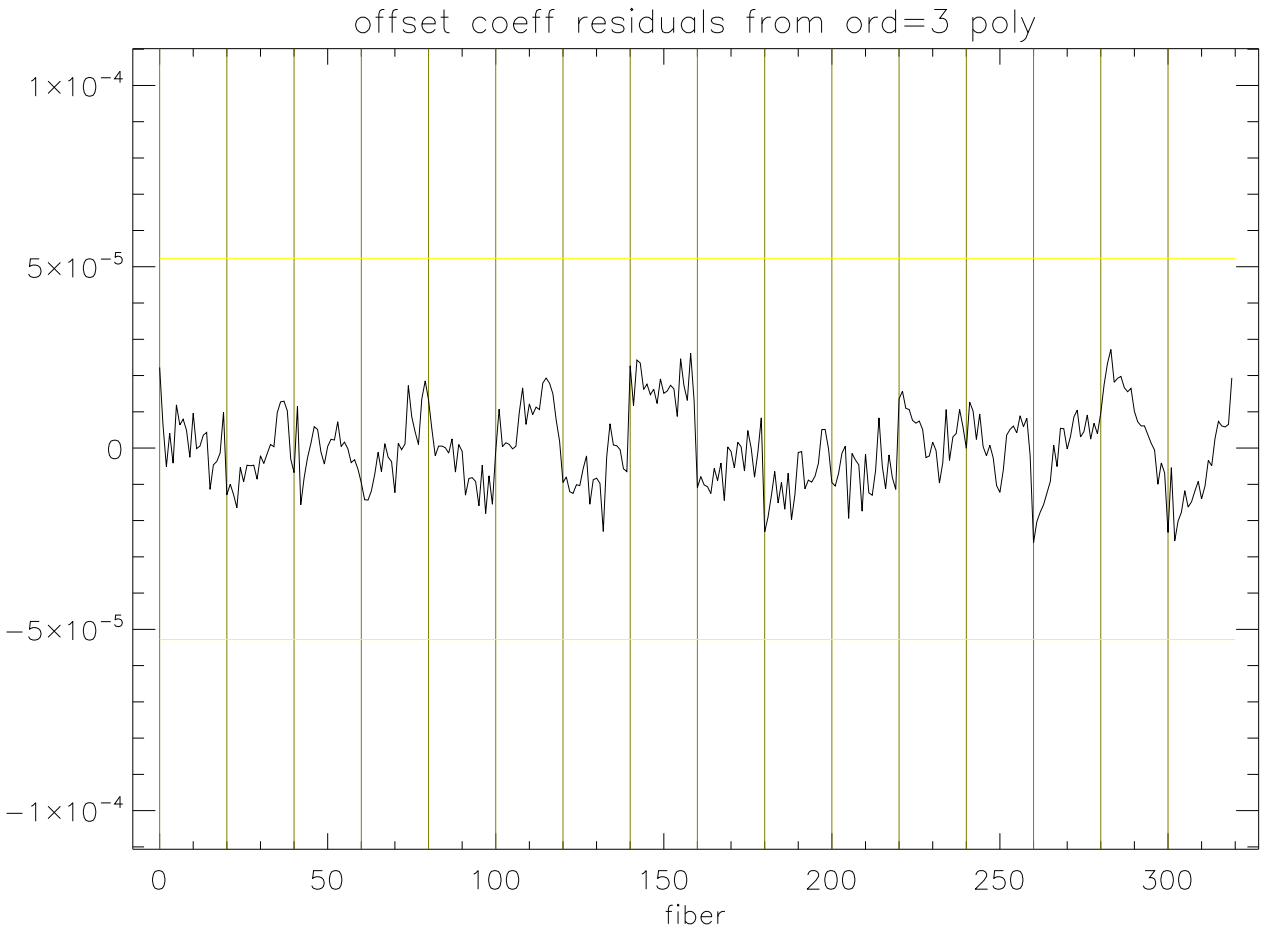
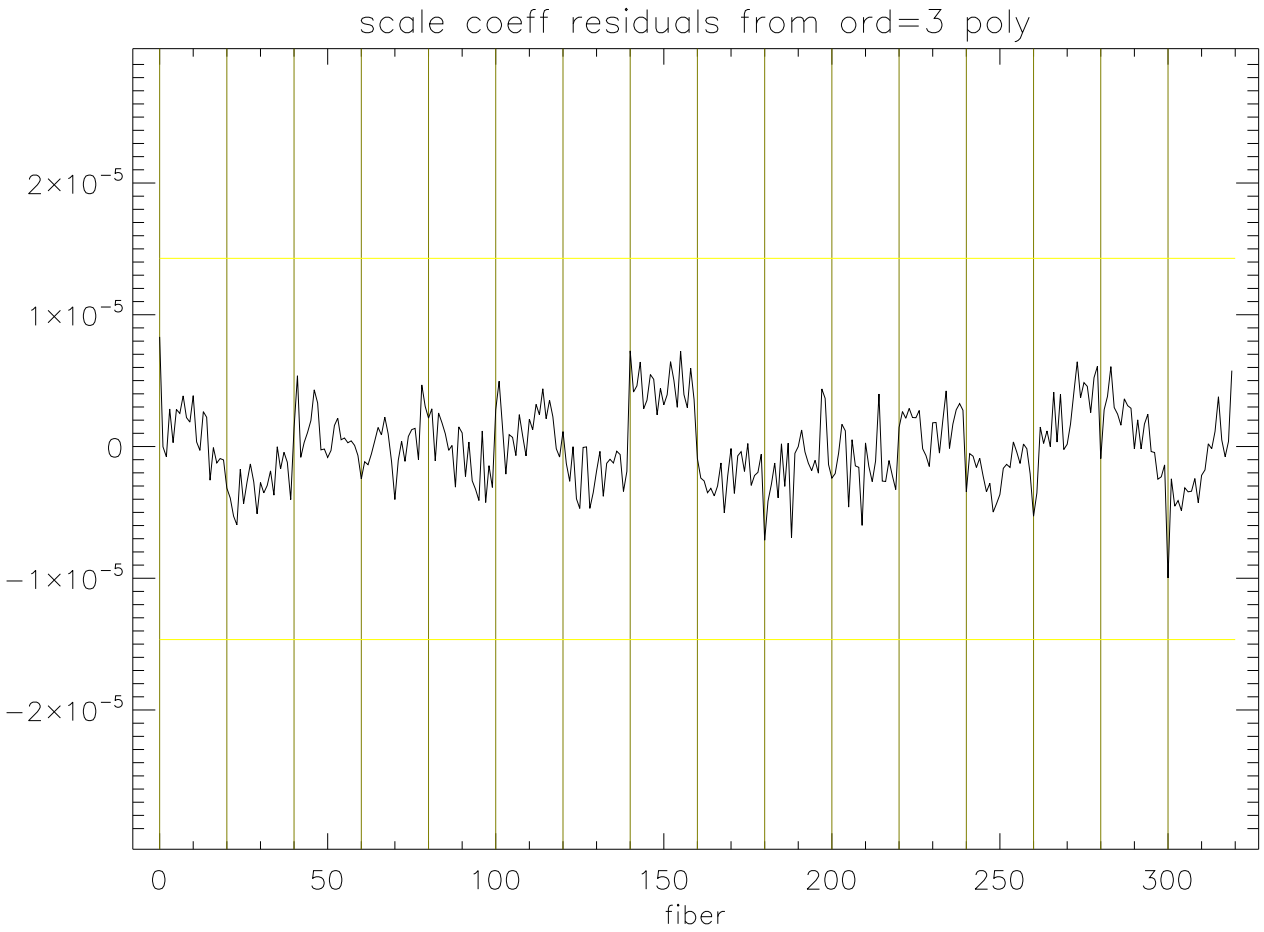
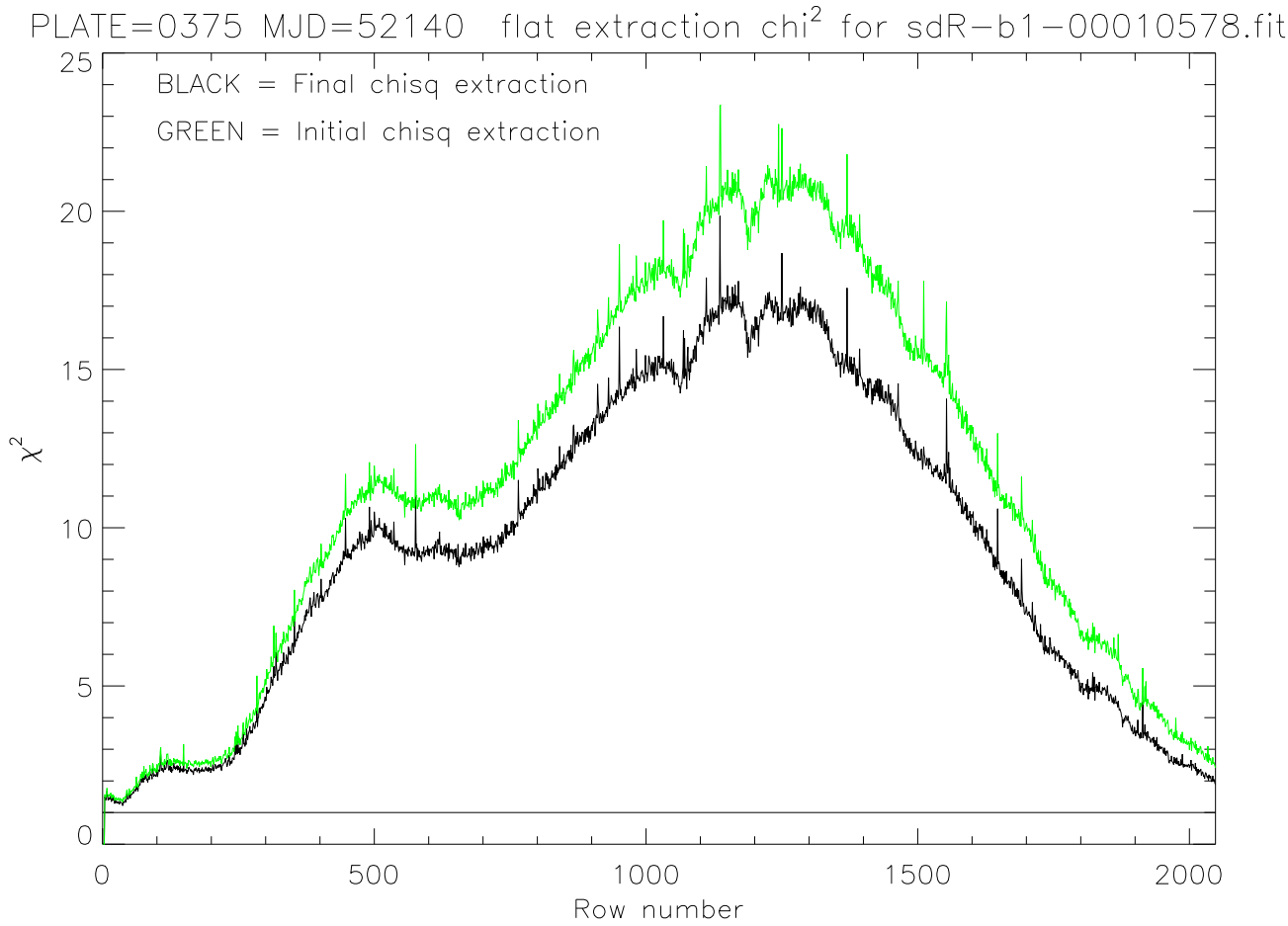
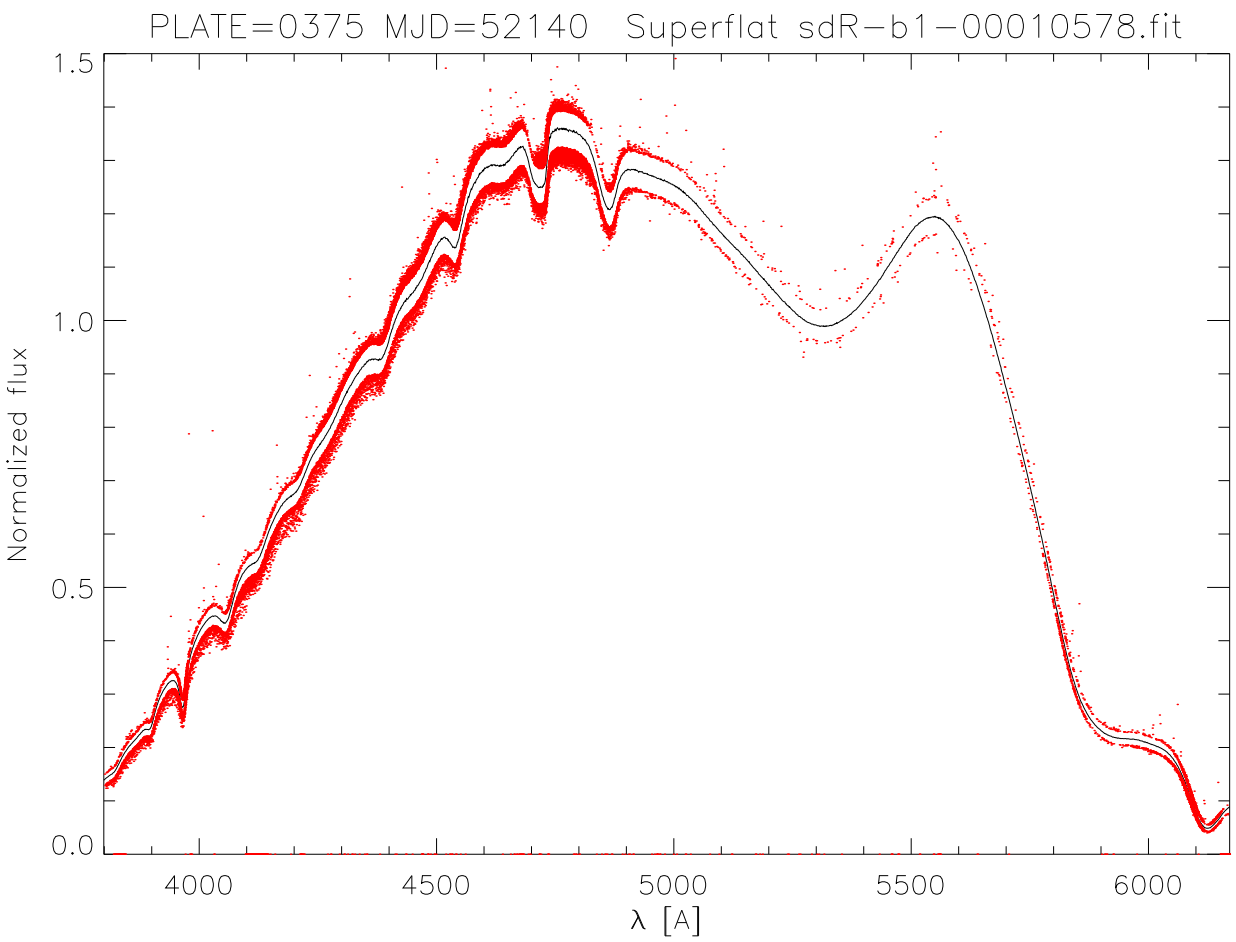
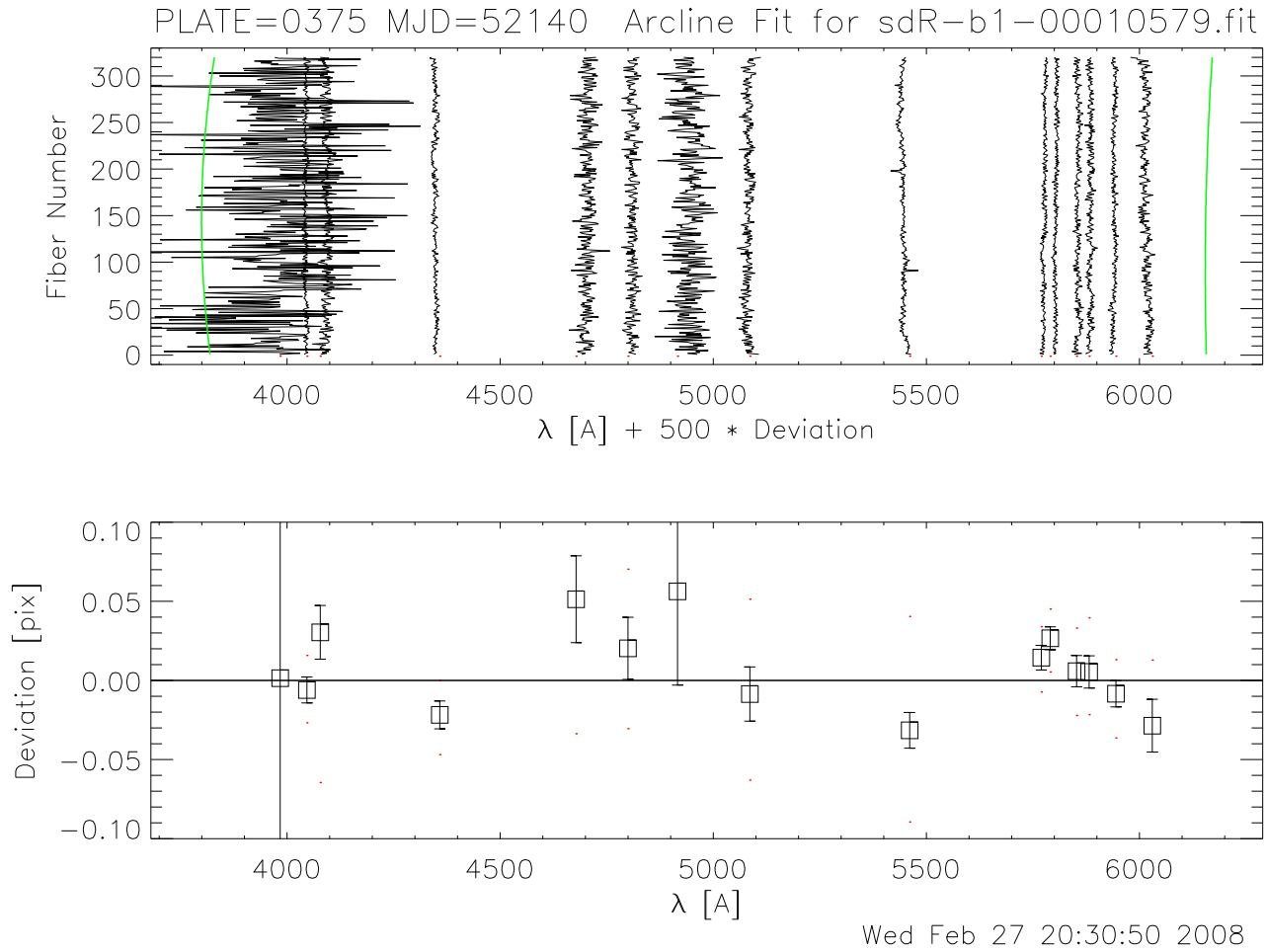

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber


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


PLATE=0375 MJD=52140 flat extraction chi^2 for sdR−b1−00010578.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
25
0
500
1000
1500
2000


PLATE=0375 MJD=52140 Superflat sdR-b1-00010578.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]


PLATE=0375 MJD=52140 Arcline Fit for sdR-b1-00010579.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
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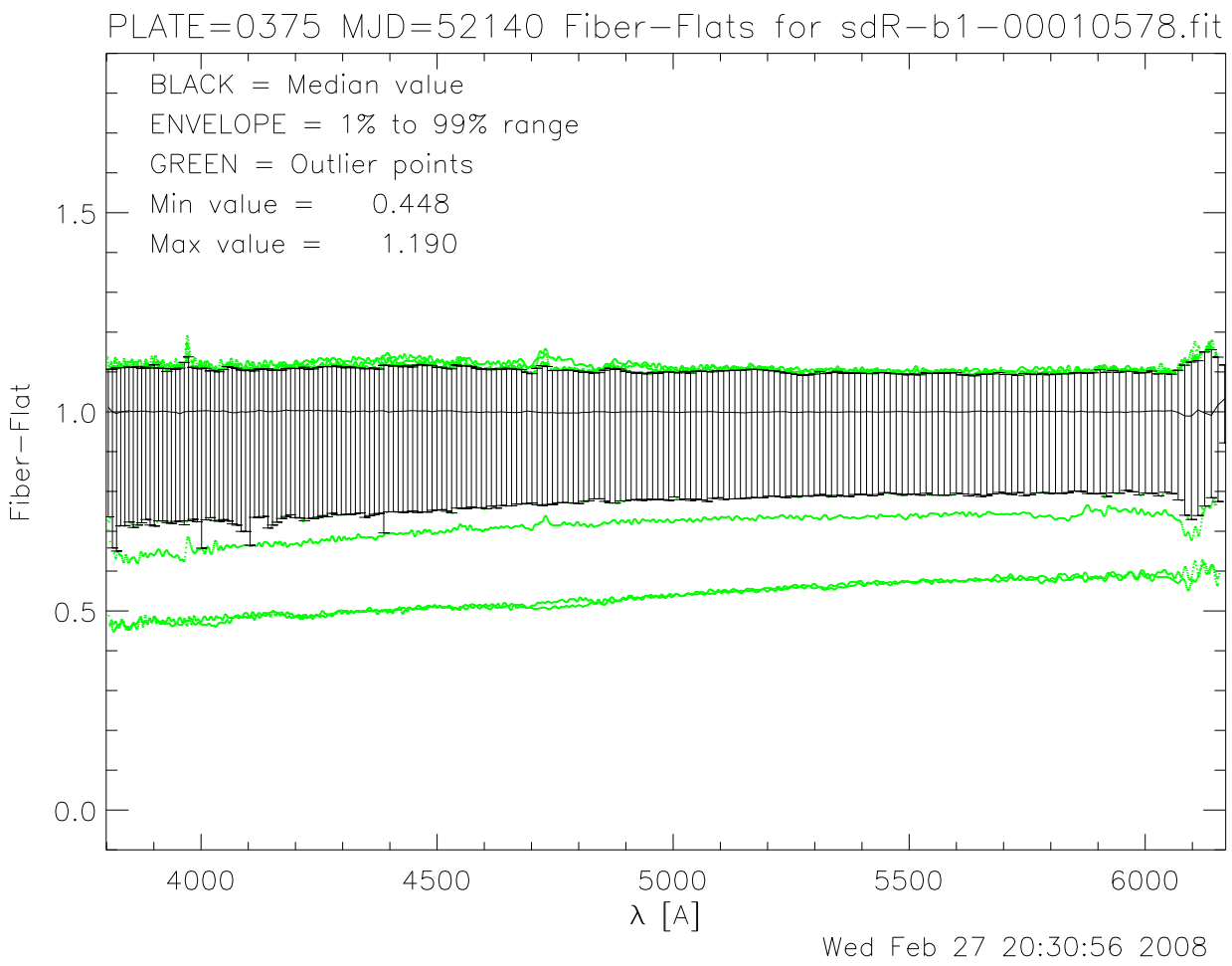
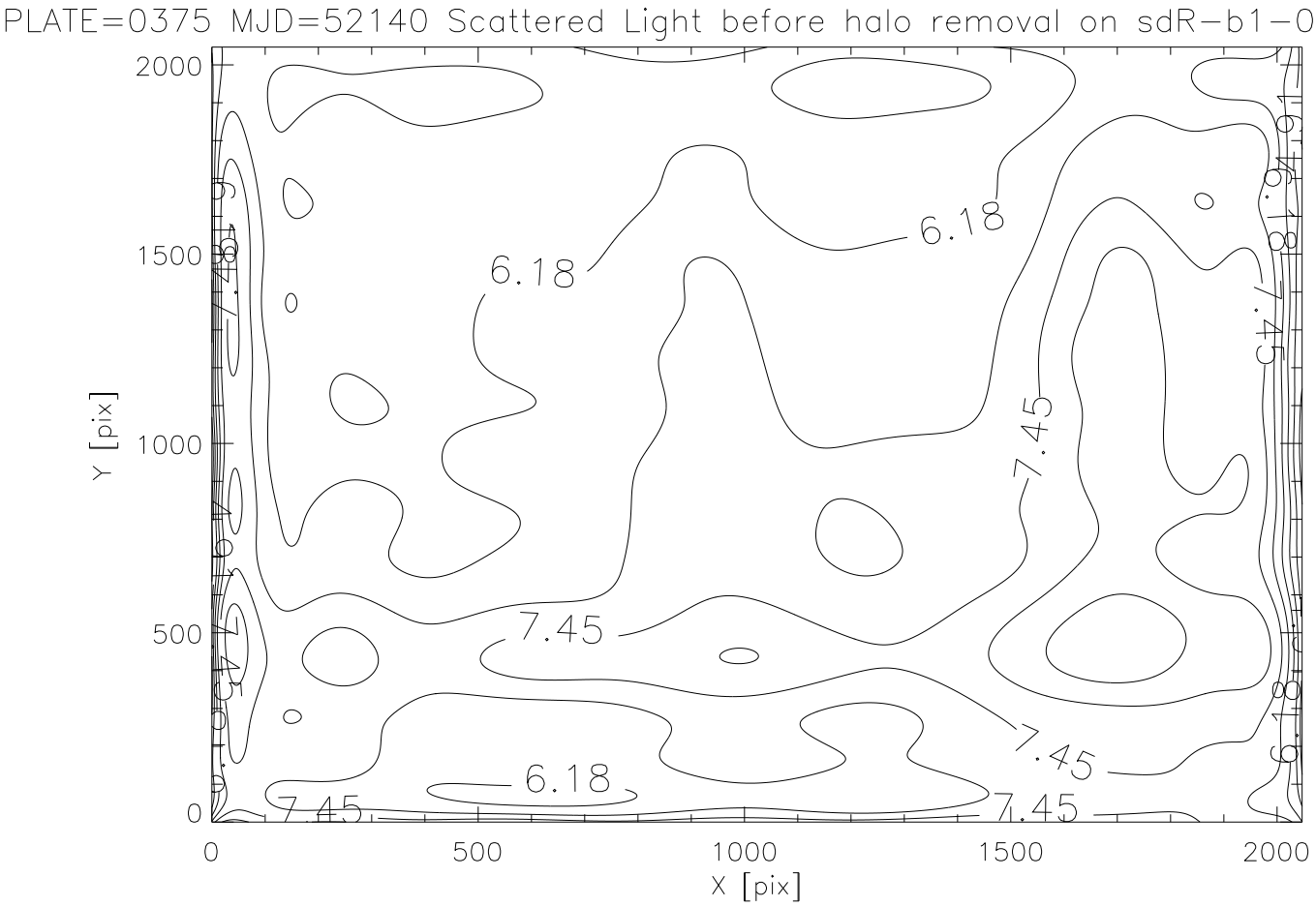
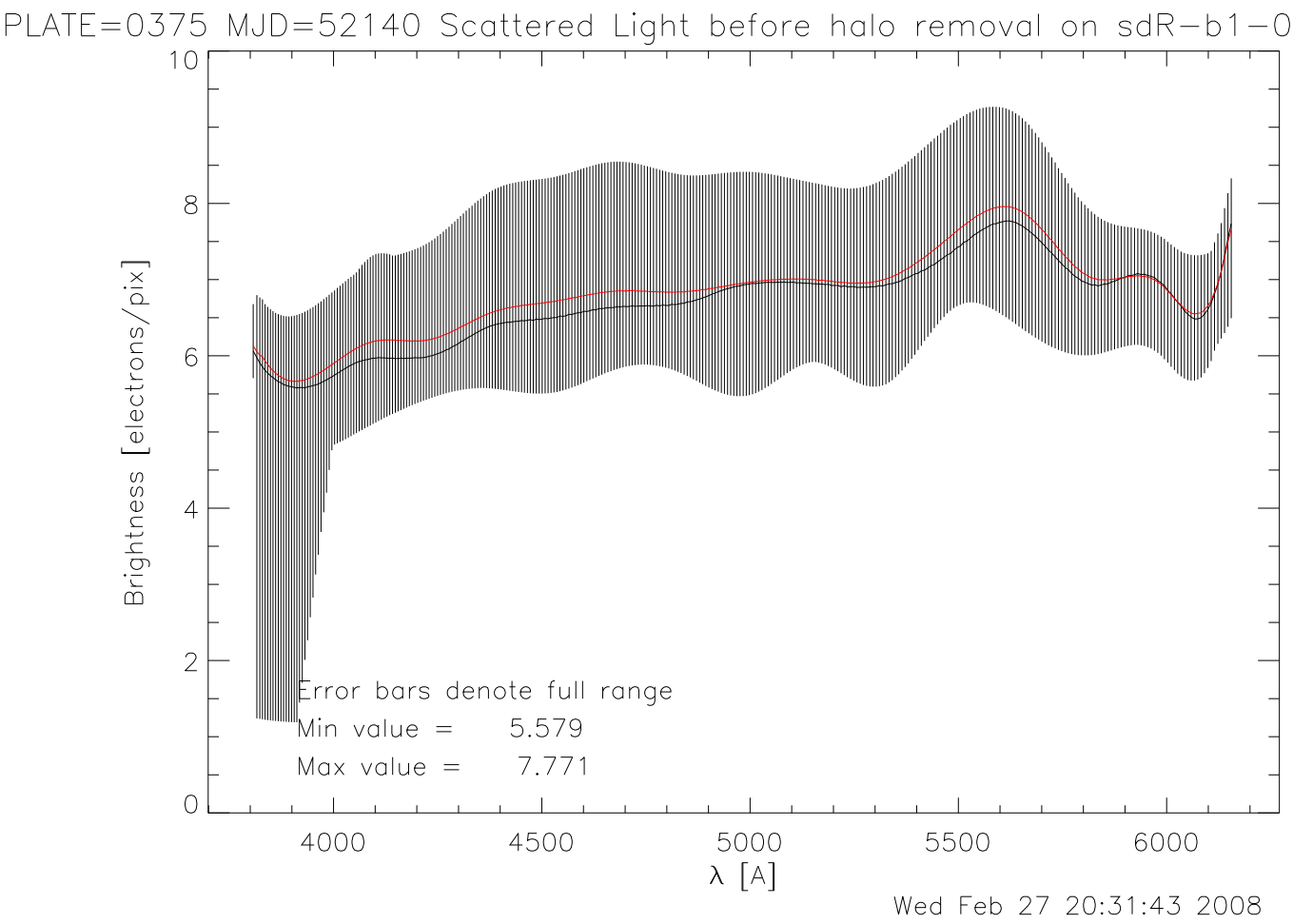

PLATE=0375 MJD=52140 Fiber-Flats for sdR-b1-00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.448
Max value = 1.190
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:30:56 2008


PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR−b1−00010580.f
Y [pix]
X [pix]
0
500
1000
1500
2000
6.18
7.45
0


PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b1-00010580.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.579
Max value = 7.771
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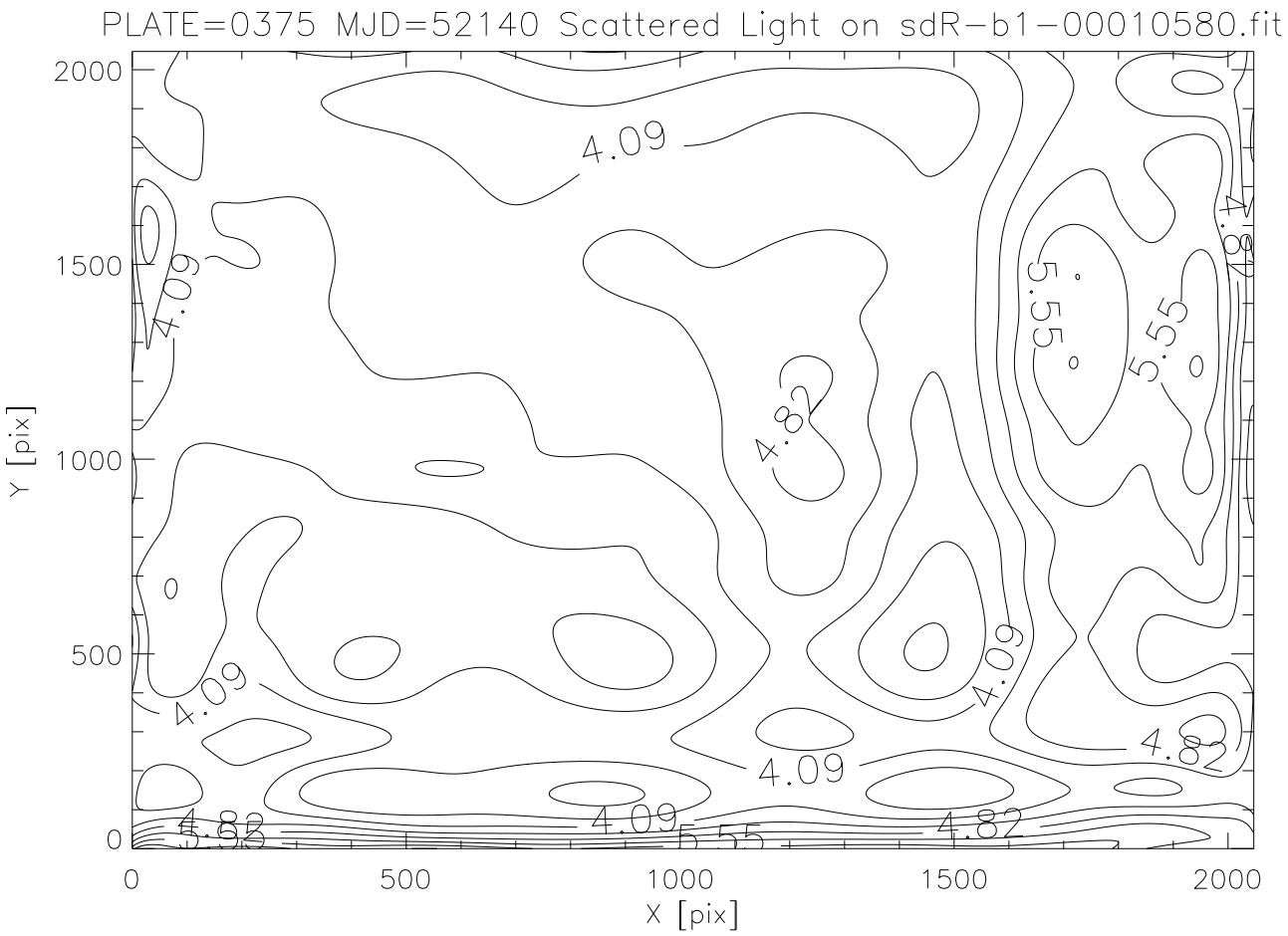
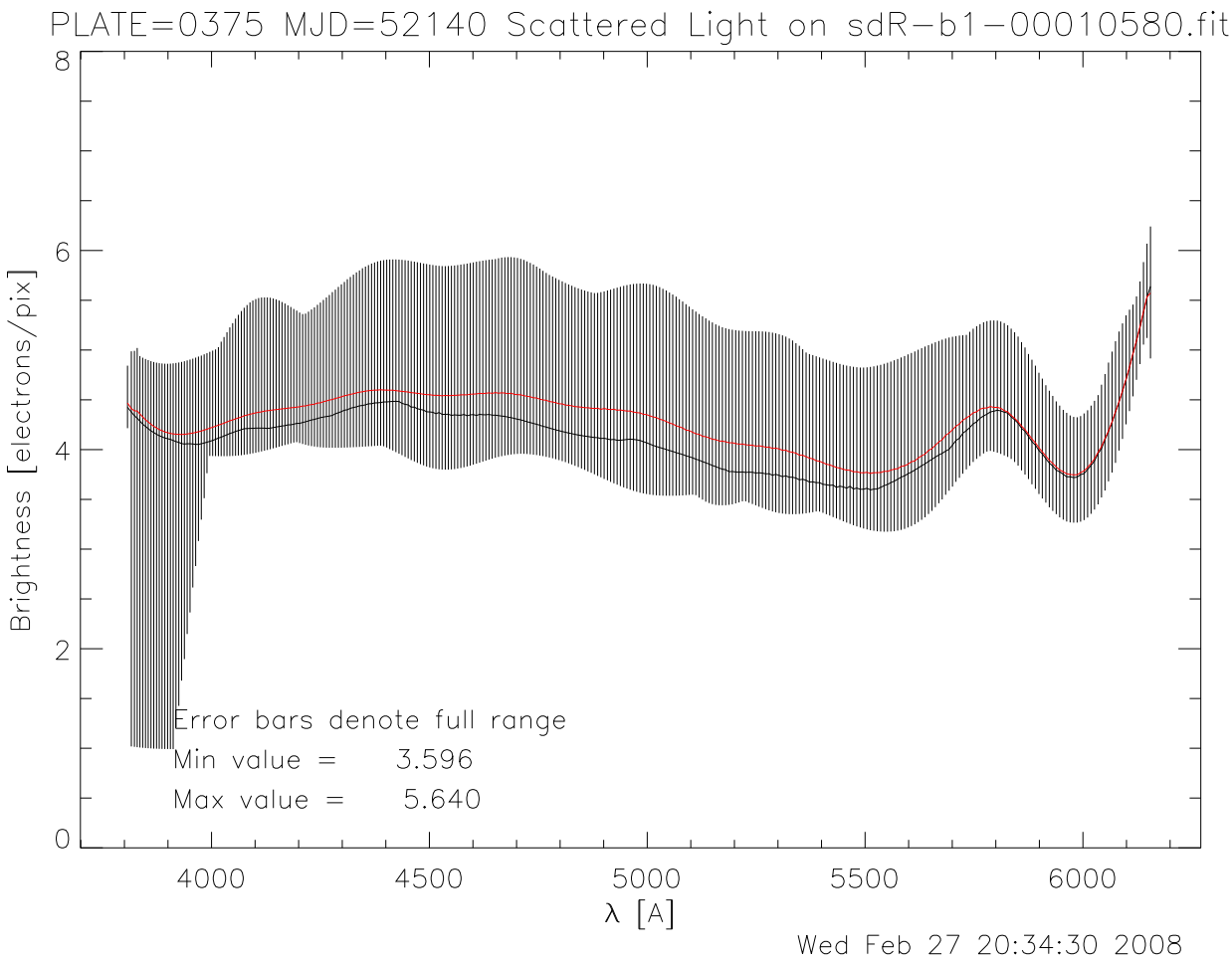
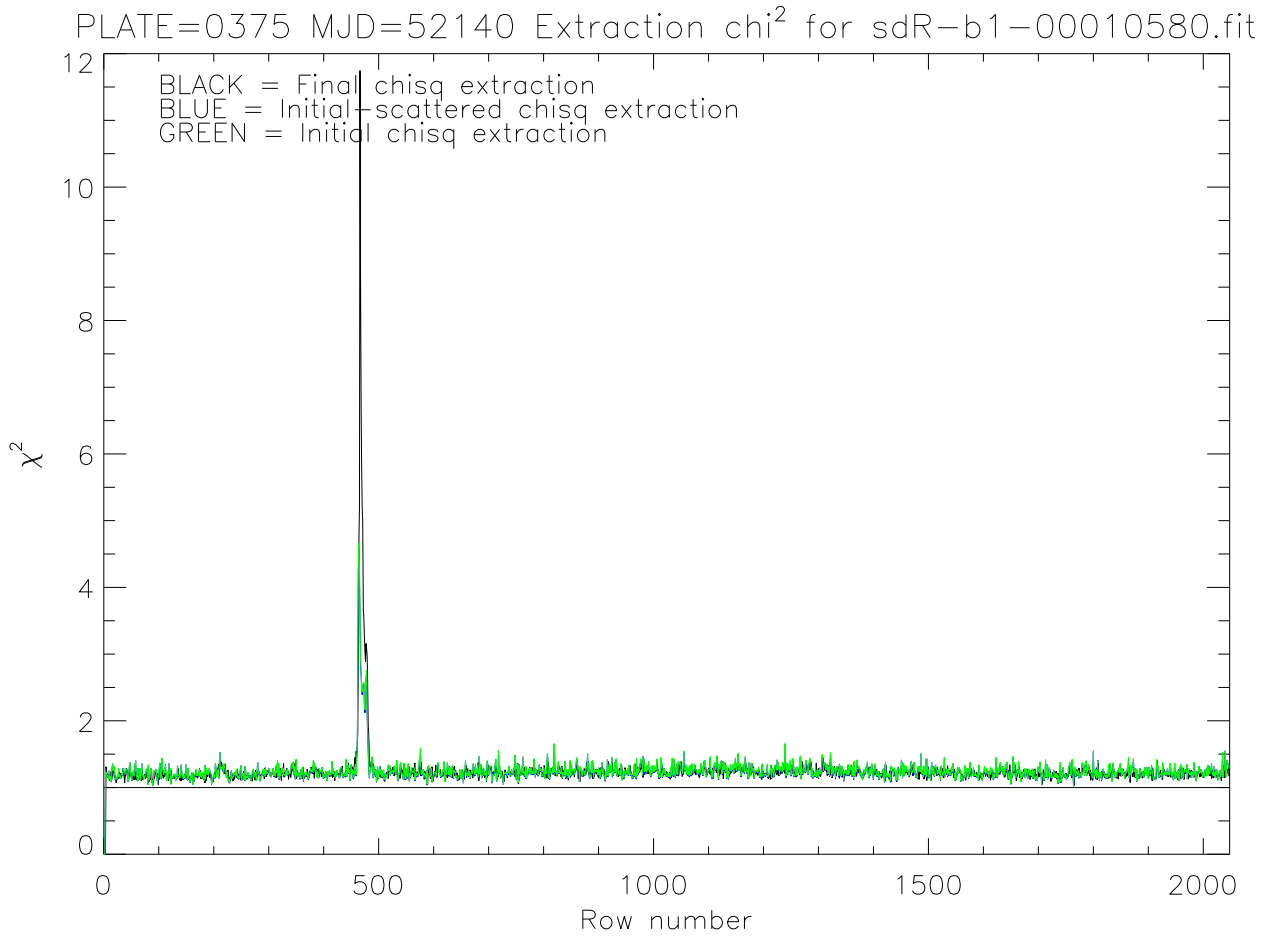
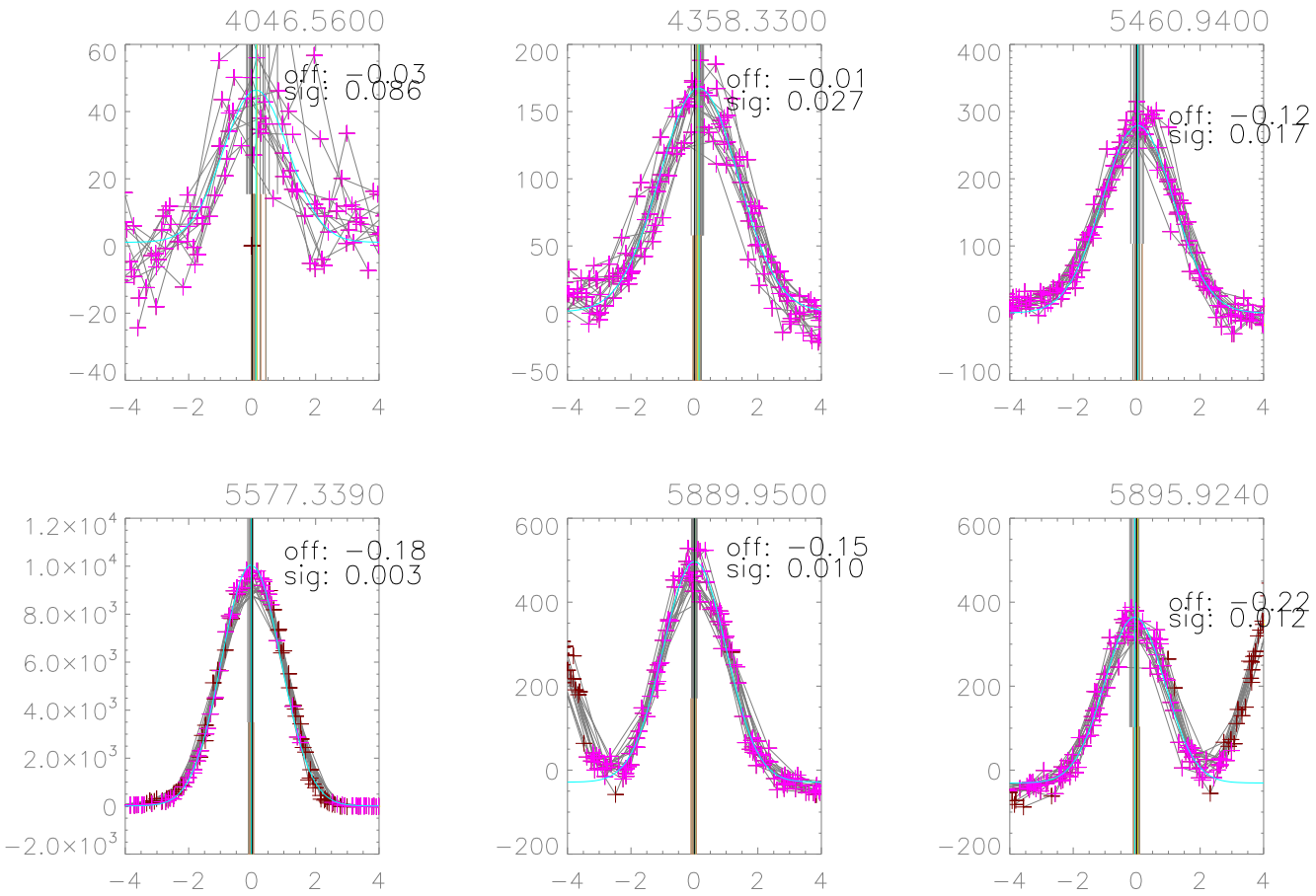
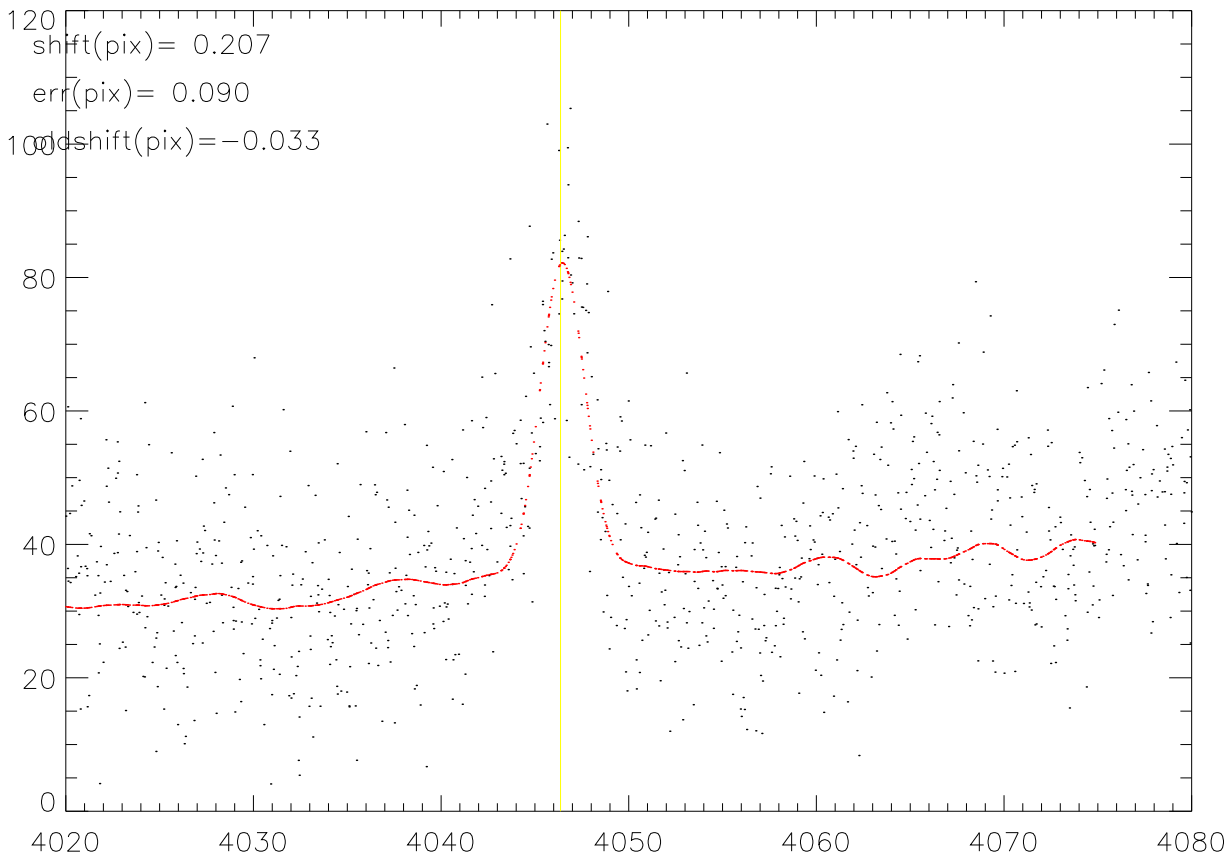
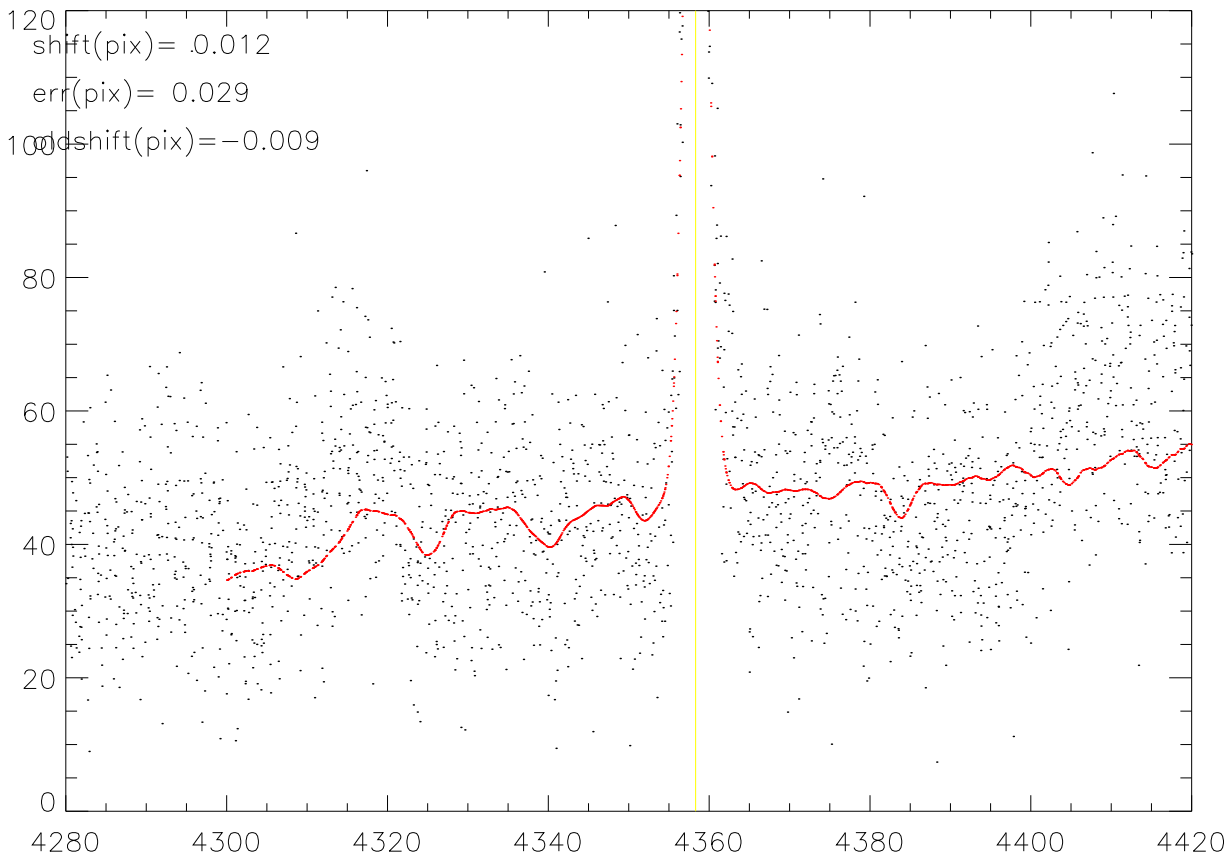

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010580.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.09
4.82
5.55
0

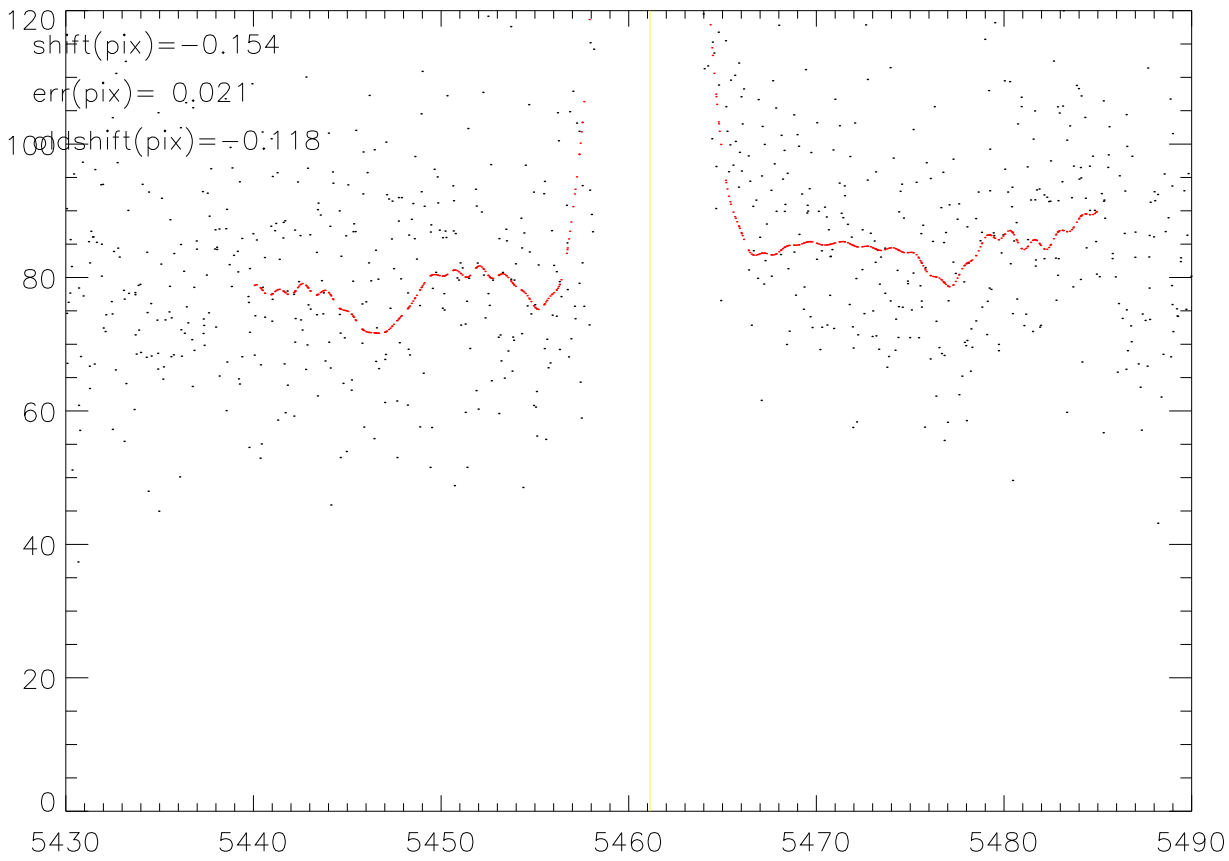

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010580.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.596
Max value = 5.640
Wed Feb 27 20:34:30 2008

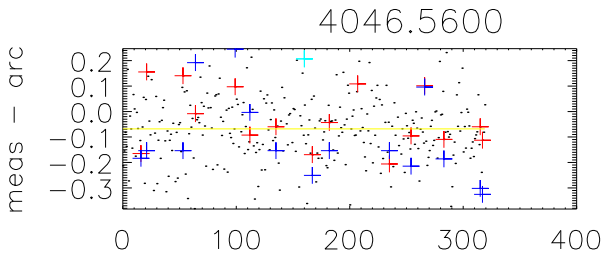

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-b1-00010580.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number

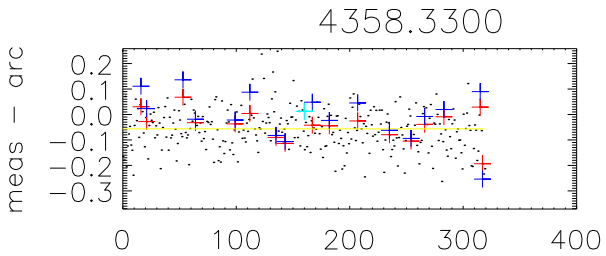

4046.5600
off: −0.03
sig: 0.086
4358.3300
off: −0.01
sig: 0.027
5460.9400
off: −0.12
sig: 0.017
5577.3390
off: −0.18
sig: 0.003
5889.9500
off: −0.15
sig: 0.010
5895.9240
off: −0.22
sig: 0.012

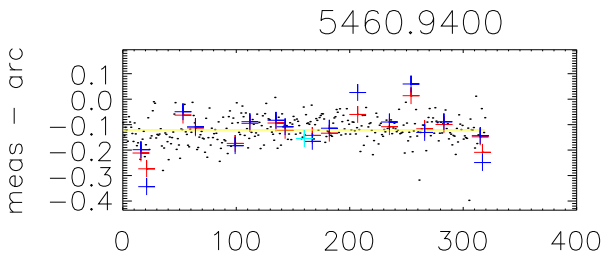

shift(pix)= 0.207
err(pix)= 0.090
oldshift(pix)=−0.033
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

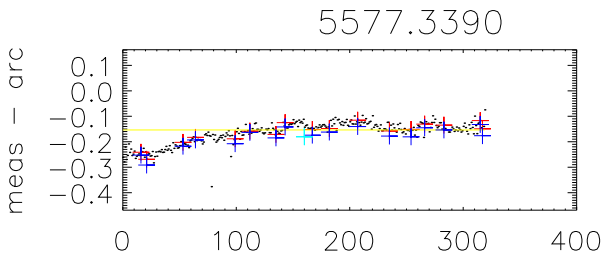

shift(pix)= 0.012
err(pix)= 0.029
oldshift(pix)=−0.009
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

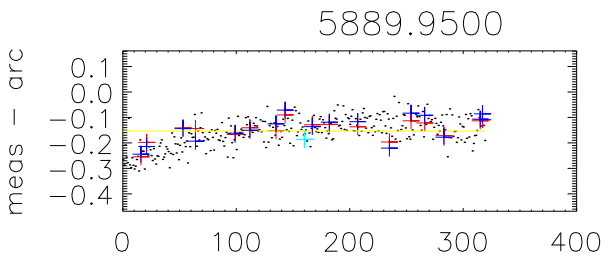

shift(pix)=−0.154
err(pix)= 0.021
oldshift(pix)=−0.118
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

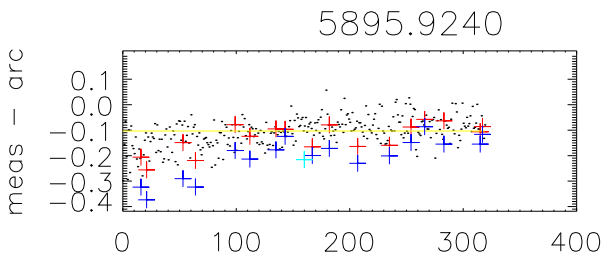

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

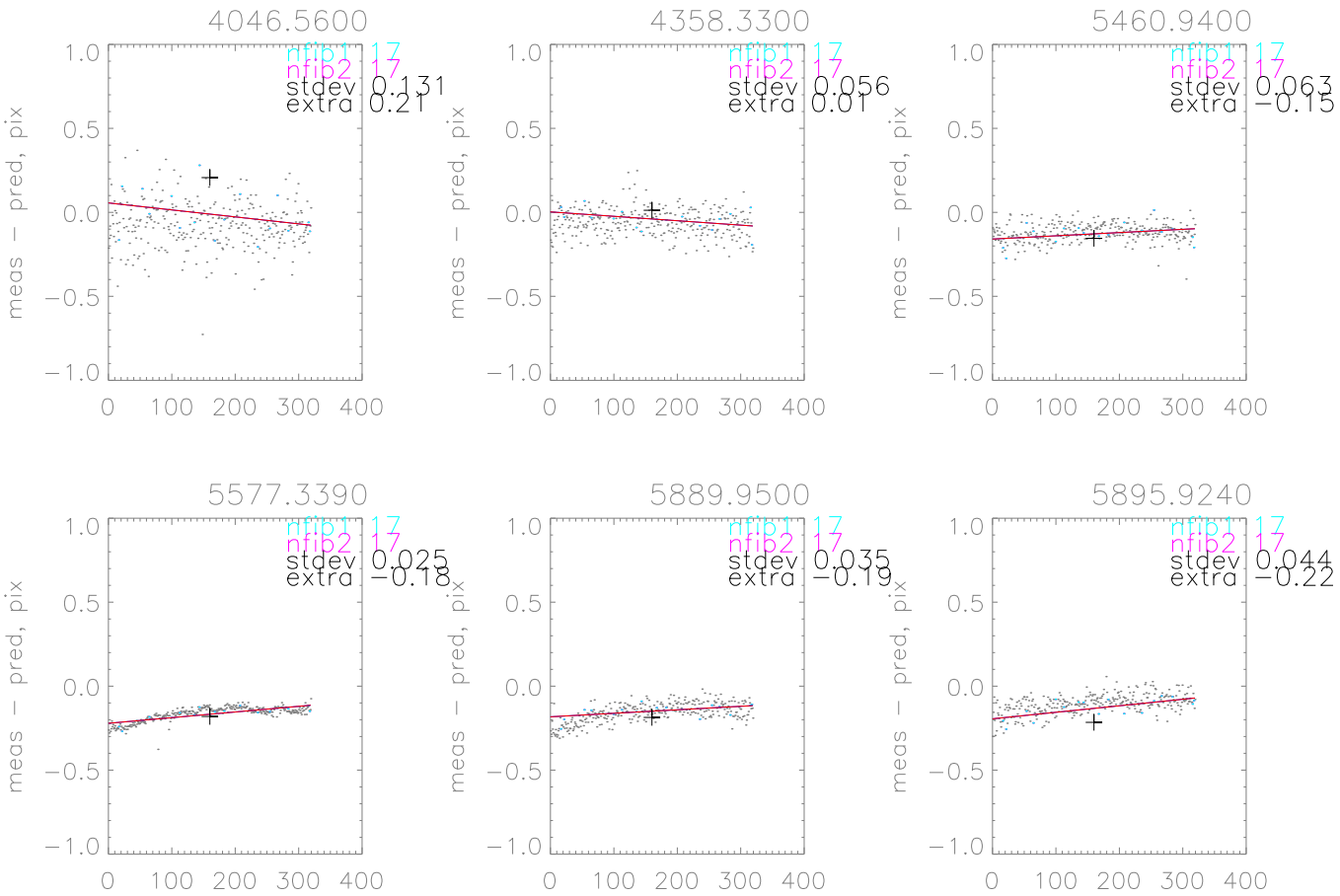

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

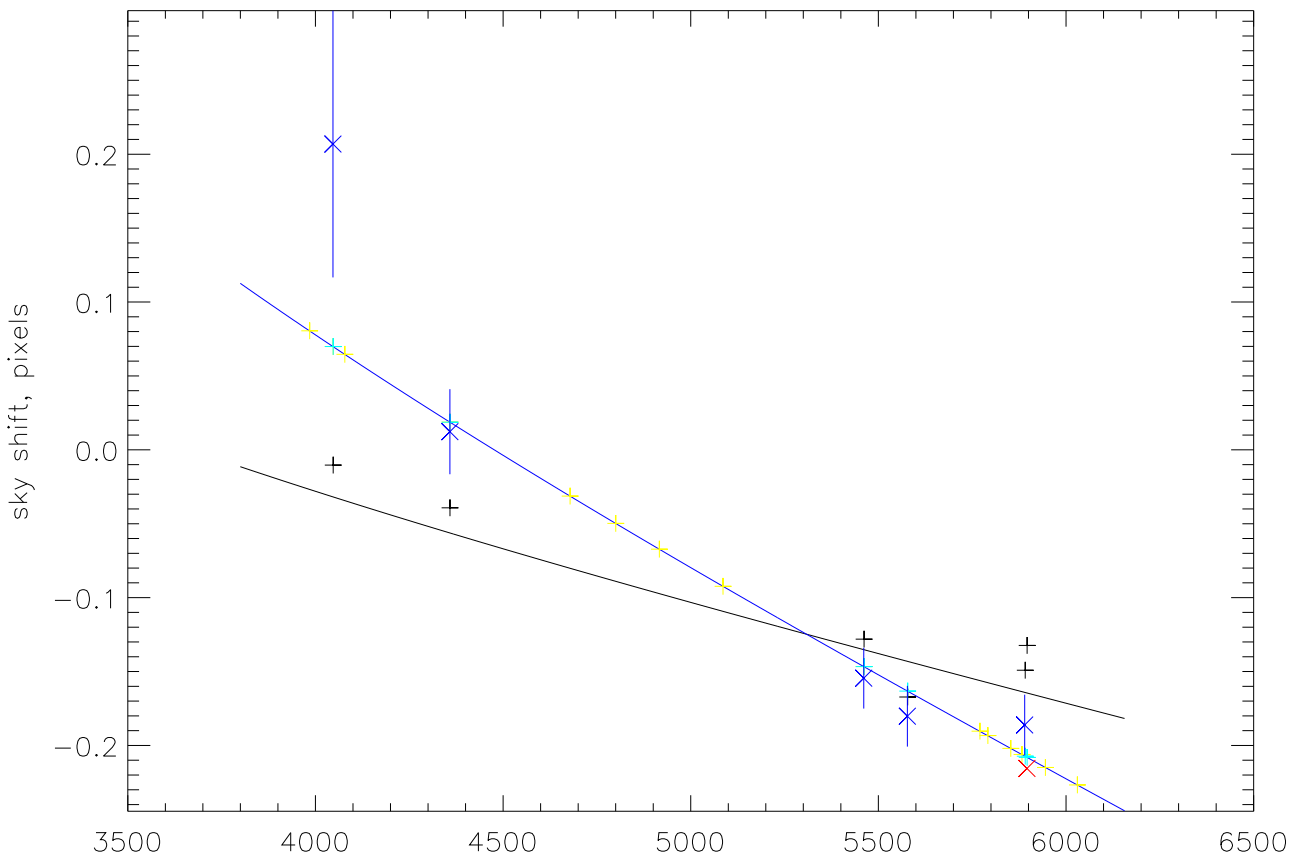

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

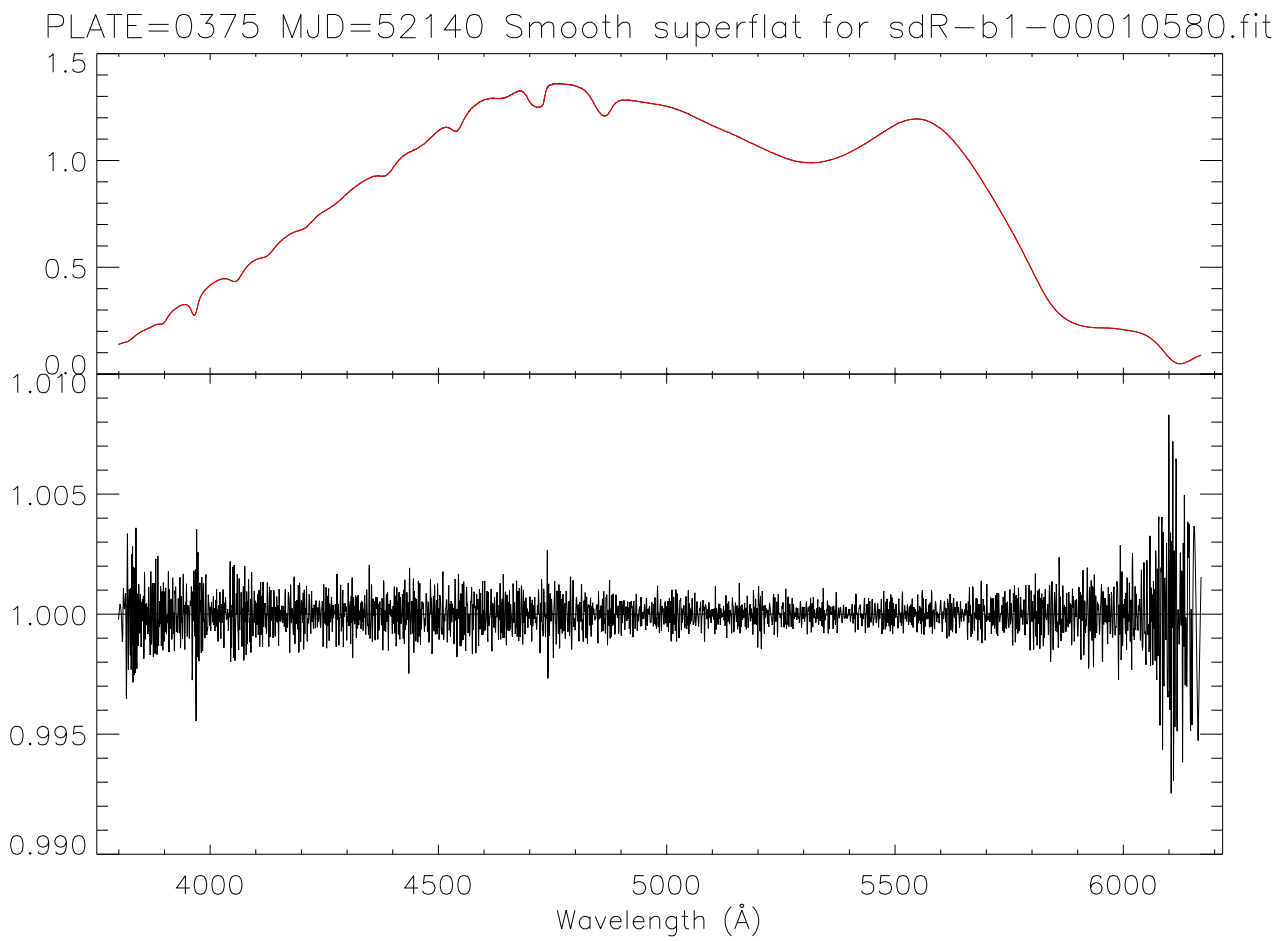

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

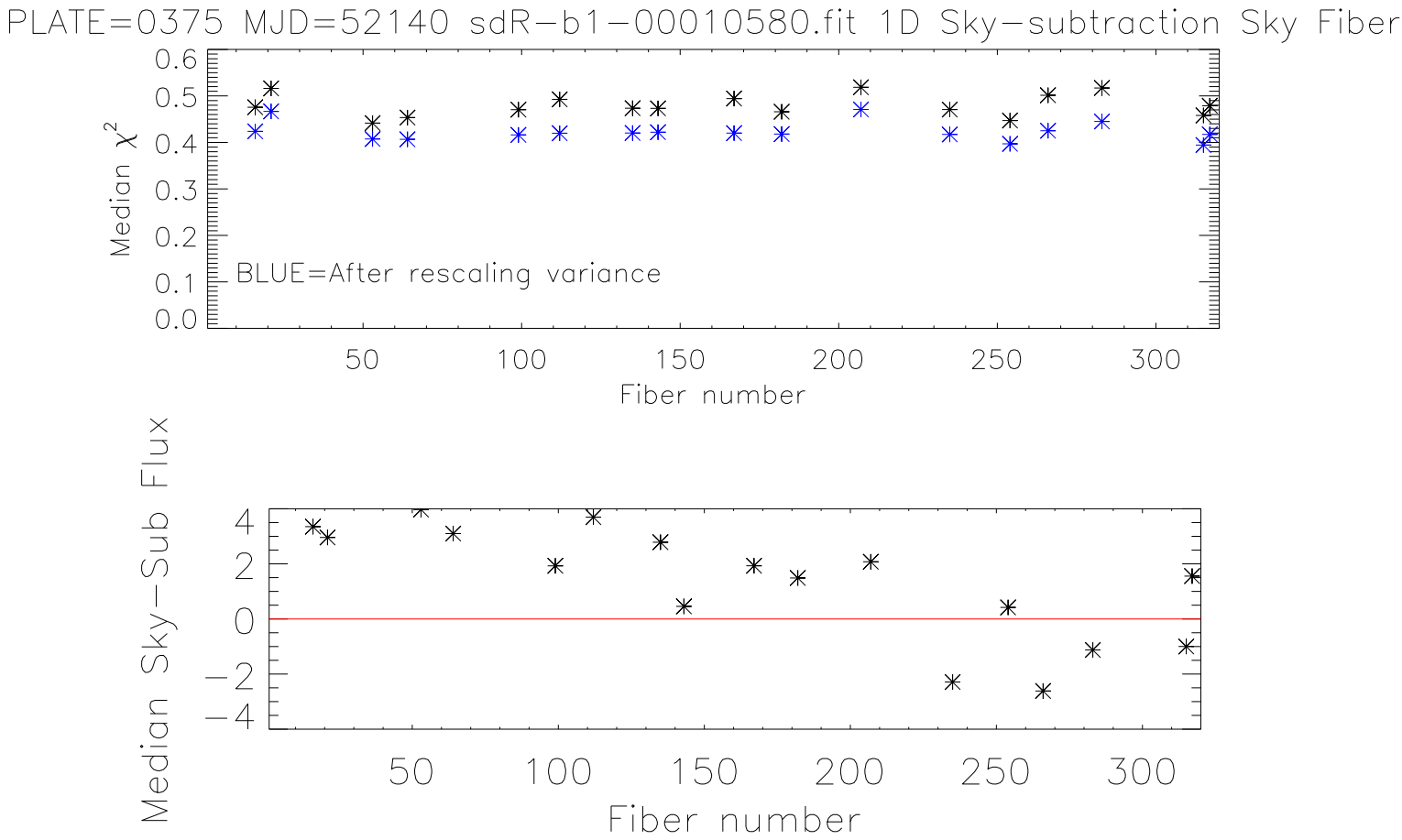

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

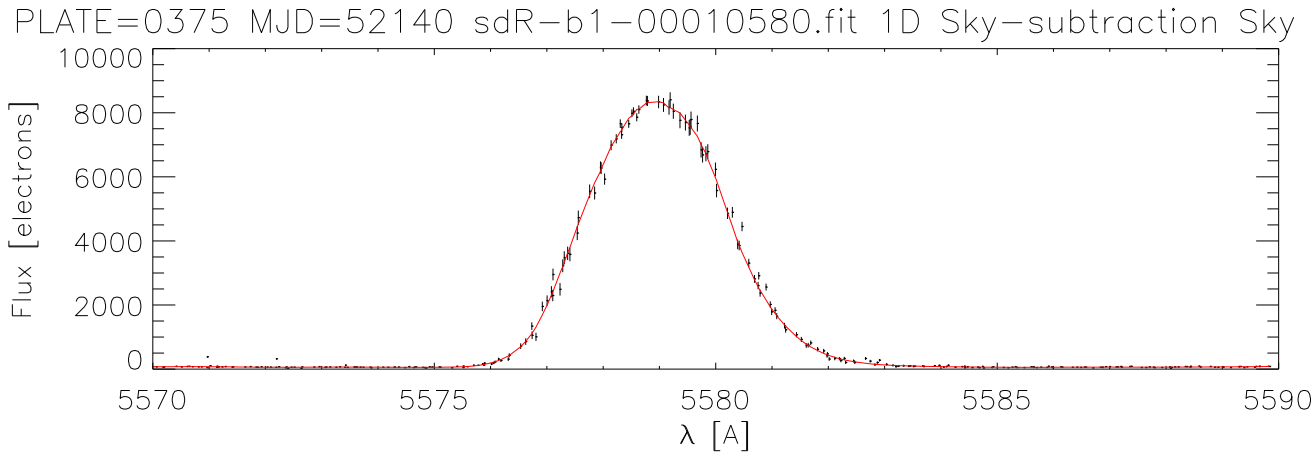

4046.5600
nfib1 17
nfib2 17
stdev 0.131
extra 0.21
4358.3300
nfib1 17
nfib2 17
stdev 0.056
extra 0.01
5460.9400
nfib1 17
nfib2 17
stdev 0.063
extra −0.15
5577.3390
nfib1 17
nfib2 17
stdev 0.025
extra −0.18
5889.9500
nfib1 17
nfib2 17
stdev 0.035
extra −0.19
5895.9240
nfib1 17
nfib2 17
stdev 0.044
extra −0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

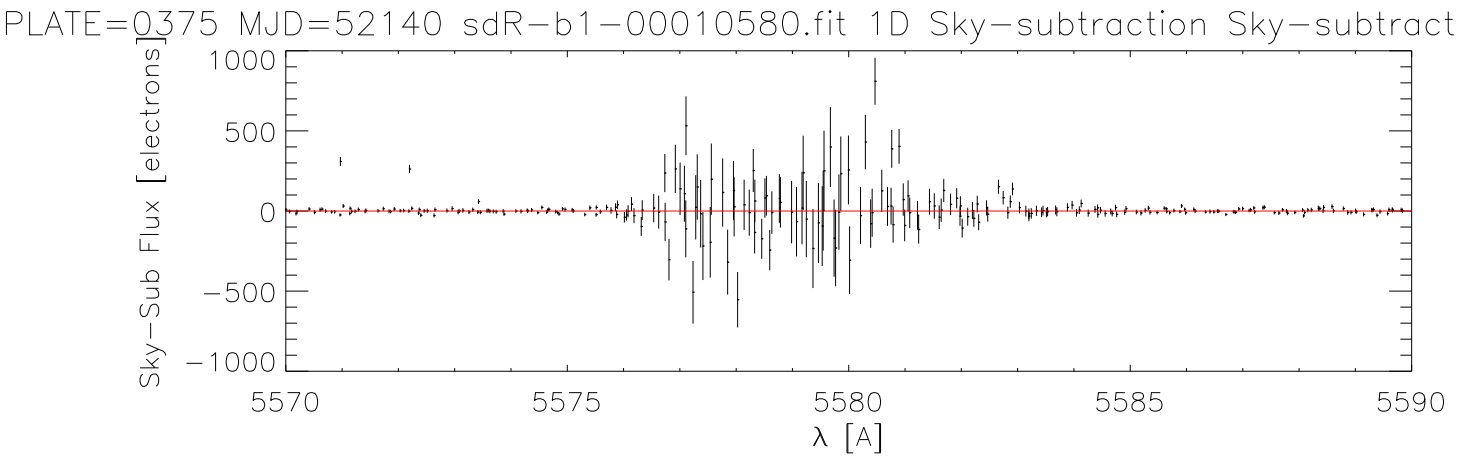

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

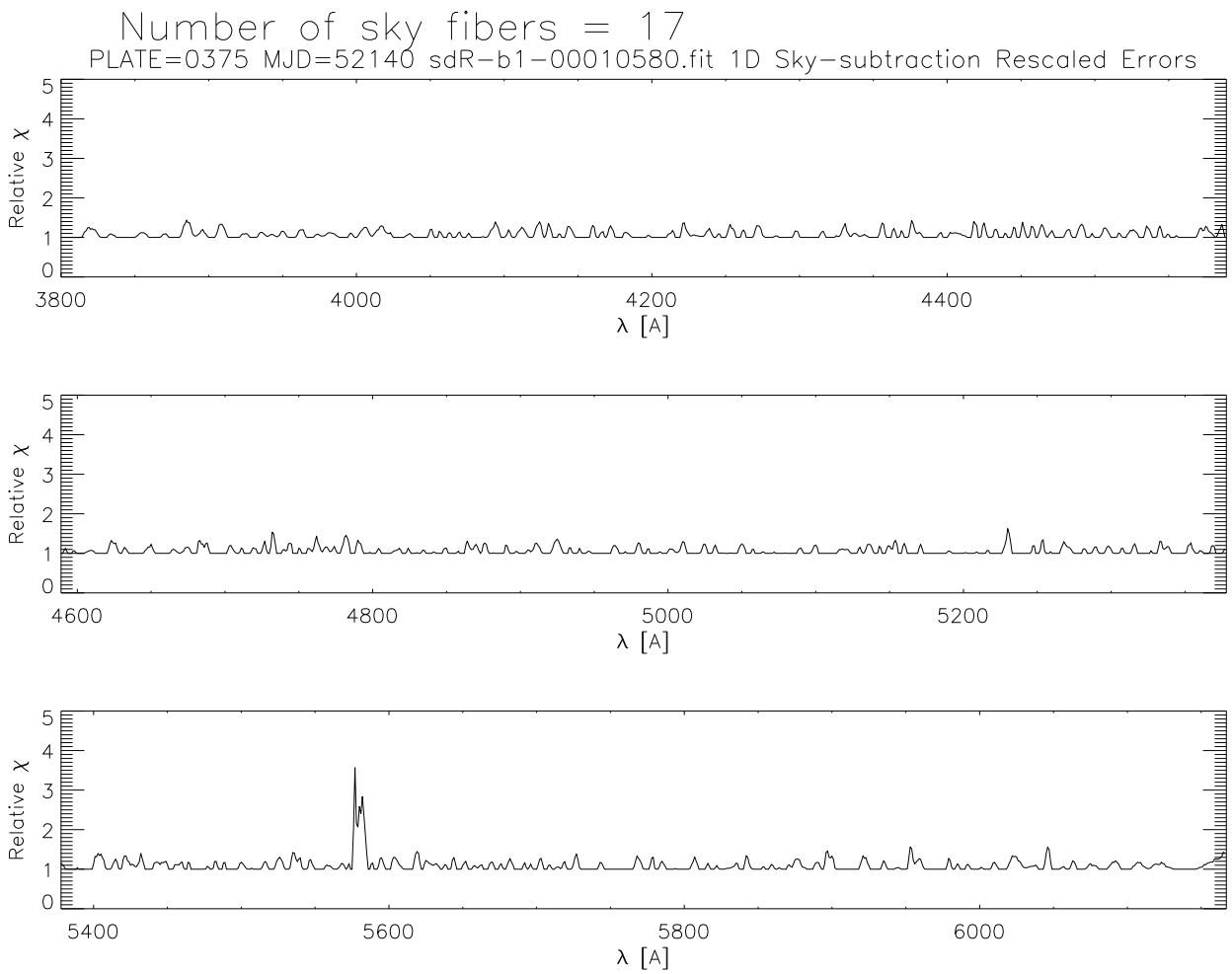
es= 0.0000

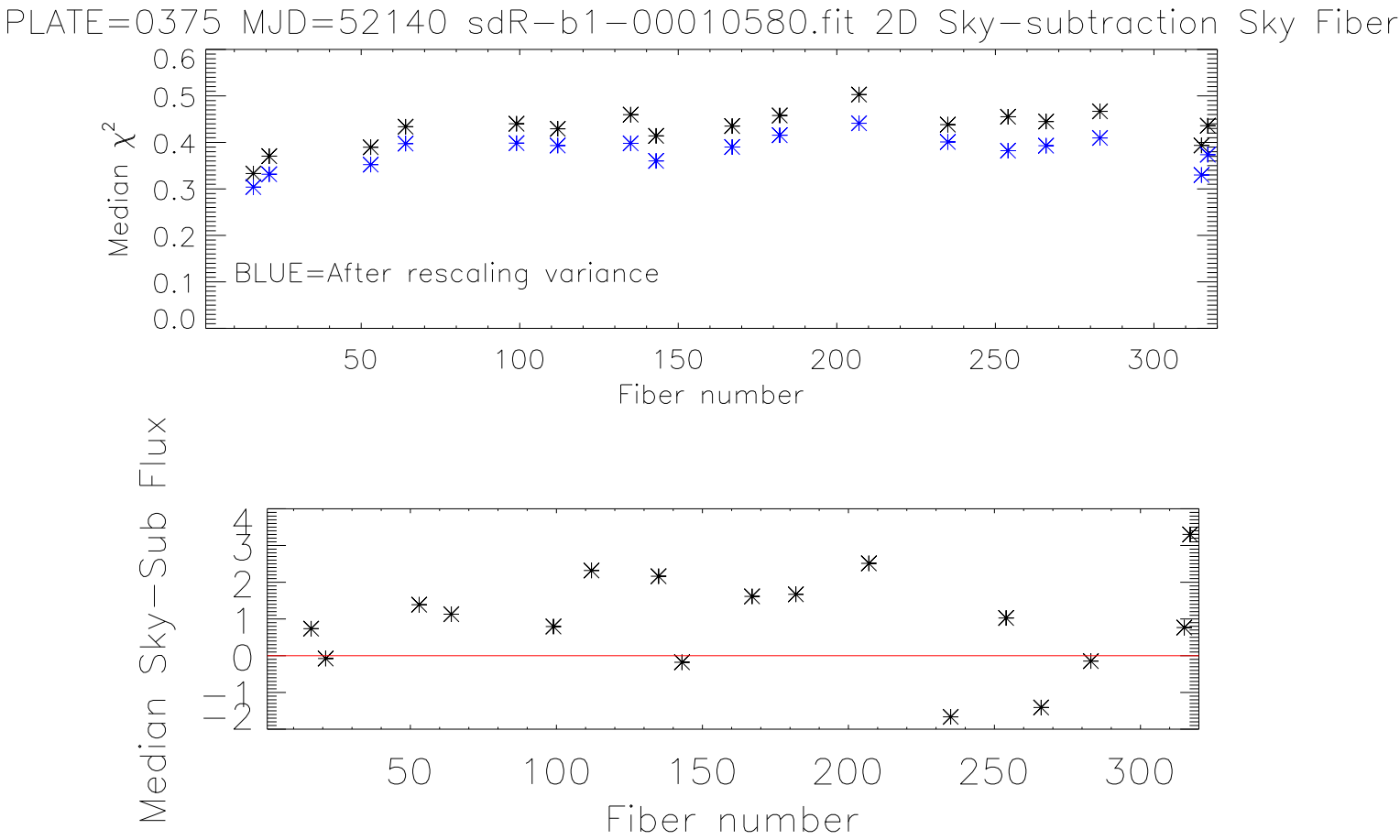

PLATE=0375 MJD=52140 Smooth superflat for sdR-b1-00010580.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

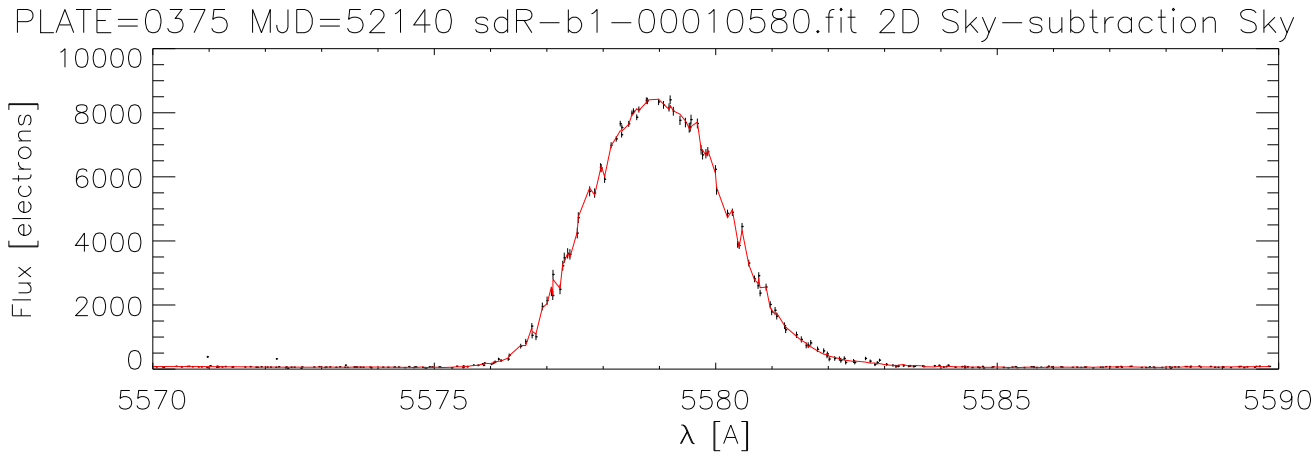

PLATE=0375 MJD=52140 sdR-b1-00010580.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

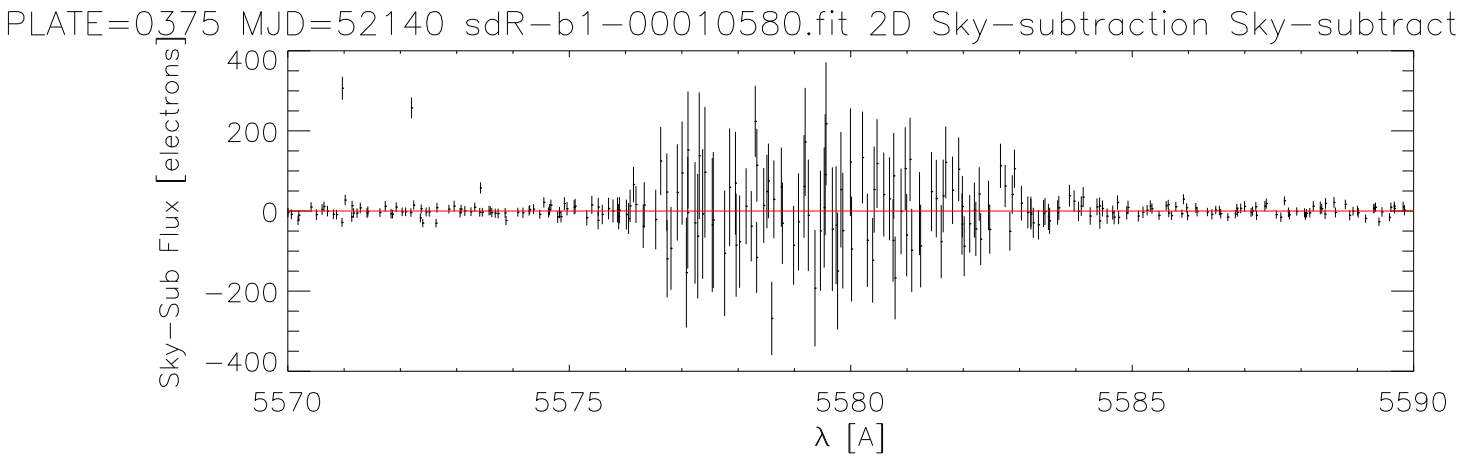

PLATE=0375 MJD=52140 sdR-b1-00010580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

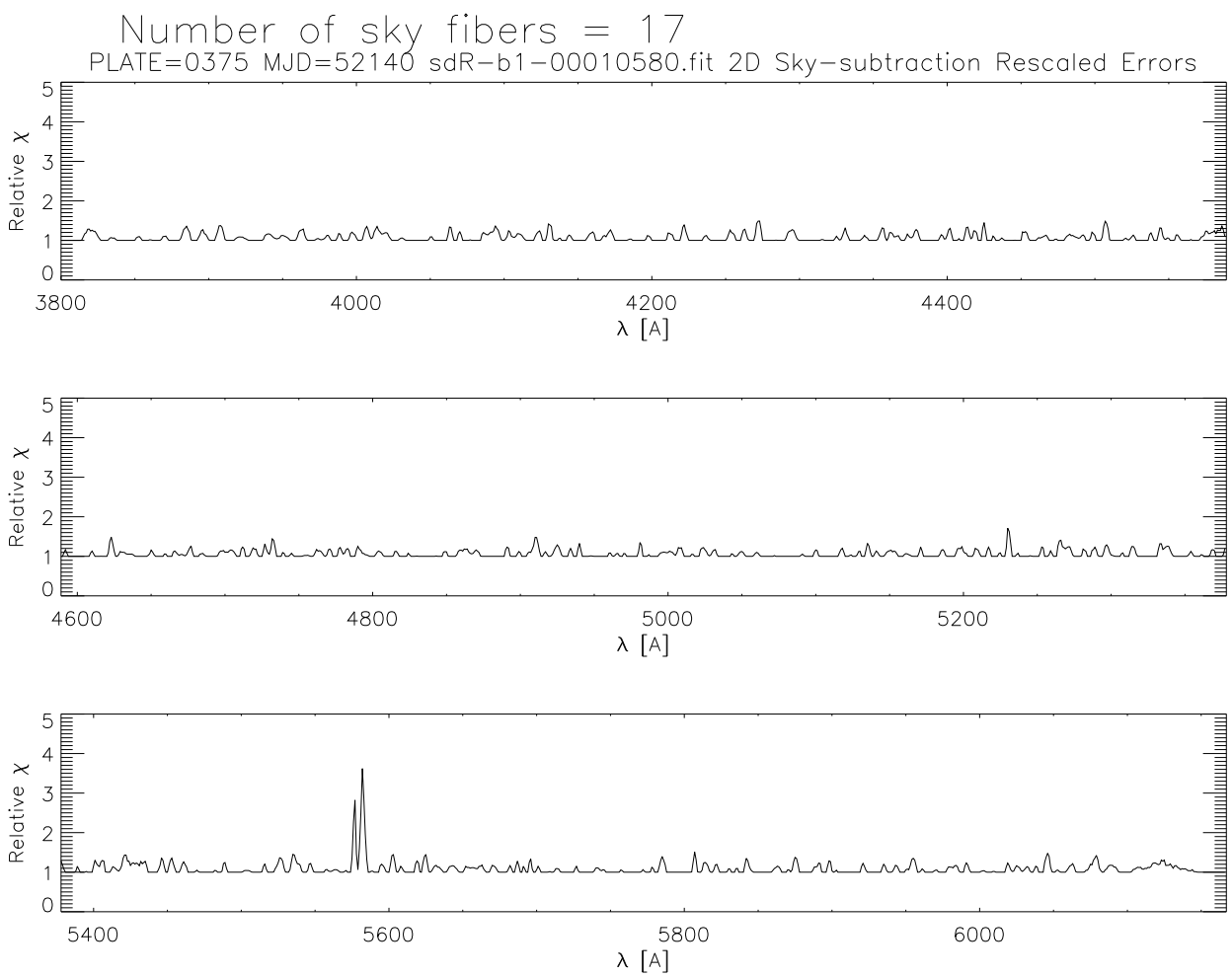

PLATE=0375 MJD=52140 sdR-b1-00010580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

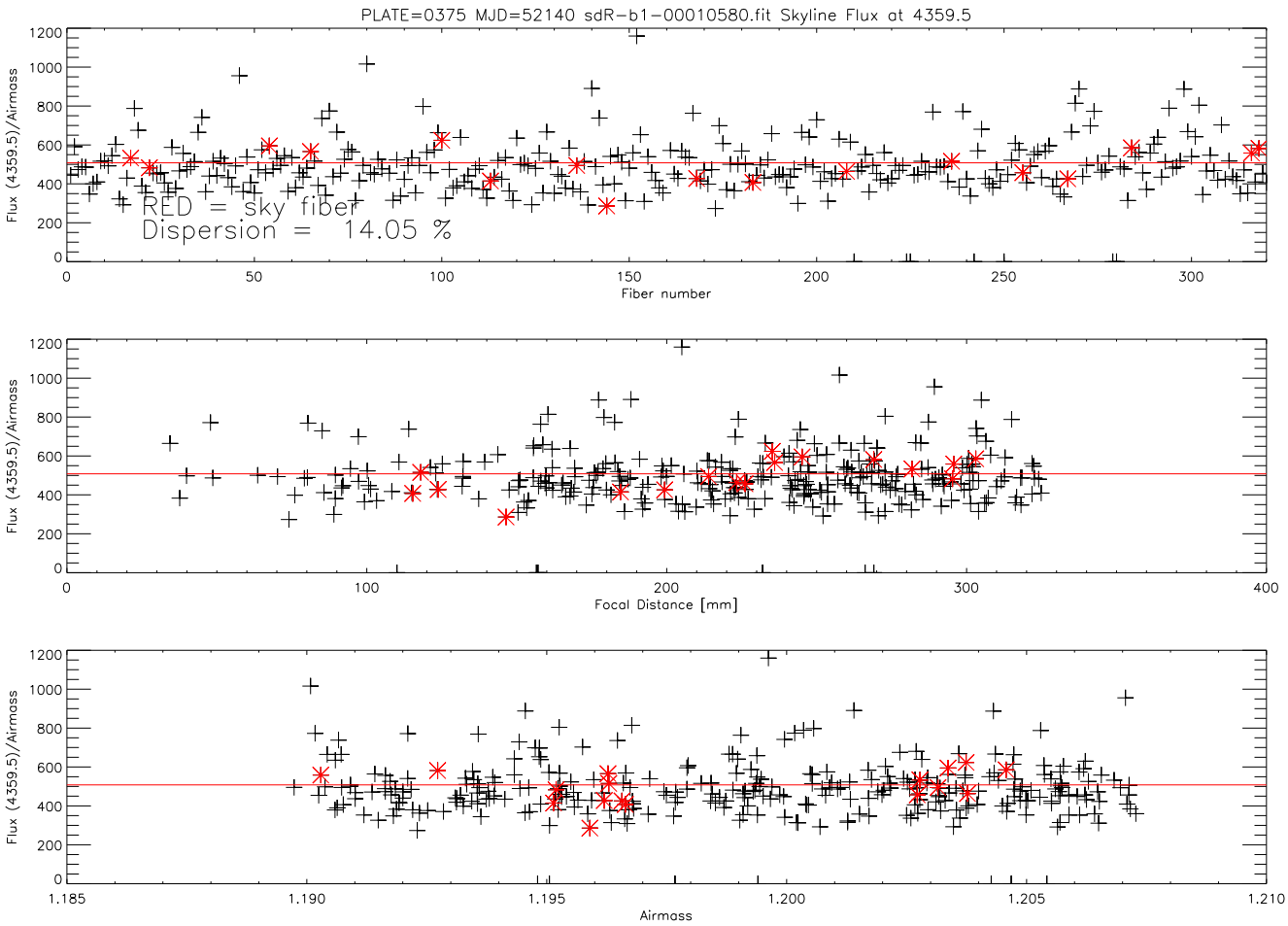

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010580.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

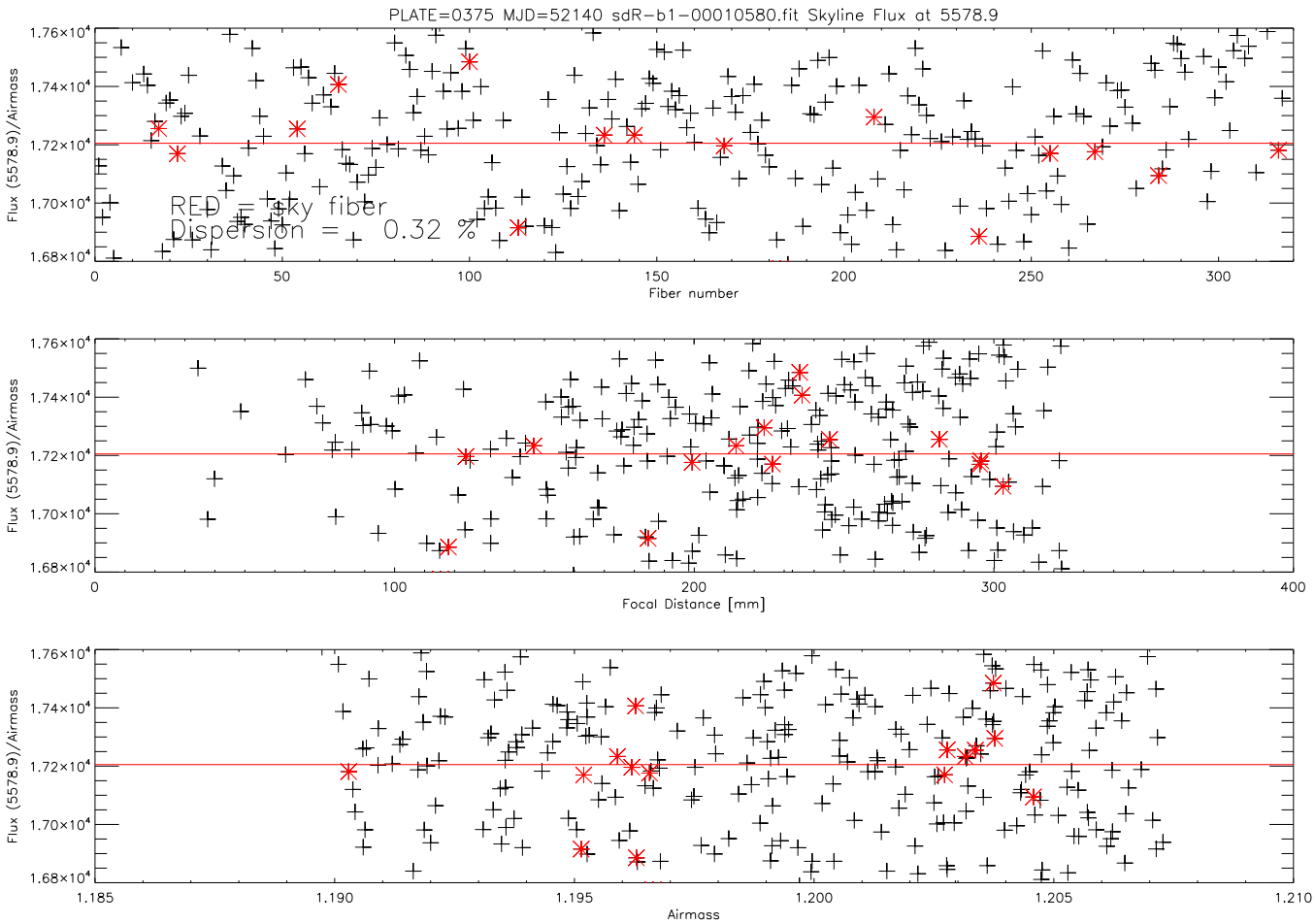

PLATE=0375 MJD=52140 sdR-b1-00010580.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

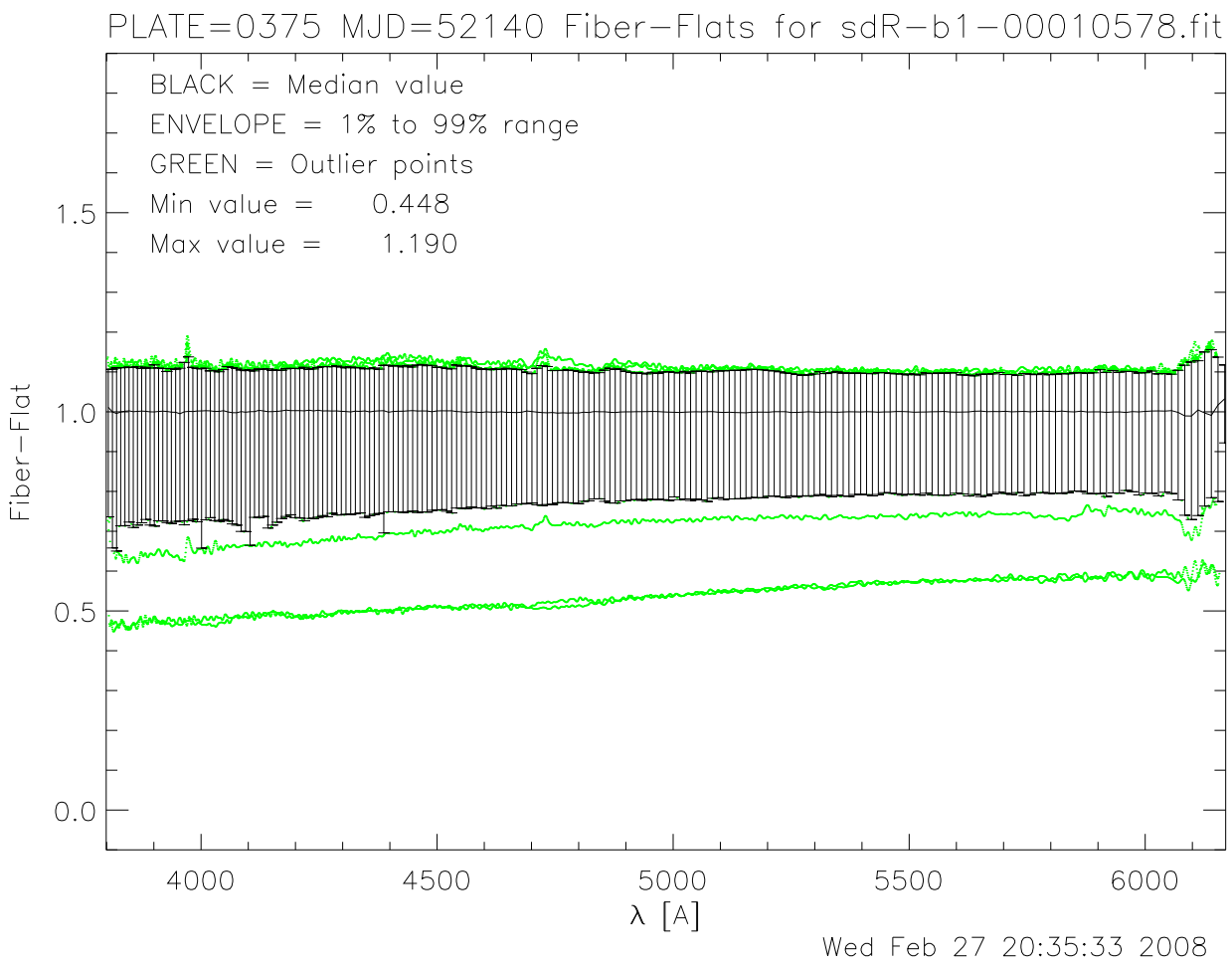

PLATE=0375 MJD=52140 sdR-b1-00010580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

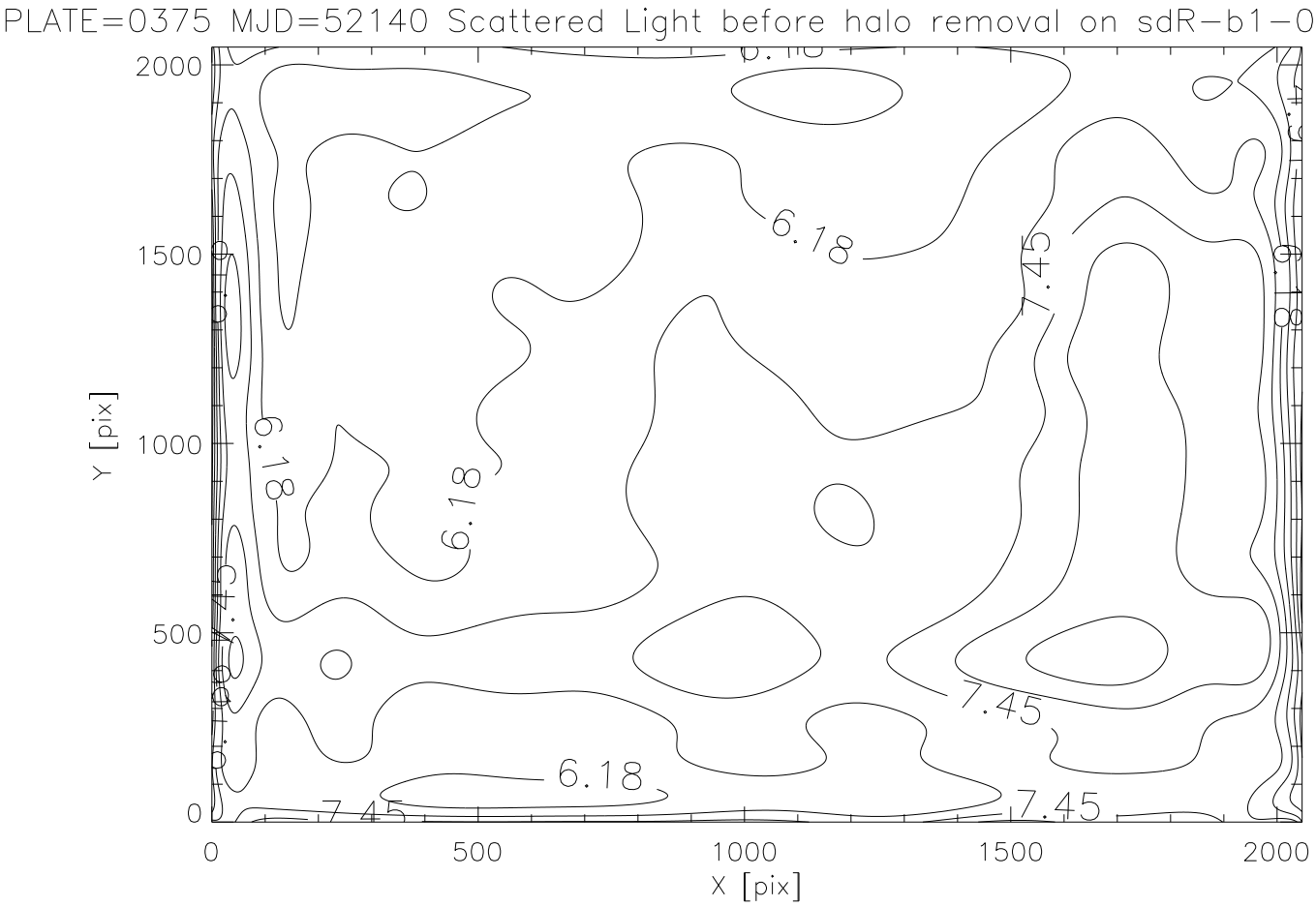

PLATE=0375 MJD=52140 sdR-b1-00010580.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

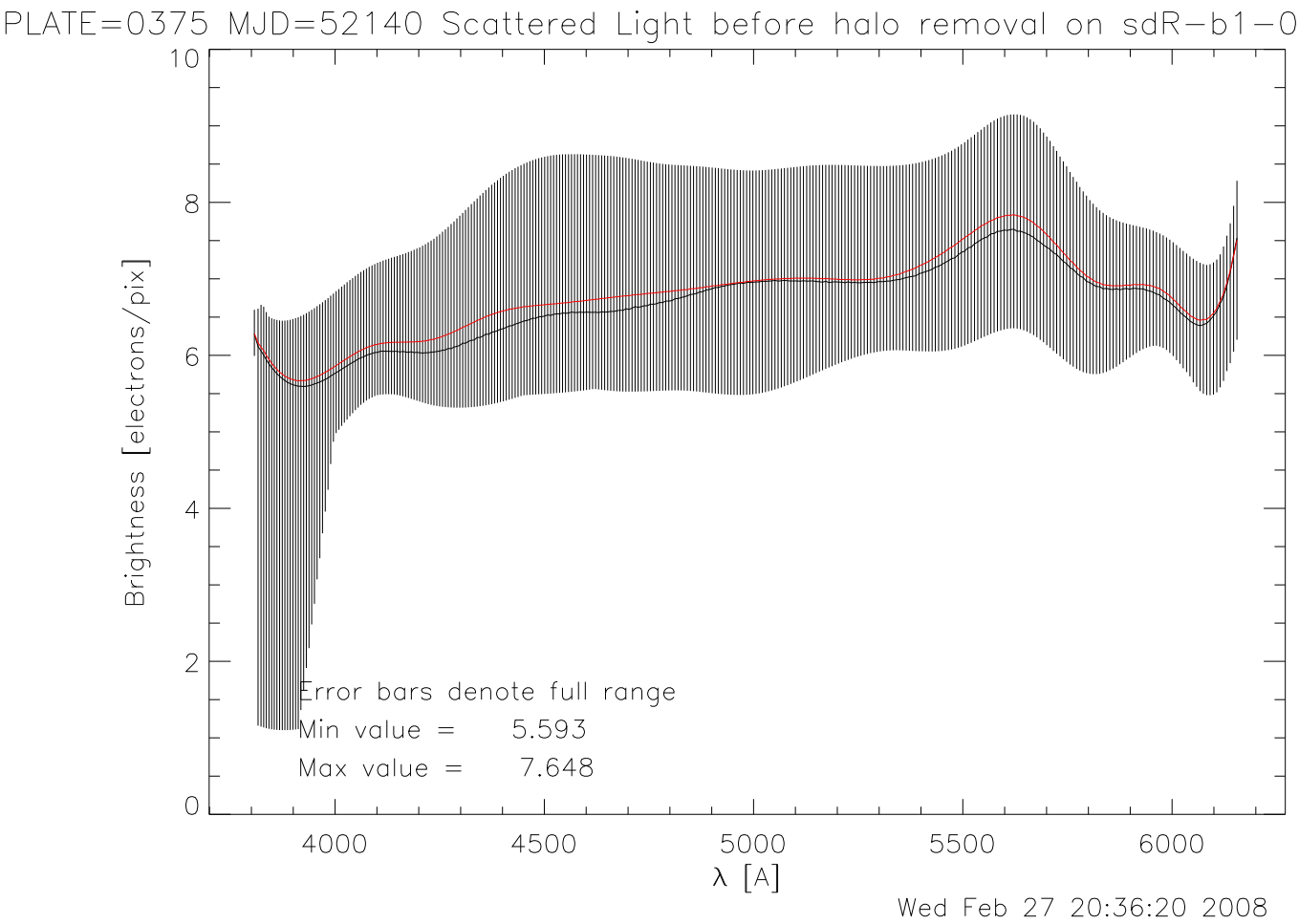

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010580.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

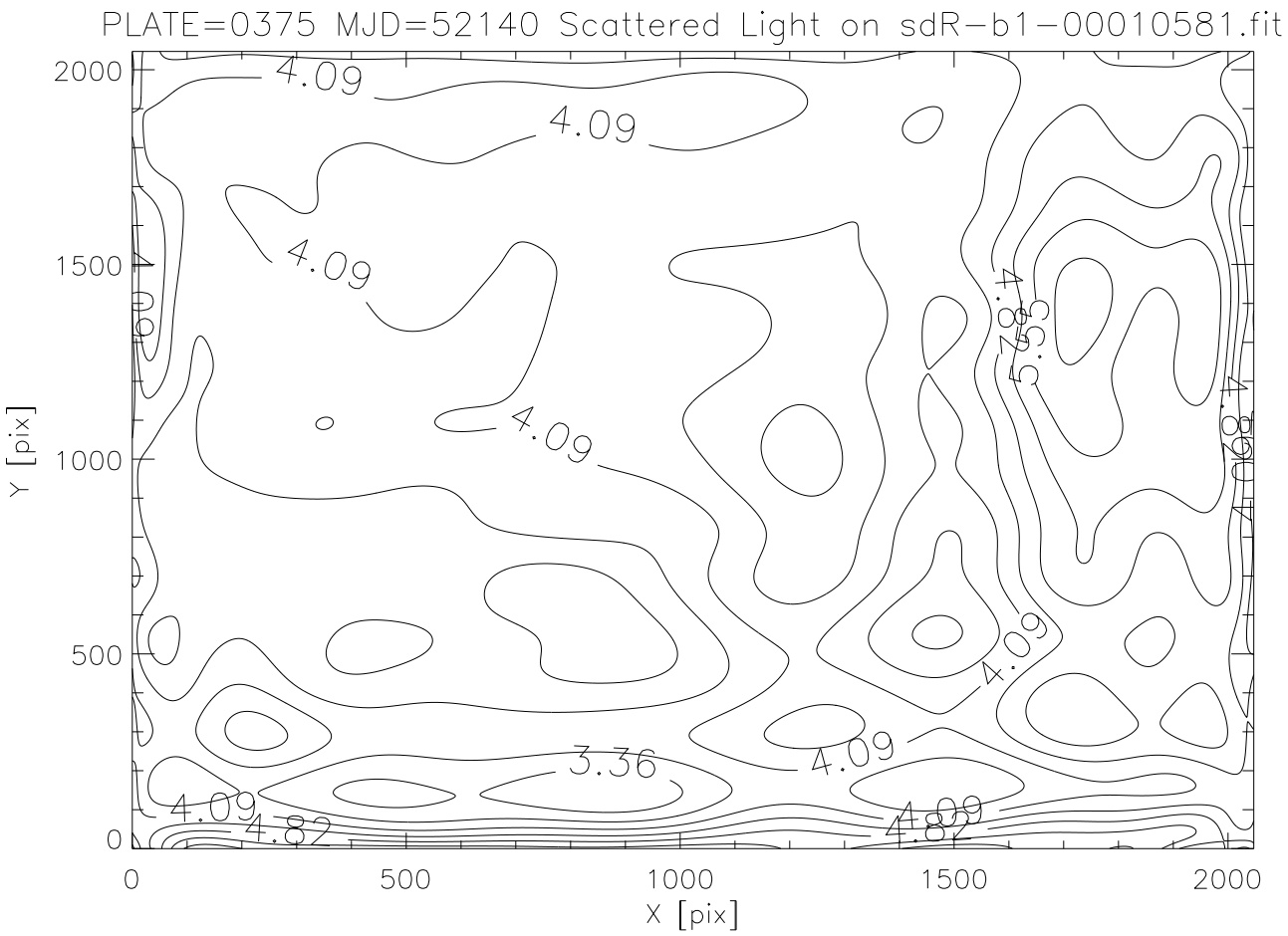

PLATE=0375 MJD=52140 sdR-b1-00010580.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.05 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

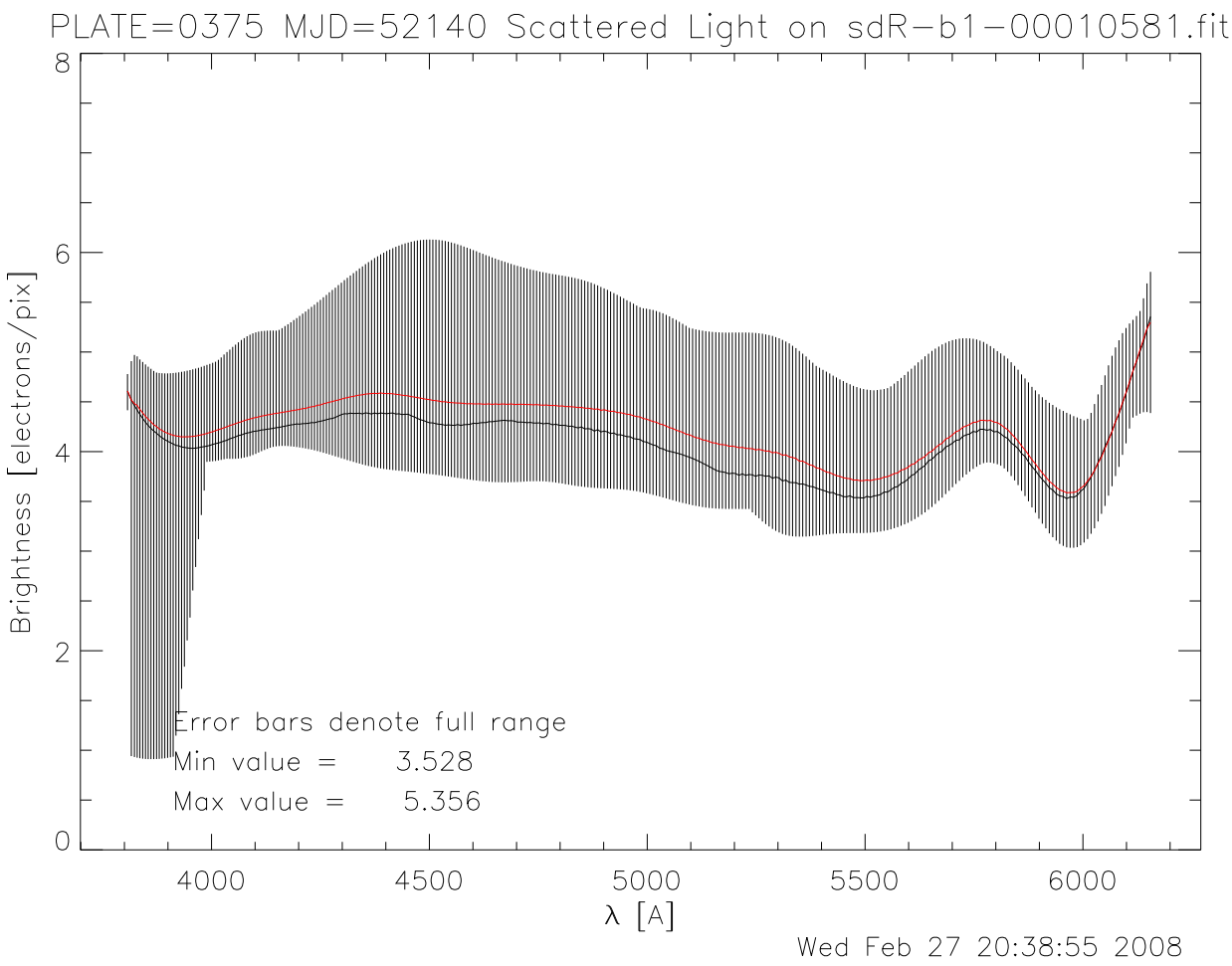

PLATE=0375 MJD=52140 sdR-b1-00010580.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.76×10^4
1.74×10^4
1.72×10^4
1.70×10^4
1.68×10^4
RED = sky fiber
Dispersion = 0.32 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.76×10^4
1.74×10^4
1.72×10^4
1.70×10^4
1.68×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.76×10^4
1.74×10^4
1.72×10^4
1.70×10^4
1.68×10^4
1.185
1.190
1.195
1.200
1.205
1.210
Airmass

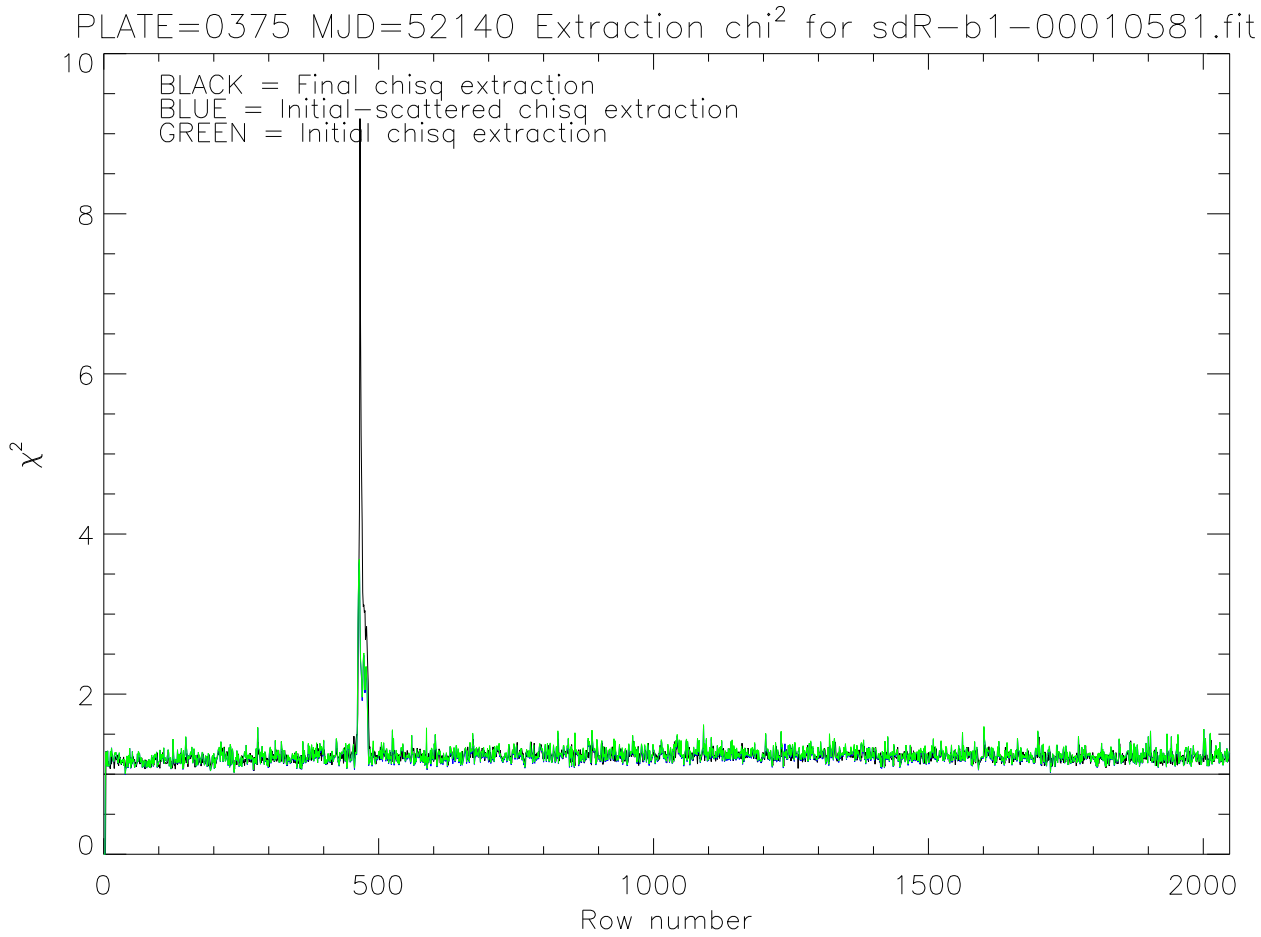

PLATE=0375 MJD=52140 Fiber−Flats for sdR−b1−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.448
Max value = 1.190
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:35:33 2008

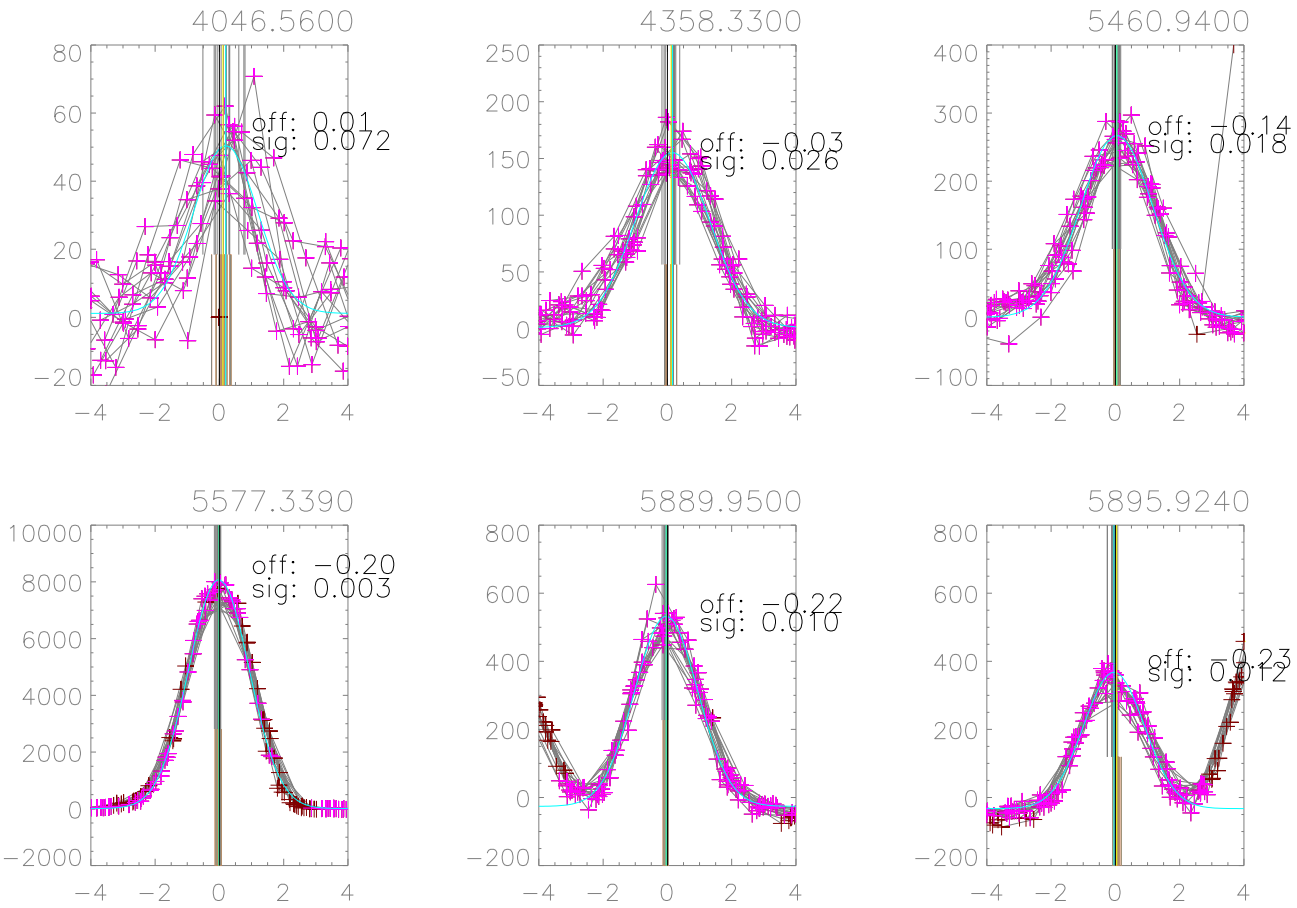

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR−b1−00010581.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
6.18
7.45

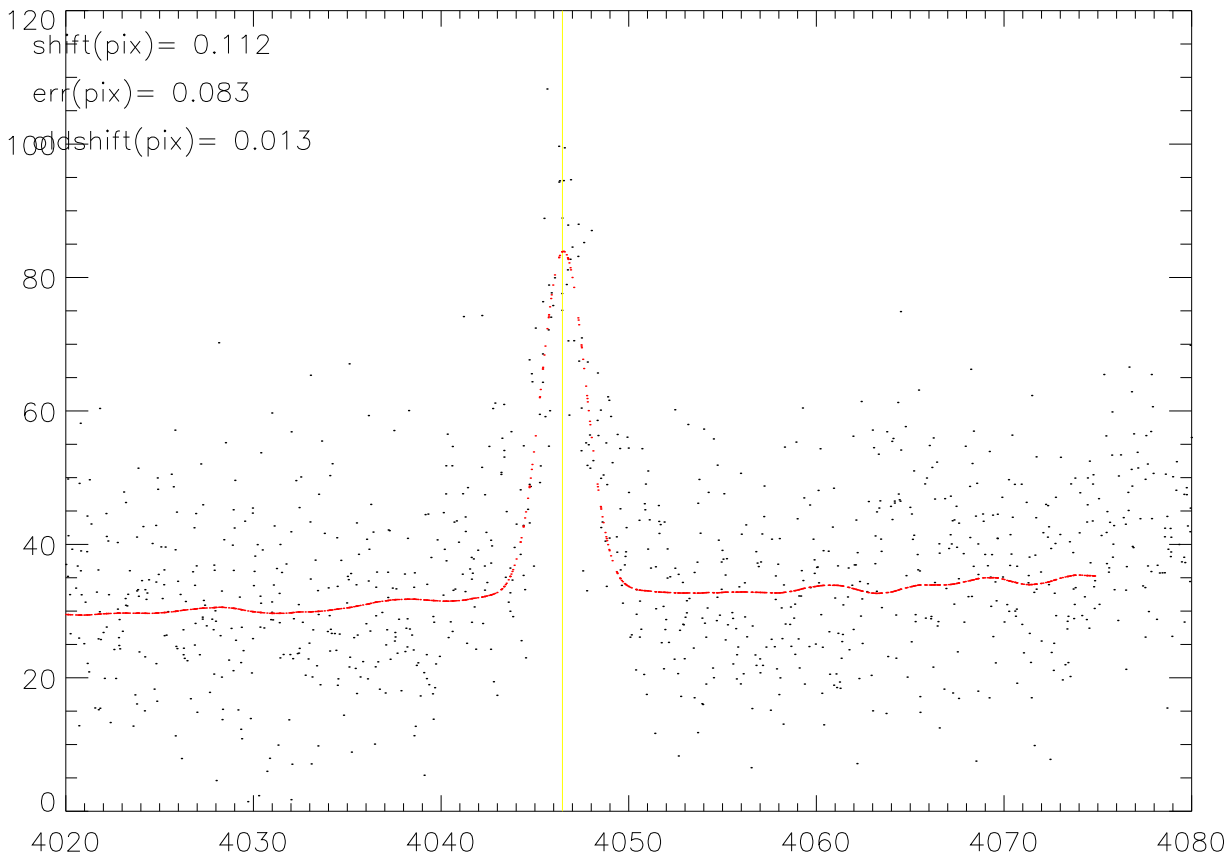

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b1-00010581.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.593
Max value = 7.648
Wed Feb 27 20:36:20 2008

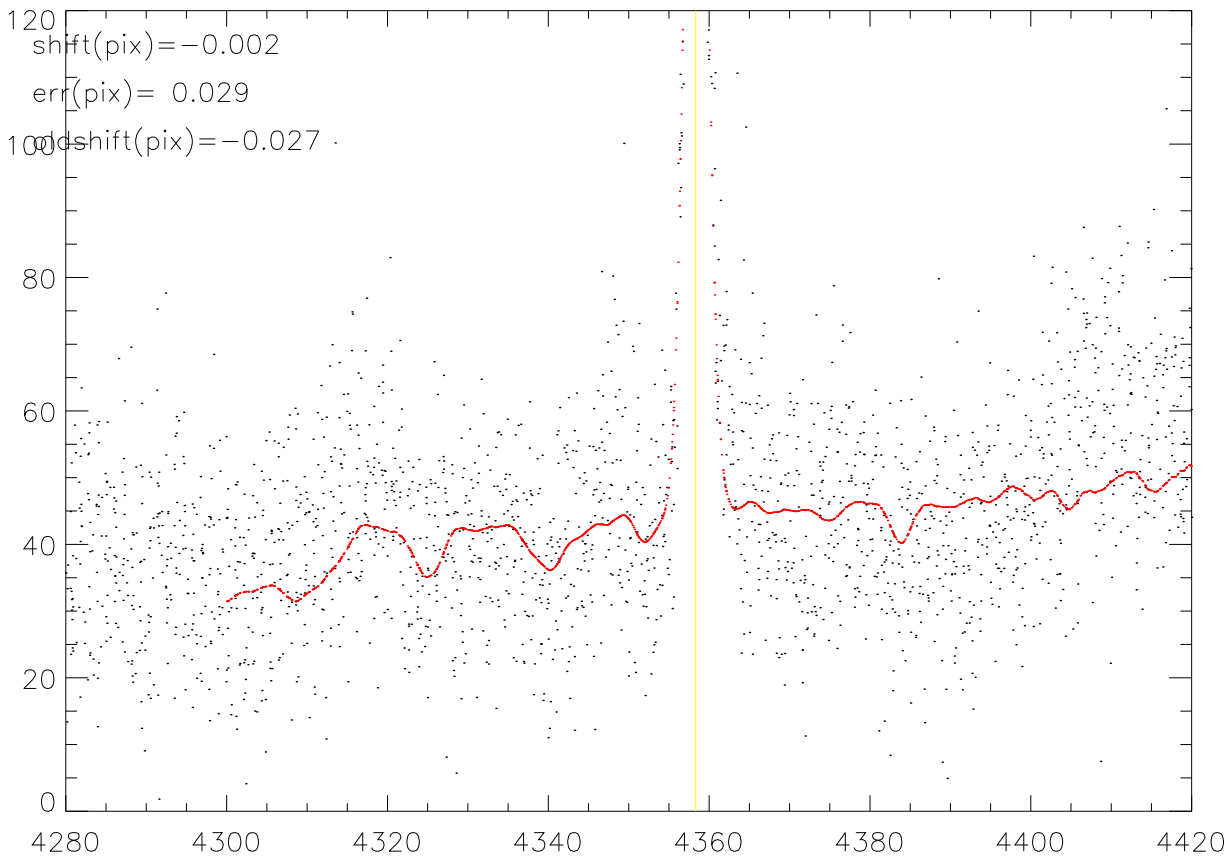

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010581.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.09
3.36
4.82

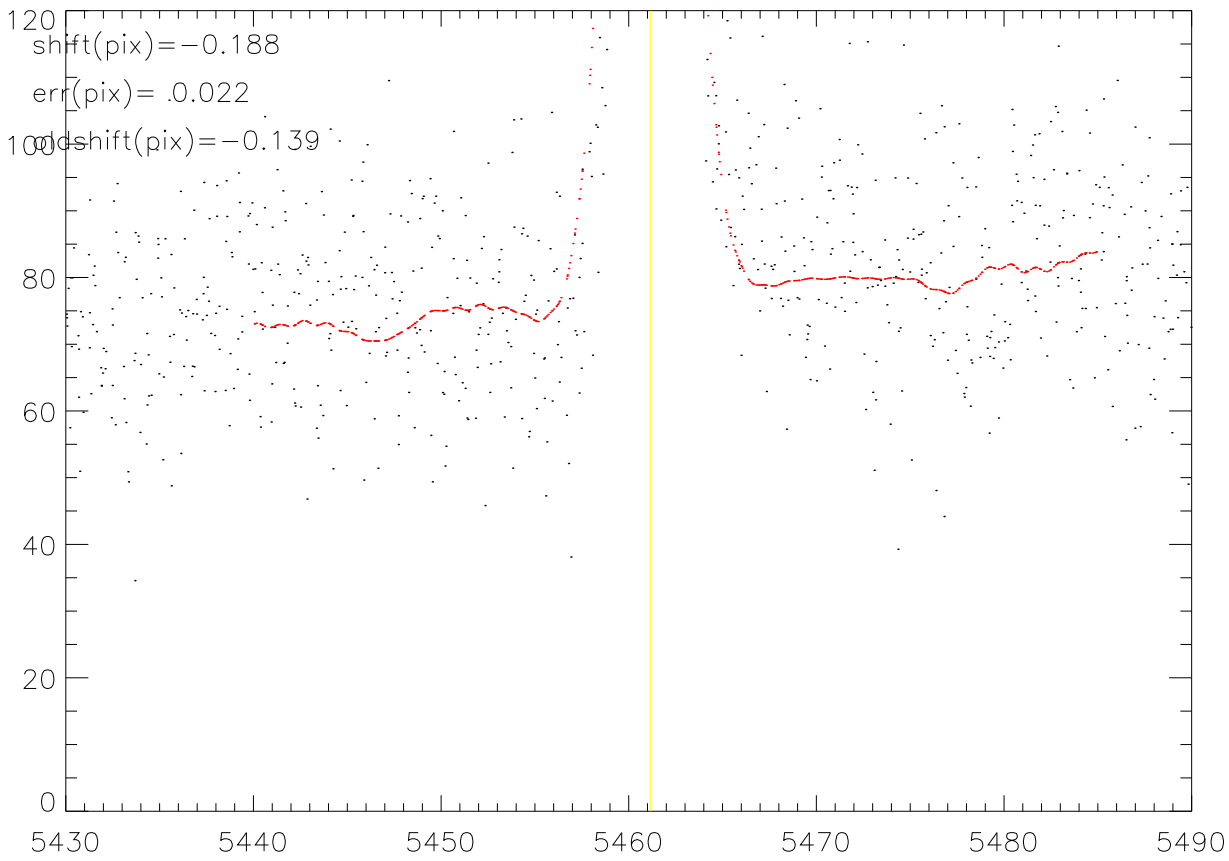

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010581.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 3.528
Max value = 5.356
Wed Feb 27 20:38:55 2008

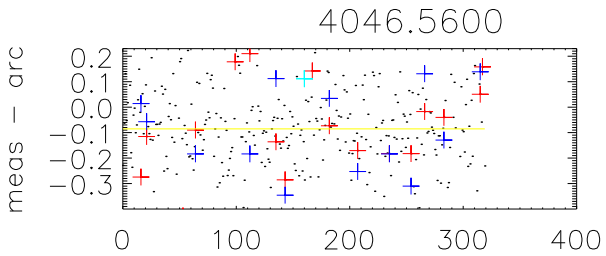

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-b1-00010581.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

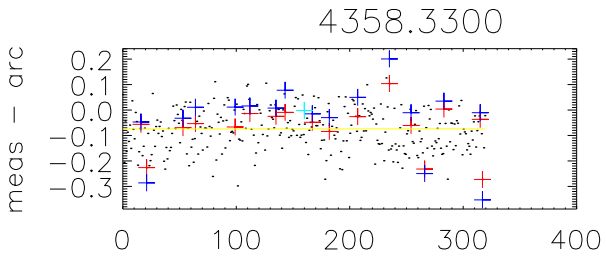

4046.5600
off: 0.01
sig: 0.072
4358.3300
off: −0.03
sig: 0.026
5460.9400
off: −0.14
sig: 0.018
5577.3390
off: −0.20
sig: 0.003
5889.9500
off: −0.22
sig: 0.010
5895.9240
off: −0.23
sig: 0.012

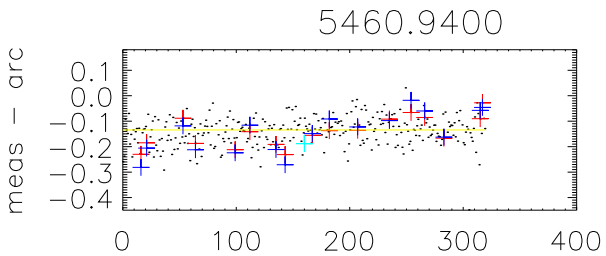

shift(pix)= 0.112
err(pix)= 0.083
oldshift(pix)= 0.013
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

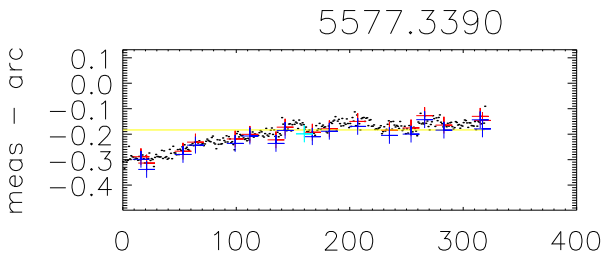

shift(pix)=−0.002
err(pix)= 0.029
oldshift(pix)=−0.027
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

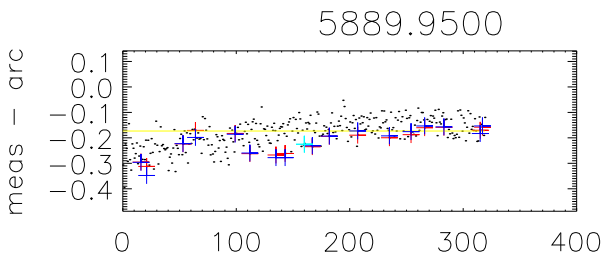

shift(pix)=−0.188
err(pix)= .0.022
oldshift(pix)=−0.139
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

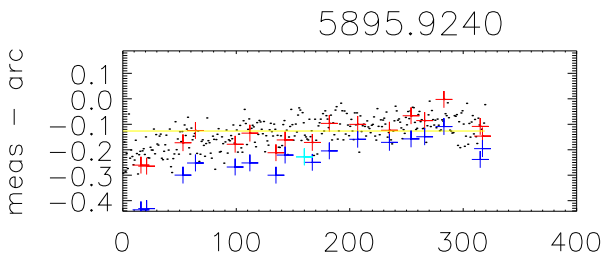

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

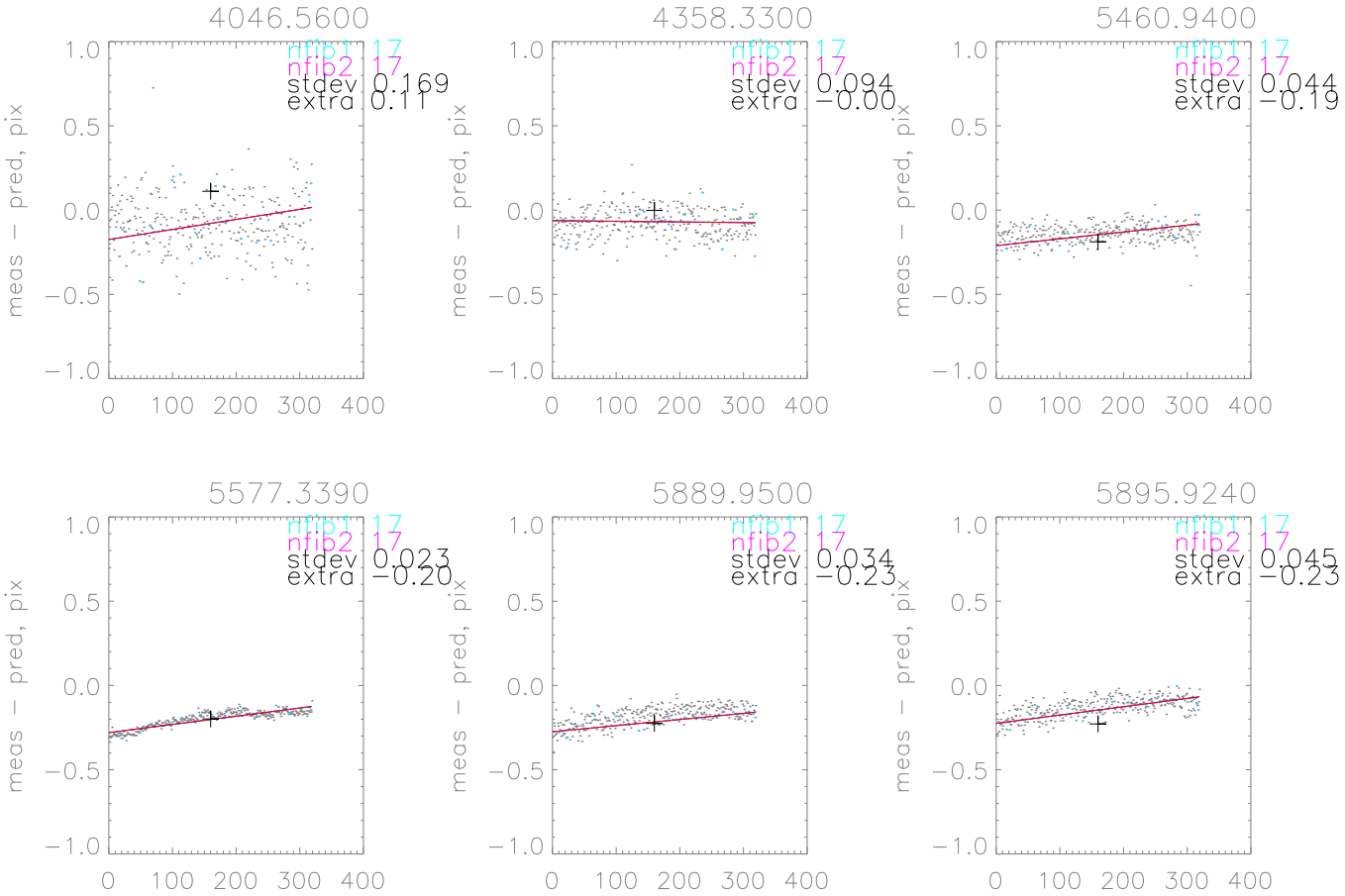

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

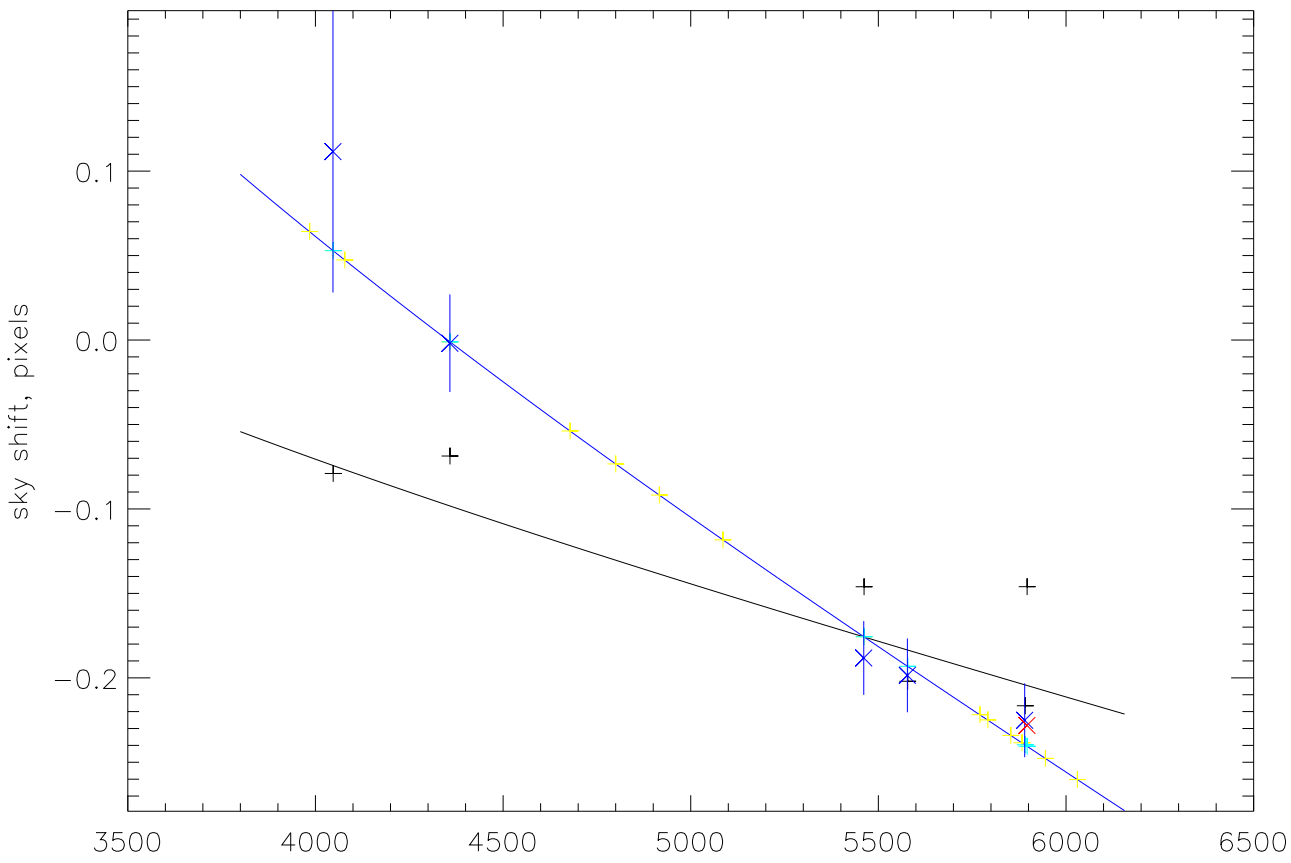

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

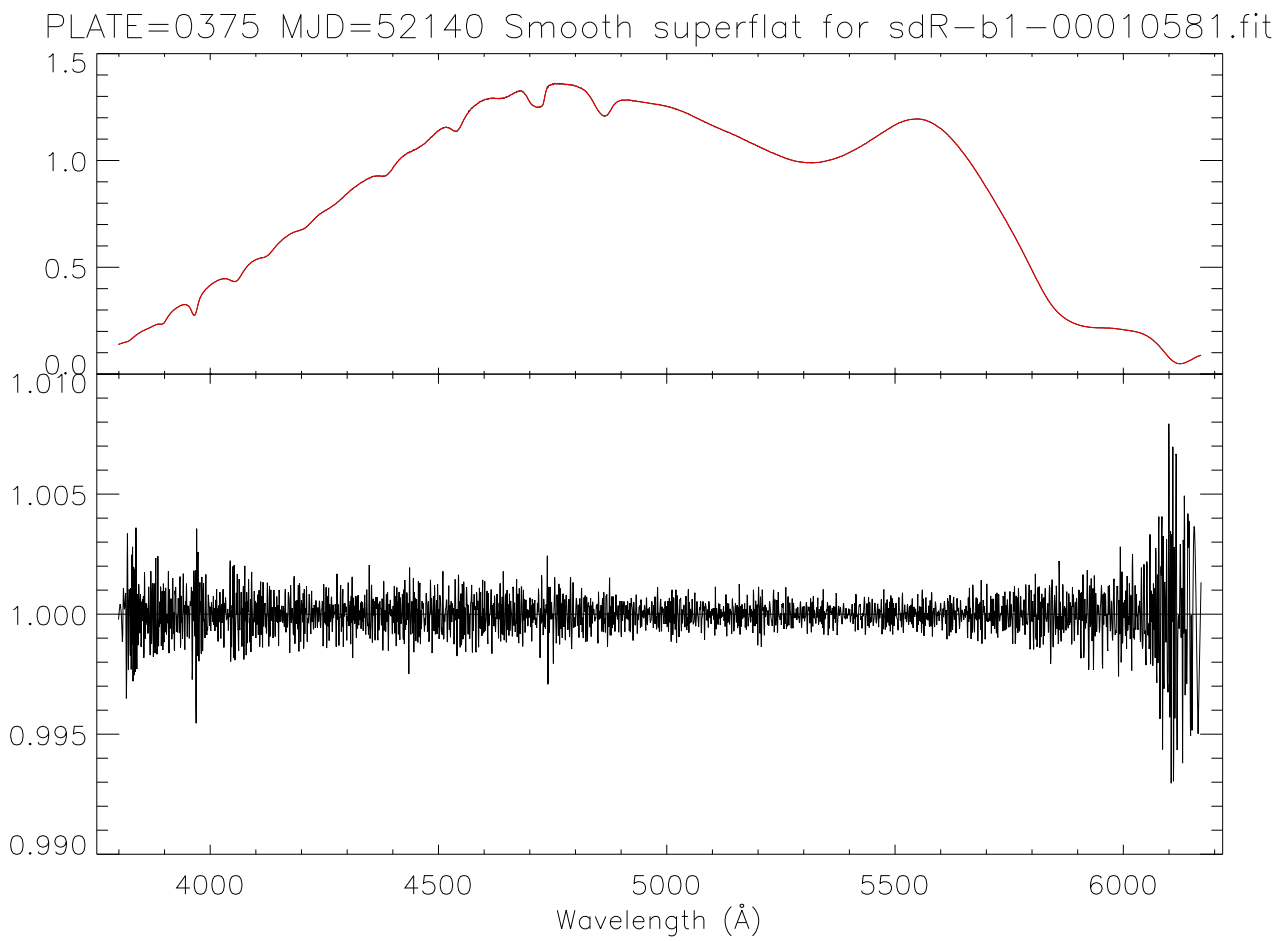

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

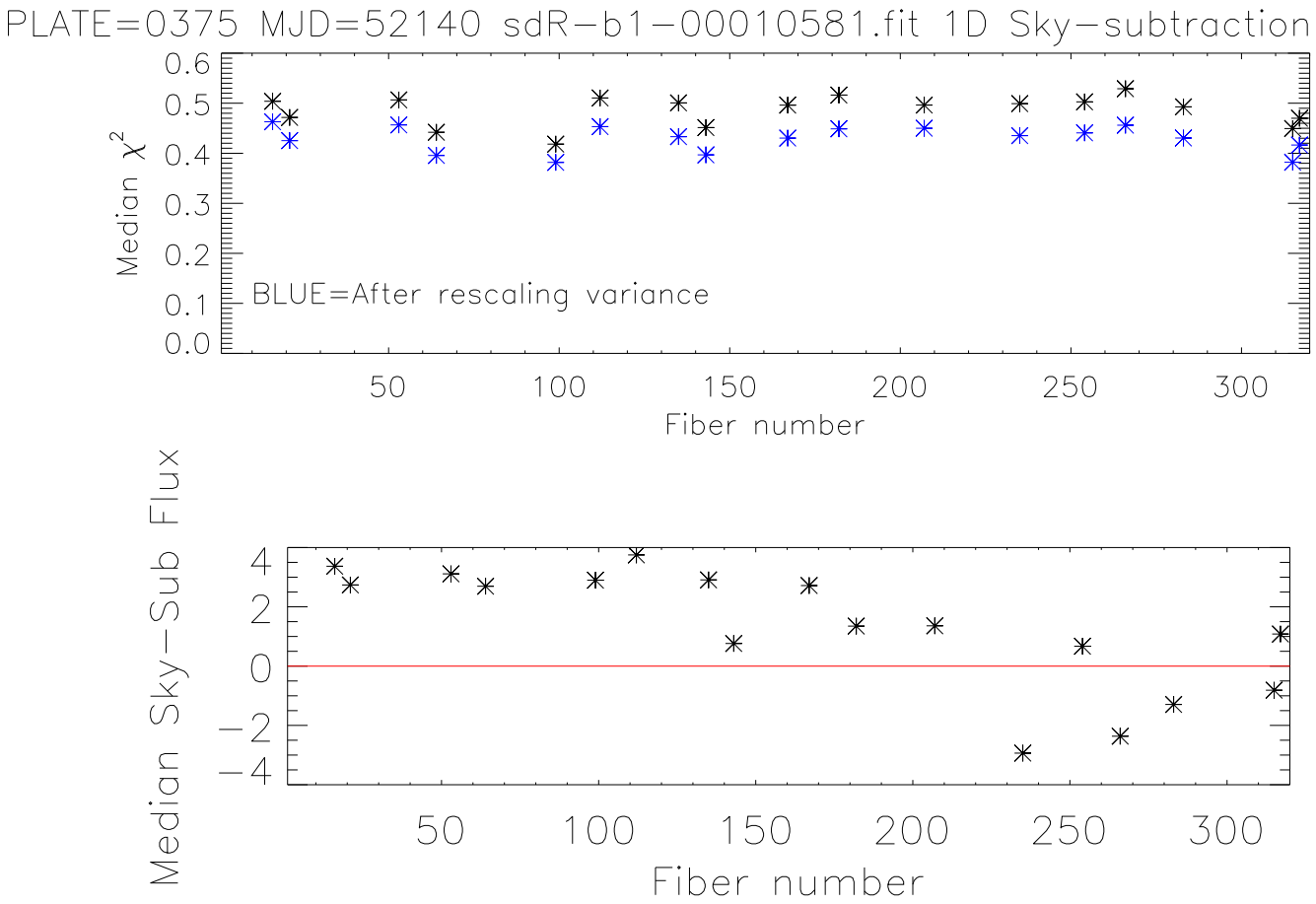

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

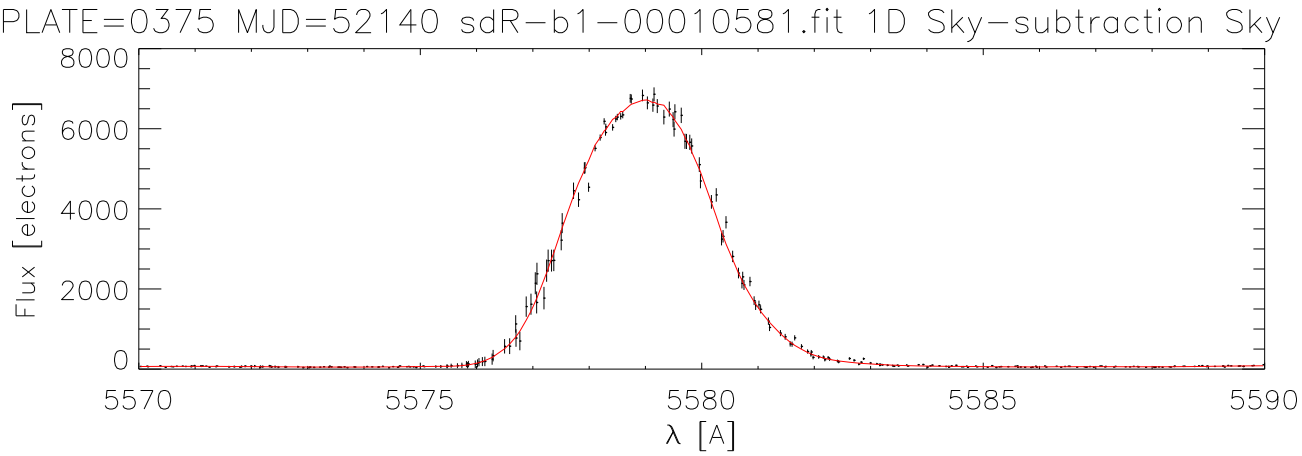

4046.5600
nfib1 17
nfib2 17
stdev 0.169
extra 0.11
4358.3300
nfib1 17
nfib2 17
stdev 0.094
extra −0.00
5460.9400
nfib1 17
nfib2 17
stdev 0.044
extra −0.19
5577.3390
nfib1 17
nfib2 17
stdev 0.023
extra −0.20
5889.9500
nfib1 17
nfib2 17
stdev 0.034
extra −0.23
5895.9240
nfib1 17
nfib2 17
stdev 0.045
extra −0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

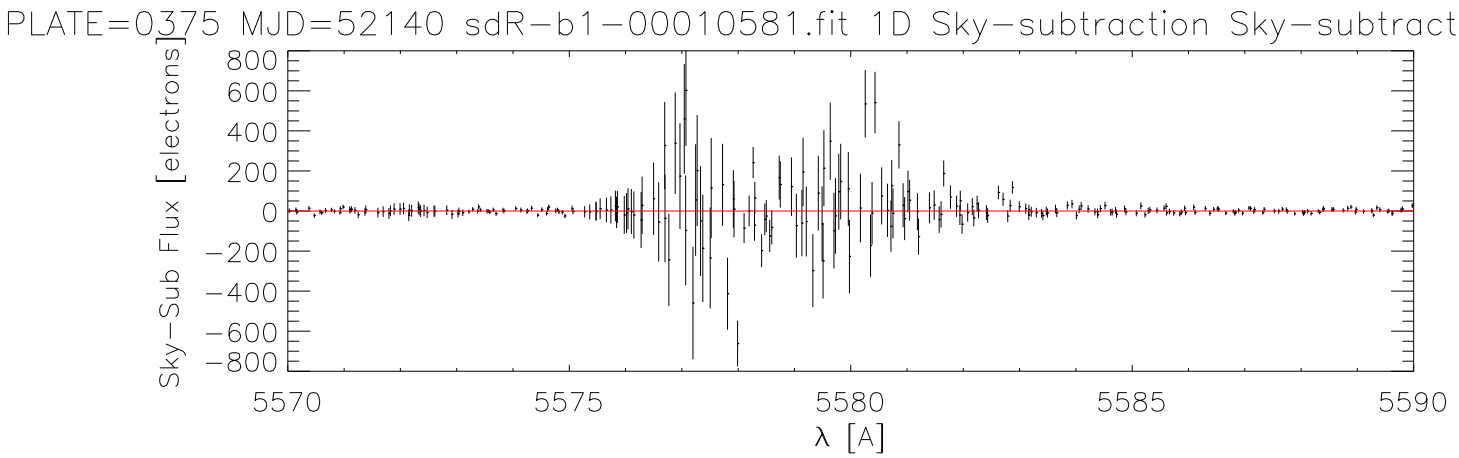

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

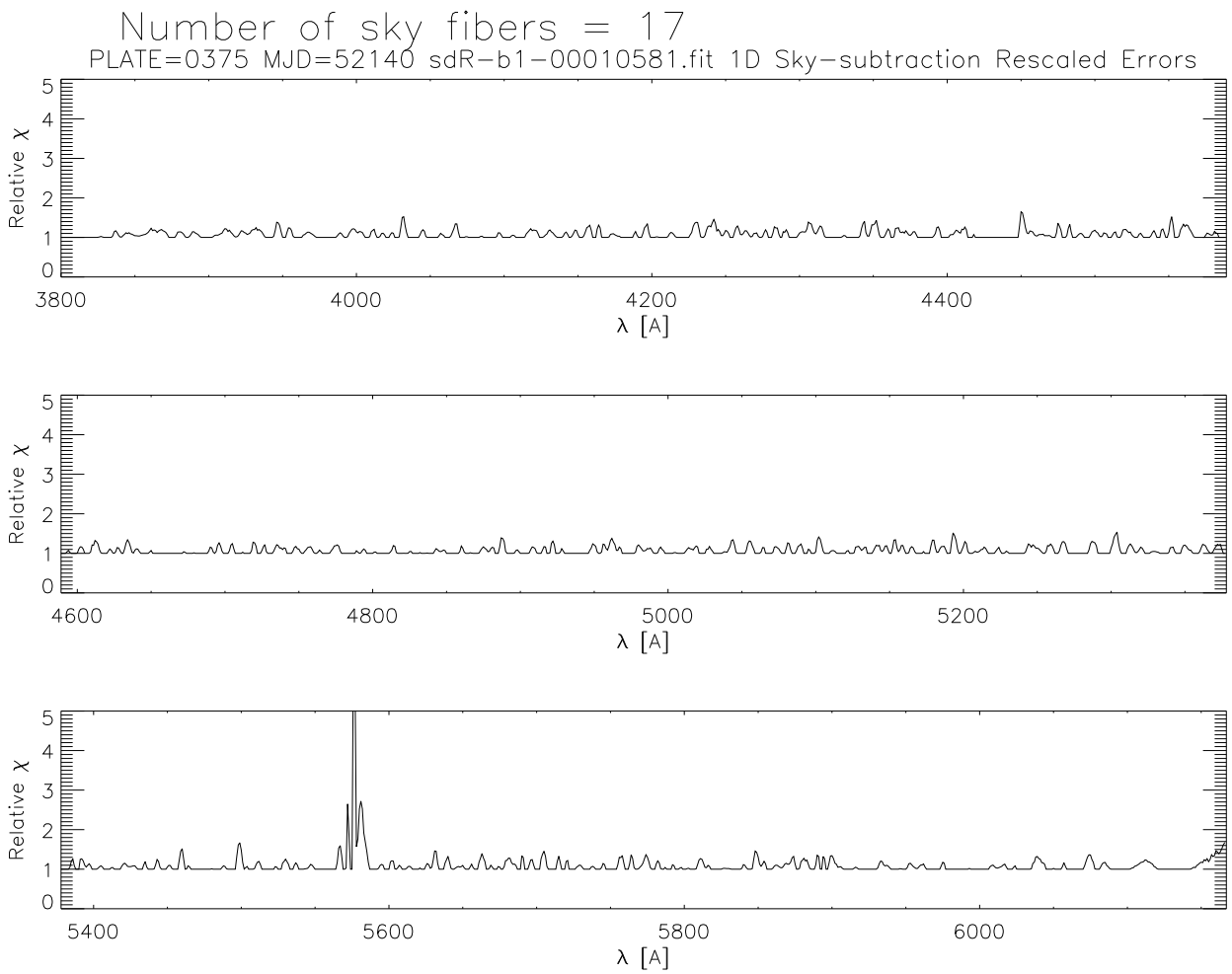
es= 0.0000

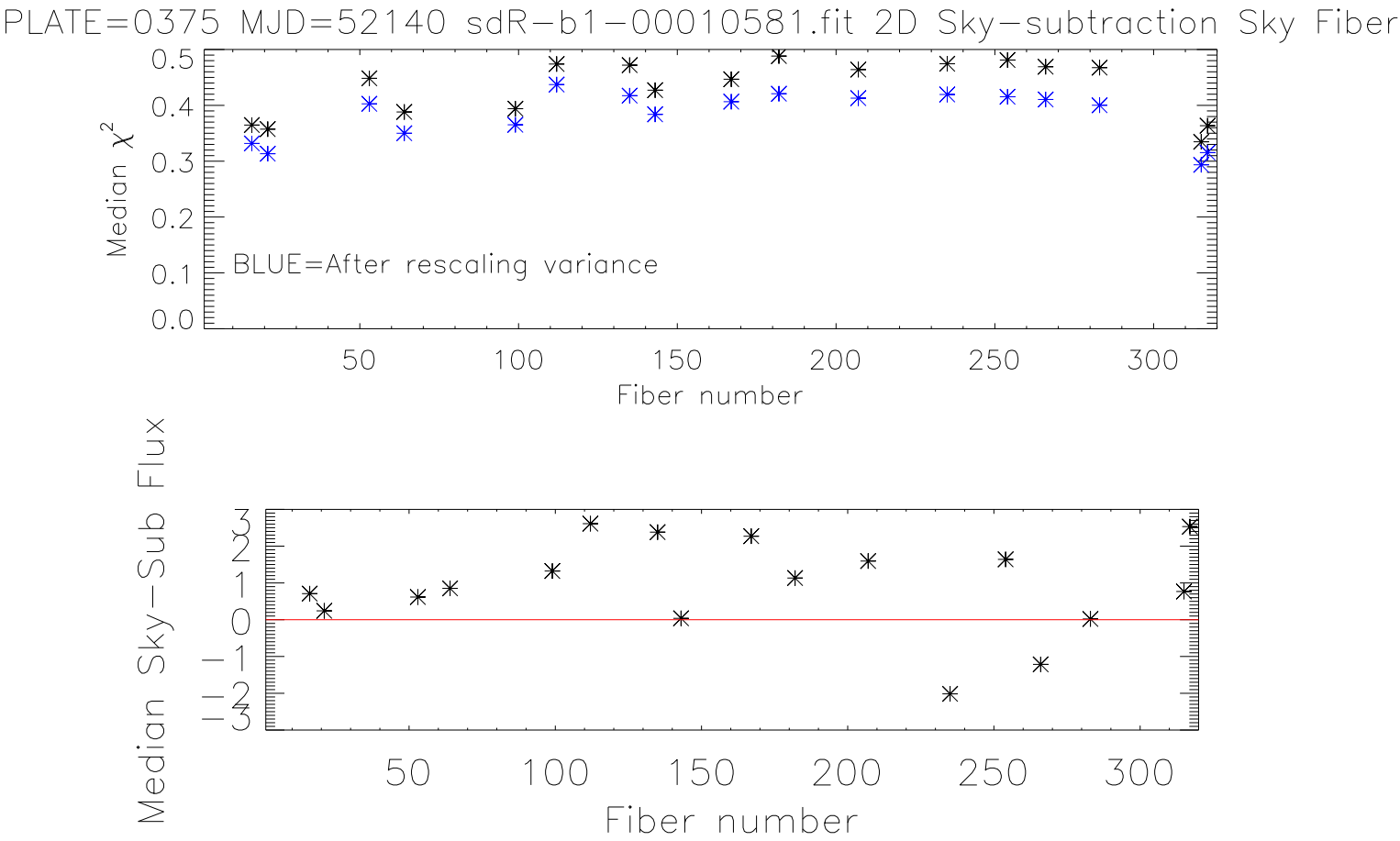

PLATE=0375 MJD=52140 Smooth superflat for sdR-b1-00010581.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

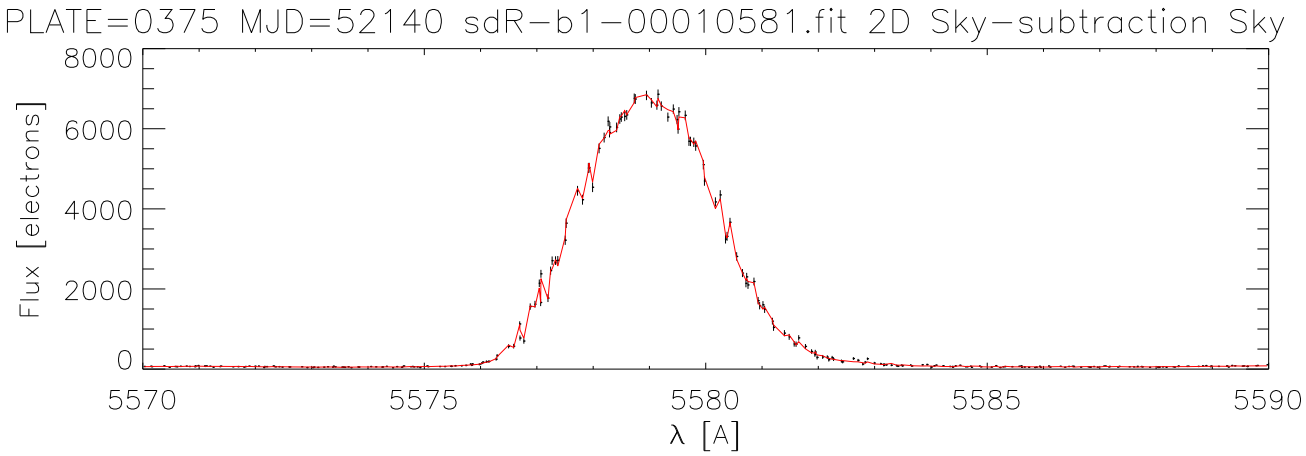

PLATE=0375 MJD=52140 sdR-b1-00010581.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

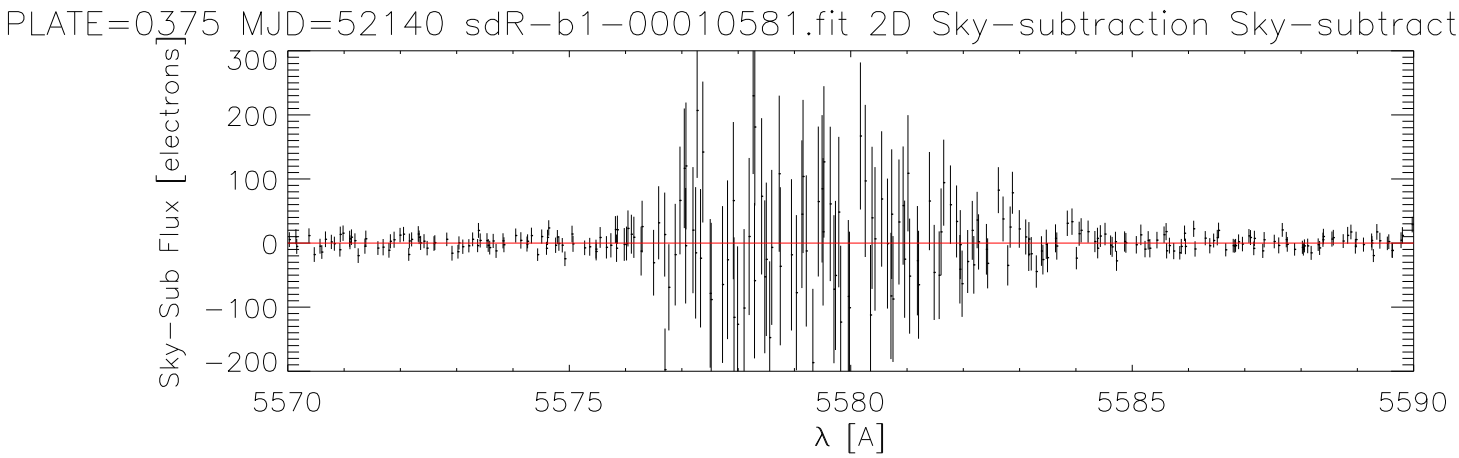

PLATE=0375 MJD=52140 sdR-b1-00010581.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

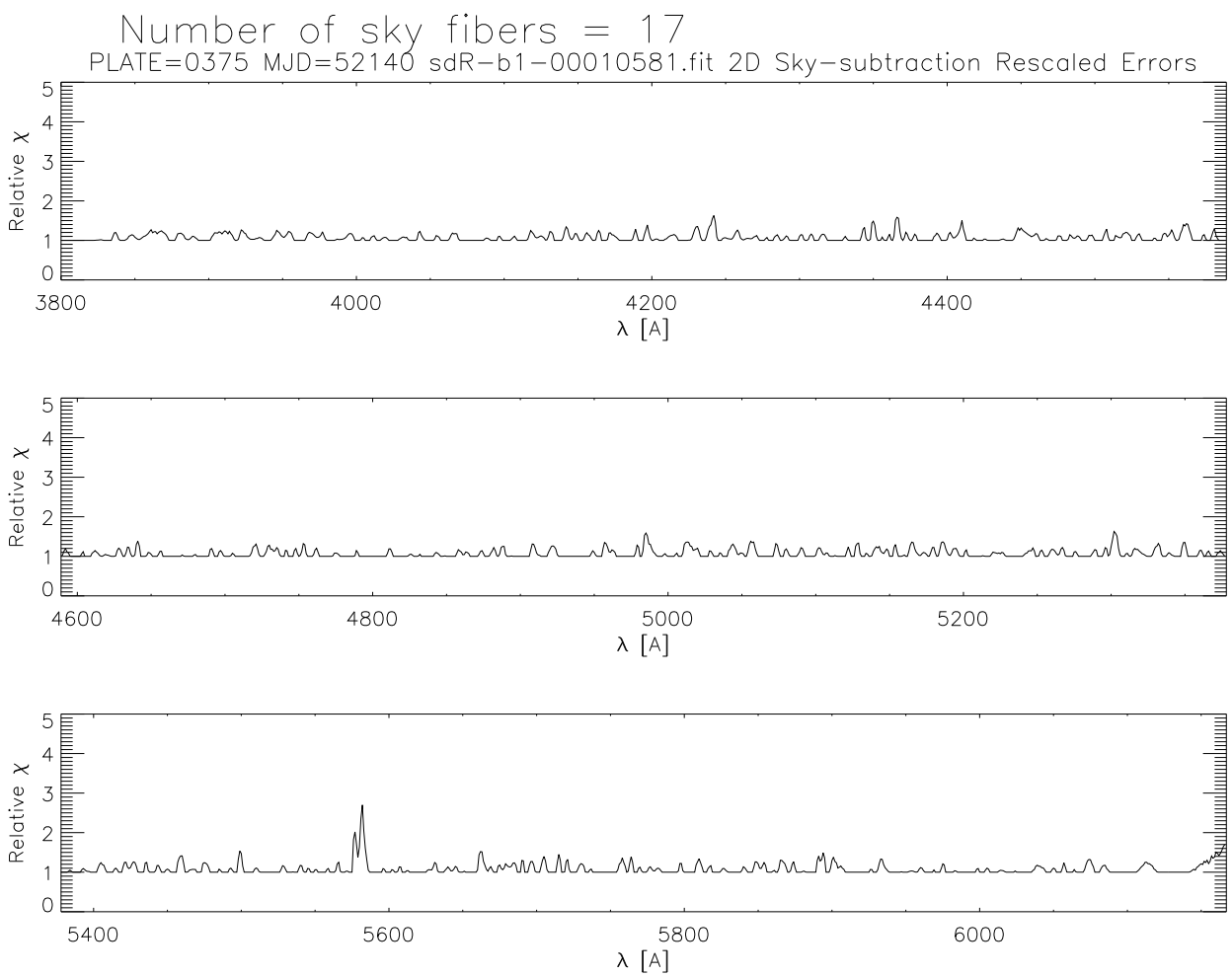

PLATE=0375 MJD=52140 sdR-b1-00010581.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
-600
-800
5570
5575
5580
5585
5590
λ [A]

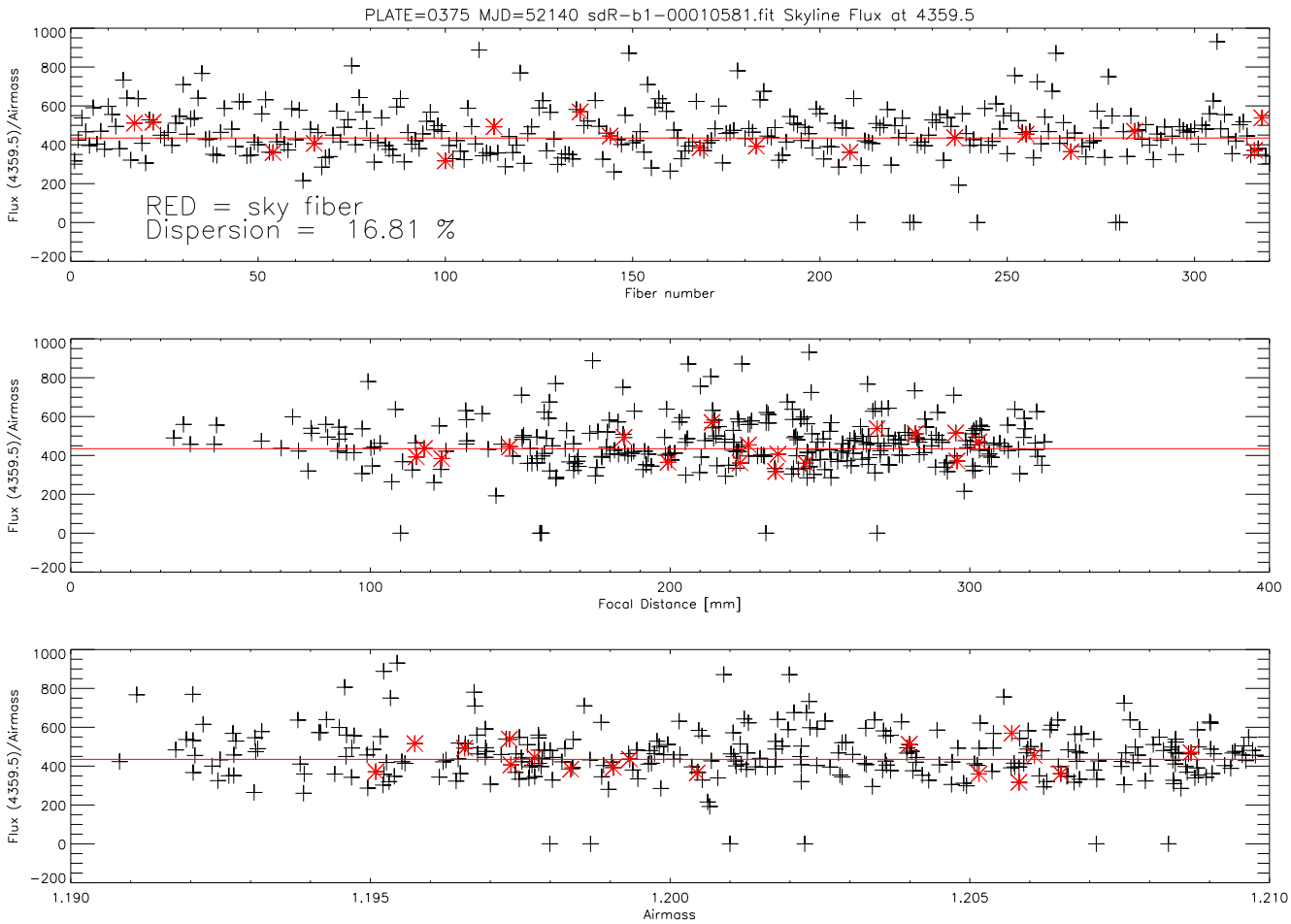

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010581.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

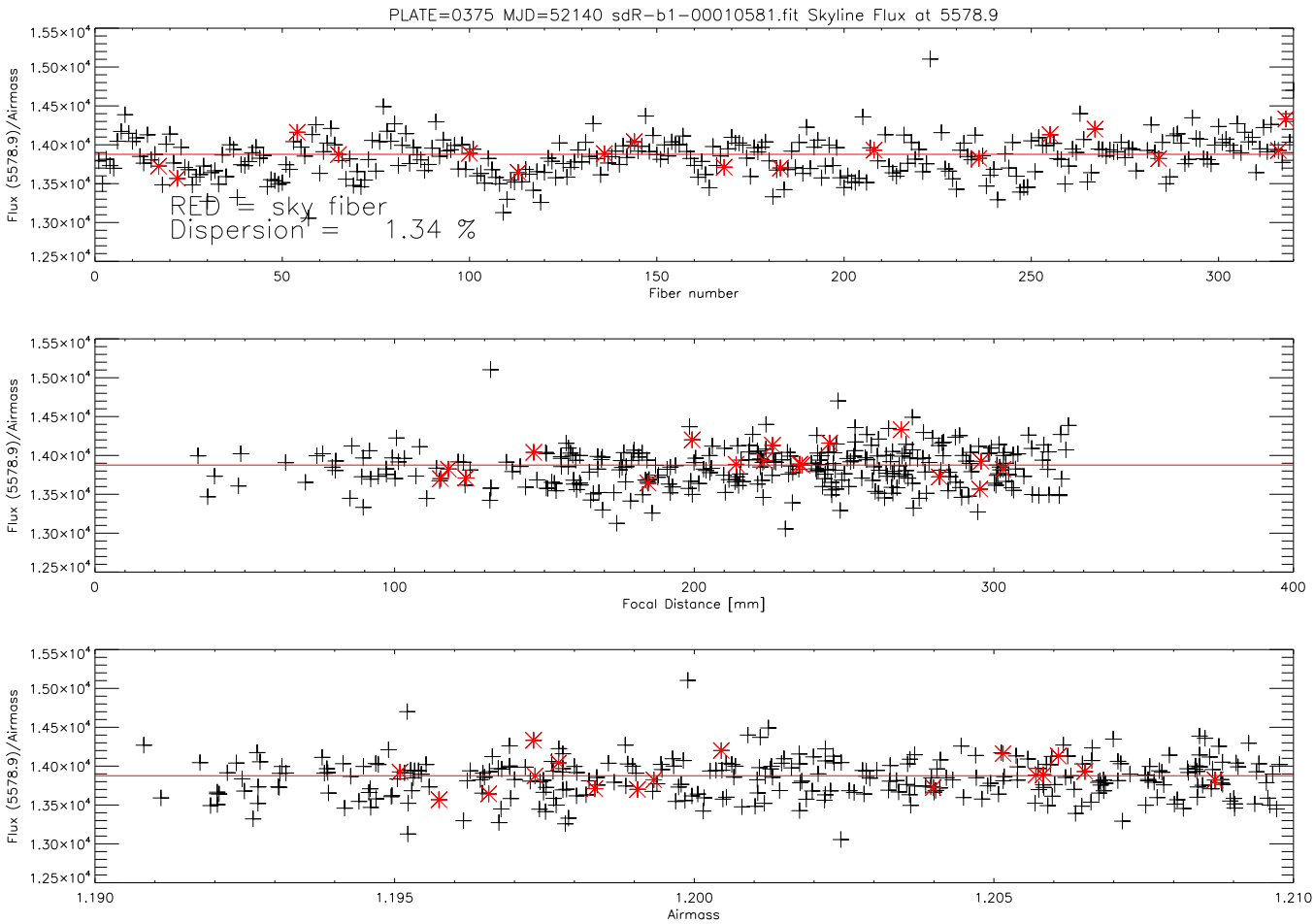

PLATE=0375 MJD=52140 sdR-b1-00010581.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

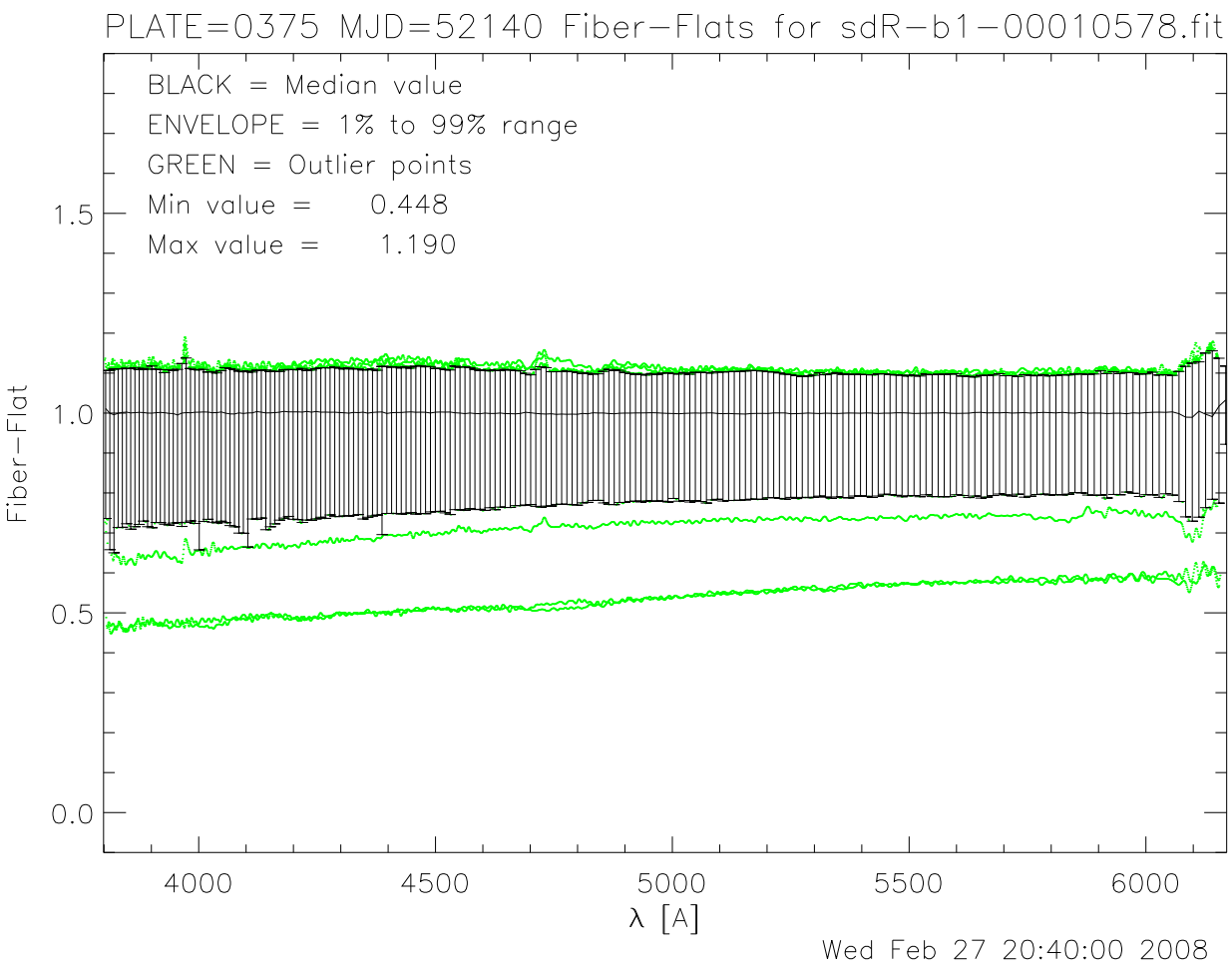

PLATE=0375 MJD=52140 sdR-b1-00010581.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

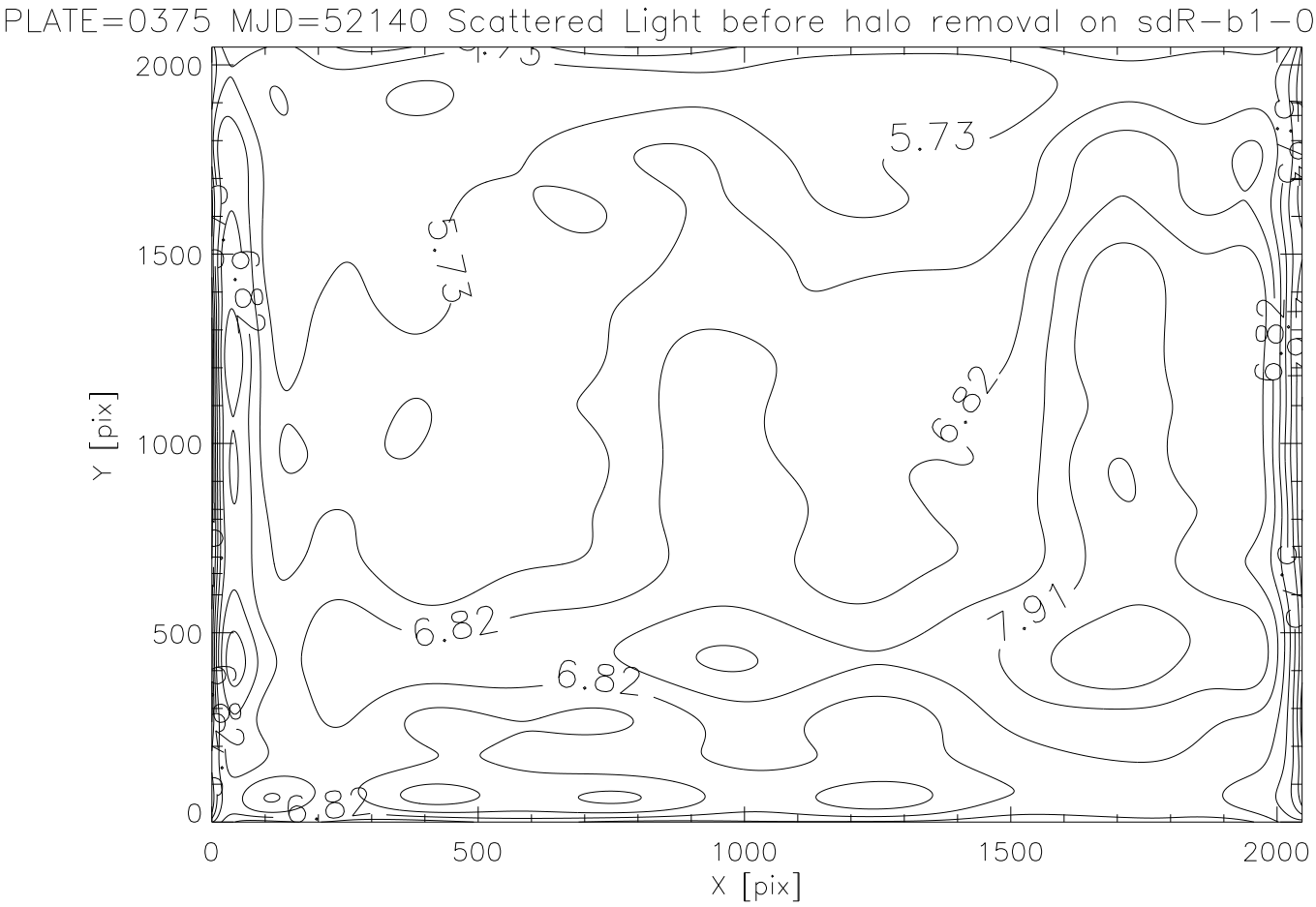

PLATE=0375 MJD=52140 sdR-b1-00010581.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

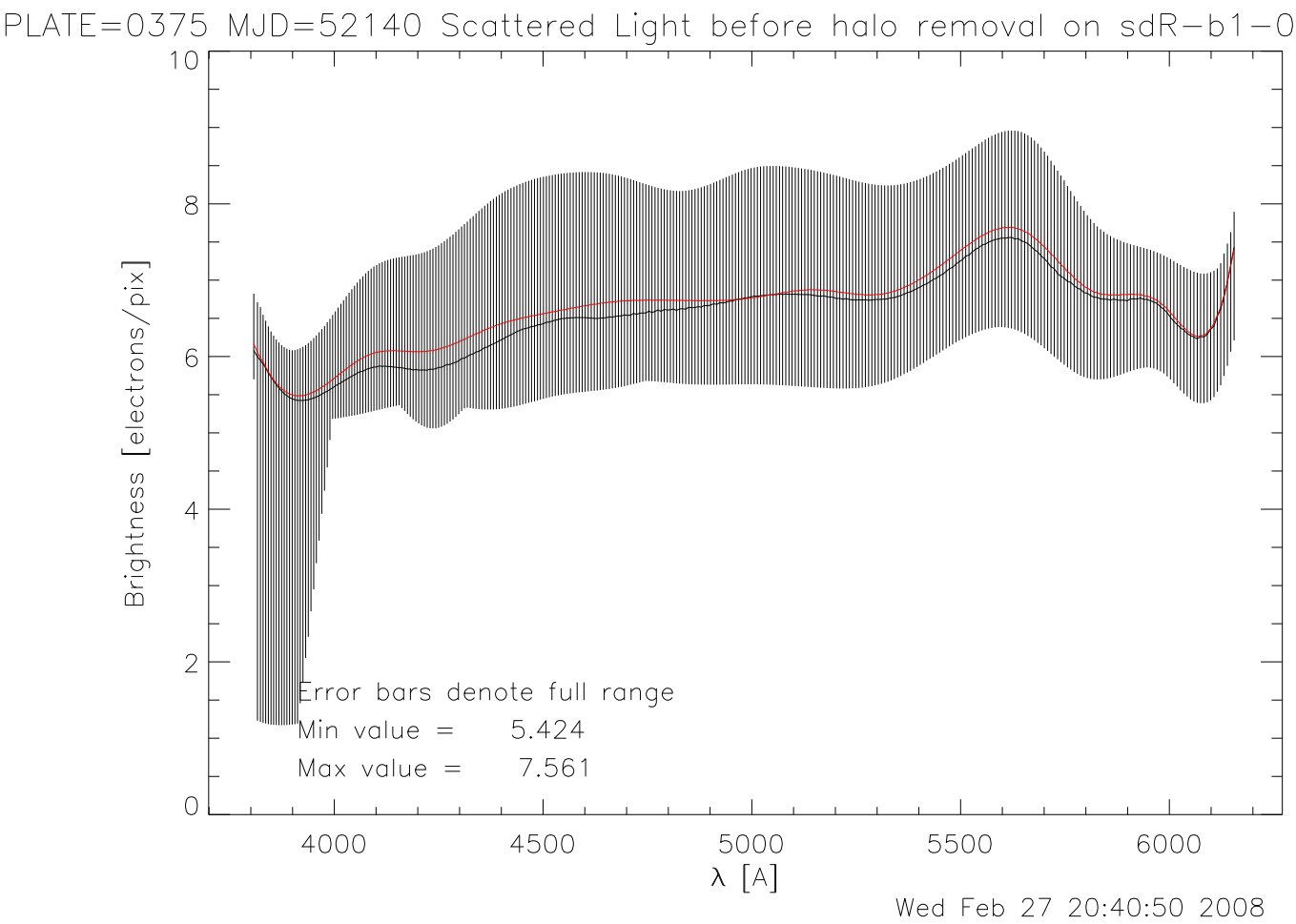

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010581.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

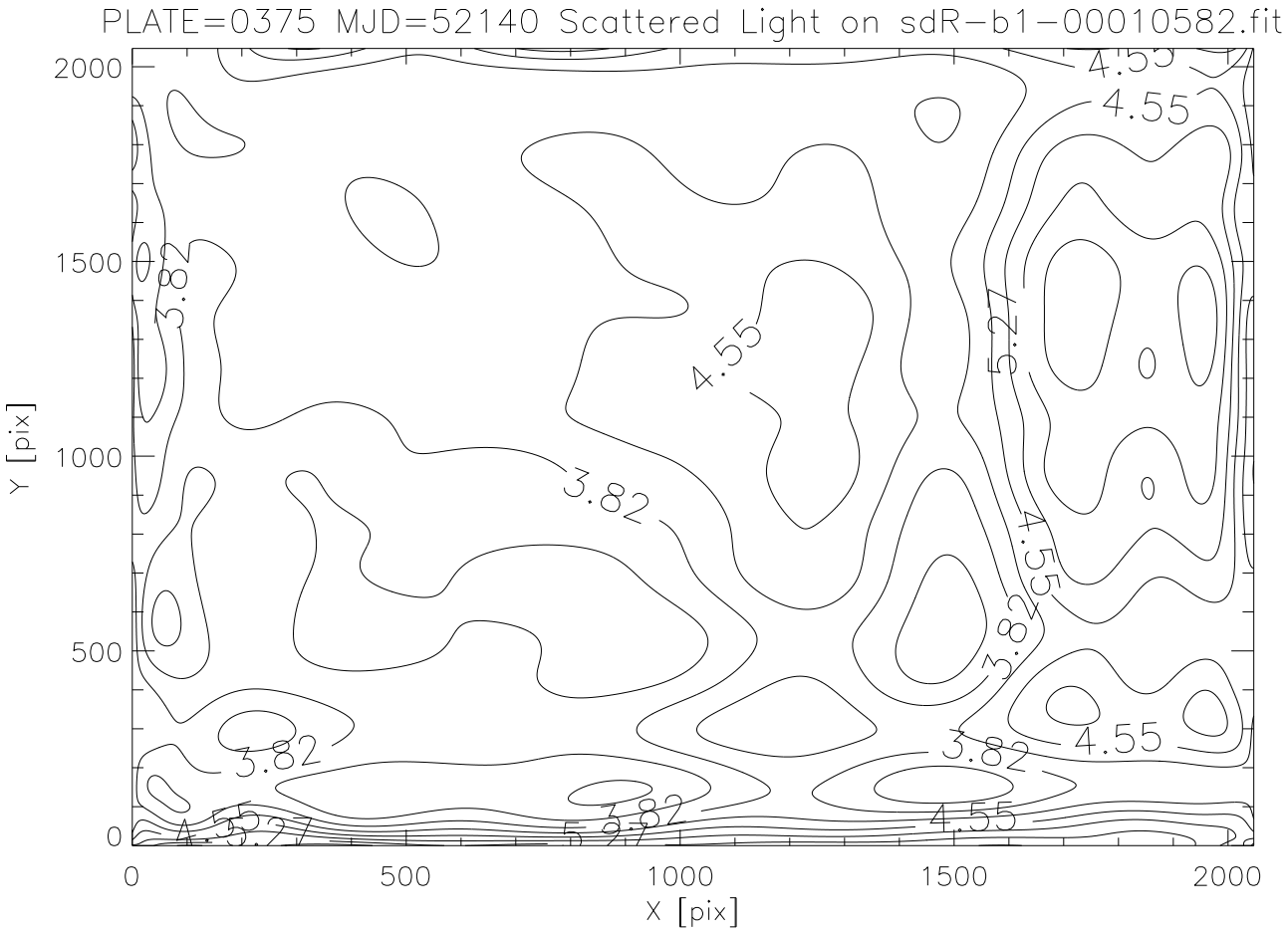

PLATE=0375 MJD=52140 sdR-b1-00010581.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 16.81 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

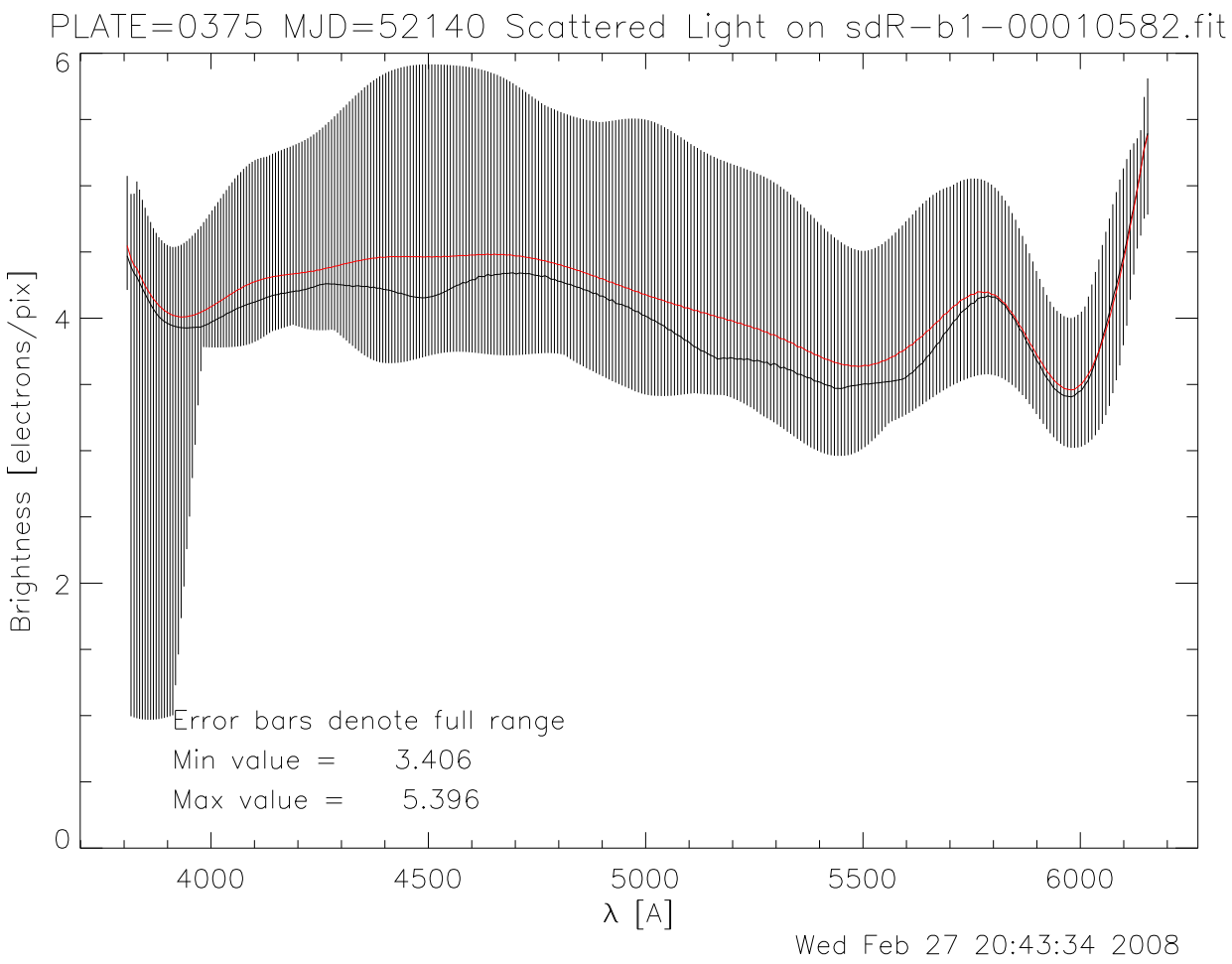

PLATE=0375 MJD=52140 sdR-b1-00010581.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.34 %
Fiber number
Focal Distance [mm]
Airmass

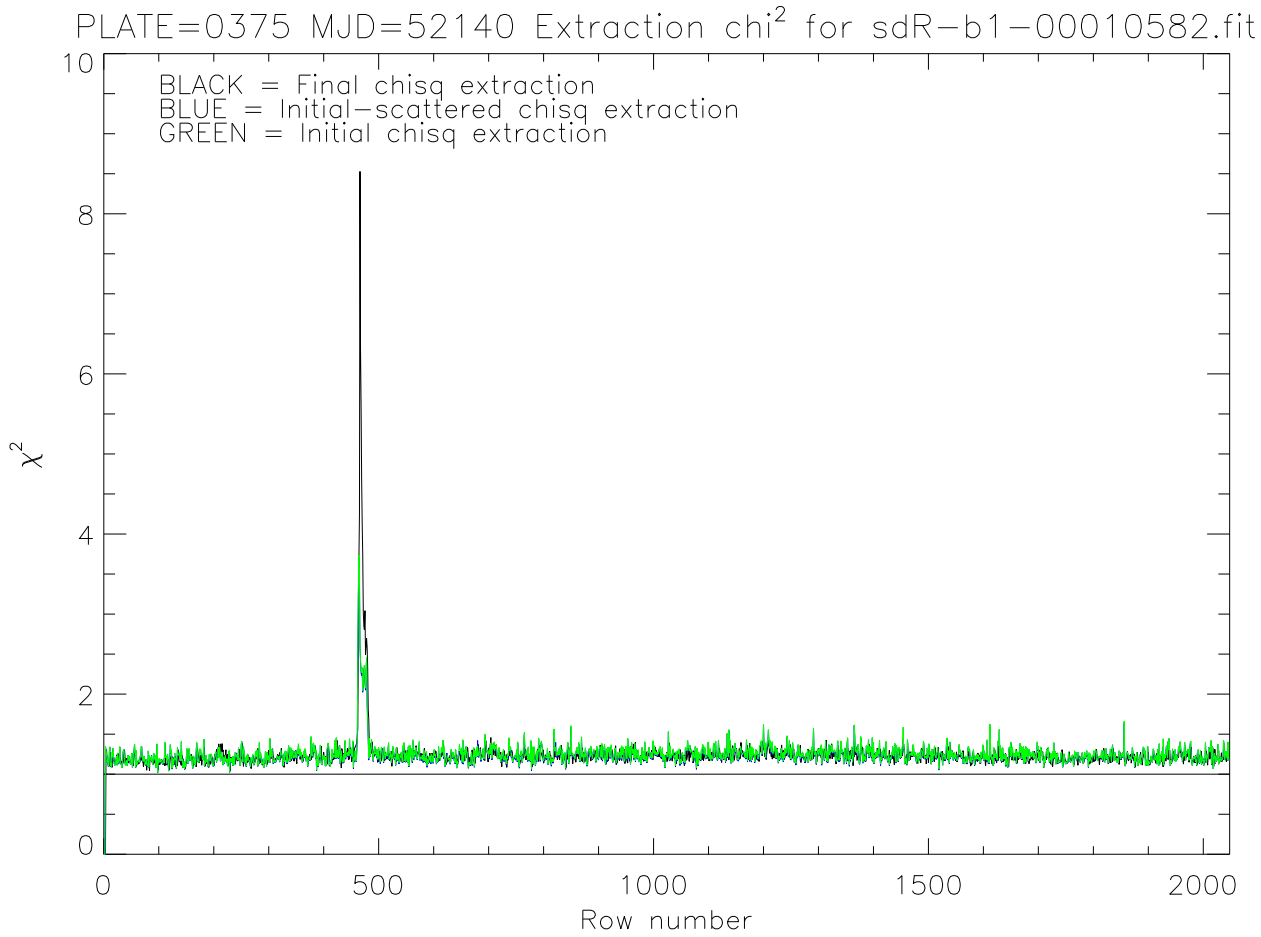

PLATE=0375 MJD=52140 Fiber-Flats for sdR-b1-00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.448
Max value = 1.190
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:40:00 2008

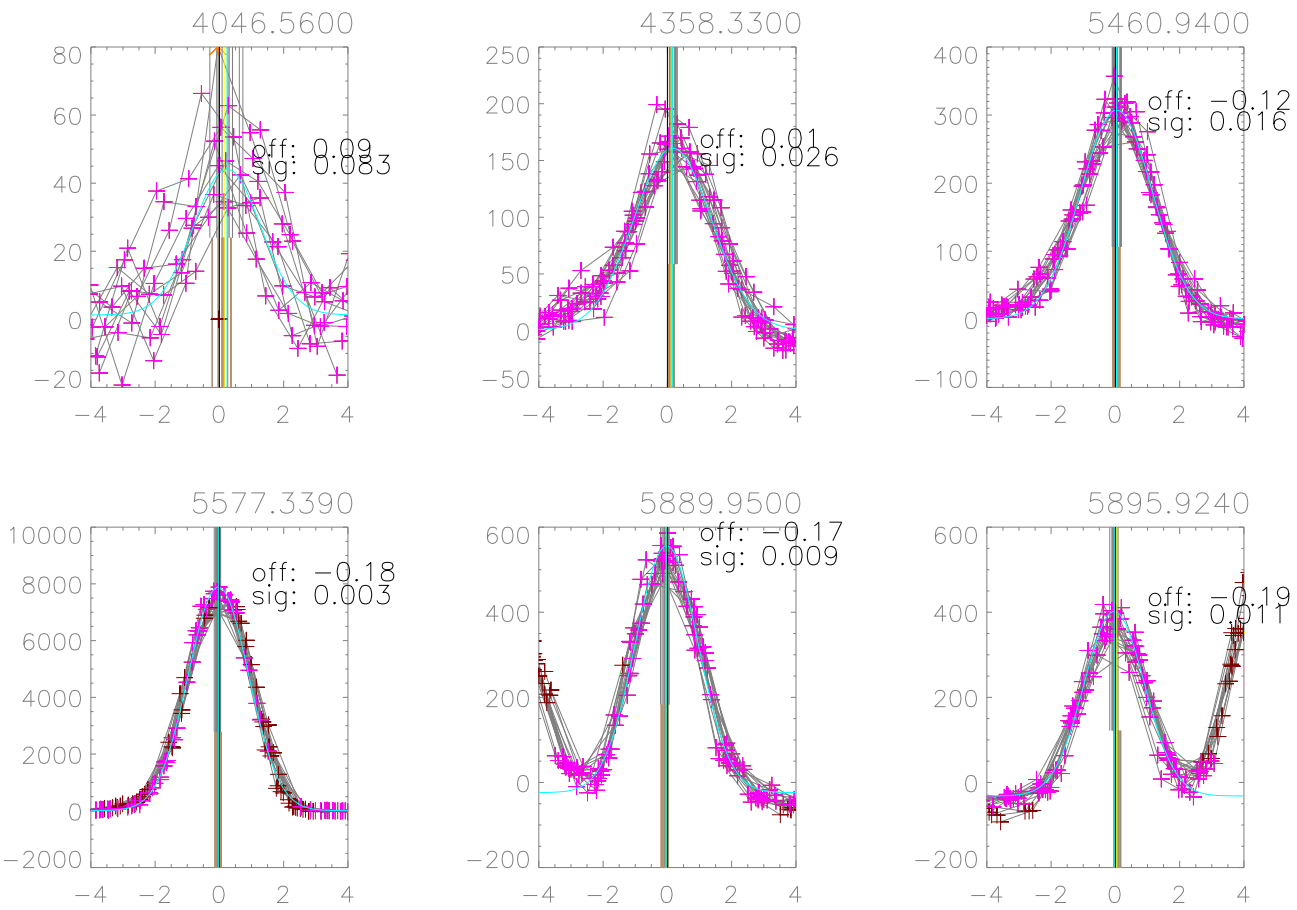

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR−b1−00010582.f
5.73
5.73
6.82
6.82
6.82
6.82
7.91
Y [pix]
X [pix]
0
500
1000
1500
2000

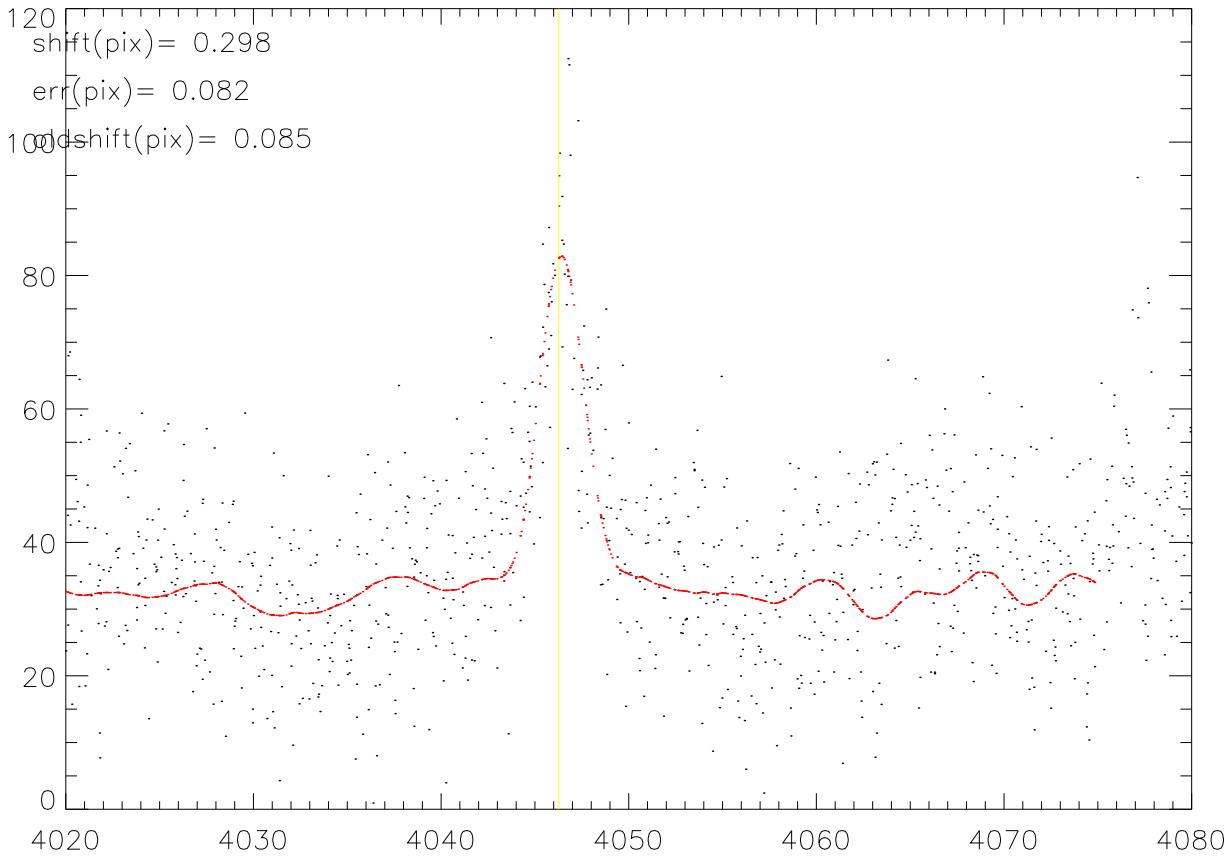

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b1-00010582.f
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.424
Max value = 7.561
Wed Feb 27 20:40:50 2008

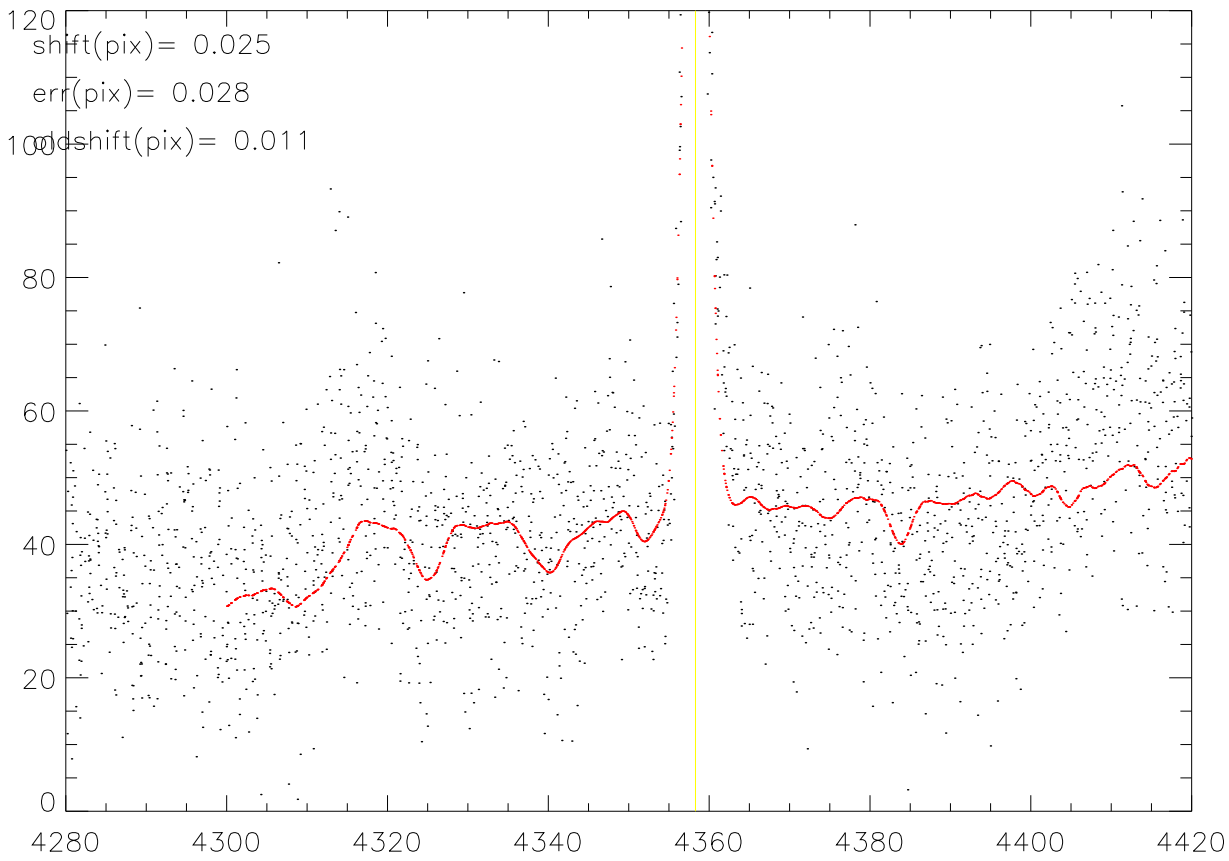

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010582.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.82
4.55
5.27
0

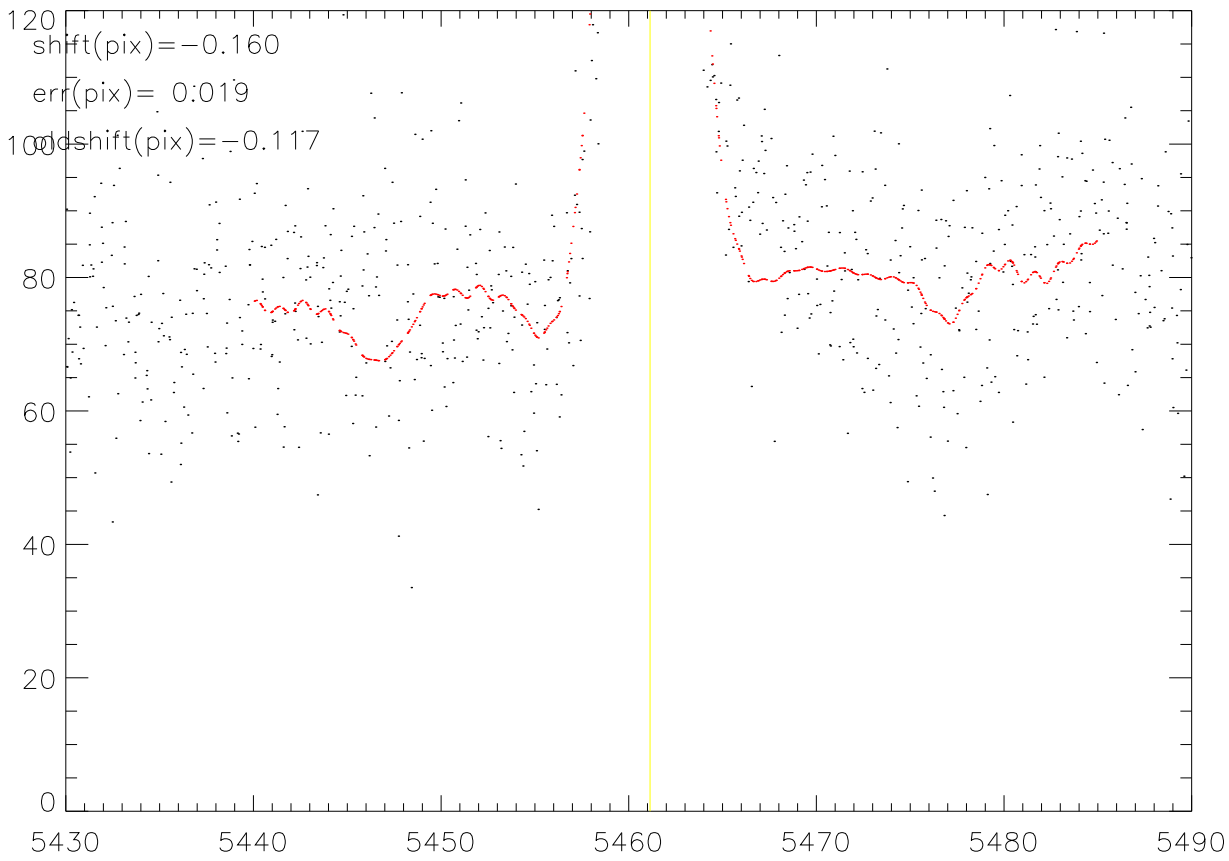

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010582.fit
Brightness [electrons/pix]
0
2
4
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.406
Max value = 5.396
Wed Feb 27 20:43:34 2008

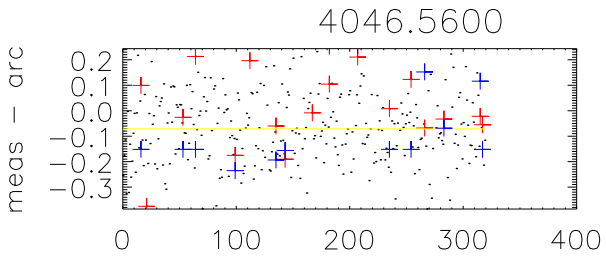

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-b1-00010582.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

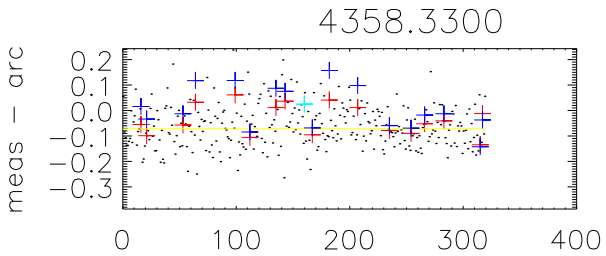

4046.5600
off: 0.09
sig: 0.083
4358.3300
off: 0.01
sig: 0.026
5460.9400
off: −0.12
sig: 0.016
5577.3390
off: −0.18
sig: 0.003
5889.9500
off: −0.17
sig: 0.009
5895.9240
off: −0.19
sig: 0.011

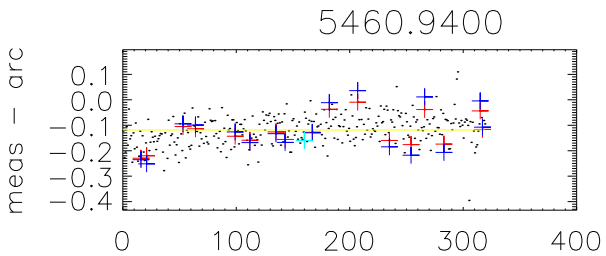

shift(pix)= 0.298
err(pix)= 0.082
oldshift(pix)= 0.085
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

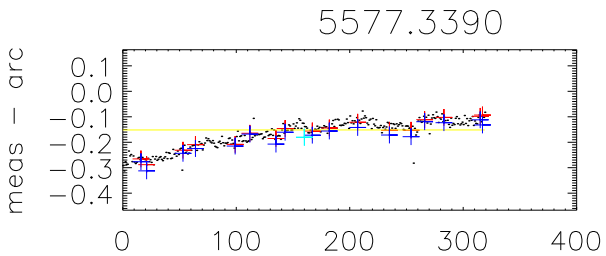

shift(pix)= 0.025
err(pix)= 0.028
oldshift(pix)= 0.011
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

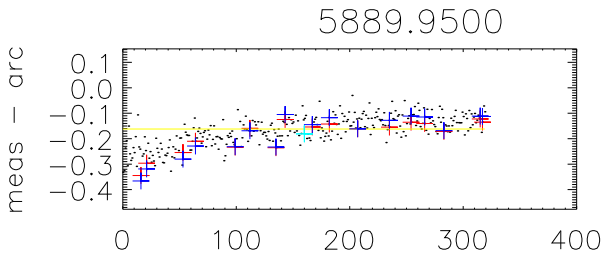

shift(pix)=−0.160
err(pix)= 0.019
oldshift(pix)=−0.117
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

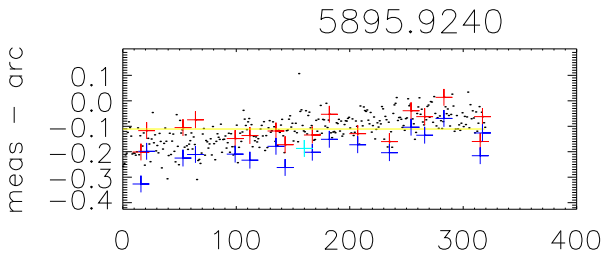

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

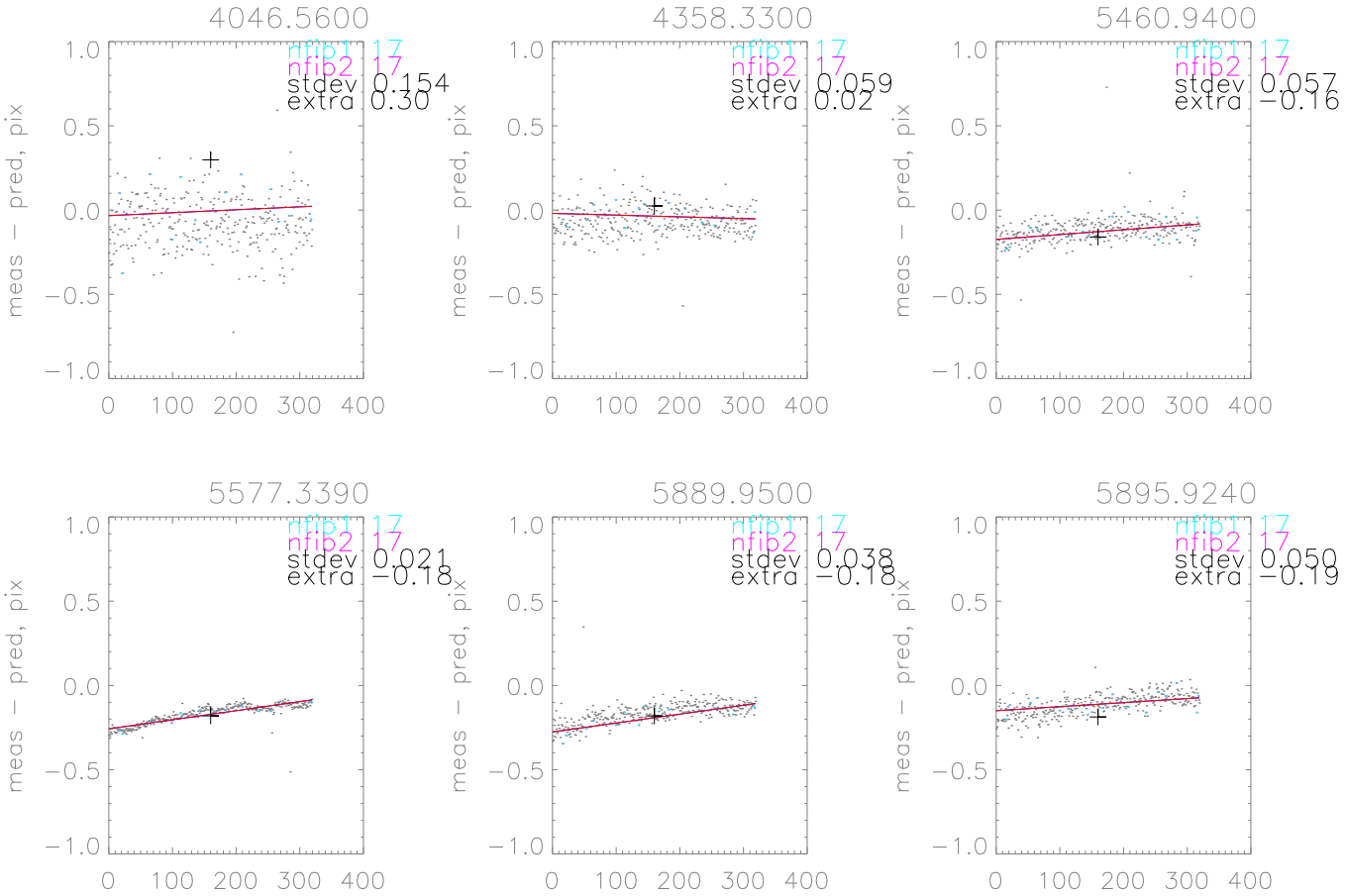

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

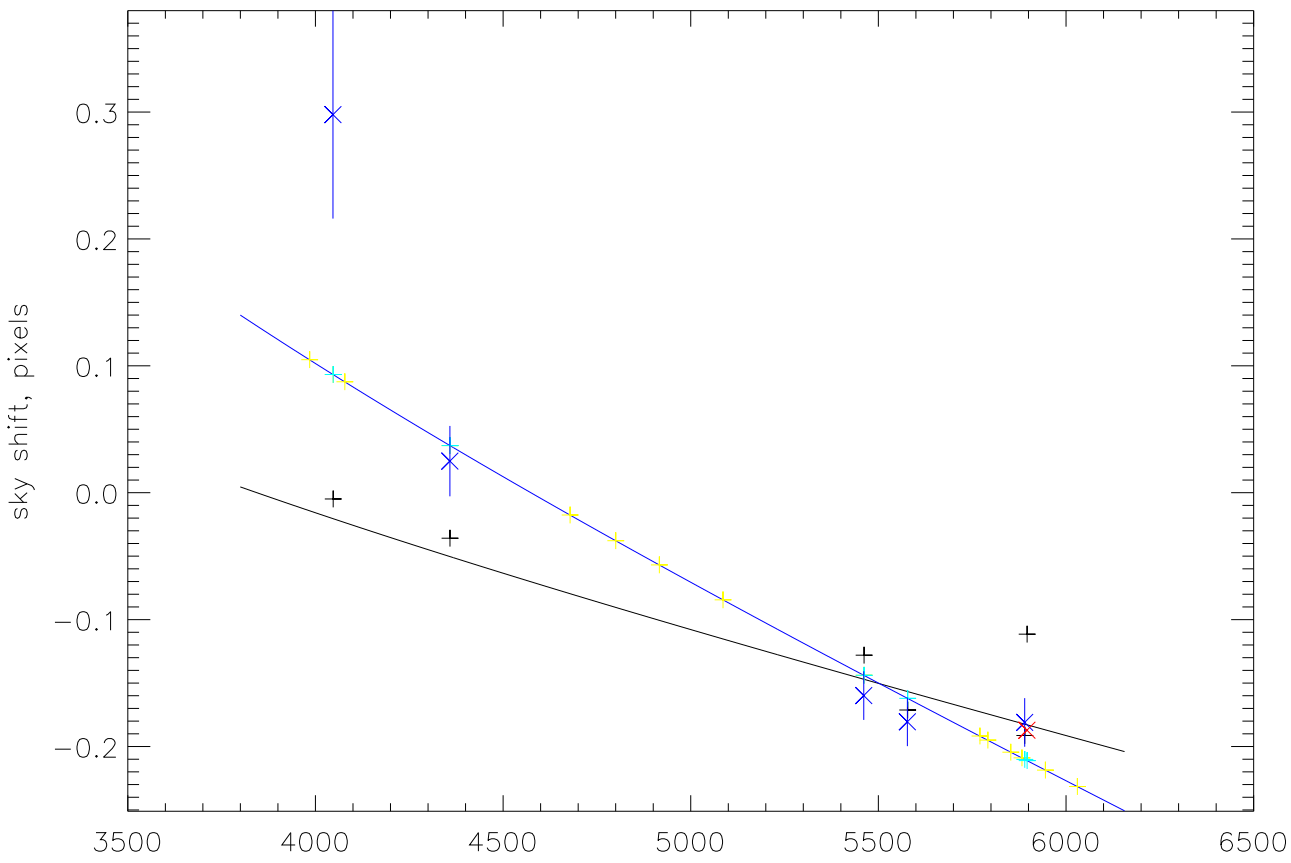

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

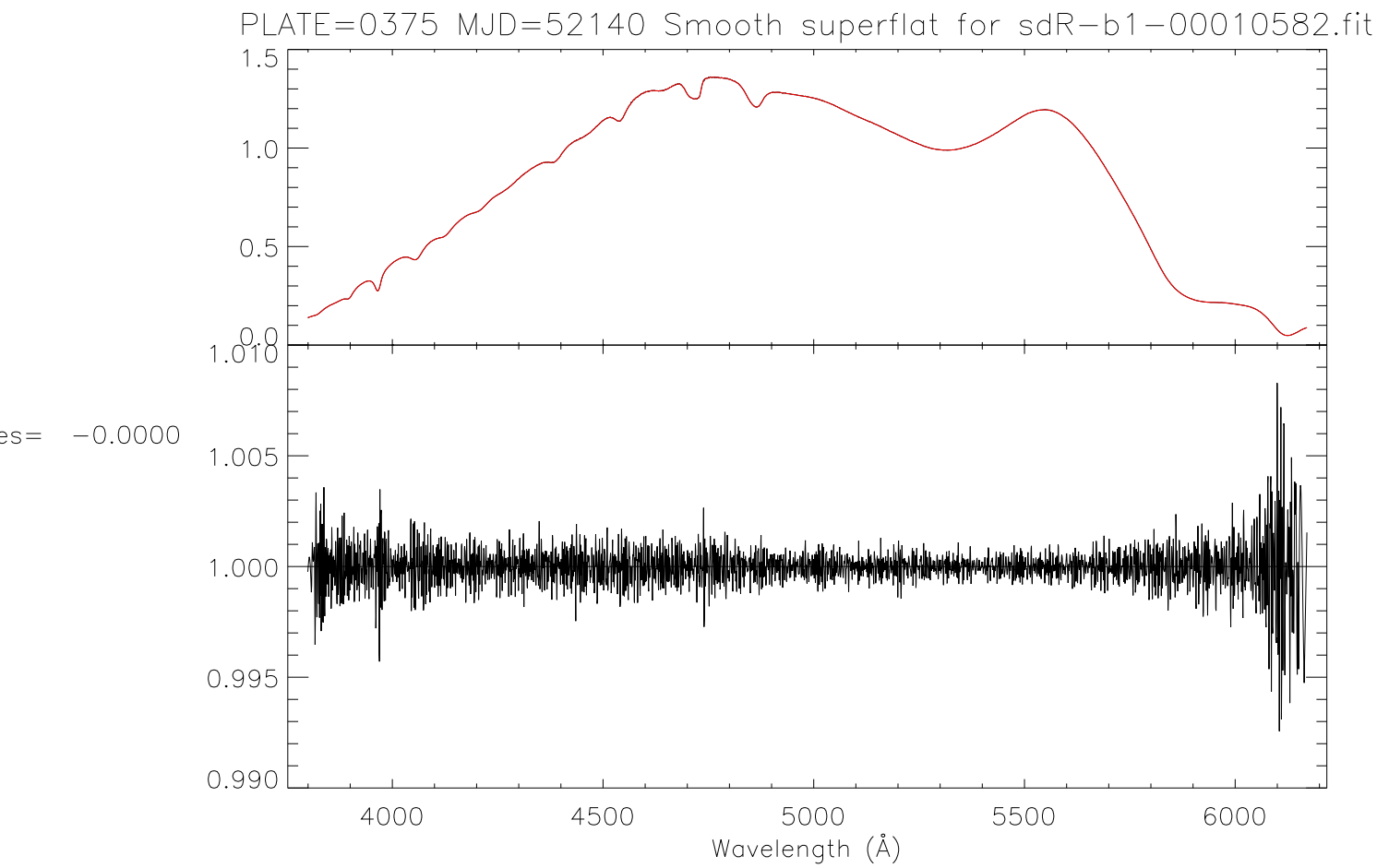

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

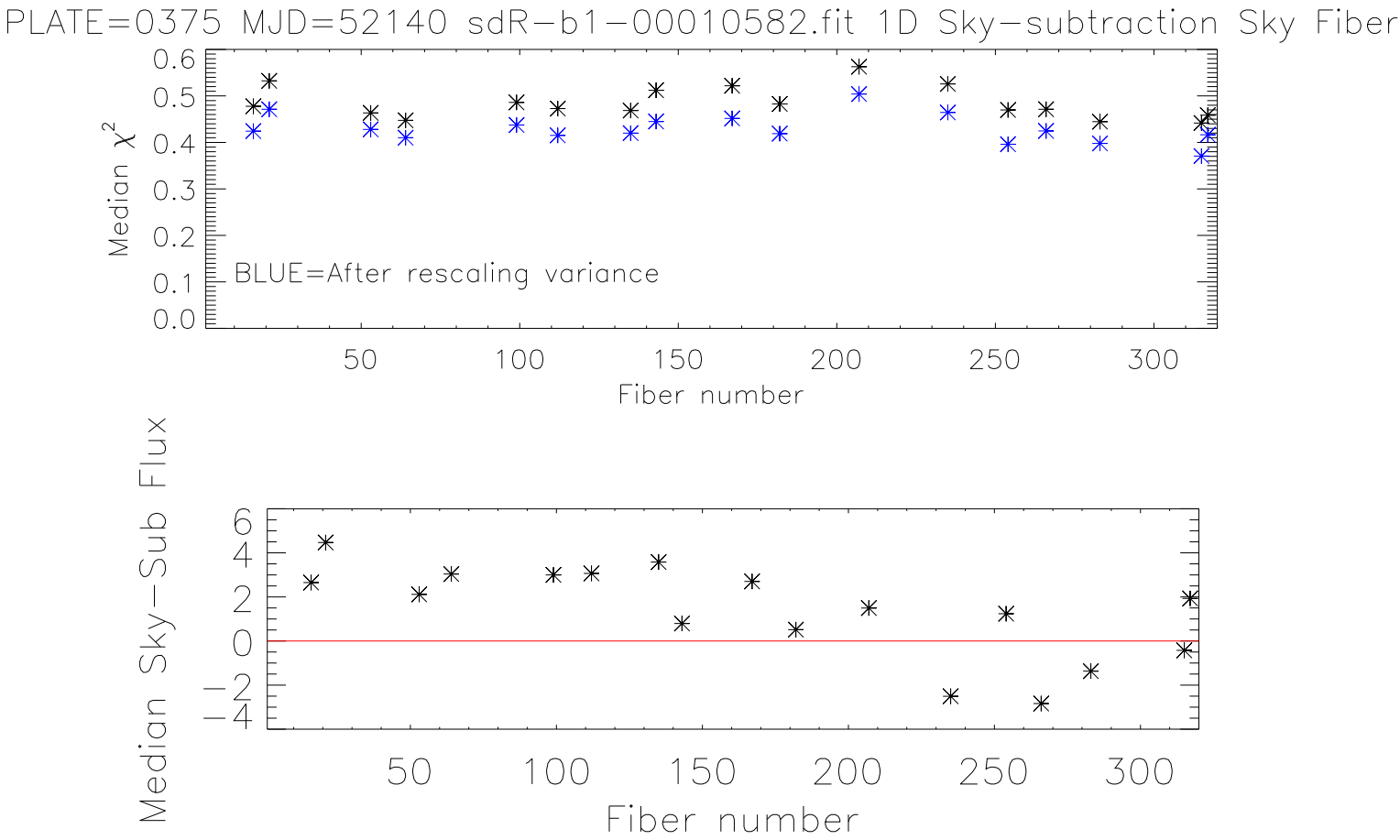

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

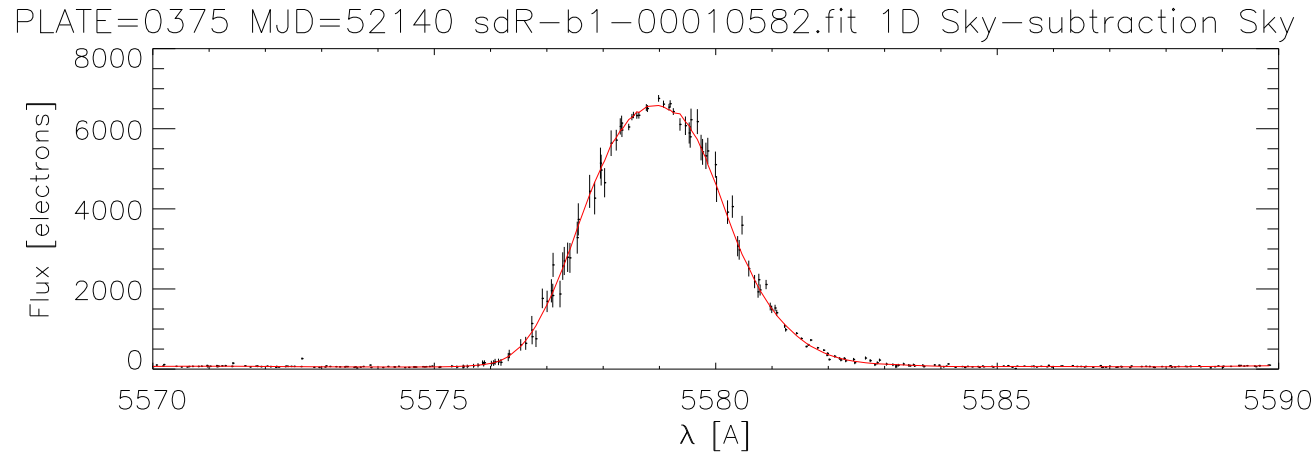

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

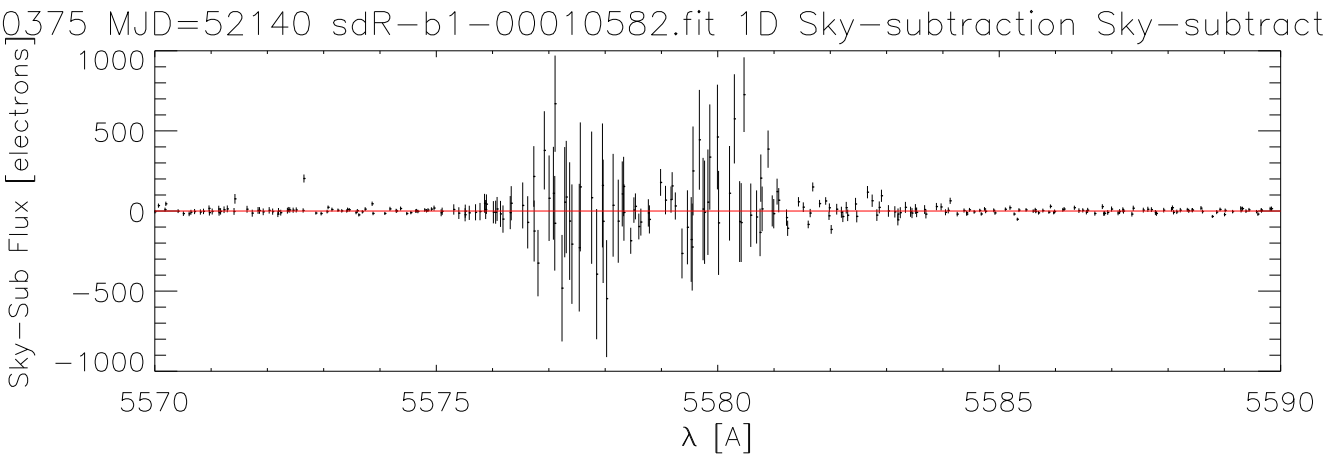

4046.5600
nfib1 17
nfib2 17
stdev 0.154
extra 0.30
4358.3300
nfib1 17
nfib2 17
stdev 0.059
extra 0.02
5460.9400
nfib1 17
nfib2 17
stdev 0.057
extra −0.16
5577.3390
nfib1 17
nfib2 17
stdev 0.021
extra −0.18
5889.9500
nfib1 17
nfib2 17
stdev 0.038
extra −0.18
5895.9240
nfib1 17
nfib2 17
stdev 0.050
extra −0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

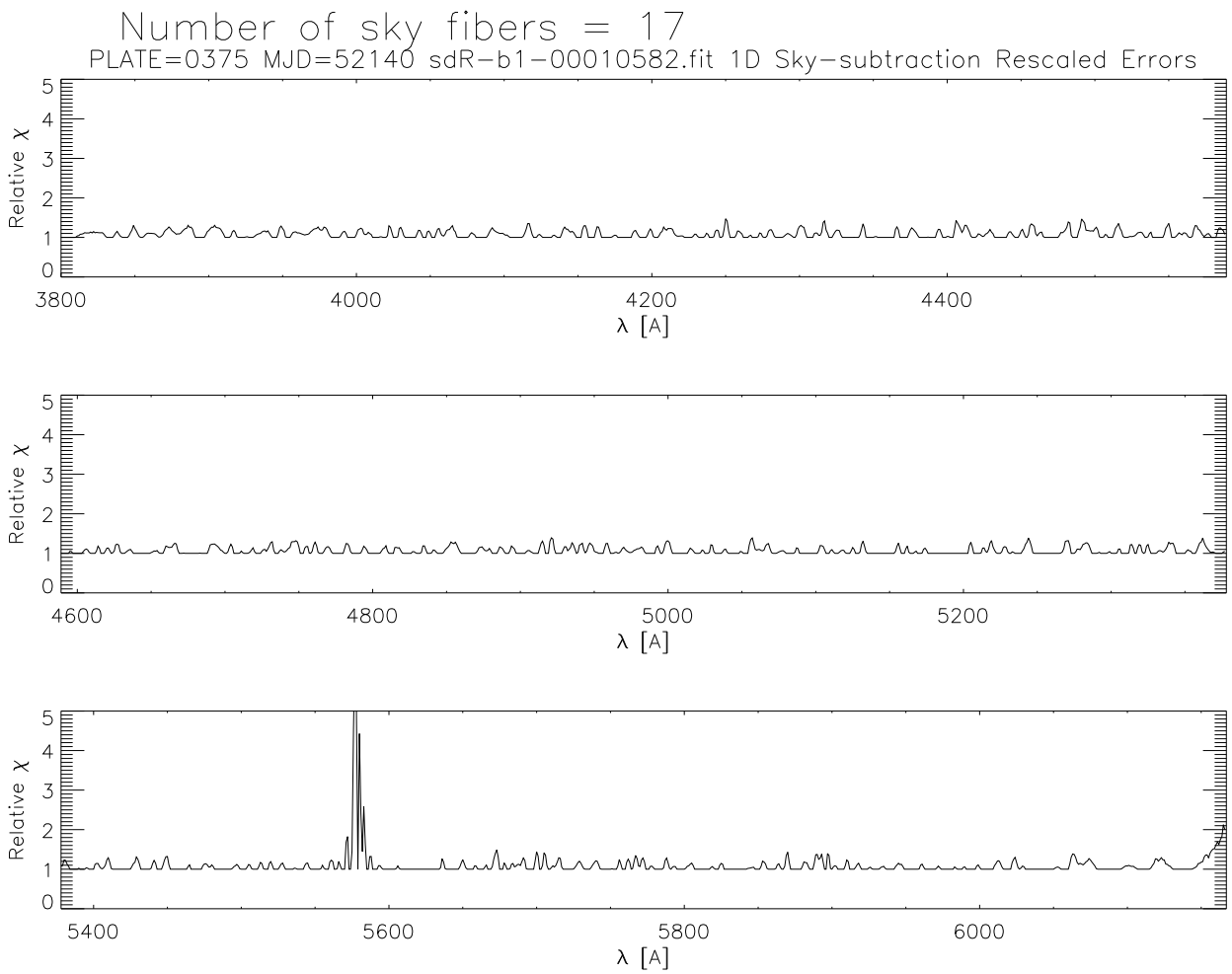

sky shift, pixels
0.3
0.2
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

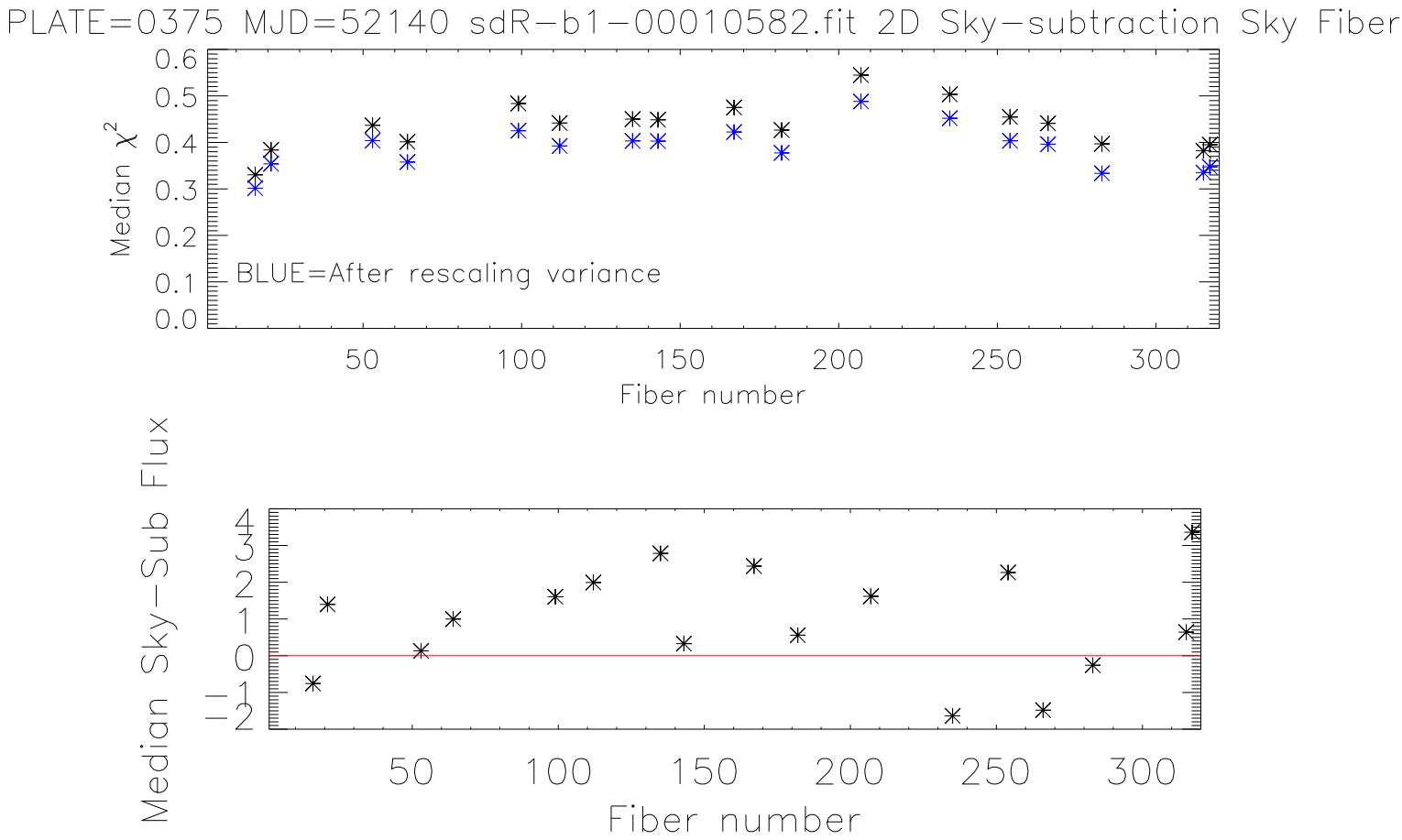

PLATE=0375 MJD=52140 Smooth superflat for sdR-b1-00010582.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

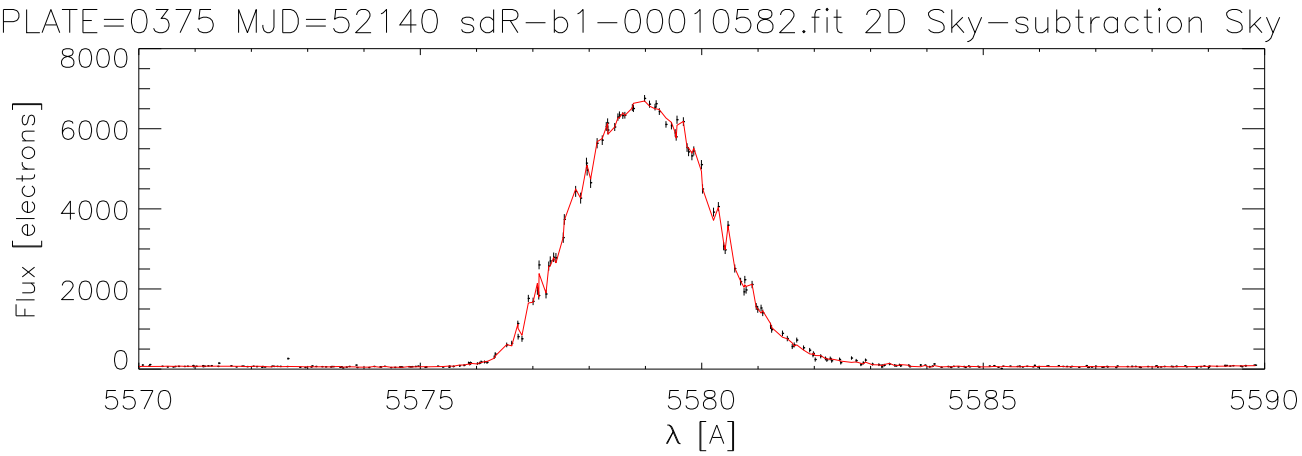

PLATE=0375 MJD=52140 sdR-b1-00010582.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

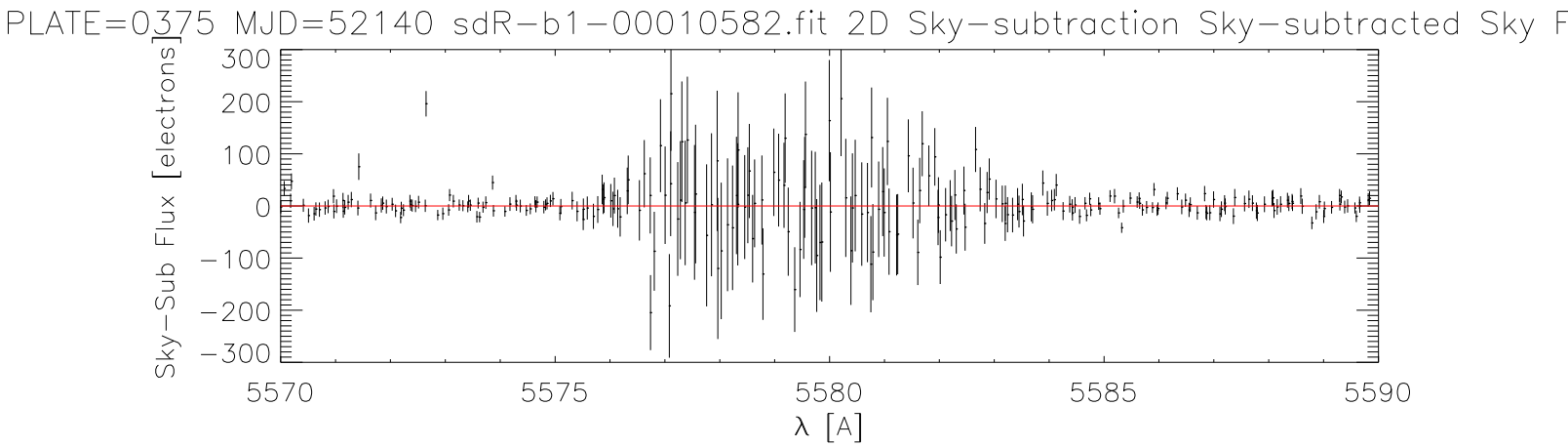

PLATE=0375 MJD=52140 sdR-b1-00010582.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

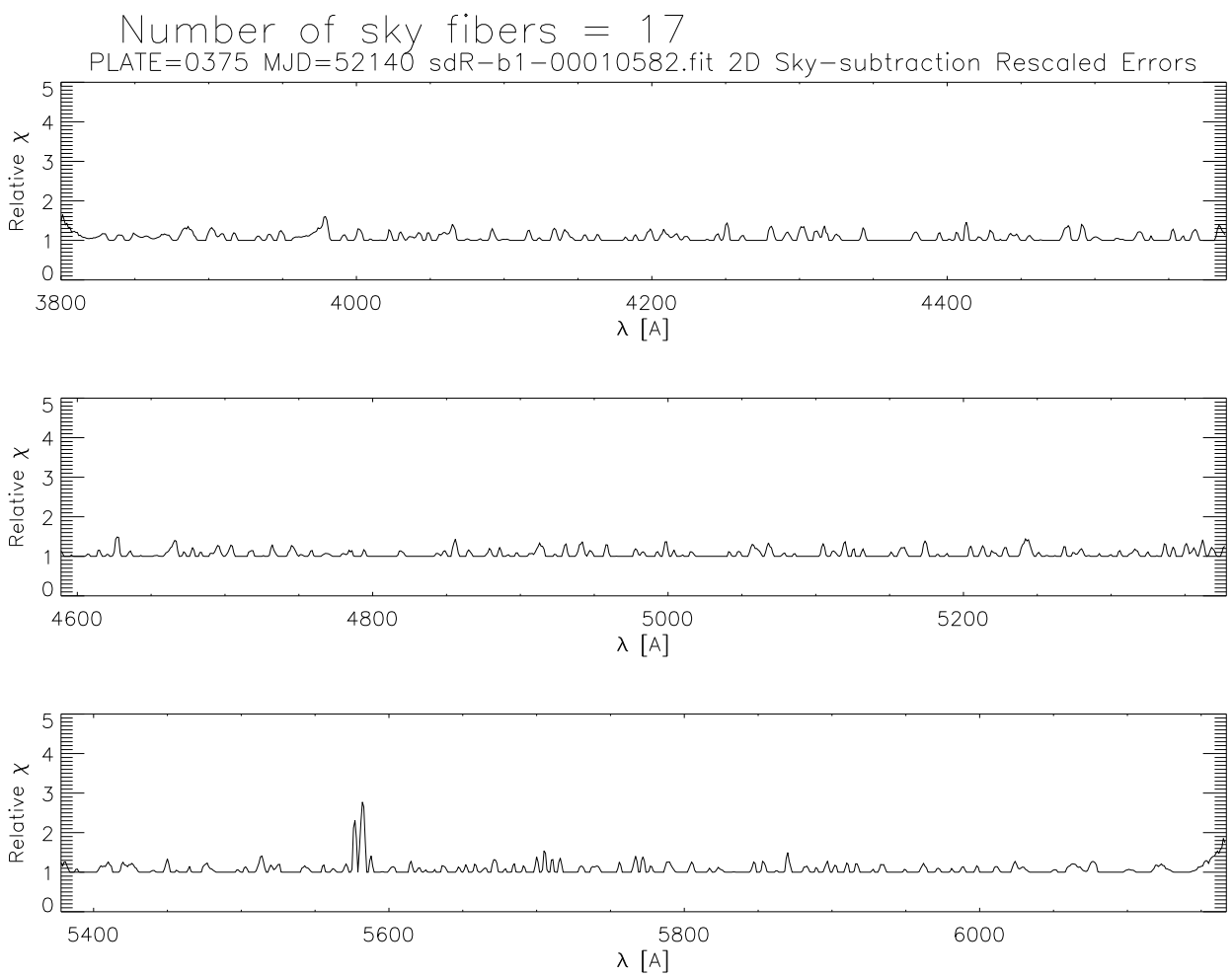

PLATE=0375 MJD=52140 sdR-b1-00010582.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

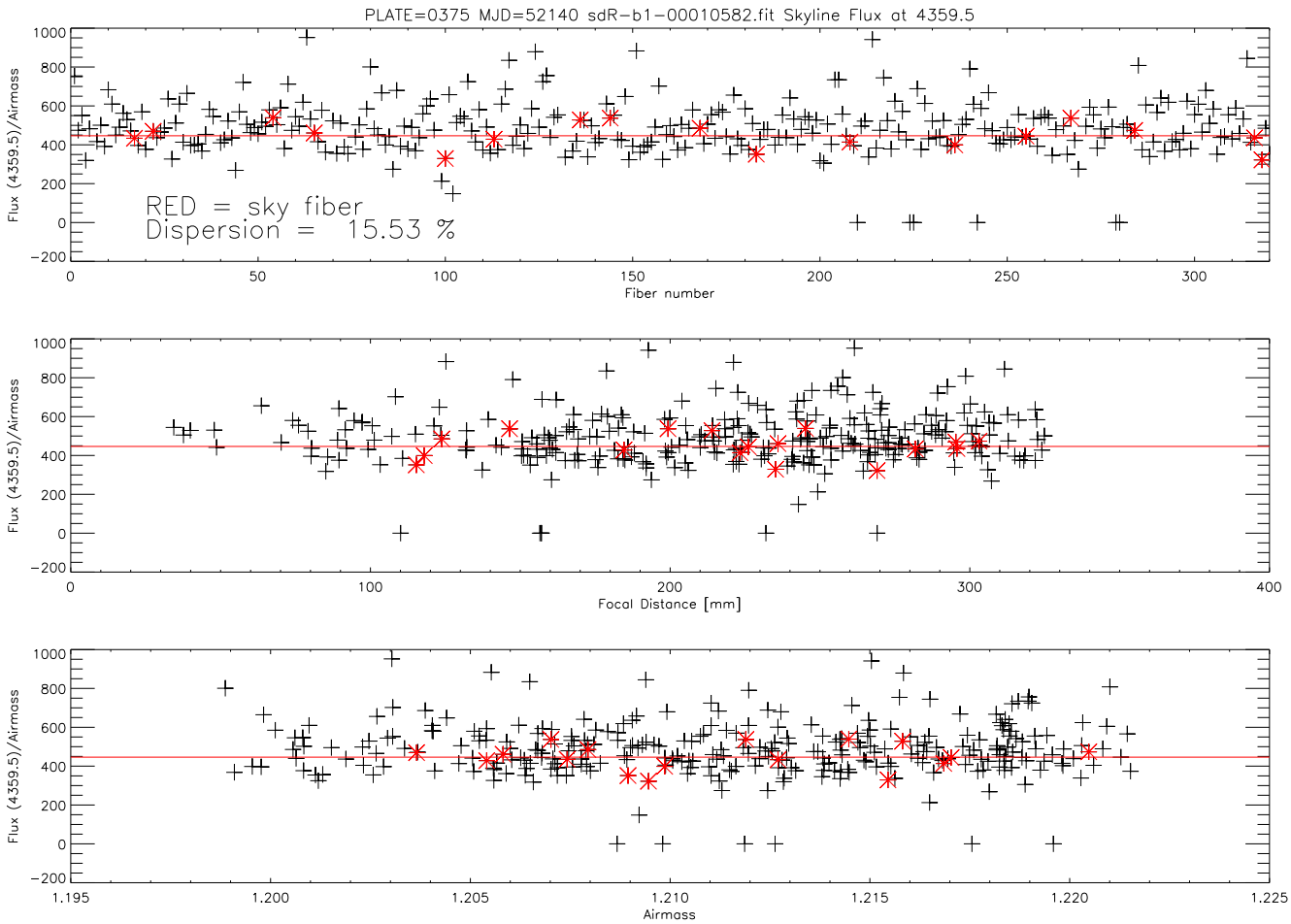

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010582.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

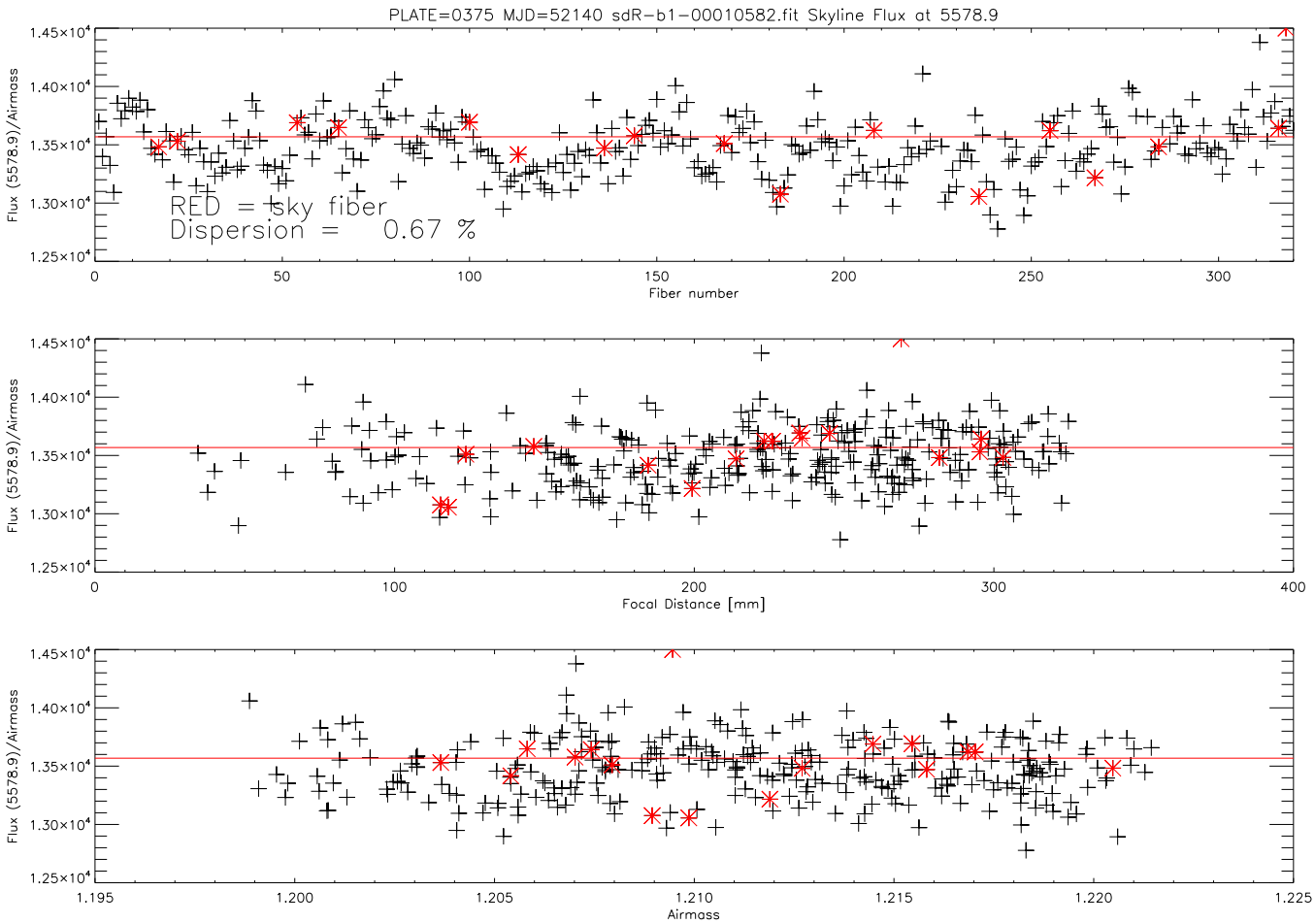

PLATE=0375 MJD=52140 sdR-b1-00010582.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

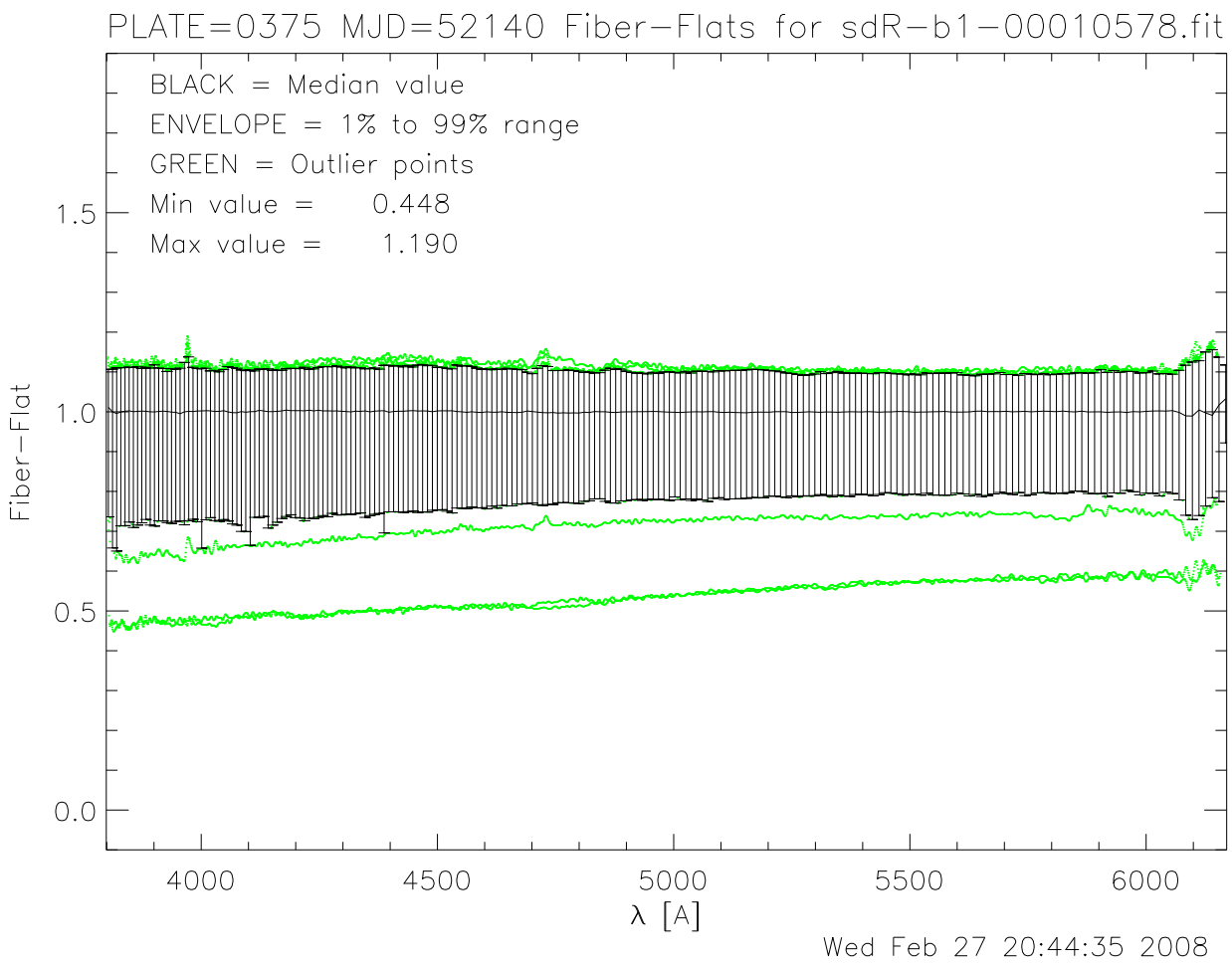

PLATE=0375 MJD=52140 sdR-b1-00010582.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

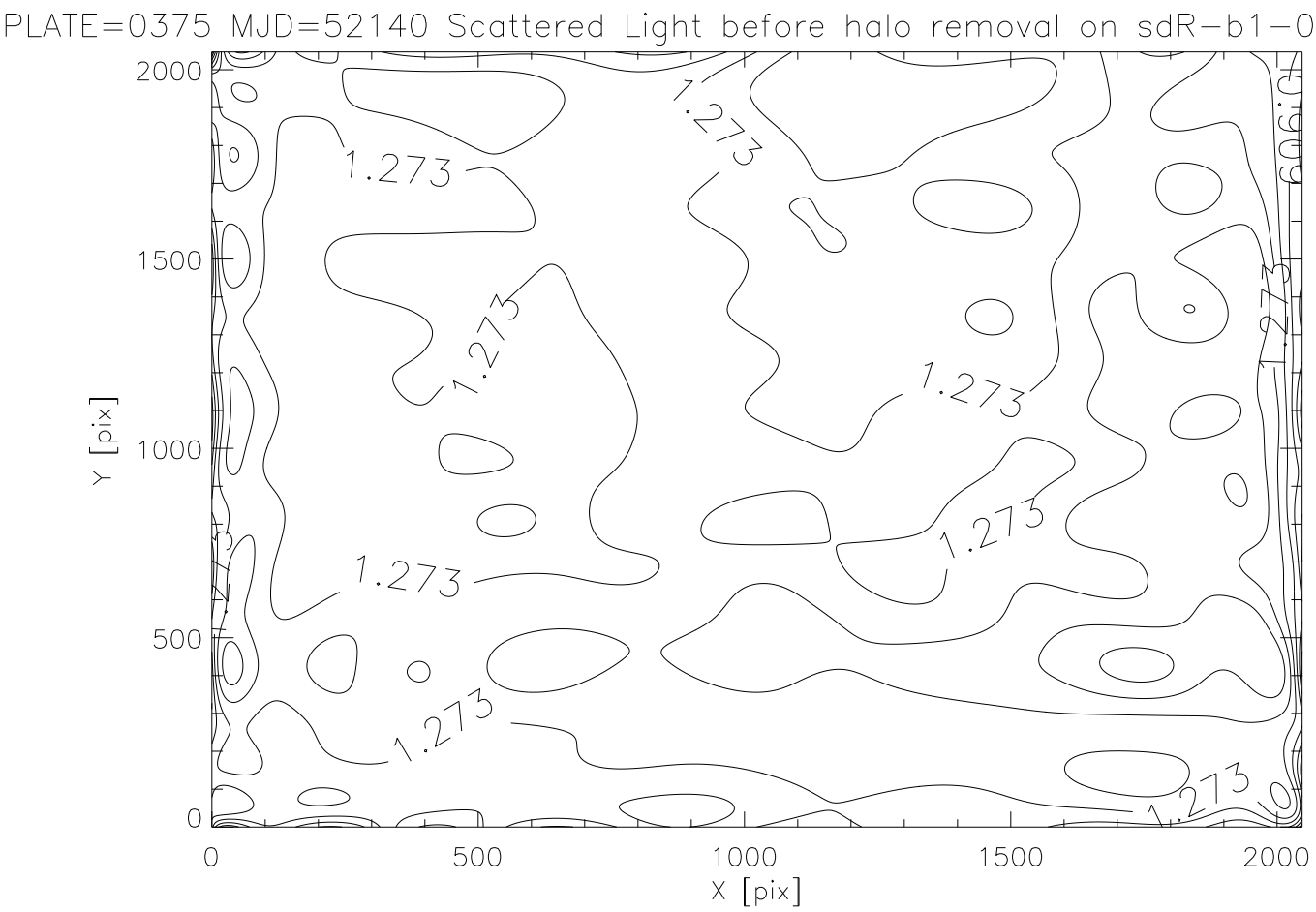

PLATE=0375 MJD=52140 sdR-b1-00010582.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

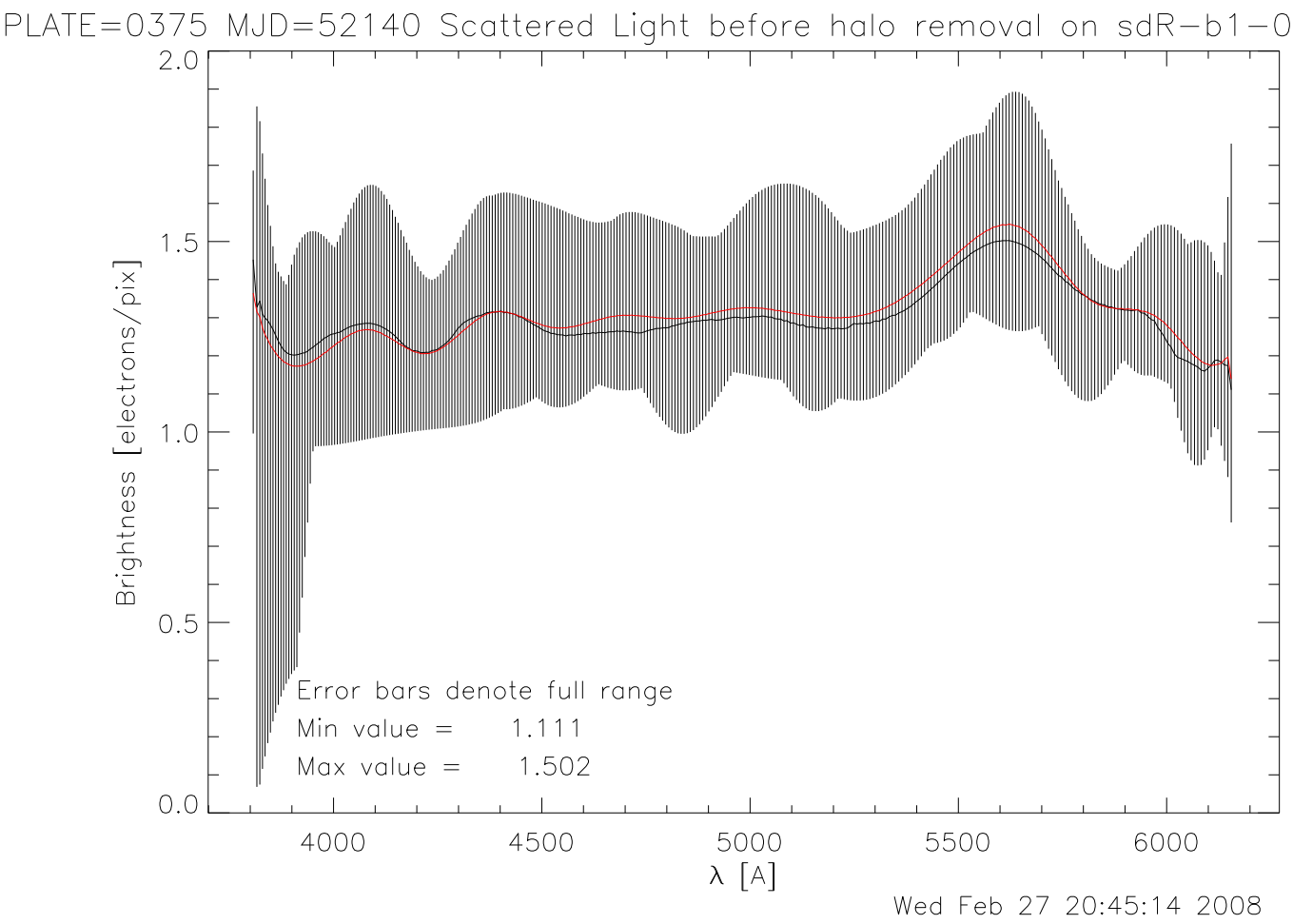

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010582.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

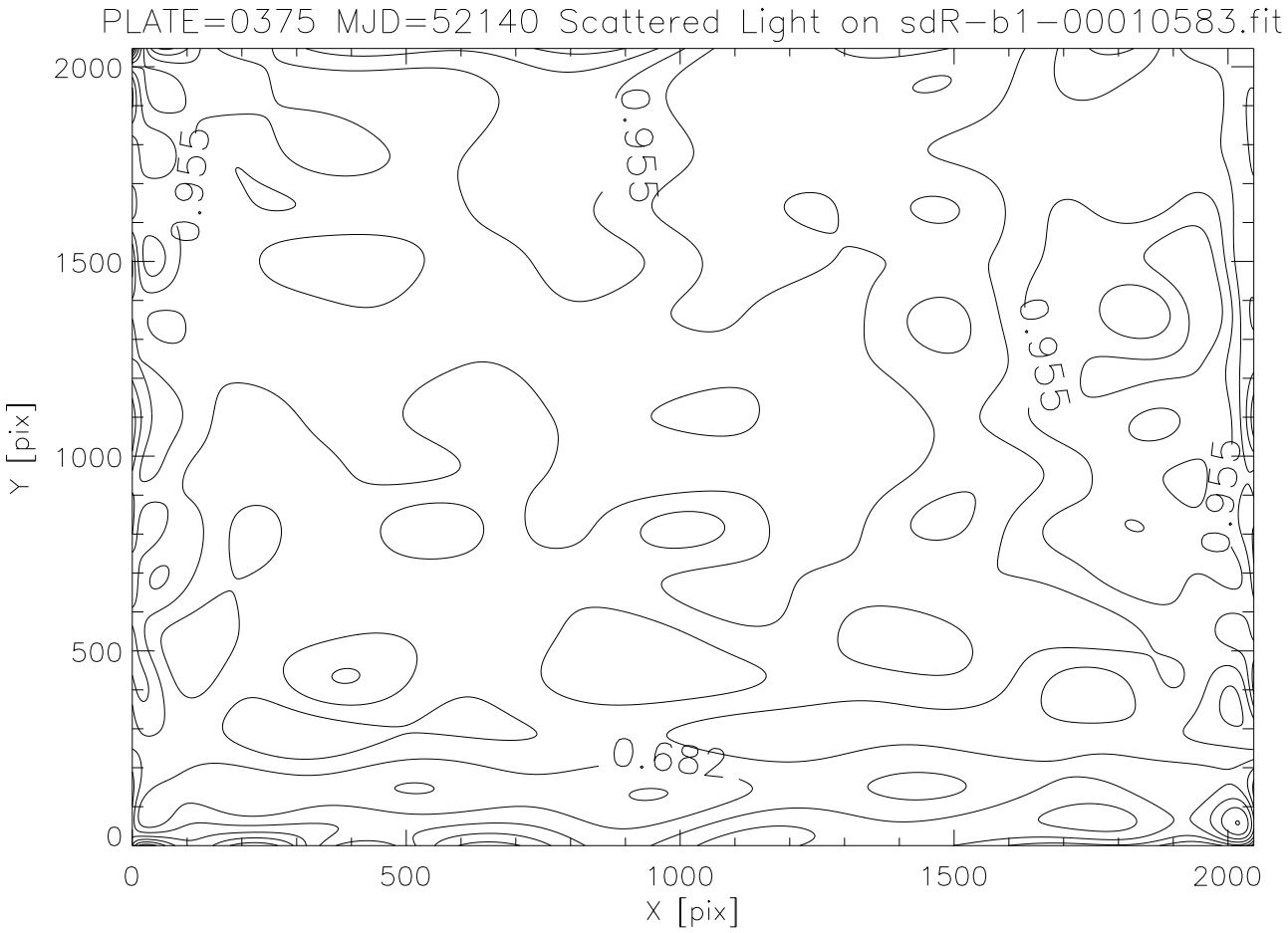

PLATE=0375 MJD=52140 sdR-b1-00010582.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 15.53 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

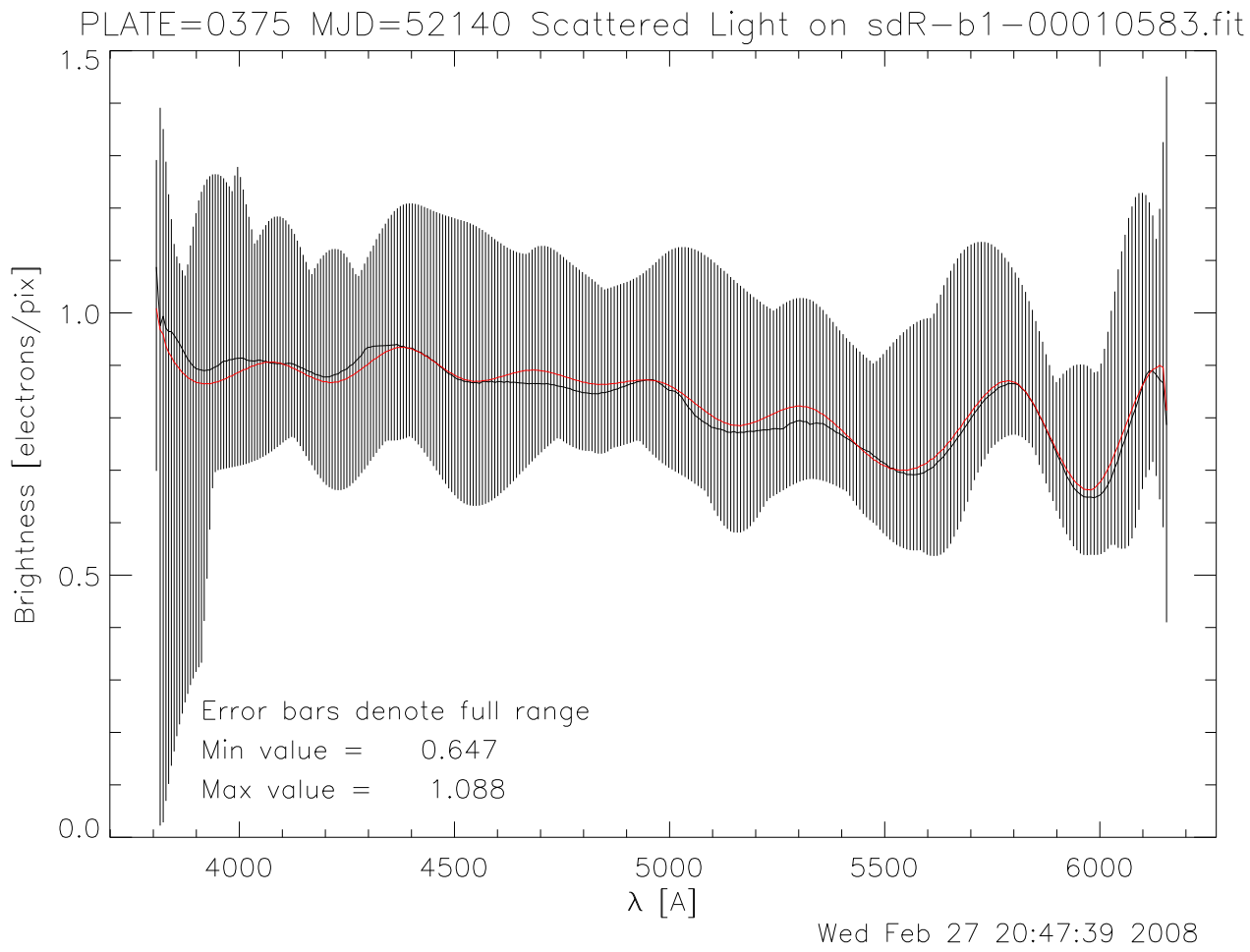

PLATE=0375 MJD=52140 sdR-b1-00010582.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.45×10^4
1.40×10^4
1.35×10^4
1.30×10^4
1.25×10^4
RED = sky fiber
Dispersion = 0.67 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.45×10^4
1.40×10^4
1.35×10^4
1.30×10^4
1.25×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.45×10^4
1.40×10^4
1.35×10^4
1.30×10^4
1.25×10^4
1.195
1.200
1.205
1.210
1.215
1.220
1.225
Airmass

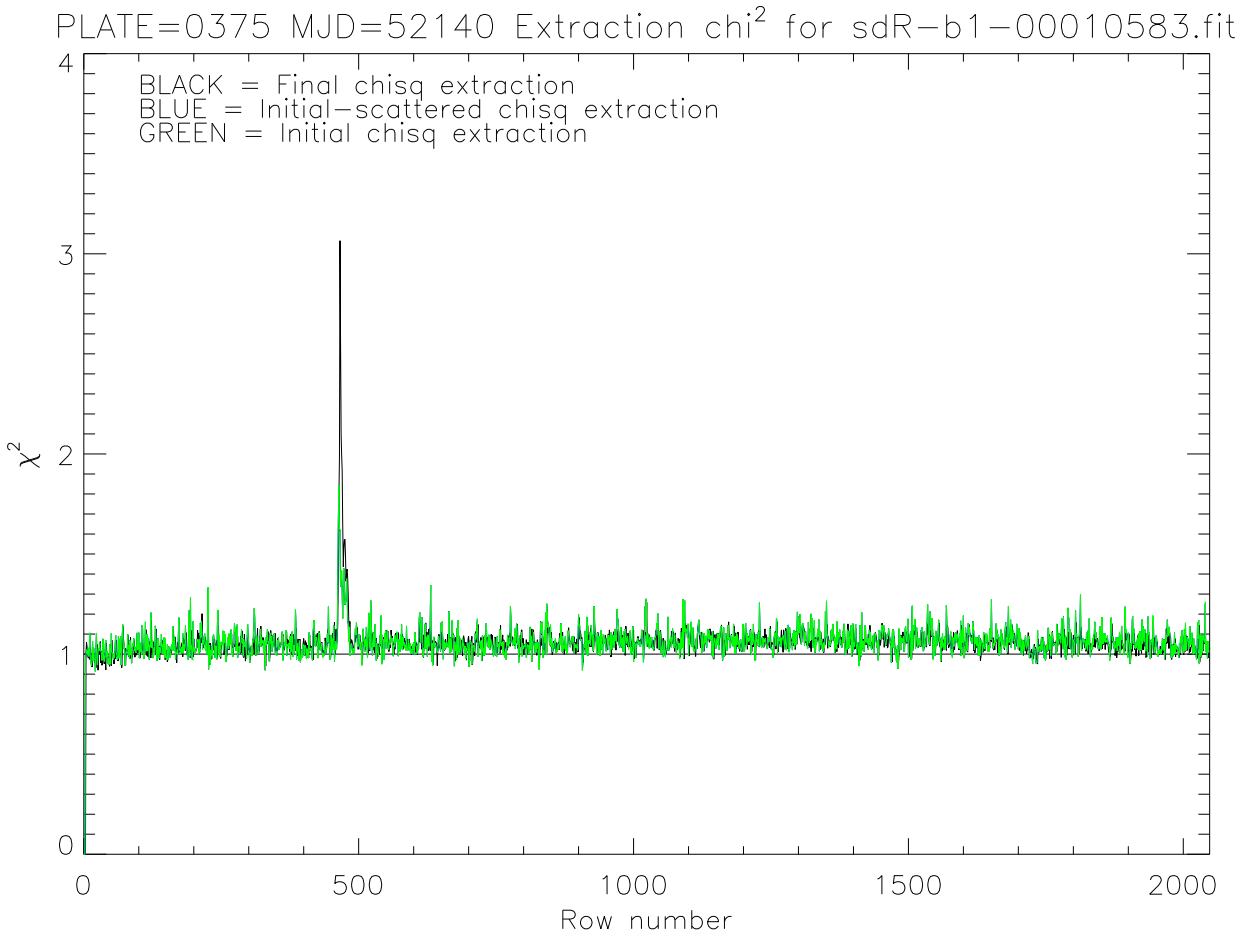

PLATE=0375 MJD=52140 Fiber−Flats for sdR−b1−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.448
Max value = 1.190
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:44:35 2008

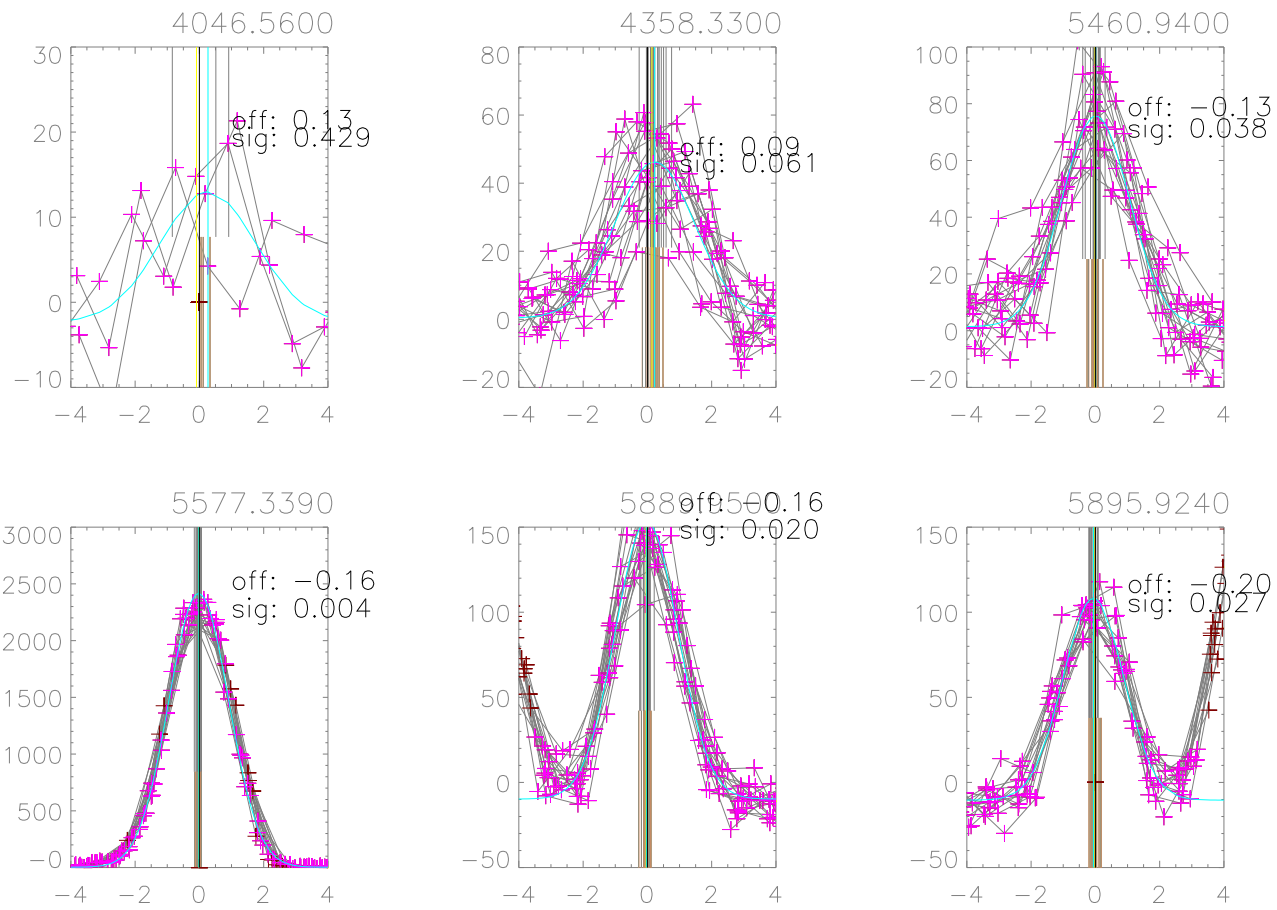

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b1-00010583.f
1.273
Y [pix]
X [pix]
0
500
1000
1500
2000

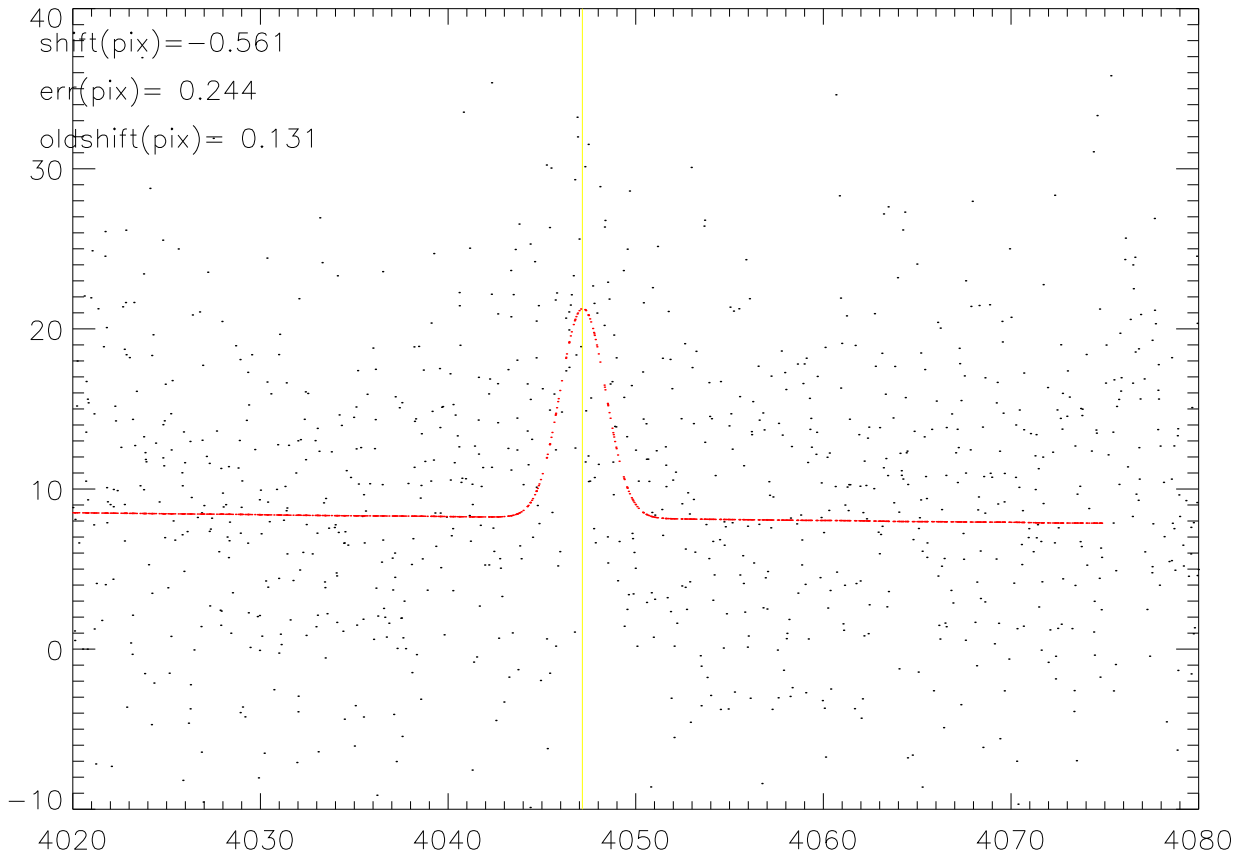

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b1-00010583.f
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.111
Max value = 1.502
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:45:14 2008

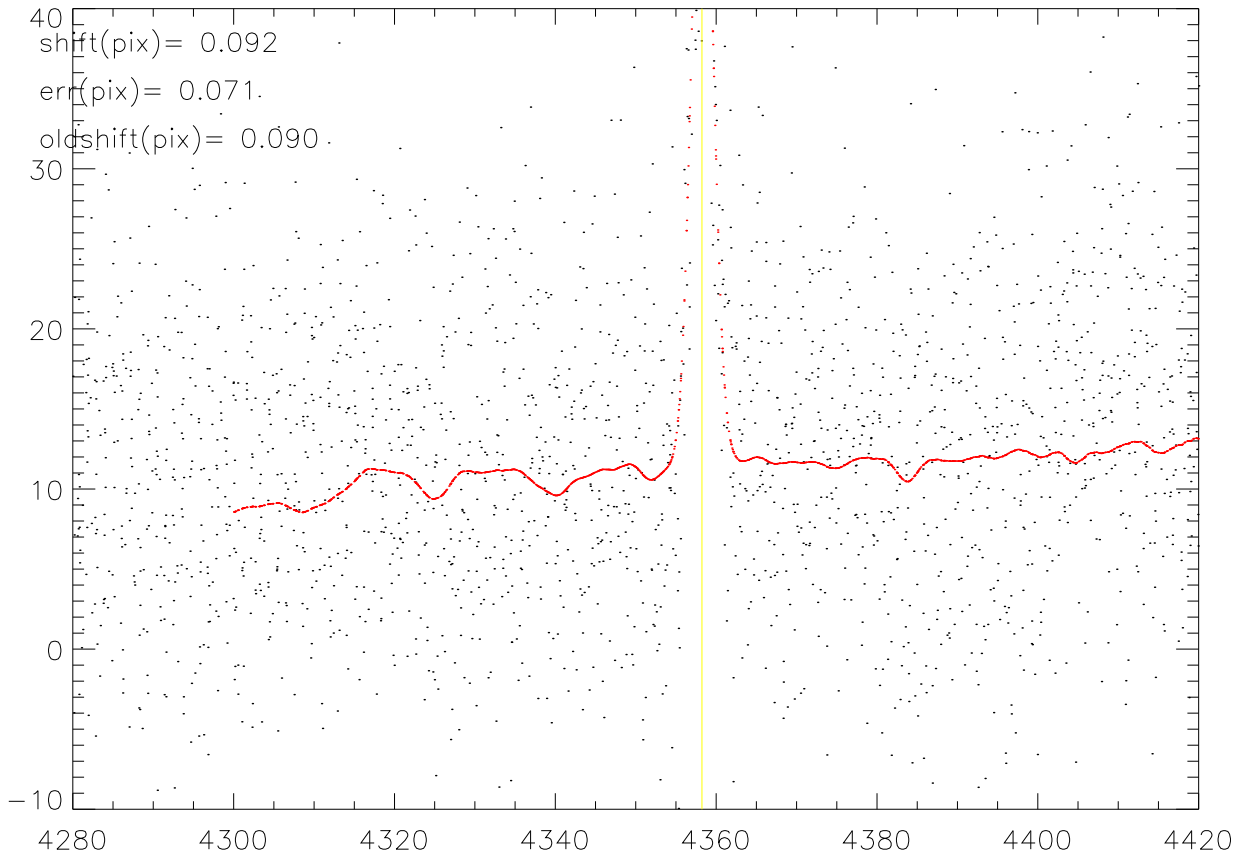

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010583.fit
0.955
0.955
0.955
0.955
0.682
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

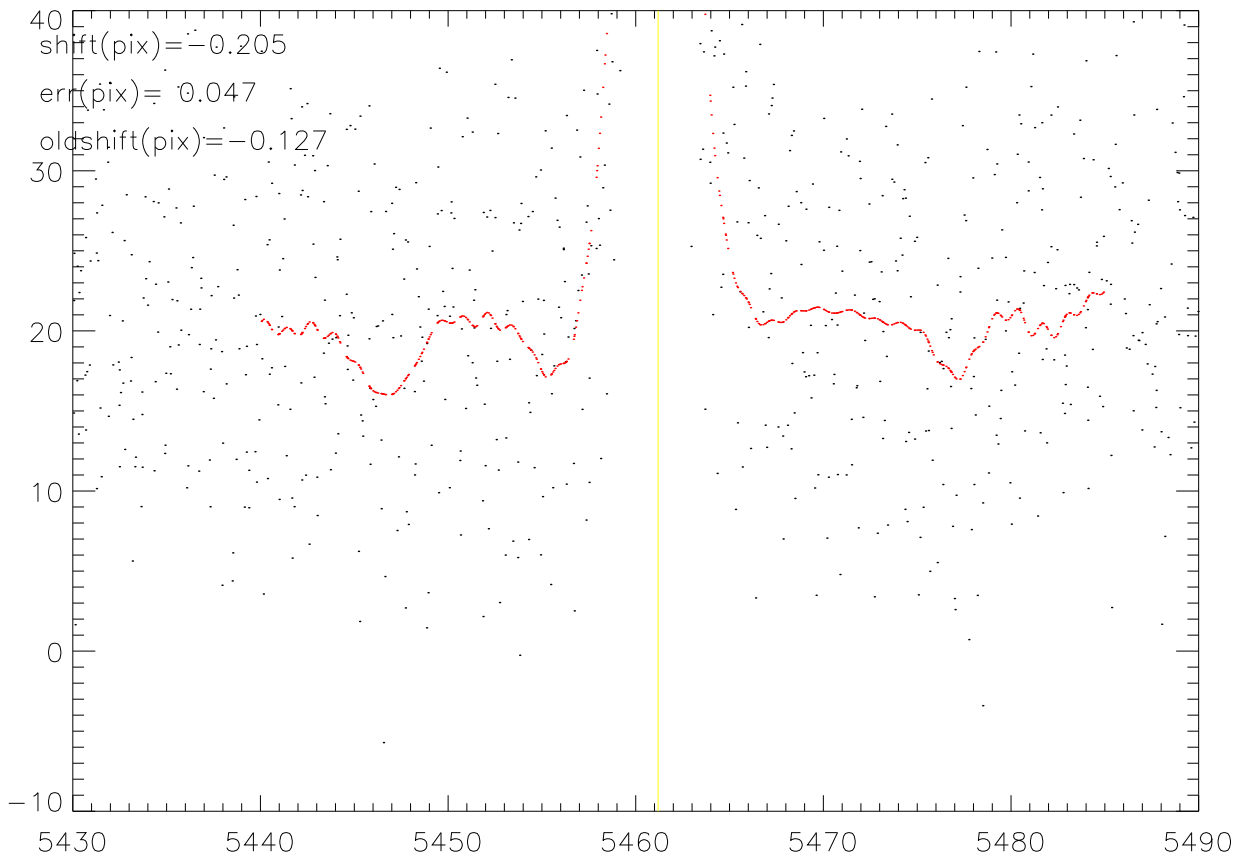

PLATE=0375 MJD=52140 Scattered Light on sdR-b1-00010583.fit
Brightness [electrons/pix]
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.647
Max value = 1.088
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:47:39 2008

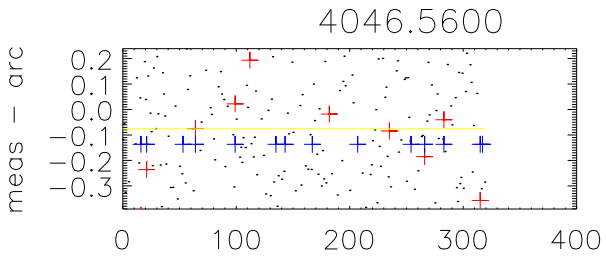

PLATE=0375 MJD=52140 Extraction chi^2 for sdR−b1−00010583.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

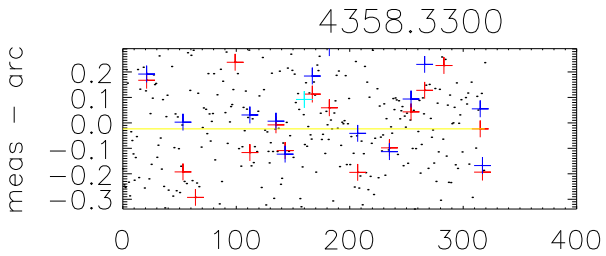

4046.5600
off: 0.13
sig: 0.429
4358.3300
off: 0.09
sig: 0.061
5460.9400
off: −0.13
sig: 0.038
5577.3390
off: −0.16
sig: 0.004
off: −0.16
sig: 0.020
5895.9240
off: −0.20
sig: 0.027

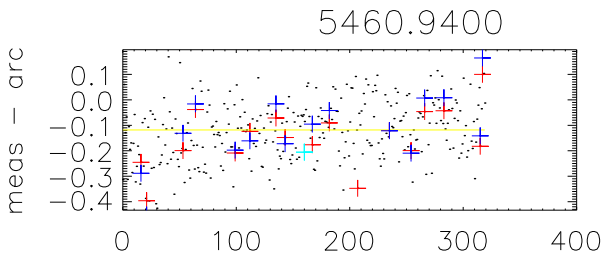

shift(pix)=−0.561
err(pix)= 0.244
oldshift(pix)= 0.131
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

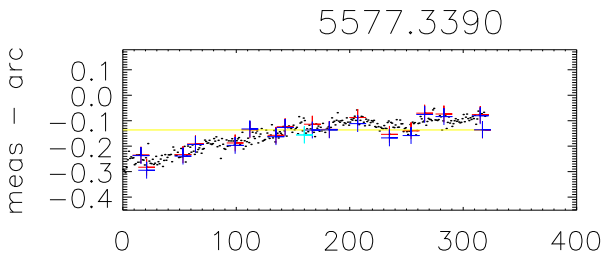

shift(pix)= 0.092
err(pix)= 0.071
oldshift(pix)= 0.090
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

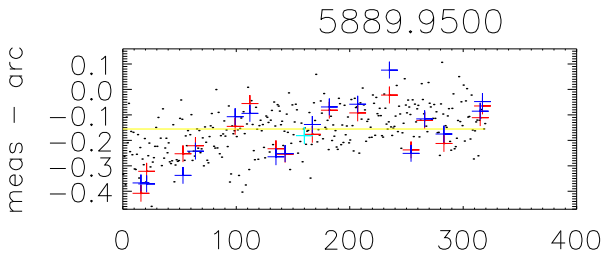

shift(pix)=−0.205
err(pix)= 0.047
oldshift(pix)=−0.127
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

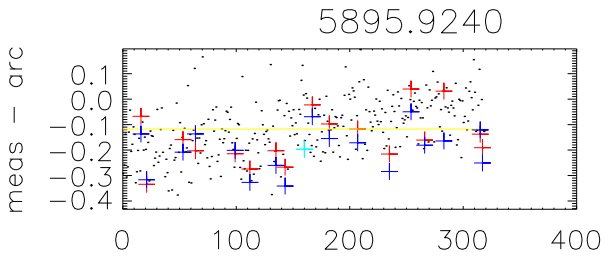

4046.5600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

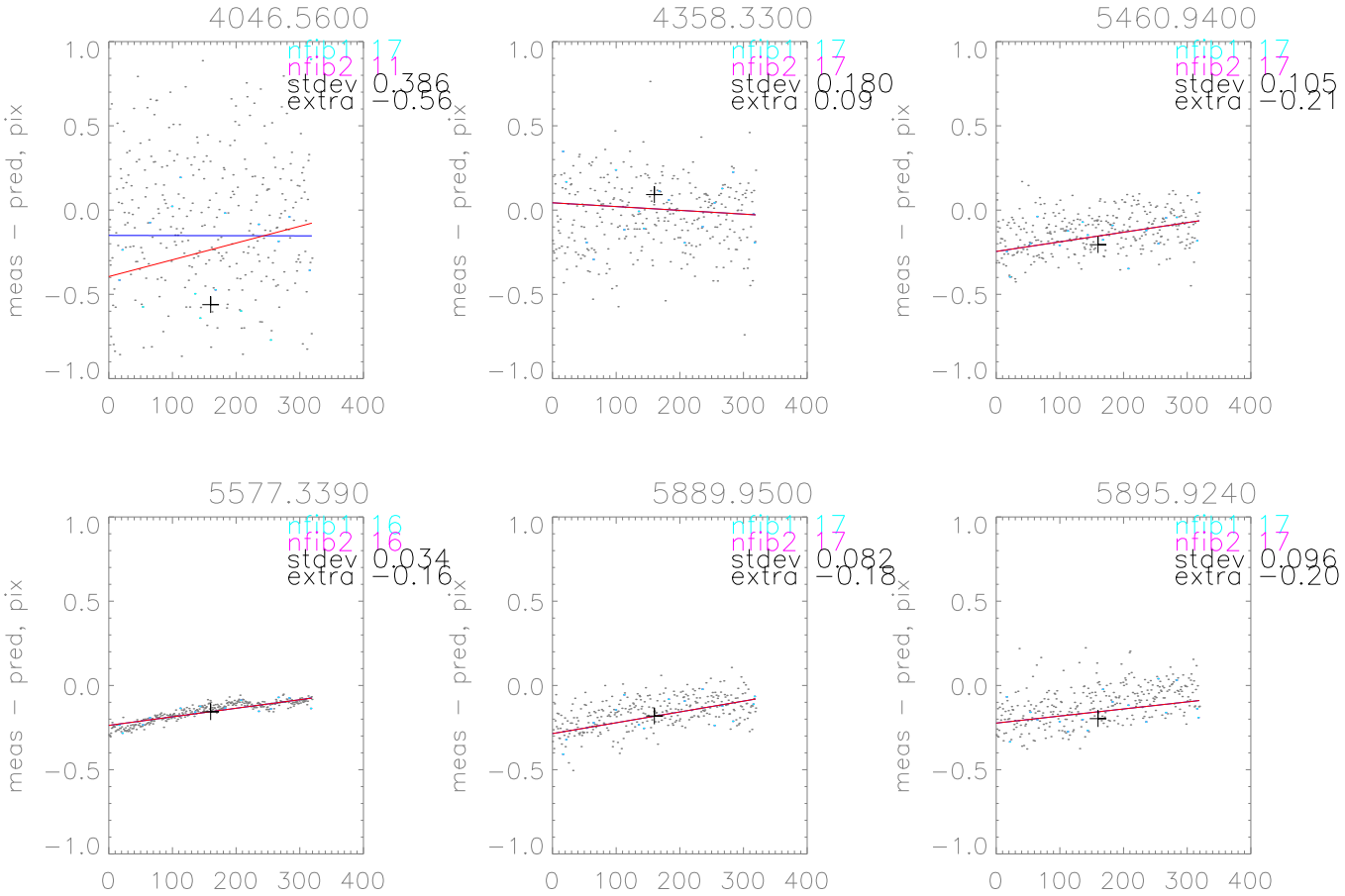

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

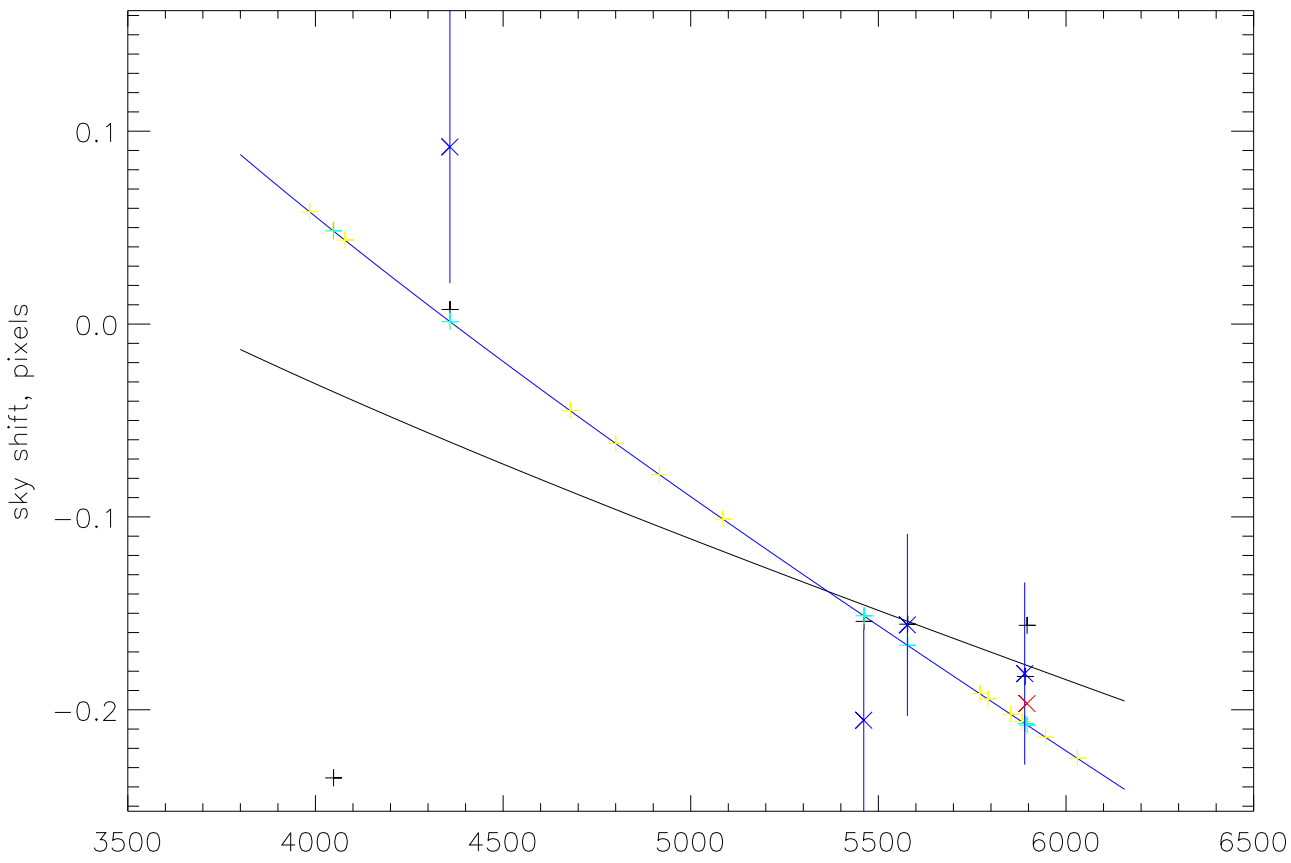

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

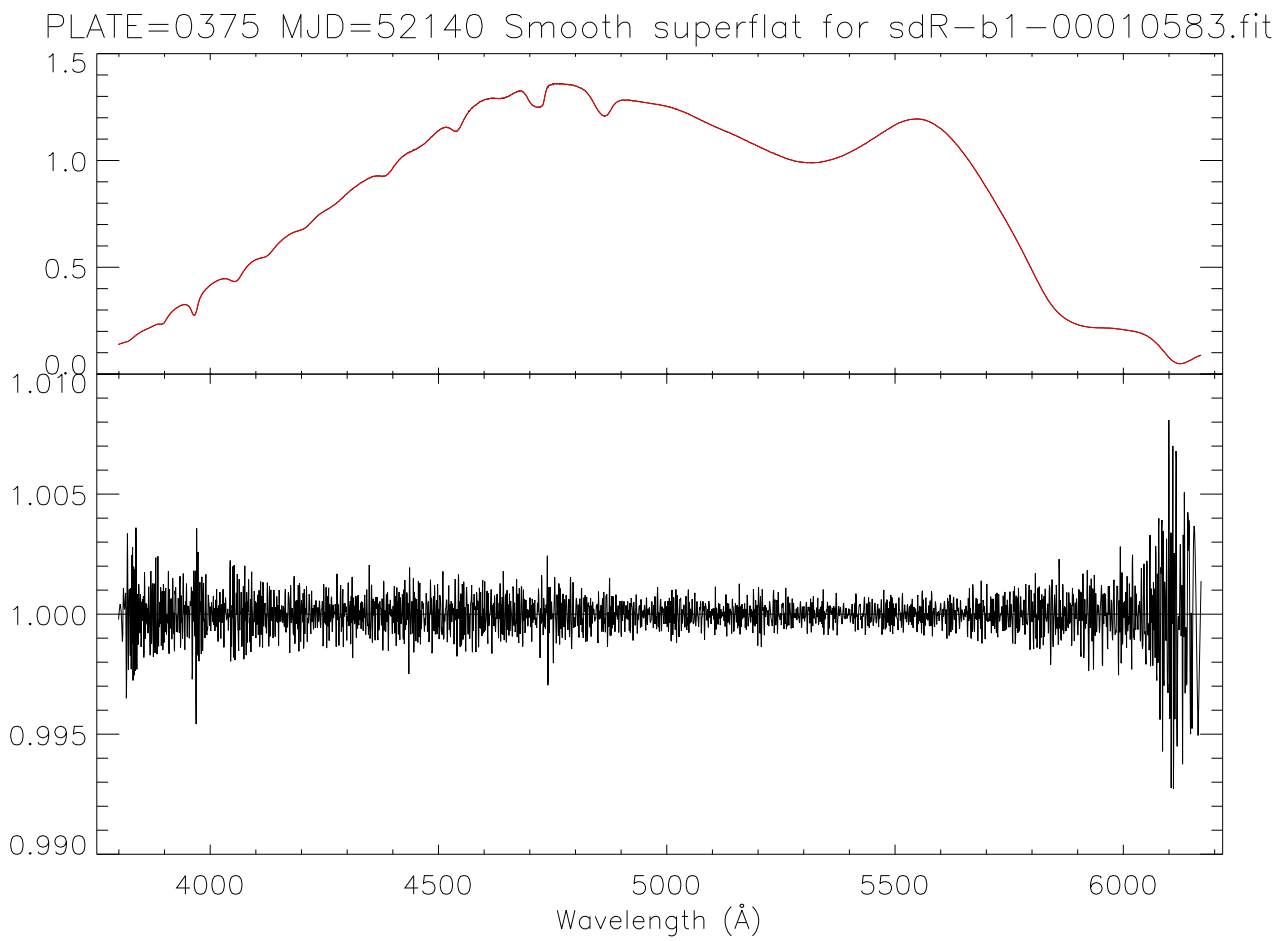

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

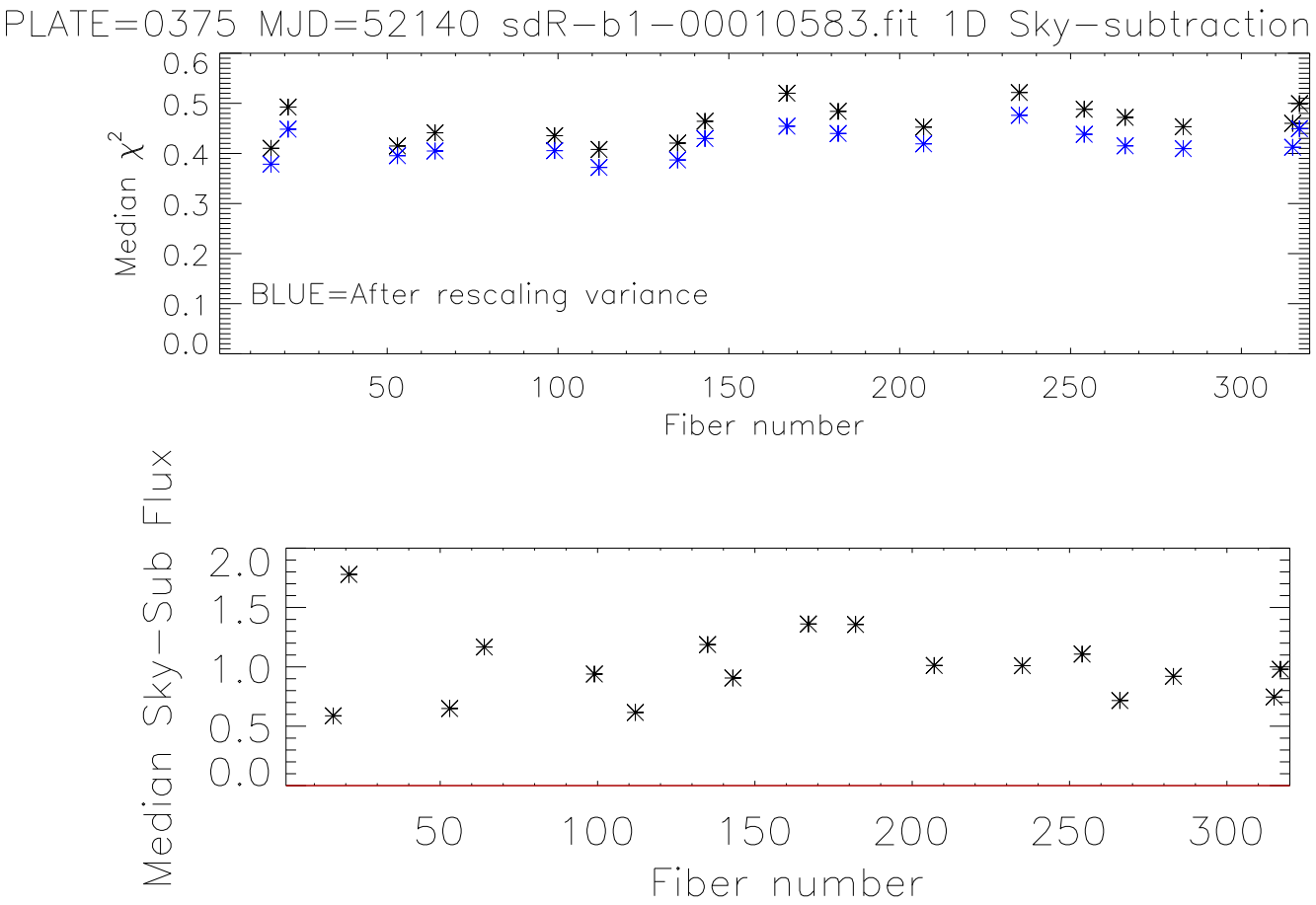

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

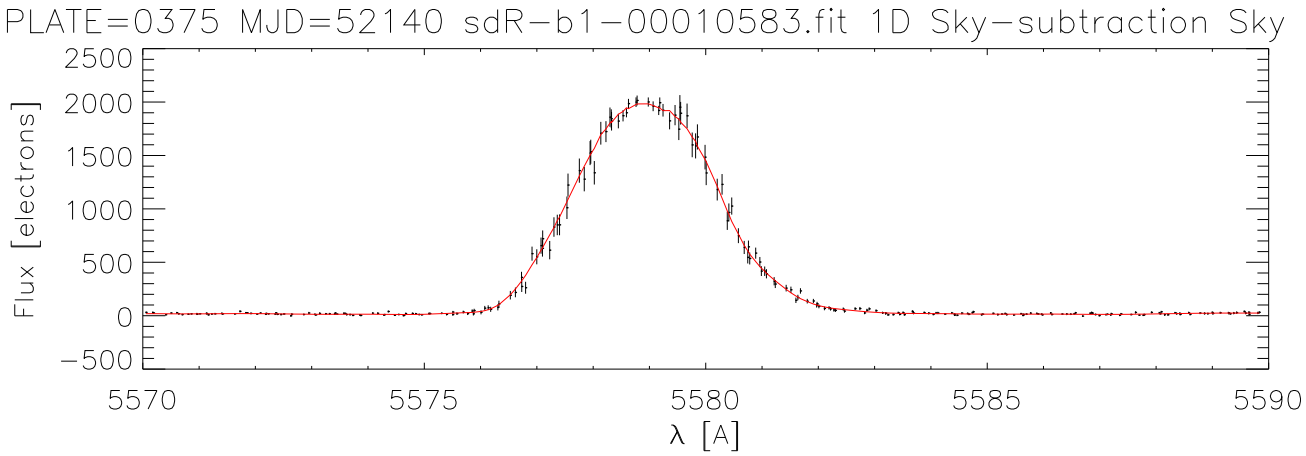

4046.5600
nfib1 17
nfib2 11
stdev 0.386
extra −0.56
4358.3300
nfib1 17
nfib2 17
stdev 0.180
extra 0.09
5460.9400
nfib1 17
nfib2 17
stdev 0.105
extra −0.21
5577.3390
nfib1 16
nfib2 16
stdev 0.034
extra −0.16
5889.9500
nfib1 17
nfib2 17
stdev 0.082
extra −0.18
5895.9240
nfib1 17
nfib2 17
stdev 0.096
extra −0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

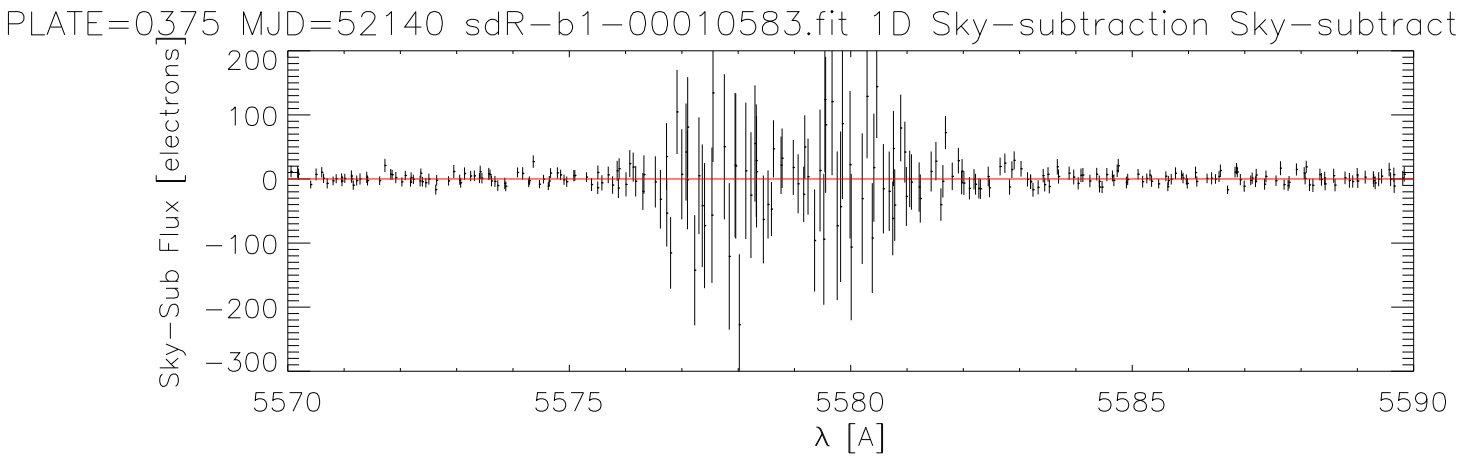

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500

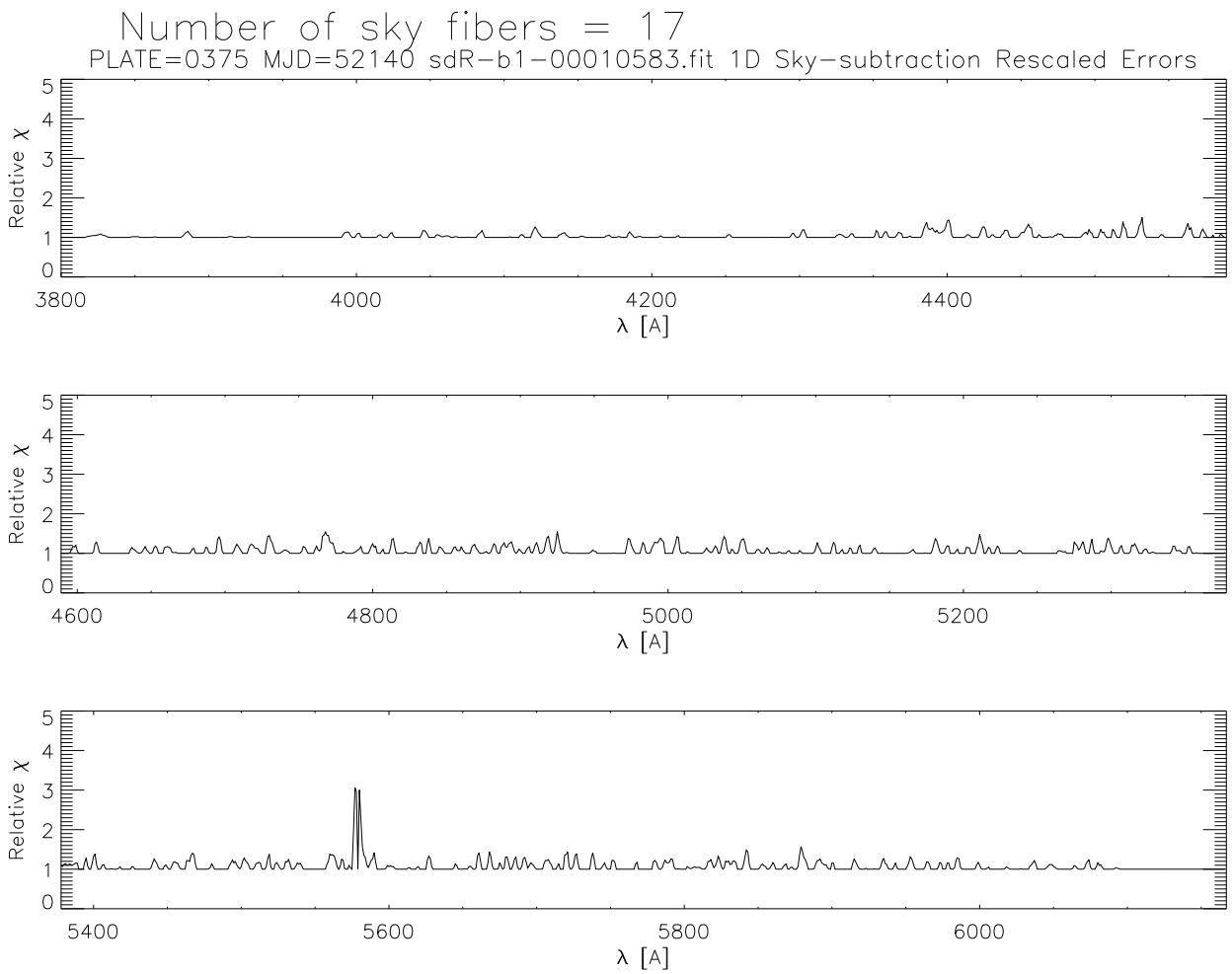
es= 0.0000

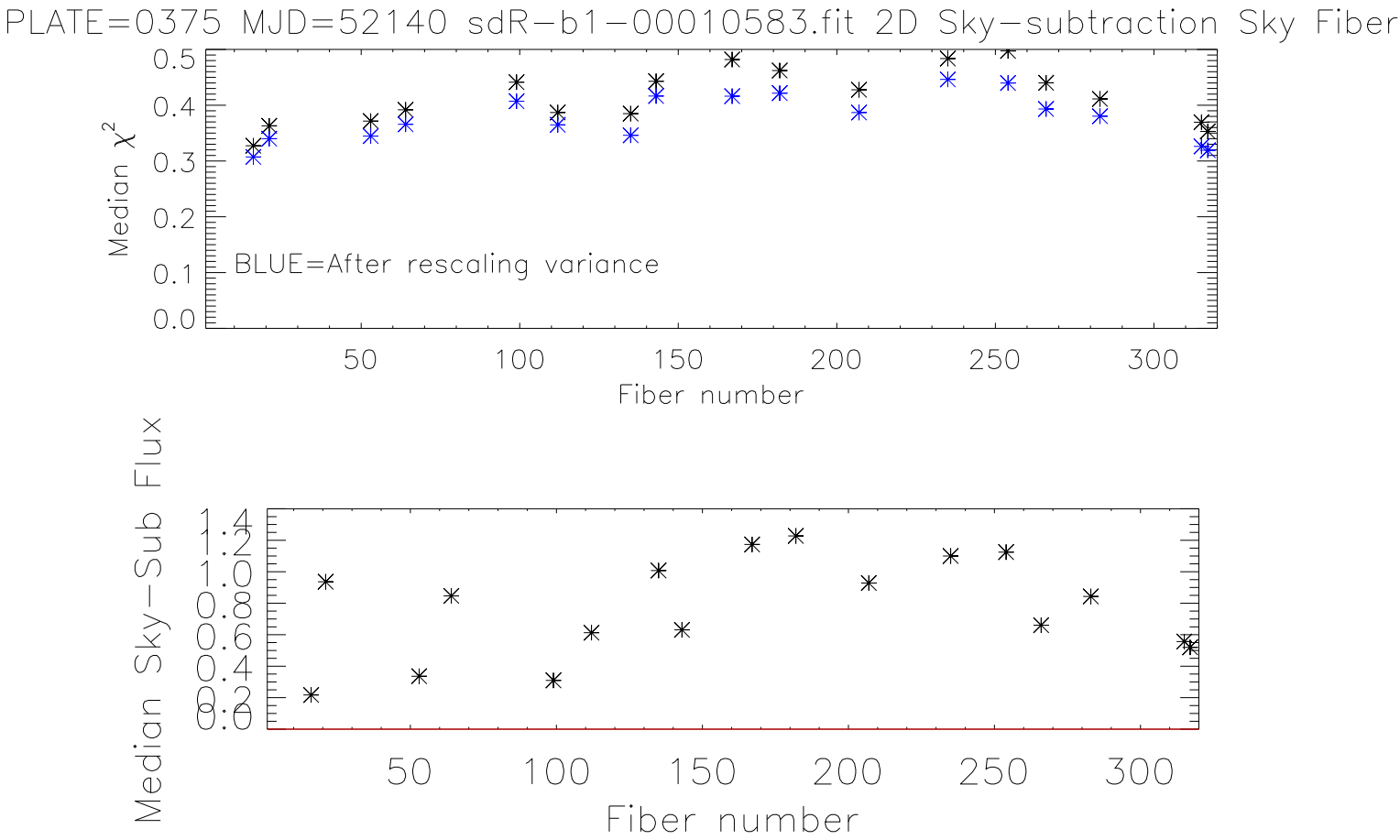

PLATE=0375 MJD=52140 Smooth superflat for sdR-b1-00010583.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

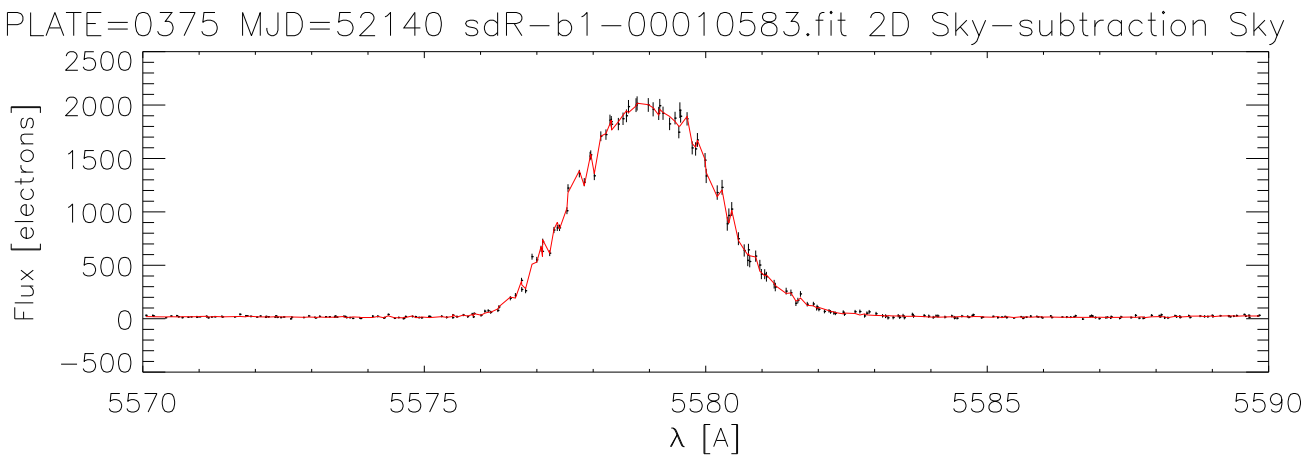

PLATE=0375 MJD=52140 sdR-b1-00010583.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

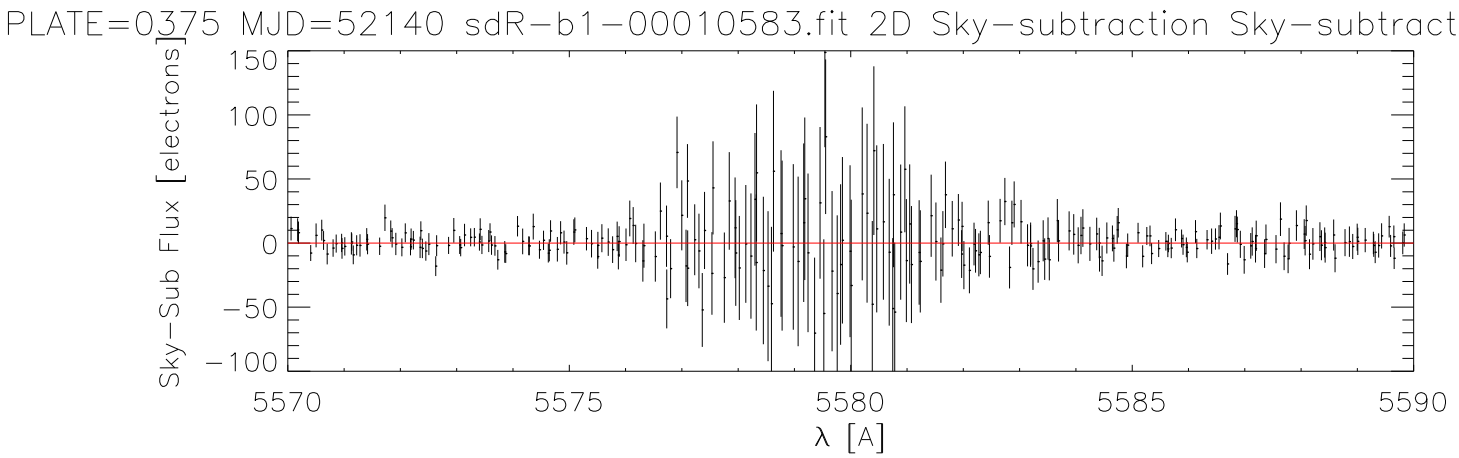

PLATE=0375 MJD=52140 sdR-b1-00010583.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

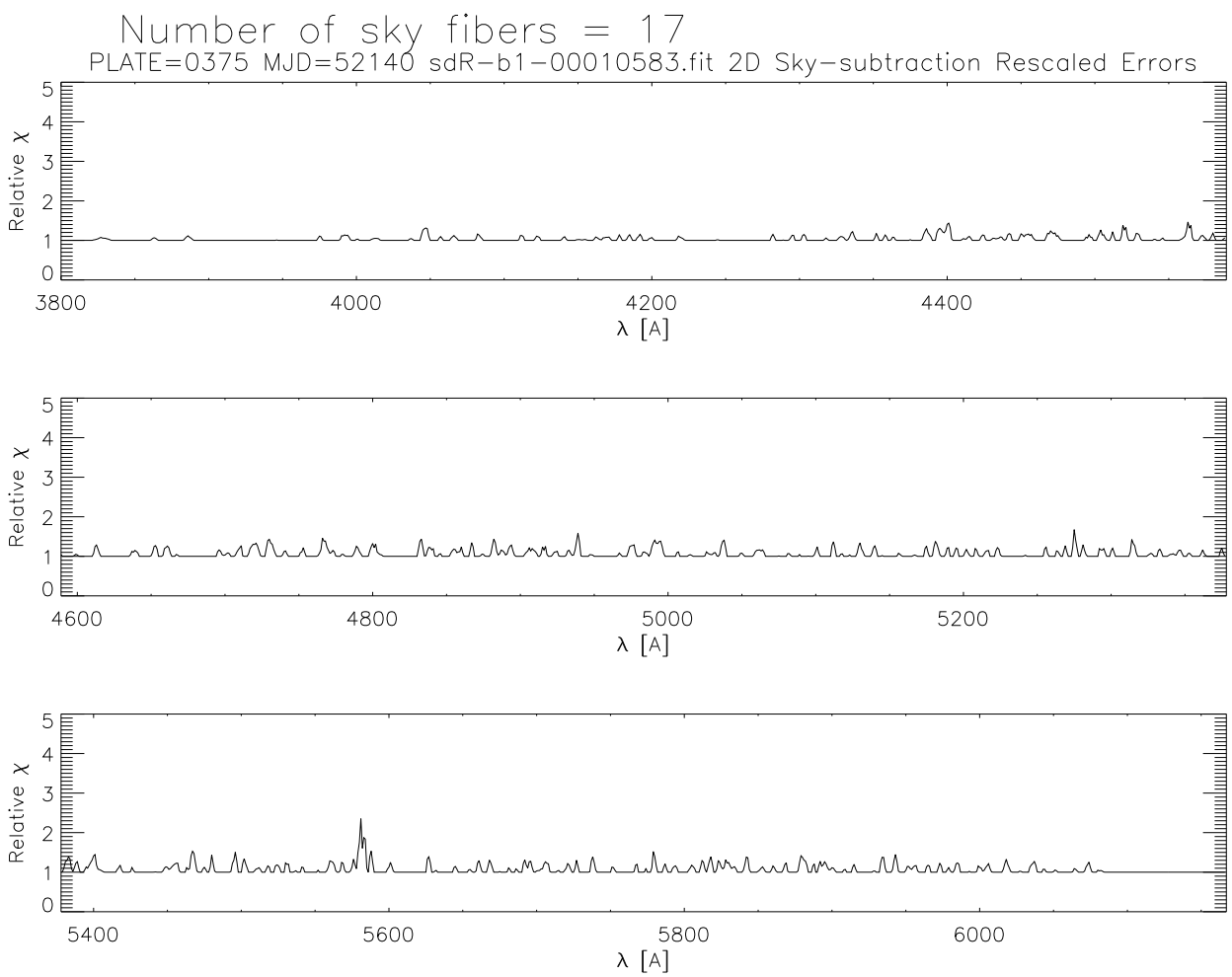

PLATE=0375 MJD=52140 sdR-b1-00010583.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

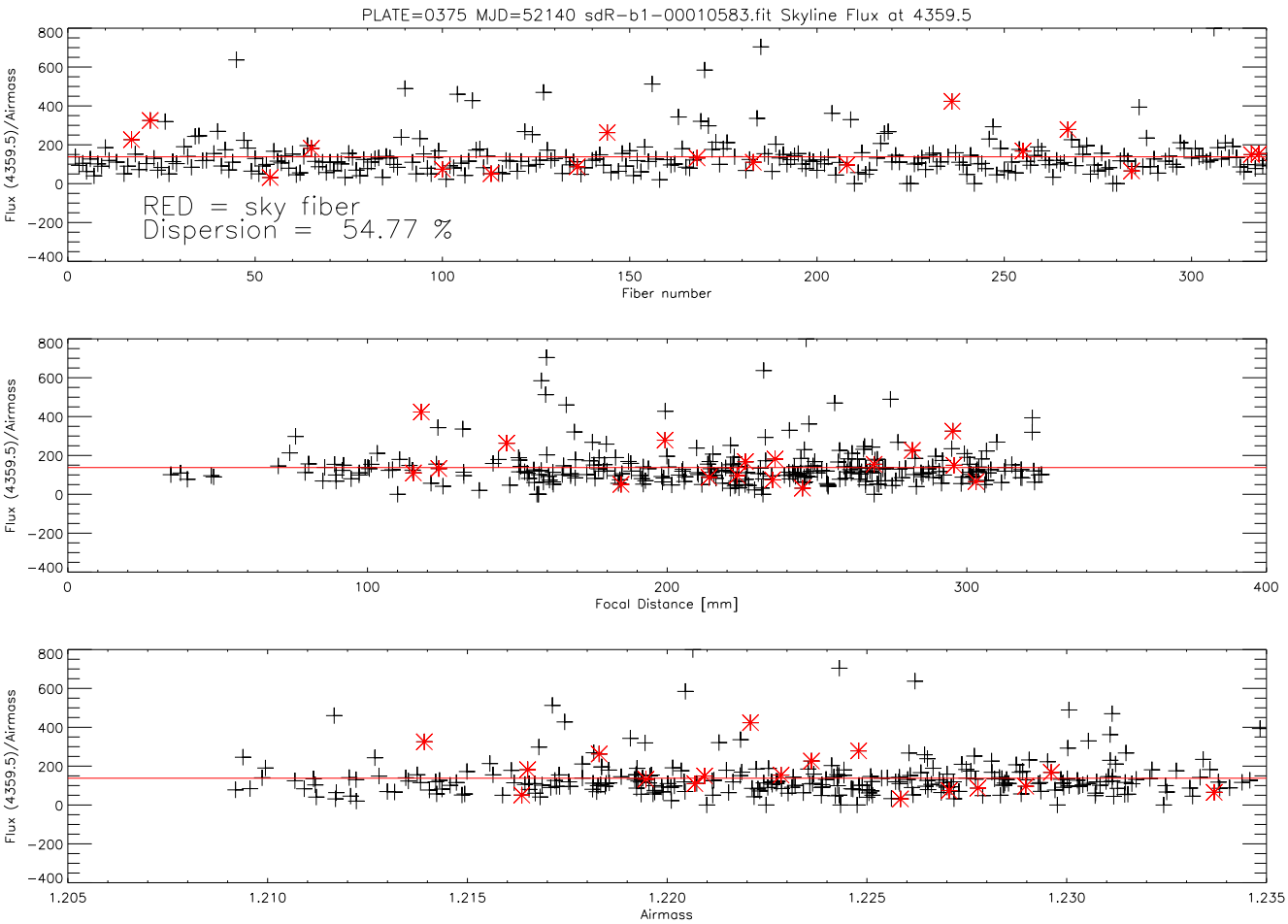

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010583.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

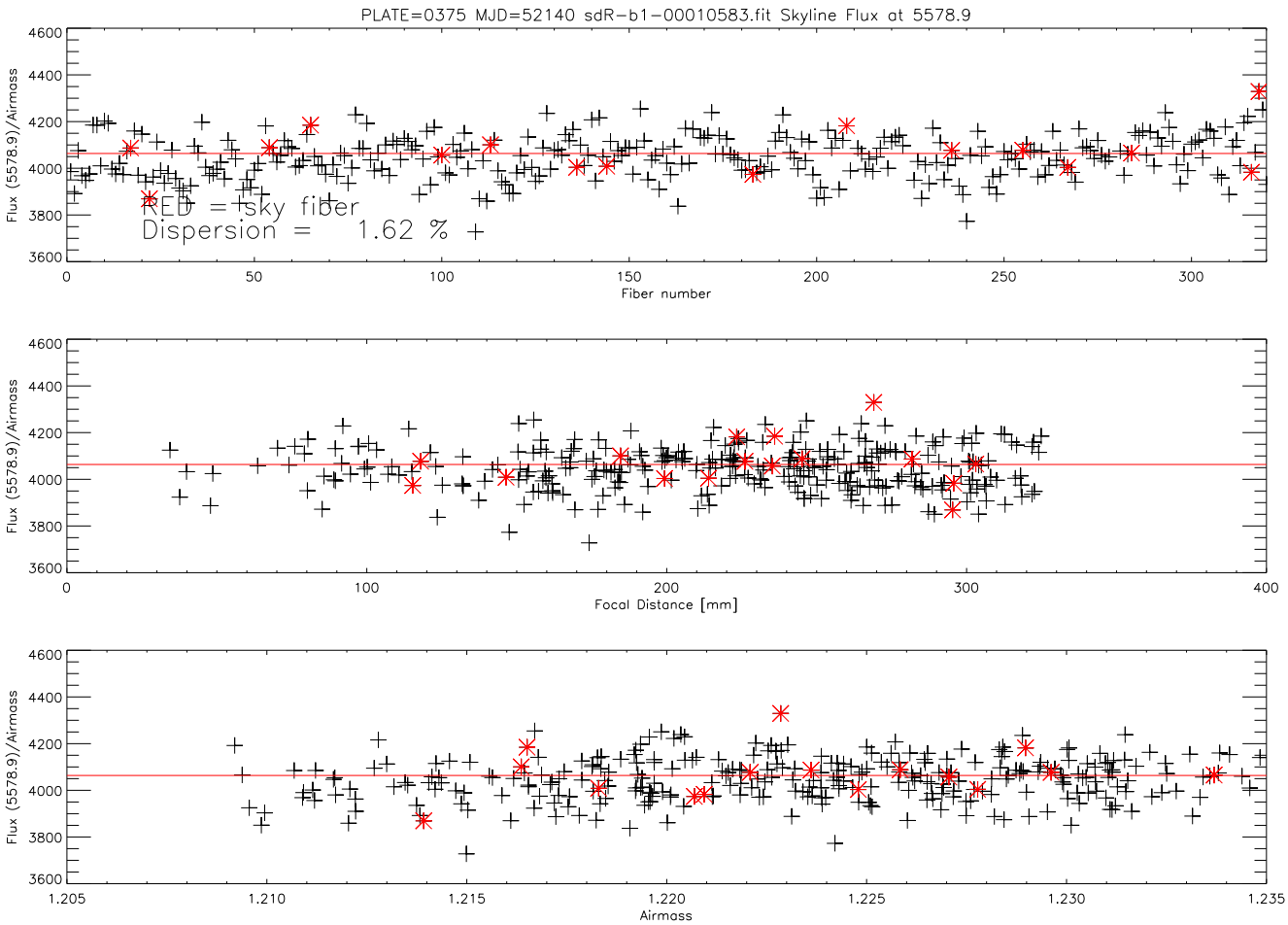

PLATE=0375 MJD=52140 sdR-b1-00010583.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

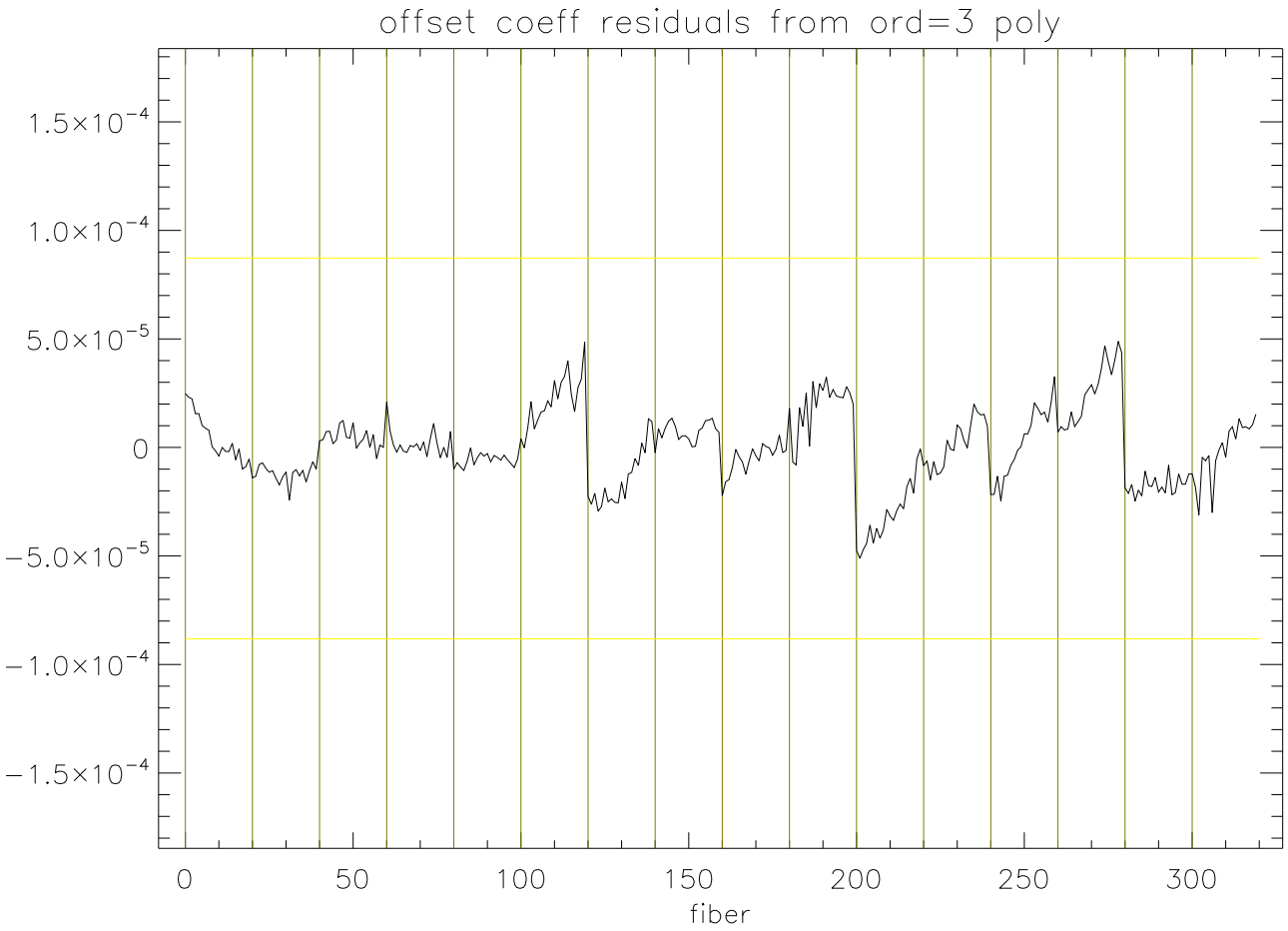

PLATE=0375 MJD=52140 sdR-b1-00010583.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

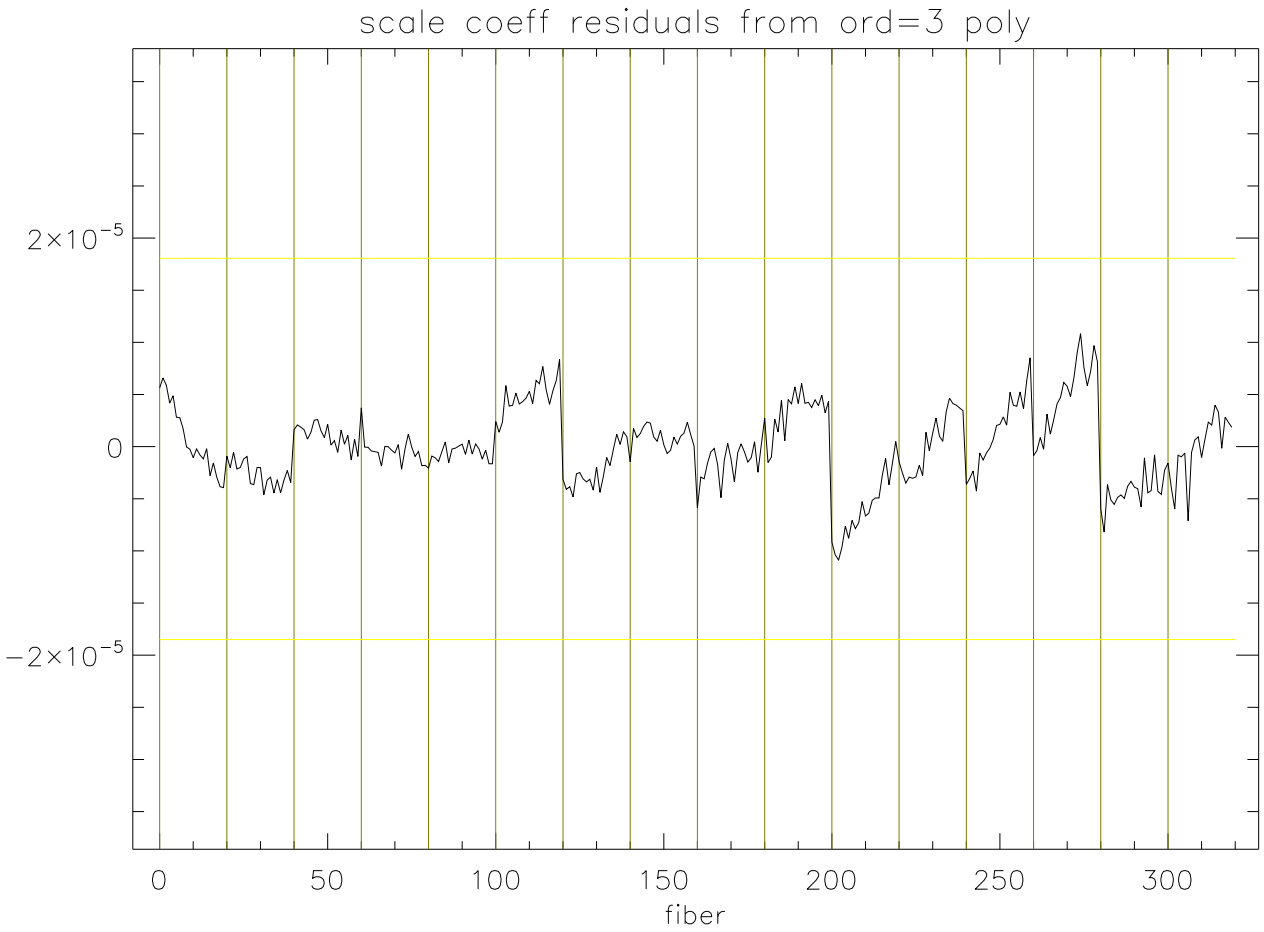

PLATE=0375 MJD=52140 sdR-b1-00010583.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

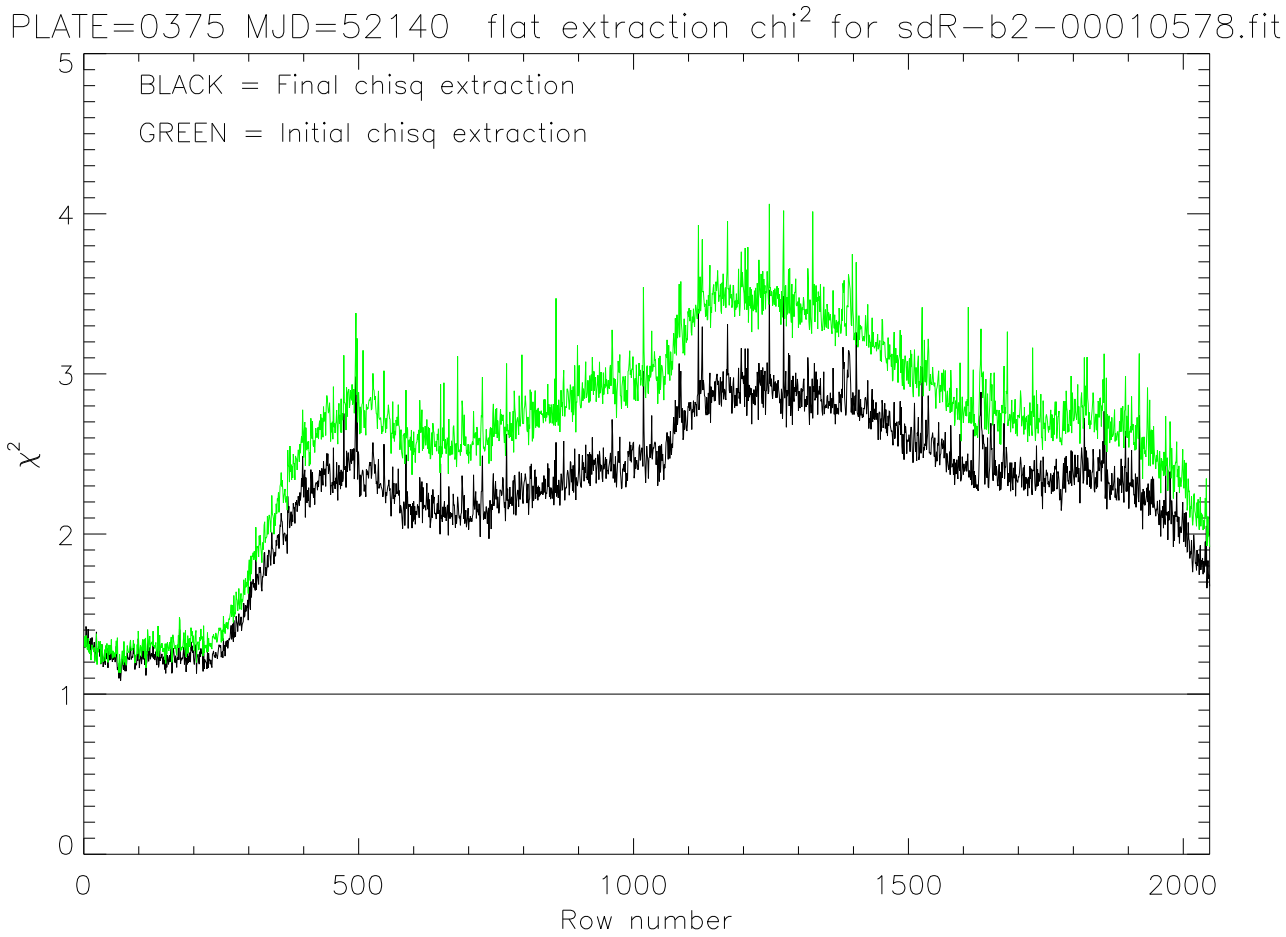

Number of sky fibers = 17
PLATE=0375 MJD=52140 sdR-b1-00010583.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

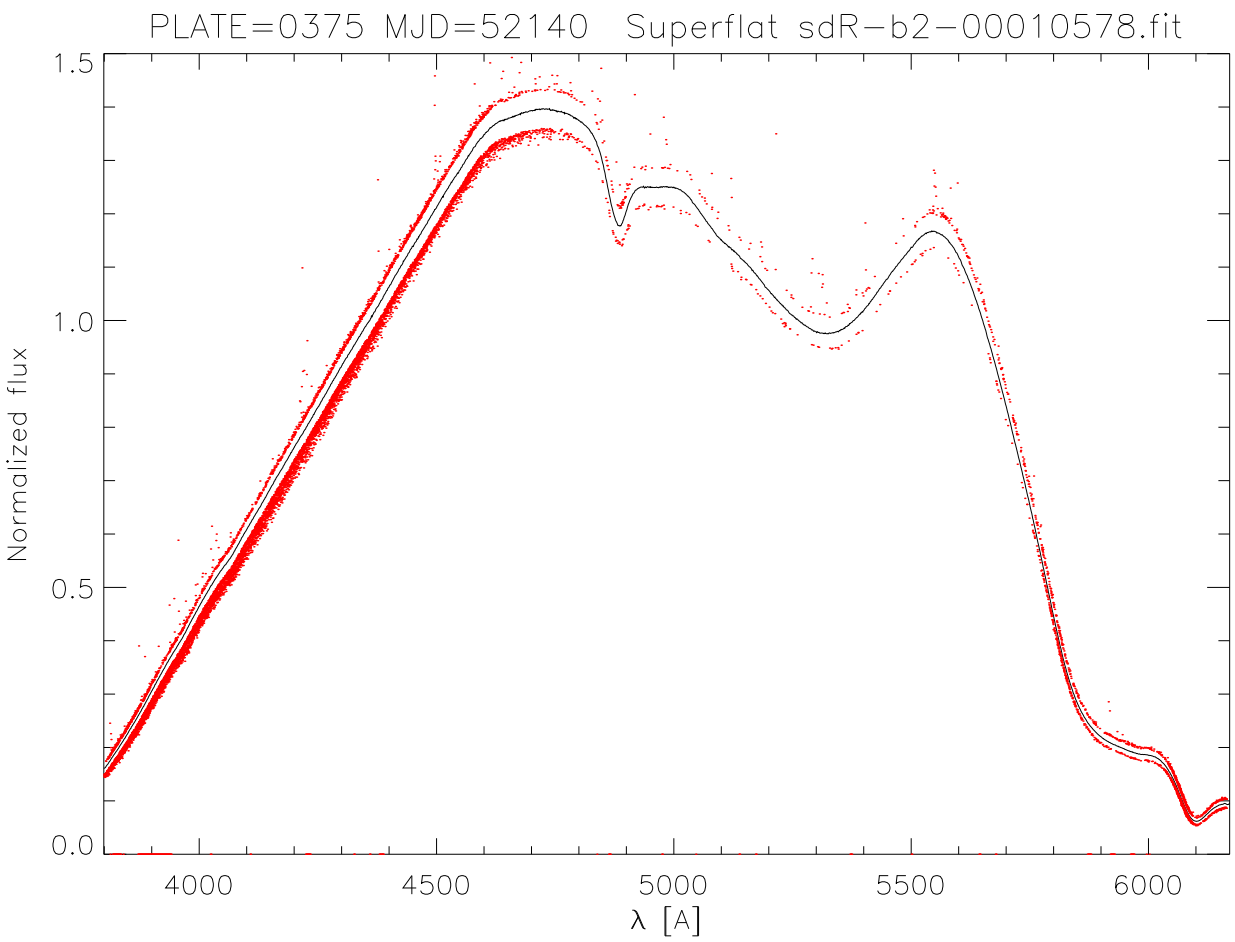

PLATE=0375 MJD=52140 sdR-b1-00010583.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 54.77 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

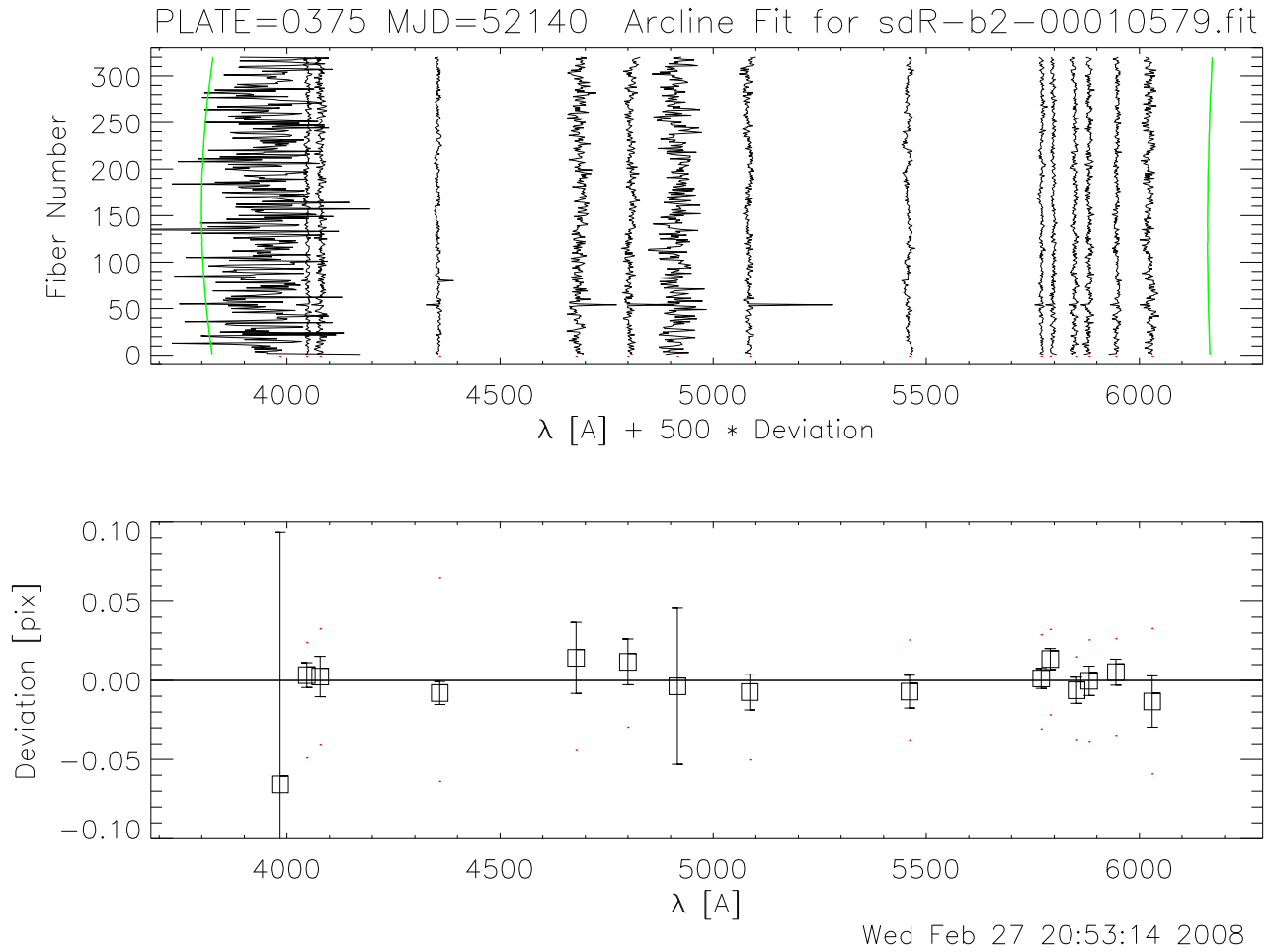

PLATE=0375 MJD=52140 sdR-b1-00010583.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.62 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

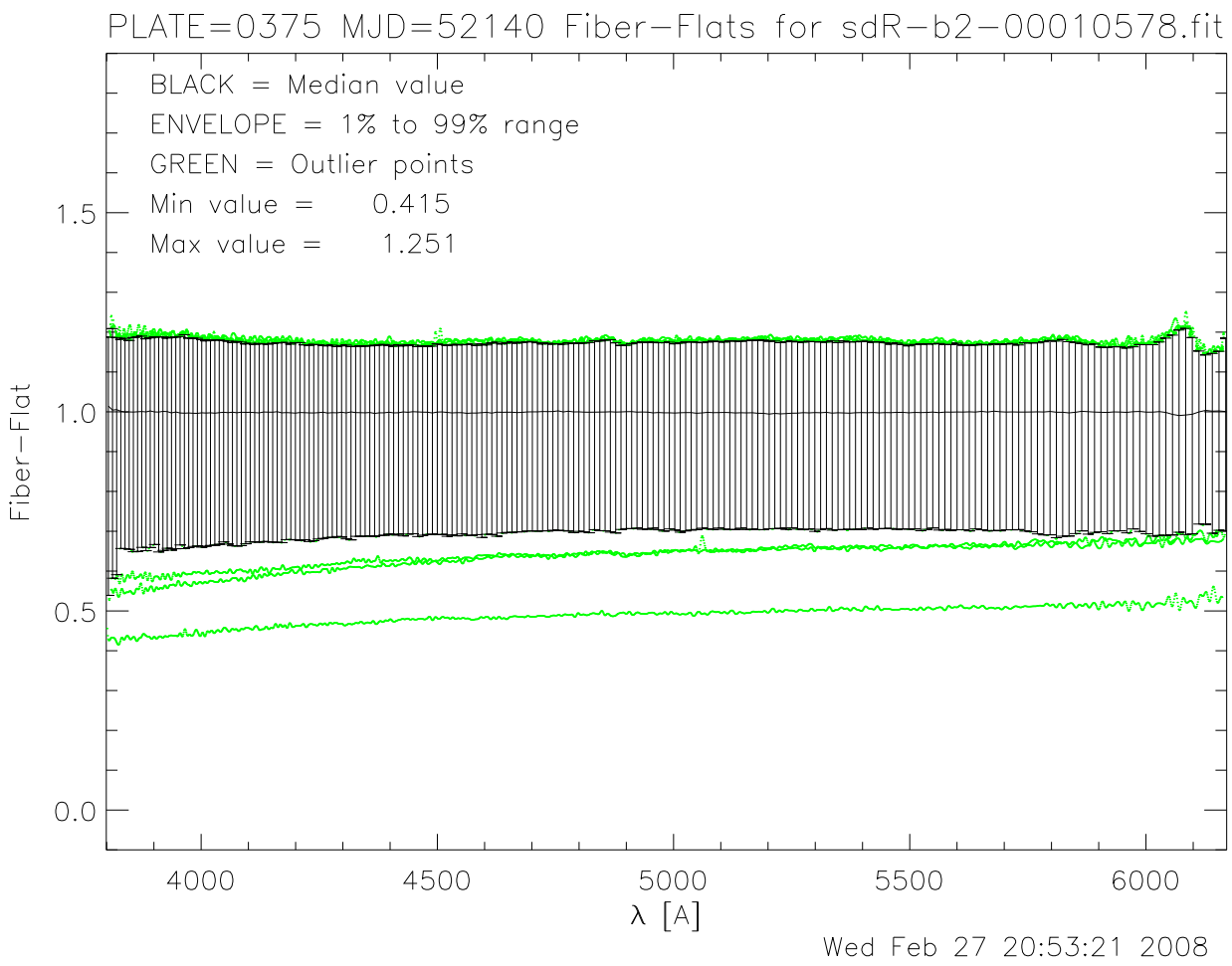

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

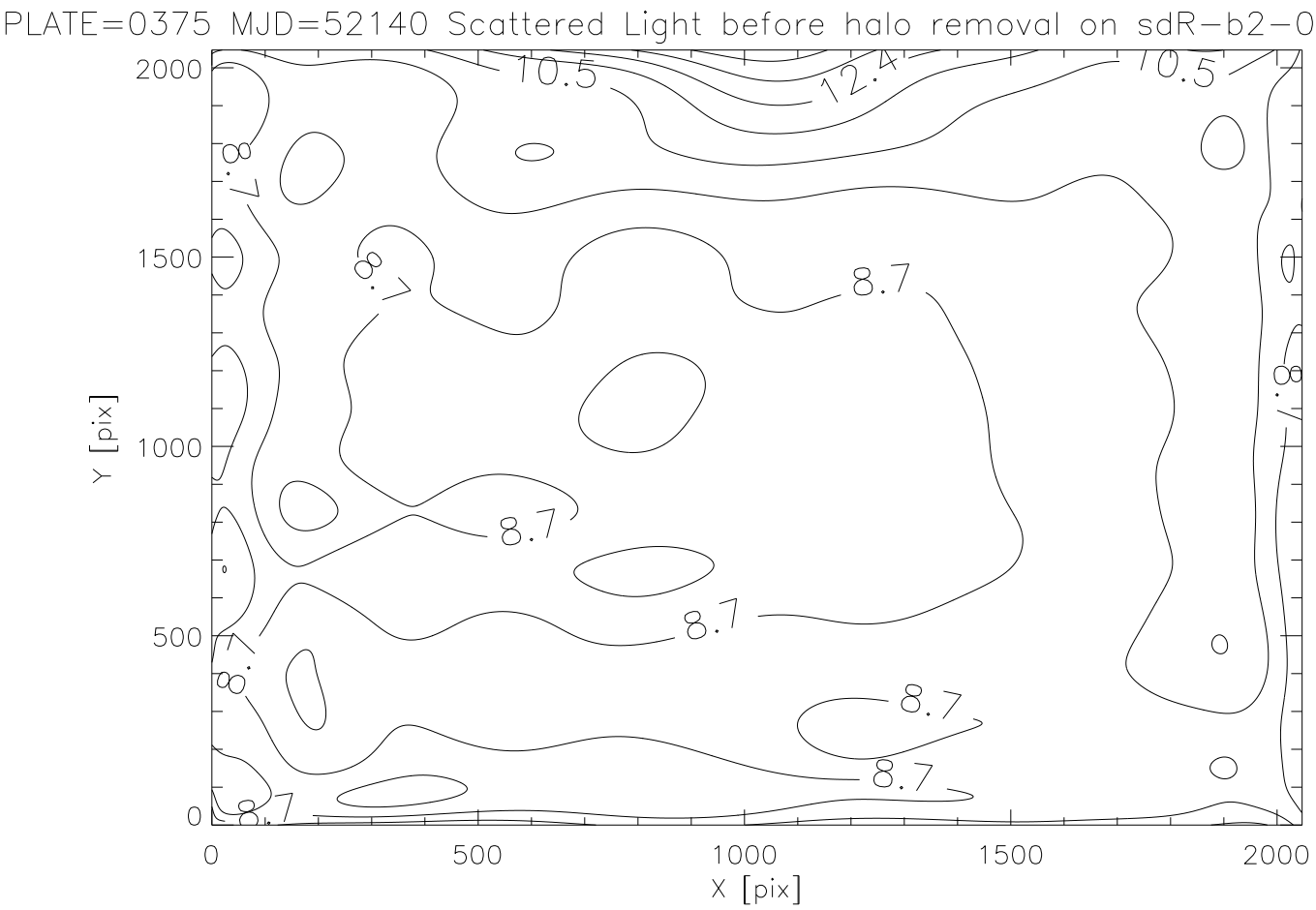

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

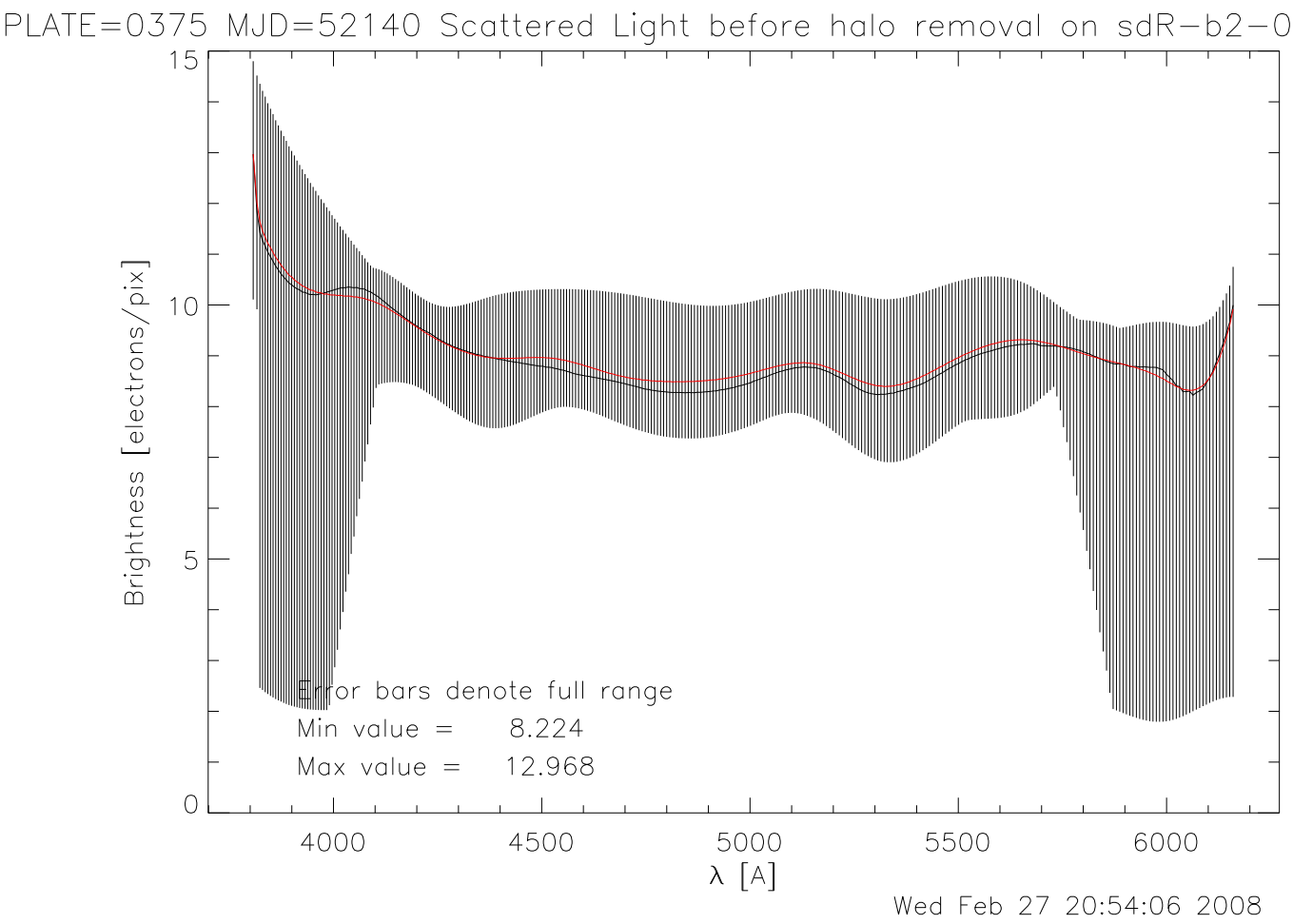

PLATE=0375 MJD=52140 flat extraction chi^2 for sdR−b2−00010578.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

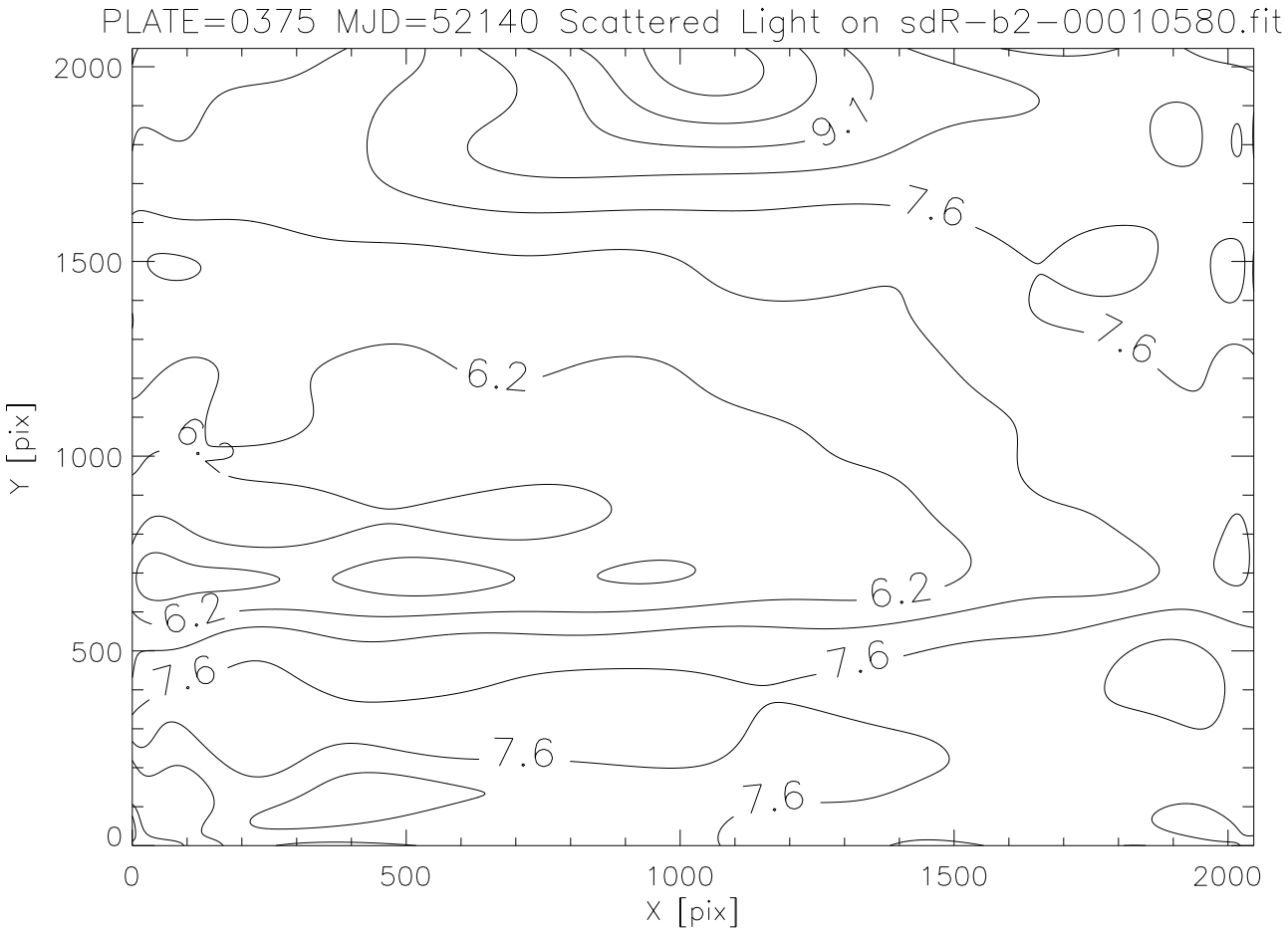

PLATE=0375 MJD=52140 Superflat sdR-b2-00010578.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

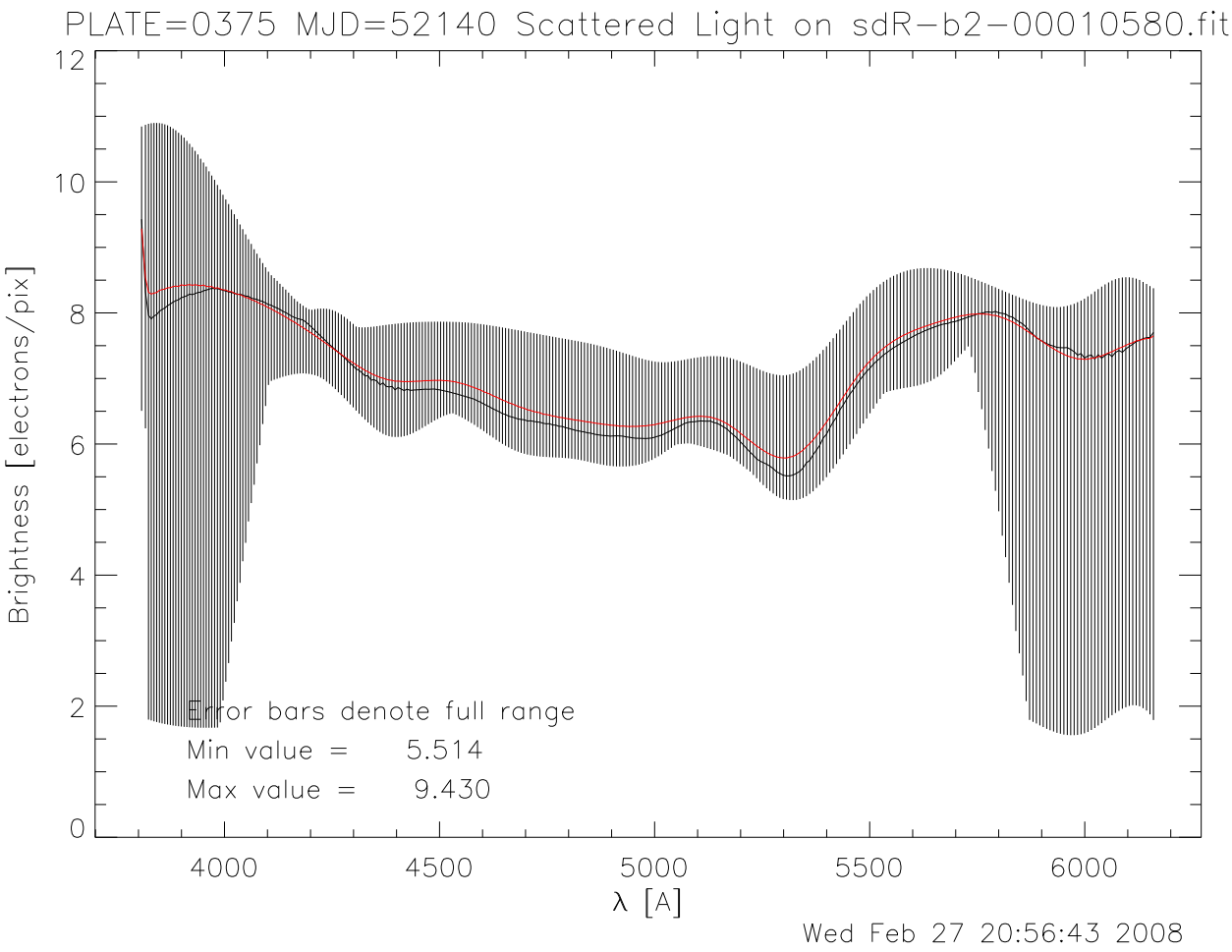

PLATE=0375 MJD=52140 Arcline Fit for sdR-b2-00010579.fit
Fiber Number
300
250
200
150
100
50
0
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:53:14 2008

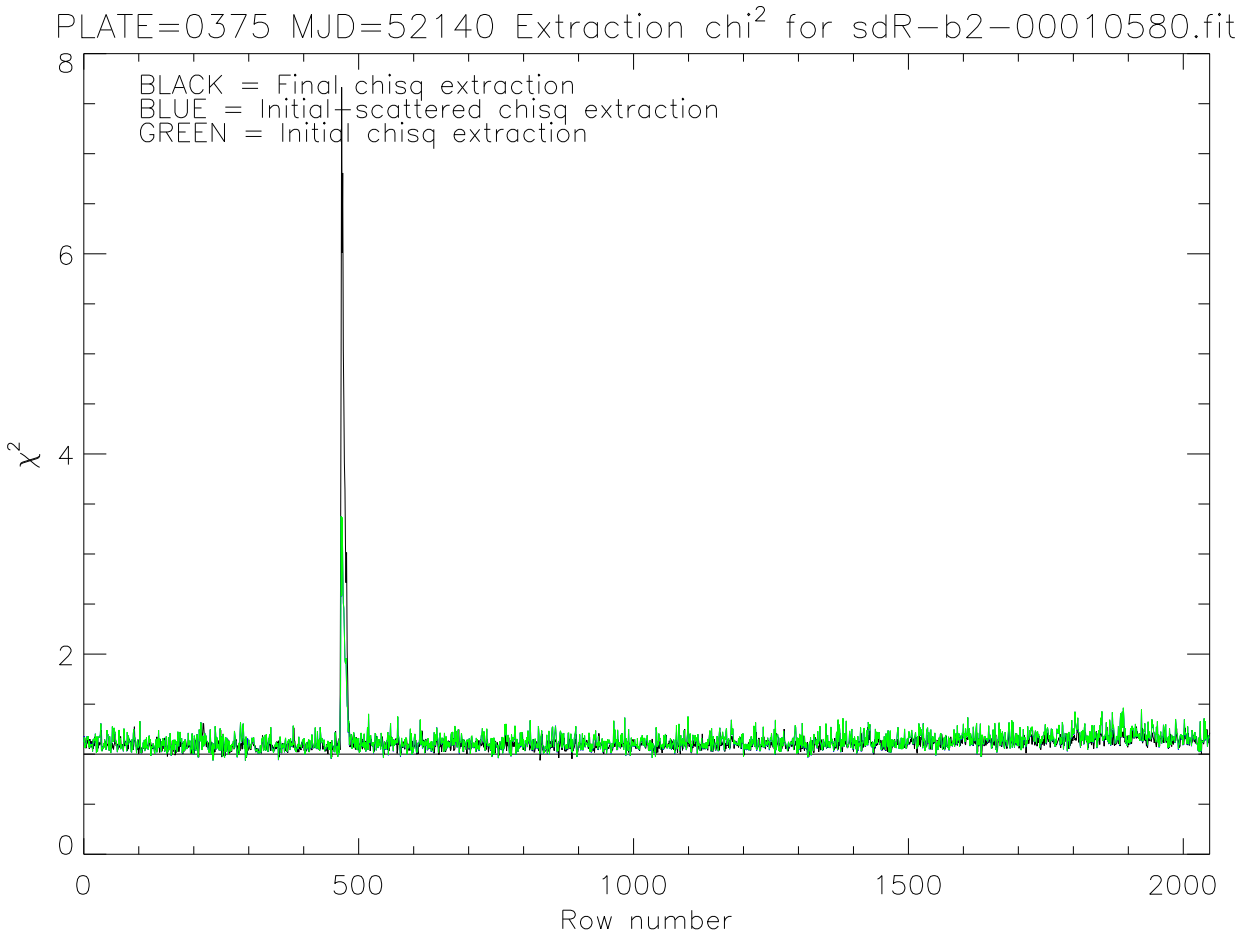

PLATE=0375 MJD=52140 Fiber-Flats for sdR-b2-00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.415
Max value = 1.251
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:53:21 2008

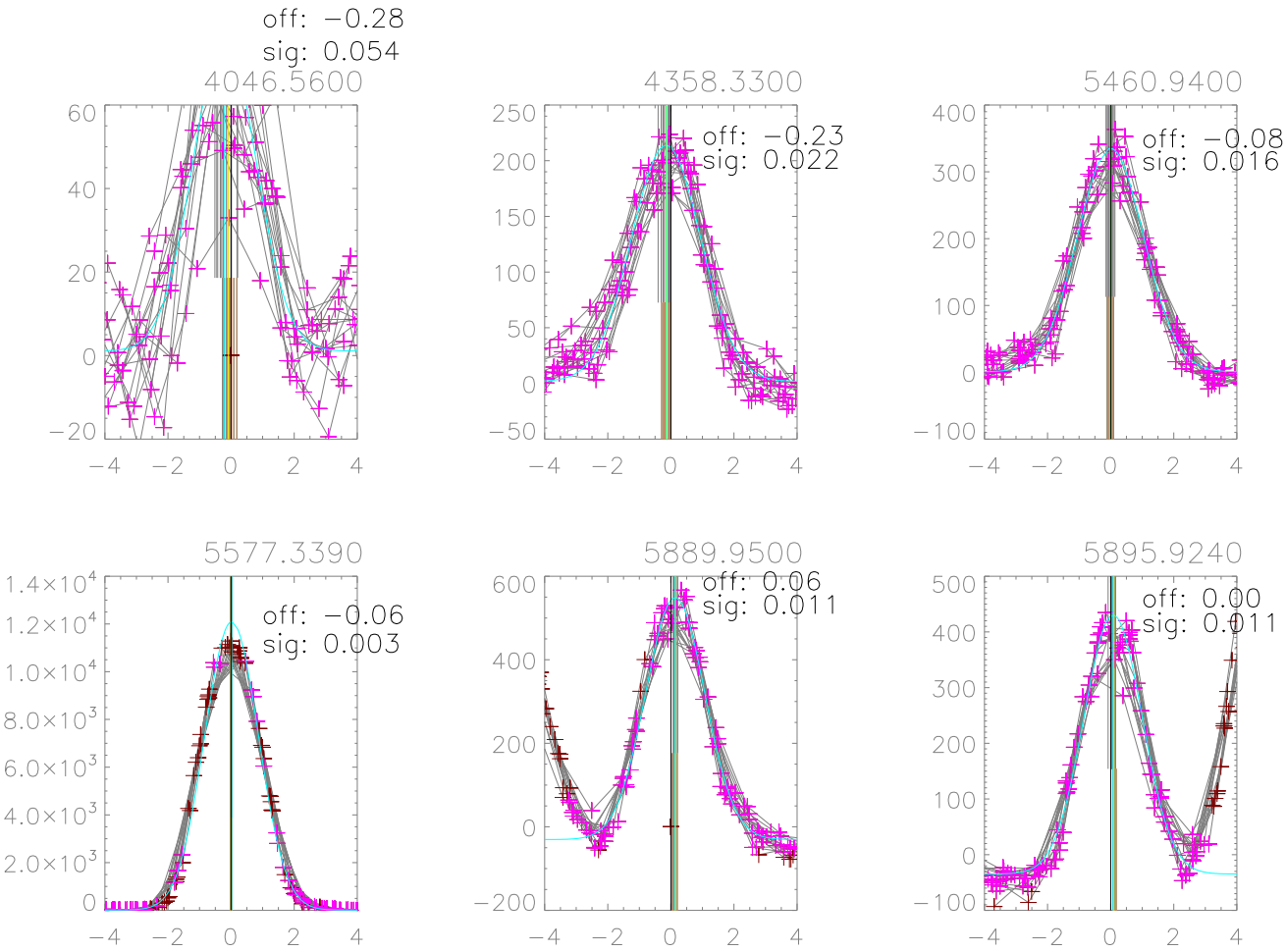

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR−b2−00010580.f
10.5
12.4
10.5
8.7
8.7
8.7
8.7
8.7
8.7
8.7
8.7
8.7
0
0
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

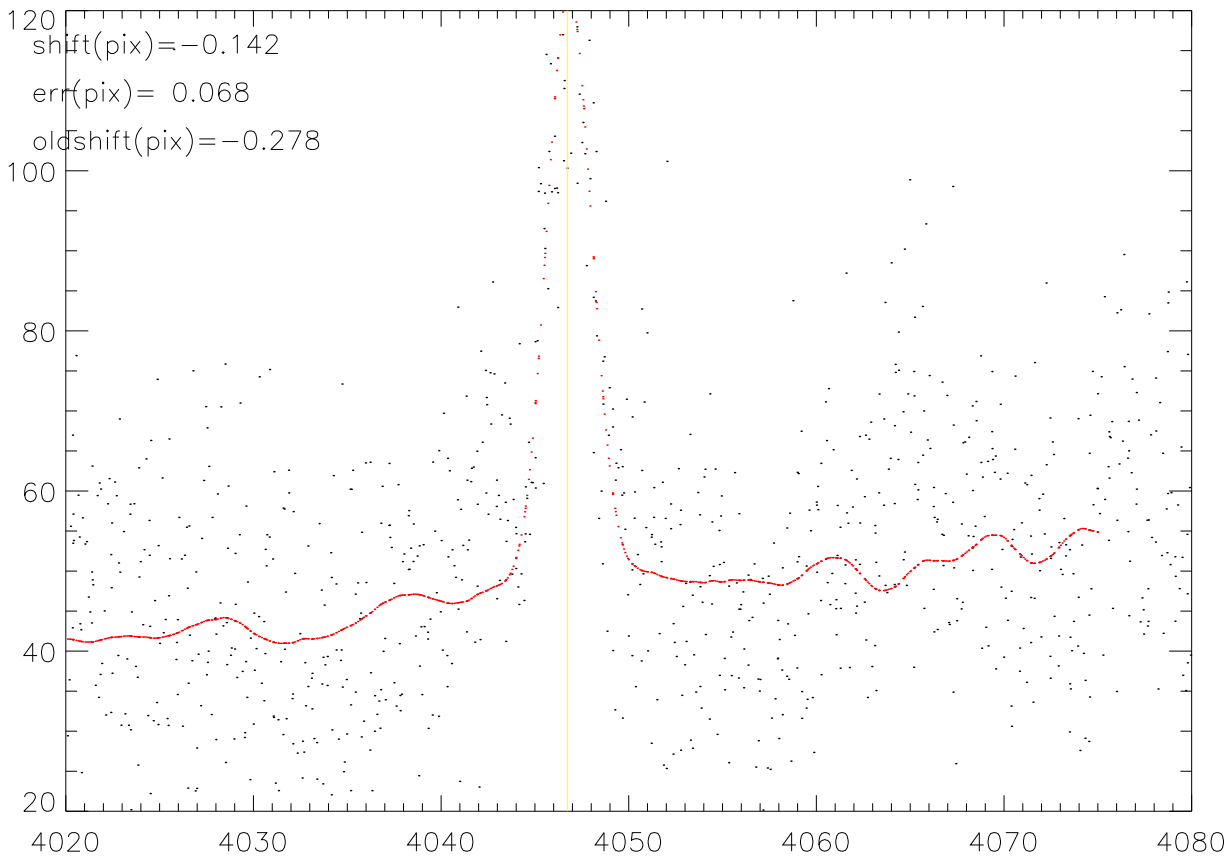

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b2-00010580.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.224
Max value = 12.968
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:54:06 2008

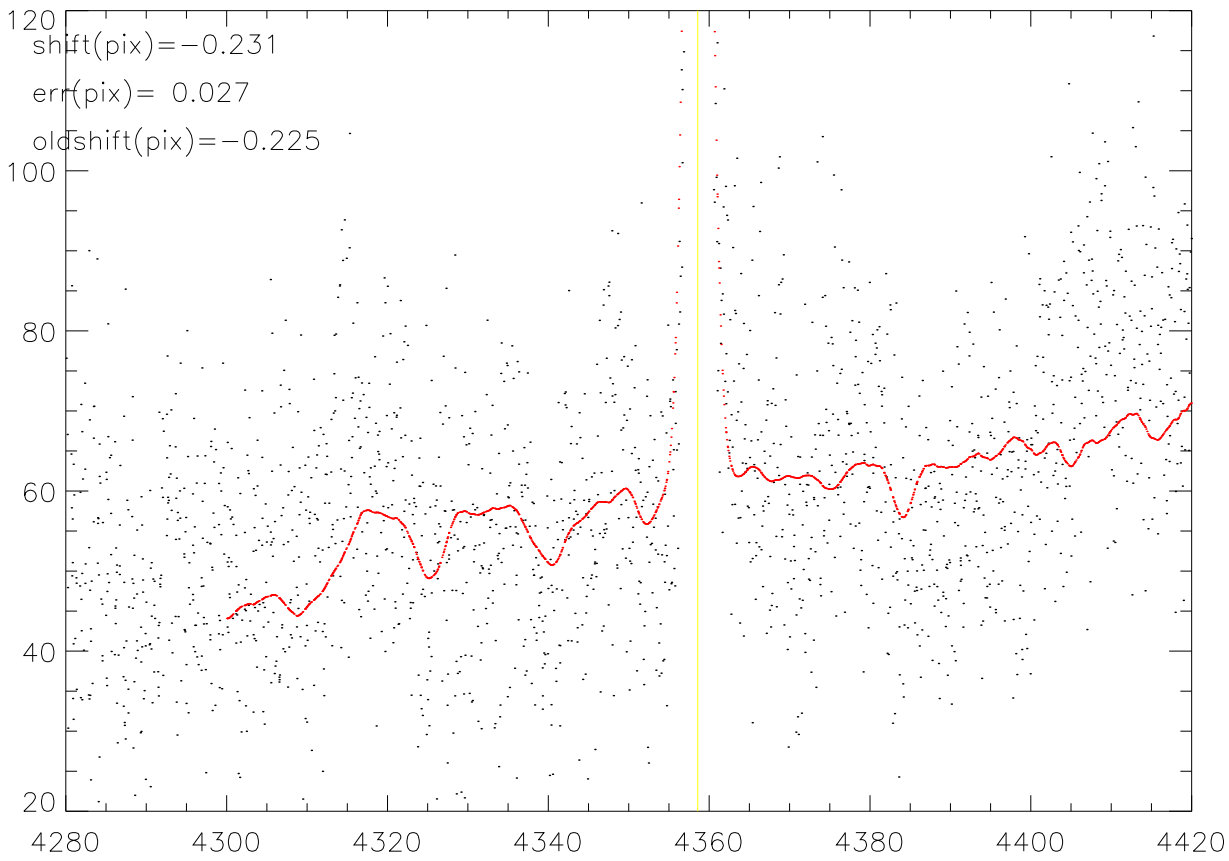

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010580.fit
9.1
7.6
7.6
6.2
6.2
6.2
7.6
7.6
7.6
7.6
Y [pix]
X [pix]
0
500
1000
1500
2000

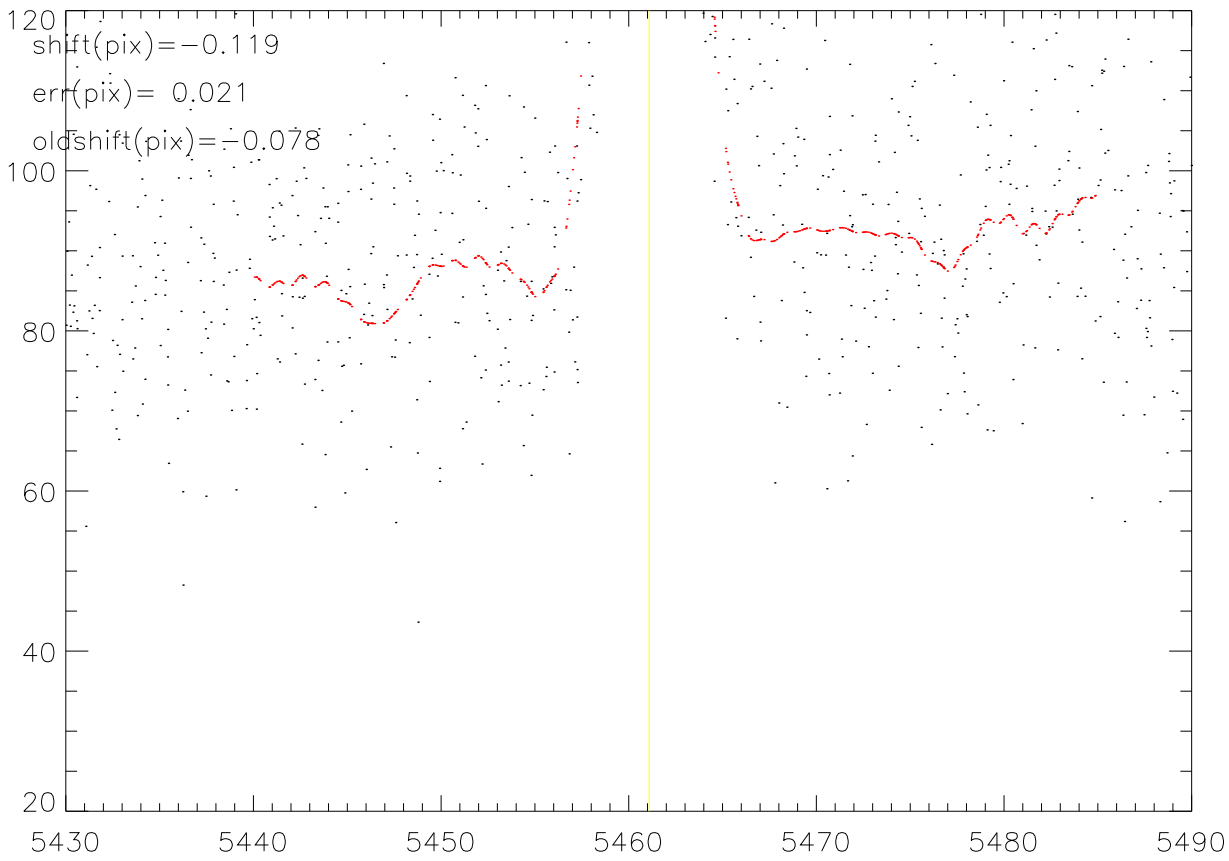

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010580.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.514
Max value = 9.430
Wed Feb 27 20:56:43 2008

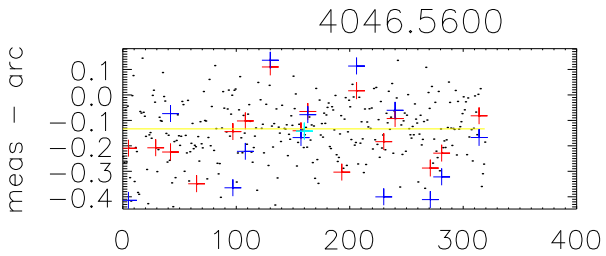

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-b2-00010580.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

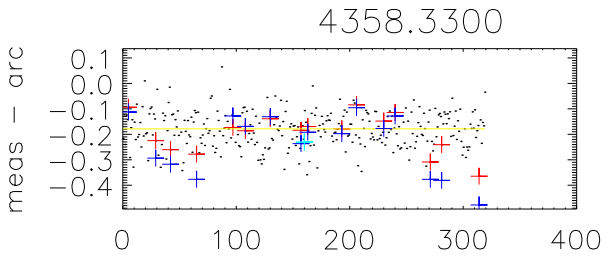

4046.5600
off: −0.28
sig: 0.054
4358.3300
off: −0.23
sig: 0.022
5460.9400
off: −0.08
sig: 0.016
5577.3390
off: −0.06
sig: 0.003
5889.9500
off: 0.06
sig: 0.011
5895.9240
off: 0.00
sig: 0.011

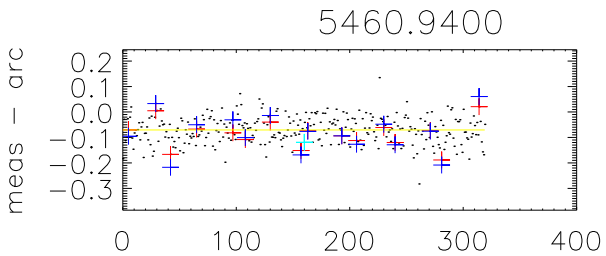

shift(pix)=−0.142
err(pix)= 0.068
oldshift(pix)=−0.278
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

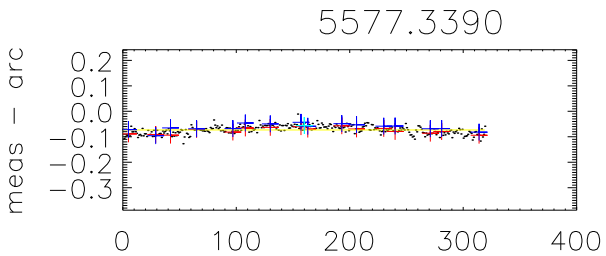

shift(pix)=−0.231
err(pix)= 0.027
oldshift(pix)=−0.225
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

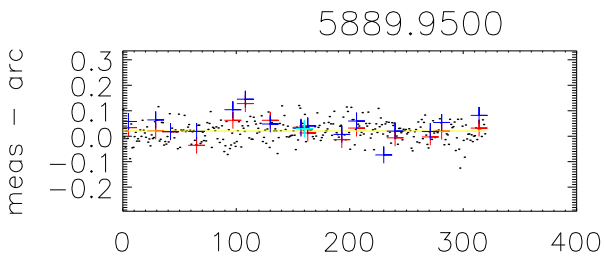

shift(pix)=−0.119
err(pix)= 0.021
oldshift(pix)=−0.078
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

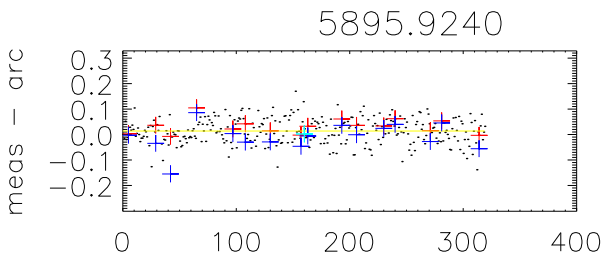

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

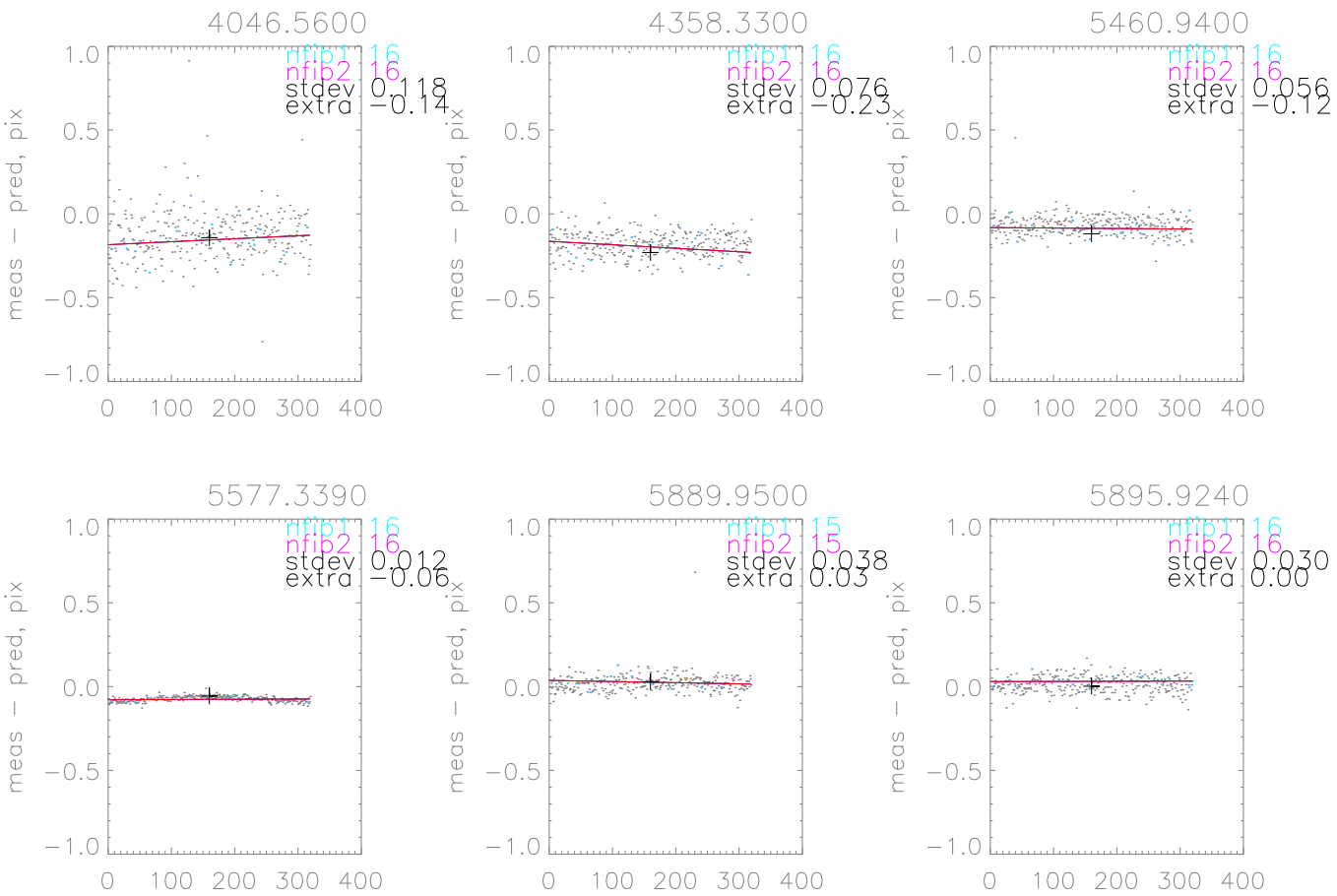

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

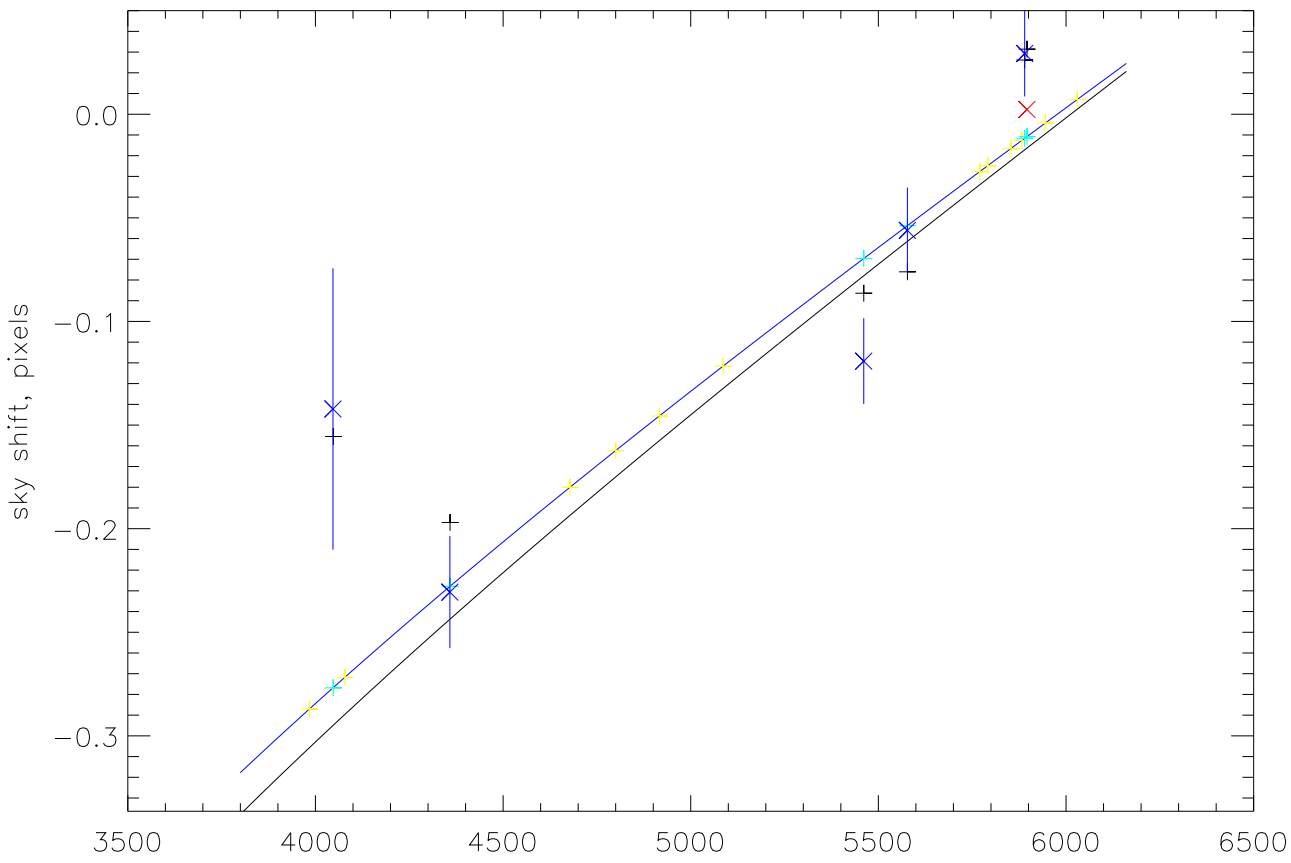

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

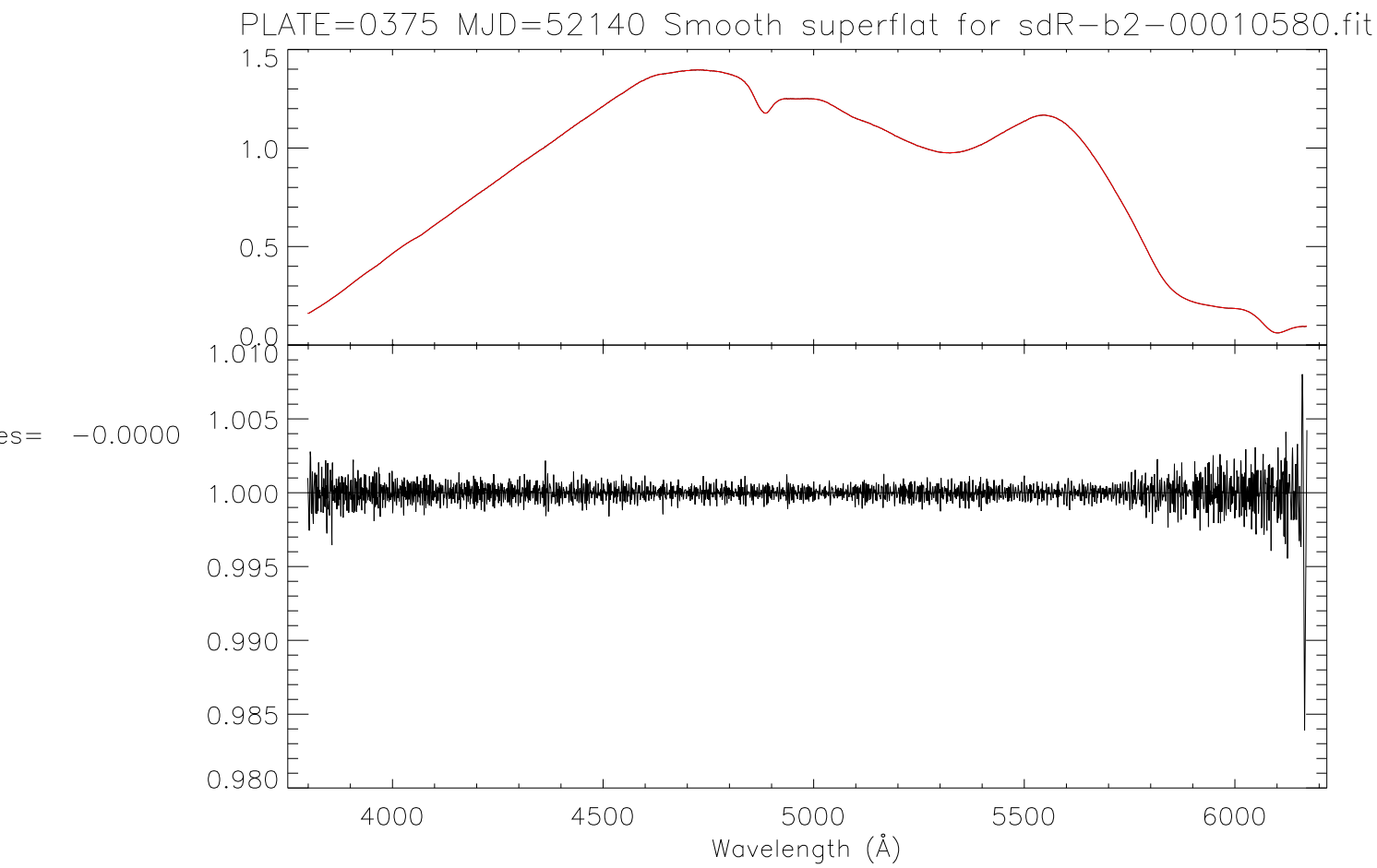

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

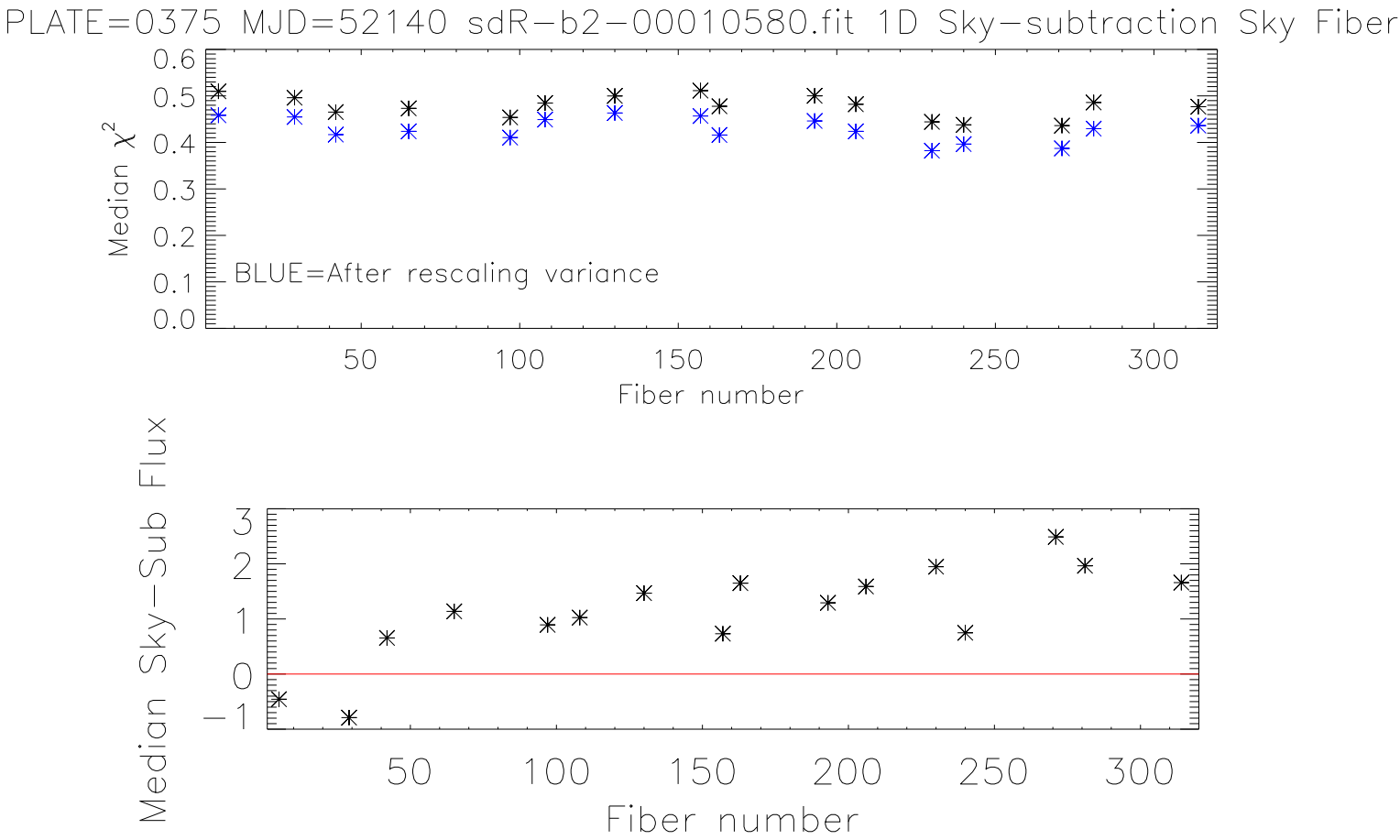

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

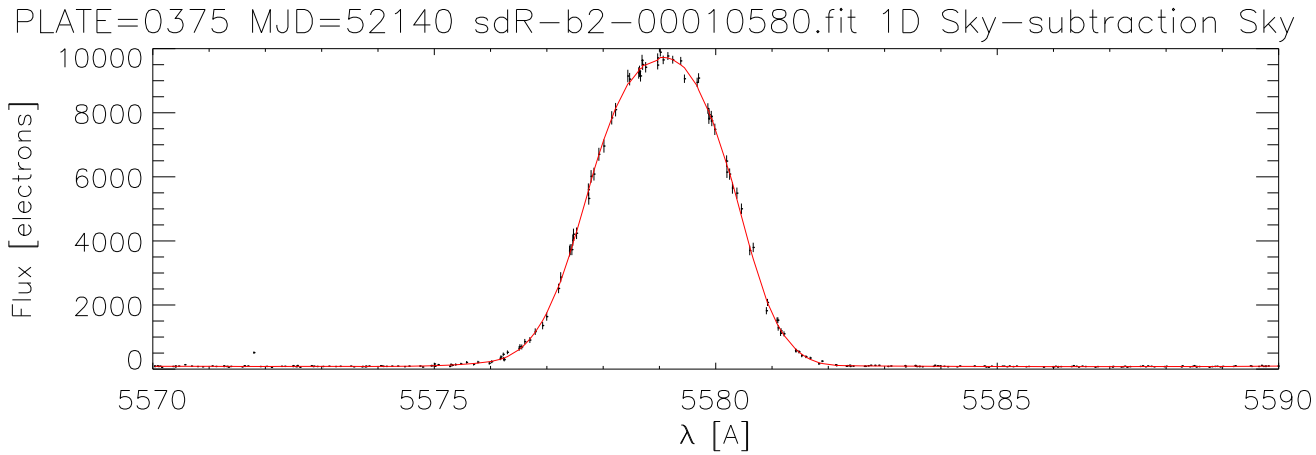

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

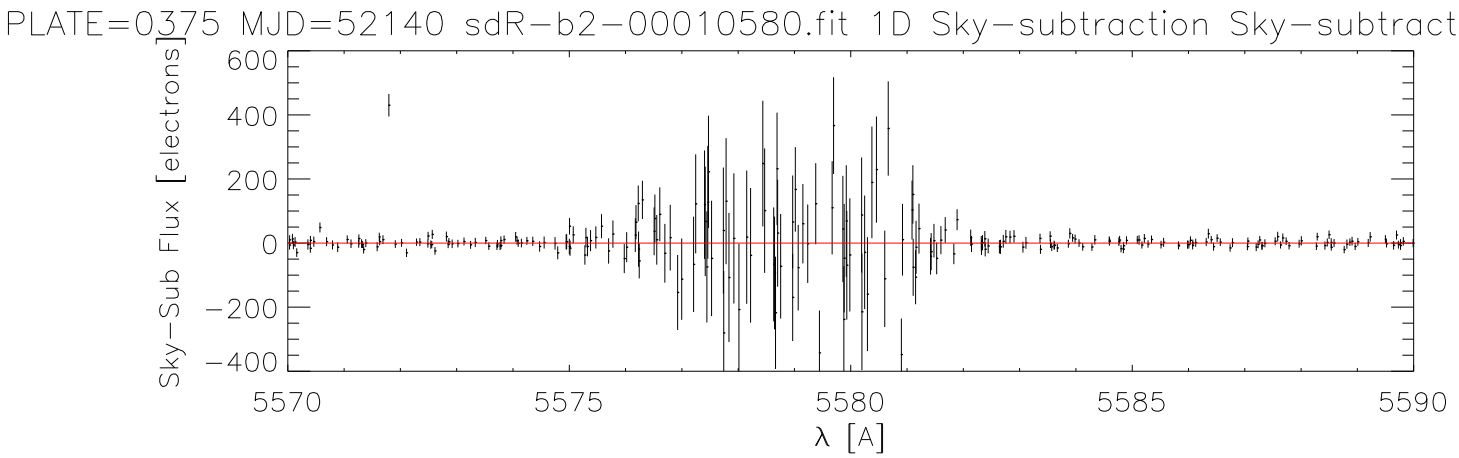

4046.5600
nfib1 16
nfib2 16
stdev 0.118
extra −0.14
4358.3300
nfib1 16
nfib2 16
stdev 0.076
extra −0.23
5460.9400
nfib1 16
nfib2 16
stdev 0.056
extra −0.12
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra −0.06
5889.9500
nfib1 15
nfib2 15
stdev 0.038
extra 0.03
5895.9240
nfib1 16
nfib2 16
stdev 0.030
extra 0.00
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

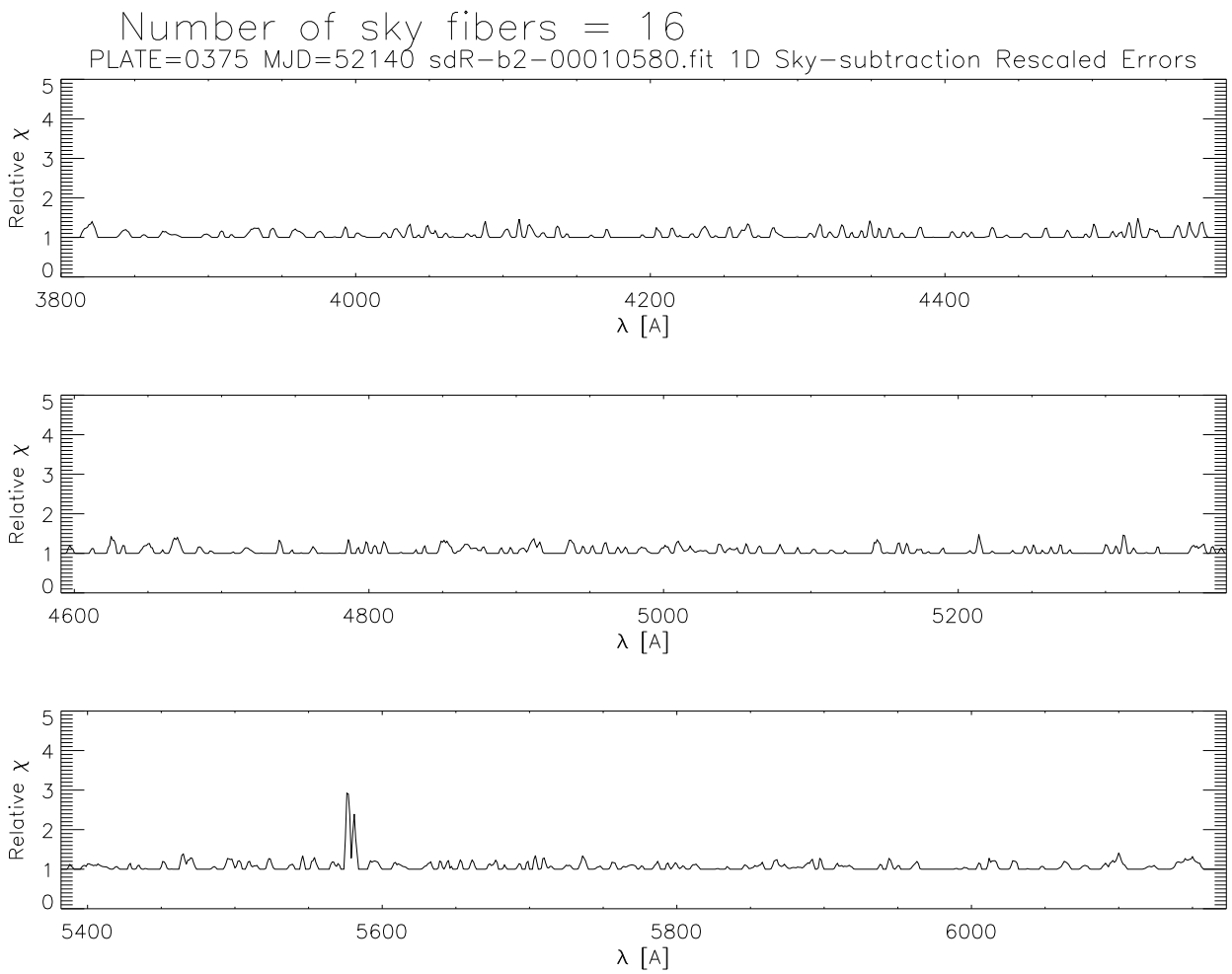

0.0
−0.1
−0.2
−0.3
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

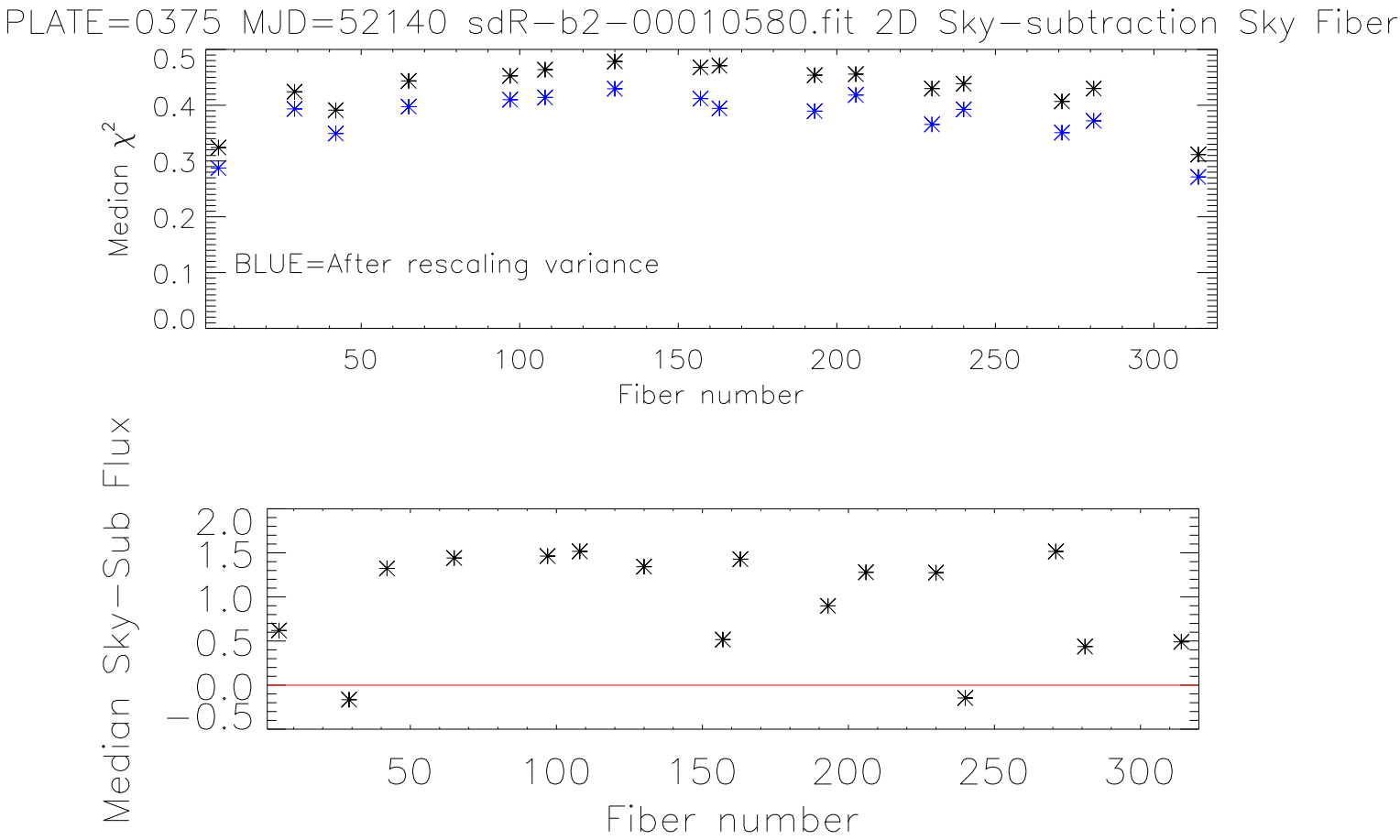

PLATE=0375 MJD=52140 Smooth superflat for sdR-b2-00010580.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

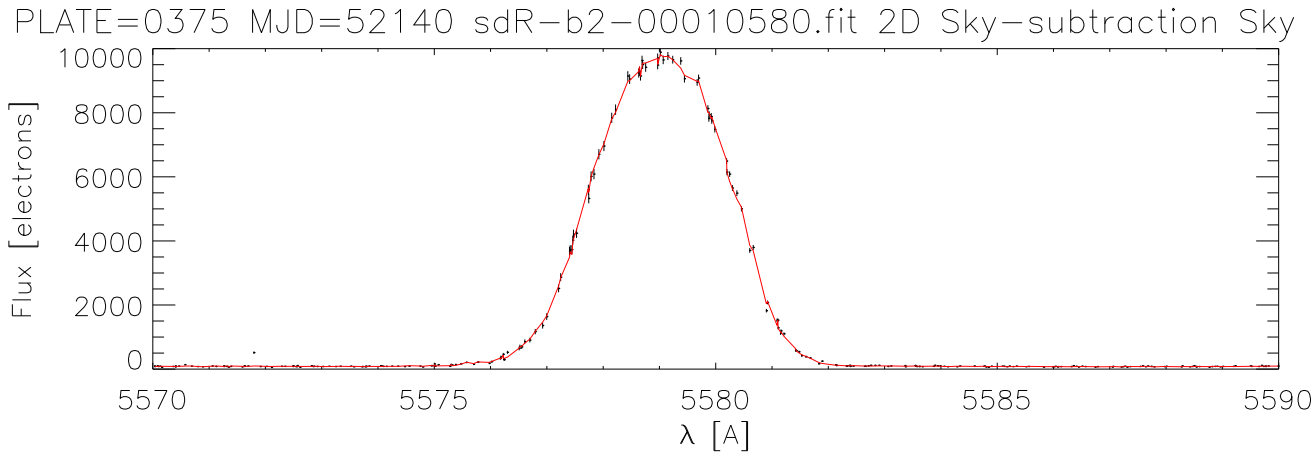

PLATE=0375 MJD=52140 sdR-b2-00010580.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

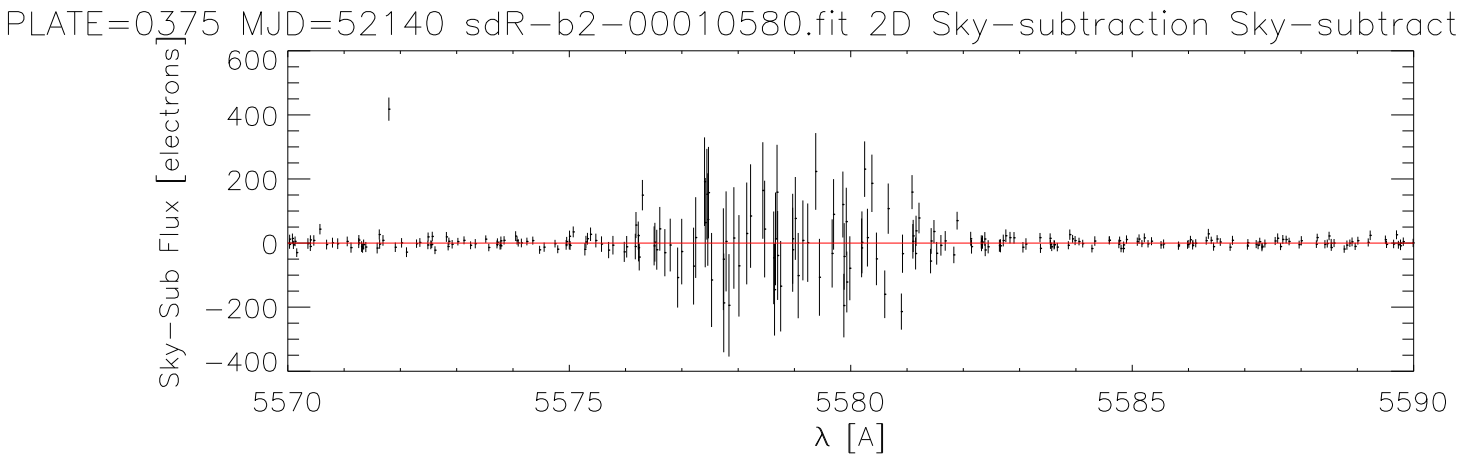

PLATE=0375 MJD=52140 sdR-b2-00010580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

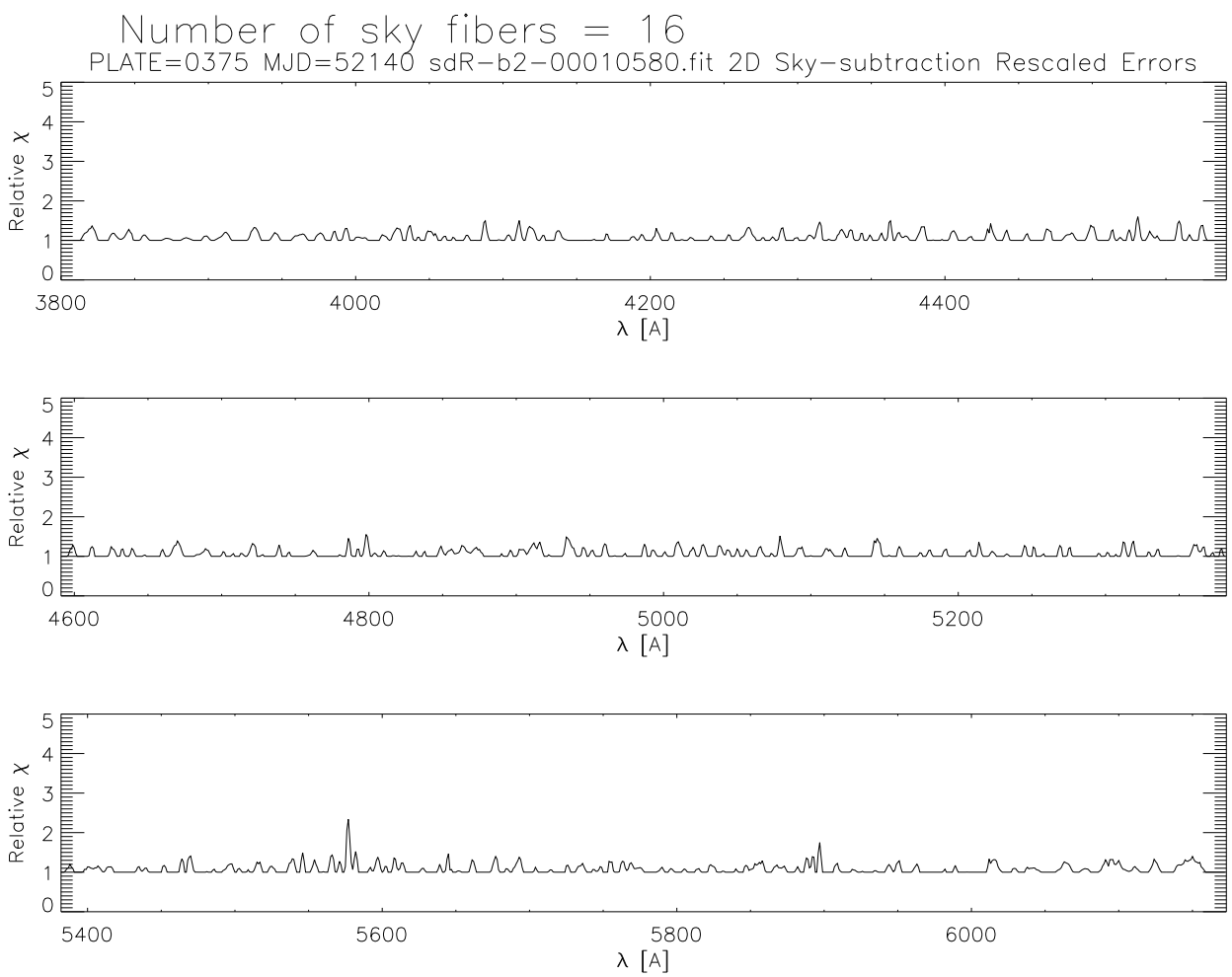

PLATE=0375 MJD=52140 sdR-b2-00010580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

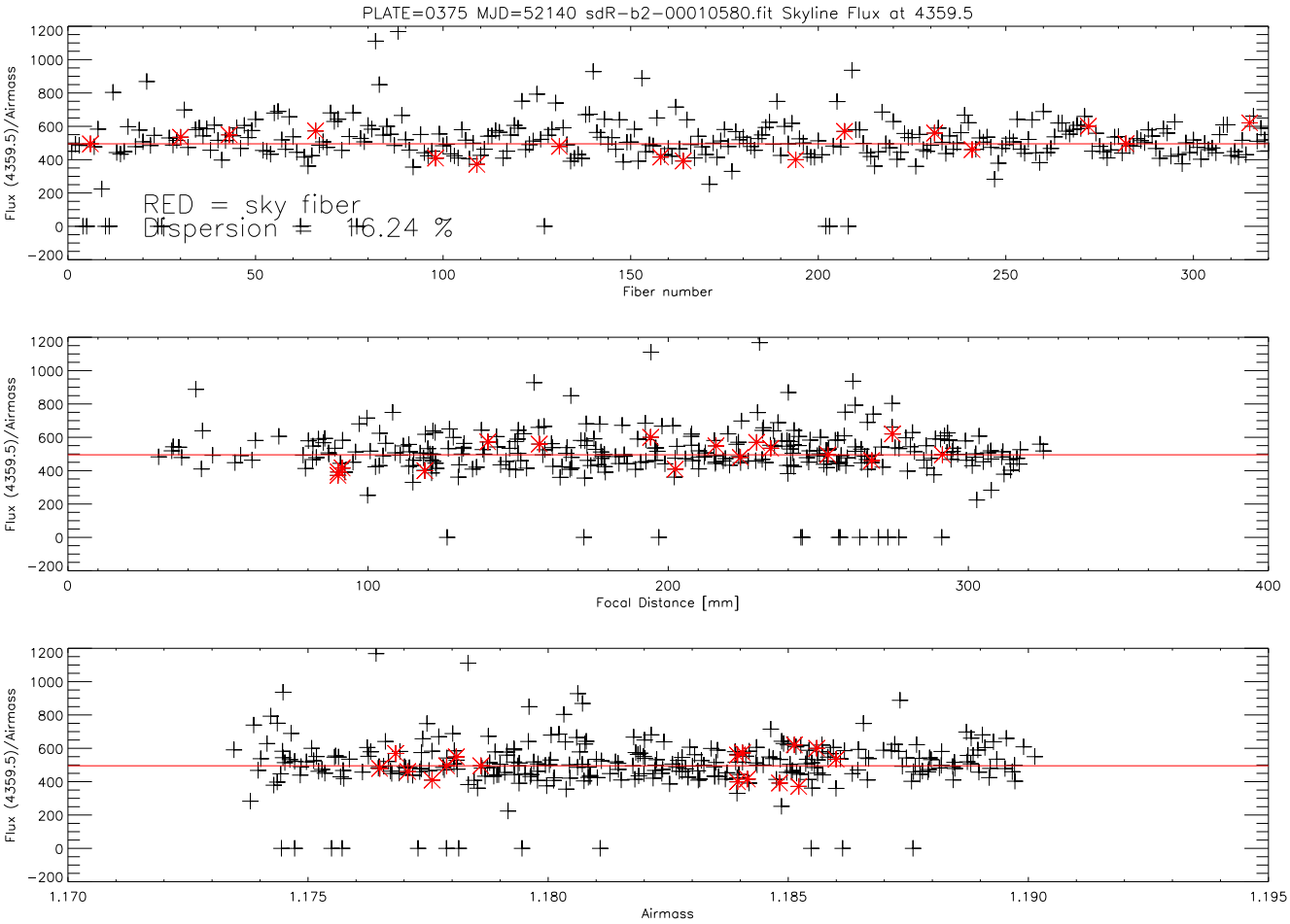

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010580.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

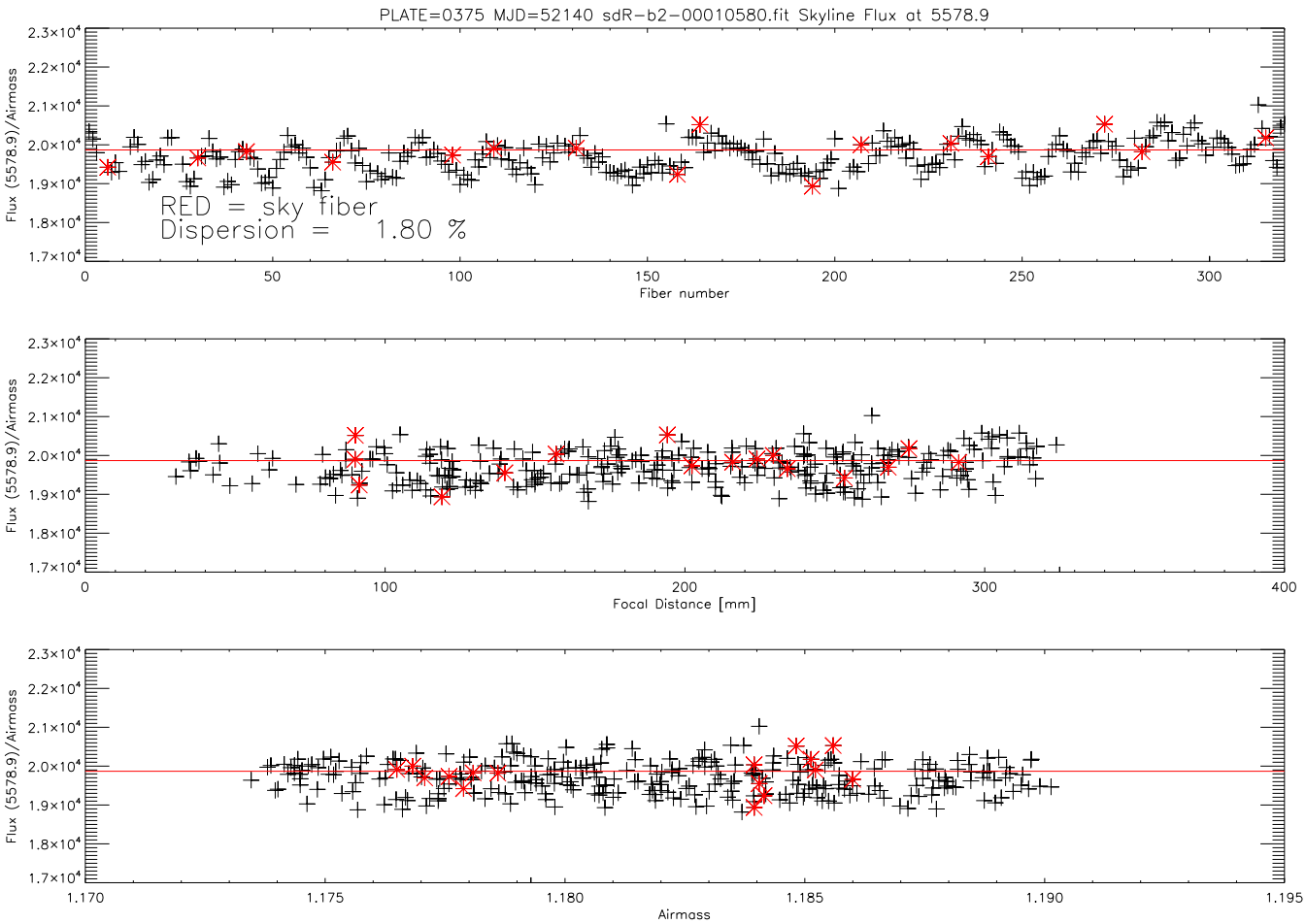

PLATE=0375 MJD=52140 sdR-b2-00010580.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

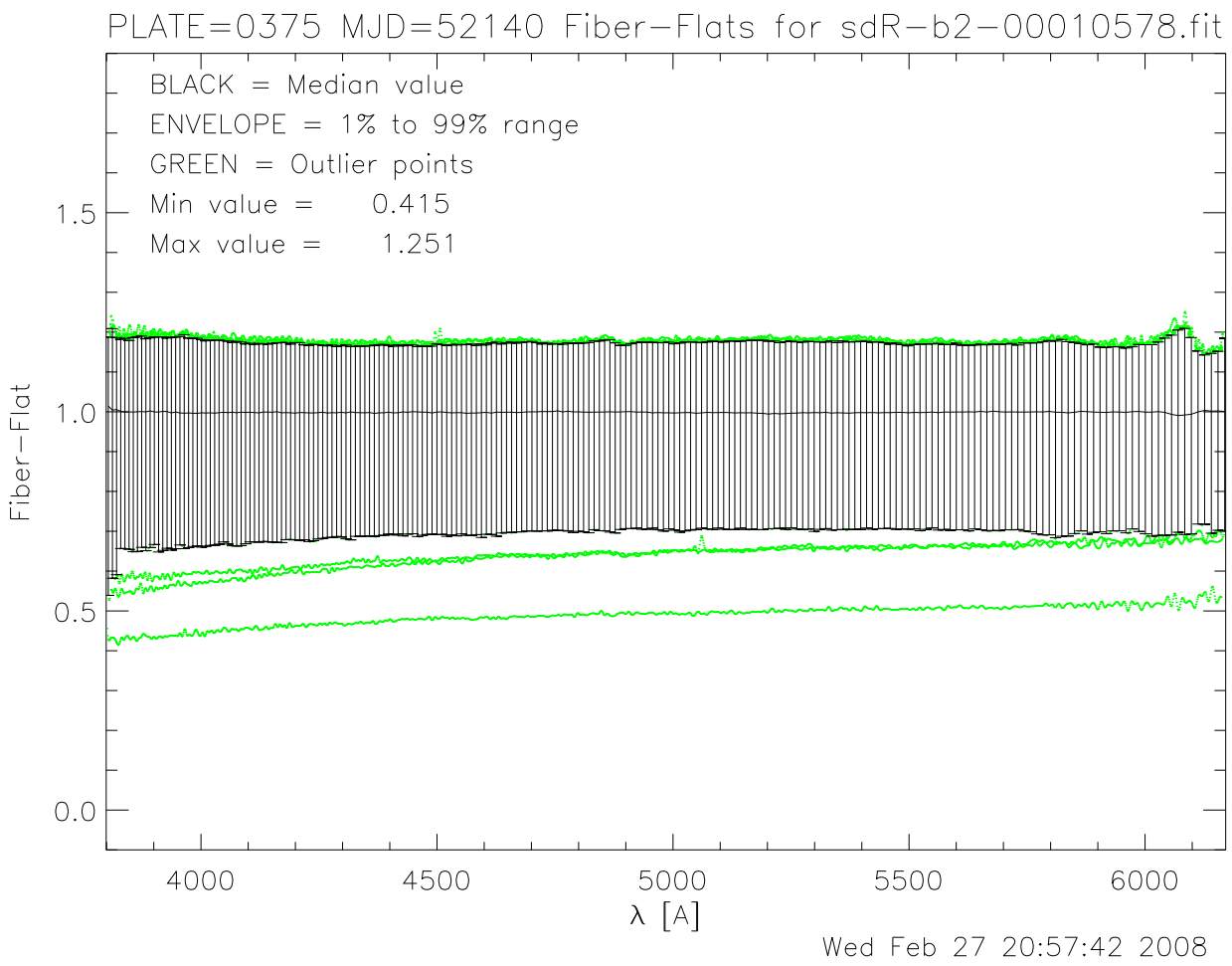

PLATE=0375 MJD=52140 sdR-b2-00010580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

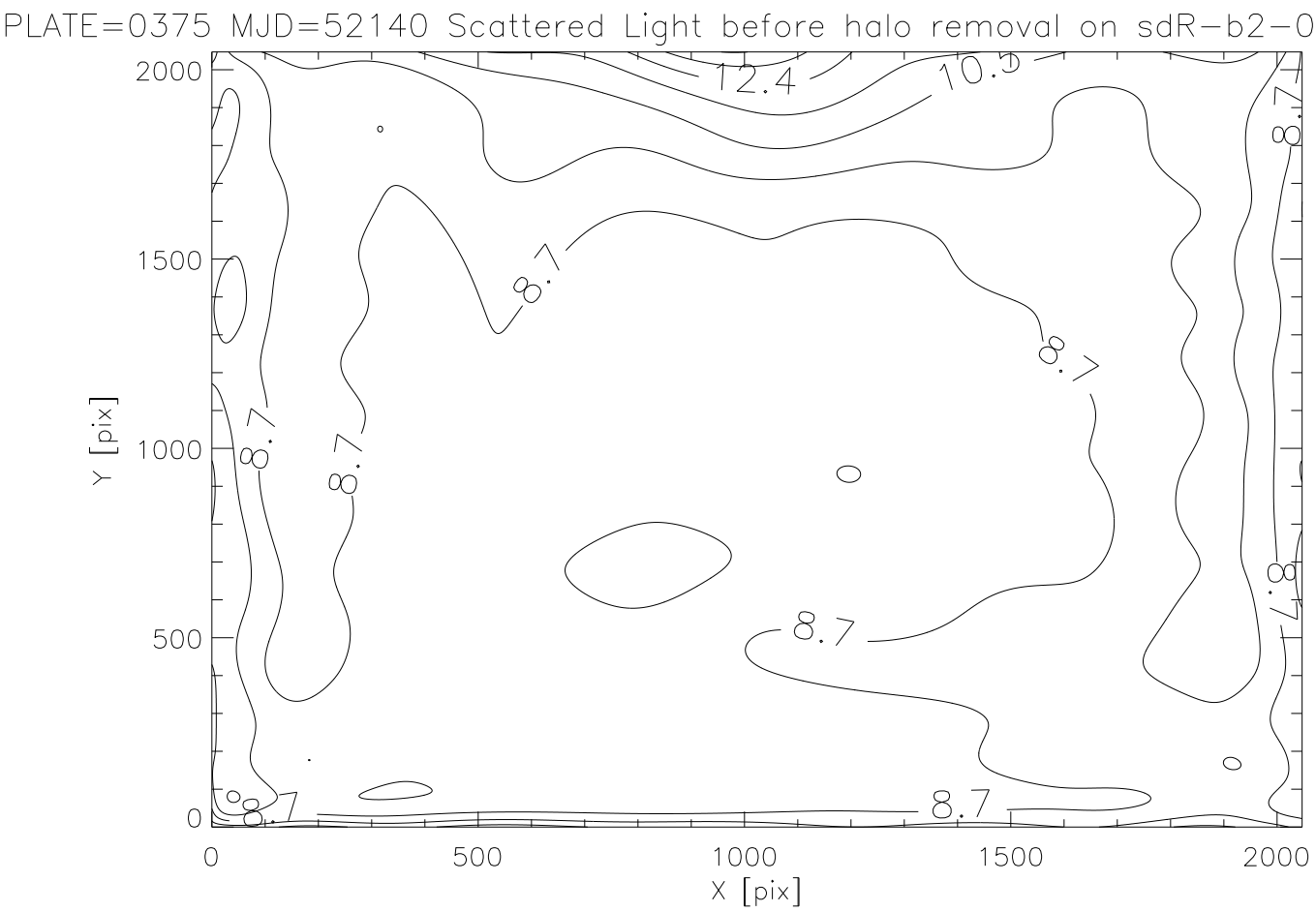

PLATE=0375 MJD=52140 sdR-b2-00010580.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

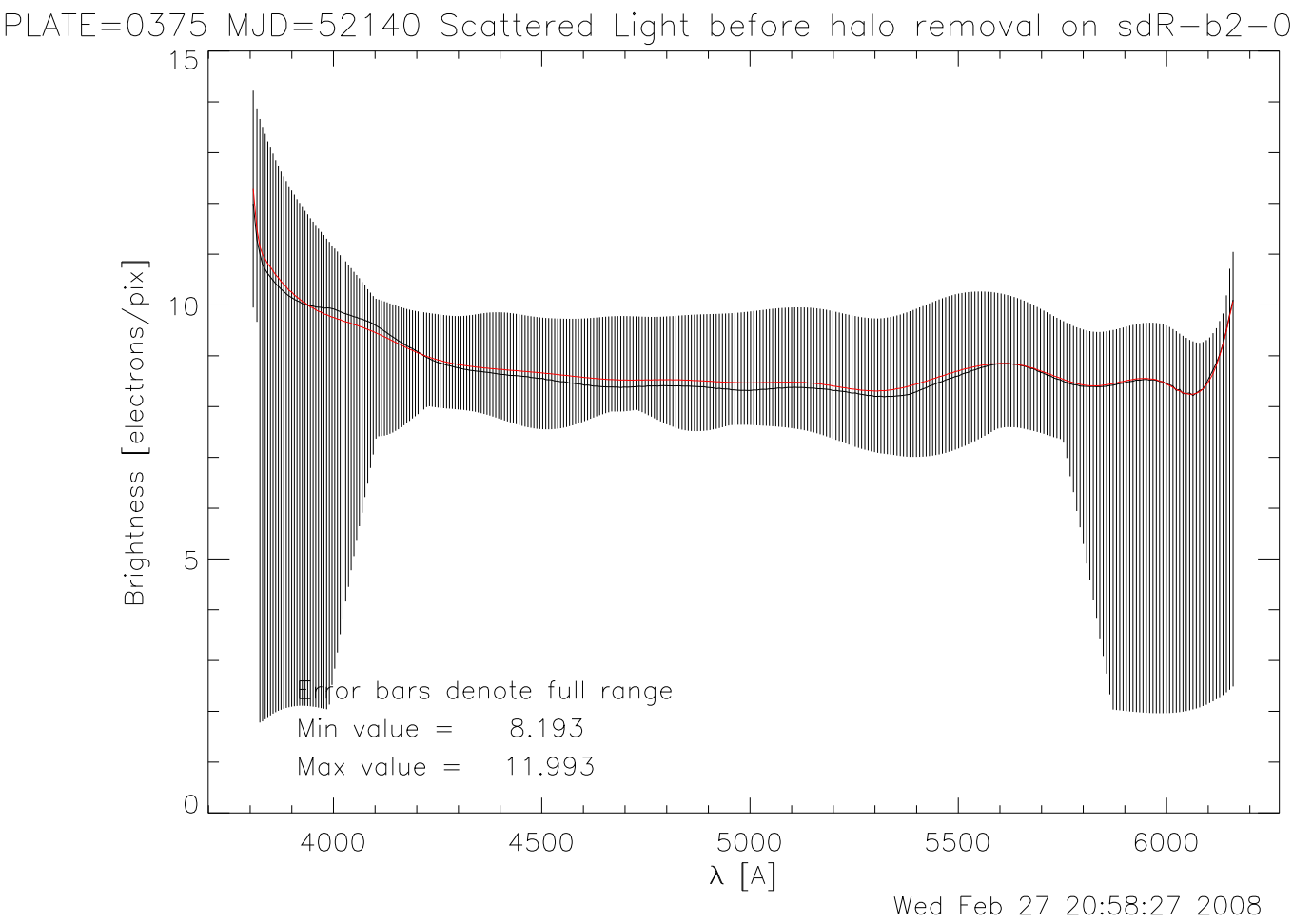

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010580.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000

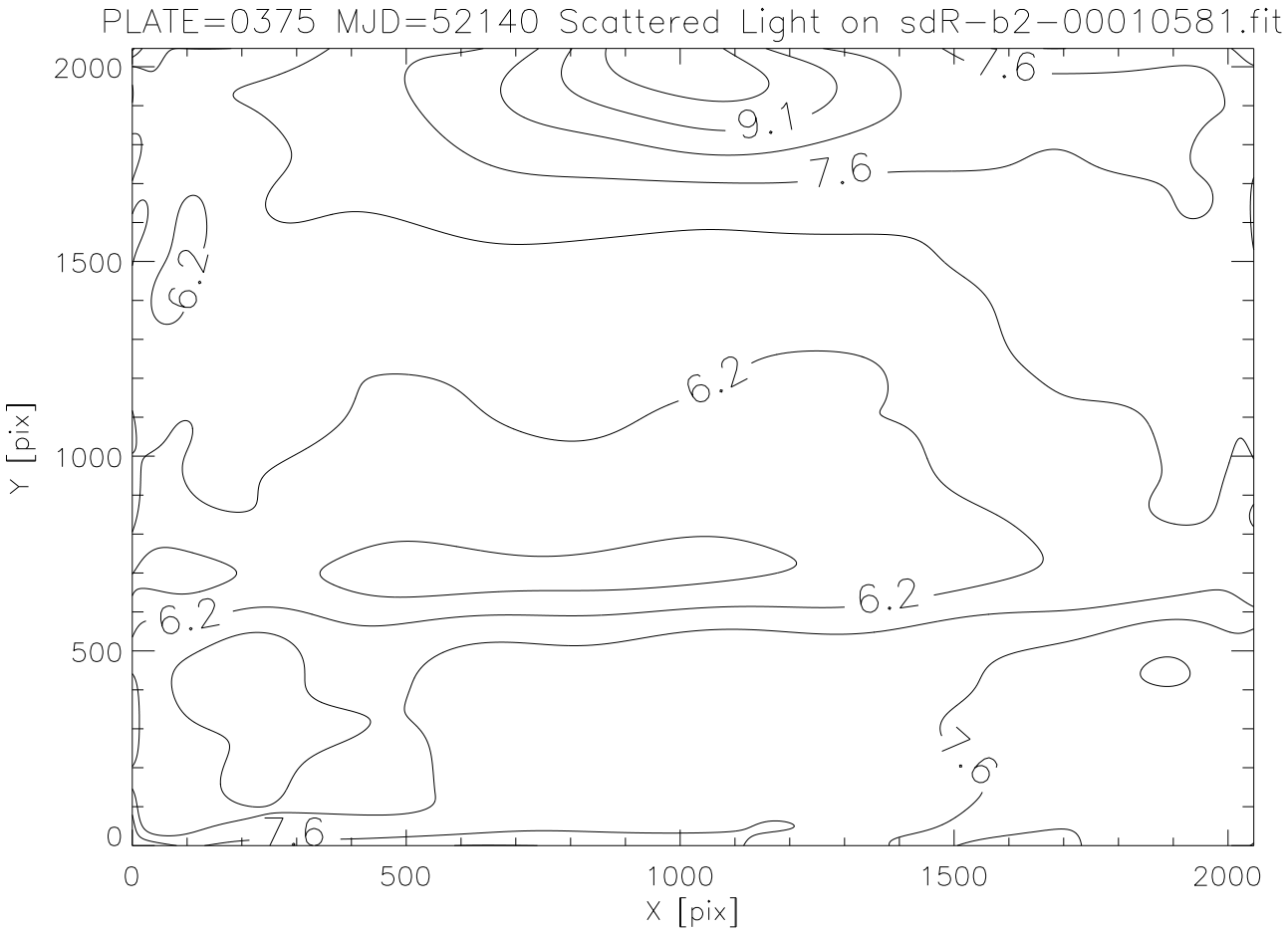

PLATE=0375 MJD=52140 sdR-b2-00010580.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 16.24 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

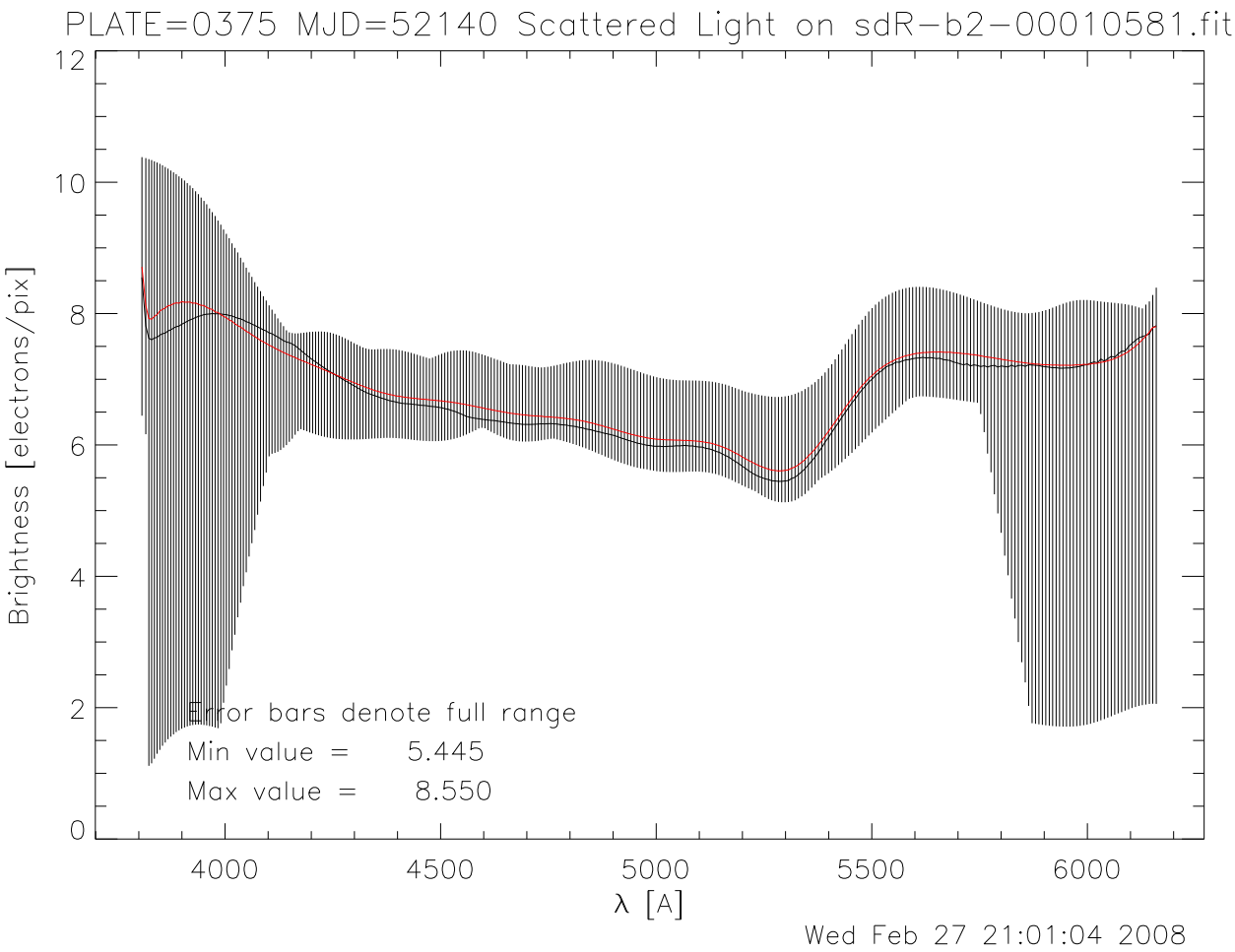

PLATE=0375 MJD=52140 sdR-b2-00010580.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.80 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

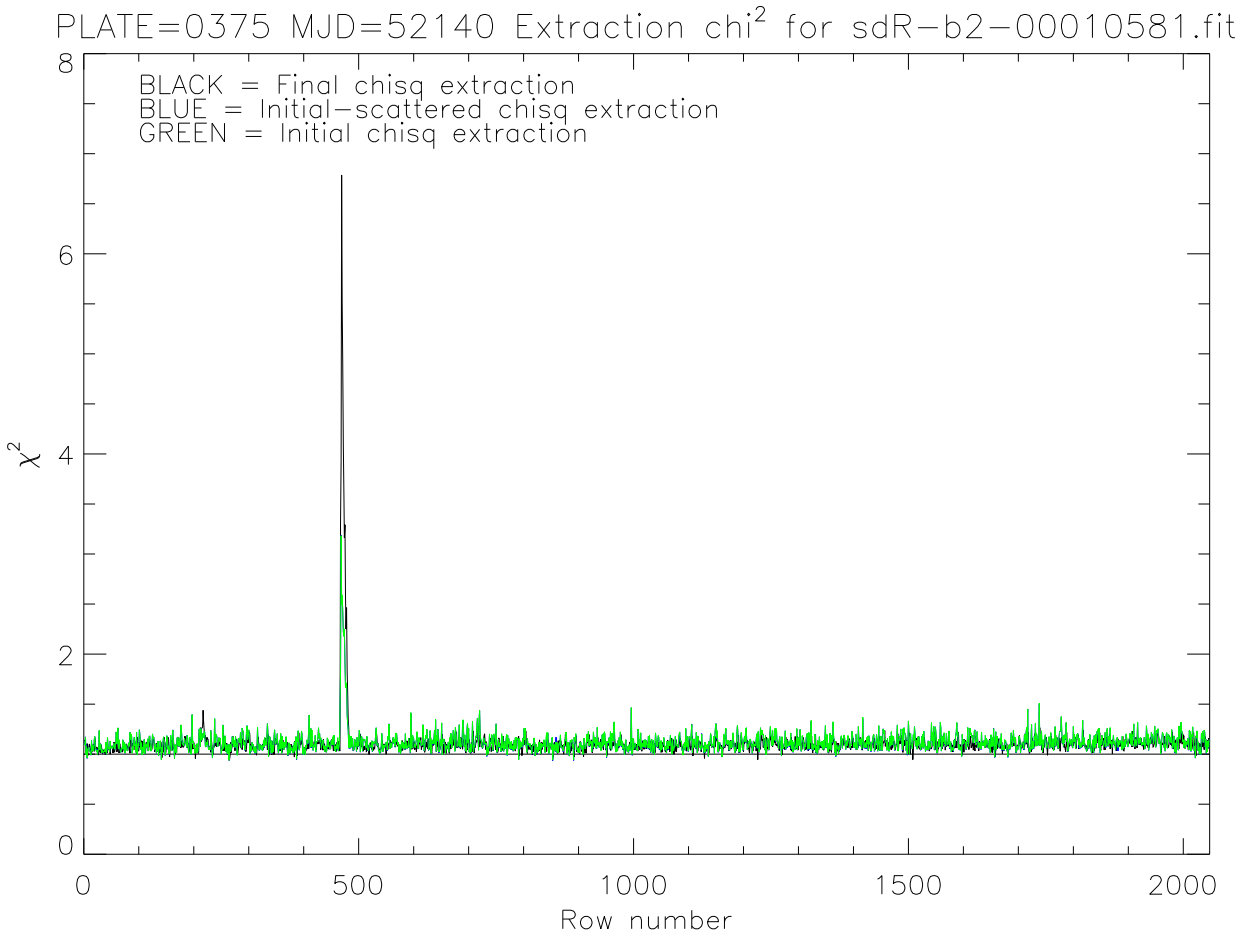

PLATE=0375 MJD=52140 Fiber-Flats for sdR-b2-00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.415
Max value = 1.251
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:57:42 2008

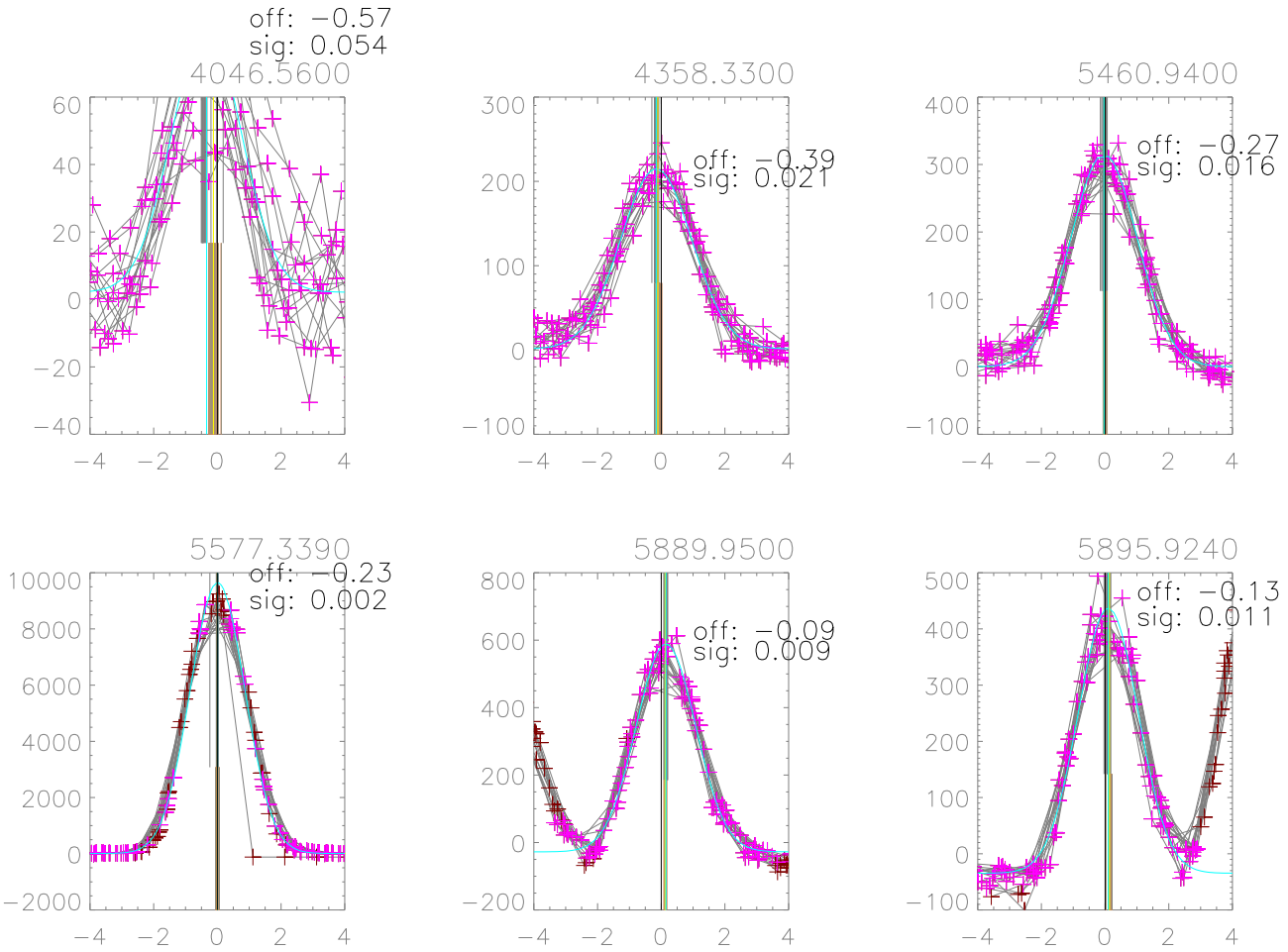

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b2-00010581.f
12.4
10.5
8.7
8.7
8.7
8.7
8.7
8.7
8.7
8.7
8.7
0
0
0
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

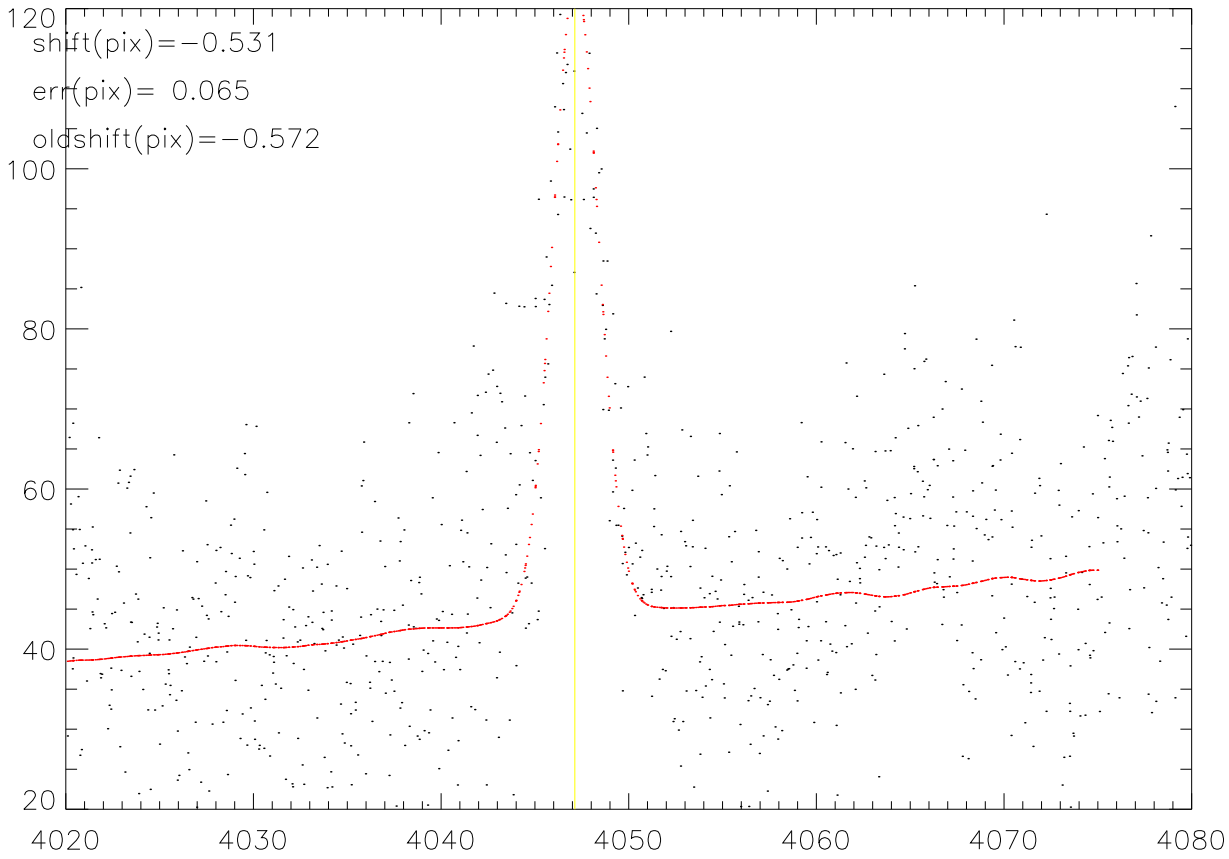

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b2-00010581.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.193
Max value = 11.993
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 20:58:27 2008

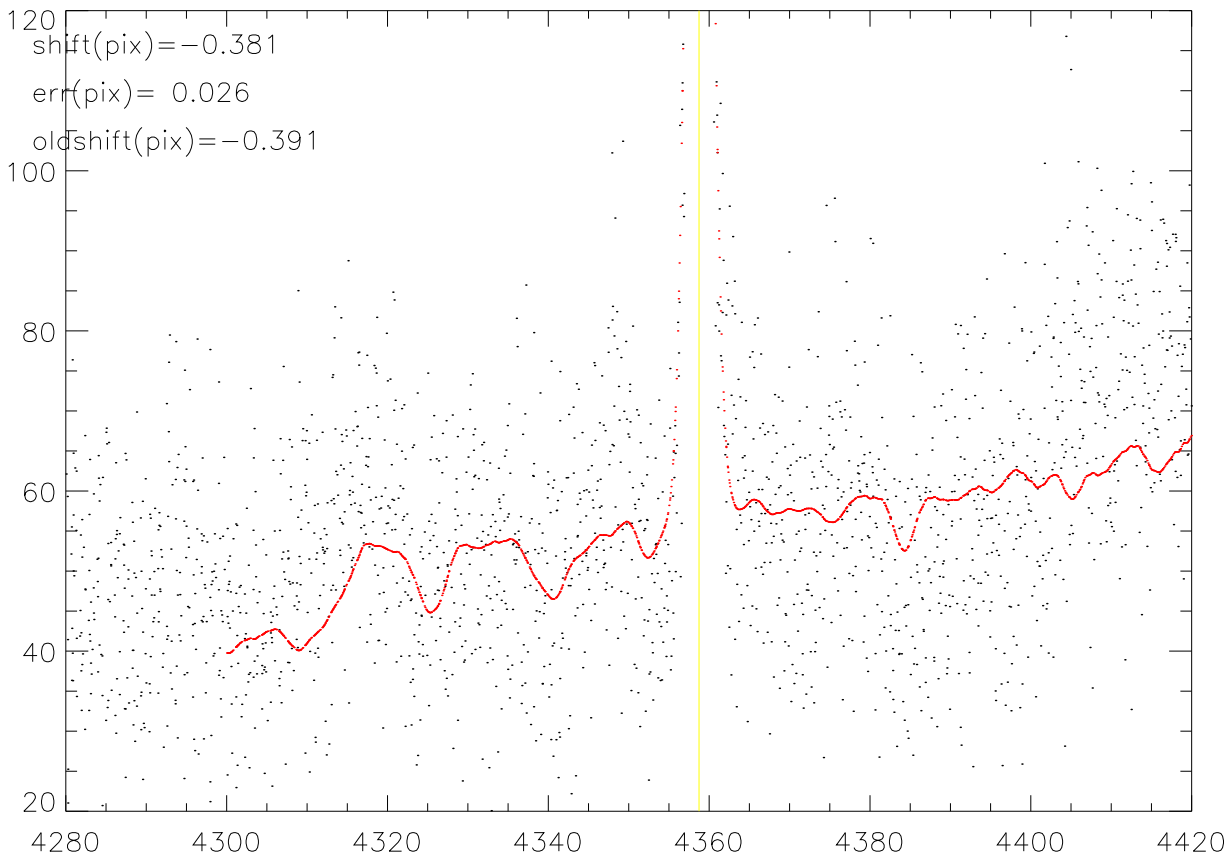

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010581.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
9.1
7.6
6.2
6.2
6.2
7.6
7.6

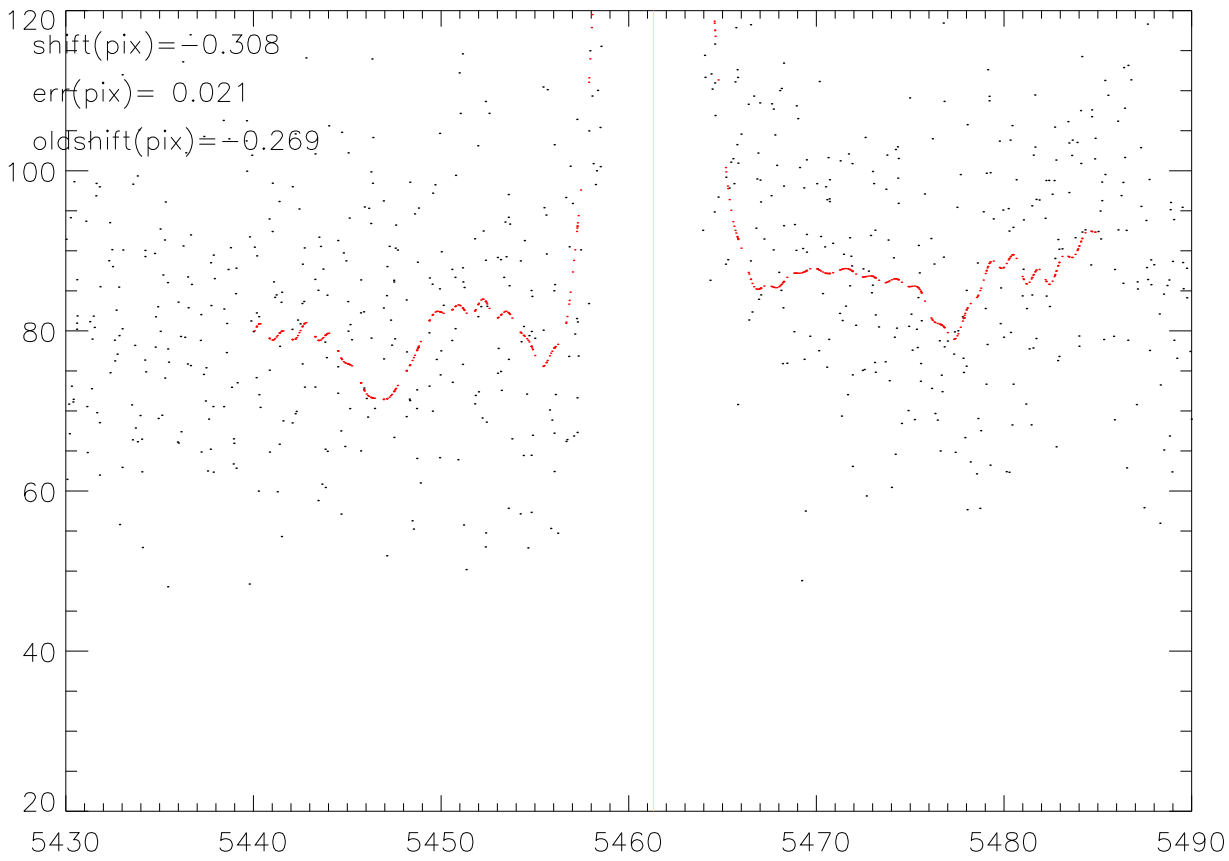

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010581.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.445
Max value = 8.550
Wed Feb 27 21:01:04 2008

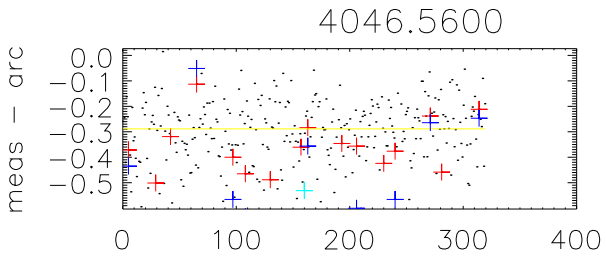

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-b2-00010581.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

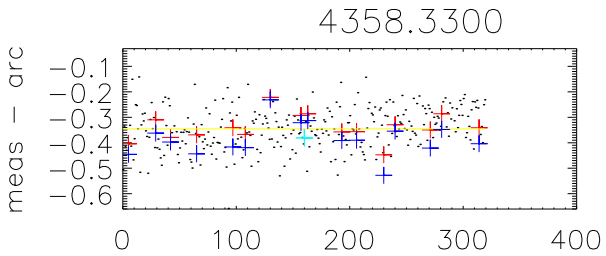

4046.5600
off: −0.57
sig: 0.054
4358.3300
off: −0.39
sig: 0.021
5460.9400
off: −0.27
sig: 0.016
5577.3390
off: −0.23
sig: 0.002
5889.9500
off: −0.09
sig: 0.009
5895.9240
off: −0.13
sig: 0.011

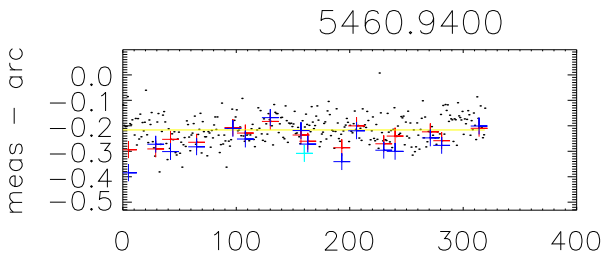

shift(pix)=−0.531
err(pix)= 0.065
oldshift(pix)=−0.572
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

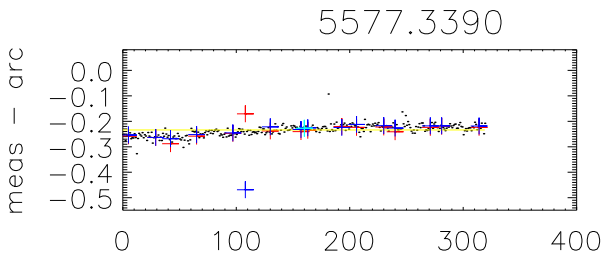

shift(pix)=−0.381
err(pix)= 0.026
oldshift(pix)=−0.391
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

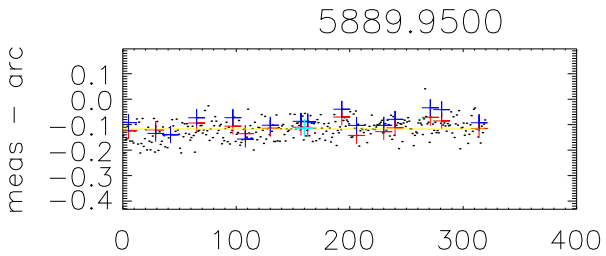

shift(pix)=−0.308
err(pix)= 0.021
oldshift(pix)=−0.269
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

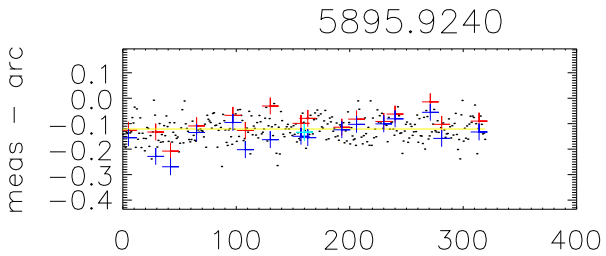

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

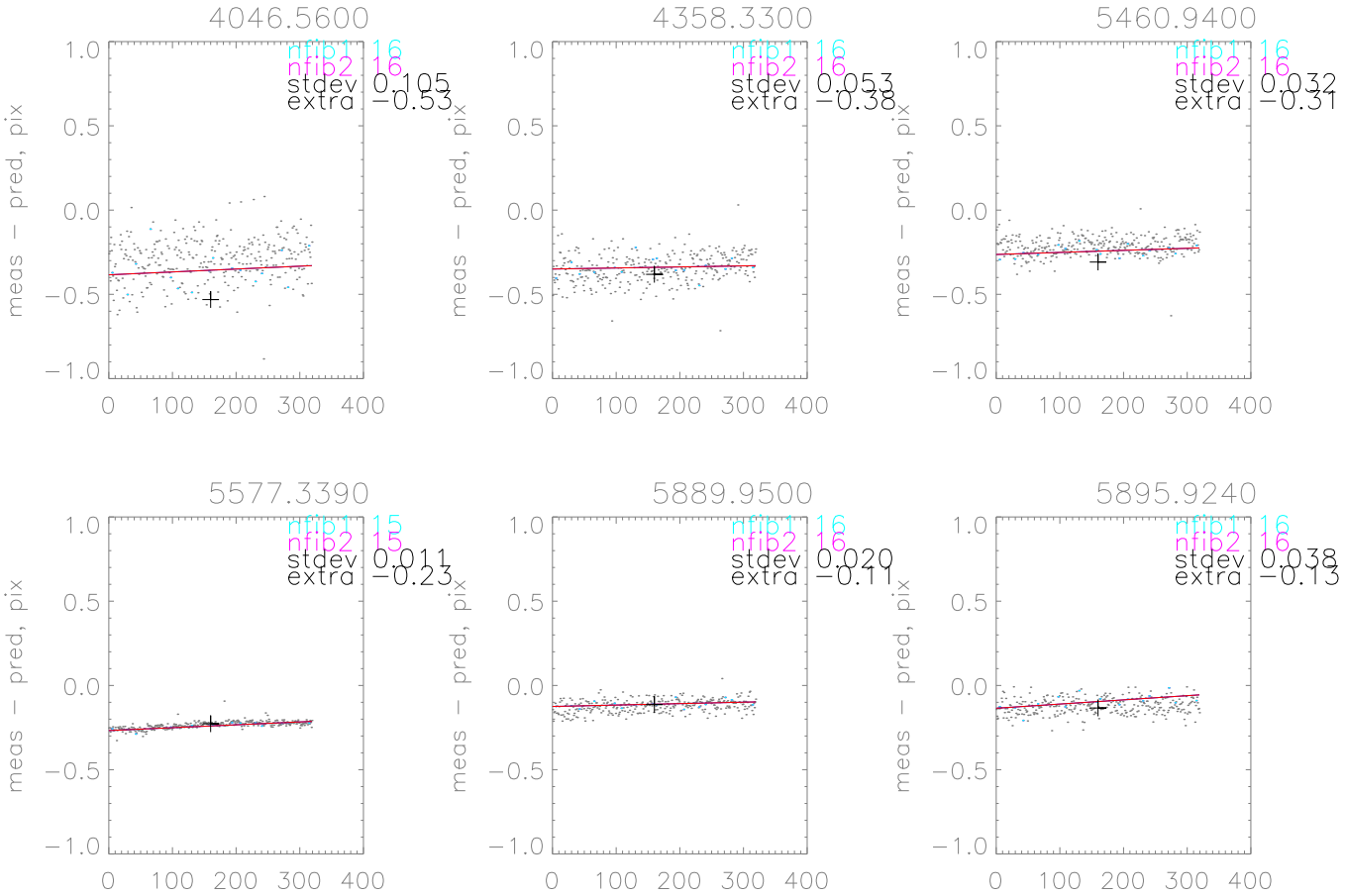

4358.3300
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

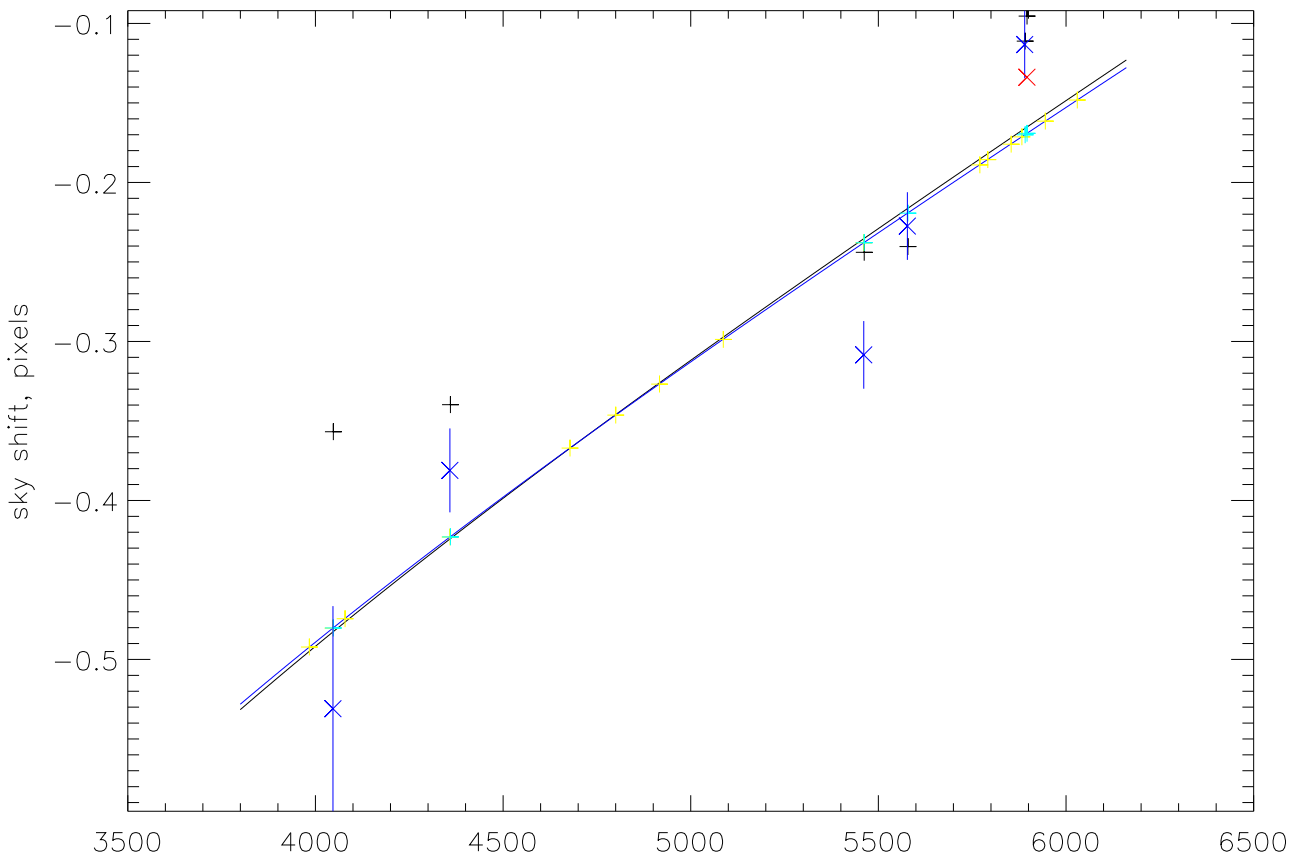

5460.9400
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

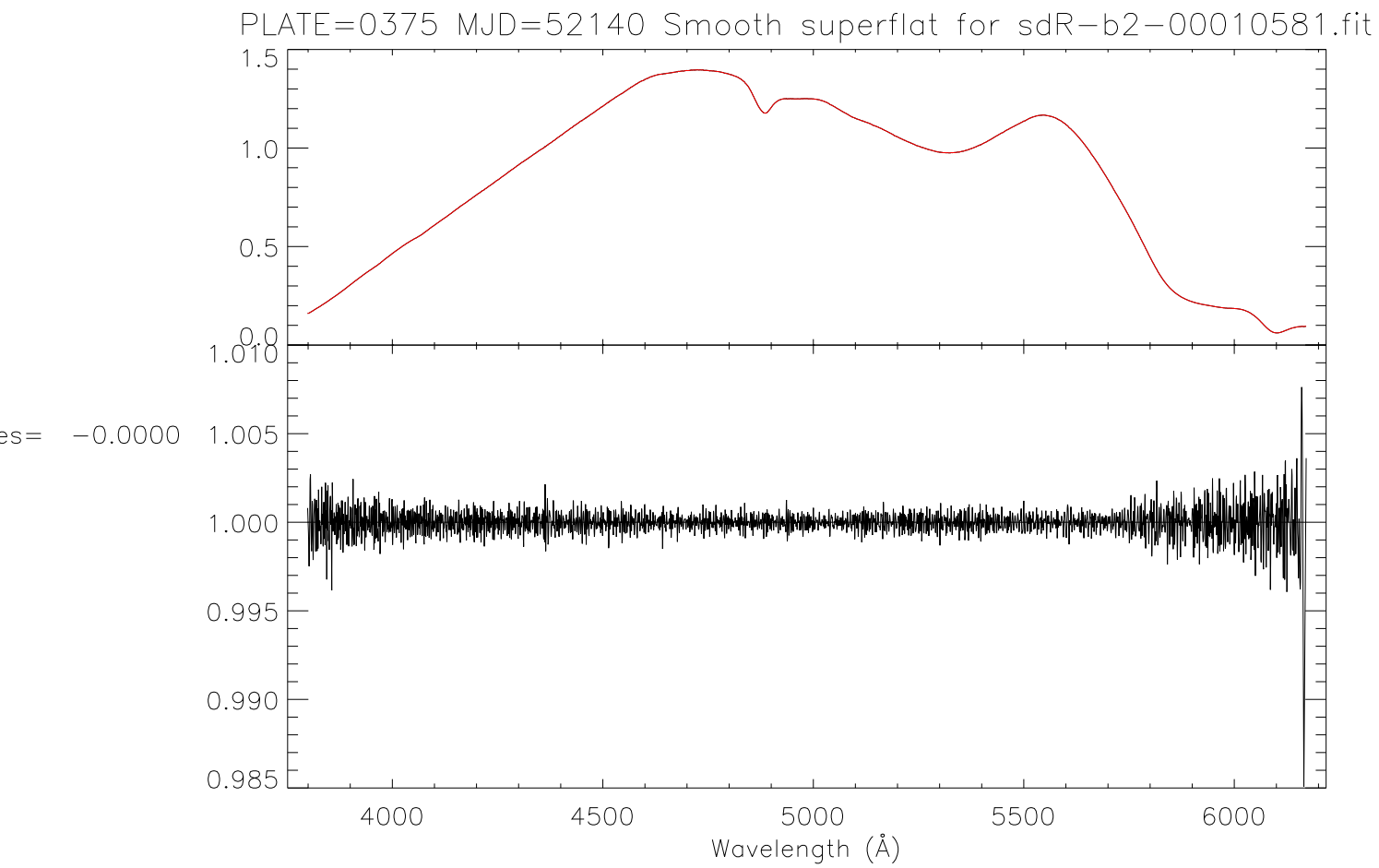

5577.3390
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

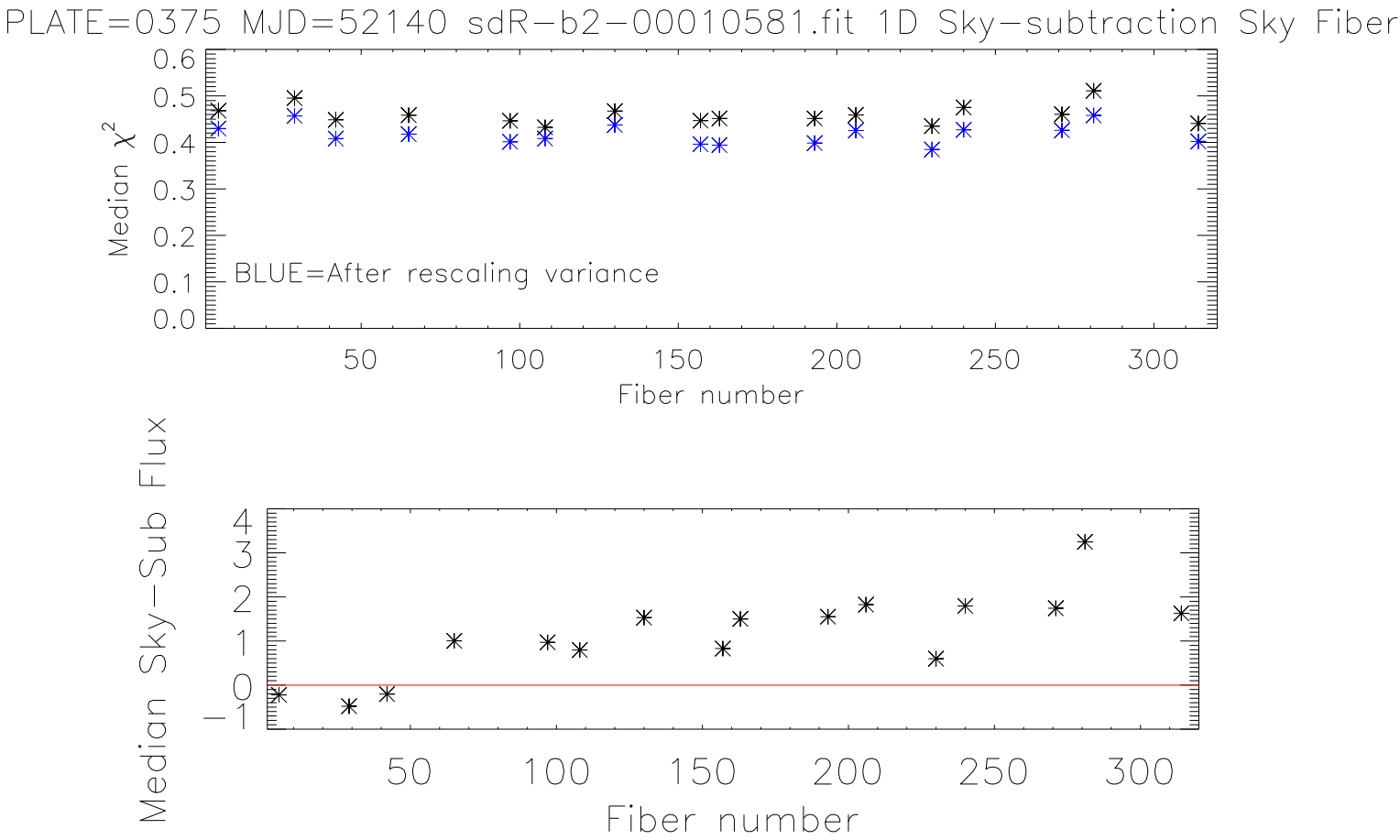

5889.9500
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

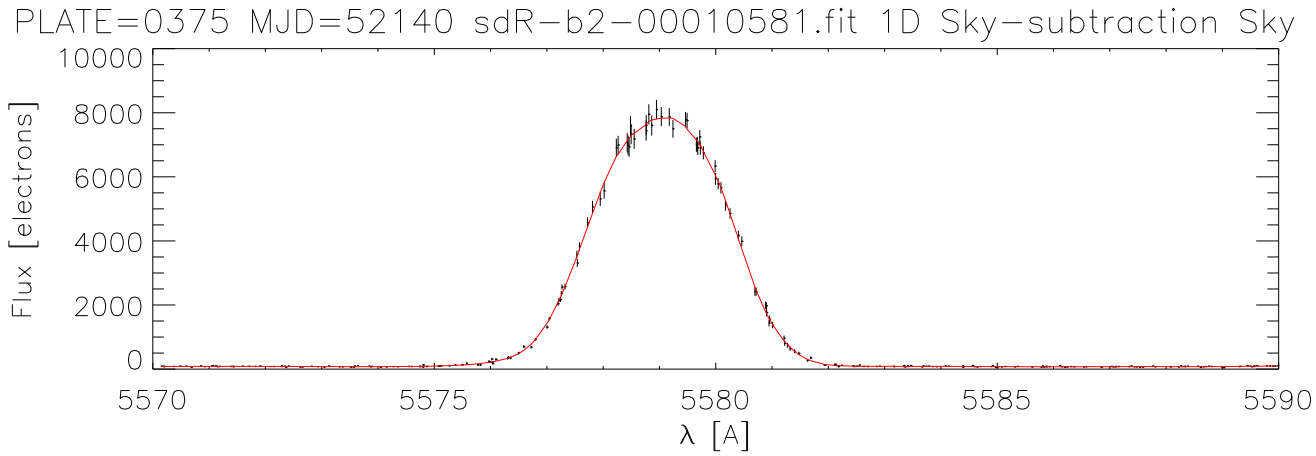

5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

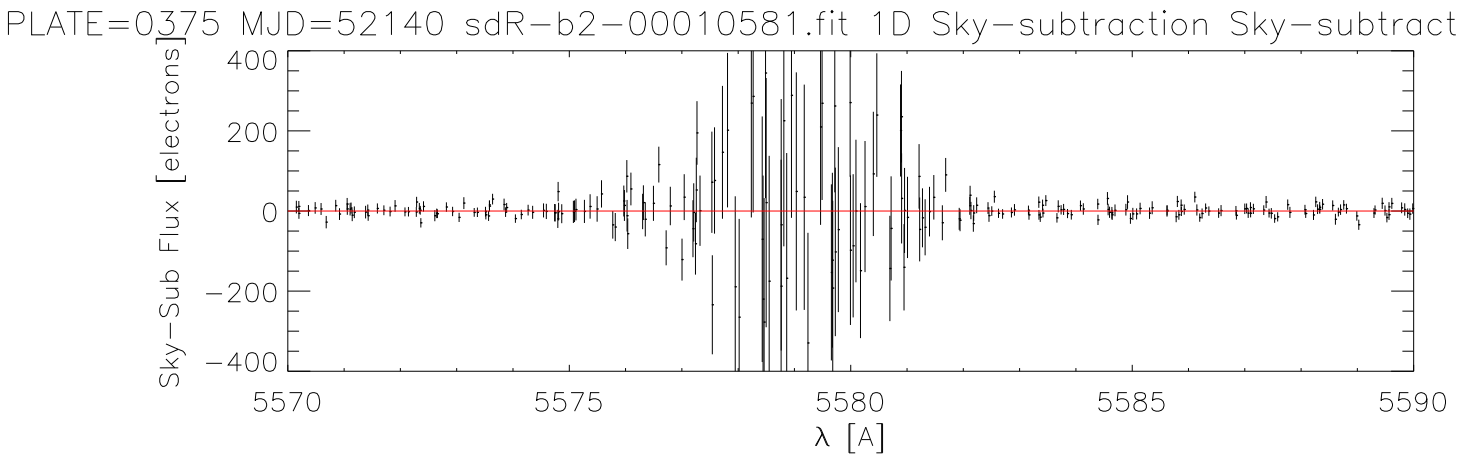

4046.5600
nfib1 16
nfib2 16
stdev 0.105
extra −0.53
4358.3300
nfib1 16
nfib2 16
stdev 0.053
extra −0.38
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra −0.31
5577.3390
nfib1 15
nfib2 15
stdev 0.011
extra −0.23
5889.9500
nfib1 16
nfib2 16
stdev 0.020
extra −0.11
5895.9240
nfib1 16
nfib2 16
stdev 0.038
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

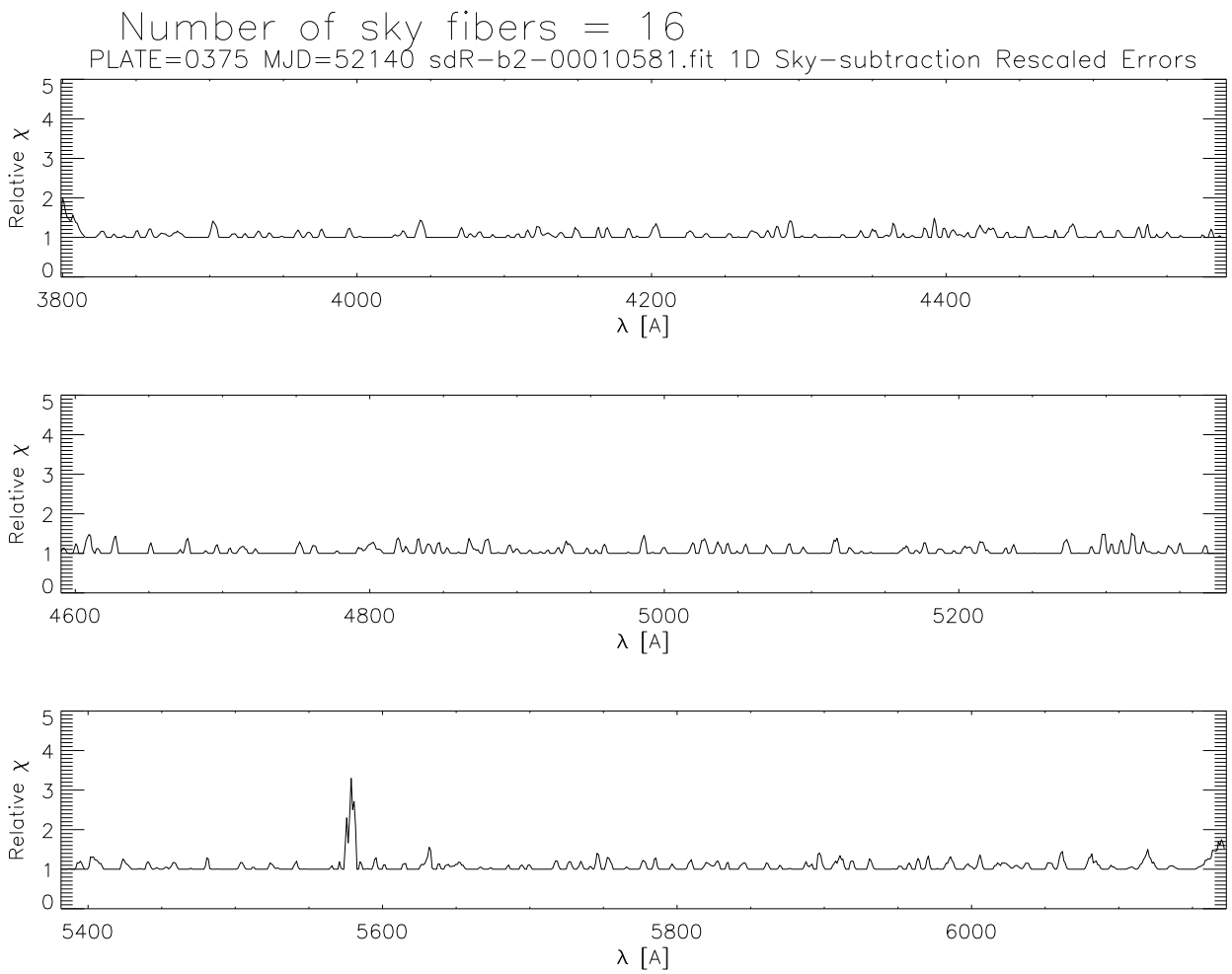

sky shift, pixels
−0.1
−0.2
−0.3
−0.4
−0.5
3500
4000
4500
5000
5500
6000
6500

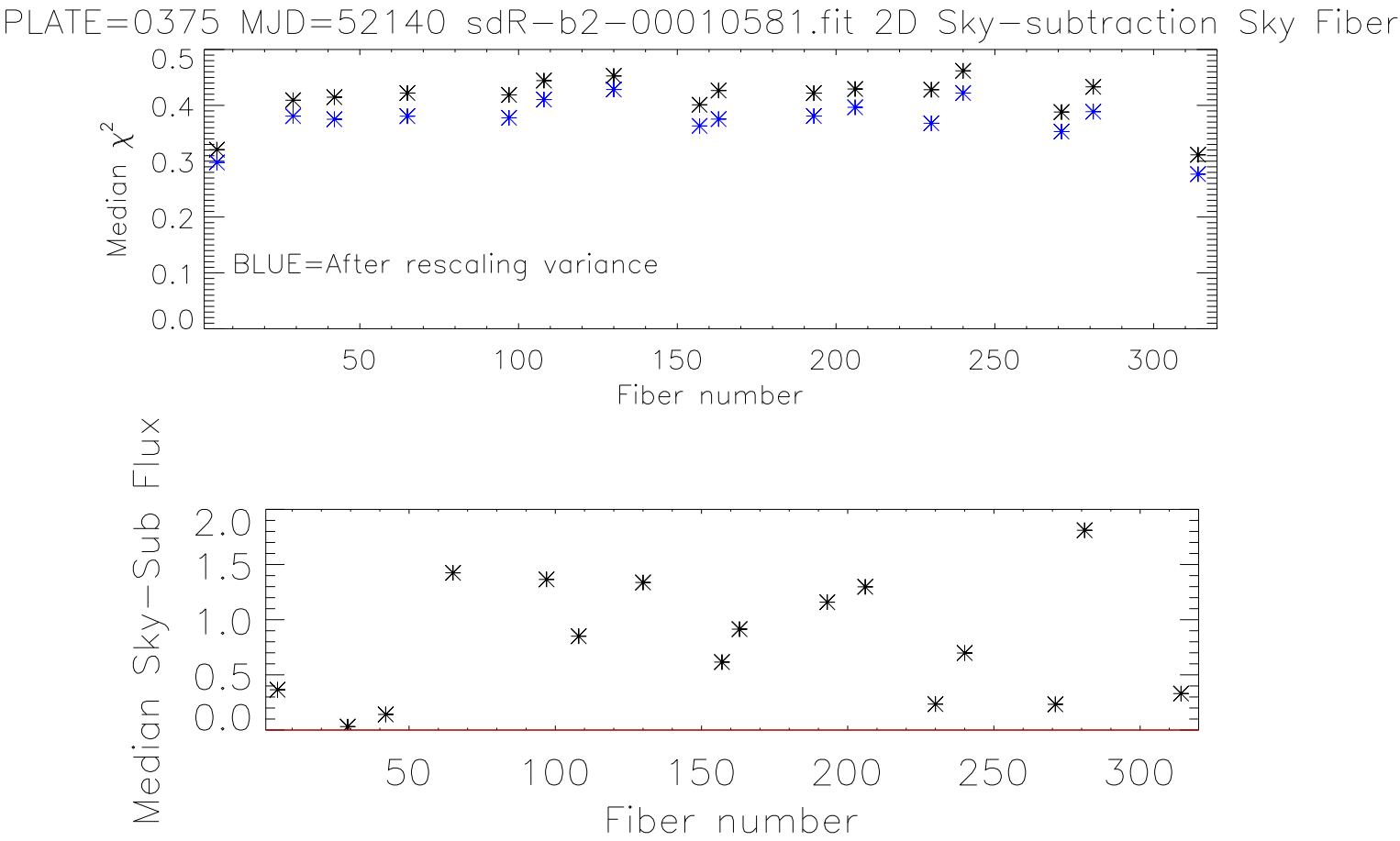

PLATE=0375 MJD=52140 Smooth superflat for sdR-b2-00010581.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

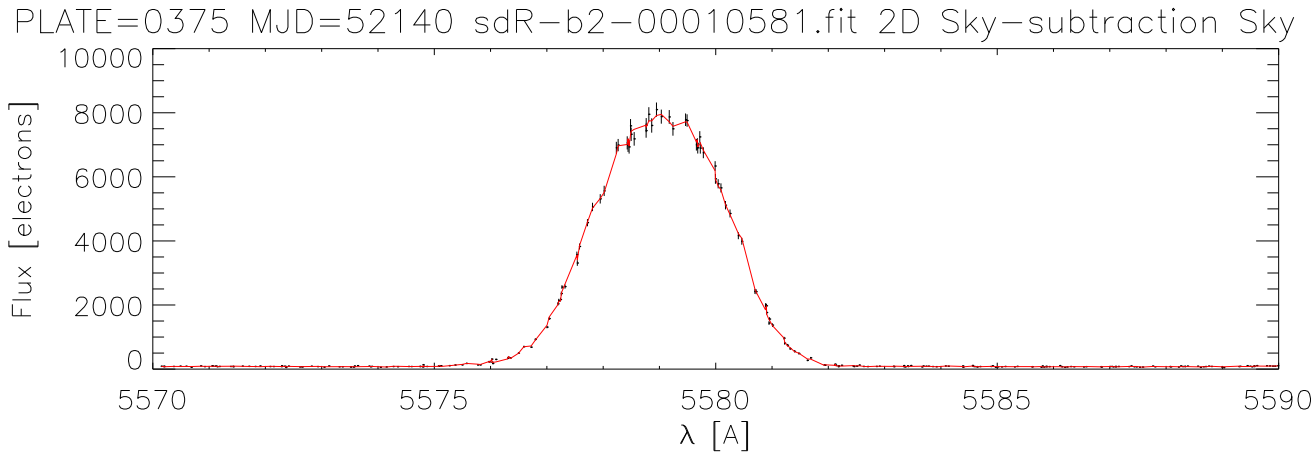

PLATE=0375 MJD=52140 sdR-b2-00010581.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

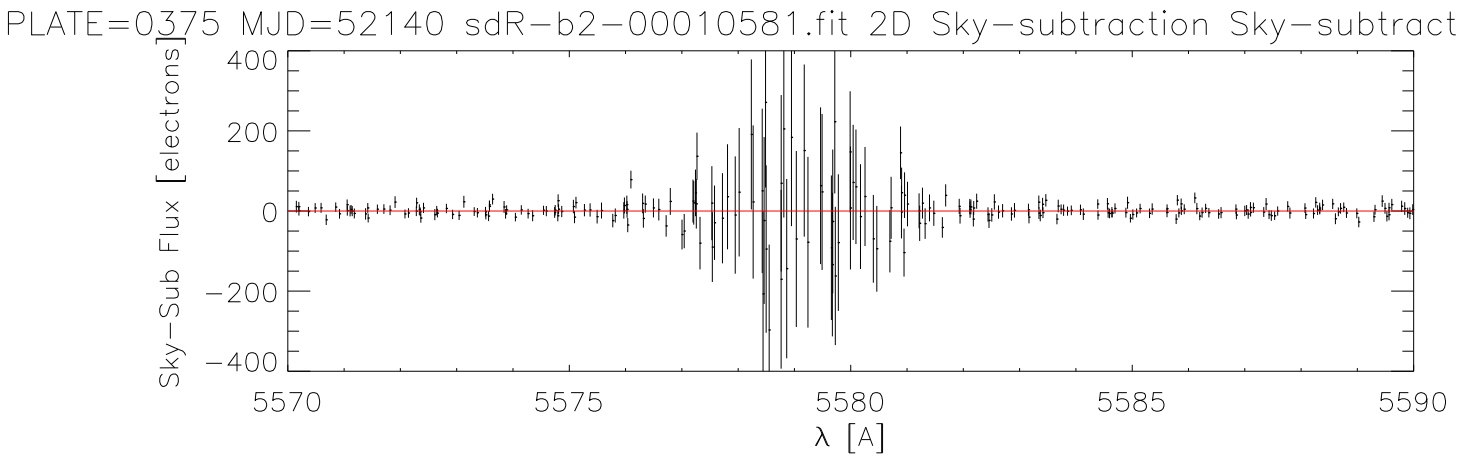

PLATE=0375 MJD=52140 sdR-b2-00010581.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

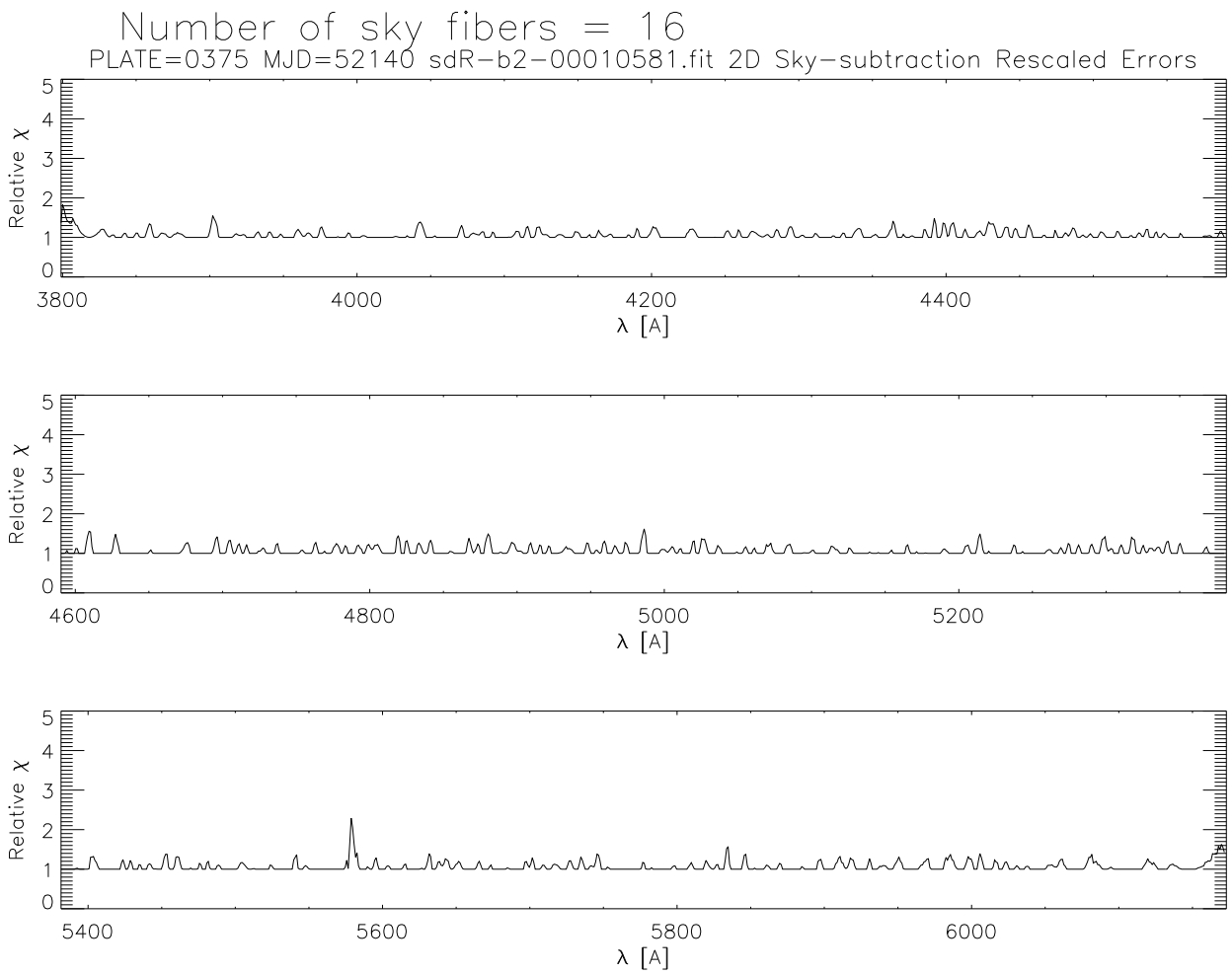

PLATE=0375 MJD=52140 sdR-b2-00010581.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

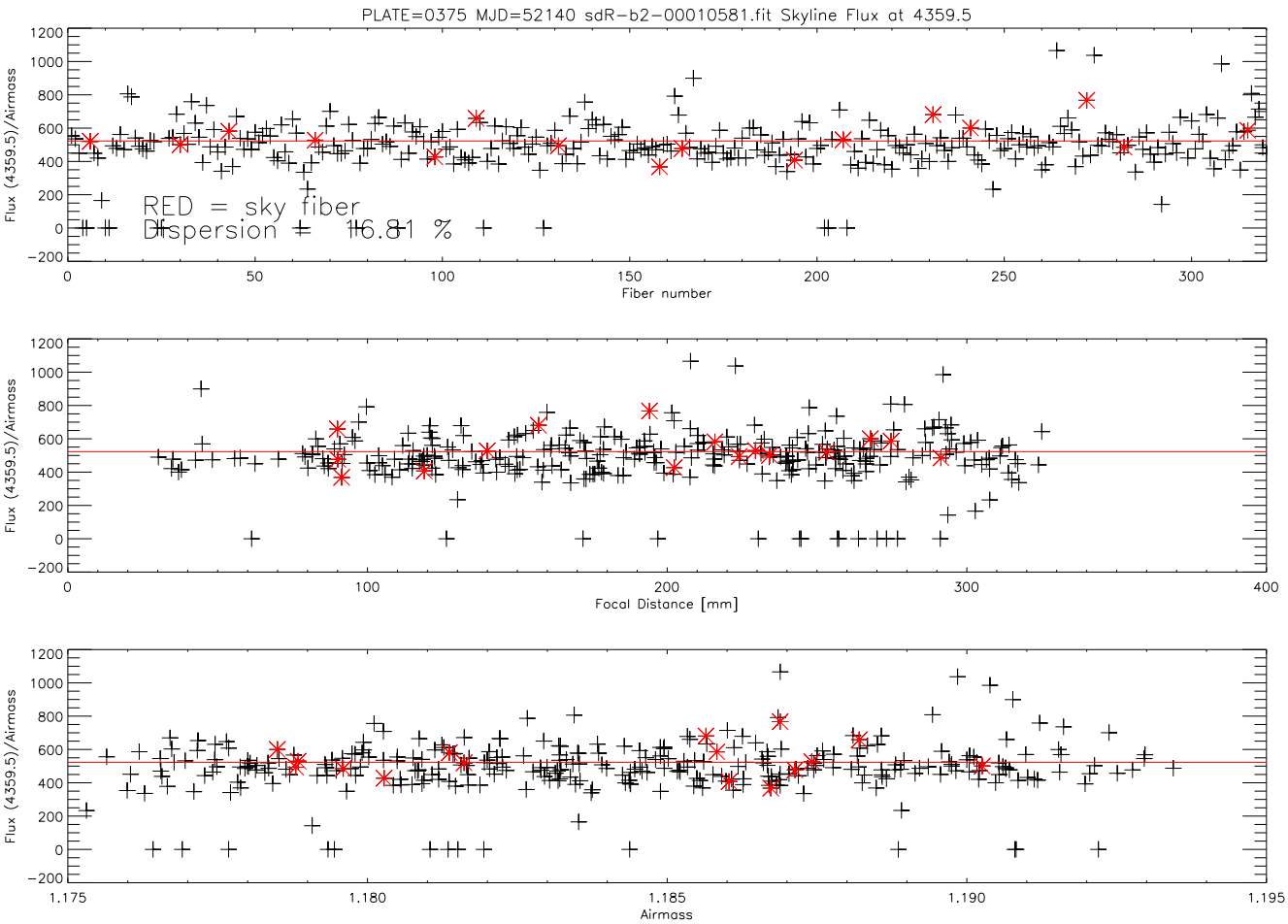

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010581.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

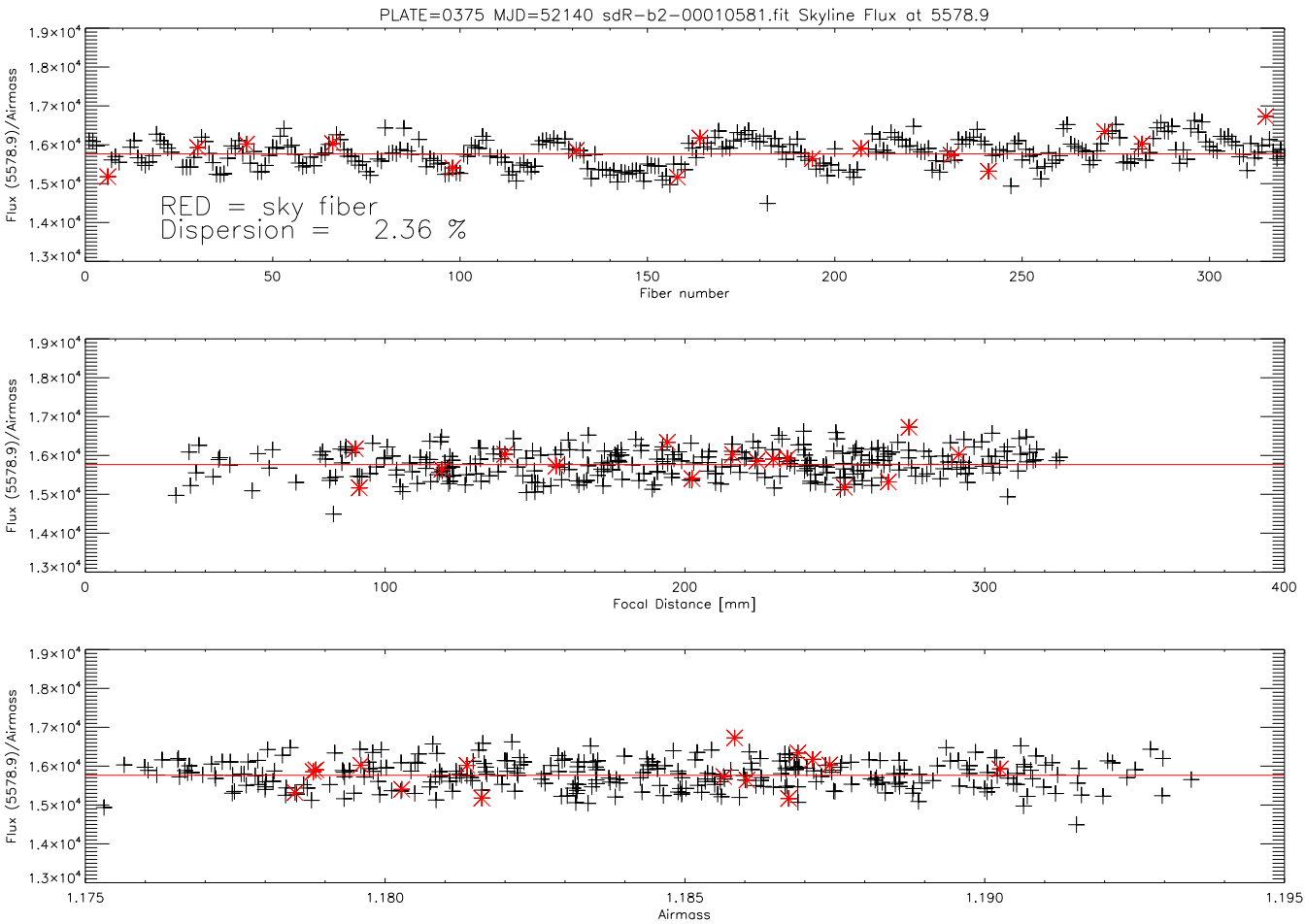

PLATE=0375 MJD=52140 sdR-b2-00010581.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

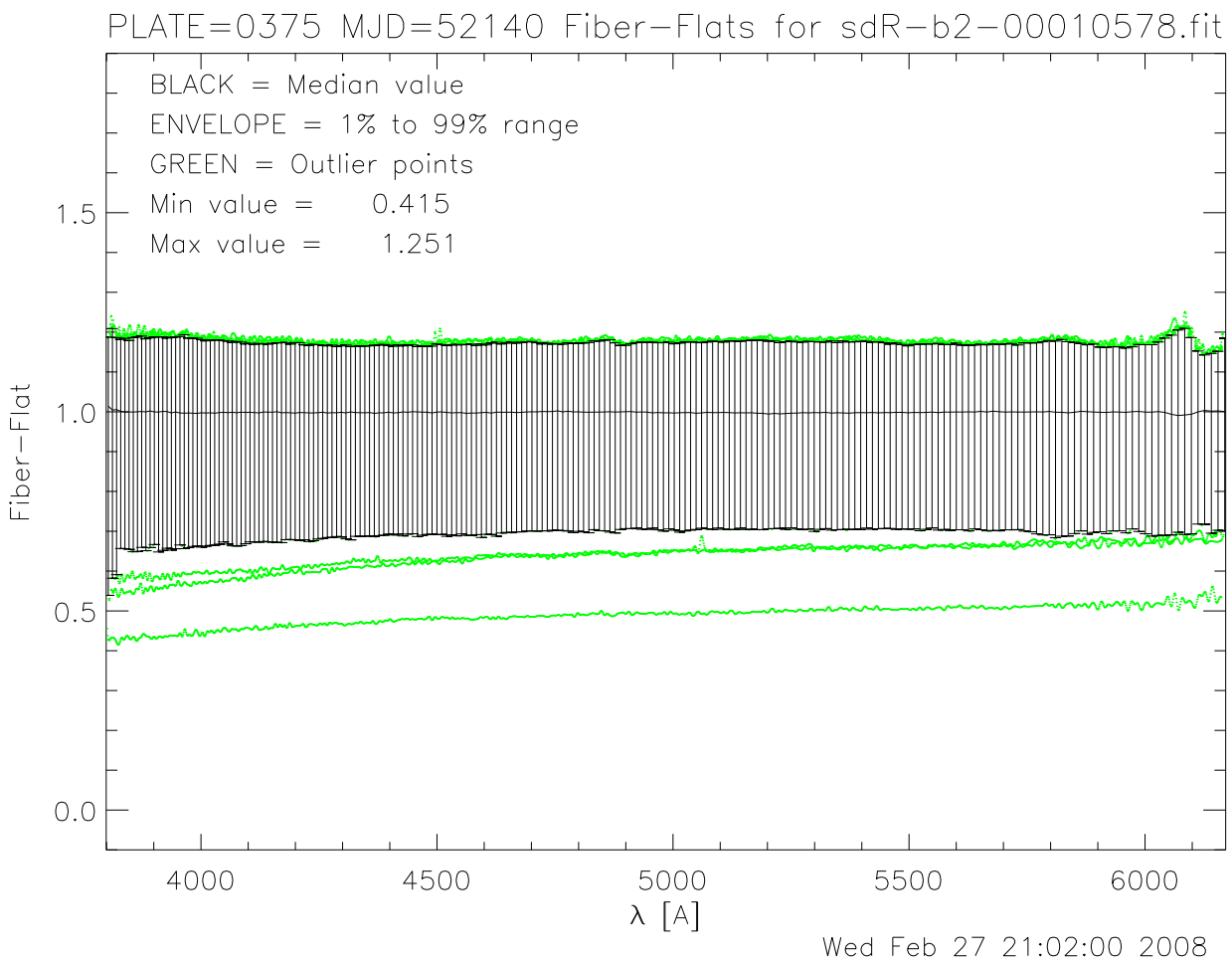

PLATE=0375 MJD=52140 sdR-b2-00010581.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

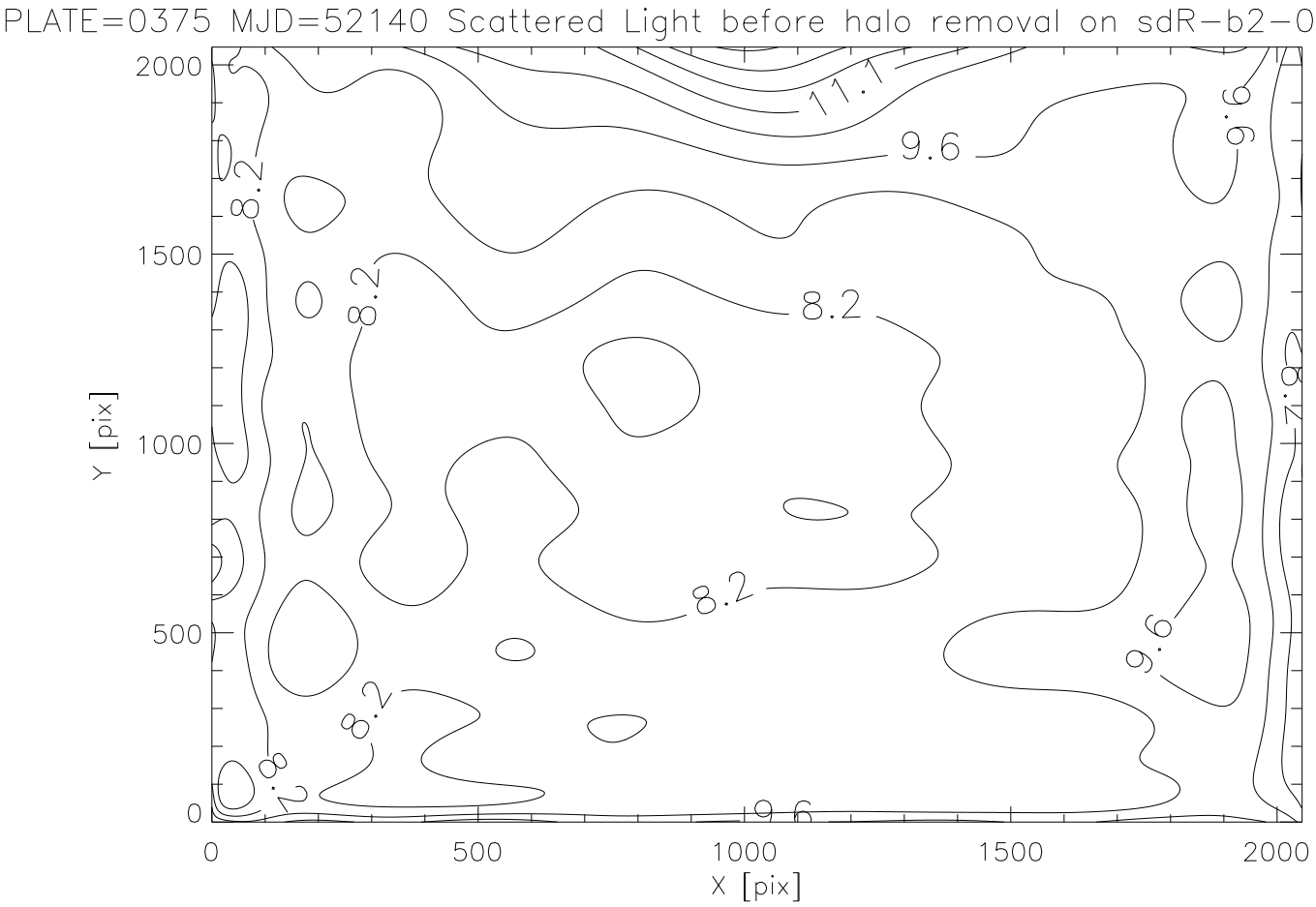

PLATE=0375 MJD=52140 sdR-b2-00010581.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

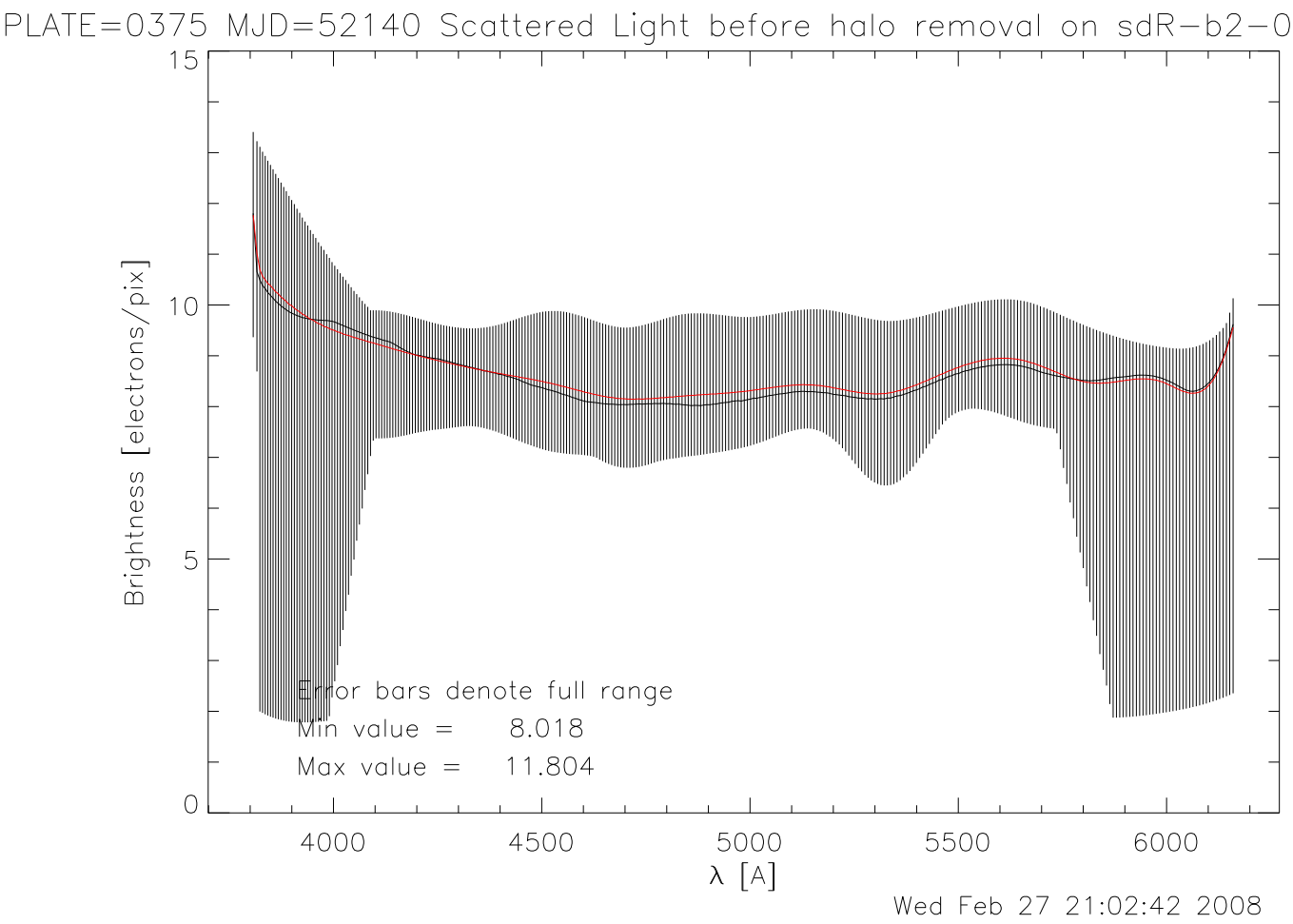

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010581.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

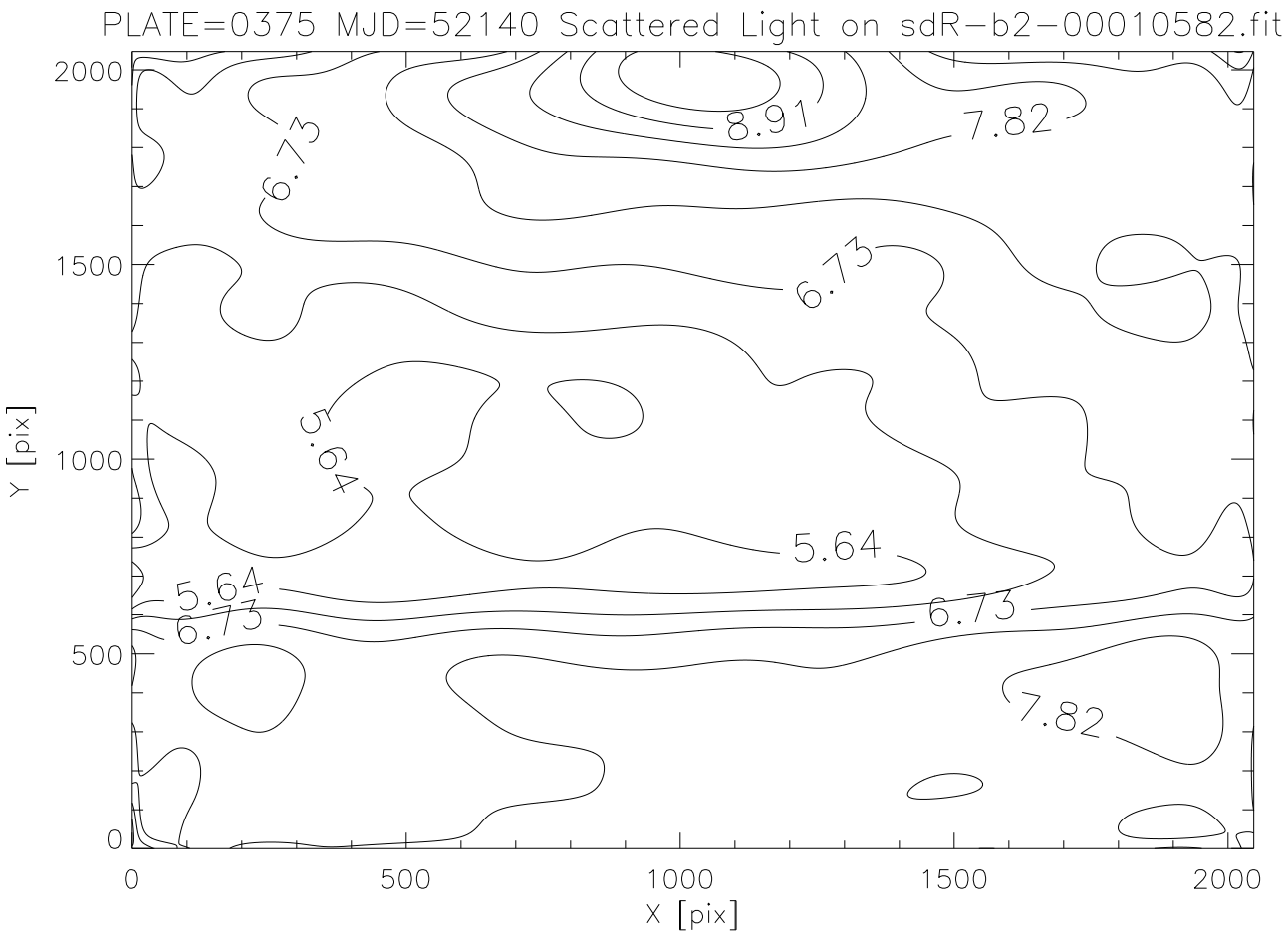

PLATE=0375 MJD=52140 sdR-b2-00010581.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 16.81 %
Fiber number
Focal Distance [mm]
Airmass

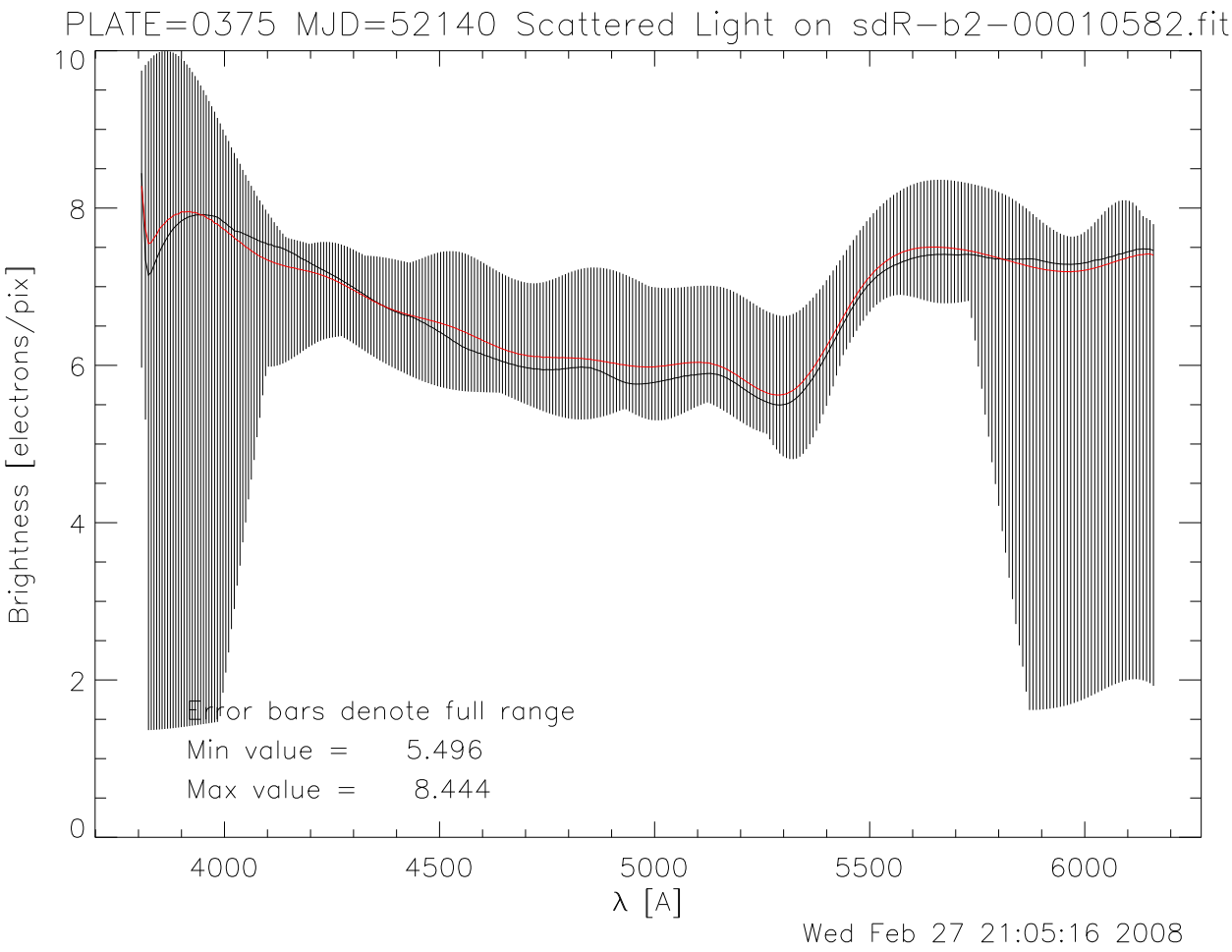

PLATE=0375 MJD=52140 sdR-b2-00010581.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.36 %
Fiber number
Focal Distance [mm]
Airmass

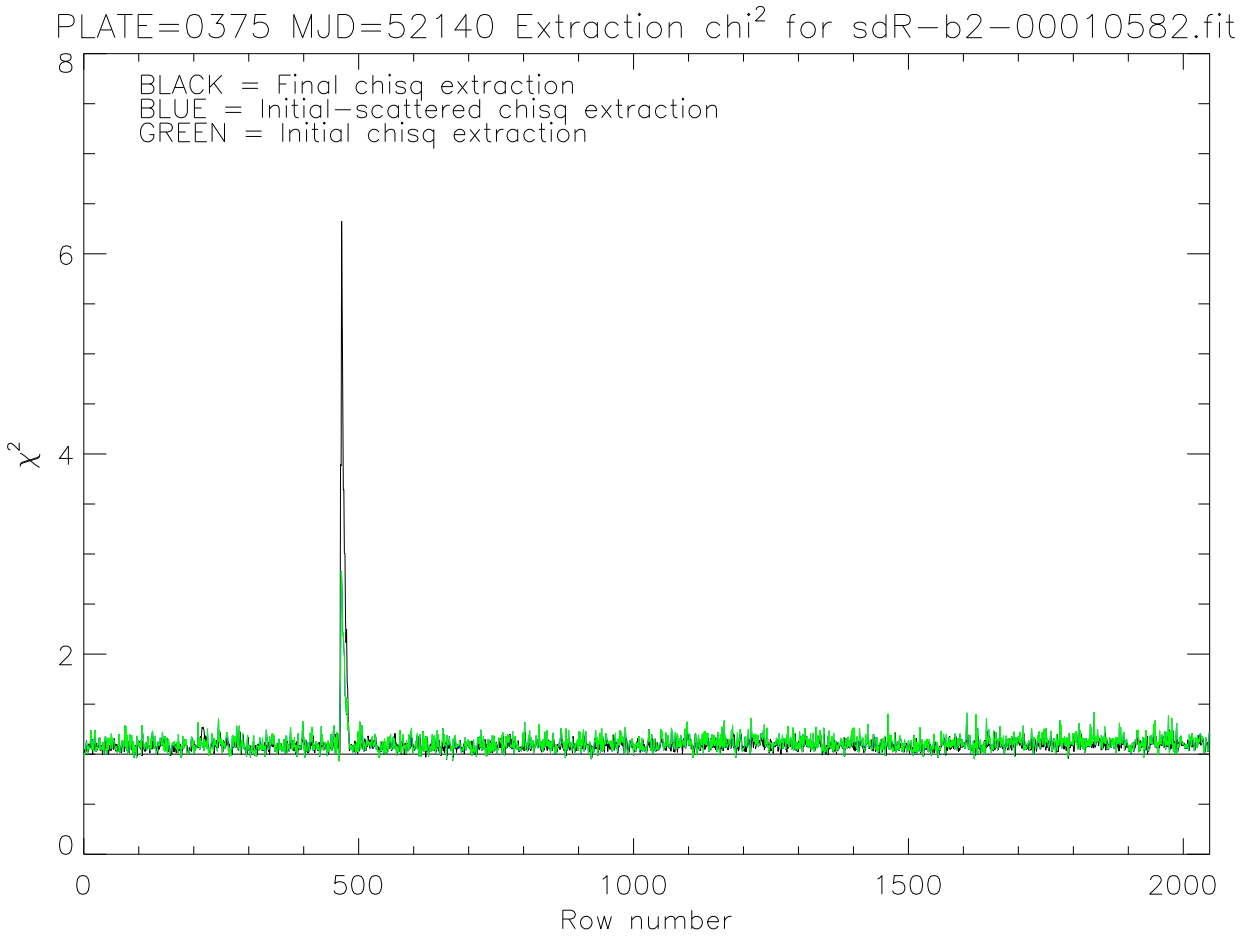

PLATE=0375 MJD=52140 Fiber-Flats for sdR-b2-00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.415
Max value = 1.251
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 21:02:00 2008

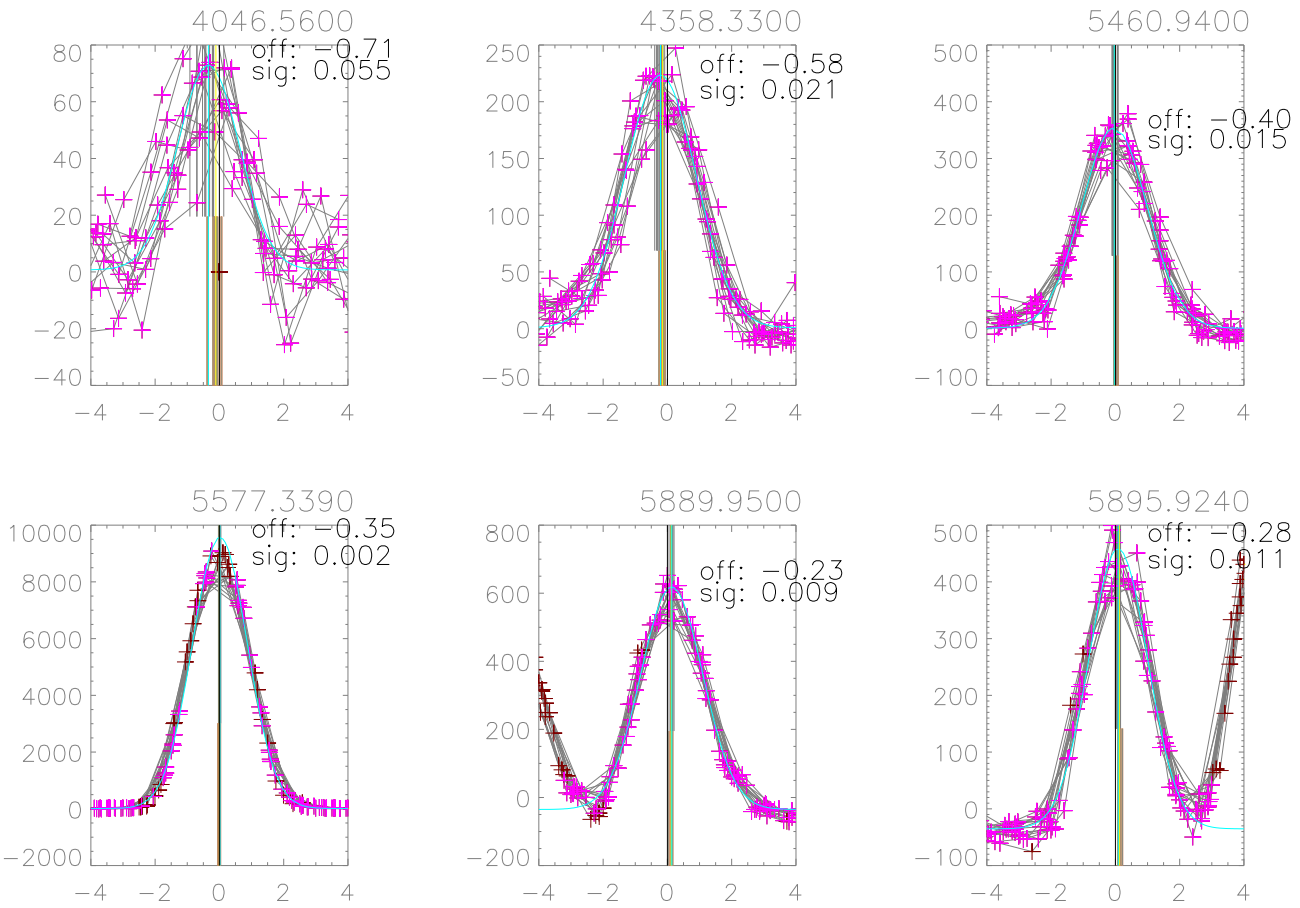

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b2-00010582.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
11.1
9.6
8.2
7.8

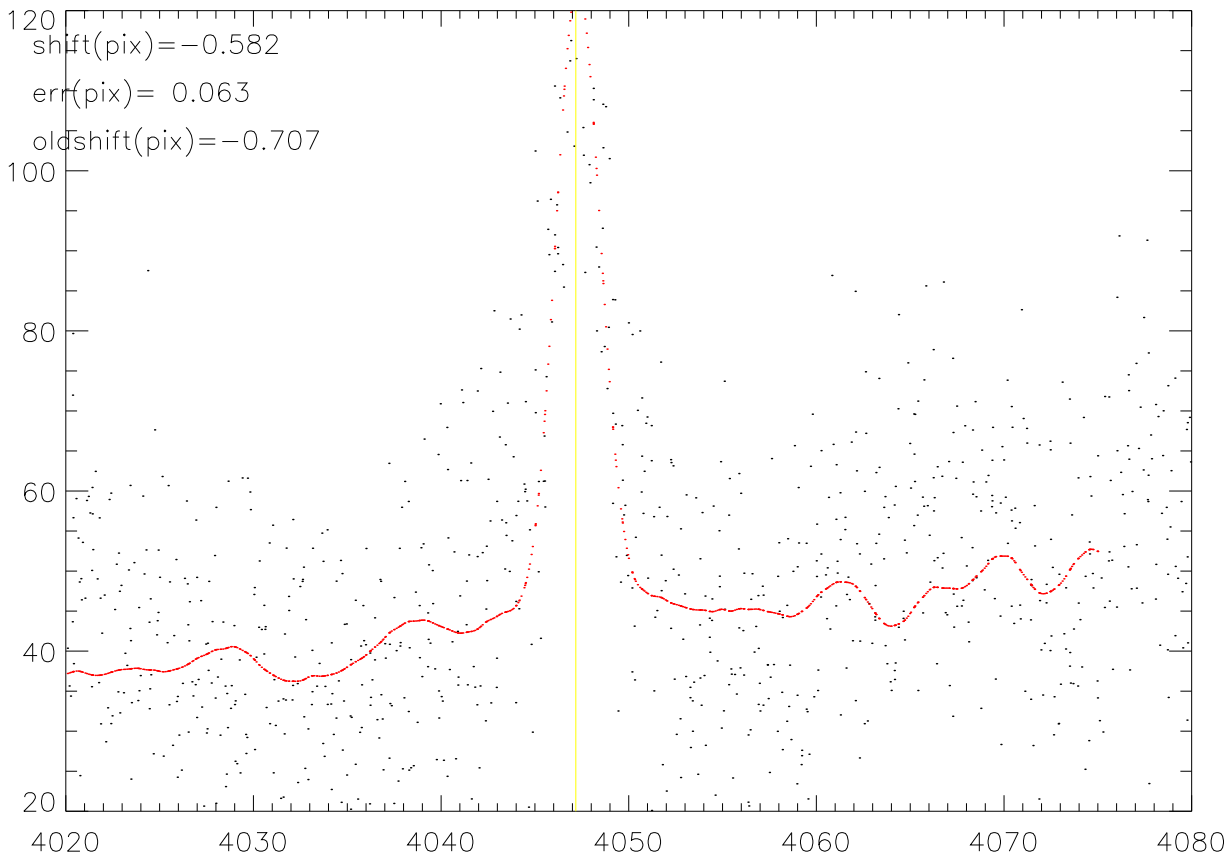

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b2-00010582.f
Brightness [electrons/pix]
15
10
5
0
Error bars denote full range
Min value = 8.018
Max value = 11.804
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 21:02:42 2008

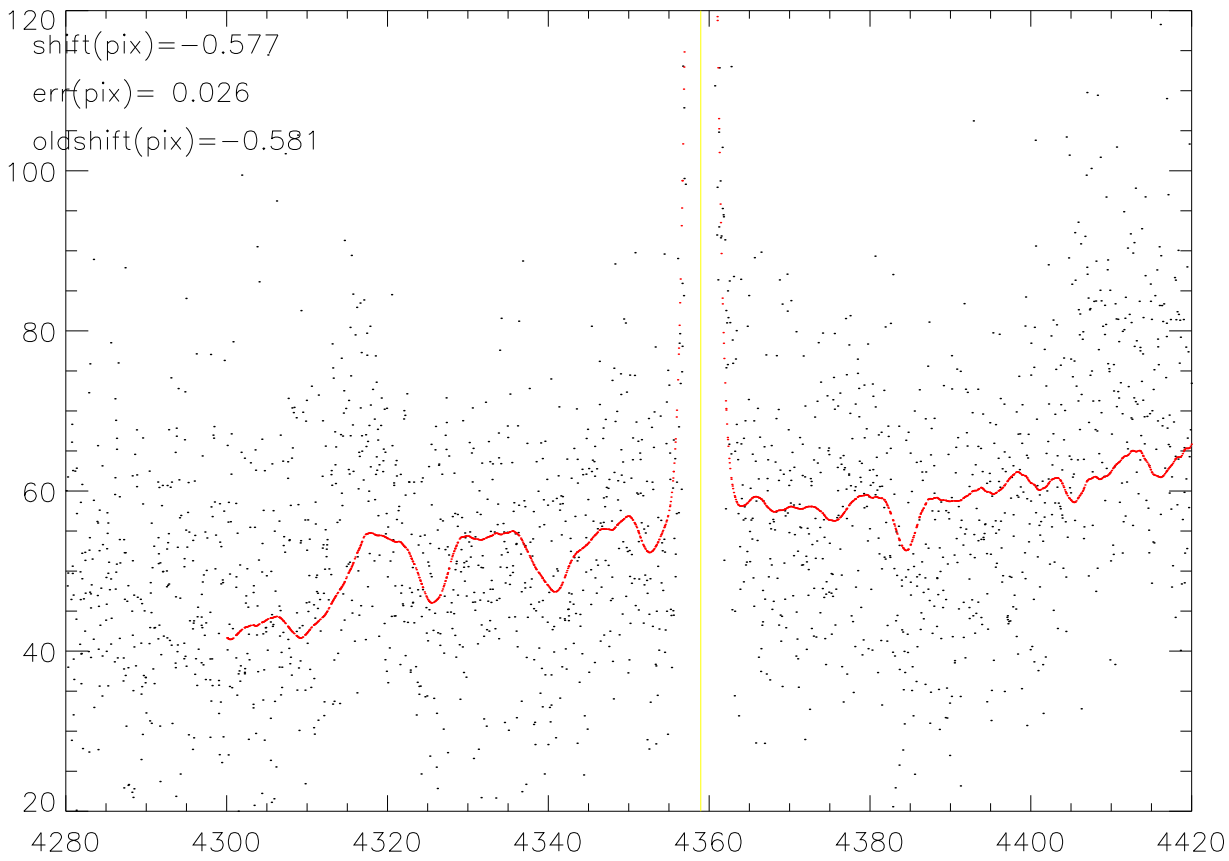

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010582.fit
8.91
7.82
6.73
6.73
5.64
5.64
6.73
6.73
5.64
7.82
Y [pix]
X [pix]
0
500
1000
1500
2000

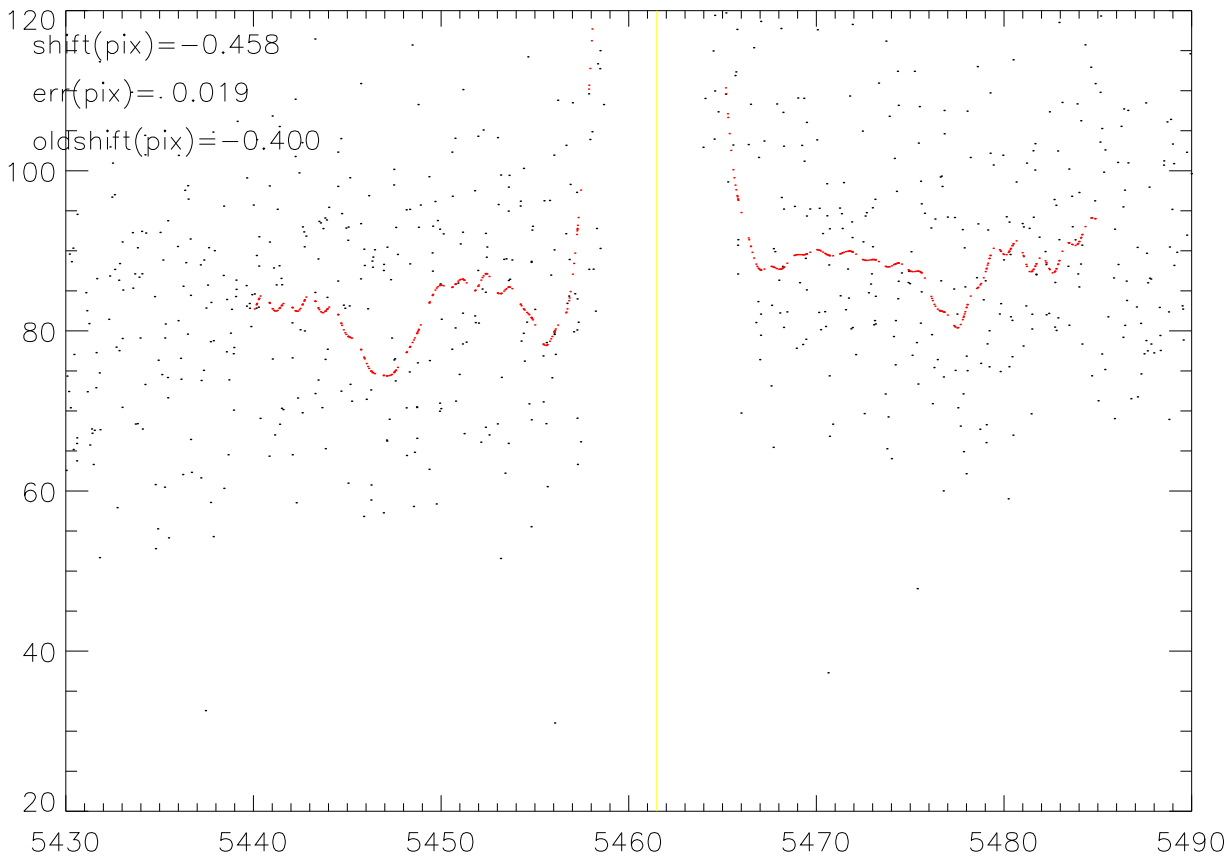

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010582.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.496
Max value = 8.444
Wed Feb 27 21:05:16 2008

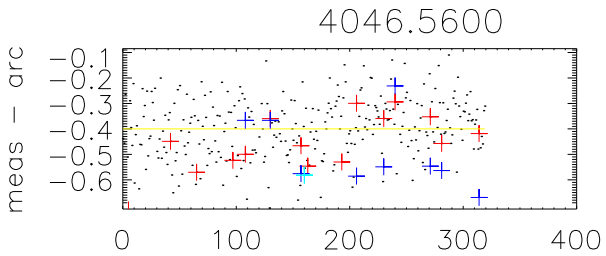

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-b2-00010582.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

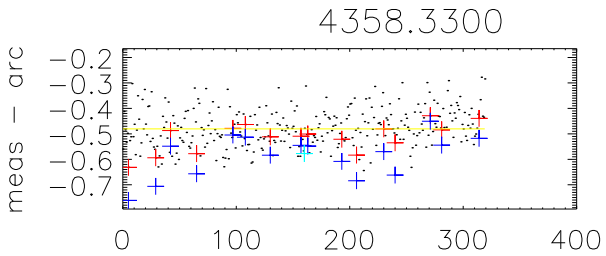

4046.5600
off: −0.71
sig: 0.055
4358.3300
off: −0.58
sig: 0.021
5460.9400
off: −0.40
sig: 0.015
5577.3390
off: −0.35
sig: 0.002
5889.9500
off: −0.23
sig: 0.009
5895.9240
off: −0.28
sig: 0.011

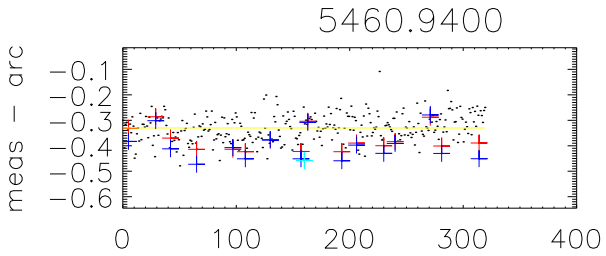

shift(pix)=−0.582
err(pix)= 0.063
oldshift(pix)=−0.707
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

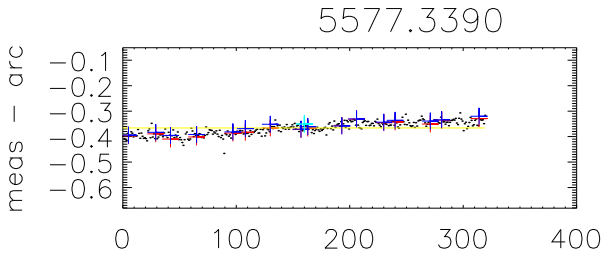

shift(pix)=−0.577
err(pix)= 0.026
oldshift(pix)=−0.581
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

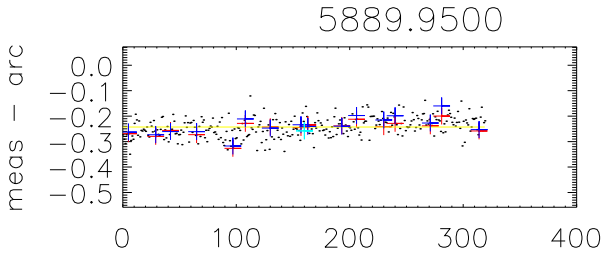

shift(pix)=−0.458
err(pix)=. 0.019
oldshift(pix)=−0.400
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

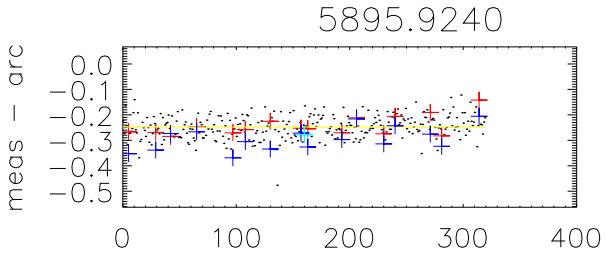

4046.5600
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

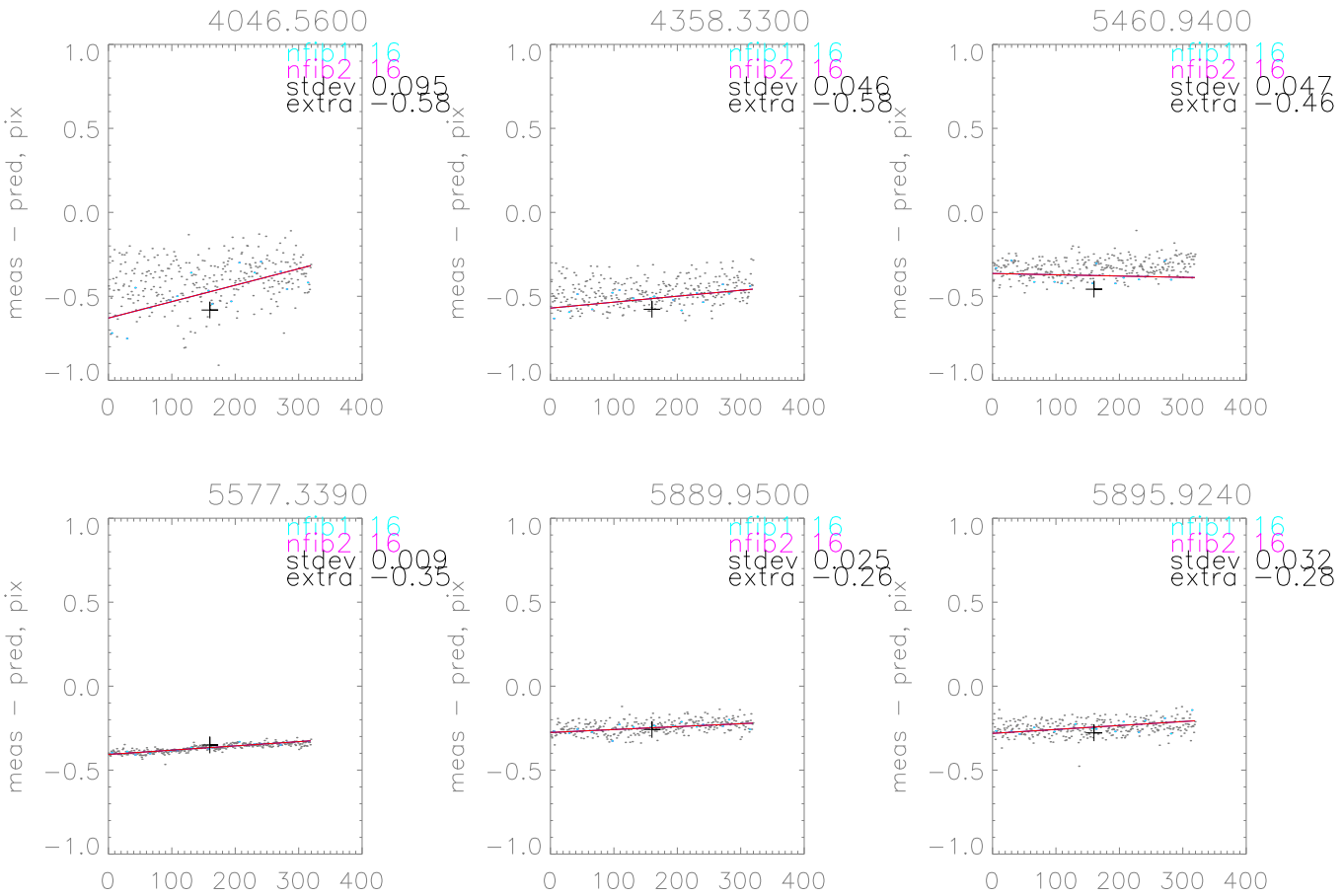

4358.3300
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

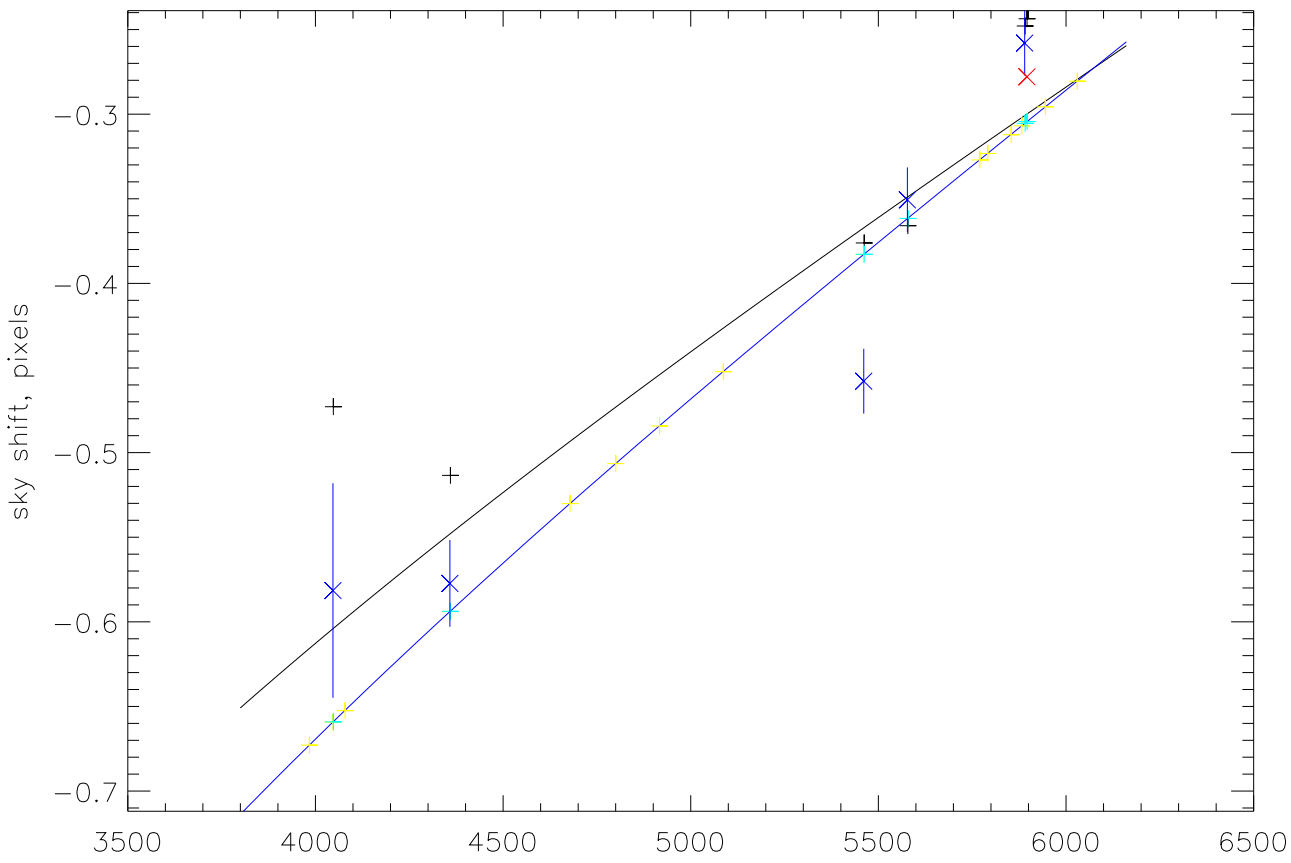

5460.9400
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

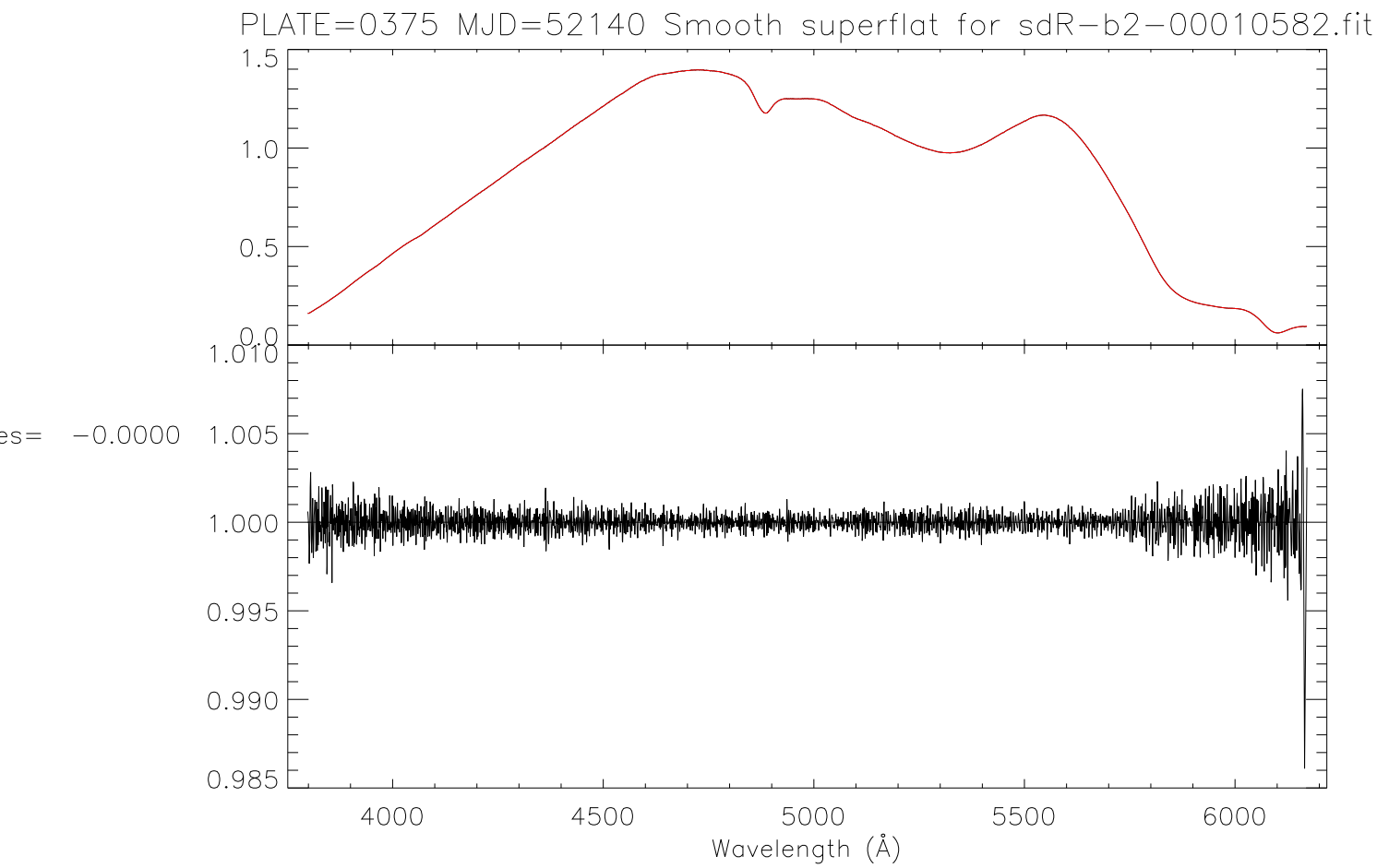

5577.3390
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

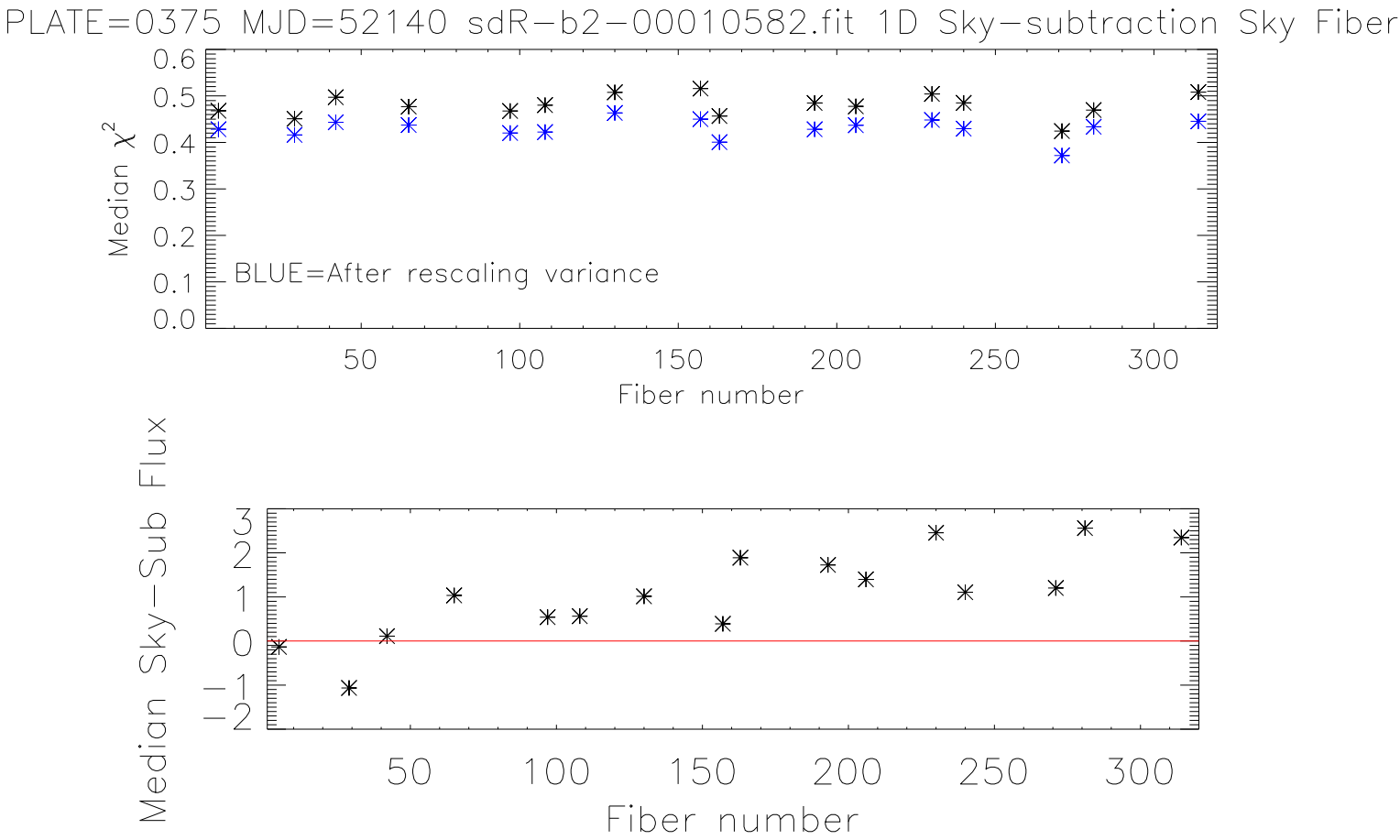

5889.9500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

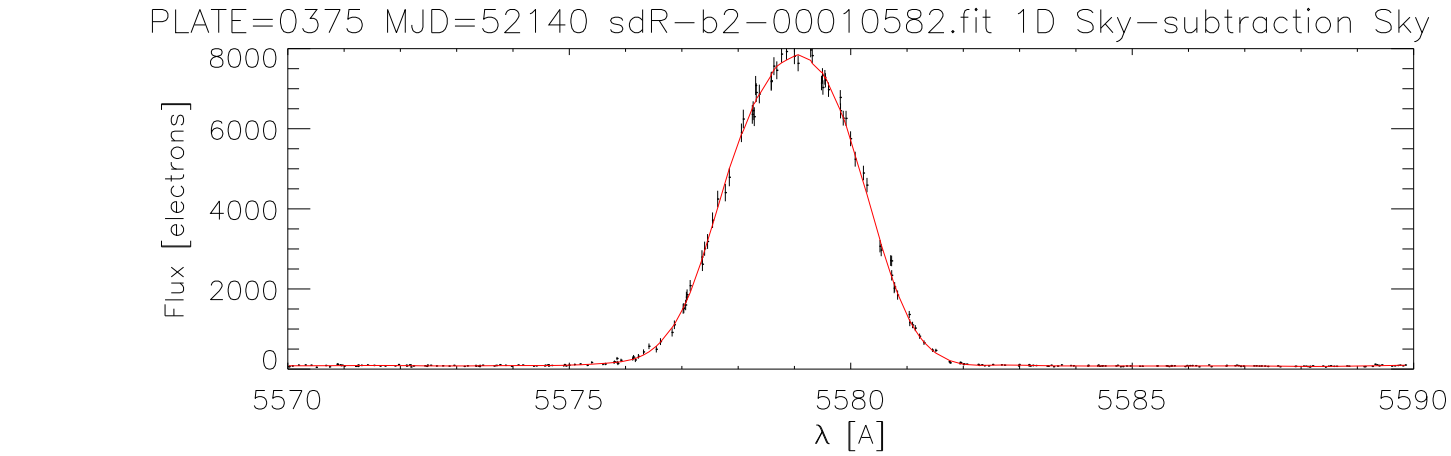

5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

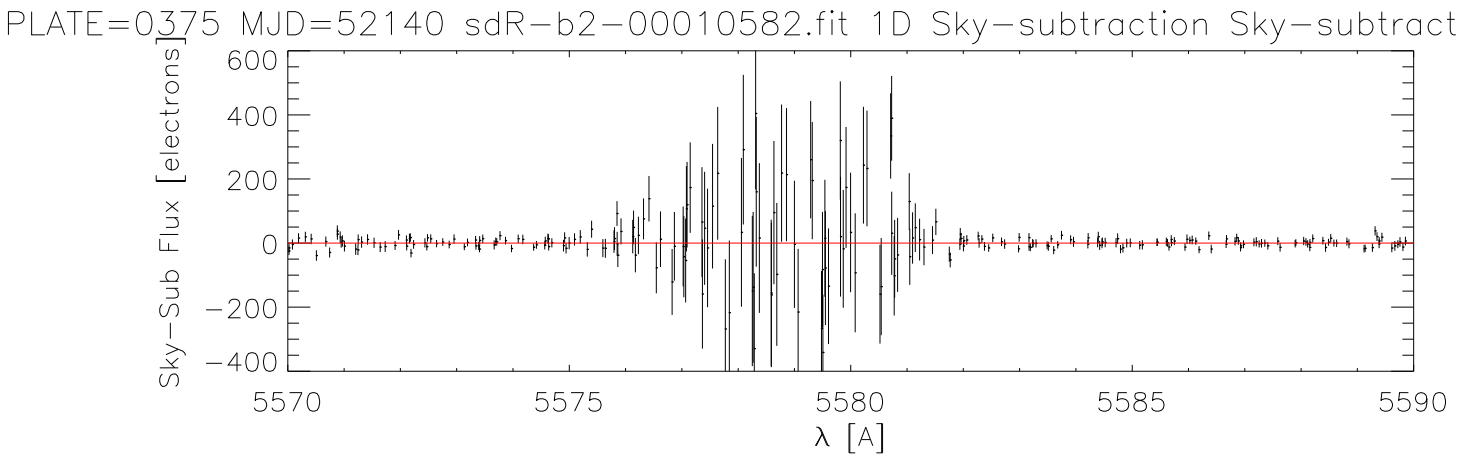

4046.5600
nfib1 16
nfib2 16
stdev 0.095
extra −0.58
4358.3300
nfib1 16
nfib2 16
stdev 0.046
extra −0.58
5460.9400
nfib1 16
nfib2 16
stdev 0.047
extra −0.46
5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.35
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra −0.26
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra −0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

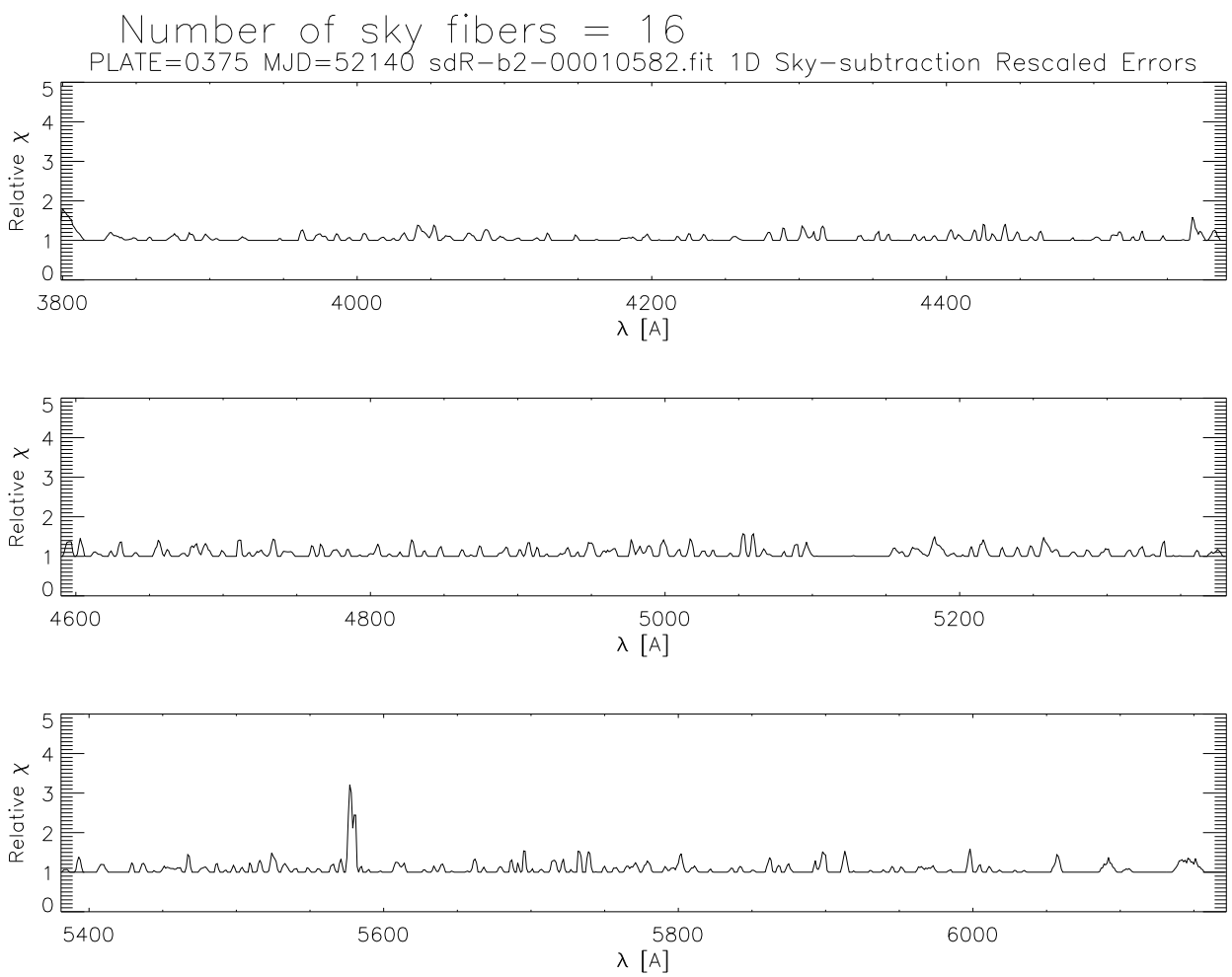

sky shift, pixels
−0.3
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500

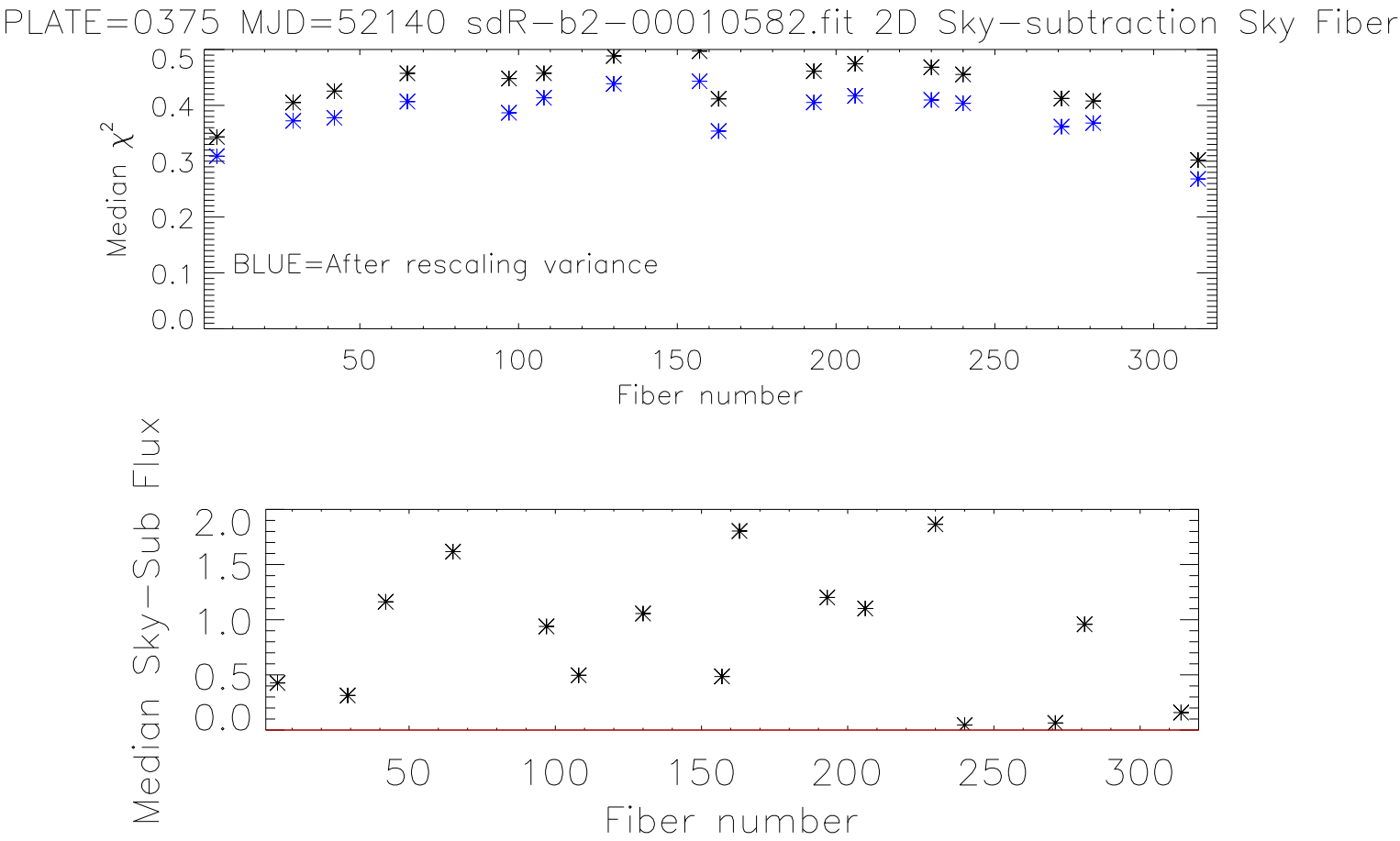

PLATE=0375 MJD=52140 Smooth superflat for sdR-b2-00010582.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

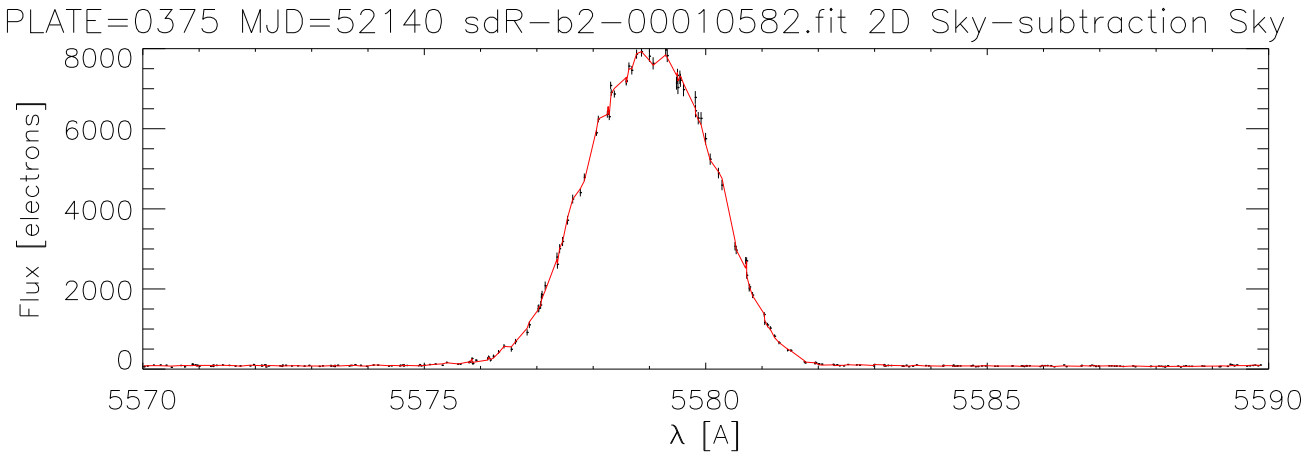

PLATE=0375 MJD=52140 sdR-b2-00010582.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

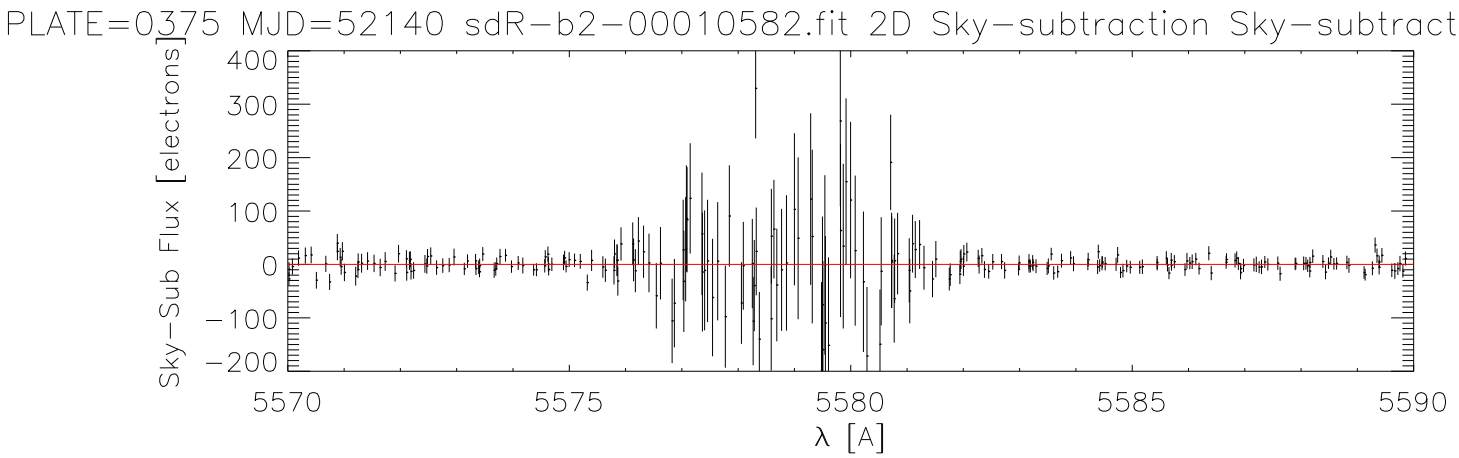

PLATE=0375 MJD=52140 sdR-b2-00010582.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

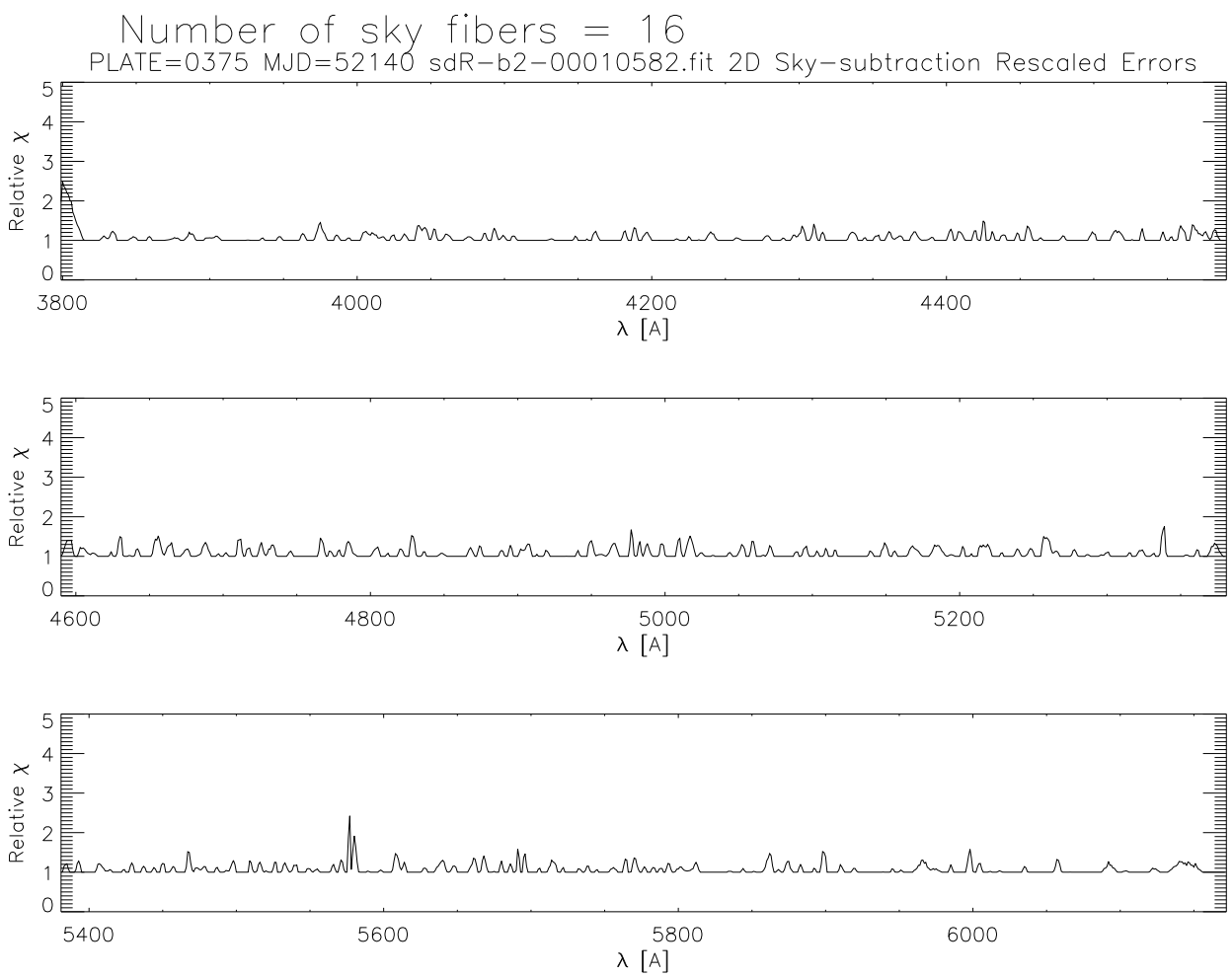

PLATE=0375 MJD=52140 sdR-b2-00010582.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

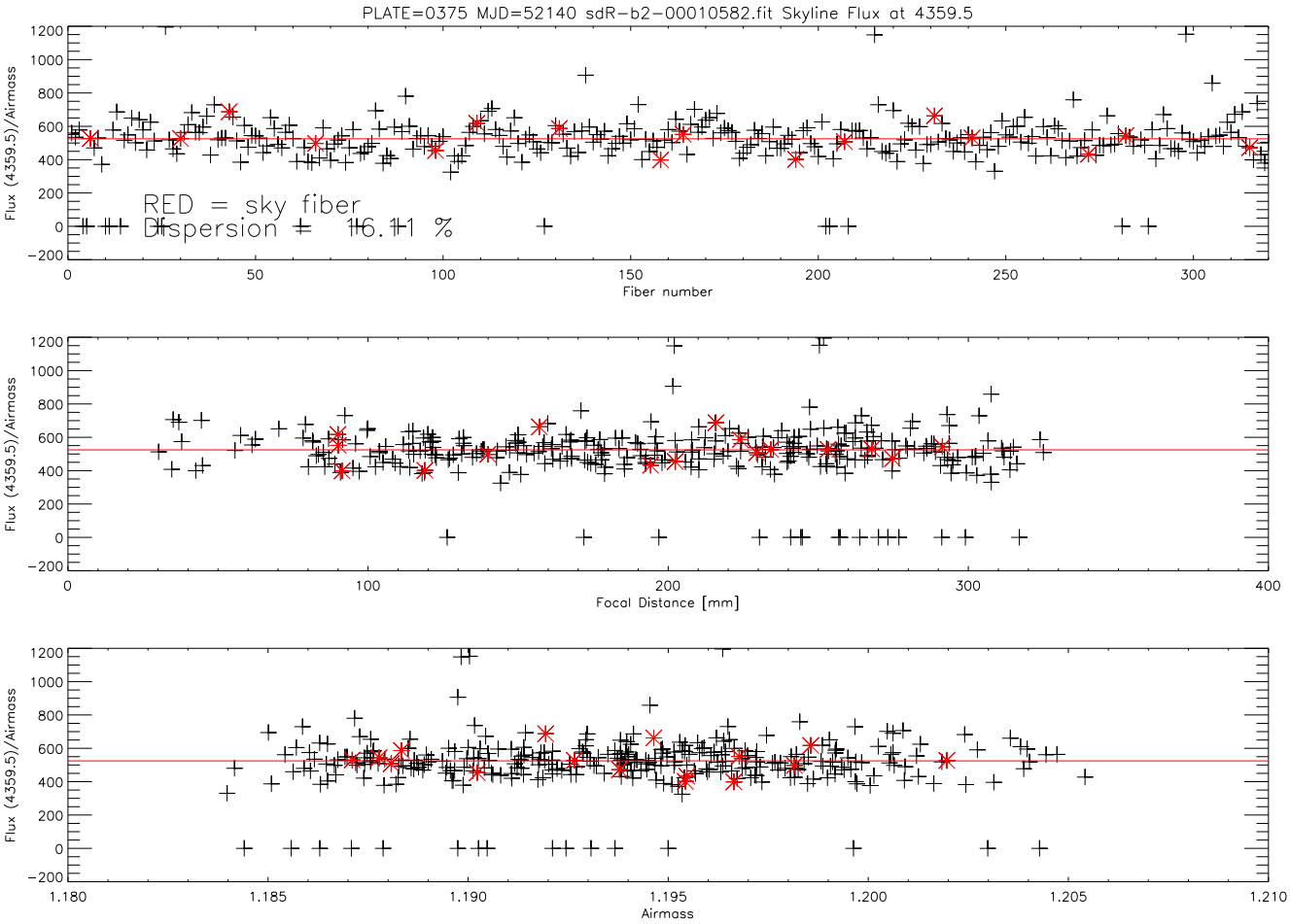

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010582.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

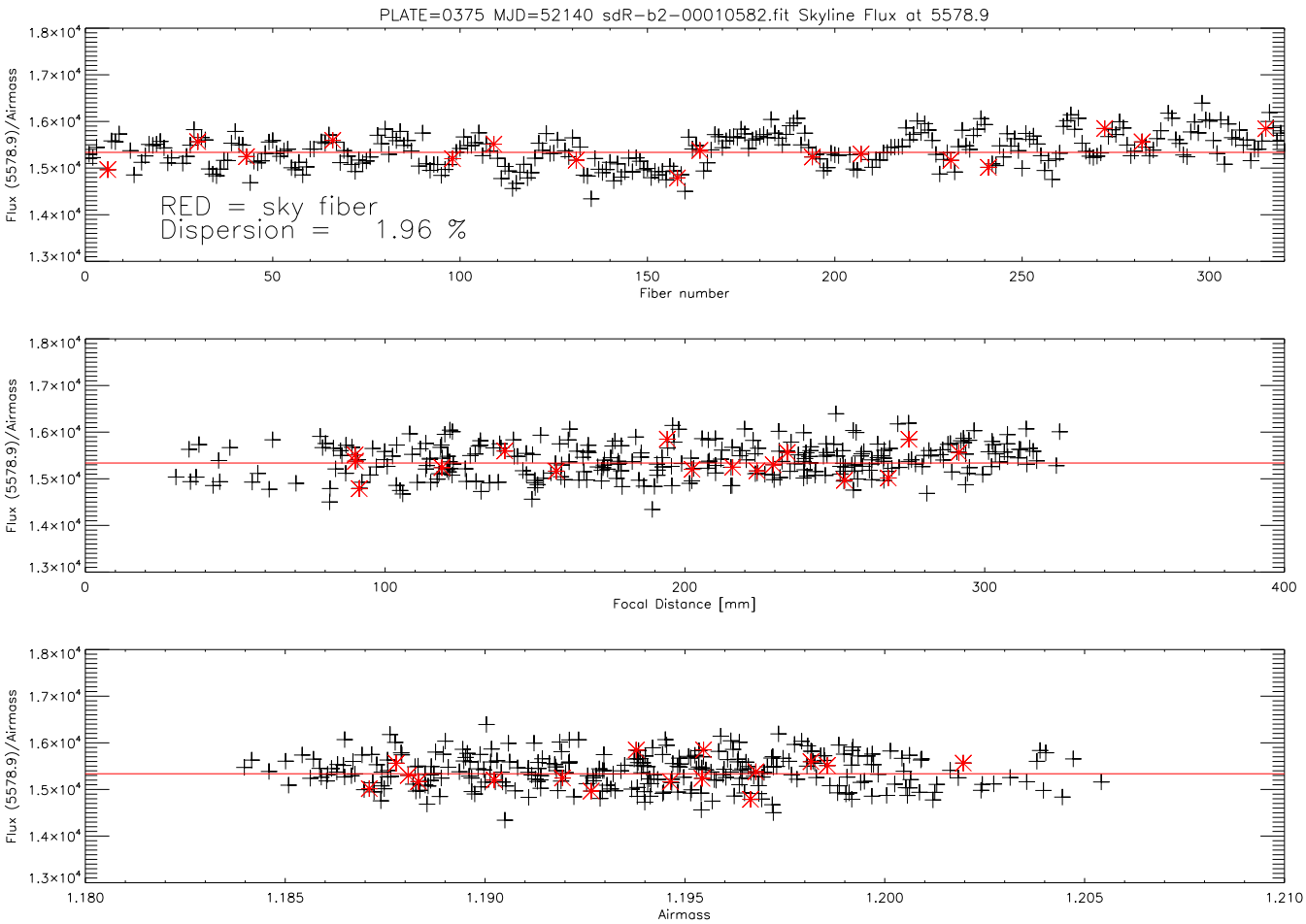

PLATE=0375 MJD=52140 sdR-b2-00010582.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

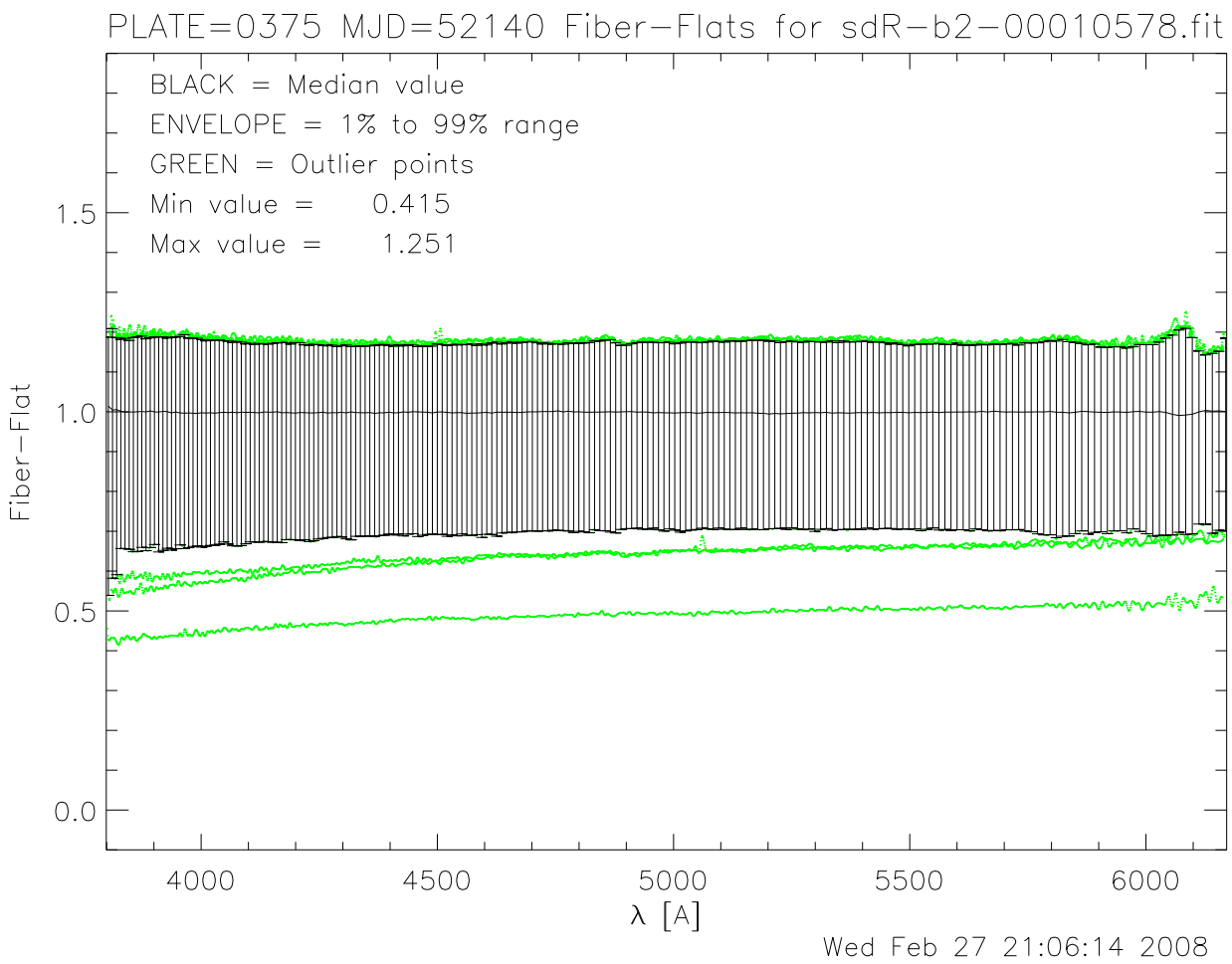

PLATE=0375 MJD=52140 sdR-b2-00010582.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

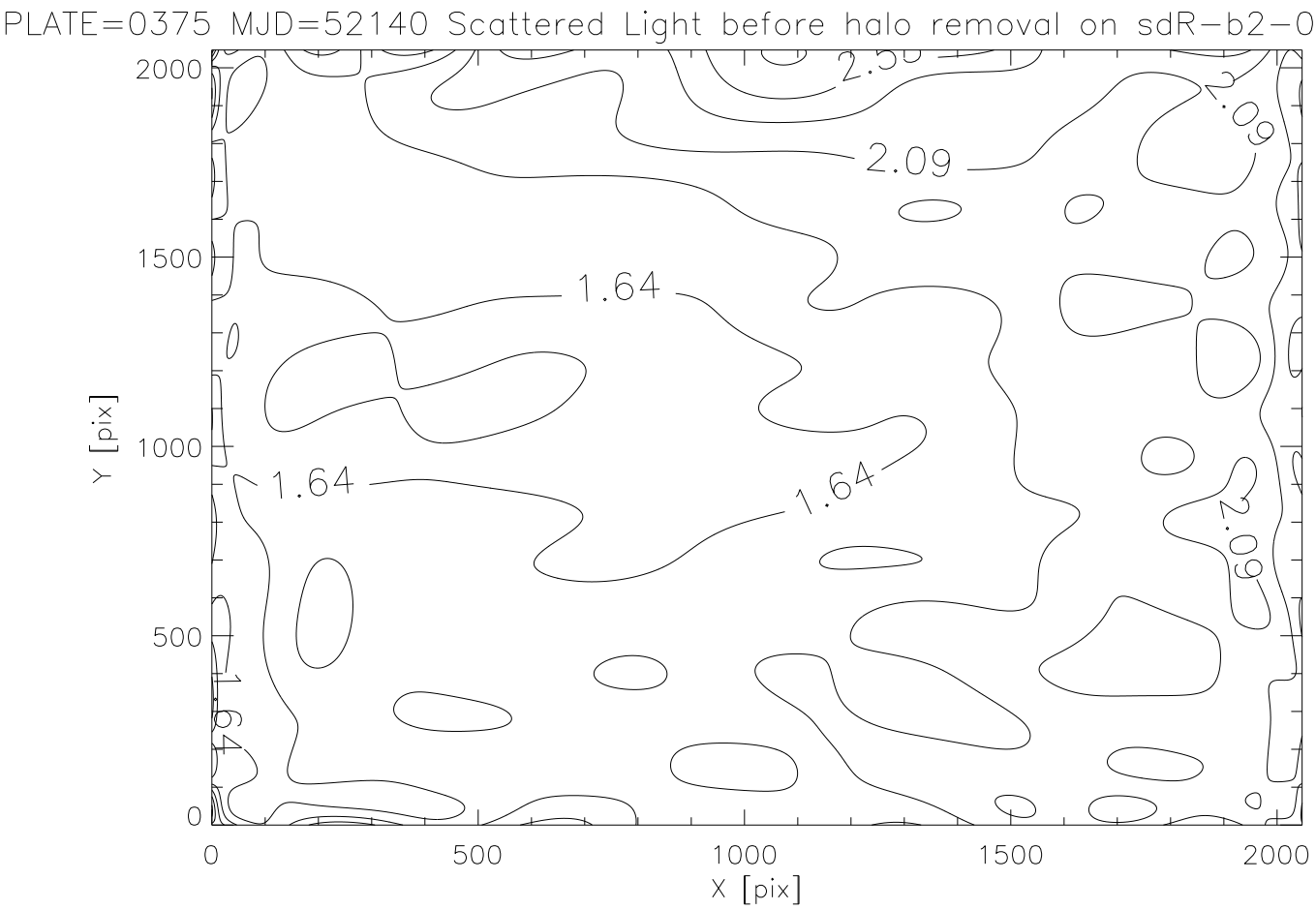

PLATE=0375 MJD=52140 sdR-b2-00010582.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

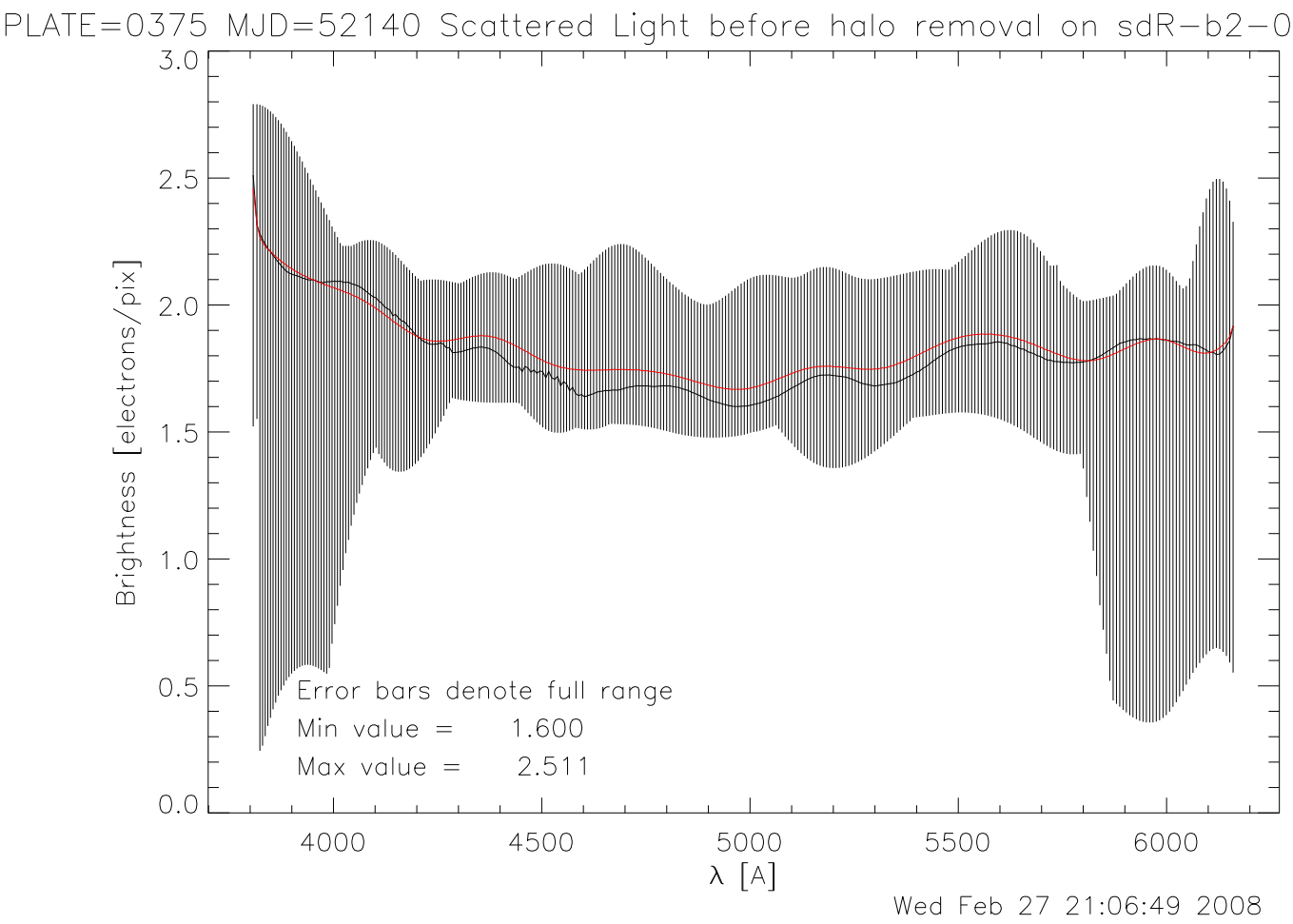

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010582.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000


PLATE=0375 MJD=52140 sdR-b2-00010582.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 16.11 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=0375 MJD=52140 sdR-b2-00010582.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.96 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=0375 MJD=52140 Fiber-Flats for sdR-b2-00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.415
Max value = 1.251
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 21:06:14 2008


PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b2-00010583.f
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
2.09
1.64
1.64
1.64
2.09
2.09
1.64
0


PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-b2-00010583.f
Brightness [electrons/pix]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.600
Max value = 2.511
4000
4500
5000
5500
6000
λ [A]
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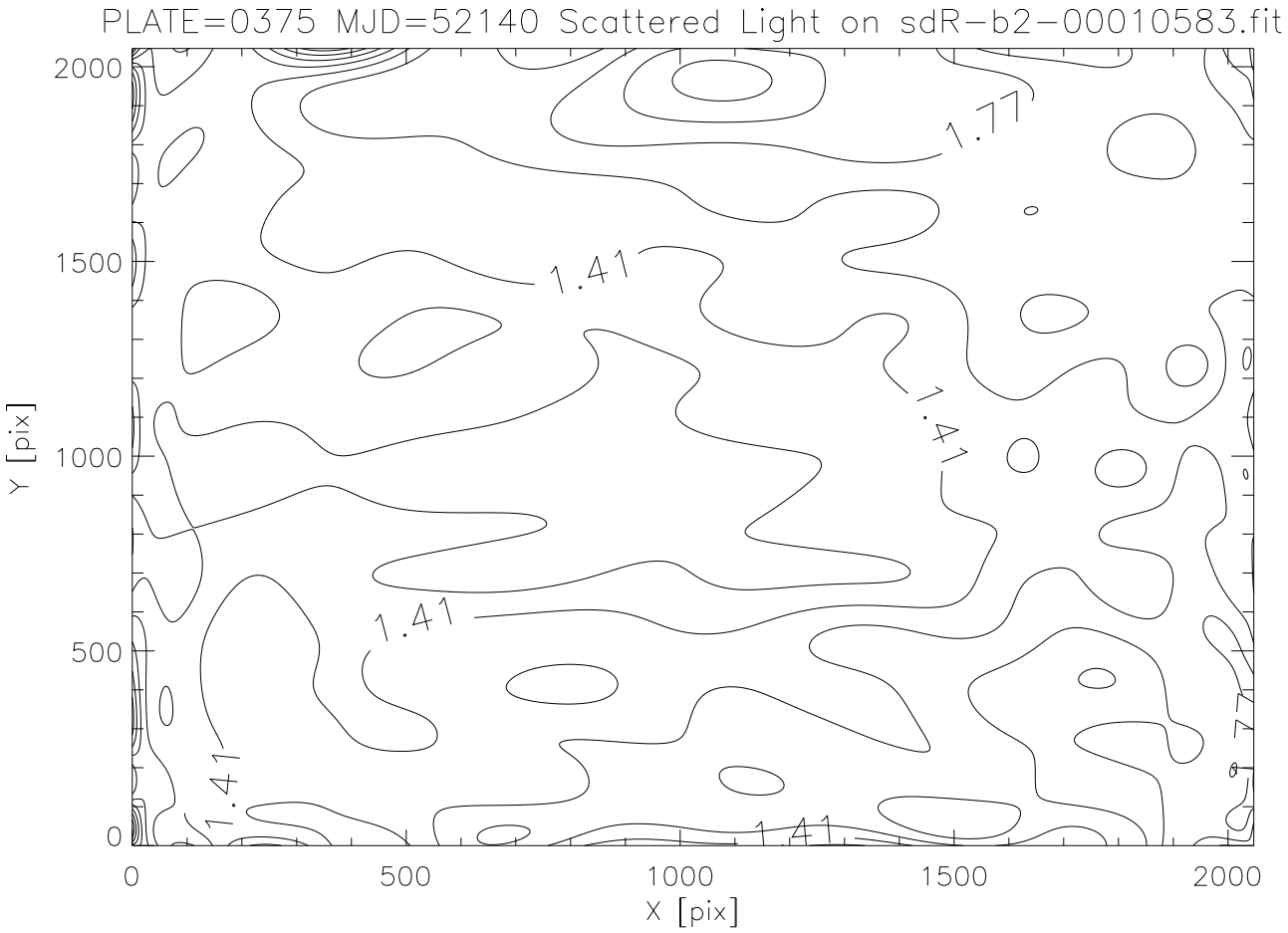
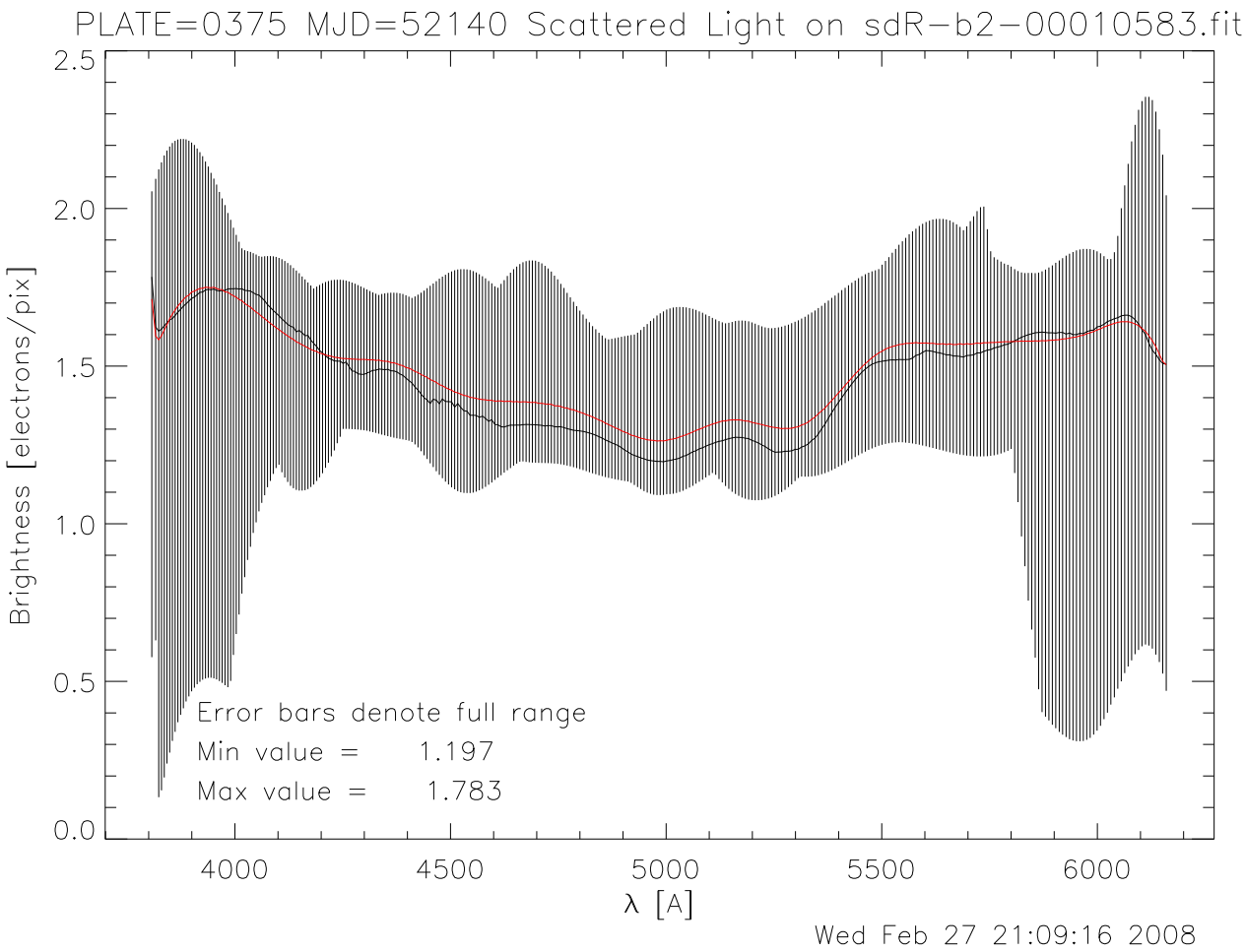
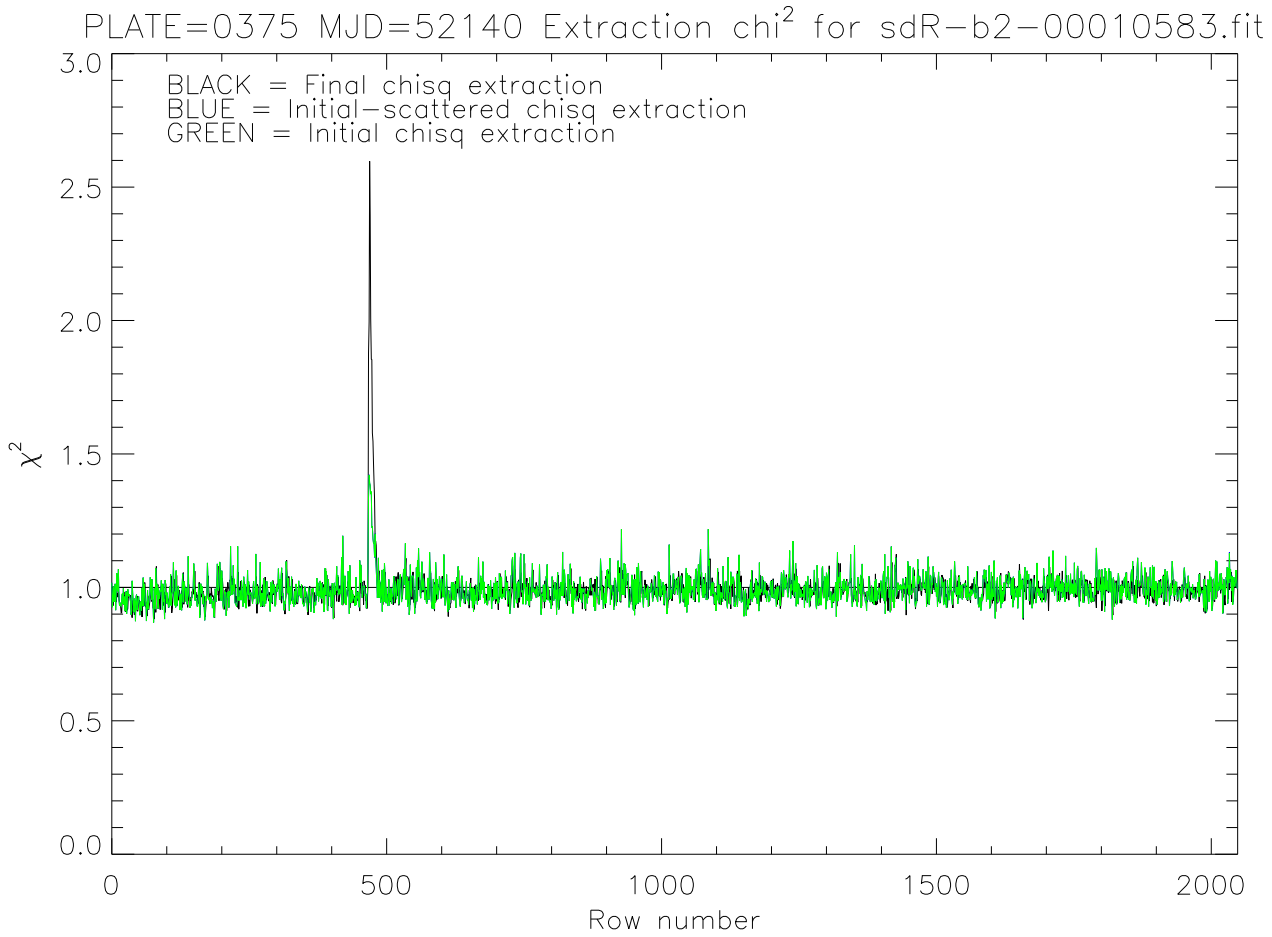
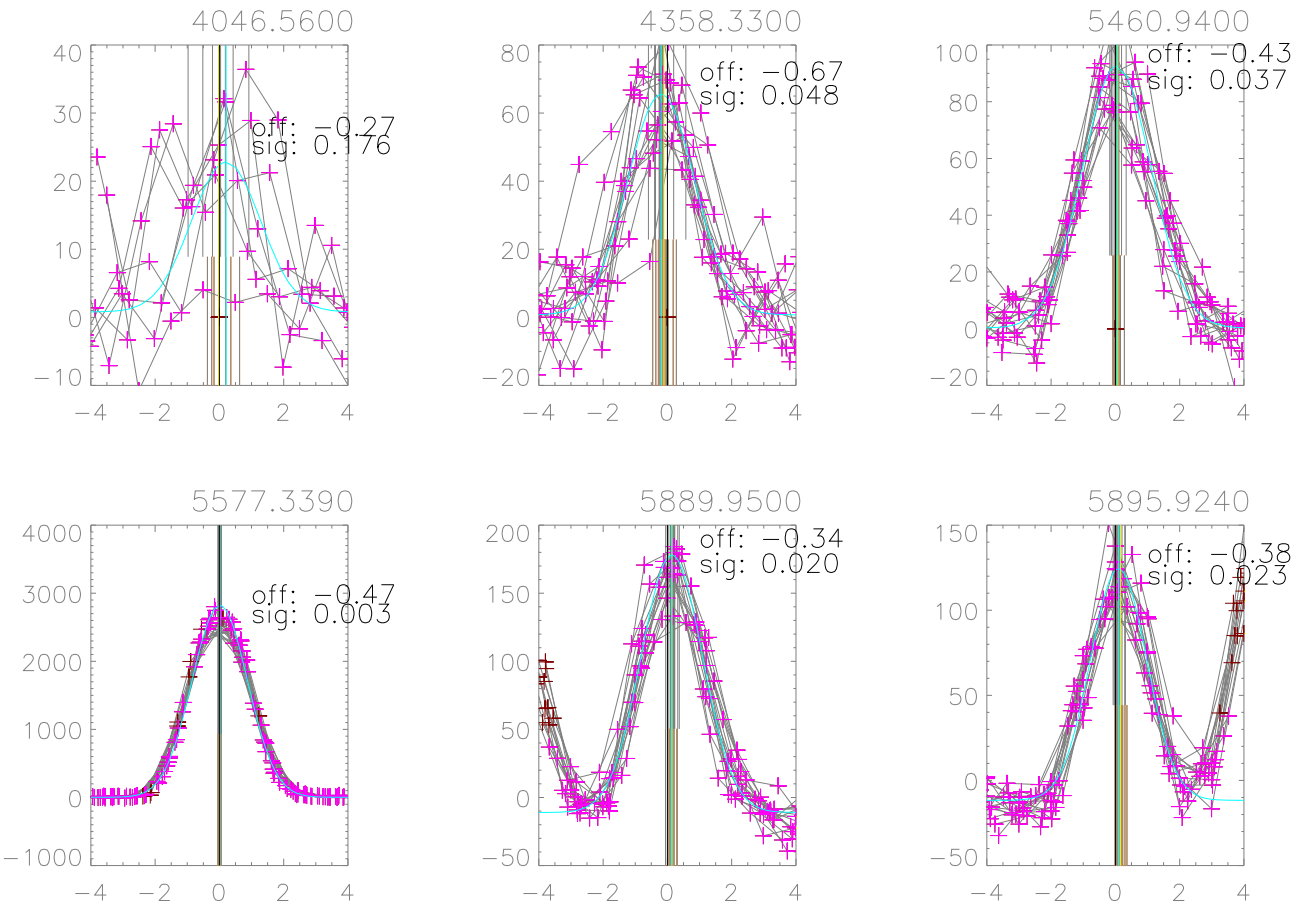
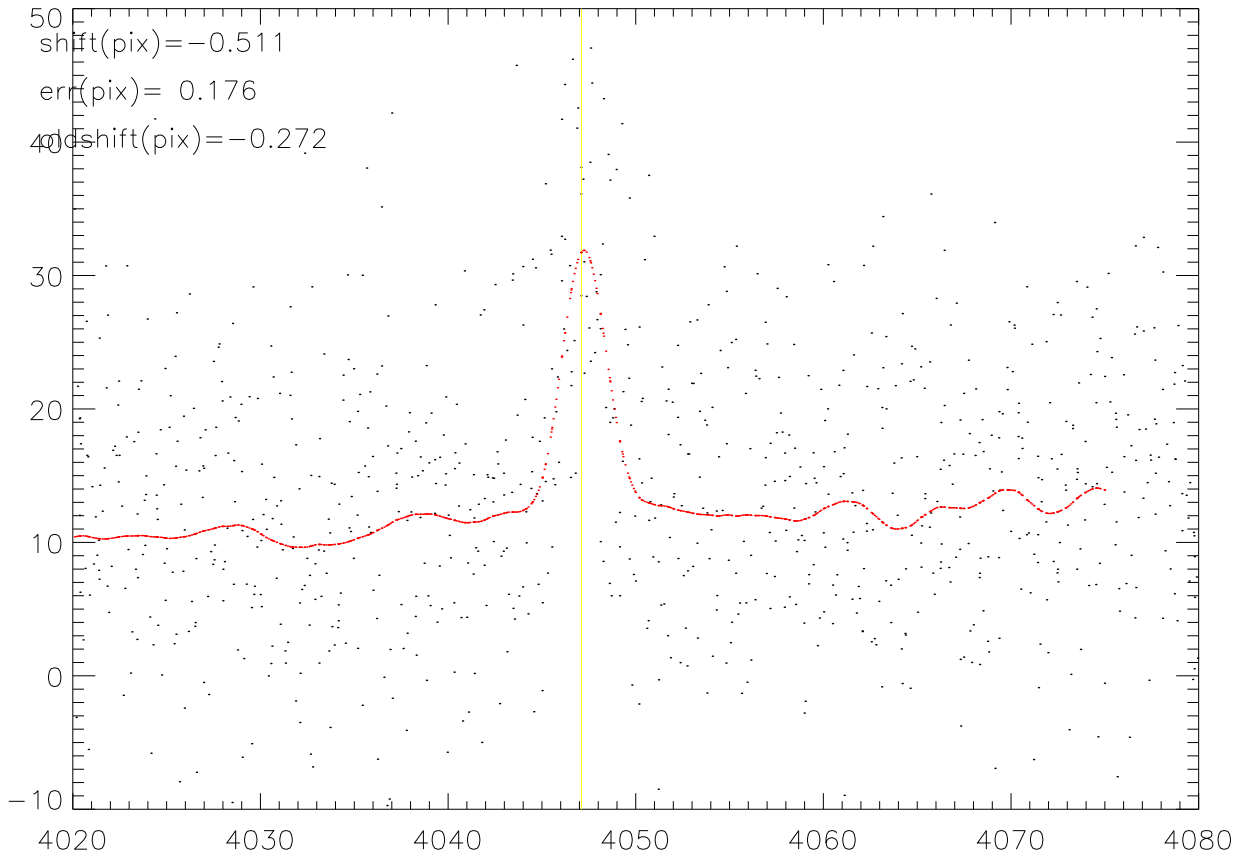
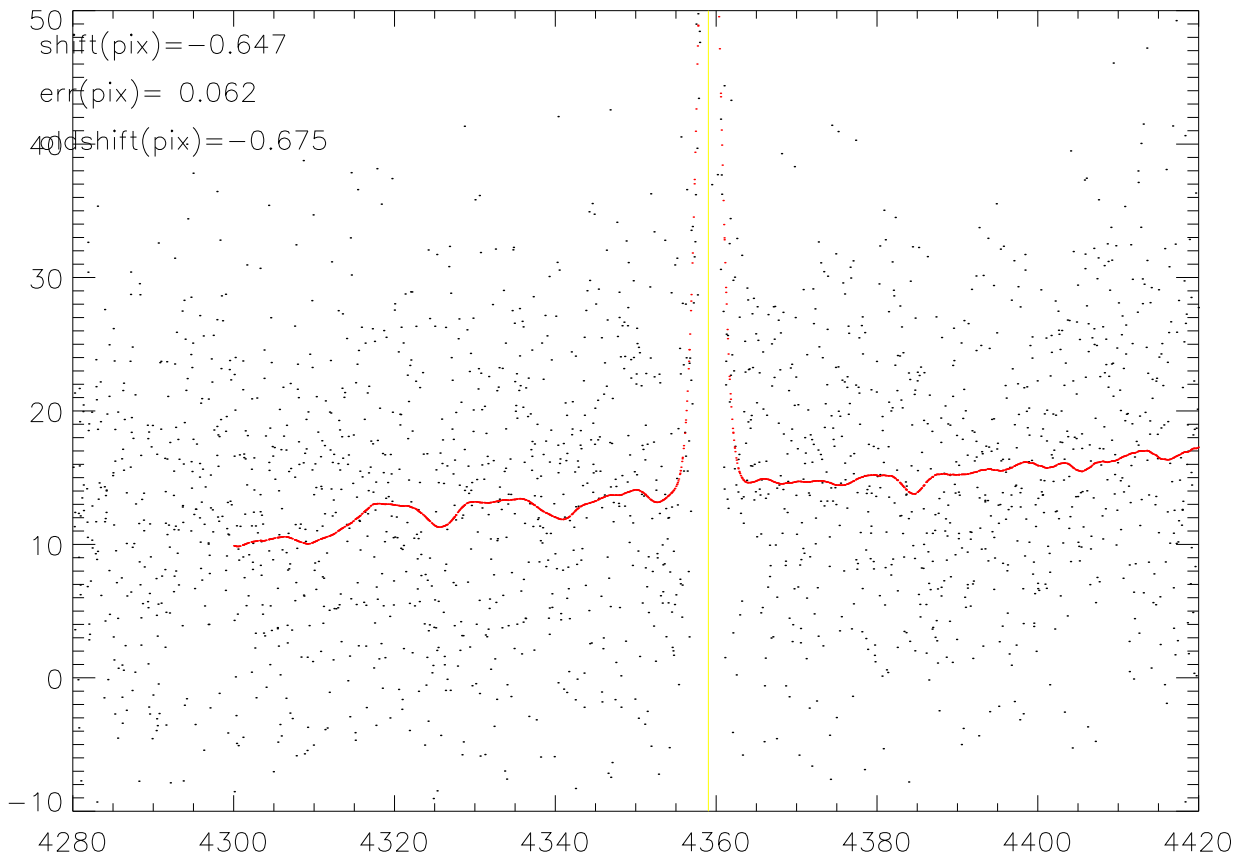

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010583.fit
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]
1.77
1.41
1.41
1.41
1.41
1.41
1.77

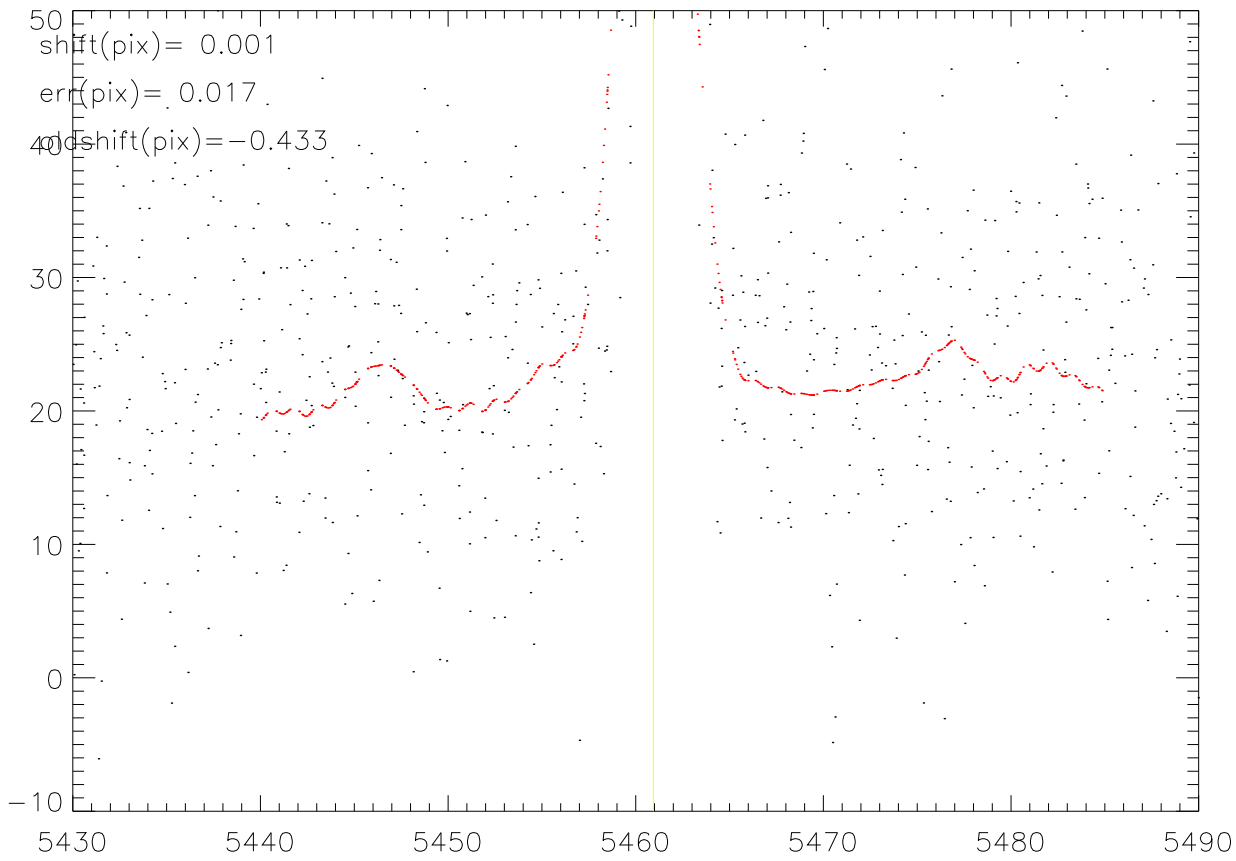

PLATE=0375 MJD=52140 Scattered Light on sdR-b2-00010583.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 1.197
Max value = 1.783
4000
4500
5000
5500
6000
λ [A]
Wed Feb 27 21:09:16 2008

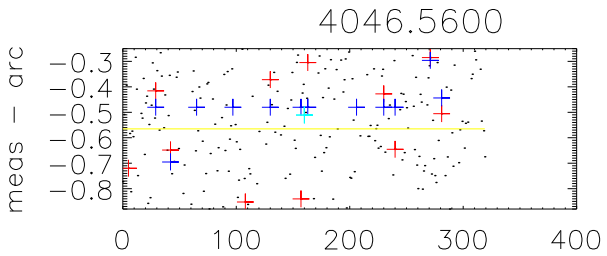

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-b2-00010583.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

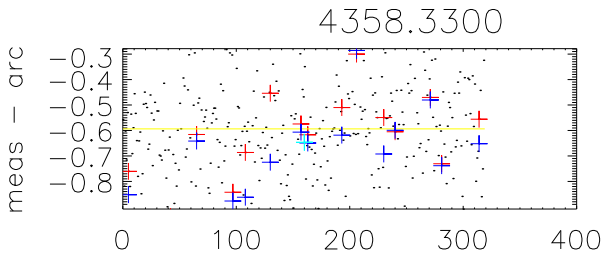

4046.5600
off: −0.27
sig: 0.176
4358.3300
off: −0.67
sig: 0.048
5460.9400
off: −0.43
sig: 0.037
5577.3390
off: −0.47
sig: 0.003
5889.9500
off: −0.34
sig: 0.020
5895.9240
off: −0.38
sig: 0.023

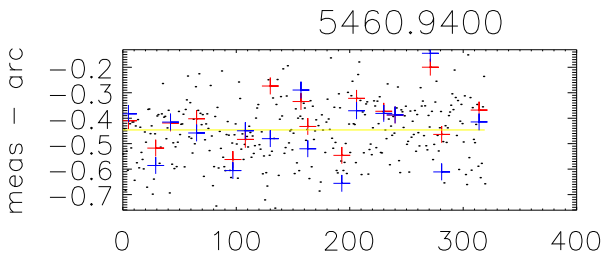

shift(pix)=−0.511
err(pix)= 0.176
oldshift(pix)=−0.272
50
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

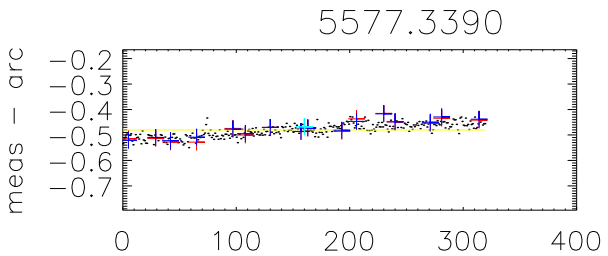

shift(pix)=−0.647
err(pix)= 0.062
oldshift(pix)=−0.675
50
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

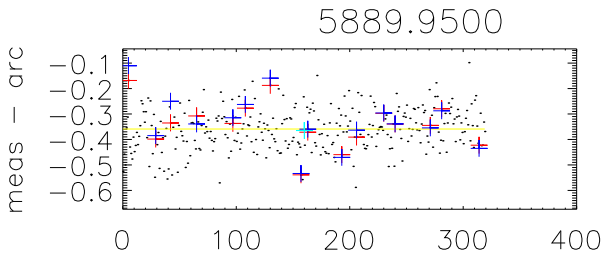

shift(pix)= 0.001
err(pix)= 0.017
oldshift(pix)=−0.433
50
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

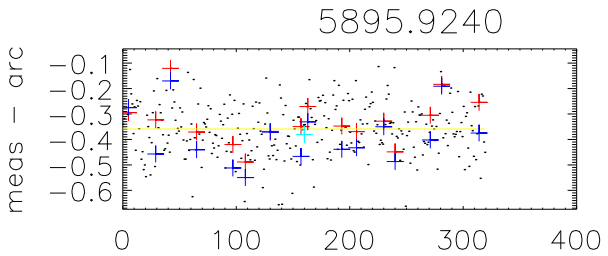

4046.5600
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

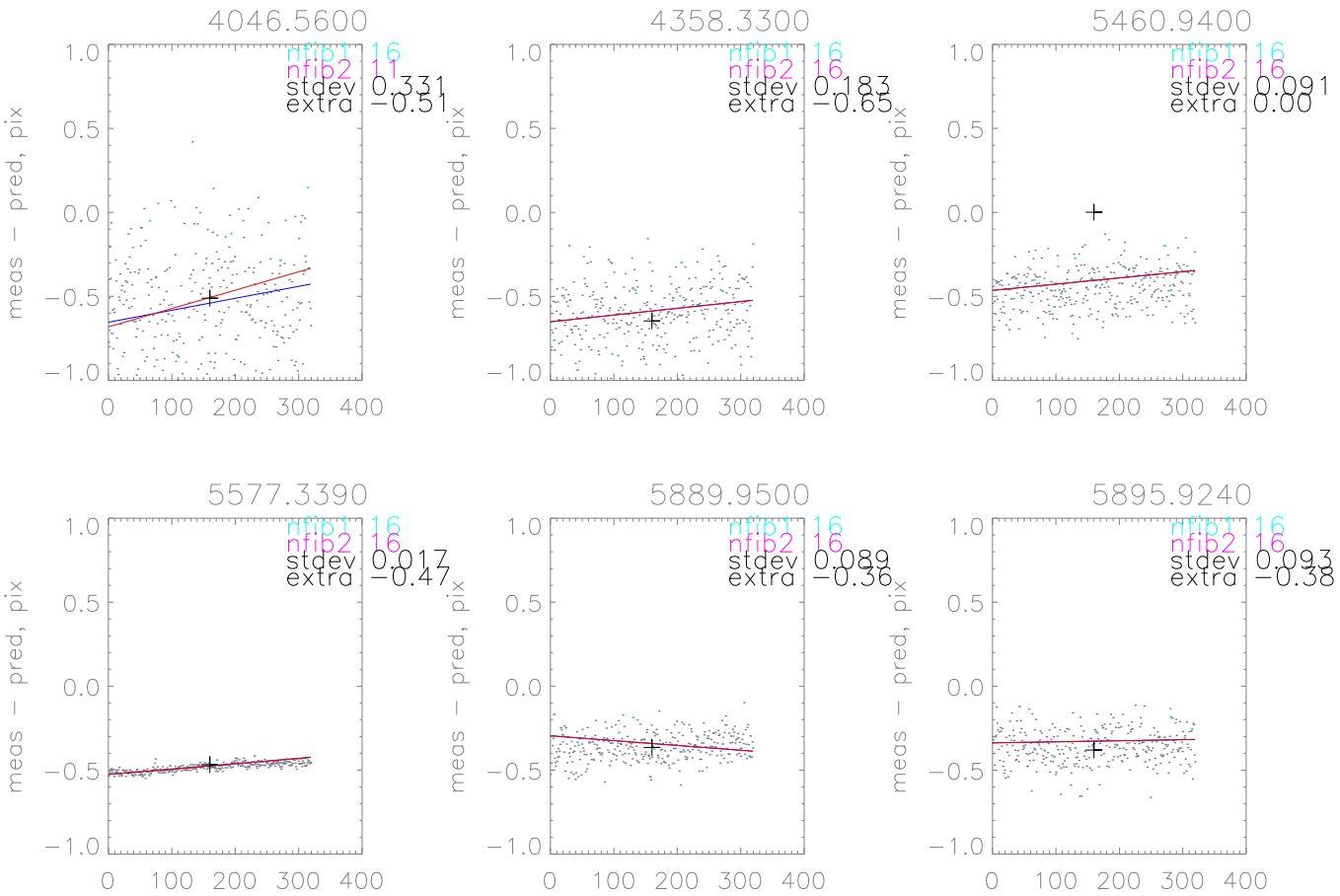

4358.3300
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

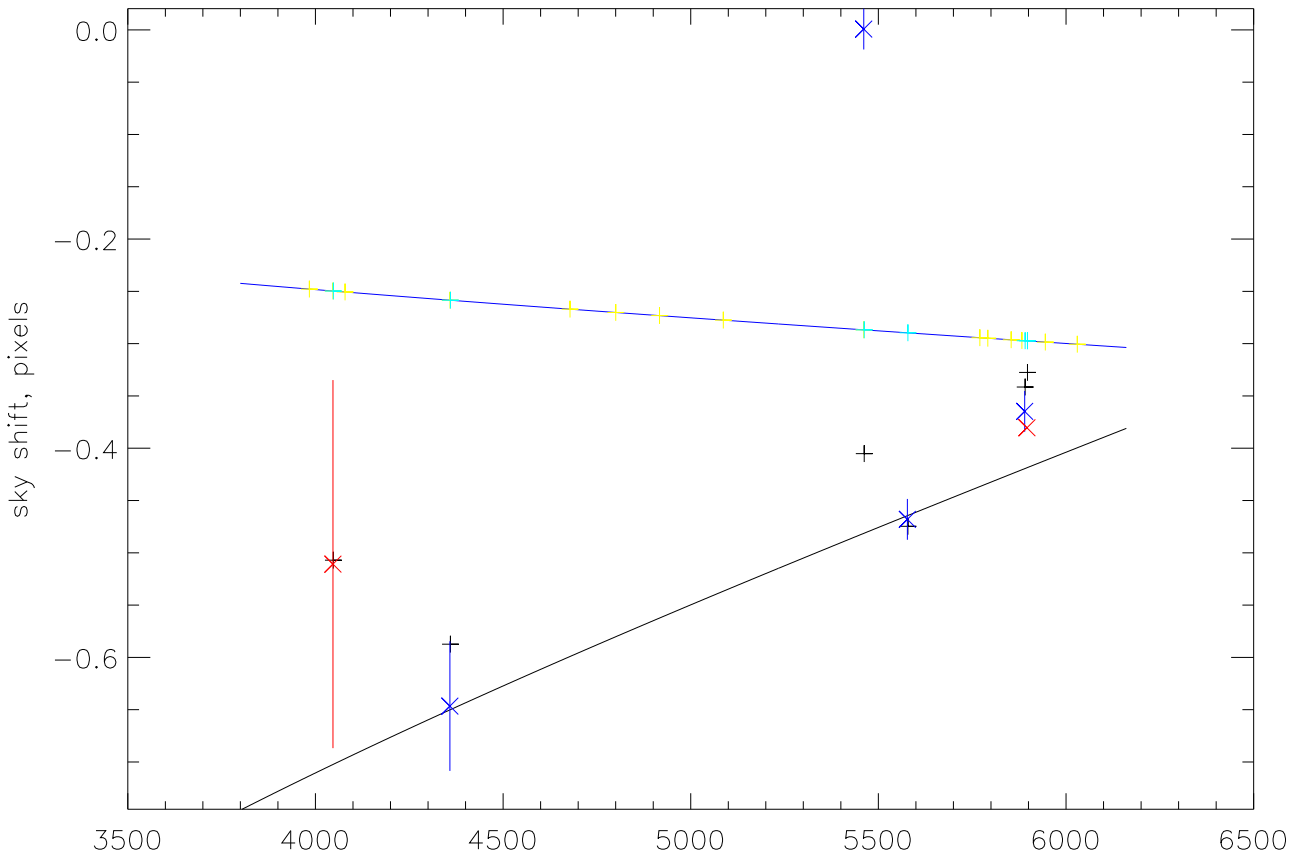

5460.9400
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

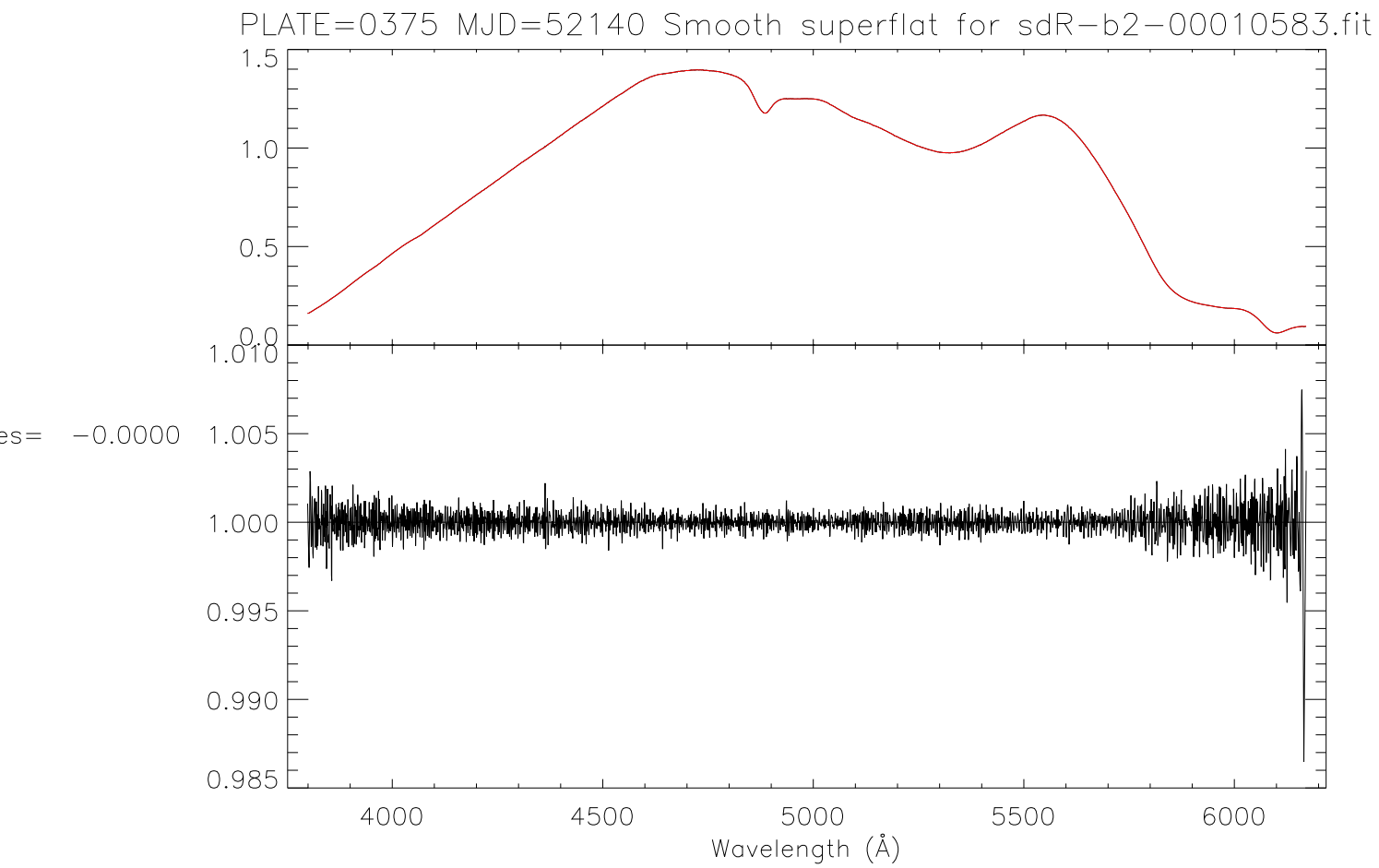

5577.3390
meas − arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

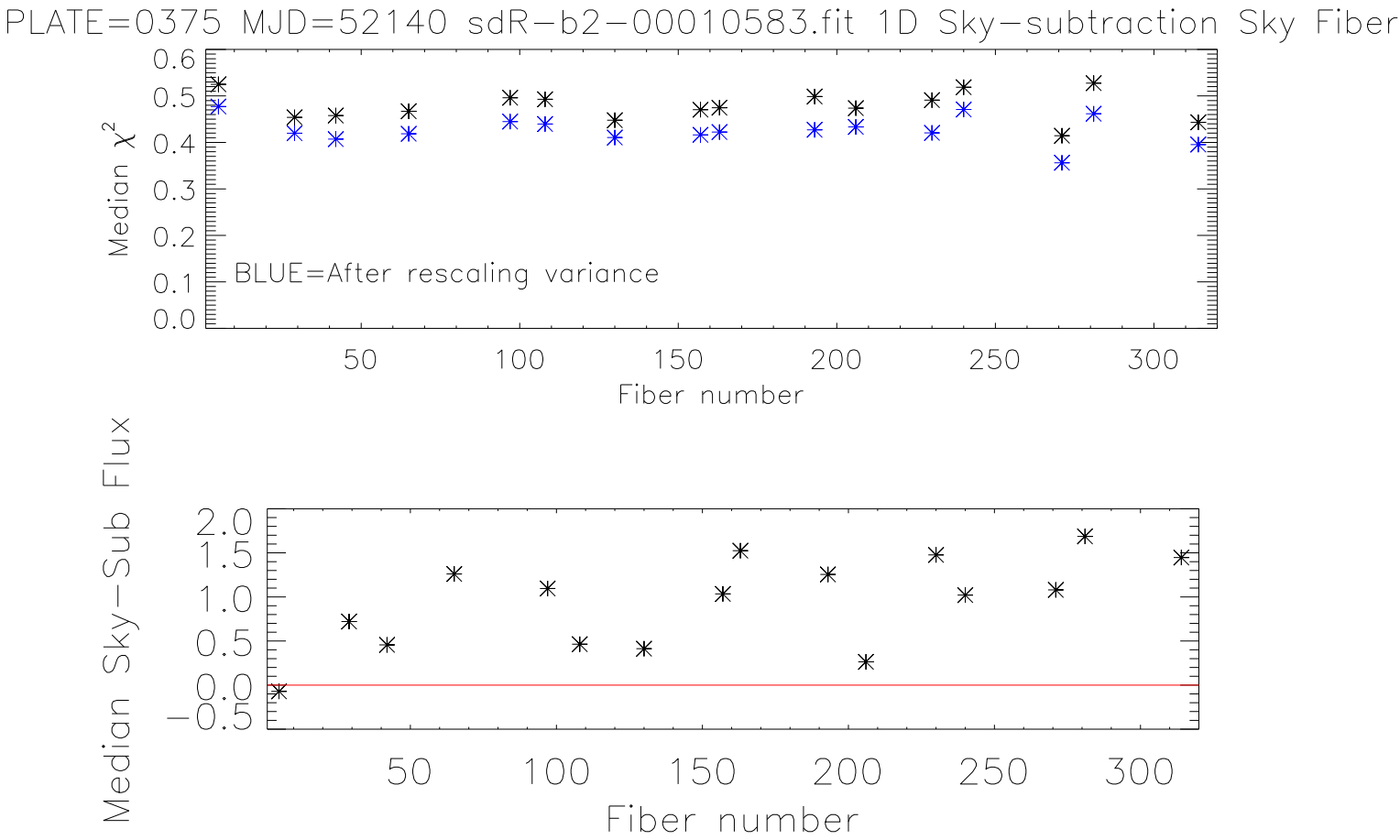

5889.9500
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

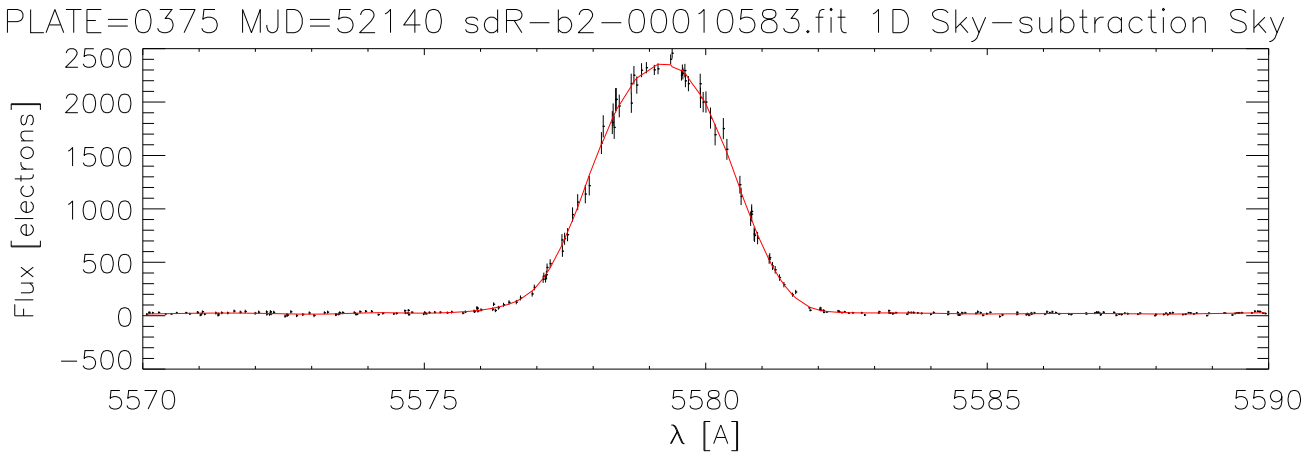

5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

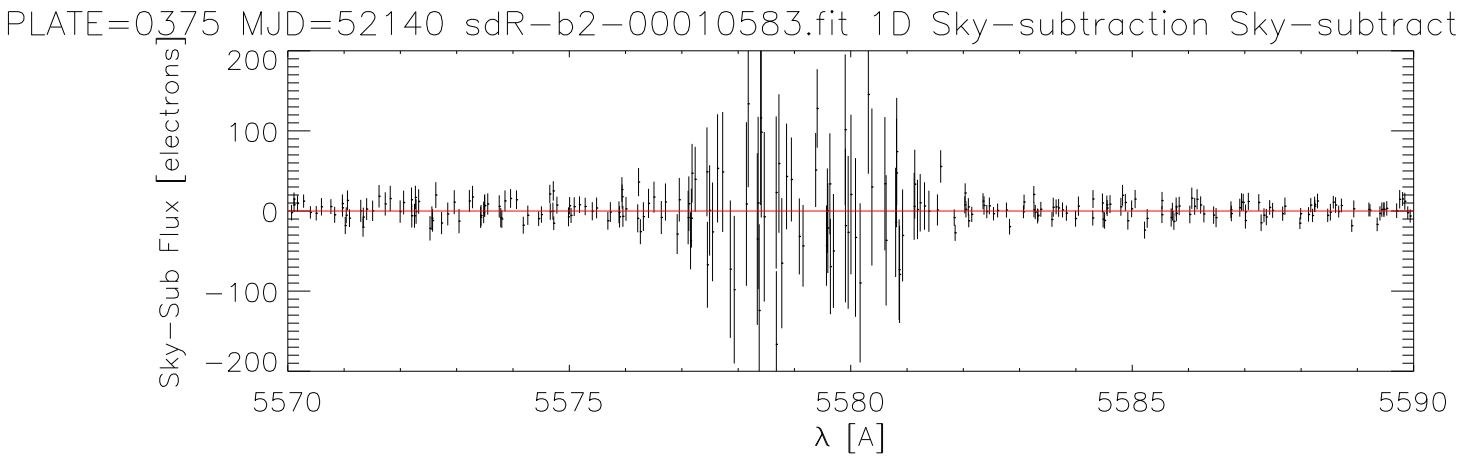

4046.5600
nfib1 16
nfib2 11
stdev 0.331
extra −0.51
4358.3300
nfib1 16
nfib2 16
stdev 0.183
extra −0.65
5460.9400
nfib1 16
nfib2 16
stdev 0.091
extra 0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra −0.47
5889.9500
nfib1 16
nfib2 16
stdev 0.089
extra −0.36
5895.9240
nfib1 16
nfib2 16
stdev 0.093
extra −0.38
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

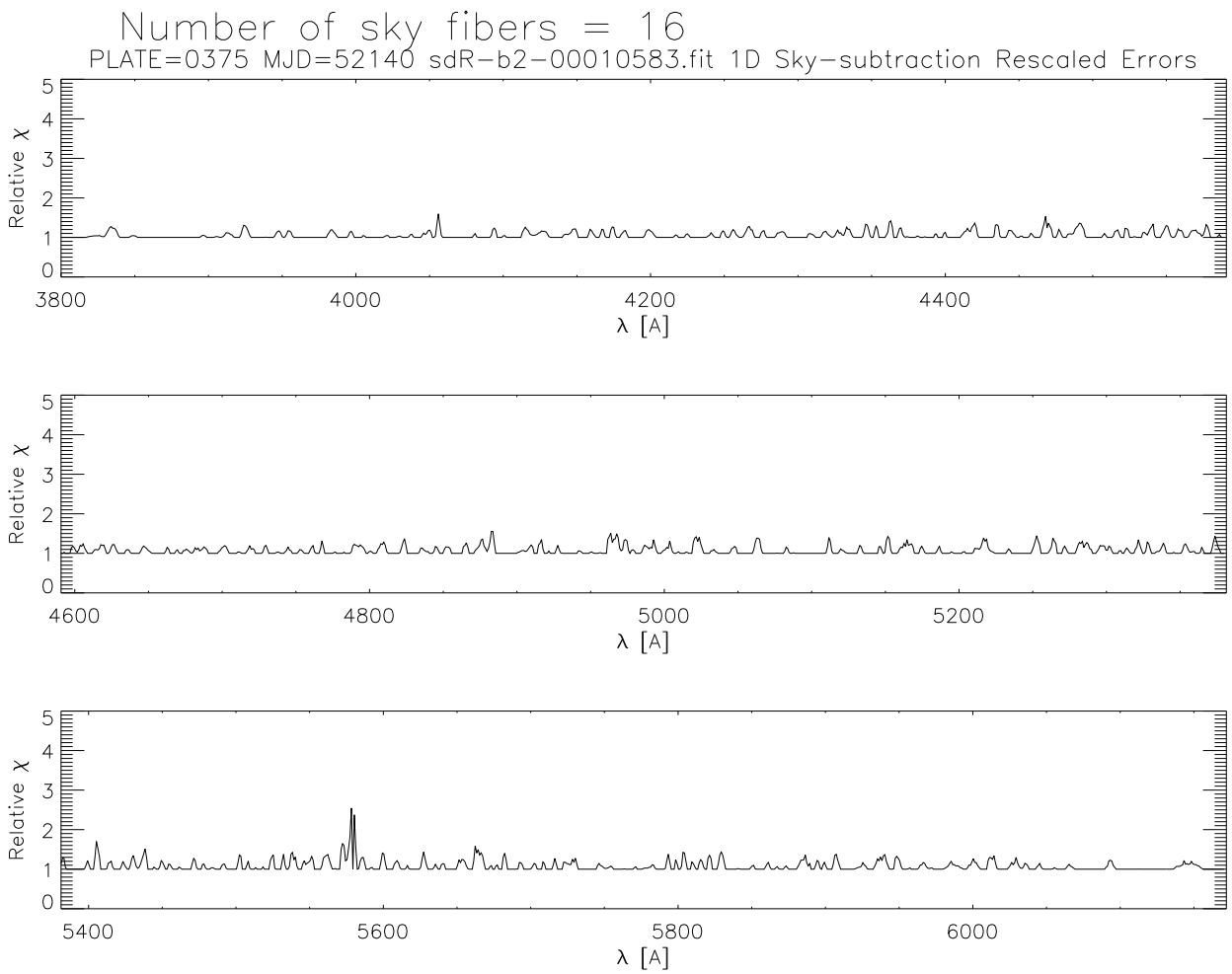

0.0
−0.2
−0.4
−0.6
sky shift, pixels
3500
4000
4500
5000
5500
6000
6500

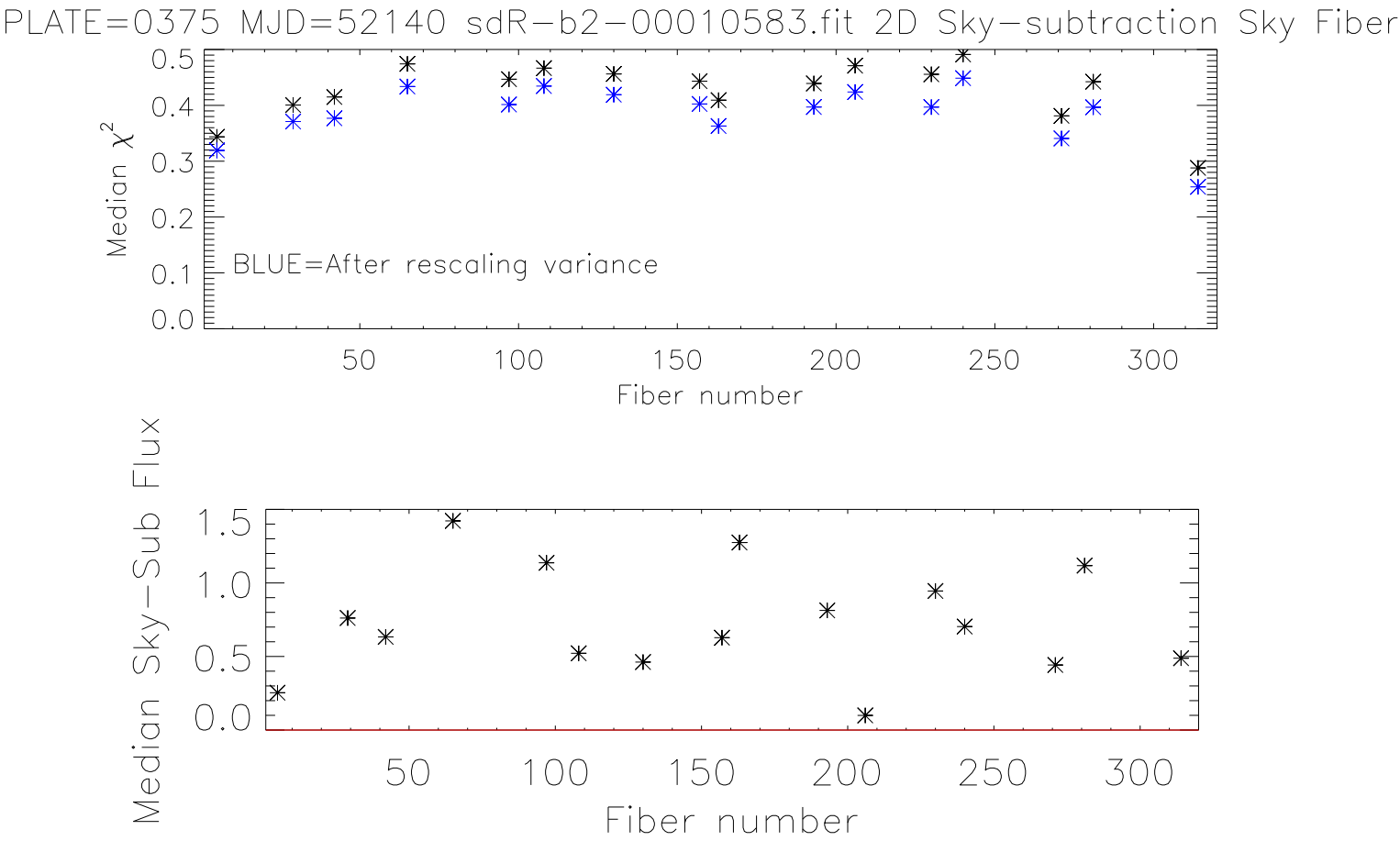

PLATE=0375 MJD=52140 Smooth superflat for sdR-b2-00010583.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

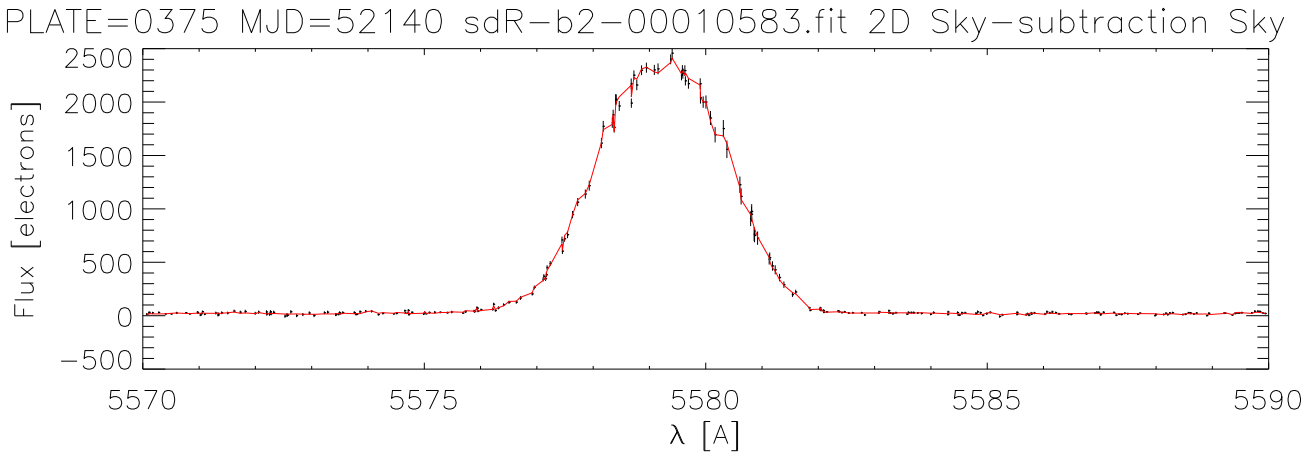

PLATE=0375 MJD=52140 sdR-b2-00010583.fit 1D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

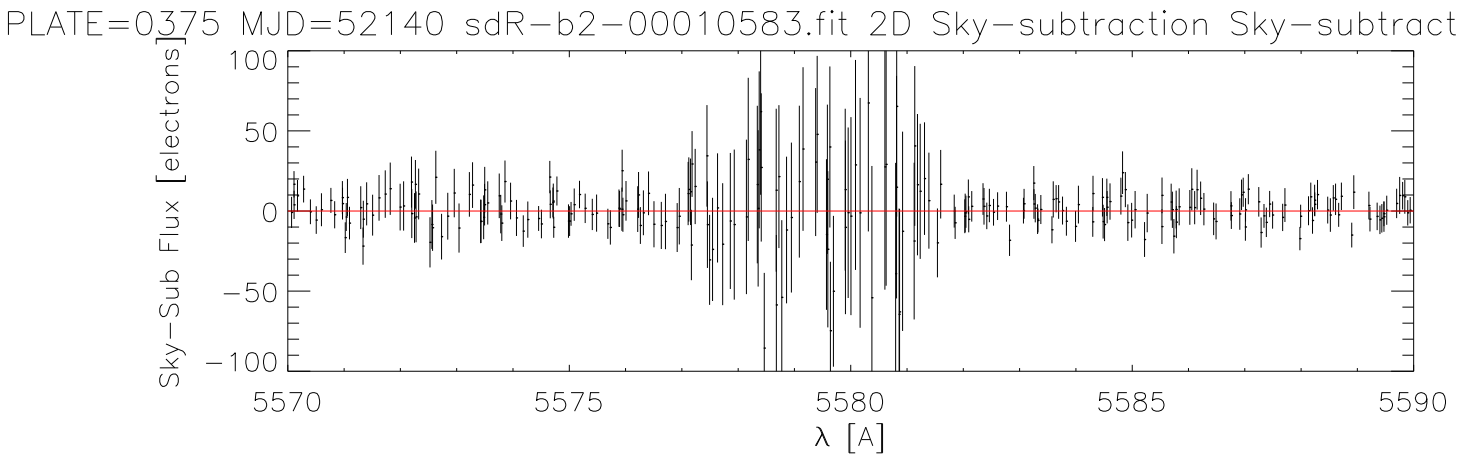

PLATE=0375 MJD=52140 sdR-b2-00010583.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

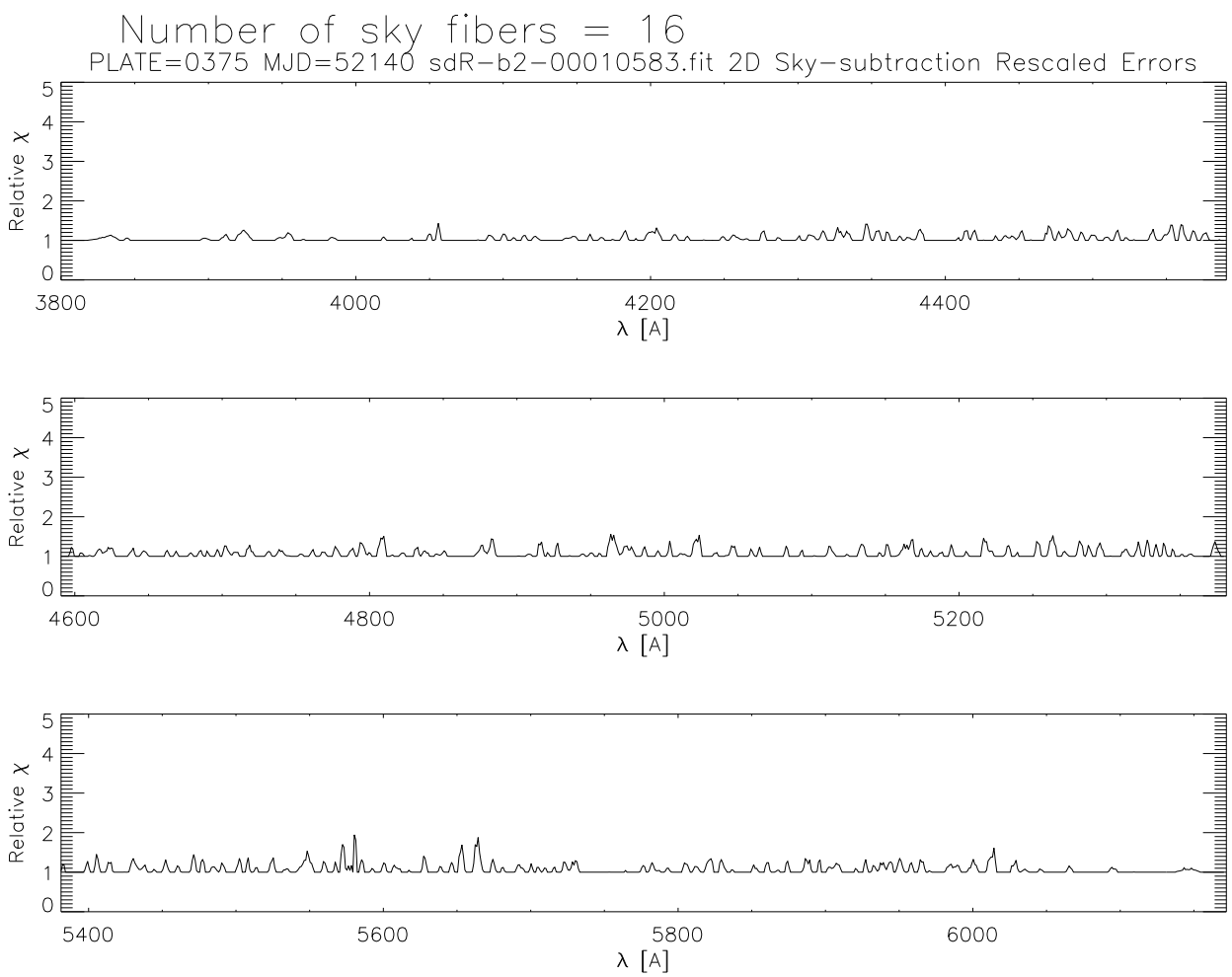

PLATE=0375 MJD=52140 sdR-b2-00010583.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

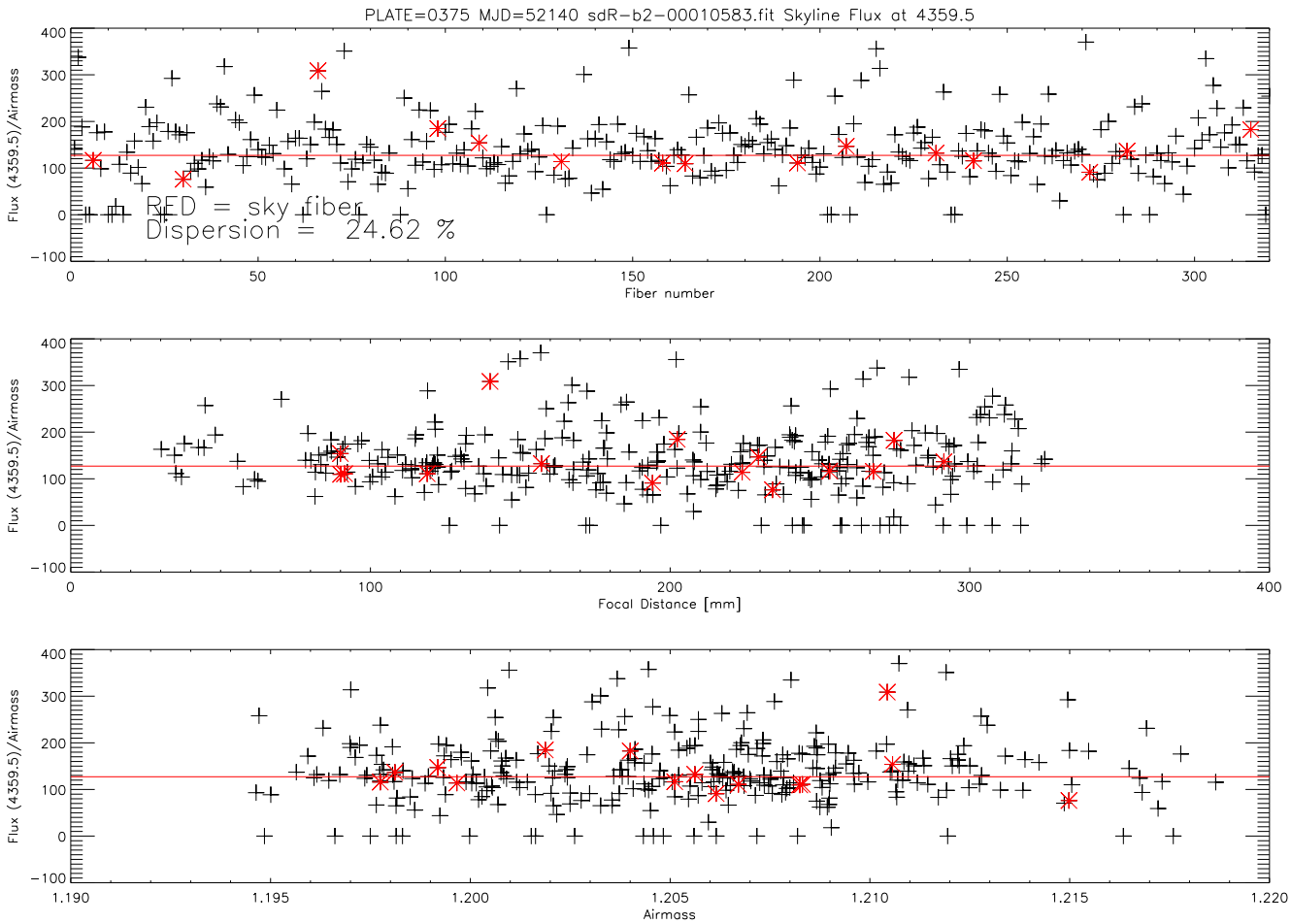

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010583.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

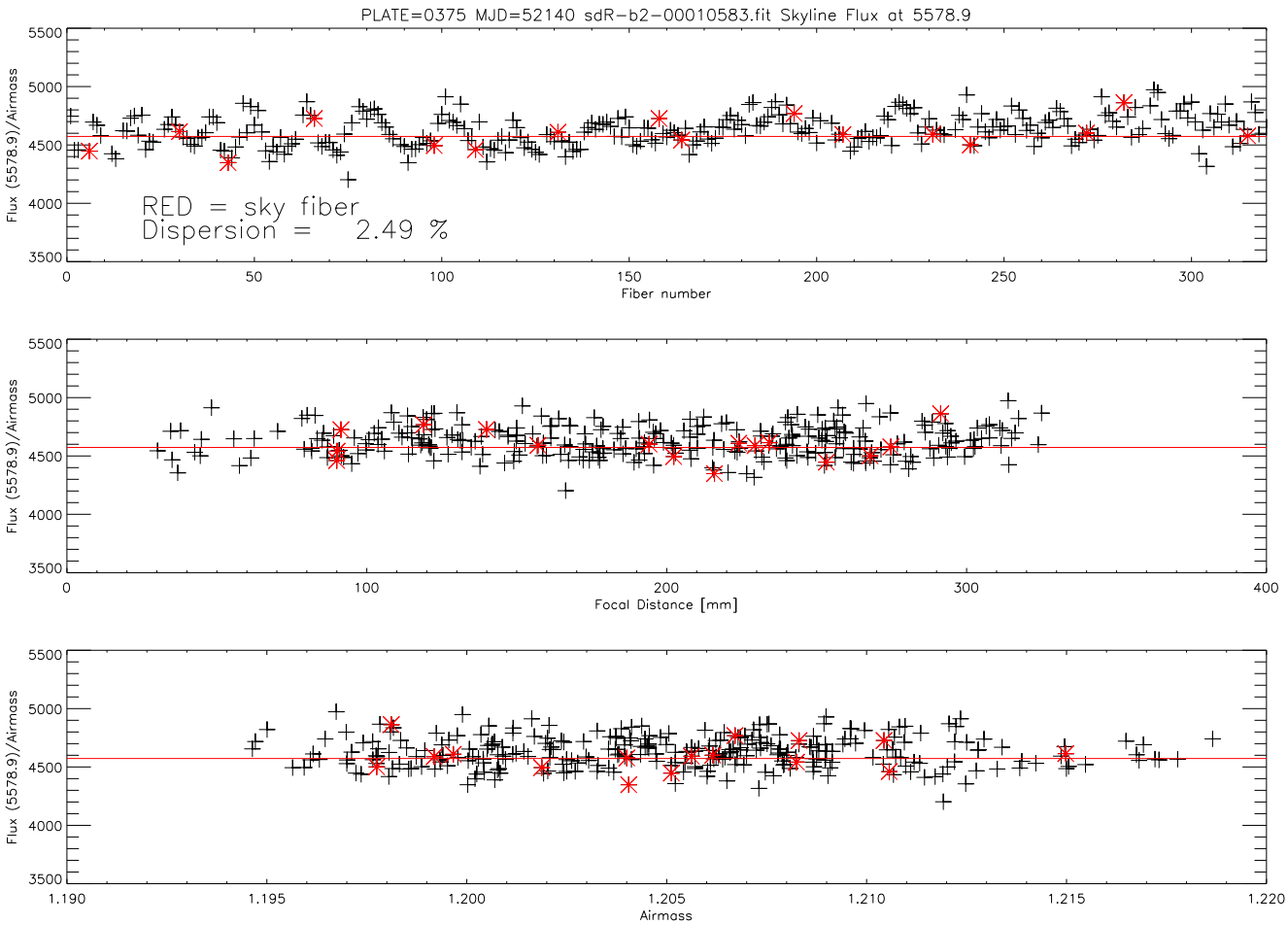

PLATE=0375 MJD=52140 sdR-b2-00010583.fit 2D Sky-subtraction Sky Fiber
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

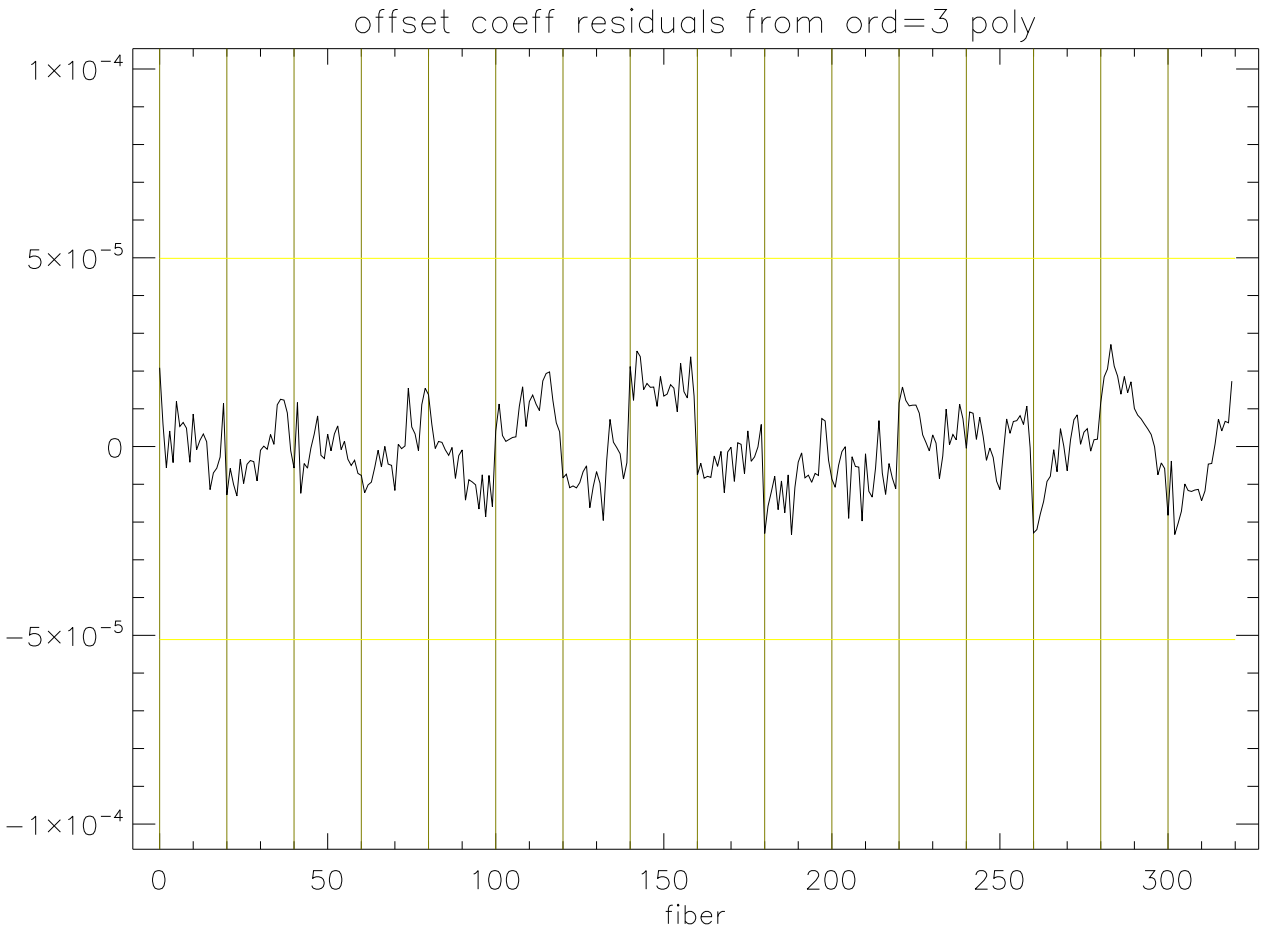

PLATE=0375 MJD=52140 sdR-b2-00010583.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

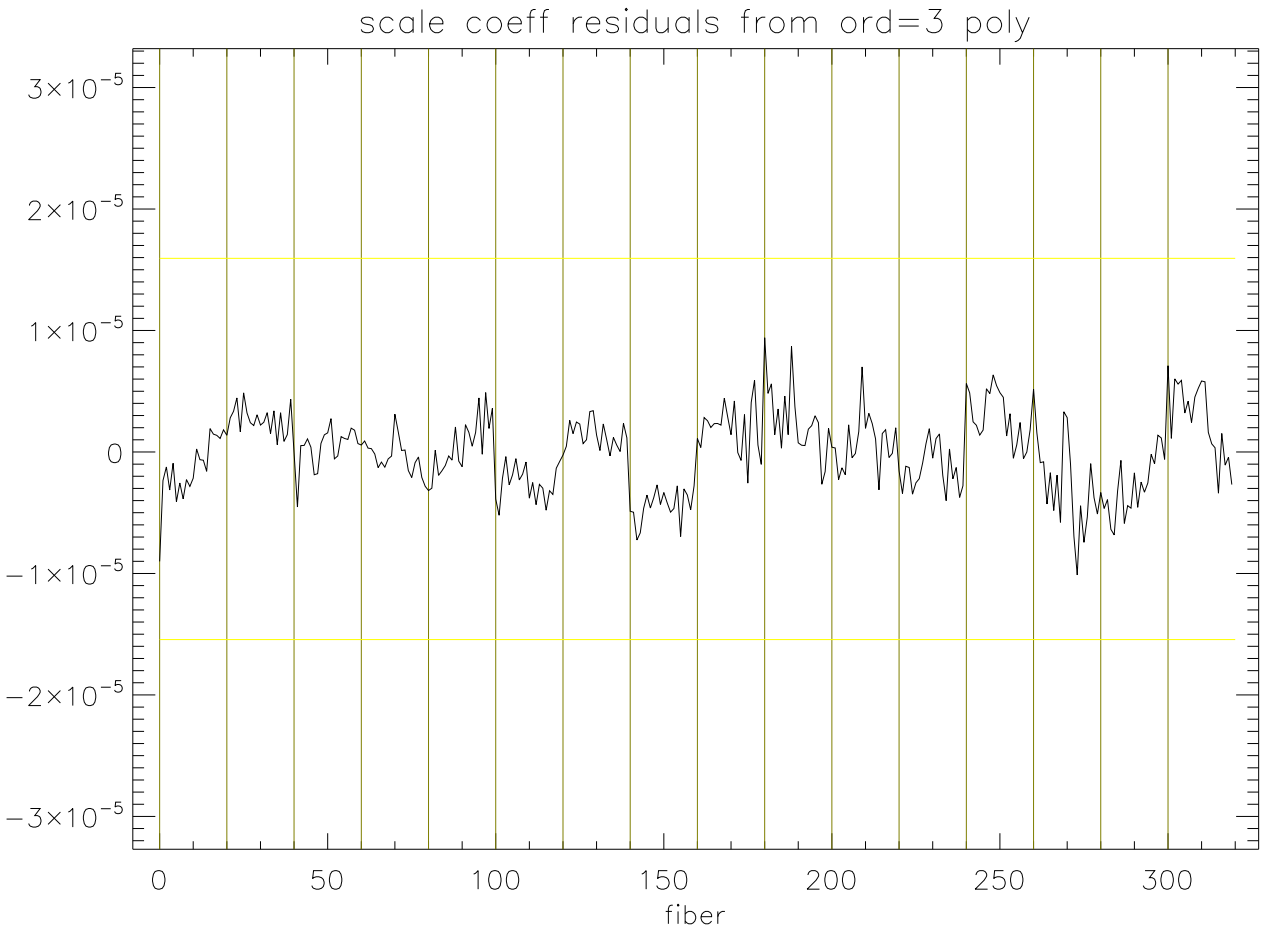

PLATE=0375 MJD=52140 sdR-b2-00010583.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

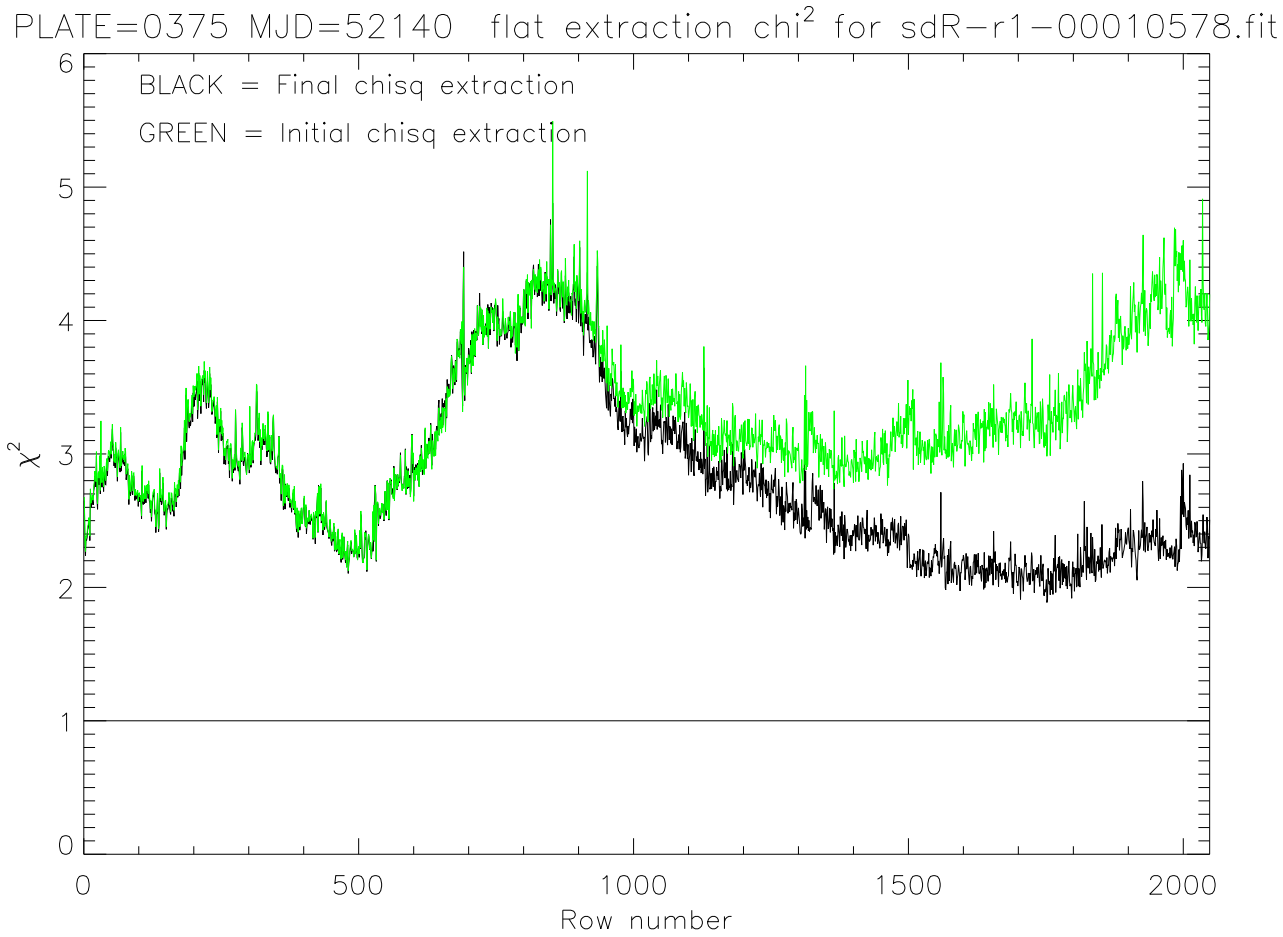

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-b2-00010583.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
3800
4000
4200
4400
4600
4800
5000
5200
5400
5600
5800
6000
0
1
2
3
4
5

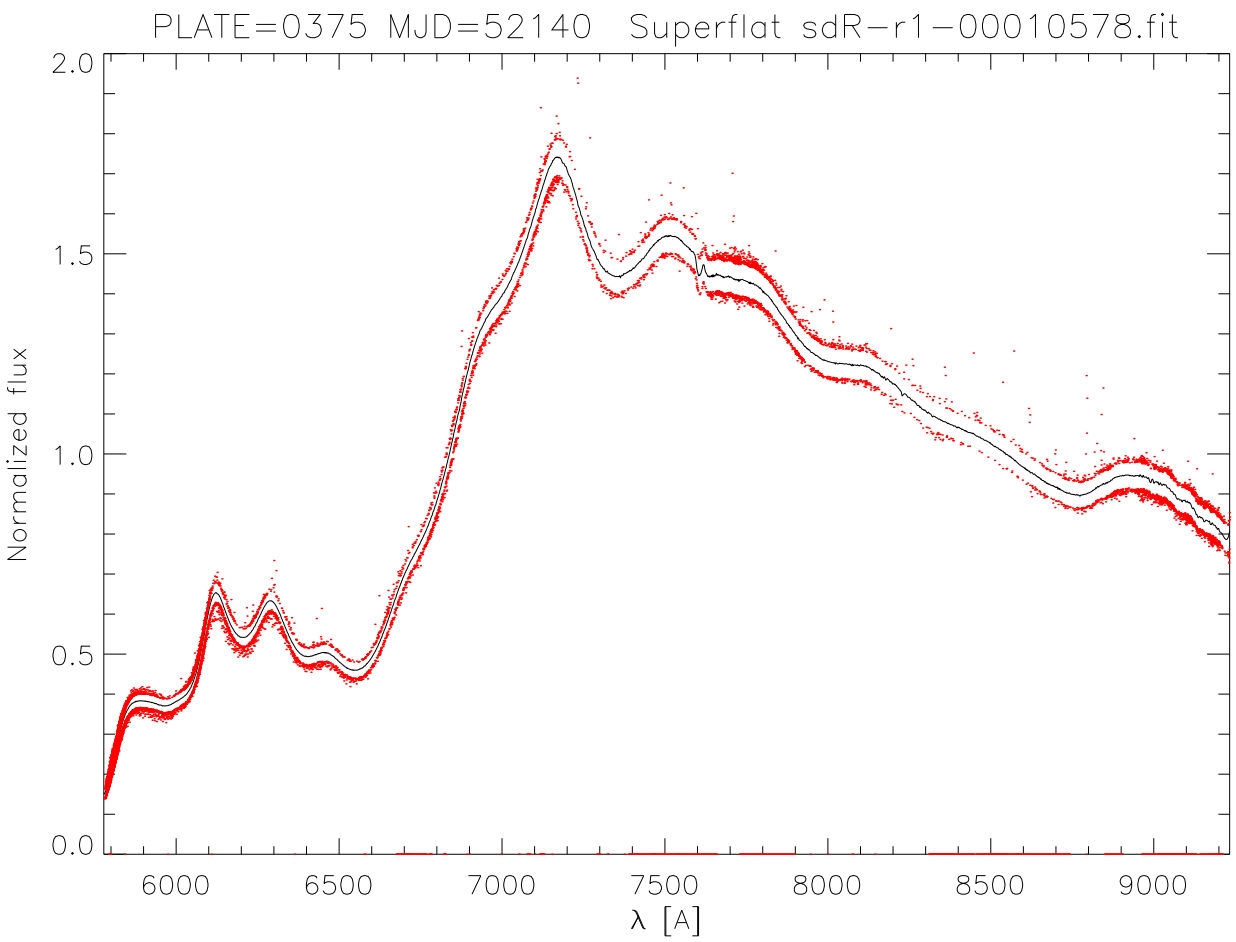

PLATE=0375 MJD=52140 sdR-b2-00010583.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 24.62 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

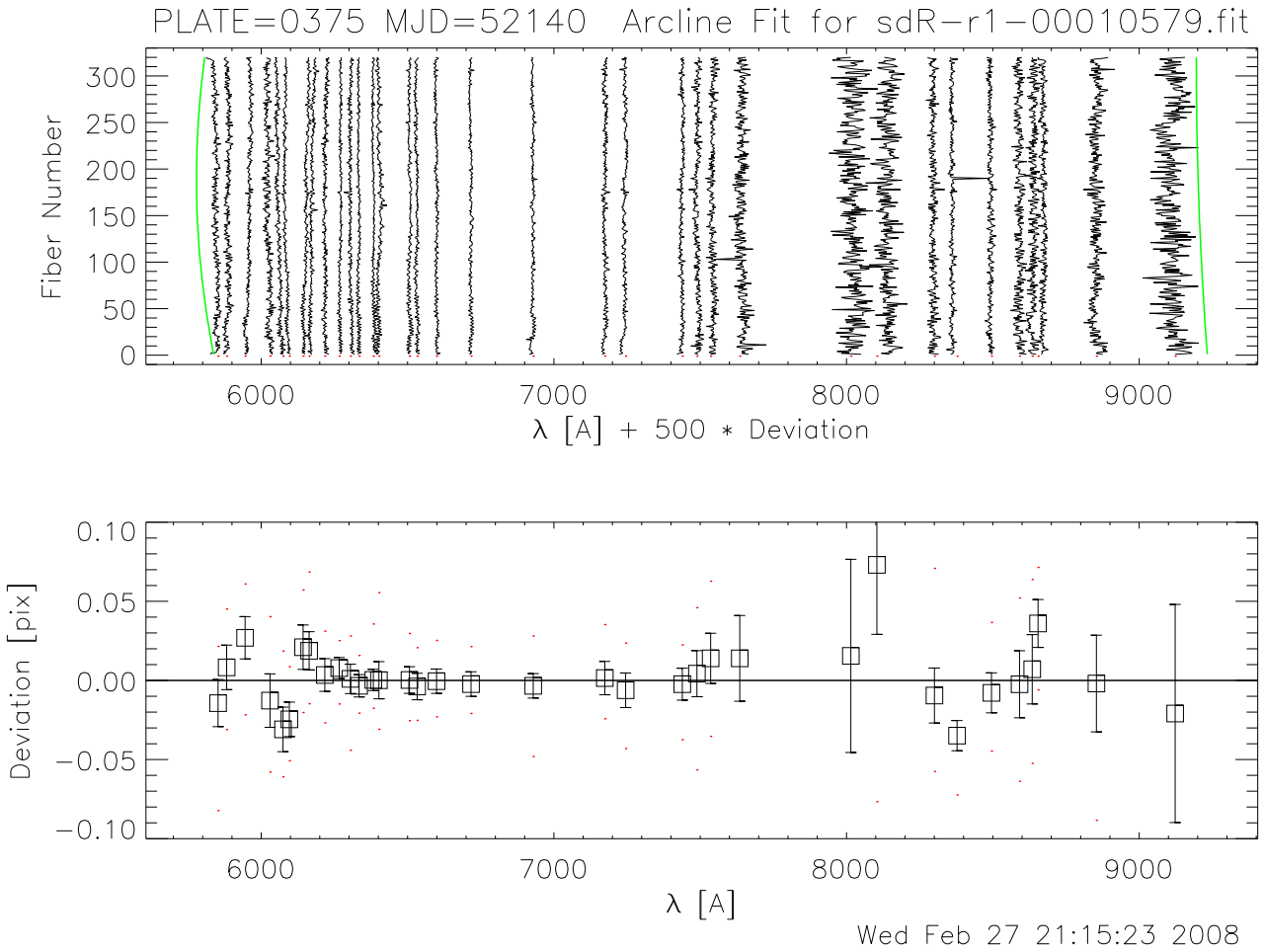

PLATE=0375 MJD=52140 sdR-b2-00010583.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.49 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass


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


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


PLATE=0375 MJD=52140 flat extraction chi^2 for sdR−r1−00010578.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
6
0
500
1000
1500
2000


PLATE=0375 MJD=52140 Superflat sdR-r1-00010578.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=0375 MJD=52140 Arcline Fit for sdR-r1-00010579.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]
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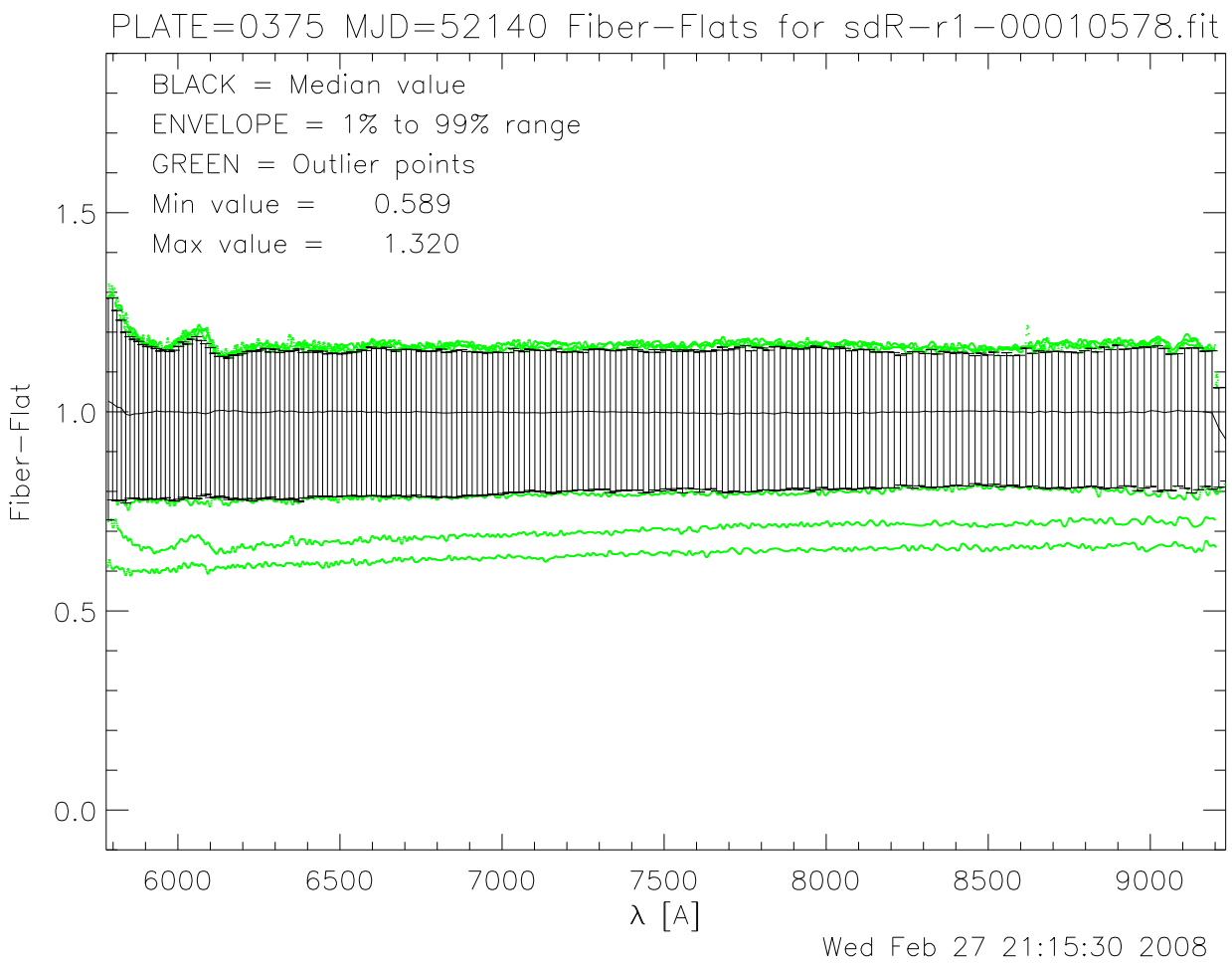
PLATE=0375 MJD=52140 Fiber−Flats for sdR−r1−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.589
Max value = 1.320
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
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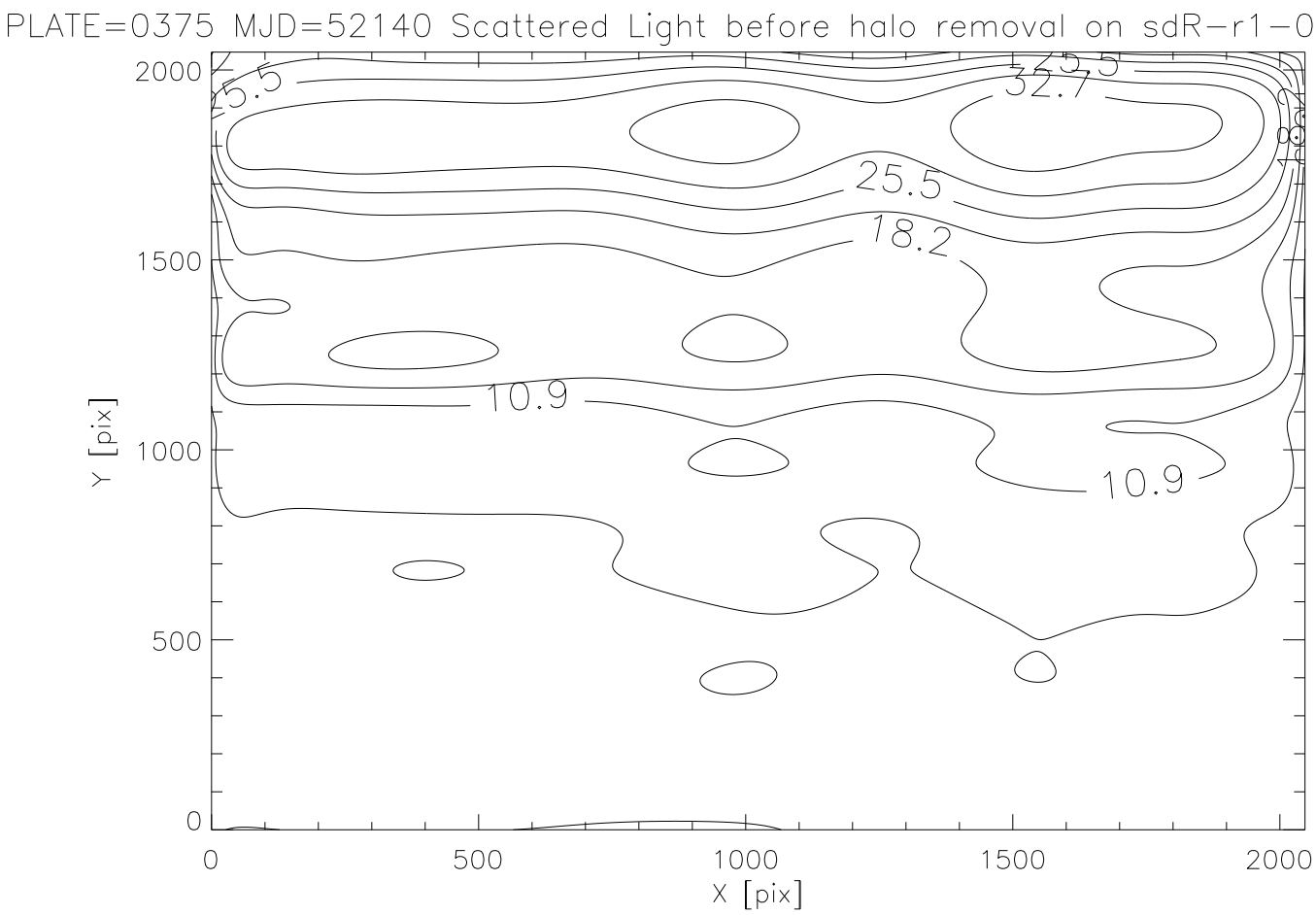
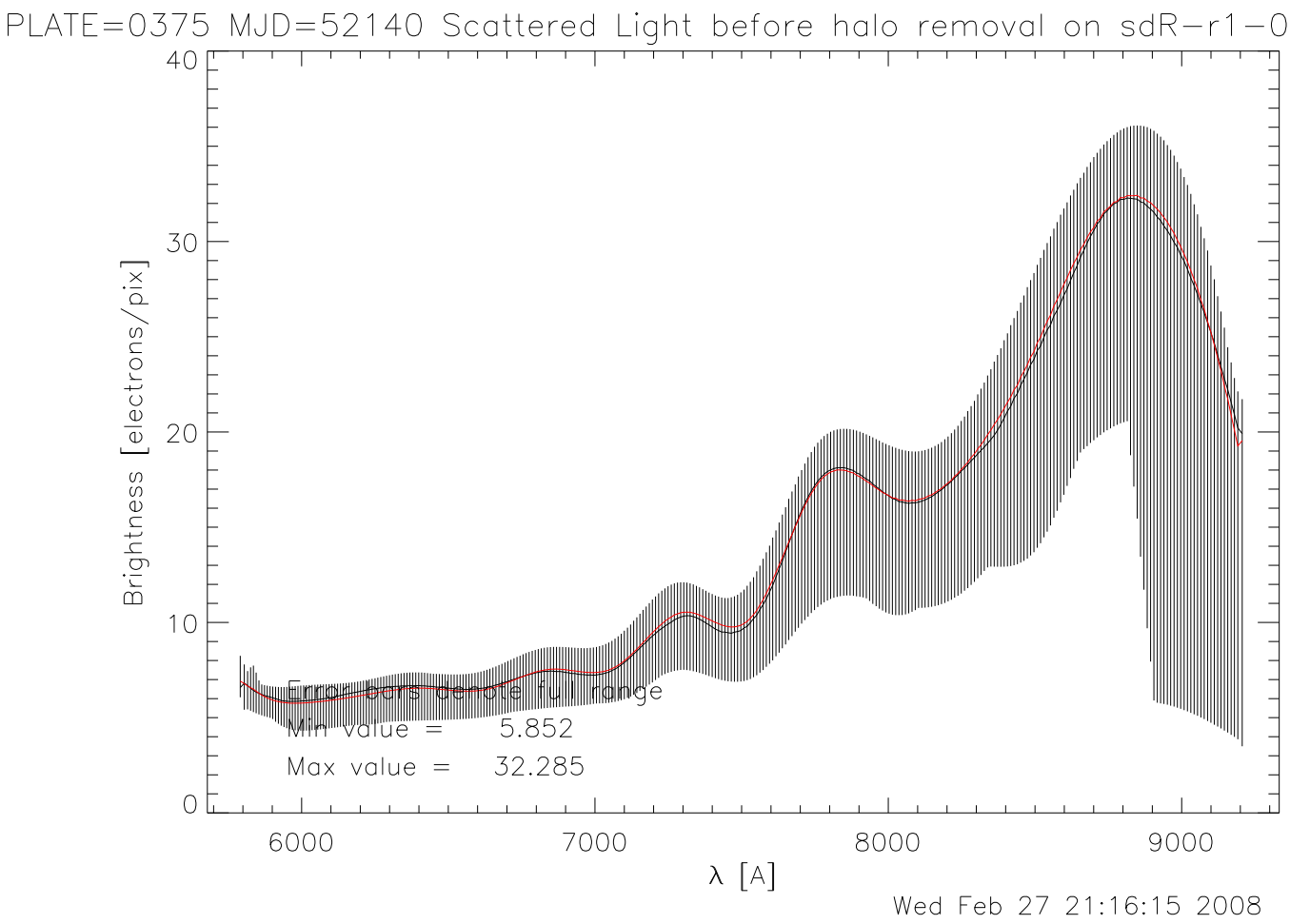

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR−r1−00010580.fi
25.5
32.7
25.5
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r1-00010580.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.852
Max value = 32.285
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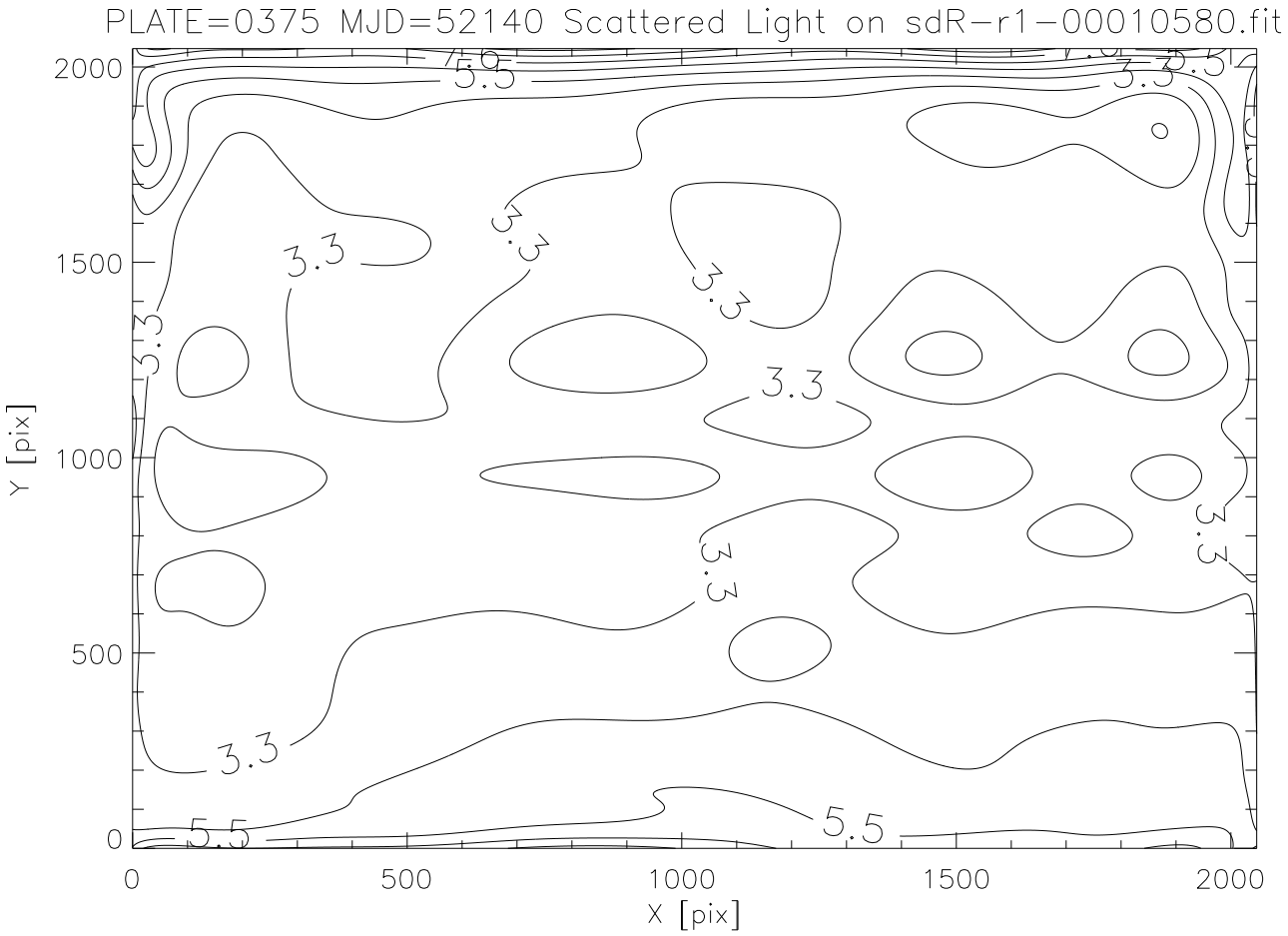
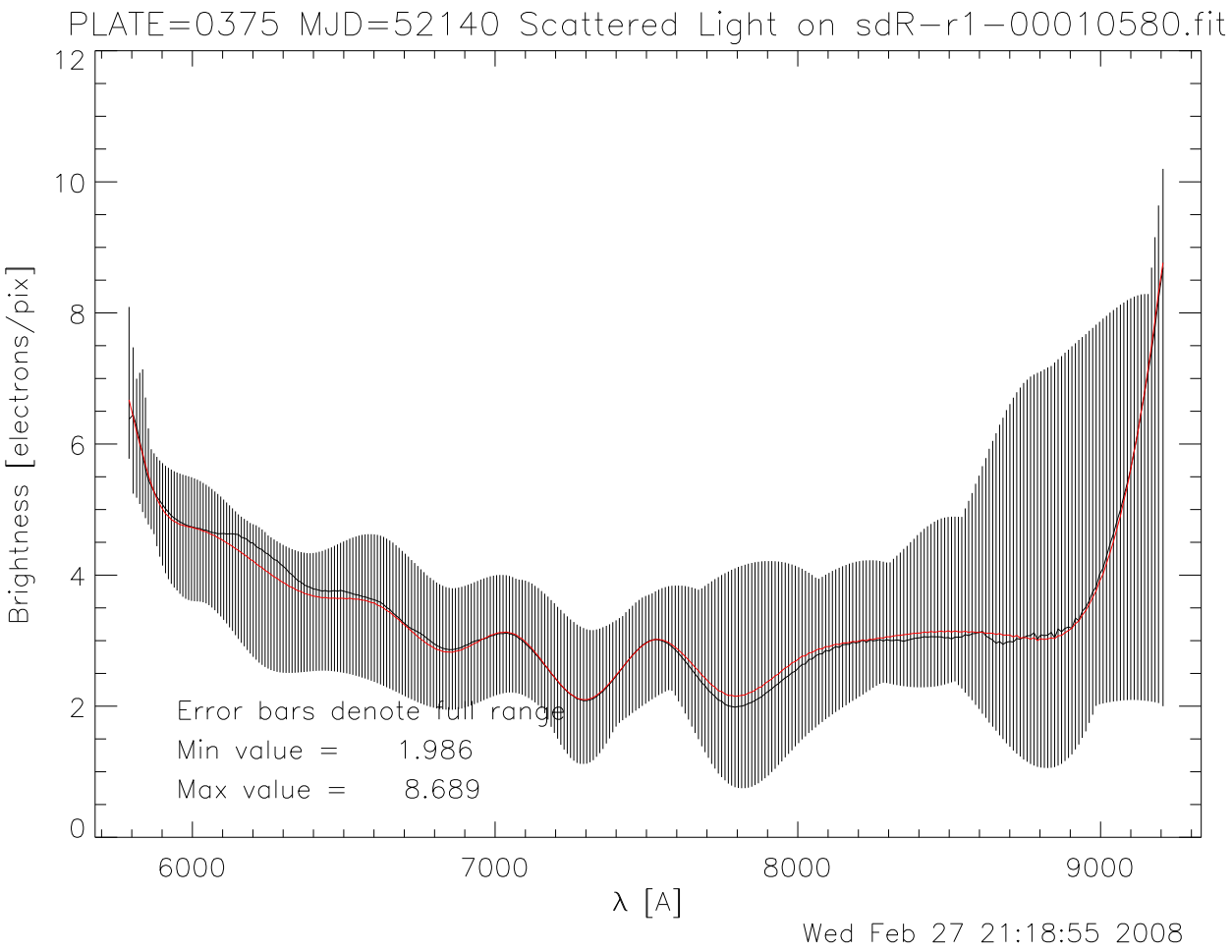

PLATE=0375 MJD=52140 Scattered Light on sdR-r1-00010580.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
5.5
3.3


PLATE=0375 MJD=52140 Scattered Light on sdR-r1-00010580.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.986
Max value = 8.689
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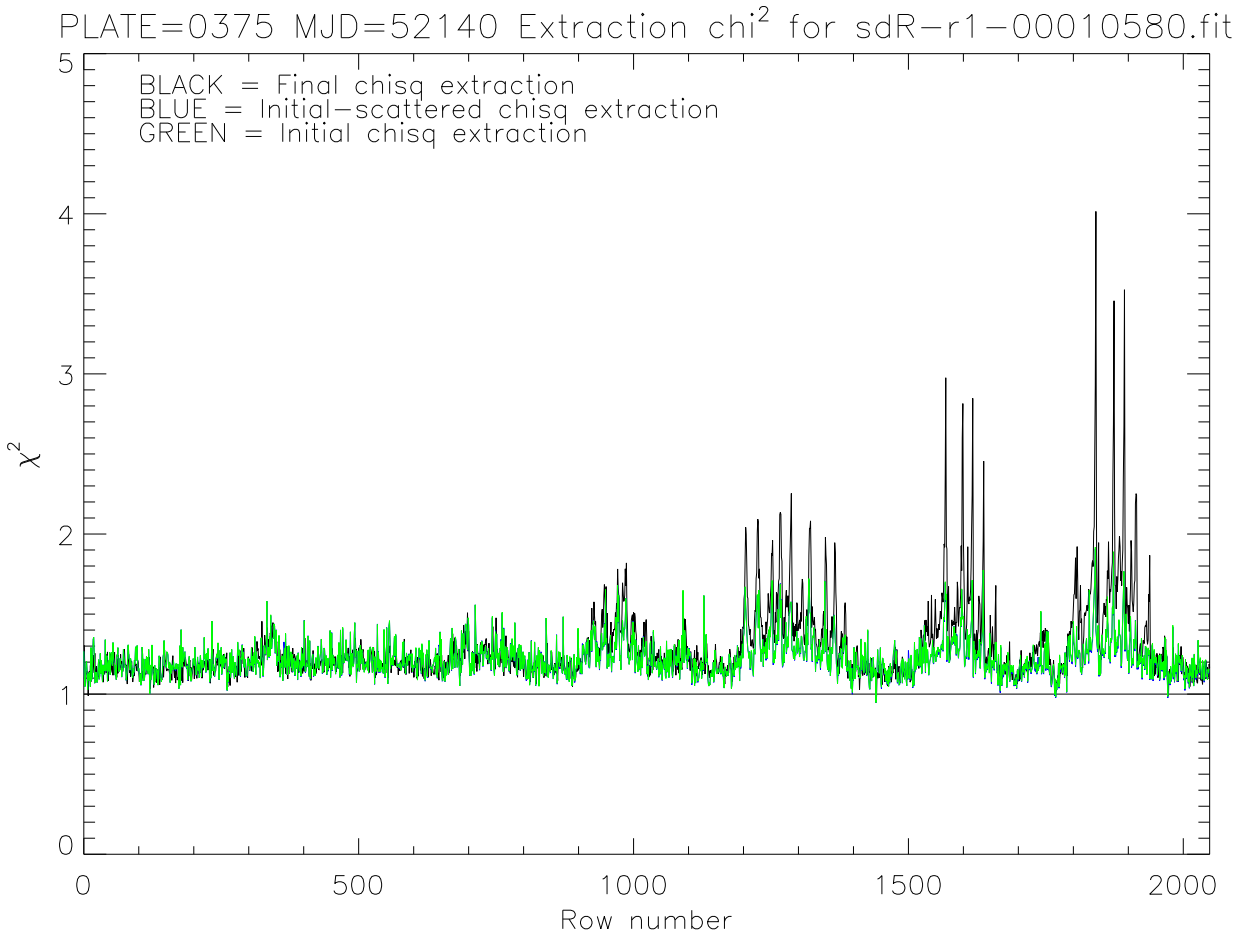
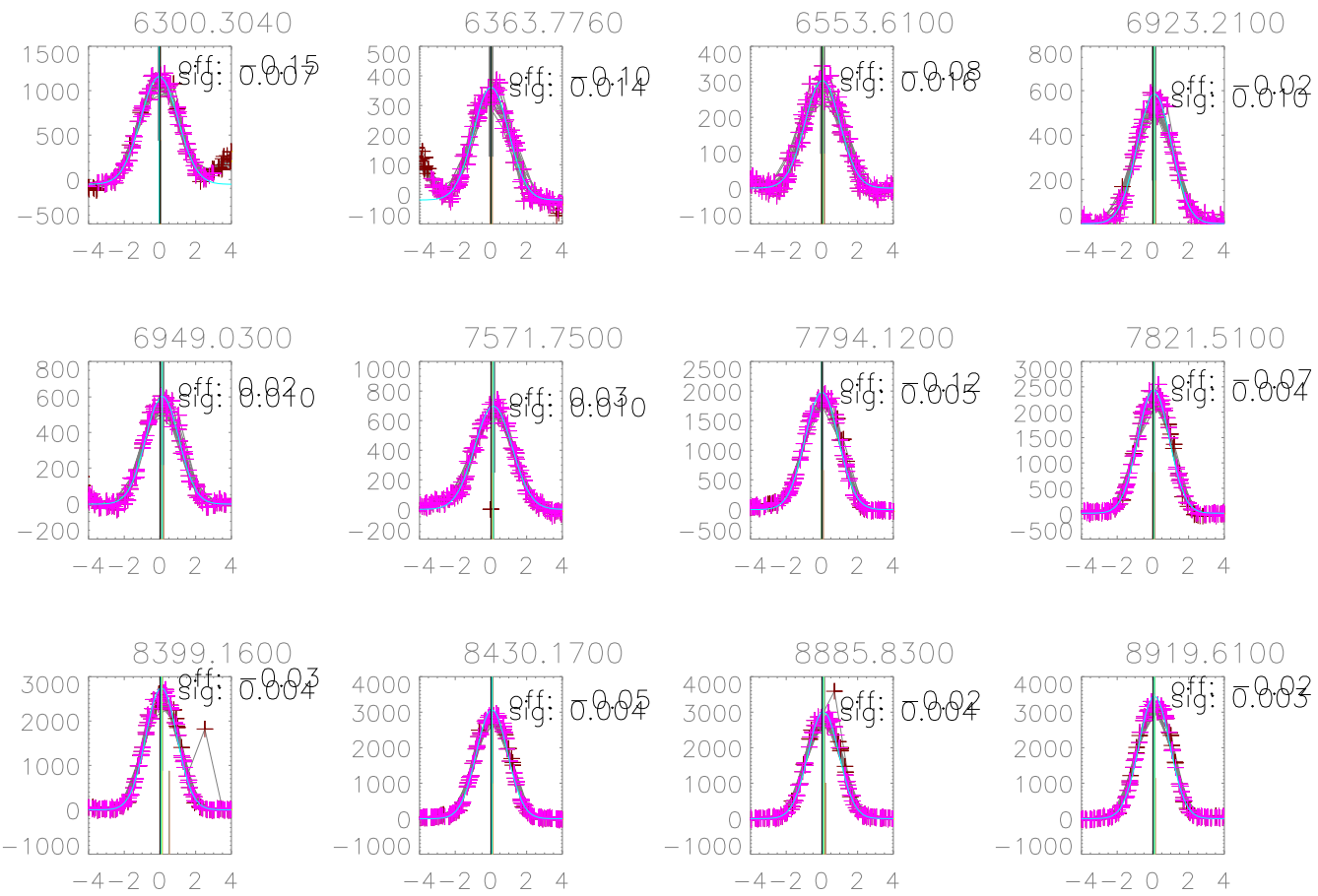
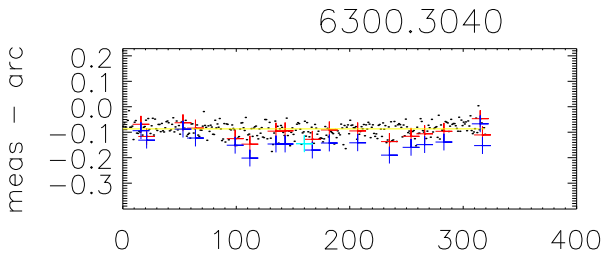
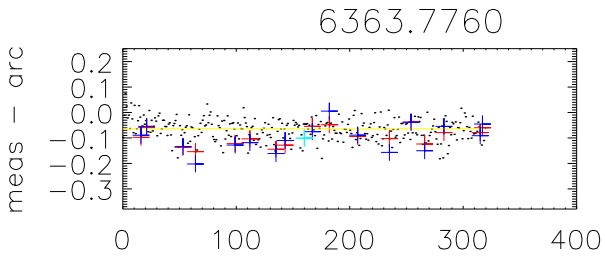
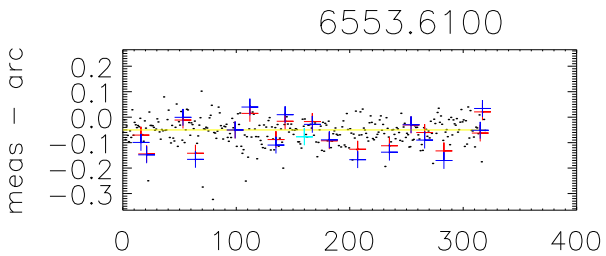
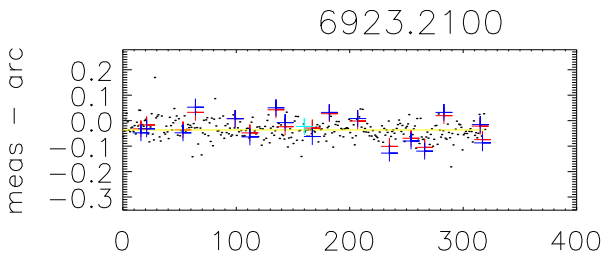

PLATE=0375 MJD=52140 Extraction chi^2 for sdR−r1−00010580.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

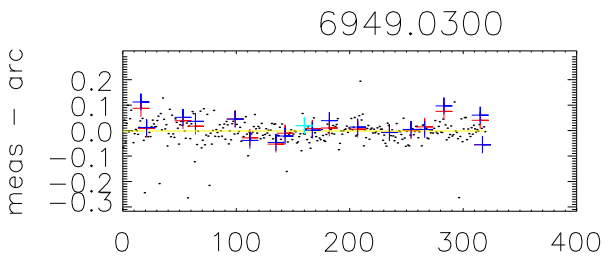

6300.3040
off: −0.15
sig: 0.007
6363.7760
off: −0.10
sig: 0.014
6553.6100
off: −0.08
sig: 0.016
6923.2100
off: −0.02
sig: 0.010
6949.0300
off: 0.02
sig: 0.010
7571.7500
off: 0.03
sig: 0.010
7794.1200
off: −0.12
sig: 0.005
7821.5100
off: −0.07
sig: 0.004
8399.1600
off: −0.03
sig: 0.004
8430.1700
off: −0.05
sig: 0.004
8885.8300
off: −0.02
sig: 0.004
8919.6100
off: −0.02
sig: 0.003

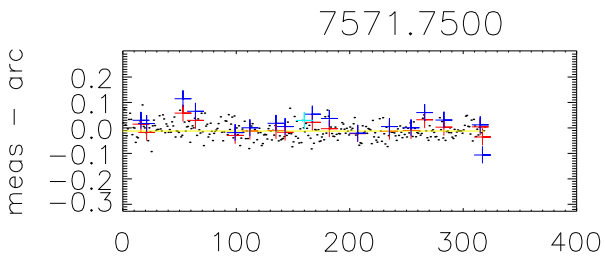

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

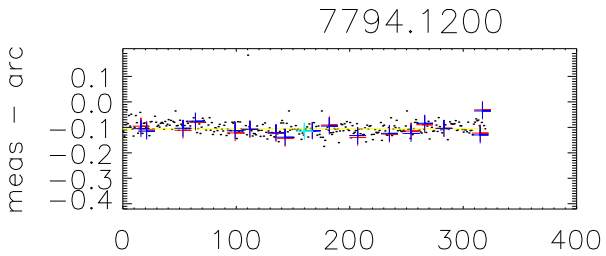

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

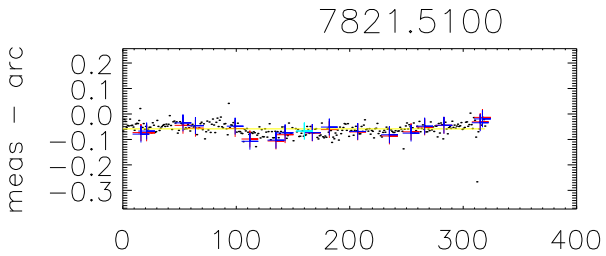

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

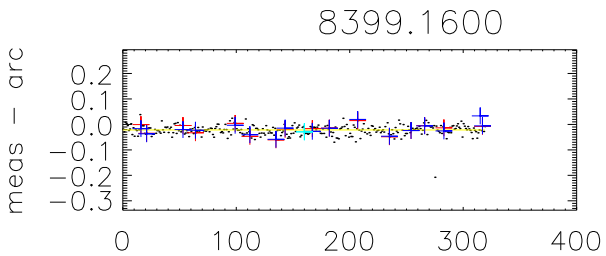

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

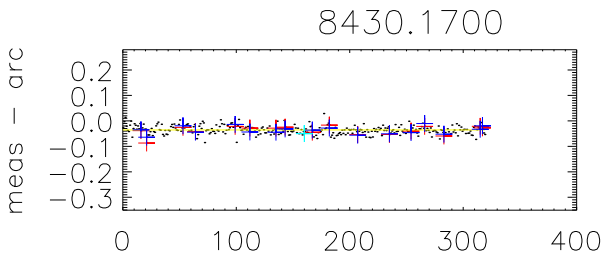

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

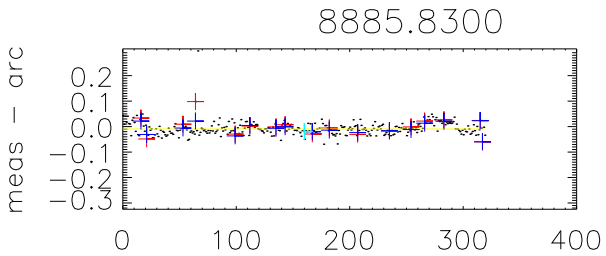

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

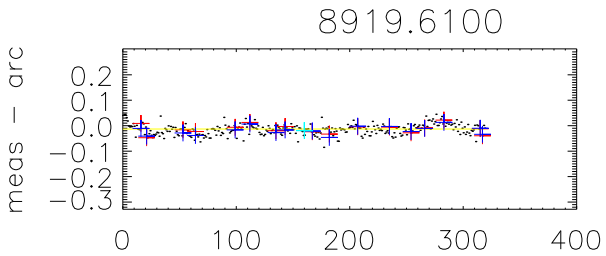

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

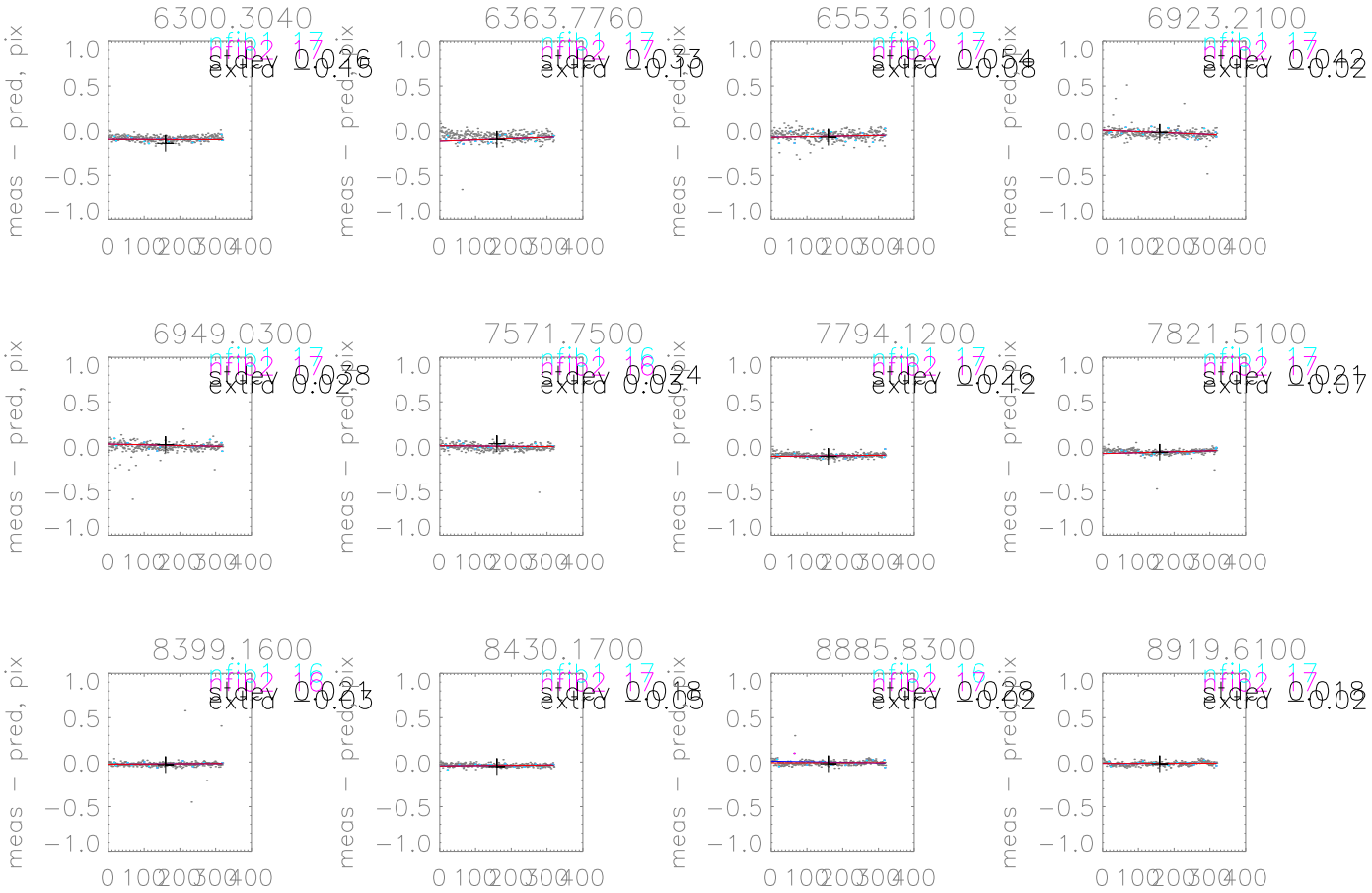

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

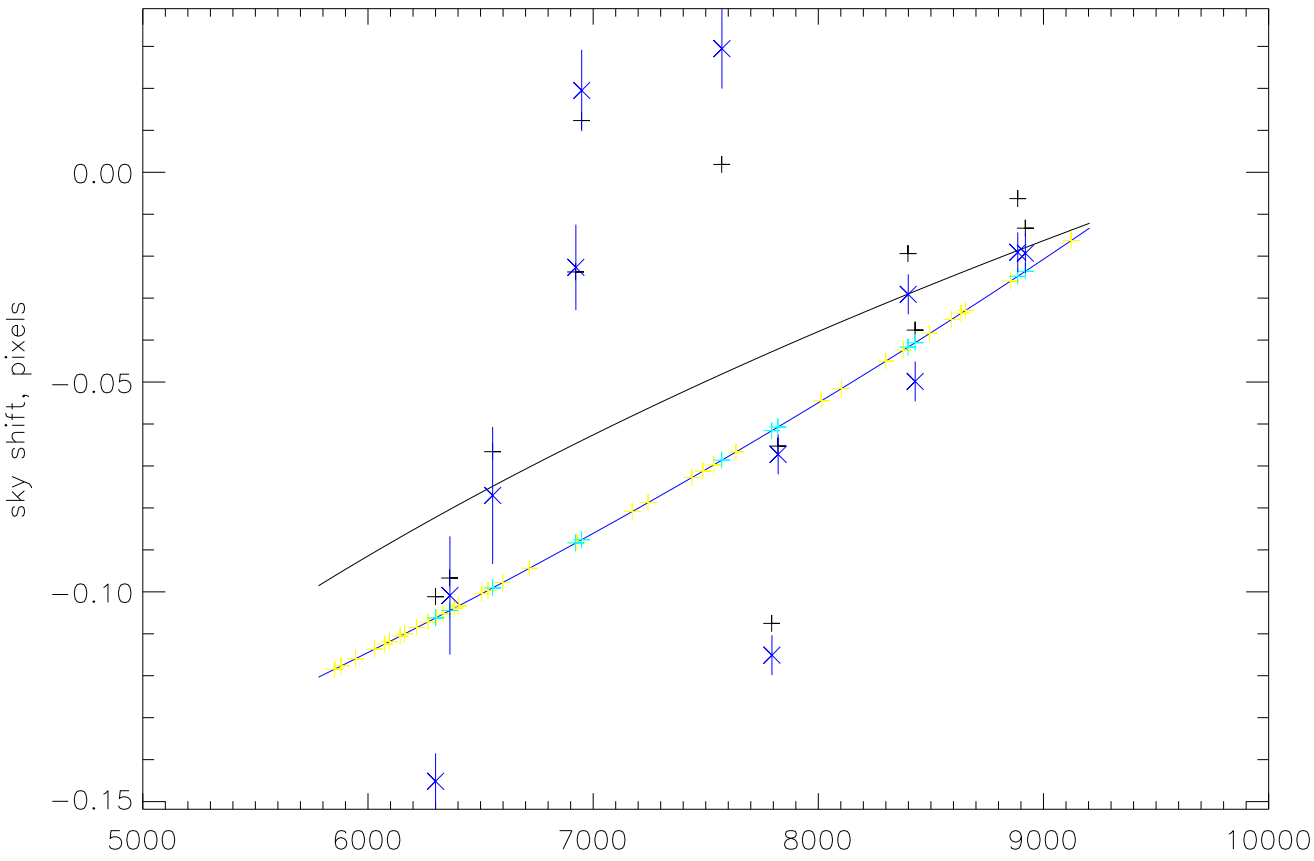

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

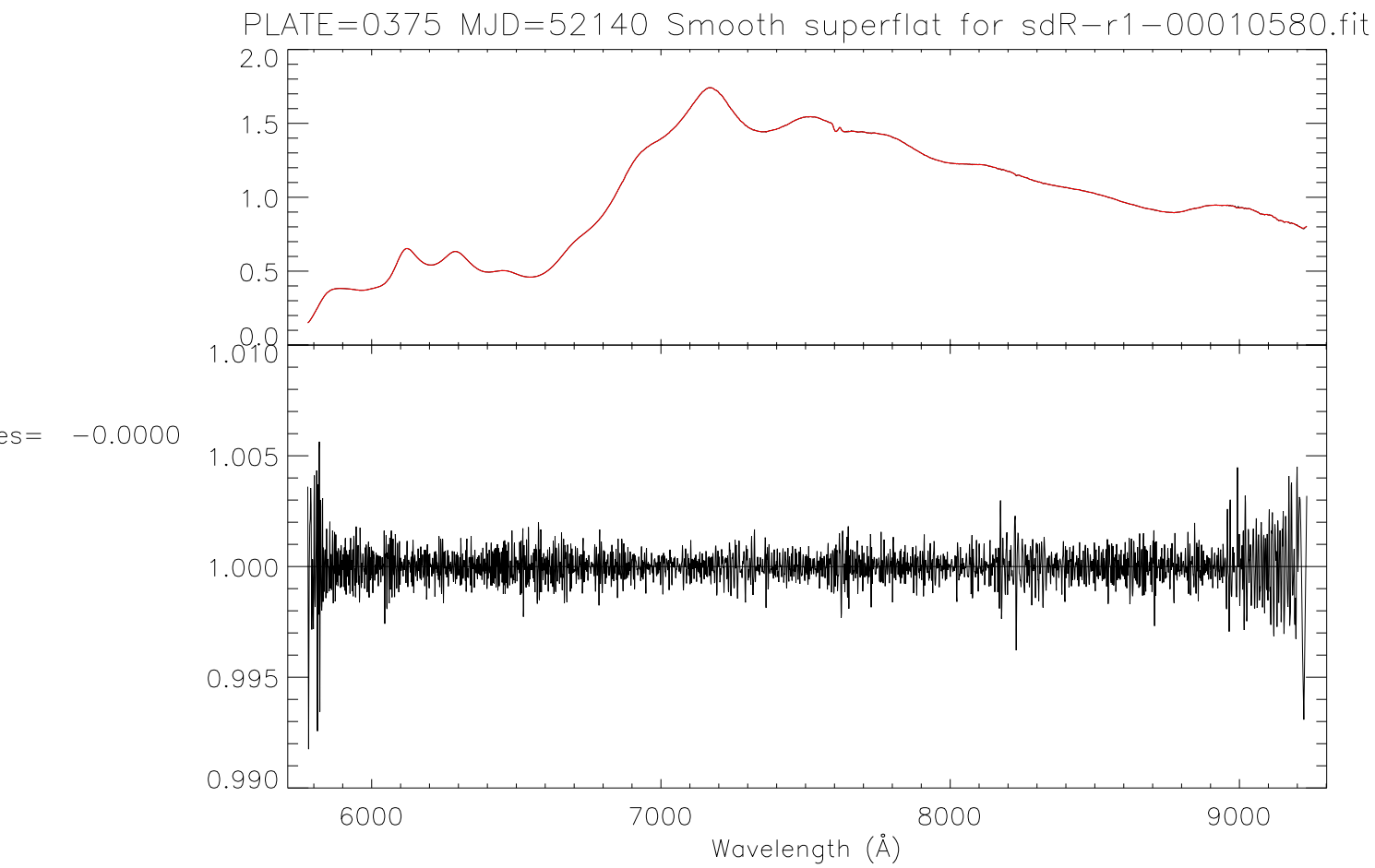

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

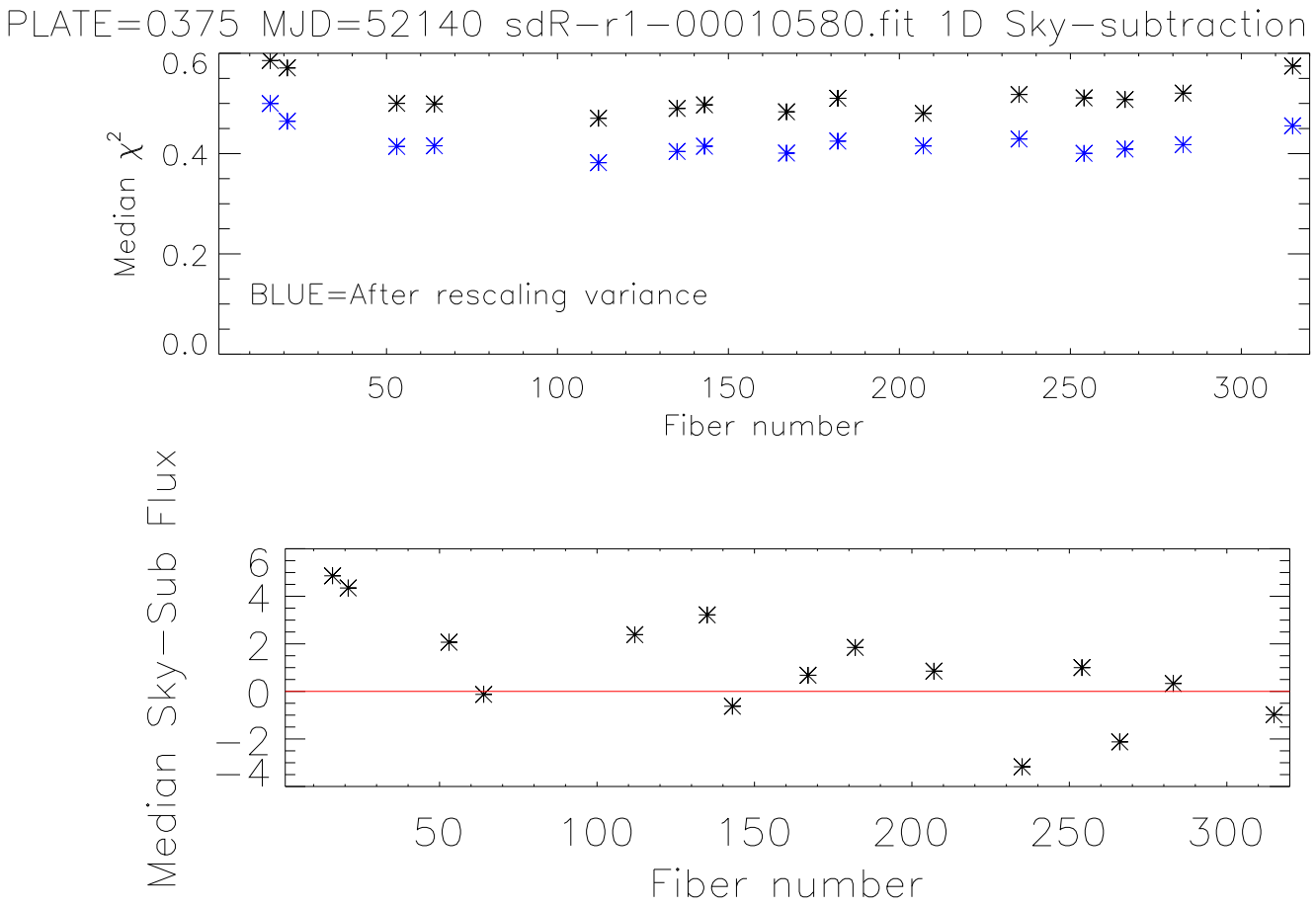

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

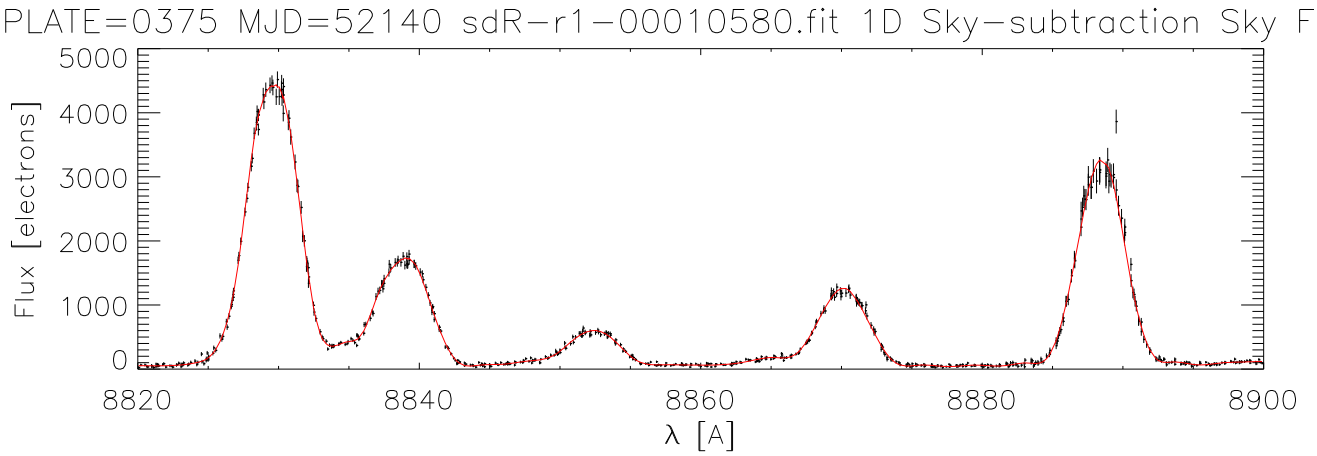

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

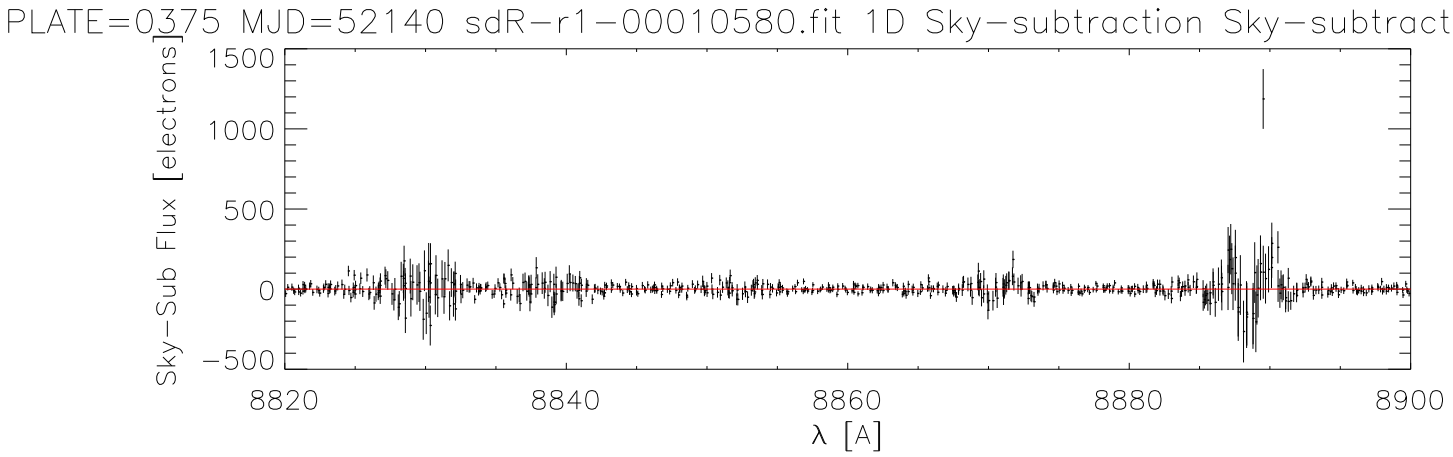

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfb1 17
mfb2 17
mfb1 16
mfb2 16
stdev 0.026
extra −0.45
stdev 0.033
extra −0.10
stdev 0.054
extra −0.08
stdev 0.042
extra −0.02
stdev 0.038
extra 0.02
stdev 0.024
extra 0.03
stdev 0.026
extra −0.42
stdev 0.021
extra −0.07
stdev 0.021
extra −0.03
stdev 0.018
extra −0.05
stdev 0.028
extra −0.02
stdev 0.018
extra −0.02

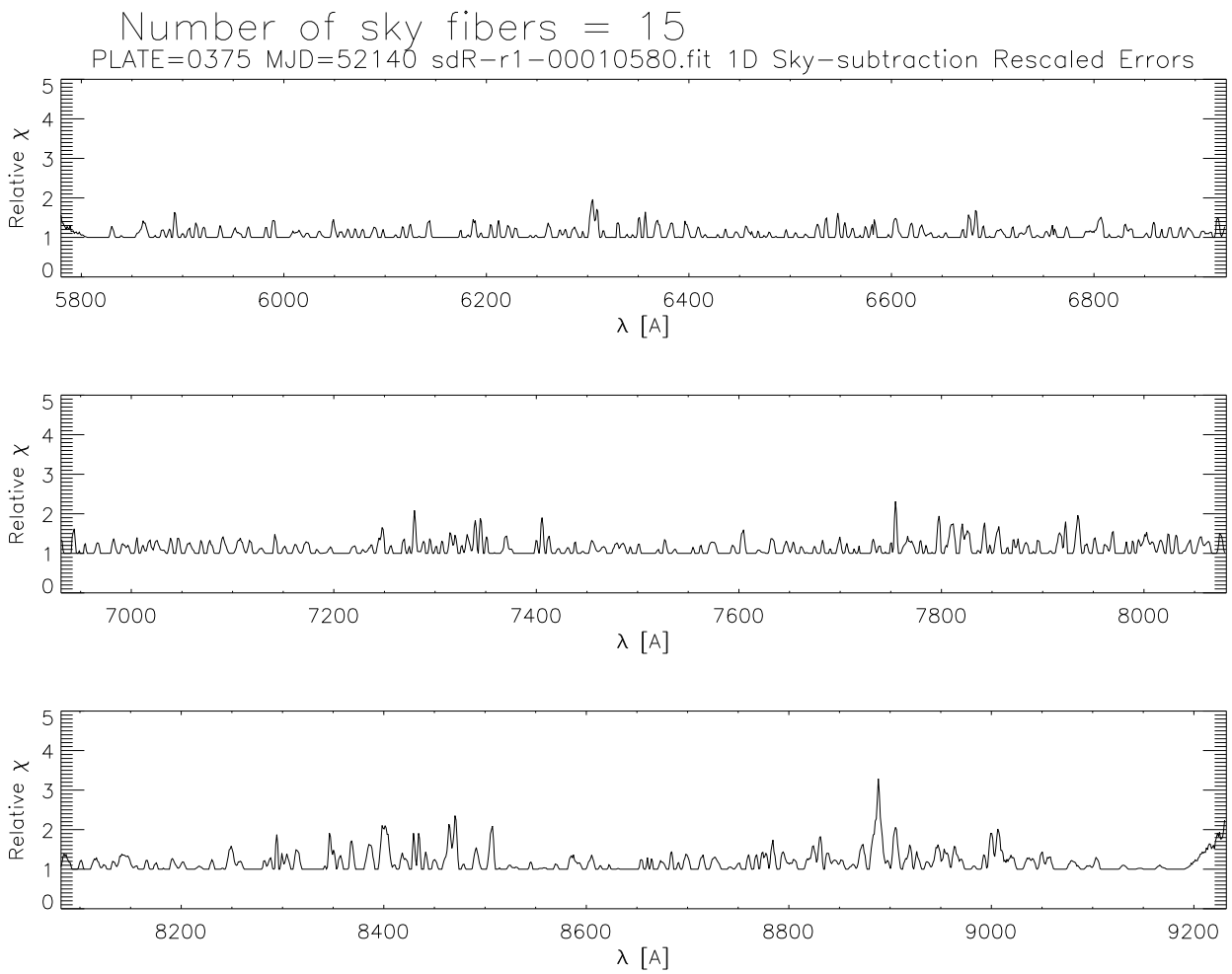

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

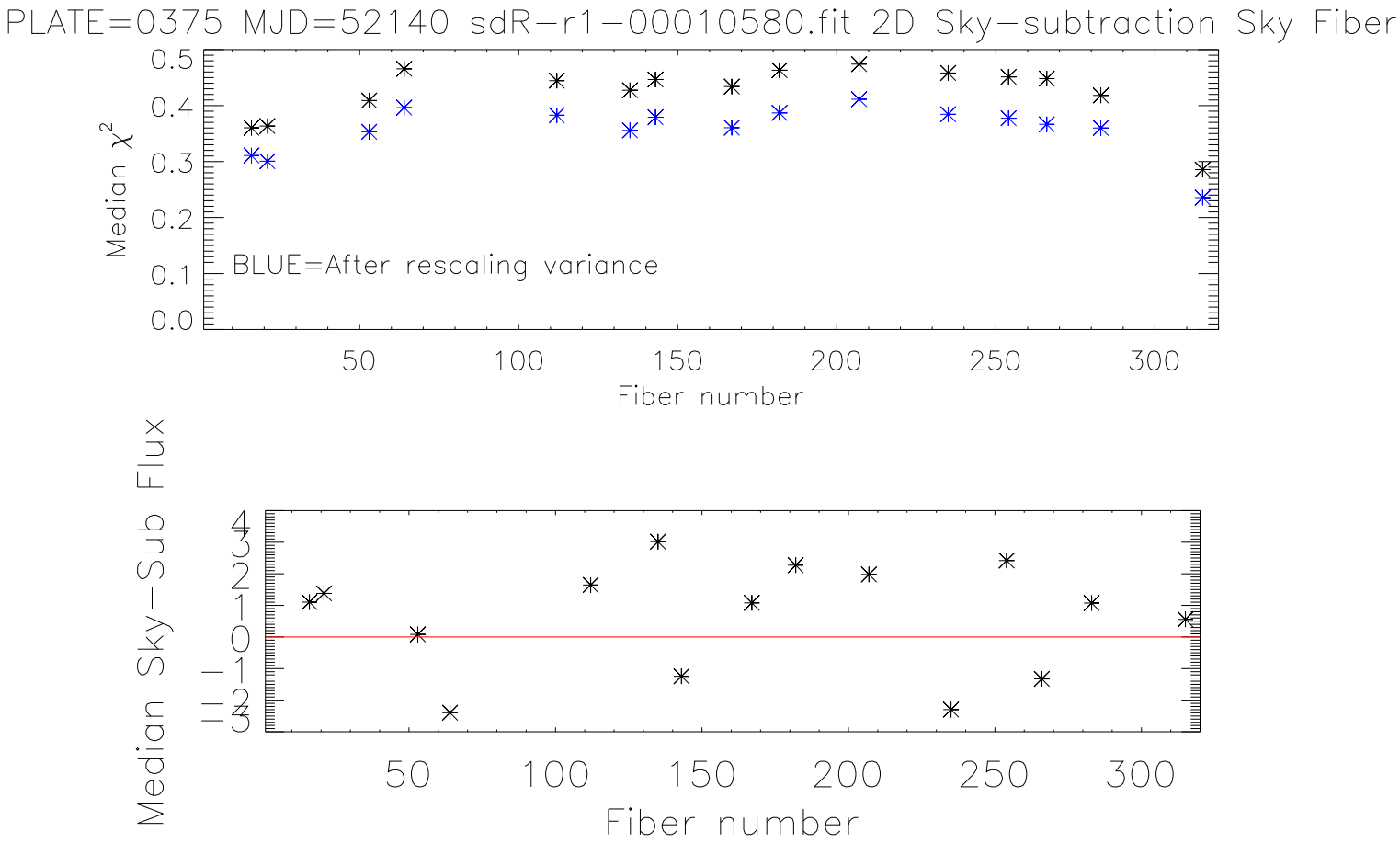

PLATE=0375 MJD=52140 Smooth superflat for sdR-r1-00010580.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

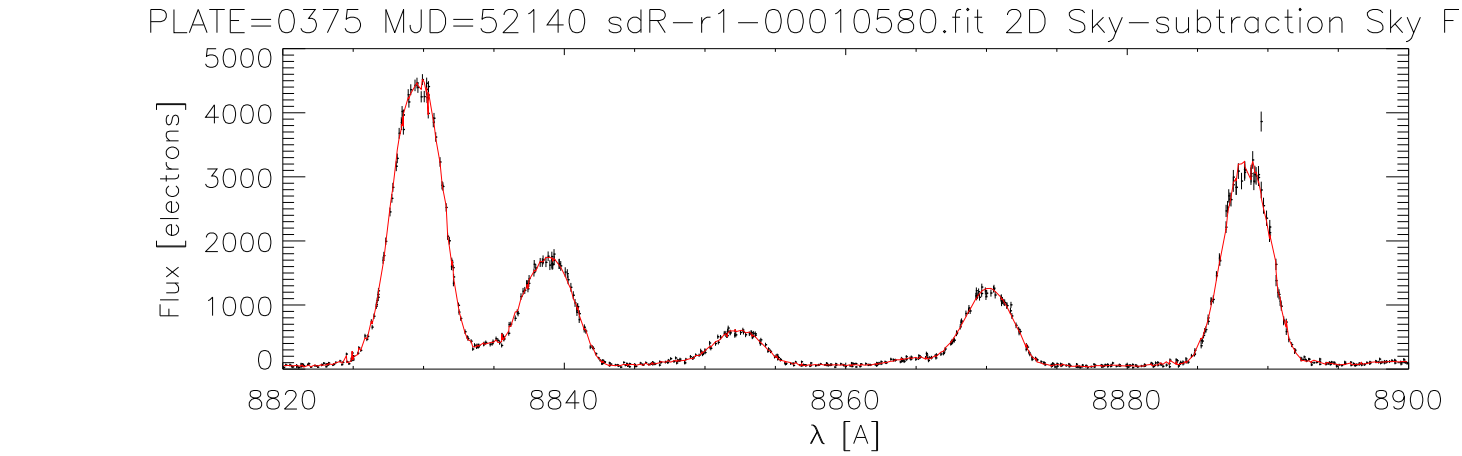

PLATE=0375 MJD=52140 sdR-r1-00010580.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

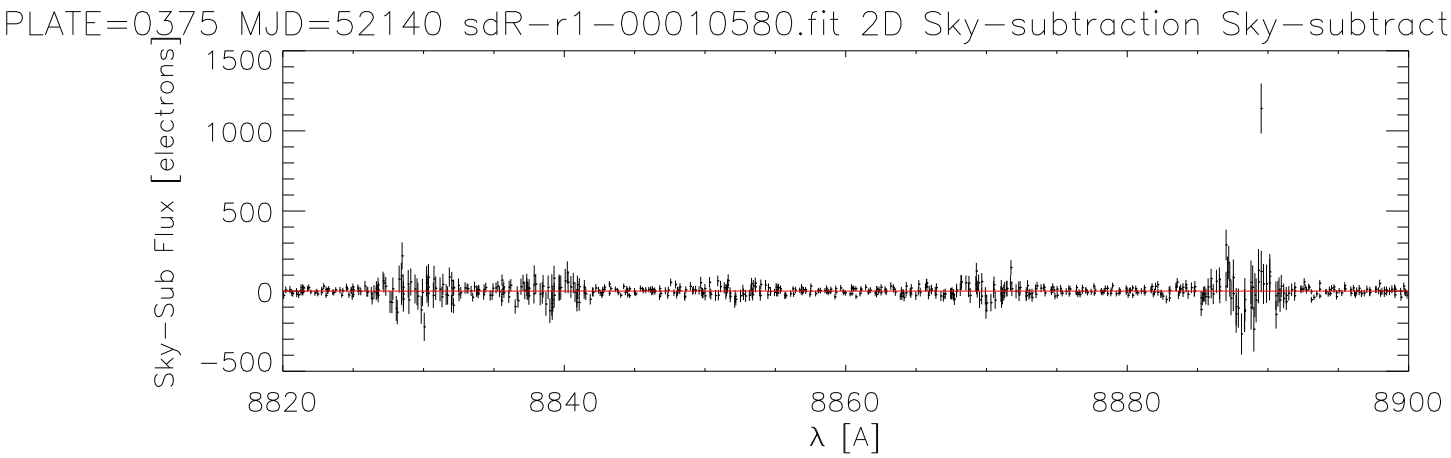

PLATE=0375 MJD=52140 sdR-r1-00010580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

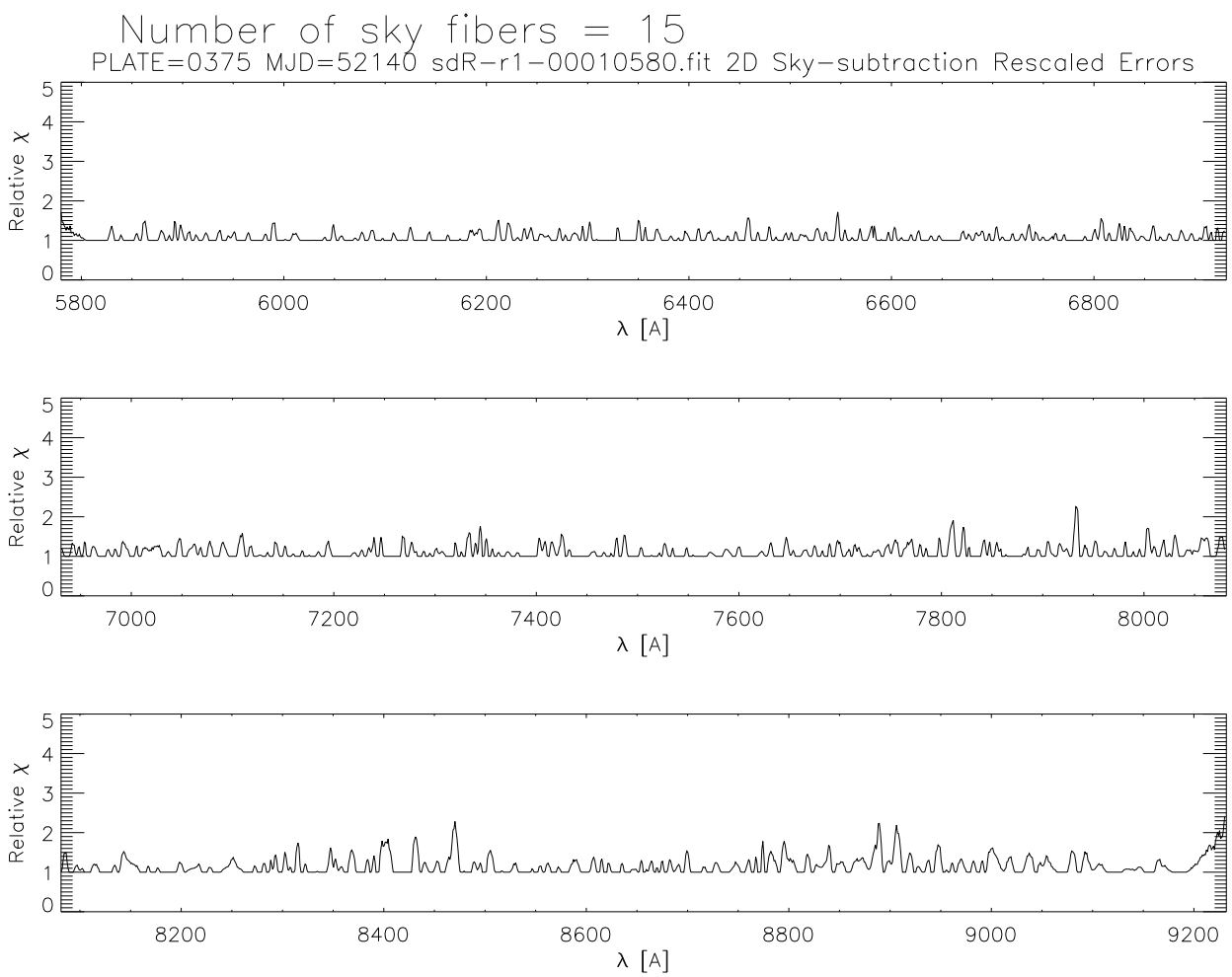

PLATE=0375 MJD=52140 sdR-r1-00010580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

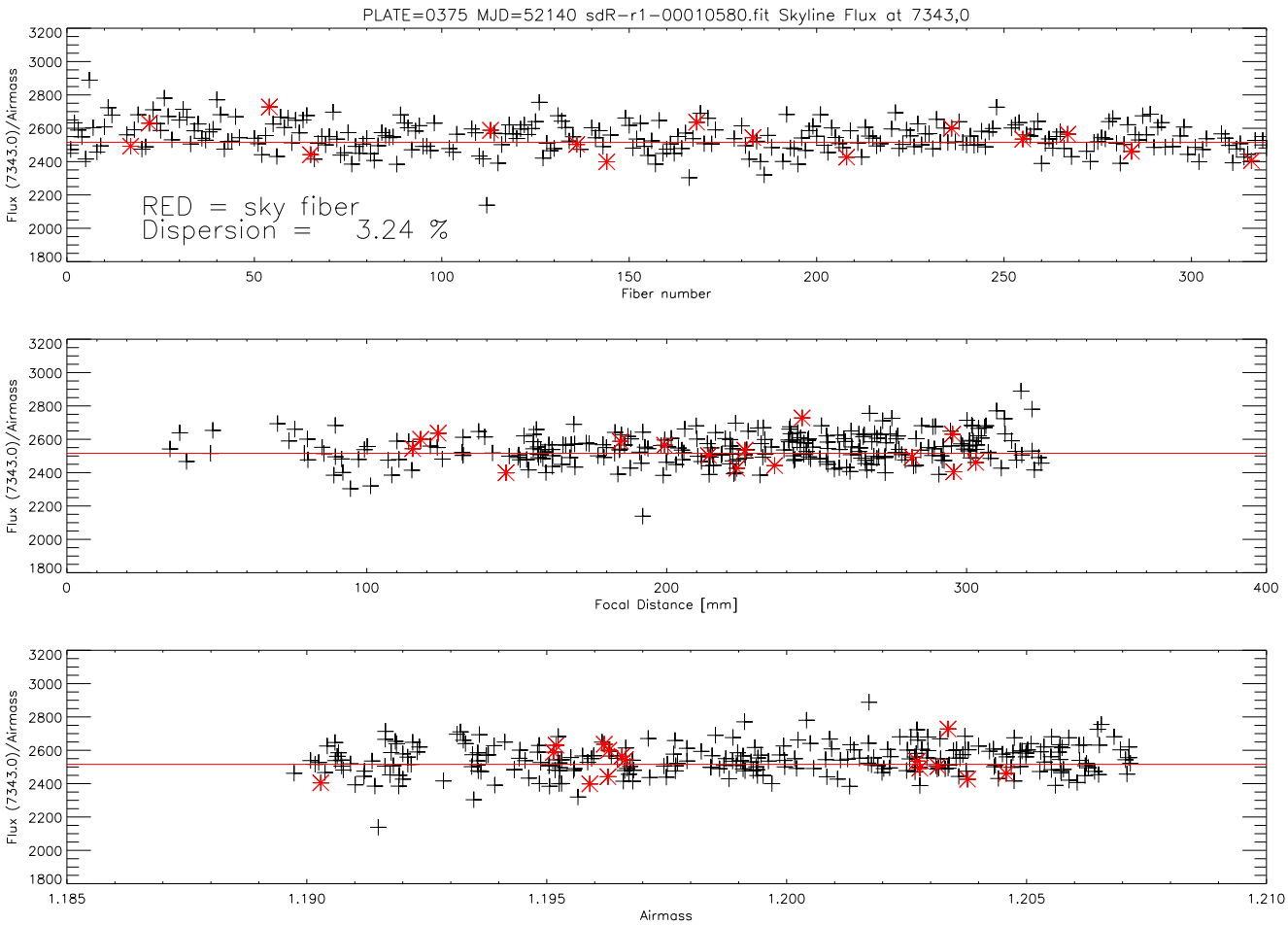

Number of sky fibers = 15
PLATE=0375 MJD=52140 sdR-r1-00010580.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

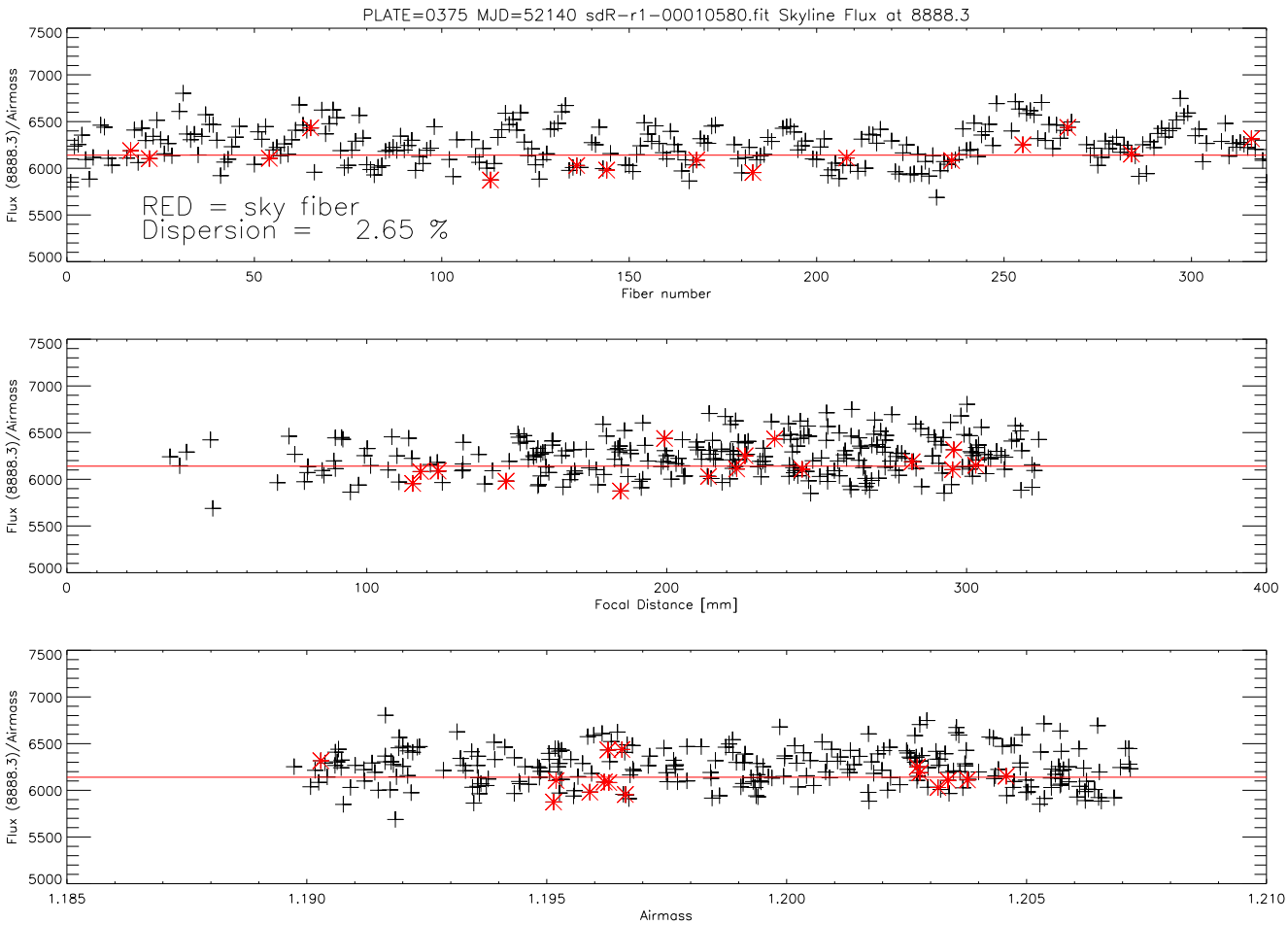

PLATE=0375 MJD=52140 sdR-r1-00010580.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

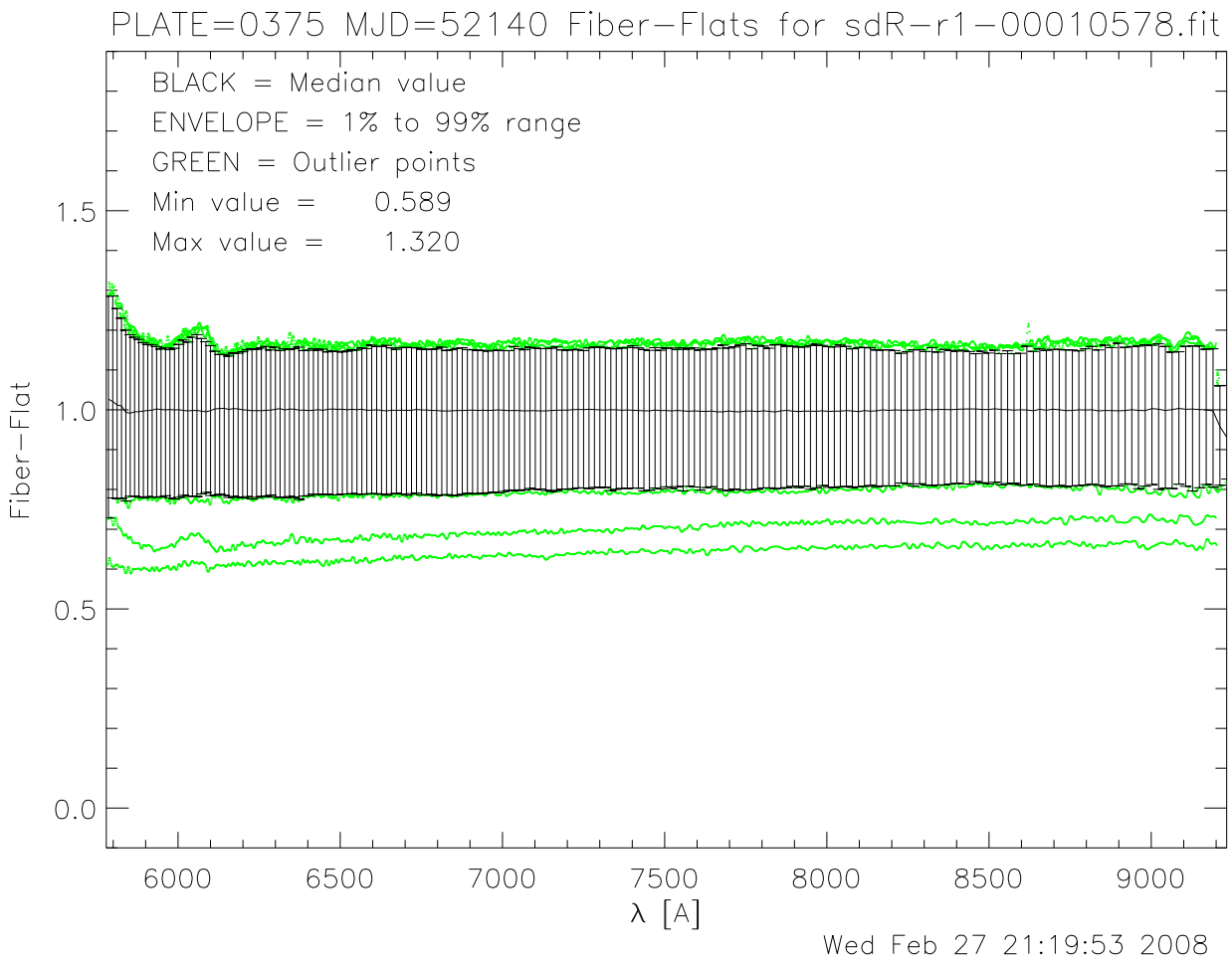

PLATE=0375 MJD=52140 sdR-r1-00010580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=0375 MJD=52140 sdR-r1-00010580.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 = 15
PLATE=0375 MJD=52140 sdR-r1-00010580.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=0375 MJD=52140 sdR-r1-00010580.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.24 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0375 MJD=52140 sdR-r1-00010580.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.65 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass


PLATE=0375 MJD=52140 Fiber−Flats for sdR−r1−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.589
Max value = 1.320
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
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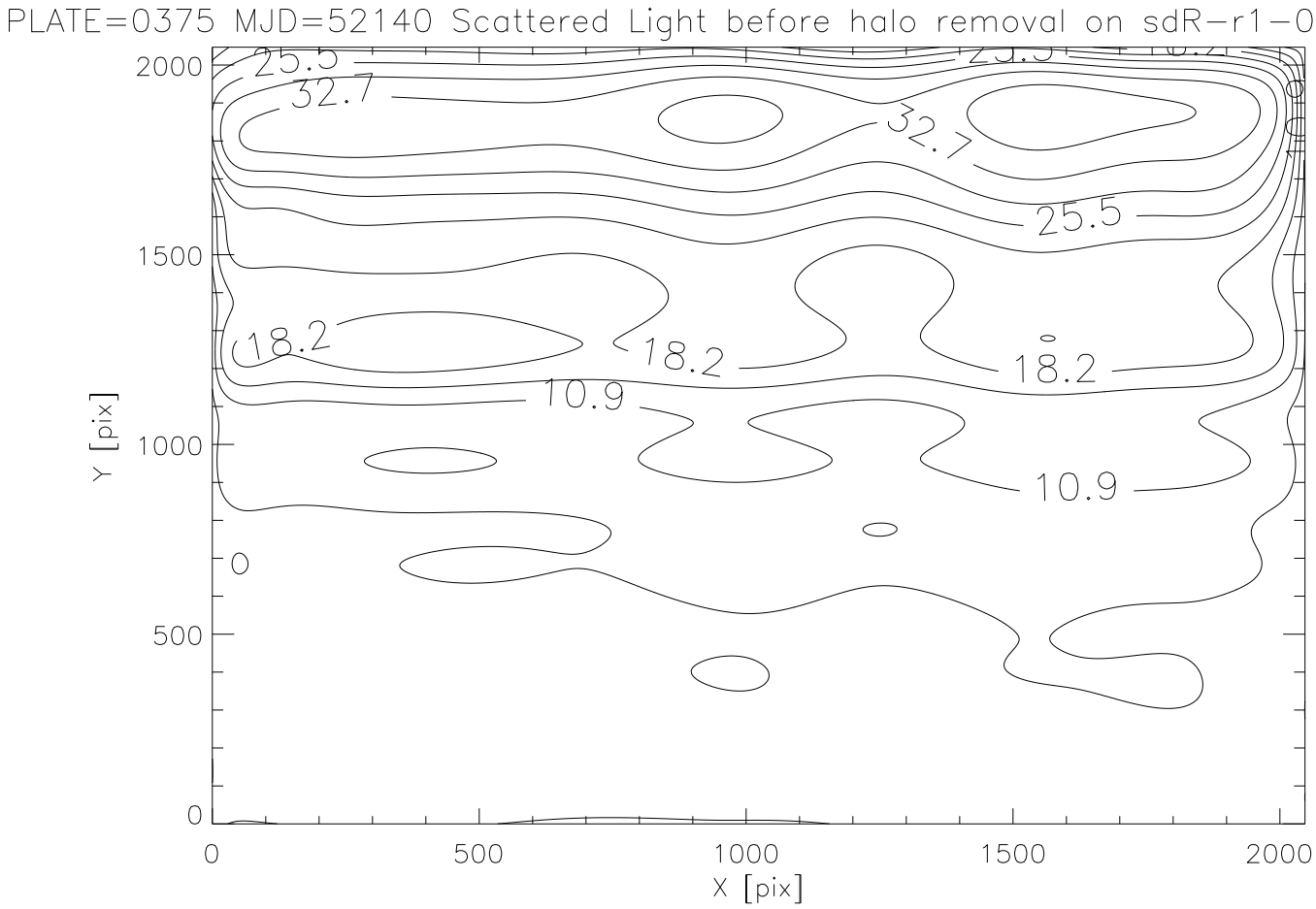
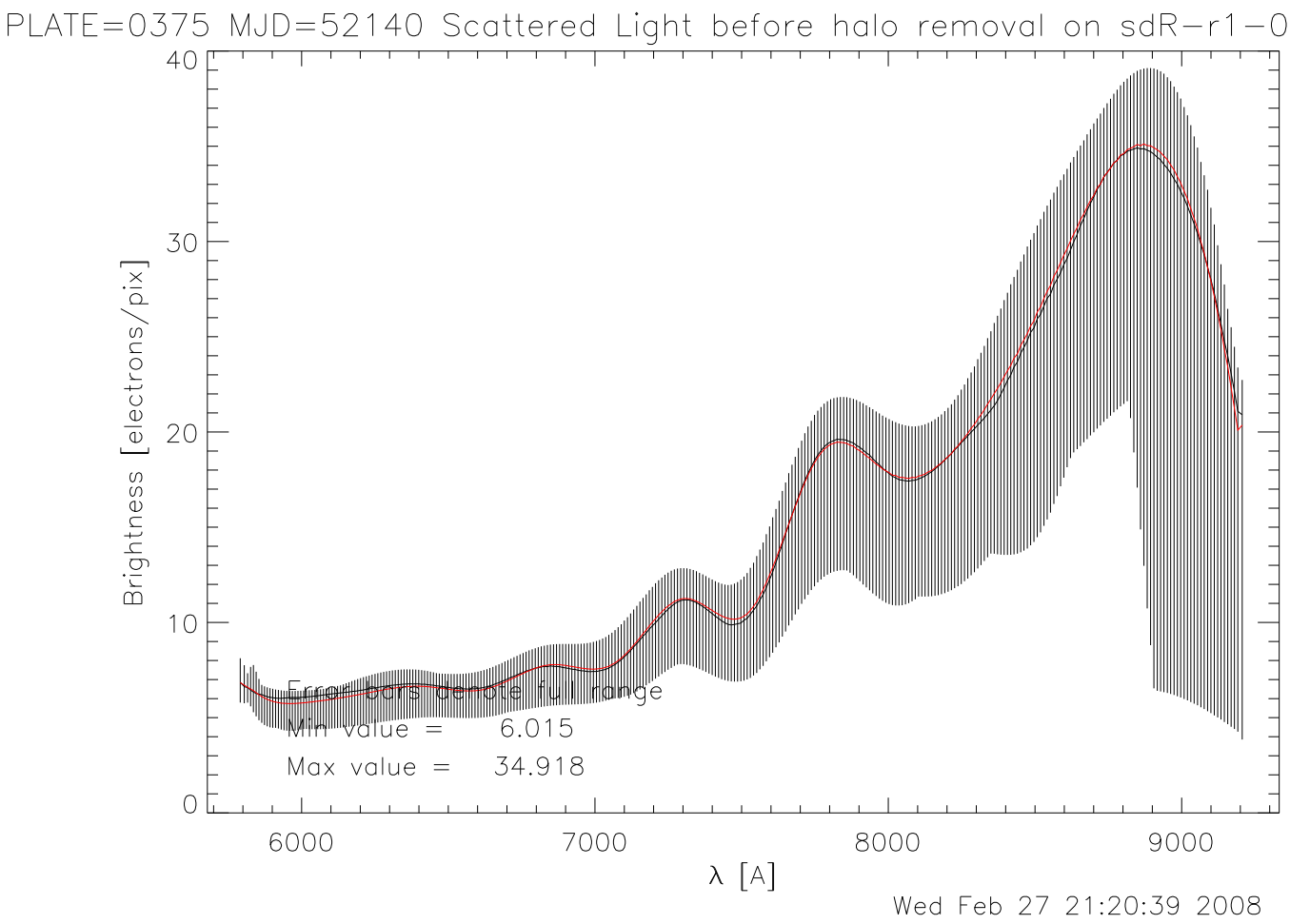

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r1-00010581.fi
25.5
32.7
32.7
25.5
18.2
18.2
18.2
10.9
10.9
0
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]


PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r1-00010581.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.015
Max value = 34.918
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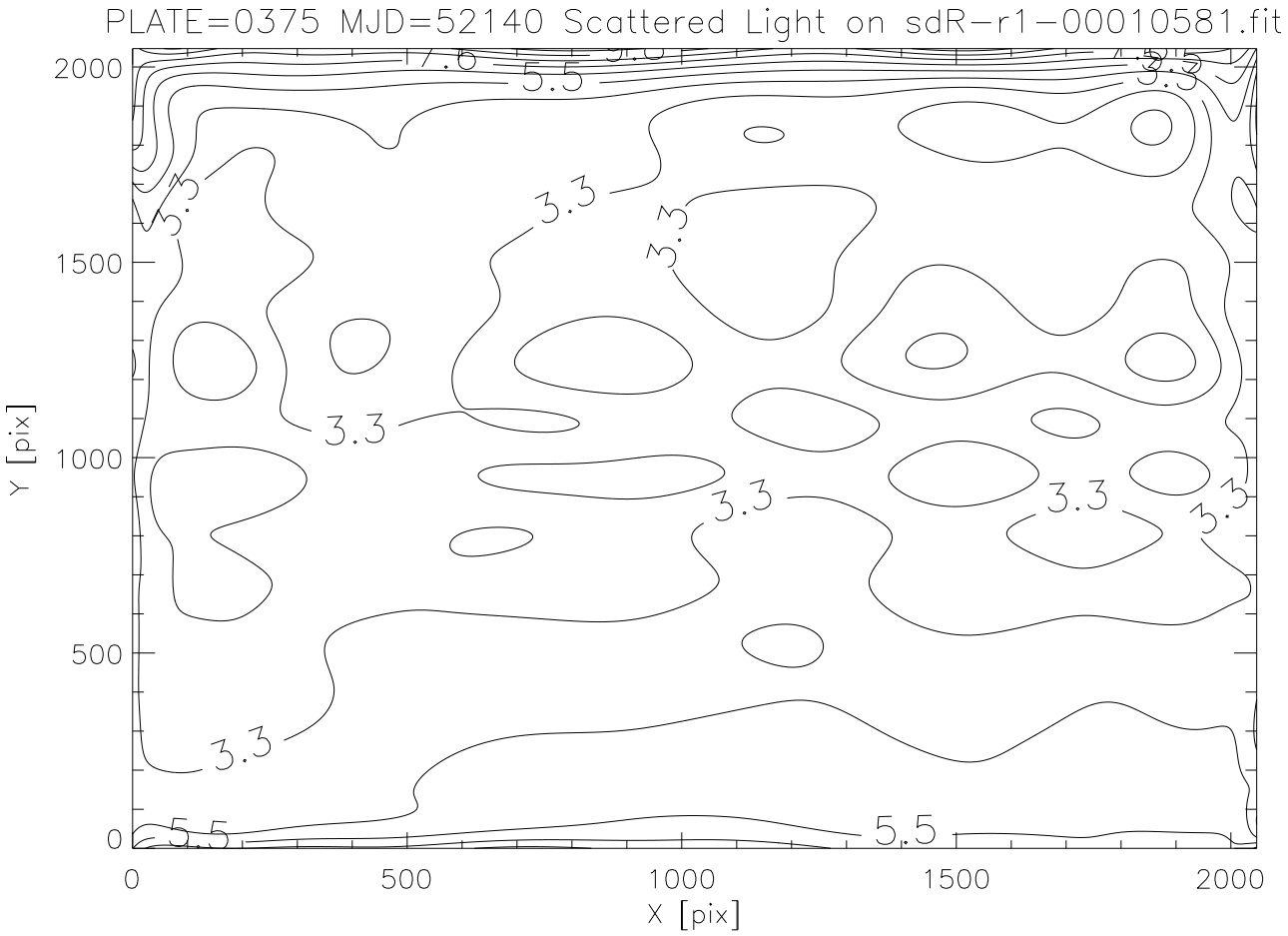
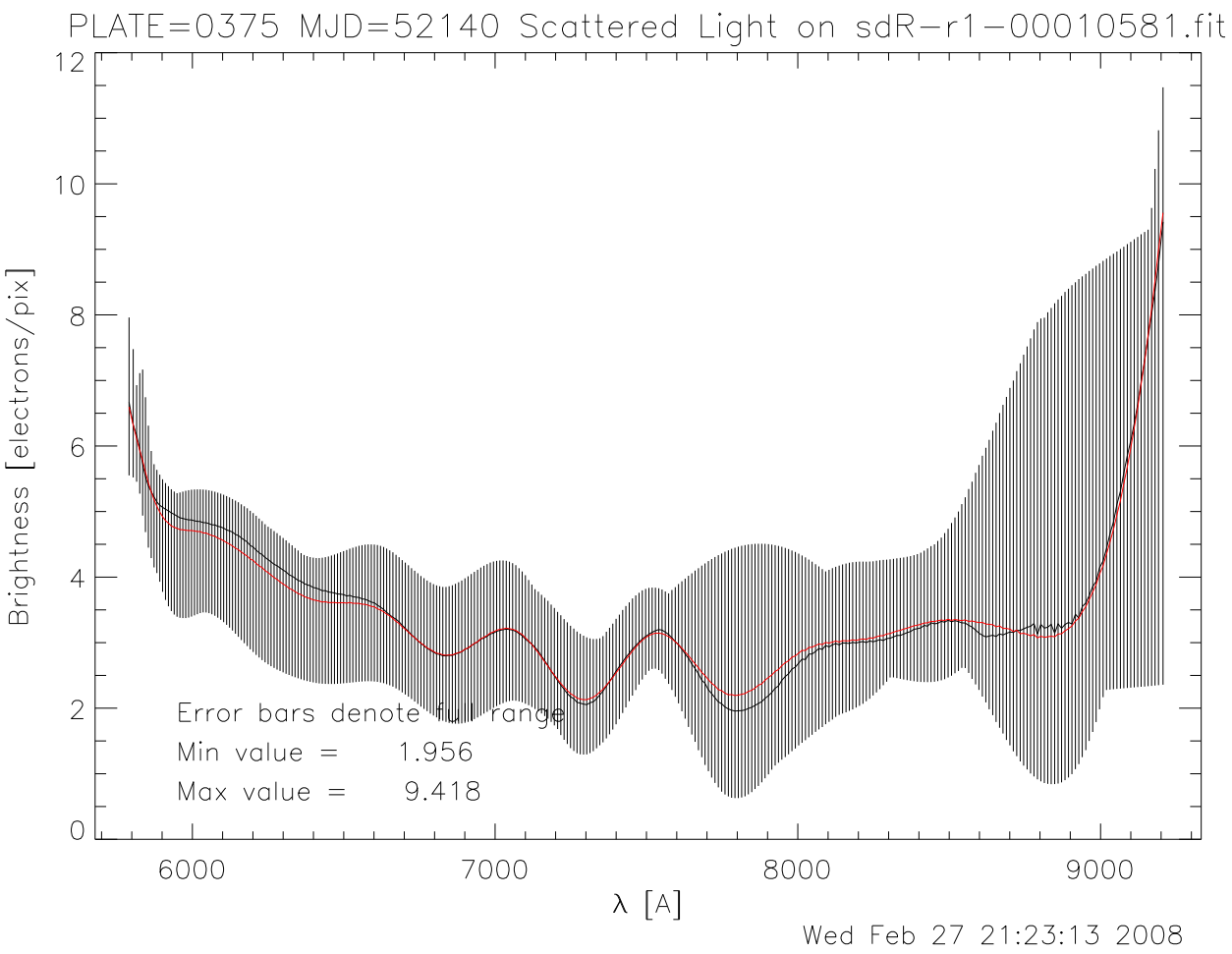

PLATE=0375 MJD=52140 Scattered Light on sdR-r1-00010581.fit
5.5
3.3
Y [pix]
X [pix]
0
500
1000
1500
2000


PLATE=0375 MJD=52140 Scattered Light on sdR-r1-00010581.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.956
Max value = 9.418
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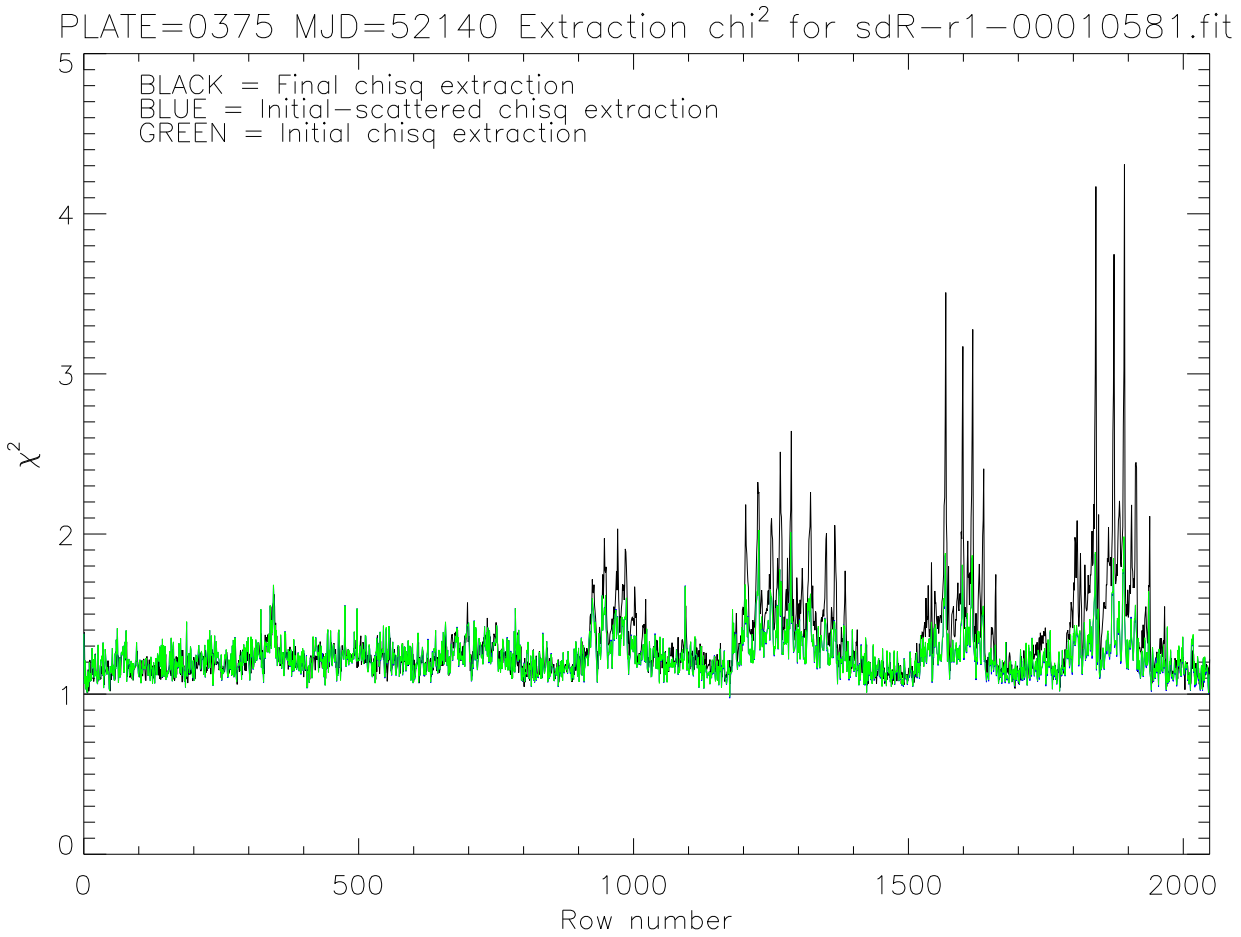
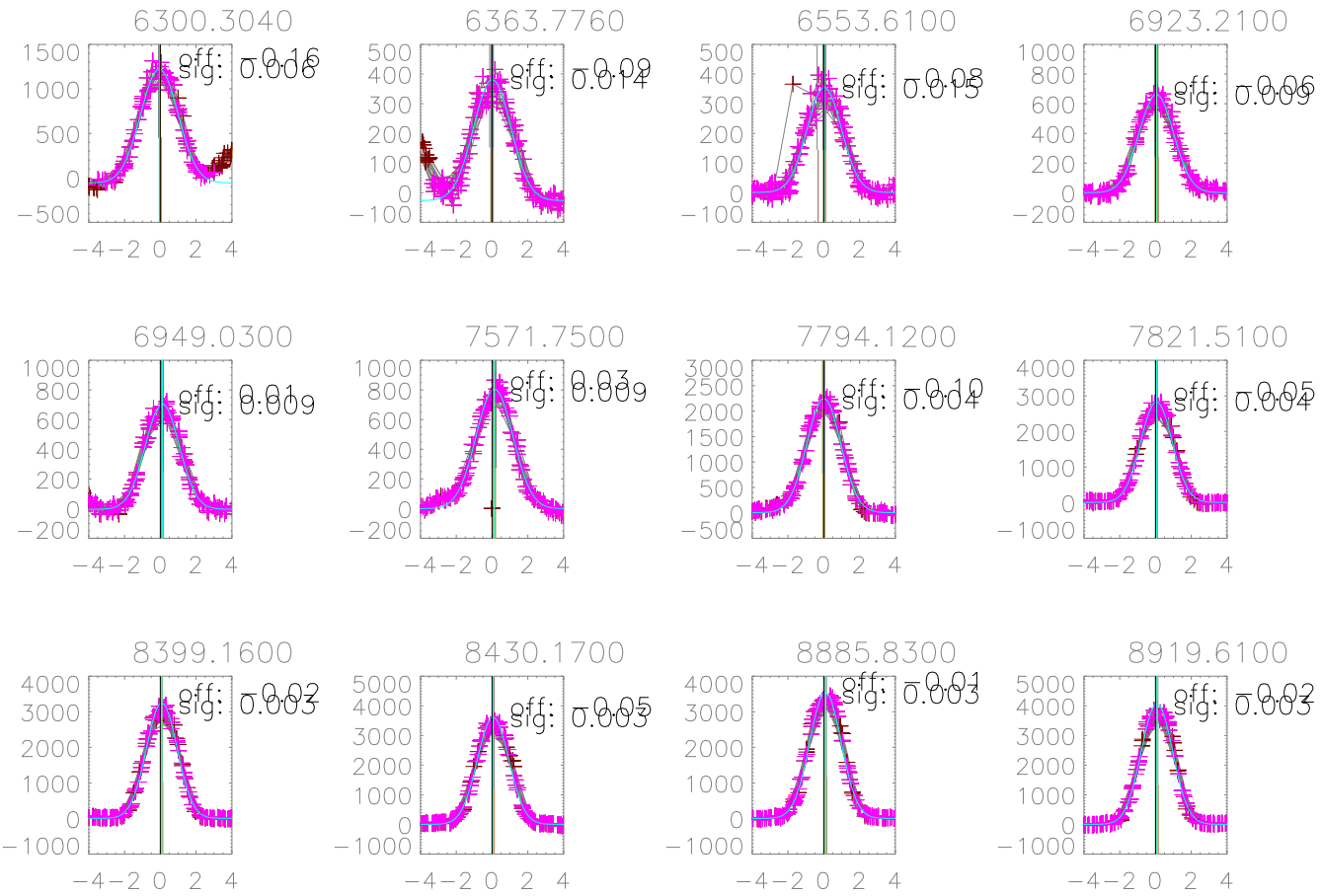
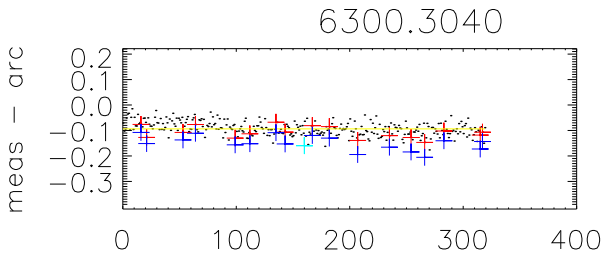
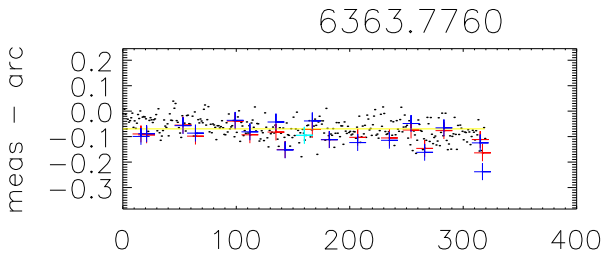
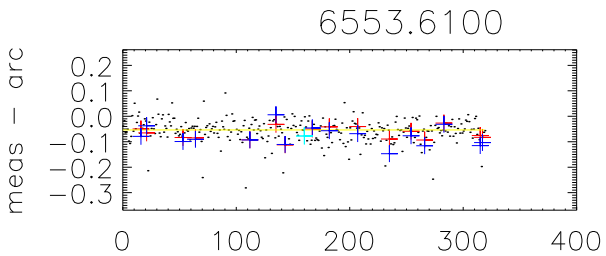
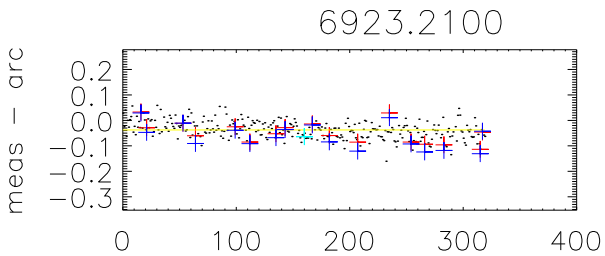

PLATE=0375 MJD=52140 Extraction chi^2 for sdR−r1−00010581.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

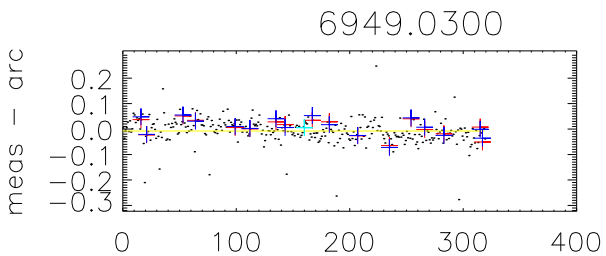

6300.3040
off: −0.16
sig: 0.008
6363.7760
off: −0.09
sig: 0.014
6553.6100
off: −0.08
sig: 0.015
6923.2100
off: −0.06
sig: 0.009
6949.0300
off: 0.01
sig: 0.009
7571.7500
off: 0.03
sig: 0.009
7794.1200
off: −0.10
sig: 0.004
7821.5100
off: −0.05
sig: 0.004
8399.1600
off: −0.02
sig: 0.003
8430.1700
off: −0.05
sig: 0.003
8885.8300
off: −0.01
sig: 0.003
8919.6100
off: −0.02
sig: 0.003

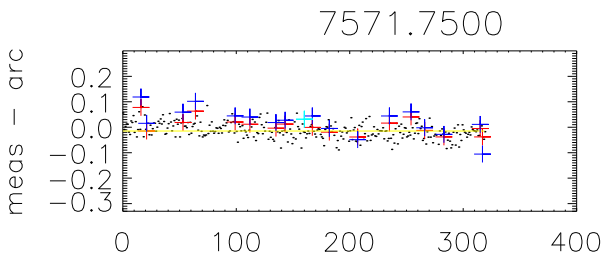

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

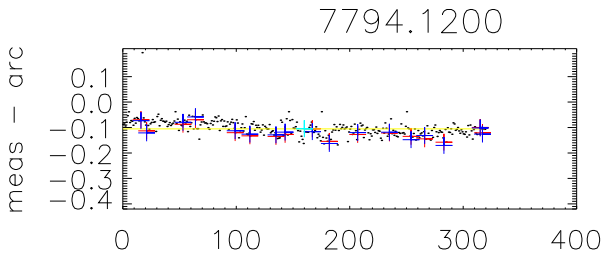

6363.7760
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

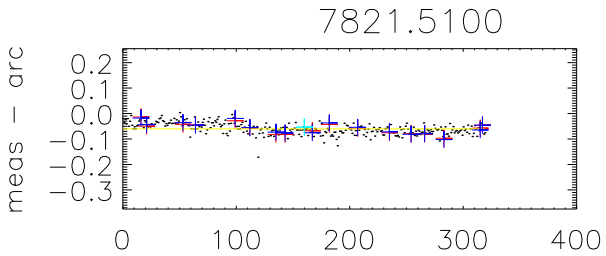

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

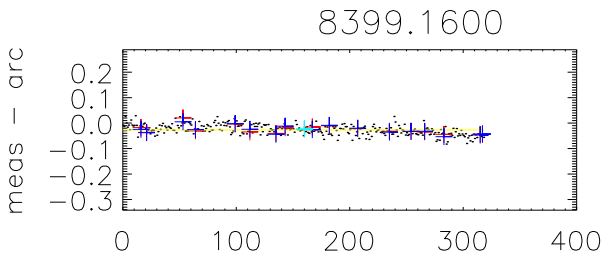

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

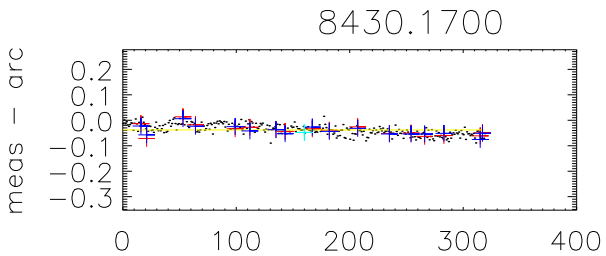

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

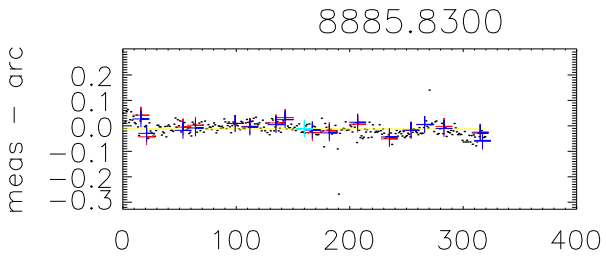

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

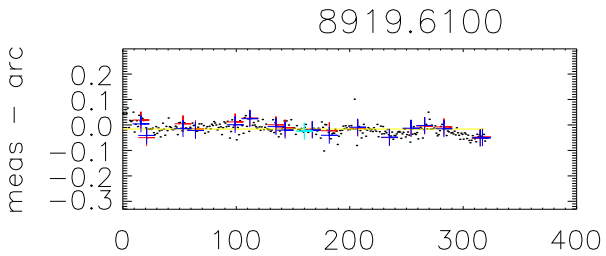

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

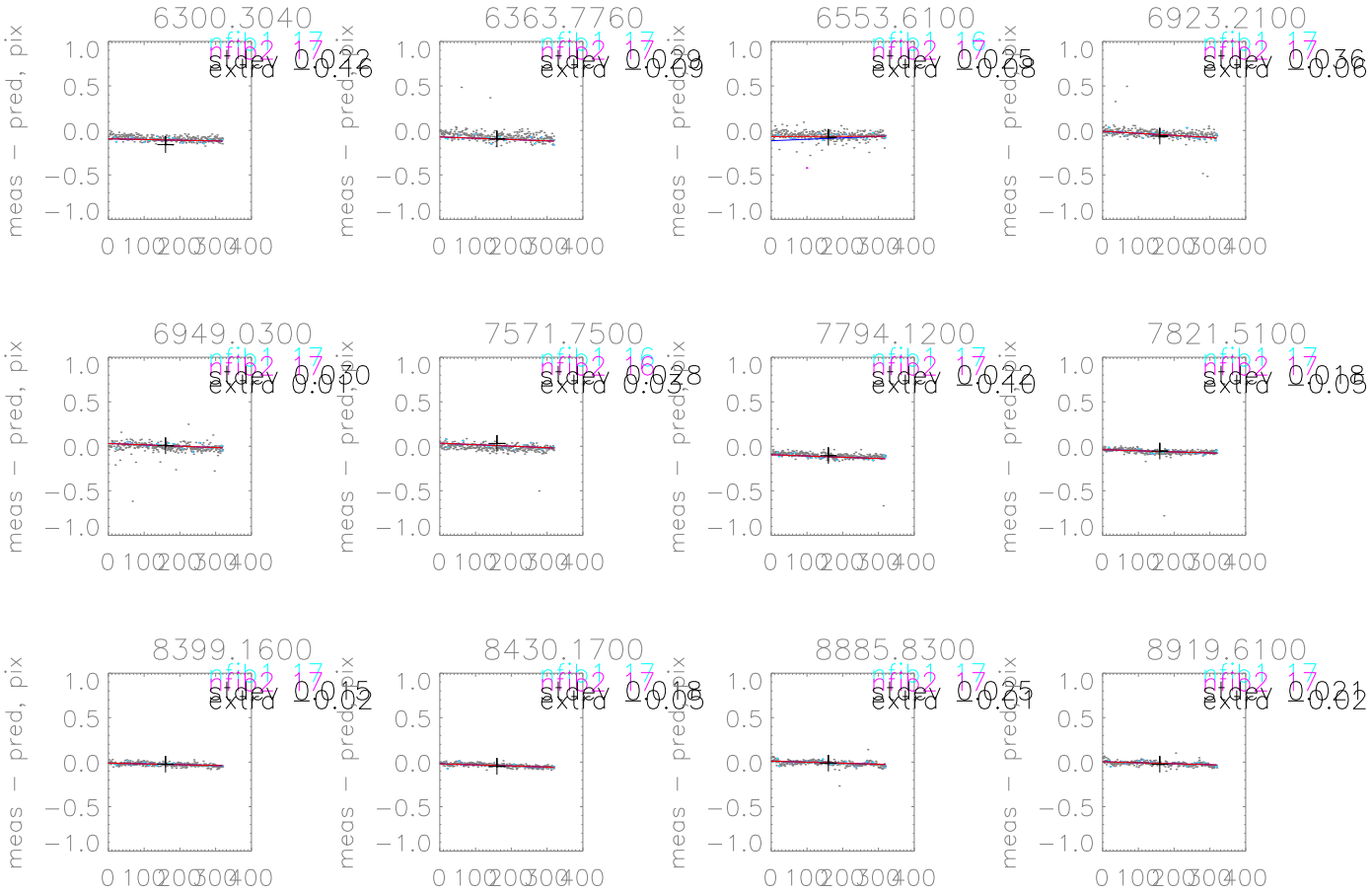

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

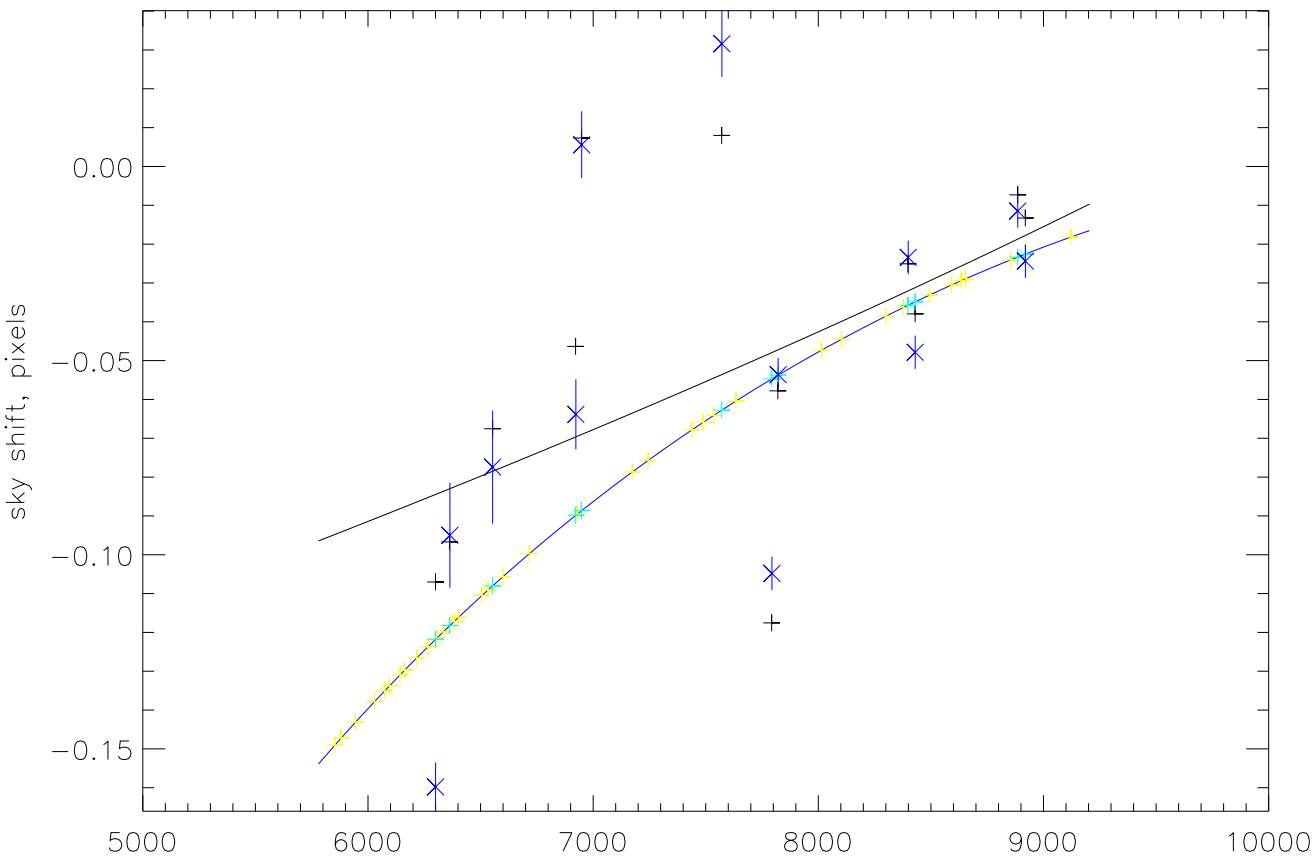

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

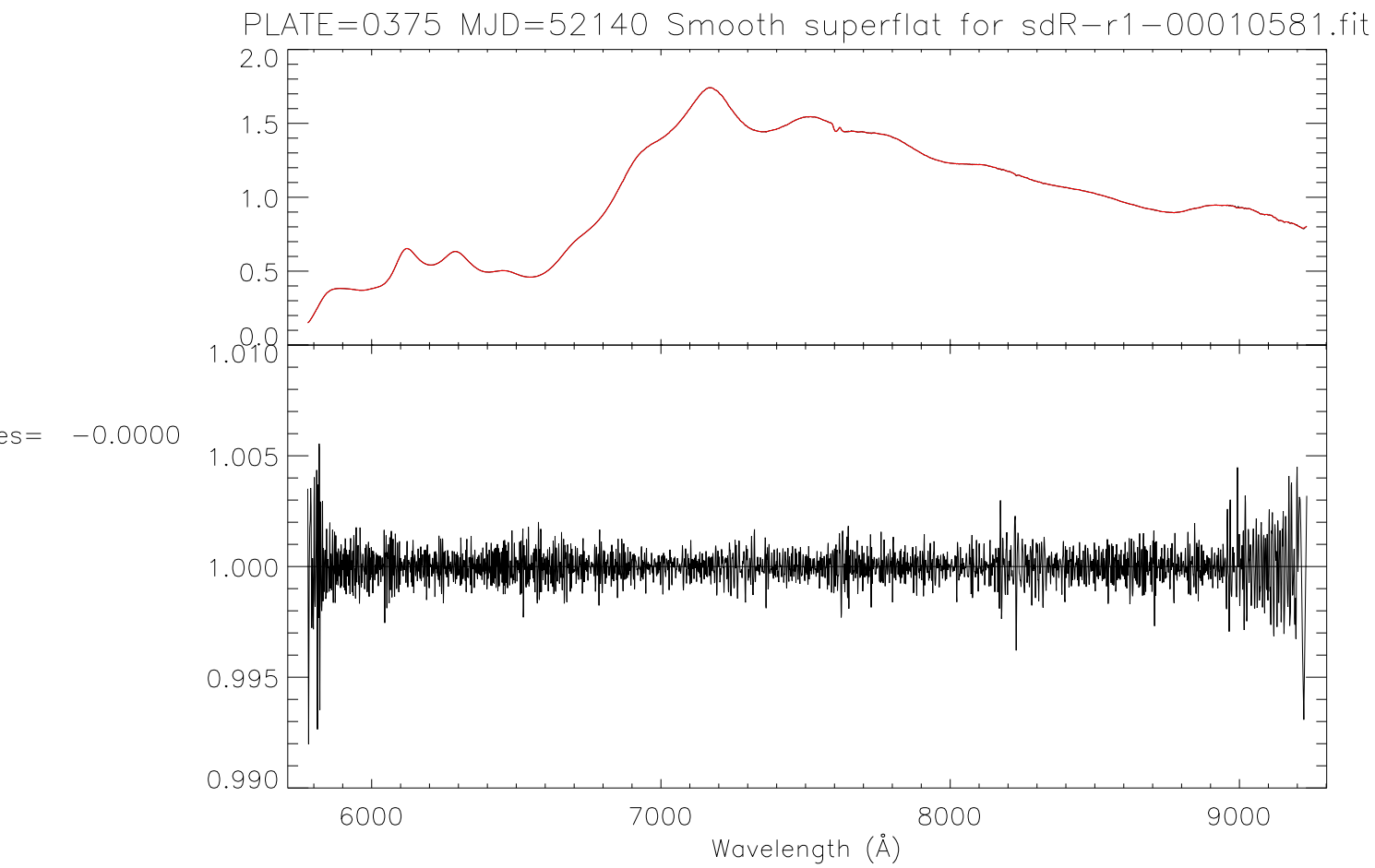

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

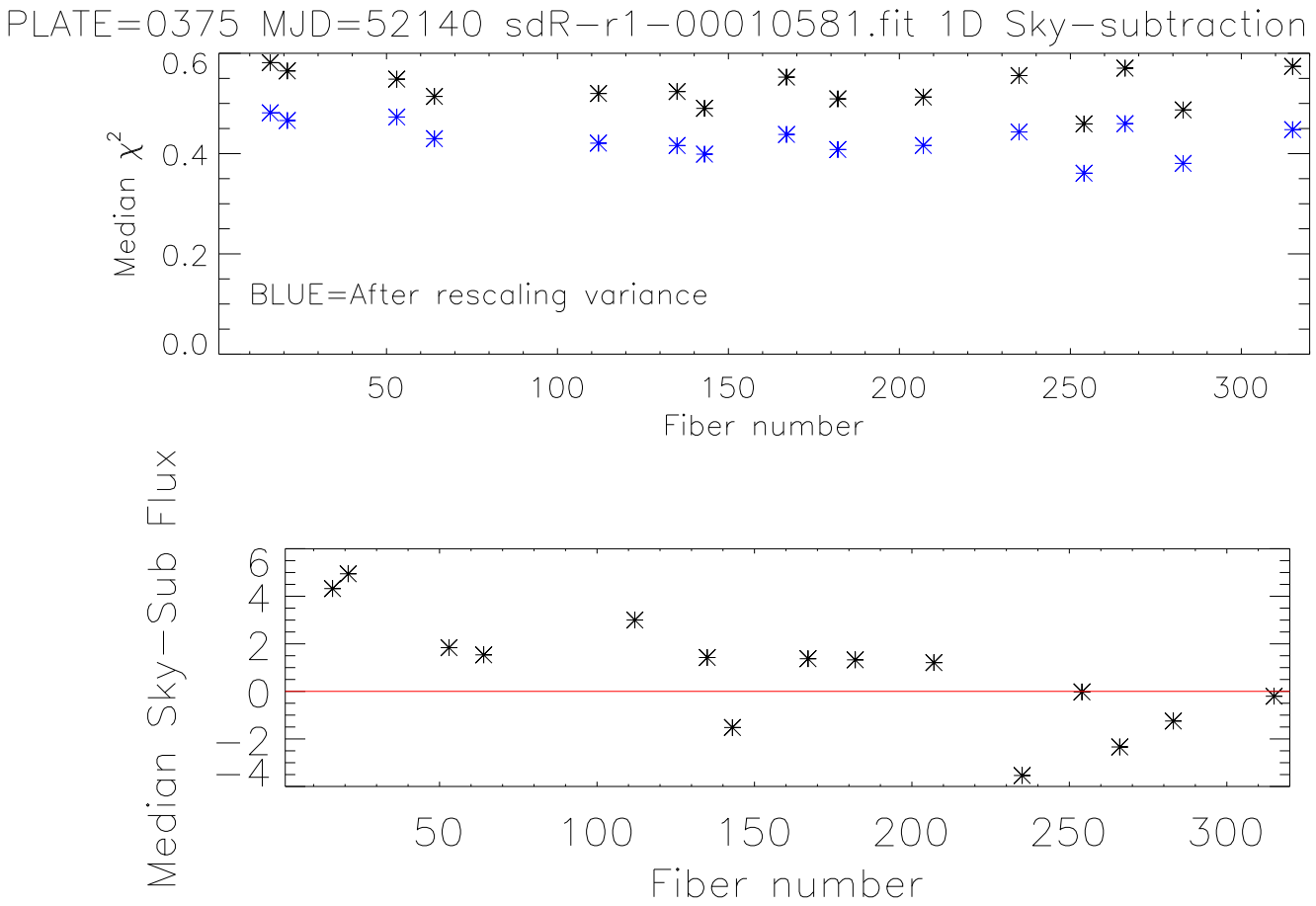

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

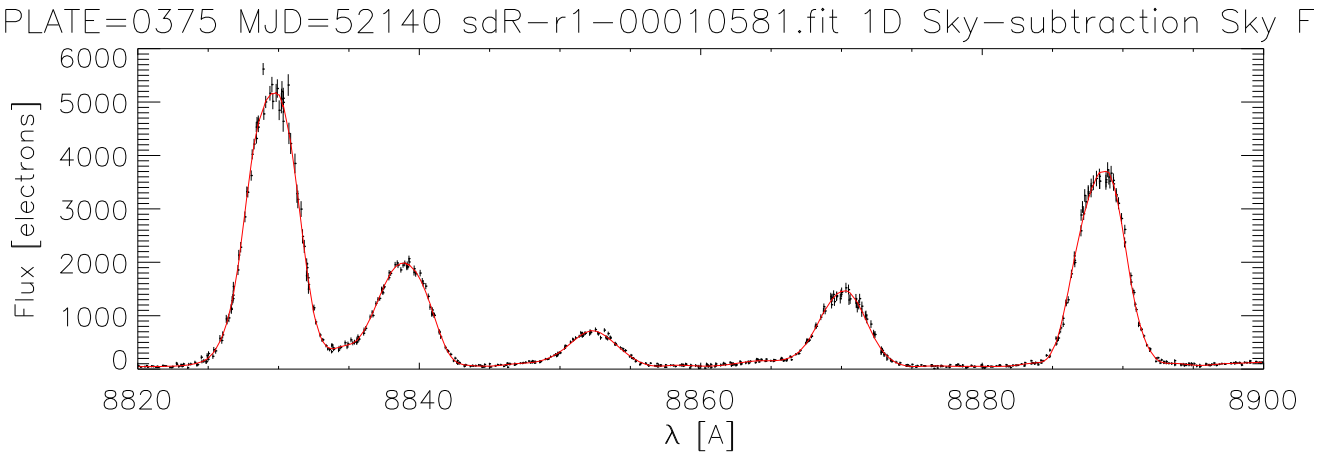

6300.3040
mfib1 17
mfib2 17
stdev 0.022
extra 0.046
6363.7760
mfib1 17
mfib2 17
stdev 0.029
extra 0.009
6553.6100
mfib1 16
mfib2 17
stdev 0.025
extra 0.008
6923.2100
mfib1 17
mfib2 17
stdev 0.036
extra 0.006
6949.0300
mfib1 17
mfib2 17
stdev 0.030
extra 0.011
7571.7500
mfib1 16
mfib2 17
stdev 0.028
extra 0.037
7794.1200
mfib1 17
mfib2 17
stdev 0.022
extra 0.046
7821.5100
mfib1 17
mfib2 17
stdev 0.018
extra 0.005
8399.1600
mfib1 17
mfib2 17
stdev 0.015
extra 0.002
8430.1700
mfib1 17
mfib2 17
stdev 0.018
extra 0.005
8885.8300
mfib1 17
mfib2 17
stdev 0.025
extra 0.001
8919.6100
mfib1 17
mfib2 17
stdev 0.021
extra 0.002
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

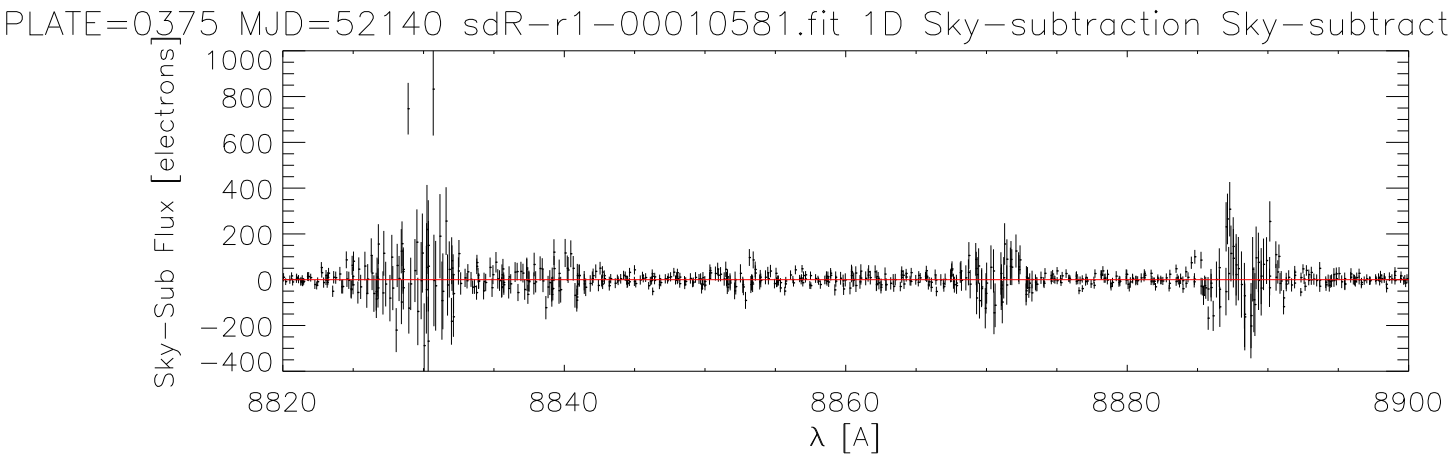

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

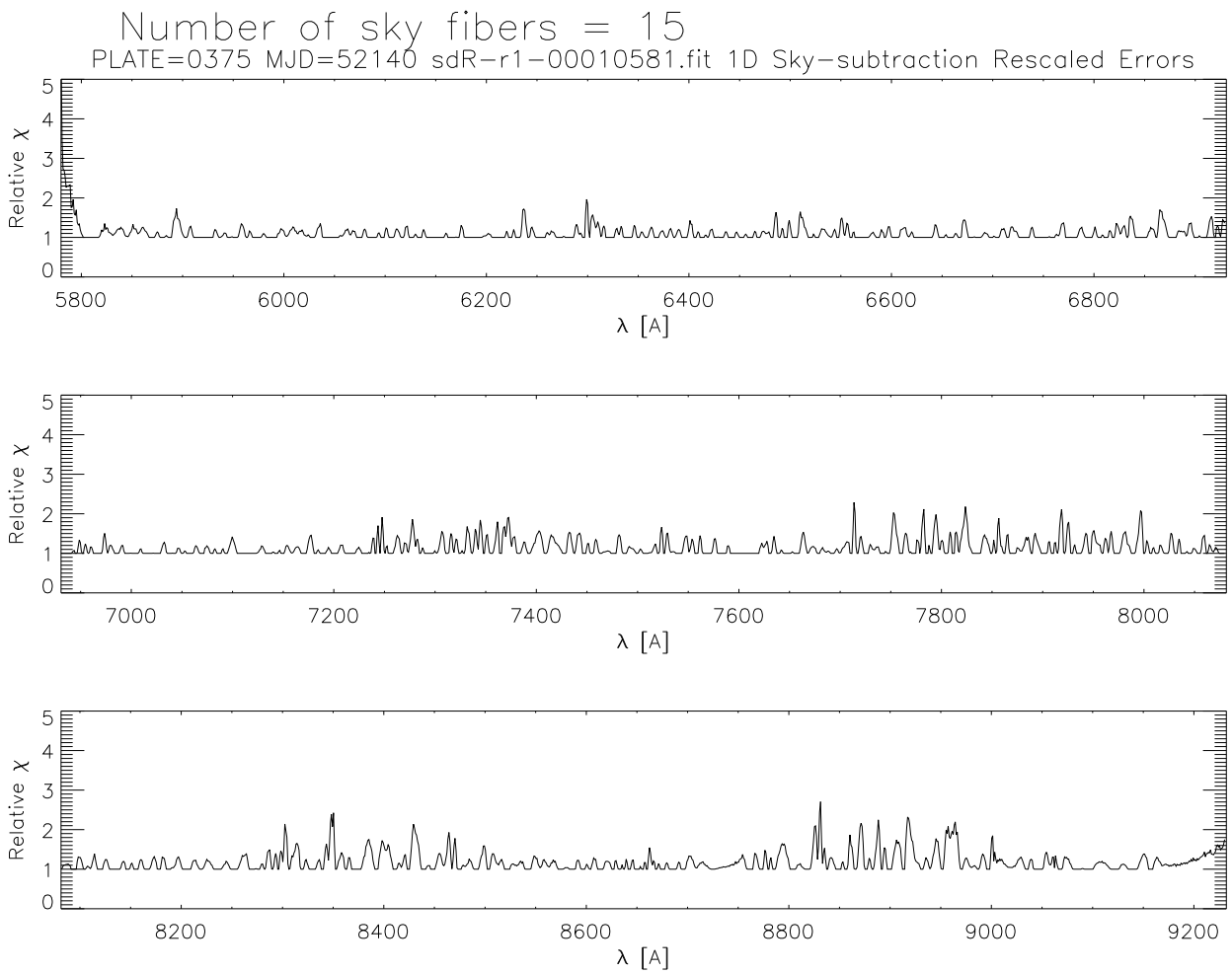

PLATE=0375 MJD=52140 Smooth superflat for sdR-r1-00010581.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)

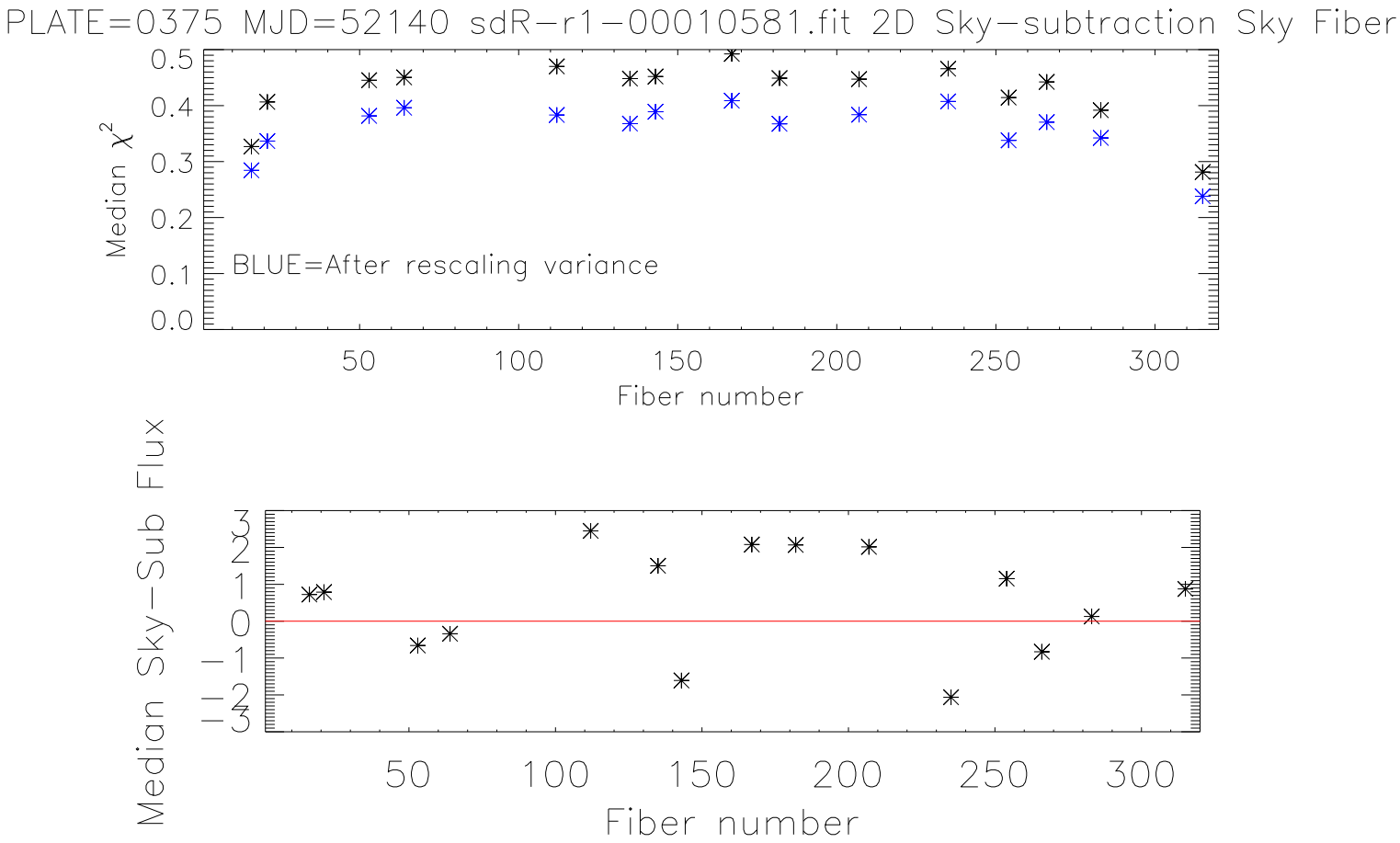
es= −0.0000

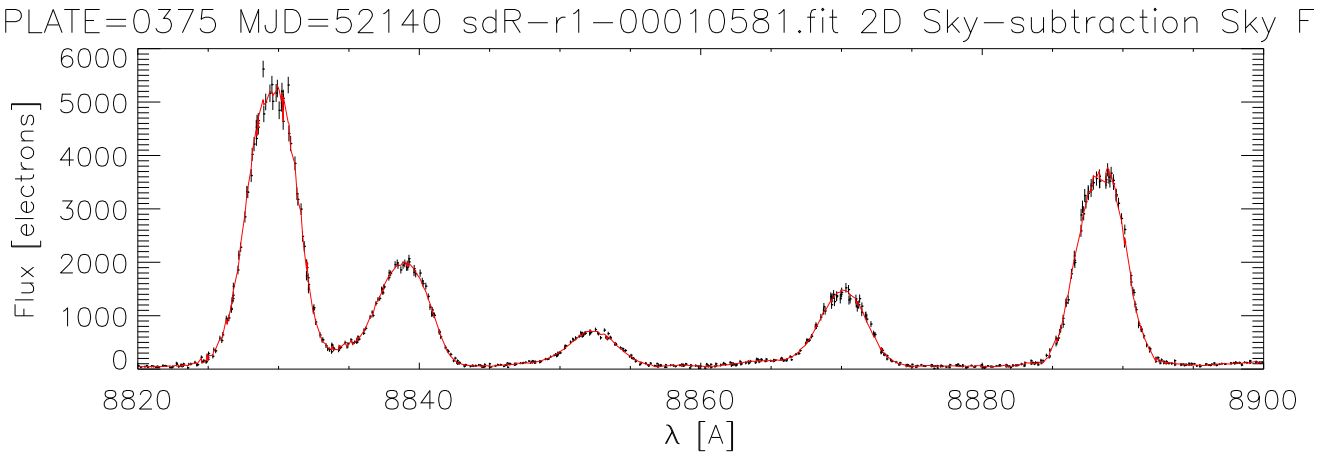

PLATE=0375 MJD=52140 sdR-r1-00010581.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

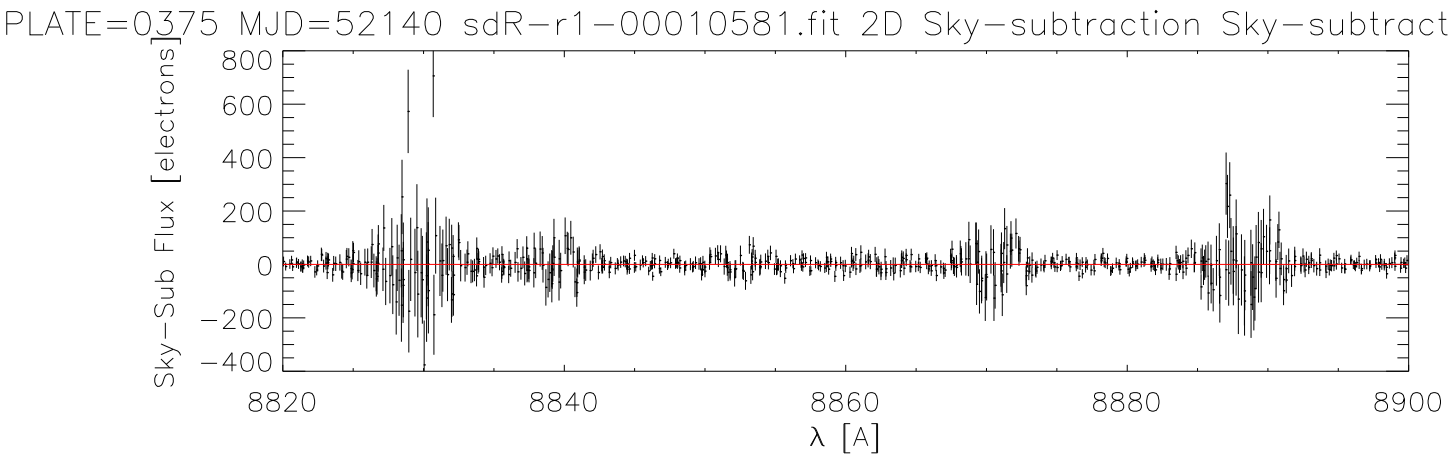

PLATE=0375 MJD=52140 sdR-r1-00010581.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

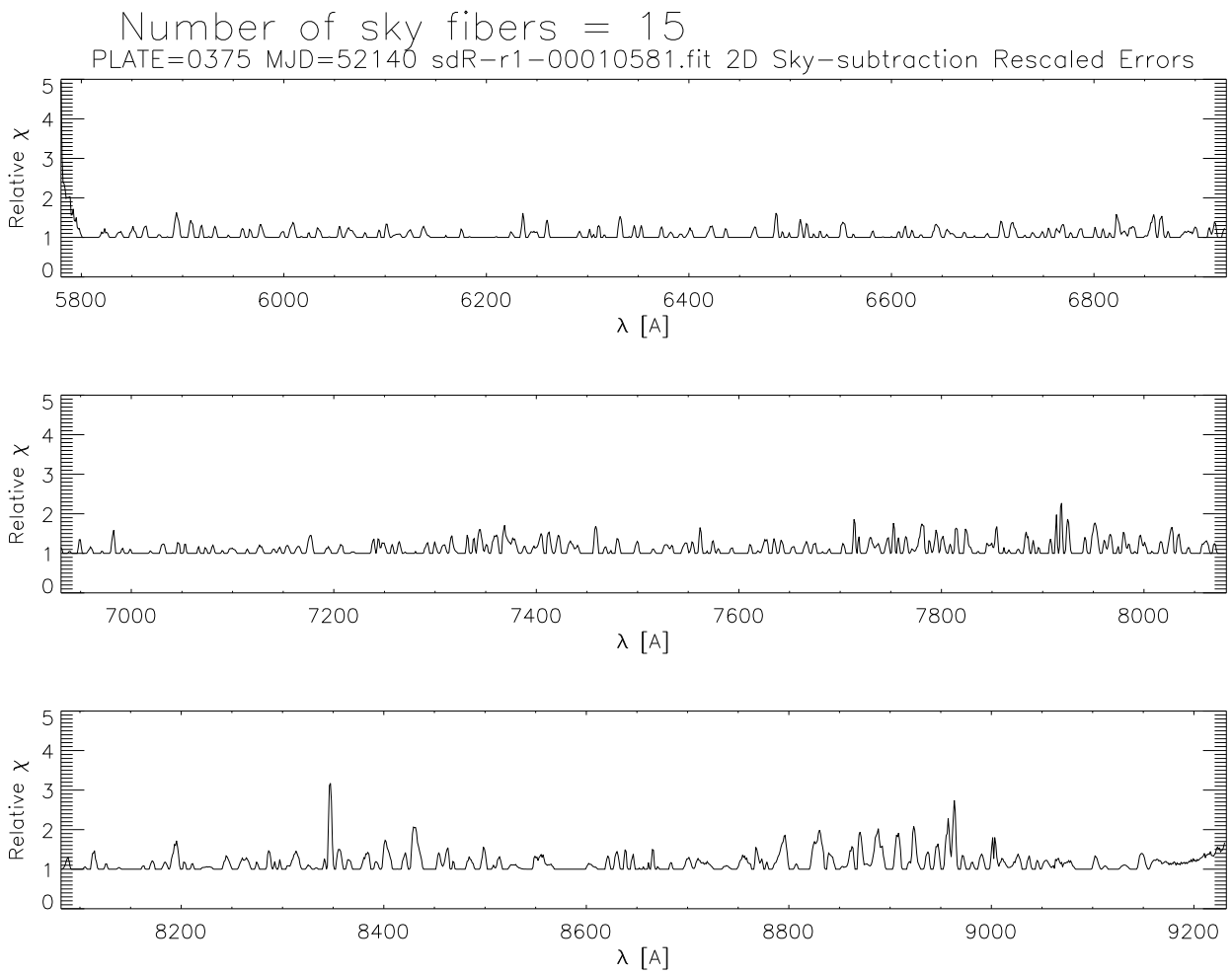

PLATE=0375 MJD=52140 sdR-r1-00010581.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

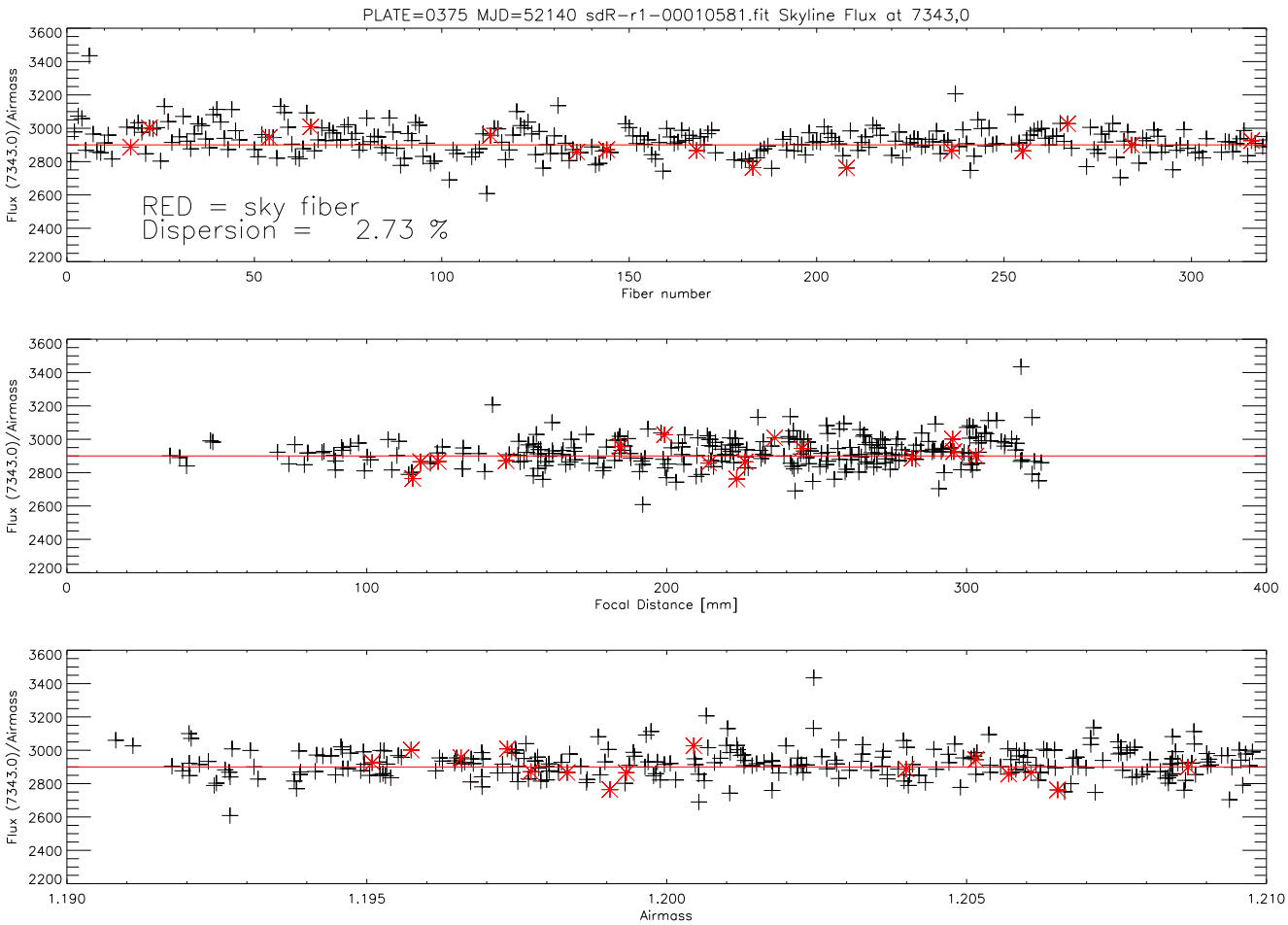

Number of sky fibers = 15
PLATE=0375 MJD=52140 sdR-r1-00010581.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

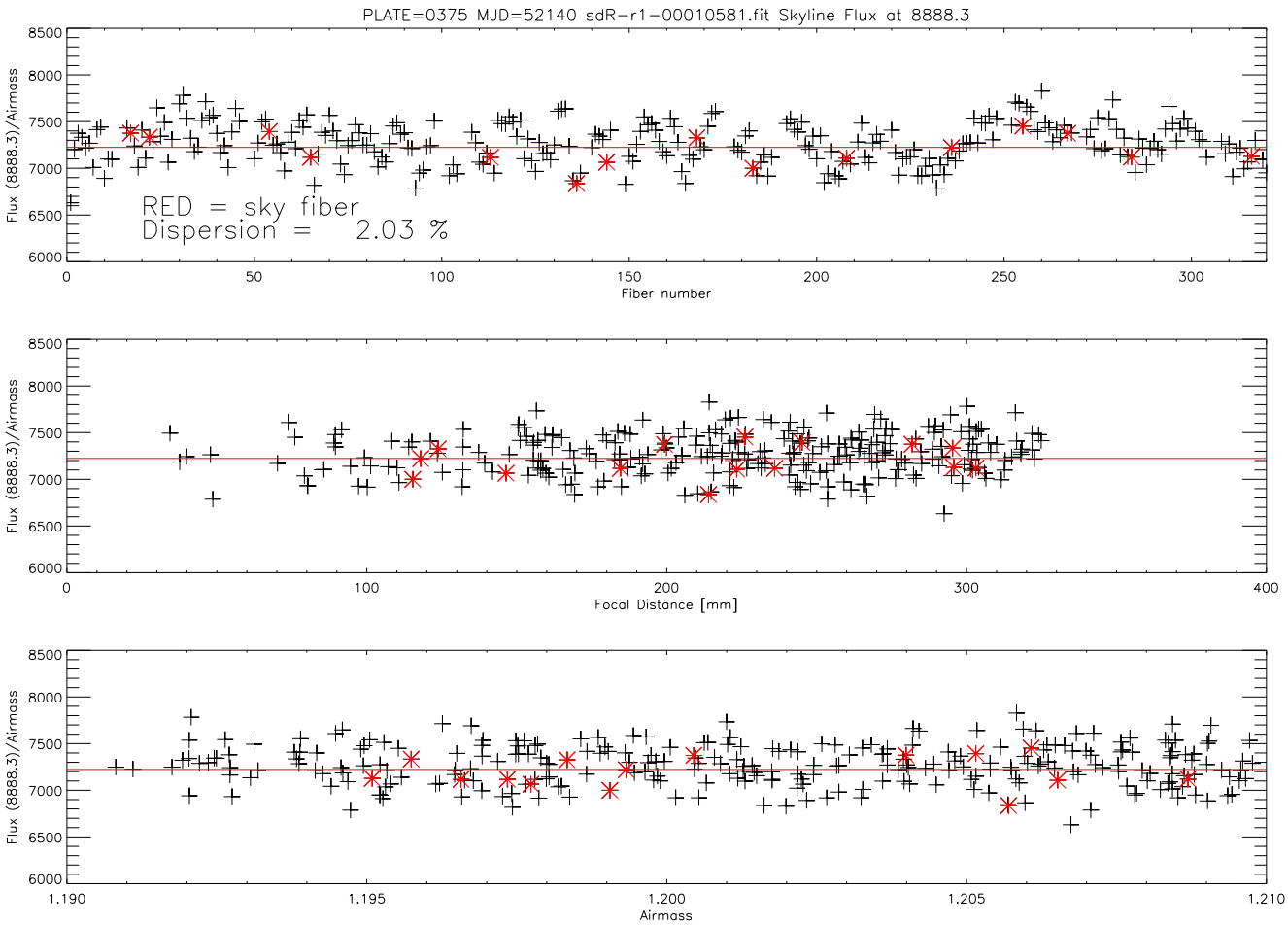

PLATE=0375 MJD=52140 sdR-r1-00010581.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

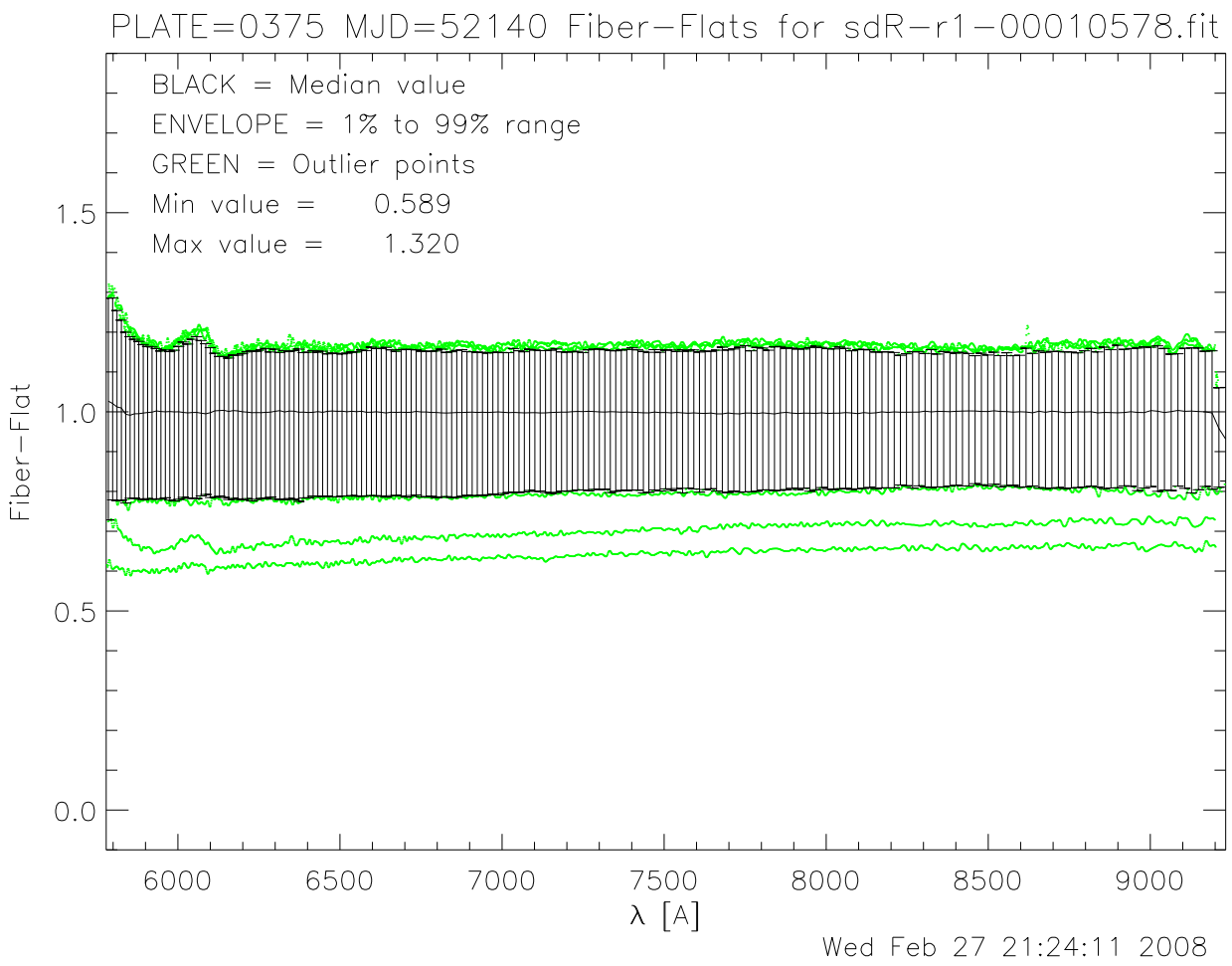

PLATE=0375 MJD=52140 sdR-r1-00010581.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

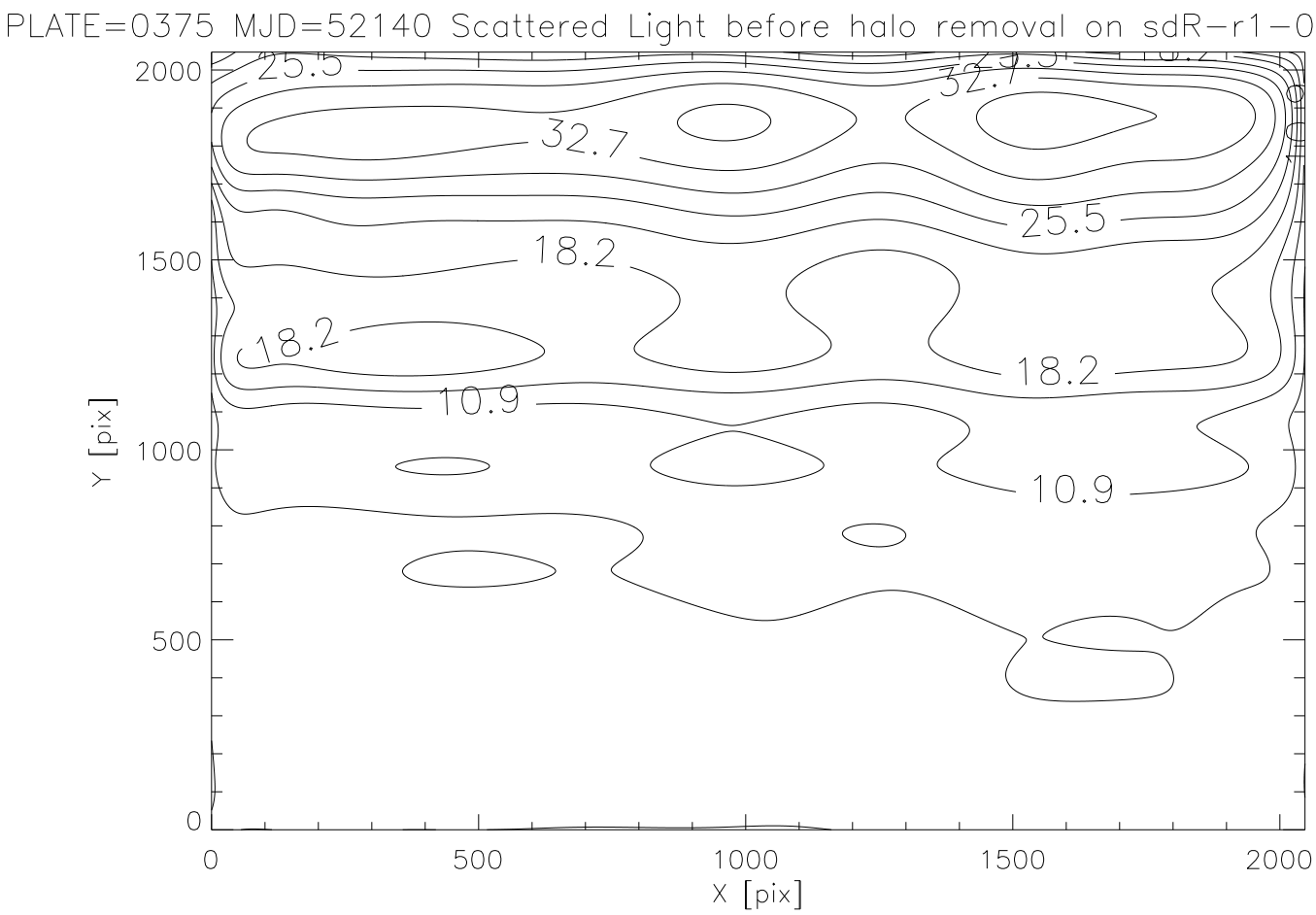

PLATE=0375 MJD=52140 sdR-r1-00010581.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

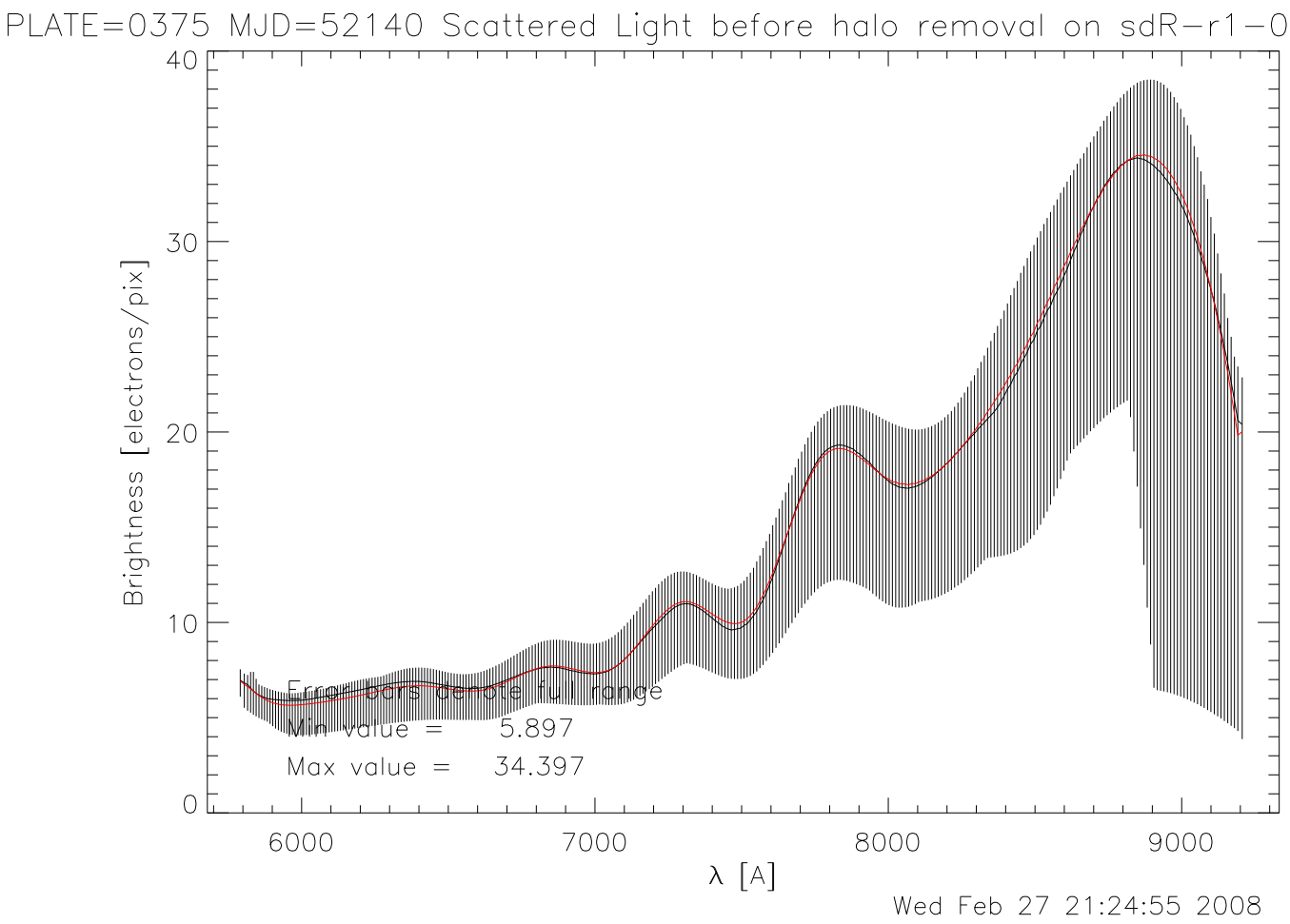

Number of sky fibers = 15
PLATE=0375 MJD=52140 sdR-r1-00010581.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

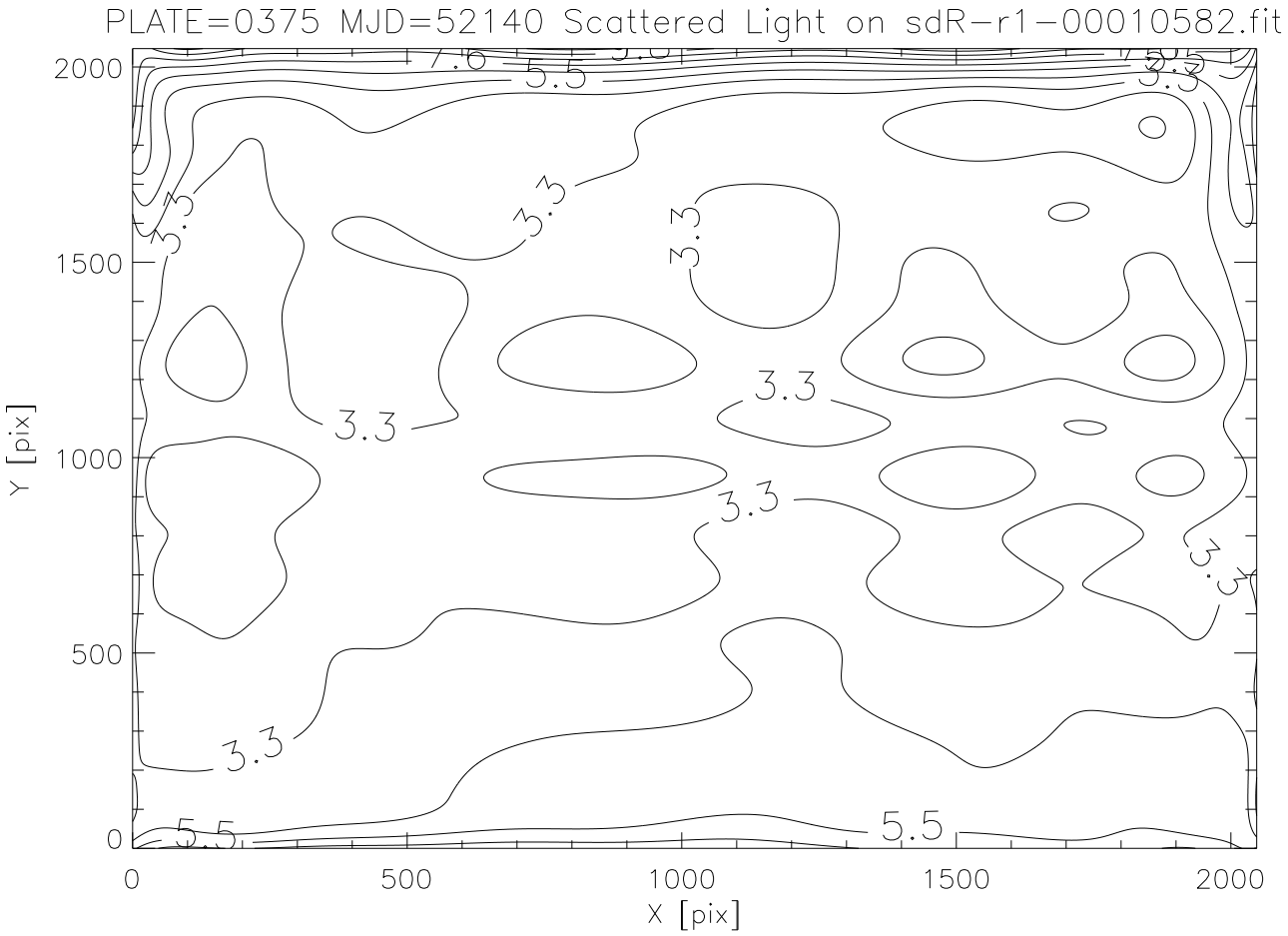

PLATE=0375 MJD=52140 sdR-r1-00010581.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.73 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

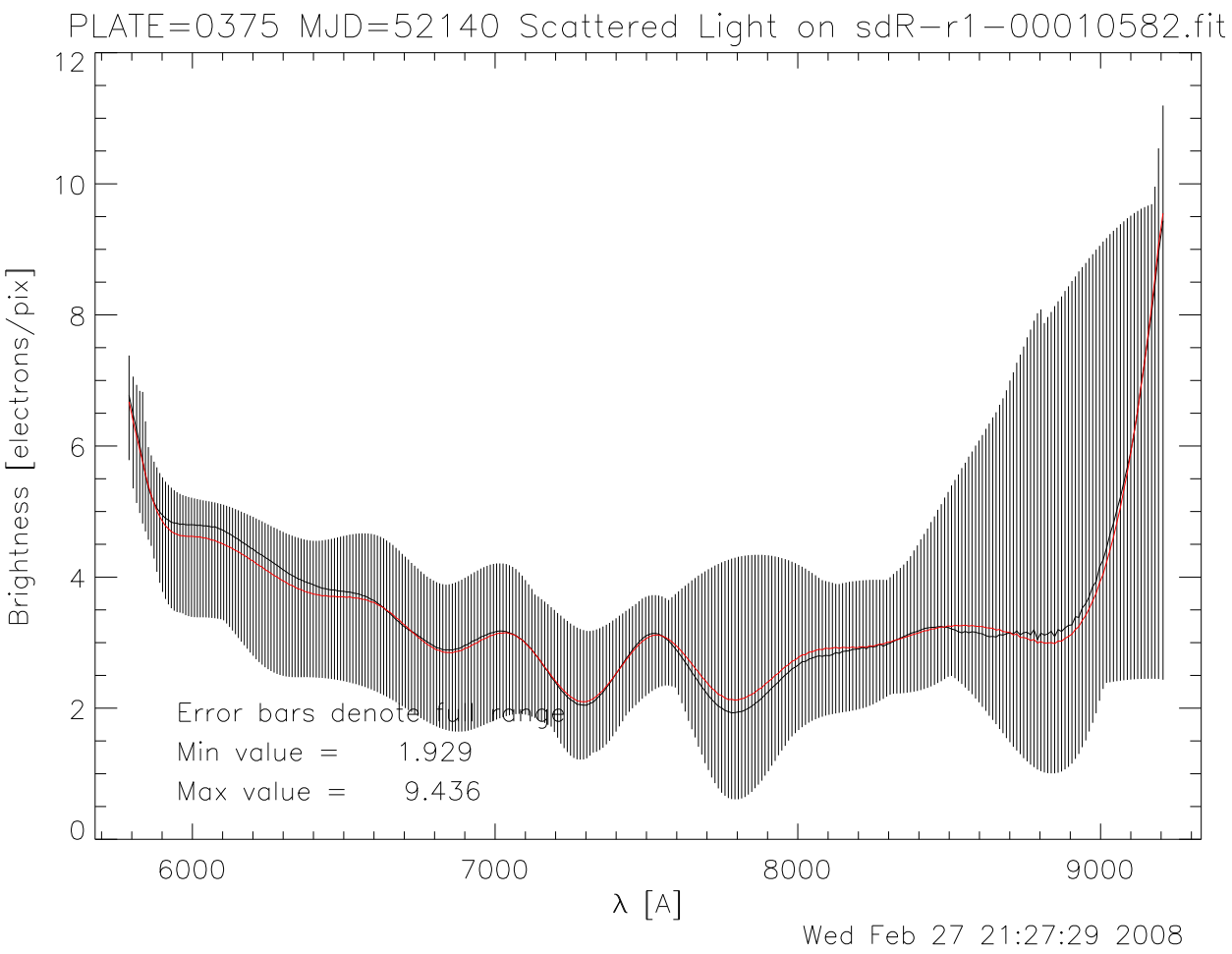

PLATE=0375 MJD=52140 sdR-r1-00010581.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.03 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

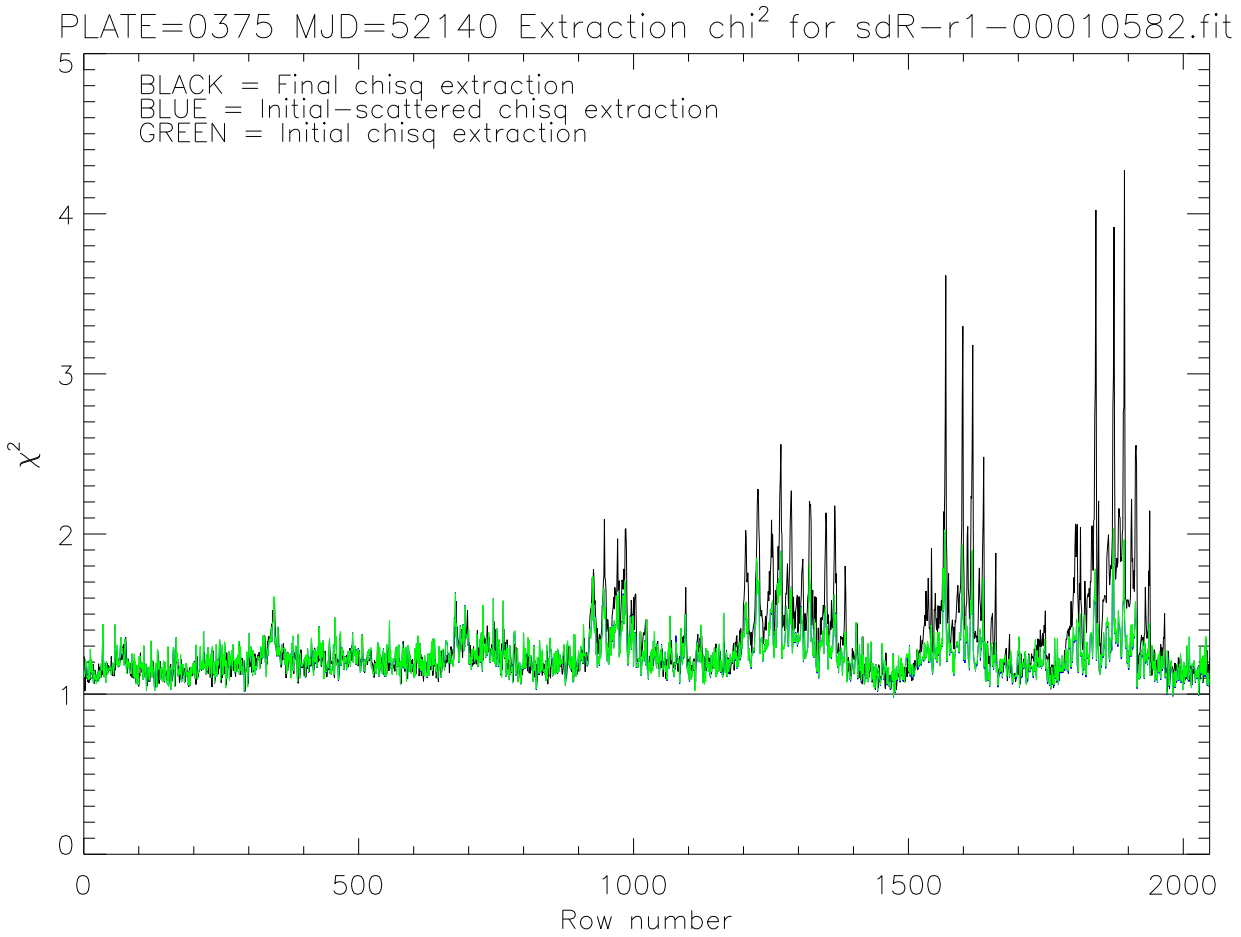

PLATE=0375 MJD=52140 Fiber−Flats for sdR−r1−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.589
Max value = 1.320
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 27 21:24:11 2008

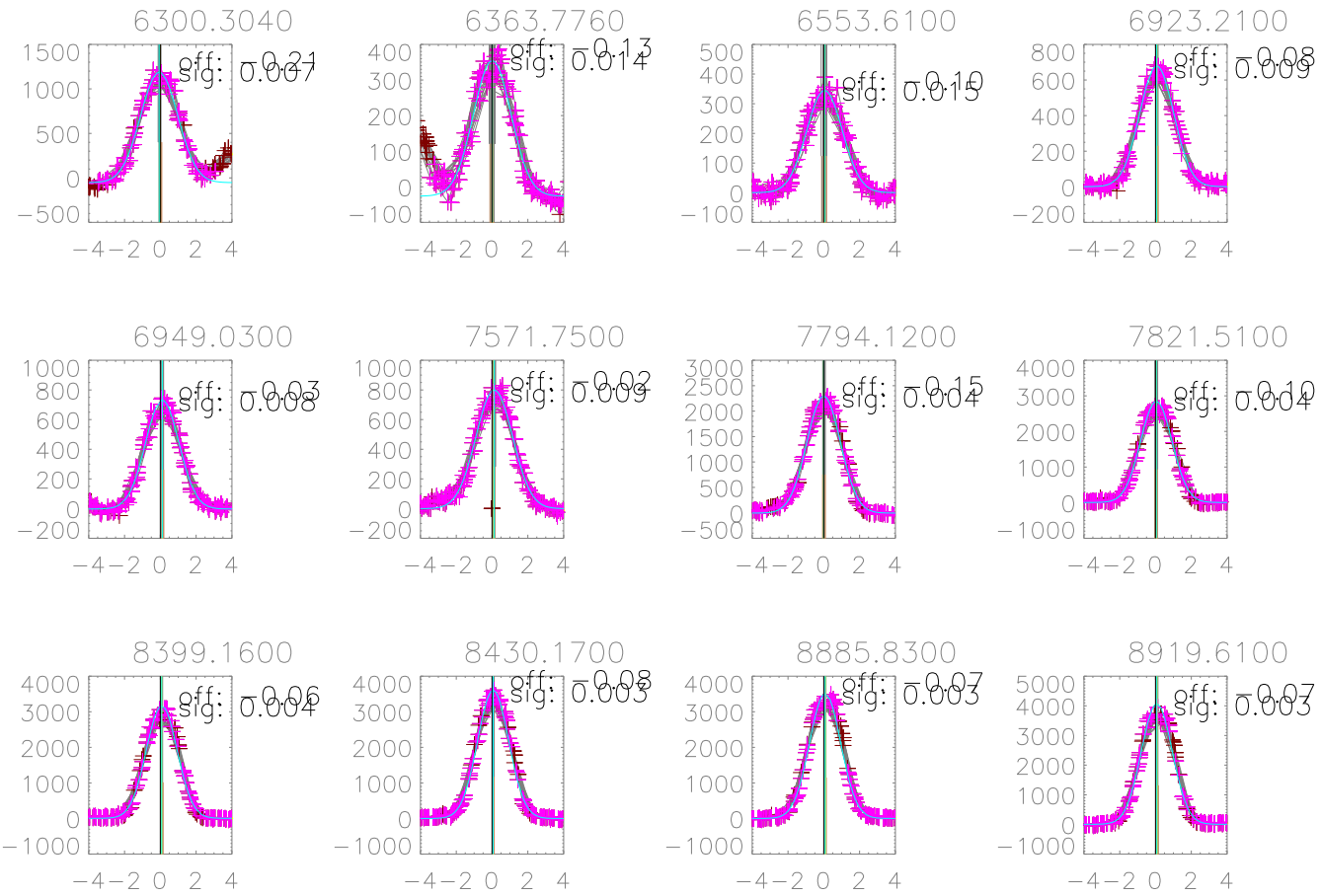

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r1-00010582.fi
25.5
32.7
32.7
25.5
18.2
18.2
18.2
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

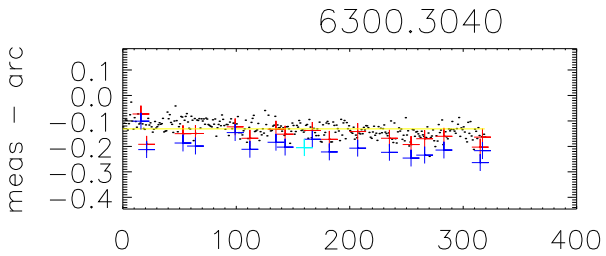

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r1-00010582.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 5.897
Max value = 34.397
Wed Feb 27 21:24:55 2008

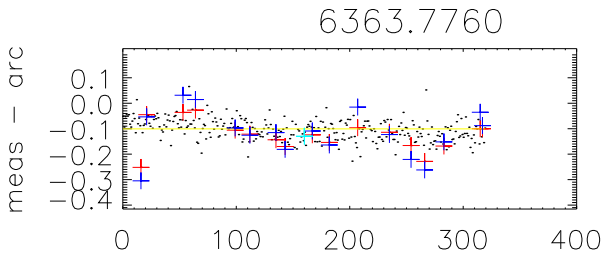

PLATE=0375 MJD=52140 Scattered Light on sdR-r1-00010582.fit
5.5
3.3
Y [pix]
X [pix]
0
500
1000
1500
2000

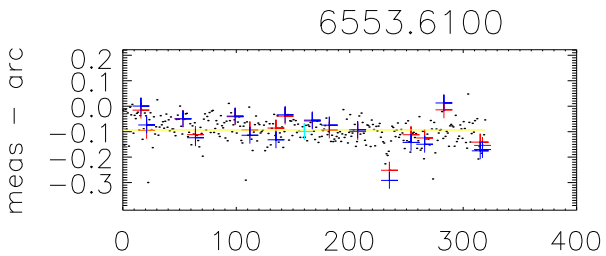

PLATE=0375 MJD=52140 Scattered Light on sdR-r1-00010582.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.929
Max value = 9.436
Wed Feb 27 21:27:29 2008

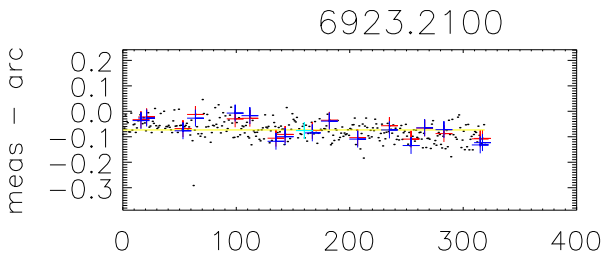

PLATE=0375 MJD=52140 Extraction chi^2 for sdR−r1−00010582.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

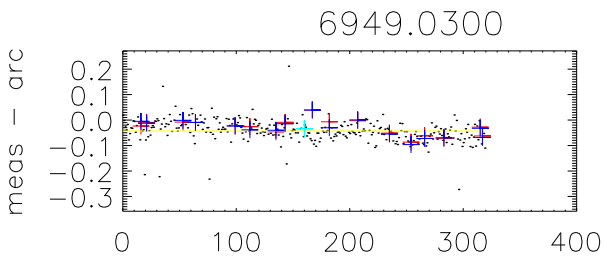

6300.3040
off: -0.21
sig: 0.007
6363.7760
off: -0.13
sig: 0.014
6553.6100
off: -0.10
sig: 0.015
6923.2100
off: -0.08
sig: 0.009
6949.0300
off: -0.03
sig: 0.008
7571.7500
off: -0.02
sig: 0.009
7794.1200
off: -0.15
sig: 0.004
7821.5100
off: -0.10
sig: 0.004
8399.1600
off: -0.06
sig: 0.004
8430.1700
off: -0.08
sig: 0.003
8885.8300
off: -0.07
sig: 0.003
8919.6100
off: -0.07
sig: 0.003

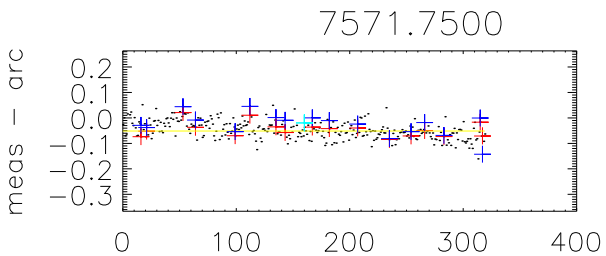

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

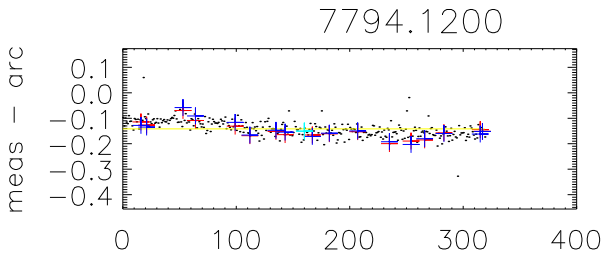

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

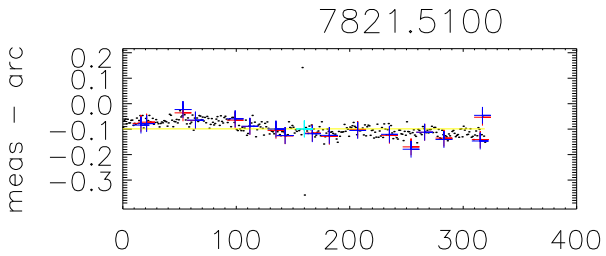

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

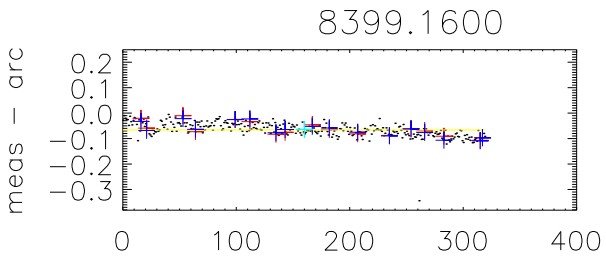

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

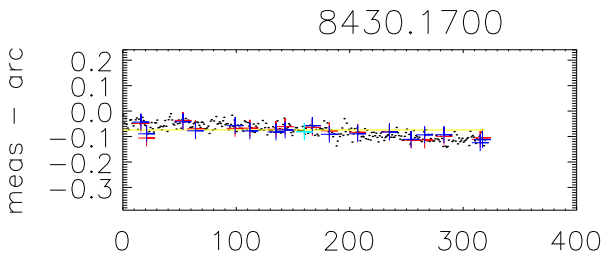

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

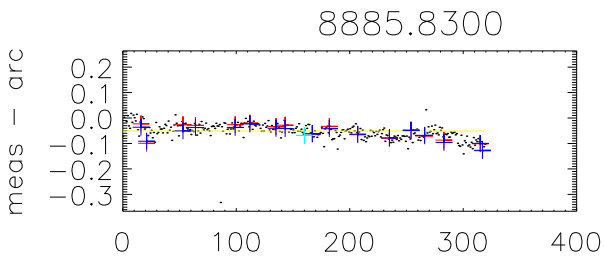

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

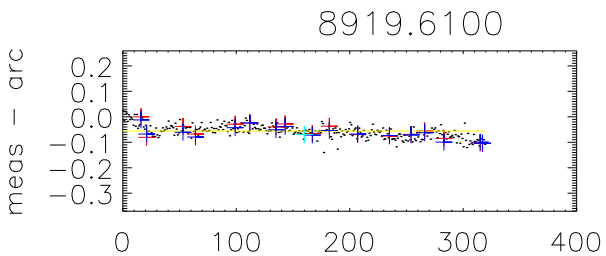

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

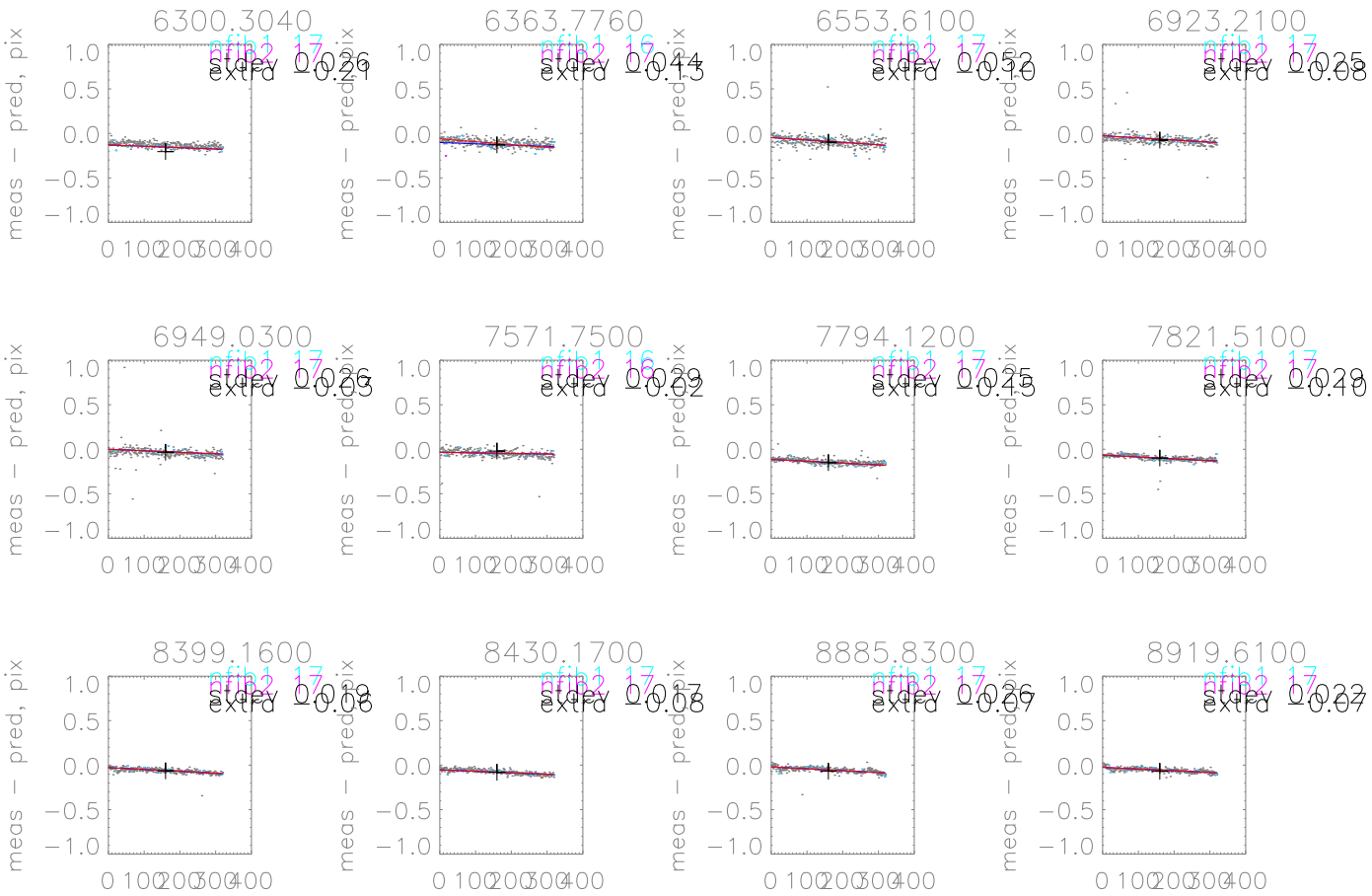

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

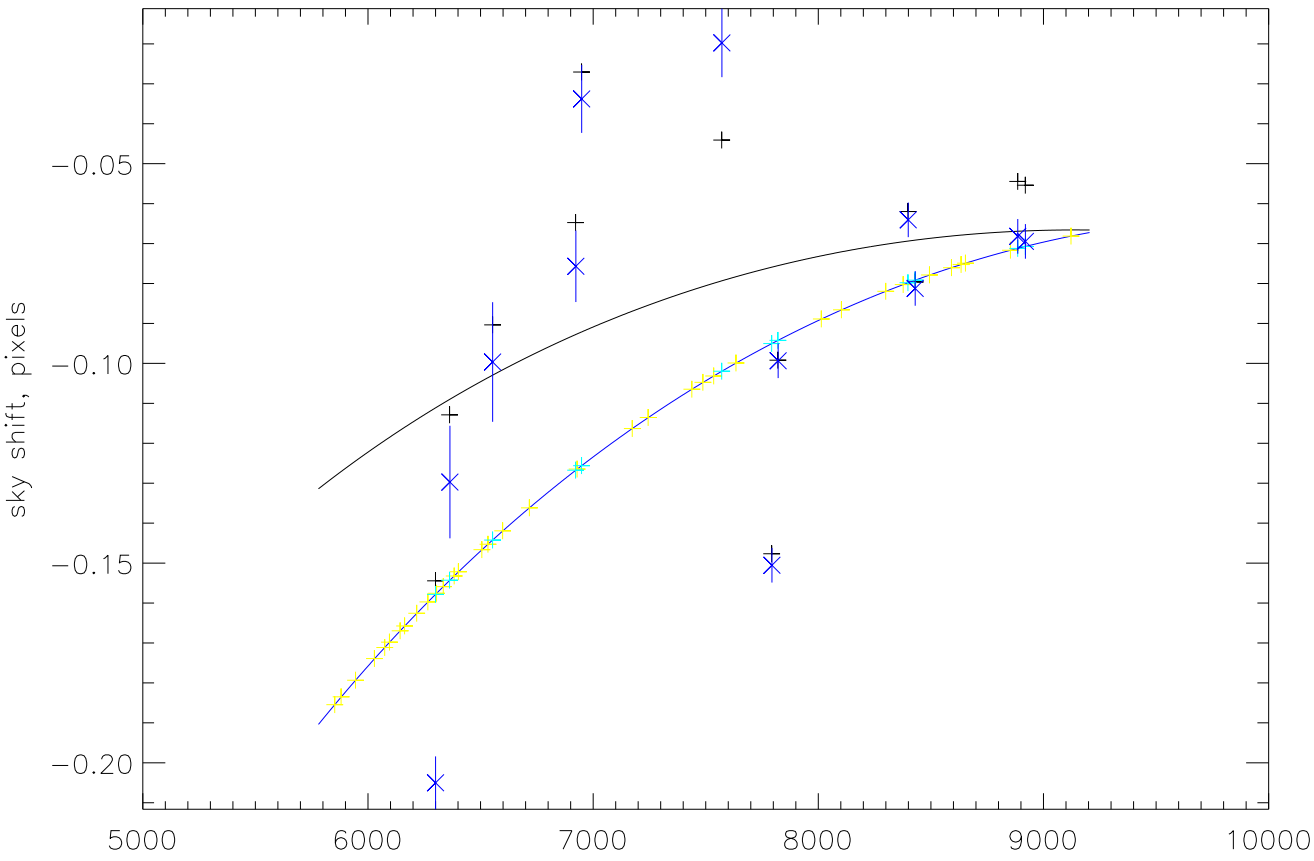

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

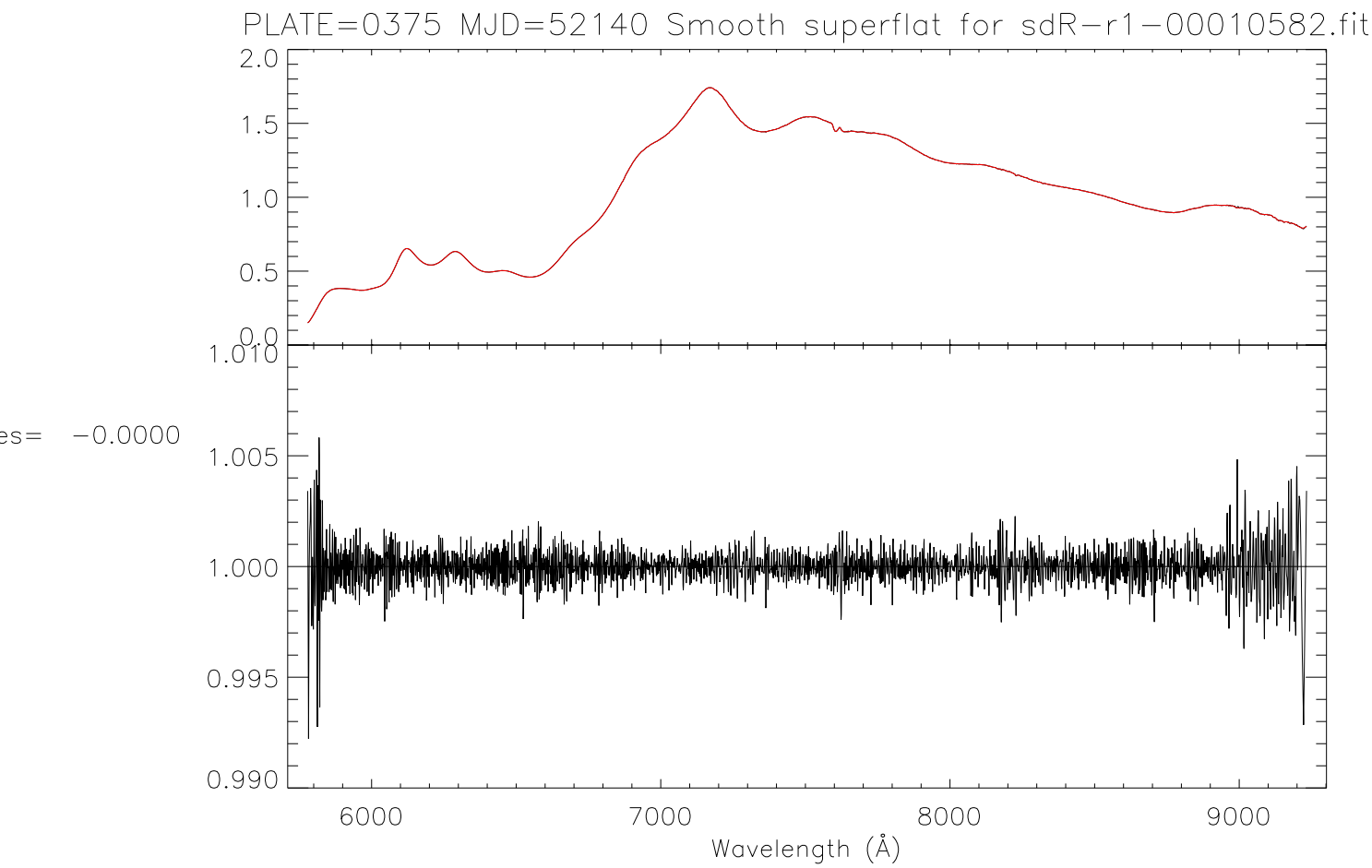

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

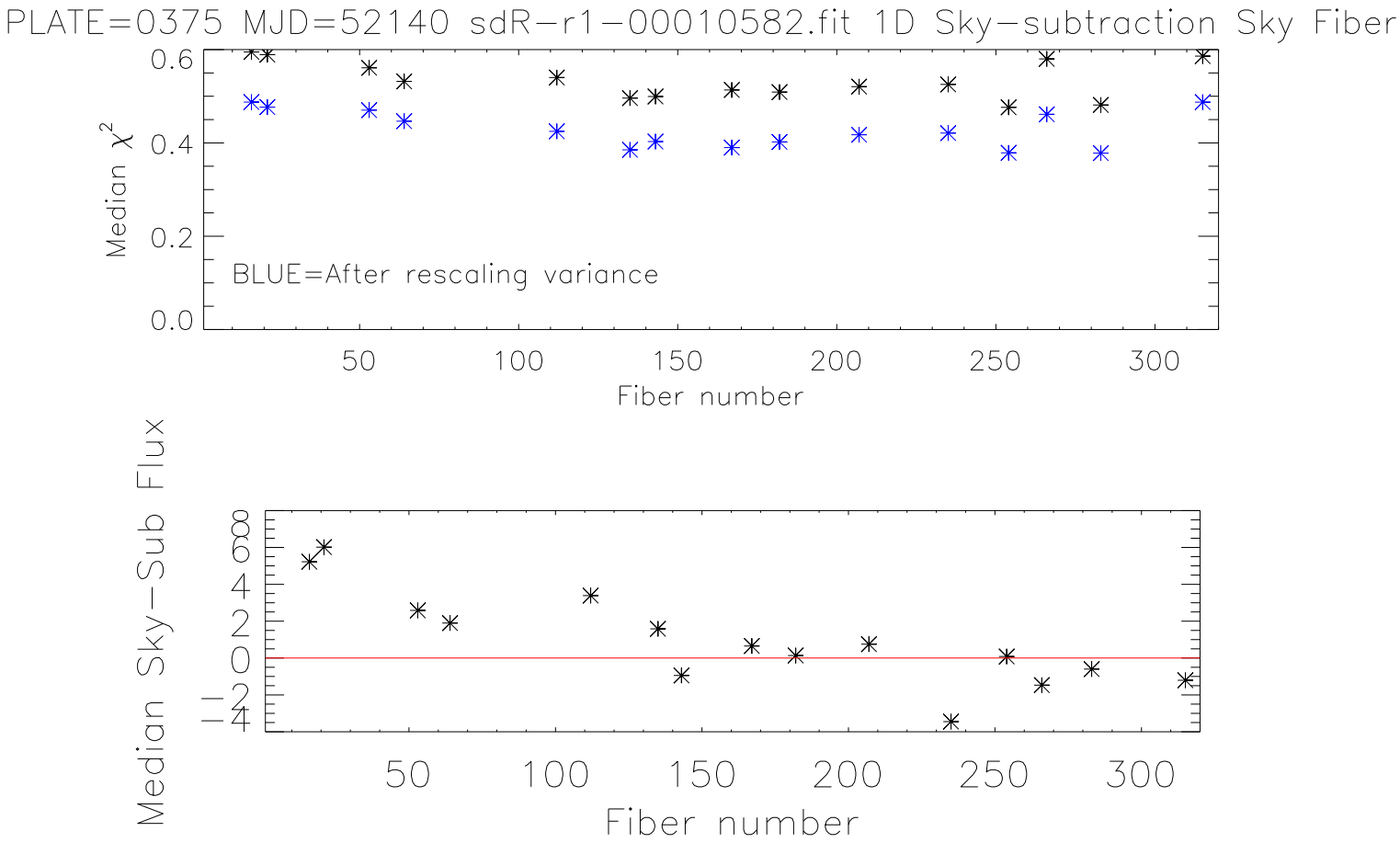

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

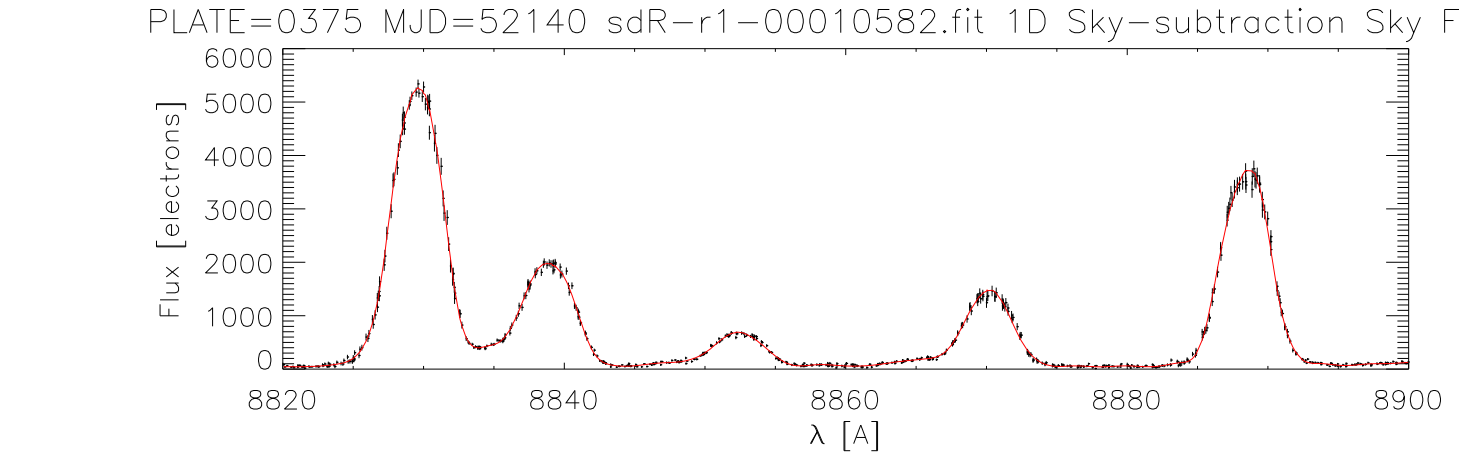

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

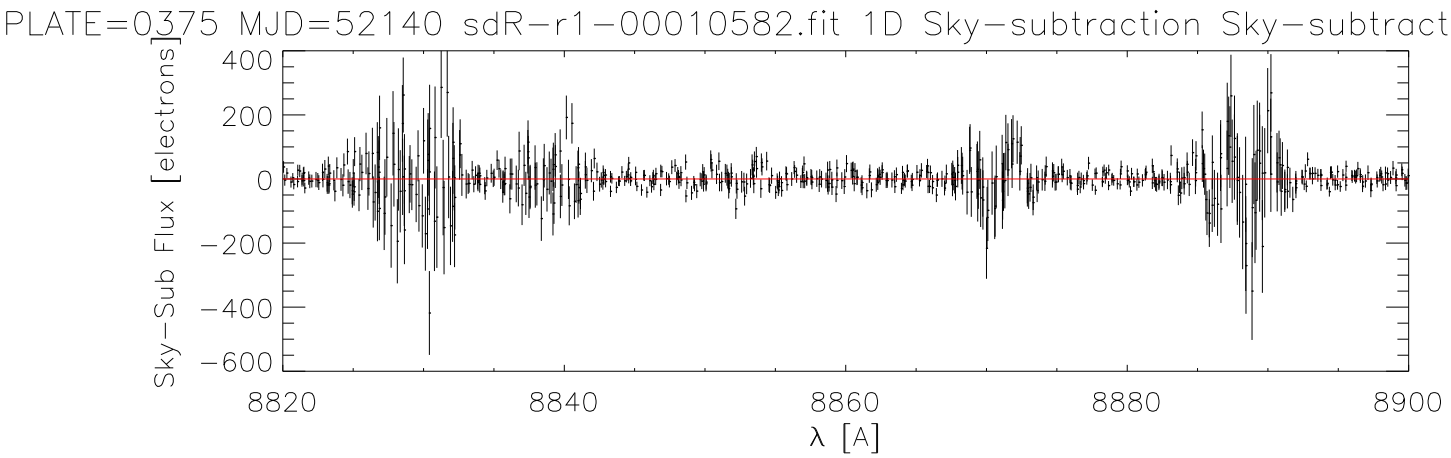

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − pred, pix
mfib1 17
mfib2 17
mfib1 16
stdev 0.026
extra 0.21
stdev 0.044
extra 0.13
stdev 0.052
extra 0.10
stdev 0.025
extra 0.08
stdev 0.026
extra 0.03
stdev 0.029
extra 0.02
stdev 0.025
extra 0.05
stdev 0.029
extra 0.10
stdev 0.019
extra 0.06
stdev 0.017
extra 0.08
stdev 0.026
extra 0.07
stdev 0.022
extra 0.07

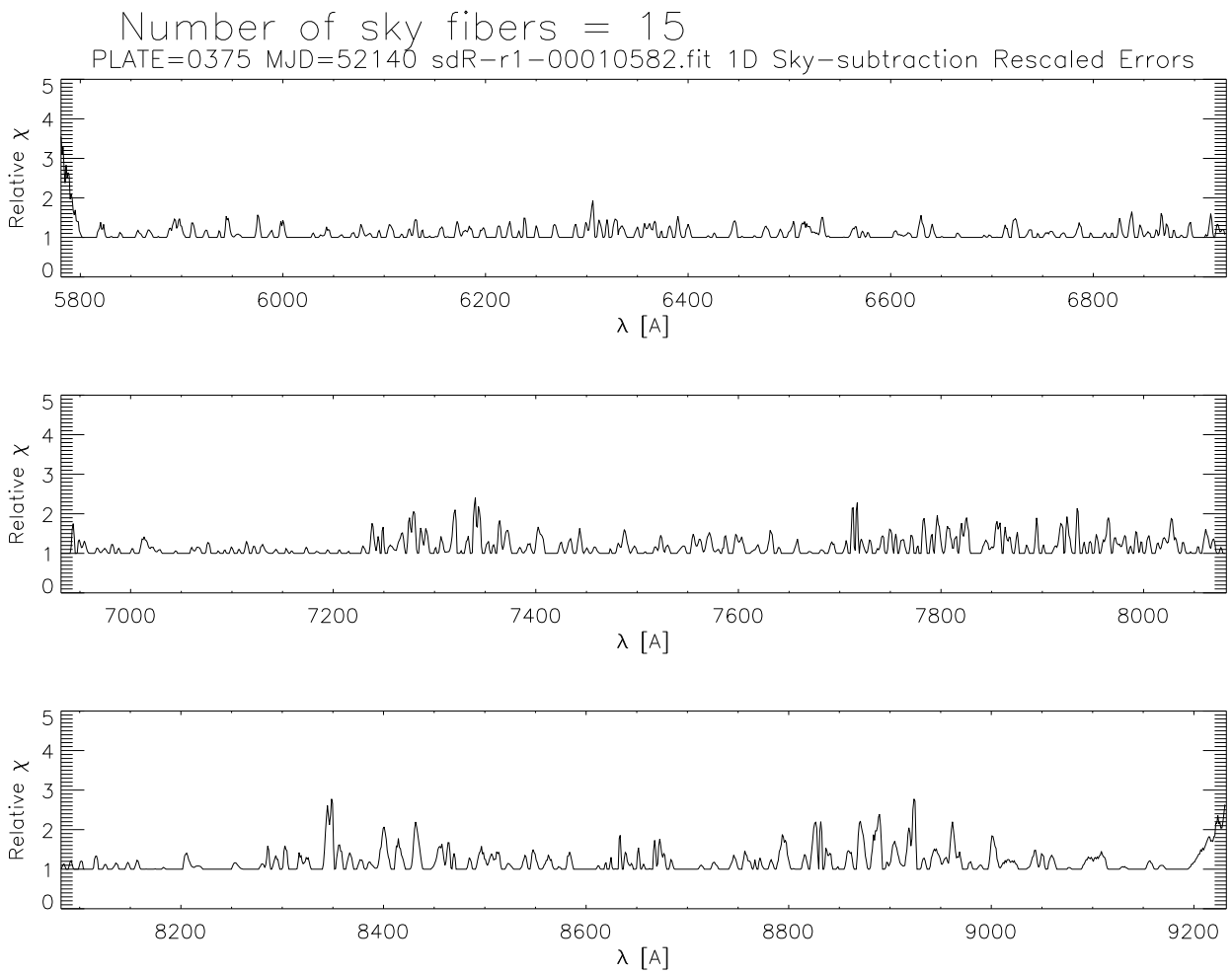

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
5000
6000
7000
8000
9000
10000

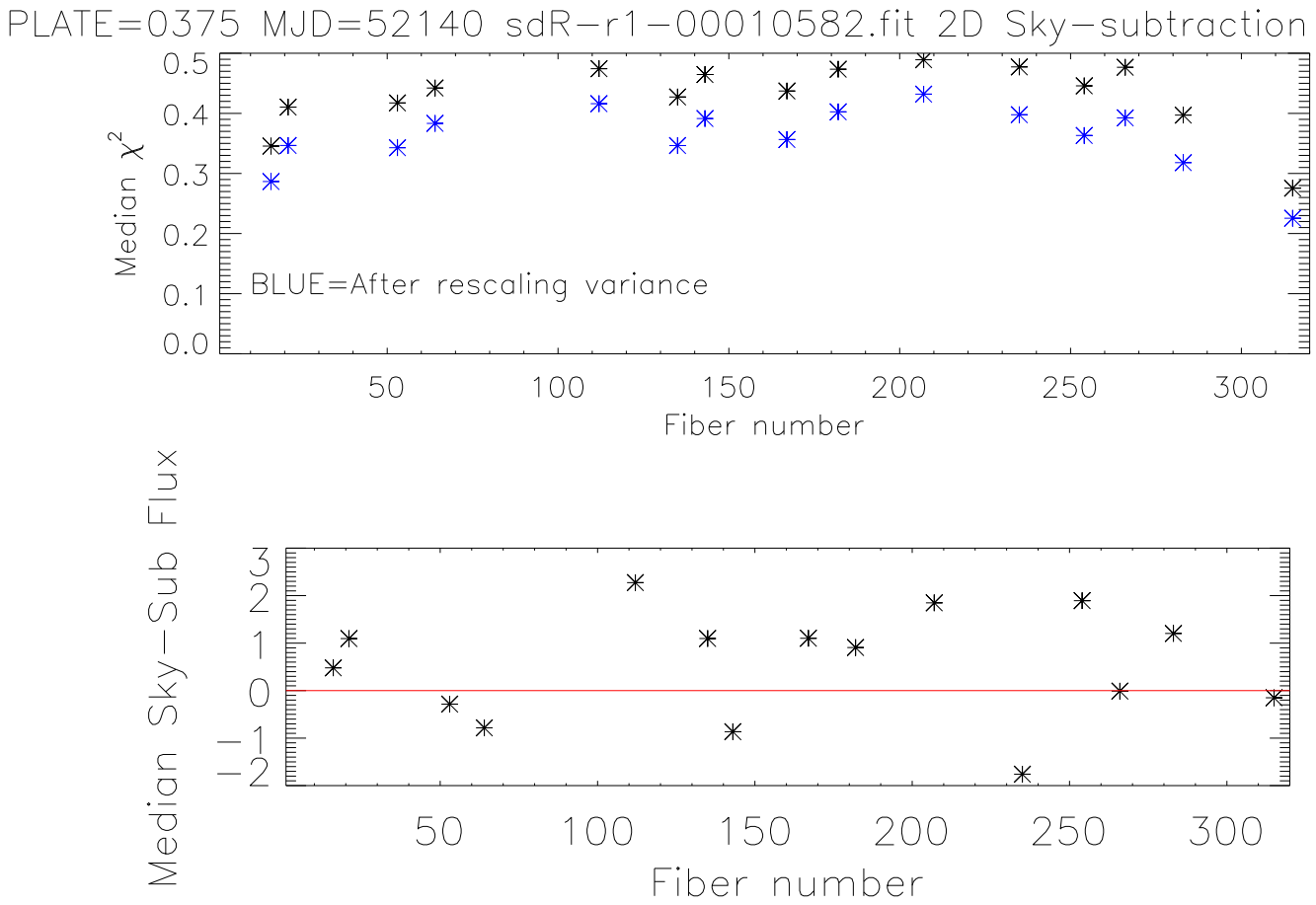

PLATE=0375 MJD=52140 Smooth superflat for sdR-r1-00010582.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

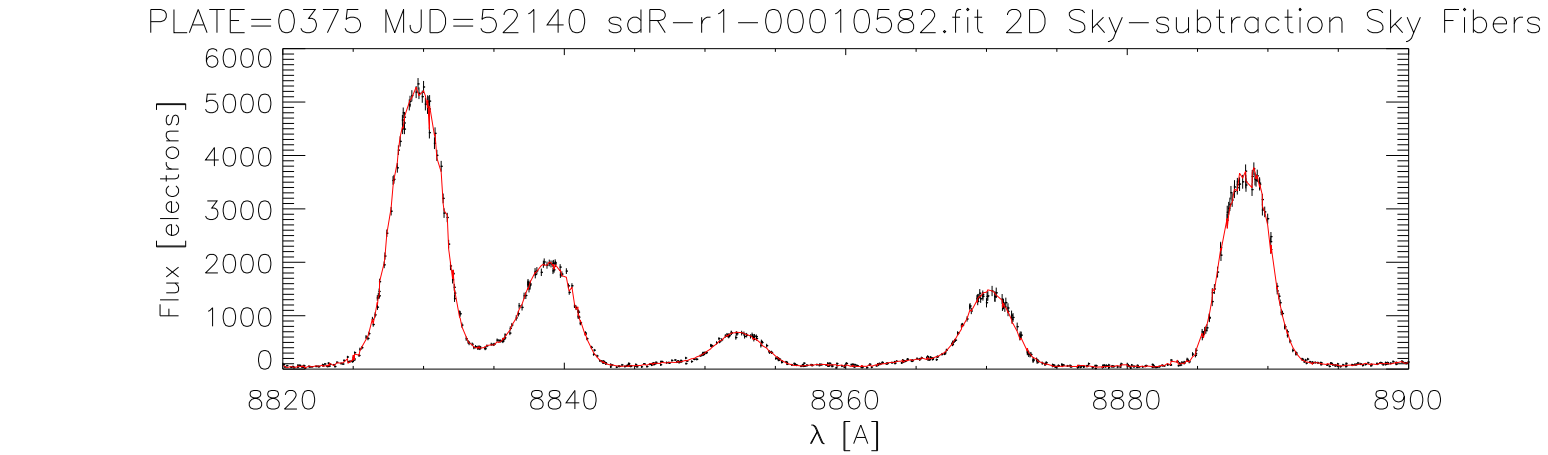

PLATE=0375 MJD=52140 sdR-r1-00010582.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

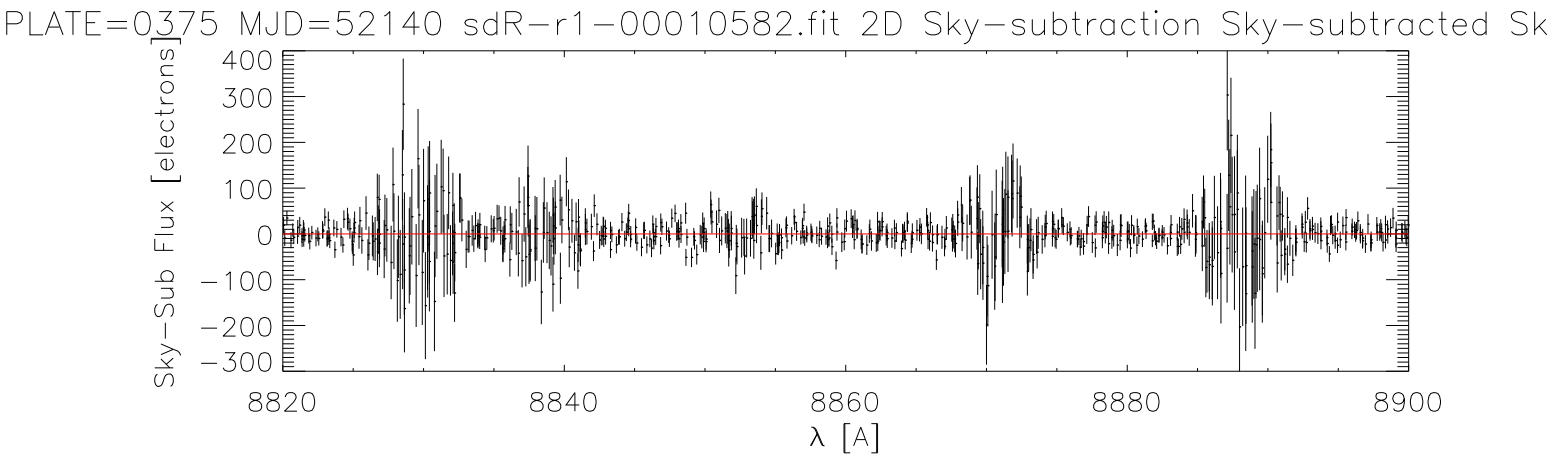

PLATE=0375 MJD=52140 sdR-r1-00010582.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

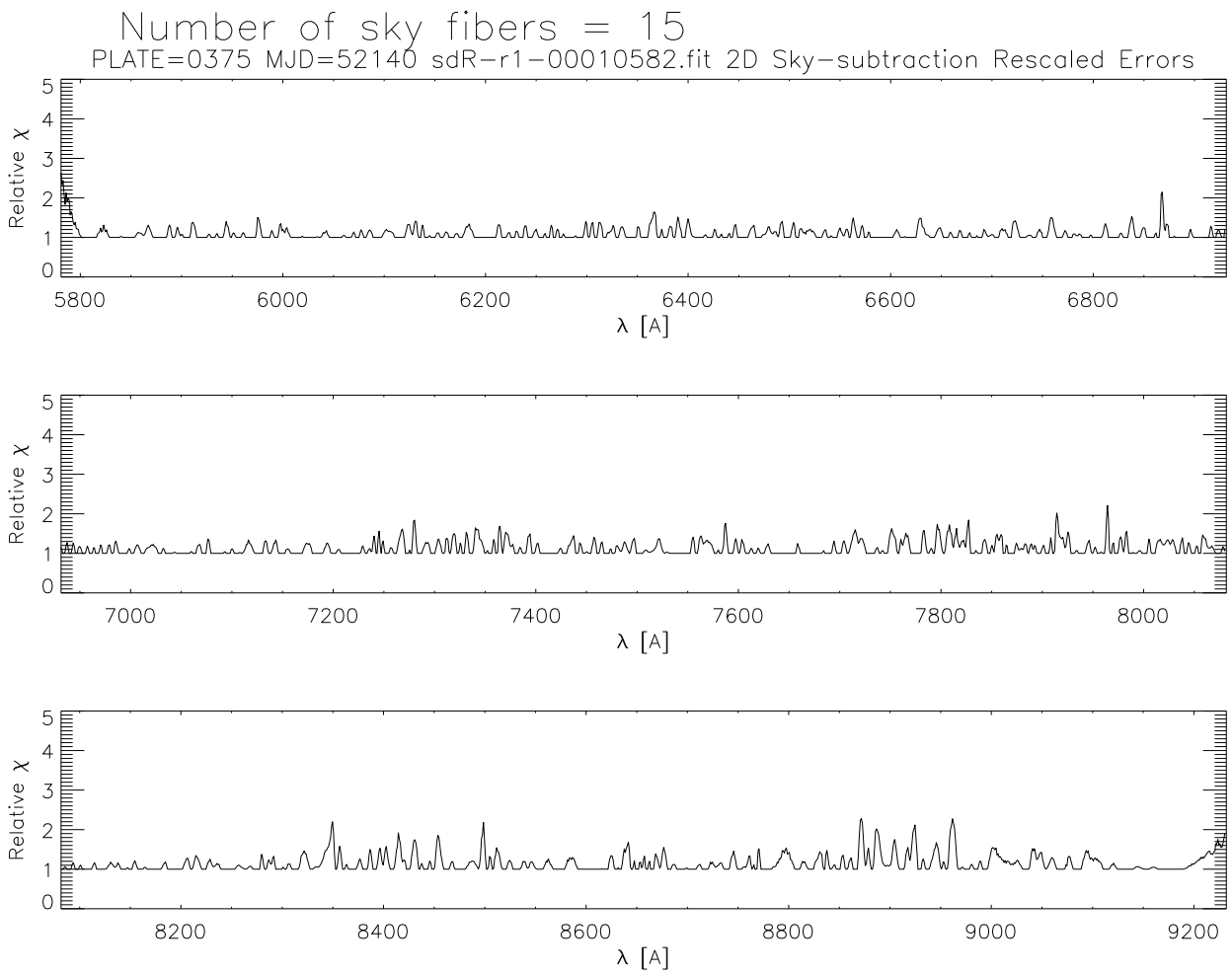

PLATE=0375 MJD=52140 sdR-r1-00010582.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
8820
8840
8860
8880
8900
λ [A]

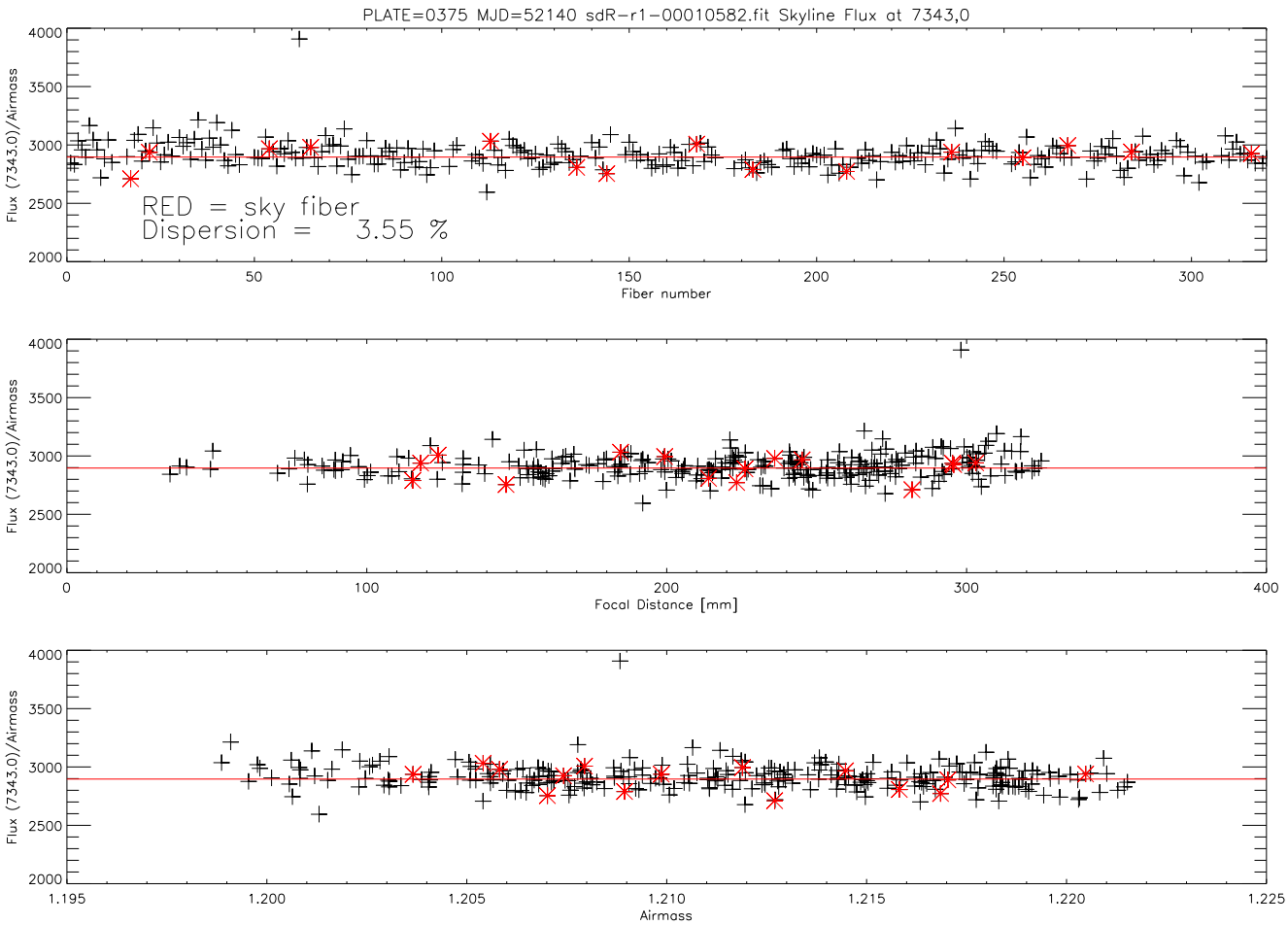

Number of sky fibers = 15
PLATE=0375 MJD=52140 sdR-r1-00010582.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

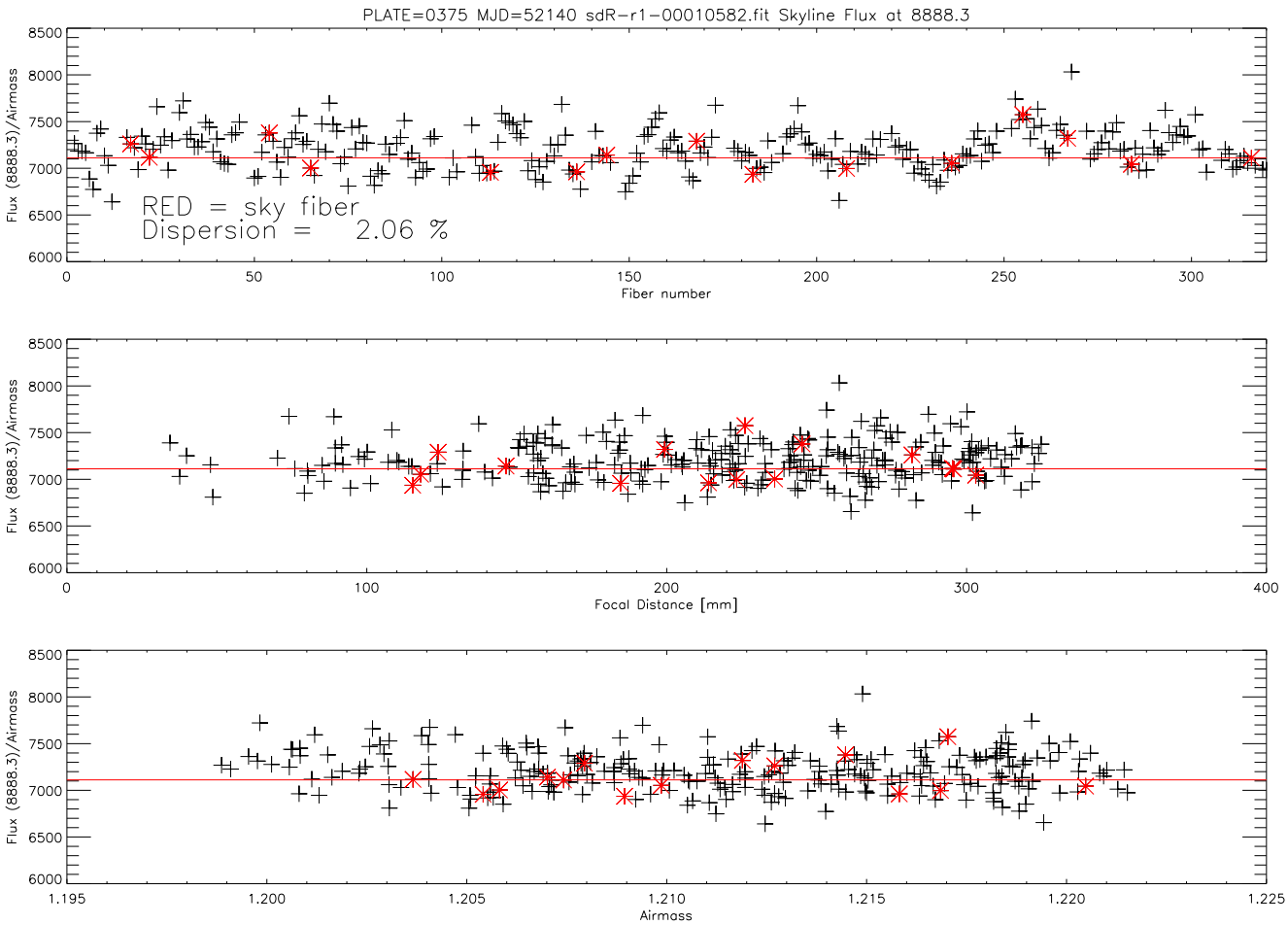

PLATE=0375 MJD=52140 sdR-r1-00010582.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

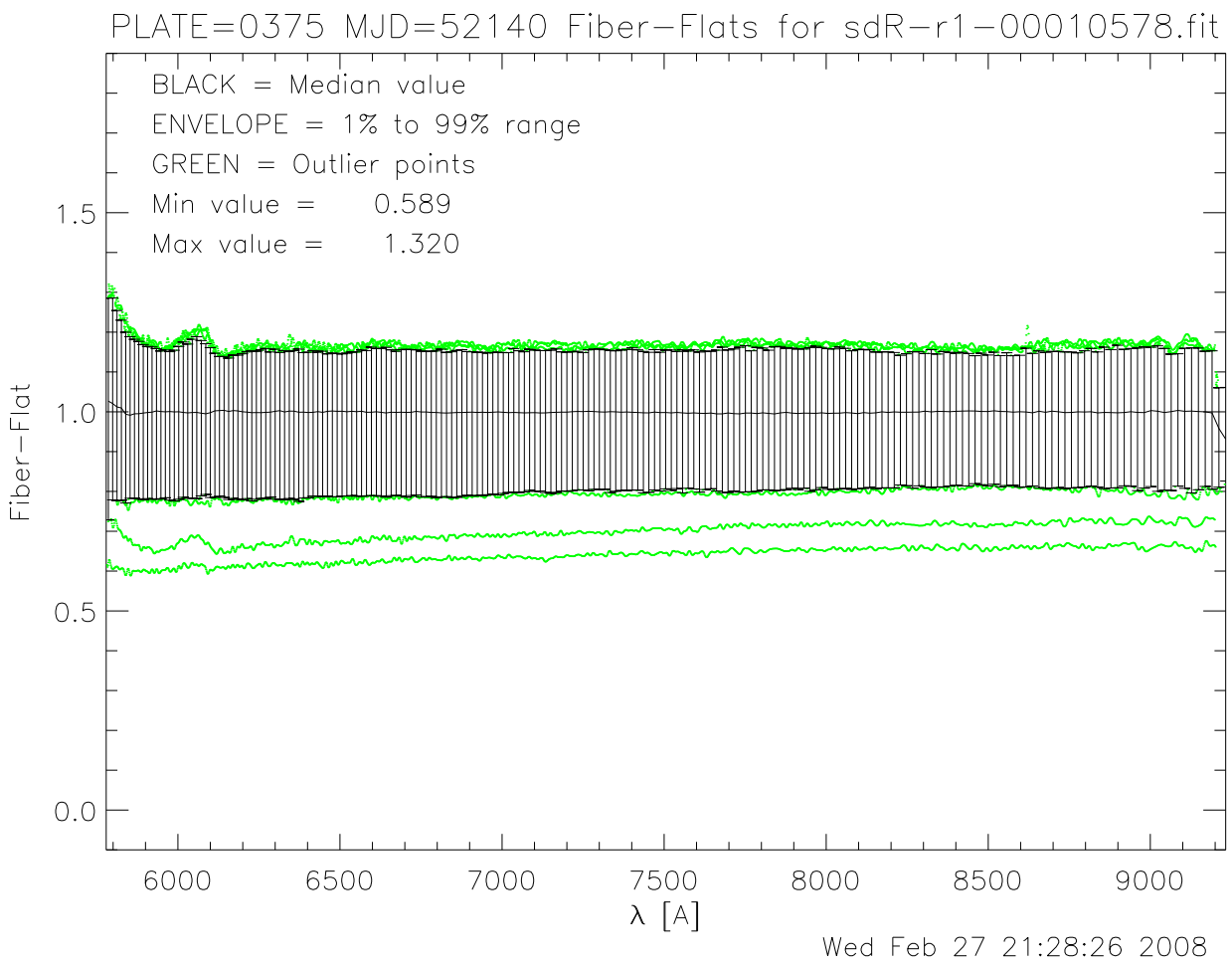

PLATE=0375 MJD=52140 sdR-r1-00010582.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

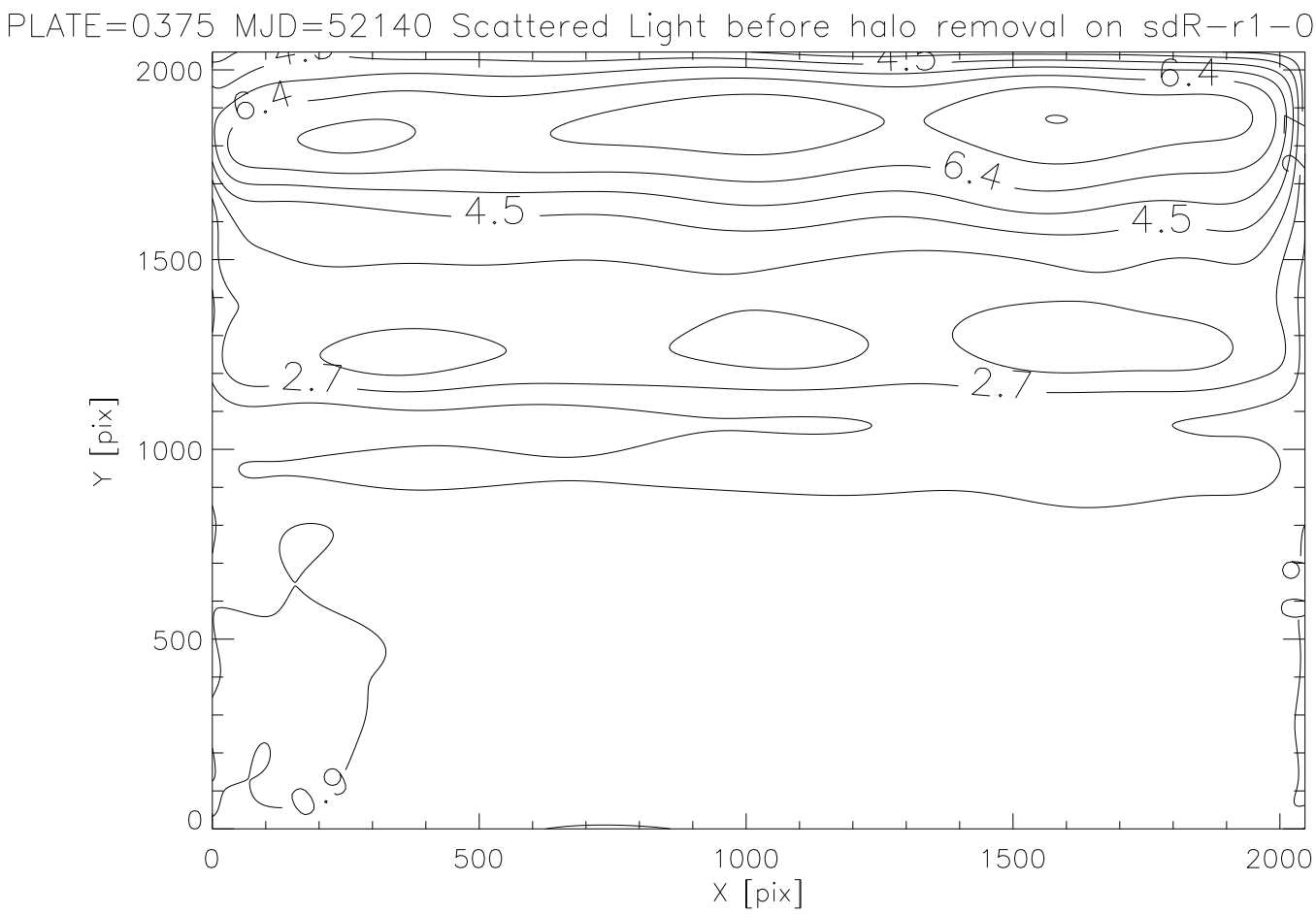

PLATE=0375 MJD=52140 sdR-r1-00010582.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

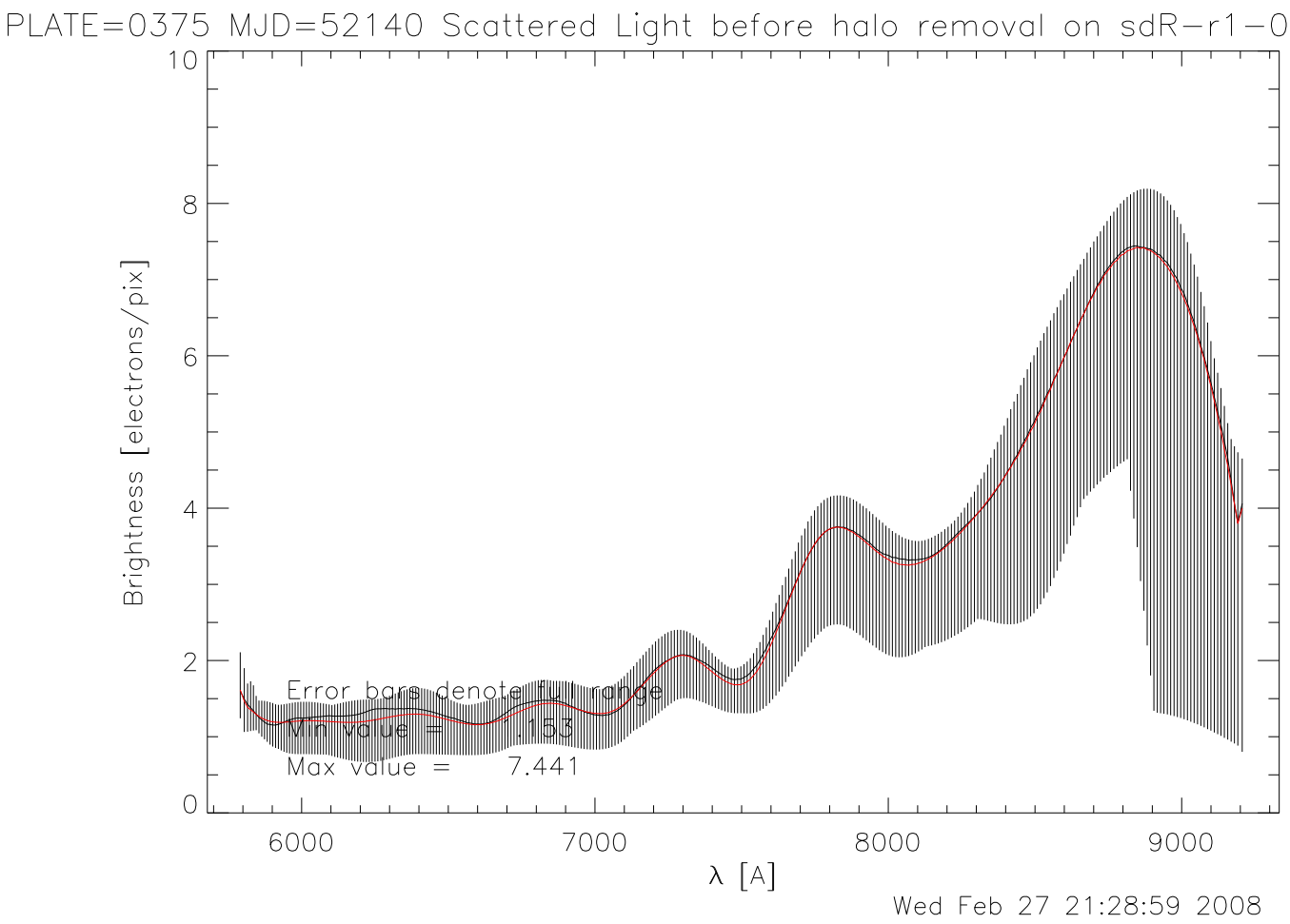

Number of sky fibers = 15
PLATE=0375 MJD=52140 sdR-r1-00010582.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

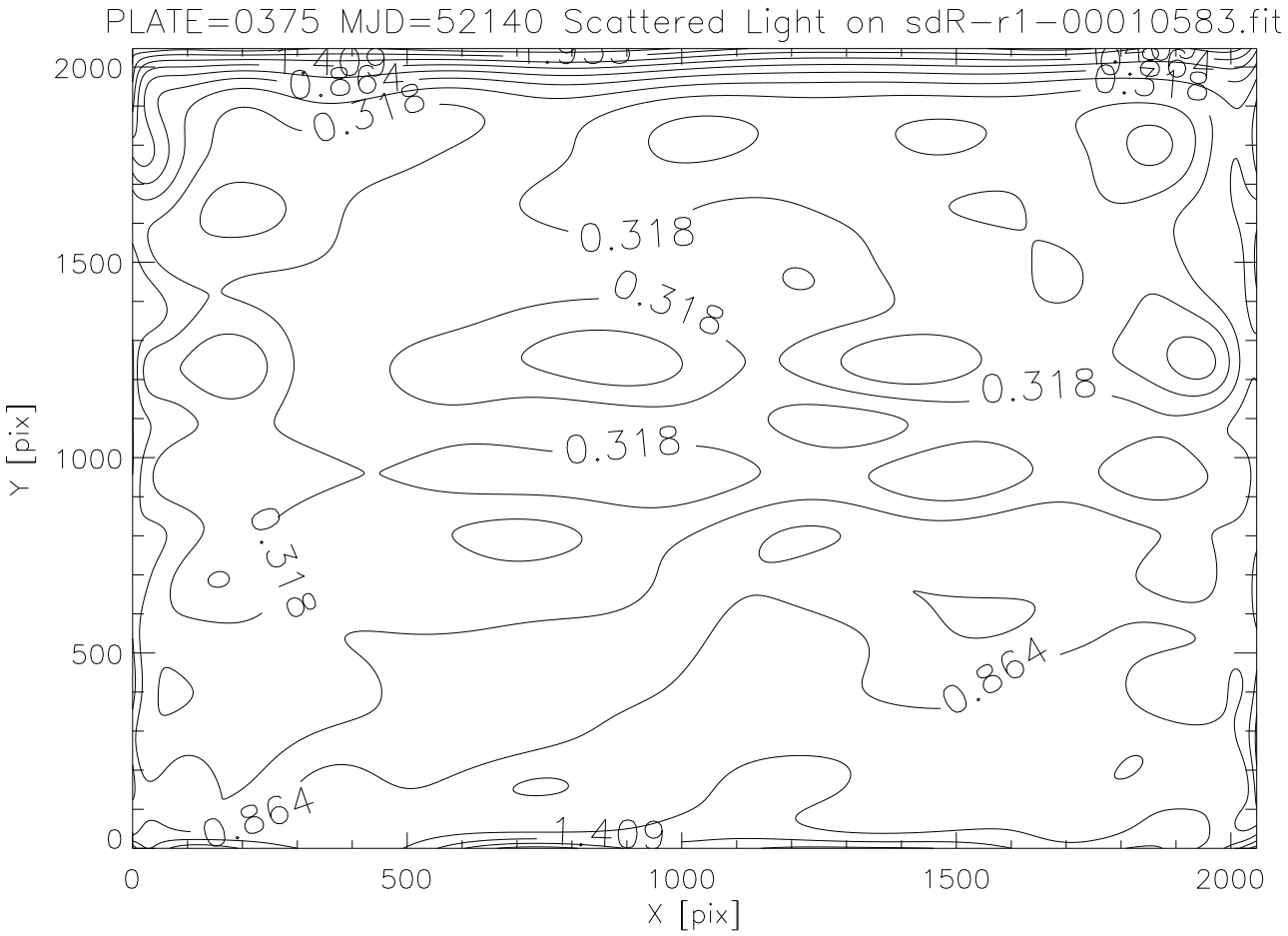

PLATE=0375 MJD=52140 sdR-r1-00010582.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.55 %
Fiber number
Focal Distance [mm]
Airmass

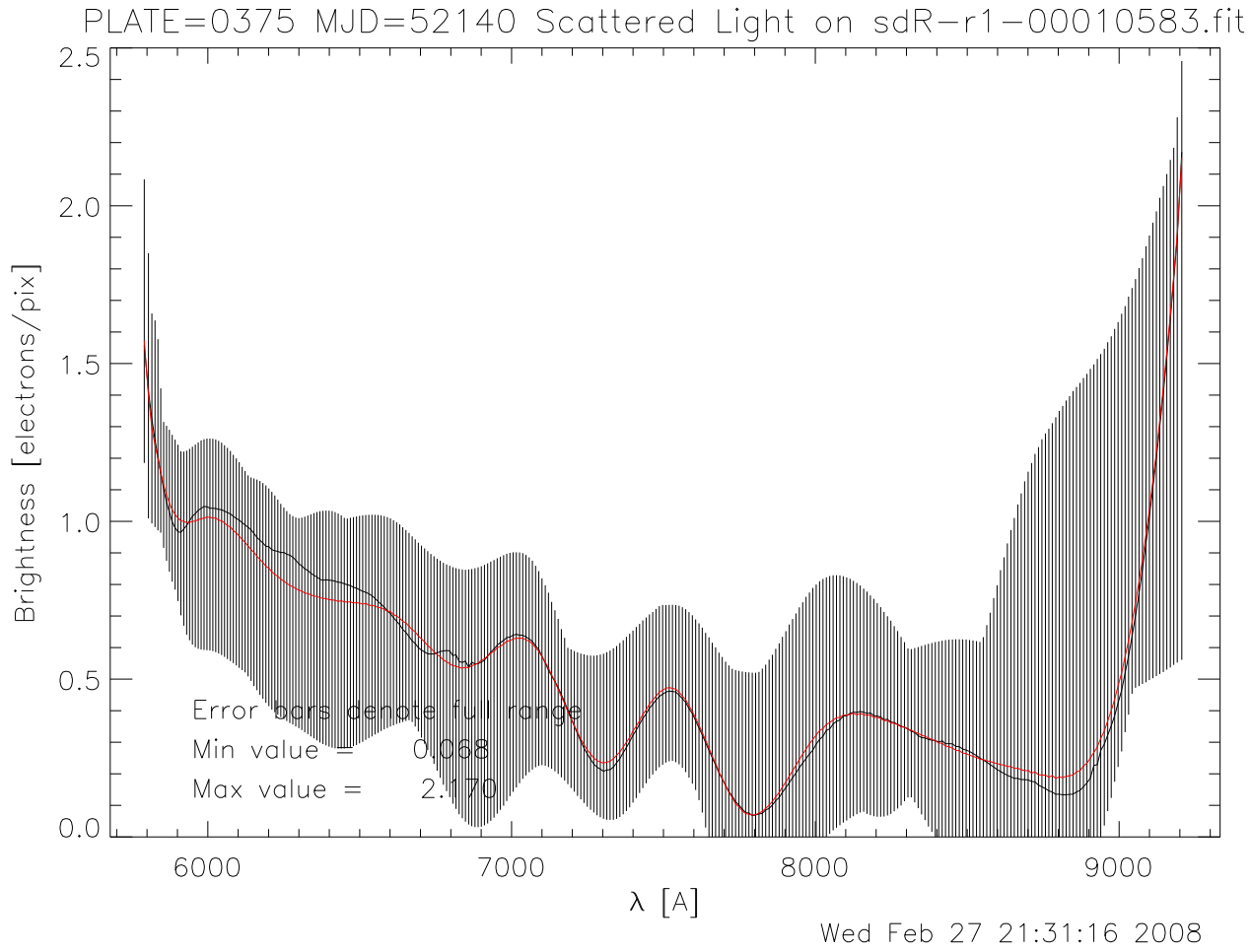

PLATE=0375 MJD=52140 sdR-r1-00010582.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.06 %
Fiber number
Focal Distance [mm]
Airmass

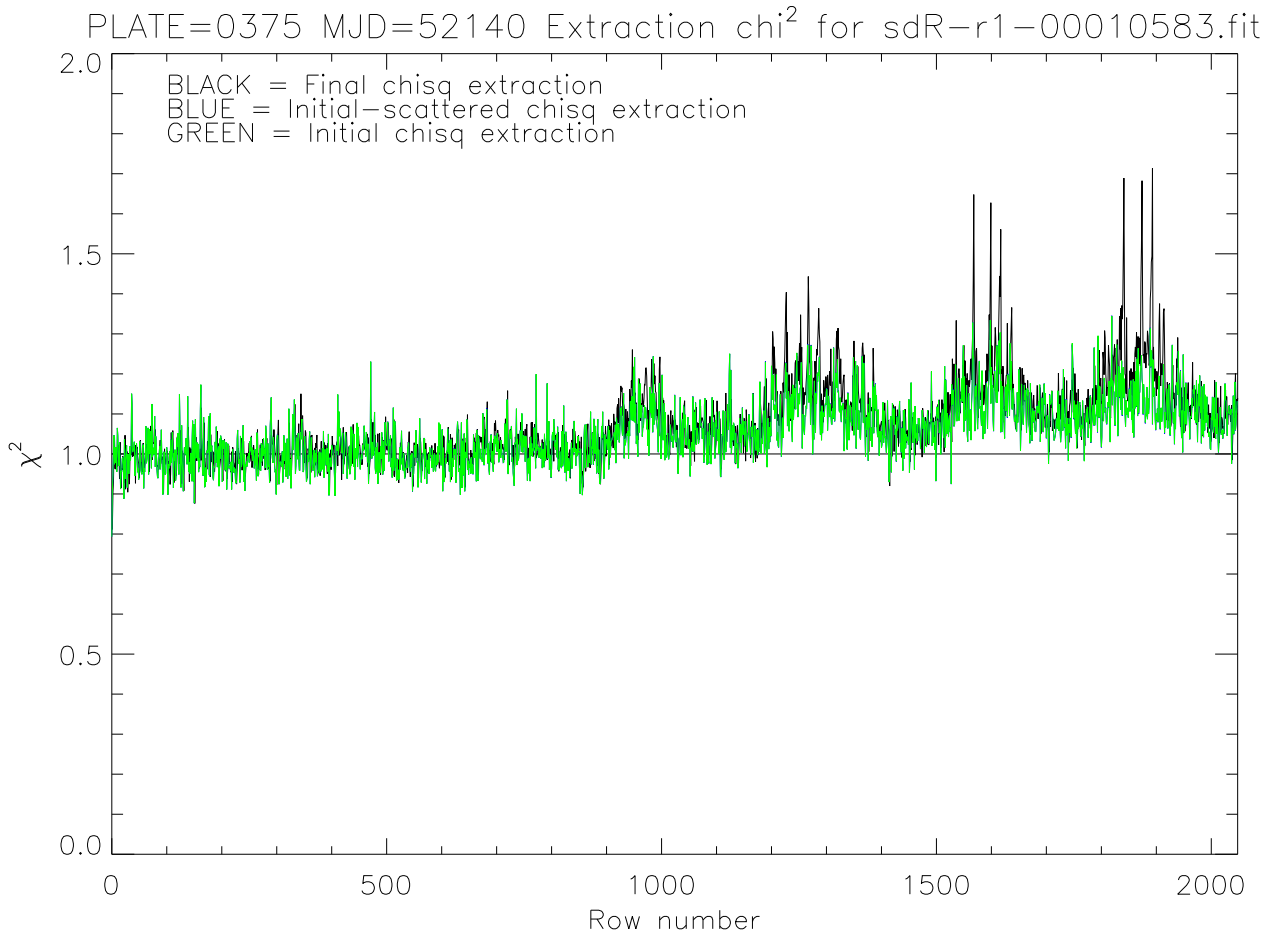

PLATE=0375 MJD=52140 Fiber−Flats for sdR−r1−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.589
Max value = 1.320
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 27 21:28:26 2008

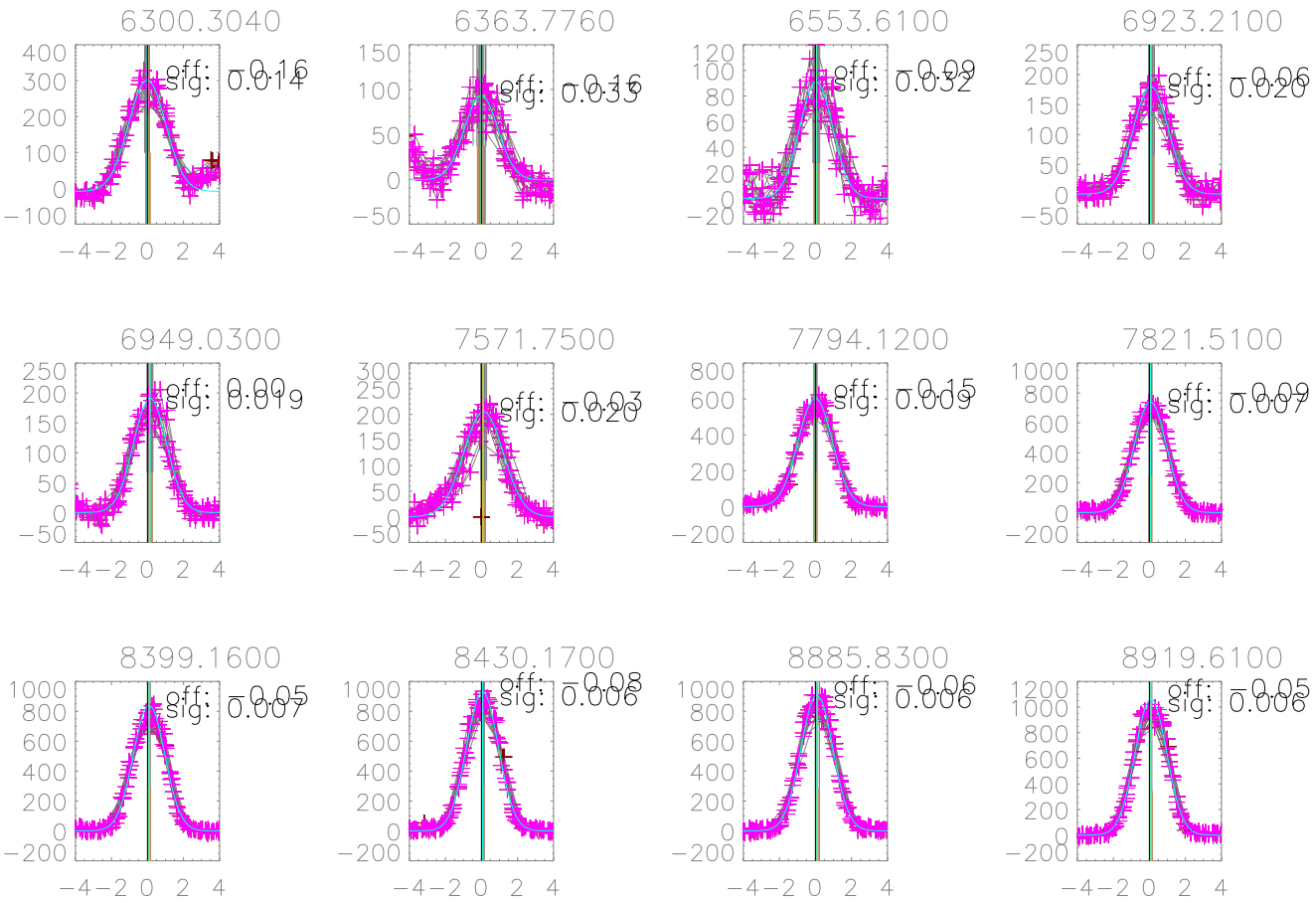

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR−r1−00010583.fi
6.4
4.5
2.7
0.9
Y [pix]
X [pix]
0
500
1000
1500
2000

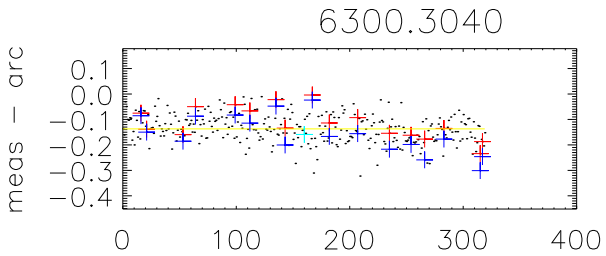

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r1-00010583.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = .1153
Max value = 7.441
Wed Feb 27 21:28:59 2008

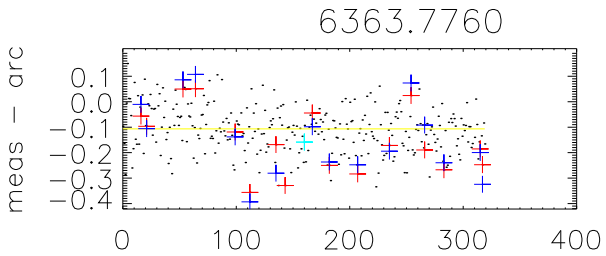

PLATE=0375 MJD=52140 Scattered Light on sdR−r1−00010583.fit
0.864
0.318
0.318
0.318
0.318
0.318
0.318
0.864
0.864
1.409
Y [pix]
X [pix]
0
500
1000
1500
2000

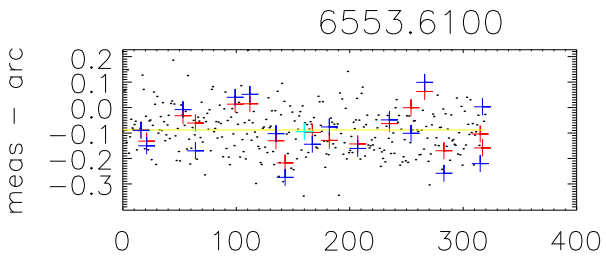

PLATE=0375 MJD=52140 Scattered Light on sdR-r1-00010583.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = 0.068
Max value = 2.170
6000
7000
8000
9000
λ [A]
Wed Feb 27 21:31:16 2008

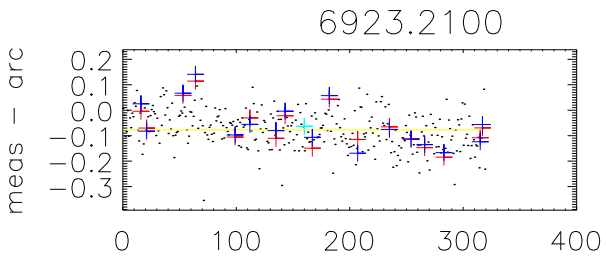

PLATE=0375 MJD=52140 Extraction chi^2 for sdR−r1−00010583.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

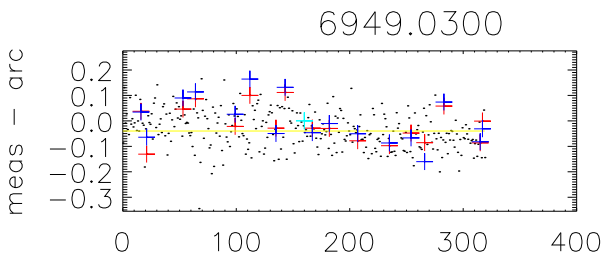

6300.3040
off: −0.16
sig: 0.014
6363.7760
off: −0.16
sig: 0.033
6553.6100
off: −0.09
sig: 0.032
6923.2100
off: −0.06
sig: 0.020
6949.0300
off: 0.00
sig: 0.019
7571.7500
off: −0.03
sig: 0.020
7794.1200
off: −0.15
sig: 0.009
7821.5100
off: −0.09
sig: 0.007
8399.1600
off: −0.05
sig: 0.007
8430.1700
off: −0.08
sig: 0.006
8885.8300
off: −0.06
sig: 0.006
8919.6100
off: −0.05
sig: 0.006

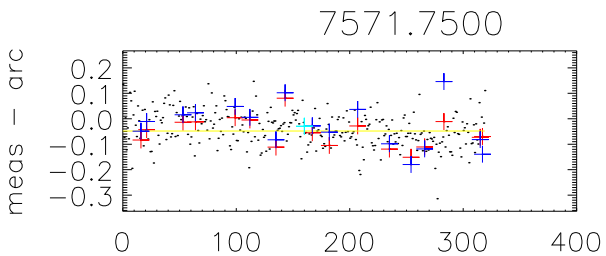

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

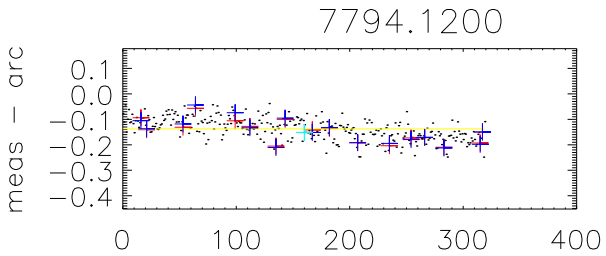

6363.7760
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

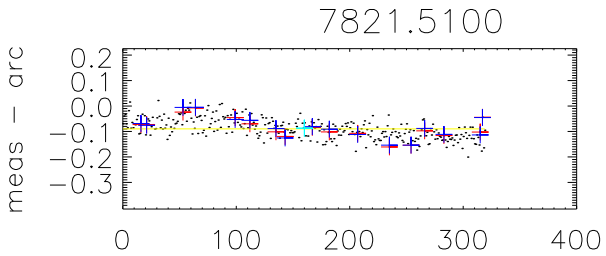

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

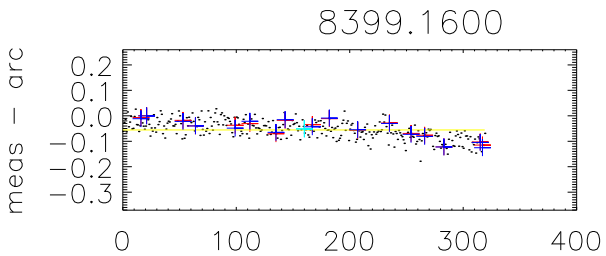

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

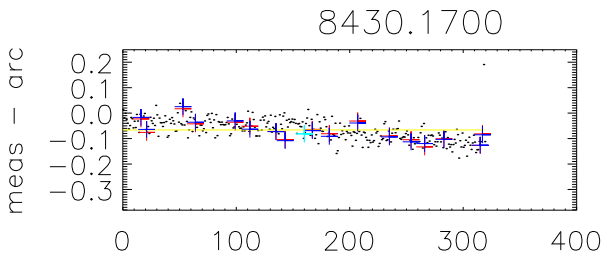

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

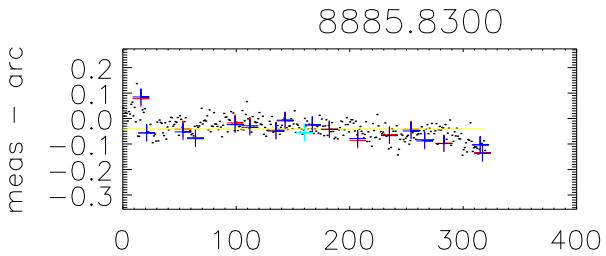

7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

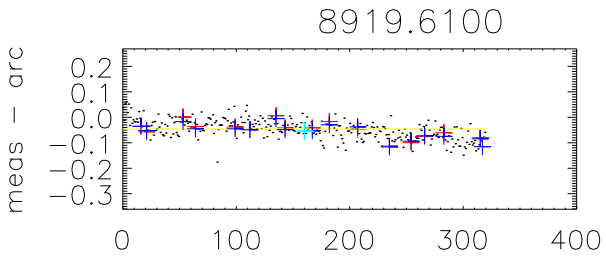

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

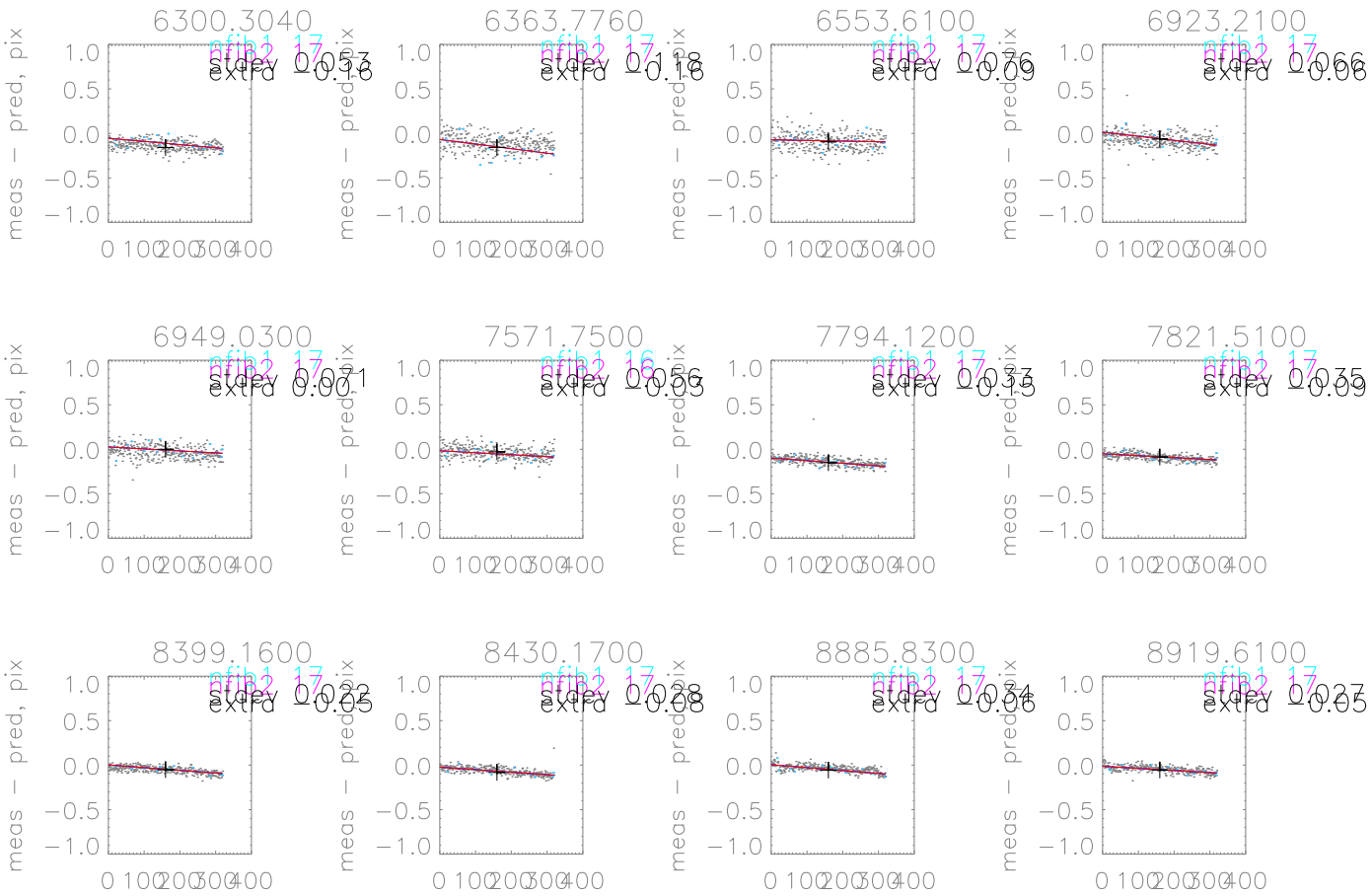

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

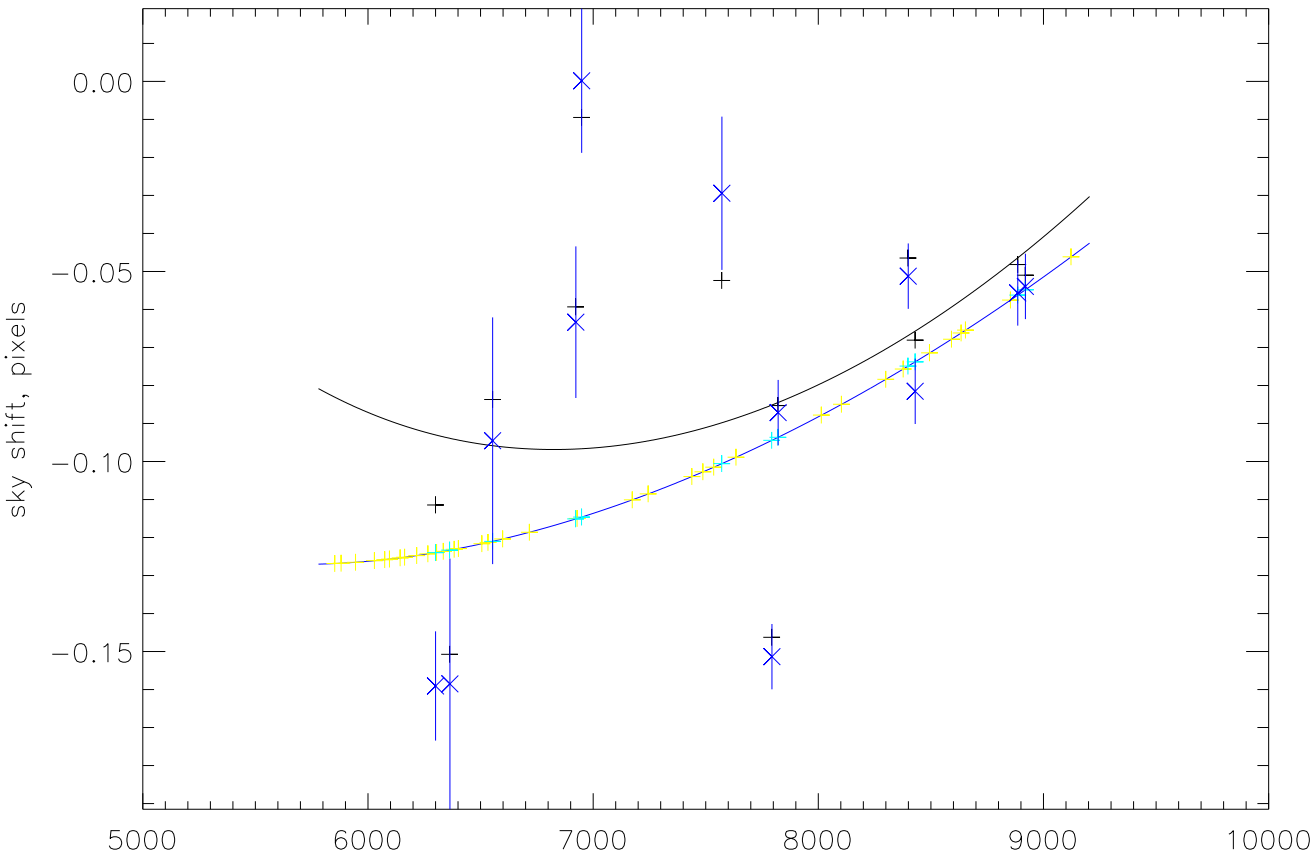

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

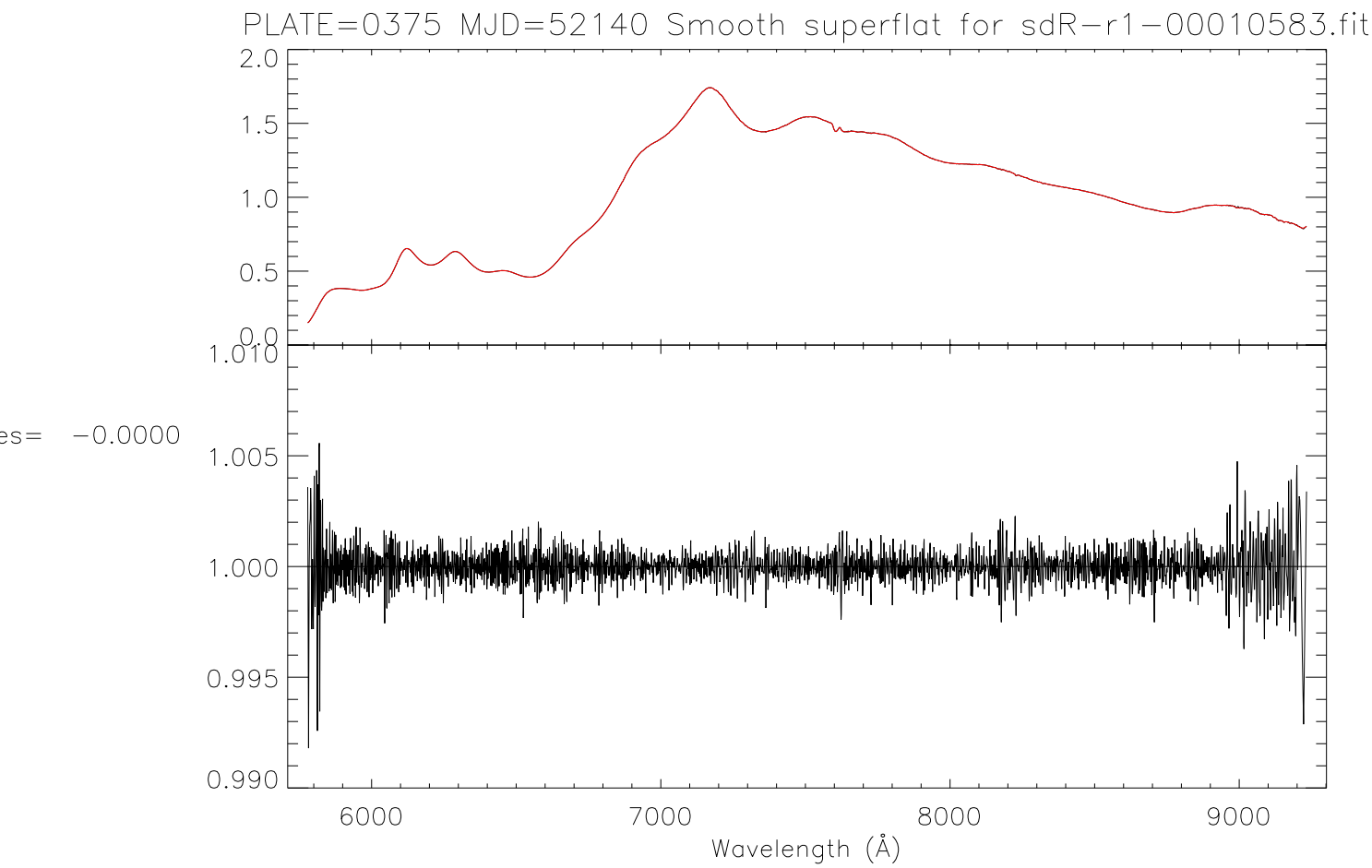

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

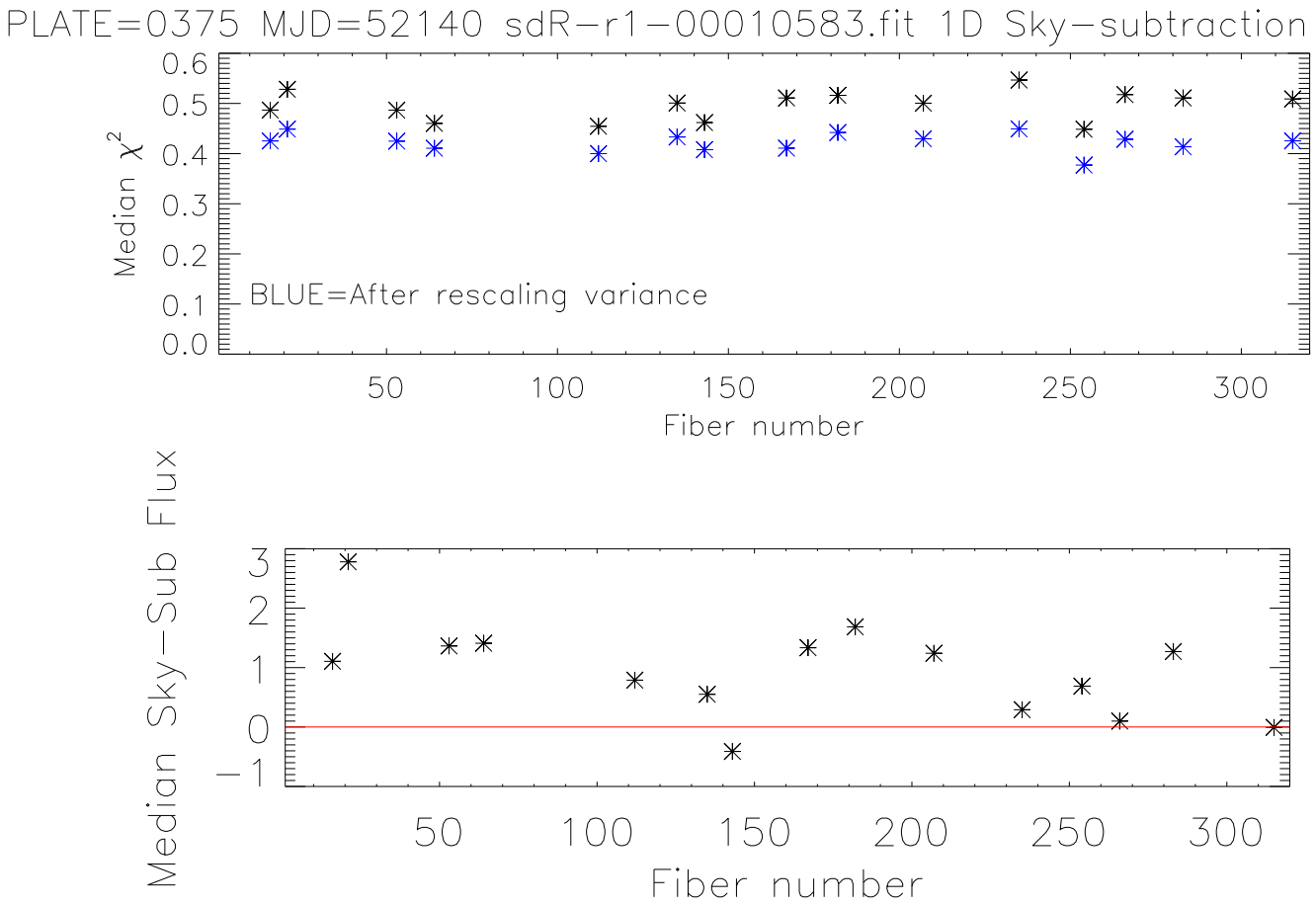

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

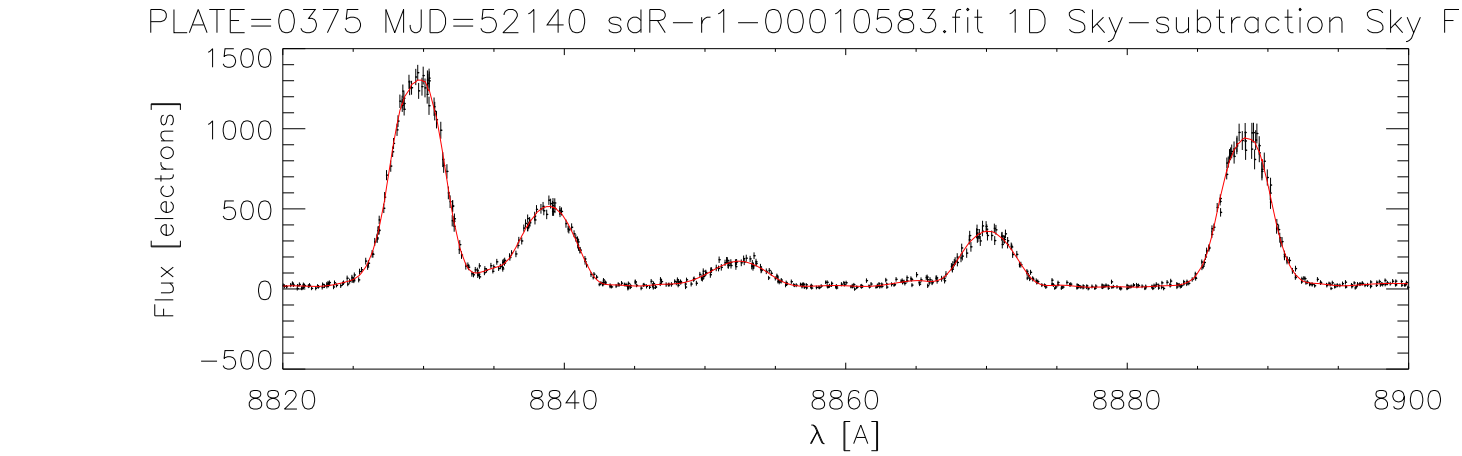

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

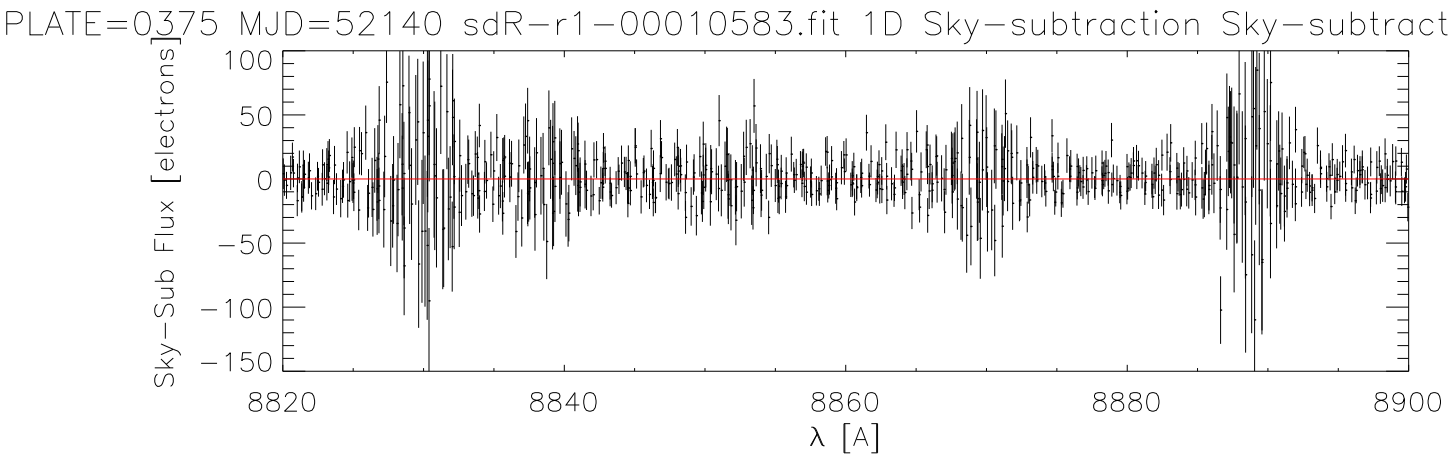

6300.3040
mfb32 17
stdev 0.053
extra 0.016
6363.7760
mfb32 17
stdev 0.118
extra 0.016
6553.6100
mfb32 17
stdev 0.076
extra 0.009
6923.2100
mfb32 17
stdev 0.066
extra 0.008
6949.0300
mfb32 17
stdev 0.071
extra 0.007
7571.7500
mfb32 16
stdev 0.056
extra 0.003
7794.1200
mfb32 17
stdev 0.033
extra 0.015
7821.5100
mfb32 17
stdev 0.035
extra 0.009
8399.1600
mfb32 17
stdev 0.022
extra 0.005
8430.1700
mfb32 17
stdev 0.028
extra 0.008
8885.8300
mfb32 17
stdev 0.034
extra 0.006
8919.6100
mfb32 17
stdev 0.027
extra 0.005
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

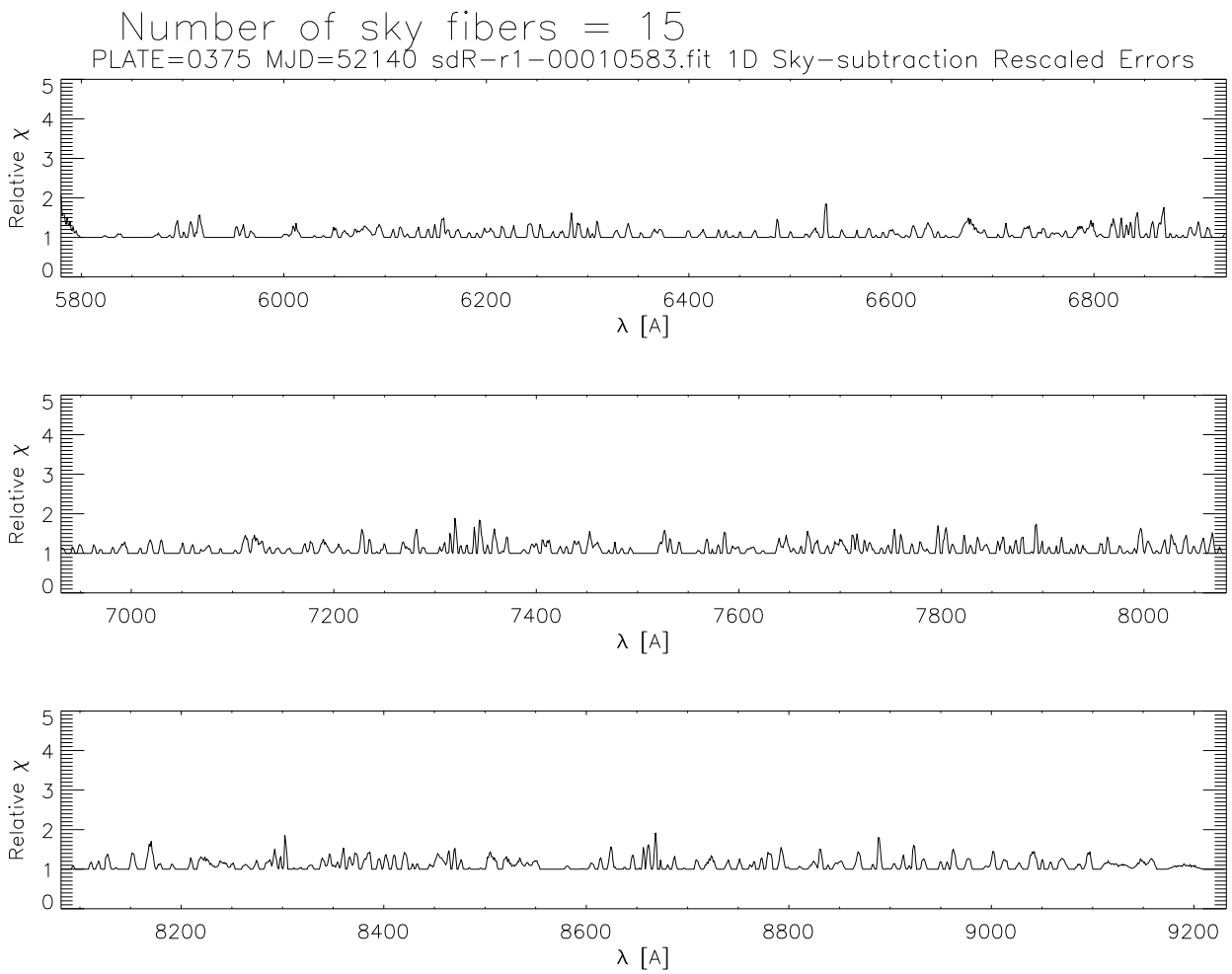

0.00
−0.05
−0.10
−0.15
sky shift, pixels
5000
6000
7000
8000
9000
10000

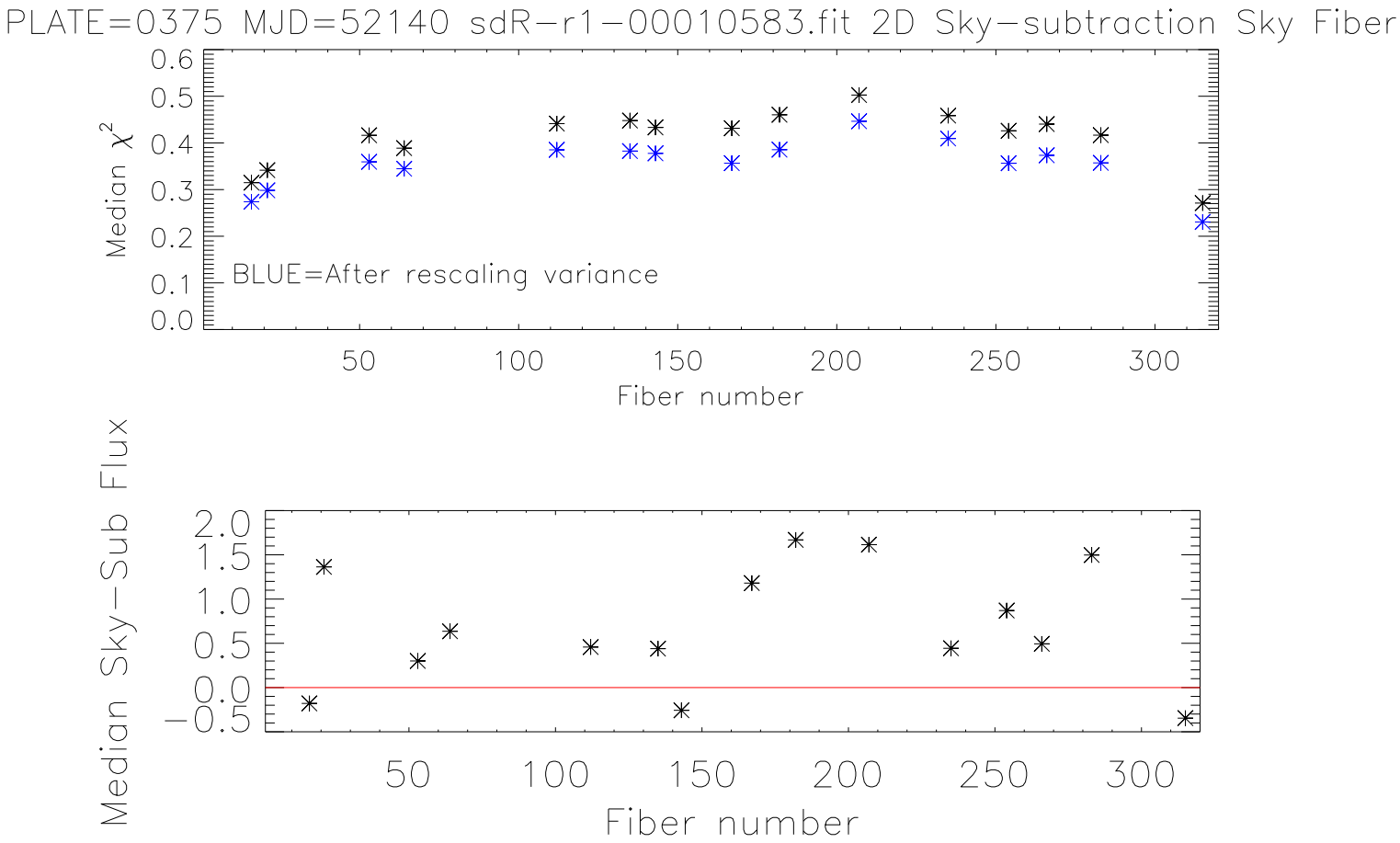

PLATE=0375 MJD=52140 Smooth superflat for sdR-r1-00010583.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

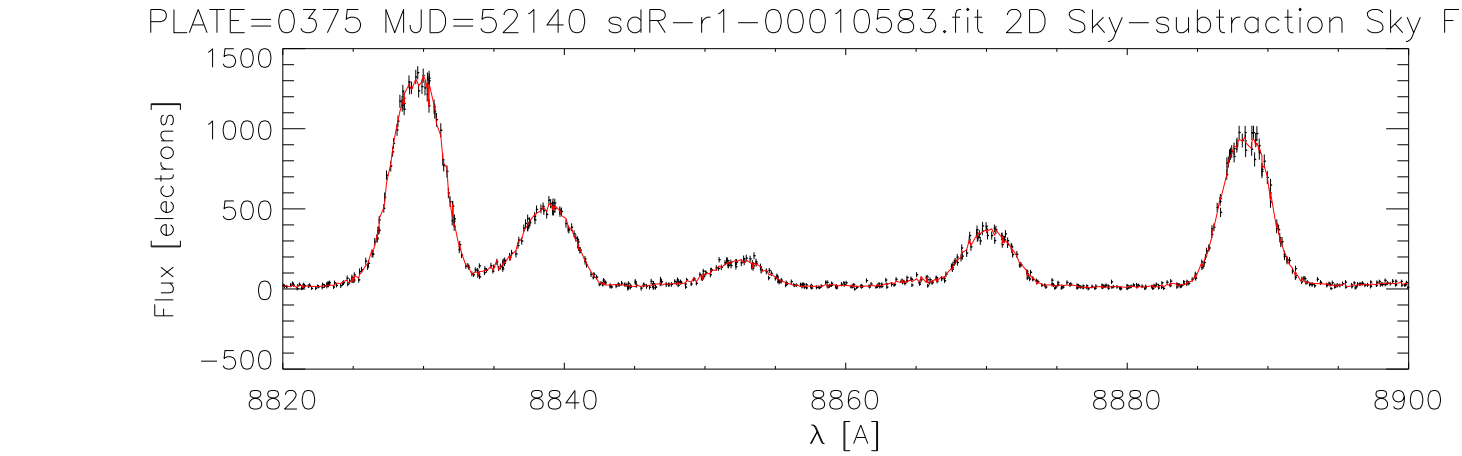

PLATE=0375 MJD=52140 sdR-r1-00010583.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

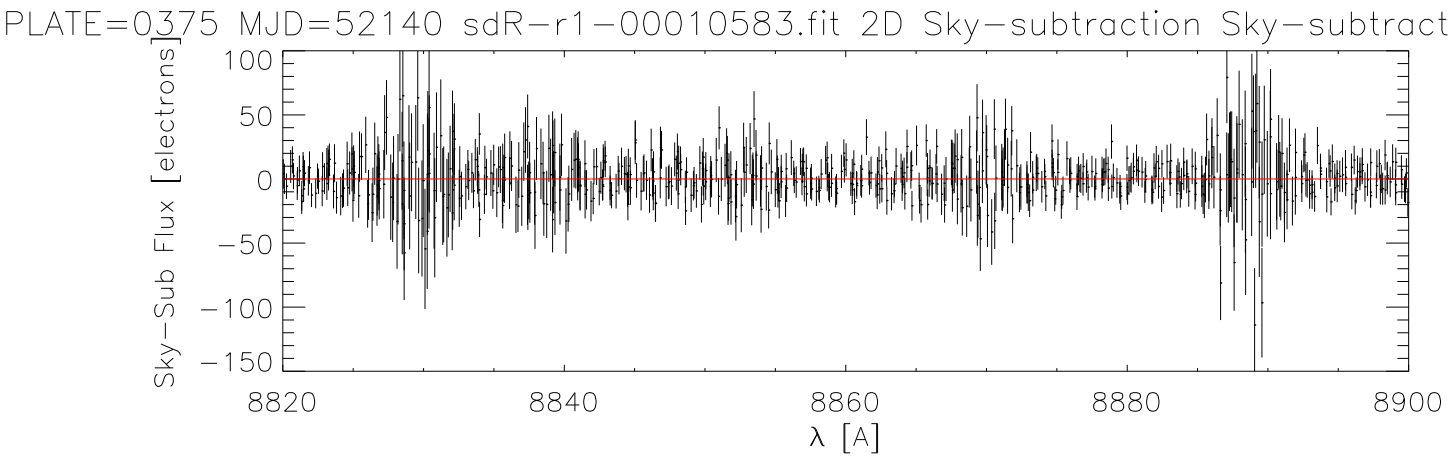

PLATE=0375 MJD=52140 sdR-r1-00010583.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

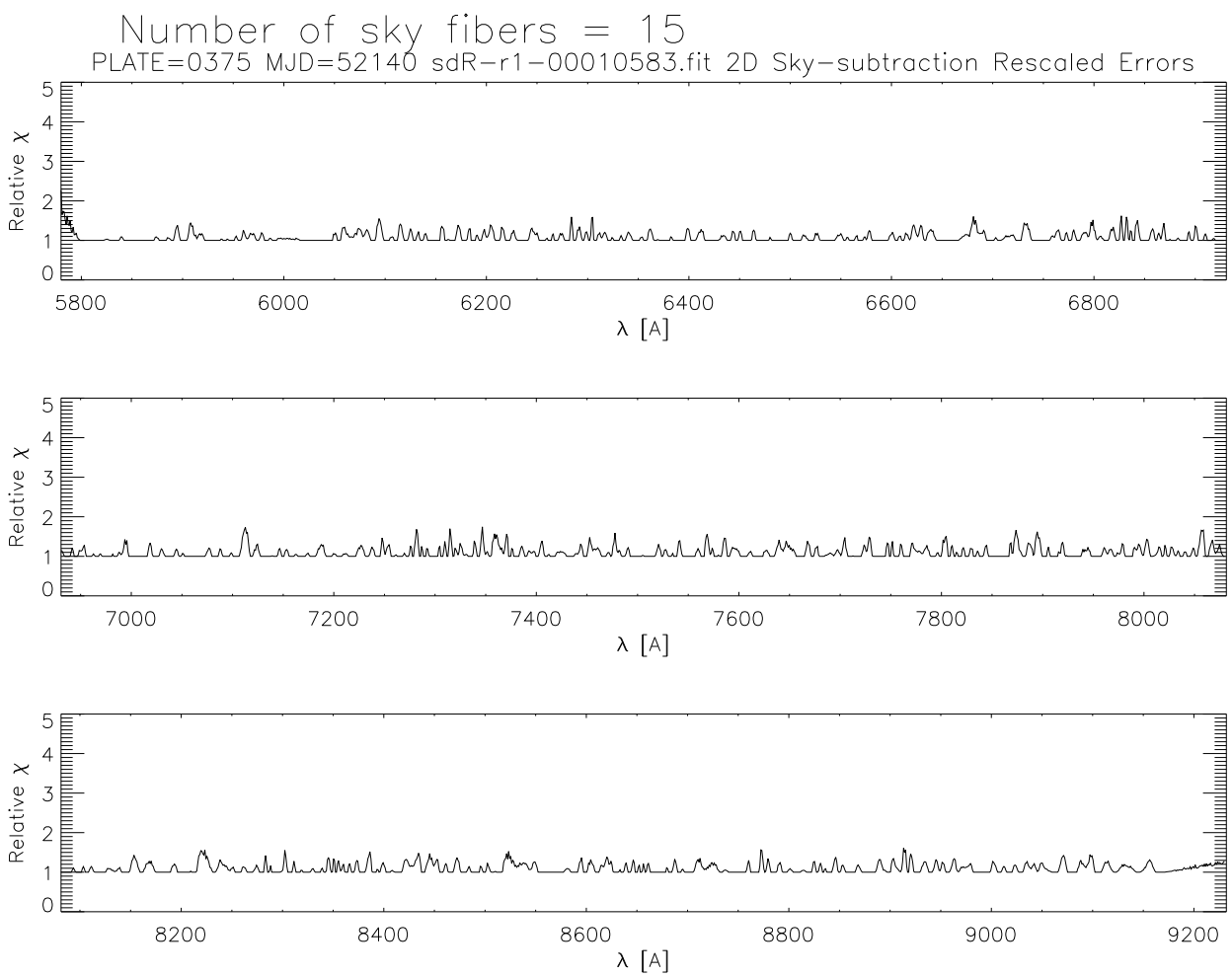

PLATE=0375 MJD=52140 sdR-r1-00010583.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

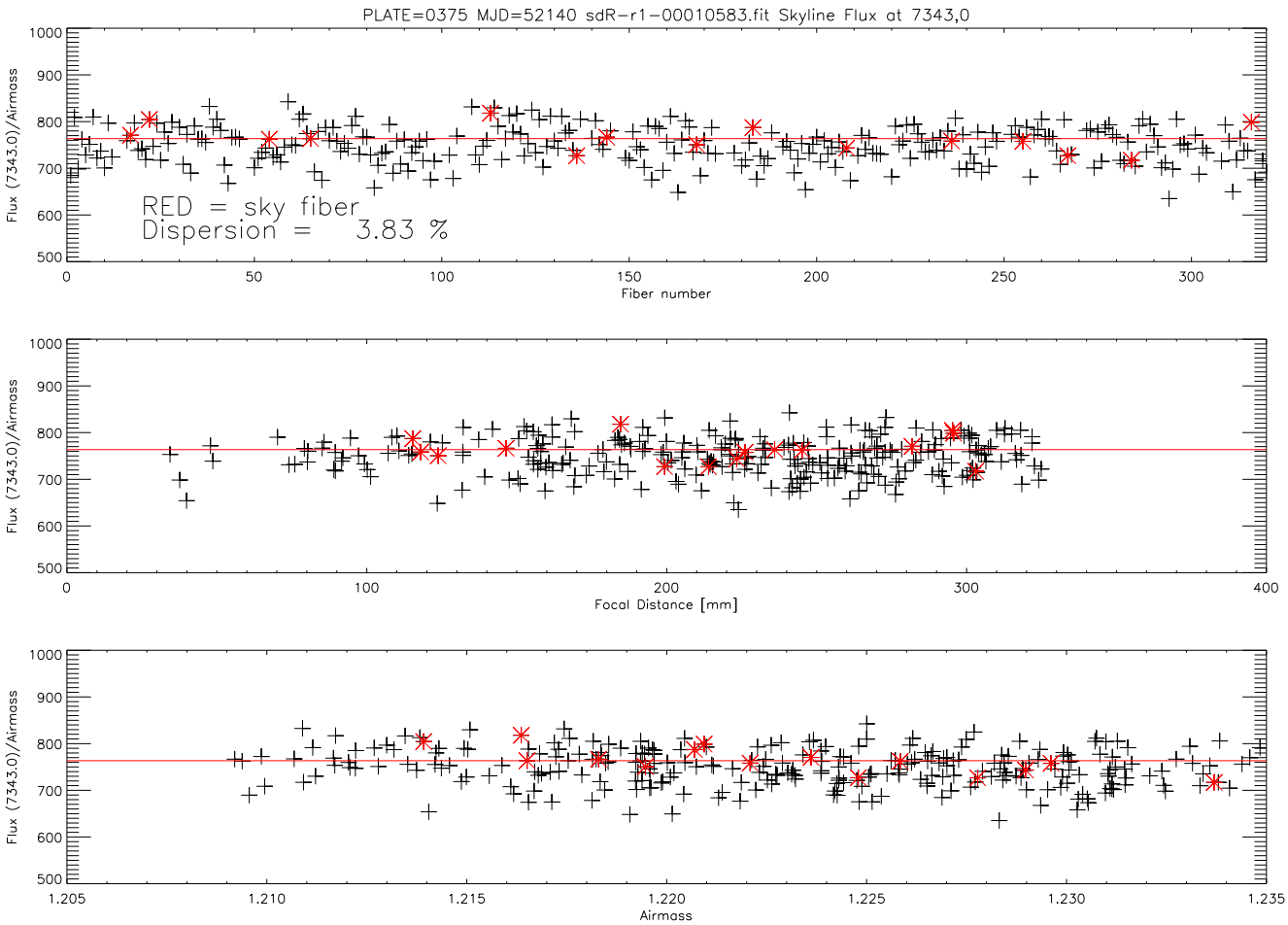

Number of sky fibers = 15
PLATE=0375 MJD=52140 sdR-r1-00010583.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

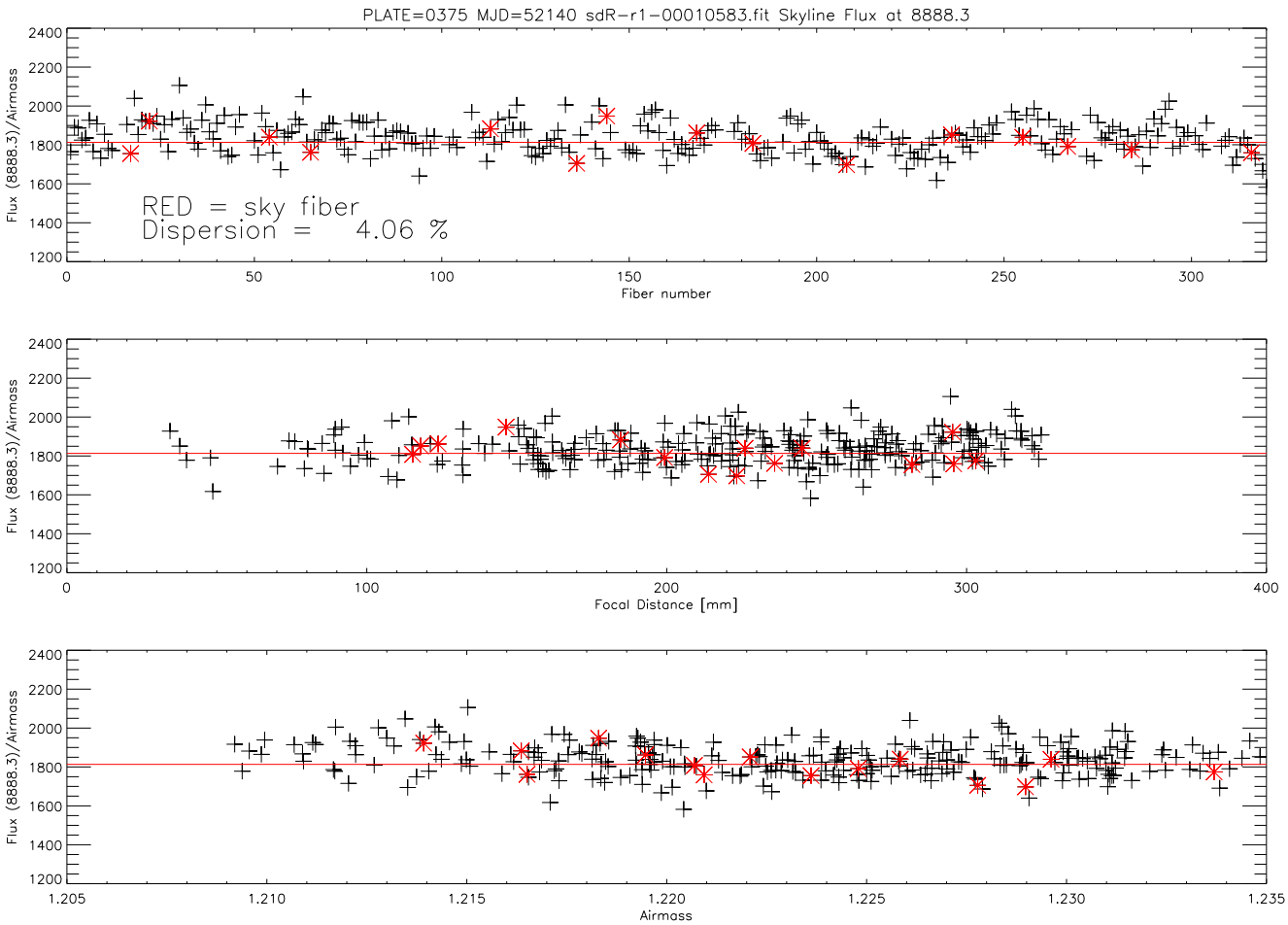

PLATE=0375 MJD=52140 sdR-r1-00010583.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

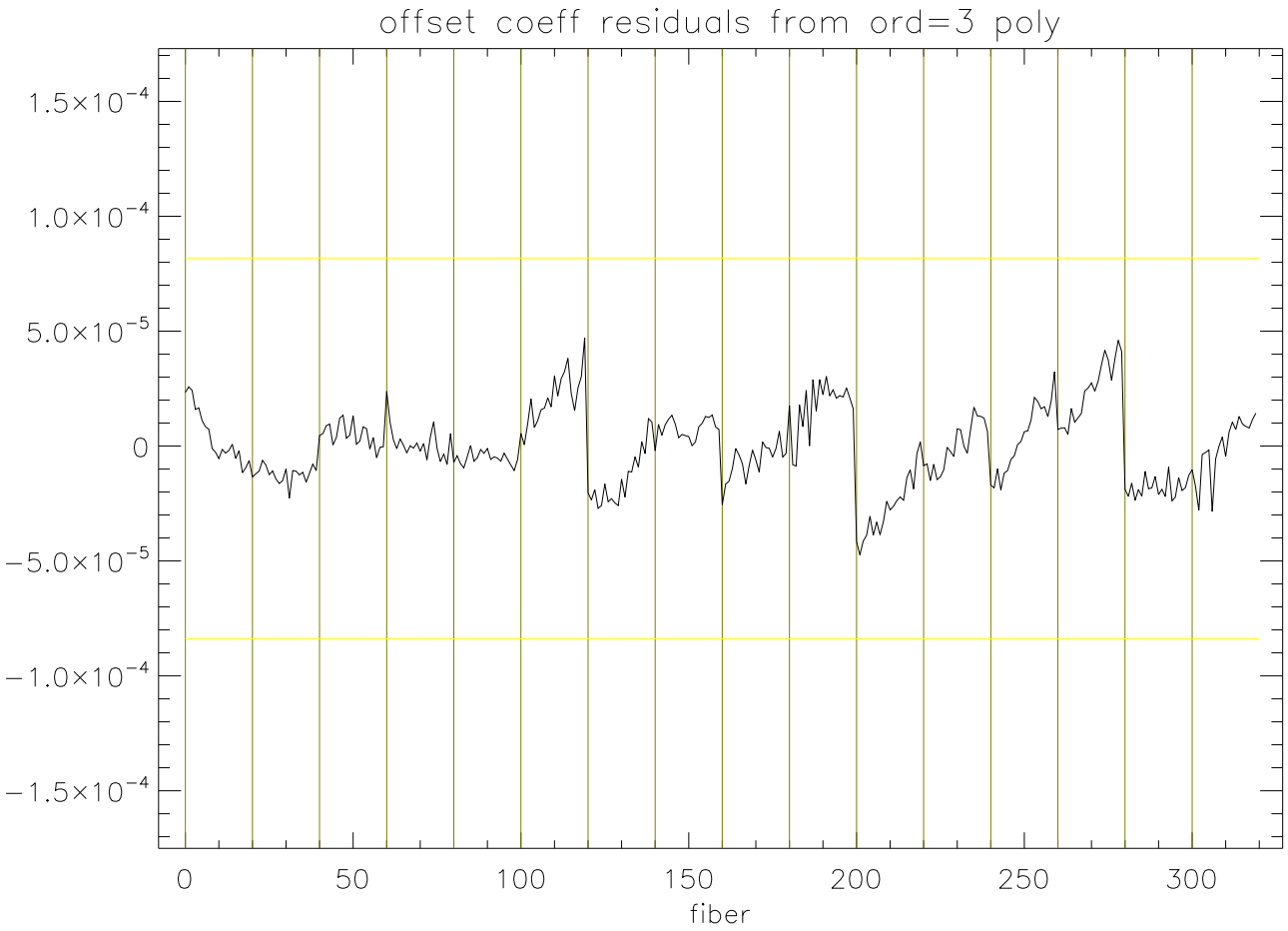

PLATE=0375 MJD=52140 sdR-r1-00010583.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

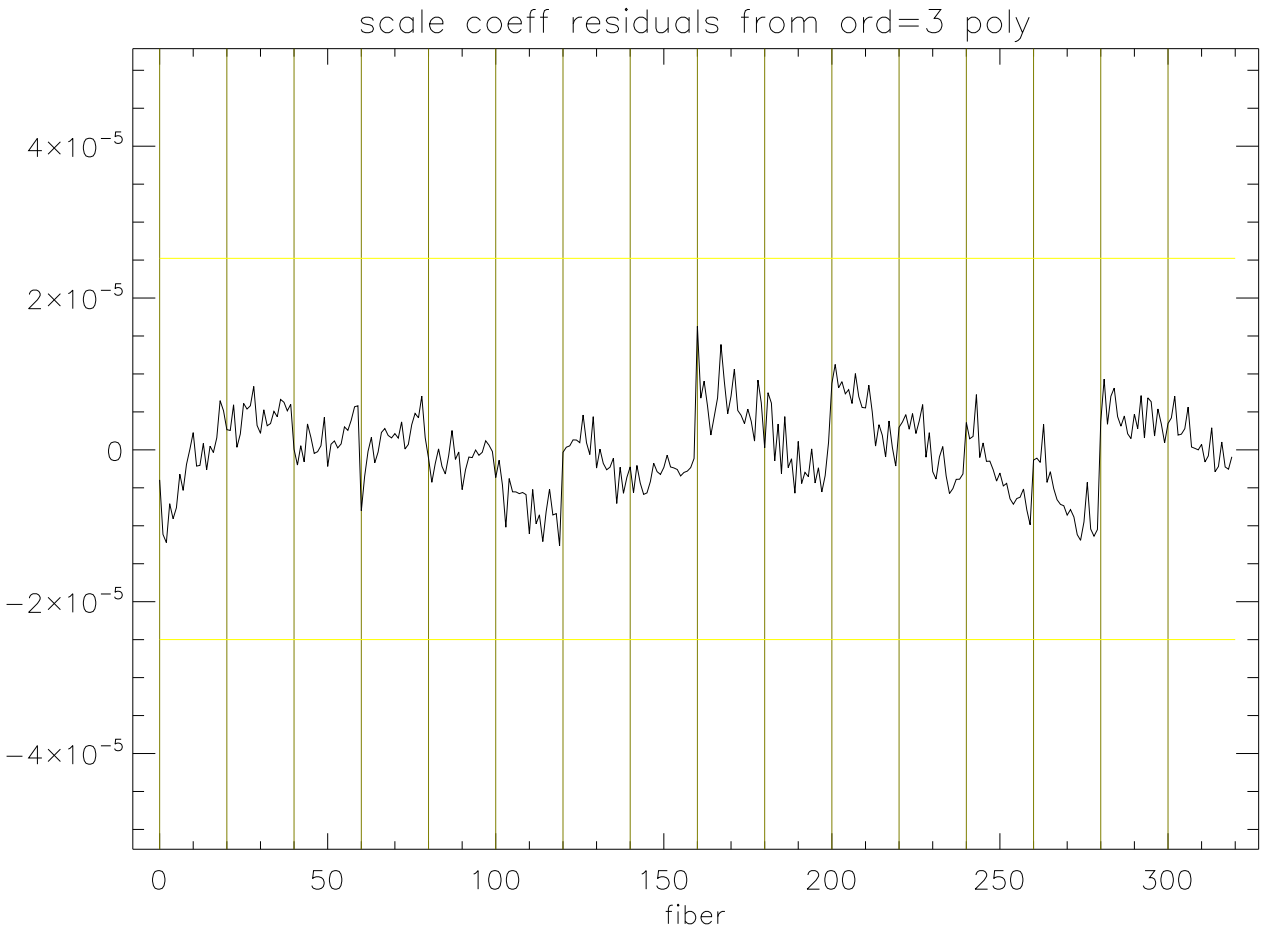

PLATE=0375 MJD=52140 sdR-r1-00010583.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

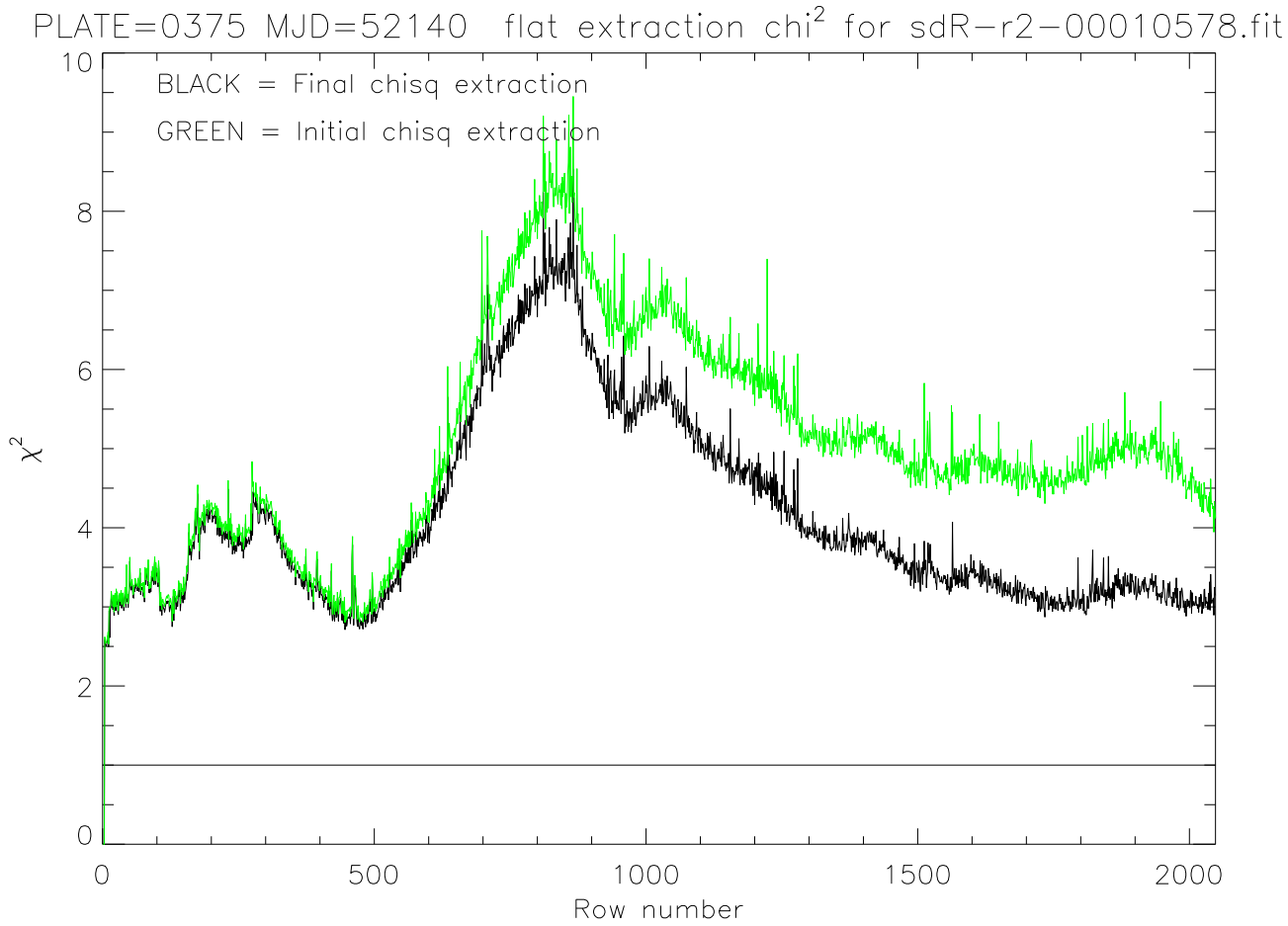

Number of sky fibers = 15
PLATE=0375 MJD=52140 sdR-r1-00010583.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

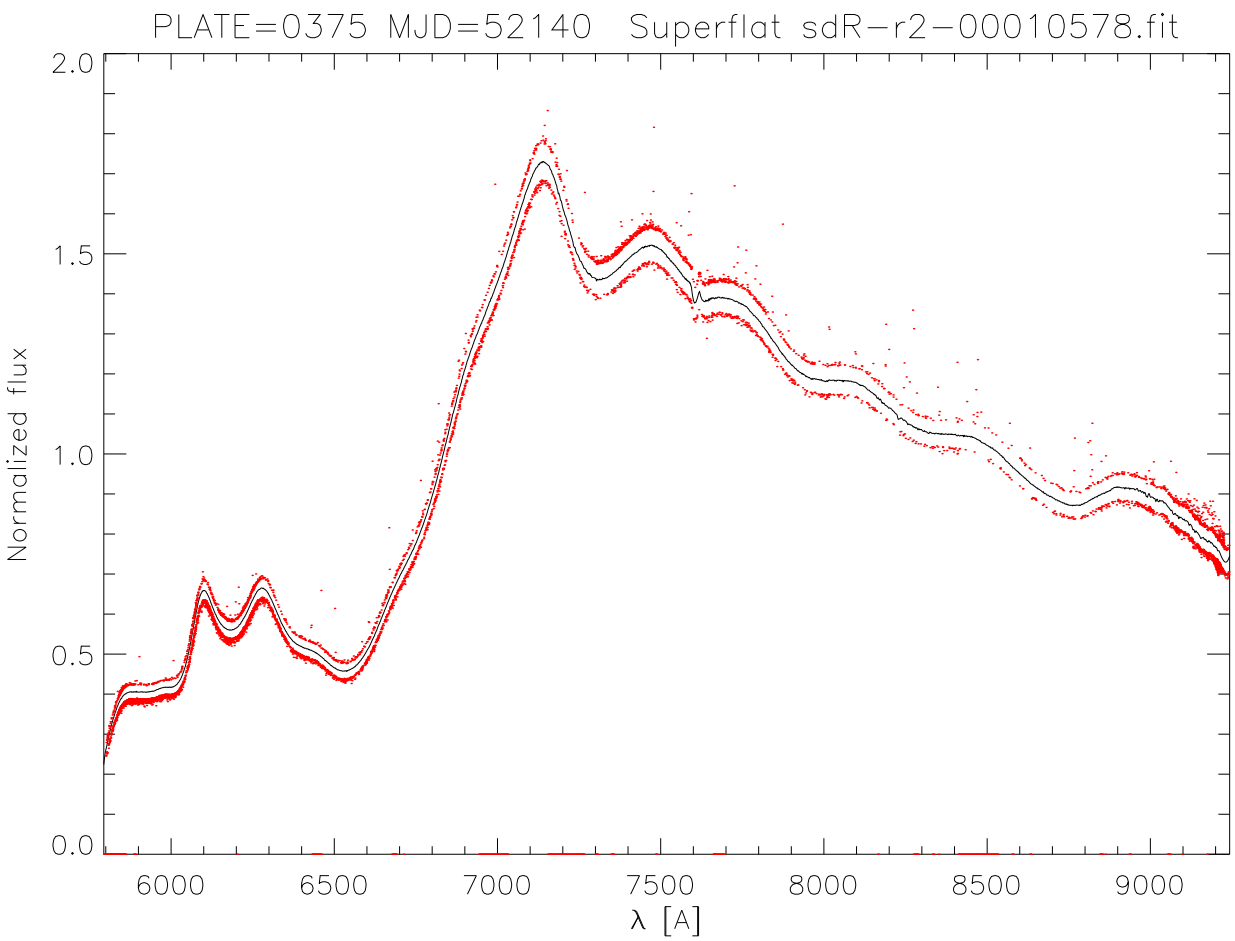

PLATE=0375 MJD=52140 sdR-r1-00010583.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.83 %
Fiber number
Focal Distance [mm]
Airmass

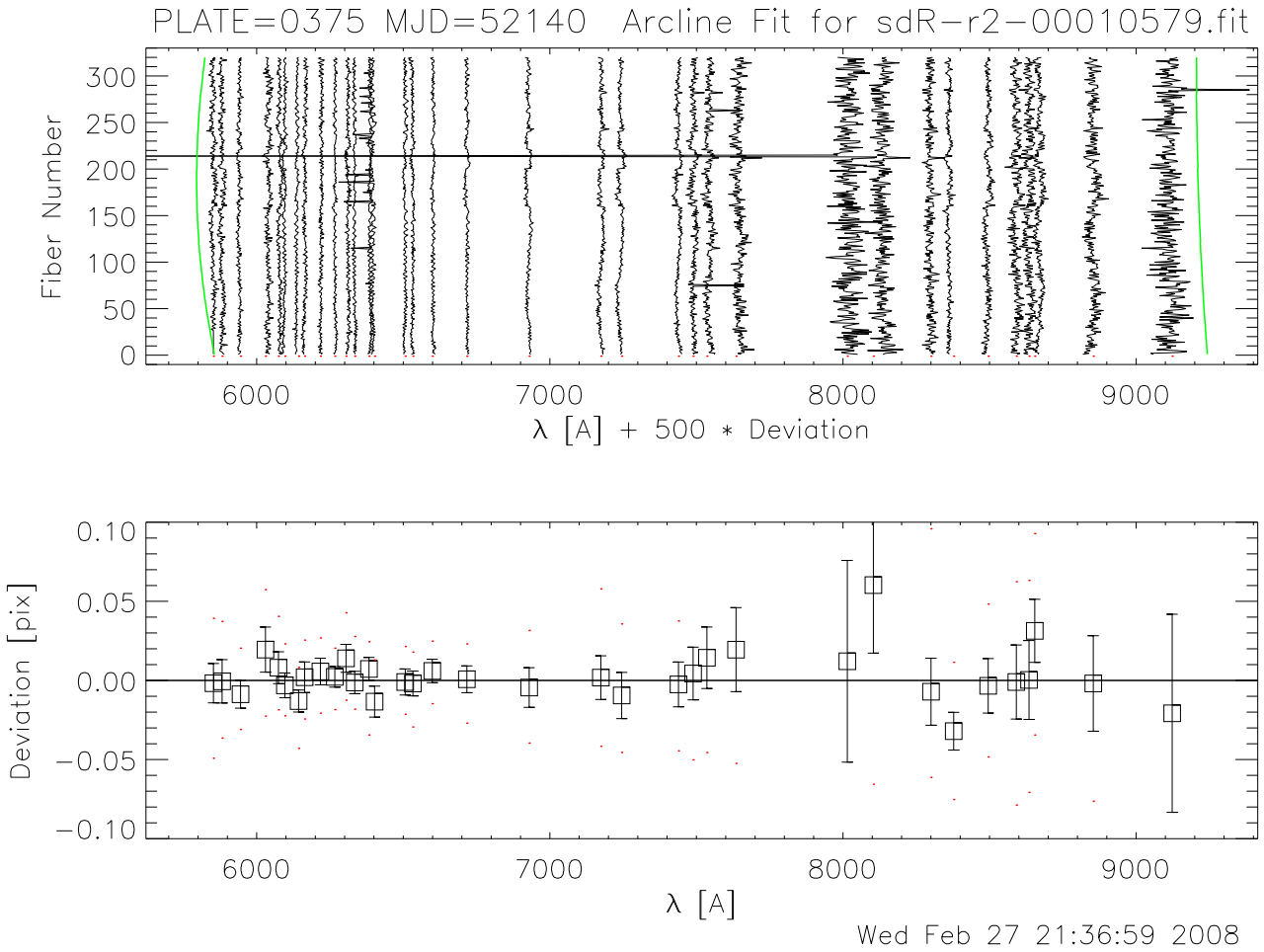

PLATE=0375 MJD=52140 sdR-r1-00010583.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.06 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

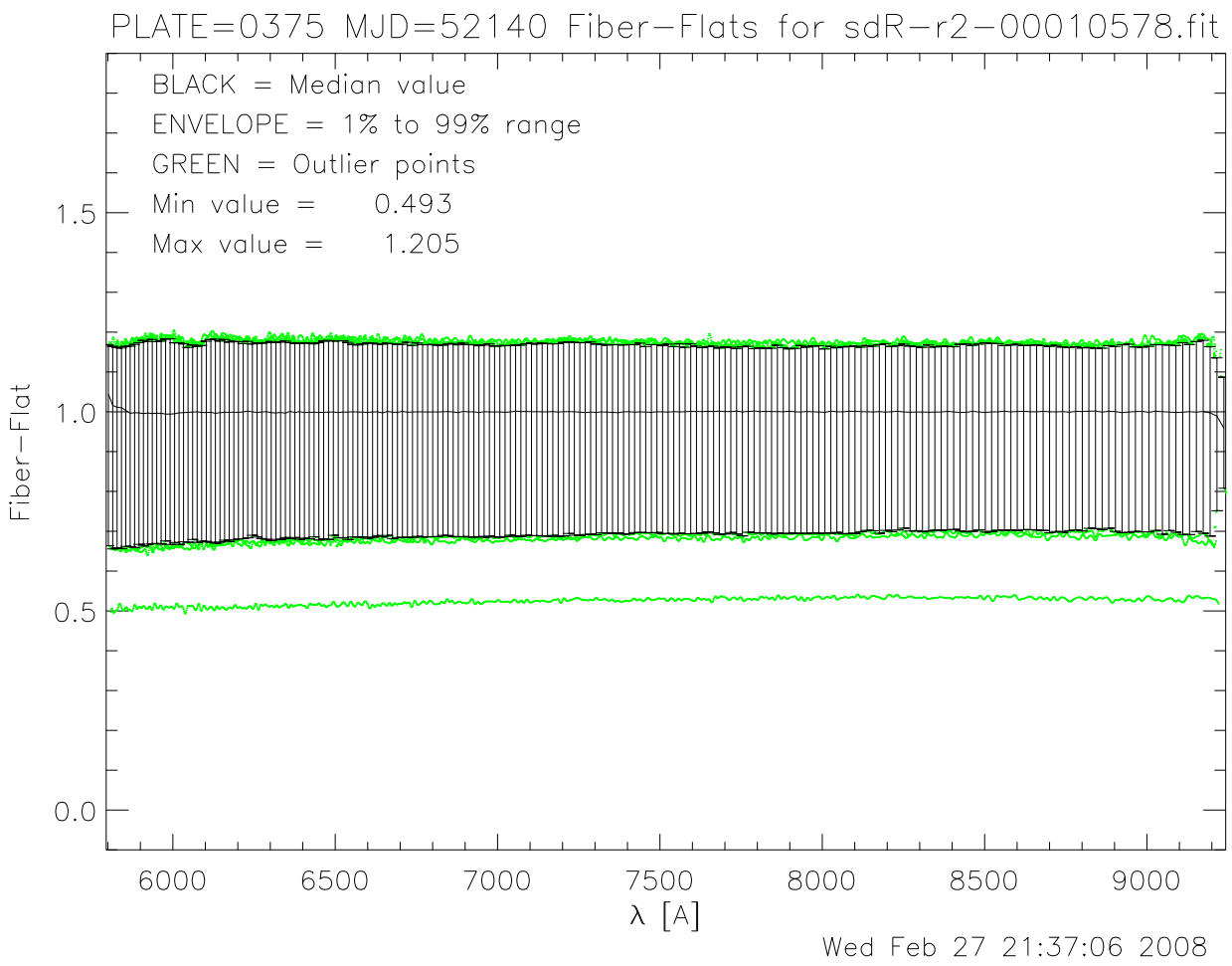

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

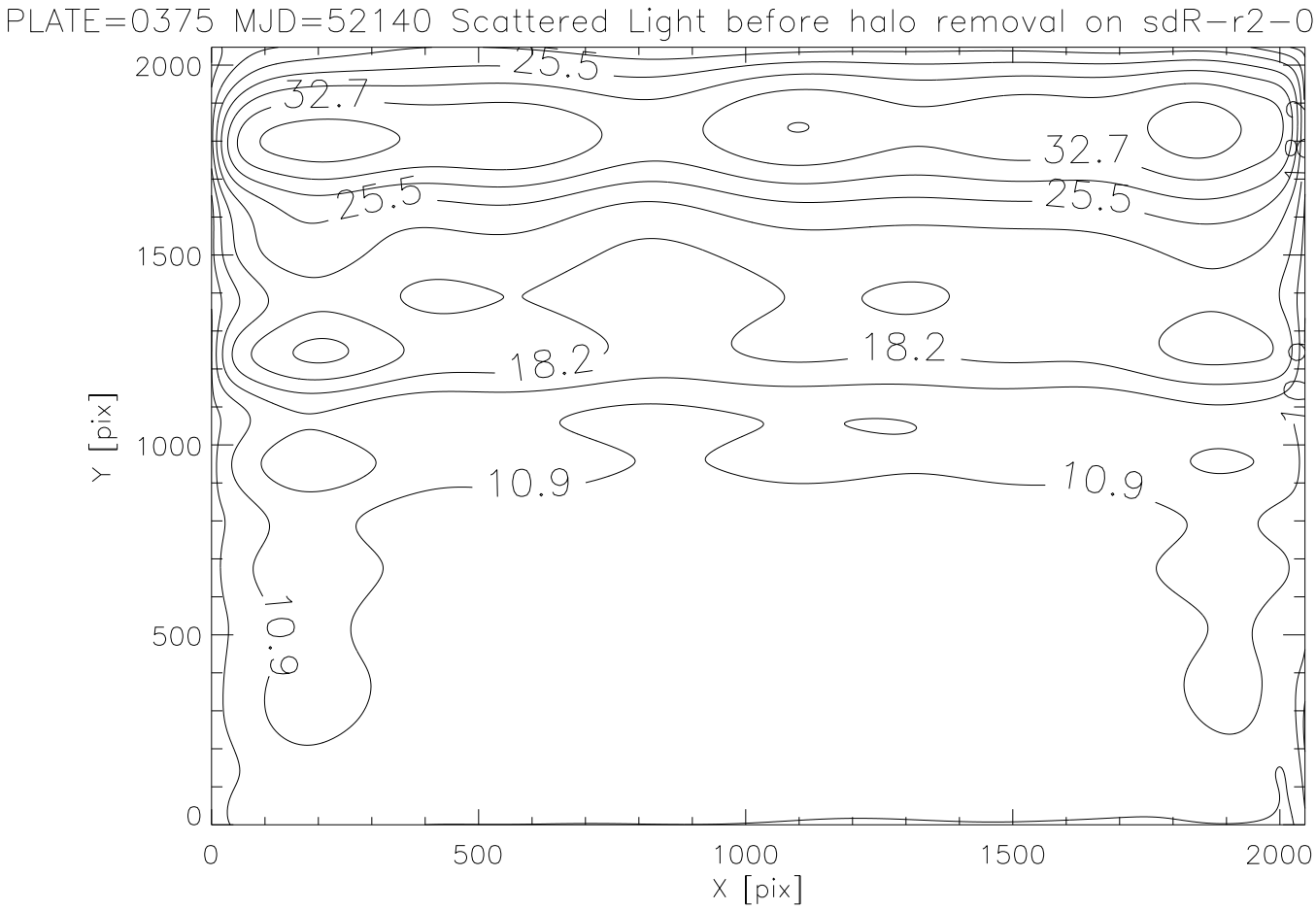

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

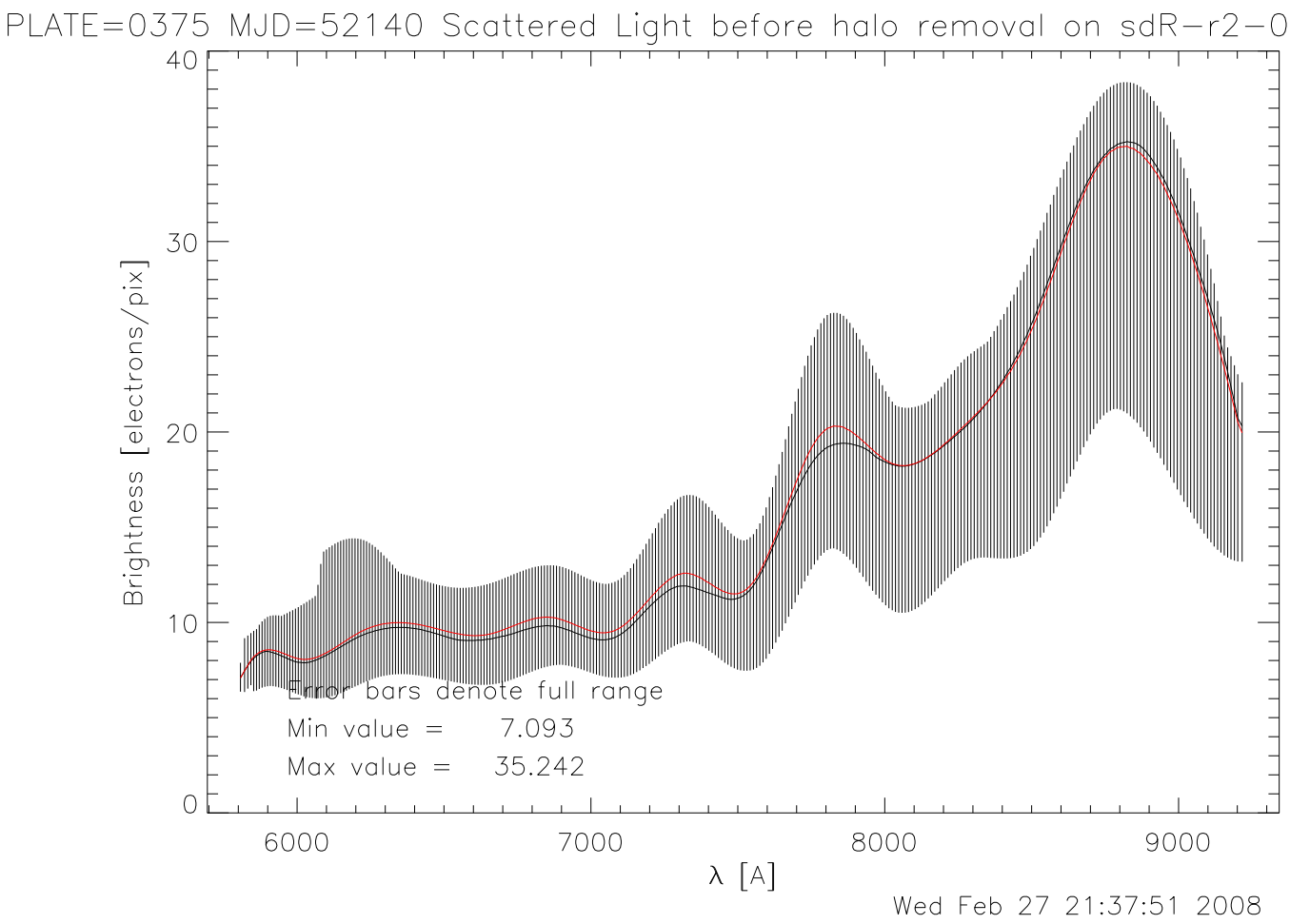

PLATE=0375 MJD=52140 flat extraction chi^2 for sdR−r2−00010578.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
2
4
6
8
10
0
500
1000
1500
2000

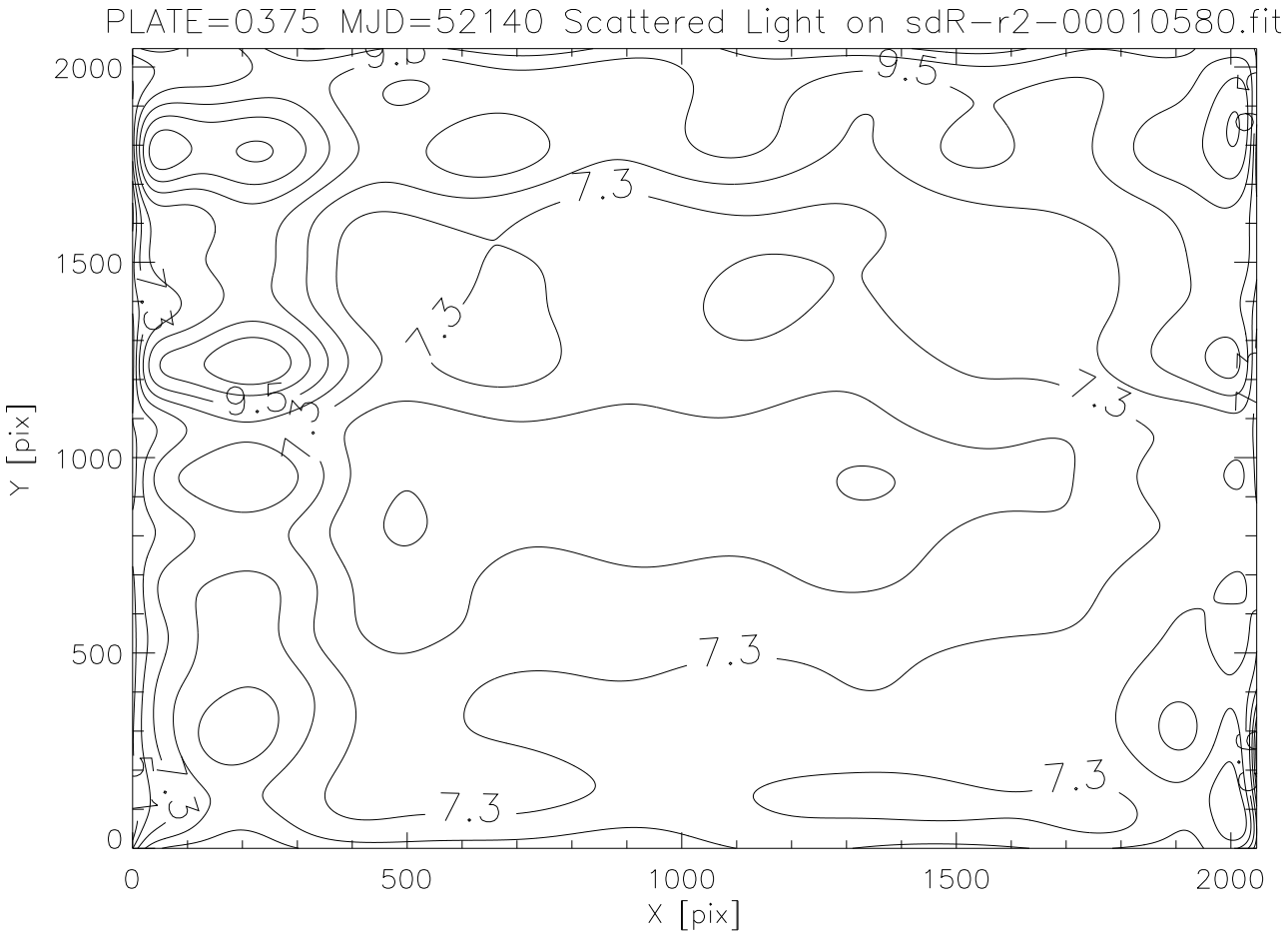

PLATE=0375 MJD=52140 Superflat sdR-r2-00010578.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

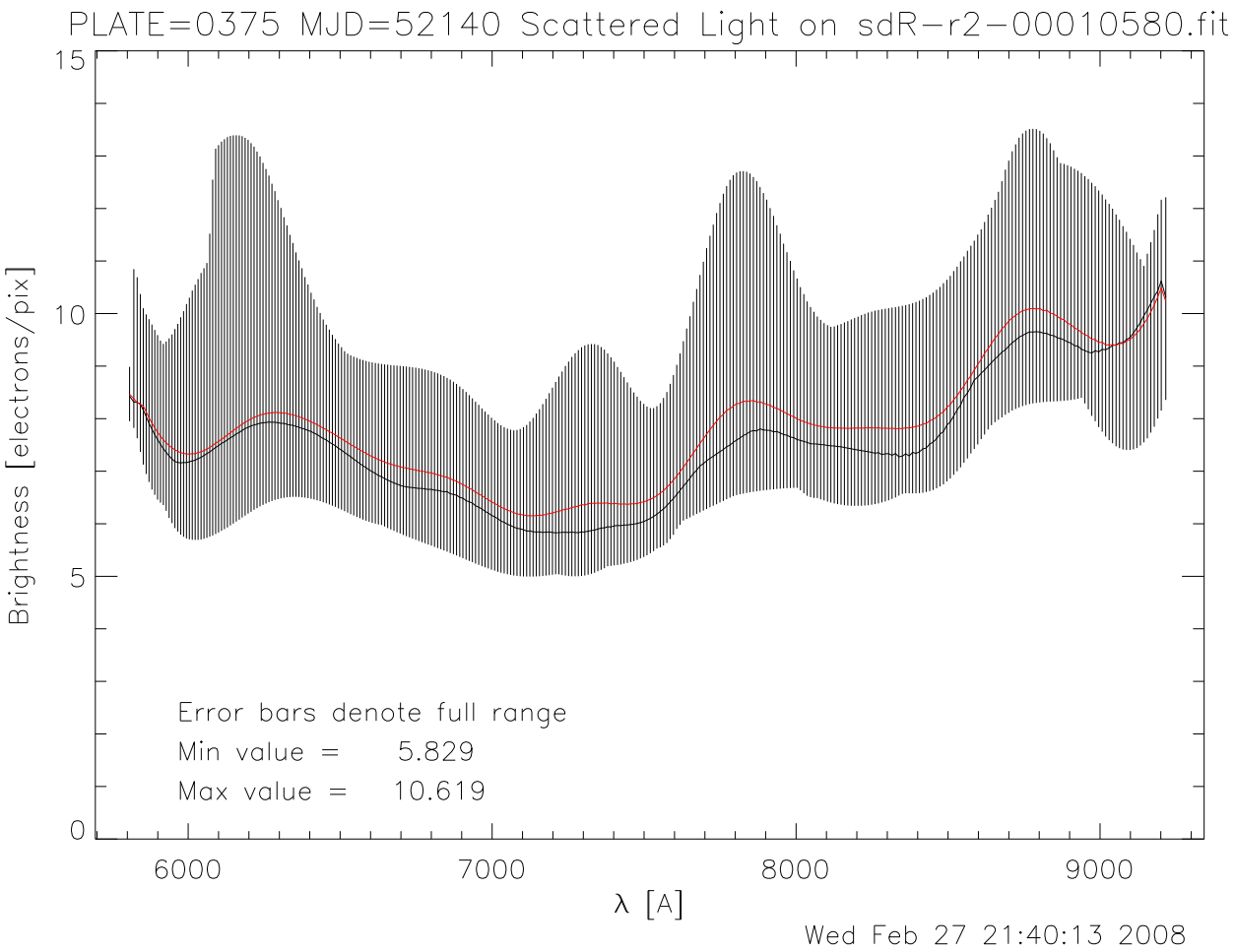

PLATE=0375 MJD=52140 Arcline Fit for sdR-r2-00010579.fit
Fiber Number
300
250
200
150
100
50
0
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Wed Feb 27 21:36:59 2008

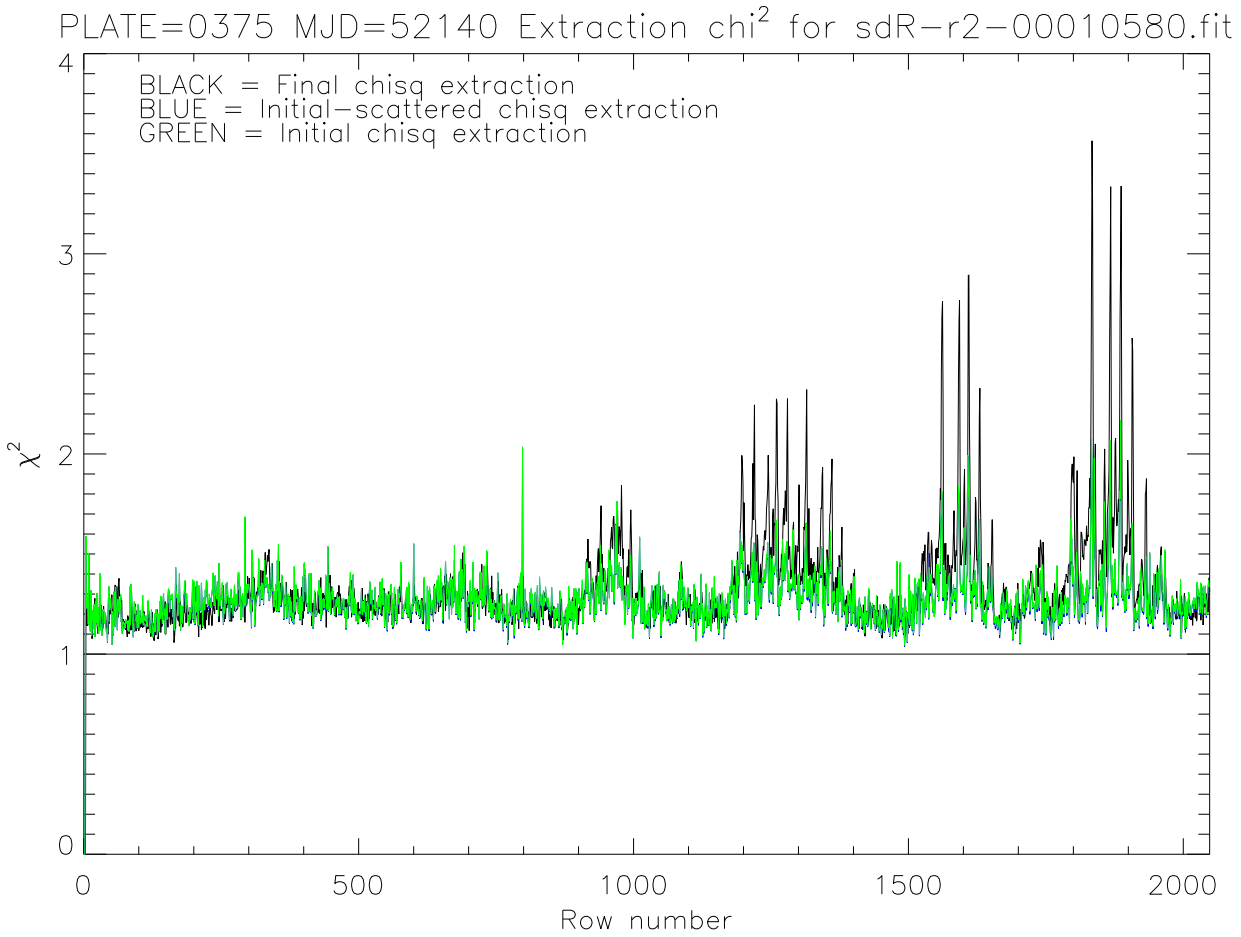

PLATE=0375 MJD=52140 Fiber−Flats for sdR−r2−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.493
Max value = 1.205
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 27 21:37:06 2008

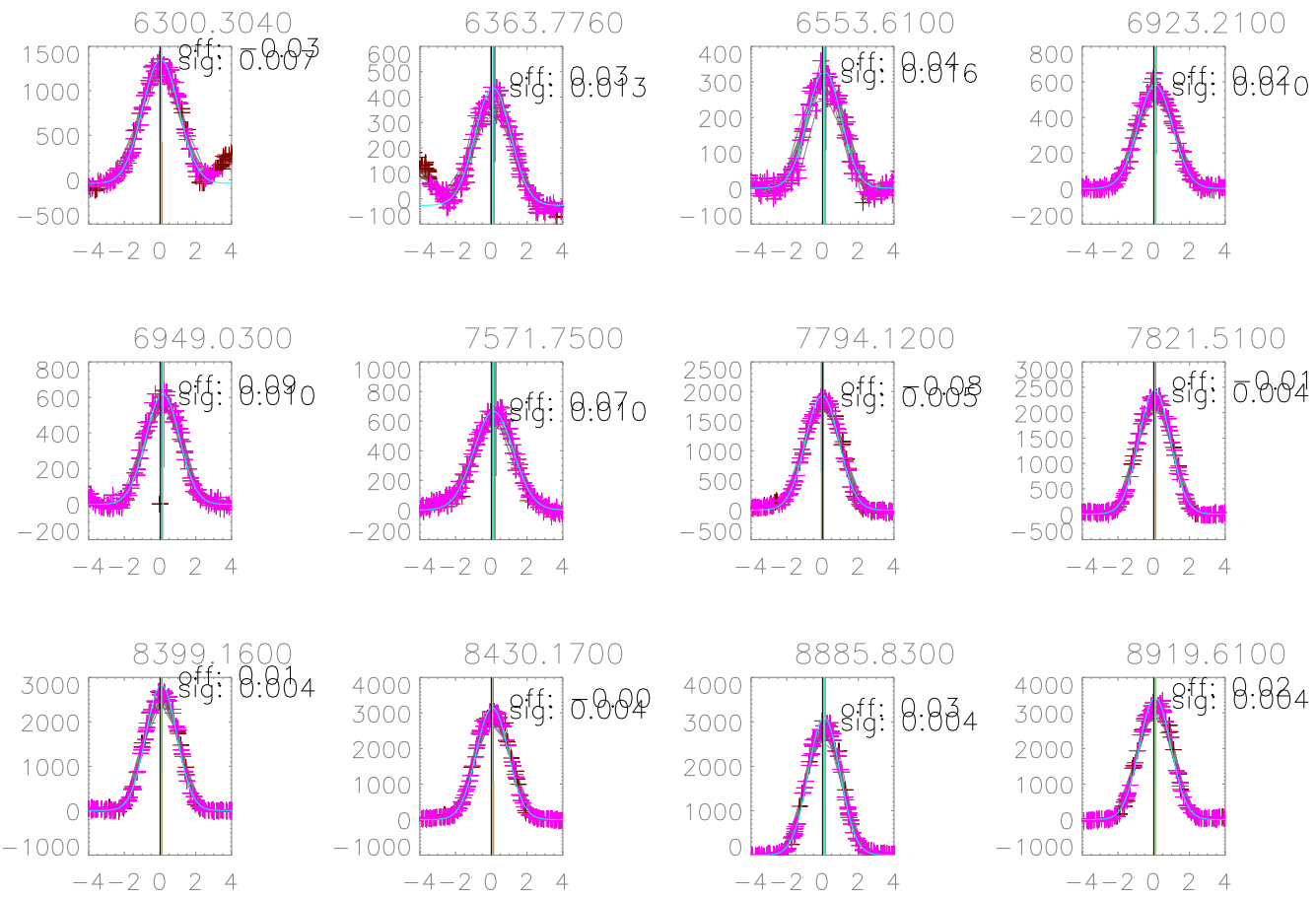

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r2-00010580.fi
25.5
32.7
32.7
25.5
25.5
18.2
18.2
10.9
10.9
10.9
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

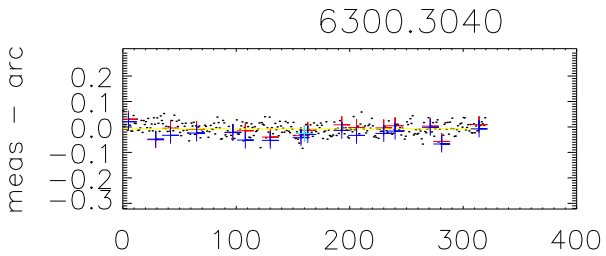

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r2-00010580.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 7.093
Max value = 35.242
Wed Feb 27 21:37:51 2008

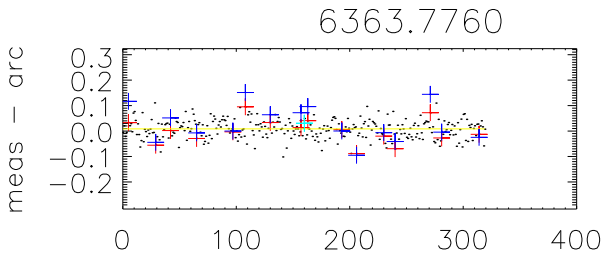

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010580.fit
9.5
7.3
Y [pix]
X [pix]
0
500
1000
1500
2000

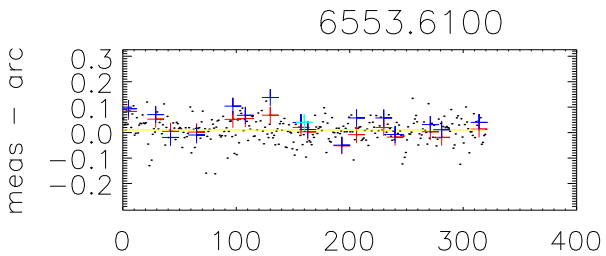

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010580.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.829
Max value = 10.619
Wed Feb 27 21:40:13 2008

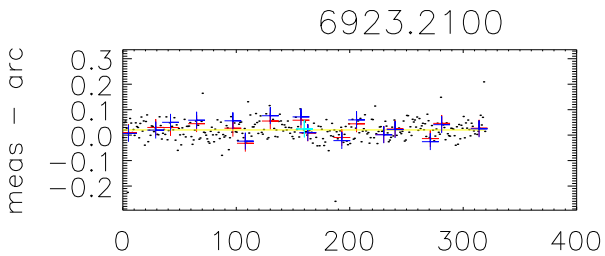

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-r2-00010580.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

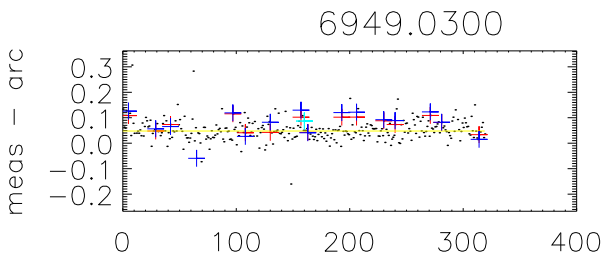

6300.3040
off: −0.03
sig: 0.007
6363.7760
off: 0.03
sig: 0.013
6553.6100
off: 0.04
sig: 0.016
6923.2100
off: 0.02
sig: 0.010
6949.0300
off: 0.09
sig: 0.010
7571.7500
off: 0.07
sig: 0.010
7794.1200
off: −0.08
sig: 0.005
7821.5100
off: −0.01
sig: 0.004
8399.1600
off: 0.01
sig: 0.004
8430.1700
off: −0.00
sig: 0.004
8885.8300
off: 0.03
sig: 0.004
8919.6100
off: 0.02
sig: 0.004

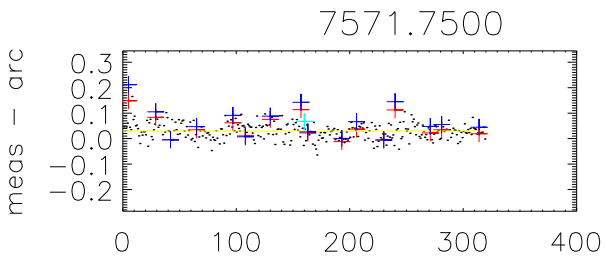

6300.3040
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

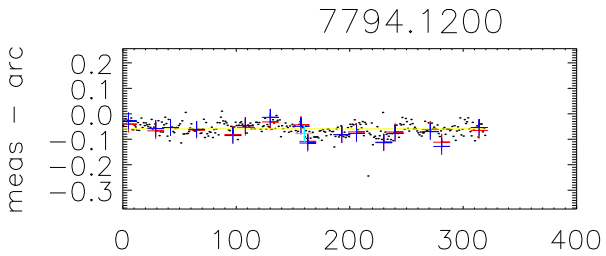

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

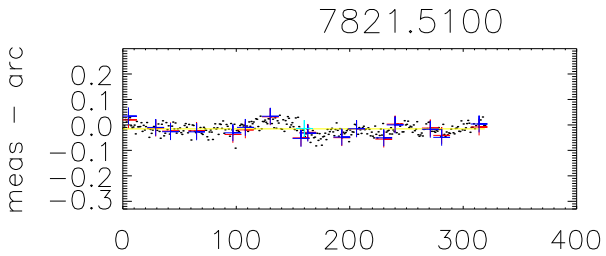

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

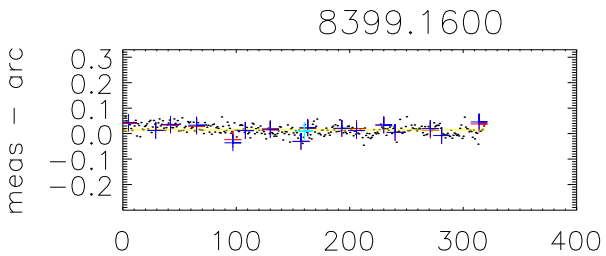

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

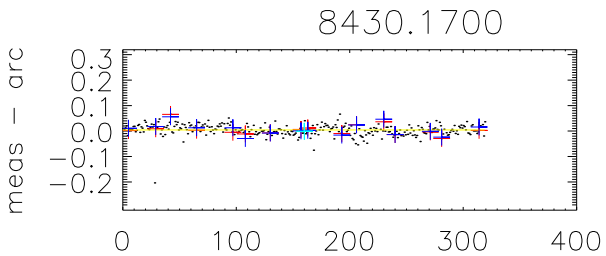

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

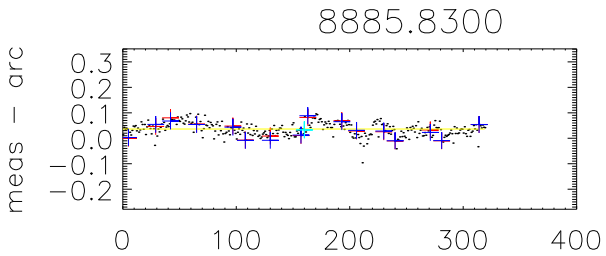

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

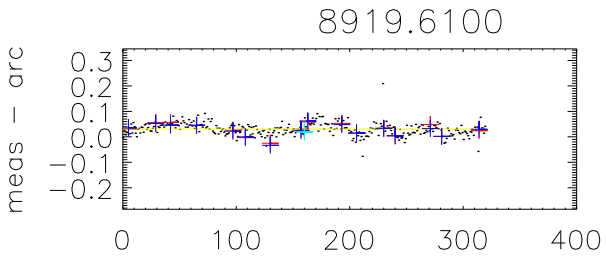

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

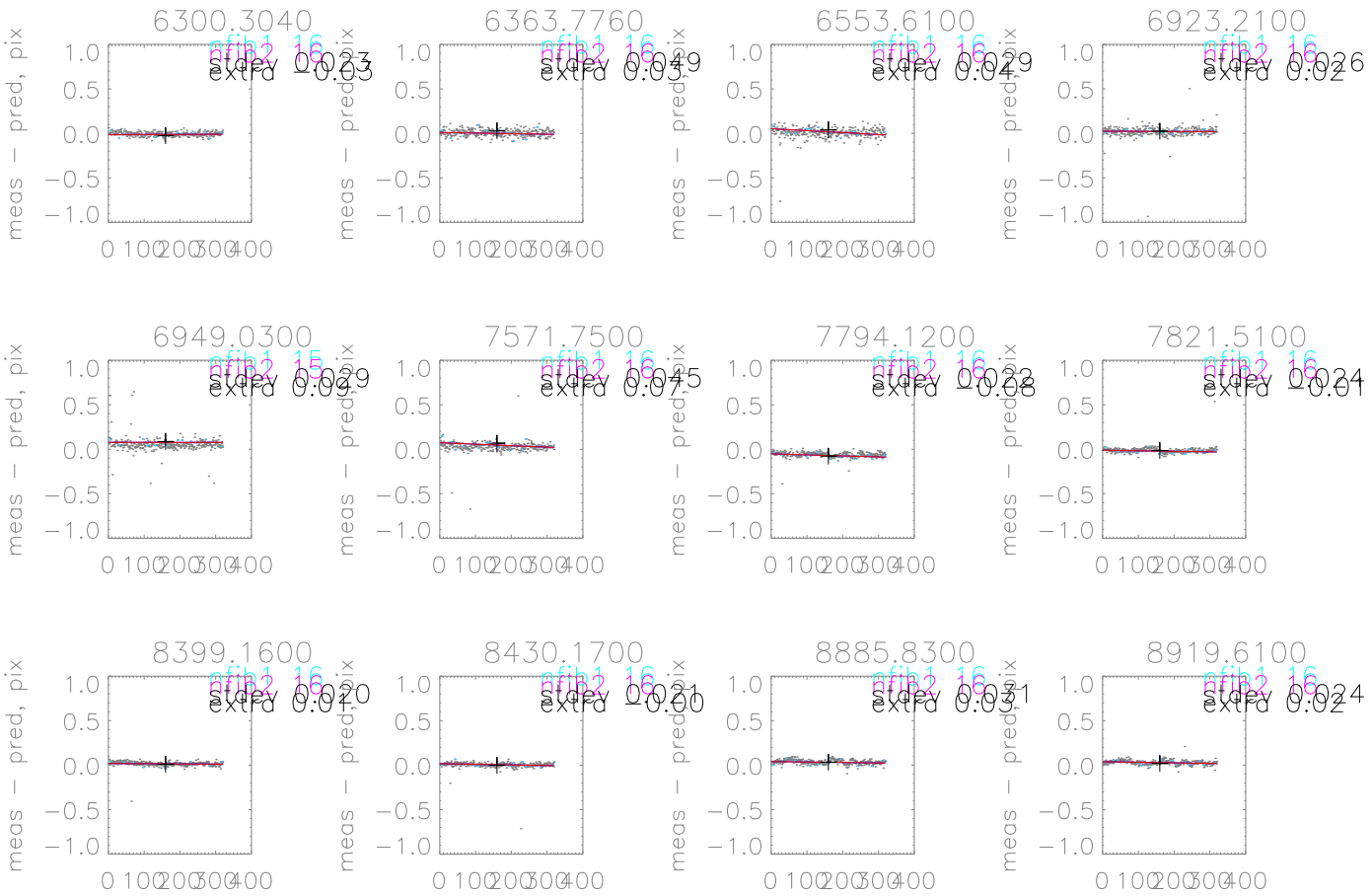

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

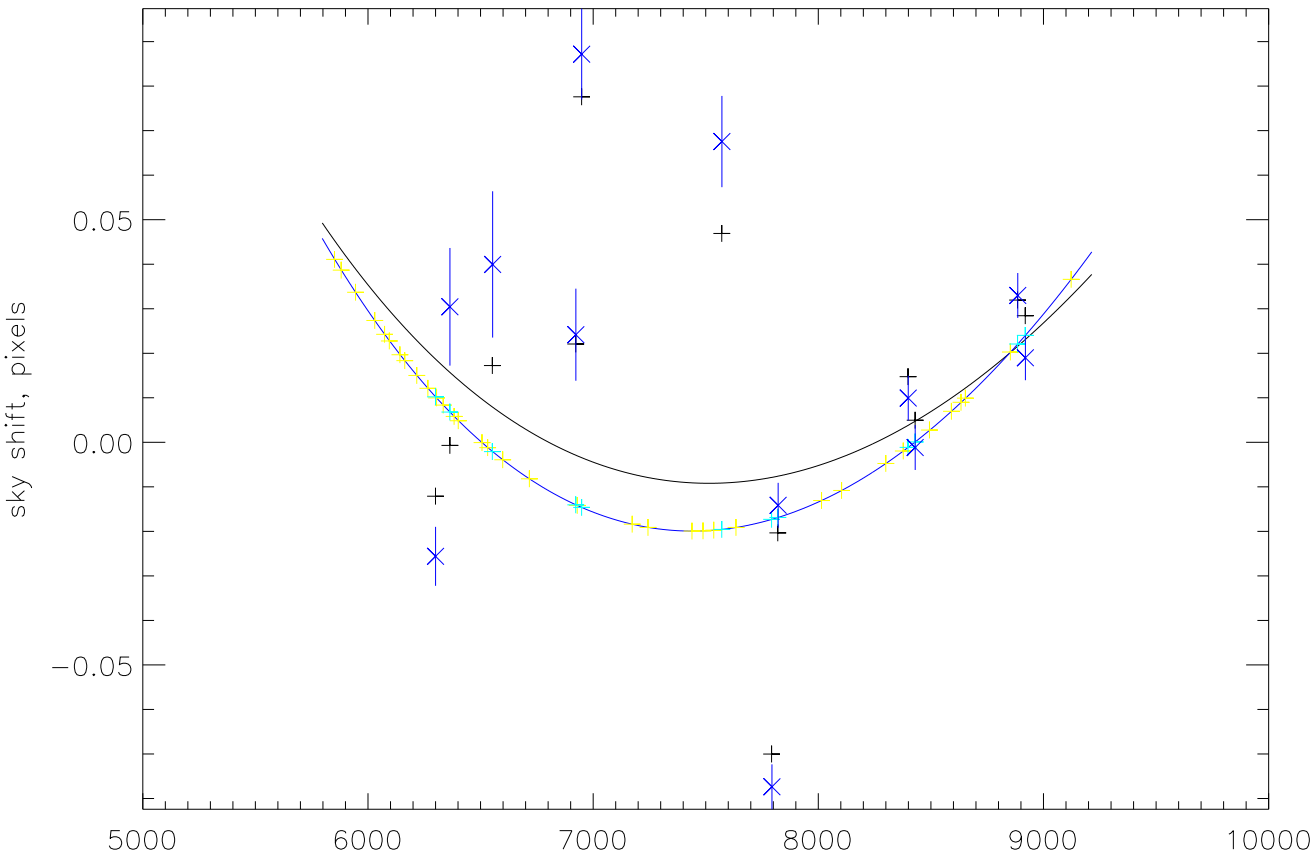

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

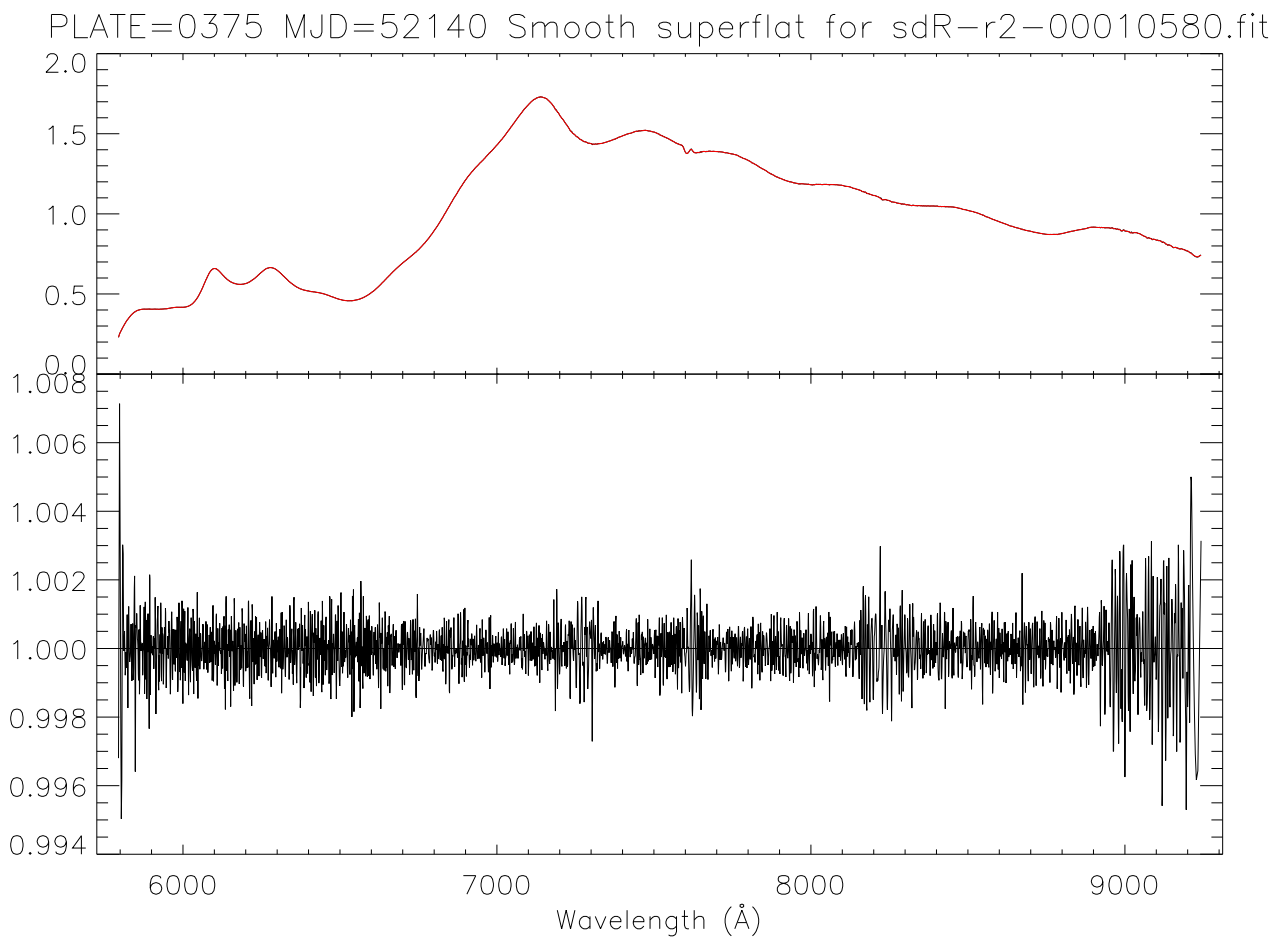

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

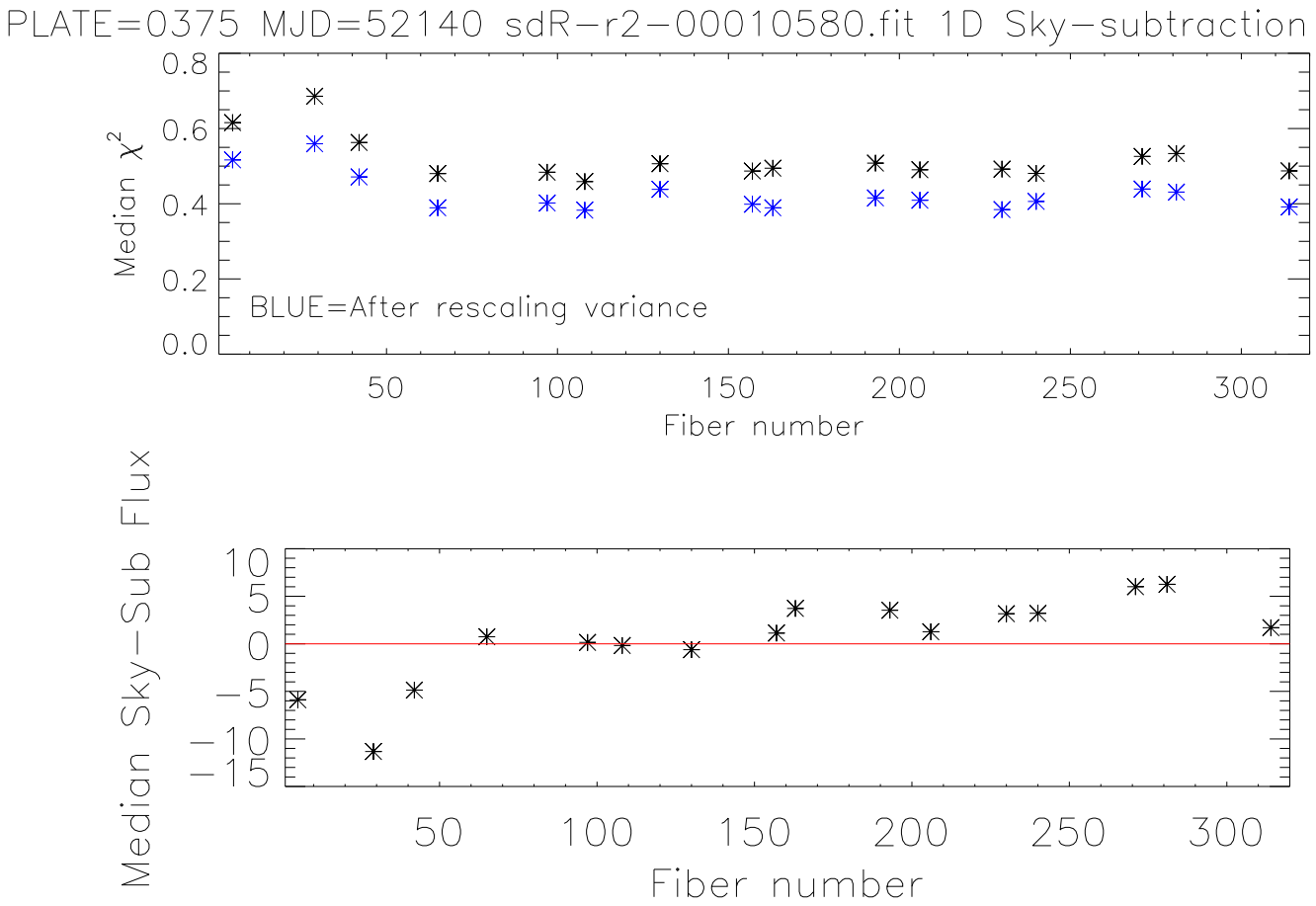

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

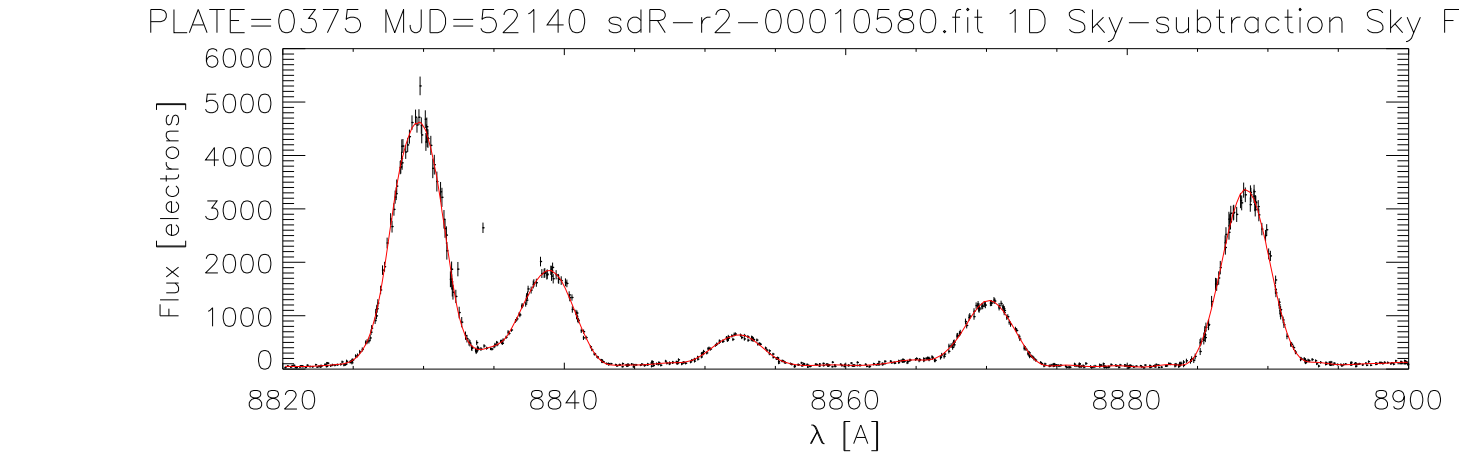

6300.3040
stdev 0.023
extra −0.03
6363.7760
stdev 0.049
extra 0.03
6553.6100
stdev 0.029
extra 0.04
6923.2100
stdev 0.026
extra 0.02
6949.0300
stdev 0.029
extra 0.04
7571.7500
stdev 0.045
extra 0.07
7794.1200
stdev 0.022
extra −0.08
7821.5100
stdev 0.024
extra −0.01
8399.1600
stdev 0.020
extra 0.01
8430.1700
stdev 0.021
extra −0.00
8885.8300
stdev 0.031
extra 0.03
8919.6100
stdev 0.024
extra 0.02
meas − pred, pix
mfb2 16
mfb1 15
mfb1 16
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

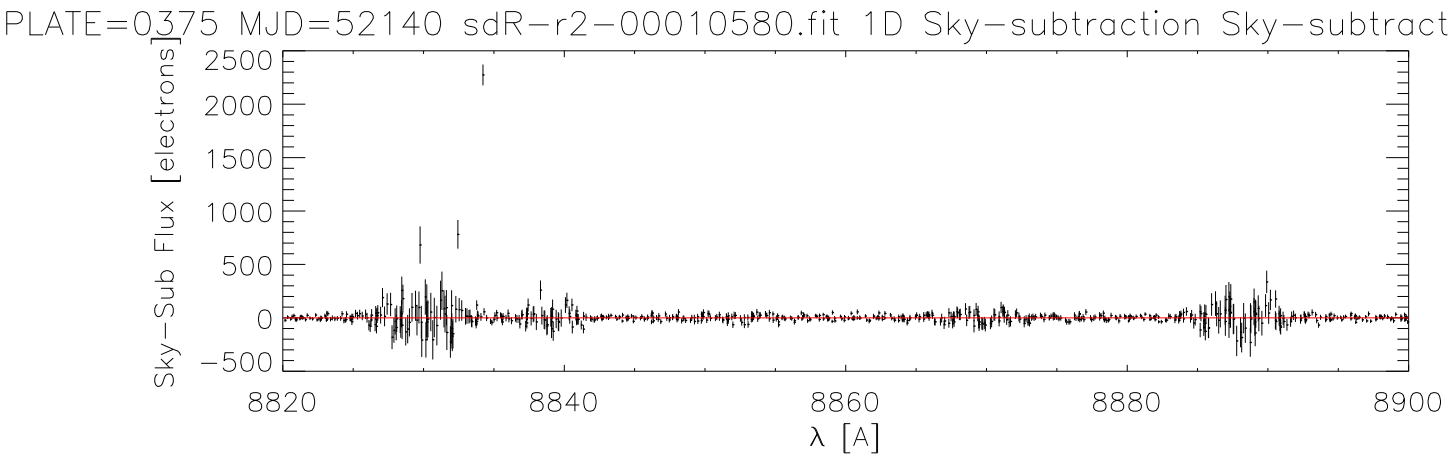

sky shift, pixels
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000

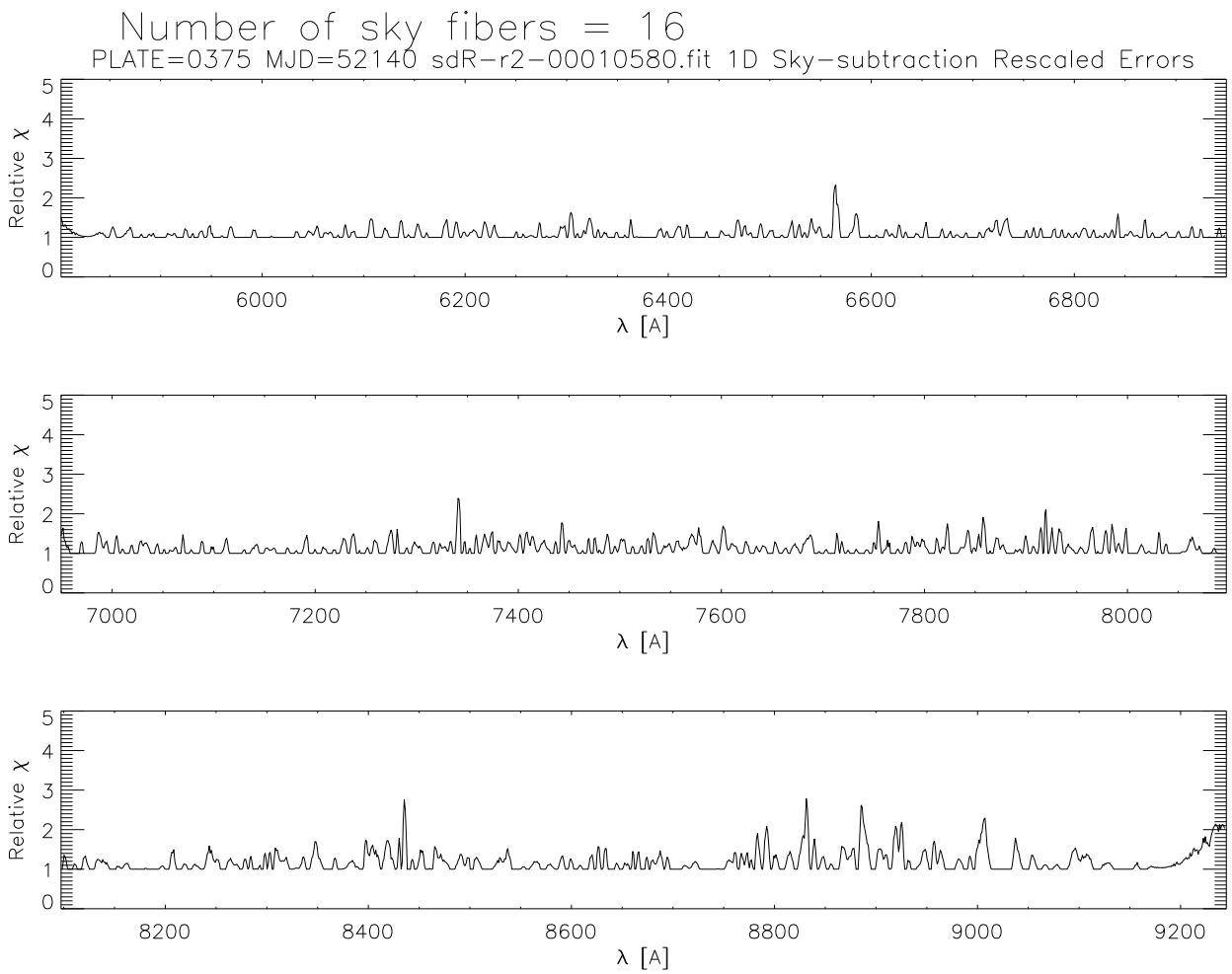
es= −0.0000

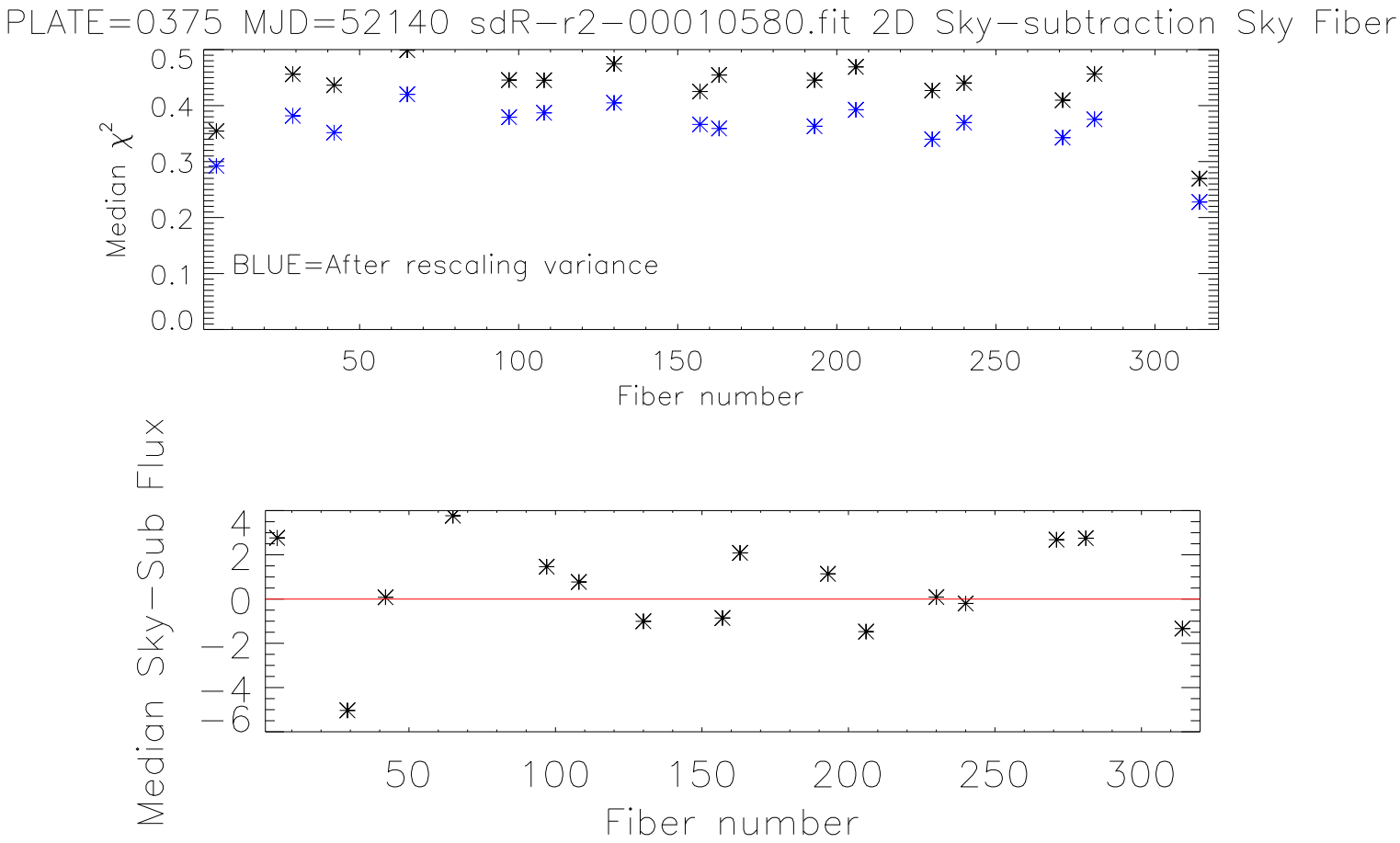

PLATE=0375 MJD=52140 Smooth superflat for sdR−r2−00010580.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

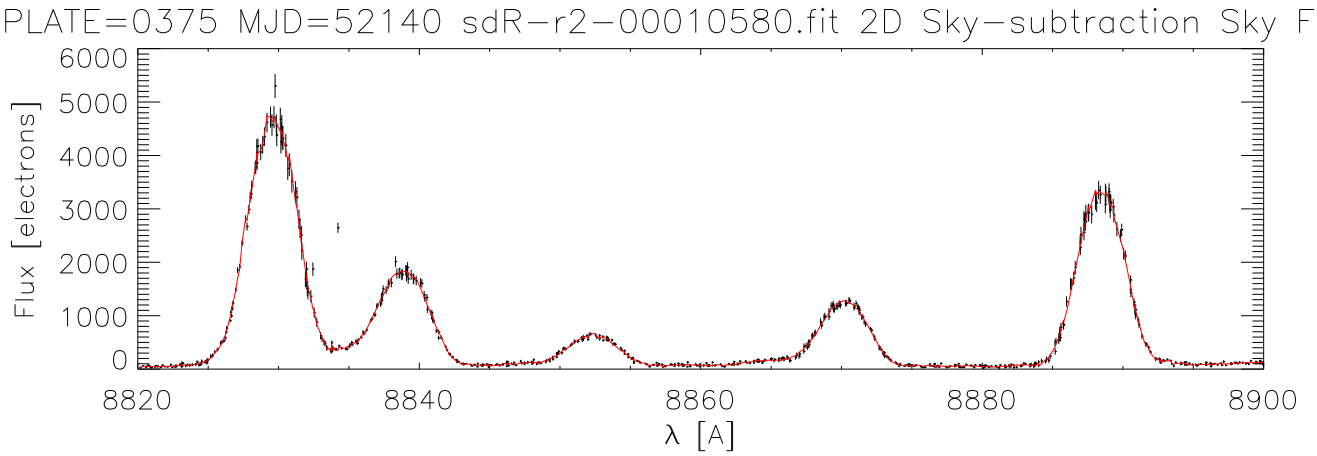

PLATE=0375 MJD=52140 sdR-r2-00010580.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

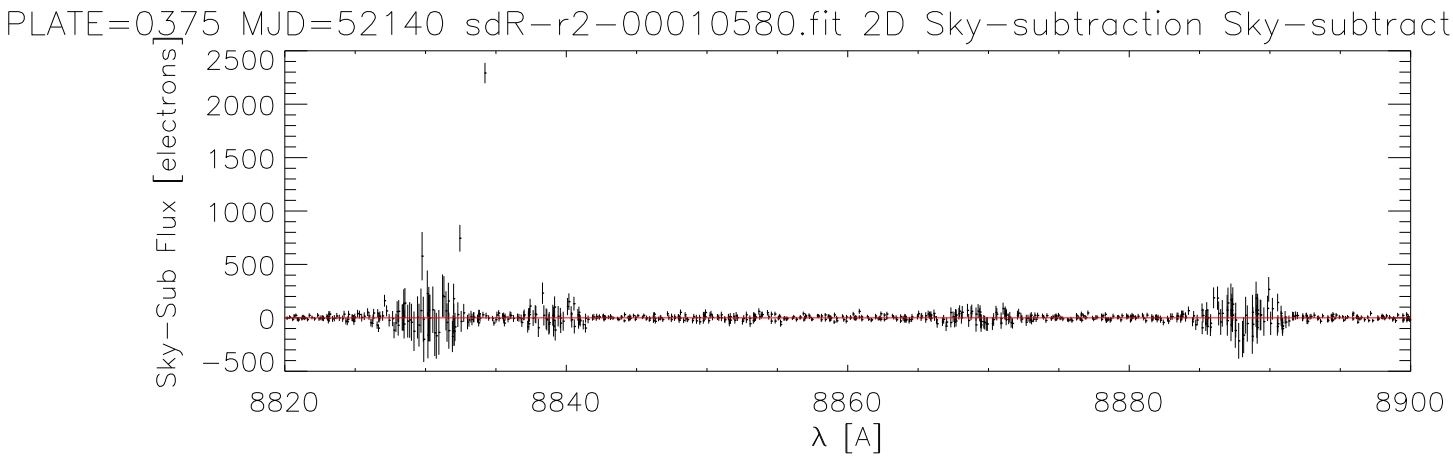

PLATE=0375 MJD=52140 sdR-r2-00010580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

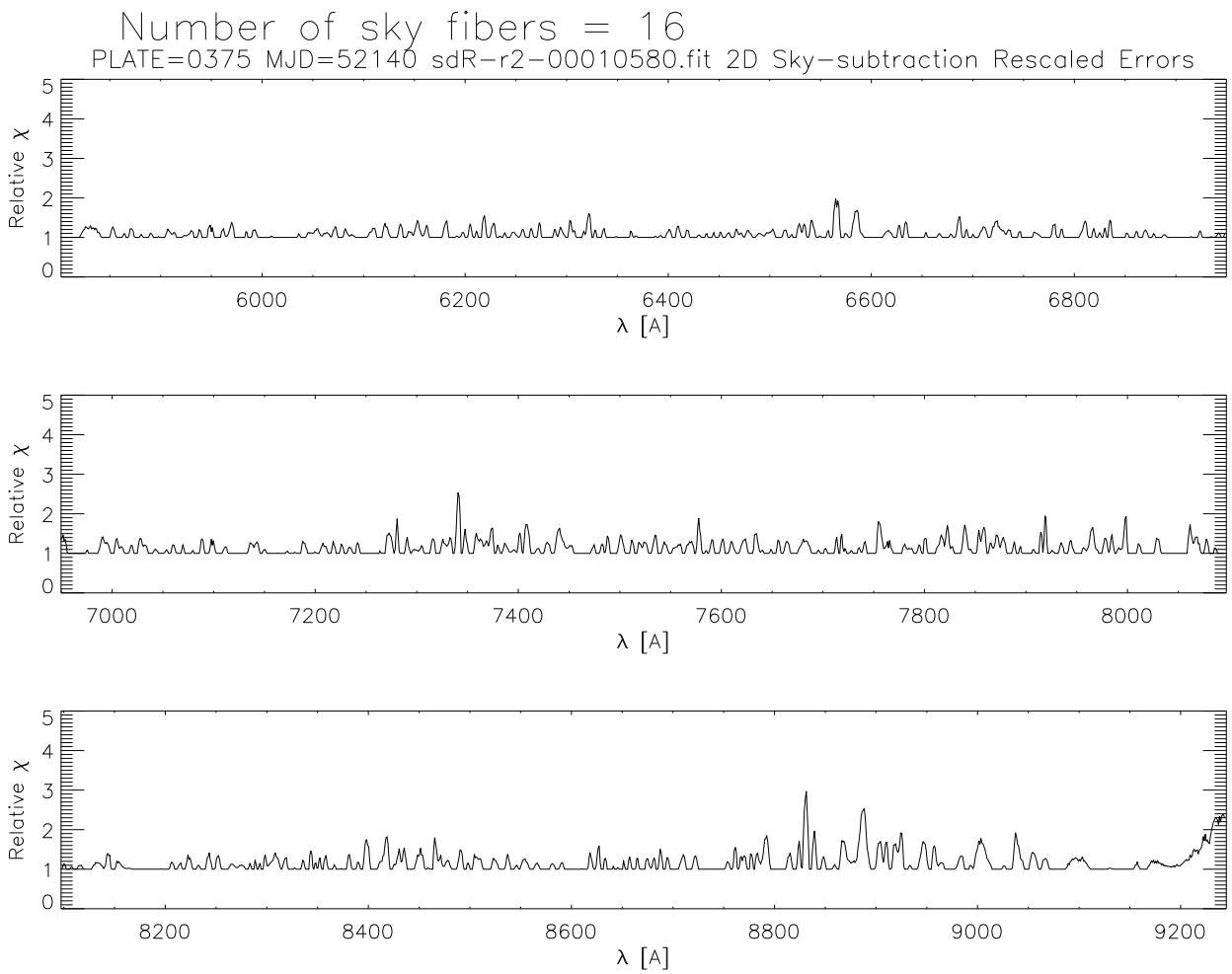

PLATE=0375 MJD=52140 sdR-r2-00010580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

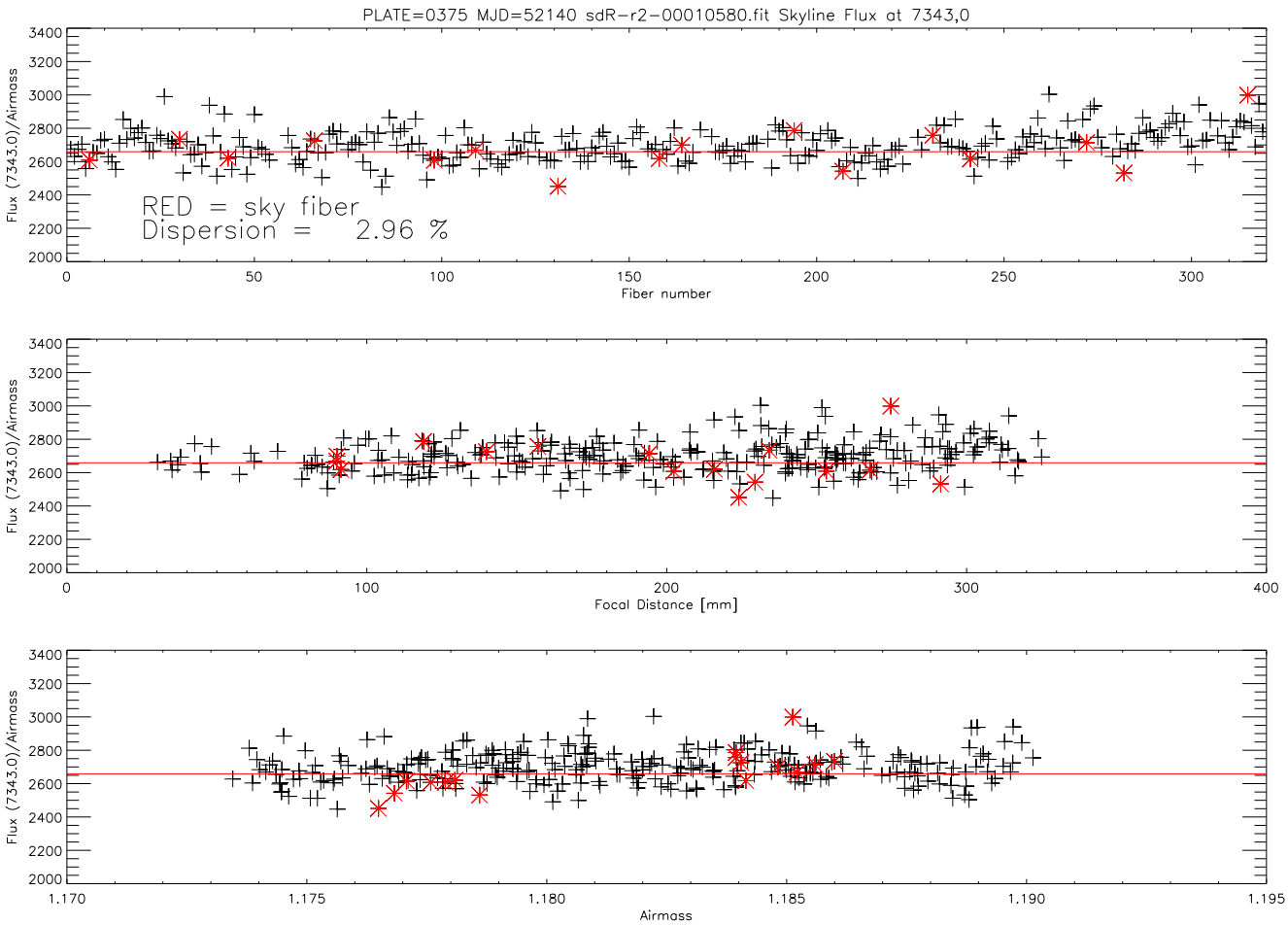

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010580.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

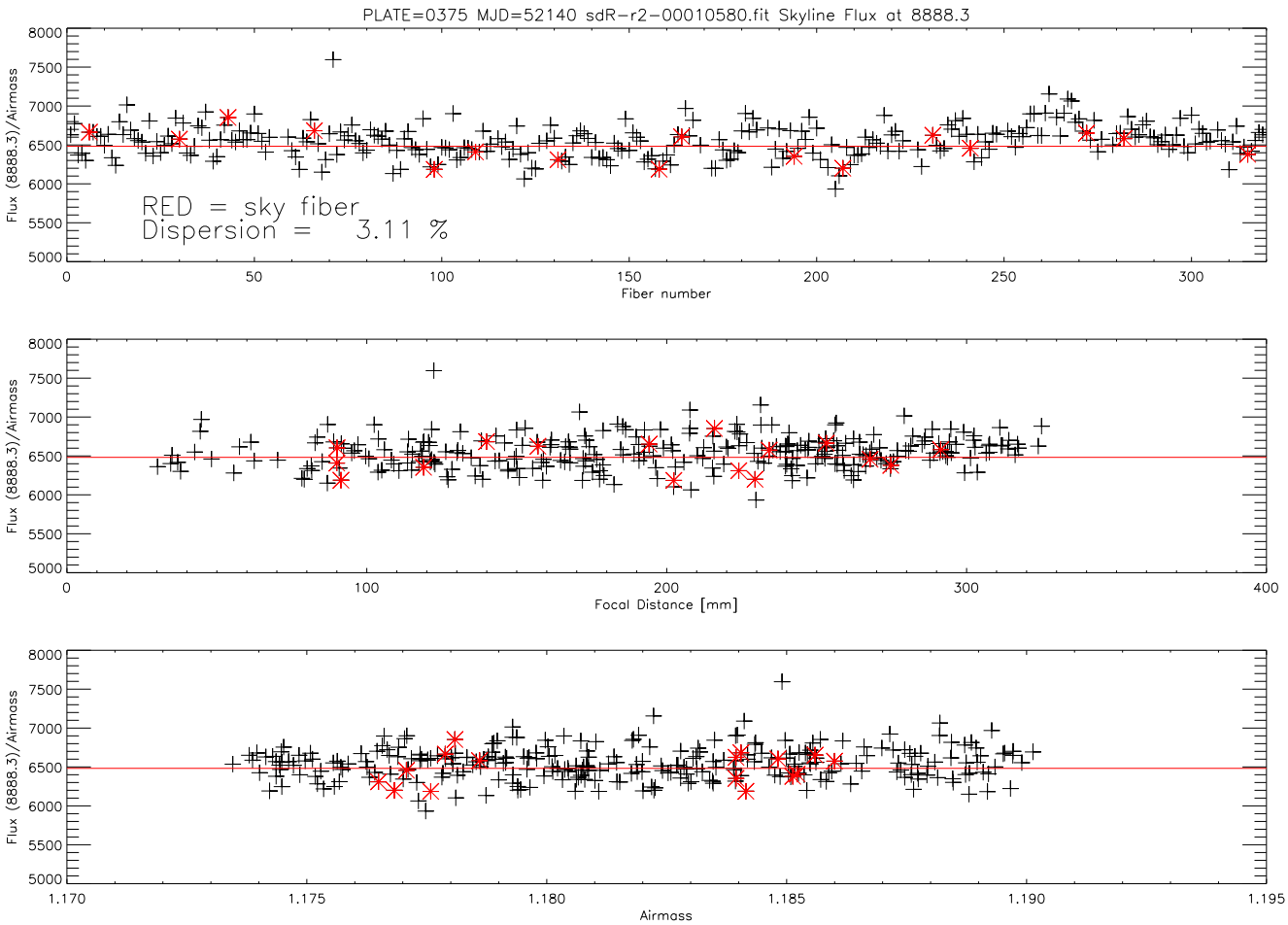

PLATE=0375 MJD=52140 sdR-r2-00010580.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

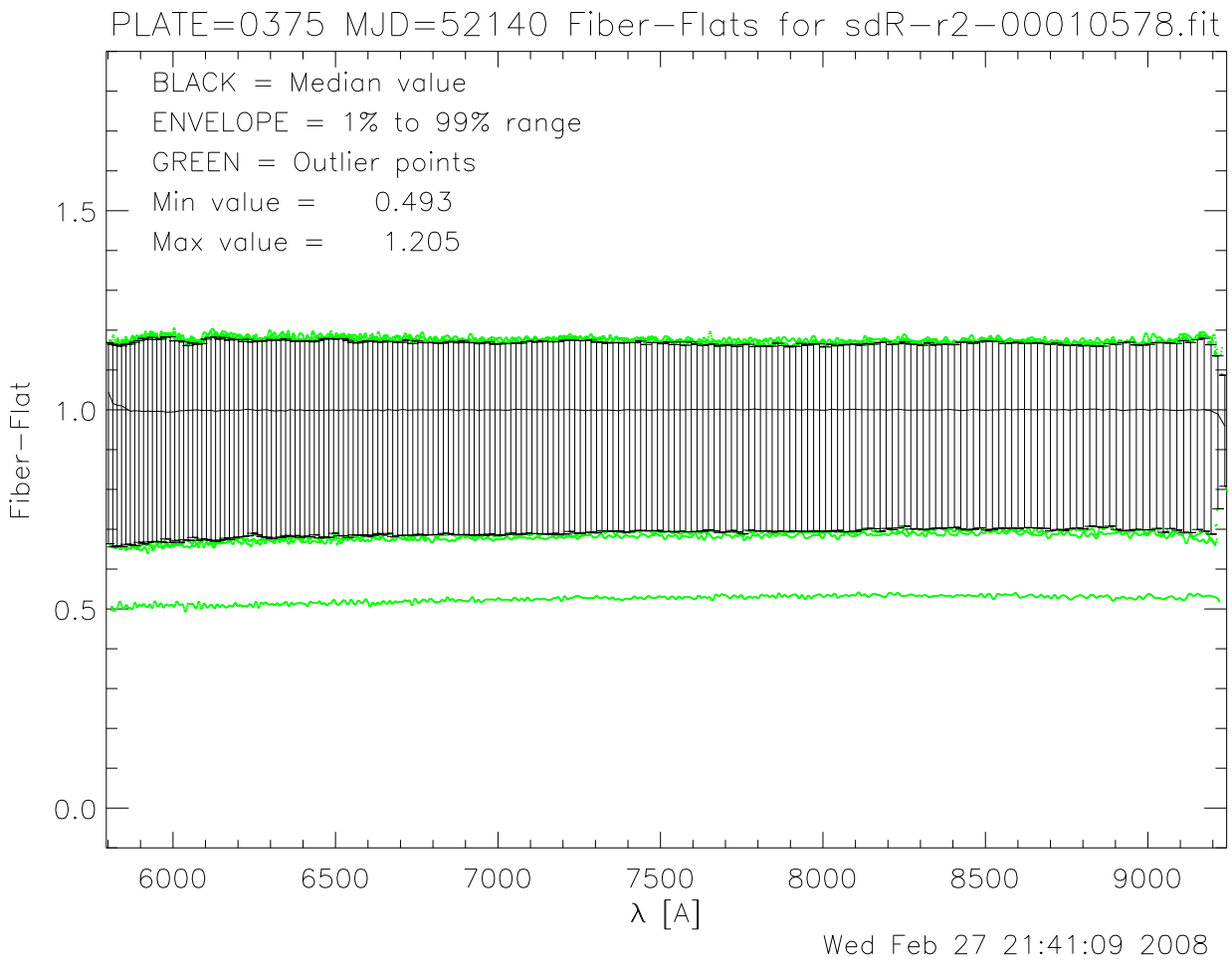

PLATE=0375 MJD=52140 sdR-r2-00010580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

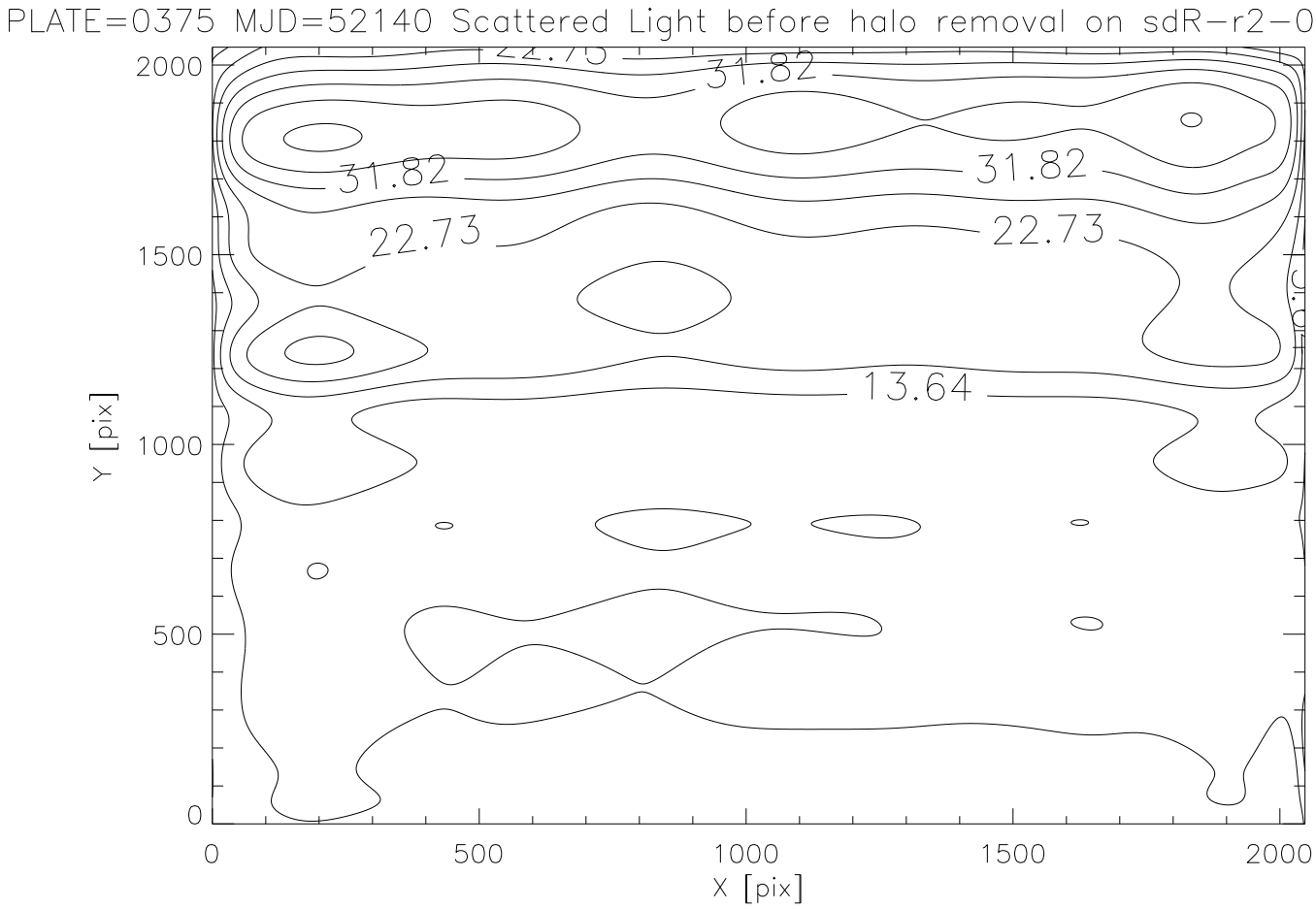

PLATE=0375 MJD=52140 sdR-r2-00010580.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

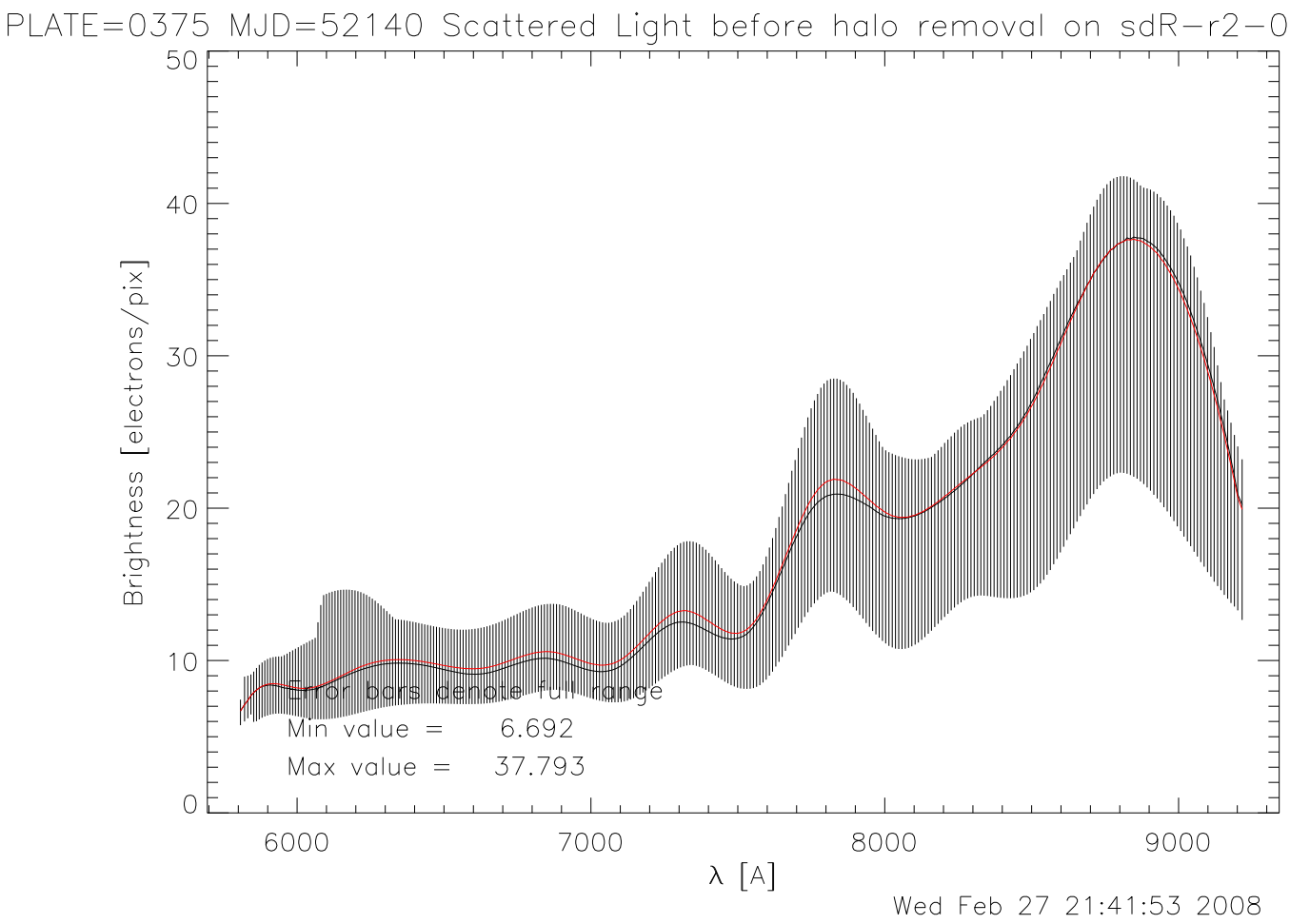

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010580.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5

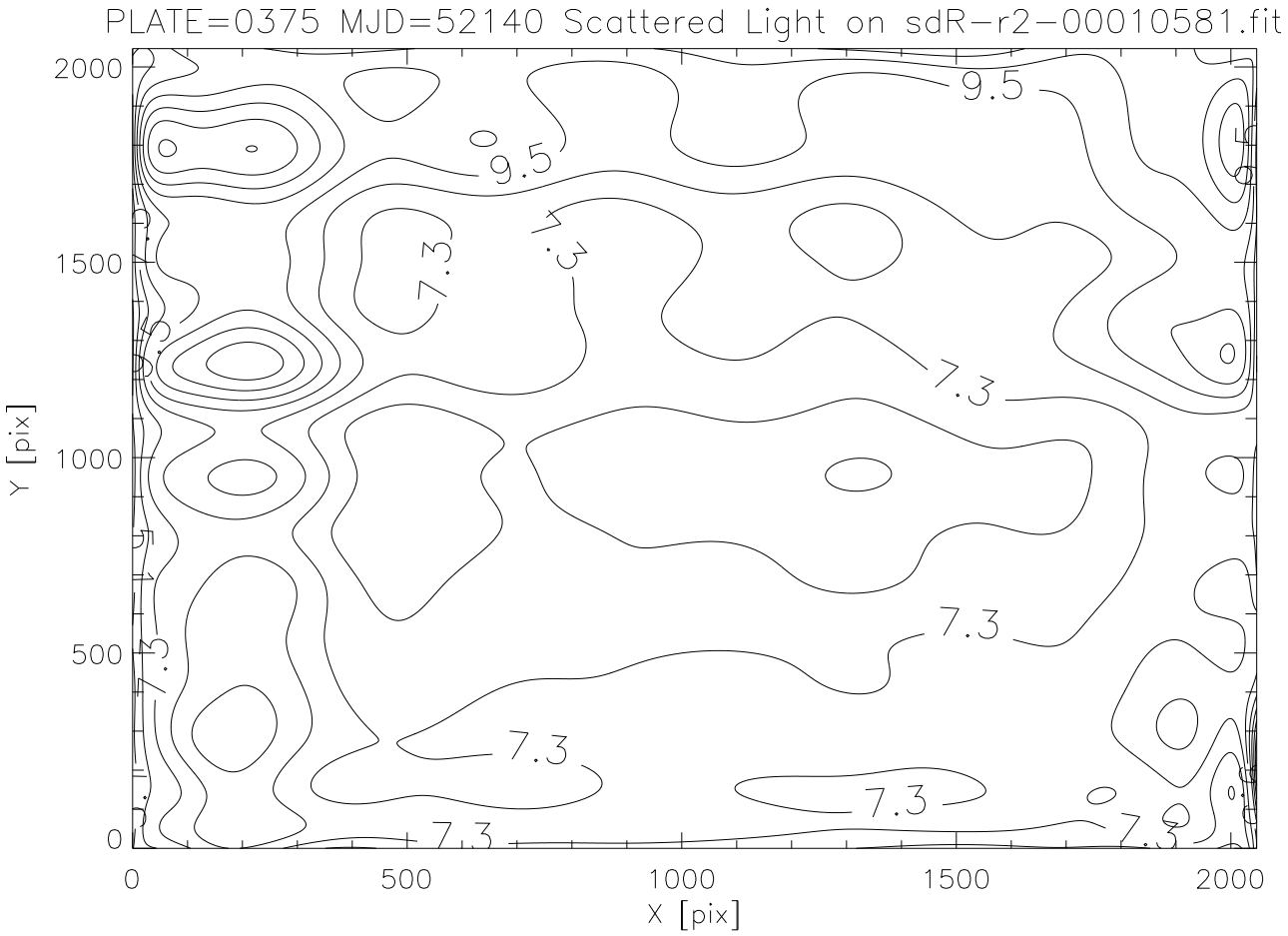

PLATE=0375 MJD=52140 sdR-r2-00010580.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.96 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

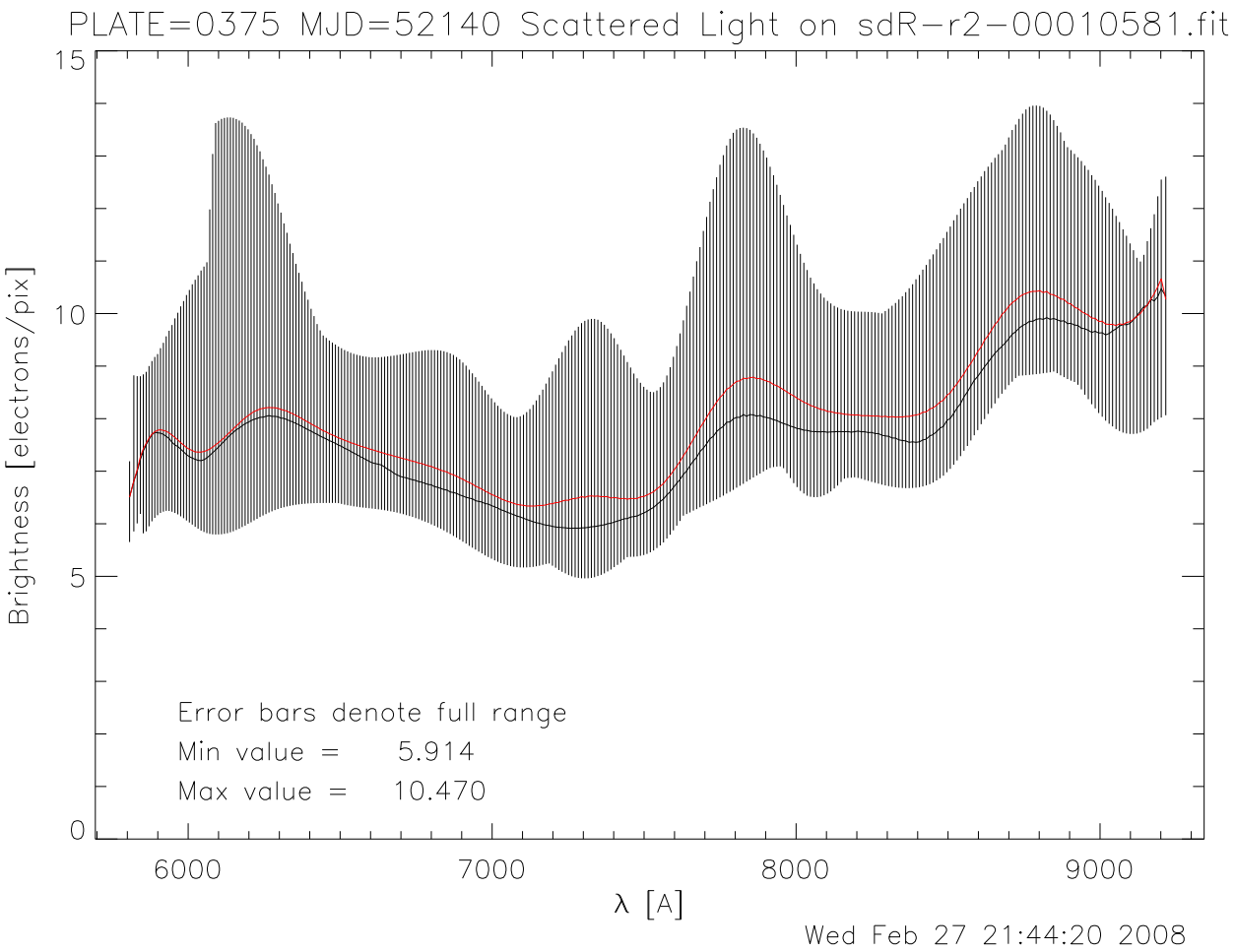

PLATE=0375 MJD=52140 sdR-r2-00010580.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.11 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

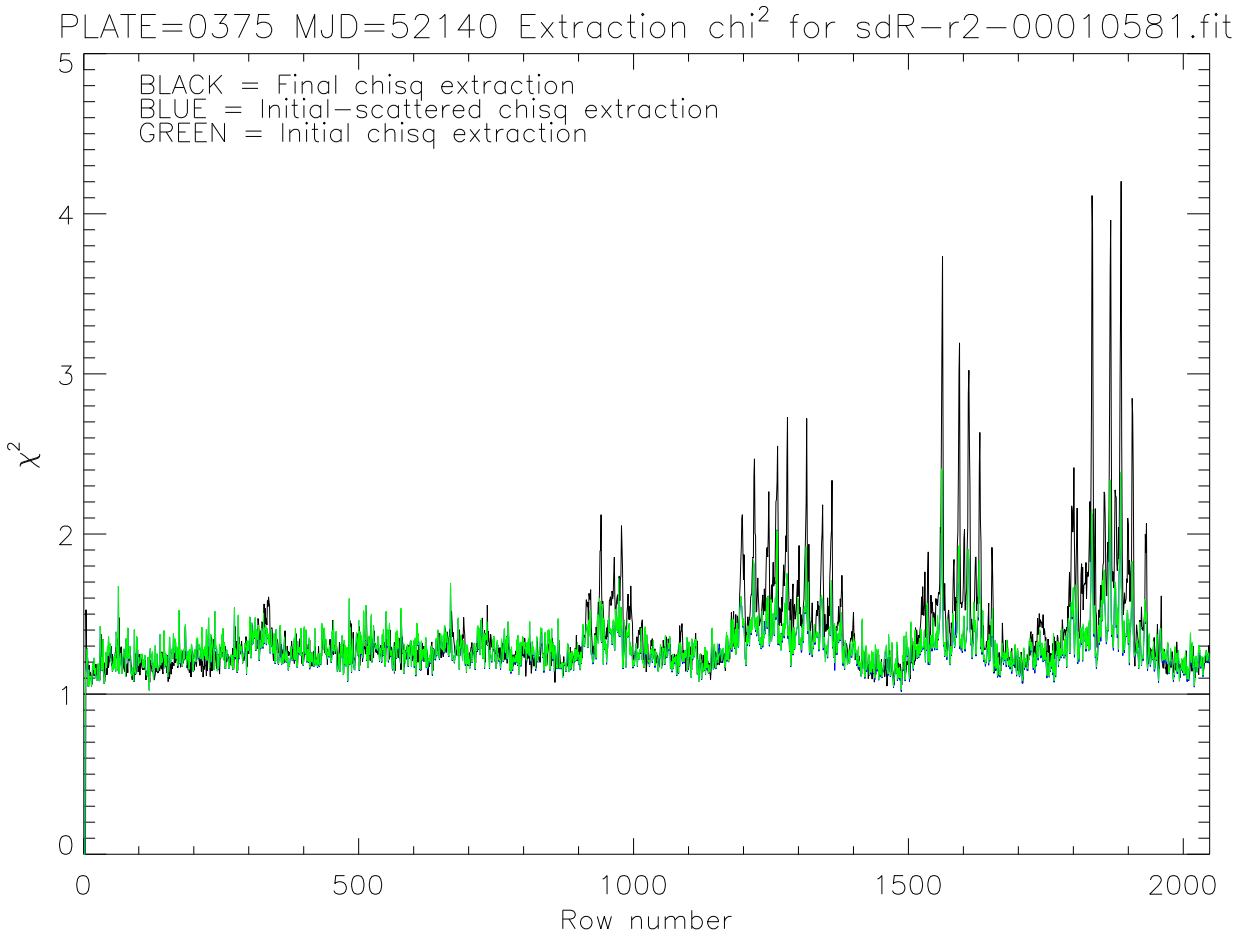

PLATE=0375 MJD=52140 Fiber−Flats for sdR−r2−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.493
Max value = 1.205
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 27 21:41:09 2008

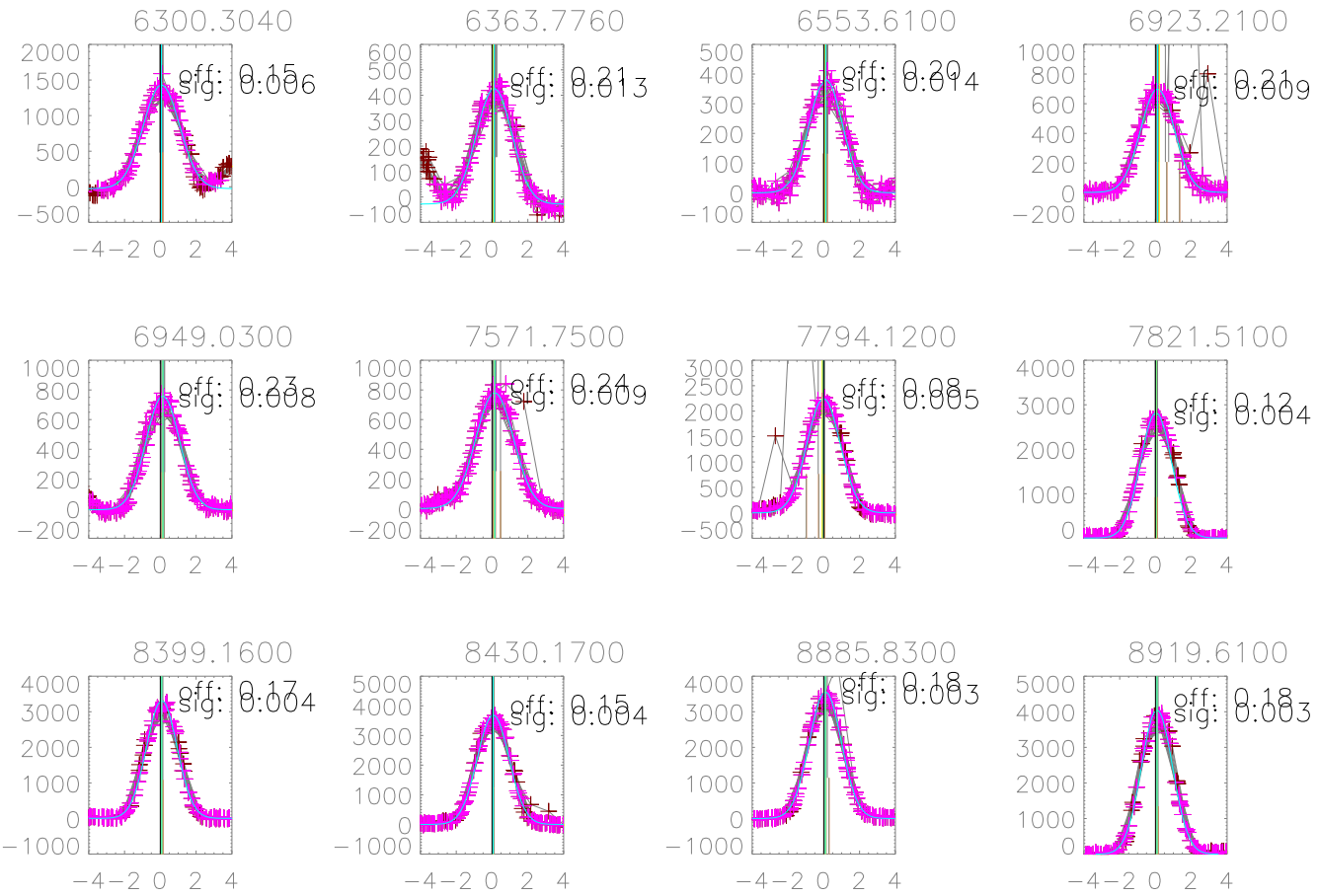

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR−r2−00010581.fi
31.82
31.82
31.82
22.73
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

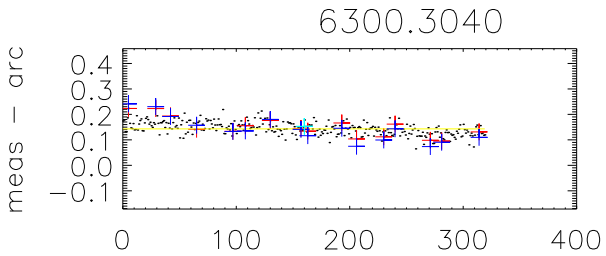

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r2-00010581.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.692
Max value = 37.793
Wed Feb 27 21:41:53 2008

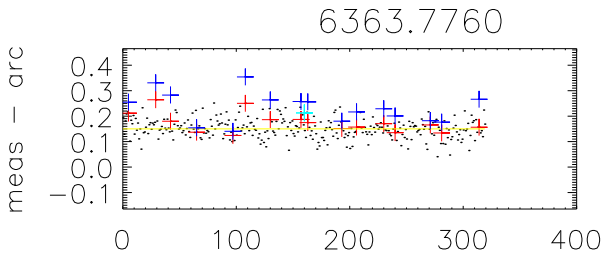

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010581.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.5
7.3

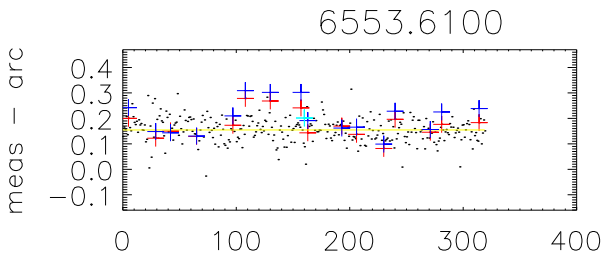

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010581.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.914
Max value = 10.470
Wed Feb 27 21:44:20 2008

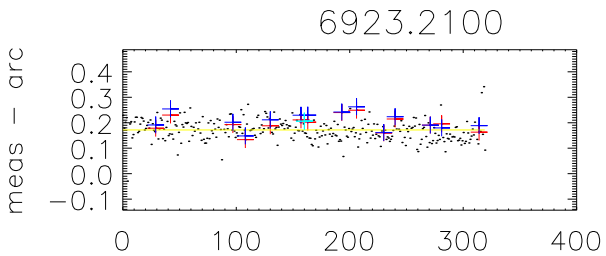

PLATE=0375 MJD=52140 Extraction chi^2 for sdR−r2−00010581.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

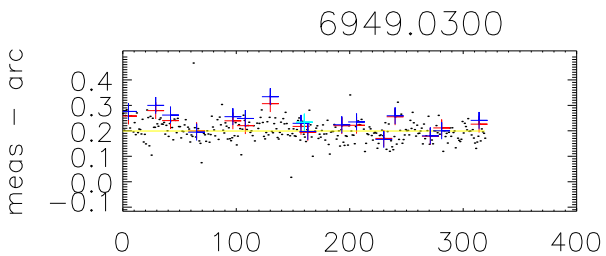

6300.3040
off: 0.15
sig: 0.006
6363.7760
off: 0.21
sig: 0.013
6553.6100
off: 0.20
sig: 0.014
6923.2100
off: 0.21
sig: 0.009
6949.0300
off: 0.23
sig: 0.008
7571.7500
off: 0.24
sig: 0.009
7794.1200
off: 0.08
sig: 0.005
7821.5100
off: 0.12
sig: 0.004
8399.1600
off: 0.17
sig: 0.004
8430.1700
off: 0.15
sig: 0.004
8885.8300
off: 0.18
sig: 0.003
8919.6100
off: 0.18
sig: 0.003

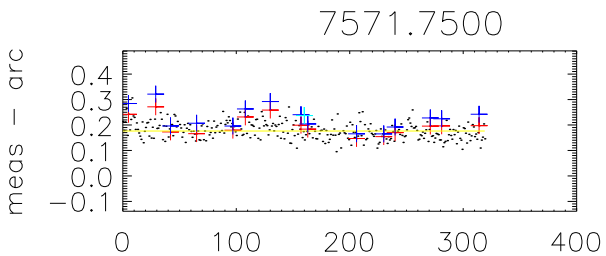

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

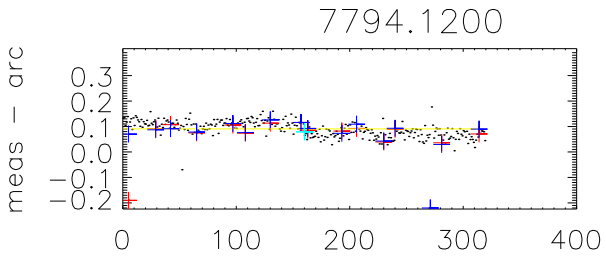

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

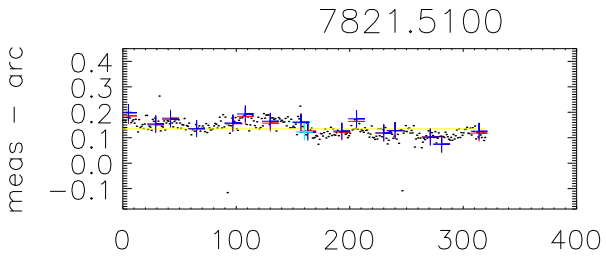

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

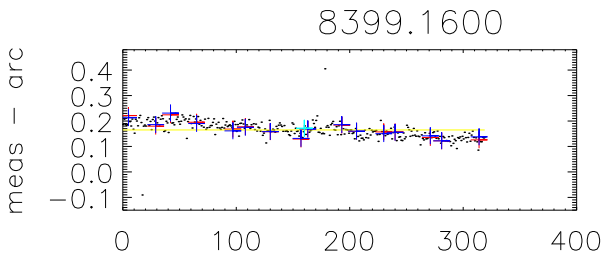

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

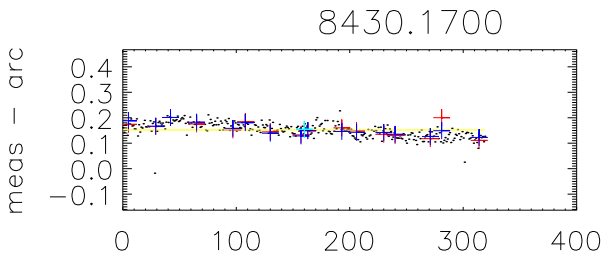

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

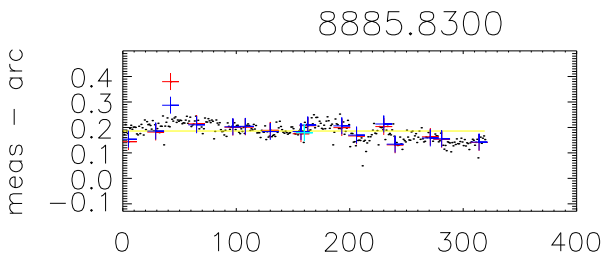

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

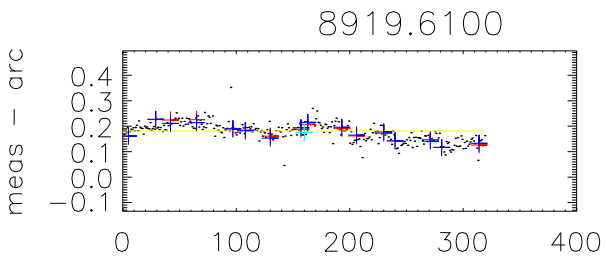

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

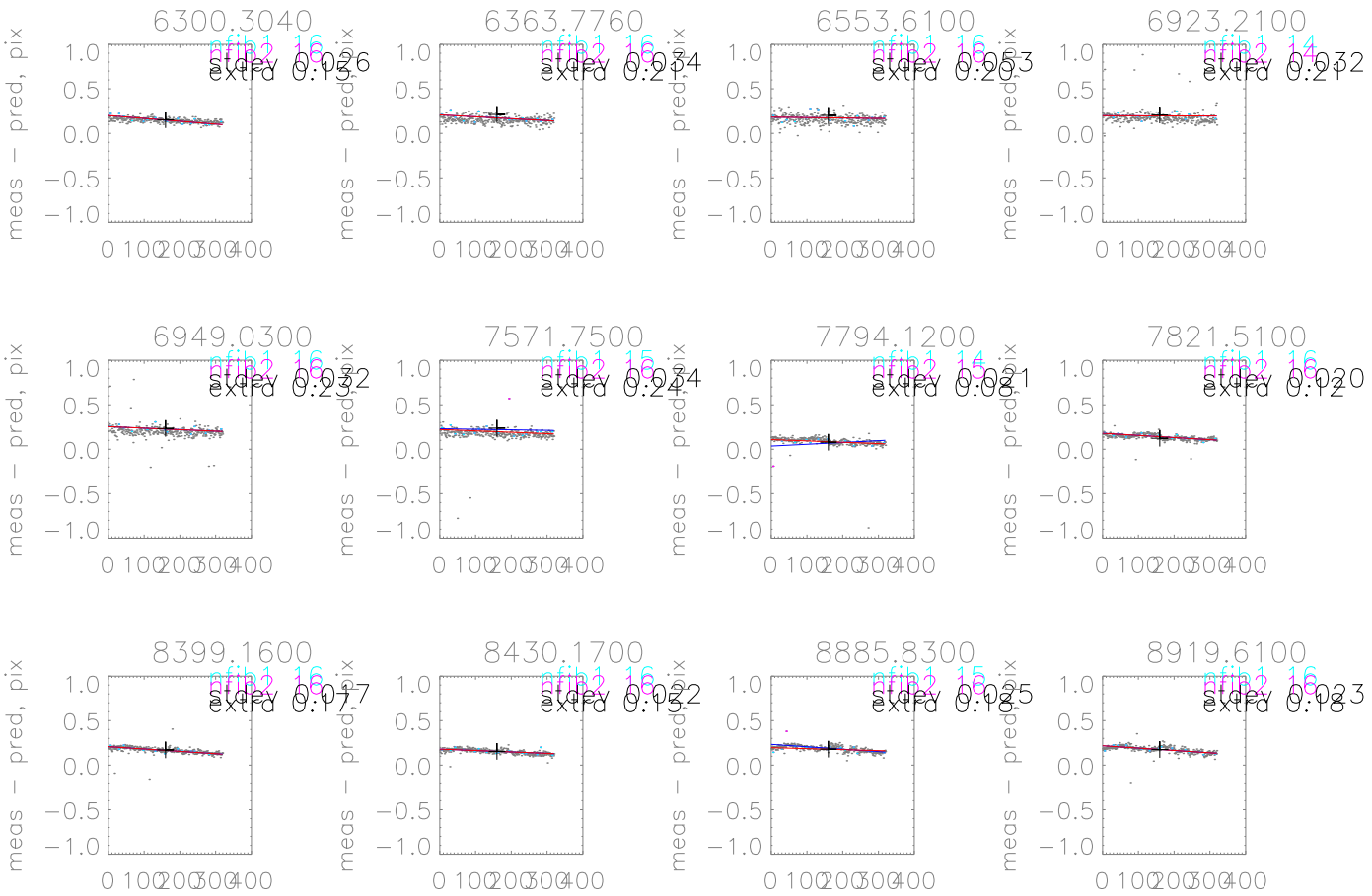

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

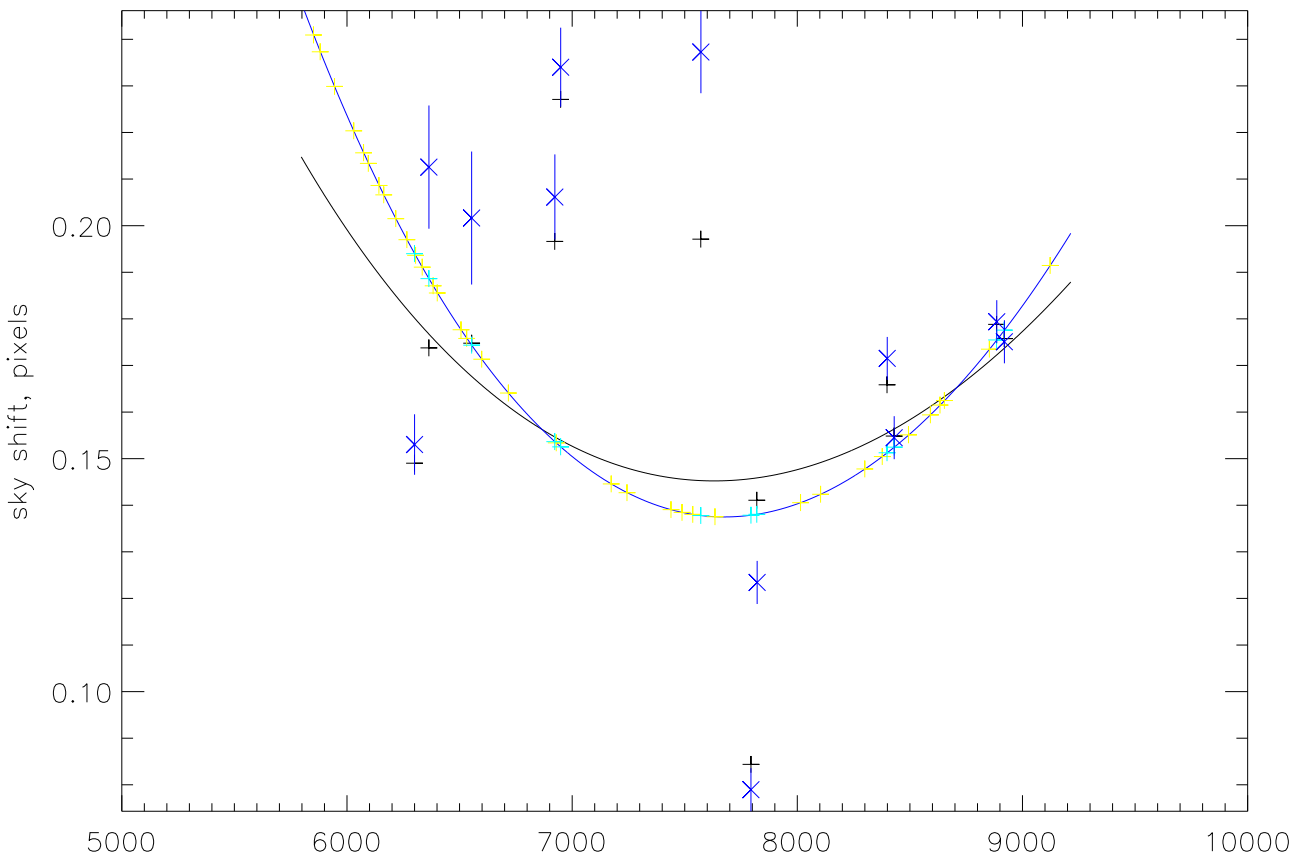

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

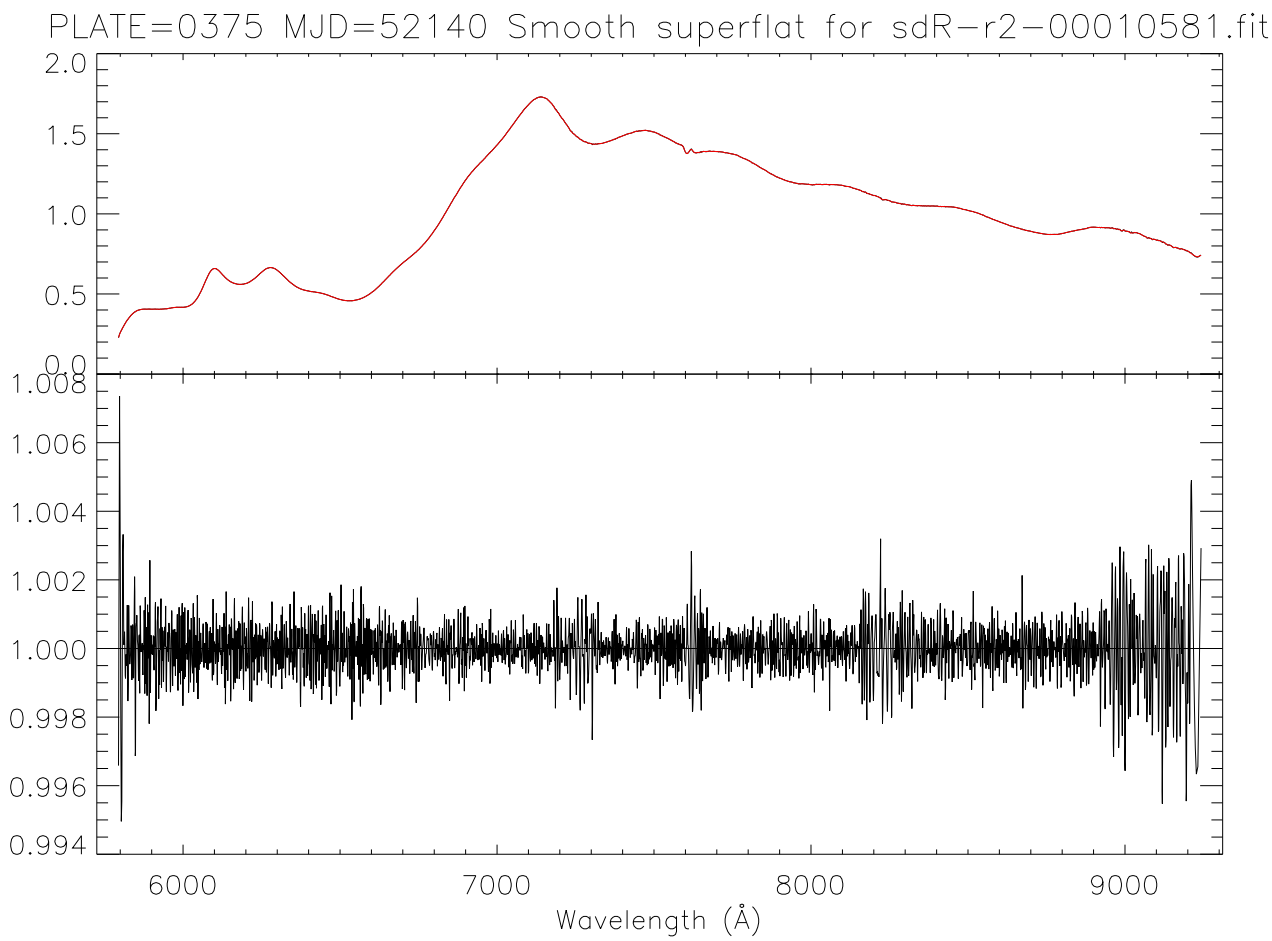

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

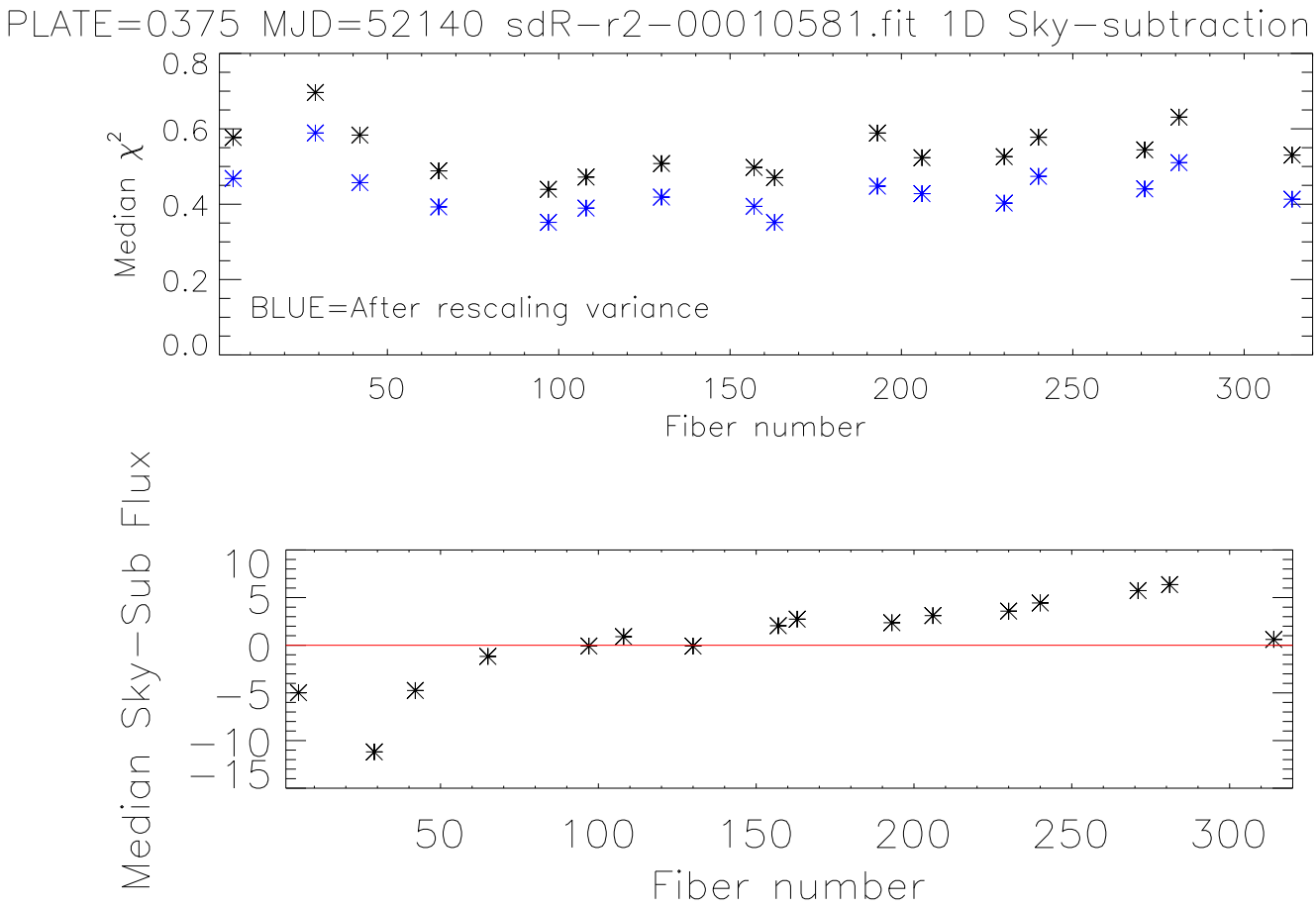

8919.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

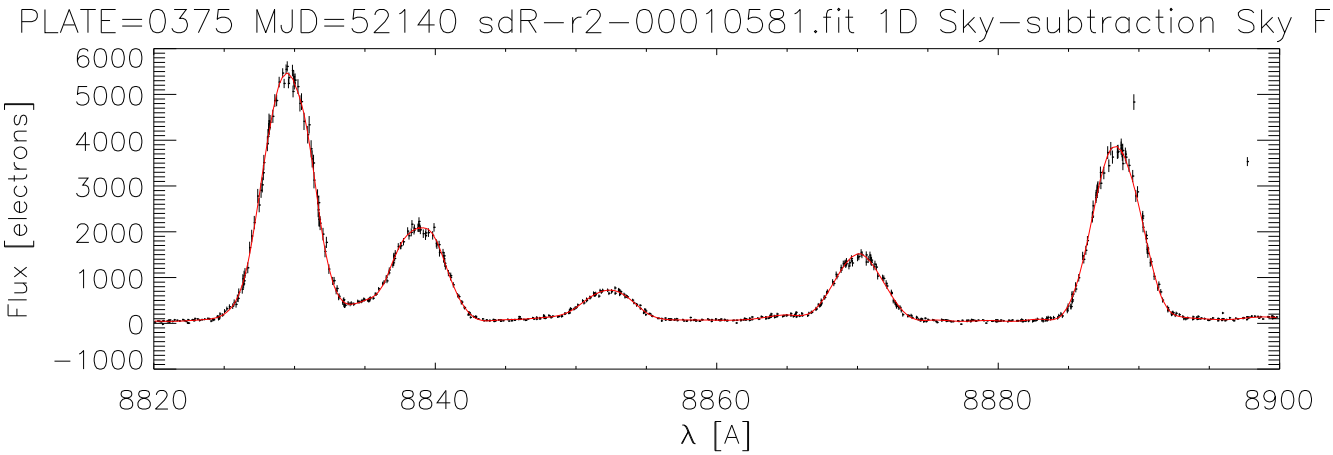

6300.3040
stdev 0.026
extra 0.15
6363.7760
stdev 0.034
extra 0.21
6553.6100
stdev 0.053
extra 0.20
6923.2100
stdev 0.032
extra 0.21
6949.0300
stdev 0.032
extra 0.23
7571.7500
stdev 0.034
extra 0.24
7794.1200
stdev 0.021
extra 0.08
7821.5100
stdev 0.020
extra 0.12
8399.1600
stdev 0.017
extra 0.17
8430.1700
stdev 0.022
extra 0.13
8885.8300
stdev 0.025
extra 0.18
8919.6100
stdev 0.023
extra 0.18
meas − pred, pix

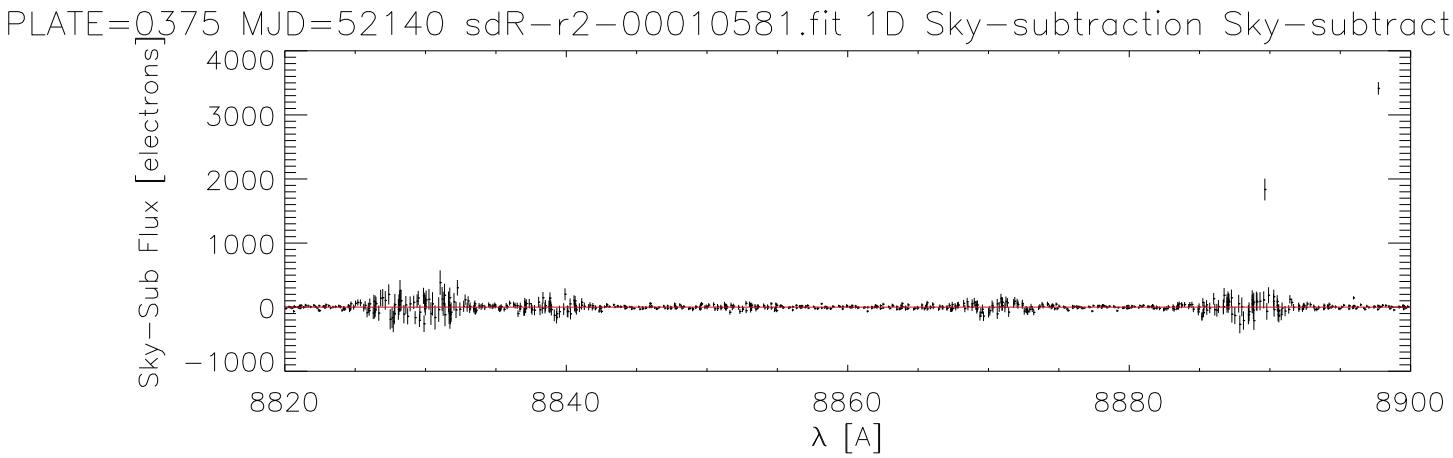

sky shift, pixels
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

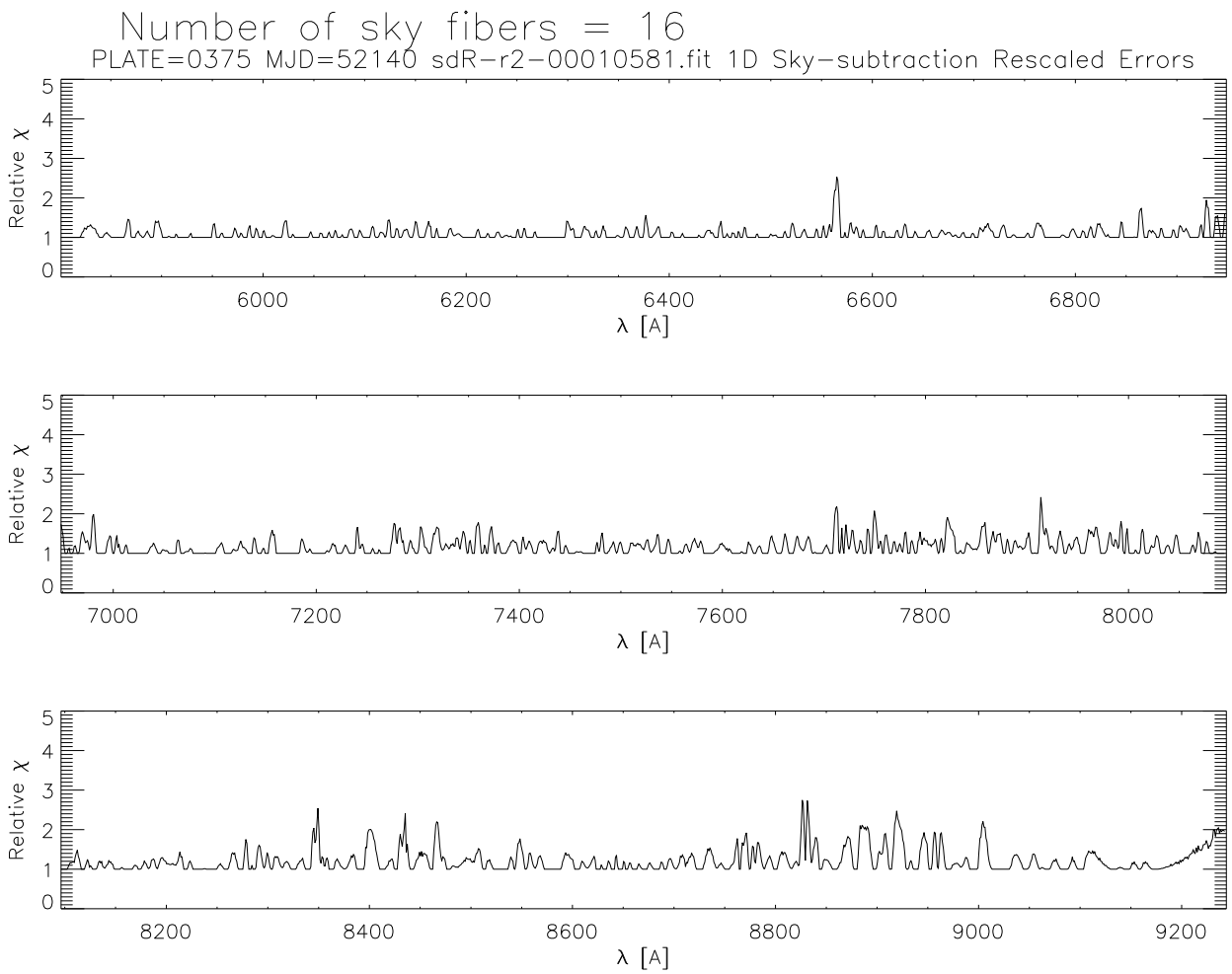
es= −0.0000

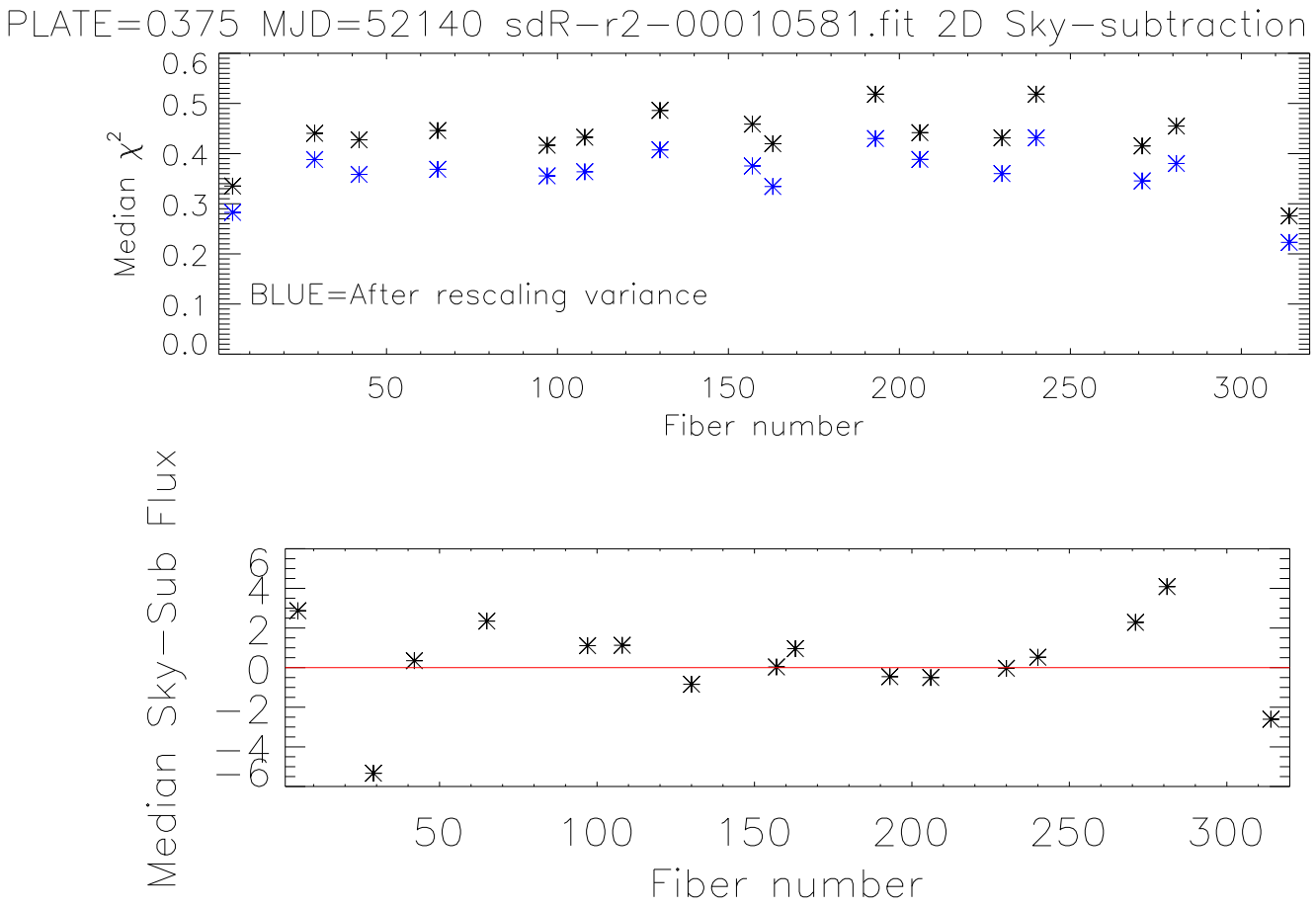

PLATE=0375 MJD=52140 Smooth superflat for sdR−r2−00010581.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

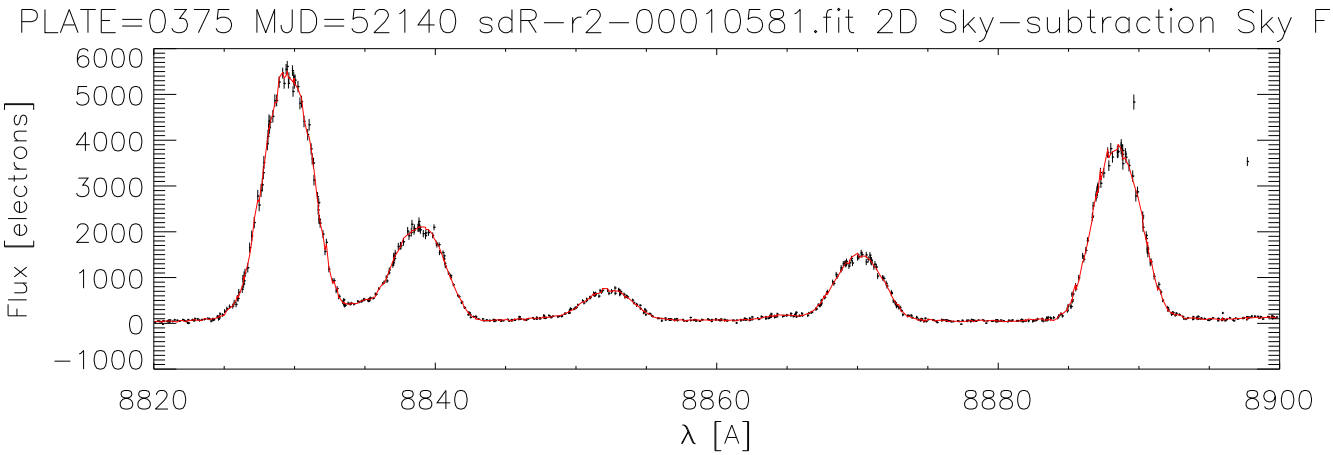

PLATE=0375 MJD=52140 sdR-r2-00010581.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

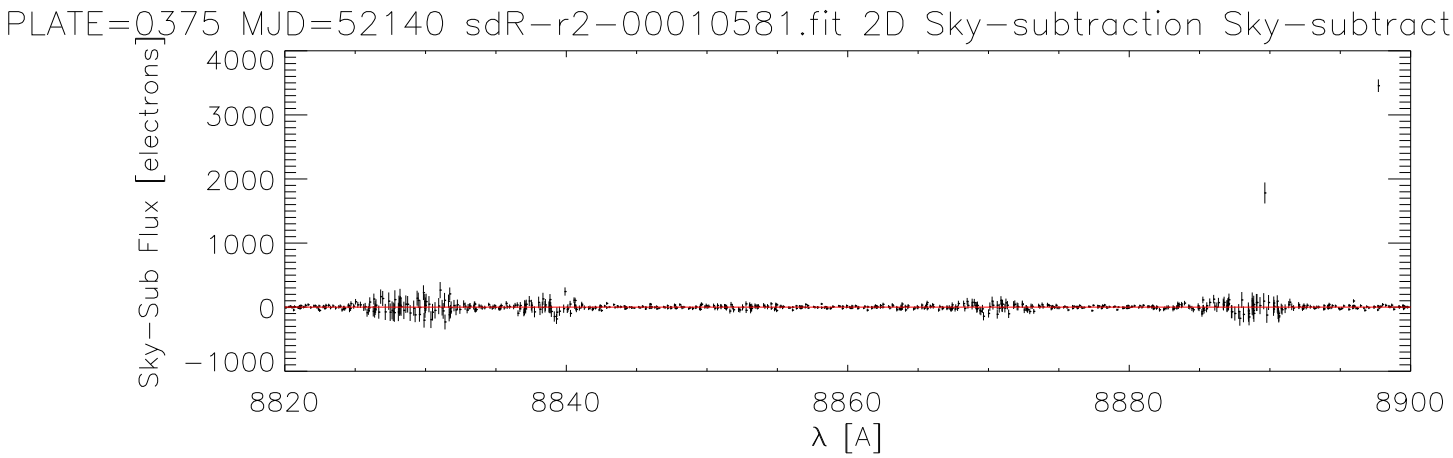

PLATE=0375 MJD=52140 sdR-r2-00010581.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

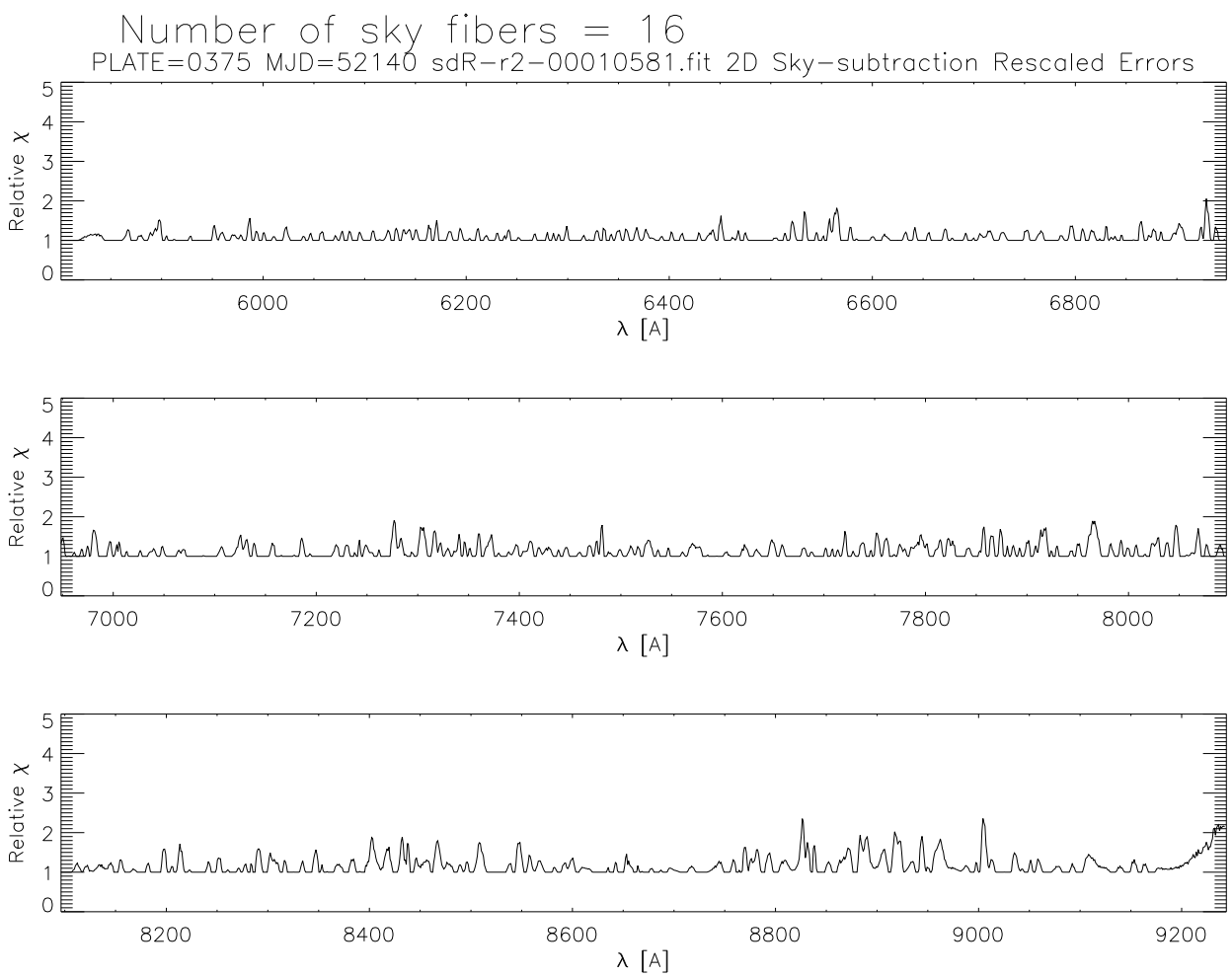

PLATE=0375 MJD=52140 sdR-r2-00010581.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

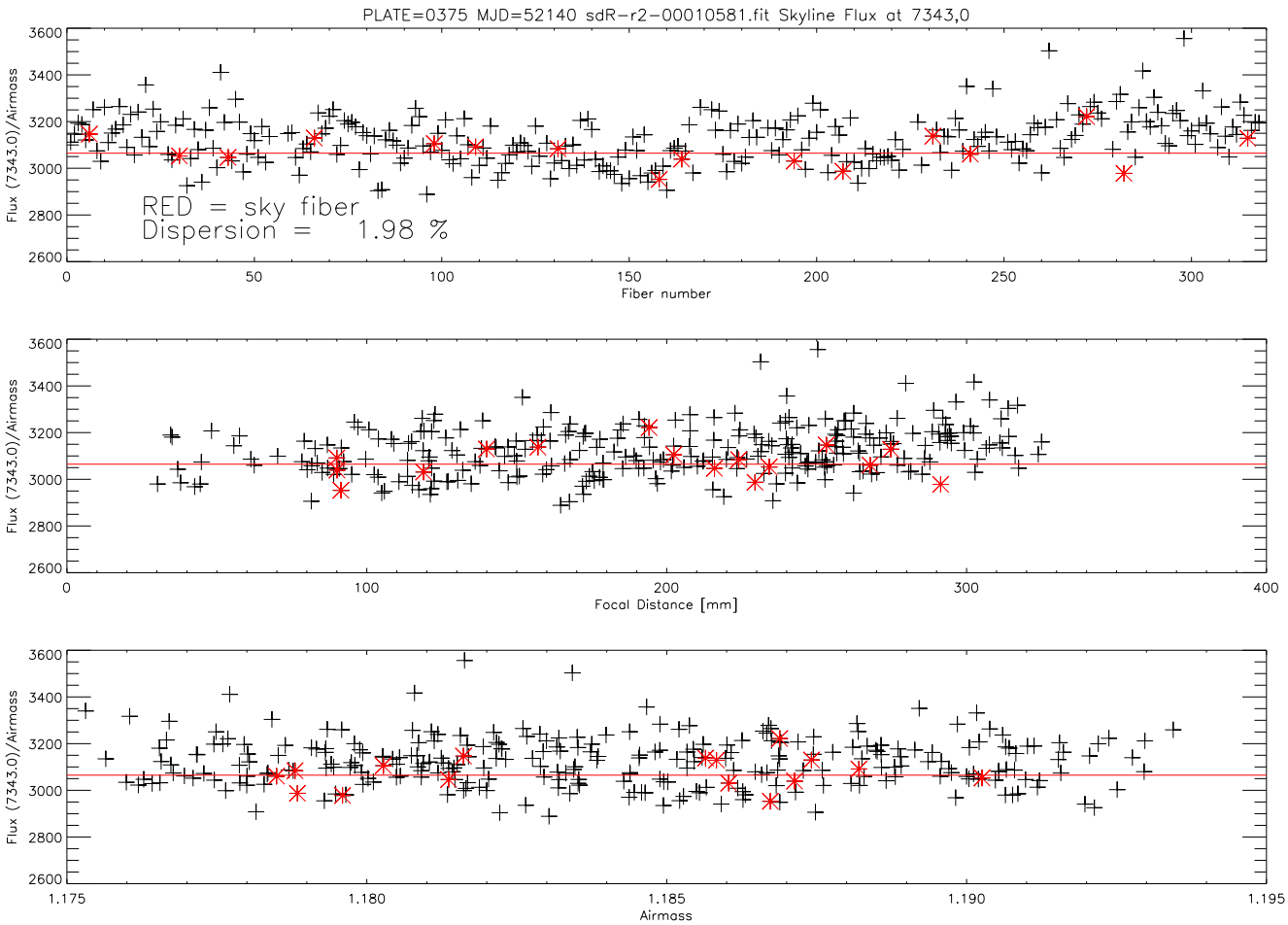

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010581.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

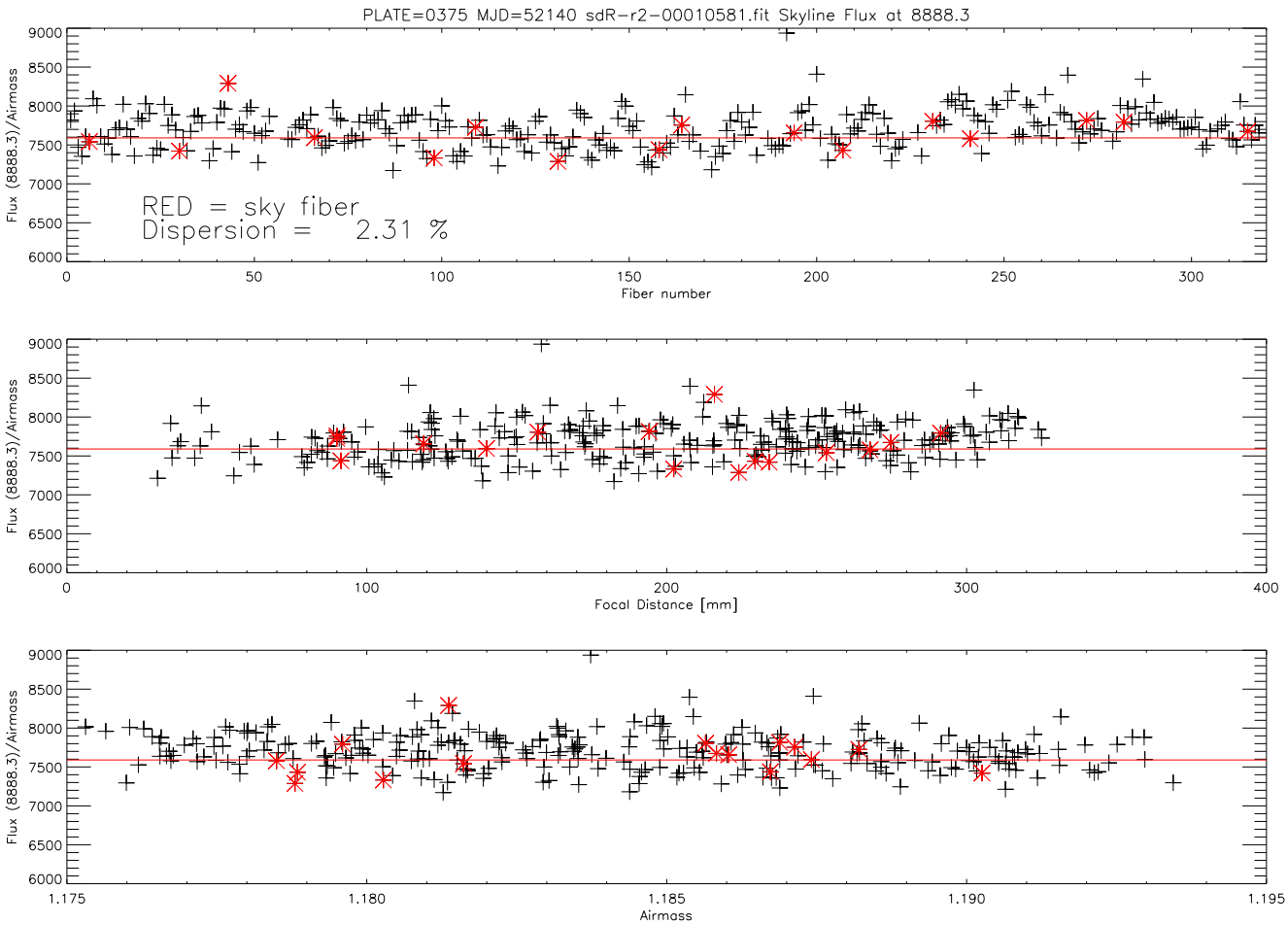

PLATE=0375 MJD=52140 sdR-r2-00010581.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

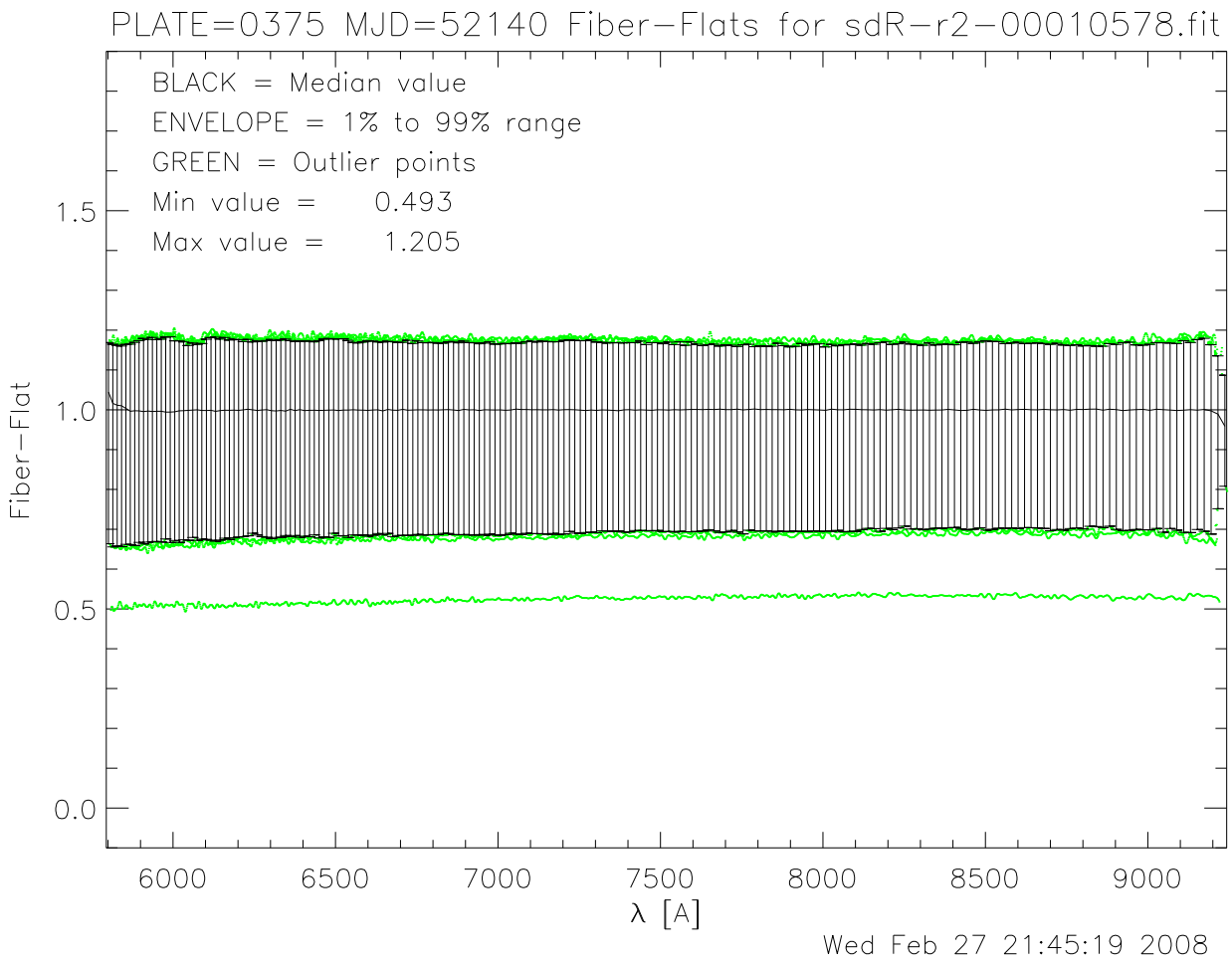

PLATE=0375 MJD=52140 sdR-r2-00010581.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

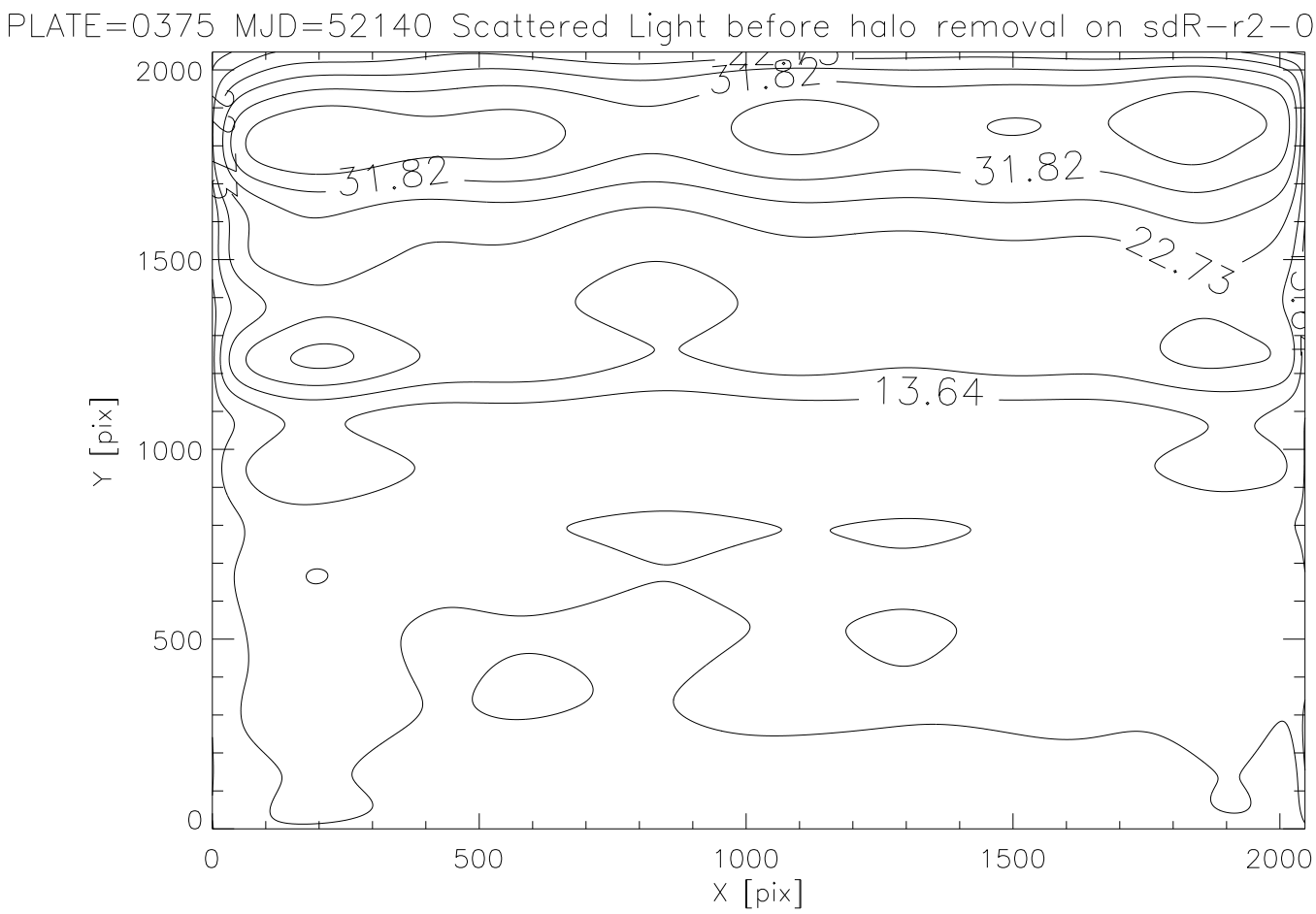

PLATE=0375 MJD=52140 sdR-r2-00010581.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
8820
8840
8860
8880
8900
λ [A]

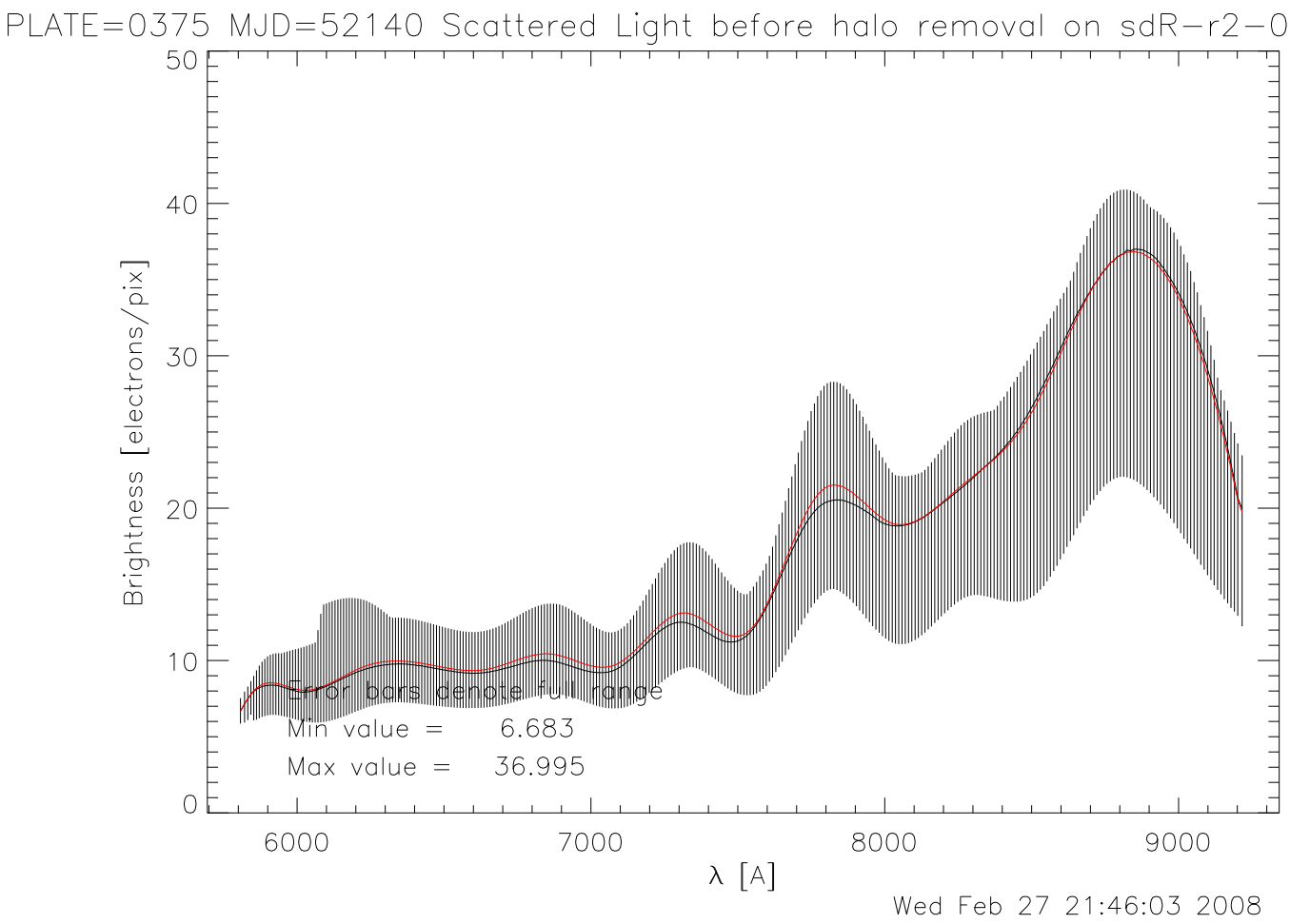

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010581.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

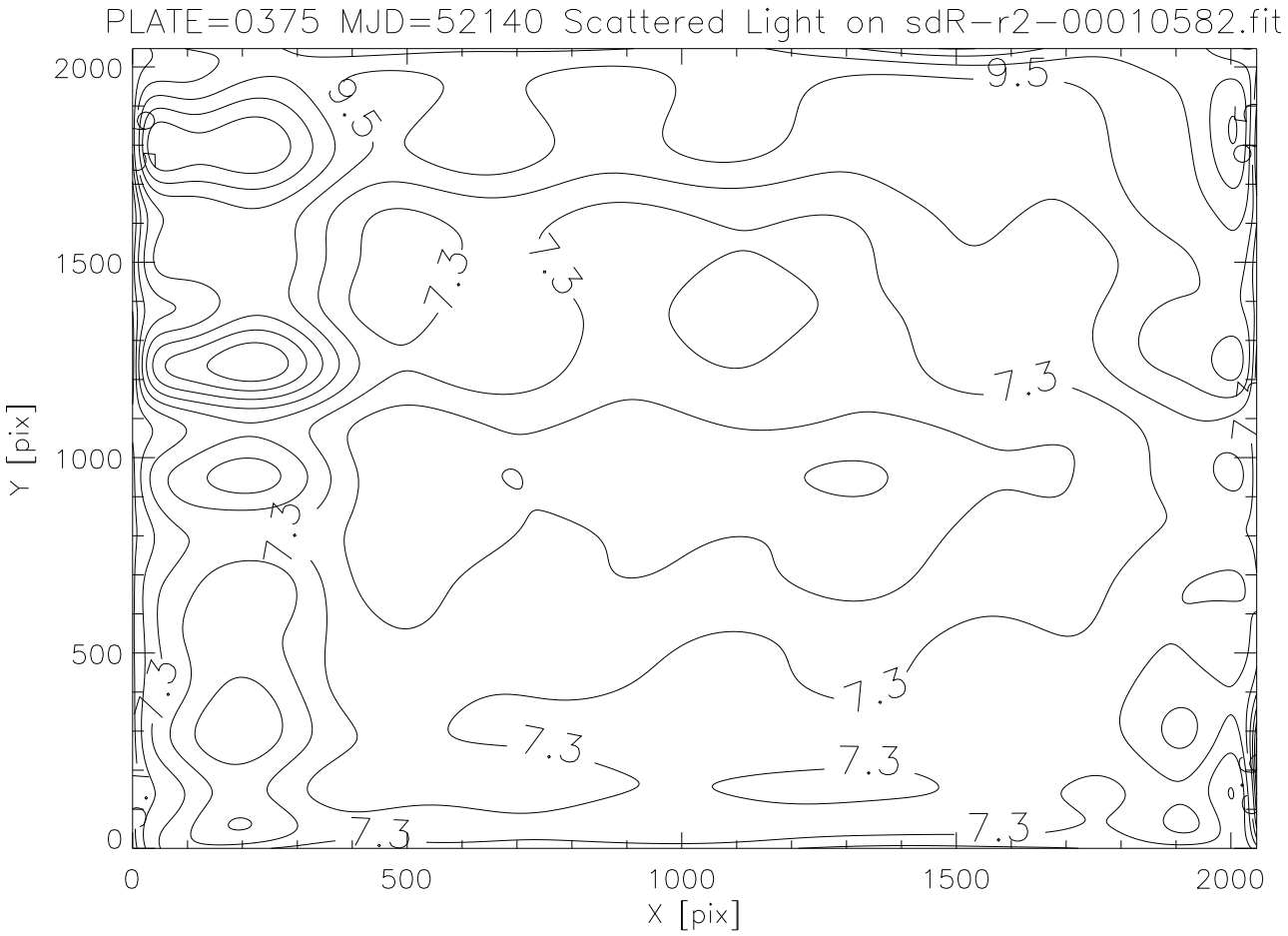

PLATE=0375 MJD=52140 sdR-r2-00010581.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.98 %
Fiber number
Focal Distance [mm]
Airmass

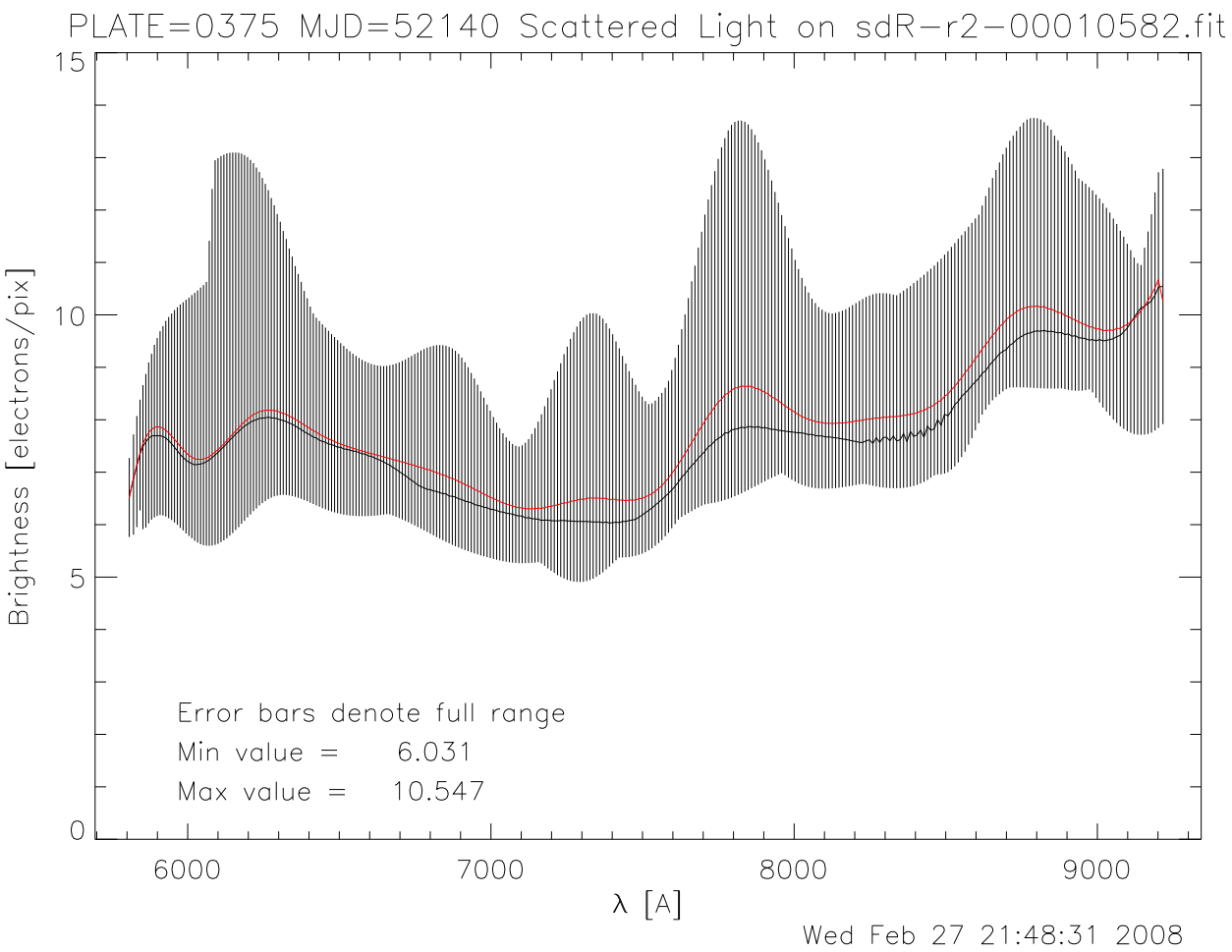

PLATE=0375 MJD=52140 sdR-r2-00010581.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.31 %
Fiber number
Focal Distance [mm]
Airmass

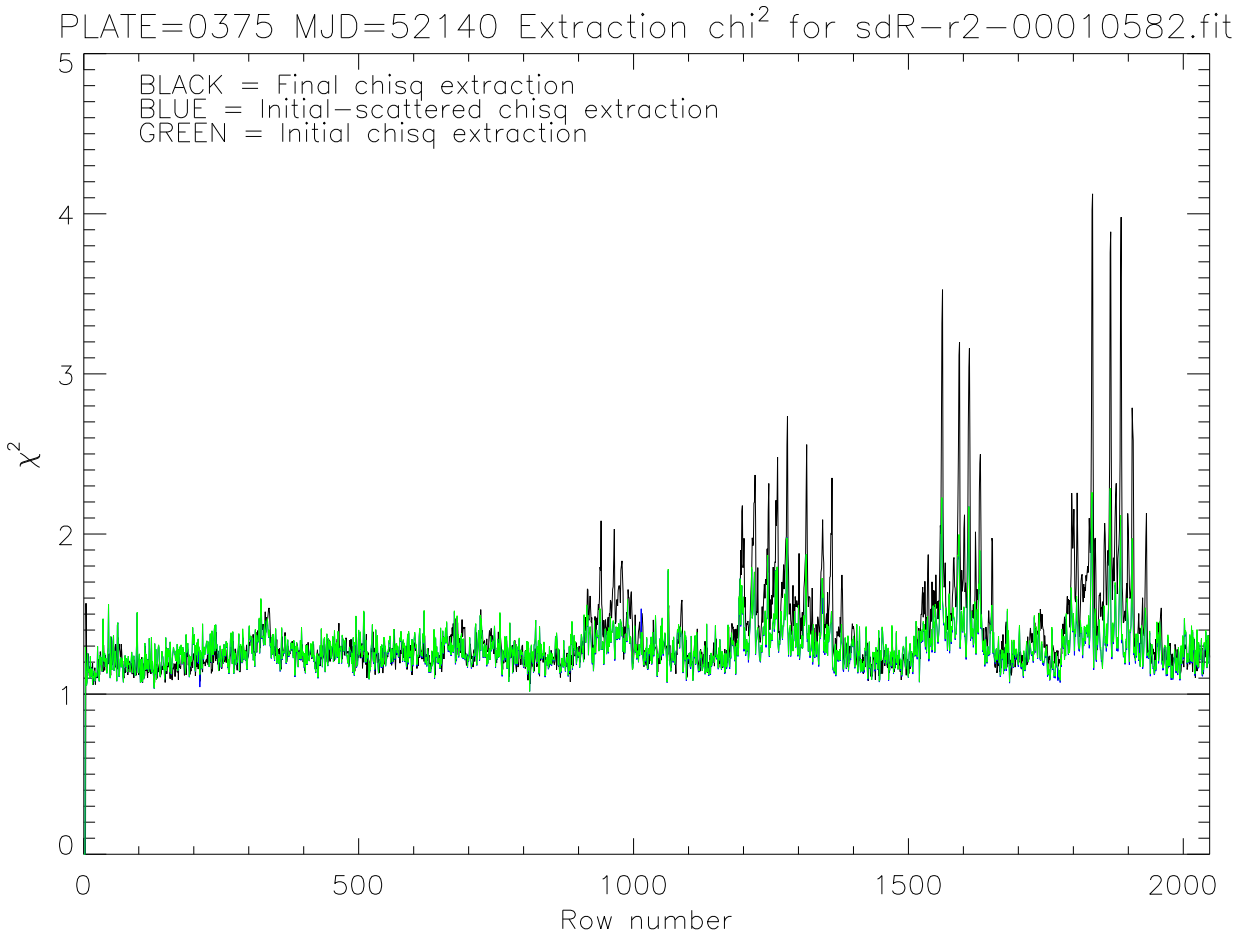

PLATE=0375 MJD=52140 Fiber-Flats for sdR-r2-00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.493
Max value = 1.205
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 27 21:45:19 2008

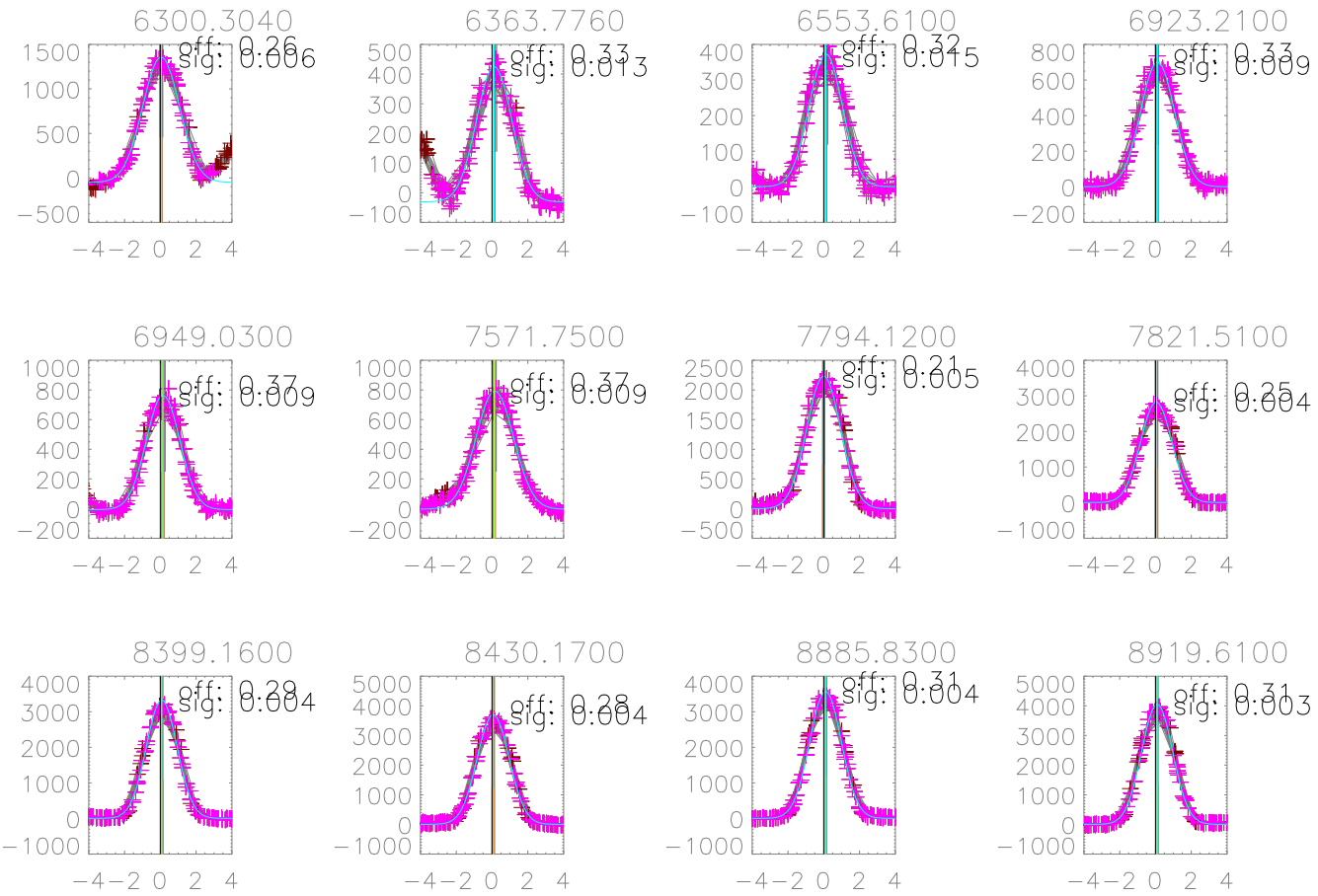

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r2-00010582.fi
31.82
31.82
31.82
22.73
13.64
Y [pix]
X [pix]
0
500
1000
1500
2000

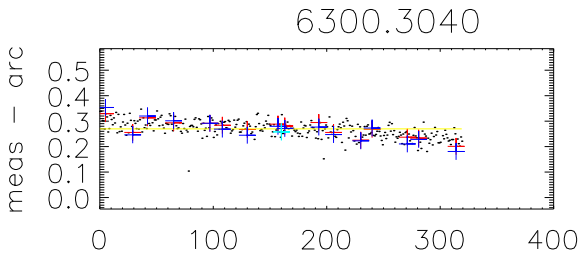

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r2-00010582.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 6.683
Max value = 36.995
Wed Feb 27 21:46:03 2008

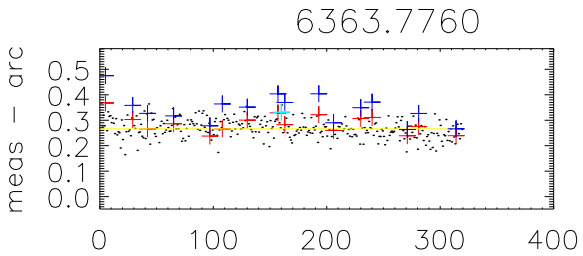

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010582.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.5
7.3

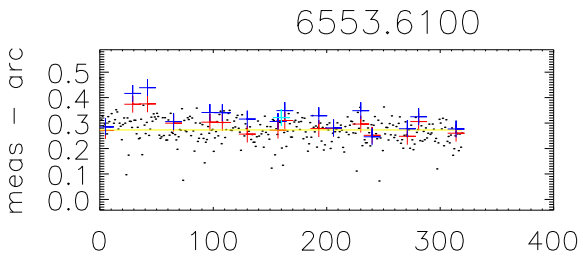

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010582.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.031
Max value = 10.547
Wed Feb 27 21:48:31 2008

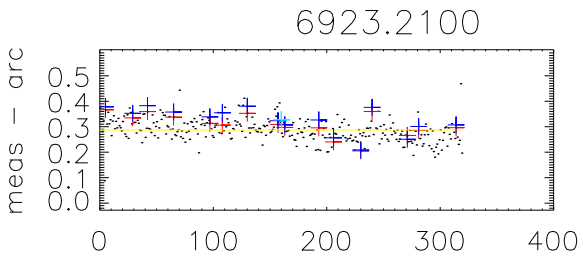

PLATE=0375 MJD=52140 Extraction chi^2 for sdR-r2-00010582.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

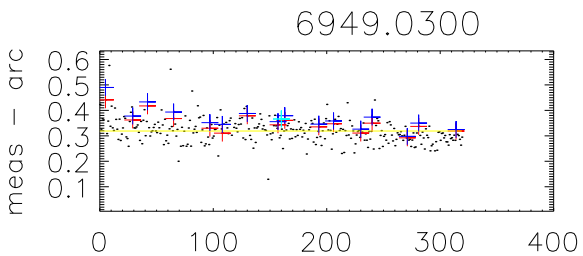

6300.3040
off: 0.26
sig: 0.006
6363.7760
off: 0.33
sig: 0.013
6553.6100
off: 0.32
sig: 0.015
6923.2100
off: 0.33
sig: 0.009
6949.0300
off: 0.37
sig: 0.009
7571.7500
off: 0.37
sig: 0.009
7794.1200
off: 0.21
sig: 0.005
7821.5100
off: 0.25
sig: 0.004
8399.1600
off: 0.29
sig: 0.004
8430.1700
off: 0.28
sig: 0.004
8885.8300
off: 0.31
sig: 0.004
8919.6100
off: 0.31
sig: 0.003

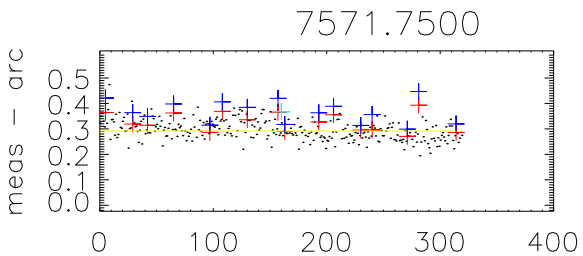

6300.3040
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

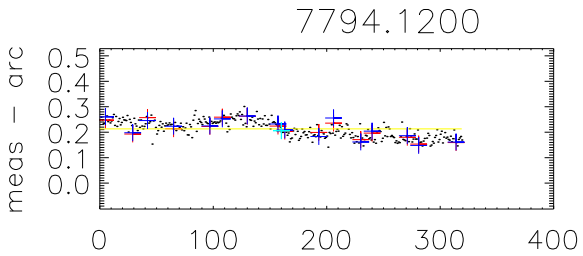

6363.7760
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

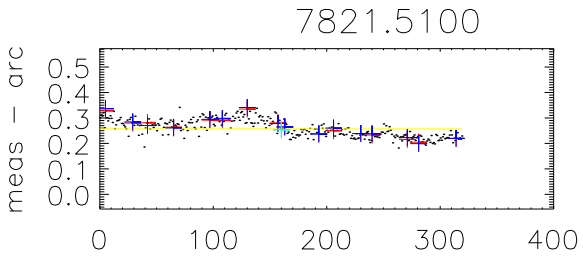

6553.6100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

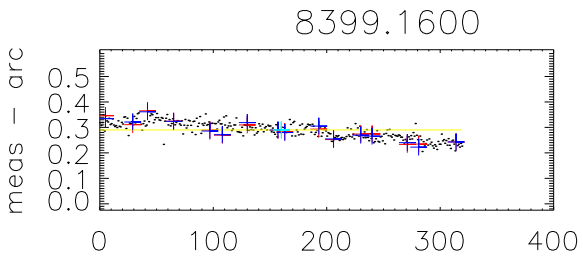

6923.2100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

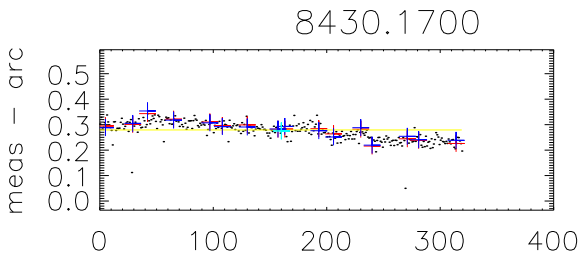

6949.0300
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

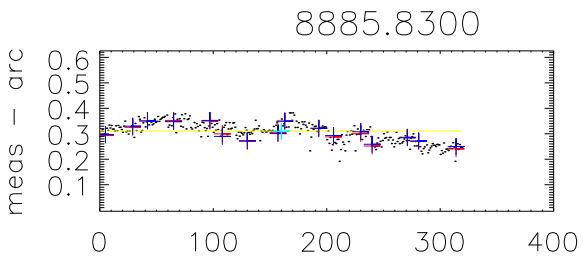

7571.7500
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

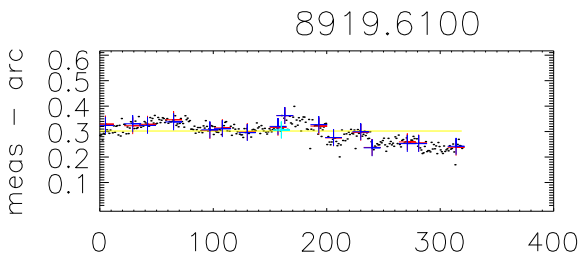

7794.1200
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

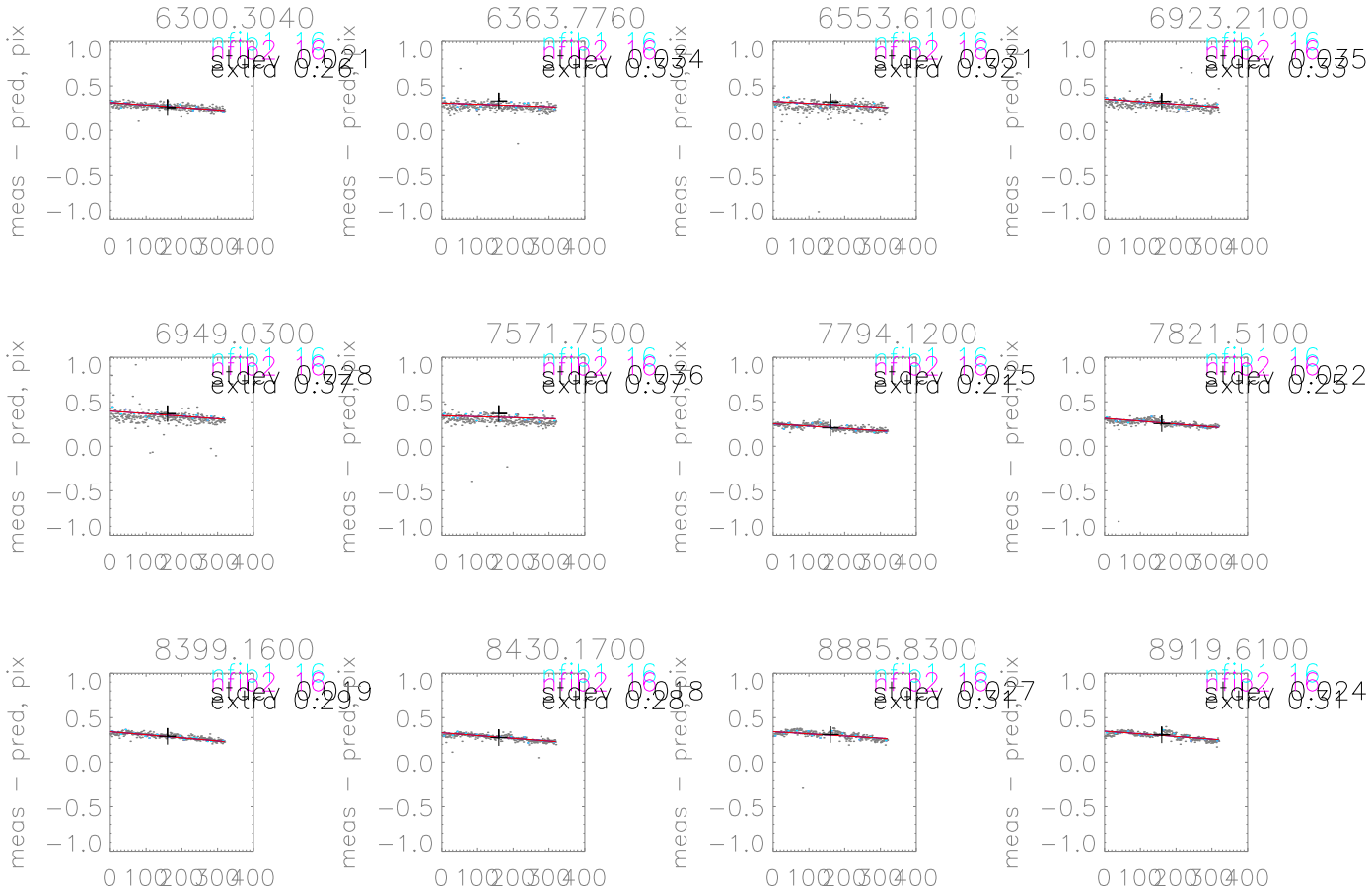

7821.5100
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

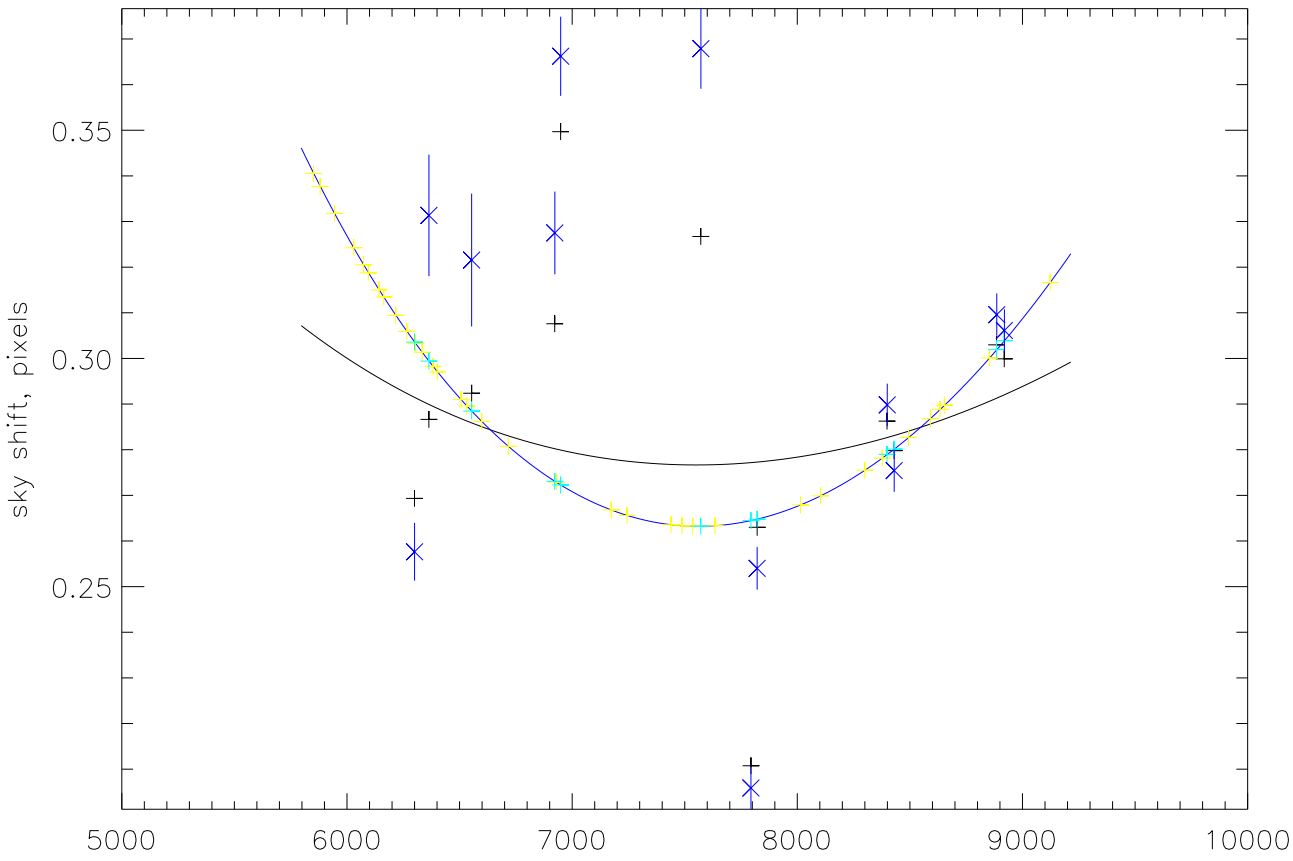

8399.1600
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

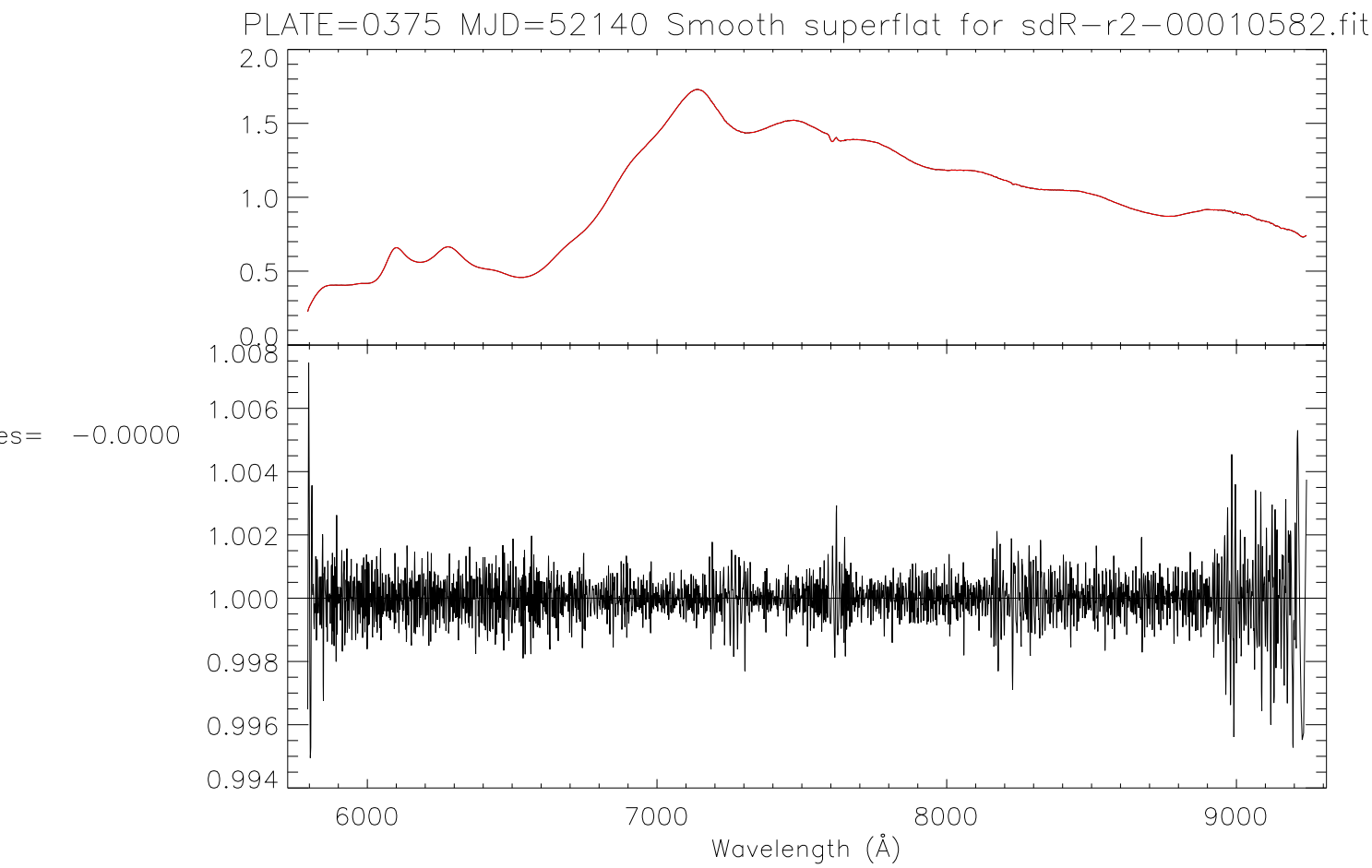

8430.1700
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400


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

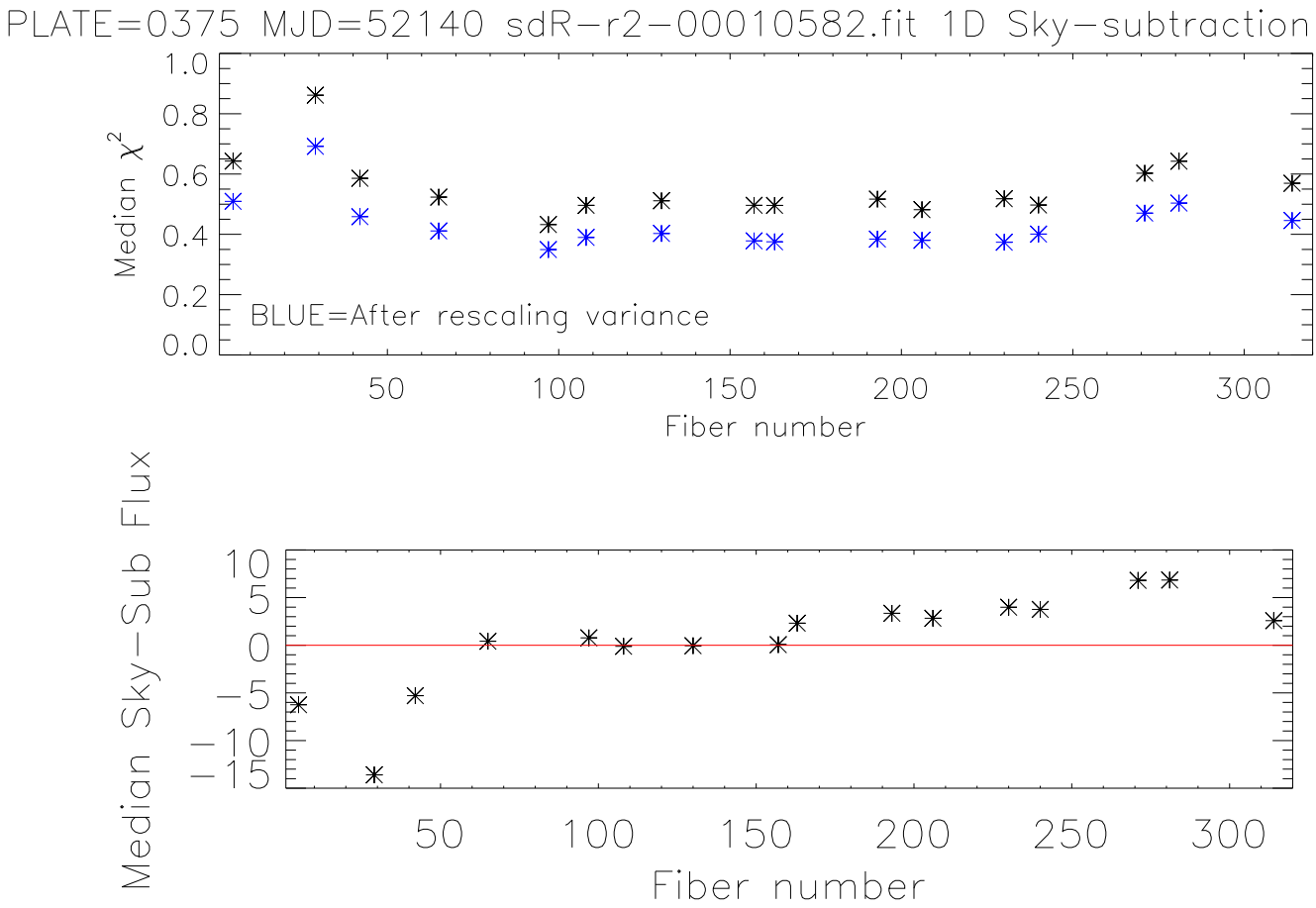

8919.6100
meas − arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

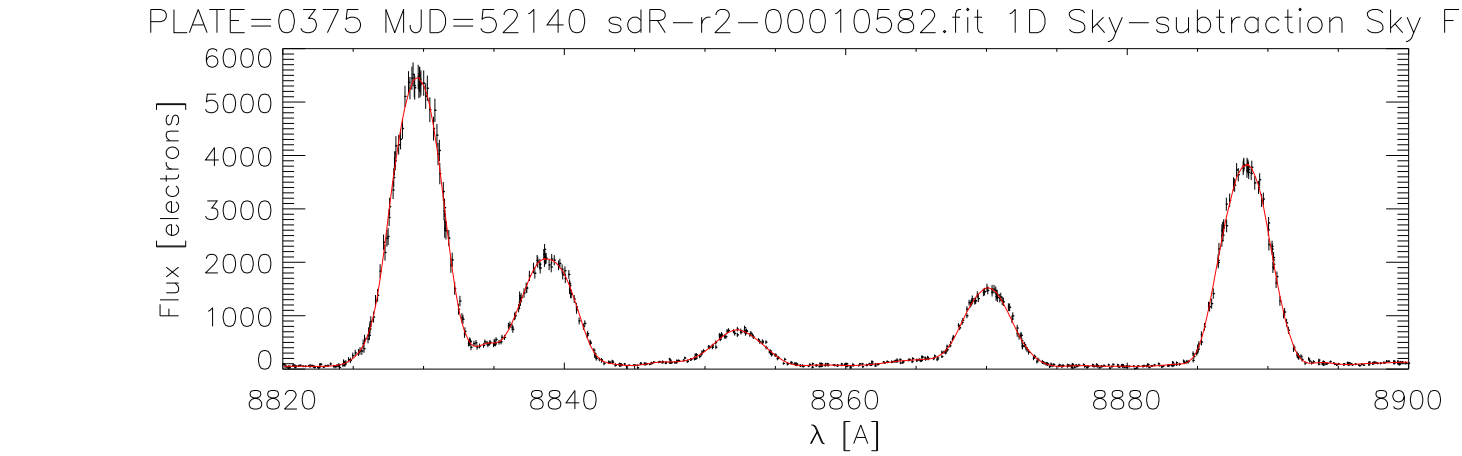

6300.3040
stdev 0.021
extra 0.26
6363.7760
stdev 0.034
extra 0.33
6553.6100
stdev 0.031
extra 0.32
6923.2100
stdev 0.035
extra 0.33
6949.0300
stdev 0.028
extra 0.37
7571.7500
stdev 0.036
extra 0.37
7794.1200
stdev 0.025
extra 0.21
7821.5100
stdev 0.022
extra 0.25
8399.1600
stdev 0.049
extra 0.29
8430.1700
stdev 0.048
extra 0.28
8885.8300
stdev 0.027
extra 0.31
8919.6100
stdev 0.024
extra 0.31
meas − pred, pix
mfbx2 16

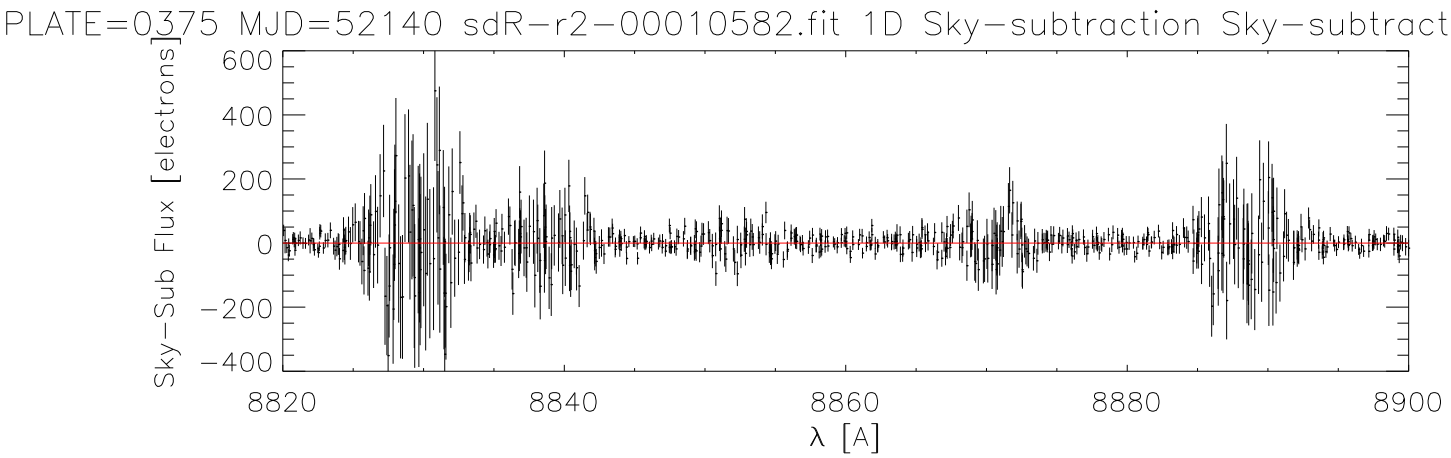

sky shift, pixels
0.35
0.30
0.25
5000
6000
7000
8000
9000
10000

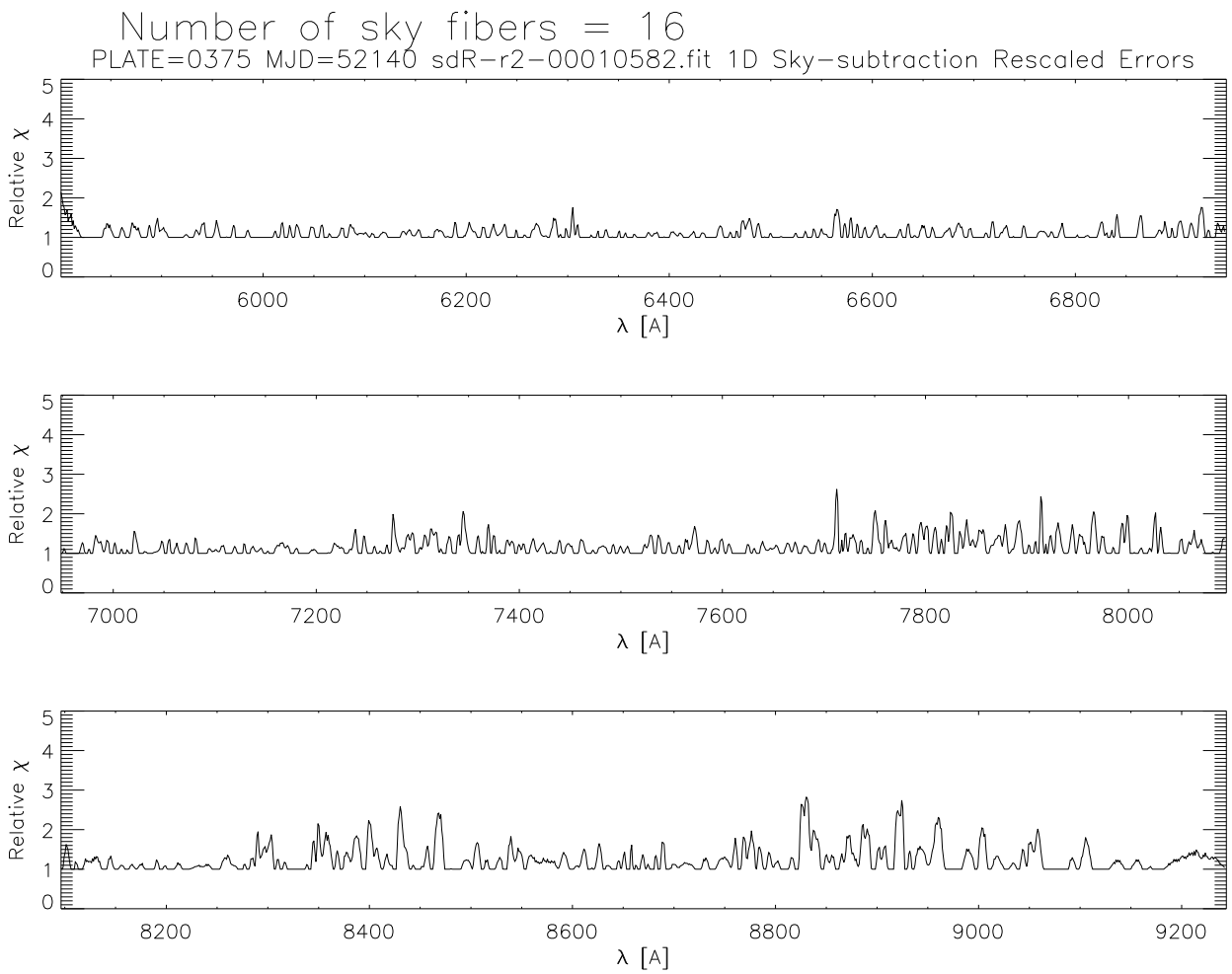

PLATE=0375 MJD=52140 Smooth superflat for sdR-r2-00010582.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

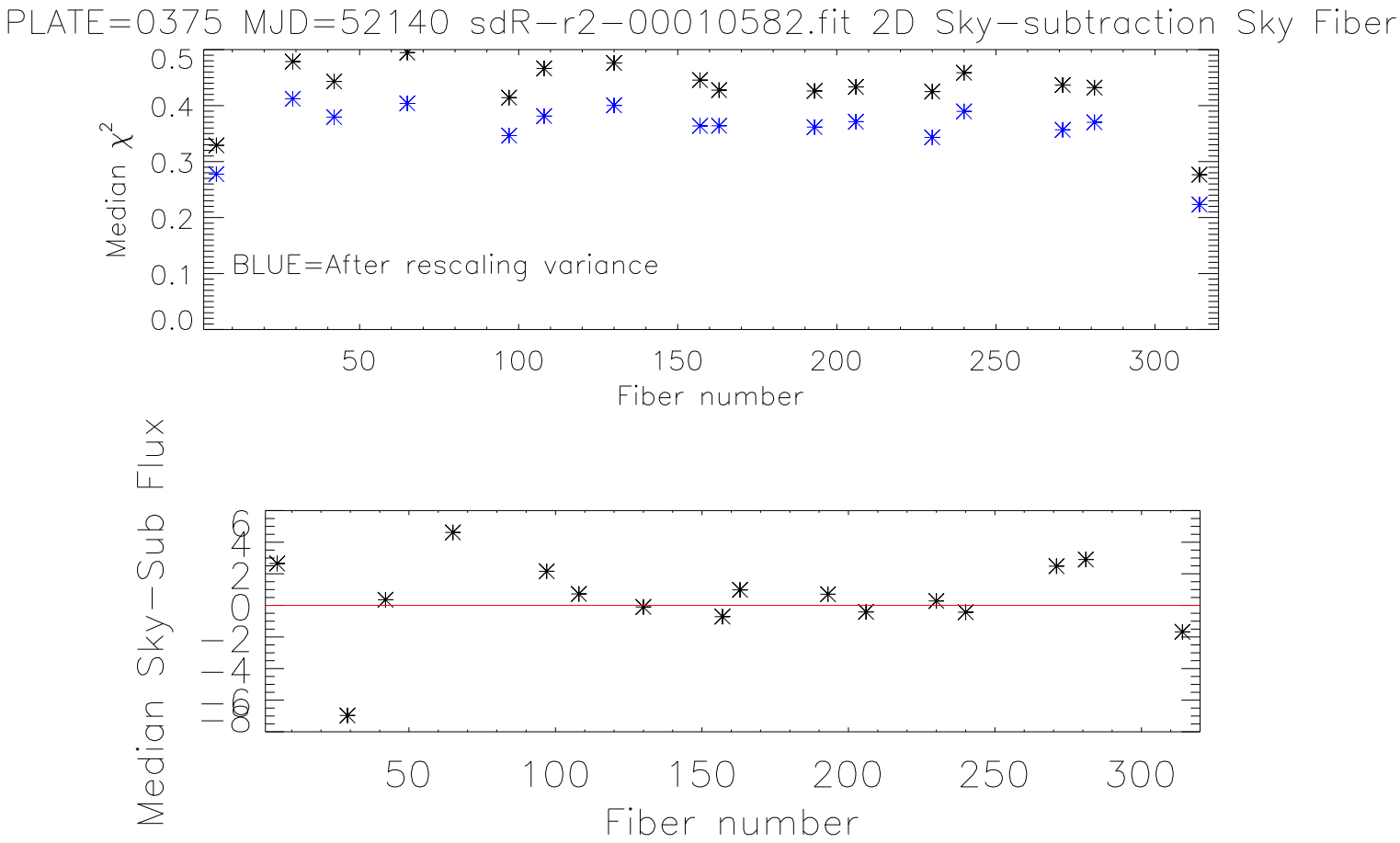
es= −0.0000

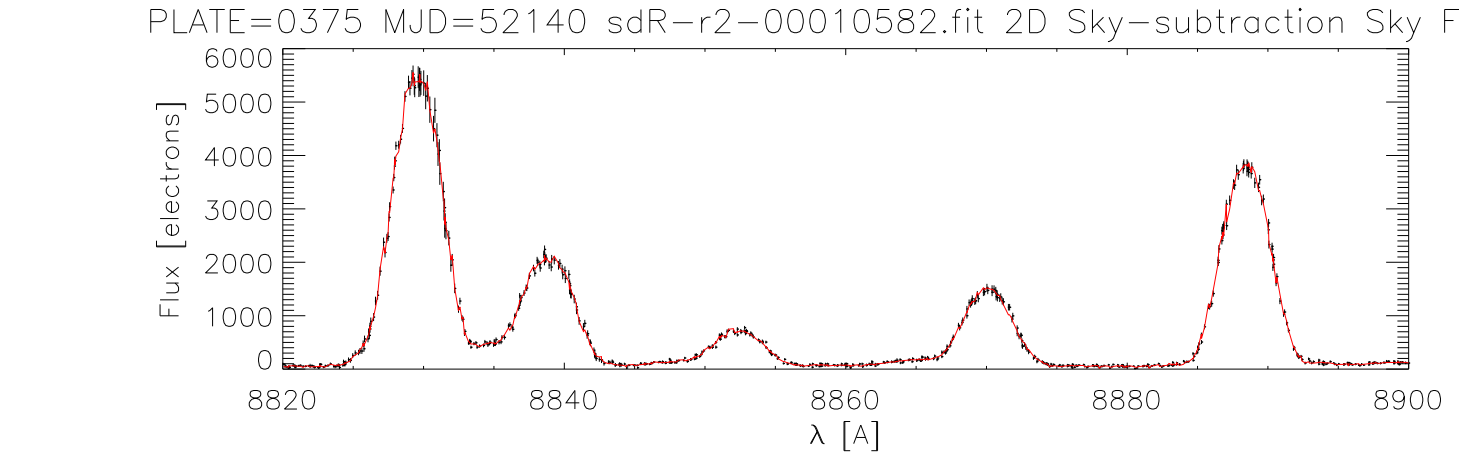

PLATE=0375 MJD=52140 sdR-r2-00010582.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

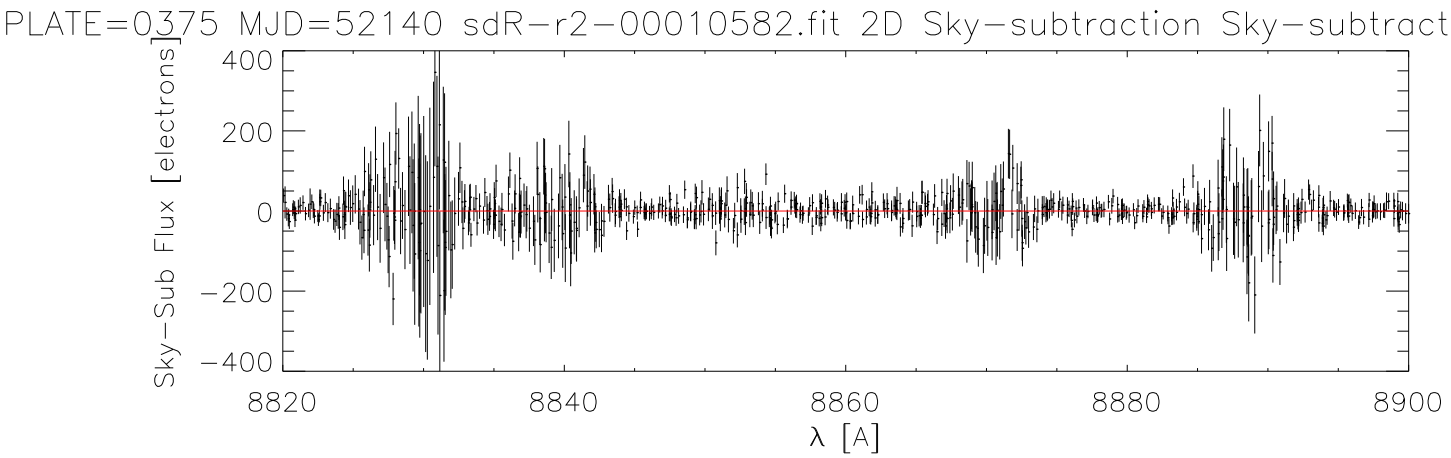

PLATE=0375 MJD=52140 sdR-r2-00010582.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

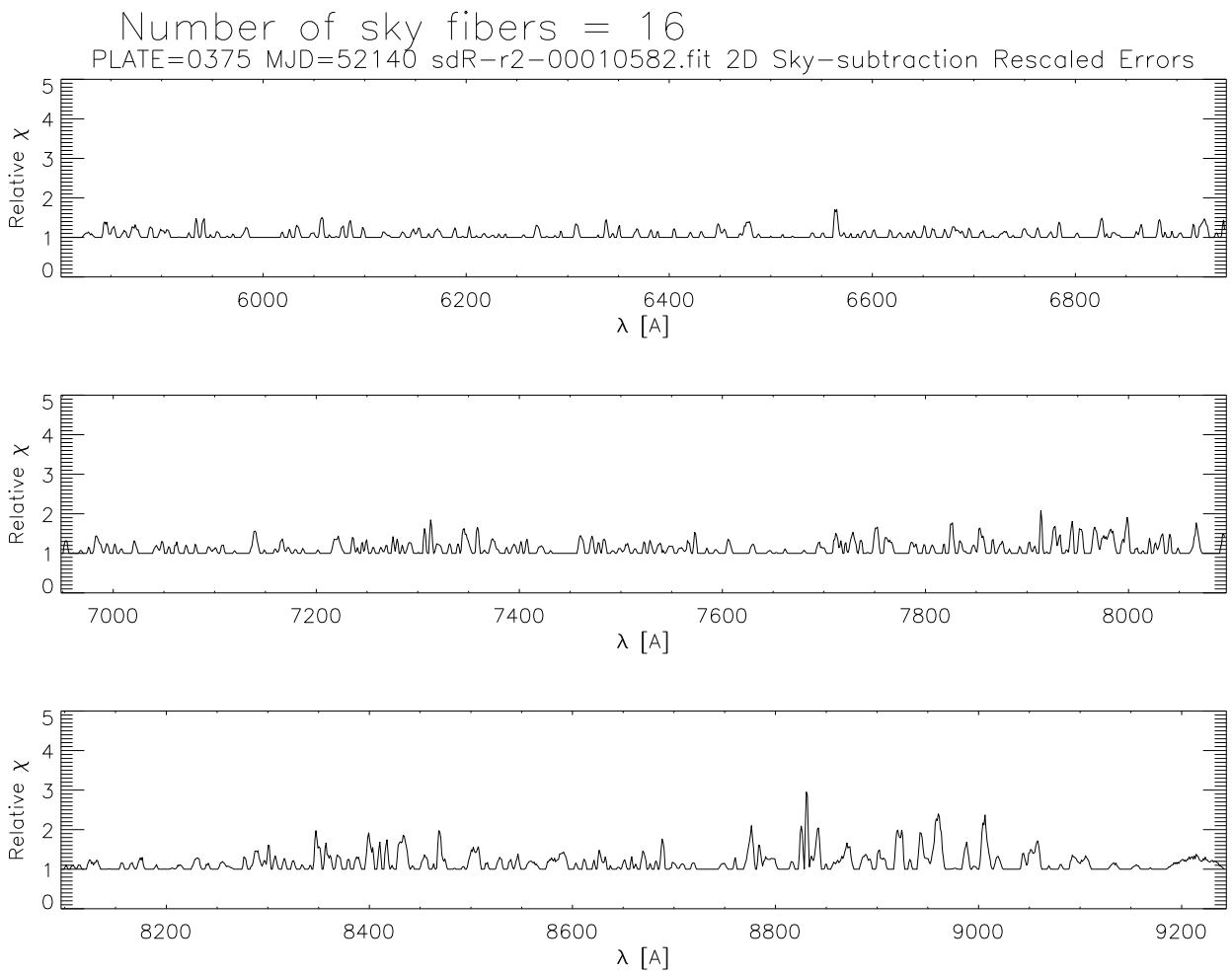

PLATE=0375 MJD=52140 sdR-r2-00010582.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

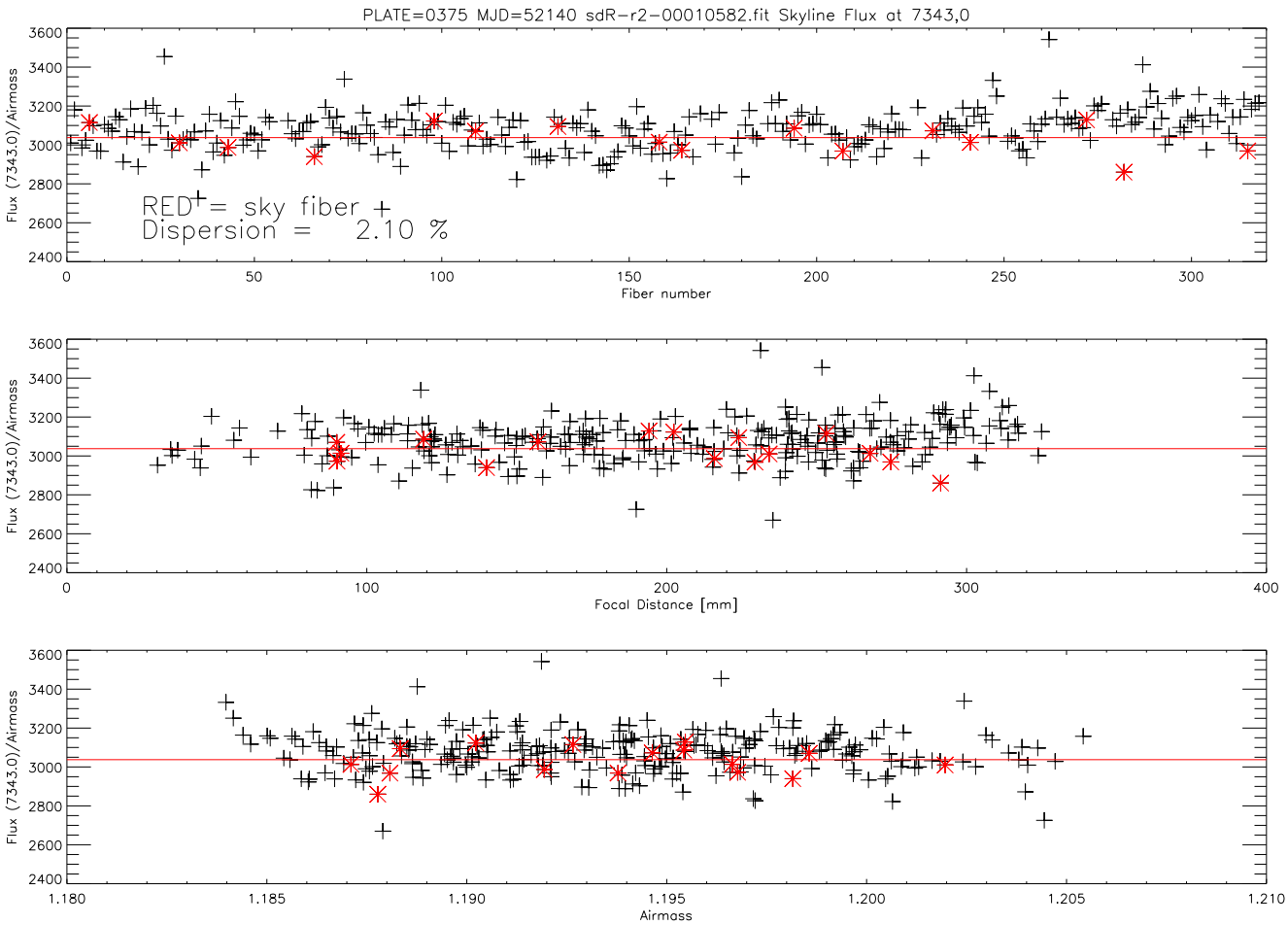

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010582.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

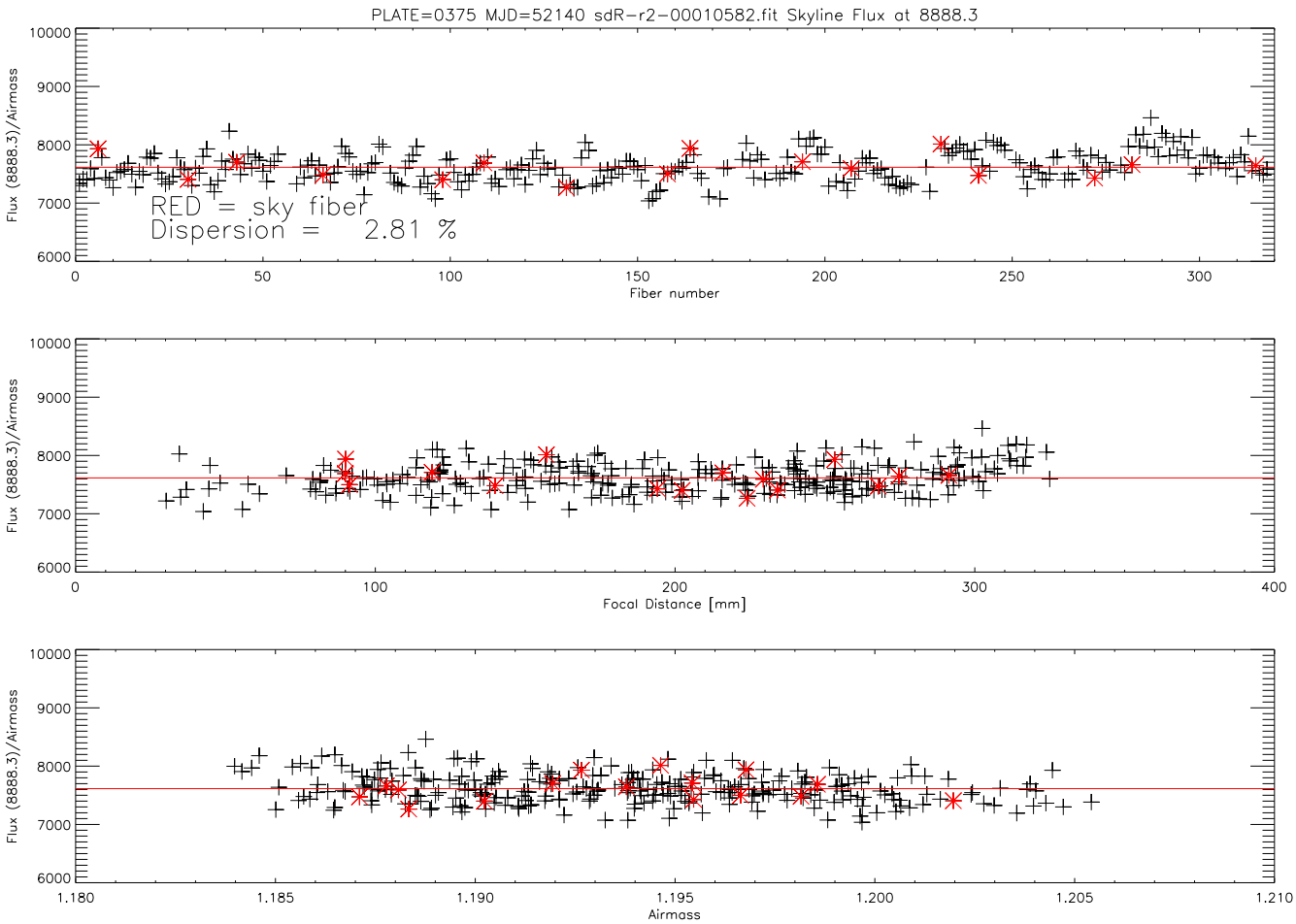

PLATE=0375 MJD=52140 sdR-r2-00010582.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-11.1
-11.0
-10.9
Fiber number

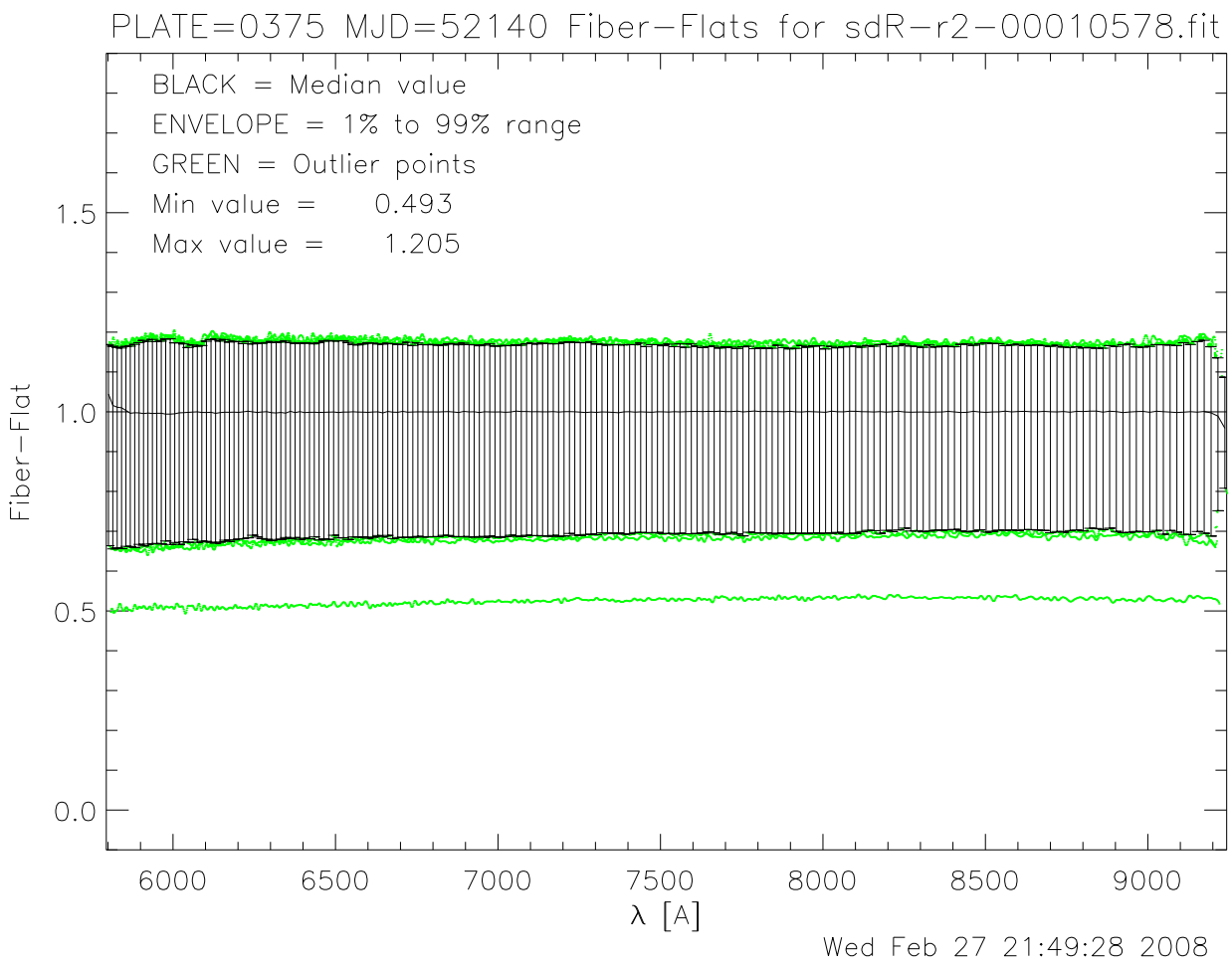

PLATE=0375 MJD=52140 sdR-r2-00010582.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

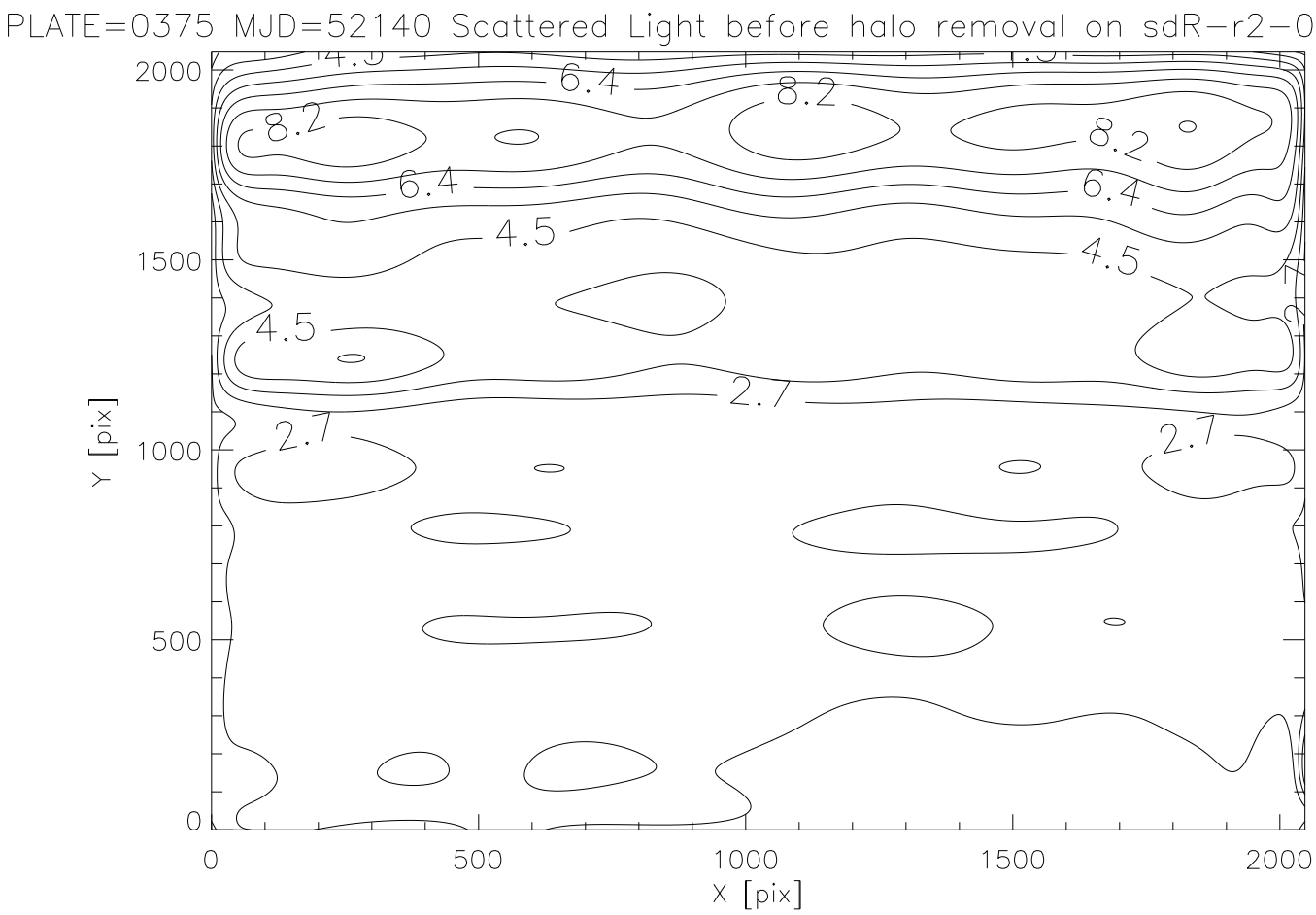

PLATE=0375 MJD=52140 sdR-r2-00010582.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

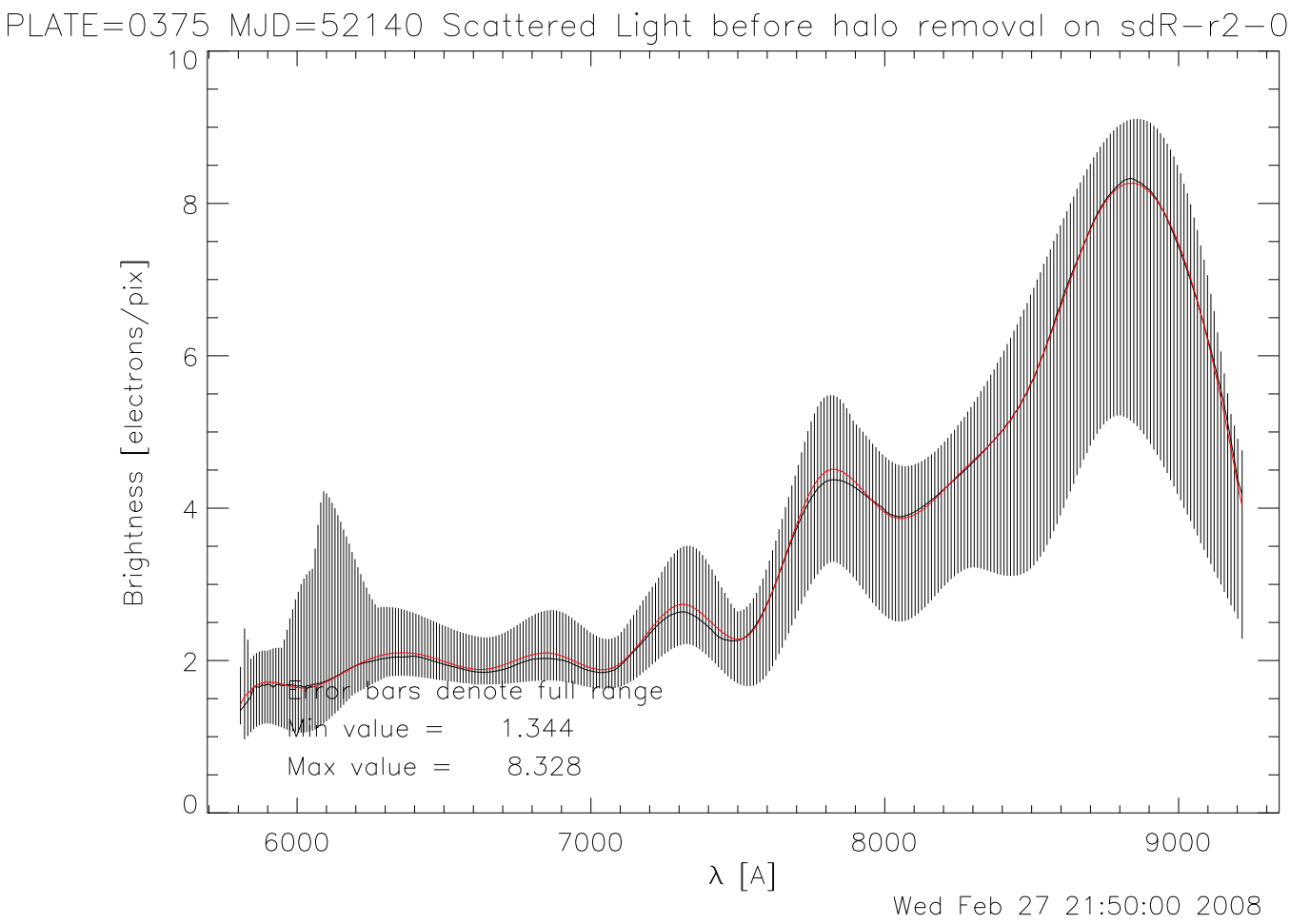

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010582.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

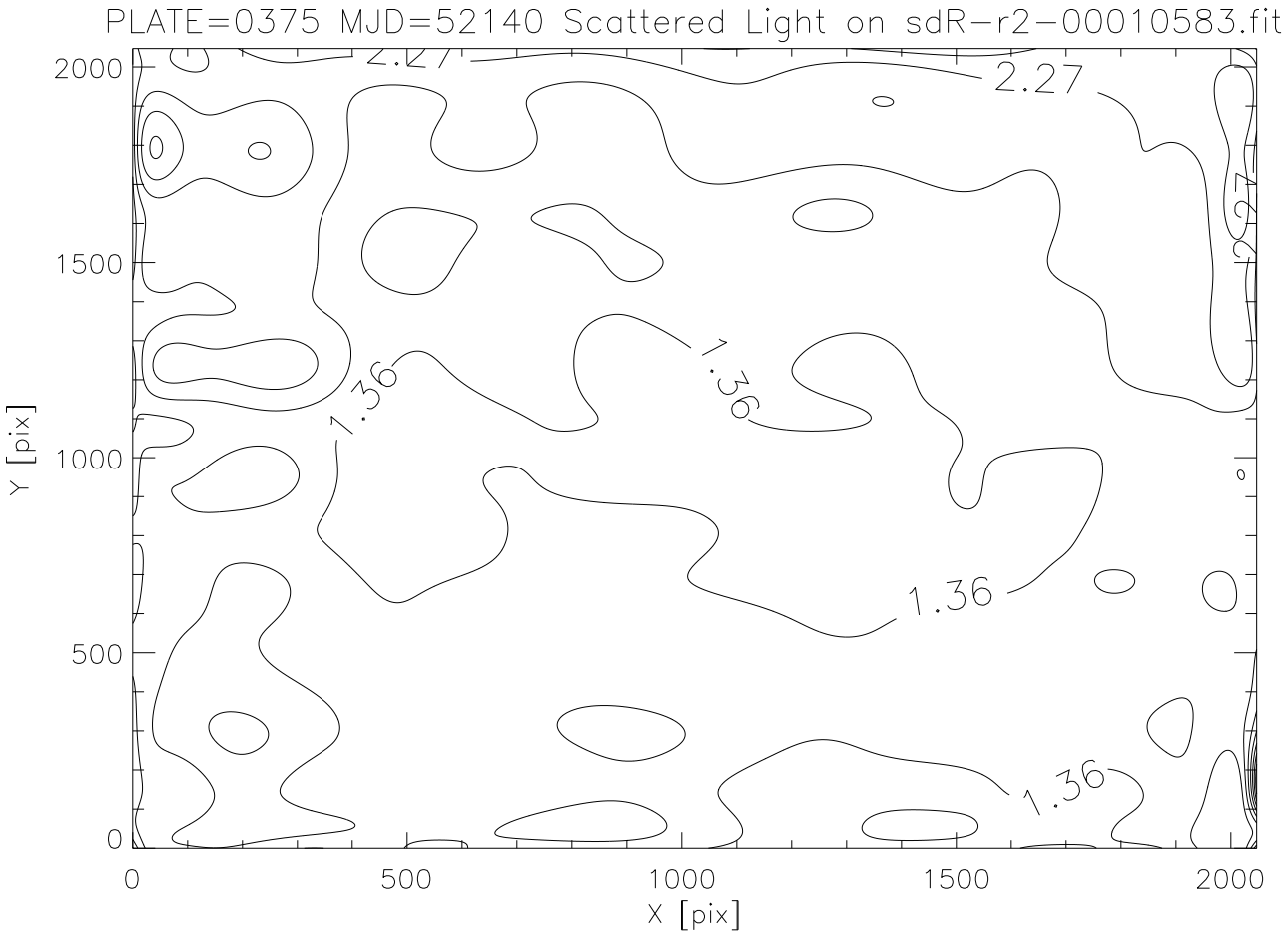

PLATE=0375 MJD=52140 sdR-r2-00010582.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED+= sky fiber +
Dispersion = 2.10 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

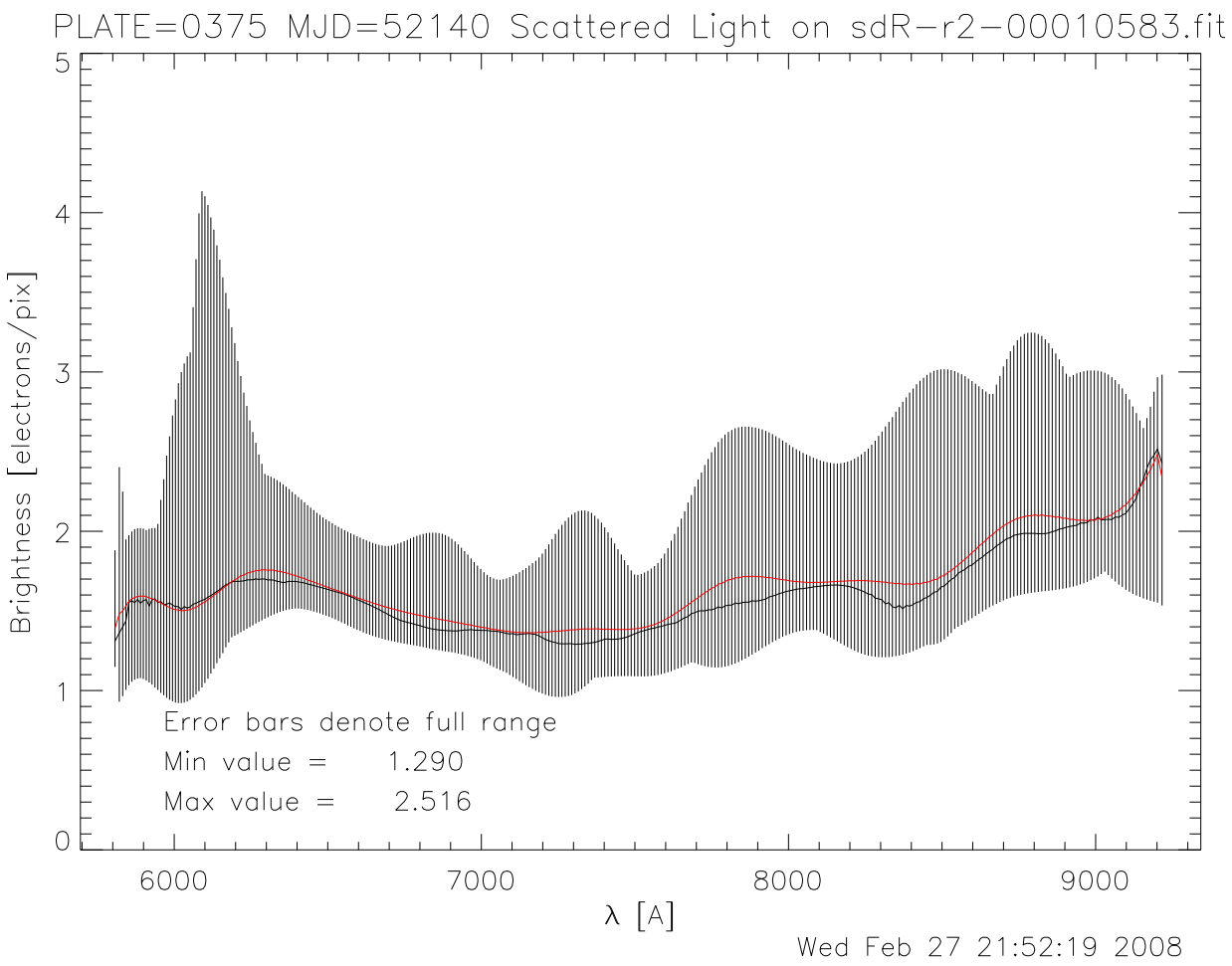

PLATE=0375 MJD=52140 sdR-r2-00010582.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.81 %
Fiber number
Focal Distance [mm]
Airmass

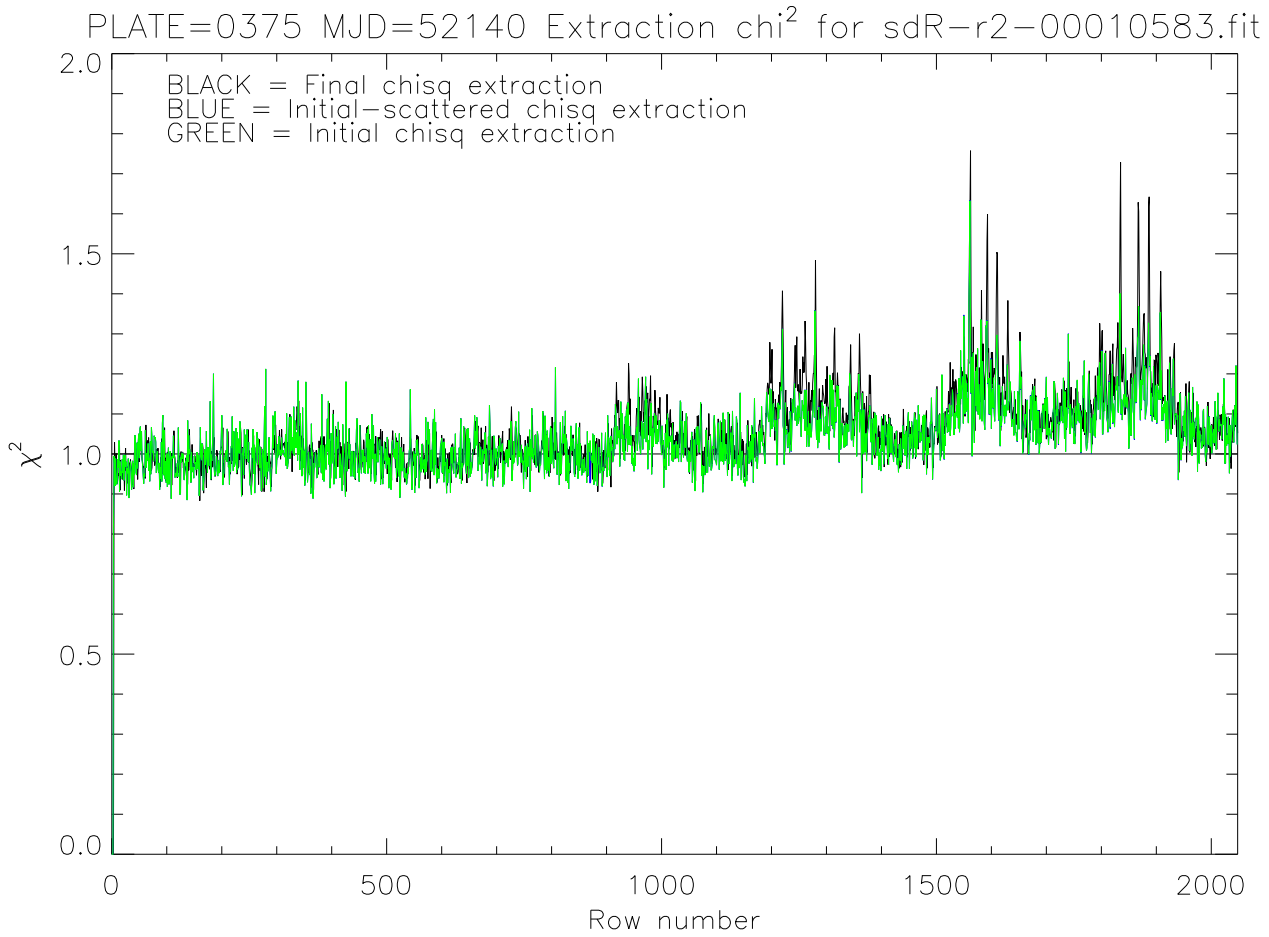

PLATE=0375 MJD=52140 Fiber−Flats for sdR−r2−00010578.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.493
Max value = 1.205
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Feb 27 21:49:28 2008

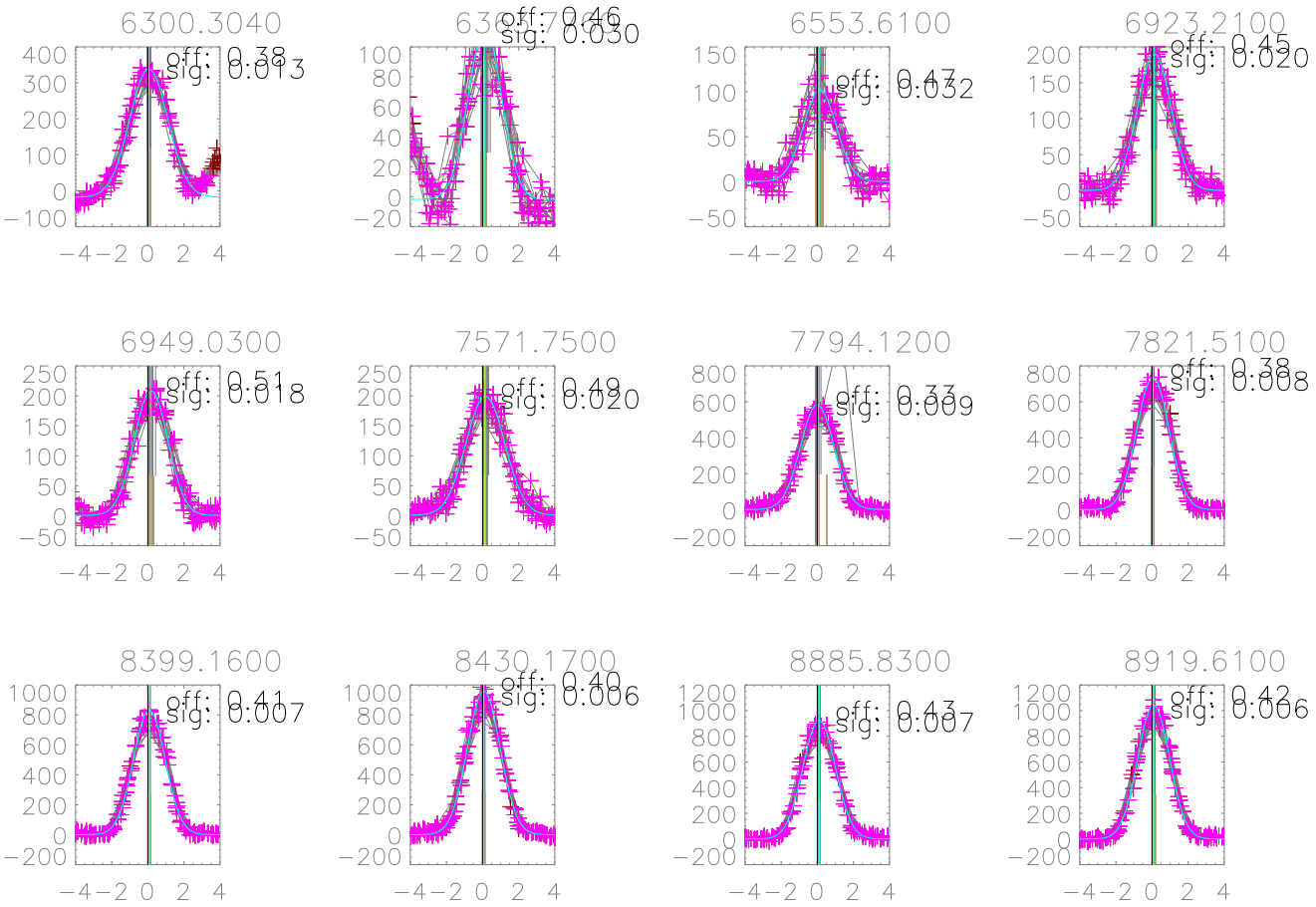

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r2-00010583.fi
6.4
8.2
8.2
8.2
6.4
6.4
4.5
4.5
4.5
2.7
2.7
2.7
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

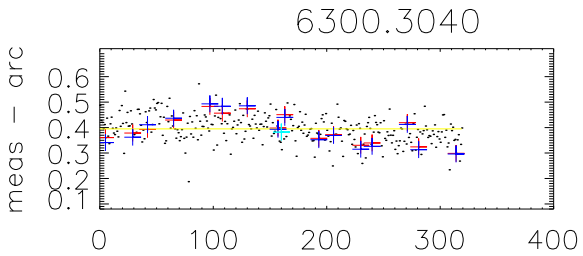

PLATE=0375 MJD=52140 Scattered Light before halo removal on sdR-r2-00010583.fi
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.344
Max value = 8.328
Wed Feb 27 21:50:00 2008

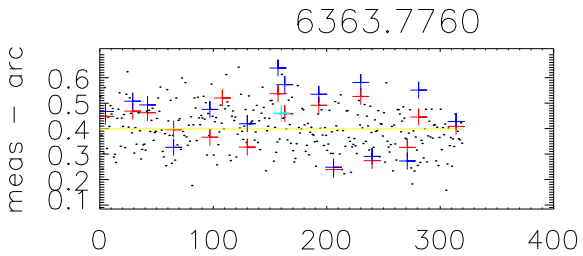

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010583.fit
2.27
1.36
0
2000
1500
1000
500
0
Y [pix]
X [pix]

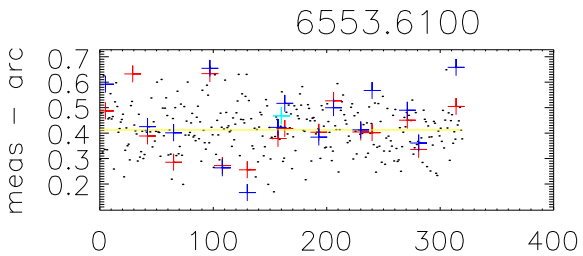

PLATE=0375 MJD=52140 Scattered Light on sdR-r2-00010583.fit
Brightness [electrons/pix]
λ [A]
Error bars denote full range
Min value = 1.290
Max value = 2.516
Wed Feb 27 21:52:19 2008

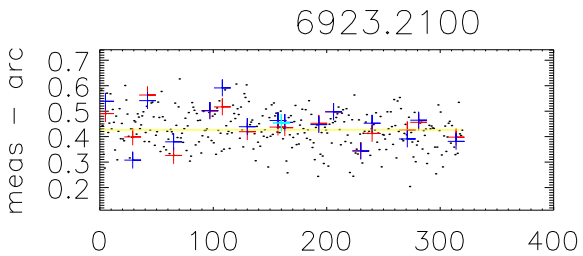

PLATE=0375 MJD=52140 Extraction chi^2 for sdR−r2−00010583.fit
BLACK = Final chisq extraction
BLUE = Initial−scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

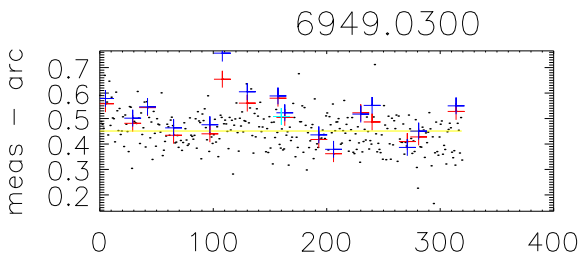

6300.3040
off: 0.38
sig: 0.013
6301.7046
off: 0.46
sig: 0.030
6553.6100
off: 0.47
sig: 0.032
6923.2100
off: 0.45
sig: 0.020
6949.0300
off: 0.51
sig: 0.018
7571.7500
off: 0.49
sig: 0.020
7794.1200
off: 0.33
sig: 0.009
7821.5100
off: 0.38
sig: 0.008
8399.1600
off: 0.41
sig: 0.007
8430.1700
off: 0.40
sig: 0.006
8885.8300
off: 0.43
sig: 0.007
8919.6100
off: 0.42
sig: 0.006

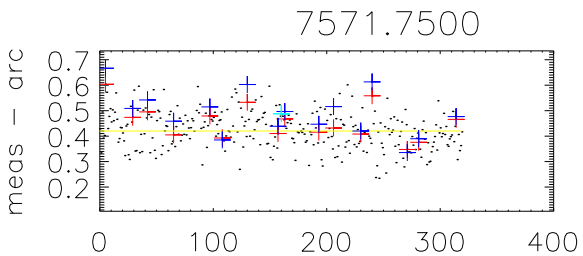

6300.3040
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

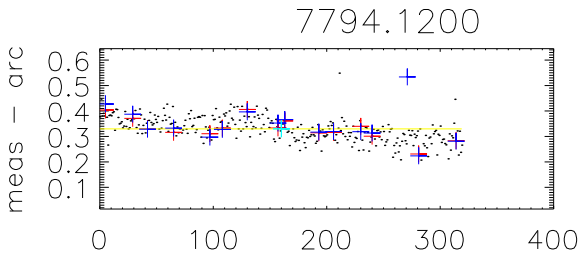

6363.7760
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

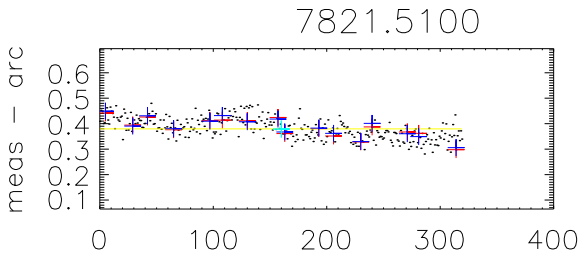

6553.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

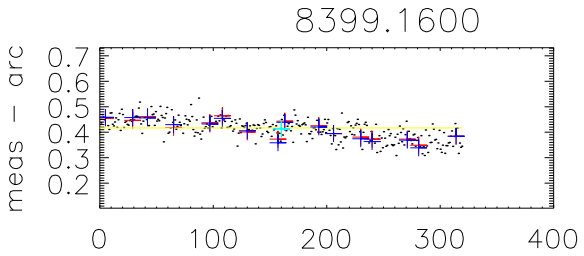

6923.2100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

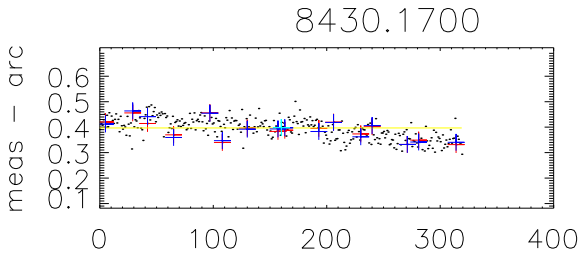

6949.0300
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

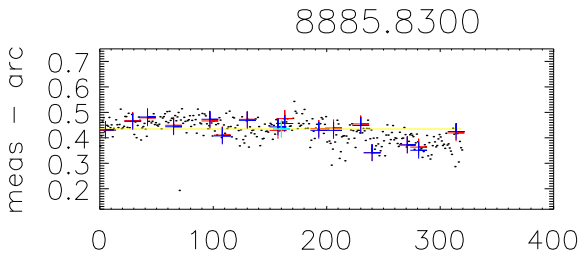

7571.7500
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

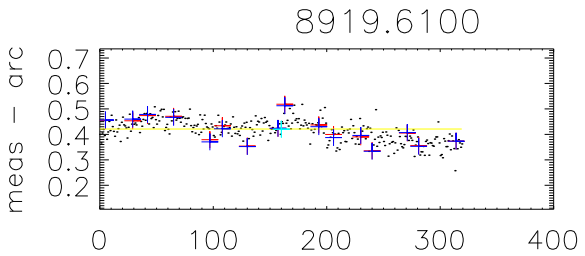

7794.1200
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

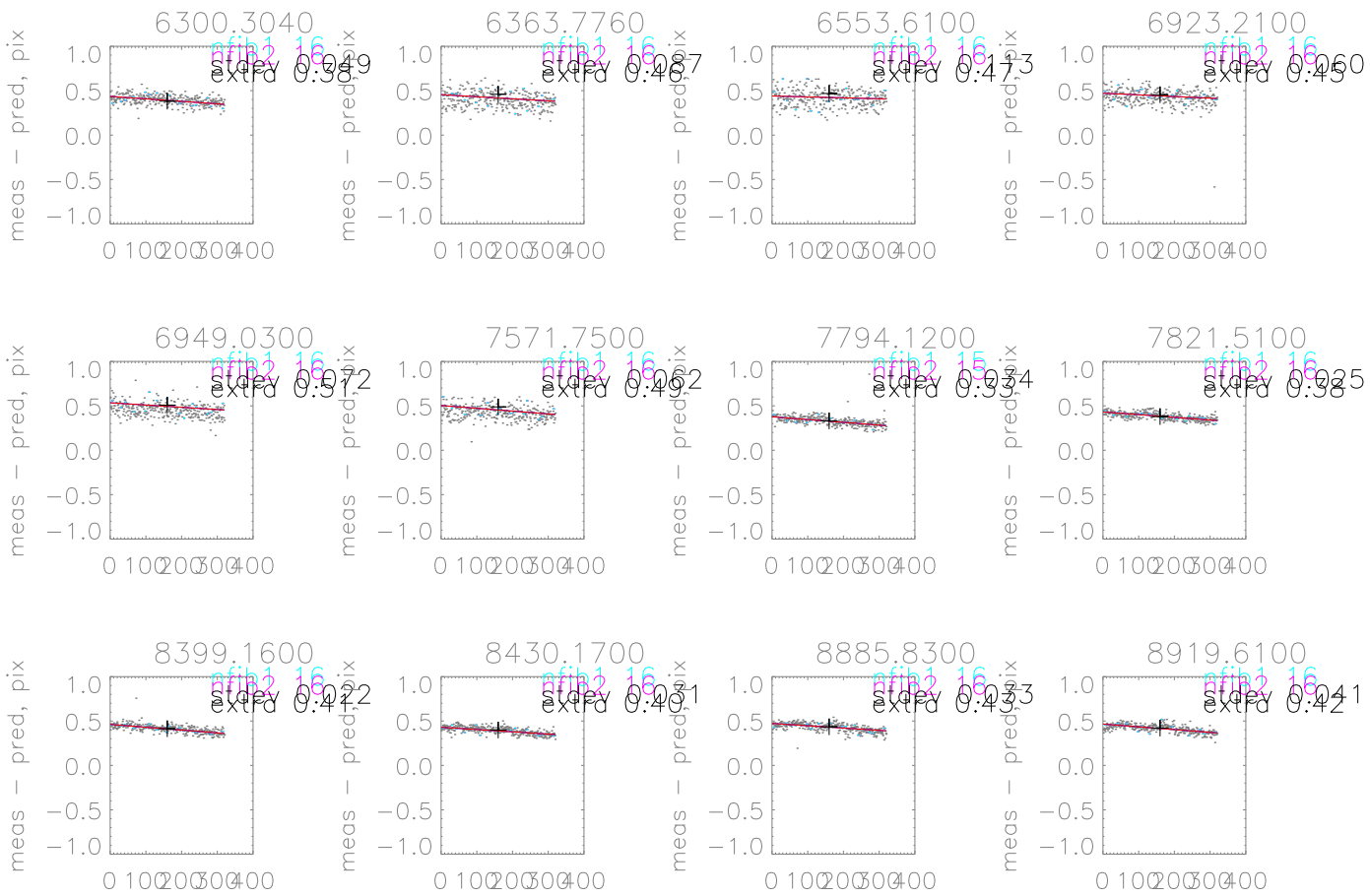

7821.5100
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

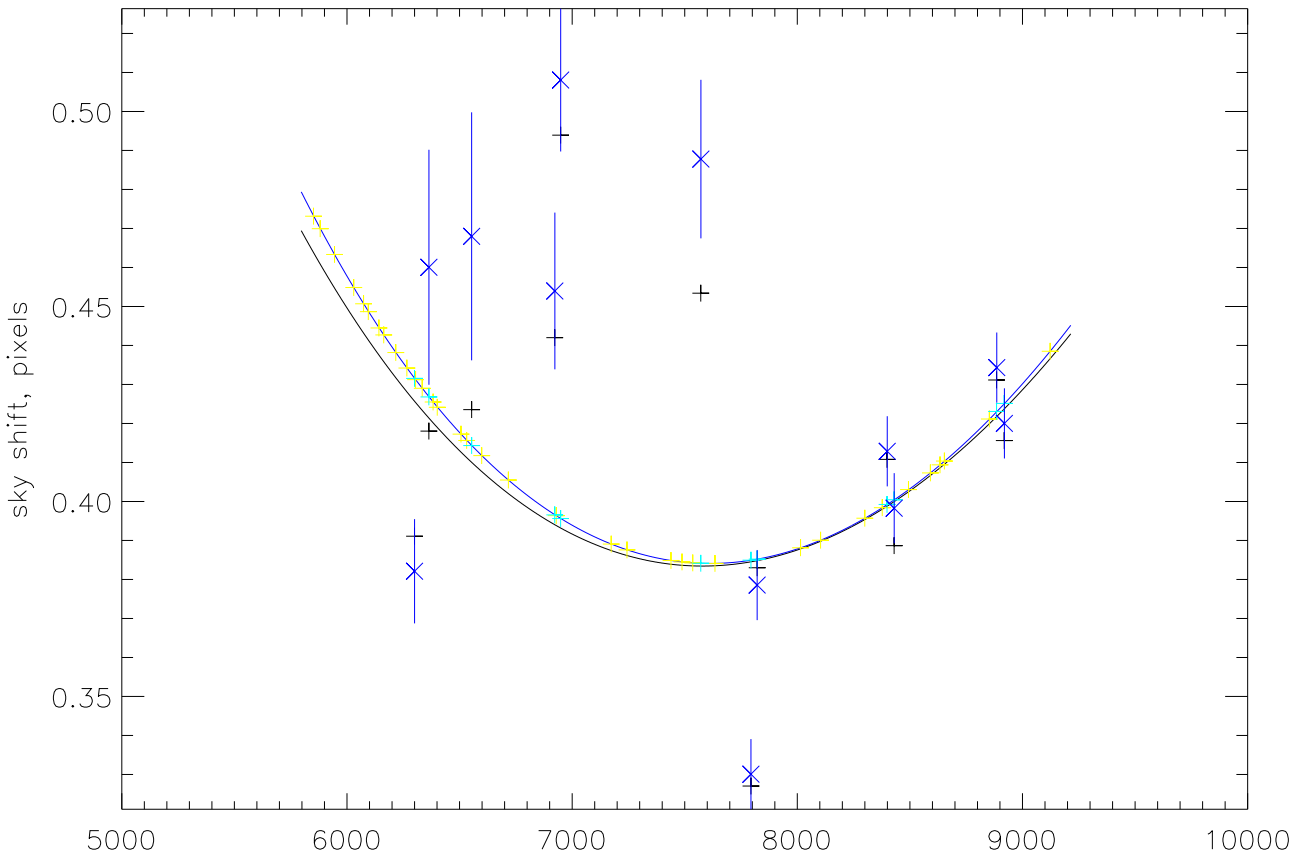

8399.1600
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

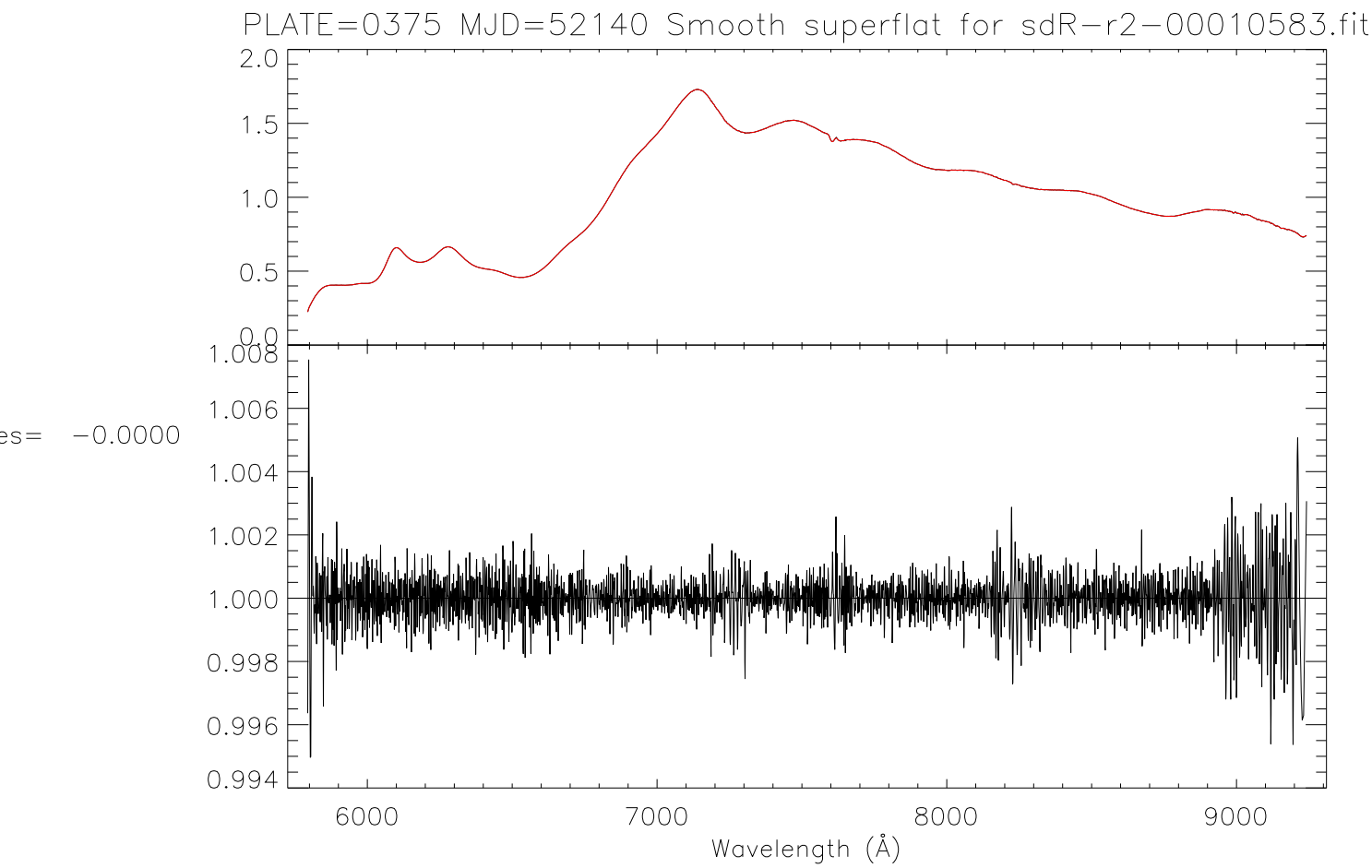

8430.1700
meas − arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


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

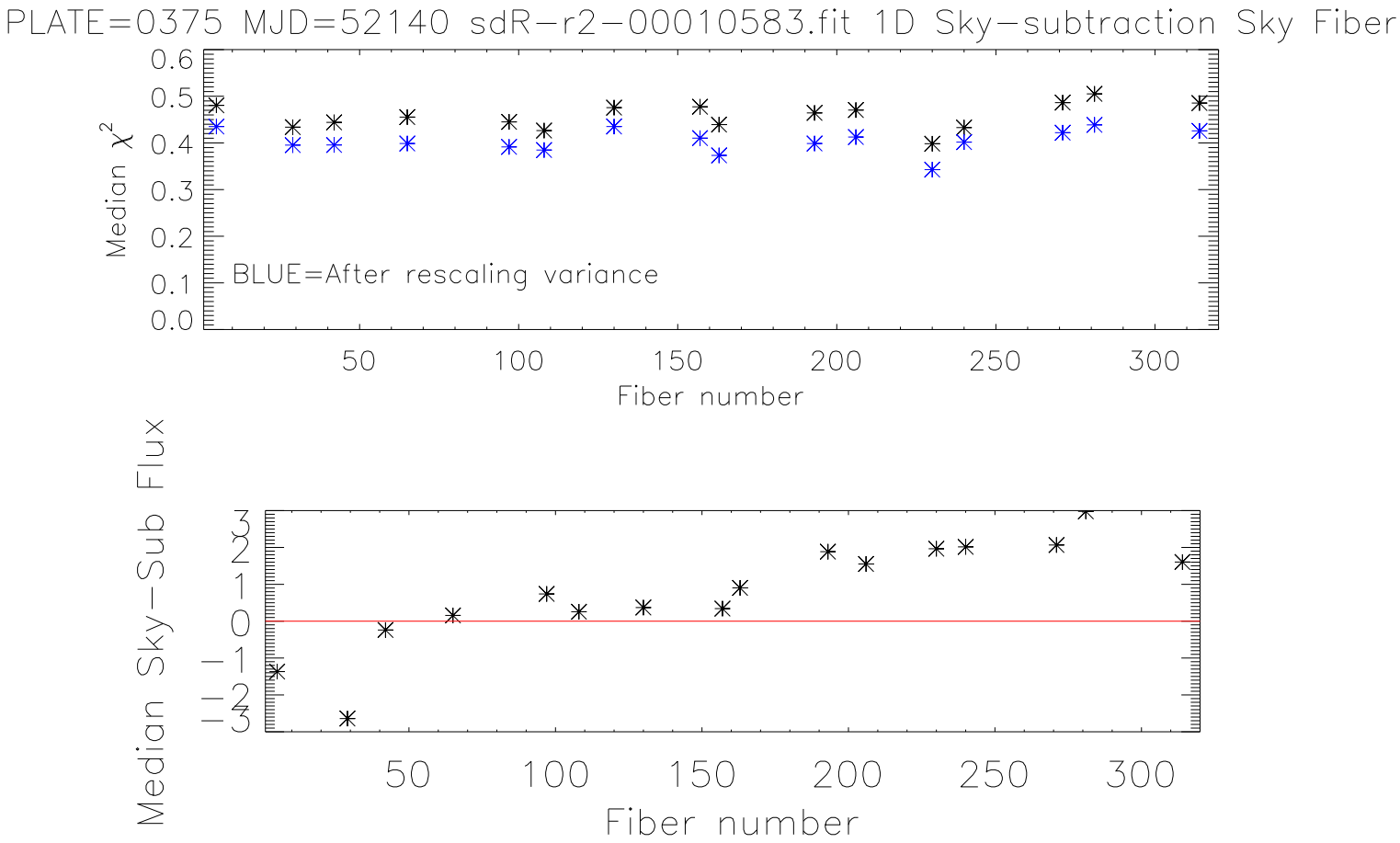

8919.6100
meas − arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

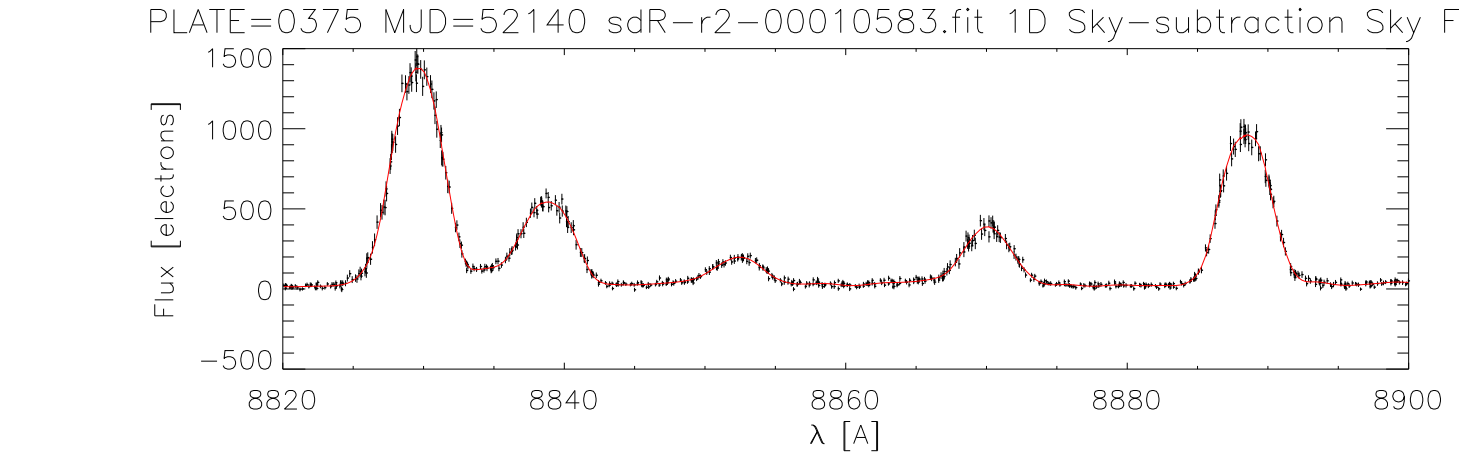

6300.3040
stdev 0.049
extra 0.389
6363.7760
stdev 0.087
extra 0.468
6553.6100
stdev 0.113
extra 0.473
6923.2100
stdev 0.060
extra 0.45
6949.0300
stdev 0.072
extra 0.517
7571.7500
stdev 0.062
extra 0.492
7794.1200
stdev 0.034
extra 0.33
7821.5100
stdev 0.025
extra 0.38
8399.1600
stdev 0.022
extra 0.412
8430.1700
stdev 0.031
extra 0.401
8885.8300
stdev 0.033
extra 0.43
8919.6100
stdev 0.041
extra 0.42
meas − pred, pix
mfhd2 16
mfhd1 16
mfhd2 15
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

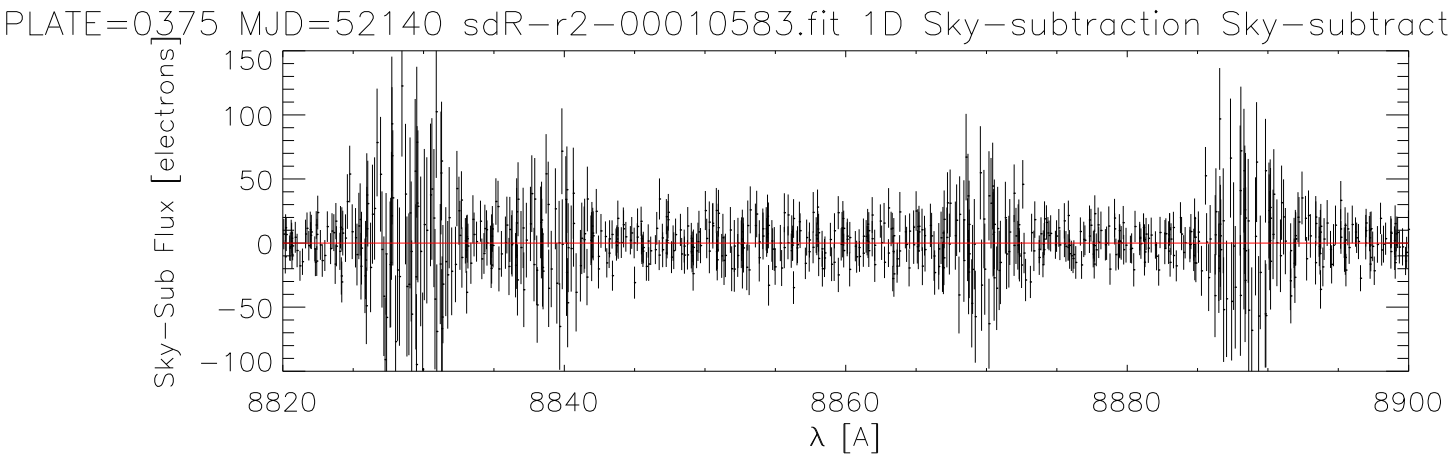

sky shift, pixels
0.50
0.45
0.40
0.35
5000
6000
7000
8000
9000
10000

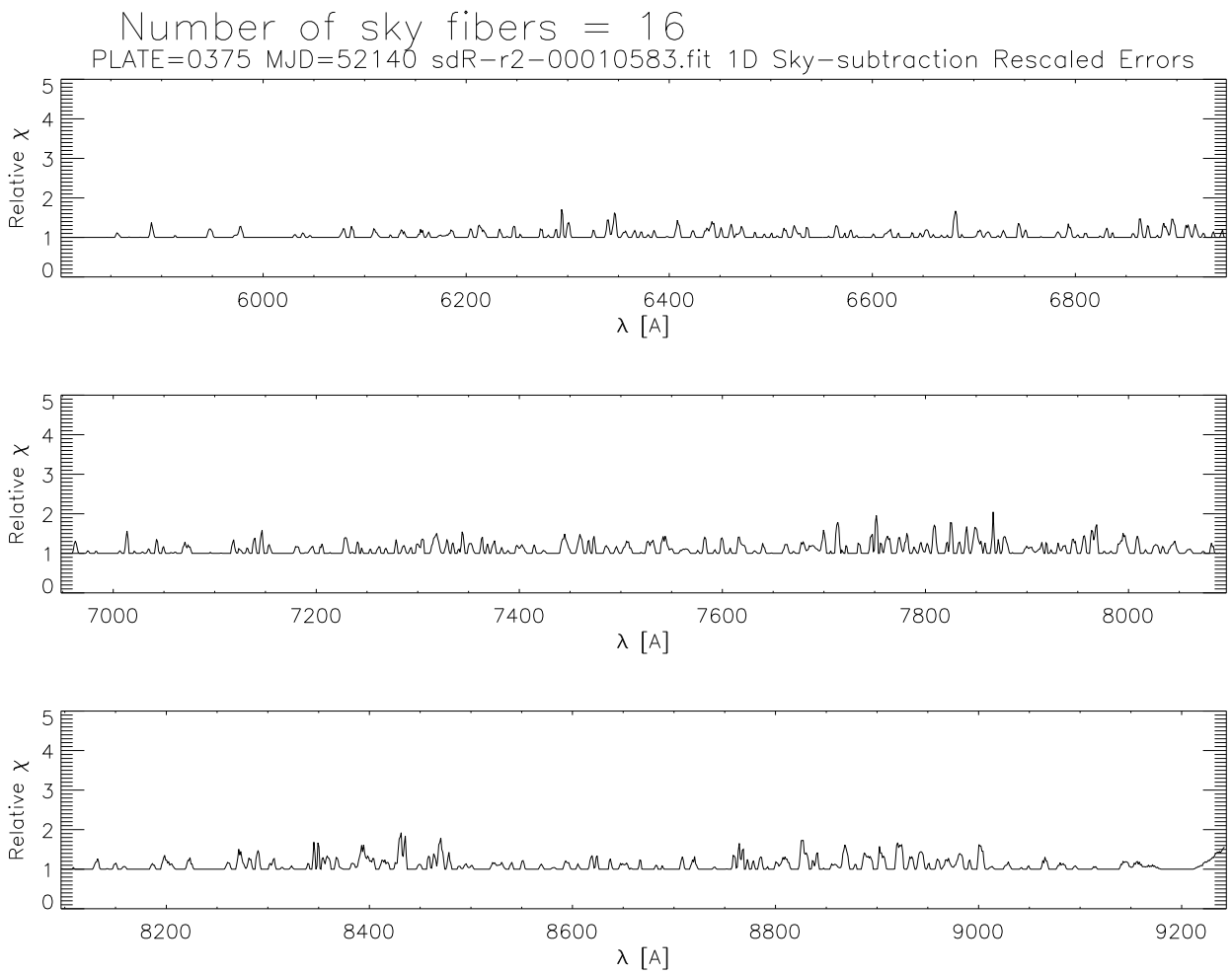

PLATE=0375 MJD=52140 Smooth superflat for sdR-r2-00010583.fit
2.0
1.5
1.0
0.5
0.0
1.008
1.006
1.004
1.002
1.000
0.998
0.996
0.994
6000
7000
8000
9000
Wavelength (Å)

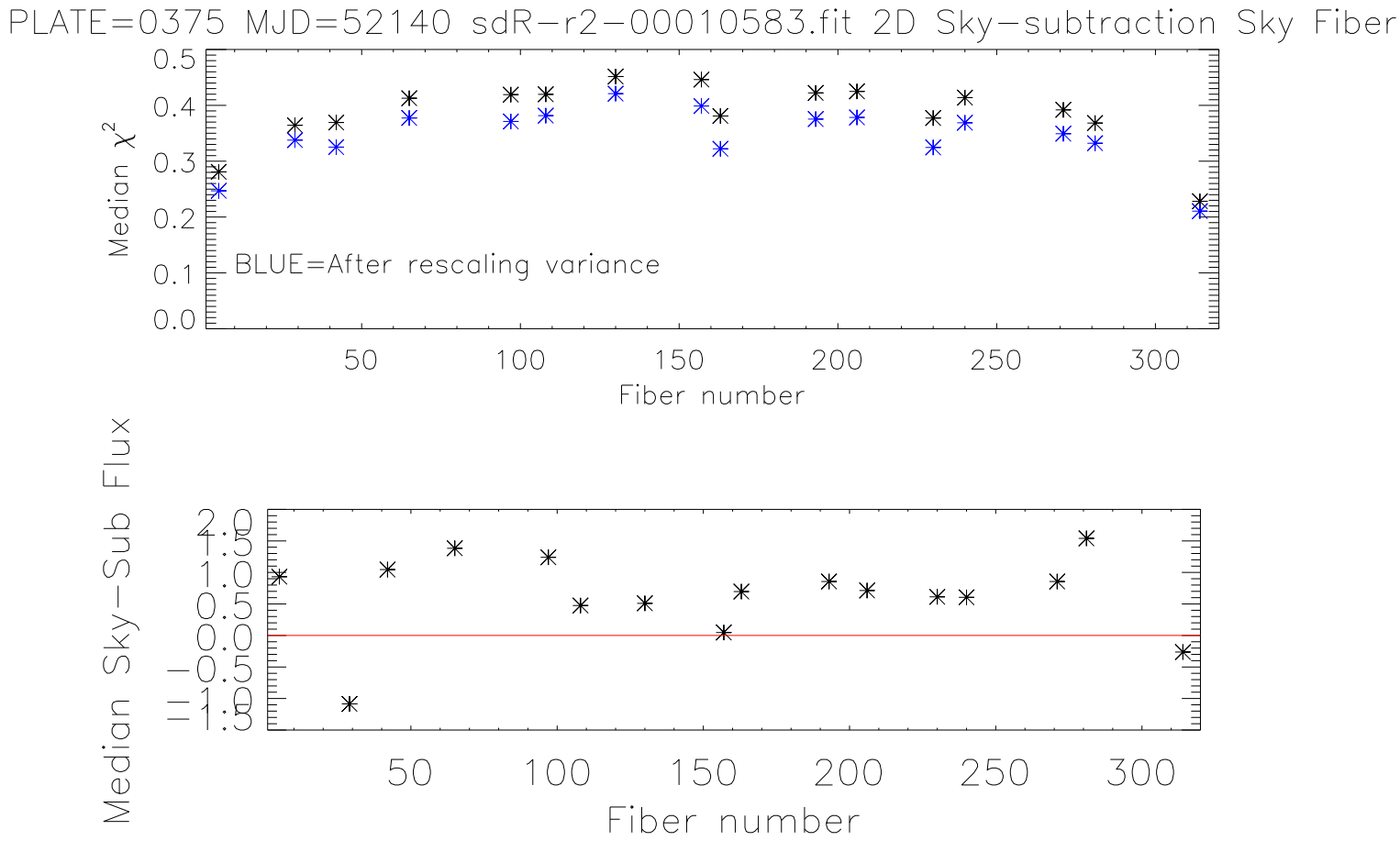
es= −0.0000

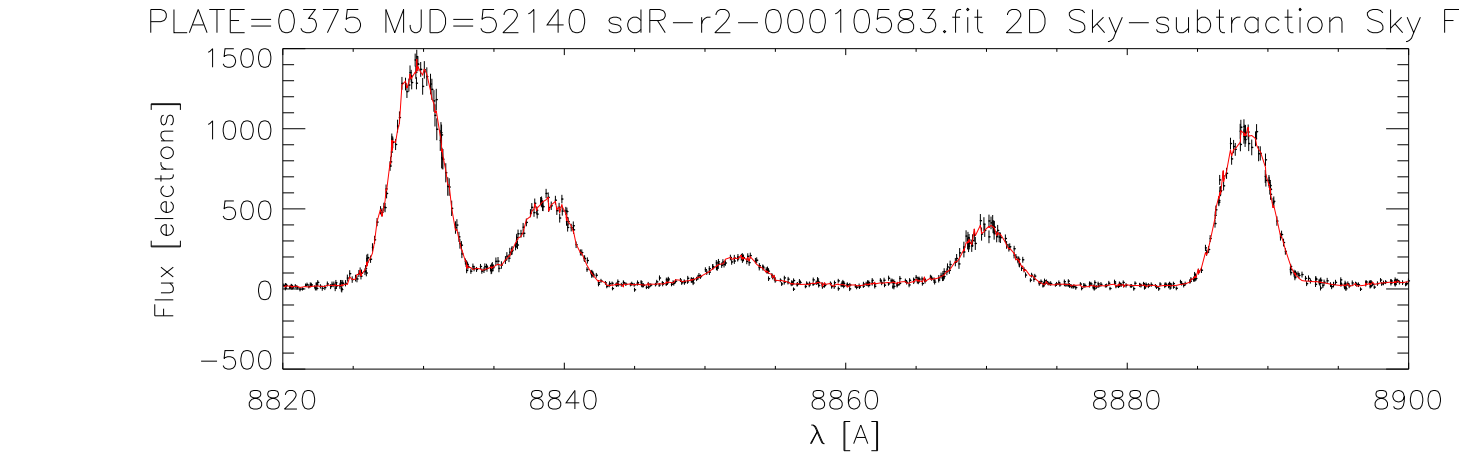

PLATE=0375 MJD=52140 sdR-r2-00010583.fit 1D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number

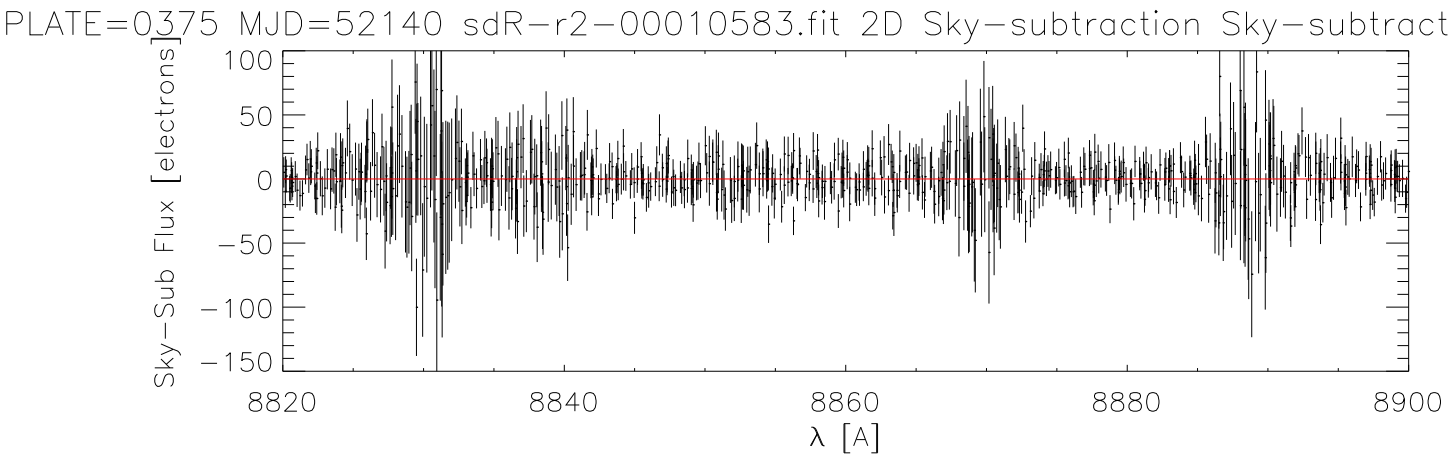

PLATE=0375 MJD=52140 sdR-r2-00010583.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

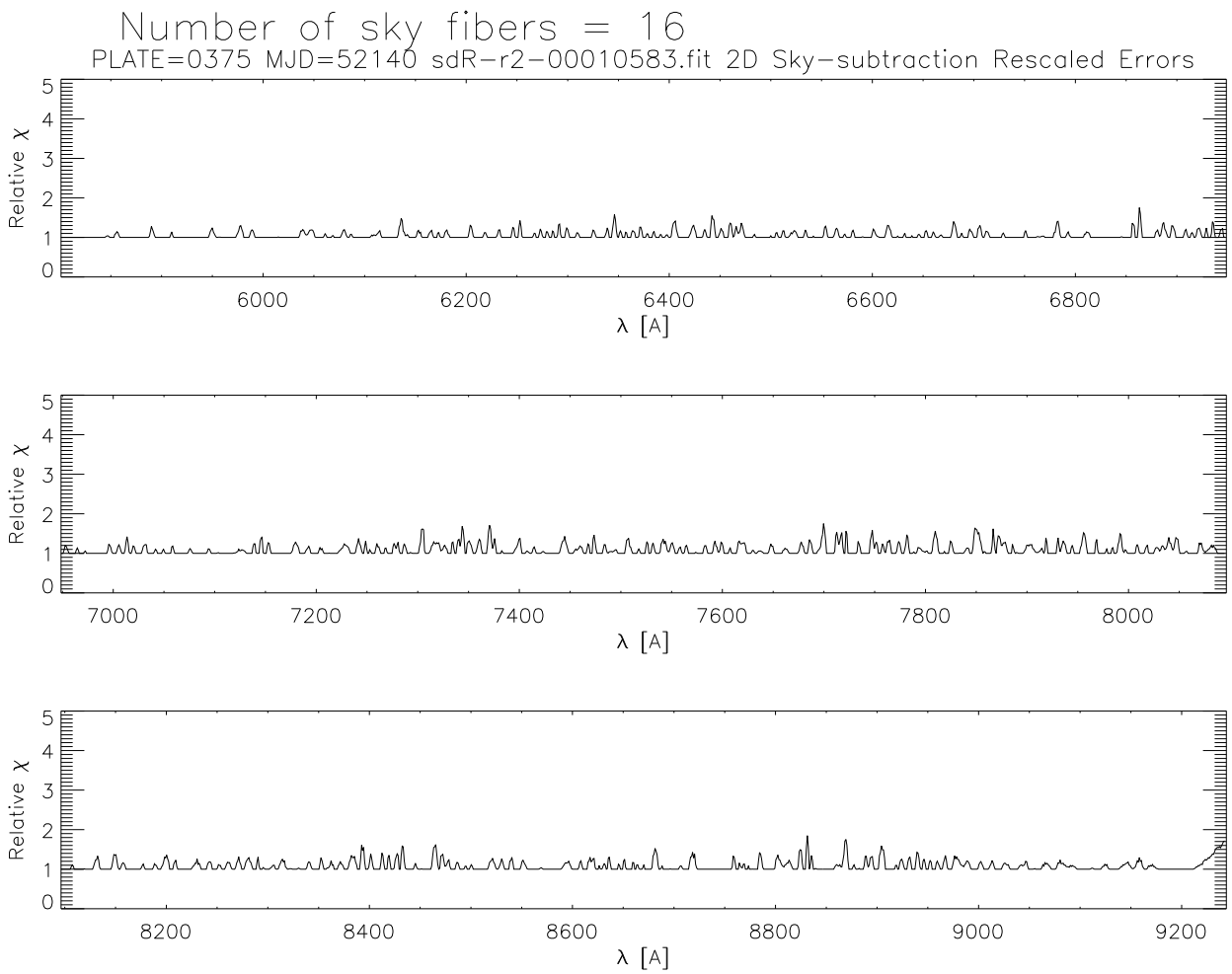

PLATE=0375 MJD=52140 sdR-r2-00010583.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

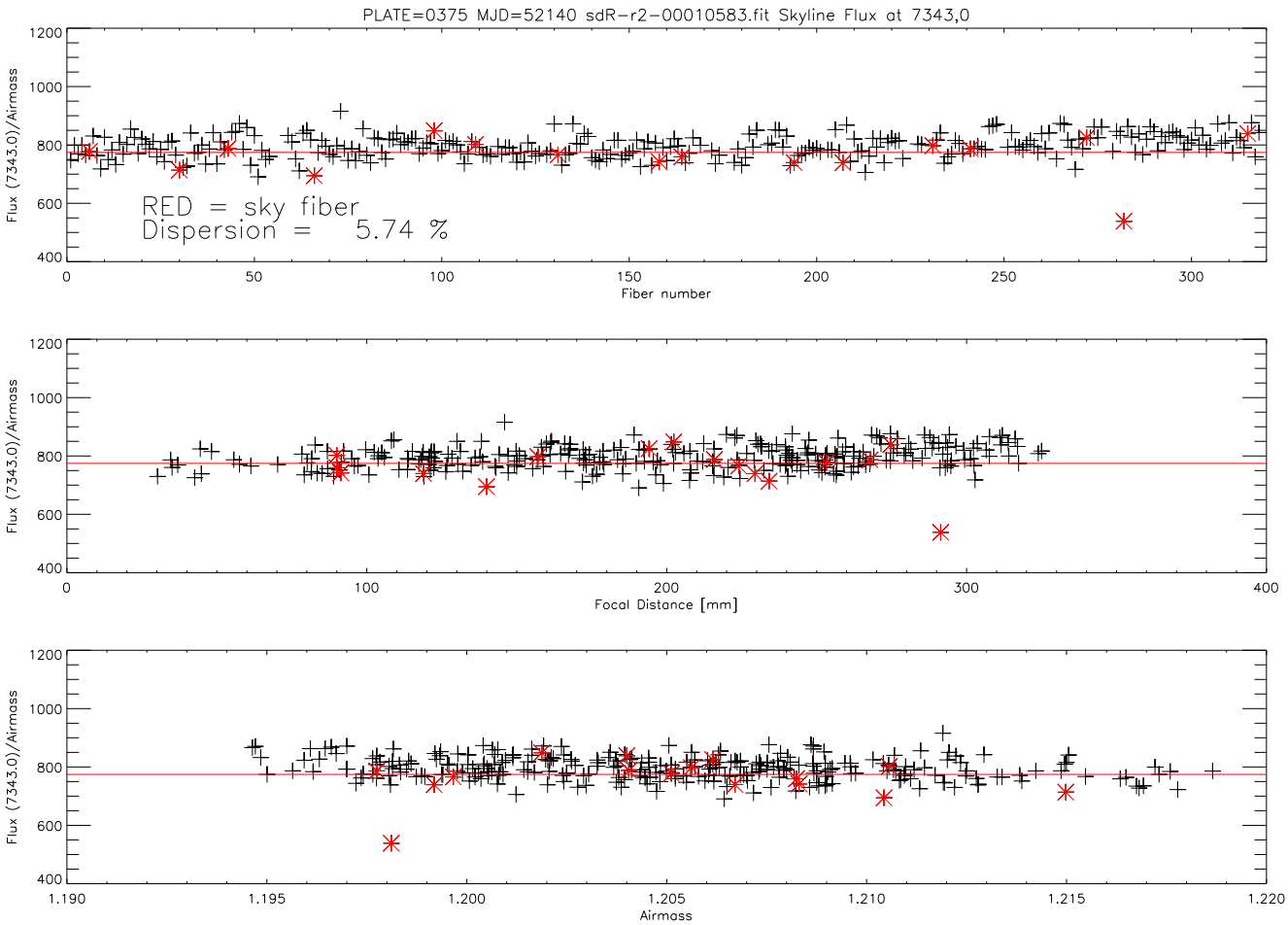

Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010583.fit 1D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200

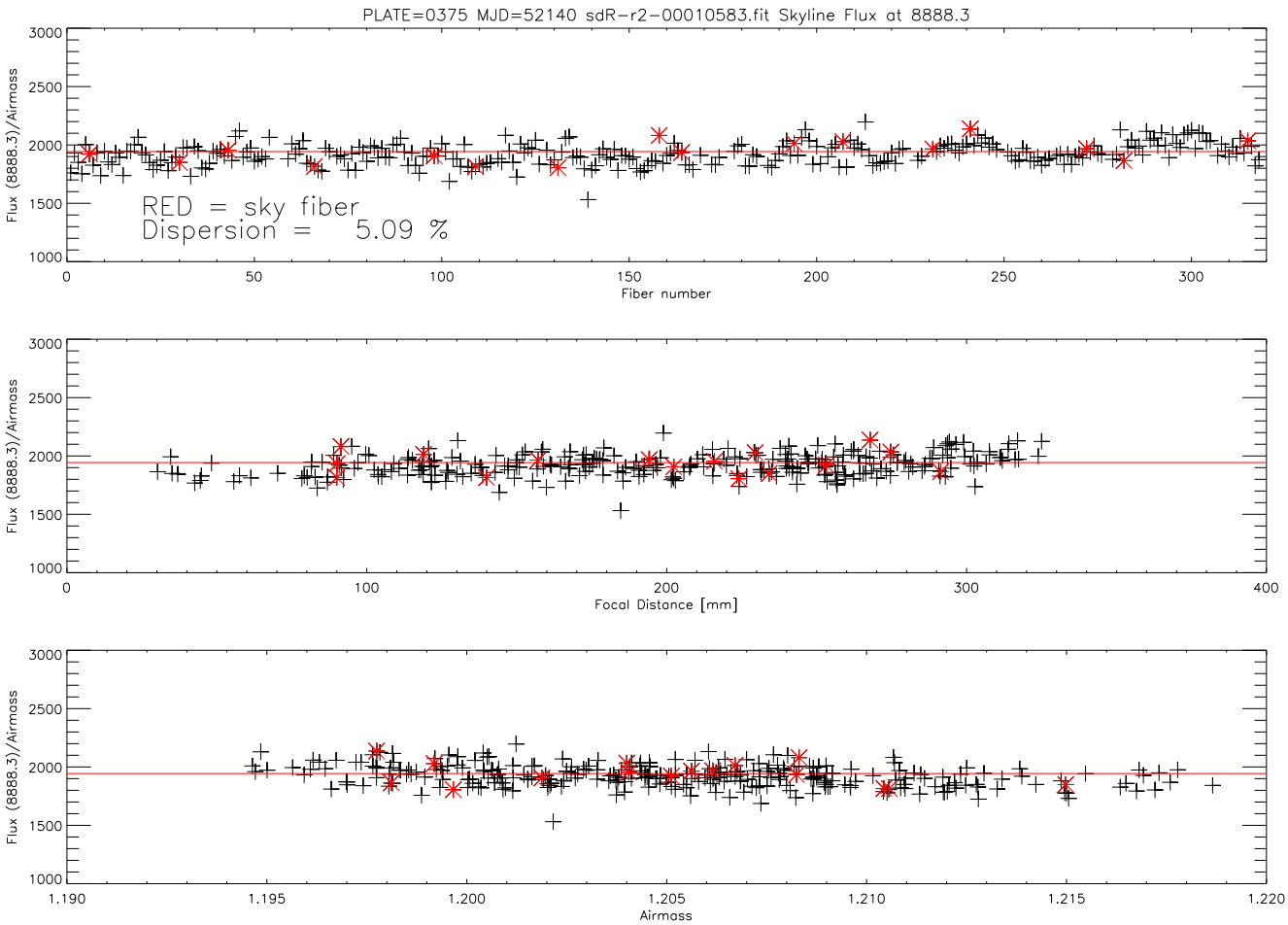

PLATE=0375 MJD=52140 sdR-r2-00010583.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=0375 MJD=52140 sdR-r2-00010583.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]


PLATE=0375 MJD=52140 sdR-r2-00010583.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 16
PLATE=0375 MJD=52140 sdR-r2-00010583.fit 2D Sky-subtraction Rescaled Errors
Relative χ
λ [A]
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
0
1
2
3
4
5


PLATE=0375 MJD=52140 sdR-r2-00010583.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 5.74 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=0375 MJD=52140 sdR-r2-00010583.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 5.09 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass