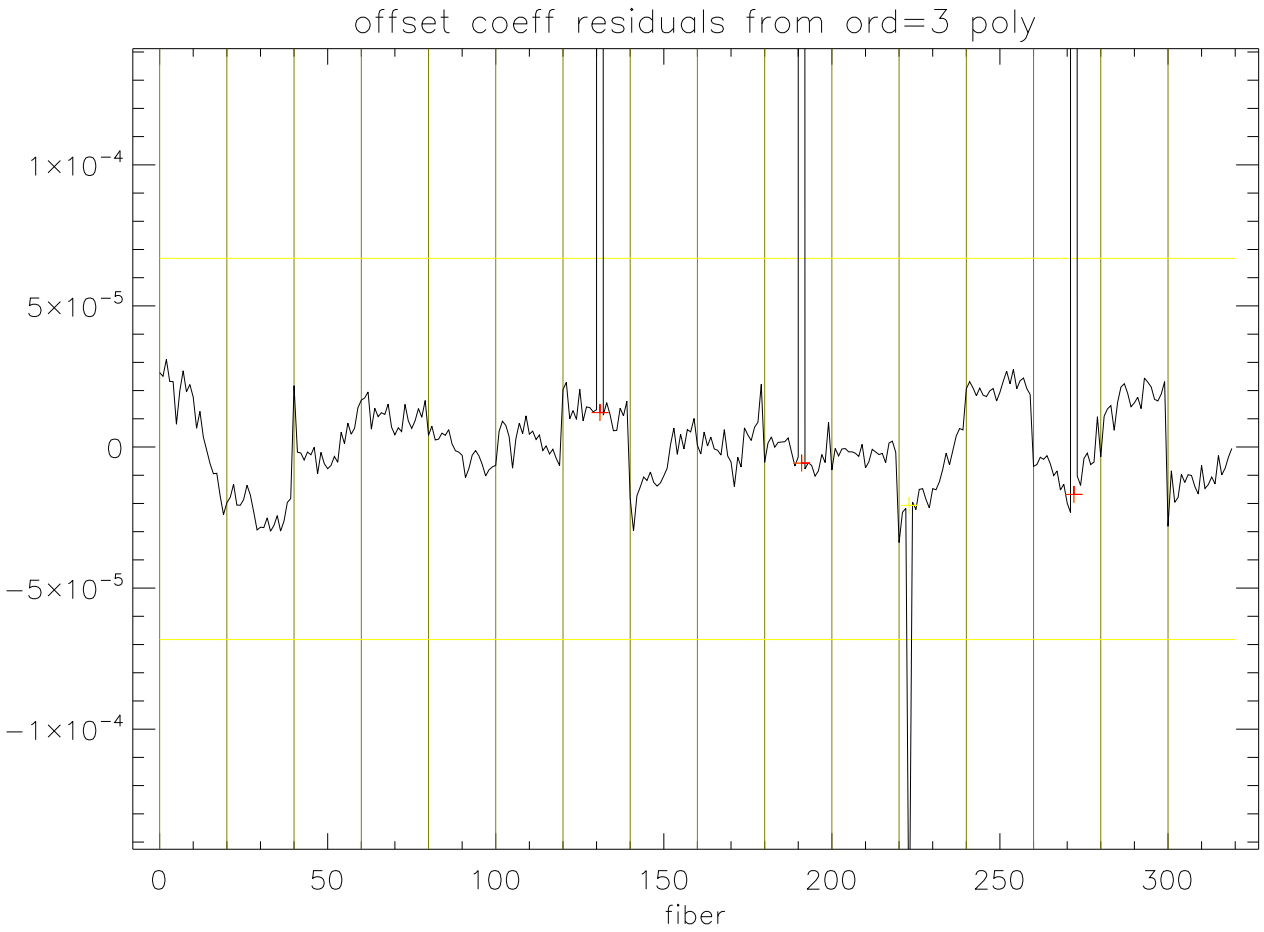
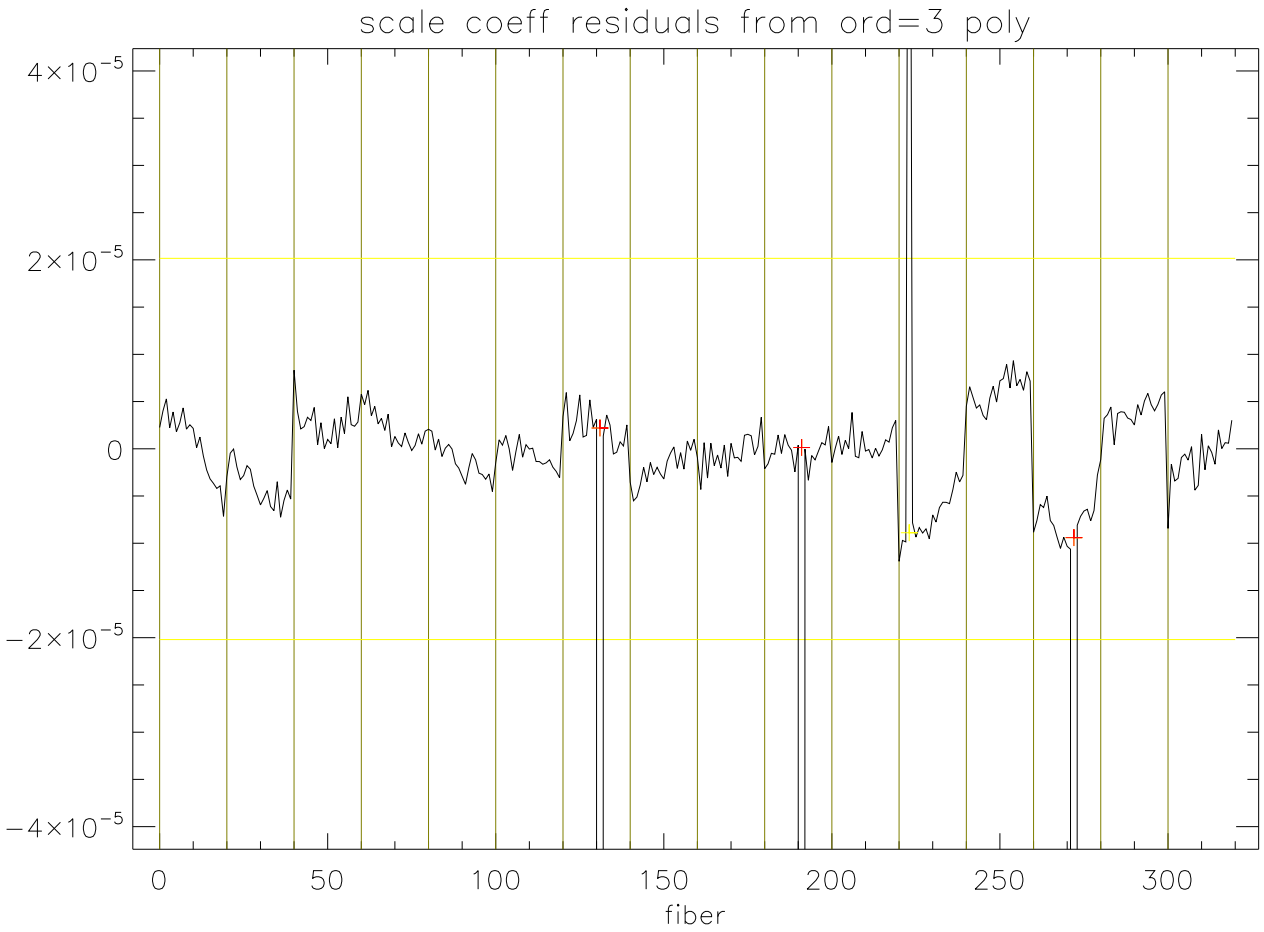
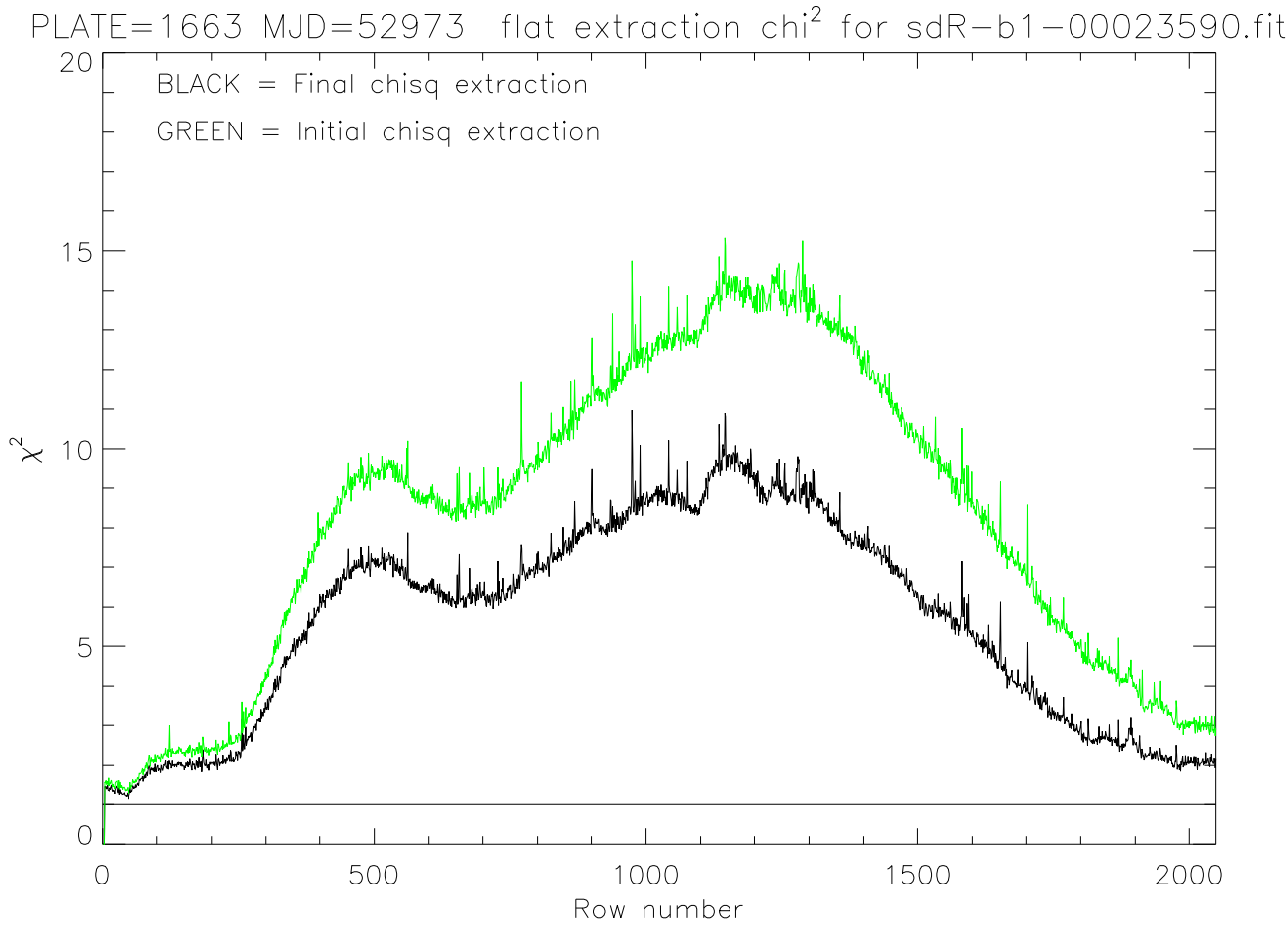
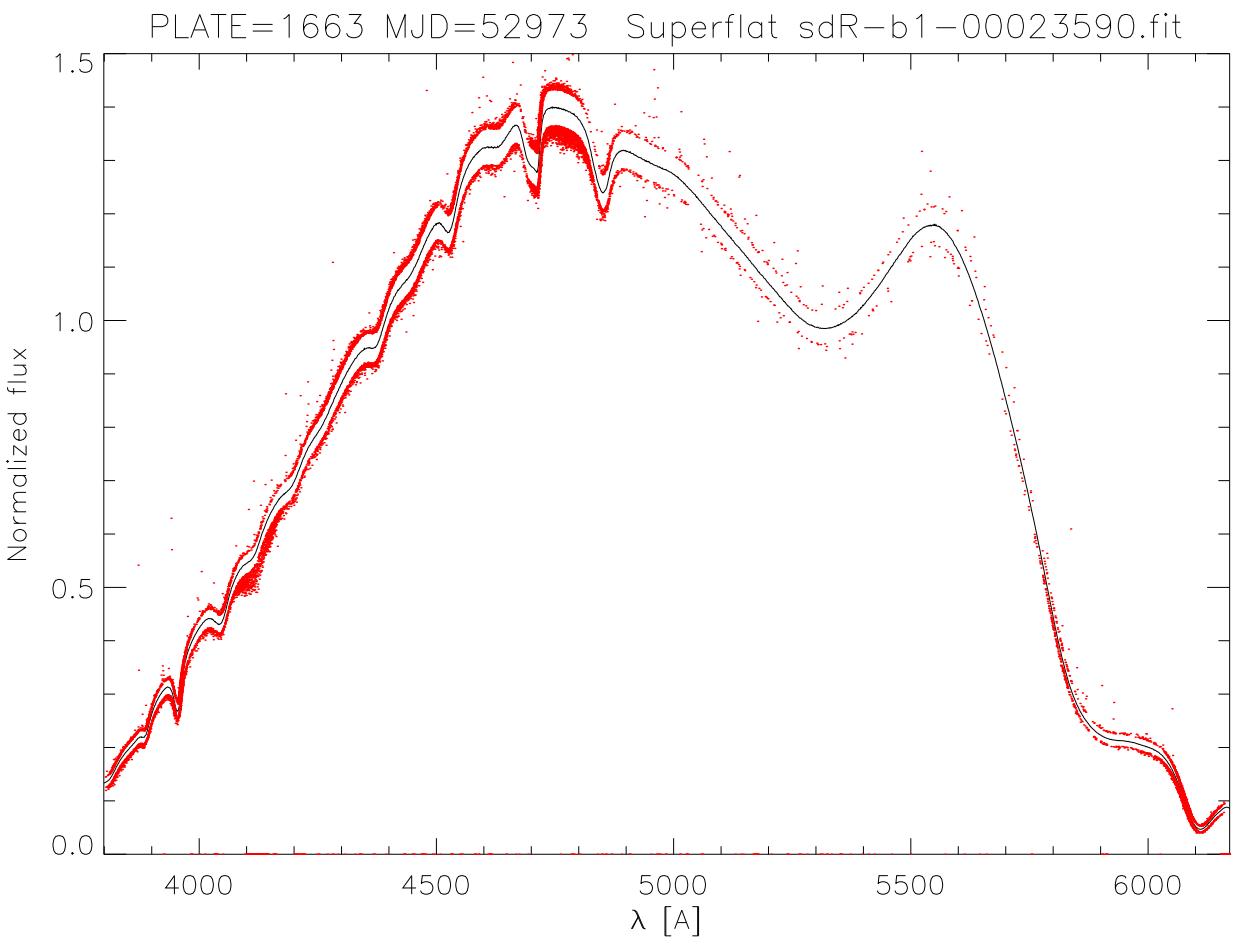
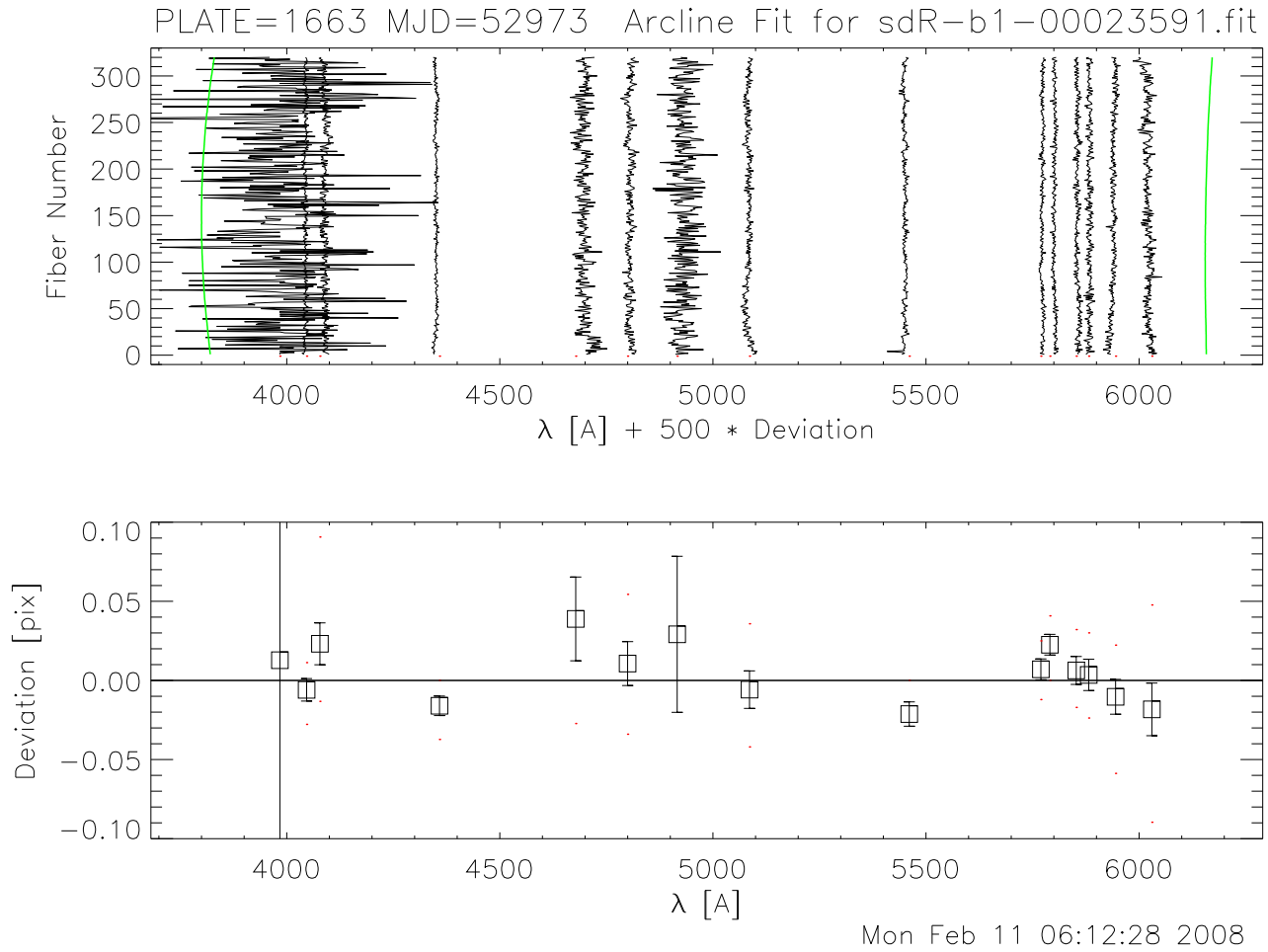
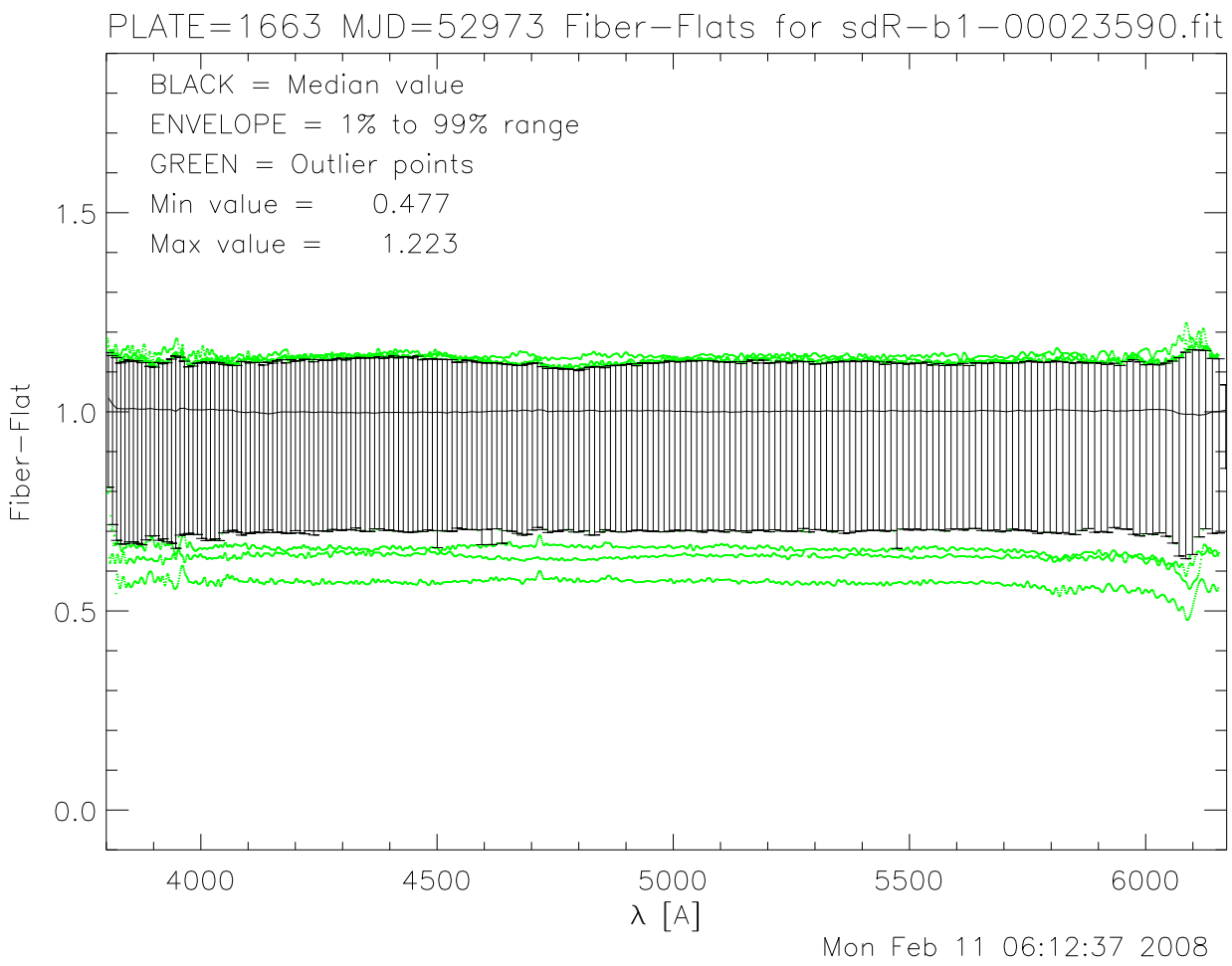

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

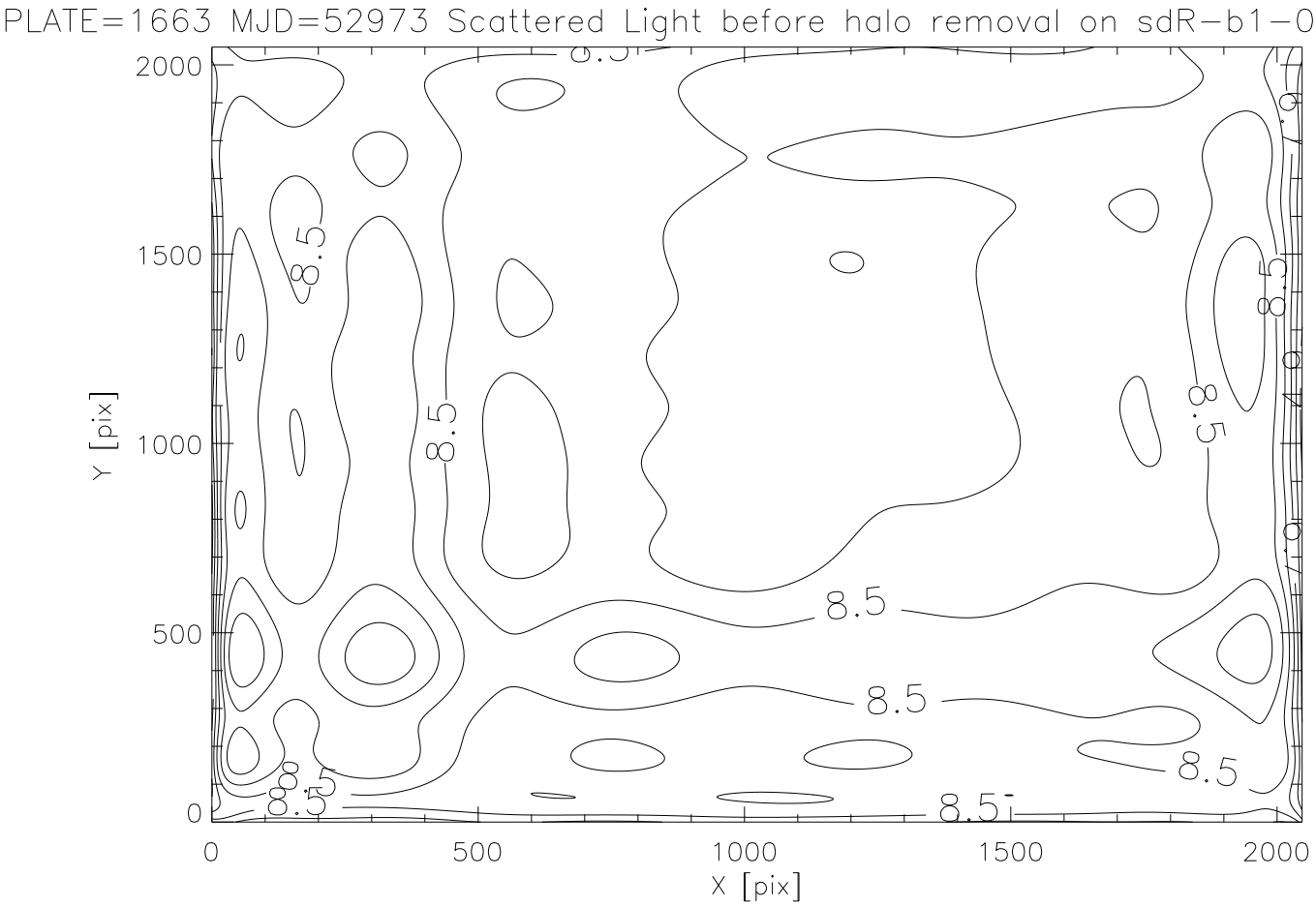

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

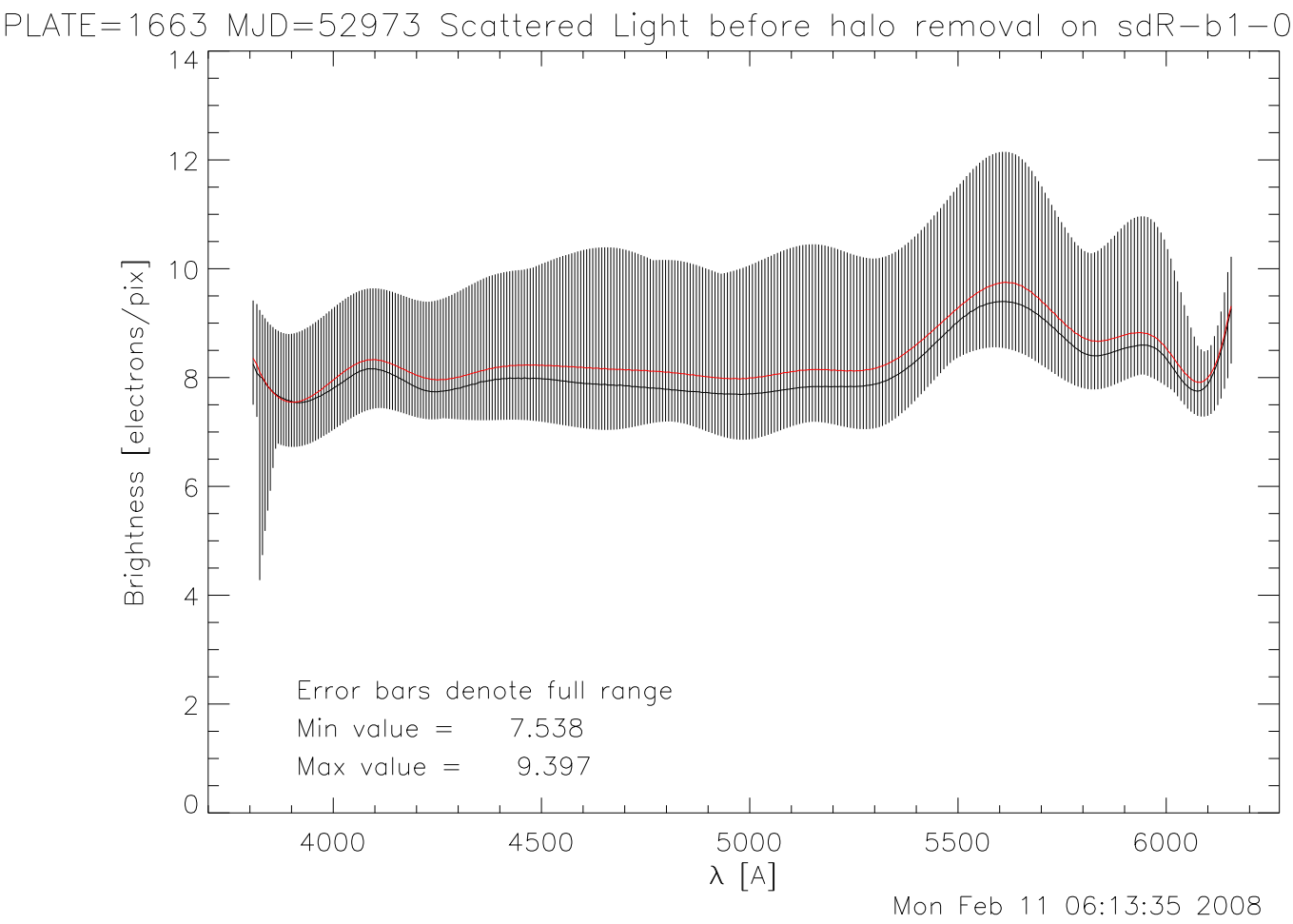

PLATE=1663 MJD=52973 flat extraction chi^2 for sdR−b1−00023590.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000

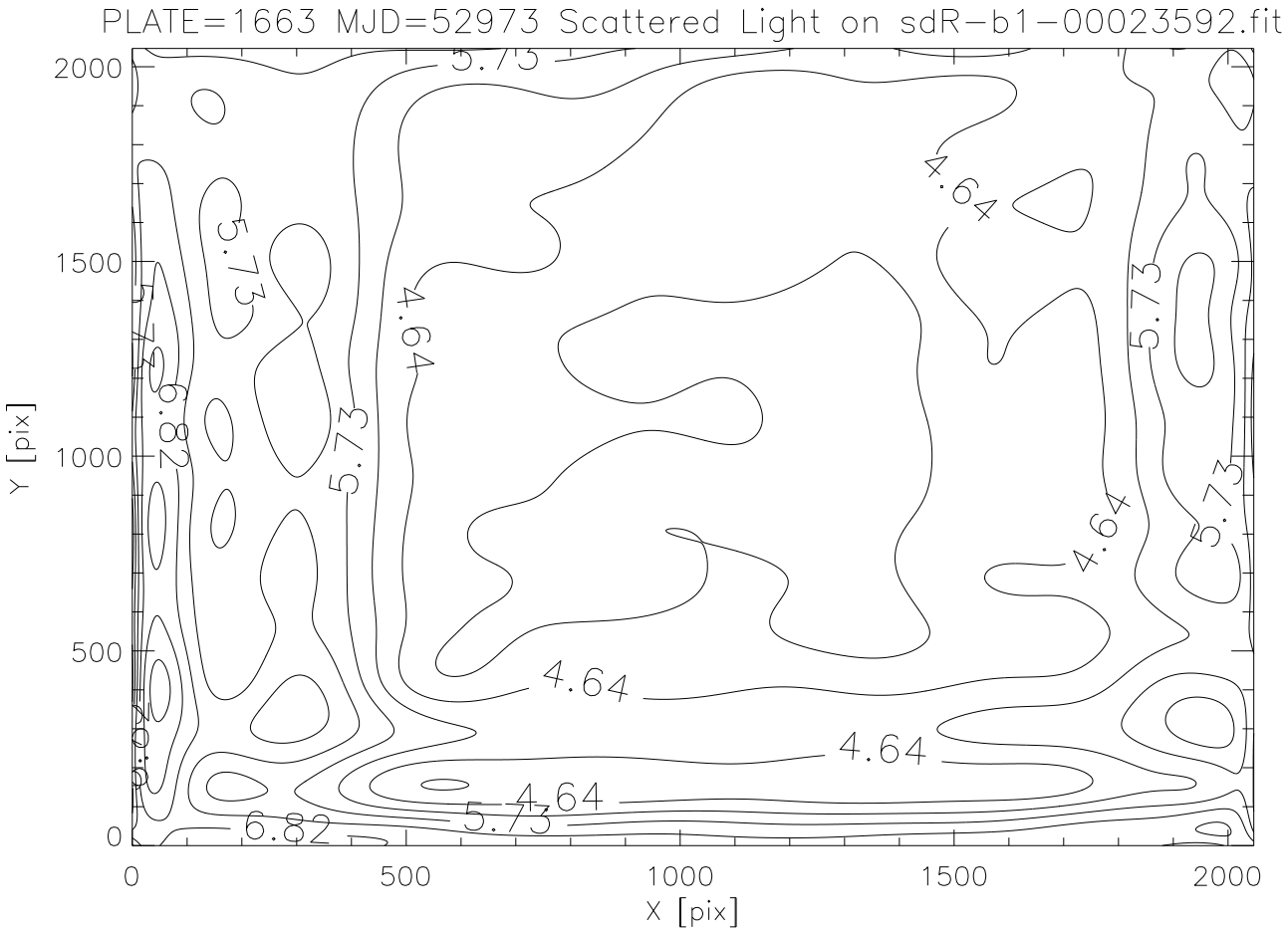

PLATE=1663 MJD=52973 Superflat sdR-b1-00023590.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

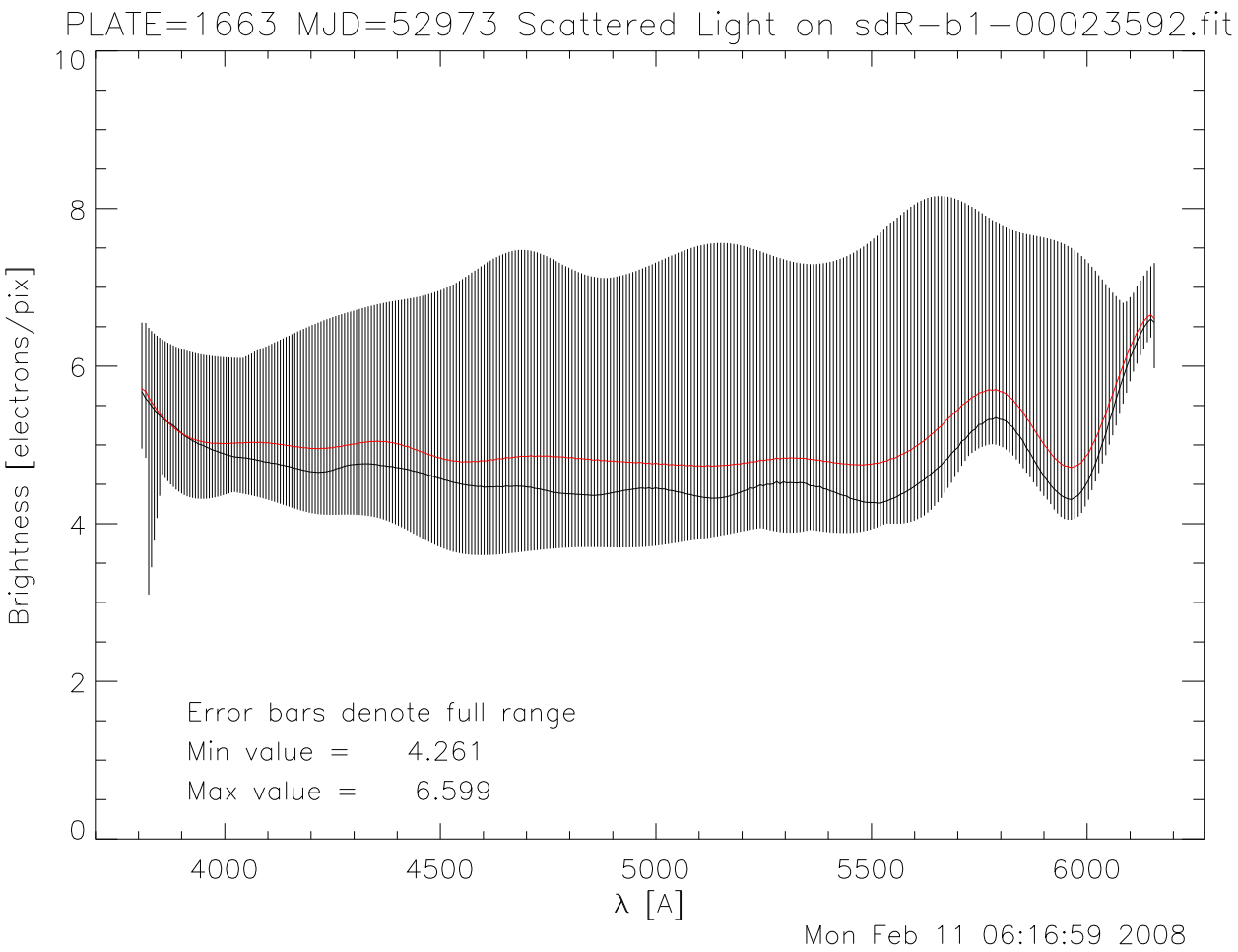

PLATE=1663 MJD=52973 Arcline Fit for sdR-b1-00023591.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 06:12:28 2008

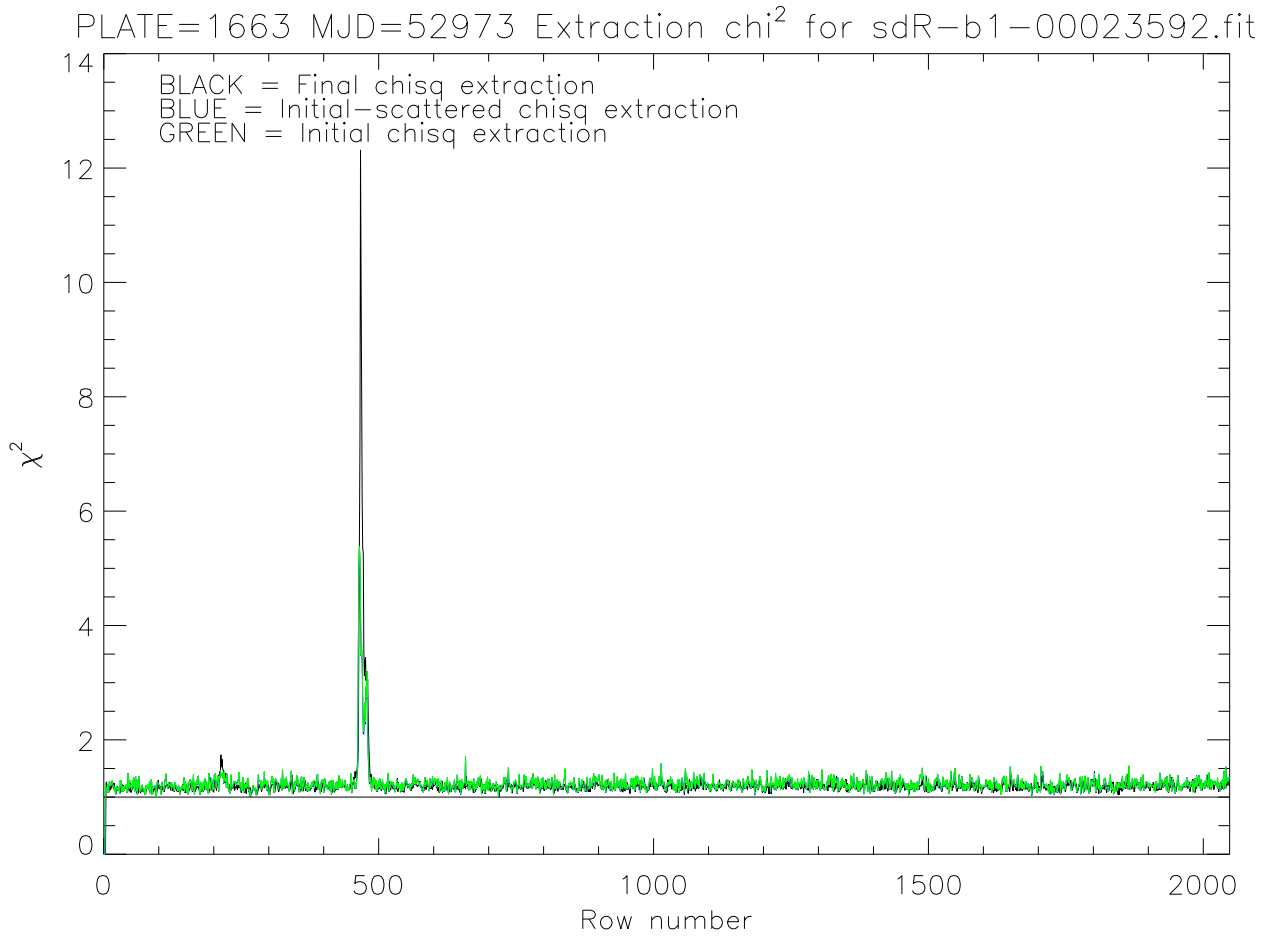

PLATE=1663 MJD=52973 Fiber-Flats for sdR-b1-00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.477
Max value = 1.223
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 06:12:37 2008

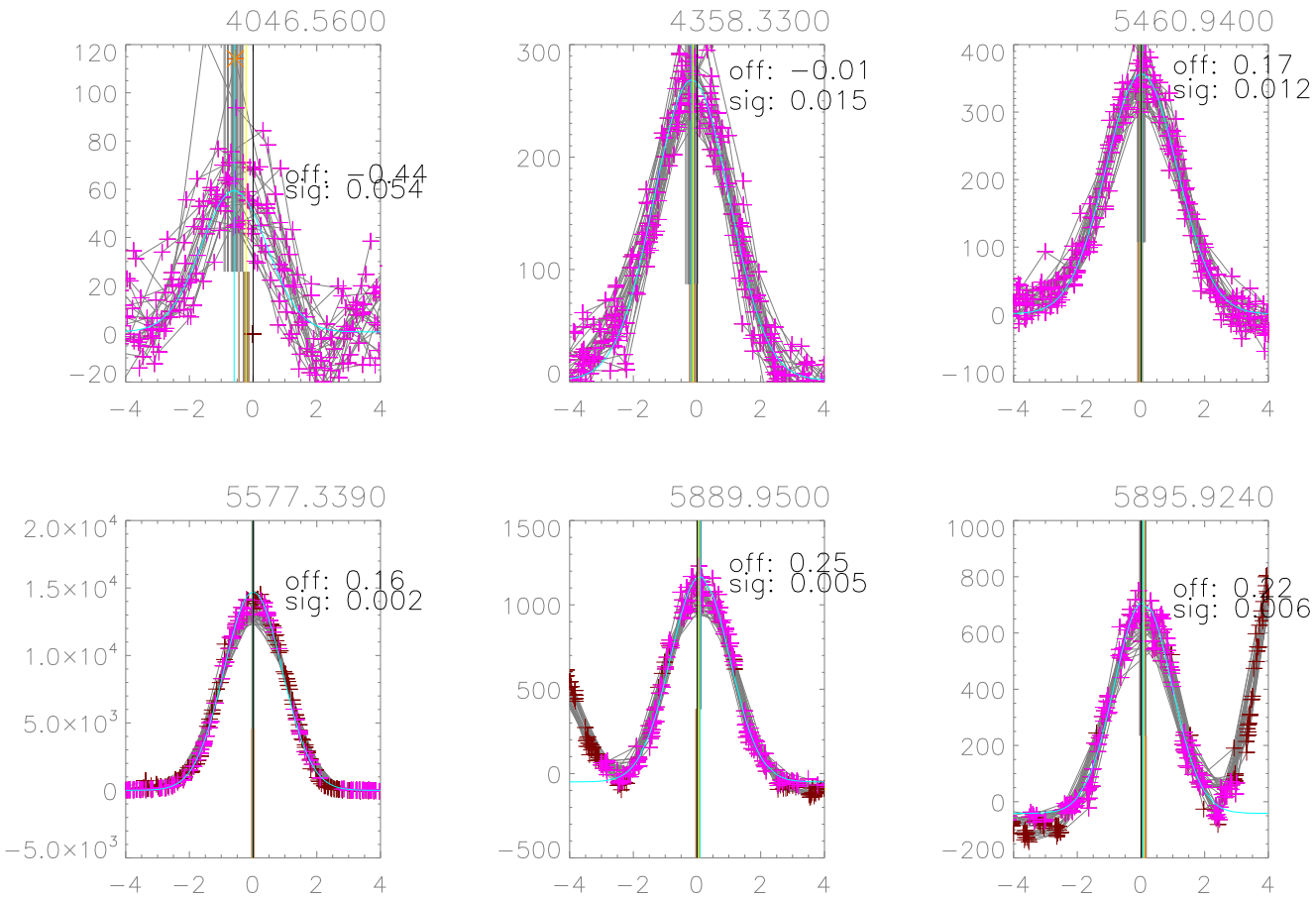

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR−b1−00023592.f
8.5
8.5
8.5

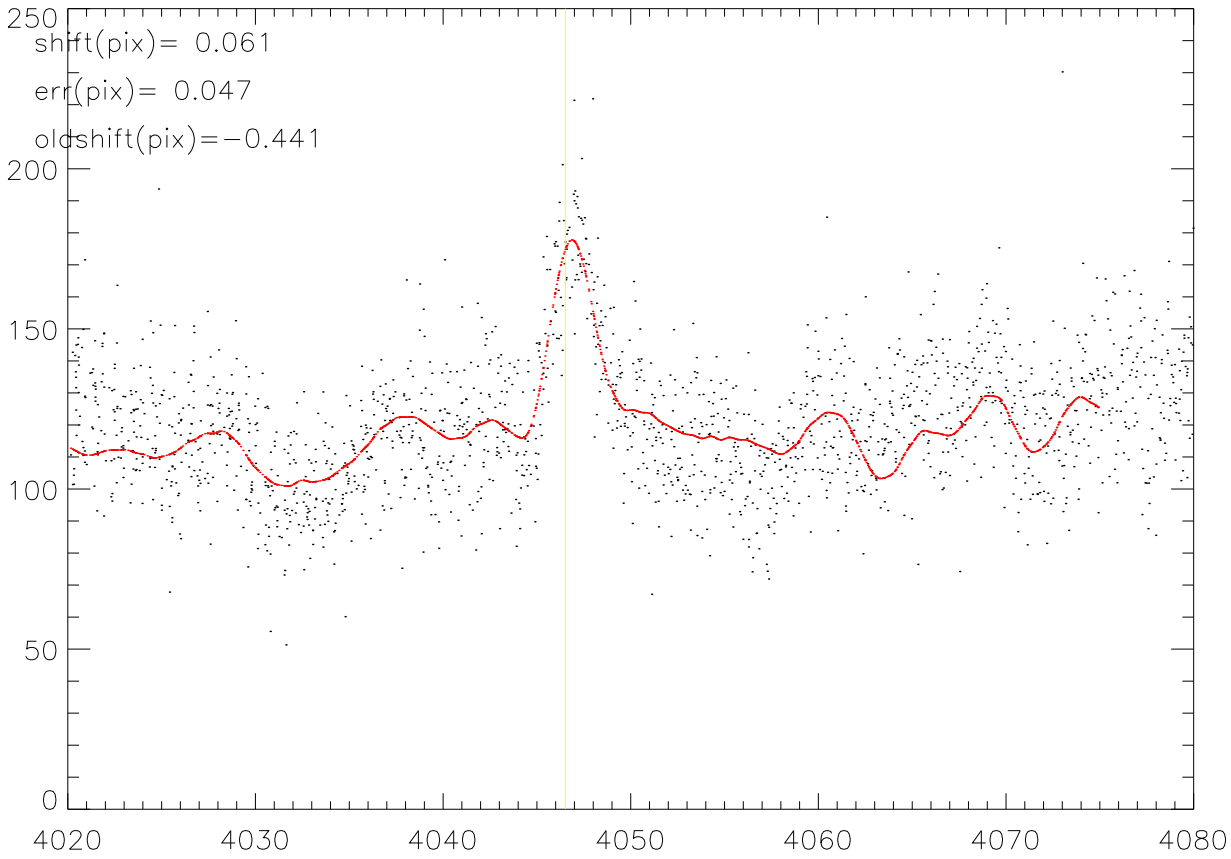

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-b1-00023592.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.538
Max value = 9.397
Mon Feb 11 06:13:35 2008

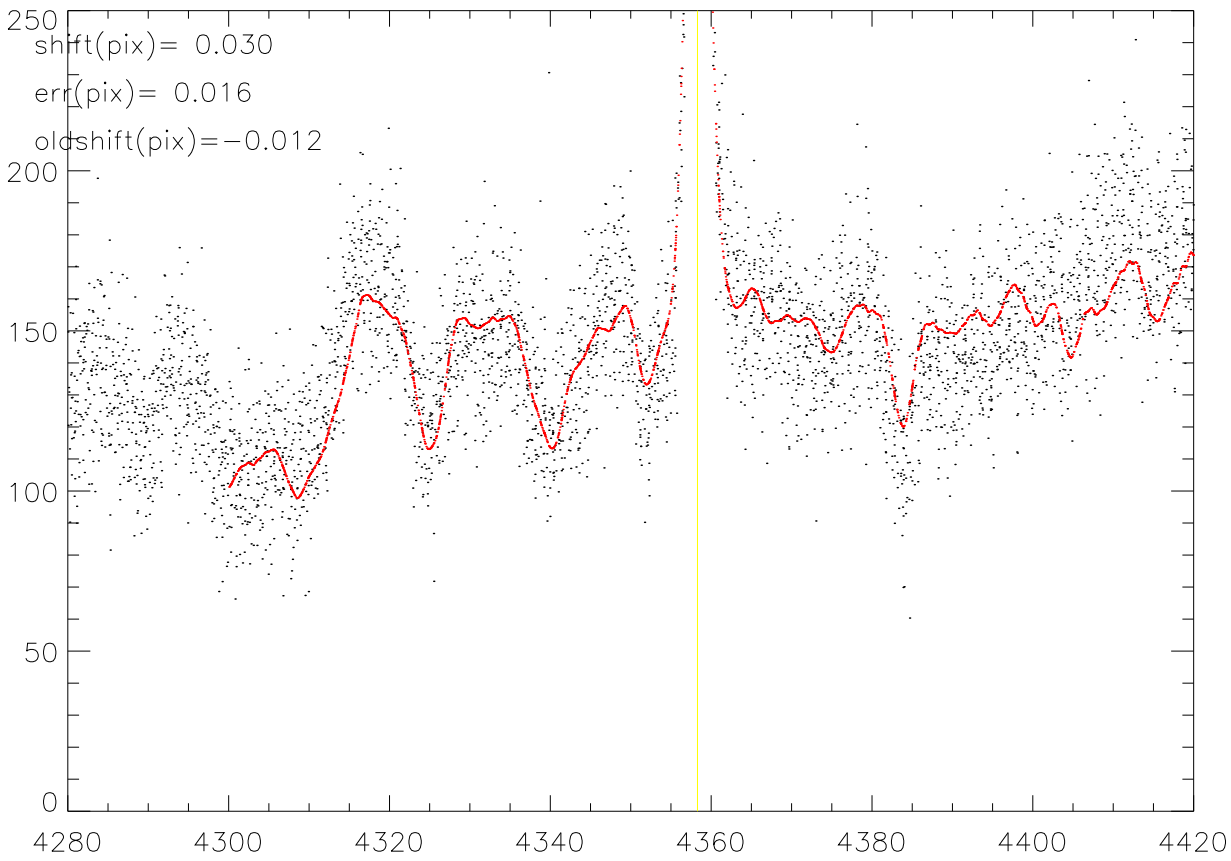

PLATE=1663 MJD=52973 Scattered Light on sdR-b1-00023592.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.73
4.64
6.82

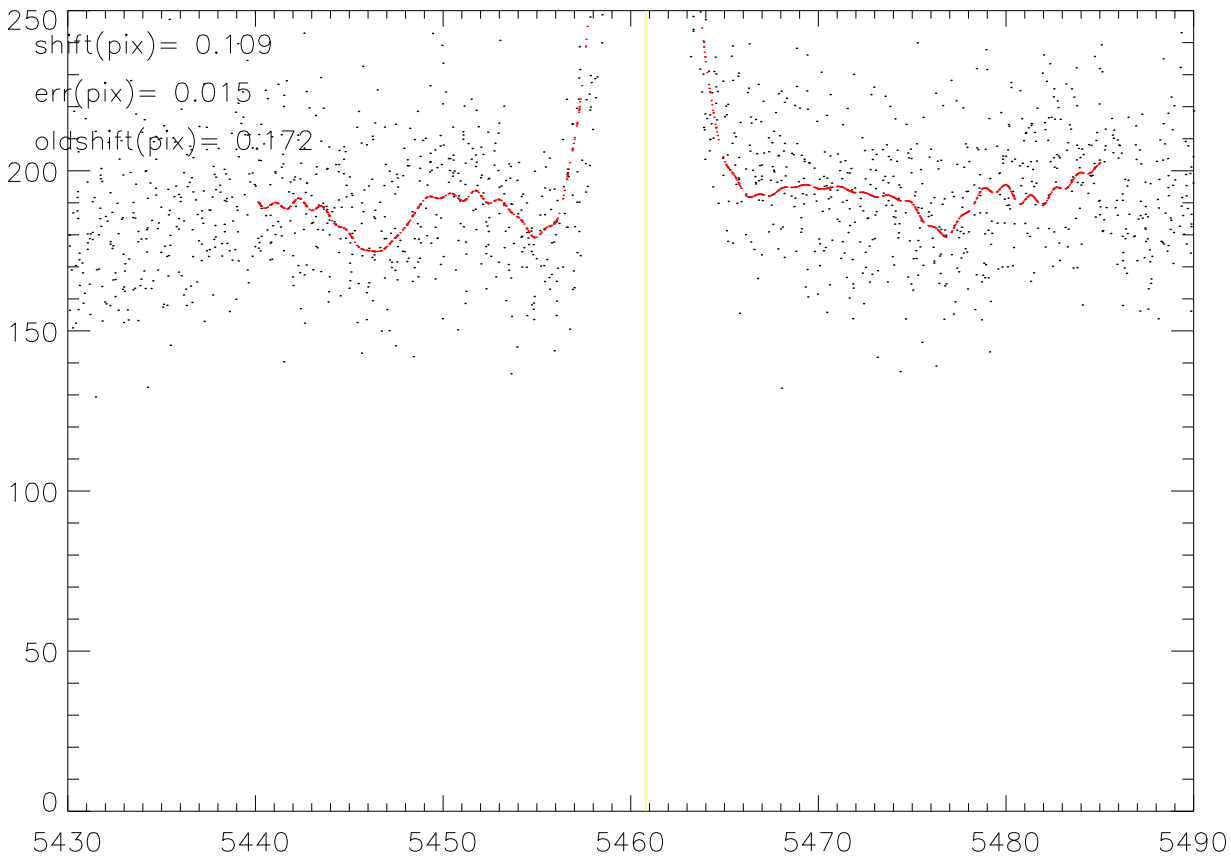

PLATE=1663 MJD=52973 Scattered Light on sdR-b1-00023592.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.261
Max value = 6.599
Mon Feb 11 06:16:59 2008

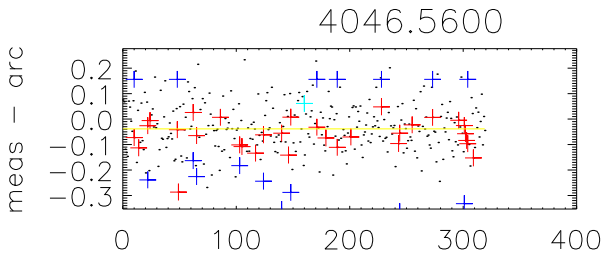

PLATE=1663 MJD=52973 Extraction chi^2 for sdR-b1-00023592.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
Row number

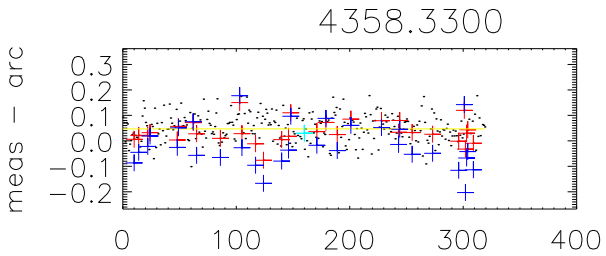

4046.5600
off: −0.44
sig: 0.054
4358.3300
off: −0.01
sig: 0.015
5460.9400
off: 0.17
sig: 0.012
5577.3390
off: 0.16
sig: 0.002
5889.9500
off: 0.25
sig: 0.005
5895.9240
off: 0.22
sig: 0.006

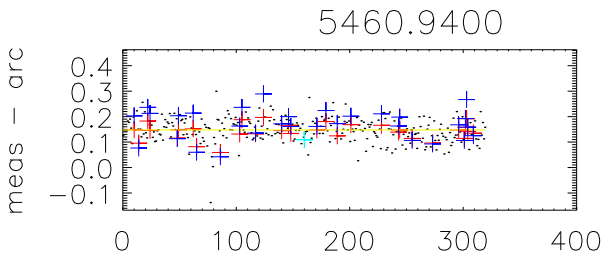

shift(pix)= 0.061
err(pix)= 0.047
oldshift(pix)=−0.441
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

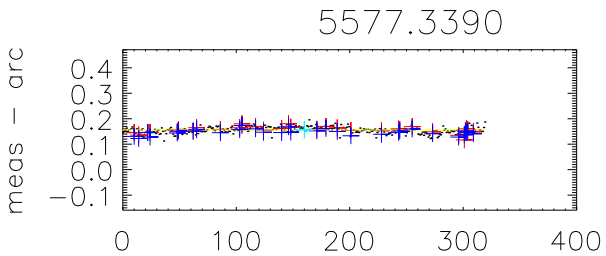

shift(pix)= 0.030
err(pix)= 0.016
oldshift(pix)=-0.012
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

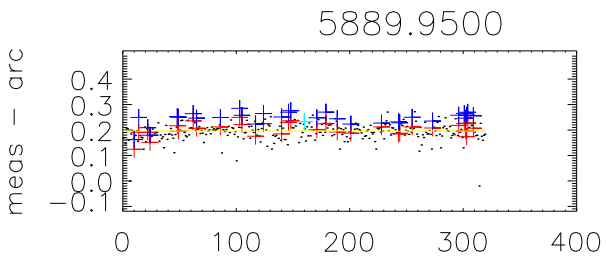

shift(pix)= 0.109
err(pix)= 0.015
oldshift(pix)= 0.172
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

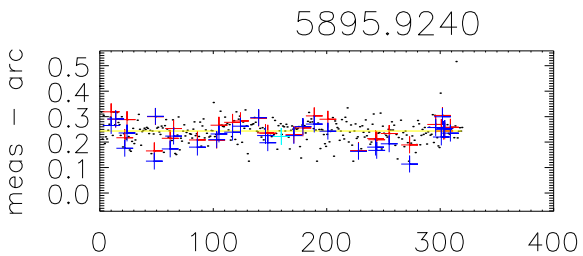

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

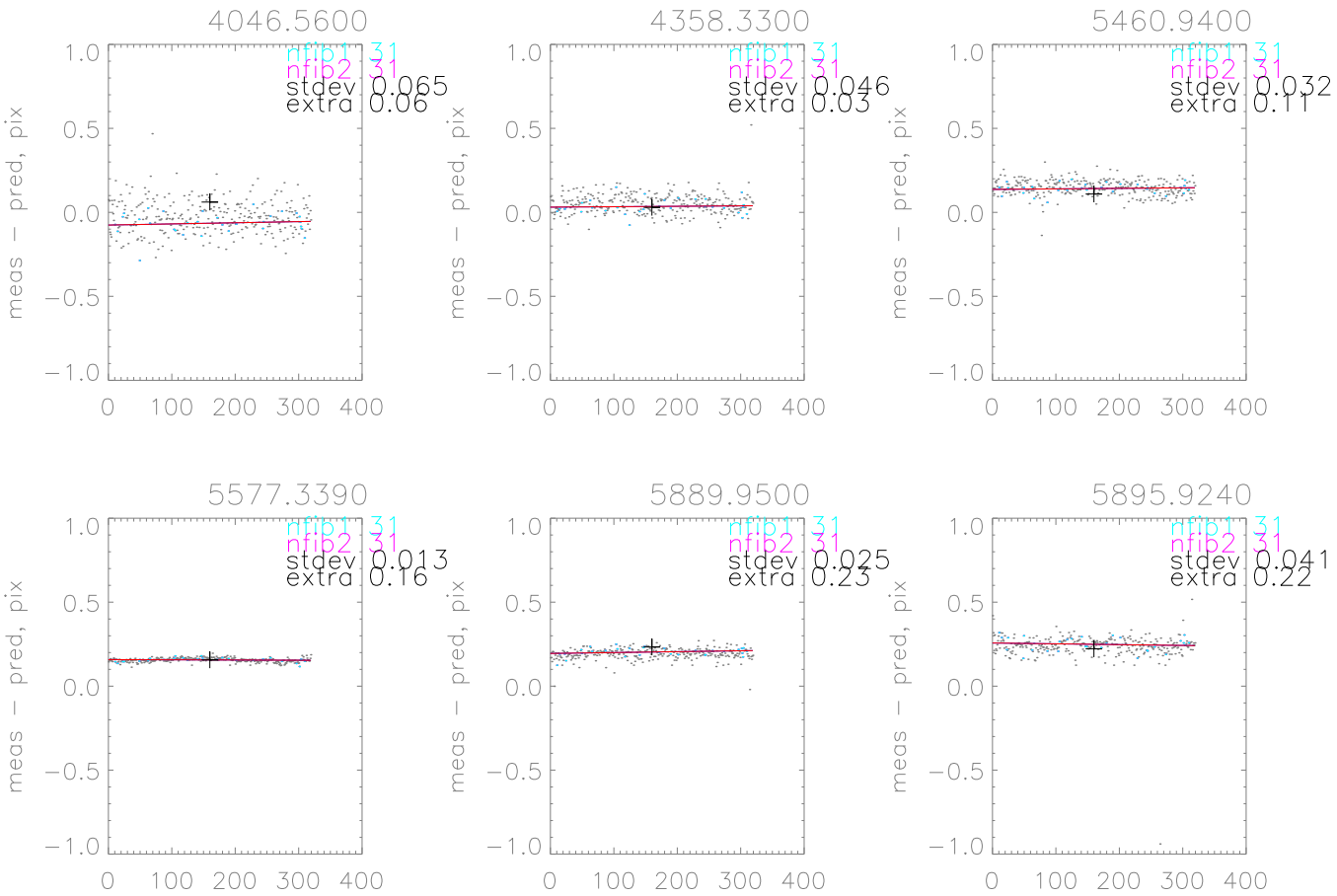

4358.3300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

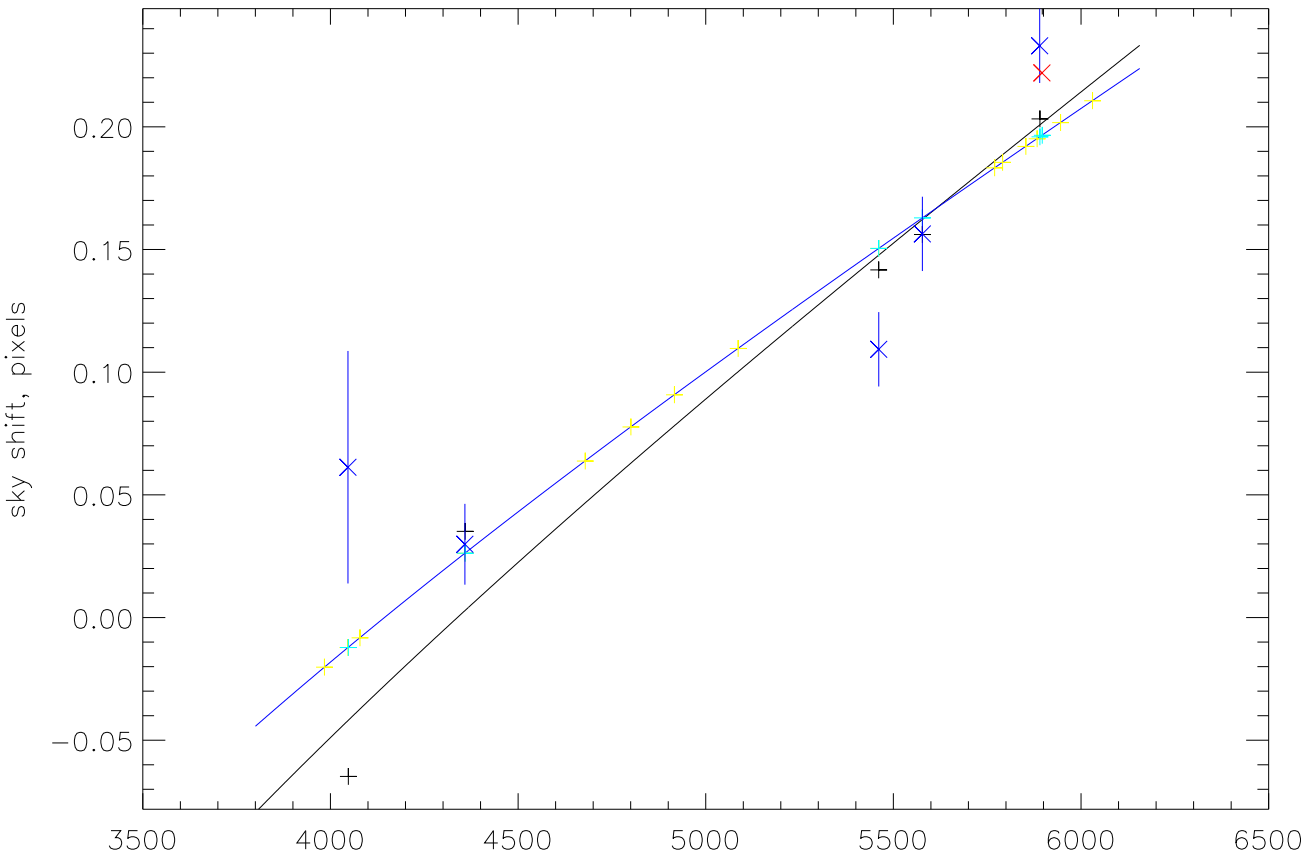

5460.9400
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

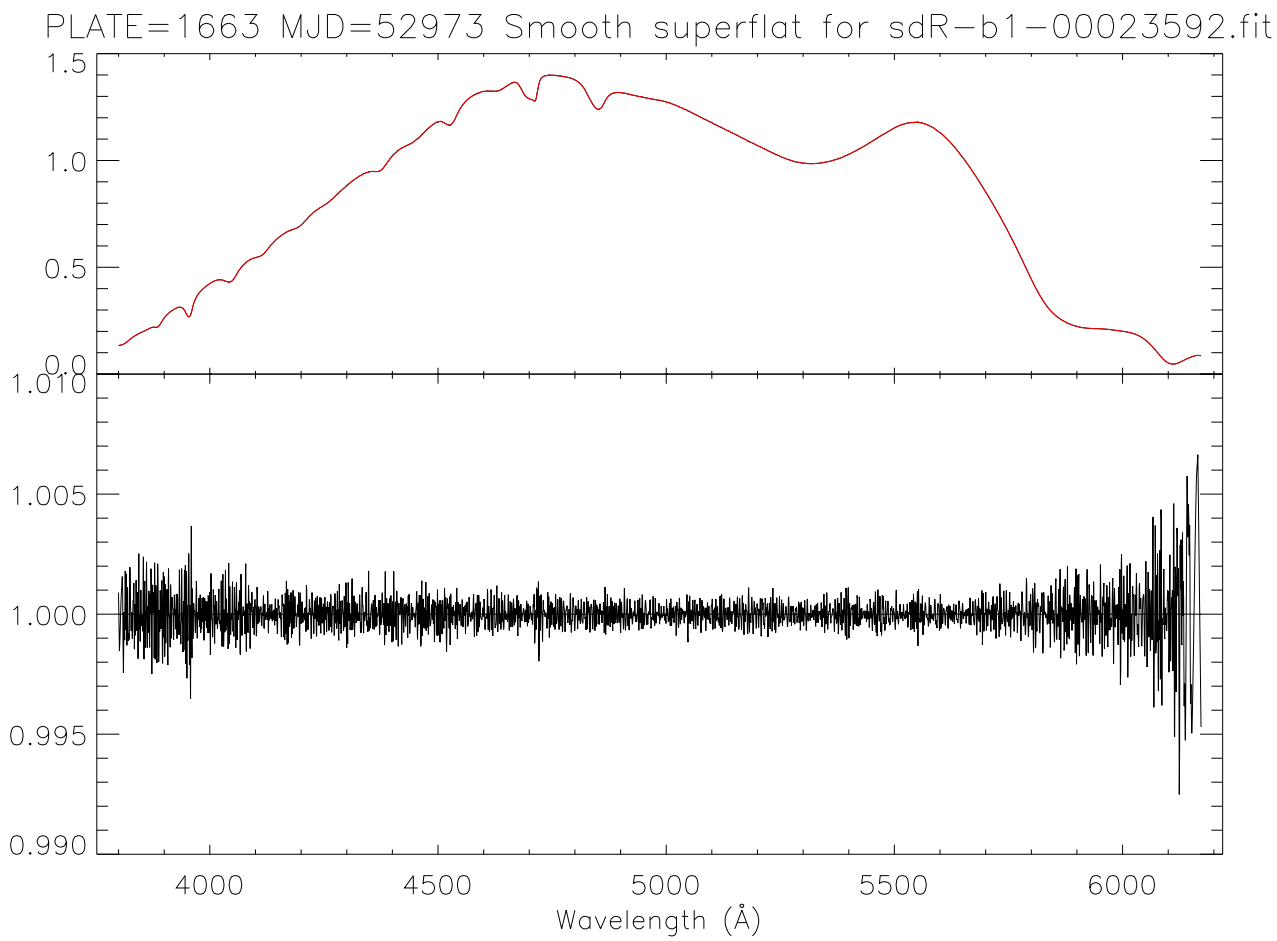

5889.9500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

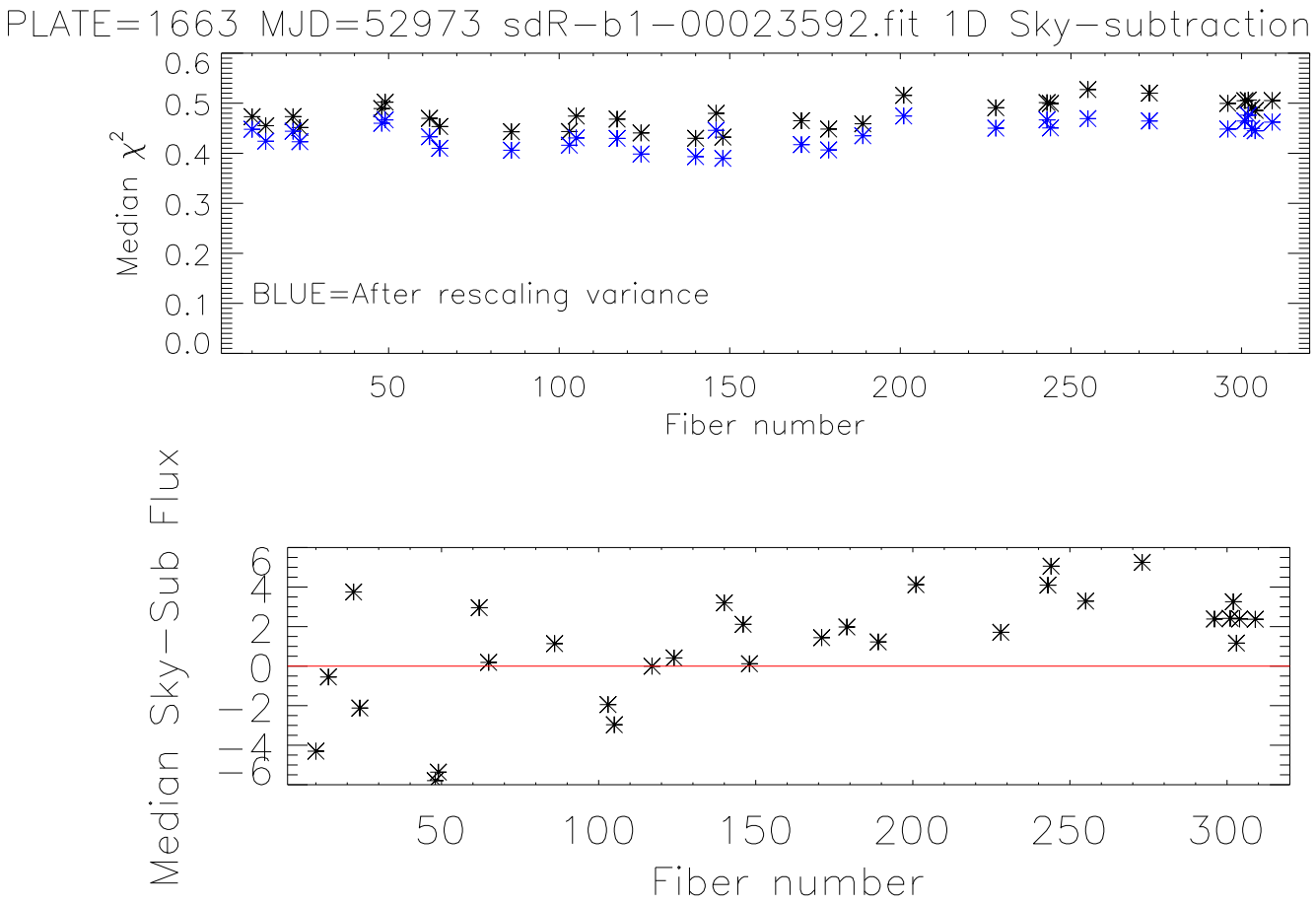

5895.9240
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

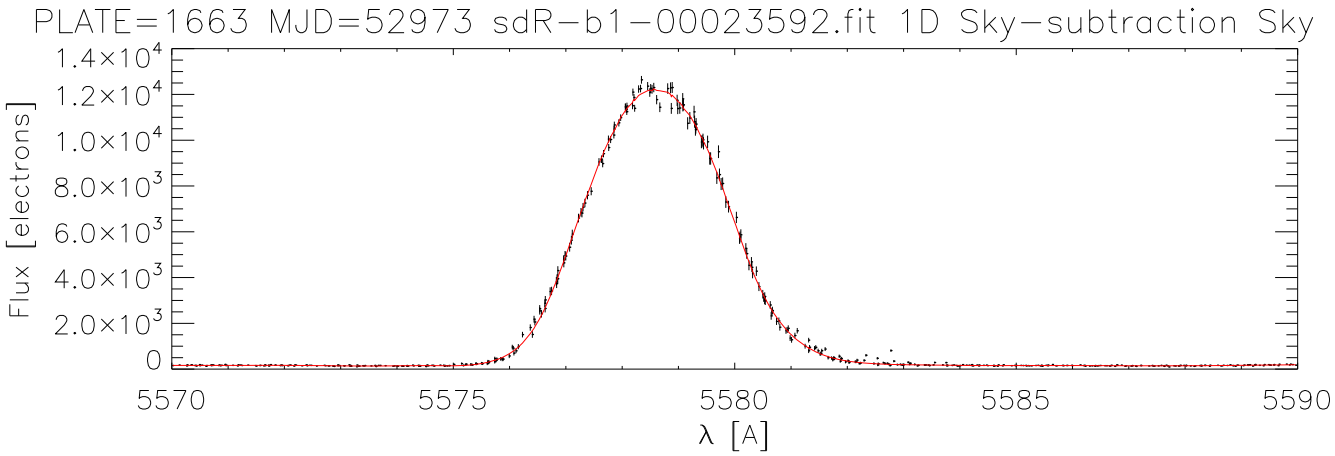

4046.5600
nfib1 31
nfib2 31
stdev 0.065
extra 0.06
4358.3300
nfib1 31
nfib2 31
stdev 0.046
extra 0.03
5460.9400
nfib1 31
nfib2 31
stdev 0.032
extra 0.11
5577.3390
nfib1 31
nfib2 31
stdev 0.013
extra 0.16
5889.9500
nfib1 31
nfib2 31
stdev 0.025
extra 0.23
5895.9240
nfib1 31
nfib2 31
stdev 0.041
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

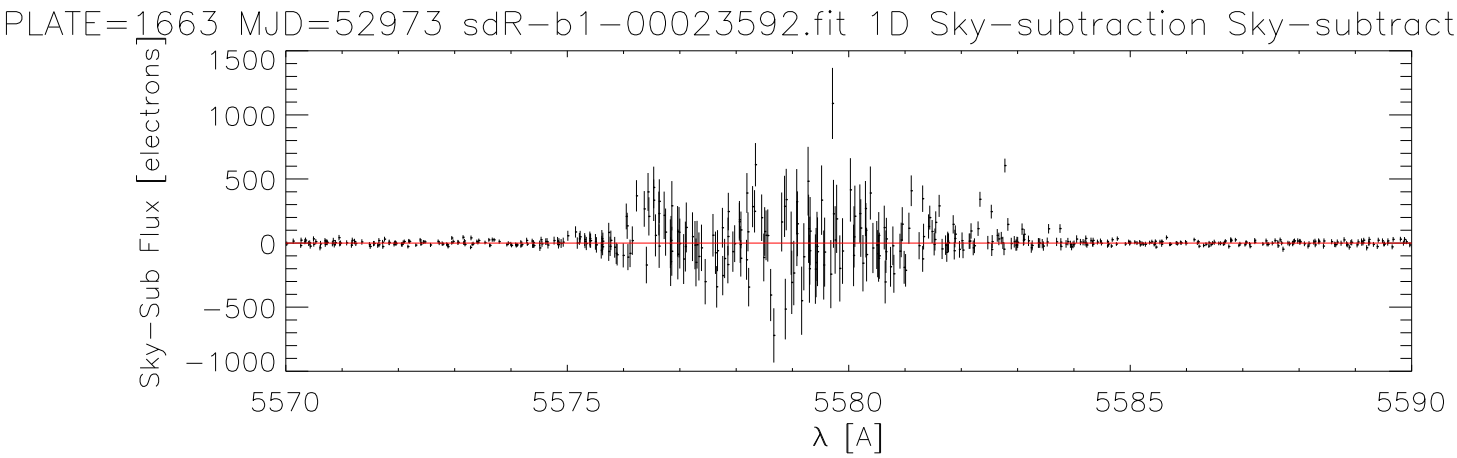

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500

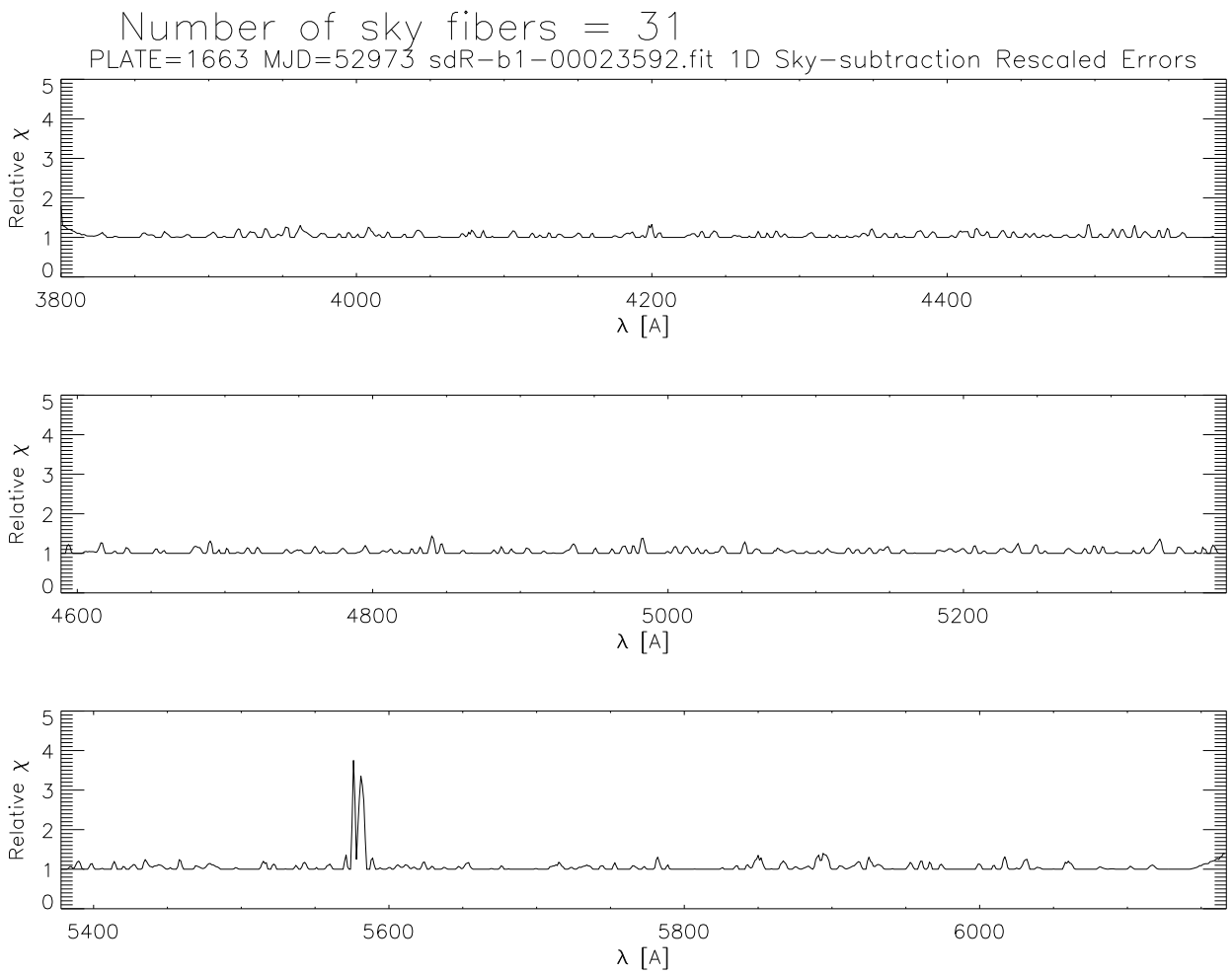
es= 0.0000

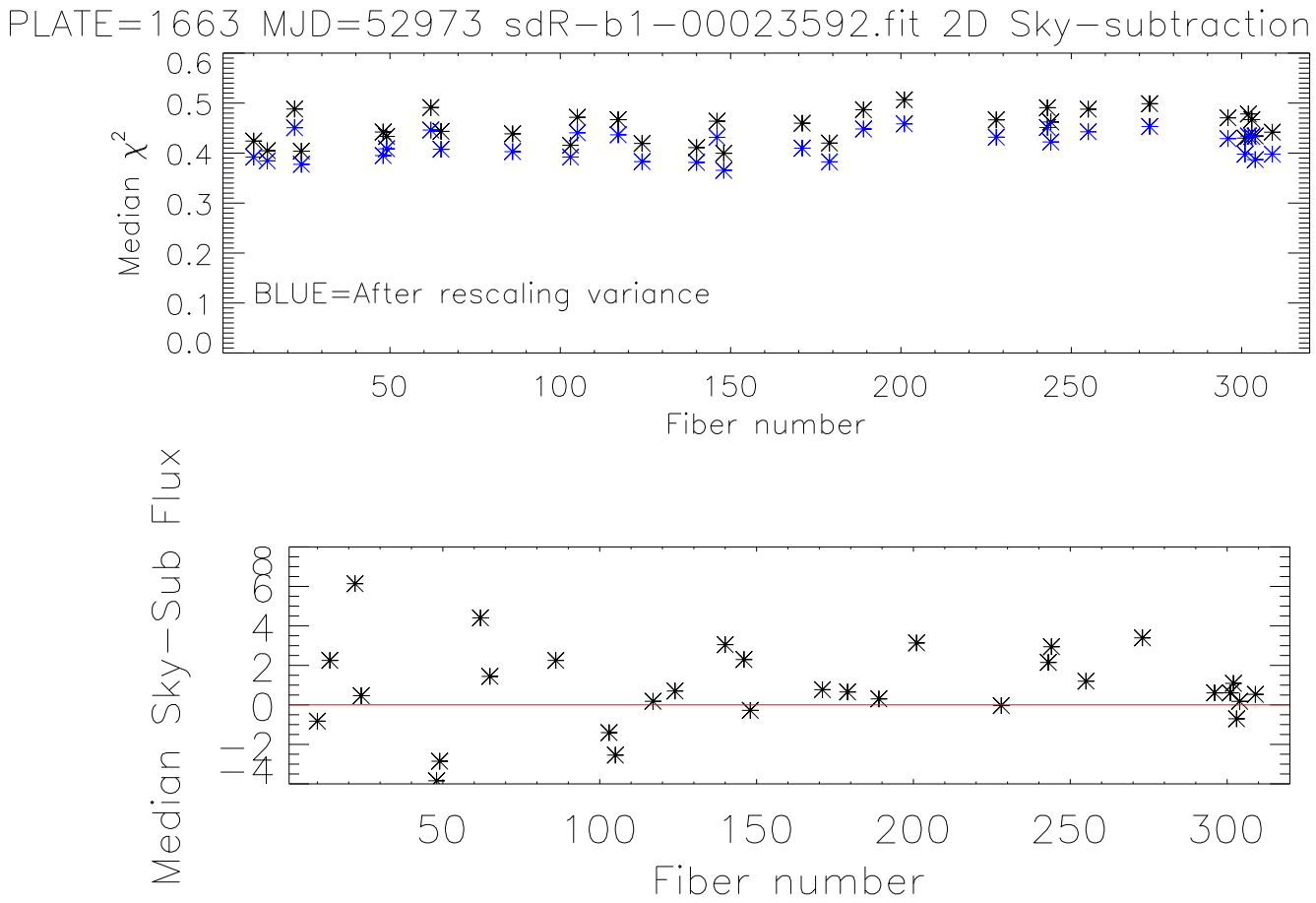

PLATE=1663 MJD=52973 Smooth superflat for sdR-b1-00023592.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

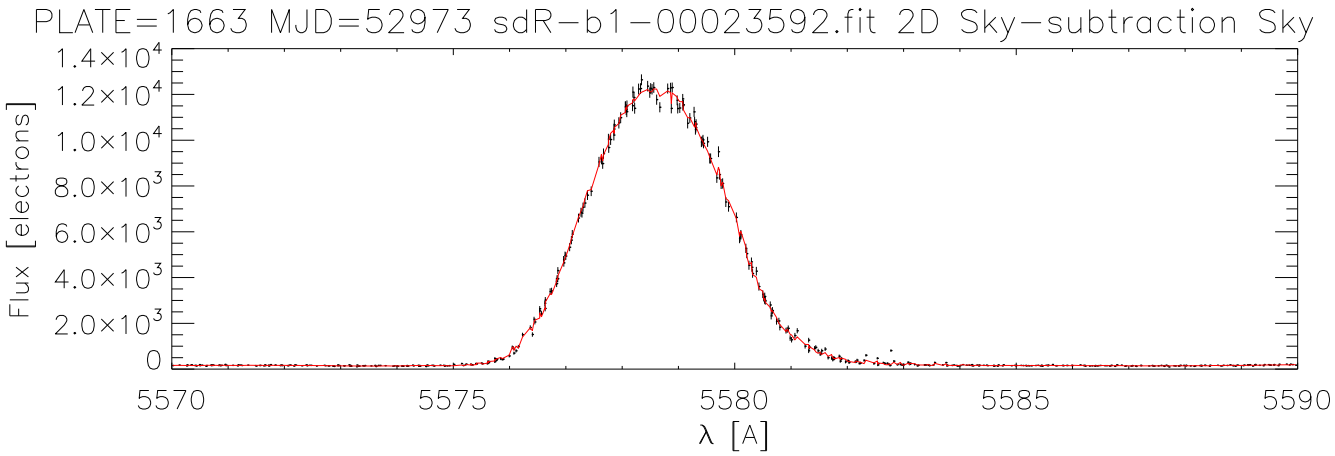

PLATE=1663 MJD=52973 sdR-b1-00023592.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

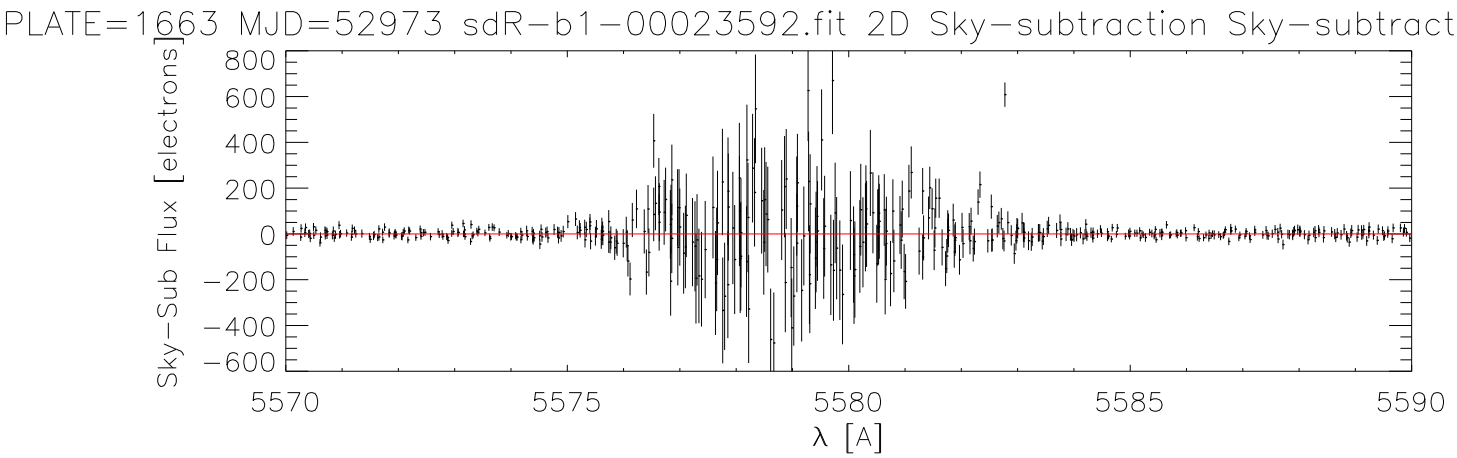

PLATE=1663 MJD=52973 sdR-b1-00023592.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

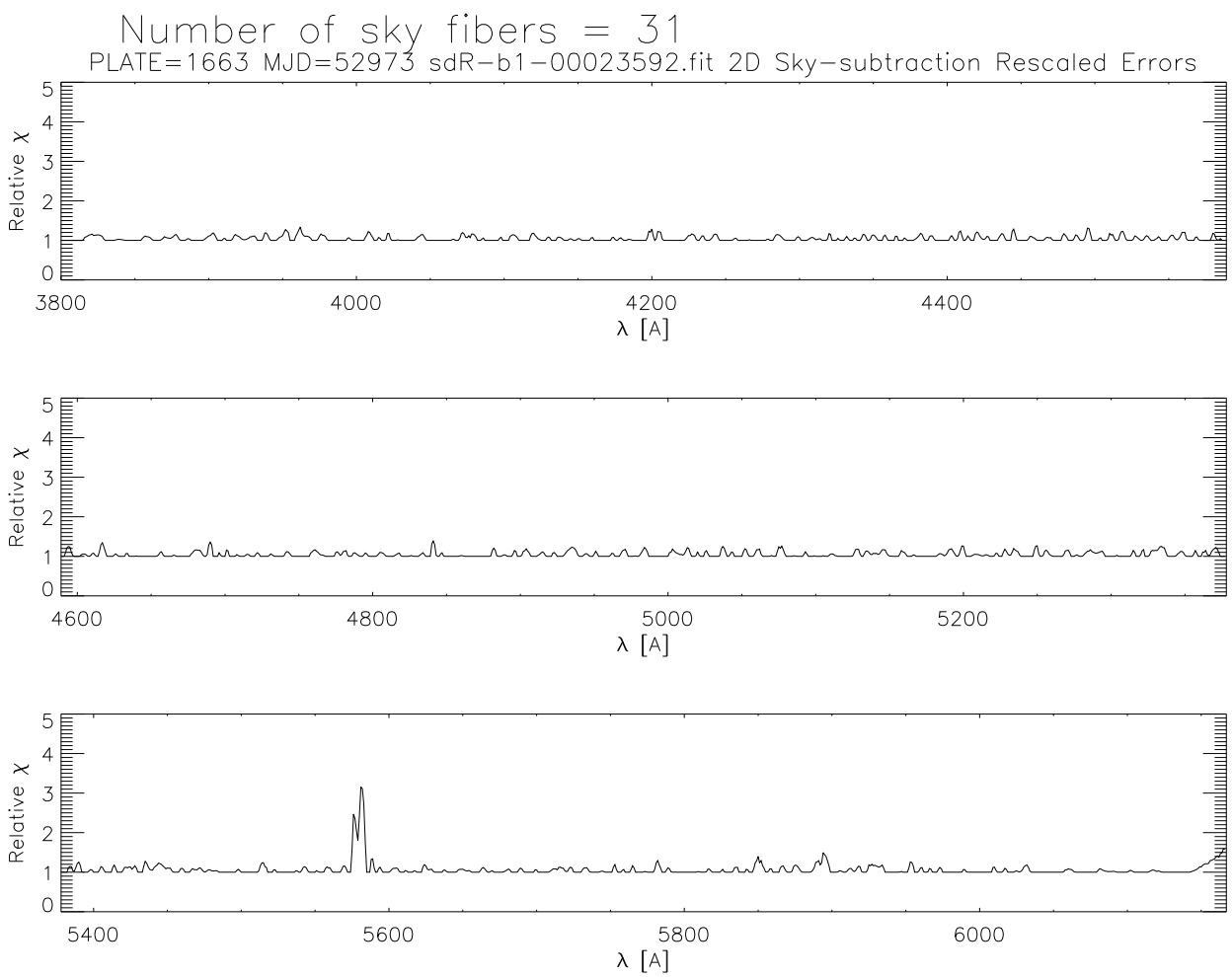

PLATE=1663 MJD=52973 sdR-b1-00023592.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

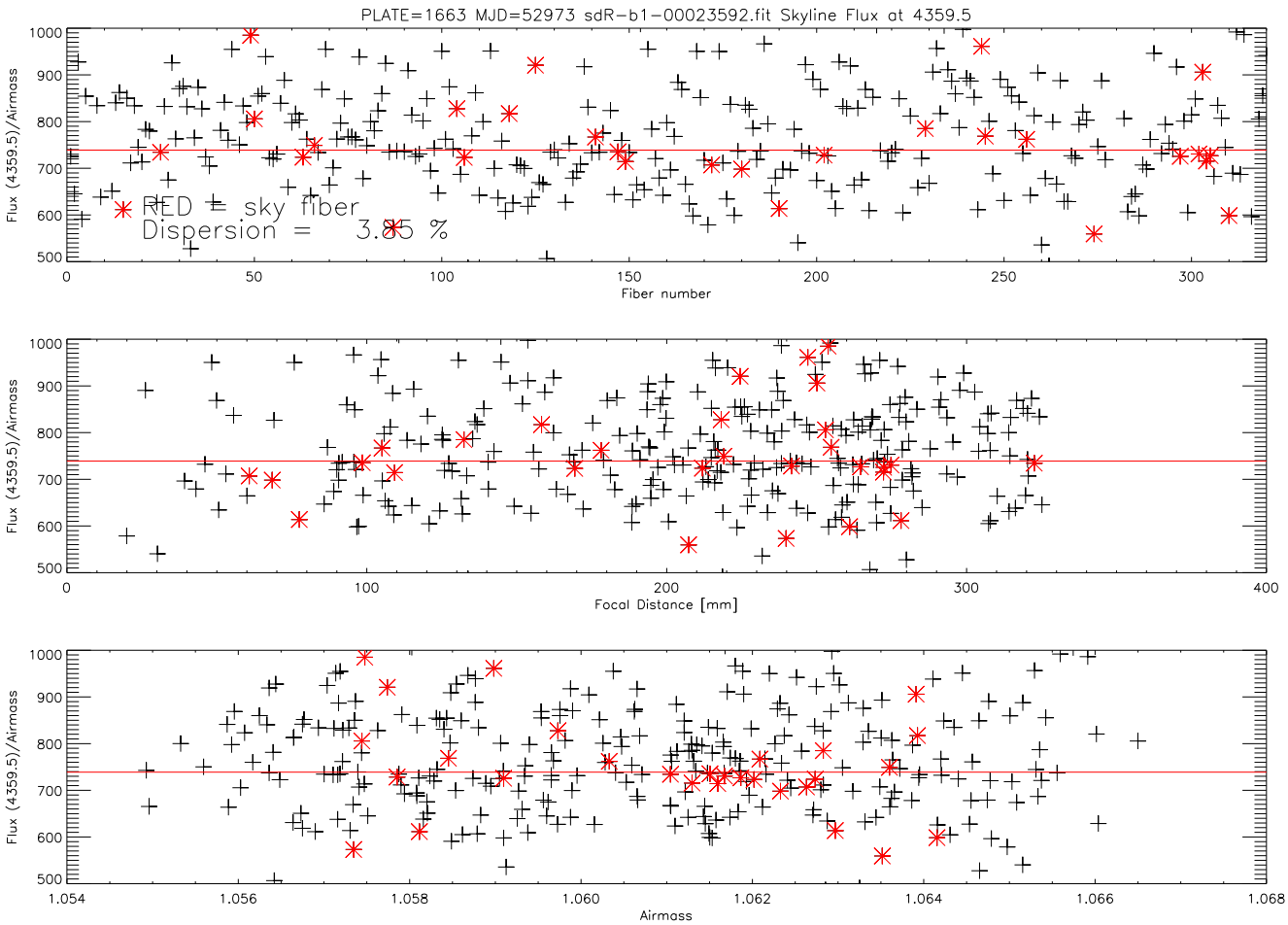

Number of sky fibers = 31
PLATE=1663 MJD=52973 sdR-b1-00023592.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

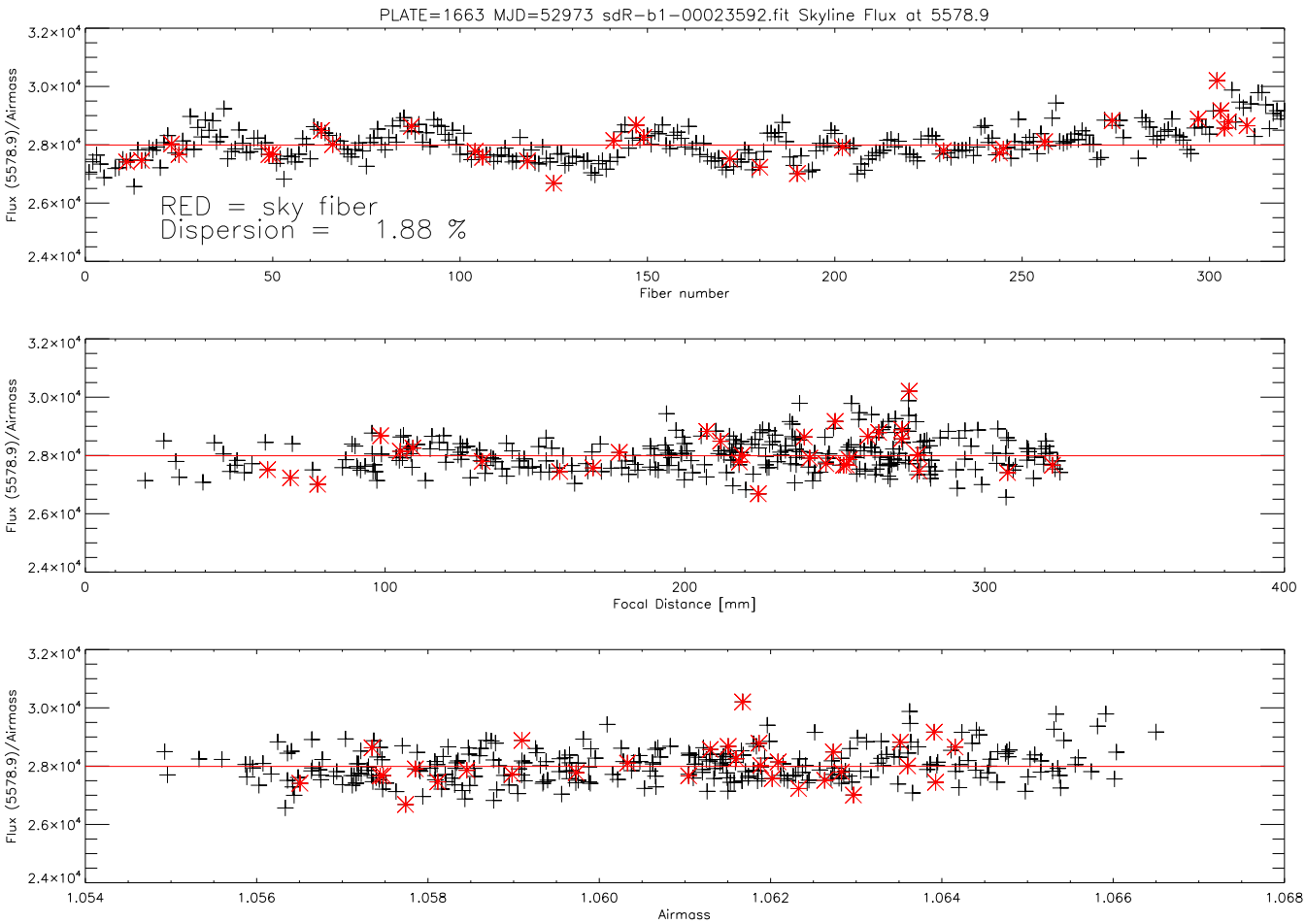

PLATE=1663 MJD=52973 sdR-b1-00023592.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

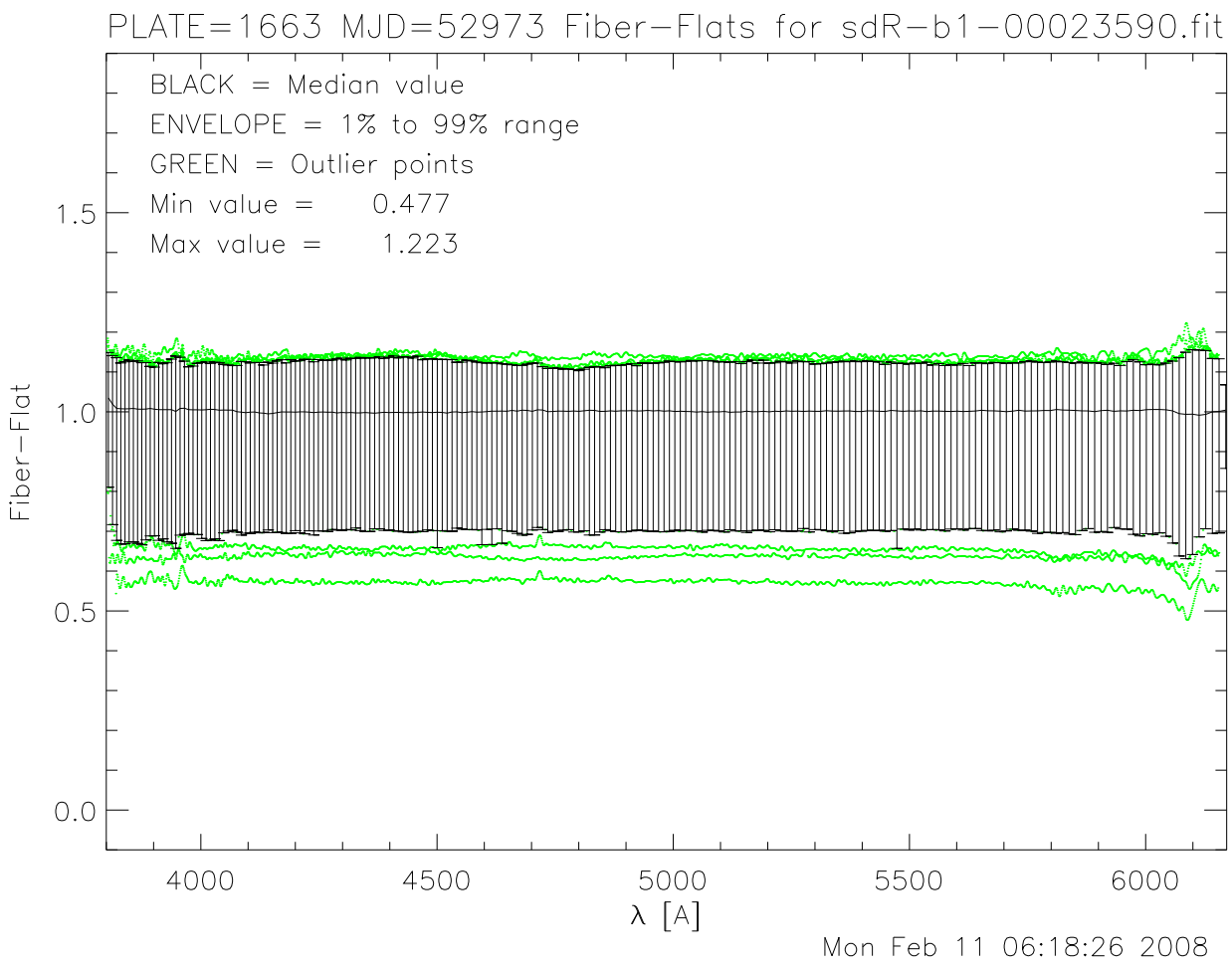

PLATE=1663 MJD=52973 sdR-b1-00023592.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

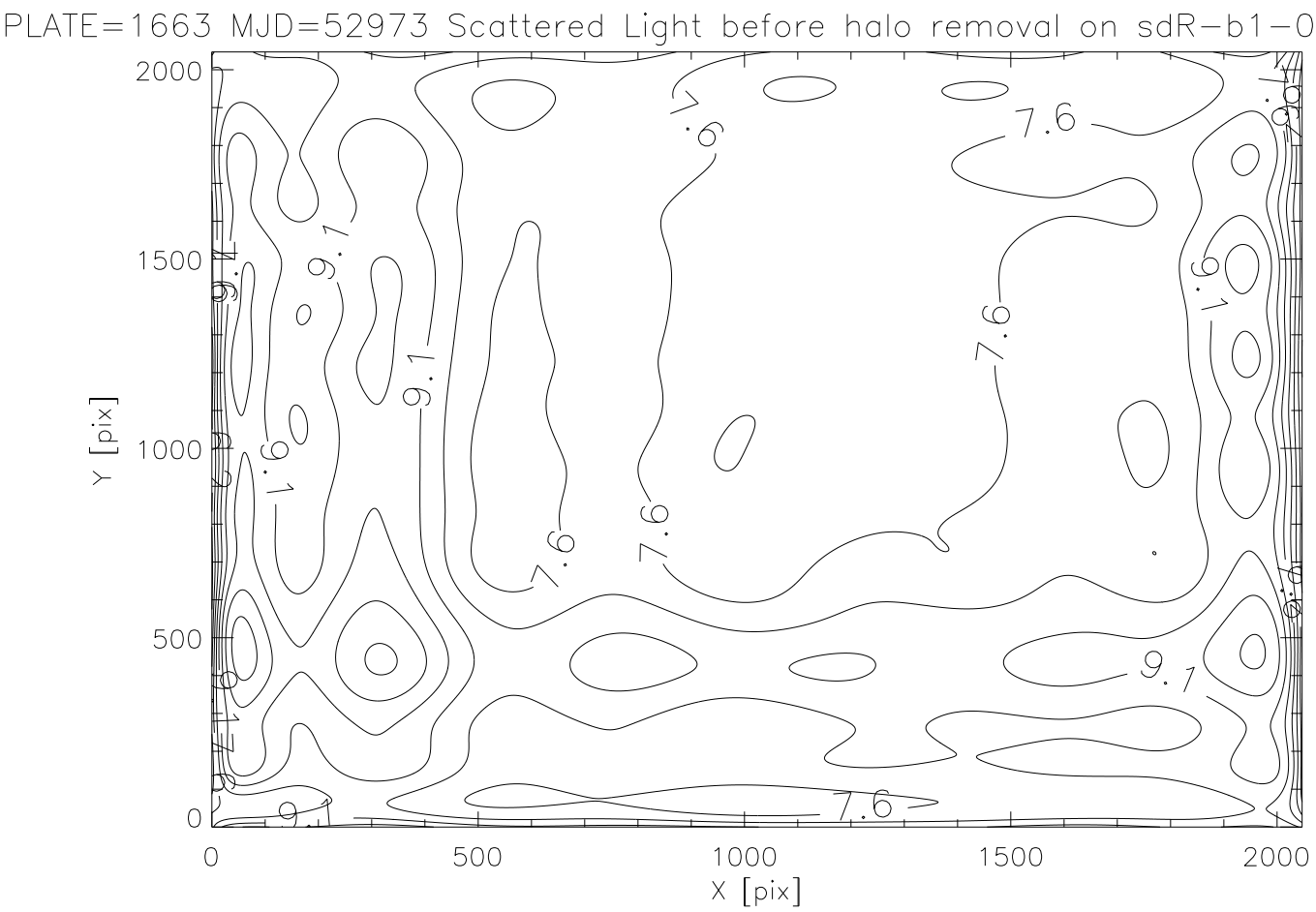

PLATE=1663 MJD=52973 sdR-b1-00023592.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

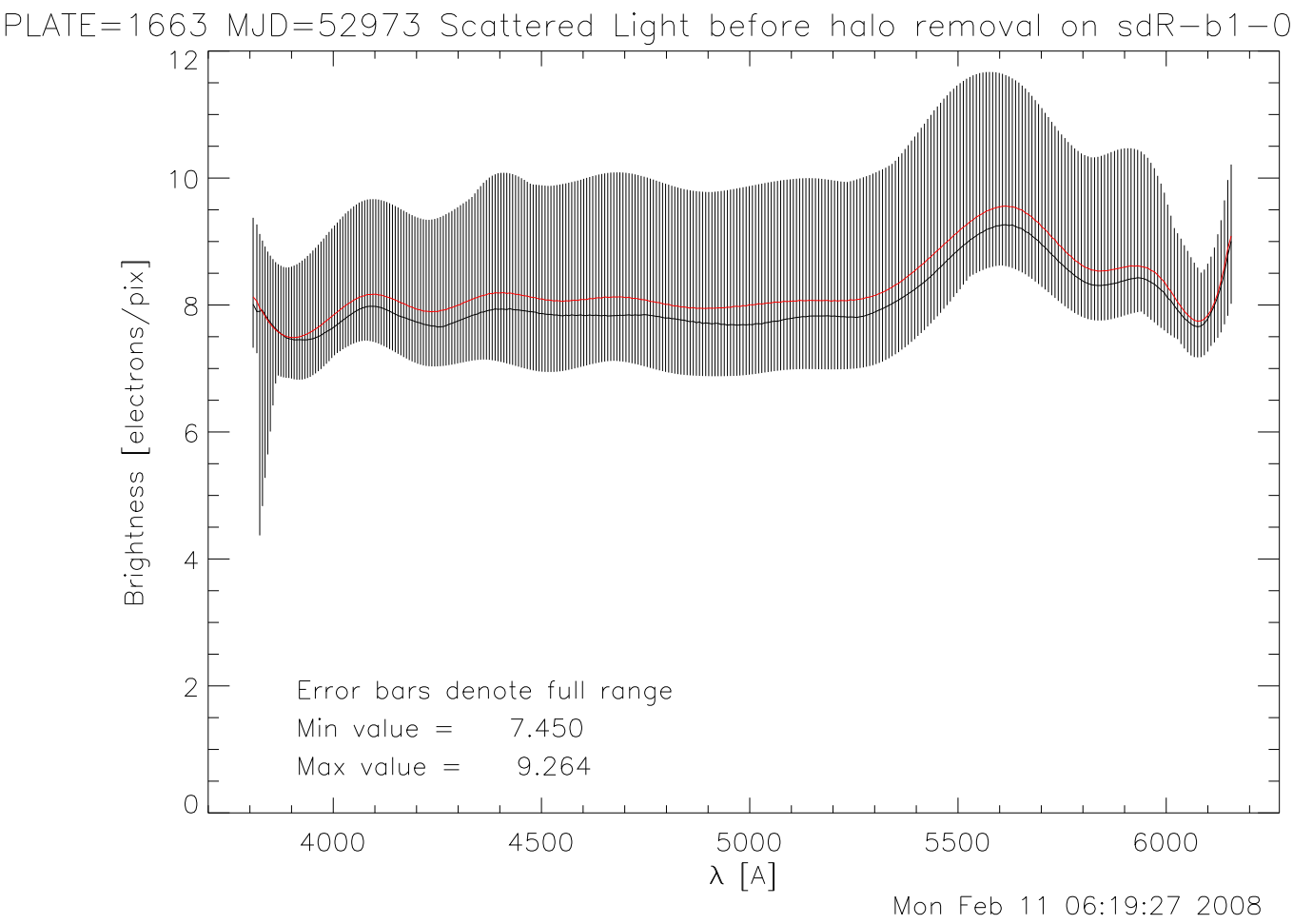

Number of sky fibers = 31
PLATE=1663 MJD=52973 sdR-b1-00023592.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

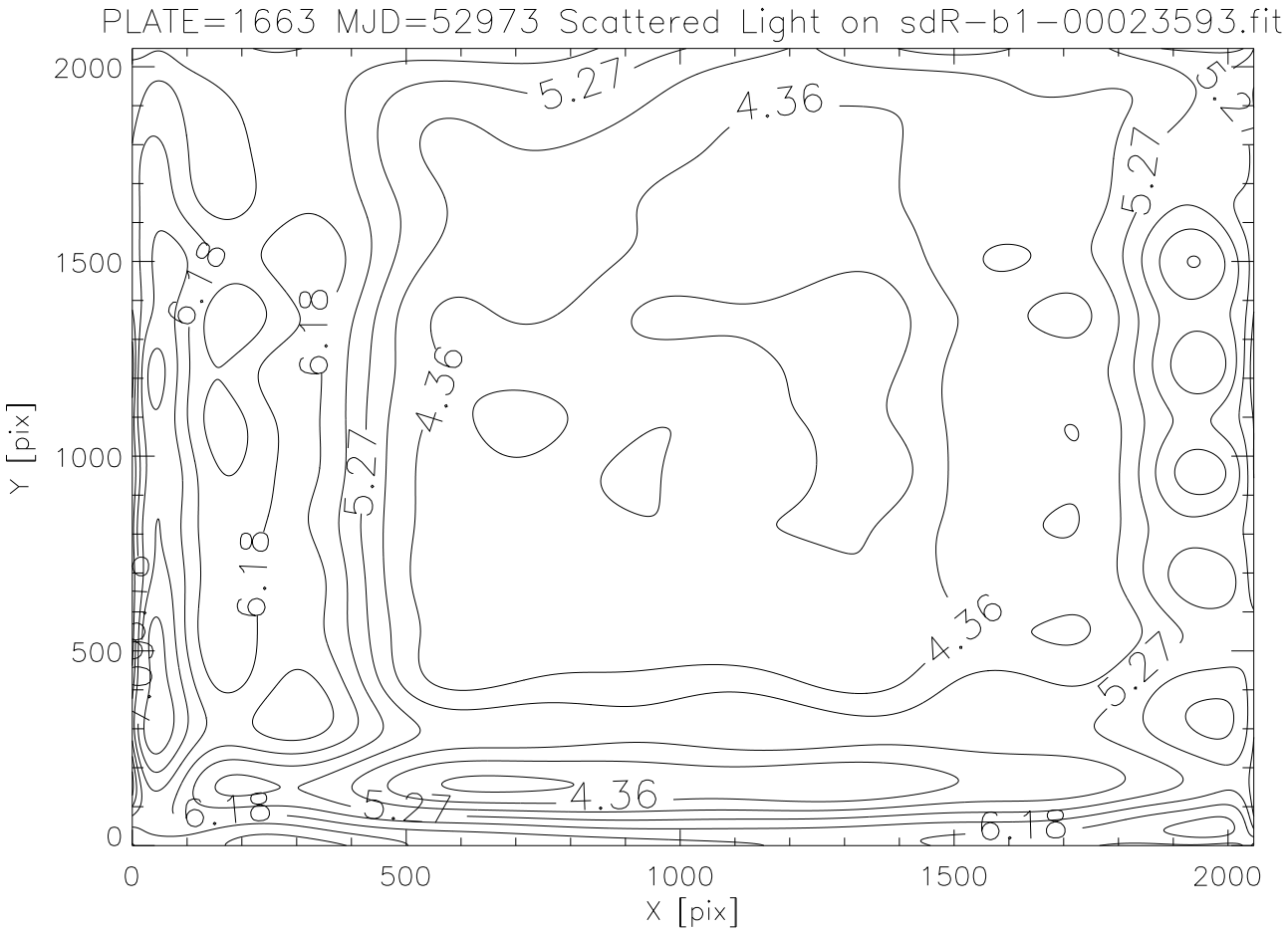

PLATE=1663 MJD=52973 sdR-b1-00023592.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.85 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

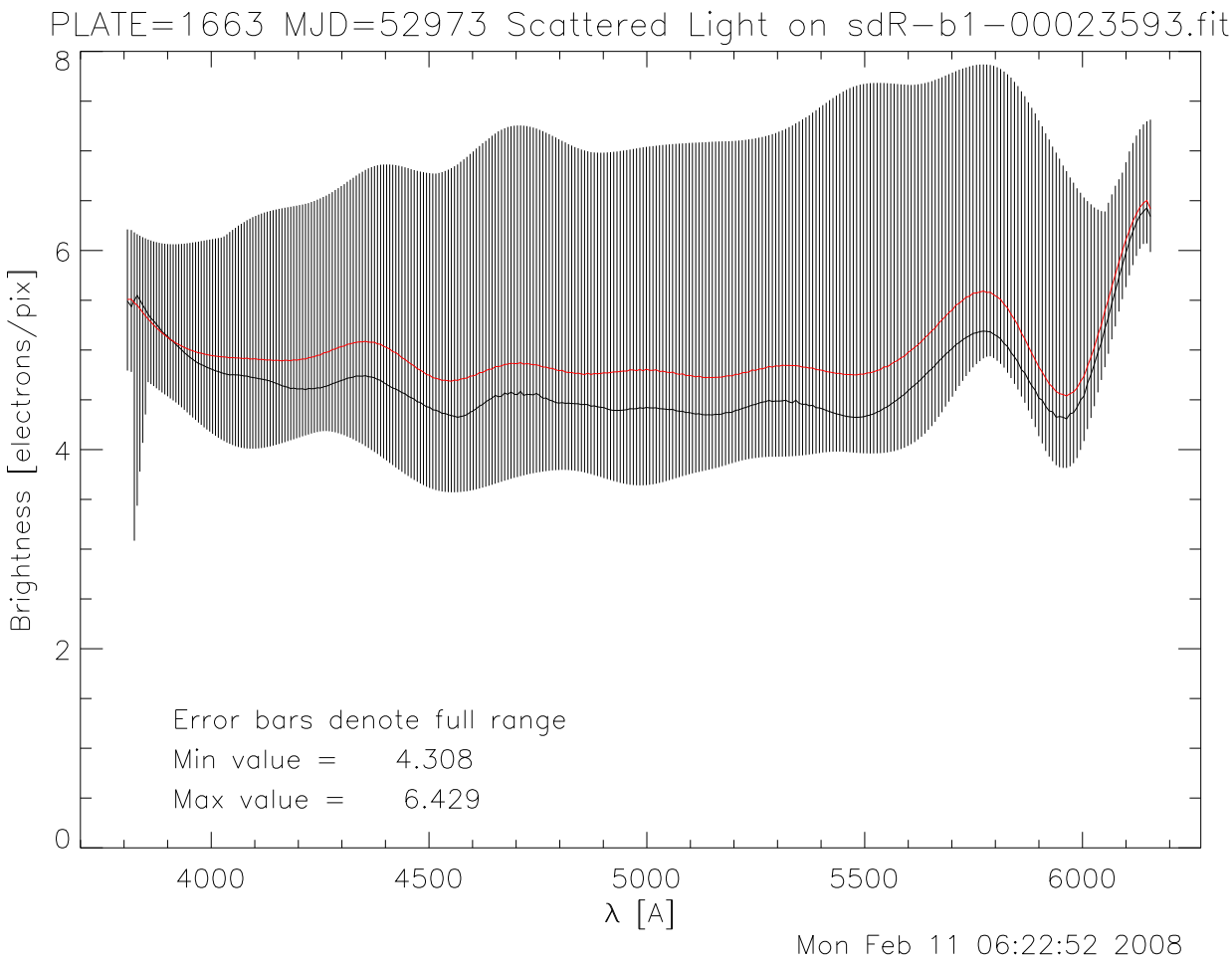

PLATE=1663 MJD=52973 sdR-b1-00023592.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.88 %
Fiber number
Focal Distance [mm]
Airmass

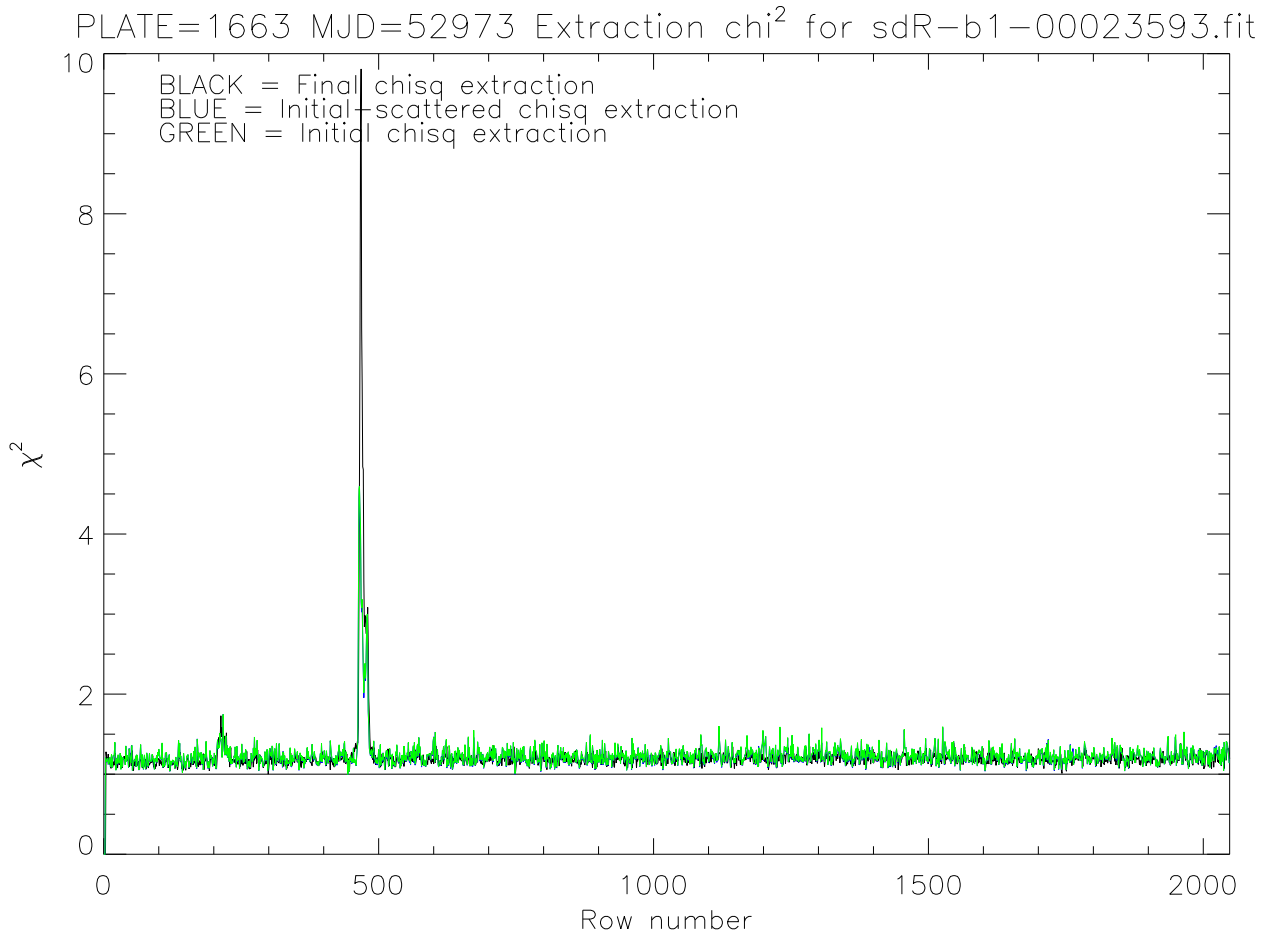

PLATE=1663 MJD=52973 Fiber-Flats for sdR-b1-00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.477
Max value = 1.223
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 06:18:26 2008

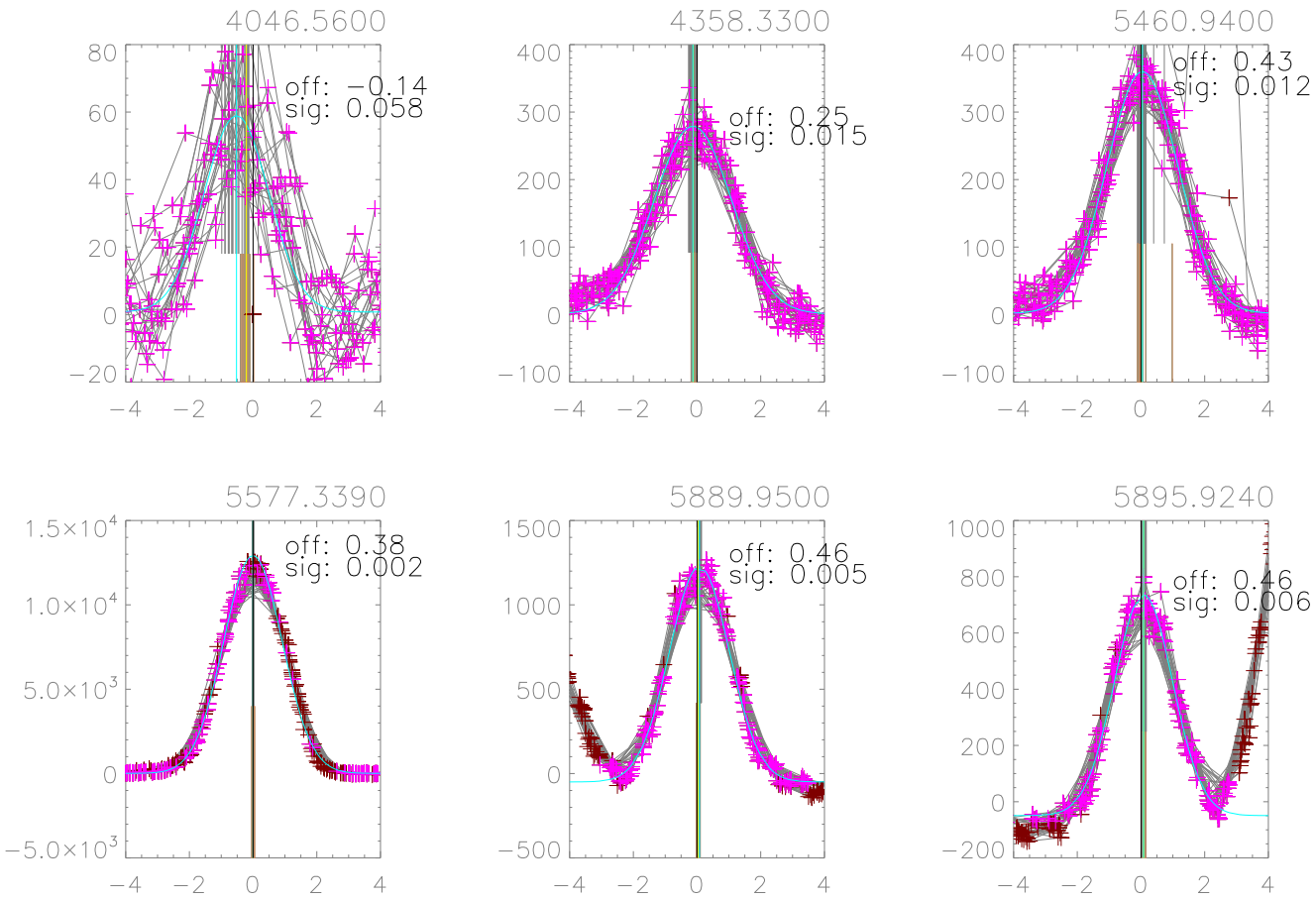

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR−b1−00023593.f
Y [pix]
X [pix]
0
500
1000
1500
2000
7.6
9.1

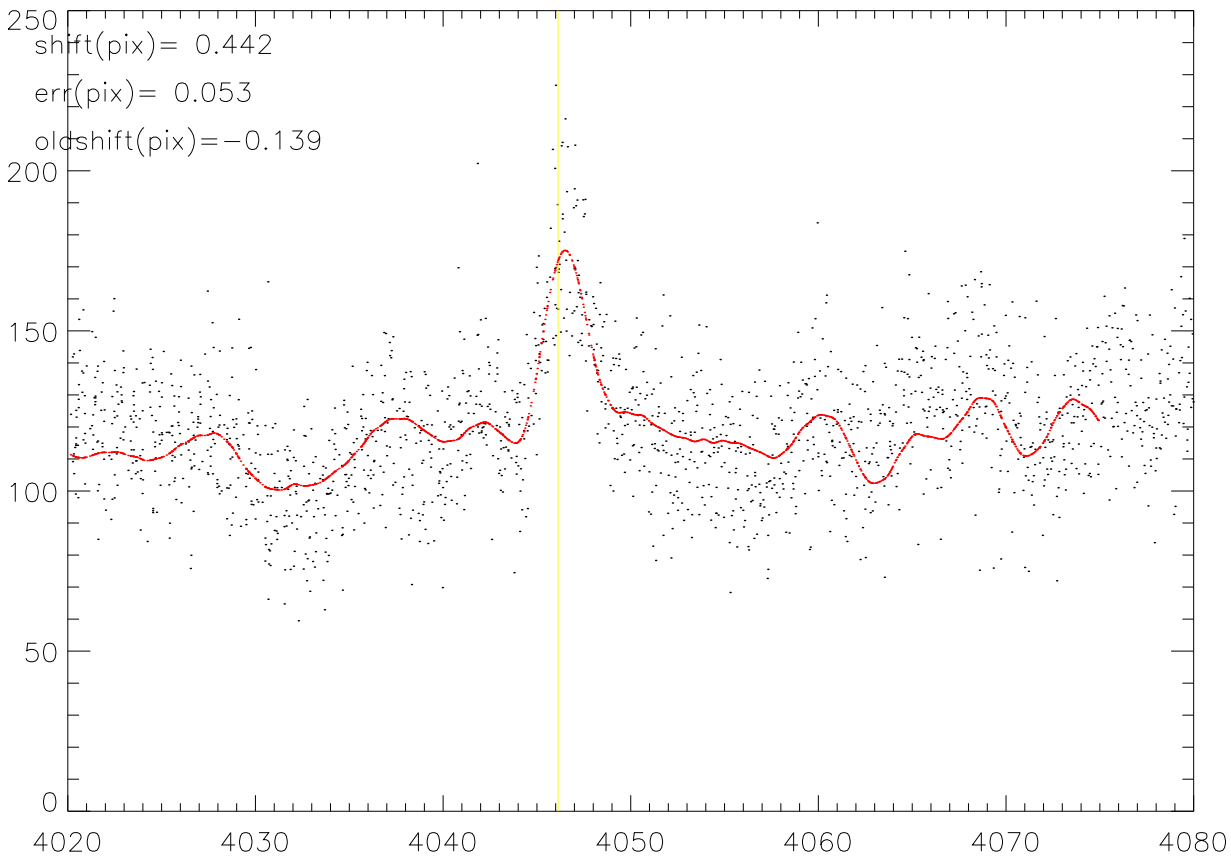

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-b1-00023593.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.450
Max value = 9.264
Mon Feb 11 06:19:27 2008

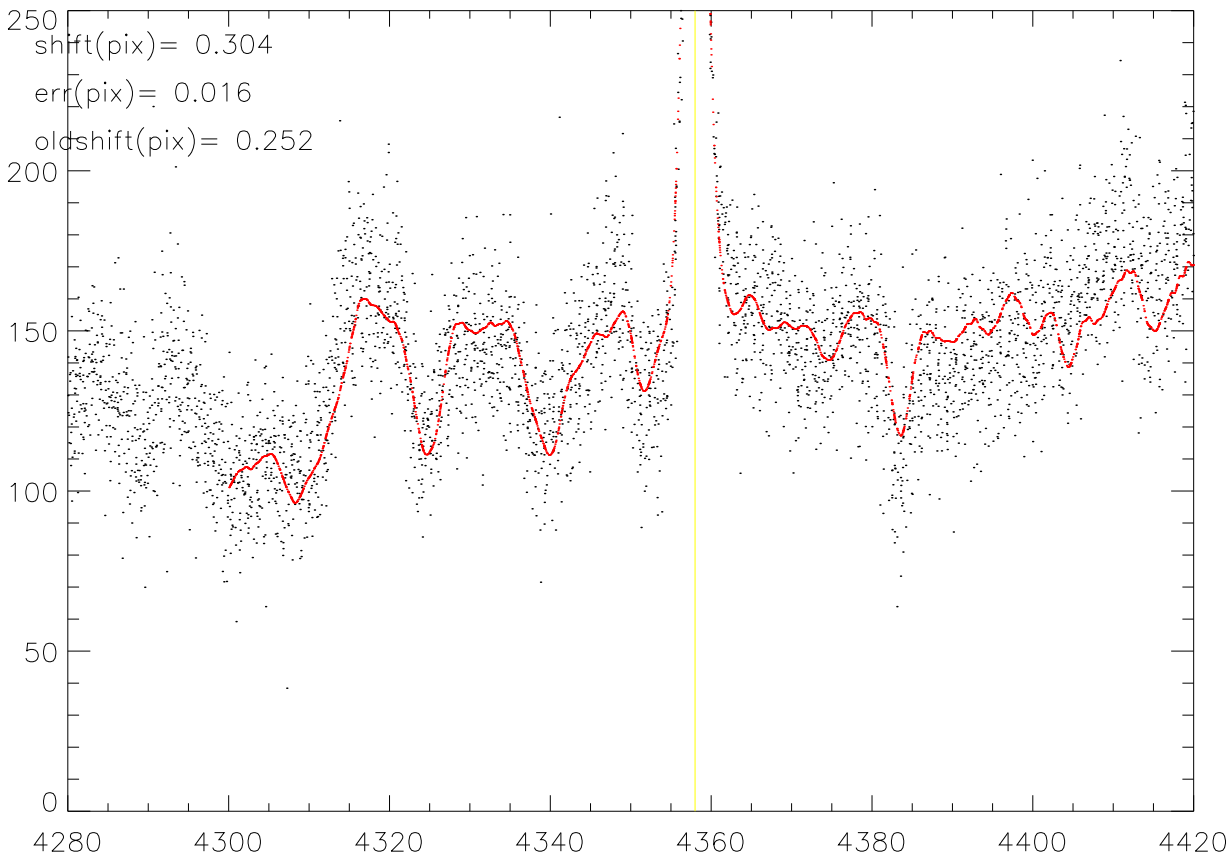

PLATE=1663 MJD=52973 Scattered Light on sdR−b1−00023593.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.27
4.36
6.18

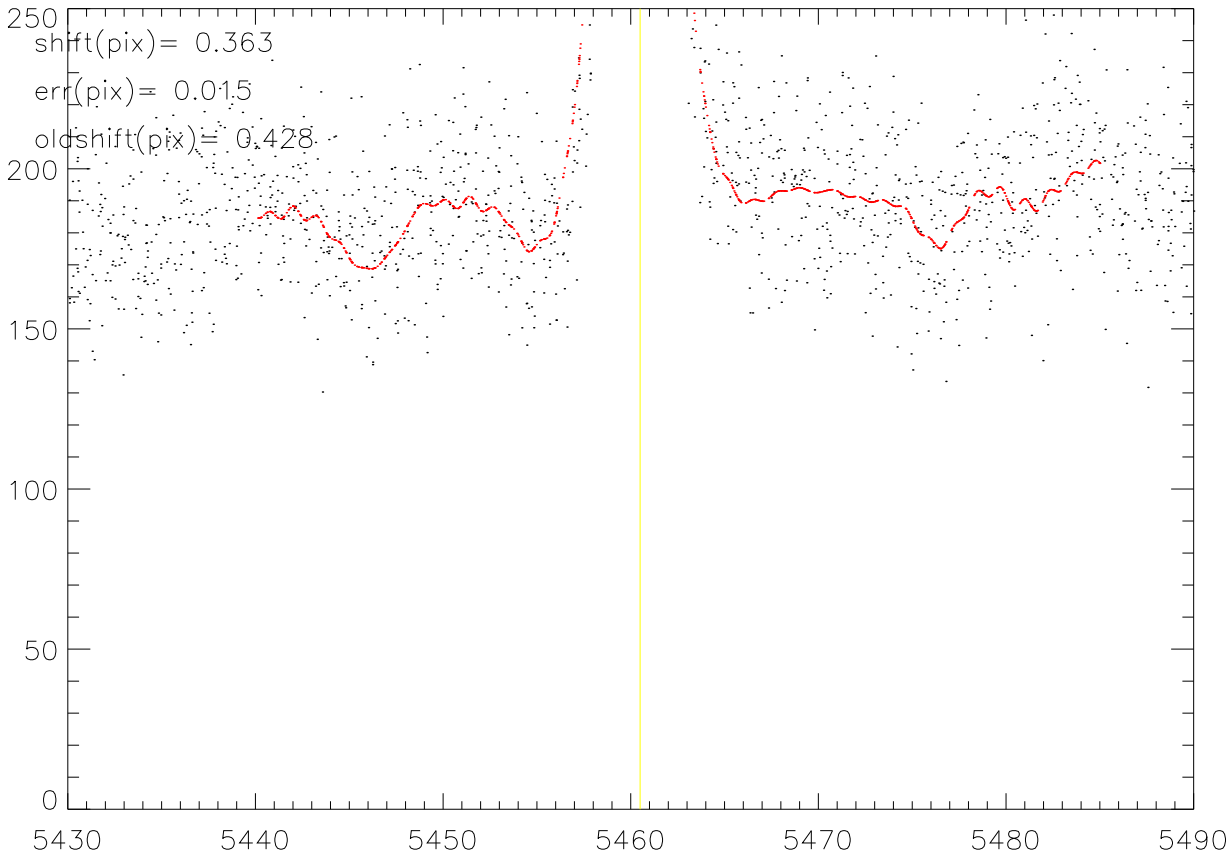

PLATE=1663 MJD=52973 Scattered Light on sdR-b1-00023593.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 4.308
Max value = 6.429
Mon Feb 11 06:22:52 2008

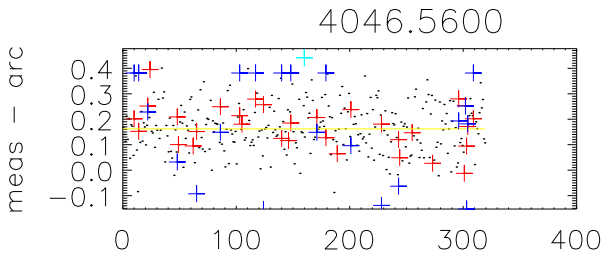

PLATE=1663 MJD=52973 Extraction chi^2 for sdR-b1-00023593.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

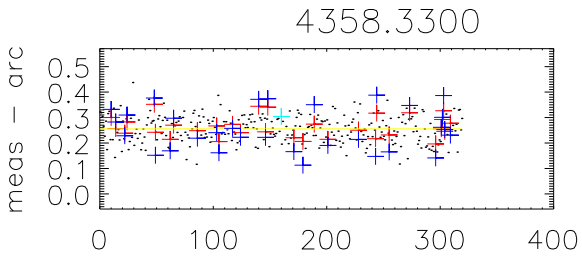

4046.5600
off: −0.14
sig: 0.058
4358.3300
off: 0.25
sig: 0.015
5460.9400
off: 0.43
sig: 0.012
5577.3390
off: 0.38
sig: 0.002
5889.9500
off: 0.46
sig: 0.005
5895.9240
off: 0.46
sig: 0.006

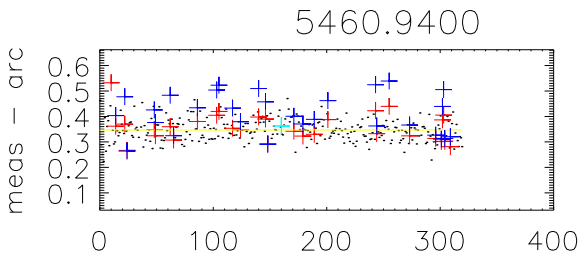

shift(pix)= 0.442
err(pix)= 0.053
oldshift(pix)=−0.139
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

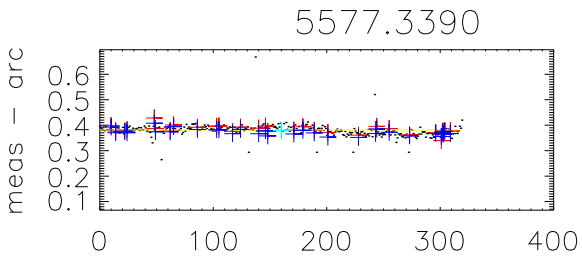

shift(pix)= 0.304
err(pix)= 0.016
oldshift(pix)= 0.252
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

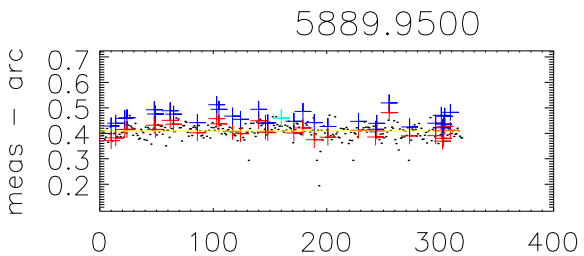

shift(pix)= 0.363
err(pix)= 0.015
oldshift(pix)= 0.428
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

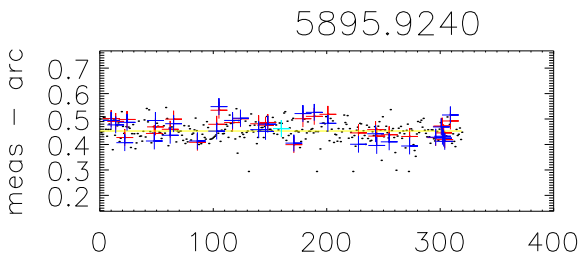

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

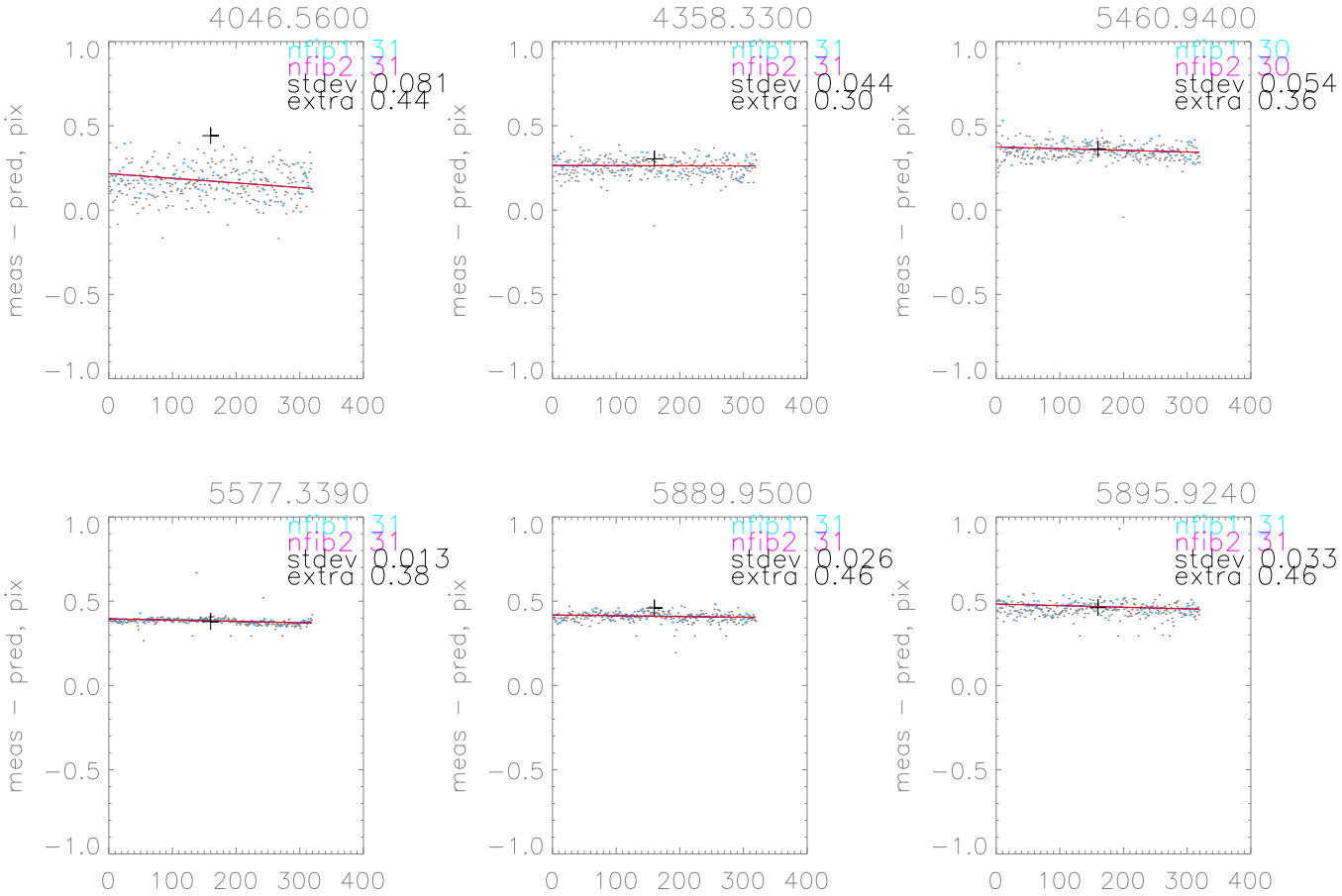

4358.3300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

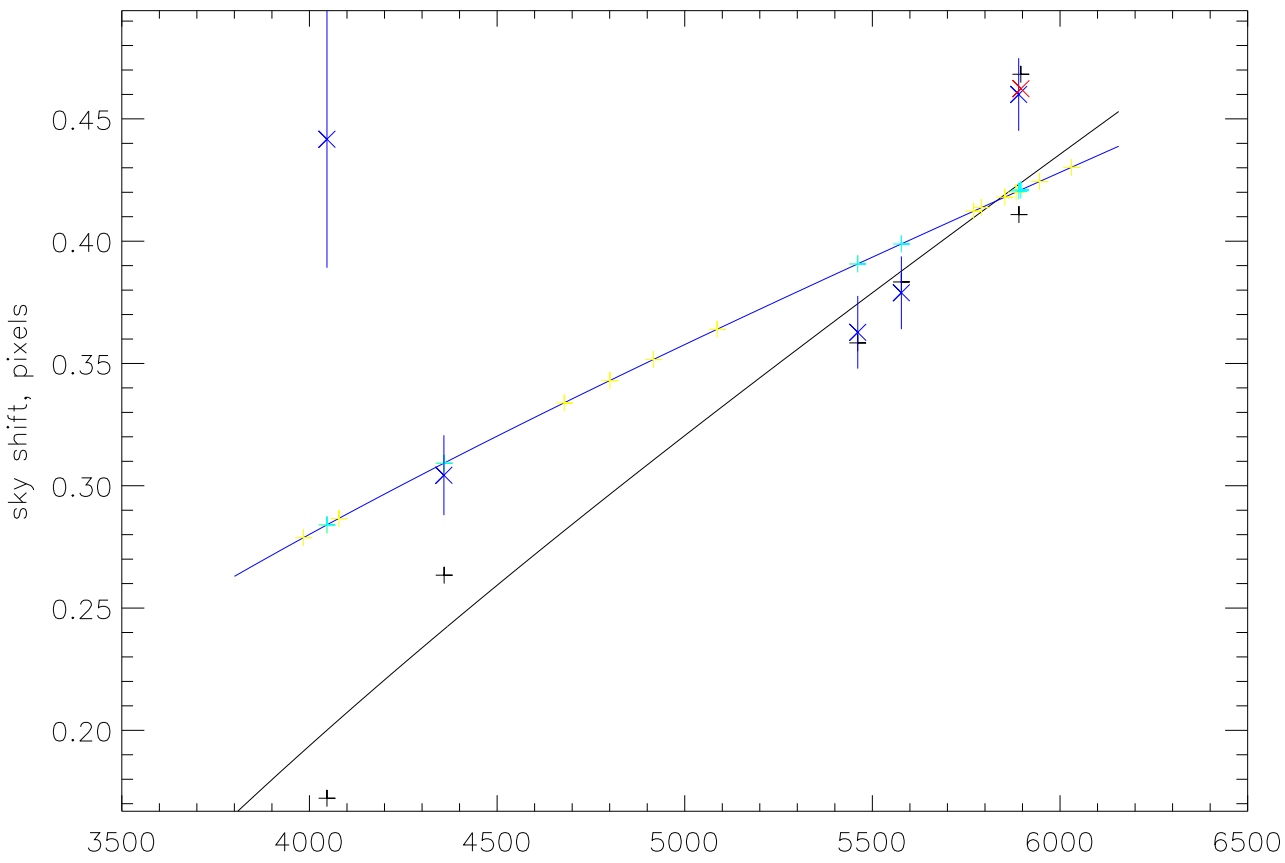

5460.9400
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


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

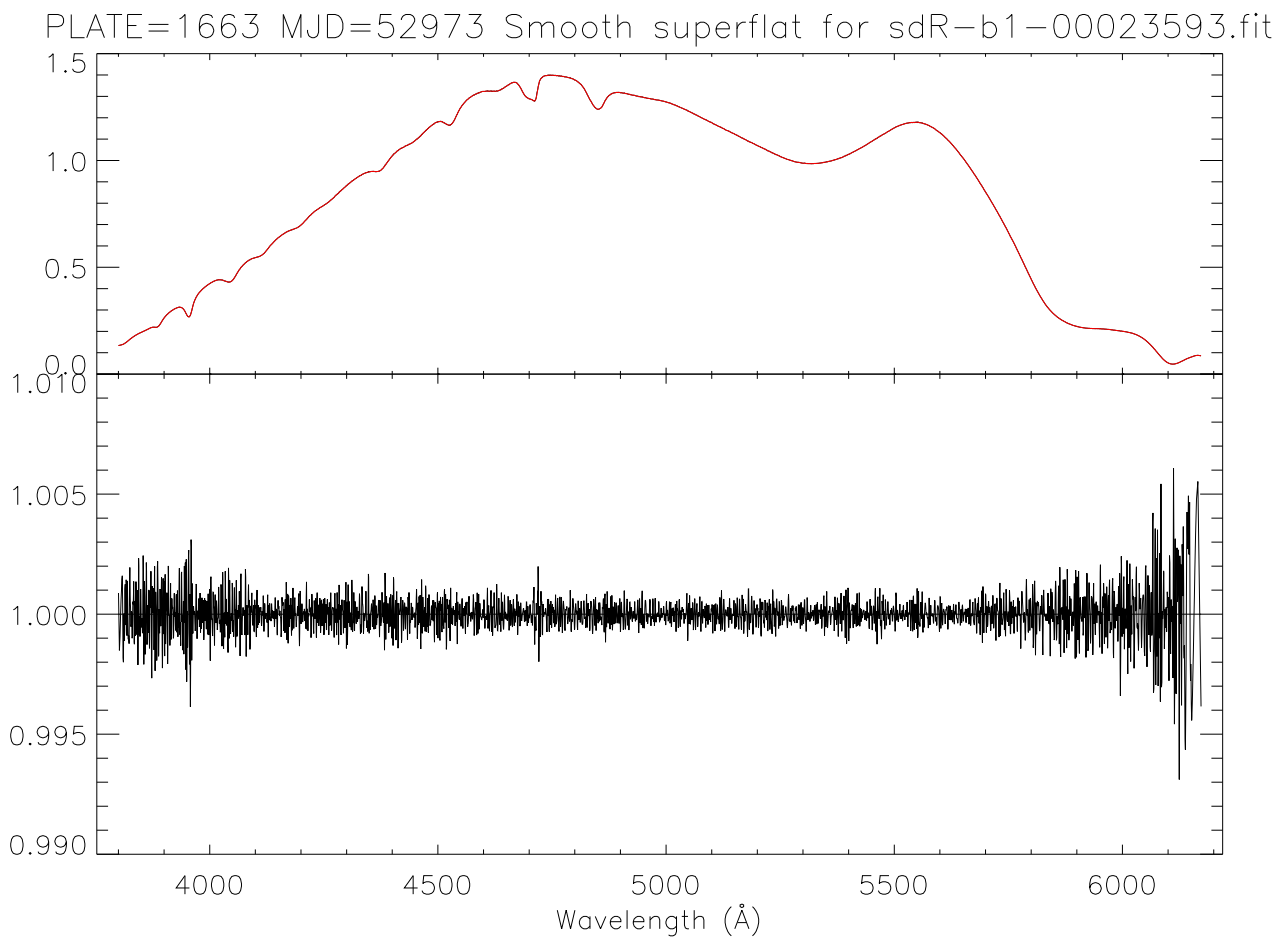

5889.9500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

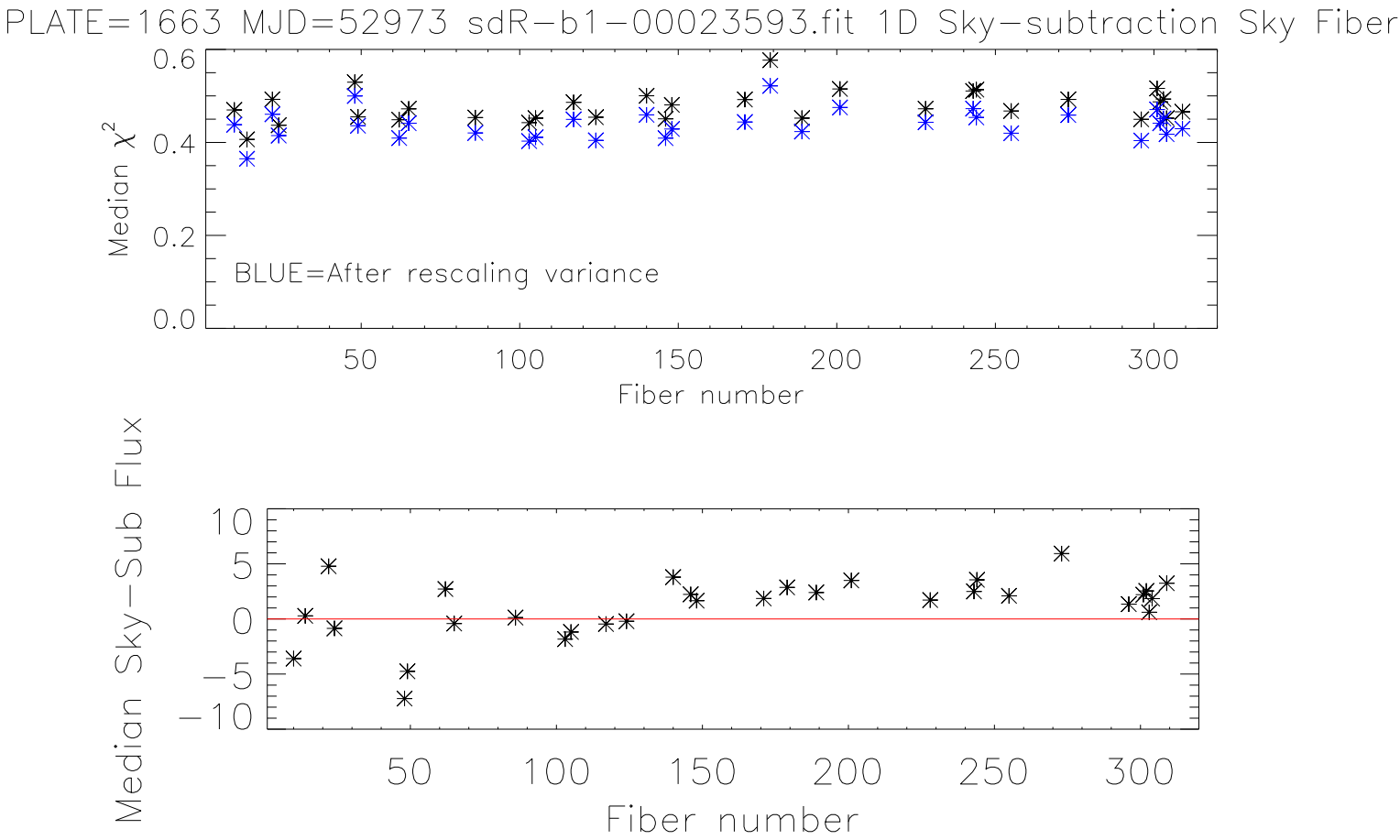

5895.9240
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

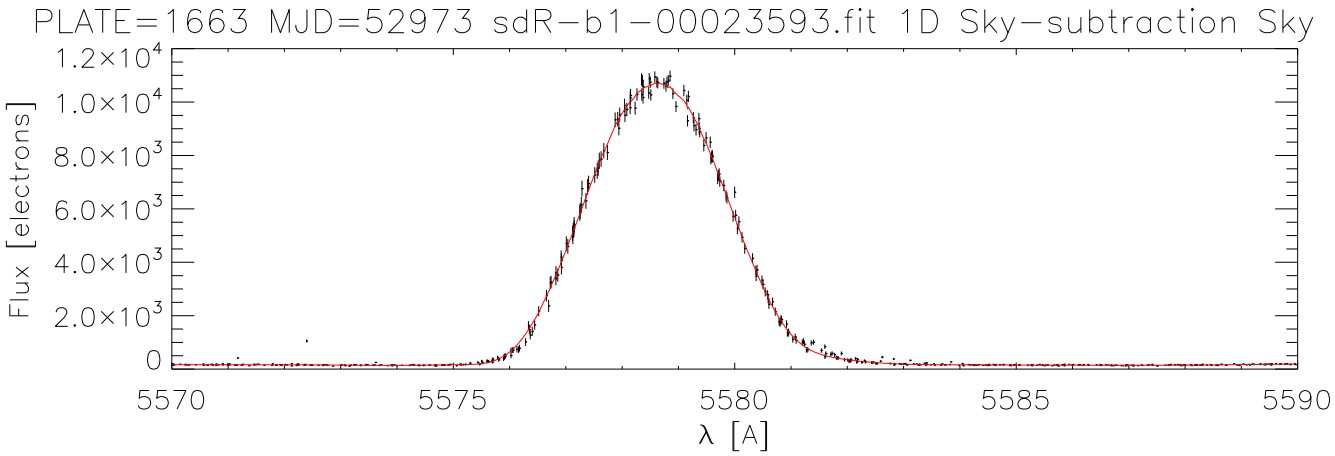

4046.5600
nfib1 31
nfib2 31
stdev 0.081
extra 0.44
4358.3300
nfib1 31
nfib2 31
stdev 0.044
extra 0.30
5460.9400
nfib1 30
nfib2 30
stdev 0.054
extra 0.36
5577.3390
nfib1 31
nfib2 31
stdev 0.013
extra 0.38
5889.9500
nfib1 31
nfib2 31
stdev 0.026
extra 0.46
5895.9240
nfib1 31
nfib2 31
stdev 0.033
extra 0.46
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

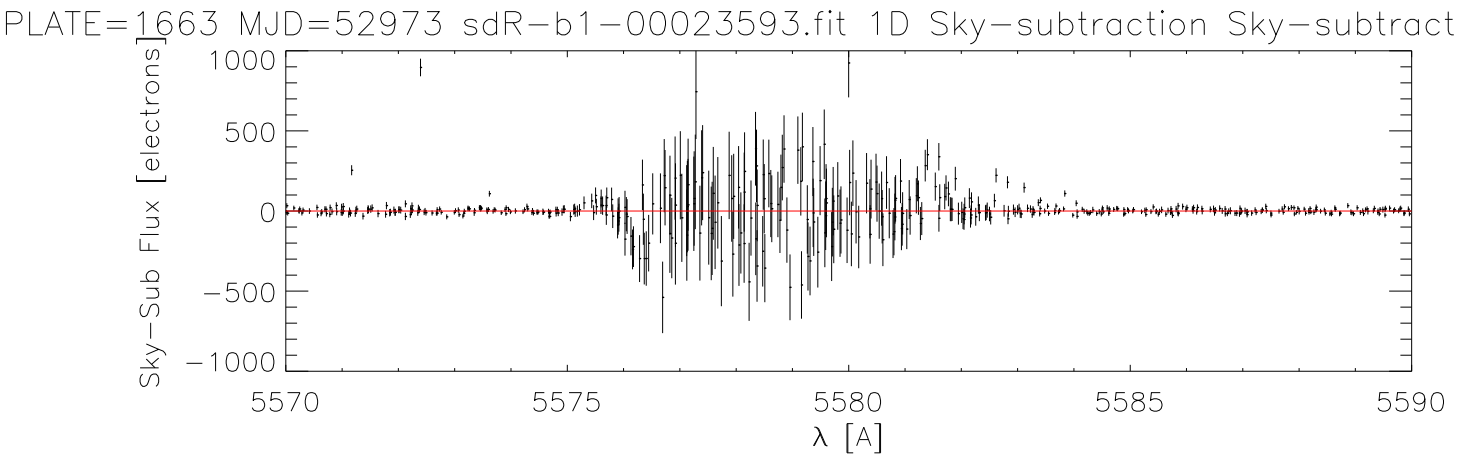

sky shift, pixels
0.45
0.40
0.35
0.30
0.25
0.20
3500
4000
4500
5000
5500
6000
6500

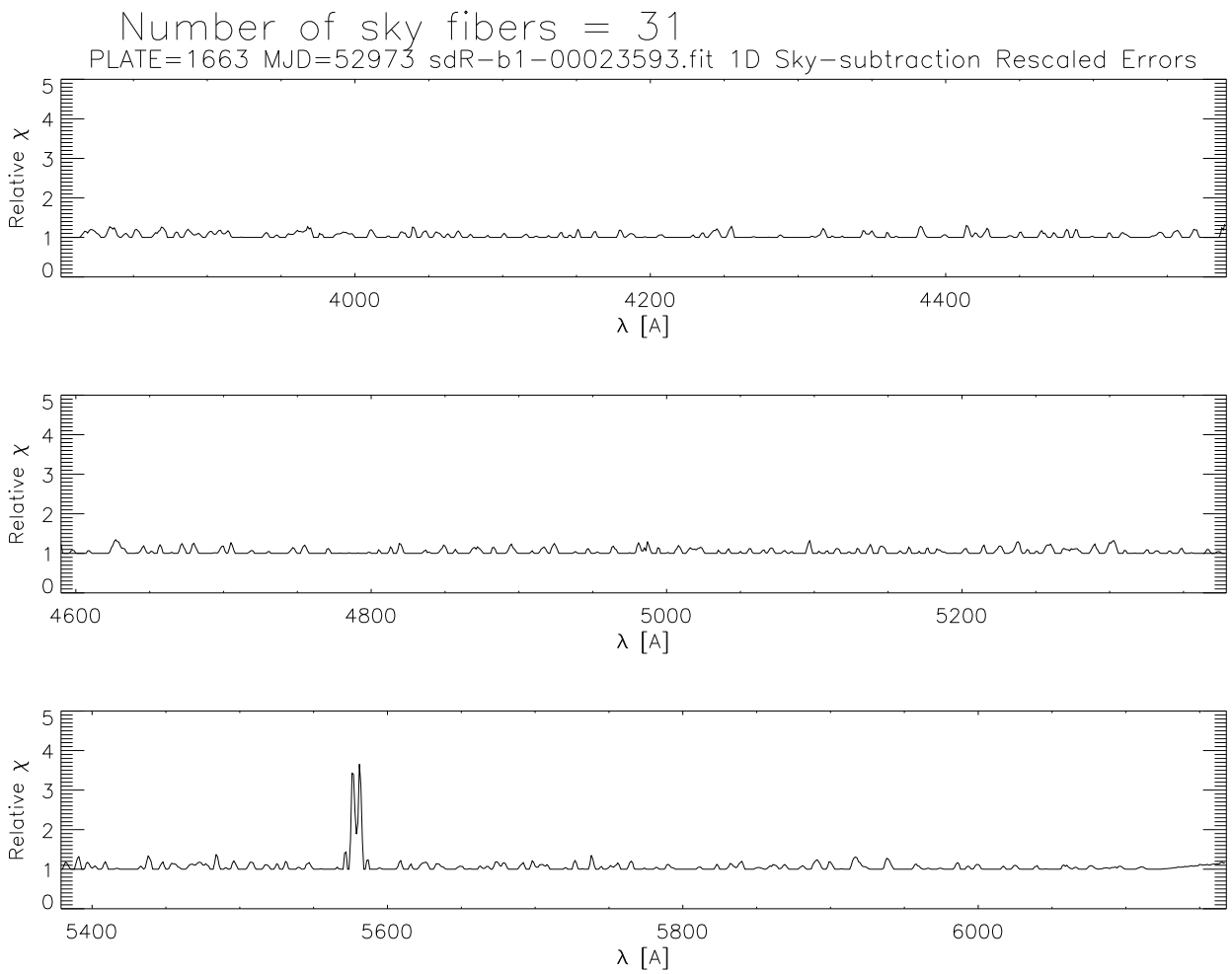
es= 0.0000

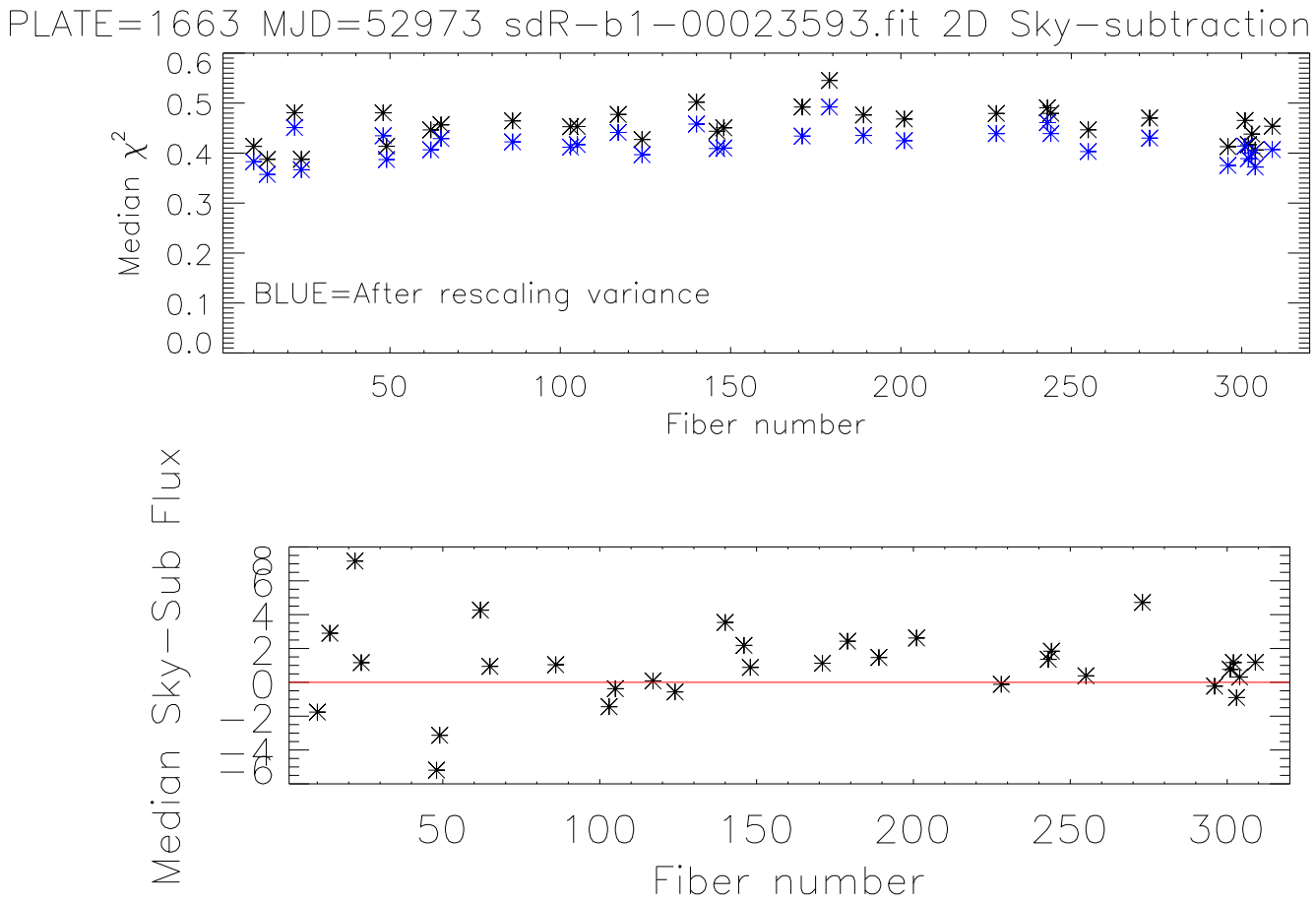

PLATE=1663 MJD=52973 Smooth superflat for sdR-b1-00023593.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

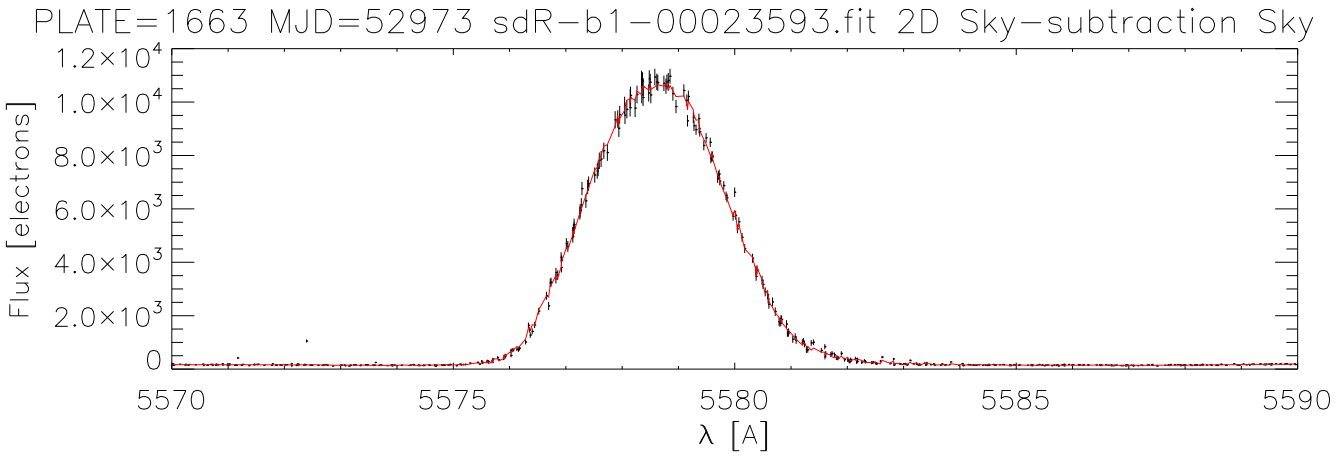

PLATE=1663 MJD=52973 sdR-b1-00023593.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

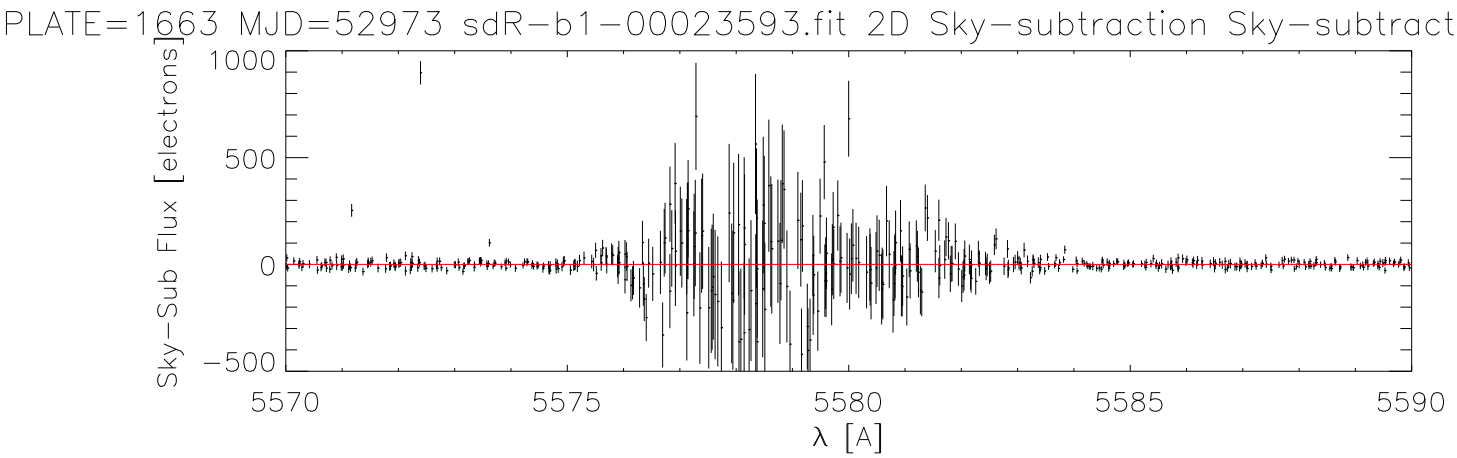

PLATE=1663 MJD=52973 sdR-b1-00023593.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

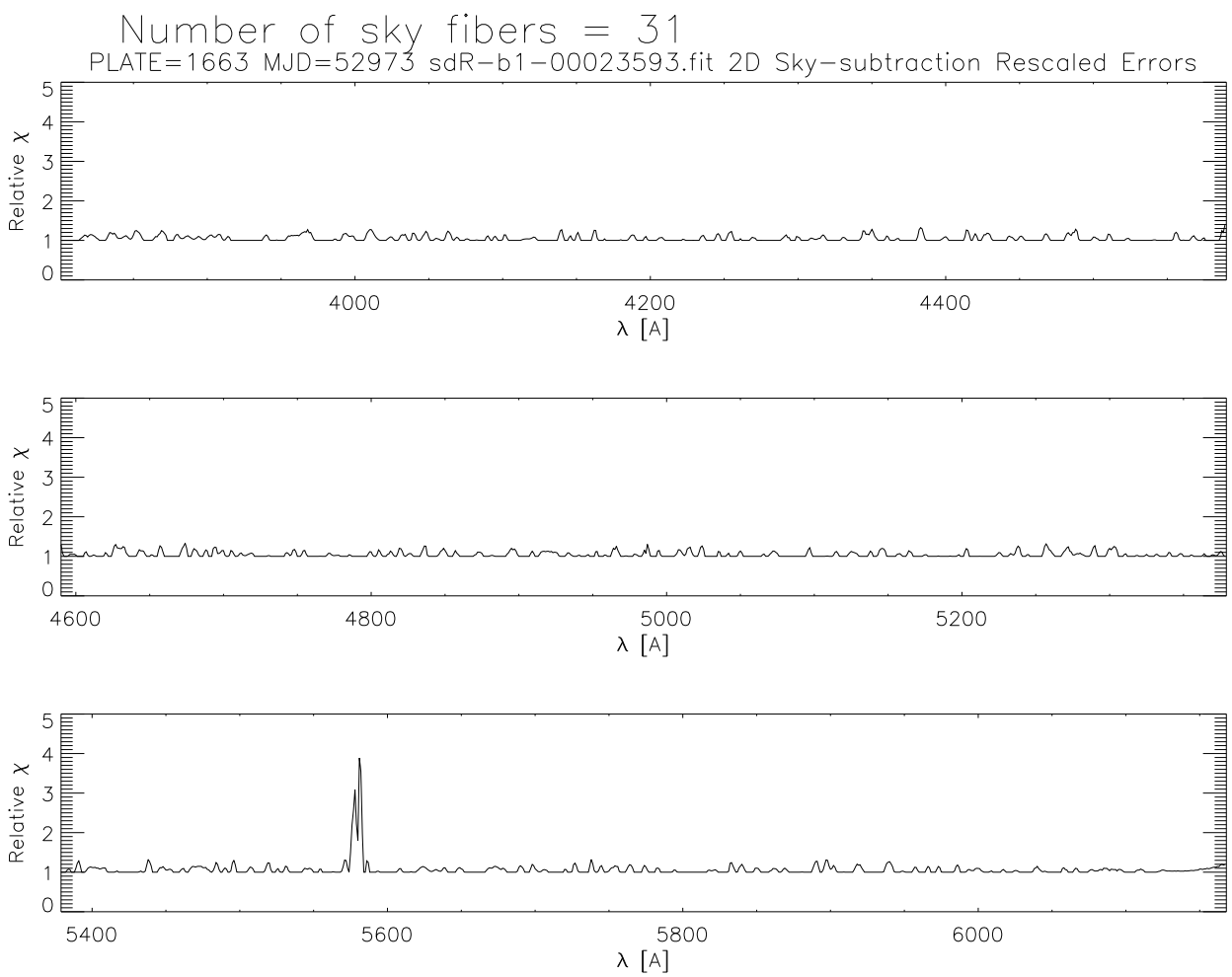

PLATE=1663 MJD=52973 sdR-b1-00023593.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

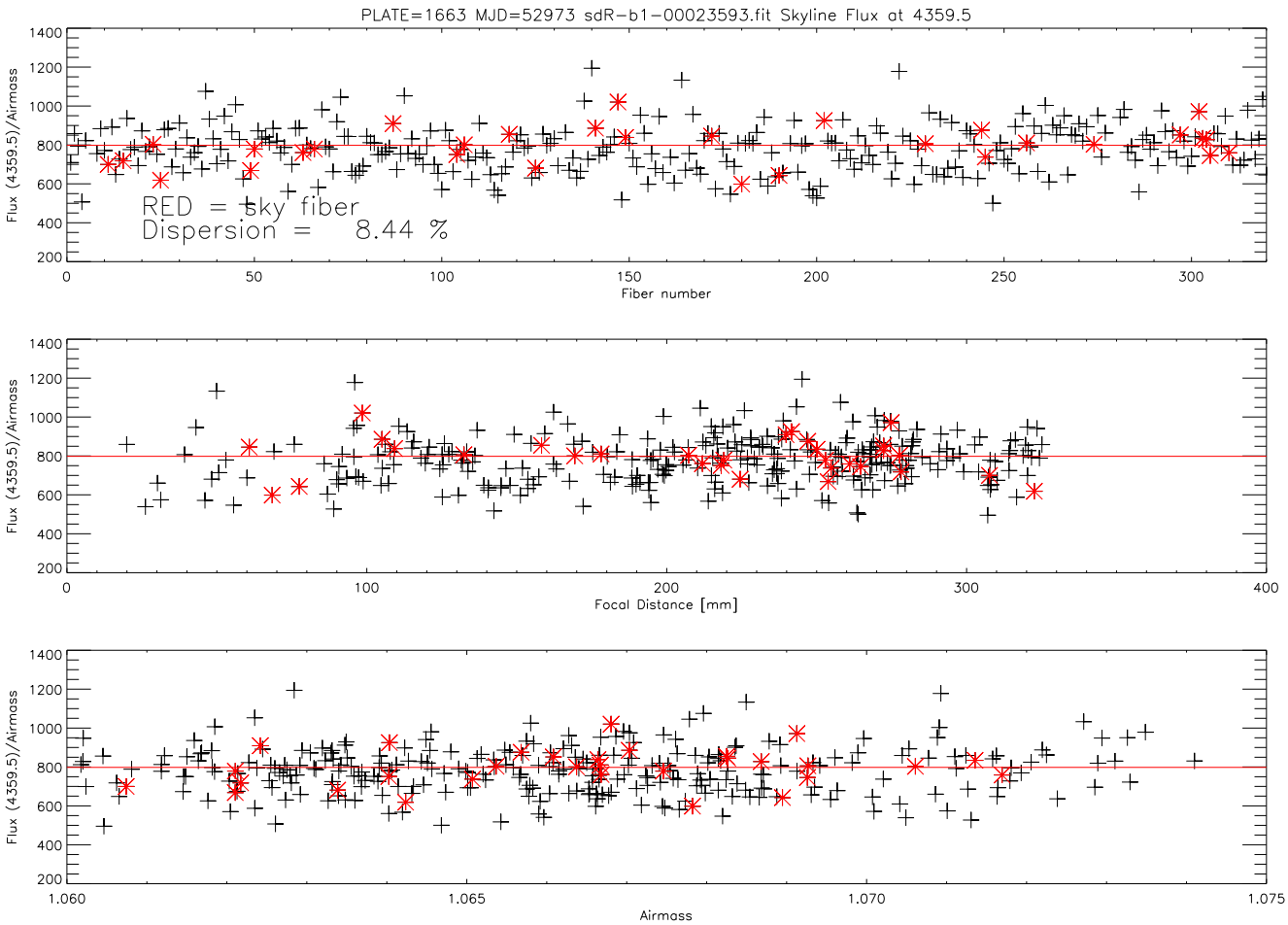

Number of sky fibers = 31
PLATE=1663 MJD=52973 sdR-b1-00023593.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

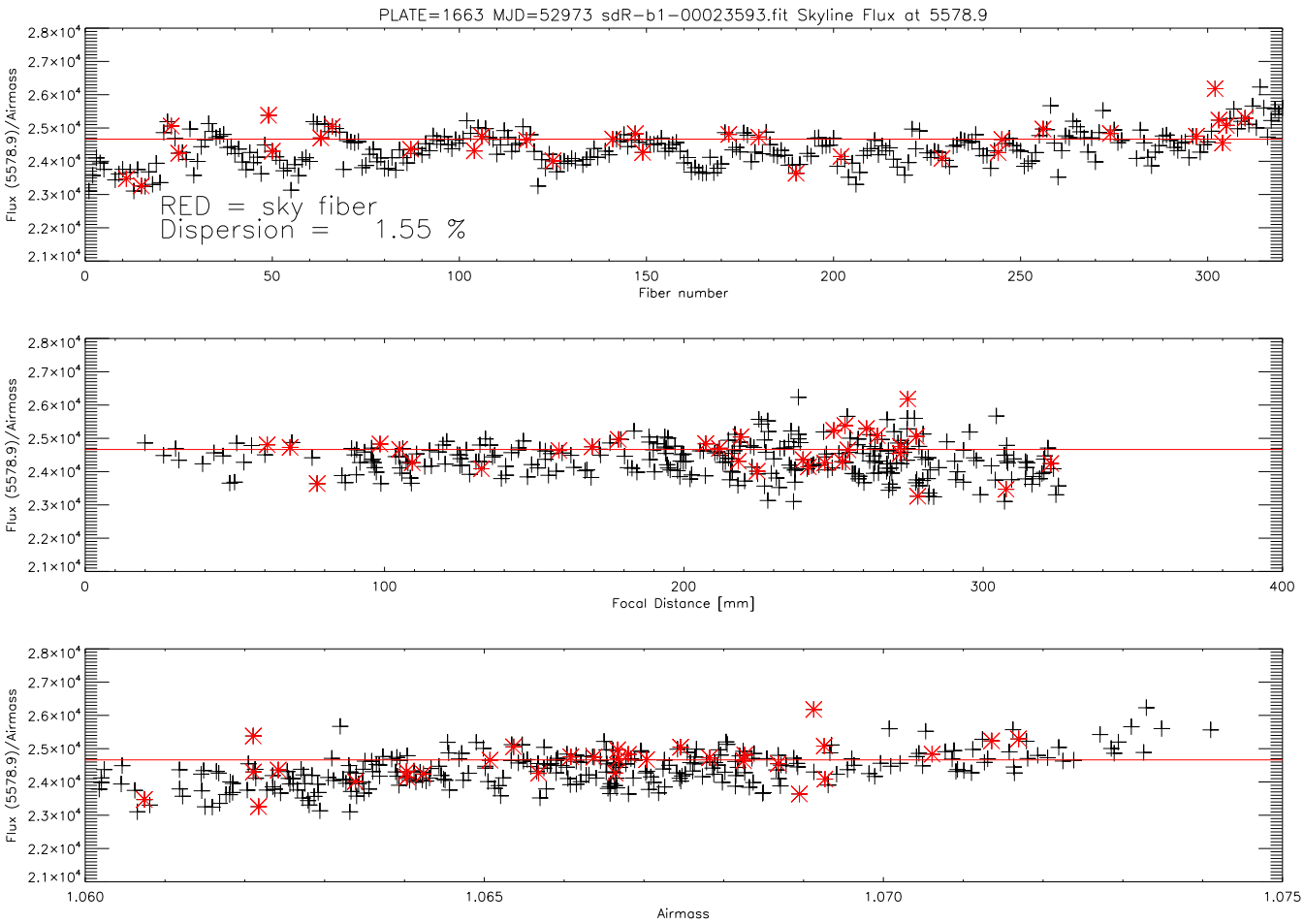

PLATE=1663 MJD=52973 sdR-b1-00023593.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11
-6
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

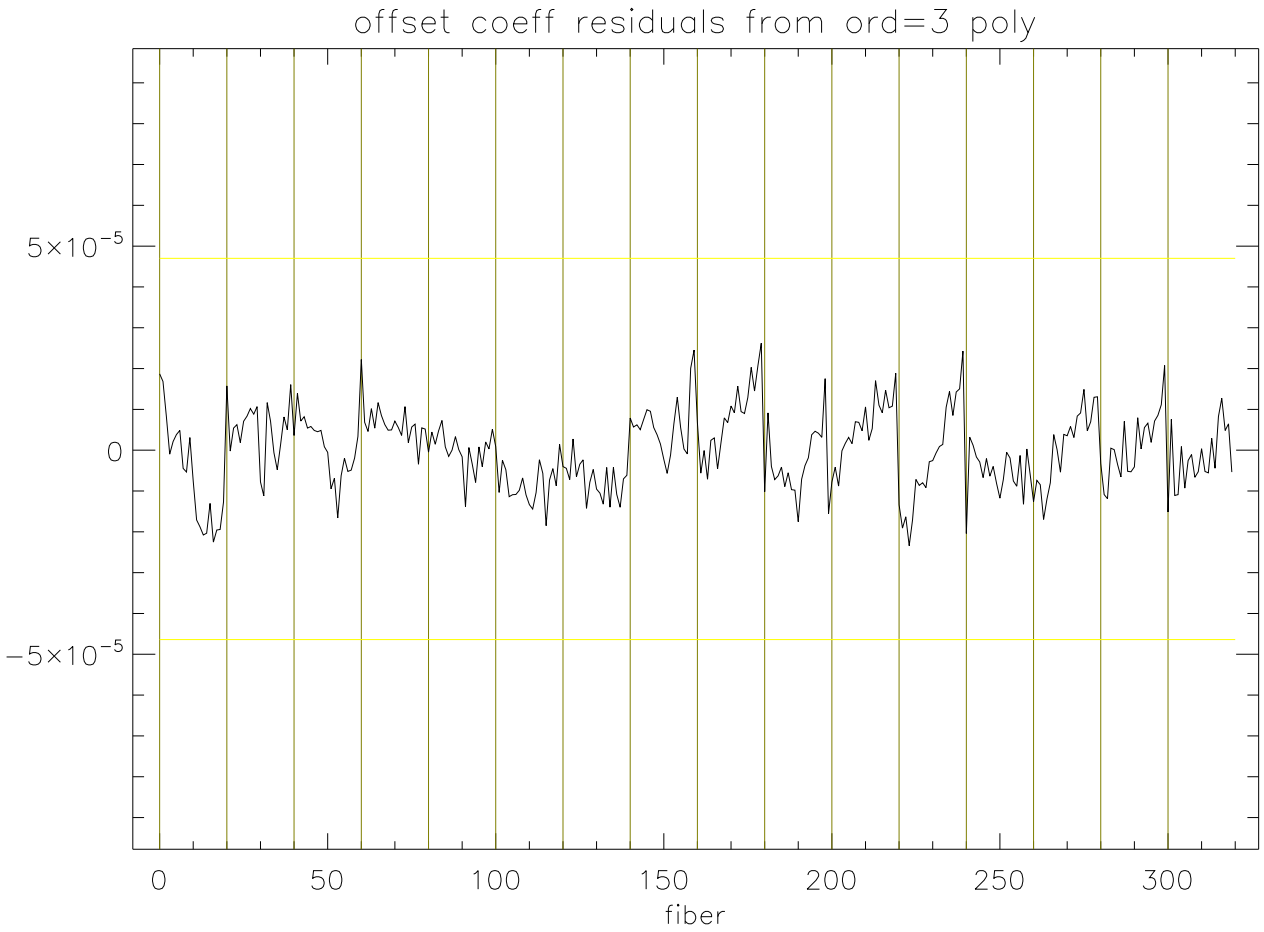

PLATE=1663 MJD=52973 sdR-b1-00023593.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

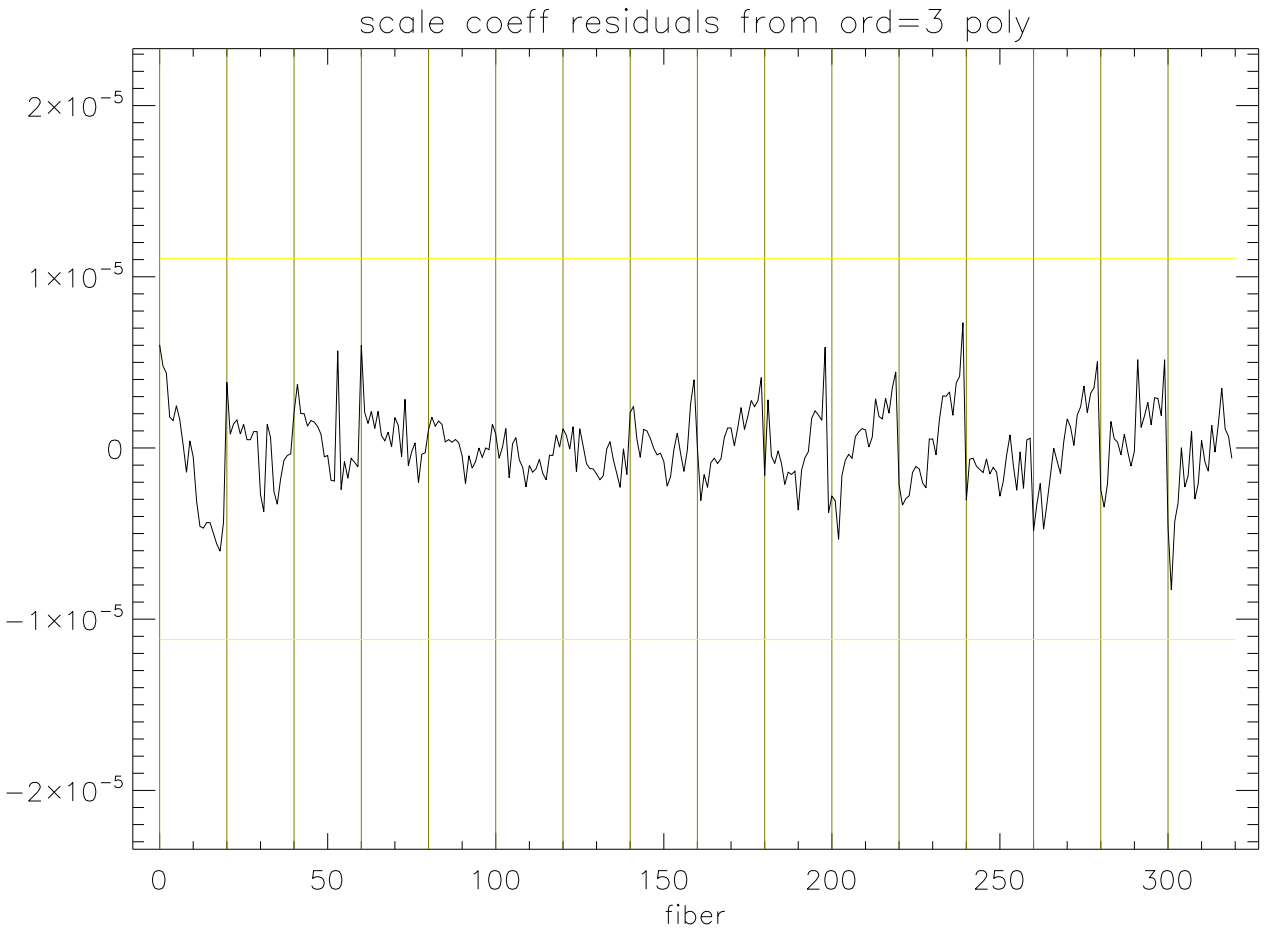

PLATE=1663 MJD=52973 sdR-b1-00023593.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

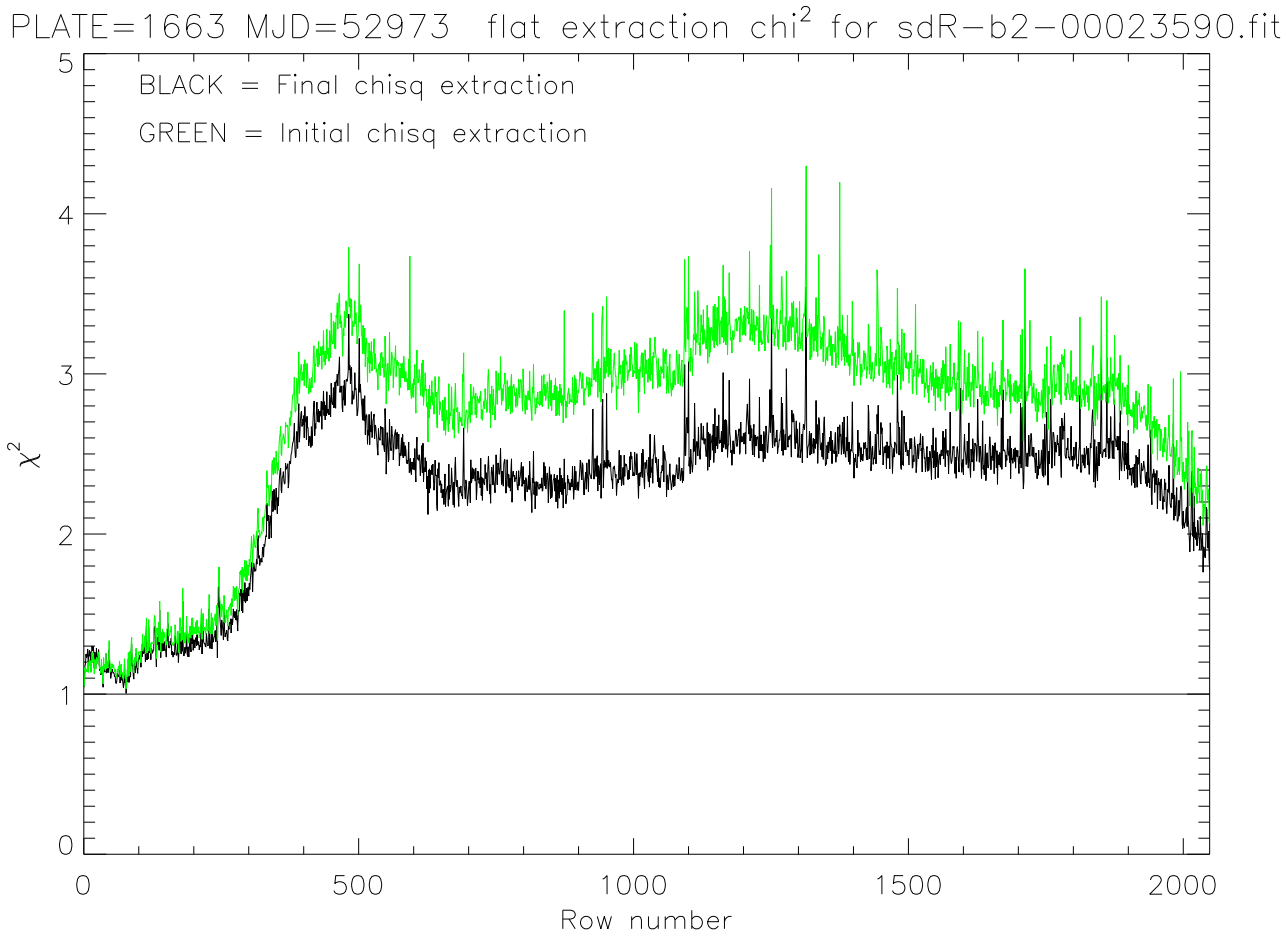

Number of sky fibers = 31
PLATE=1663 MJD=52973 sdR-b1-00023593.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

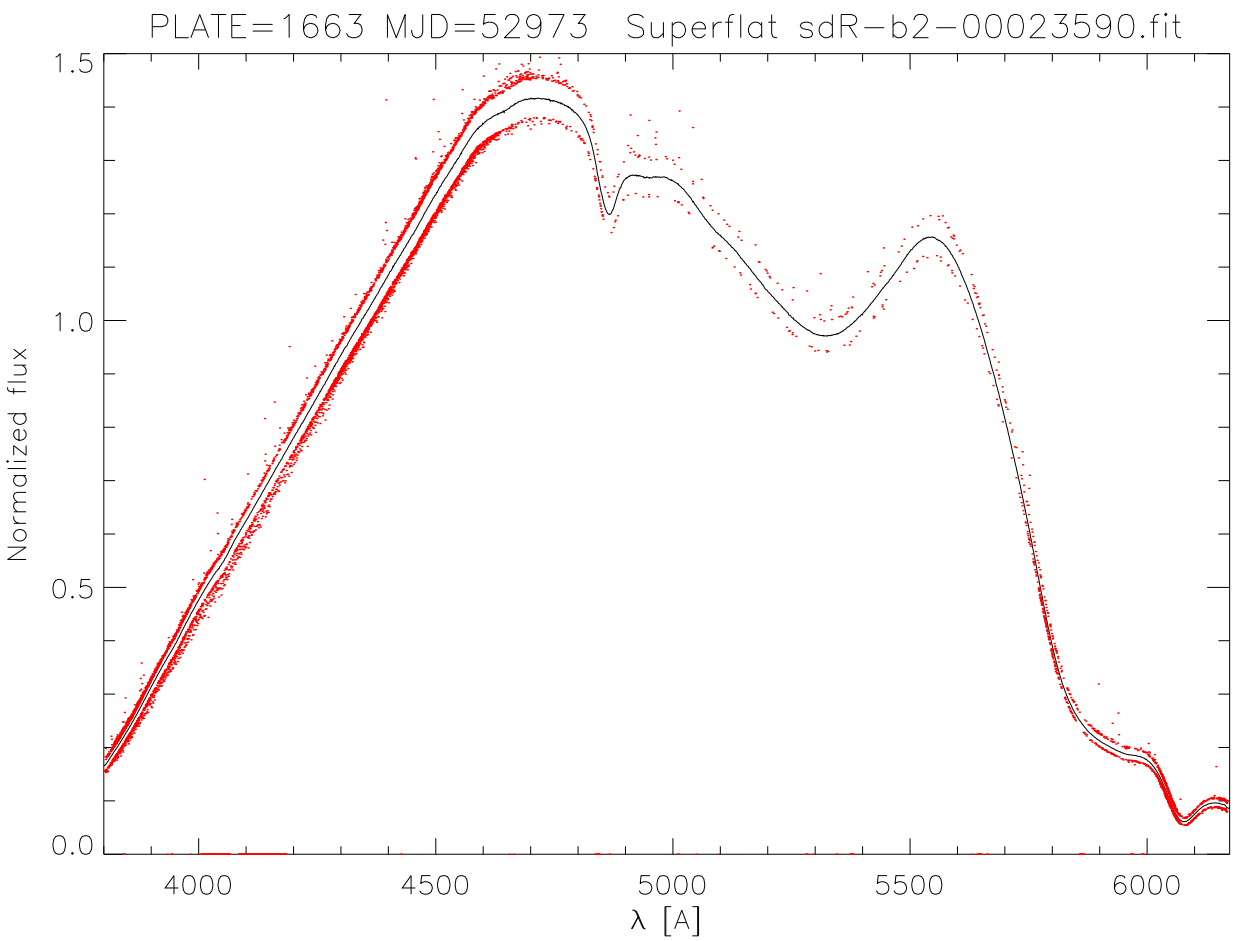

PLATE=1663 MJD=52973 sdR-b1-00023593.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.44 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

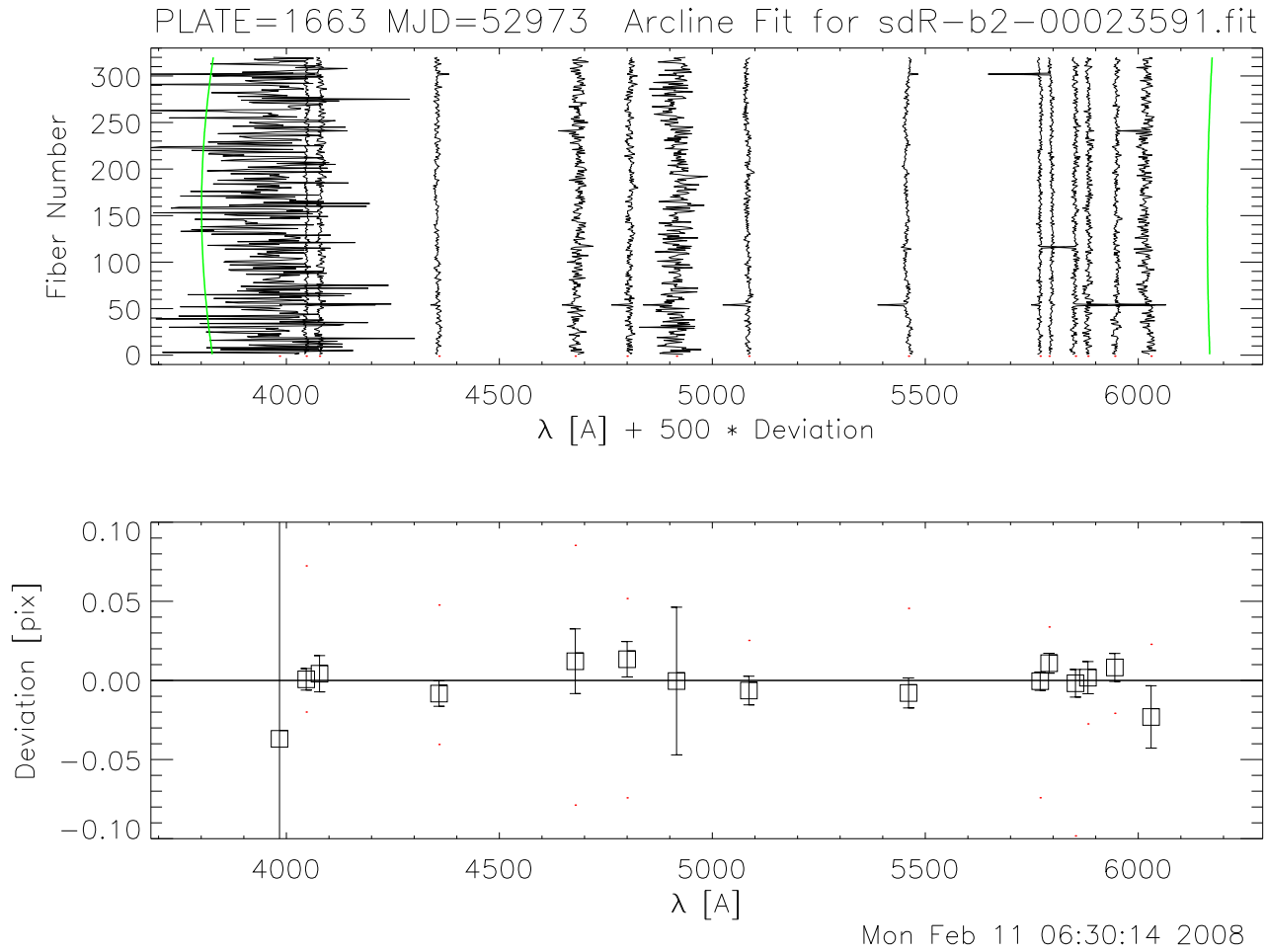

PLATE=1663 MJD=52973 sdR-b1-00023593.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.55 %
Fiber number
Focal Distance [mm]
Airmass

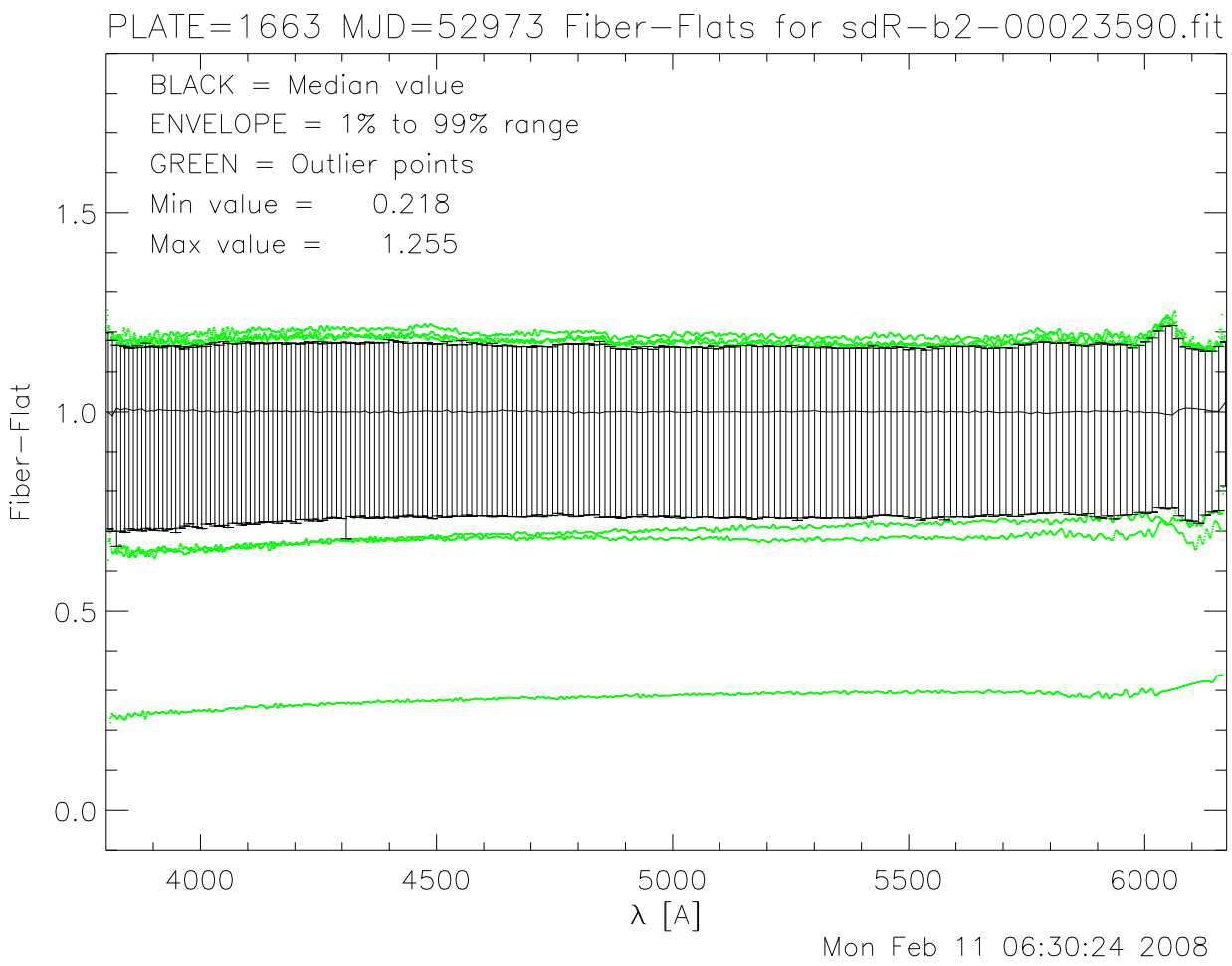

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

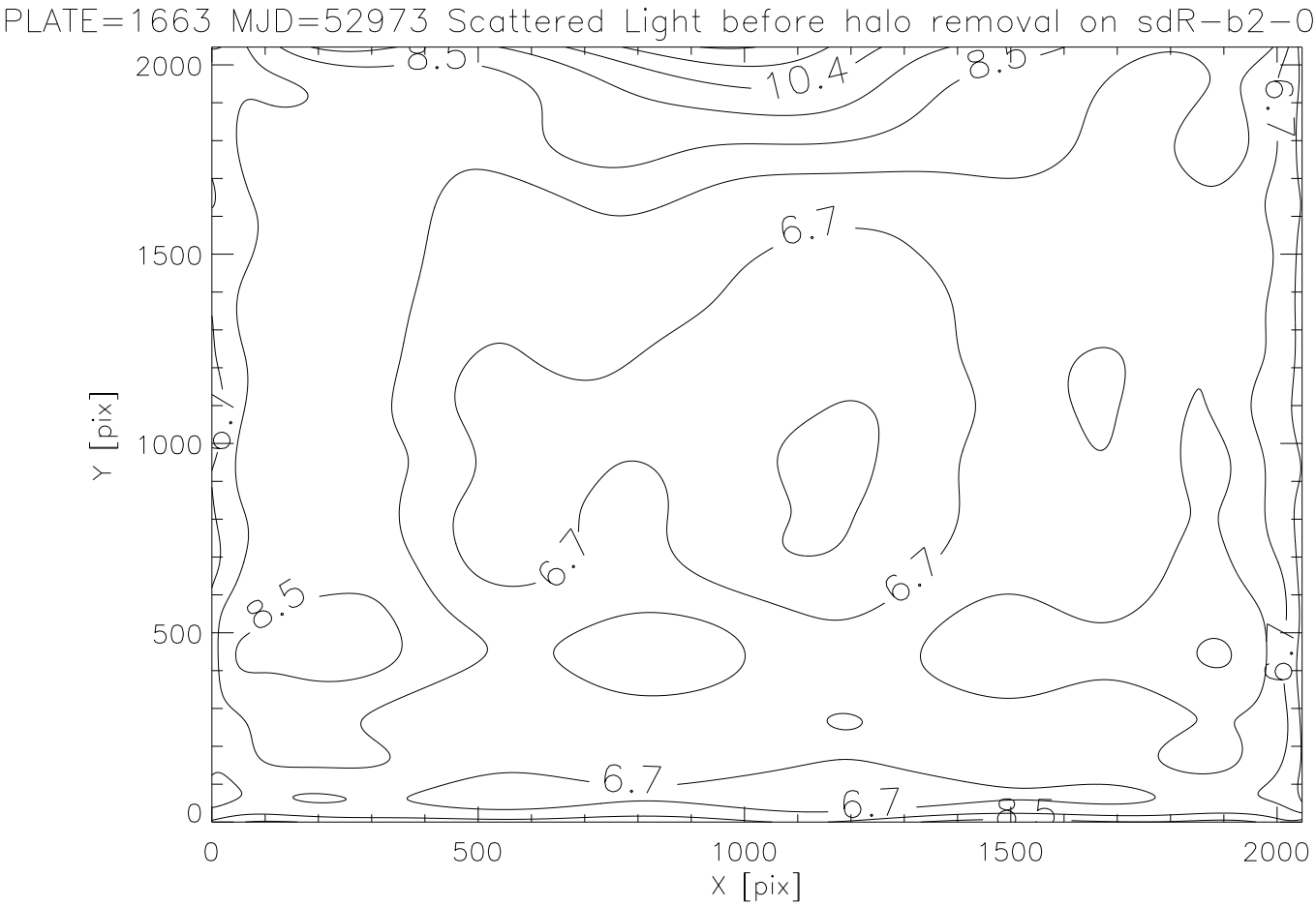

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

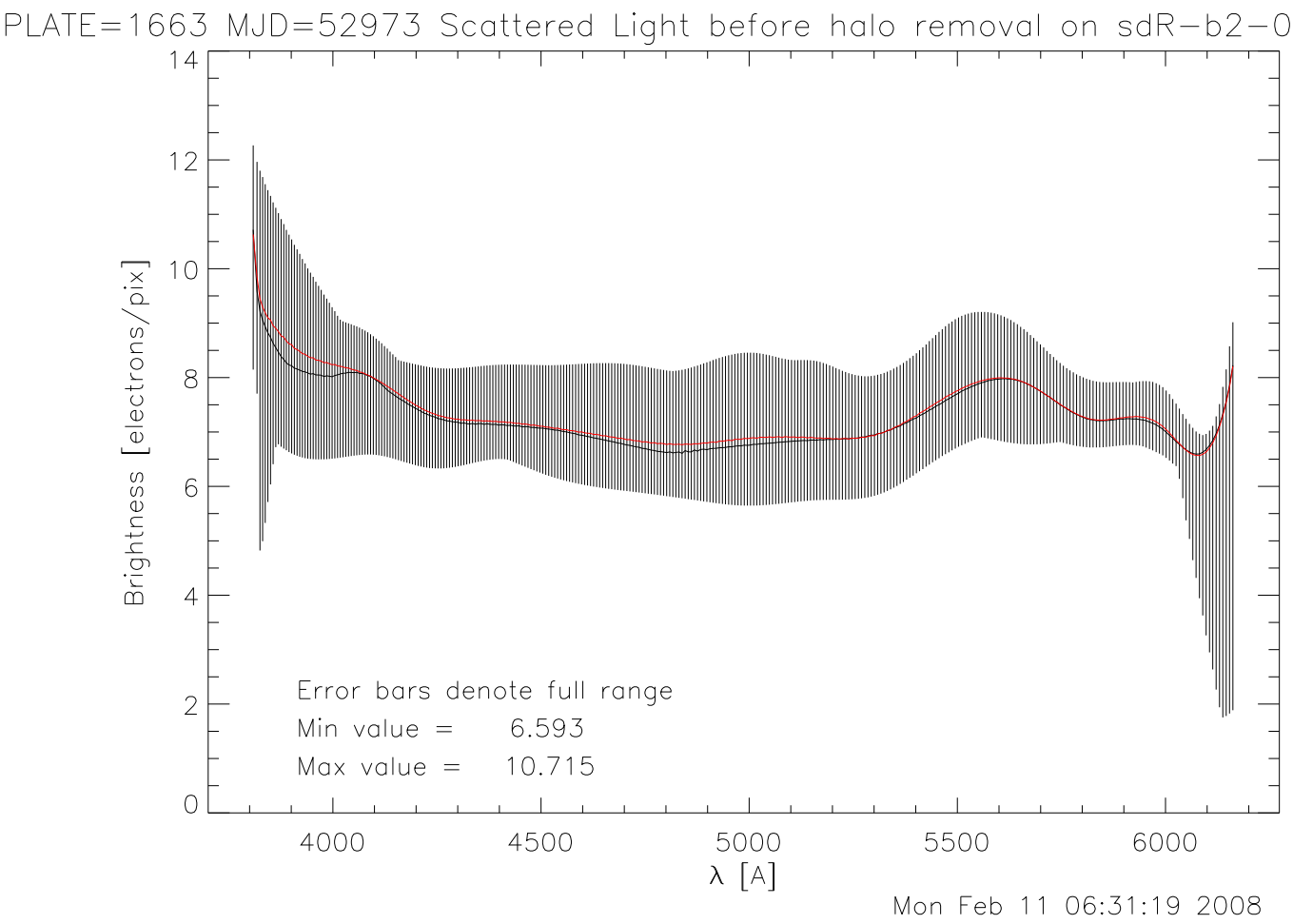

PLATE=1663 MJD=52973 flat extraction chi^2 for sdR−b2−00023590.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000

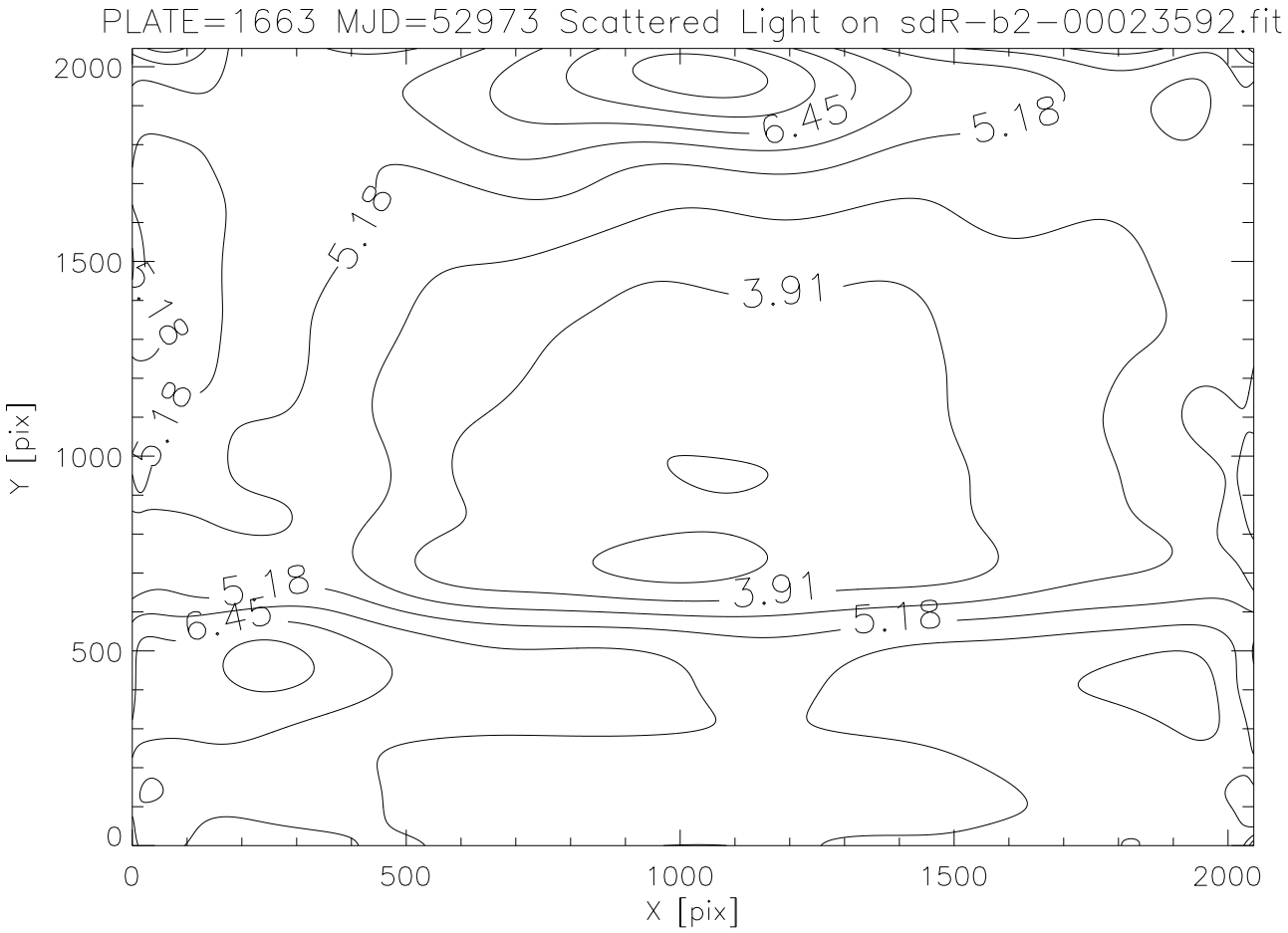

PLATE=1663 MJD=52973 Superflat sdR-b2-00023590.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

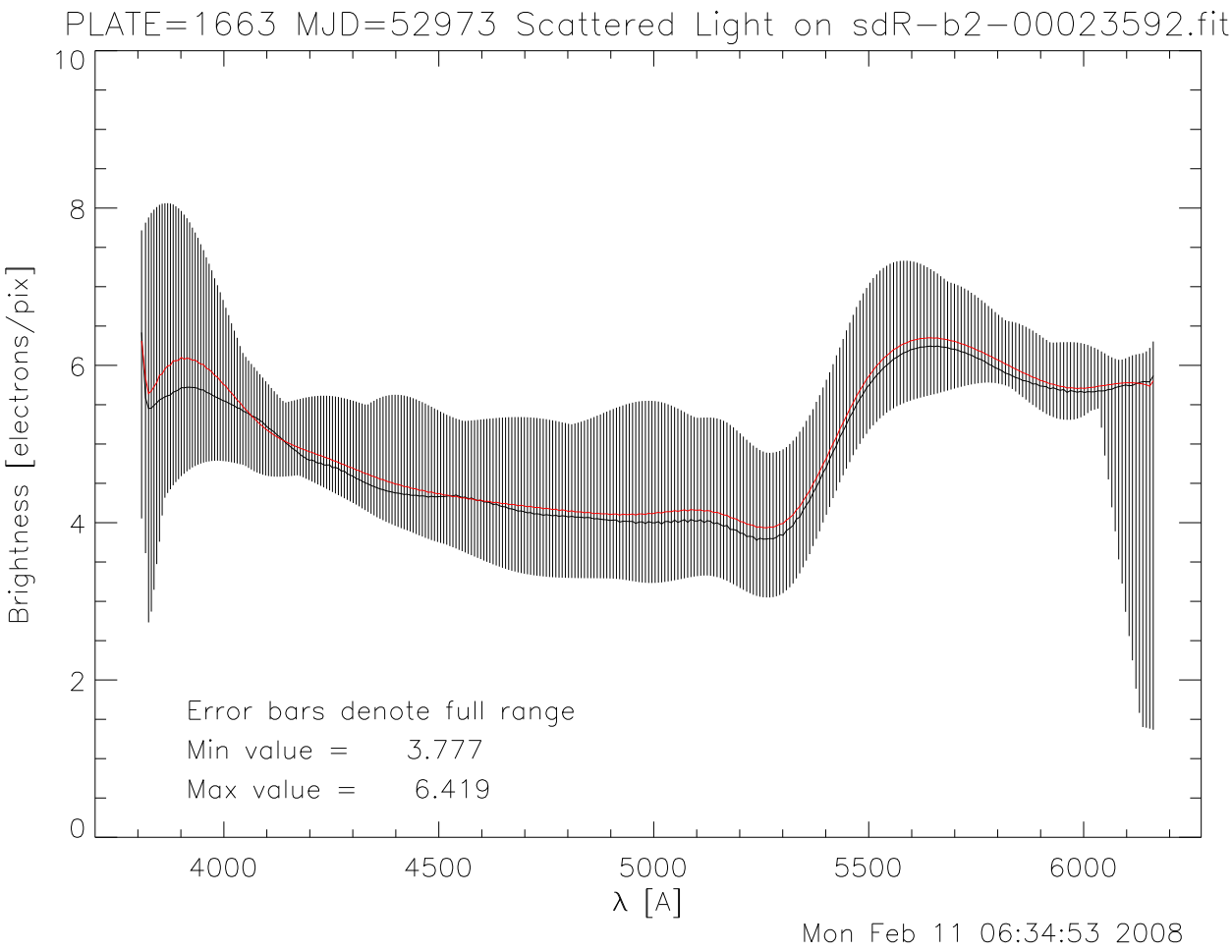

PLATE=1663 MJD=52973 Arcline Fit for sdR-b2-00023591.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 06:30:14 2008

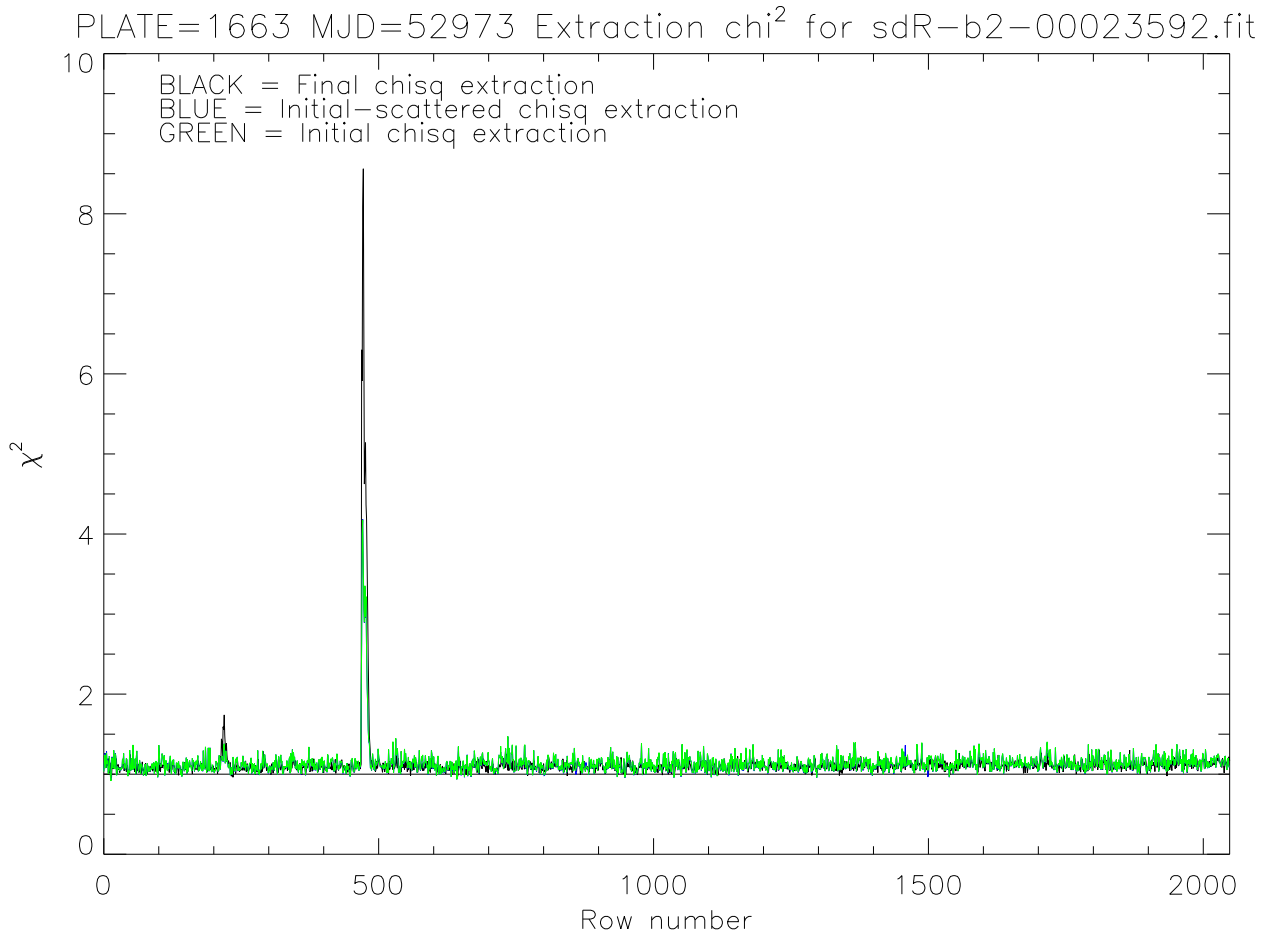

PLATE=1663 MJD=52973 Fiber-Flats for sdR-b2-00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.218
Max value = 1.255
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 06:30:24 2008

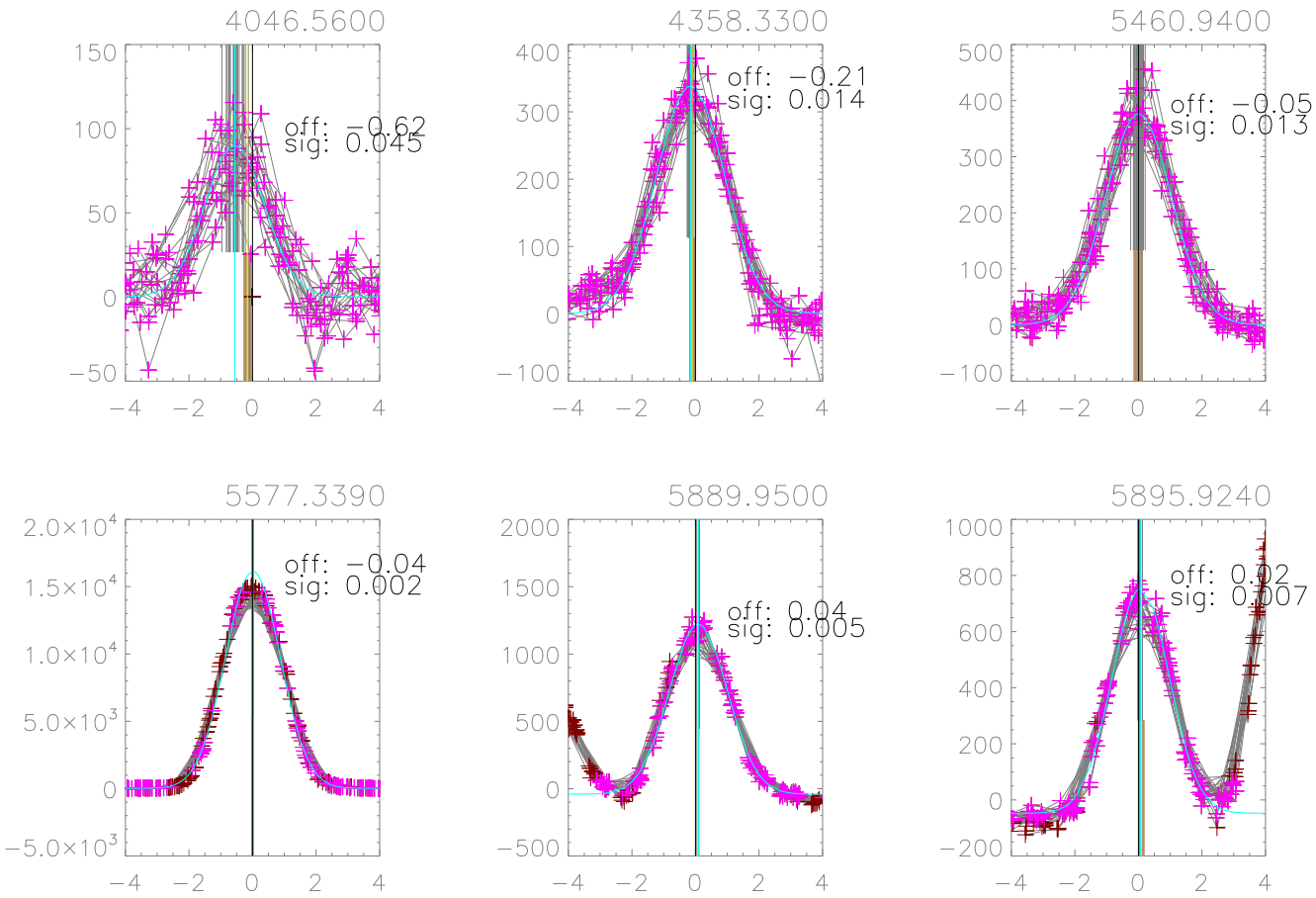

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-b2-00023592.f
8.5
10.4
8.5
6.7
6.7
6.7
6.7
8.5
6.7
6.7
8.5
Y [pix]
X [pix]
0
500
1000
1500
2000

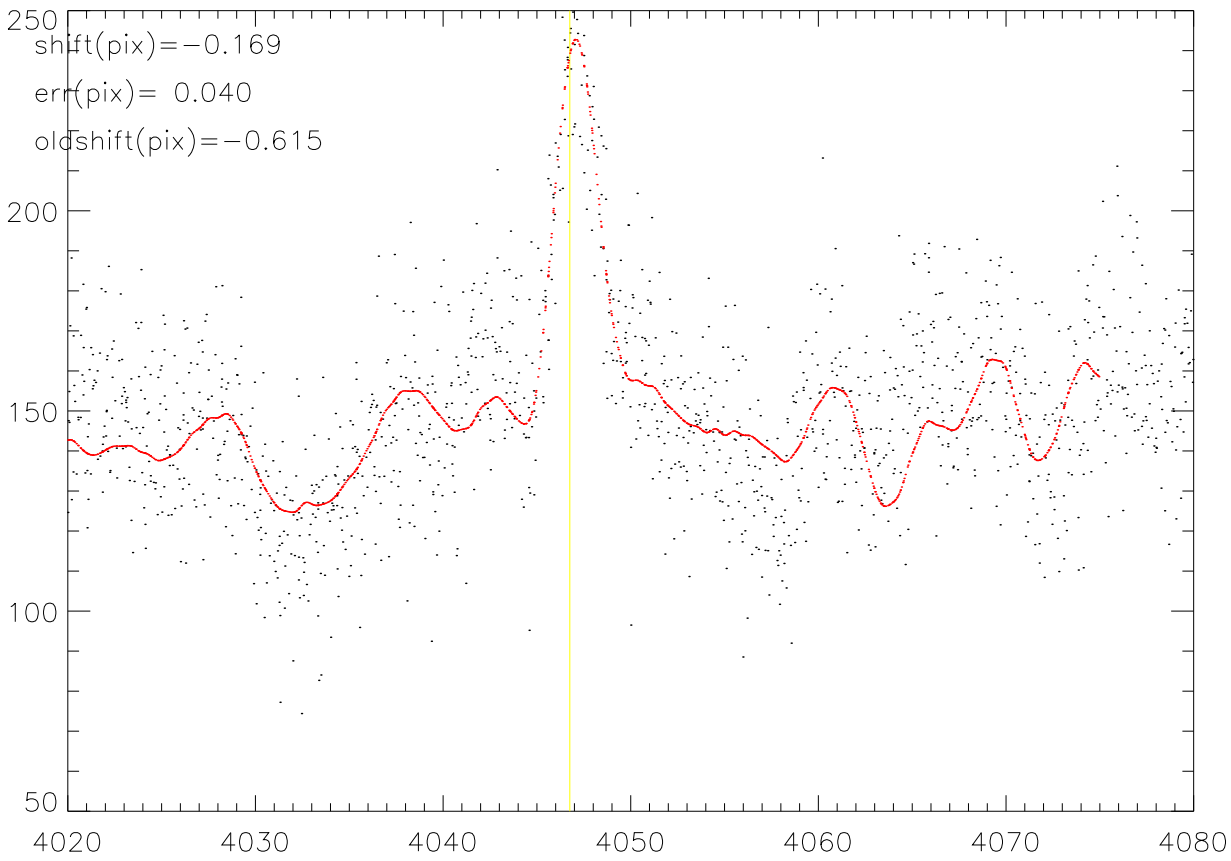

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-b2-00023592.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.593
Max value = 10.715
Mon Feb 11 06:31:19 2008

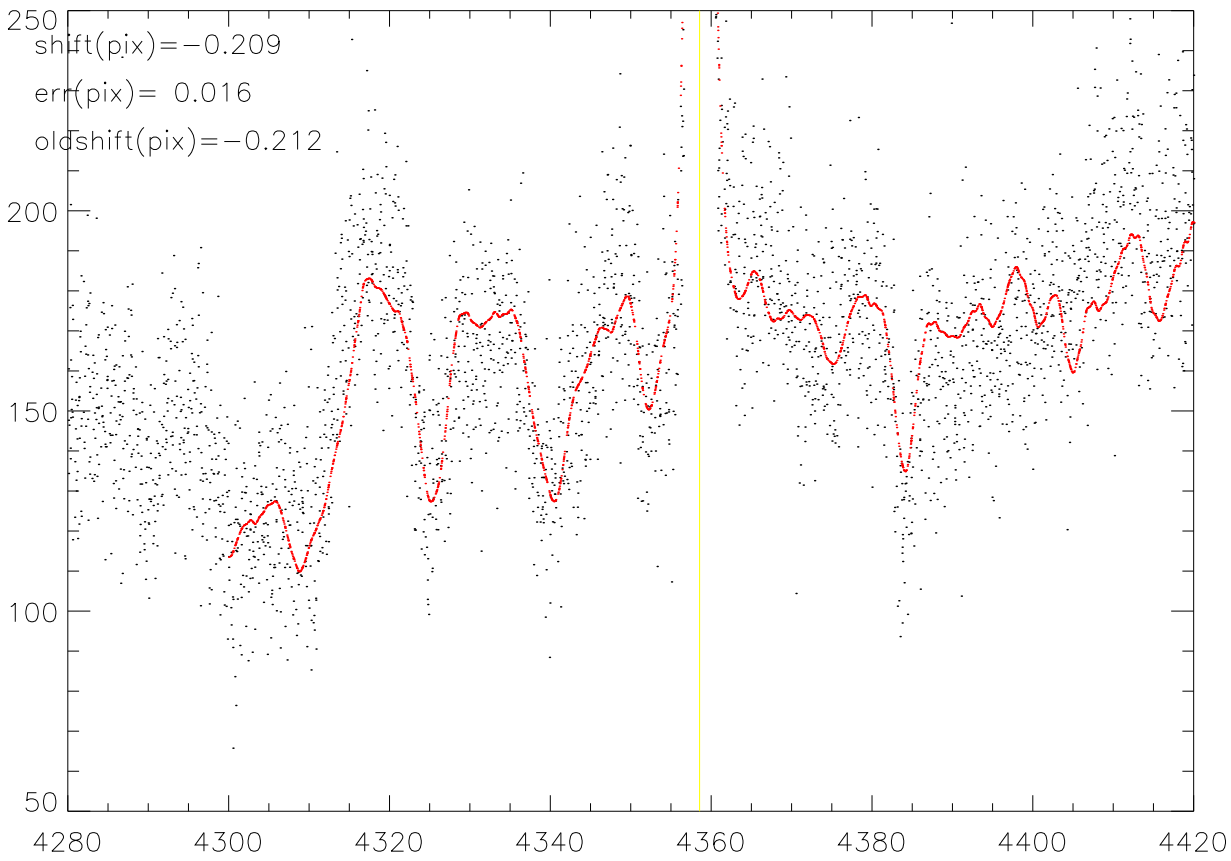

PLATE=1663 MJD=52973 Scattered Light on sdR-b2-00023592.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.45
5.18
3.91

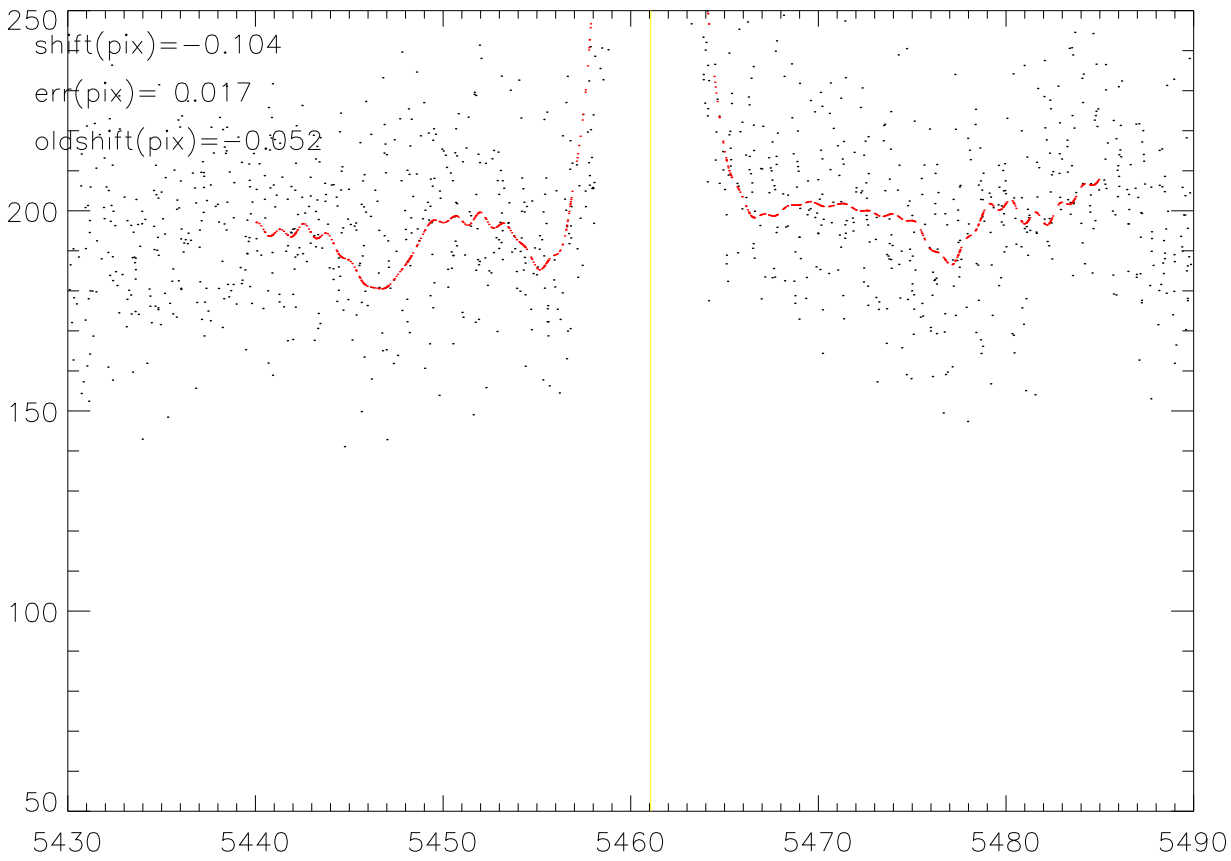

PLATE=1663 MJD=52973 Scattered Light on sdR-b2-00023592.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.777
Max value = 6.419
Mon Feb 11 06:34:53 2008

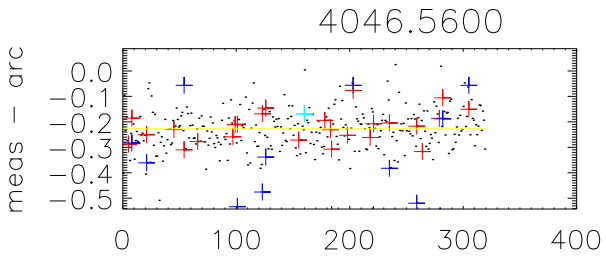

PLATE=1663 MJD=52973 Extraction chi^2 for sdR-b2-00023592.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

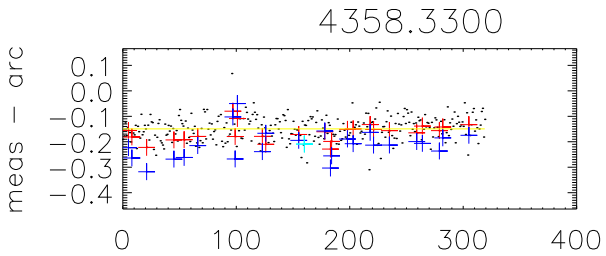

4046.5600
off: −0.62
sig: 0.045
4358.3300
off: −0.21
sig: 0.014
5460.9400
off: −0.05
sig: 0.013
5577.3390
off: −0.04
sig: 0.002
5889.9500
off: 0.04
sig: 0.005
5895.9240
off: 0.02
sig: 0.007

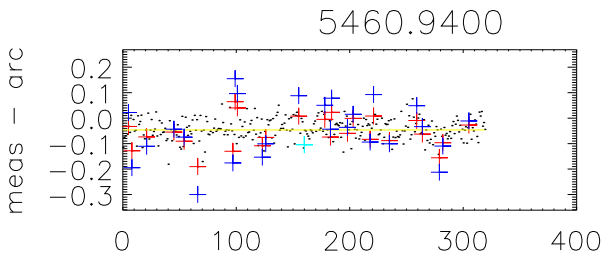

shift(pix)=−0.169
err(pix)= 0.040
oldshift(pix)=−0.615
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

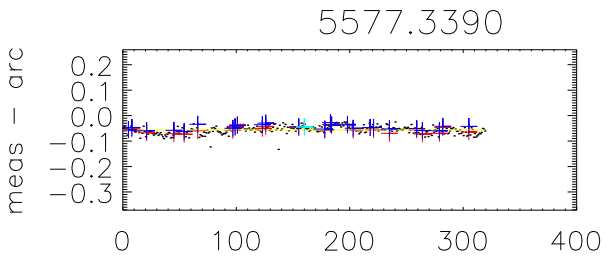

shift(pix)=−0.209
err(pix)= 0.016
oldshift(pix)=−0.212
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

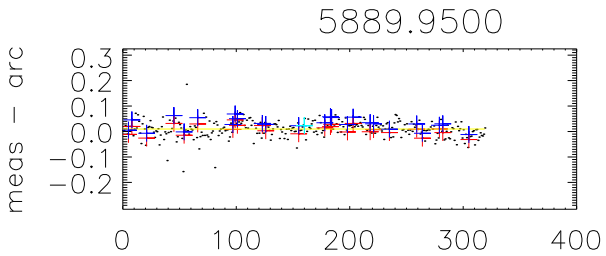

shift(pix)=−0.104
err(pix)= 0.017
oldshift(pix)=−0.052
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

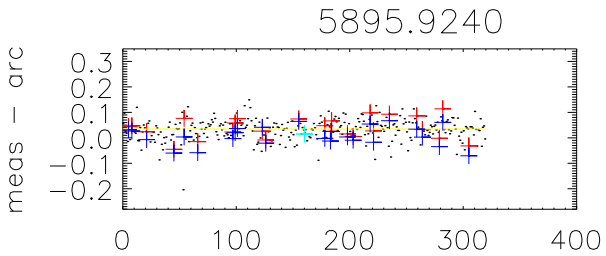

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

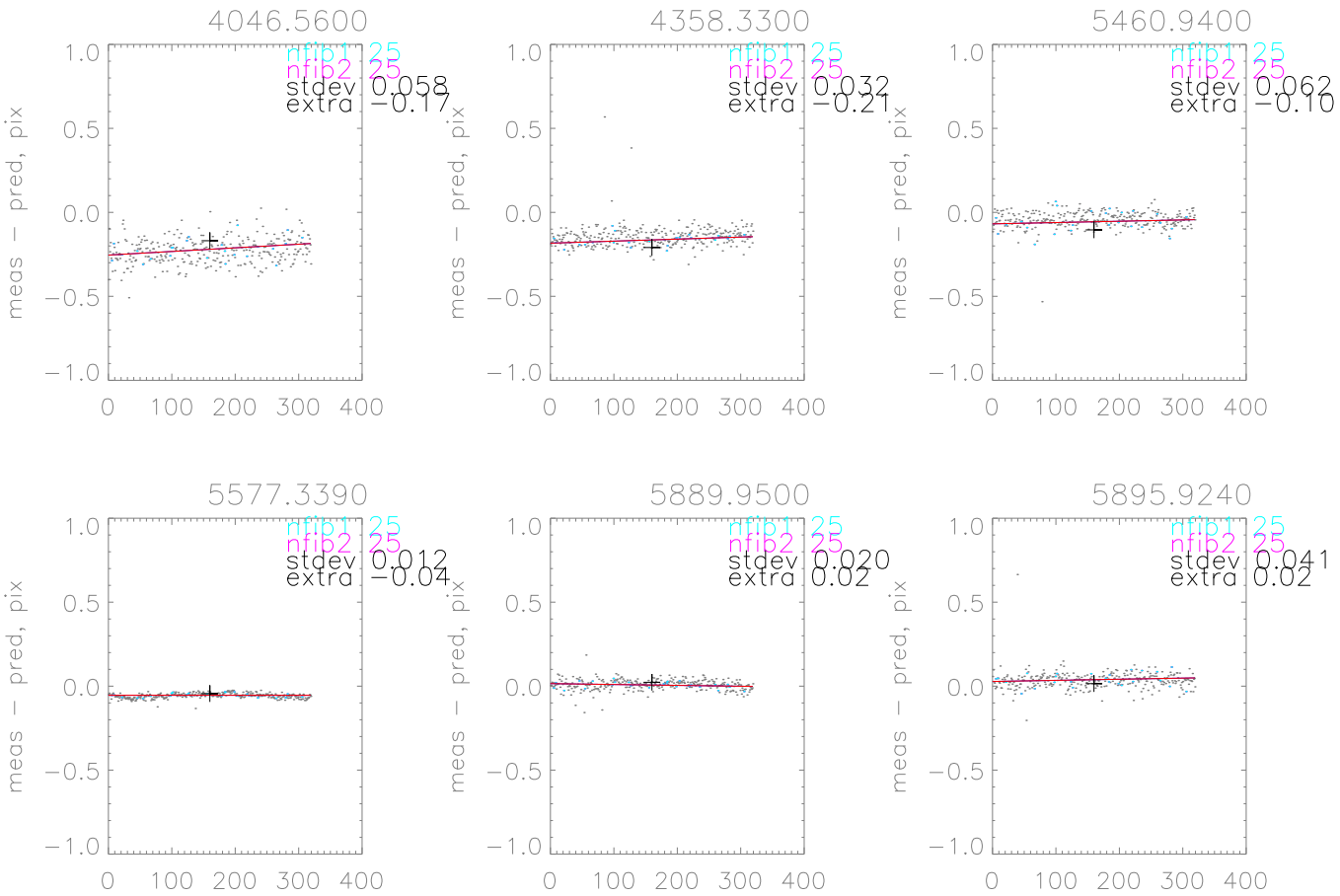

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

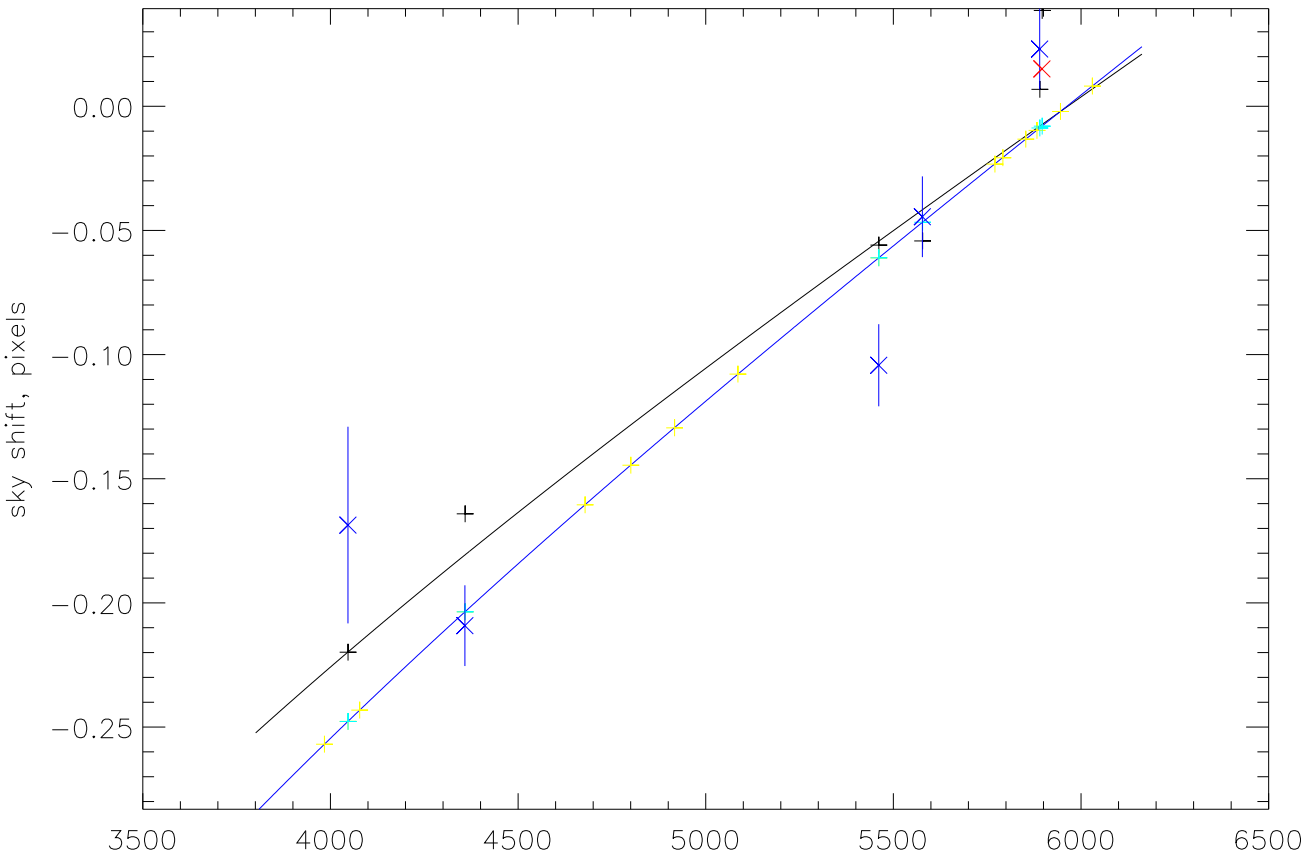

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

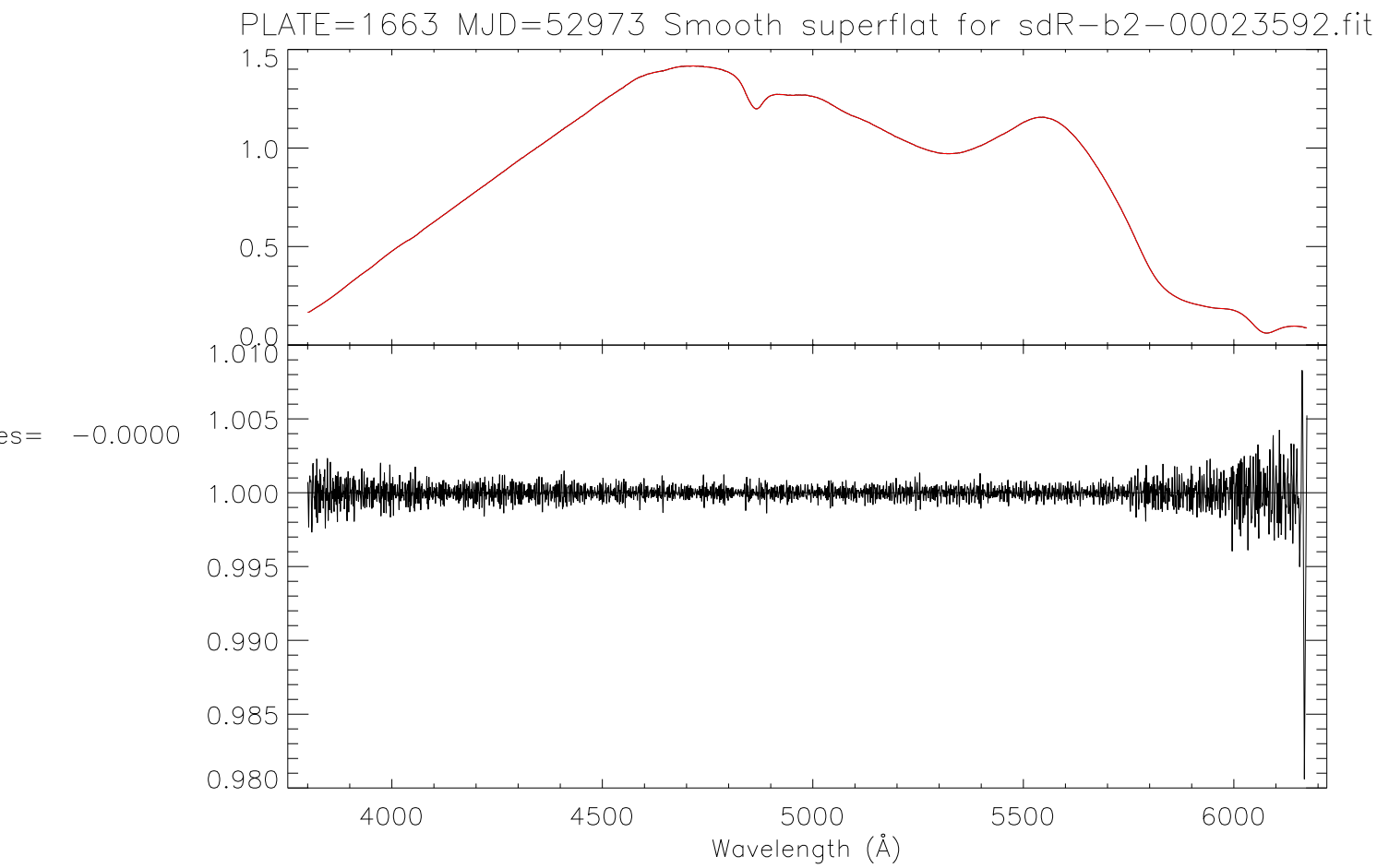

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

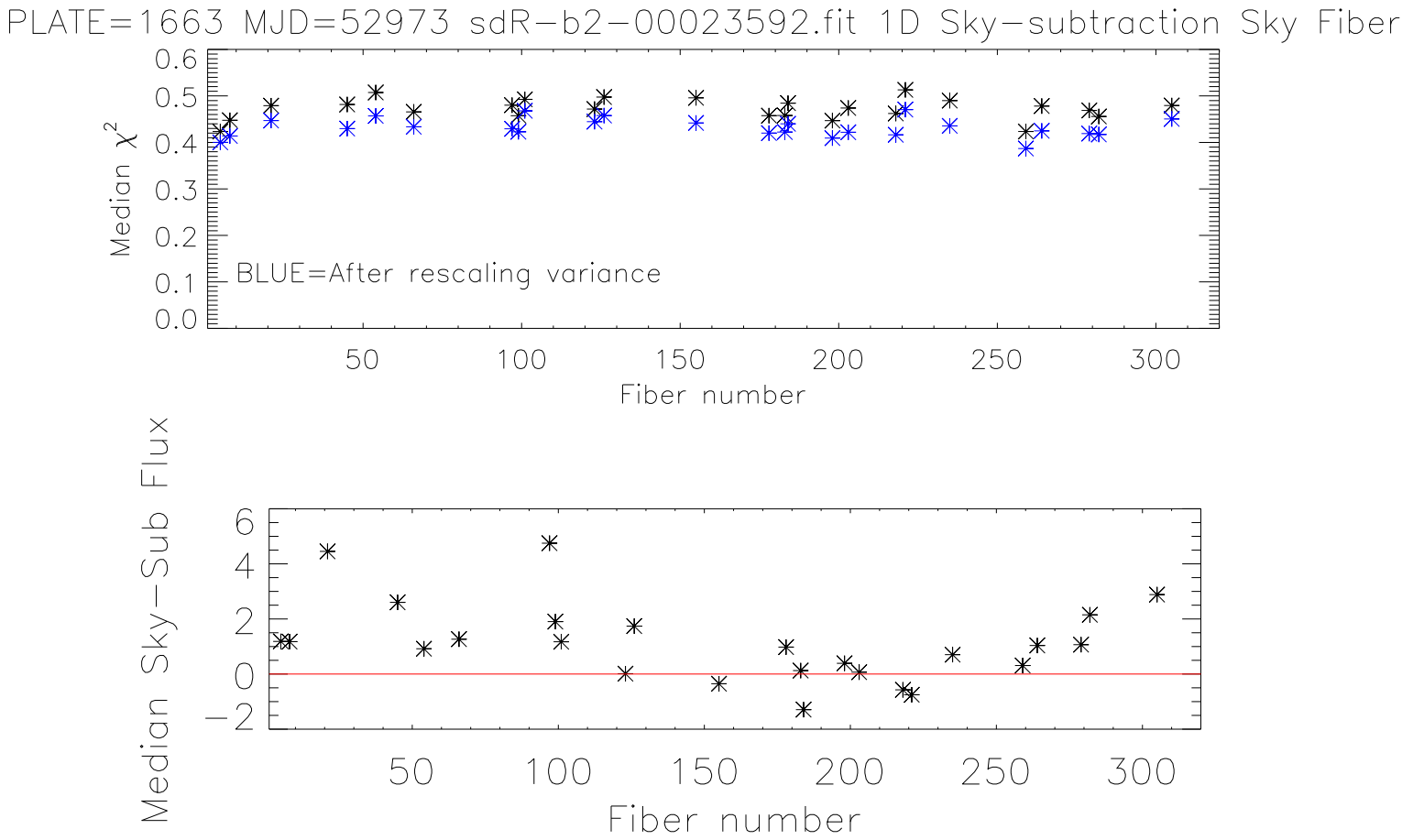

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

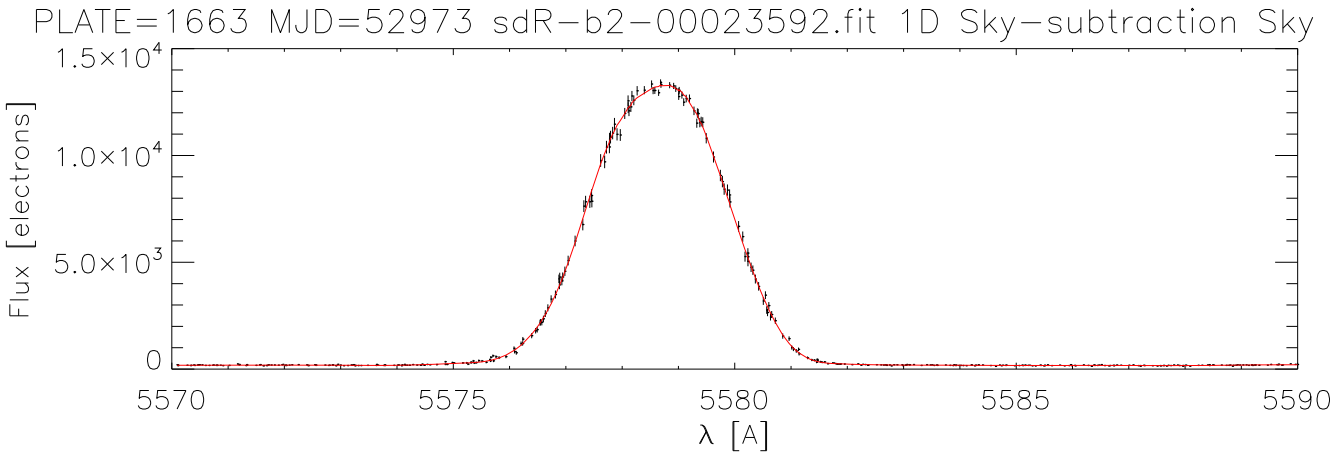

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

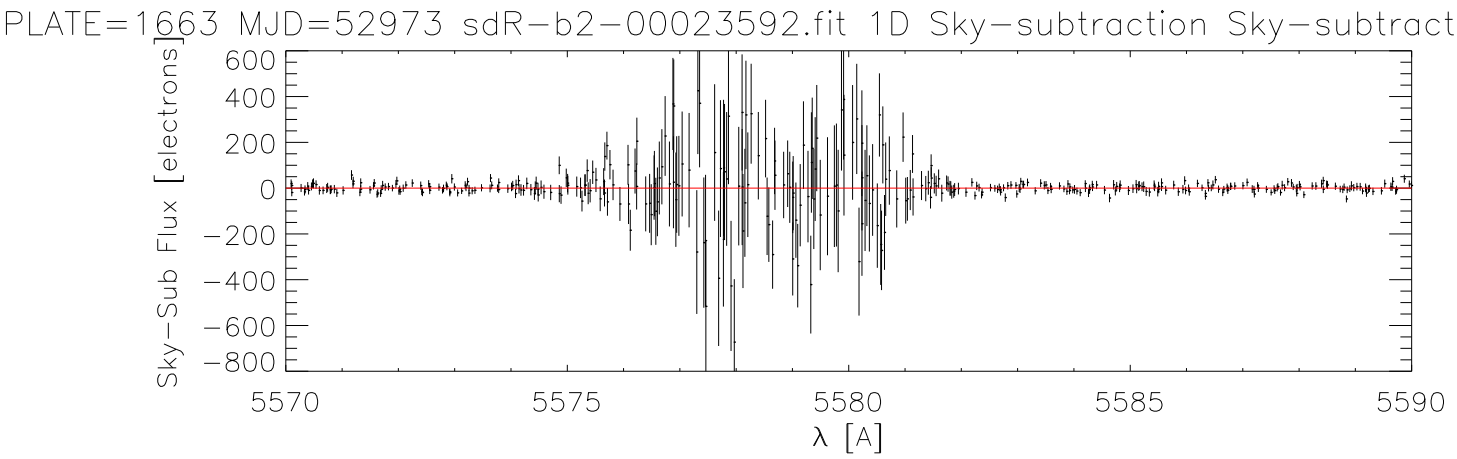

4046.5600
nfib1 25
nfib2 25
stdev 0.058
extra −0.17
4358.3300
nfib1 25
nfib2 25
stdev 0.032
extra −0.21
5460.9400
nfib1 25
nfib2 25
stdev 0.062
extra −0.10
5577.3390
nfib1 25
nfib2 25
stdev 0.012
extra −0.04
5889.9500
nfib1 25
nfib2 25
stdev 0.020
extra 0.02
5895.9240
nfib1 25
nfib2 25
stdev 0.041
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

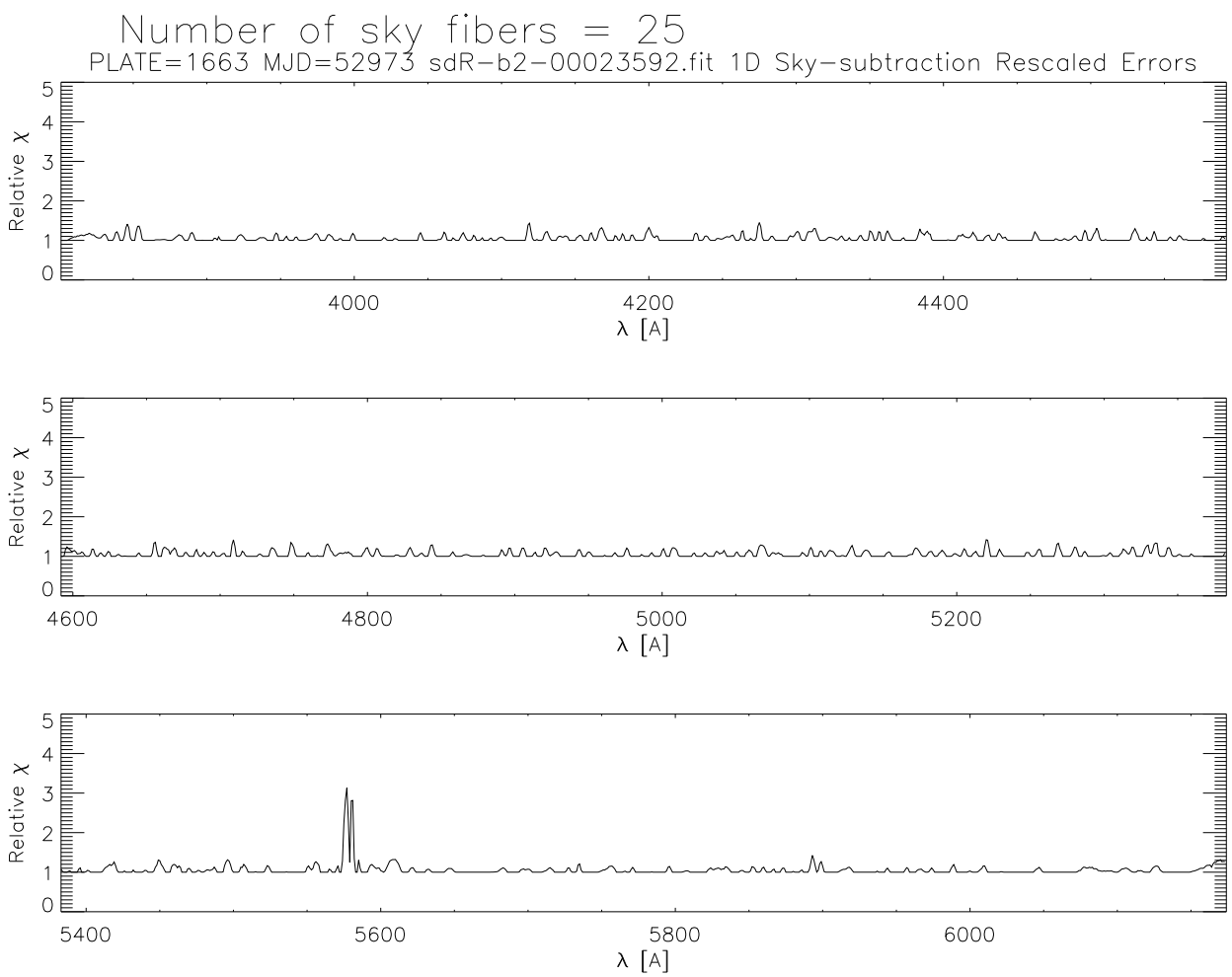

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

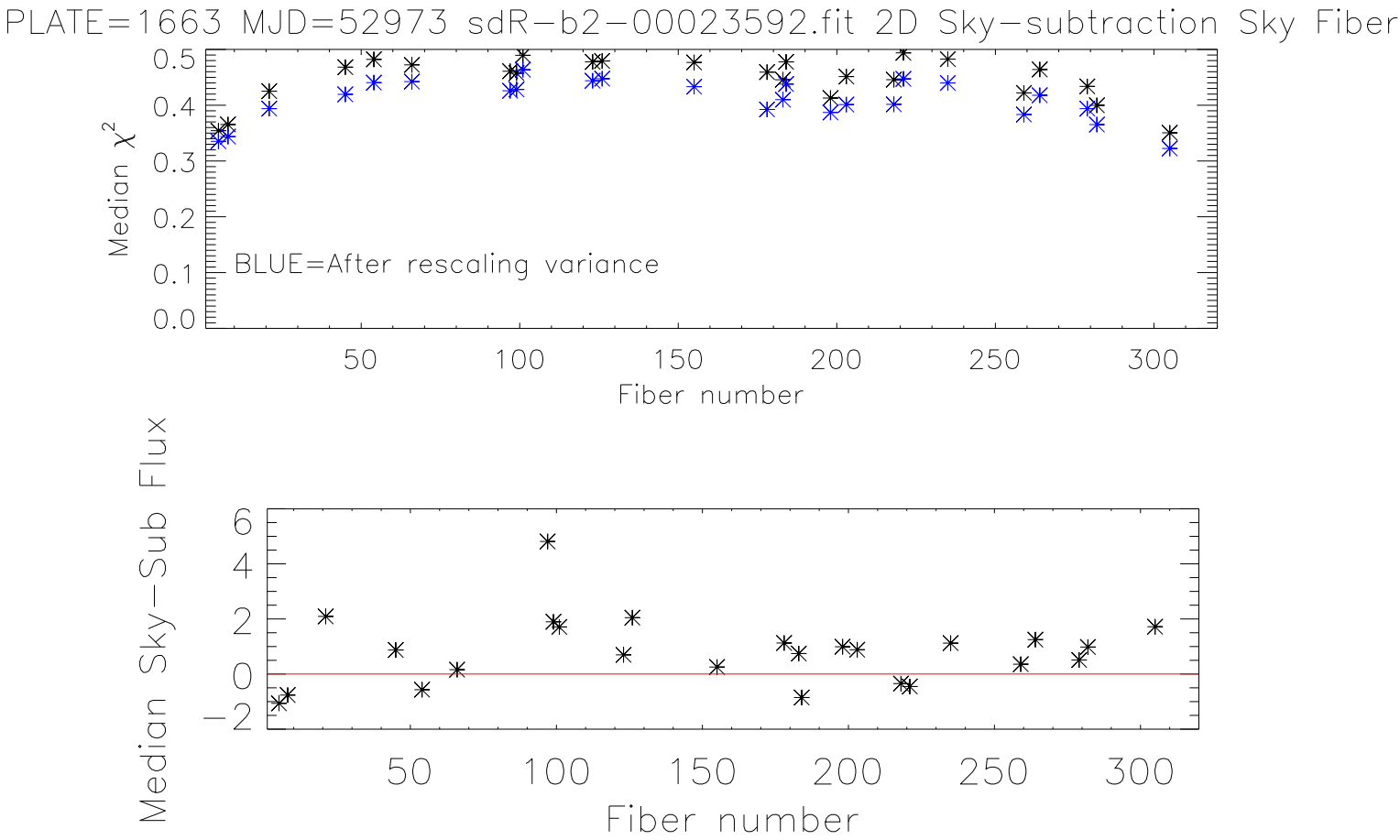

PLATE=1663 MJD=52973 Smooth superflat for sdR-b2-00023592.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

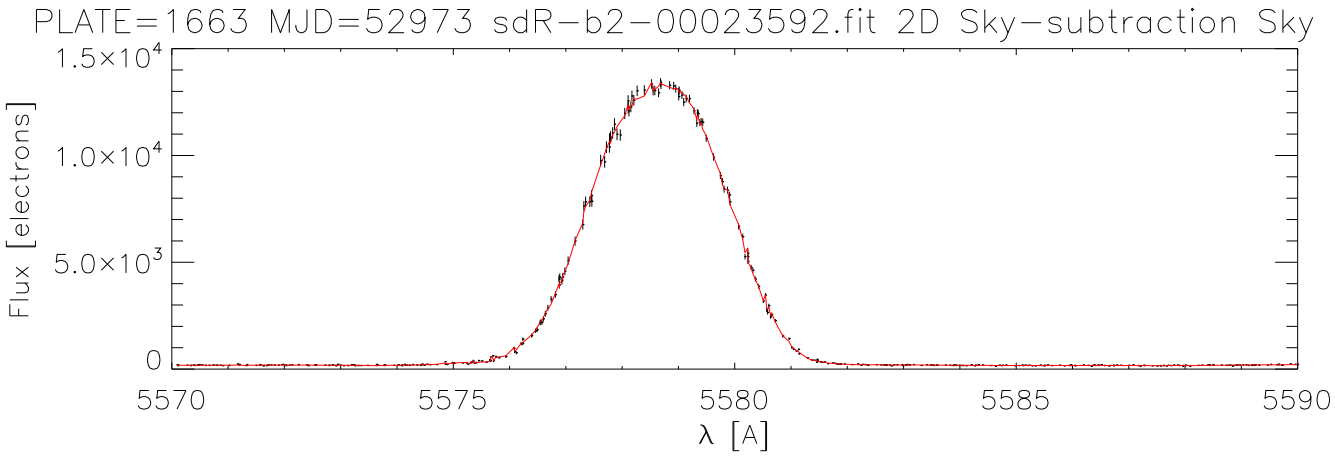

PLATE=1663 MJD=52973 sdR-b2-00023592.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

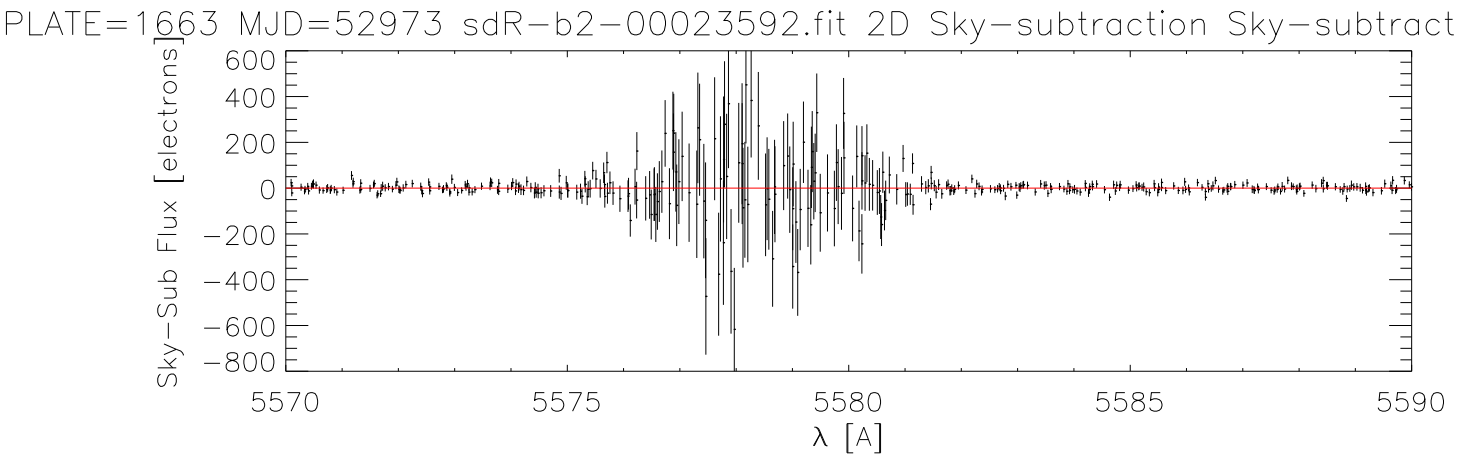

PLATE=1663 MJD=52973 sdR-b2-00023592.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

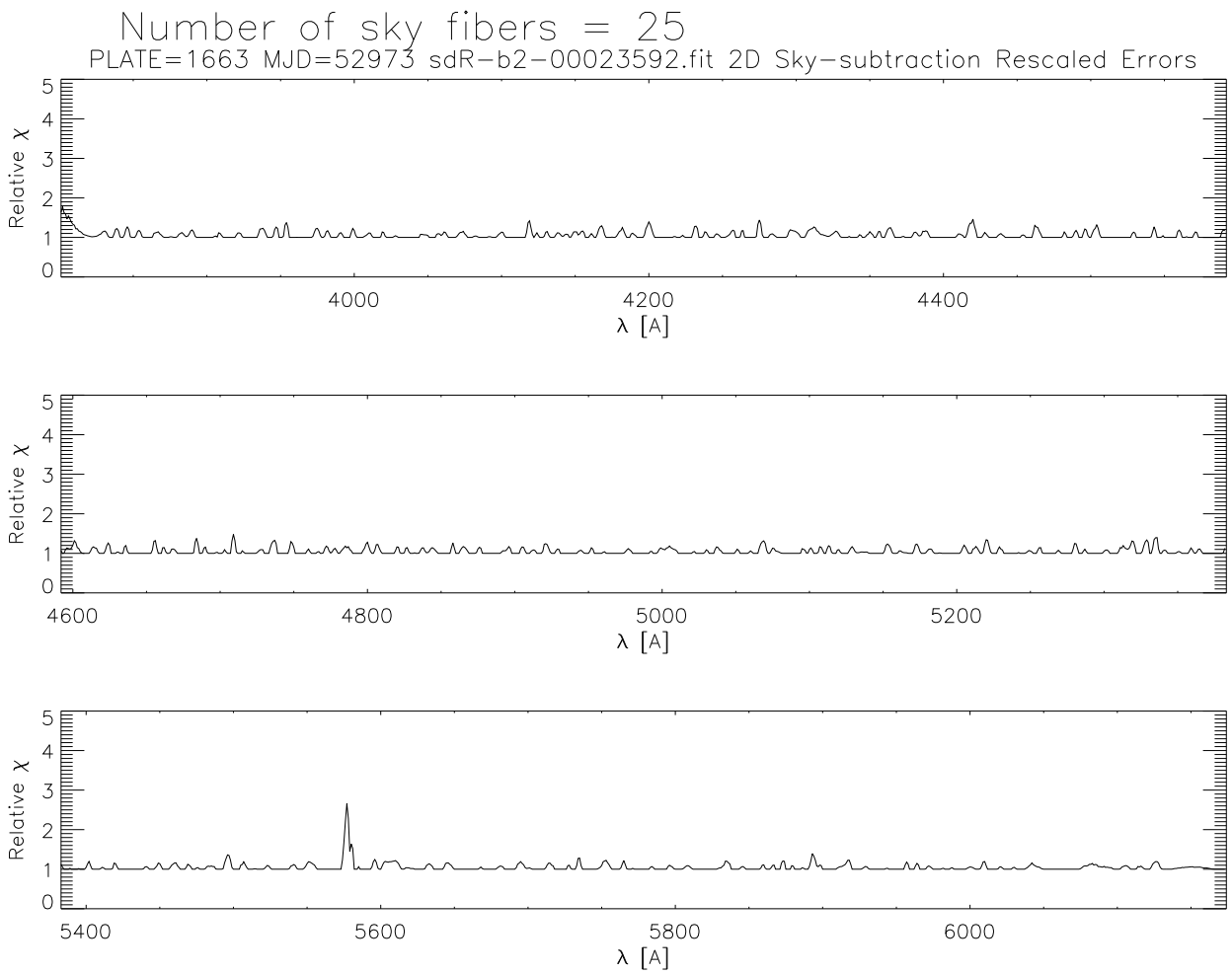

PLATE=1663 MJD=52973 sdR-b2-00023592.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

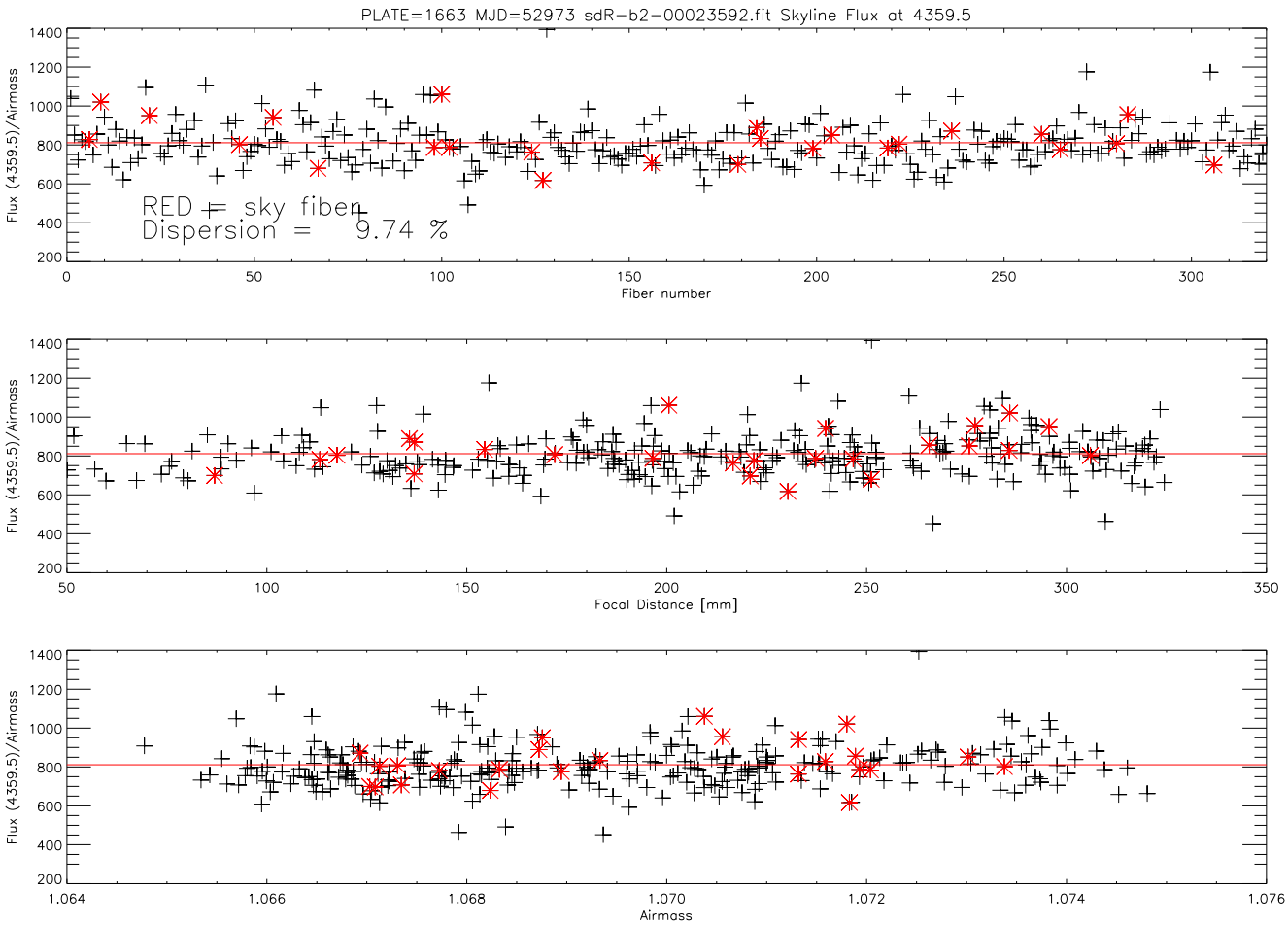

Number of sky fibers = 25
PLATE=1663 MJD=52973 sdR-b2-00023592.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

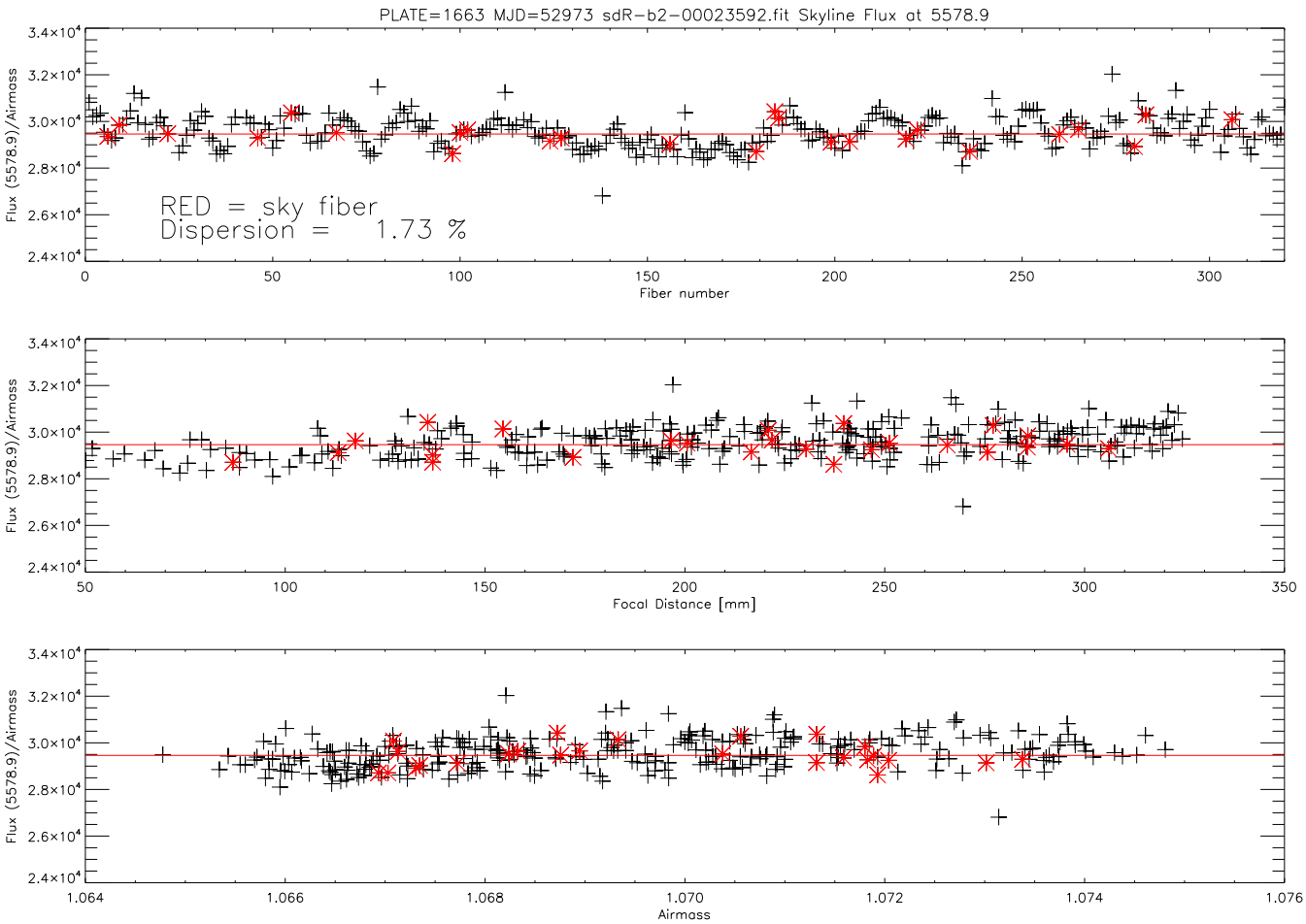

PLATE=1663 MJD=52973 sdR-b2-00023592.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

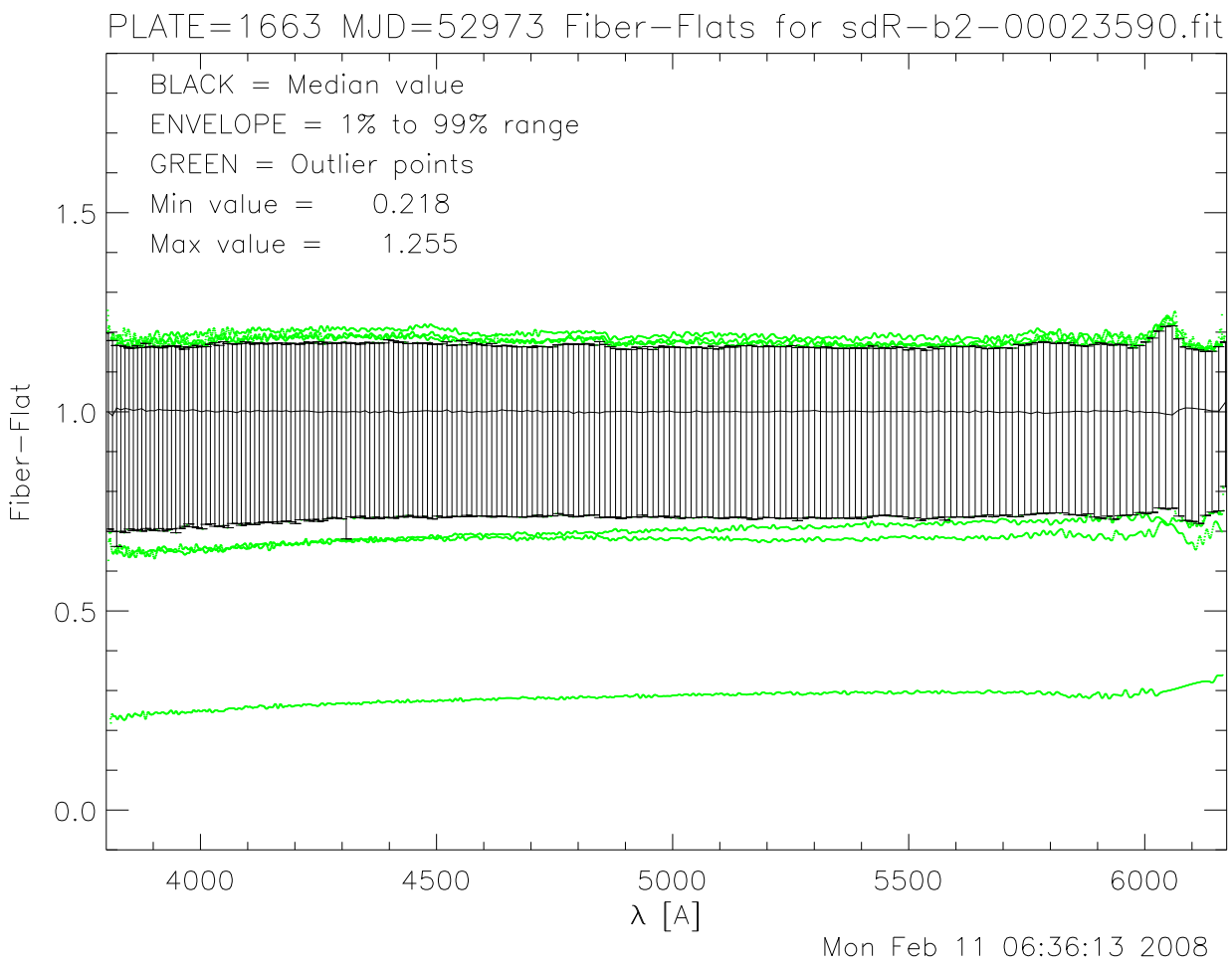

PLATE=1663 MJD=52973 sdR-b2-00023592.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

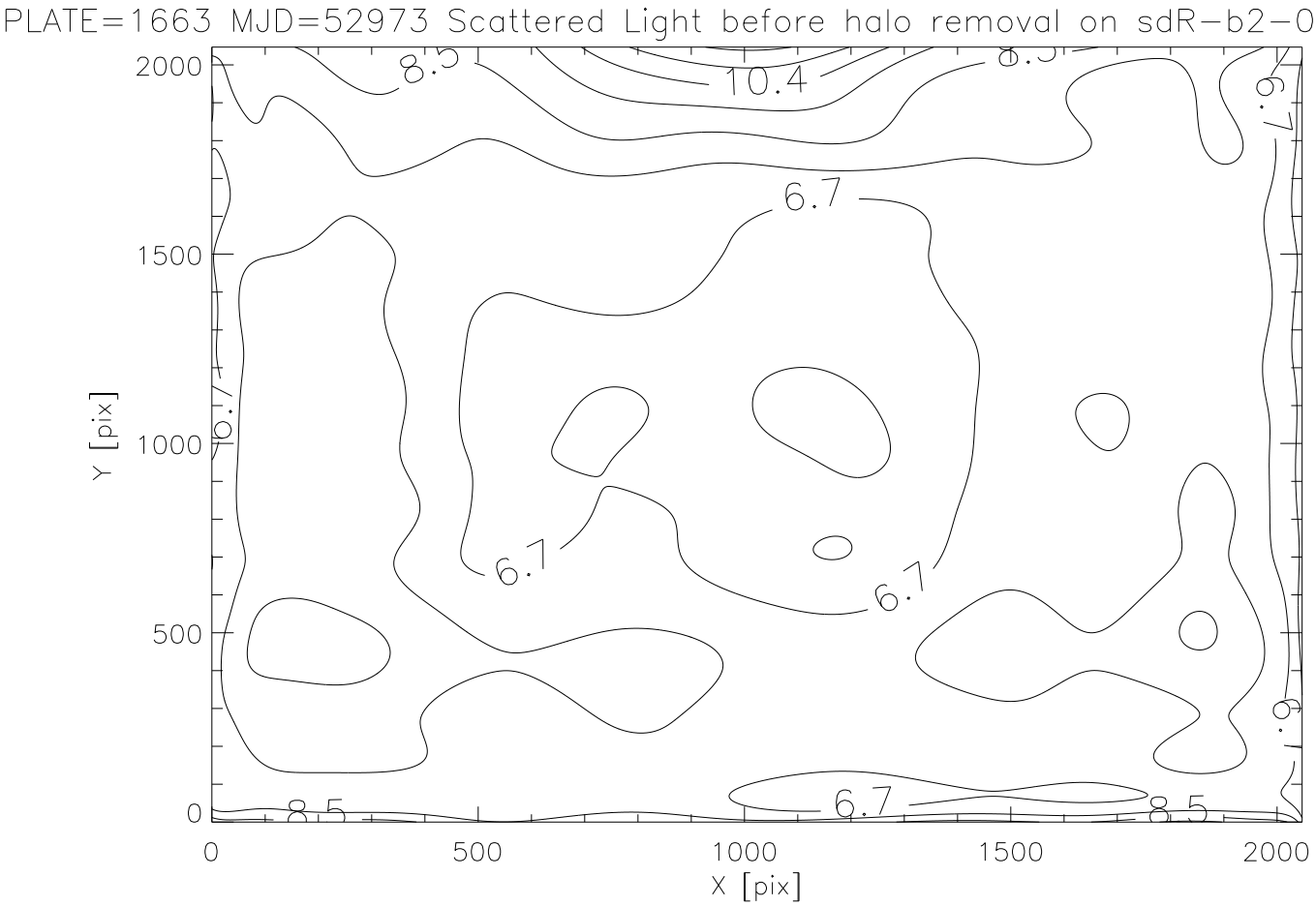

PLATE=1663 MJD=52973 sdR-b2-00023592.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

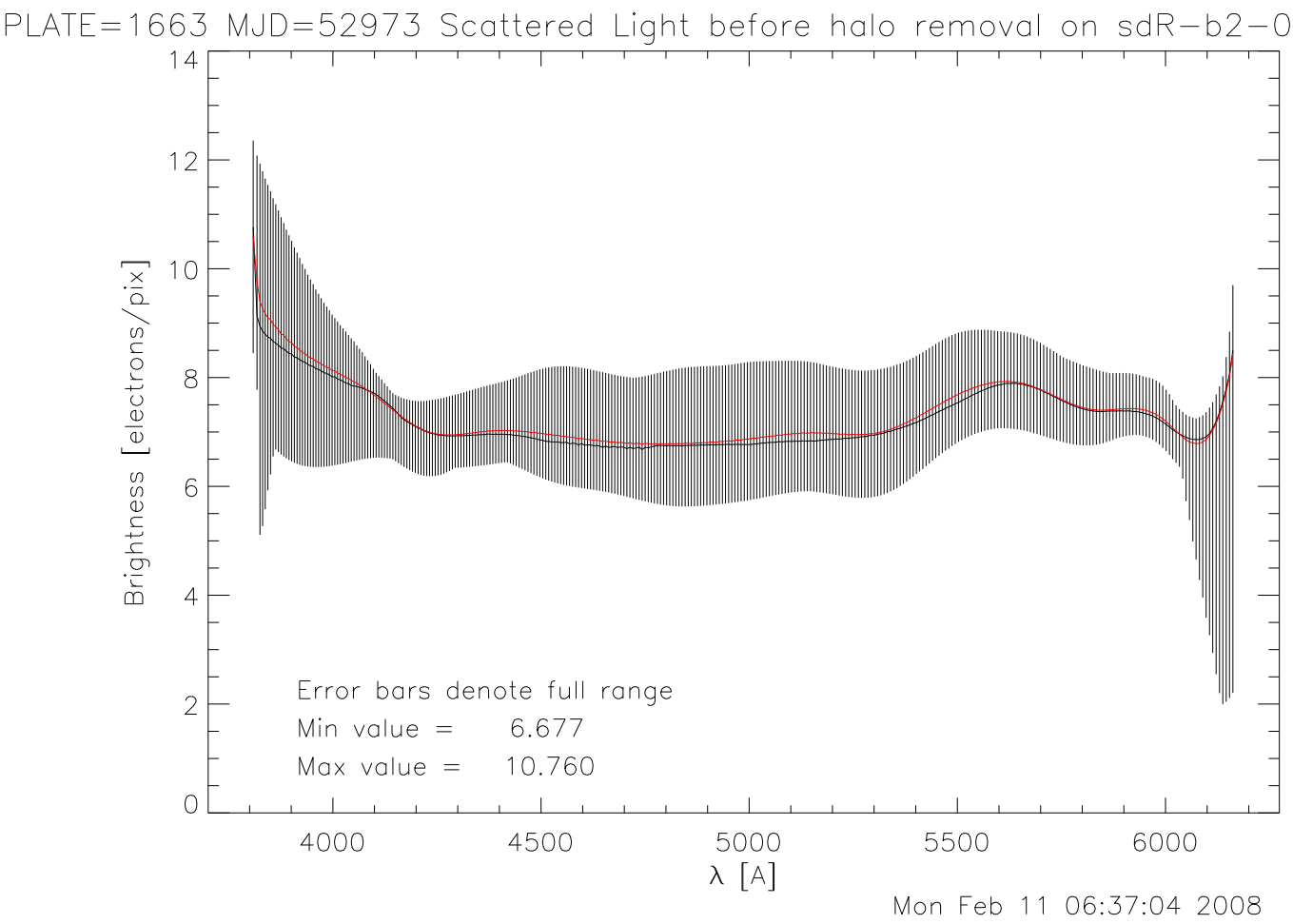

Number of sky fibers = 25
PLATE=1663 MJD=52973 sdR-b2-00023592.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

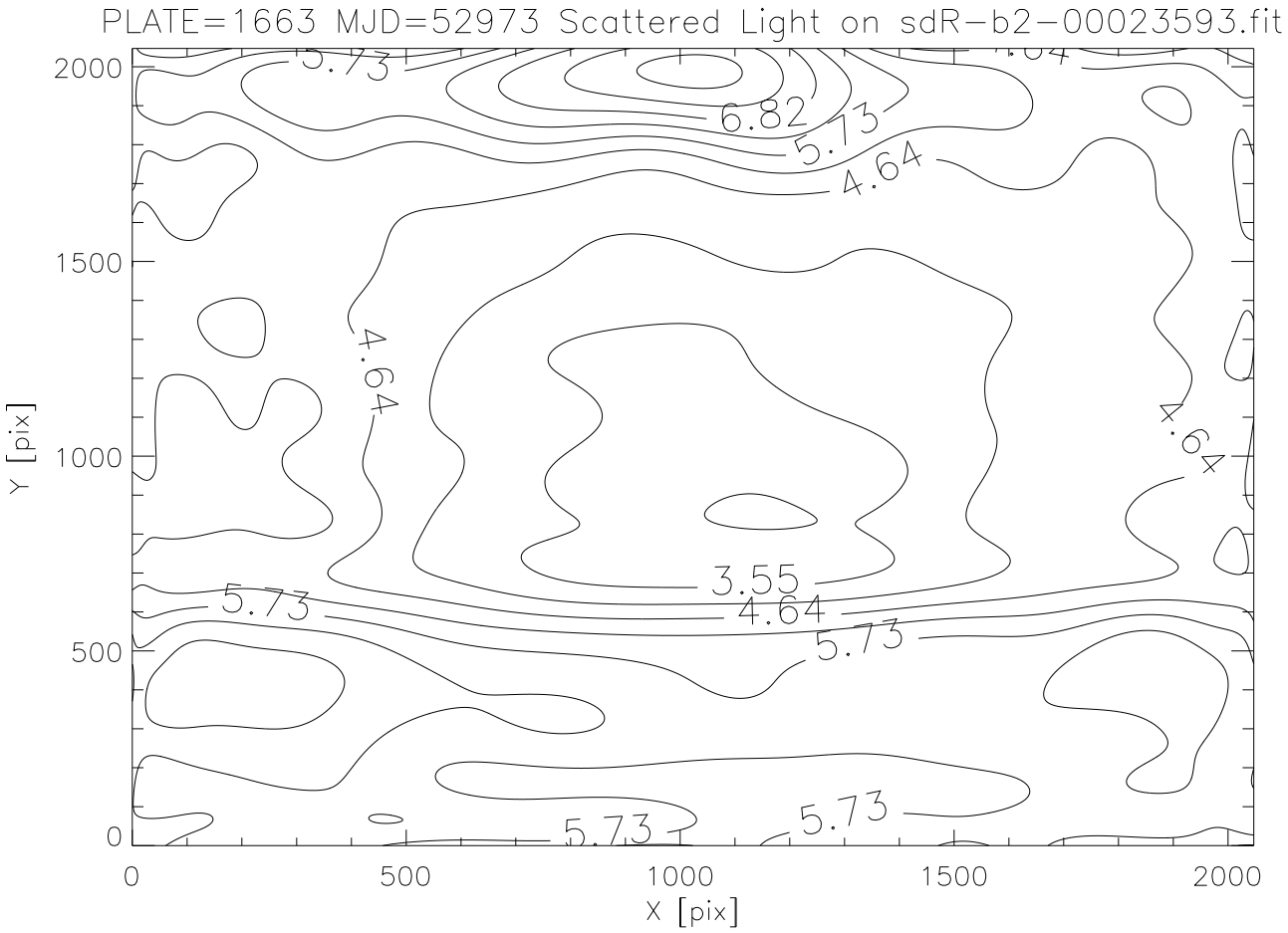

PLATE=1663 MJD=52973 sdR-b2-00023592.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.74 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

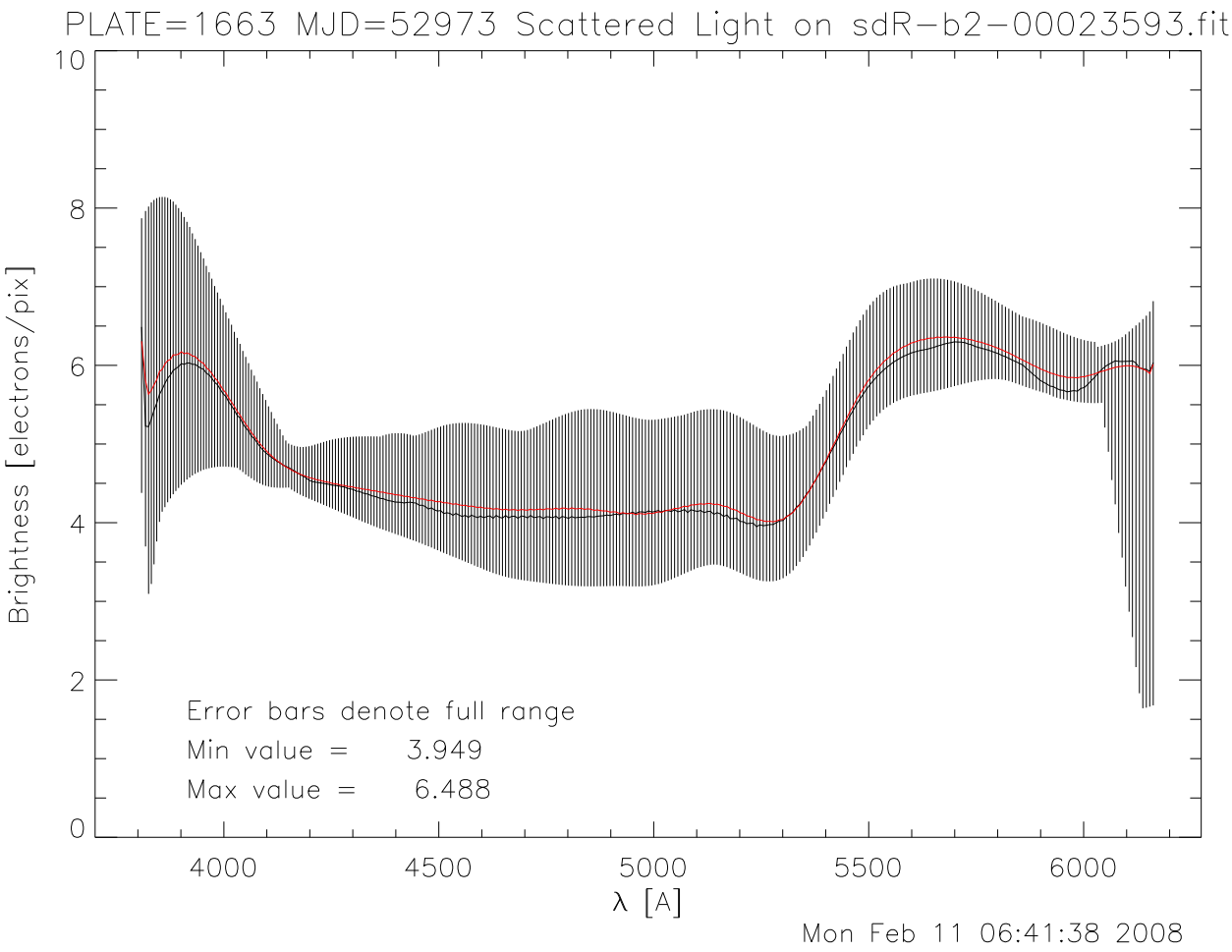

PLATE=1663 MJD=52973 sdR-b2-00023592.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.73 %
Fiber number
Focal Distance [mm]
Airmass

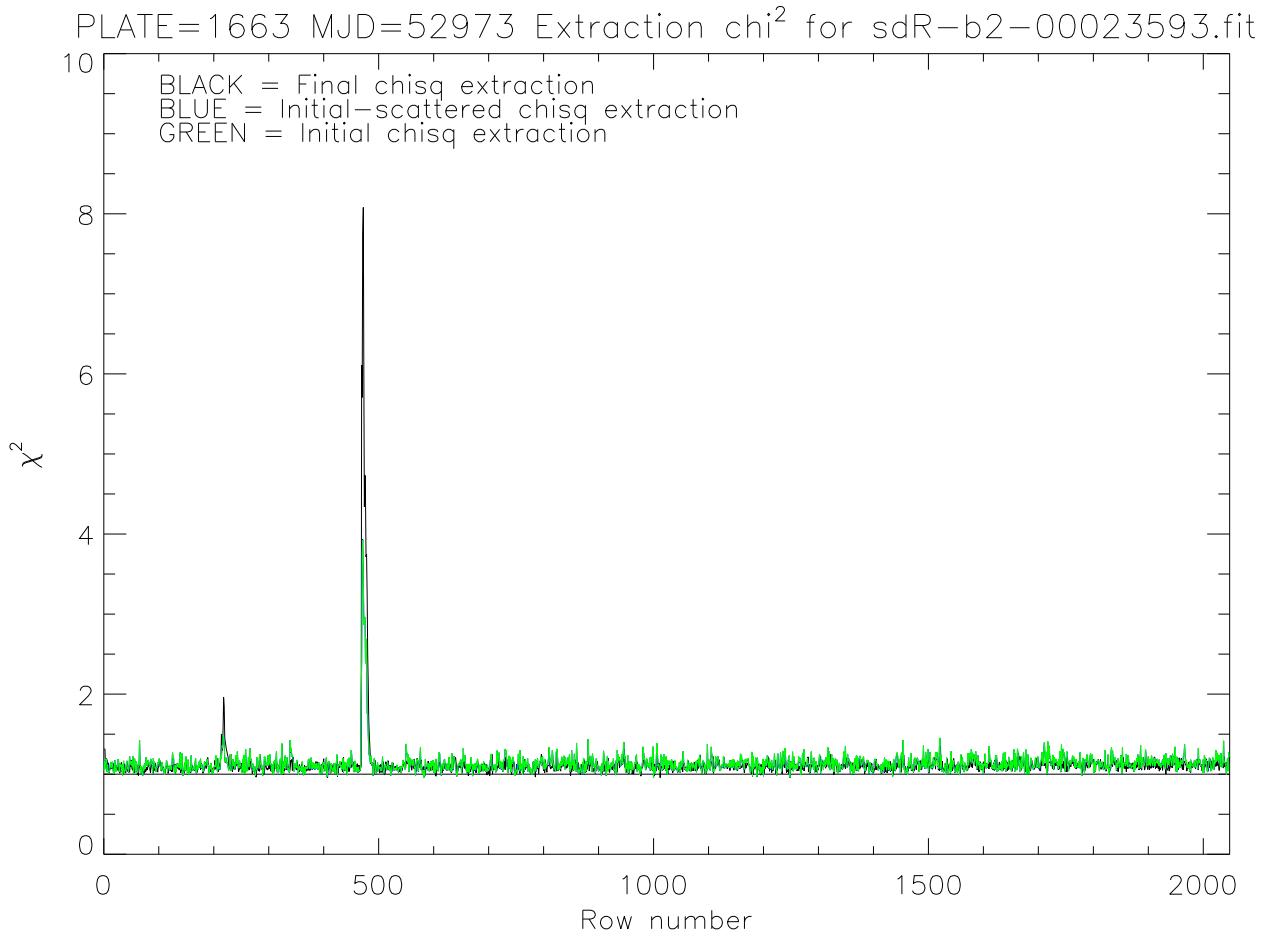

PLATE=1663 MJD=52973 Fiber-Flats for sdR-b2-00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.218
Max value = 1.255
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 11 06:36:13 2008

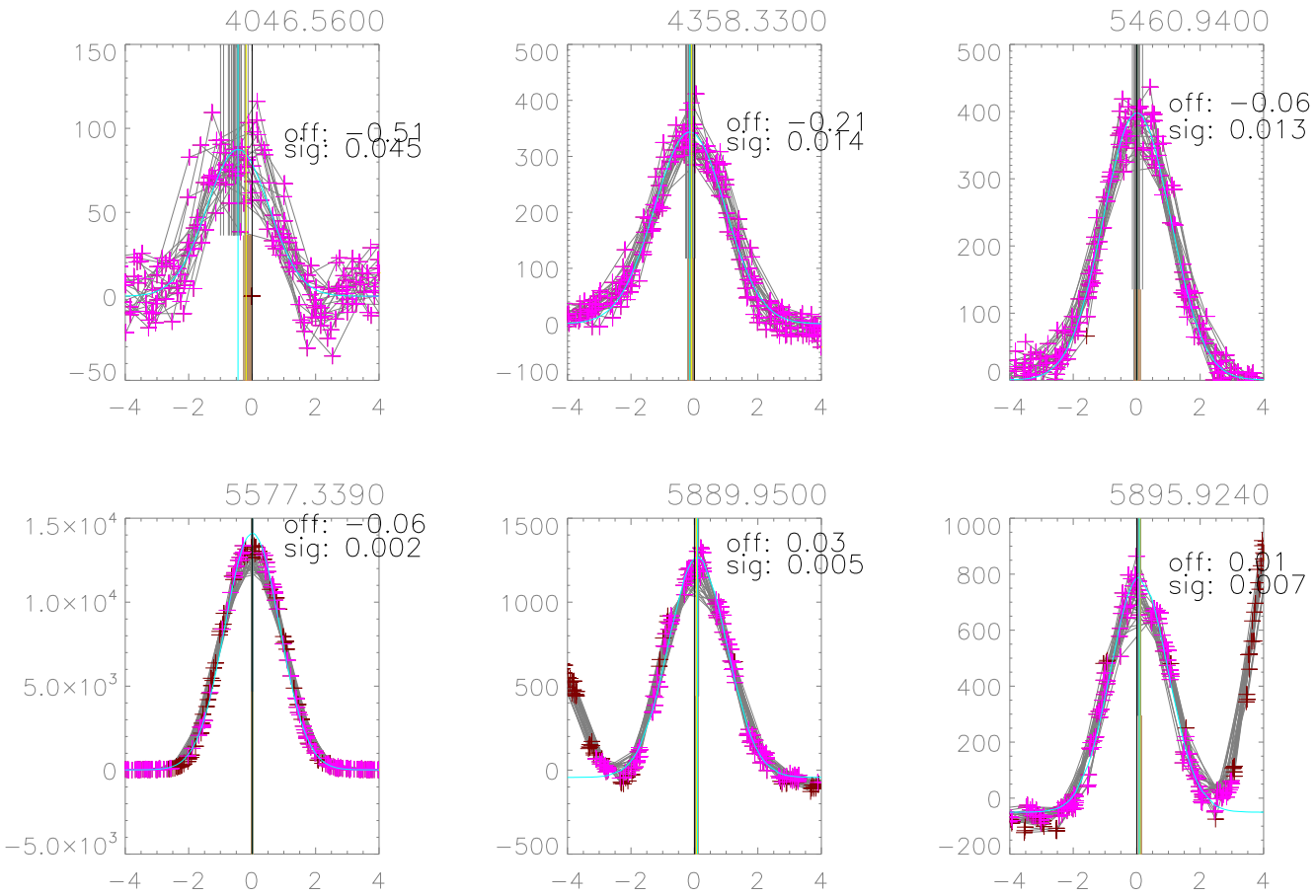

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-b2-00023593.f
8.5
10.4
8.5
6.7
6.7
6.7
6.7
6.7
6.7
6.7
8.5
6.7
8.5
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

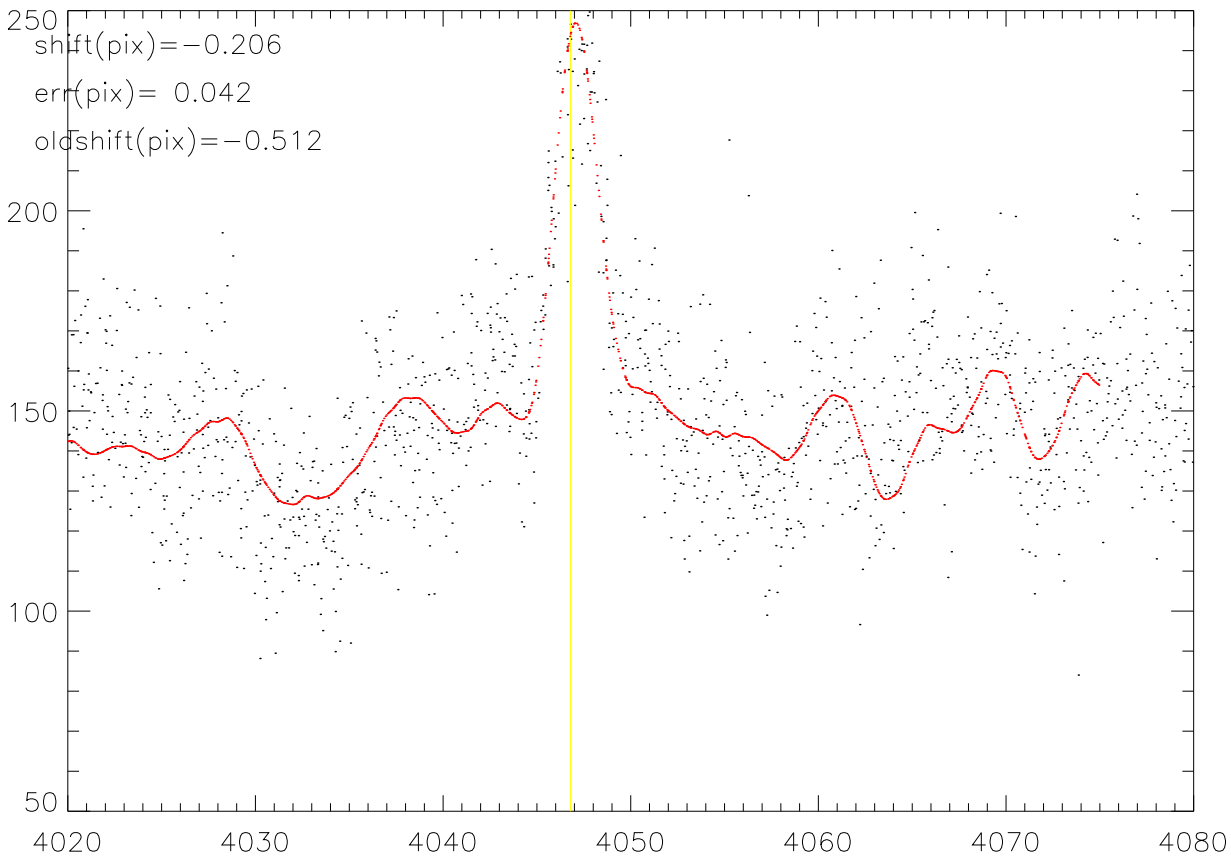

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-b2-00023593.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.677
Max value = 10.760
Mon Feb 11 06:37:04 2008

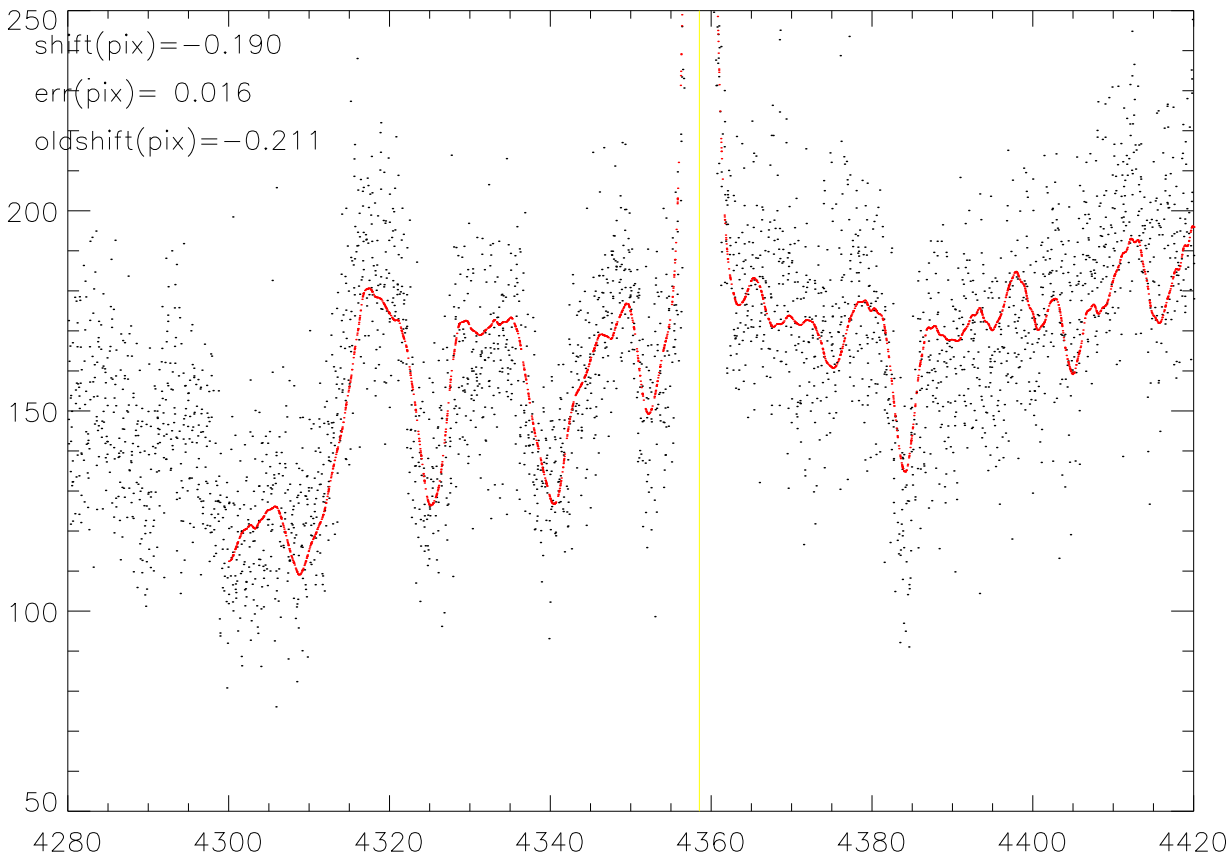

PLATE=1663 MJD=52973 Scattered Light on sdR-b2-00023593.fit
5.73
6.82
5.73
4.64
4.64
4.64
3.55
5.73
4.64
5.73
5.73
5.73
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

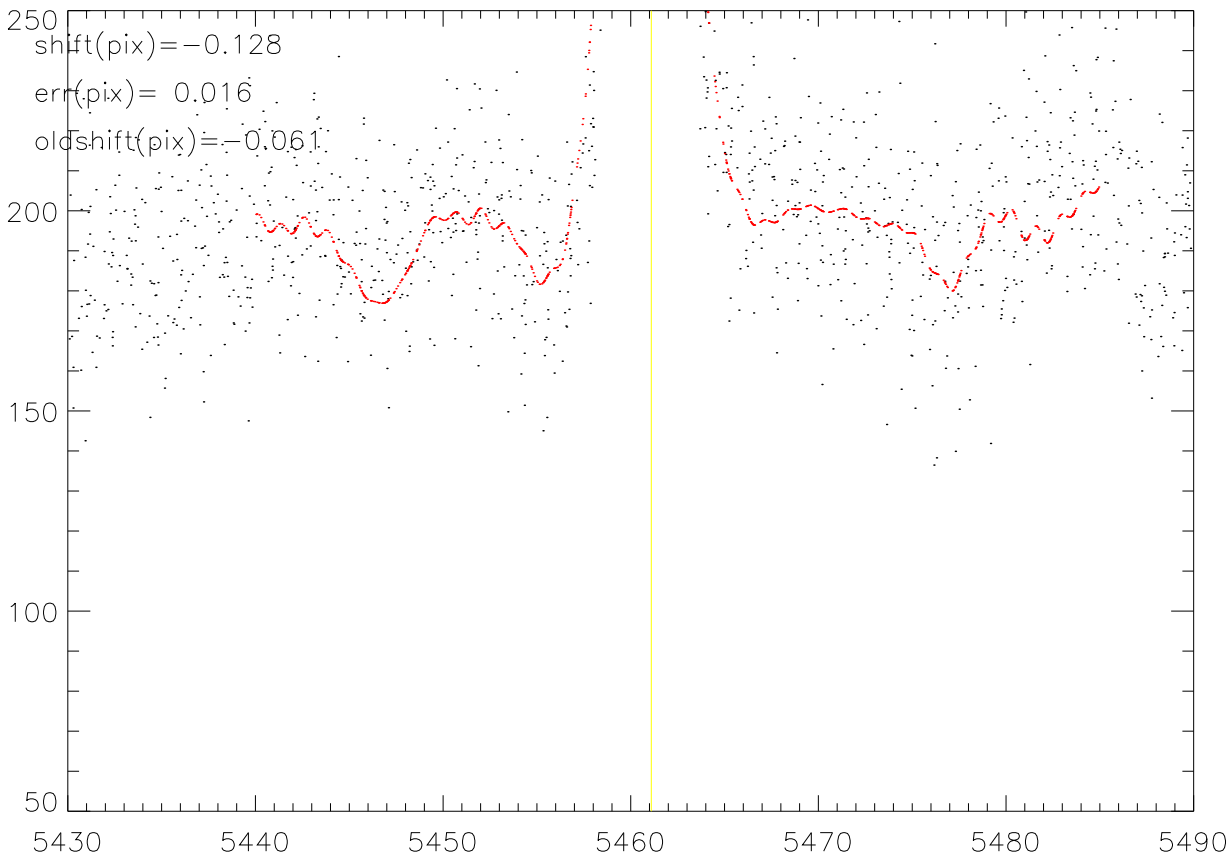

PLATE=1663 MJD=52973 Scattered Light on sdR-b2-00023593.fit
Brightness [electrons/pix]
10
8
6
4
2
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.949
Max value = 6.488
Mon Feb 11 06:41:38 2008

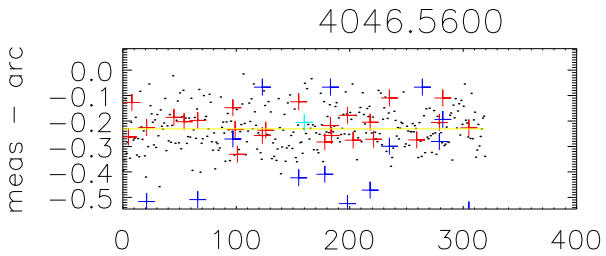

PLATE=1663 MJD=52973 Extraction chi^2 for sdR-b2-00023593.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

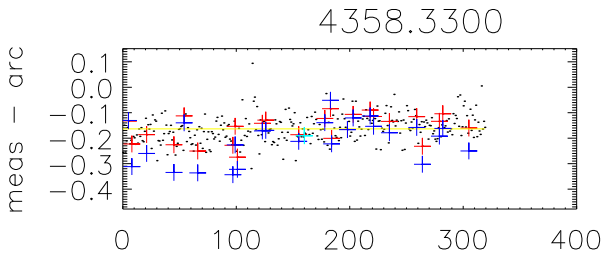

4046.5600
off: −0.51
sig: 0.045
4358.3300
off: −0.21
sig: 0.014
5460.9400
off: −0.06
sig: 0.013
5577.3390
off: −0.06
sig: 0.002
5889.9500
off: 0.03
sig: 0.005
5895.9240
off: 0.01
sig: 0.007

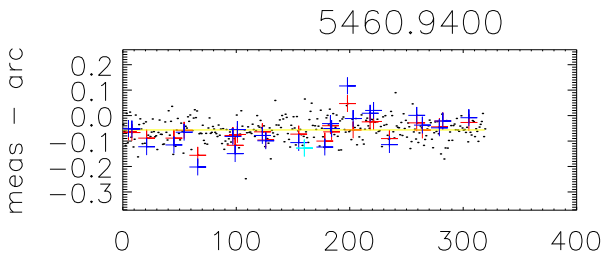

shift(pix)=−0.206
err(pix)= 0.042
oldshift(pix)=−0.512
250
200
150
100
50
4020
4030
4040
4050
4060
4070
4080

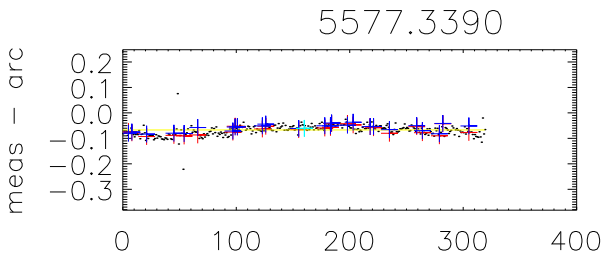

shift(pix)=−0.190
err(pix)= 0.016
oldshift(pix)=−0.211
250
200
150
100
50
4280
4300
4320
4340
4360
4380
4400
4420

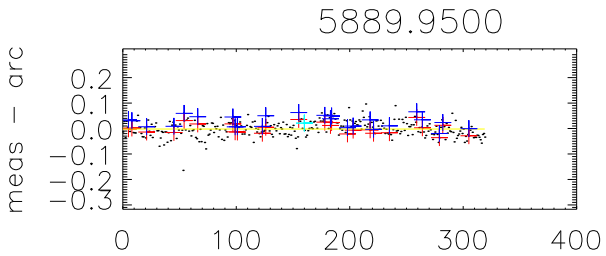

shift(pix)=−0.128
err(pix)= 0.016
oldshift(pix)=−0.061
250
200
150
100
50
5430
5440
5450
5460
5470
5480
5490

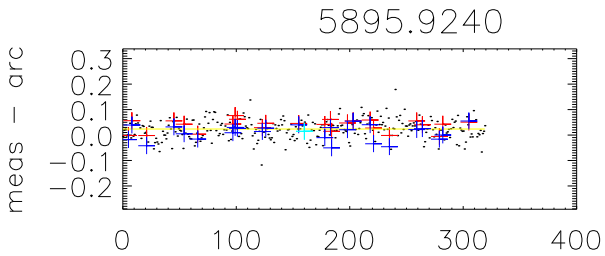

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

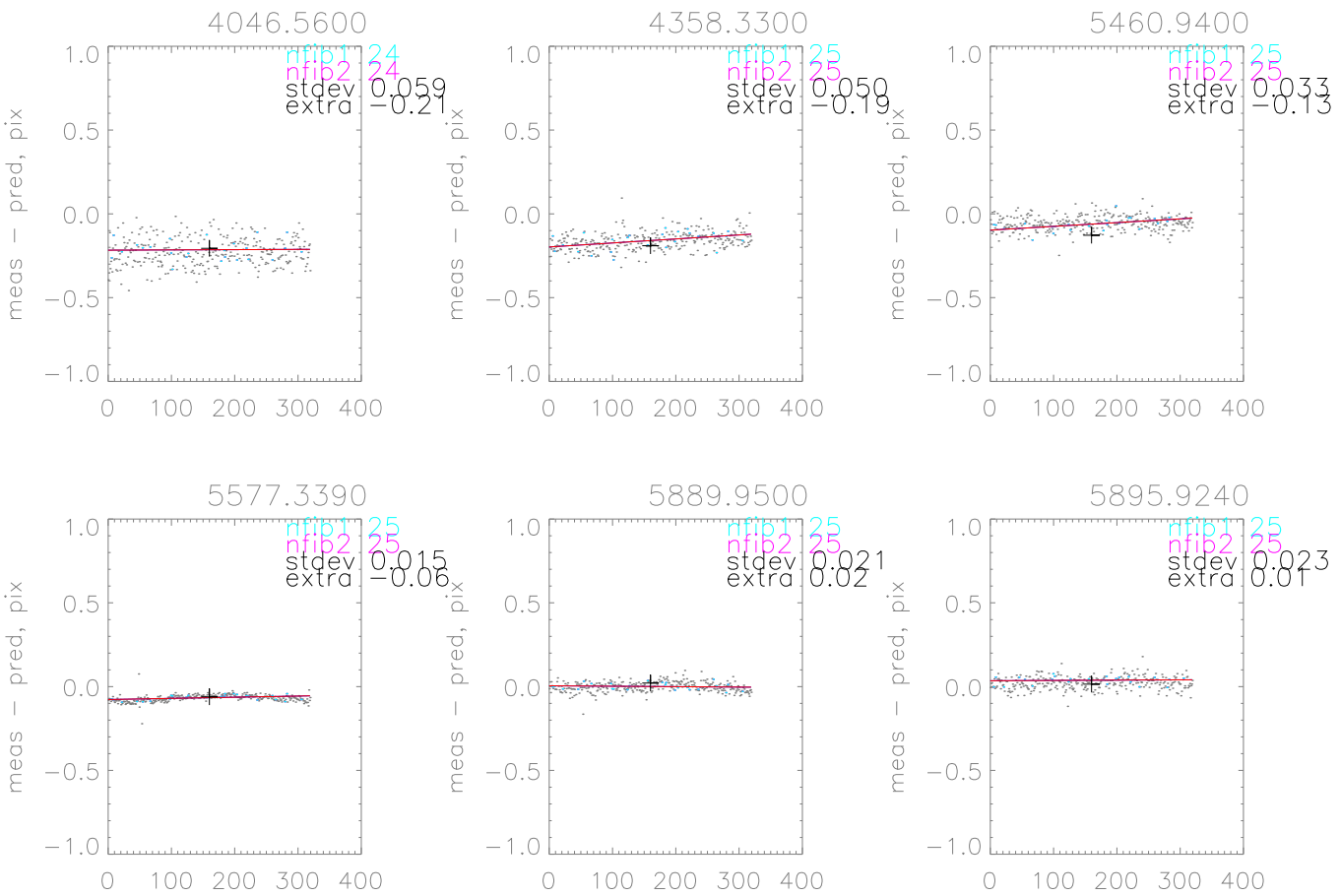

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

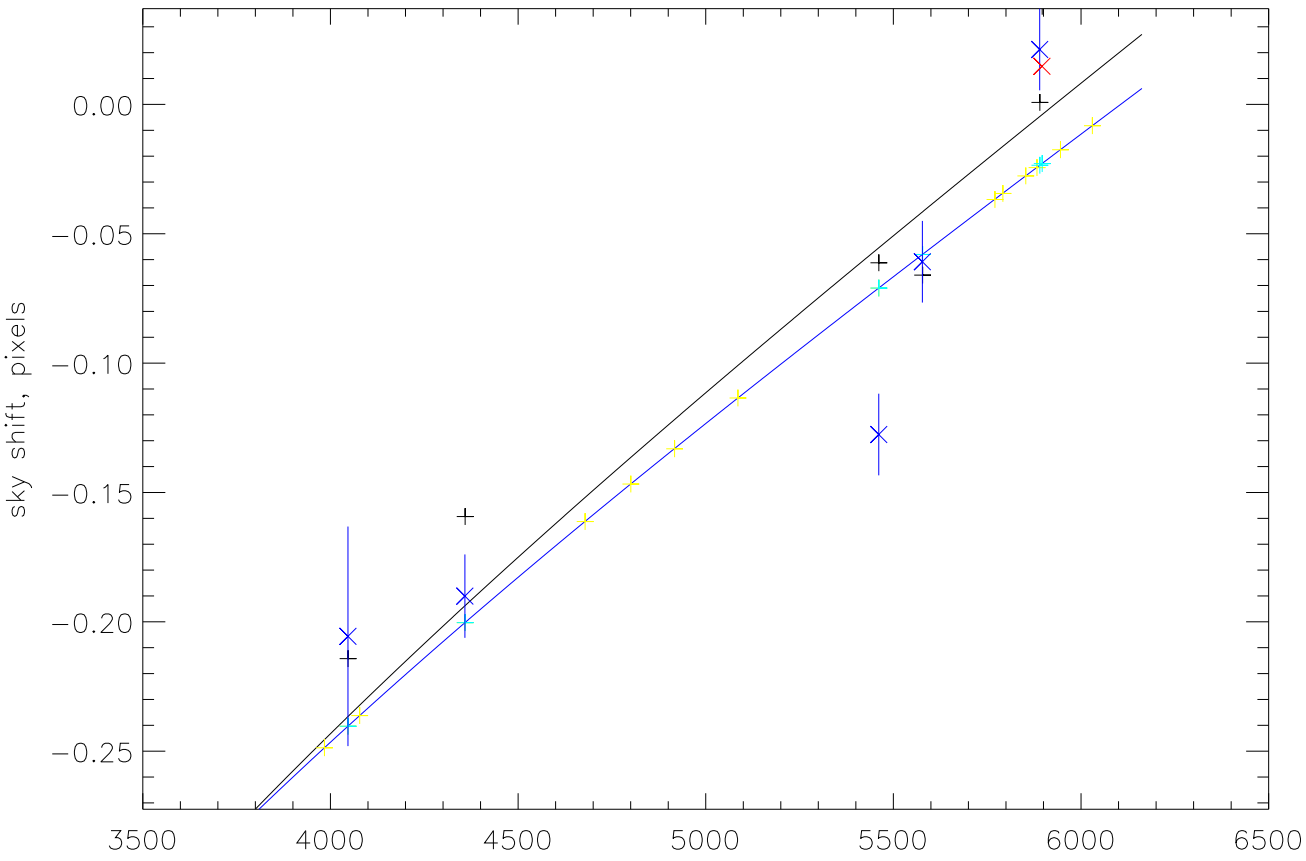

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

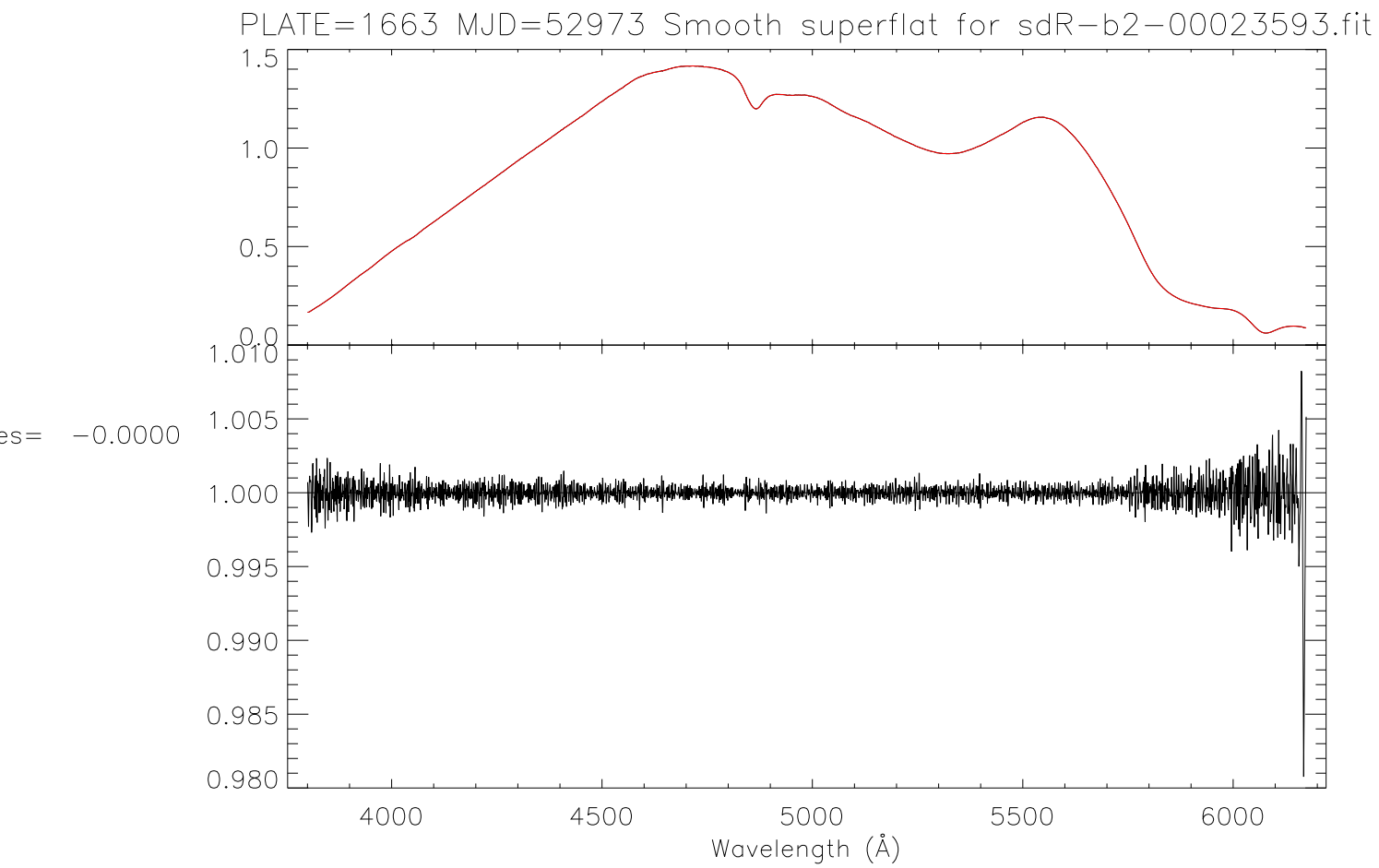

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

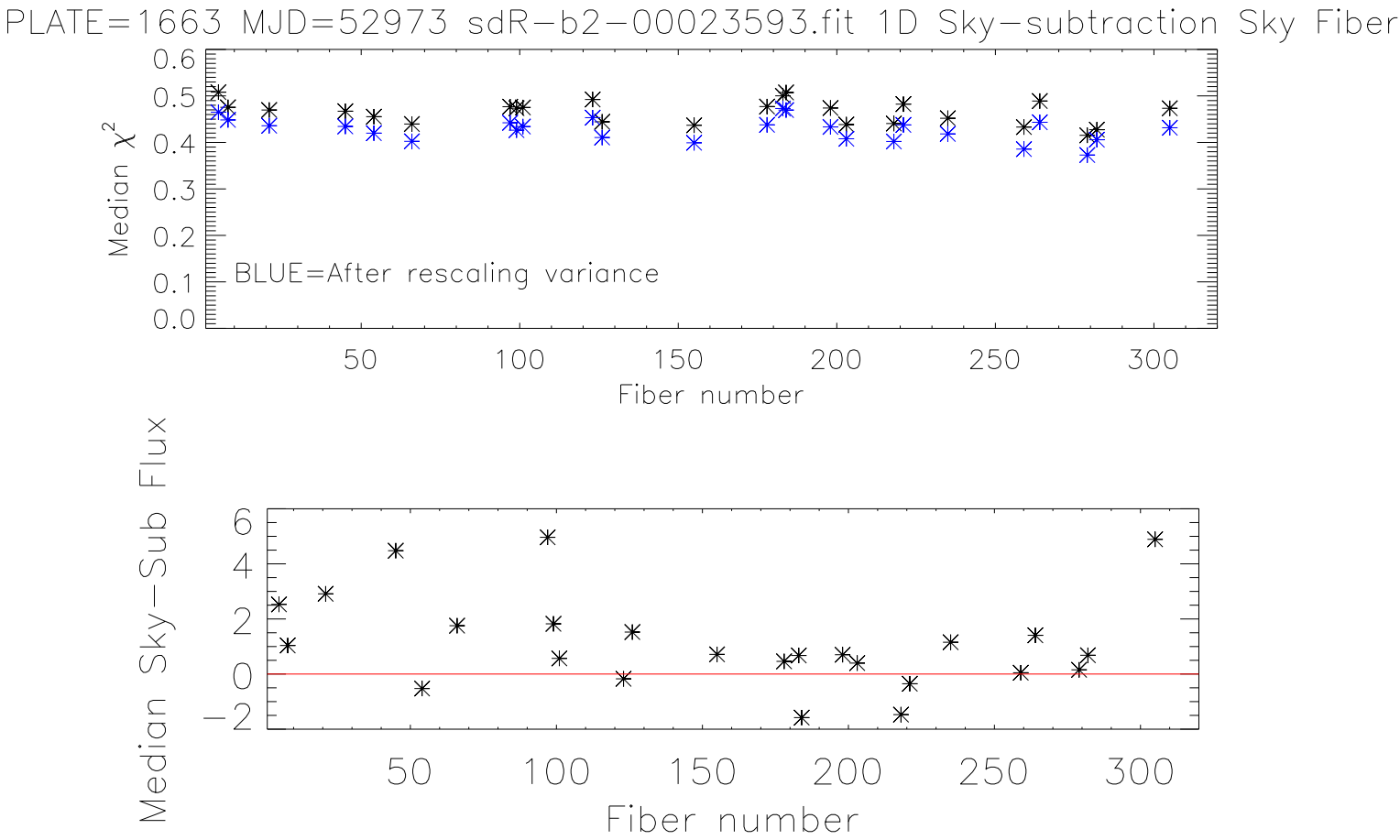

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

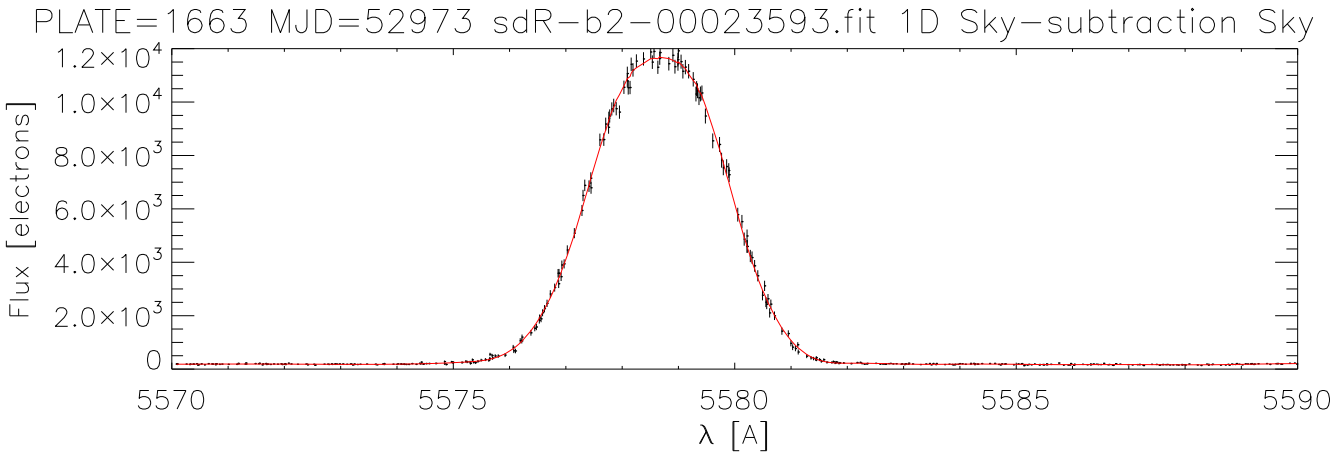

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

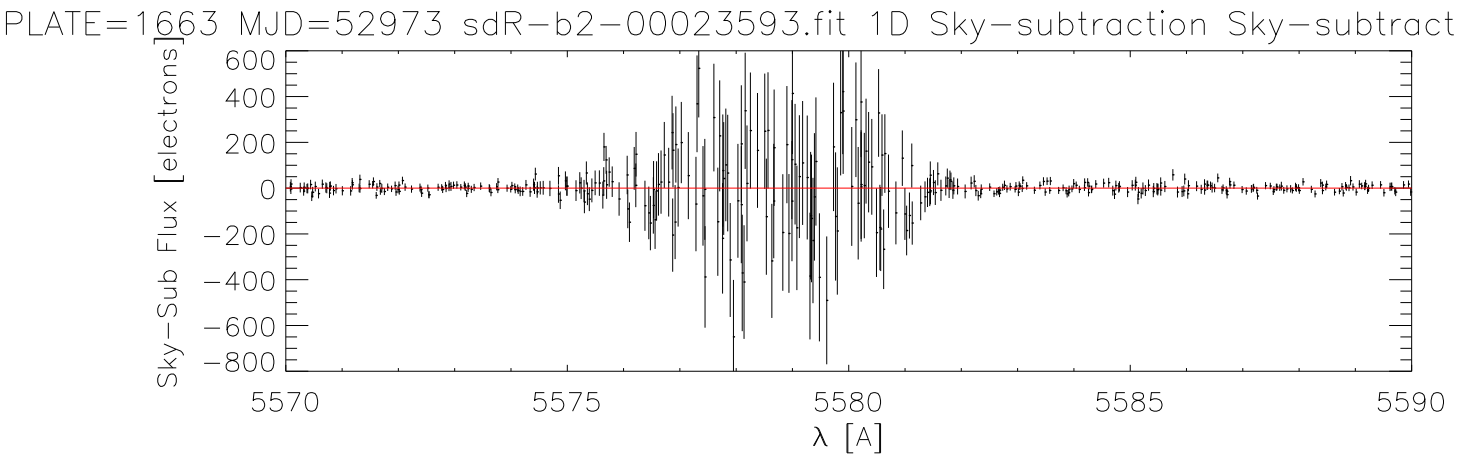

4046.5600
nfib1 24
nfib2 24
stdev 0.059
extra −0.21
4358.3300
nfib1 25
nfib2 25
stdev 0.050
extra −0.19
5460.9400
nfib1 25
nfib2 25
stdev 0.033
extra −0.13
5577.3390
nfib1 25
nfib2 25
stdev 0.015
extra −0.06
5889.9500
nfib1 25
nfib2 25
stdev 0.021
extra 0.02
5895.9240
nfib1 25
nfib2 25
stdev 0.023
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

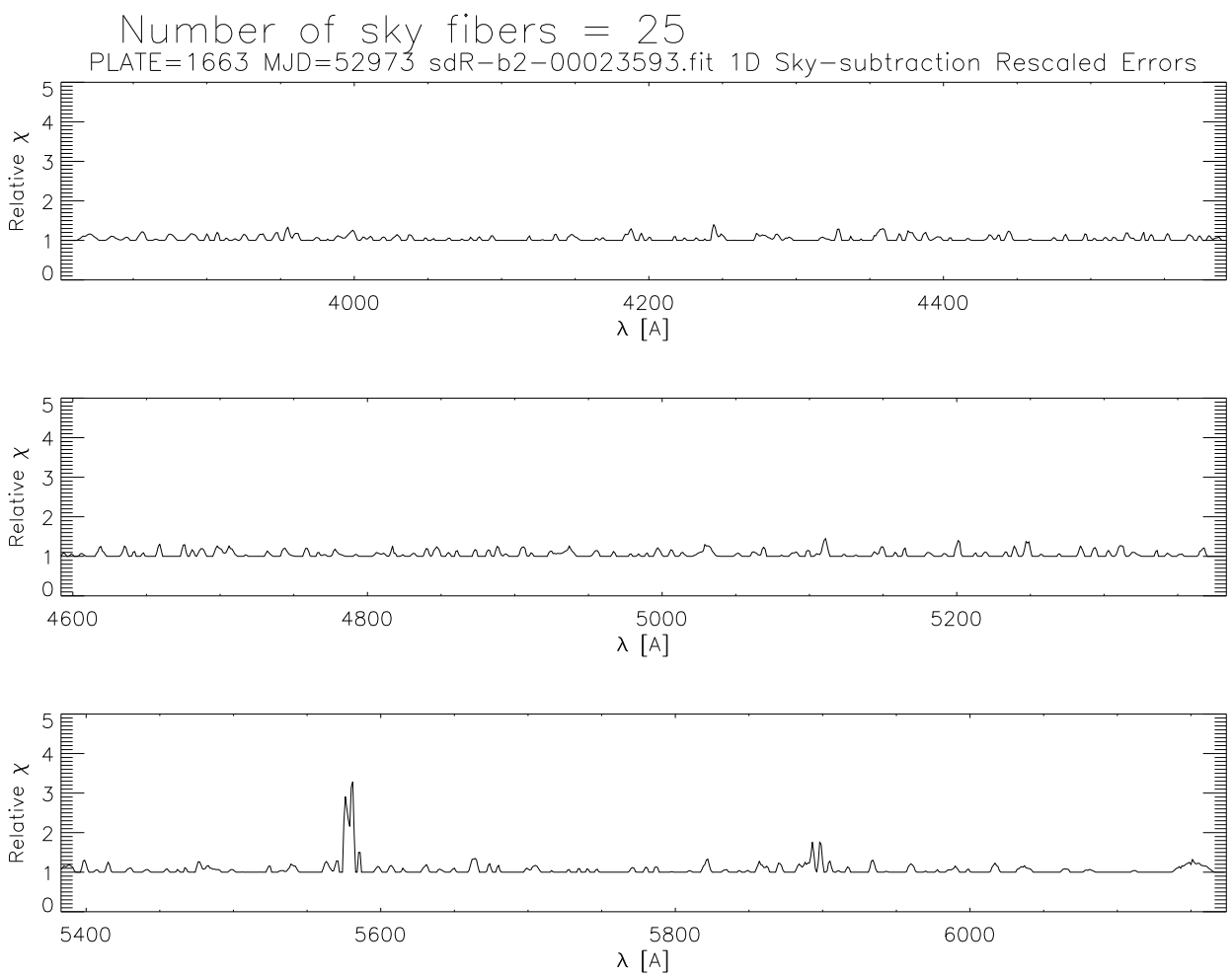

0.00
−0.05
−0.10
−0.15
−0.20
−0.25
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

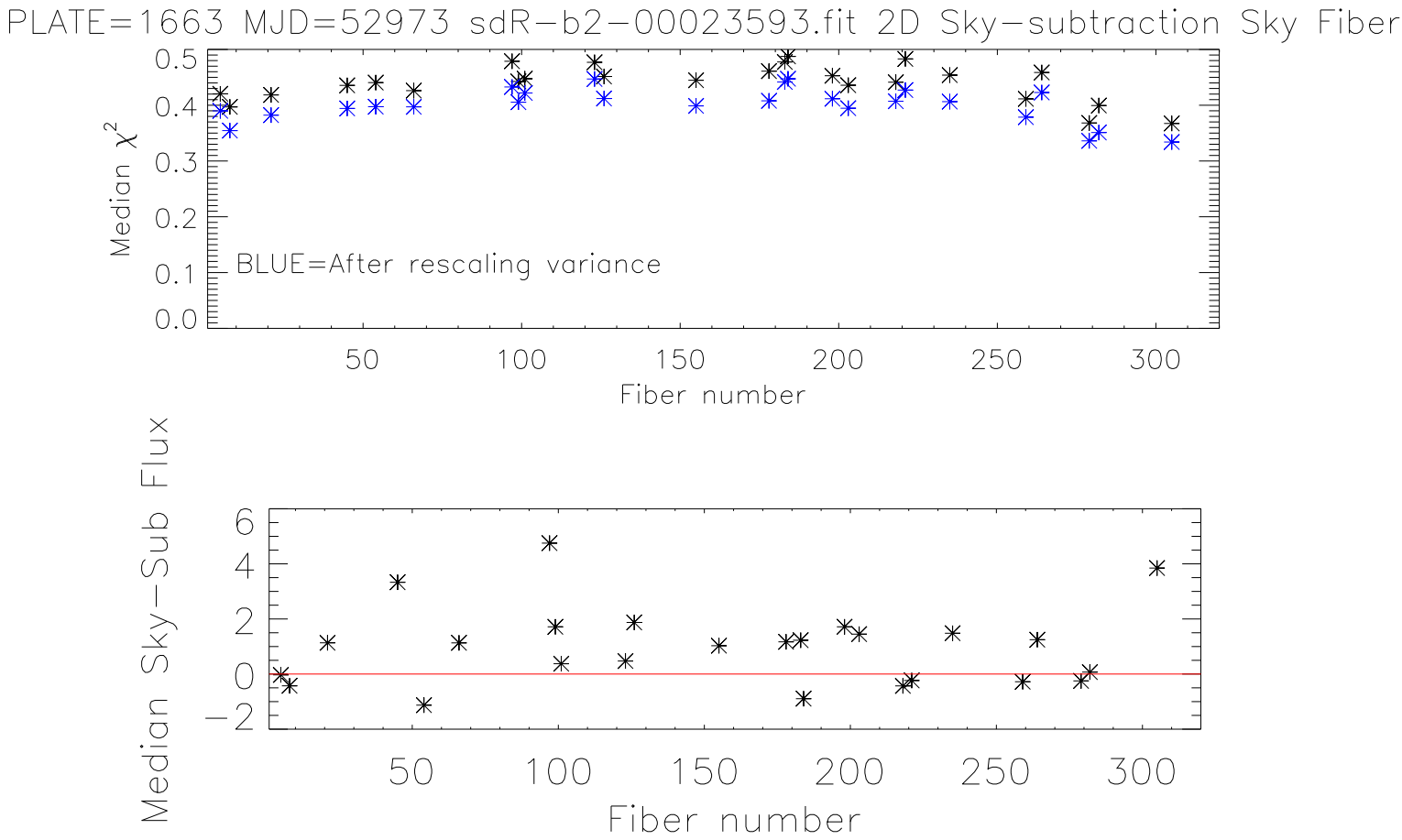

PLATE=1663 MJD=52973 Smooth superflat for sdR-b2-00023593.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

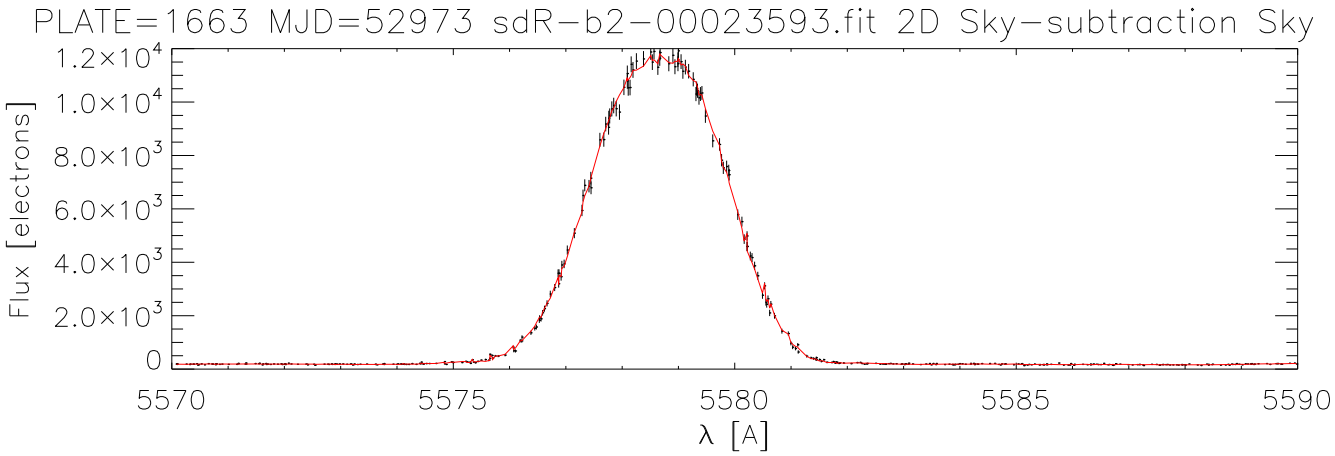

PLATE=1663 MJD=52973 sdR-b2-00023593.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

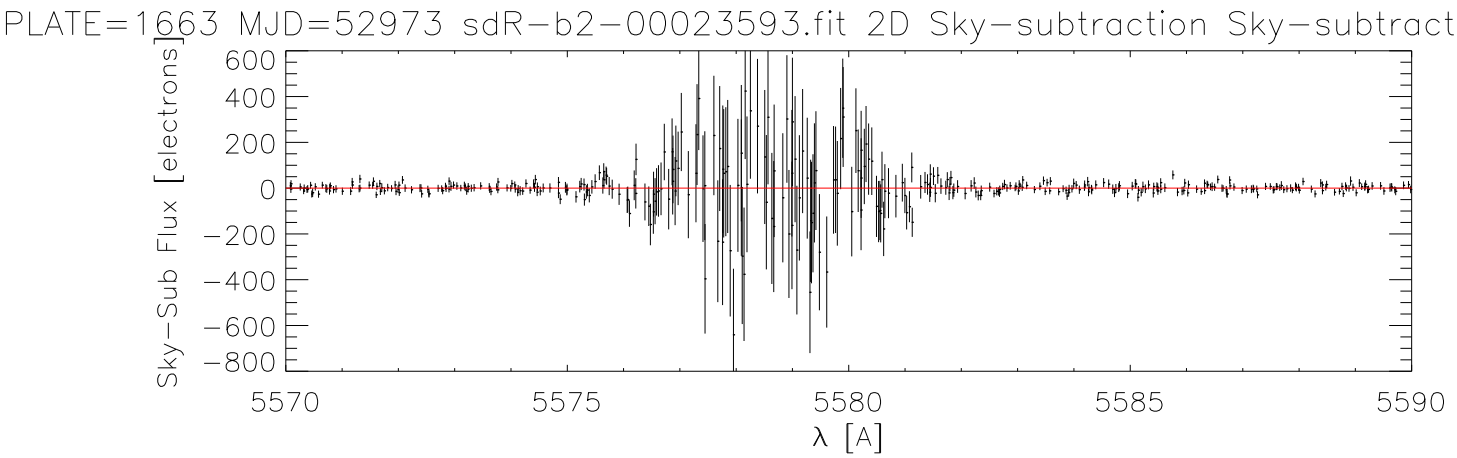

PLATE=1663 MJD=52973 sdR-b2-00023593.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

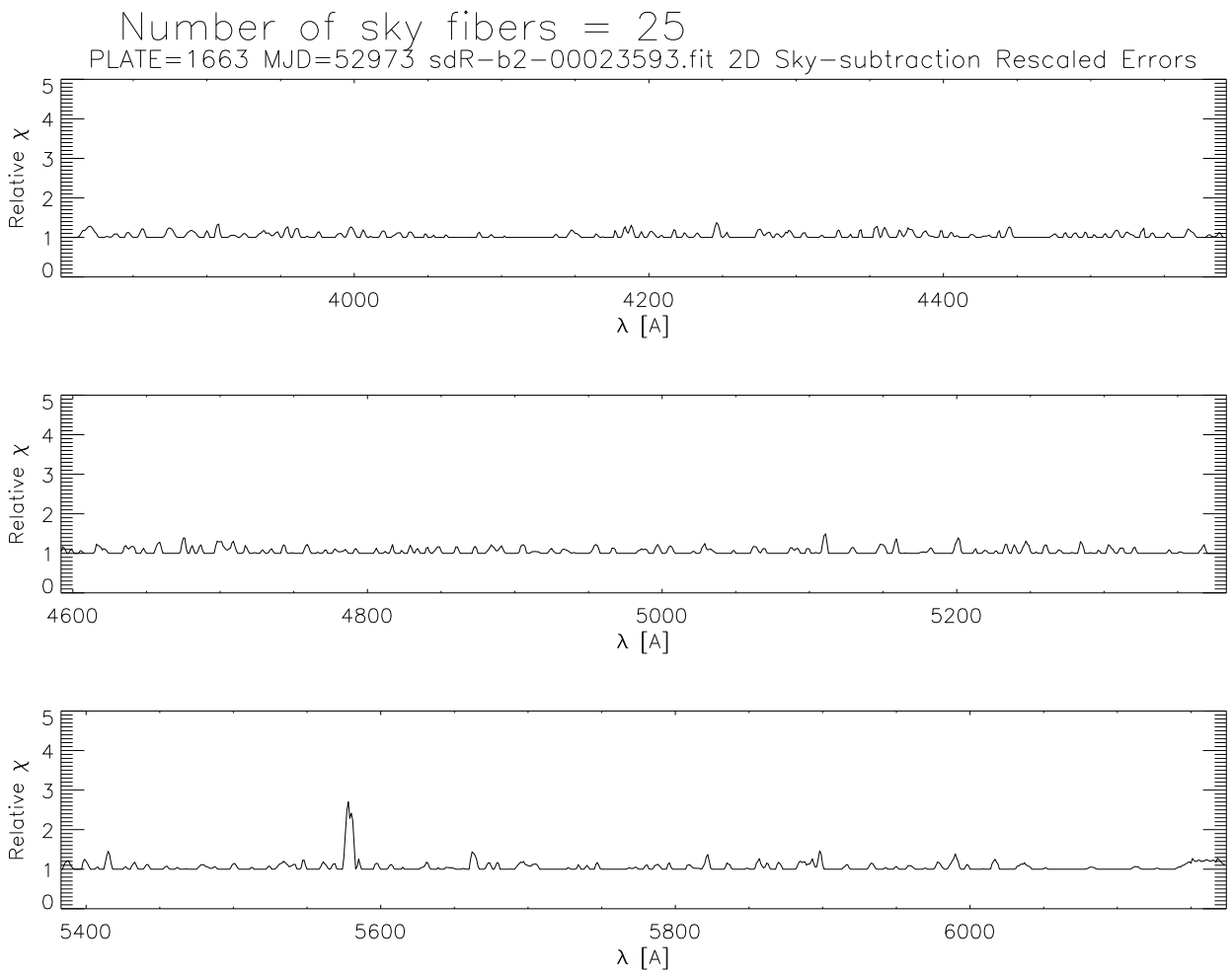

PLATE=1663 MJD=52973 sdR-b2-00023593.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

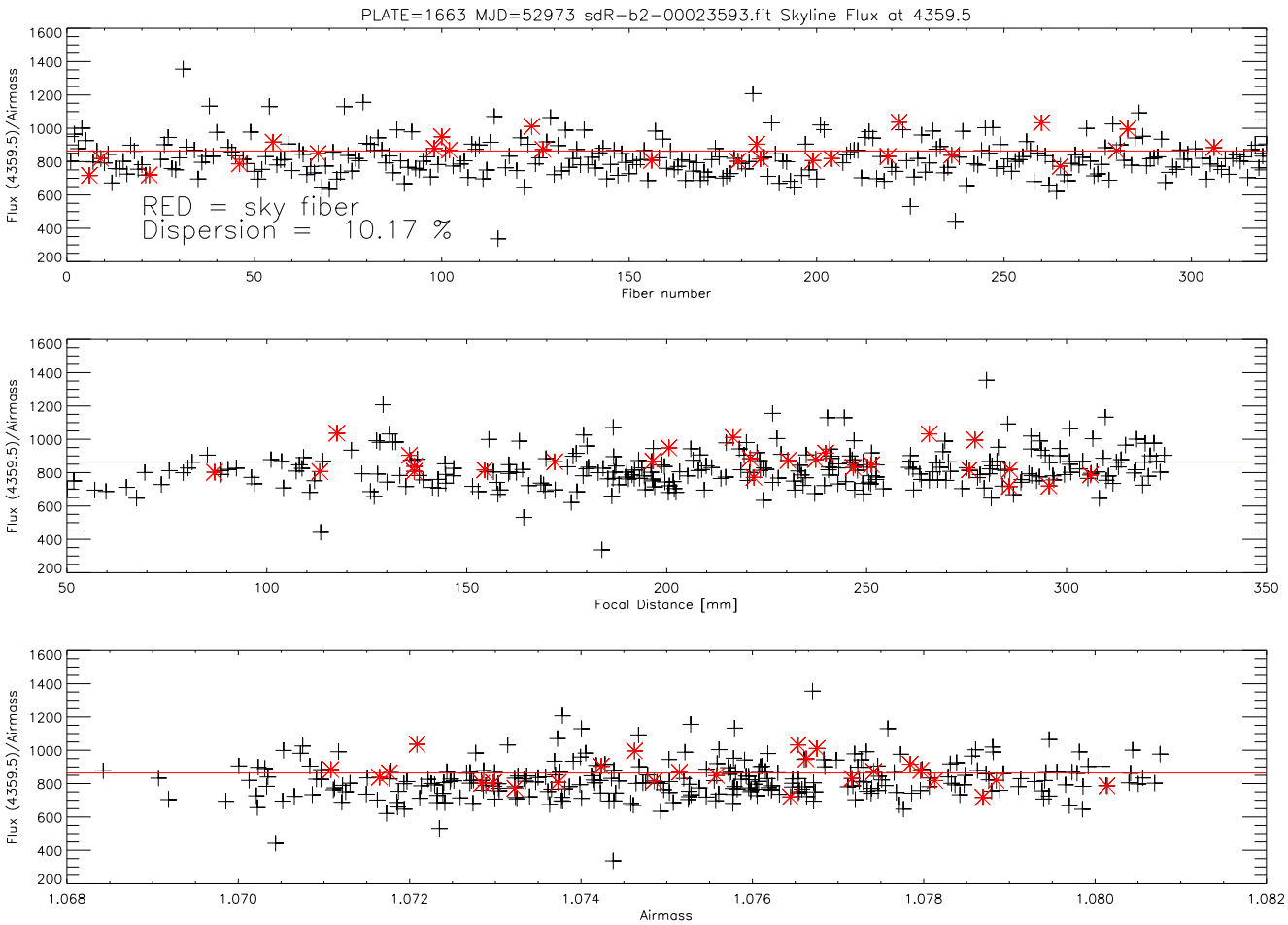

Number of sky fibers = 25
PLATE=1663 MJD=52973 sdR-b2-00023593.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

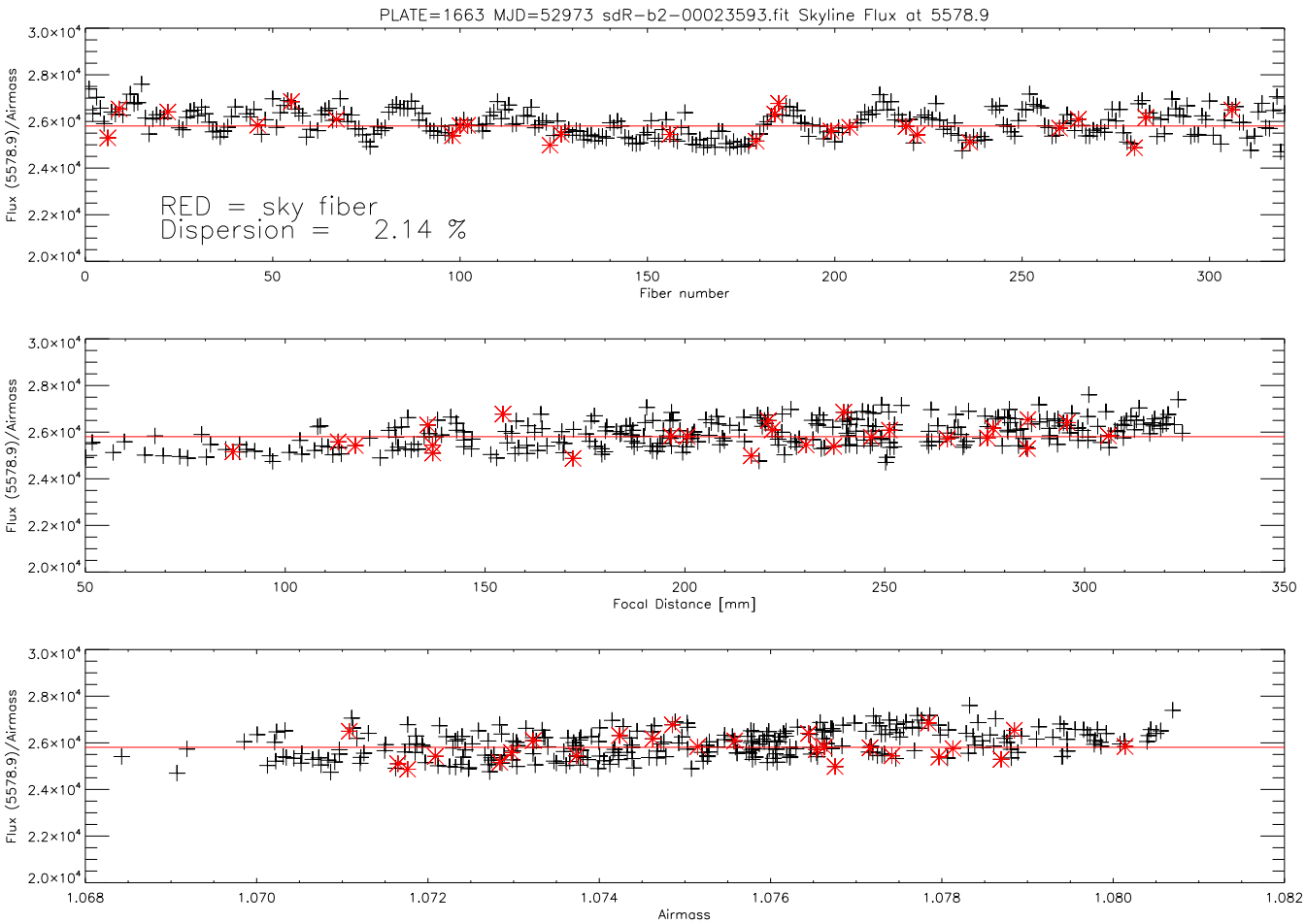

PLATE=1663 MJD=52973 sdR-b2-00023593.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

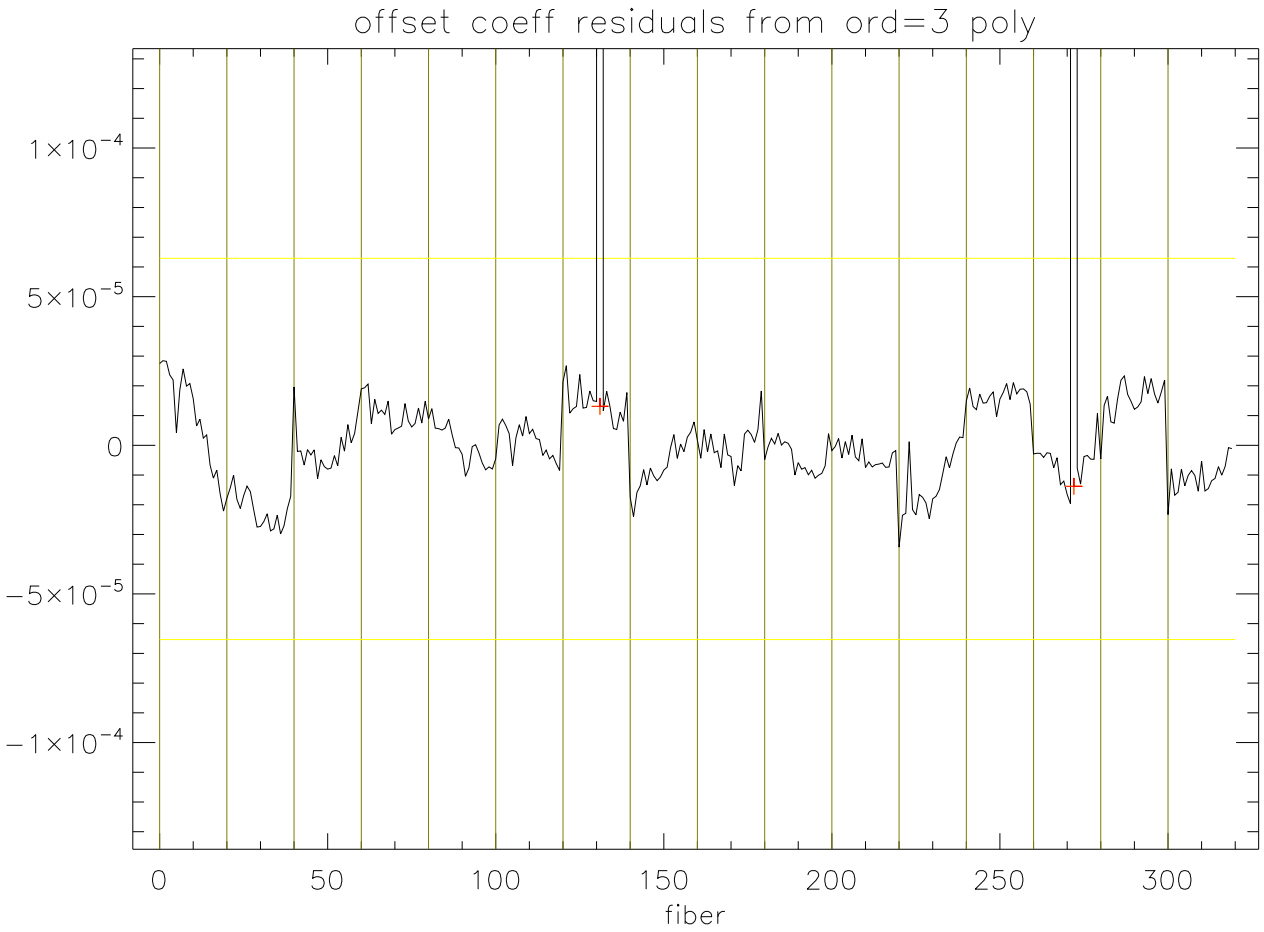

PLATE=1663 MJD=52973 sdR-b2-00023593.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

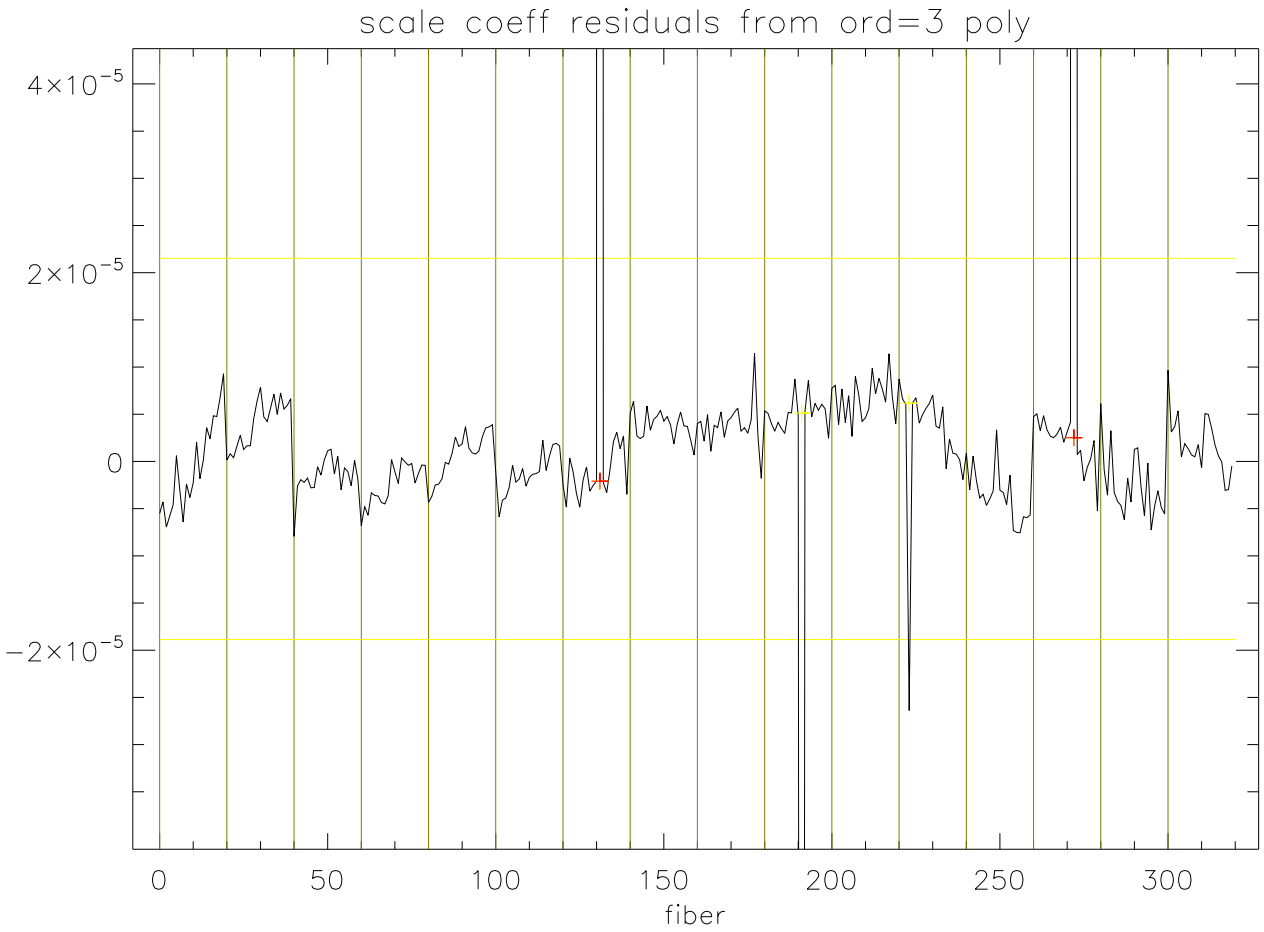

PLATE=1663 MJD=52973 sdR-b2-00023593.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

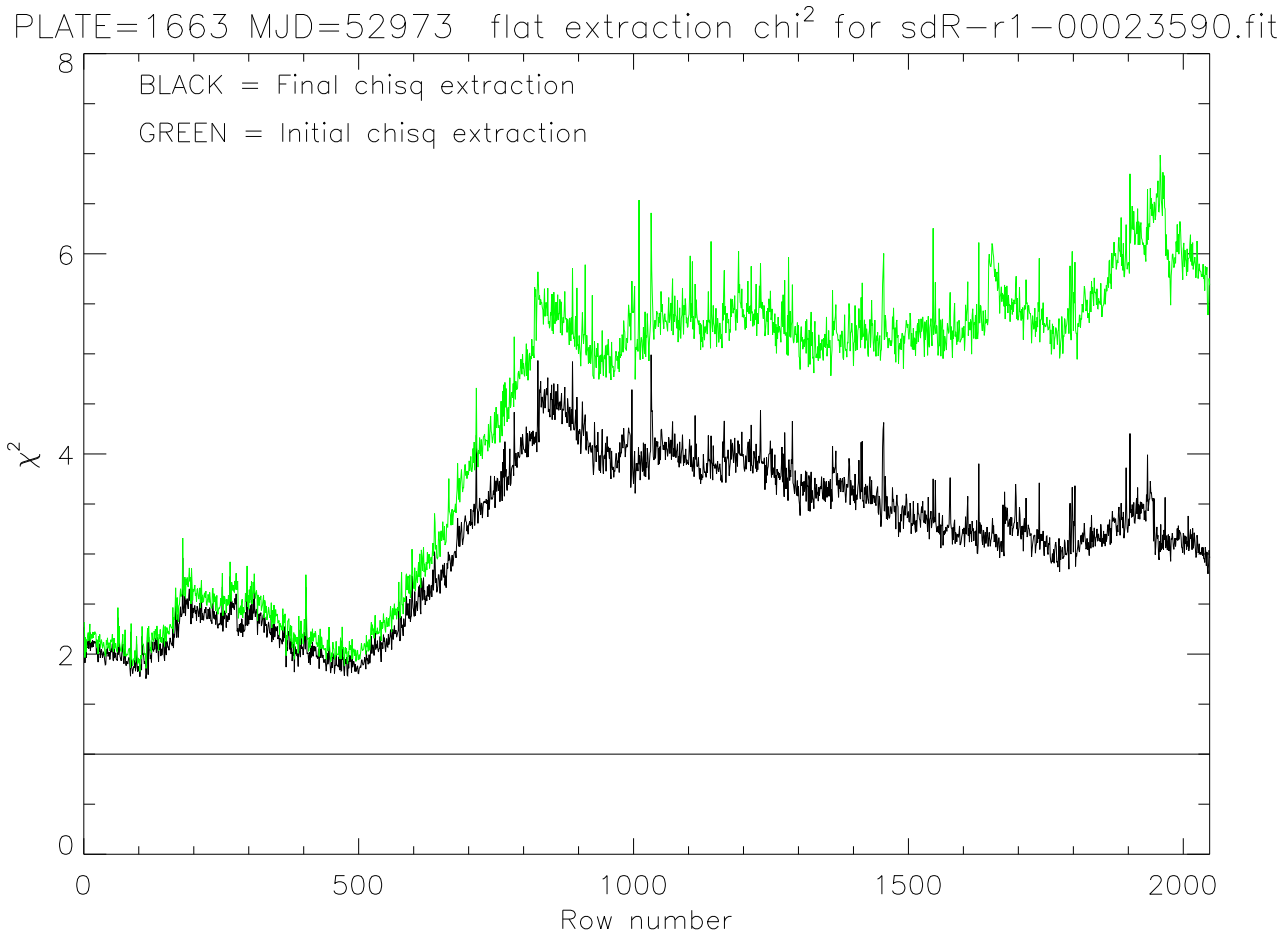

Number of sky fibers = 25
PLATE=1663 MJD=52973 sdR-b2-00023593.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

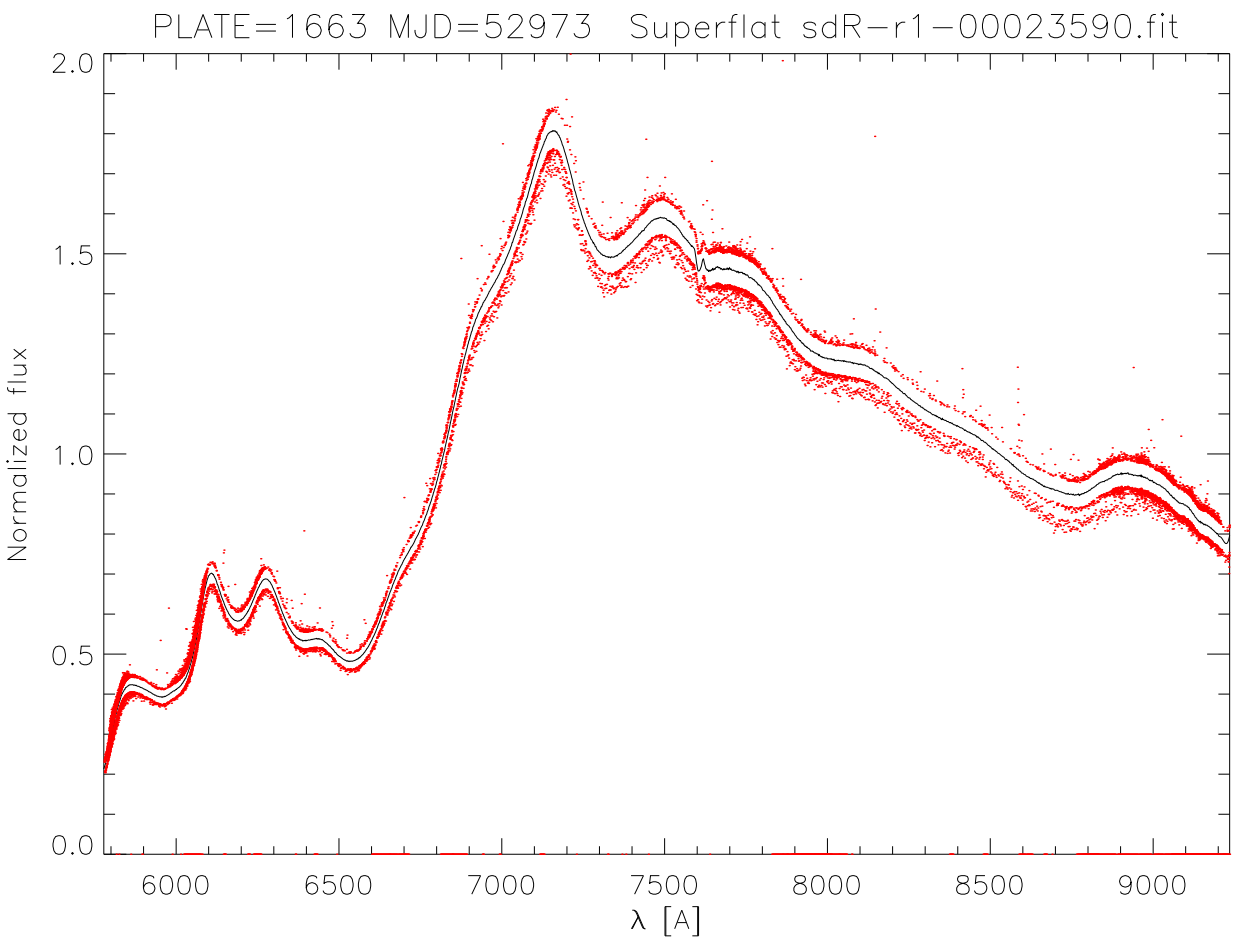

PLATE=1663 MJD=52973 sdR-b2-00023593.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.17 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

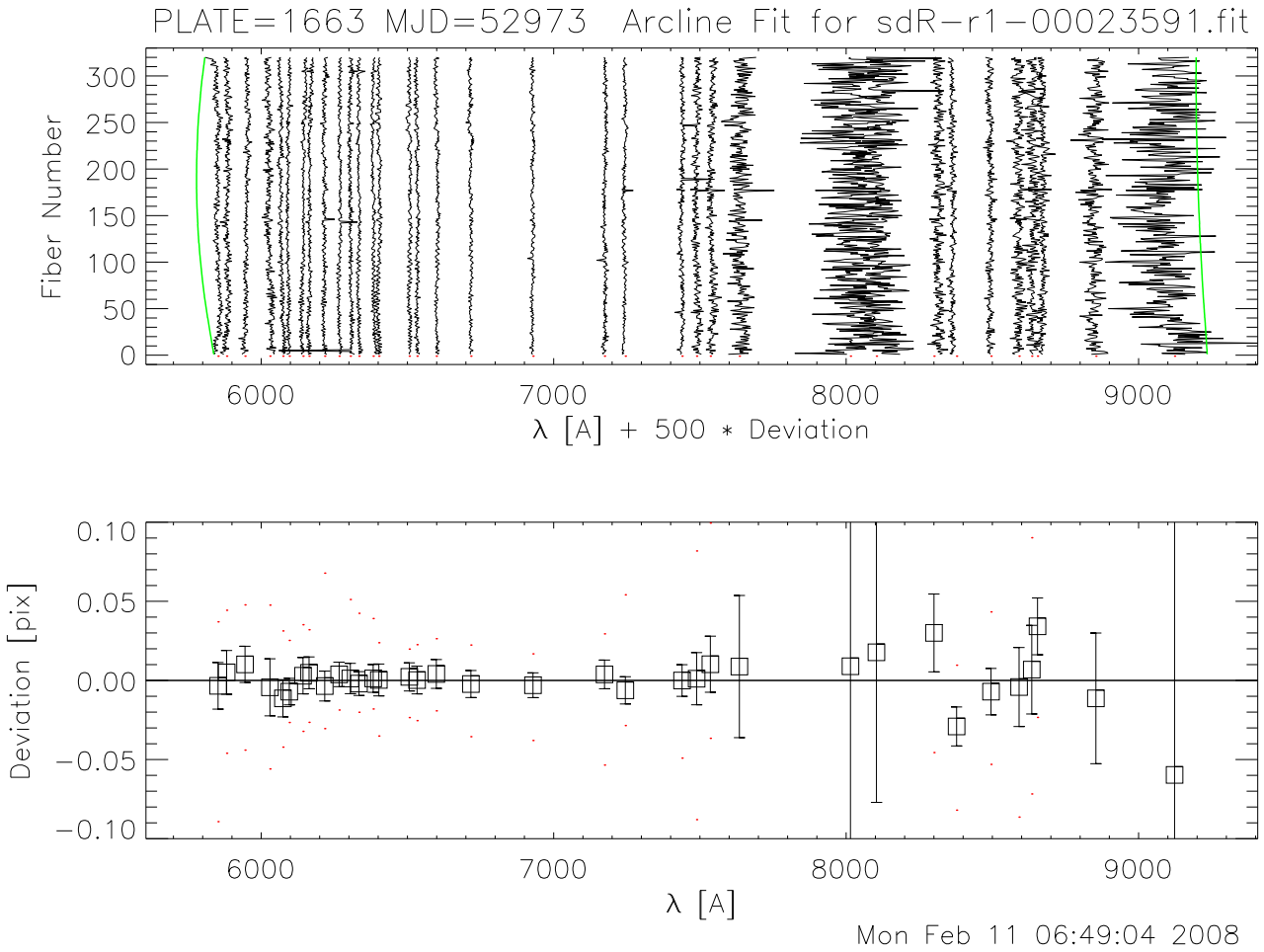

PLATE=1663 MJD=52973 sdR-b2-00023593.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.14 %
Fiber number
Focal Distance [mm]
Airmass

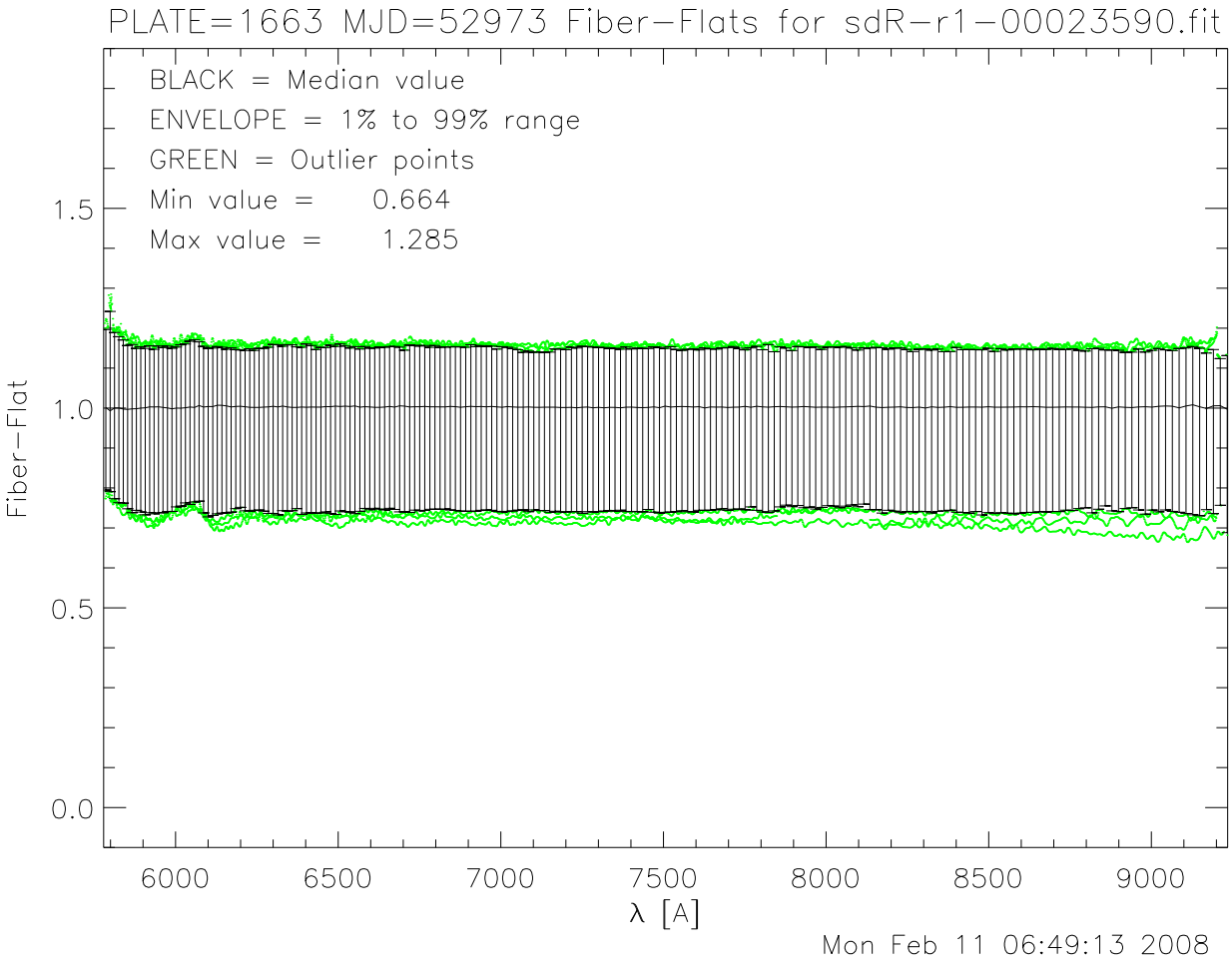

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

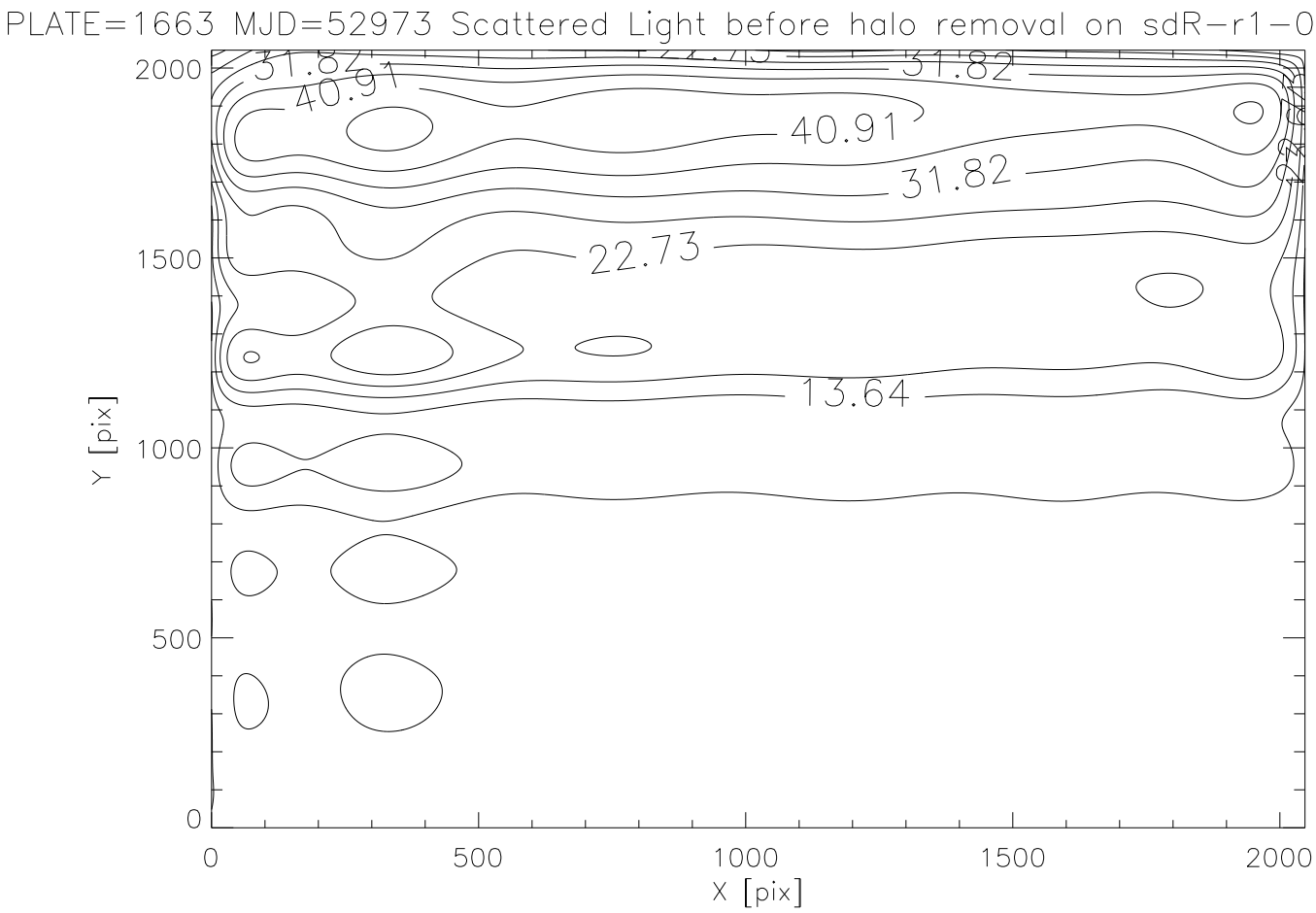

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

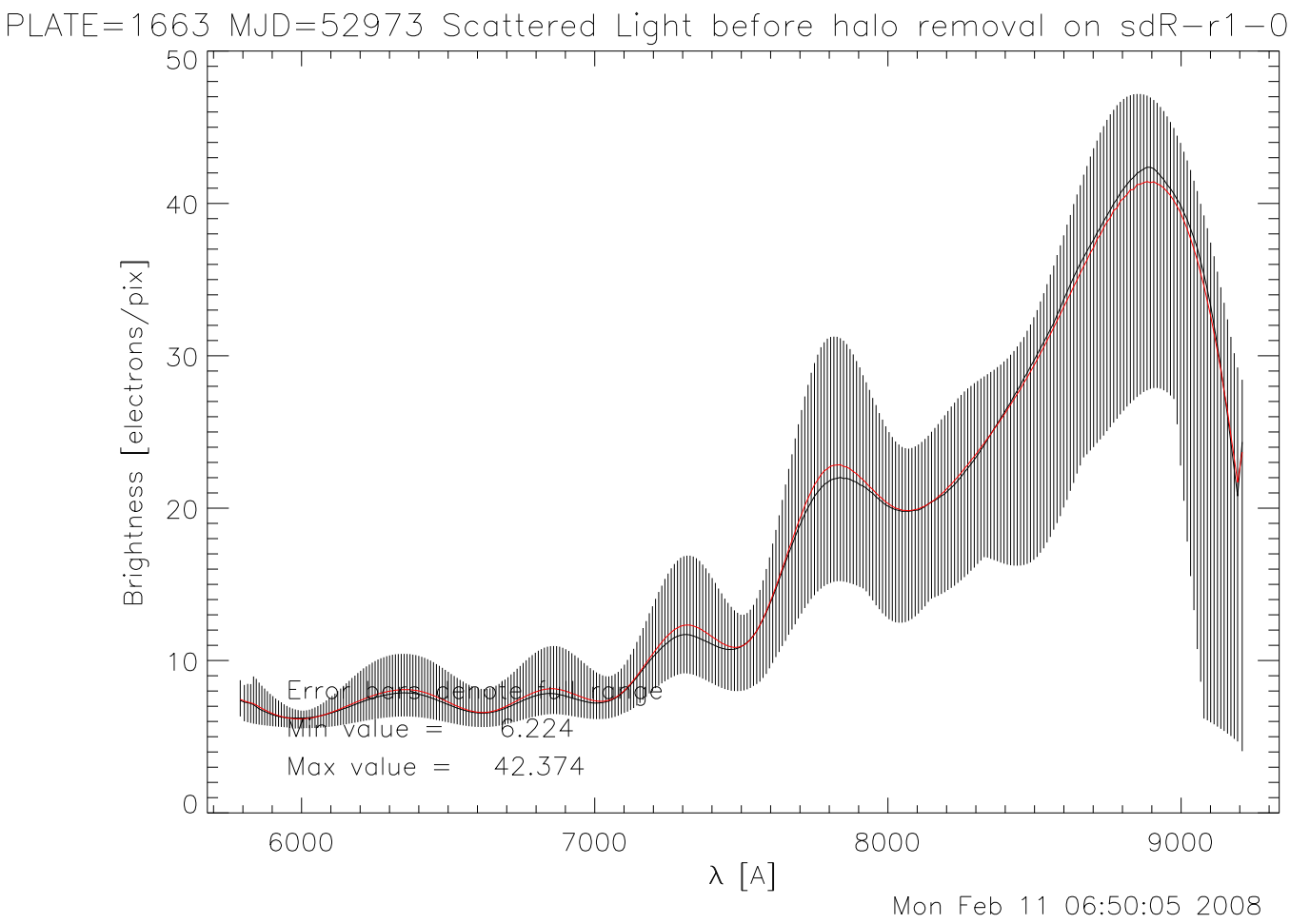

PLATE=1663 MJD=52973 flat extraction chi^2 for sdR−r1−00023590.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

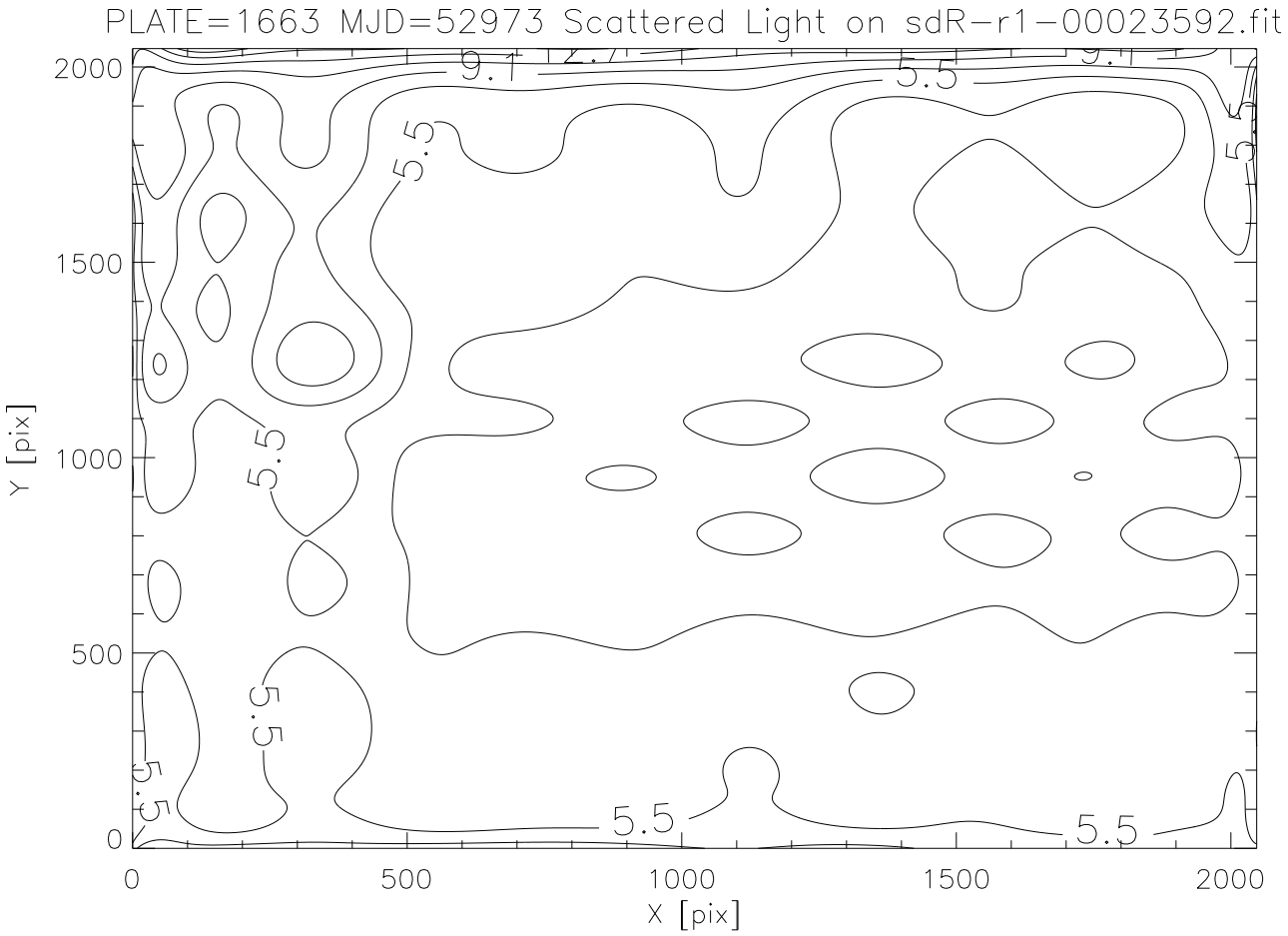

PLATE=1663 MJD=52973 Superflat sdR-r1-00023590.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

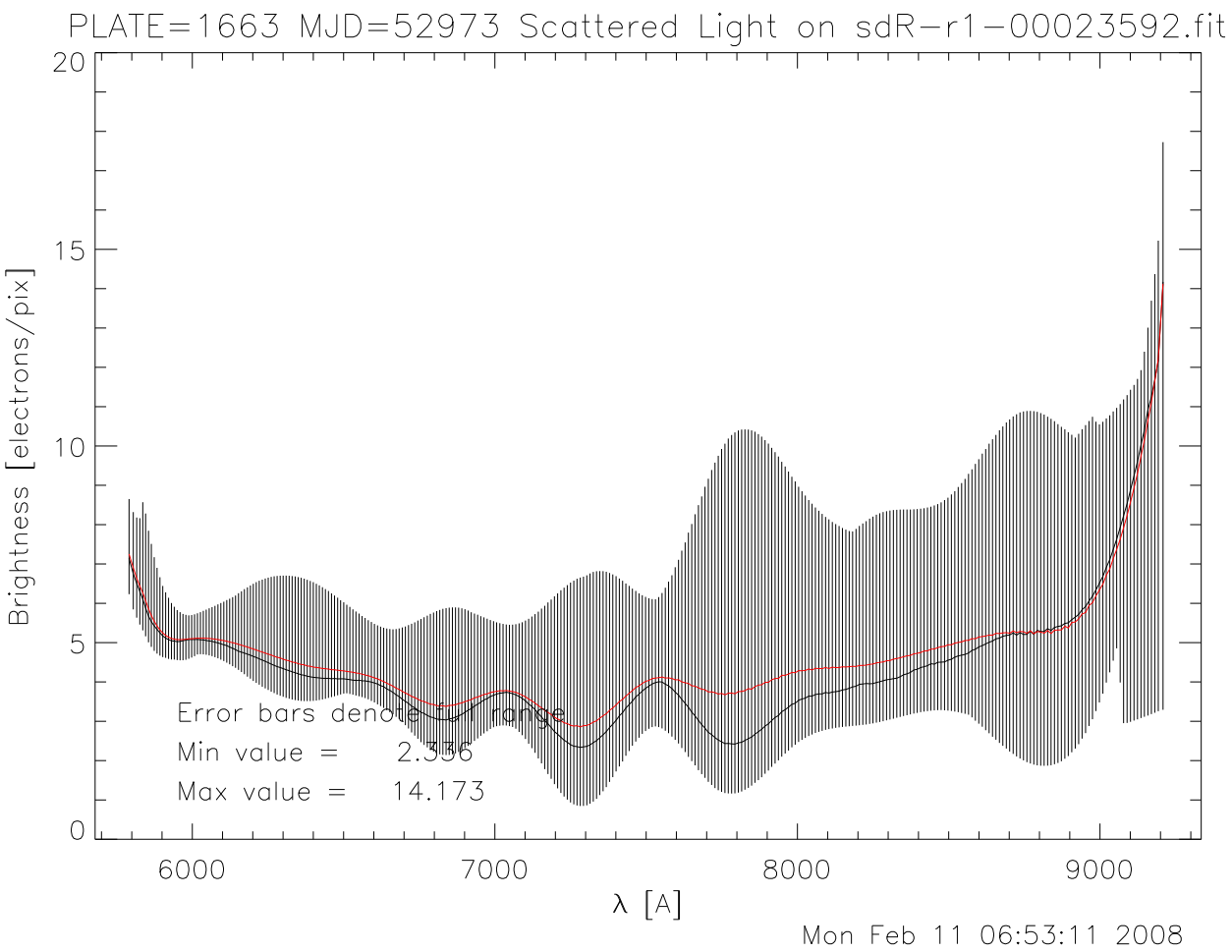

PLATE=1663 MJD=52973 Arcline Fit for sdR-r1-00023591.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 06:49:04 2008

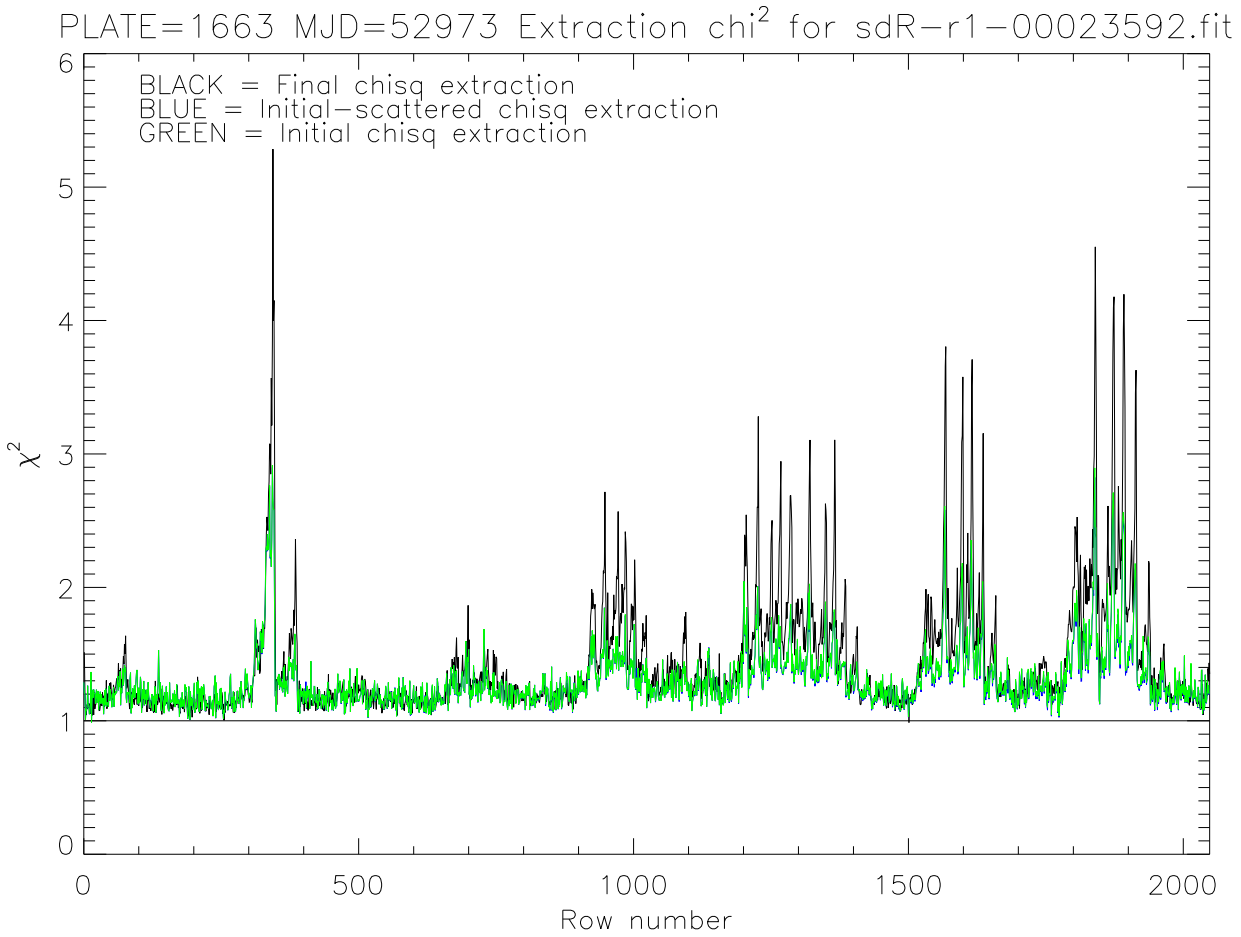

PLATE=1663 MJD=52973 Fiber−Flats for sdR−r1−00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.664
Max value = 1.285
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 06:49:13 2008

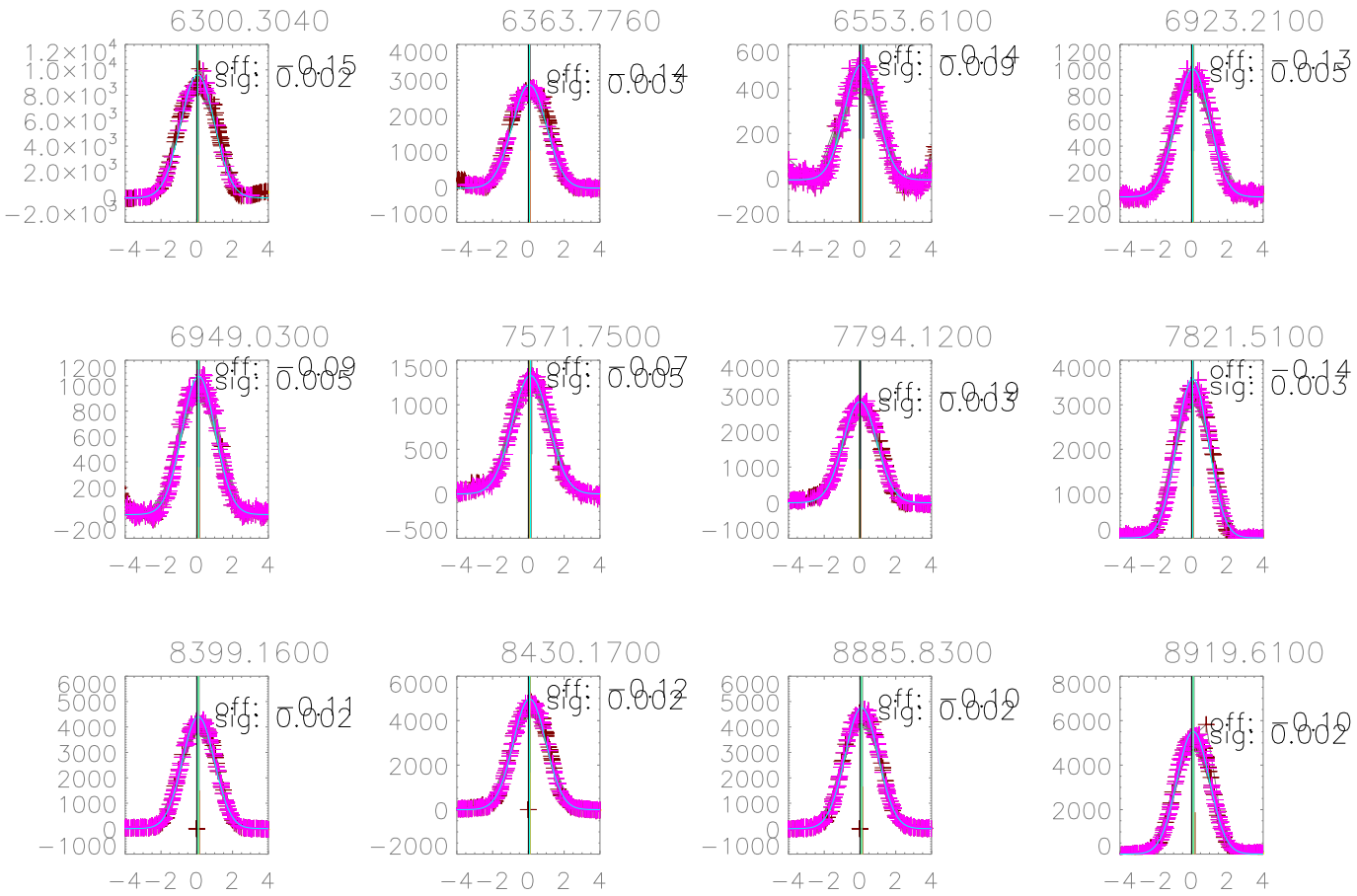

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r1-00023592.fi
31.82
40.91
40.91
31.82
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

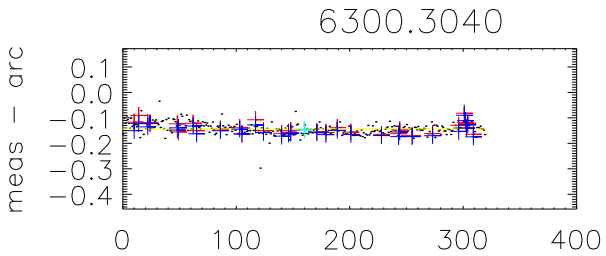

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r1-00023592.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 6.224
Max value = 42.374
Mon Feb 11 06:50:05 2008

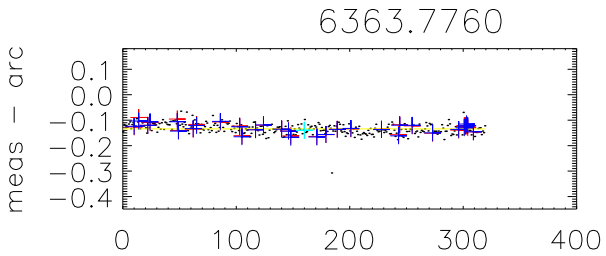

PLATE=1663 MJD=52973 Scattered Light on sdR−r1−00023592.fit
9.1
5.5
0
Y [pix]
X [pix]
0
500
1000
1500
2000

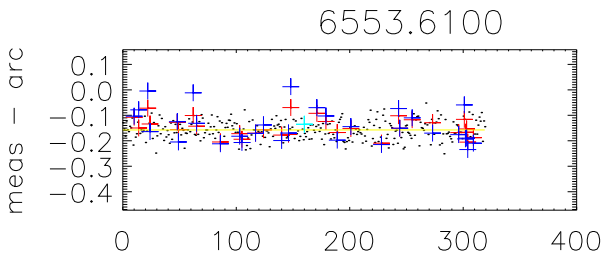

PLATE=1663 MJD=52973 Scattered Light on sdR-r1-00023592.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote 1-σ range
Min value = 2.336
Max value = 14.173
Mon Feb 11 06:53:11 2008

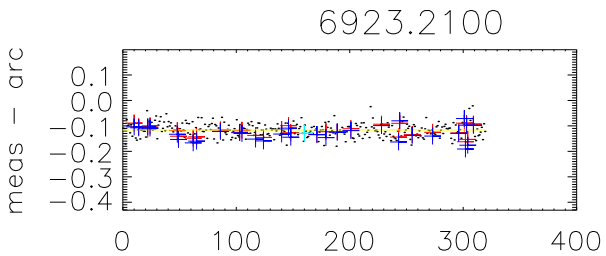

PLATE=1663 MJD=52973 Extraction chi^2 for sdR−r1−00023592.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

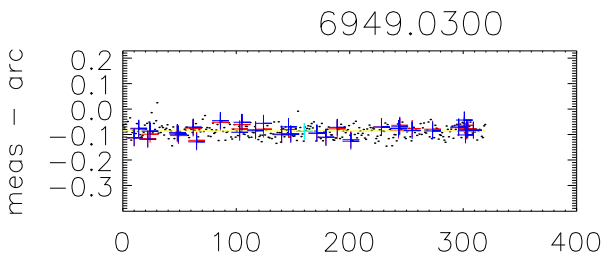

6300.3040
off: −0.15
sig: 0.002
6363.7760
off: −0.14
sig: 0.003
6553.6100
off: −0.14
sig: 0.009
6923.2100
off: −0.13
sig: 0.005
6949.0300
off: −0.09
sig: 0.005
7571.7500
off: −0.07
sig: 0.005
7794.1200
off: −0.19
sig: 0.003
7821.5100
off: −0.14
sig: 0.003
8399.1600
off: −0.11
sig: 0.002
8430.1700
off: −0.12
sig: 0.002
8885.8300
off: −0.10
sig: 0.002
8919.6100
off: −0.10
sig: 0.002

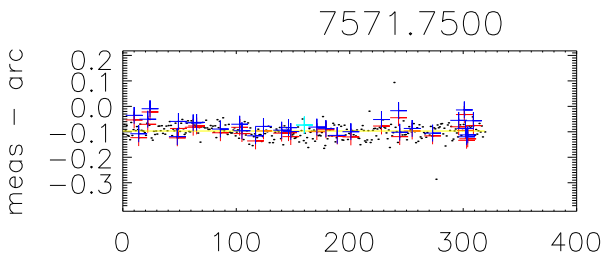

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

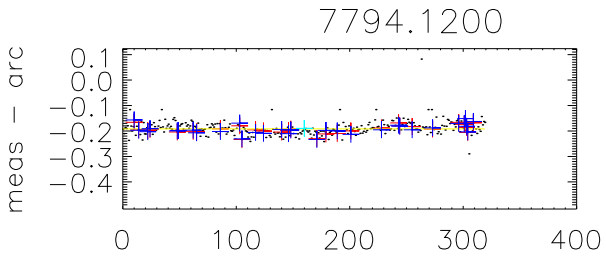

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

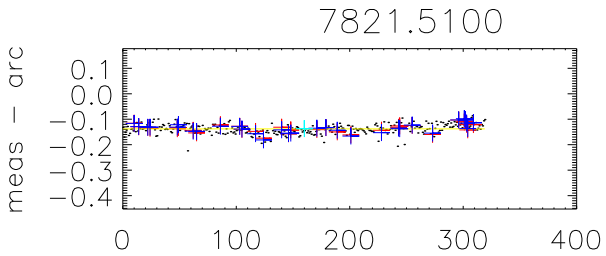

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

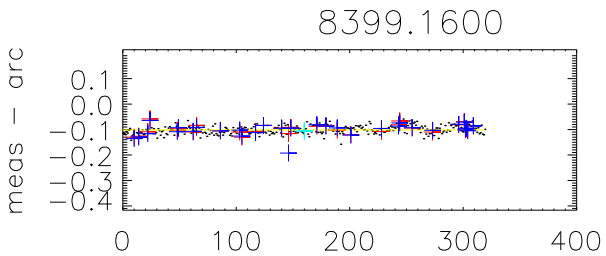

6923.2100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

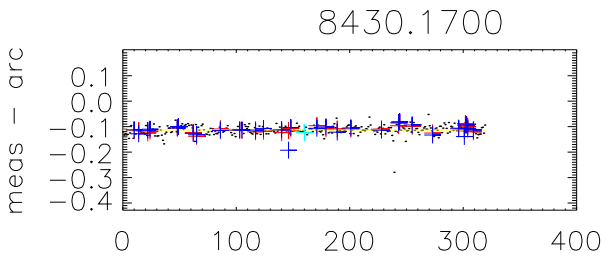

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

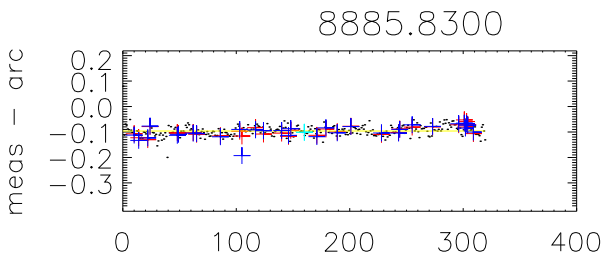

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

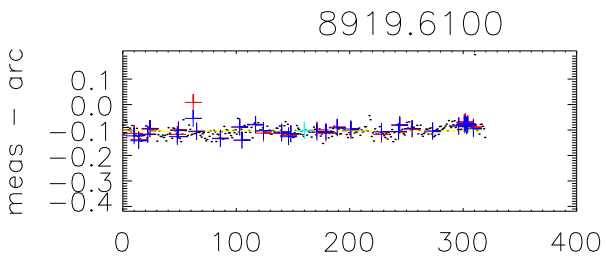

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

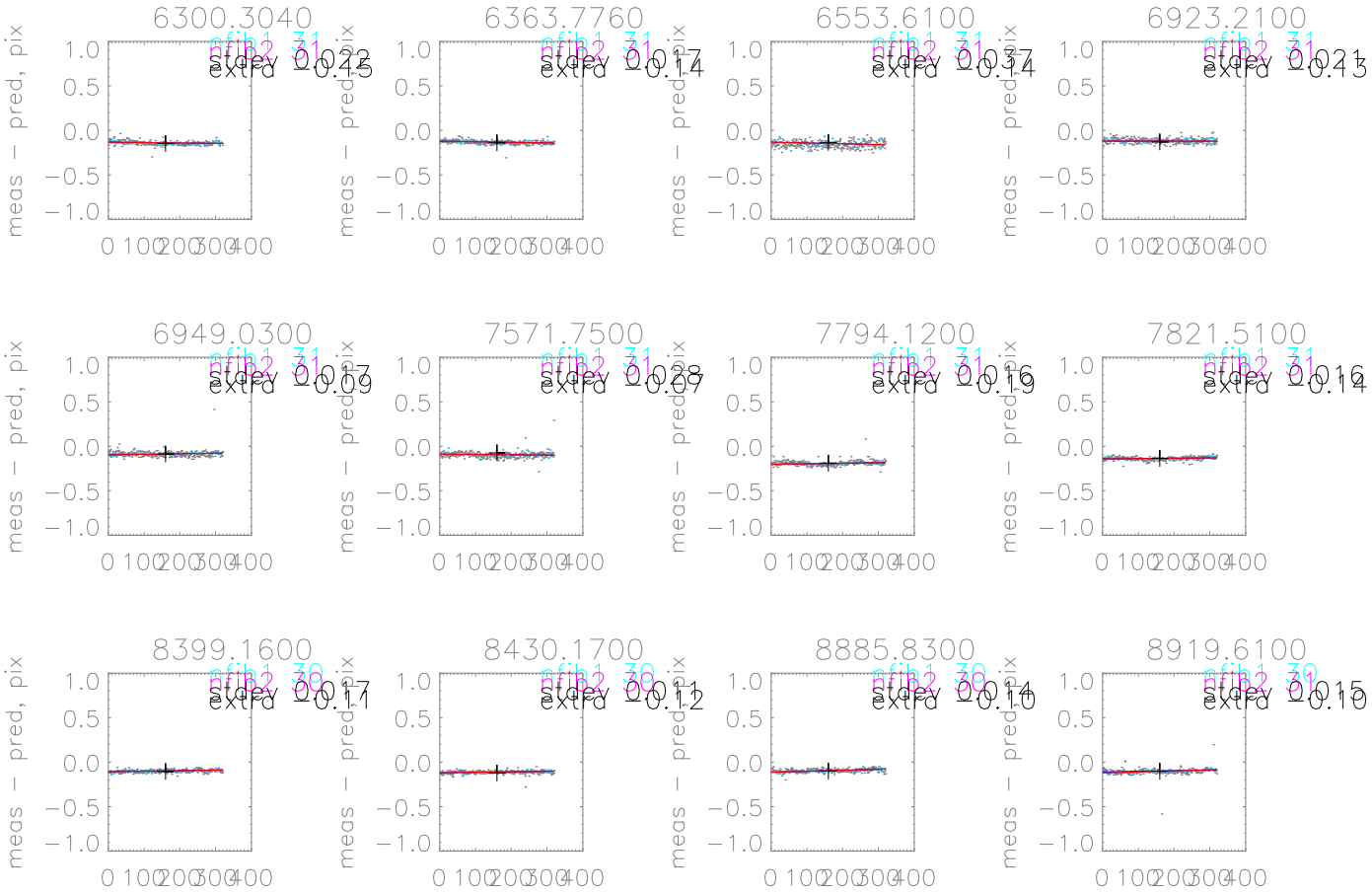

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

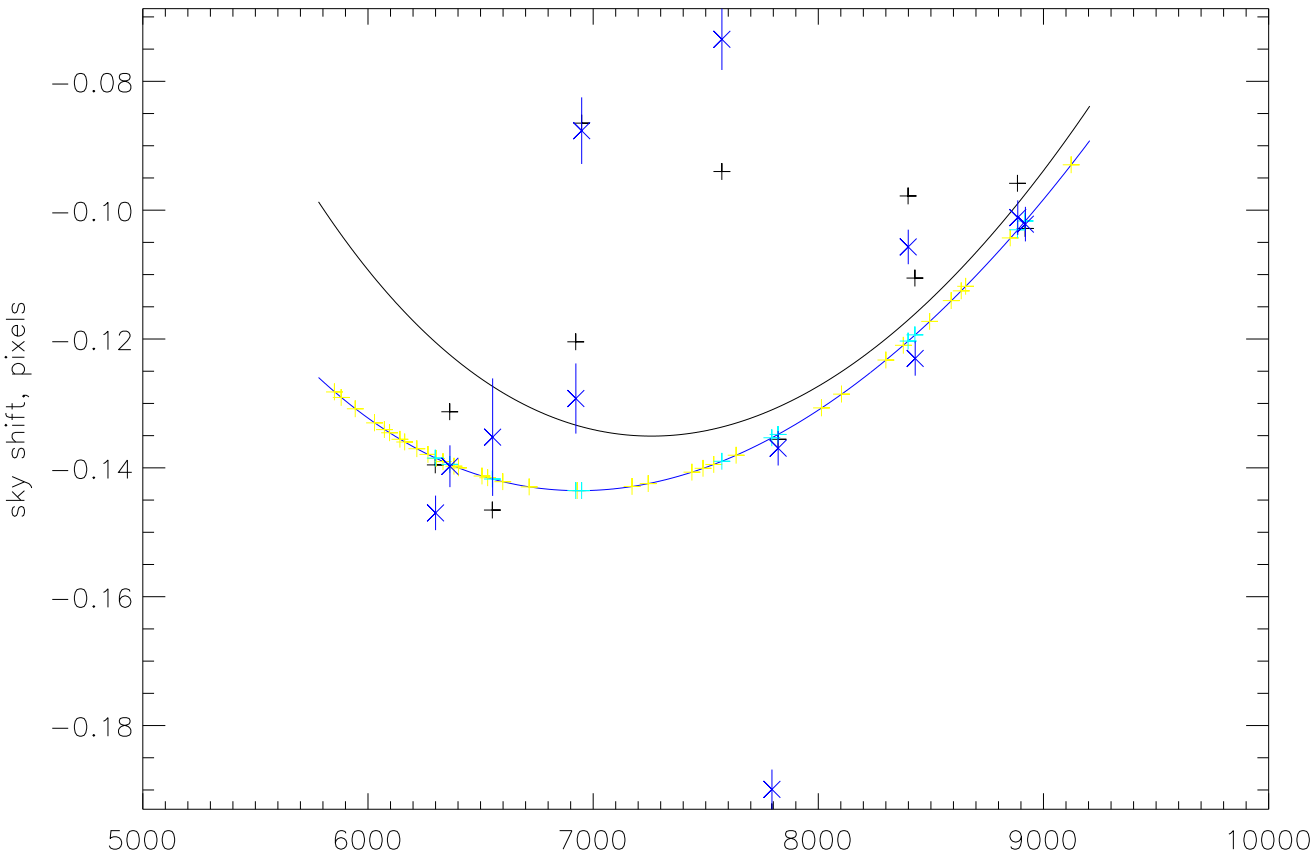

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

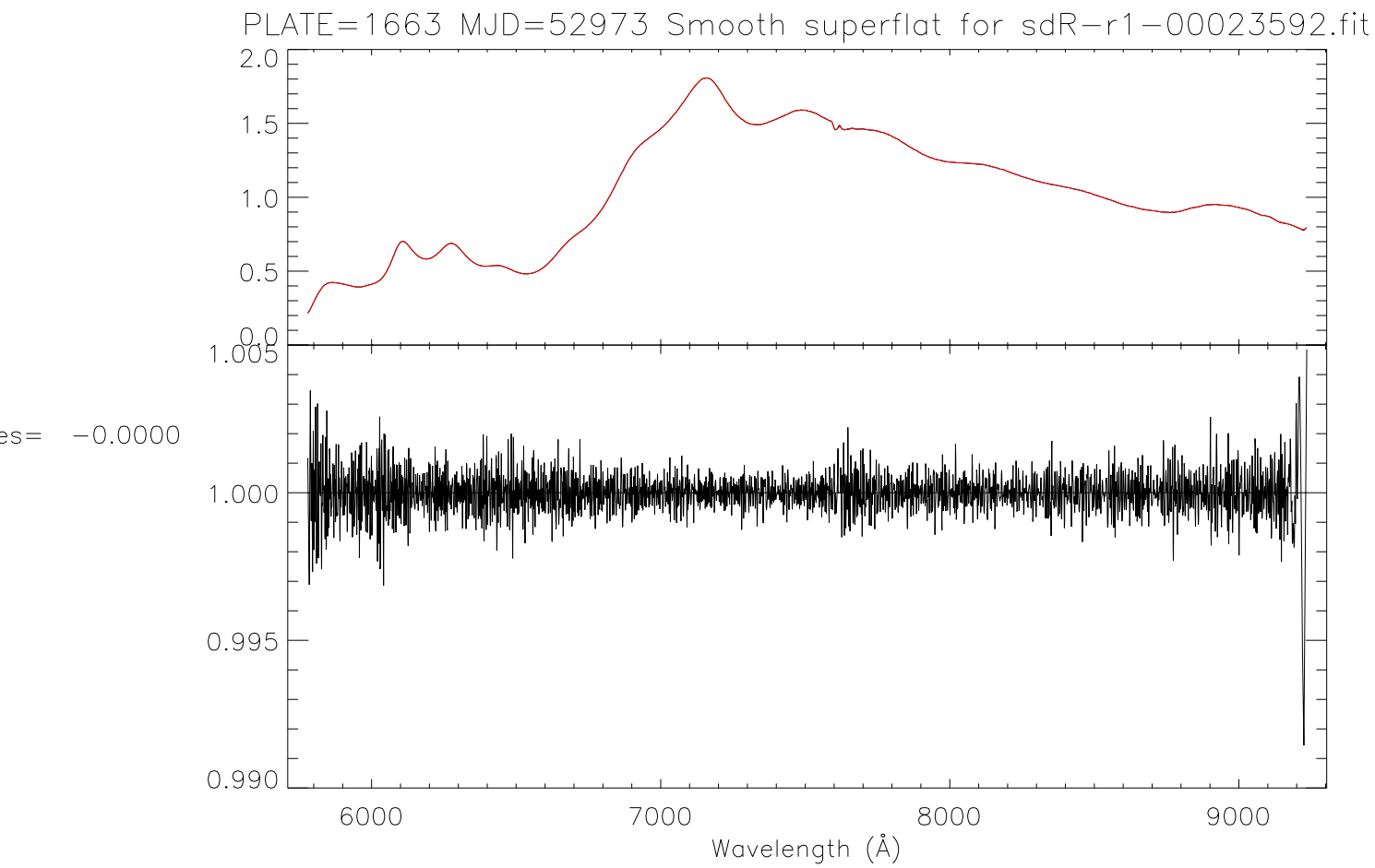

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

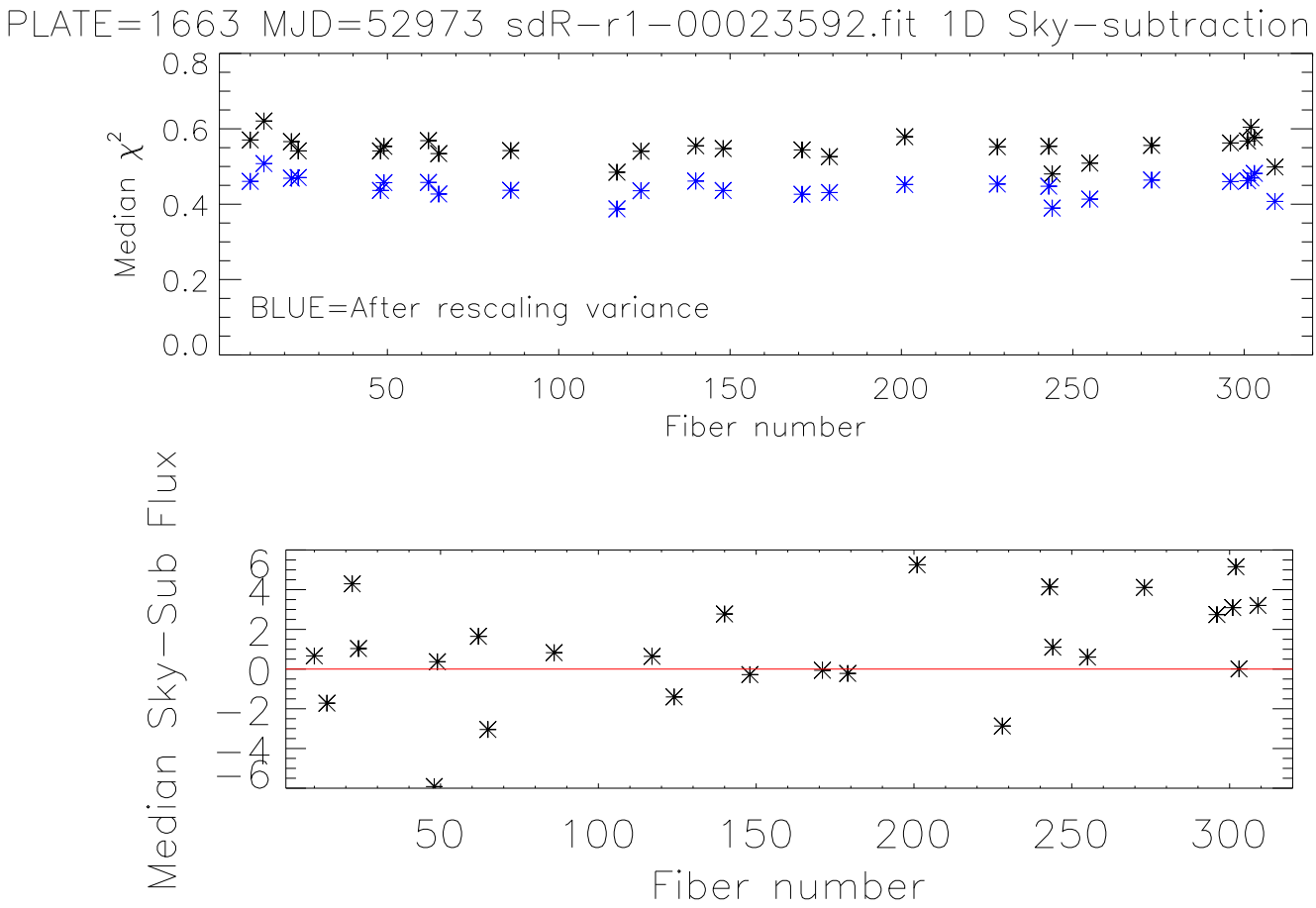

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

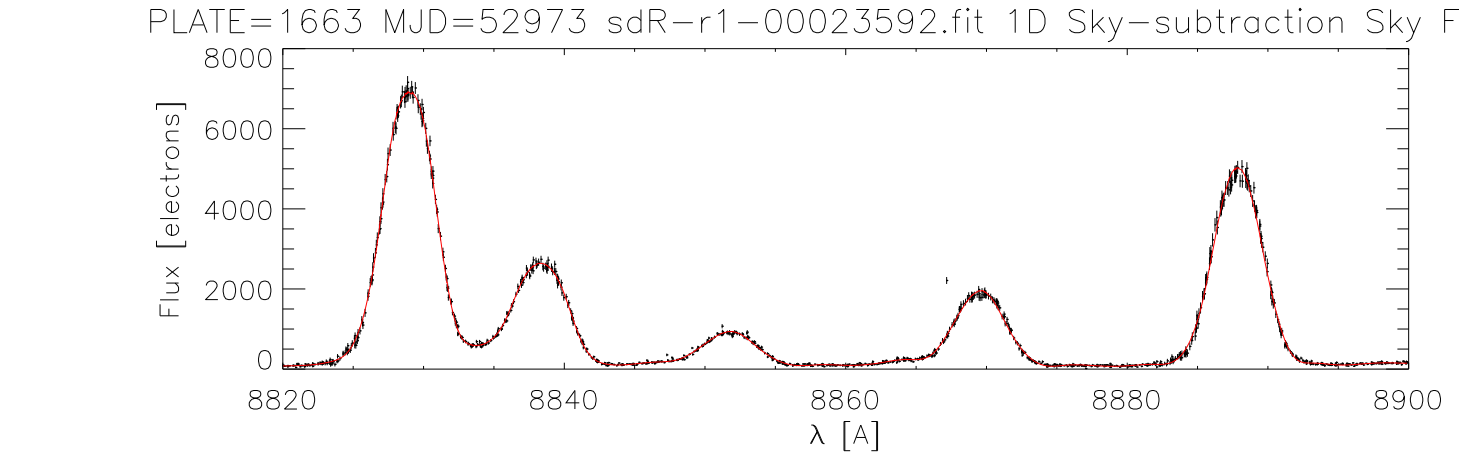

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

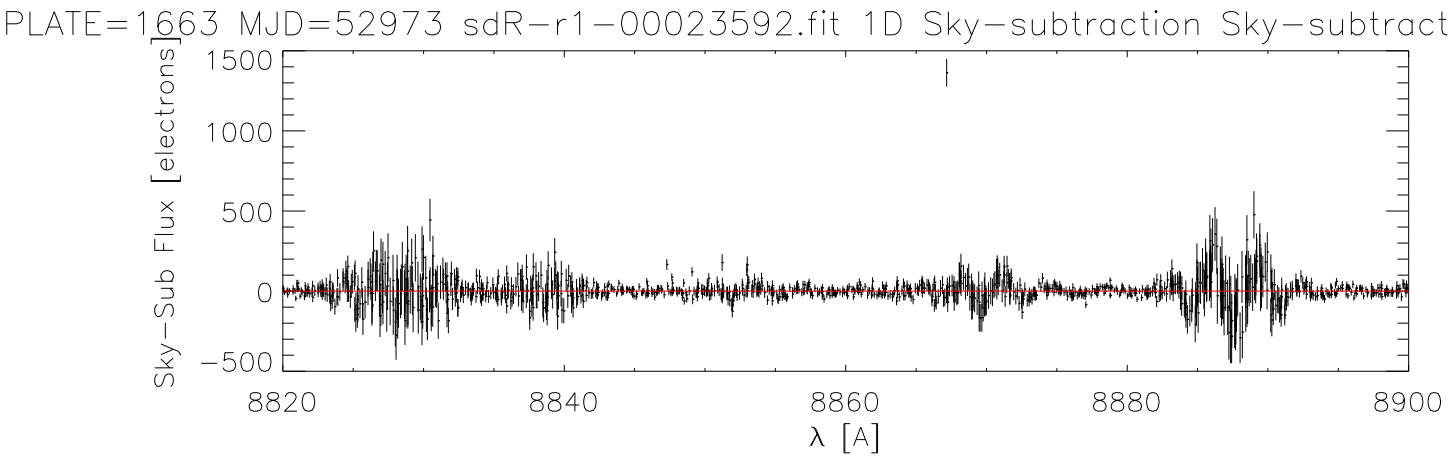

6300.3040
mfib1 31
mfib2 31
stdev 0.022
extra 0.45
6363.7760
mfib1 31
mfib2 31
stdev 0.017
extra 0.14
6553.6100
mfib1 31
mfib2 31
stdev 0.037
extra 0.34
6923.2100
mfib1 31
mfib2 31
stdev 0.021
extra 0.43
6949.0300
mfib1 31
mfib2 31
stdev 0.017
extra 0.09
7571.7500
mfib1 31
mfib2 31
stdev 0.028
extra 0.07
7794.1200
mfib1 31
mfib2 31
stdev 0.016
extra 0.19
7821.5100
mfib1 31
mfib2 31
stdev 0.016
extra 0.14
8399.1600
mfib1 30
mfib2 30
stdev 0.017
extra 0.11
8430.1700
mfib1 30
mfib2 30
stdev 0.011
extra 0.12
8885.8300
mfib1 30
mfib2 30
stdev 0.014
extra 0.10
8919.6100
mfib1 30
mfib2 31
stdev 0.015
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

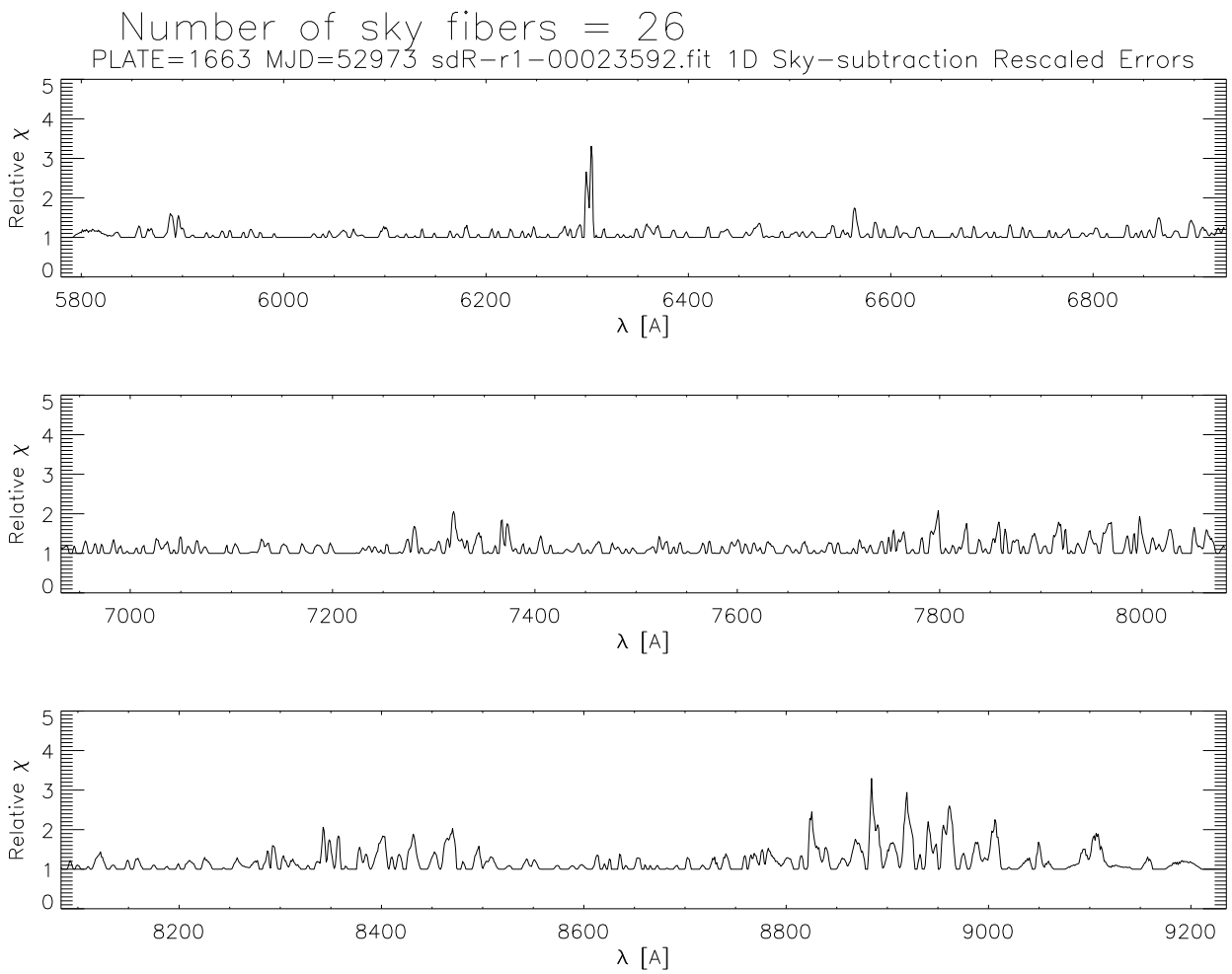

sky shift, pixels
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
5000
6000
7000
8000
9000
10000

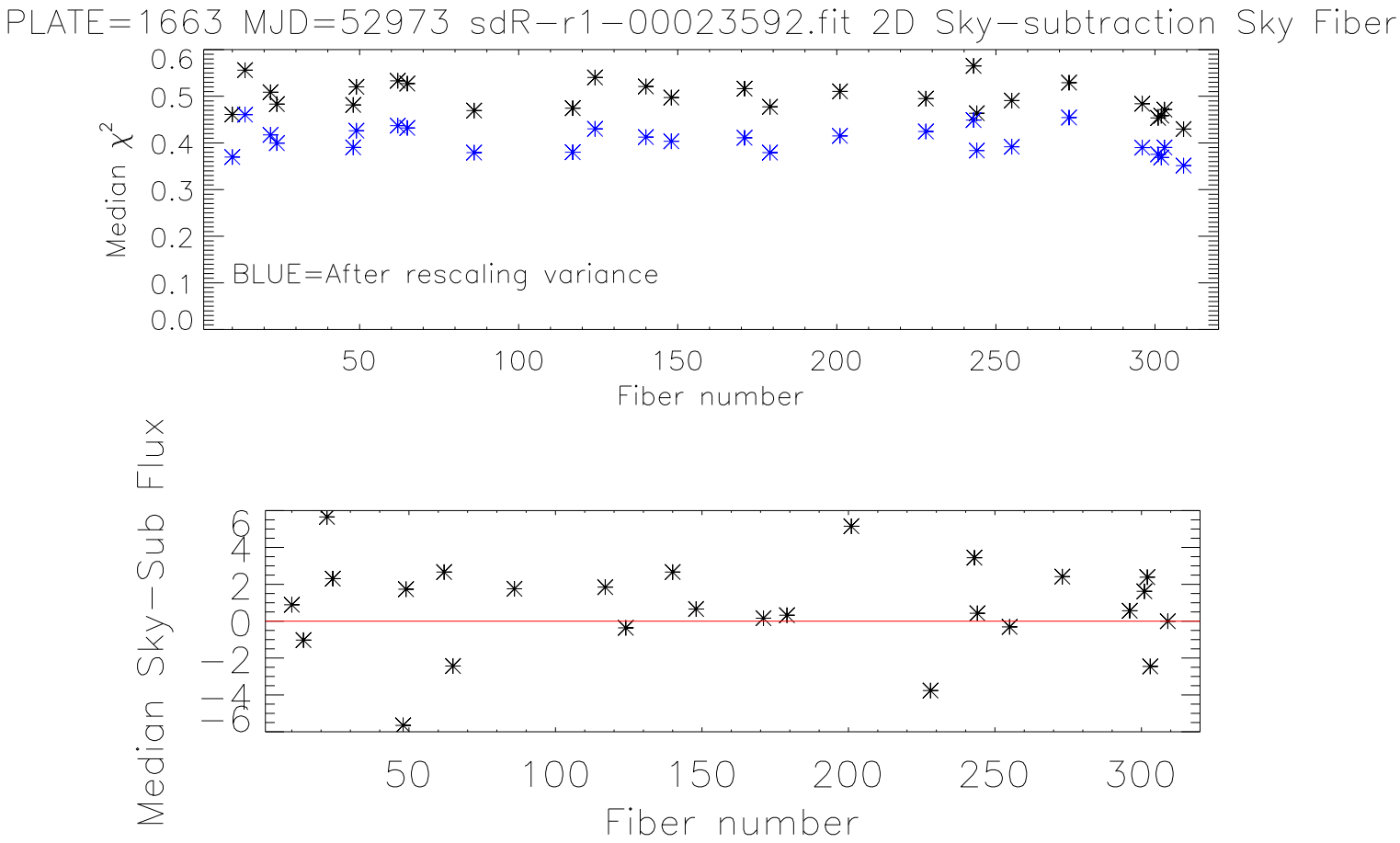

PLATE=1663 MJD=52973 Smooth superflat for sdR-r1-00023592.fit
2.0
1.5
1.0
0.5
0.0
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

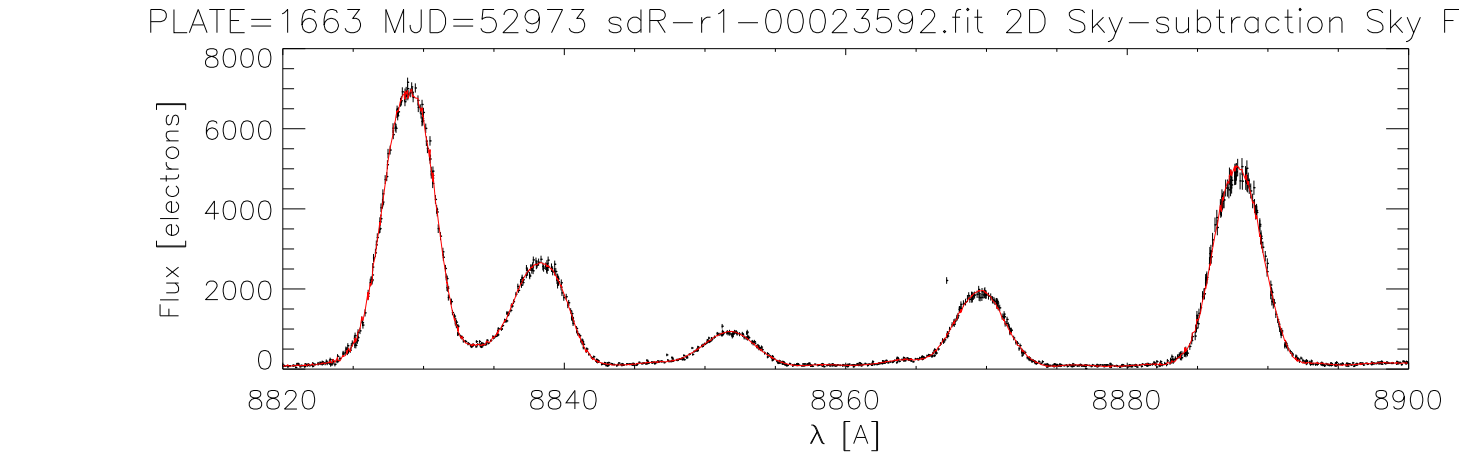

PLATE=1663 MJD=52973 sdR-r1-00023592.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

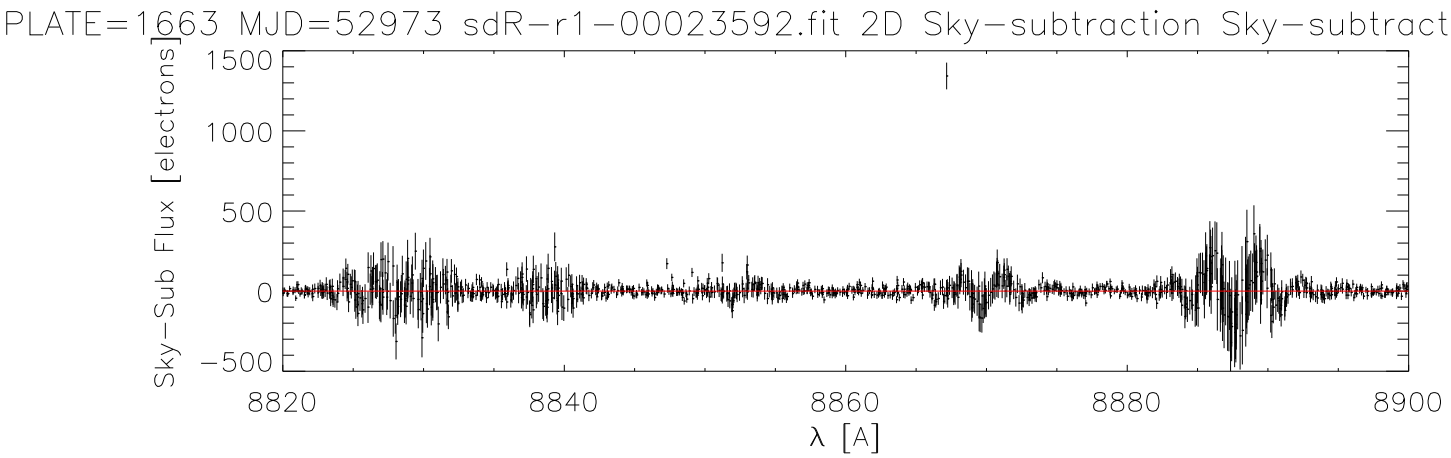

PLATE=1663 MJD=52973 sdR-r1-00023592.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

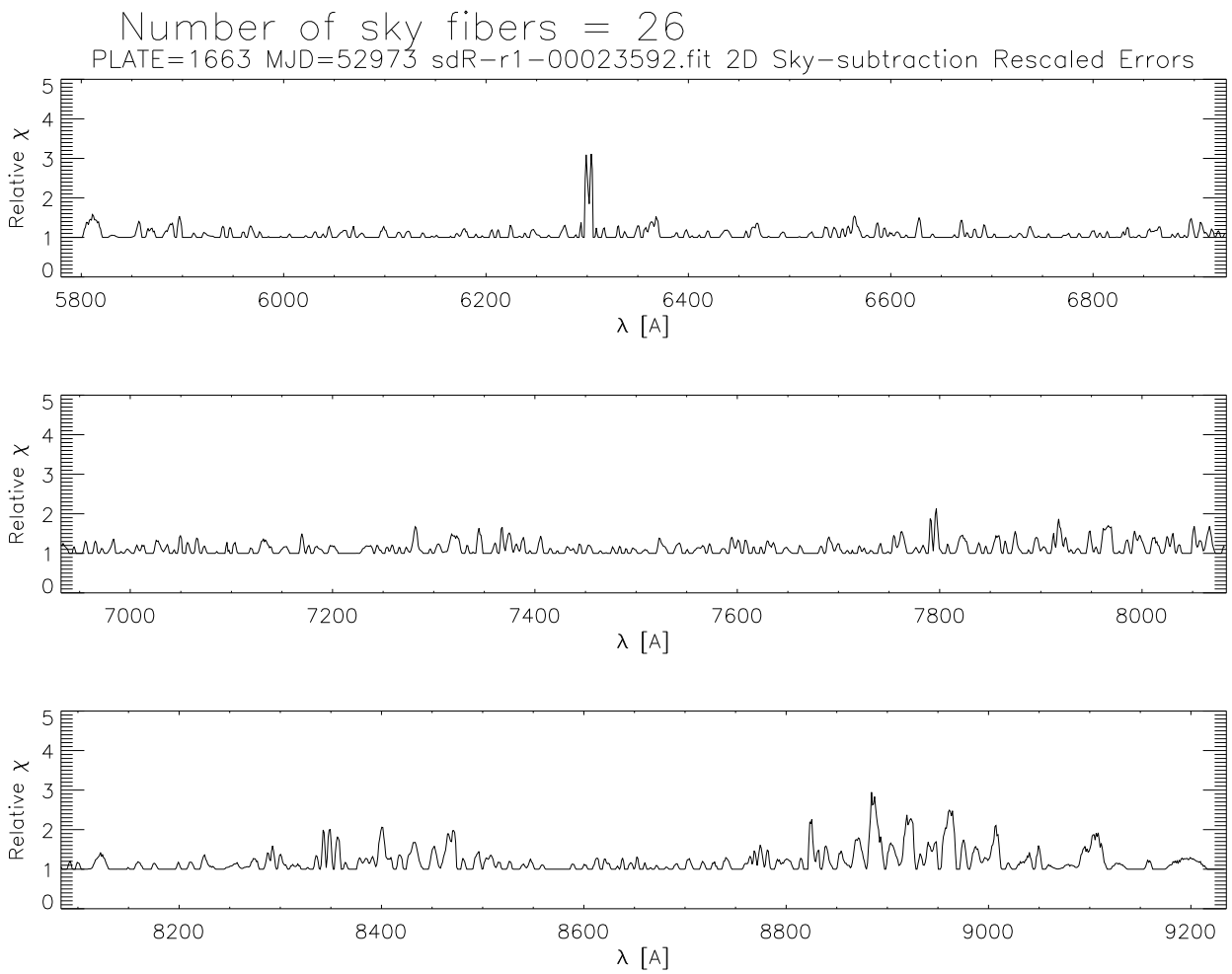

PLATE=1663 MJD=52973 sdR-r1-00023592.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

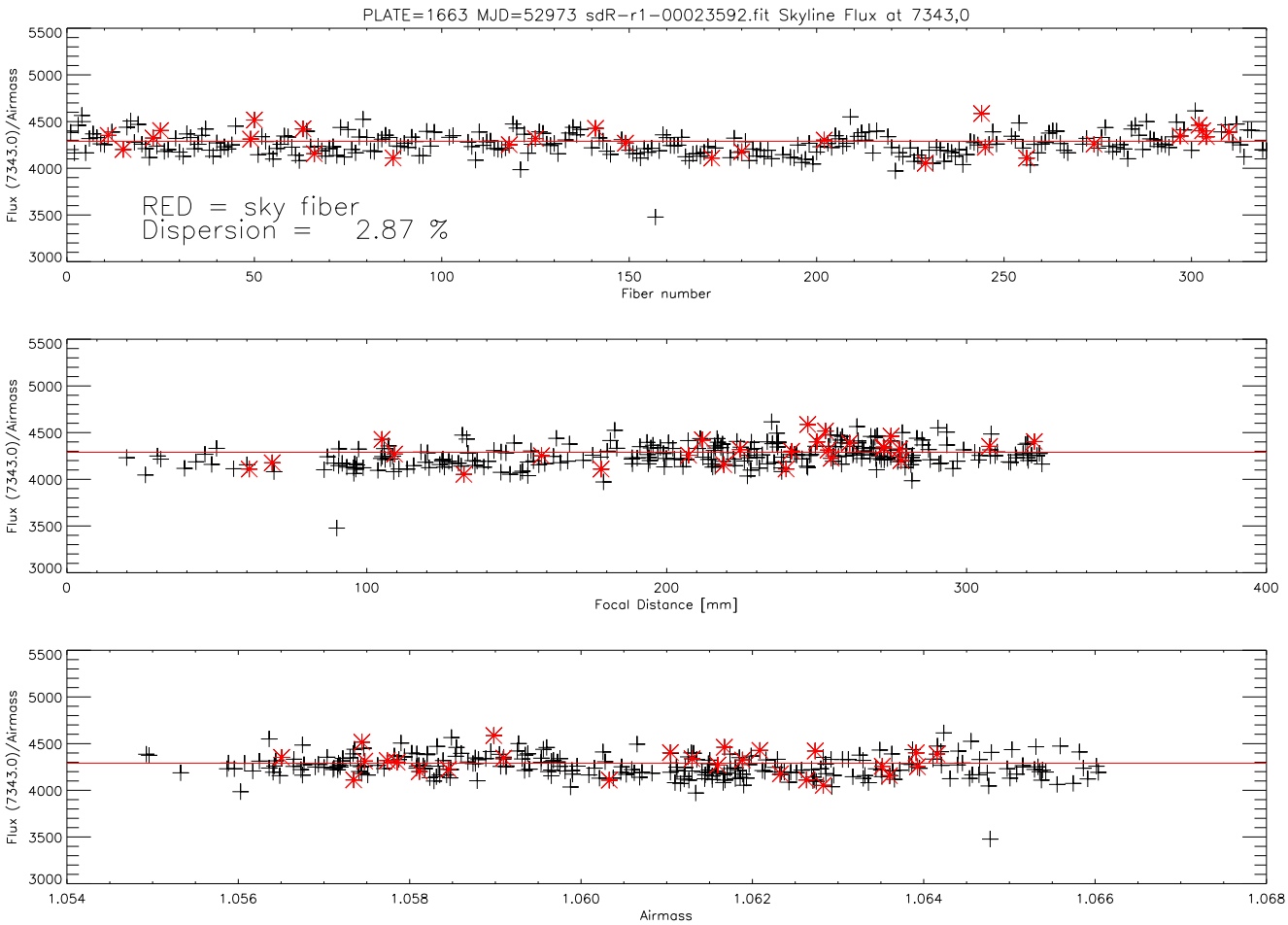

Number of sky fibers = 26
PLATE=1663 MJD=52973 sdR-r1-00023592.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

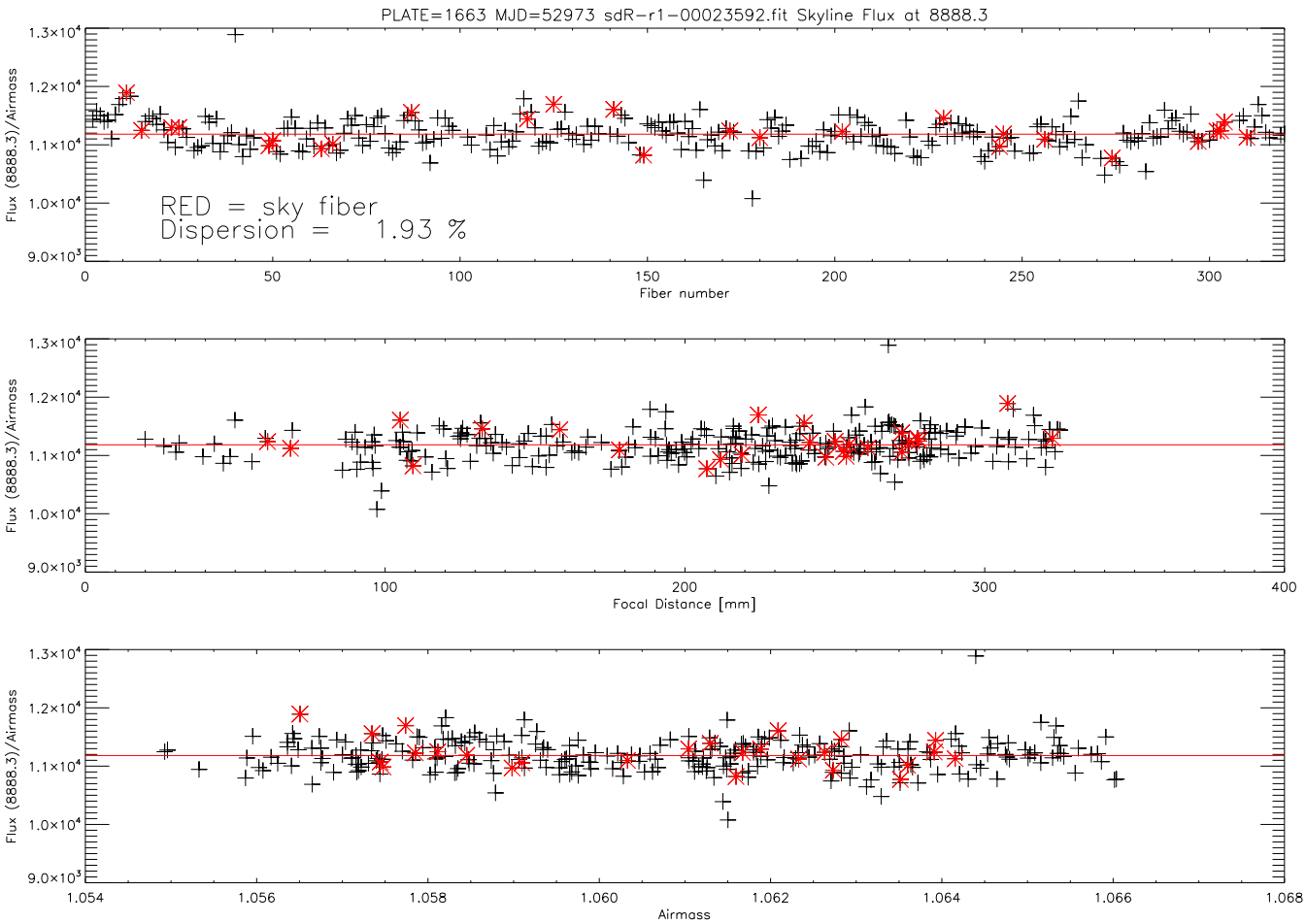

PLATE=1663 MJD=52973 sdR-r1-00023592.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

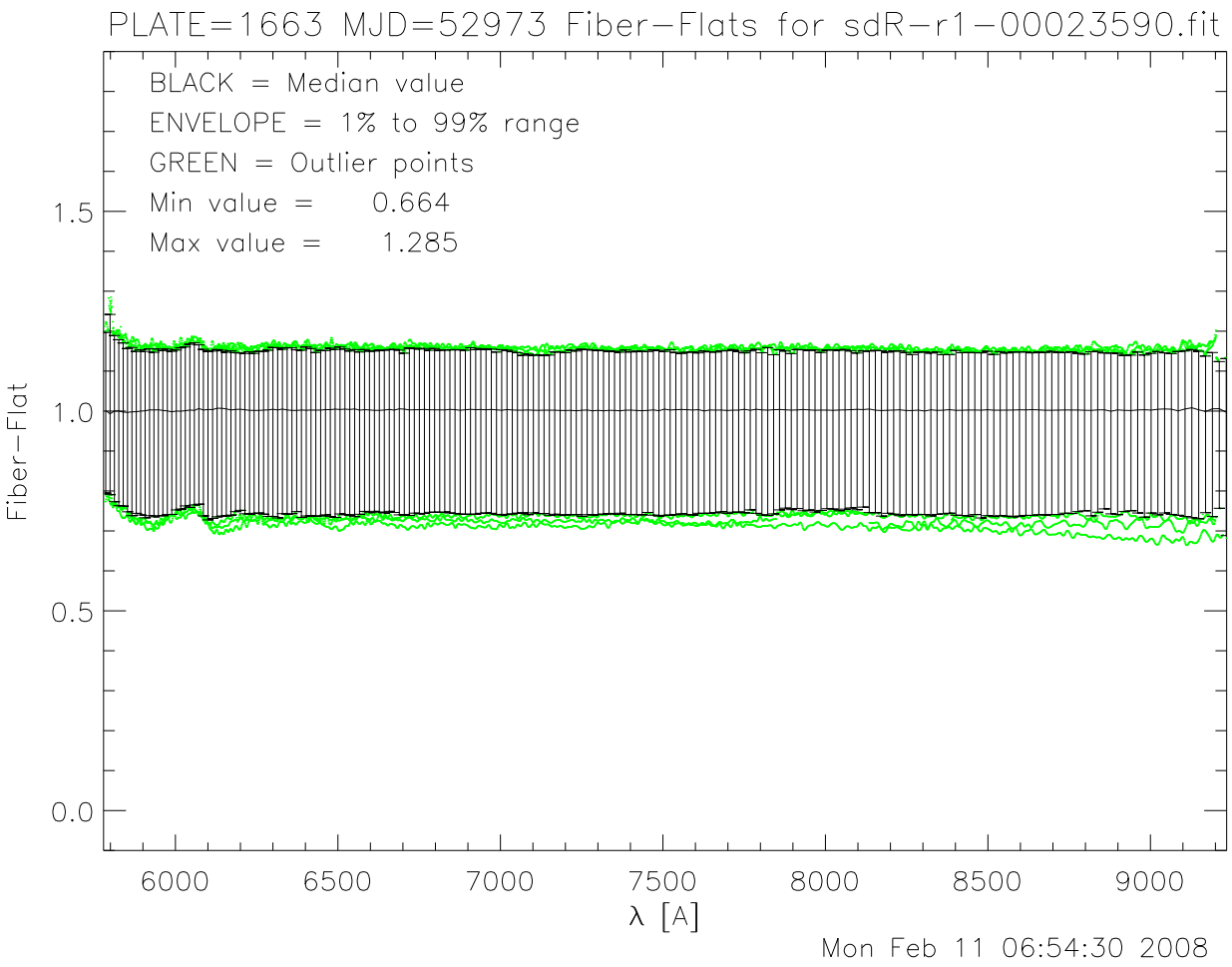

PLATE=1663 MJD=52973 sdR-r1-00023592.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

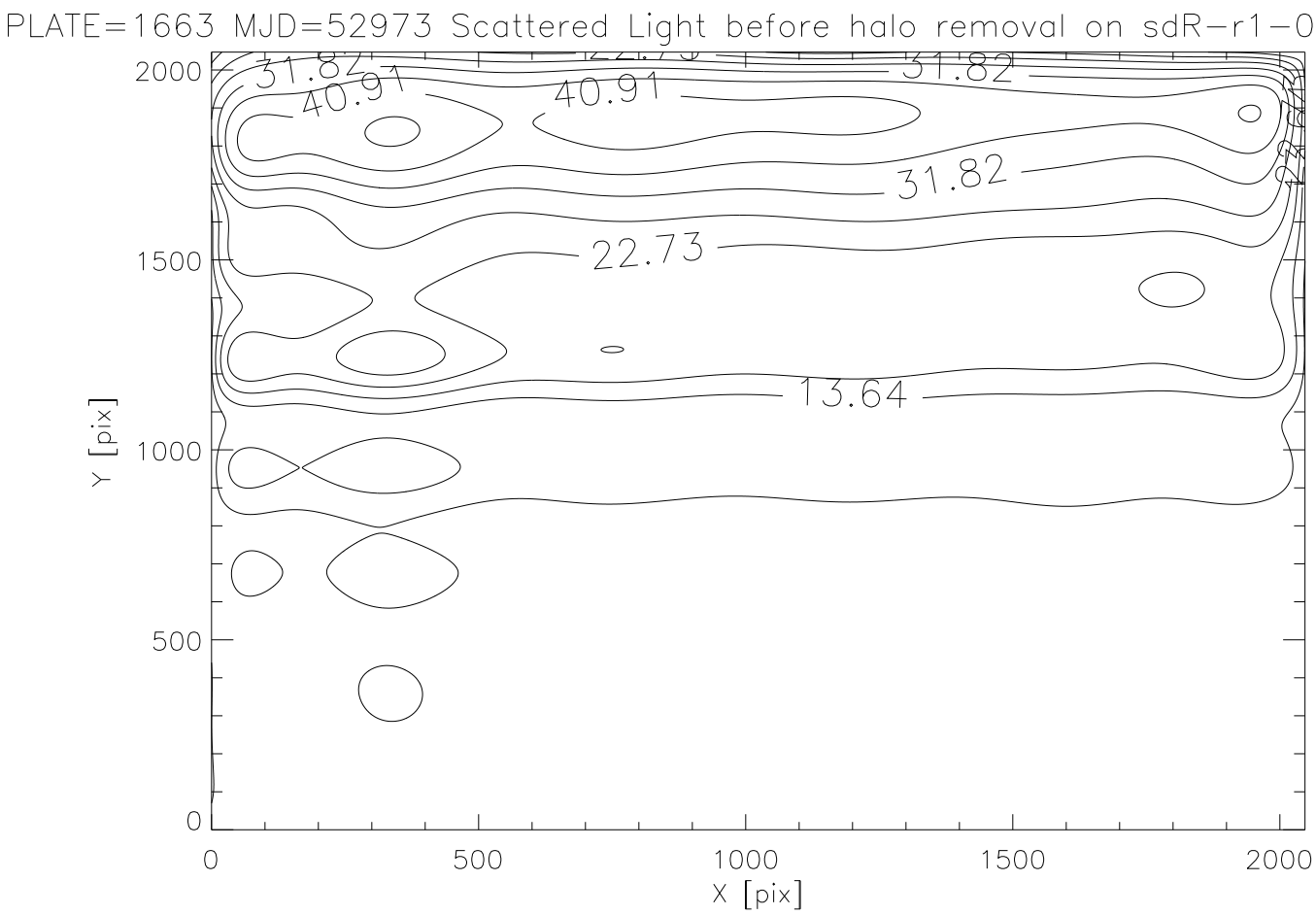

PLATE=1663 MJD=52973 sdR-r1-00023592.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

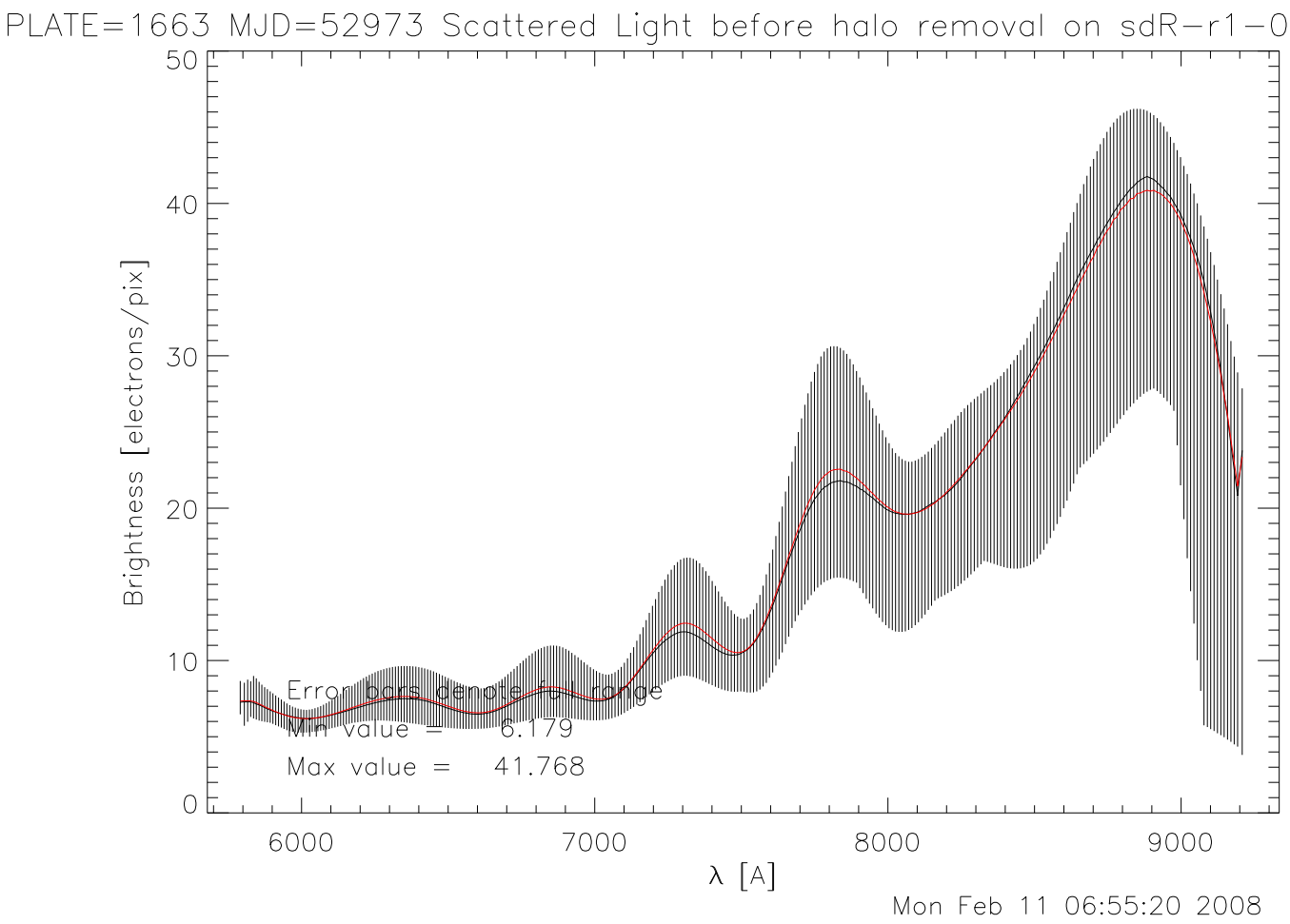

Number of sky fibers = 26
PLATE=1663 MJD=52973 sdR-r1-00023592.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

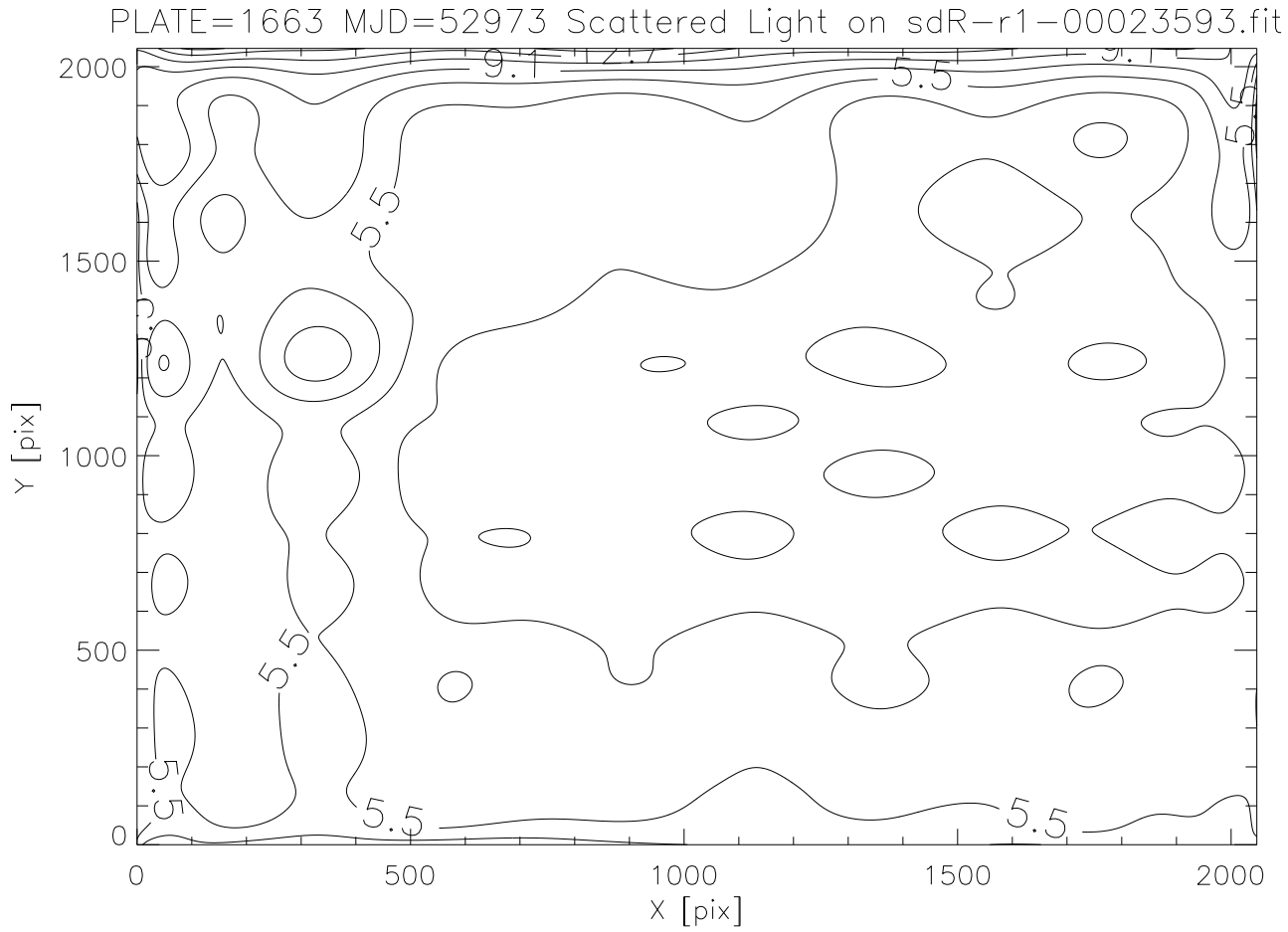

PLATE=1663 MJD=52973 sdR-r1-00023592.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.87 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

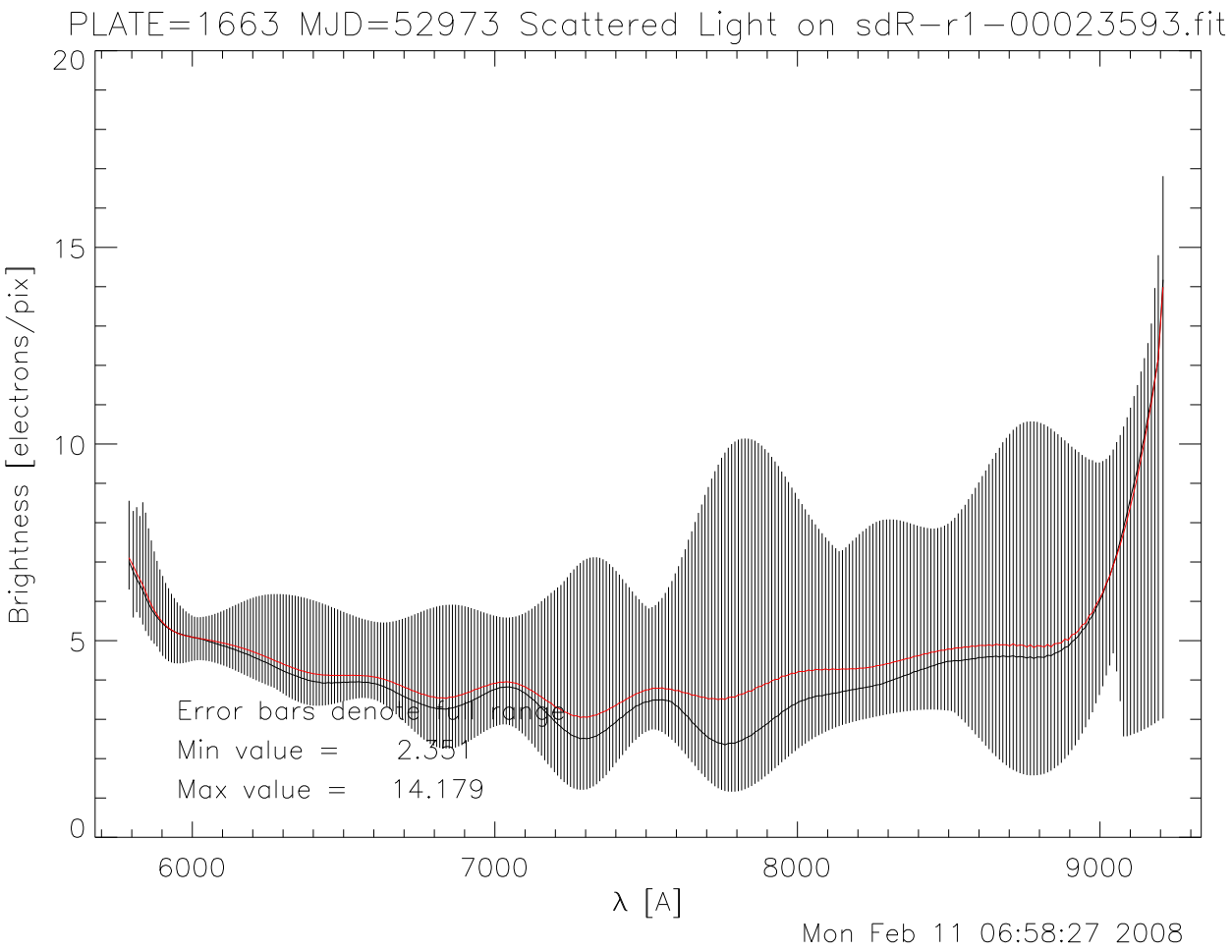

PLATE=1663 MJD=52973 sdR-r1-00023592.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.93 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

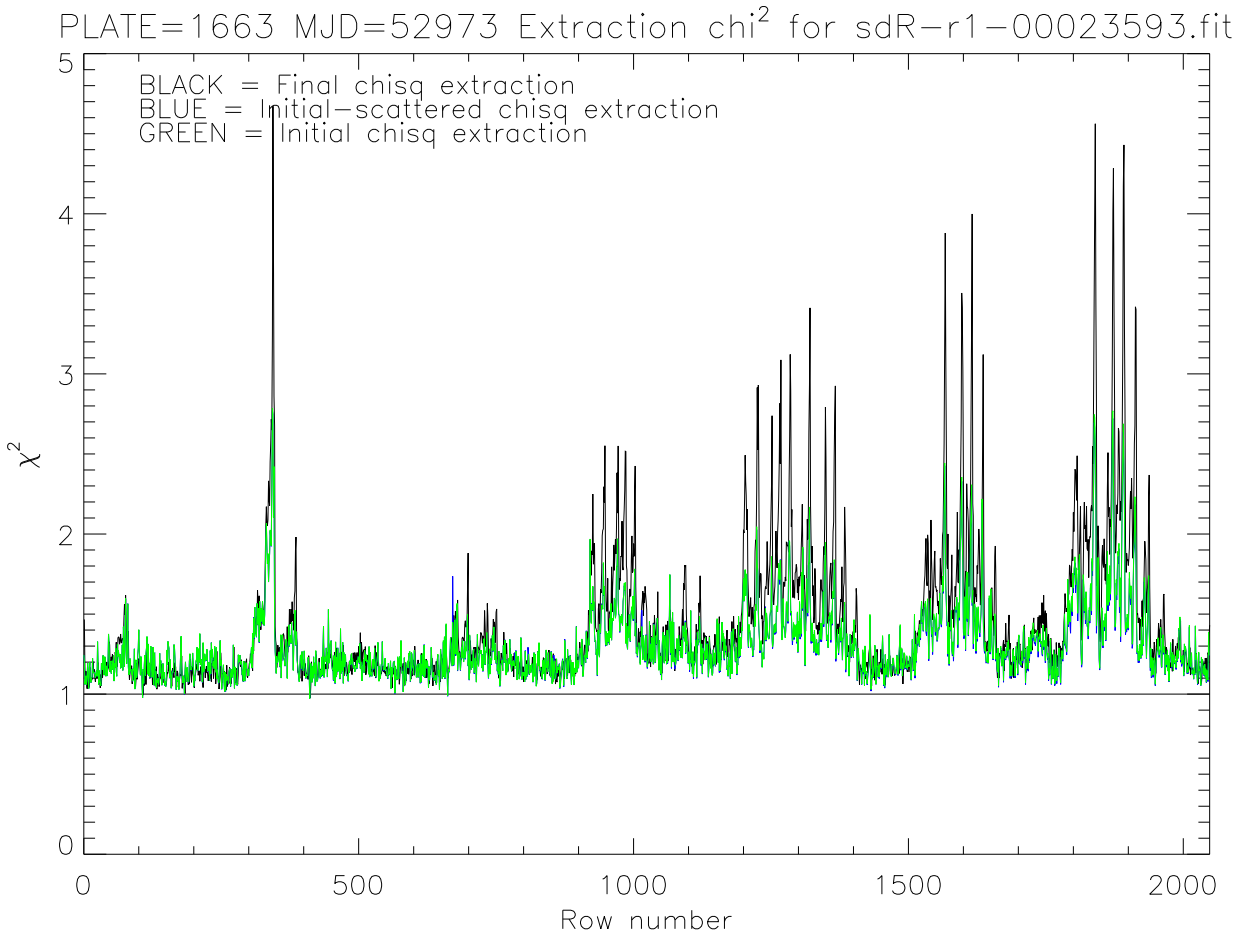

PLATE=1663 MJD=52973 Fiber−Flats for sdR−r1−00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.664
Max value = 1.285
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 06:54:30 2008

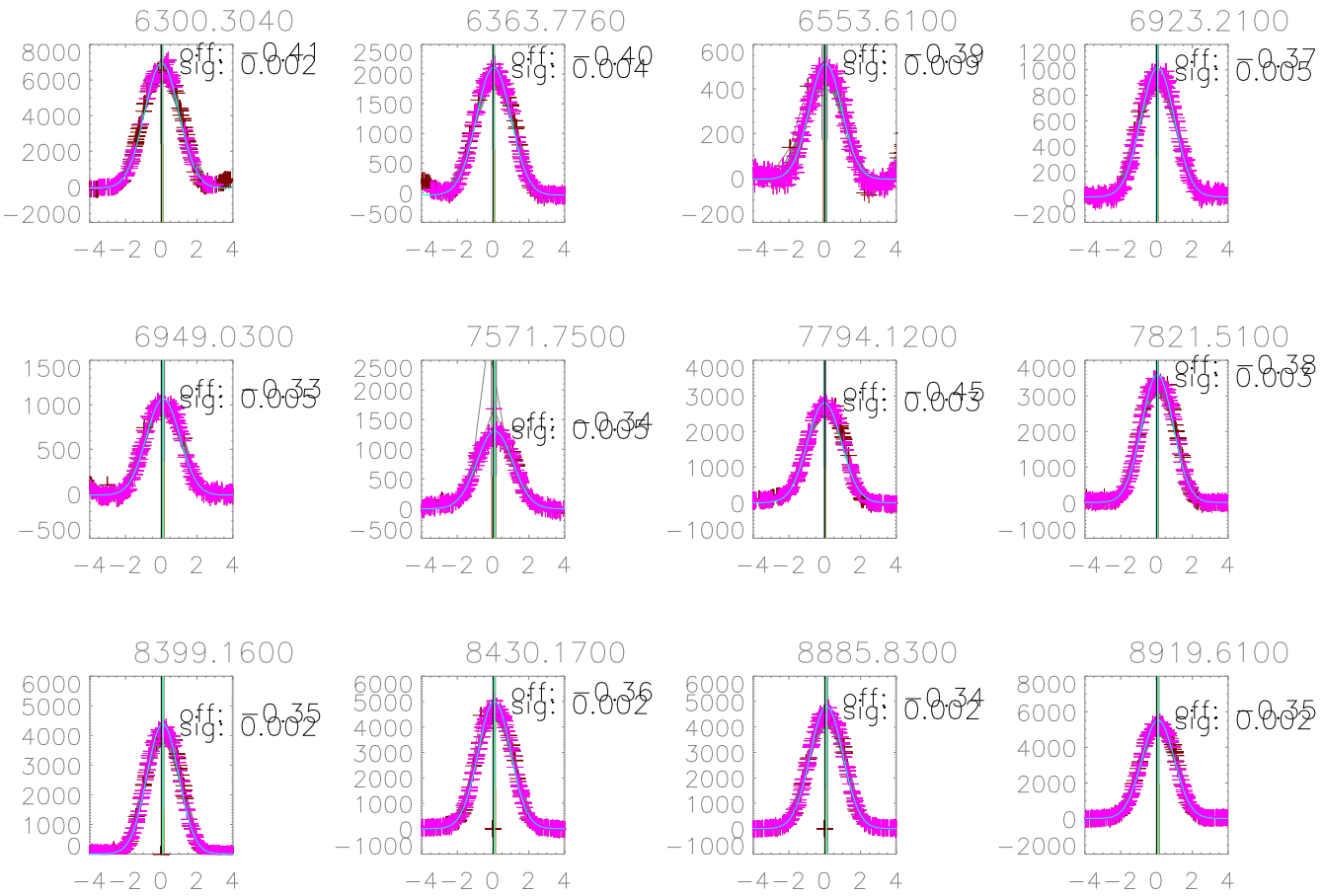

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r1-00023593.fi
31.82
40.91
40.91
31.82
31.82
22.73
13.64
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

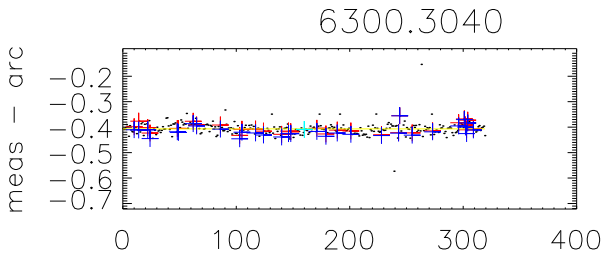

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r1-00023593.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 6.179
Max value = 41.768
Mon Feb 11 06:55:20 2008

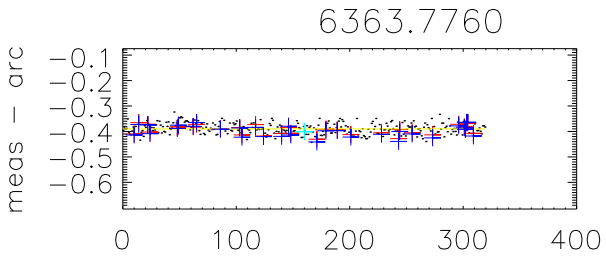

PLATE=1663 MJD=52973 Scattered Light on sdR-r1-00023593.fit
9.1
5.5
5.5
5.5
5.5
5.5
5.5
5.5
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

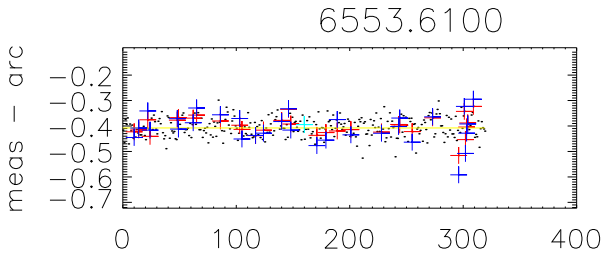

PLATE=1663 MJD=52973 Scattered Light on sdR-r1-00023593.fit
Brightness [electrons/pix]
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote 1σ range
Min value = 2.351
Max value = 14.179
Mon Feb 11 06:58:27 2008

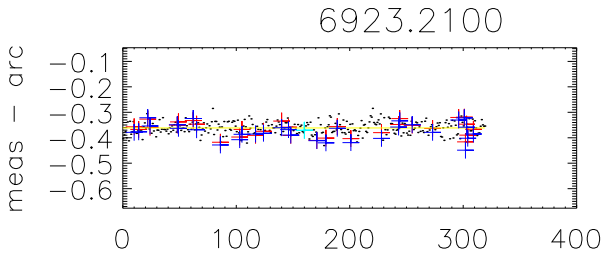

PLATE=1663 MJD=52973 Extraction chi^2 for sdR−r1−00023593.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

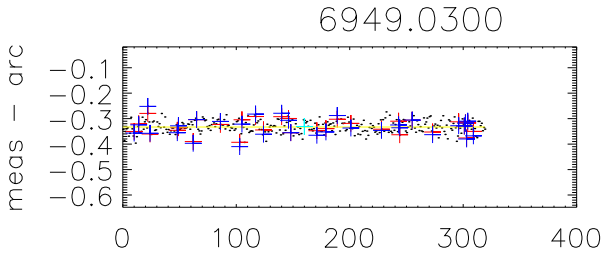

6300.3040
off: −0.41
sig: 0.002
6363.7760
off: −0.40
sig: 0.004
6553.6100
off: −0.39
sig: 0.009
6923.2100
off: −0.37
sig: 0.005
6949.0300
off: −0.33
sig: 0.005
7571.7500
off: −0.34
sig: 0.005
7794.1200
off: −0.45
sig: 0.003
7821.5100
off: −0.38
sig: 0.003
8399.1600
off: −0.35
sig: 0.002
8430.1700
off: −0.36
sig: 0.002
8885.8300
off: −0.34
sig: 0.002
8919.6100
off: −0.35
sig: 0.002

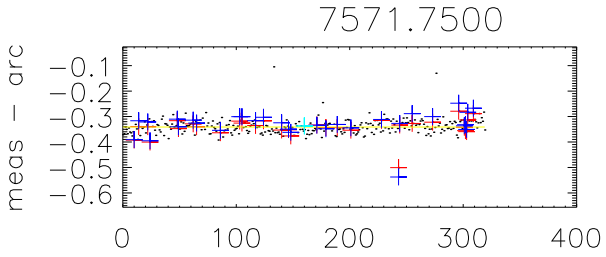

6300.3040
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

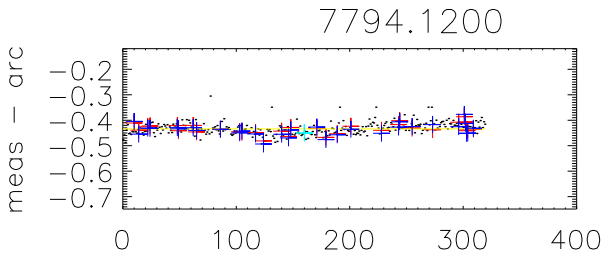

6363.7760
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

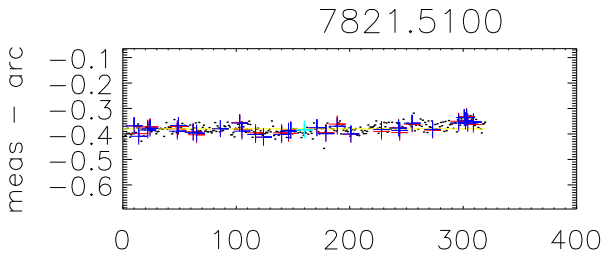

6553.6100
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

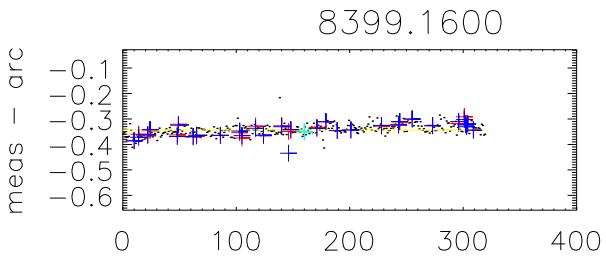

6923.2100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

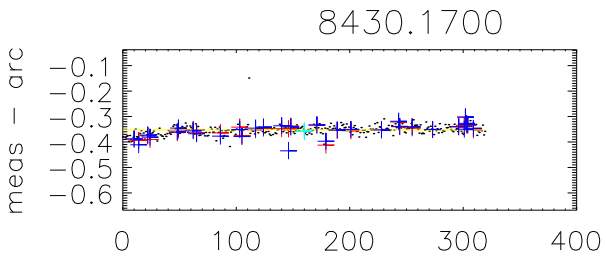

6949.0300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

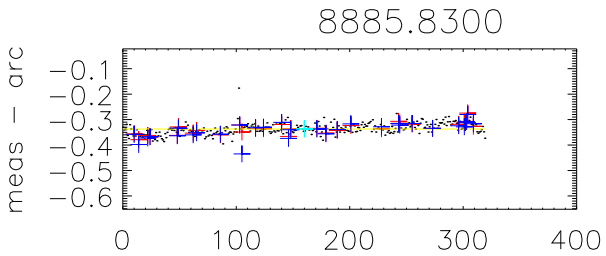

7571.7500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

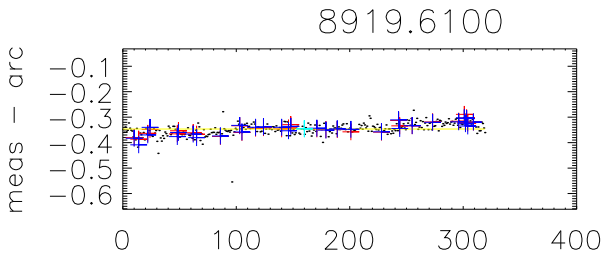

7794.1200
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

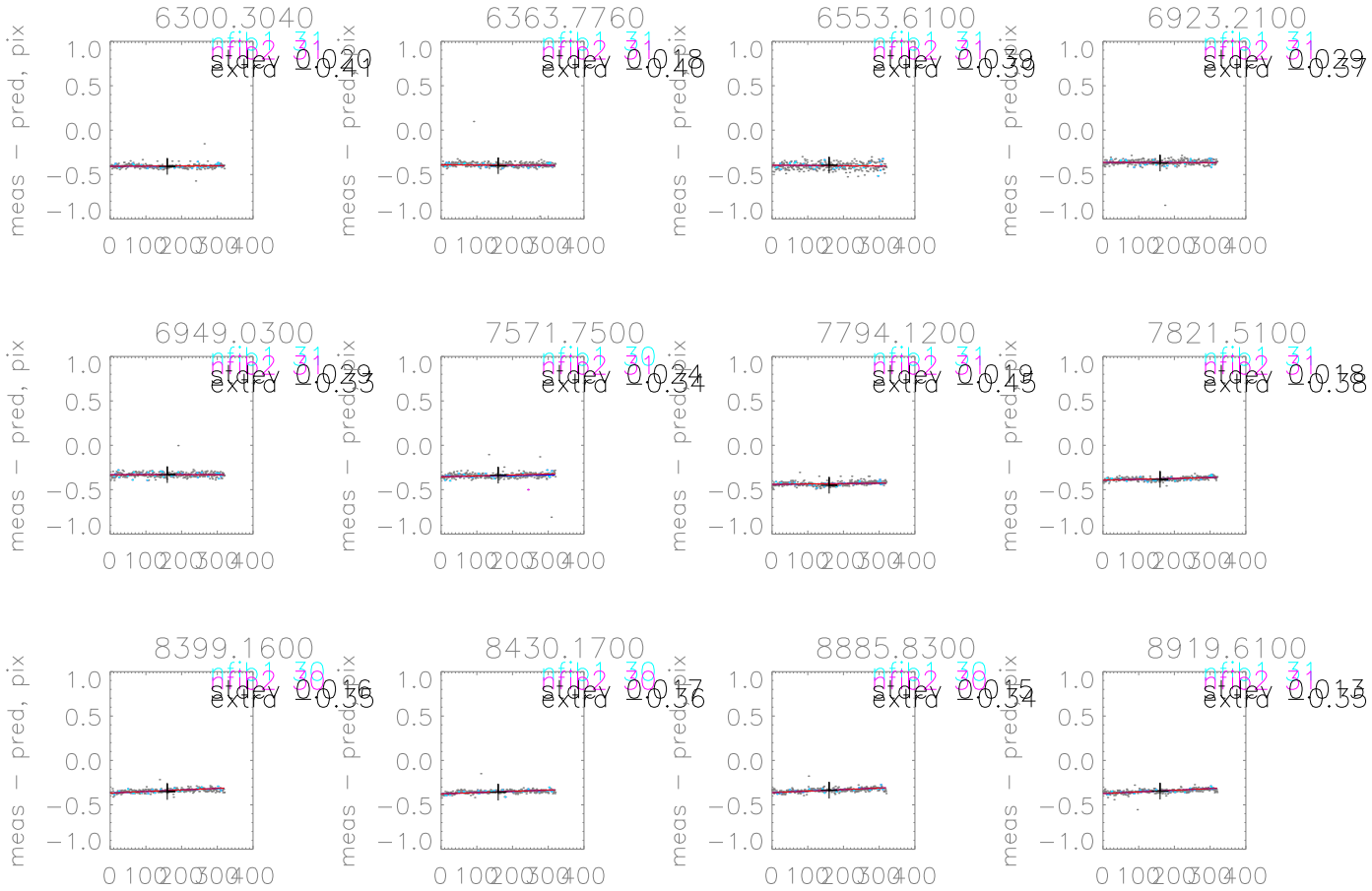

7821.5100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

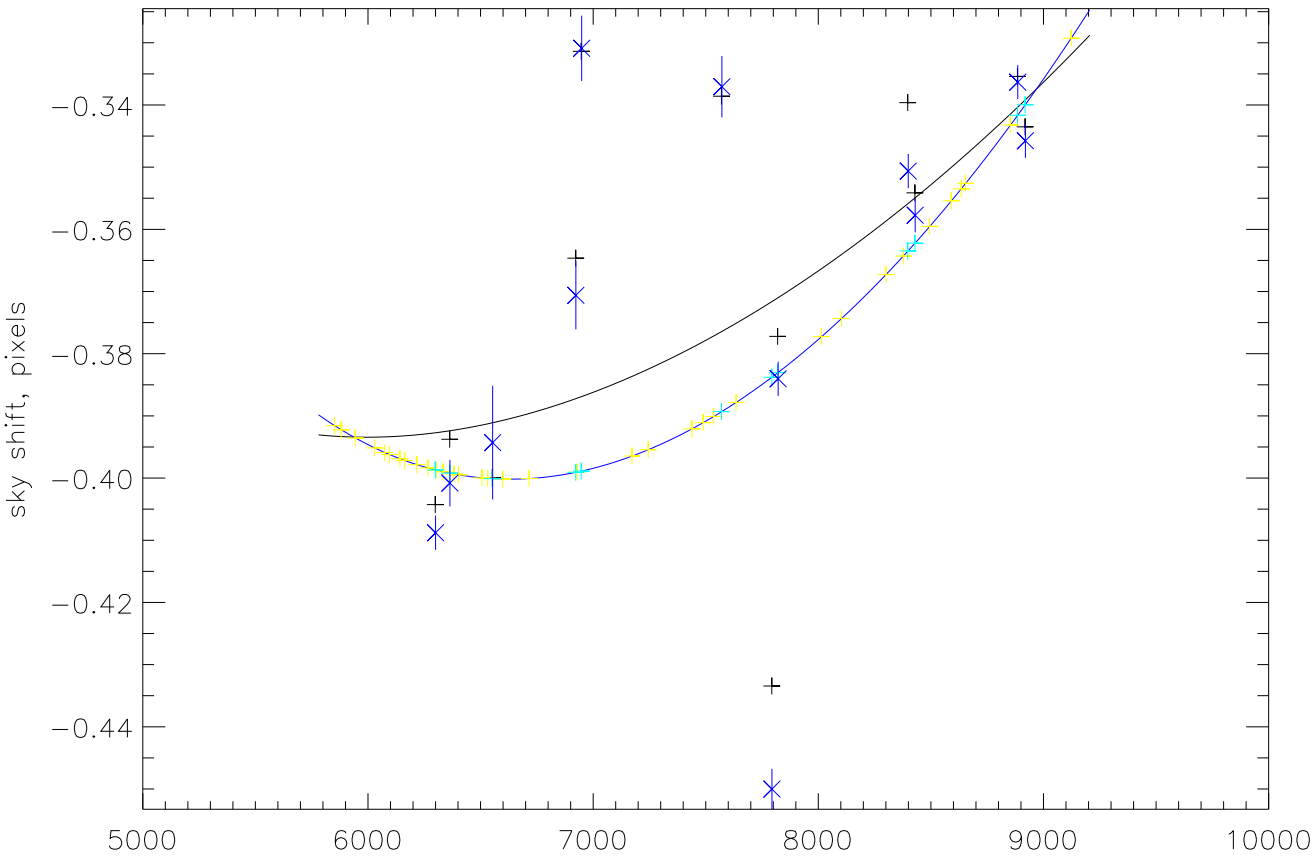

8399.1600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

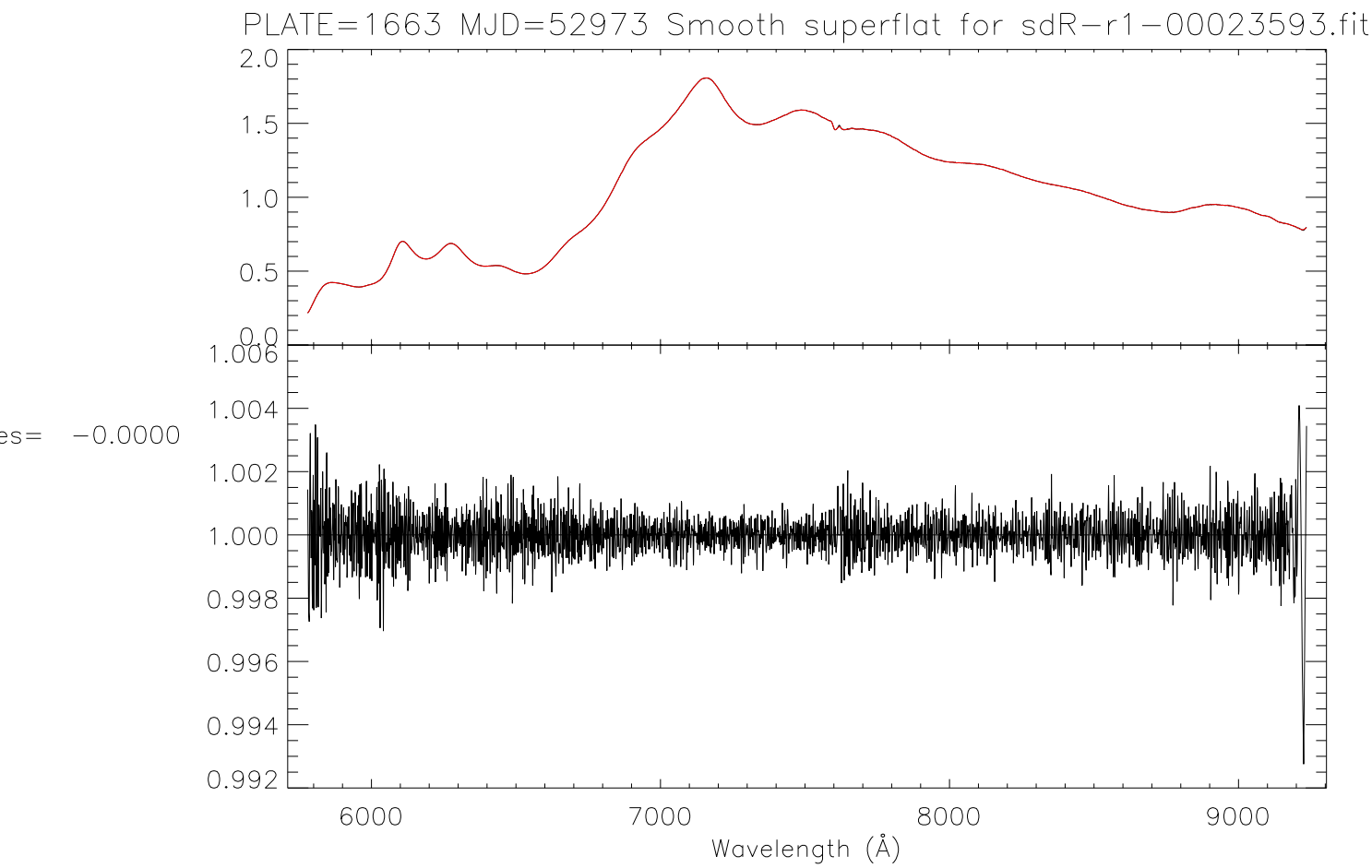

8430.1700
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400


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

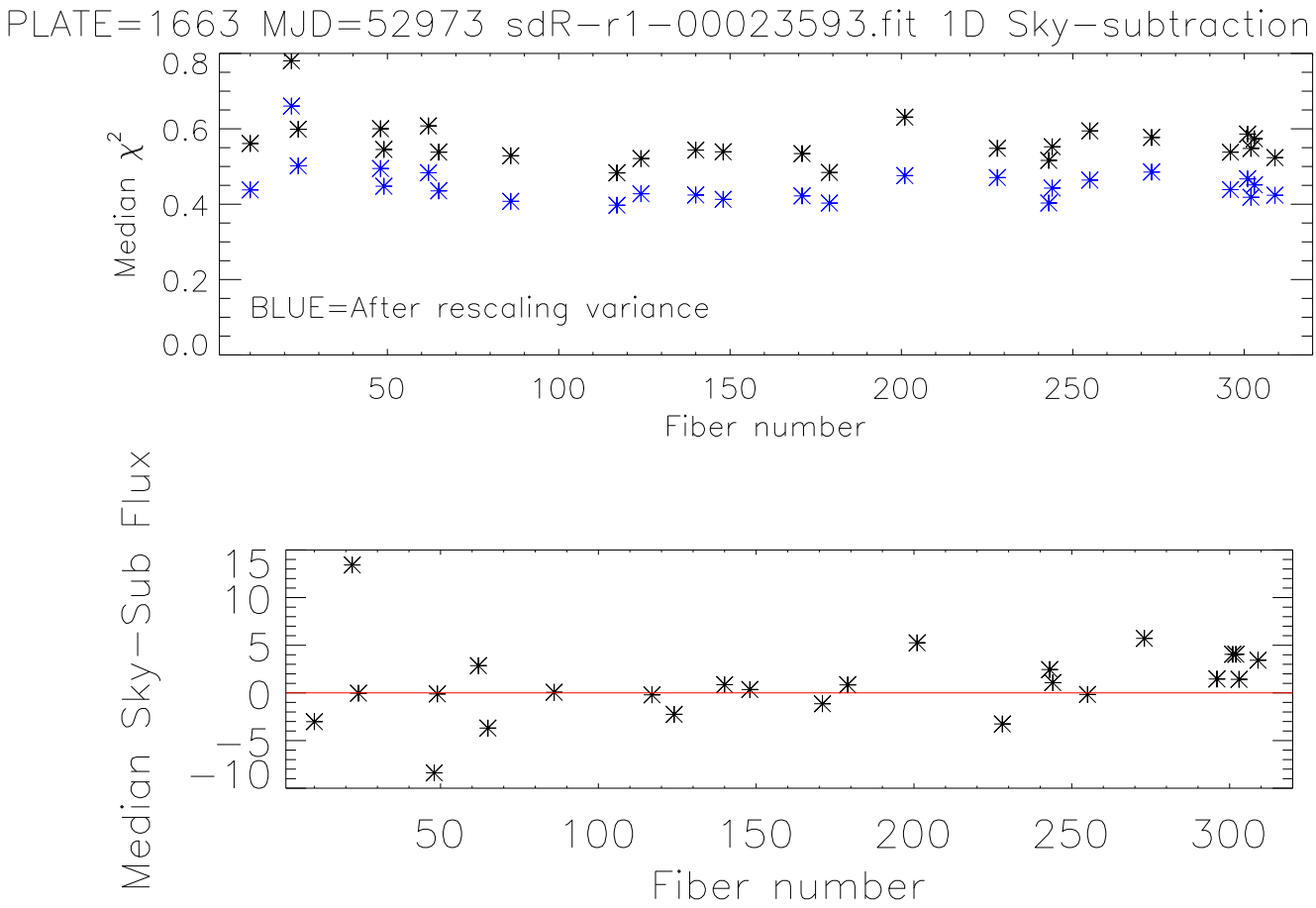

8919.6100
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

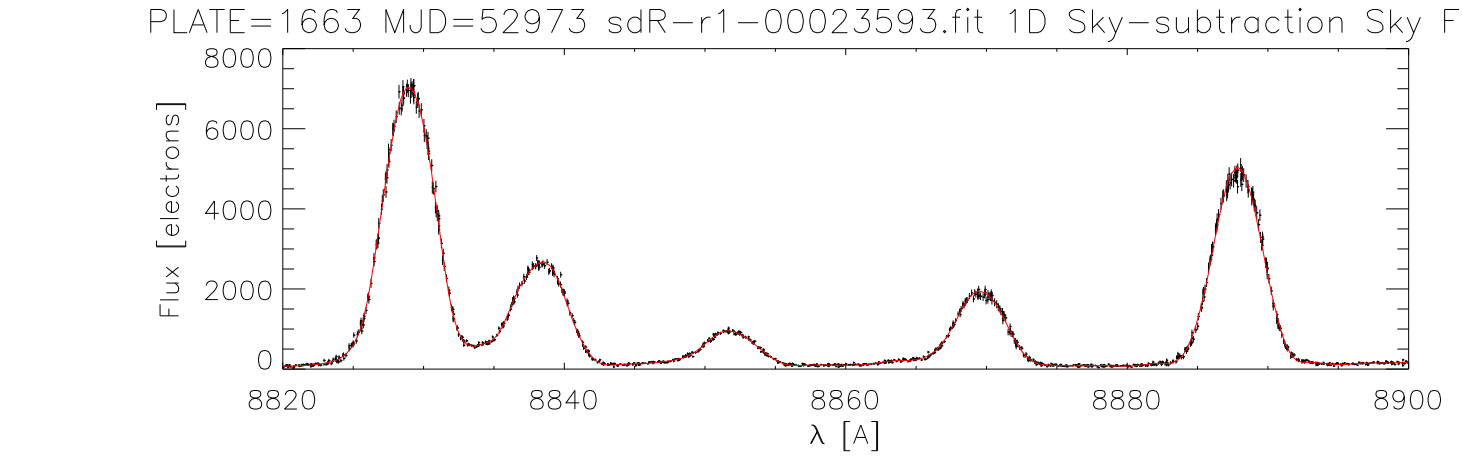

6300.3040
mfib1 31
mfib2 31
stdev 0.020
extra -0.41
6363.7760
mfib1 31
mfib2 31
stdev 0.018
extra -0.40
6553.6100
mfib1 31
mfib2 31
stdev 0.030
extra -0.39
6923.2100
mfib1 31
mfib2 31
stdev 0.029
extra -0.37
6949.0300
mfib1 31
mfib2 31
stdev 0.029
extra -0.33
7571.7500
mfib1 30
mfib2 30
stdev 0.024
extra -0.34
7794.1200
mfib1 31
mfib2 31
stdev 0.019
extra -0.45
7821.5100
mfib1 31
mfib2 31
stdev 0.018
extra -0.38
8399.1600
mfib1 30
mfib2 30
stdev 0.016
extra -0.35
8430.1700
mfib1 30
mfib2 30
stdev 0.017
extra -0.36
8885.8300
mfib1 30
mfib2 30
stdev 0.015
extra -0.34
8919.6100
mfib1 31
mfib2 31
stdev 0.013
extra -0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

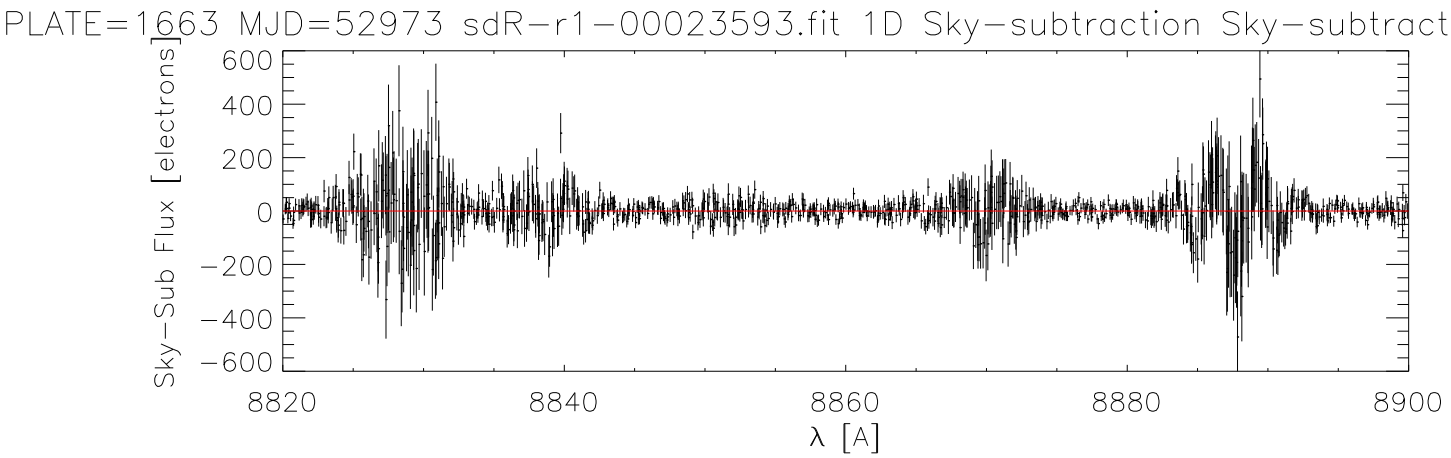

sky shift, pixels
−0.34
−0.36
−0.38
−0.40
−0.42
−0.44
5000
6000
7000
8000
9000
10000

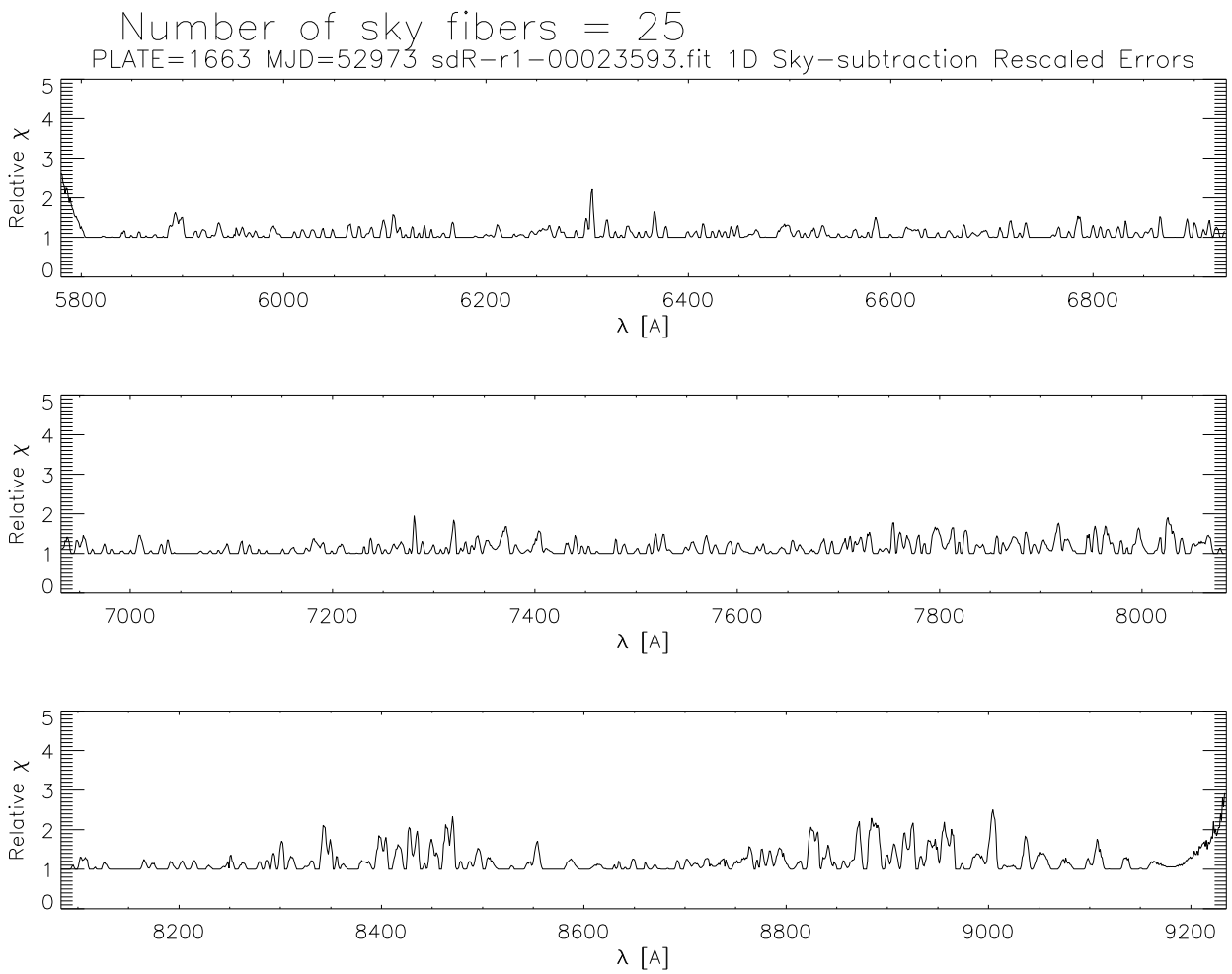

PLATE=1663 MJD=52973 Smooth superflat for sdR-r1-00023593.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
6000
7000
8000
9000
Wavelength (Å)

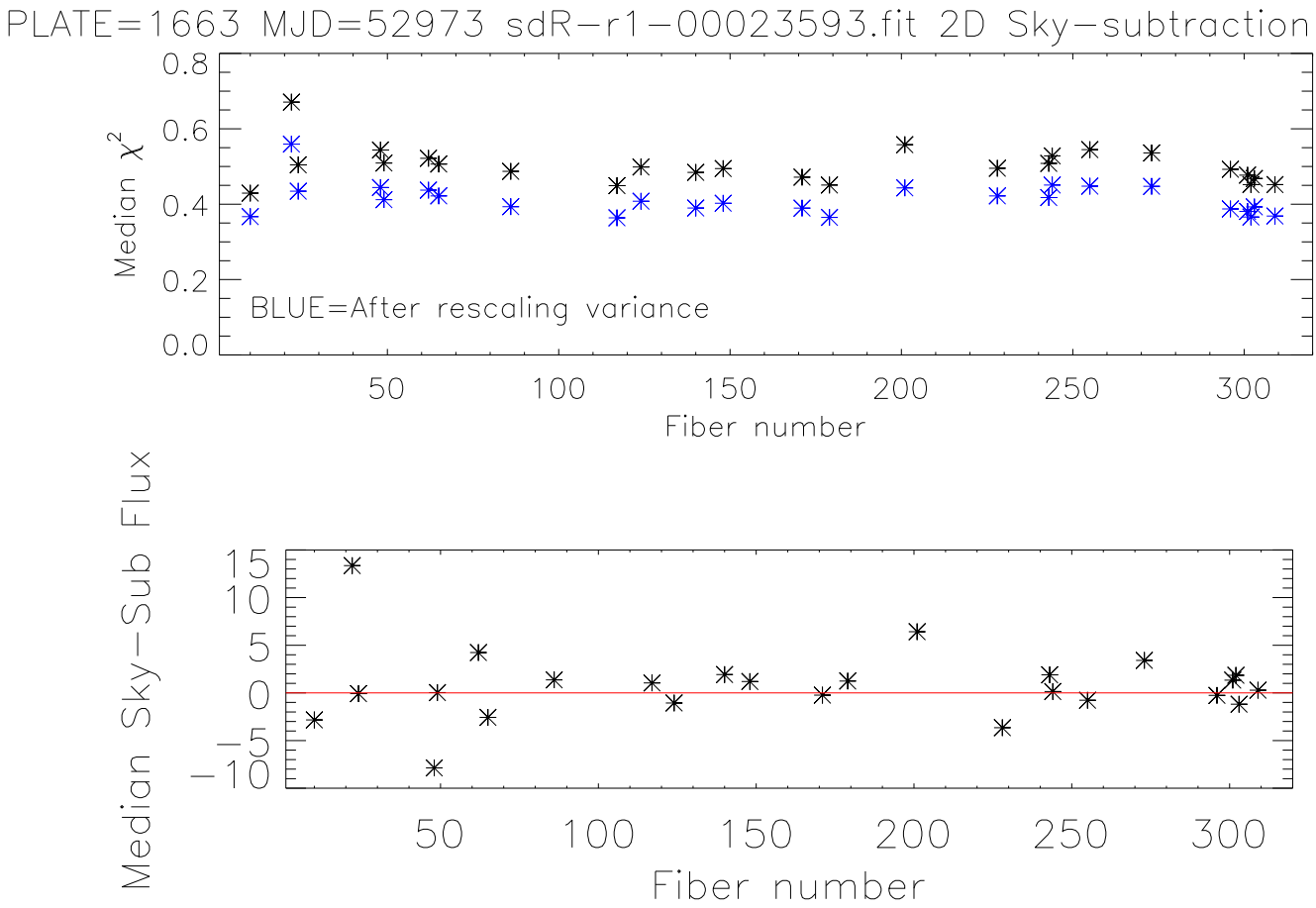
es= −0.0000

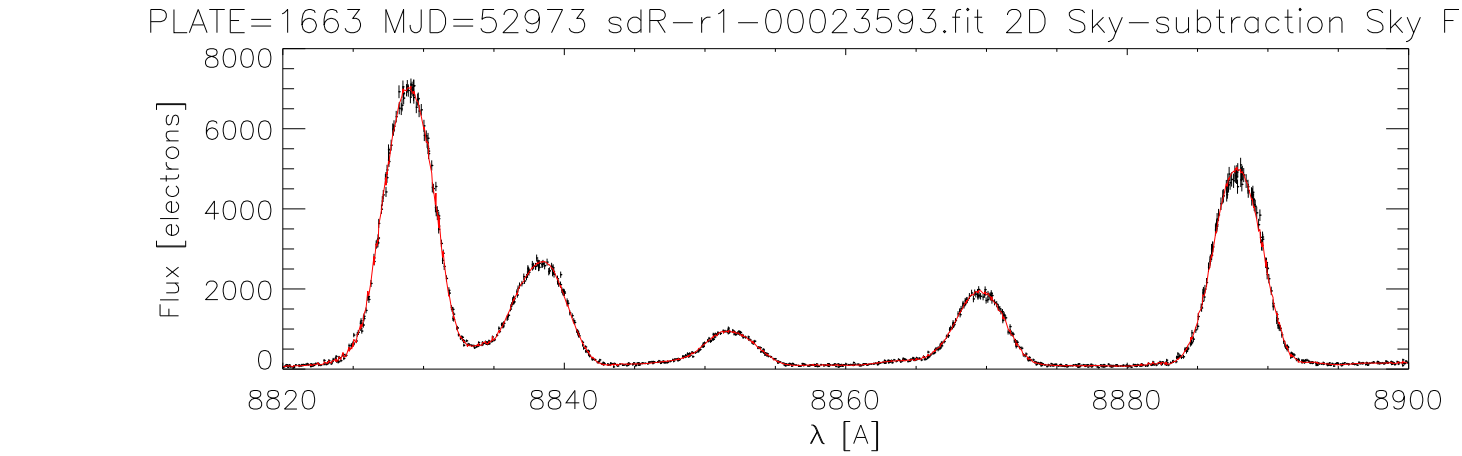

PLATE=1663 MJD=52973 sdR-r1-00023593.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

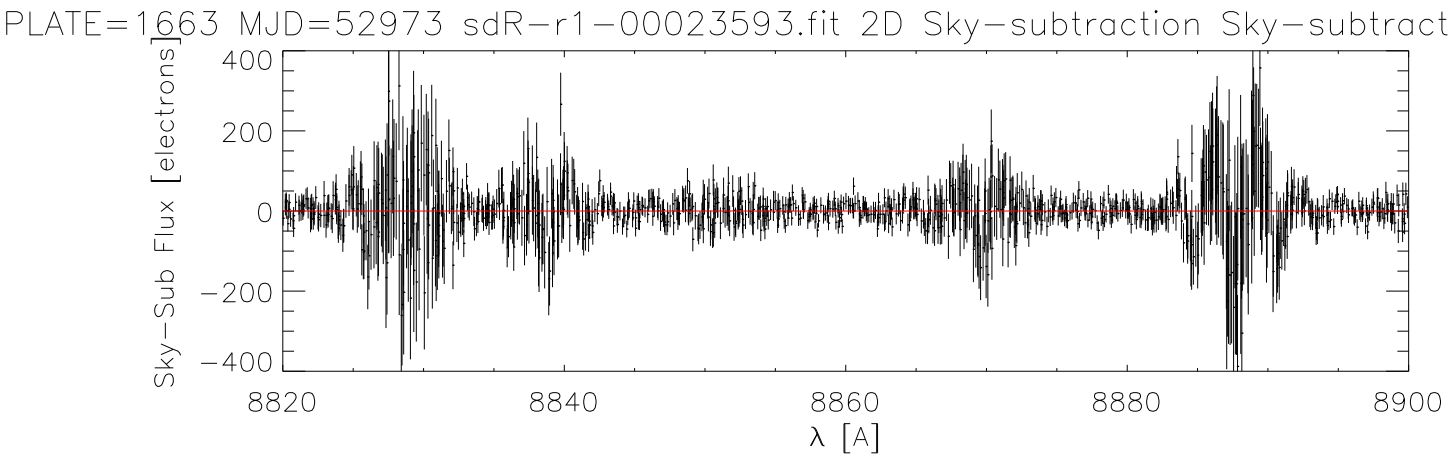

PLATE=1663 MJD=52973 sdR-r1-00023593.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

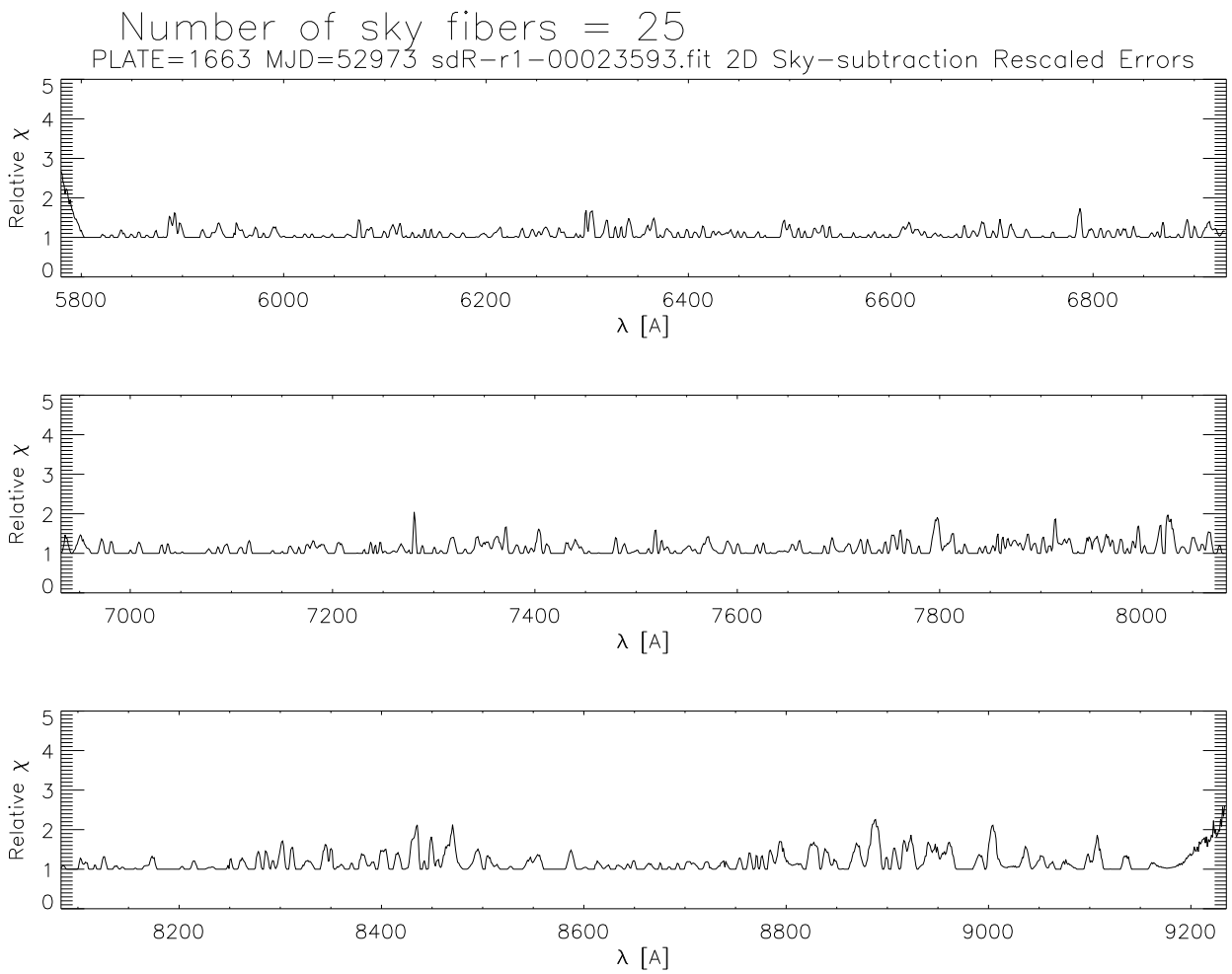

PLATE=1663 MJD=52973 sdR-r1-00023593.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

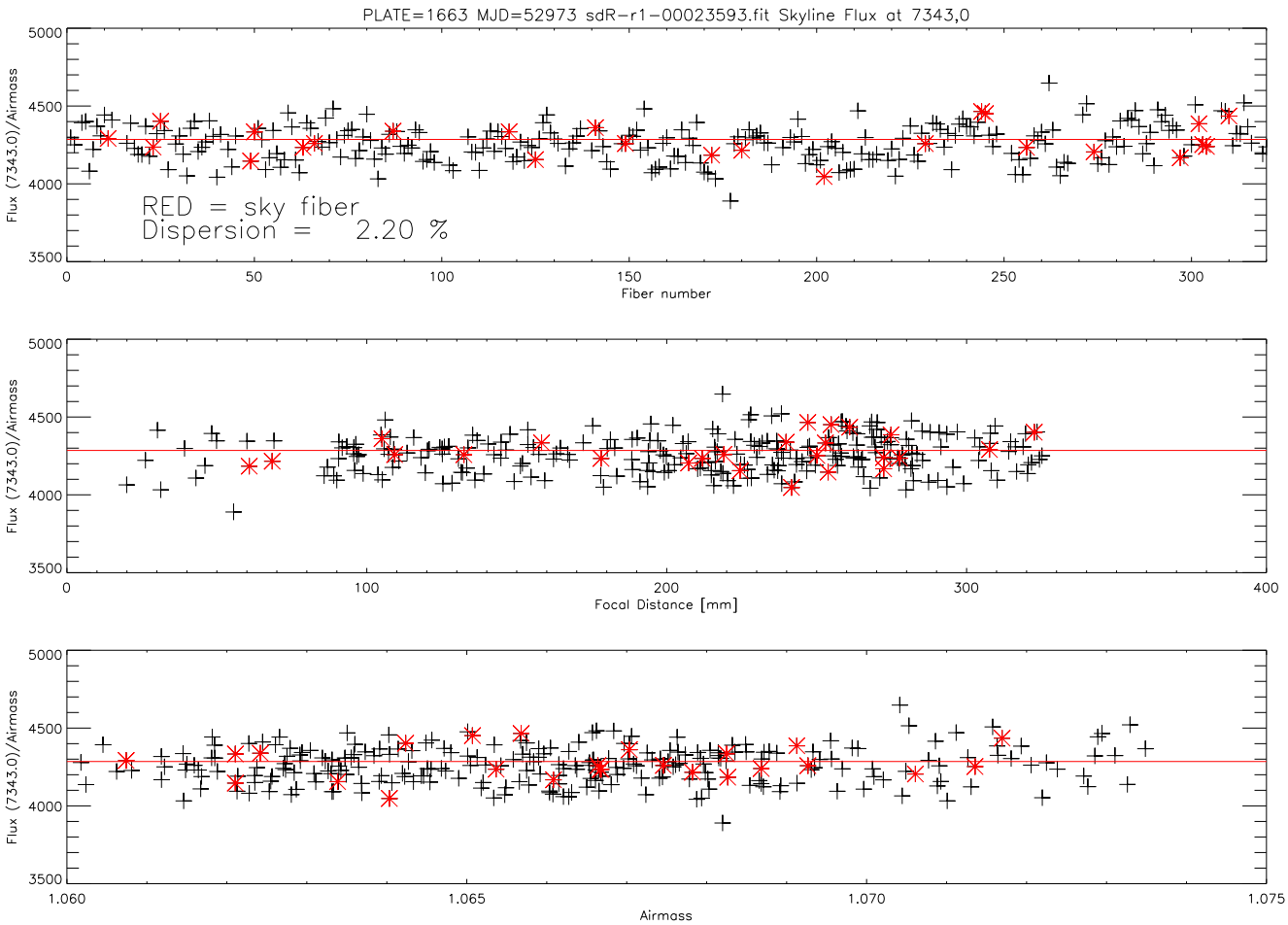

Number of sky fibers = 25
PLATE=1663 MJD=52973 sdR-r1-00023593.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

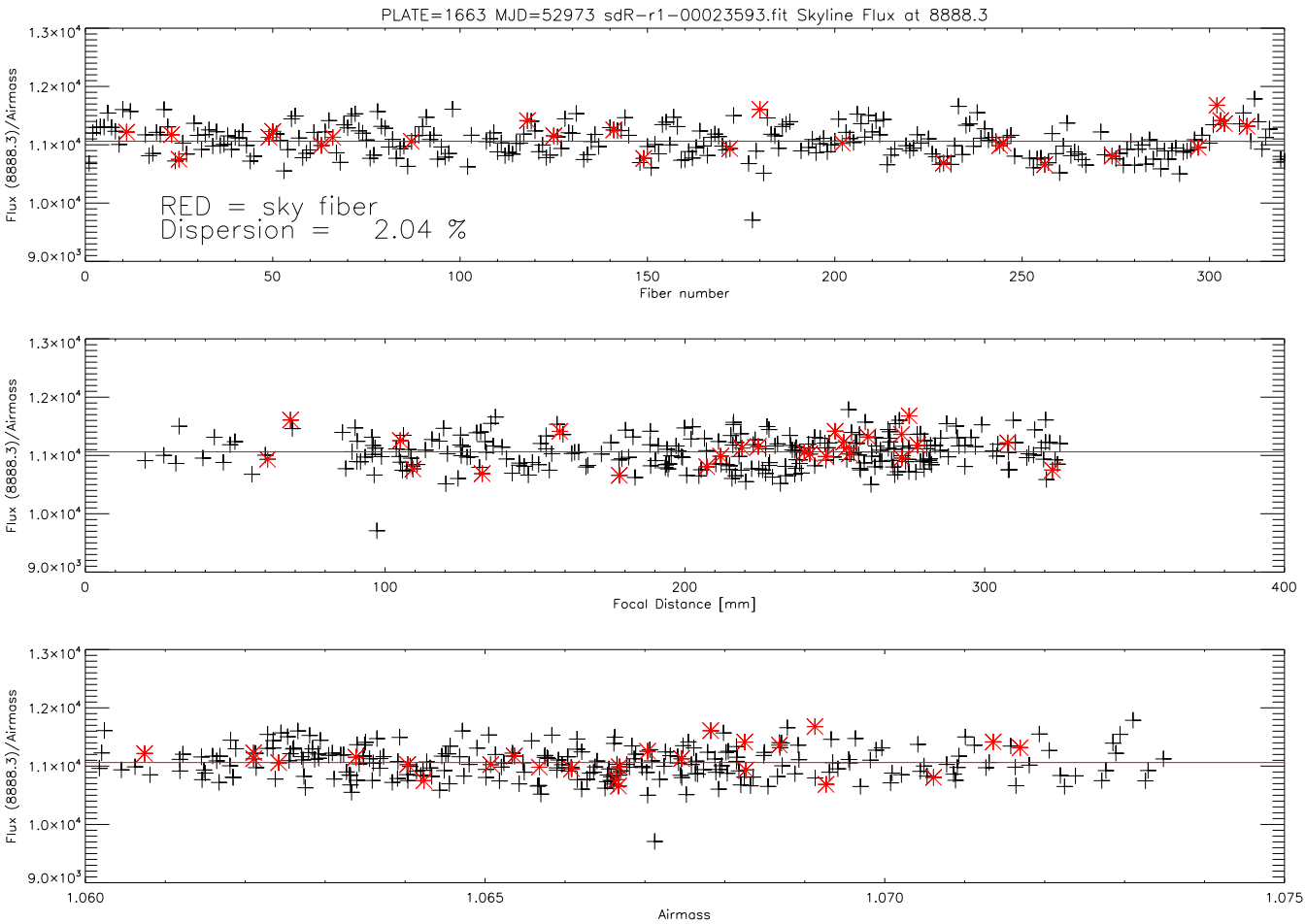

PLATE=1663 MJD=52973 sdR-r1-00023593.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

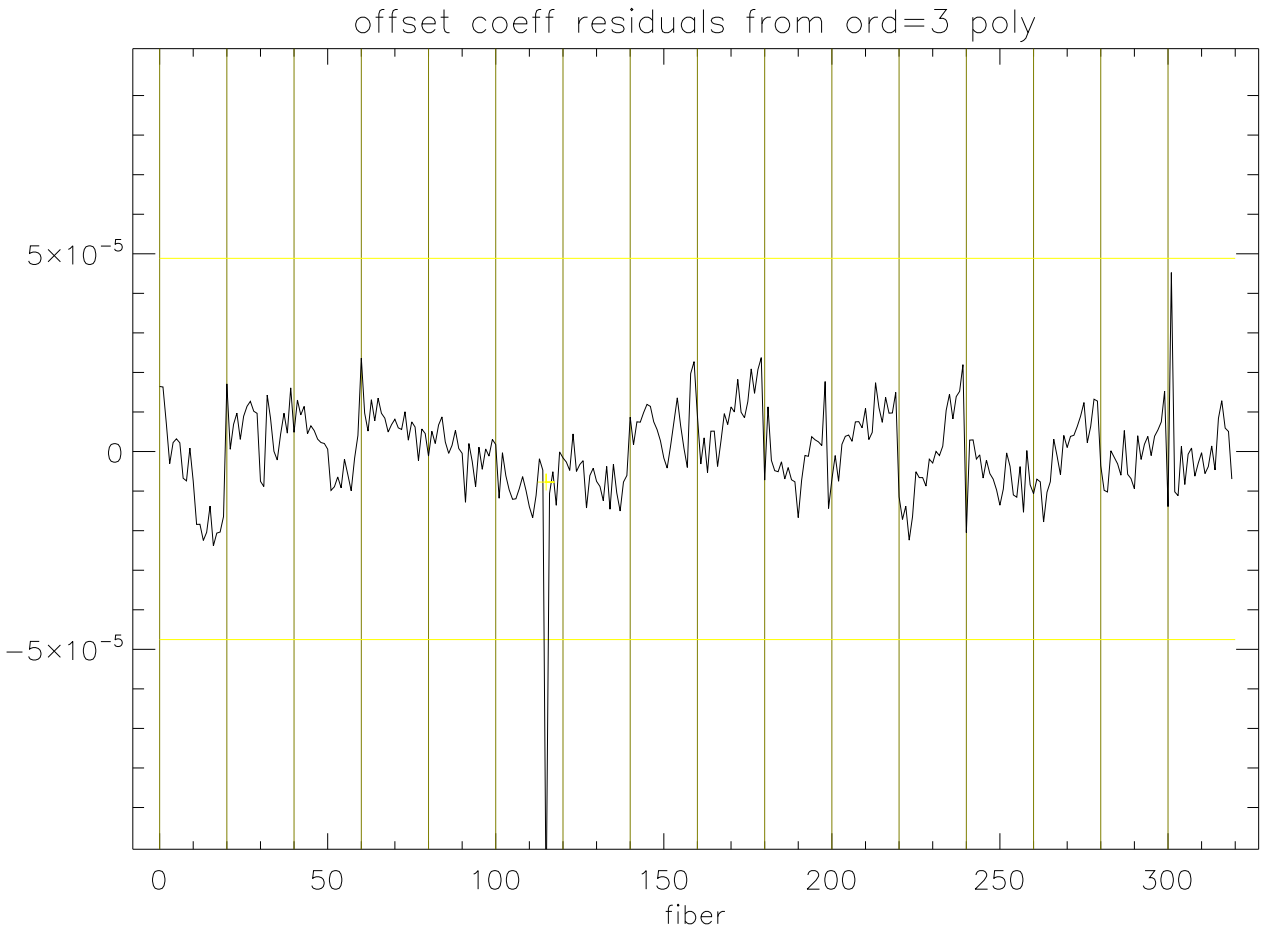

PLATE=1663 MJD=52973 sdR-r1-00023593.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

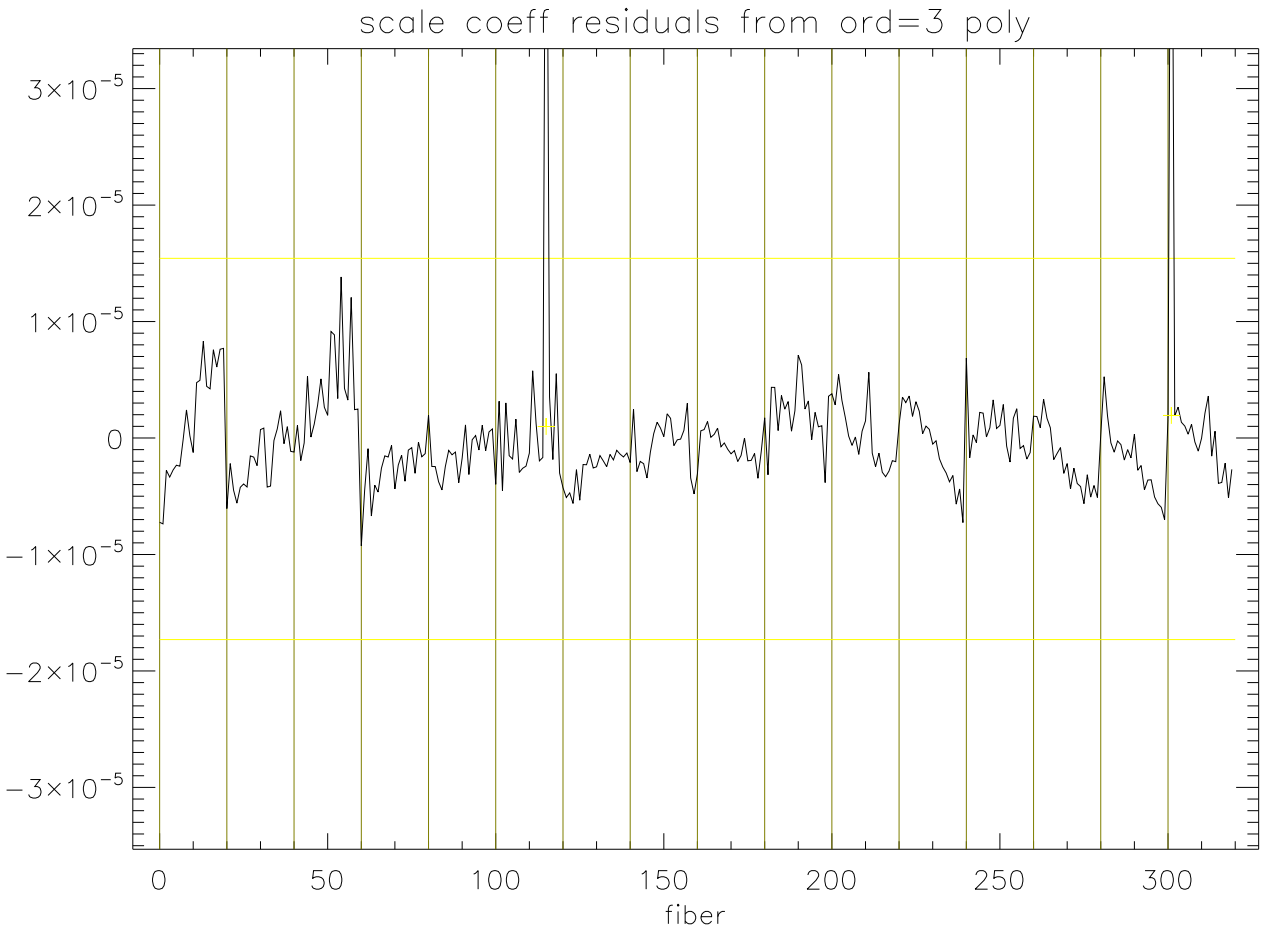

PLATE=1663 MJD=52973 sdR-r1-00023593.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

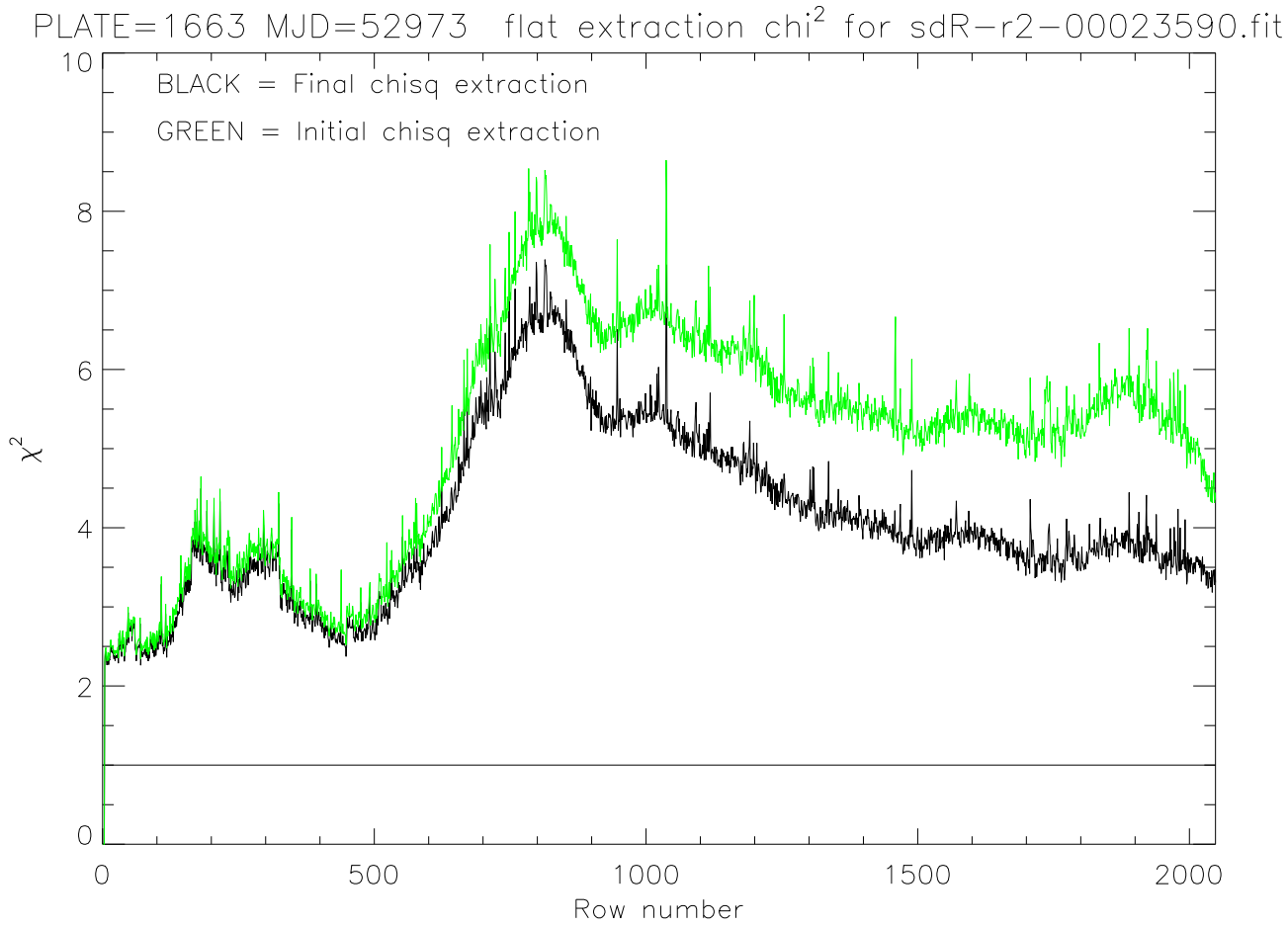

Number of sky fibers = 25
PLATE=1663 MJD=52973 sdR-r1-00023593.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

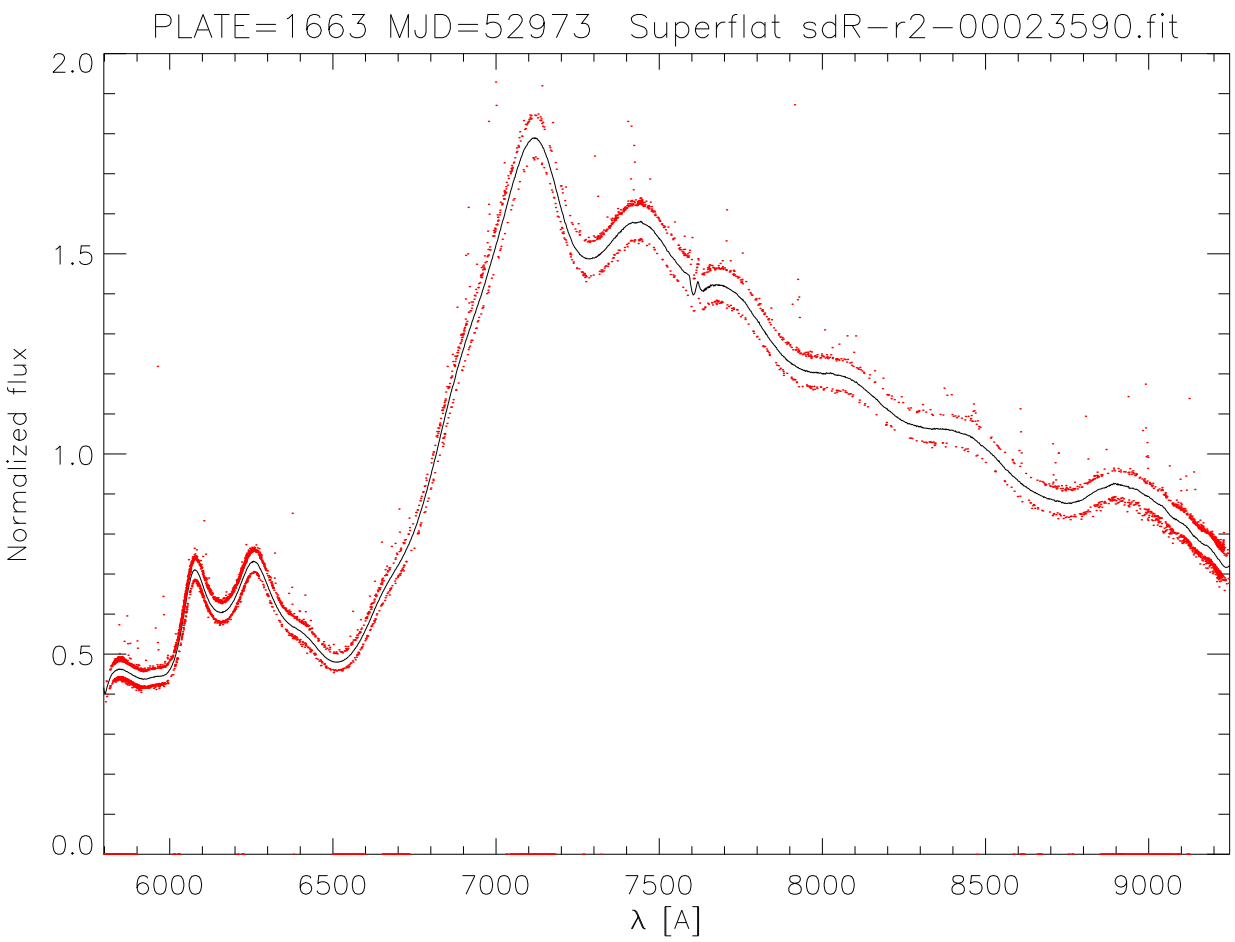

PLATE=1663 MJD=52973 sdR-r1-00023593.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.20 %
Fiber number
Focal Distance [mm]
Airmass

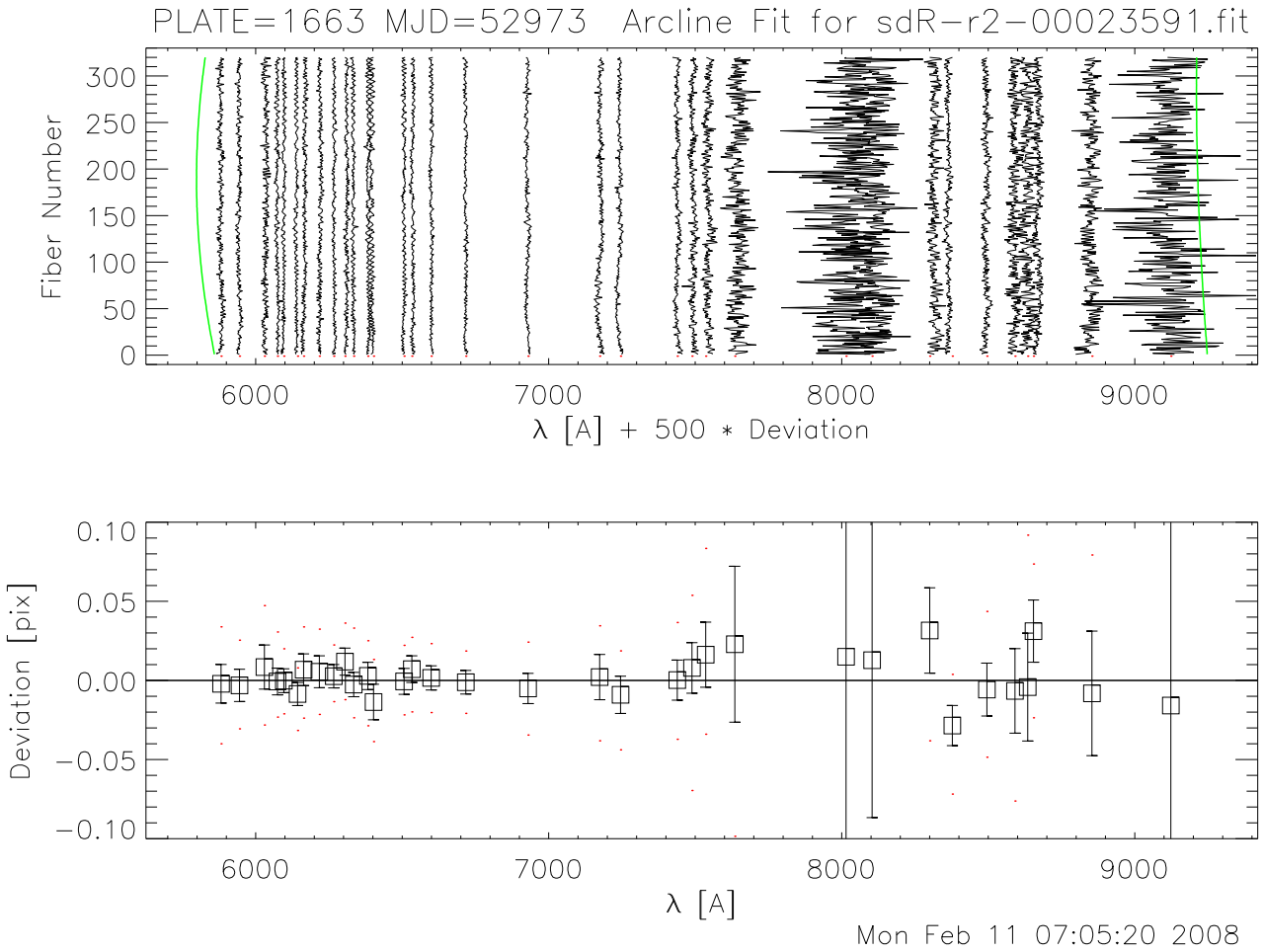

PLATE=1663 MJD=52973 sdR-r1-00023593.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.04 %
Fiber number
Focal Distance [mm]
Airmass

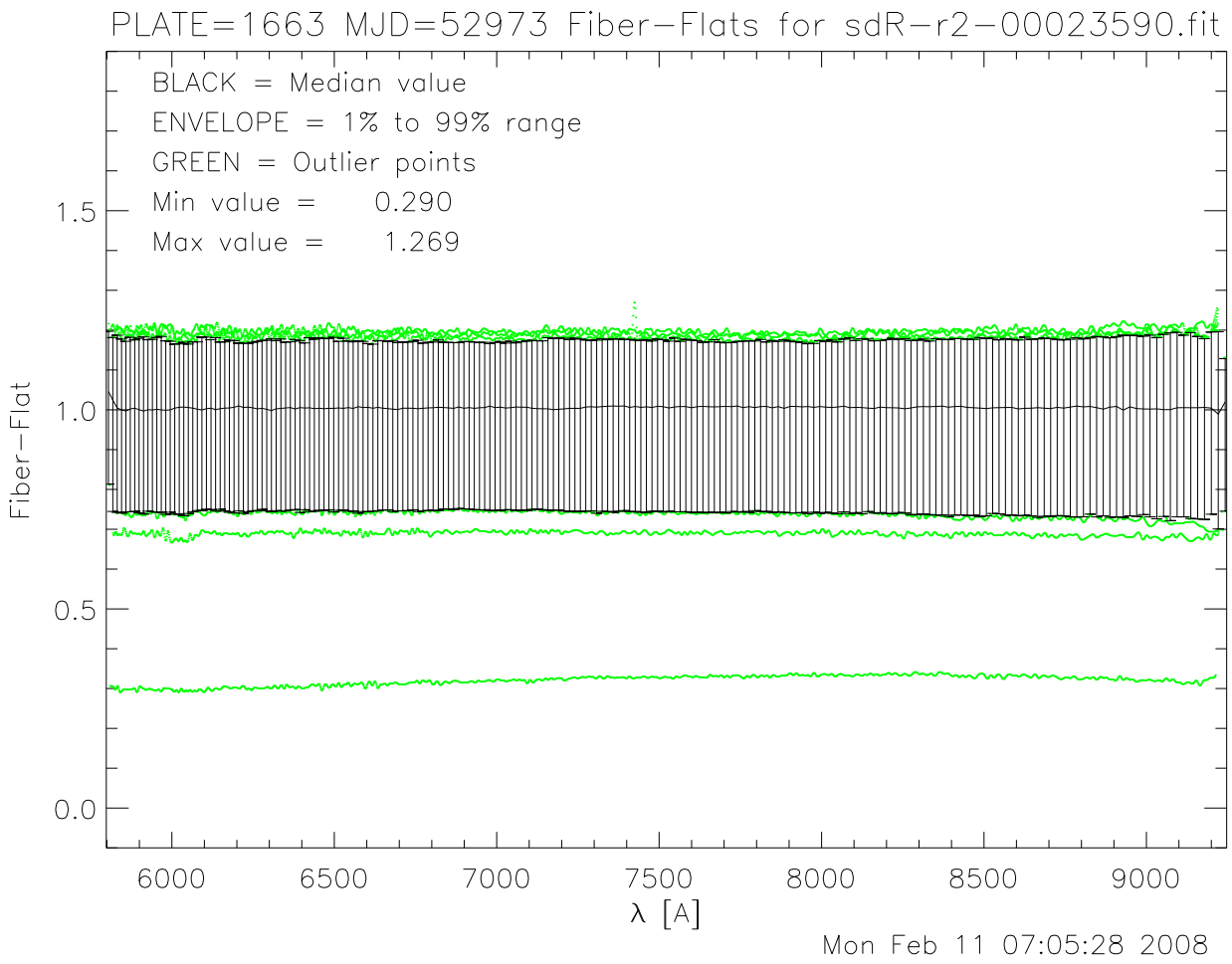

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
0
50
100
150
200
250
300
fiber

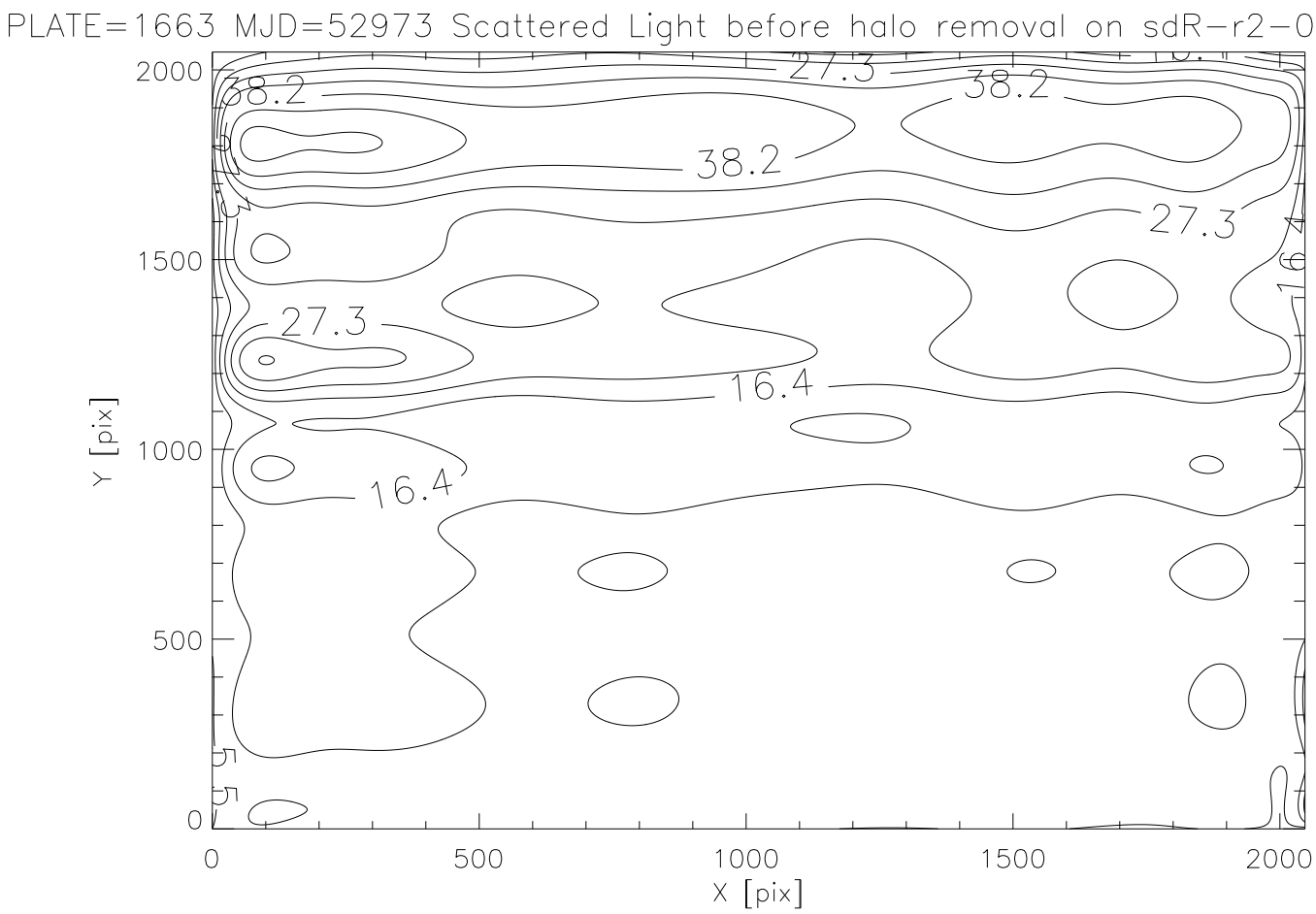

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

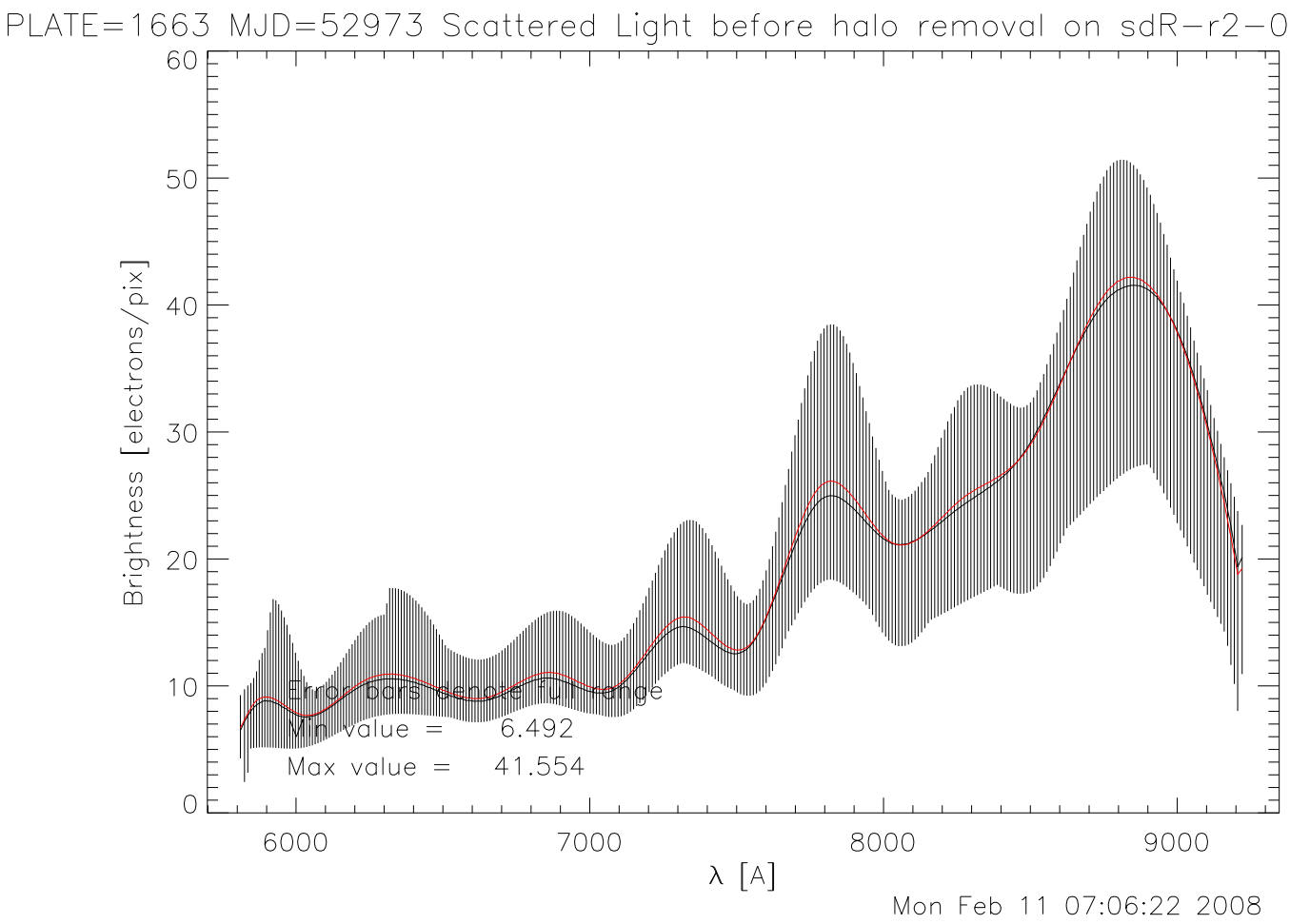

PLATE=1663 MJD=52973 flat extraction chi^2 for sdR−r2−00023590.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

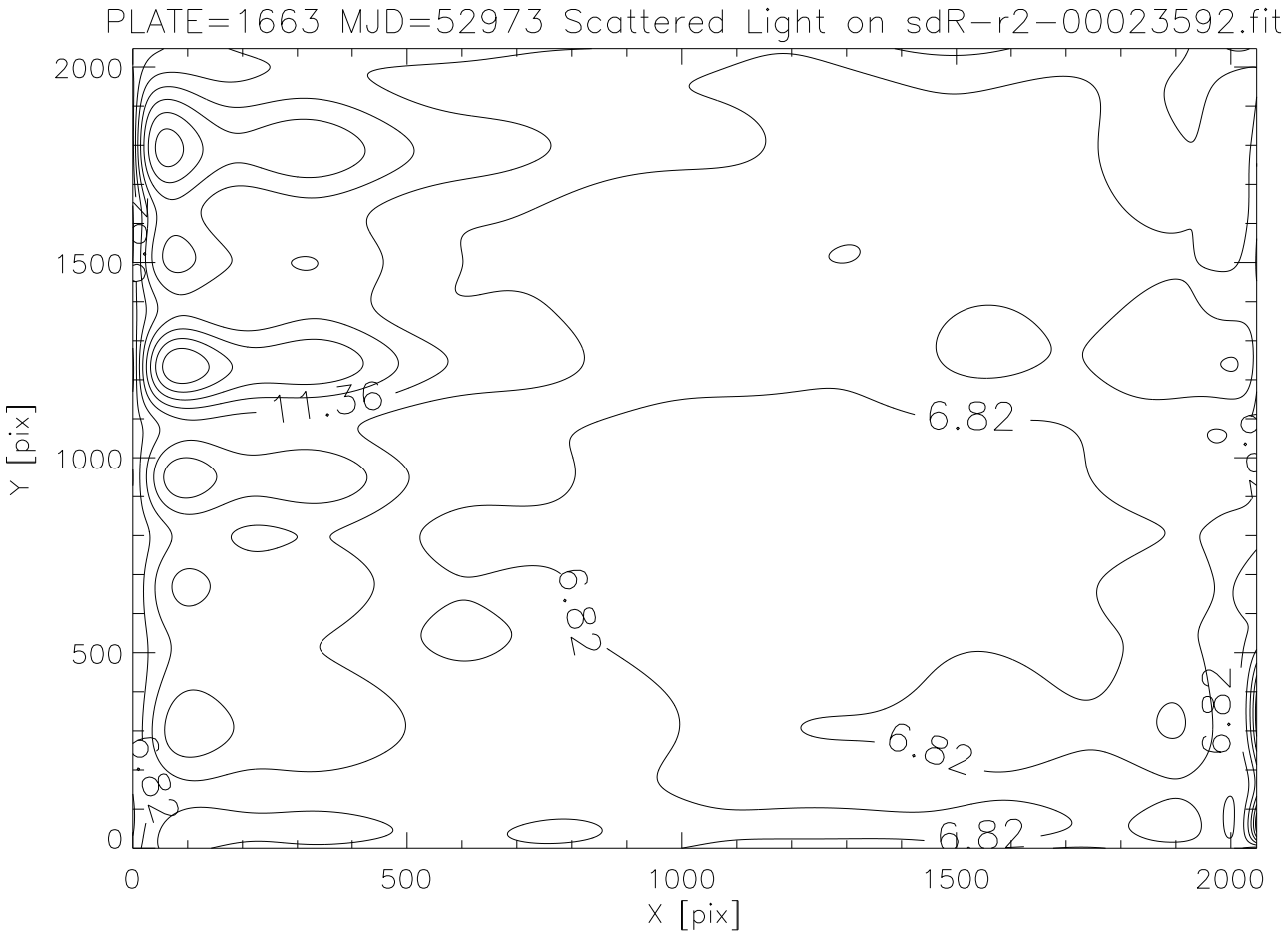

PLATE=1663 MJD=52973 Superflat sdR-r2-00023590.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

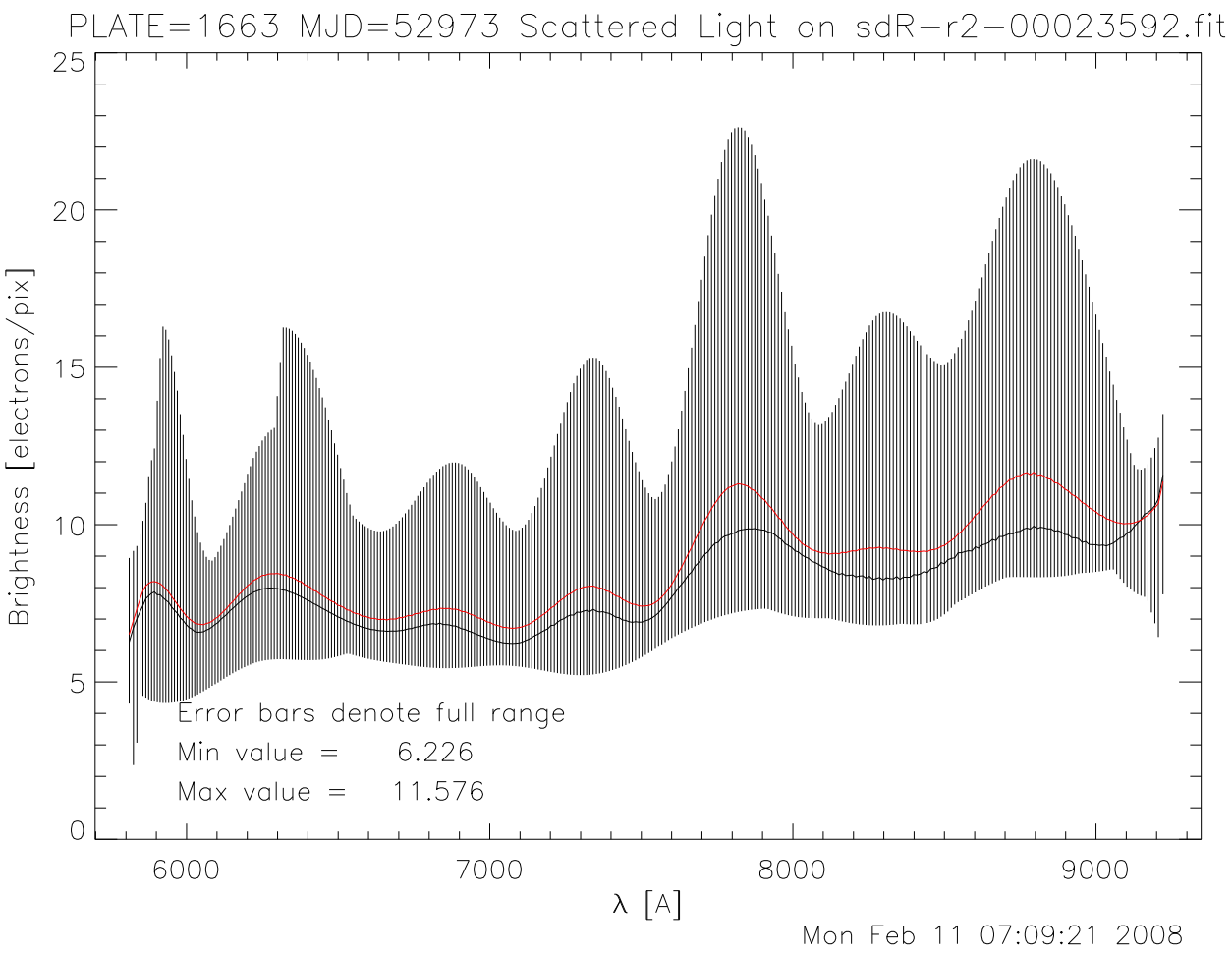

PLATE=1663 MJD=52973 Arcline Fit for sdR-r2-00023591.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Feb 11 07:05:20 2008

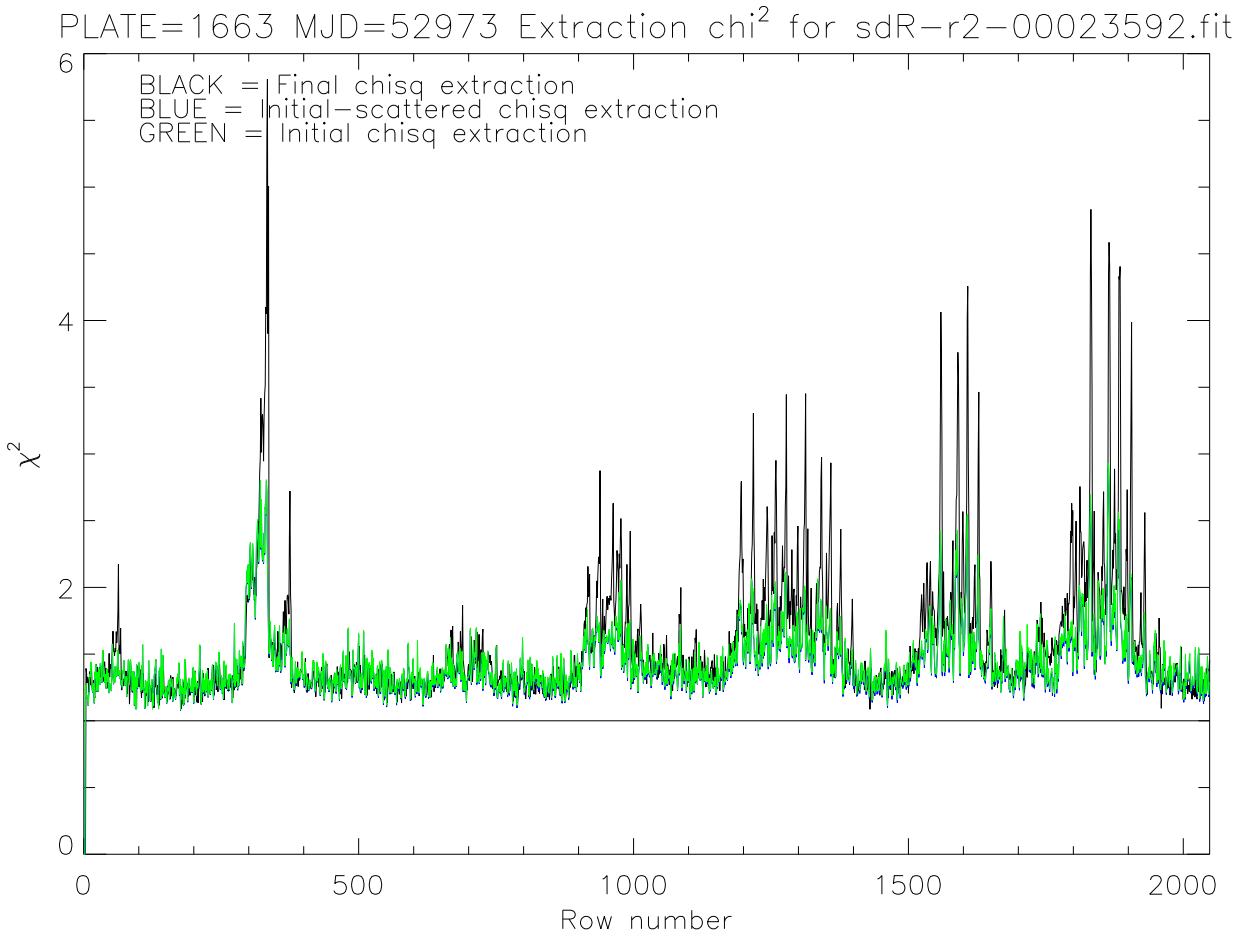

PLATE=1663 MJD=52973 Fiber-Flats for sdR-r2-00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.290
Max value = 1.269
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 07:05:28 2008

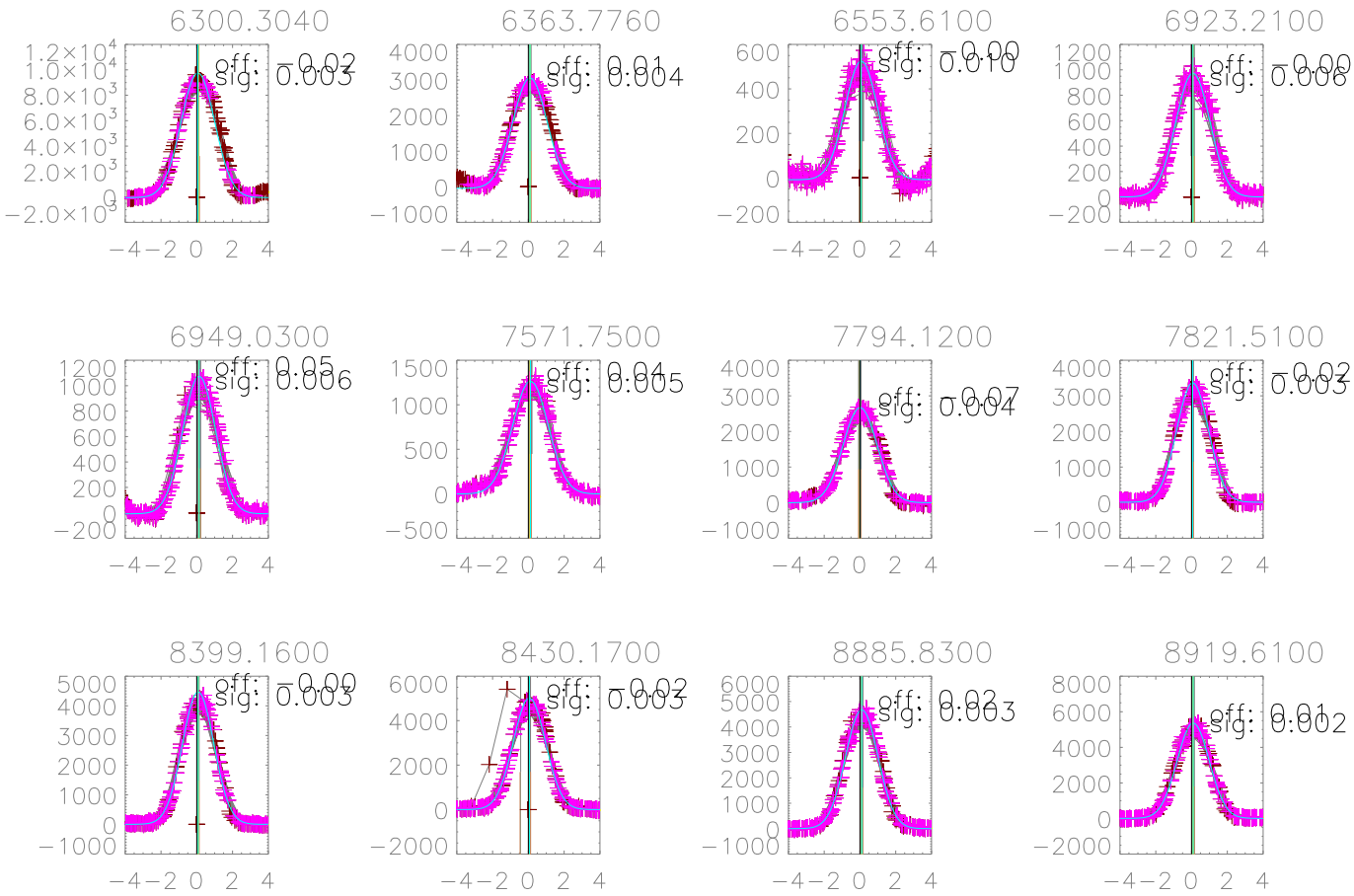

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r2-00023592.fi
38.2
27.3
16.4
5
Y [pix]
X [pix]
0
500
1000
1500
2000

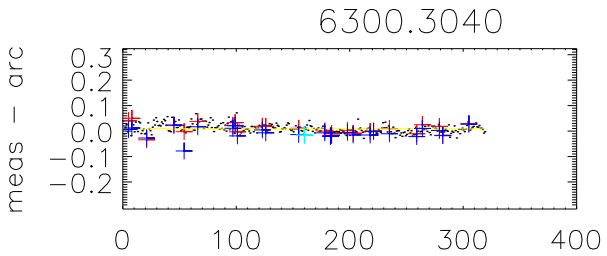

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r2-00023592.fi
Brightness [electrons/pix]
λ [A]
Error bars encode 1σ range
Min value = 6.492
Max value = 41.554
Mon Feb 11 07:06:22 2008

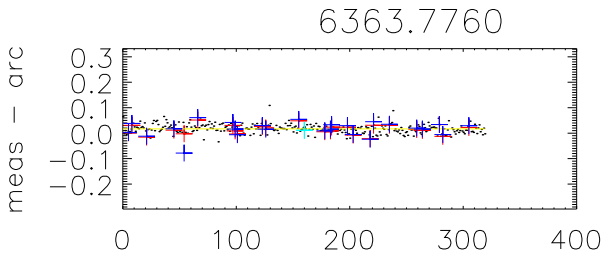

PLATE=1663 MJD=52973 Scattered Light on sdR-r2-00023592.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
11.36
6.82
6.82
6.82
6.82
6.82
6.82
6.82

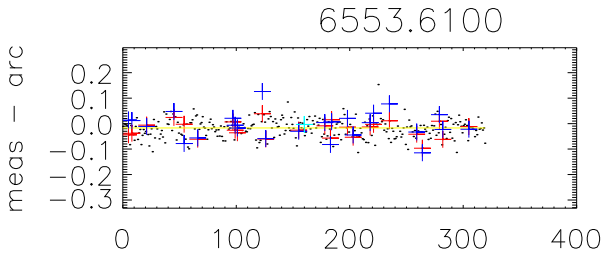

PLATE=1663 MJD=52973 Scattered Light on sdR-r2-00023592.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.226
Max value = 11.576
Mon Feb 11 07:09:21 2008

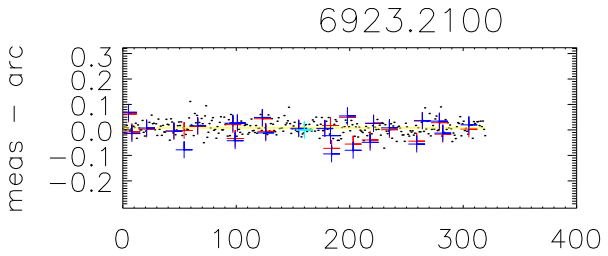

PLATE=1663 MJD=52973 Extraction chi^2 for sdR−r2−00023592.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

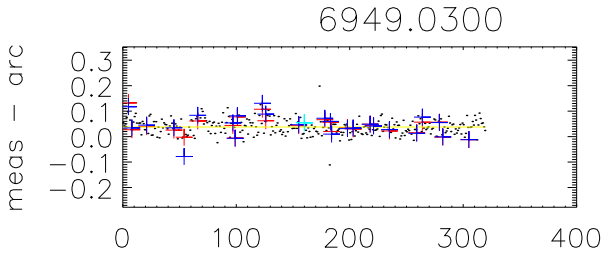

6300.3040
off: −0.02
sig: 0.003
6363.7760
off: 0.01
sig: 0.004
6553.6100
off: −0.00
sig: 0.010
6923.2100
off: −0.00
sig: 0.006
6949.0300
off: 0.05
sig: 0.006
7571.7500
off: 0.04
sig: 0.005
7794.1200
off: −0.07
sig: 0.004
7821.5100
off: −0.02
sig: 0.003
8399.1600
off: −0.00
sig: 0.003
8430.1700
off: −0.02
sig: 0.003
8885.8300
off: 0.02
sig: 0.003
8919.6100
off: 0.01
sig: 0.002

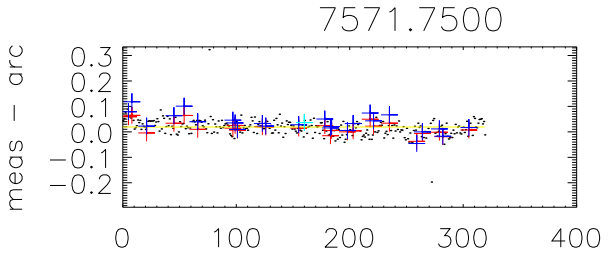

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

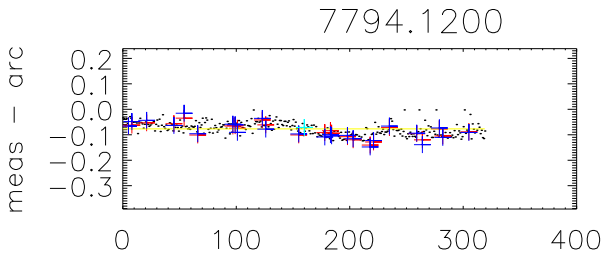

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

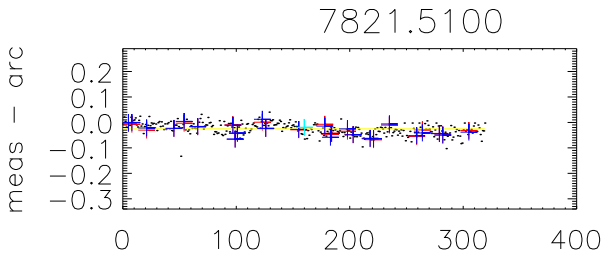

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

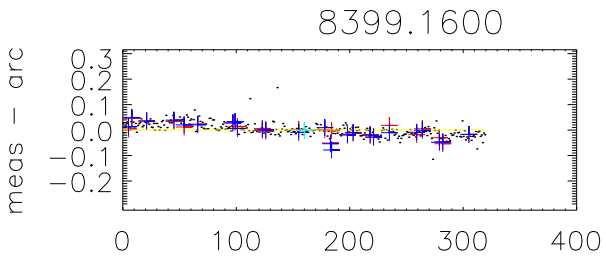

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

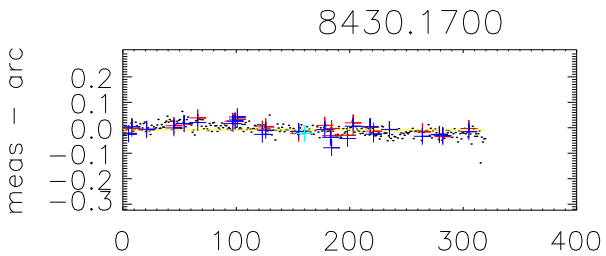

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

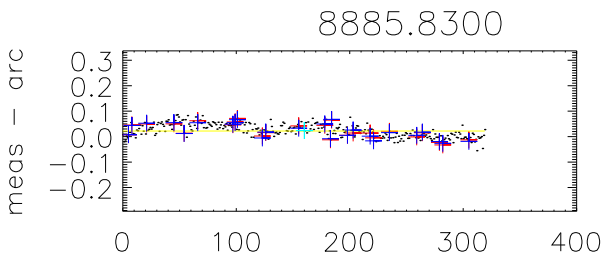

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

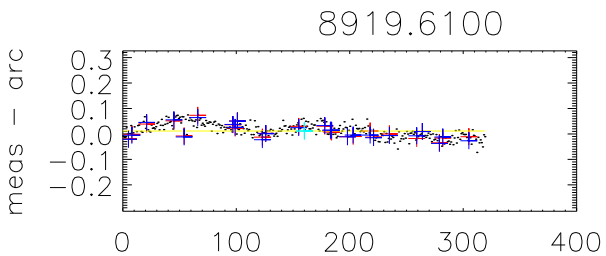

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

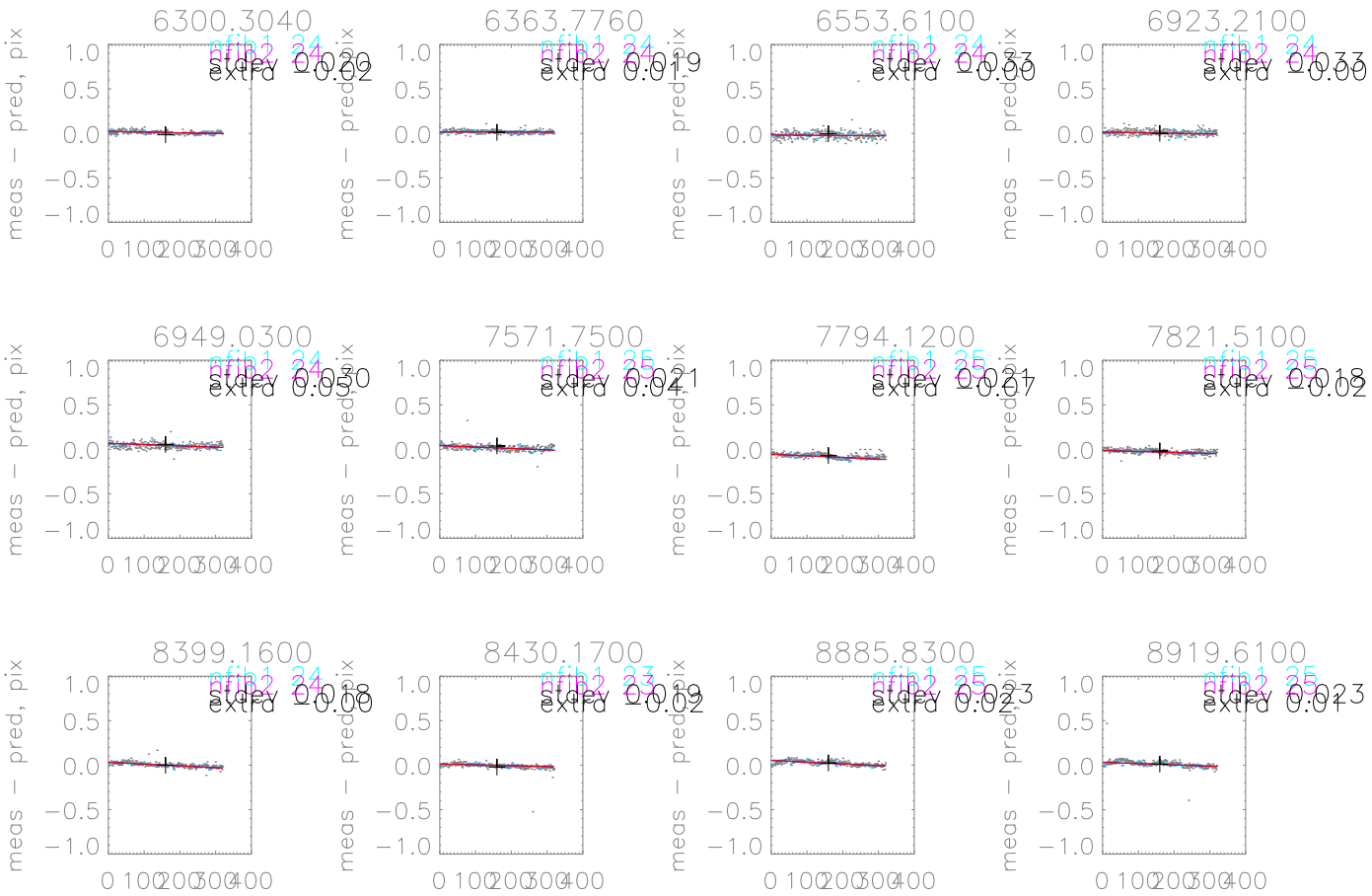

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

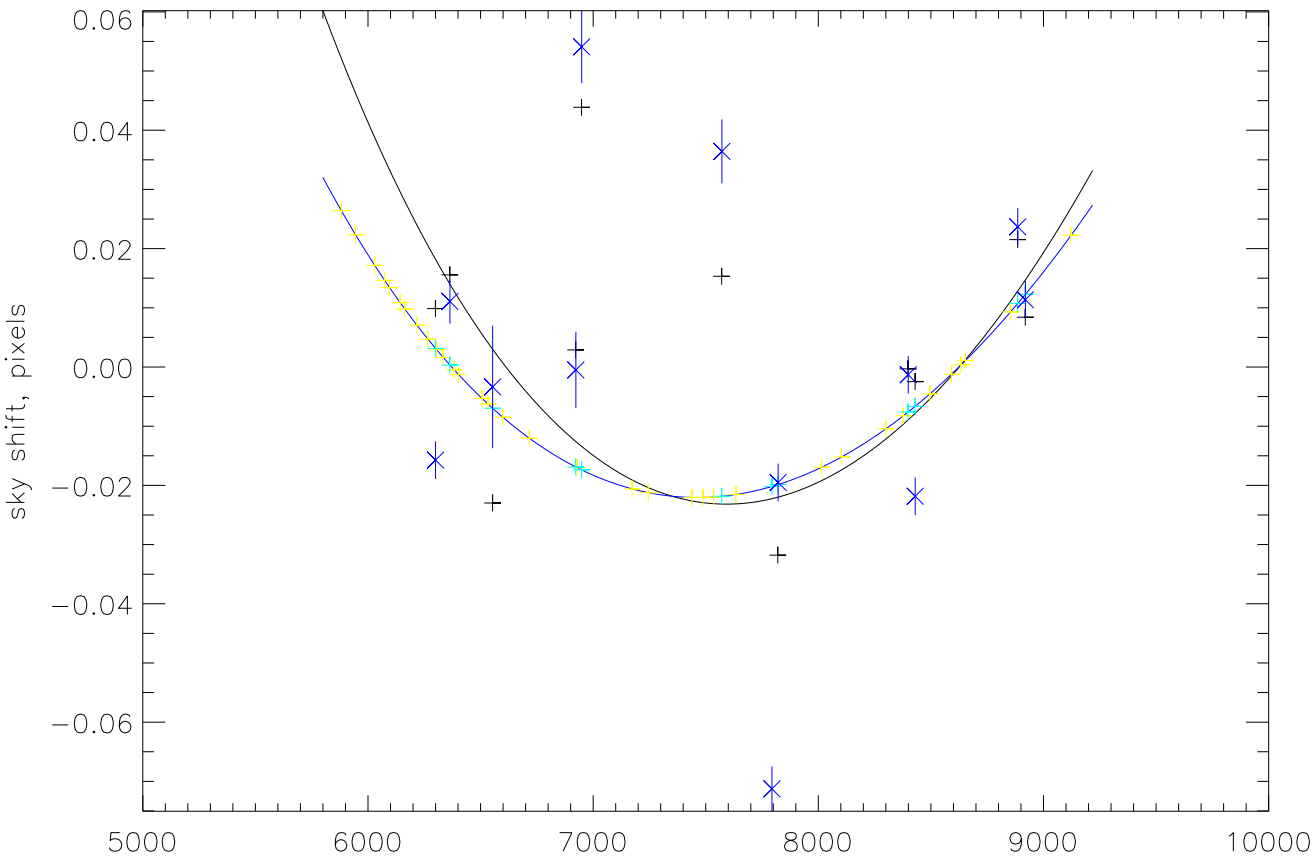

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

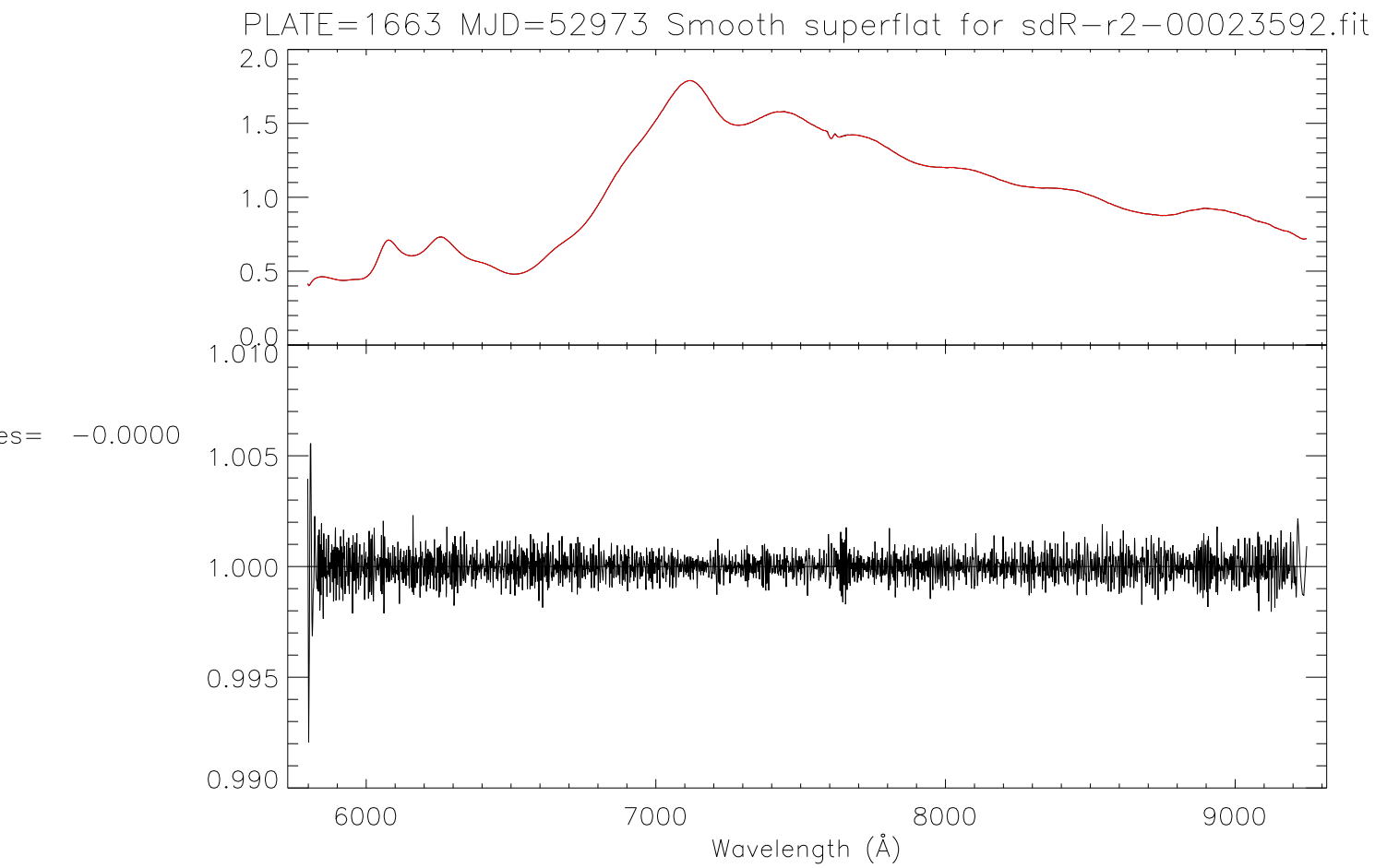

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

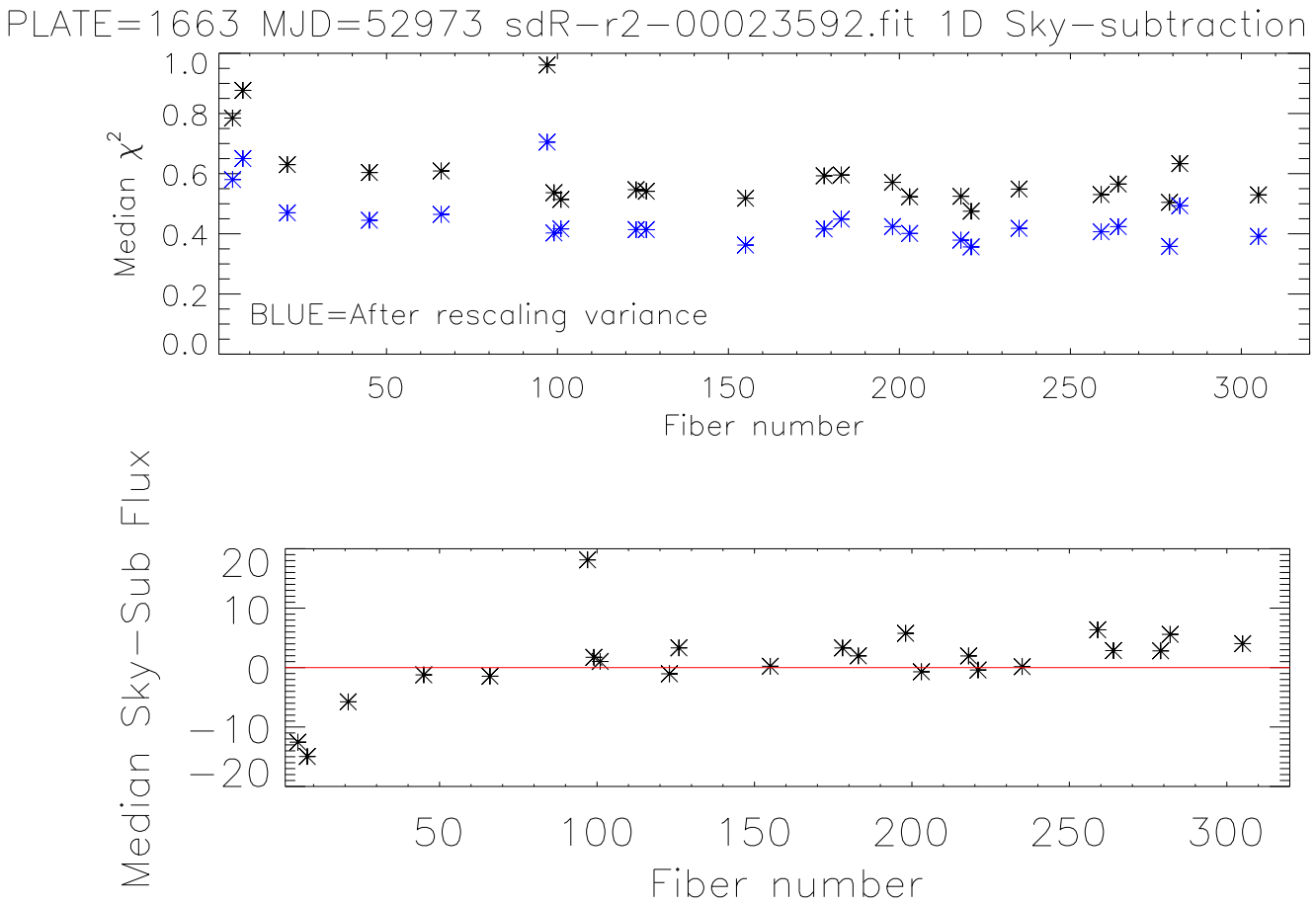

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

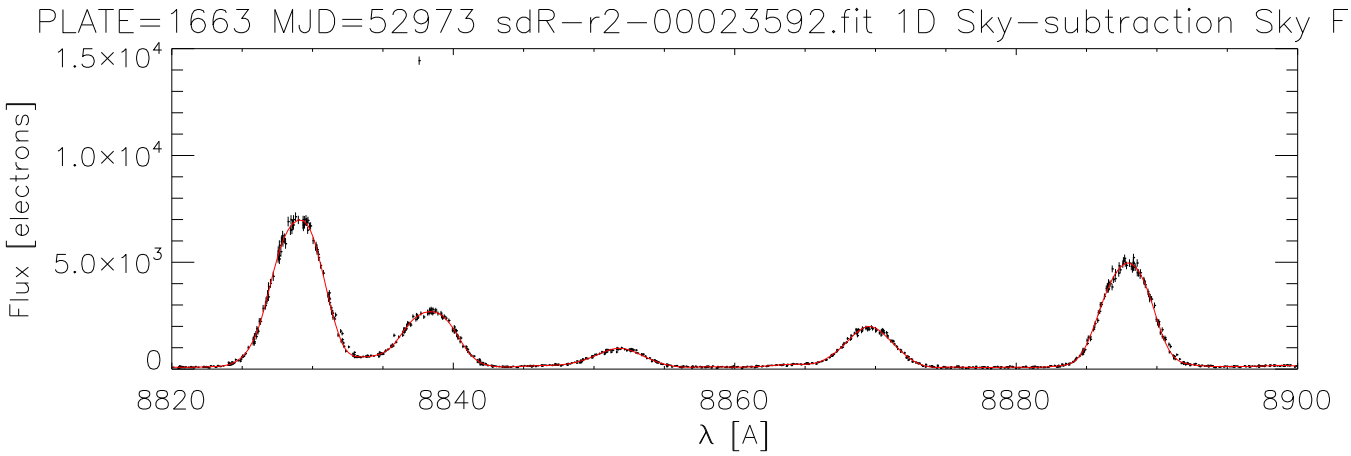

6300.3040
mfib1 24
mfib2 24
stdev 0.020
extra −0.02
6363.7760
mfib1 24
mfib2 24
stdev 0.019
extra 0.019
6553.6100
mfib1 24
mfib2 24
stdev 0.033
extra −0.00
6923.2100
mfib1 24
mfib2 24
stdev 0.033
extra −0.00
6949.0300
mfib1 24
mfib2 24
stdev 0.030
extra 0.05
7571.7500
mfib1 25
mfib2 25
stdev 0.021
extra 0.04
7794.1200
mfib1 25
mfib2 25
stdev 0.021
extra −0.07
7821.5100
mfib1 25
mfib2 25
stdev 0.018
extra −0.02
8399.1600
mfib1 24
mfib2 24
stdev 0.018
extra −0.00
8430.1700
mfib1 23
mfib2 23
stdev 0.019
extra −0.02
8885.8300
mfib1 25
mfib2 25
stdev 0.023
extra 0.02
8919.6100
mfib1 25
mfib2 25
stdev 0.023
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

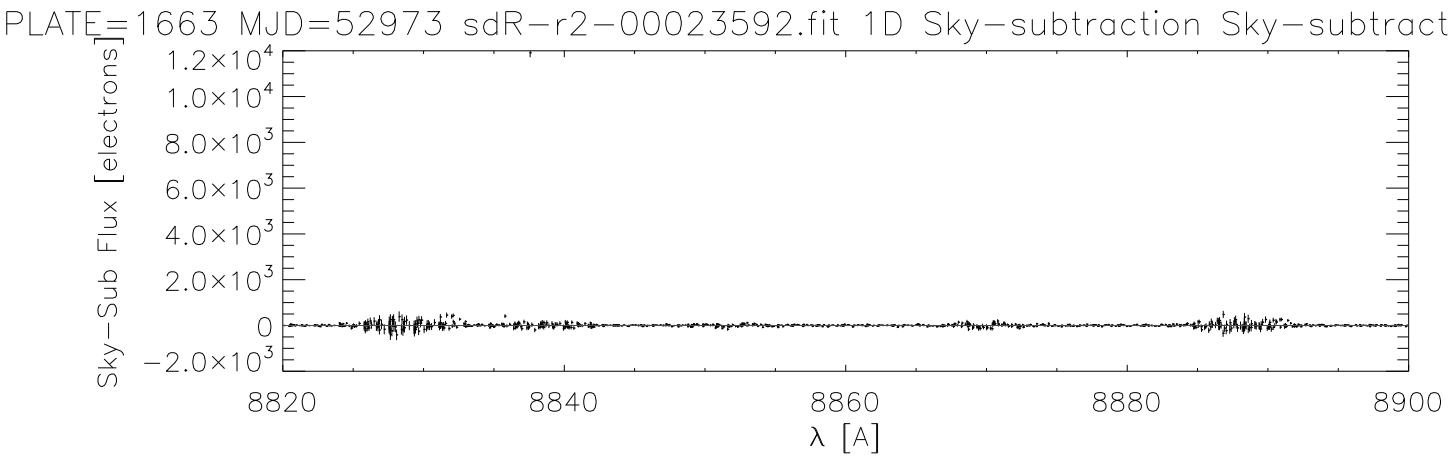

0.06
0.04
0.02
0.00
−0.02
−0.04
−0.06
sky shift, pixels
5000
6000
7000
8000
9000
10000

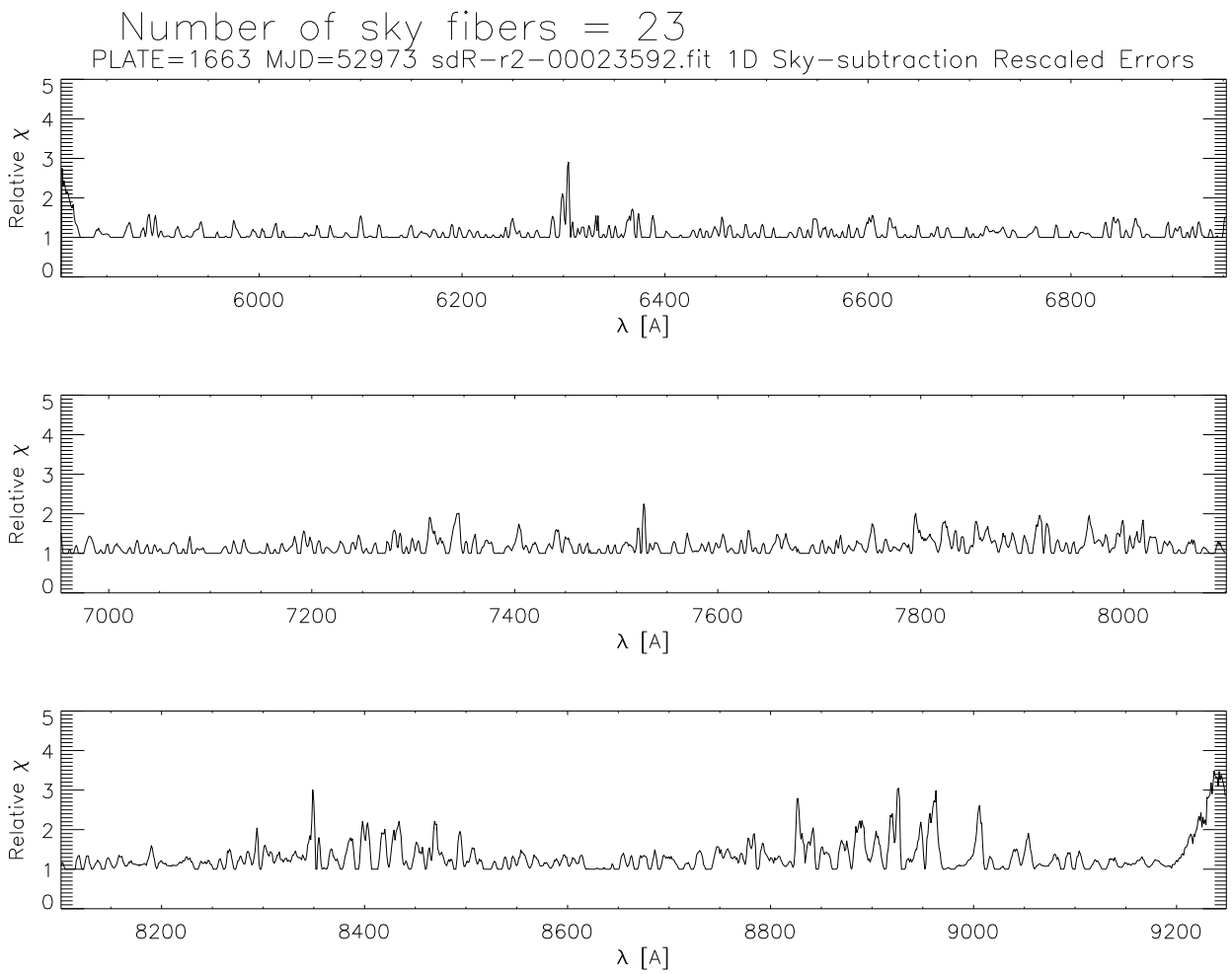

PLATE=1663 MJD=52973 Smooth superflat for sdR-r2-00023592.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

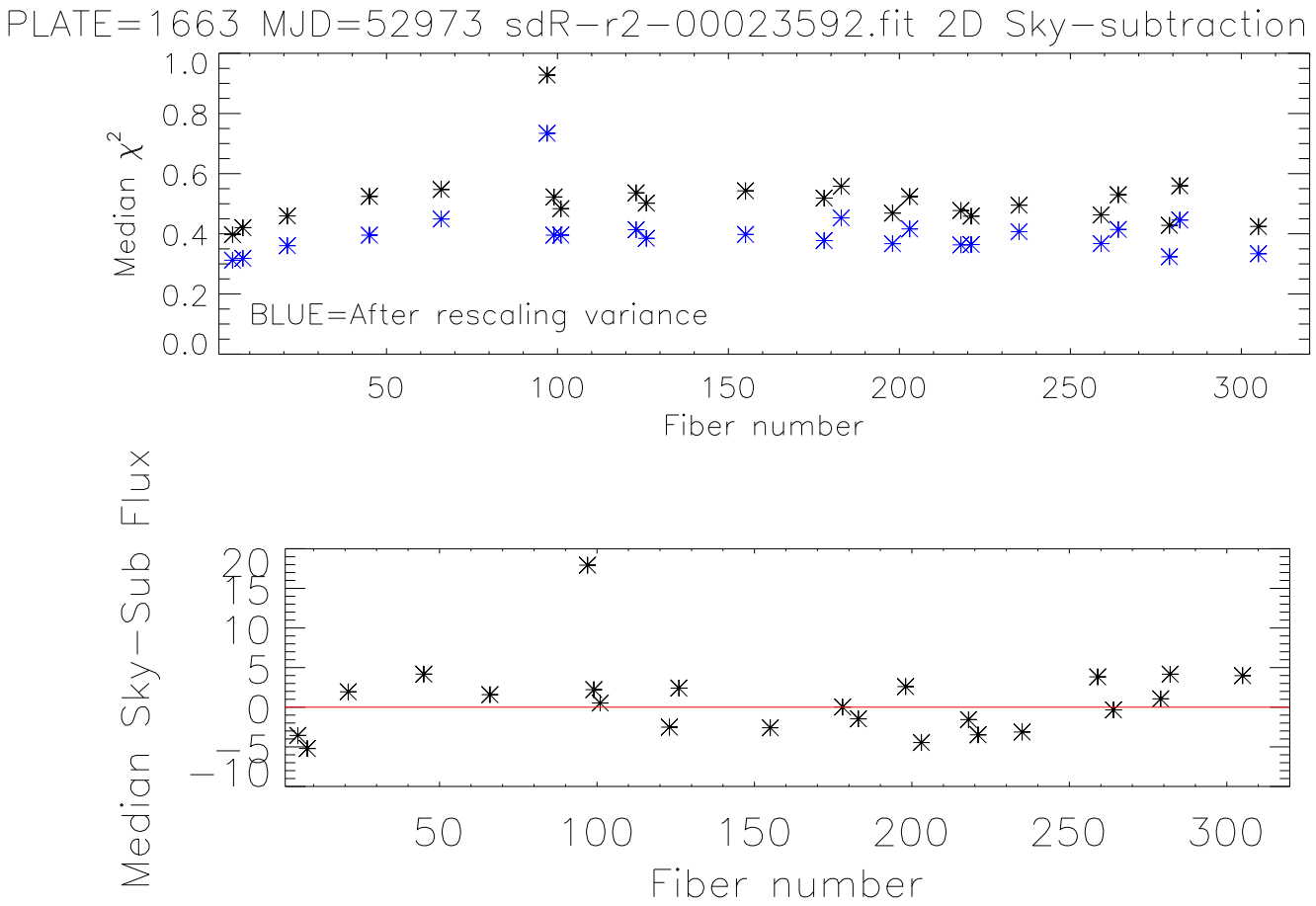
es= −0.0000

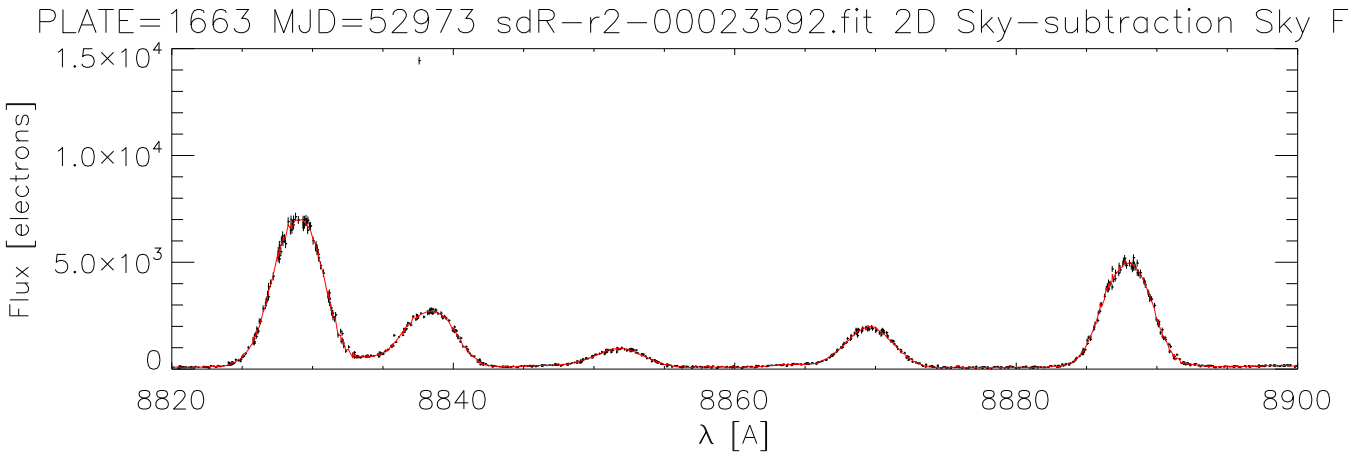

PLATE=1663 MJD=52973 sdR-r2-00023592.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

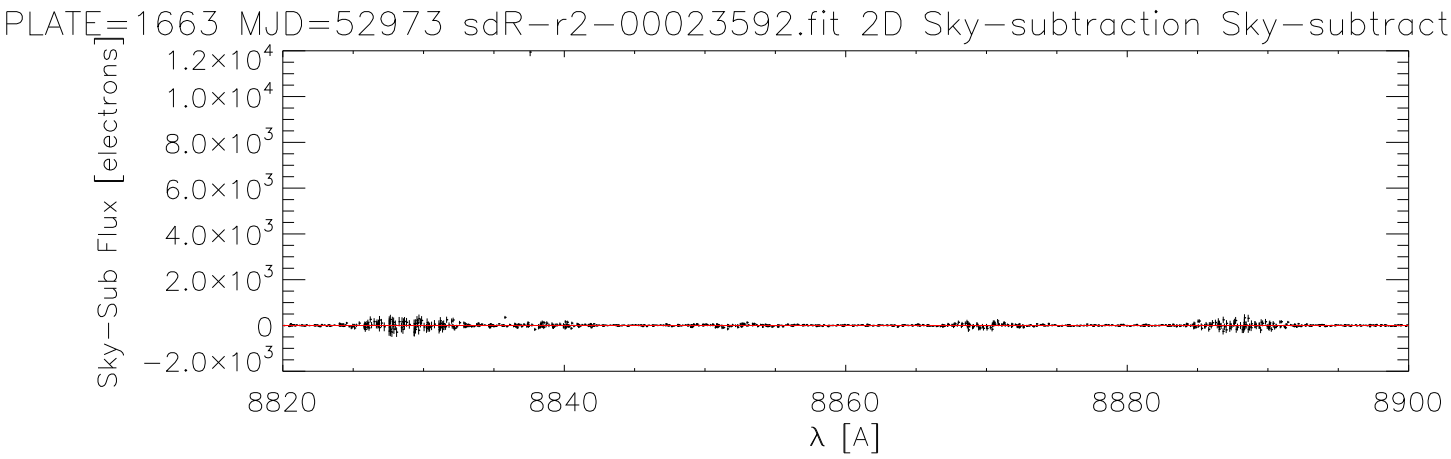

PLATE=1663 MJD=52973 sdR-r2-00023592.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

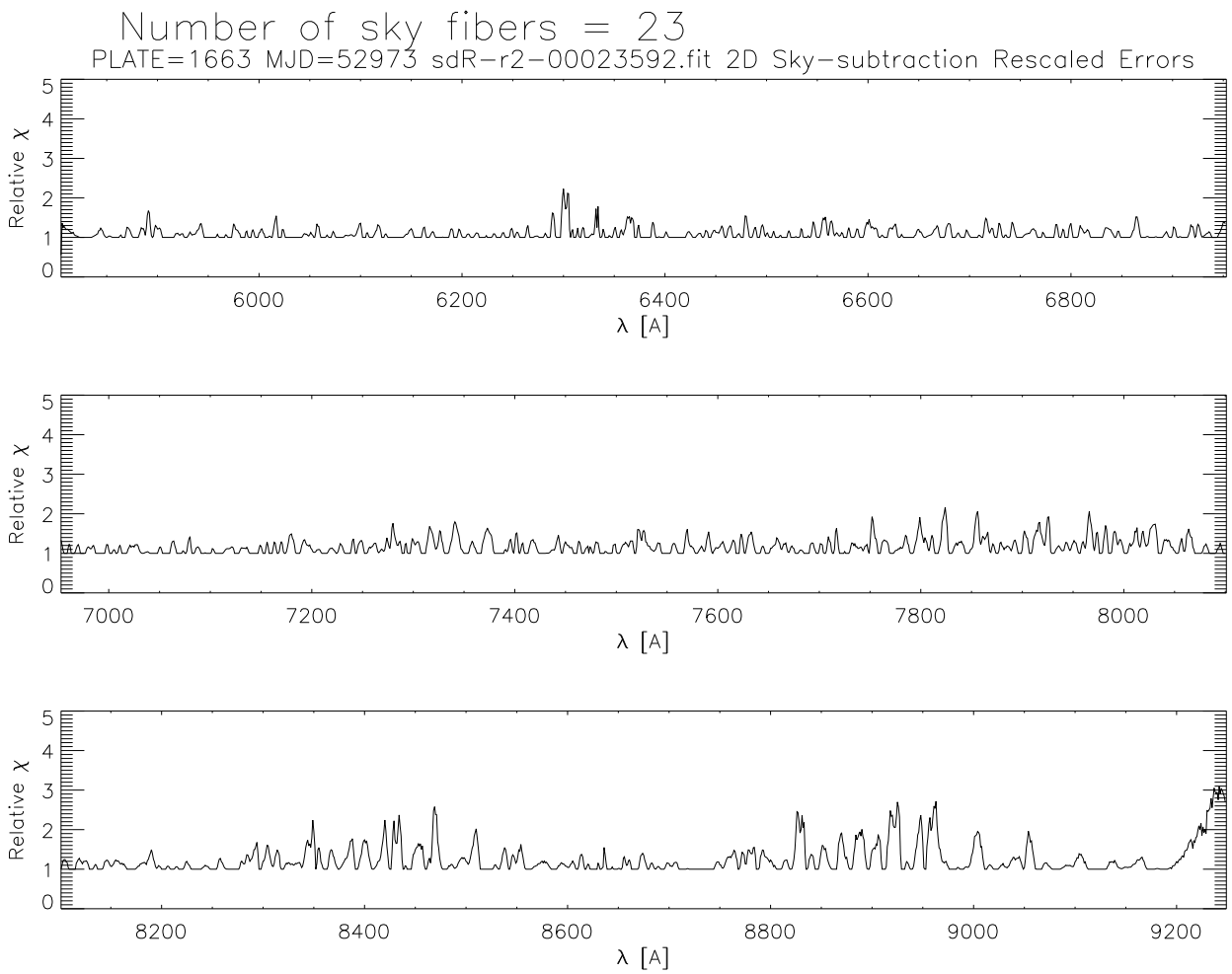

PLATE=1663 MJD=52973 sdR-r2-00023592.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
-2.0×10^3
8820
8840
8860
8880
8900
λ [A]

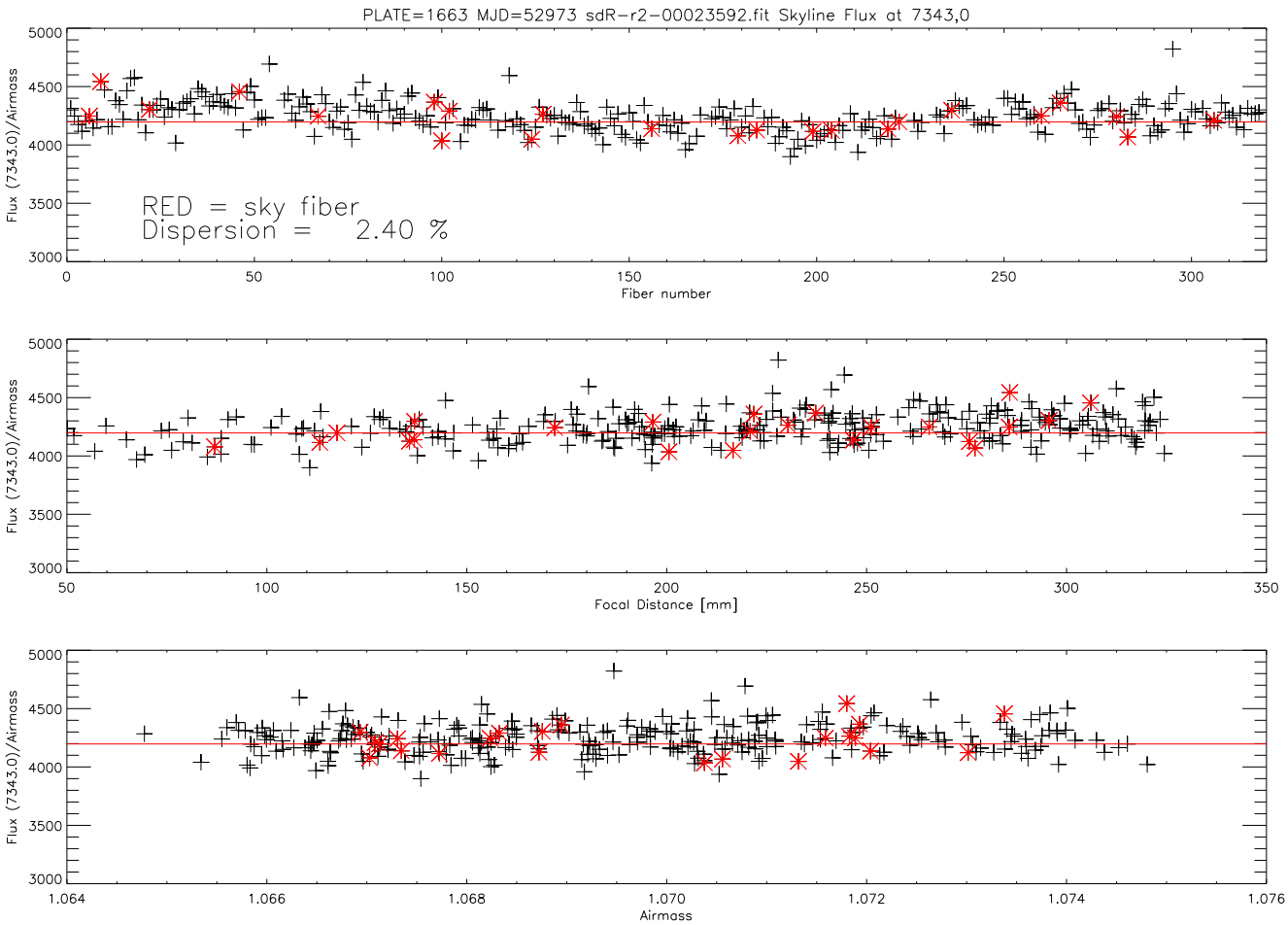

Number of sky fibers = 23
PLATE=1663 MJD=52973 sdR-r2-00023592.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

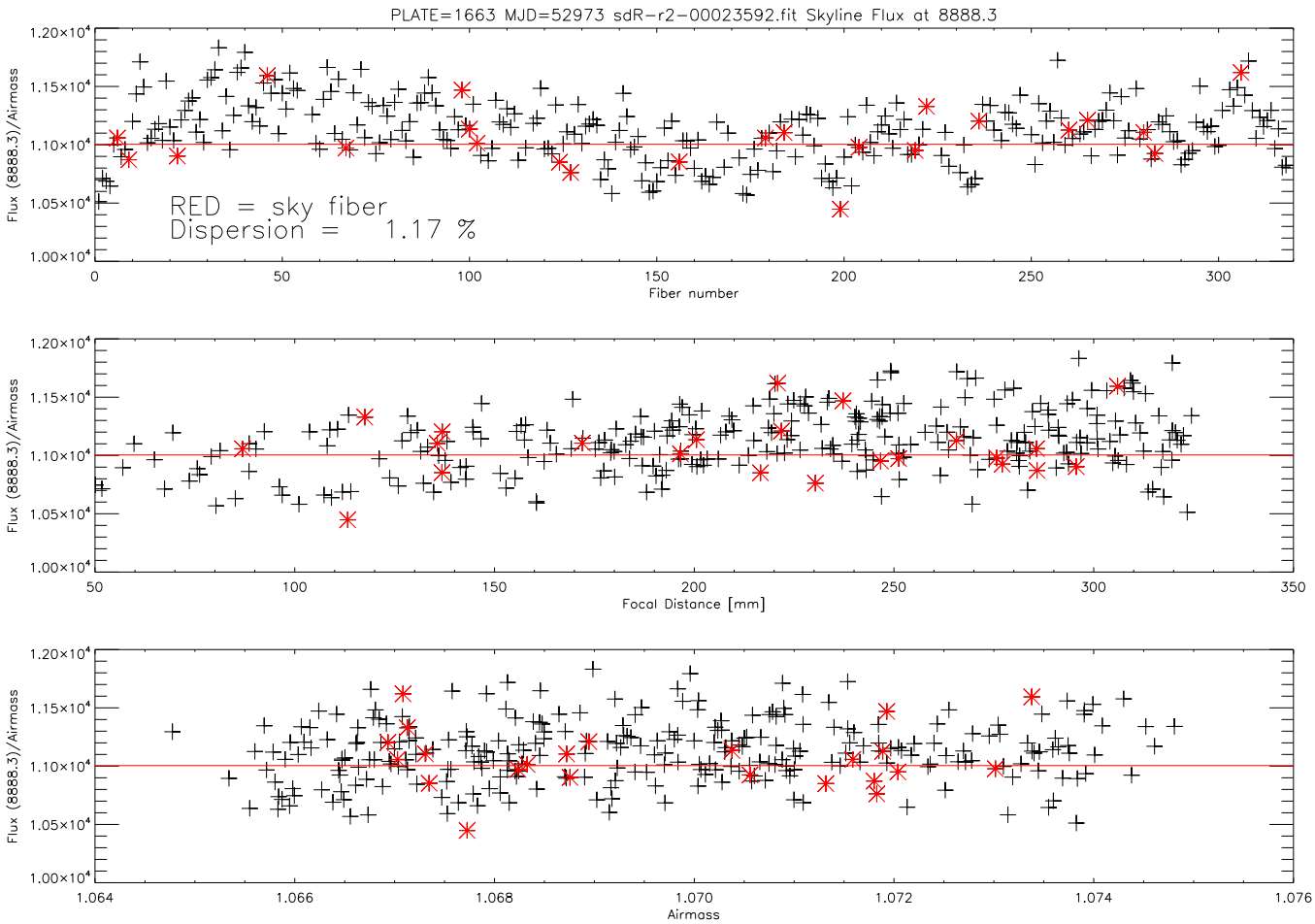

PLATE=1663 MJD=52973 sdR-r2-00023592.fit 2D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
15
10
5
0
-5
-10
50
100
150
200
250
300
Fiber number

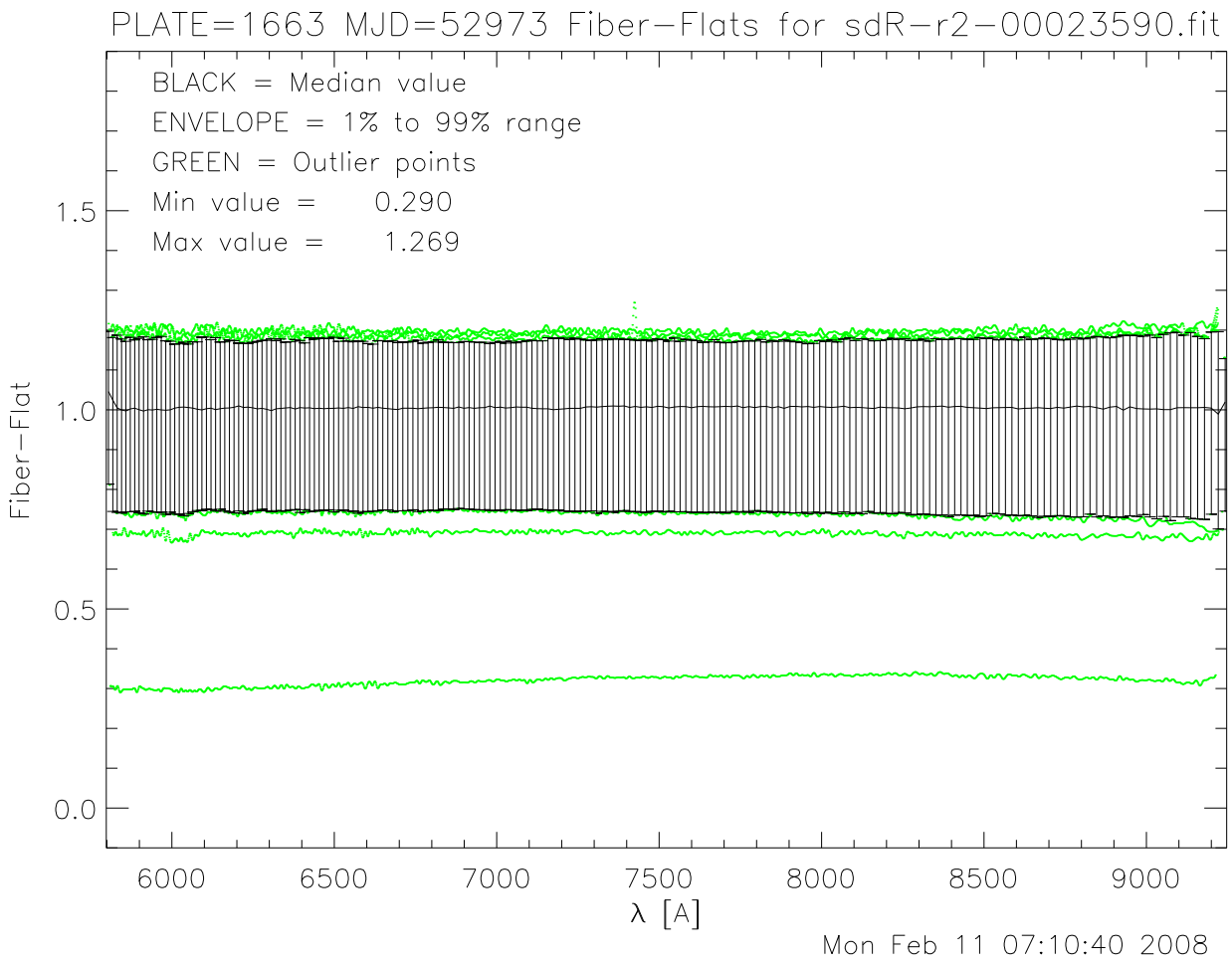

PLATE=1663 MJD=52973 sdR-r2-00023592.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
8820
8840
8860
8880
8900
λ [A]

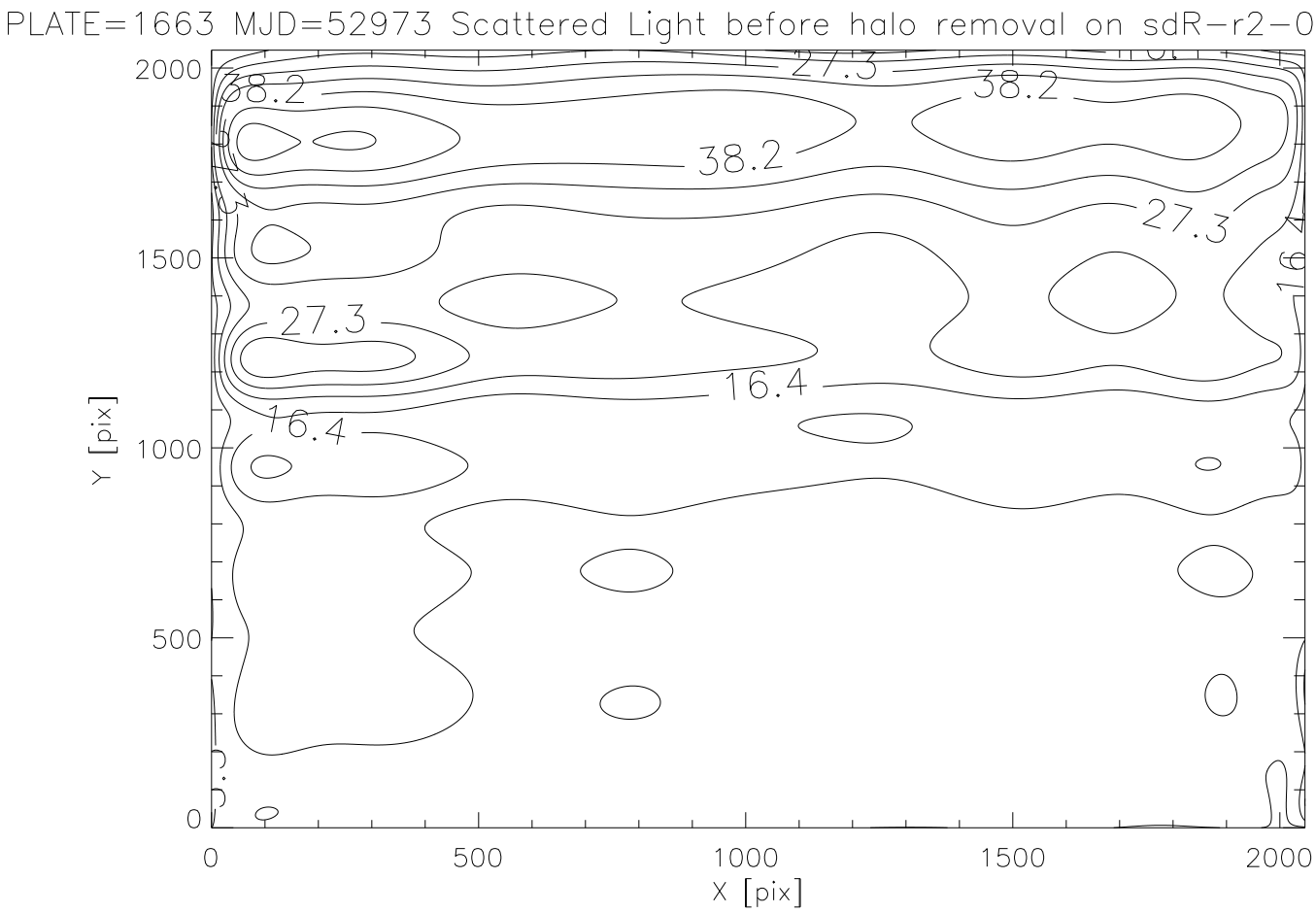

PLATE=1663 MJD=52973 sdR-r2-00023592.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
-2.0×10^3
8820
8840
8860
8880
8900
λ [A]

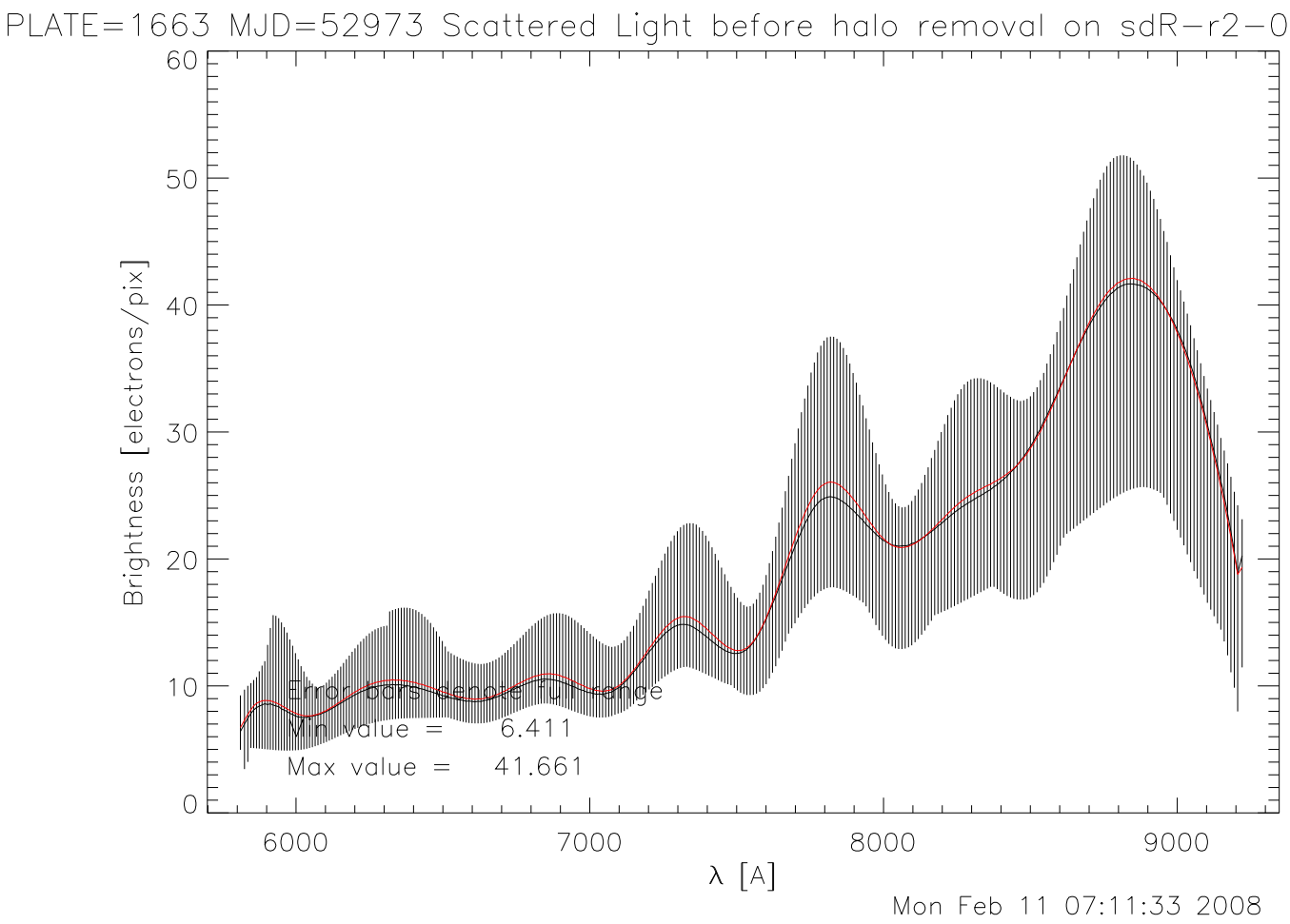

Number of sky fibers = 23
PLATE=1663 MJD=52973 sdR-r2-00023592.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

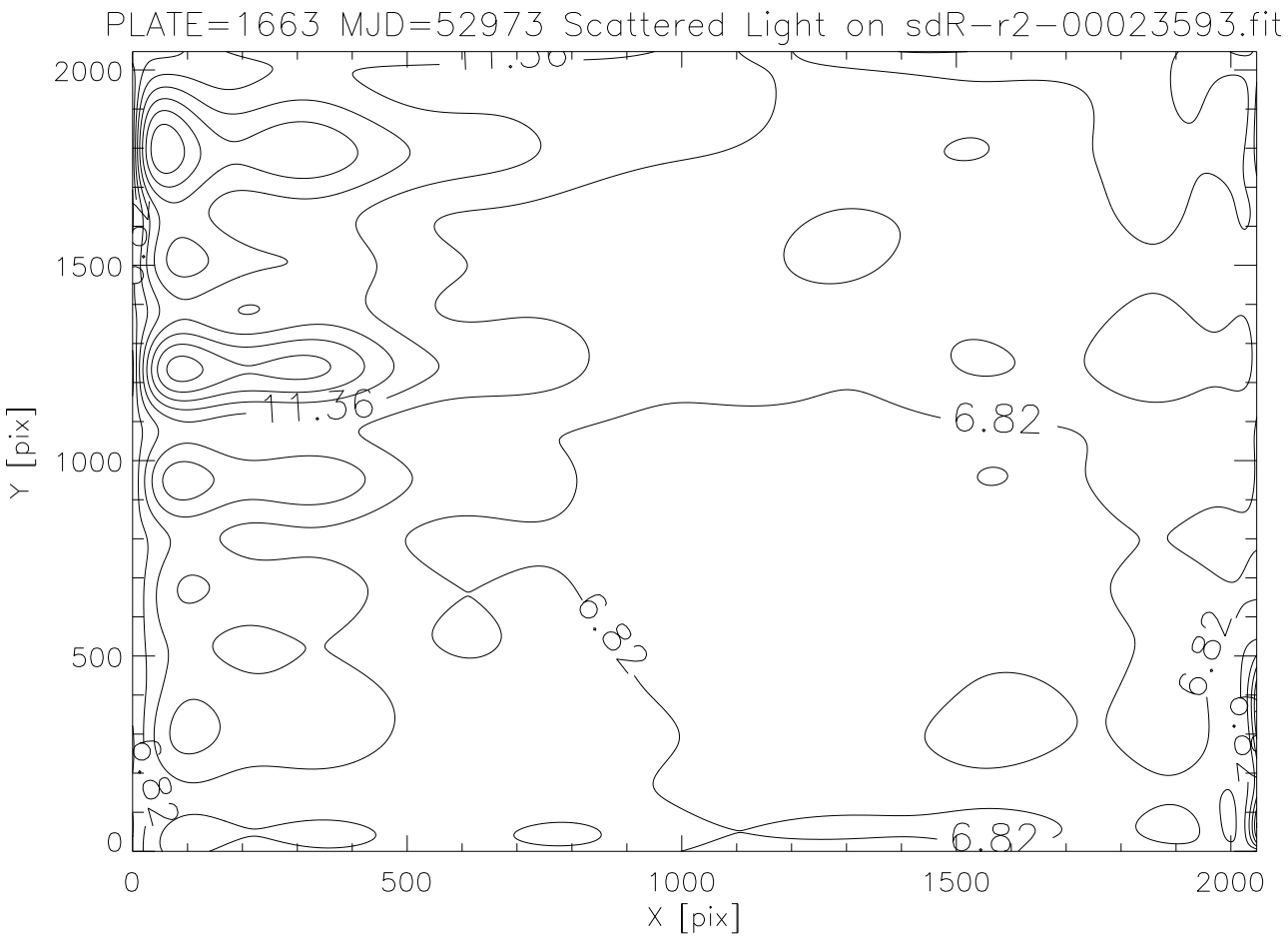

PLATE=1663 MJD=52973 sdR-r2-00023592.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.40 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

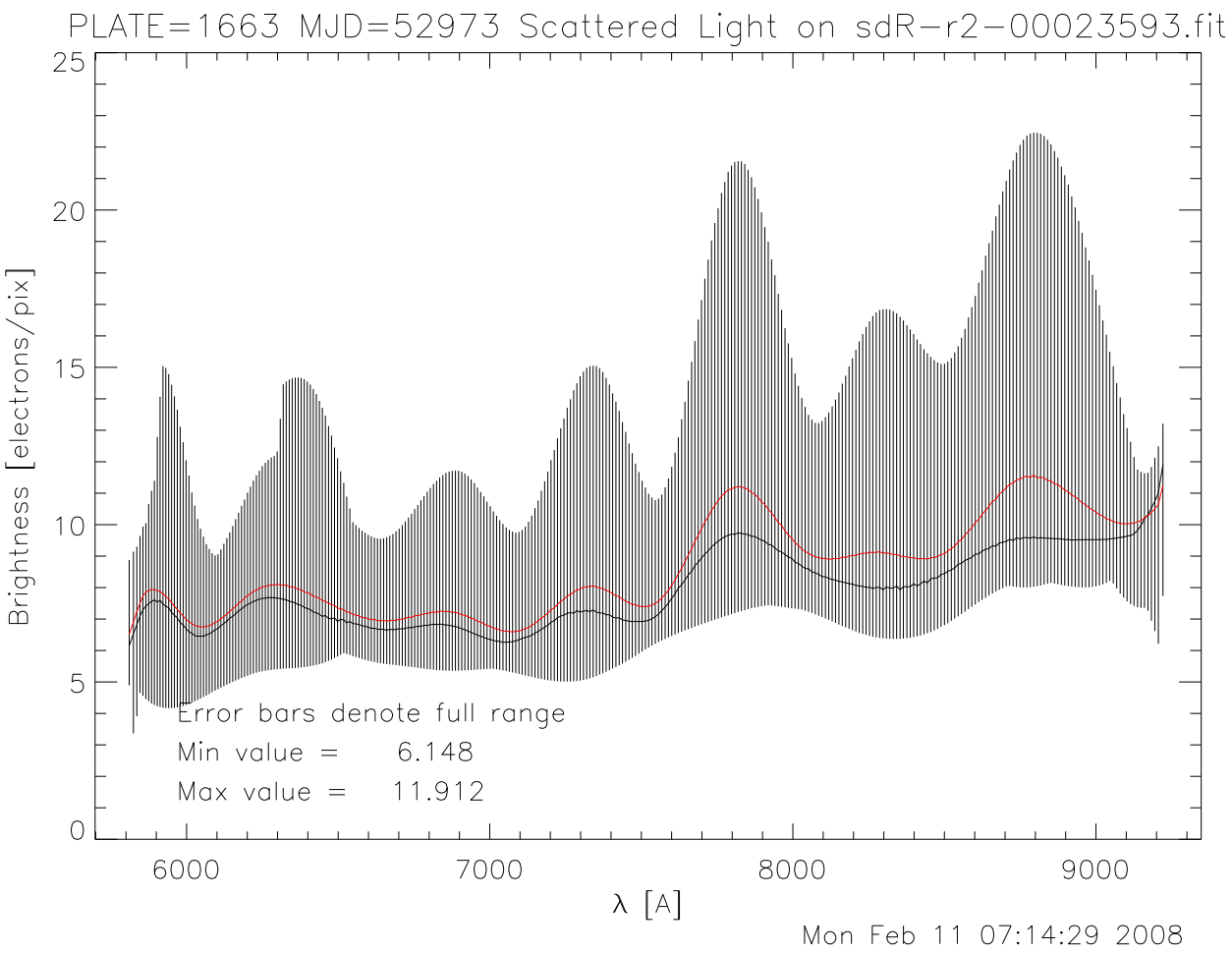

PLATE=1663 MJD=52973 sdR-r2-00023592.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.20×10^4
1.15×10^4
1.10×10^4
1.05×10^4
1.00×10^4
RED = sky fiber
Dispersion = 1.17 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1.20×10^4
1.15×10^4
1.10×10^4
1.05×10^4
1.00×10^4
50
100
150
200
250
300
350
Focal Distance [mm]
Flux (8888.3)/Airmass
1.20×10^4
1.15×10^4
1.10×10^4
1.05×10^4
1.00×10^4
1.064
1.066
1.068
1.070
1.072
1.074
1.076
Airmass

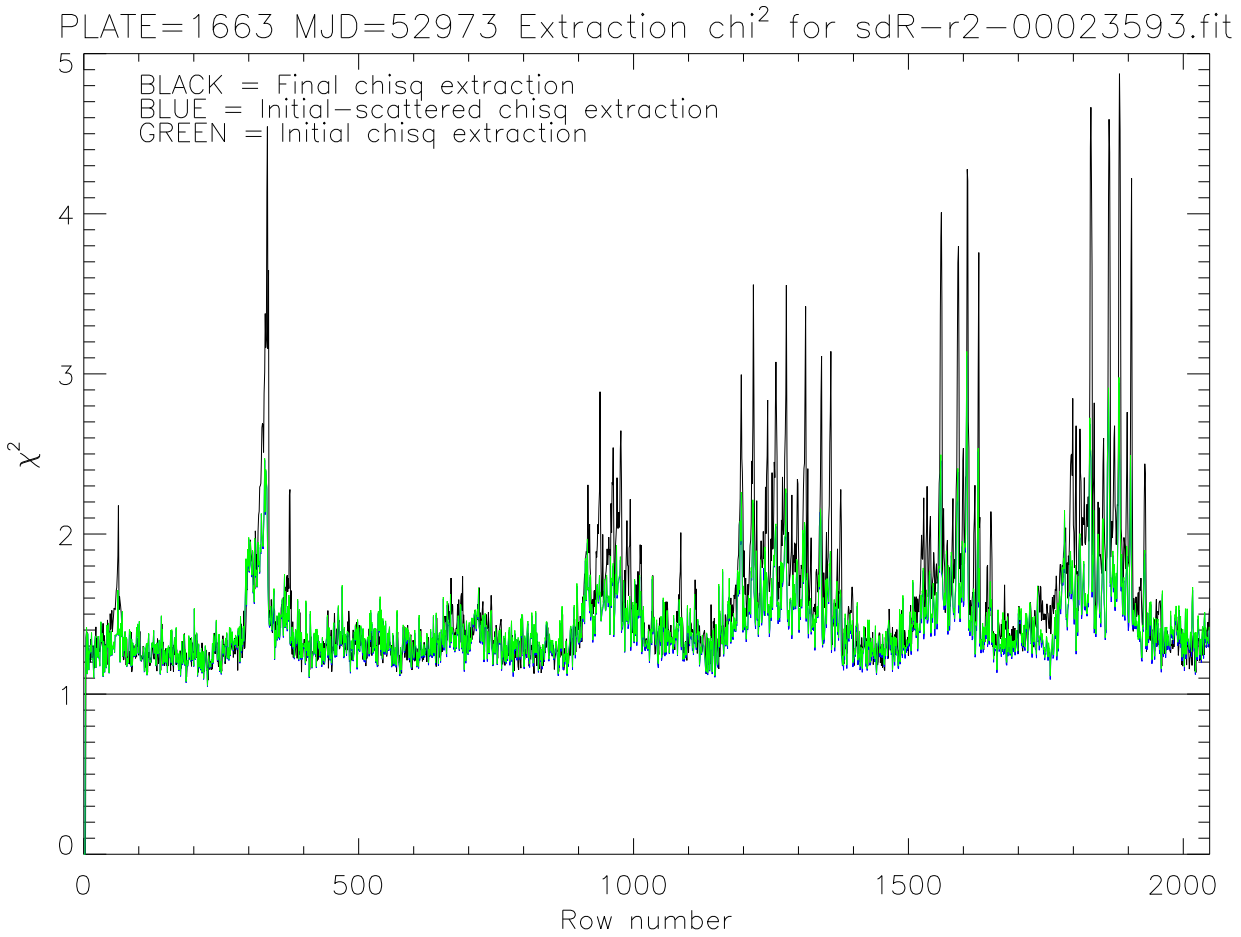

PLATE=1663 MJD=52973 Fiber−Flats for sdR−r2−00023590.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.290
Max value = 1.269
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Feb 11 07:10:40 2008

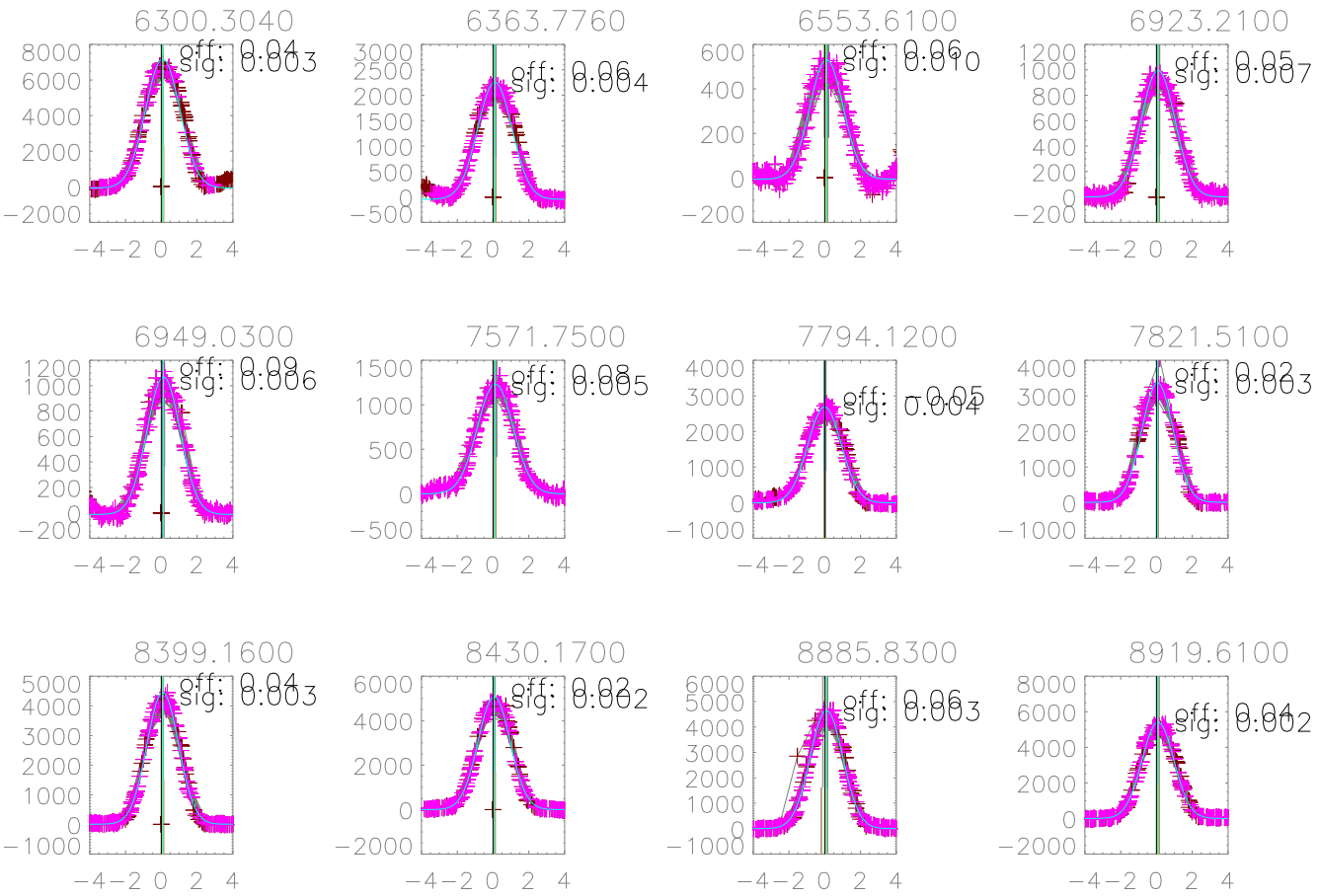

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r2-00023593.fi
38.2
27.3
16.4
Y [pix]
X [pix]
0
500
1000
1500
2000

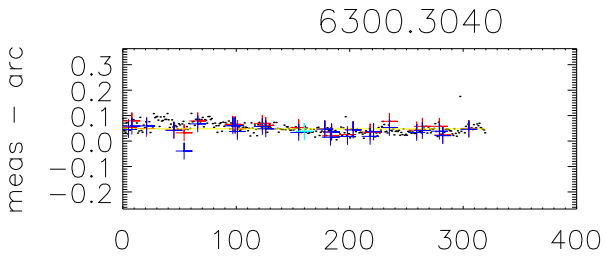

PLATE=1663 MJD=52973 Scattered Light before halo removal on sdR-r2-00023593.fi
Brightness [electrons/pix]
λ [A]
Error bars denote 1σ range
Min value = 6.411
Max value = 41.661
Mon Feb 11 07:11:33 2008

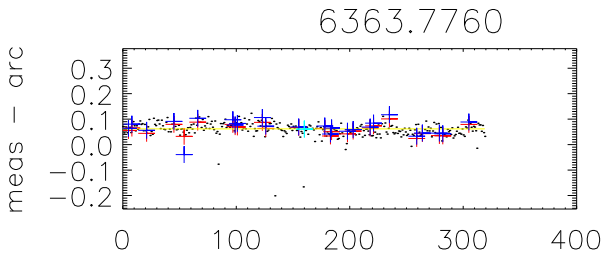

PLATE=1663 MJD=52973 Scattered Light on sdR-r2-00023593.fit
11.36
6.82
Y [pix]
X [pix]
0
500
1000
1500
2000

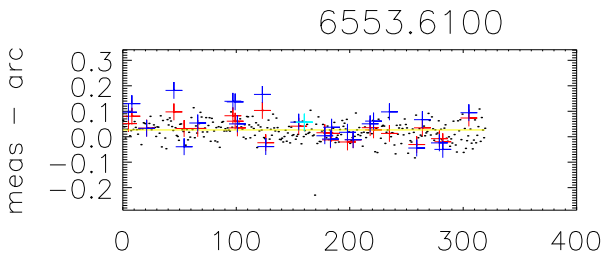

PLATE=1663 MJD=52973 Scattered Light on sdR-r2-00023593.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.148
Max value = 11.912
Mon Feb 11 07:14:29 2008

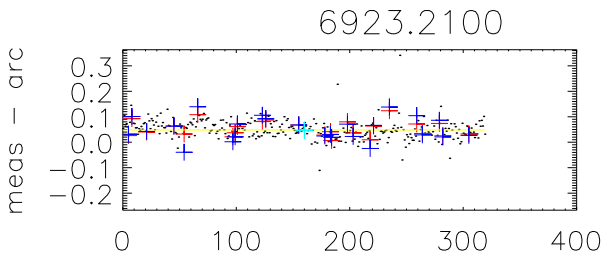

PLATE=1663 MJD=52973 Extraction chi^2 for sdR-r2-00023593.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

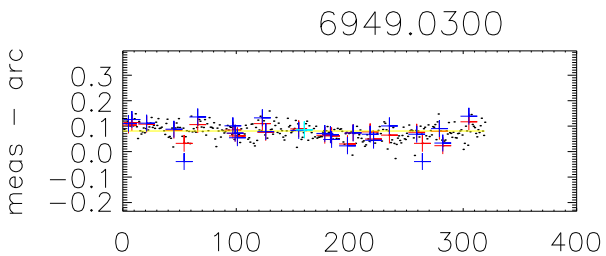

6300.3040
off: 0.04
sig: 0.003
6363.7760
off: 0.06
sig: 0.004
6553.6100
off: 0.06
sig: 0.010
6923.2100
off: 0.05
sig: 0.007
6949.0300
off: 0.09
sig: 0.006
7571.7500
off: 0.08
sig: 0.005
7794.1200
off: 0.05
sig: 0.004
7821.5100
off: 0.02
sig: 0.003
8399.1600
off: 0.04
sig: 0.003
8430.1700
off: 0.02
sig: 0.002
8885.8300
off: 0.06
sig: 0.003
8919.6100
off: 0.04
sig: 0.002

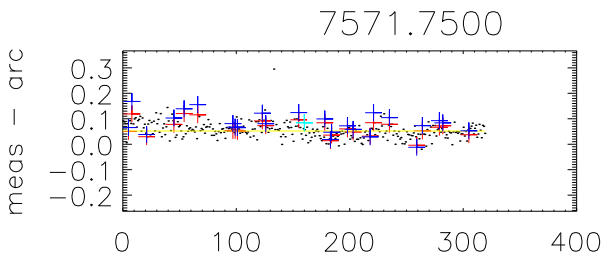

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

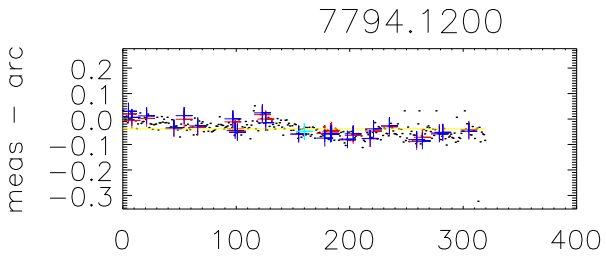

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

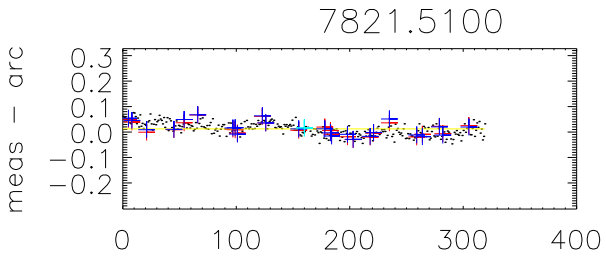

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

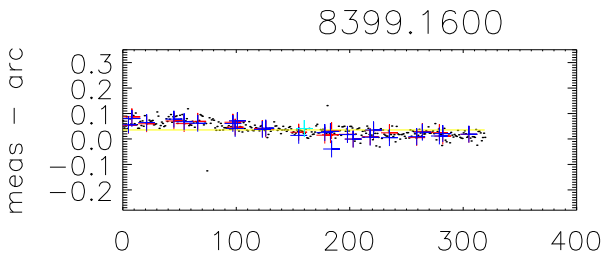

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

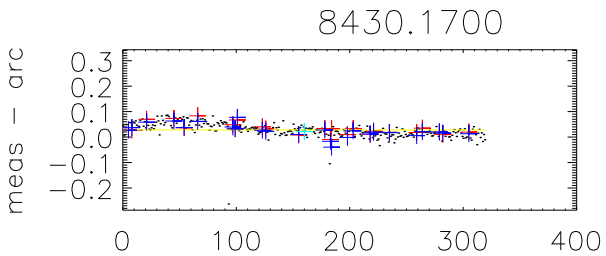

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

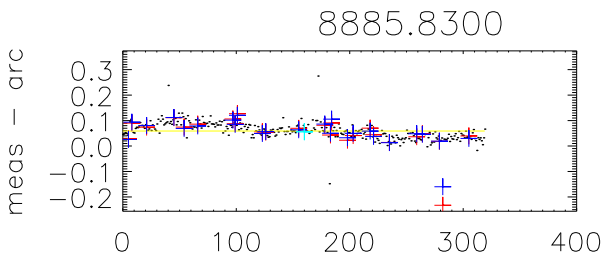

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

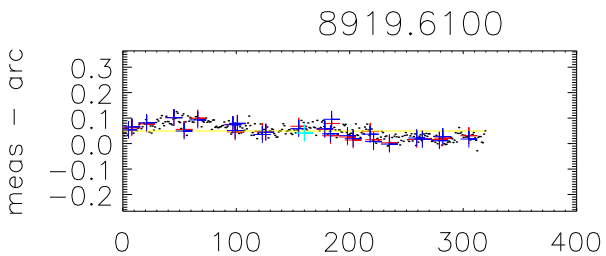

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

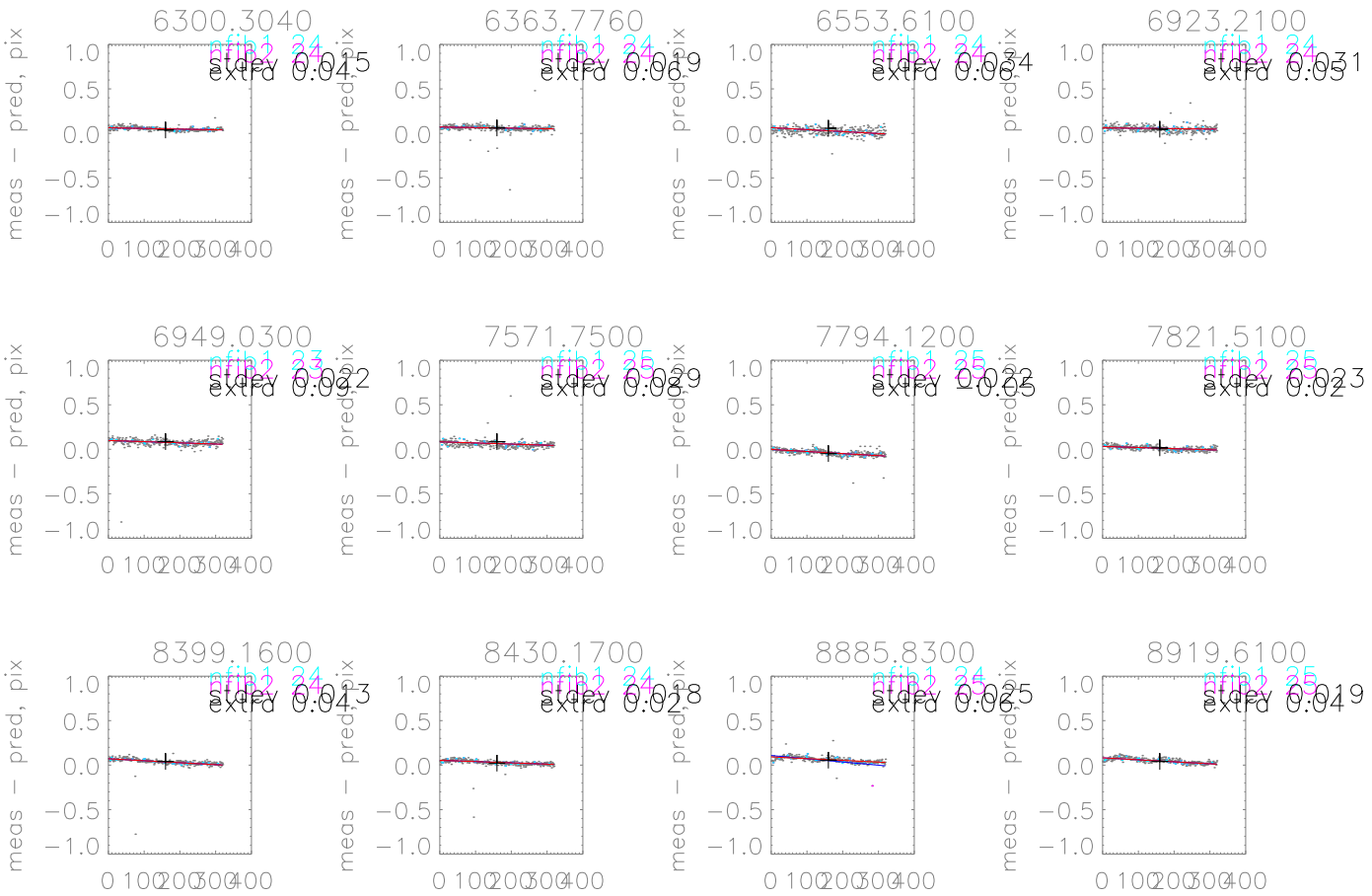

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

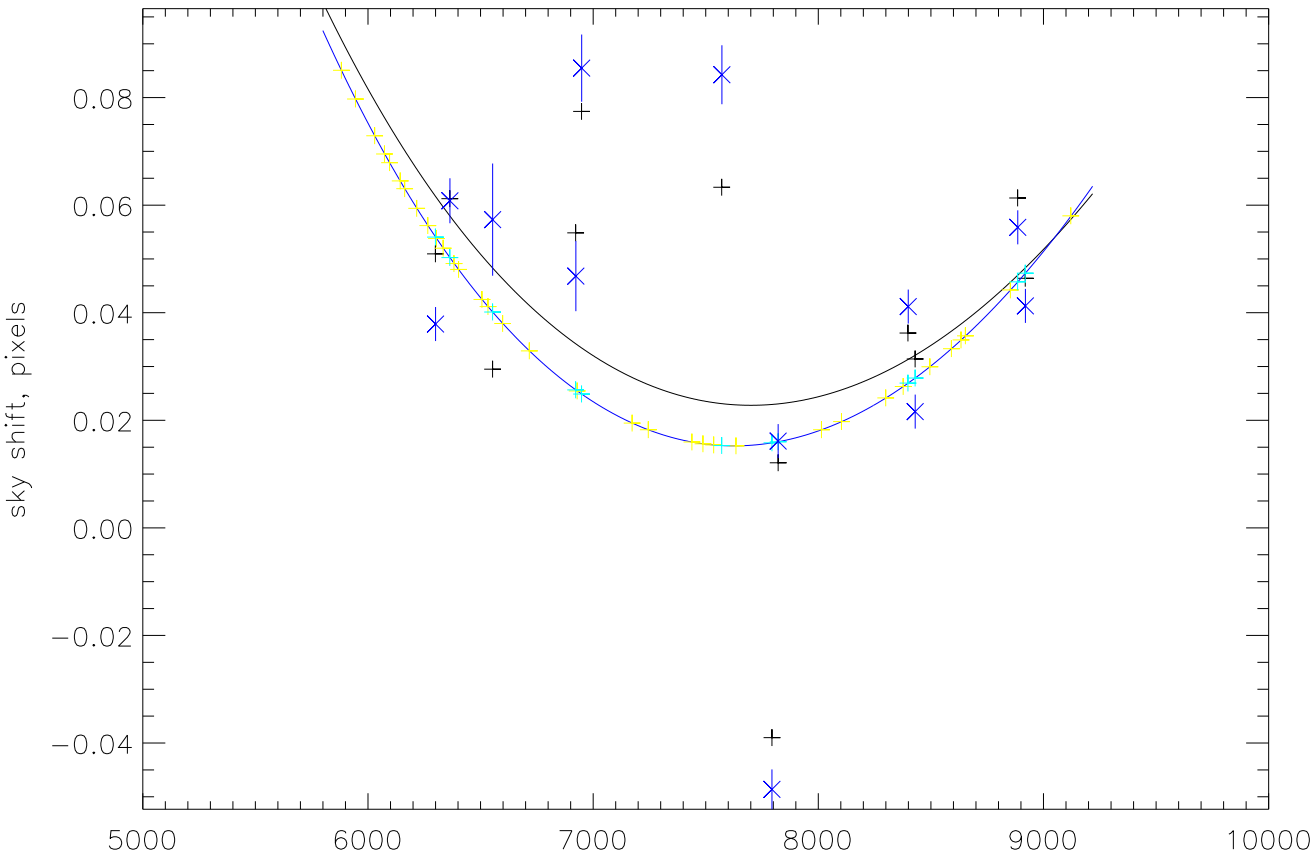

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

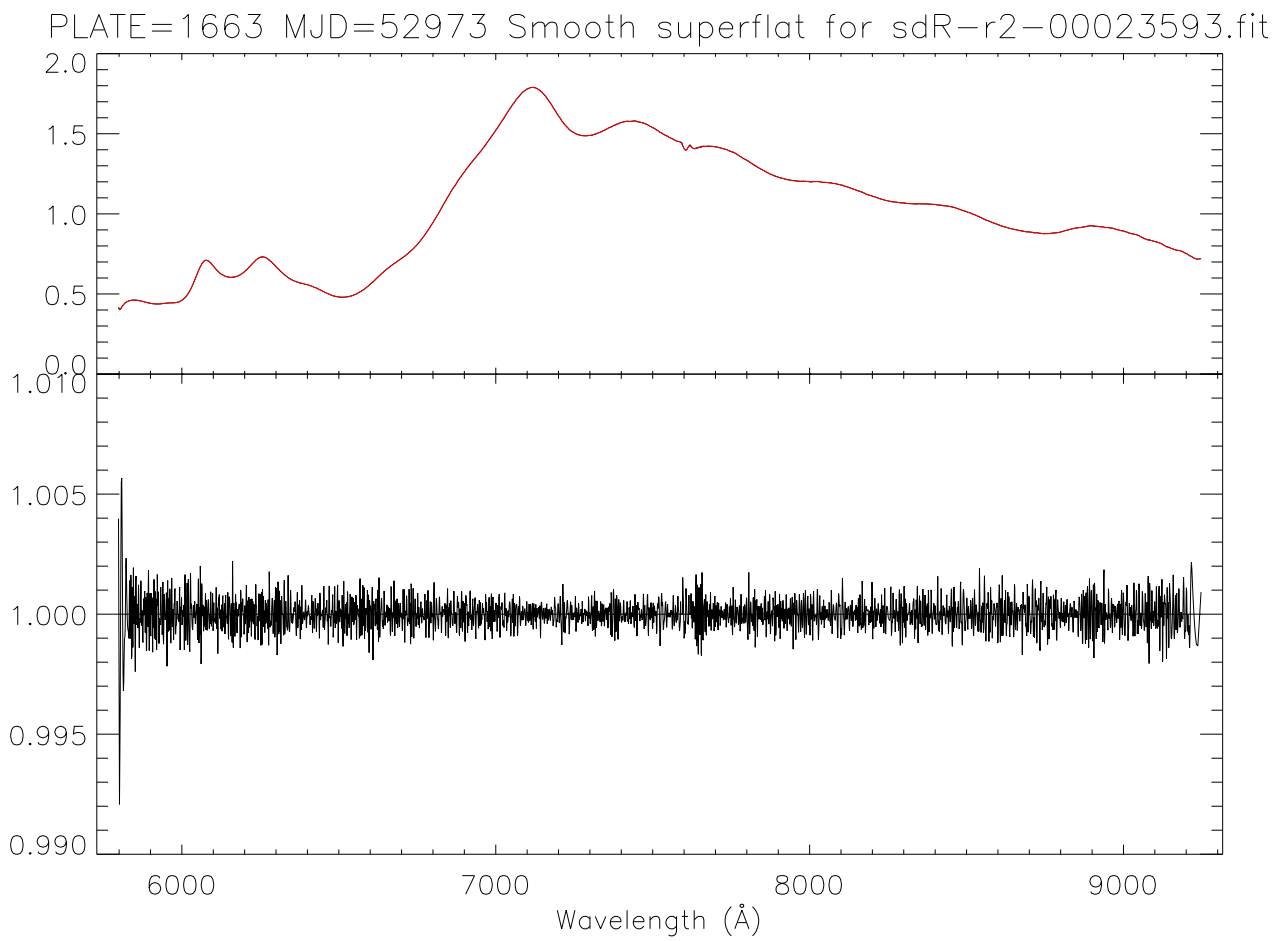

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

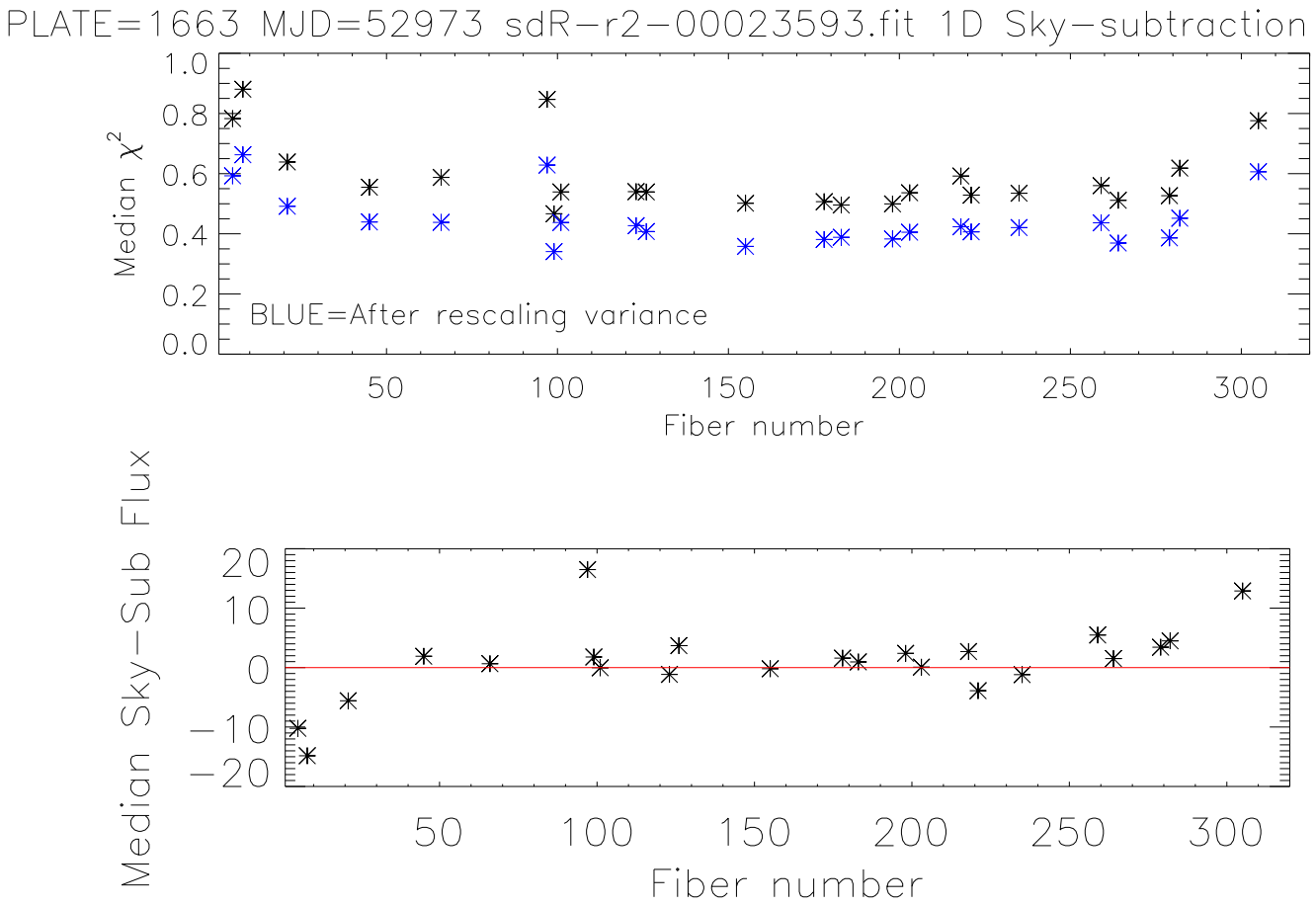

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

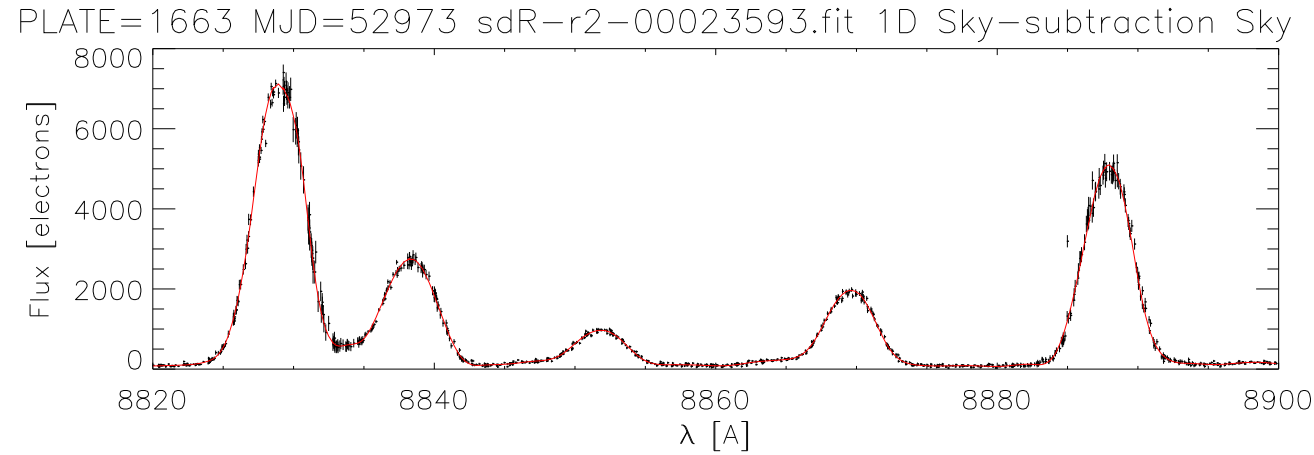

6300.3040
mfib1 24
mfib2 24
stdev 0.045
extra 0.045
6363.7760
mfib1 24
mfib2 24
stdev 0.019
extra 0.069
6553.6100
mfib1 24
mfib2 24
stdev 0.034
extra 0.066
6923.2100
mfib1 24
mfib2 24
stdev 0.031
extra 0.05
6949.0300
mfib1 23
mfib2 24
stdev 0.022
extra 0.04
7571.7500
mfib1 25
mfib2 25
stdev 0.029
extra 0.087
7794.1200
mfib1 25
mfib2 25
stdev 0.032
extra −0.05
7821.5100
mfib1 25
mfib2 25
stdev 0.023
extra 0.02
8399.1600
mfib1 24
mfib2 24
stdev 0.013
extra 0.043
8430.1700
mfib1 24
mfib2 24
stdev 0.018
extra 0.02
8885.8300
mfib1 24
mfib2 25
stdev 0.025
extra 0.06
8919.6100
mfib1 25
mfib2 25
stdev 0.019
extra 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

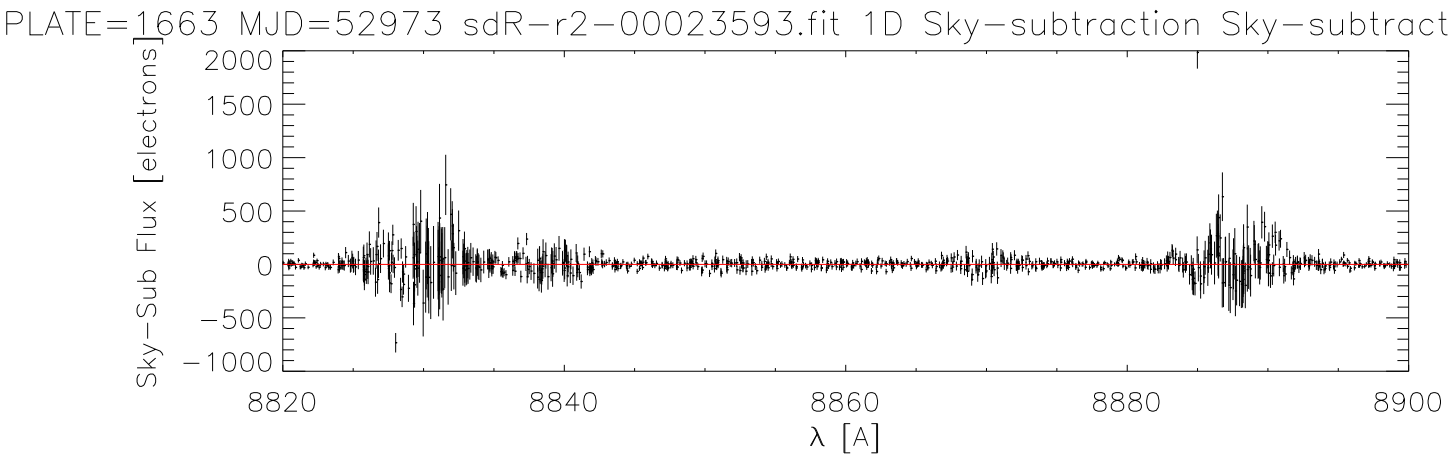

sky shift, pixels
0.08
0.06
0.04
0.02
0.00
−0.02
−0.04
5000
6000
7000
8000
9000
10000

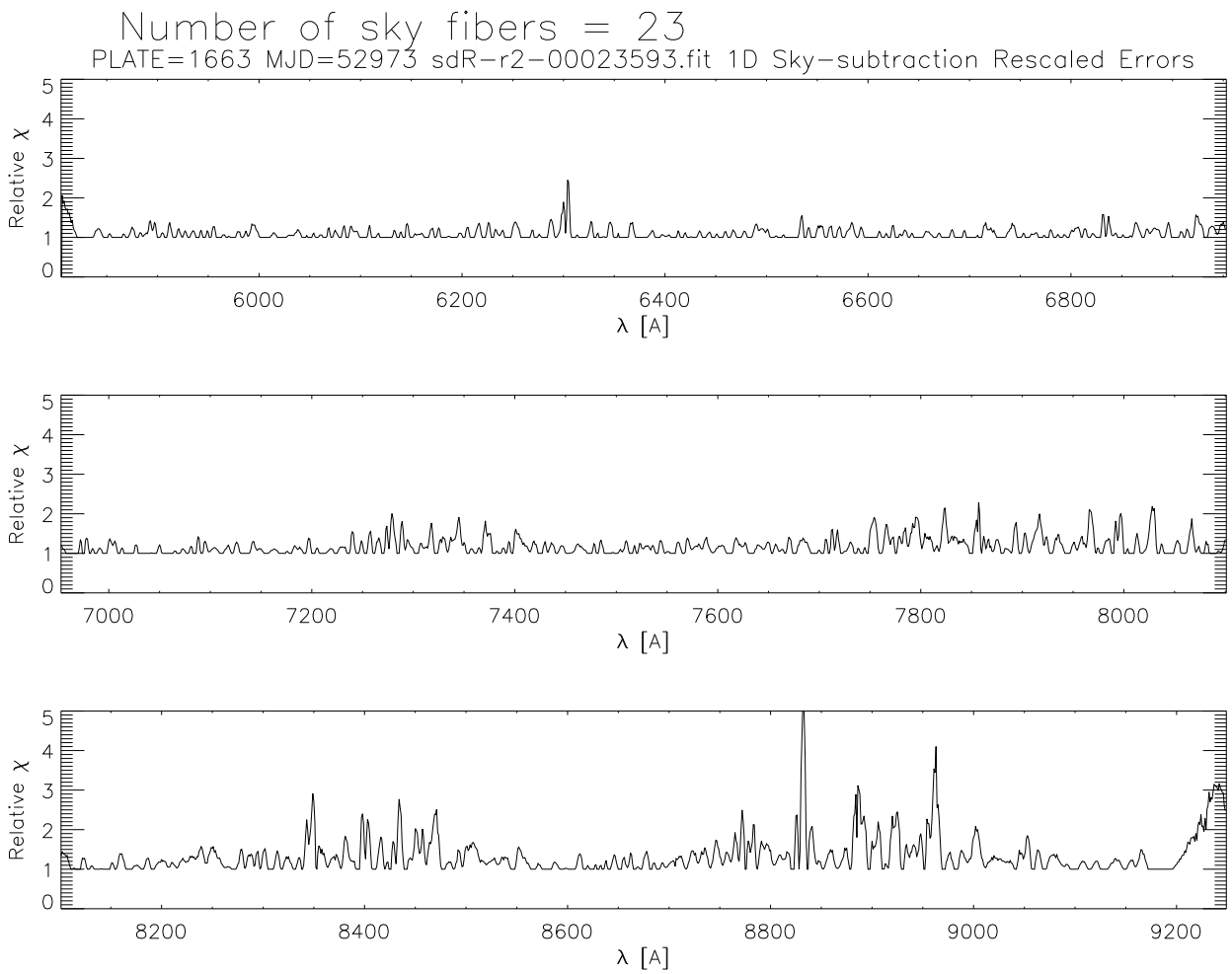
es= −0.0000

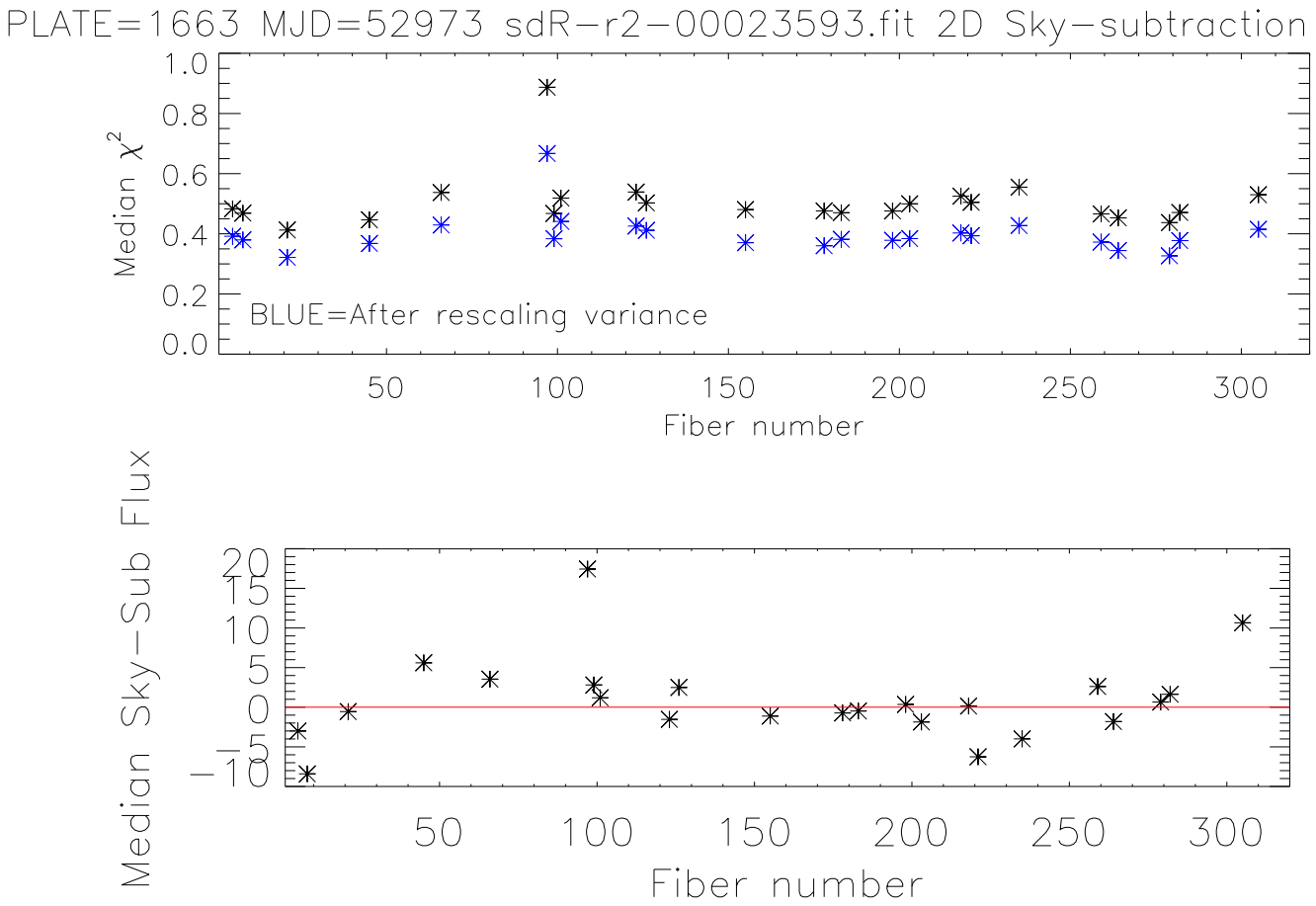

PLATE=1663 MJD=52973 Smooth superflat for sdR−r2−00023593.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

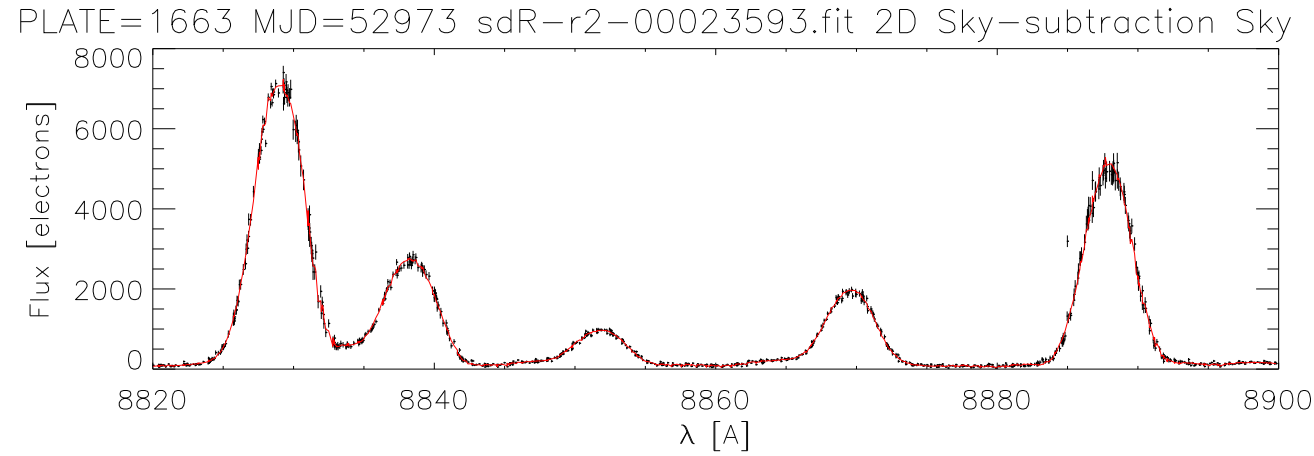

PLATE=1663 MJD=52973 sdR-r2-00023593.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

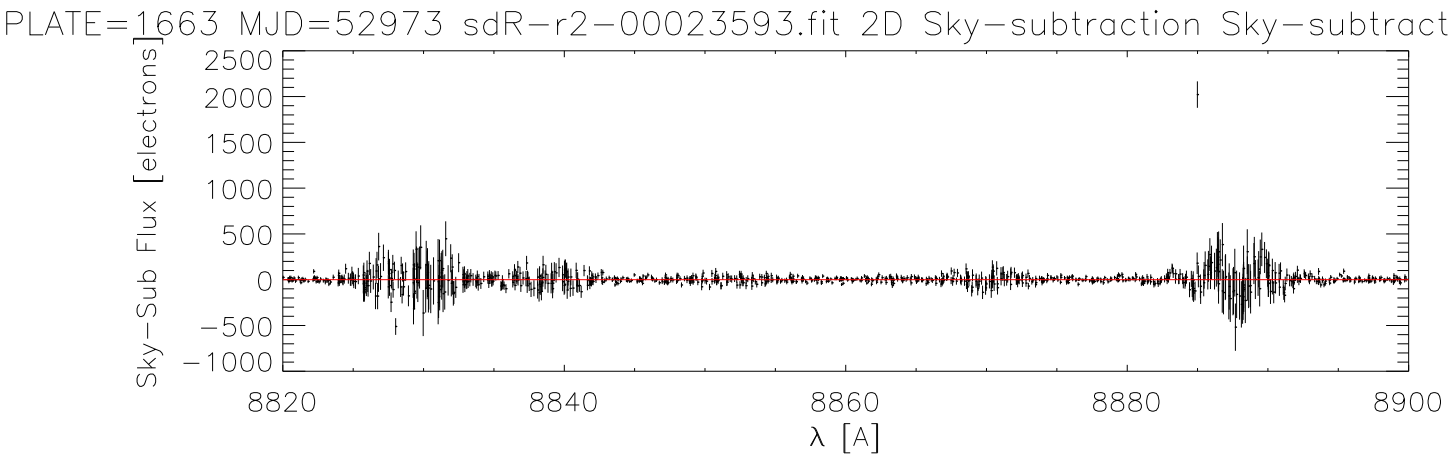

PLATE=1663 MJD=52973 sdR-r2-00023593.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

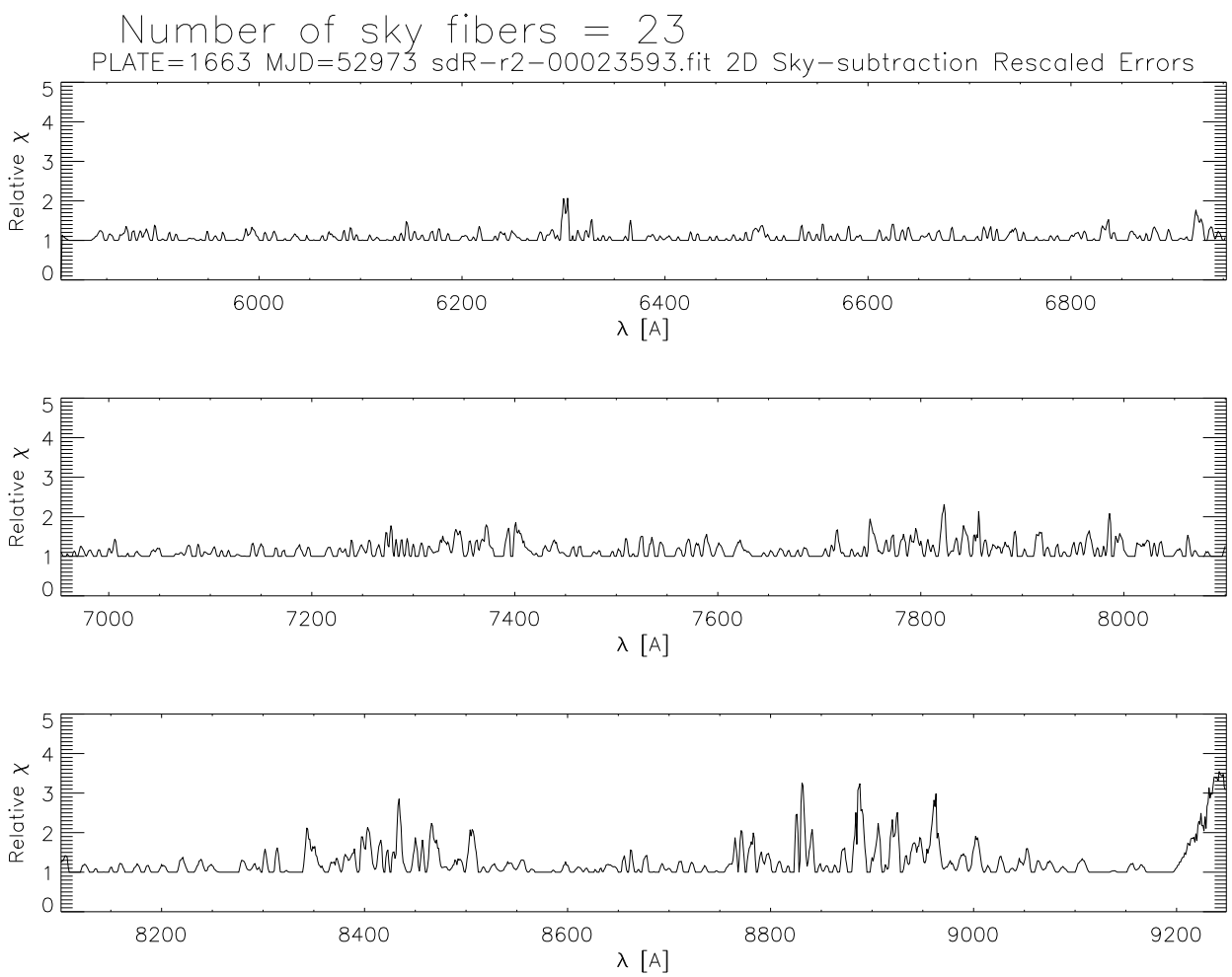

PLATE=1663 MJD=52973 sdR-r2-00023593.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]

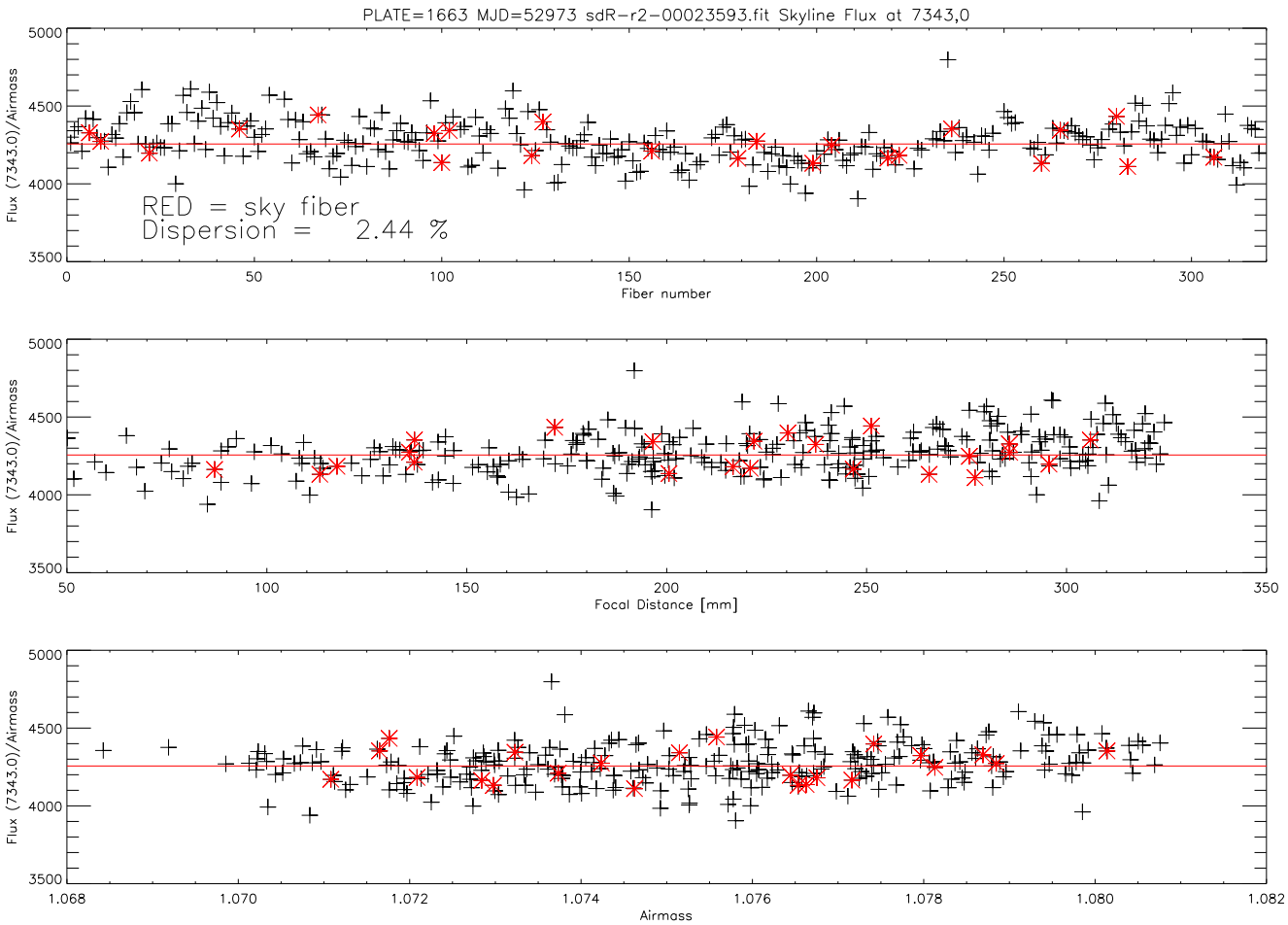

Number of sky fibers = 23
PLATE=1663 MJD=52973 sdR-r2-00023593.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

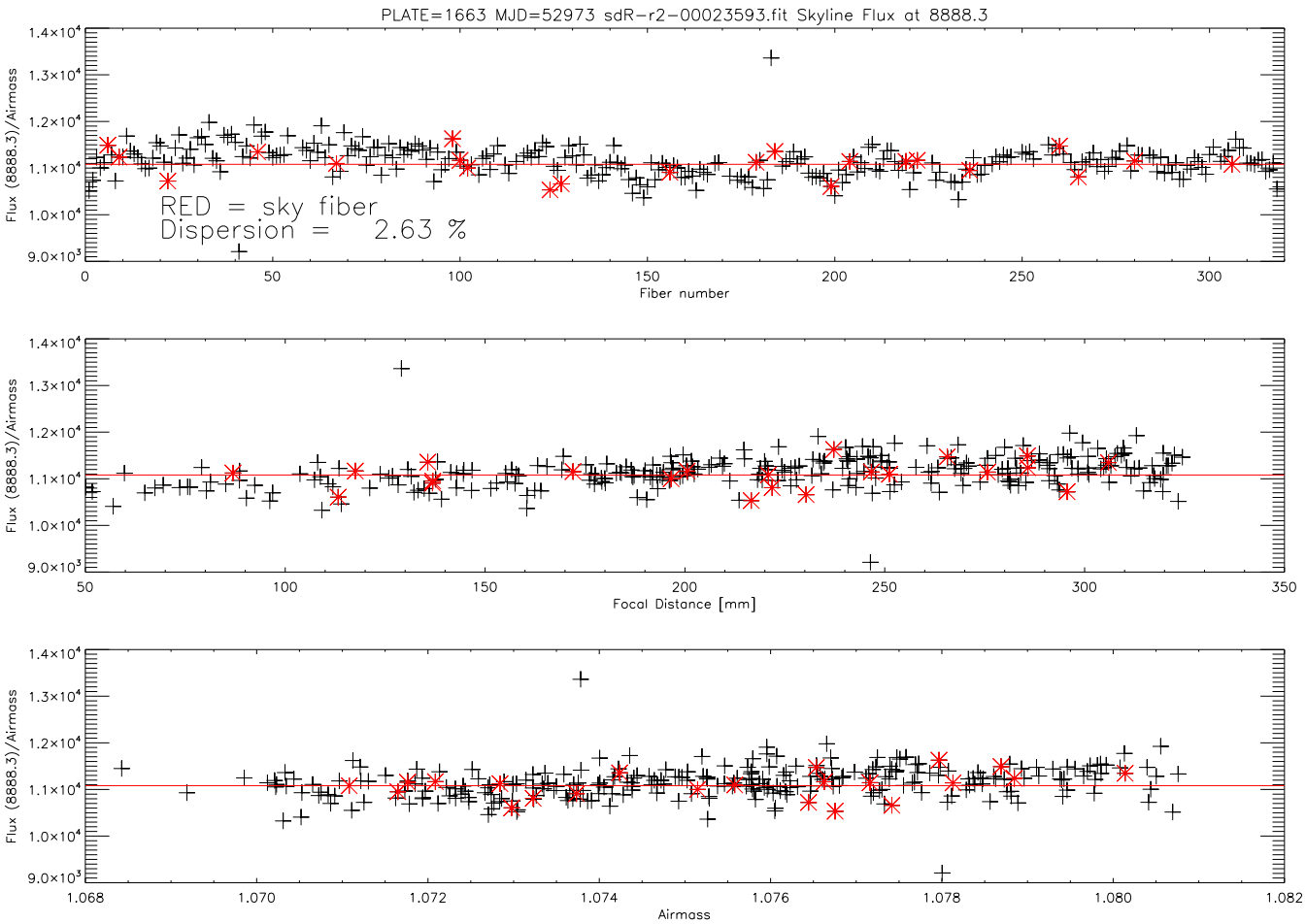

PLATE=1663 MJD=52973 sdR-r2-00023593.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=1663 MJD=52973 sdR-r2-00023593.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=1663 MJD=52973 sdR-r2-00023593.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
-1000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 23
PLATE=1663 MJD=52973 sdR-r2-00023593.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=1663 MJD=52973 sdR-r2-00023593.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.44 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=1663 MJD=52973 sdR-r2-00023593.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.63 %
Fiber number
Focal Distance [mm]
Airmass