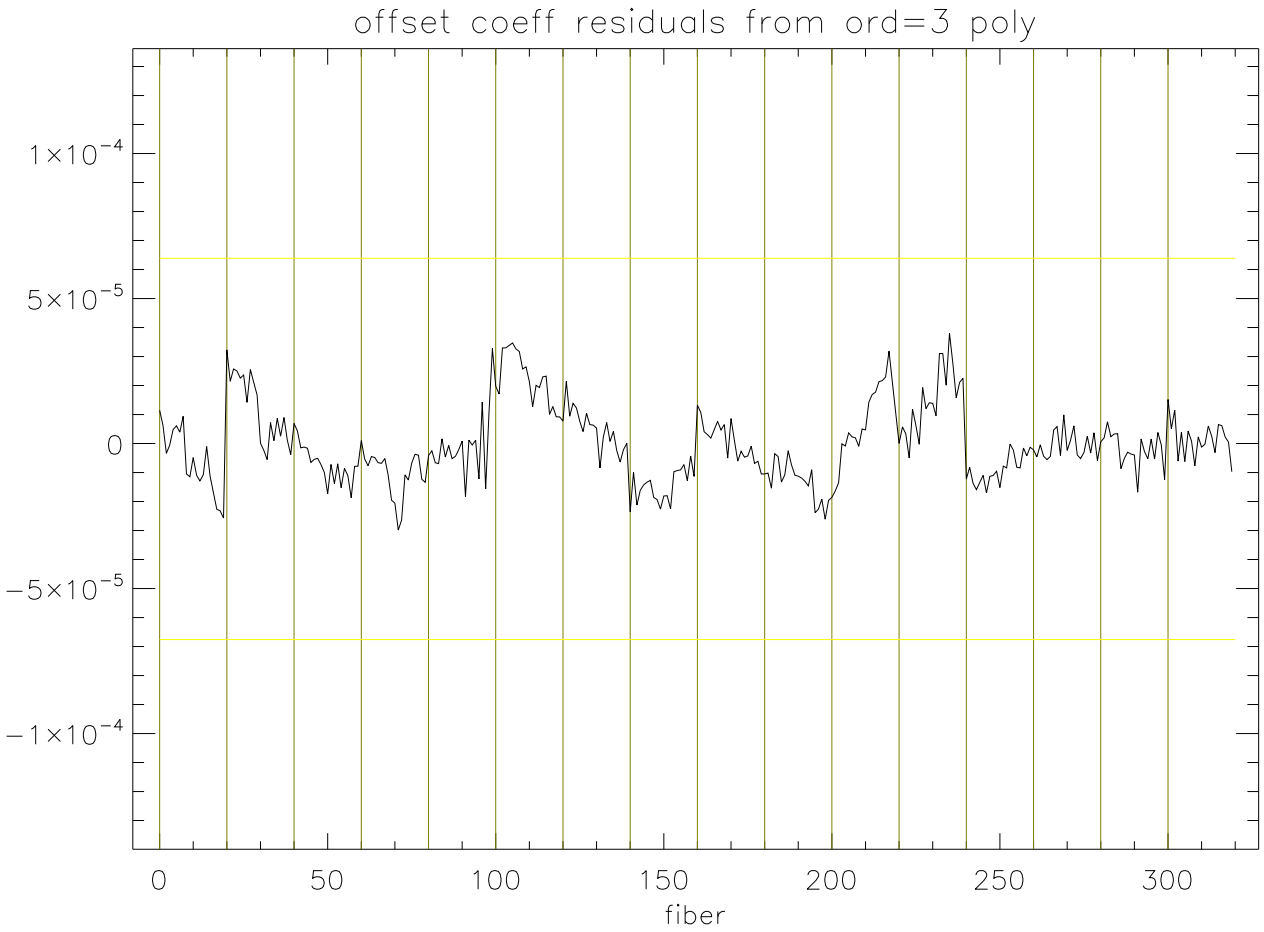

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-b2-00037842.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

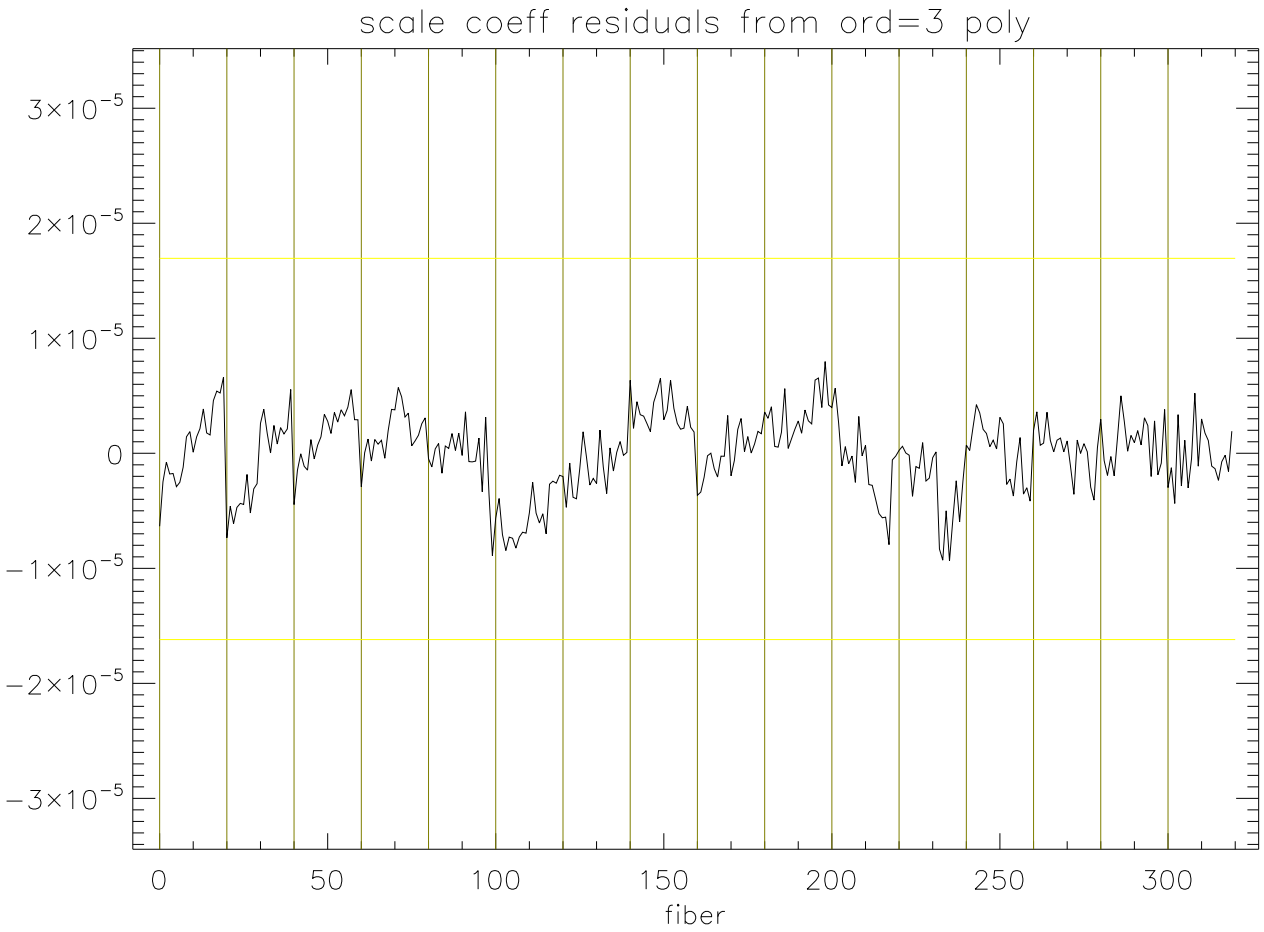

PLATE=2222 MJD=53797 sdR-b2-00037842.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 6.50 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

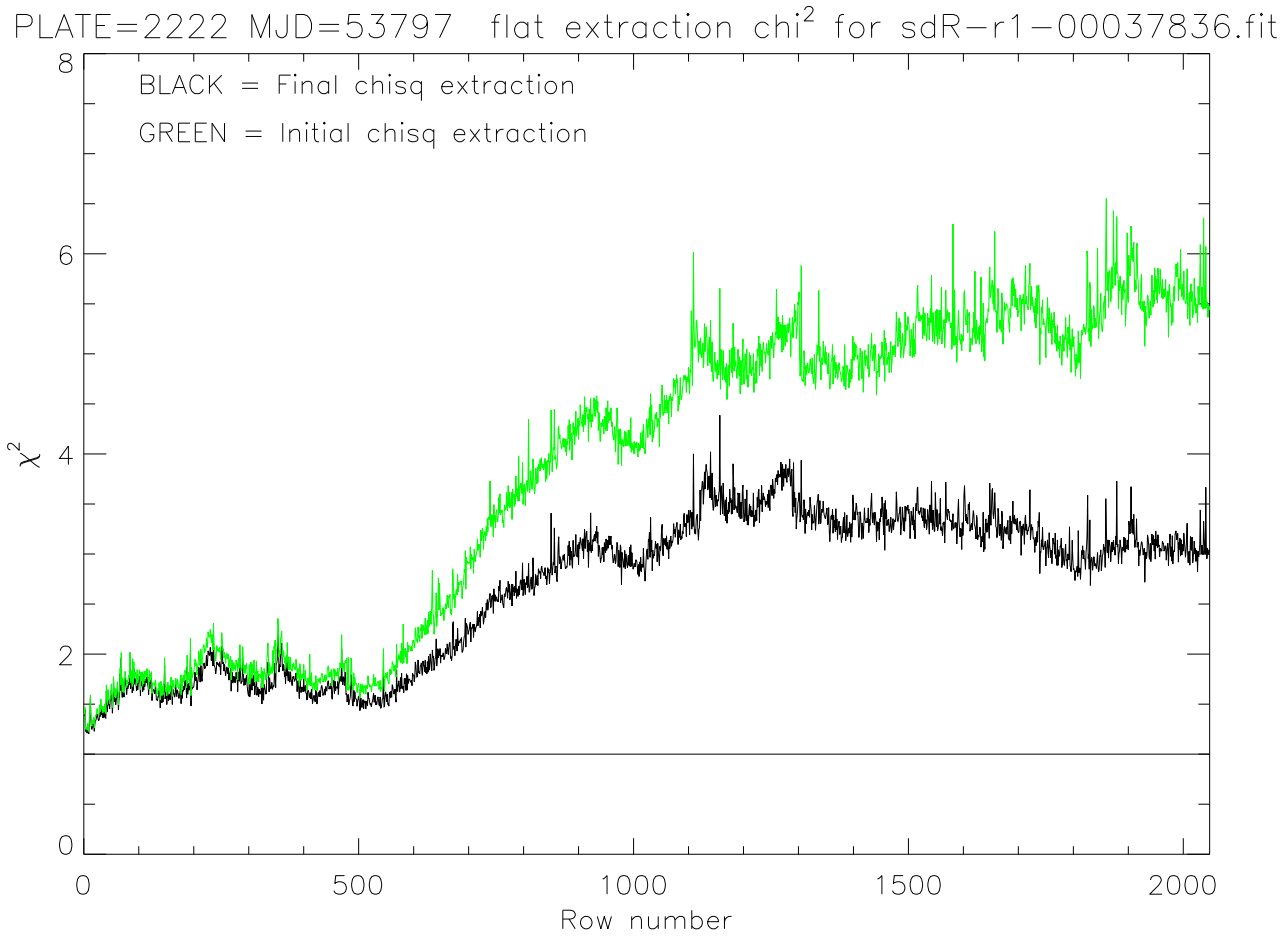

PLATE=2222 MJD=53797 sdR-b2-00037842.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.65 %
Focal Distance [mm]
Airmass

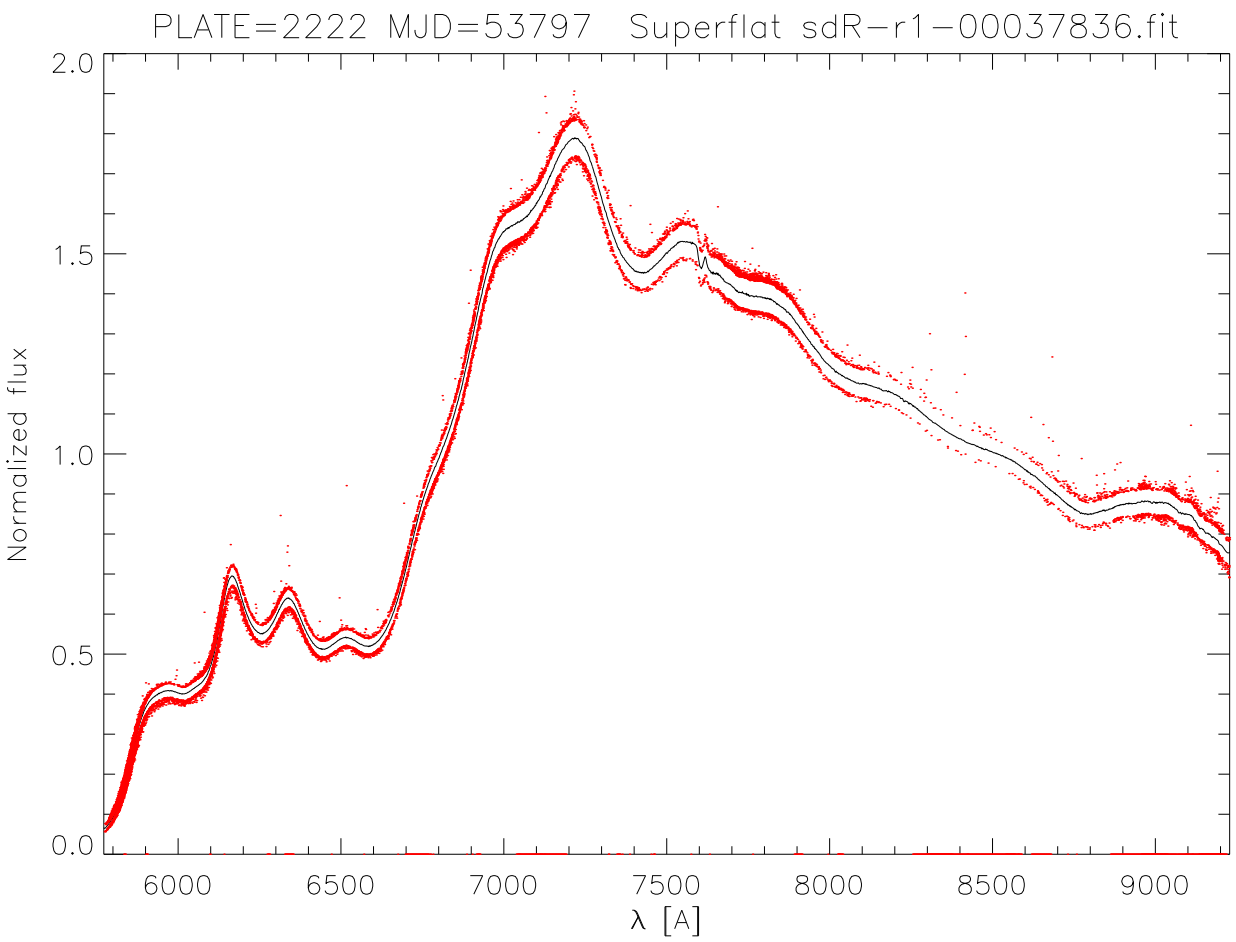

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

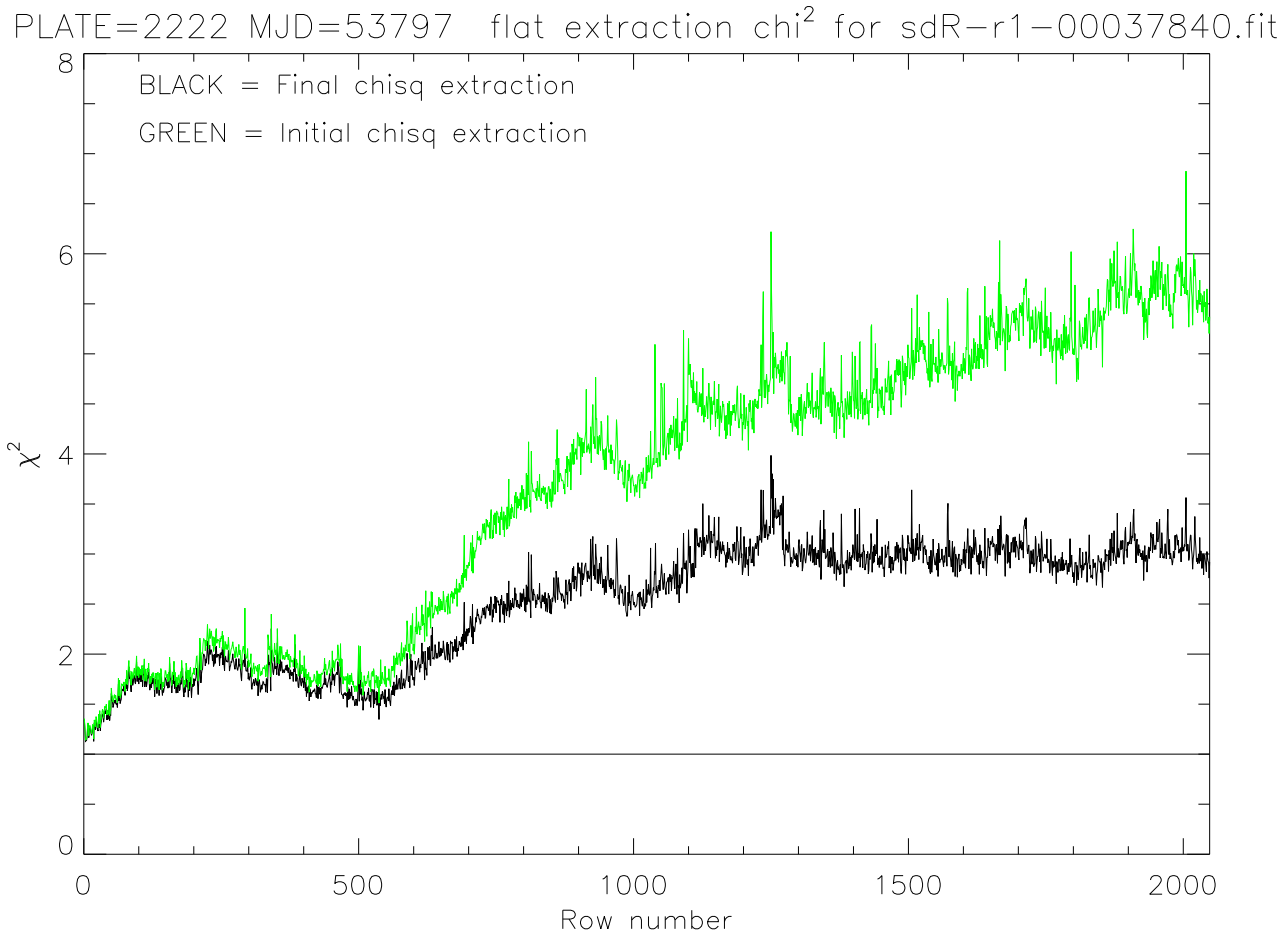

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

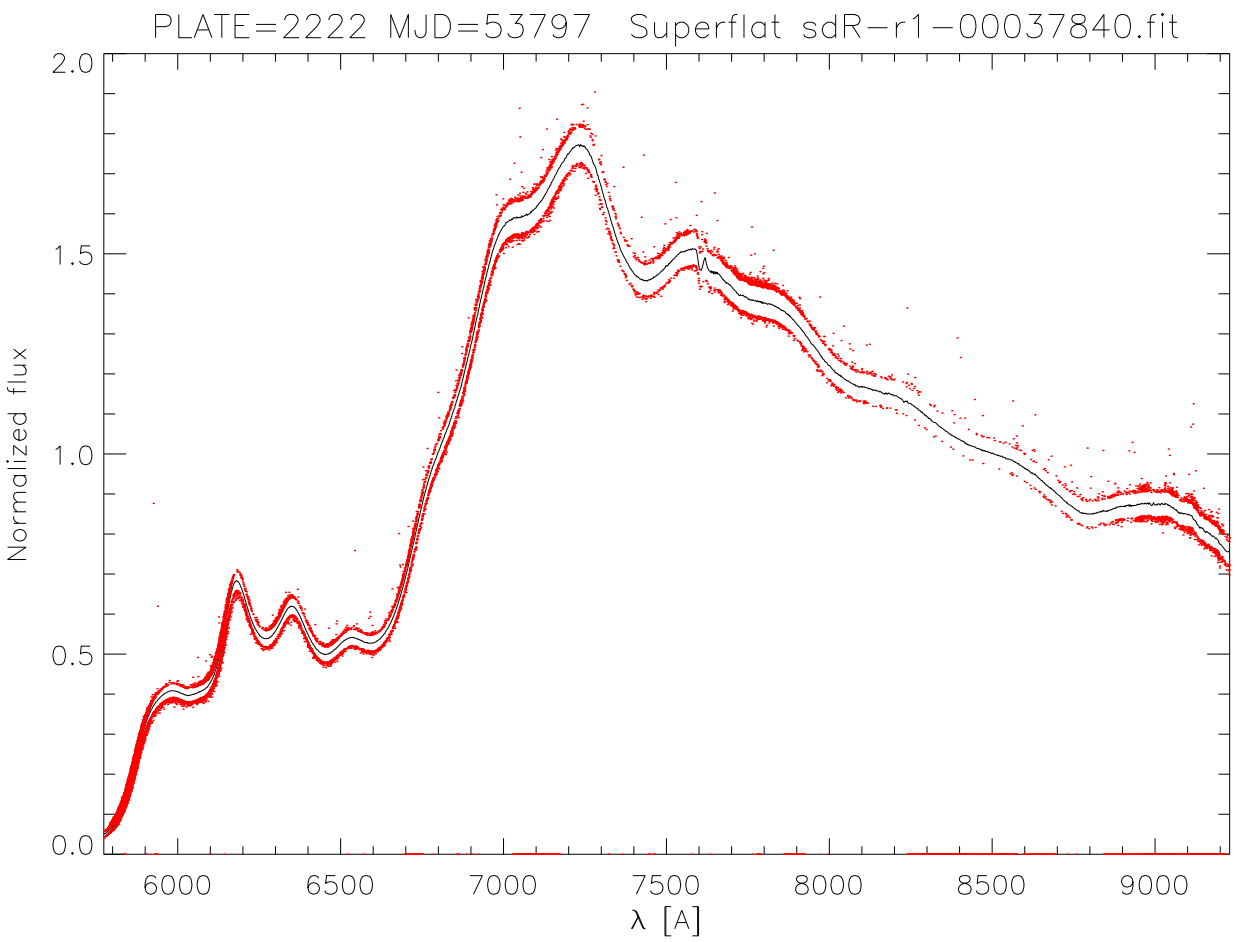

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

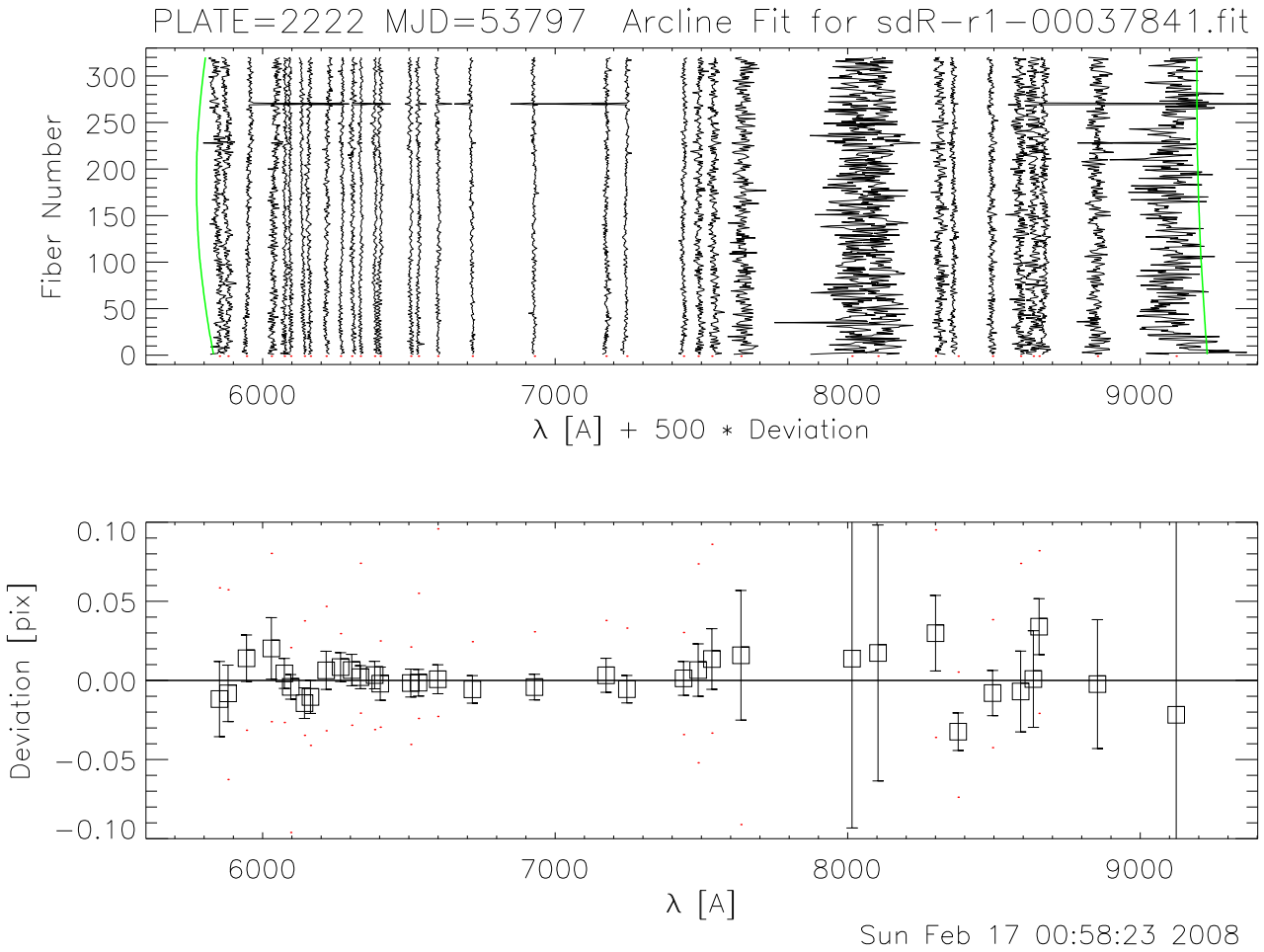

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

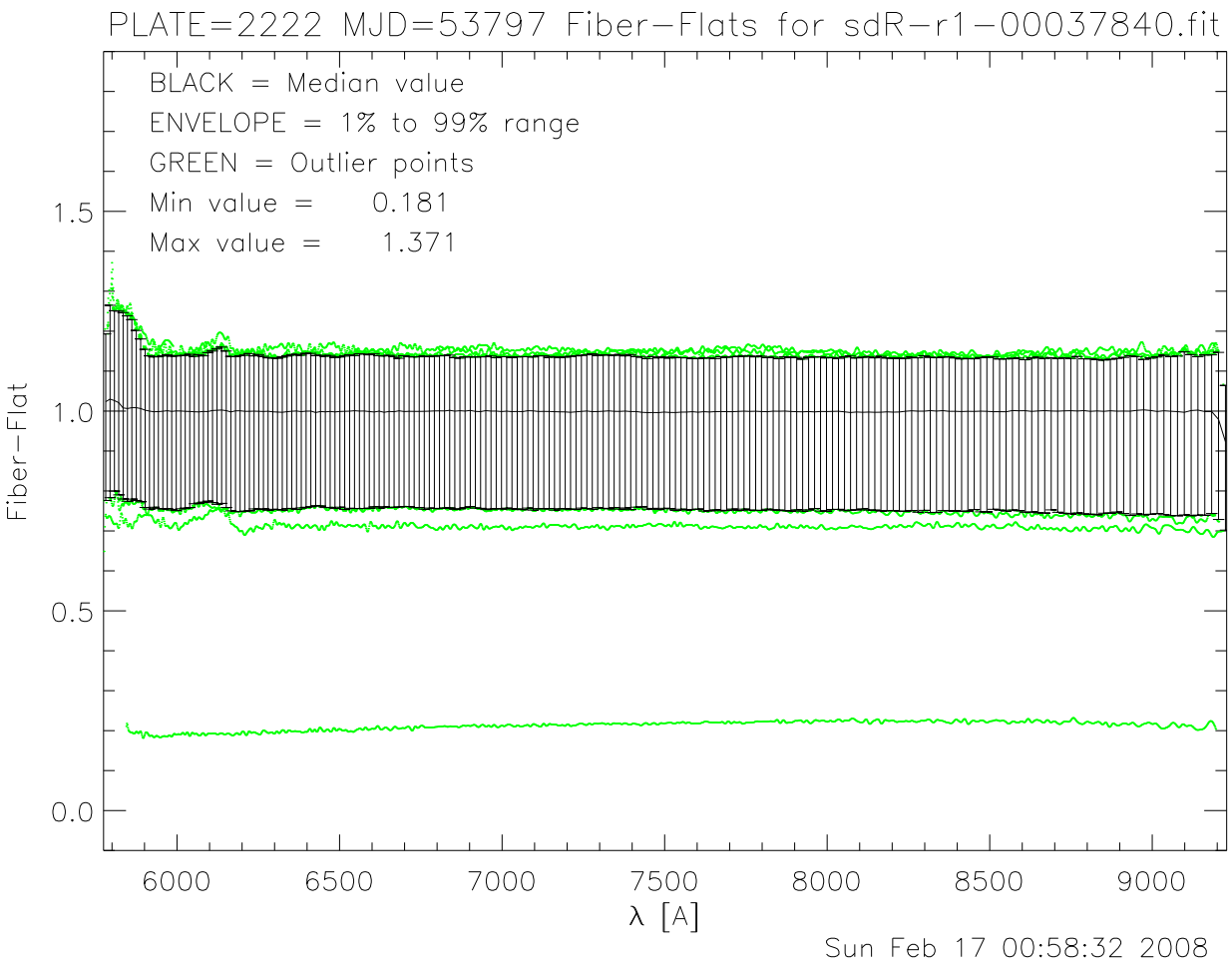

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR−r1−00037836.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

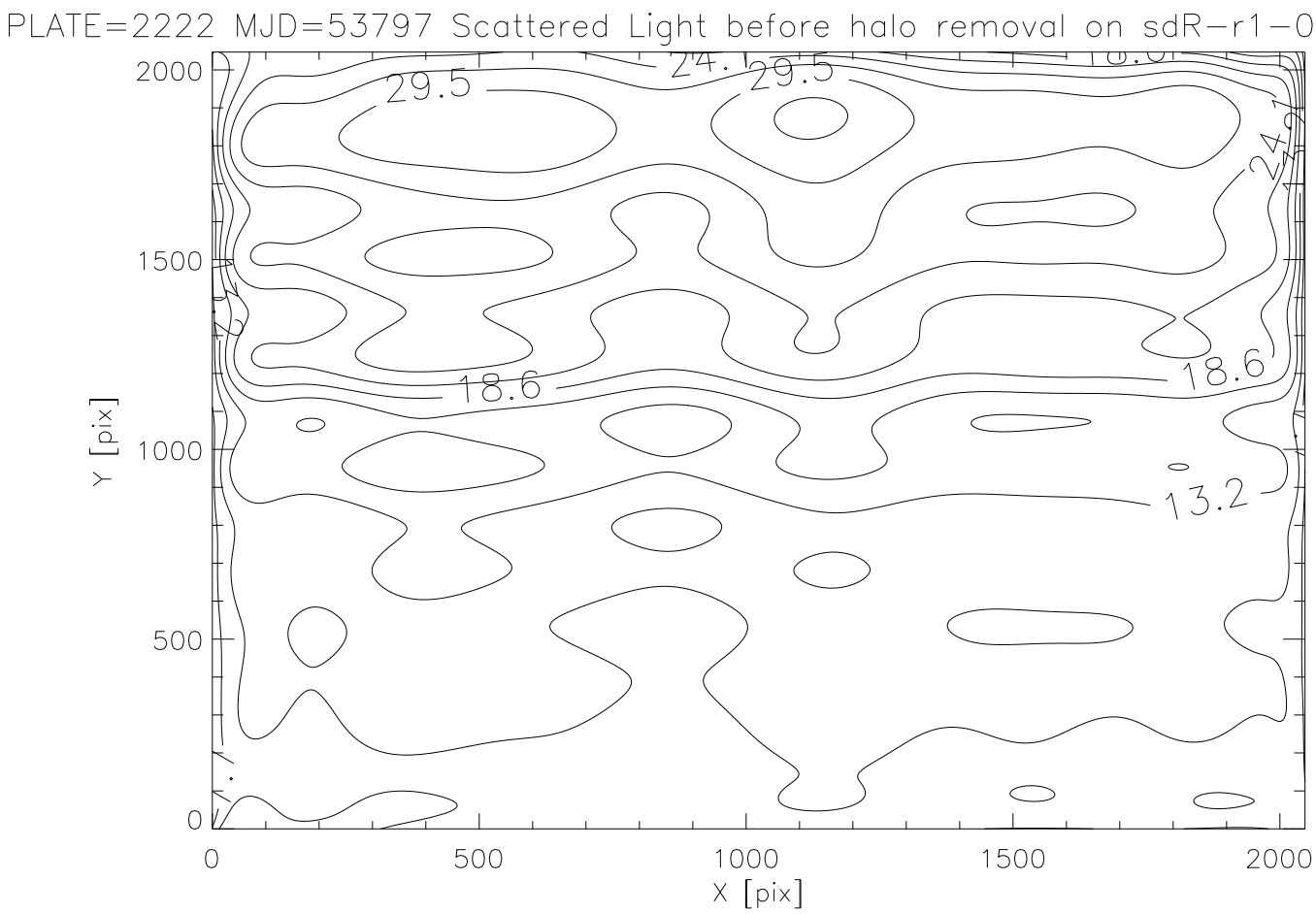

PLATE=2222 MJD=53797 Superflat sdR-r1-00037836.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

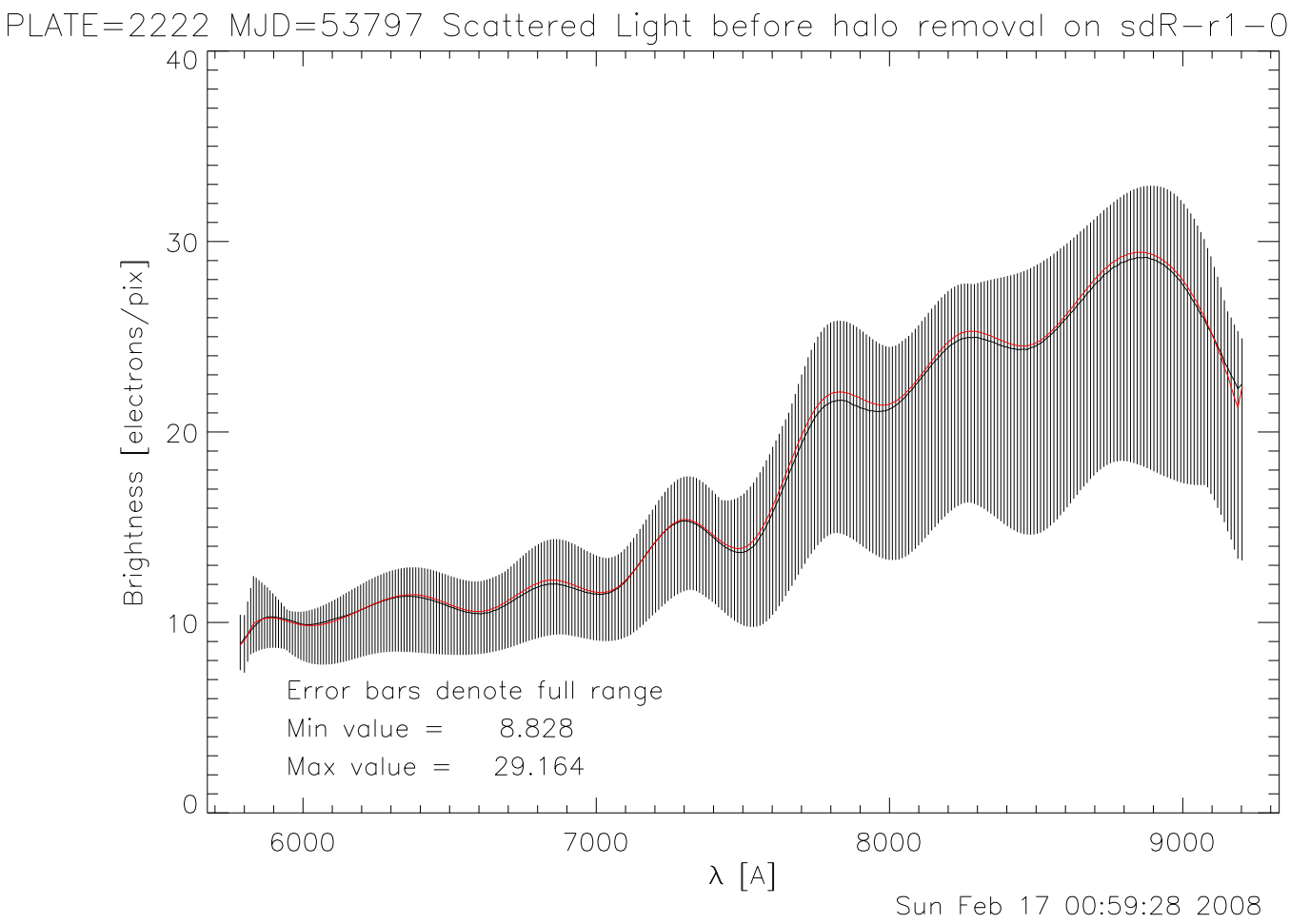

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR−r1−00037840.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

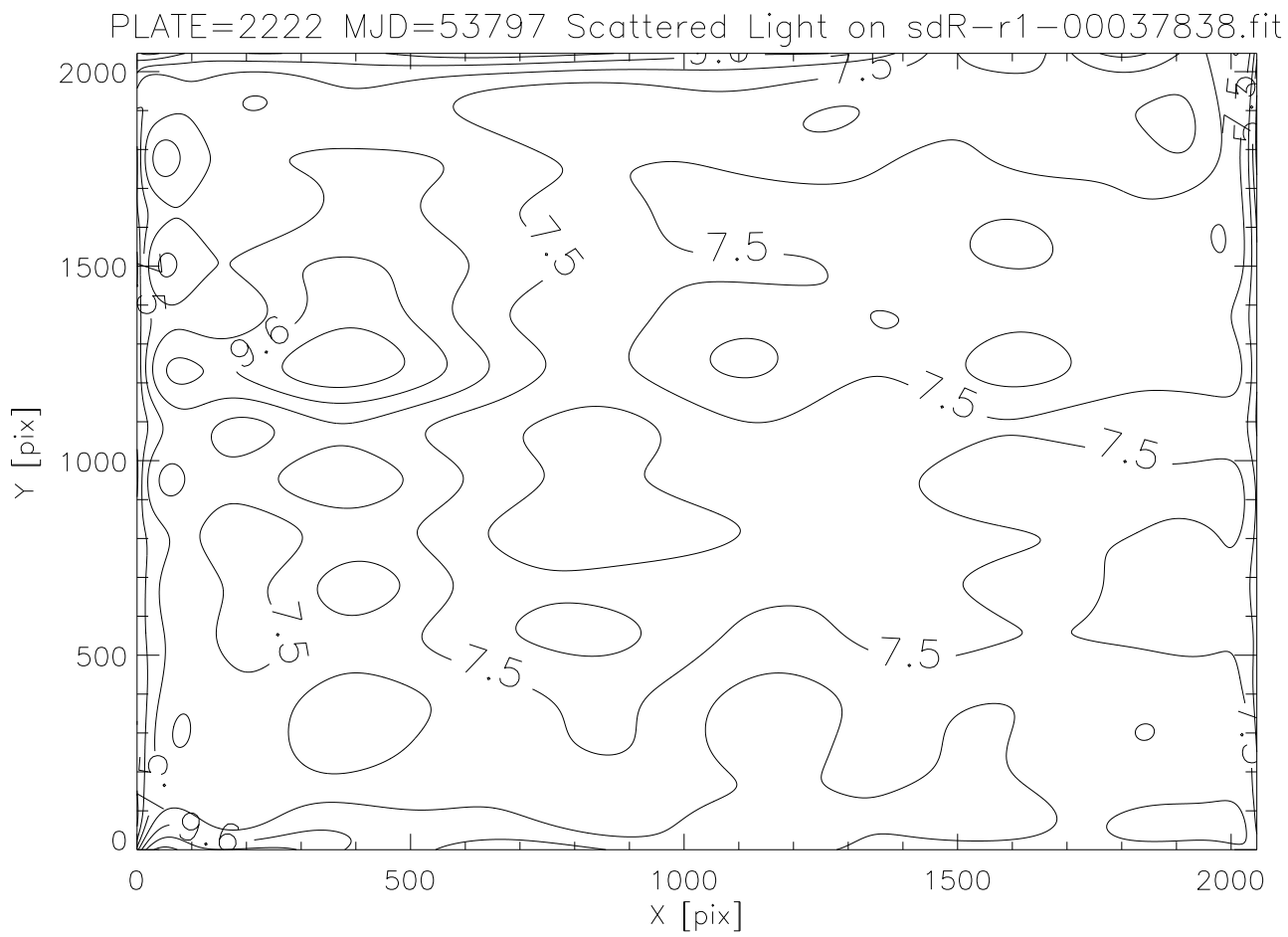

PLATE=2222 MJD=53797 Superflat sdR-r1-00037840.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

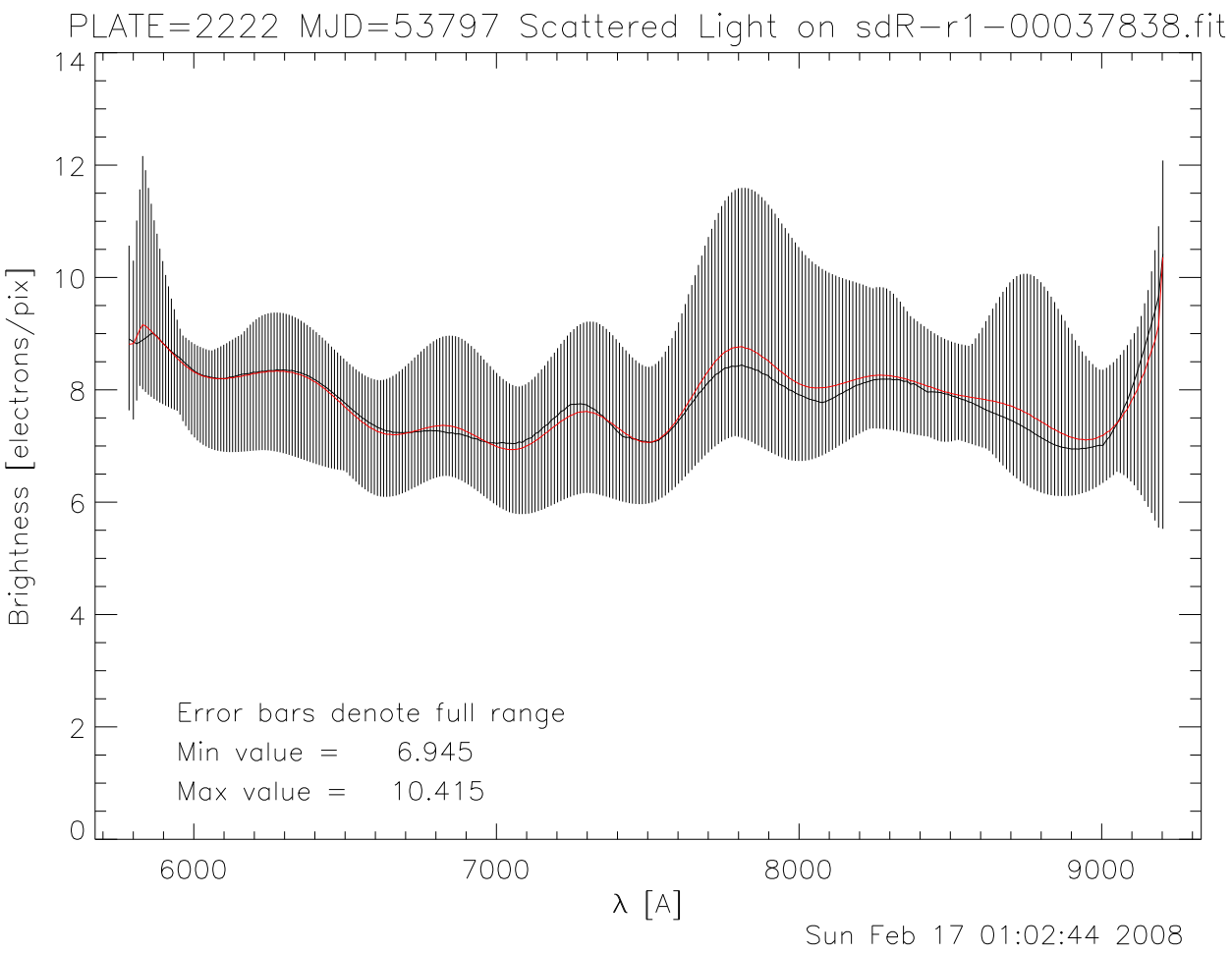

PLATE=2222 MJD=53797 Arcline Fit for sdR-r1-00037841.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sun Feb 17 00:58:23 2008

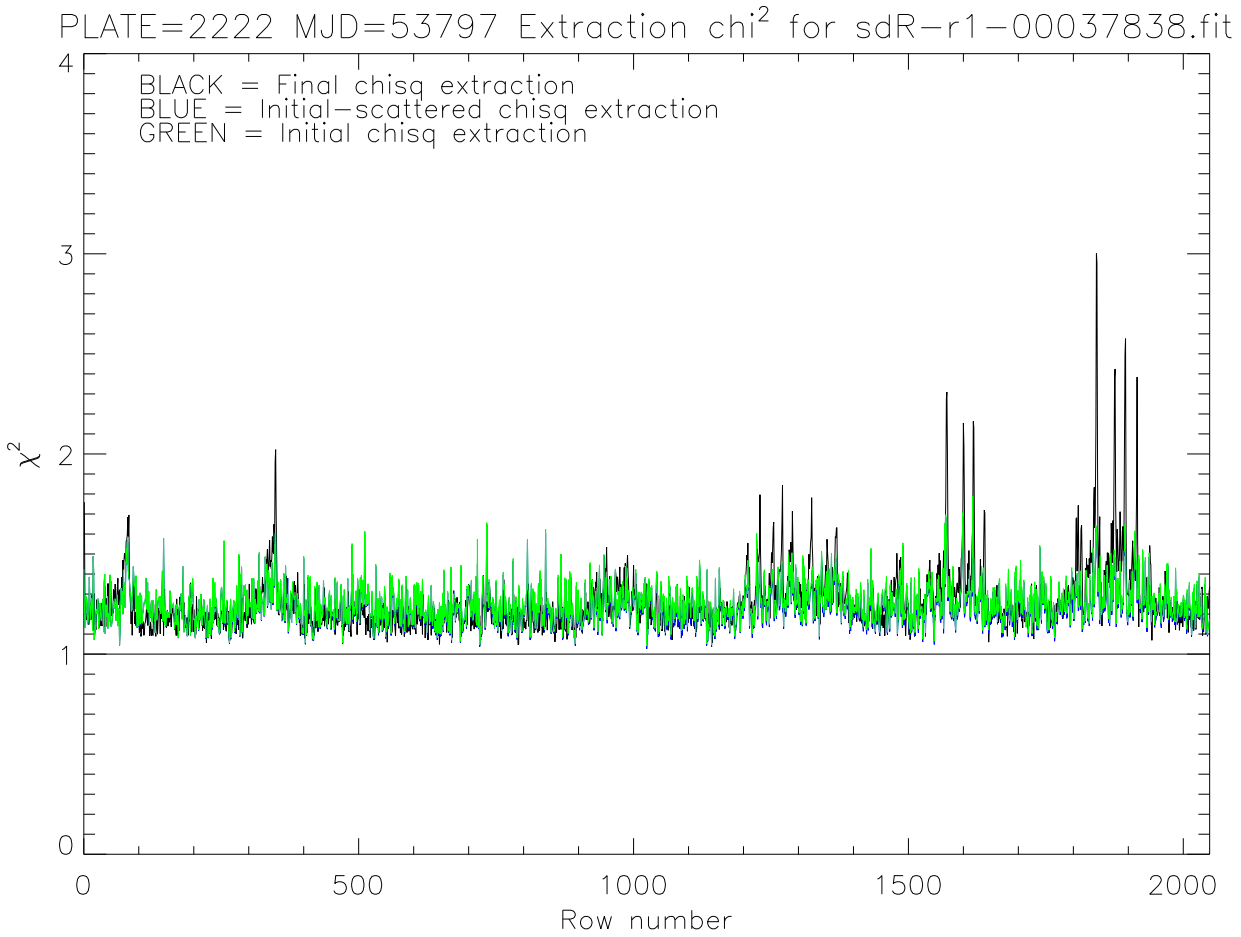

PLATE=2222 MJD=53797 Fiber−Flats for sdR−r1−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.181
Max value = 1.371
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 00:58:32 2008

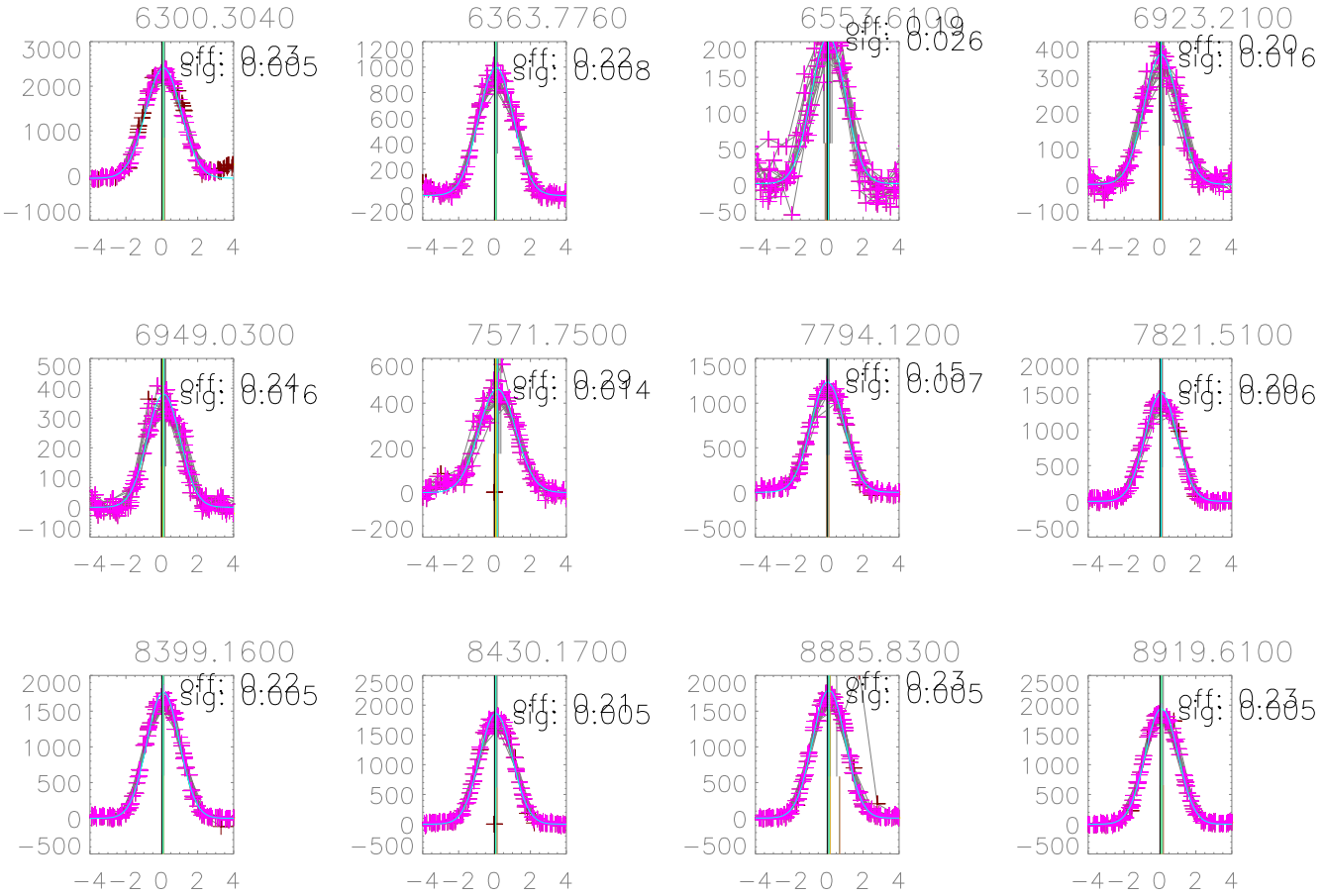

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r1-00037838.fi
29.5
24.1
29.5
24.1
18.6
18.6
13.2
Y [pix]
X [pix]
0
500
1000
1500
2000

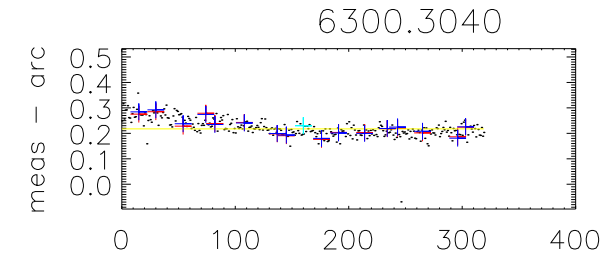

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r1-00037838.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 8.828
Max value = 29.164
Sun Feb 17 00:59:28 2008

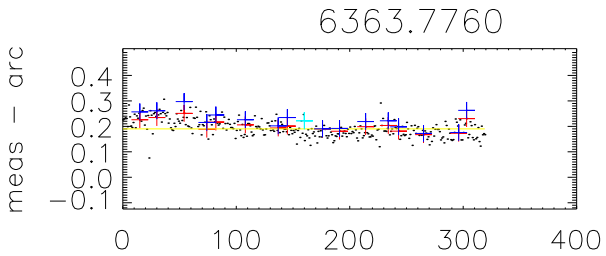

PLATE=2222 MJD=53797 Scattered Light on sdR-r1-00037838.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
7.5
9.6
0

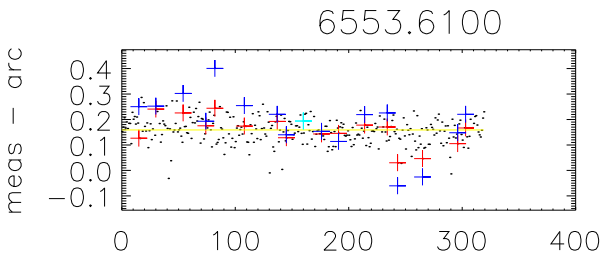

PLATE=2222 MJD=53797 Scattered Light on sdR-r1-00037838.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.945
Max value = 10.415
Sun Feb 17 01:02:44 2008

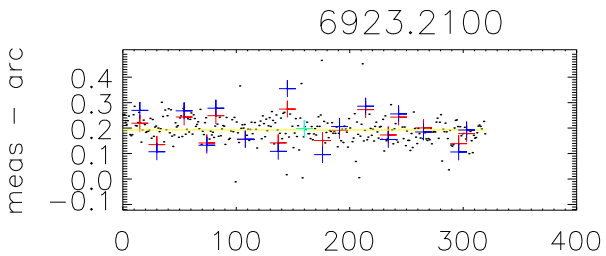

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−r1−00037838.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

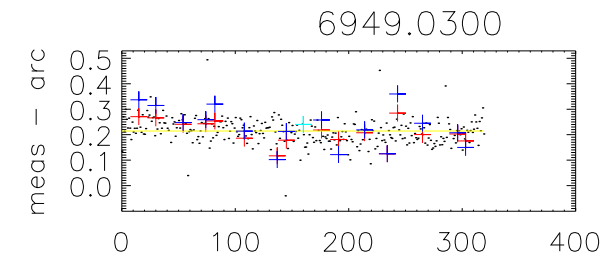

6300.3040
off: 0.23
sig: 0.005
6363.7760
off: 0.22
sig: 0.008
6553.6100
off: 0.19
sig: 0.026
6923.2100
off: 0.20
sig: 0.016
6949.0300
off: 0.24
sig: 0.016
7571.7500
off: 0.29
sig: 0.014
7794.1200
off: 0.15
sig: 0.007
7821.5100
off: 0.20
sig: 0.006
8399.1600
off: 0.22
sig: 0.005
8430.1700
off: 0.21
sig: 0.005
8885.8300
off: 0.23
sig: 0.005
8919.6100
off: 0.23
sig: 0.005

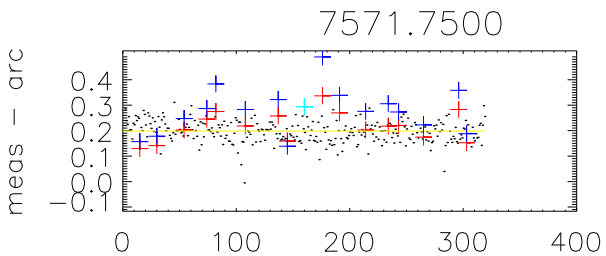

6300.3040
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

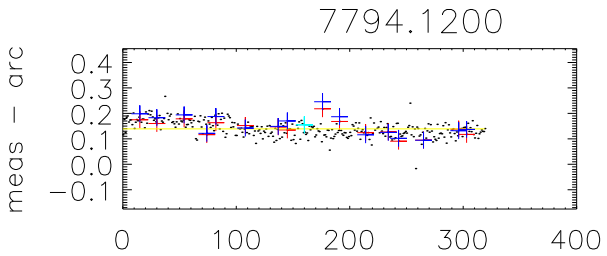

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

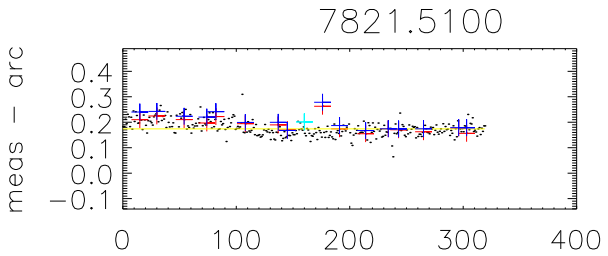

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

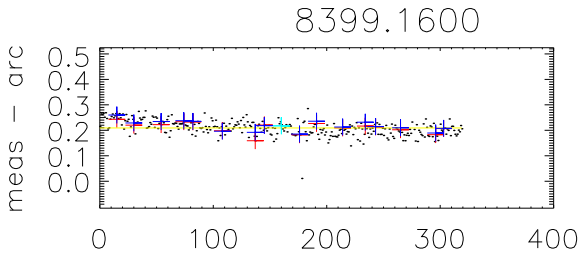

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

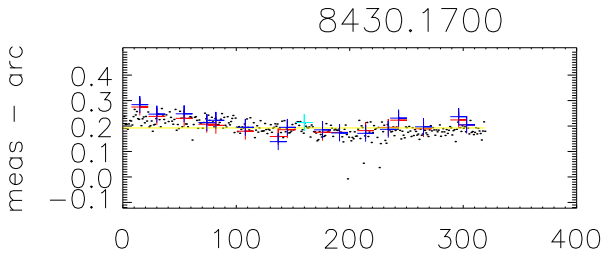

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

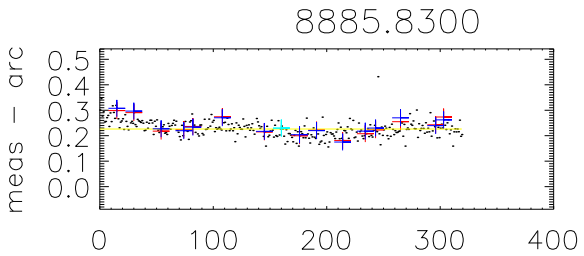

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

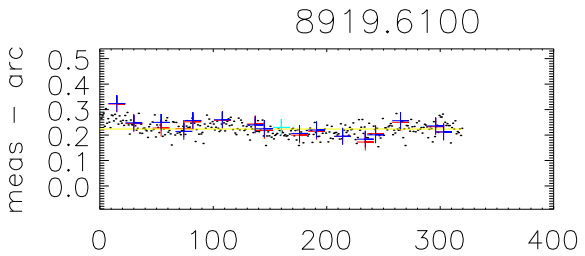

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

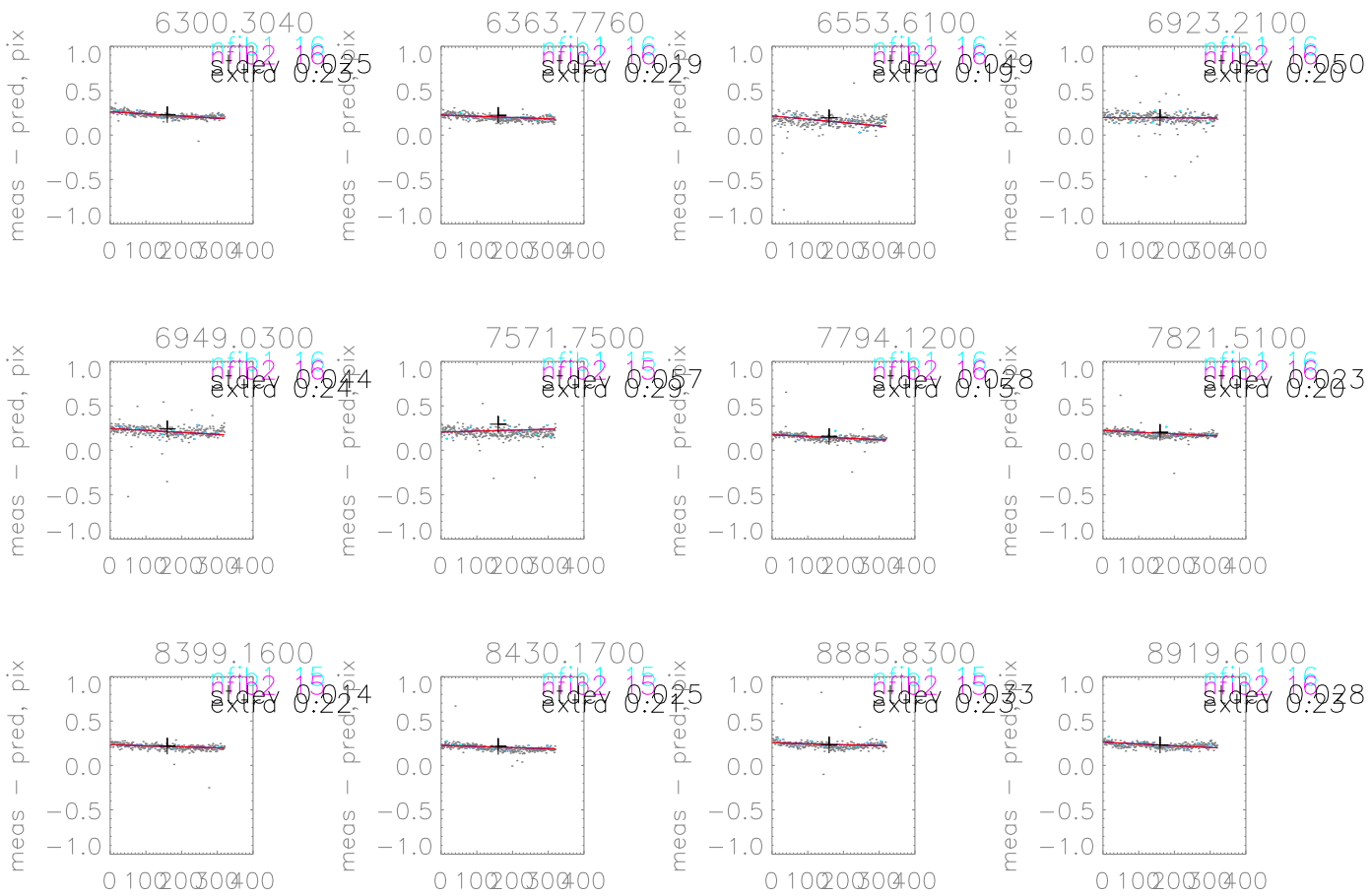

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

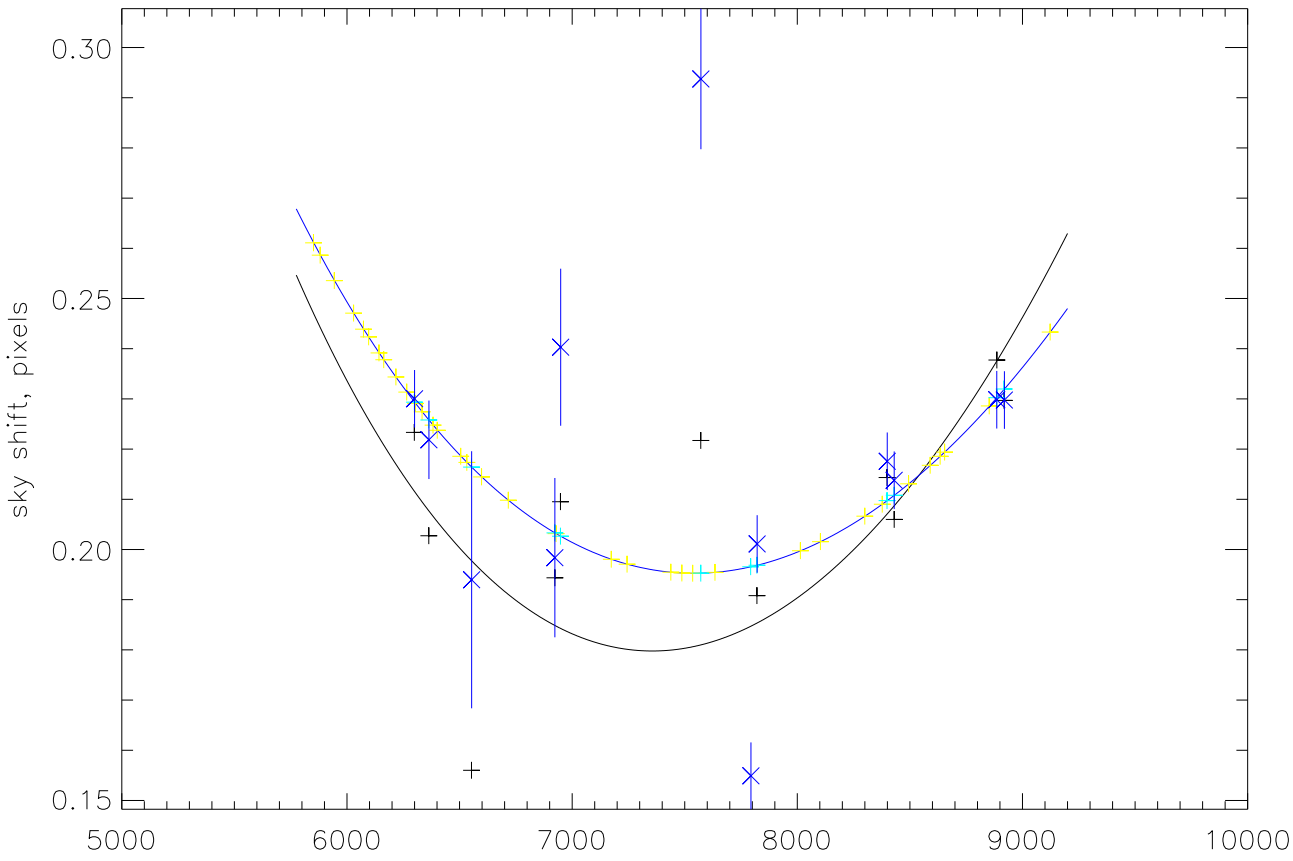

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

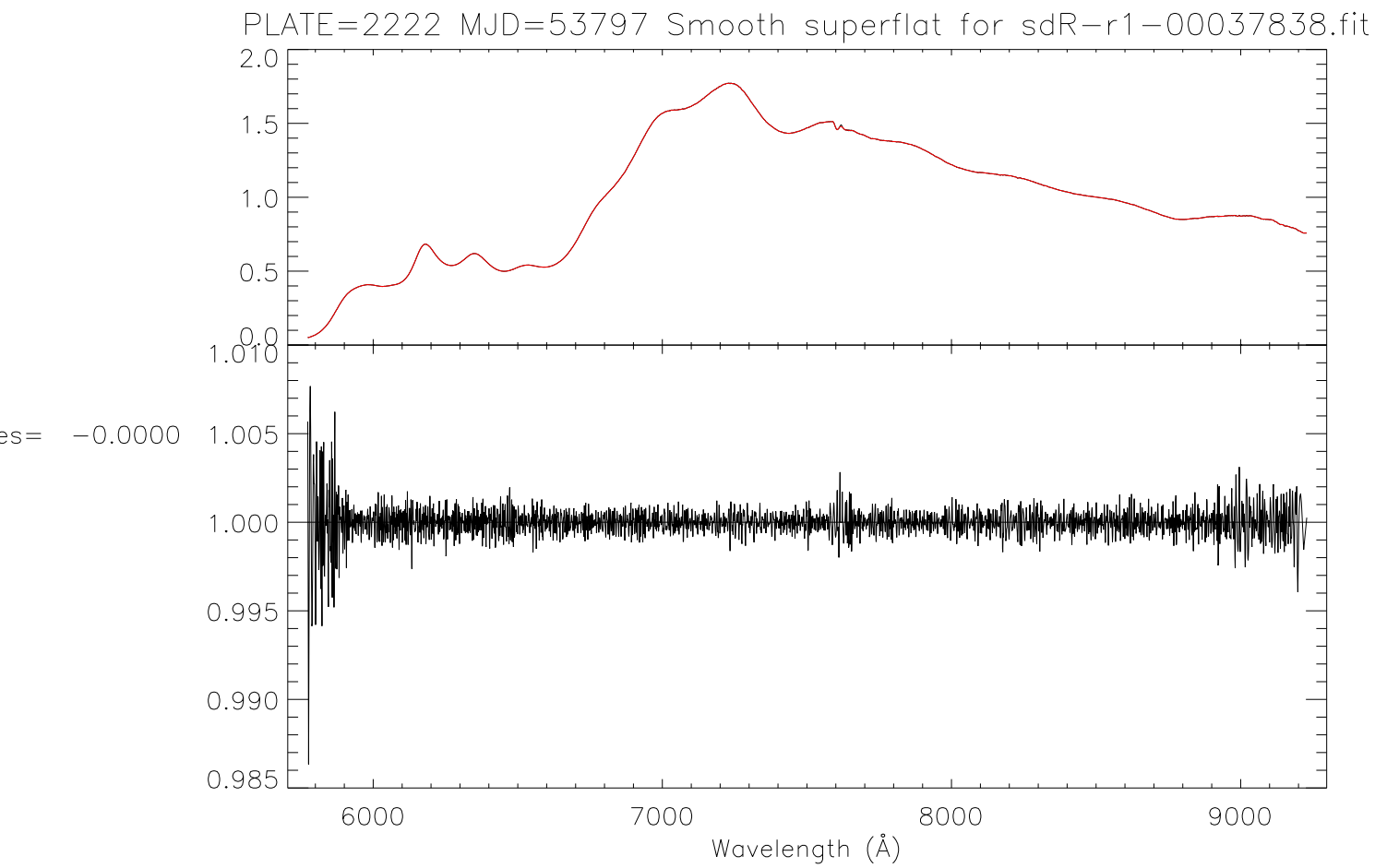

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

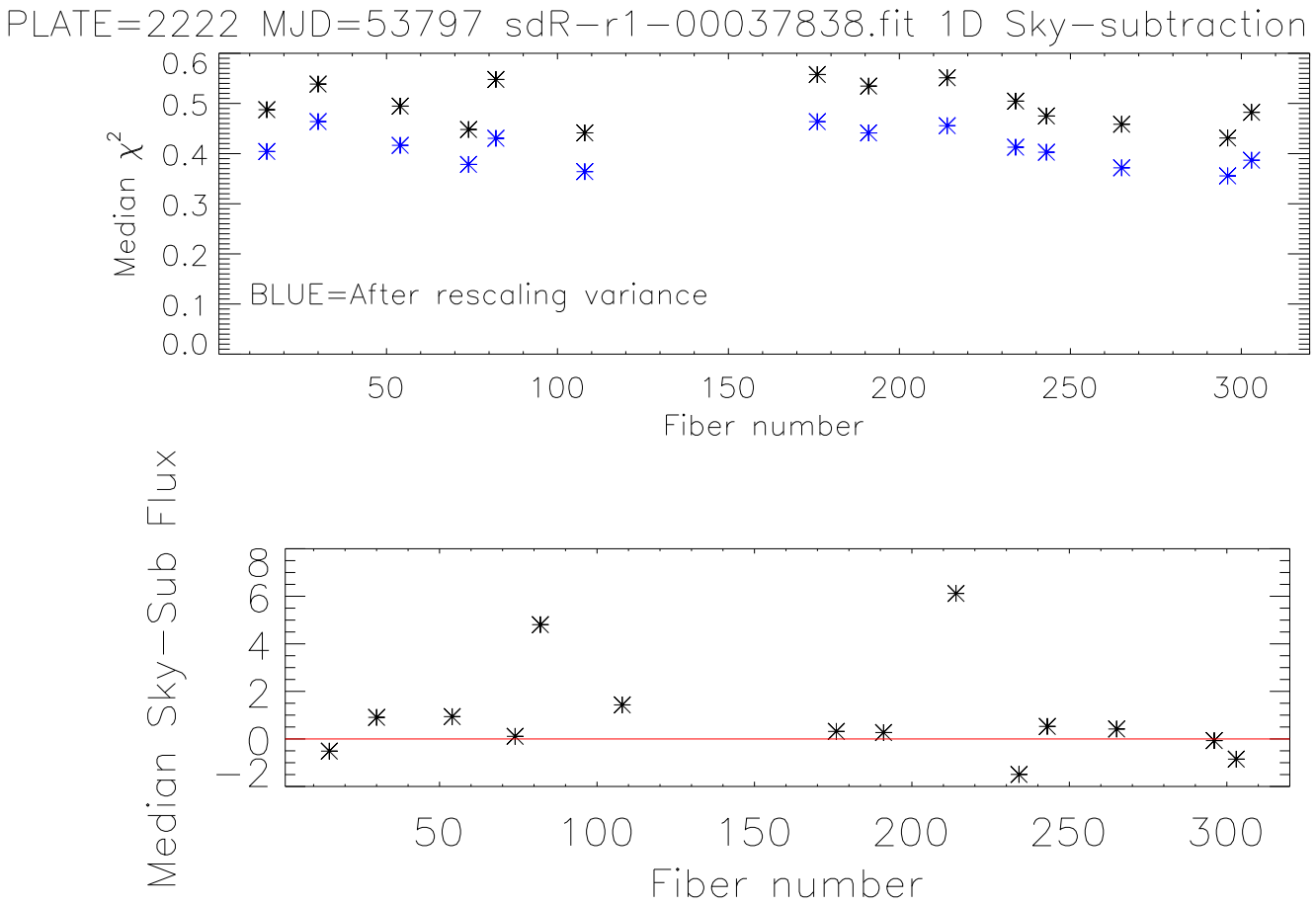

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

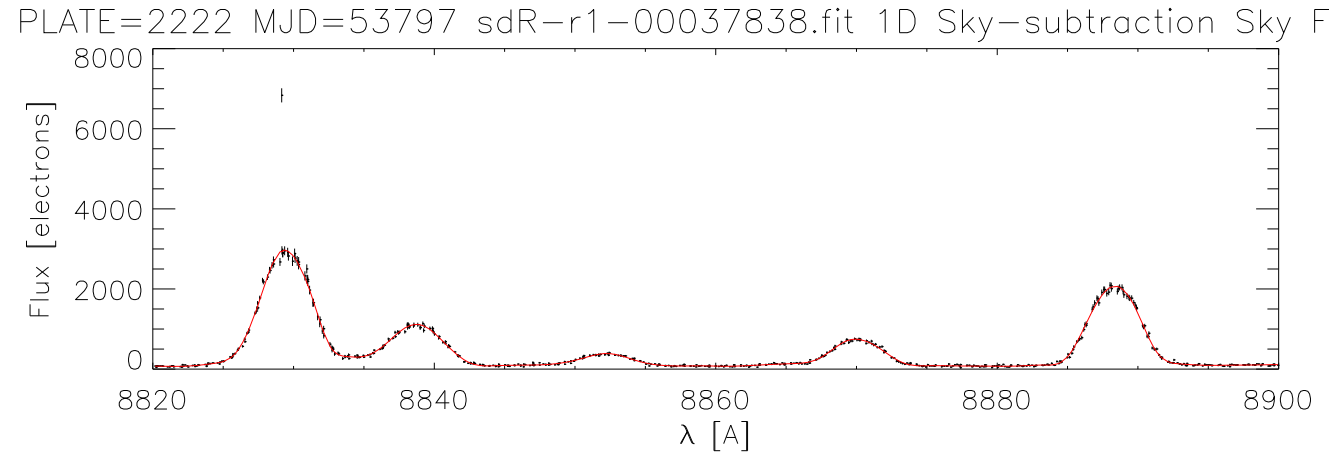

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

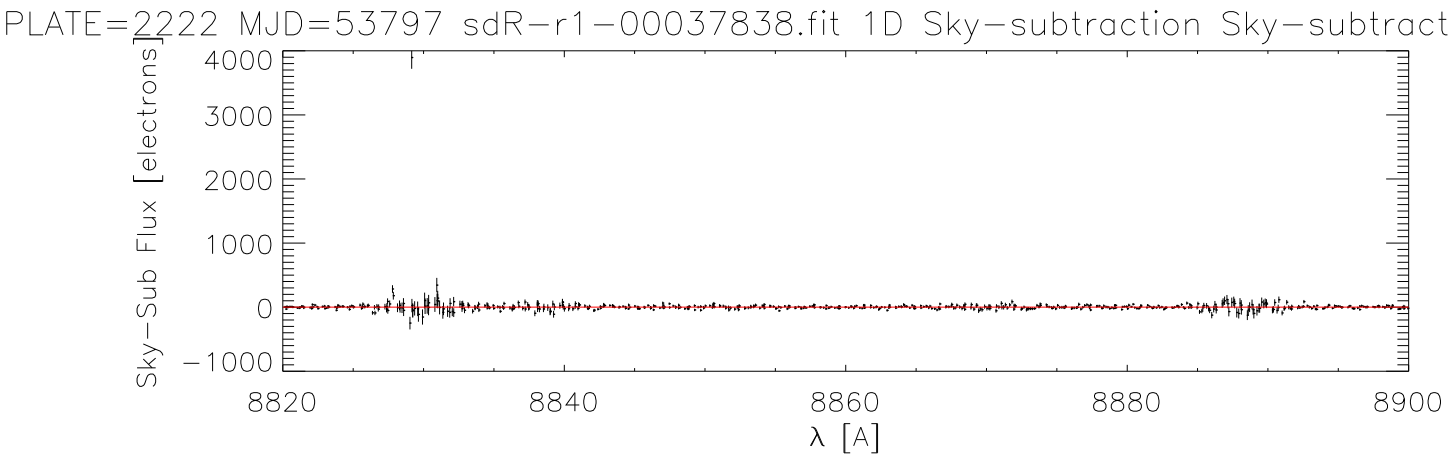

6300.3040
mfhd1 16
mfhd2 16
stdev 0.025
extra 0.23
6363.7760
mfhd1 16
mfhd2 16
stdev 0.019
extra 0.22
6553.6100
mfhd1 16
mfhd2 16
stdev 0.049
extra 0.19
6923.2100
mfhd1 16
mfhd2 16
stdev 0.050
extra 0.20
6949.0300
mfhd1 16
mfhd2 16
stdev 0.044
extra 0.24
7571.7500
mfhd1 15
mfhd2 16
stdev 0.057
extra 0.29
7794.1200
mfhd1 16
mfhd2 16
stdev 0.028
extra 0.15
7821.5100
mfhd1 16
mfhd2 16
stdev 0.023
extra 0.20
8399.1600
mfhd1 15
mfhd2 16
stdev 0.014
extra 0.22
8430.1700
mfhd1 15
mfhd2 16
stdev 0.025
extra 0.21
8885.8300
mfhd1 15
mfhd2 16
stdev 0.033
extra 0.23
8919.6100
mfhd1 16
mfhd2 16
stdev 0.028
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

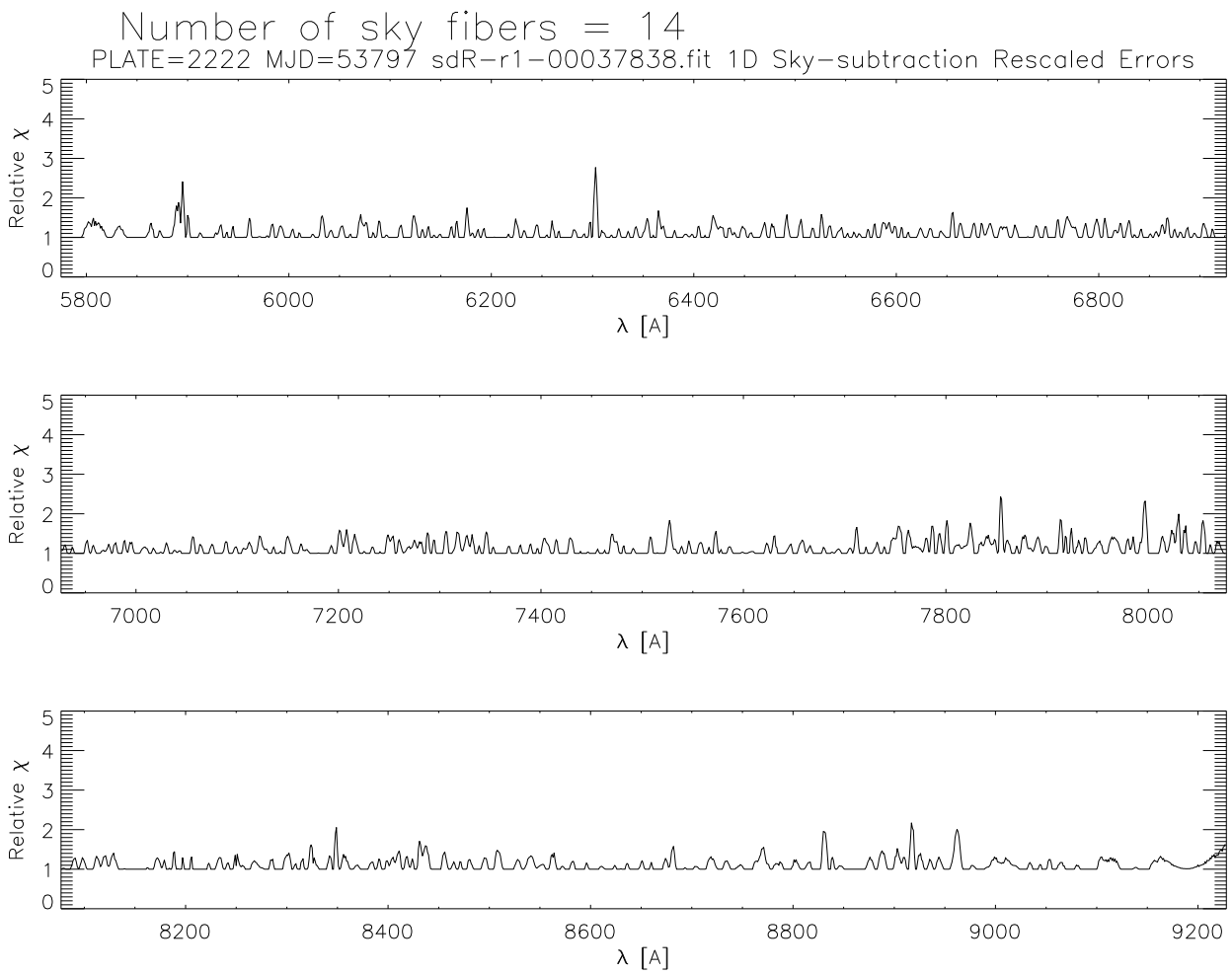

0.30
0.25
0.20
0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

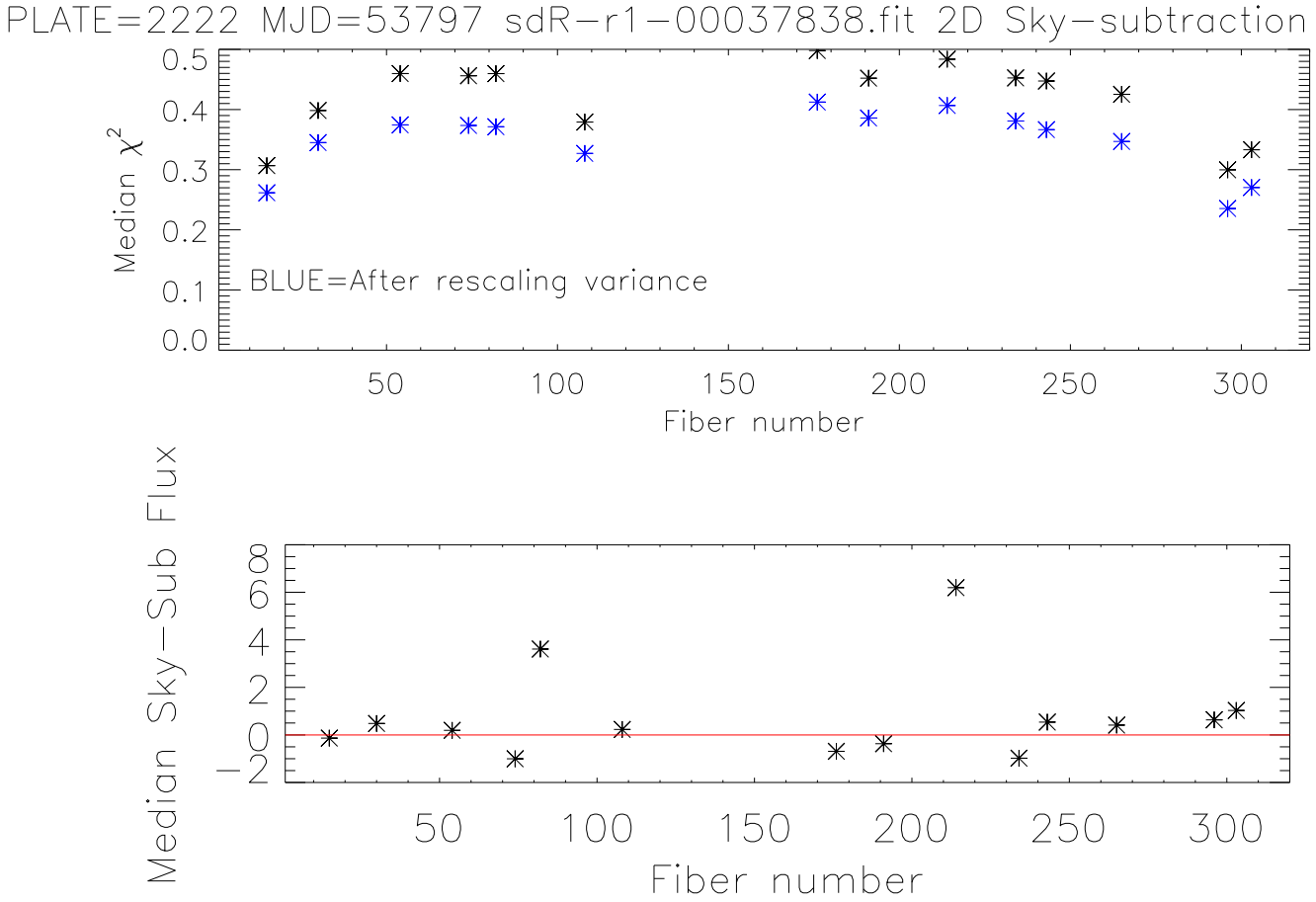

PLATE=2222 MJD=53797 Smooth superflat for sdR-r1-00037838.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

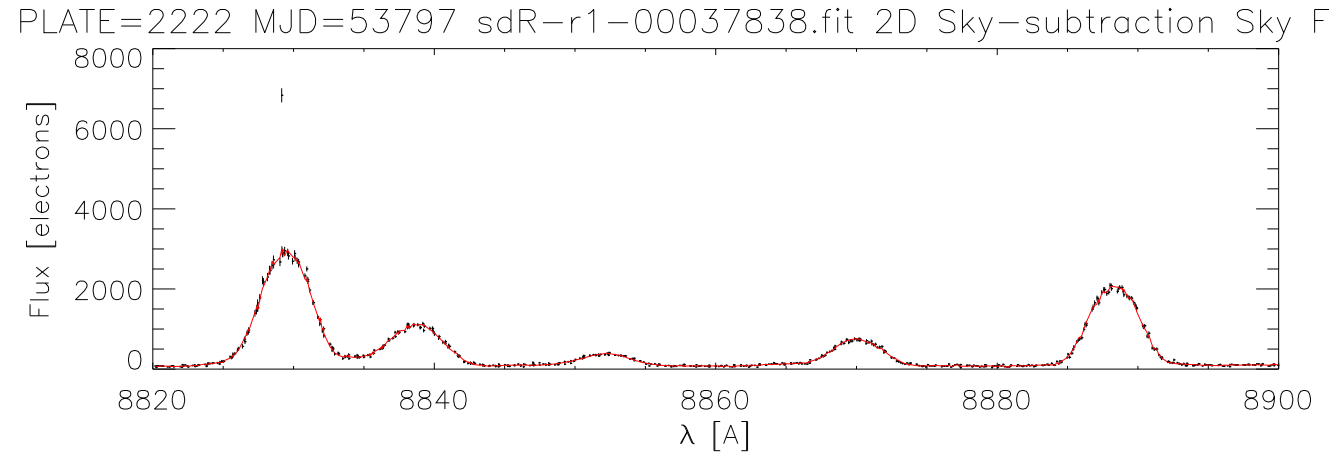

PLATE=2222 MJD=53797 sdR-r1-00037838.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

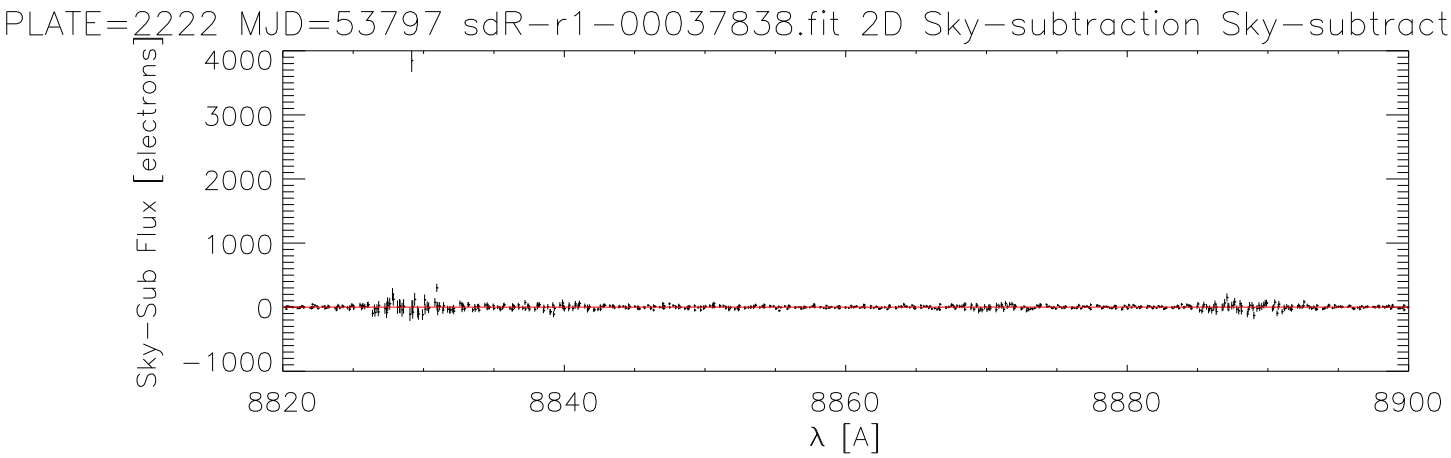

PLATE=2222 MJD=53797 sdR-r1-00037838.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

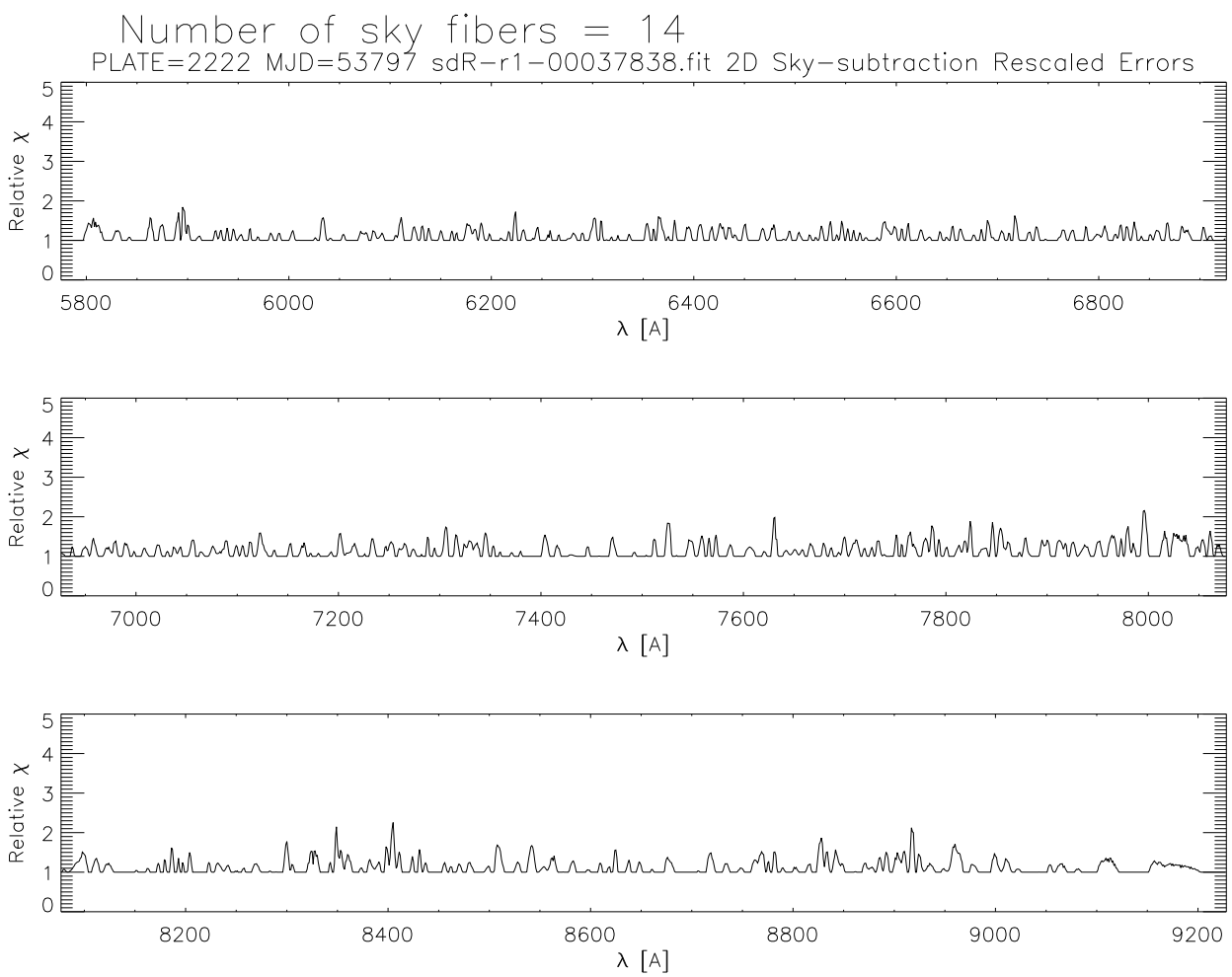

PLATE=2222 MJD=53797 sdR-r1-00037838.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

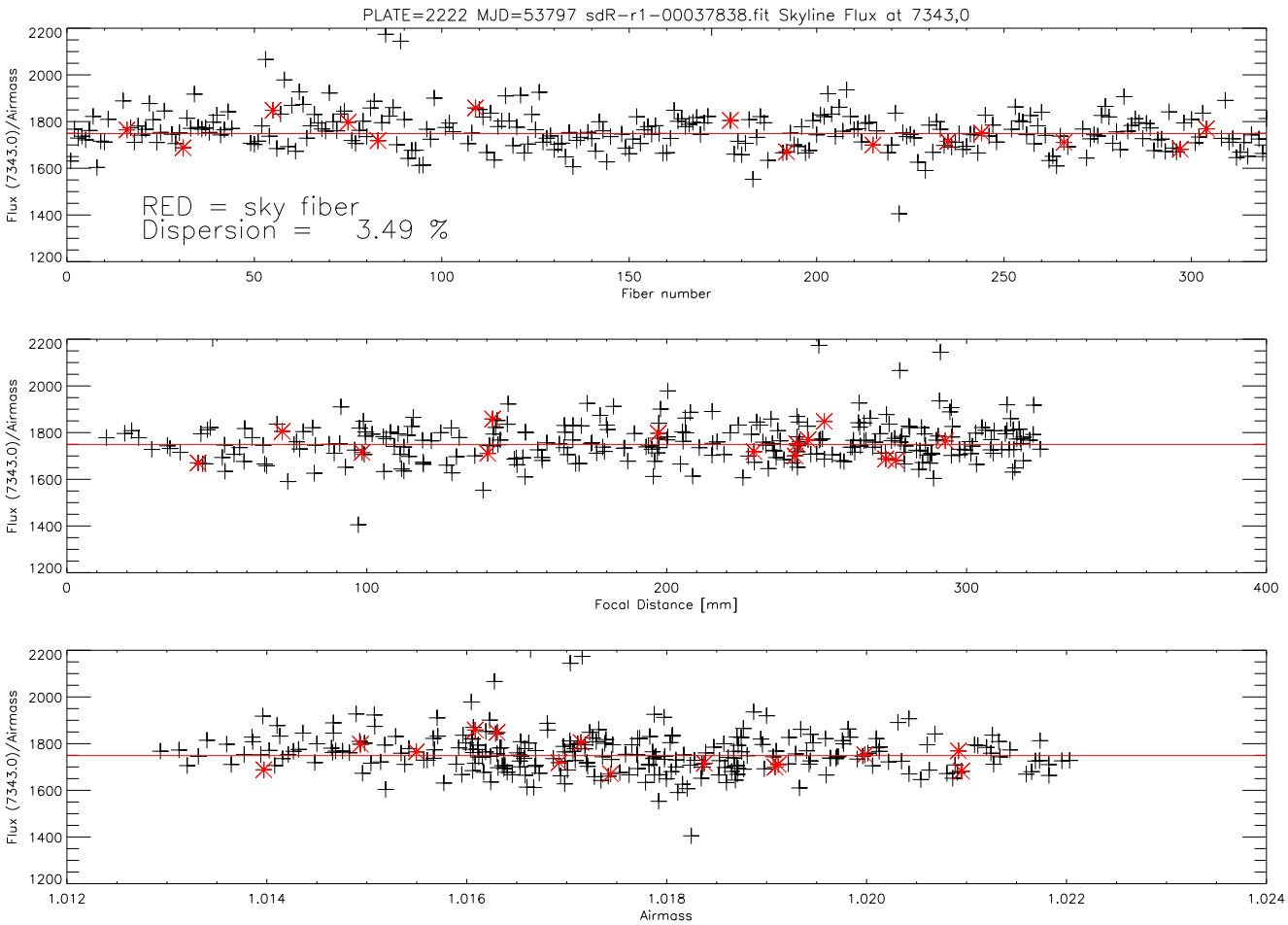

Number of sky fibers = 14
PLATE=2222 MJD=53797 sdR-r1-00037838.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

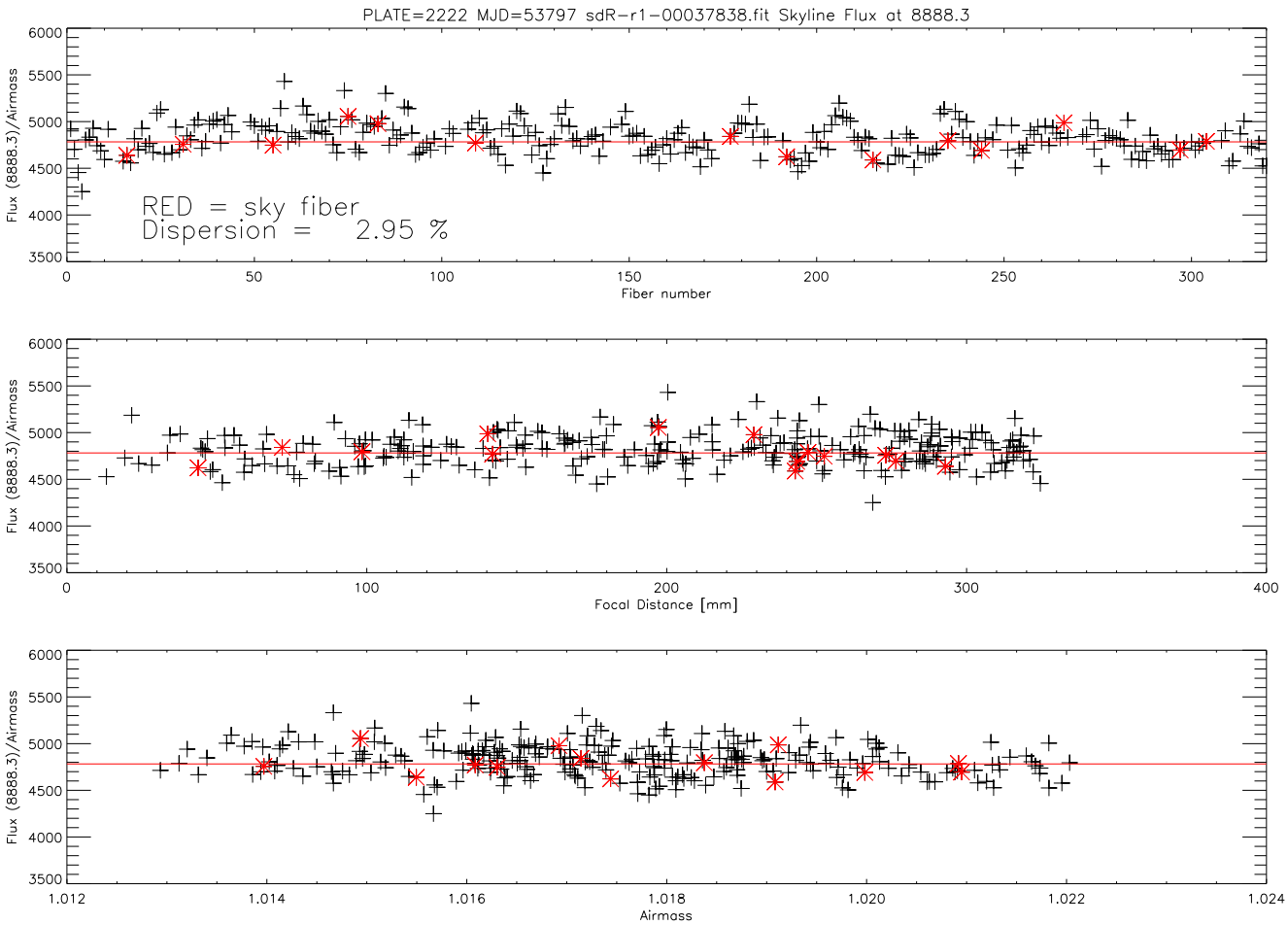

PLATE=2222 MJD=53797 sdR-r1-00037838.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

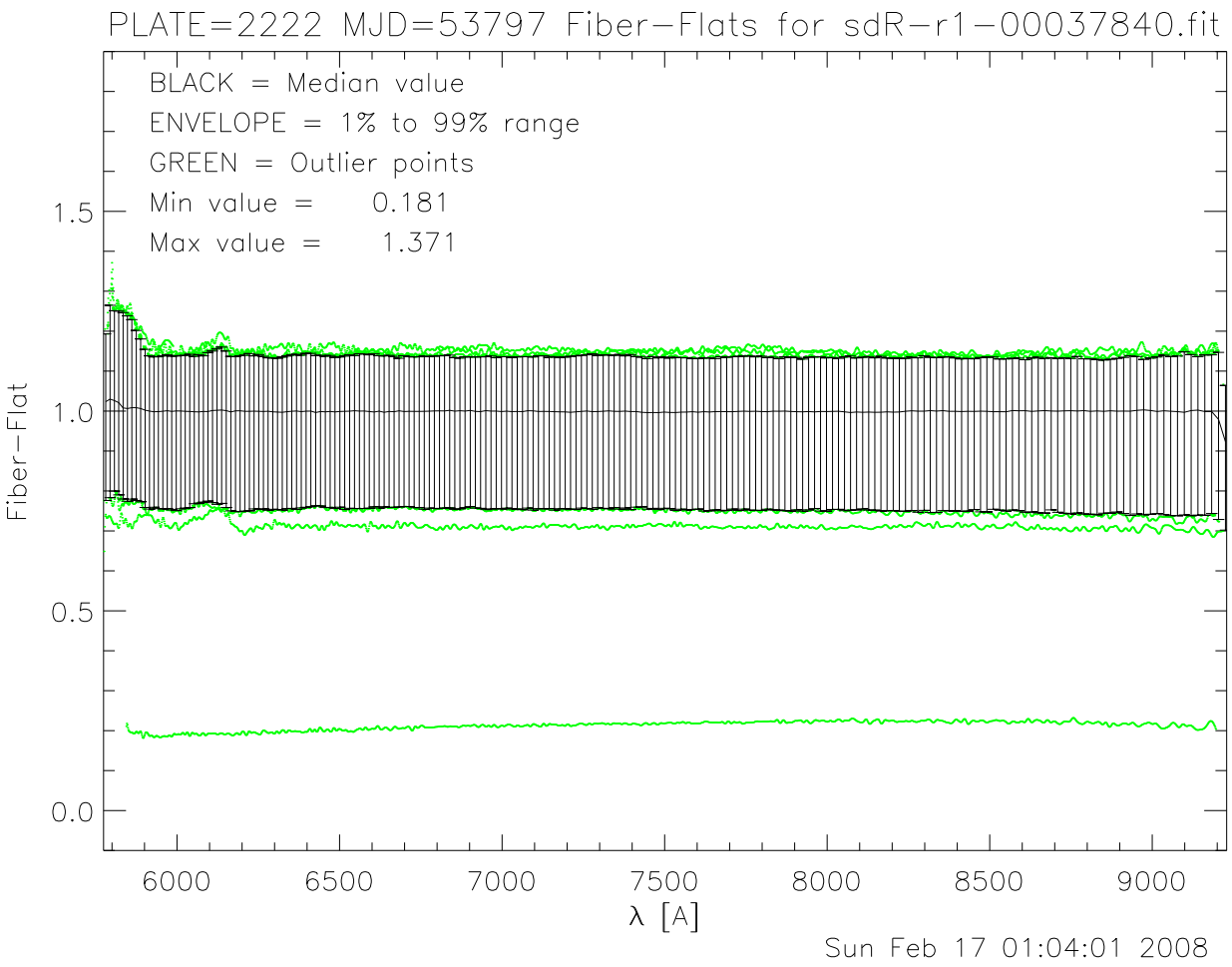

PLATE=2222 MJD=53797 sdR-r1-00037838.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

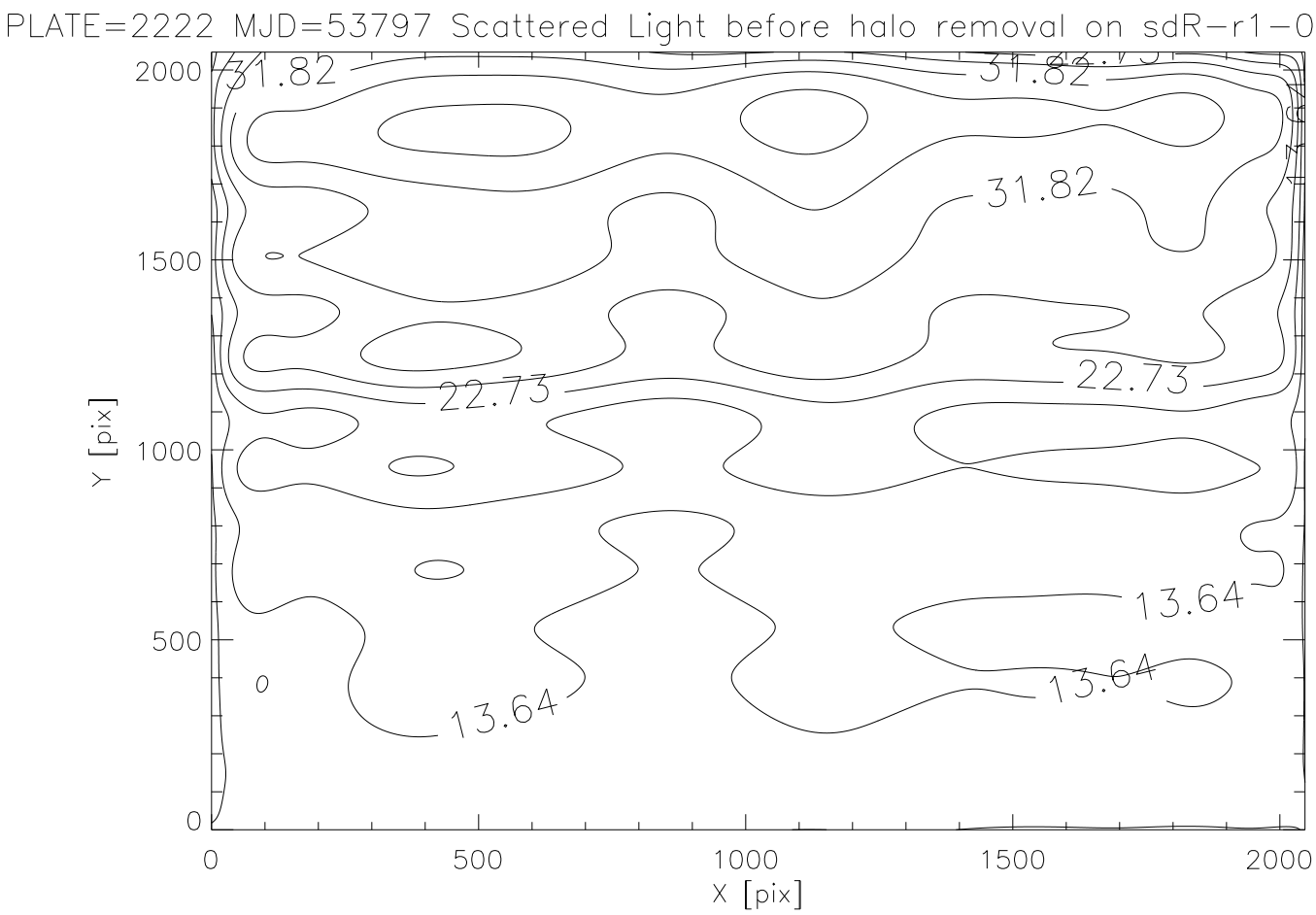

PLATE=2222 MJD=53797 sdR-r1-00037838.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

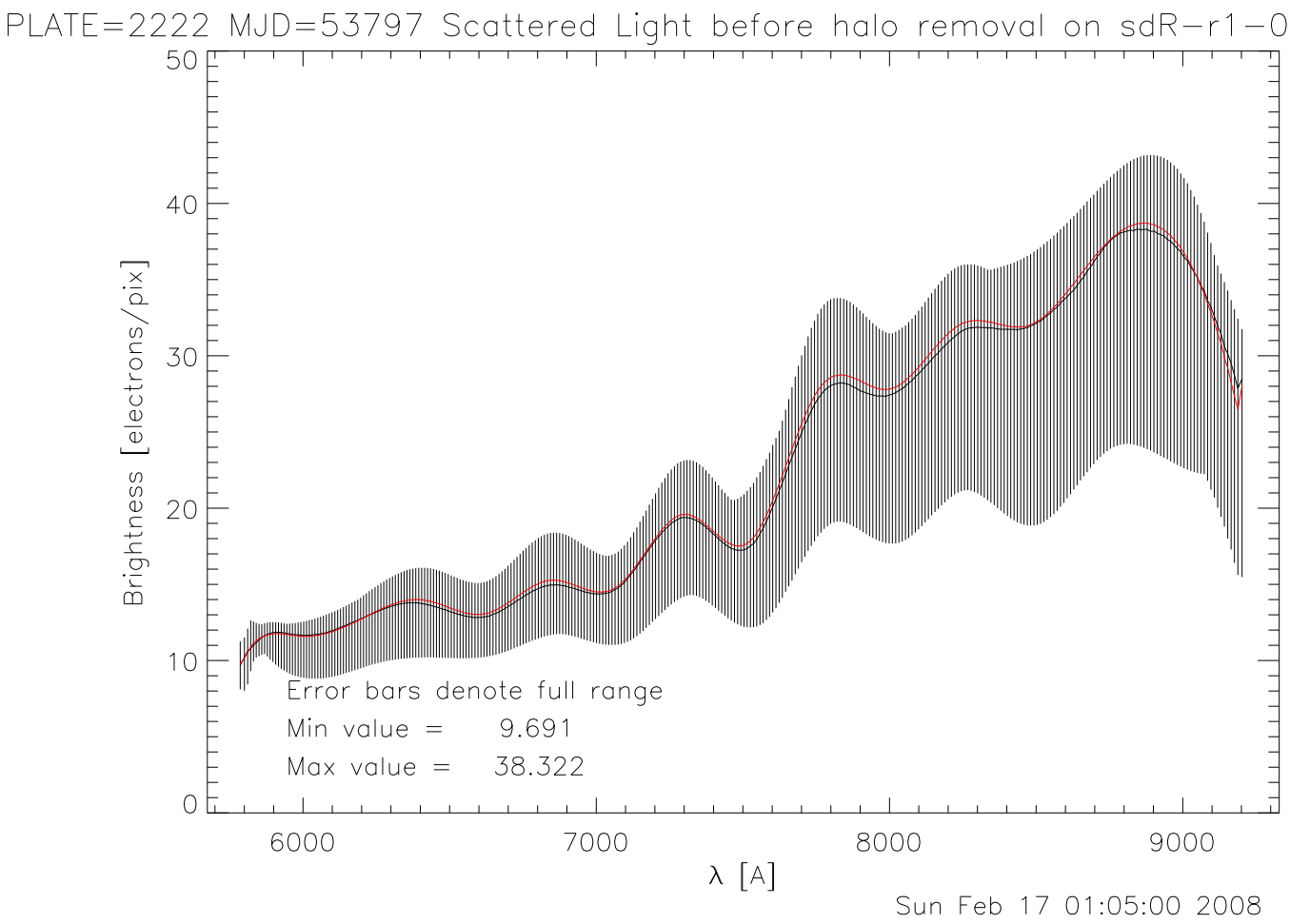

Number of sky fibers = 14
PLATE=2222 MJD=53797 sdR-r1-00037838.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

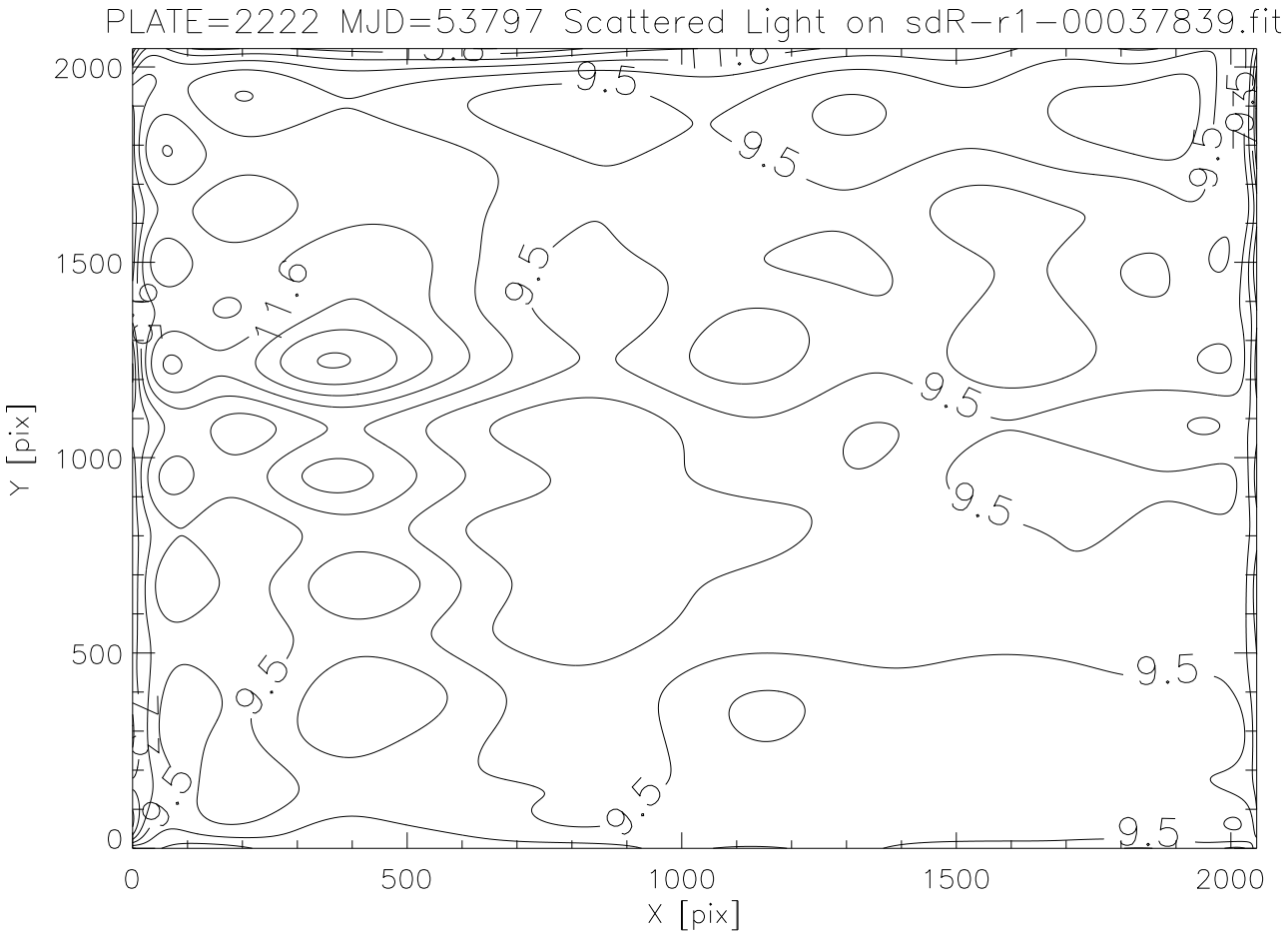

PLATE=2222 MJD=53797 sdR-r1-00037838.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.49 %
Fiber number
Focal Distance [mm]
Airmass

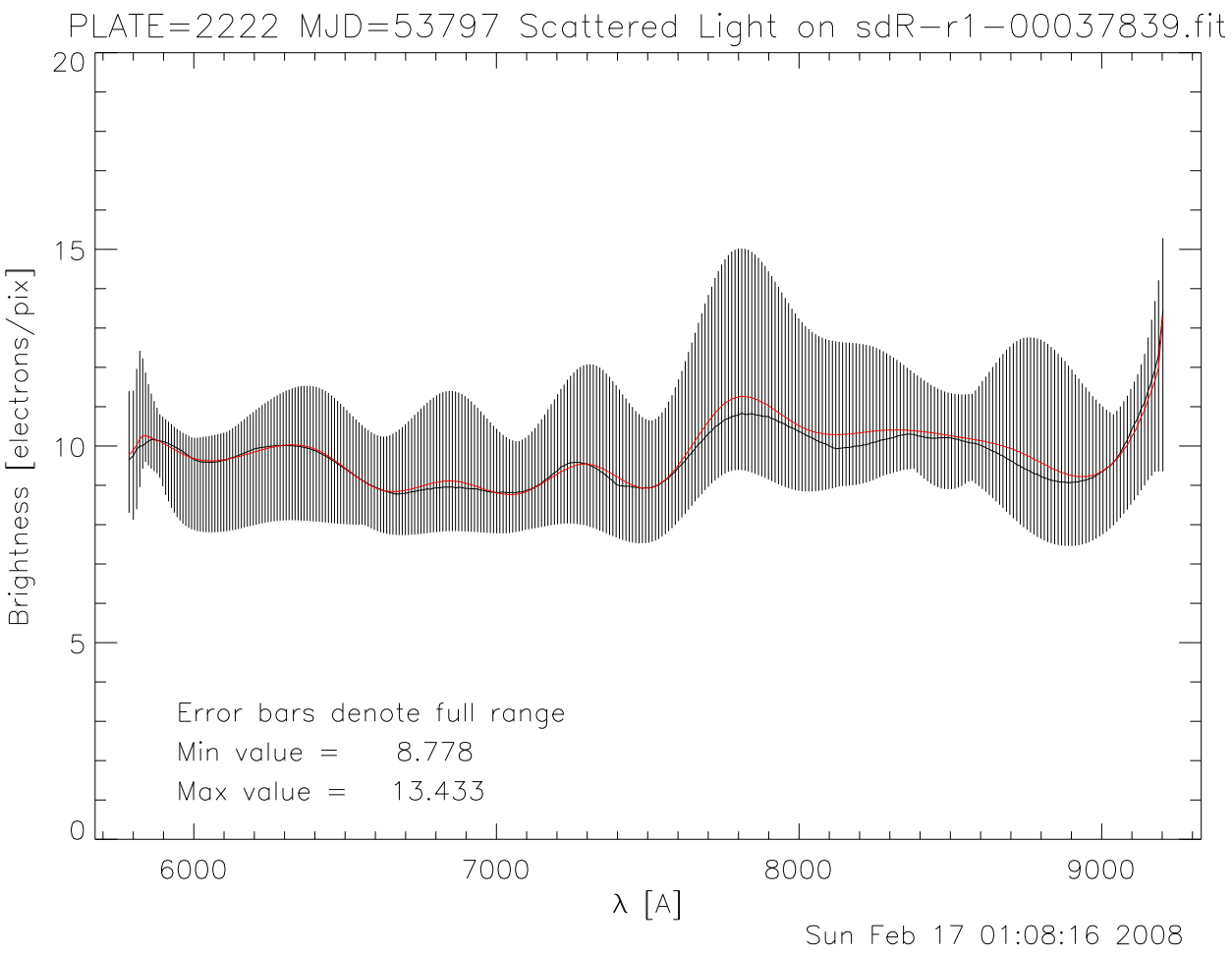

PLATE=2222 MJD=53797 sdR-r1-00037838.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.95 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

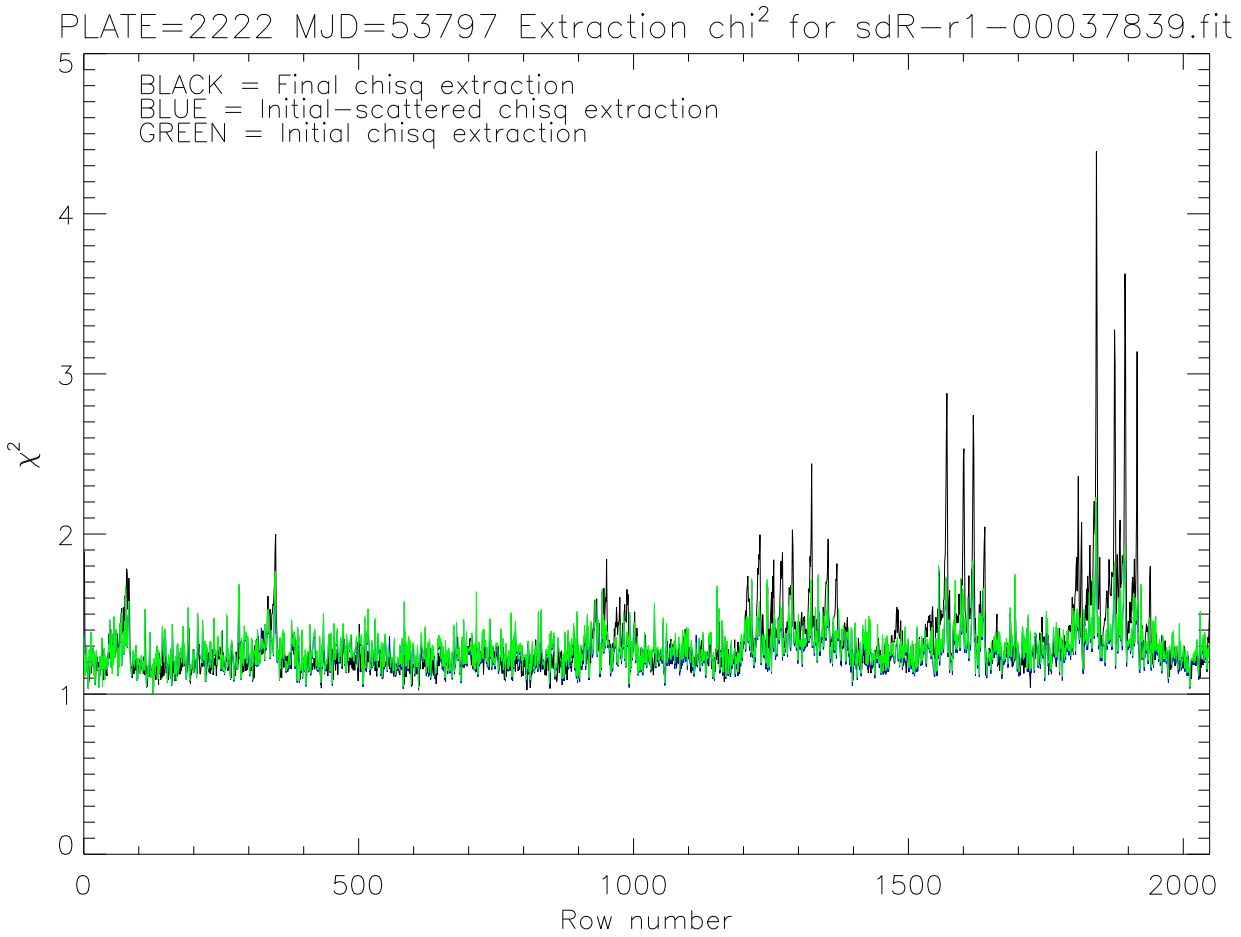

PLATE=2222 MJD=53797 Fiber−Flats for sdR−r1−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.181
Max value = 1.371
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 01:04:01 2008

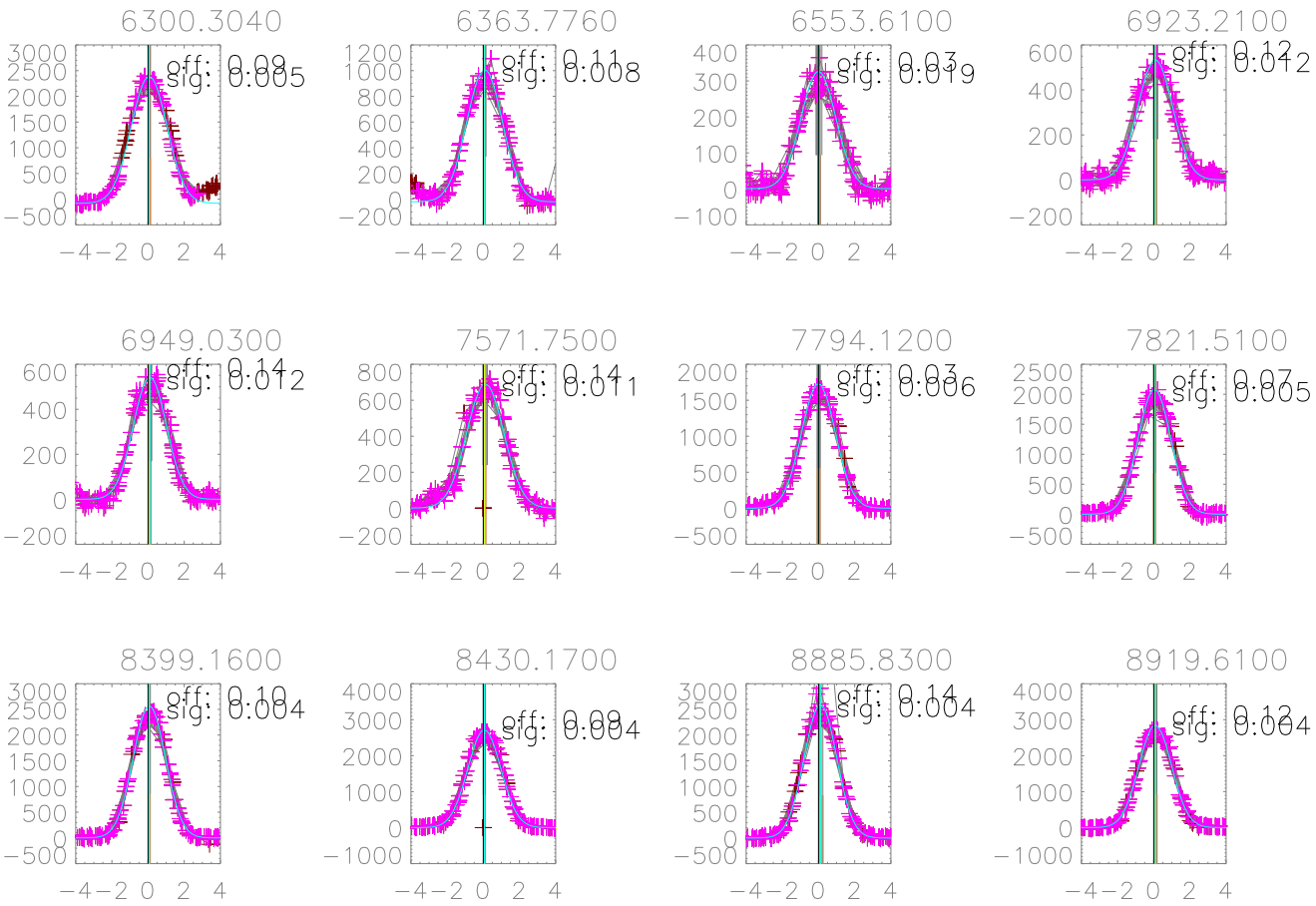

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r1-00037839.fi
31.82
31.82
31.82
22.73
22.73
13.64
13.64
13.64
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

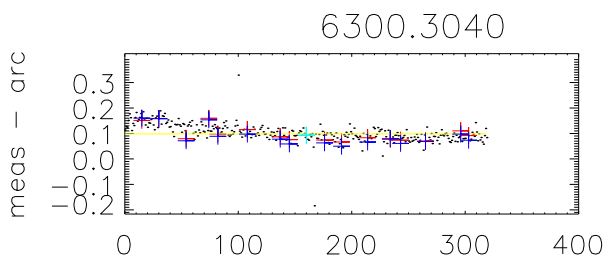

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r1-00037839.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.691
Max value = 38.322
Sun Feb 17 01:05:00 2008

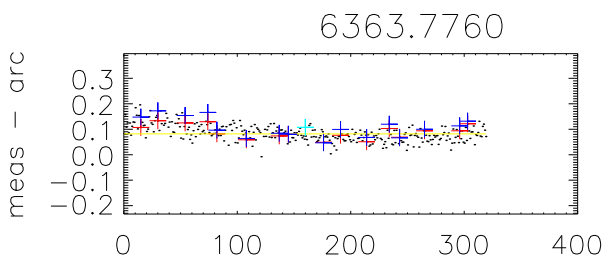

PLATE=2222 MJD=53797 Scattered Light on sdR-r1-00037839.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.5
11.6

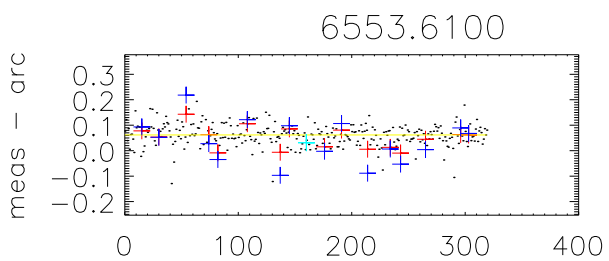

PLATE=2222 MJD=53797 Scattered Light on sdR-r1-00037839.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.778
Max value = 13.433
Sun Feb 17 01:08:16 2008

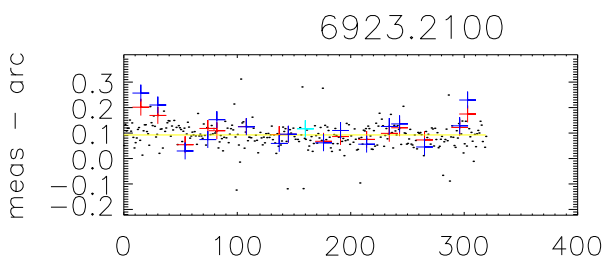

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−r1−00037839.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

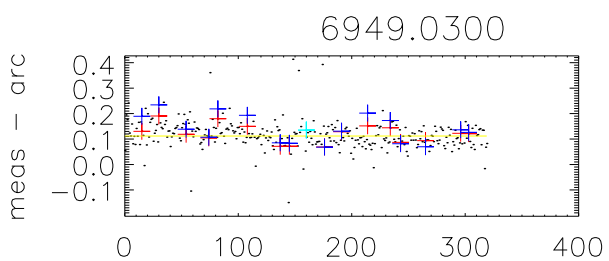

6300.3040
off: 0.09
sig: 0.005
6363.7760
off: 0.11
sig: 0.008
6553.6100
off: 0.03
sig: 0.019
6923.2100
off: 0.12
sig: 0.012
6949.0300
off: 0.14
sig: 0.012
7571.7500
off: 0.14
sig: 0.011
7794.1200
off: 0.03
sig: 0.006
7821.5100
off: 0.07
sig: 0.005
8399.1600
off: 0.10
sig: 0.004
8430.1700
off: 0.09
sig: 0.004
8885.8300
off: 0.14
sig: 0.004
8919.6100
off: 0.12
sig: 0.004

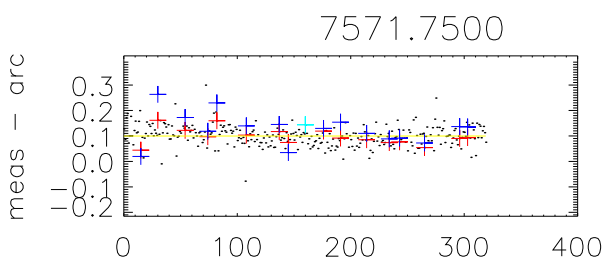

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

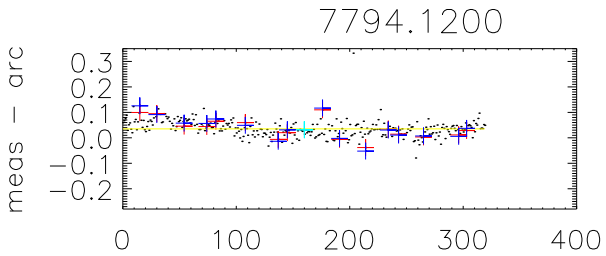

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

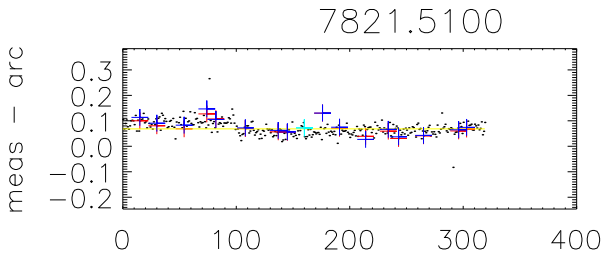

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

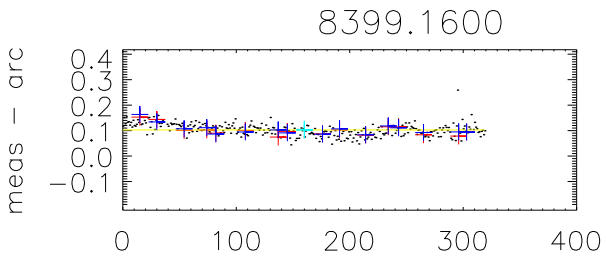

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

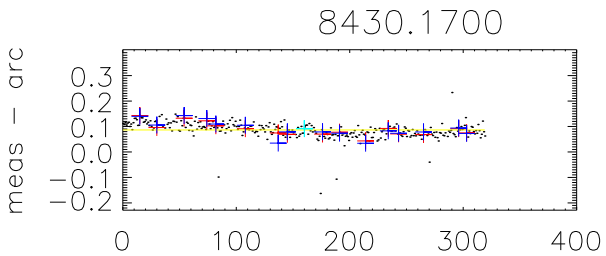

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

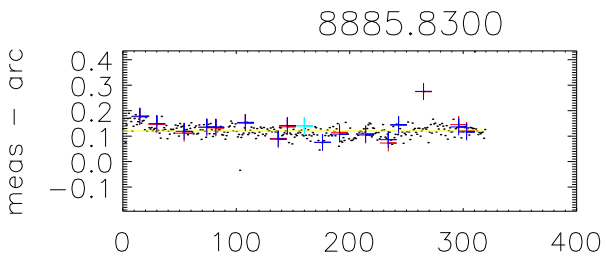

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

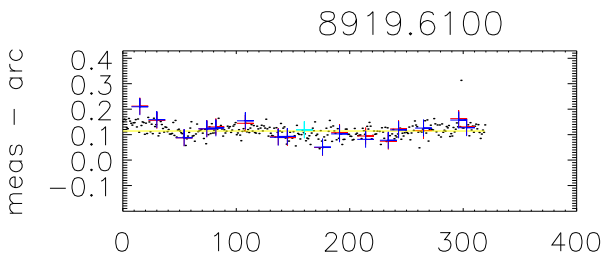

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

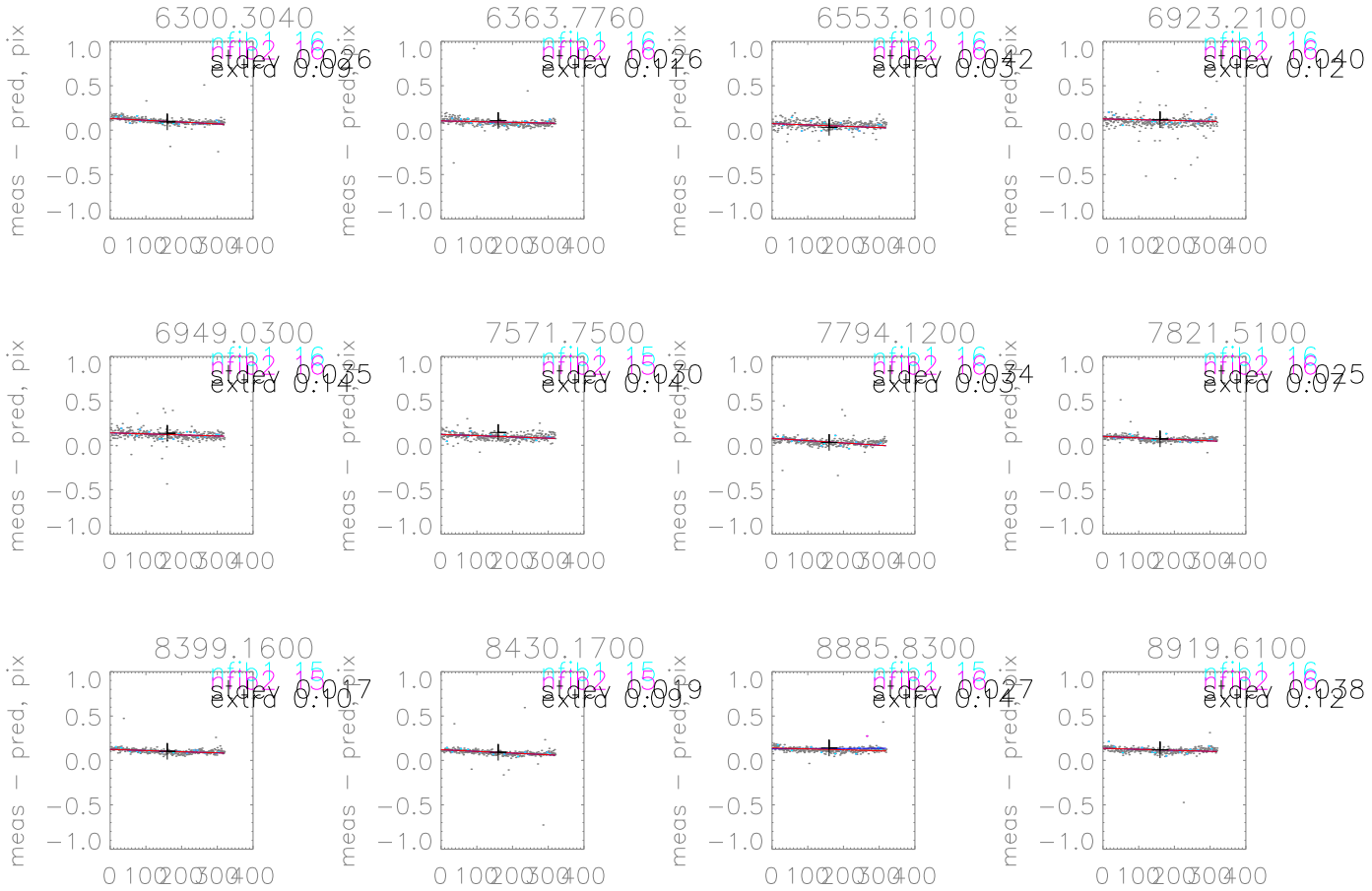

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

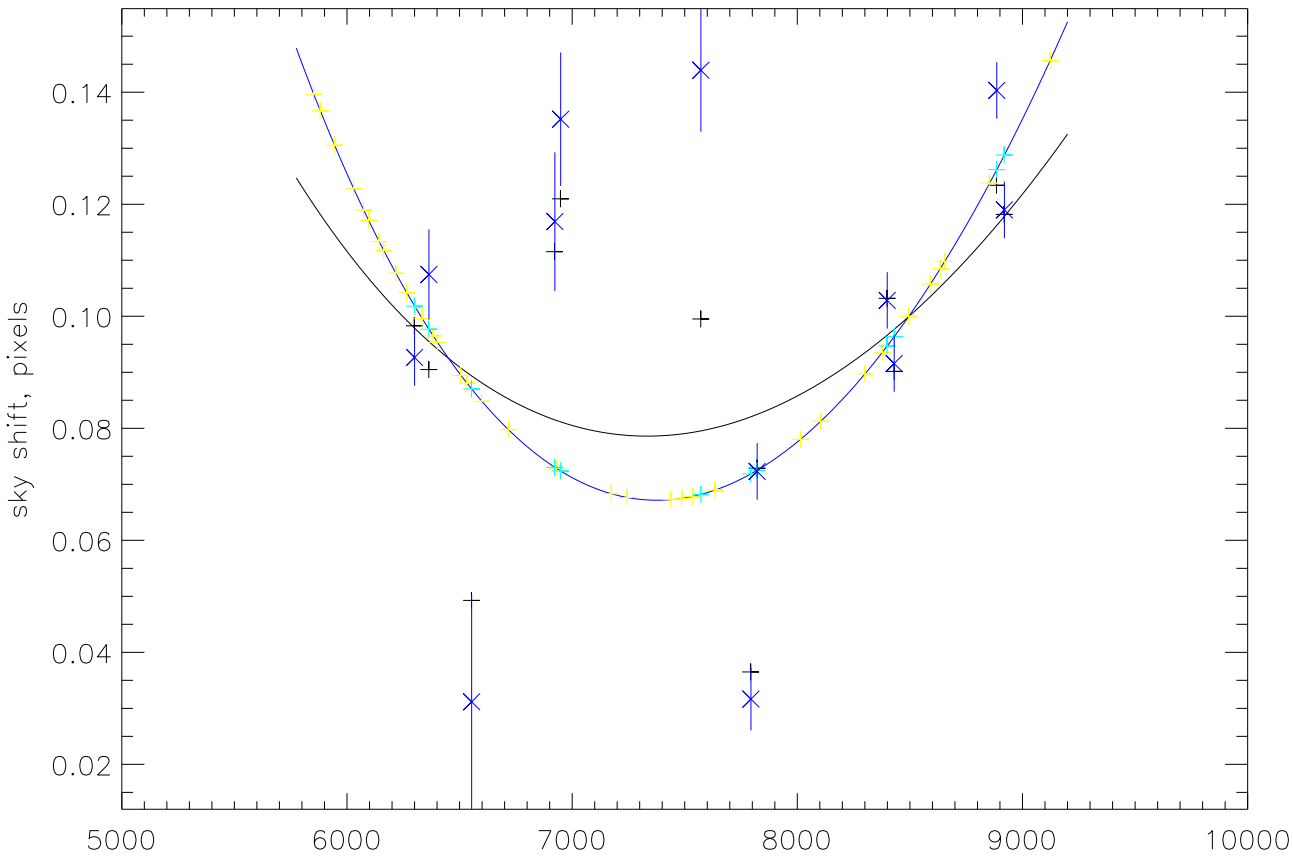

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

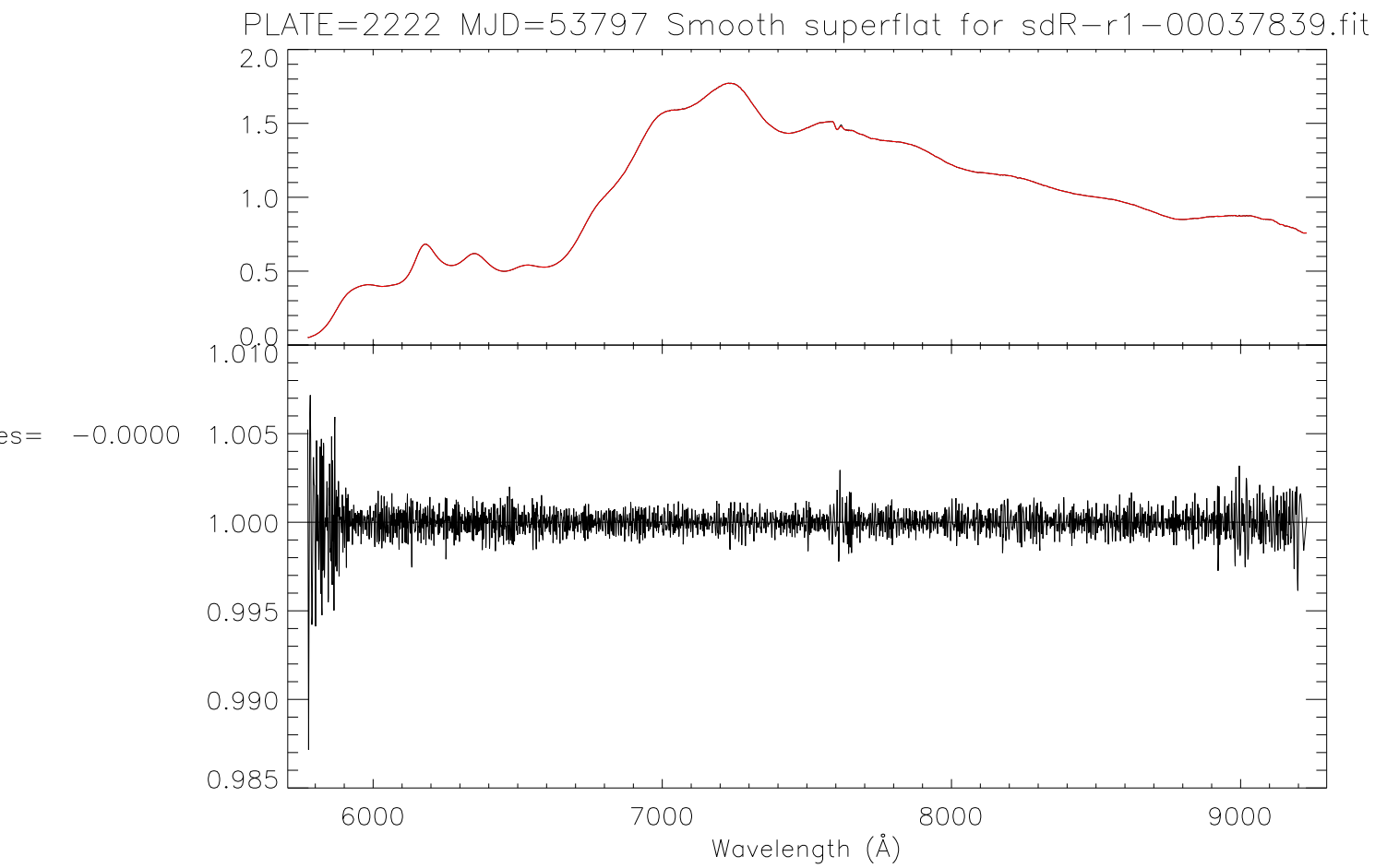

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

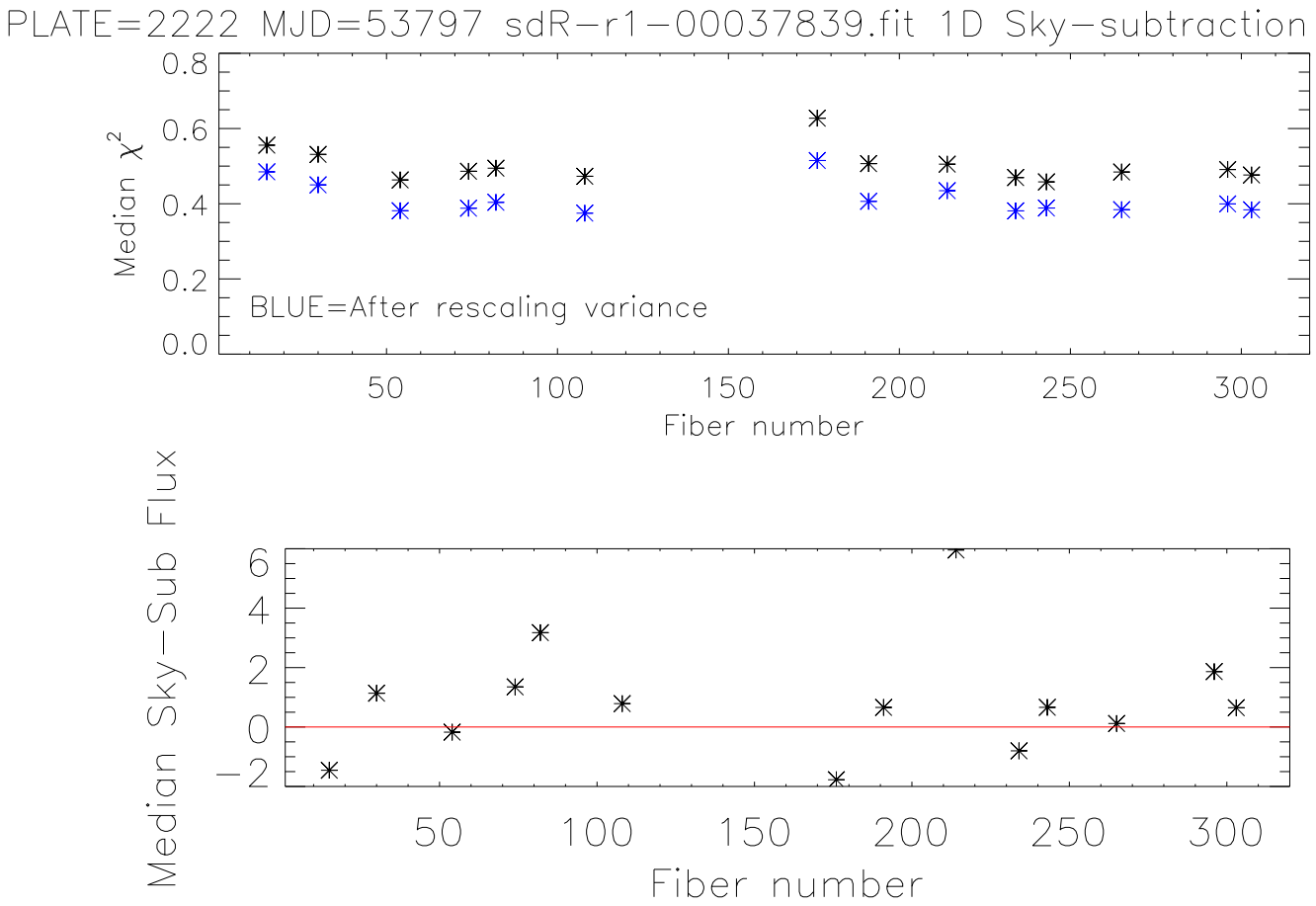

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

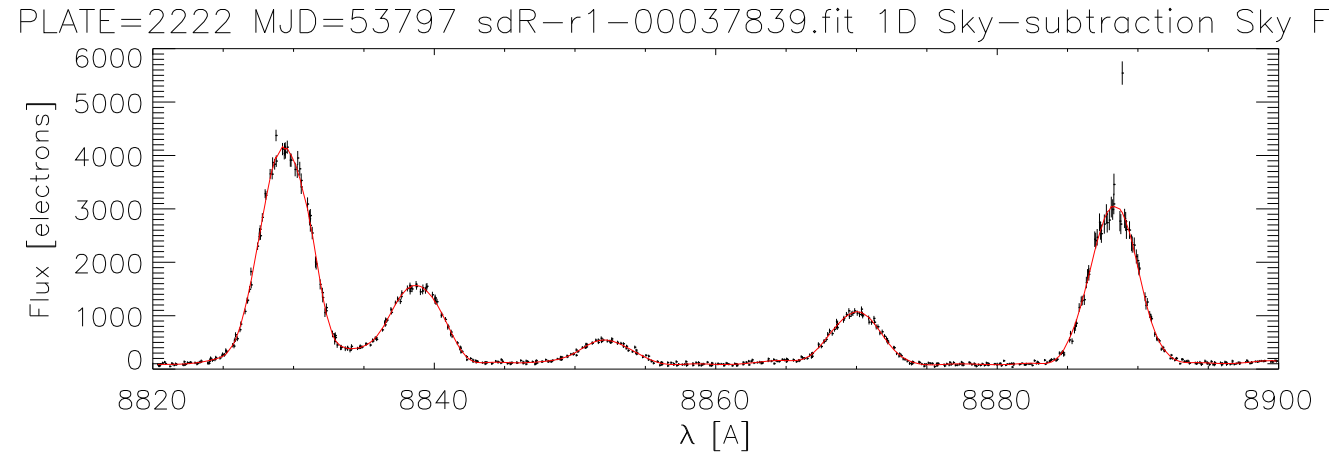

6300.3040
stdev 0.026
extra 0.09
6363.7760
stdev 0.026
extra 0.11
6553.6100
stdev 0.042
extra 0.03
6923.2100
stdev 0.040
extra 0.12
6949.0300
stdev 0.035
extra 0.14
7571.7500
stdev 0.030
extra 0.14
7794.1200
stdev 0.034
extra 0.03
7821.5100
stdev 0.025
extra 0.07
8399.1600
stdev 0.017
extra 0.10
8430.1700
stdev 0.019
extra 0.09
8885.8300
stdev 0.027
extra 0.14
8919.6100
stdev 0.038
extra 0.12
meas − pred, pix

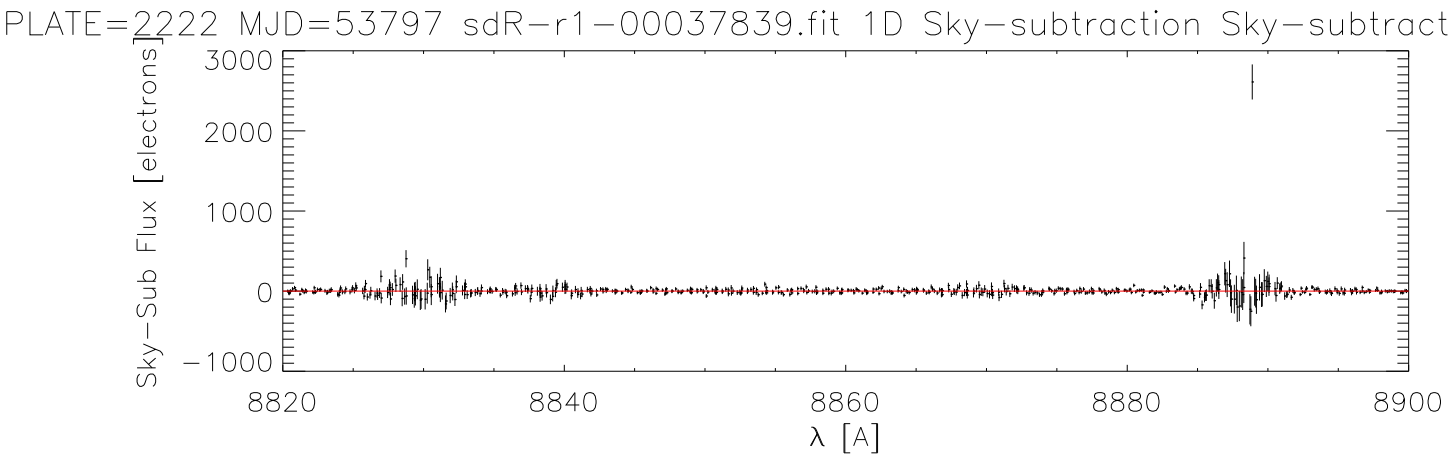

sky shift, pixels
0.14
0.12
0.10
0.08
0.06
0.04
0.02
5000
6000
7000
8000
9000
10000

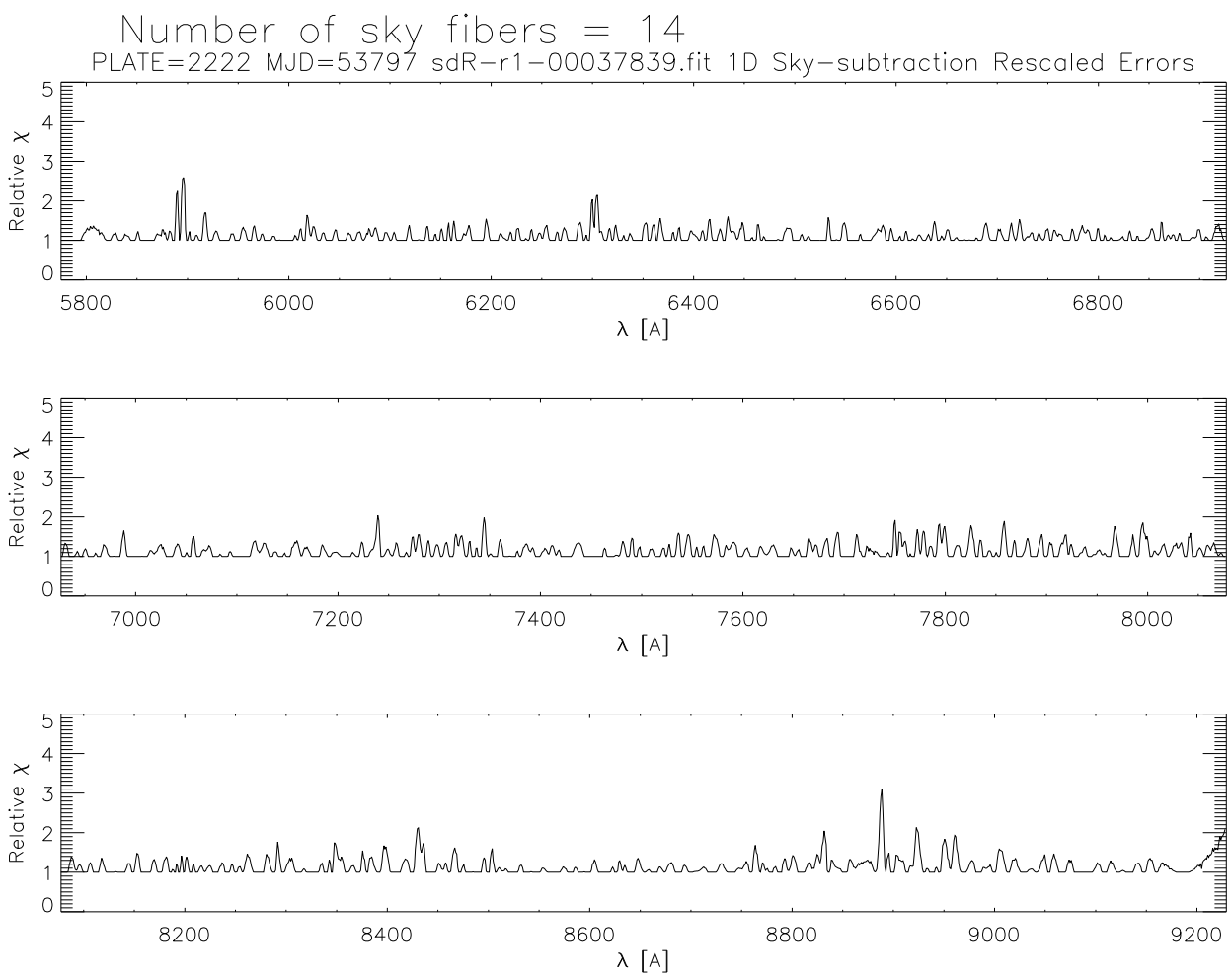

PLATE=2222 MJD=53797 Smooth superflat for sdR-r1-00037839.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

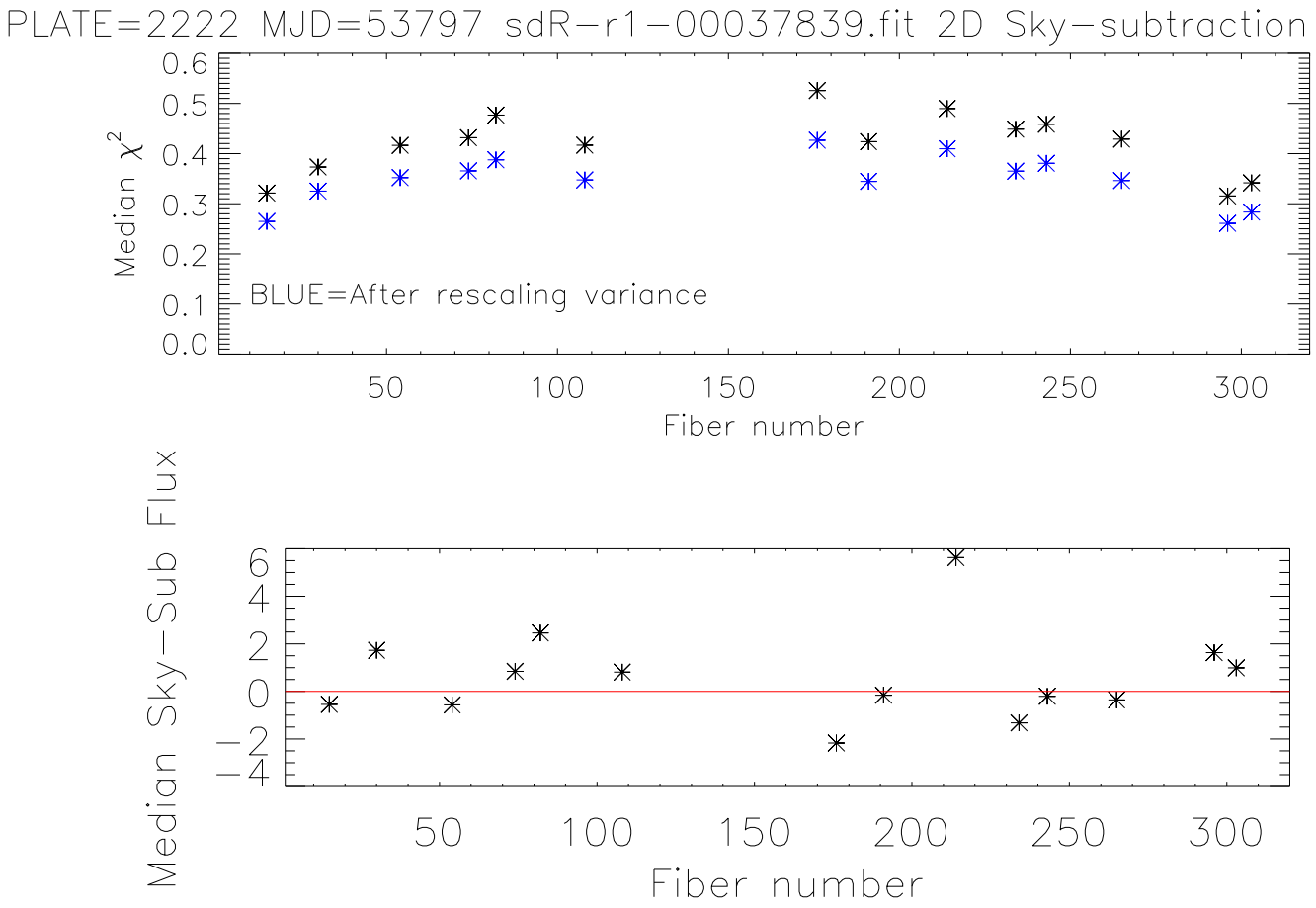

PLATE=2222 MJD=53797 sdR-r1-00037839.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number

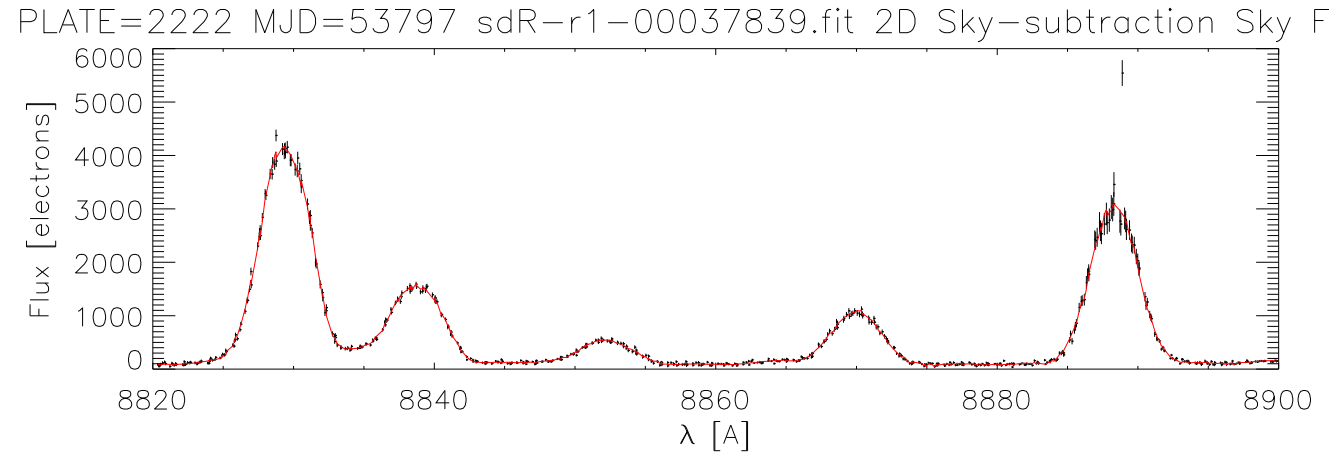
Median Sky-Sub Flux
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

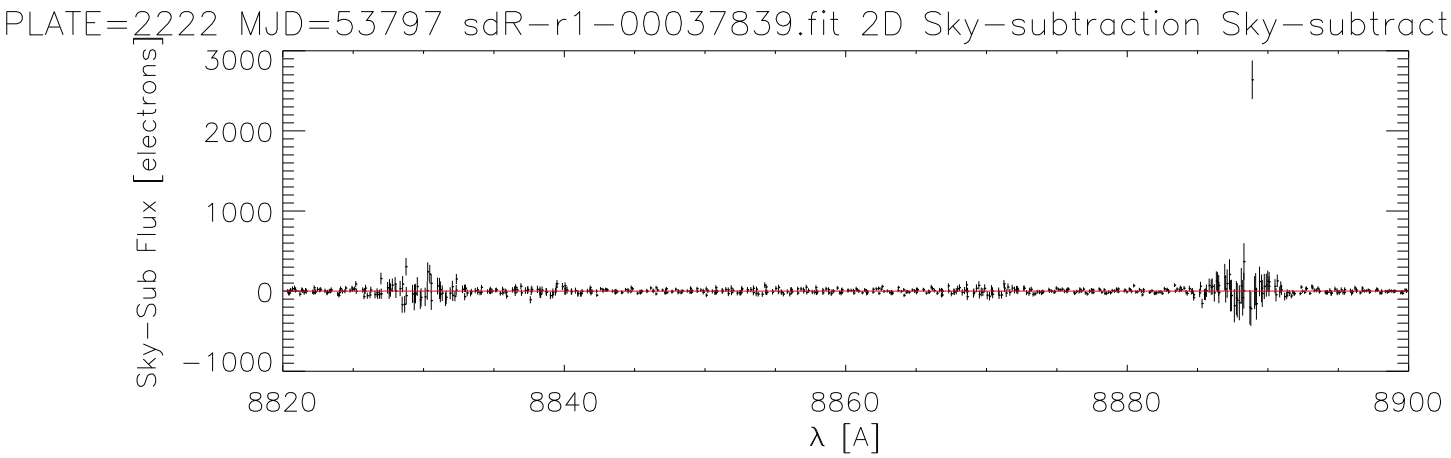

PLATE=2222 MJD=53797 sdR-r1-00037839.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

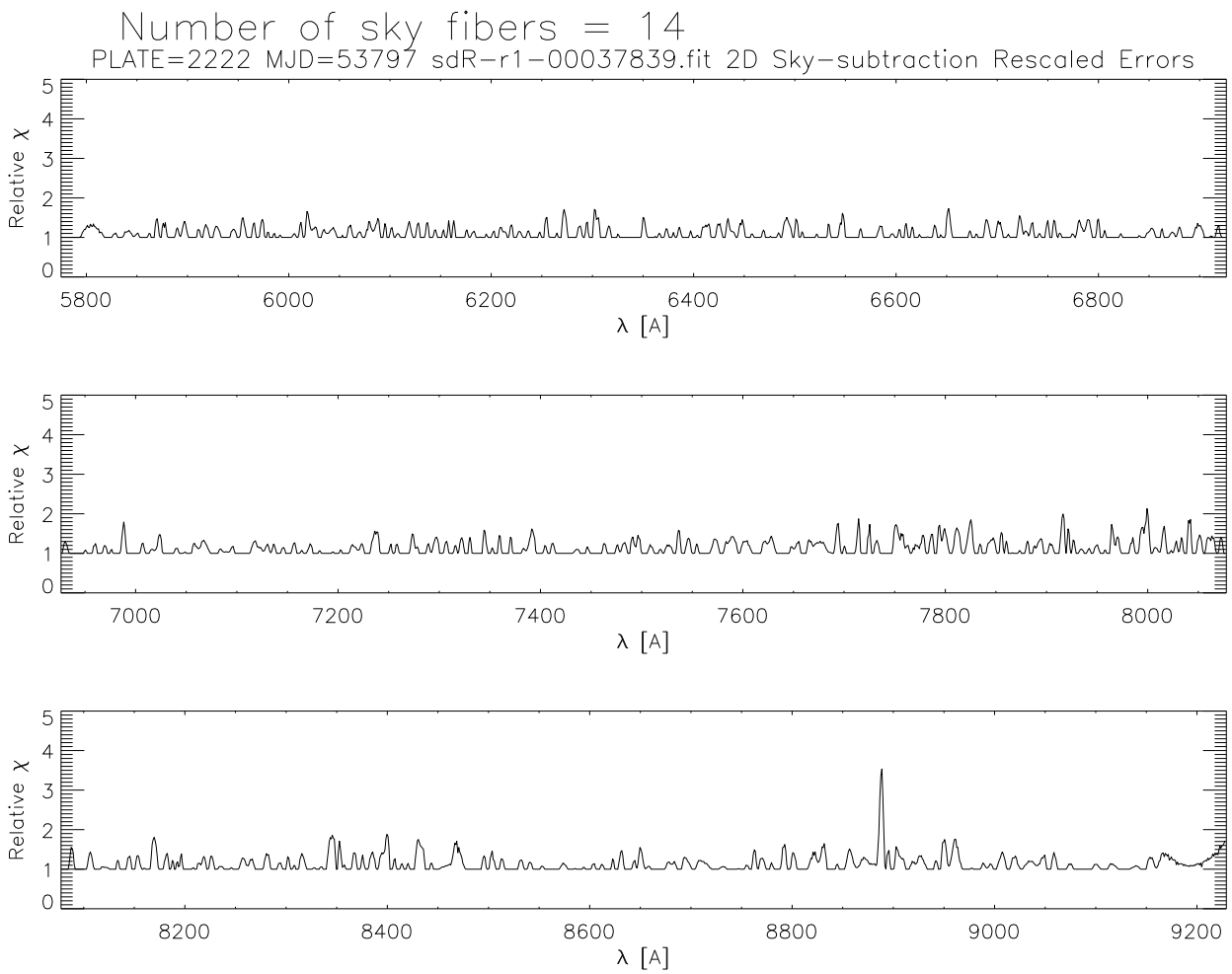

PLATE=2222 MJD=53797 sdR-r1-00037839.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

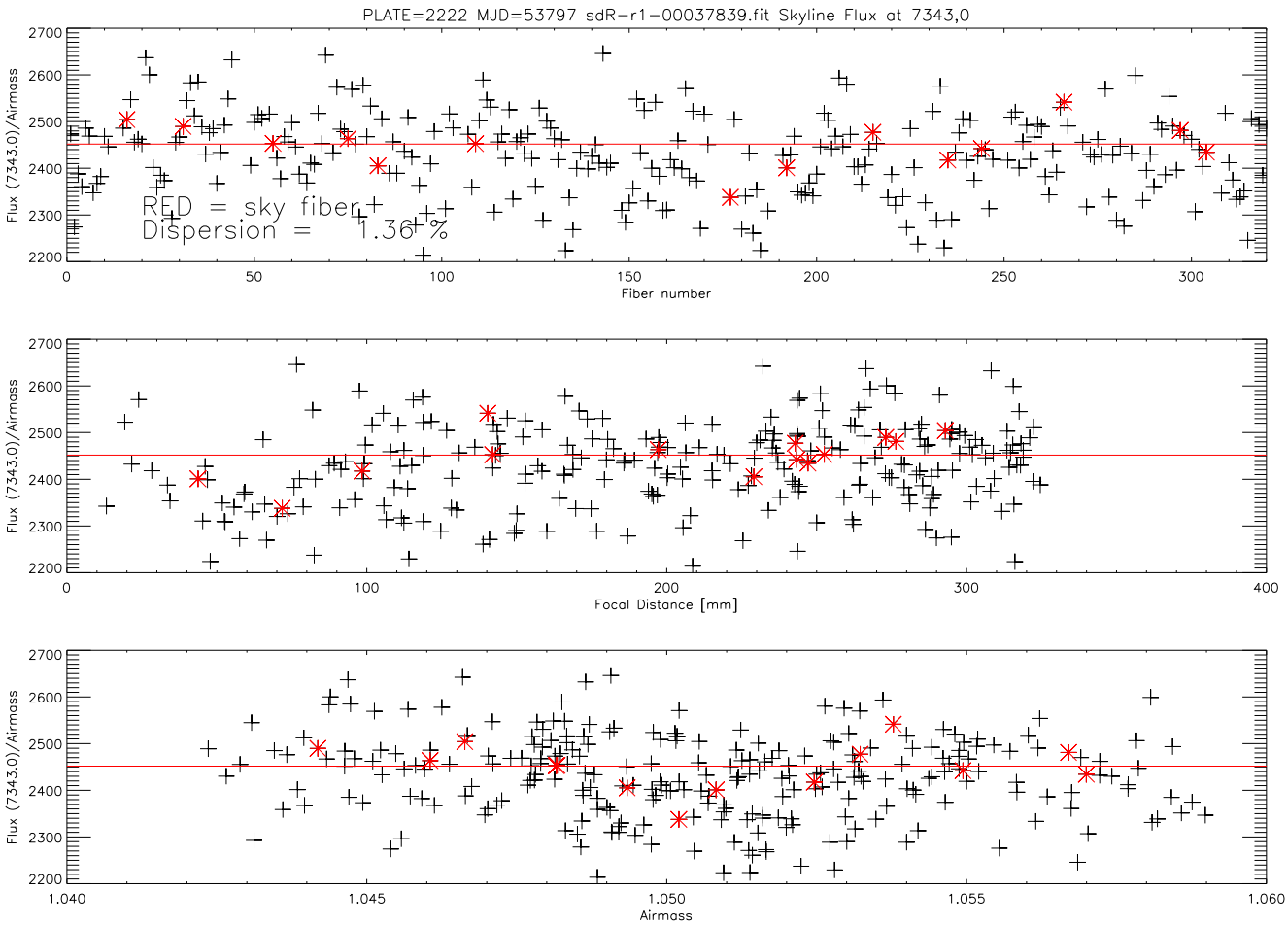

Number of sky fibers = 14
PLATE=2222 MJD=53797 sdR-r1-00037839.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

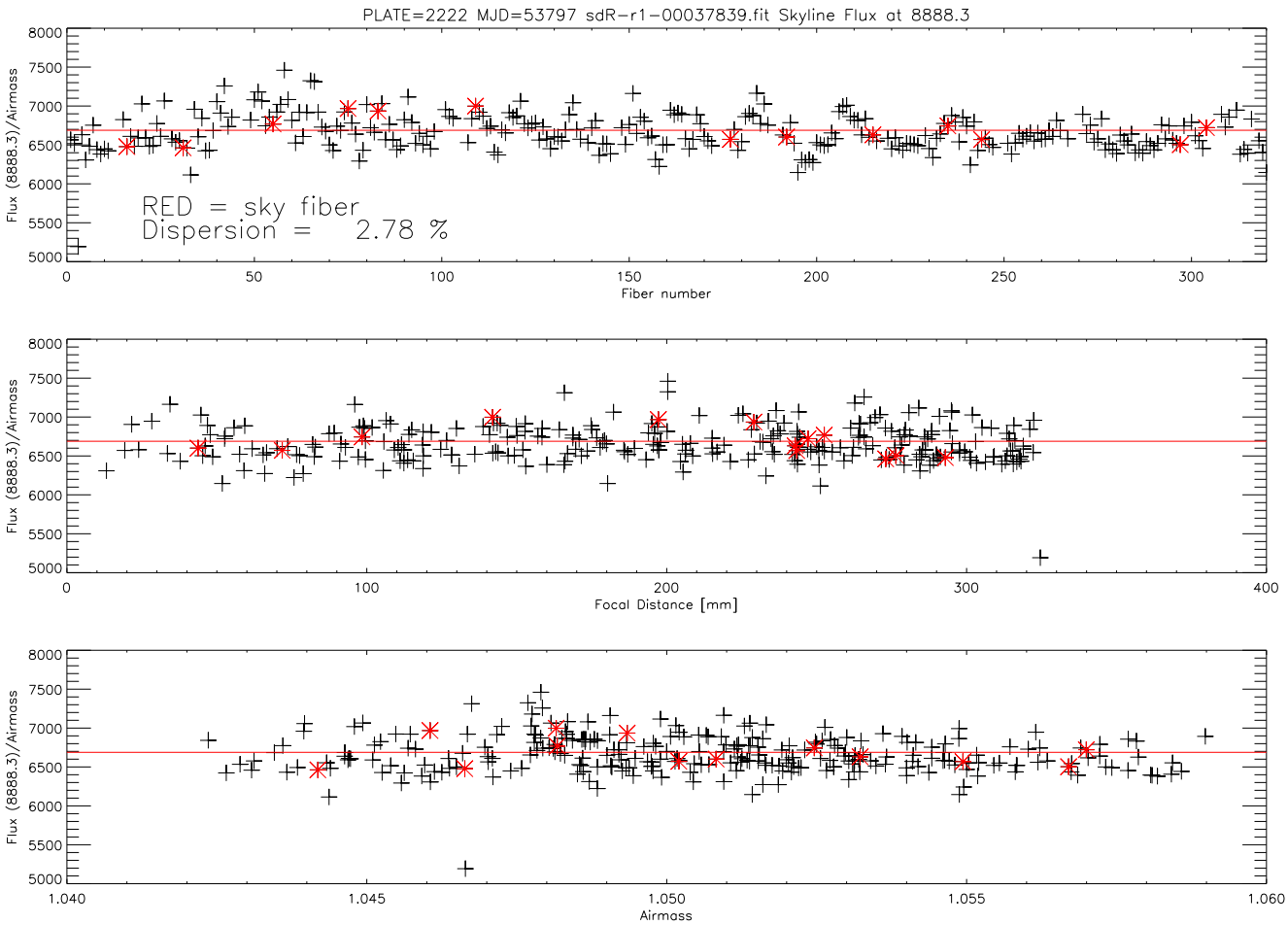

PLATE=2222 MJD=53797 sdR-r1-00037839.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

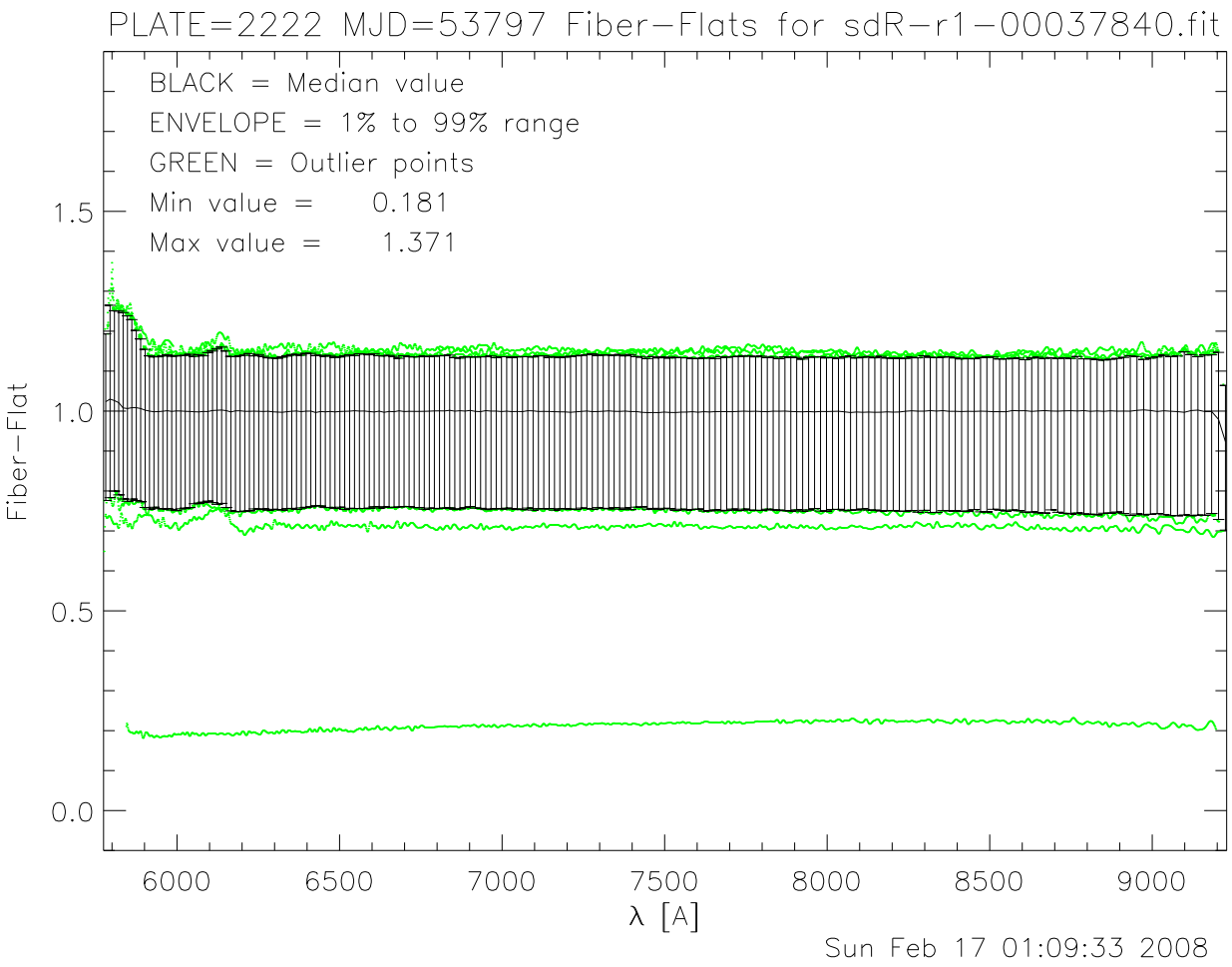

PLATE=2222 MJD=53797 sdR-r1-00037839.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

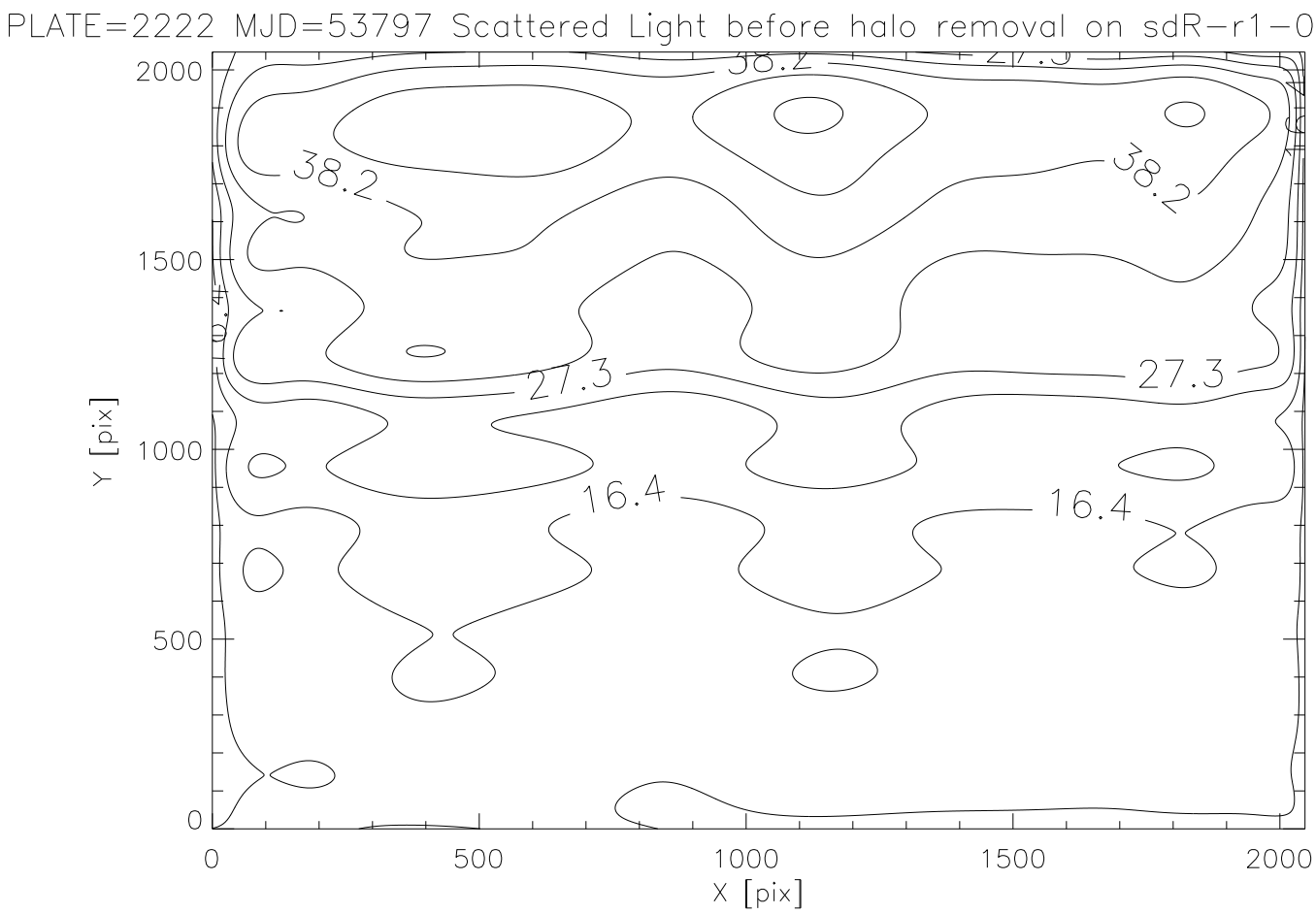

PLATE=2222 MJD=53797 sdR-r1-00037839.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

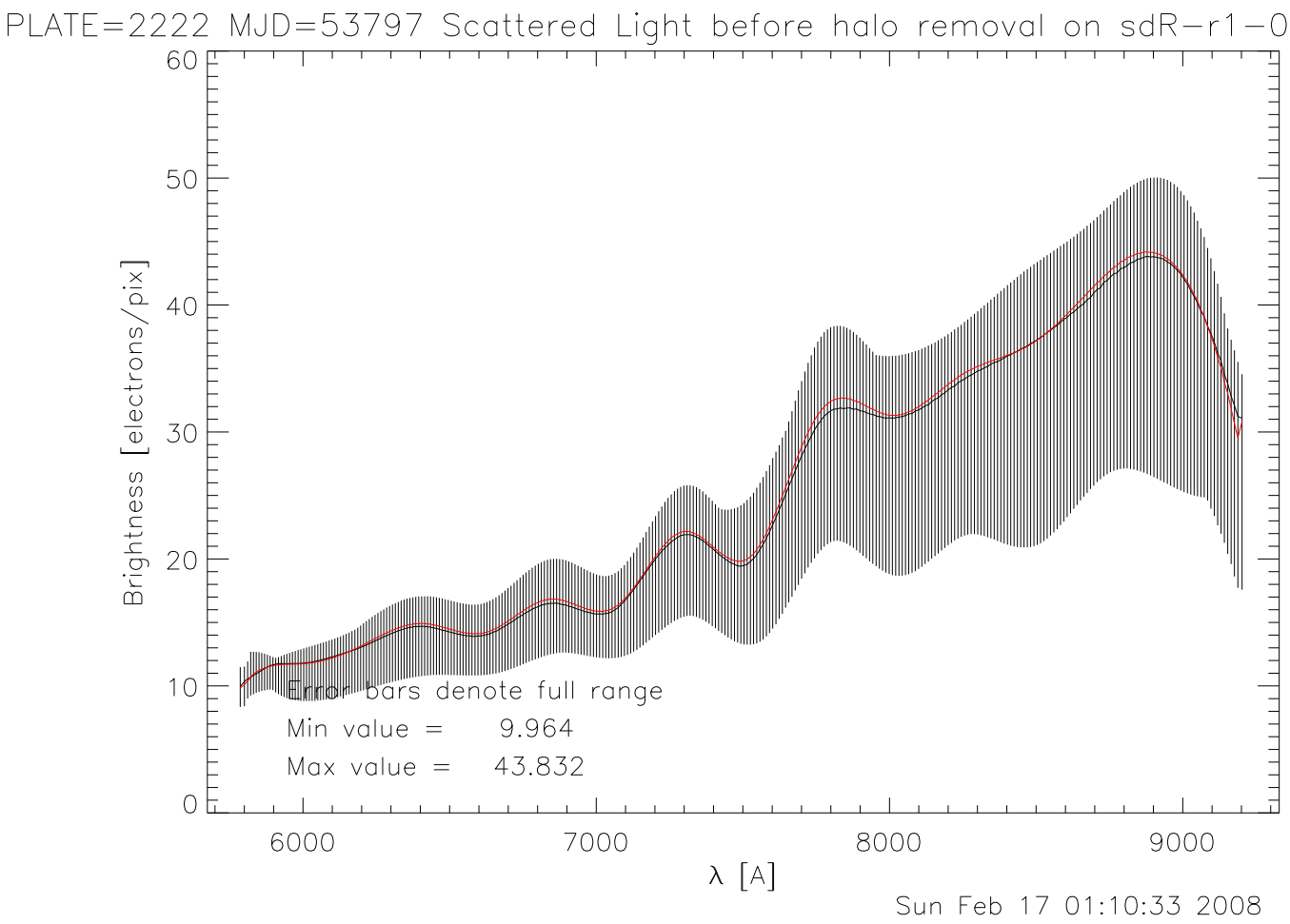

Number of sky fibers = 14
PLATE=2222 MJD=53797 sdR-r1-00037839.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

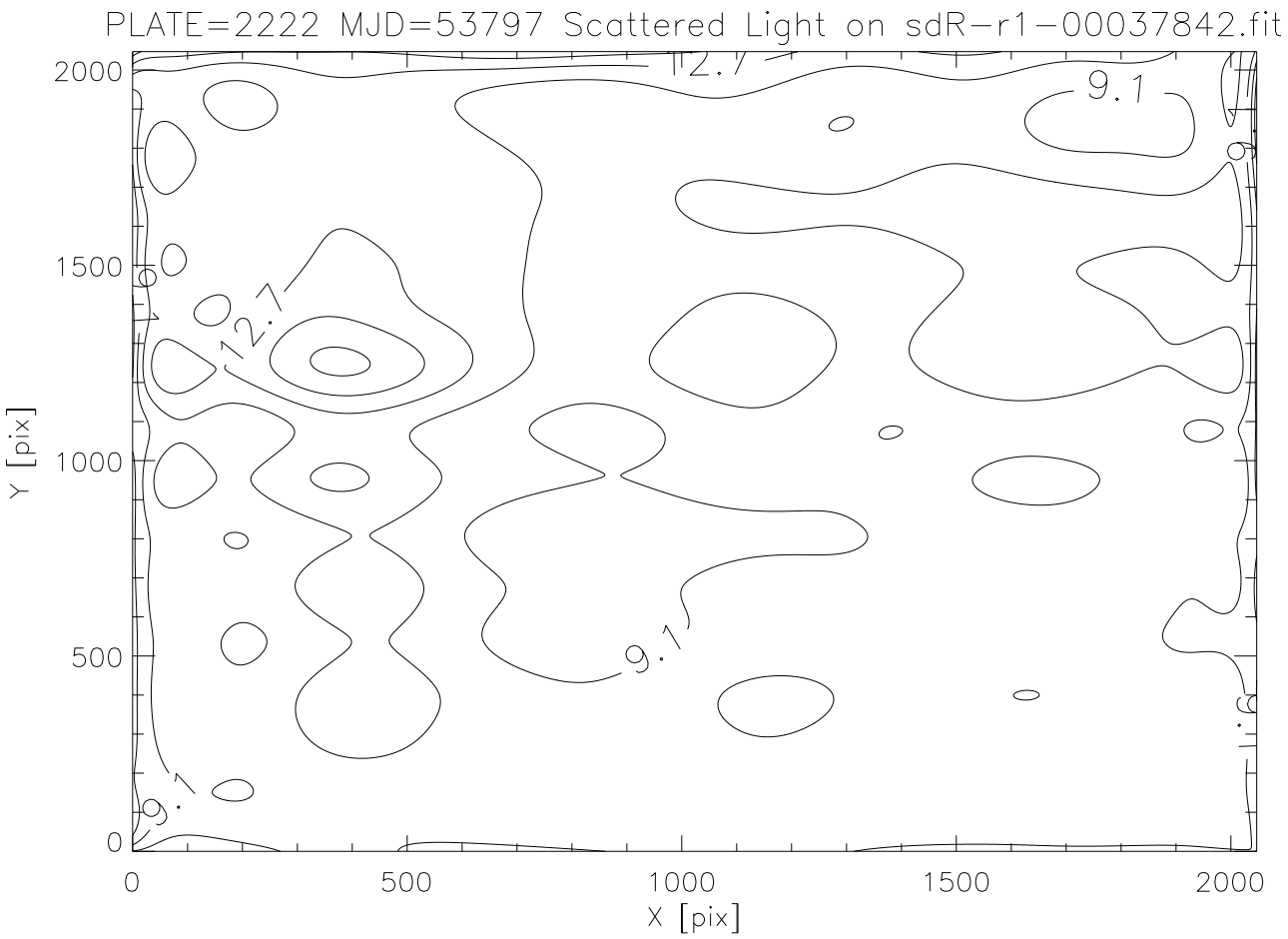

PLATE=2222 MJD=53797 sdR-r1-00037839.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.36 %
Fiber number
Focal Distance [mm]
Airmass

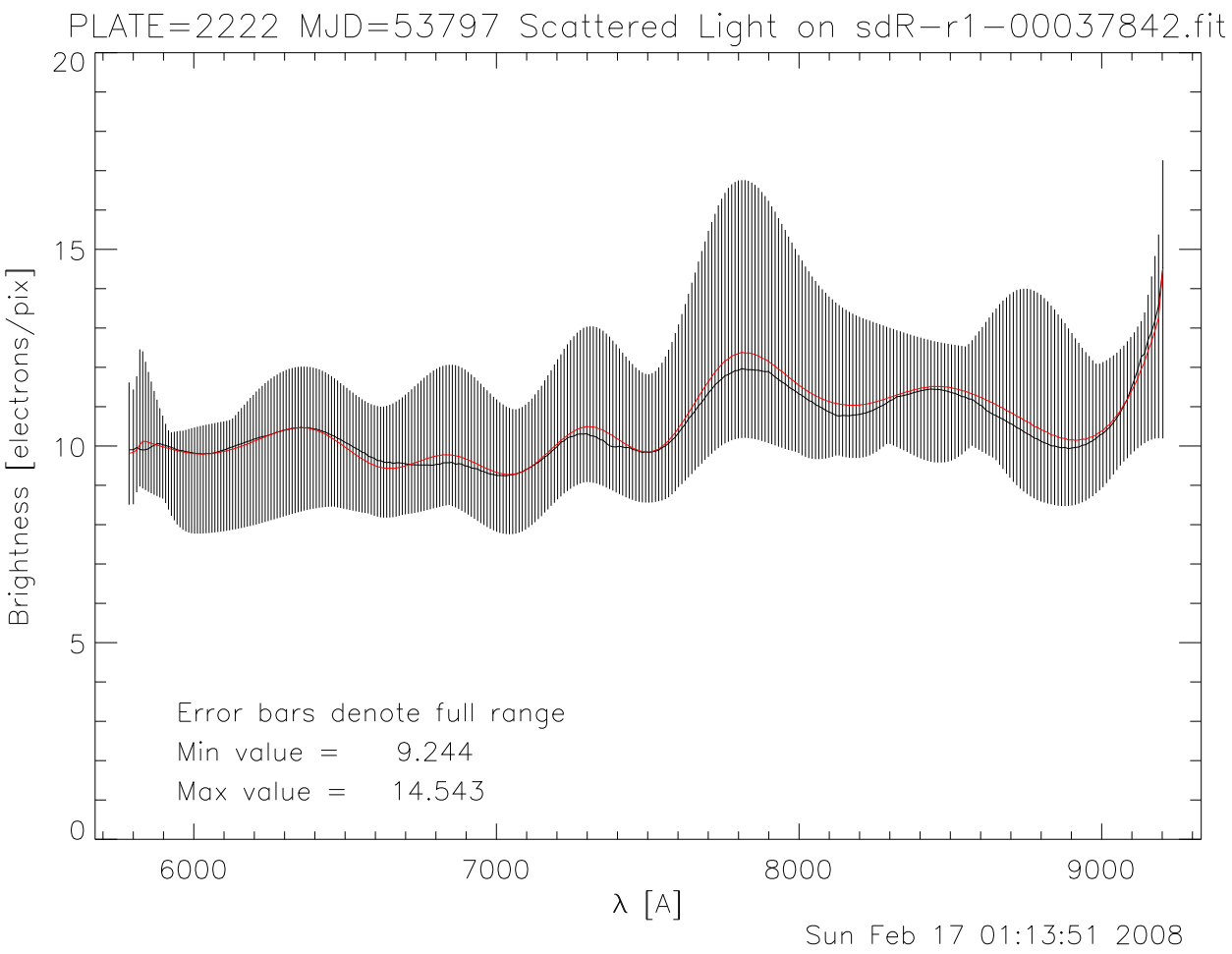

PLATE=2222 MJD=53797 sdR-r1-00037839.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.78 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

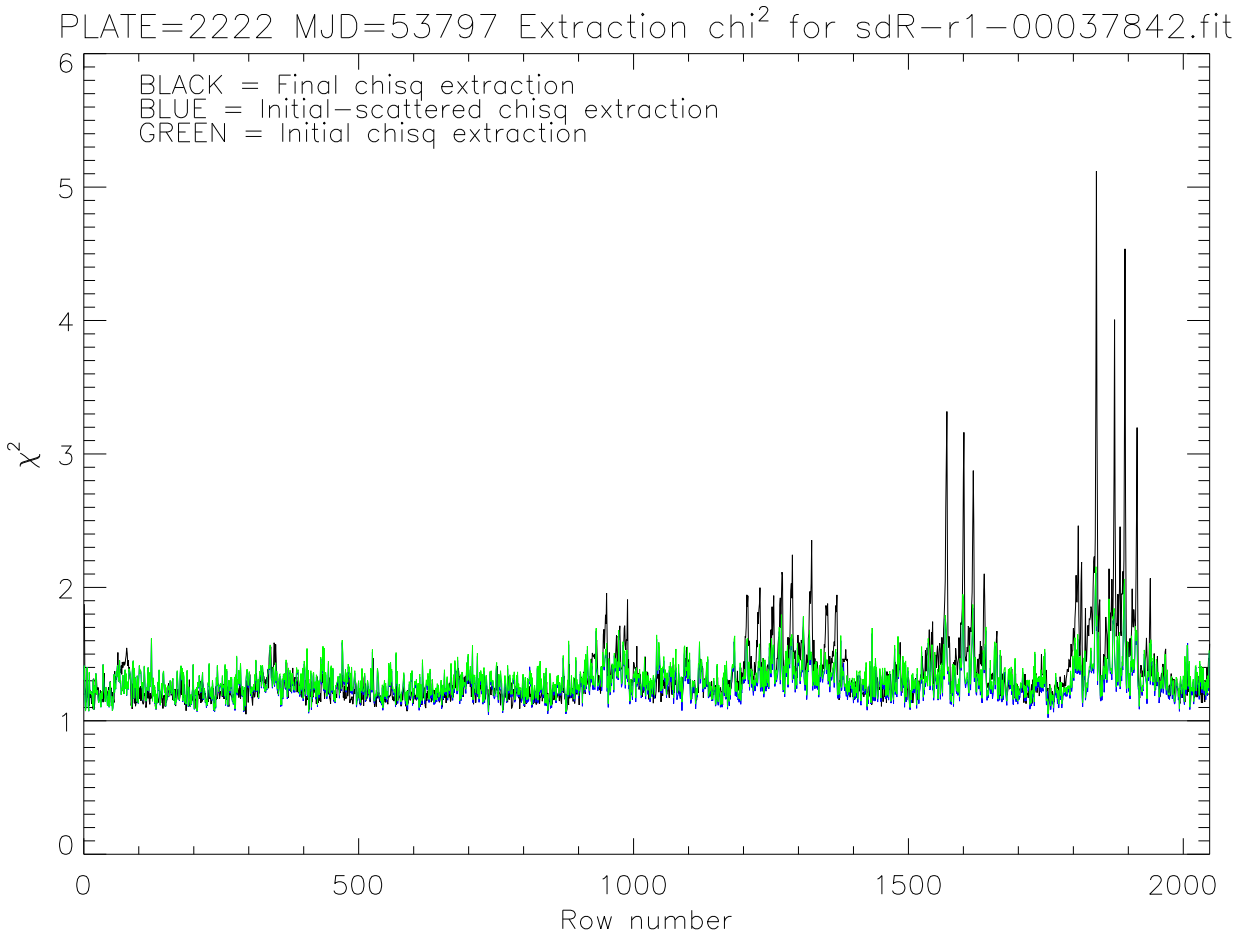

PLATE=2222 MJD=53797 Fiber−Flats for sdR−r1−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.181
Max value = 1.371
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 01:09:33 2008

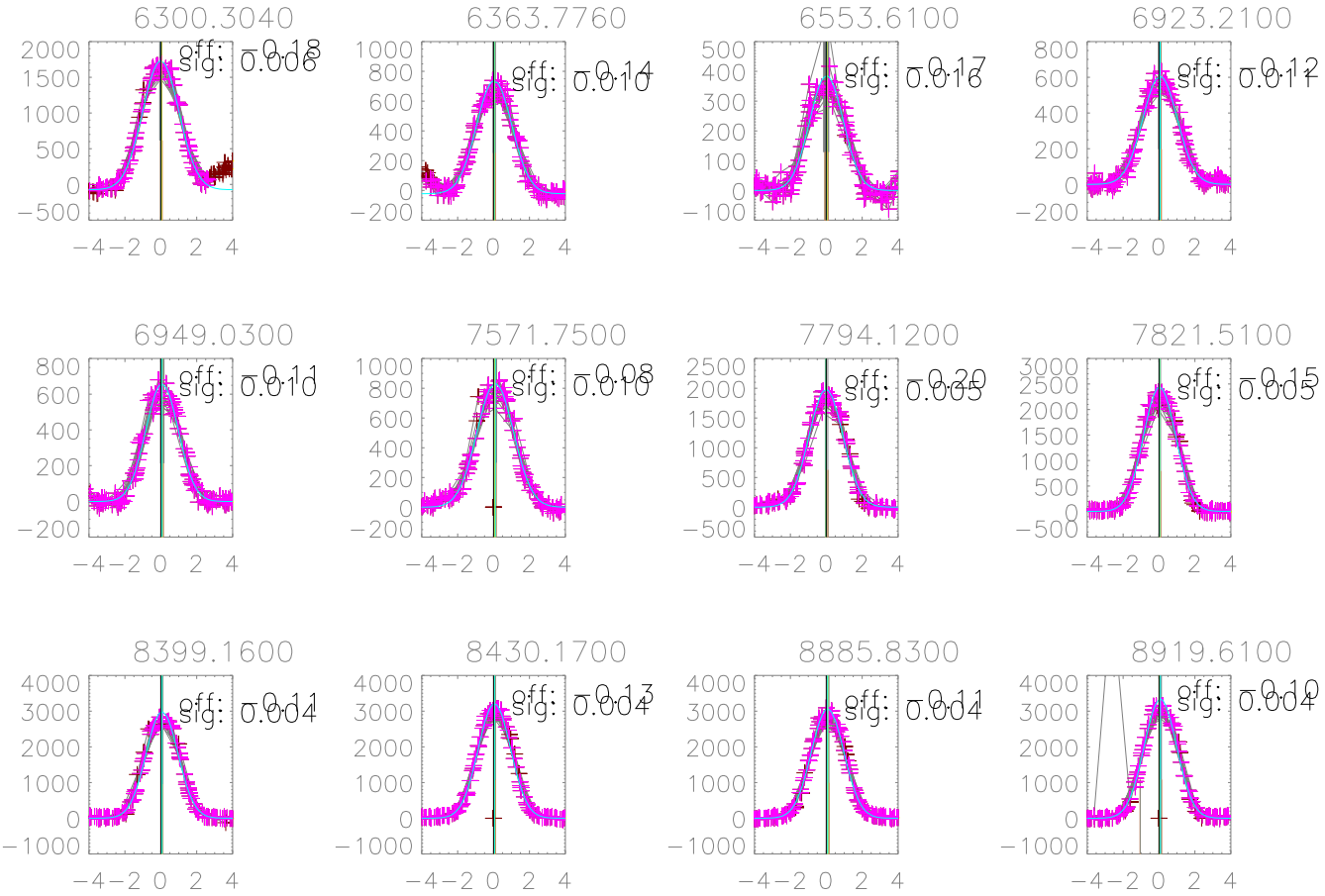

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r1-00037842.fi
38.2
38.2
38.2
27.3
27.3
16.4
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

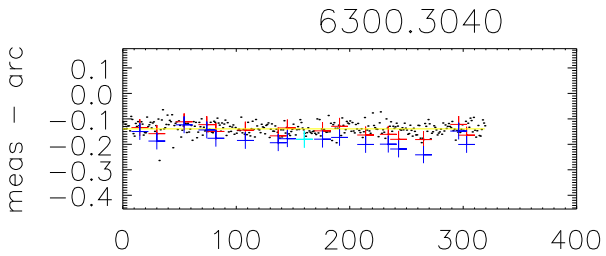

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r1-00037842.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 9.964
Max value = 43.832
Sun Feb 17 01:10:33 2008

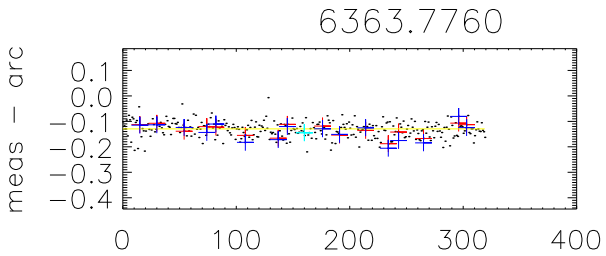

PLATE=2222 MJD=53797 Scattered Light on sdR-r1-00037842.fit
12.7
9.1
12.7
9.1
9.1
Y [pix]
X [pix]
0
500
1000
1500
2000

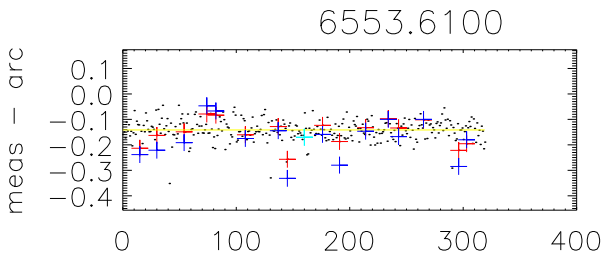

PLATE=2222 MJD=53797 Scattered Light on sdR-r1-00037842.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.244
Max value = 14.543
Sun Feb 17 01:13:51 2008

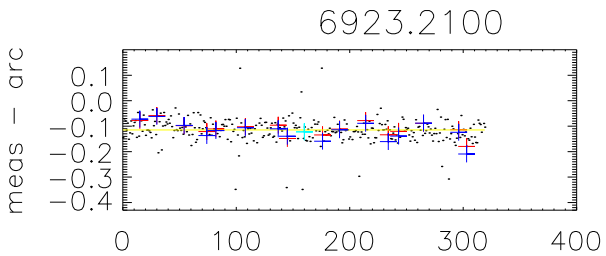

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−r1−00037842.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

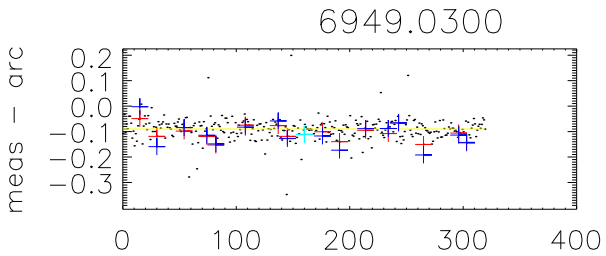

6300.3040
off: 0.18
sig: 0.006
6363.7760
off: 0.14
sig: 0.010
6553.6100
off: 0.17
sig: 0.016
6923.2100
off: 0.12
sig: 0.011
6949.0300
off: 0.11
sig: 0.010
7571.7500
off: 0.08
sig: 0.010
7794.1200
off: 0.20
sig: 0.005
7821.5100
off: 0.15
sig: 0.005
8399.1600
off: 0.11
sig: 0.004
8430.1700
off: 0.13
sig: 0.004
8885.8300
off: 0.11
sig: 0.004
8919.6100
off: 0.10
sig: 0.004

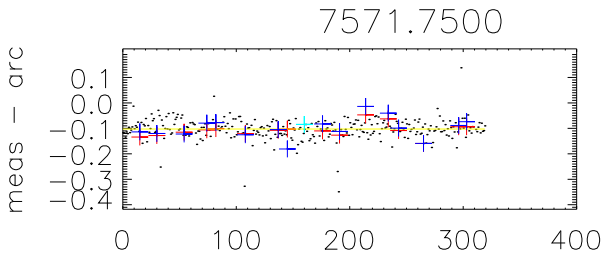

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

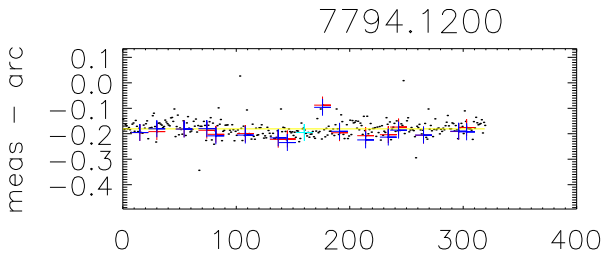

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

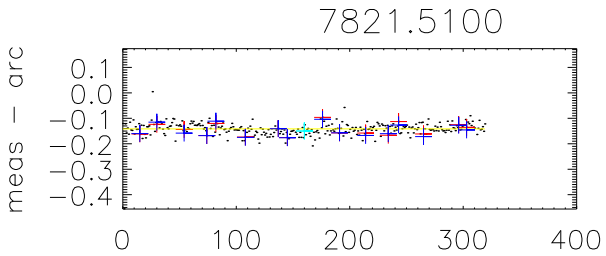

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

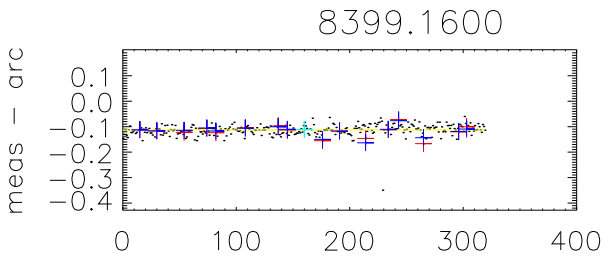

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

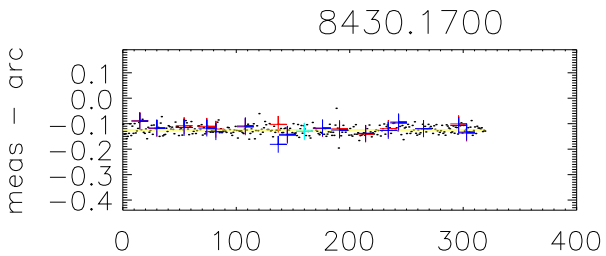

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

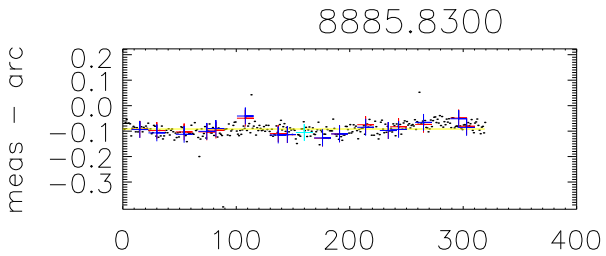

7571.7500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

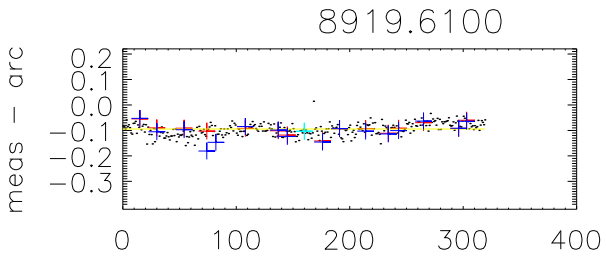

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

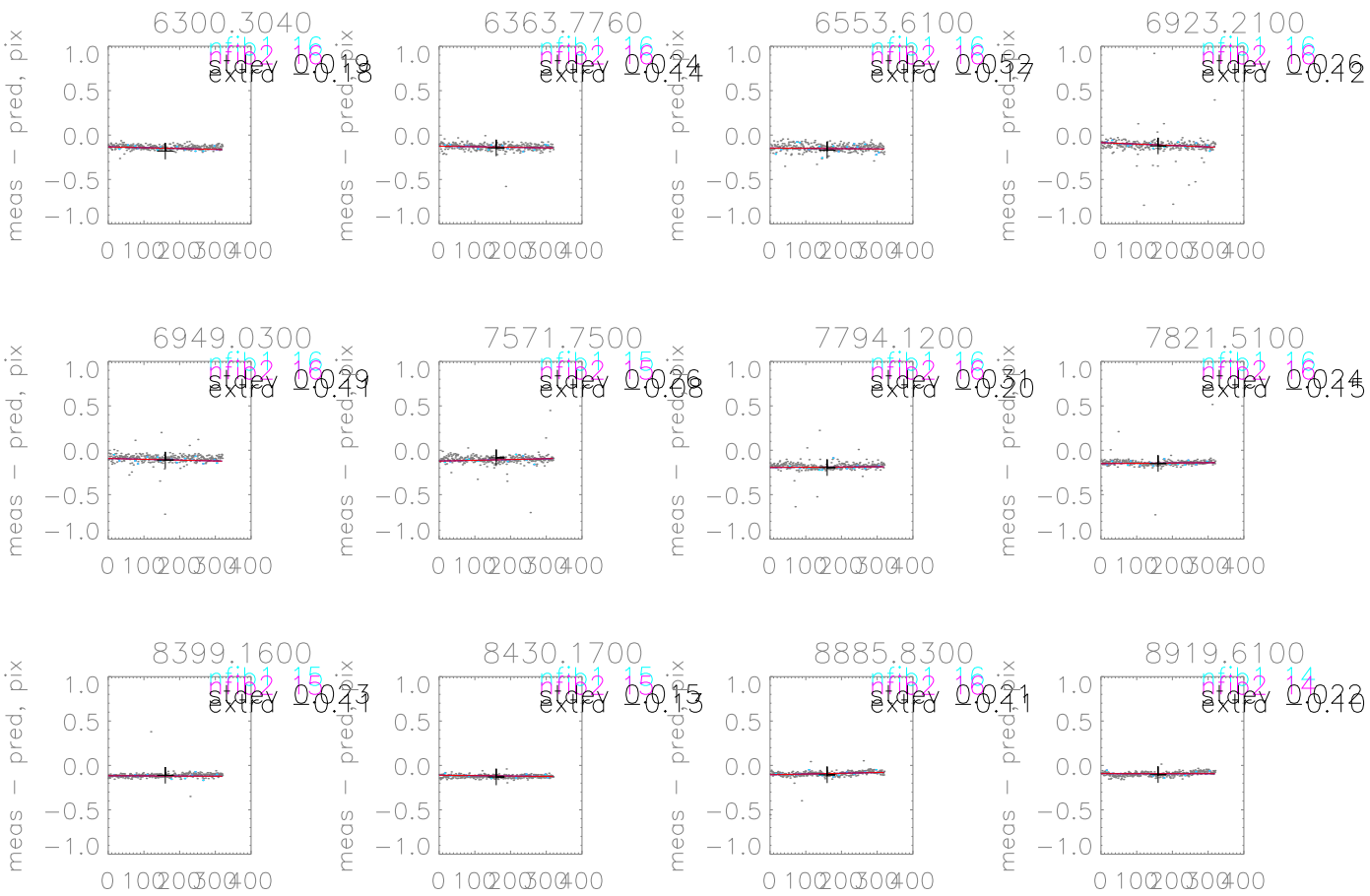

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

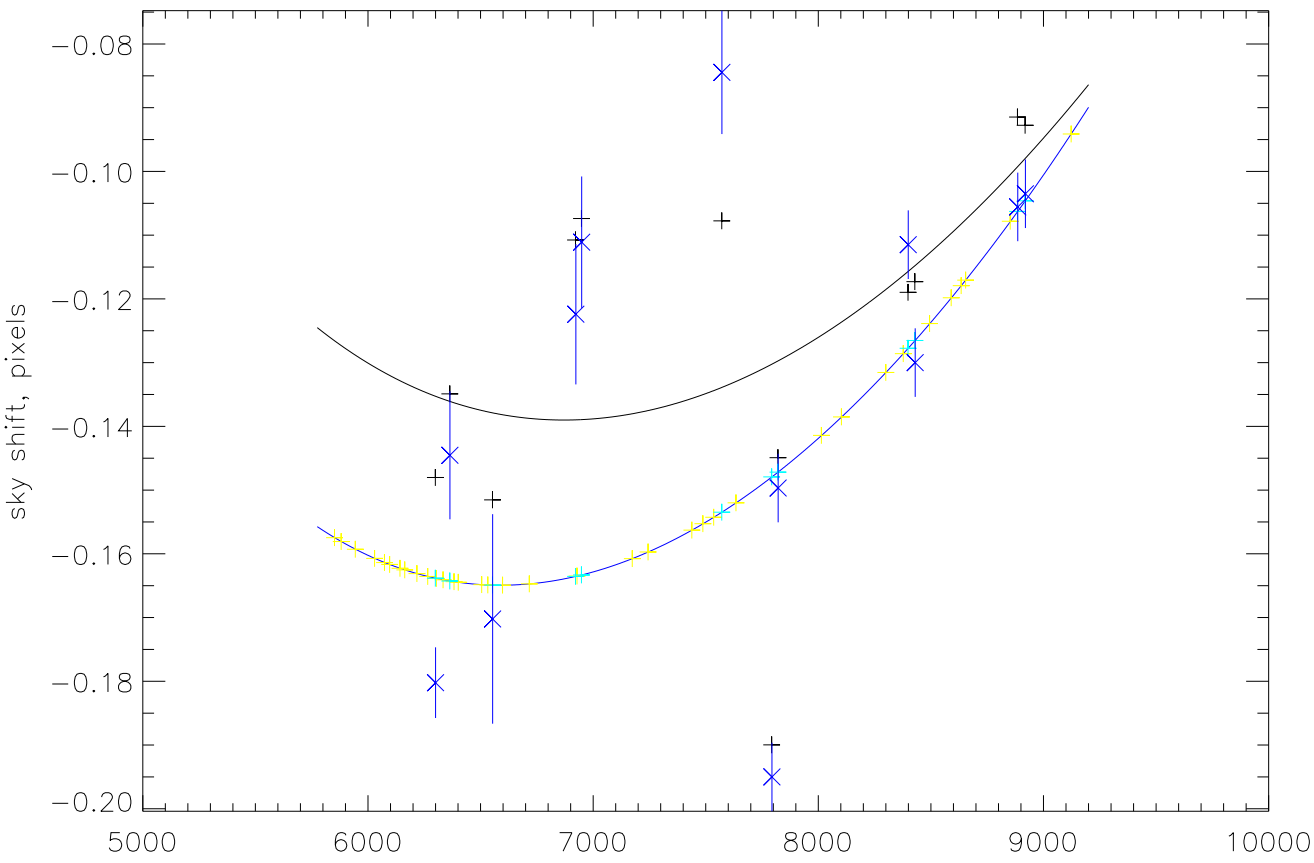

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

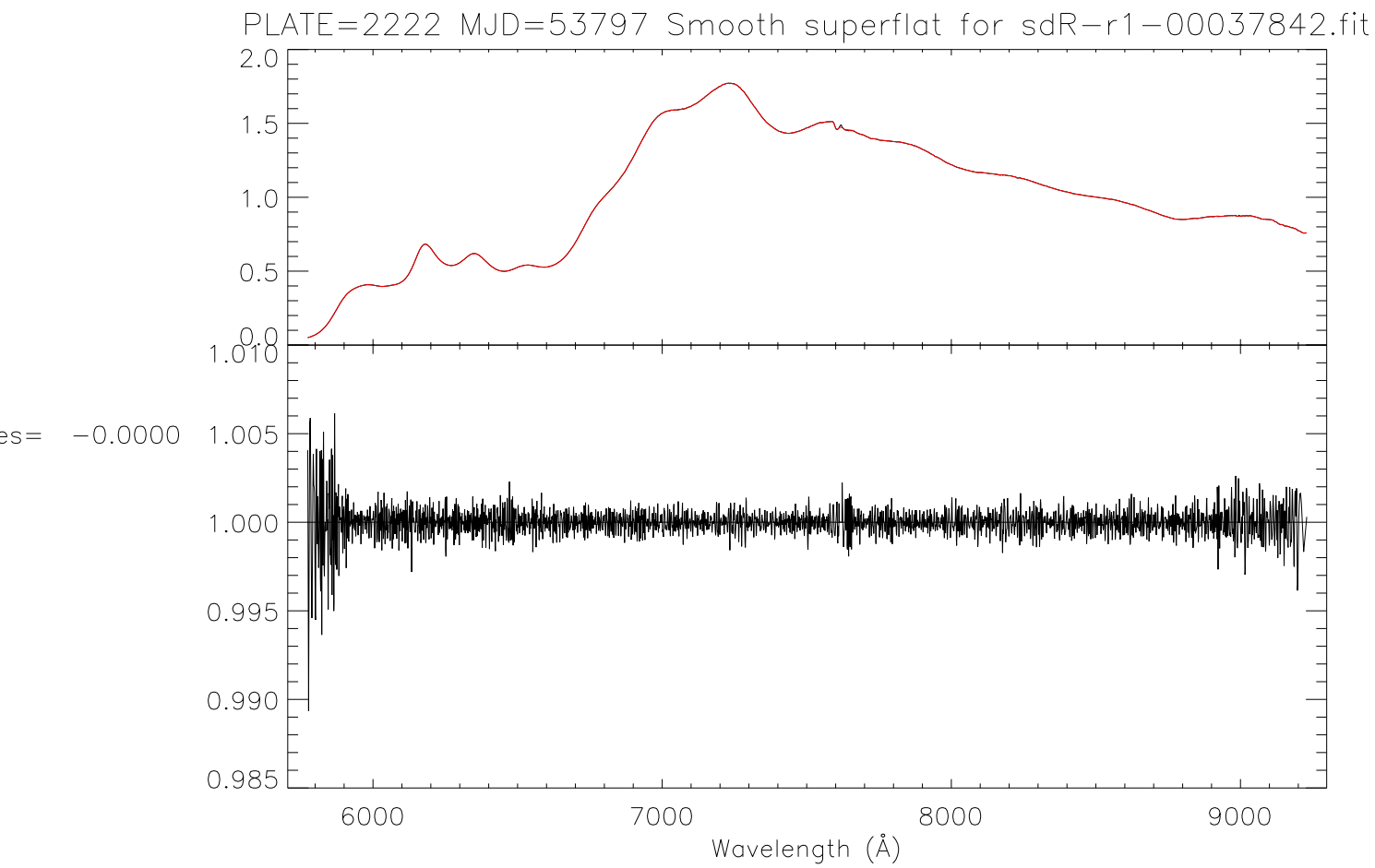

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

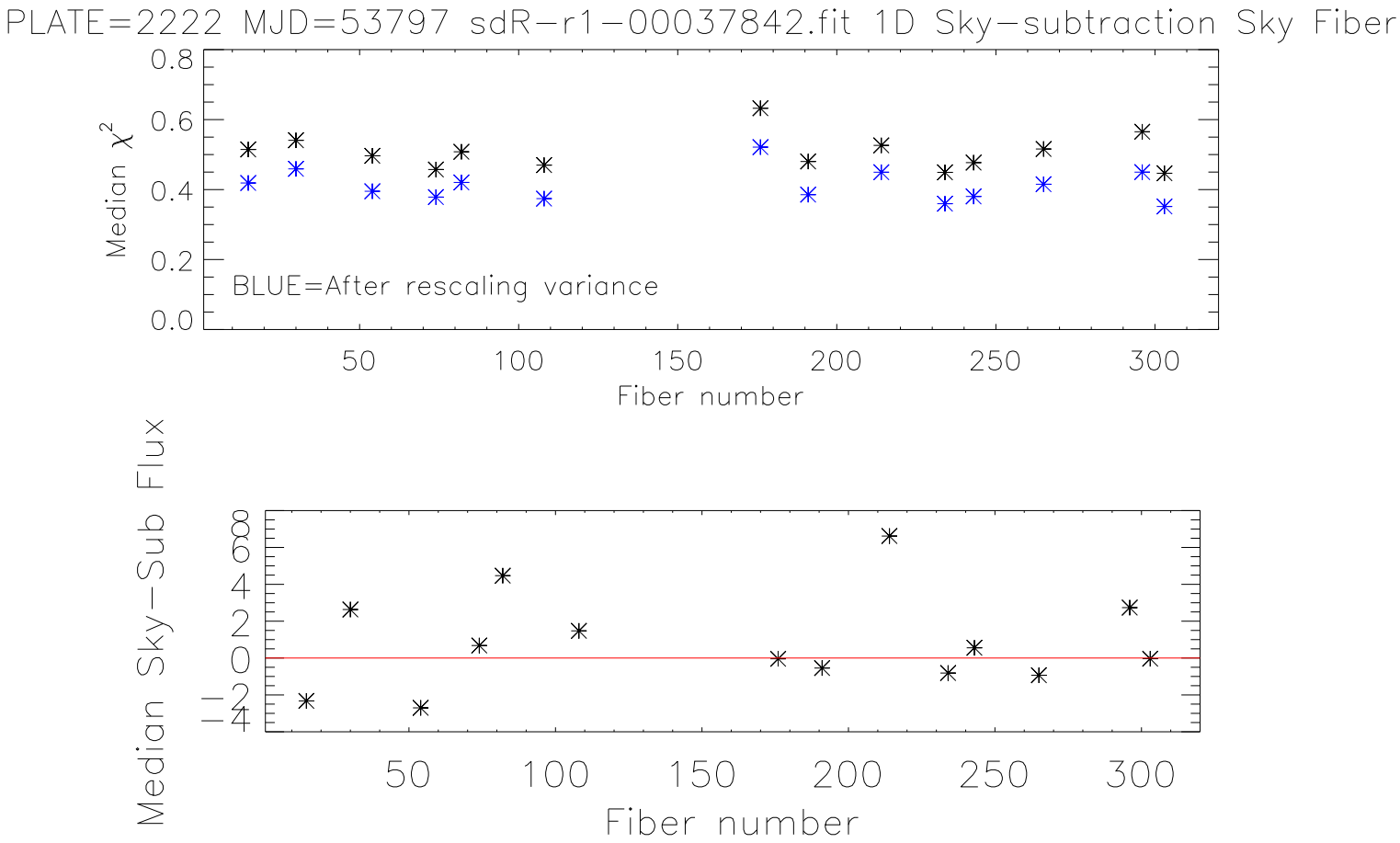

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

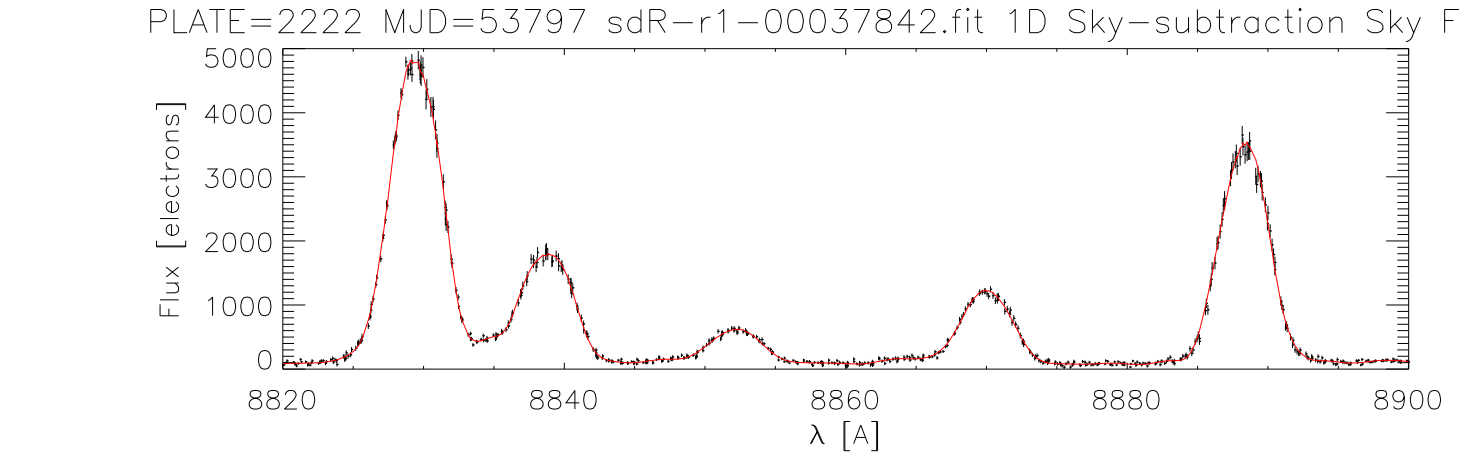

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

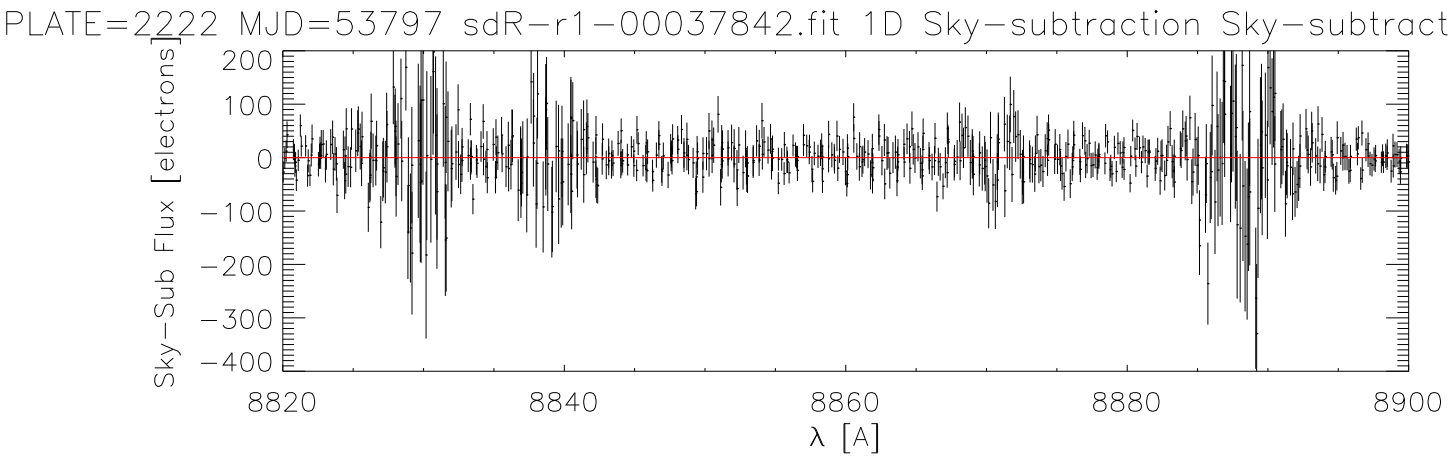

6300.3040
mfib1 16
mfib2 16
stdev 0.019
extrd 0.18
6363.7760
mfib1 16
mfib2 16
stdev 0.024
extrd 0.44
6553.6100
mfib1 16
mfib2 16
stdev 0.052
extrd 0.17
6923.2100
mfib1 16
mfib2 16
stdev 0.026
extrd 0.42
6949.0300
mfib1 16
mfib2 16
stdev 0.029
extrd 0.41
7571.7500
mfib1 15
mfib2 15
stdev 0.026
extrd 0.08
7794.1200
mfib1 16
mfib2 16
stdev 0.031
extrd 0.20
7821.5100
mfib1 16
mfib2 16
stdev 0.024
extrd 0.45
8399.1600
mfib1 15
mfib2 15
stdev 0.023
extrd 0.41
8430.1700
mfib1 15
mfib2 15
stdev 0.015
extrd 0.13
8885.8300
mfib1 16
mfib2 16
stdev 0.021
extrd 0.41
8919.6100
mfib1 14
mfib2 14
stdev 0.022
extrd 0.40
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

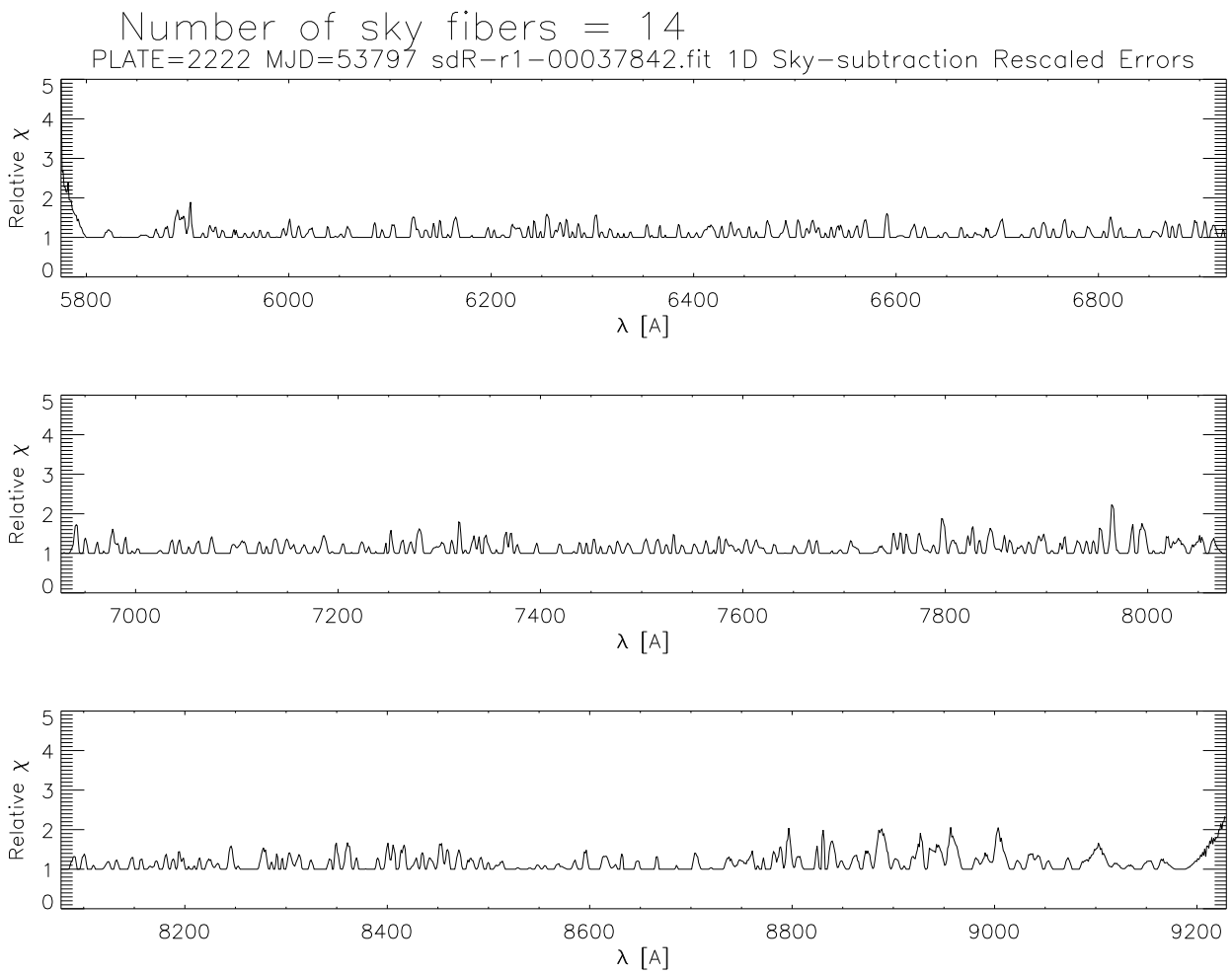

sky shift, pixels
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
5000
6000
7000
8000
9000
10000

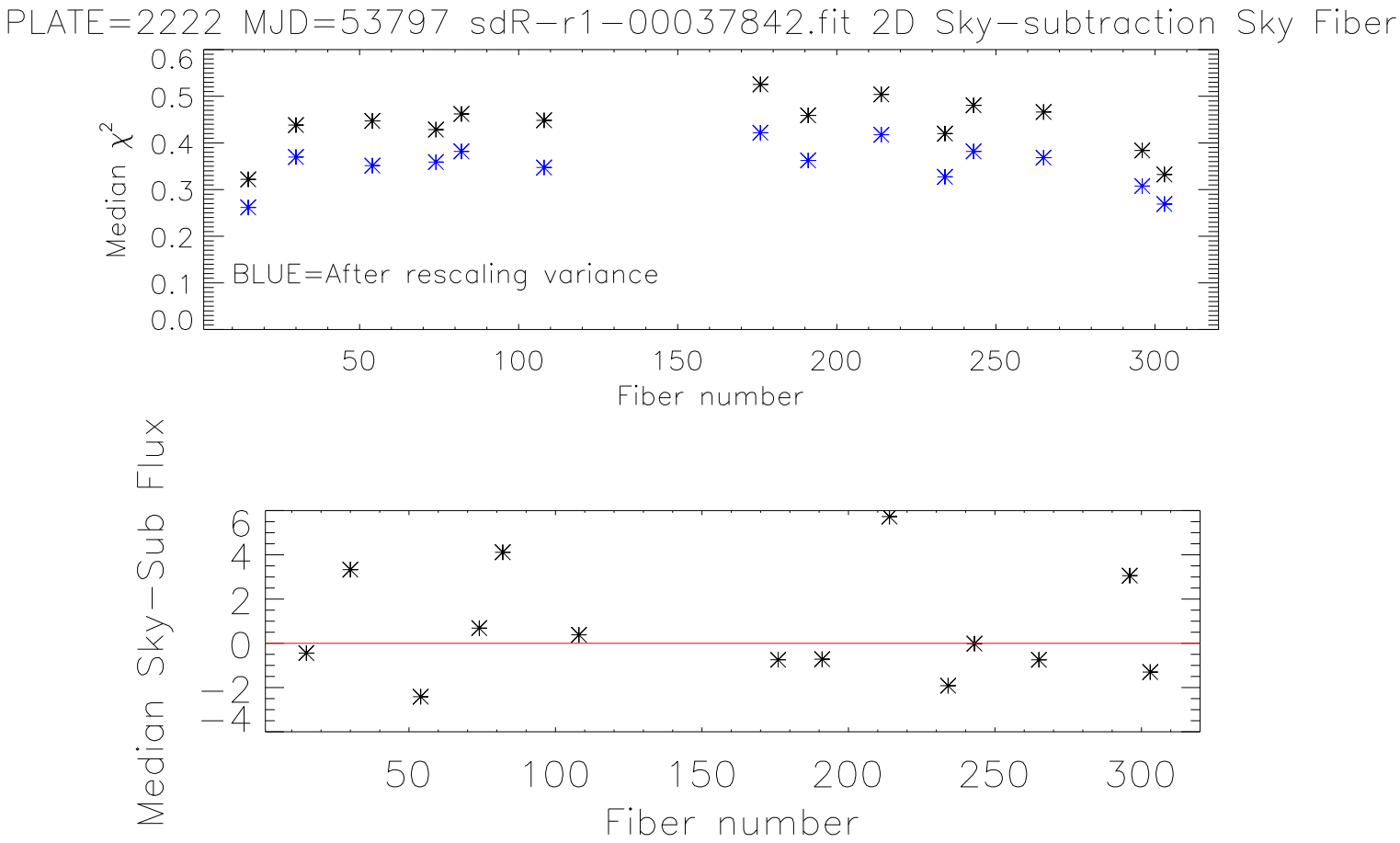

PLATE=2222 MJD=53797 Smooth superflat for sdR-r1-00037842.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

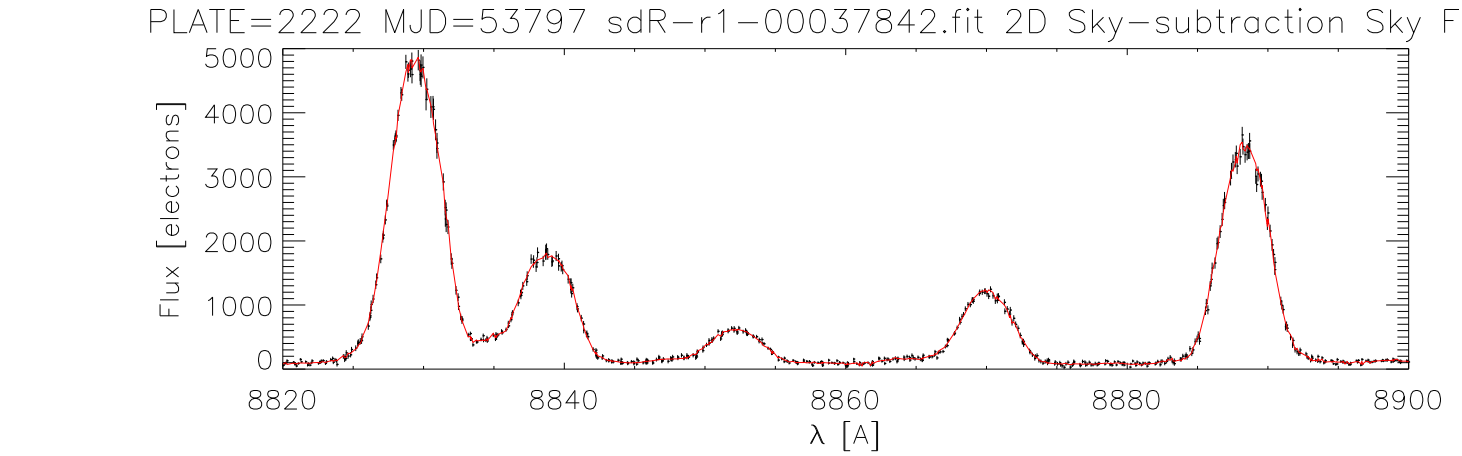

PLATE=2222 MJD=53797 sdR-r1-00037842.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

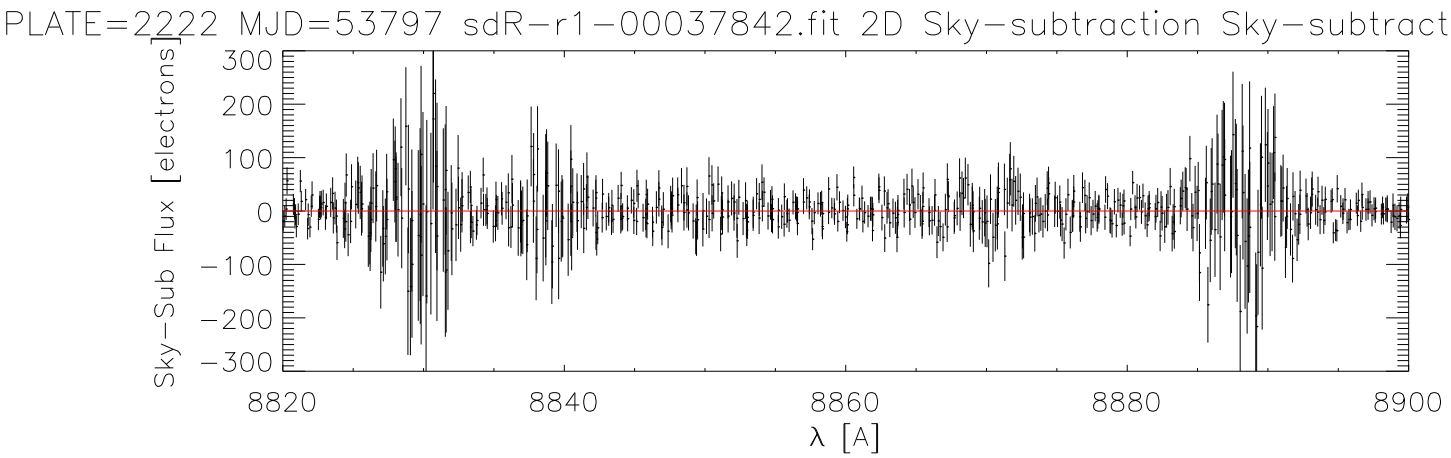

PLATE=2222 MJD=53797 sdR-r1-00037842.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

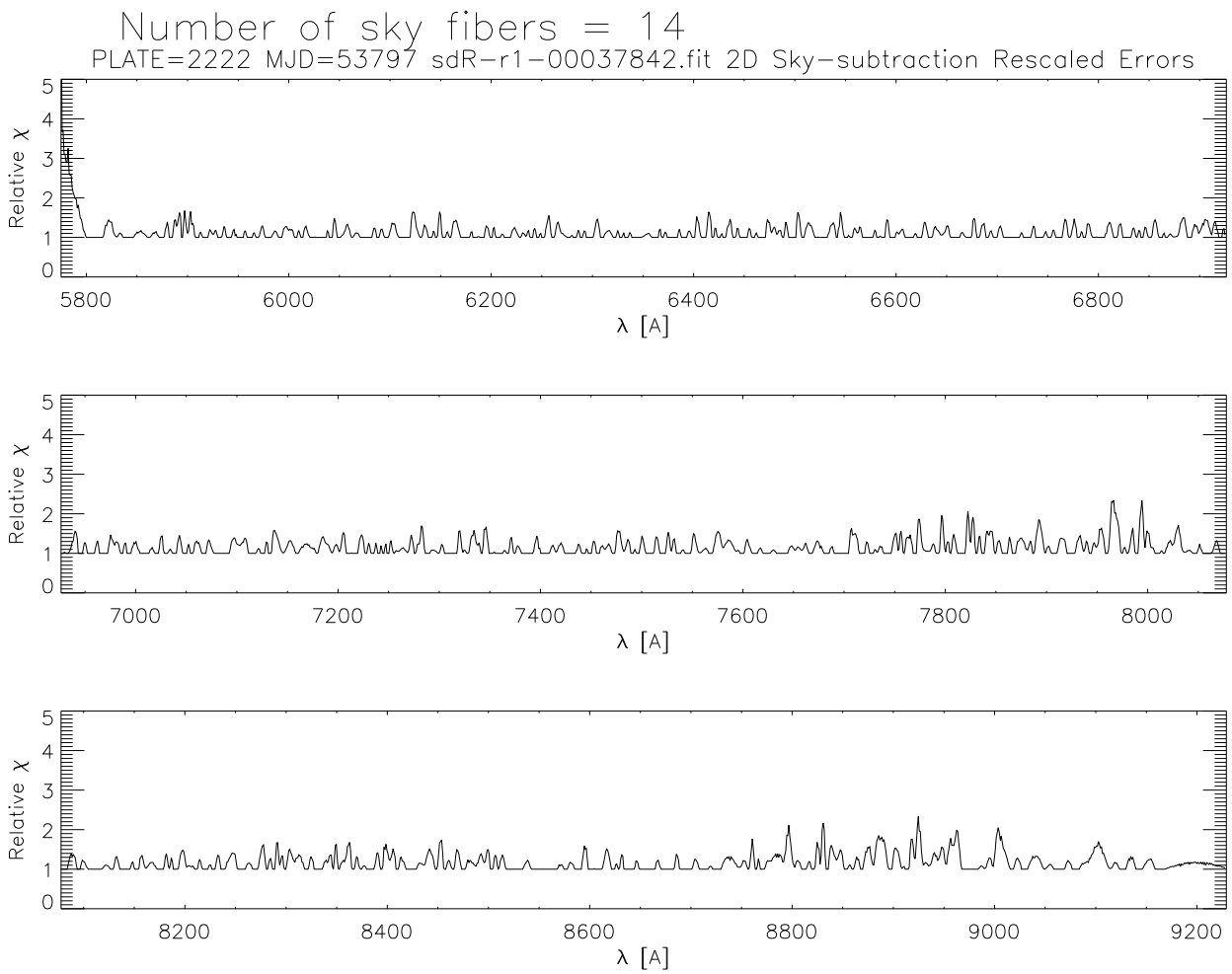

PLATE=2222 MJD=53797 sdR-r1-00037842.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
-400
8820
8840
8860
8880
8900
λ [A]

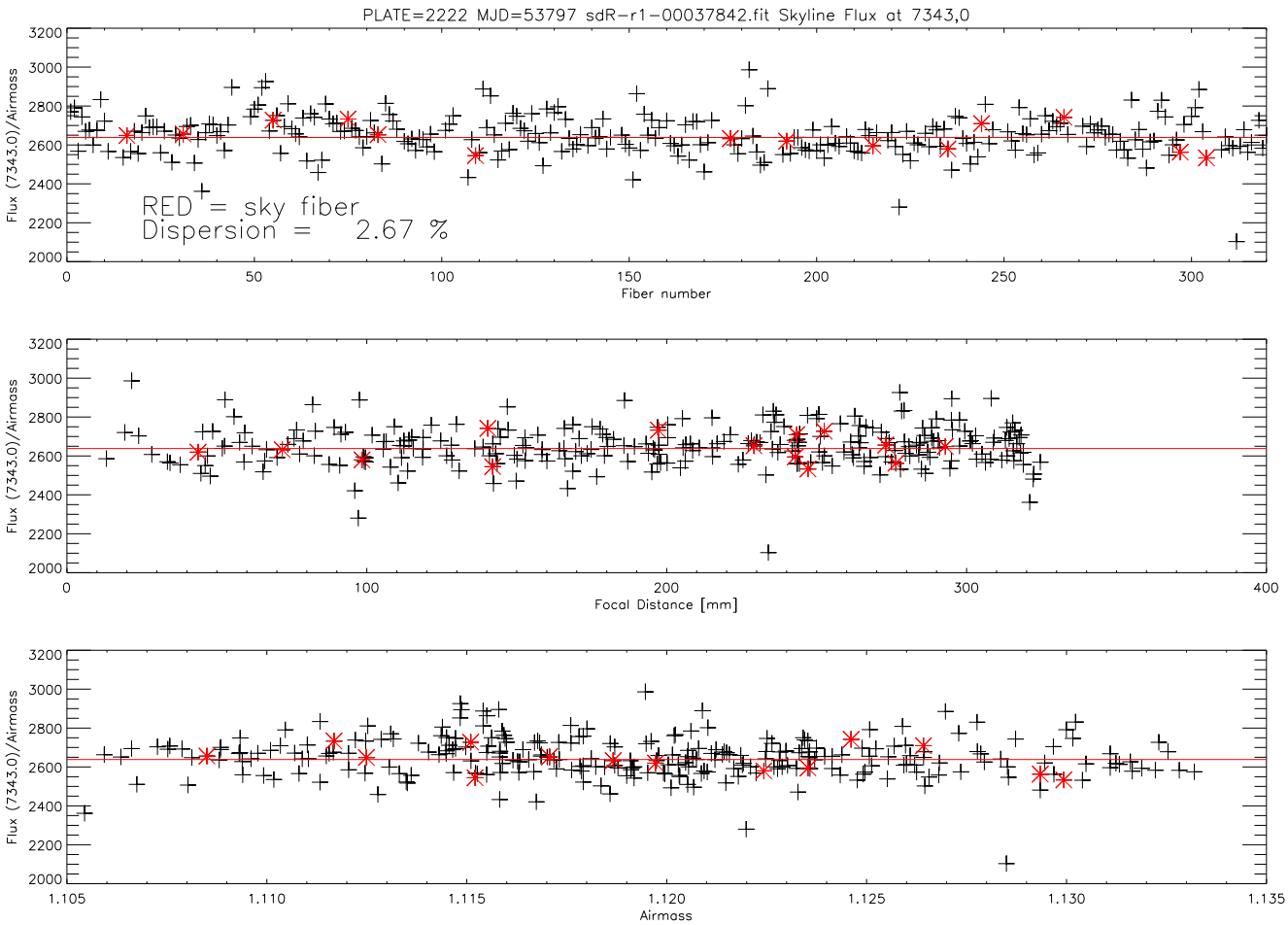

Number of sky fibers = 14
PLATE=2222 MJD=53797 sdR-r1-00037842.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

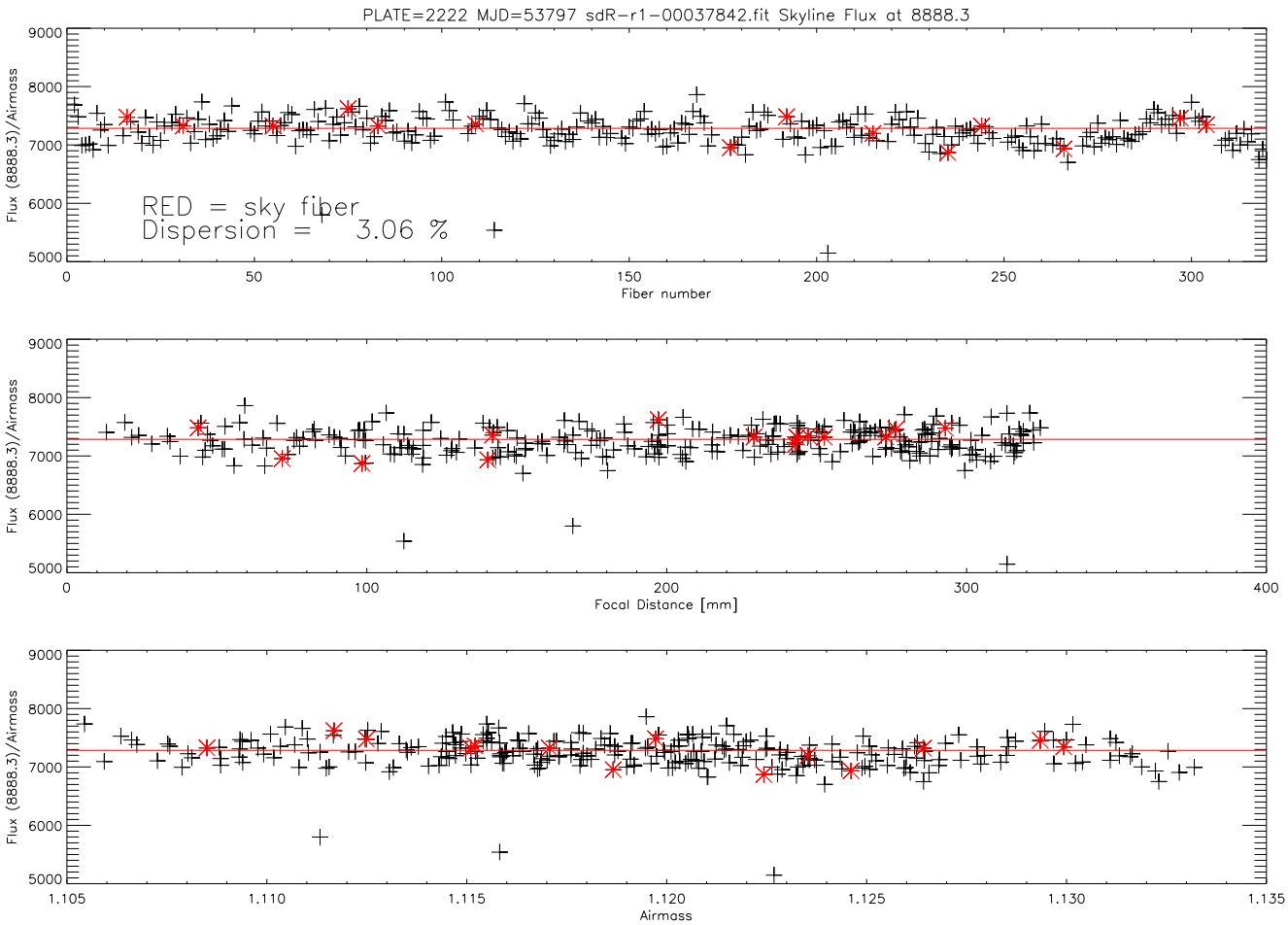

PLATE=2222 MJD=53797 sdR-r1-00037842.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

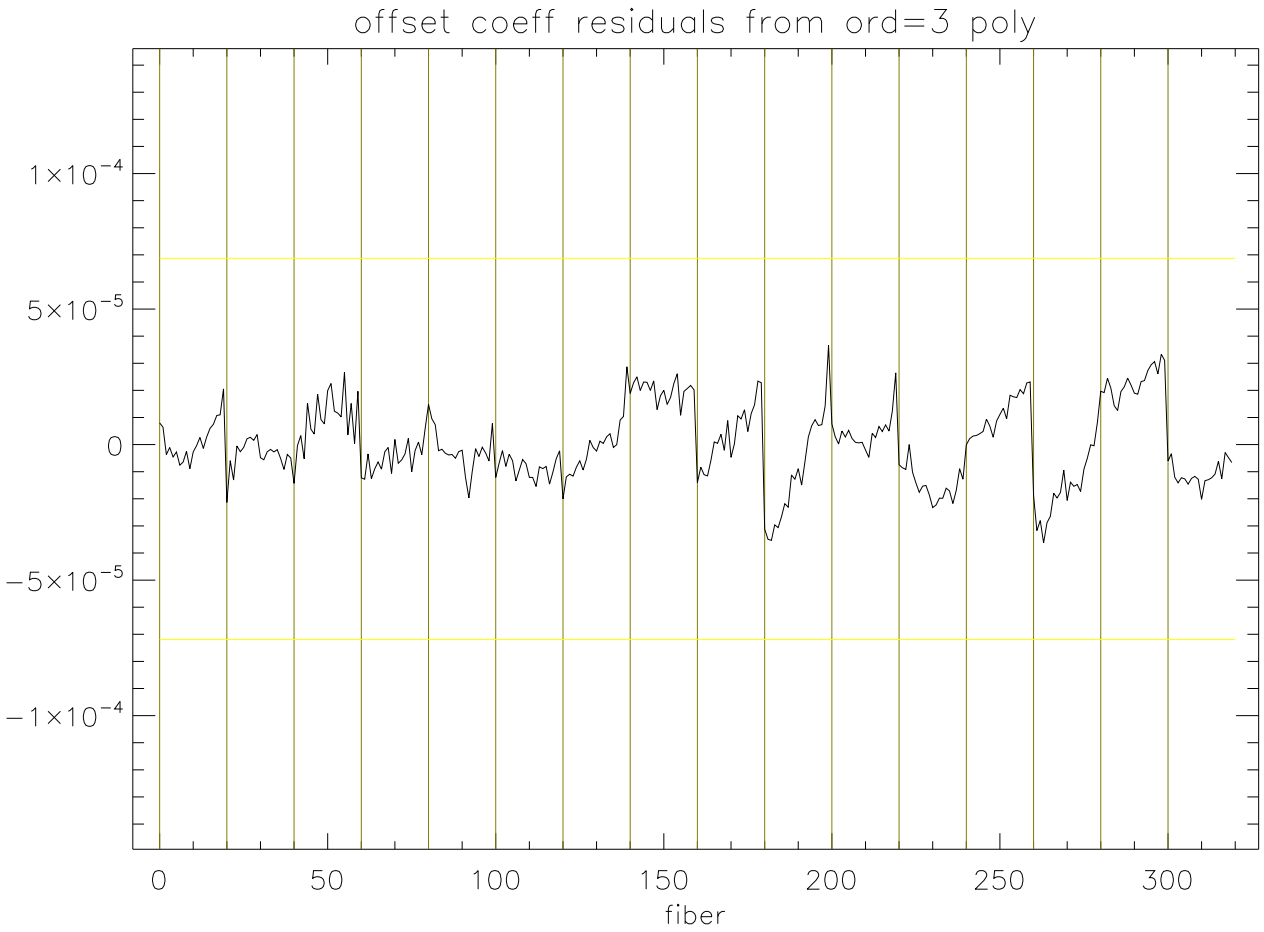

PLATE=2222 MJD=53797 sdR-r1-00037842.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

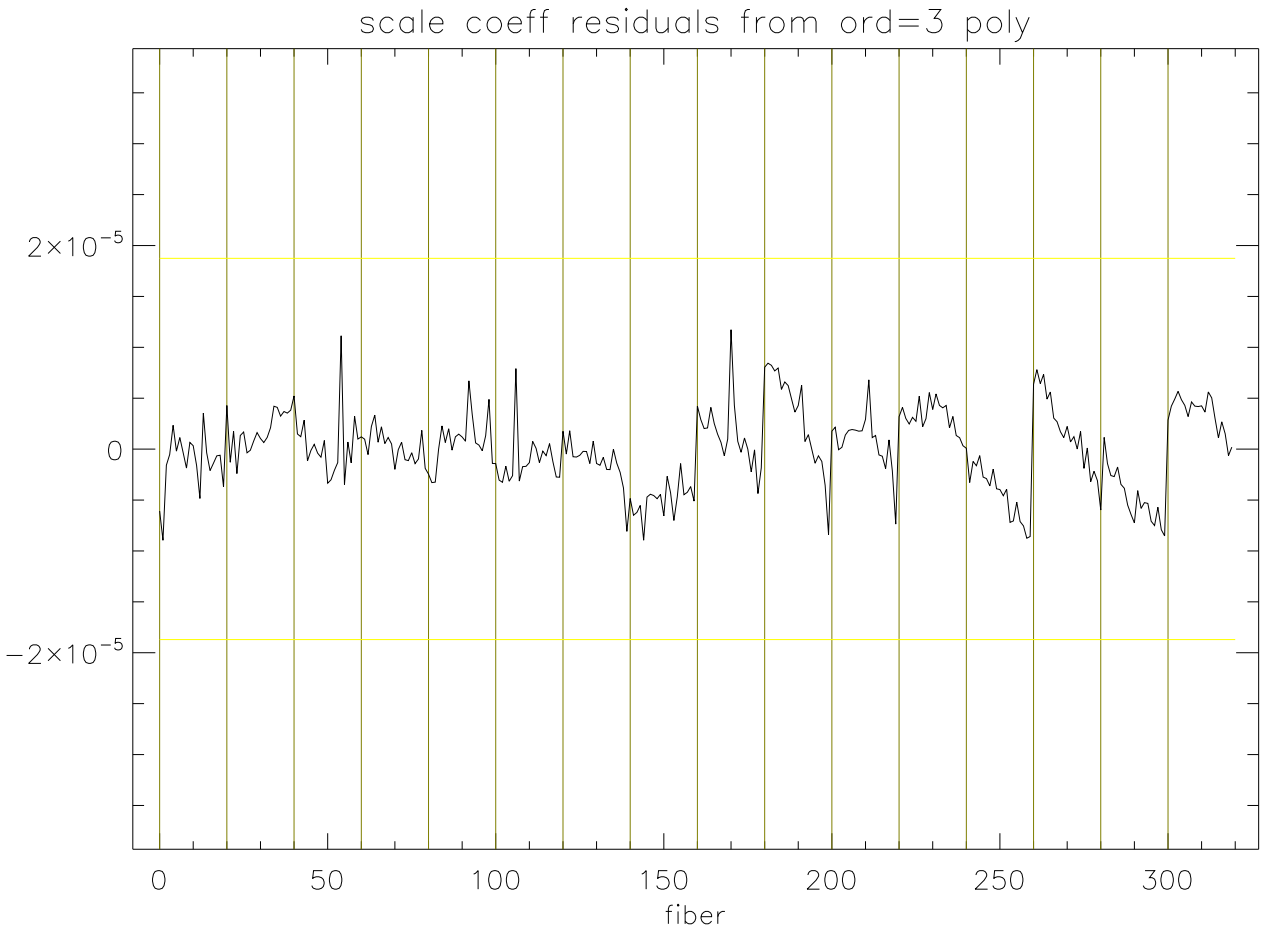

PLATE=2222 MJD=53797 sdR-r1-00037842.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

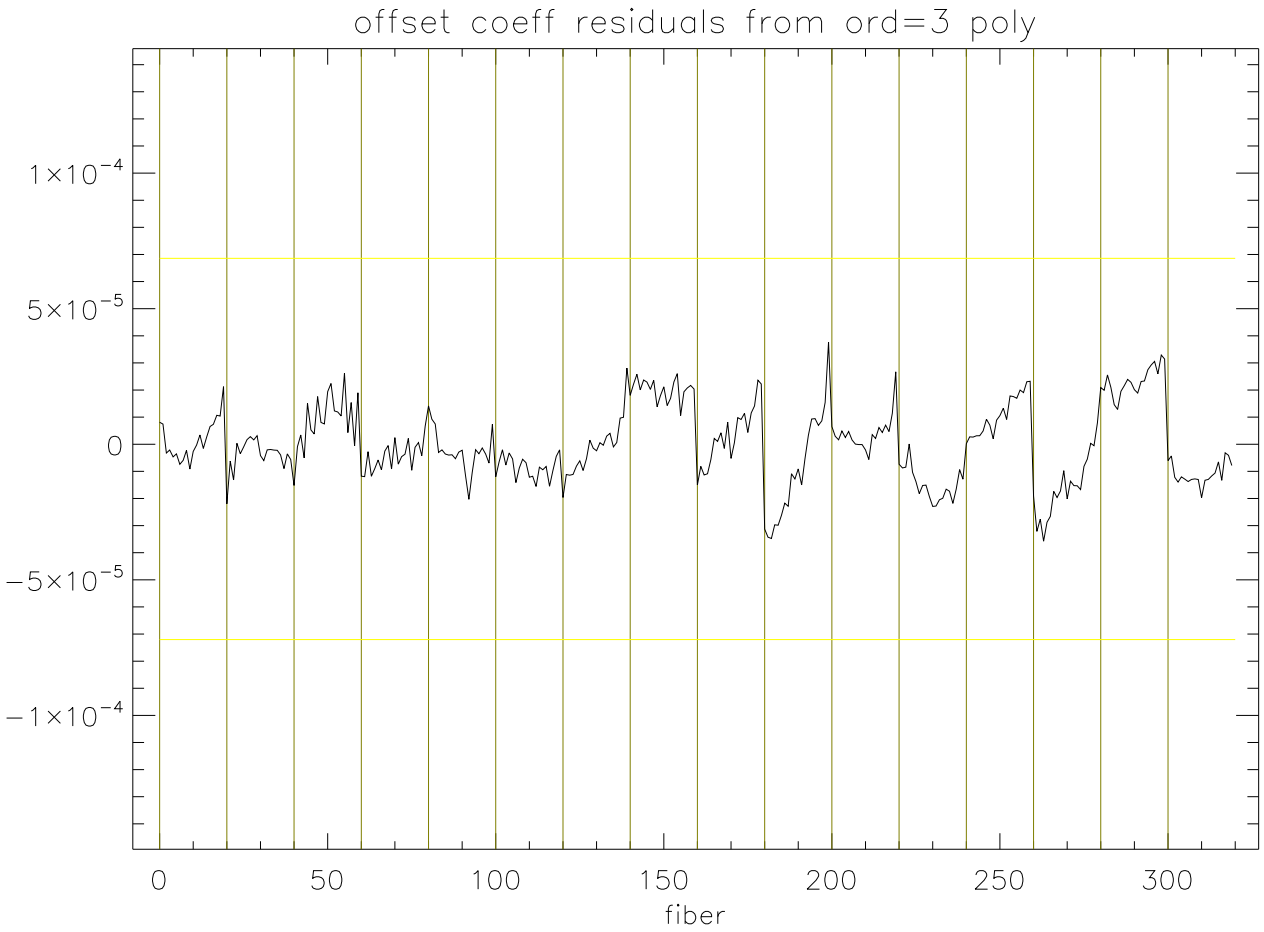

Number of sky fibers = 14
PLATE=2222 MJD=53797 sdR-r1-00037842.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

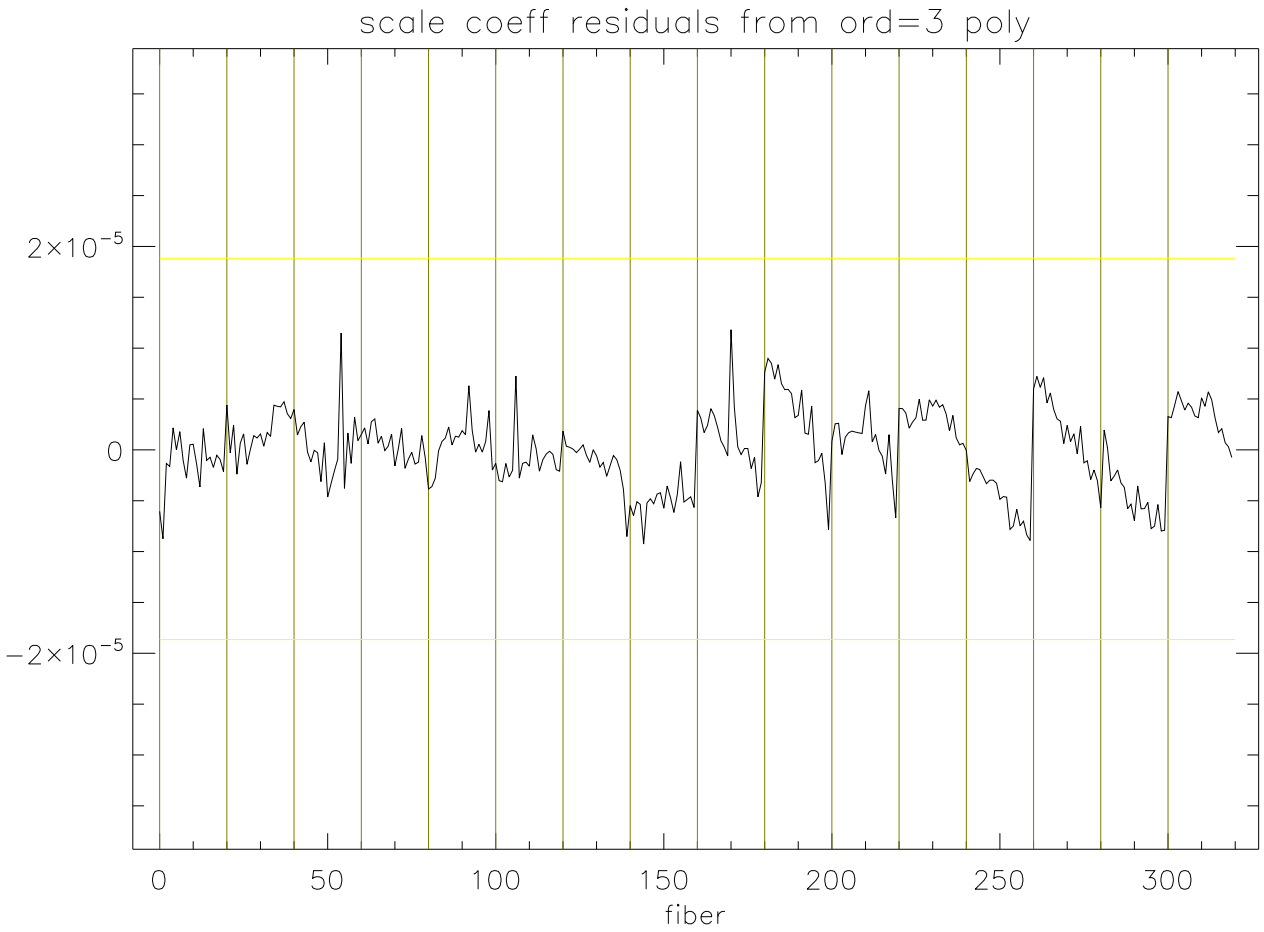

PLATE=2222 MJD=53797 sdR-r1-00037842.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.67 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

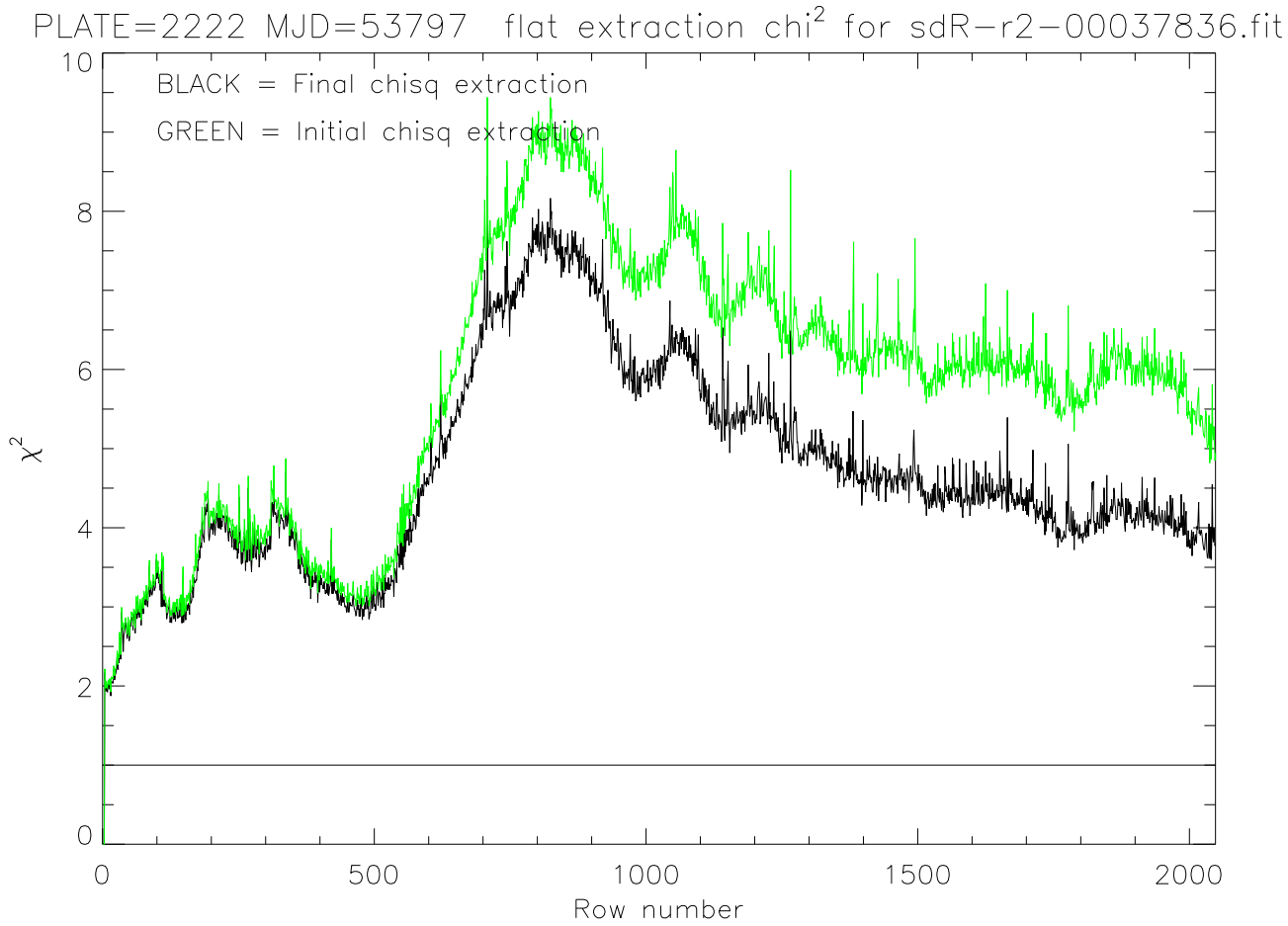

PLATE=2222 MJD=53797 sdR-r1-00037842.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.06 %
Fiber number
Focal Distance [mm]
Airmass

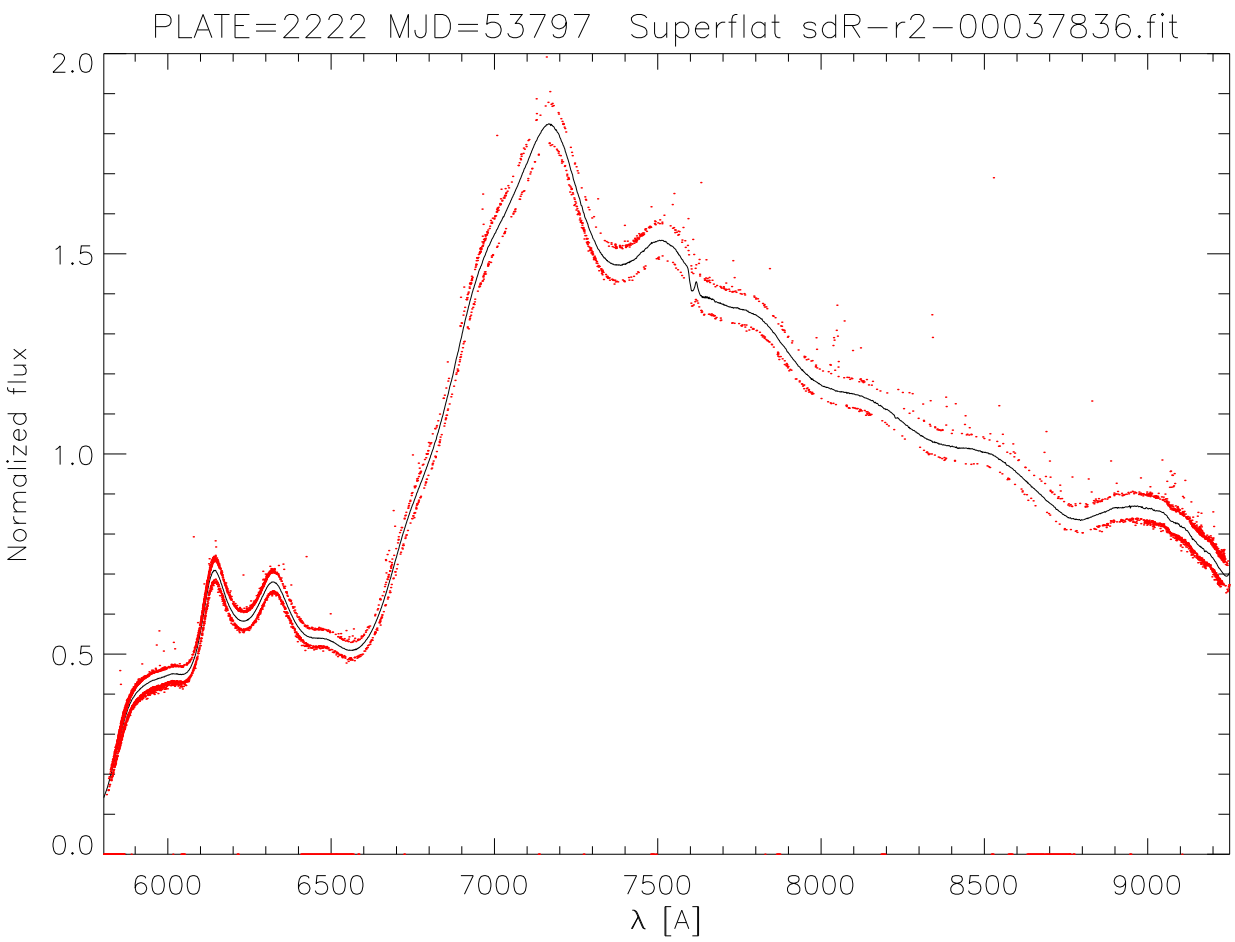

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

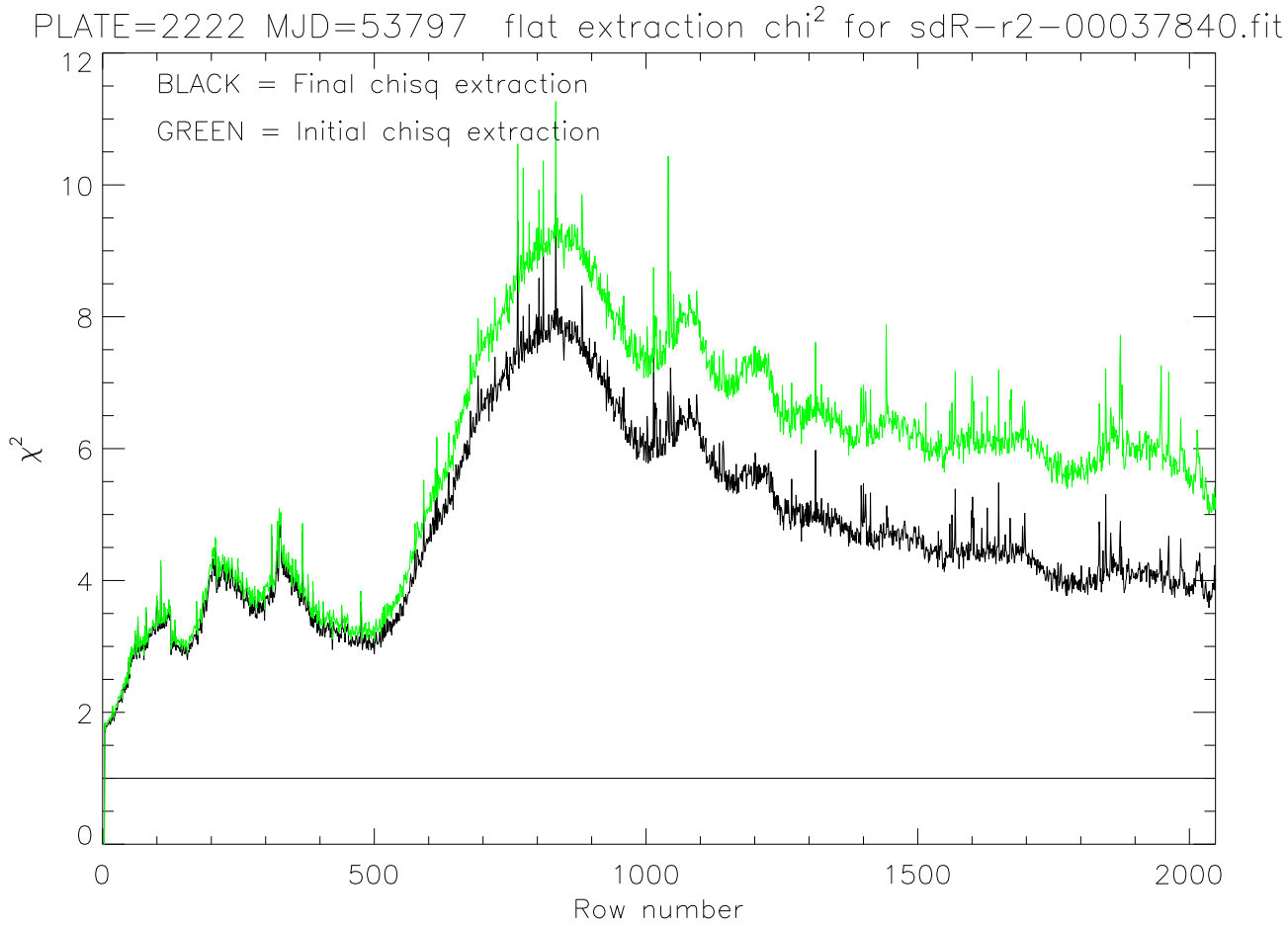

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

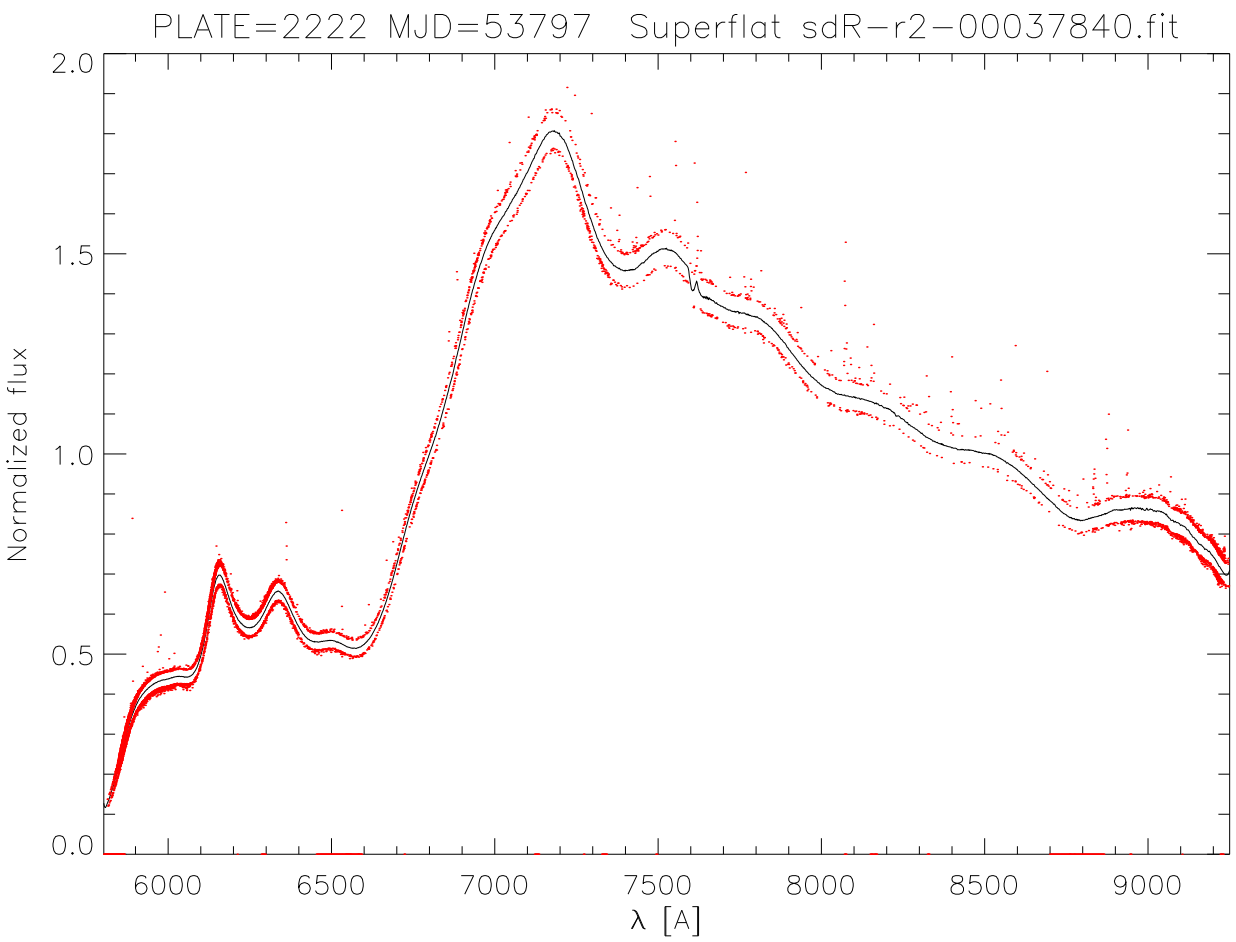

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

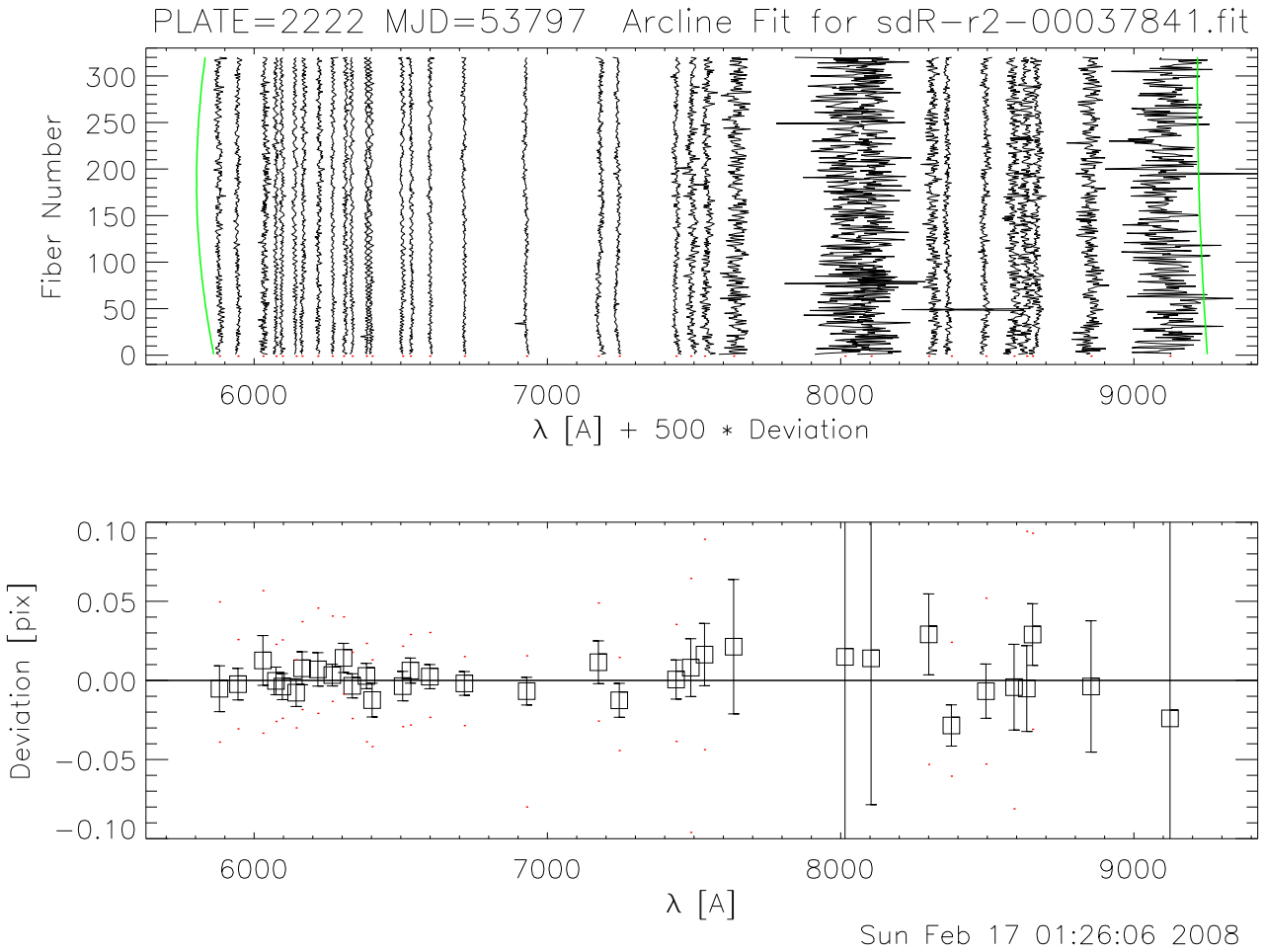

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

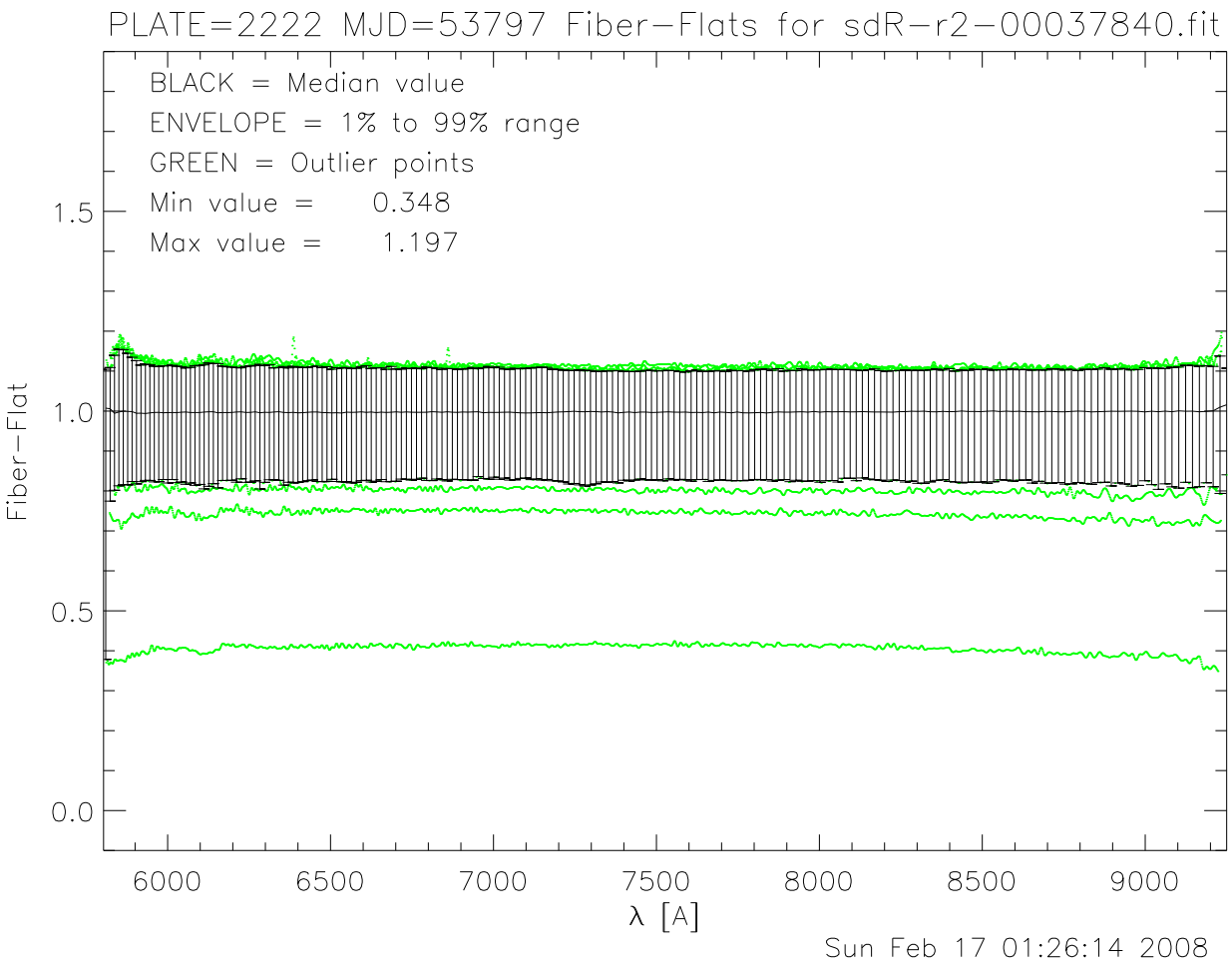

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR−r2−00037836.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

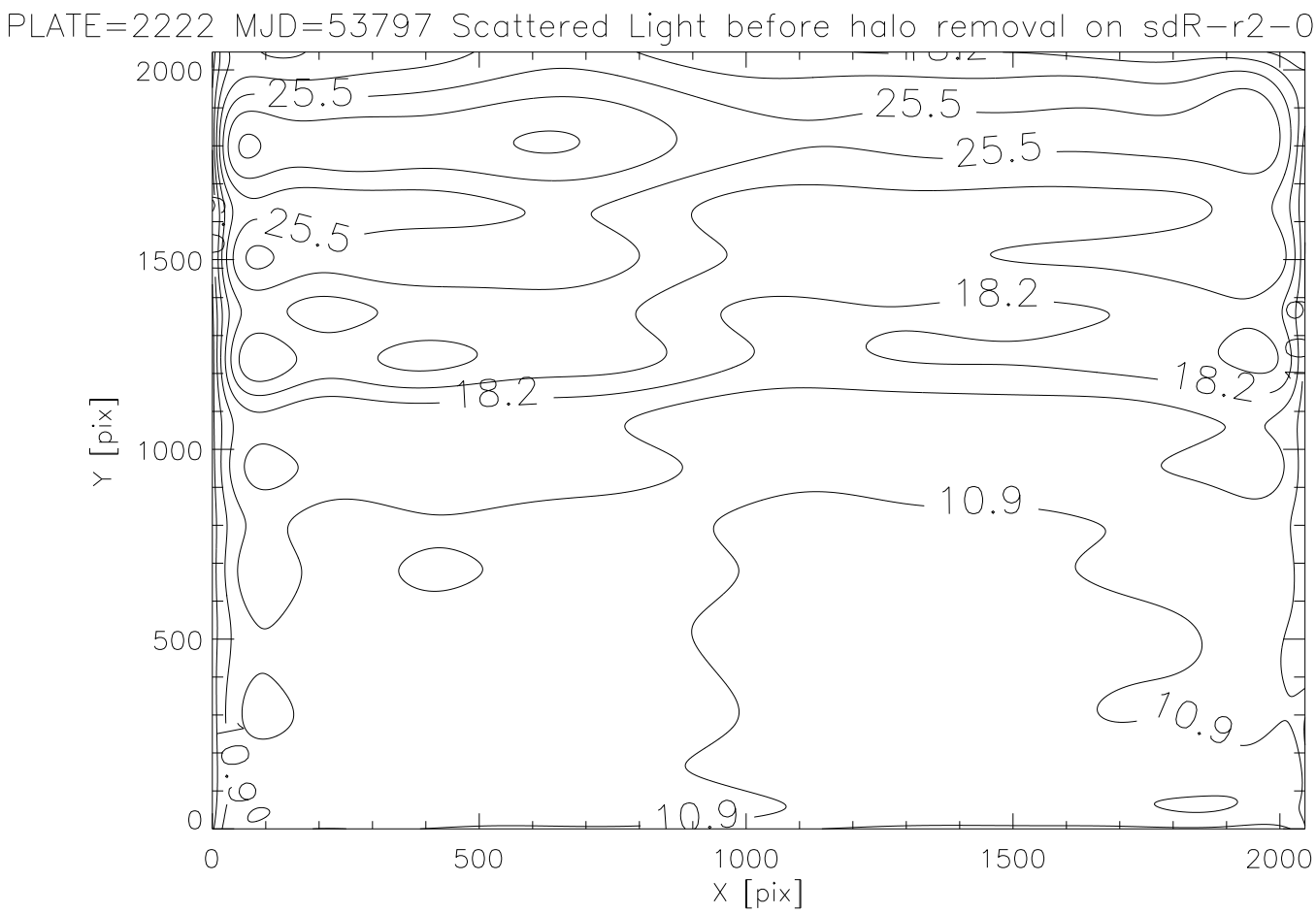

PLATE=2222 MJD=53797 Superflat sdR-r2-00037836.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

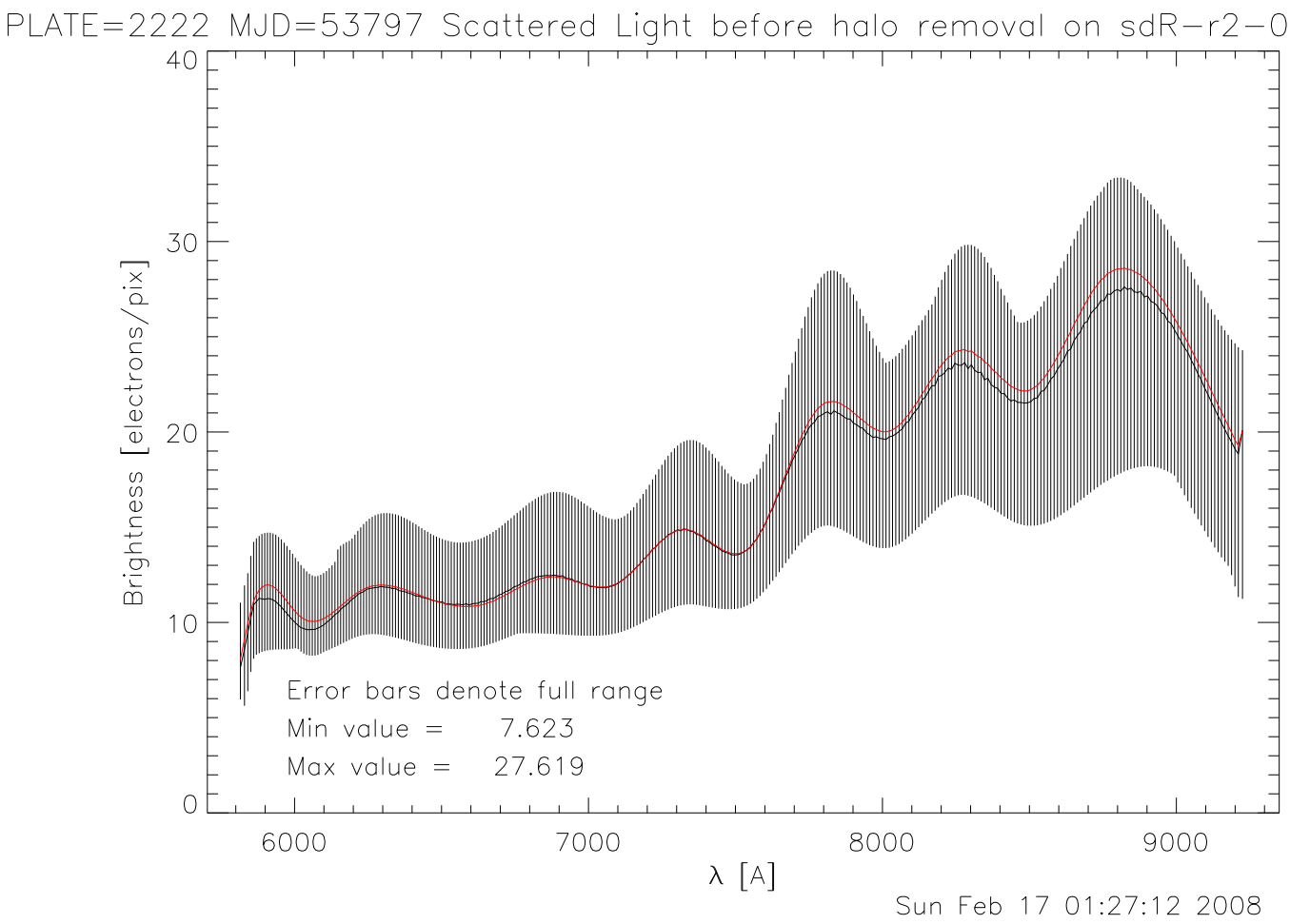

PLATE=2222 MJD=53797 flat extraction chi^2 for sdR−r2−00037840.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
12
0
500
1000
1500
2000

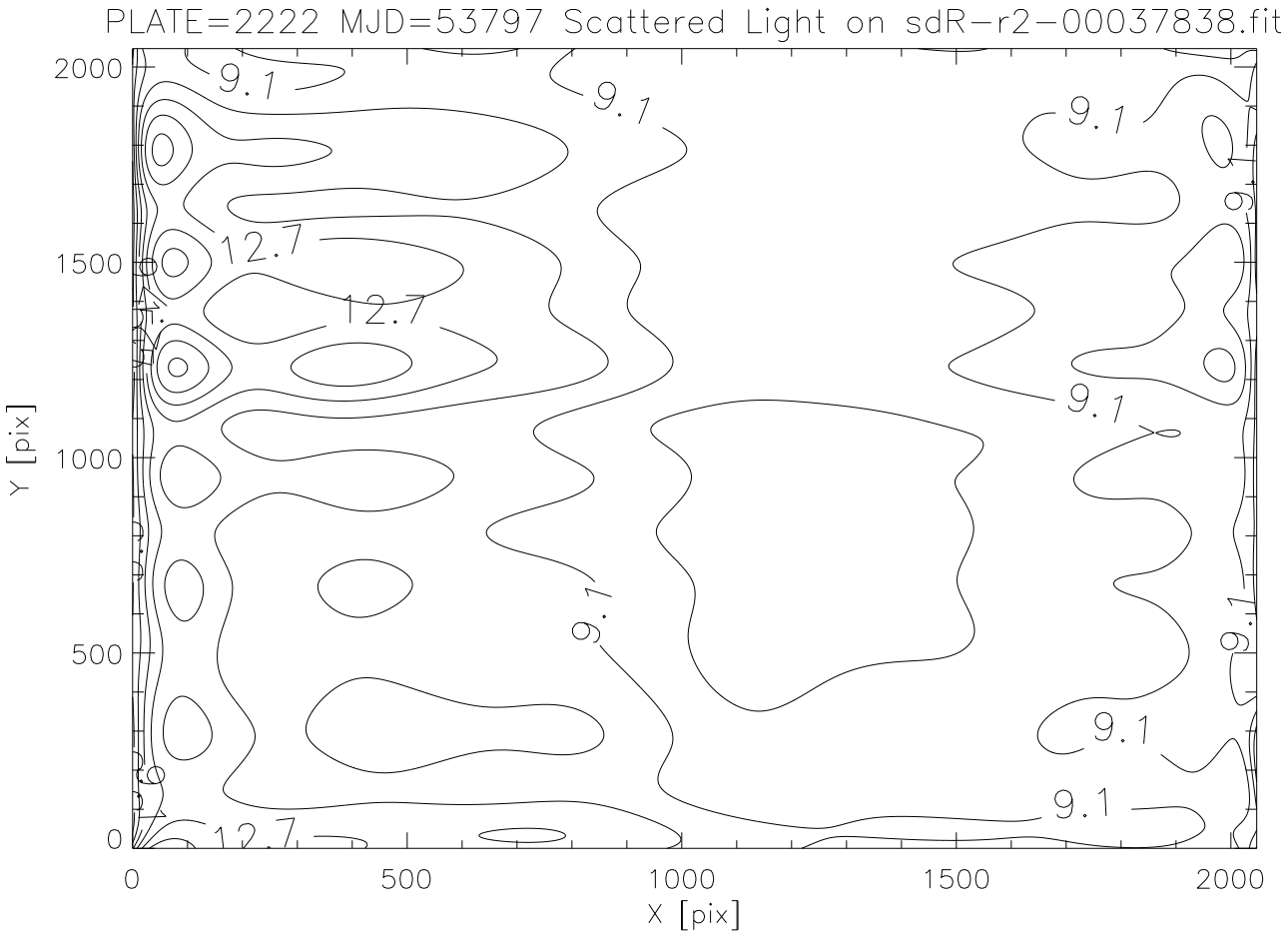

PLATE=2222 MJD=53797 Superflat sdR-r2-00037840.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

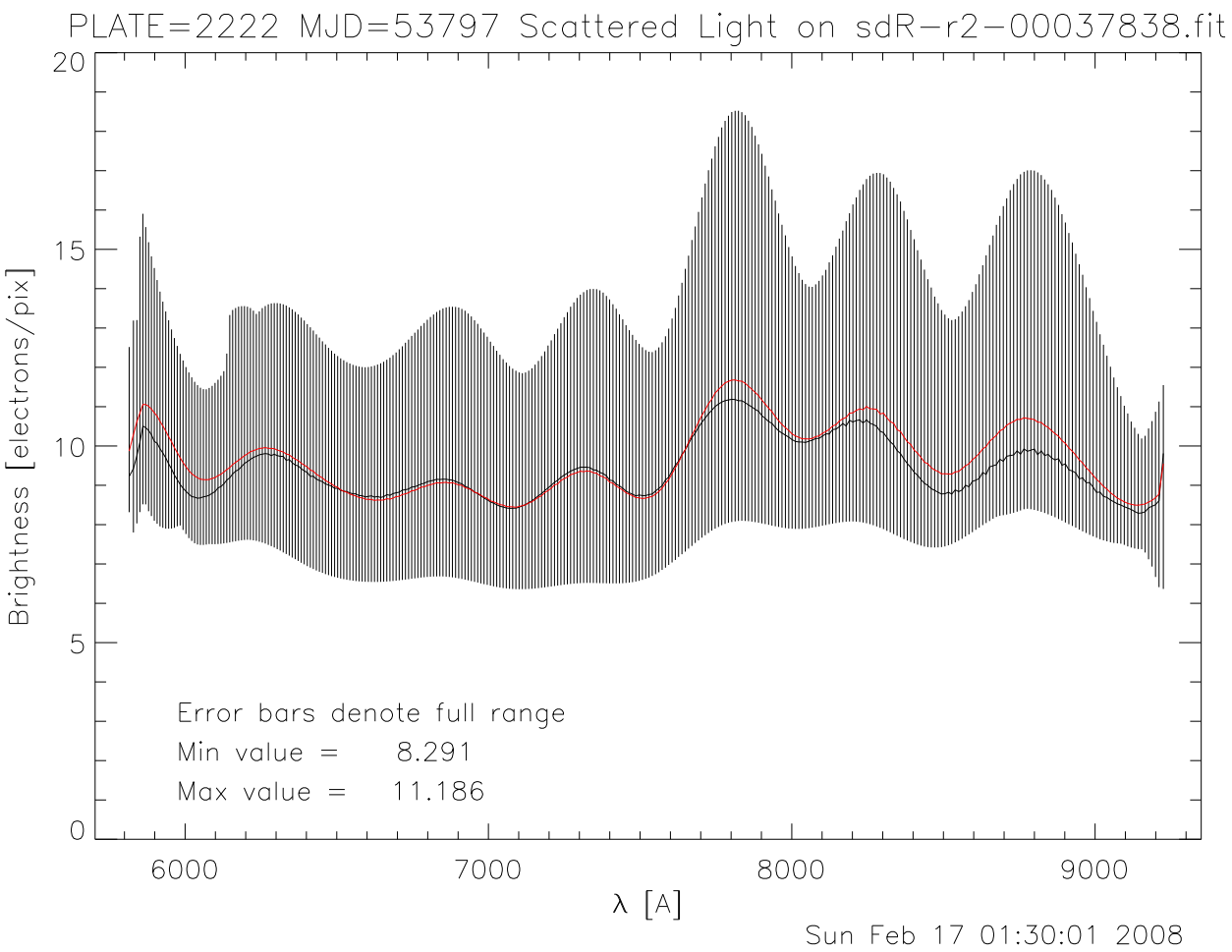

PLATE=2222 MJD=53797 Arcline Fit for sdR-r2-00037841.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
0.10
0.05
0.00
−0.05
−0.10
Deviation [pix]
6000
7000
8000
9000
λ [A]
Sun Feb 17 01:26:06 2008

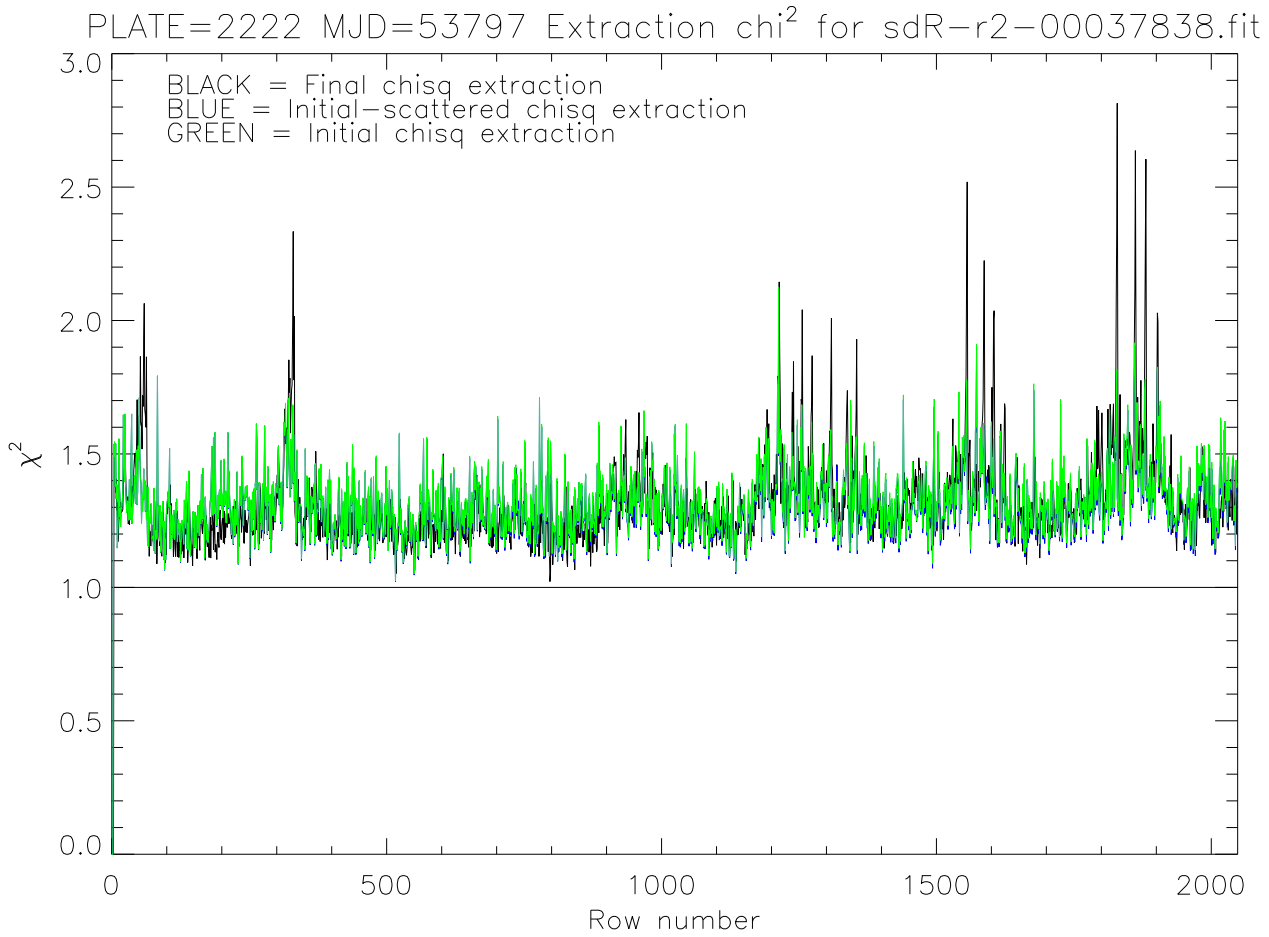

PLATE=2222 MJD=53797 Fiber−Flats for sdR−r2−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.348
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 01:26:14 2008

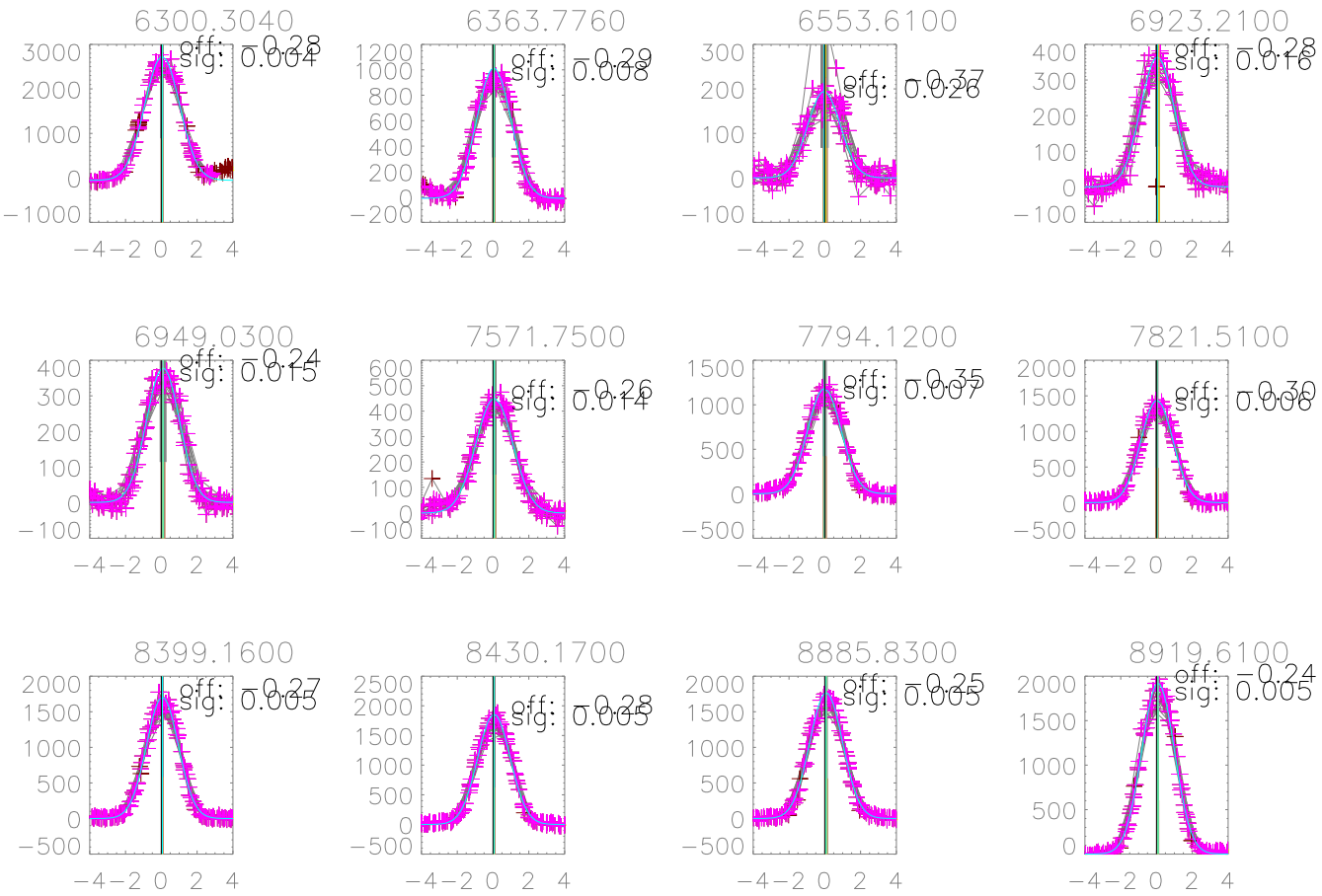

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r2-00037838.fi
25.5
25.5
25.5
25.5
18.2
18.2
18.2
10.9
10.9
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000

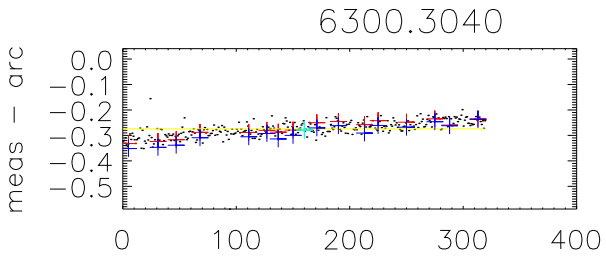

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r2-00037838.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.623
Max value = 27.619
Sun Feb 17 01:27:12 2008

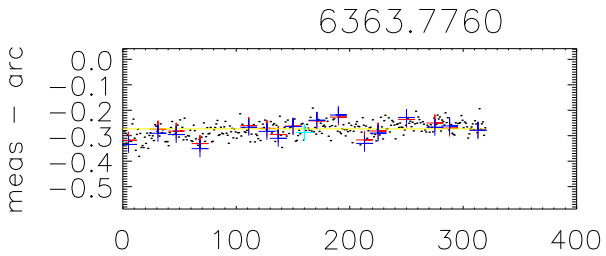

PLATE=2222 MJD=53797 Scattered Light on sdR-r2-00037838.fit
9.1
12.7
Y [pix]
X [pix]
0
500
1000
1500
2000

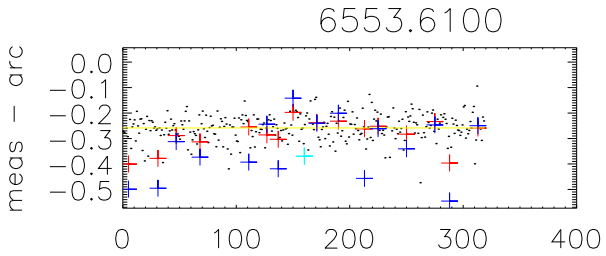

PLATE=2222 MJD=53797 Scattered Light on sdR-r2-00037838.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.291
Max value = 11.186
Sun Feb 17 01:30:01 2008

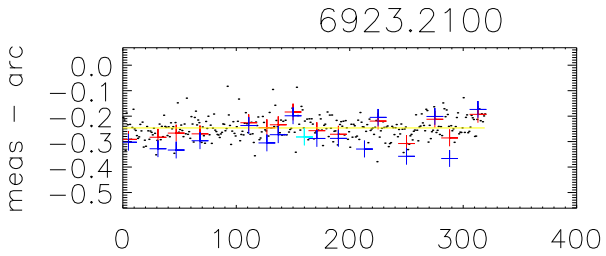

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−r2−00037838.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

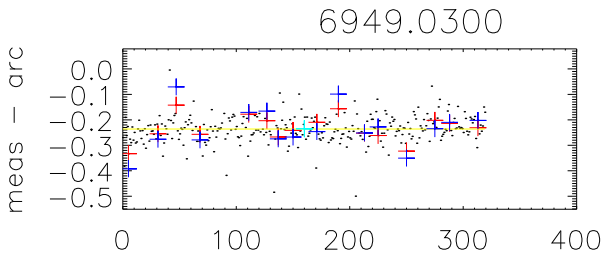

6300.3040
off: −0.28
sig: 0.004
6363.7760
off: −0.29
sig: 0.008
6553.6100
off: −0.37
sig: 0.026
6923.2100
off: −0.28
sig: 0.016
6949.0300
off: −0.24
sig: 0.015
7571.7500
off: −0.26
sig: 0.014
7794.1200
off: −0.35
sig: 0.007
7821.5100
off: −0.30
sig: 0.006
8399.1600
off: −0.27
sig: 0.005
8430.1700
off: −0.28
sig: 0.005
8885.8300
off: −0.25
sig: 0.005
8919.6100
off: −0.24
sig: 0.005

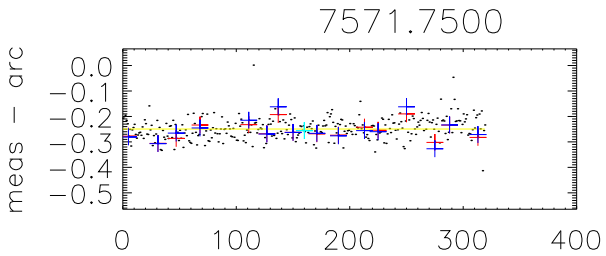

6300.3040
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

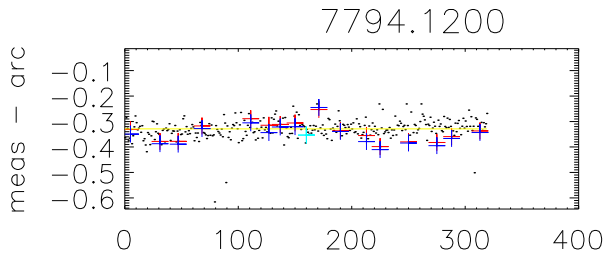

6363.7760
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

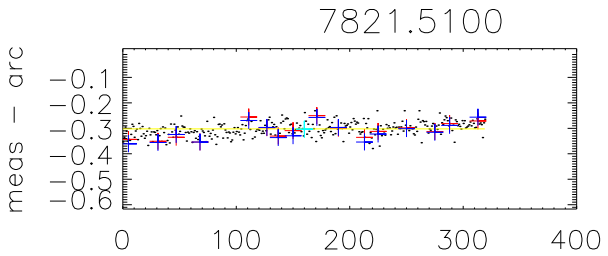

6553.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

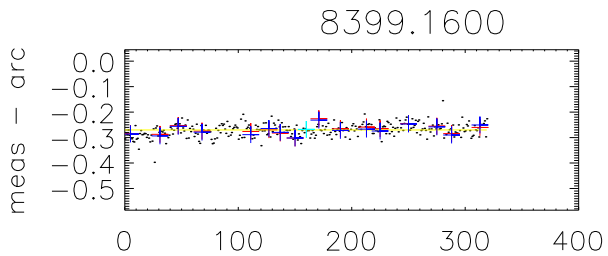

6923.2100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

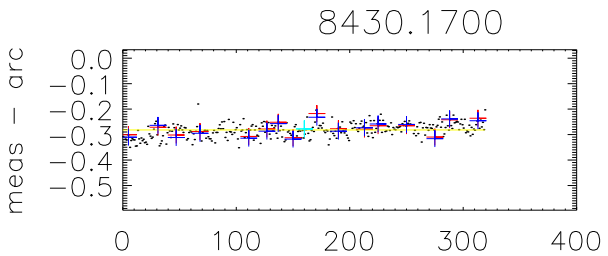

6949.0300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

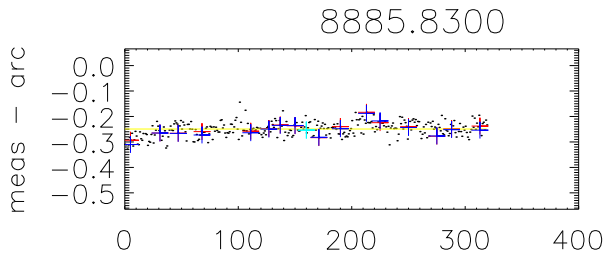

7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

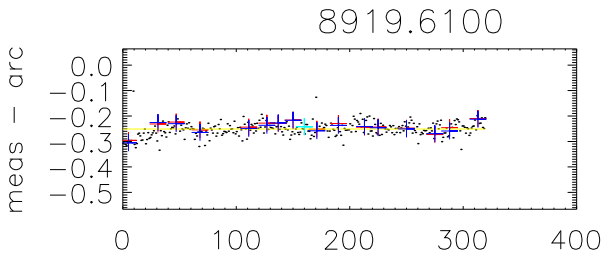

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

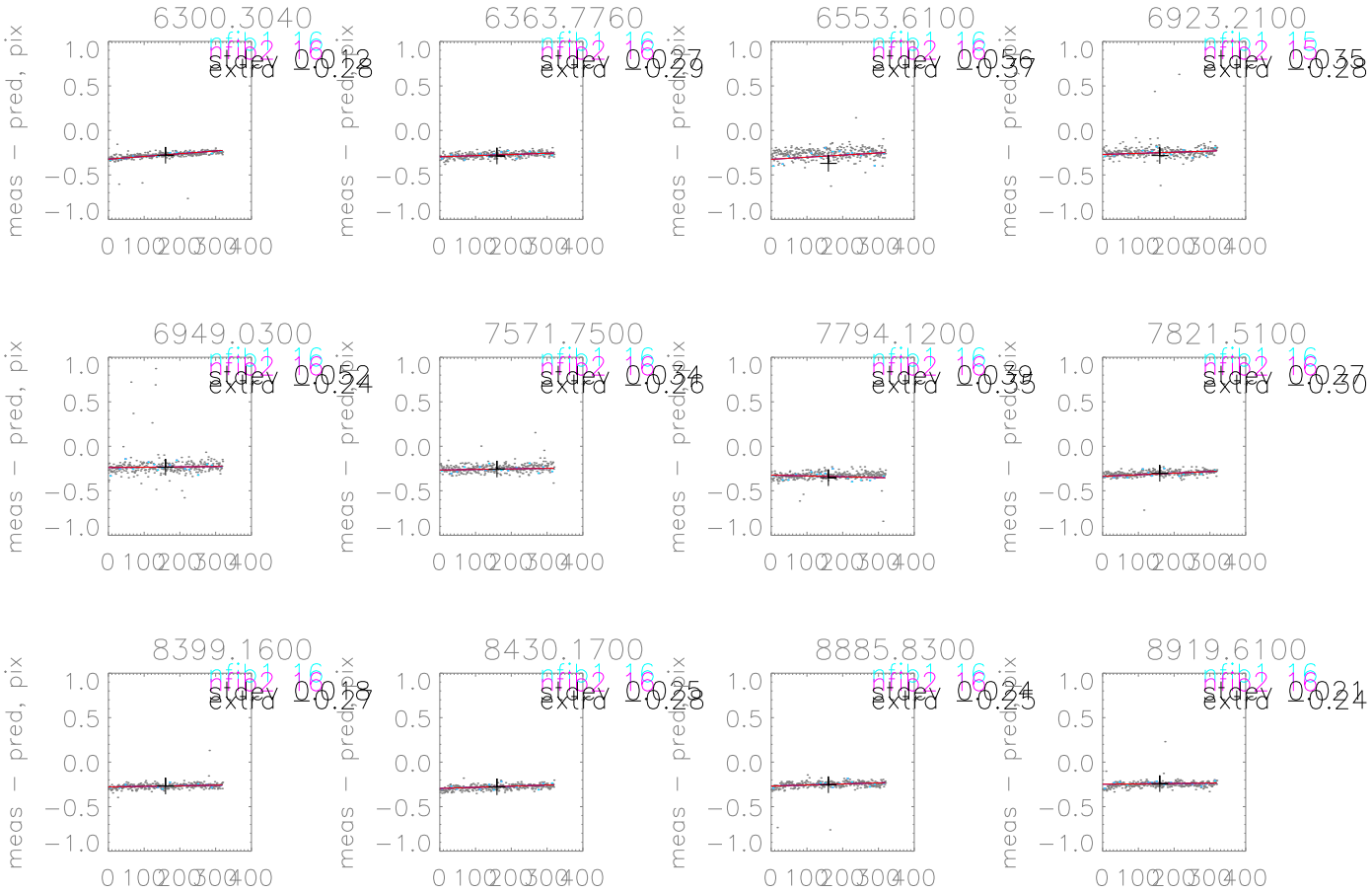

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

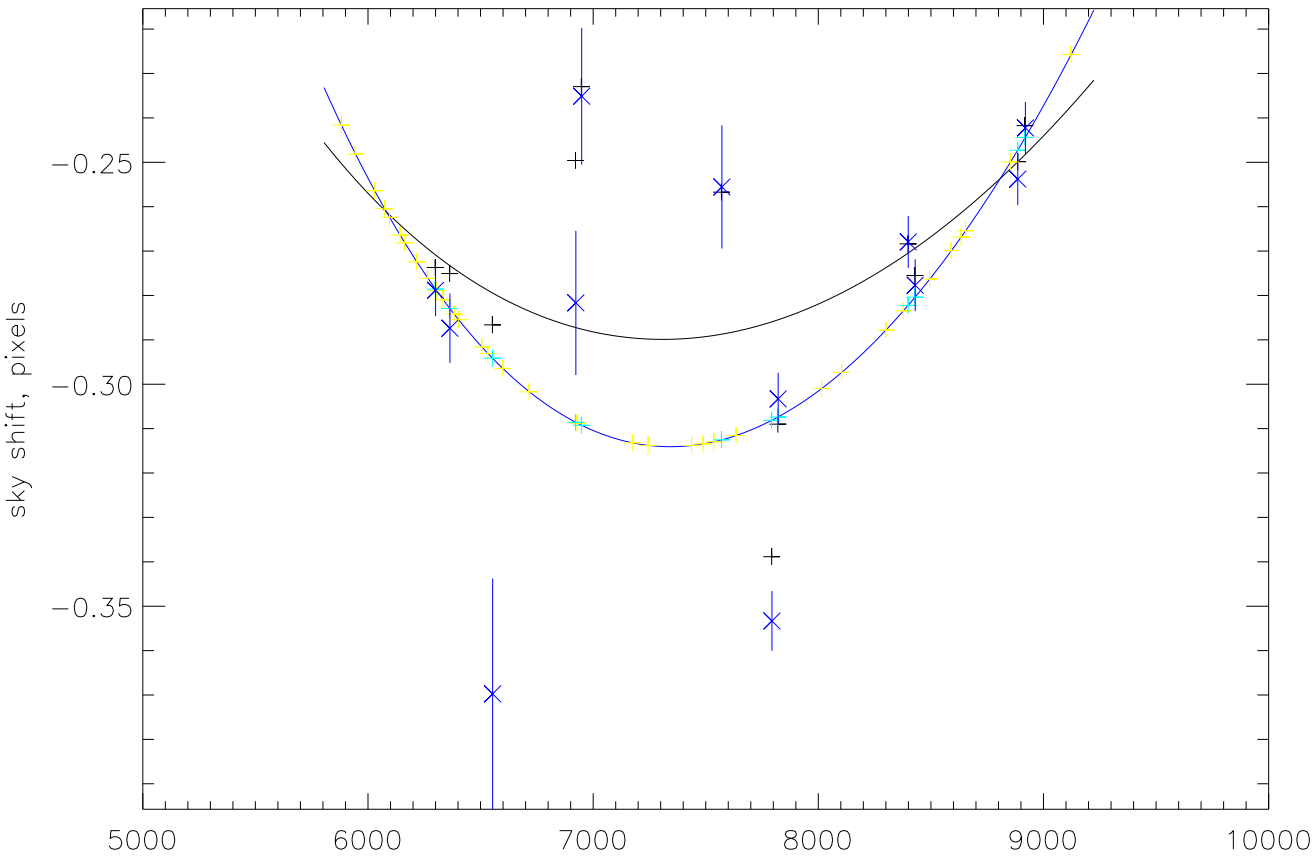

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

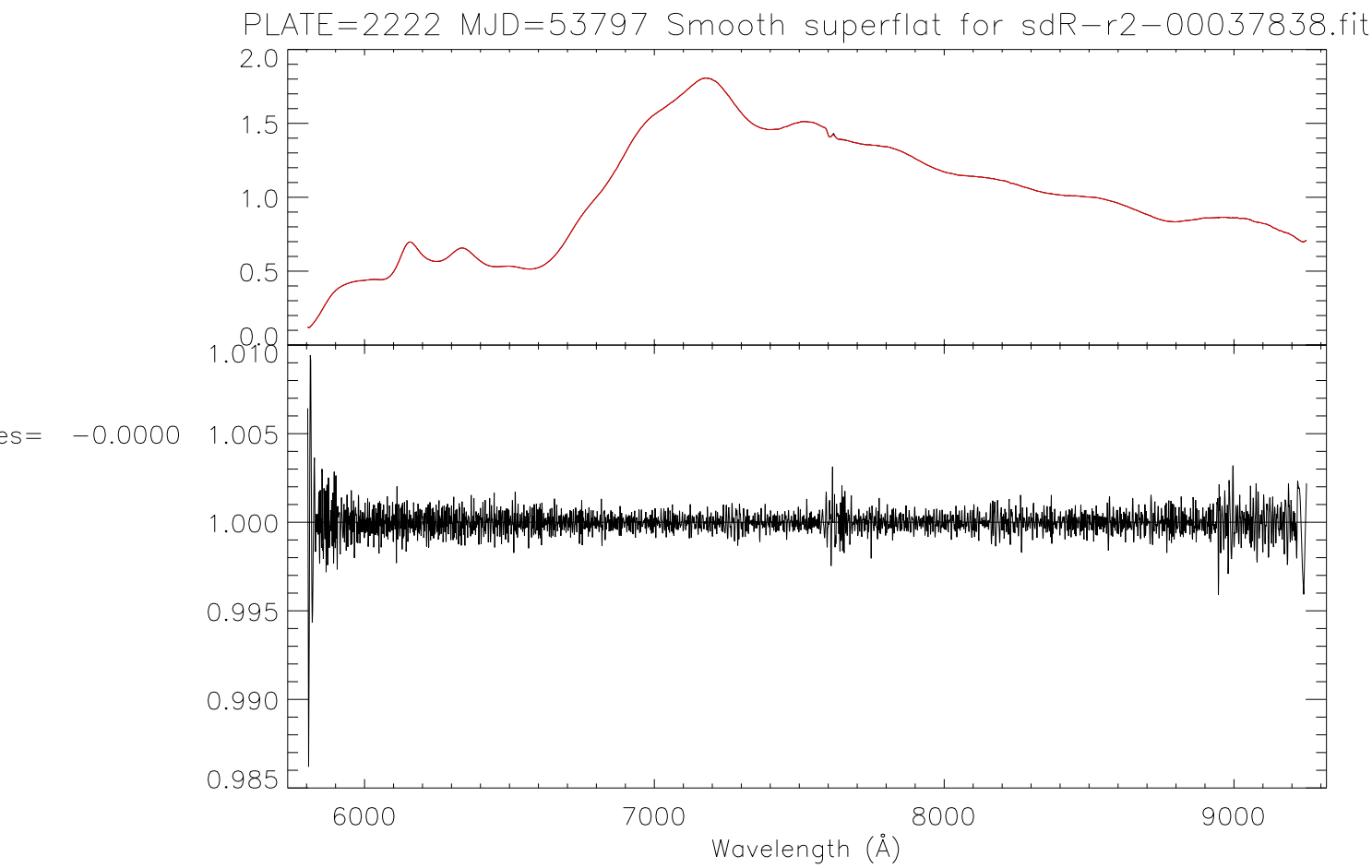

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

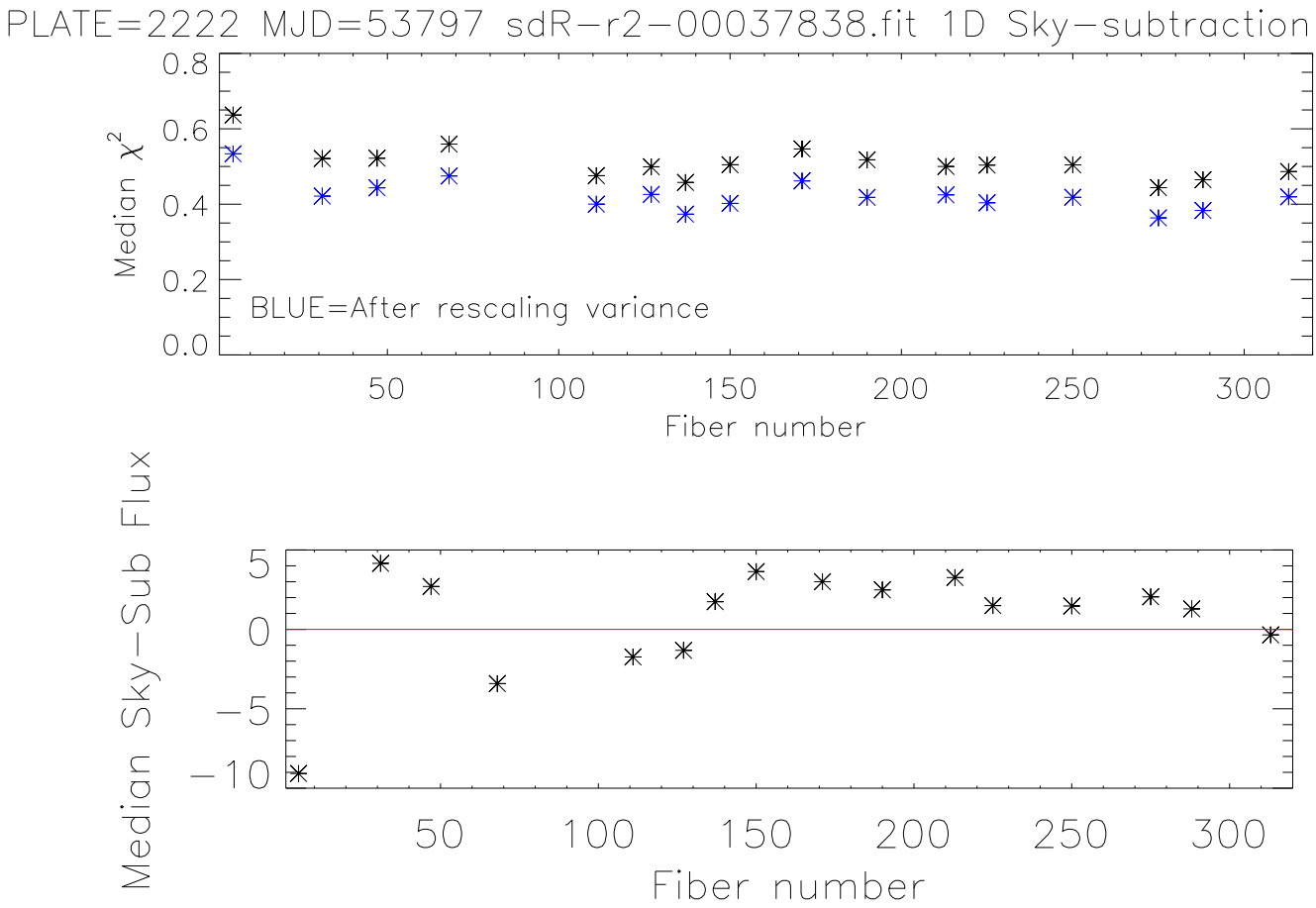

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

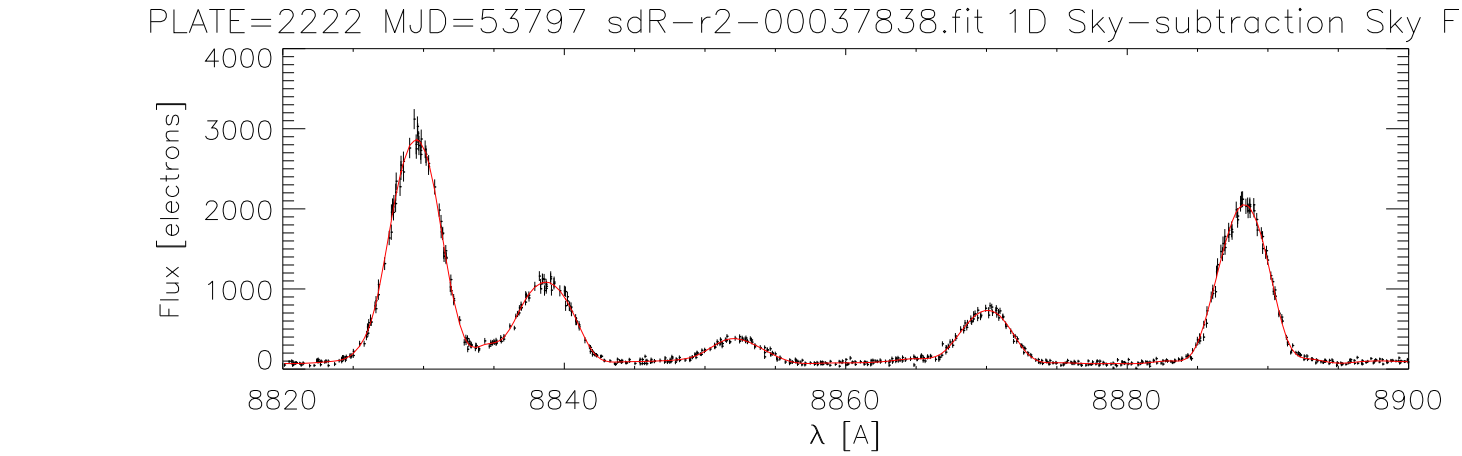

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

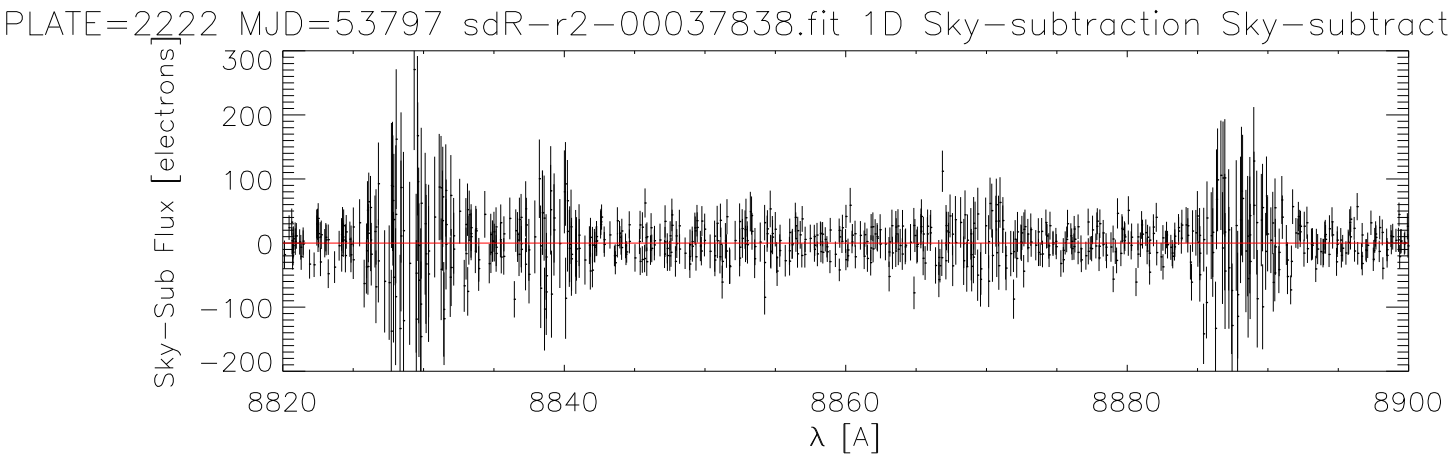

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfhs2 16
stdev 0.28
stdev 0.29
stdev 0.37
stdev 0.28
stdev 0.24
stdev 0.26
stdev 0.35
stdev 0.30
stdev 0.27
stdev 0.28
stdev 0.25
stdev 0.24
extra 0.12
extra 0.27
extra 0.24
extra 0.34
extra 0.39
extra 0.37
extra 0.18
extra 0.25
extra 0.24
extra 0.21

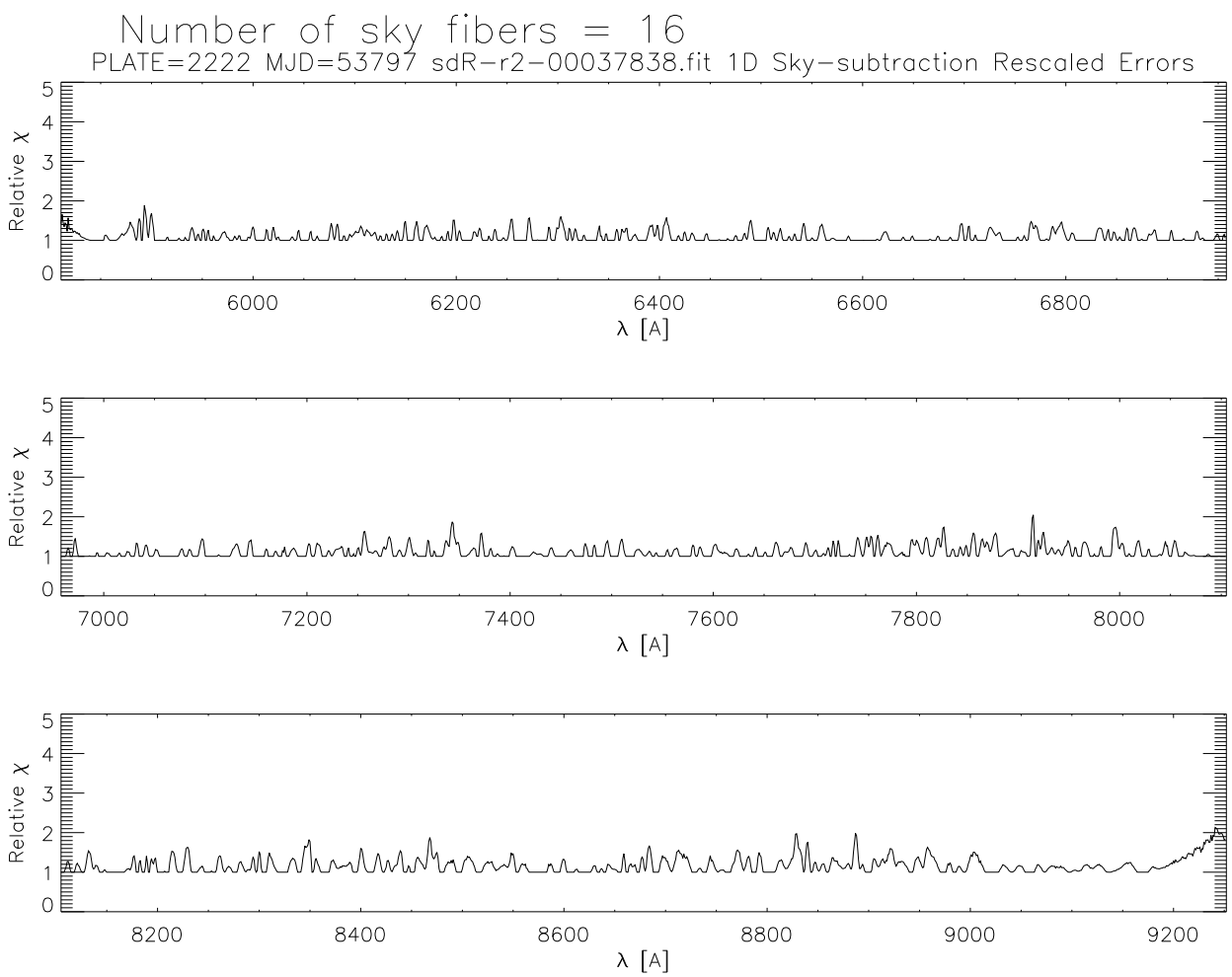

sky shift, pixels
−0.25
−0.30
−0.35
5000
6000
7000
8000
9000
10000

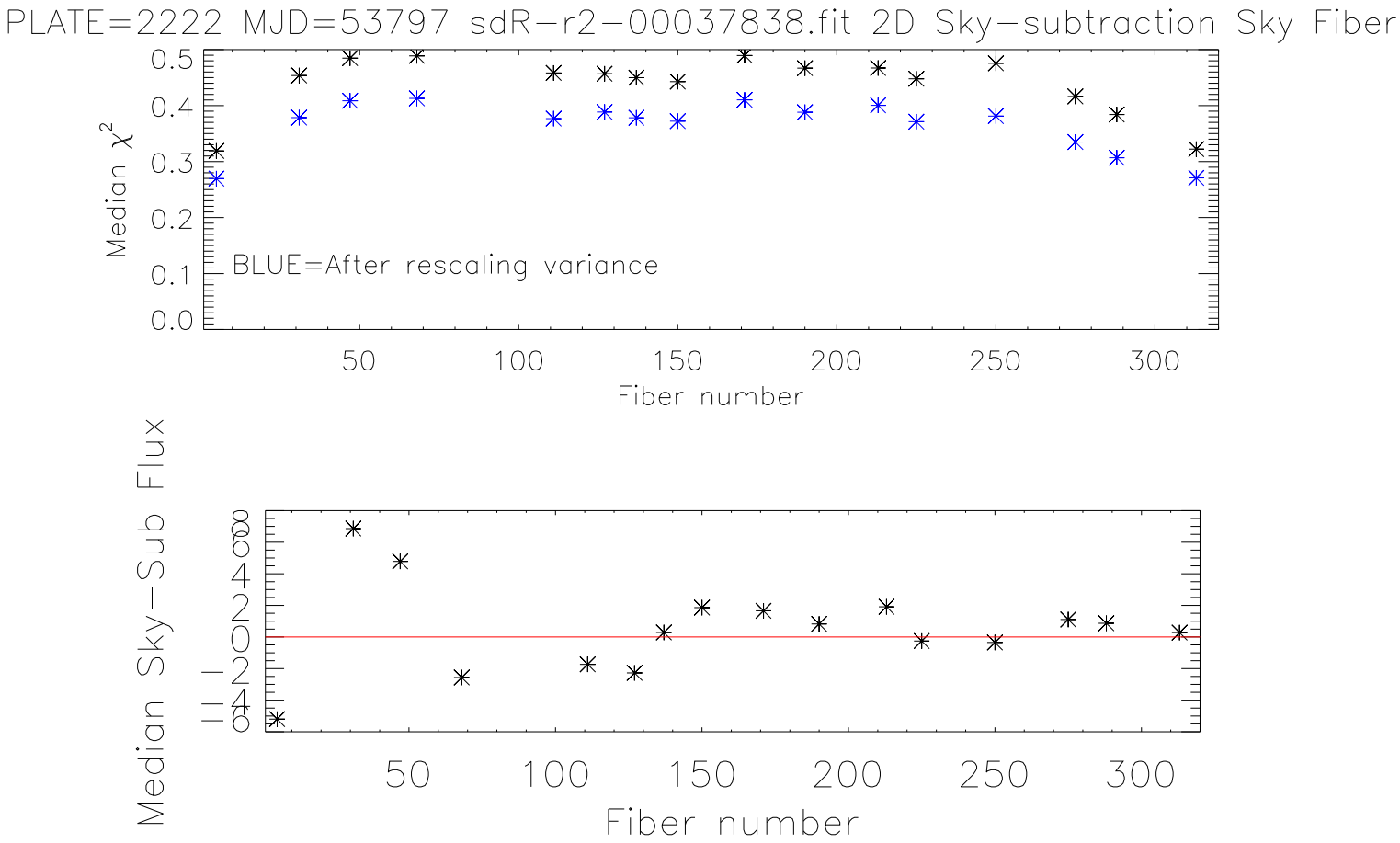

PLATE=2222 MJD=53797 Smooth superflat for sdR-r2-00037838.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

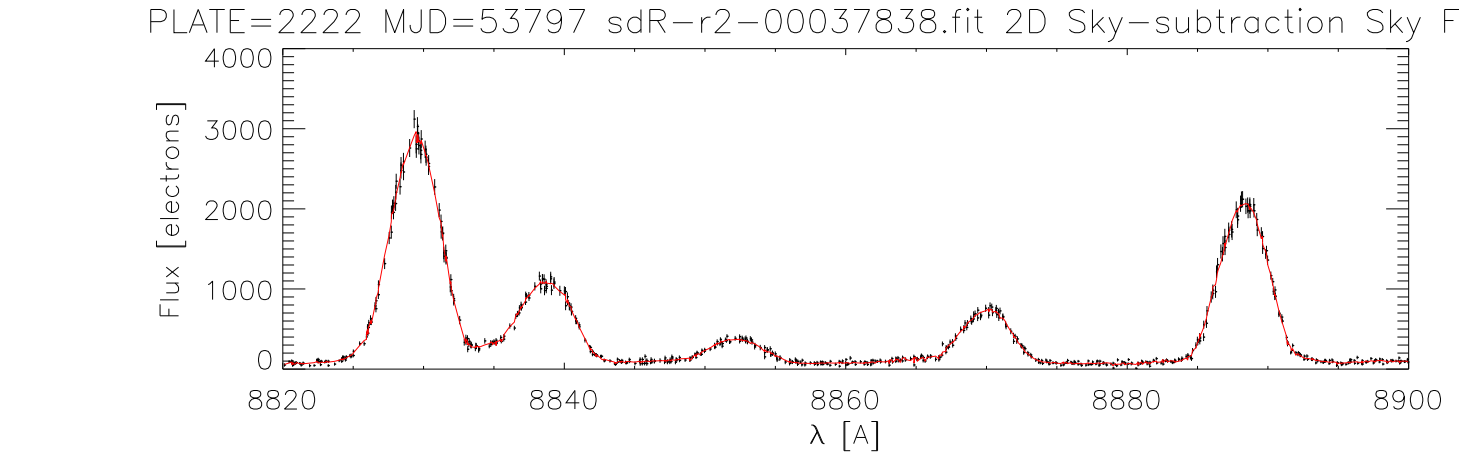

PLATE=2222 MJD=53797 sdR-r2-00037838.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
-5
-10
50
100
150
200
250
300
Fiber number

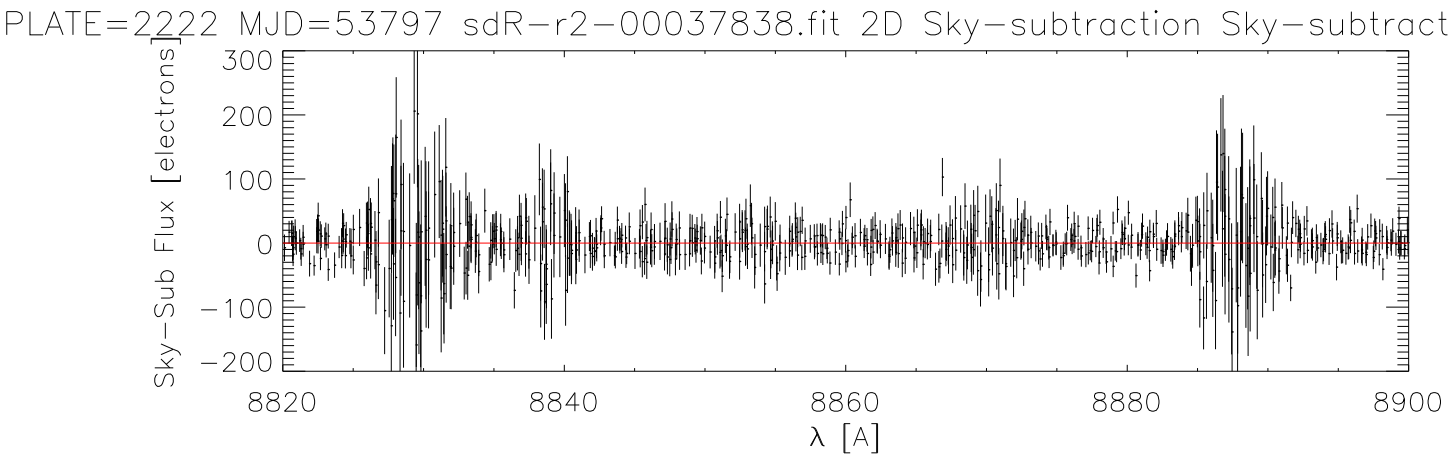

PLATE=2222 MJD=53797 sdR-r2-00037838.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

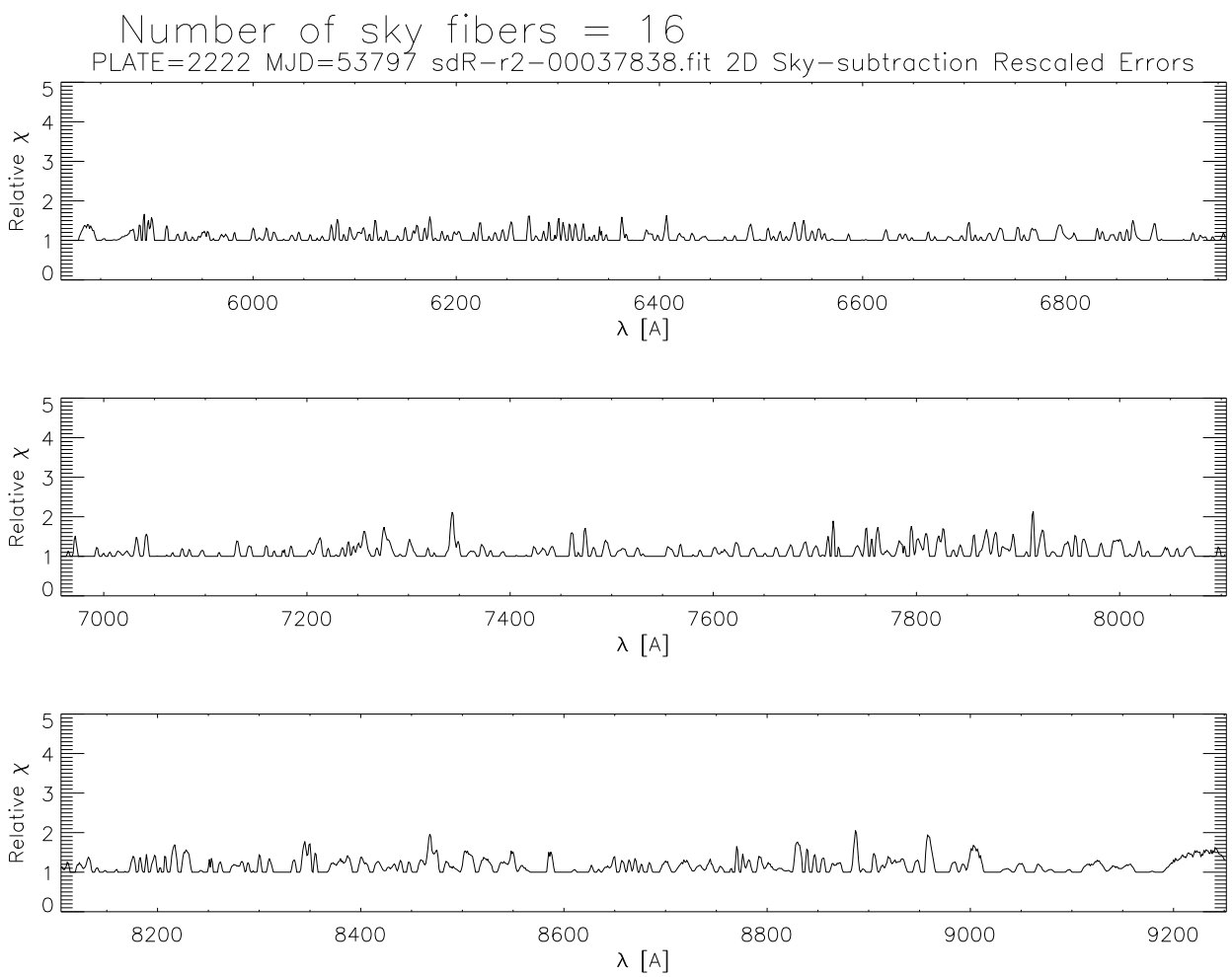

PLATE=2222 MJD=53797 sdR-r2-00037838.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

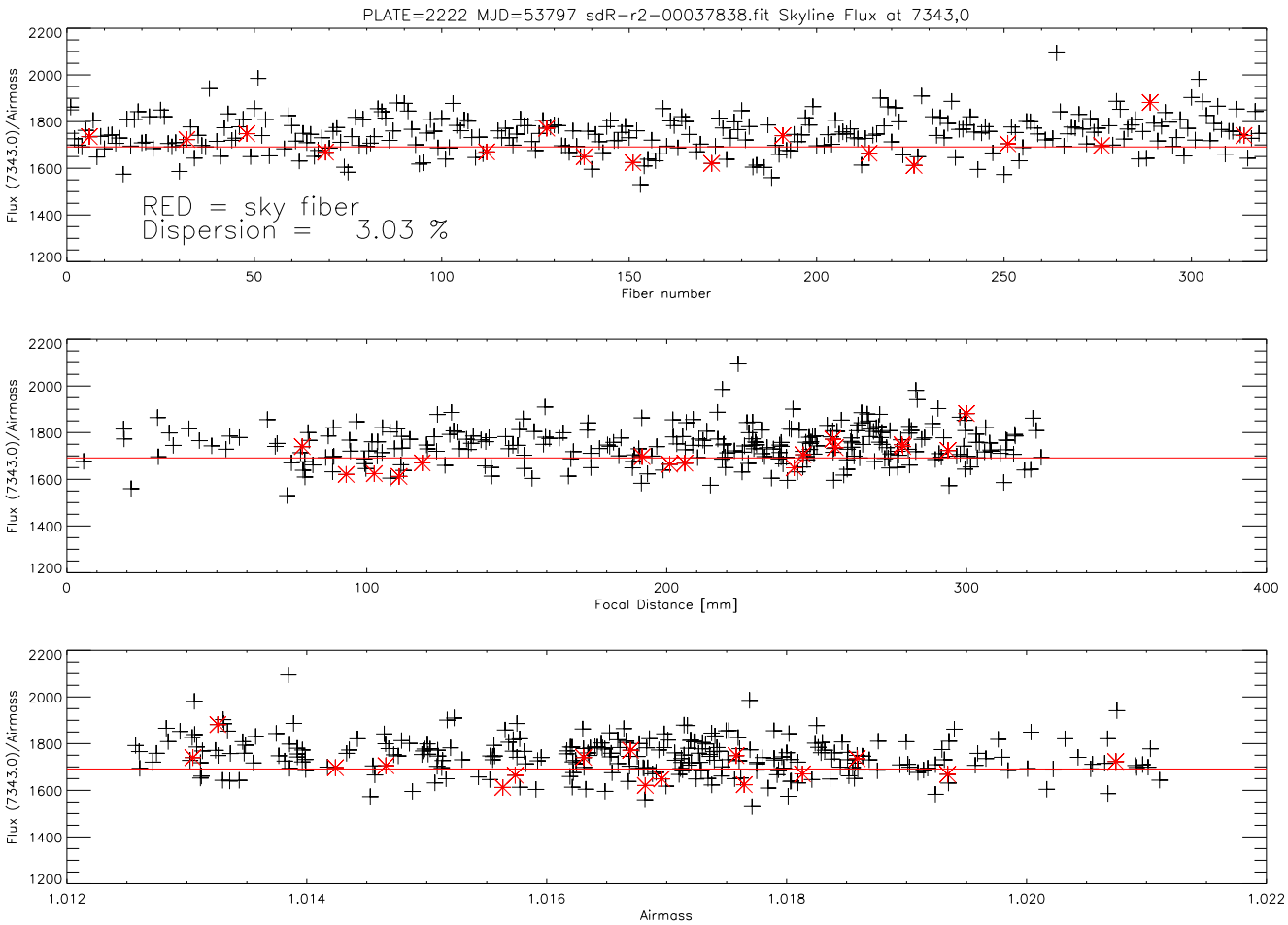

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-r2-00037838.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

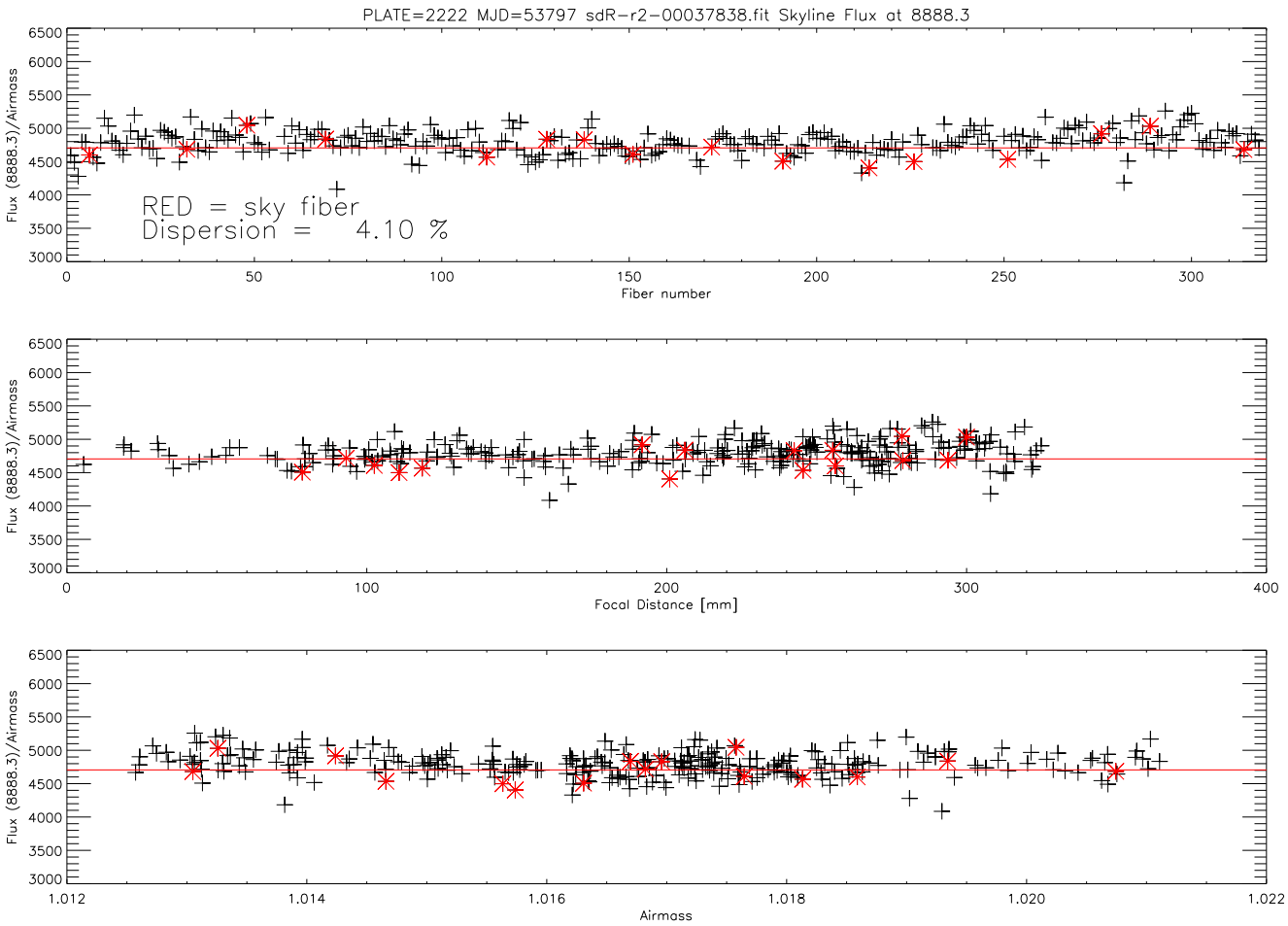

PLATE=2222 MJD=53797 sdR-r2-00037838.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

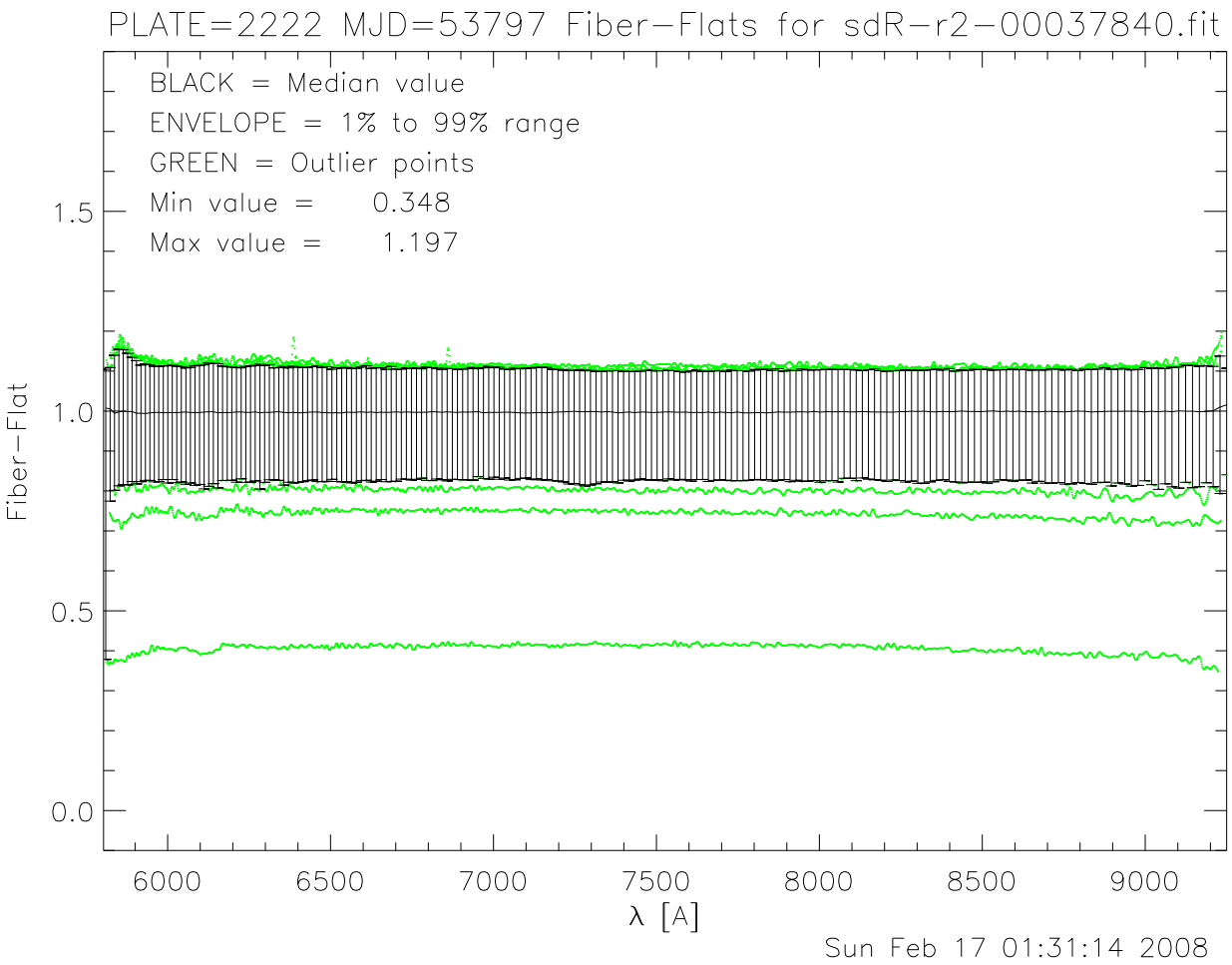

PLATE=2222 MJD=53797 sdR-r2-00037838.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

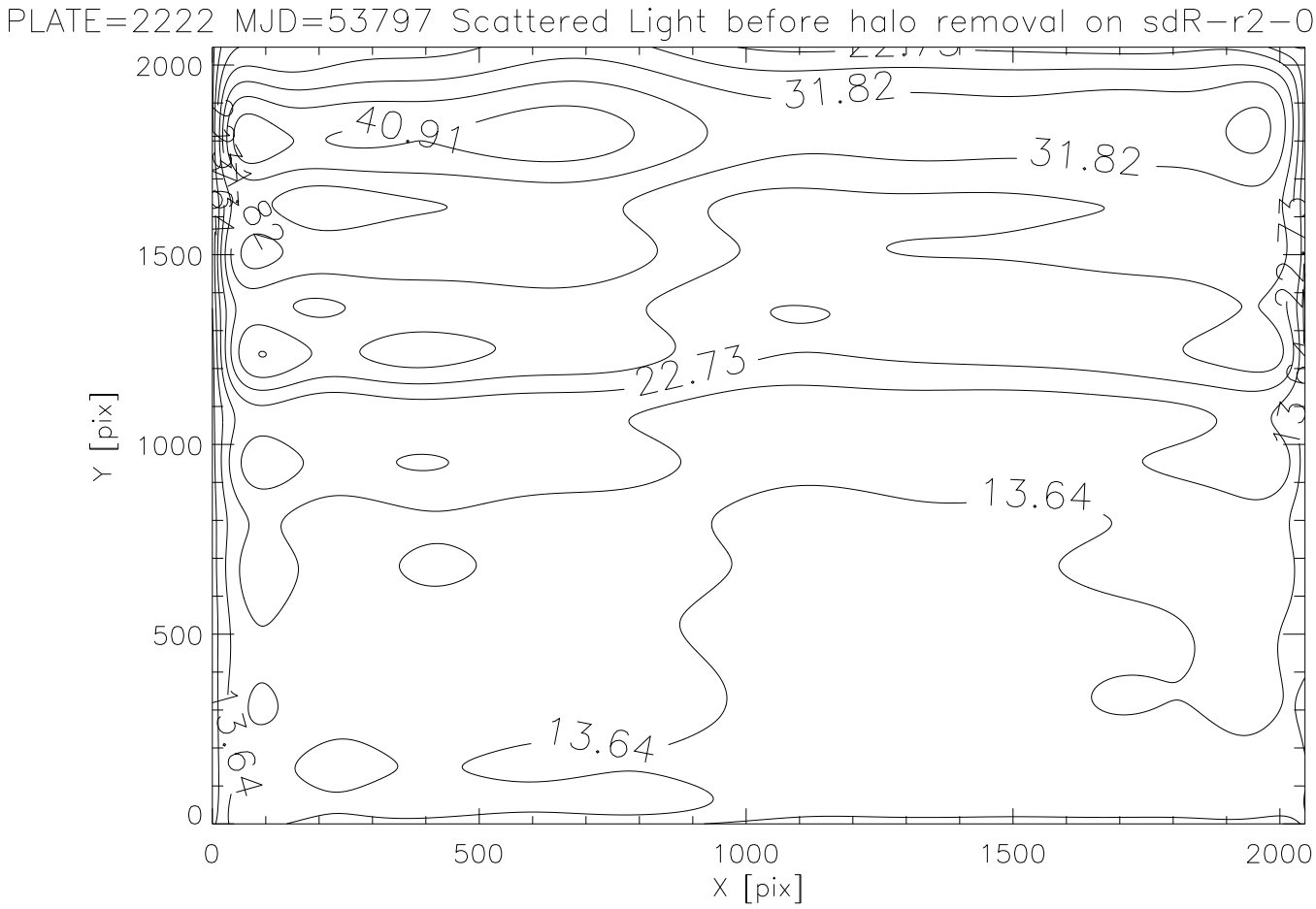

PLATE=2222 MJD=53797 sdR-r2-00037838.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

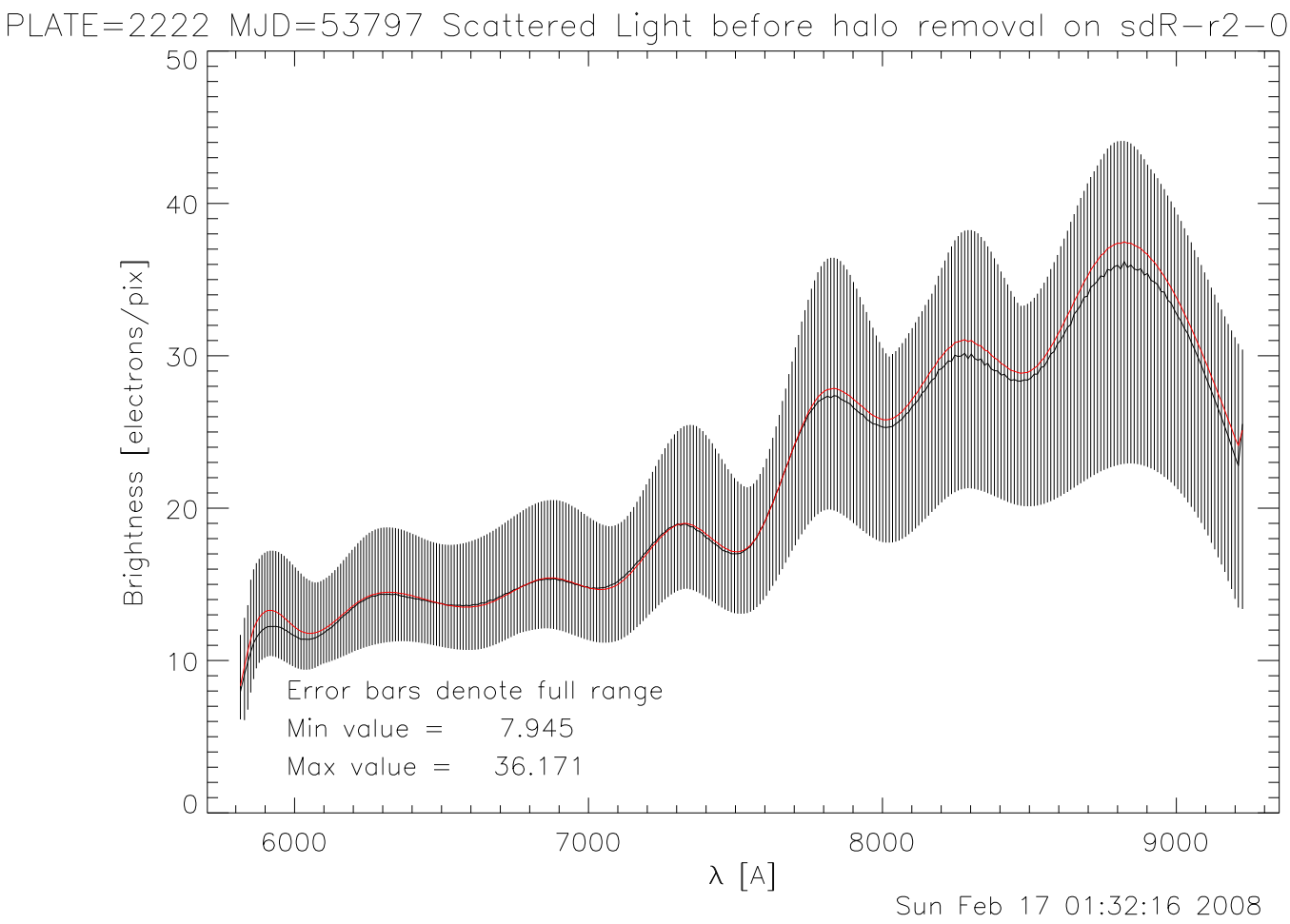

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-r2-00037838.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

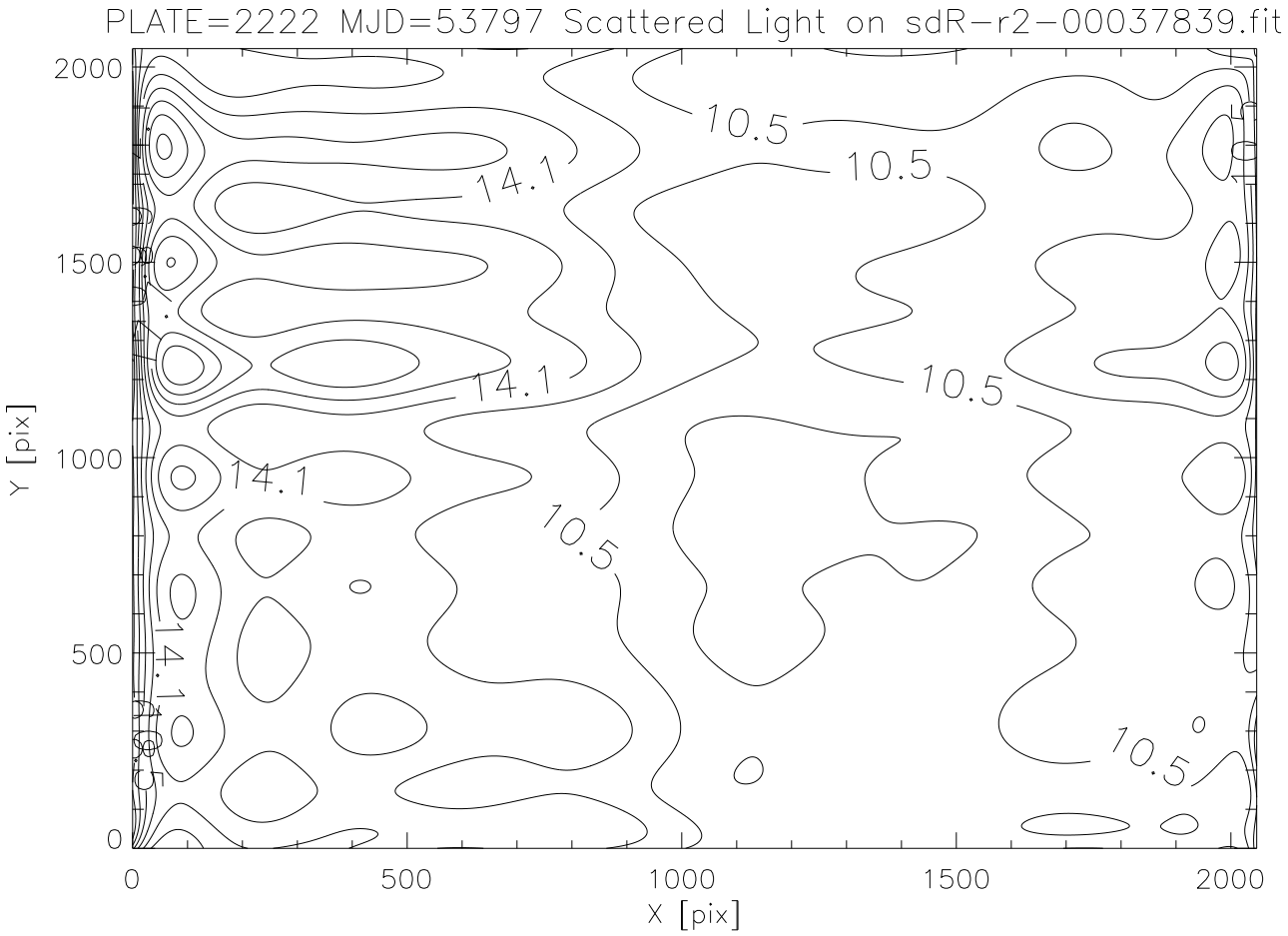

PLATE=2222 MJD=53797 sdR-r2-00037838.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.03 %
Fiber number
Focal Distance [mm]
Airmass

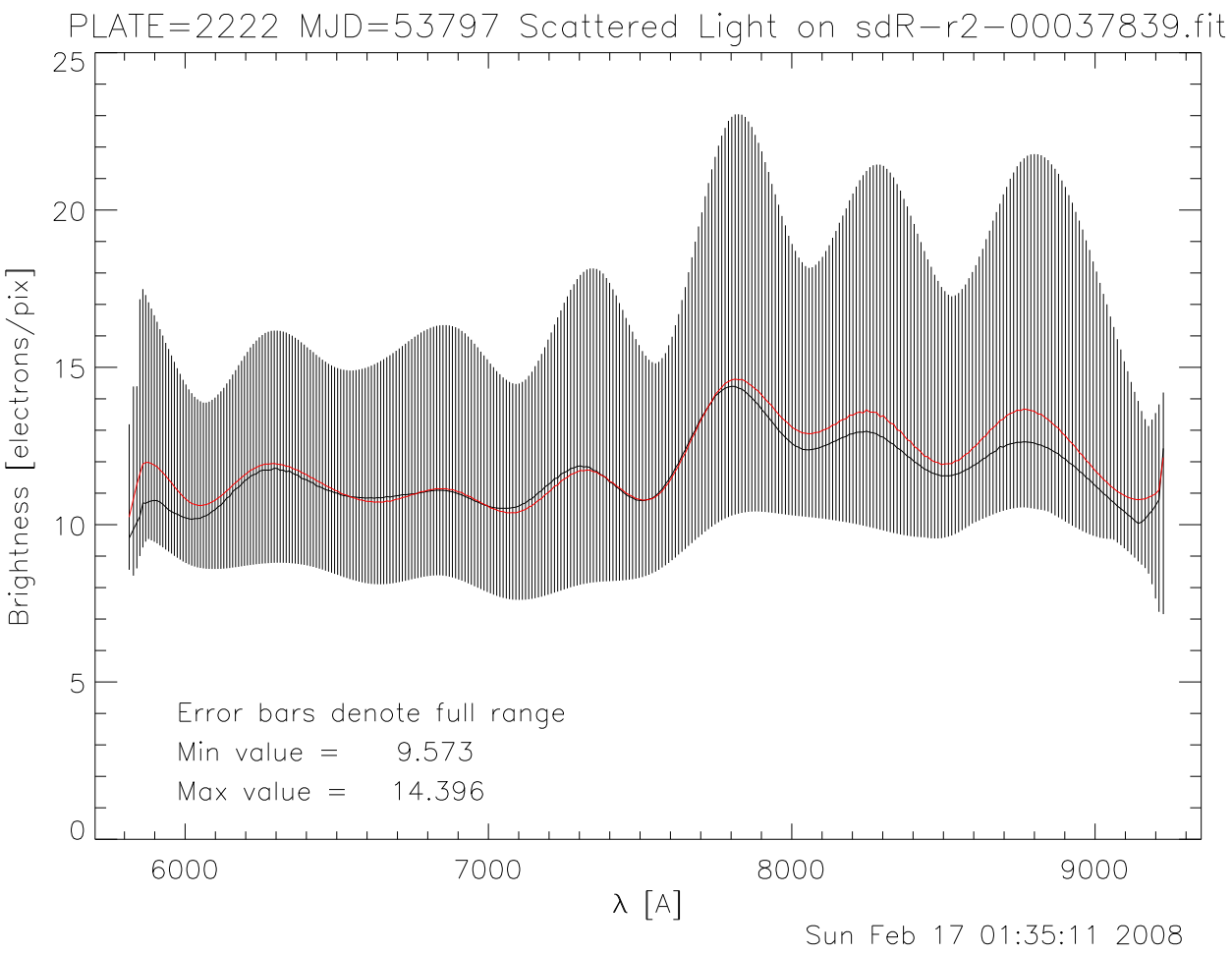

PLATE=2222 MJD=53797 sdR-r2-00037838.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.10 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

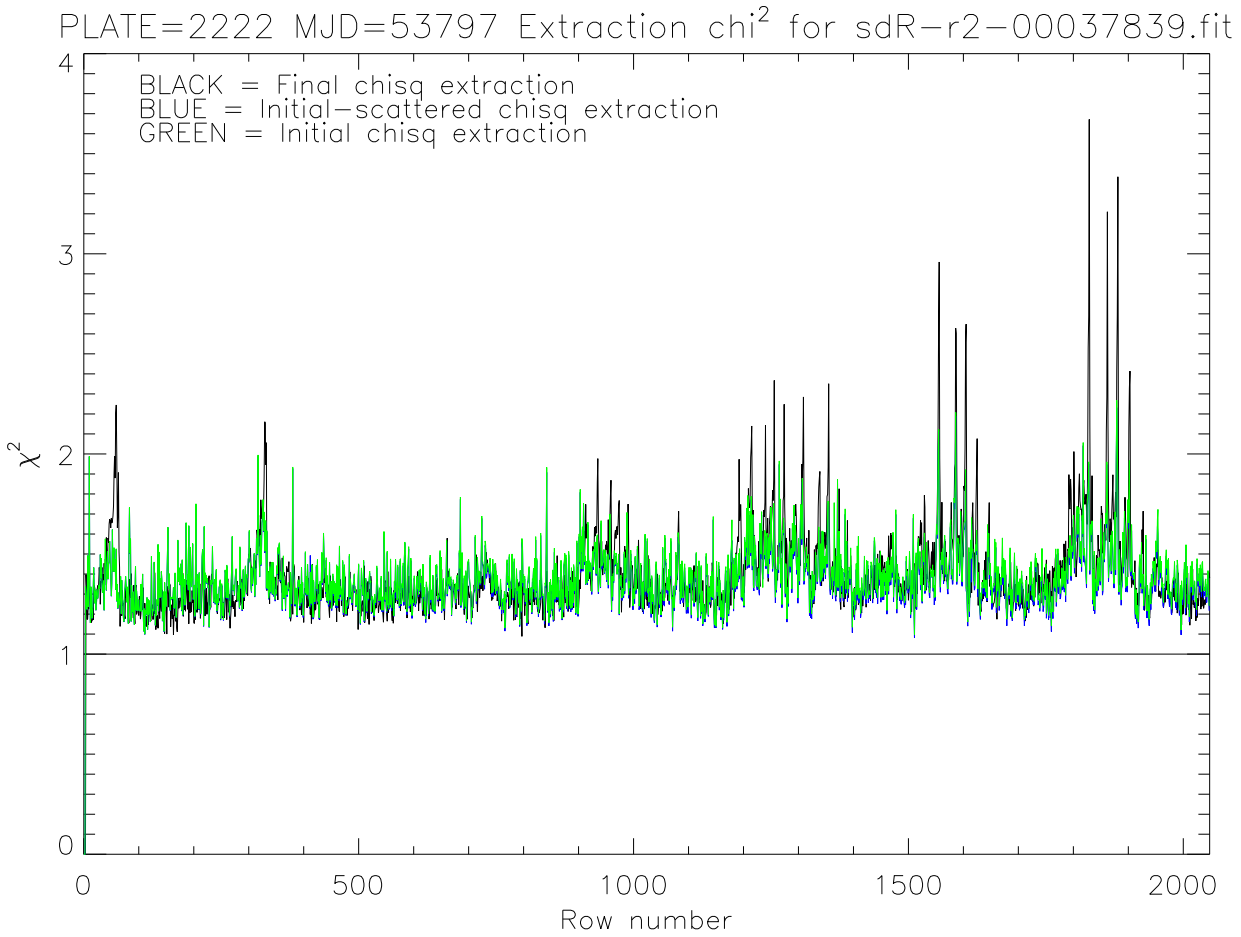

PLATE=2222 MJD=53797 Fiber−Flats for sdR−r2−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.348
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 01:31:14 2008

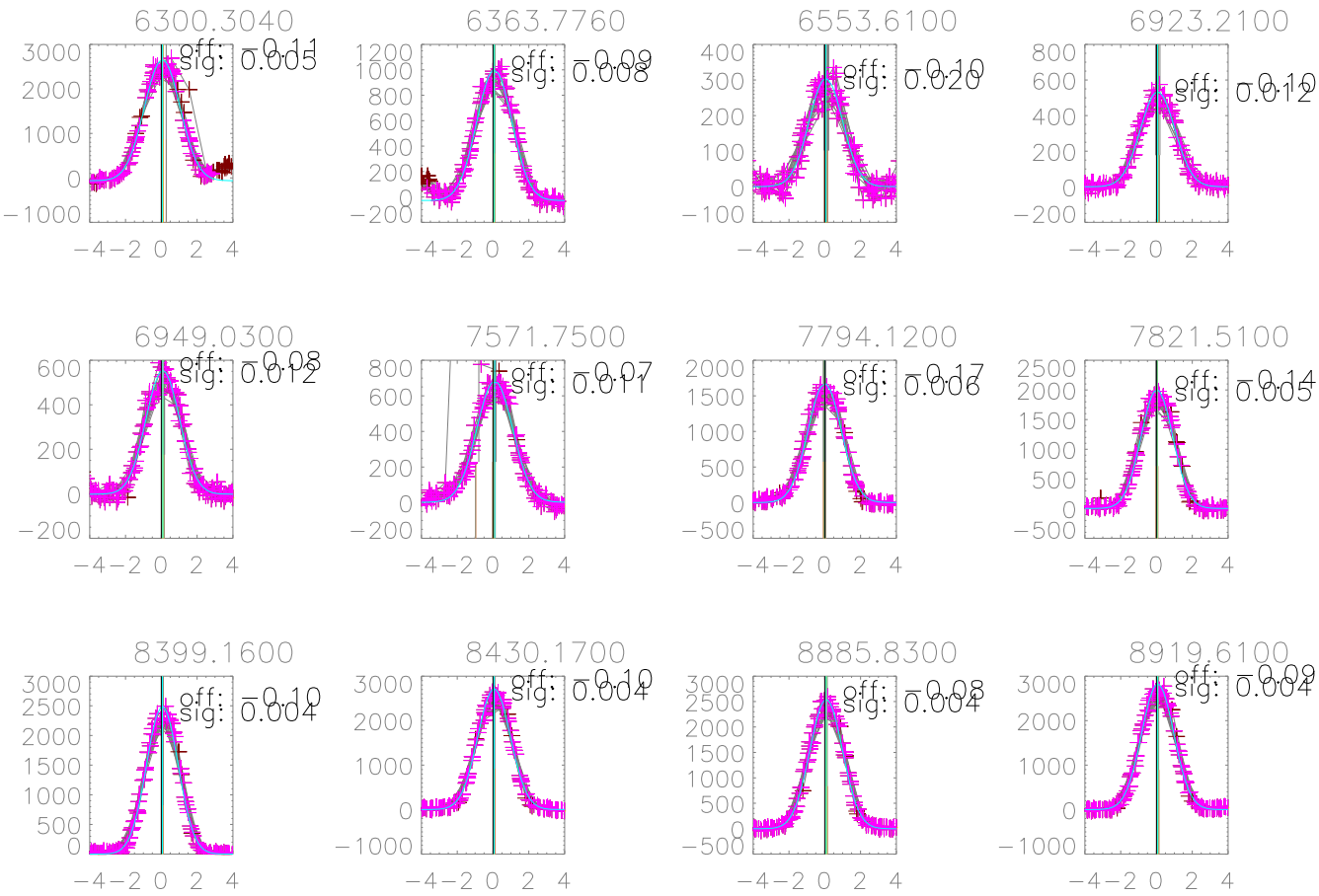

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r2-00037839.fi
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
40.91
31.82
31.82
22.73
22.73
13.64
13.64
13.64

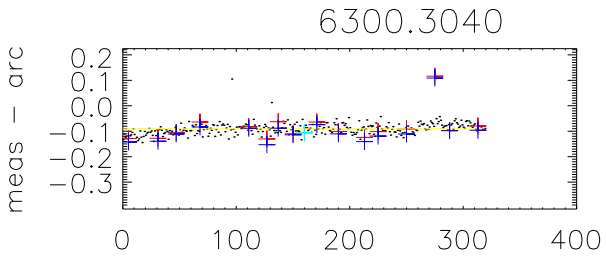

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r2-00037839.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.945
Max value = 36.171
Sun Feb 17 01:32:16 2008

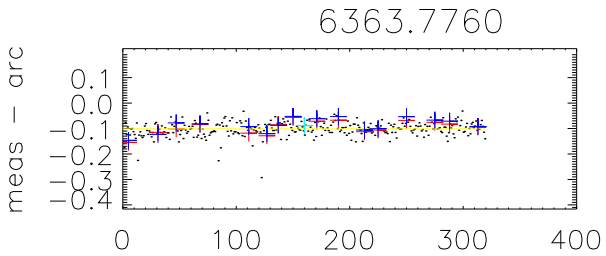

PLATE=2222 MJD=53797 Scattered Light on sdR-r2-00037839.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
10.5
14.1

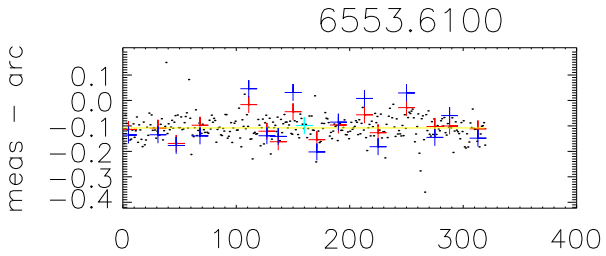

PLATE=2222 MJD=53797 Scattered Light on sdR-r2-00037839.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.573
Max value = 14.396
Sun Feb 17 01:35:11 2008

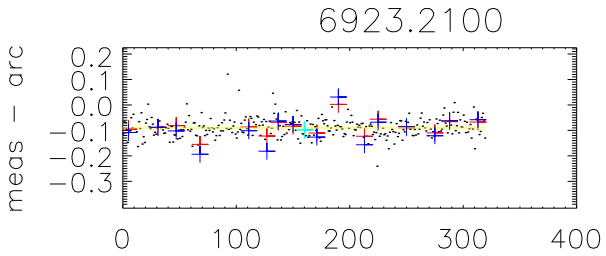

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−r2−00037839.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

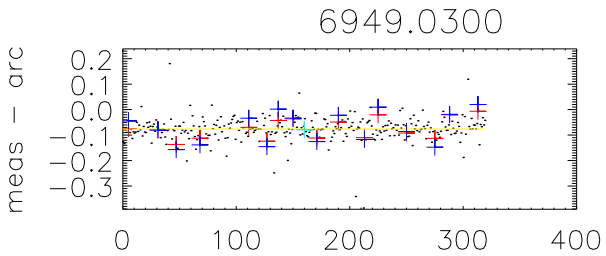

6300.3040
off: −0.11
sig: 0.005
6363.7760
off: −0.09
sig: 0.008
6553.6100
off: −0.10
sig: 0.020
6923.2100
off: −0.10
sig: 0.012
6949.0300
off: −0.08
sig: 0.012
7571.7500
off: −0.07
sig: 0.011
7794.1200
off: −0.17
sig: 0.006
7821.5100
off: −0.14
sig: 0.005
8399.1600
off: −0.10
sig: 0.004
8430.1700
off: −0.10
sig: 0.004
8885.8300
off: −0.08
sig: 0.004
8919.6100
off: −0.09
sig: 0.004

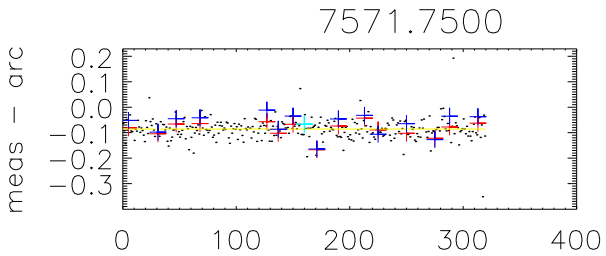

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

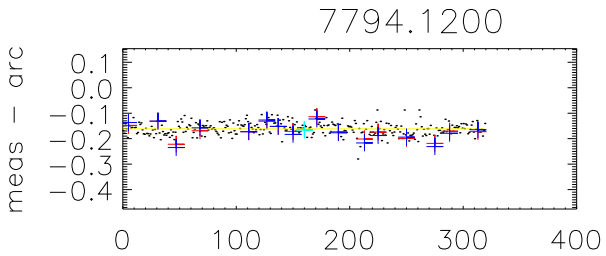

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

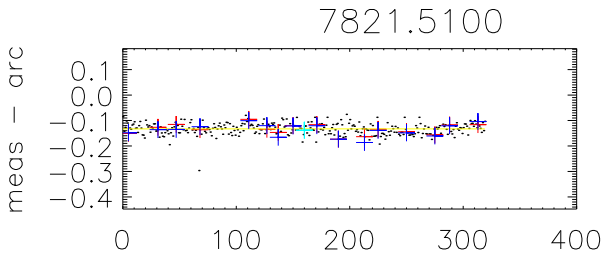

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

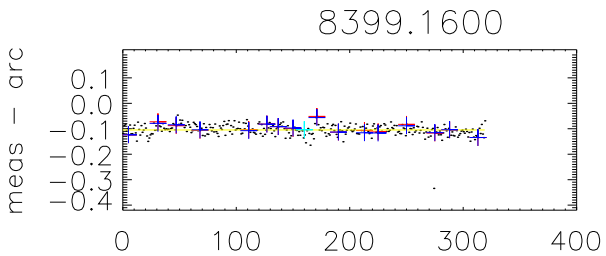

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

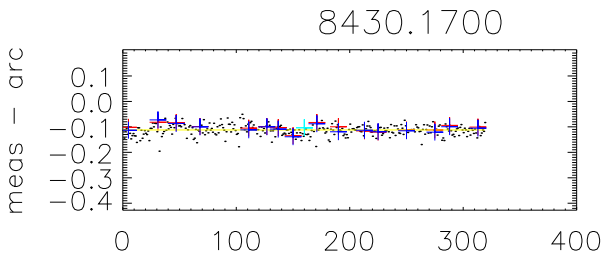

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

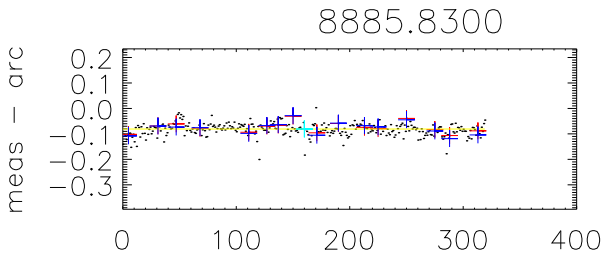

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

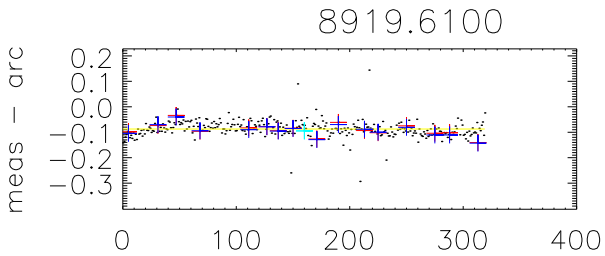

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

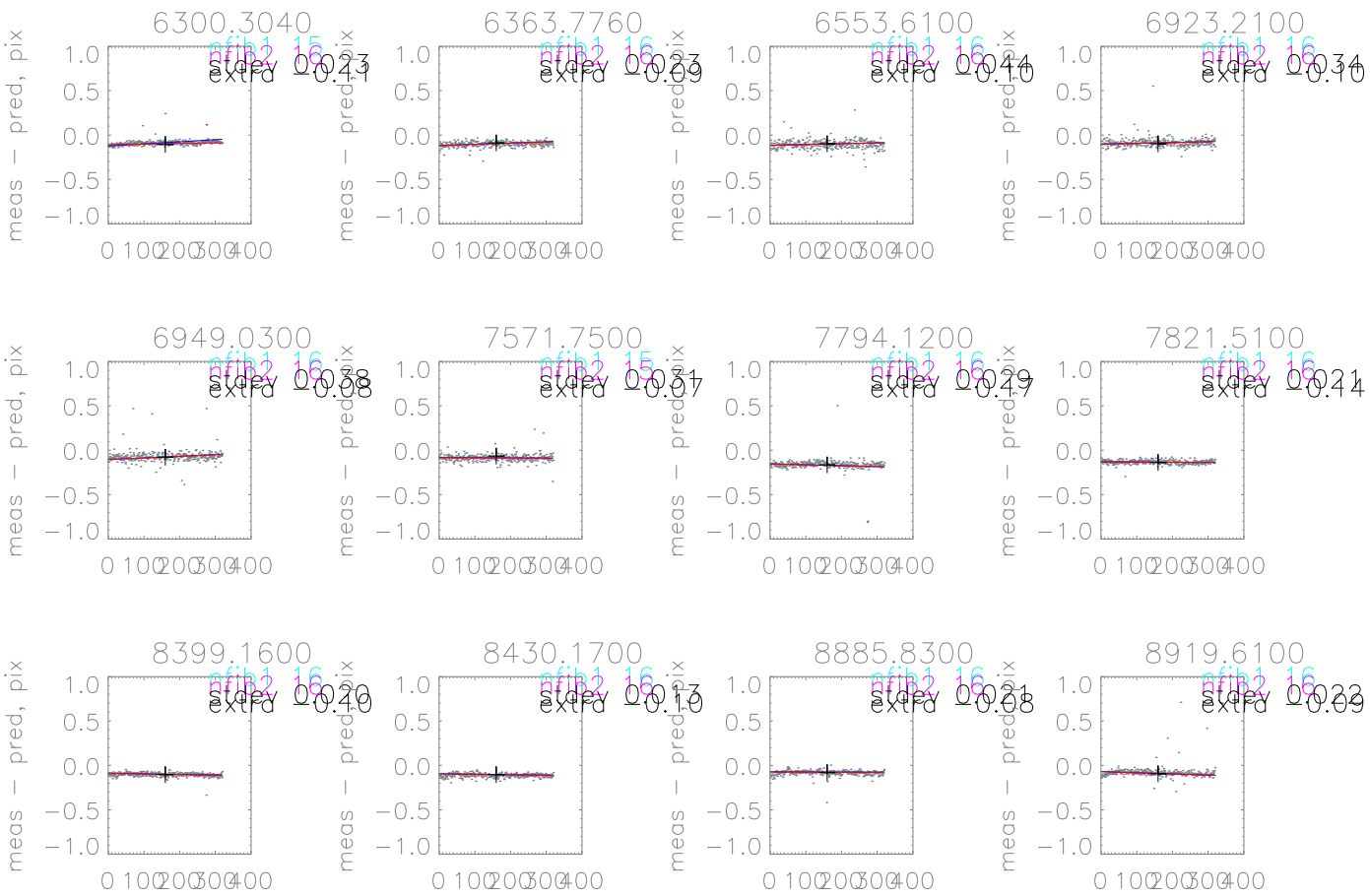

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

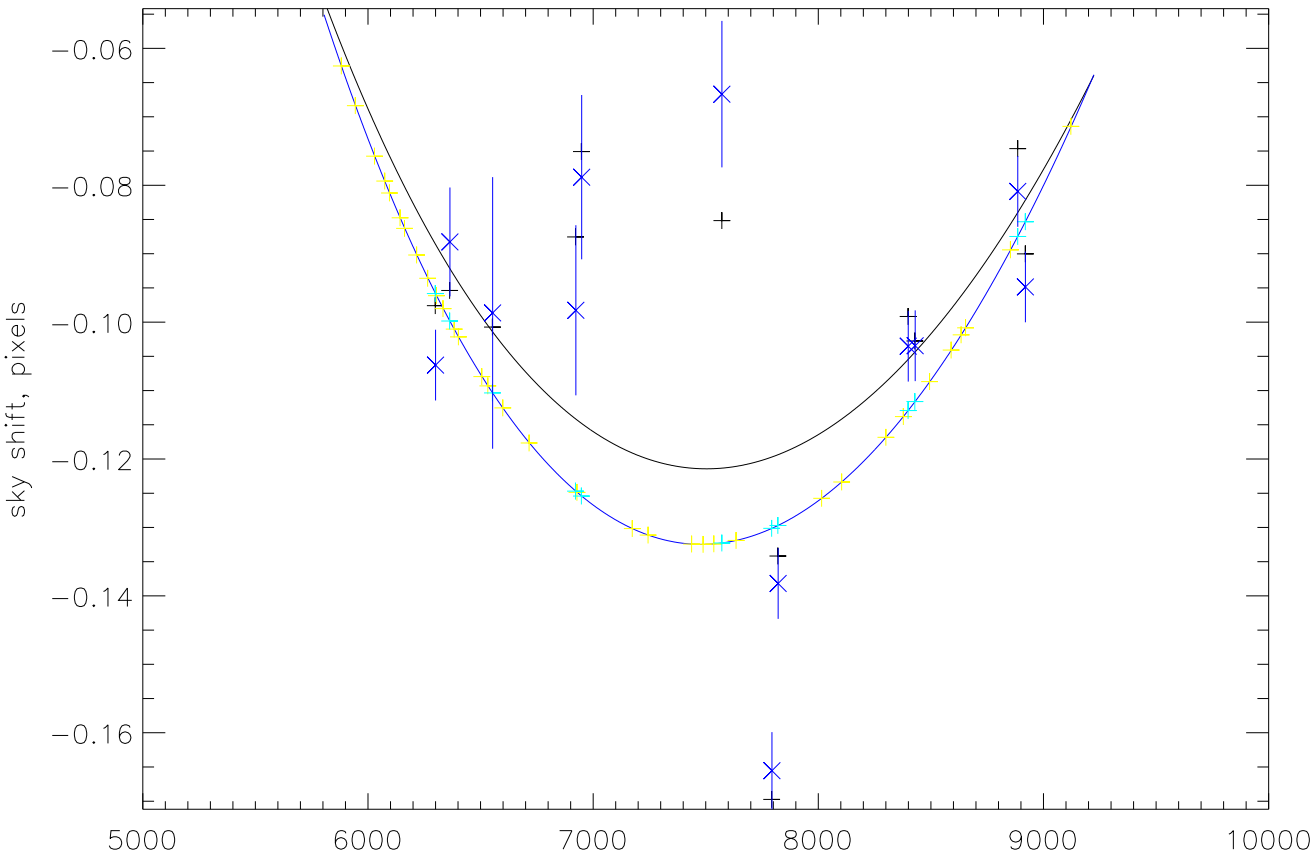

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

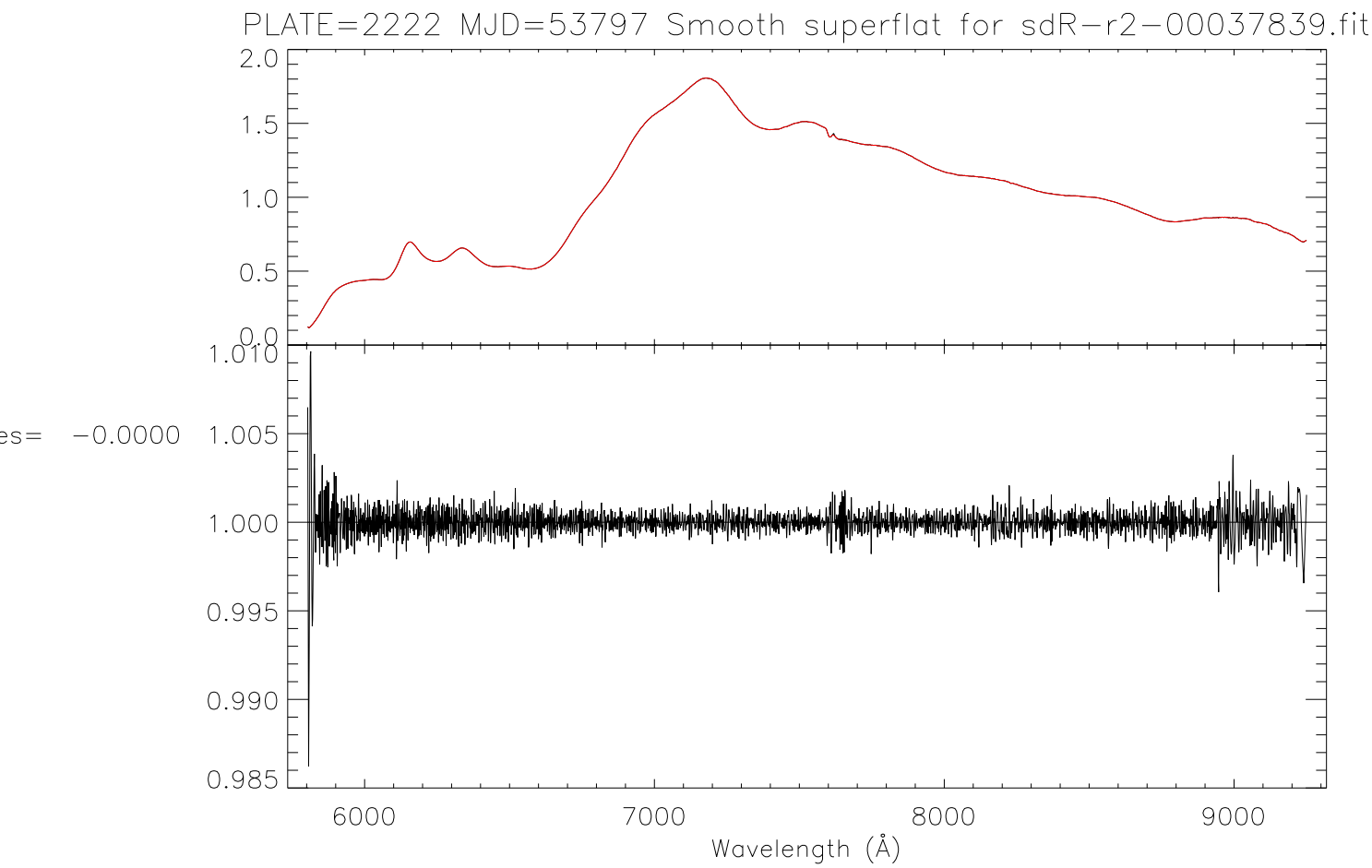

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

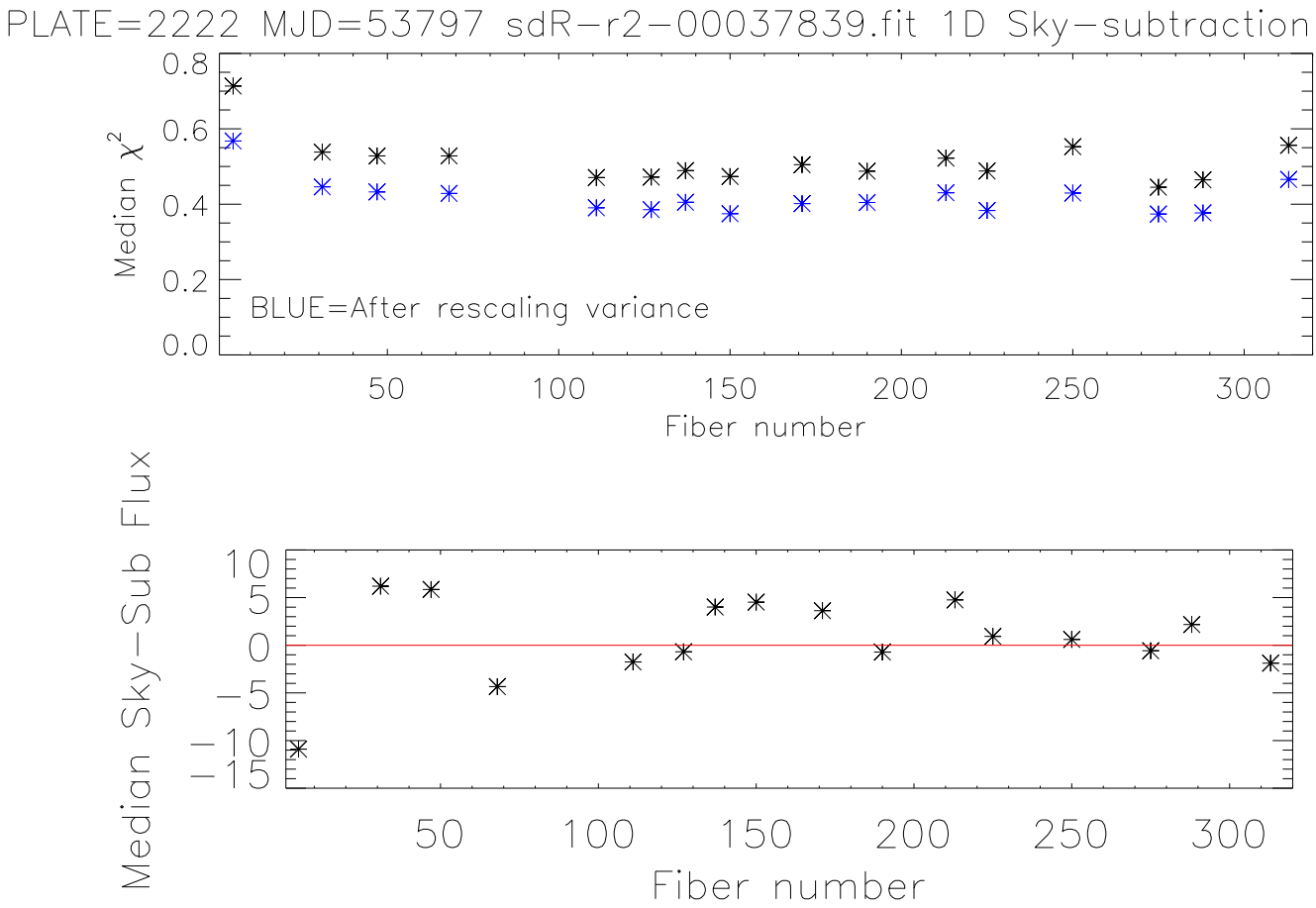

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

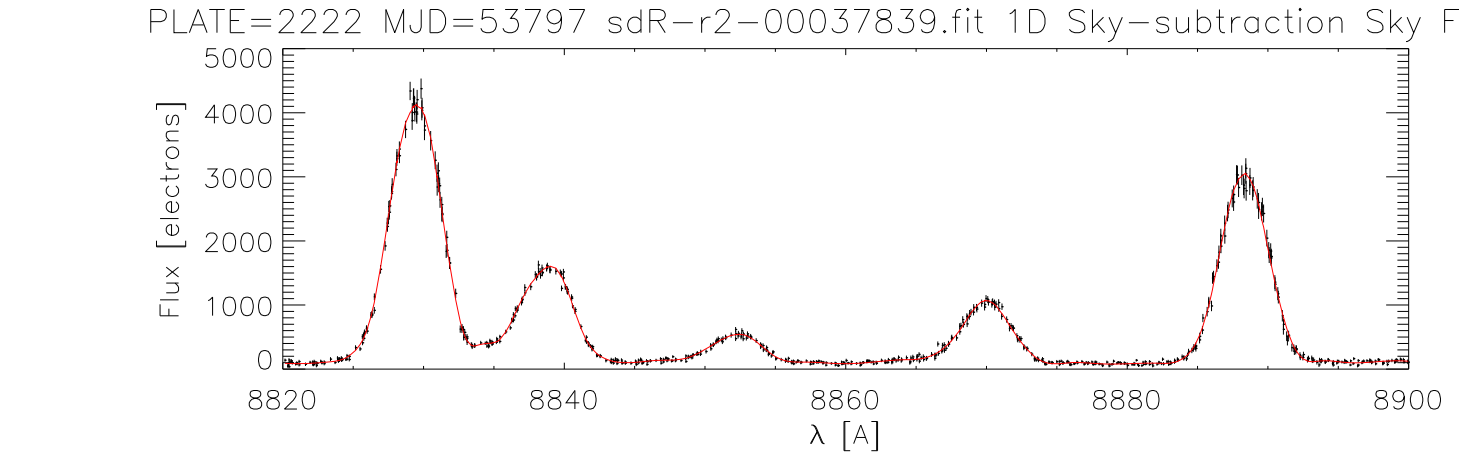

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

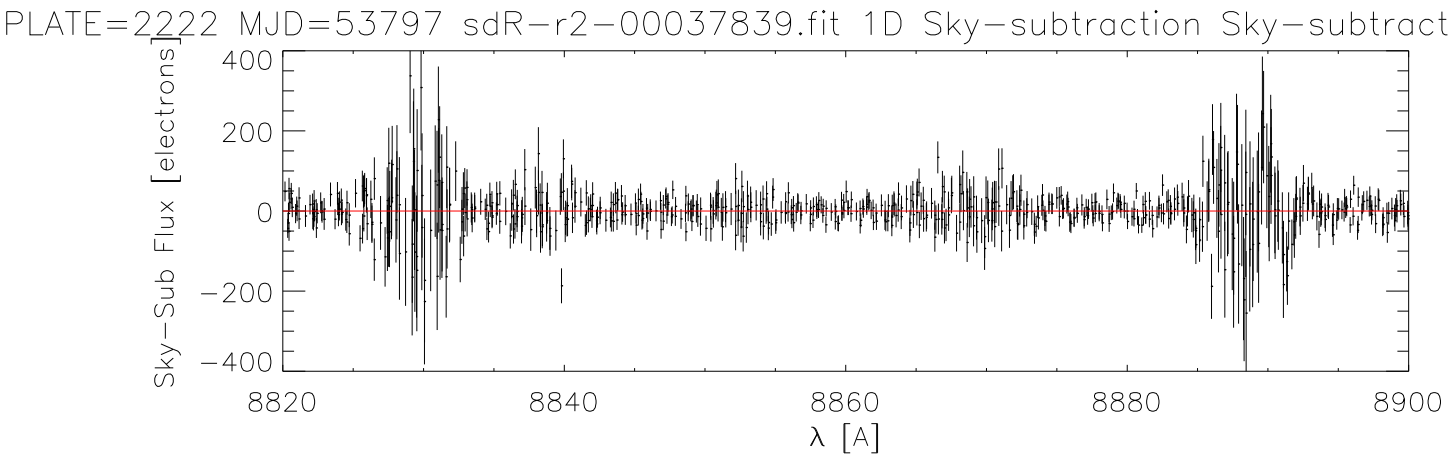

6300.3040
stdev 0.023
extra −0.041
6363.7760
stdev 0.023
extra −0.009
6553.6100
stdev 0.044
extra −0.110
6923.2100
stdev 0.034
extra −0.110
6949.0300
stdev 0.038
extra −0.008
7571.7500
stdev 0.031
extra −0.007
7794.1200
stdev 0.029
extra −0.047
7821.5100
stdev 0.021
extra −0.044
8399.1600
stdev 0.020
extra −0.040
8430.1700
stdev 0.013
extra −0.010
8885.8300
stdev 0.021
extra −0.008
8919.6100
stdev 0.022
extra −0.009
meas − pred, pix
mfhd2 15
mfhd2 16

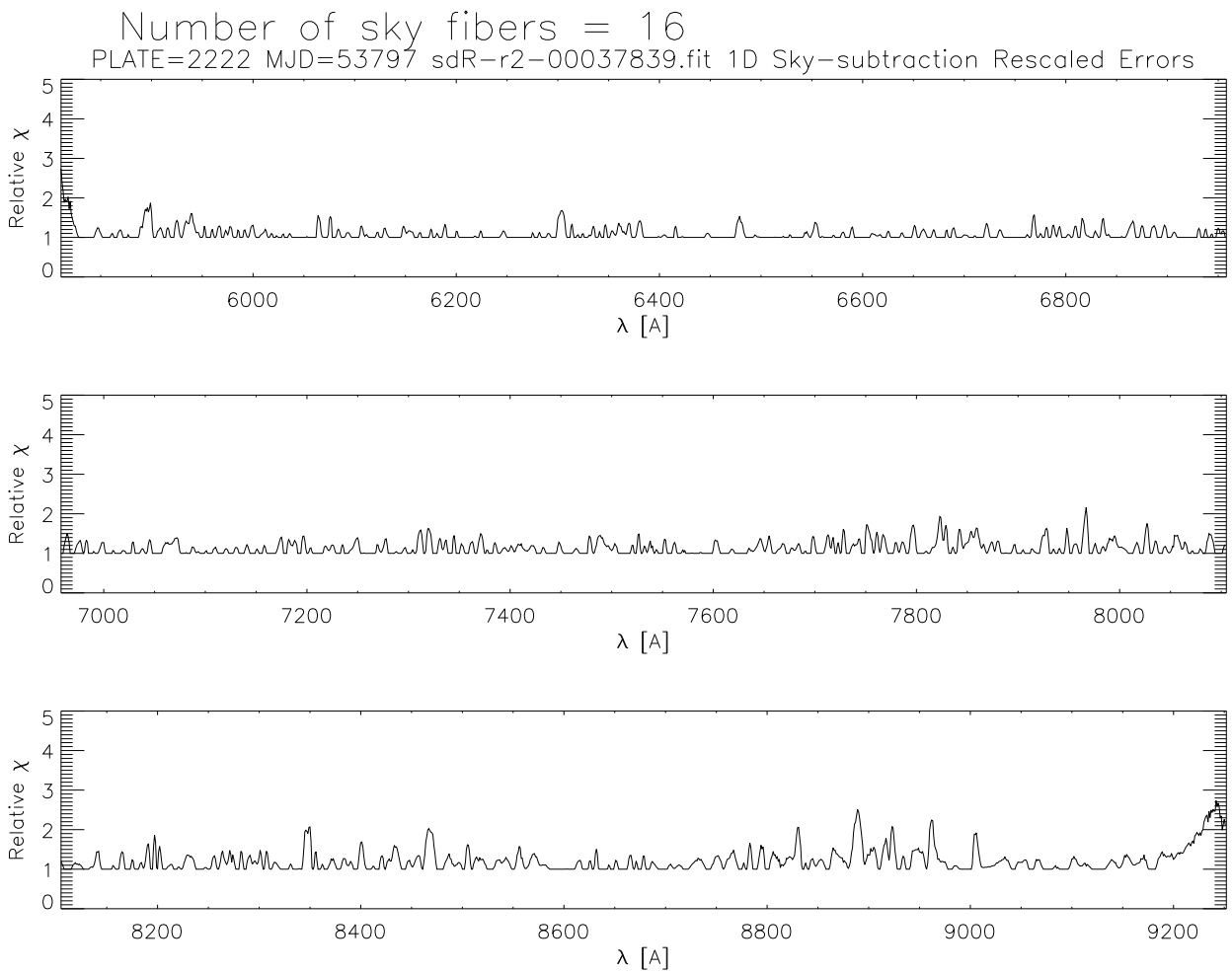

−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
sky shift, pixels
5000
6000
7000
8000
9000
10000

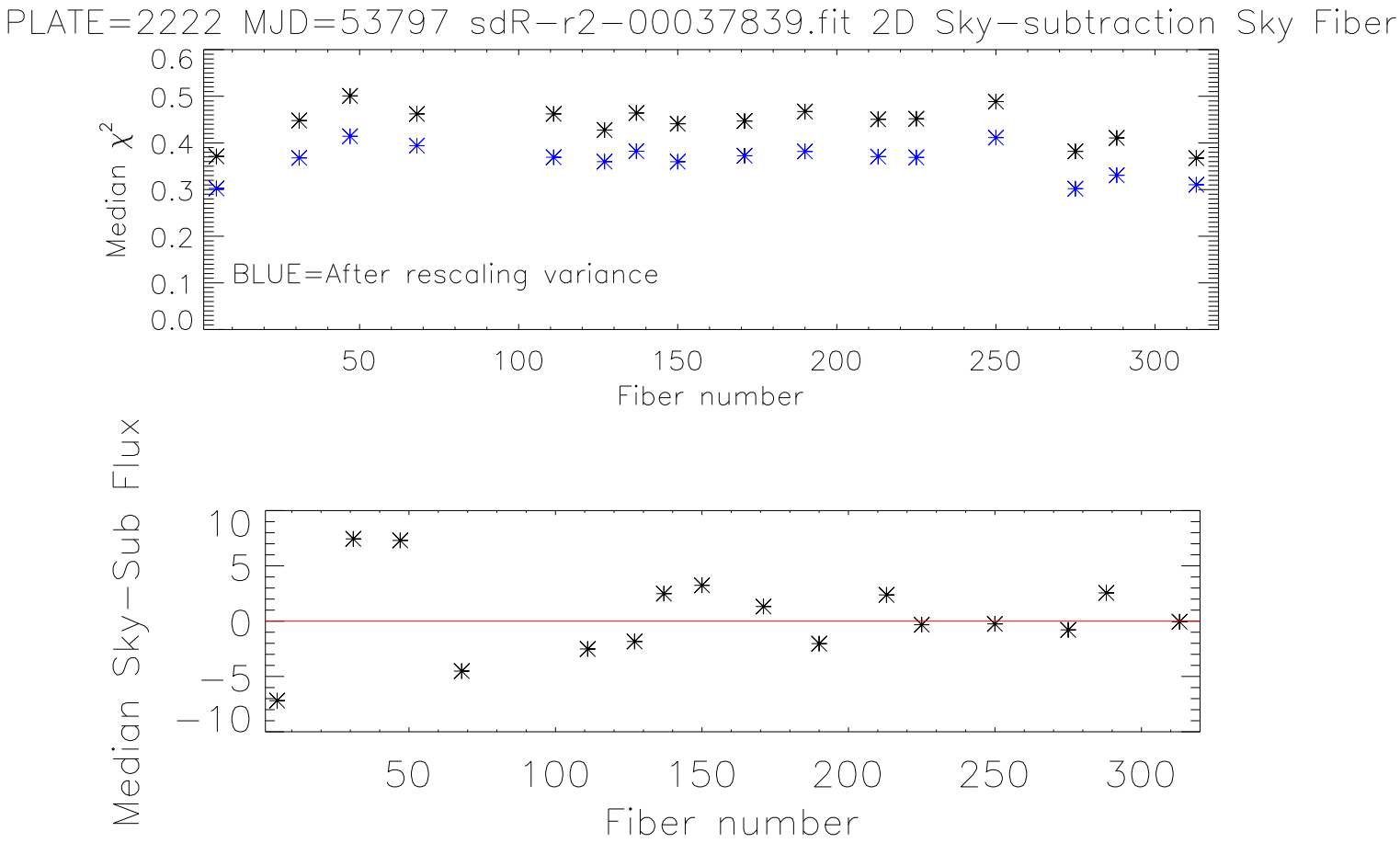

PLATE=2222 MJD=53797 Smooth superflat for sdR-r2-00037839.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

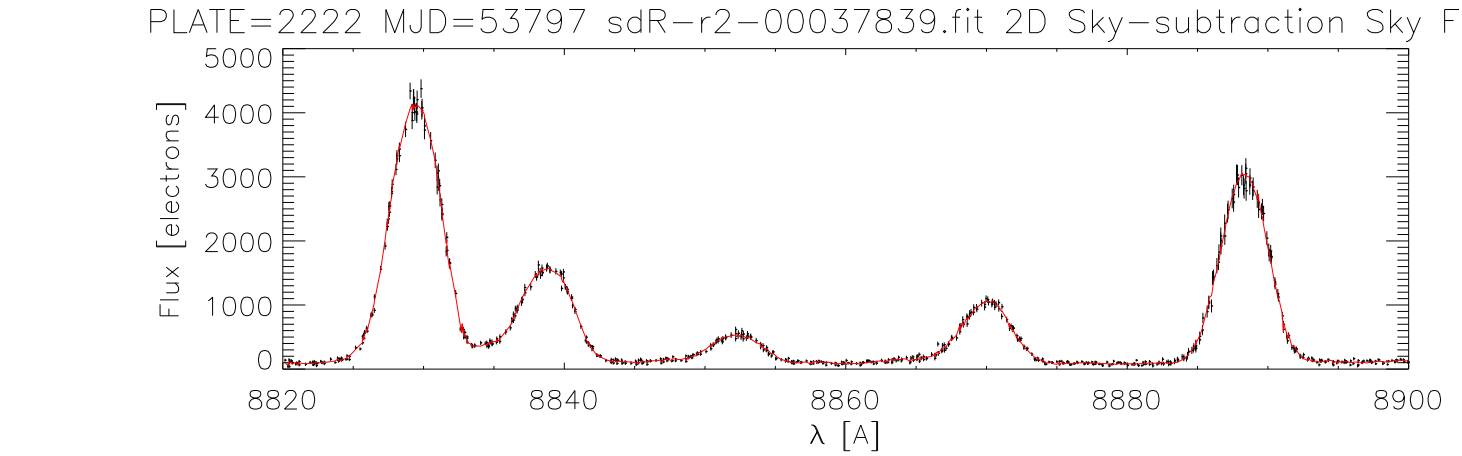

PLATE=2222 MJD=53797 sdR-r2-00037839.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

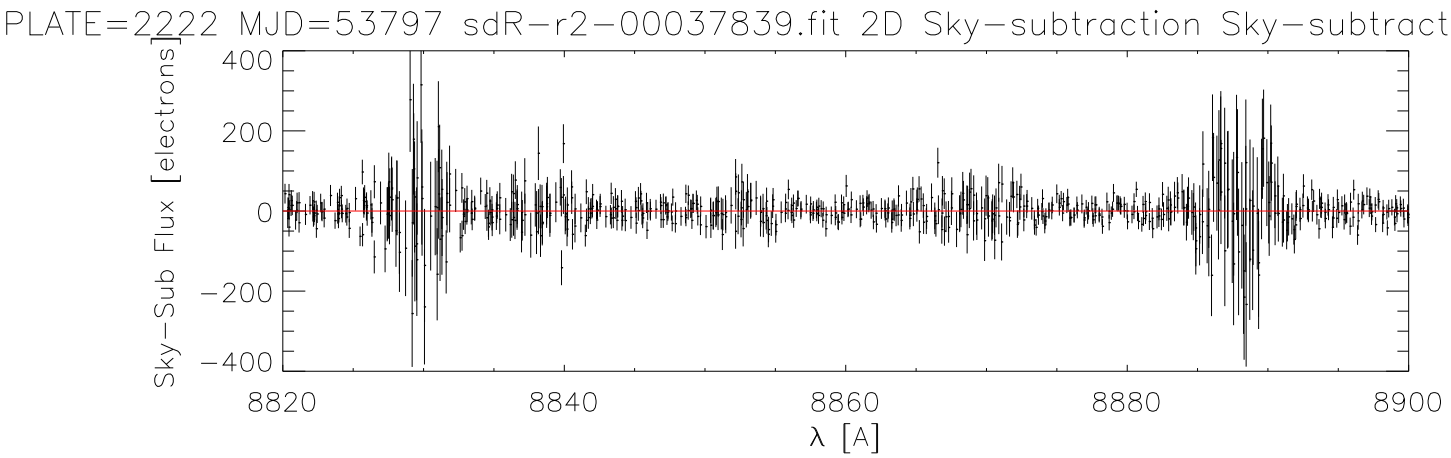

PLATE=2222 MJD=53797 sdR-r2-00037839.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

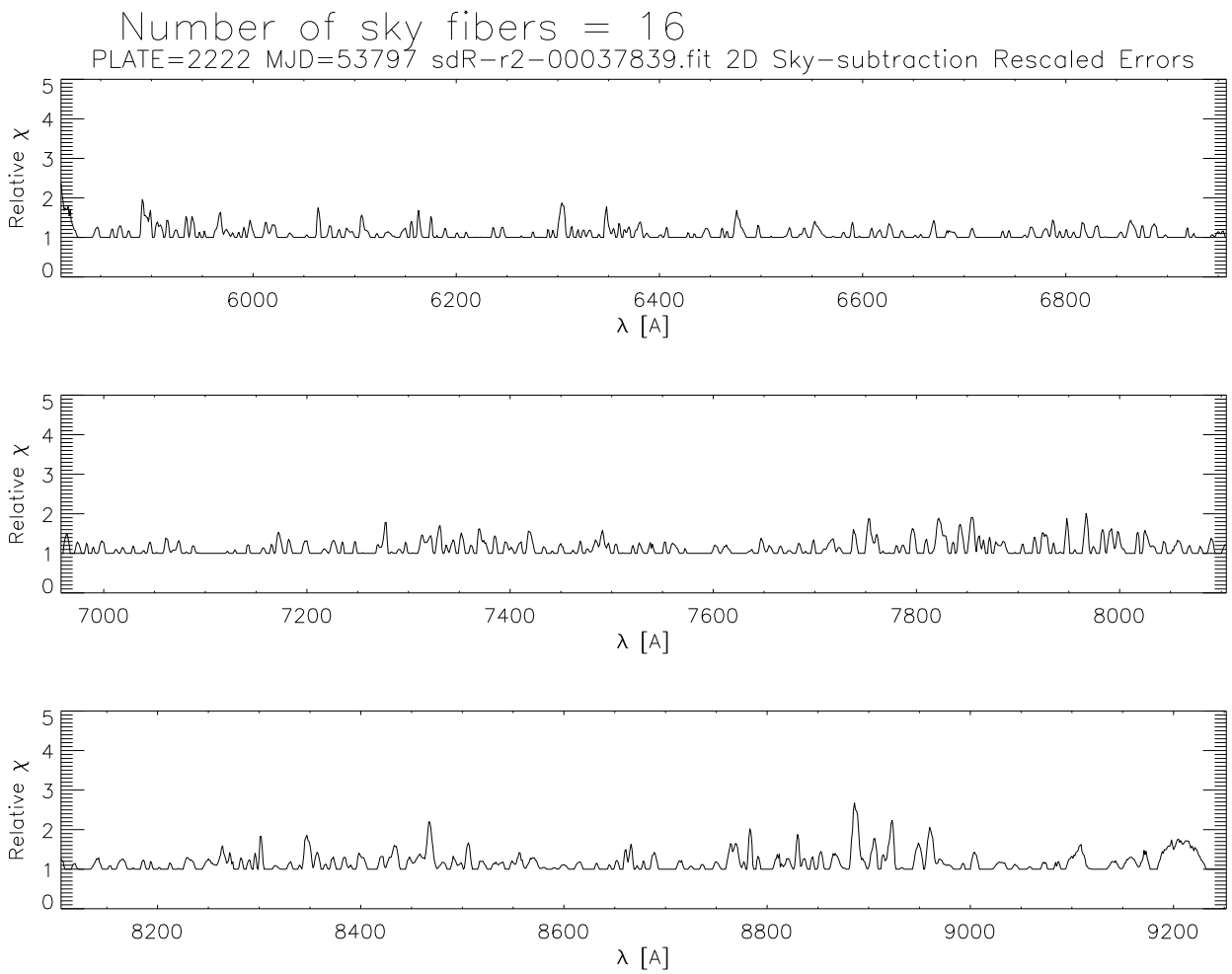

PLATE=2222 MJD=53797 sdR-r2-00037839.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

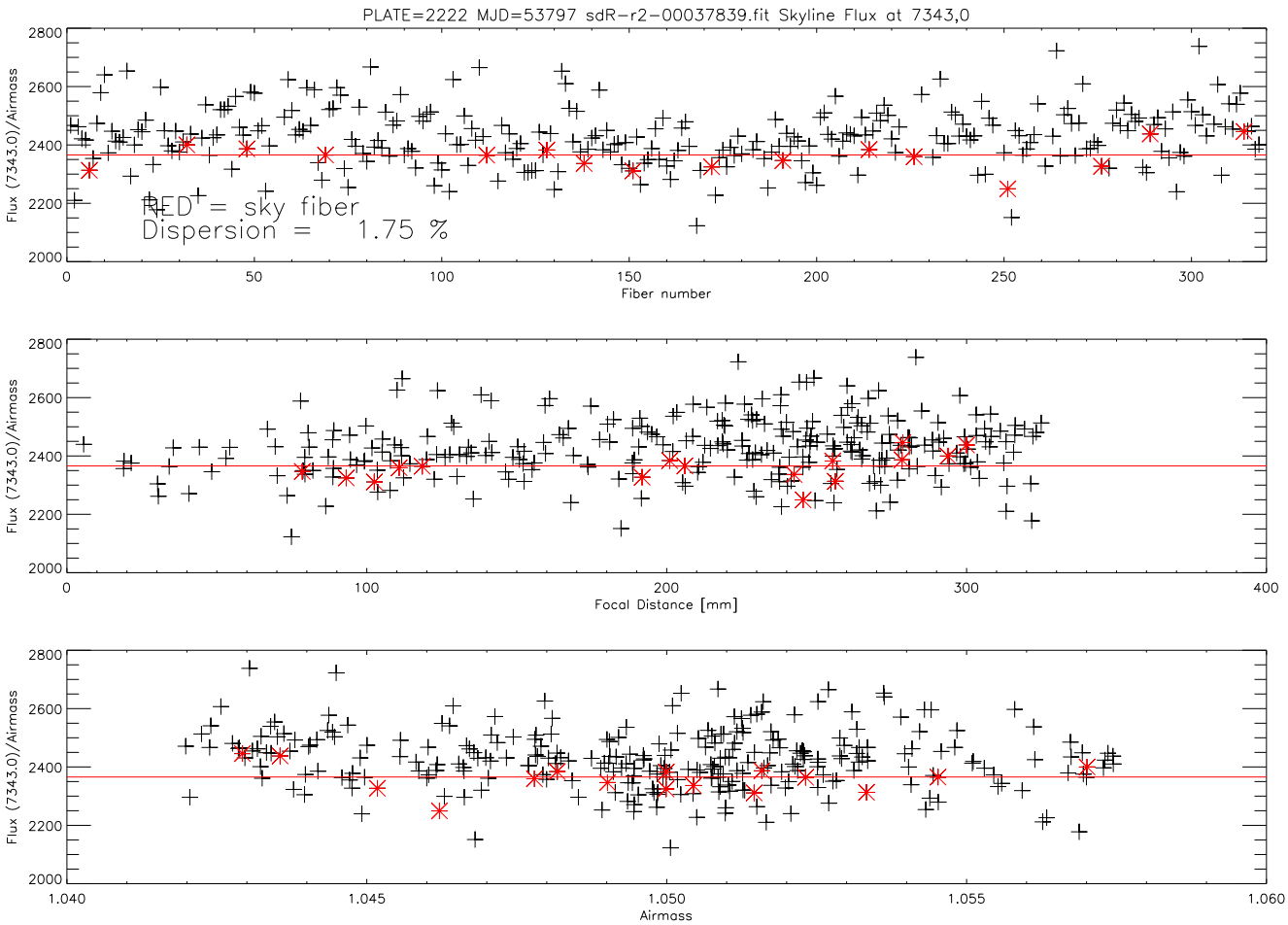

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-r2-00037839.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

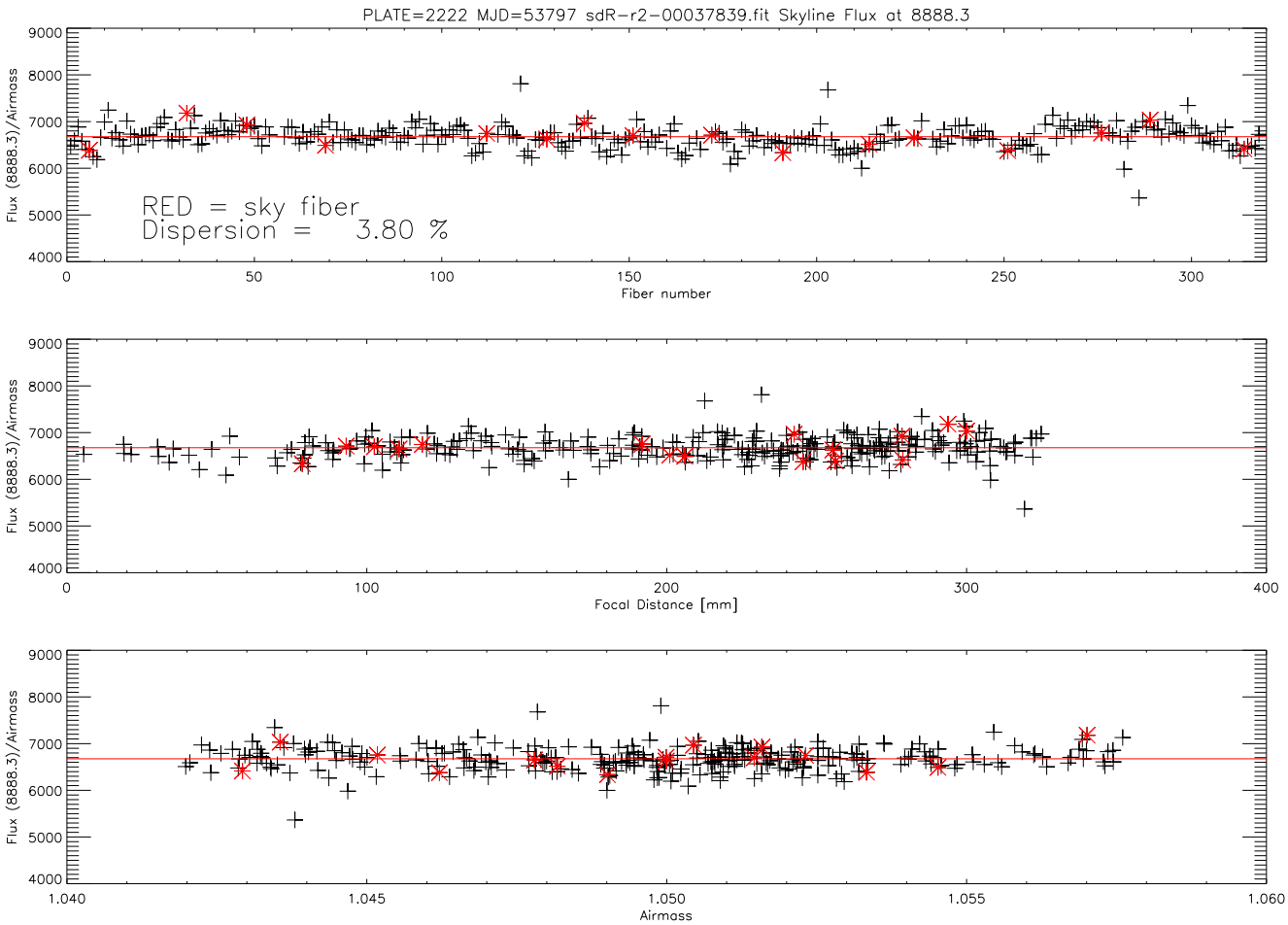

PLATE=2222 MJD=53797 sdR-r2-00037839.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

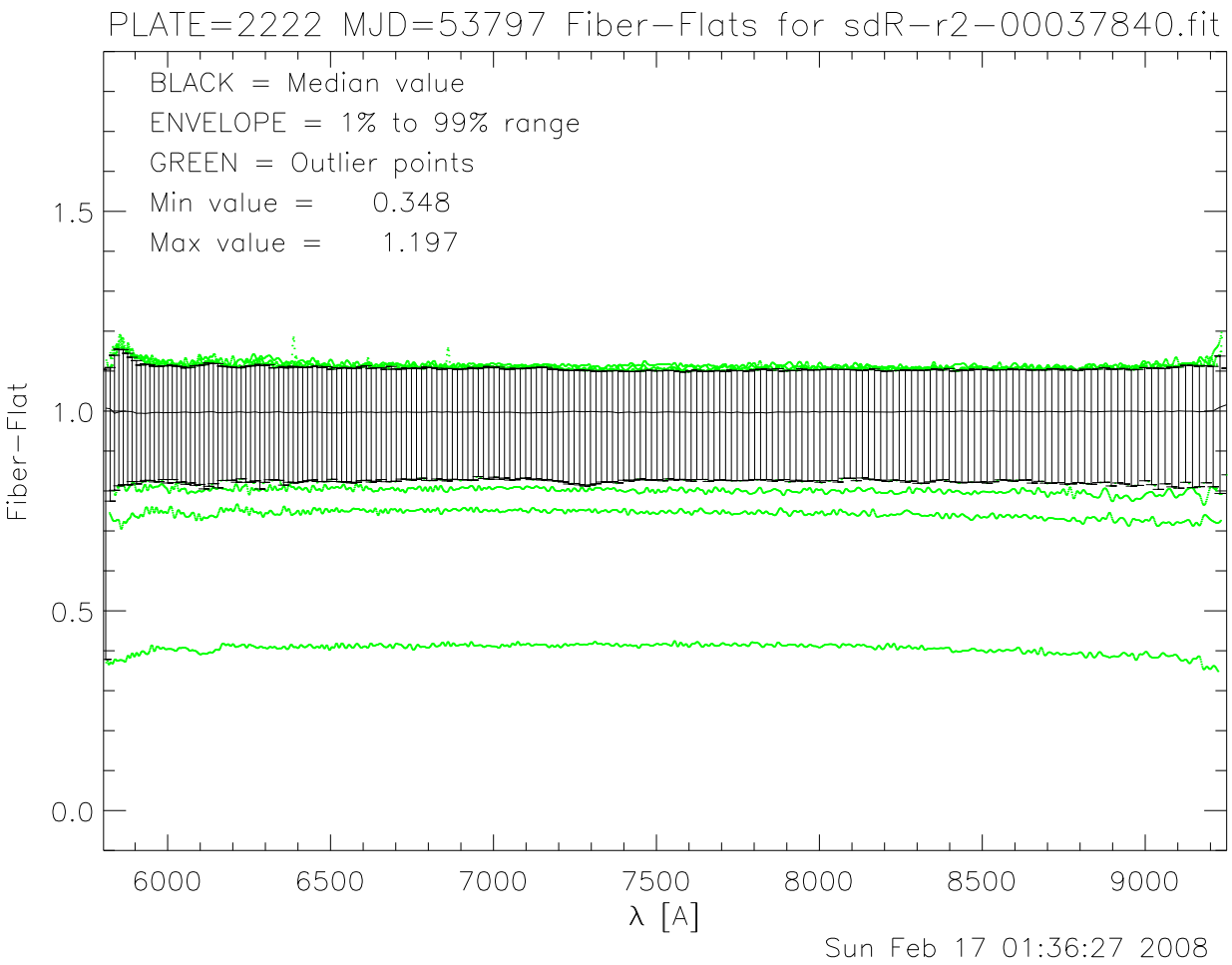

PLATE=2222 MJD=53797 sdR-r2-00037839.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

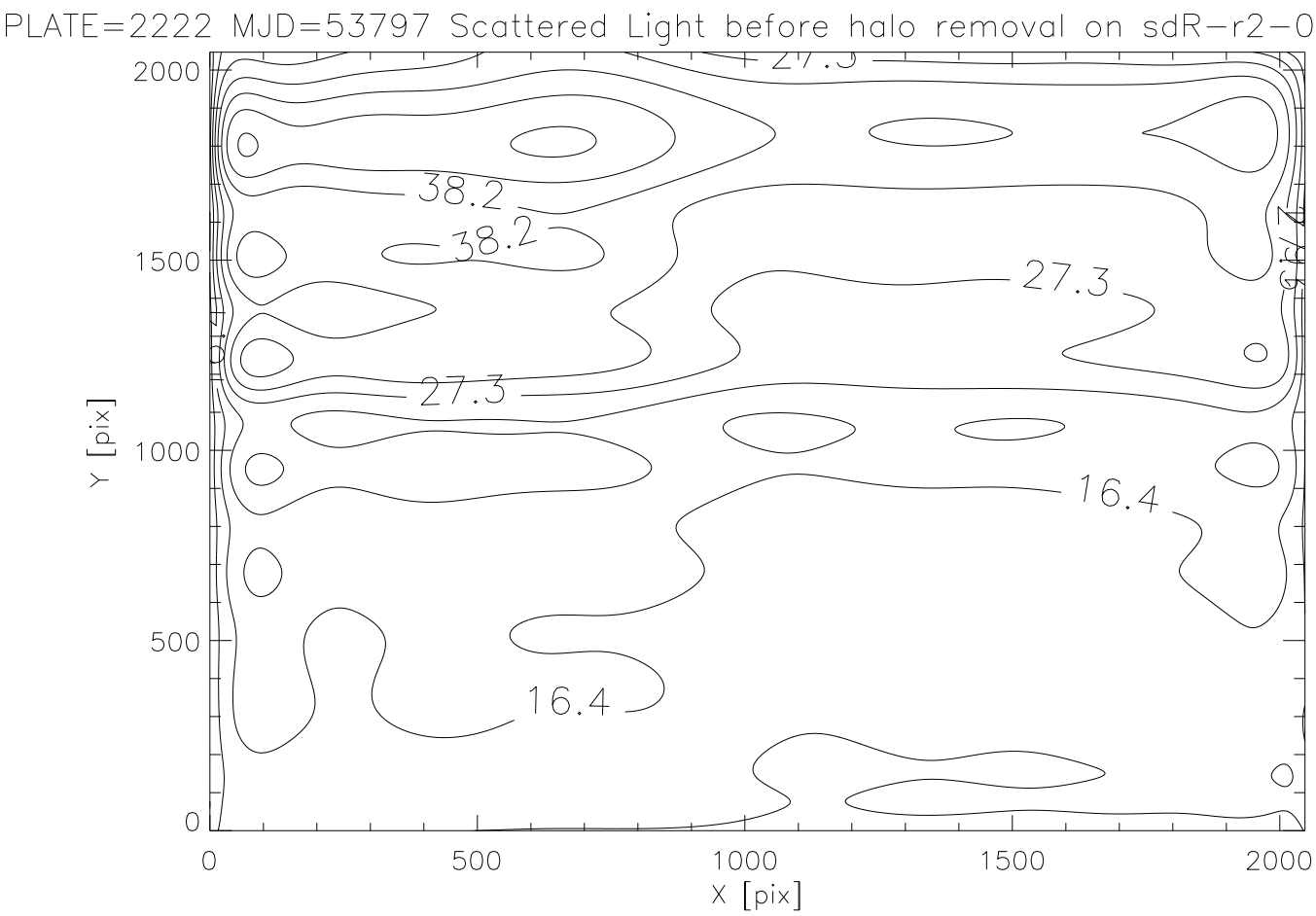

PLATE=2222 MJD=53797 sdR-r2-00037839.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

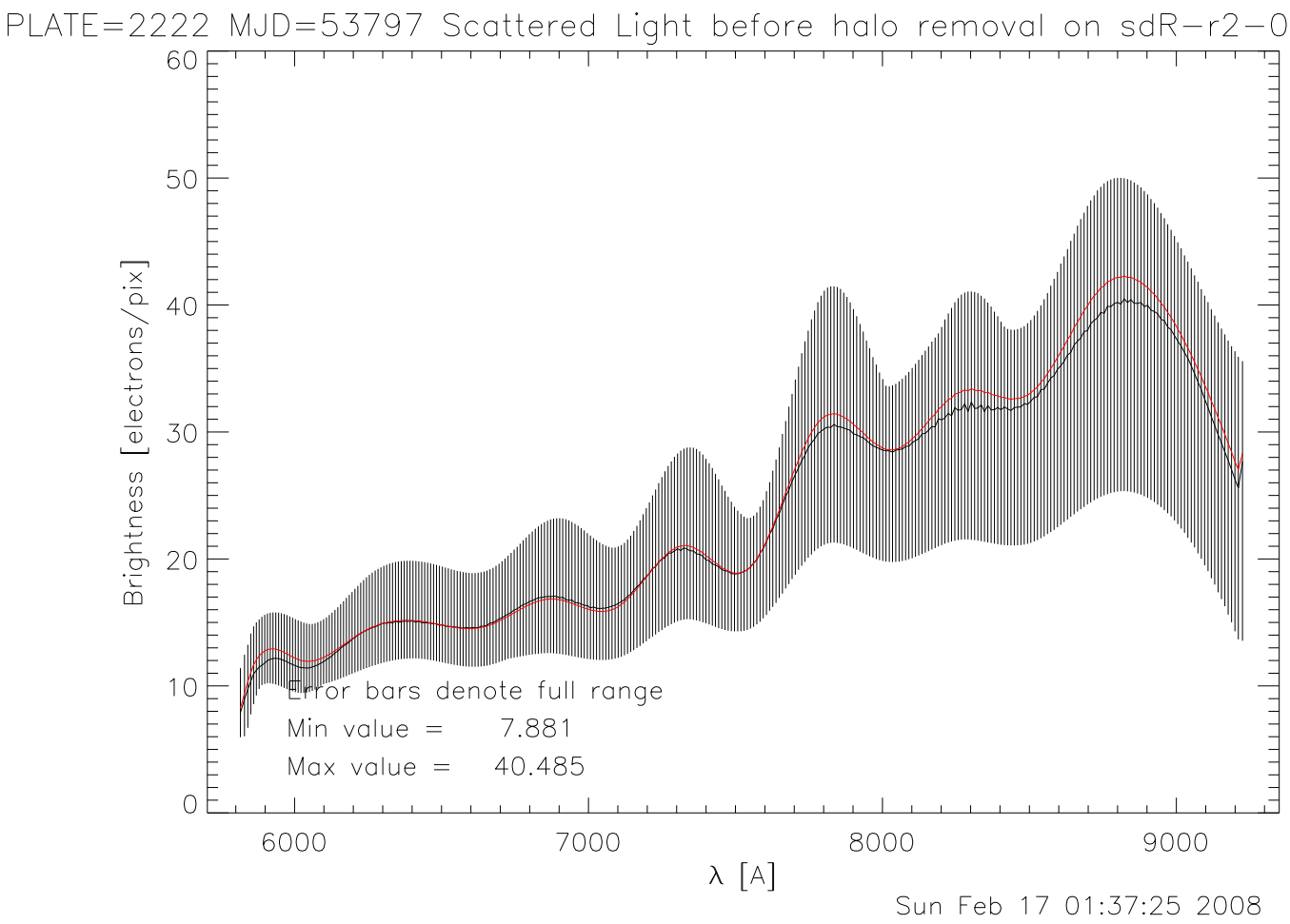

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-r2-00037839.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

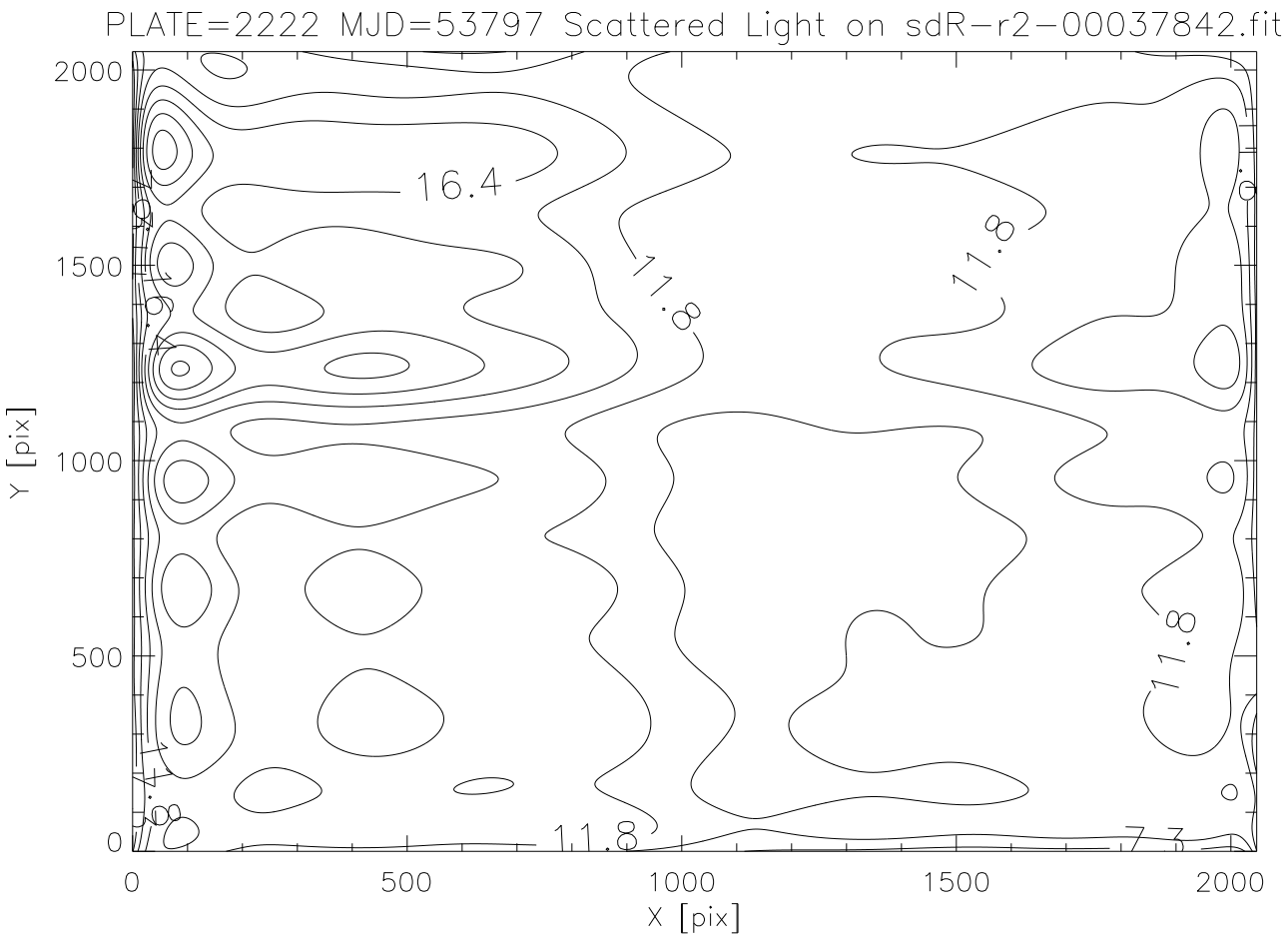

PLATE=2222 MJD=53797 sdR-r2-00037839.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.75 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

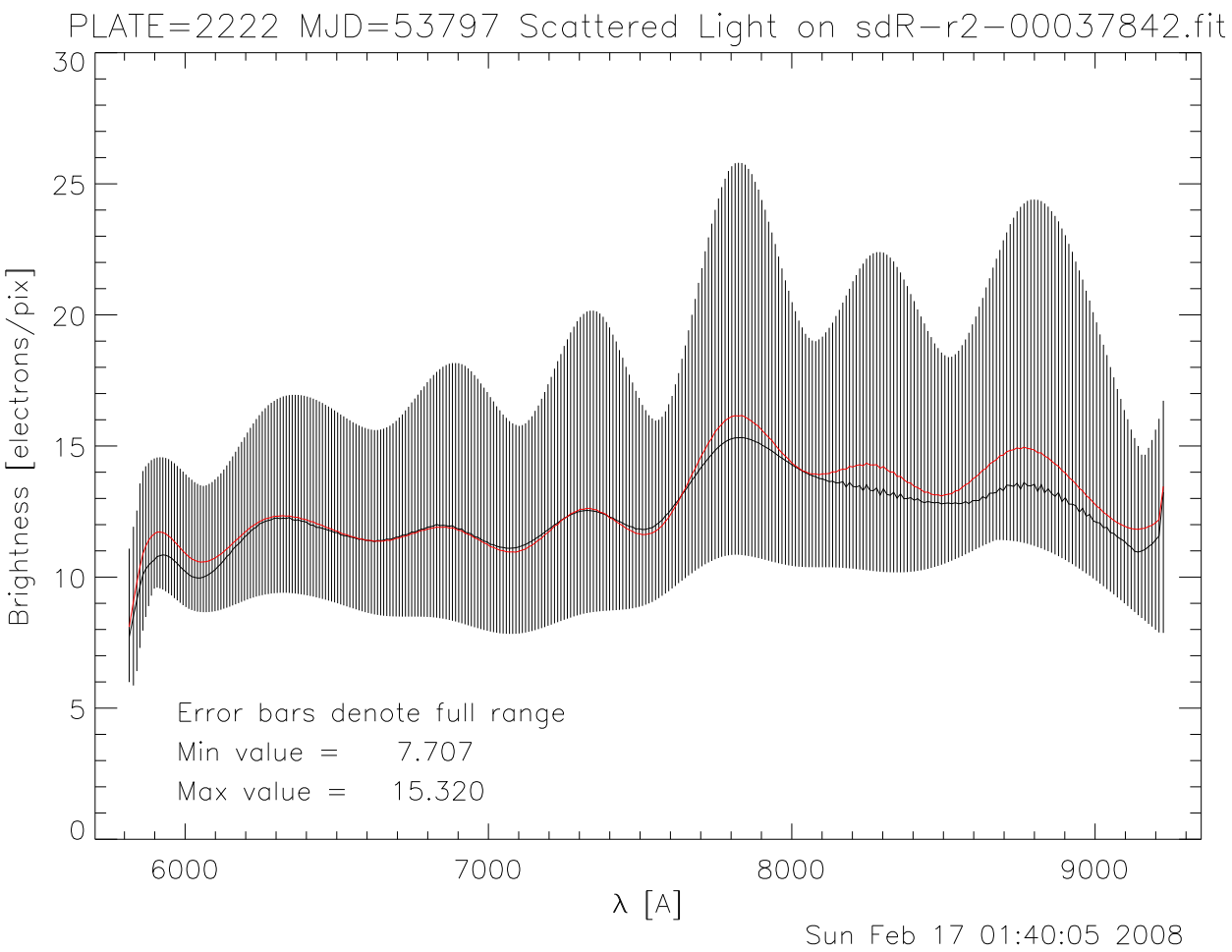

PLATE=2222 MJD=53797 sdR-r2-00037839.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.80 %
Fiber number
Focal Distance [mm]
Airmass

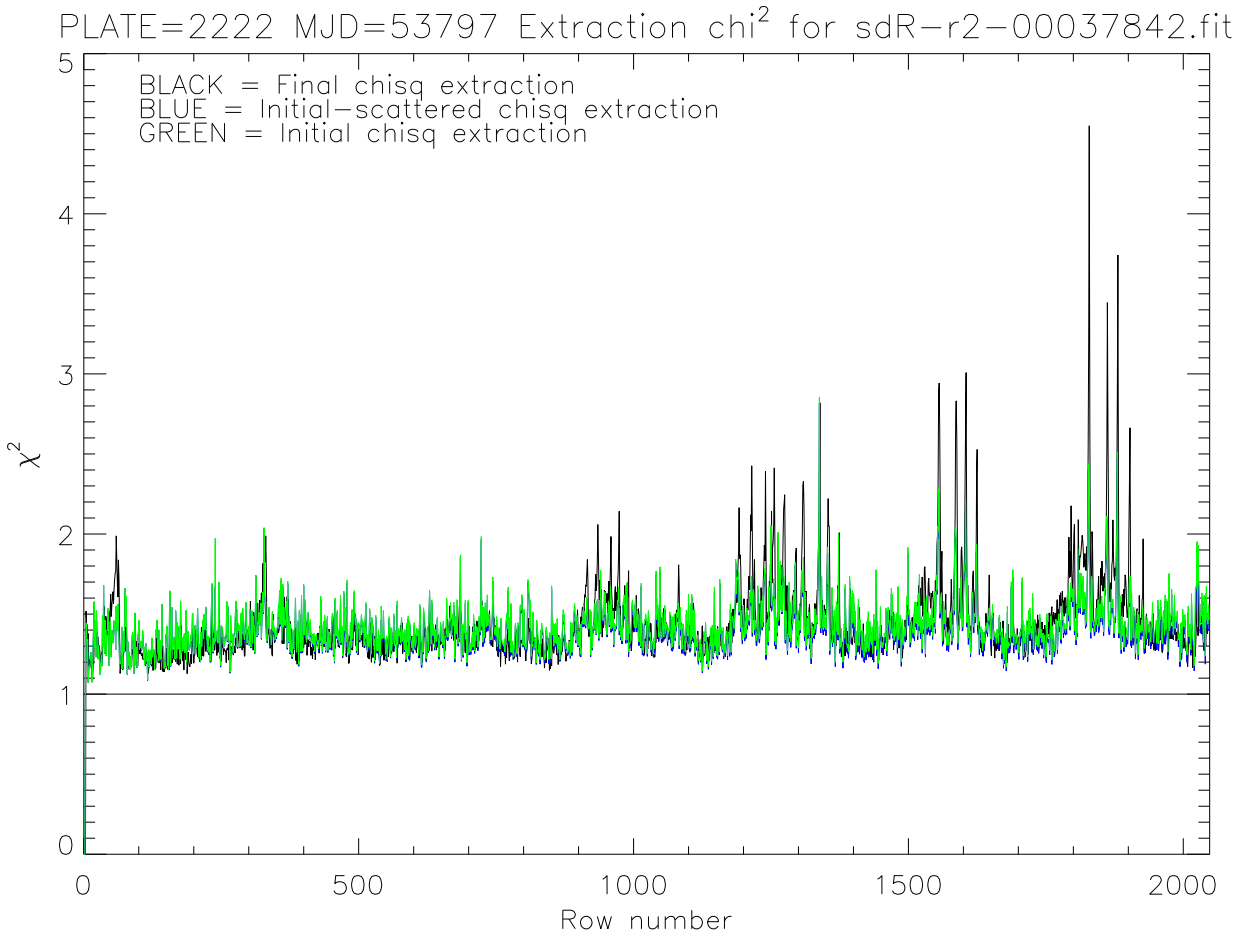

PLATE=2222 MJD=53797 Fiber−Flats for sdR−r2−00037840.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.348
Max value = 1.197
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 01:36:27 2008

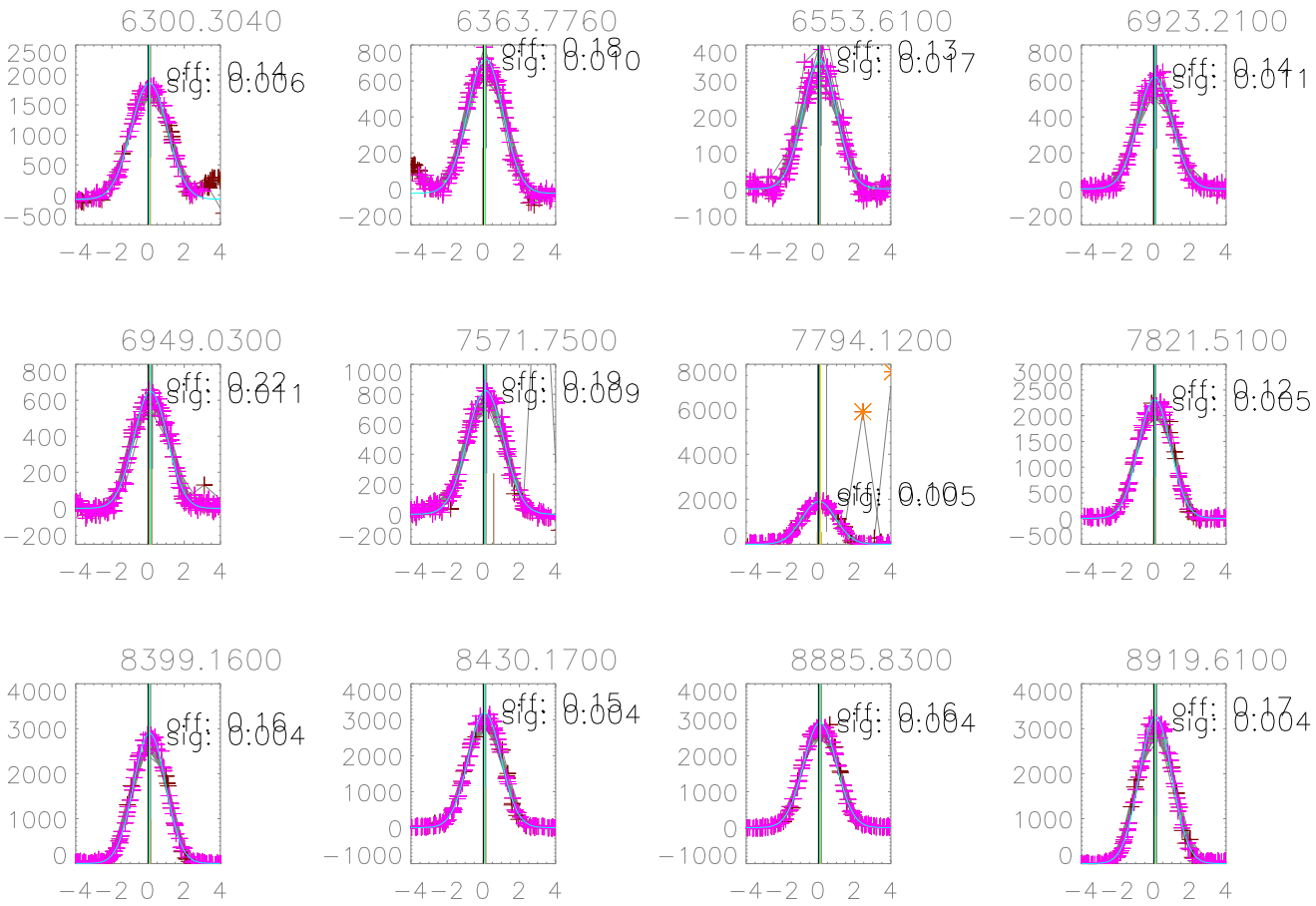

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r2-00037842.fi
38.2
38.2
27.3
27.3
16.4
16.4
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

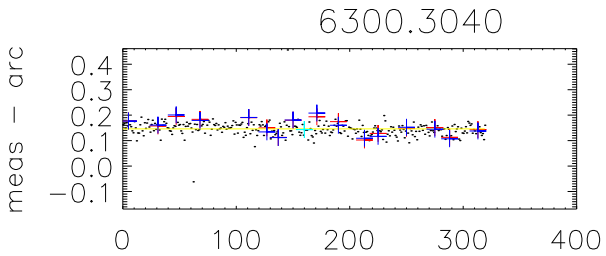

PLATE=2222 MJD=53797 Scattered Light before halo removal on sdR-r2-00037842.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.881
Max value = 40.485
Sun Feb 17 01:37:25 2008

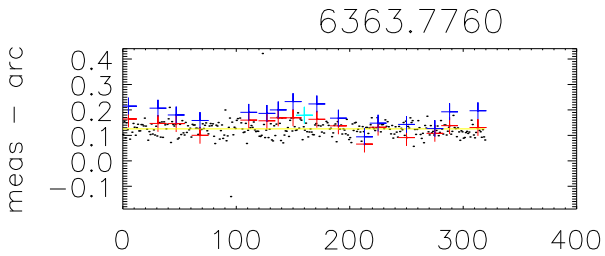

PLATE=2222 MJD=53797 Scattered Light on sdR-r2-00037842.fit
16.4
11.8
11.8
11.8
11.8
11.8
11.8
7.3
0
0
0
0
0
Y [pix]
X [pix]
0
500
1000
1500
2000

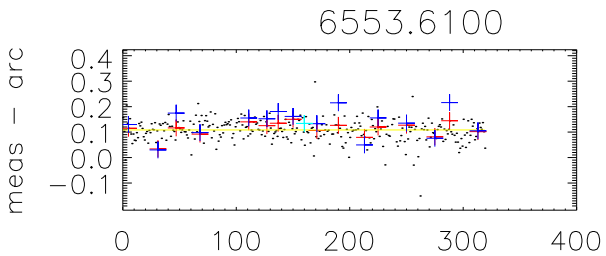

PLATE=2222 MJD=53797 Scattered Light on sdR-r2-00037842.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.707
Max value = 15.320
Sun Feb 17 01:40:05 2008

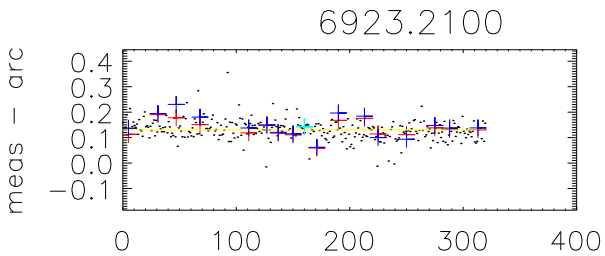

PLATE=2222 MJD=53797 Extraction chi^2 for sdR−r2−00037842.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

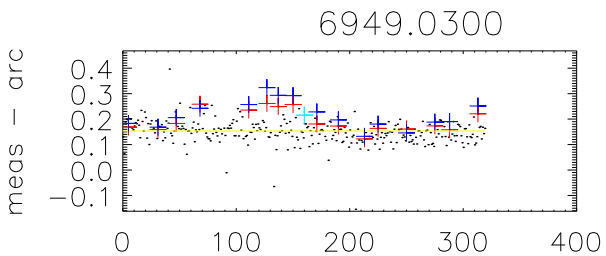

6300.3040
off: 0.14
sig: 0.006
6363.7760
off: 0.18
sig: 0.010
6553.6100
off: 0.13
sig: 0.017
6923.2100
off: 0.14
sig: 0.011
6949.0300
off: 0.22
sig: 0.011
7571.7500
off: 0.18
sig: 0.009
7794.1200
off: 0.005
sig: 0.005
7821.5100
off: 0.12
sig: 0.005
8399.1600
off: 0.16
sig: 0.004
8430.1700
off: 0.15
sig: 0.004
8885.8300
off: 0.16
sig: 0.004
8919.6100
off: 0.17
sig: 0.004

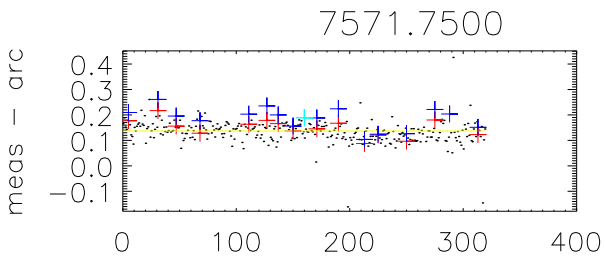

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

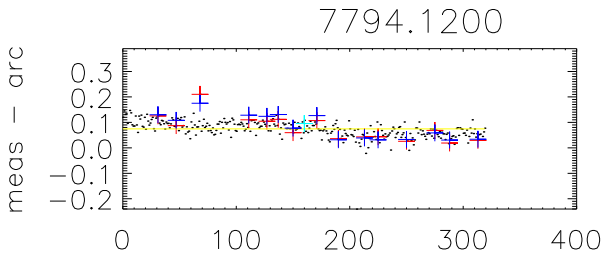

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

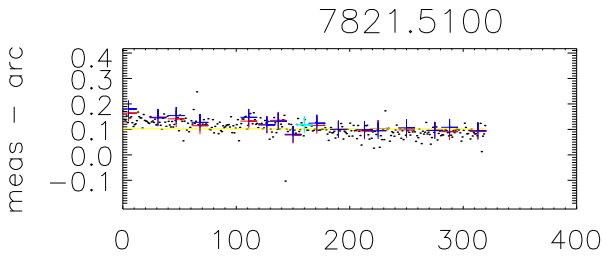

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

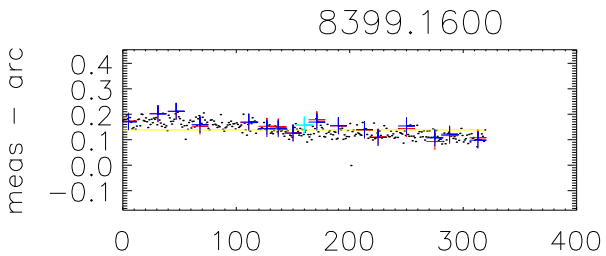

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

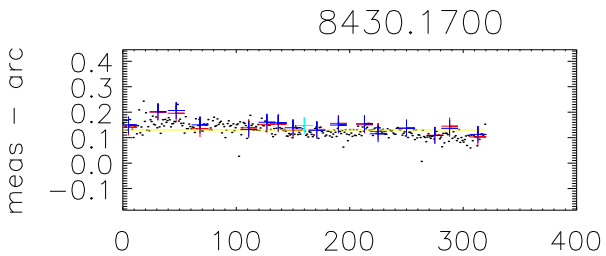

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

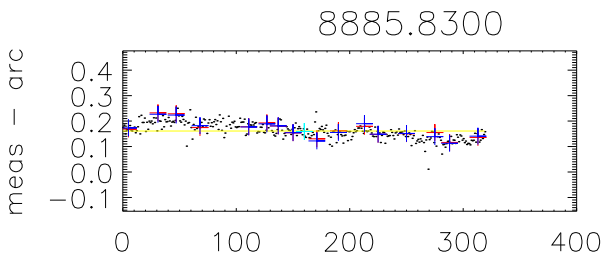

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

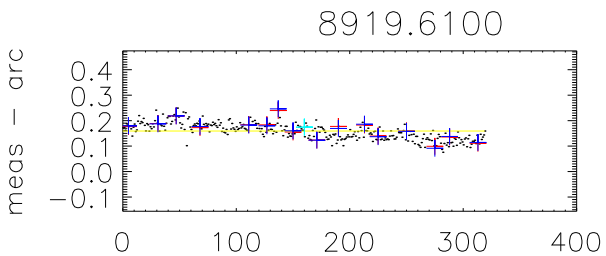

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

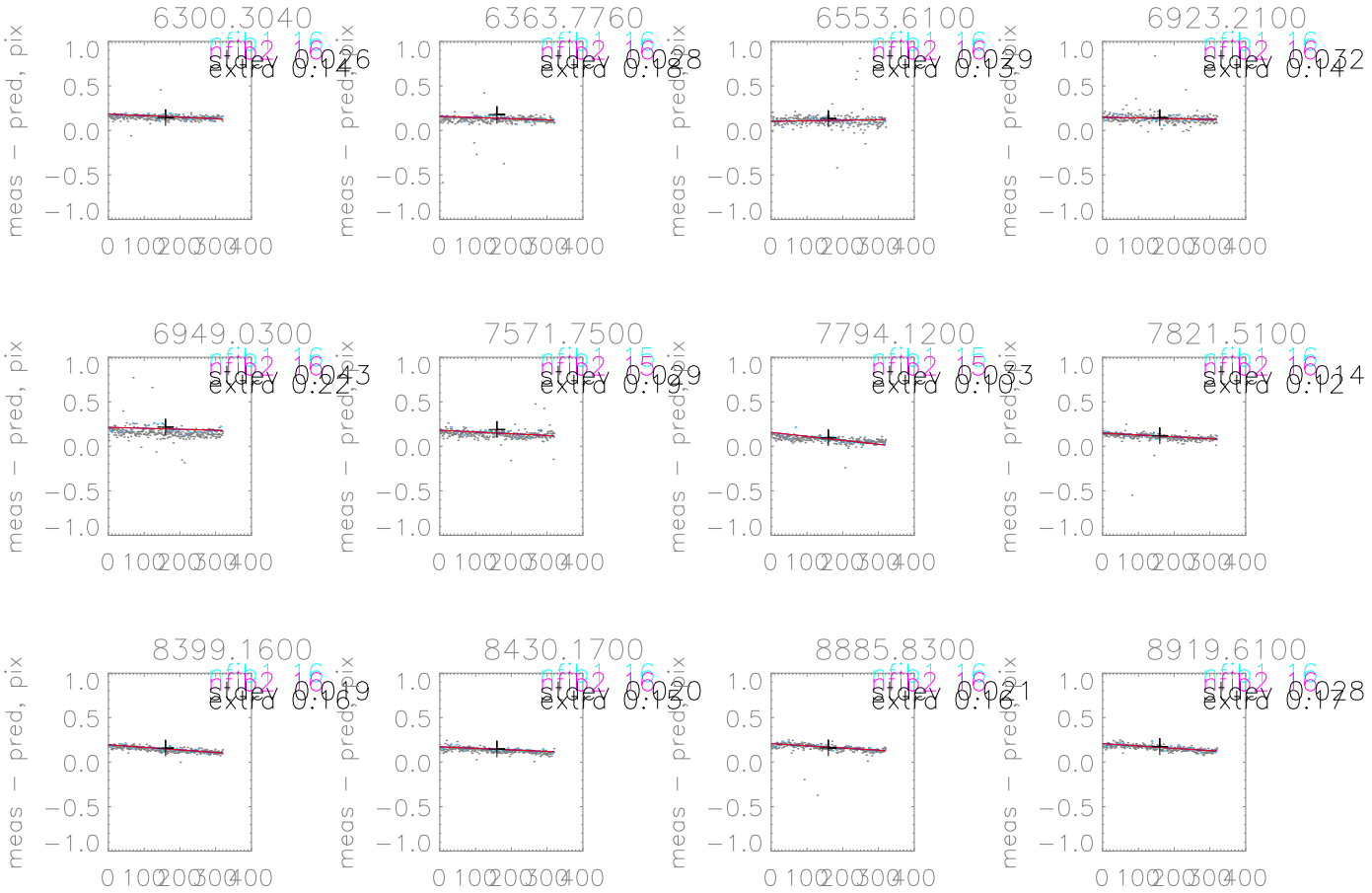

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

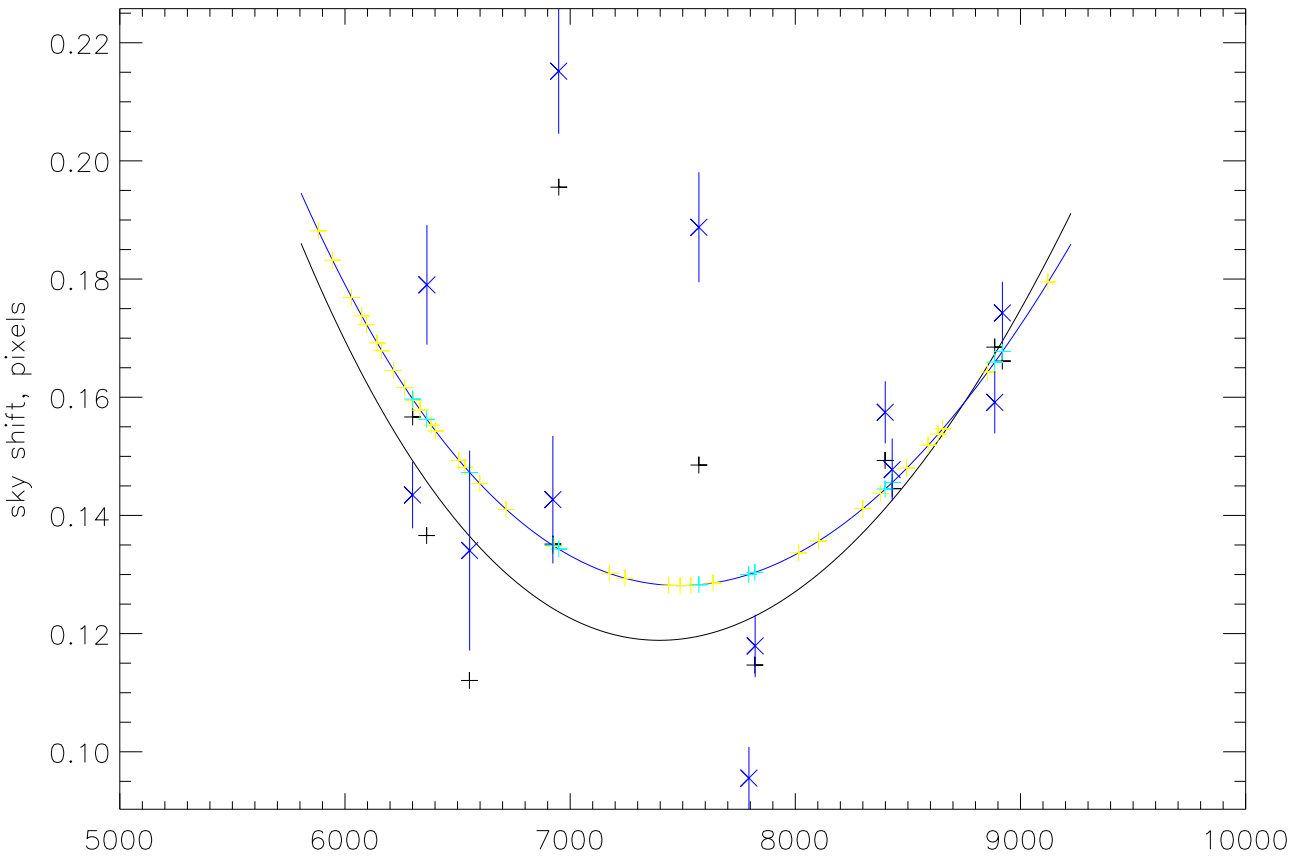

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

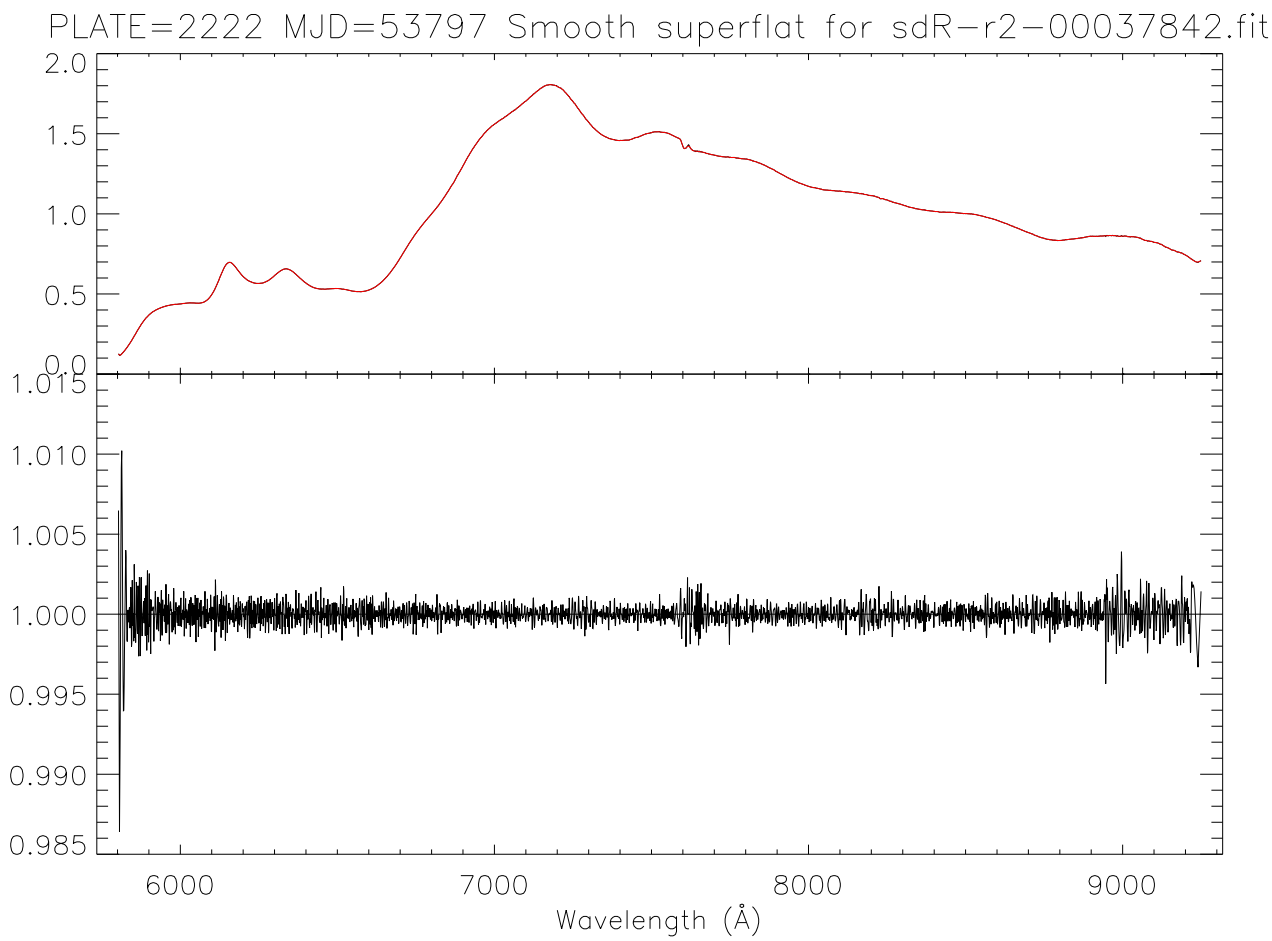

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

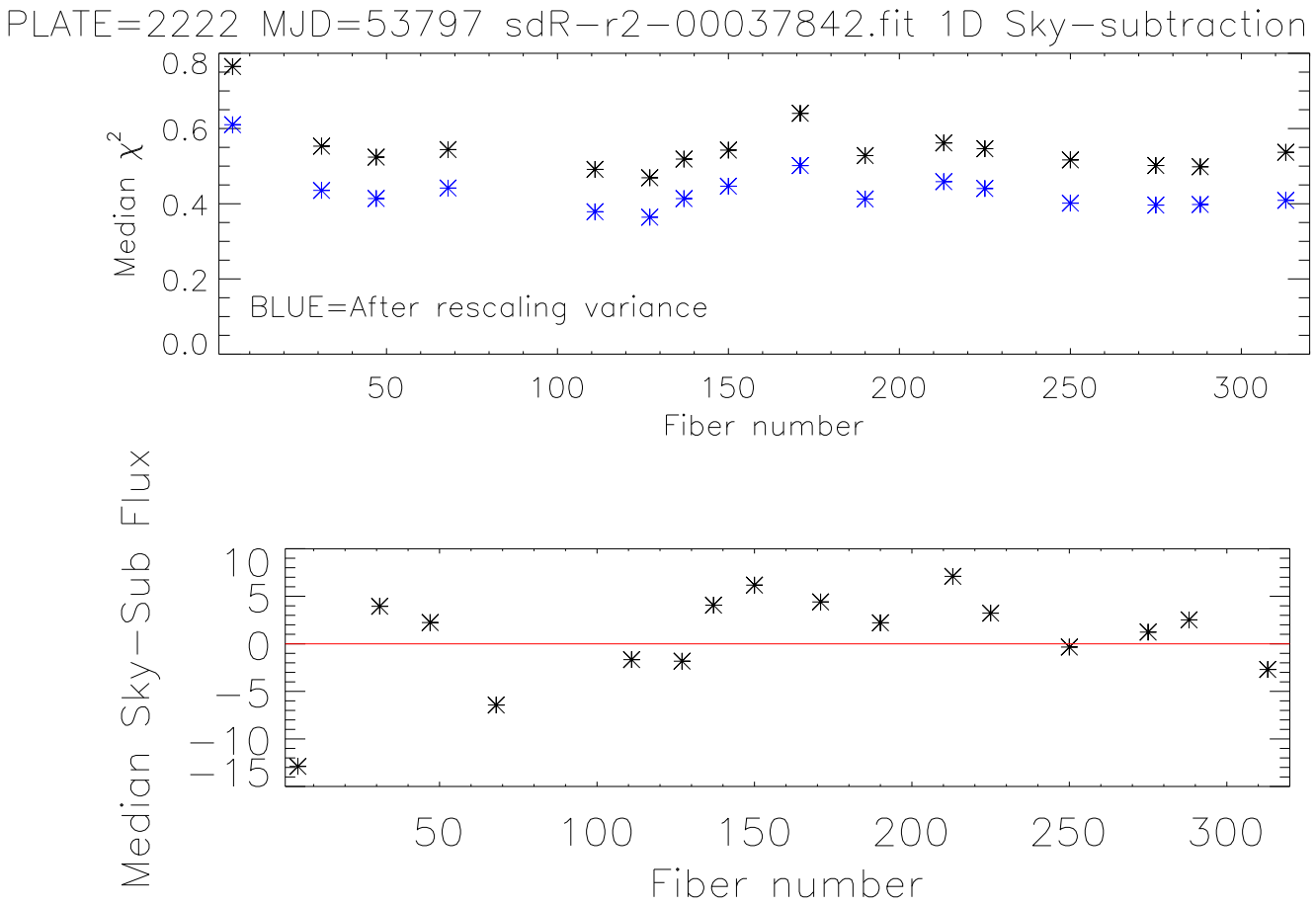

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

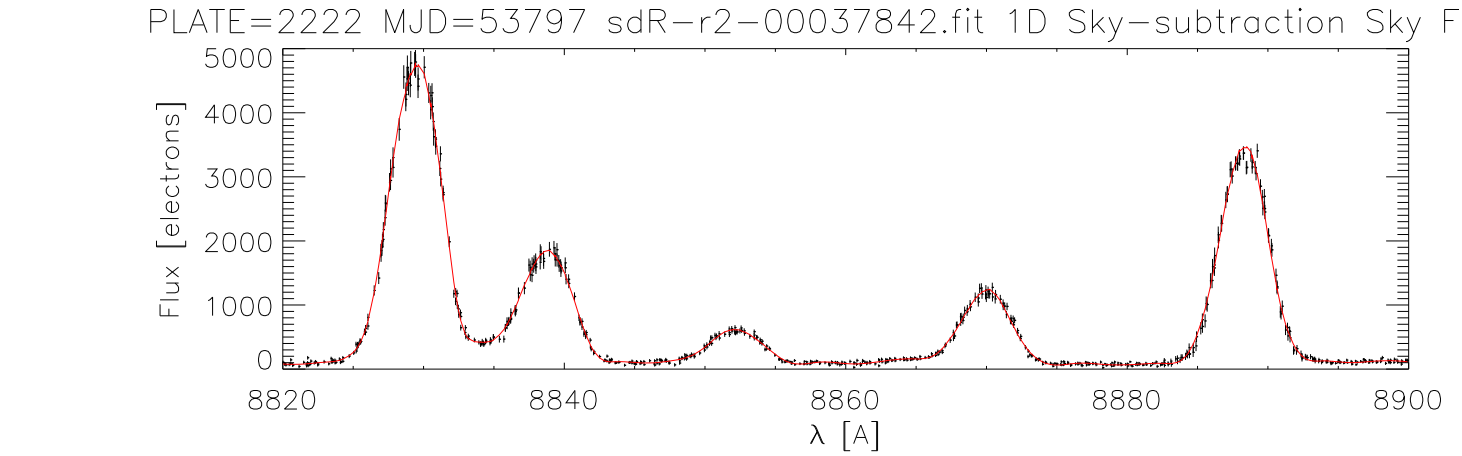

6300.3040
stdev 0.026
extra 0.14
6363.7760
stdev 0.028
extra 0.18
6553.6100
stdev 0.029
extra 0.13
6923.2100
stdev 0.032
extra 0.14
6949.0300
stdev 0.043
extra 0.22
7571.7500
stdev 0.029
extra 0.14
7794.1200
stdev 0.033
extra 0.10
7821.5100
stdev 0.014
extra 0.12
8399.1600
stdev 0.049
extra 0.16
8430.1700
stdev 0.020
extra 0.13
8885.8300
stdev 0.021
extra 0.16
8919.6100
stdev 0.028
extra 0.17
meas − pred, pix

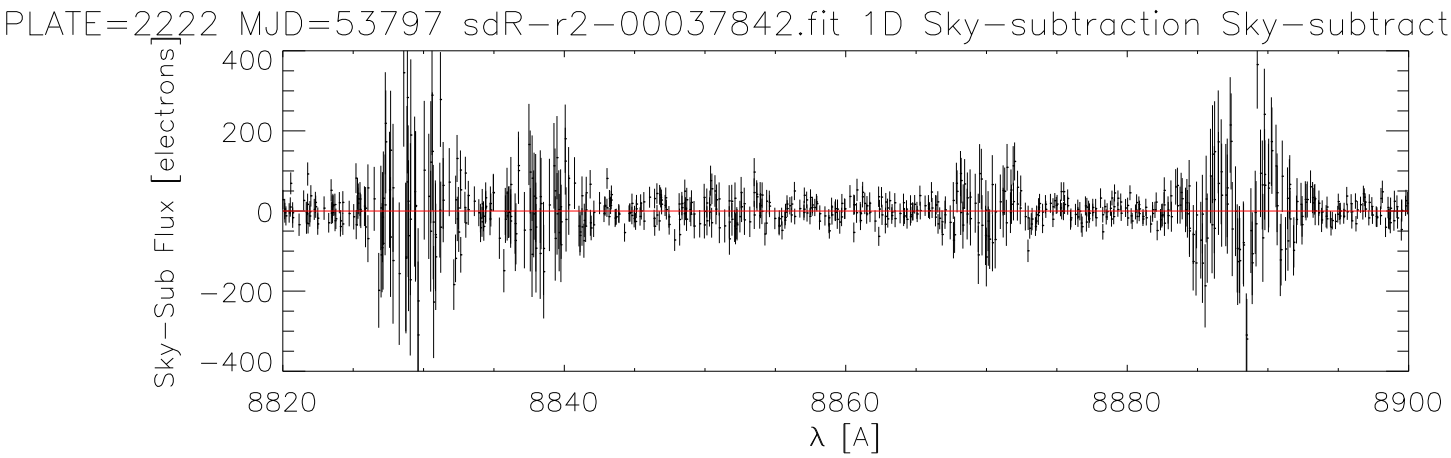

sky shift, pixels
0.22
0.20
0.18
0.16
0.14
0.12
0.10
5000
6000
7000
8000
9000
10000

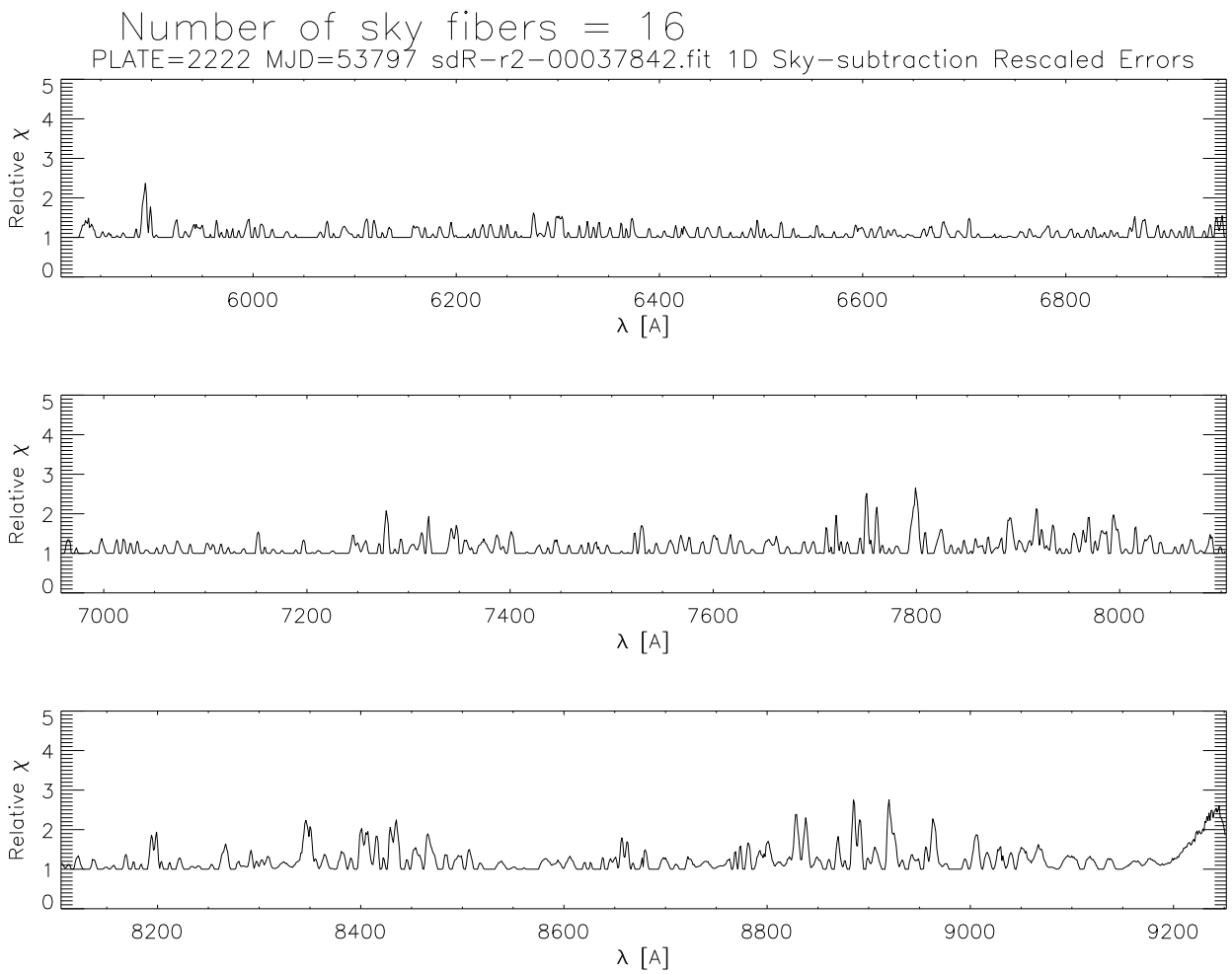
es= −0.0000

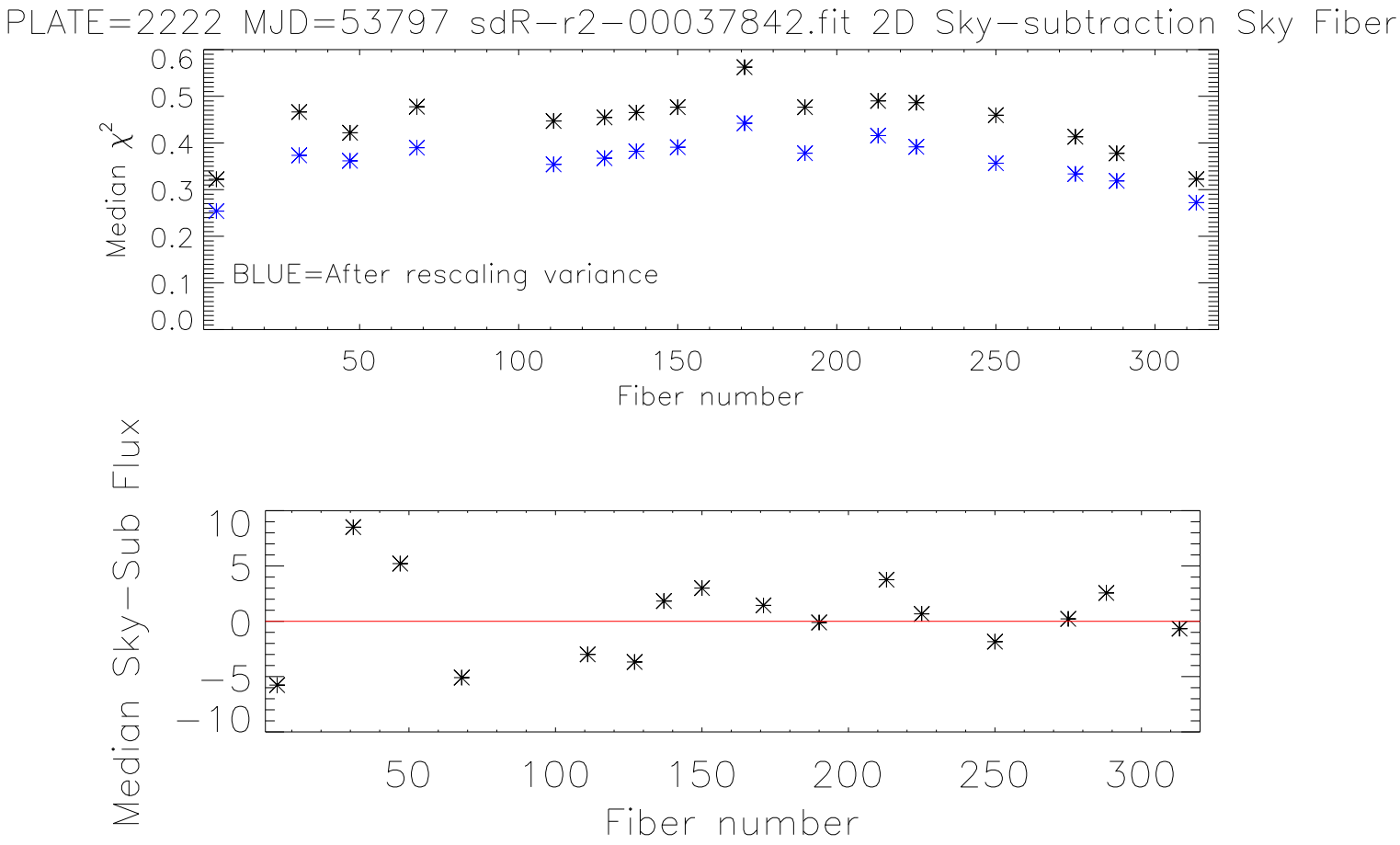

PLATE=2222 MJD=53797 Smooth superflat for sdR−r2−00037842.fit
2.0
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
6000
7000
8000
9000
Wavelength (Å)

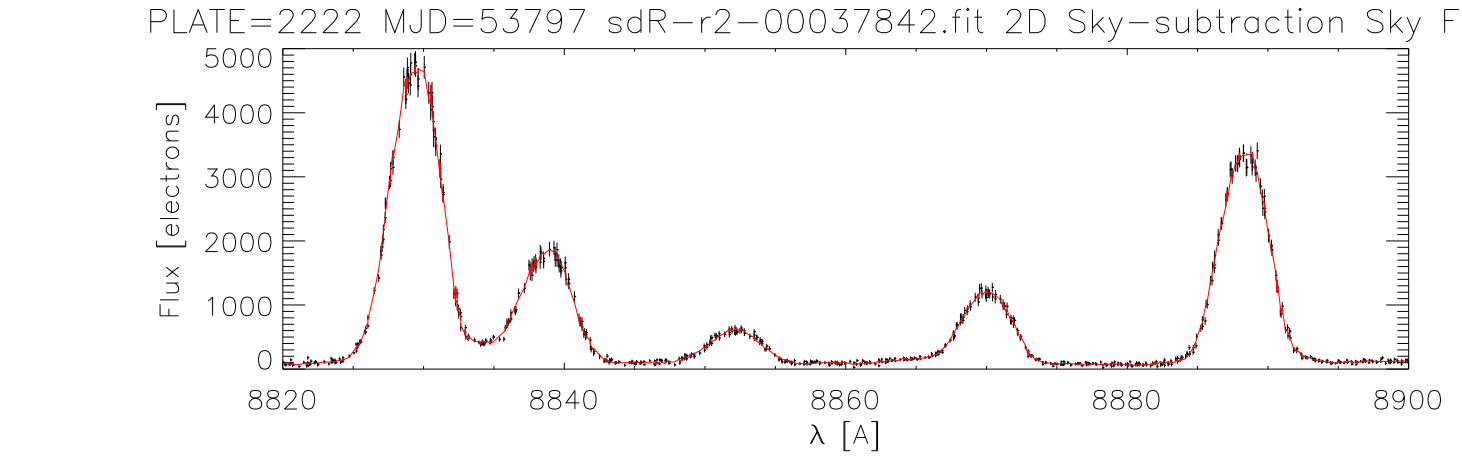

PLATE=2222 MJD=53797 sdR-r2-00037842.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

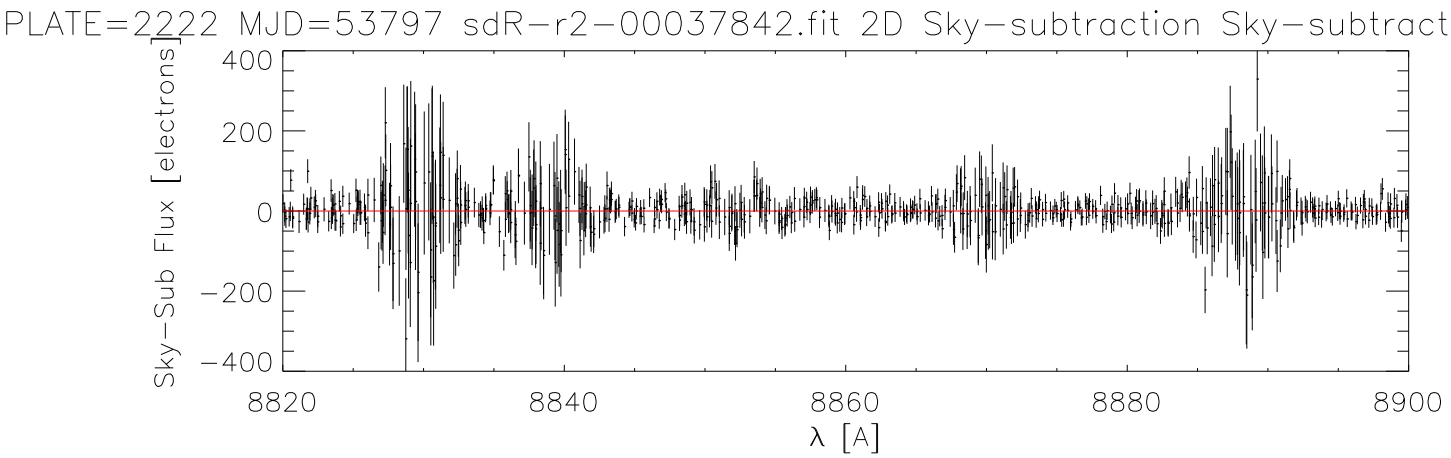

PLATE=2222 MJD=53797 sdR-r2-00037842.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

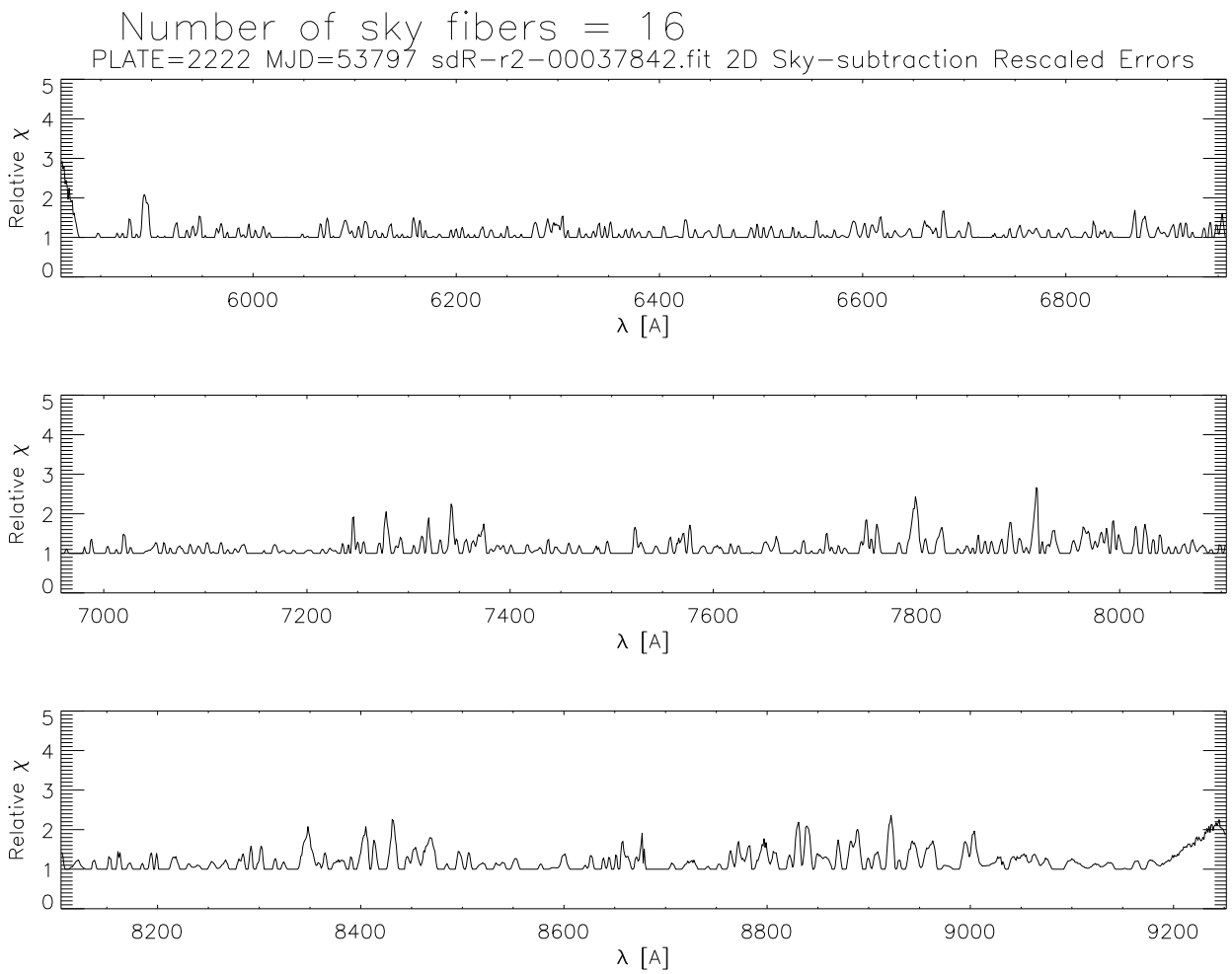

PLATE=2222 MJD=53797 sdR-r2-00037842.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

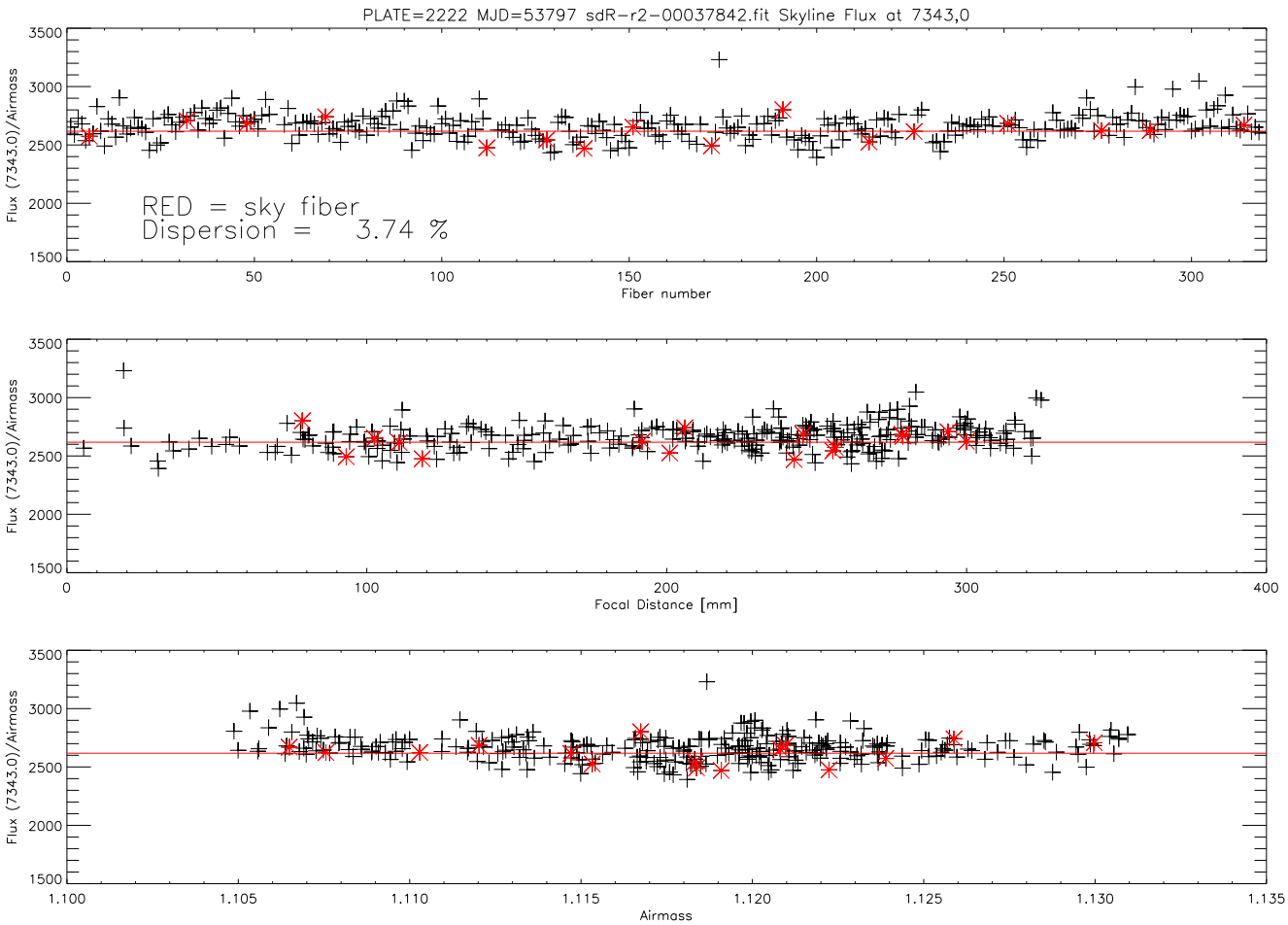

Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-r2-00037842.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

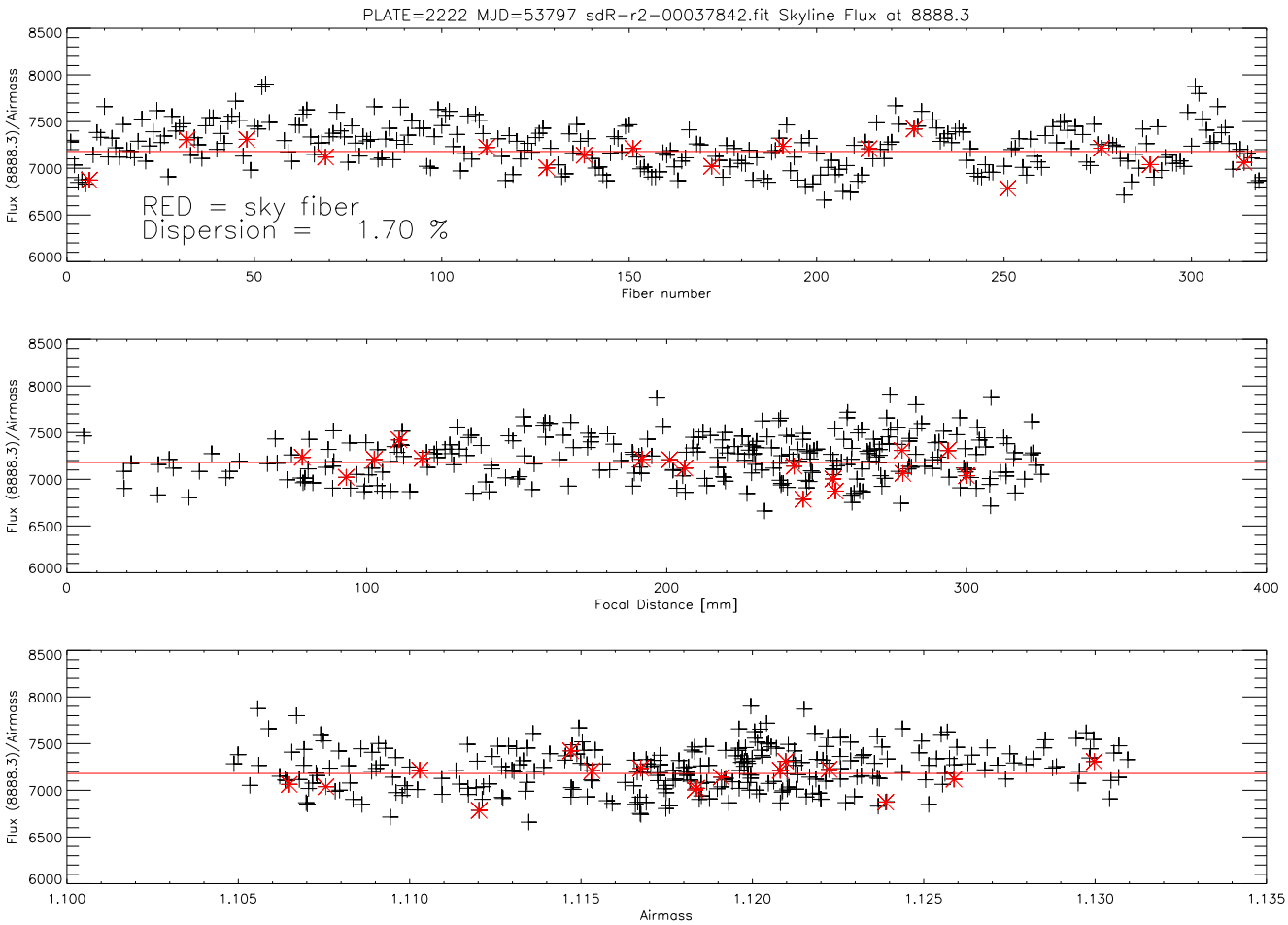

PLATE=2222 MJD=53797 sdR-r2-00037842.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number


PLATE=2222 MJD=53797 sdR-r2-00037842.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=2222 MJD=53797 sdR-r2-00037842.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=2222 MJD=53797 sdR-r2-00037842.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=2222 MJD=53797 sdR-r2-00037842.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.74 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=2222 MJD=53797 sdR-r2-00037842.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.70 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass