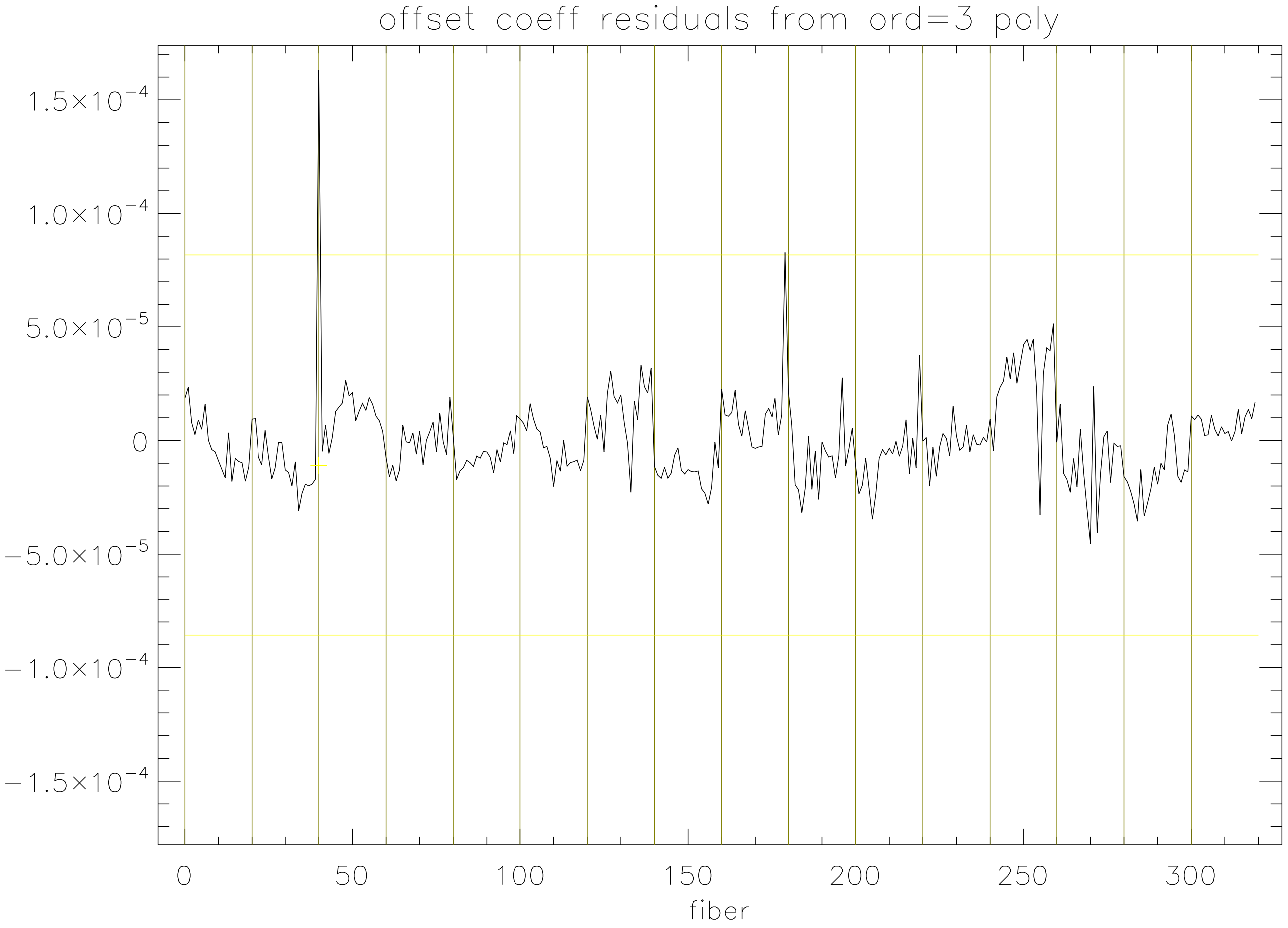
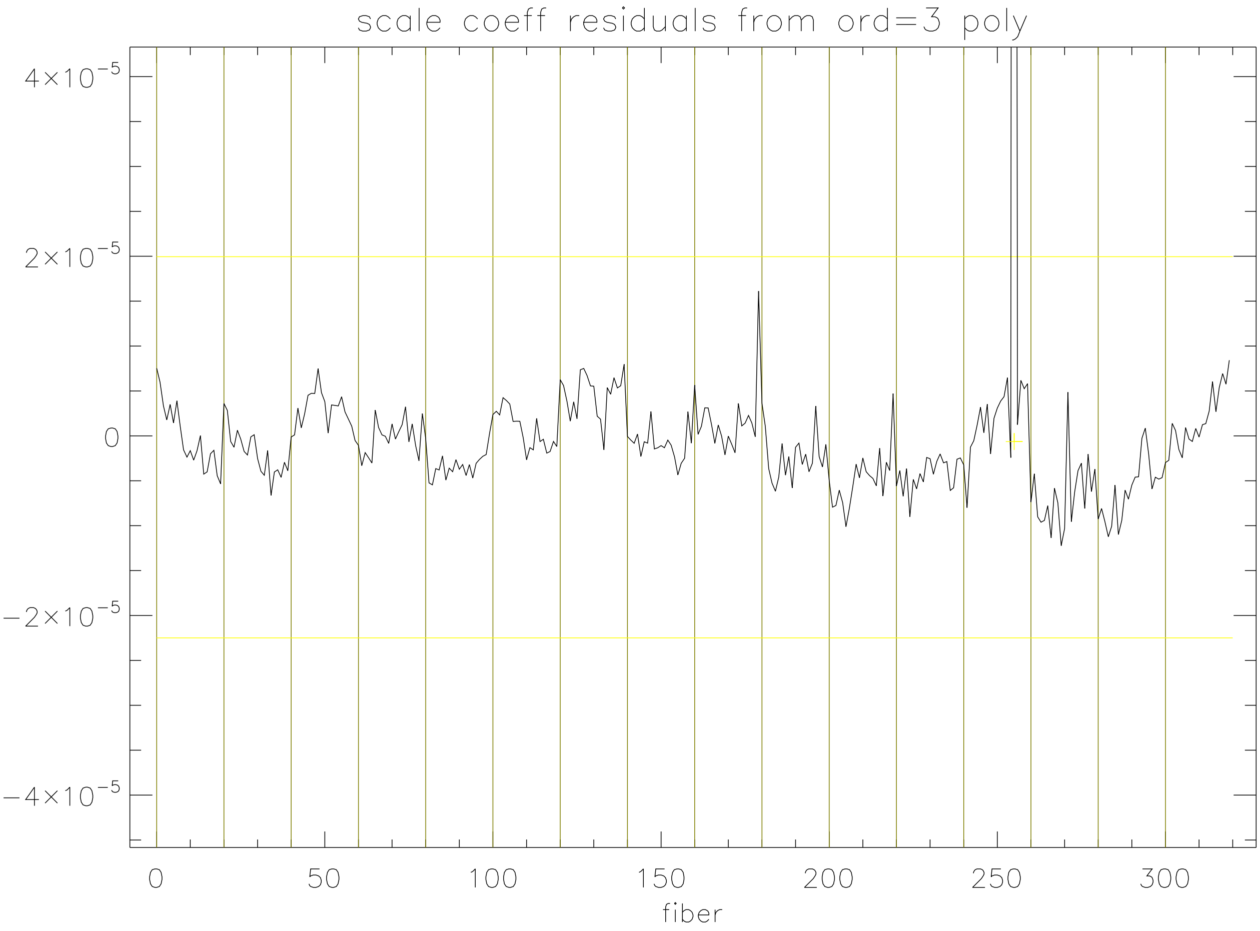
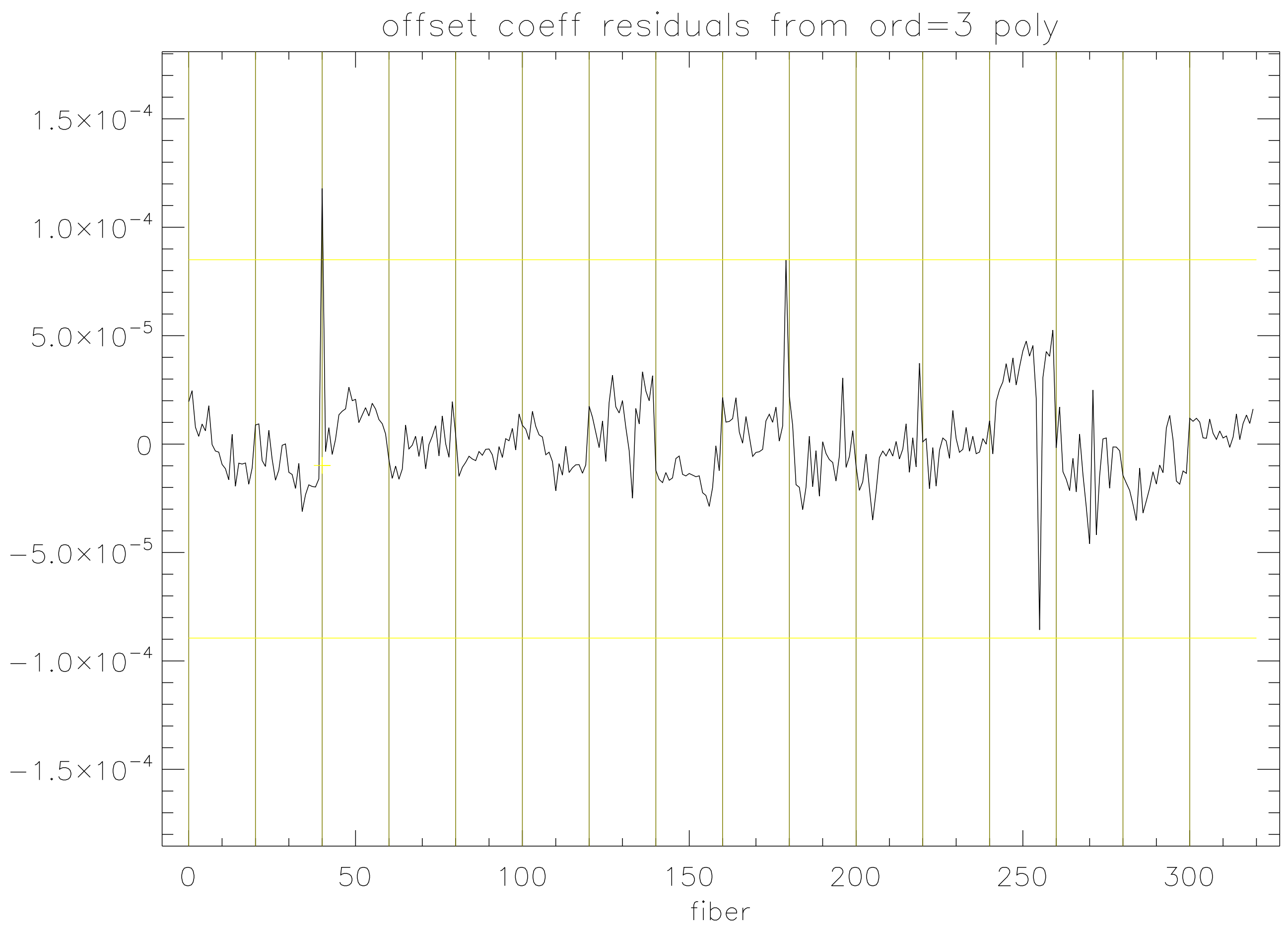
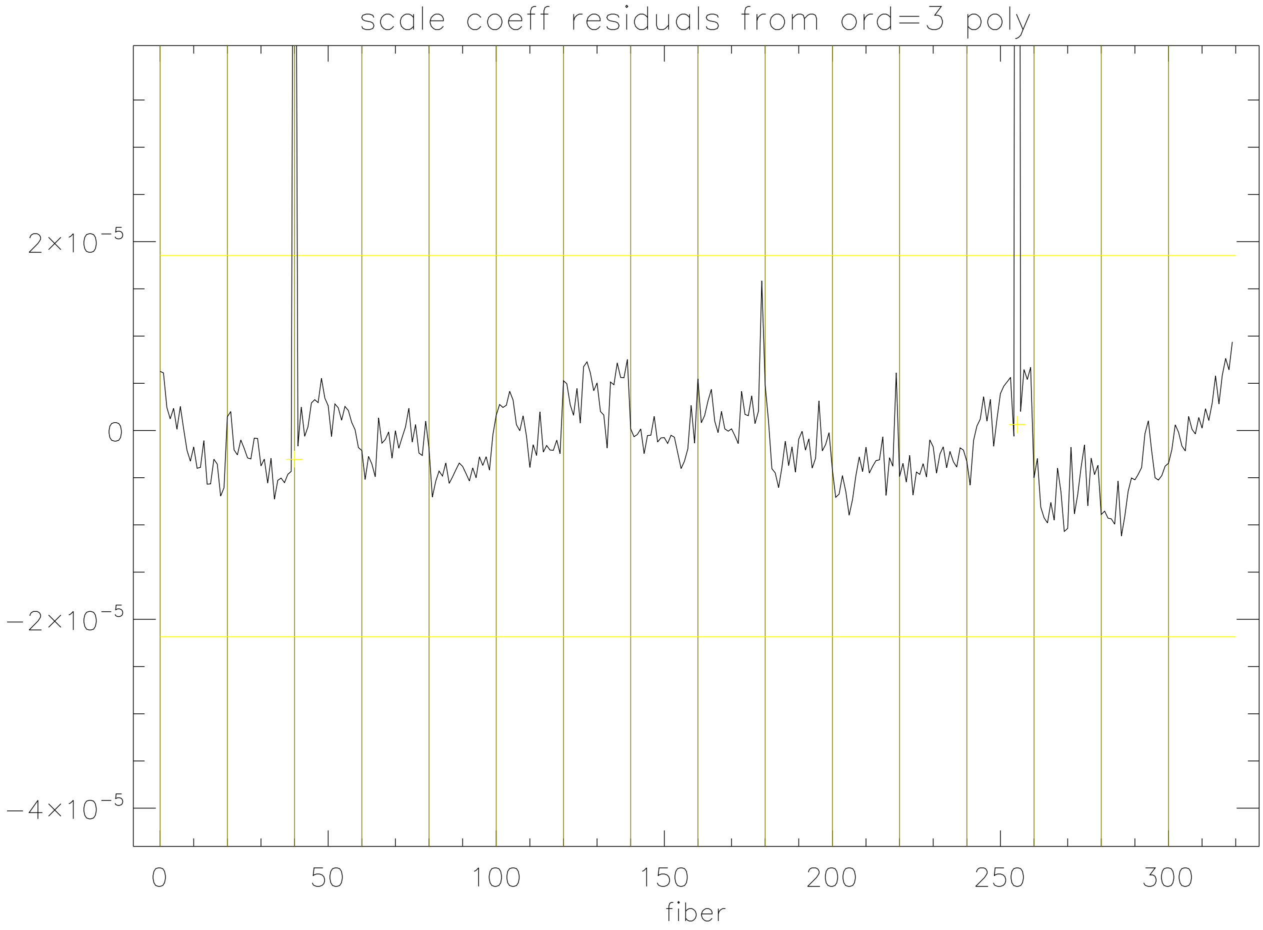
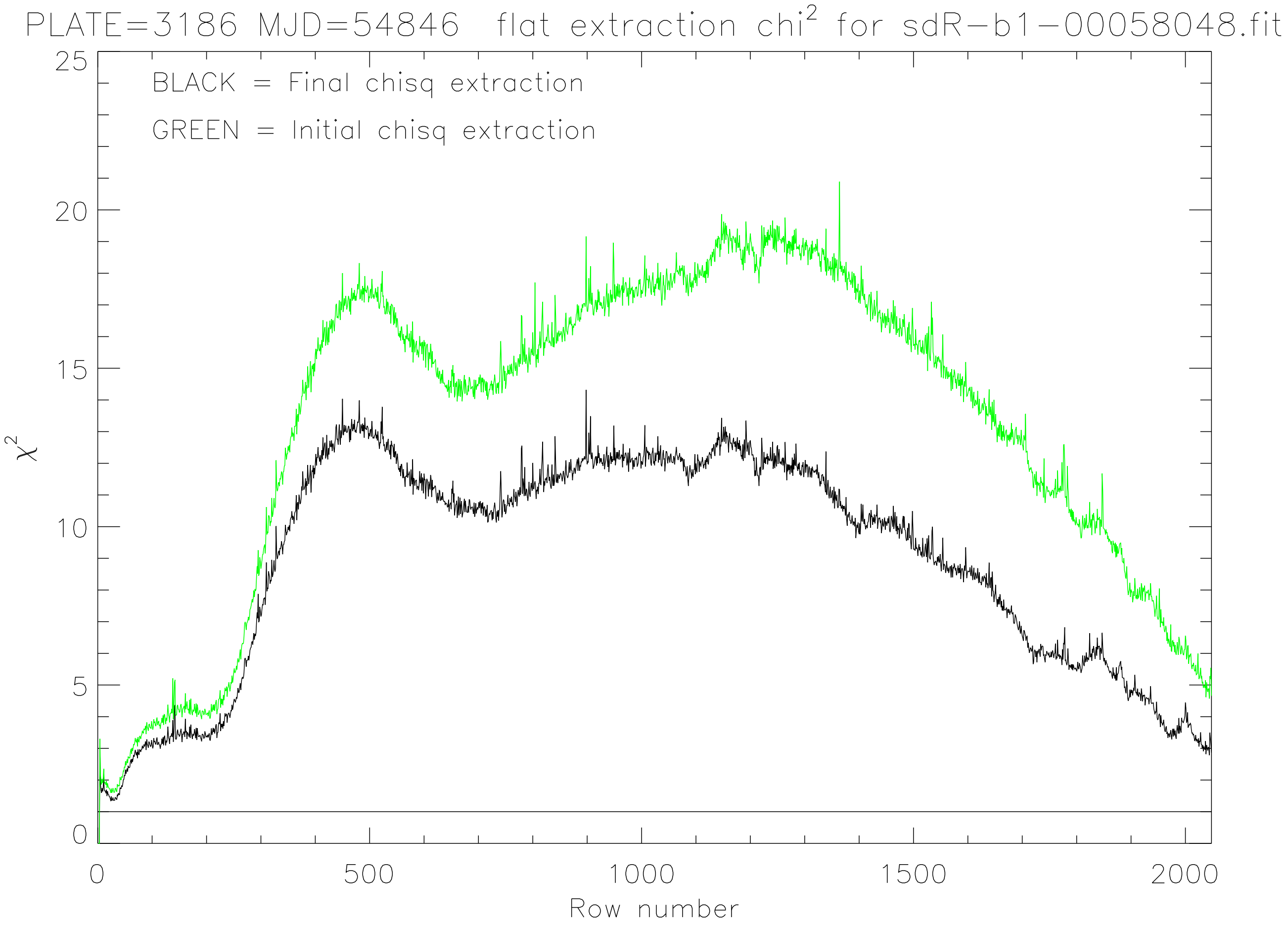
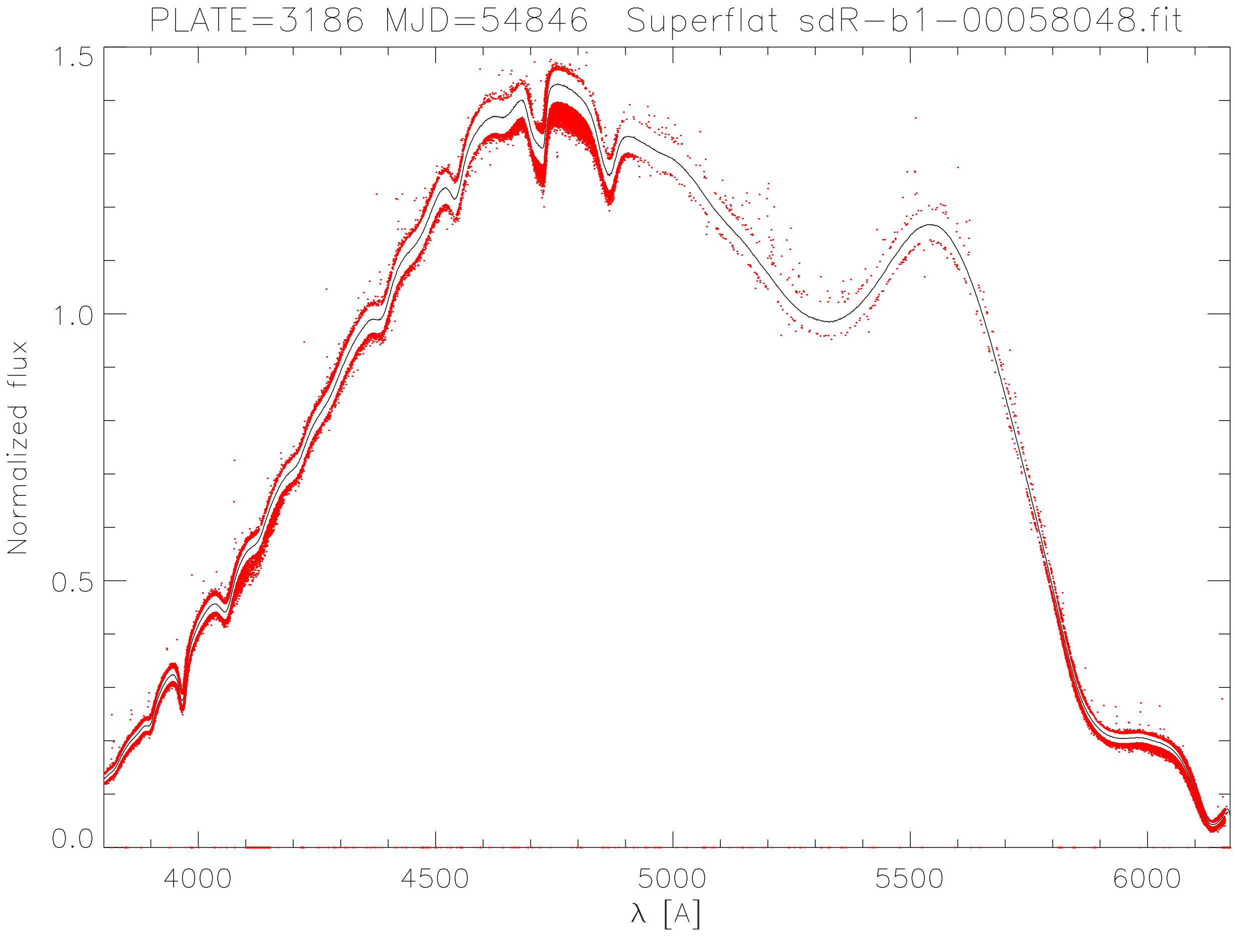

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

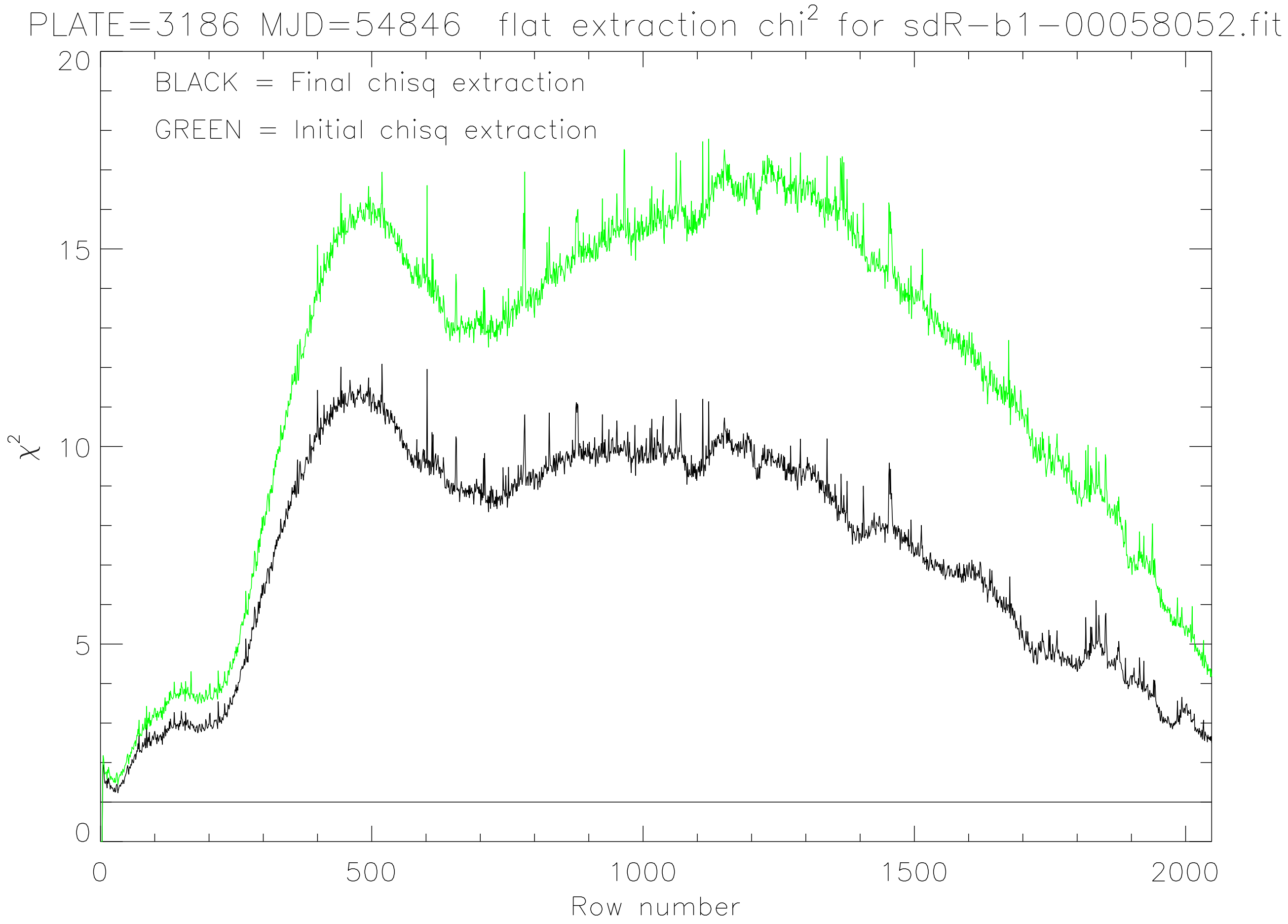

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

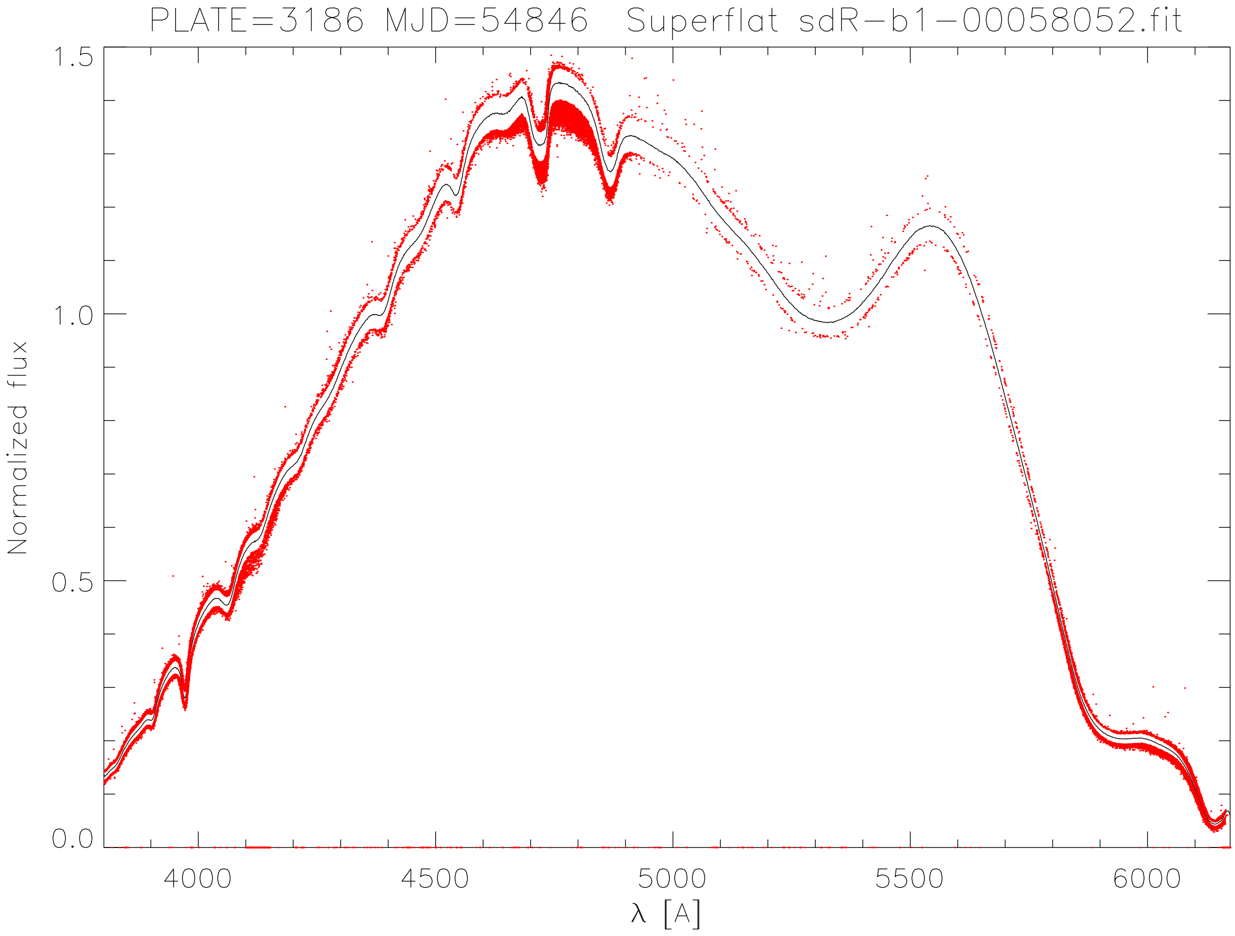

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber


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

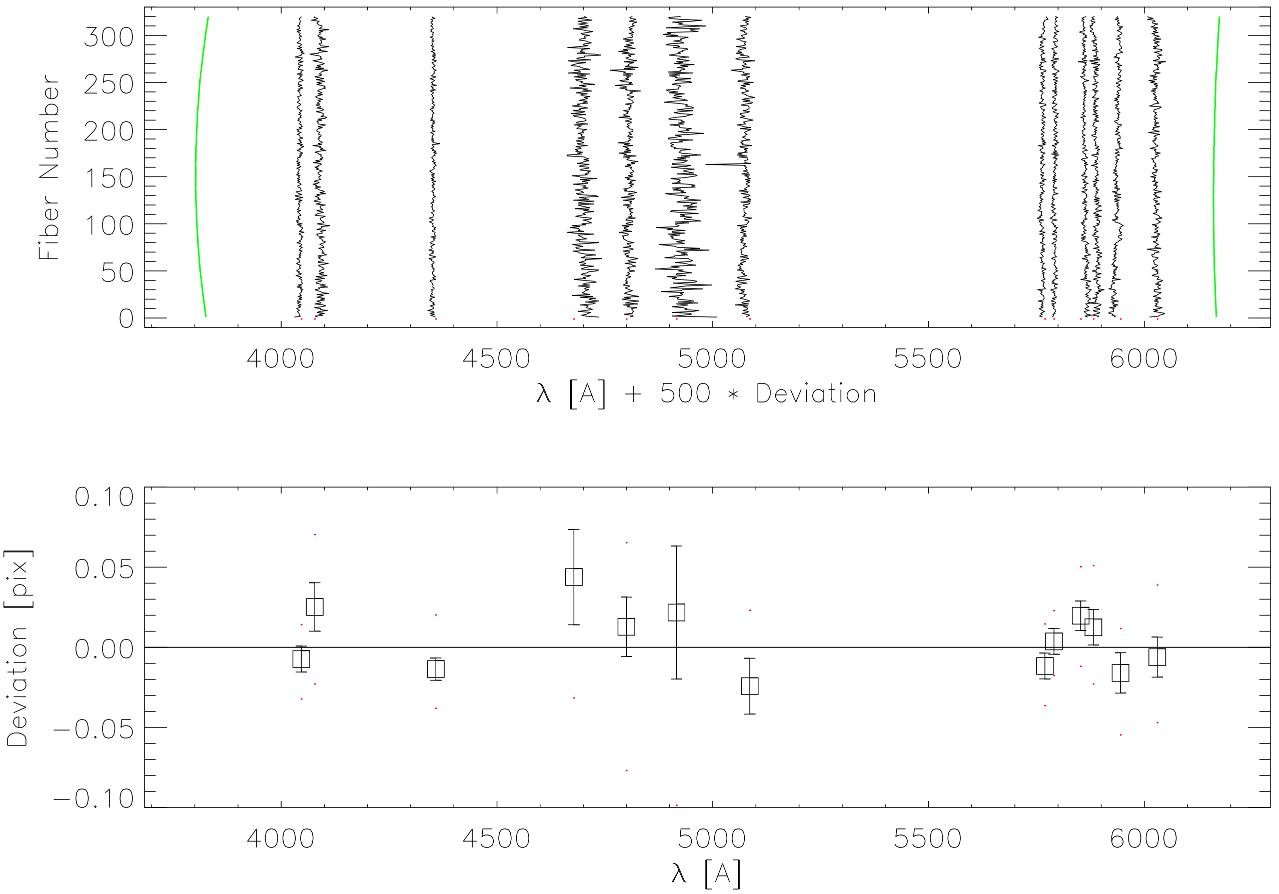

PLATE=3186 MJD=54846 flat extraction chi^2 for sdR-b1-00058048.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number


PLATE=3186 MJD=54846 Superflat sdR-b1-00058048.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]


PLATE=3186 MJD=54846 flat extraction chi^2 for sdR-b1-00058052.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
0
500
1000
1500
2000
Row number


PLATE=3186 MJD=54846 Superflat sdR-b1-00058052.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

PLATE=3186 MJD=54846 Arcline Fit for sdR-b1-00058053.fit



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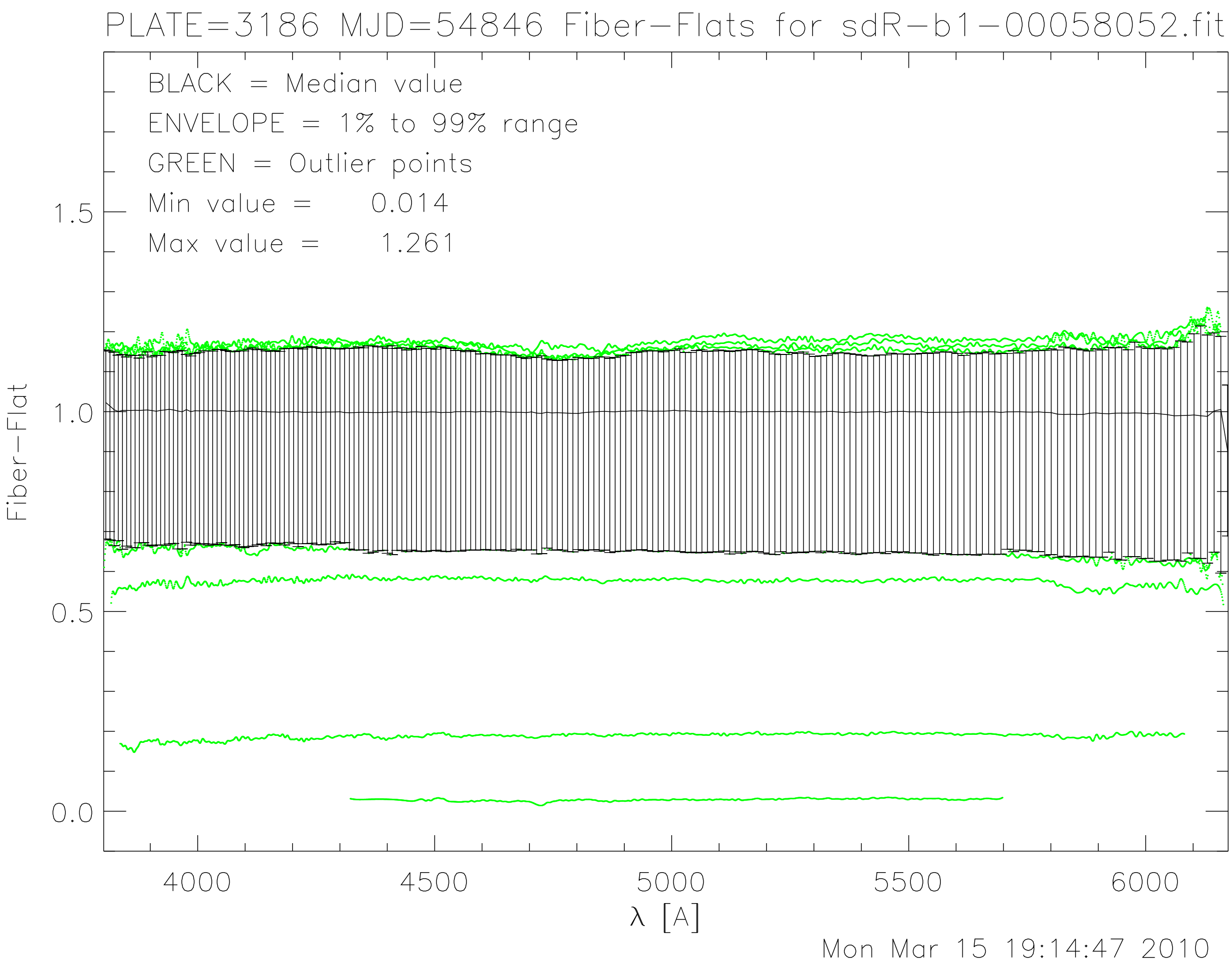
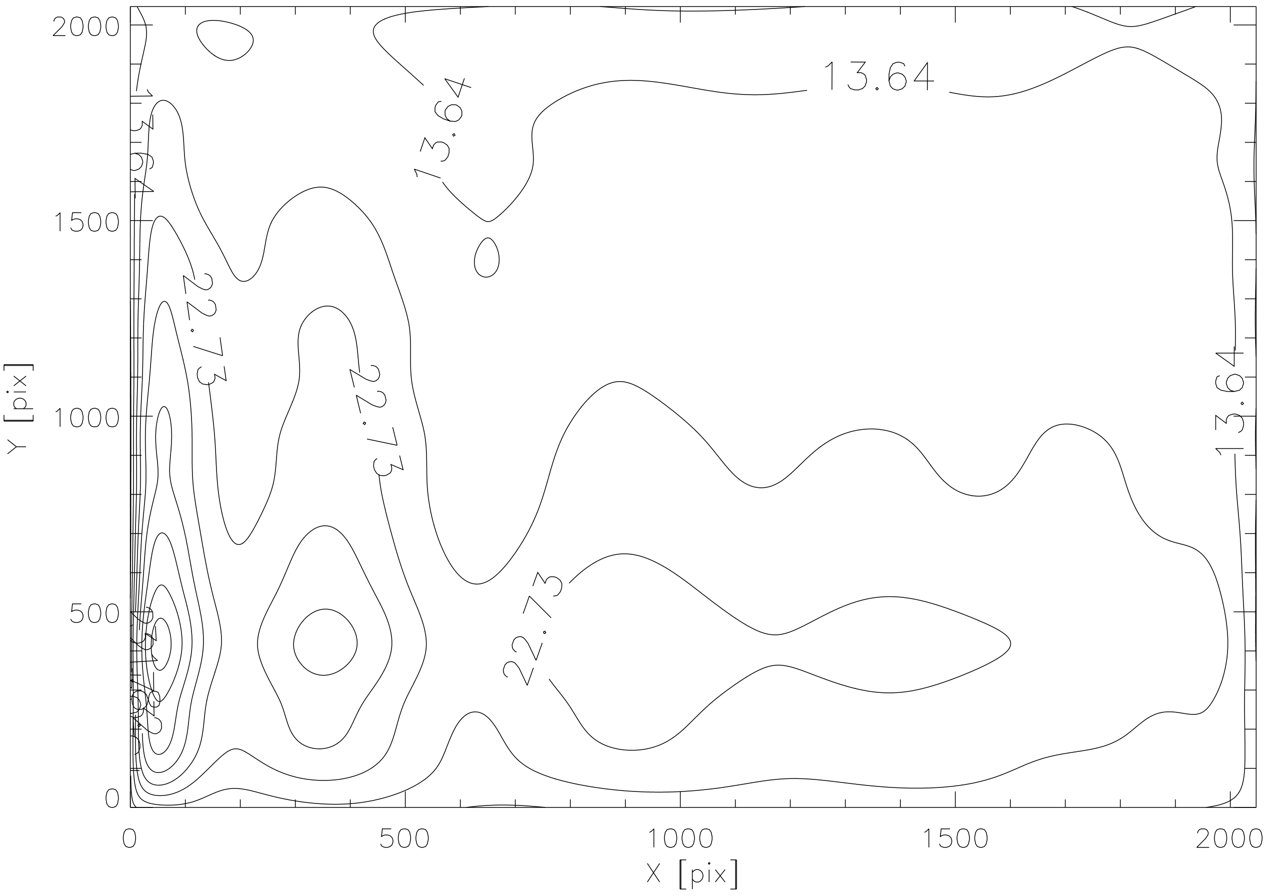
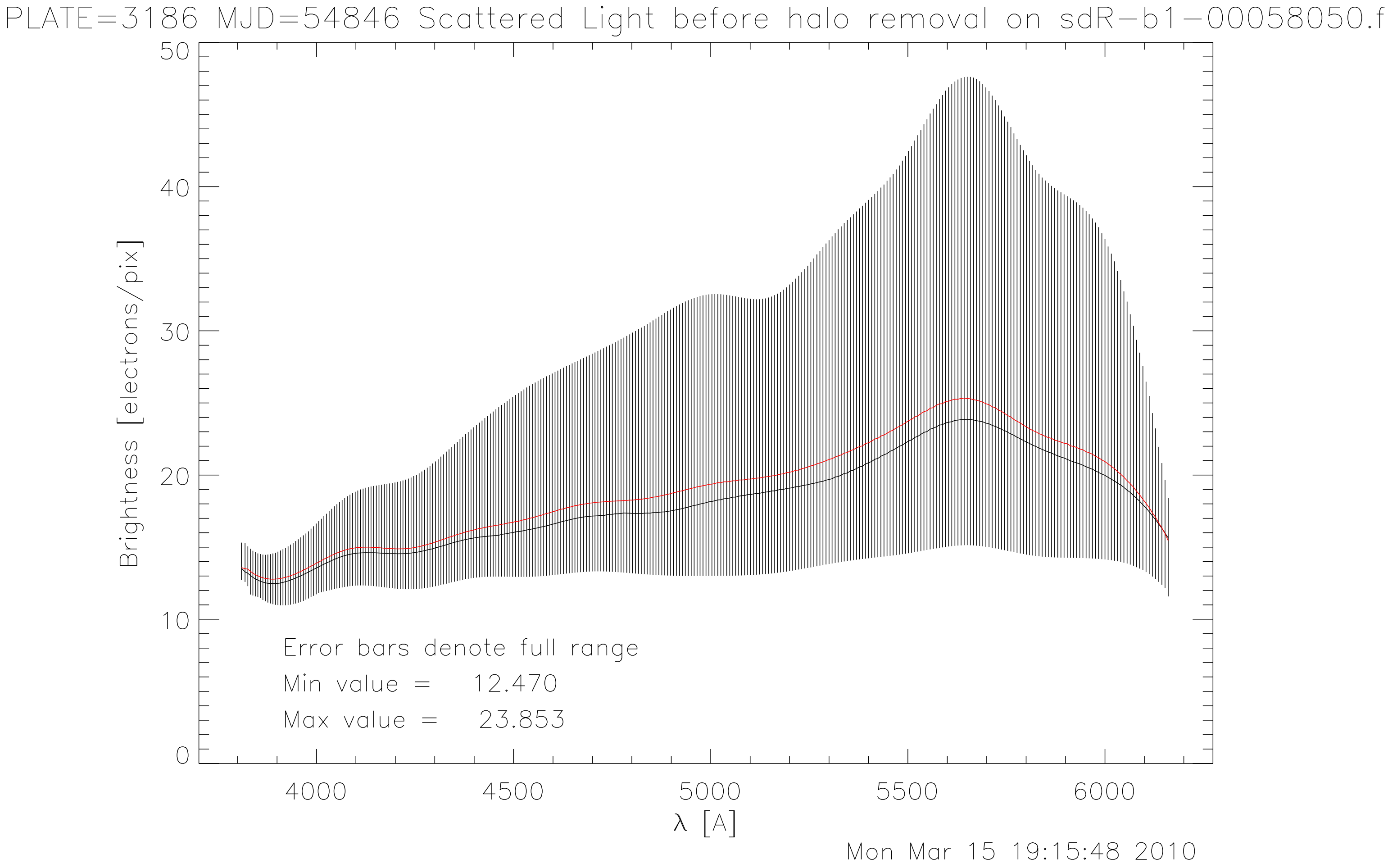
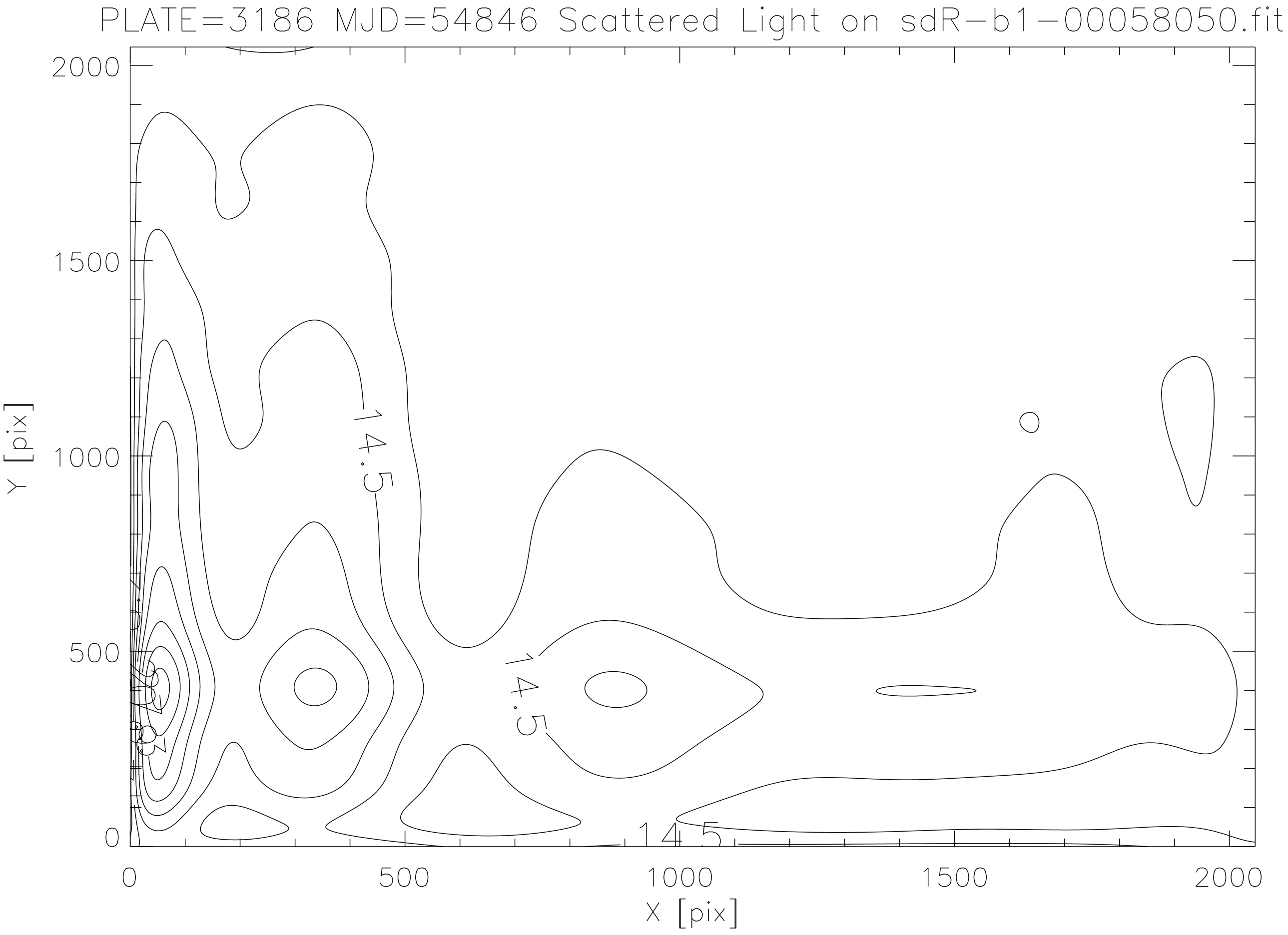
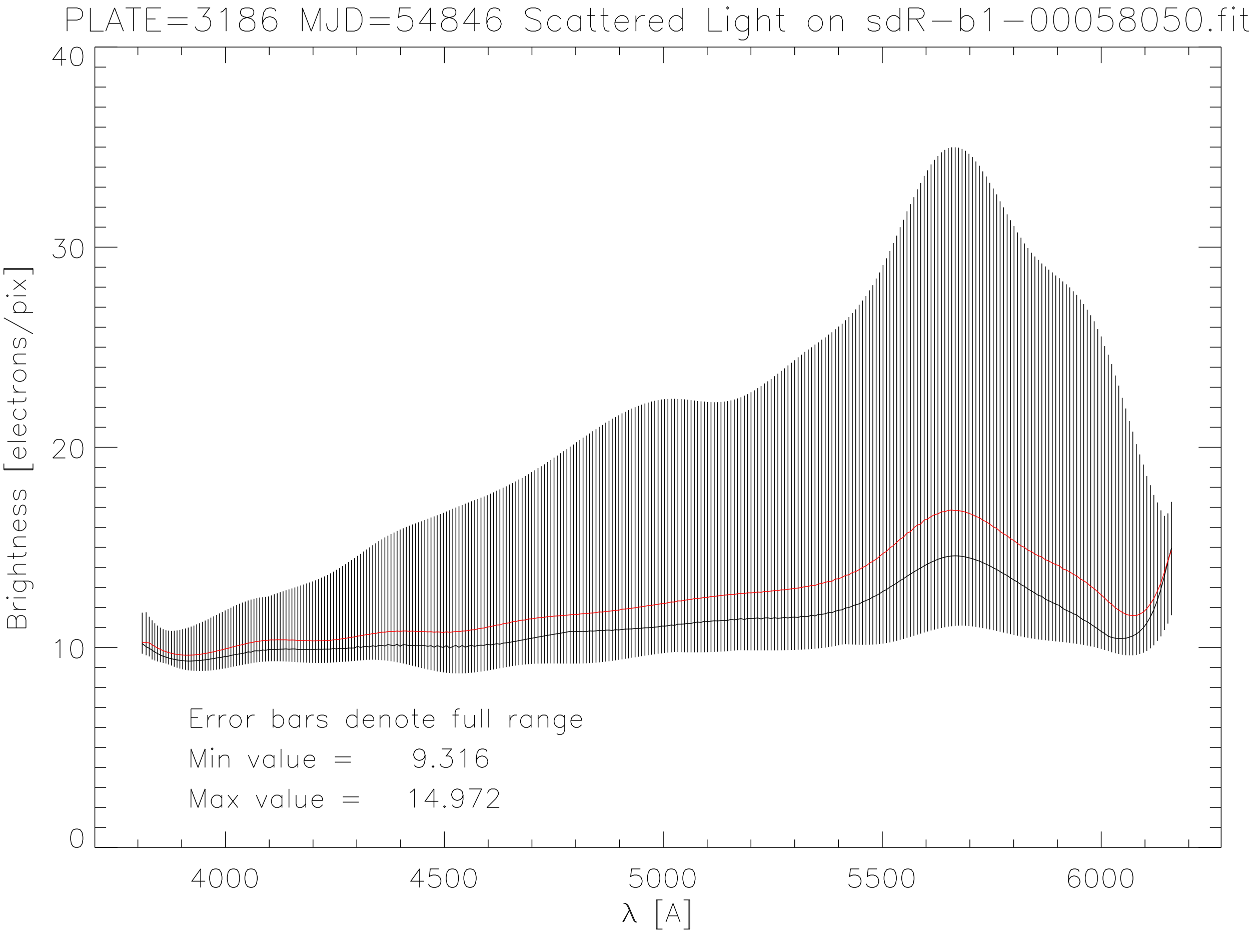

PLATE=3186 MJD=54846 Fiber-Flats for sdR-b1-00058052.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.014
Max value = 1.261
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Mar 15 19:14:47 2010



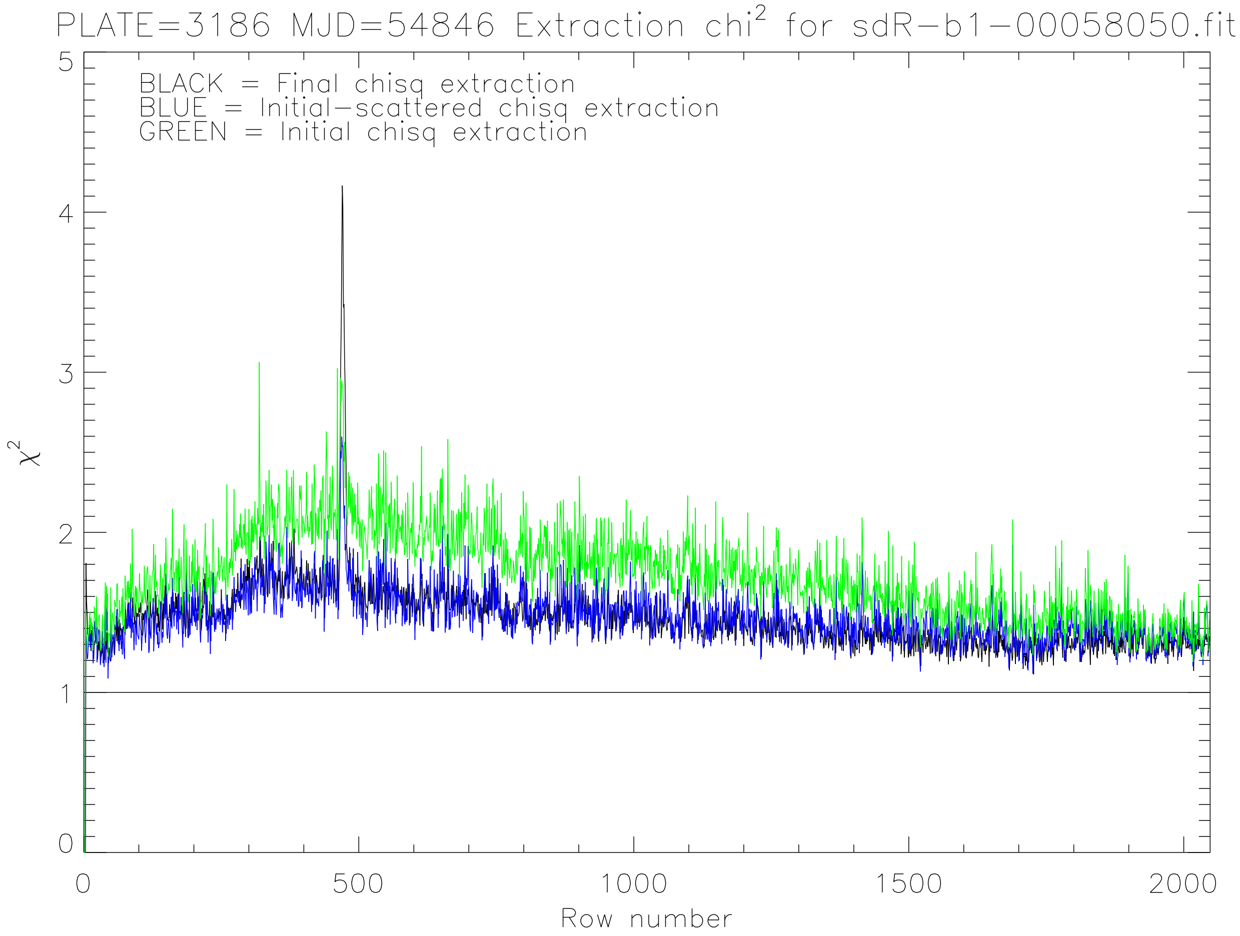
PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b1-00058050.f

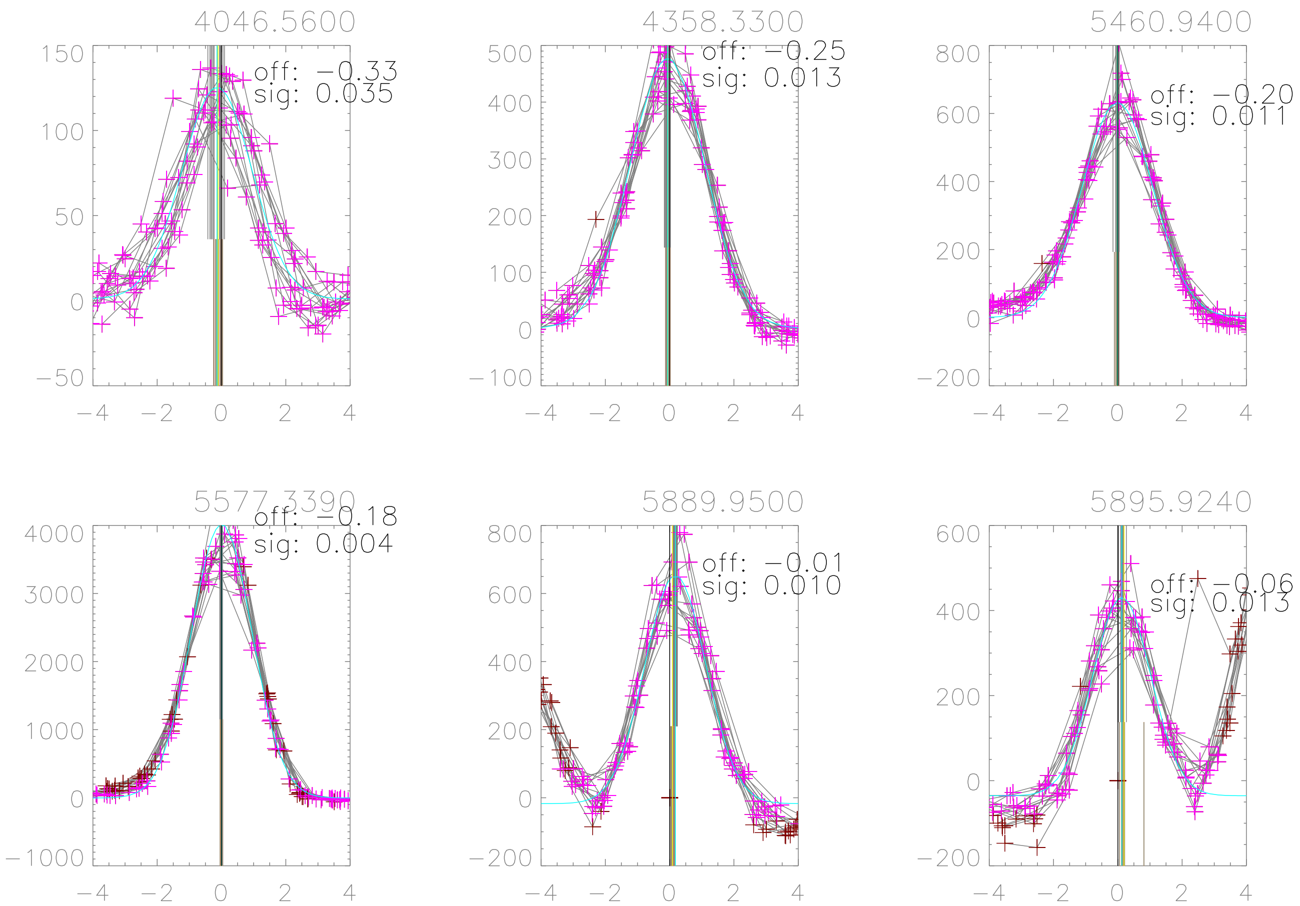

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b1-00058050.f
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 12.470
Max value = 23.853
Mon Mar 15 19:15:48 2010

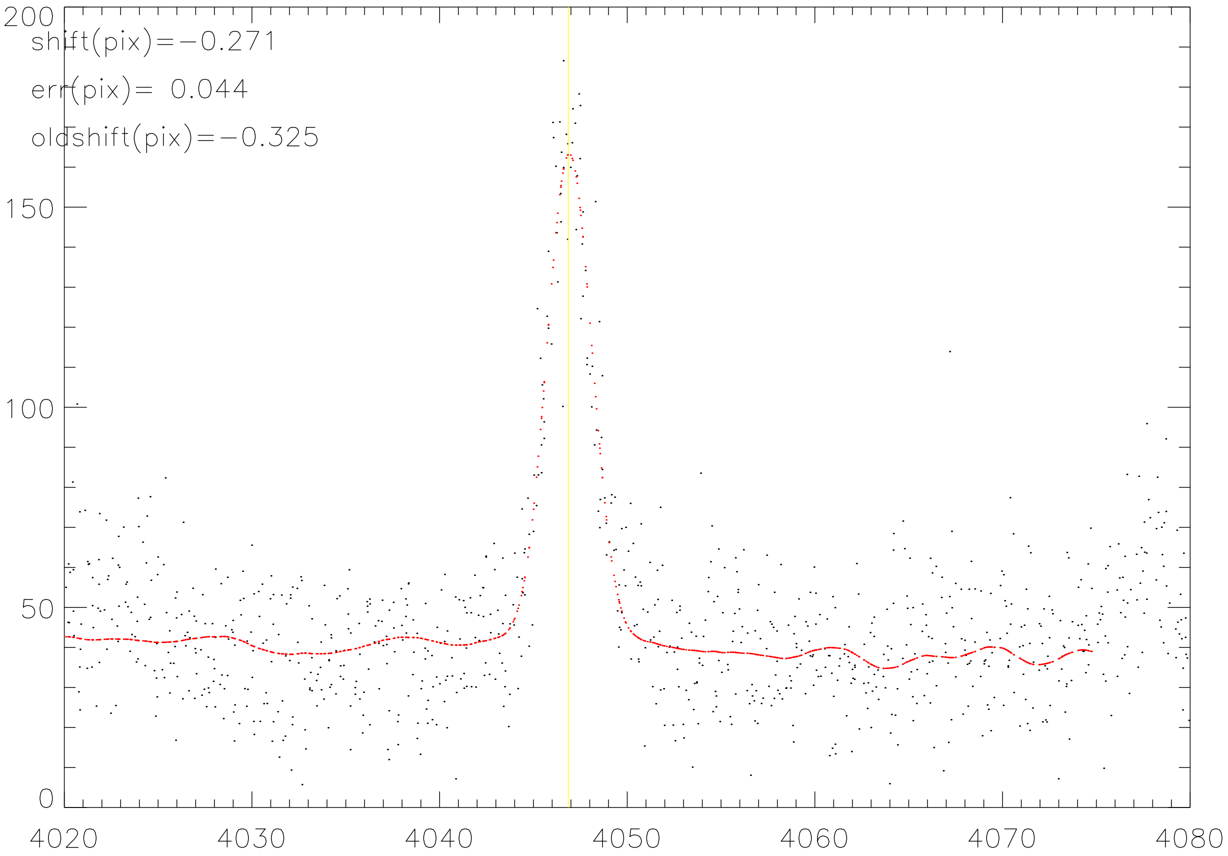

PLATE=3186 MJD=54846 Scattered Light on sdR-b1-00058050.fit
Y [pix]
2000
1500
1000
500
0
X [pix]
0
500
1000
1500
2000
14.5
14.5
14.5

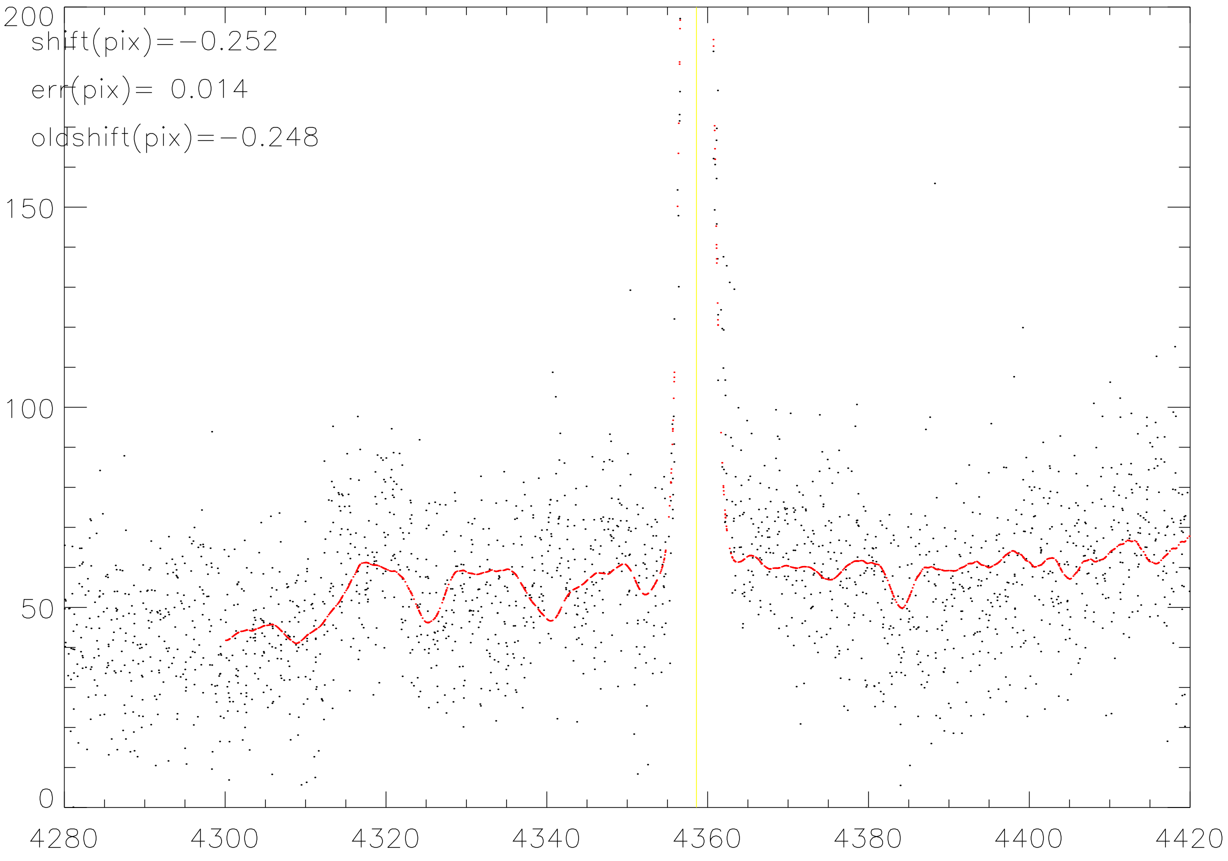


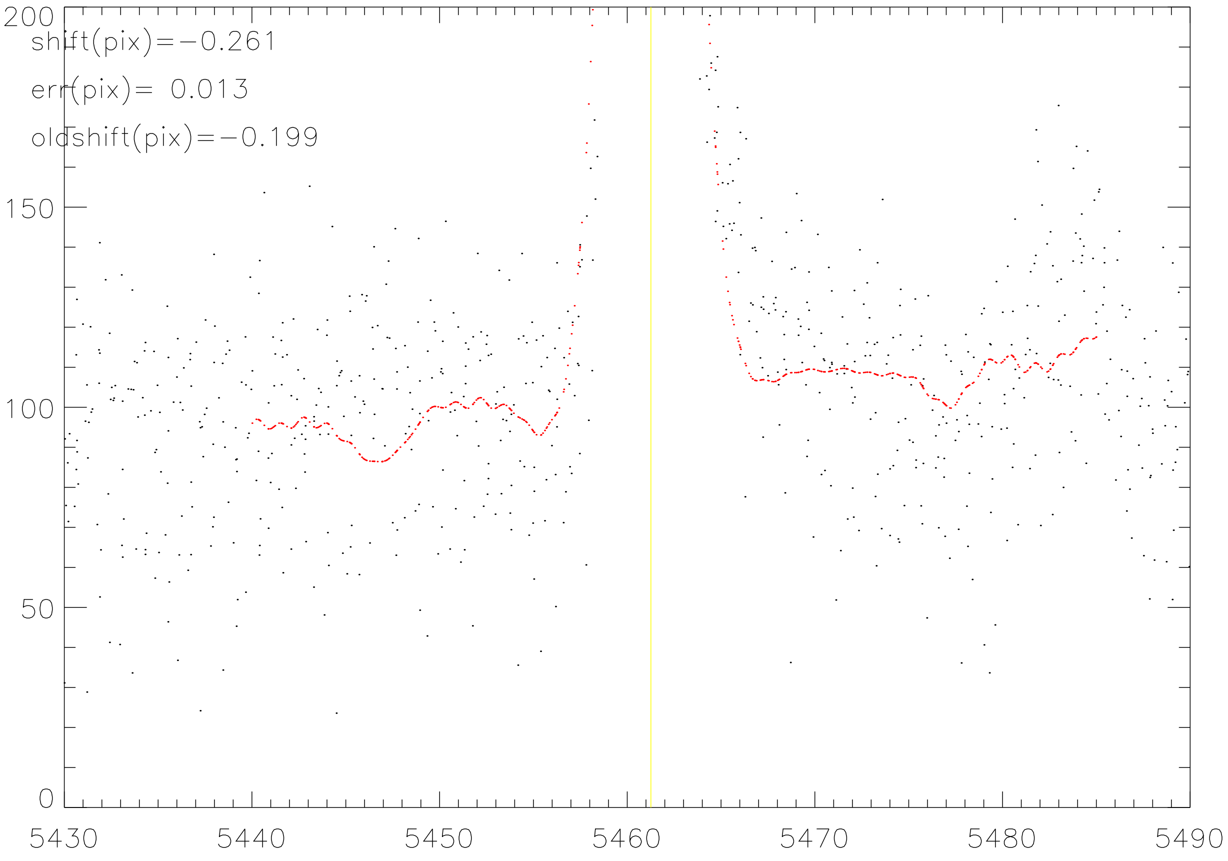
Mon Mar 15 19:18:55 2010

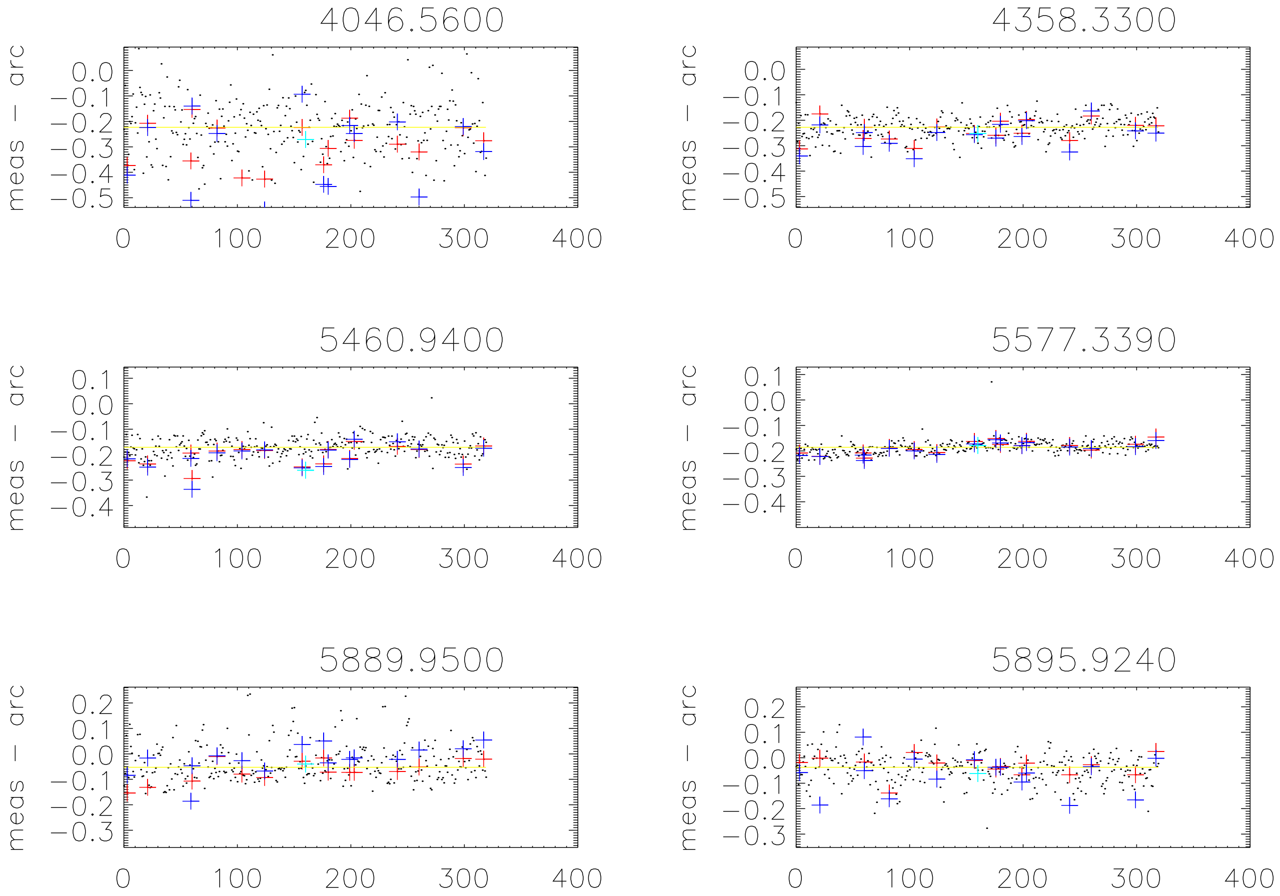

PLATE=3186 MJD=54846 Extraction chi^2 for sdR-b1-00058050.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

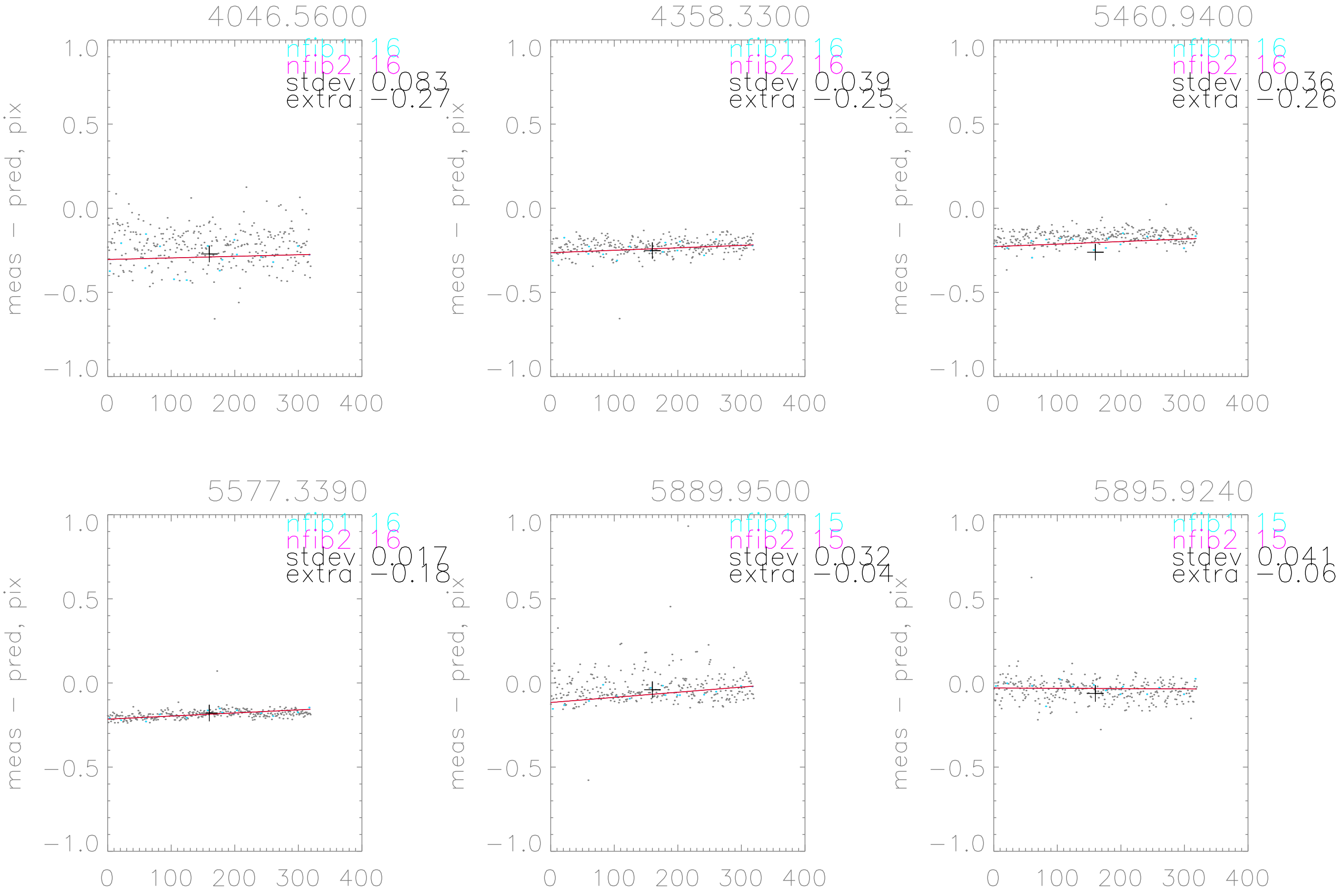

4046.5600
off: −0.33
sig: 0.035
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.25
sig: 0.013
500
400
300
200
100
0
−100
5460.9400
off: −0.20
sig: 0.011
800
600
400
200
0
−200
5577.3390
off: −0.18
sig: 0.004
4000
3000
2000
1000
0
−1000
5889.9500
off: −0.01
sig: 0.010
800
600
400
200
0
−200
5895.9240
off: −0.06
sig: 0.013
600
400
200
0
−200

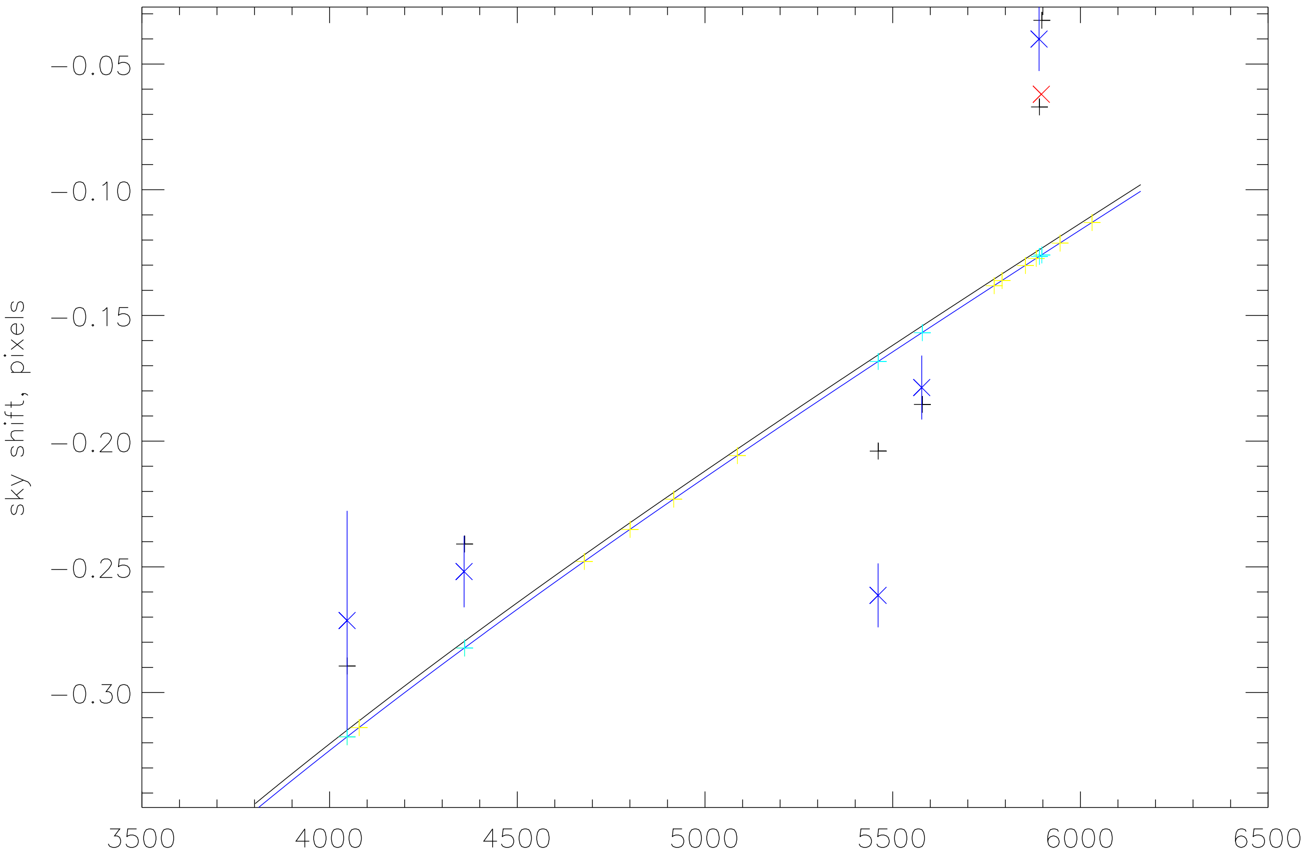

shift(pix)=−0.271
err(pix)= 0.044
oldshift(pix)=−0.325
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

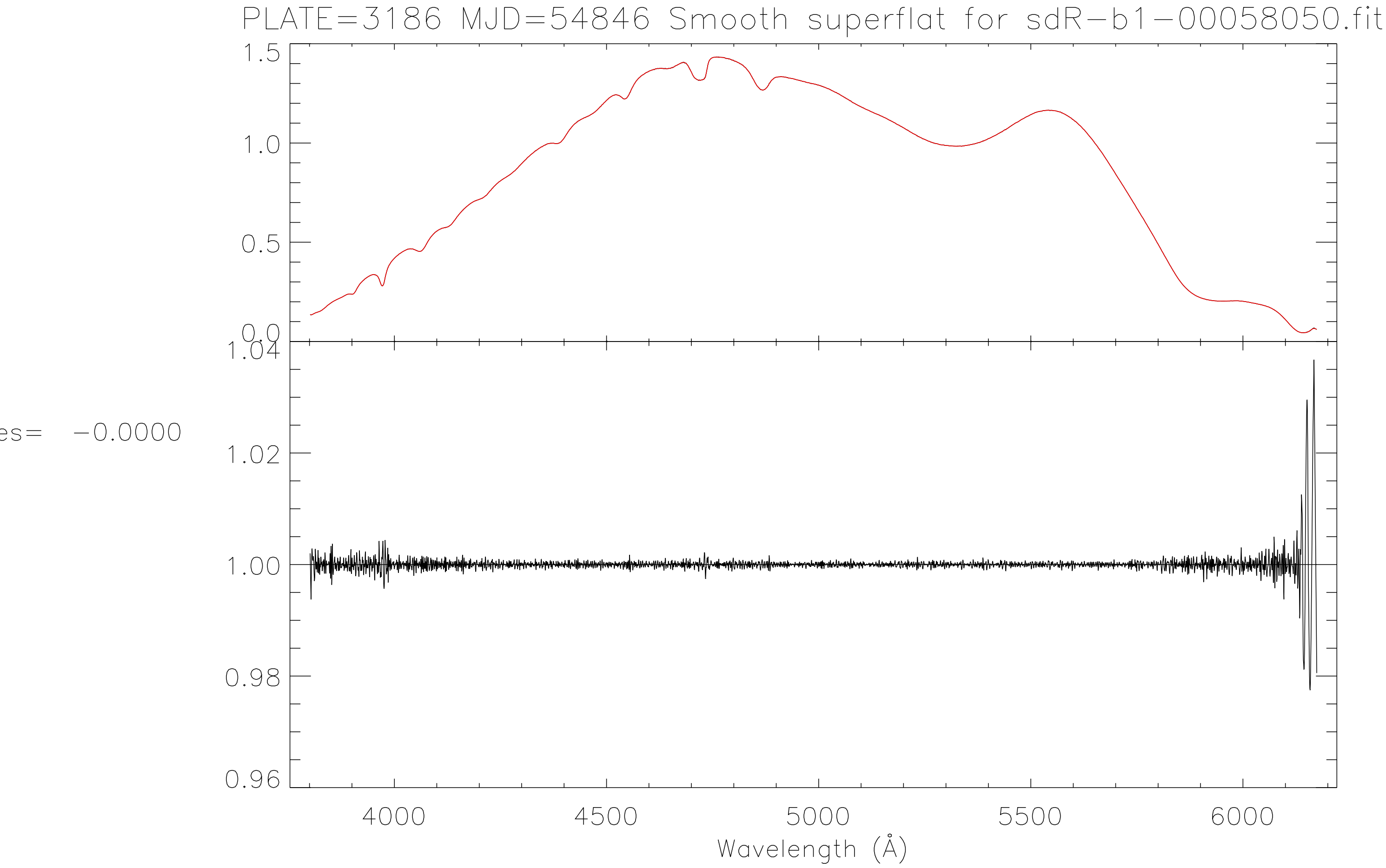

shift(pix)=−0.252
err(pix)= 0.014
oldshift(pix)=−0.248
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

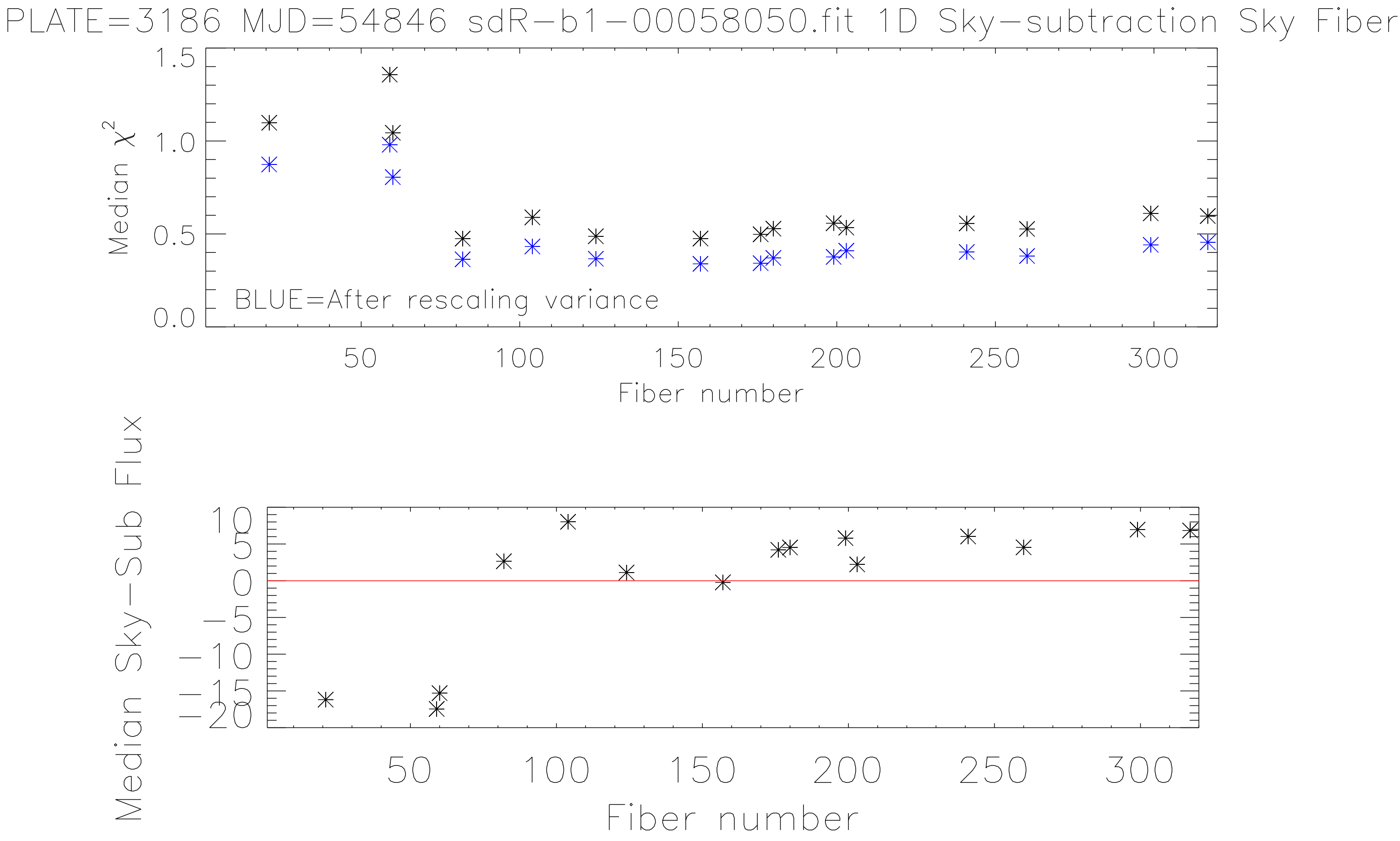

shift(pix)=−0.261
err(pix)= 0.013
oldshift(pix)=−0.199
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

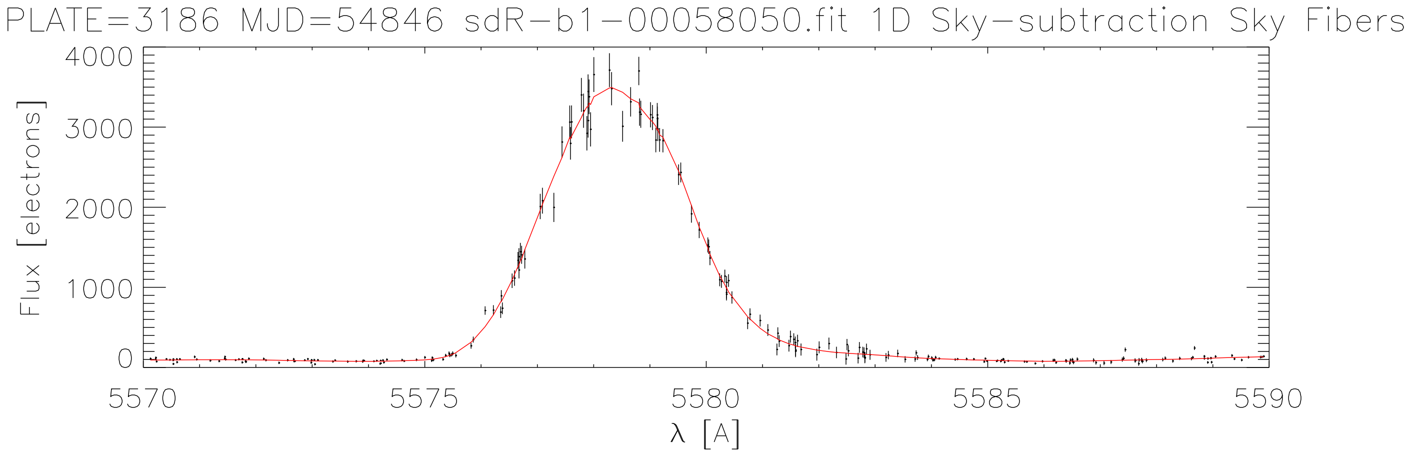

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0.1
0.2
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.083
extra −0.27
4358.3300
nfib1 16
nfib2 16
stdev 0.039
extra −0.25
5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra −0.26
5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra −0.18
5889.9500
nfib1 15
nfib2 15
stdev 0.032
extra −0.04
5895.9240
nfib1 15
nfib2 15
stdev 0.041
extra −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

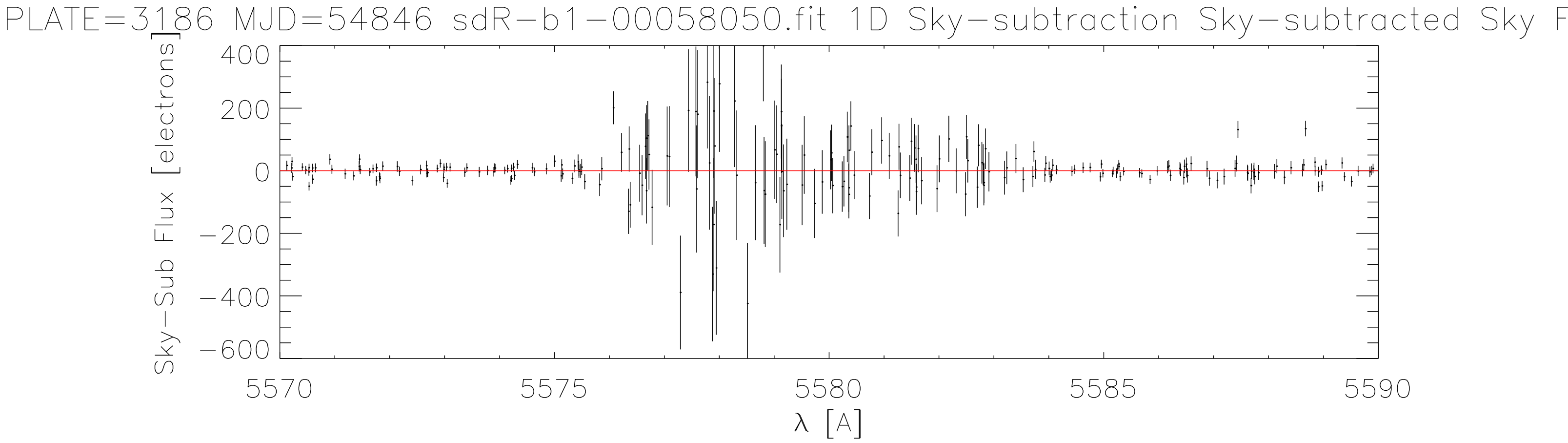

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500


PLATE=3186 MJD=54846 Smooth superflat for sdR-b1-00058050.fit
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3186 MJD=54846 sdR-b1-00058050.fit 1D Sky-subtraction Sky Fiber
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number



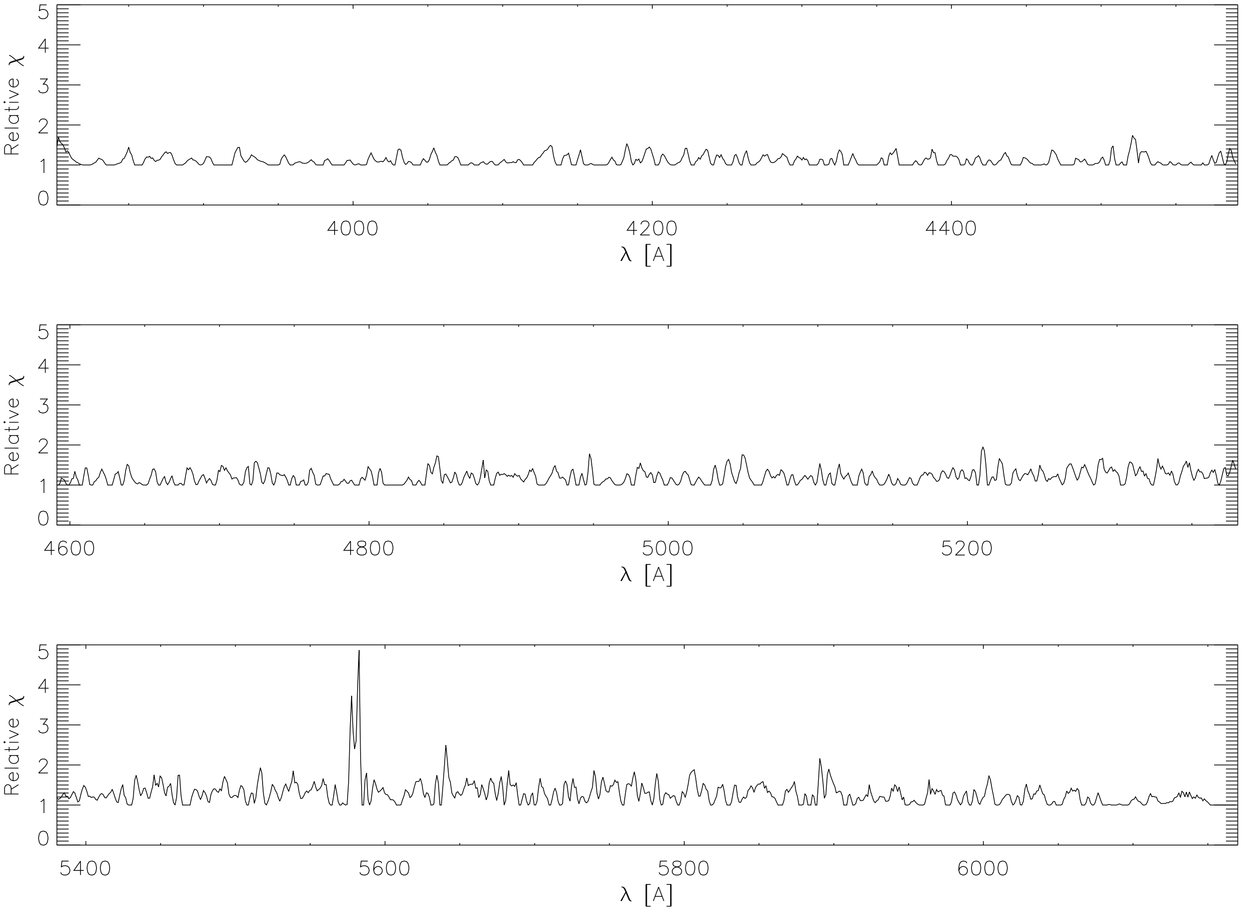
PLATE=3186 MJD=54846 sdR-b1-00058050.fit 1D Sky-subtraction Sky Fibers

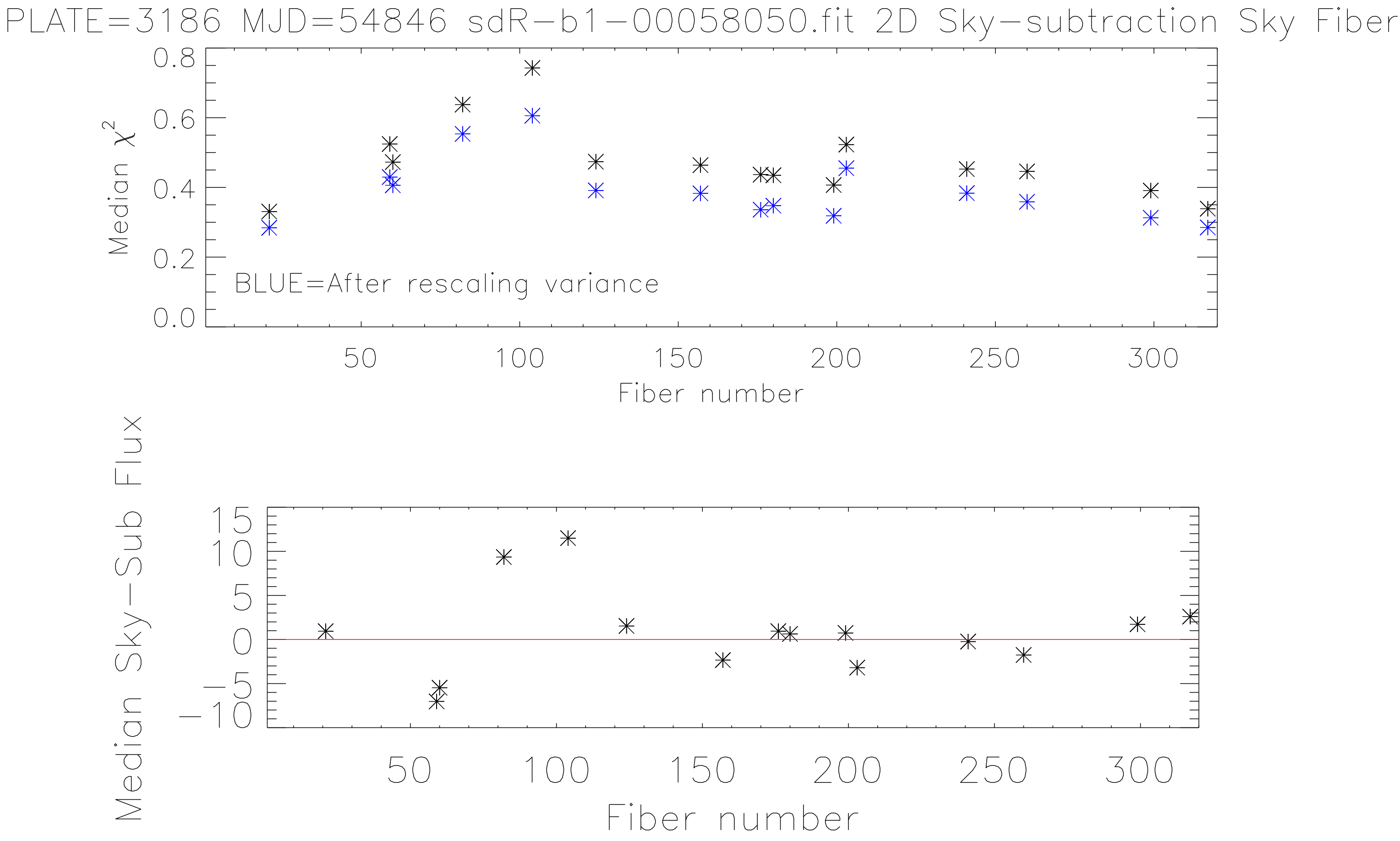


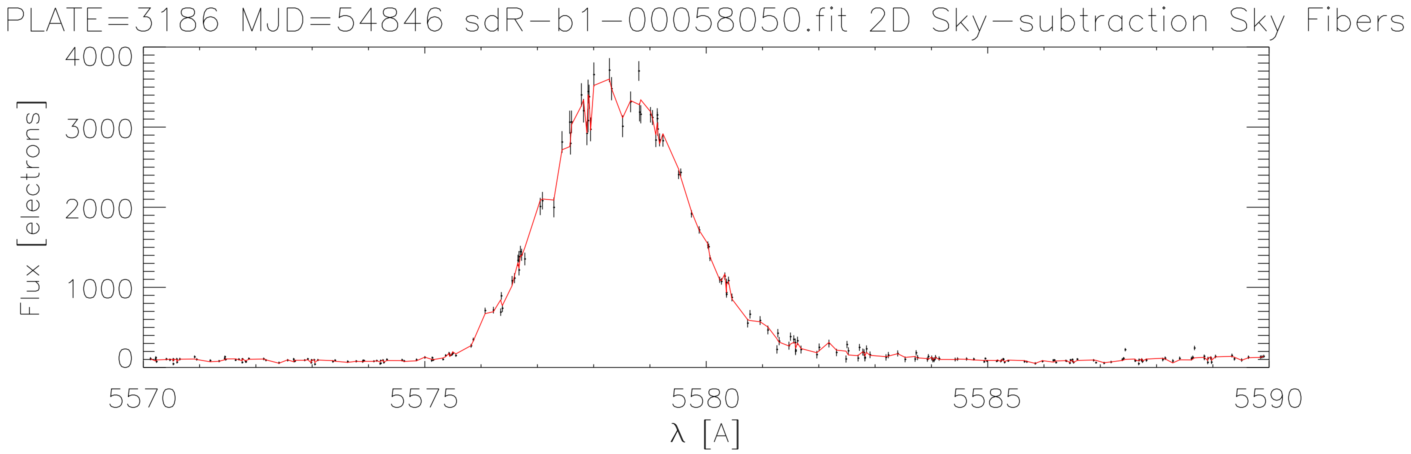
PLATE=3186 MJD=54846 sdR-b1-00058050.fit 1D Sky-subtraction Sky-subtracted Sky F

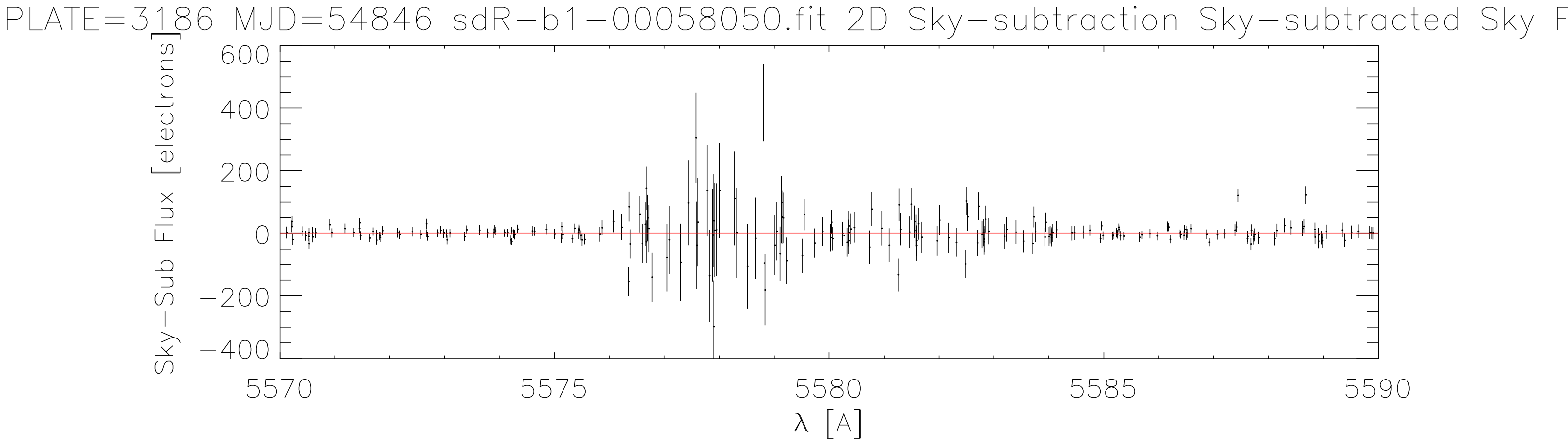
Number of sky fibers = 15

PLATE=3186 MJD=54846 sdR-b1-00058050.fit 1D Sky-subtraction Rescaled Errors



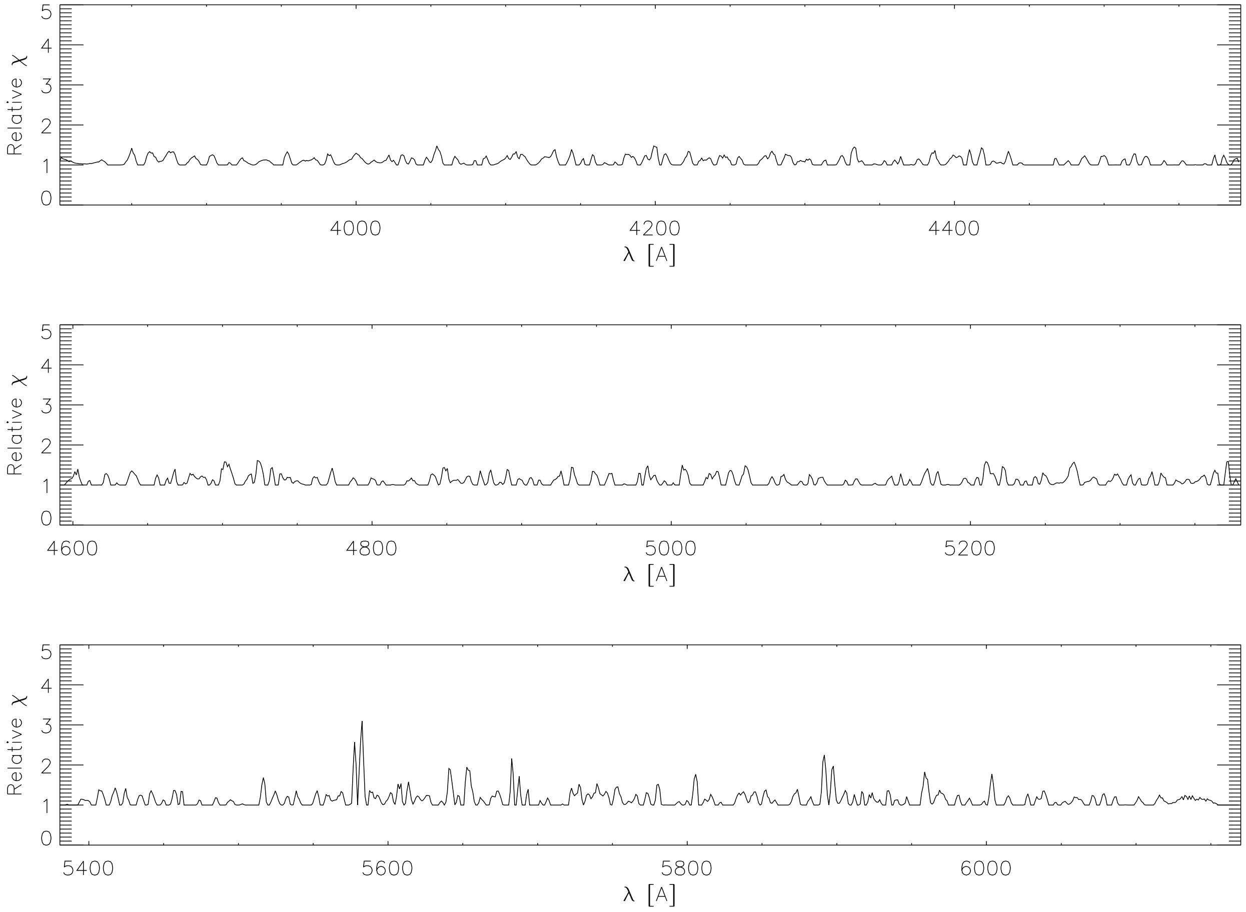

PLATE=3186 MJD=54846 sdR-b1-00058050.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
15
50
100
150
200
250
300
Fiber number

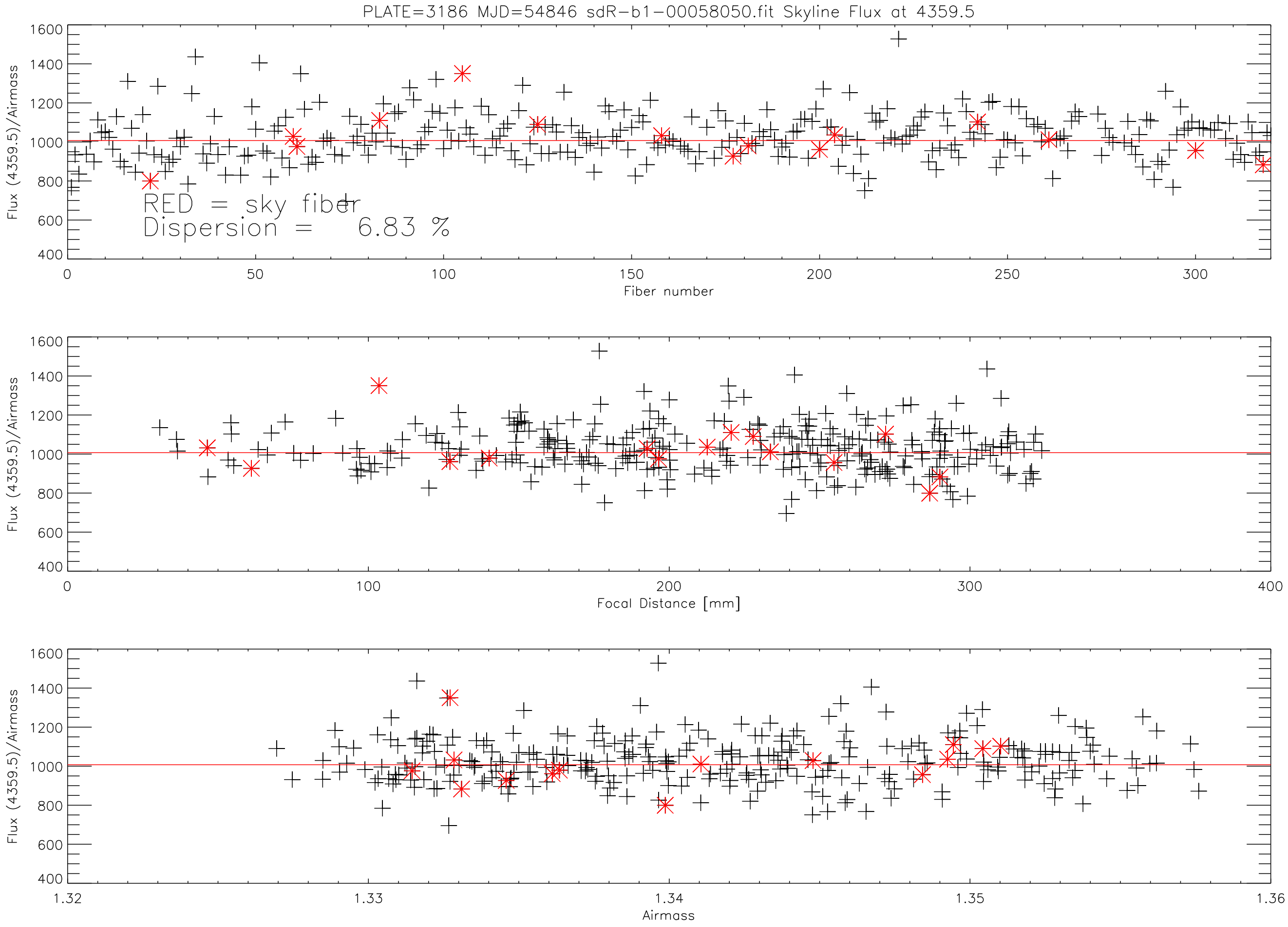

PLATE=3186 MJD=54846 sdR-b1-00058050.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

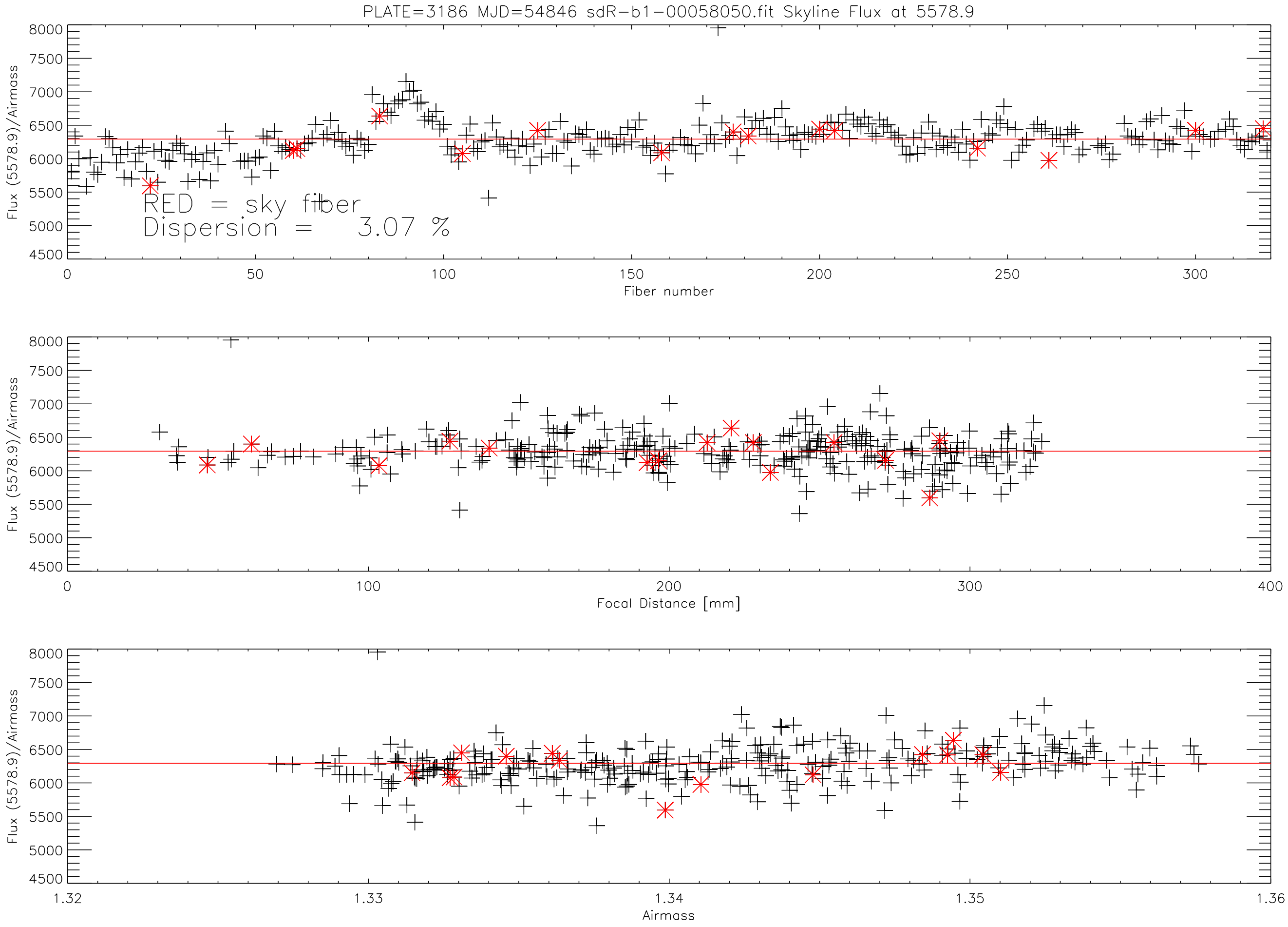

PLATE=3186 MJD=54846 sdR-b1-00058050.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 15

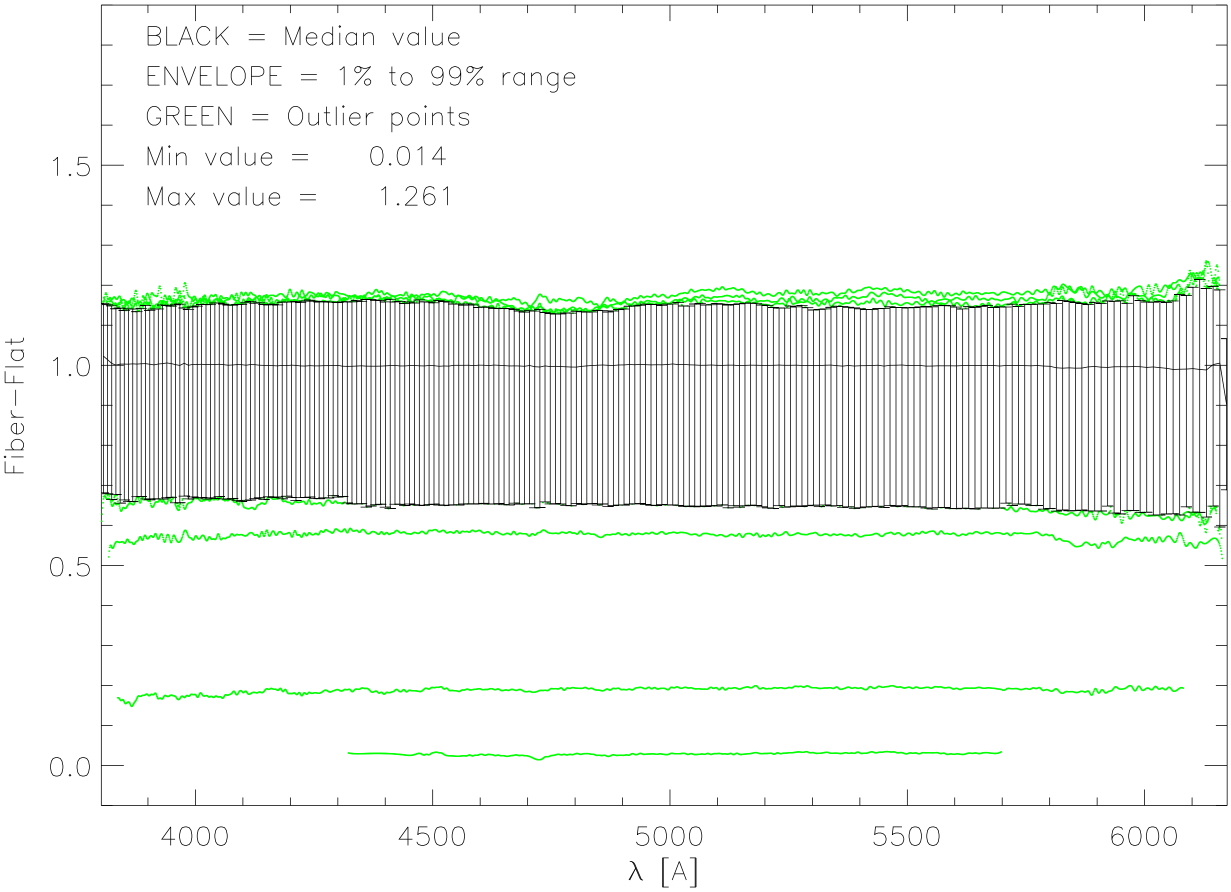
PLATE=3186 MJD=54846 sdR-b1-00058050.fit 2D Sky-subtraction Rescaled Errors




PLATE=3186 MJD=54846 sdR-b1-00058050.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
RED = sky fiber
Dispersion = 6.83 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
1.32
1.33
1.34
1.35
1.36
Airmass


PLATE=3186 MJD=54846 sdR-b1-00058050.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 3.07 %
Flux (5578.9)/Airmass
8000
7500
7000
6500
6000
5500
5000
4500
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.32
1.33
1.34
1.35
1.36
Airmass

PLATE=3186 MJD=54846 Fiber-Flats for sdR-b1-00058052.fit



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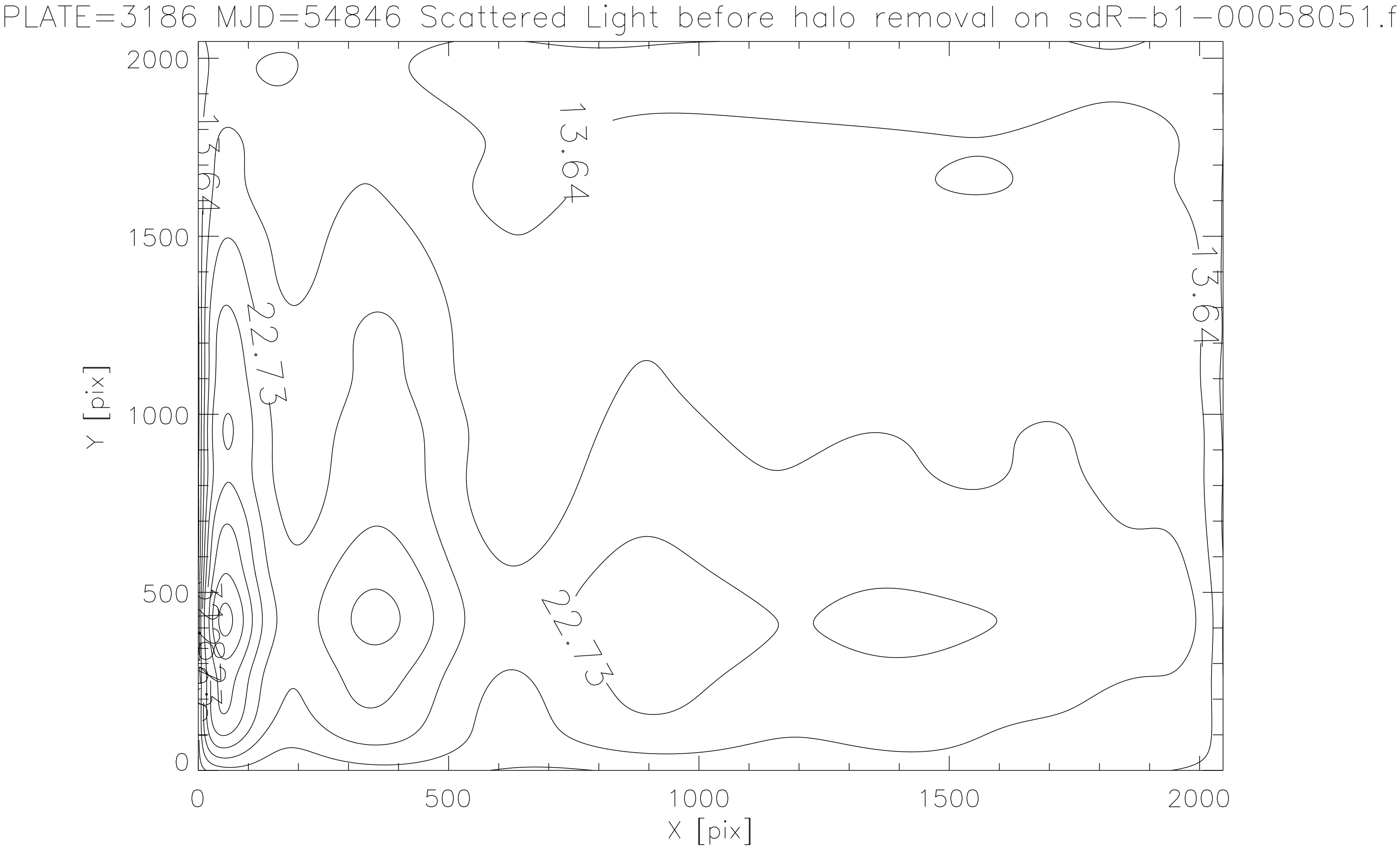
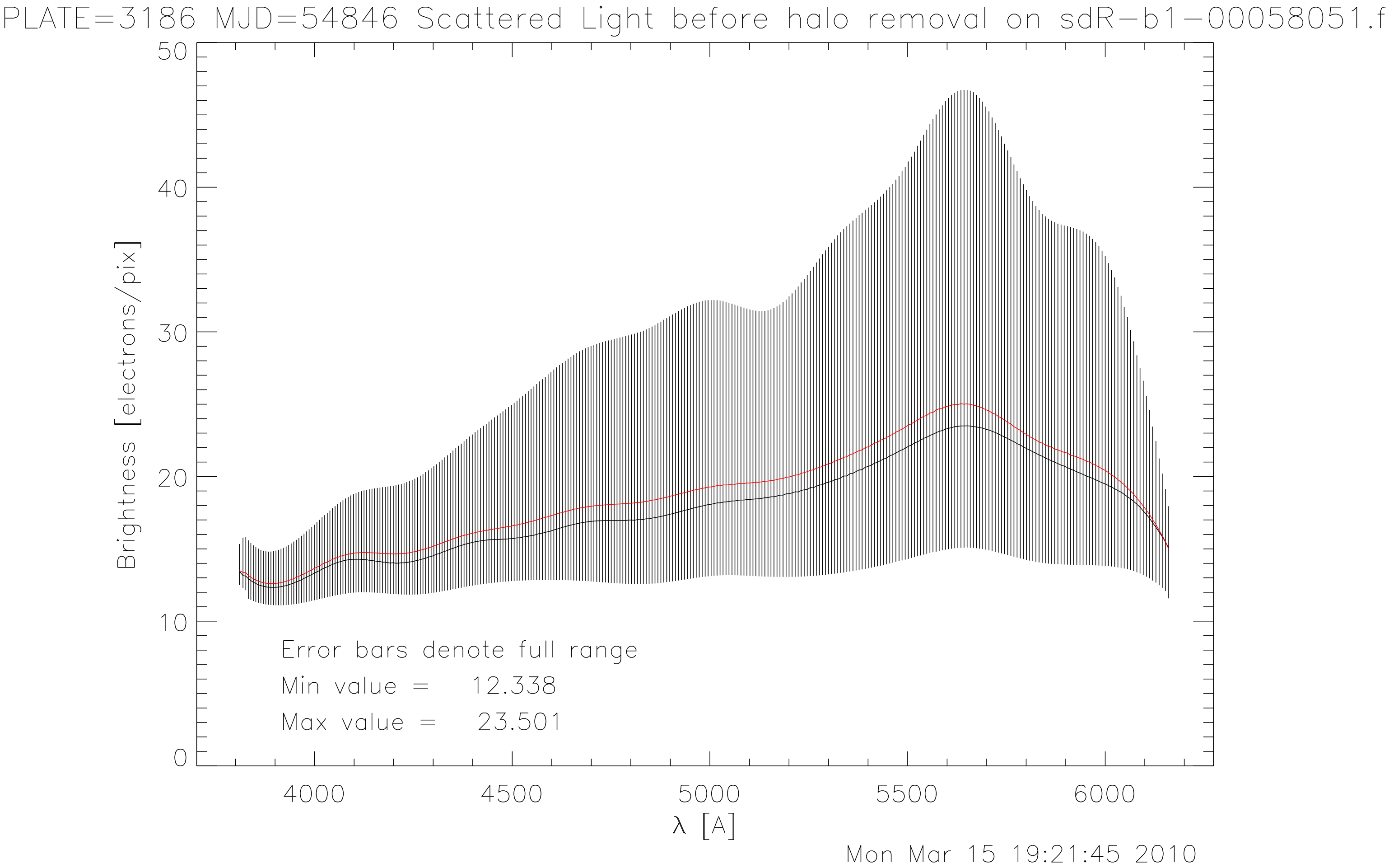
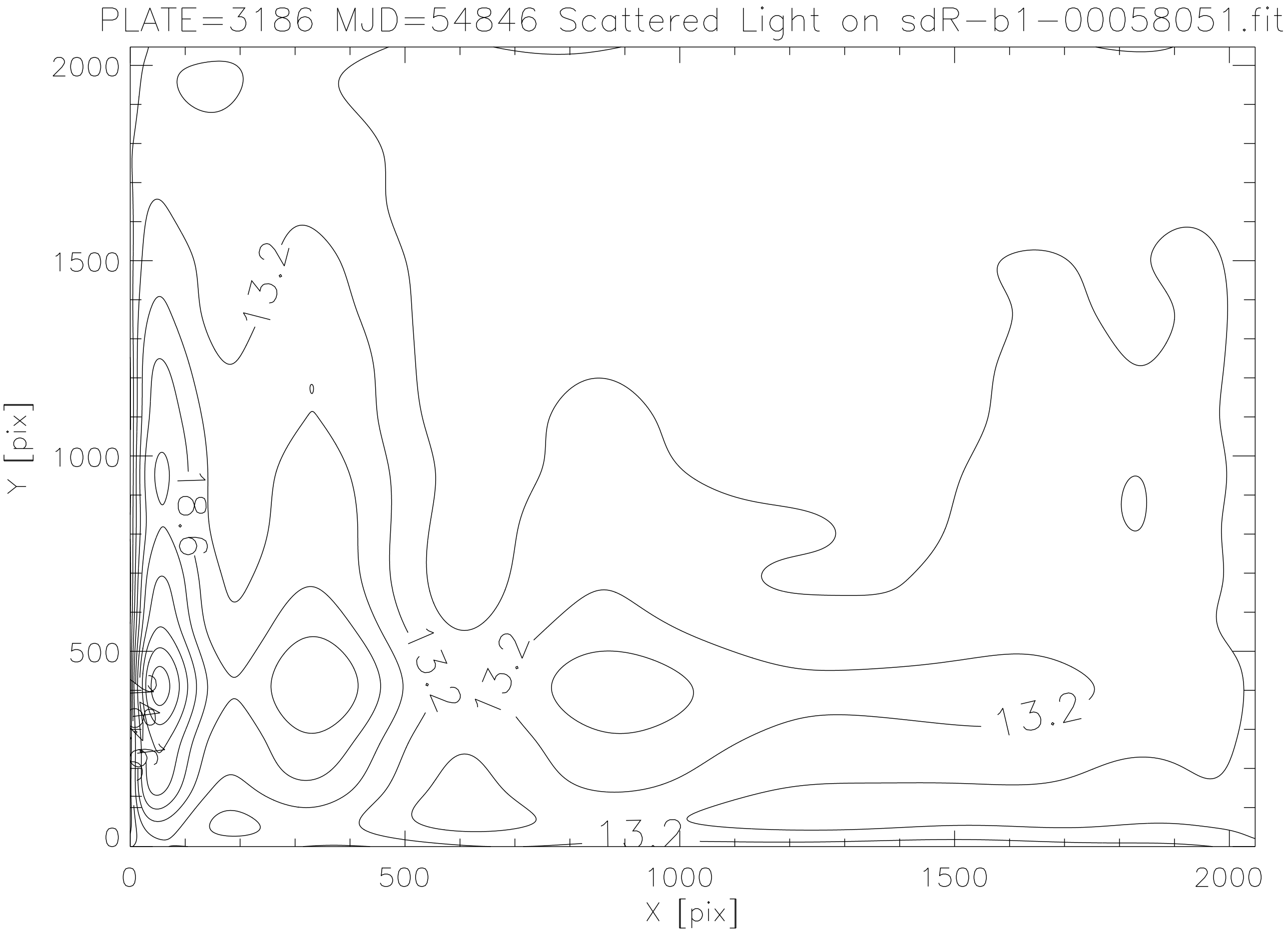
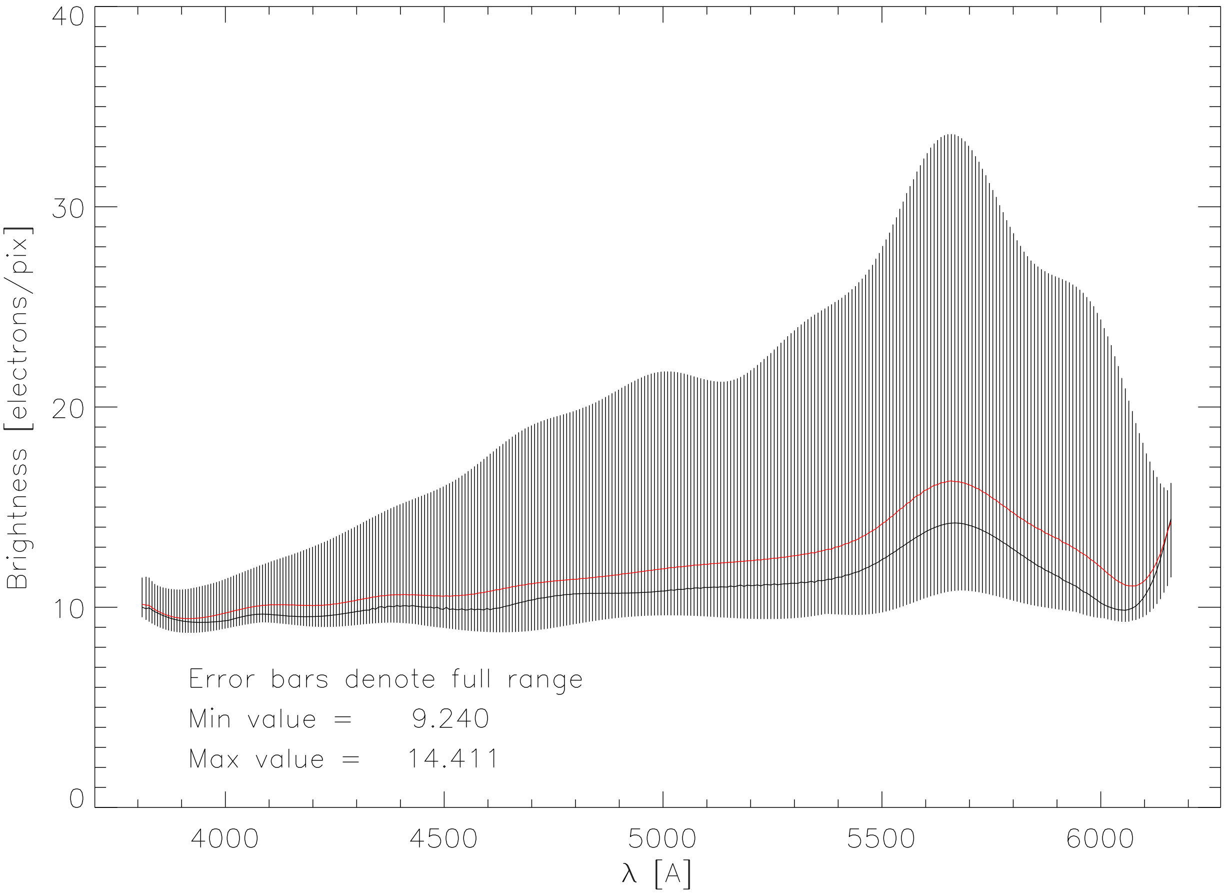

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b1-00058051.f
13.64
13.64
13.64
13.64
22.73
22.73
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]


PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b1-00058051.f
Brightness [electrons/pix]
50
40
30
20
10
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value =   12.338
Max value =   23.501
Mon Mar 15 19:21:45 2010


PLATE=3186 MJD=54846 Scattered Light on sdR-b1-00058051.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
13.2
13.2
13.2
13.2
13.2
13.2
18.6

PLATE=3186 MJD=54846 Scattered Light on sdR-b1-00058051.fit



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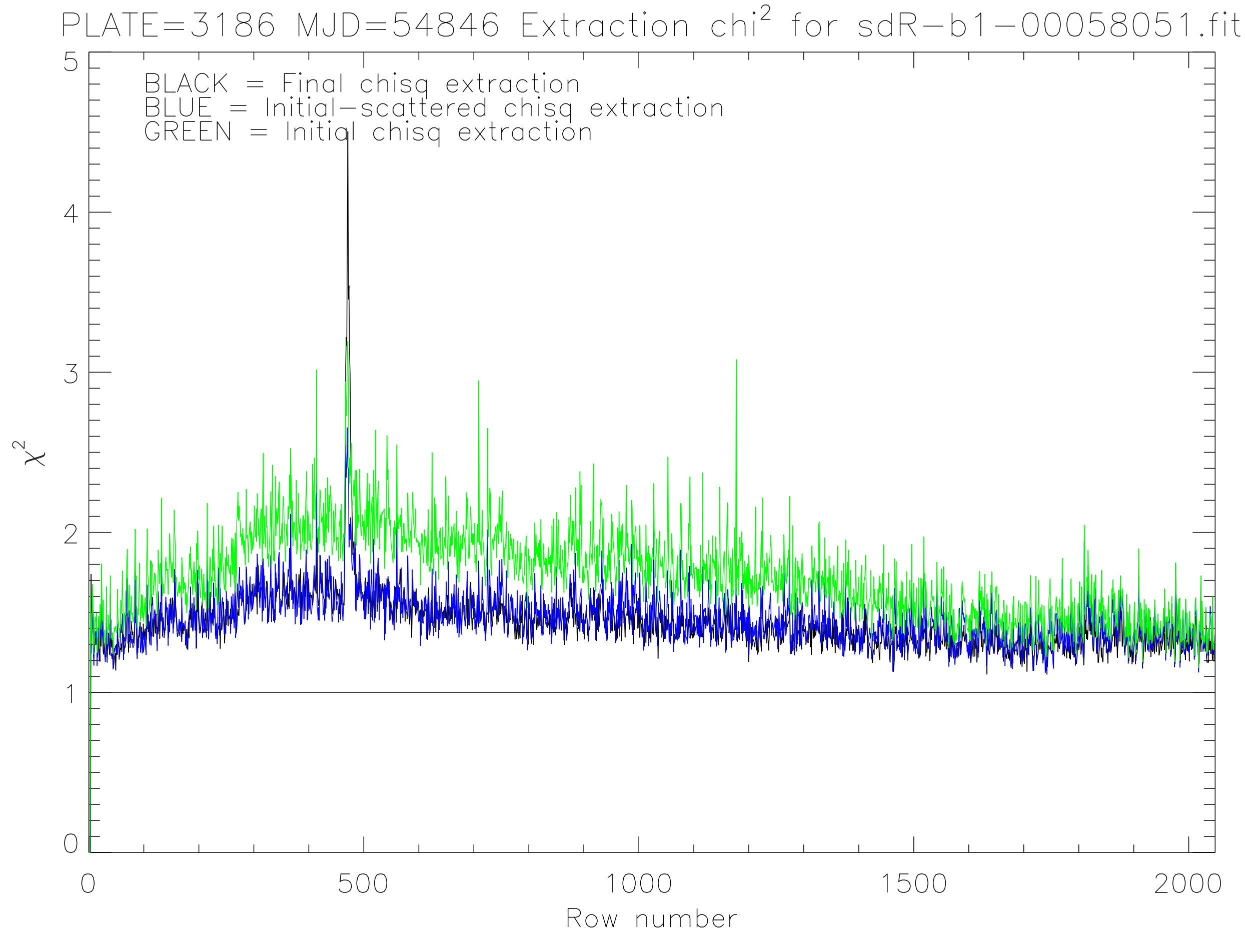
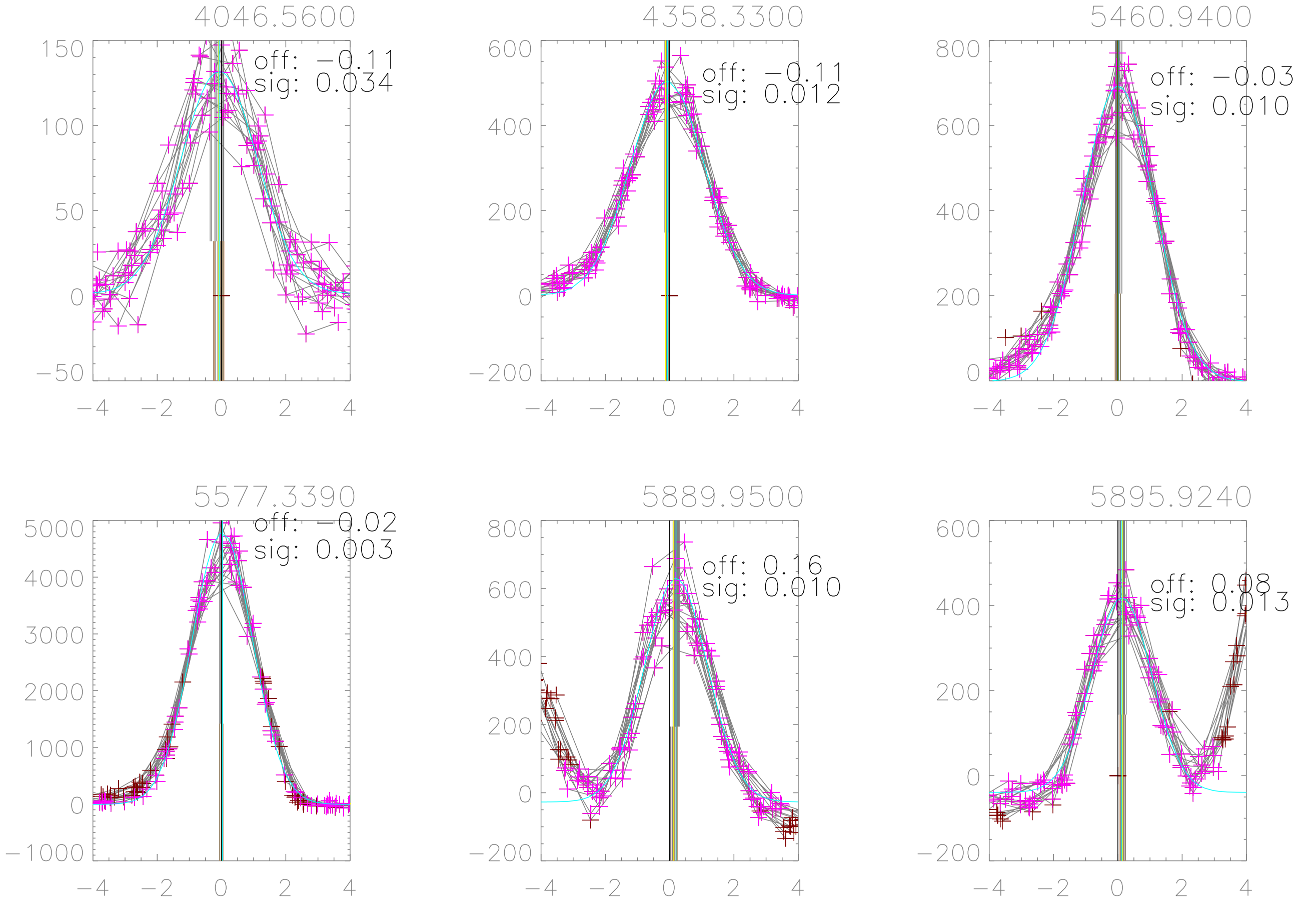
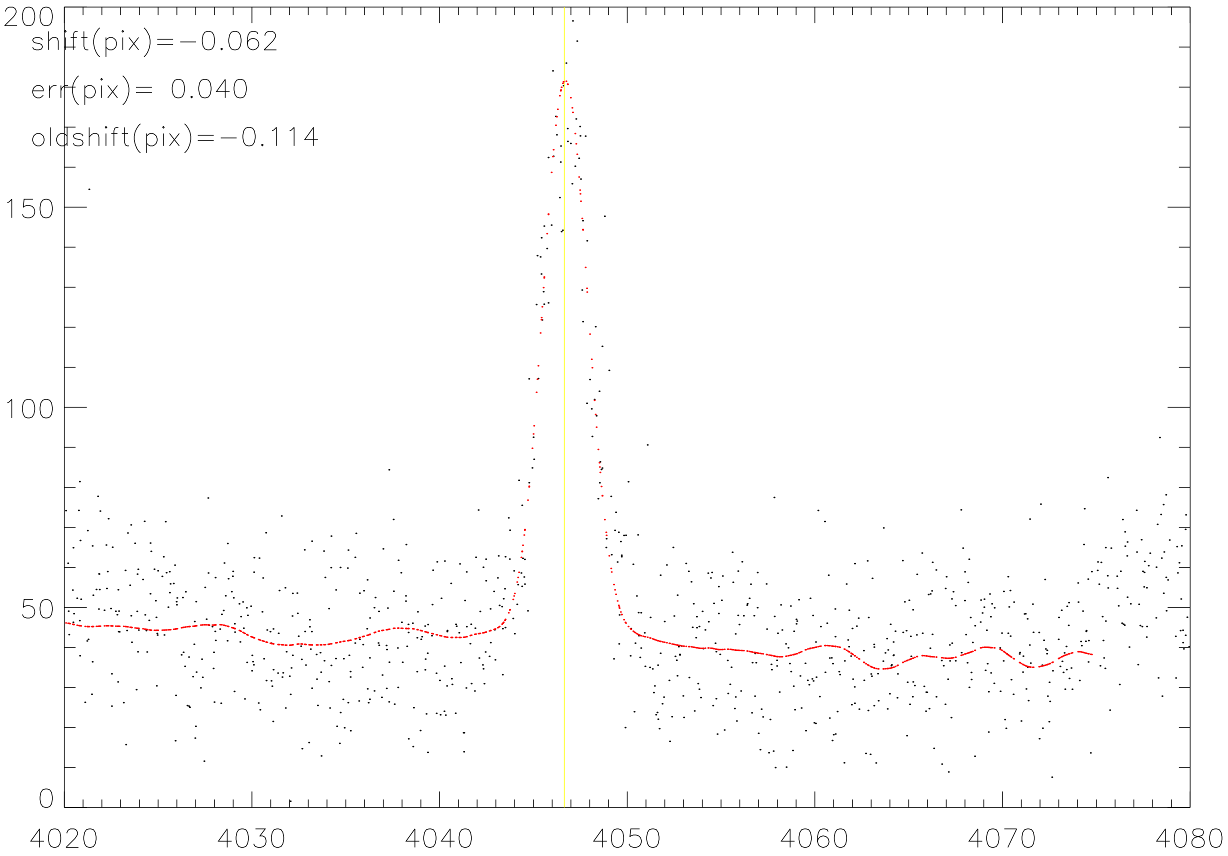
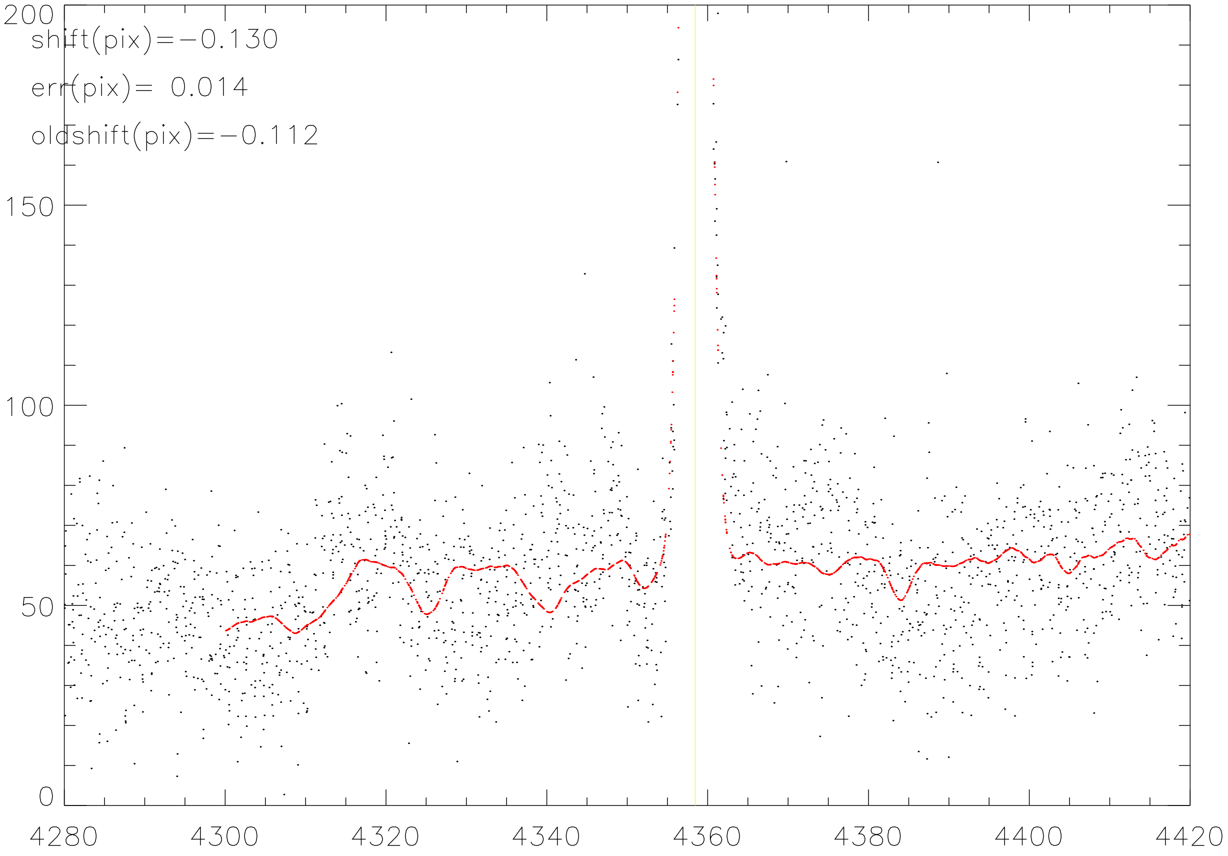
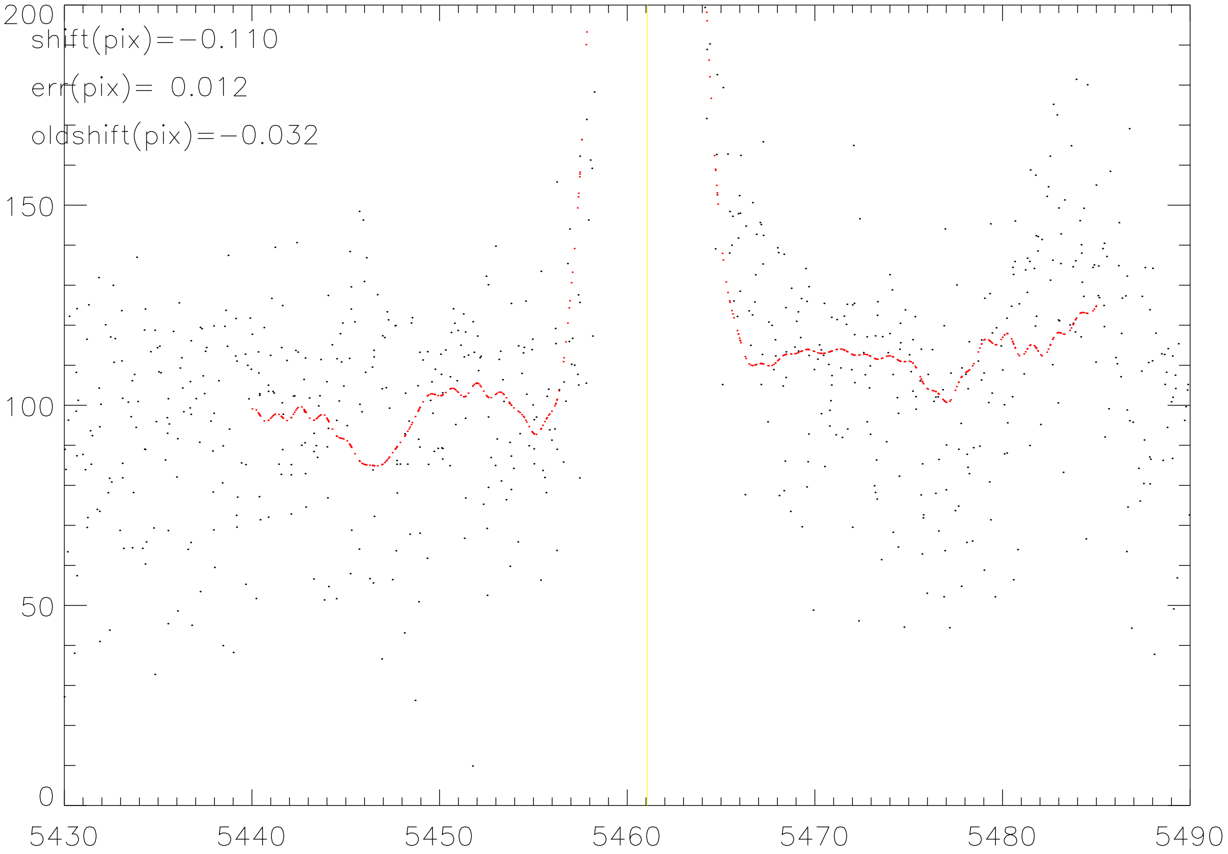

PLATE=3186 MJD=54846 Extraction chi^2 for sdR-b1-00058051.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

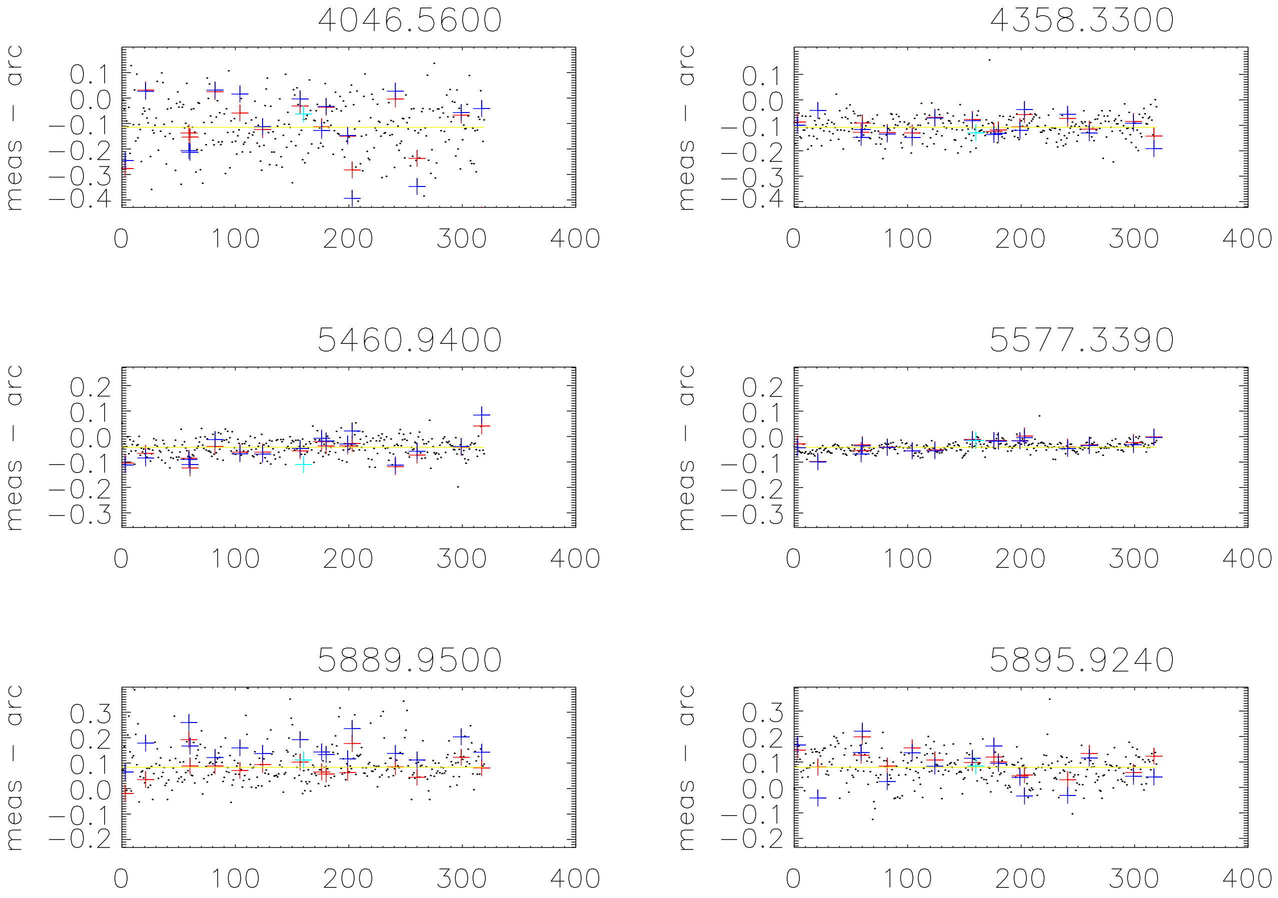

4046.5600
off: −0.11
sig: 0.034
4358.3300
off: −0.11
sig: 0.012
5460.9400
off: −0.03
sig: 0.010
5577.3390
off: −0.02
sig: 0.003
5889.9500
off: 0.16
sig: 0.010
5895.9240
off: 0.08
sig: 0.013
150
100
50
0
−50
600
400
200
0
−200
800
600
400
200
0
5000
4000
3000
2000
1000
0
−1000
800
600
400
200
0
−200
600
400
200
0
−200
−4
−2
0
2
4

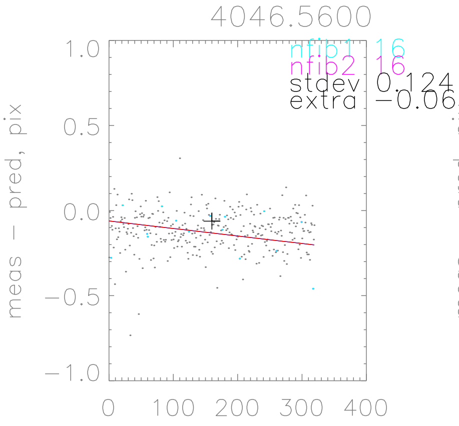


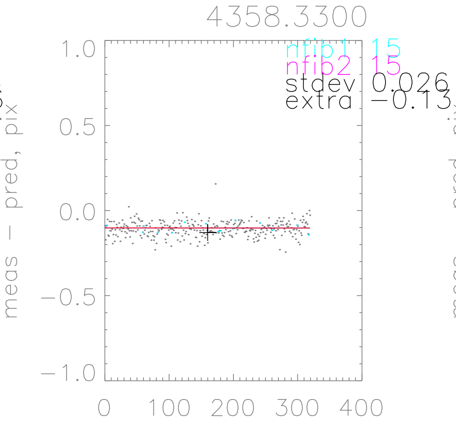
shift(pix)=−0.062
err(pix)= 0.040
oldshift(pix)=−0.114
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

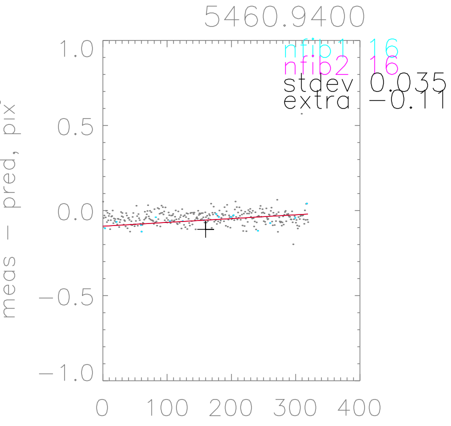

shift(pix)=−0.130
err(pix)= 0.014
oldshift(pix)=−0.112
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

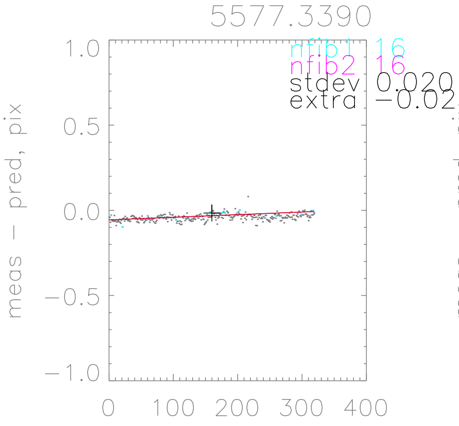

shift(pix)=−0.110
err(pix)= 0.012
oldshift(pix)=−0.032
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

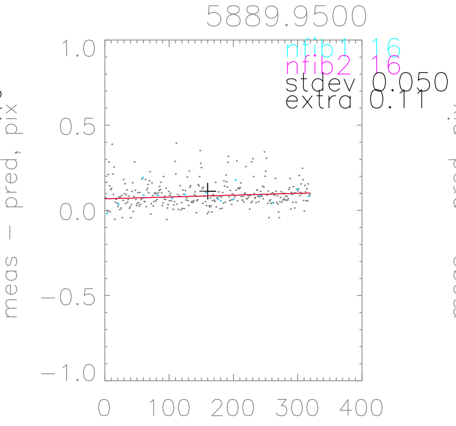

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0.2
0.3
0
100
200
300
400

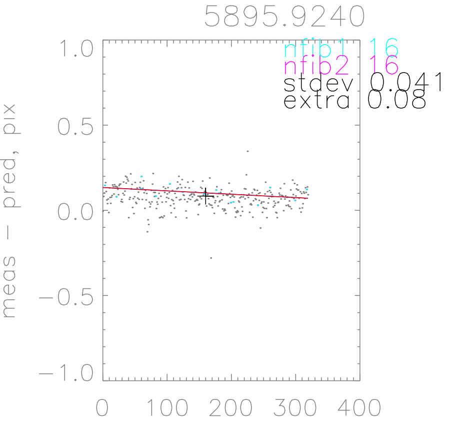

4046.5600
nfib1 16
nfib2 16
stdev 0.124
extra −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

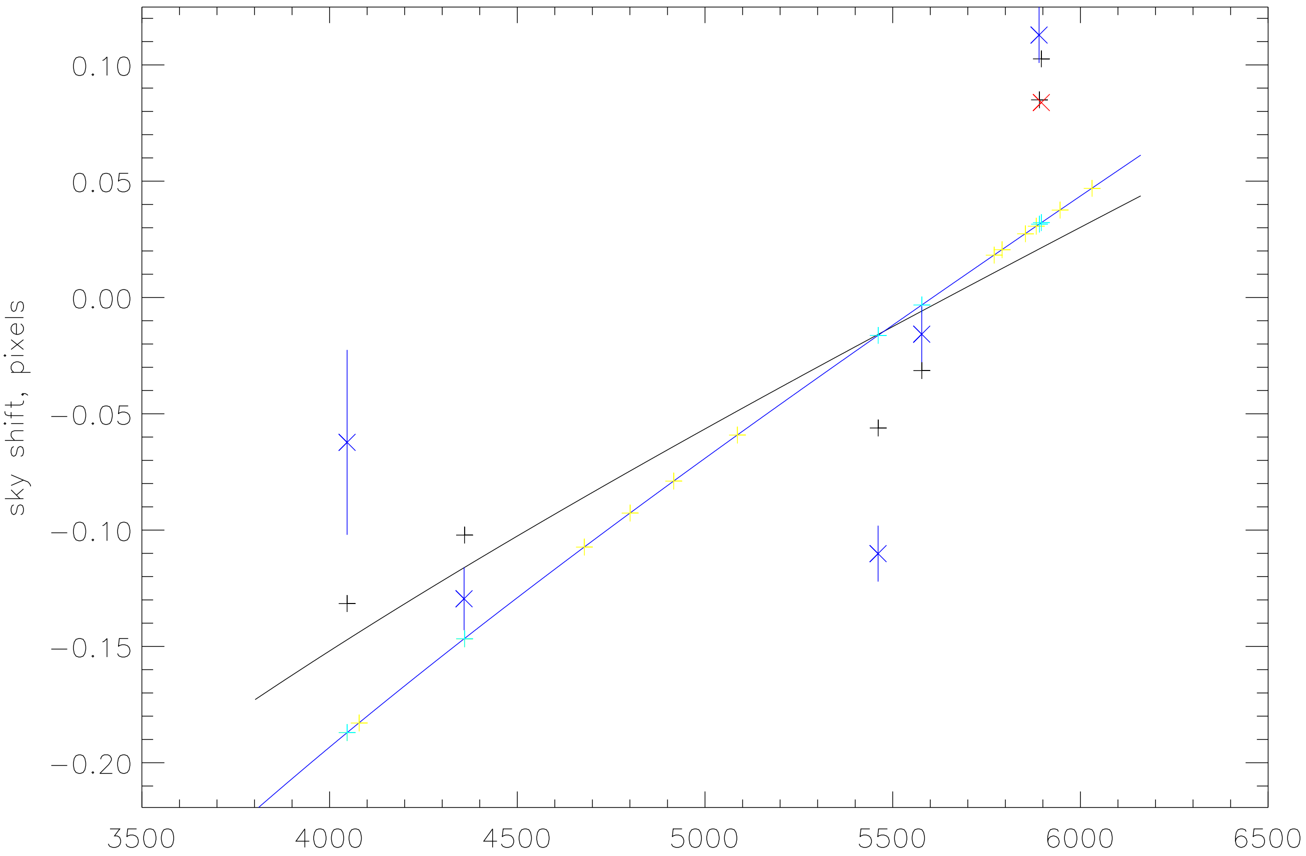

4358.3300
nfib1 15
nfib2 15
stdev 0.026
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

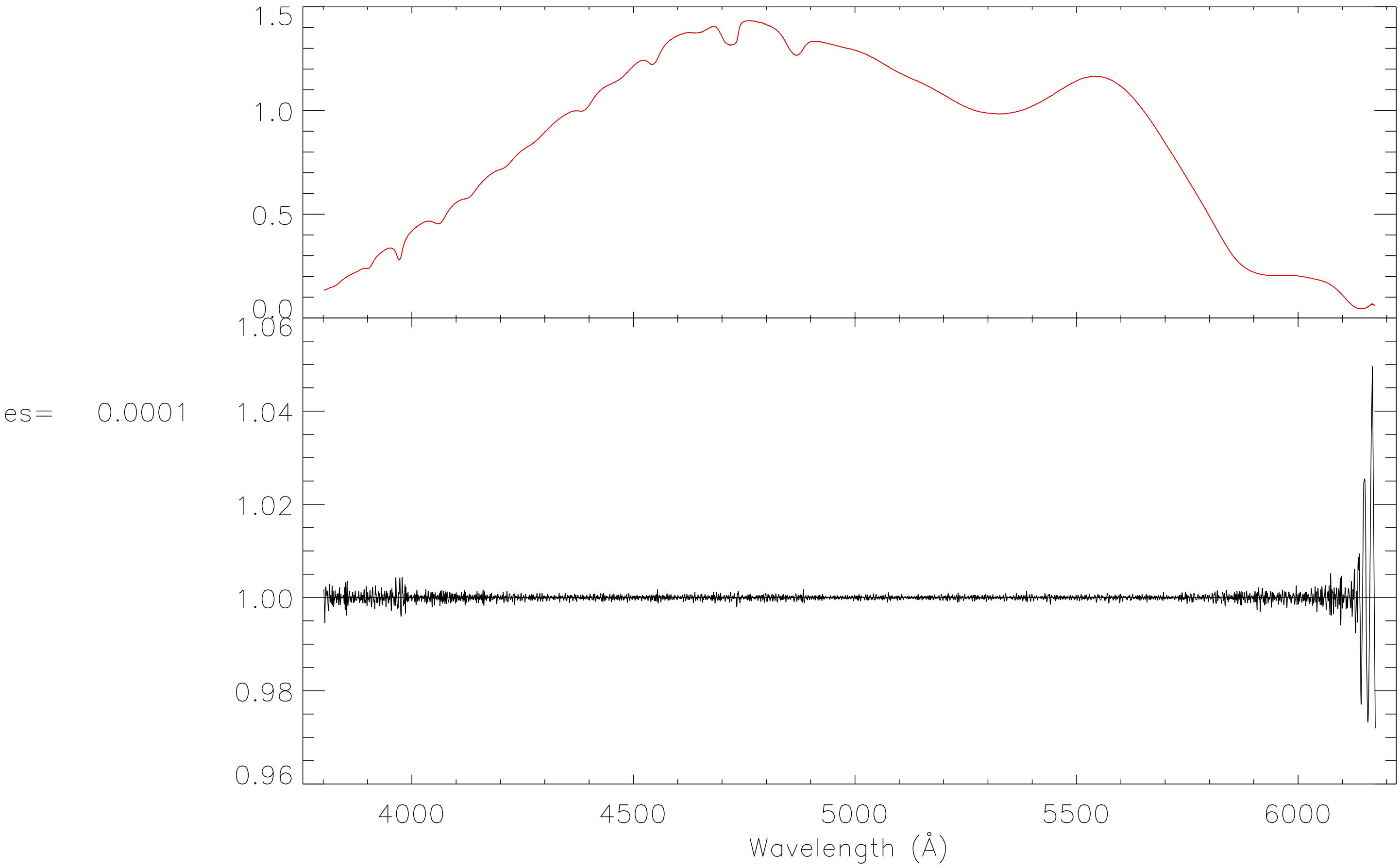

5460.9400
nfib1 16
nfib2 16
stdev 0.035
extra −0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


5889.9500
nfib1 16
nfib2 16
stdev 0.050
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

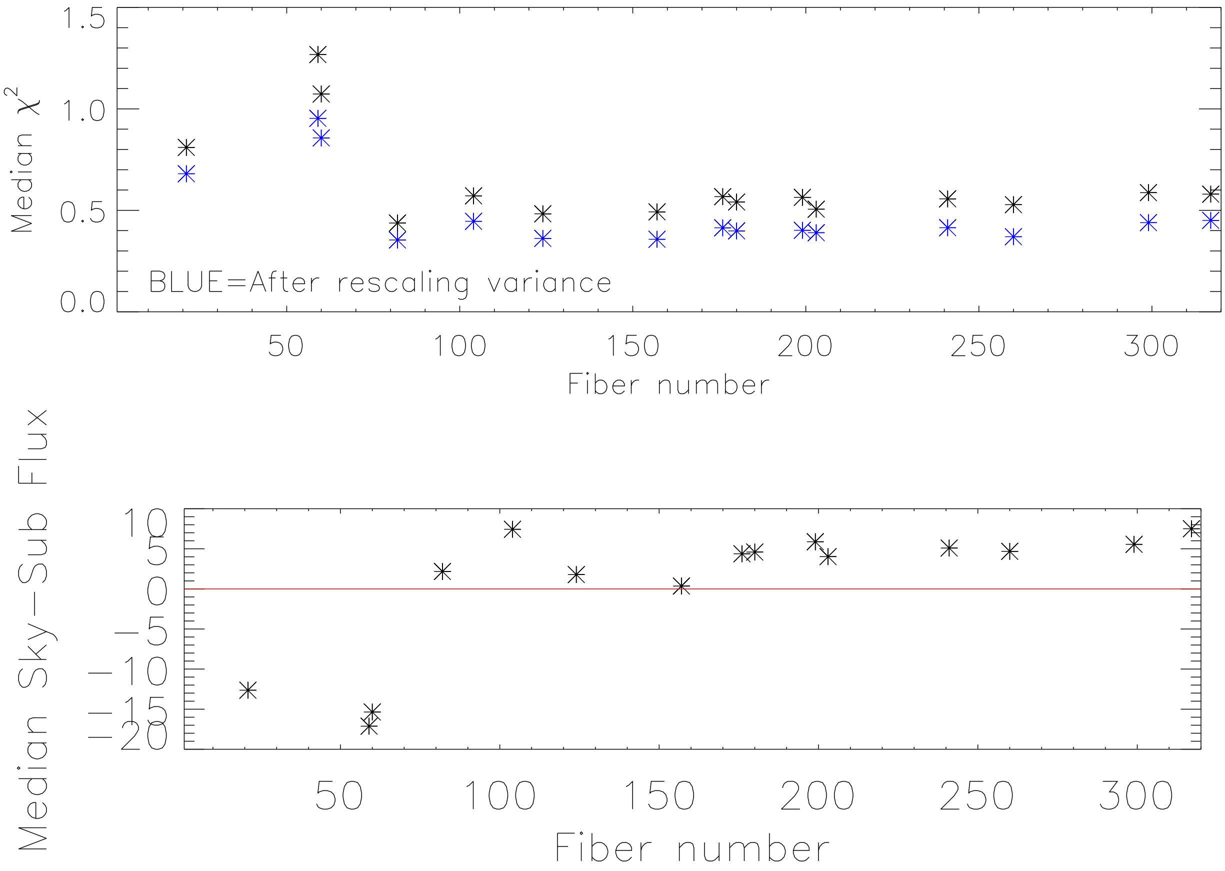

5895.9240
nfib1 16
nfib2 16
stdev 0.041
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

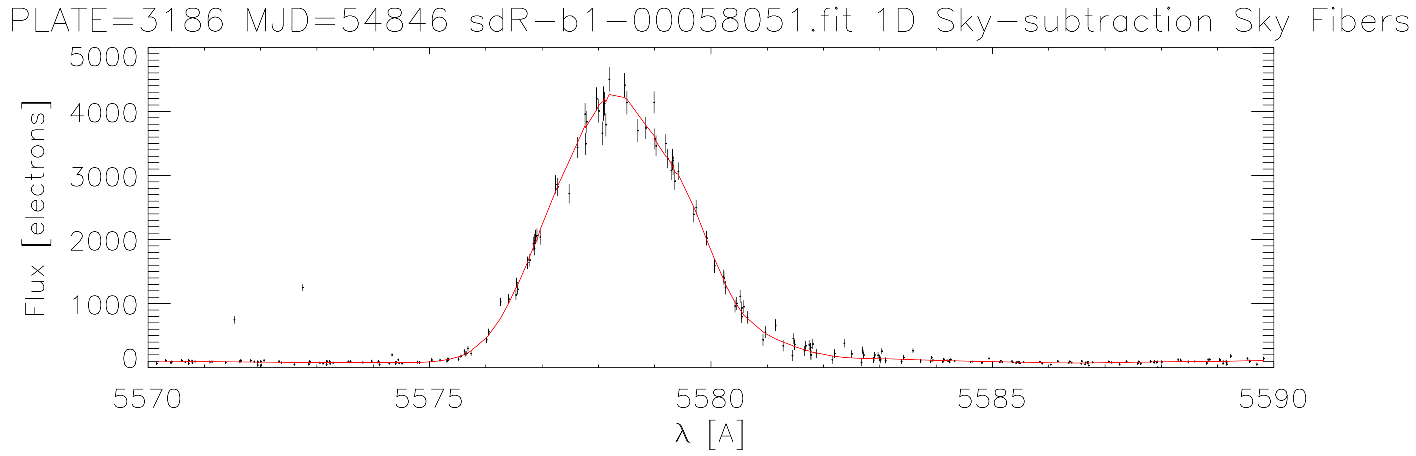

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
−0.20
3500
4000
4500
5000
5500
6000
6500

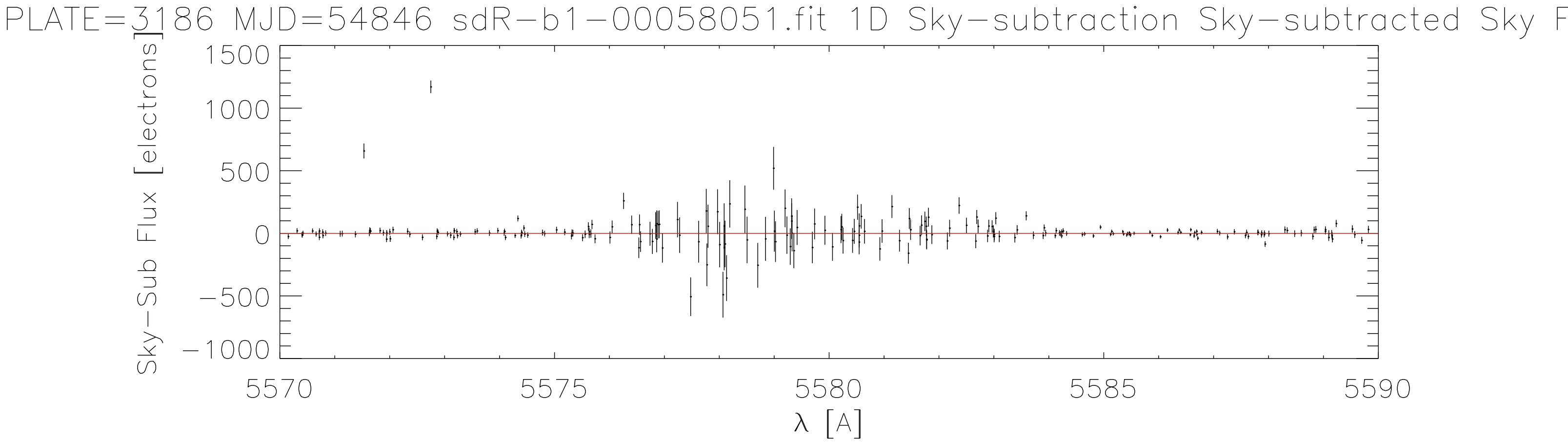


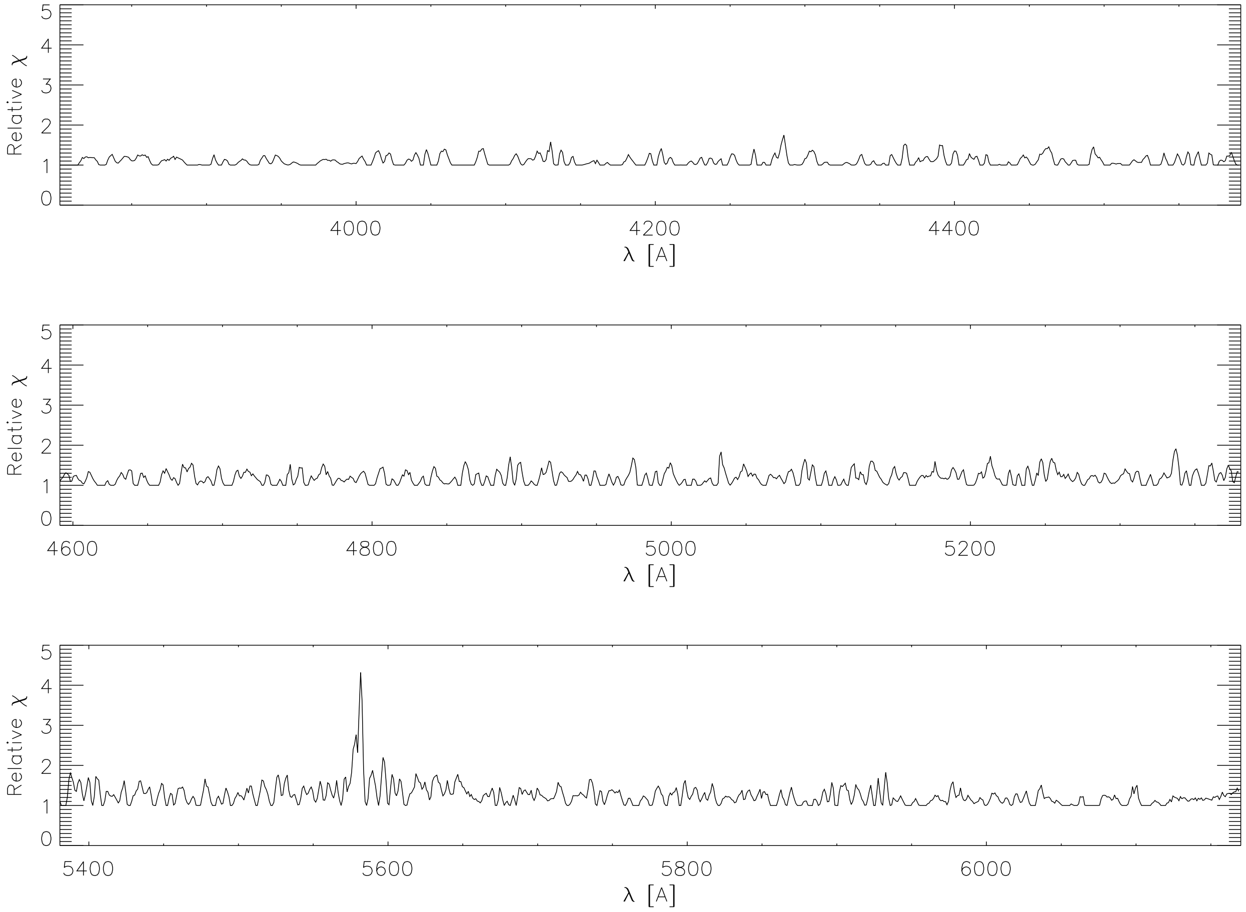
PLATE=3186 MJD=54846 Smooth superflat for sdR-b1-00058051.fit

PLATE=3186 MJD=54846 sdR-b1-00058051.fit 1D Sky-subtraction Sky Fiber



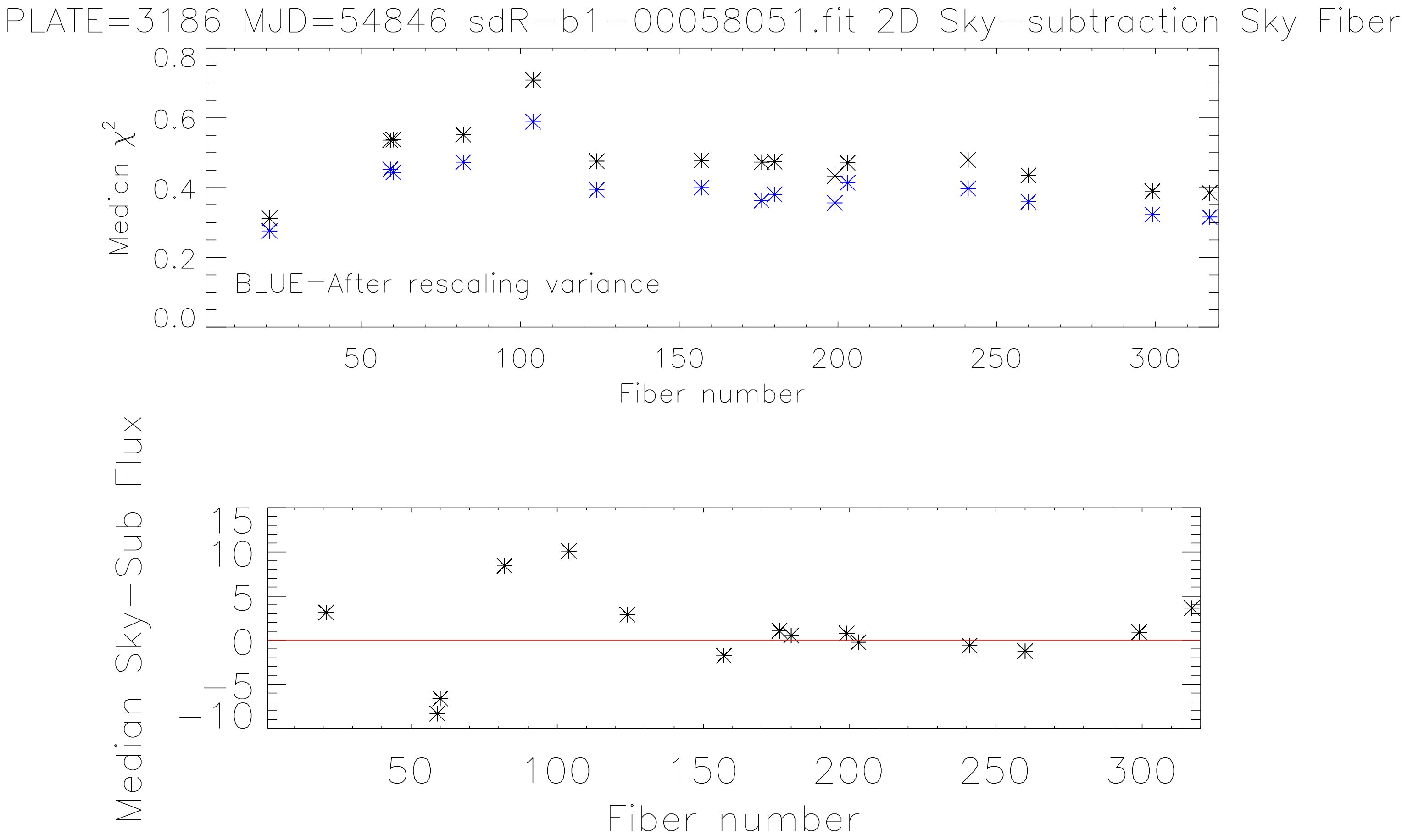

PLATE=3186 MJD=54846 sdR-b1-00058051.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=3186 MJD=54846 sdR-b1-00058051.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

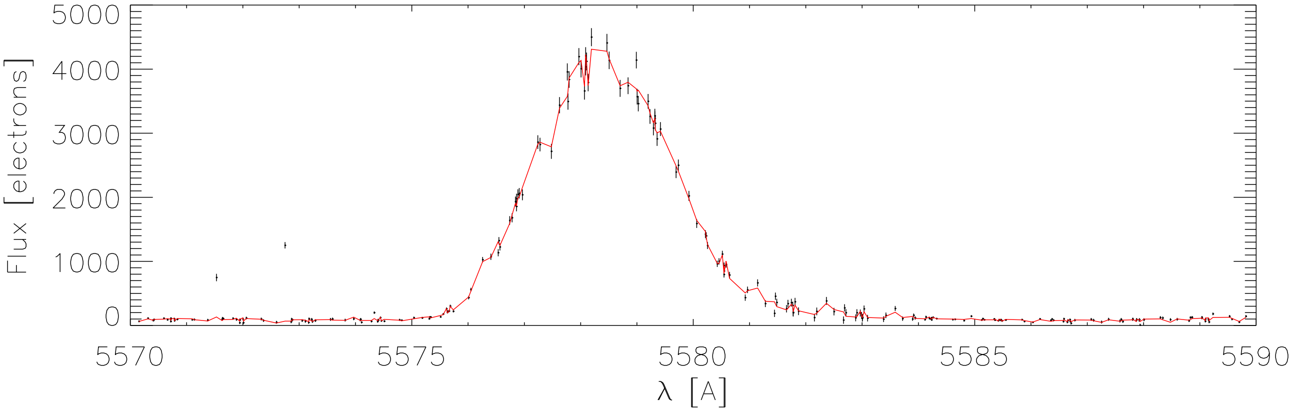


Number of sky fibers = 15

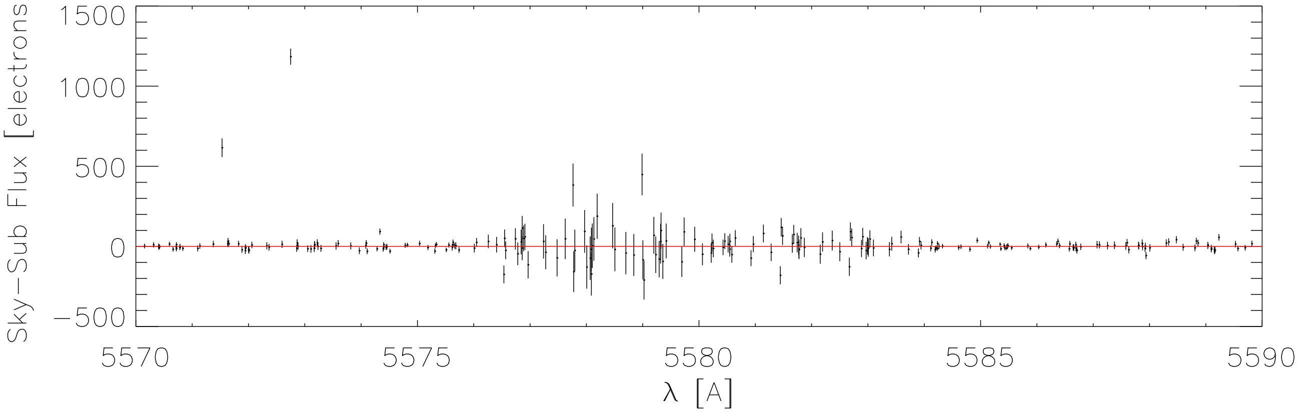
PLATE=3186 MJD=54846 sdR-b1-00058051.fit 1D Sky-subtraction Rescaled Errors


PLATE=3186 MJD=54846 sdR-b1-00058051.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

PLATE=3186 MJD=54846 sdR-b1-00058051.fit 2D Sky-subtraction Sky Fibers

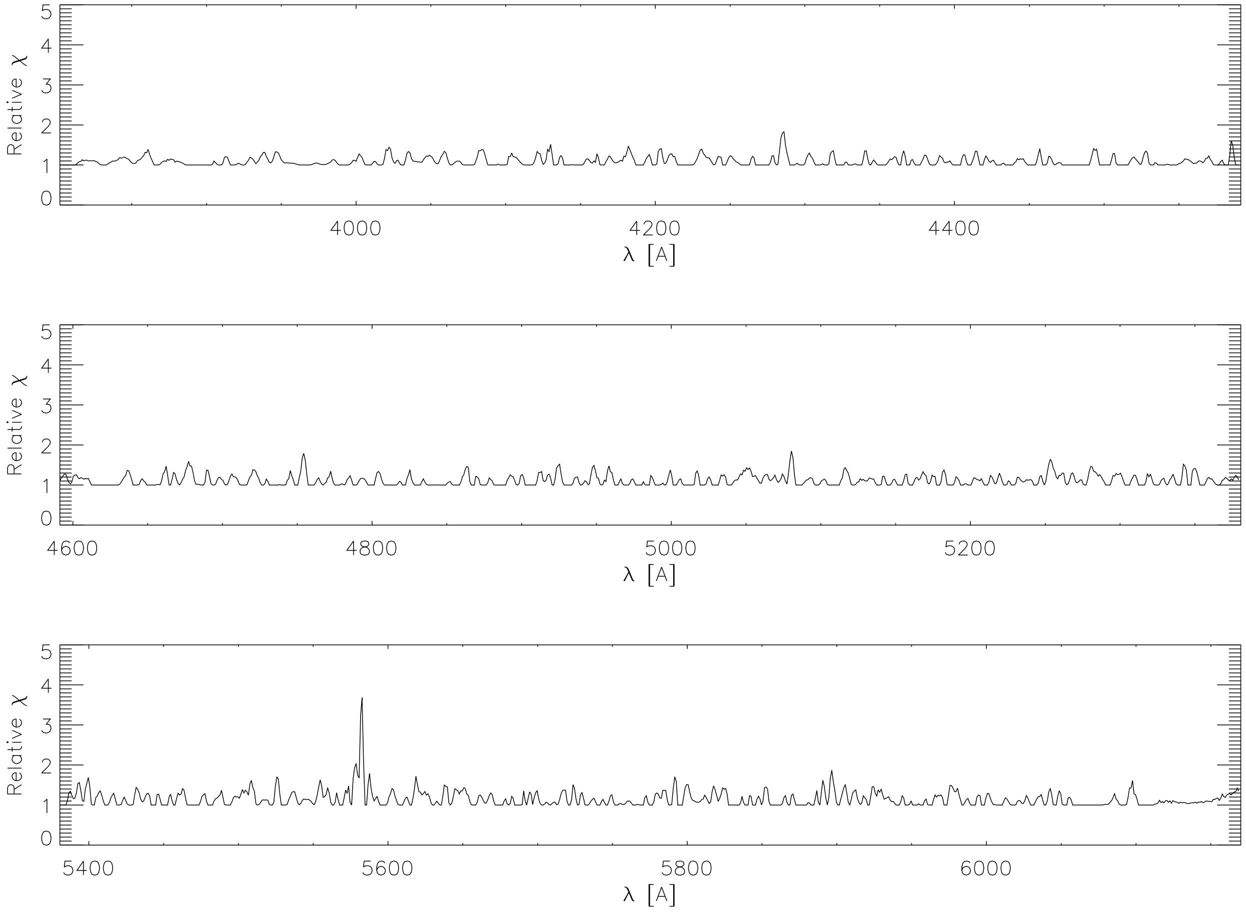


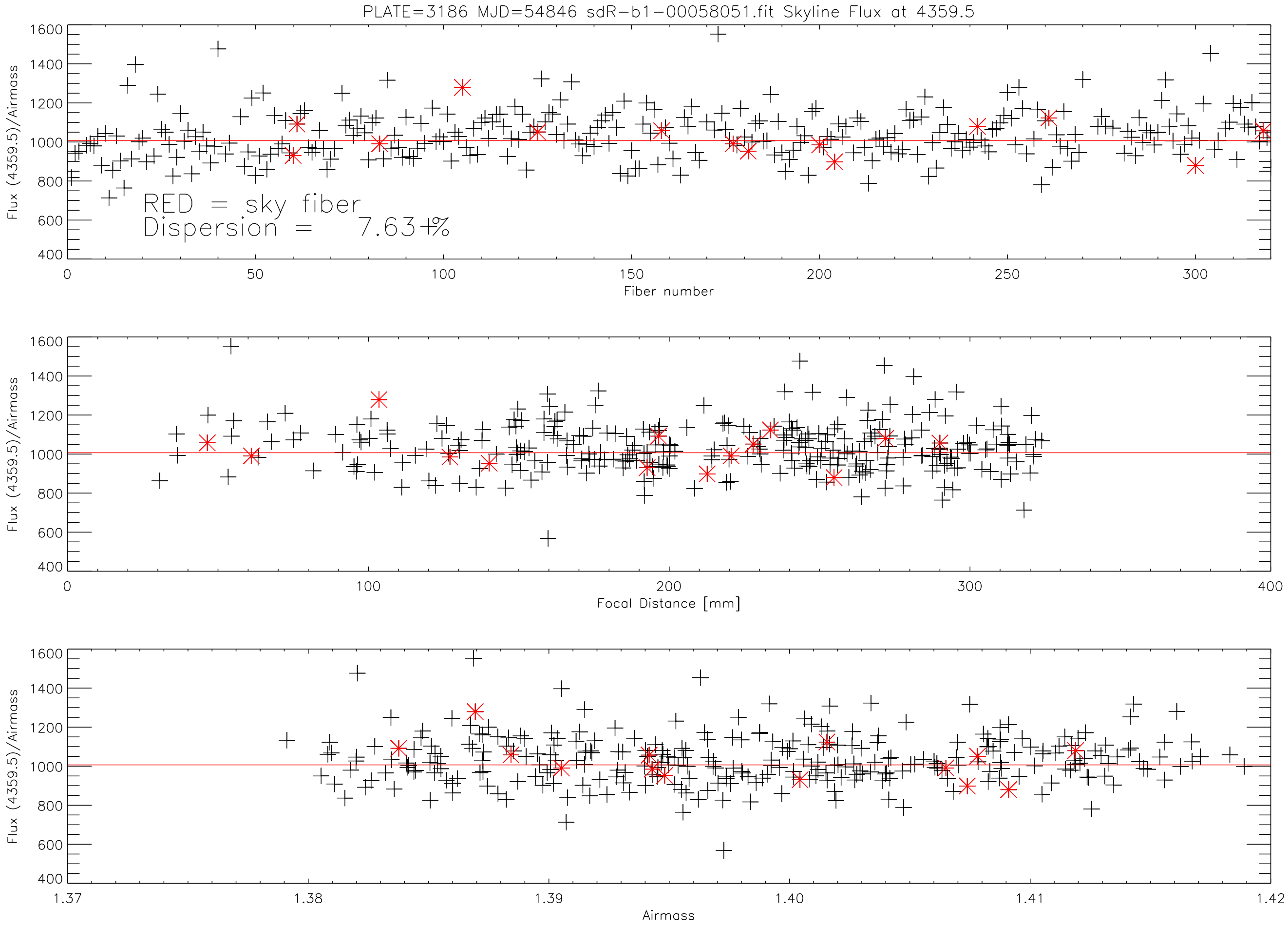
PLATE=3186 MJD=54846 sdR-b1-00058051.fit 2D Sky-subtraction Sky-subtracted Sky F

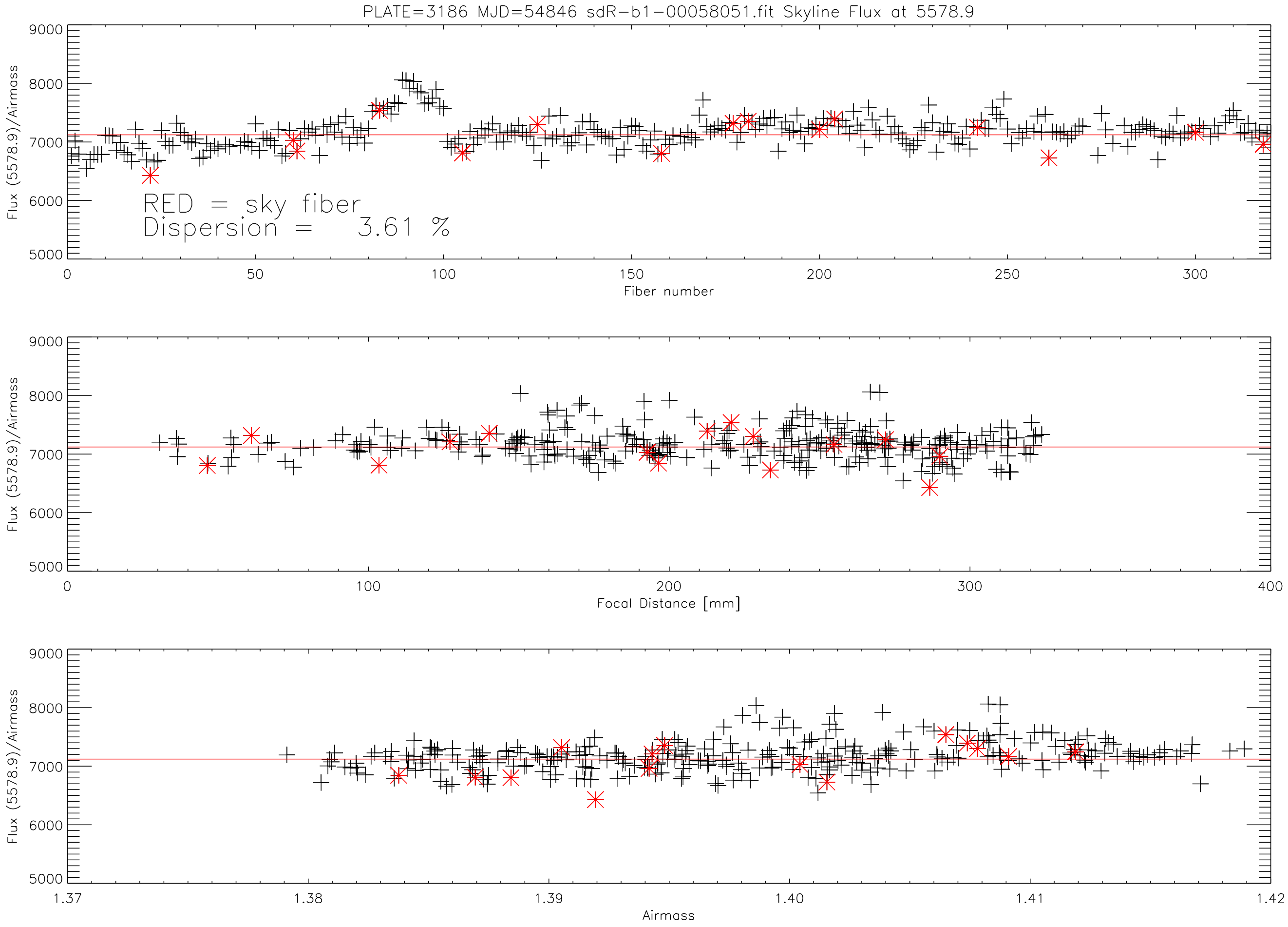


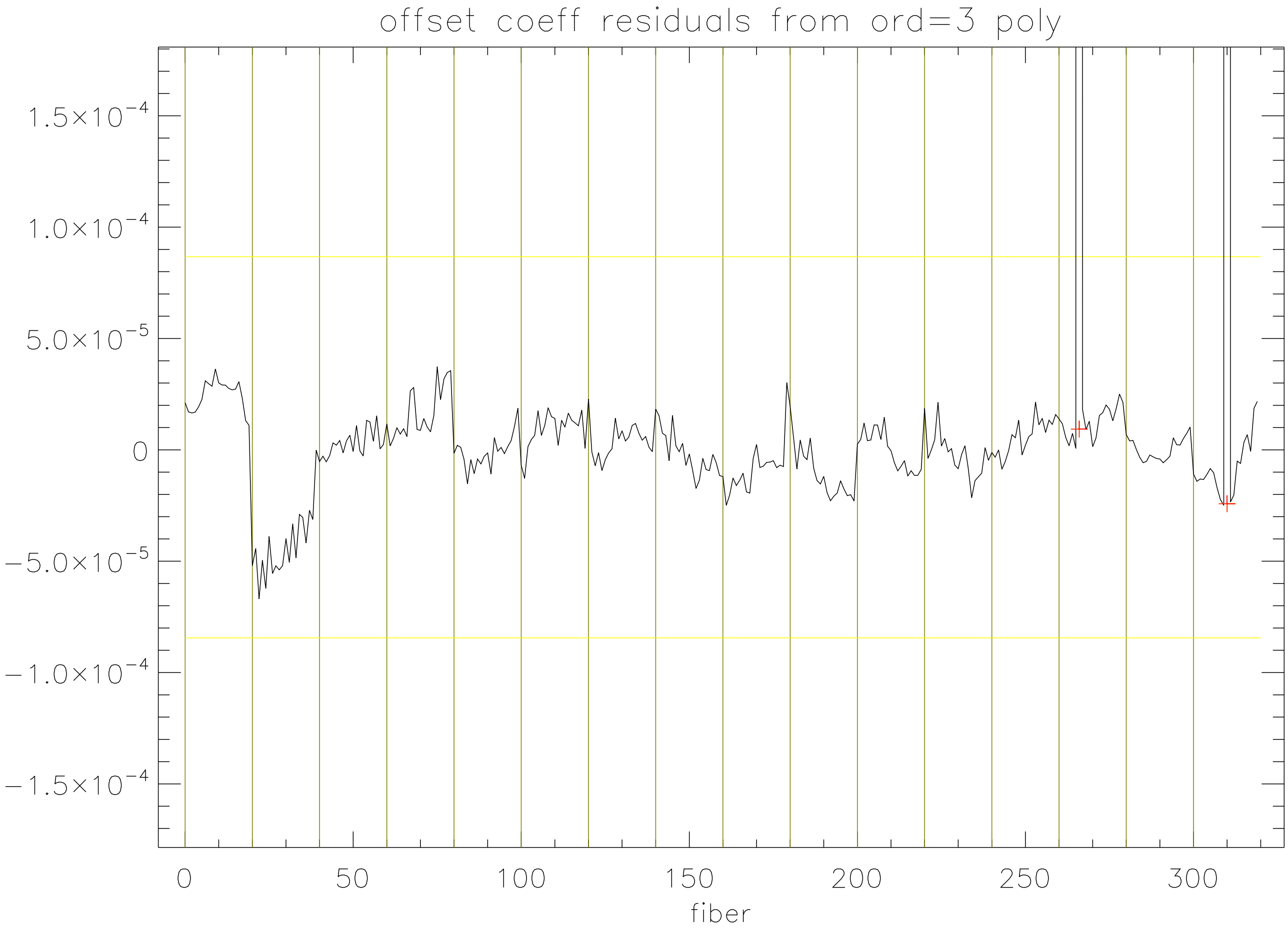
Number of sky fibers = 15

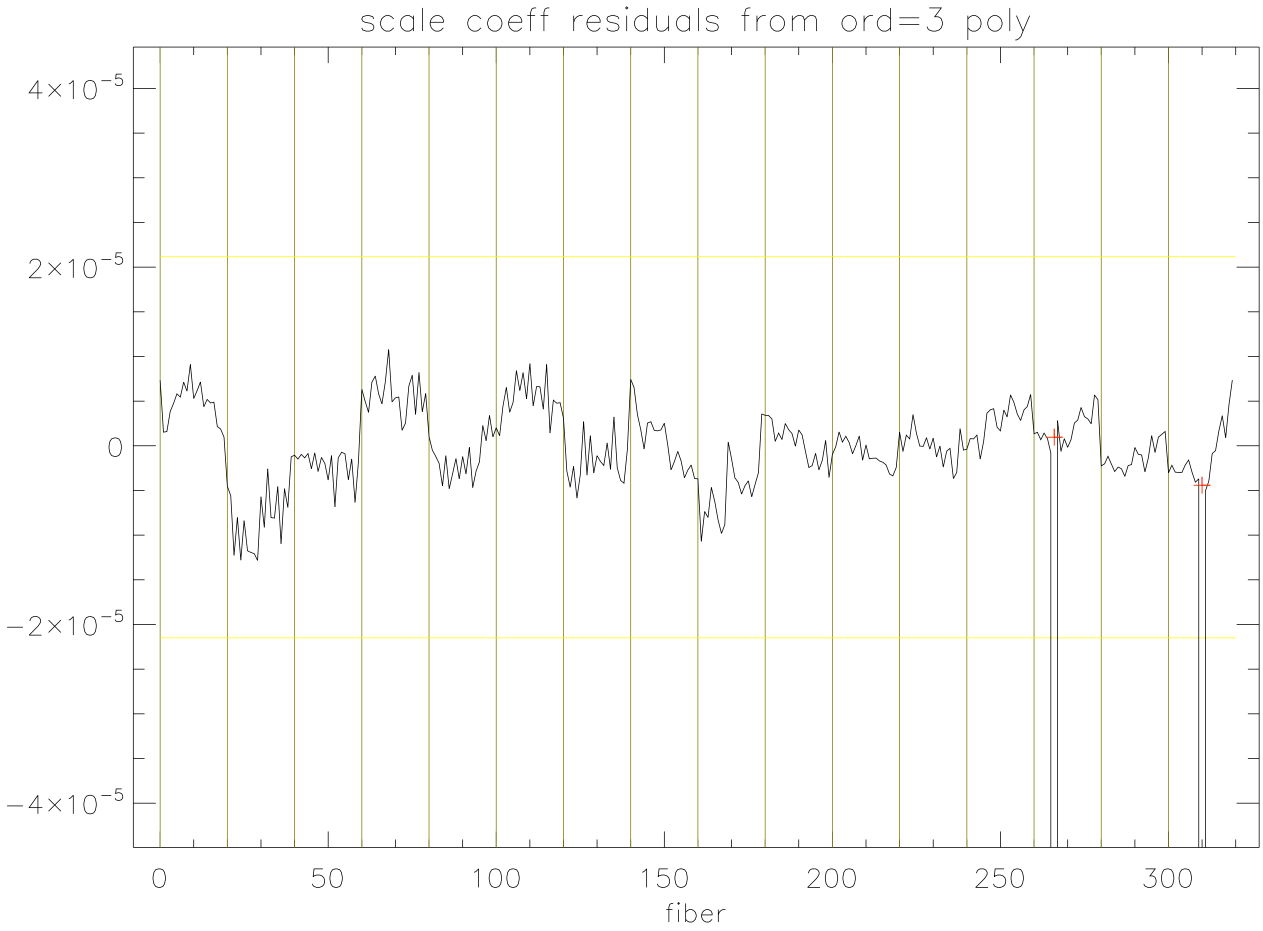
PLATE=3186 MJD=54846 sdR-b1-00058051.fit 2D Sky-subtraction Rescaled Errors

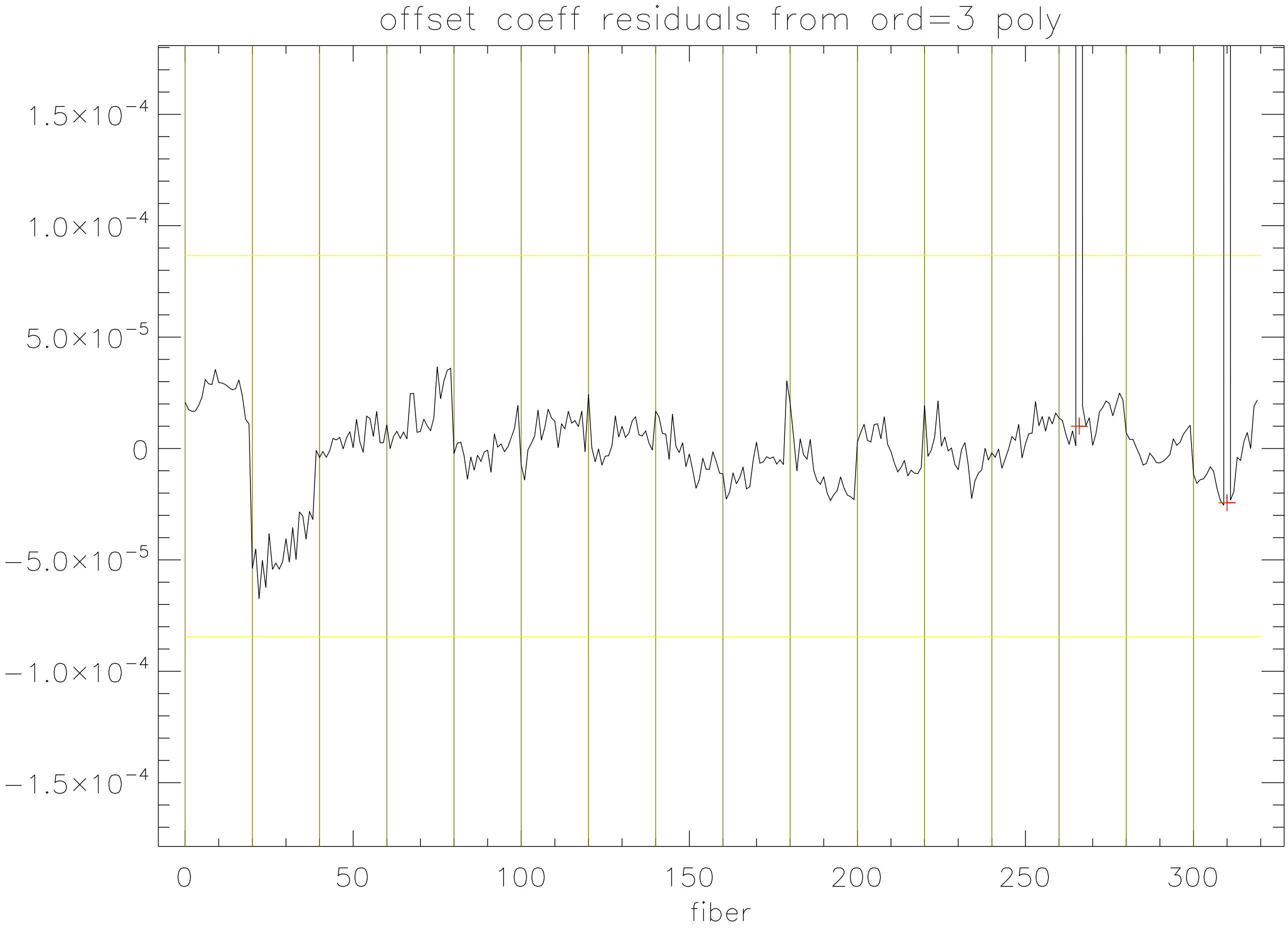


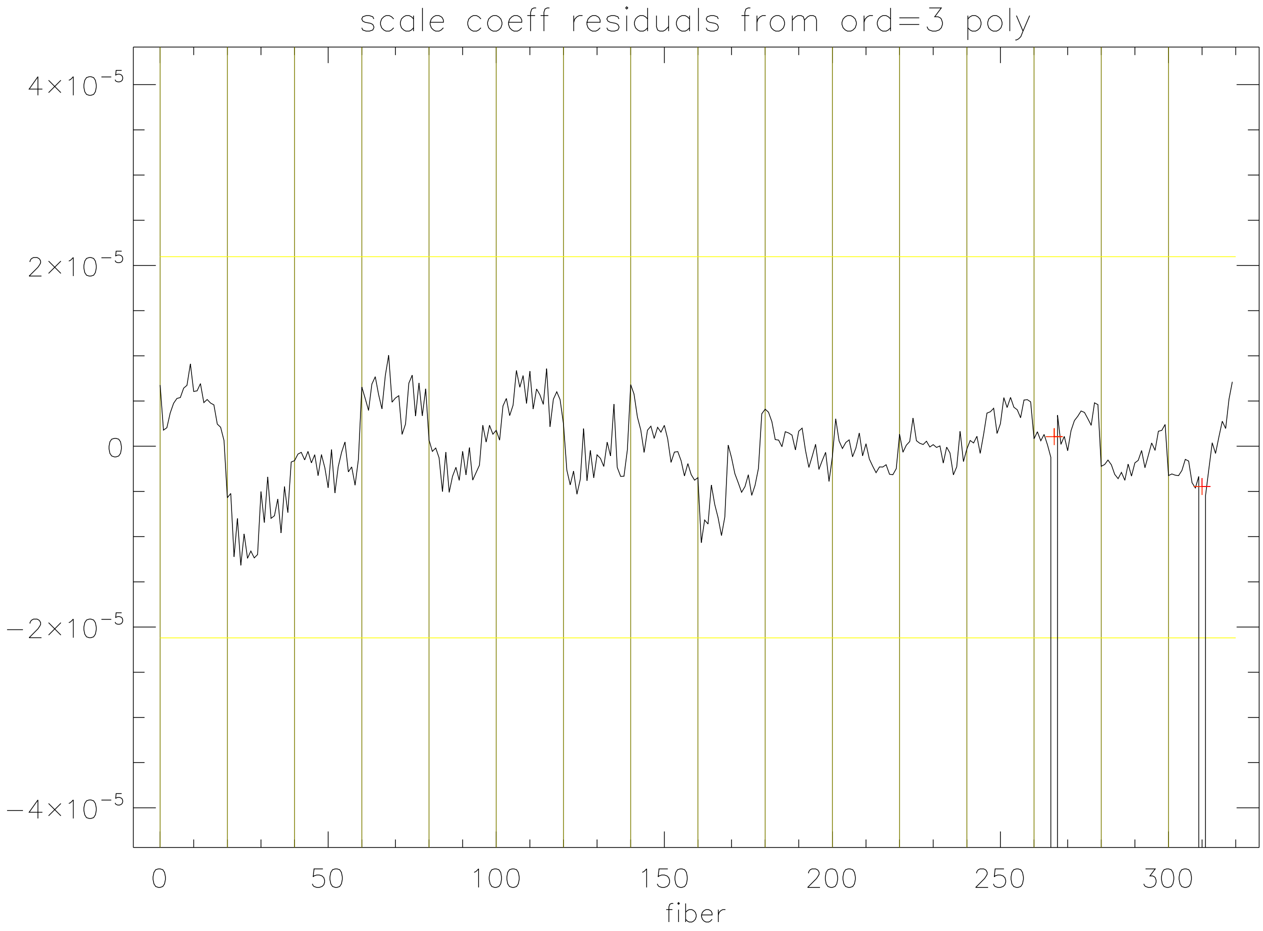

PLATE=3186 MJD=54846 sdR-b1-00058051.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
RED = sky fiber
Dispersion = 7.63%
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
1.37
1.38
1.39
1.40
1.41
1.42
Airmass

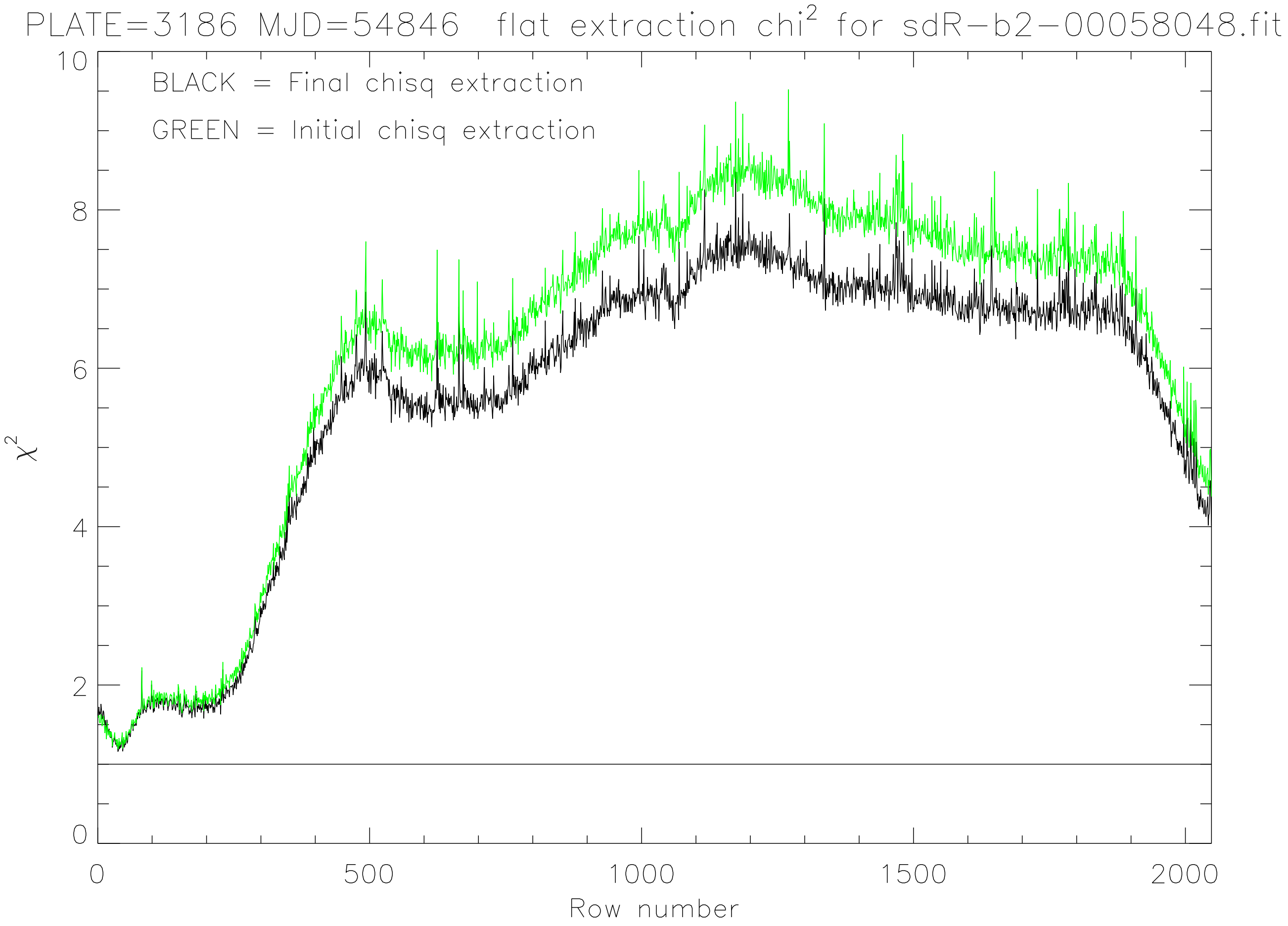

PLATE=3186 MJD=54846 sdR-b1-00058051.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
9000
8000
7000
6000
5000
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 3.61 %
Flux (5578.9)/Airmass
9000
8000
7000
6000
5000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
9000
8000
7000
6000
5000
1.37
1.38
1.39
1.40
1.41
1.42
Airmass

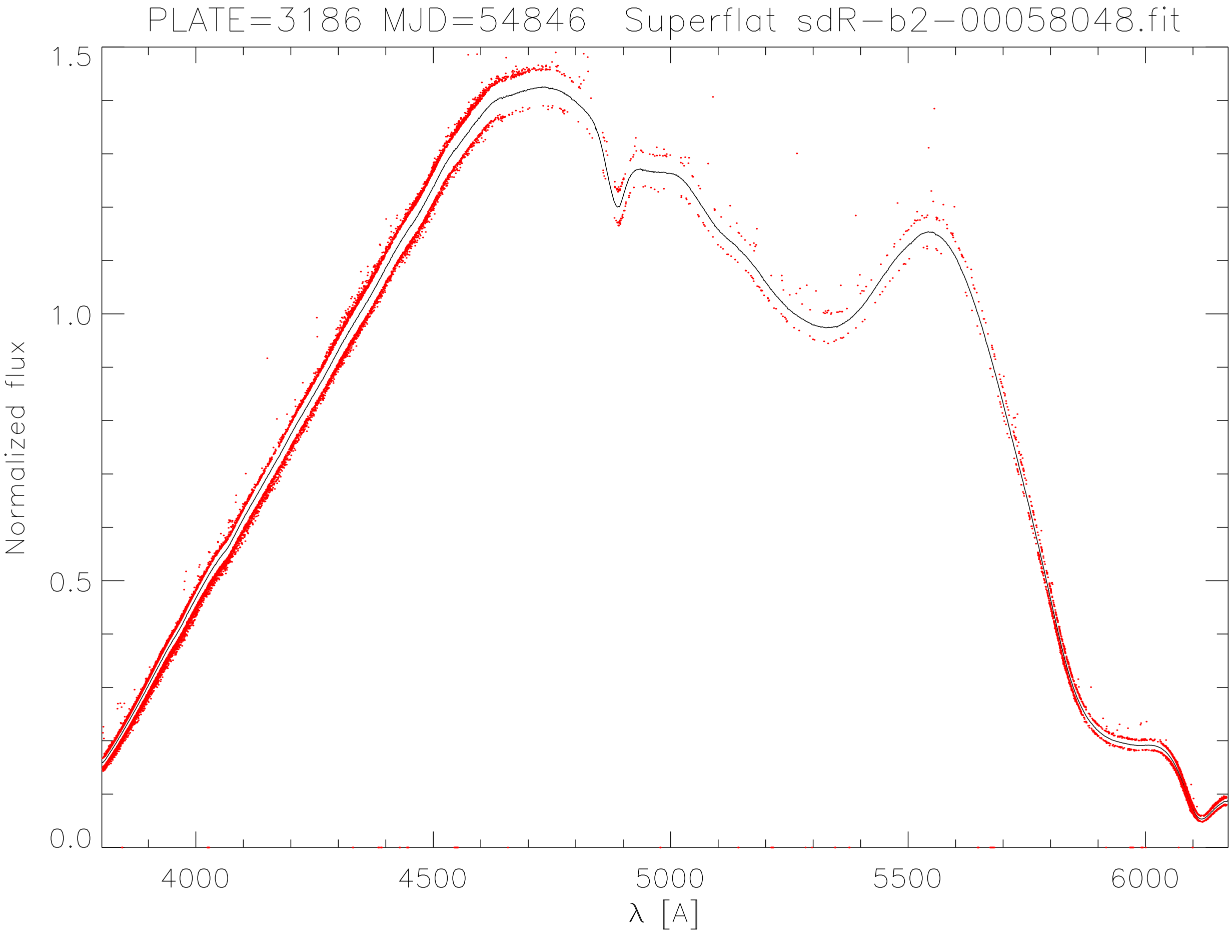

offset coeff residuals from ord=3 poly
1.5×10^{-4}
1.0×10^{-4}
5.0×10^{-5}
0
−5.0×10^{-5}
−1.0×10^{-4}
−1.5×10^{-4}
0
50
100
150
200
250
300
fiber

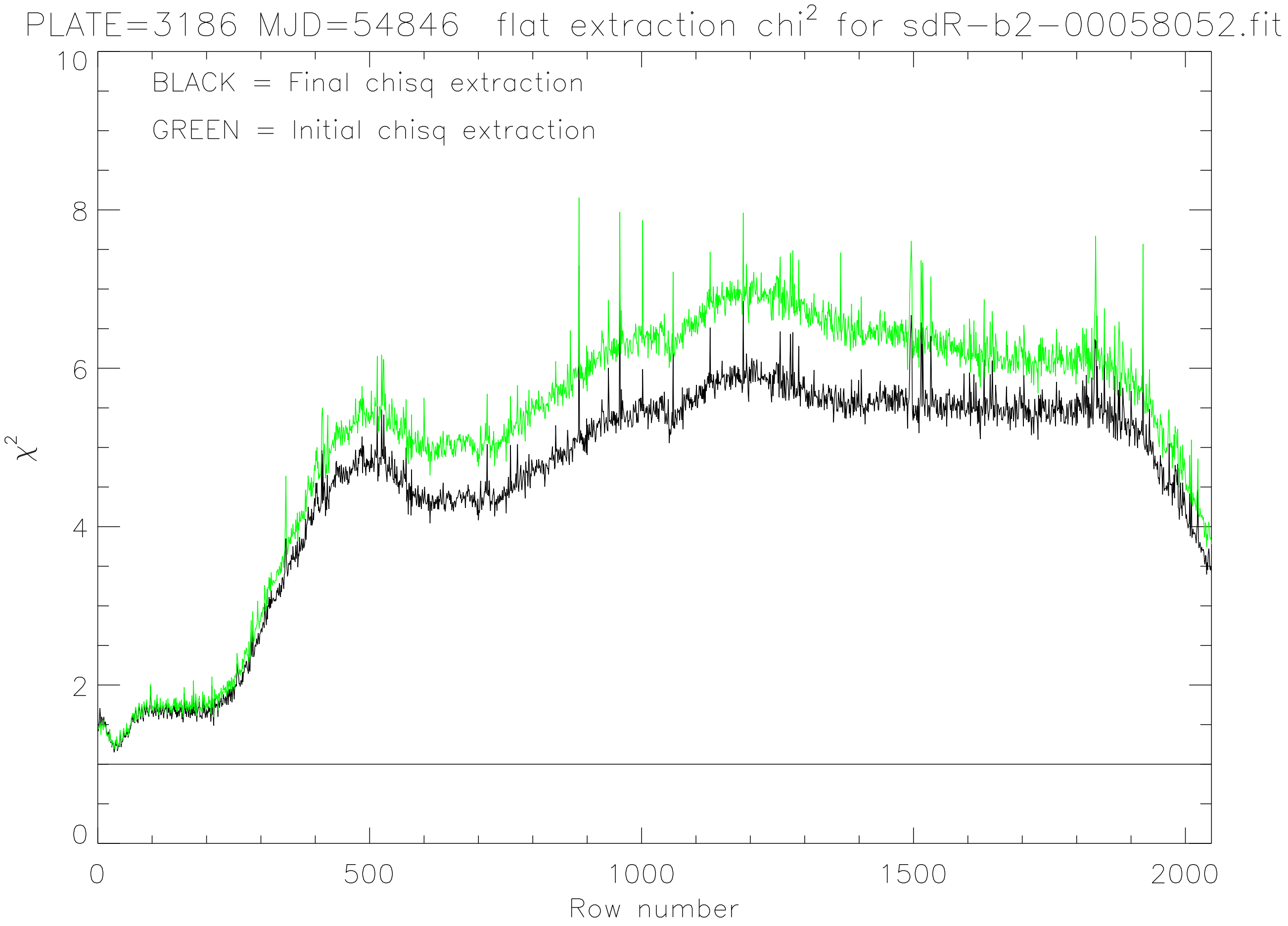

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

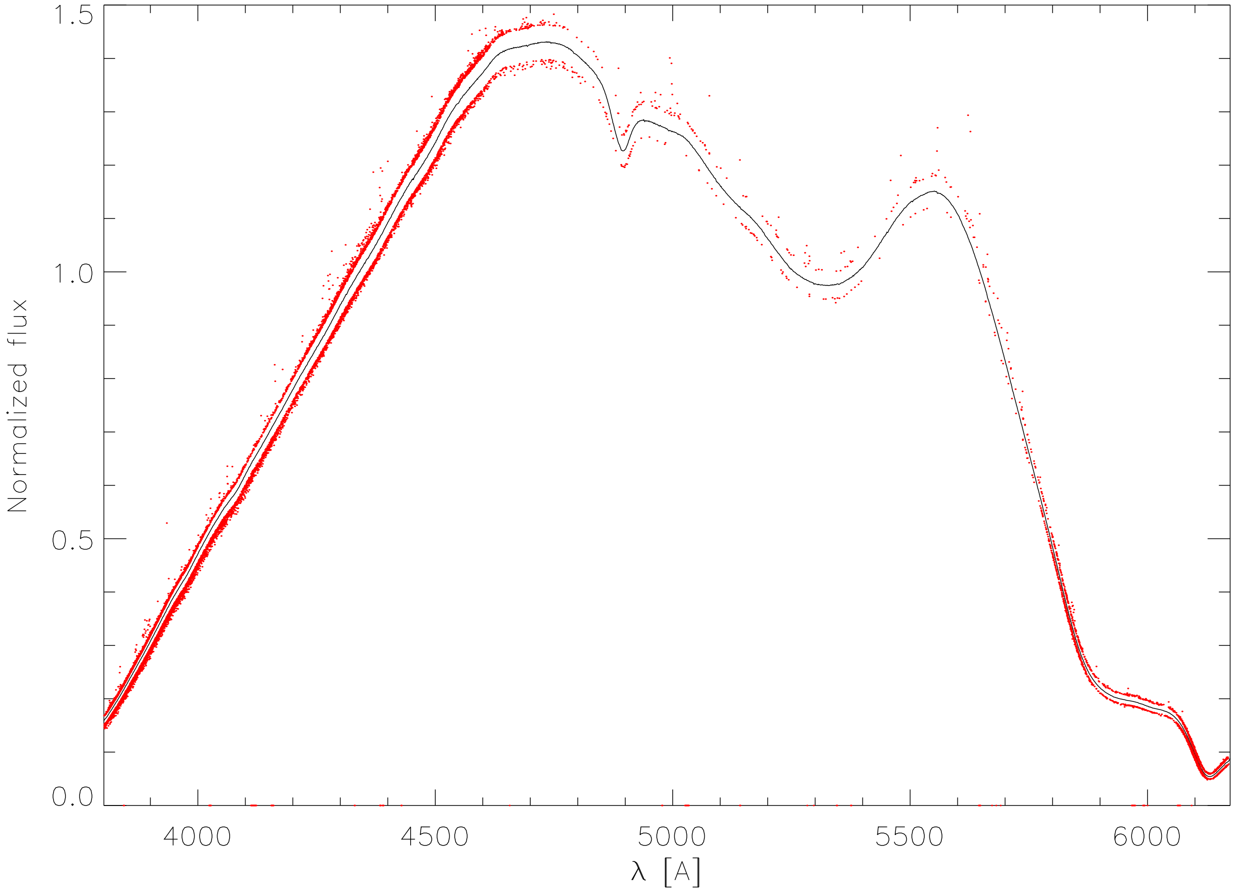

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber


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=3186 MJD=54846 flat extraction chi^2 for sdR-b2-00058048.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

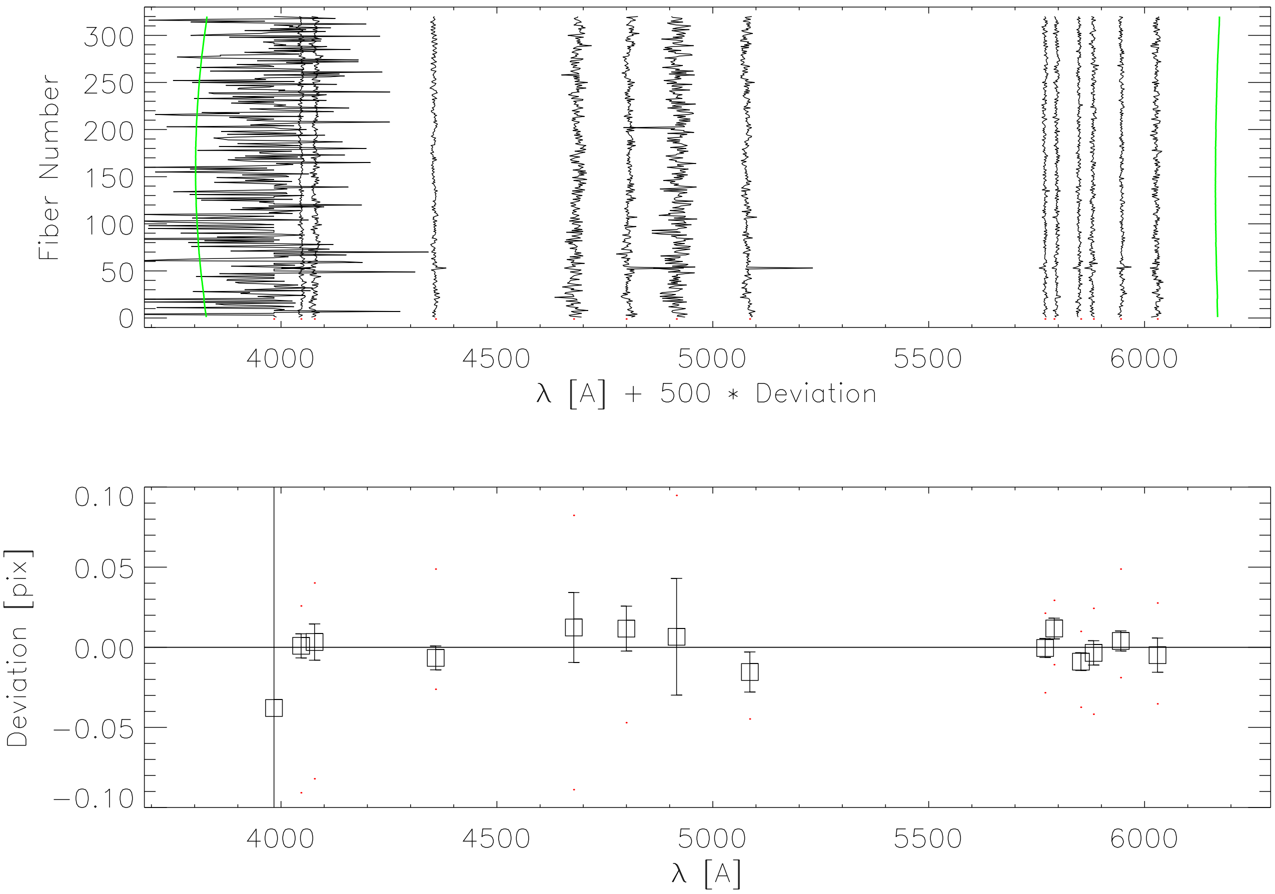

PLATE=3186 MJD=54846 Superflat sdR-b2-00058048.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000


PLATE=3186 MJD=54846 flat extraction chi^2 for sdR-b2-00058052.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number



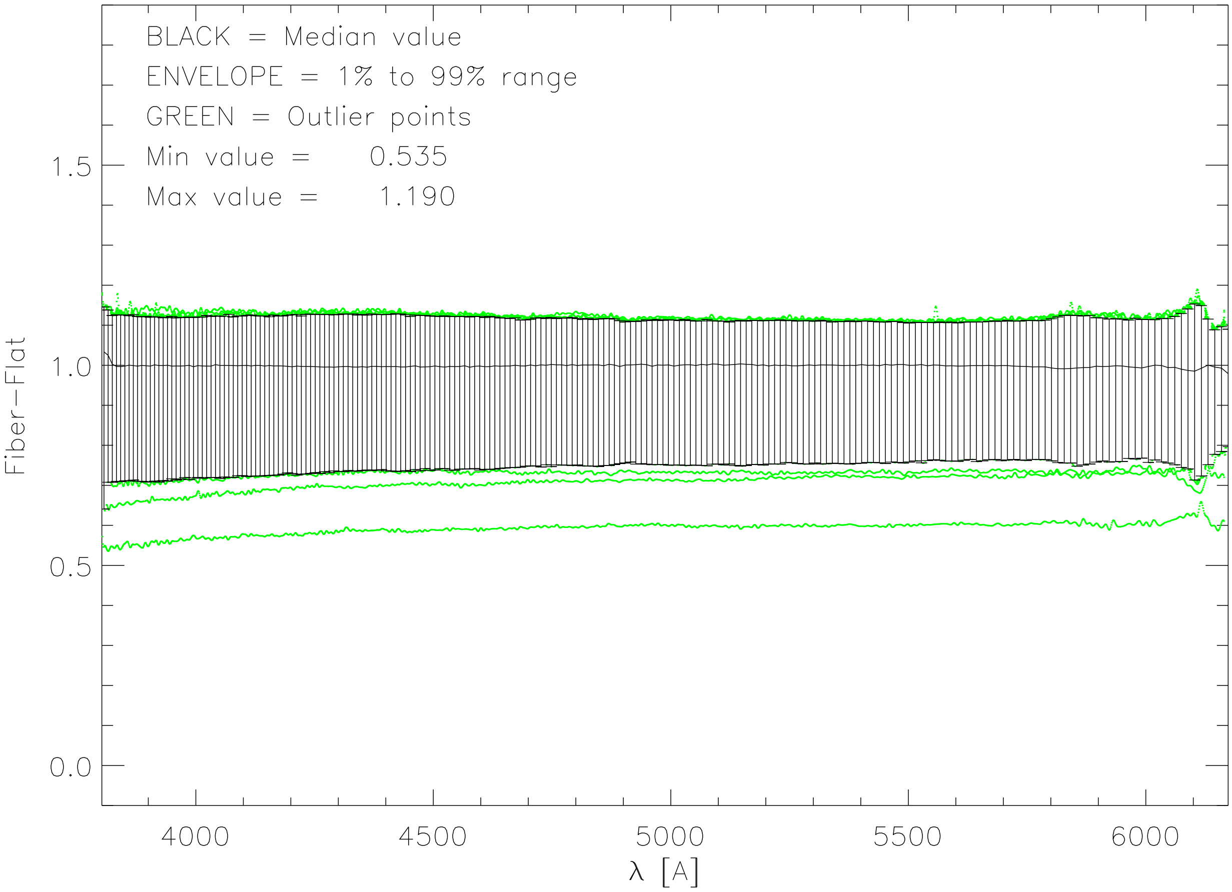
PLATE=3186 MJD=54846 Superflat sdR-b2-00058052.fit

PLATE=3186 MJD=54846 Arcline Fit for sdR-b2-00058053.fit



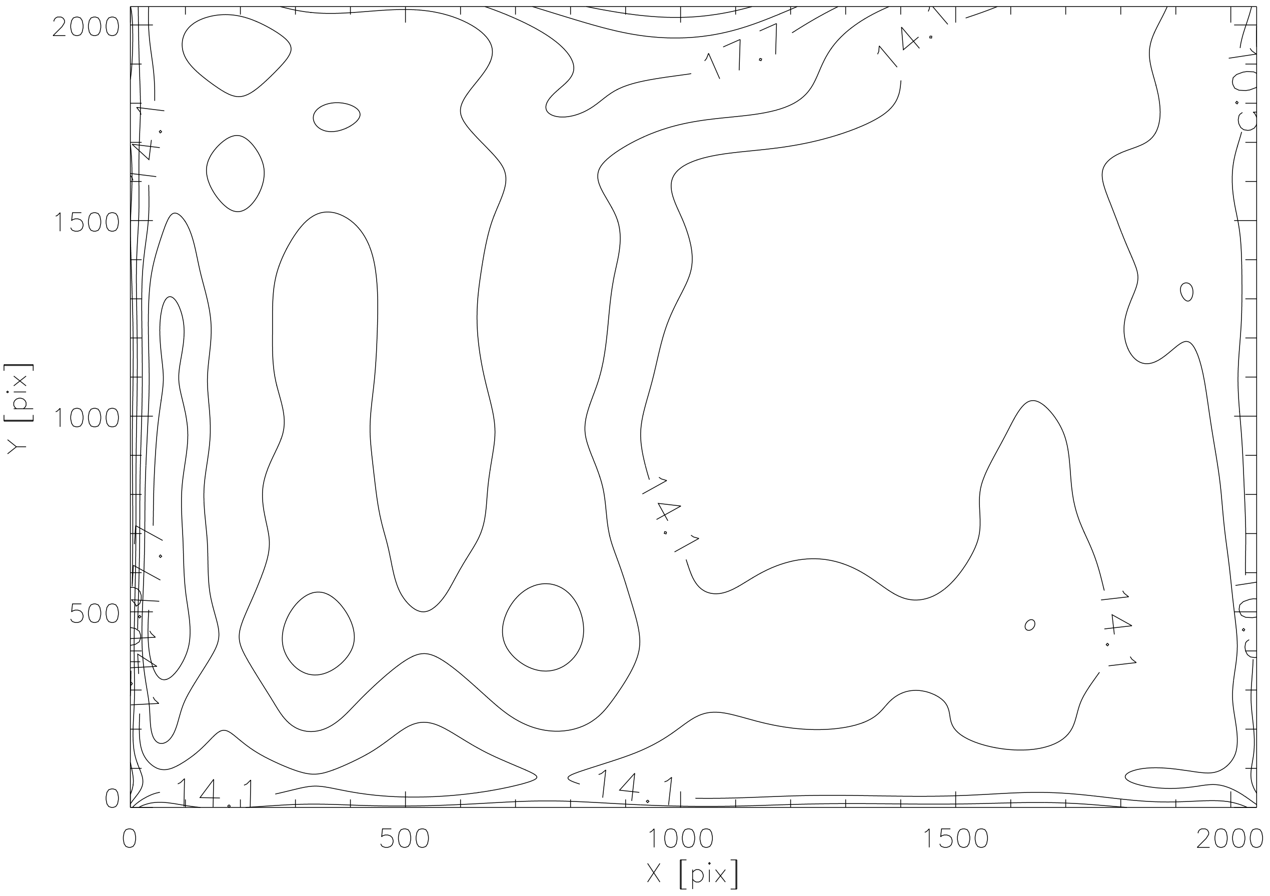
Mon Mar 15 19:37:43 2010

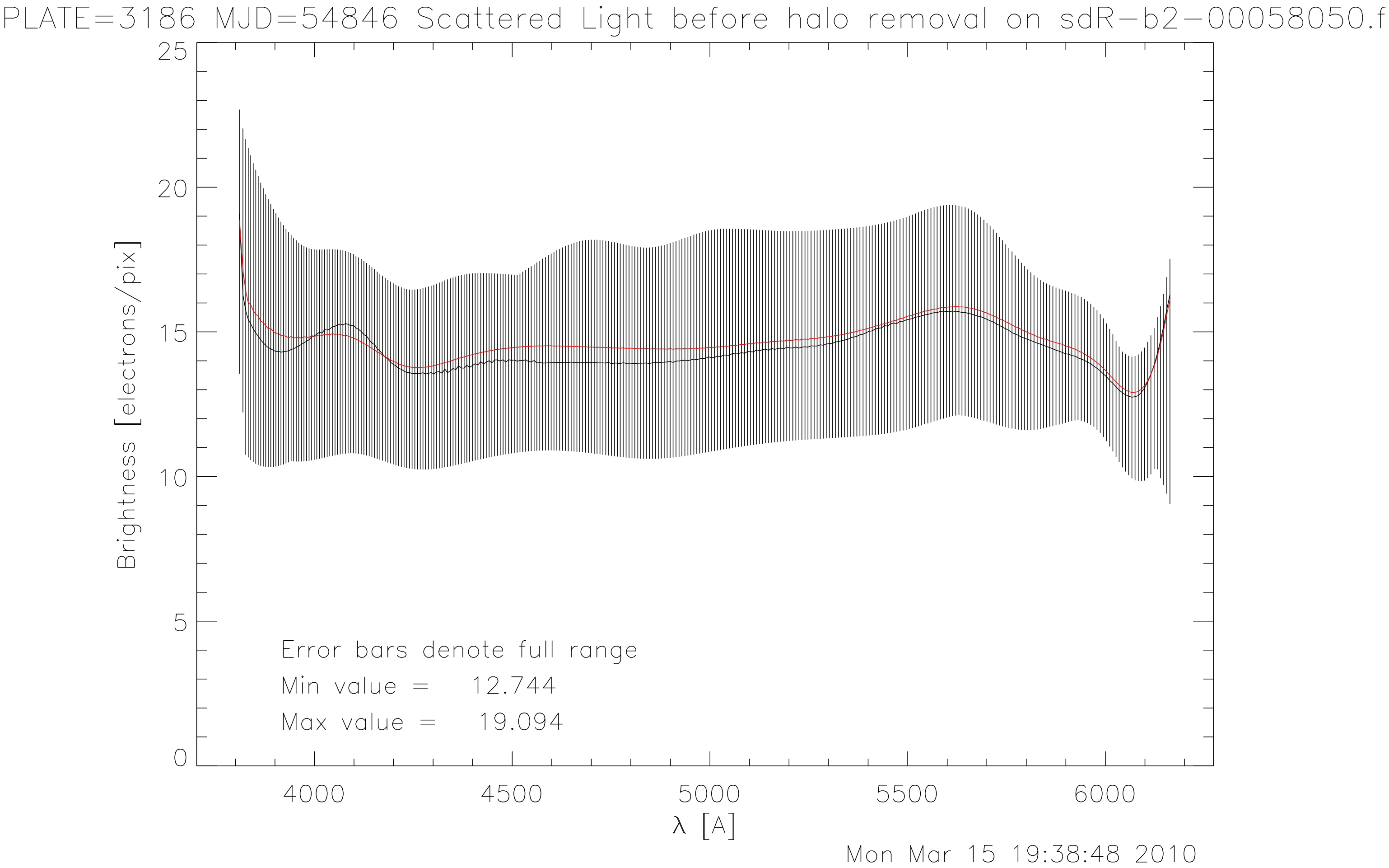
PLATE=3186 MJD=54846 Fiber−Flats for sdR−b2−00058052.fit



Mon Mar 15 19:37:52 2010

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b2-00058050.f



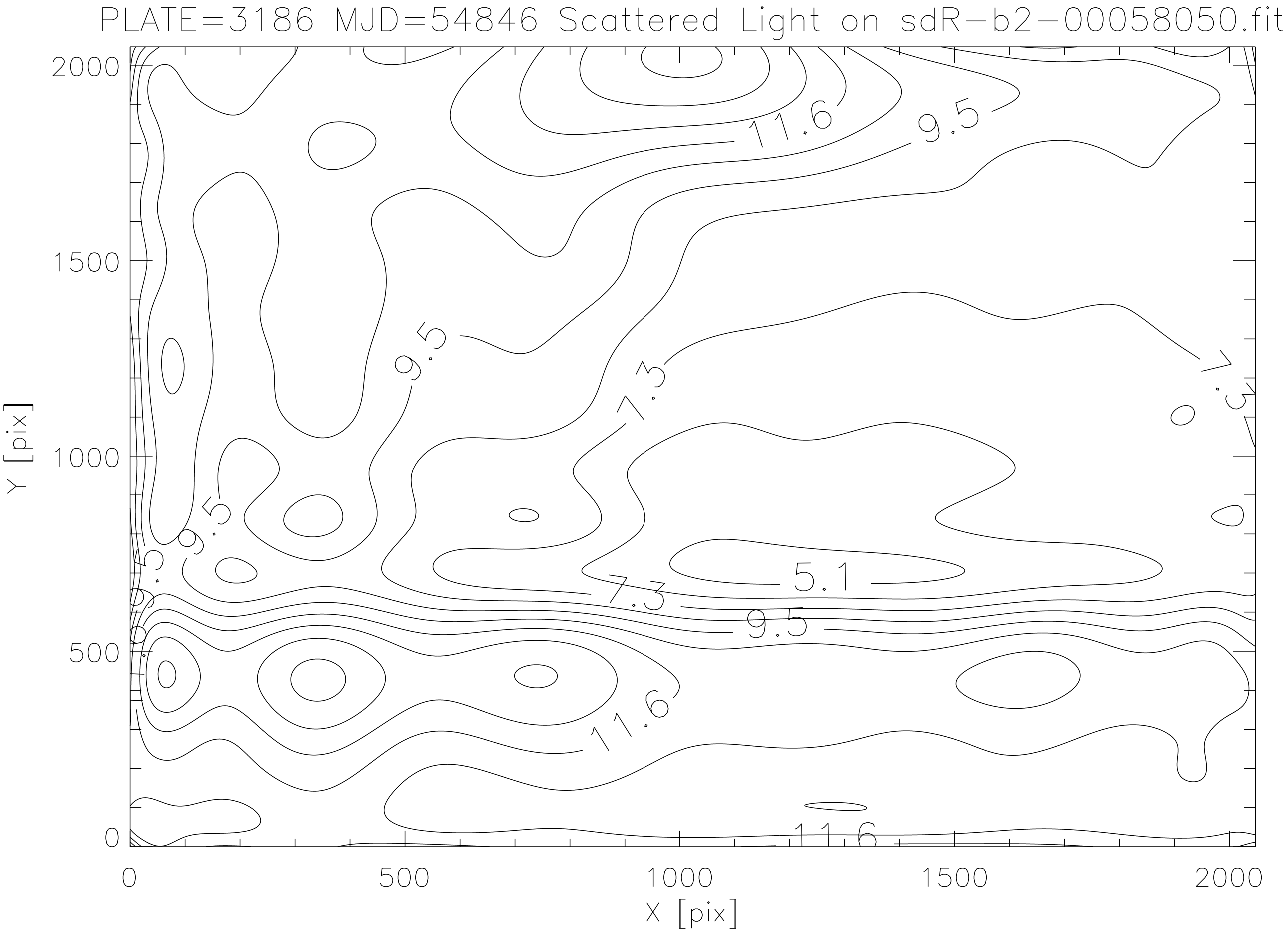

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b2-00058050.f

Error bars denote full range

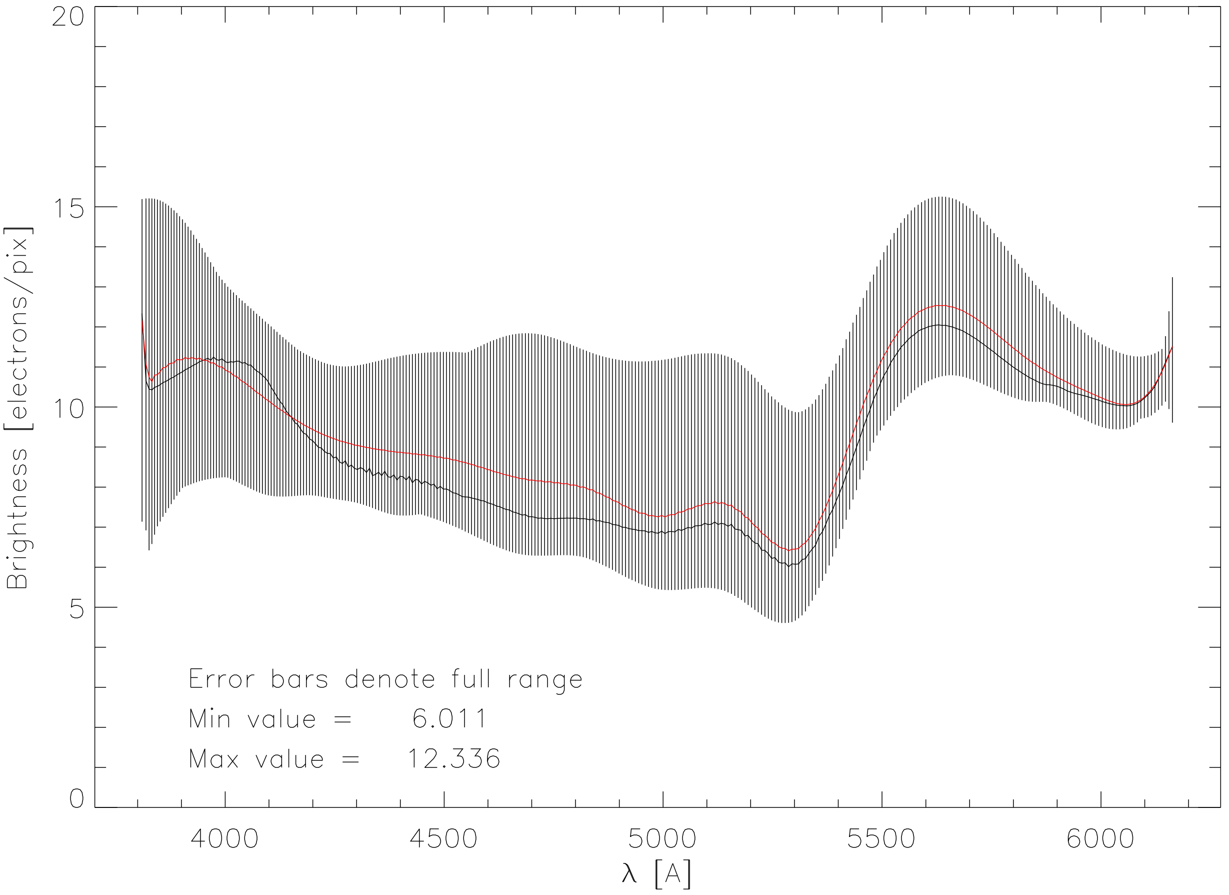
Min value = 12.744

Max value = 19.094

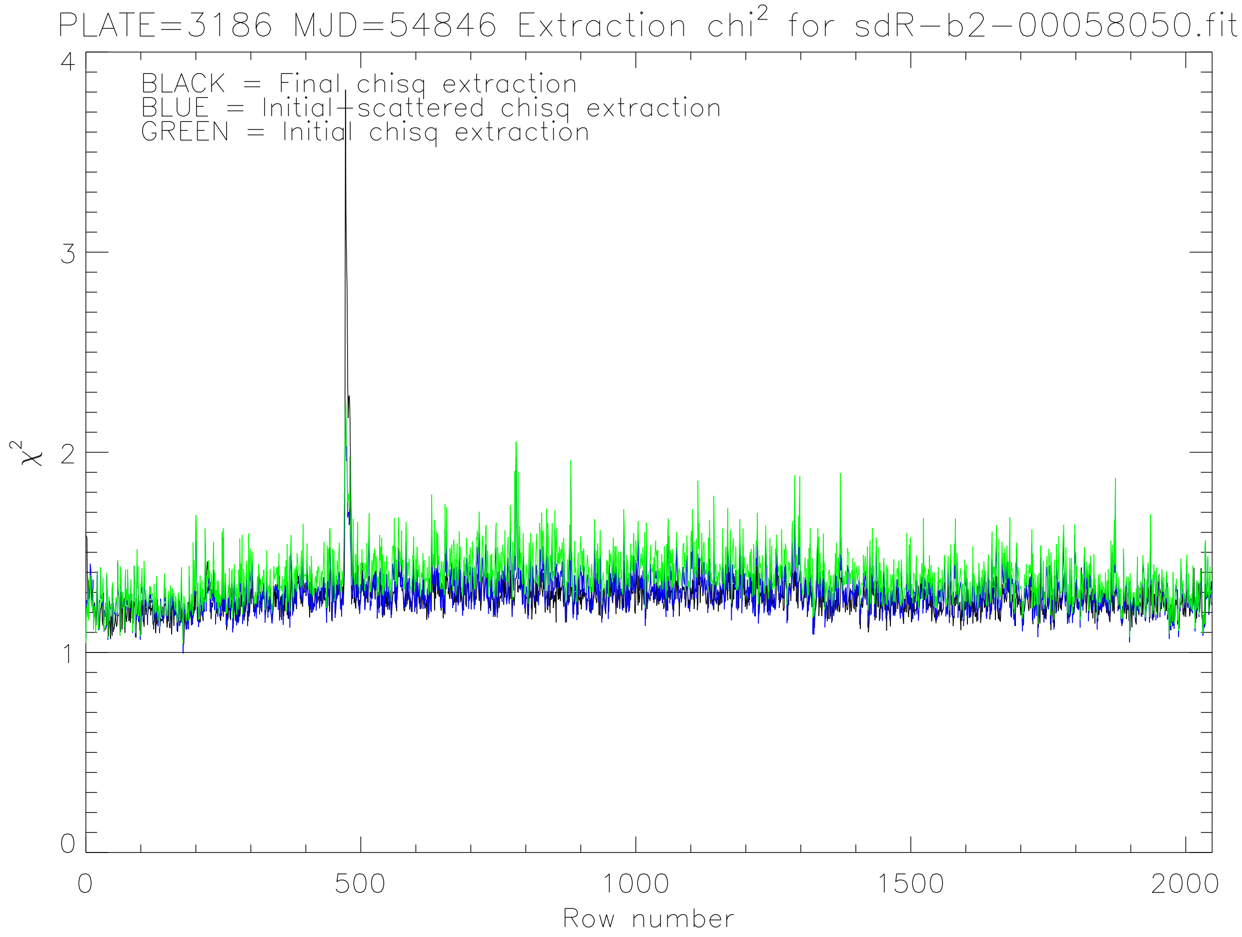
Mon Mar 15 19:38:48 2010

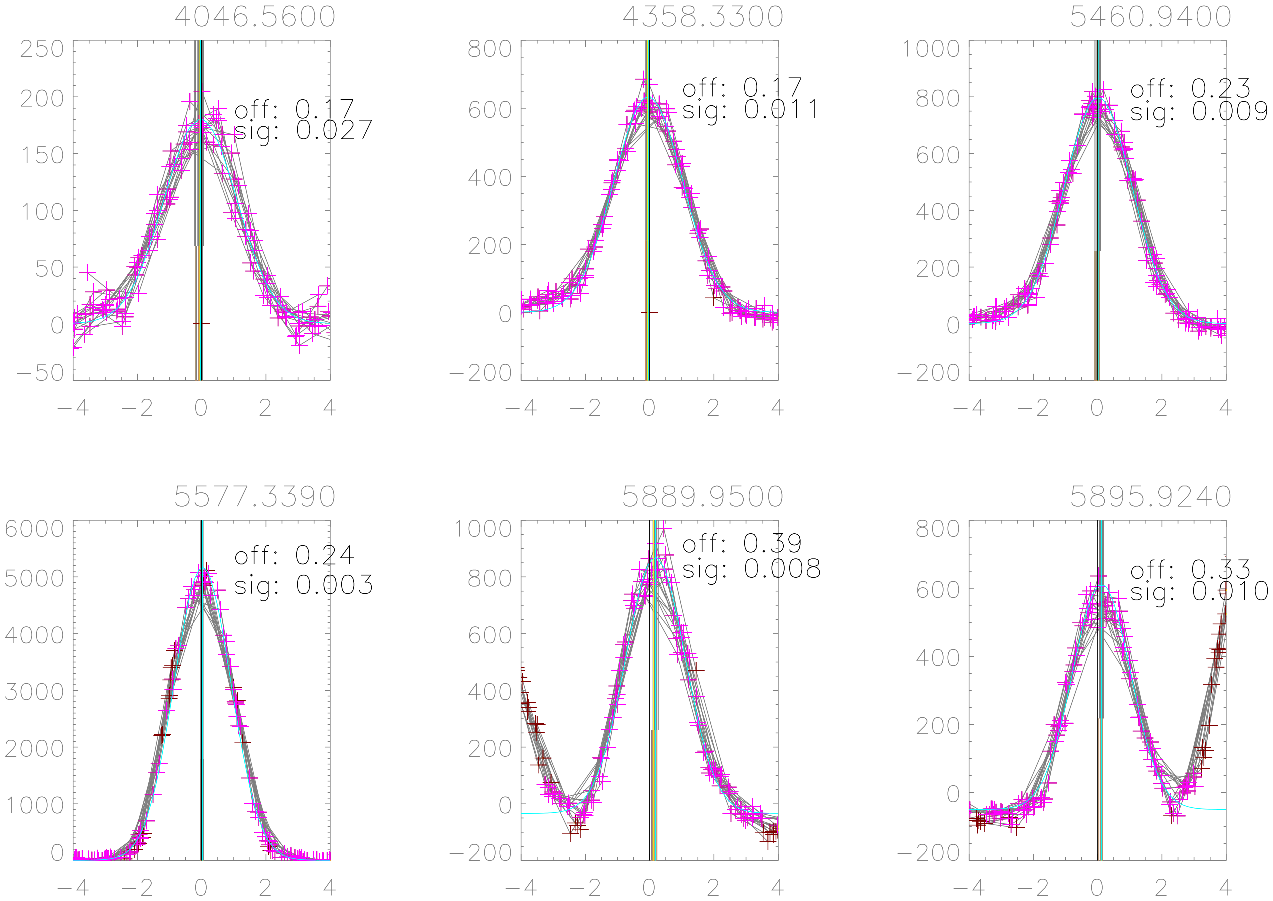

PLATE=3186 MJD=54846 Scattered Light on sdR-b2-00058050.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
11.6
9.5
9.5
7.3
7.3
9.5
5.1
7.3
9.5
11.6
11.6

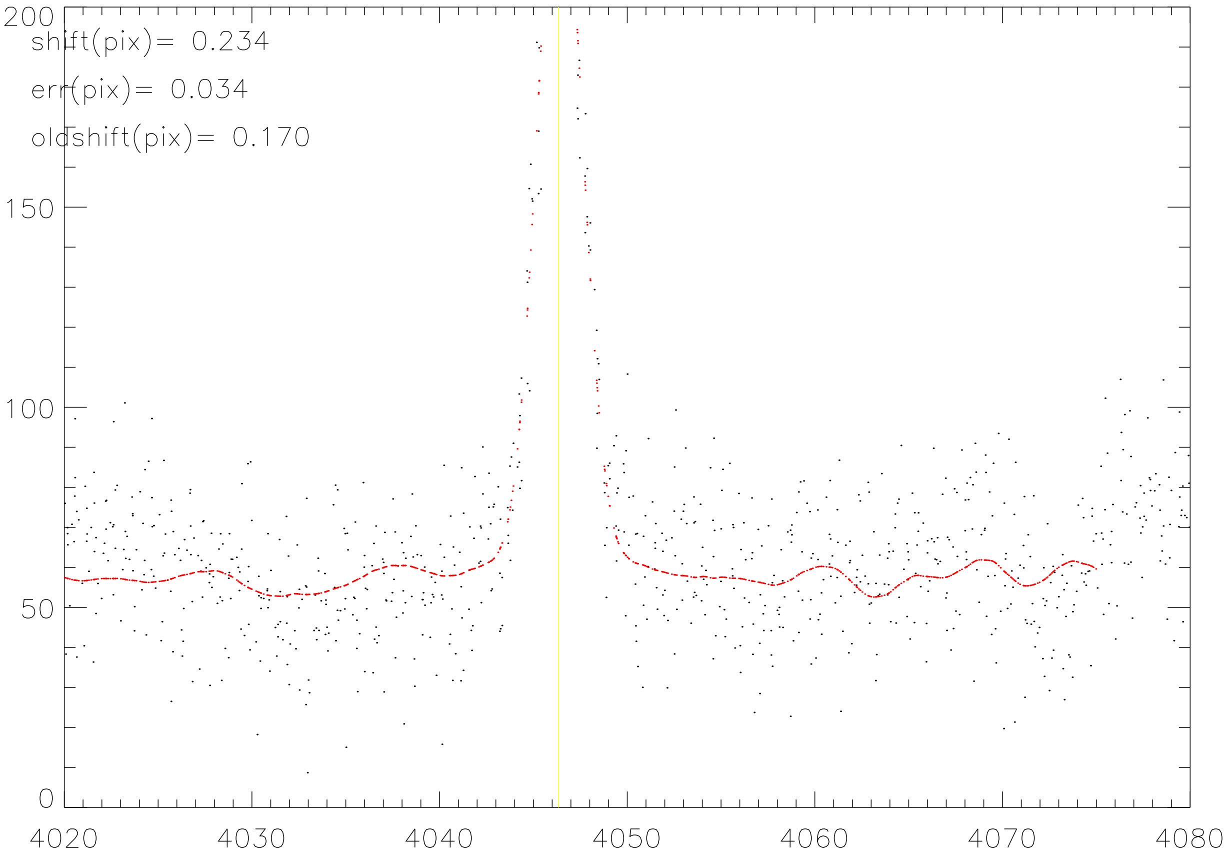
PLATE=3186 MJD=54846 Scattered Light on sdR-b2-00058050.fit

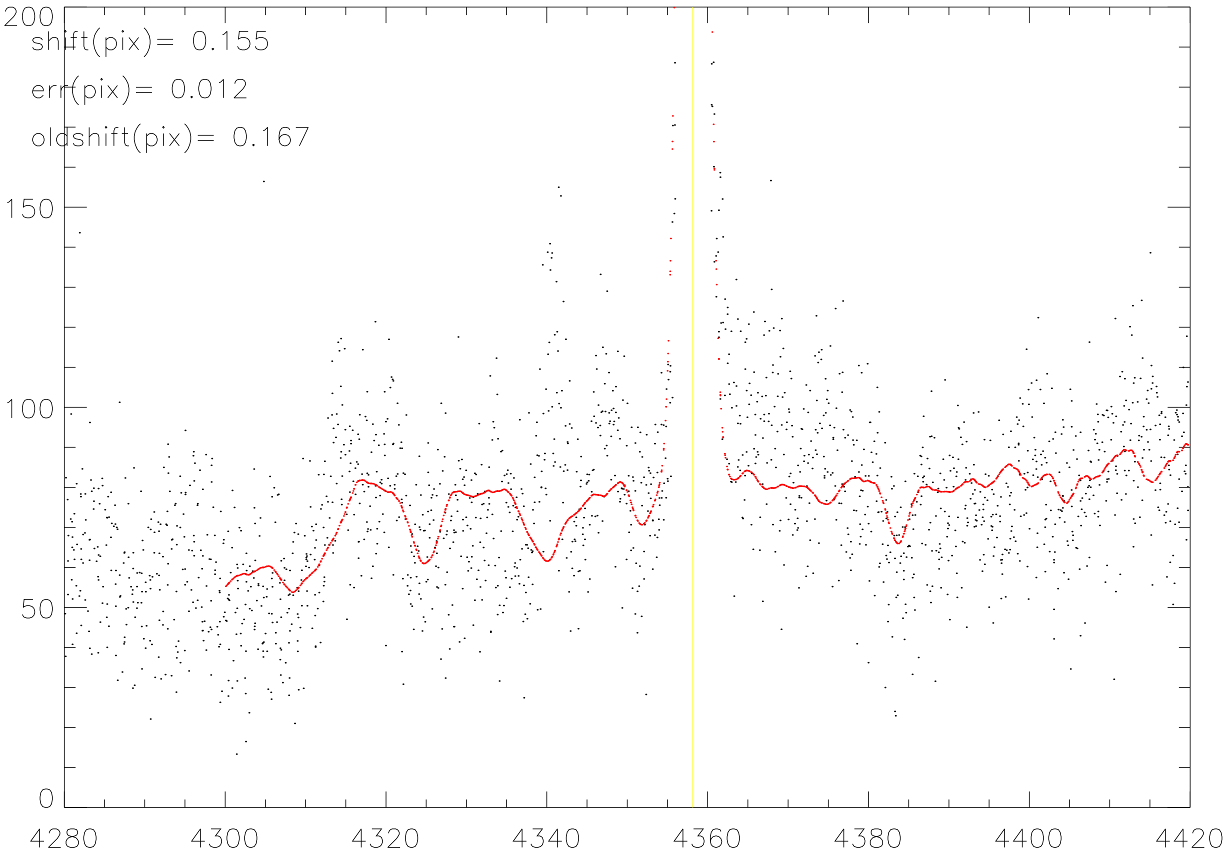


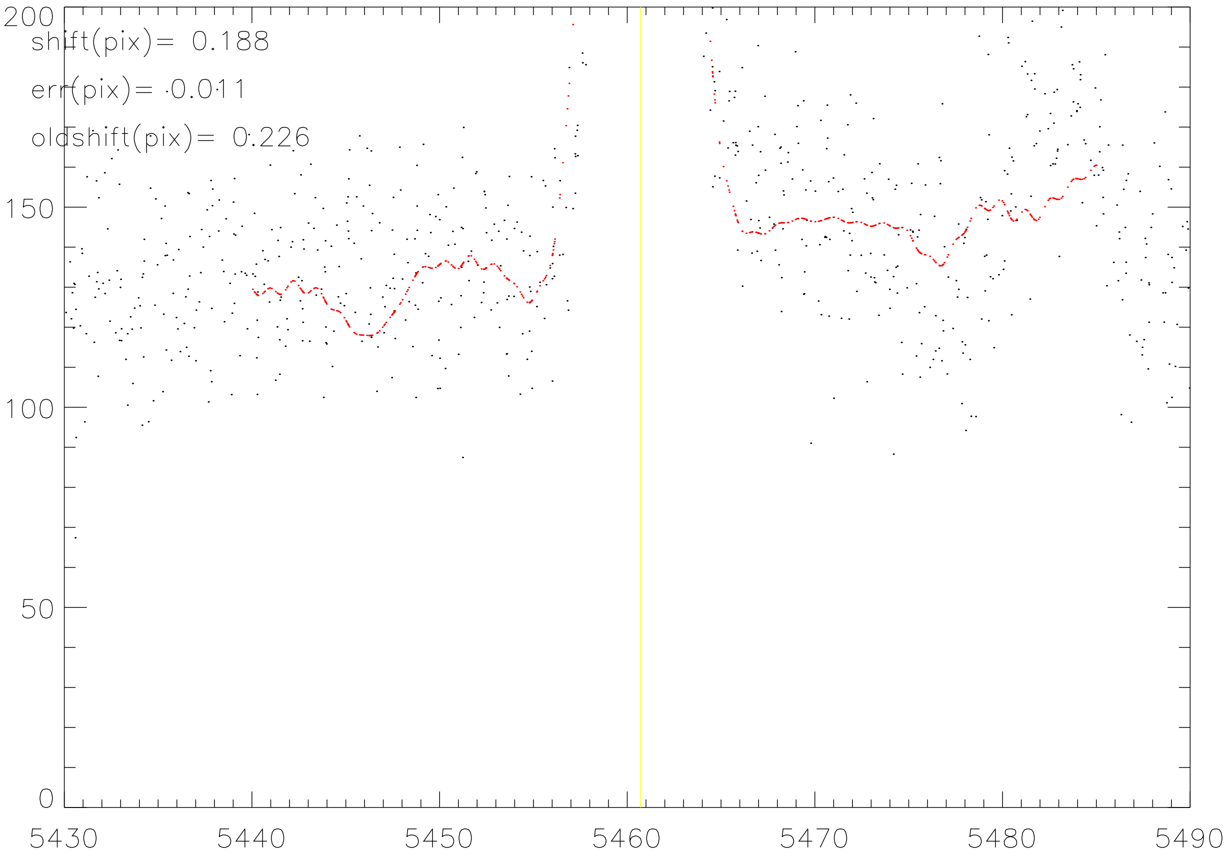
Mon Mar 15 19:42:15 2010

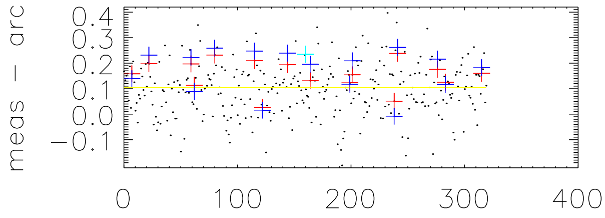

PLATE=3186 MJD=54846 Extraction chi^2 for sdR-b2-00058050.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

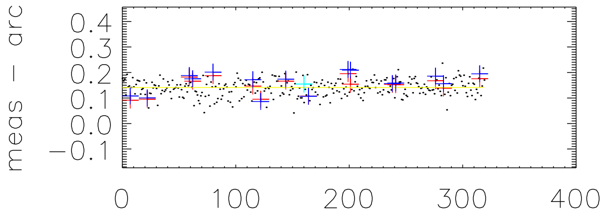

4046.5600
off: 0.17
sig: 0.027
4358.3300
off: 0.17
sig: 0.011
5460.9400
off: 0.23
sig: 0.009
5577.3390
off: 0.24
sig: 0.003
5889.9500
off: 0.39
sig: 0.008
5895.9240
off: 0.33
sig: 0.010
250
200
150
100
50
0
−50
800
600
400
200
0
−200
1000
800
600
400
200
0
−200
6000
5000
4000
3000
2000
1000
0
1000
800
600
400
200
0
−200
800
600
400
200
0
−200
−4
−2
0
2
4

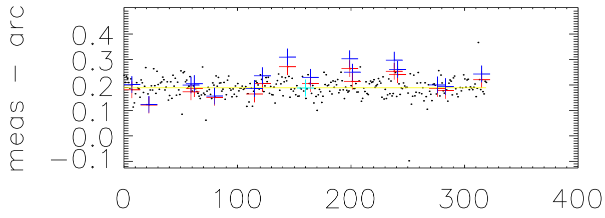

shift(pix)= 0.234
err(pix)= 0.034
oldshift(pix)= 0.170
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

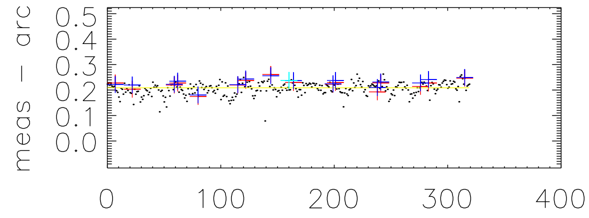

shift(pix)= 0.155
err(pix)= 0.012
oldshift(pix)= 0.167
0
50
100
150
200
4280
4300
4320
4340
4360
4380
4400
4420

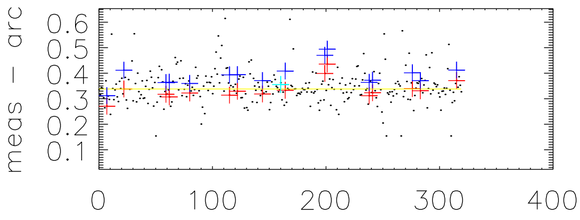

shift(pix)= 0.188
err(pix)= 0.011
oldshift(pix)= 0.226
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

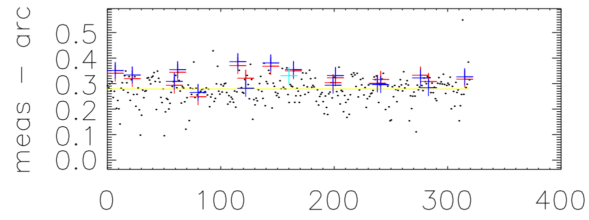

4046.5600

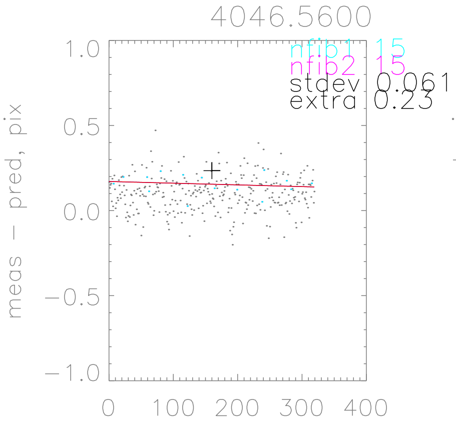

4358.3300

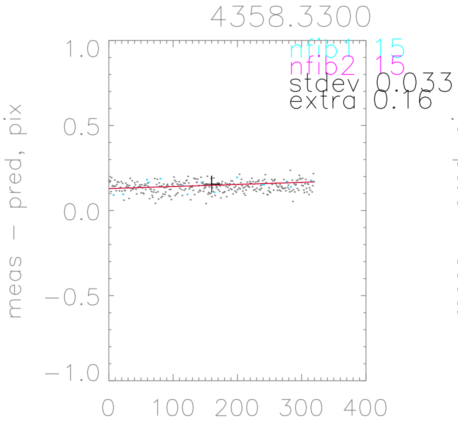

5460.9400

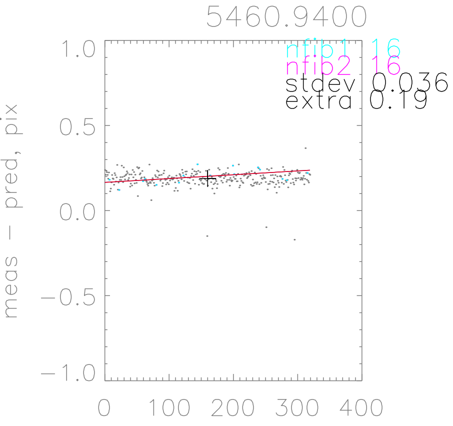

5577.3390

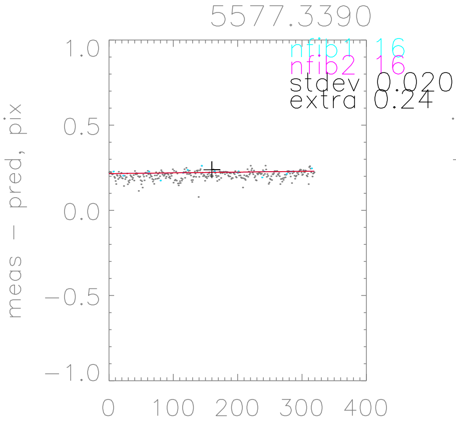

5889.9500

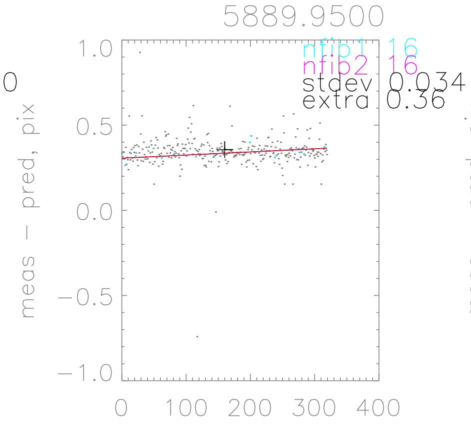

5895.9240

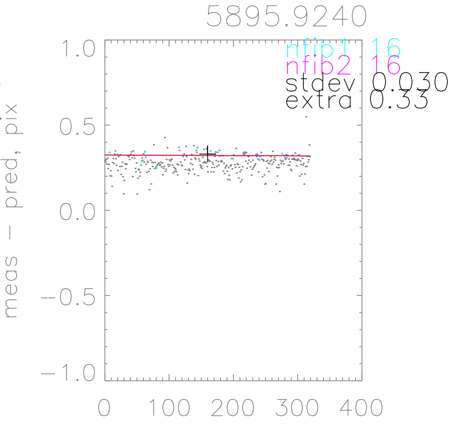

4046.5600
nfib1 15
nfib2 15
stdev 0.061
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

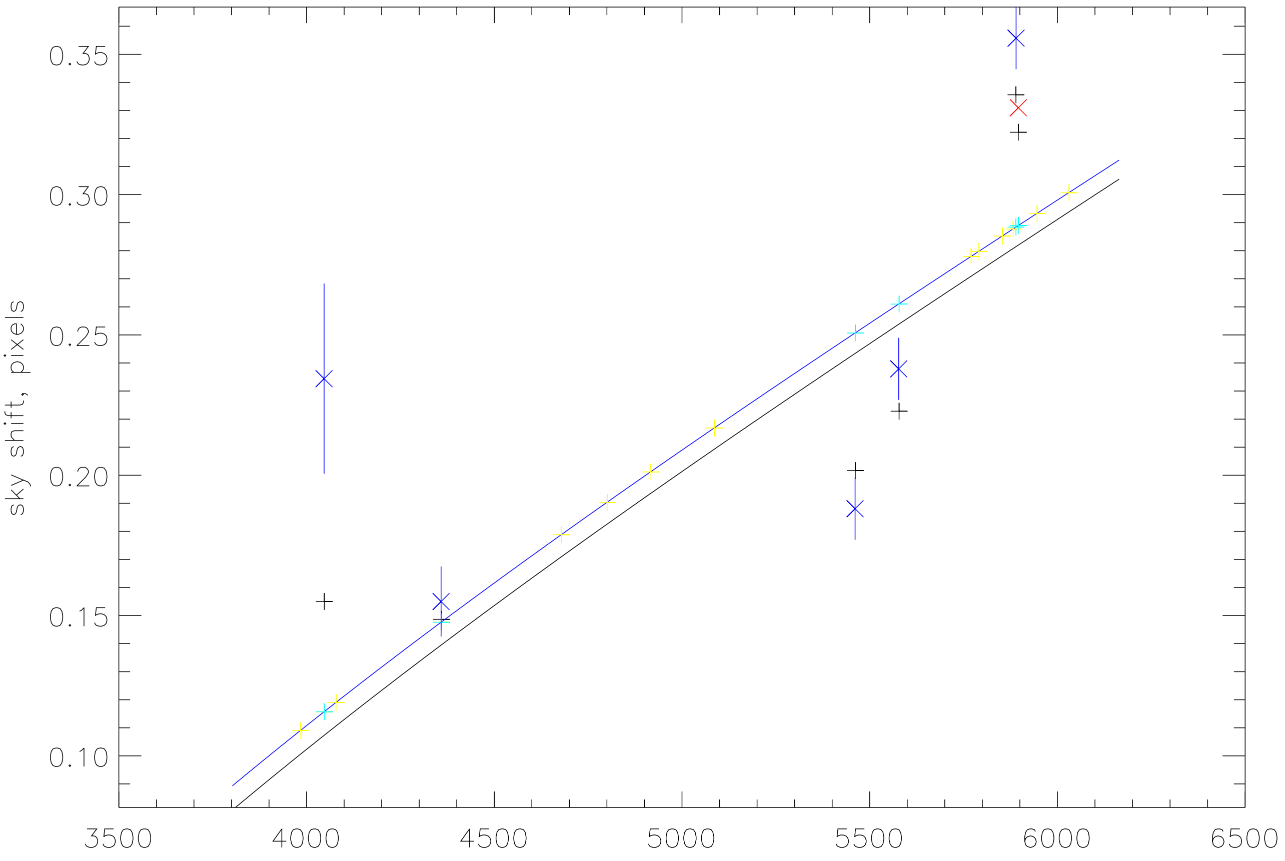

4358.3300
nfib1 15
nfib2 15
stdev 0.033
extra 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

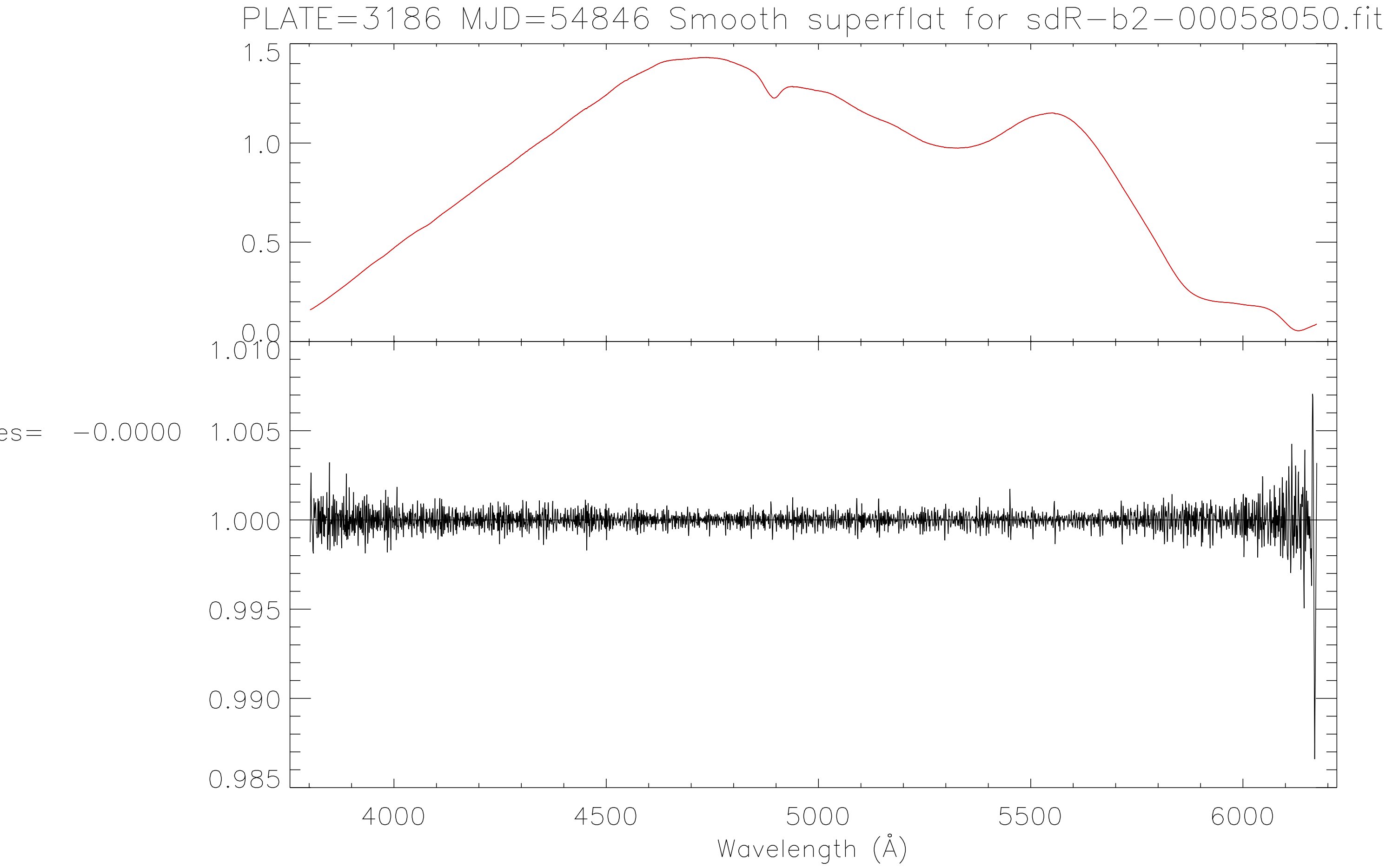

5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

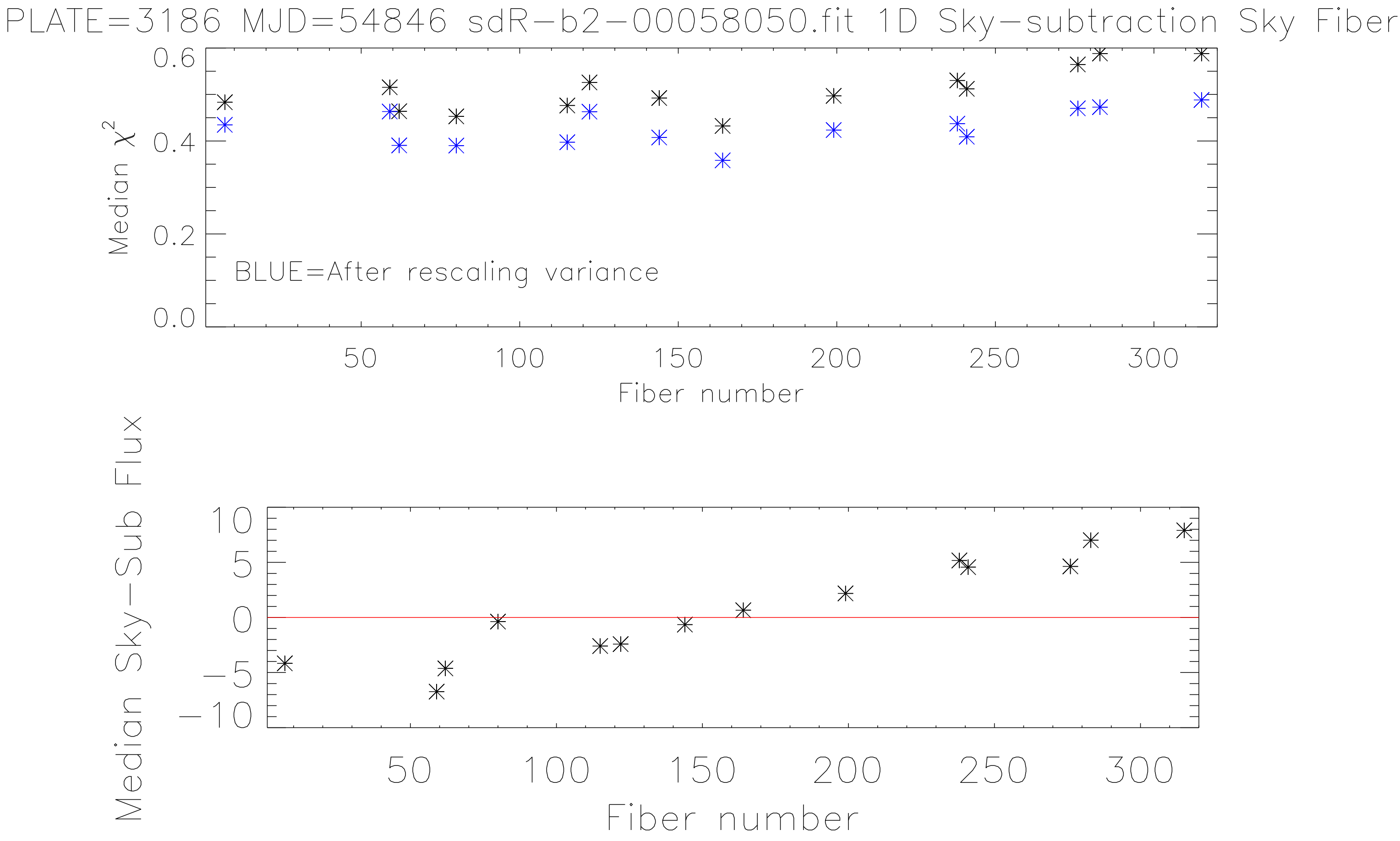

5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

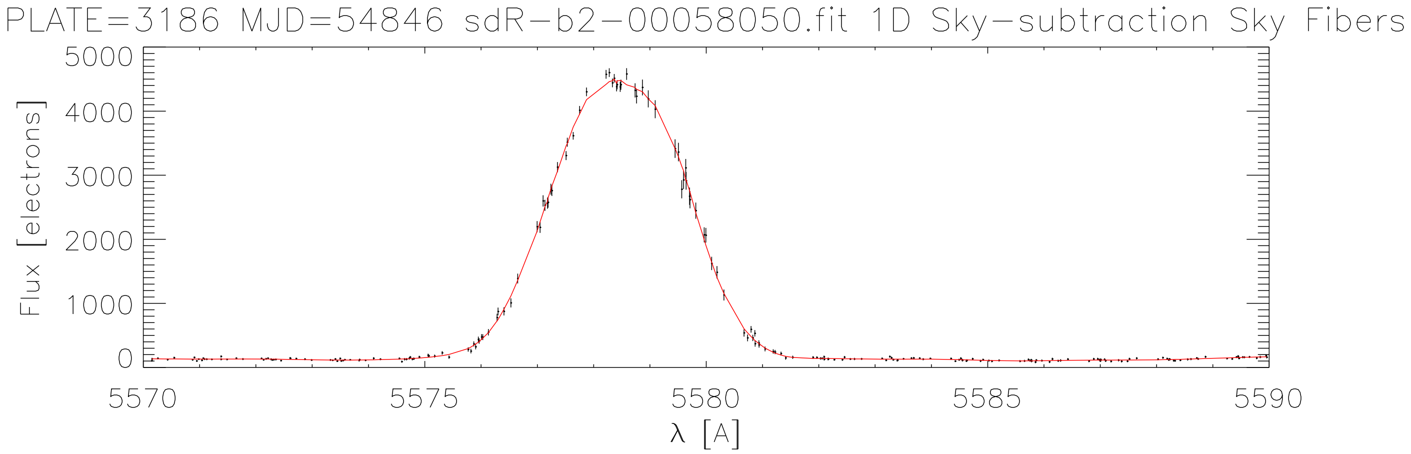

5889.9500
nfib1 16
nfib2 16
stdev 0.034
extra 0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


5895.9240
nfib1 16
nfib2 16
stdev 0.030
extra 0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

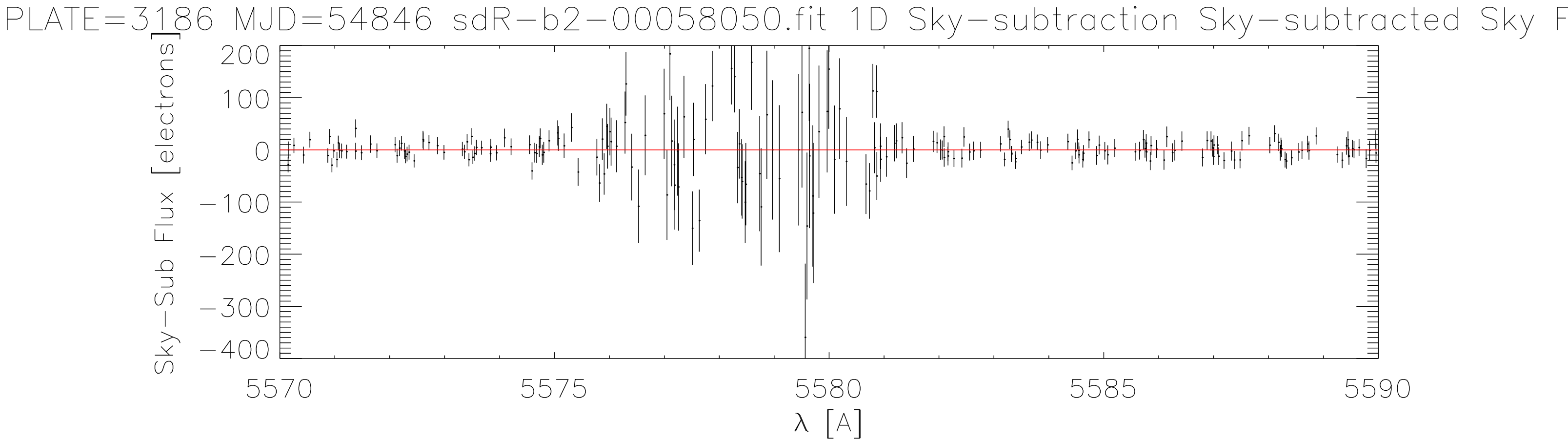

sky shift, pixels
0.10
0.15
0.20
0.25
0.30
0.35
3500
4000
4500
5000
5500
6000
6500


PLATE=3186 MJD=54846 Smooth superflat for sdR-b2-00058050.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=3186 MJD=54846 sdR-b2-00058050.fit 1D Sky-subtraction Sky Fiber
Median χ^2
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
50
100
150
200
250
300
Fiber number



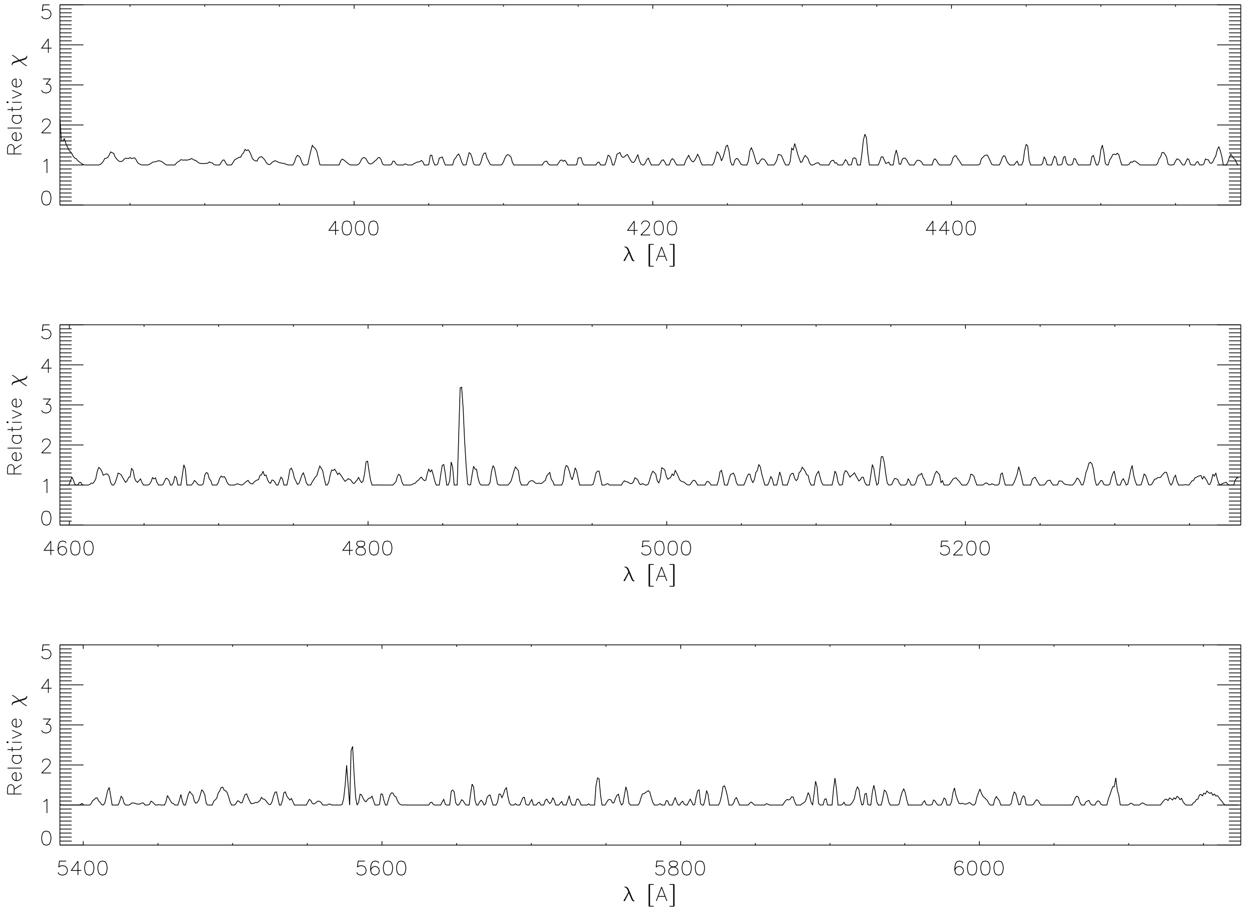
PLATE=3186 MJD=54846 sdR-b2-00058050.fit 1D Sky-subtraction Sky Fibers

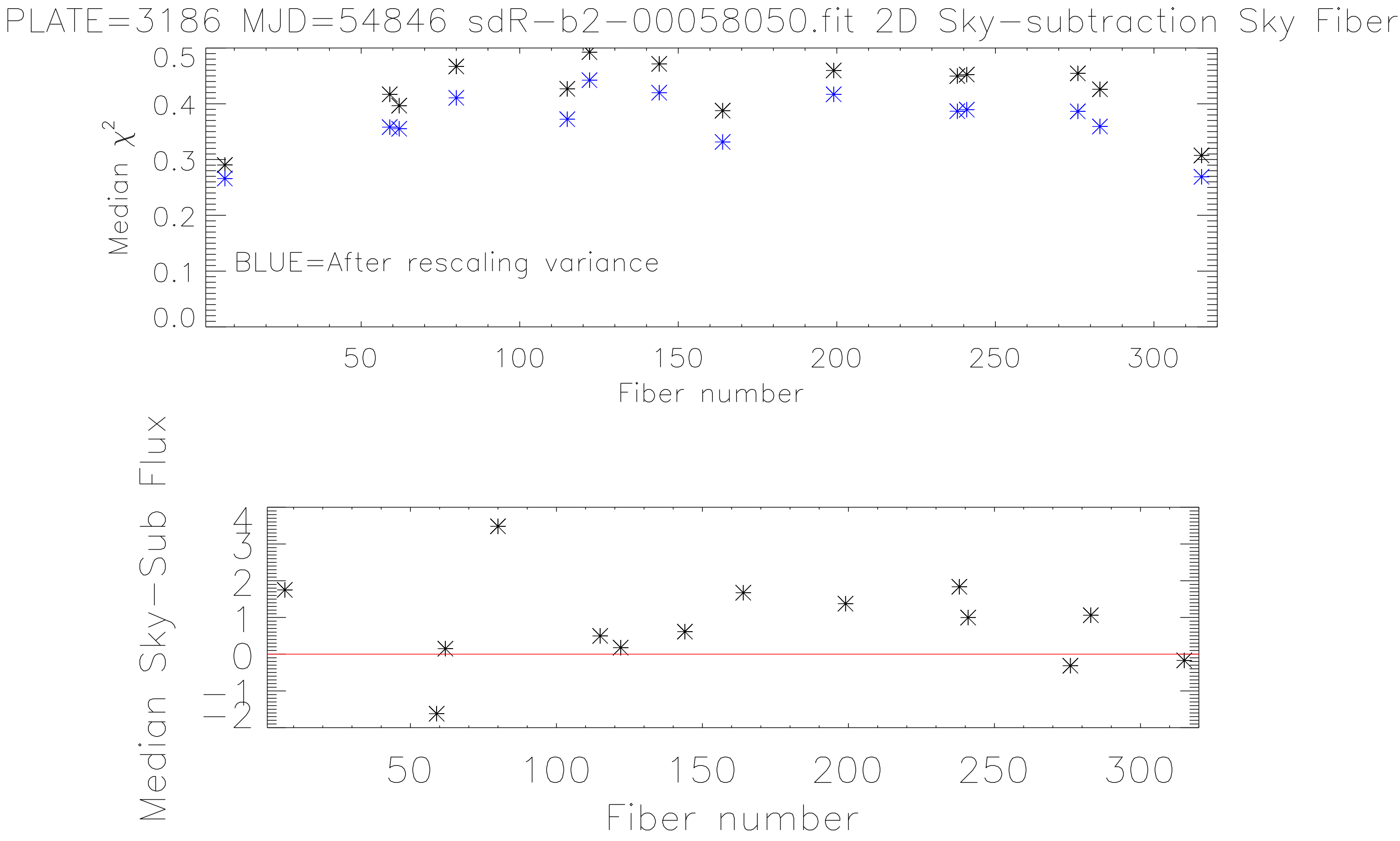


PLATE=3186 MJD=54846 sdR-b2-00058050.fit 1D Sky-subtraction Sky-subtracted Sky F

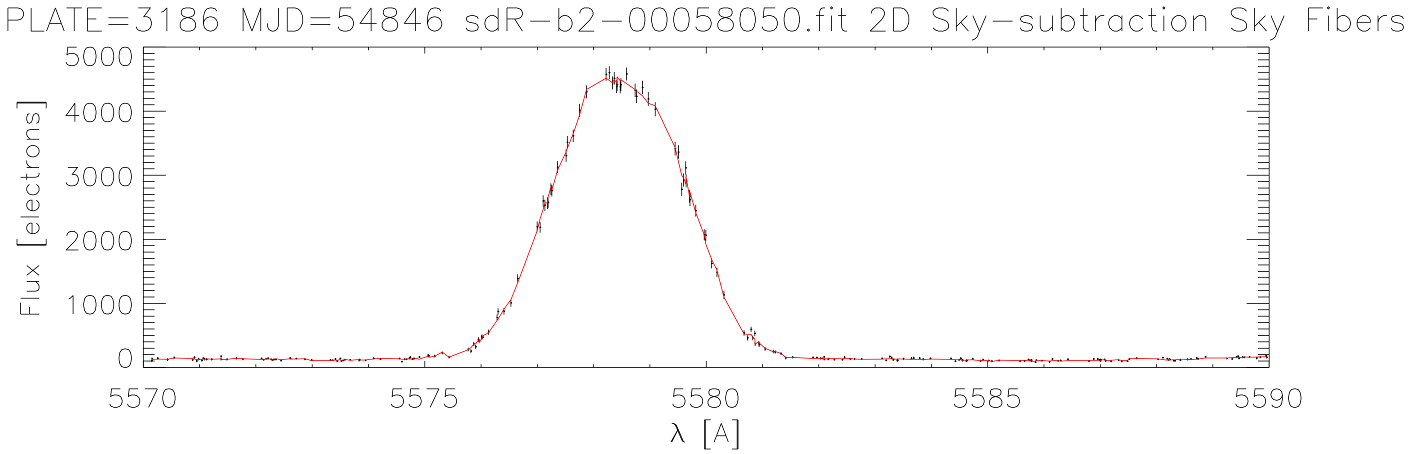
Number of sky fibers = 14

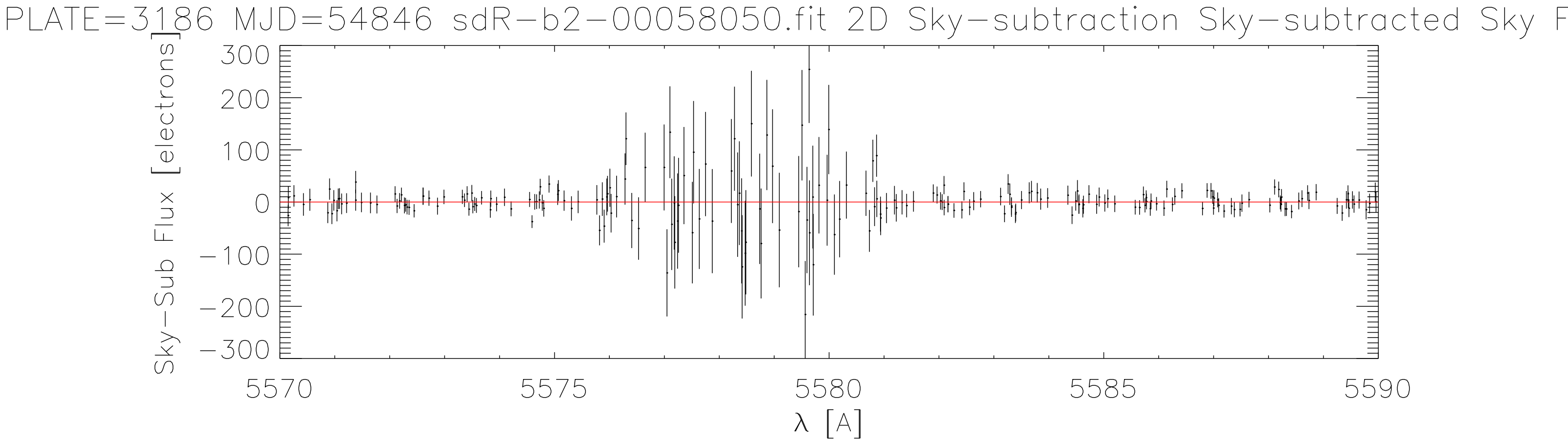
PLATE=3186 MJD=54846 sdR-b2-00058050.fit 1D Sky-subtraction Rescaled Errors





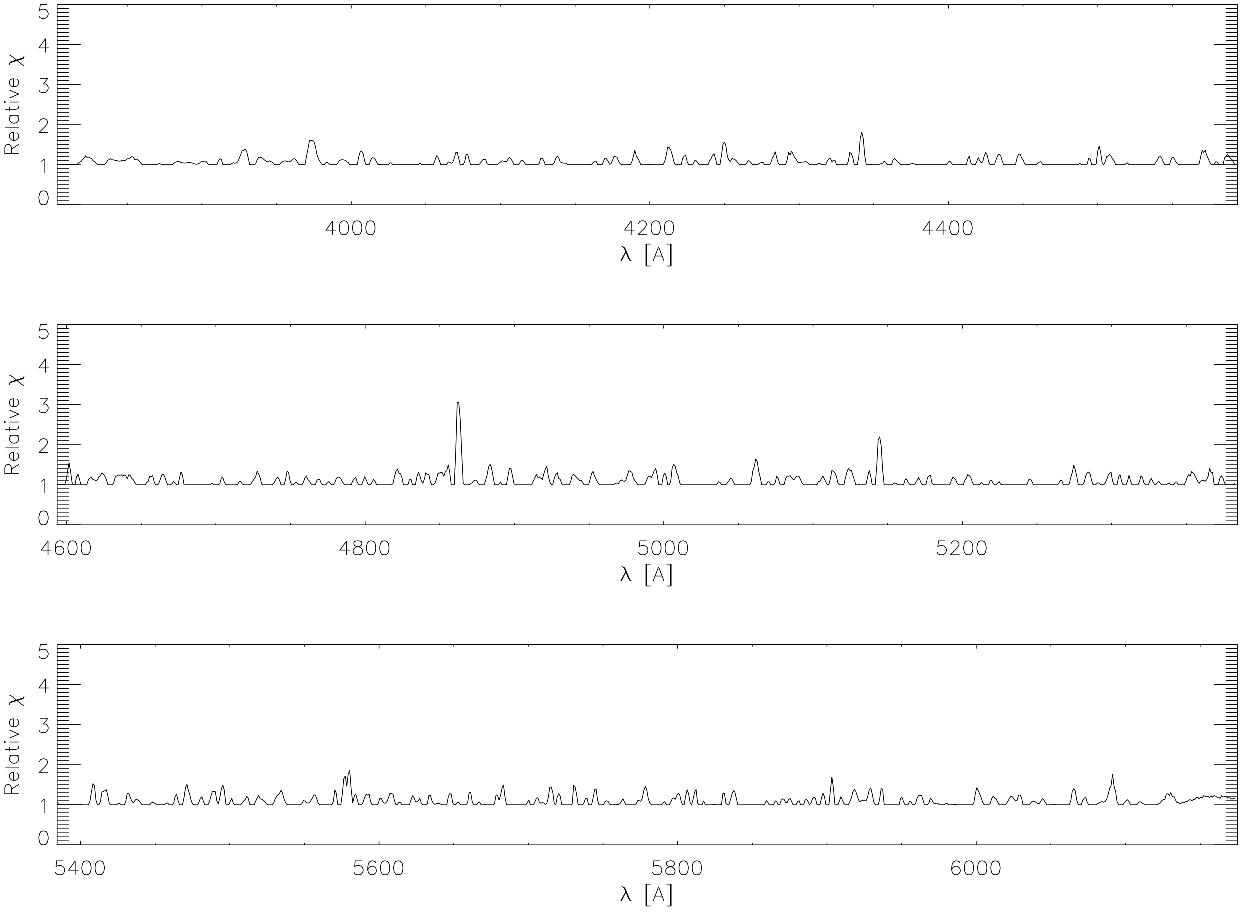
PLATE=3186 MJD=54846 sdR-b2-00058050.fit 2D Sky-subtraction Sky Fiber

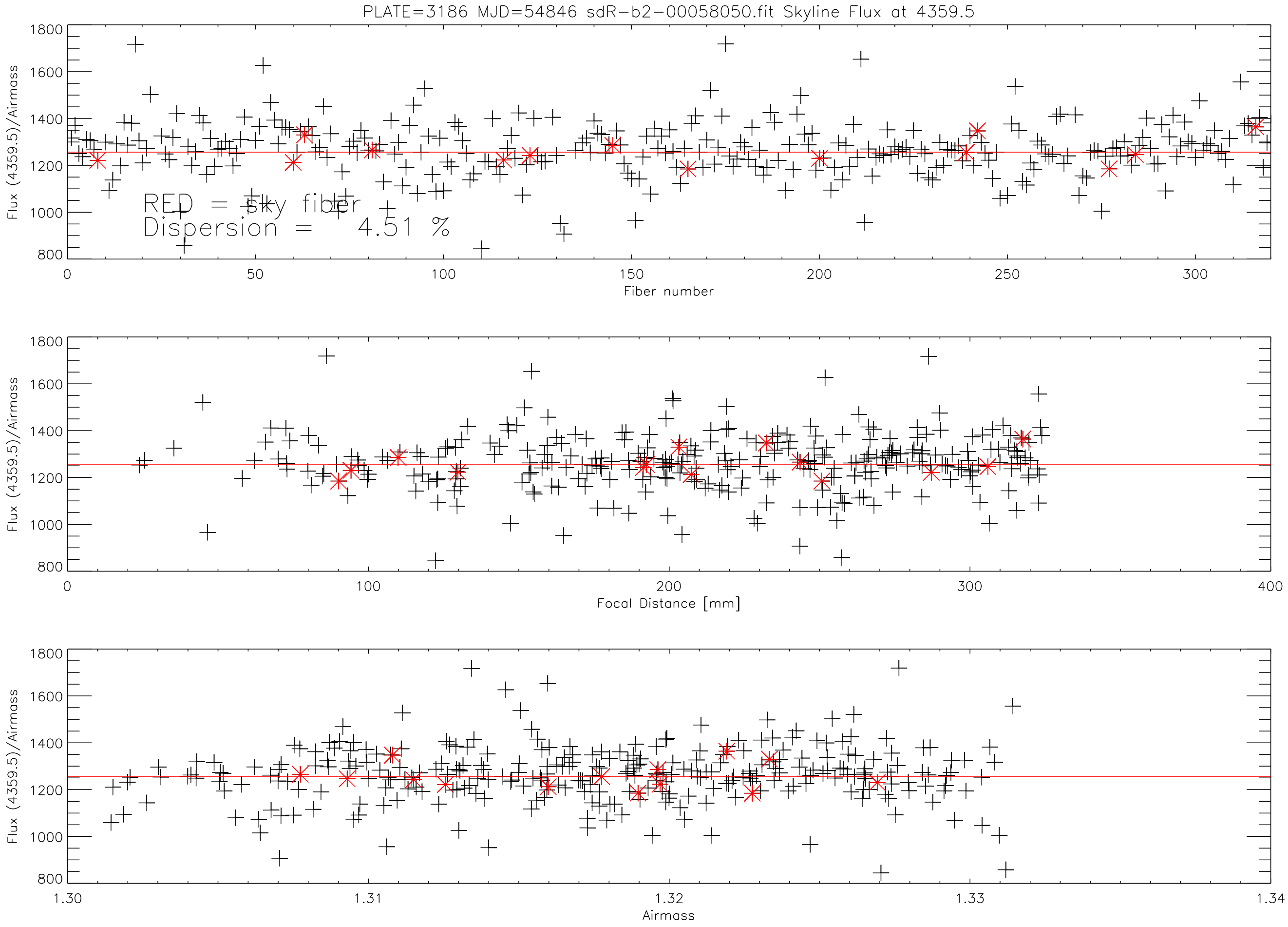

PLATE=3186 MJD=54846 sdR-b2-00058050.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

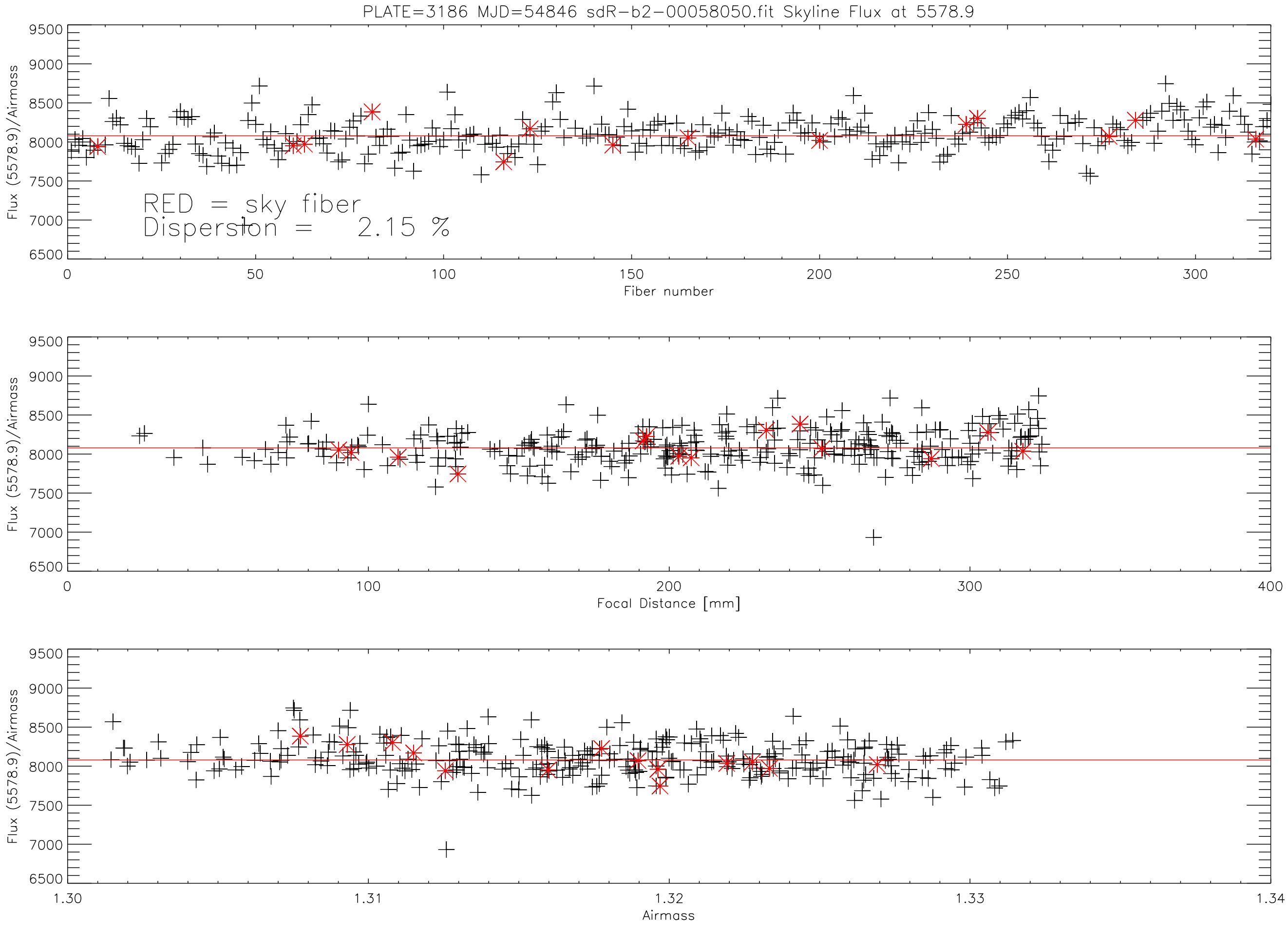

PLATE=3186 MJD=54846 sdR-b2-00058050.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

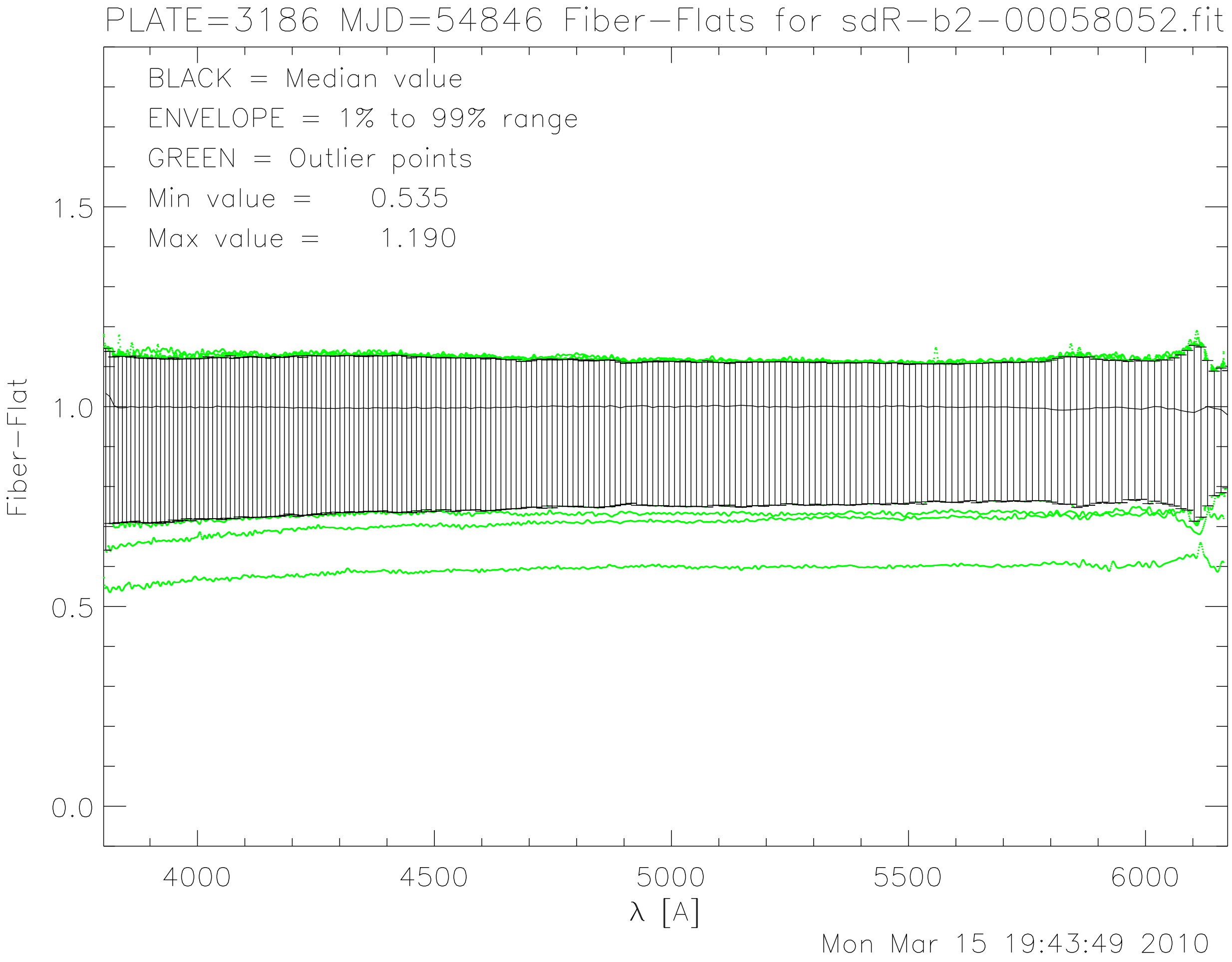
Number of sky fibers = 14

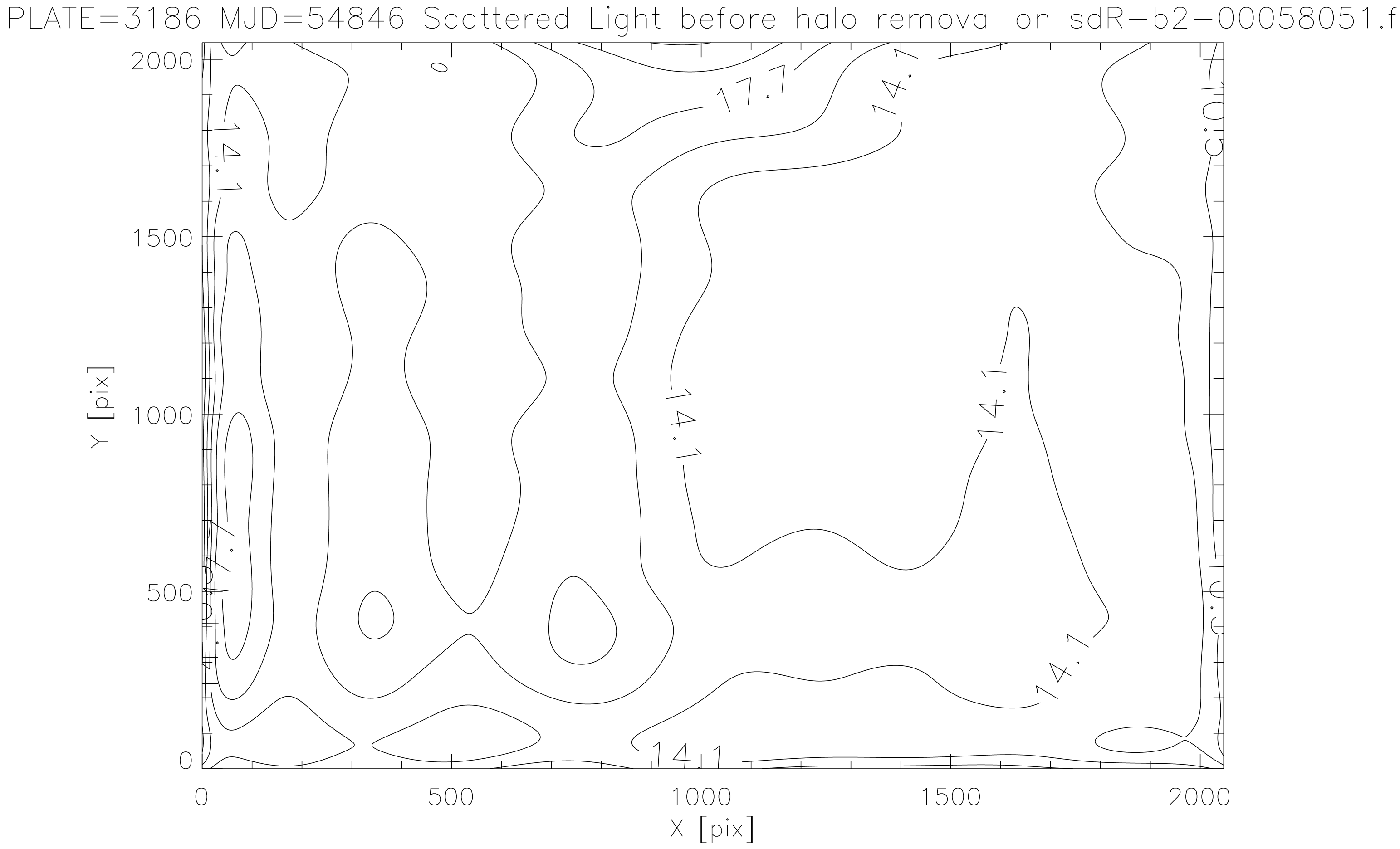
PLATE=3186 MJD=54846 sdR-b2-00058050.fit 2D Sky-subtraction Rescaled Errors



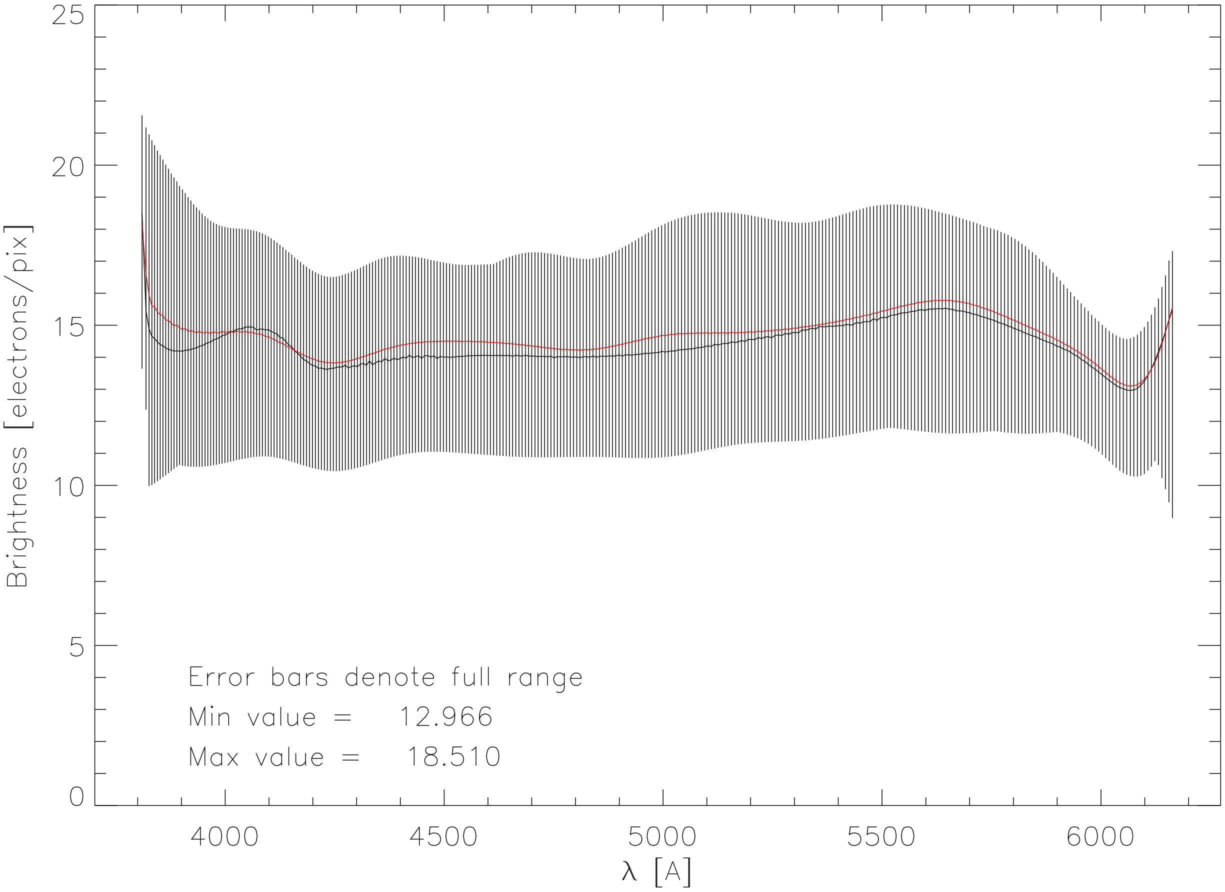

PLATE=3186 MJD=54846 sdR-b2-00058050.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 4.51 %
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
1.30
1.31
1.32
1.33
1.34
Airmass


PLATE=3186 MJD=54846 sdR-b2-00058050.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 2.15 %
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
6500
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.30
1.31
1.32
1.33
1.34

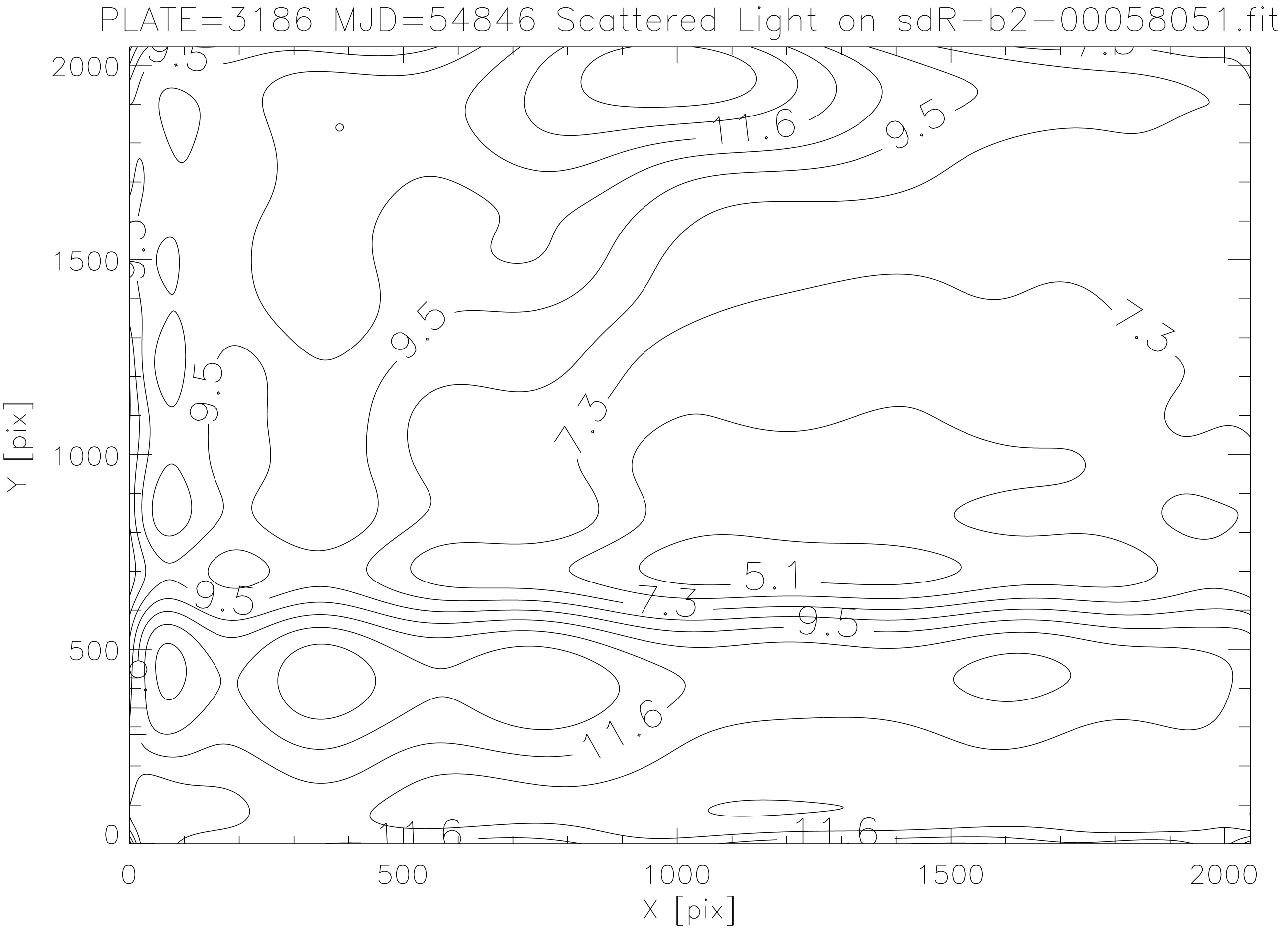

PLATE=3186 MJD=54846 Fiber−Flats for sdR−b2−00058052.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.535
Max value = 1.190
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Mar 15 19:43:49 2010

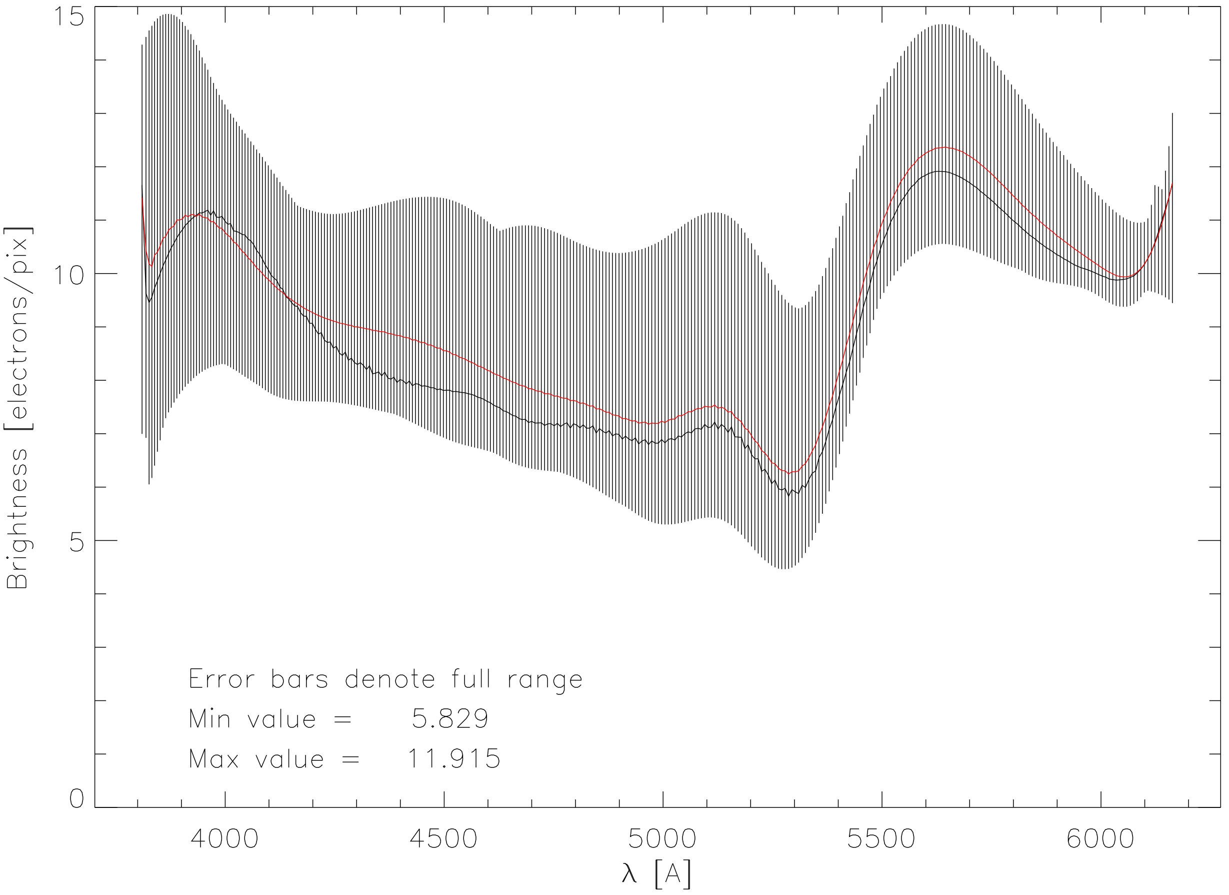

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b2-00058051.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
17.7
14.1
14.1
14.1
14.1
14.1
14.1
14.1
0

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-b2-00058051.f

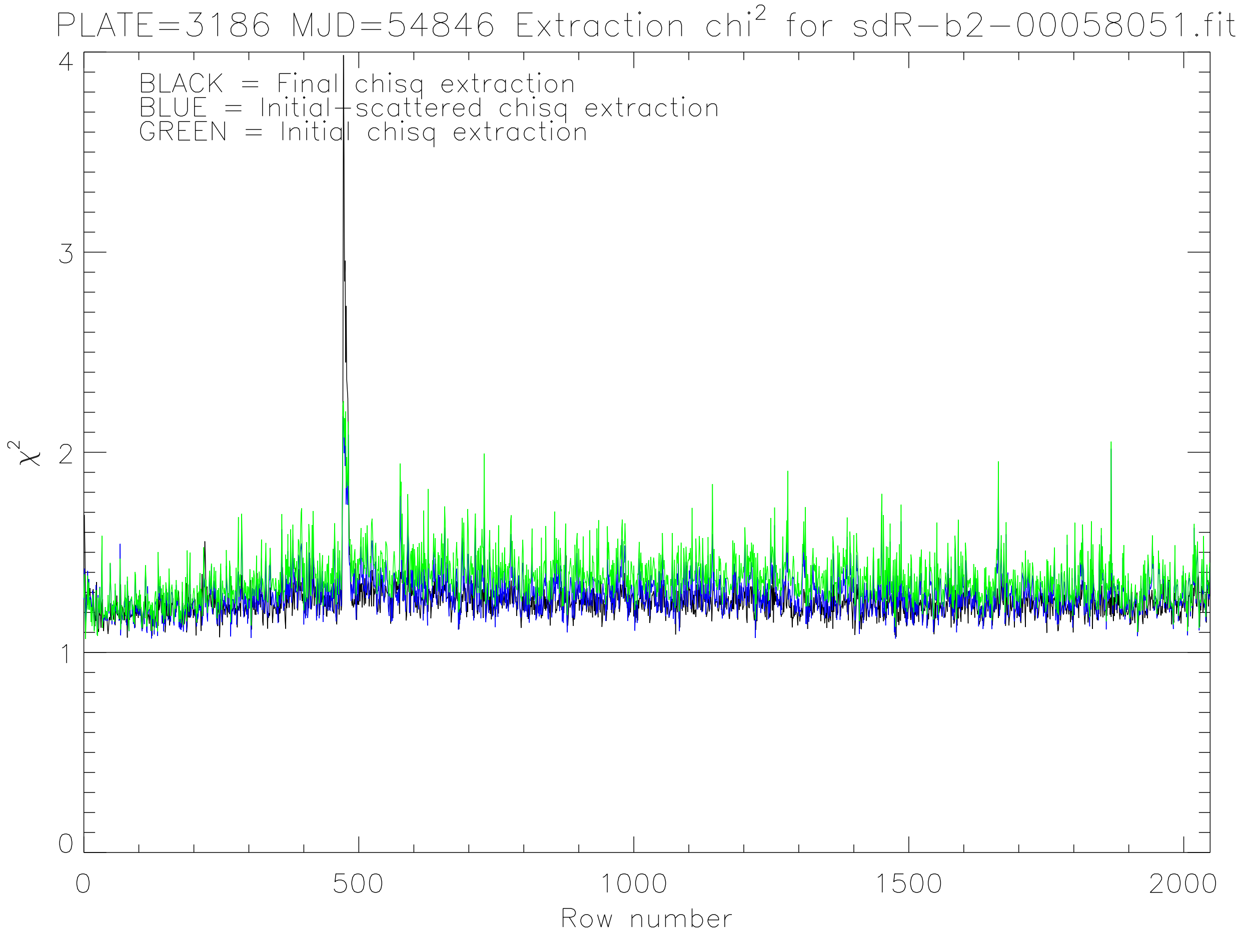


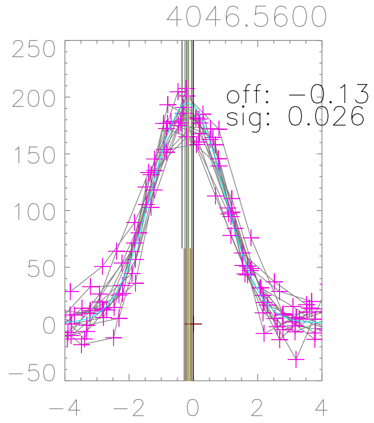
Mon Mar 15 19:44:50 2010

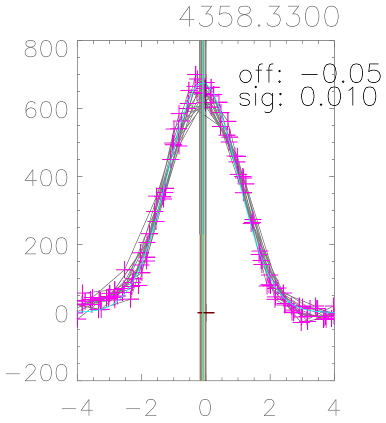

PLATE=3186 MJD=54846 Scattered Light on sdR-b2-00058051.fit

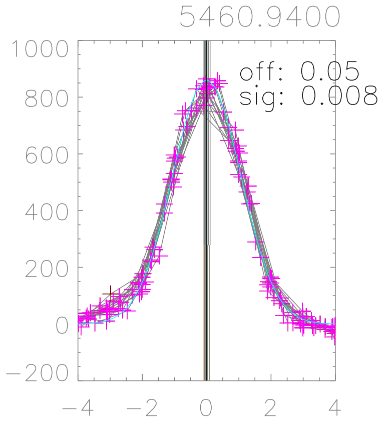

PLATE=3186 MJD=54846 Scattered Light on sdR-b2-00058051.fit

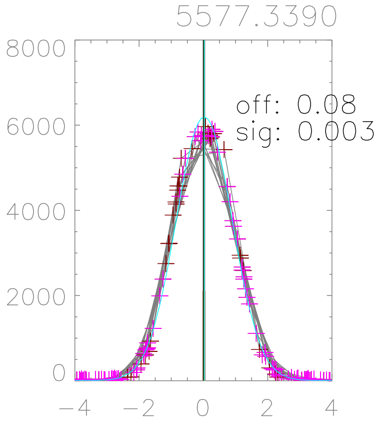
Mon Mar 15 19:48:12 2010

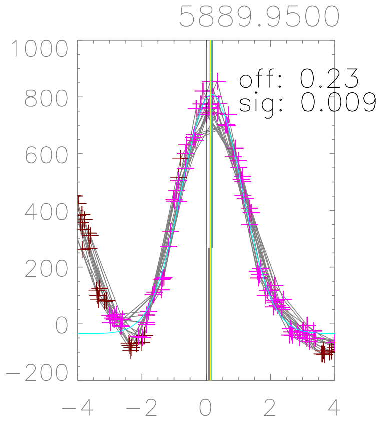

PLATE=3186 MJD=54846 Extraction chi^2 for sdR-b2-00058051.fit
BLACK = Final chisq extraction
BLUE = Initial+scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
Row number
0
500
1000
1500
2000

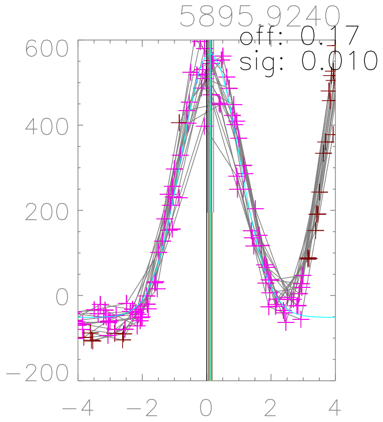

4046.5600
off: −0.13
sig: 0.026
250
200
150
100
50
0
−50
−4
−2
0
2
4

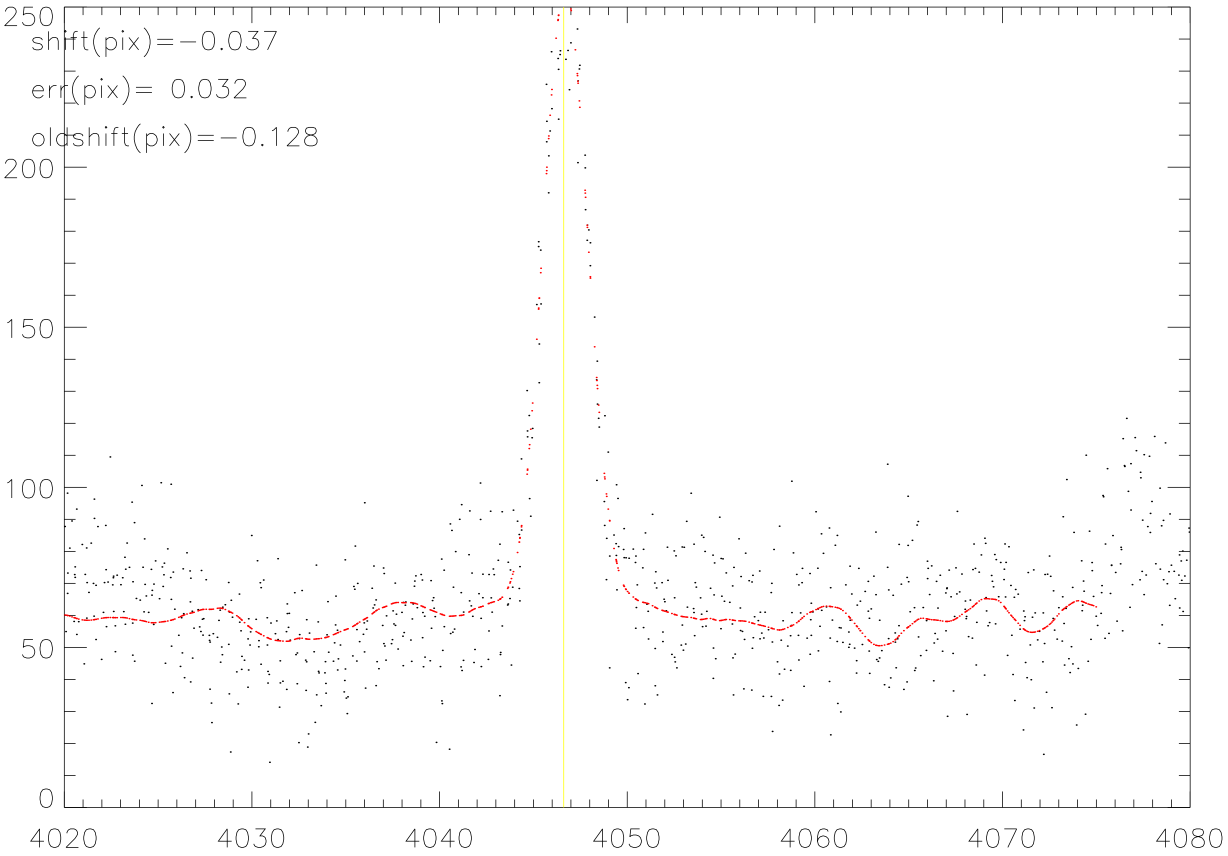

4358.3300
off: −0.05
sig: 0.010
800
600
400
200
0
−200
−4
−2
0
2
4

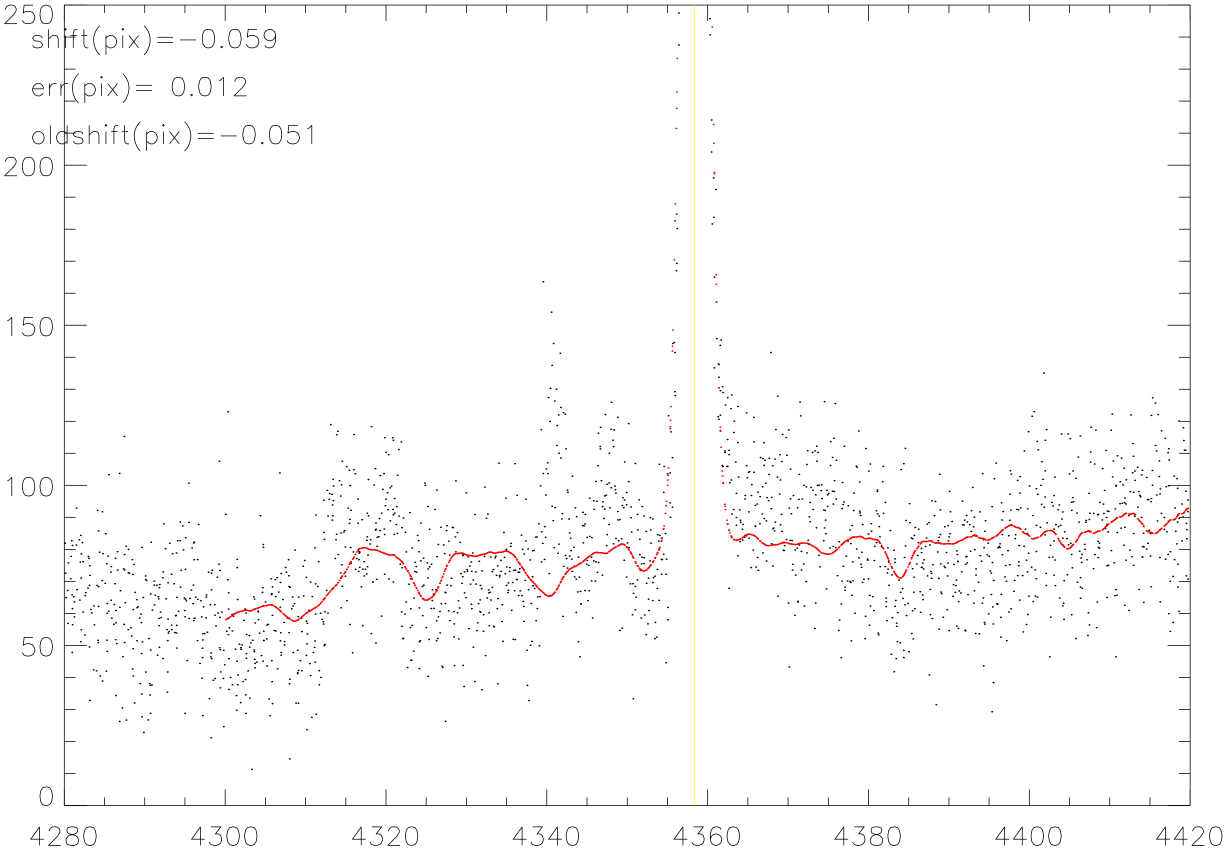

5460.9400
off: 0.05
sig: 0.008
1000
800
600
400
200
0
−200
−4
−2
0
2
4

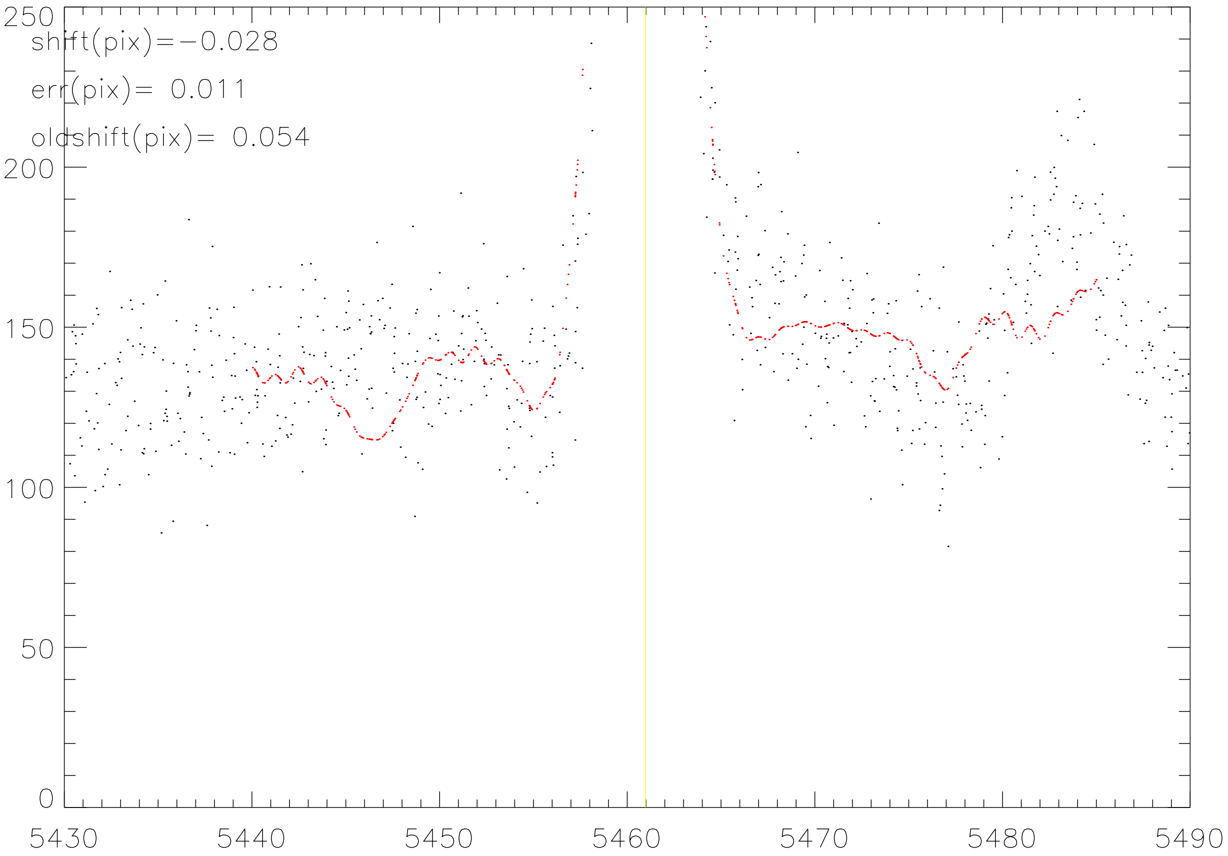

5577.3390
off: 0.08
sig: 0.003
8000
6000
4000
2000
0
−4
−2
0
2
4

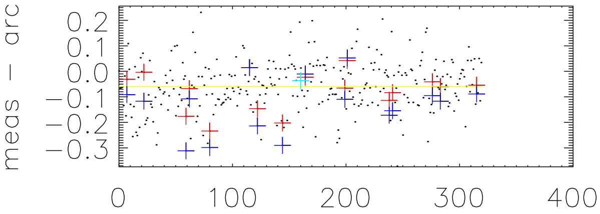

5889.9500
off: 0.23
sig: 0.009
1000
800
600
400
200
0
−200
−4
−2
0
2
4


5895.9240
off: 0.17
sig: 0.010
600
400
200
0
−200
−4
−2
0
2
4

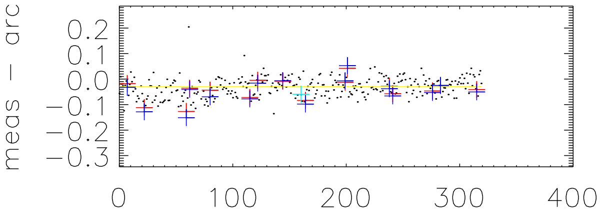

shift(pix)=−0.037
err(pix)= 0.032
oldshift(pix)=−0.128
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080


shift(pix)=−0.059
err(pix)= 0.012
oldshift(pix)=−0.051
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

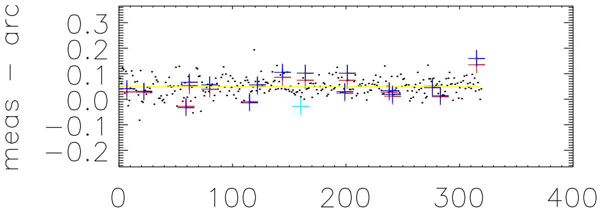

shift(pix)=−0.028
err(pix)= 0.011
oldshift(pix)= 0.054
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490



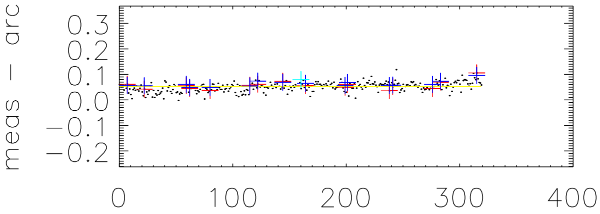
4046.5600



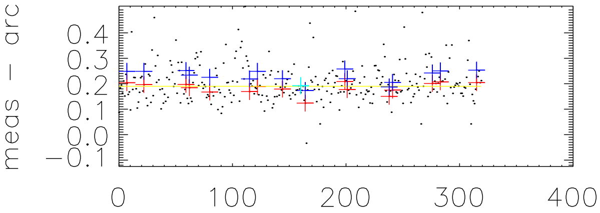
4358.3300



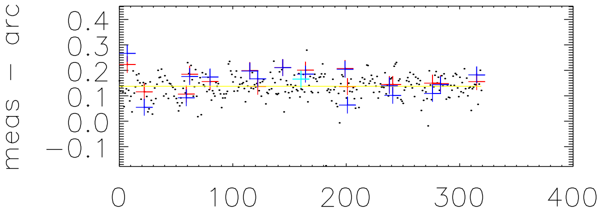
5460.9400



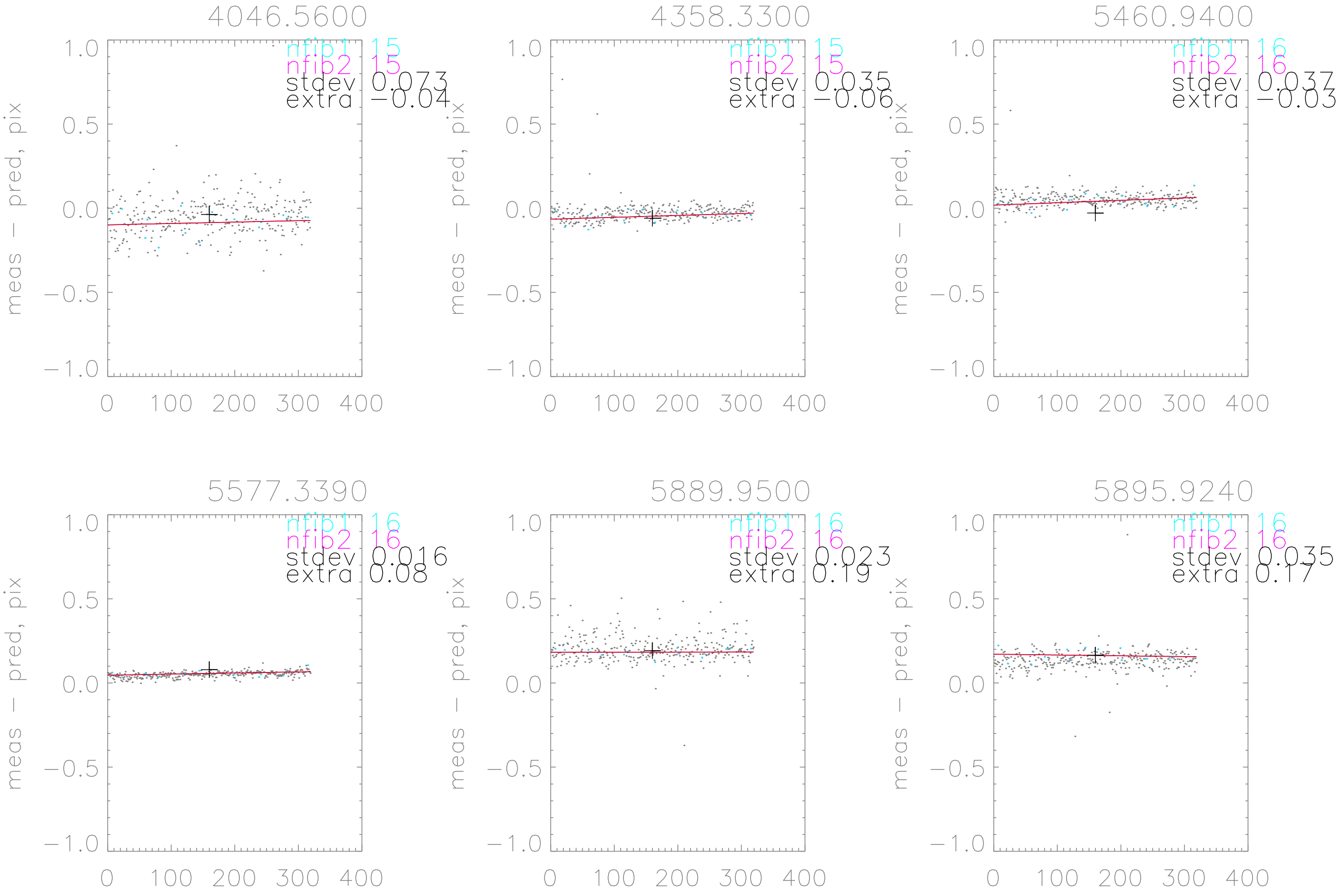
5577.3390

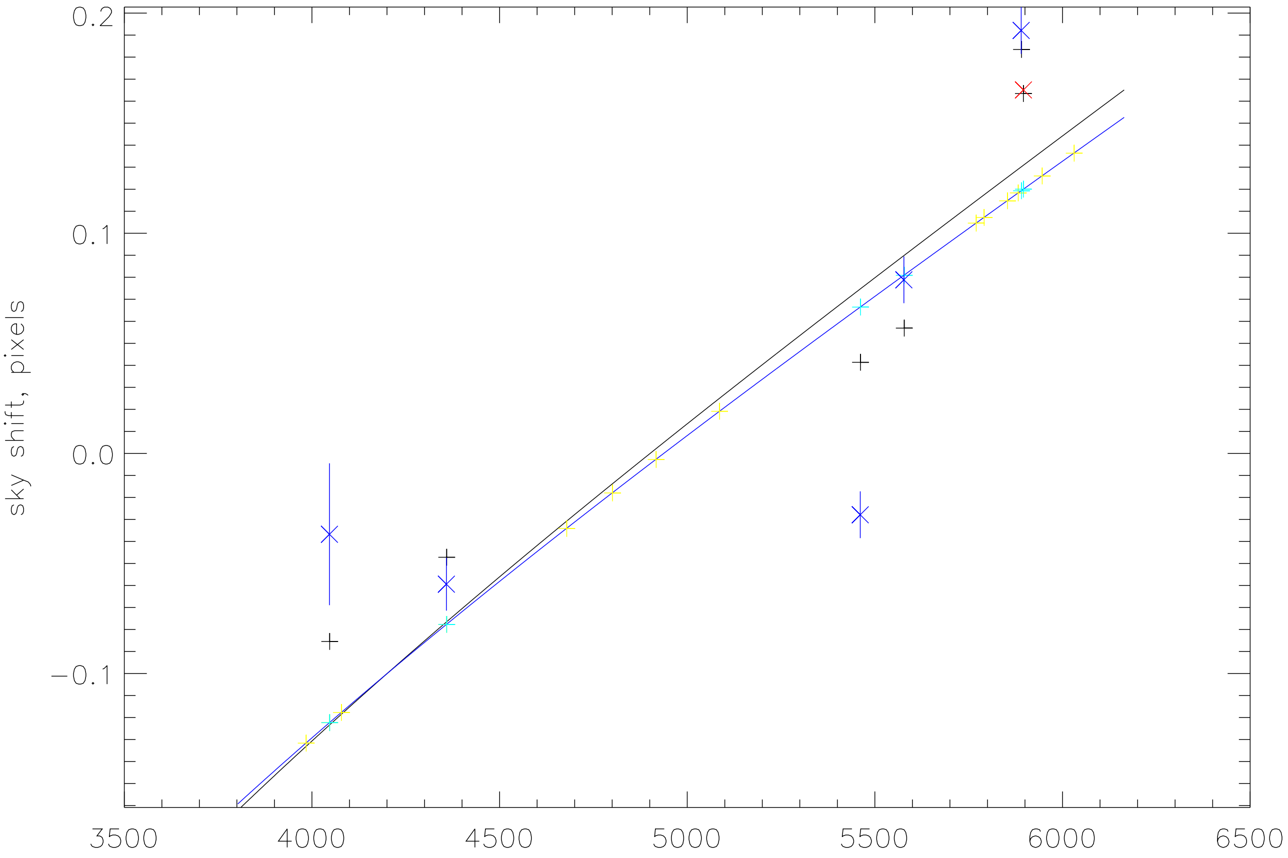


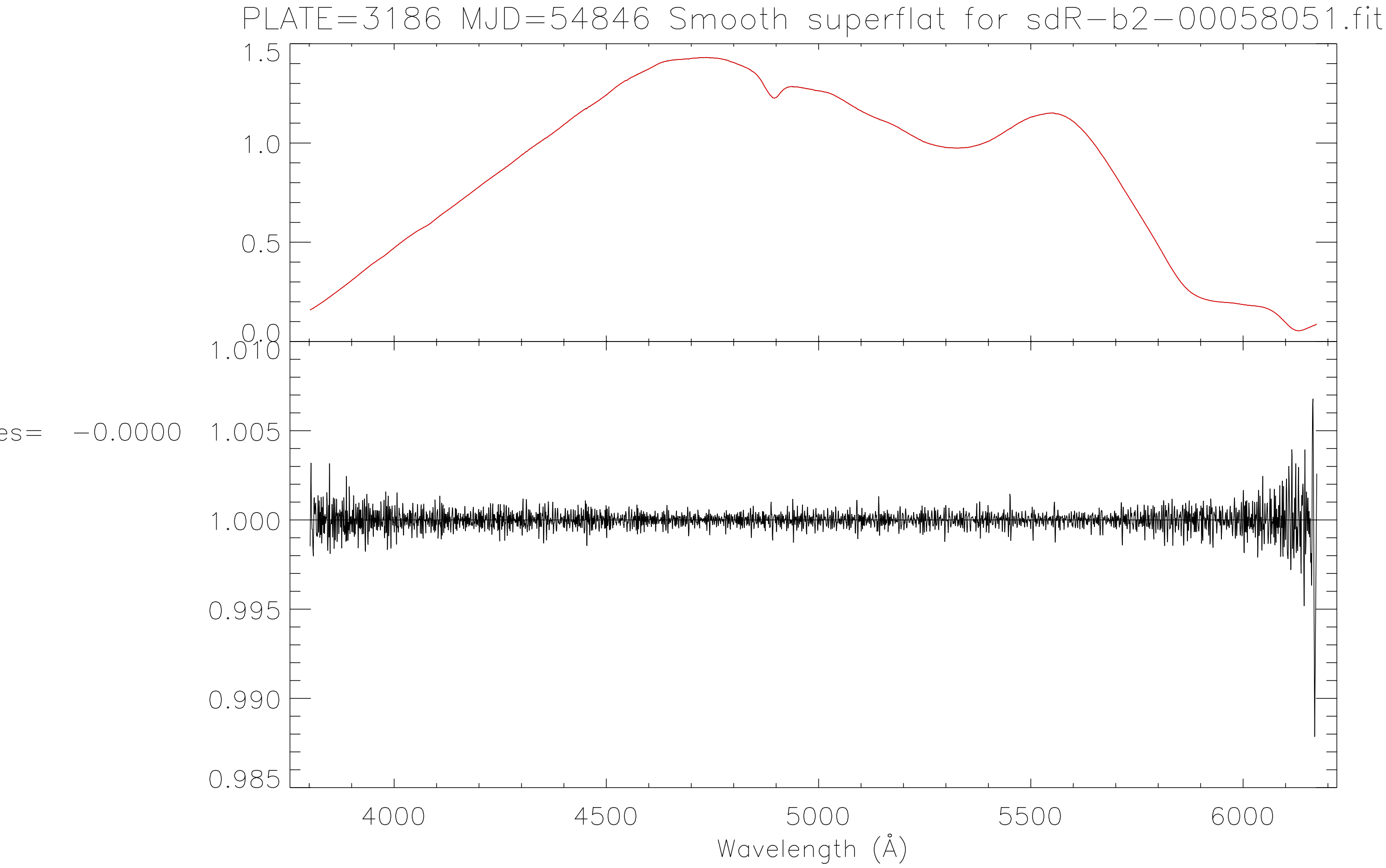
5889.9500

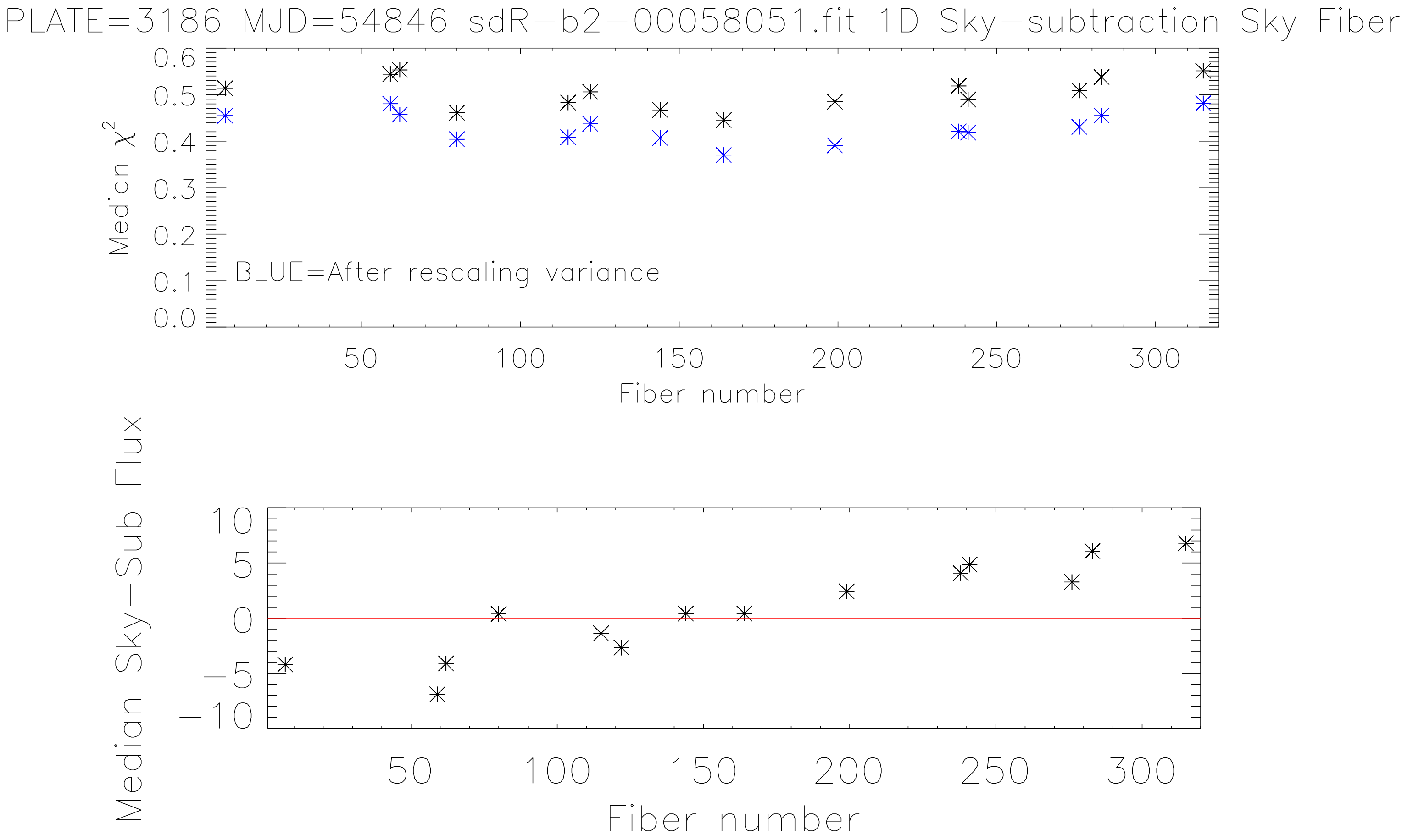


5895.9240

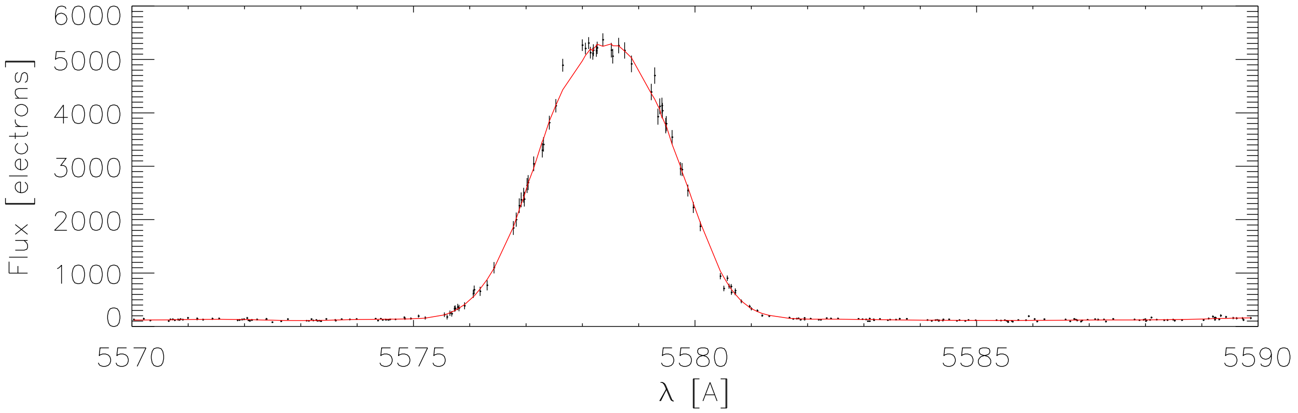

4046.5600
nfib1 15
nfib2 15
stdev 0.073
extra −0.04
4358.3300
nfib1 15
nfib2 15
stdev 0.035
extra −0.06
5460.9400
nfib1 16
nfib2 16
stdev 0.037
extra −0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.19
5895.9240
nfib1 16
nfib2 16
stdev 0.035
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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

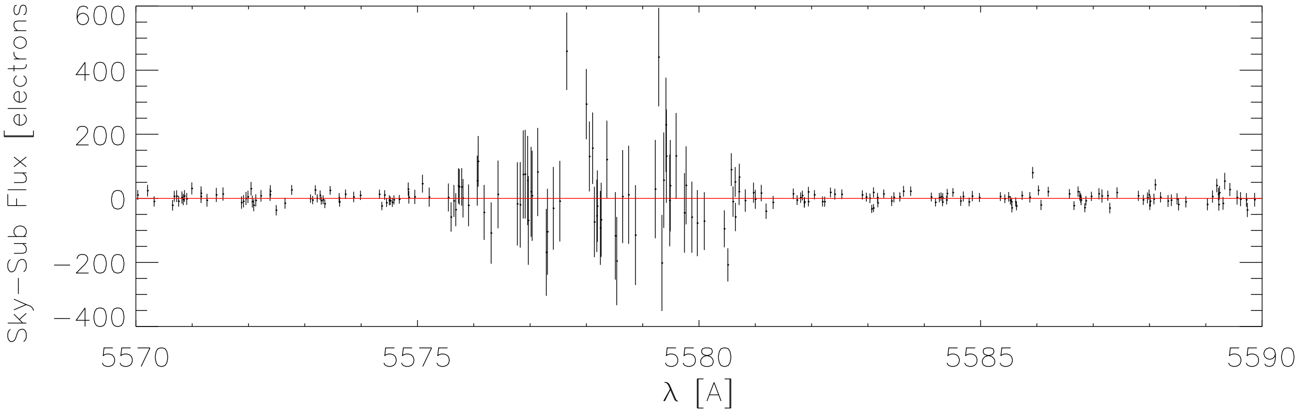

PLATE=3186 MJD=54846 Smooth superflat for sdR-b2-00058051.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3186 MJD=54846 sdR-b2-00058051.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
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

PLATE=3186 MJD=54846 sdR-b2-00058051.fit 1D Sky-subtraction Sky Fibers

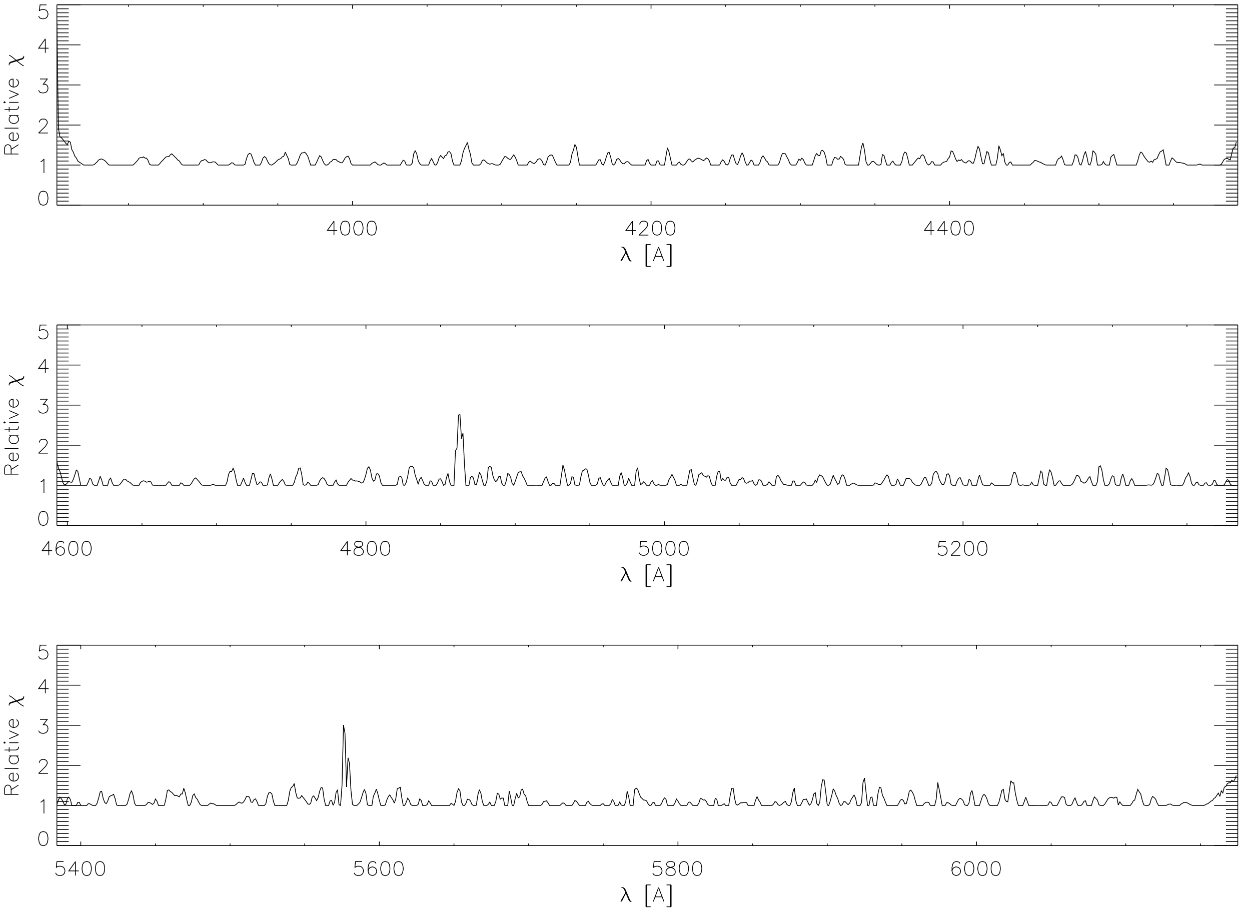


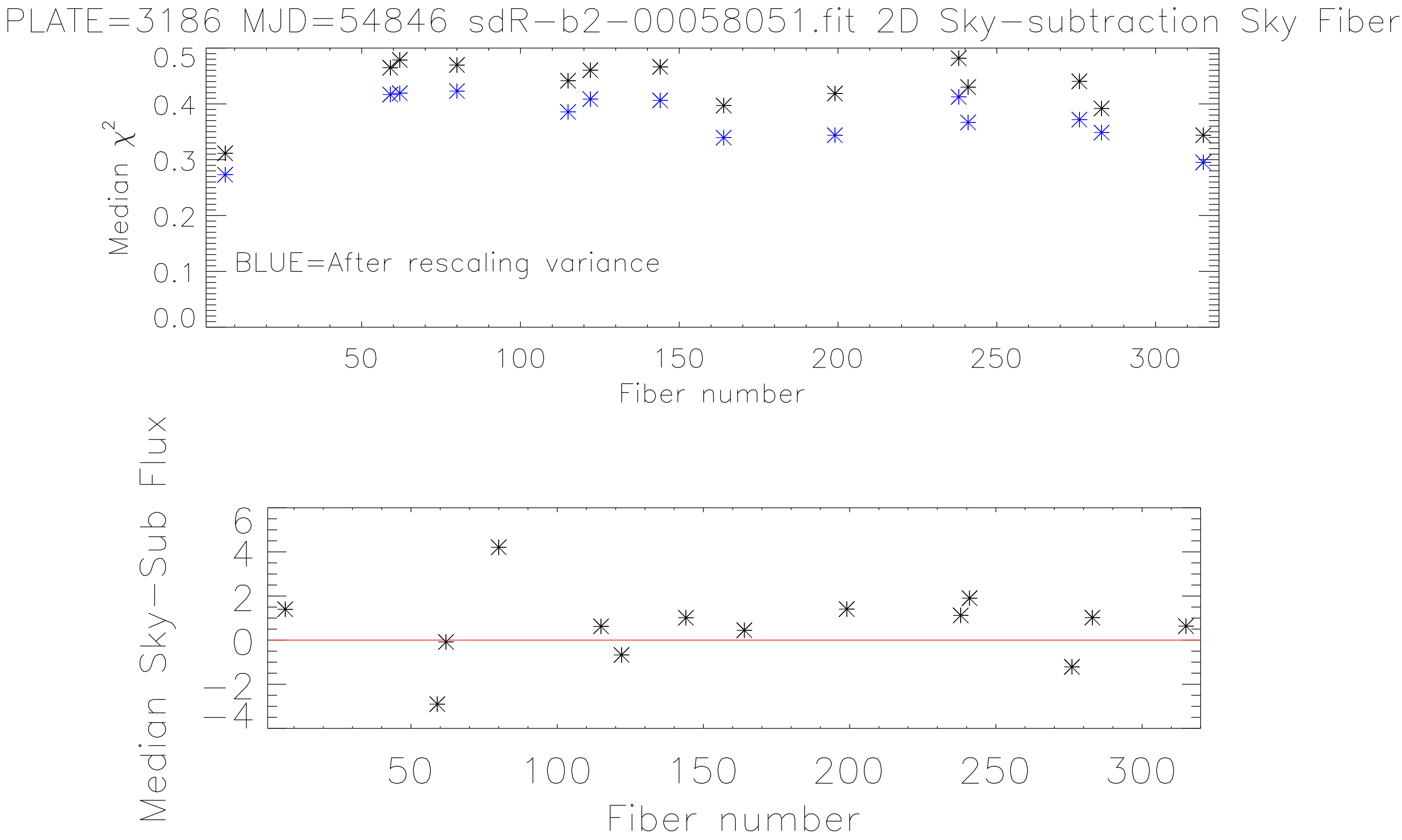
PLATE=3186 MJD=54846 sdR-b2-00058051.fit 1D Sky-subtraction Sky-subtracted Sky F



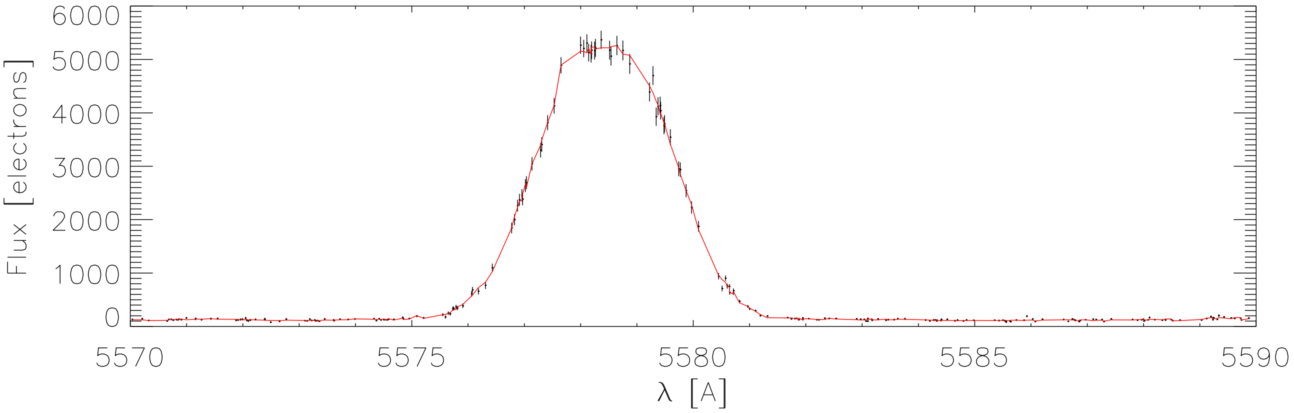
Number of sky fibers = 14

PLATE=3186 MJD=54846 sdR-b2-00058051.fit 1D Sky-subtraction Rescaled Errors

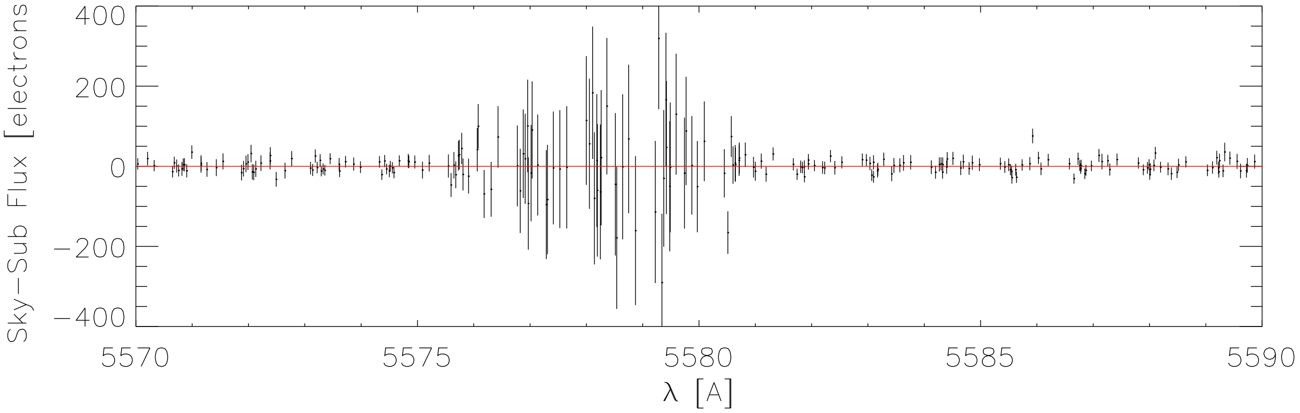



PLATE=3186 MJD=54846 sdR-b2-00058051.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

PLATE=3186 MJD=54846 sdR-b2-00058051.fit 2D Sky-subtraction Sky Fibers

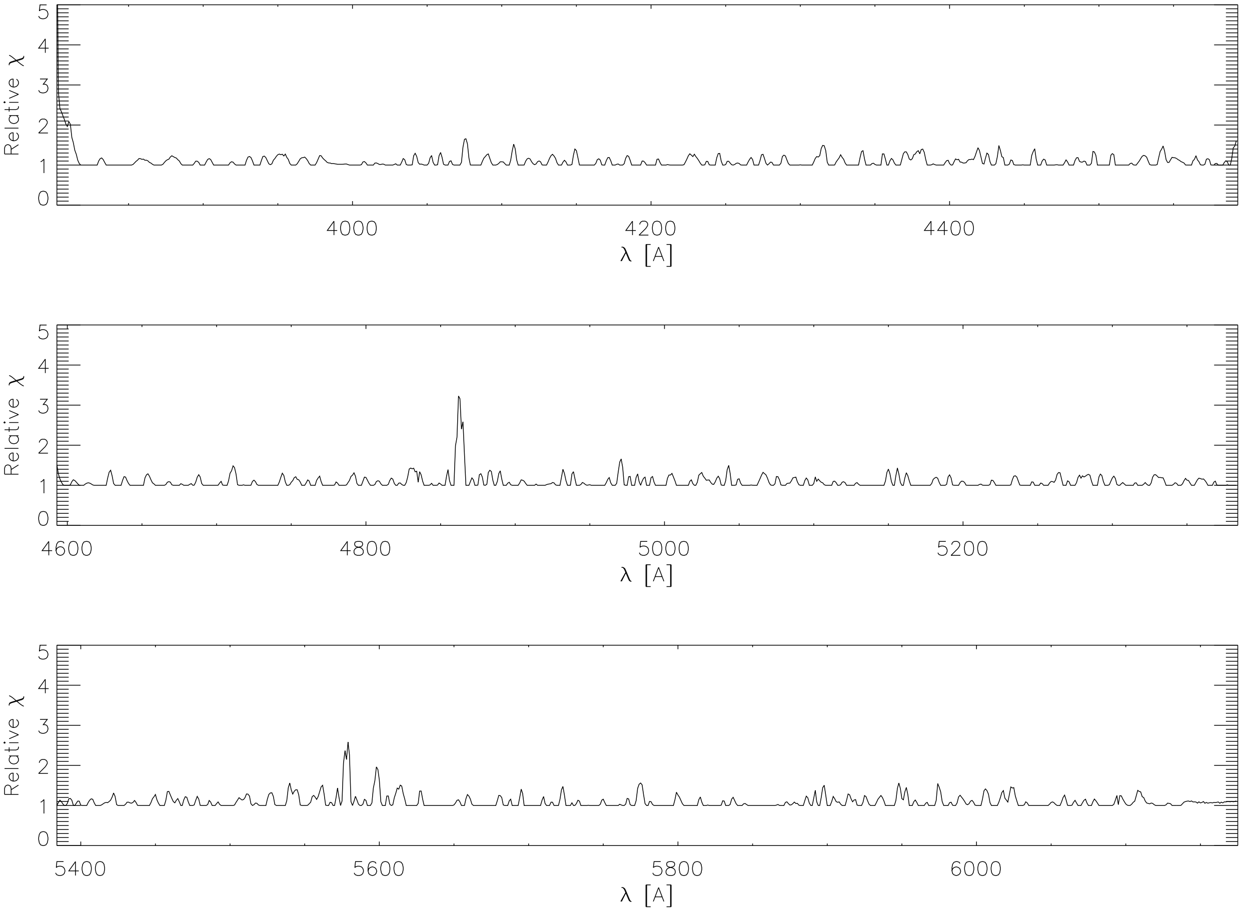


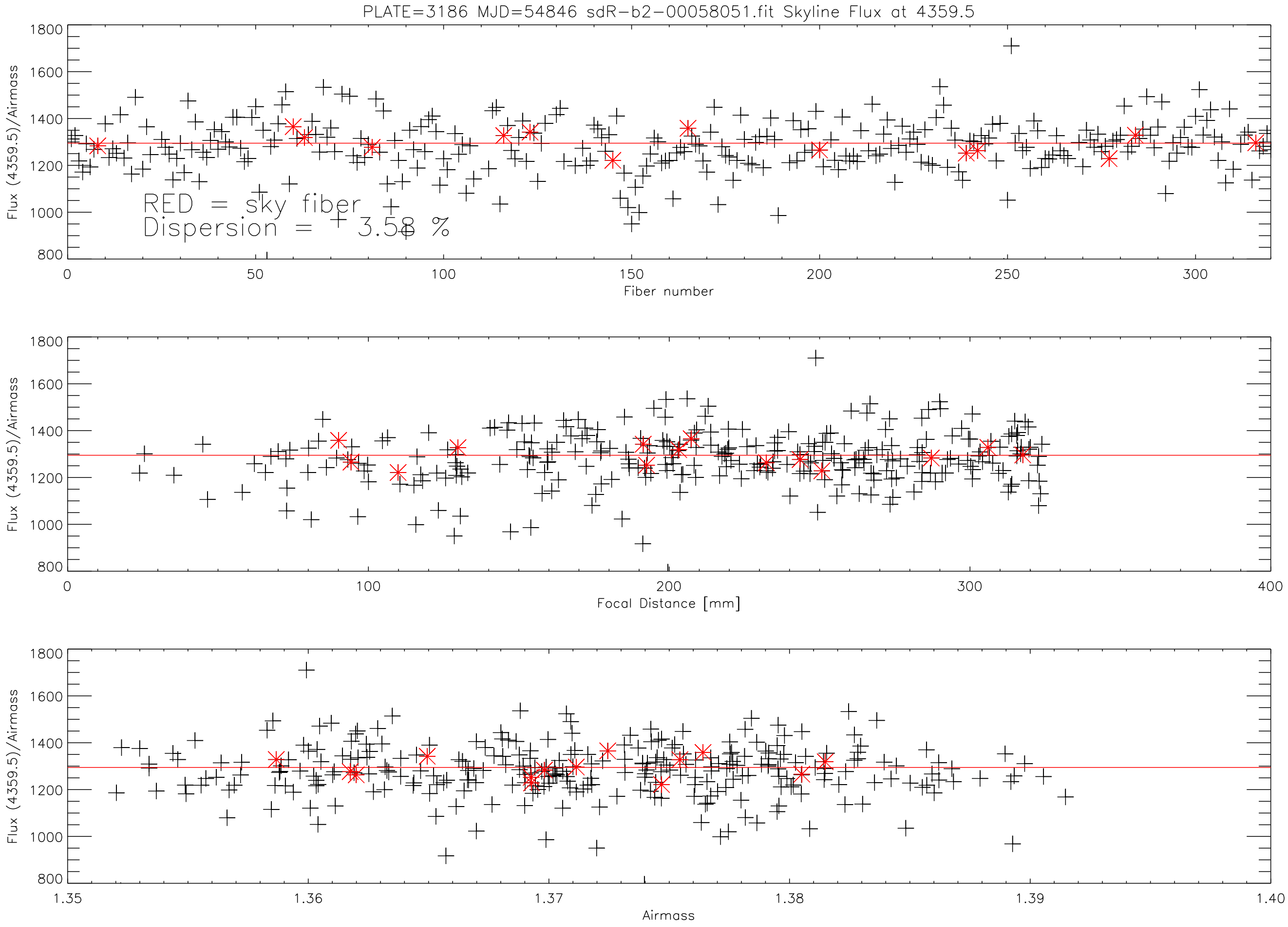
PLATE=3186 MJD=54846 sdR-b2-00058051.fit 2D Sky-subtraction Sky-subtracted Sky F

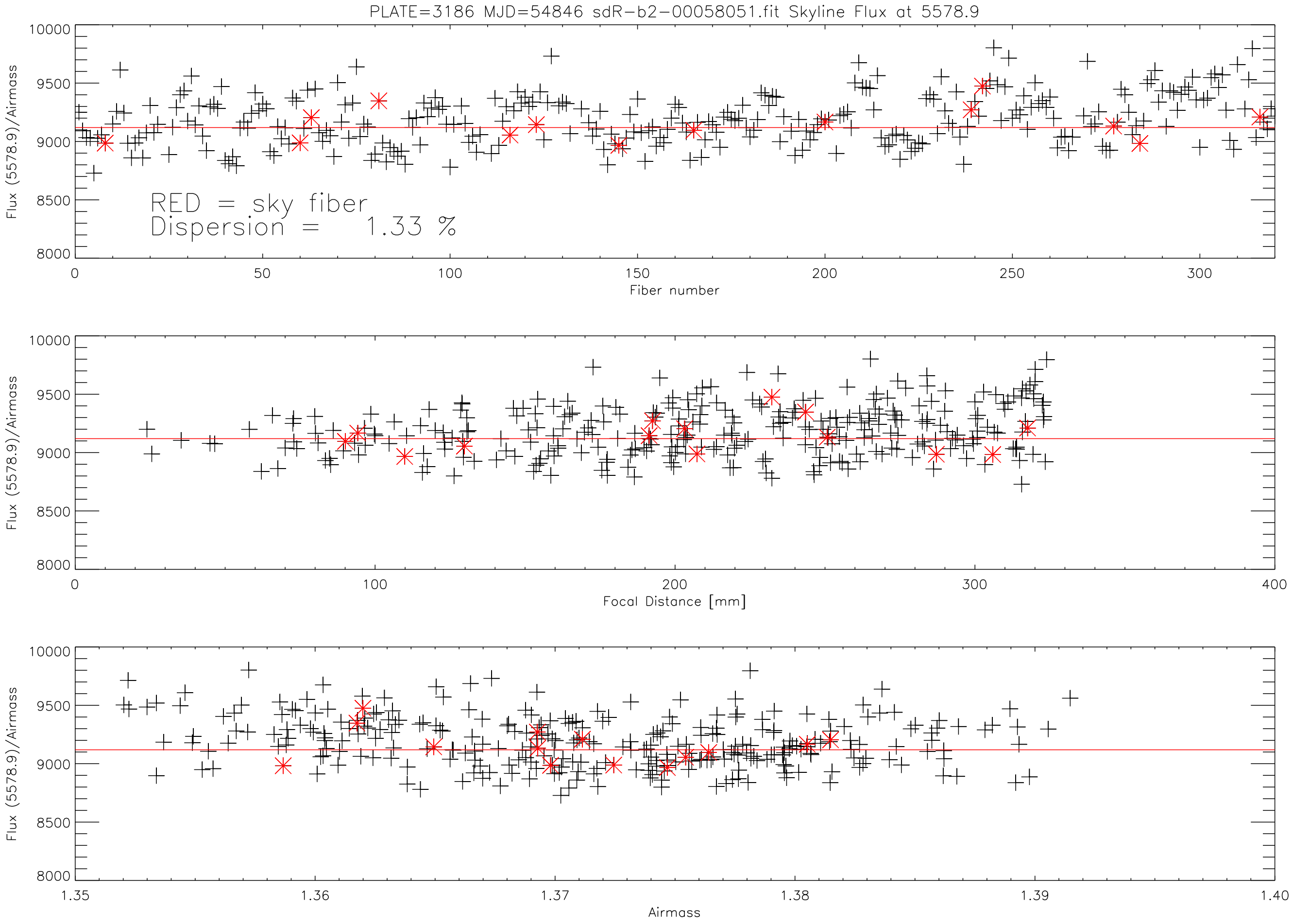


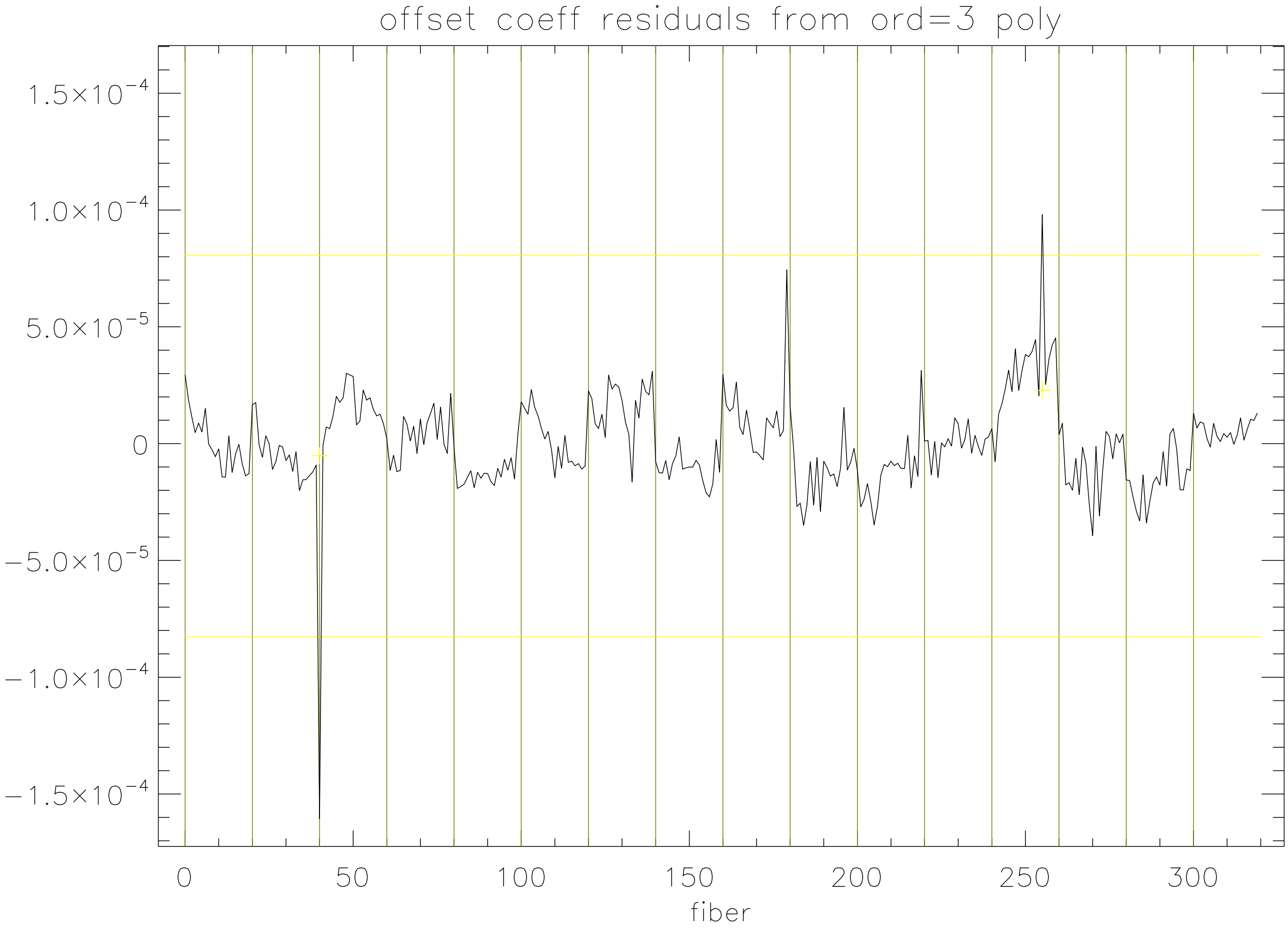
Number of sky fibers = 14

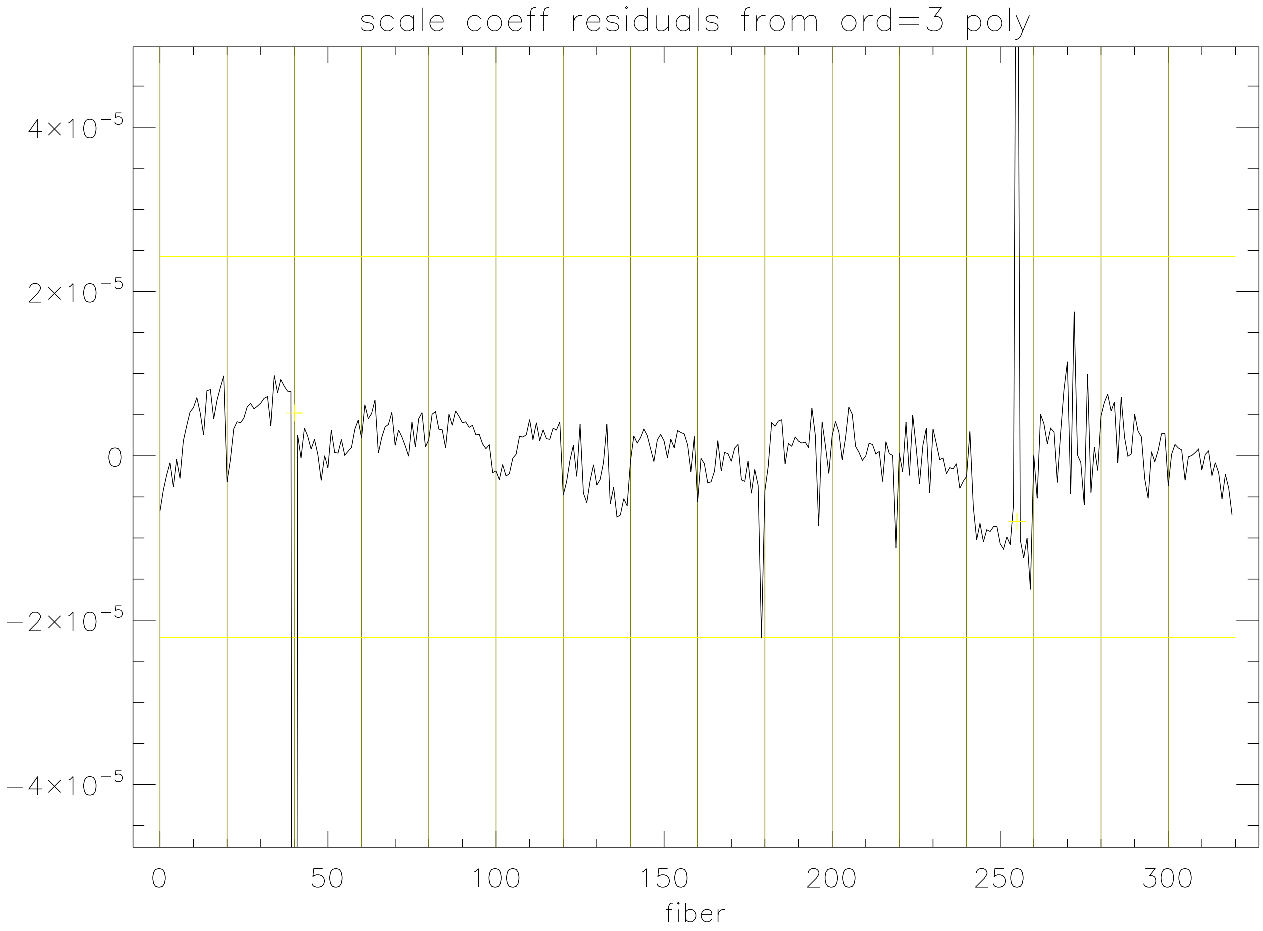
PLATE=3186 MJD=54846 sdR-b2-00058051.fit 2D Sky-subtraction Rescaled Errors

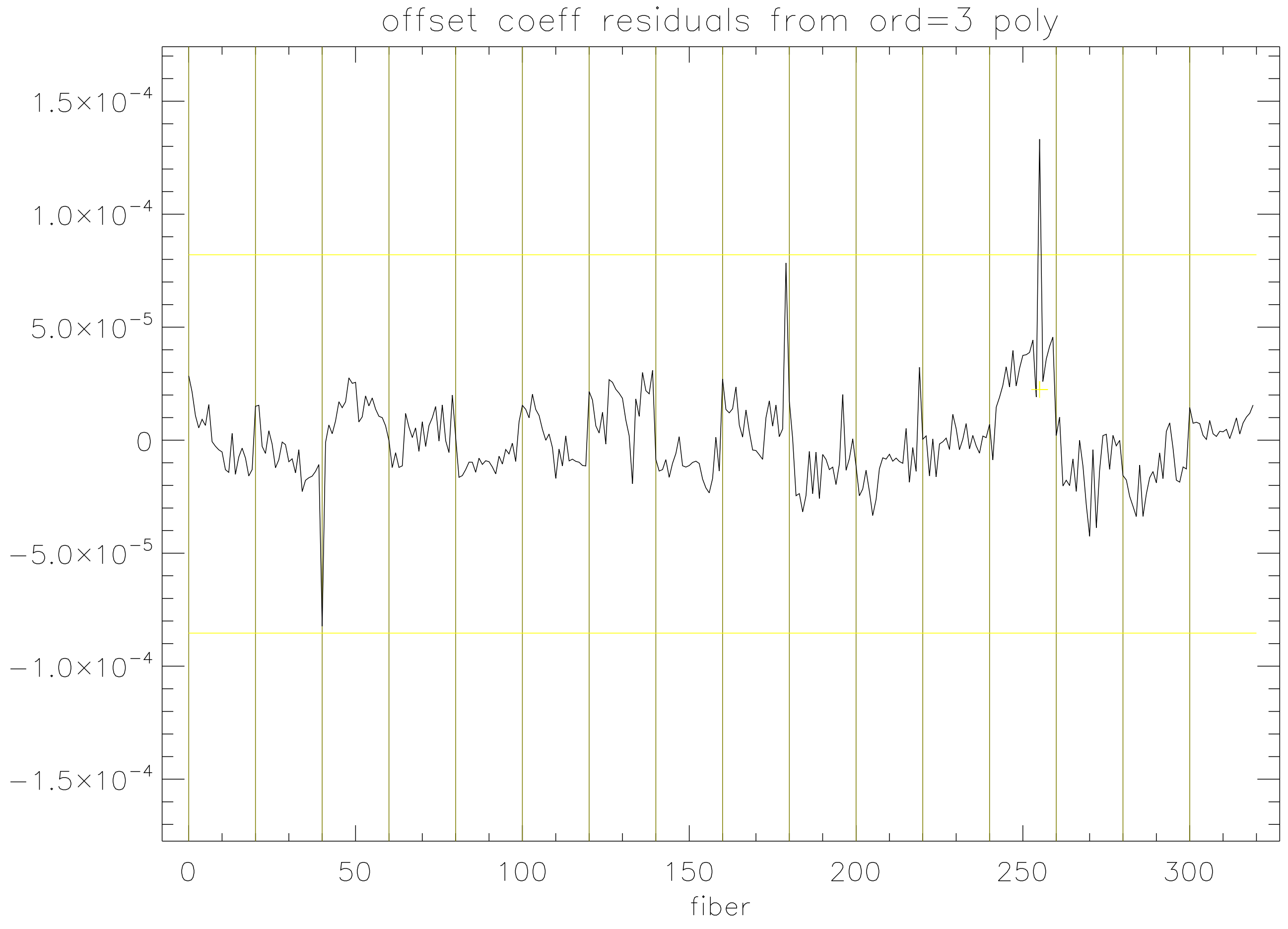


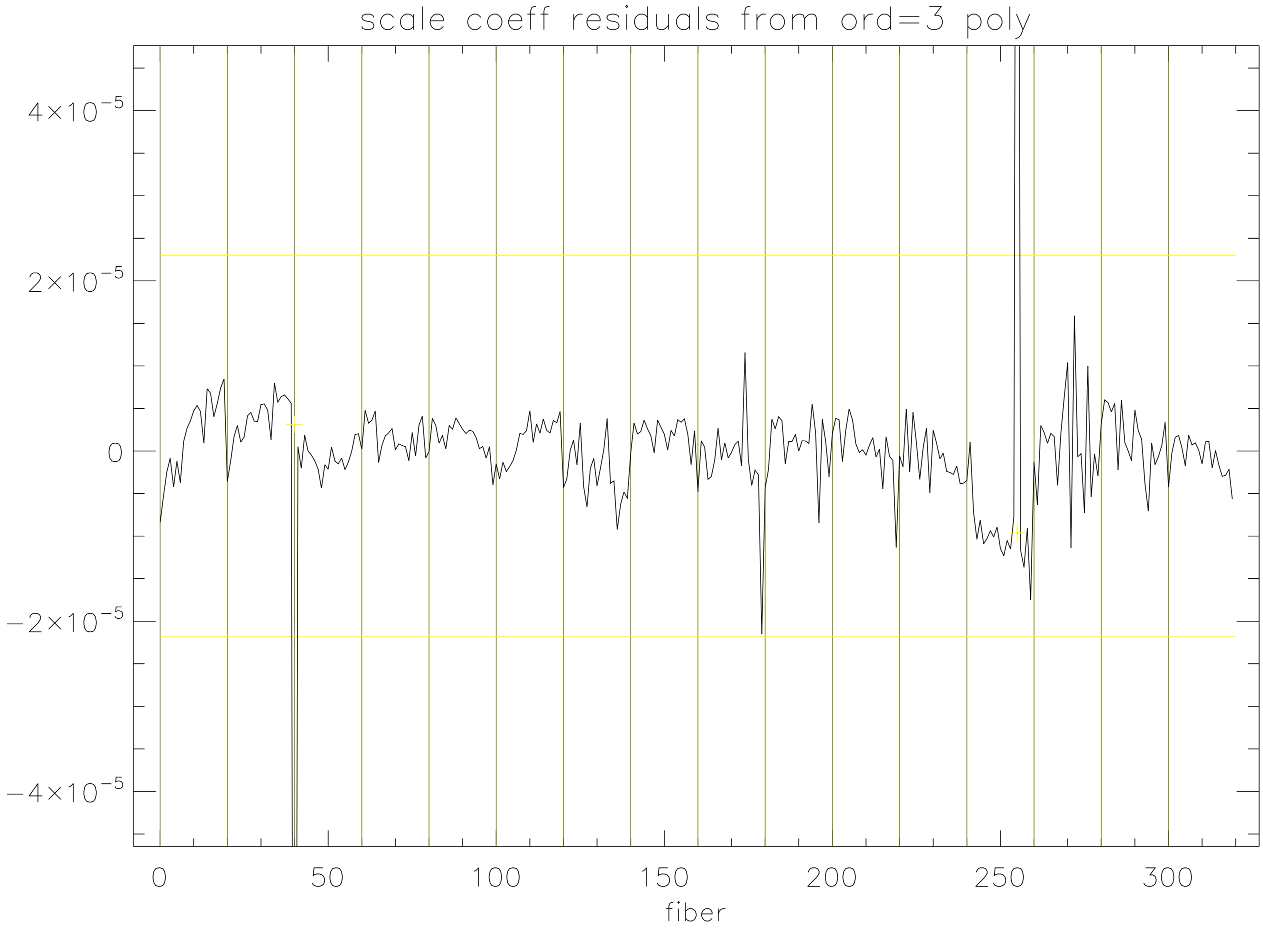

PLATE=3186 MJD=54846 sdR-b2-00058051.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
RED = sky fiber
Dispersion = 3.58 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1800
1600
1400
1200
1000
800
1.35
1.36
1.37
1.38
1.39
1.40
Airmass

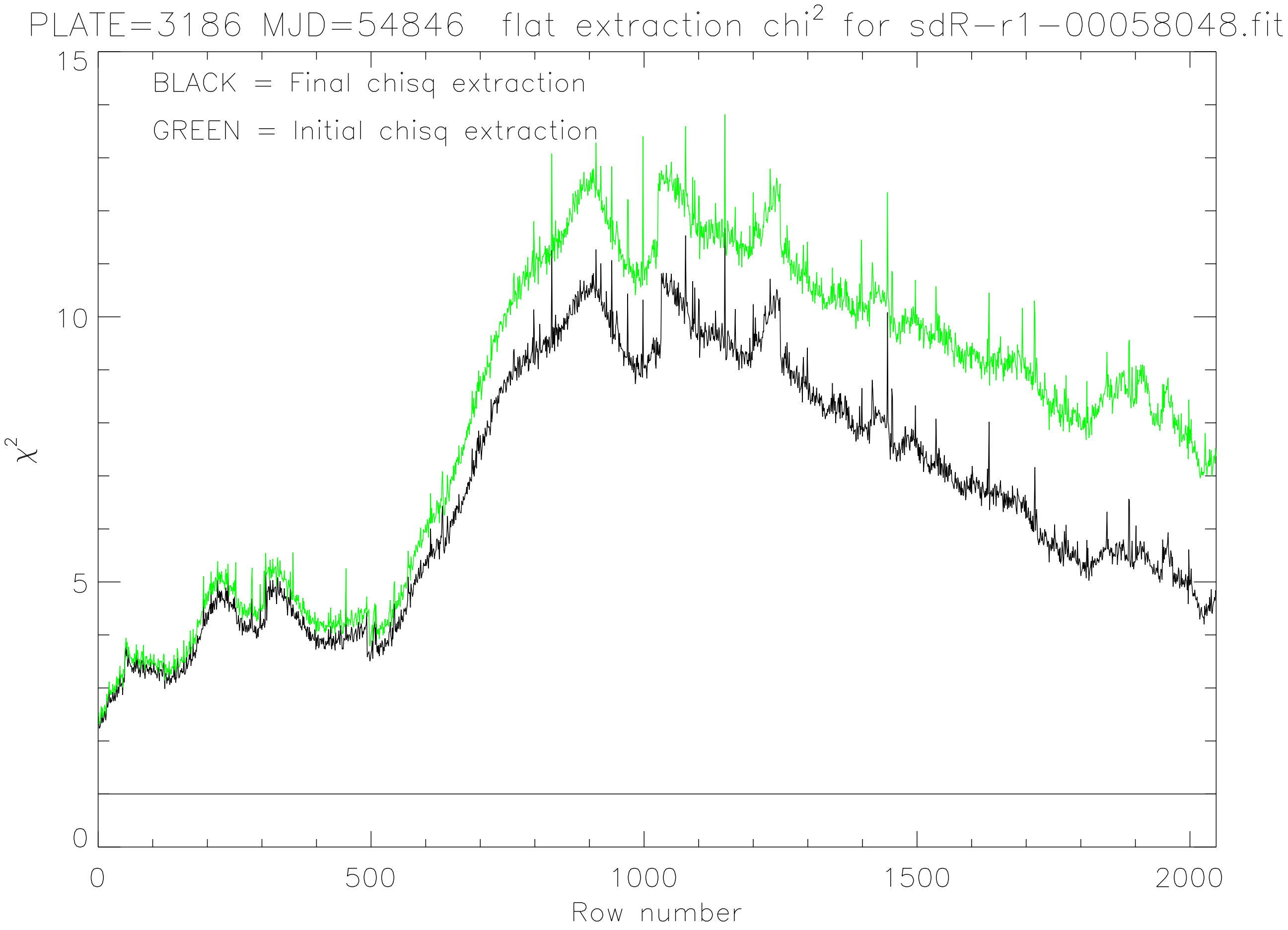

PLATE=3186 MJD=54846 sdR-b2-00058051.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
10000
9500
9000
8500
8000
RED = sky fiber
Dispersion = 1.33 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
10000
9500
9000
8500
8000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
10000
9500
9000
8500
8000
1.35
1.36
1.37
1.38
1.39
1.40
Airmass

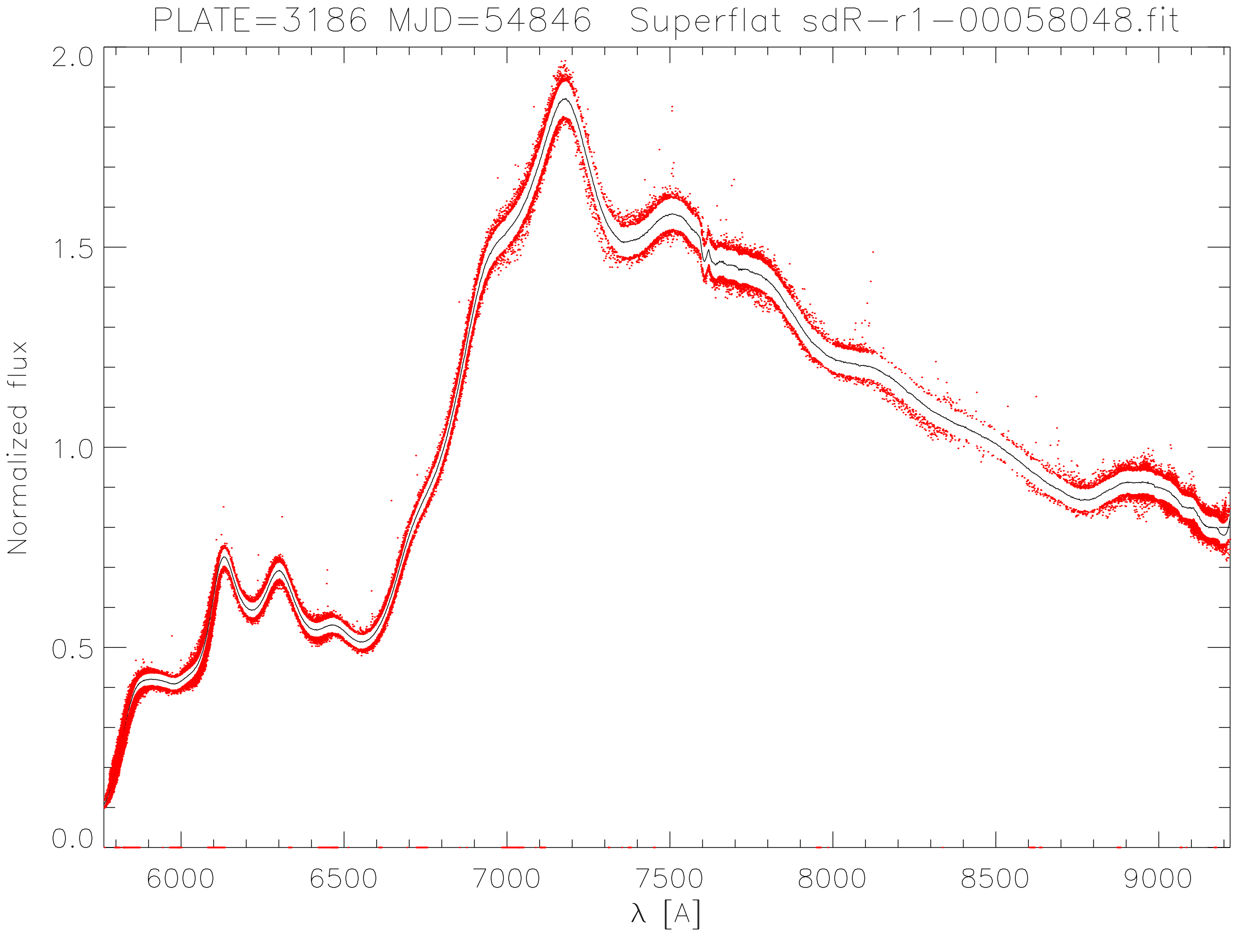

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

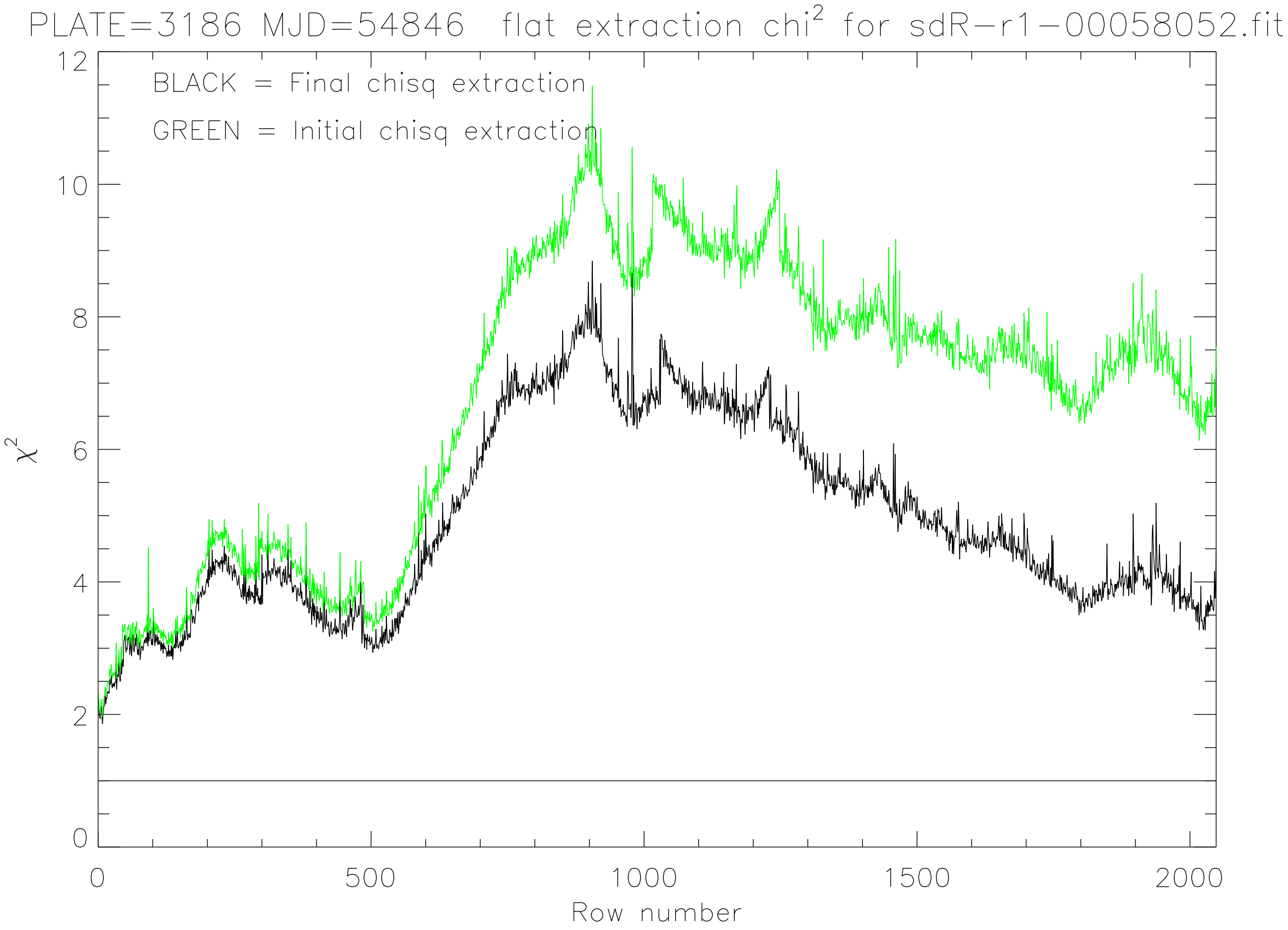

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

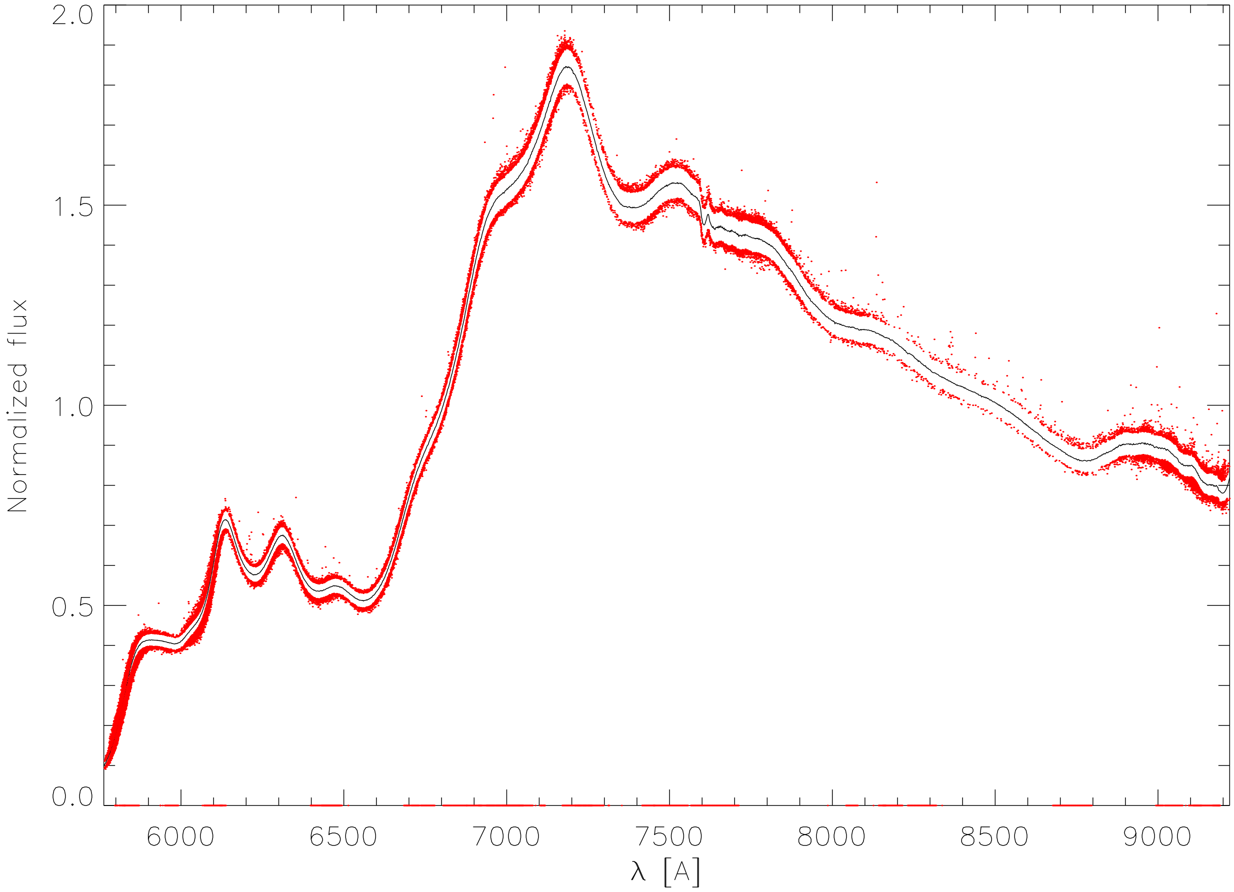

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber


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

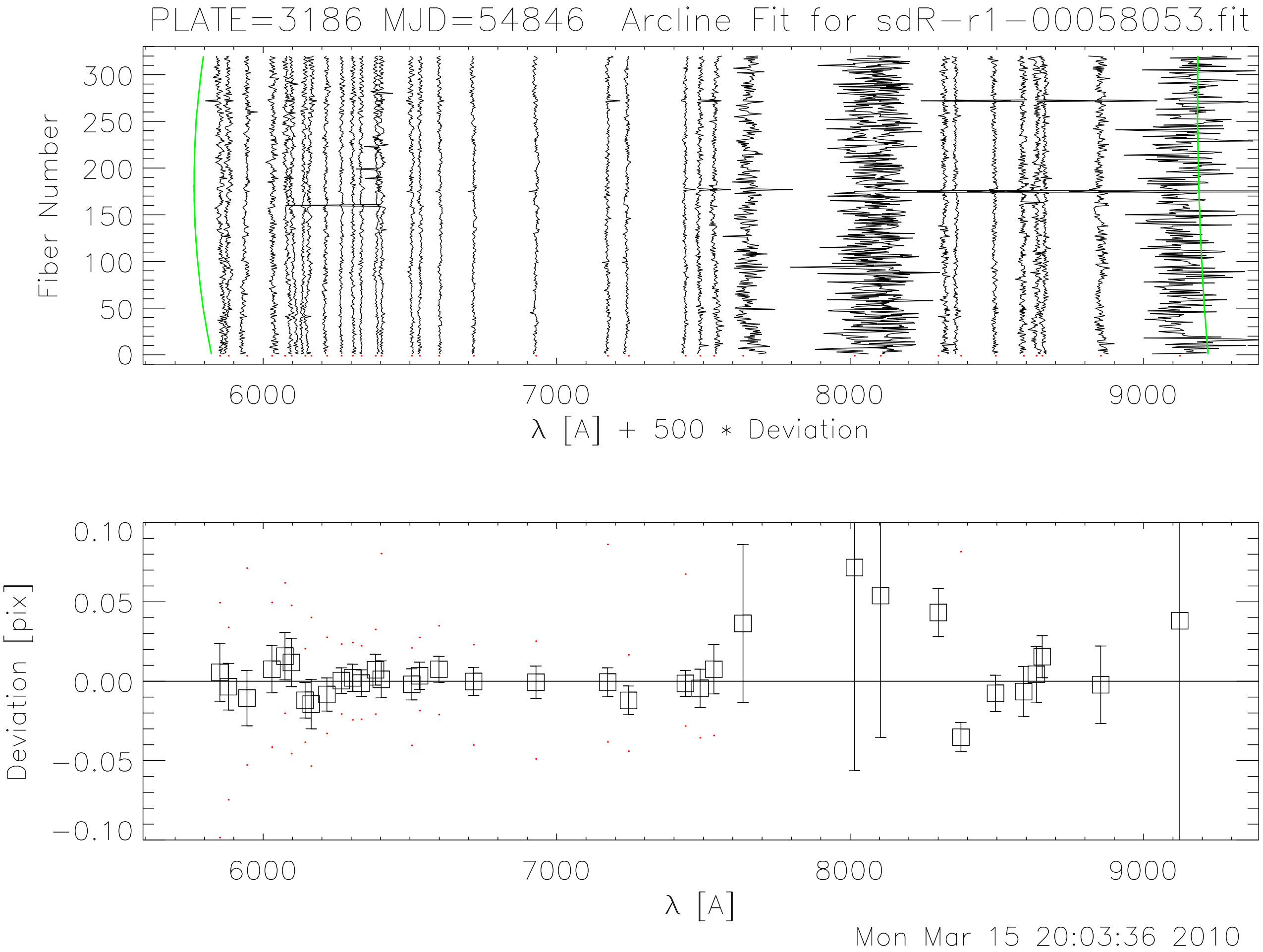

PLATE=3186 MJD=54846 flat extraction chi^2 for sdR-r1-00058048.fit


PLATE=3186 MJD=54846 Superflat sdR-r1-00058048.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

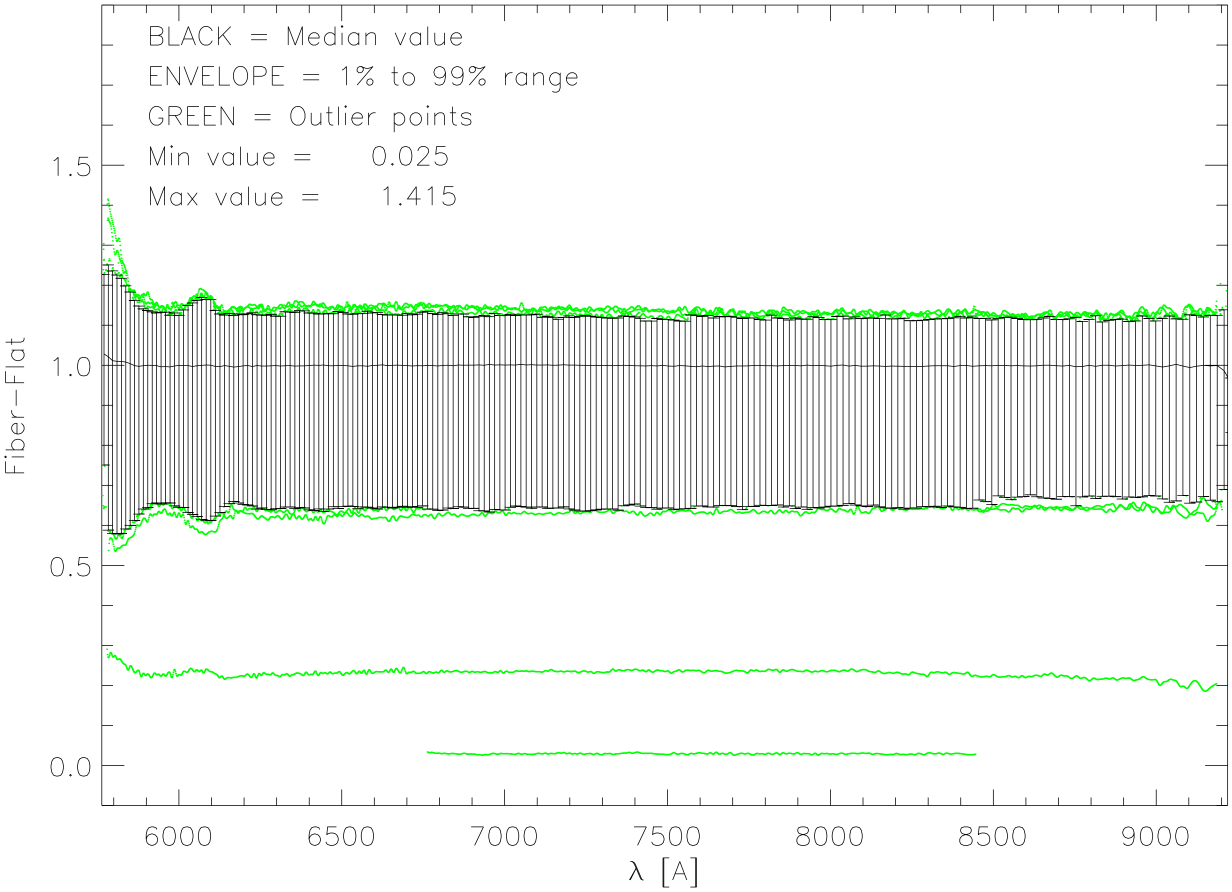

PLATE=3186 MJD=54846 flat extraction chi^2 for sdR-r1-00058052.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
12
0
500
1000
1500
2000
Row number



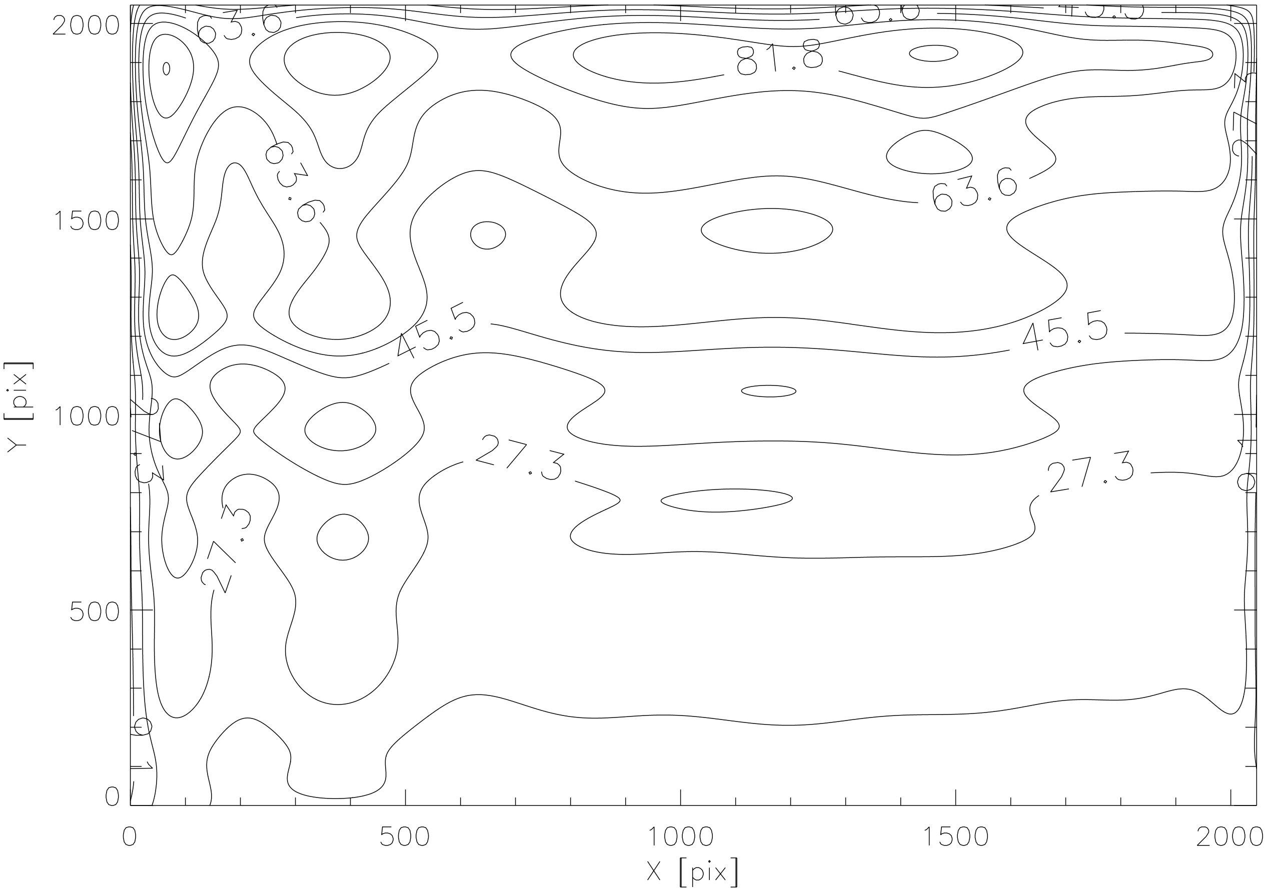
PLATE=3186 MJD=54846 Superflat sdR-r1-00058052.fit


PLATE=3186 MJD=54846 Arcline Fit for sdR-r1-00058053.fit
Fiber Number
0
50
100
150
200
250
300
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Mar 15 20:03:36 2010

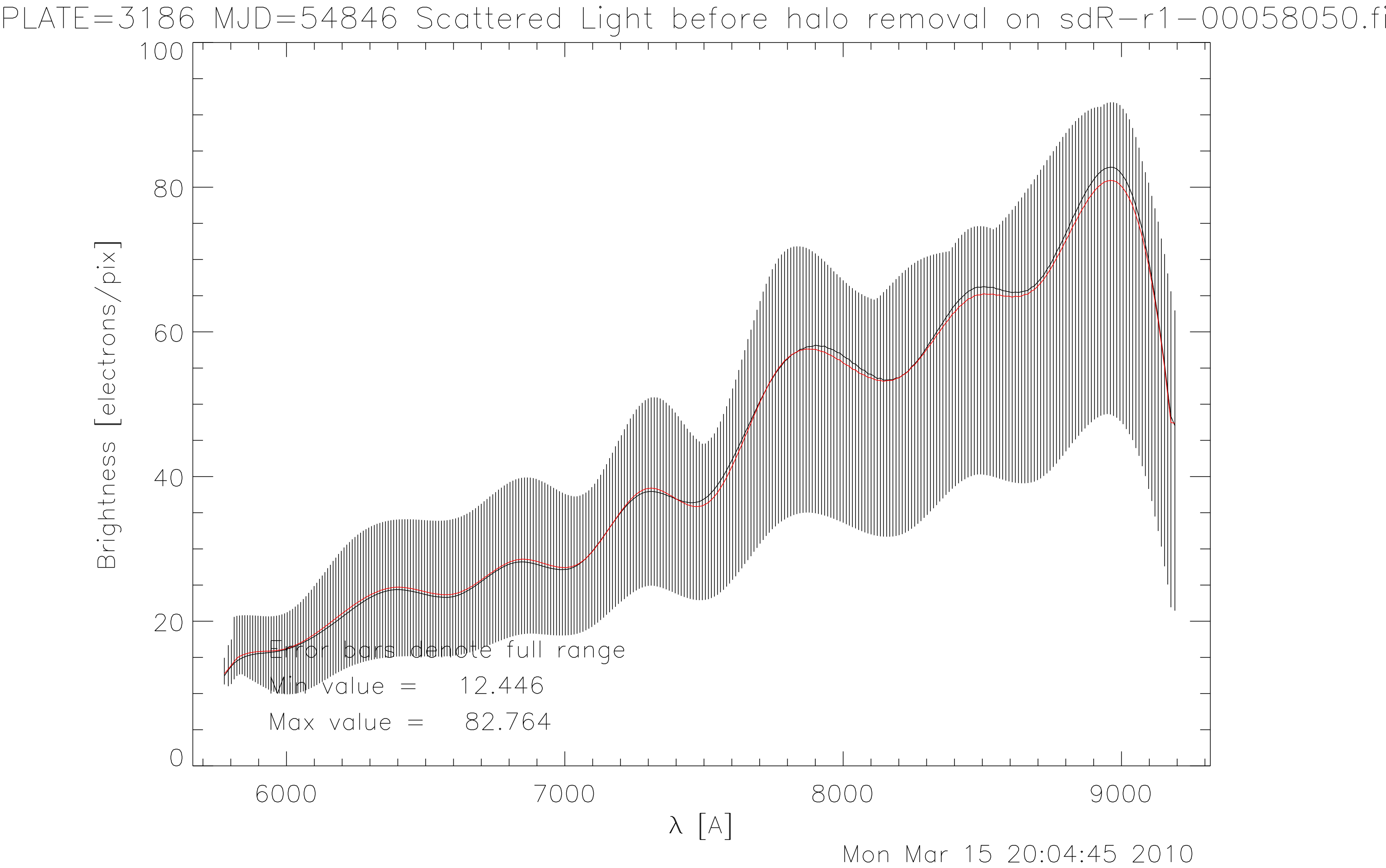
PLATE=3186 MJD=54846 Fiber−Flats for sdR−r1−00058052.fit

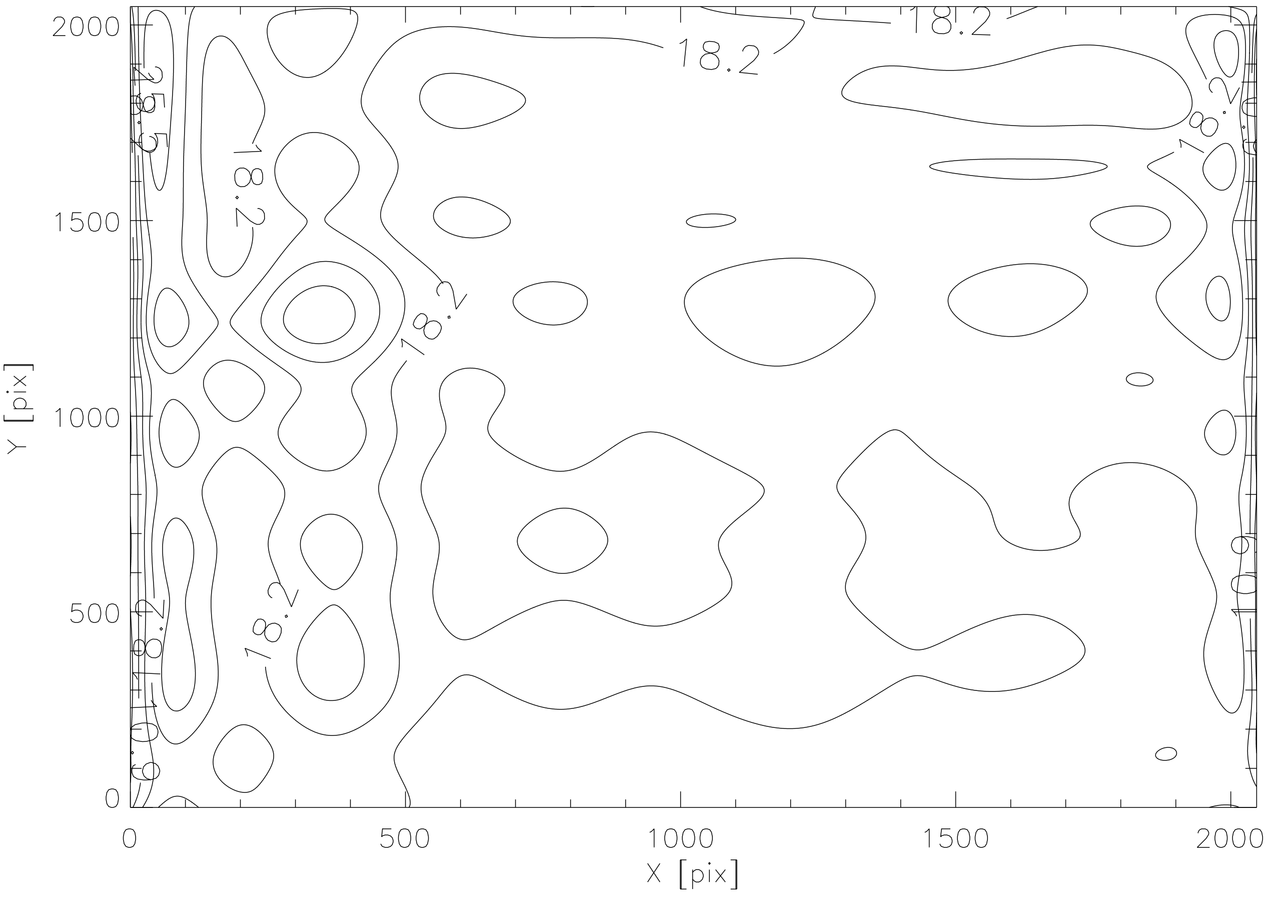


Mon Mar 15 20:03:45 2010

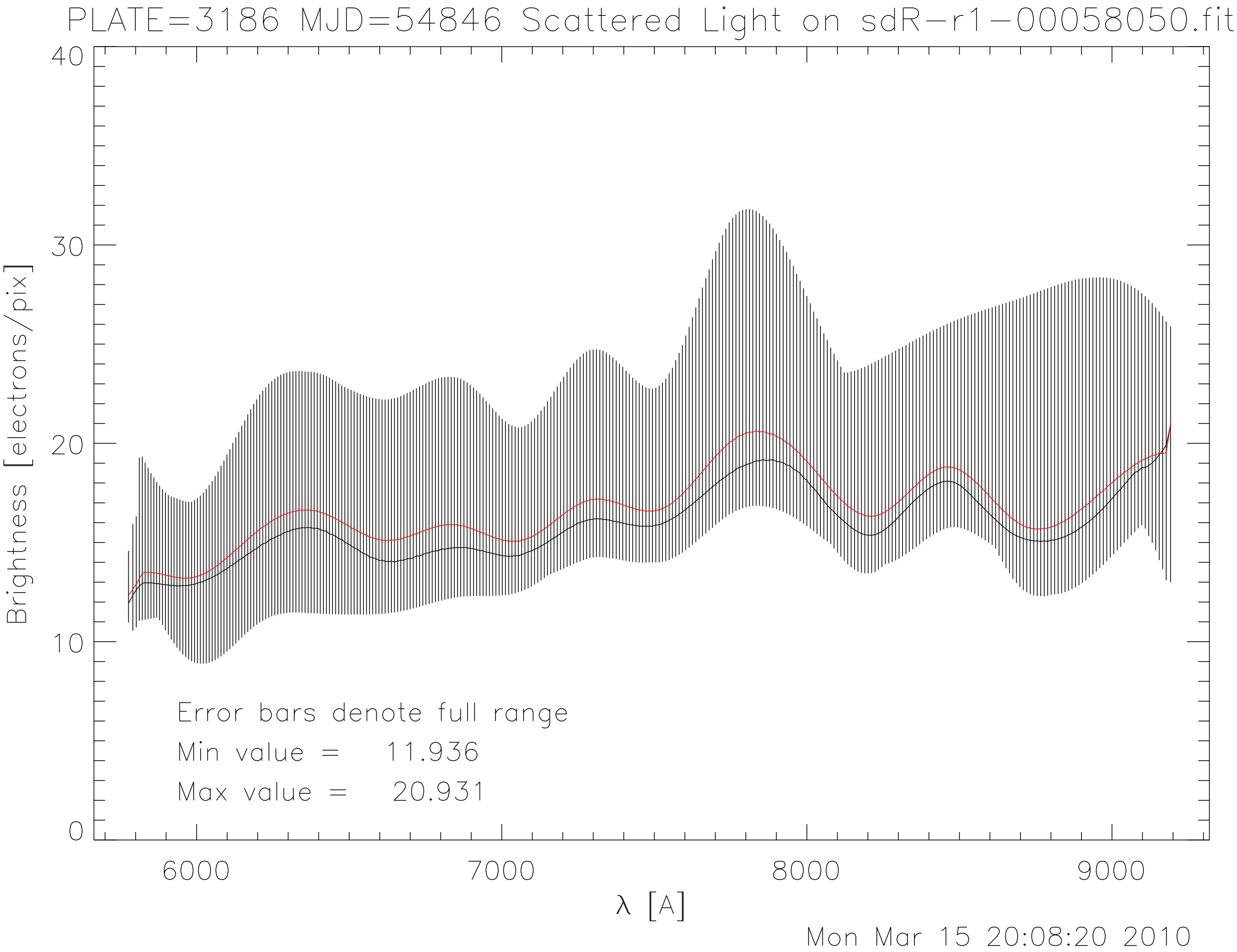


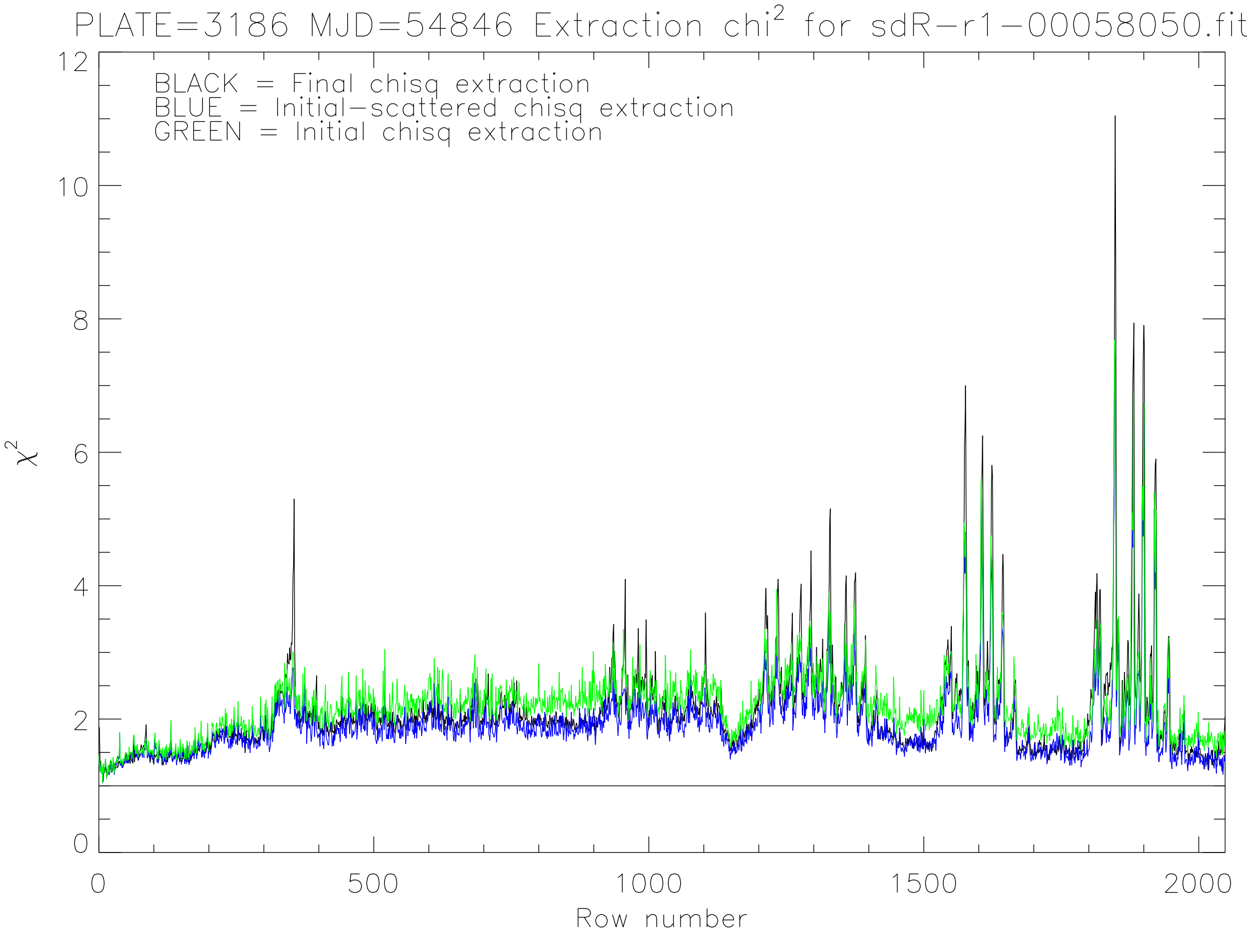
PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r1-00058050.fi

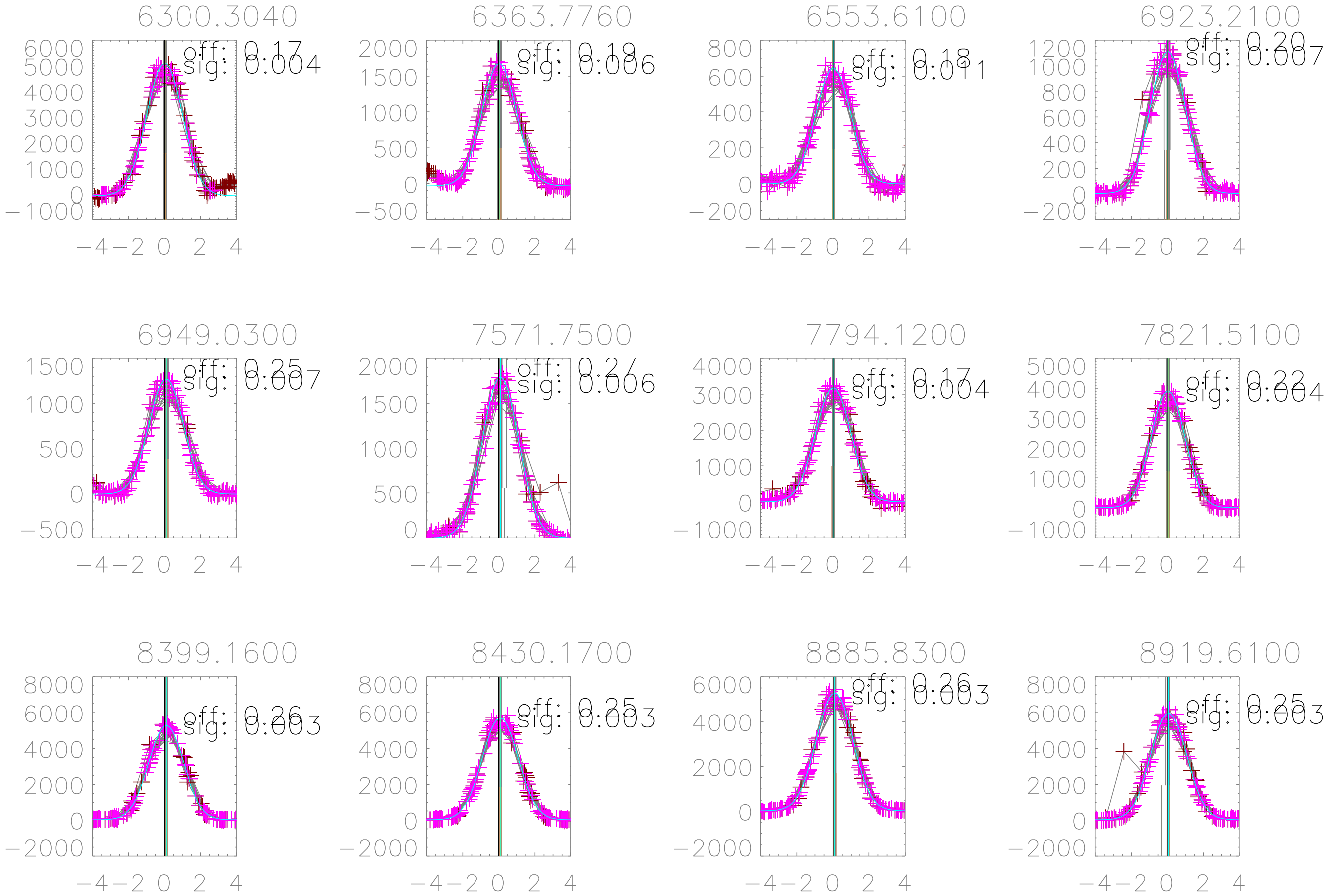

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r1-00058050.fi
Brightness [electrons/pix]
0
20
40
60
80
100
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.446
Max value = 82.764
Mon Mar 15 20:04:45 2010

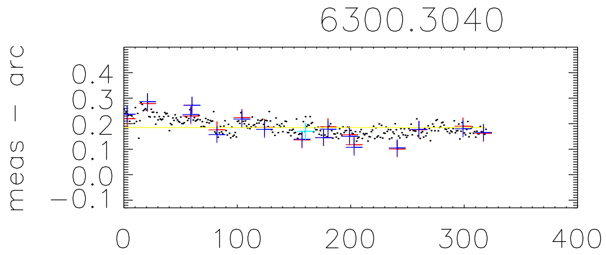


PLATE=3186 MJD=54846 Scattered Light on sdR-r1-00058050.fit

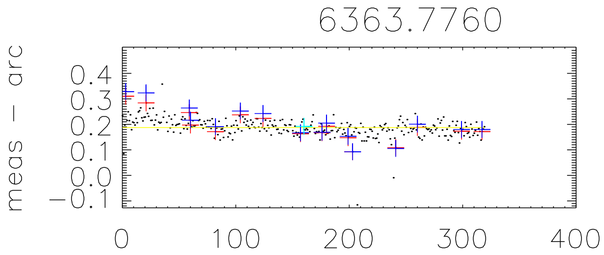

PLATE=3186 MJD=54846 Scattered Light on sdR-r1-00058050.fit
Brightness [electrons/pix]
0
10
20
30
40
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.936
Max value = 20.931
Mon Mar 15 20:08:20 2010


PLATE=3186 MJD=54846 Extraction χ^2 for sdR-r1-00058050.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

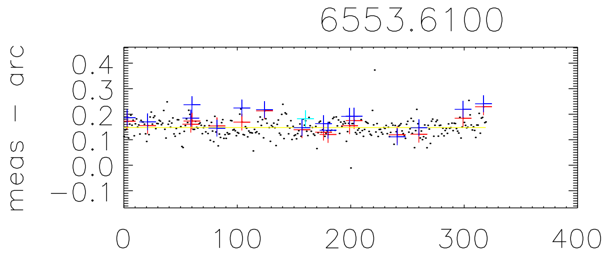

6300.3040
off: 0.17
sig: 0.004
6363.7760
off: 0.19
sig: 0.006
6553.6100
off: 0.18
sig: 0.011
6923.2100
off: 0.20
sig: 0.007
6949.0300
off: 0.25
sig: 0.007
7571.7500
off: 0.27
sig: 0.006
7794.1200
off: 0.17
sig: 0.004
7821.5100
off: 0.22
sig: 0.004
8399.1600
off: 0.26
sig: 0.003
8430.1700
off: 0.25
sig: 0.003
8885.8300
off: 0.26
sig: 0.003
8919.6100
off: 0.25
sig: 0.003
−4 −2 0 2 4



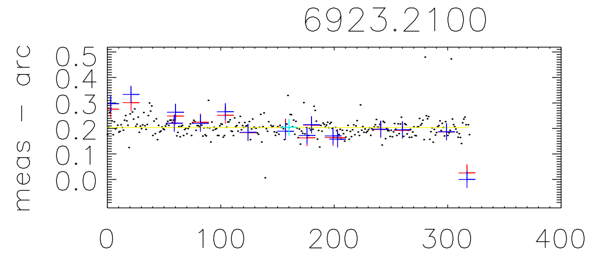
6300.3040



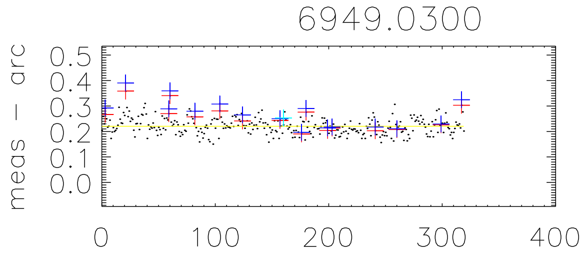
6363.7760



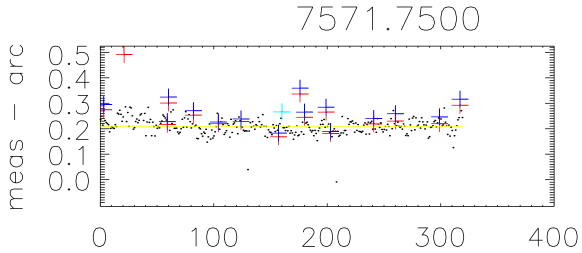
6553.6100



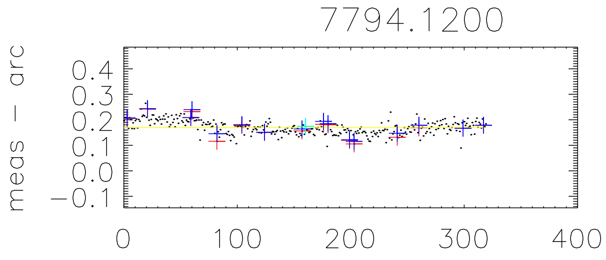
6923.2100

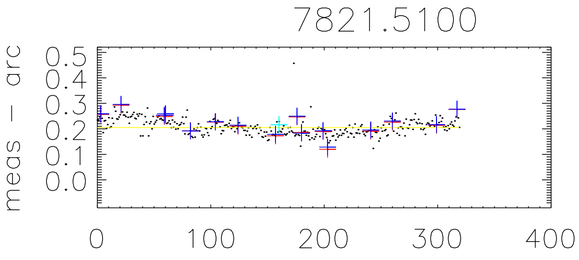


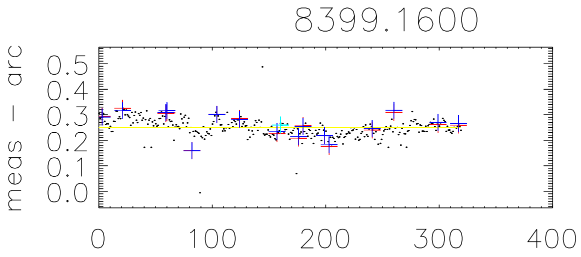
6949.0300

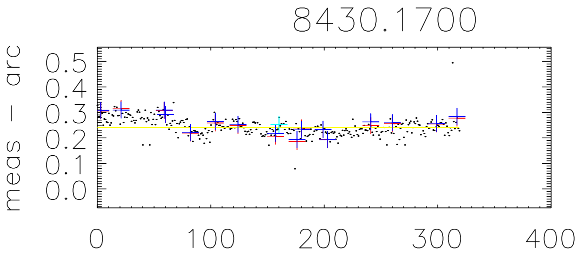


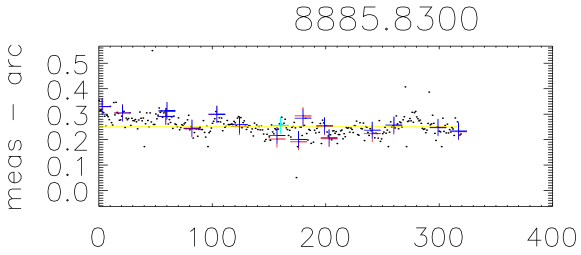
7571.7500

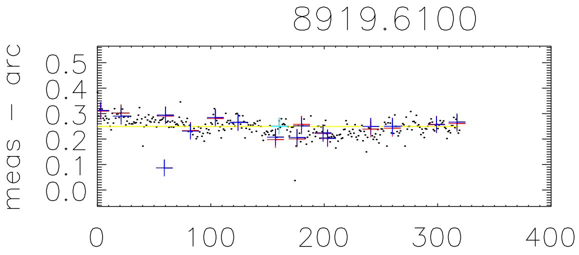

7794.1200
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

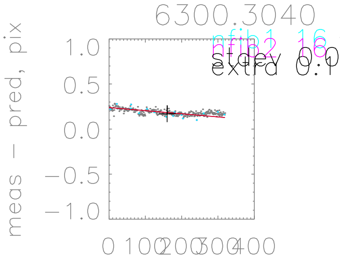

7821.5100
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

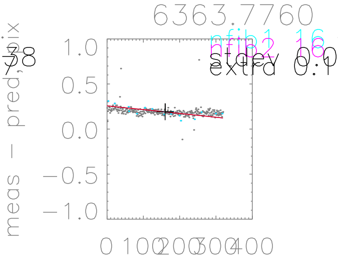

8399.1600
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

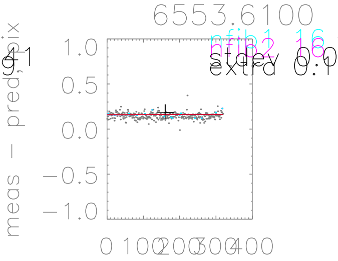

8430.1700
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

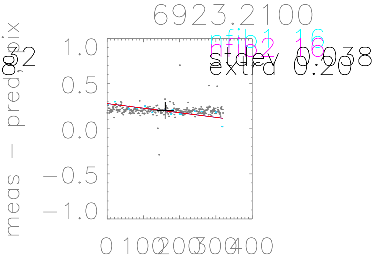

8885.8300
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

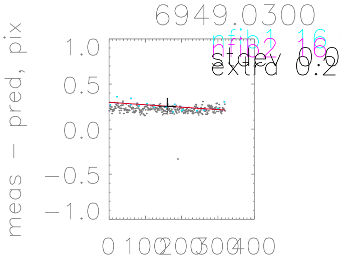

8919.6100
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

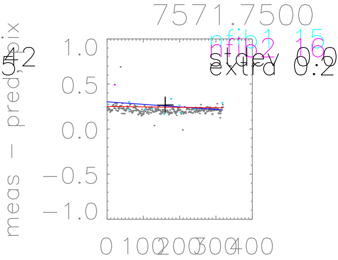

6300.3040
nfib1 16
nfib2 16
stdev 0.038
extrd 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

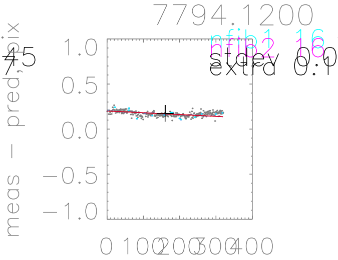

6363.7760
nfib1 16
nfib2 16
stdev 0.041
extrd 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

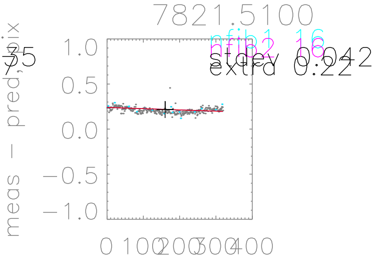

6553.6100
nfib1 16
nfib2 16
stdev 0.032
extrd 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

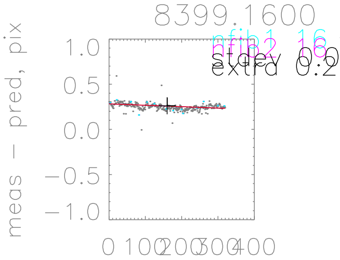

6923.2100
nfib1 16
nfib2 16
stdev 0.038
extrd 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

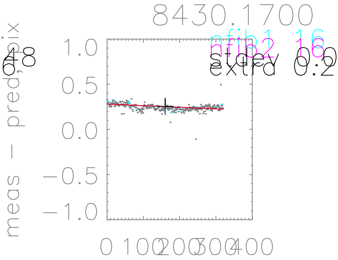

6949.0300
nfib1 16
nfib2 16
stdev 0.042
extrd 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

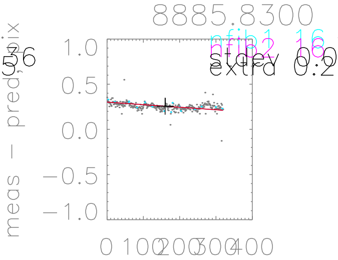

7571.7500
nfib1 15
nfib2 16
stdev 0.045
extrd 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

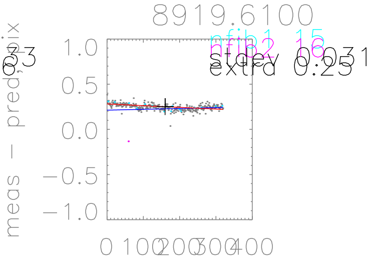

7794.1200
nfib1 16
nfib2 16
stdev 0.035
extrd 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

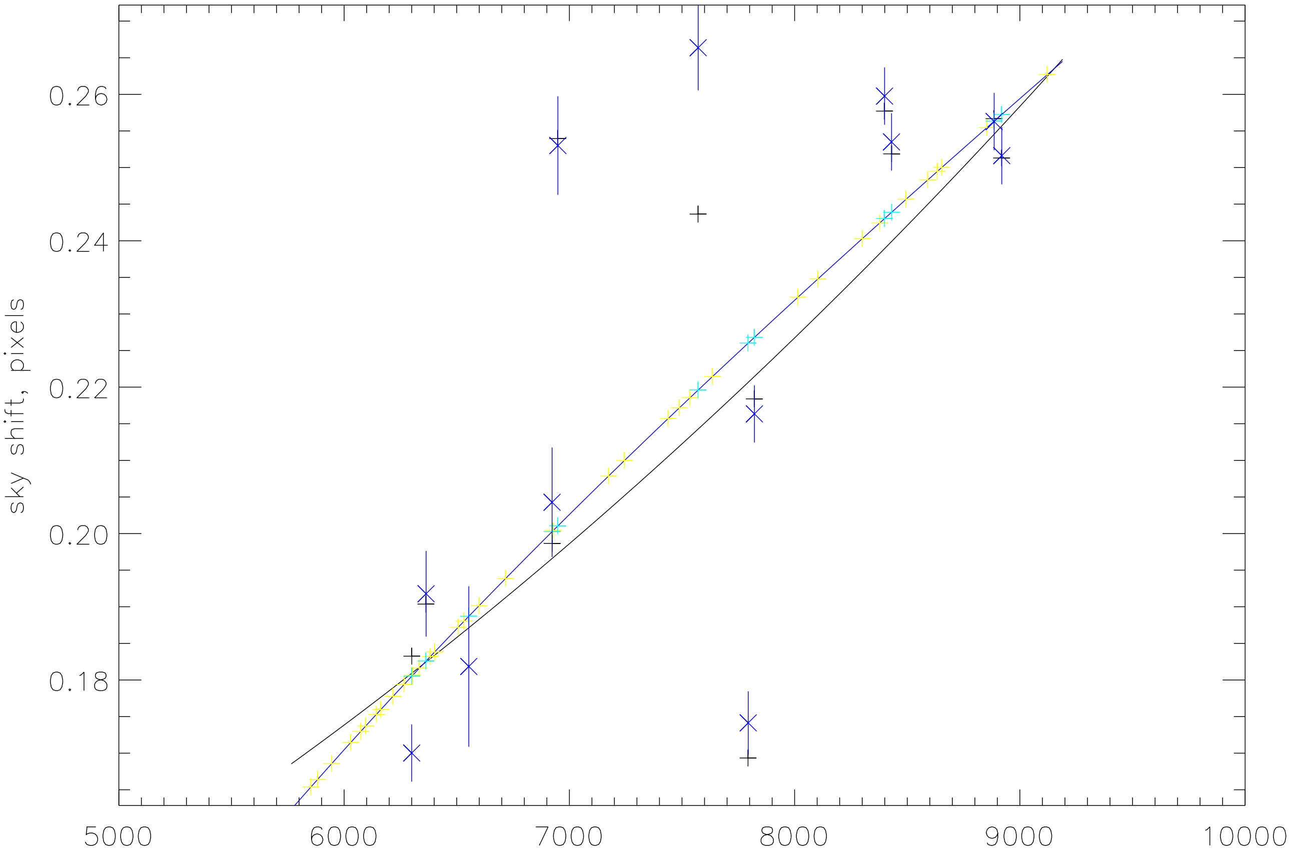

7821.5100
nfib1 16
nfib2 16
stdev 0.042
extrd 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

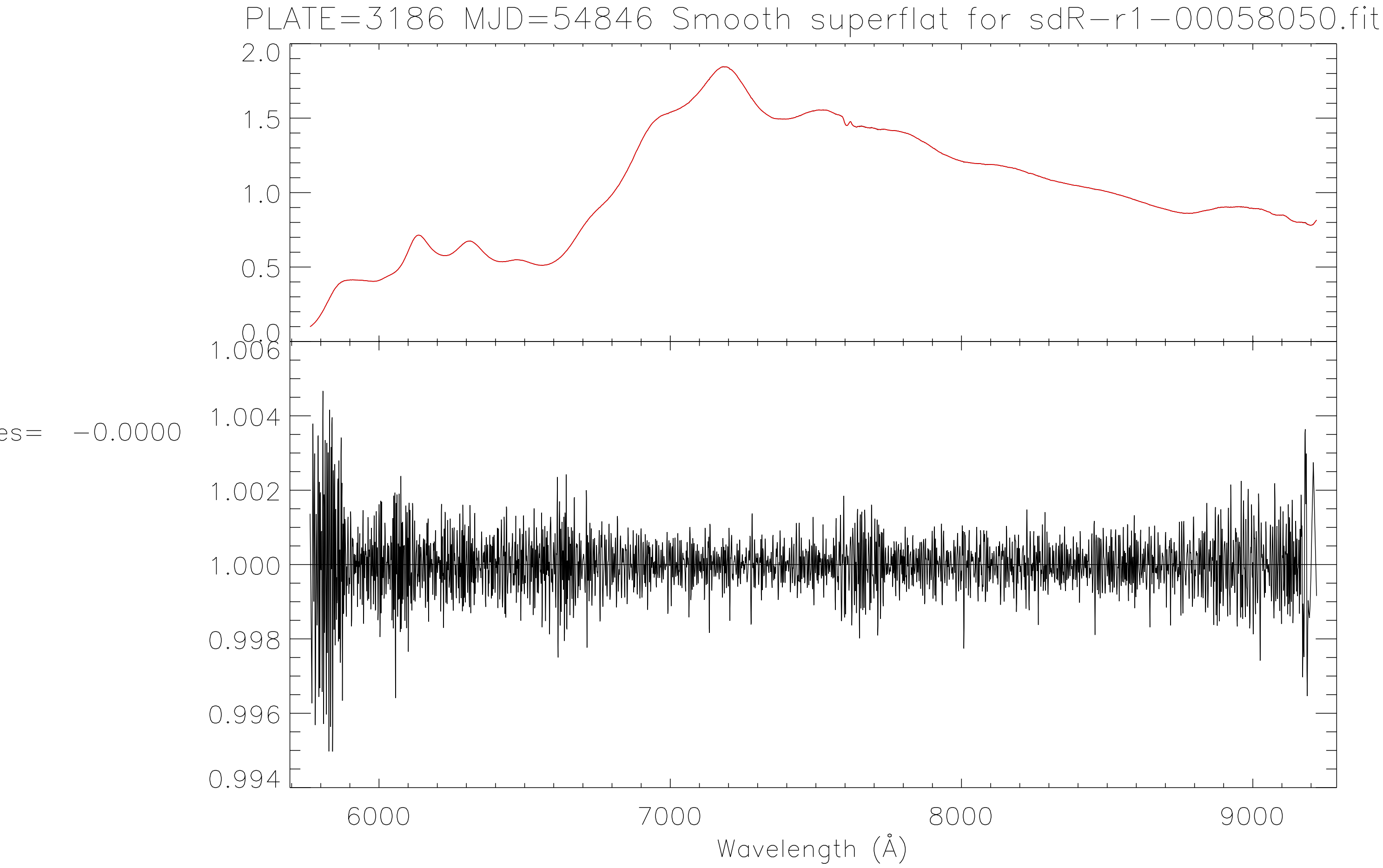

8399.1600
nfib1 16
nfib2 16
stdev 0.048
extrd 0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

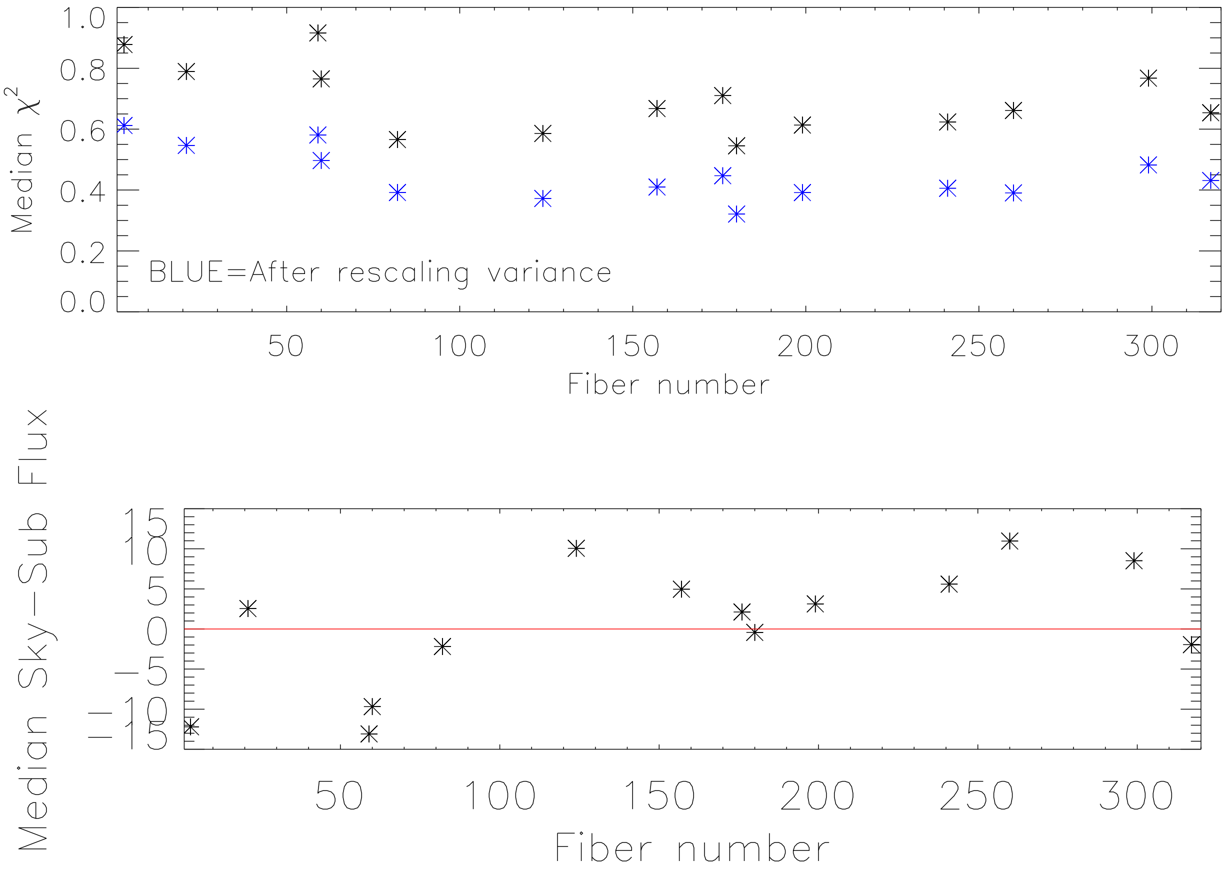

8430.1700
nfib1 16
nfib2 16
stdev 0.036
extrd 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


8885.8300
nfib1 16
nfib2 16
stdev 0.033
extrd 0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

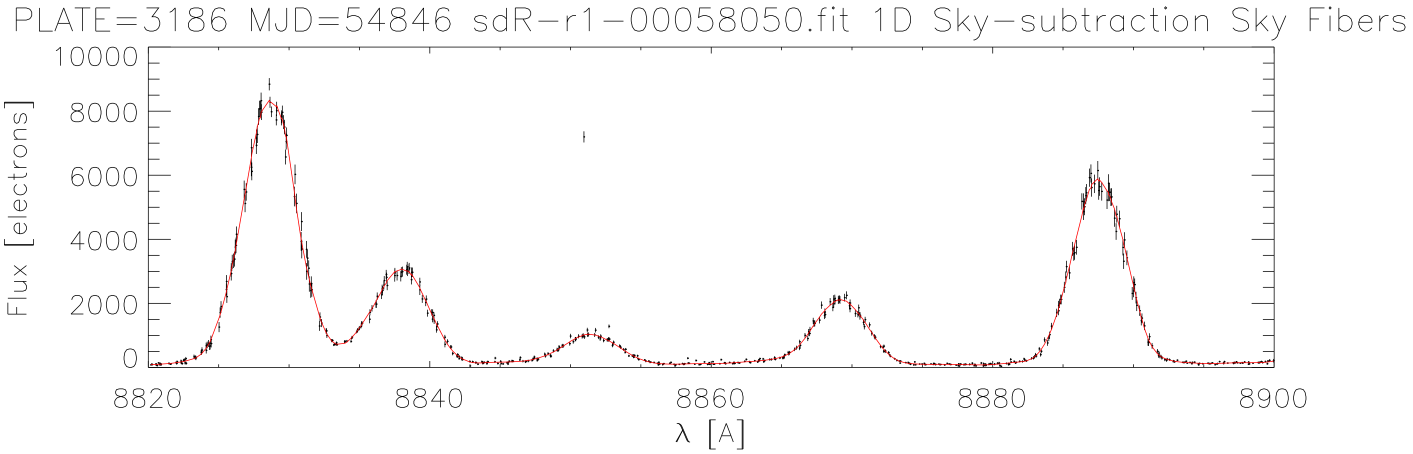

8919.6100
nfib1 15
nfib2 16
stdev 0.031
extrd 0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

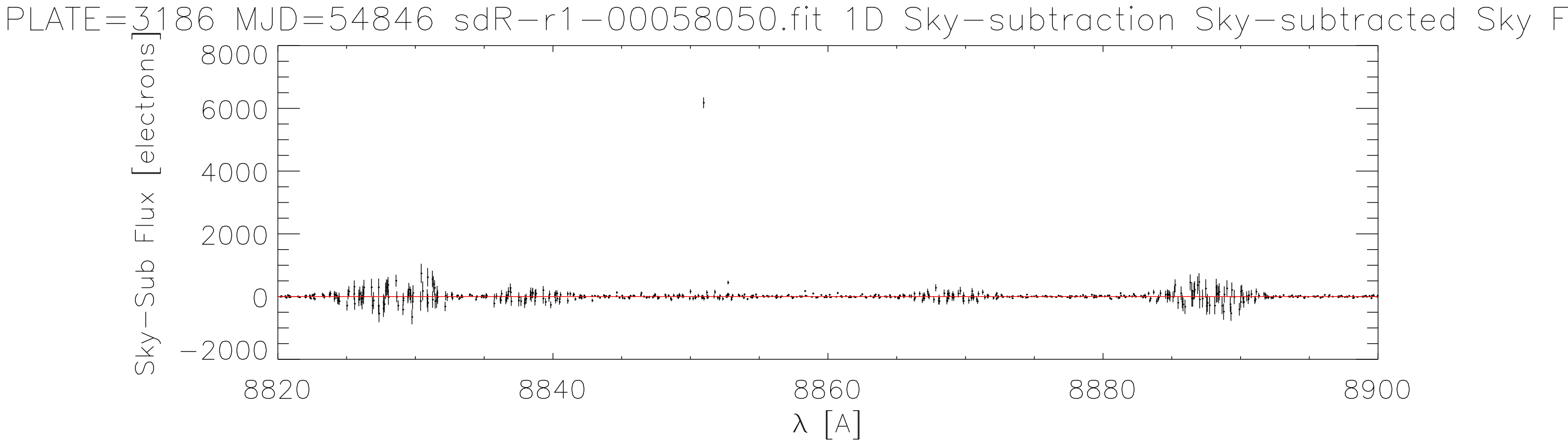

sky shift, pixels
0.18
0.20
0.22
0.24
0.26
5000
6000
7000
8000
9000
10000

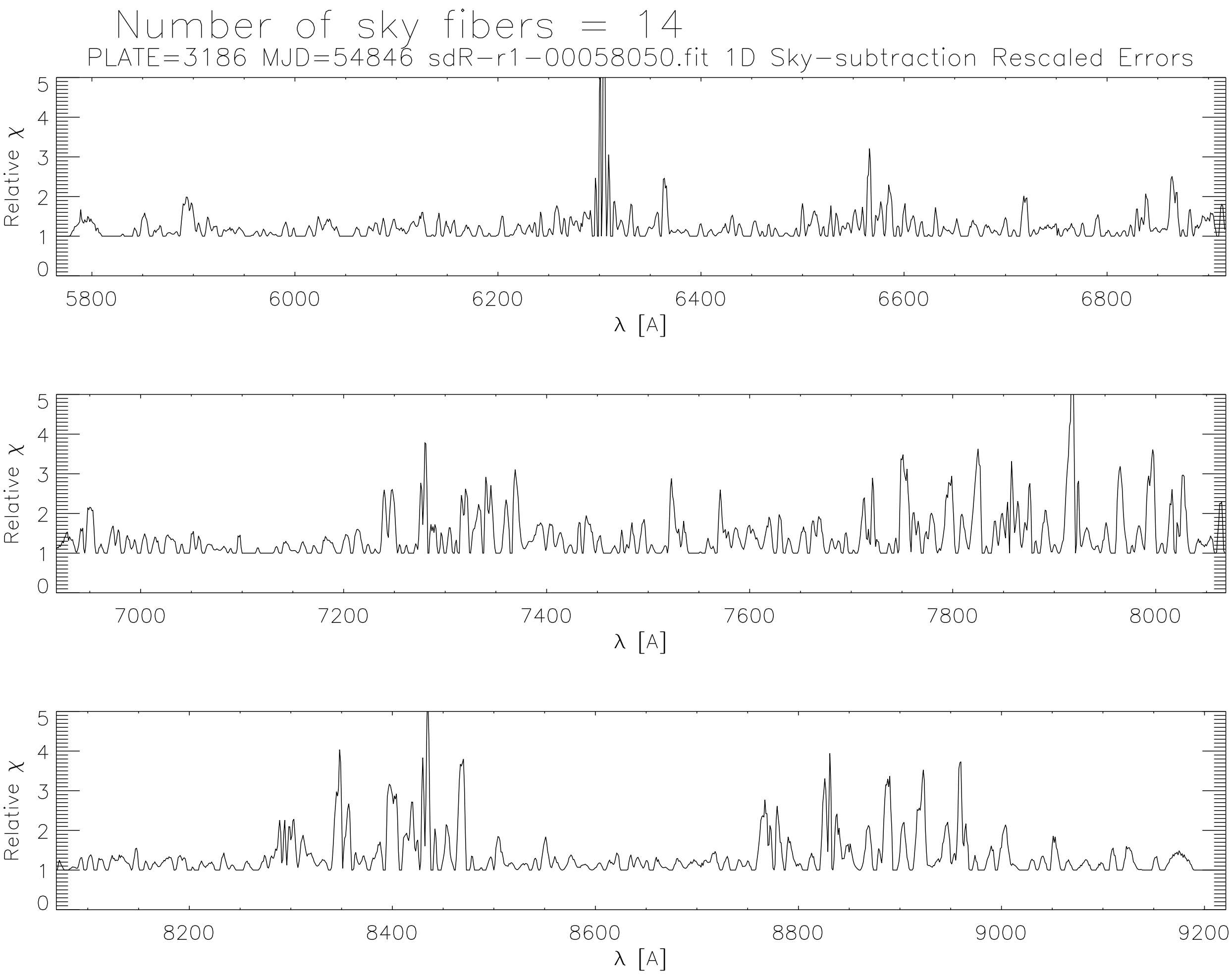

PLATE=3186 MJD=54846 Smooth superflat for sdR-r1-00058050.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)



PLATE=3186 MJD=54846 sdR-r1-00058050.fit 1D Sky-subtraction Sky Fiber


PLATE=3186 MJD=54846 sdR-r1-00058050.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

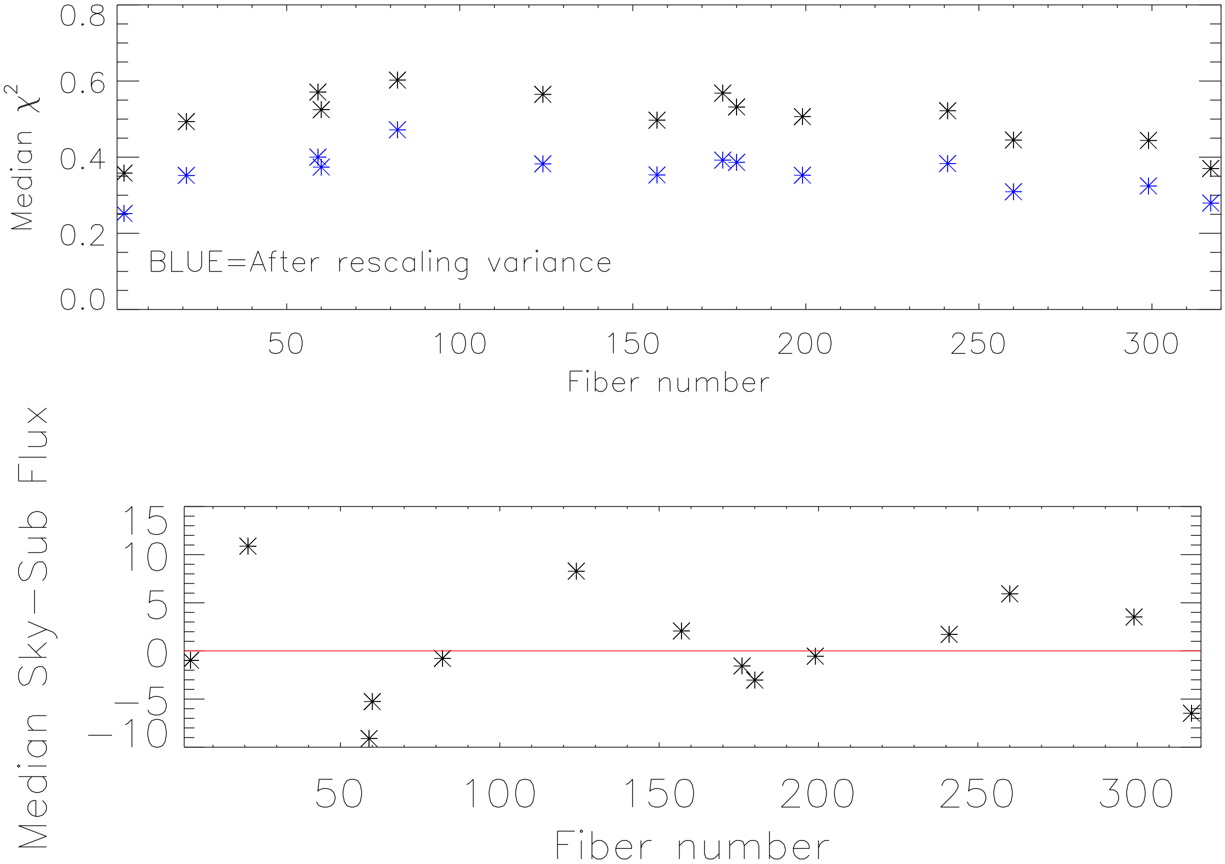

PLATE=3186 MJD=54846 sdR-r1-00058050.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

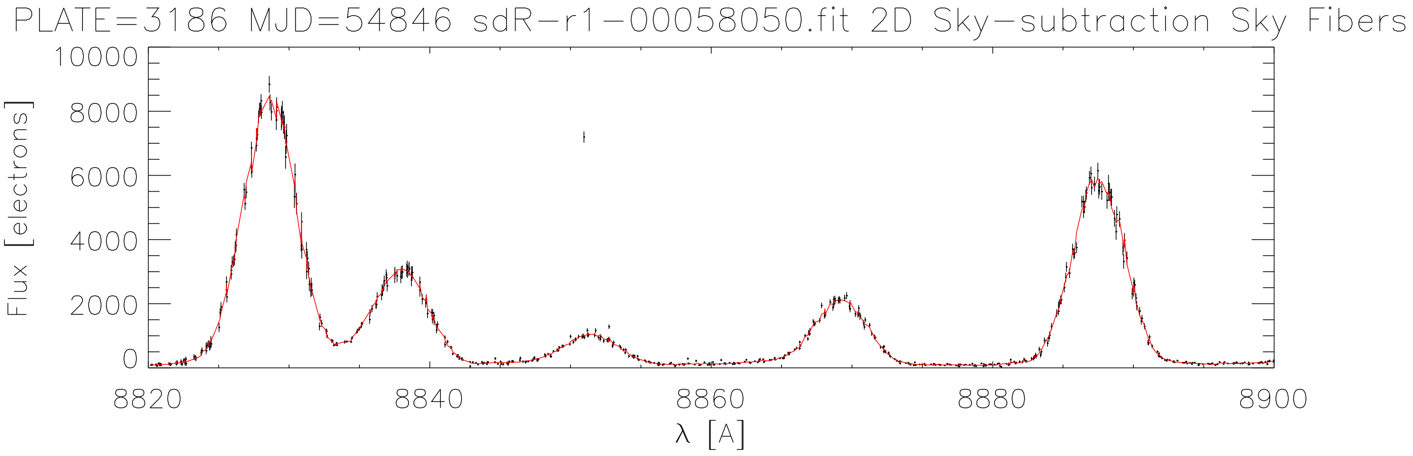


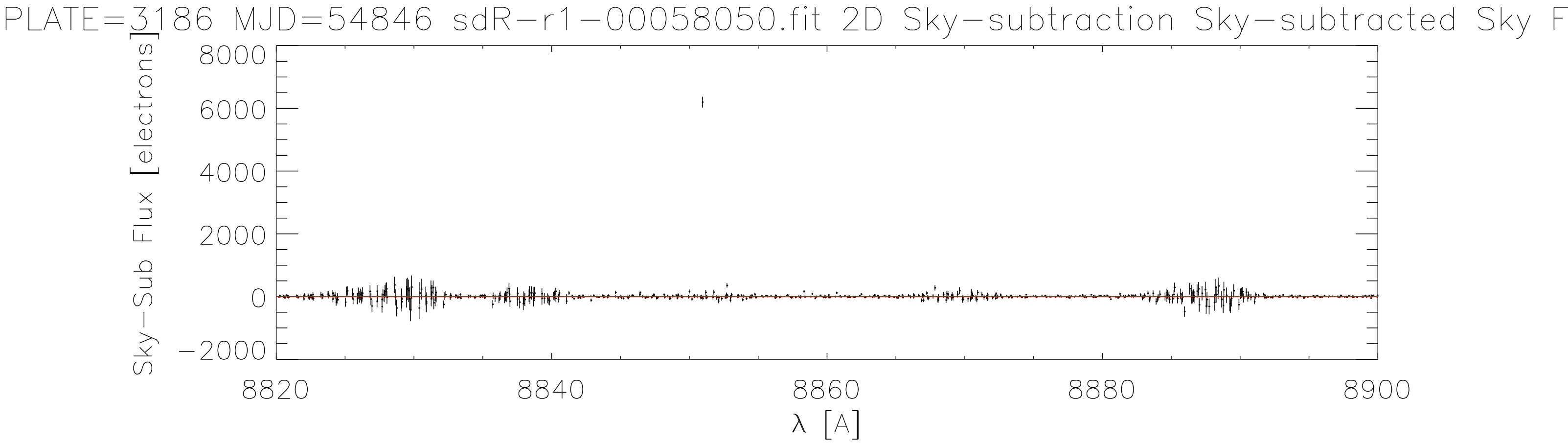
Number of sky fibers = 14

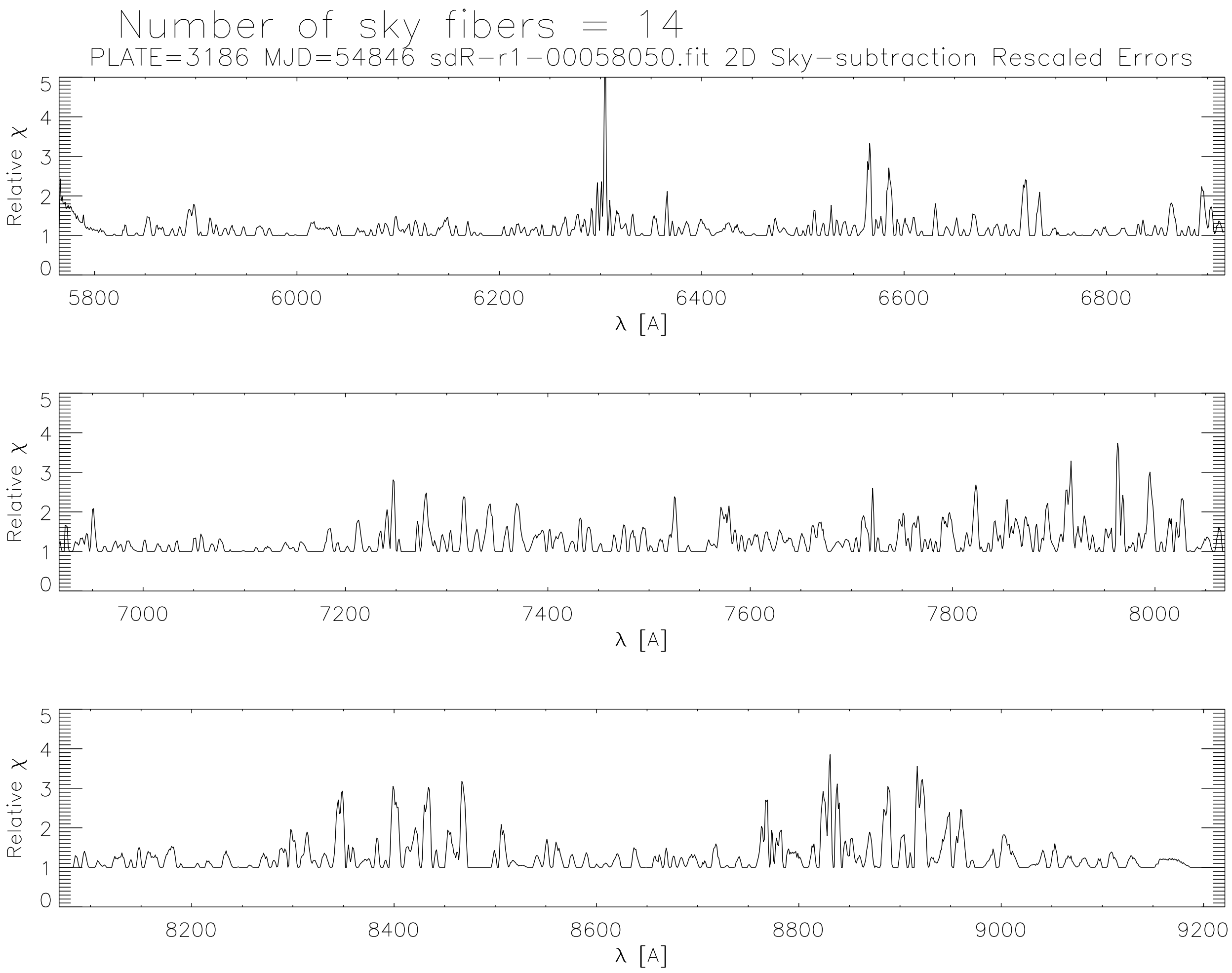
PLATE=3186 MJD=54846 sdR-r1-00058050.fit 1D Sky-subtraction Rescaled Errors

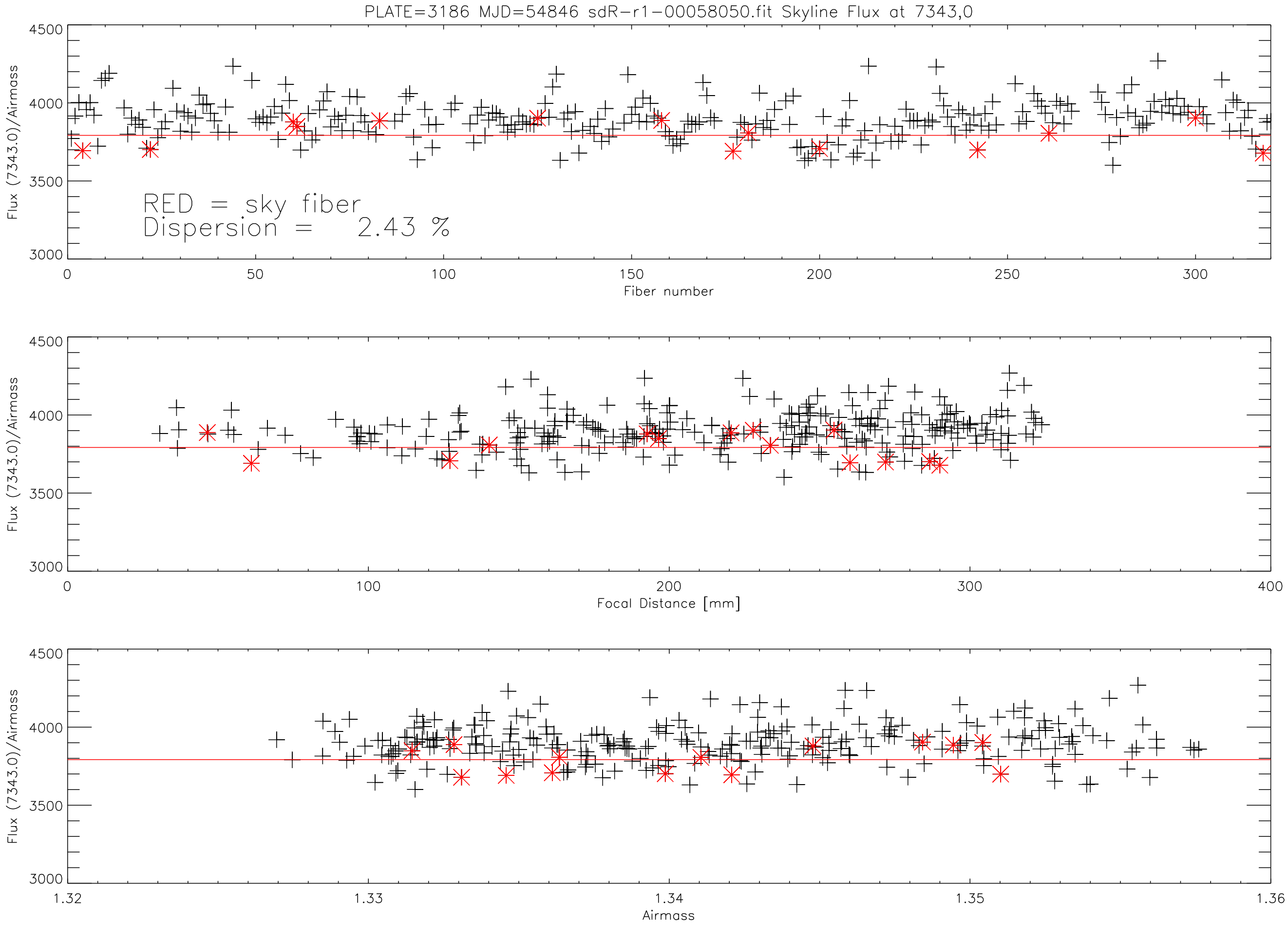
PLATE=3186 MJD=54846 sdR-r1-00058050.fit 2D Sky-subtraction Sky Fiber

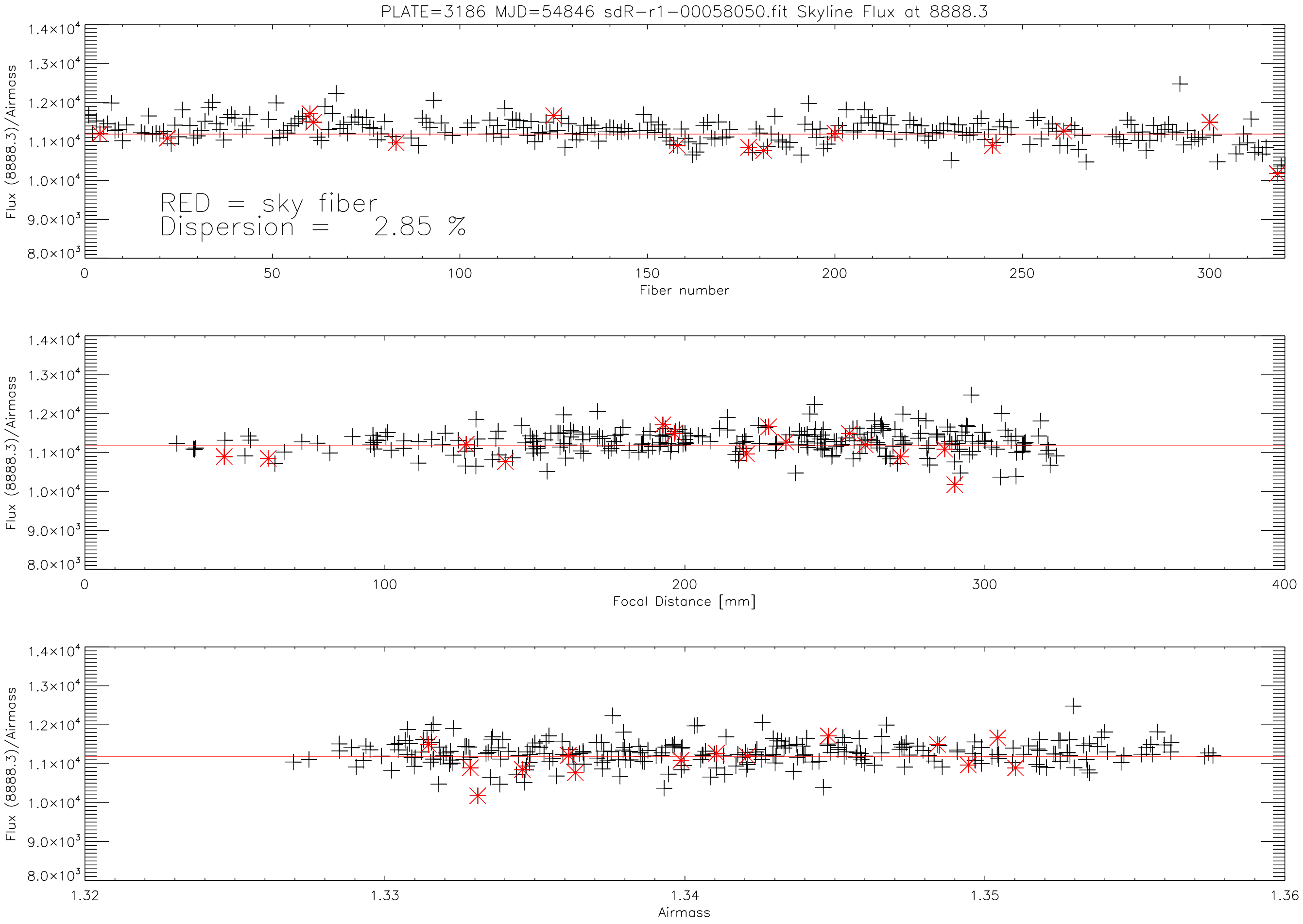


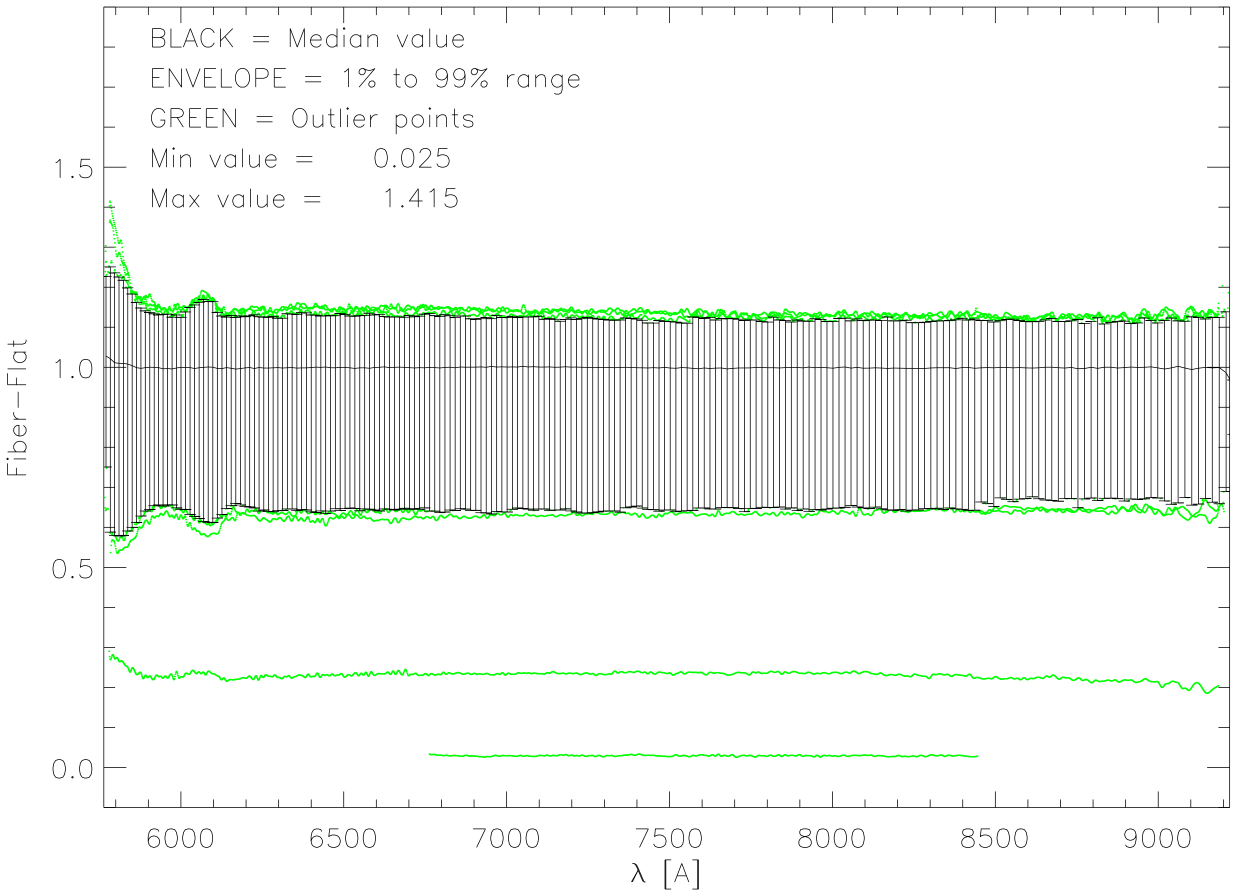

PLATE=3186 MJD=54846 sdR-r1-00058050.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=3186 MJD=54846 sdR-r1-00058050.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 14
PLATE=3186 MJD=54846 sdR-r1-00058050.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]

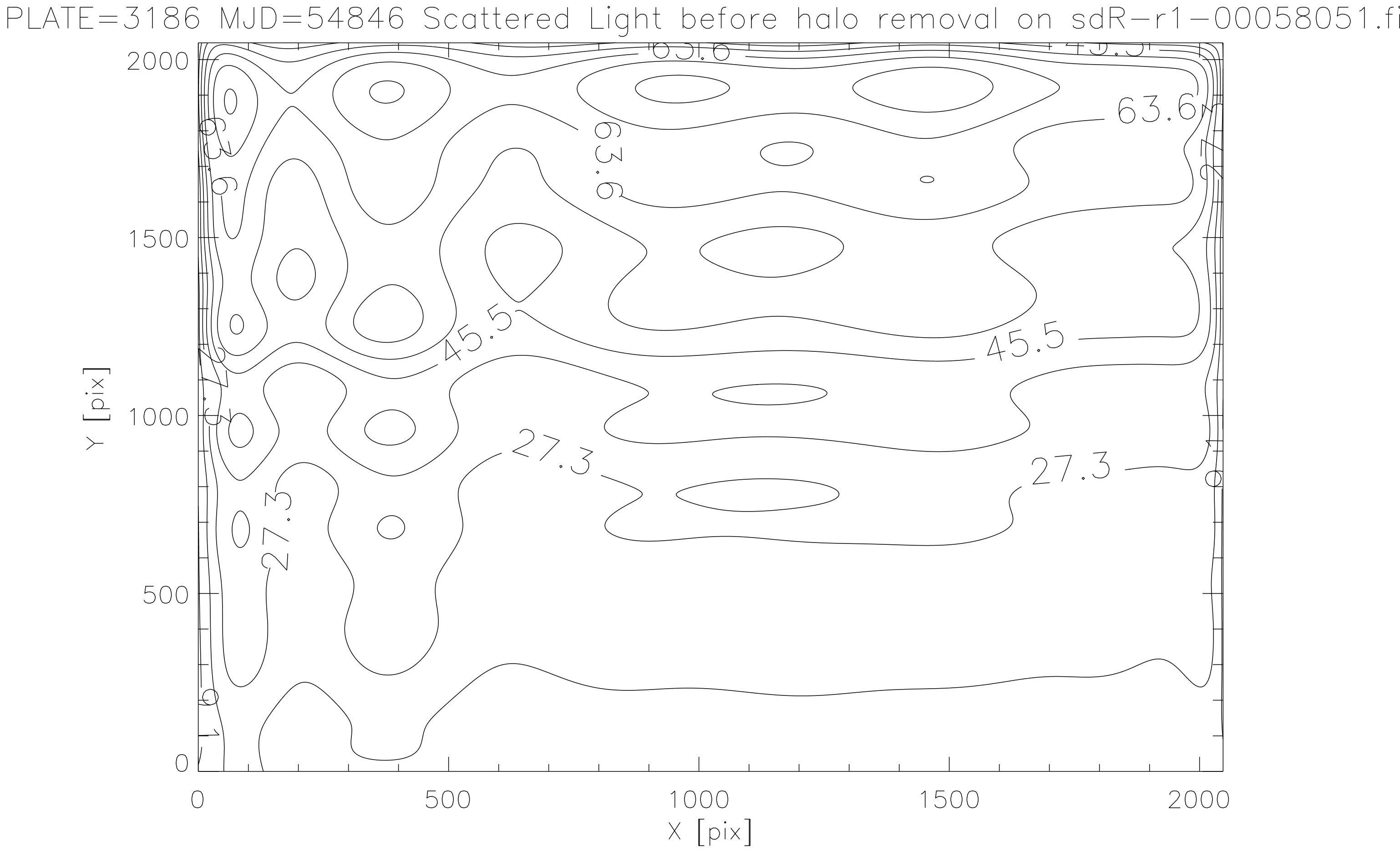

PLATE=3186 MJD=54846 sdR-r1-00058050.fit Skyline Flux at 7343,0
4500
4000
3500
3000
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.43 %
0
50
100
150
200
250
300
Fiber number
4500
4000
3500
3000
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
4500
4000
3500
3000
Flux (7343.0)/Airmass
1.32
1.33
1.34
1.35
1.36
Airmass

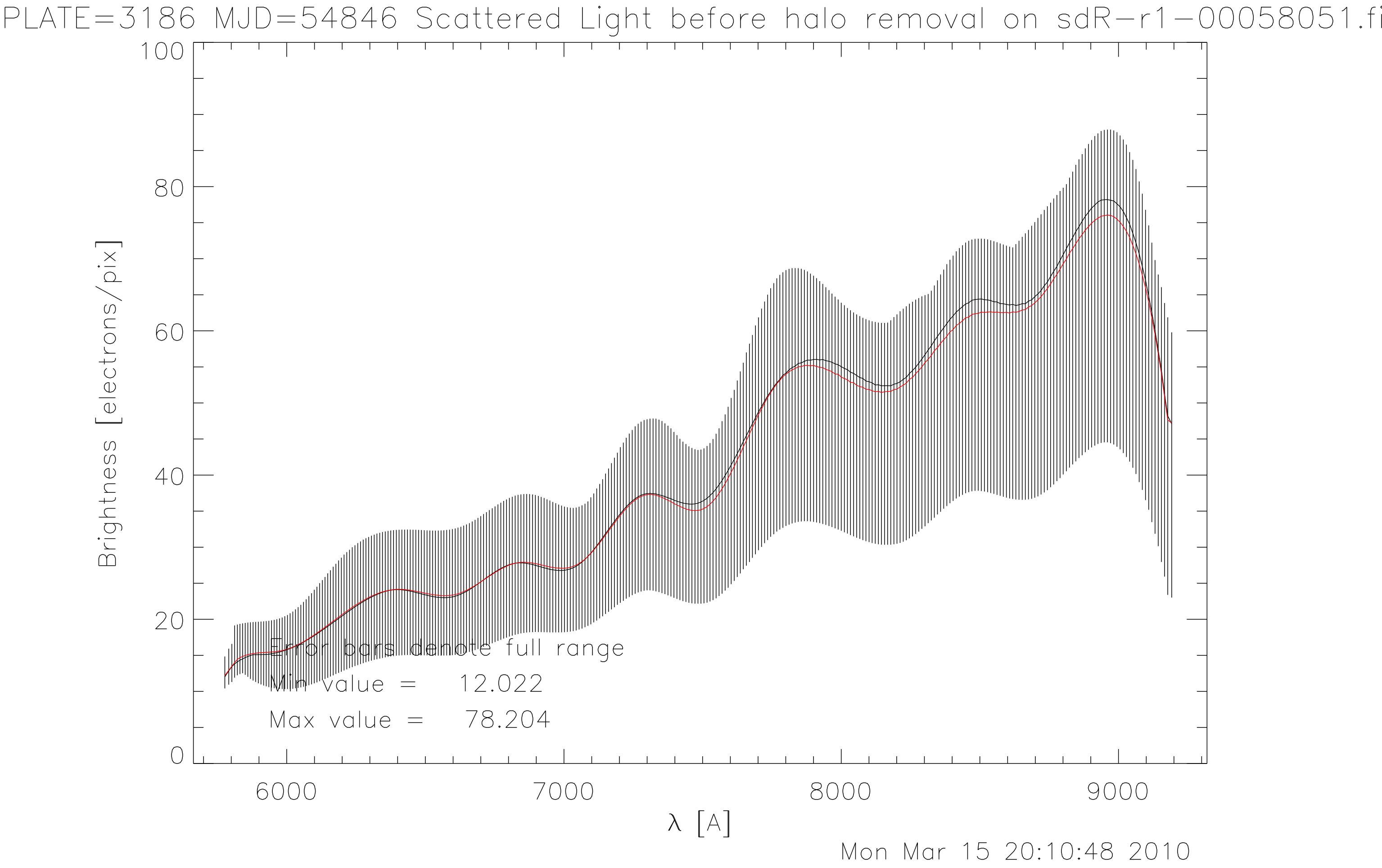

PLATE=3186 MJD=54846 sdR-r1-00058050.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
RED = sky fiber
Dispersion = 2.85 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
1.32
1.33
1.34
1.35
1.36
Airmass

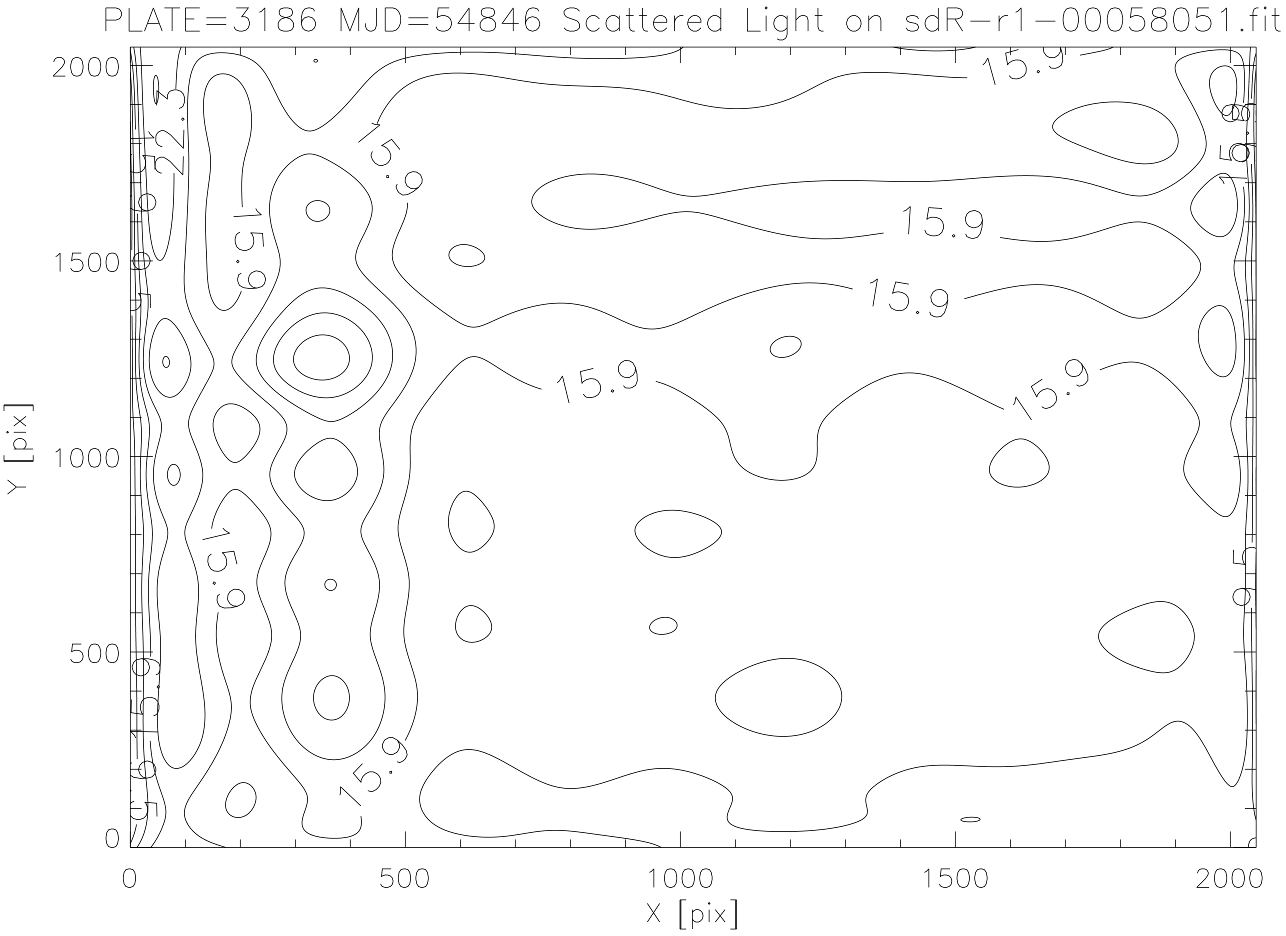


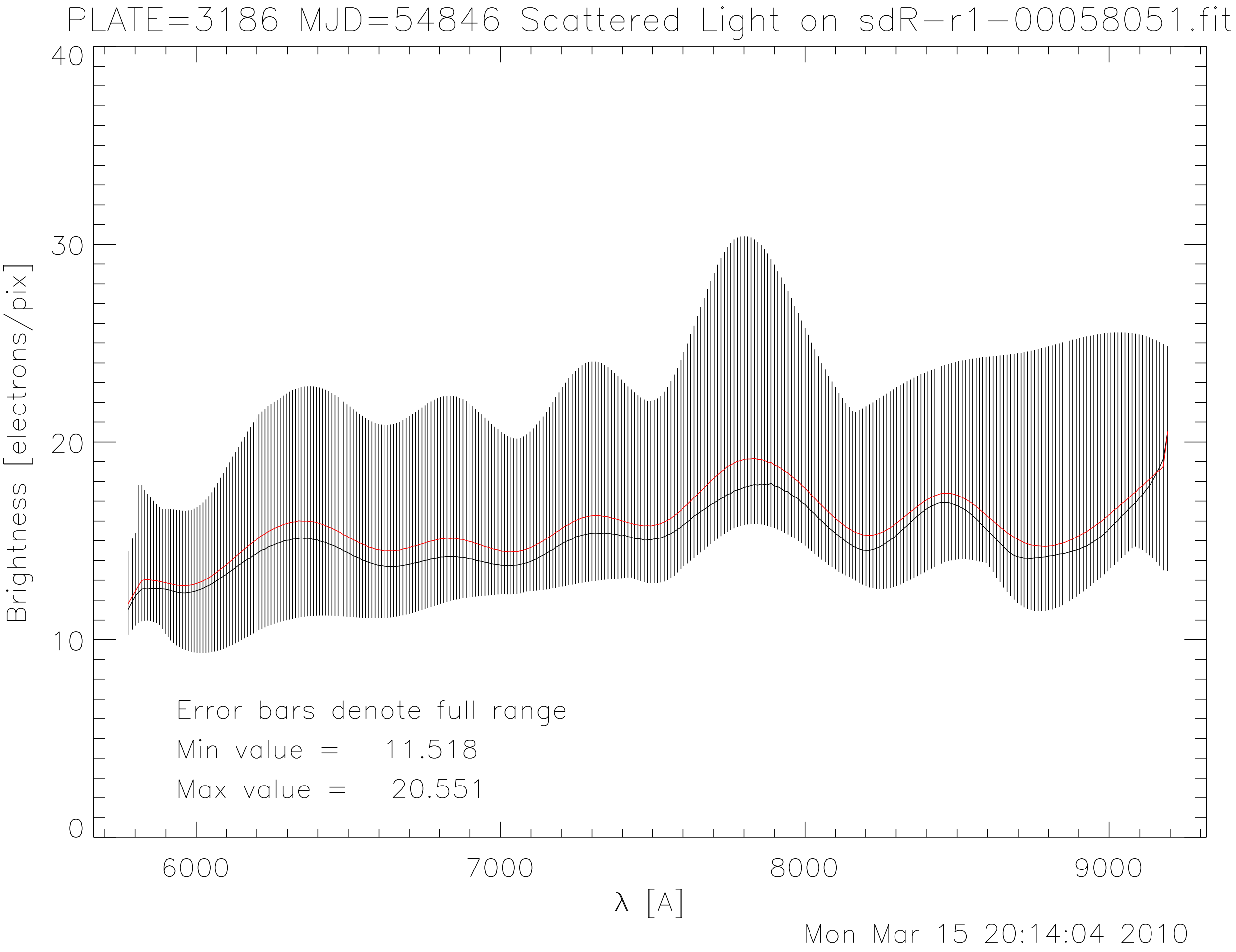
PLATE=3186 MJD=54846 Fiber−Flats for sdR−r1−00058052.fit

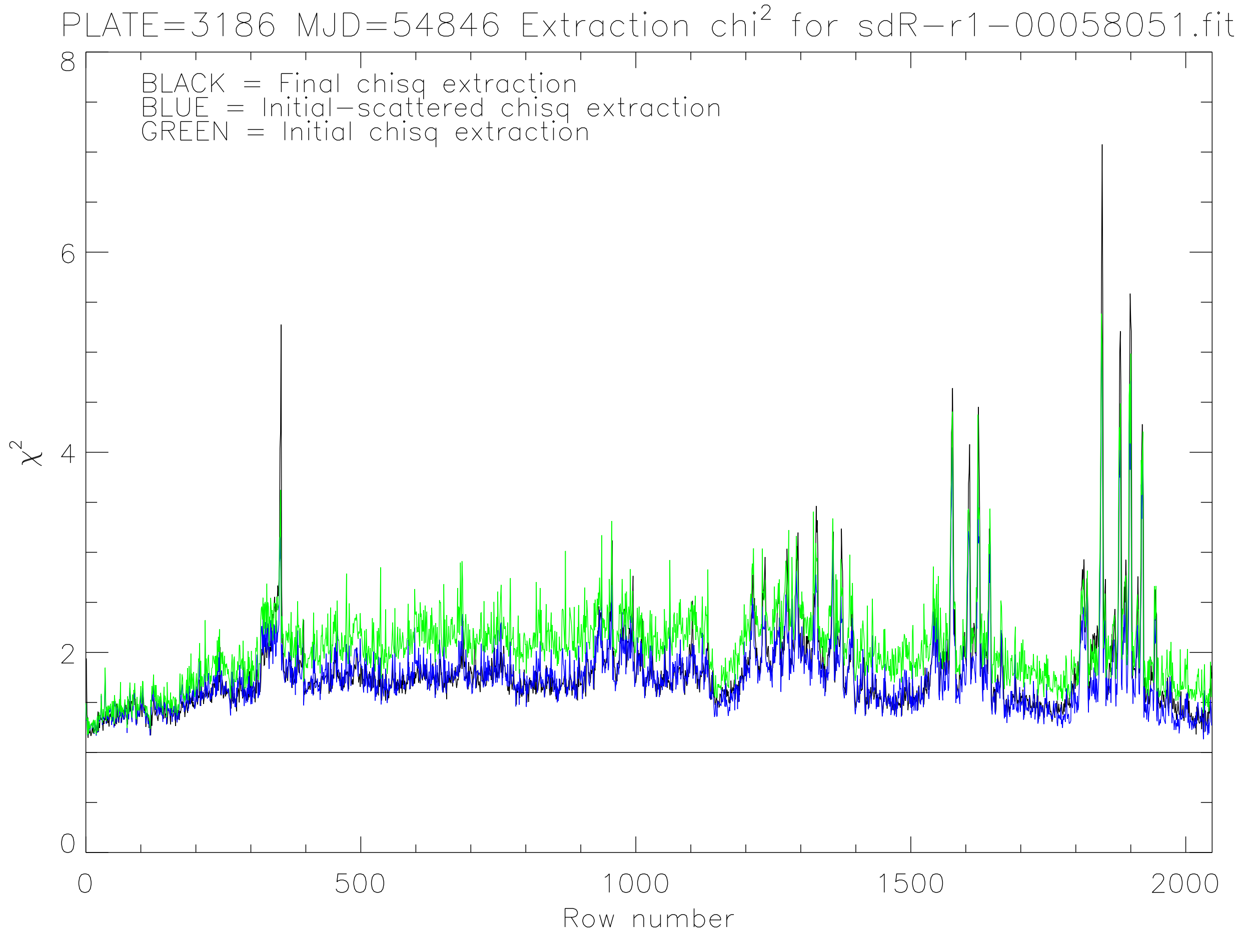
Mon Mar 15 20:09:50 2010

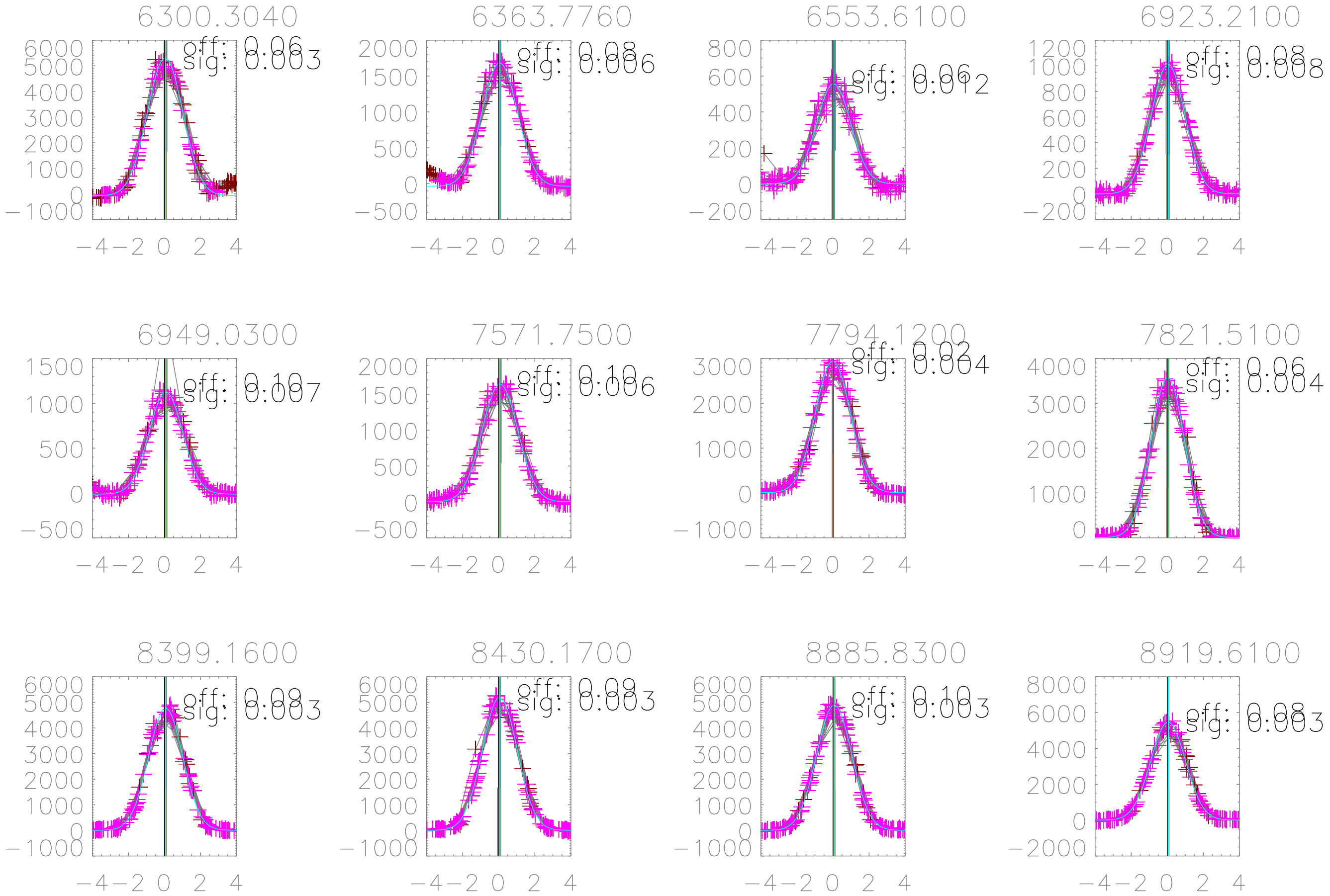

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r1-00058051.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
63.6
63.6
63.6
45.5
45.5
45.5
27.3
27.3
27.3
27.3

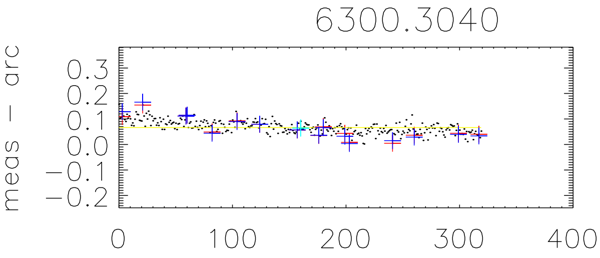

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r1-00058051.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.022
Max value = 78.204
Mon Mar 15 20:10:48 2010

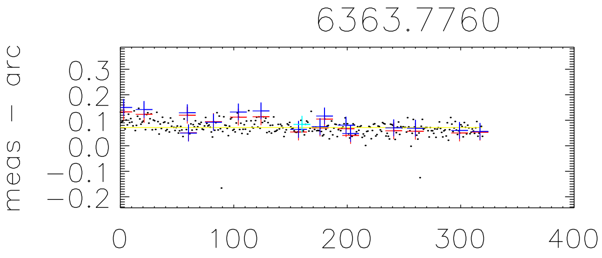

PLATE=3186 MJD=54846 Scattered Light on sdR-r1-00058051.fit

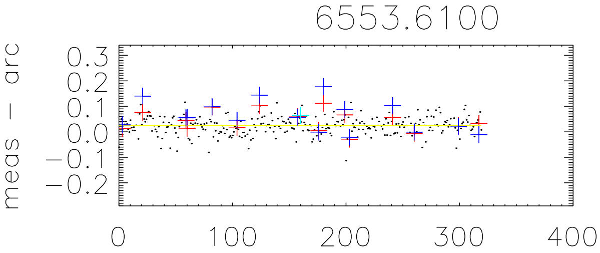

PLATE=3186 MJD=54846 Scattered Light on sdR-r1-00058051.fit
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   11.518
Max value =   20.551
Mon Mar 15 20:14:04 2010

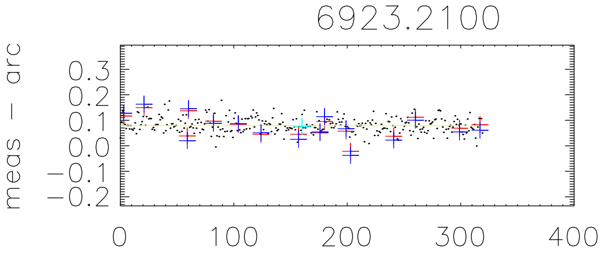


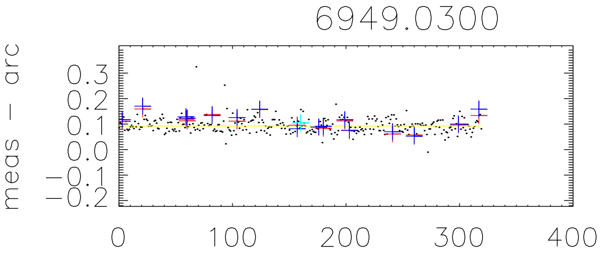

6300.3040
off: 0.06
sig: 0.003
6363.7760
off: 0.08
sig: 0.006
6553.6100
off: 0.06
sig: 0.012
6923.2100
off: 0.08
sig: 0.008
6949.0300
off: 0.10
sig: 0.007
7571.7500
off: 0.10
sig: 0.006
7794.1200
off: 0.02
sig: 0.004
7821.5100
off: 0.06
sig: 0.004
8399.1600
off: 0.09
sig: 0.003
8430.1700
off: 0.09
sig: 0.003
8885.8300
off: 0.10
sig: 0.003
8919.6100
off: 0.08
sig: 0.003
−4 −2 0 2 4

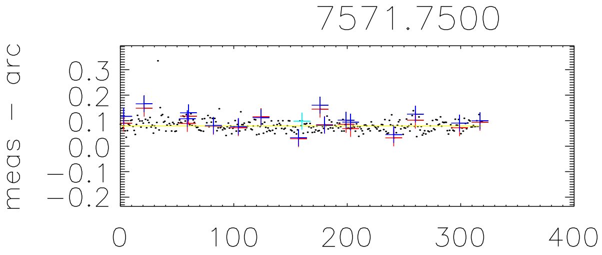

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

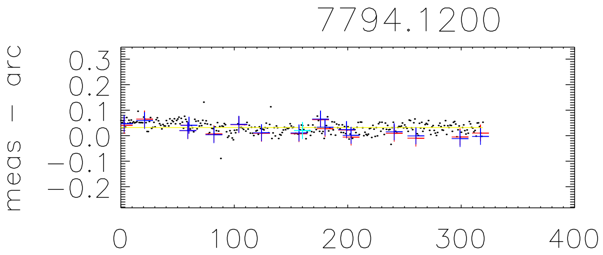

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

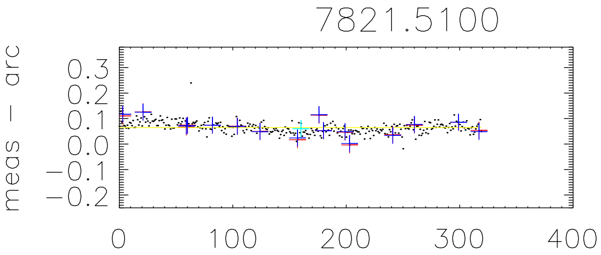

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

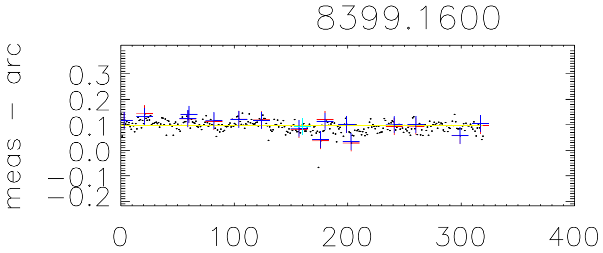

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

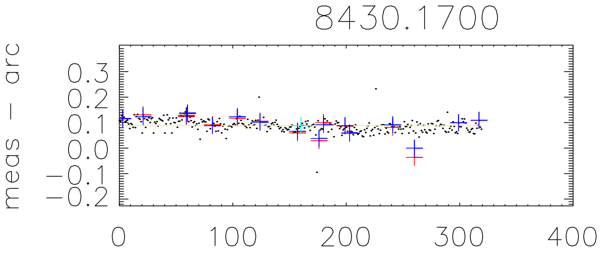

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

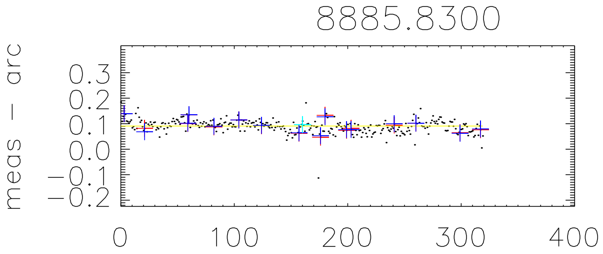

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

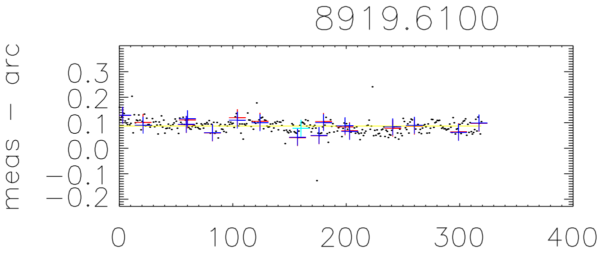

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

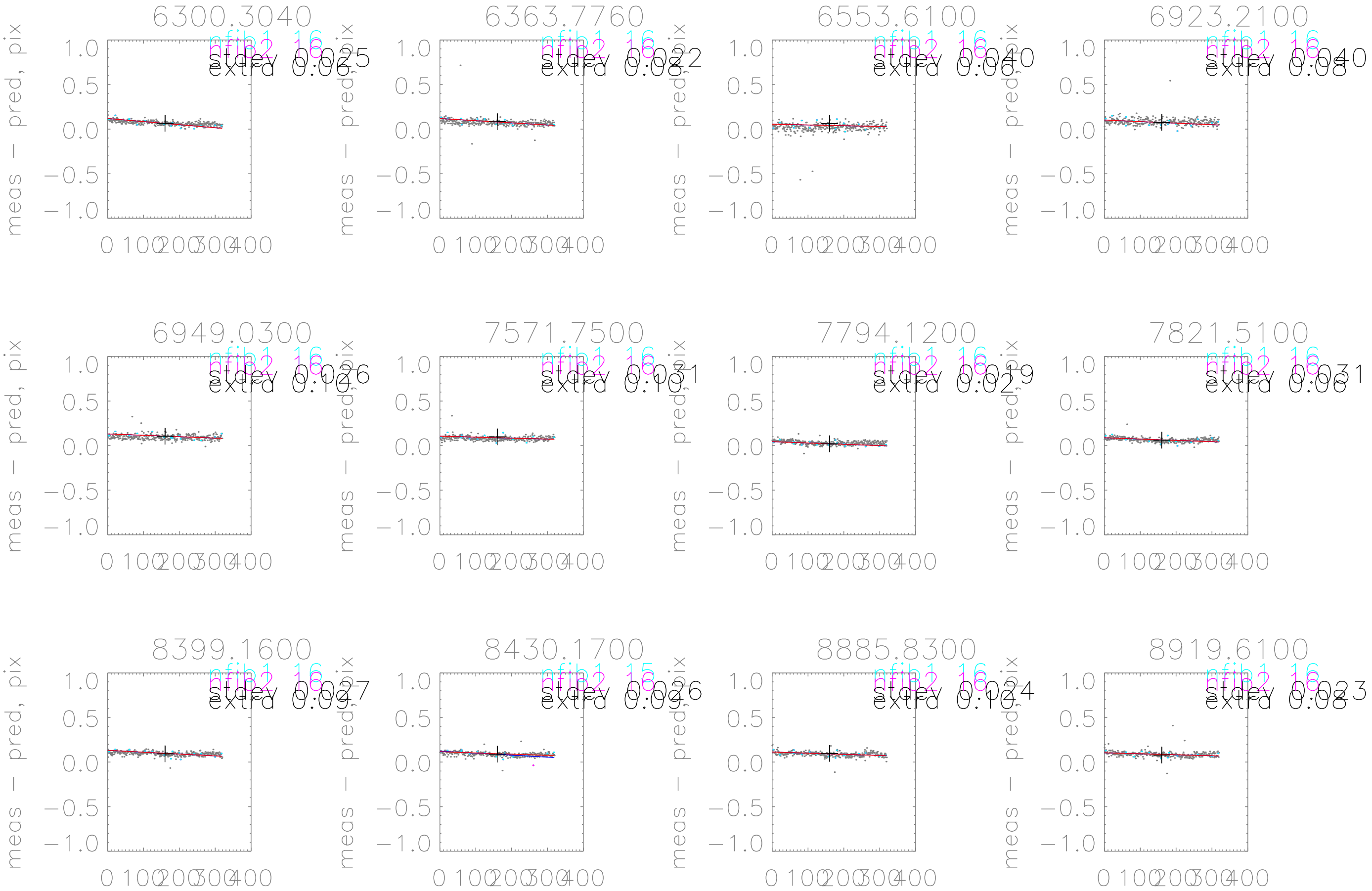

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

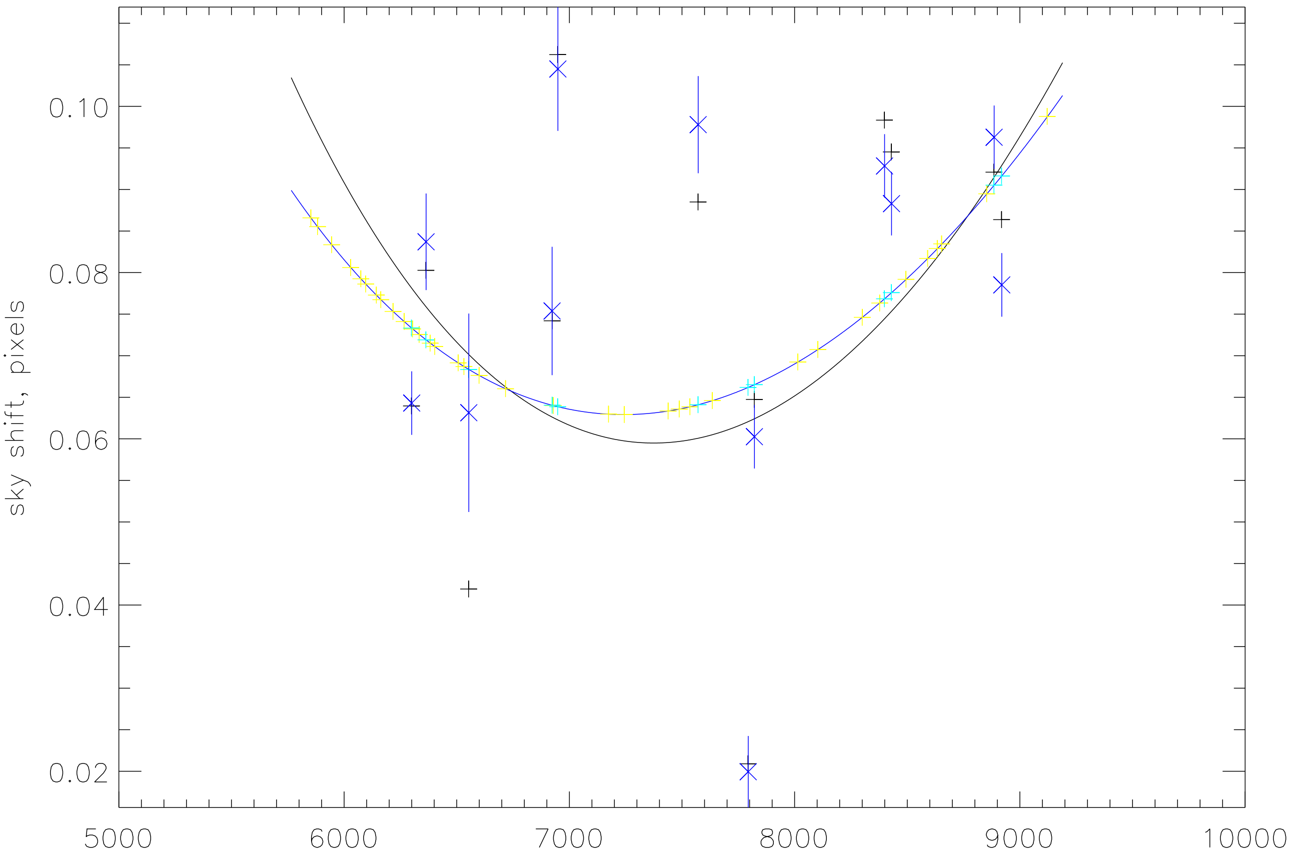

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

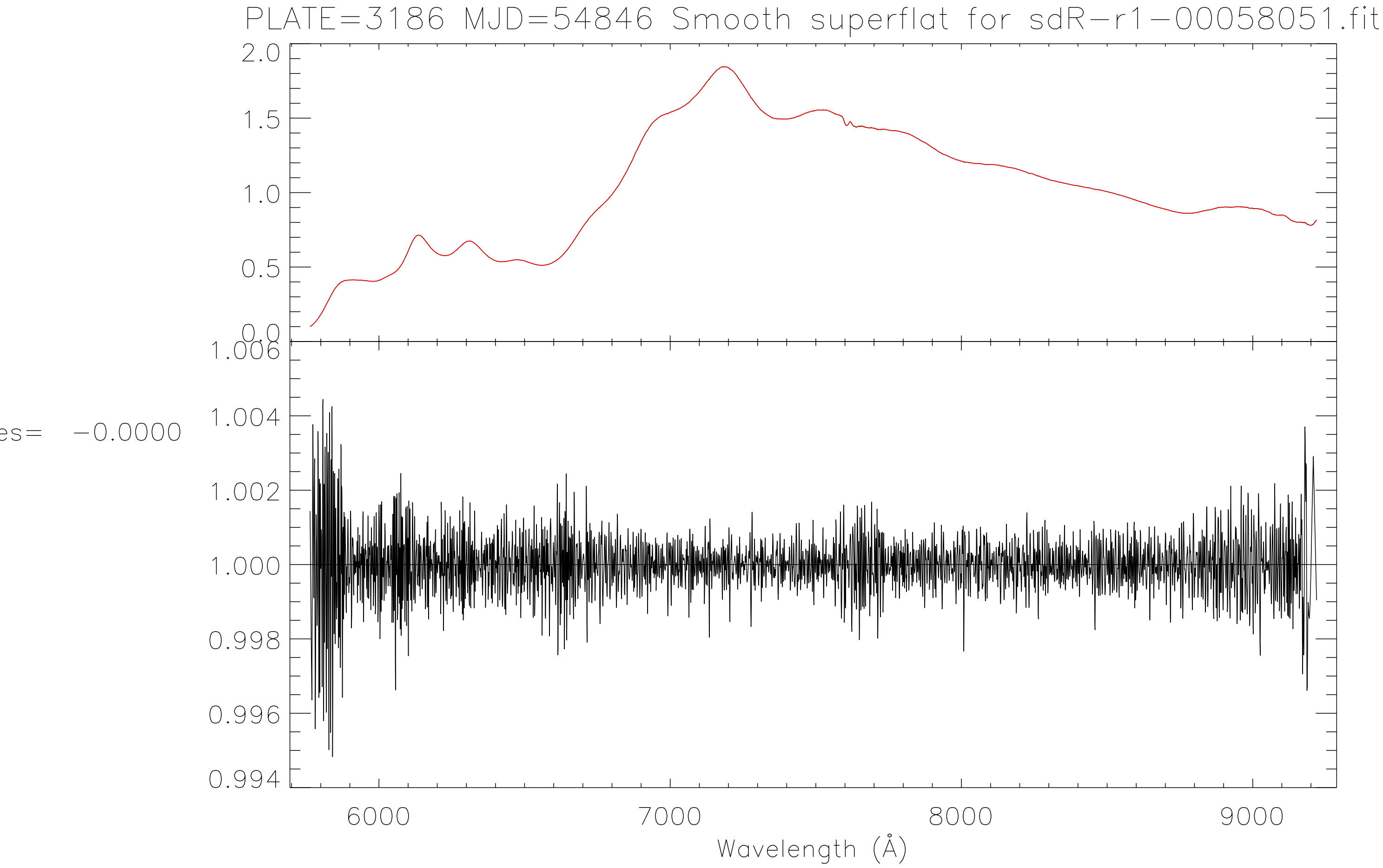

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

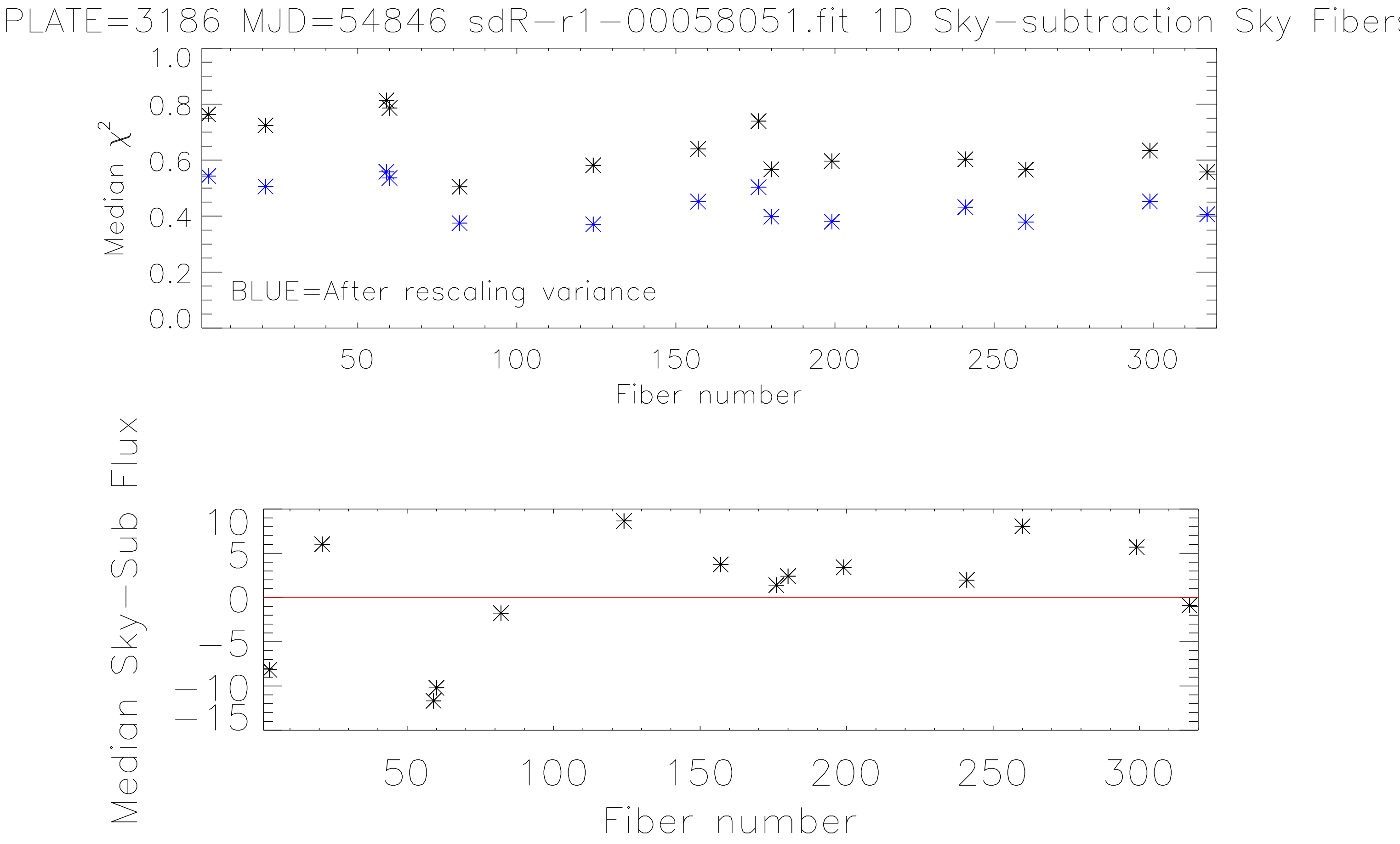

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

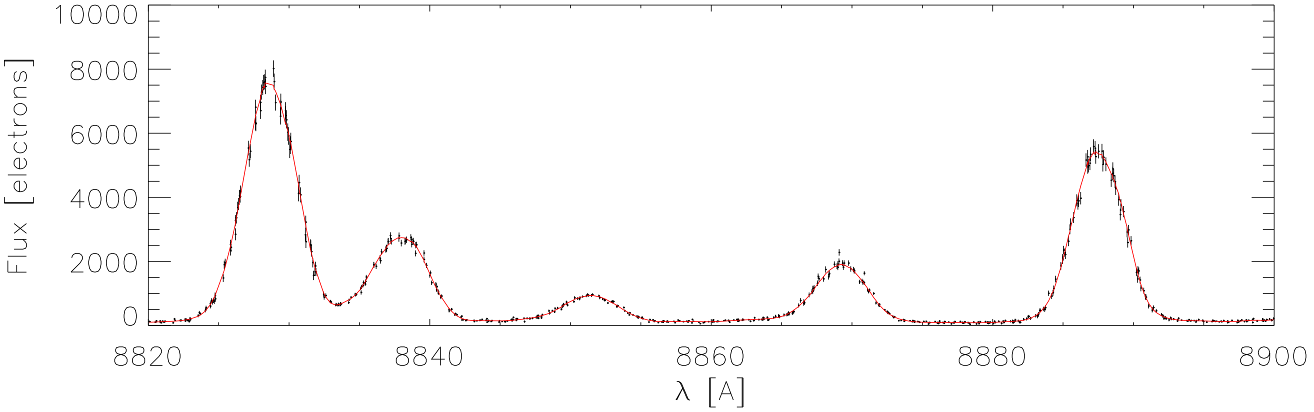

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6300.3040
nfib1 16
nfib2 16
stdev 0.025
extrd 0.06
6363.7760
nfib1 16
nfib2 16
stdev 0.022
extrd 0.08
6553.6100
nfib1 16
nfib2 16
stdev 0.040
extrd 0.06
6923.2100
nfib1 16
nfib2 16
stdev 0.040
extrd 0.08
6949.0300
nfib1 16
nfib2 16
stdev 0.026
extrd 0.10
7571.7500
nfib1 16
nfib2 16
stdev 0.031
extrd 0.10
7794.1200
nfib1 16
nfib2 16
stdev 0.019
extrd 0.02
7821.5100
nfib1 16
nfib2 16
stdev 0.031
extrd 0.06
8399.1600
nfib1 16
nfib2 16
stdev 0.027
extrd 0.09
8430.1700
nfib1 15
nfib2 15
stdev 0.026
extrd 0.09
8885.8300
nfib1 16
nfib2 16
stdev 0.024
extrd 0.10
8919.6100
nfib1 16
nfib2 16
stdev 0.023
extrd 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

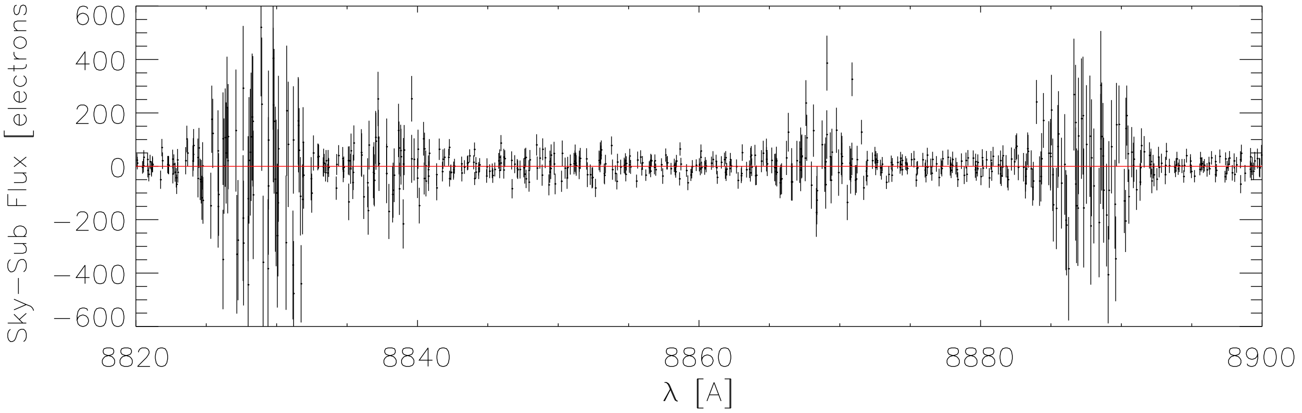

sky shift, pixels
0.02
0.04
0.06
0.08
0.10
5000
6000
7000
8000
9000
10000


PLATE=3186 MJD=54846 Smooth superflat for sdR-r1-00058051.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

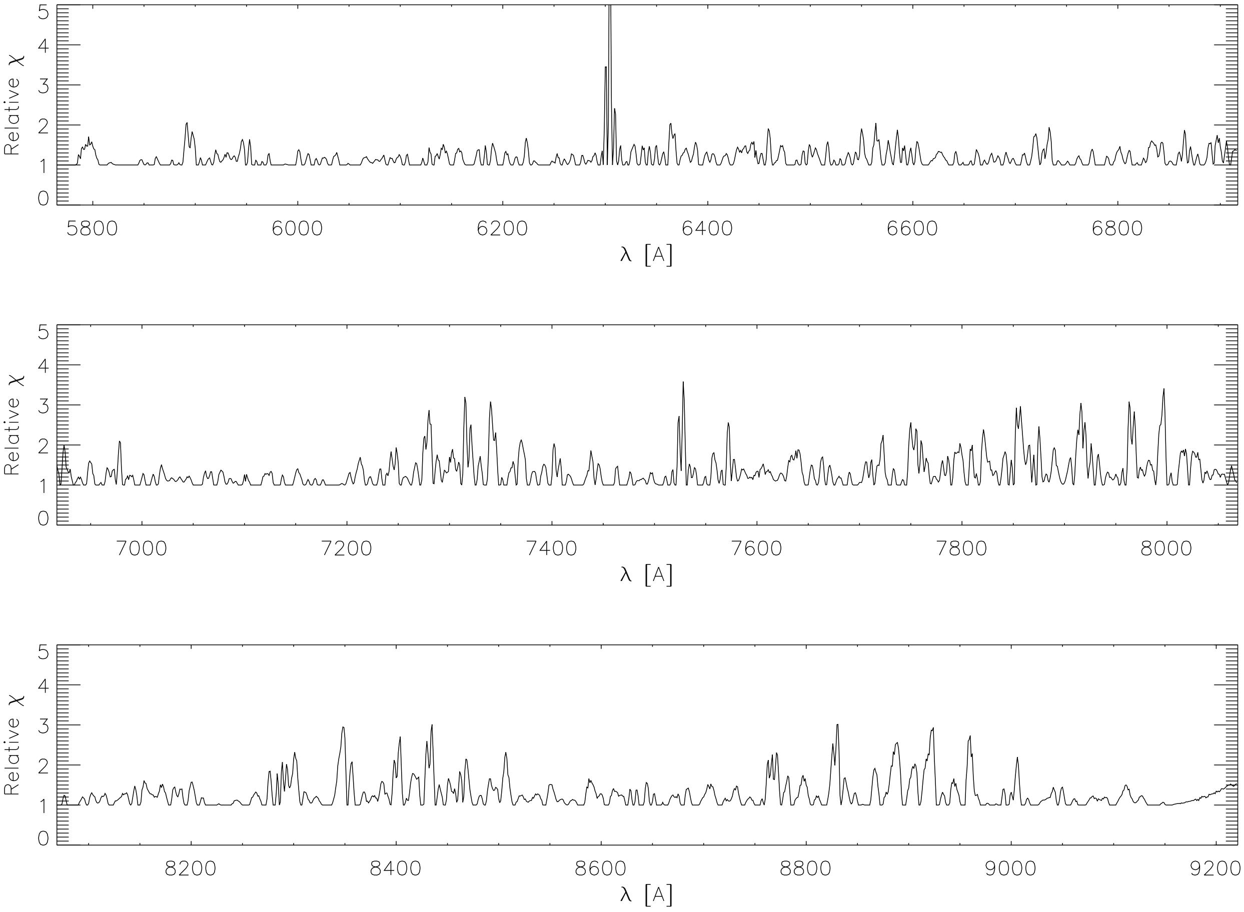

PLATE=3186 MJD=54846 sdR-r1-00058051.fit 1D Sky-subtraction Sky Fibers
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number



PLATE=3186 MJD=54846 sdR-r1-00058051.fit 1D Sky-subtraction Sky Fibers

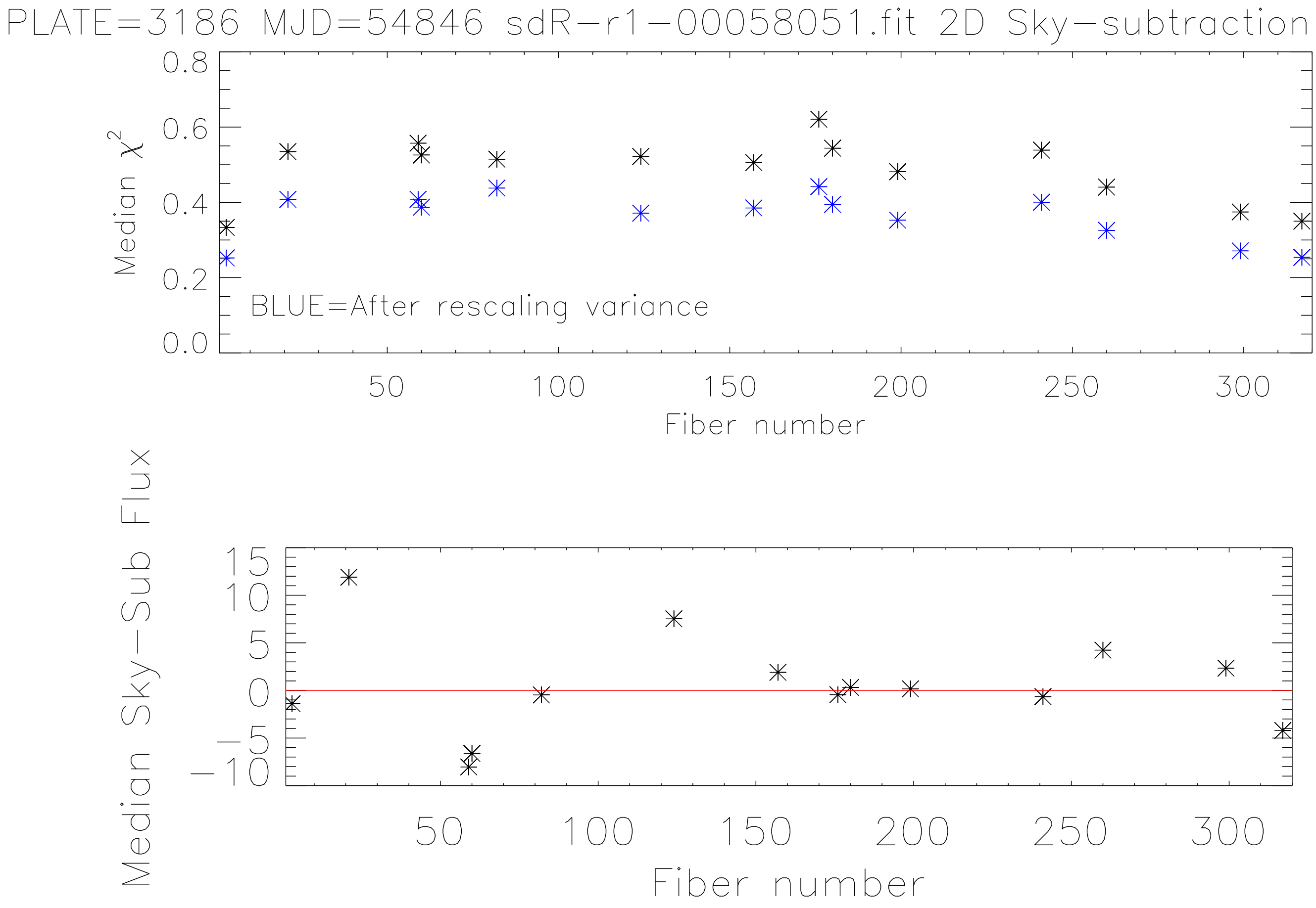


PLATE=3186 MJD=54846 sdR-r1-00058051.fit 1D Sky-subtraction Sky-subtracted Sky F

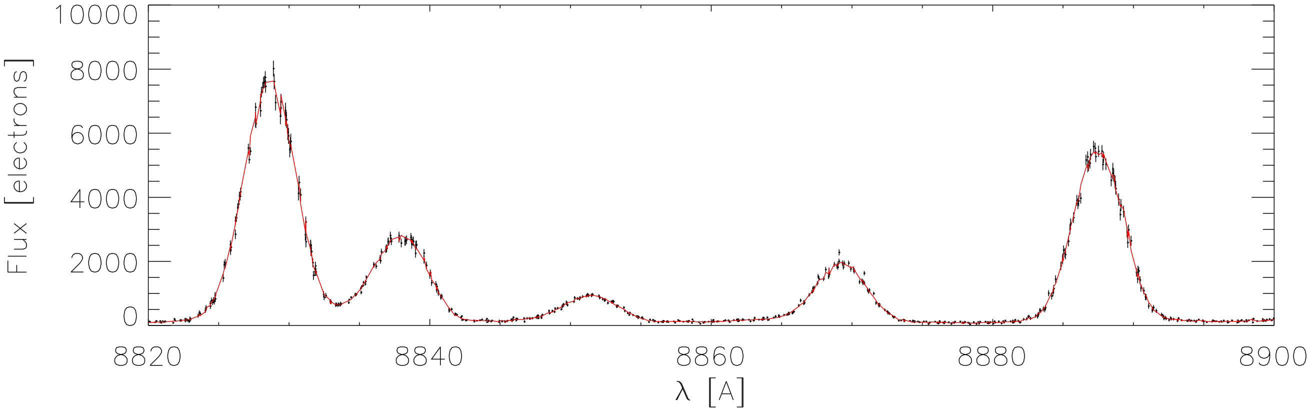


Number of sky fibers = 14

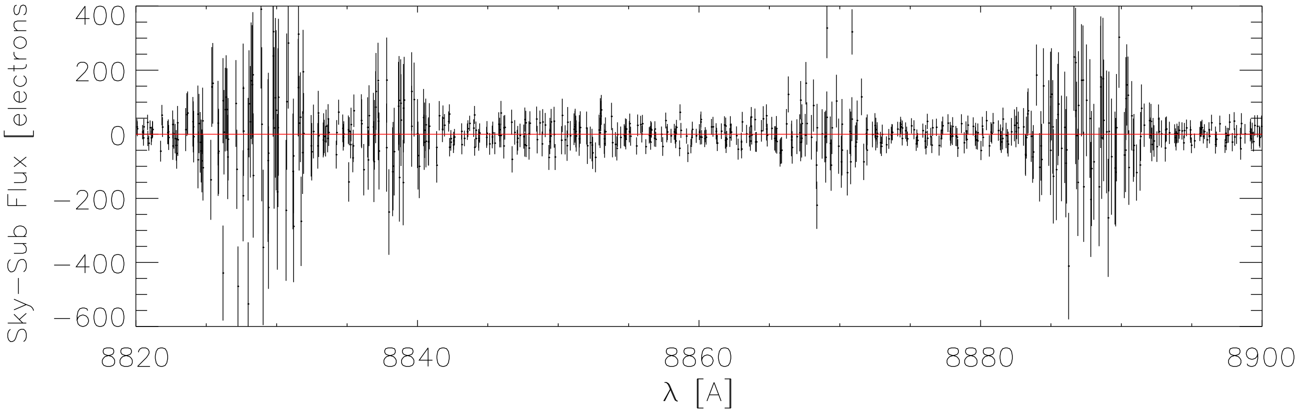
PLATE=3186 MJD=54846 sdR-r1-00058051.fit 1D Sky-subtraction Rescaled Errors


PLATE=3186 MJD=54846 sdR-r1-00058051.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
15
50
100
150
200
250
300
Fiber number

PLATE=3186 MJD=54846 sdR-r1-00058051.fit 2D Sky-subtraction Sky Fibers

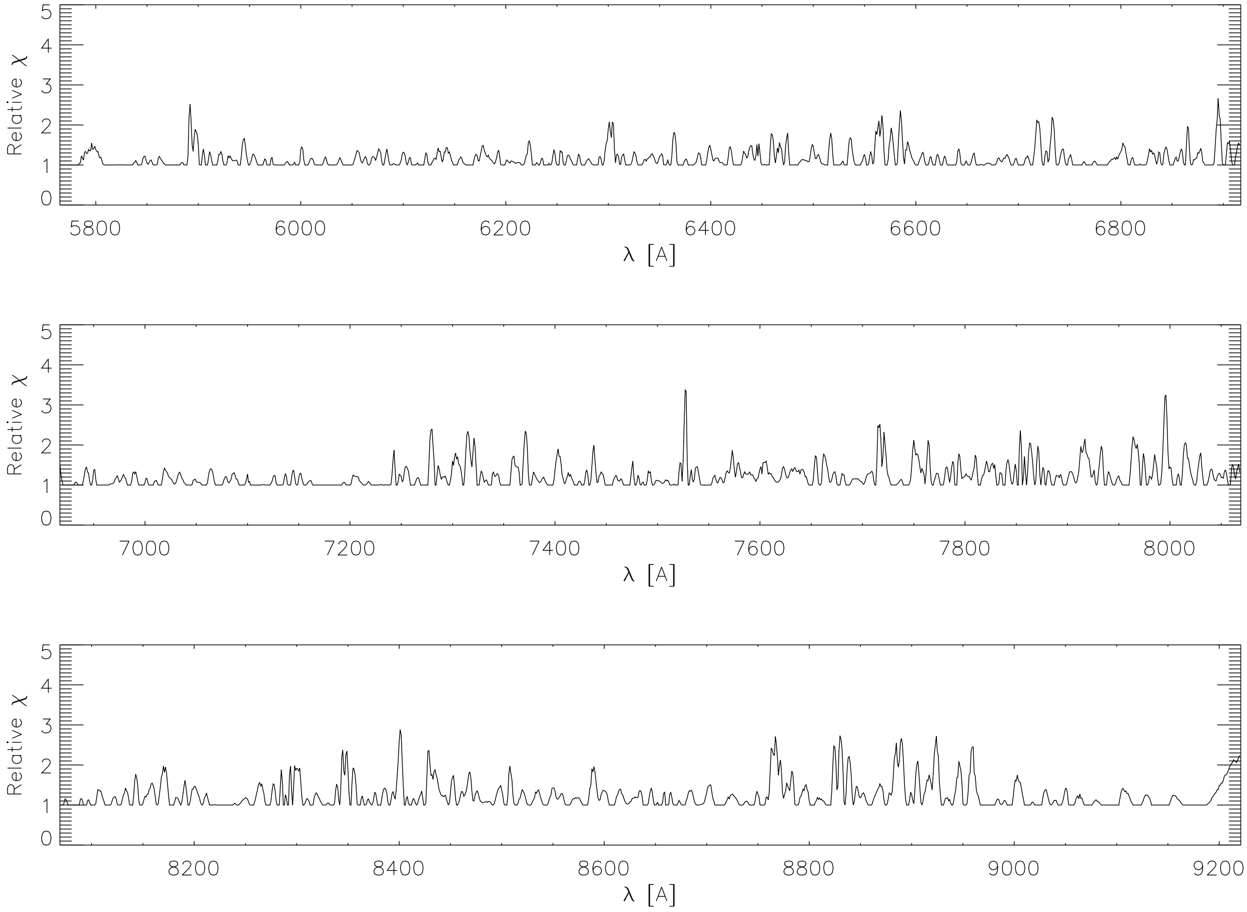


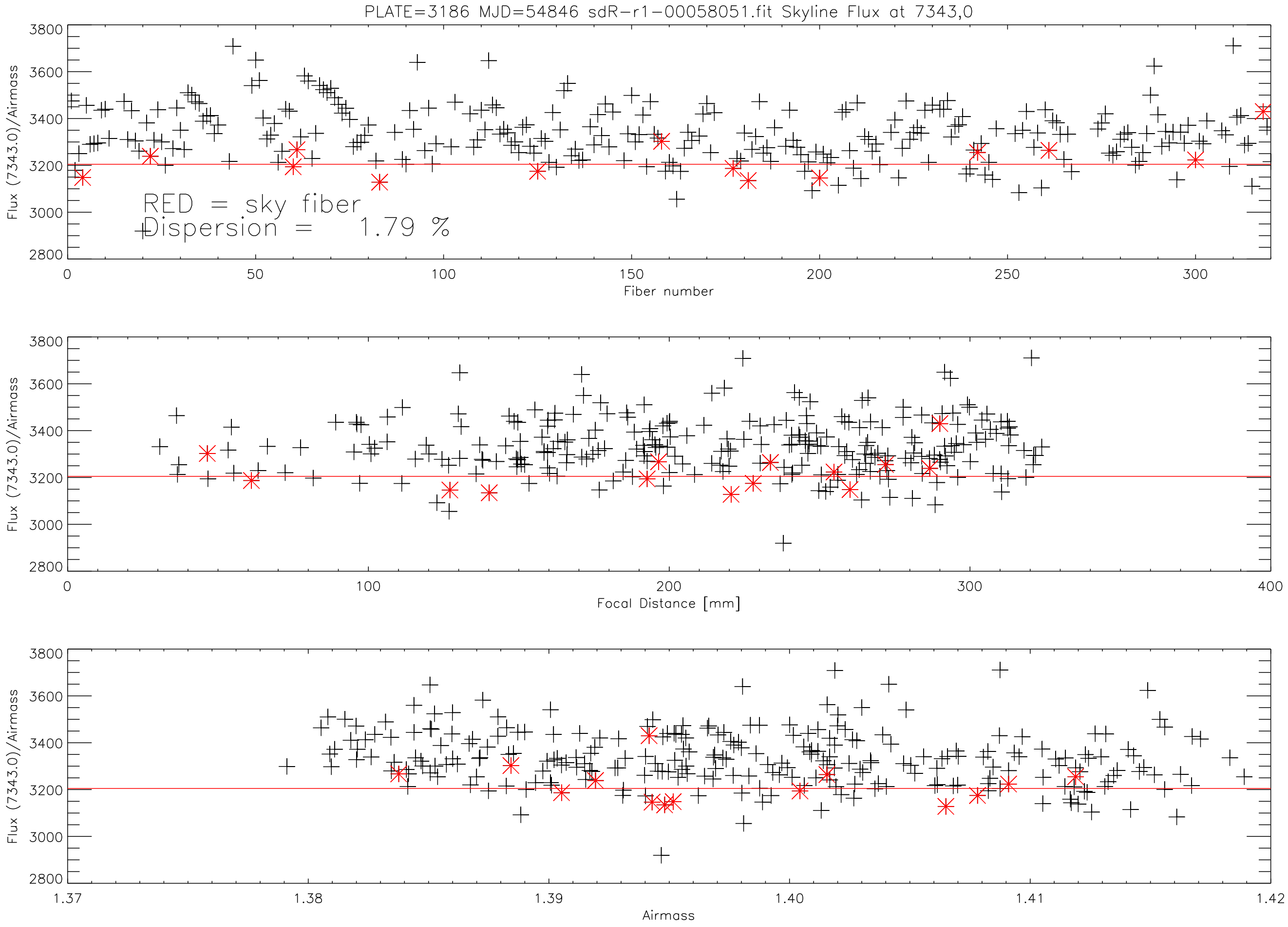
PLATE=3186 MJD=54846 sdR-r1-00058051.fit 2D Sky-subtraction Sky-subtracted Sky F

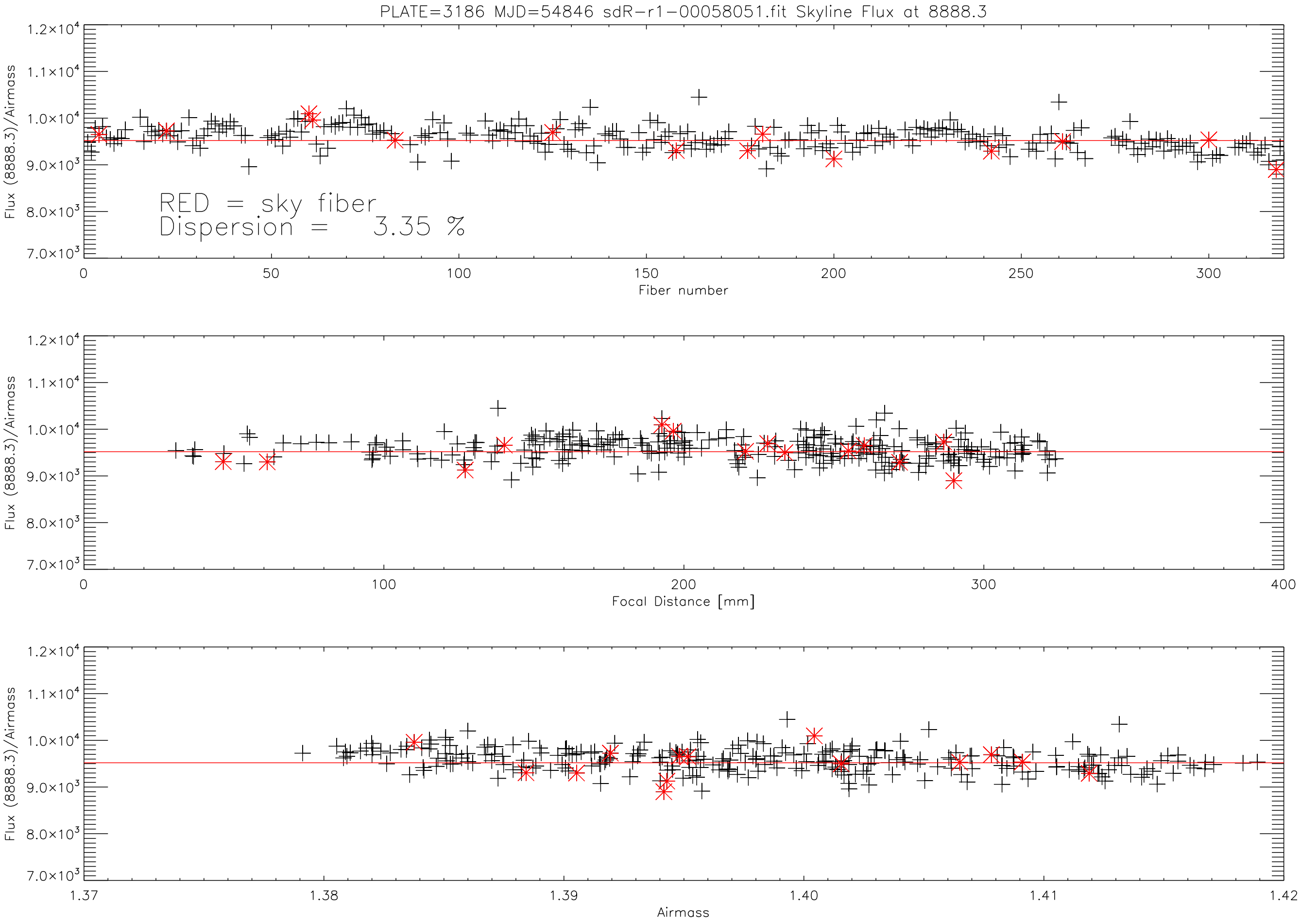


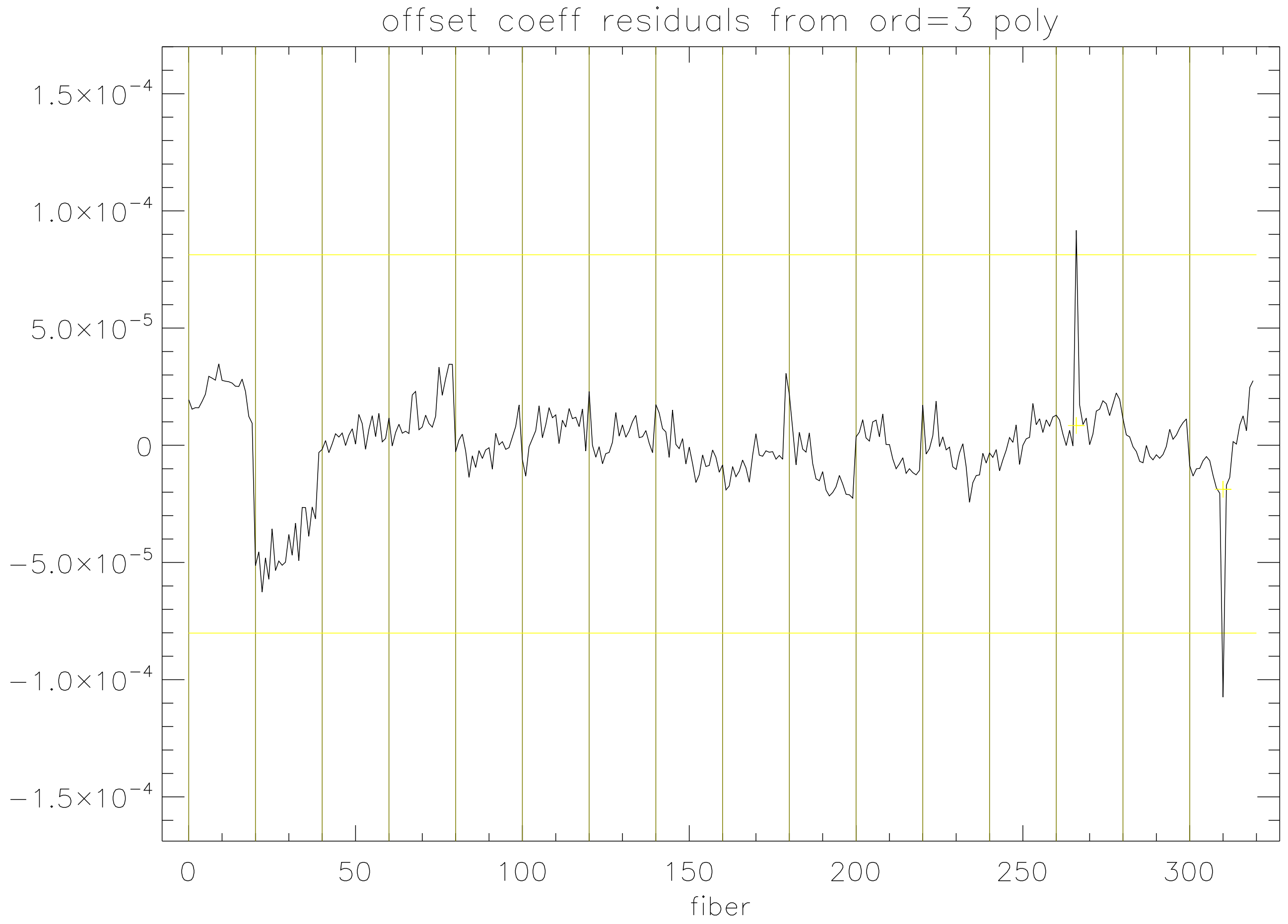
Number of sky fibers = 14

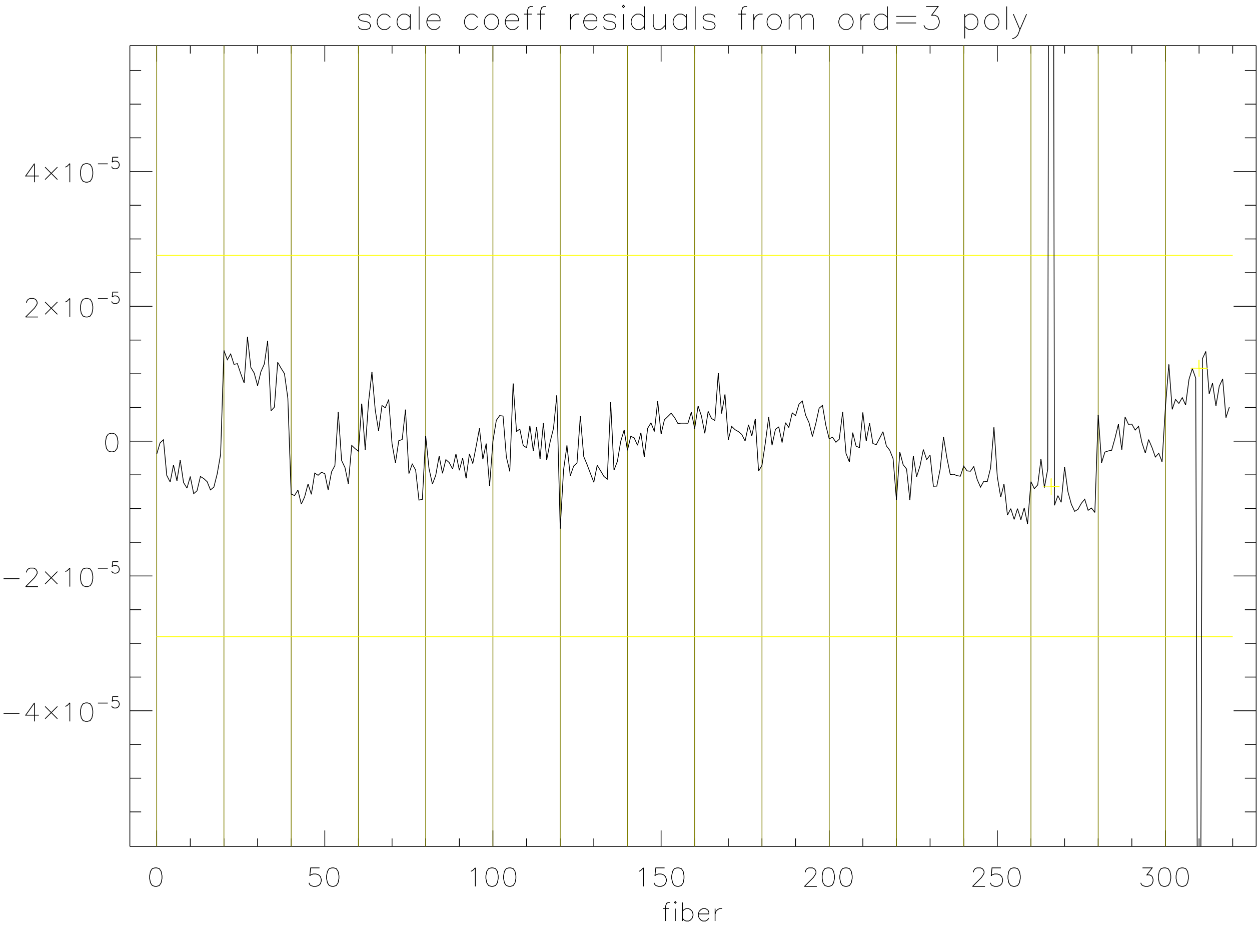
PLATE=3186 MJD=54846 sdR-r1-00058051.fit 2D Sky-subtraction Rescaled Errors



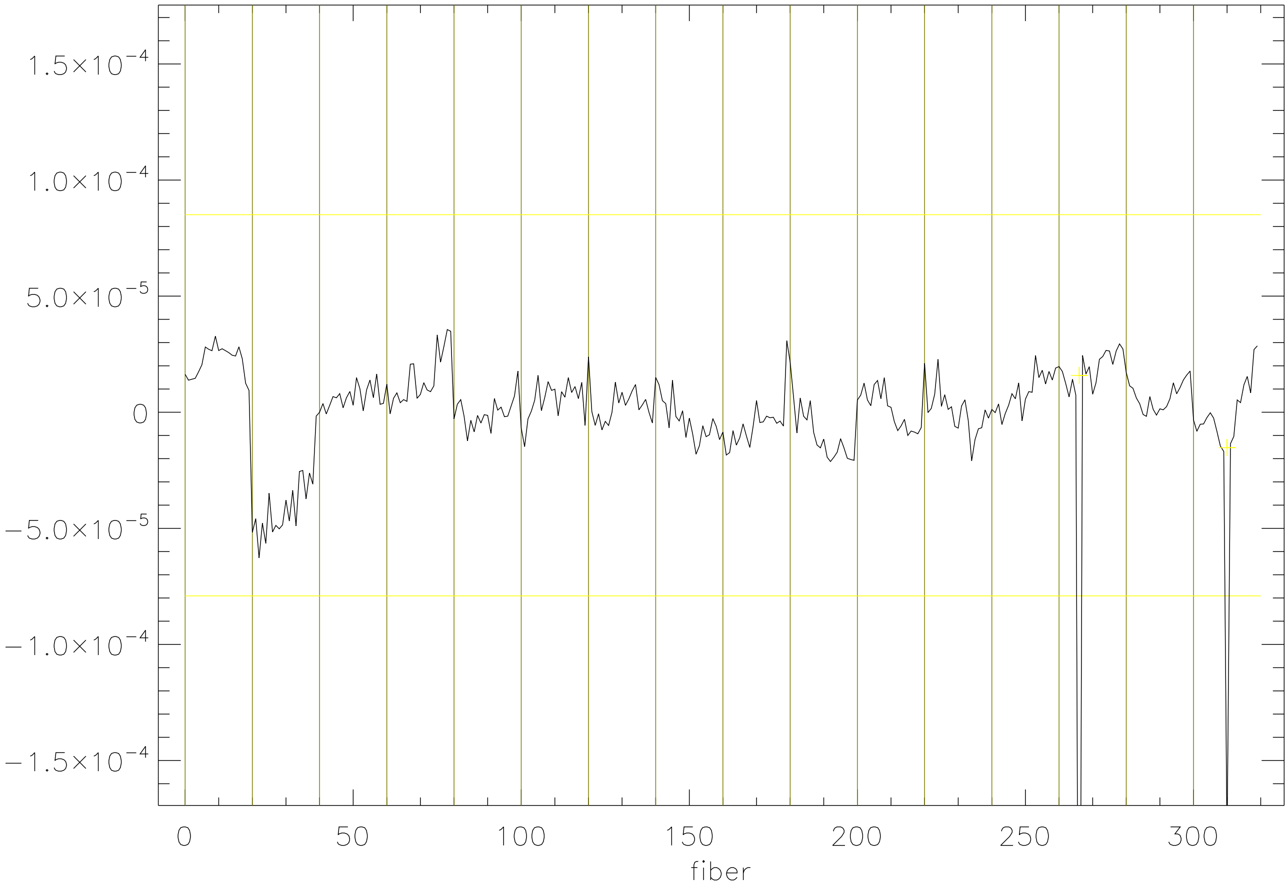

PLATE=3186 MJD=54846 sdR-r1-00058051.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.79 %
Fiber number
0
50
100
150
200
250
300
2800
3000
3200
3400
3600
3800
Focal Distance [mm]
0
100
200
300
400
Airmass
1.37
1.38
1.39
1.40
1.41
1.42

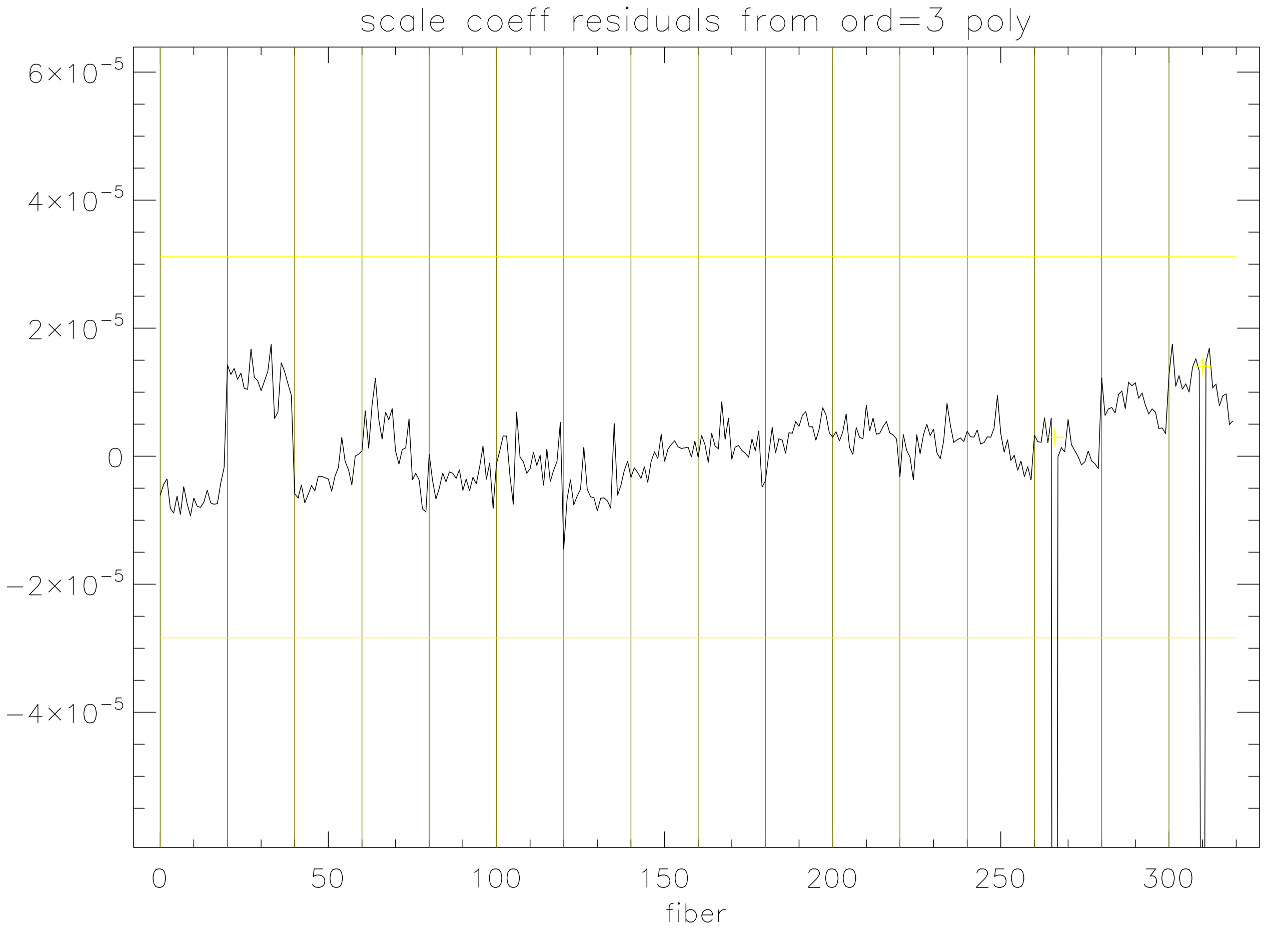

PLATE=3186 MJD=54846 sdR−r1−00058051.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.2×10^4
1.1×10^4
1.0×10^4
9.0×10^3
8.0×10^3
7.0×10^3
RED = sky fiber
Dispersion = 3.35 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.37
1.38
1.39
1.40
1.41
1.42
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

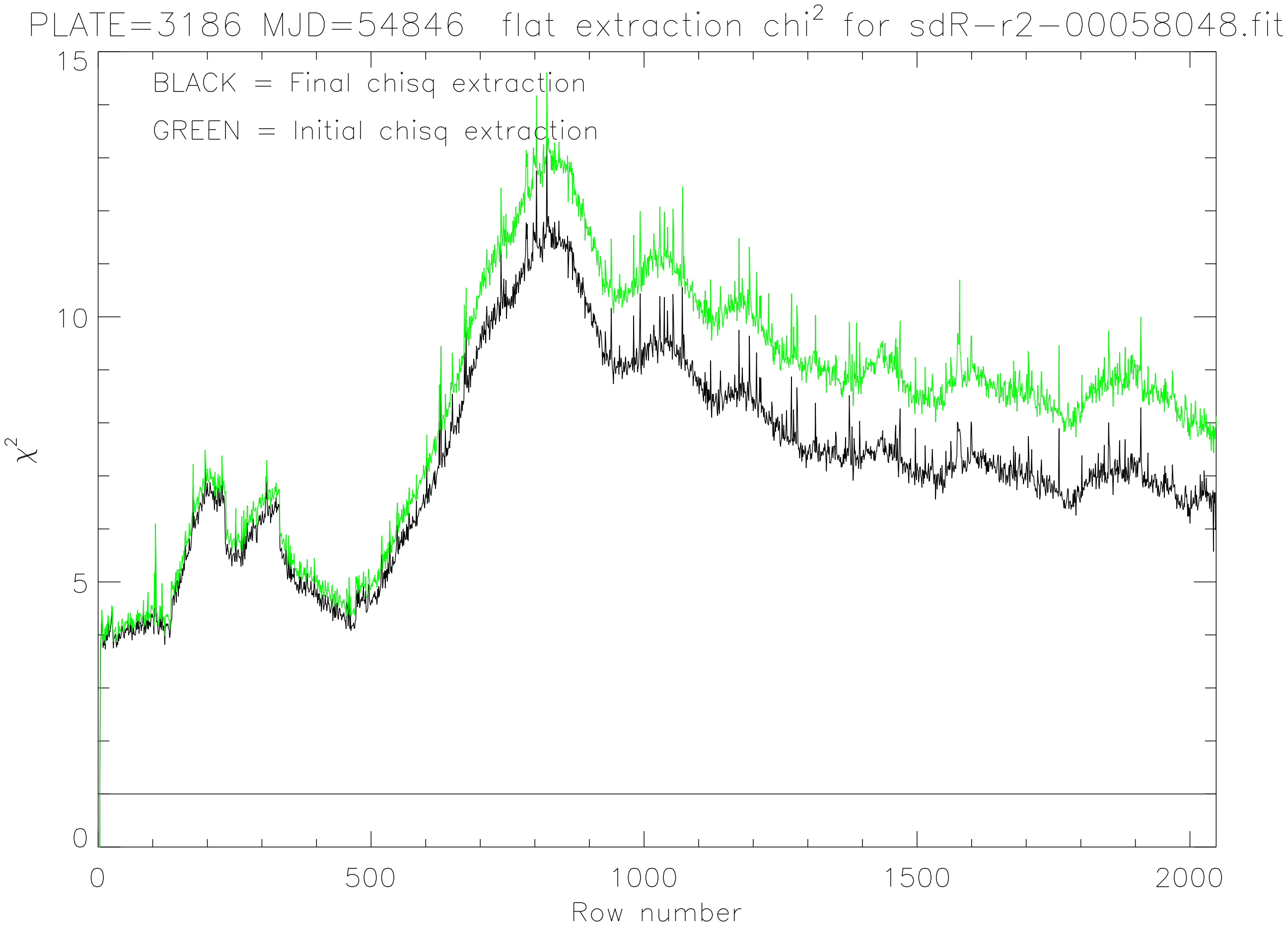

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

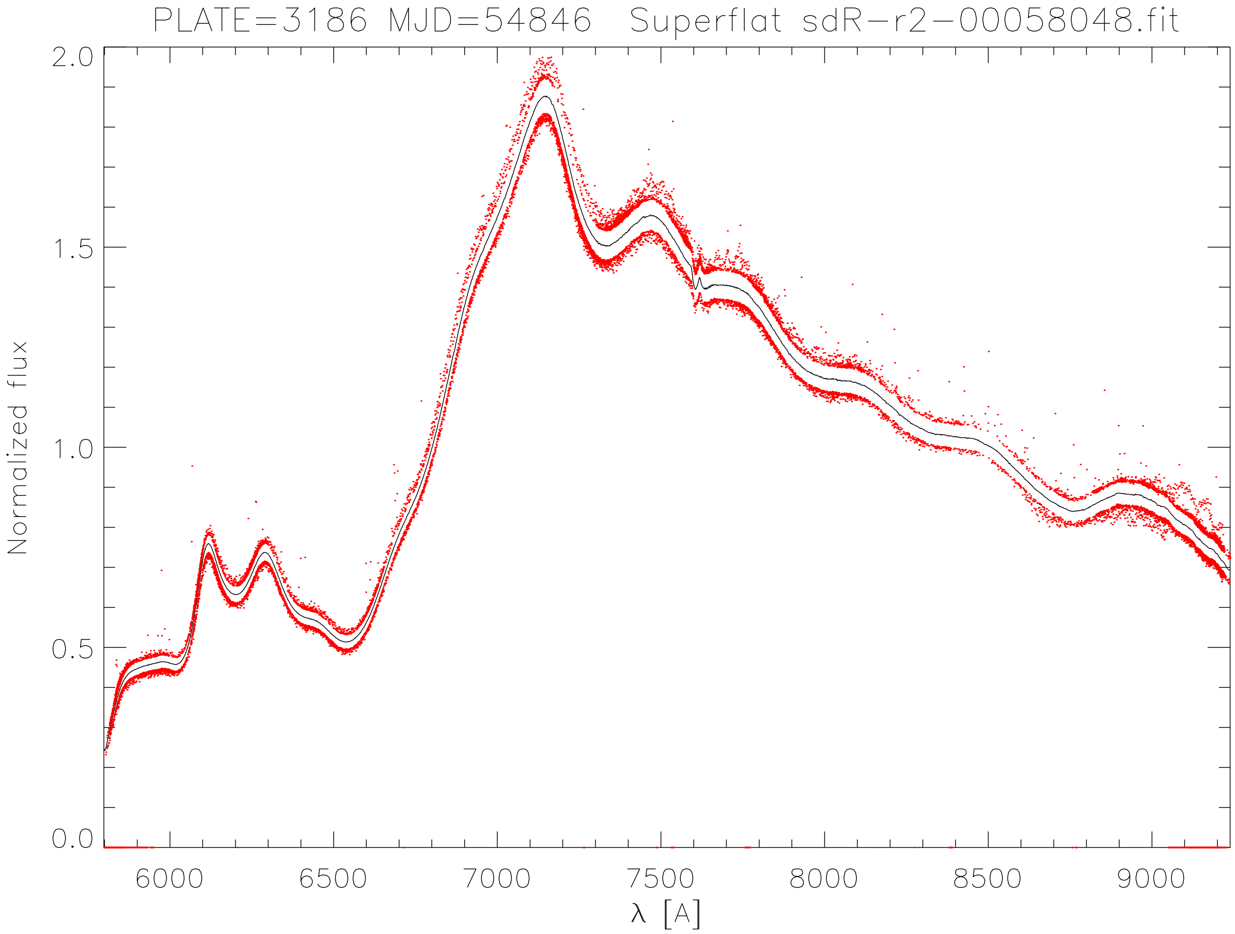
offset coeff residuals from ord=3 poly

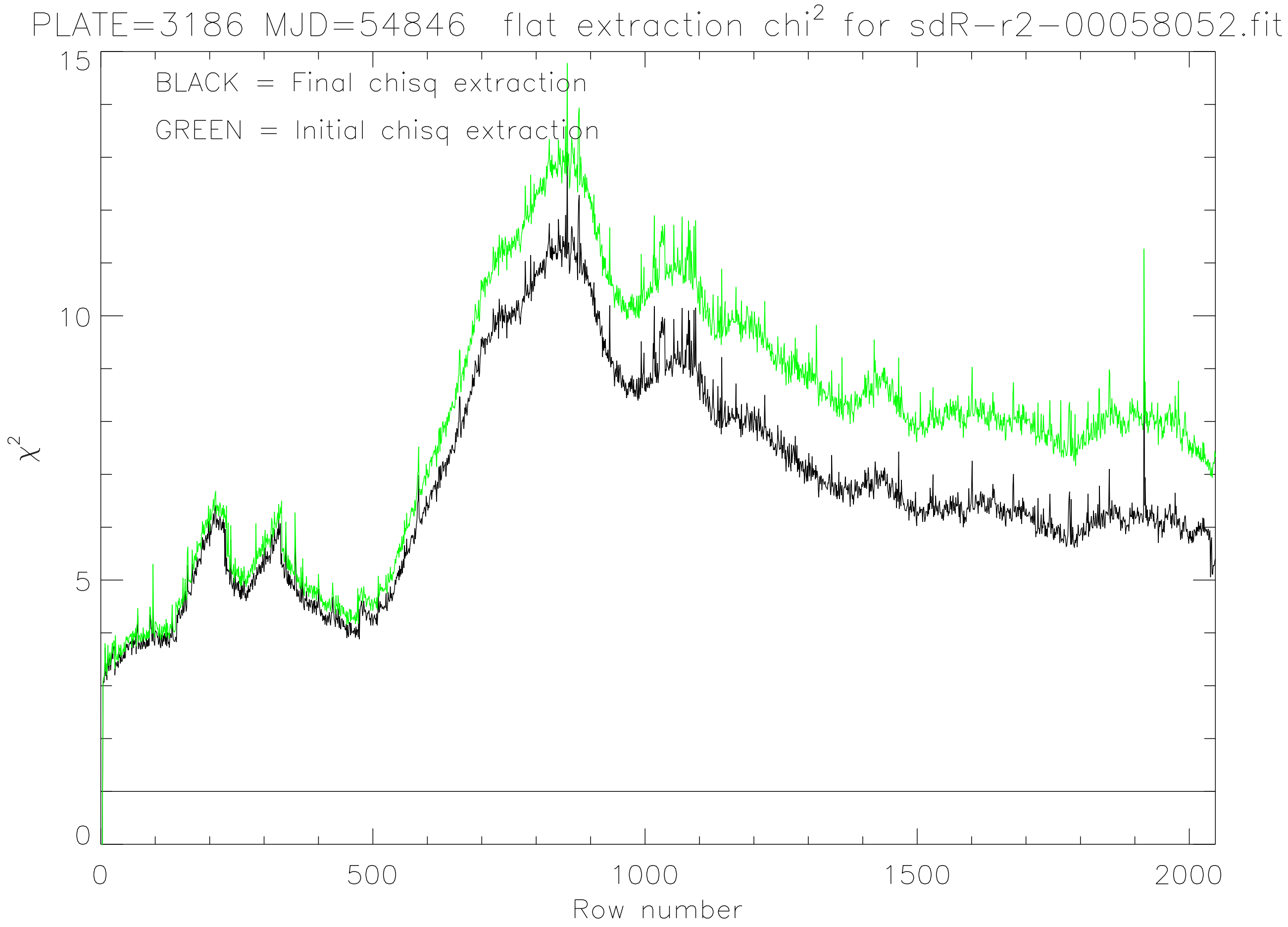


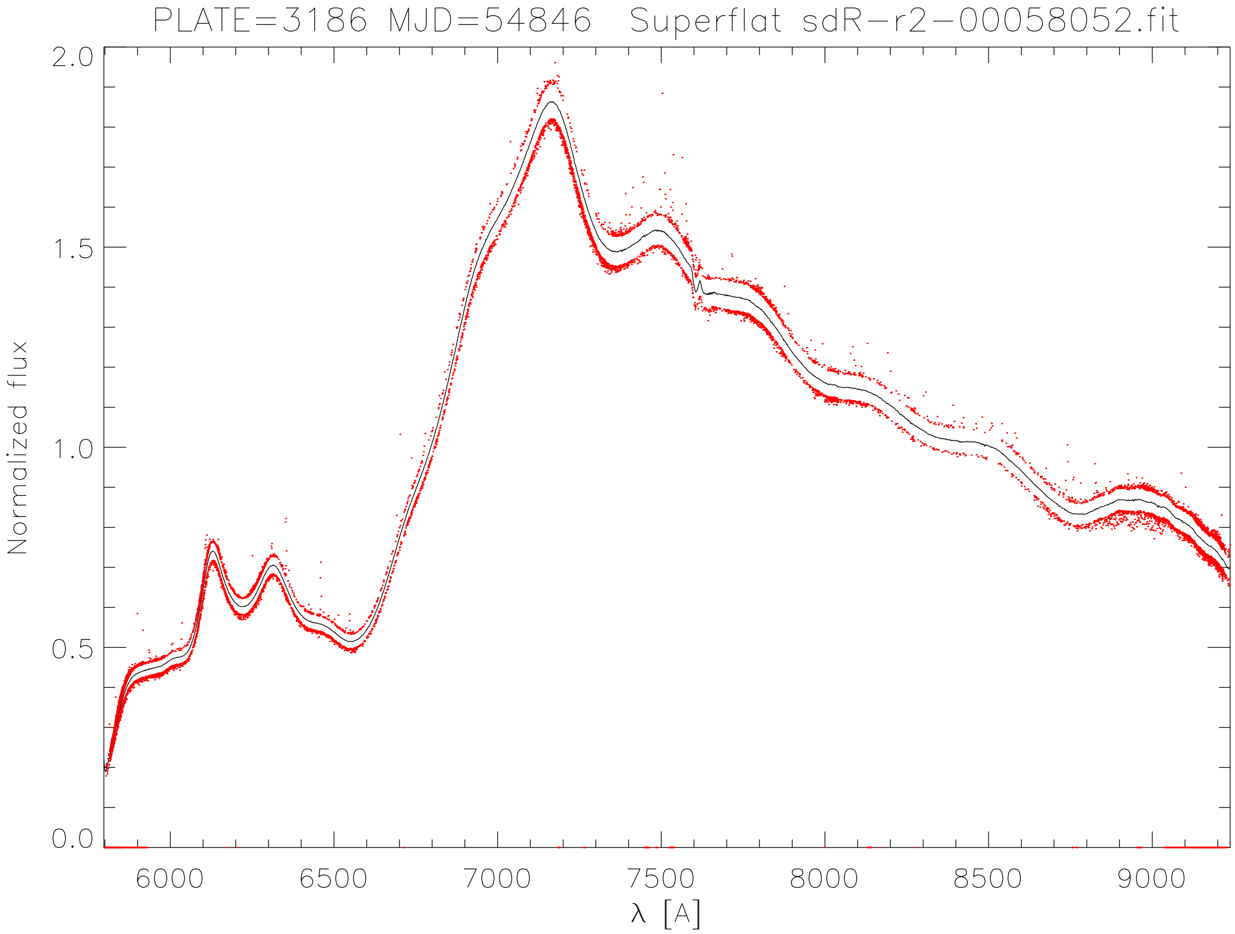


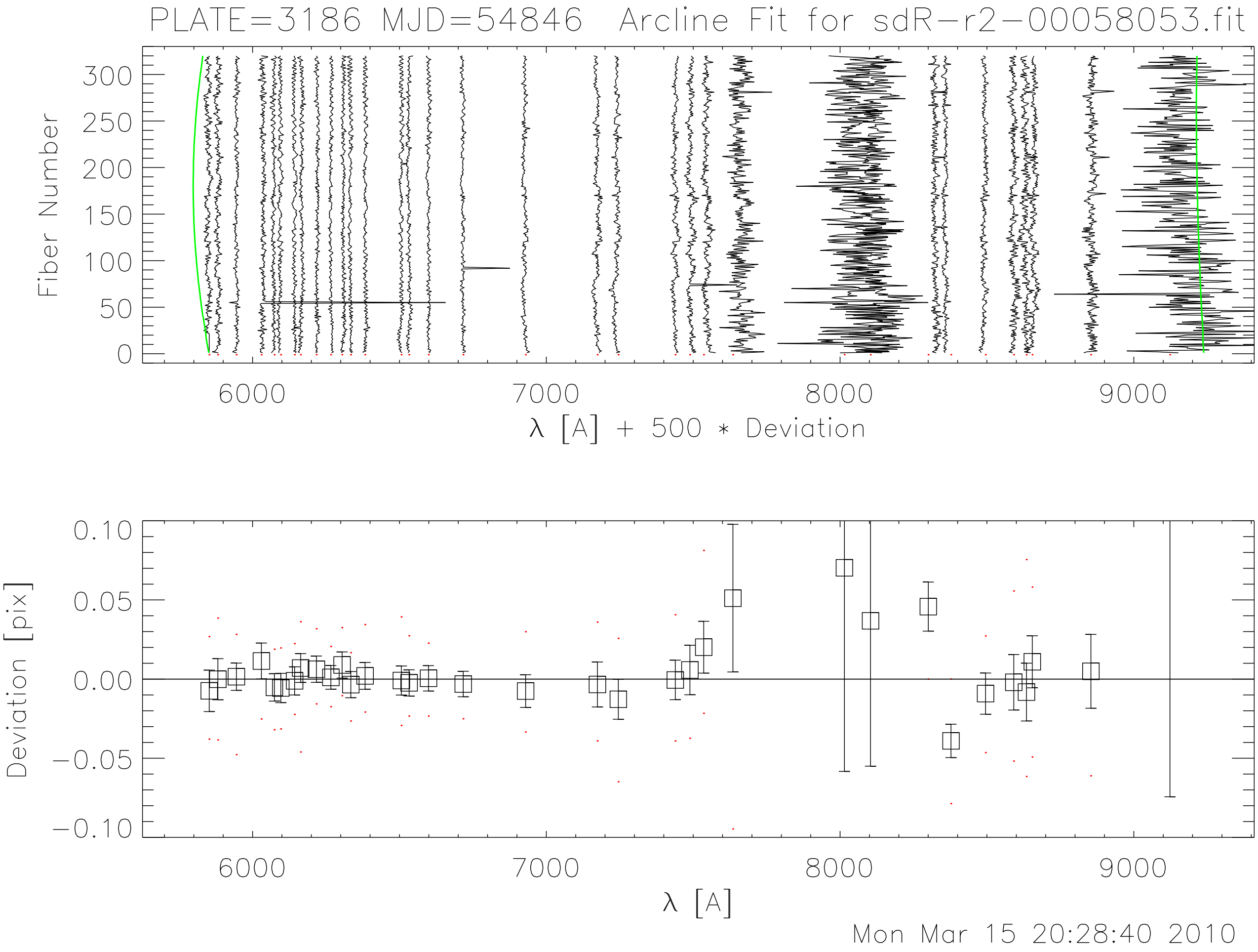
scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

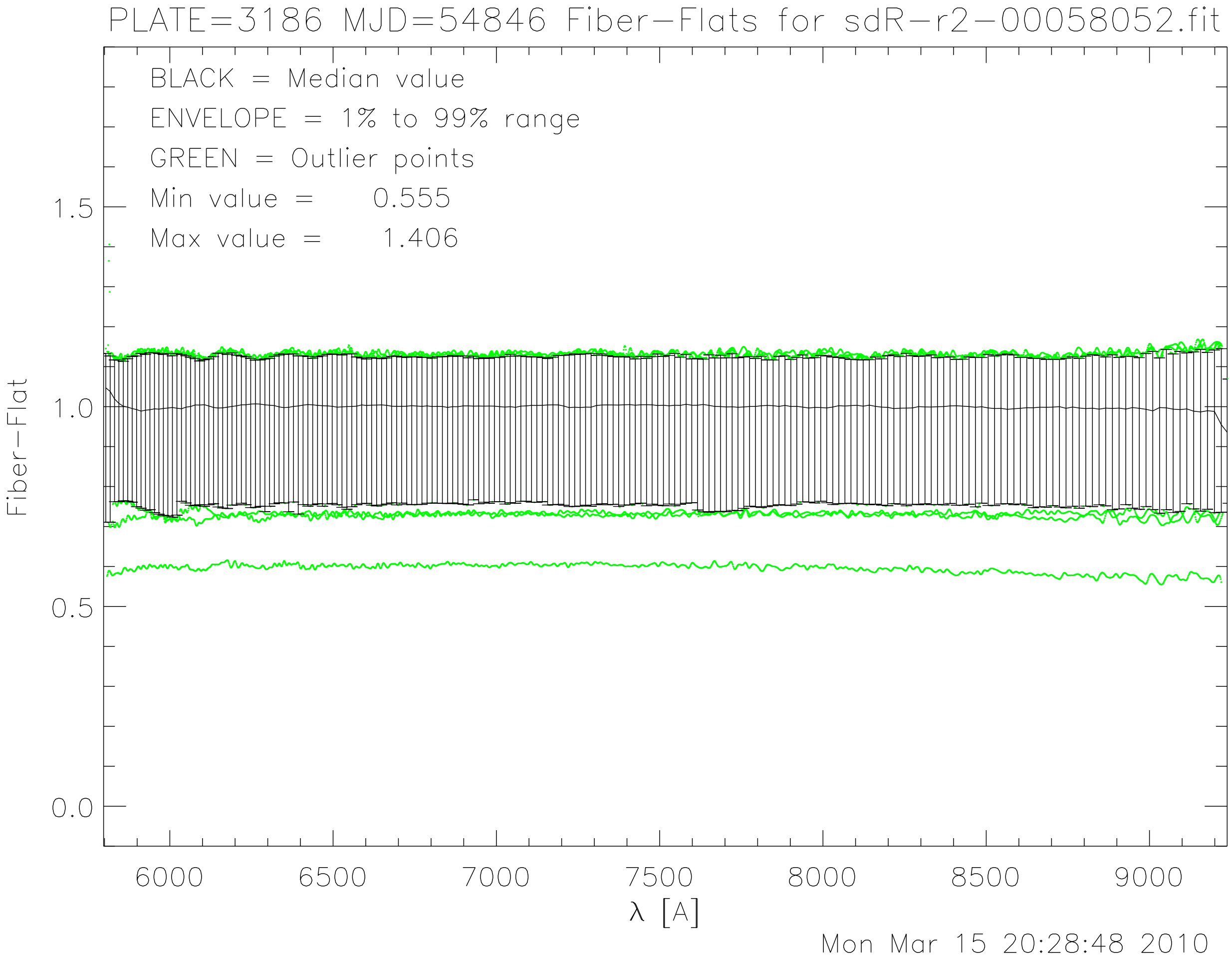

PLATE=3186 MJD=54846 flat extraction chi^2 for sdR-r2-00058048.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
15
10
5
0
0
500
1000
1500
2000
Row number

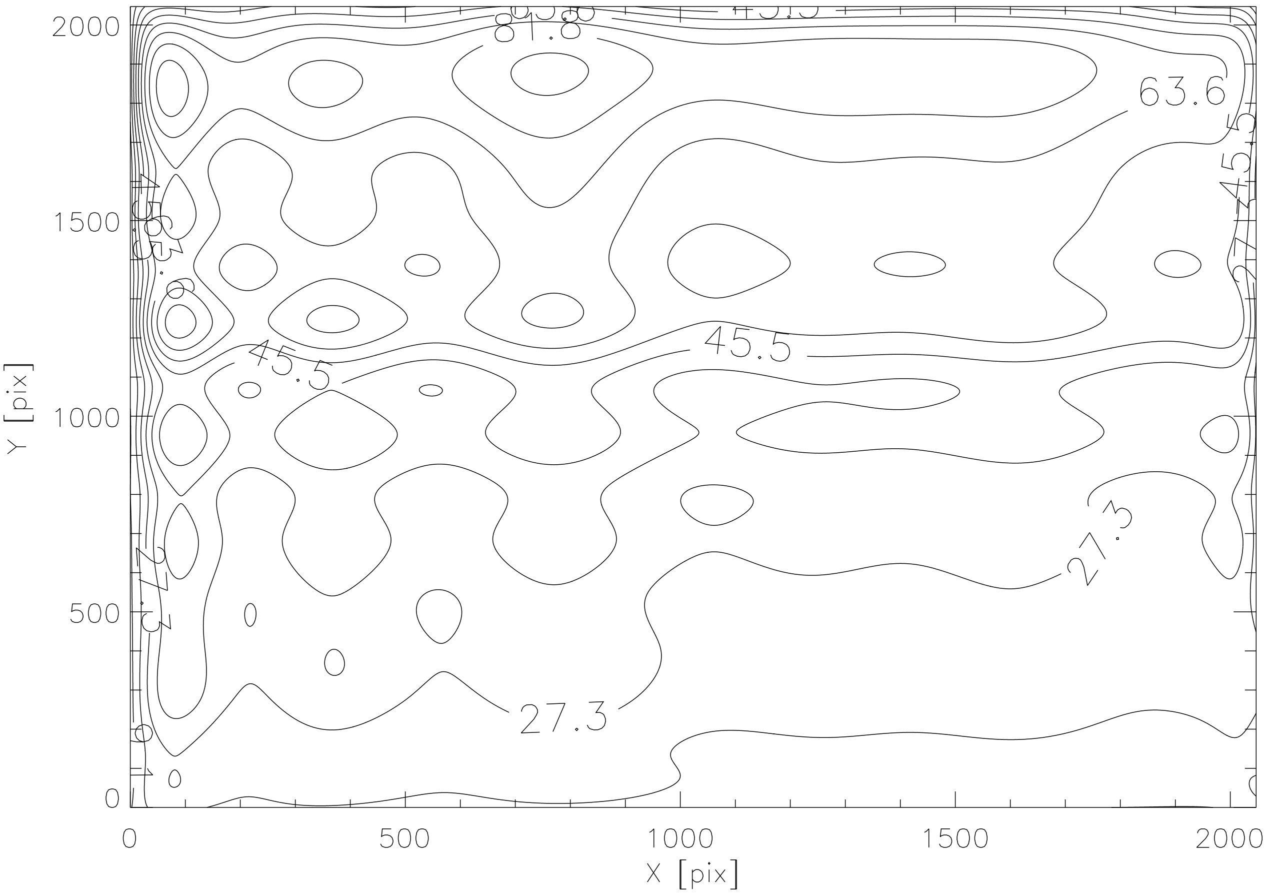

PLATE=3186 MJD=54846 Superflat sdR-r2-00058048.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=3186 MJD=54846 flat extraction chi^2 for sdR-r2-00058052.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

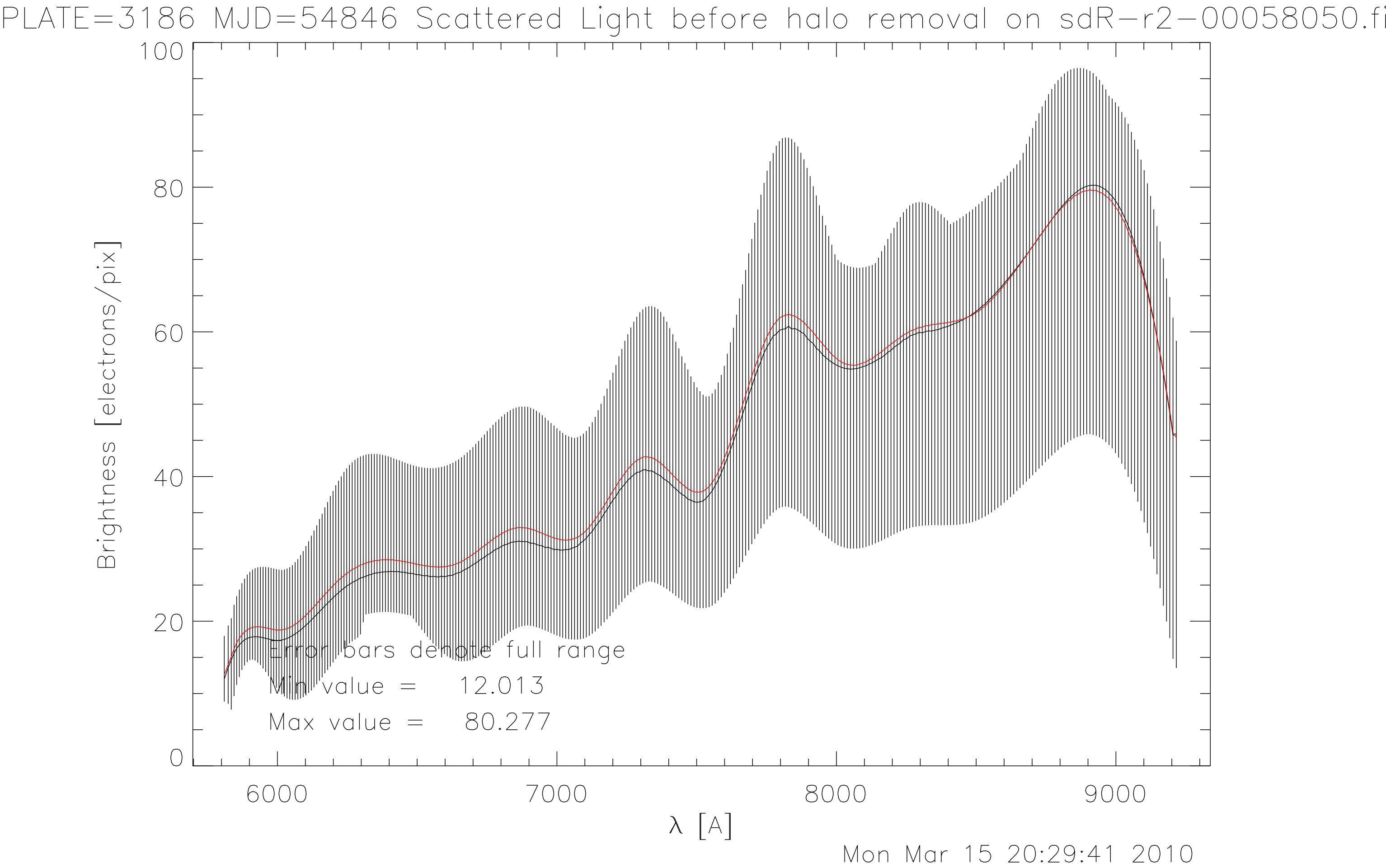
PLATE=3186 MJD=54846 Superflat sdR-r2-00058052.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=3186 MJD=54846 Arcline Fit for sdR-r2-00058053.fit
Fiber Number
0
50
100
150
200
250
300
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Mon Mar 15 20:28:40 2010

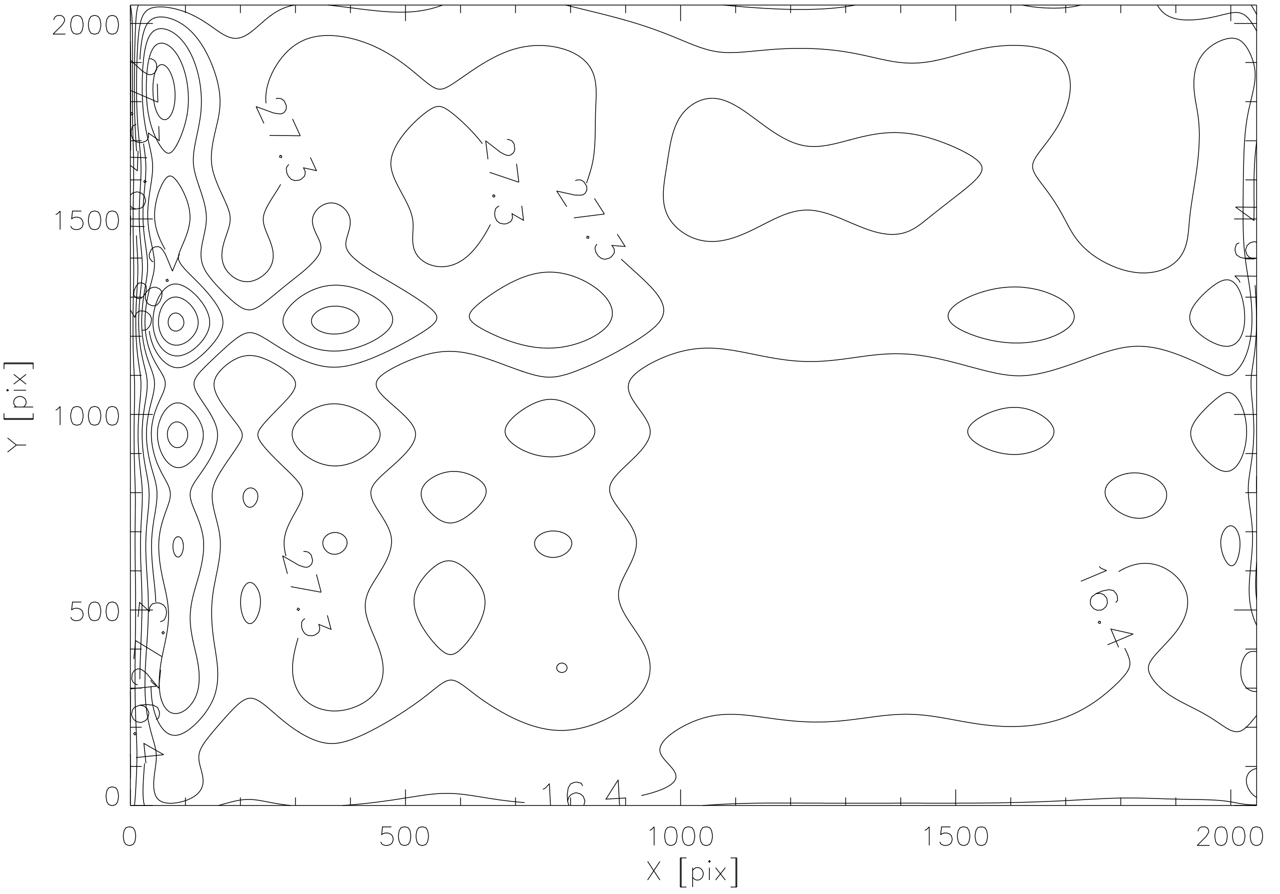

PLATE=3186 MJD=54846 Fiber−Flats for sdR−r2−00058052.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.555
Max value = 1.406
1.5
1.0
0.5
0.0
Fiber−Flat
6000
6500
7000
7500
8000
8500
9000
λ [A]
Mon Mar 15 20:28:48 2010

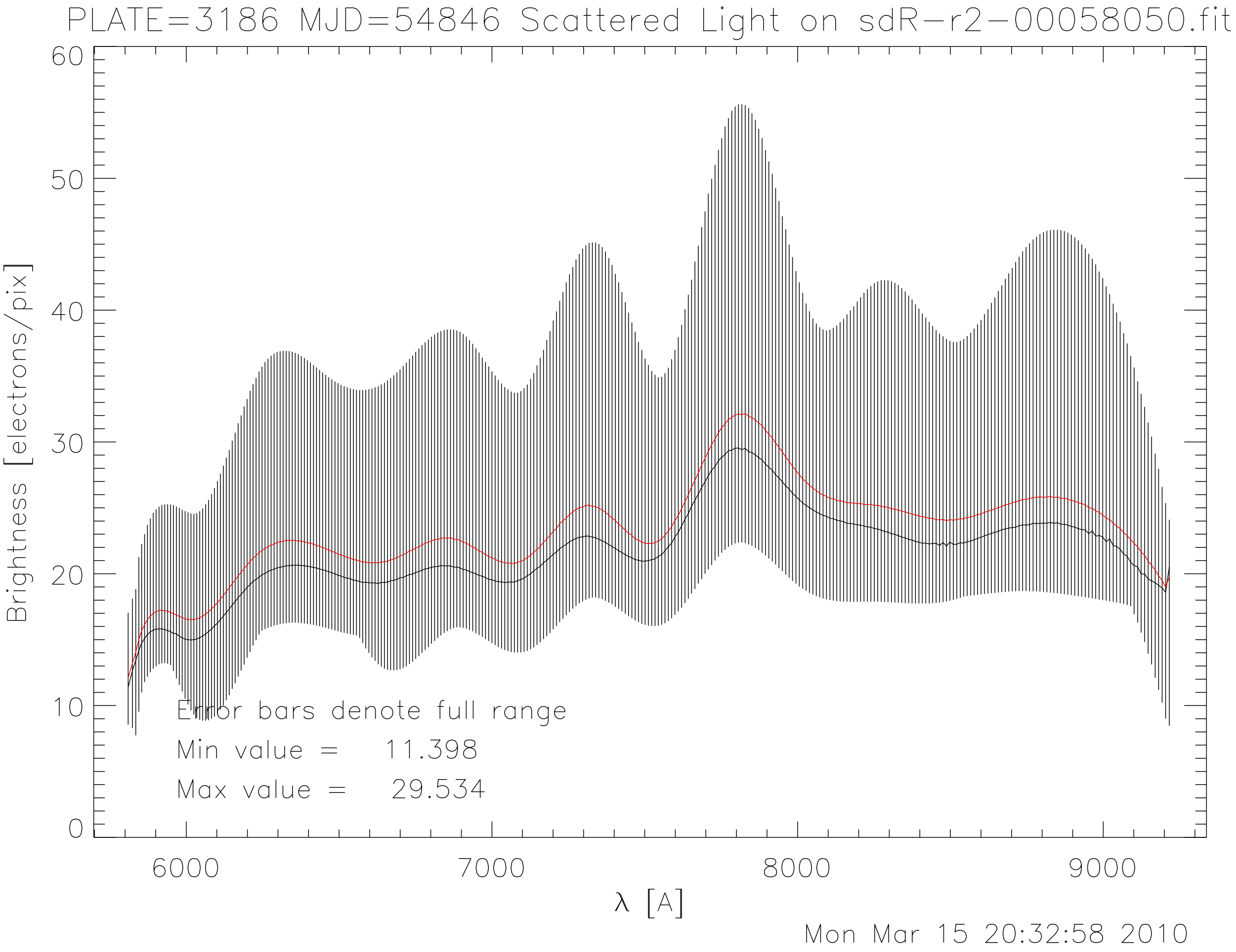


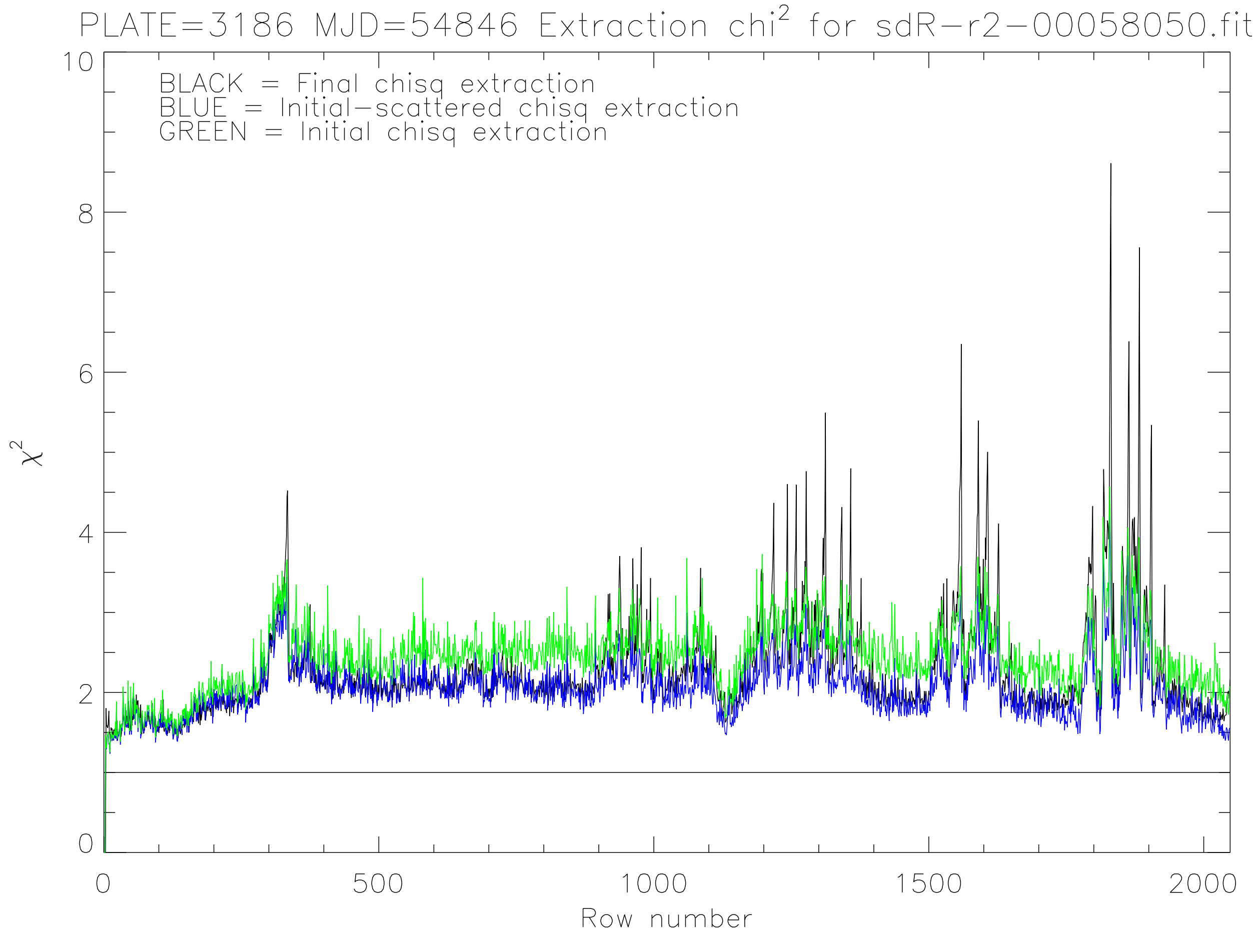
PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r2-00058050.fi

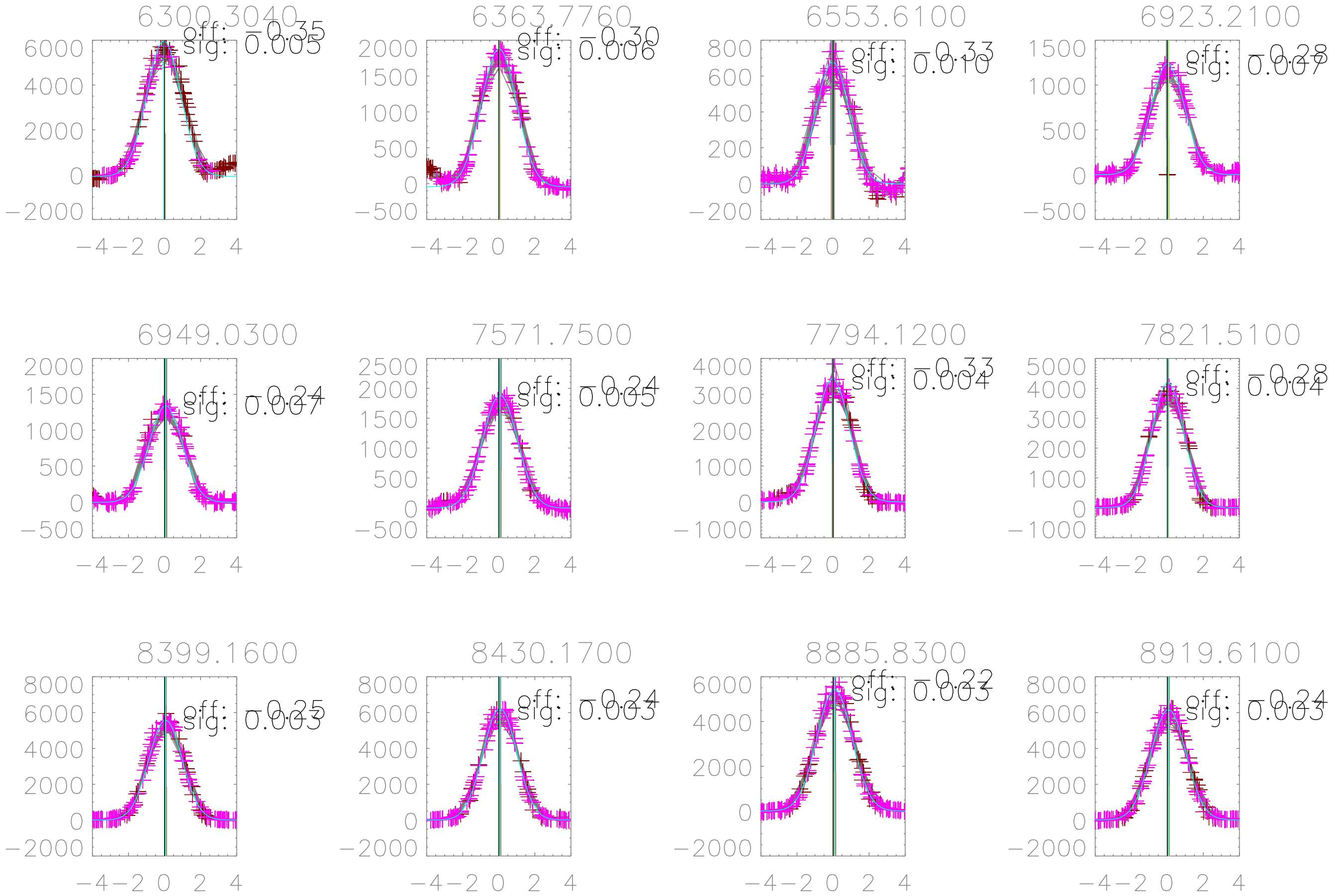

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r2-00058050.fi
Brightness [electrons/pix]
100
80
60
40
20
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 12.013
Max value = 80.277
Mon Mar 15 20:29:41 2010

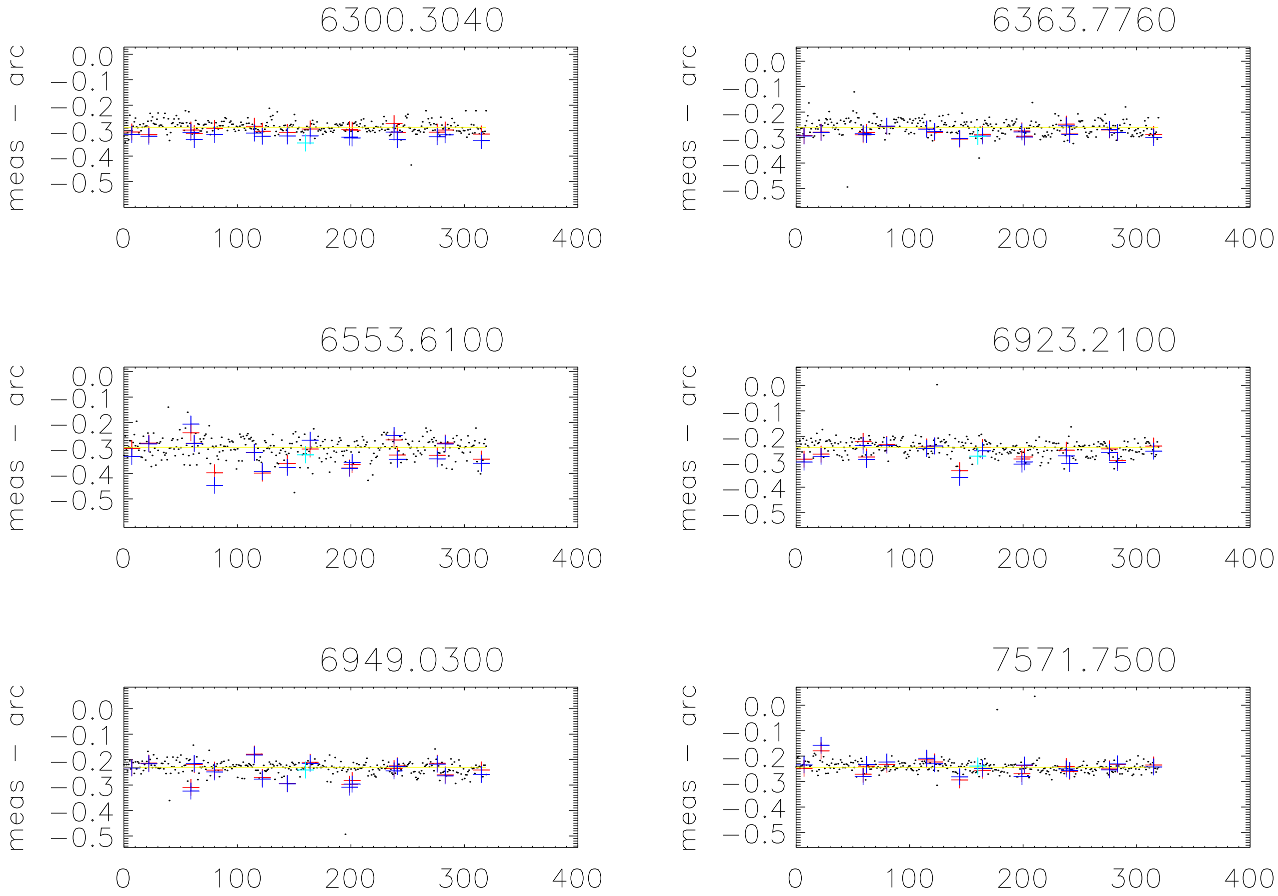
PLATE=3186 MJD=54846 Scattered Light on sdR-r2-00058050.fit

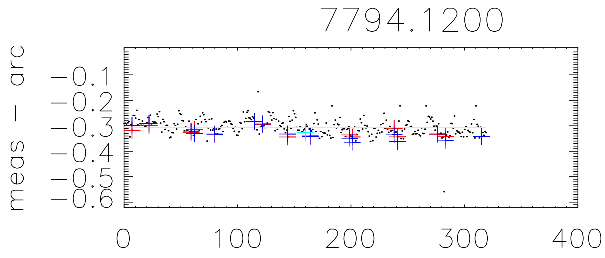


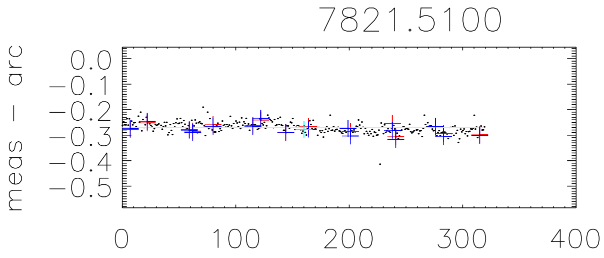

PLATE=3186 MJD=54846 Scattered Light on sdR-r2-00058050.fit
Brightness [electrons/pix]
0
10
20
30
40
50
60
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 11.398
Max value = 29.534
Mon Mar 15 20:32:58 2010

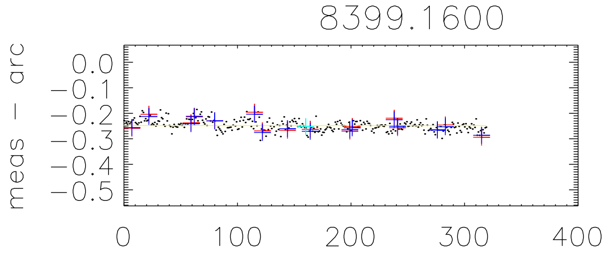

PLATE=3186 MJD=54846 Extraction chi^2 for sdR-r2-00058050.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

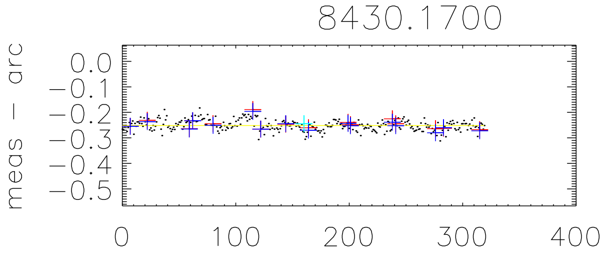

6300.3040
off: −0.35
sig: 0.005
6363.7760
off: −0.30
sig: 0.006
6553.6100
off: −0.33
sig: 0.010
6923.2100
off: −0.28
sig: 0.007
6949.0300
off: −0.24
sig: 0.007
7571.7500
off: −0.24
sig: 0.005
7794.1200
off: −0.33
sig: 0.004
7821.5100
off: −0.28
sig: 0.004
8399.1600
off: −0.25
sig: 0.003
8430.1700
off: −0.24
sig: 0.003
8885.8300
off: −0.22
sig: 0.003
8919.6100
off: −0.24
sig: 0.003
−4 −2 0 2 4

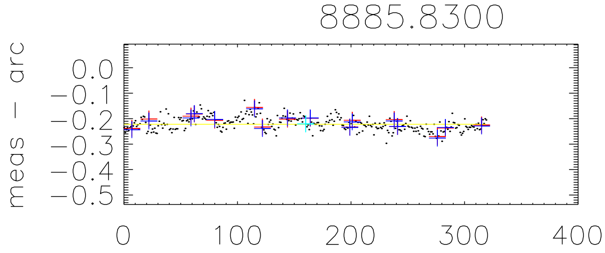

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

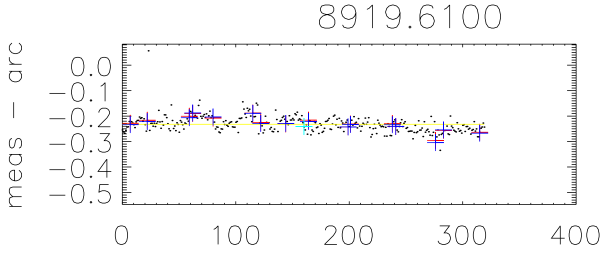

7794.1200
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

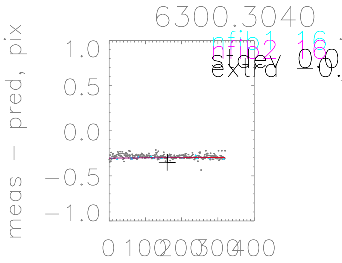

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

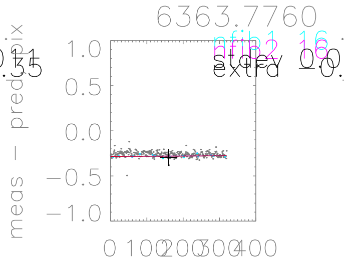

8399.1600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

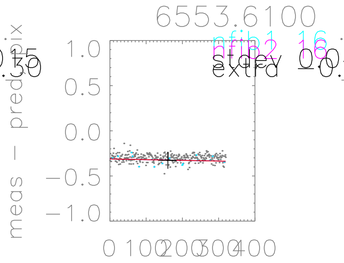

8430.1700
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

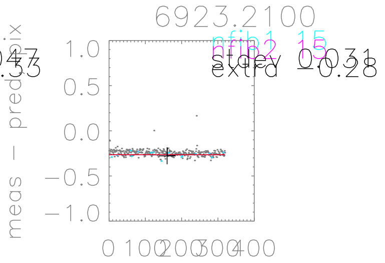

8885.8300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

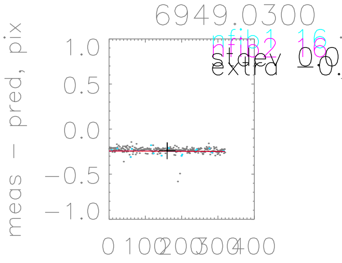

8919.6100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

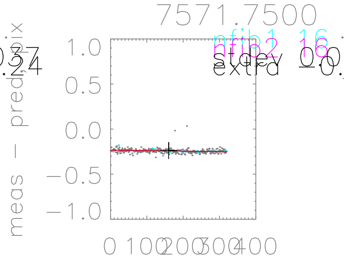

6300.3040
nfib1 16
nfib2 16
stdev 0.011
extrd −0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

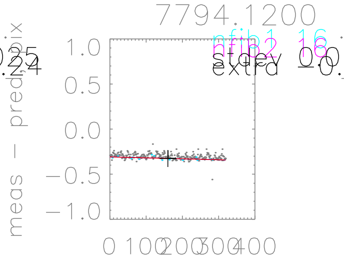

6363.7760
nfib1 16
nfib2 16
stdev 0.015
extrd −0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

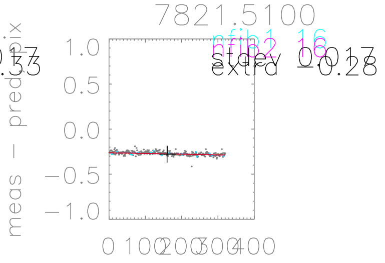

6553.6100
nfib1 16
nfib2 16
stdev 0.047
extrd −0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

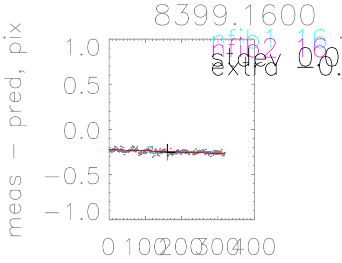

6923.2100
nfib1 15
nfib2 16
stdev 0.031
extrd −0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

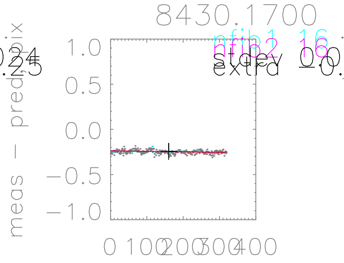

6949.0300
nfib1 16
nfib2 16
stdev 0.037
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

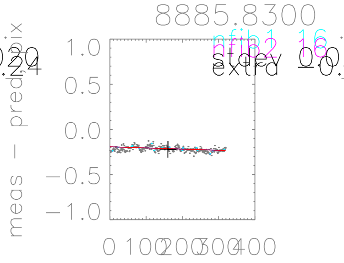

7571.7500
nfib1 16
nfib2 16
stdev 0.025
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

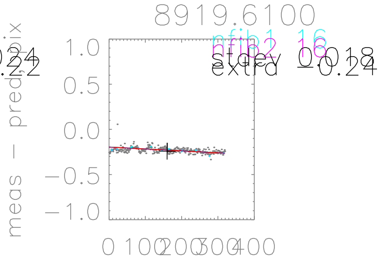

7794.1200
nfib1 16
nfib2 16
stdev 0.017
extrd −0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

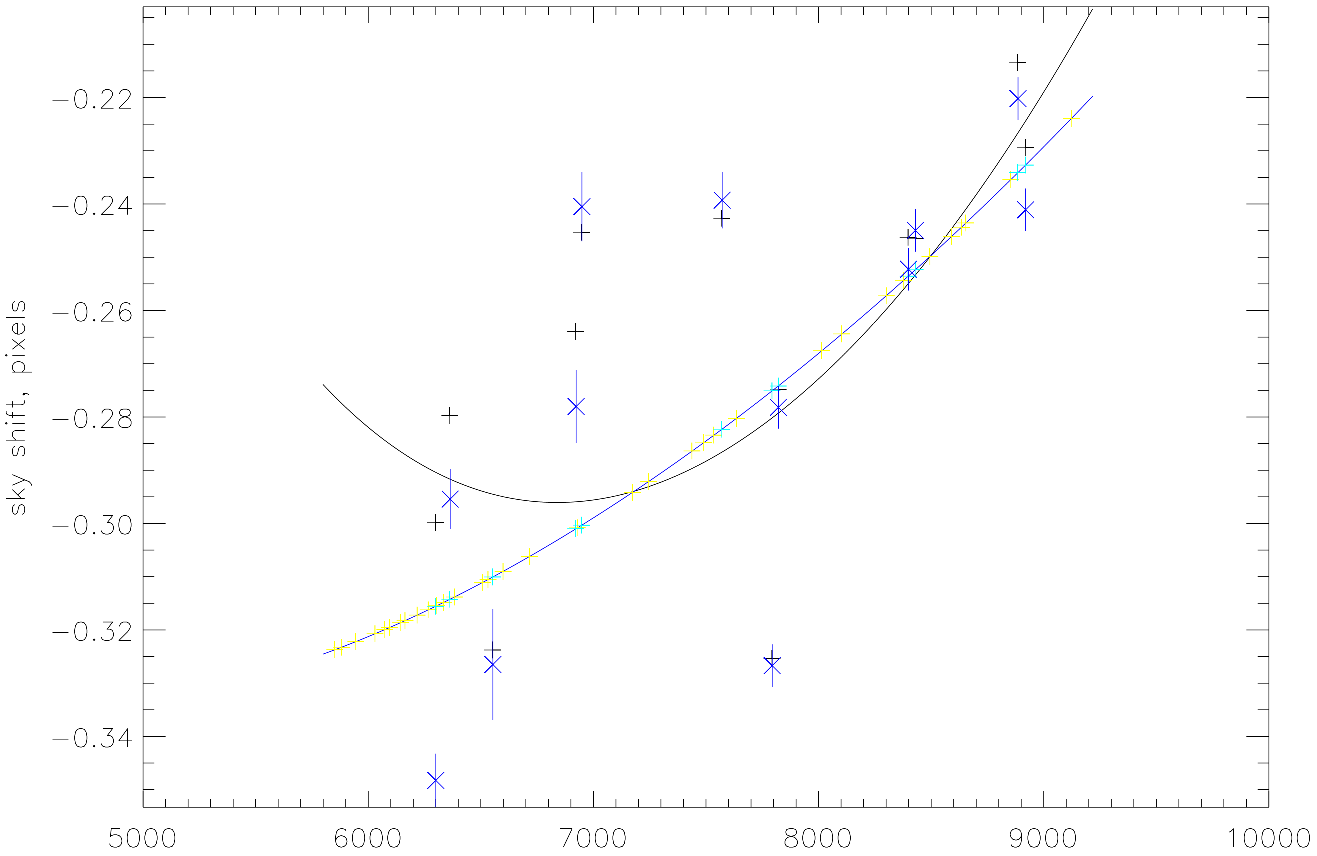

7821.5100
nfib1 16
nfib2 16
stdev 0.017
extrd −0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

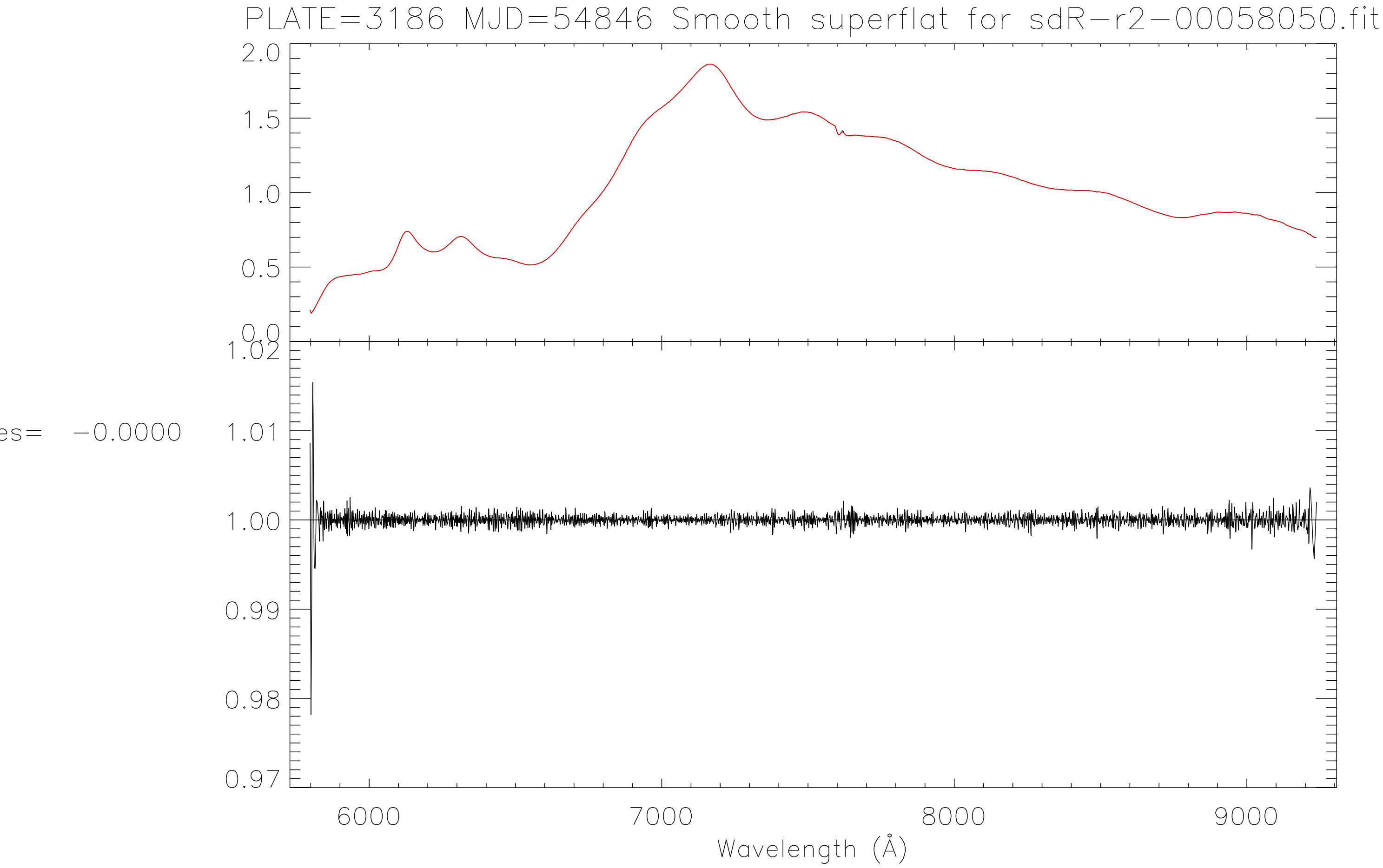

8399.1600
nfib1 16
nfib2 16
stdev 0.024
extrd −0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

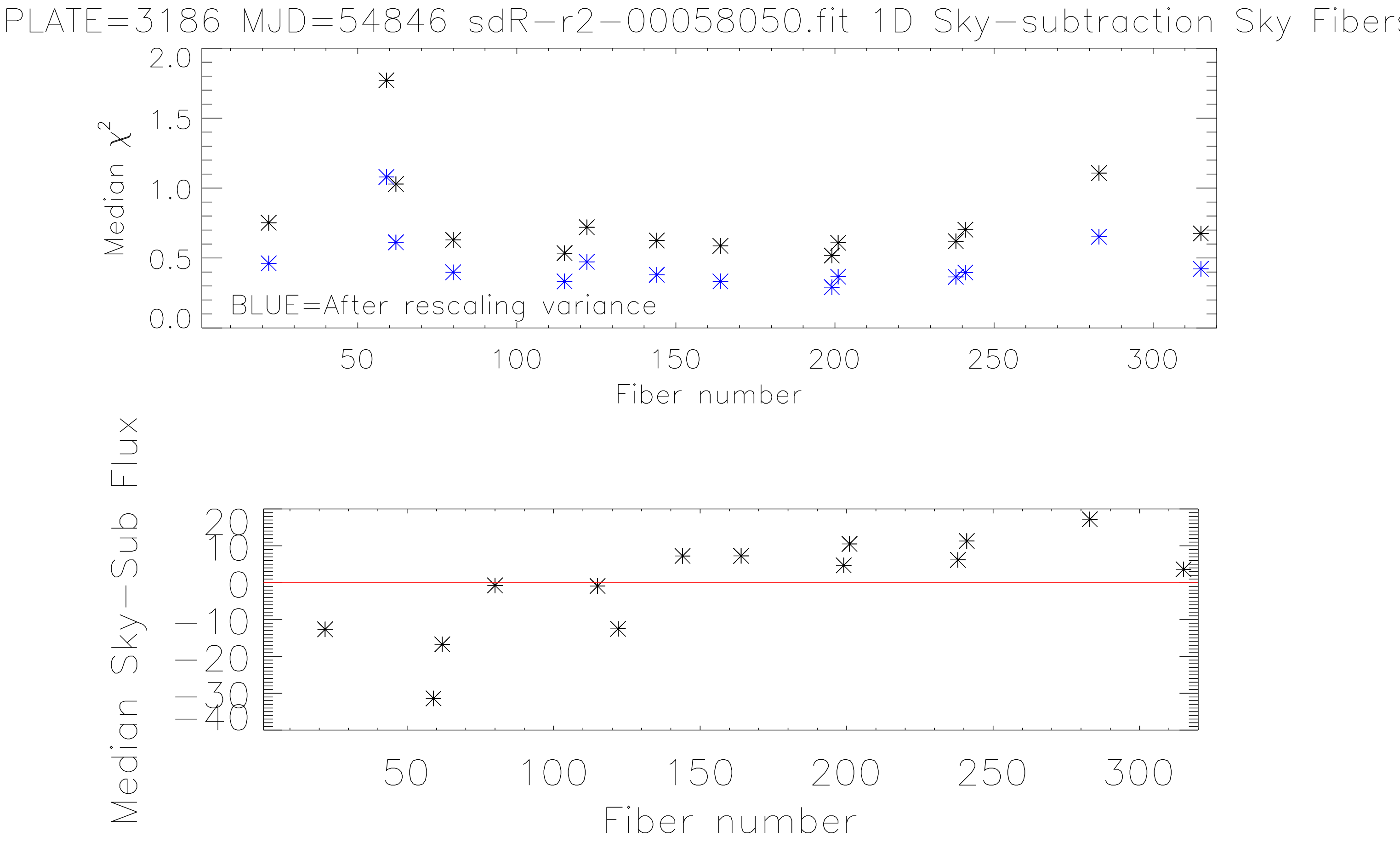

8430.1700
nfib1 16
nfib2 16
stdev 0.020
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


8885.8300
nfib1 16
nfib2 16
stdev 0.024
extrd −0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

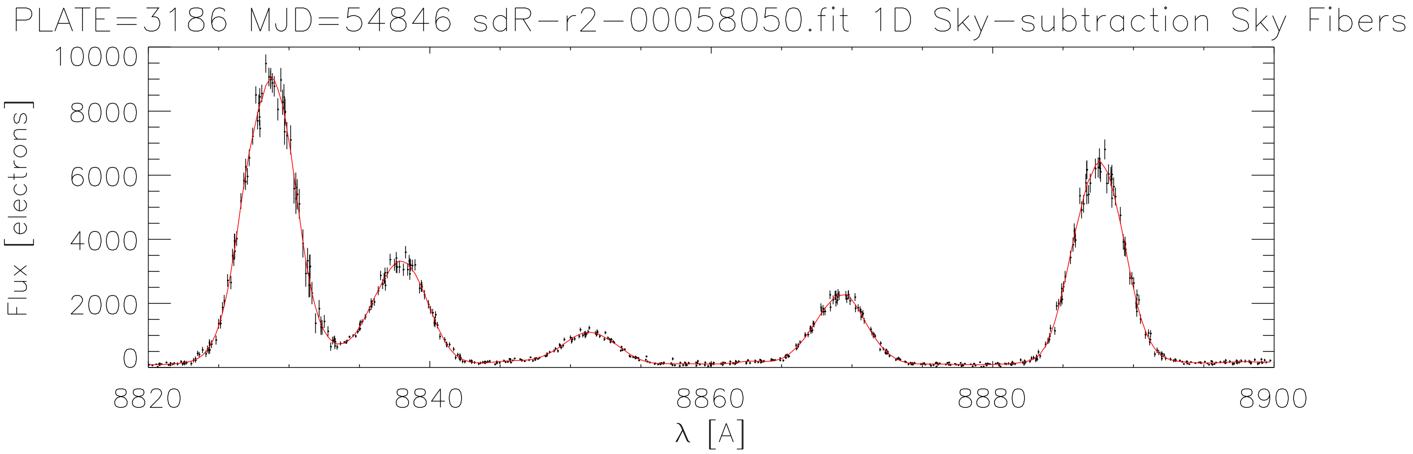

8919.6100
nfib1 16
nfib2 16
stdev 0.018
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

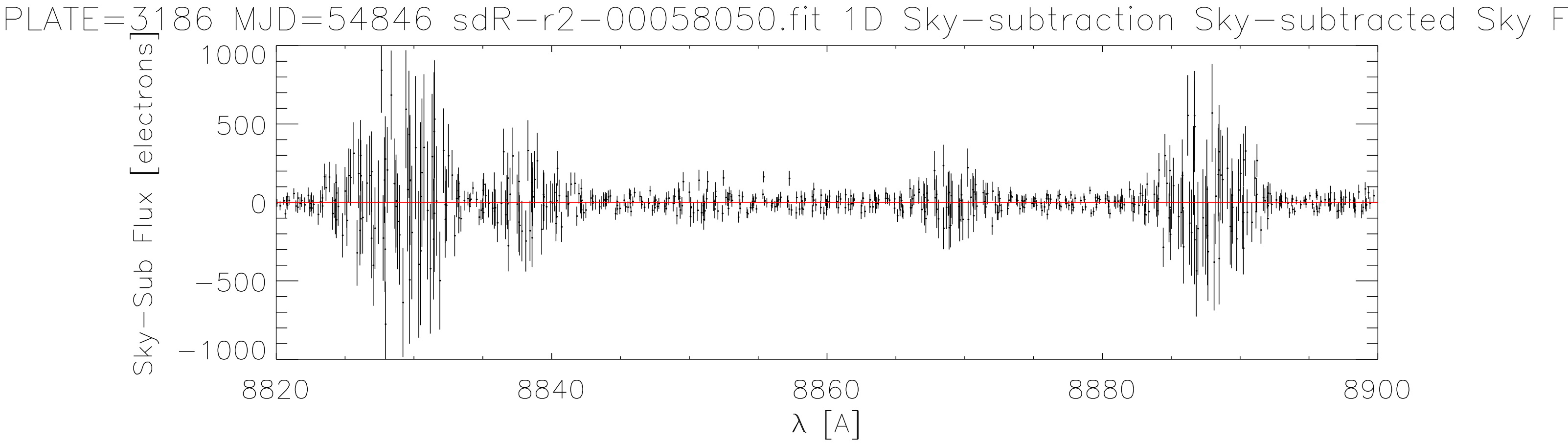

sky shift, pixels
−0.22
−0.24
−0.26
−0.28
−0.30
−0.32
−0.34
5000
6000
7000
8000
9000
10000

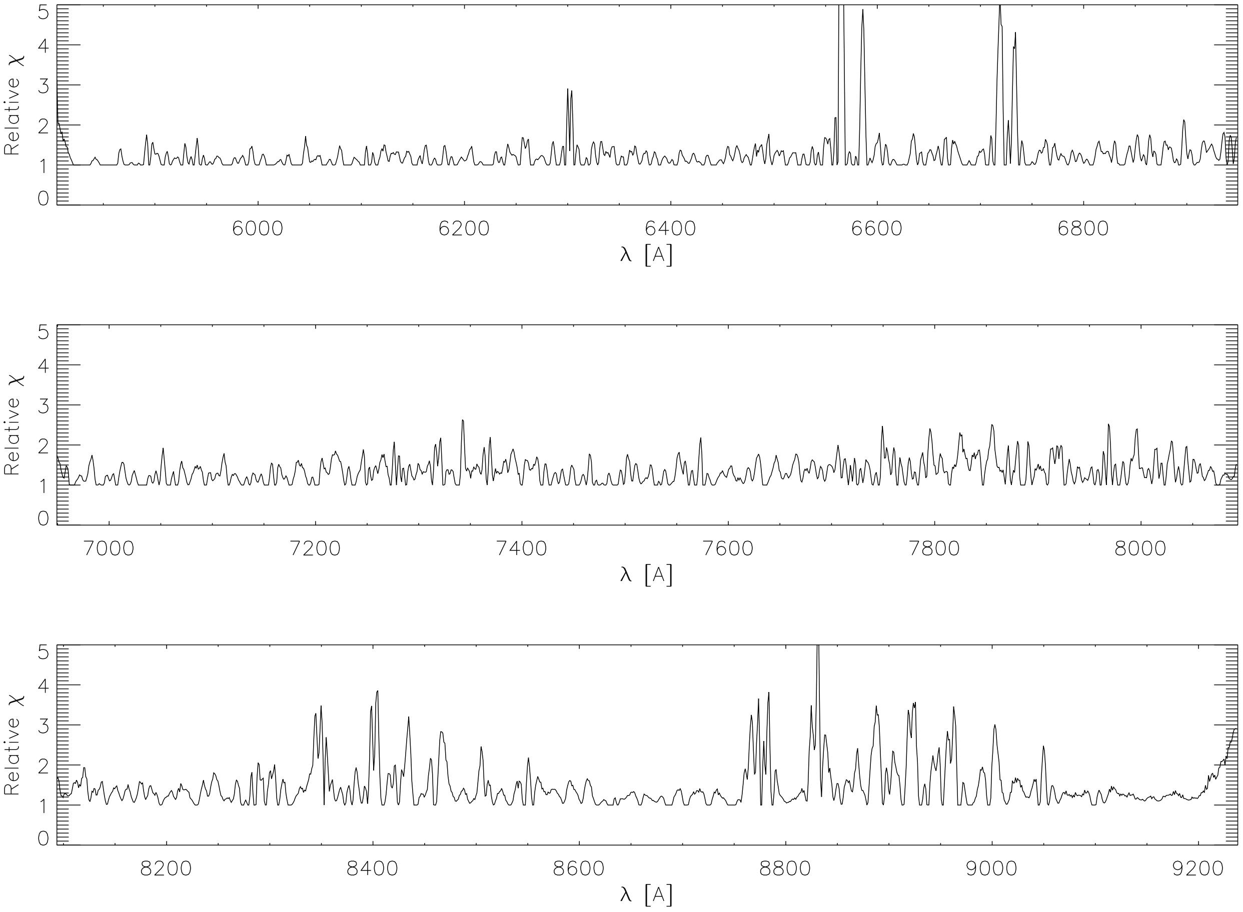

PLATE=3186 MJD=54846 Smooth superflat for sdR-r2-00058050.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)



PLATE=3186 MJD=54846 sdR-r2-00058050.fit 1D Sky-subtraction Sky Fiber

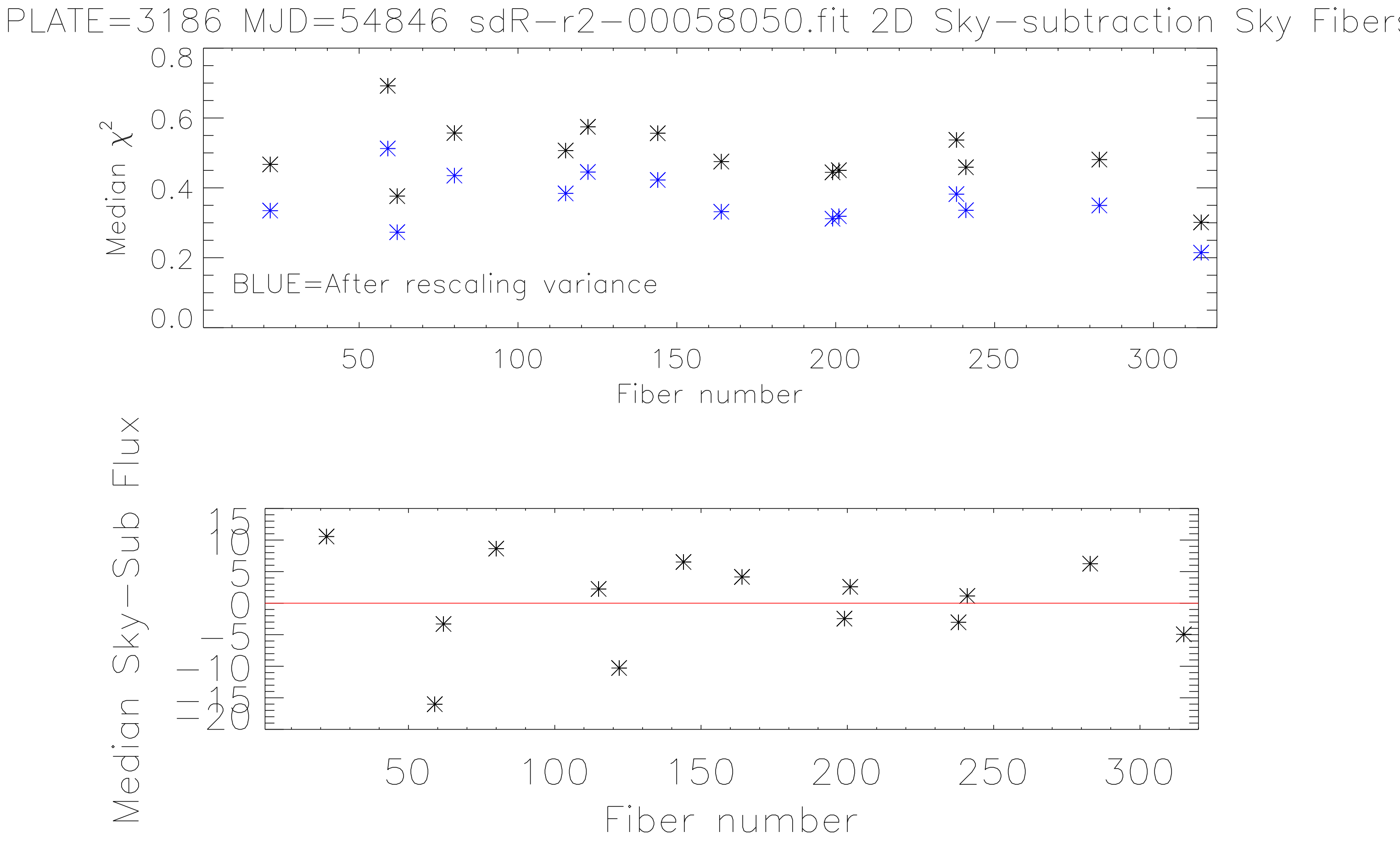

PLATE=3186 MJD=54846 sdR-r2-00058050.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

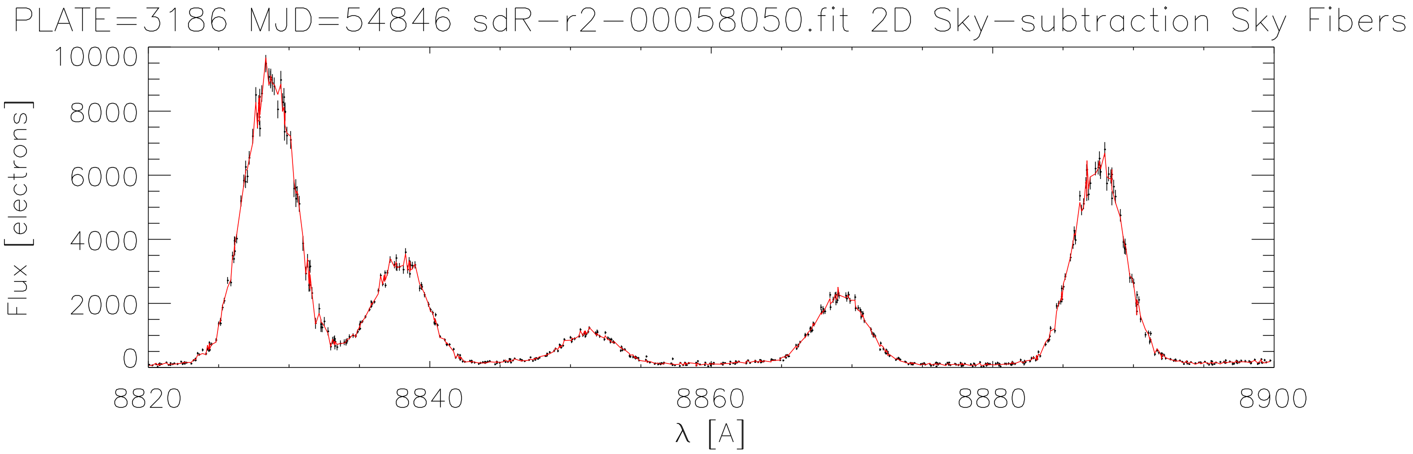

PLATE=3186 MJD=54846 sdR-r2-00058050.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
8820
8840
8860
8880
8900
λ [A]

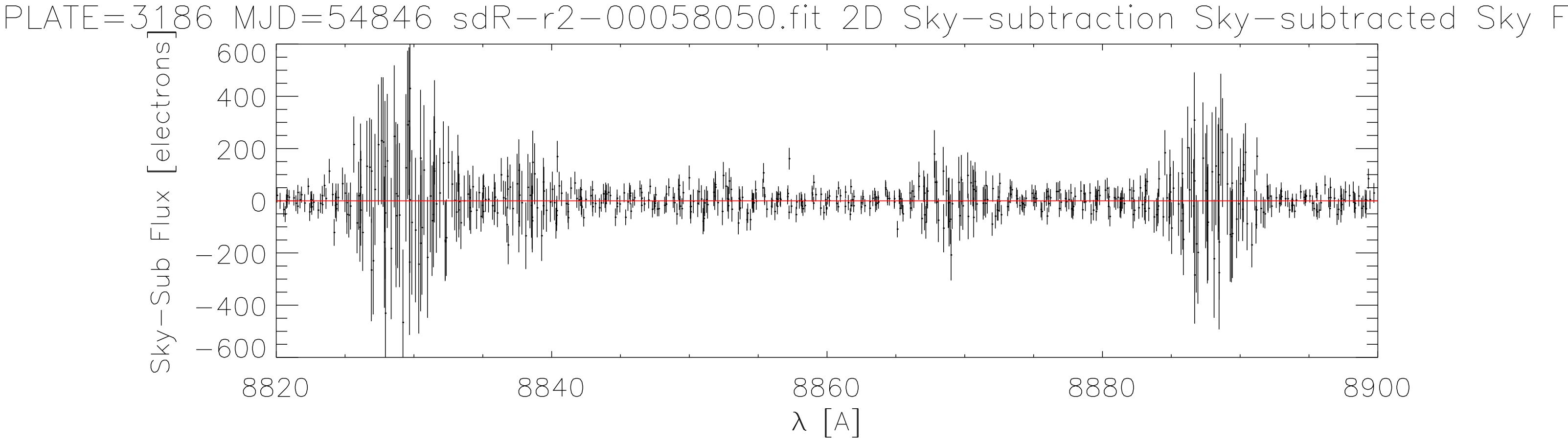


Number of sky fibers = 14

PLATE=3186 MJD=54846 sdR-r2-00058050.fit 1D Sky-subtraction Rescaled Errors

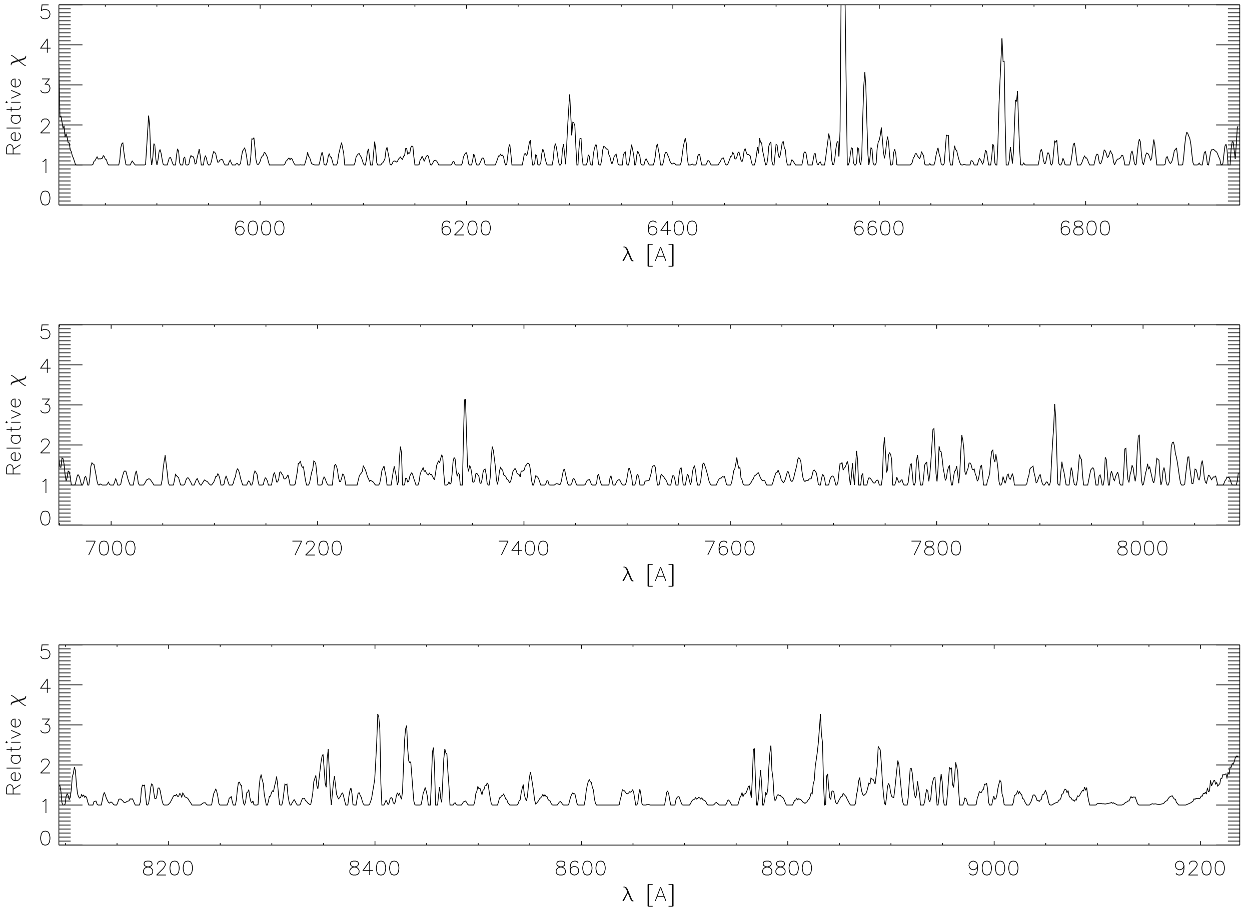

PLATE=3186 MJD=54846 sdR-r2-00058050.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
-20
50
100
150
200
250
300
Fiber number

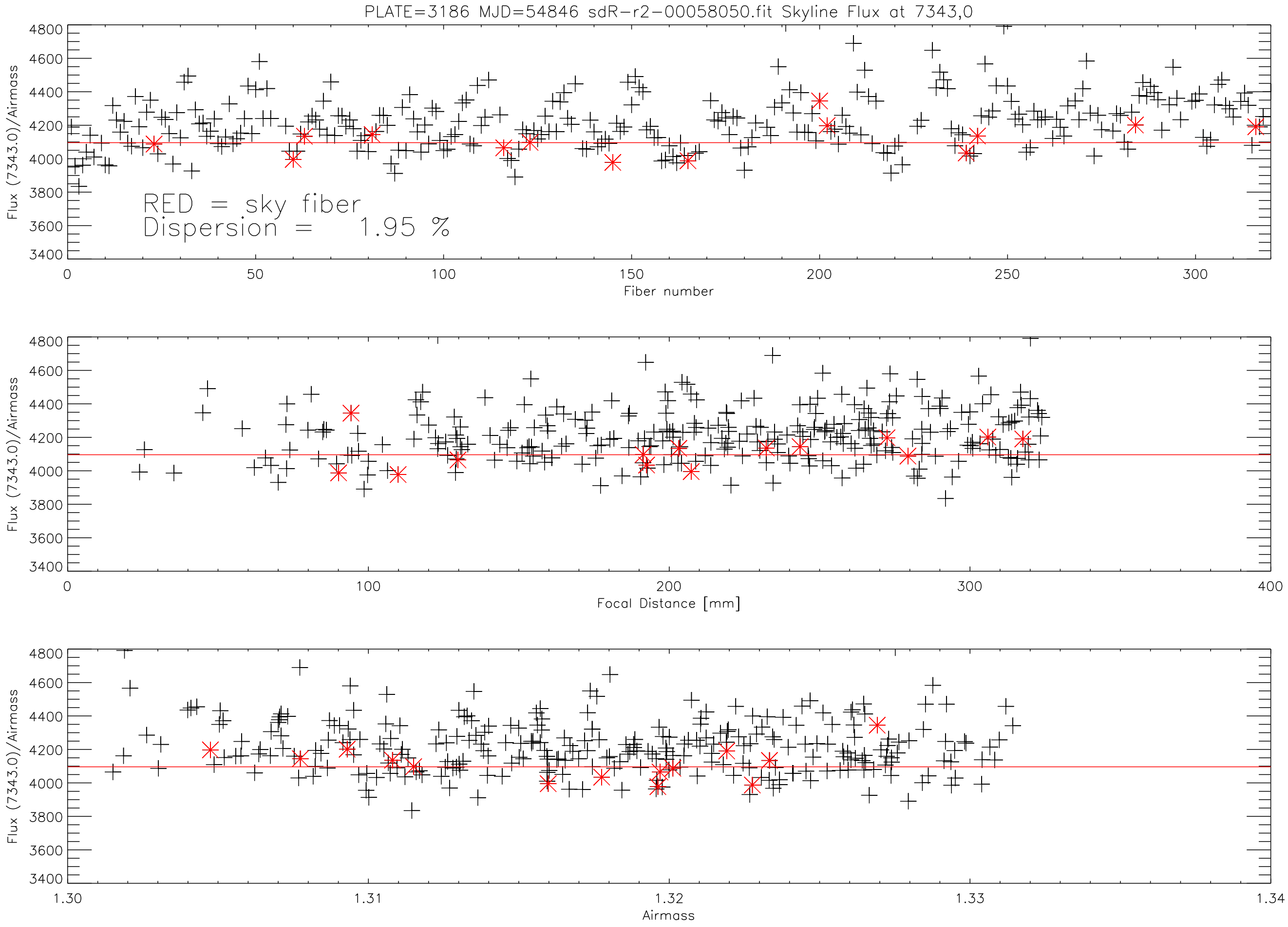

PLATE=3186 MJD=54846 sdR-r2-00058050.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

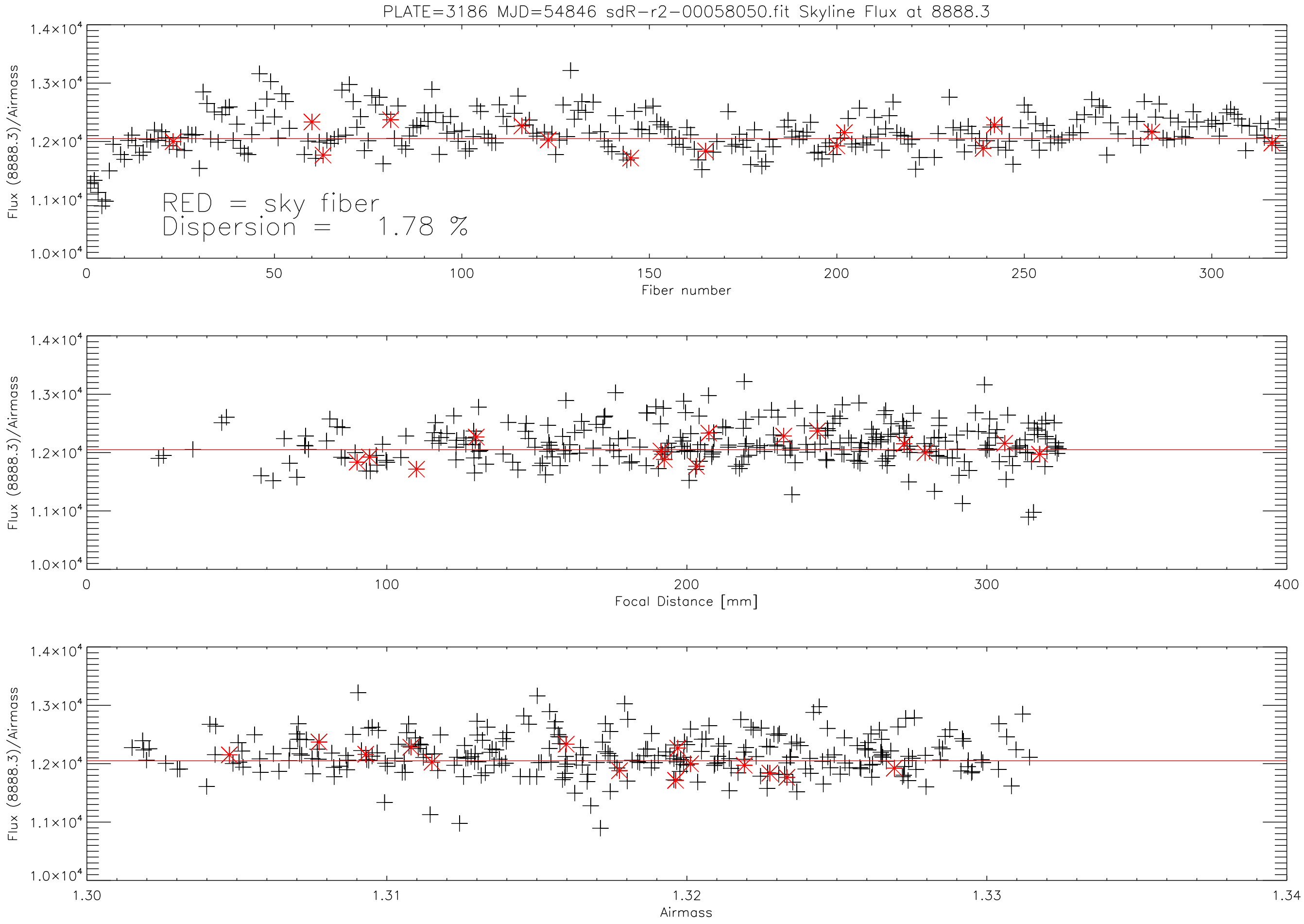

PLATE=3186 MJD=54846 sdR-r2-00058050.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
8820
8840
8860
8880
8900
λ [A]

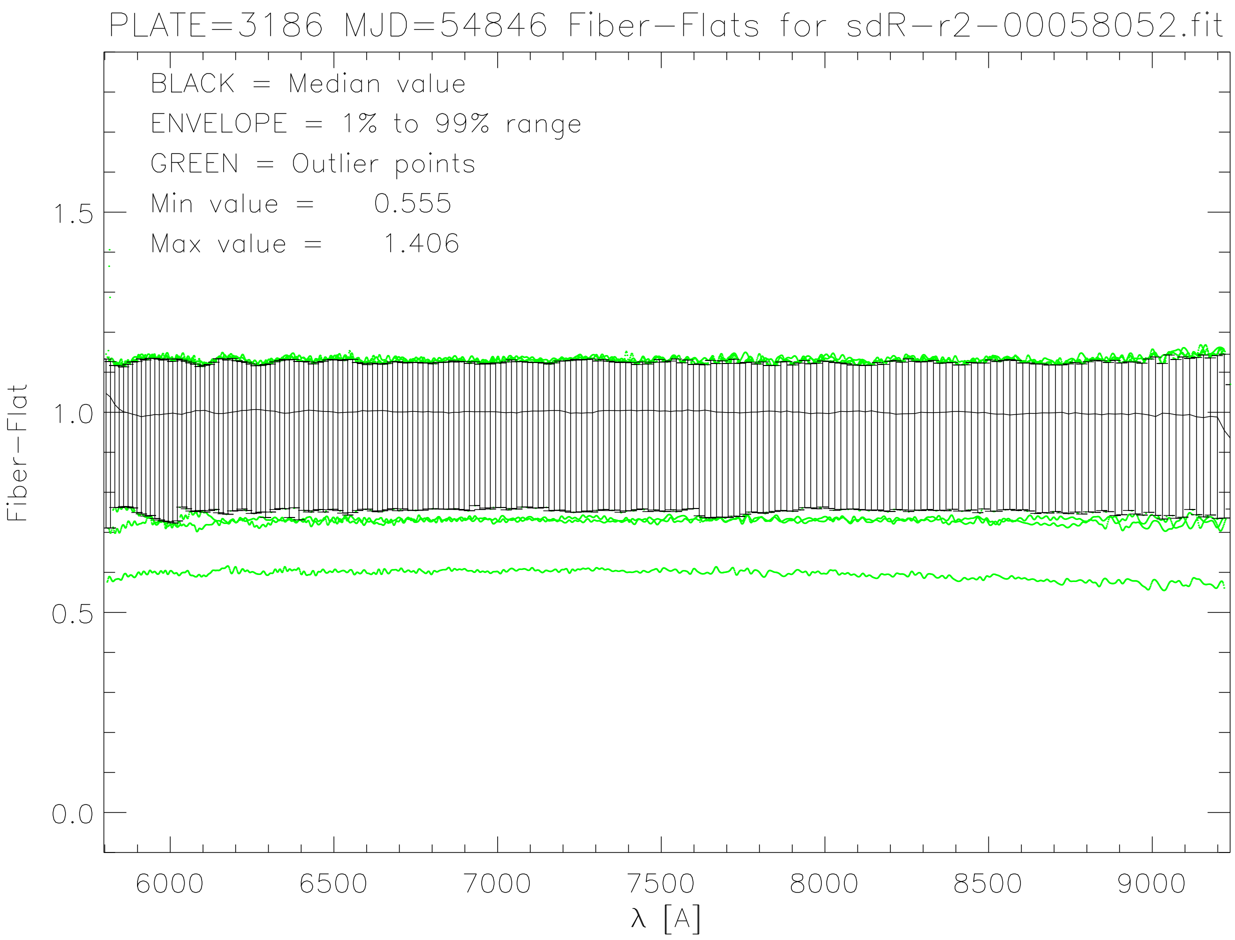
Number of sky fibers = 14

PLATE=3186 MJD=54846 sdR-r2-00058050.fit 2D Sky-subtraction Rescaled Errors

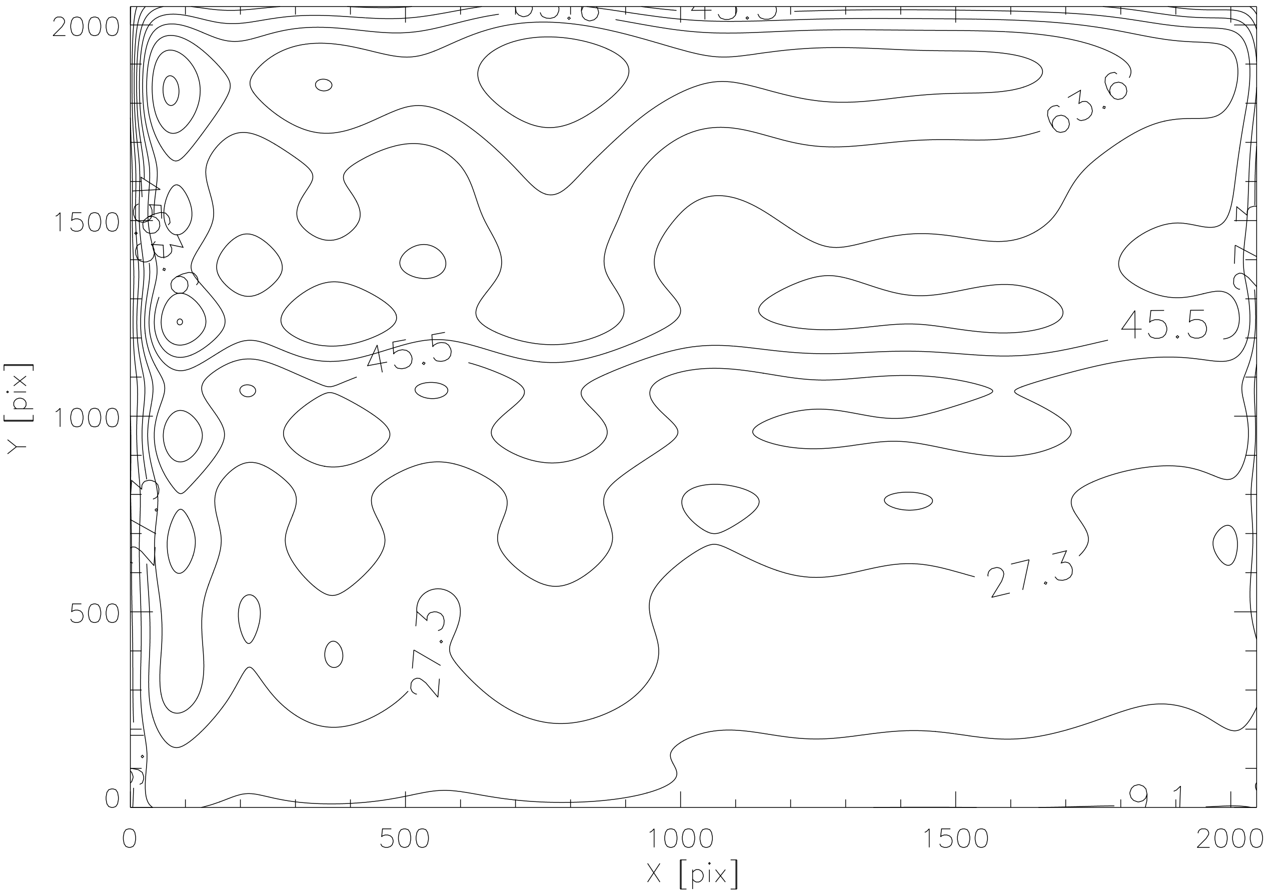



PLATE=3186 MJD=54846 sdR-r2-00058050.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
4800
4600
4400
4200
4000
3800
3600
3400
RED = sky fiber
Dispersion = 1.95 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
4800
4600
4400
4200
4000
3800
3600
3400
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
4800
4600
4400
4200
4000
3800
3600
3400
1.30
1.31
1.32
1.33
1.34
Airmass


PLATE=3186 MJD=54846 sdR-r2-00058050.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
RED = sky fiber
Dispersion = 1.78 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.30
1.31
1.32
1.33
1.34
Airmass

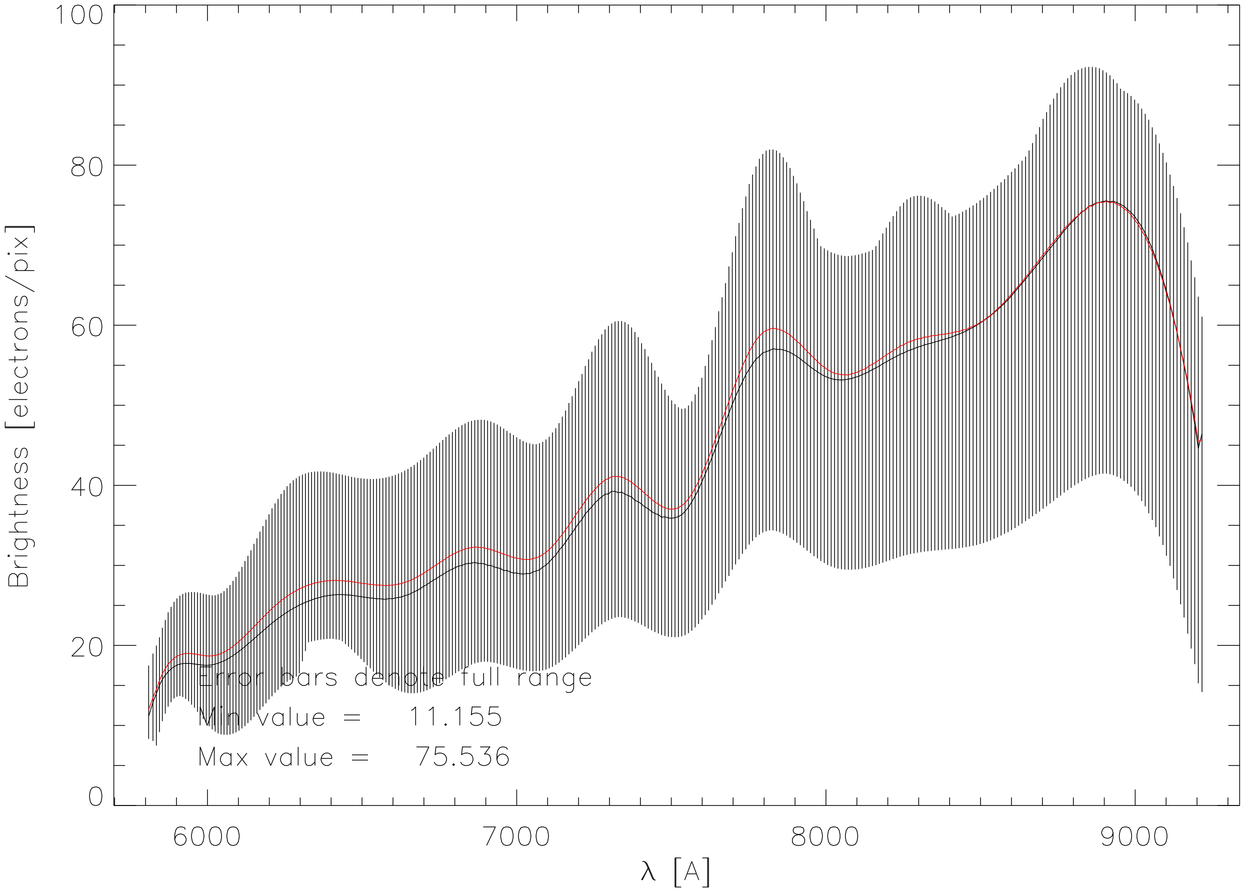


Mon Mar 15 20:34:39 2010



PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r2-00058051.fi

PLATE=3186 MJD=54846 Scattered Light before halo removal on sdR-r2-00058051.fi

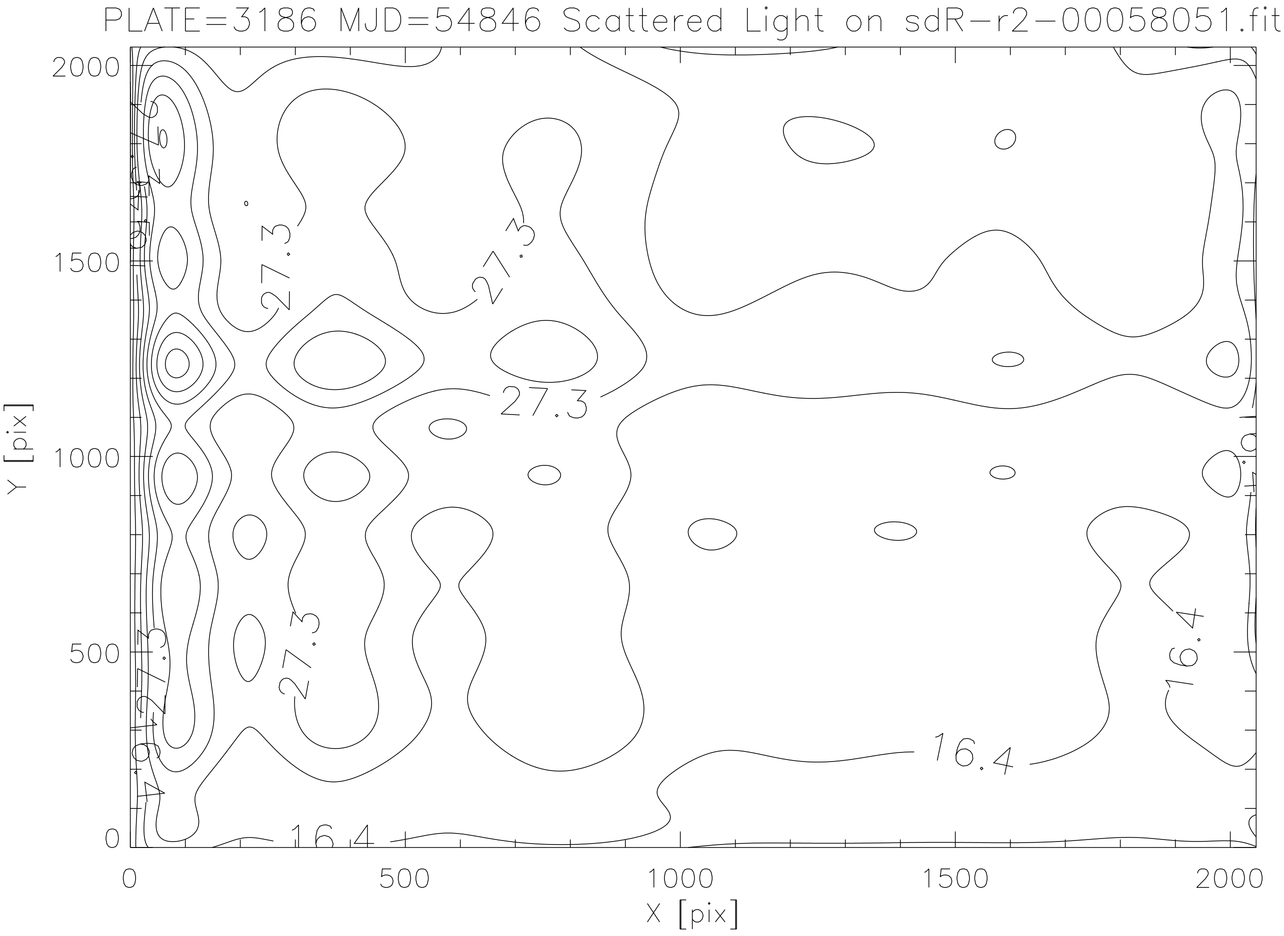


Error bars denote full range

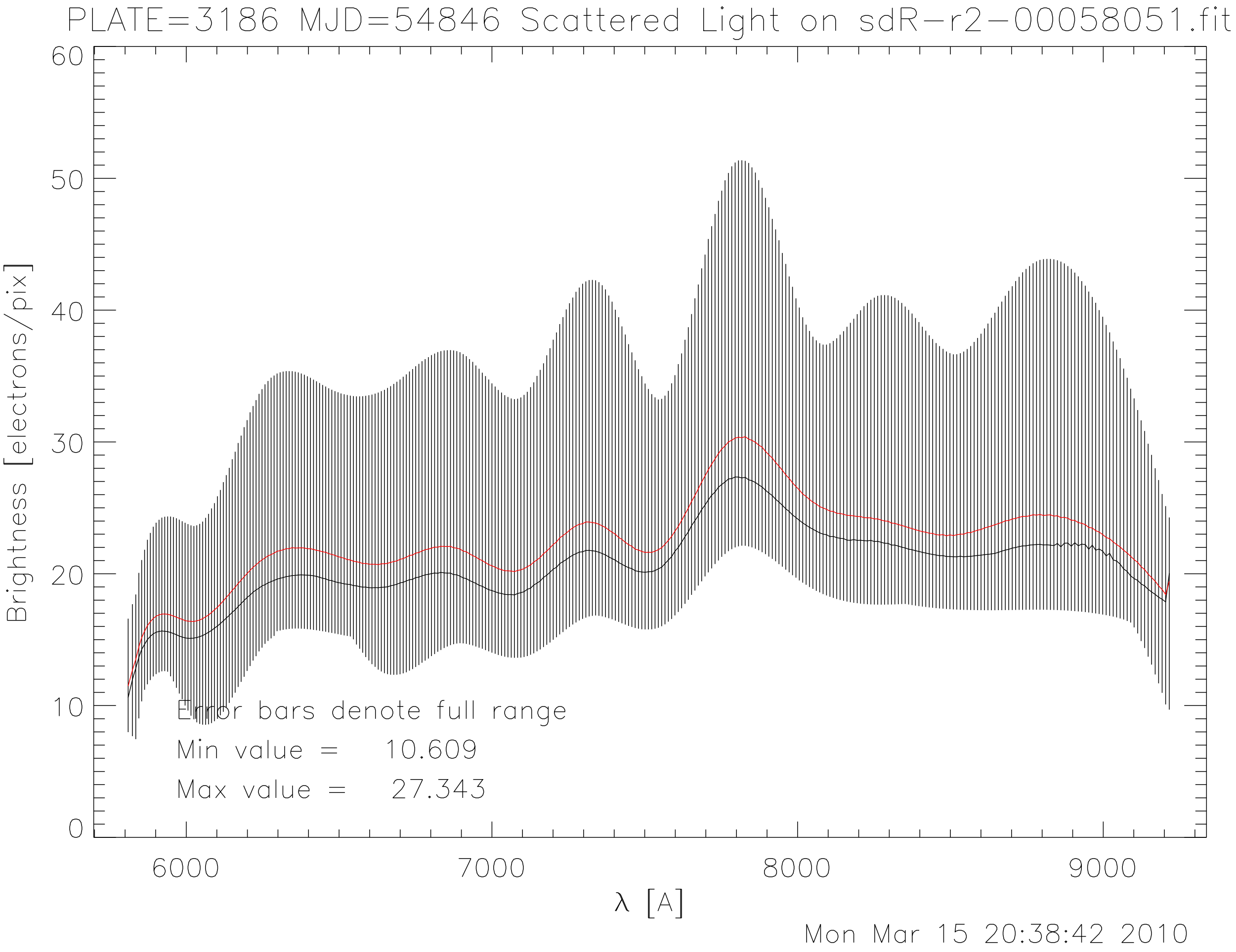
Min value = 11.155

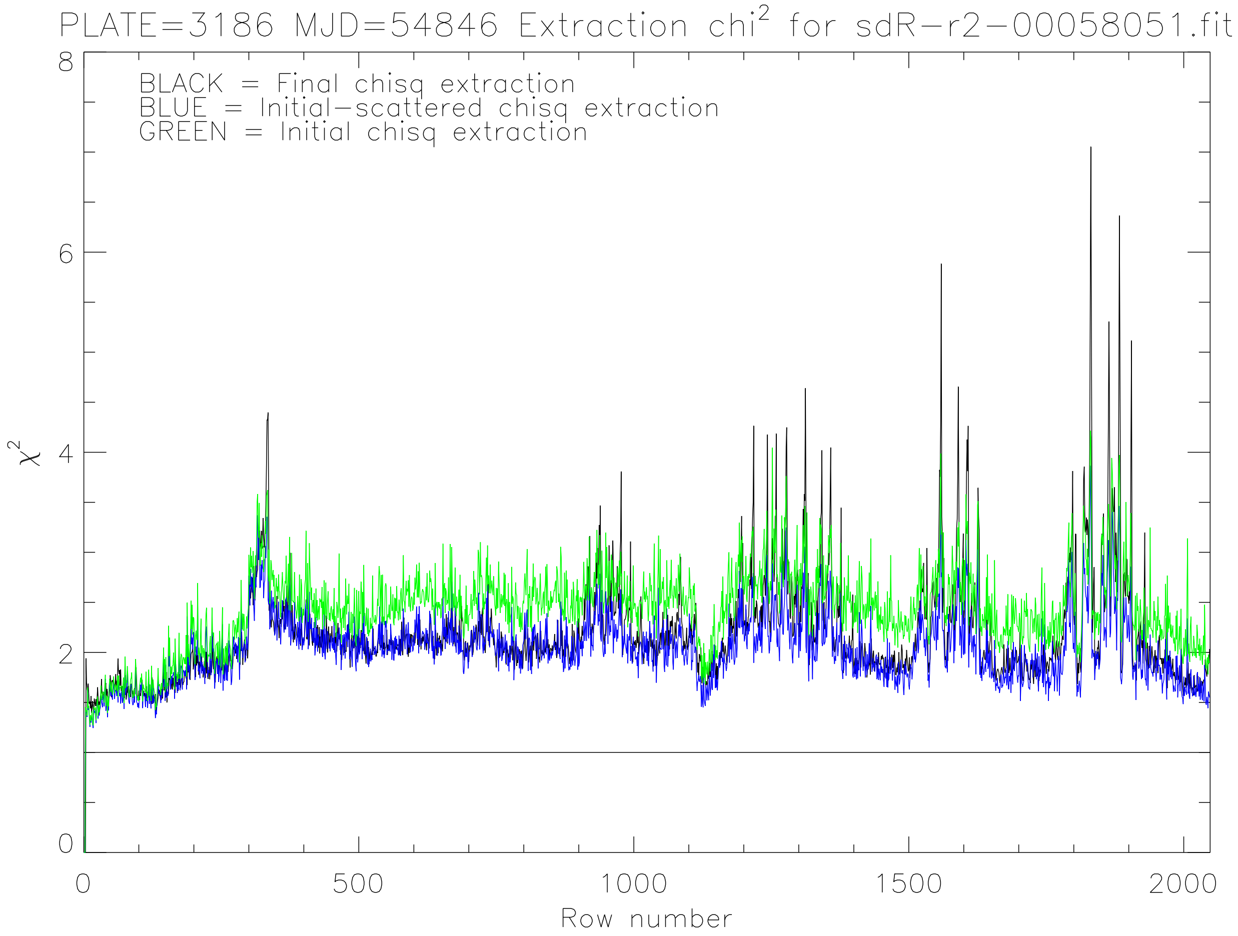
Max value = 75.536

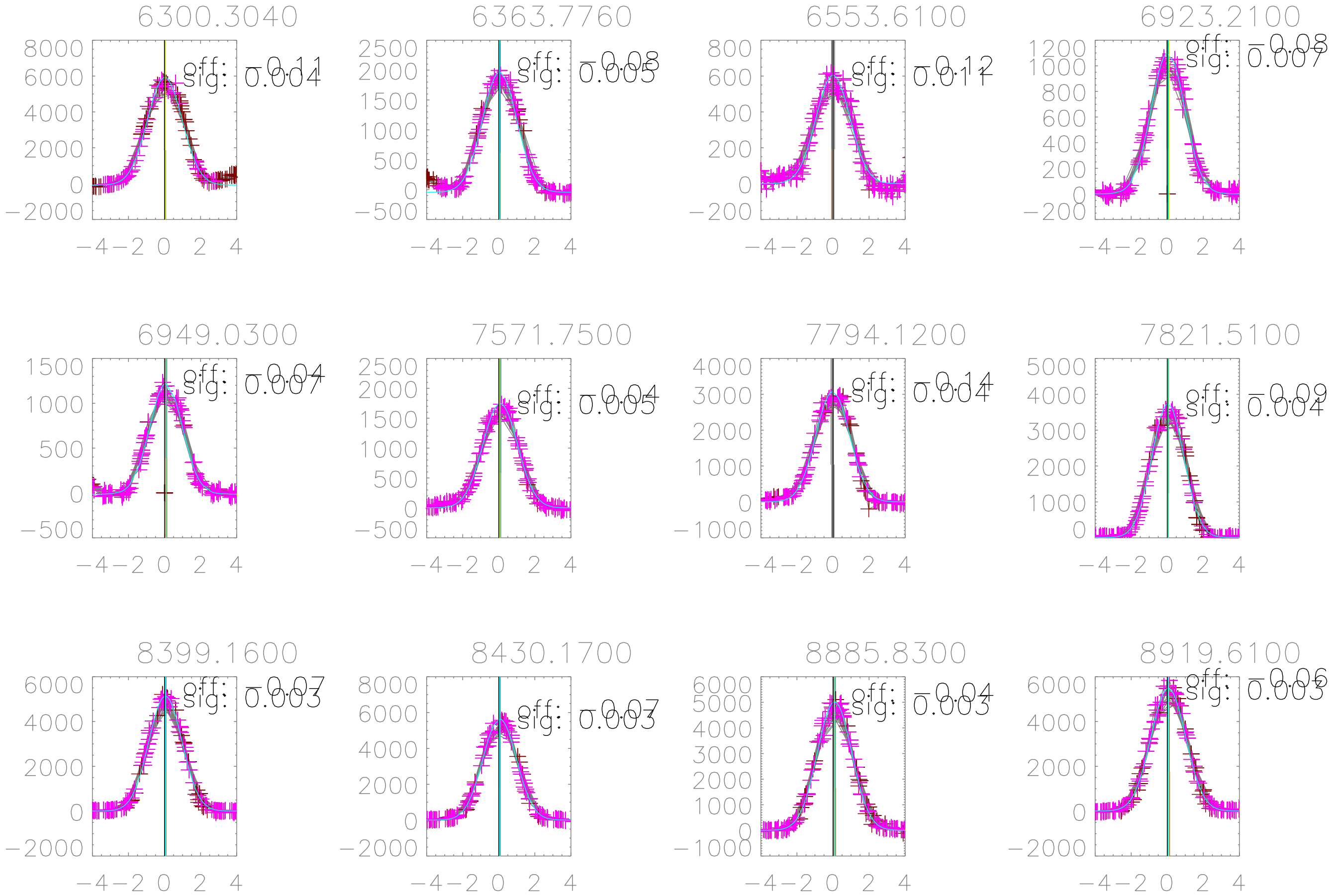
Mon Mar 15 20:35:34 2010

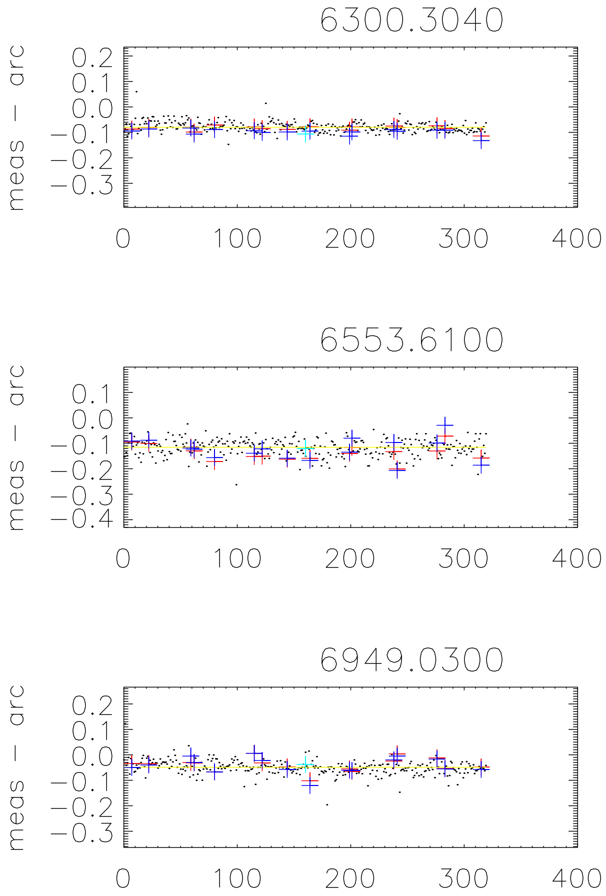


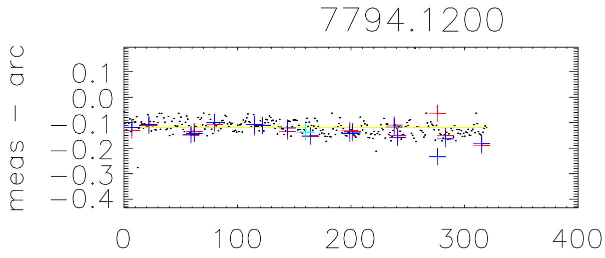
PLATE=3186 MJD=54846 Scattered Light on sdR-r2-00058051.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
27.3
16.4

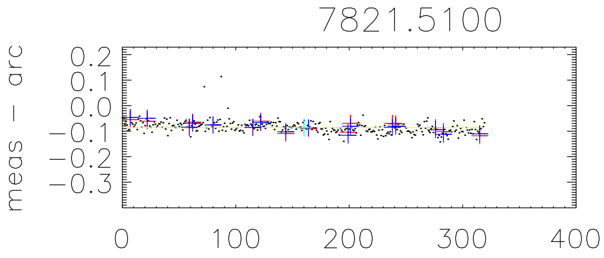

PLATE=3186 MJD=54846 Scattered Light on sdR-r2-00058051.fit
Brightness [electrons/pix]
0
10
20
30
40
50
60
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   10.609
Max value =   27.343
Mon Mar 15 20:38:42 2010

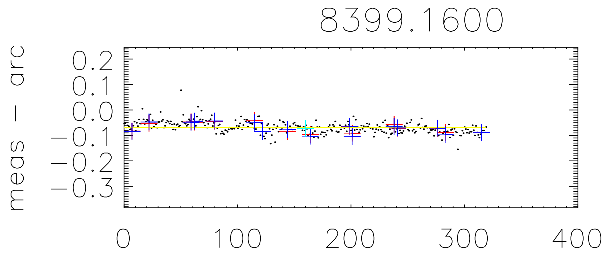

PLATE=3186 MJD=54846 Extraction chi^2 for sdR-r2-00058051.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

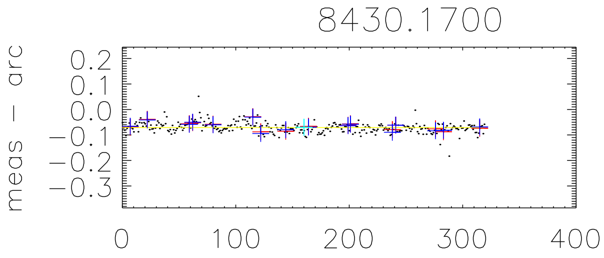

6300.3040
off: −0.11
sig: 0.004
6363.7760
off: −0.08
sig: 0.005
6553.6100
off: −0.12
sig: 0.011
6923.2100
off: −0.08
sig: 0.007
6949.0300
off: −0.04
sig: 0.007
7571.7500
off: −0.04
sig: 0.005
7794.1200
off: −0.14
sig: 0.004
7821.5100
off: −0.09
sig: 0.004
8399.1600
off: −0.07
sig: 0.003
8430.1700
off: −0.07
sig: 0.003
8885.8300
off: −0.04
sig: 0.003
8919.6100
off: −0.06
sig: 0.003
−4 −2 0 2 4

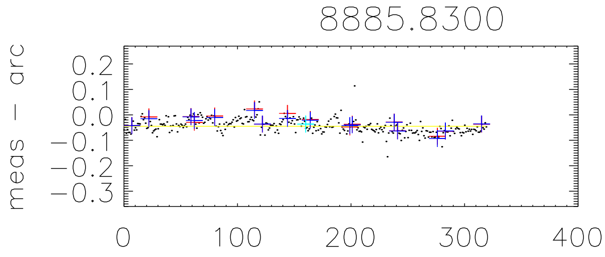

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

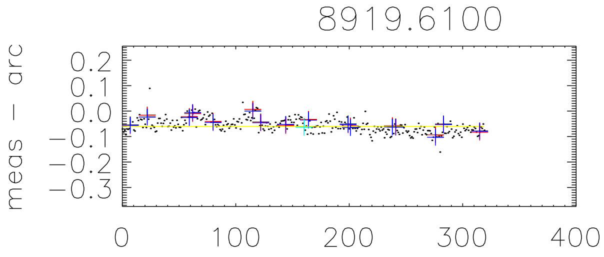

7794.1200

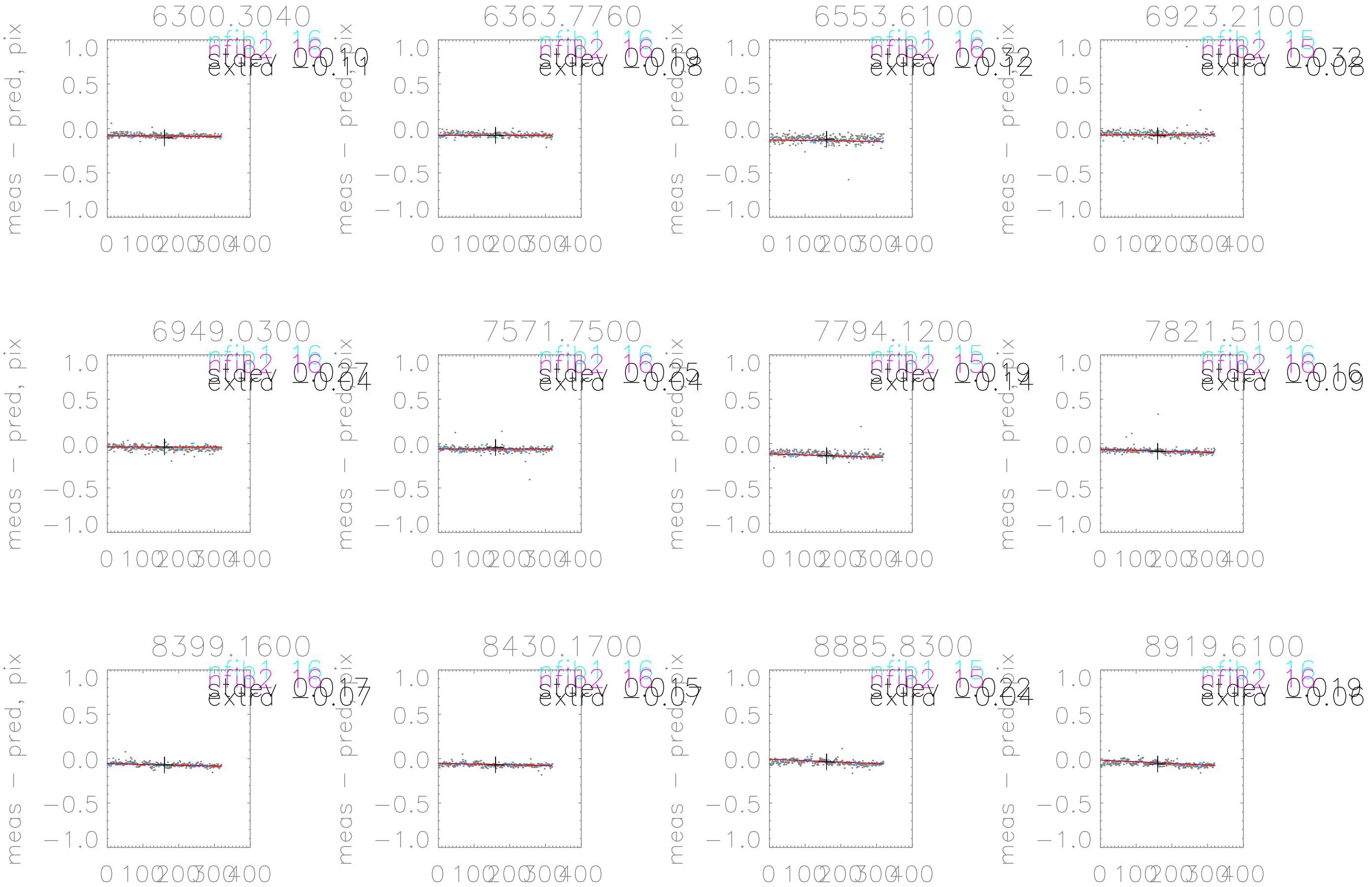

7821.5100

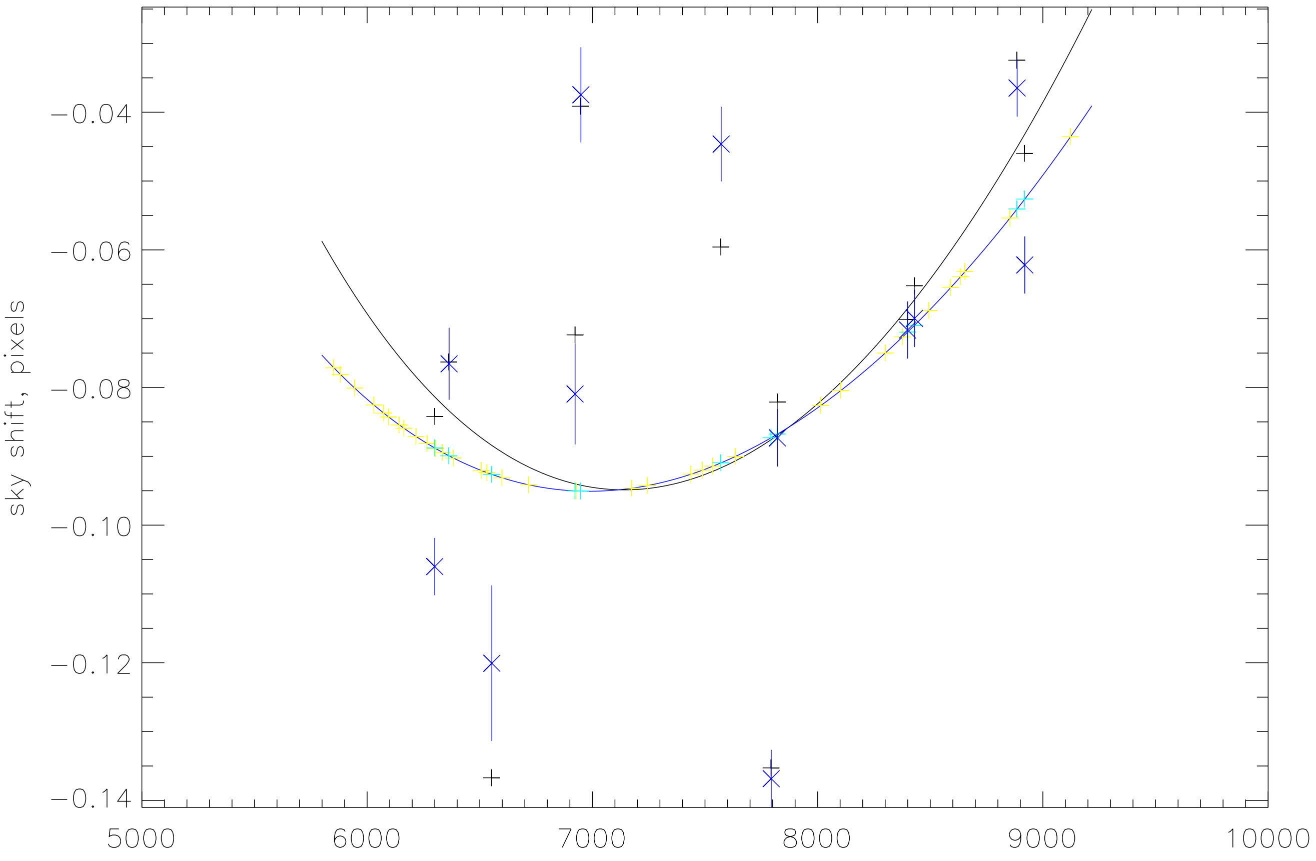

8399.1600

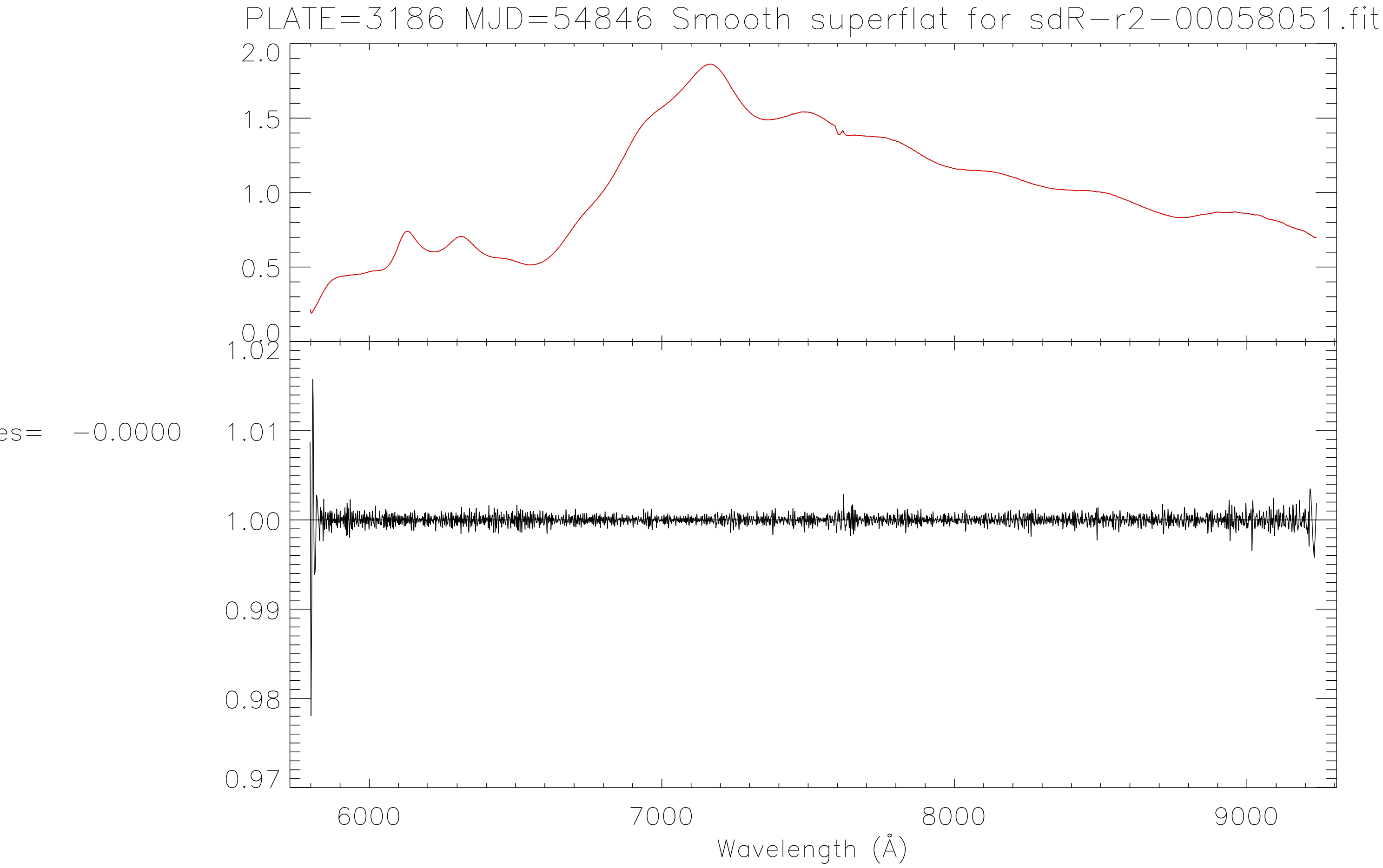

8430.1700


8885.8300

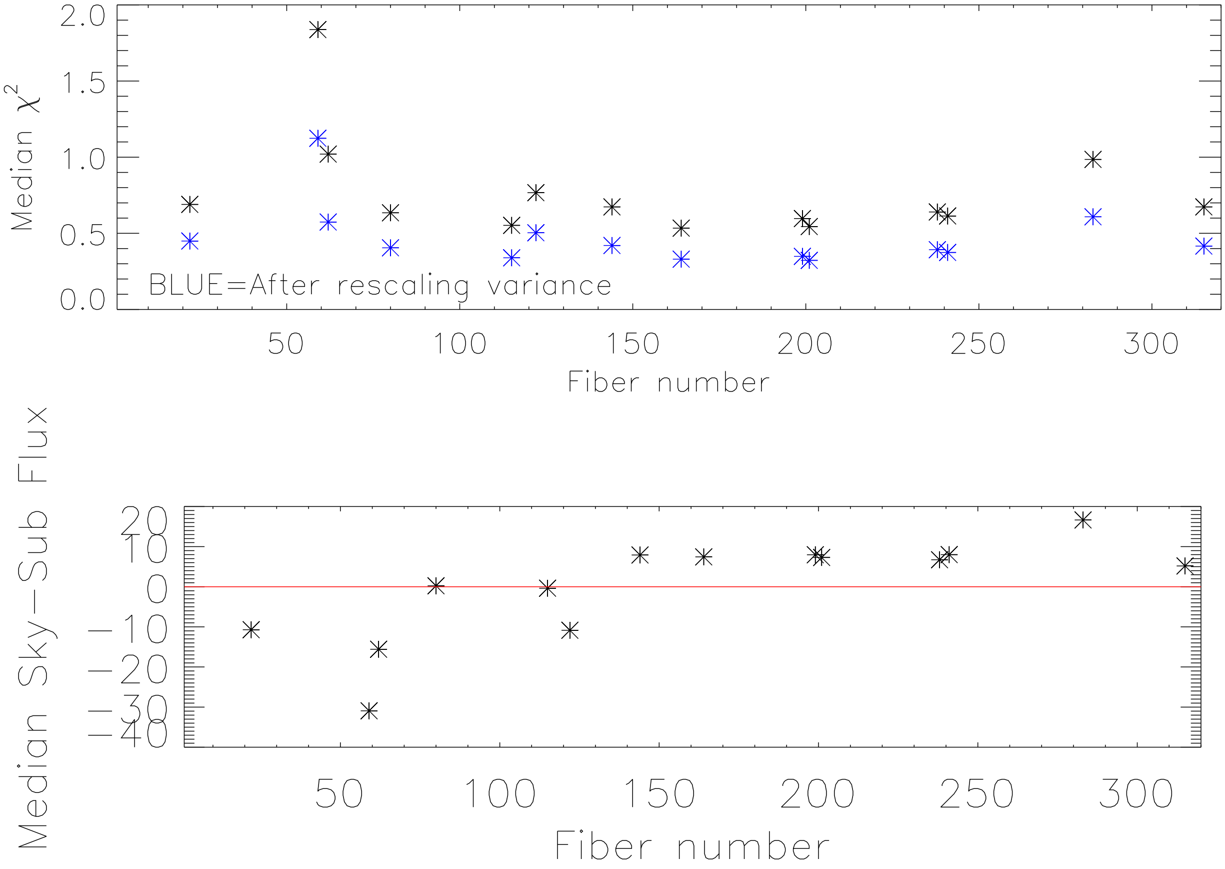

8919.6100

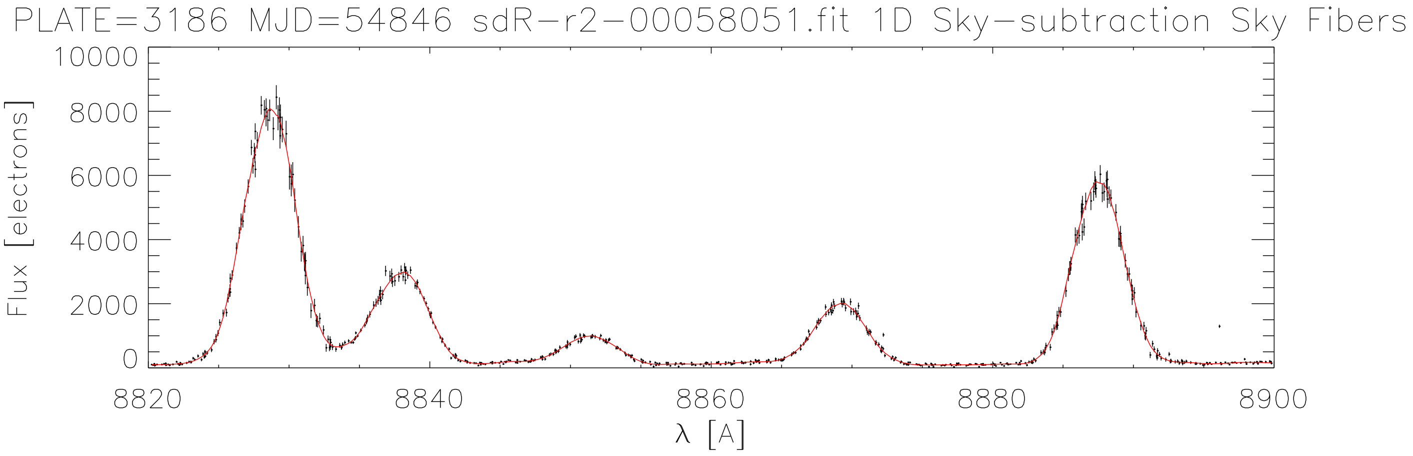

6300.3040
nfib1 16
nfib2 16
stdev 0.010
extrd −0.11
6363.7760
nfib1 16
nfib2 16
stdev 0.019
extrd −0.08
6553.6100
nfib1 16
nfib2 16
stdev 0.032
extrd −0.12
6923.2100
nfib1 15
nfib2 15
stdev 0.032
extrd −0.08
6949.0300
nfib1 16
nfib2 16
stdev 0.027
extrd −0.04
7571.7500
nfib1 16
nfib2 16
stdev 0.025
extrd −0.04
7794.1200
nfib1 15
nfib2 15
stdev 0.019
extrd −0.14
7821.5100
nfib1 16
nfib2 16
stdev 0.016
extrd −0.09
8399.1600
nfib1 16
nfib2 16
stdev 0.017
extrd −0.07
8430.1700
nfib1 16
nfib2 16
stdev 0.015
extrd −0.07
8885.8300
nfib1 15
nfib2 15
stdev 0.022
extrd −0.04
8919.6100
nfib1 16
nfib2 16
stdev 0.019
extrd −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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

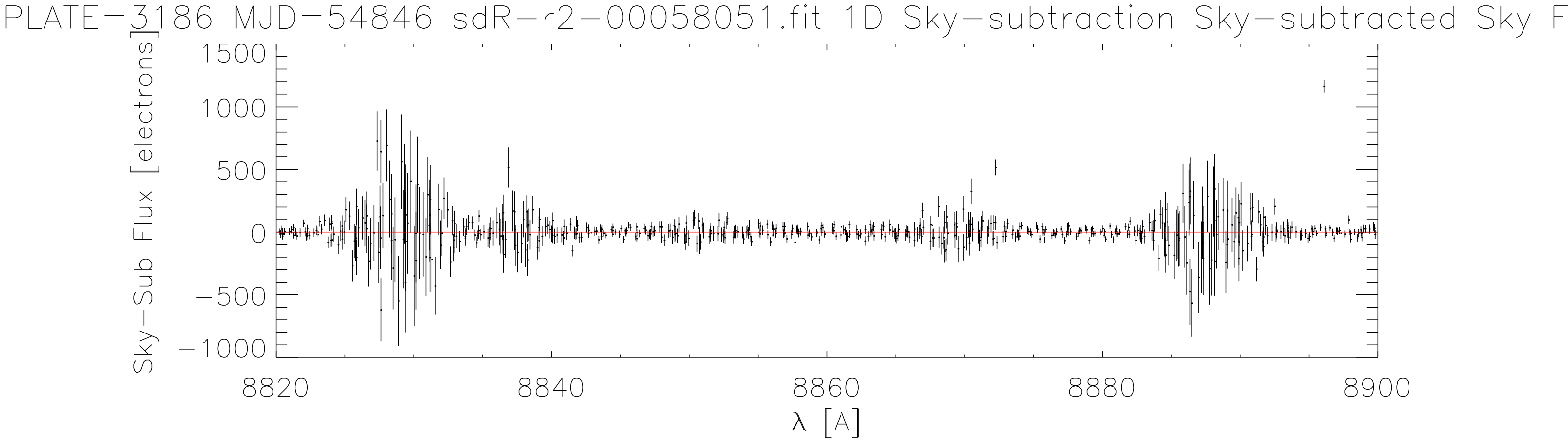

PLATE=3186 MJD=54846 Smooth superflat for sdR-r2-00058051.fit
2.0
1.5
1.0
0.5
0.0
1.02
1.01
1.00
0.99
0.98
0.97
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

PLATE=3186 MJD=54846 sdR-r2-00058051.fit 1D Sky-subtraction Sky Fiber





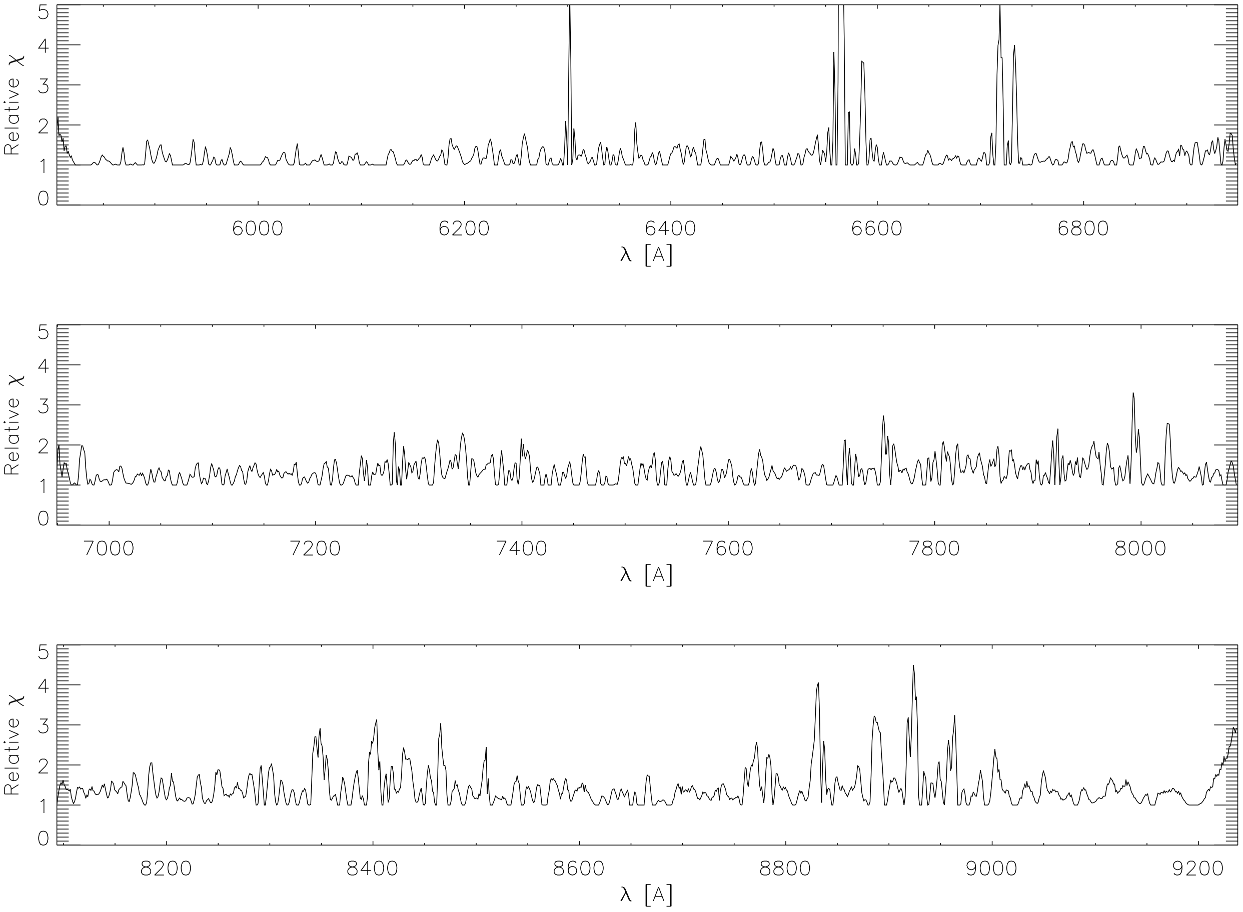
PLATE=3186 MJD=54846 sdR-r2-00058051.fit 1D Sky-subtraction Sky Fibers



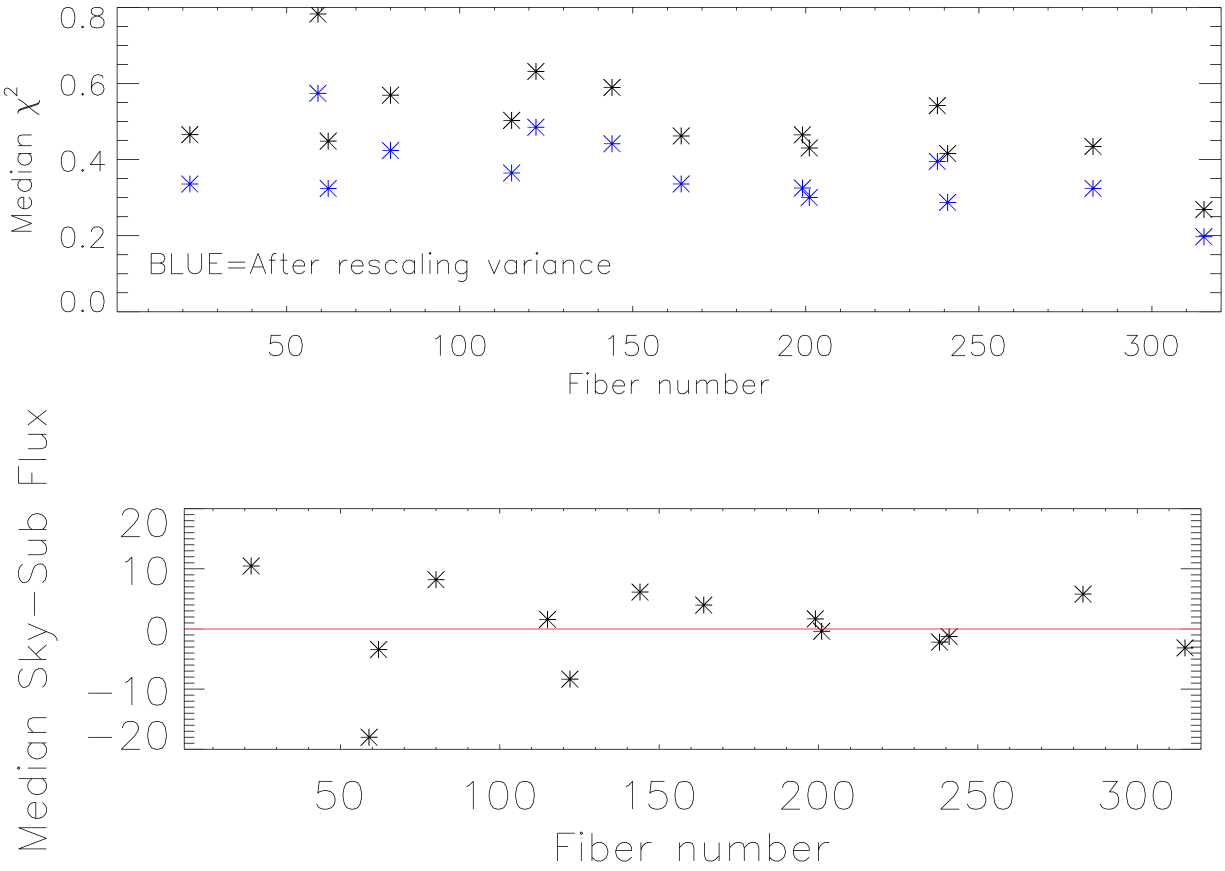
PLATE=3186 MJD=54846 sdR-r2-00058051.fit 1D Sky-subtraction Sky-subtracted Sky F

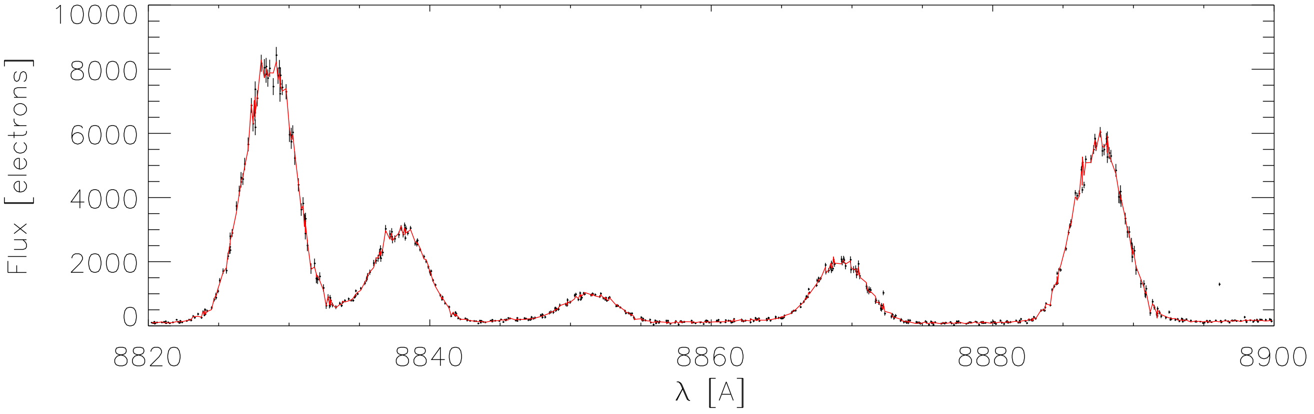
Number of sky fibers = 14

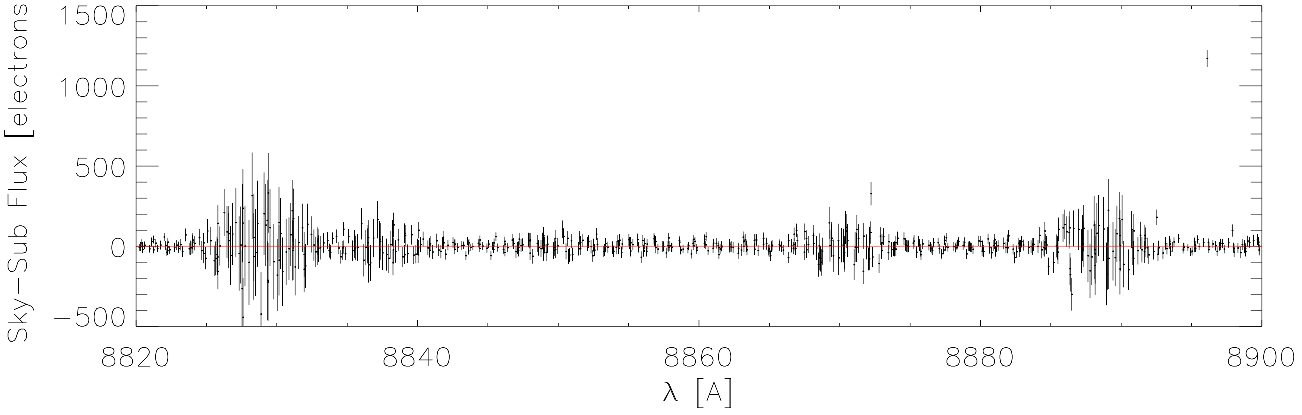
PLATE=3186 MJD=54846 sdR-r2-00058051.fit 1D Sky-subtraction Rescaled Errors



PLATE=3186 MJD=54846 sdR-r2-00058051.fit 2D Sky-subtraction Sky Fiber

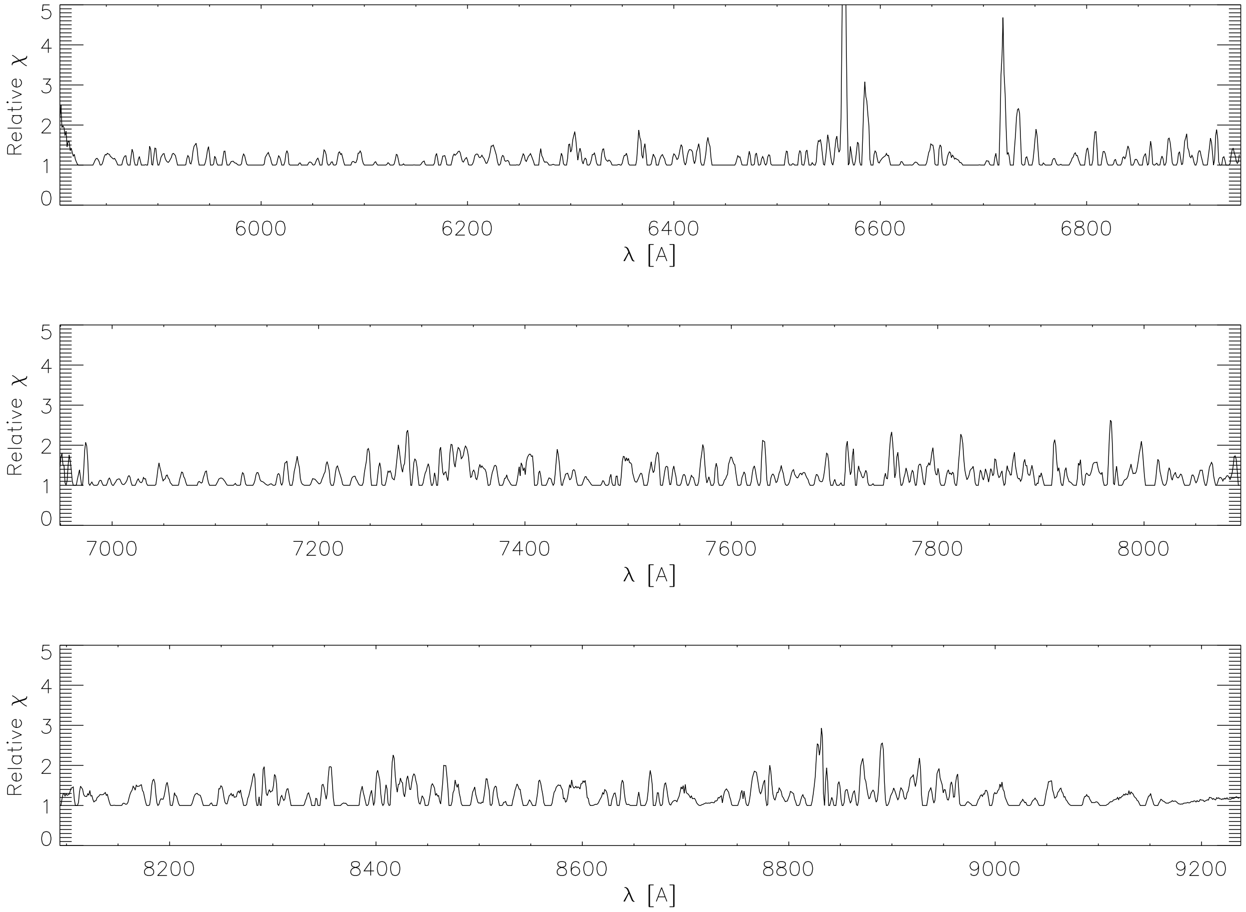


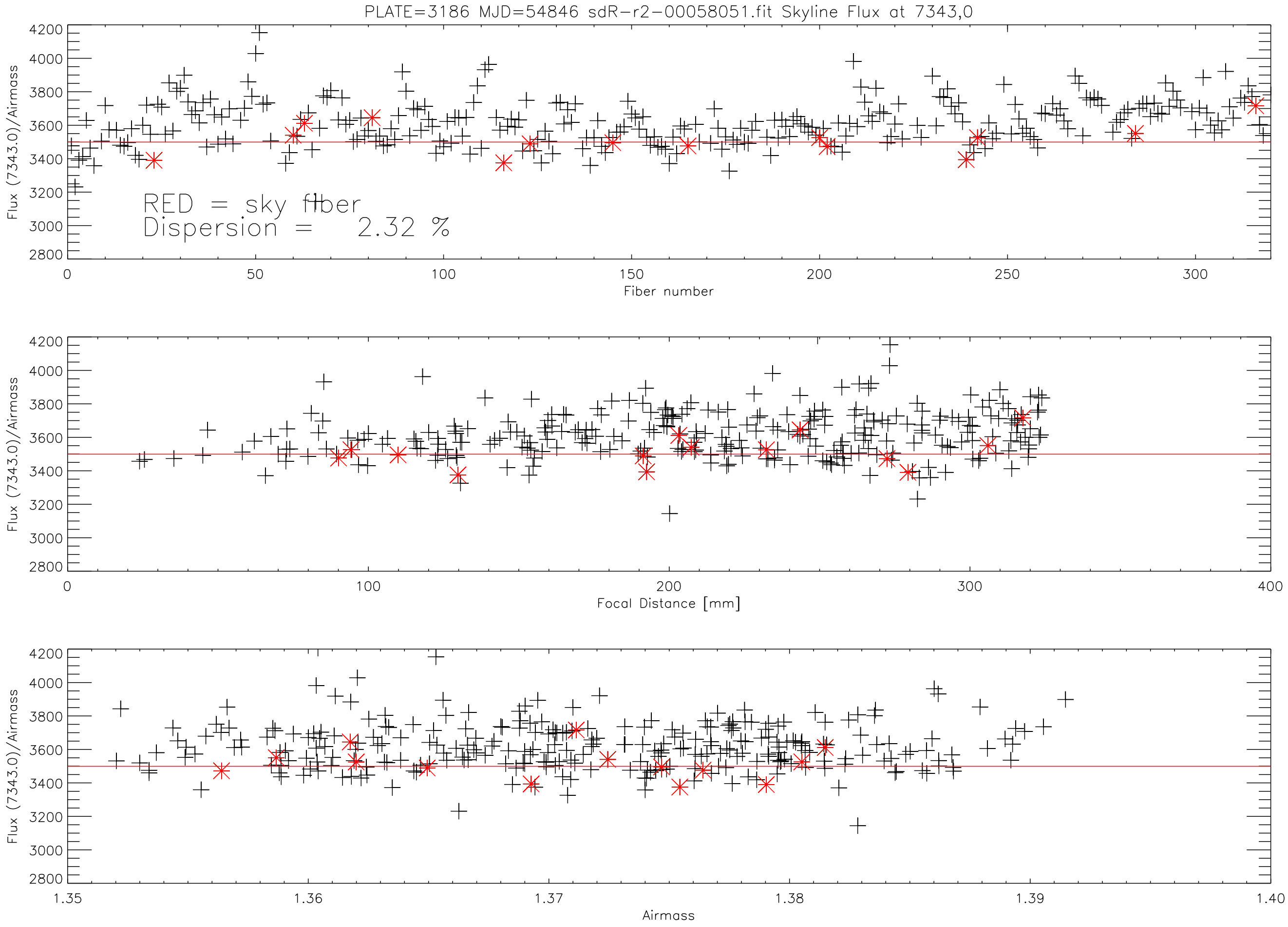

PLATE=3186 MJD=54846 sdR-r2-00058051.fit 2D Sky-subtraction Sky Fibers

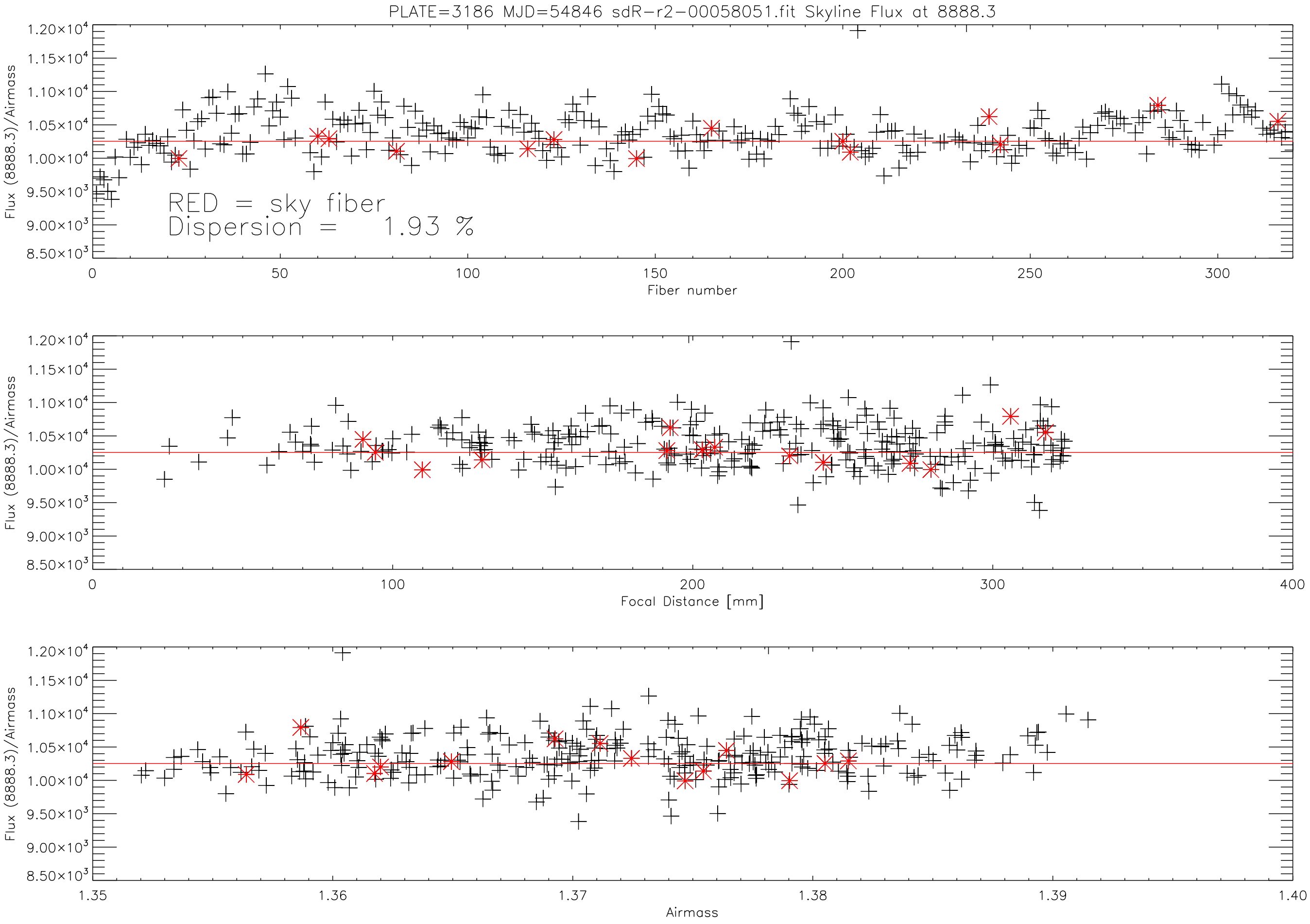

PLATE=3186 MJD=54846 sdR-r2-00058051.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 14

PLATE=3186 MJD=54846 sdR-r2-00058051.fit 2D Sky-subtraction Rescaled Errors




PLATE=3186 MJD=54846 sdR-r2-00058051.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
4200
4000
3800
3600
3400
3200
3000
2800
RED = sky fiber
Dispersion = 2.32 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.35
1.36
1.37
1.38
1.39
1.40
Airmass


PLATE=3186 MJD=54846 sdR-r2-00058051.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.20×10⁴
1.15×10⁴
1.10×10⁴
1.05×10⁴
1.00×10⁴
9.50×10³
9.00×10³
8.50×10³
RED = sky fiber
Dispersion = 1.93 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1.20×10⁴
1.15×10⁴
1.10×10⁴
1.05×10⁴
1.00×10⁴
9.50×10³
9.00×10³
8.50×10³
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.20×10⁴
1.15×10⁴
1.10×10⁴
1.05×10⁴
1.00×10⁴
9.50×10³
9.00×10³
8.50×10³
1.35
1.36
1.37
1.38
1.39
1.40
Airmass