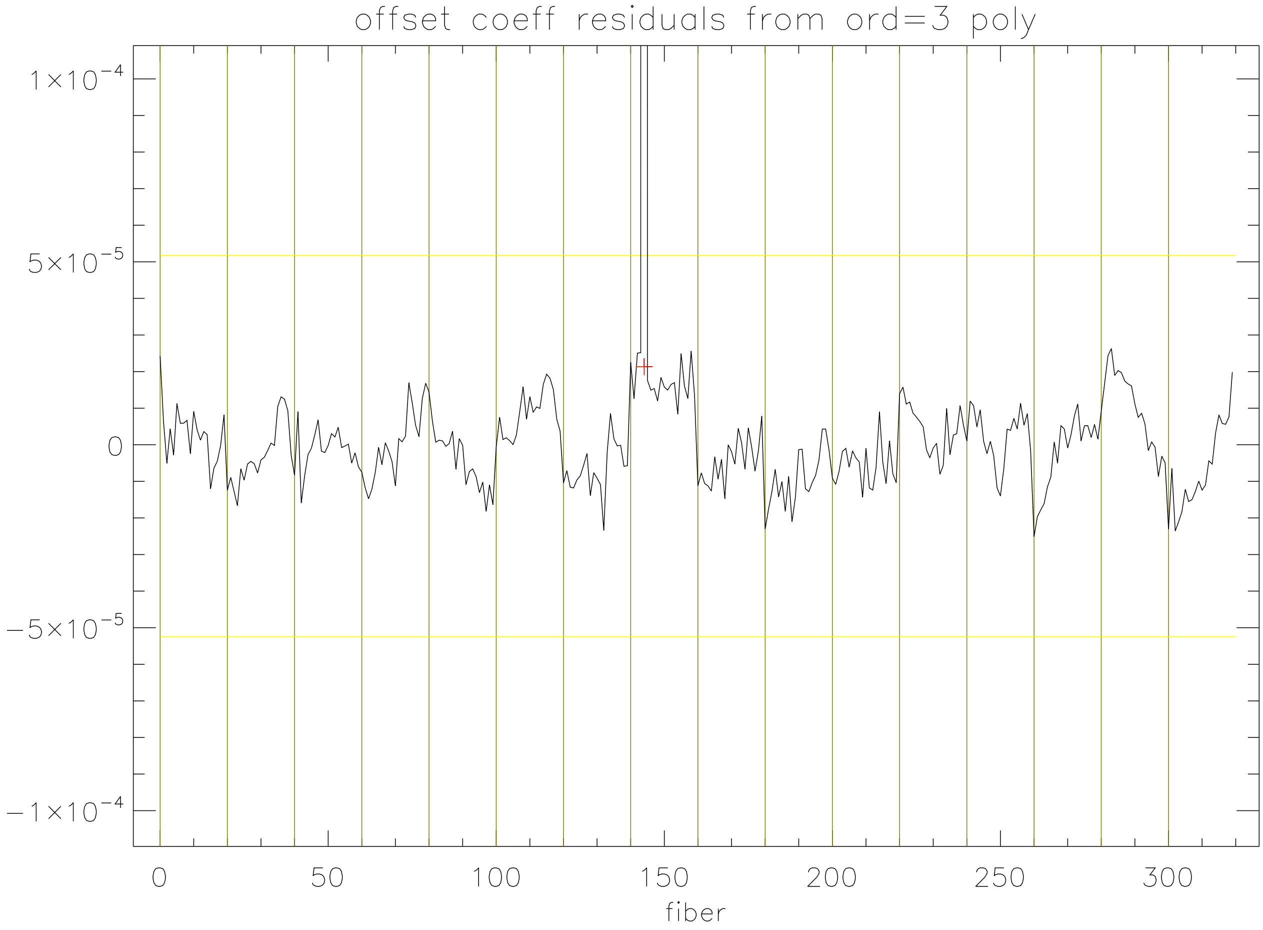
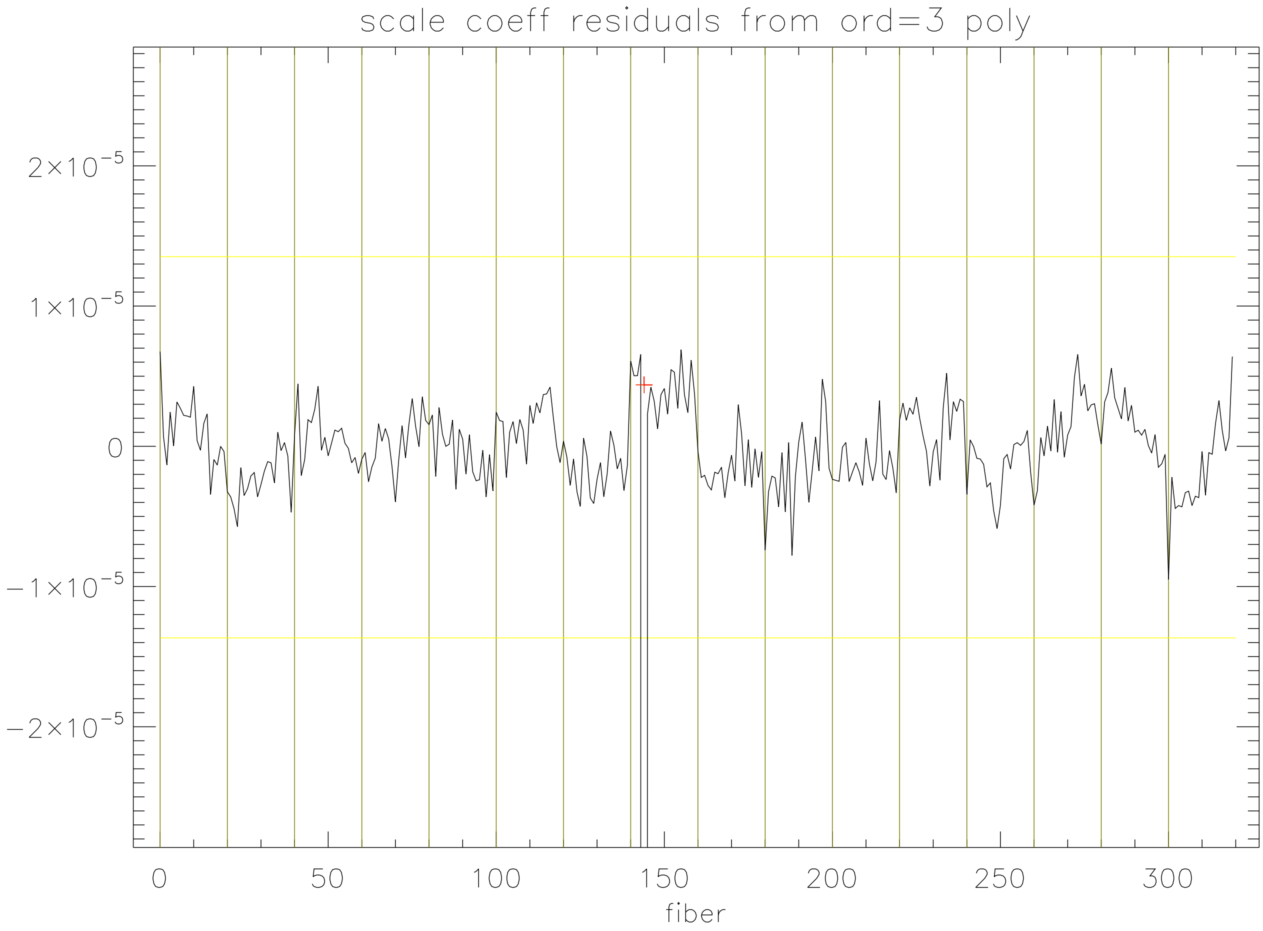
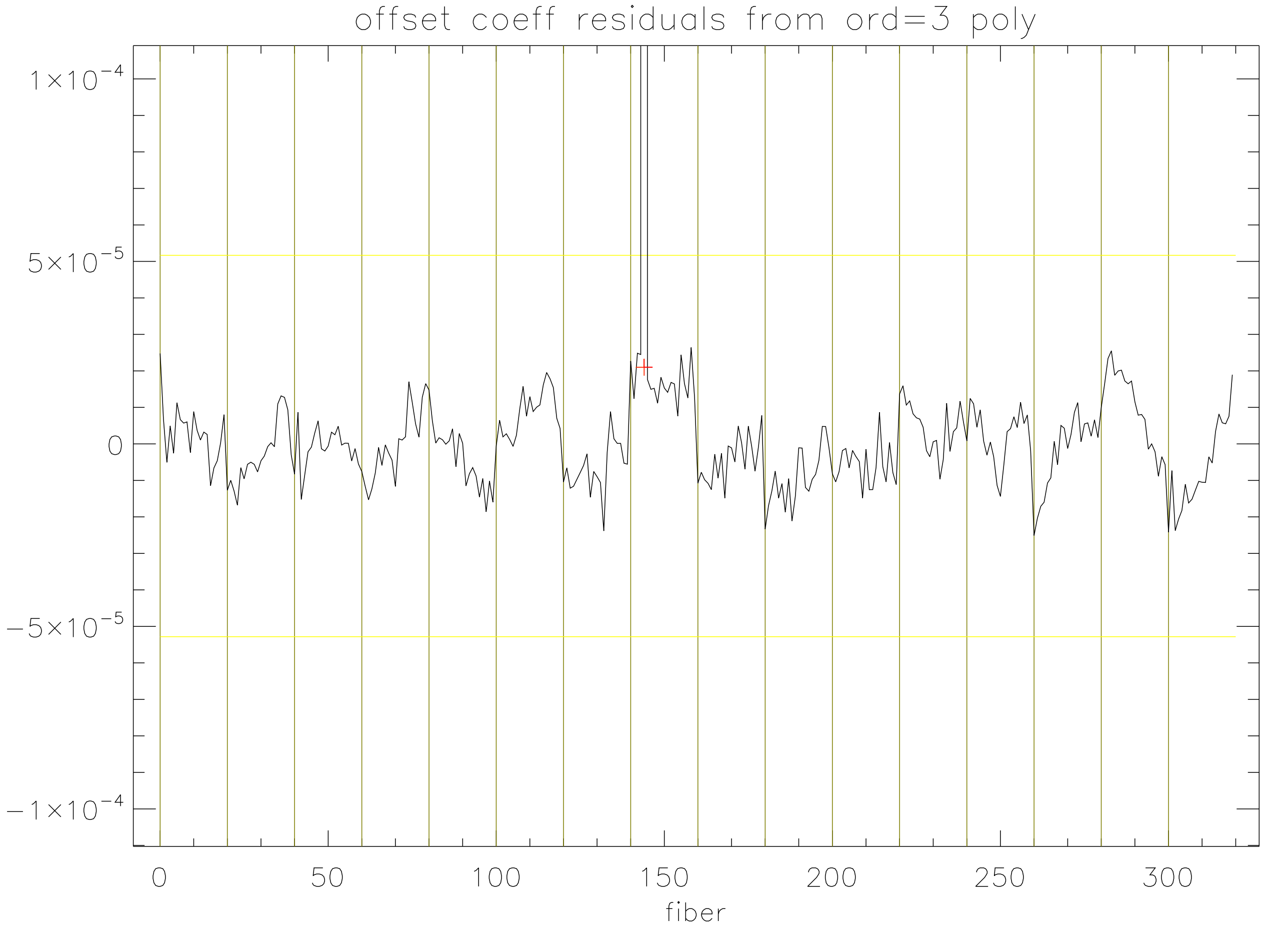
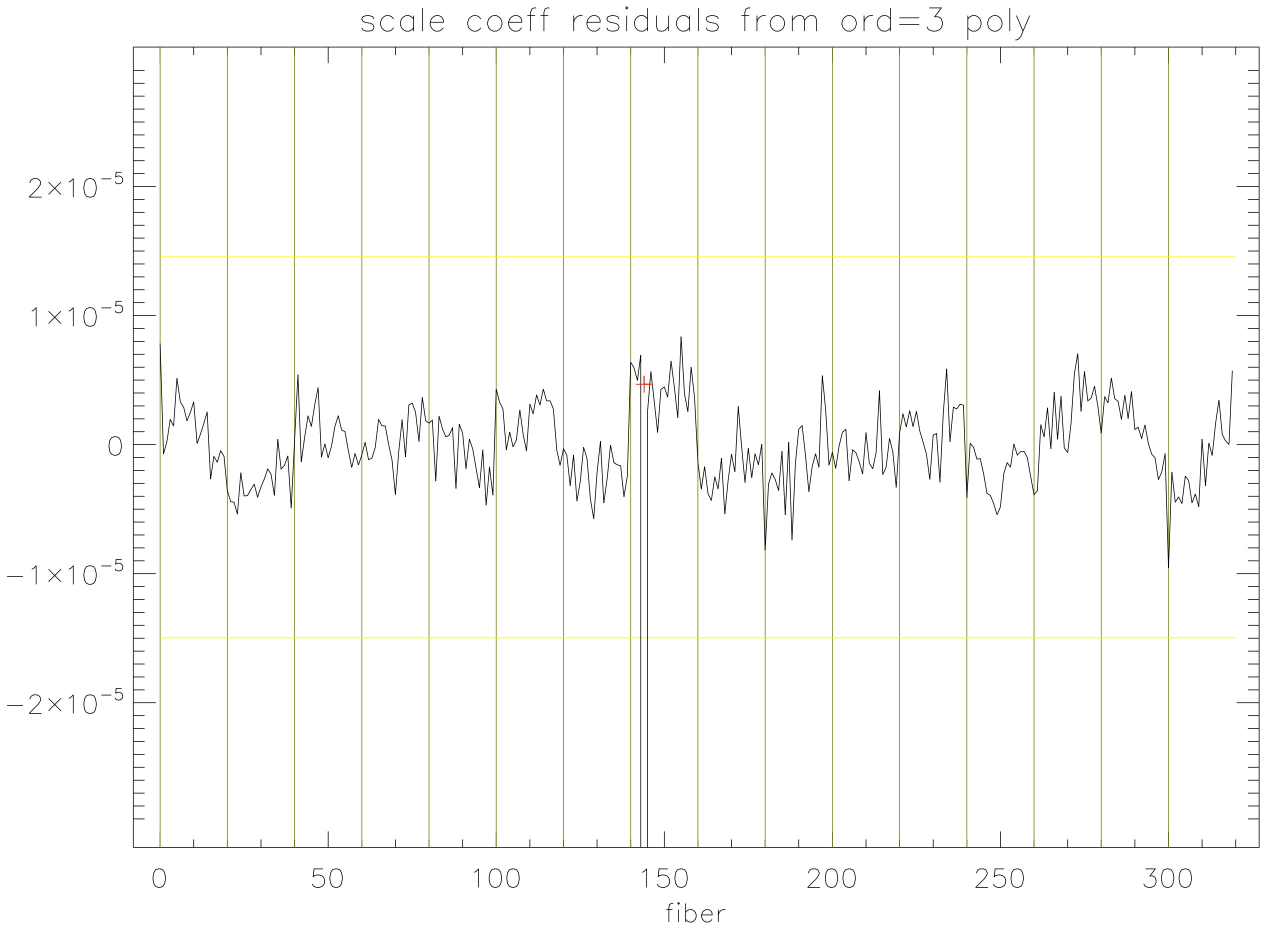
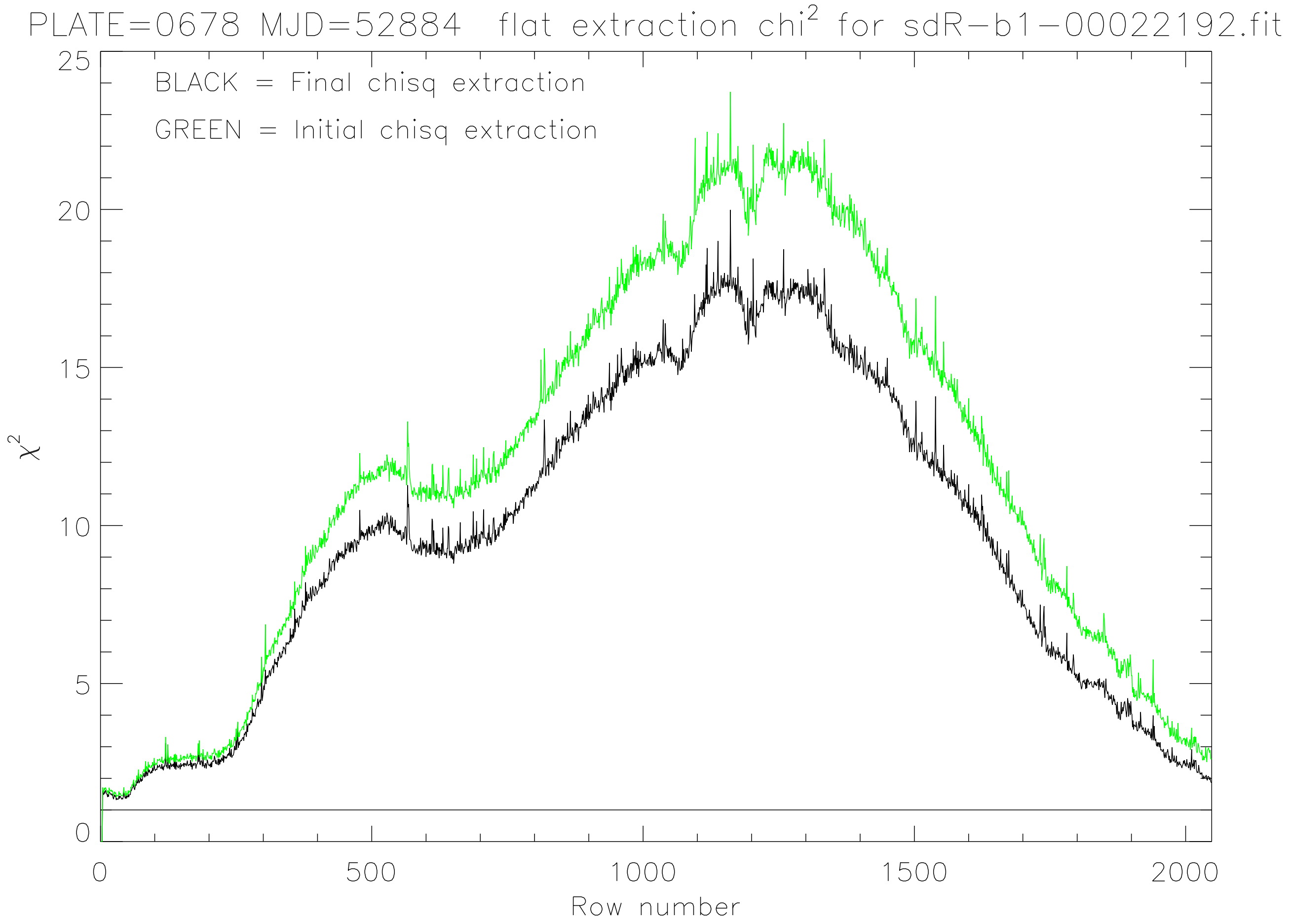
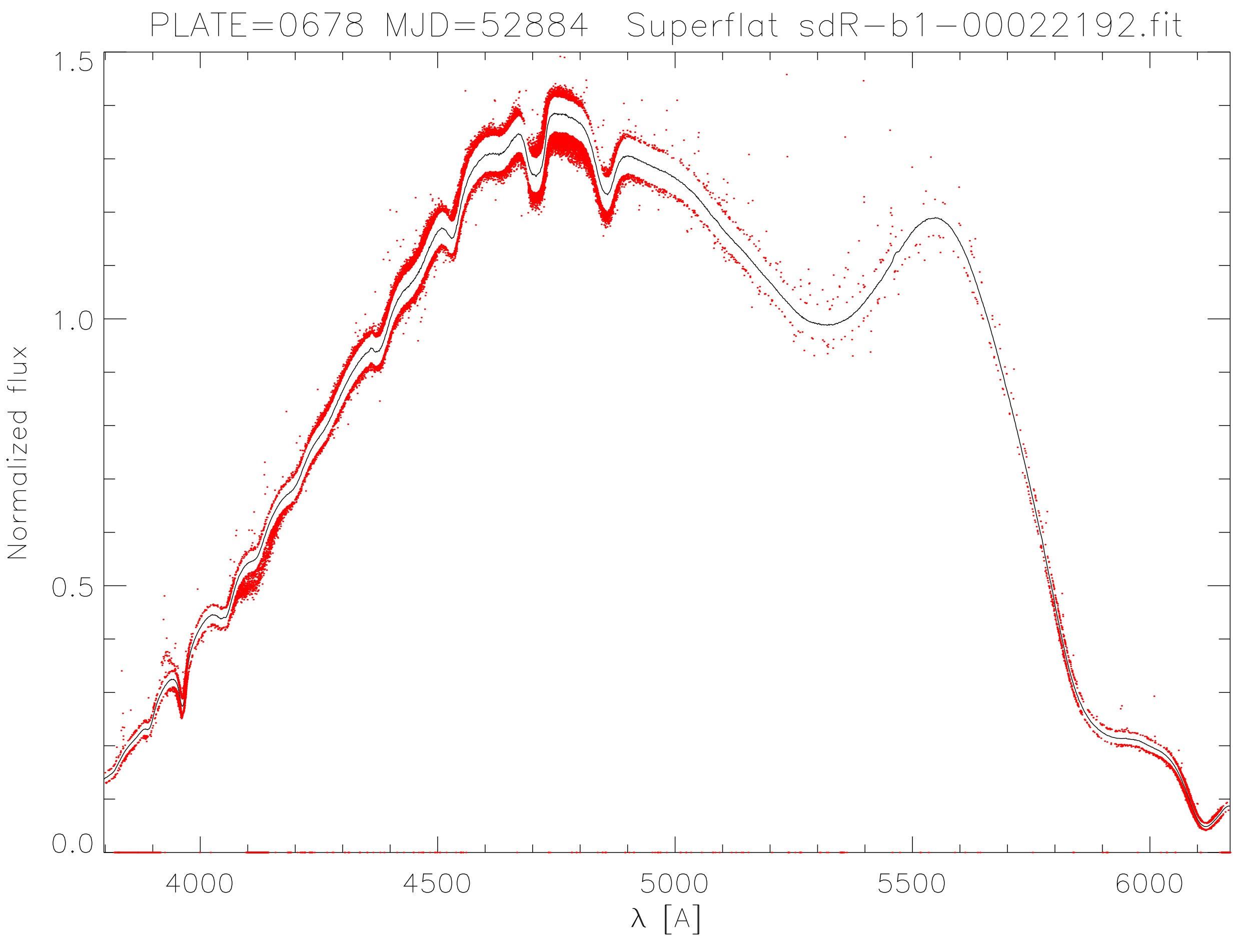

offset coeff residuals from ord=3 poly
1×10^{-4}
5×10^{-5}
0
-5×10^{-5}
-1×10^{-4}
0
50
100
150
200
250
300
fiber

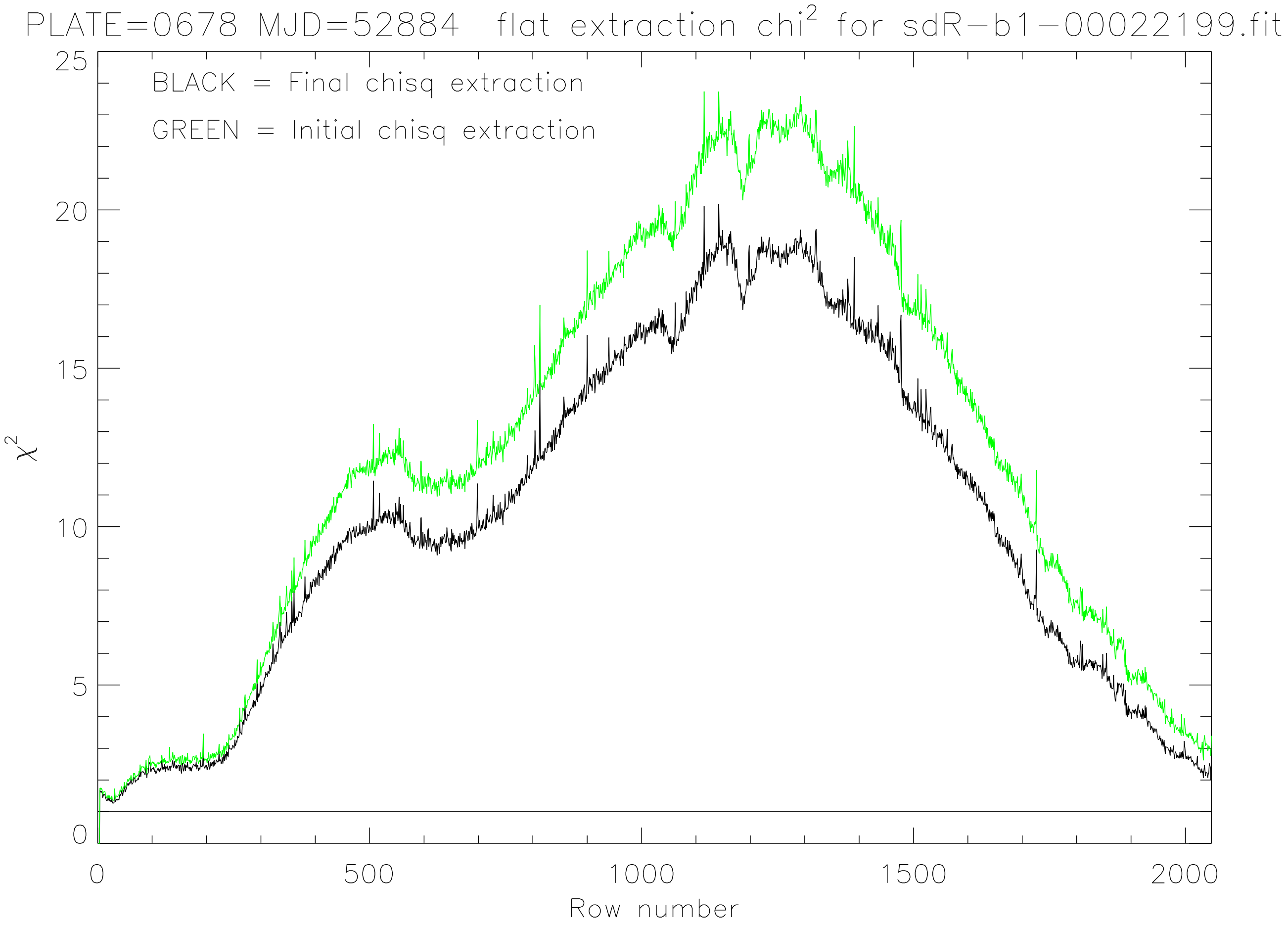

scale coeff residuals from ord=3 poly
2×10^{-5}
1×10^{-5}
0
−1×10^{-5}
−2×10^{-5}
0
50
100
150
200
250
300
fiber

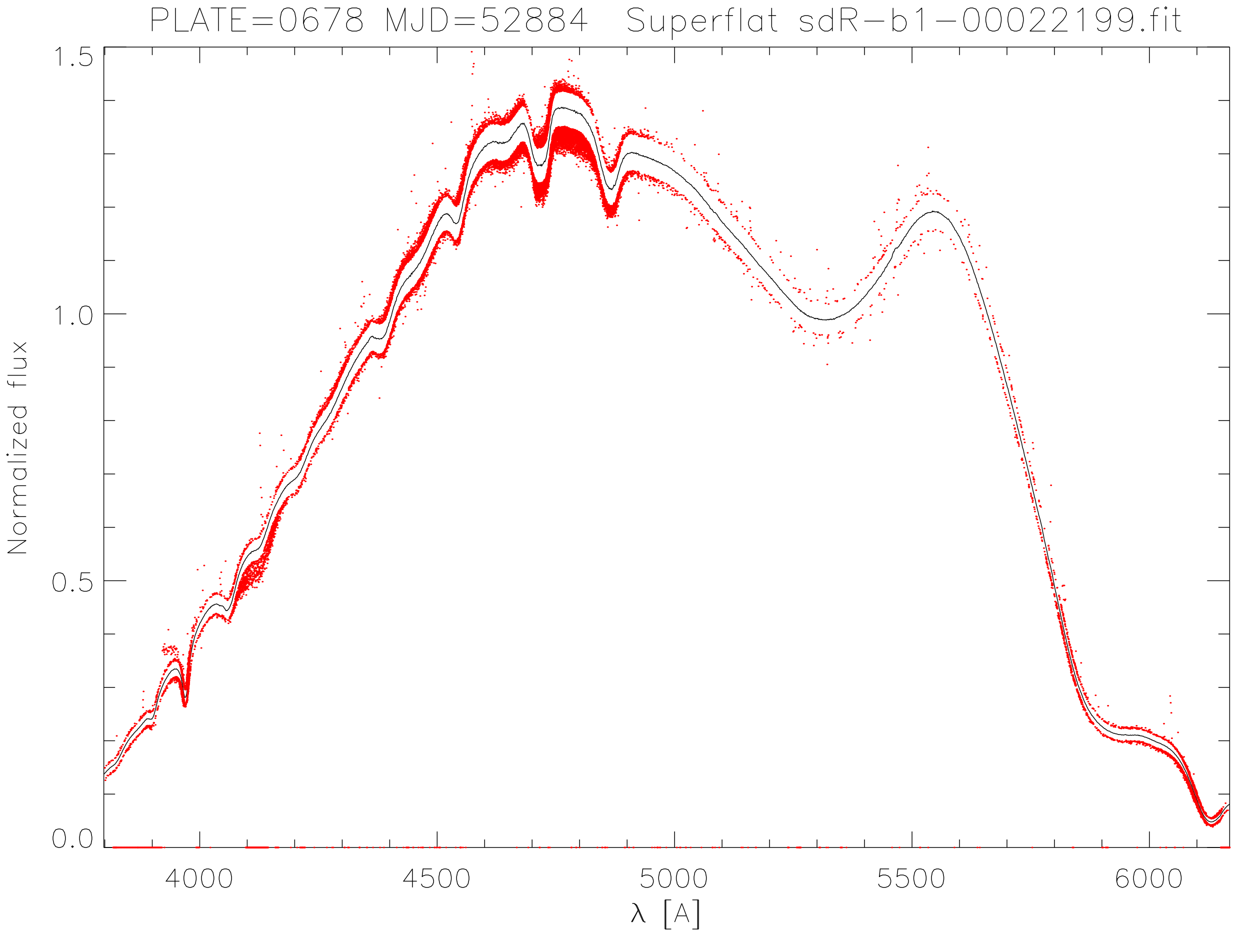

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

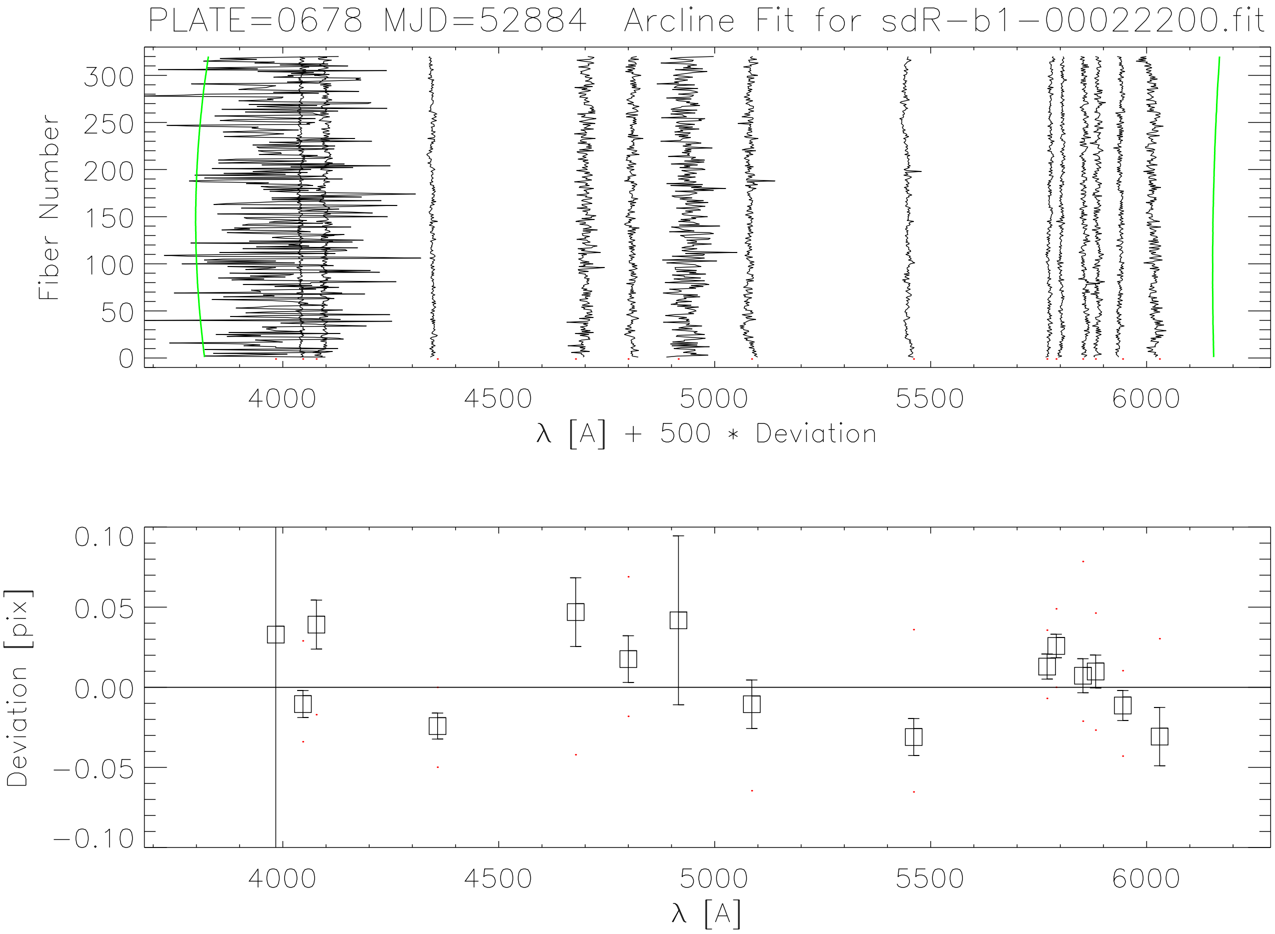

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-b1-00022192.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number

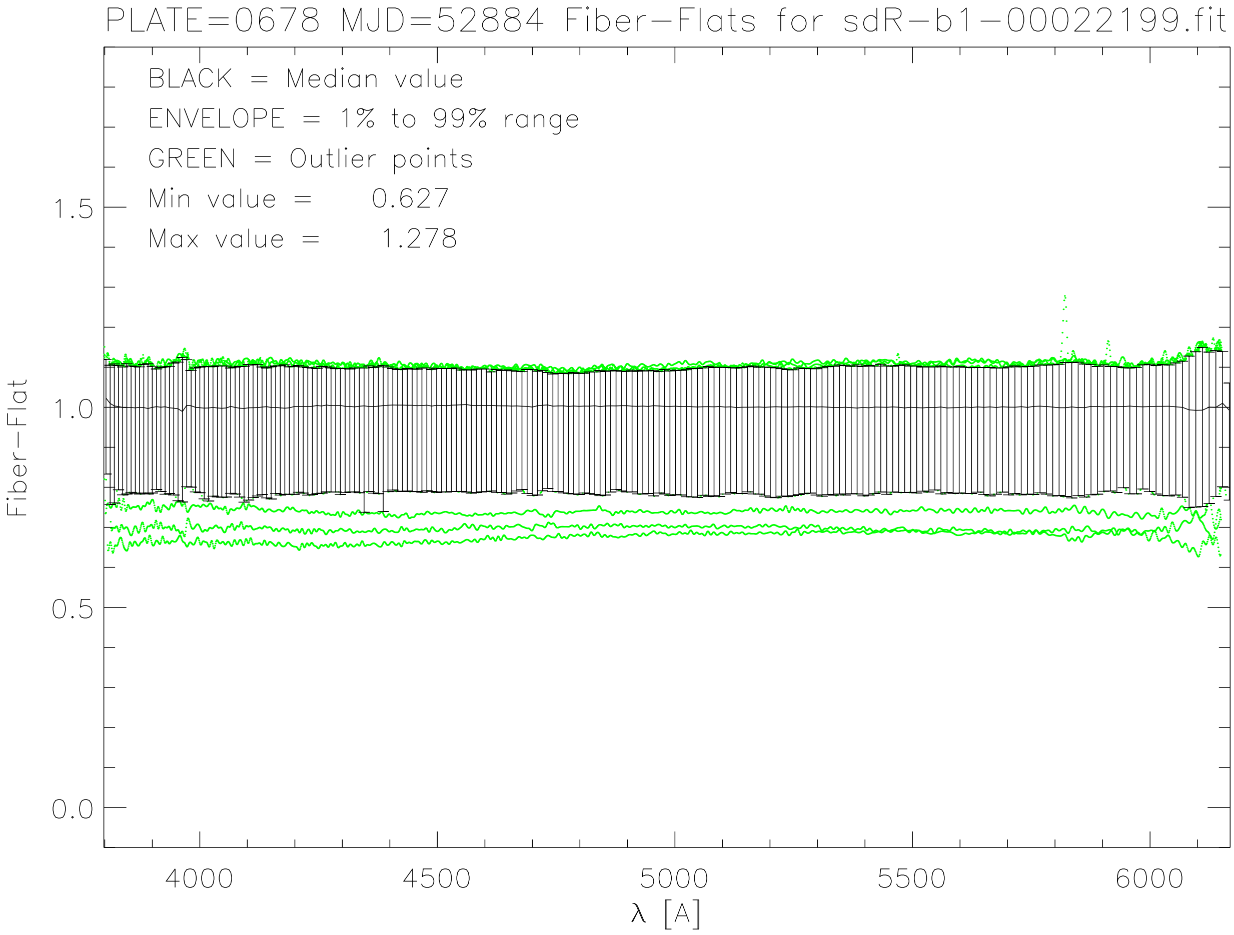

PLATE=0678 MJD=52884 Superflat sdR-b1-00022192.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]


PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-b1-00022199.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number

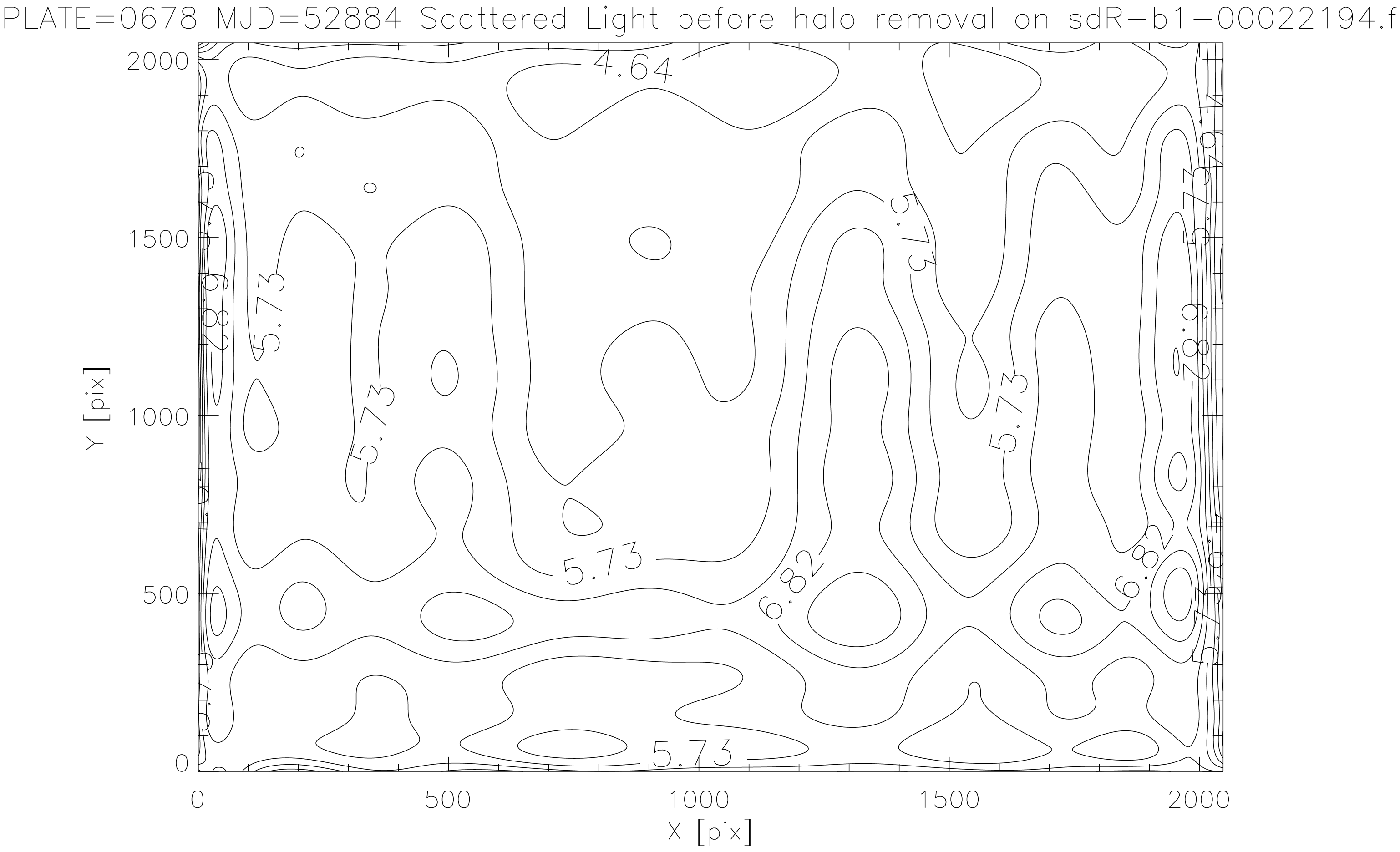

PLATE=0678 MJD=52884 Superflat sdR-b1-00022199.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]



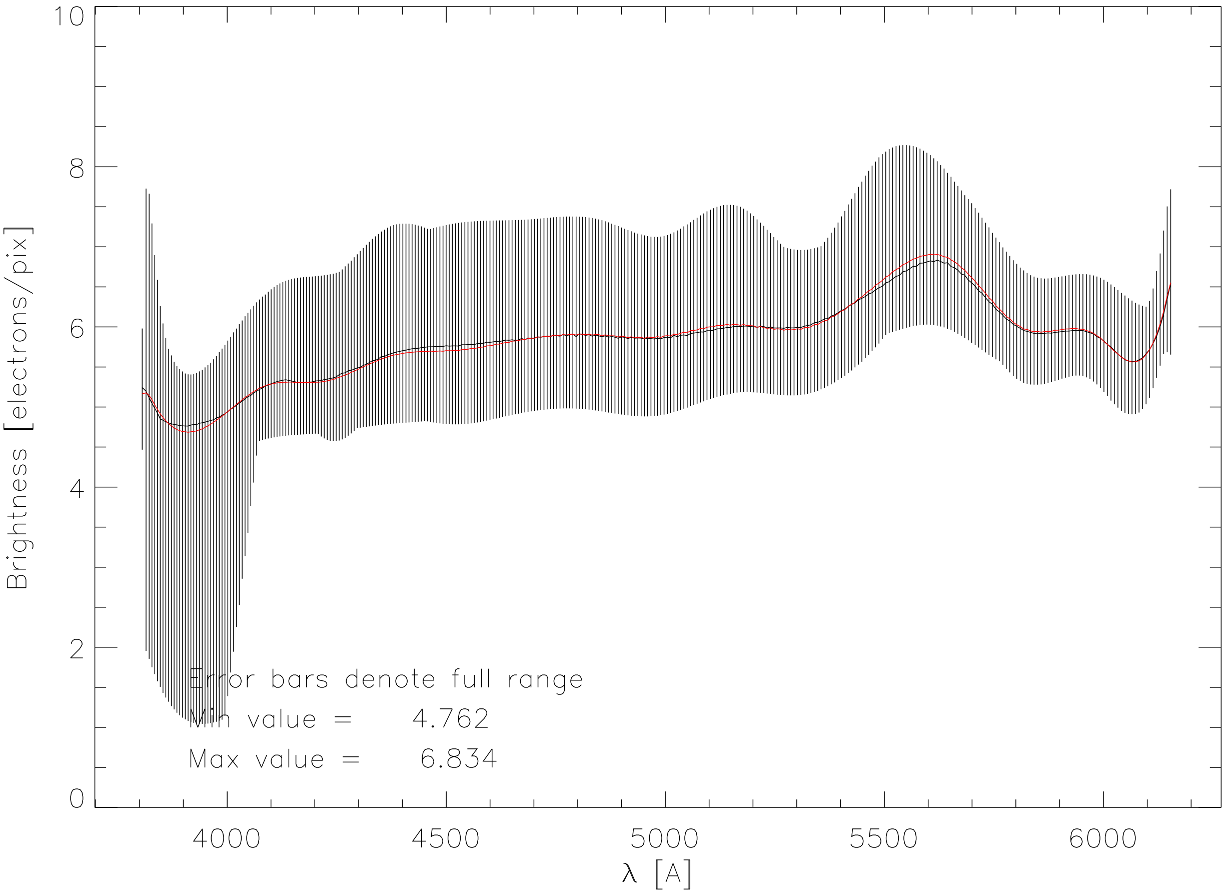
Mon Feb 25 22:22:03 2008



Mon Feb 25 22:22:12 2008

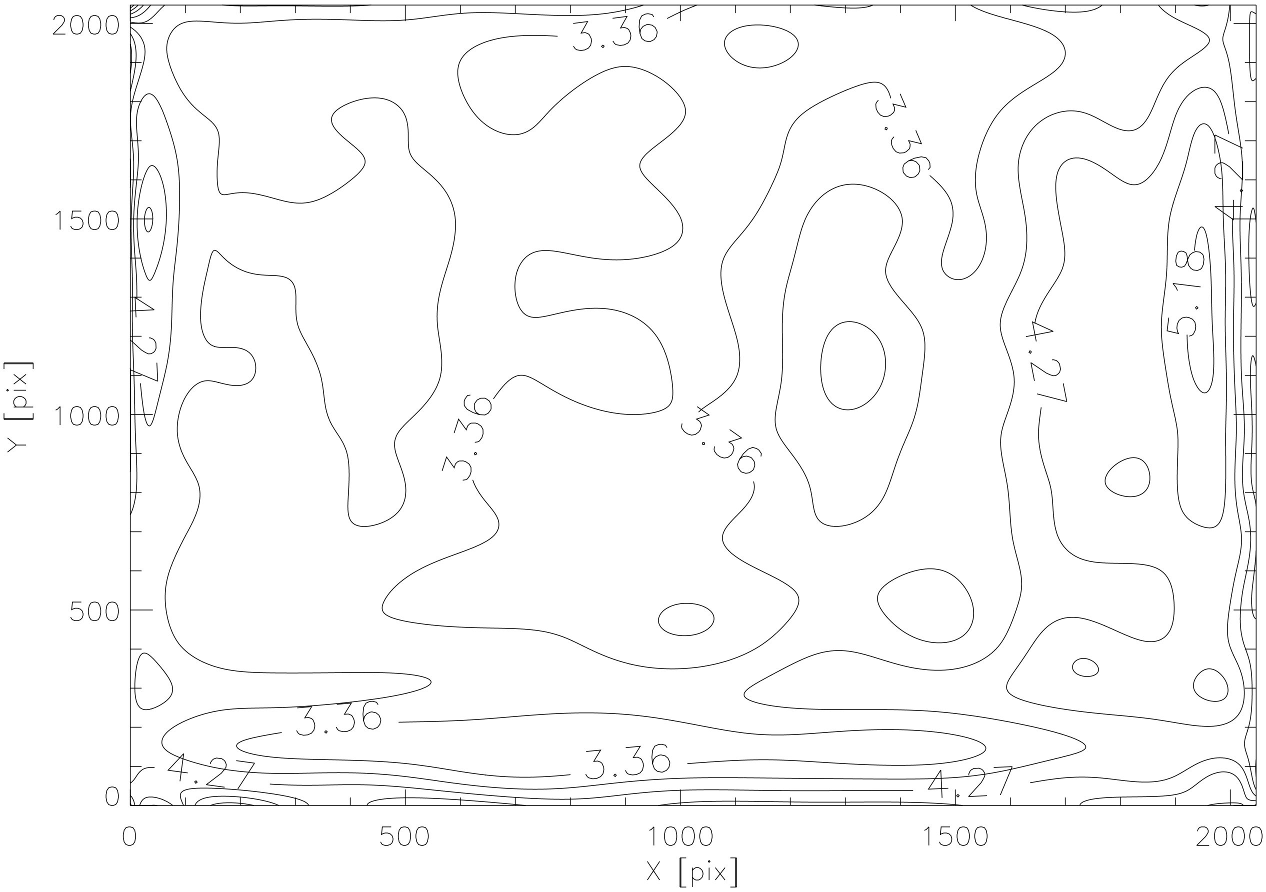

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022194.f
4.64
5.73
6.82
0
500
1000
1500
2000
Y [pix]
X [pix]

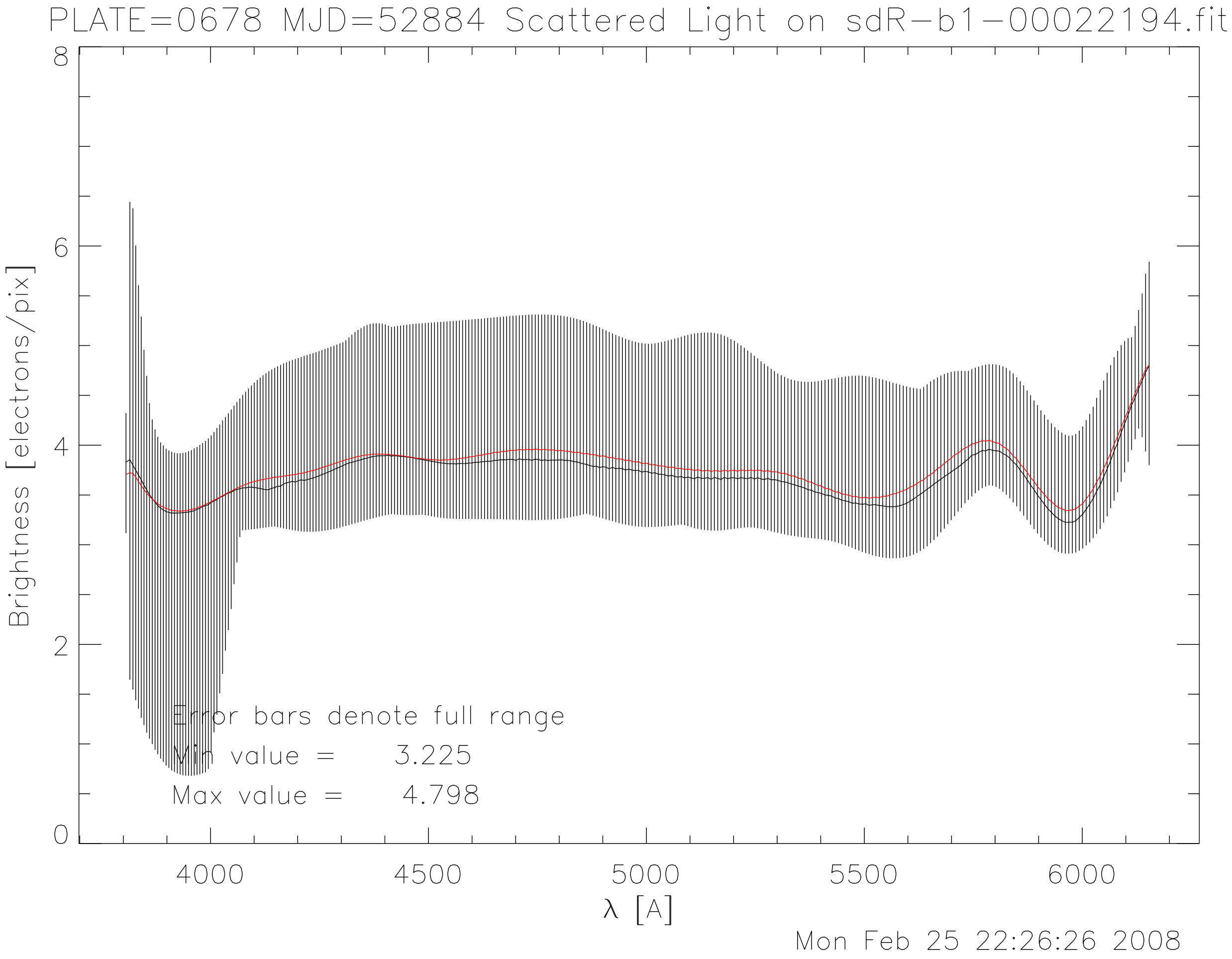
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022194.f

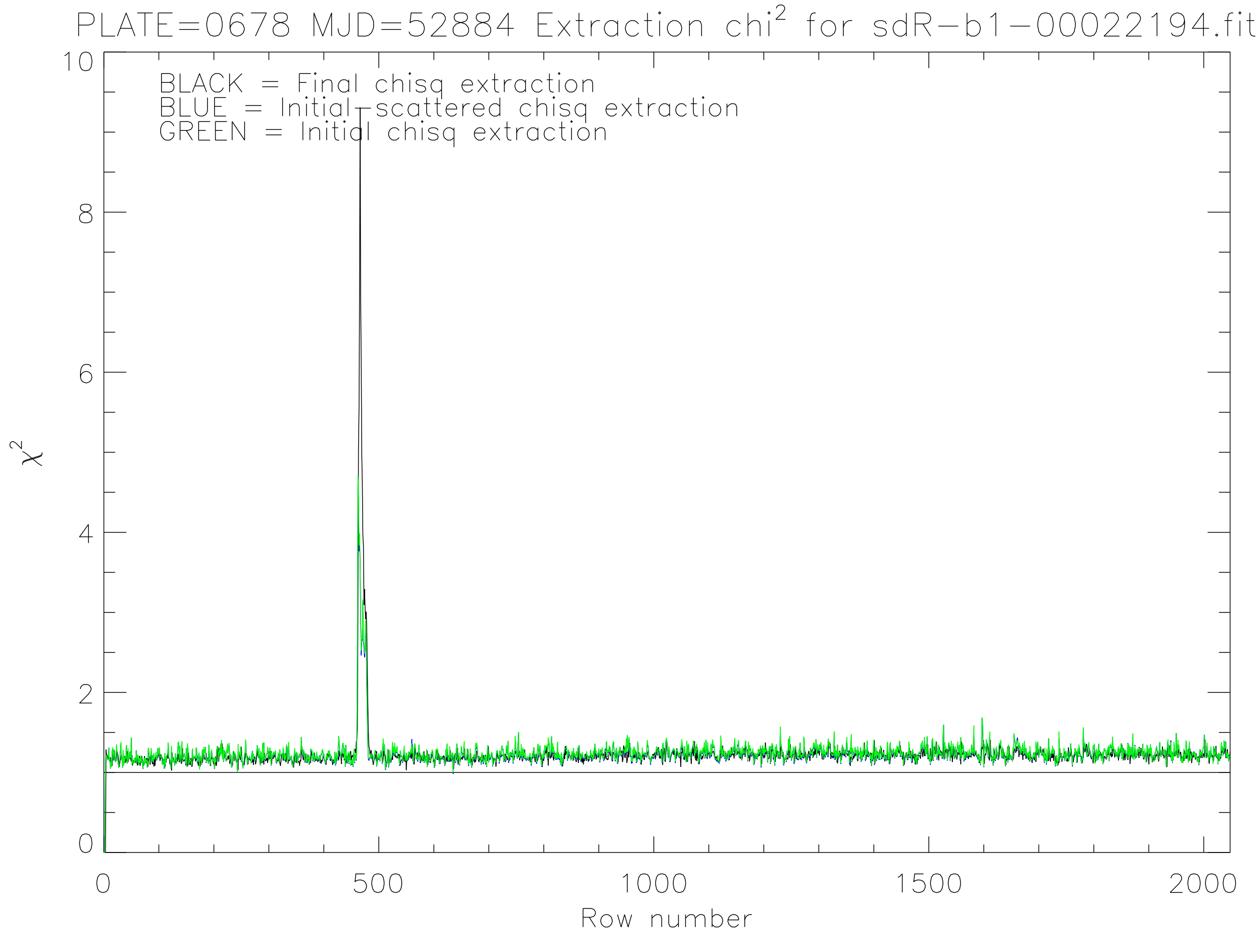


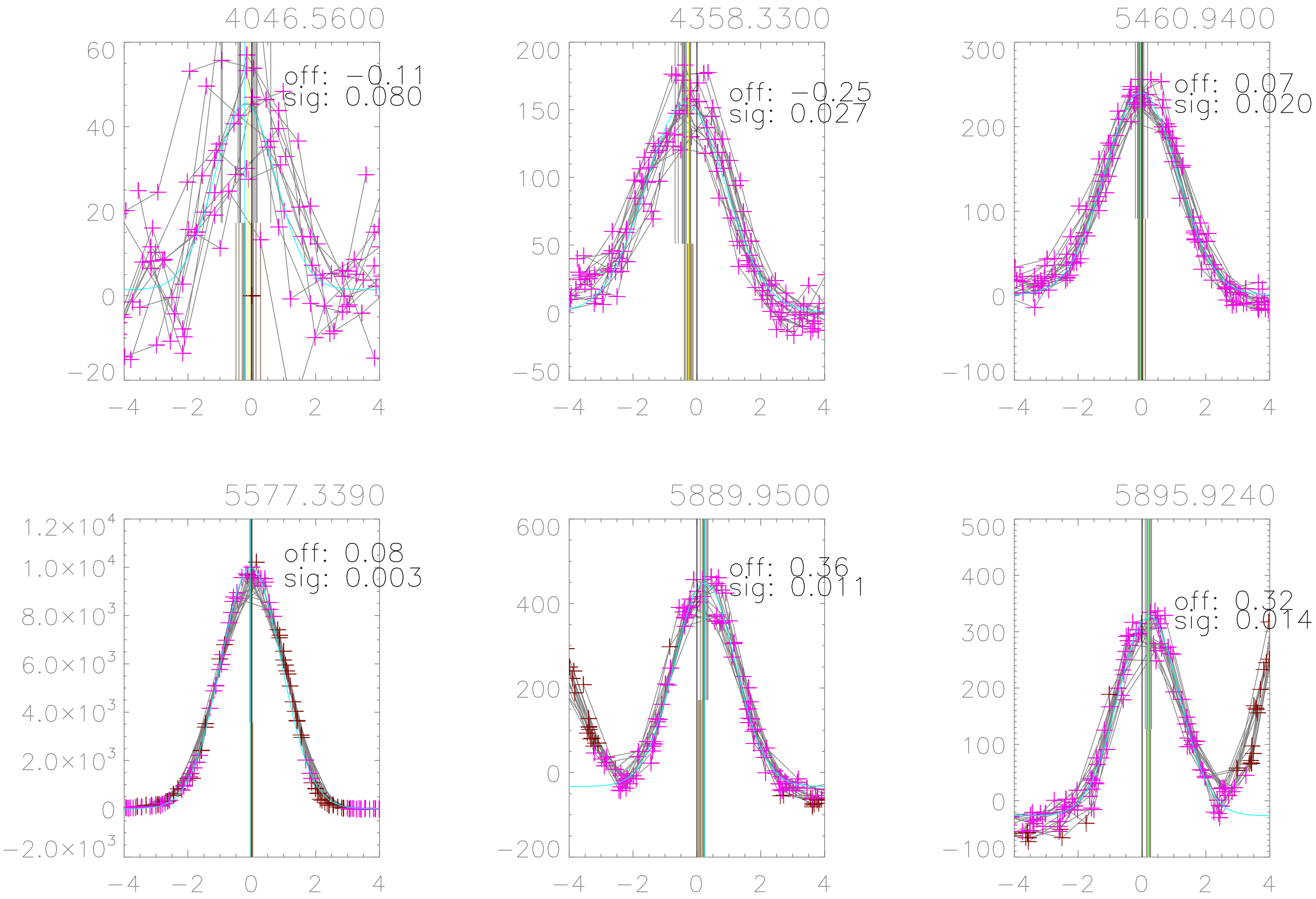
Mon Feb 25 22:23:09 2008

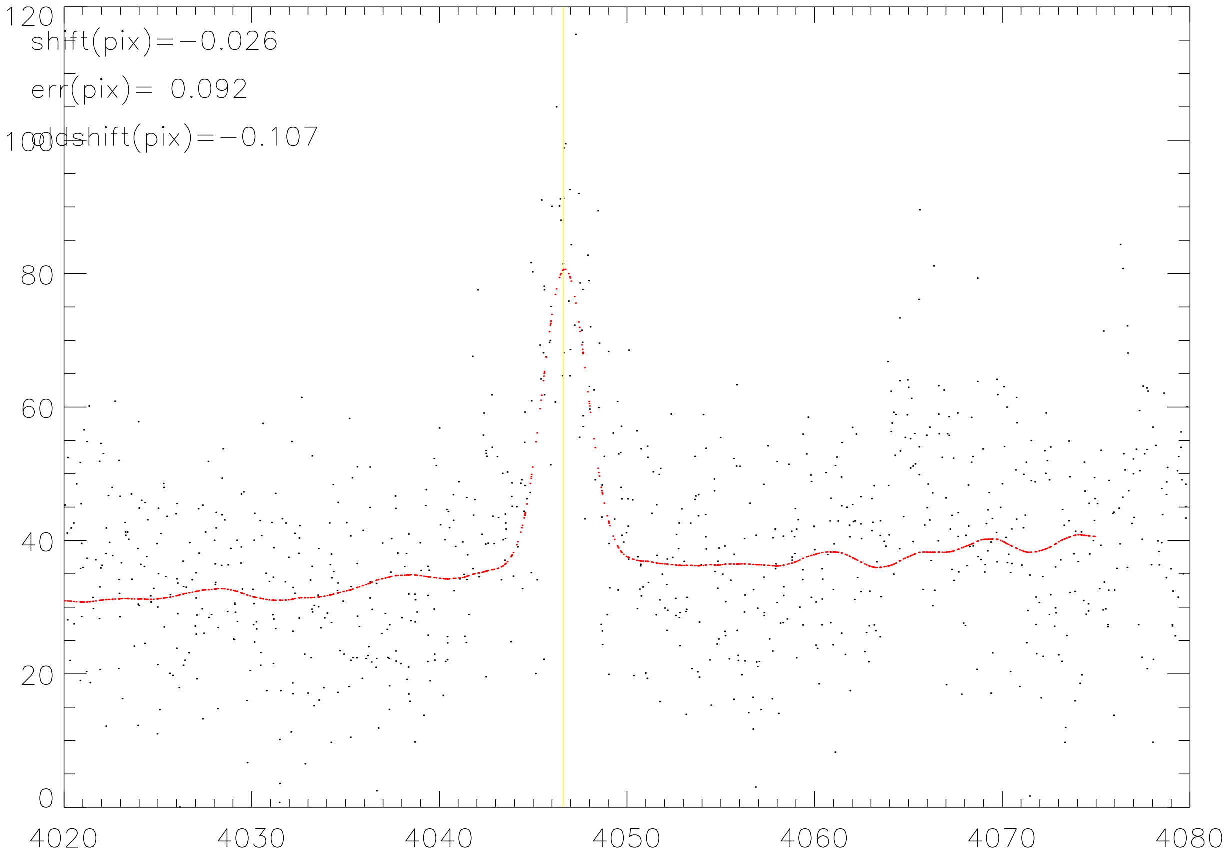
PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022194.fit

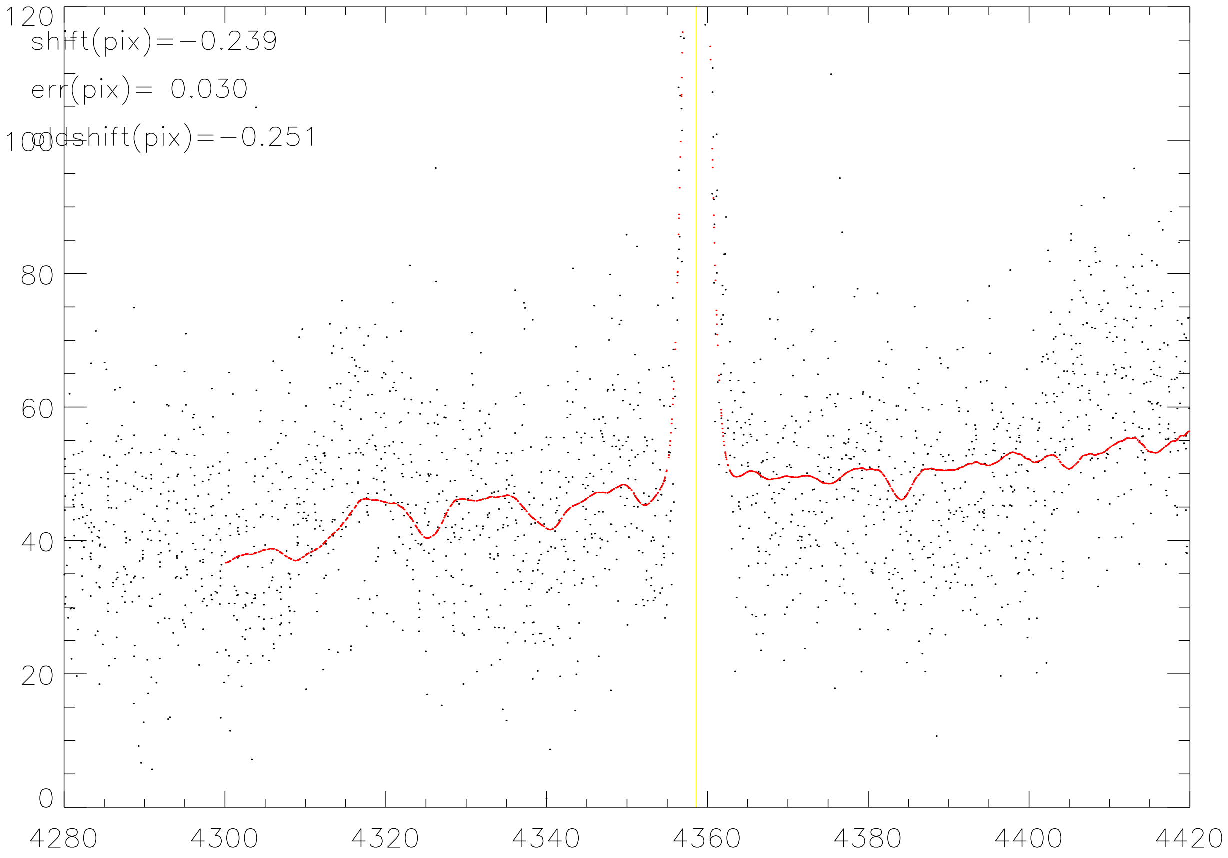


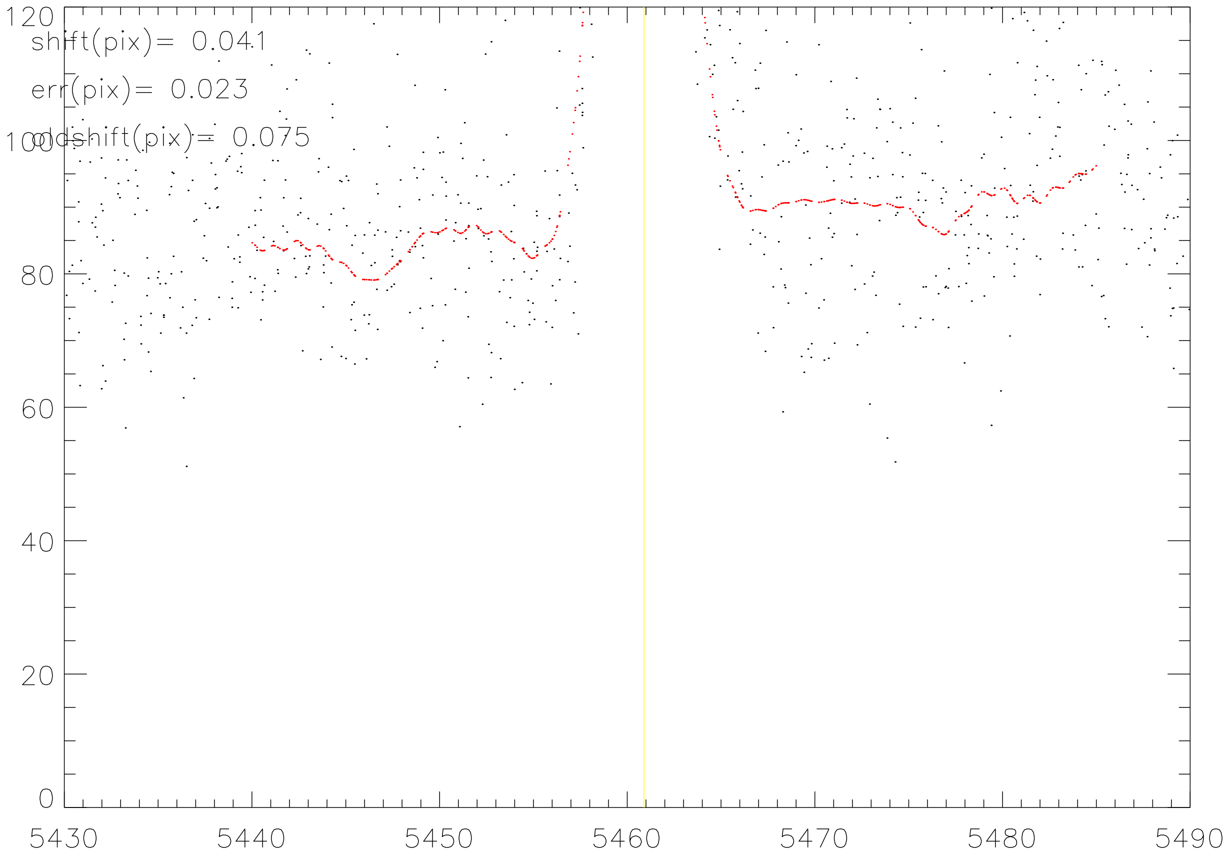

PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022194.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.225
Max value = 4.798
Mon Feb 25 22:26:26 2008

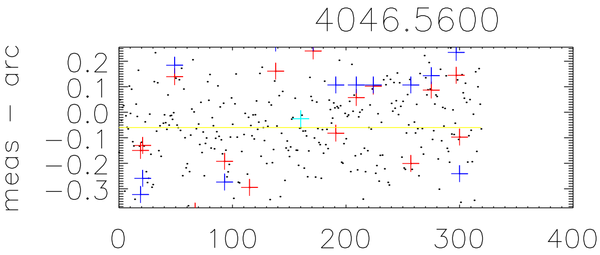

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b1-00022194.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

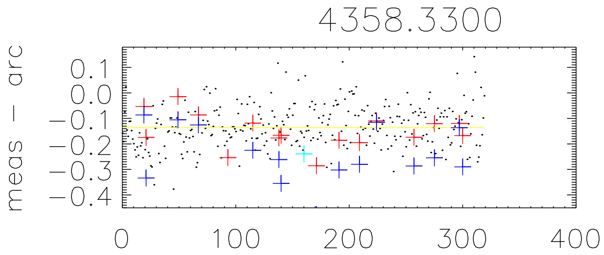

4046.5600
off: −0.11
sig: 0.080
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.25
sig: 0.027
200
150
100
50
0
−50
−4
−2
0
2
4
5460.9400
off: 0.07
sig: 0.020
300
200
100
0
−100
−4
−2
0
2
4
5577.3390
off: 0.08
sig: 0.003
1.2×10⁴
1.0×10⁴
8.0×10³
6.0×10³
4.0×10³
2.0×10³
0
−2.0×10³
−4
−2
0
2
4
5889.9500
off: 0.36
sig: 0.011
600
400
200
0
−200
−4
−2
0
2
4
5895.9240
off: 0.32
sig: 0.014
500
400
300
200
100
0
−100
−4
−2
0
2
4

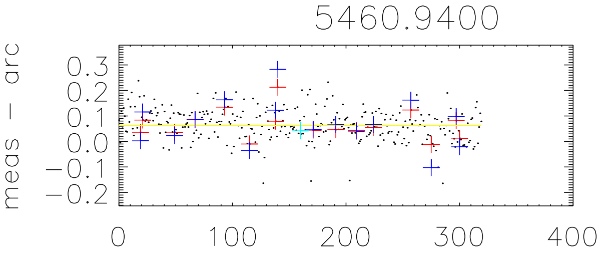

shift(pix)=-0.026
err(pix)= 0.092
oldshift(pix)=-0.107
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

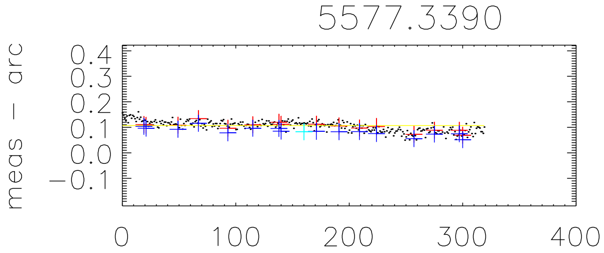

shift(pix)=−0.239
err(pix)= 0.030
oldshift(pix)=−0.251
0
20
40
60
80
100
120
4280
4300
4320
4340
4360
4380
4400
4420

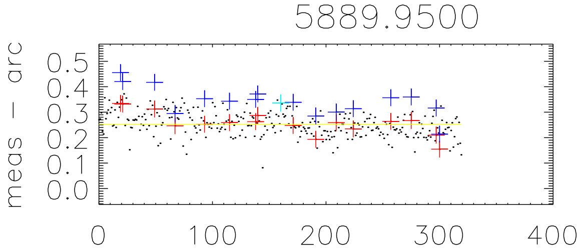

shift(pix)= 0.041
err(pix)= 0.023
oldshift(pix)= 0.075
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

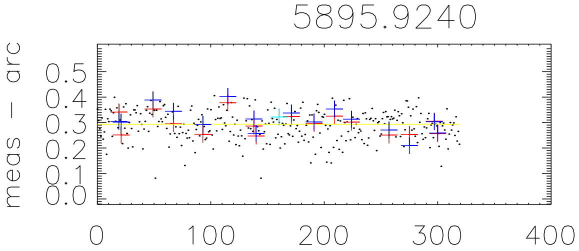

4046.5600

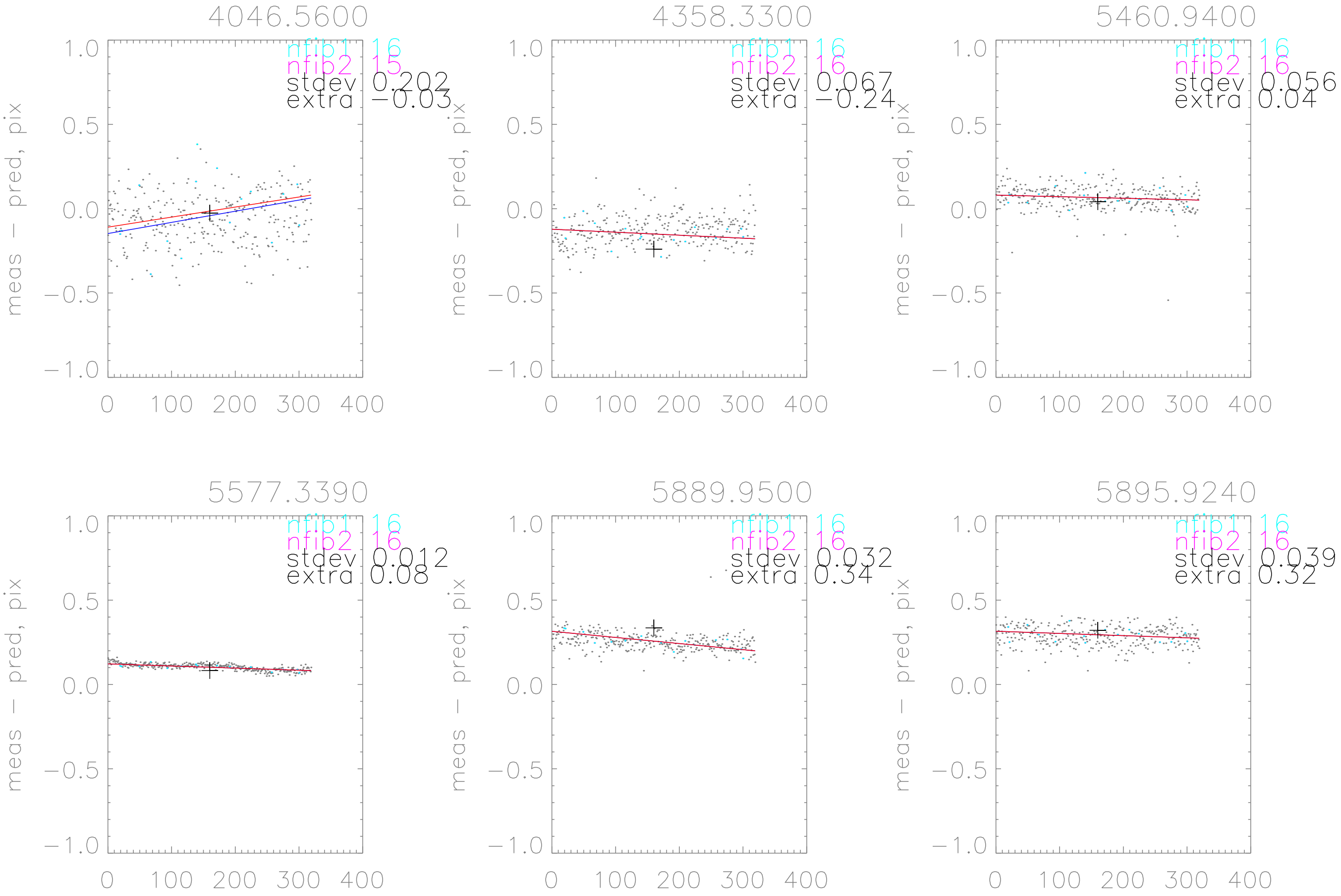

4358.3300

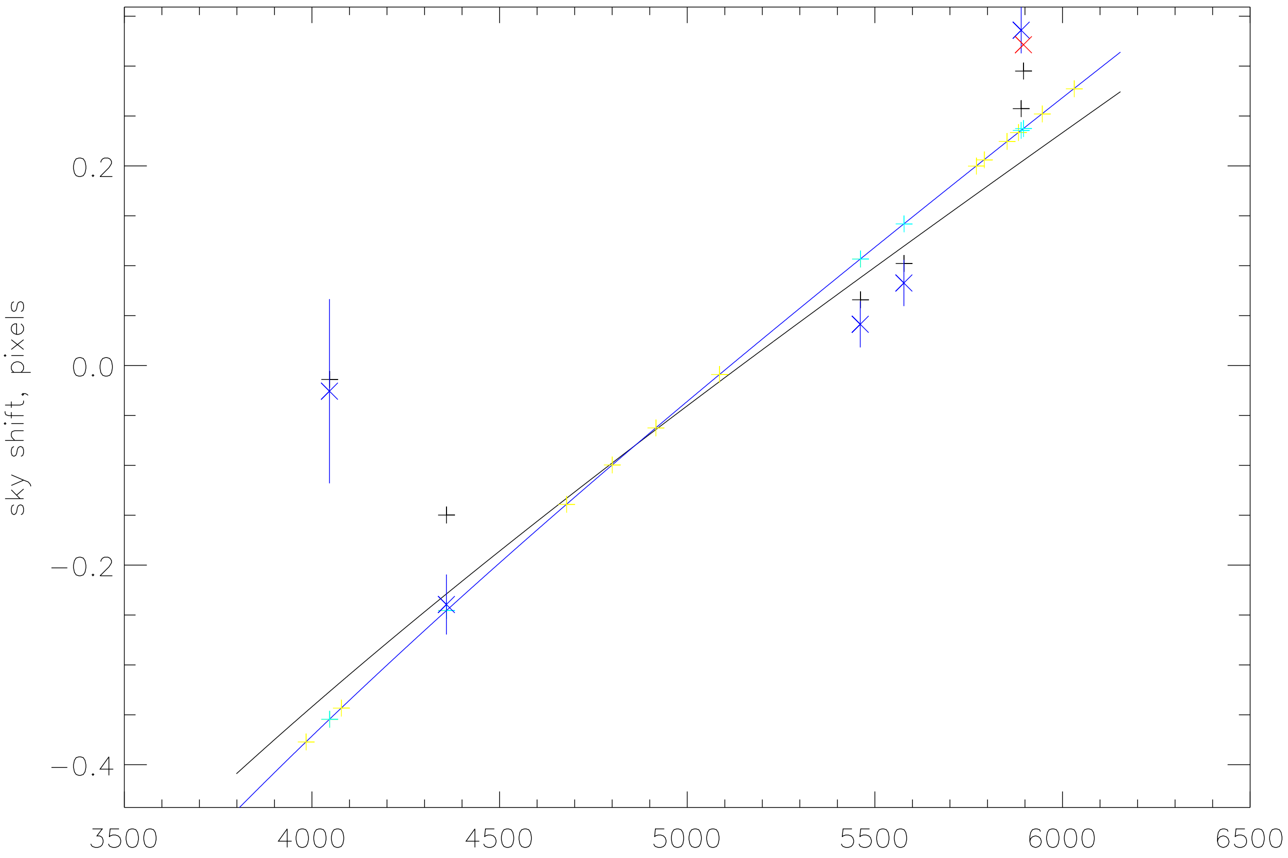

5460.9400

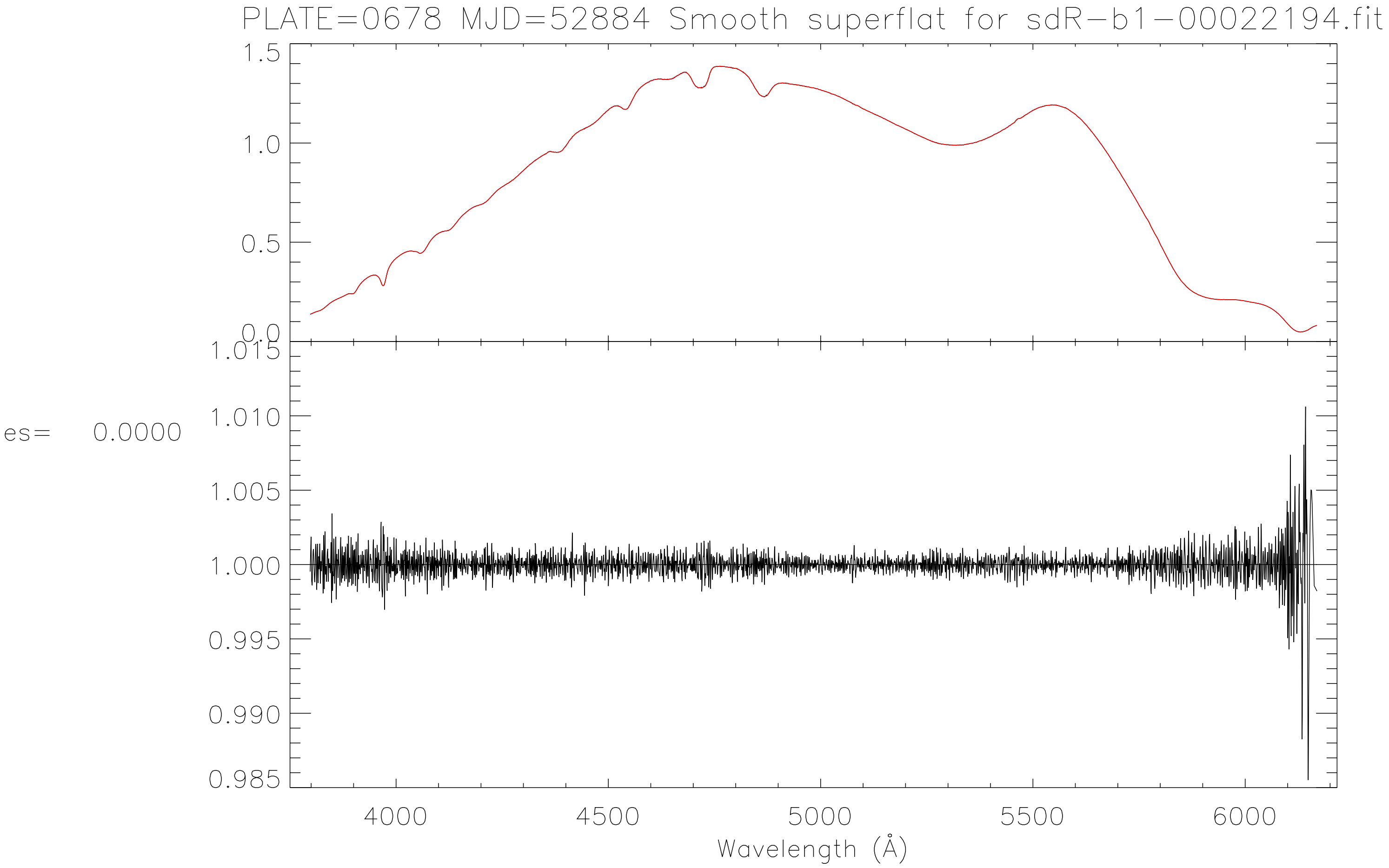

5577.3390

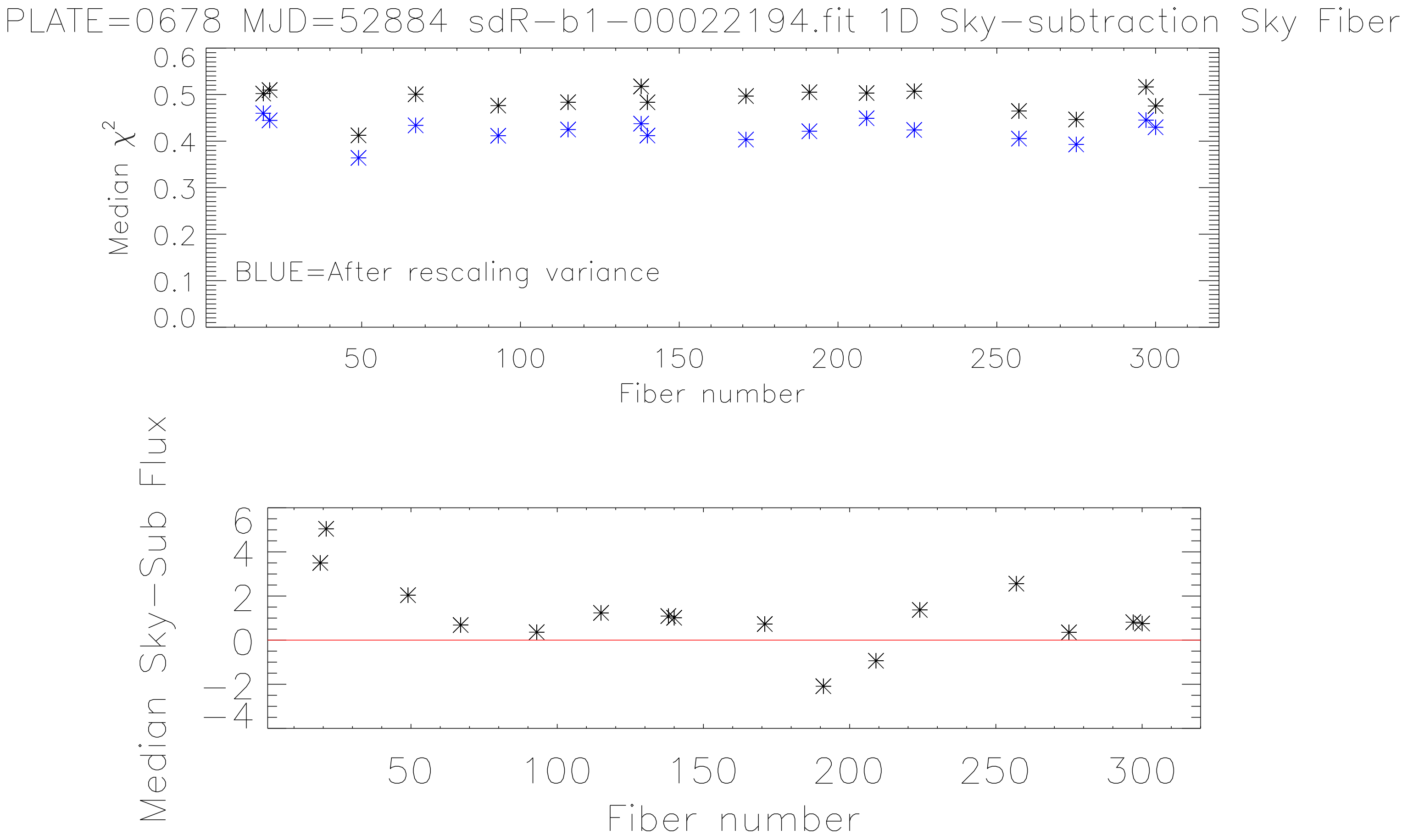

5889.9500

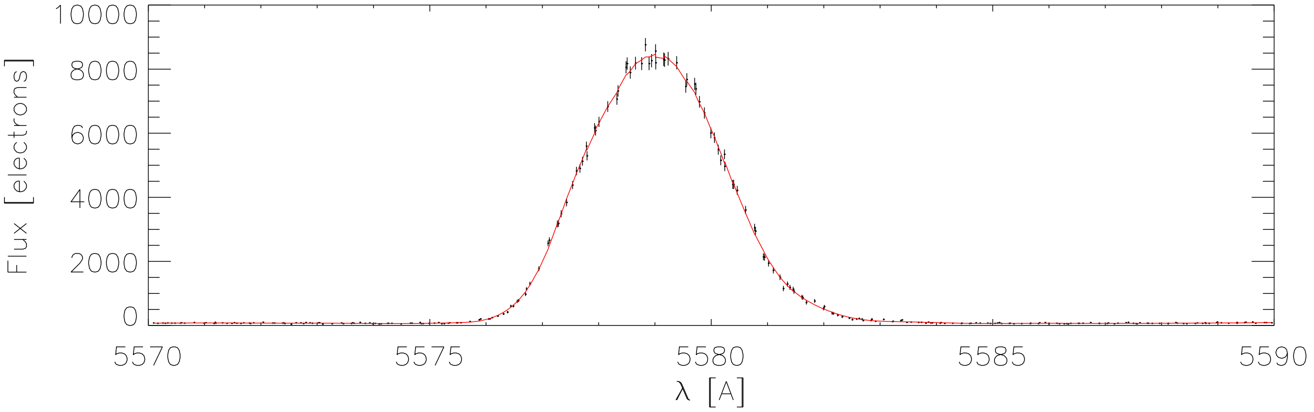

5895.9240


4046.5600
nfib1 16
nfib2 15
stdev 0.202
extra −0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.067
extra −0.24
5460.9400
nfib1 16
nfib2 16
stdev 0.056
extra 0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.012
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.032
extra 0.34
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

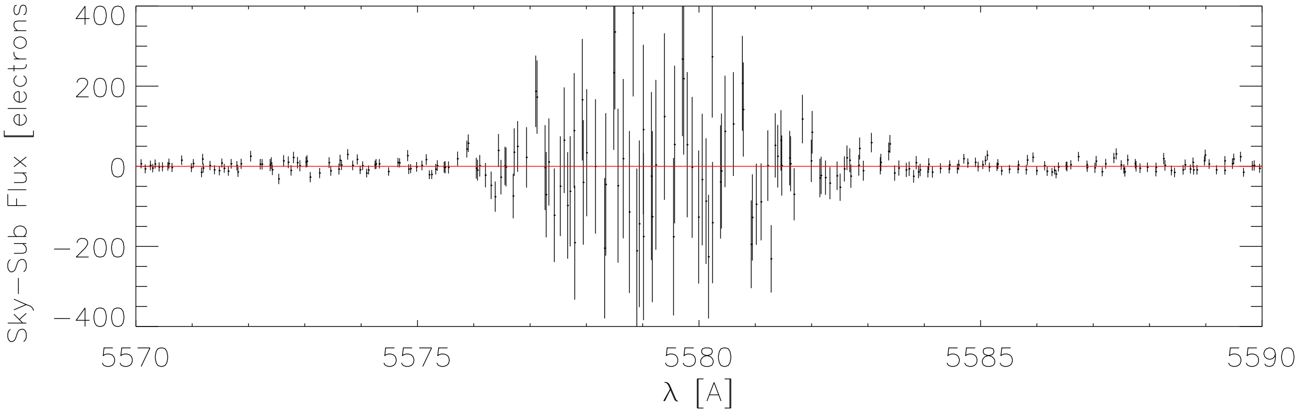

sky shift, pixels
0.2
0.0
−0.2
−0.4
3500
4000
4500
5000
5500
6000
6500


PLATE=0678 MJD=52884 Smooth superflat for sdR-b1-00022194.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= 0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

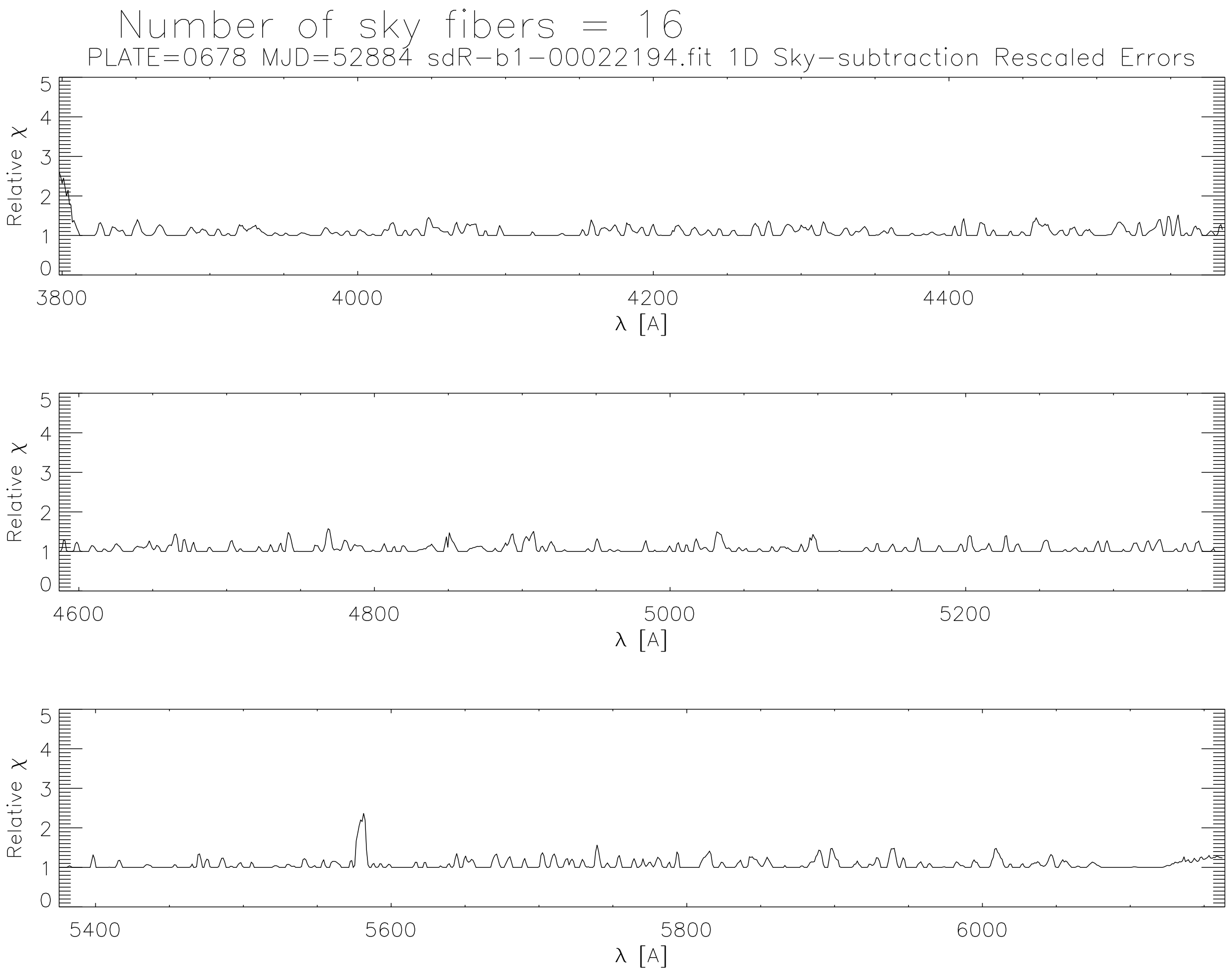

PLATE=0678 MJD=52884 sdR-b1-00022194.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

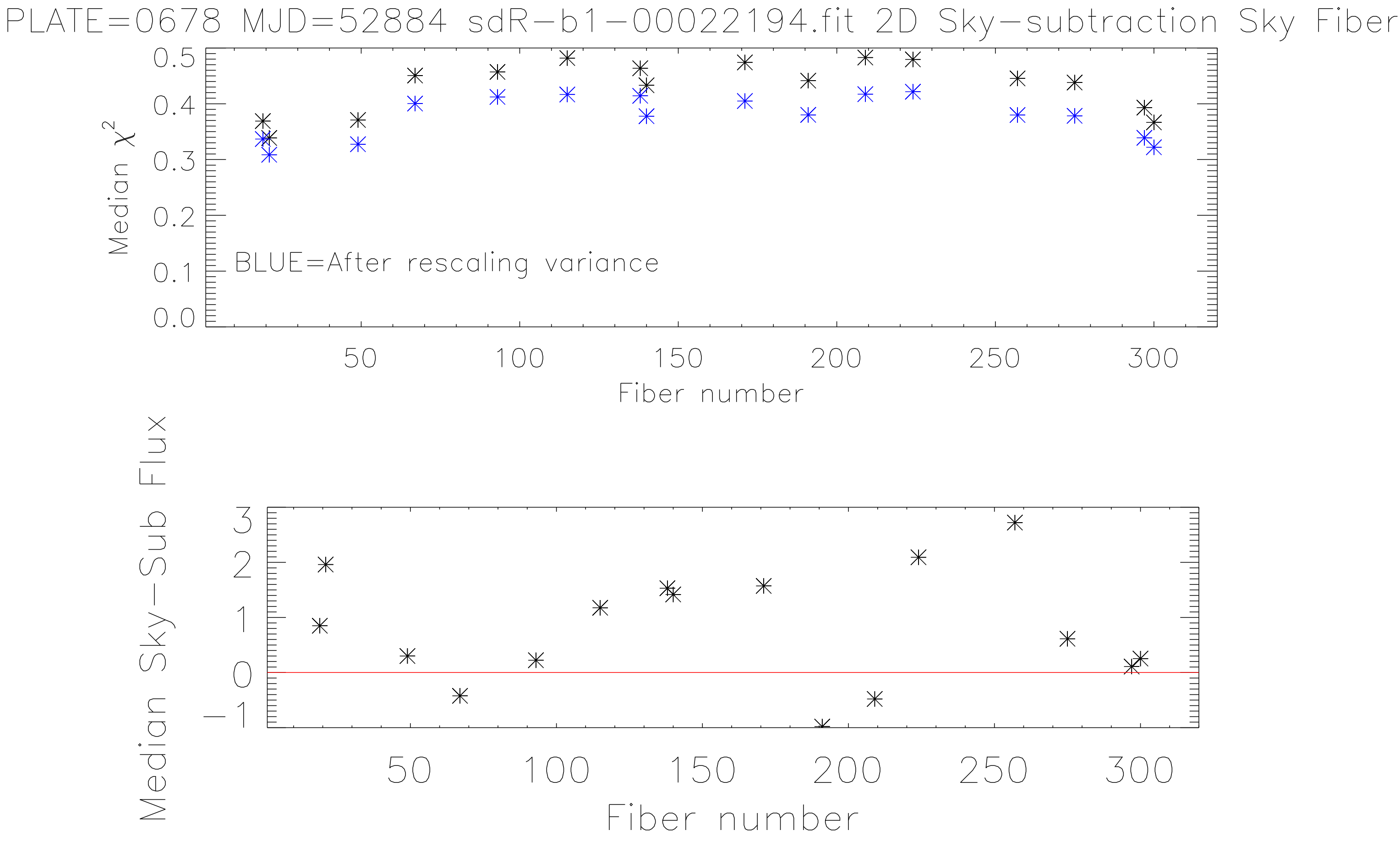


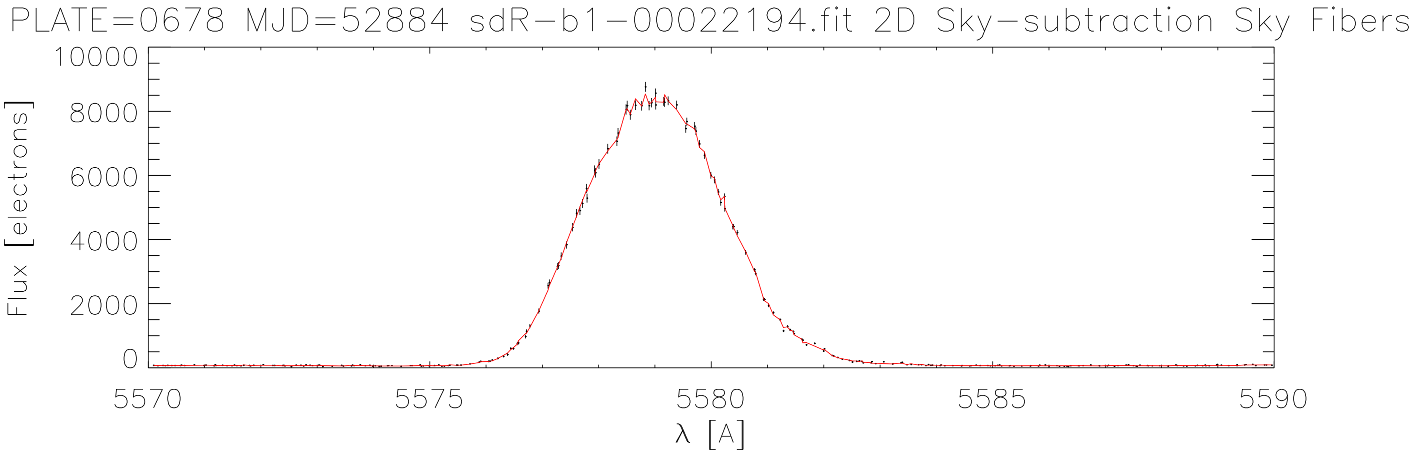
PLATE=0678 MJD=52884 sdR-b1-00022194.fit 1D Sky-subtraction Sky Fibers

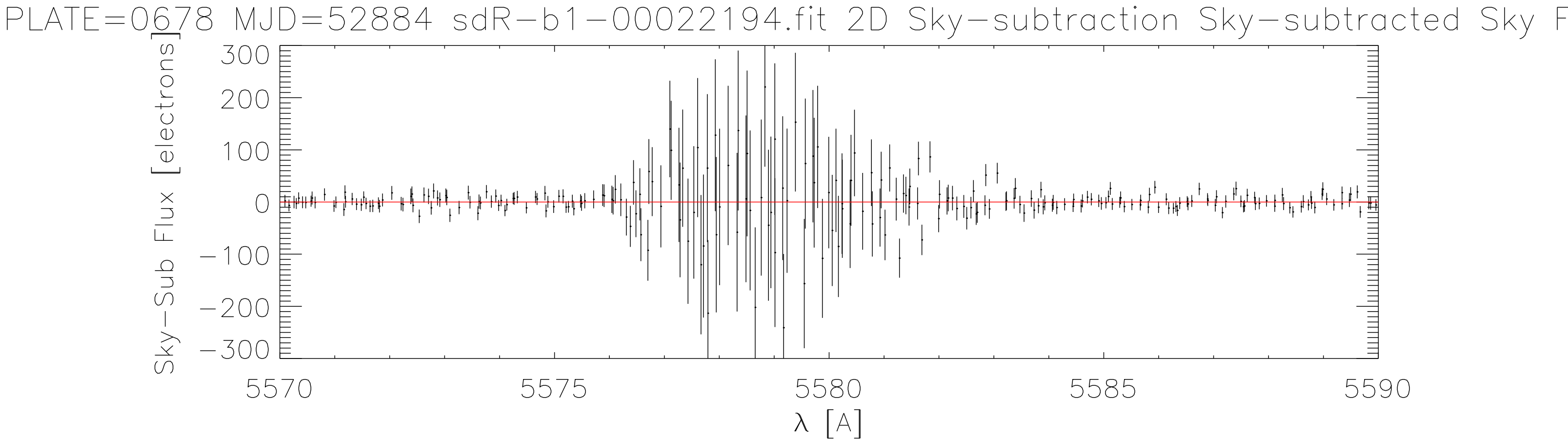


PLATE=0678 MJD=52884 sdR-b1-00022194.fit 1D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 16
PLATE=0678 MJD=52884 sdR-b1-00022194.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

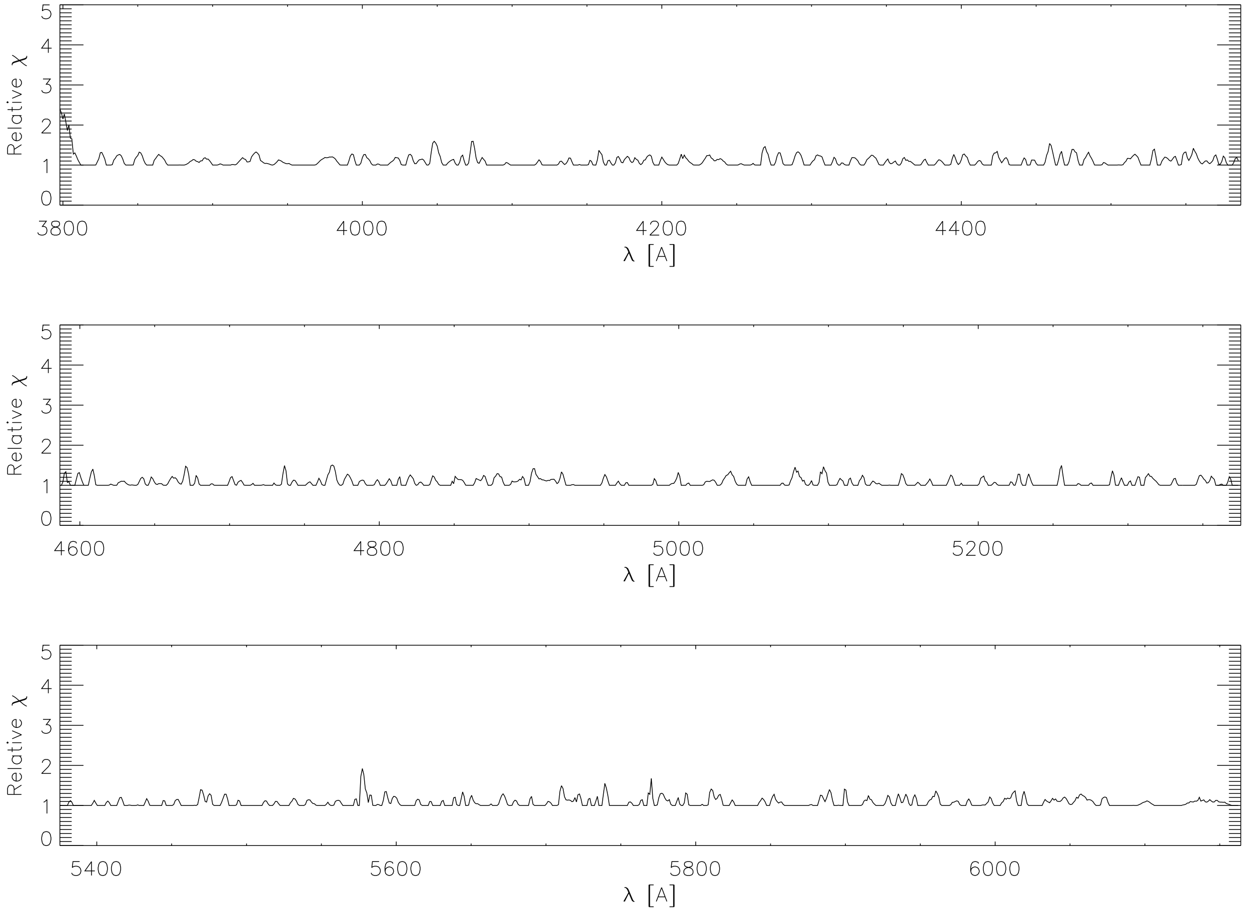

PLATE=0678 MJD=52884 sdR-b1-00022194.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-1
0
1
2
3
50
100
150
200
250
300
Fiber number


PLATE=0678 MJD=52884 sdR-b1-00022194.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

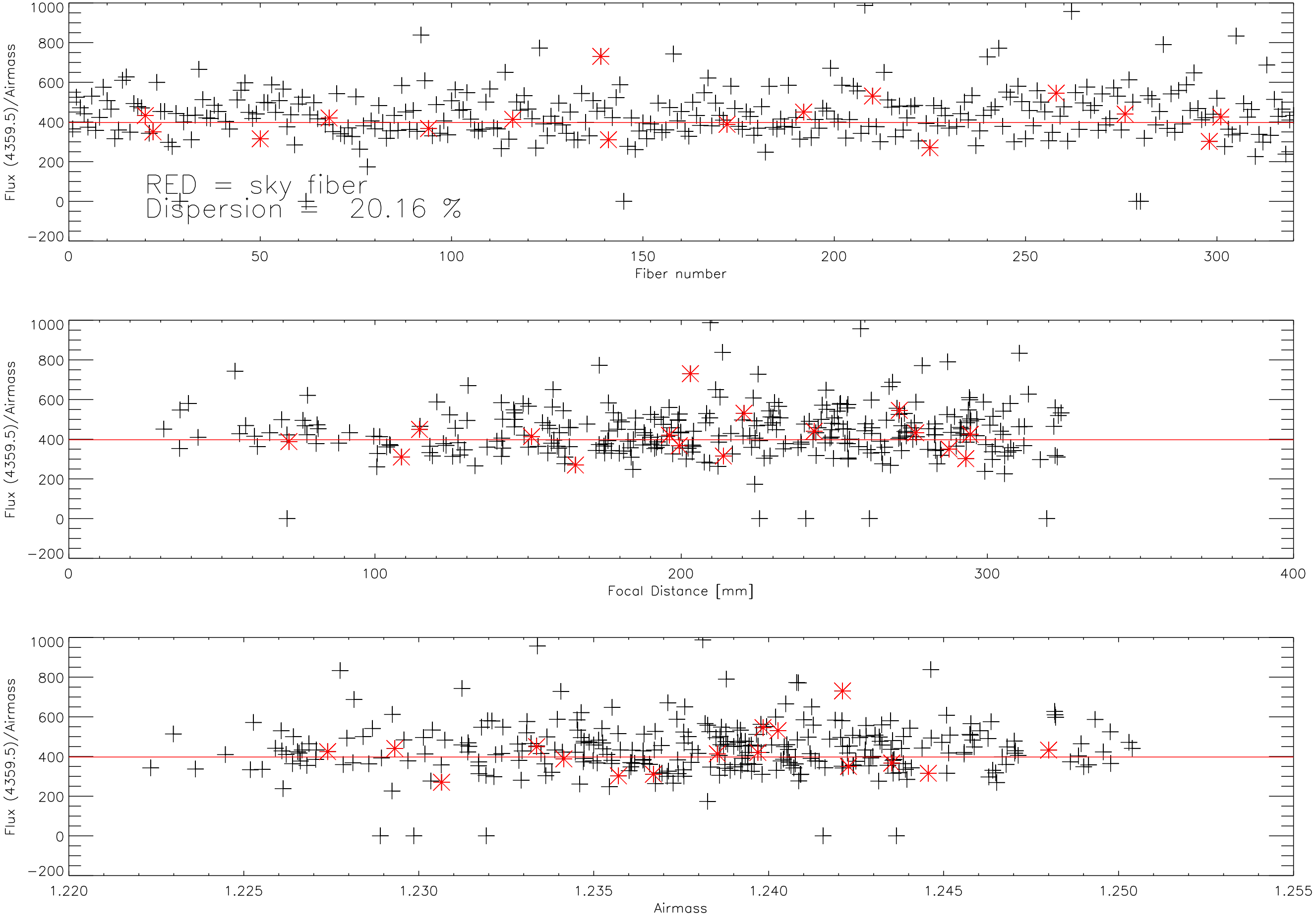

PLATE=0678 MJD=52884 sdR-b1-00022194.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

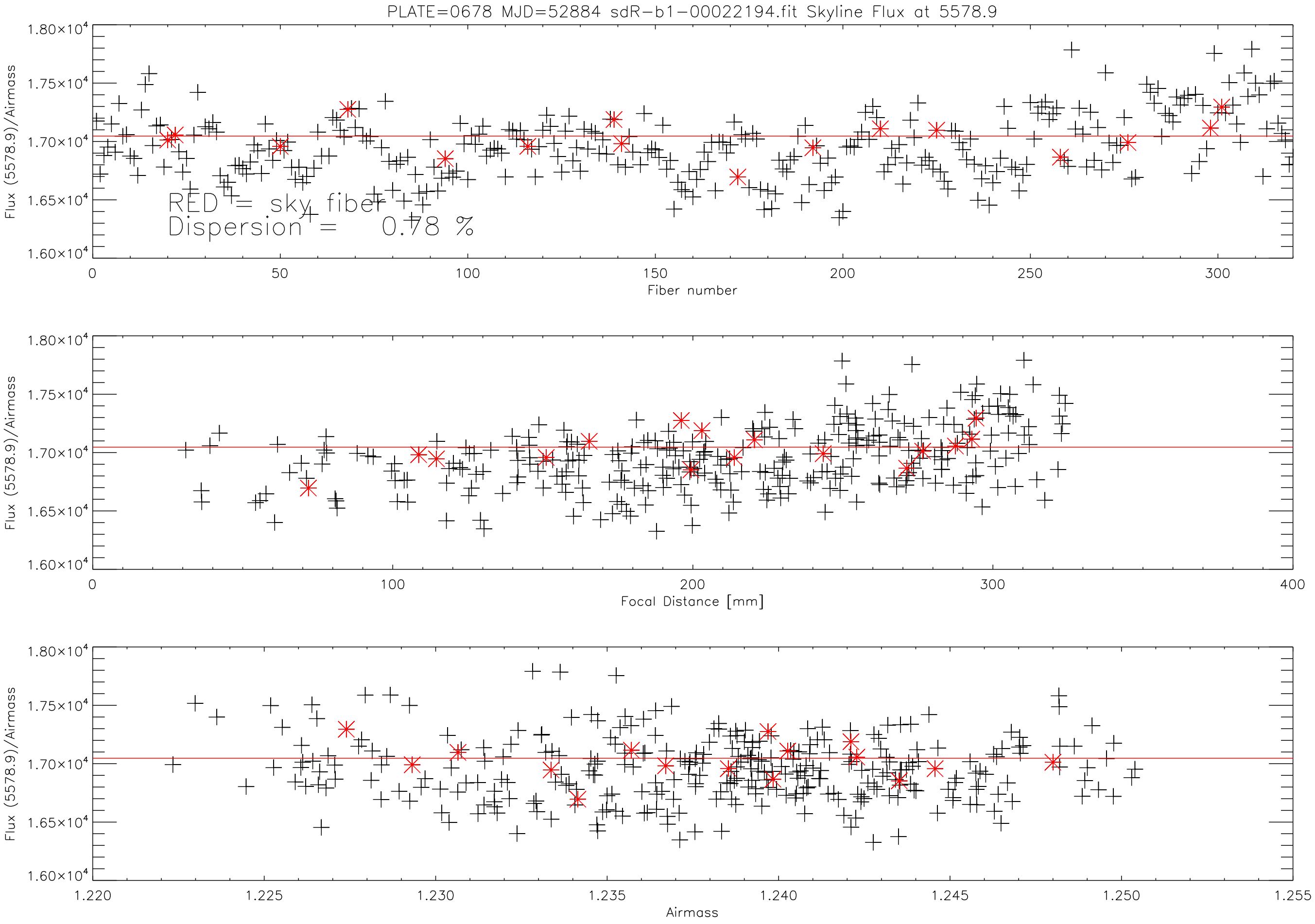
Number of sky fibers = 16

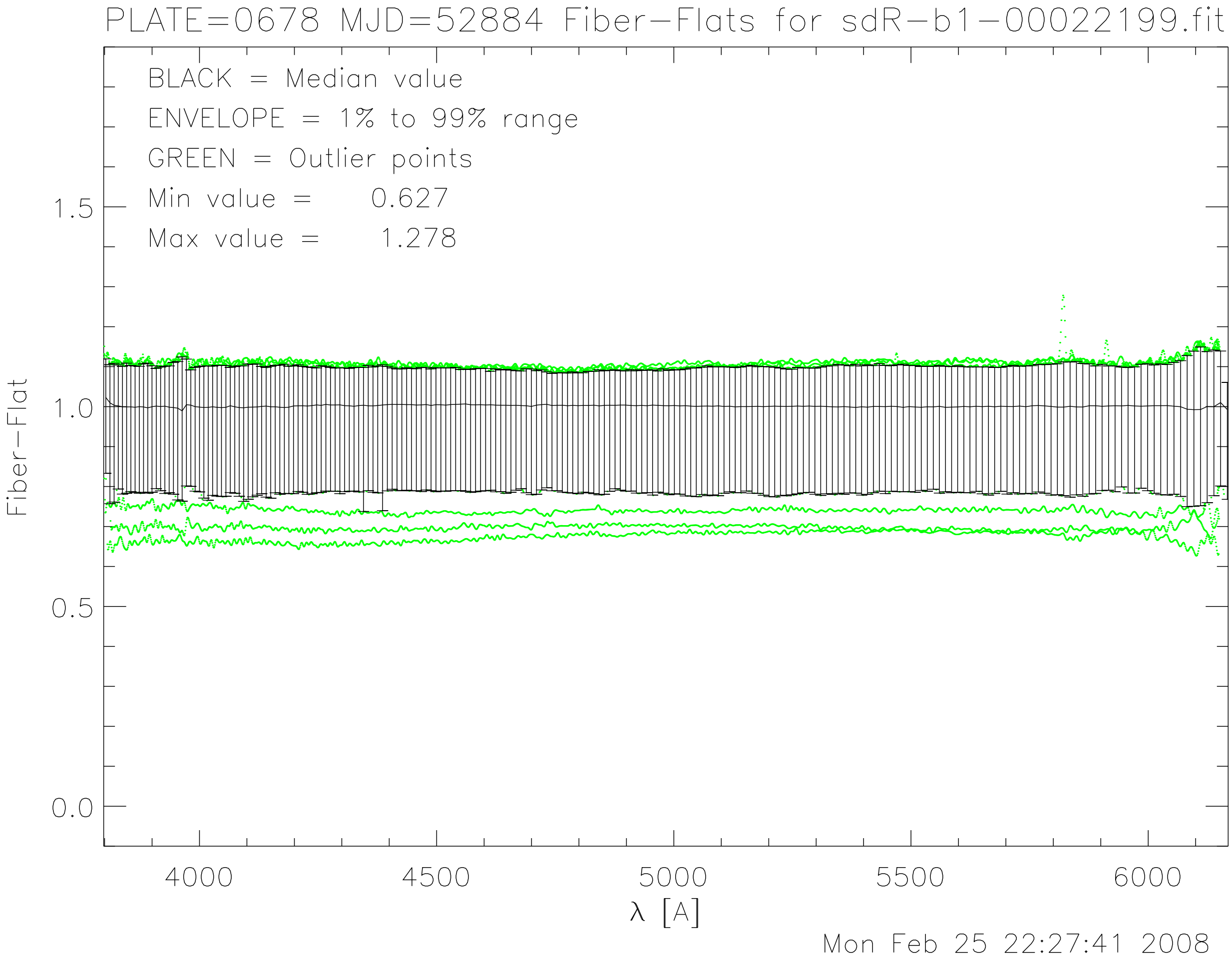
PLATE=0678 MJD=52884 sdR-b1-00022194.fit 2D Sky-subtraction Rescaled Errors



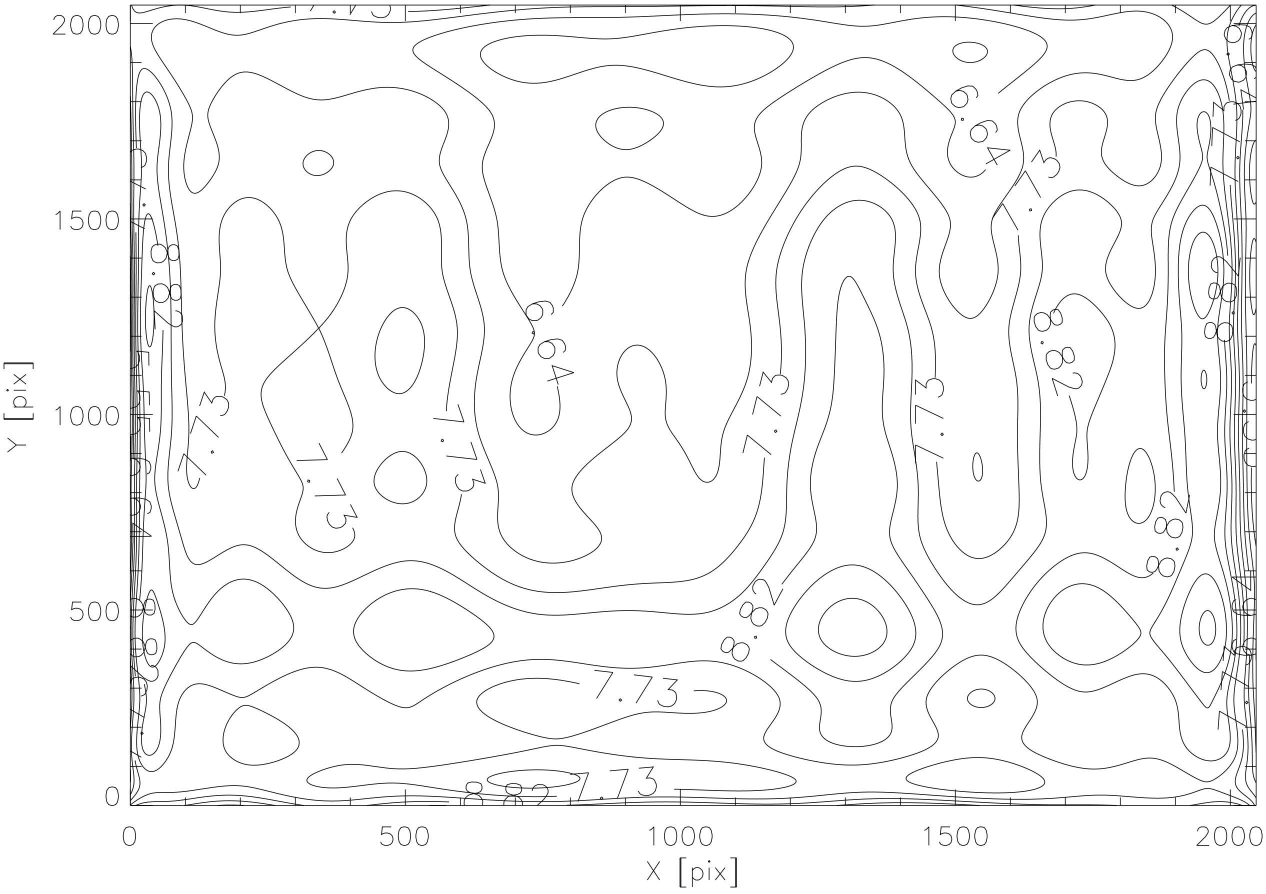
PLATE=0678 MJD=52884 sdR-b1-00022194.fit Skyline Flux at 4359.5

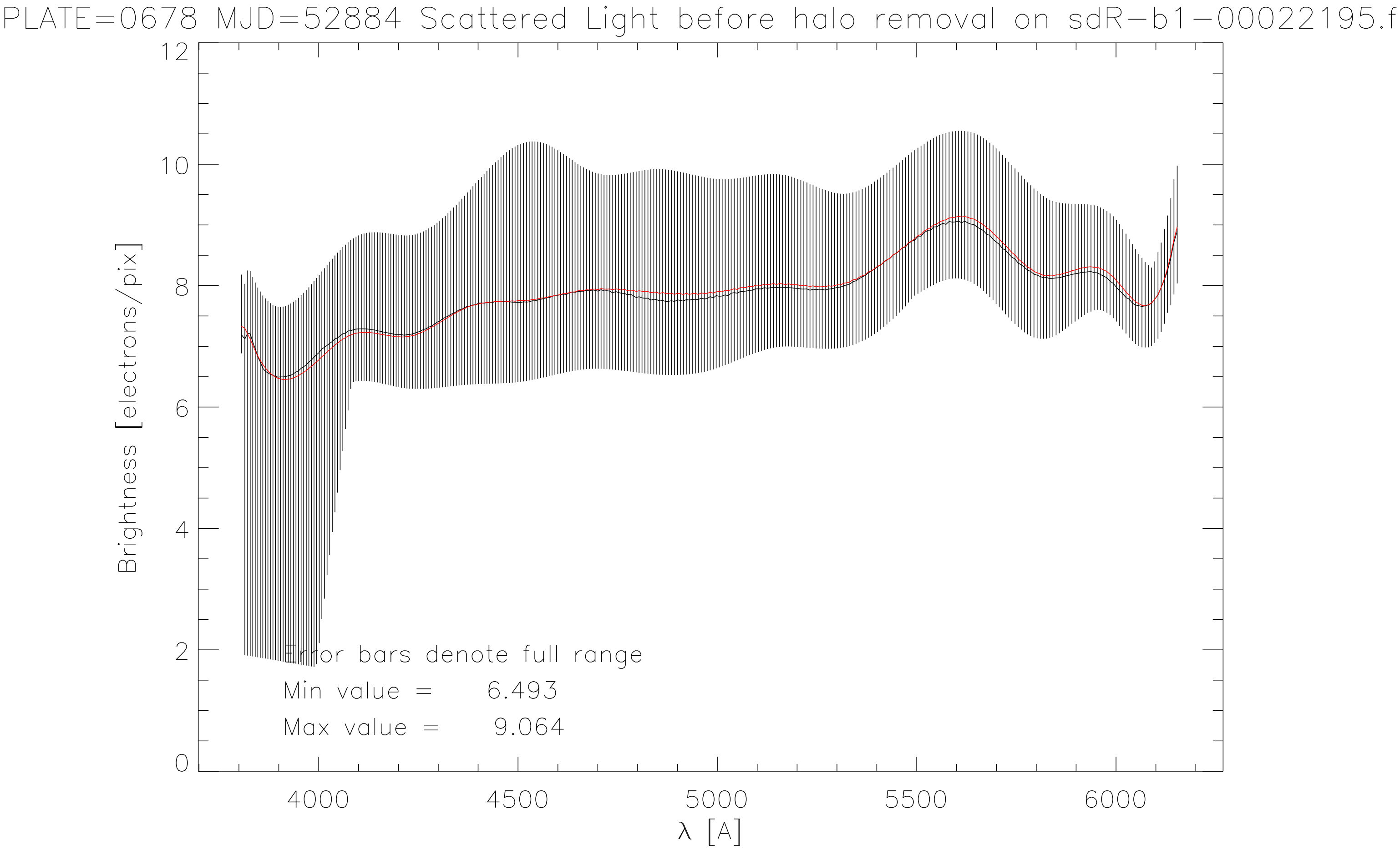



PLATE=0678 MJD=52884 sdR-b1-00022194.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 0.78 %
Flux (5578.9)/Airmass
1.80×10⁴
1.75×10⁴
1.70×10⁴
1.65×10⁴
1.60×10⁴
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.220
1.225
1.230
1.235
1.240
1.245
1.250
1.255
Airmass


PLATE=0678 MJD=52884 Fiber−Flats for sdR−b1−00022199.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.627
Max value = 1.278
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:27:41 2008

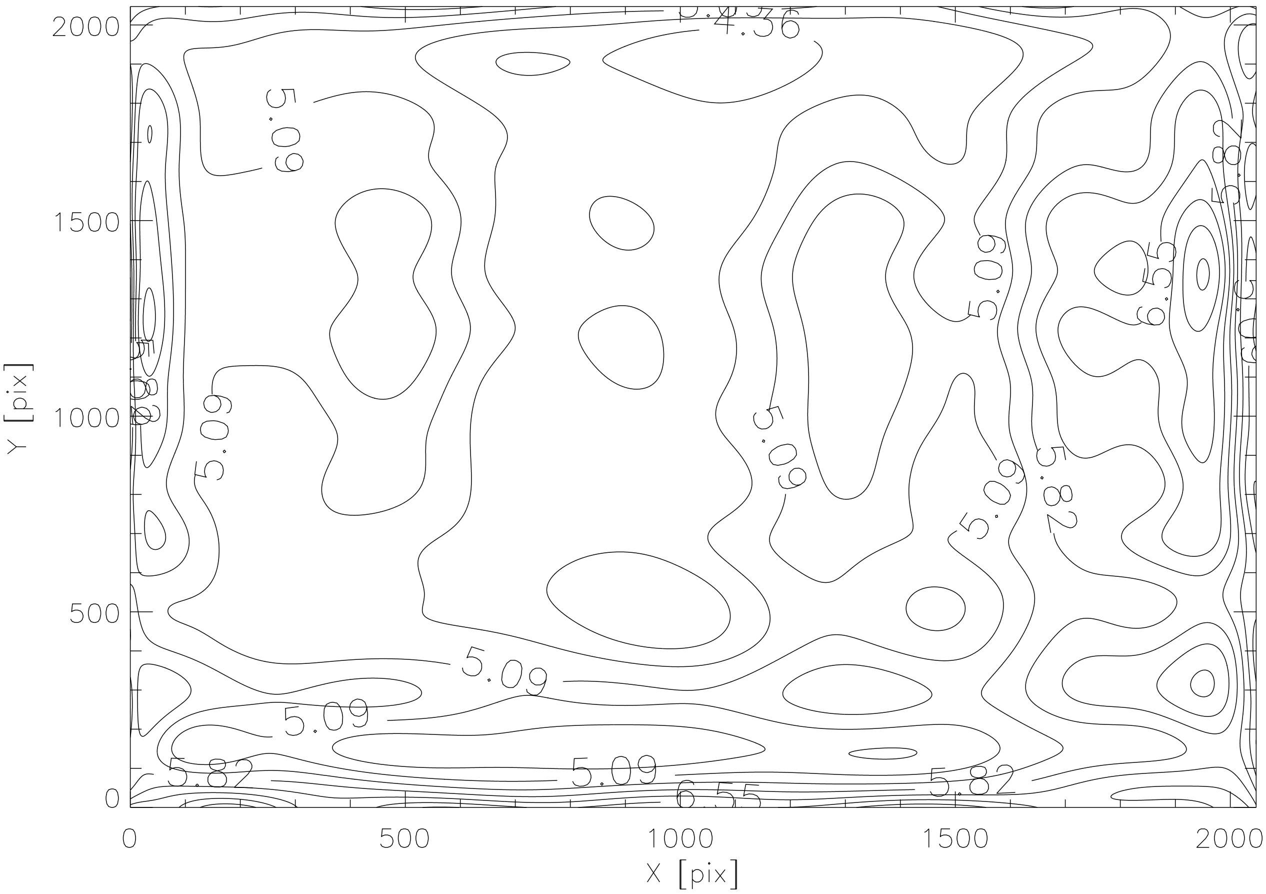
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022195.f



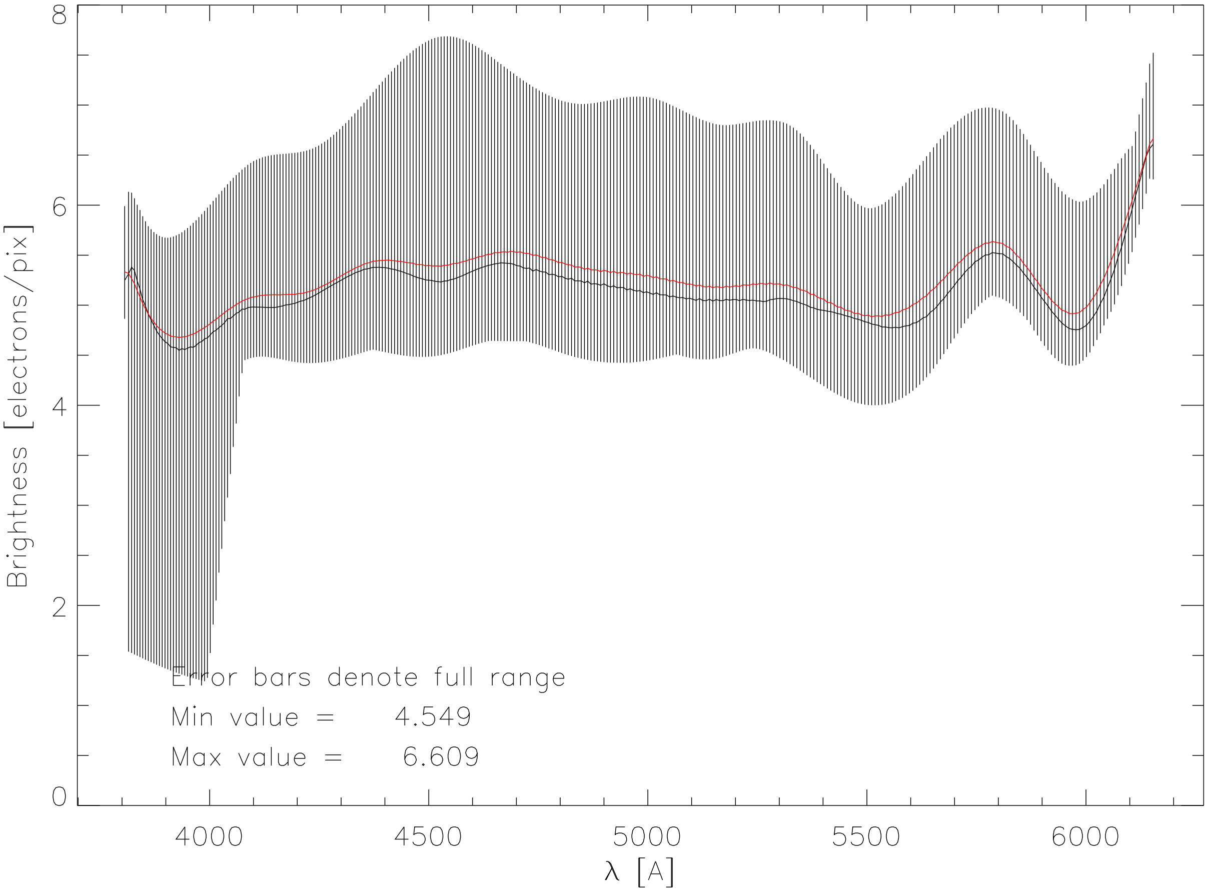


Mon Feb 25 22:28:43 2008

PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022195.fit



PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022195.fit

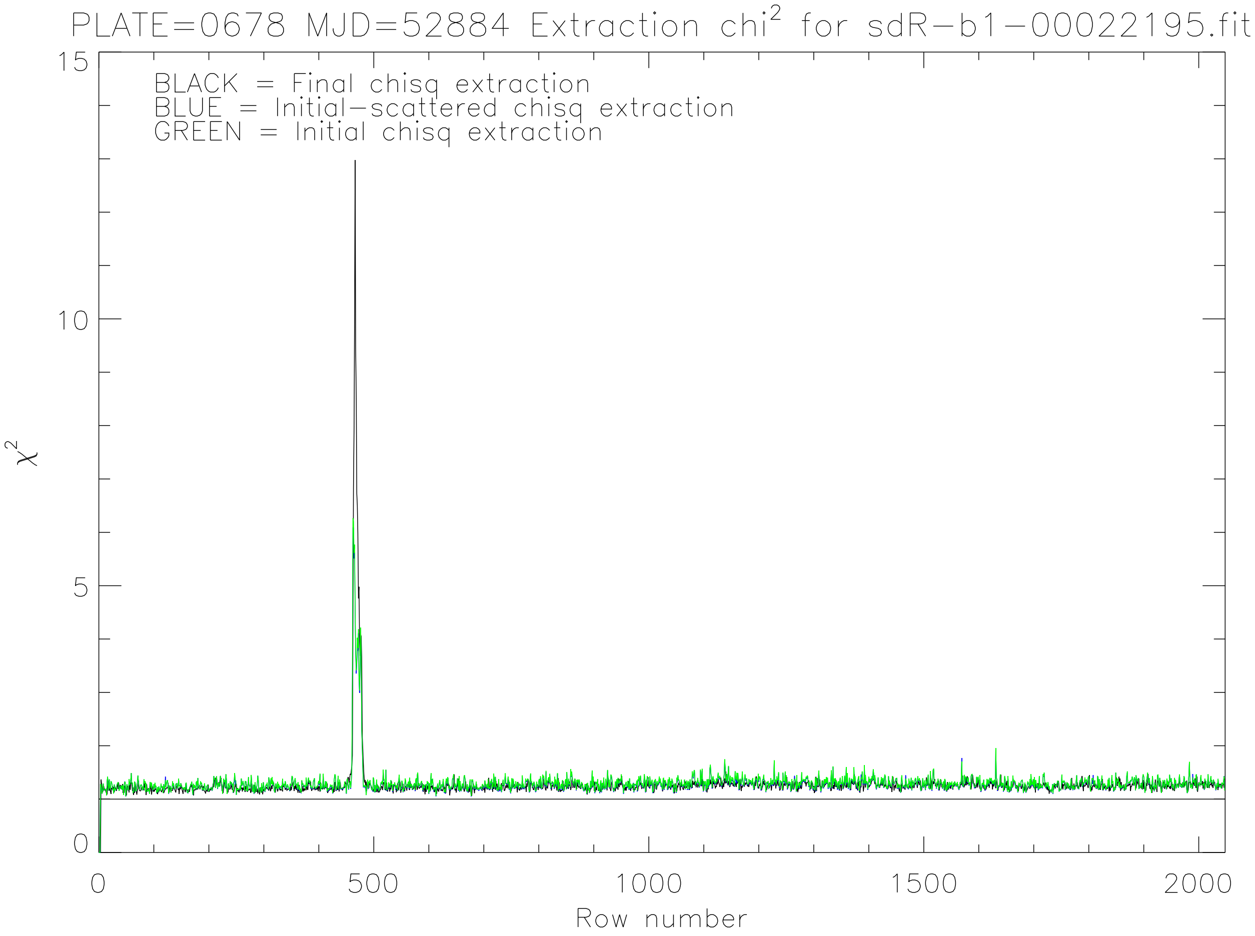


Error bars denote full range

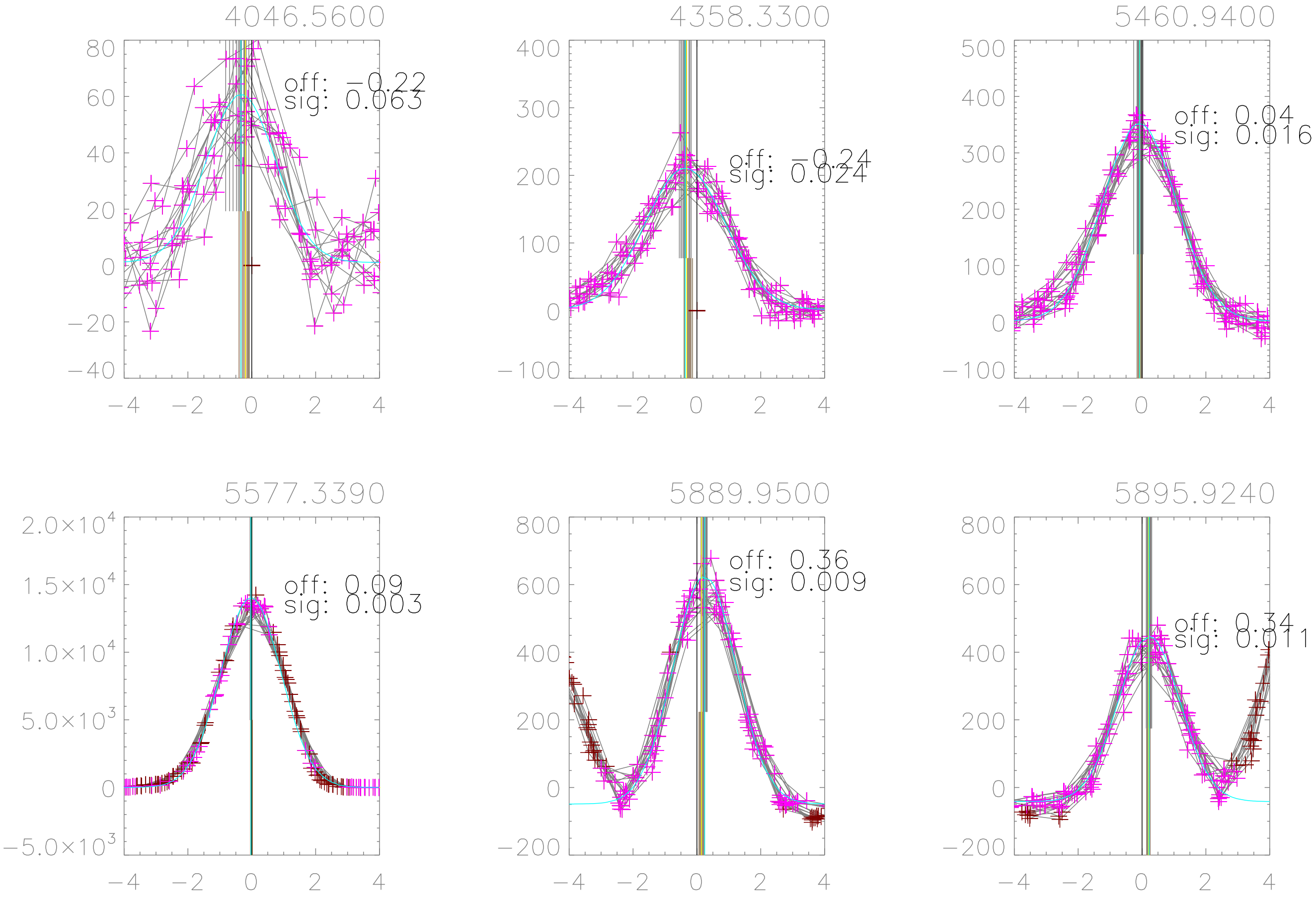
Min value = 4.549

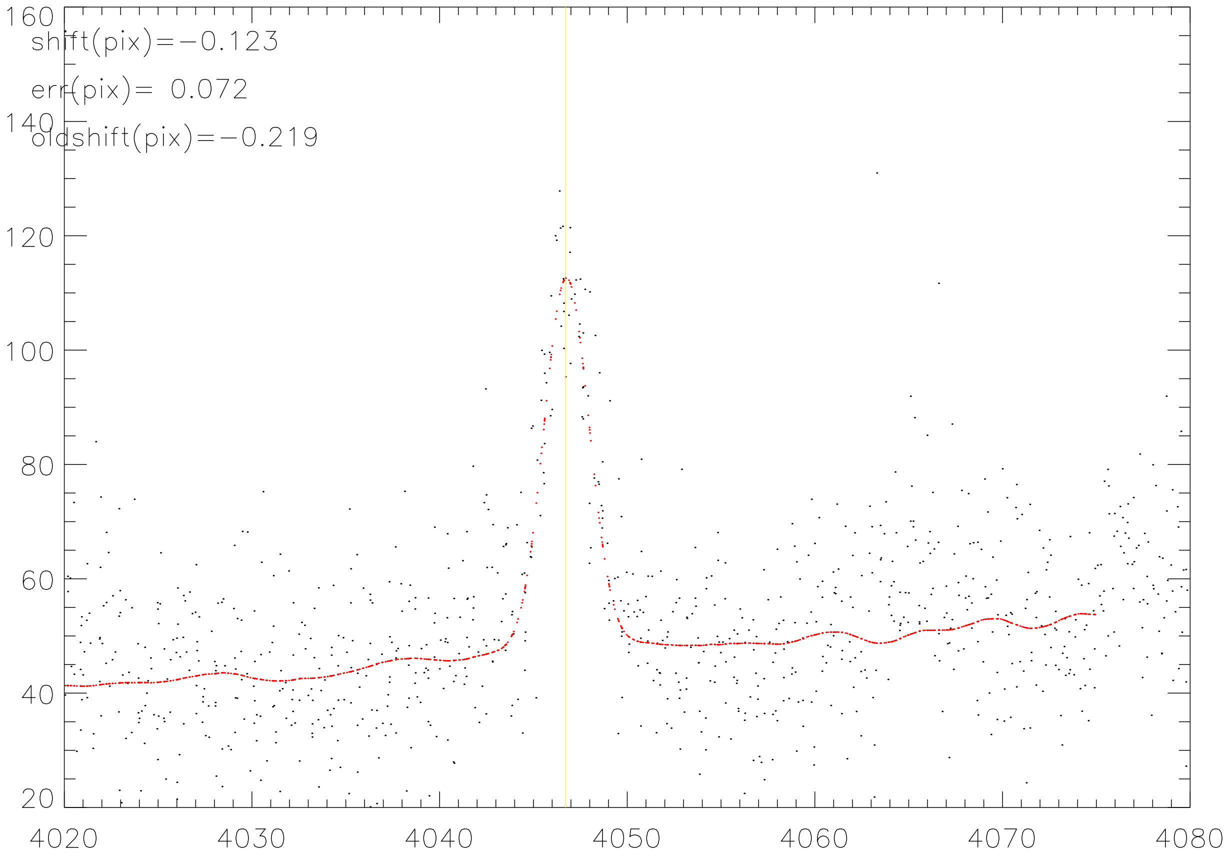
Max value = 6.609

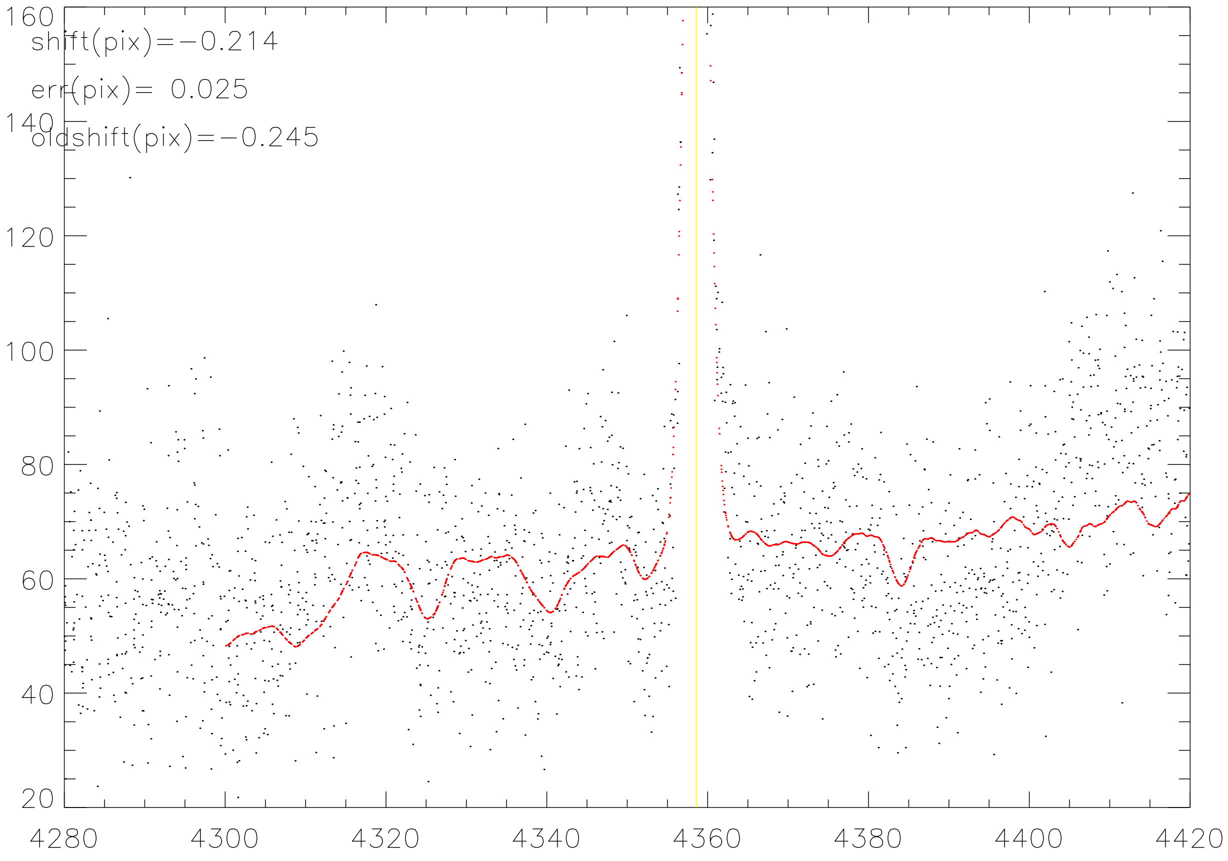
Mon Feb 25 22:32:12 2008



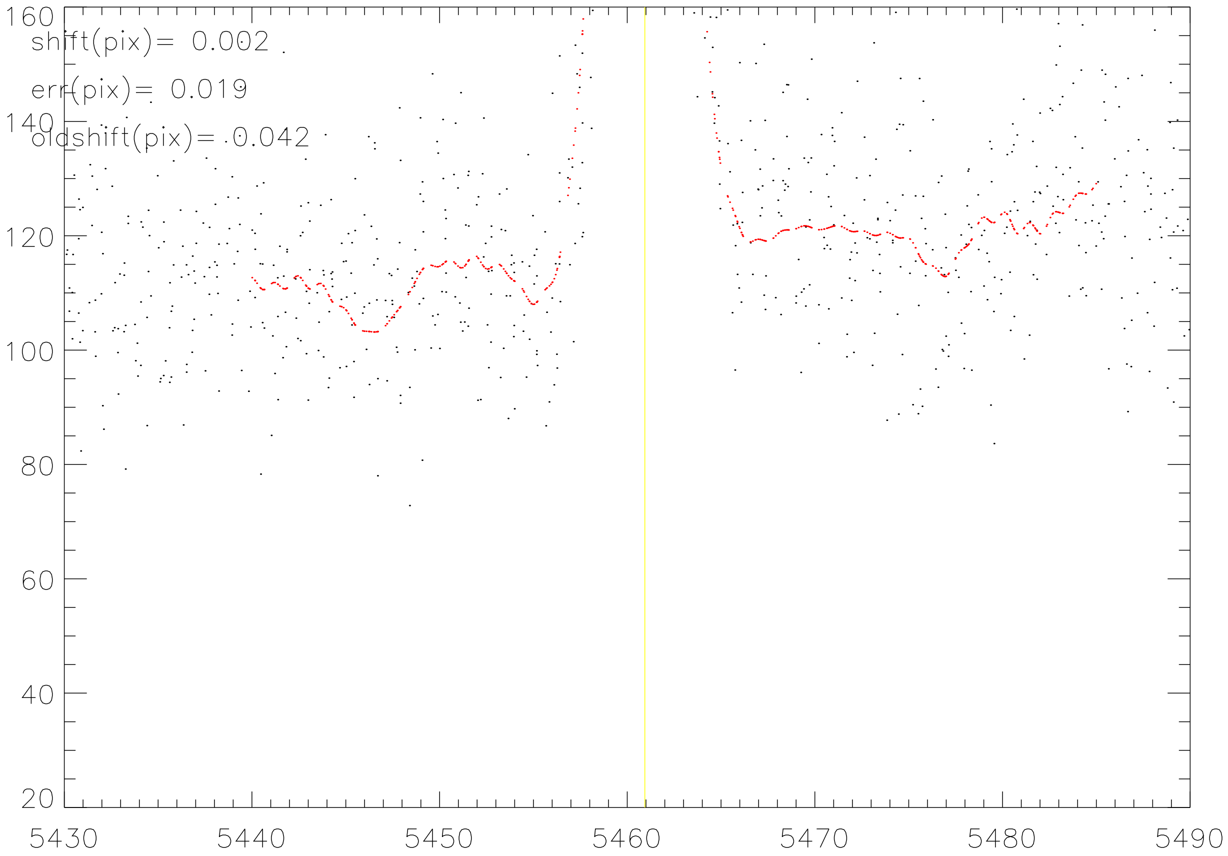
PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b1-00022195.fit

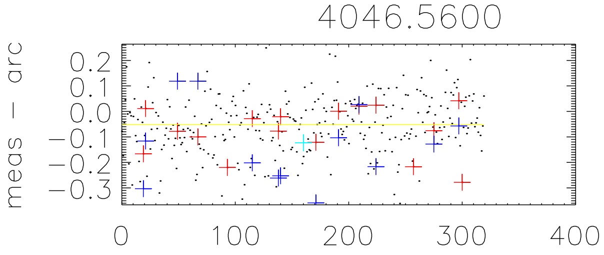

4046.5600
off: −0.22
sig: 0.063
80
60
40
20
0
−20
−40
−4
−2
0
2
4
4358.3300
off: −0.24
sig: 0.024
400
300
200
100
0
−100
−4
−2
0
2
4
5460.9400
off: 0.04
sig: 0.016
500
400
300
200
100
0
−100
−4
−2
0
2
4
5577.3390
off: 0.09
sig: 0.003
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
−5.0×10^3
−4
−2
0
2
4
5889.9500
off: 0.36
sig: 0.009
800
600
400
200
0
−200
−4
−2
0
2
4
5895.9240
off: 0.34
sig: 0.011
800
600
400
200
0
−200
−4
−2
0
2
4

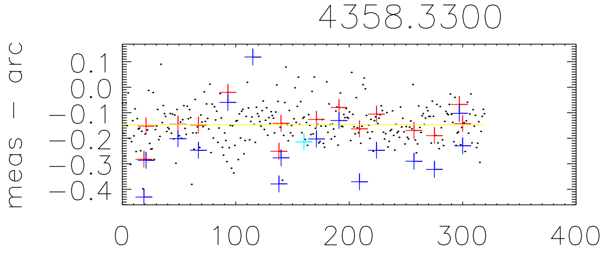

shift(pix)=−0.123
err(pix)= 0.072
oldshift(pix)=−0.219
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

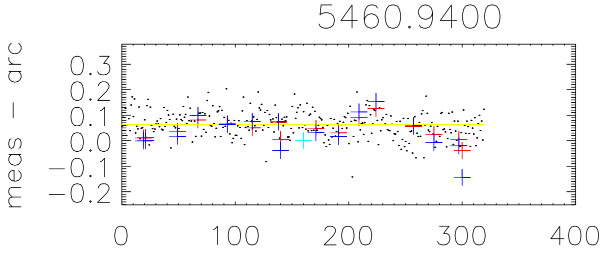


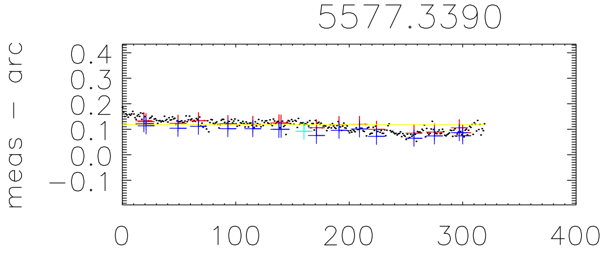
shift(pix)=−0.214
err(pix)= 0.025
oldshift(pix)=−0.245
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

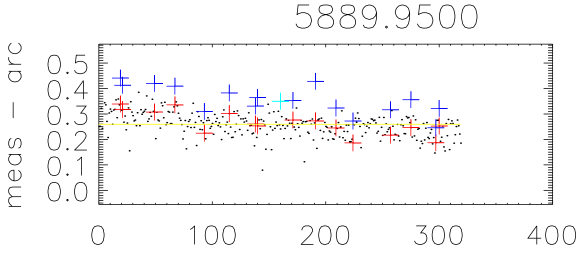

shift(pix)= 0.002
err(pix)= 0.019
oldshift(pix)= 0.042
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

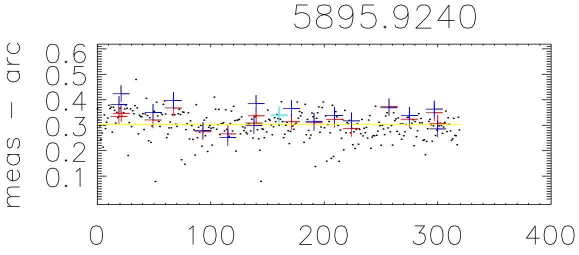

4046.5600
meas - arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

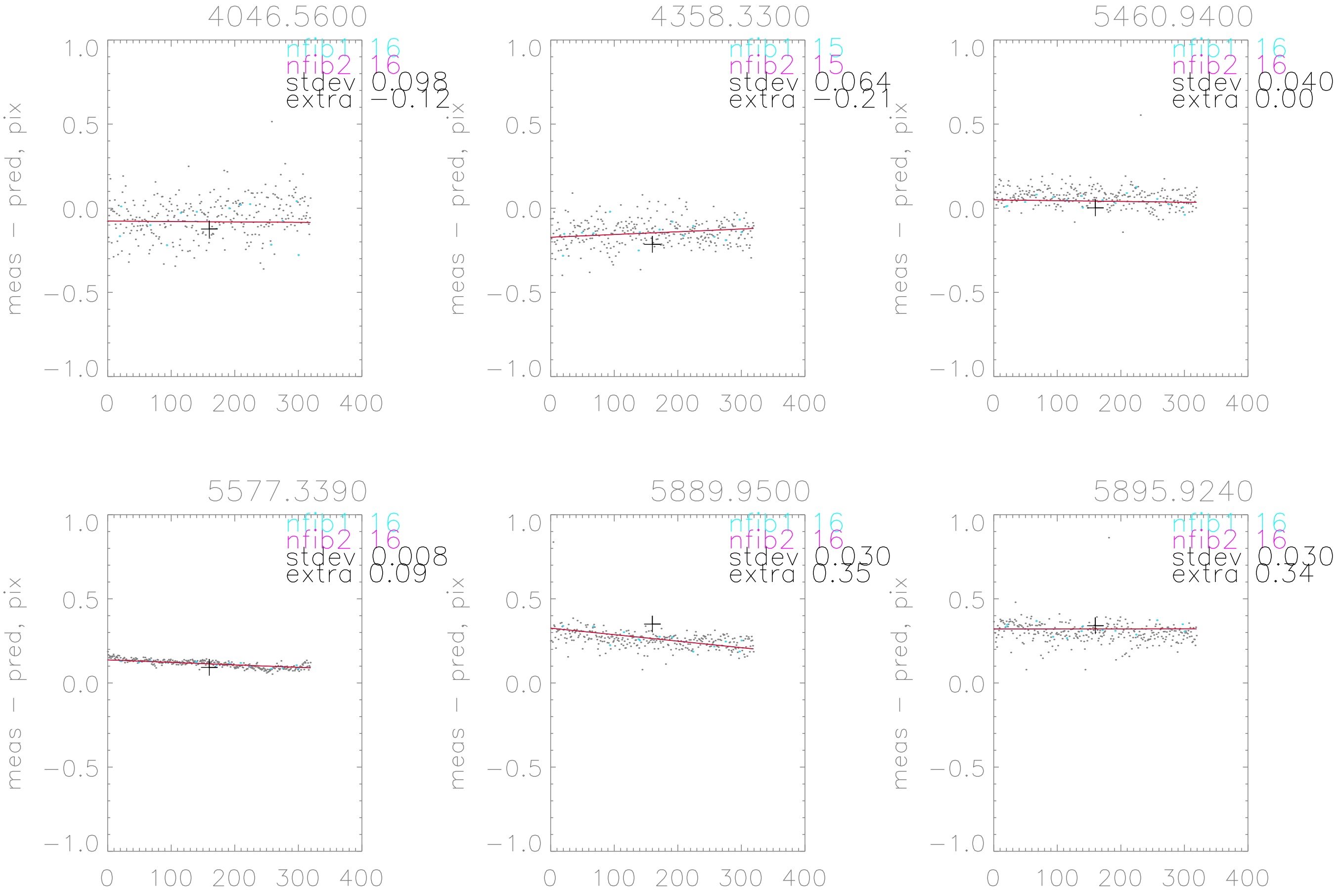

4358.3300
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

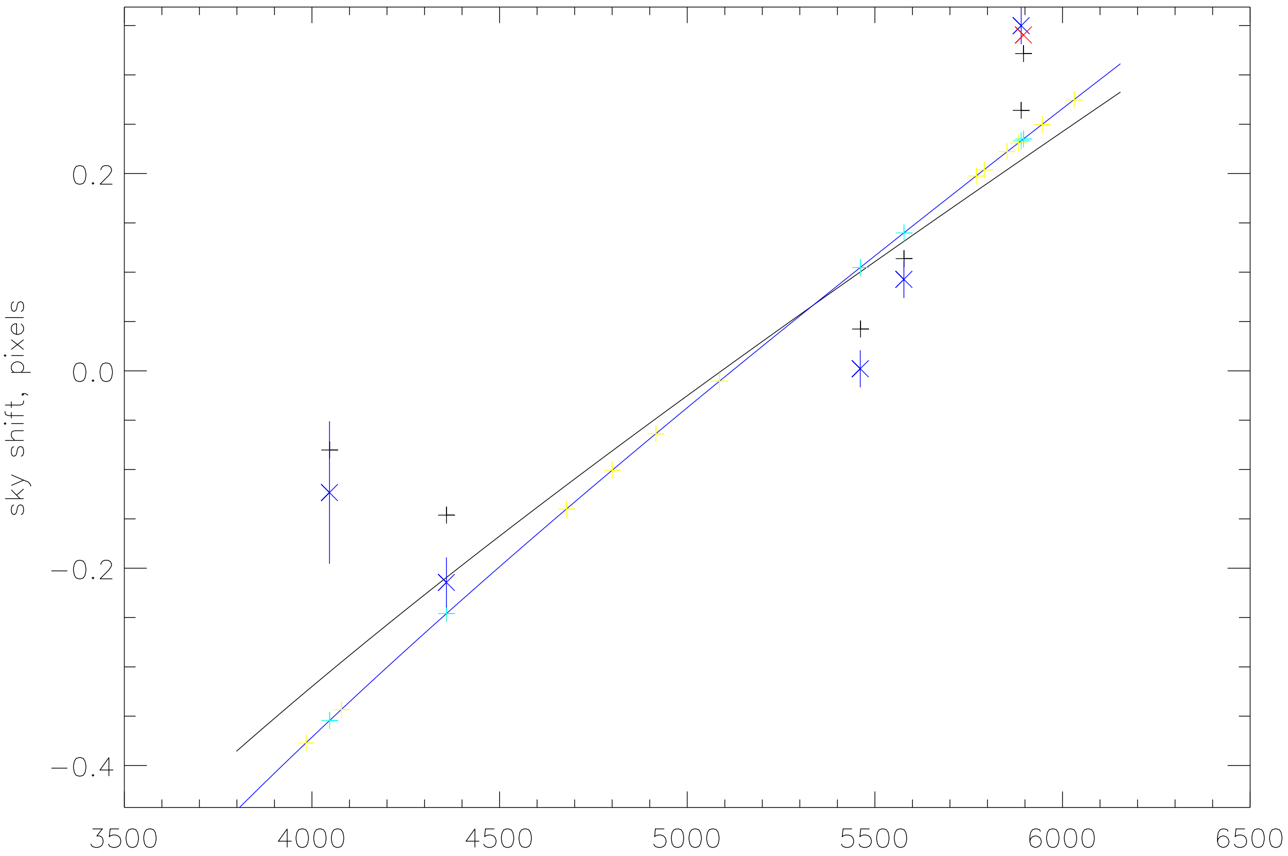

5460.9400
meas - arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

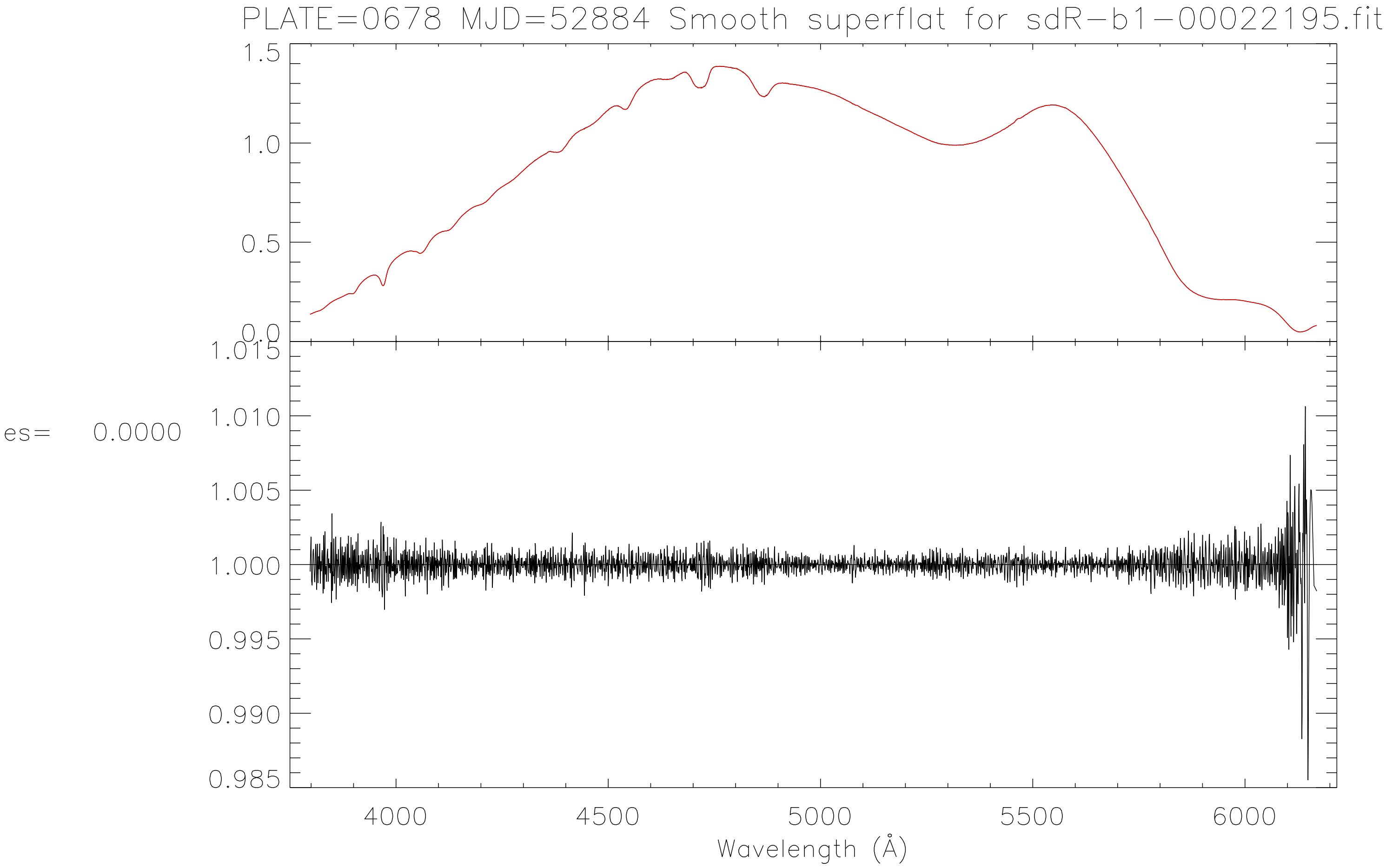

5577.3390
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

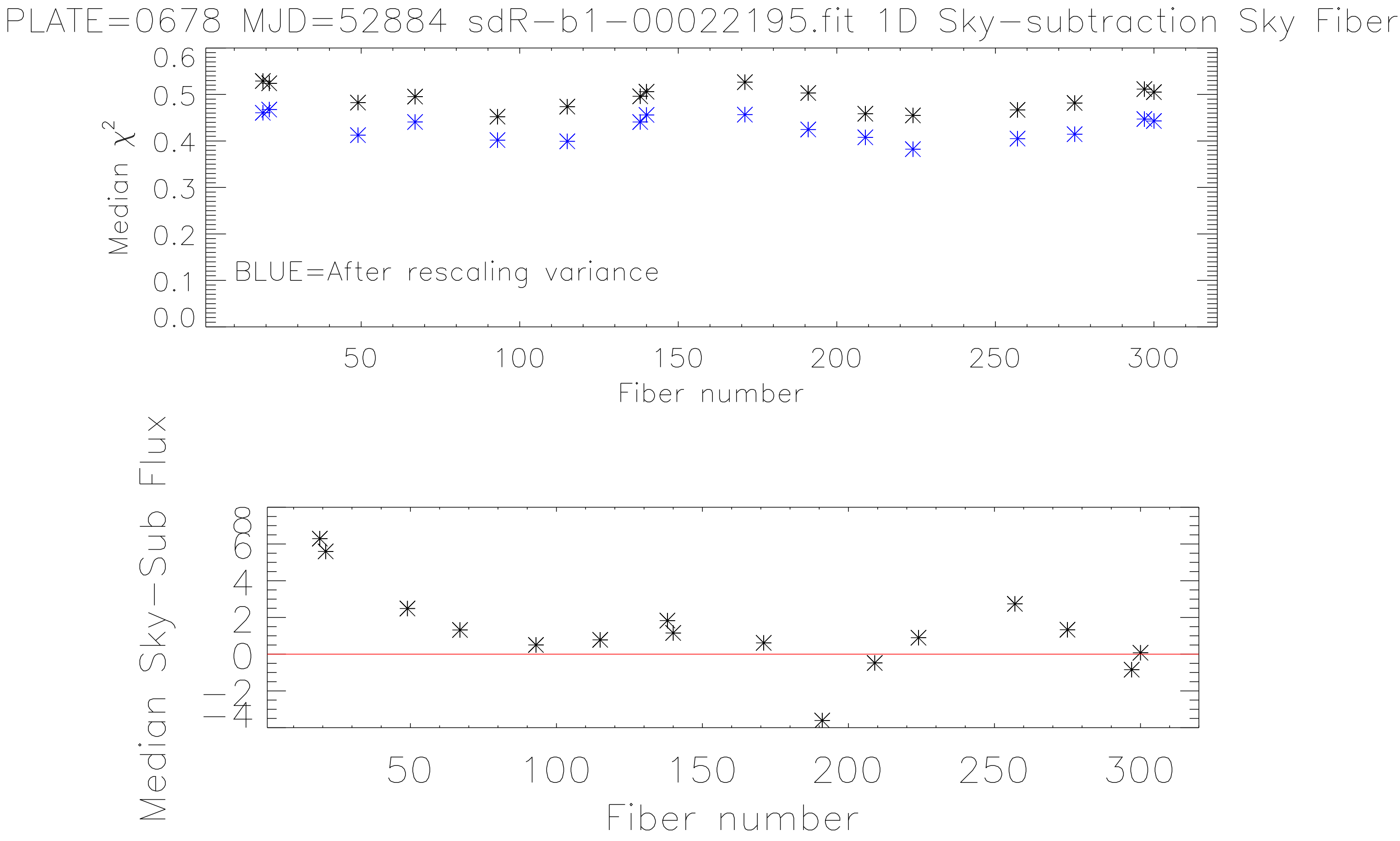

5889.9500
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

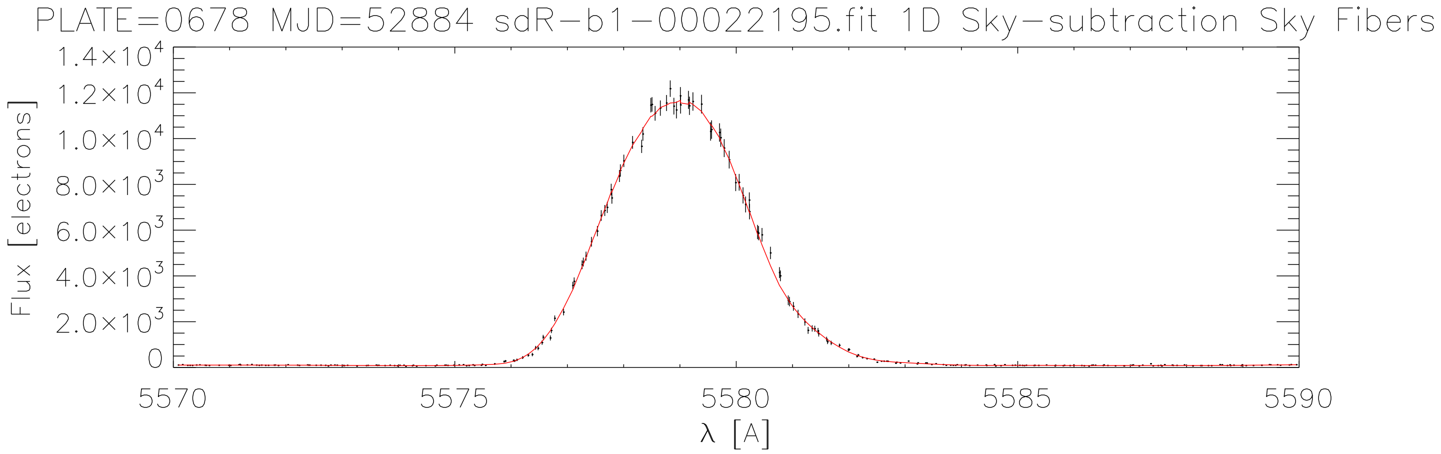

5895.9240
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

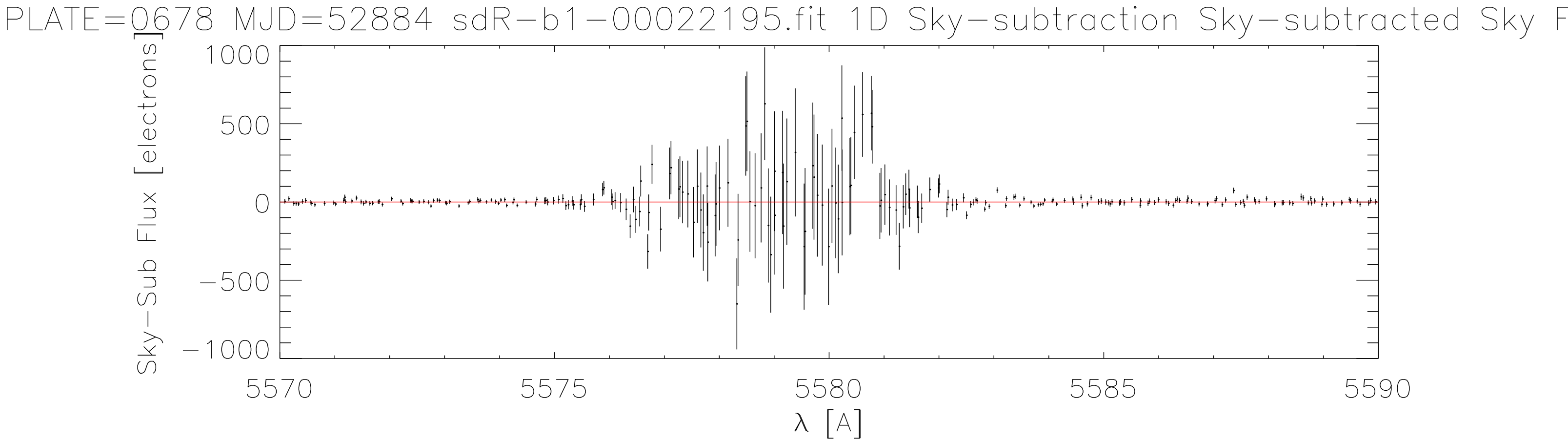

4046.5600
nfib1 16
nfib2 16
stdev 0.098
extra −0.12
4358.3300
nfib1 15
nfib2 15
stdev 0.064
extra −0.21
5460.9400
nfib1 16
nfib2 16
stdev 0.040
extra 0.00
5577.3390
nfib1 16
nfib2 16
stdev 0.008
extra 0.09
5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra 0.35
5895.9240
nfib1 16
nfib2 16
stdev 0.030
extra 0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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


PLATE=0678 MJD=52884 Smooth superflat for sdR-b1-00022195.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es=
0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

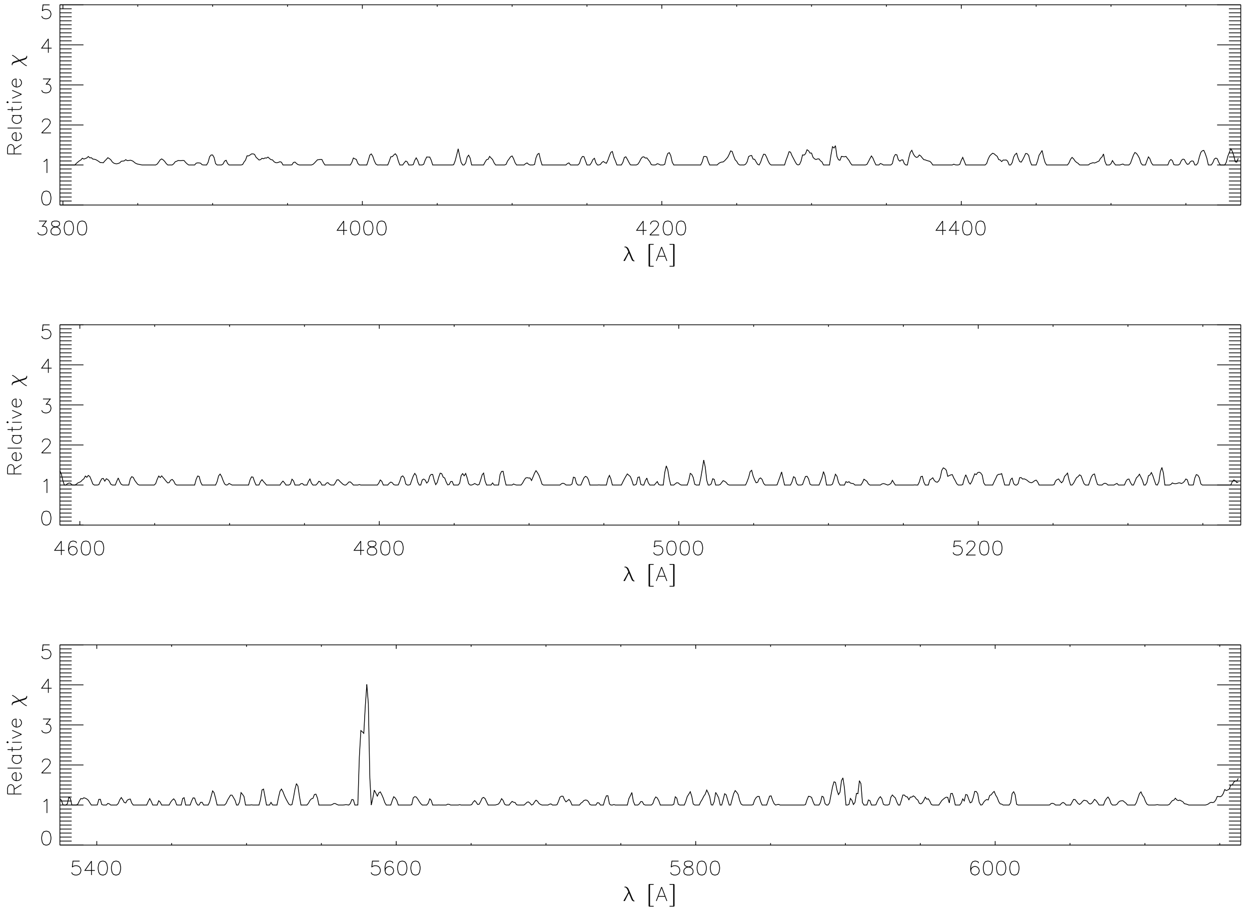

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

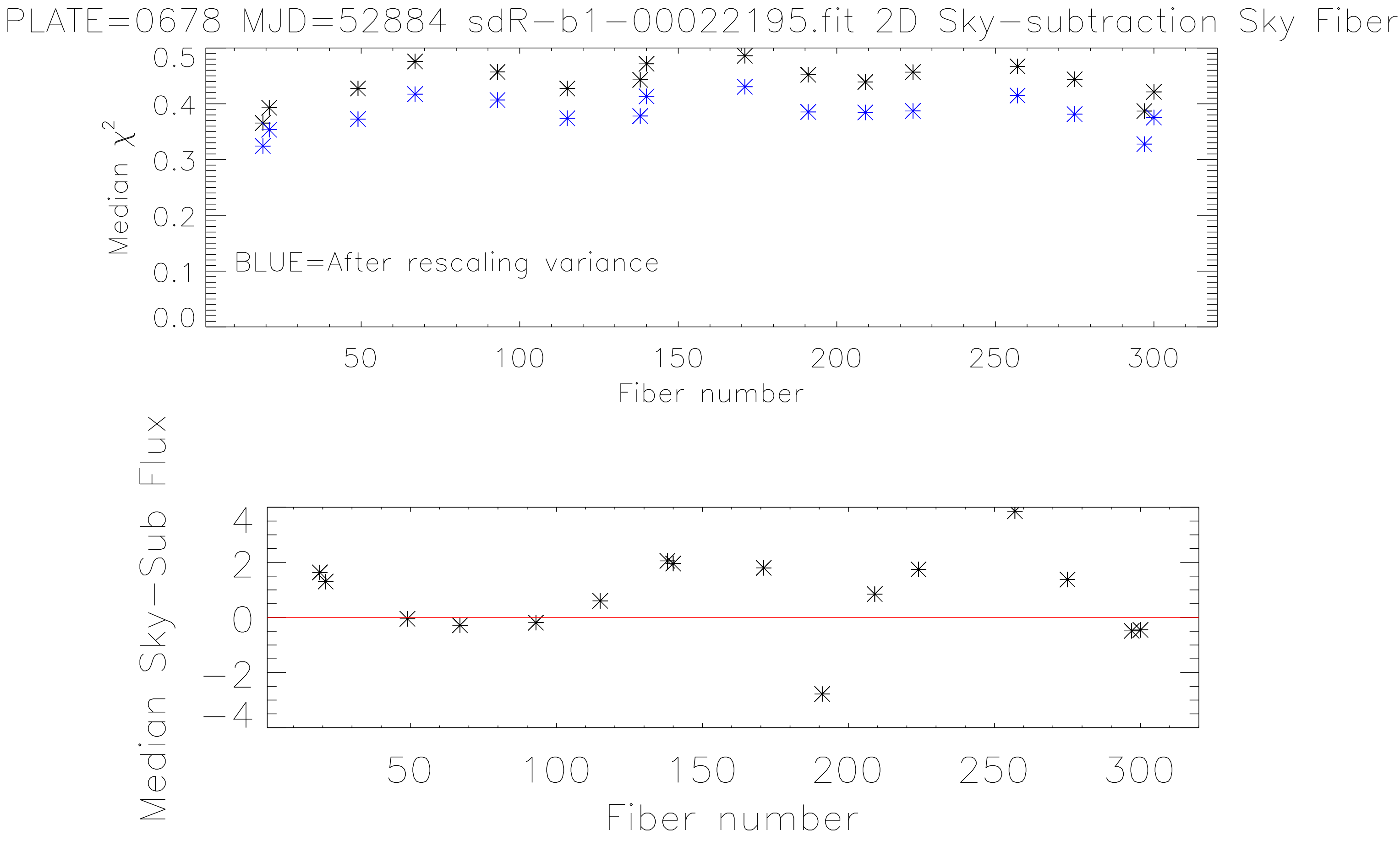

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

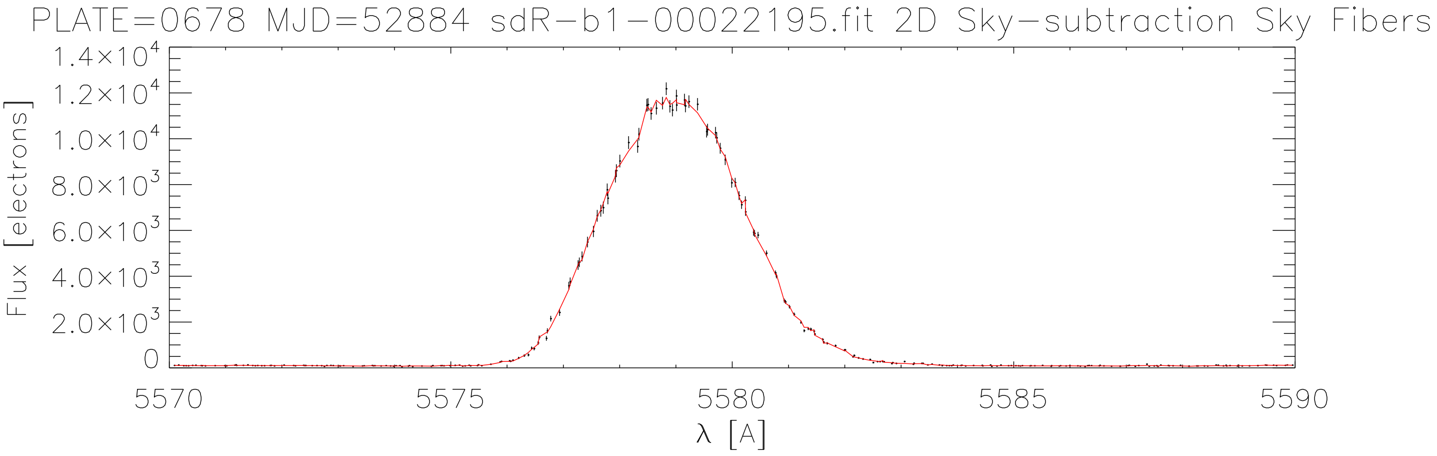

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

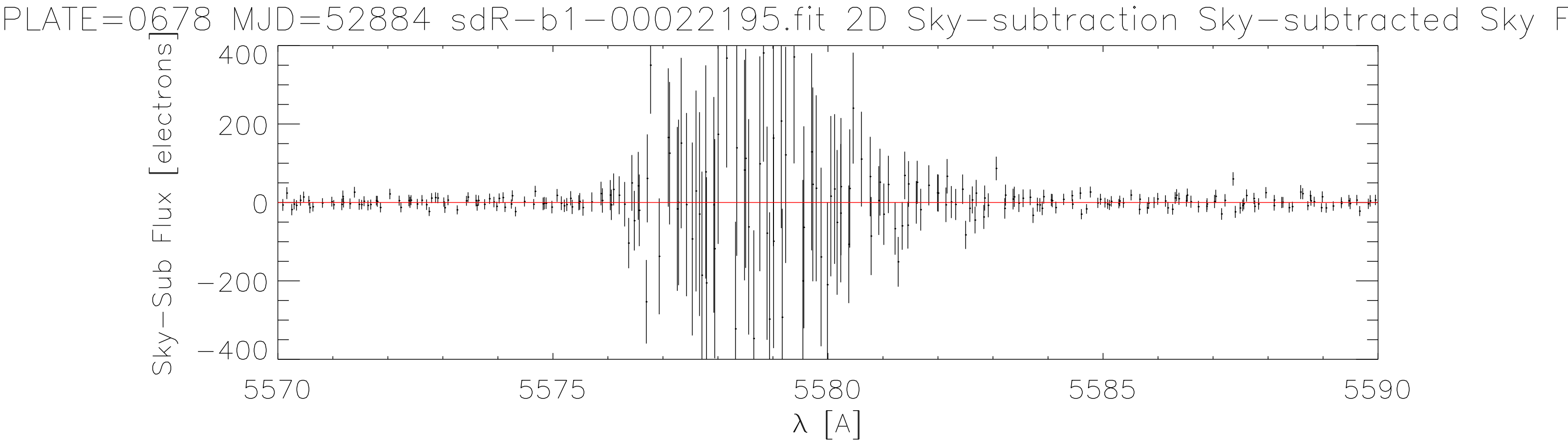
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 1D Sky-subtraction Rescaled Errors



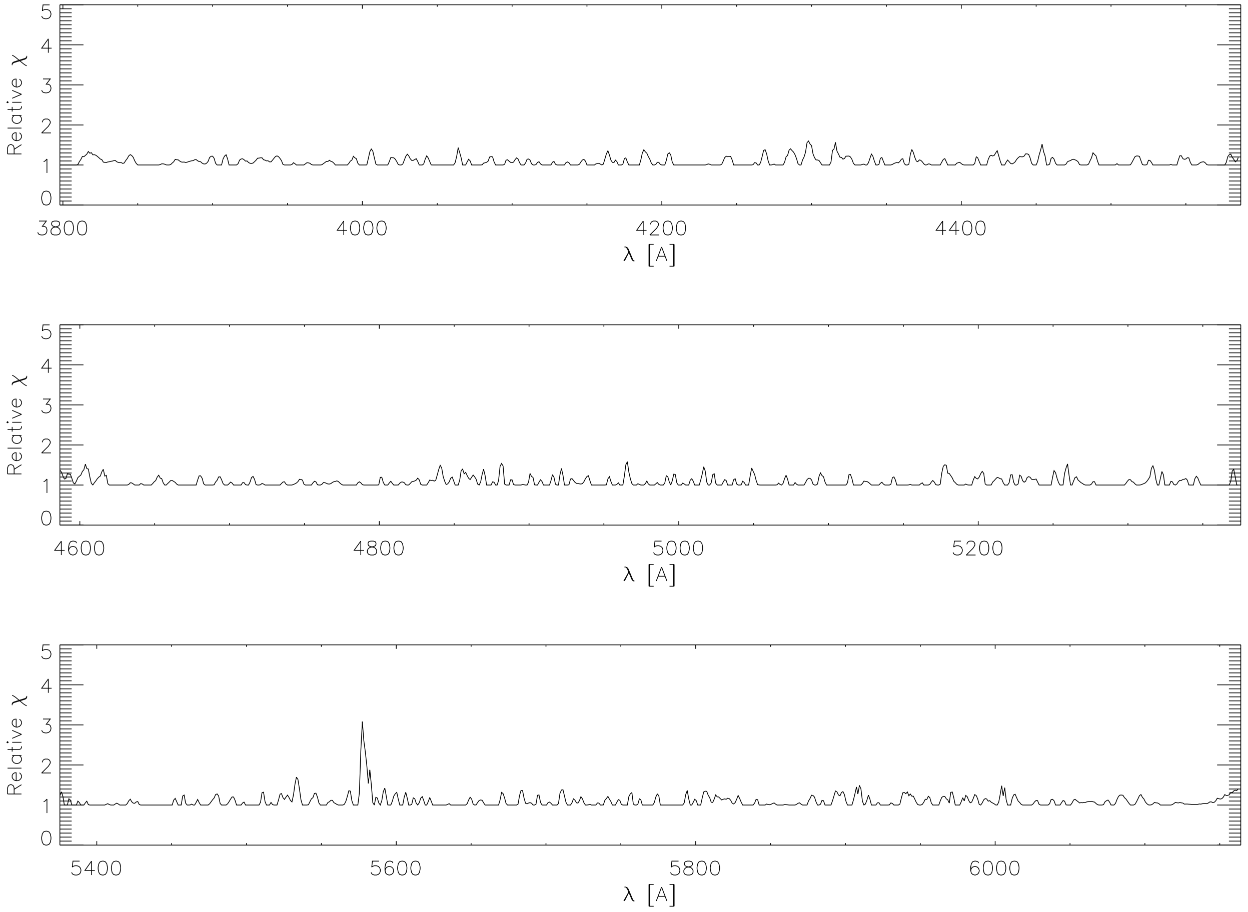

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
50
100
150
200
250
300
Fiber number

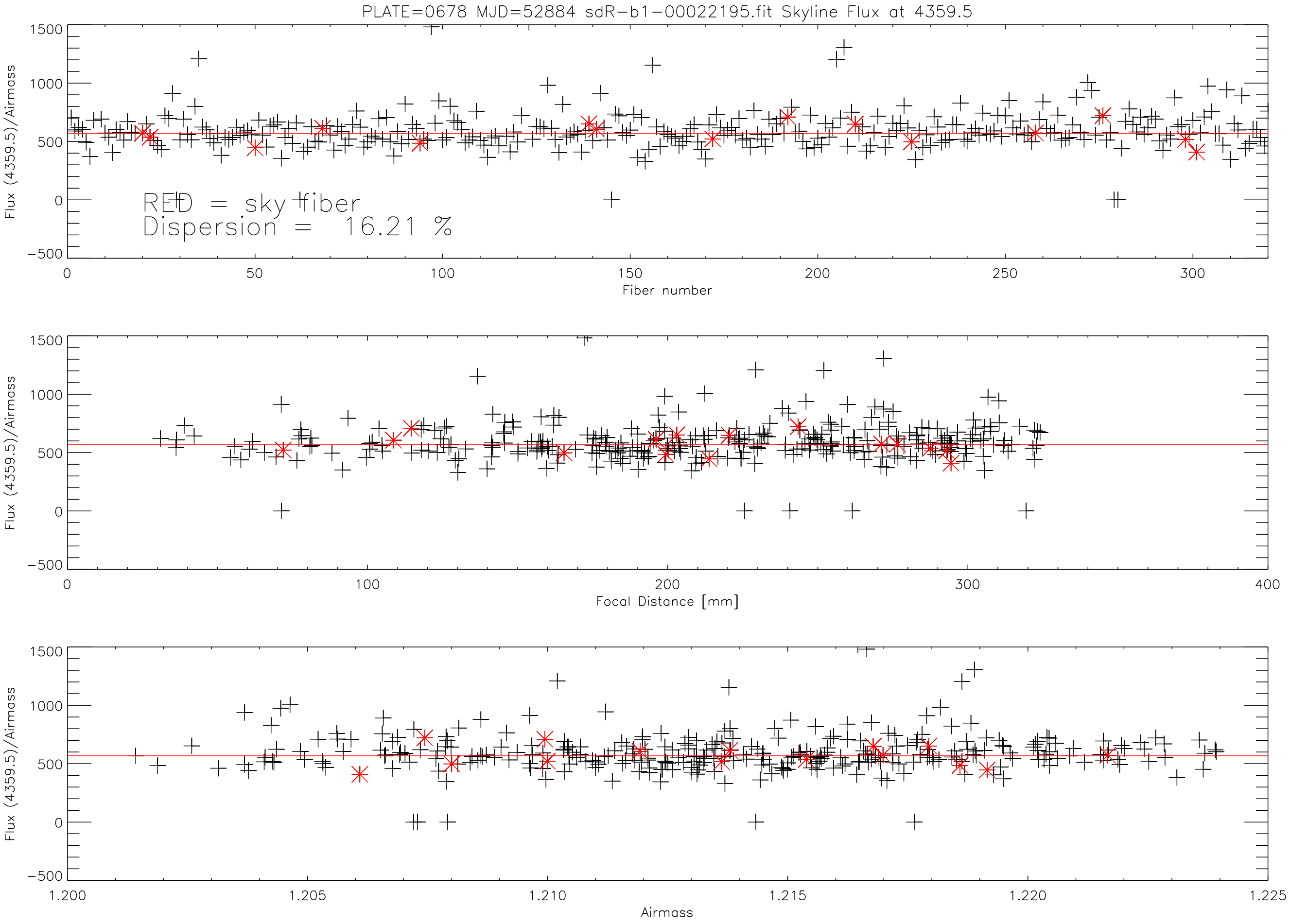

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

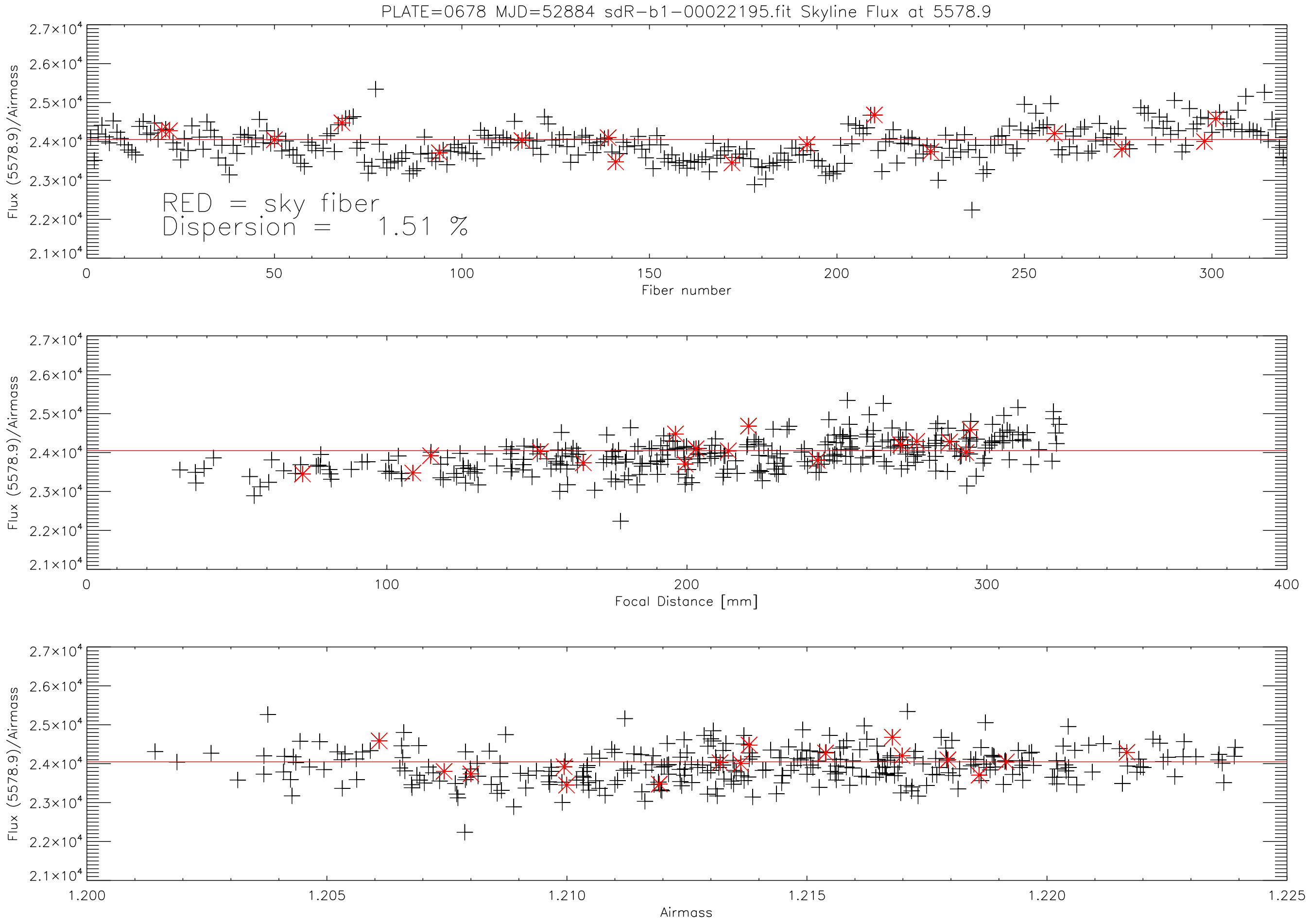

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

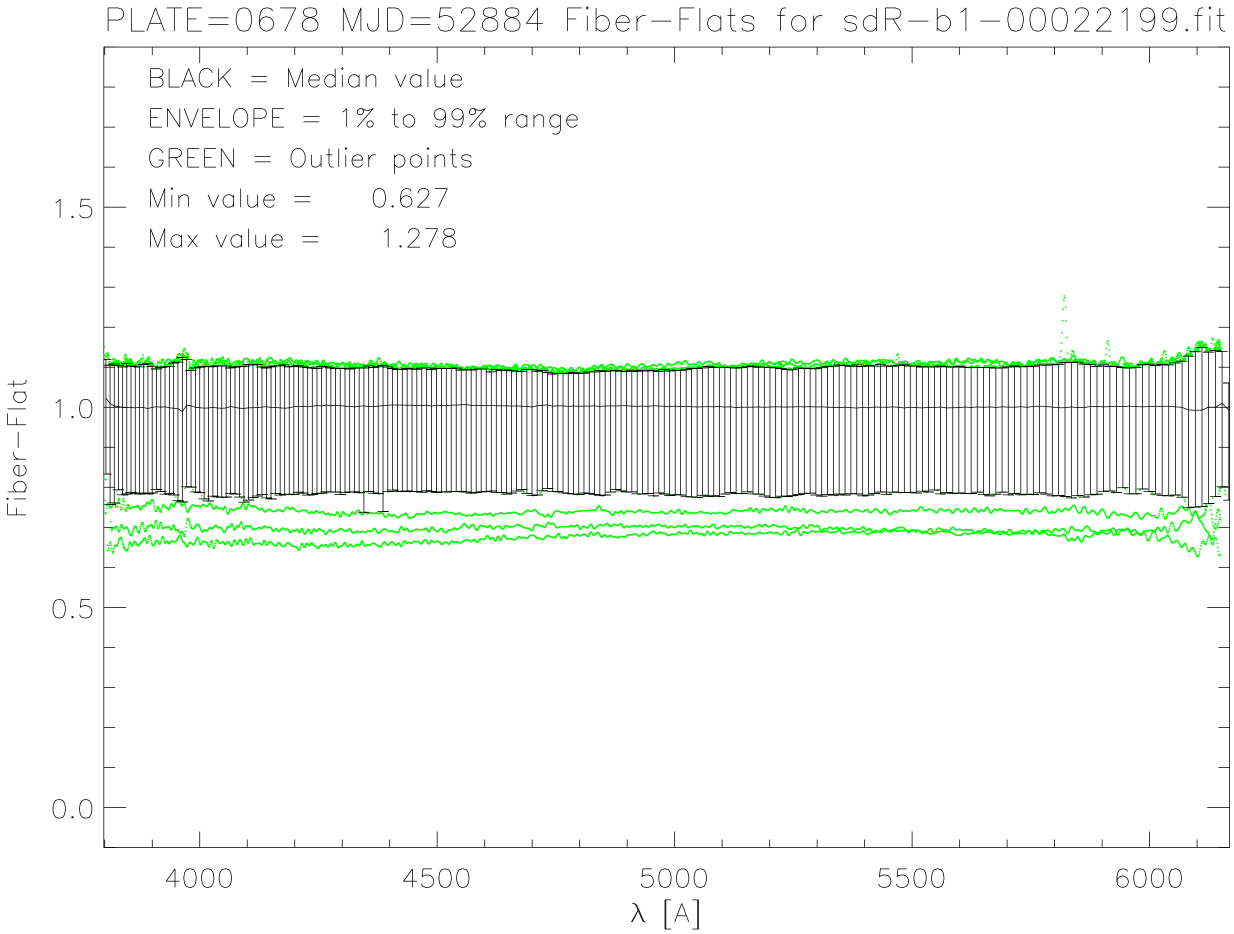
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b1-00022195.fit 2D Sky-subtraction Rescaled Errors

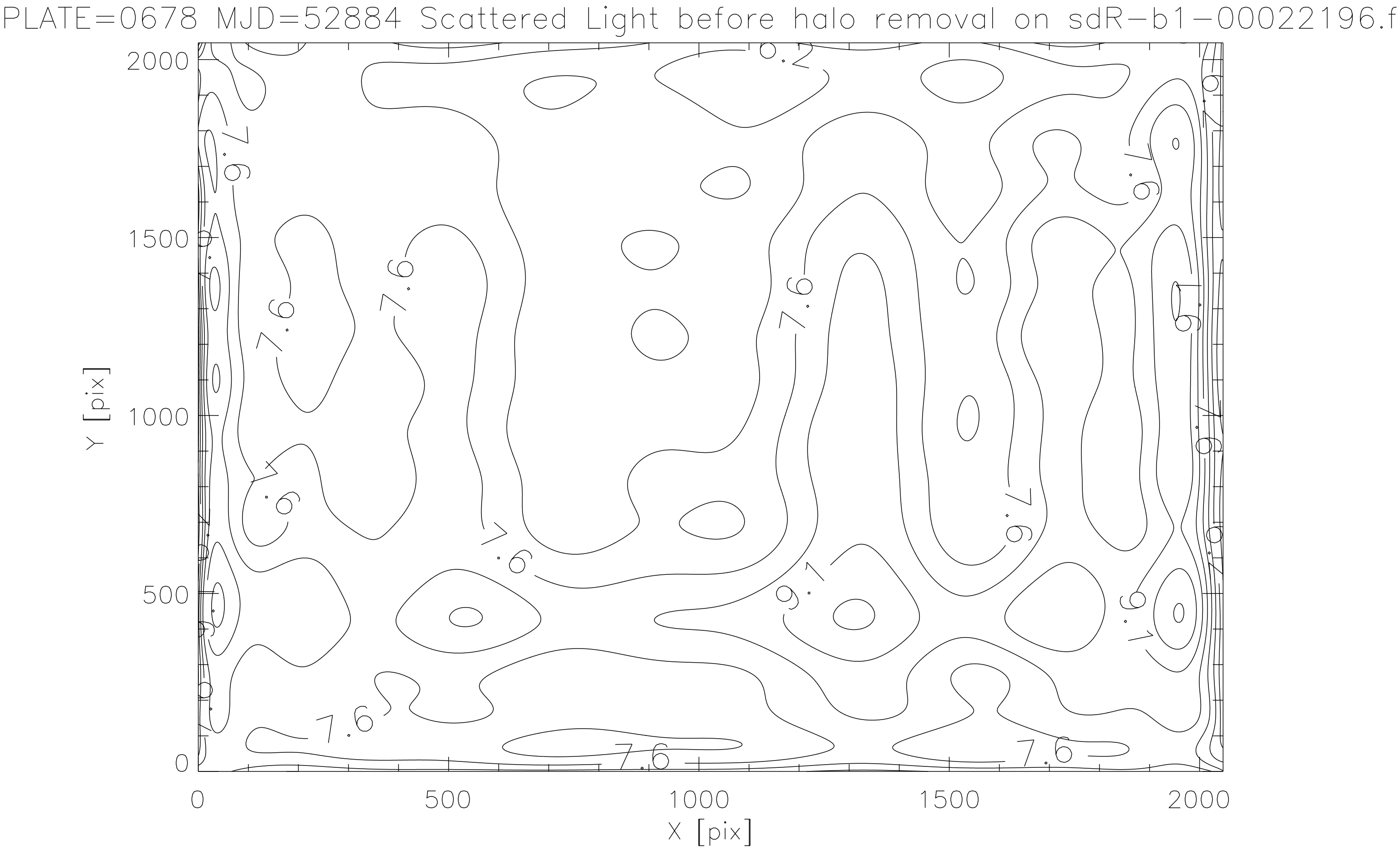



PLATE=0678 MJD=52884 sdR-b1-00022195.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1500
1000
500
0
-500
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 16.21 %
Flux (4359.5)/Airmass
1500
1000
500
0
-500
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1500
1000
500
0
-500
1.200
1.205
1.210
1.215
1.220
1.225
Airmass

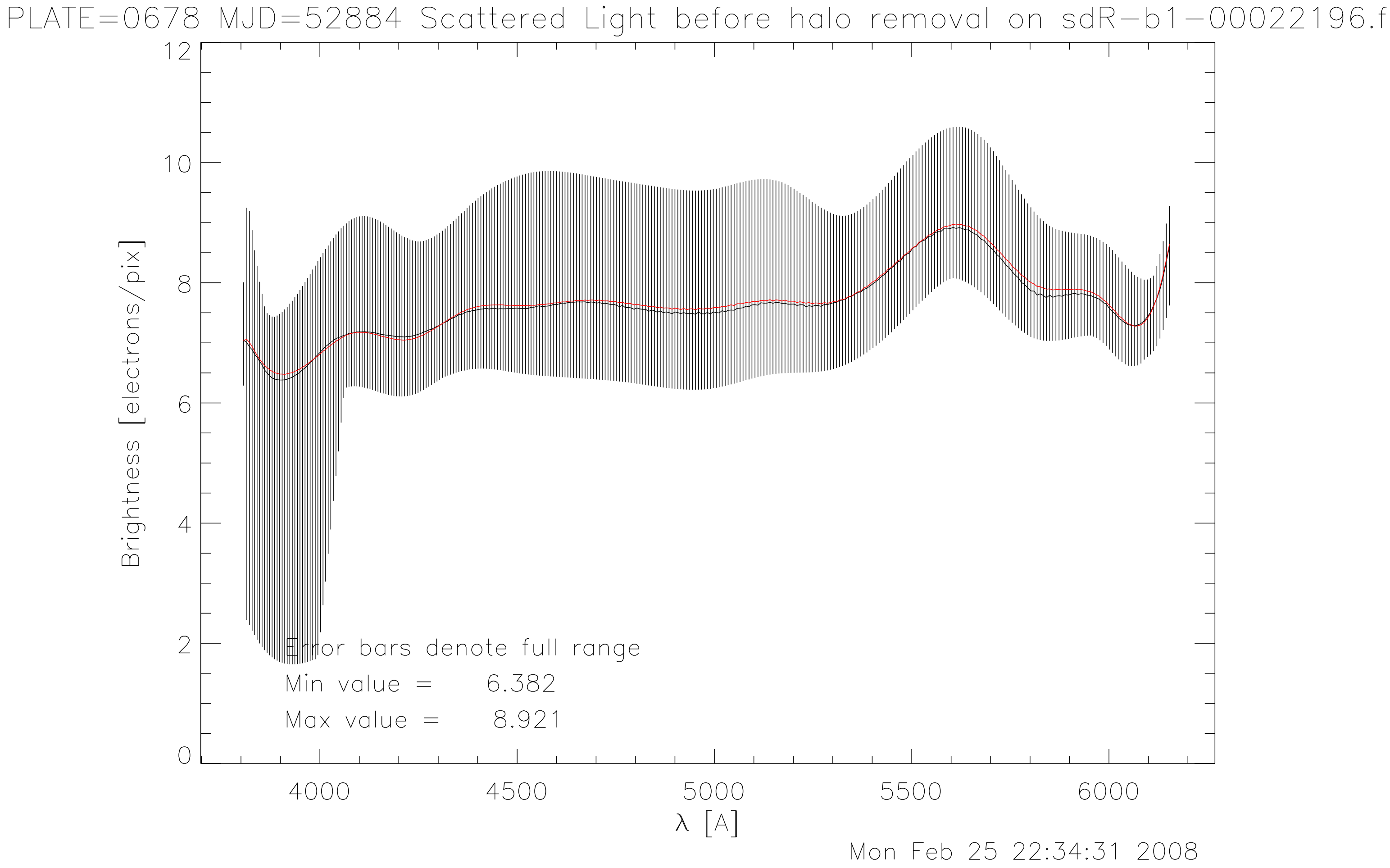

PLATE=0678 MJD=52884 sdR-b1-00022195.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.7×10⁴
2.6×10⁴
2.5×10⁴
2.4×10⁴
2.3×10⁴
2.2×10⁴
2.1×10⁴
RED = sky fiber
Dispersion = 1.51 %
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.200
1.205
1.210
1.215
1.220
1.225
Airmass

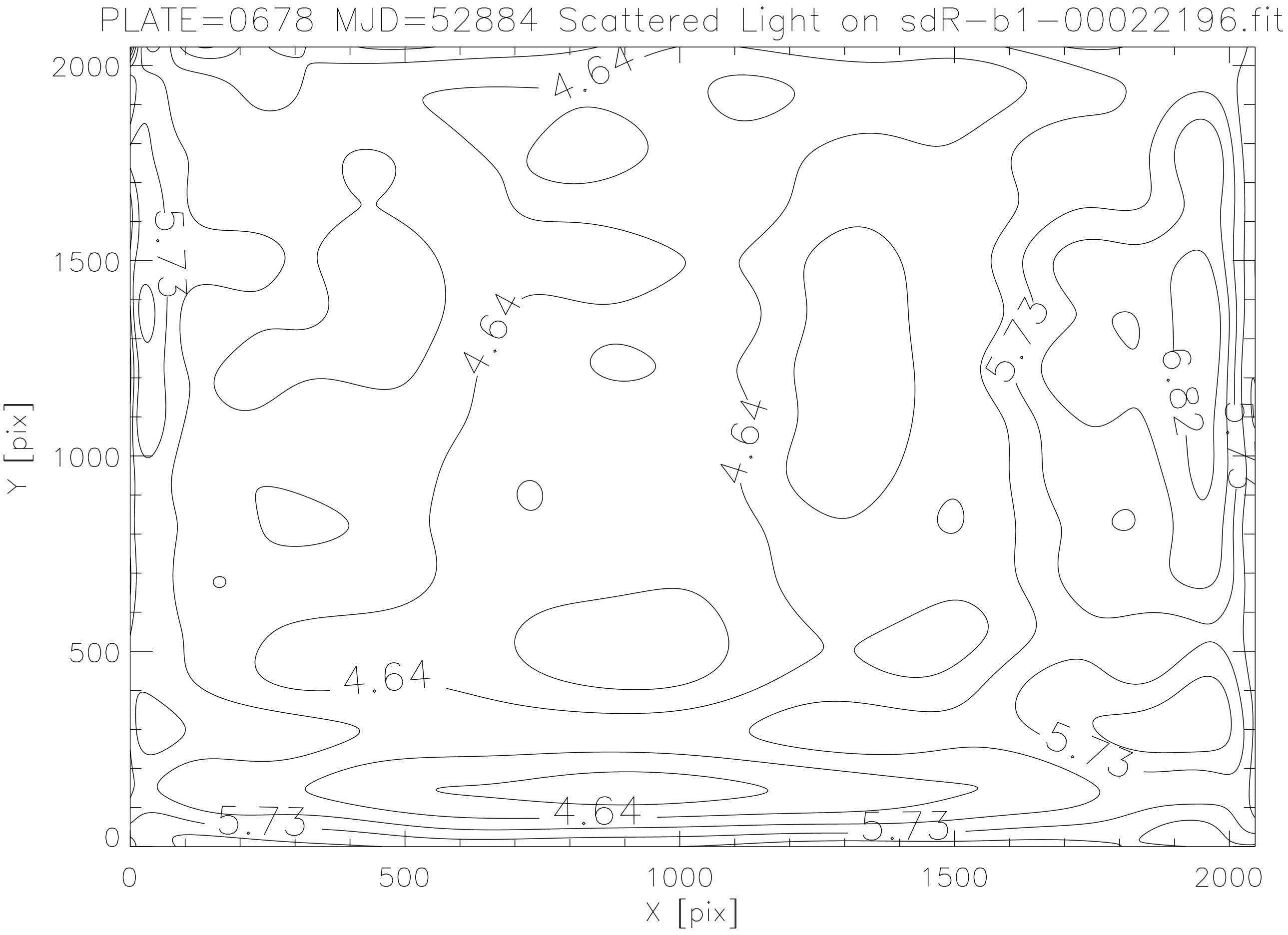


Mon Feb 25 22:33:31 2008

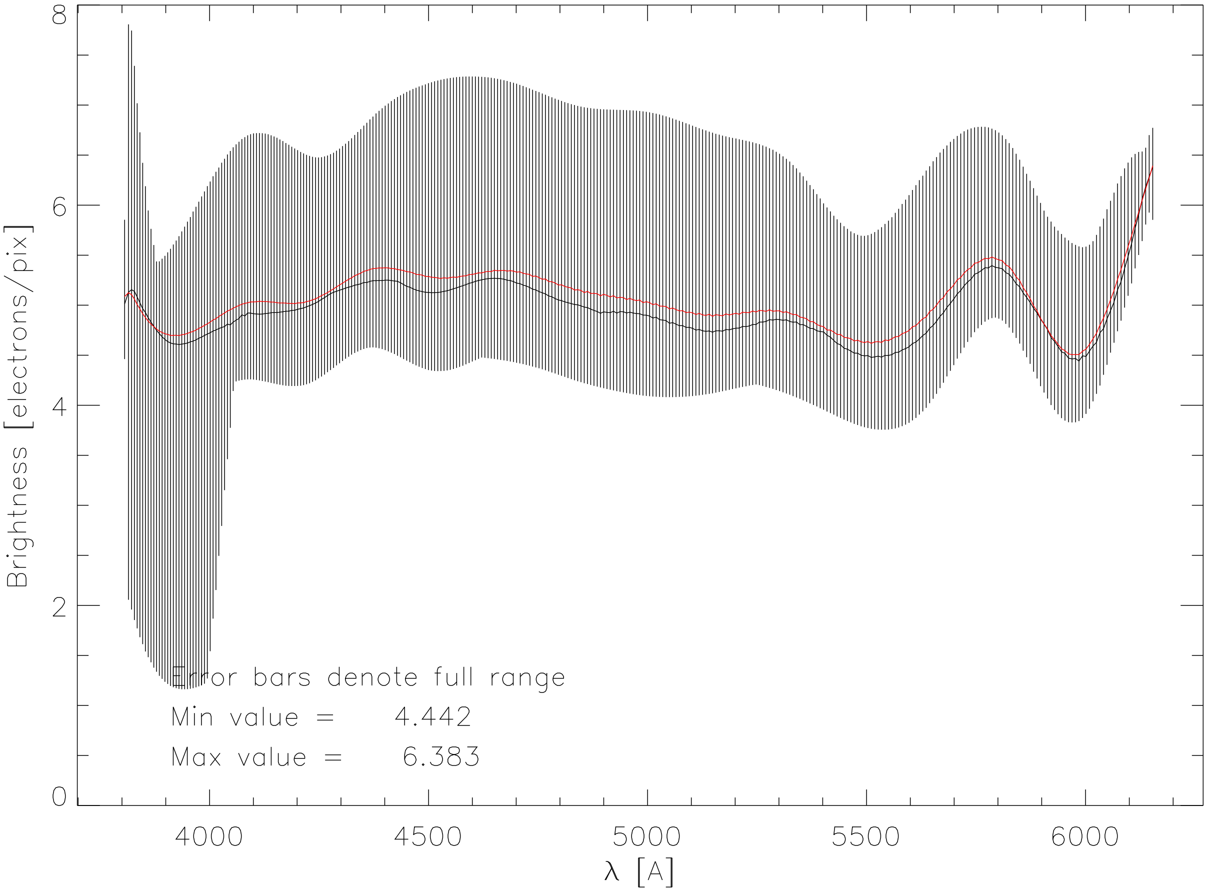


PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022196.f

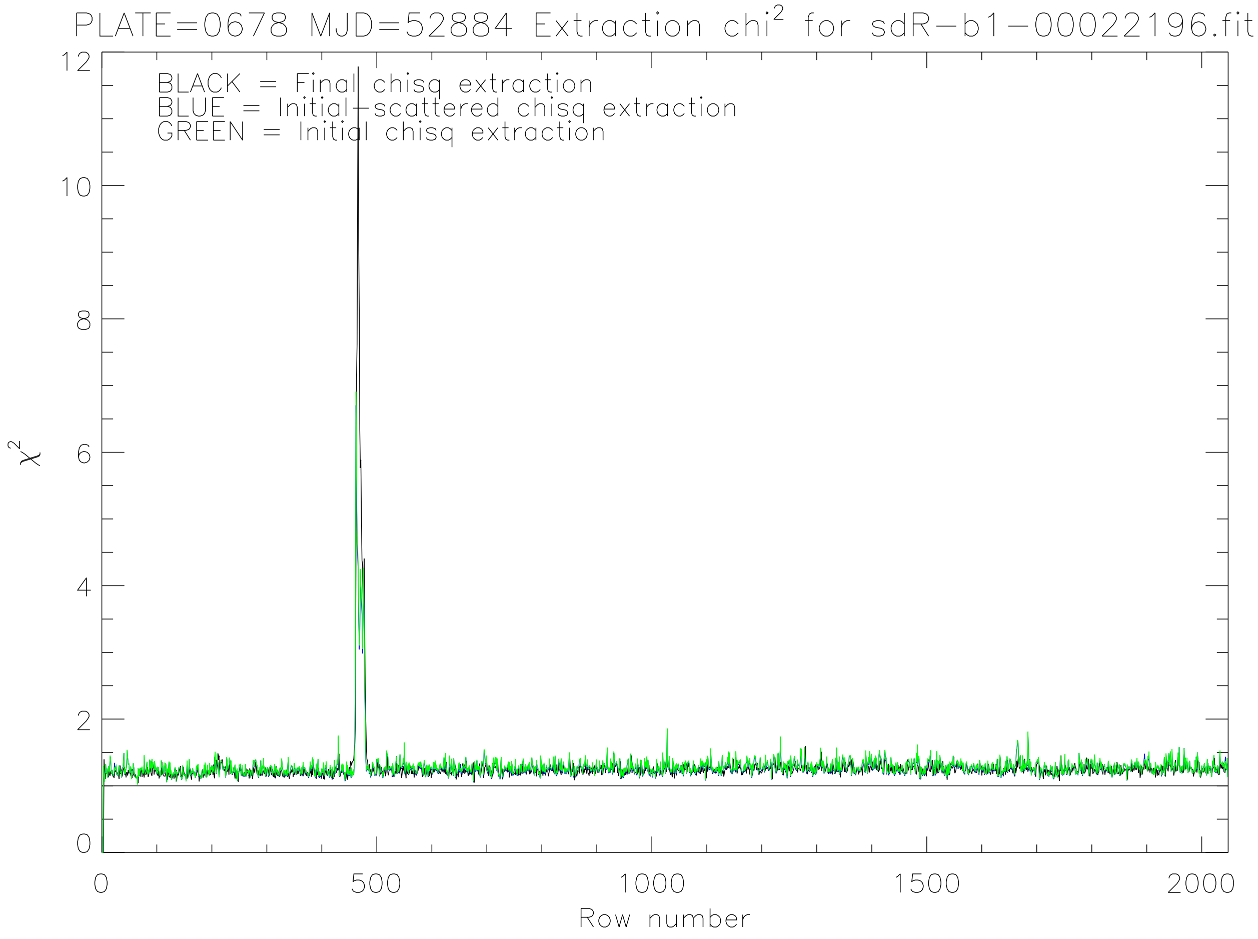

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022196.f
Brightness [electrons/pix]
0
2
4
6
8
10
12
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.382
Max value = 8.921
Mon Feb 25 22:34:31 2008


PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022196.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
4.64
5.73
6.82

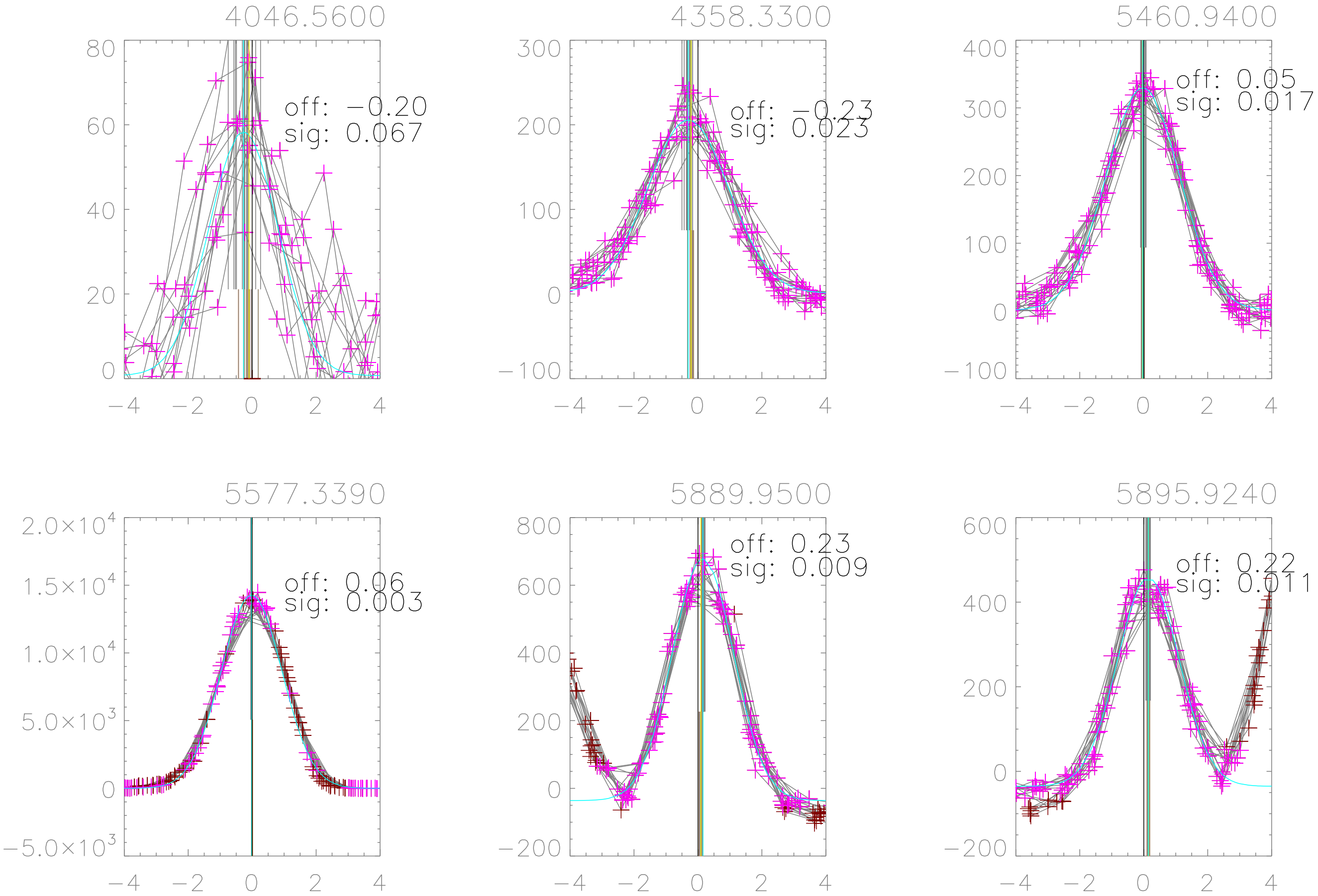
PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022196.fit

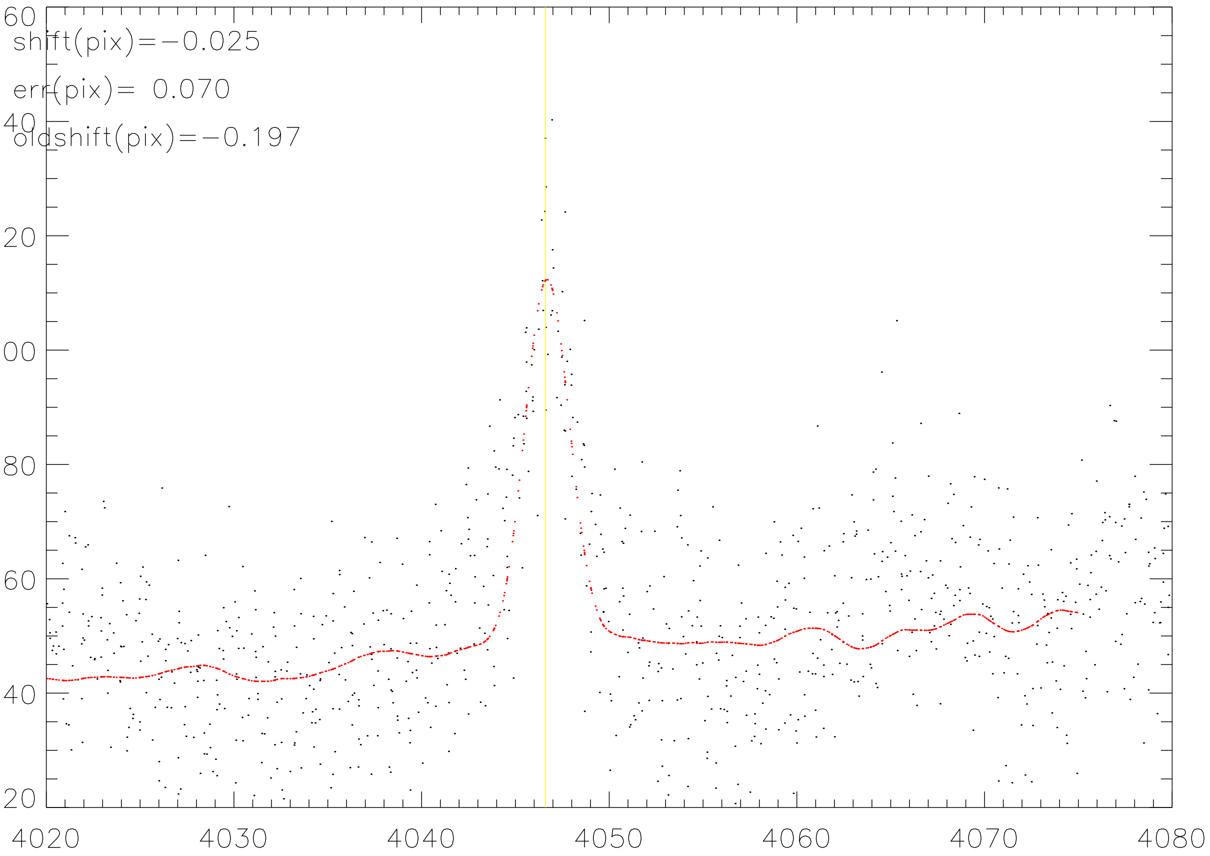


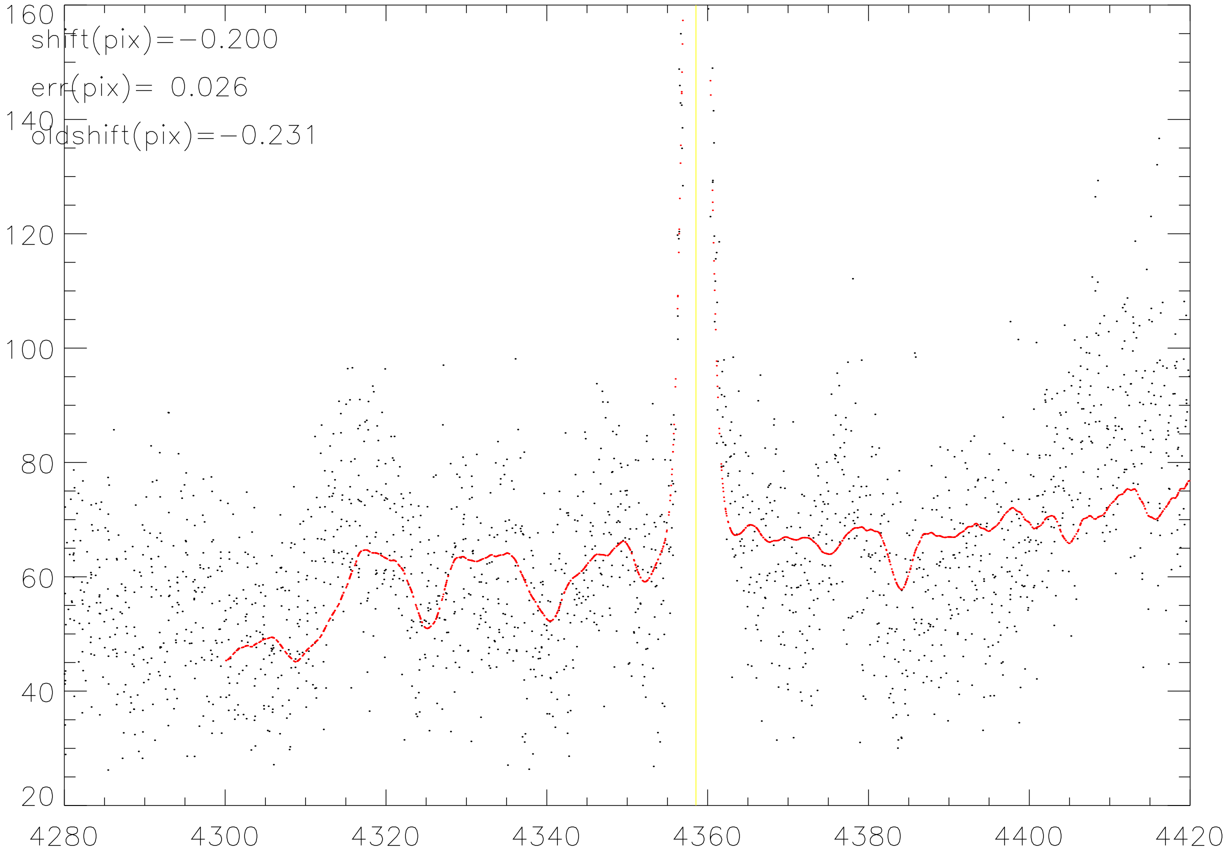
Mon Feb 25 22:37:53 2008

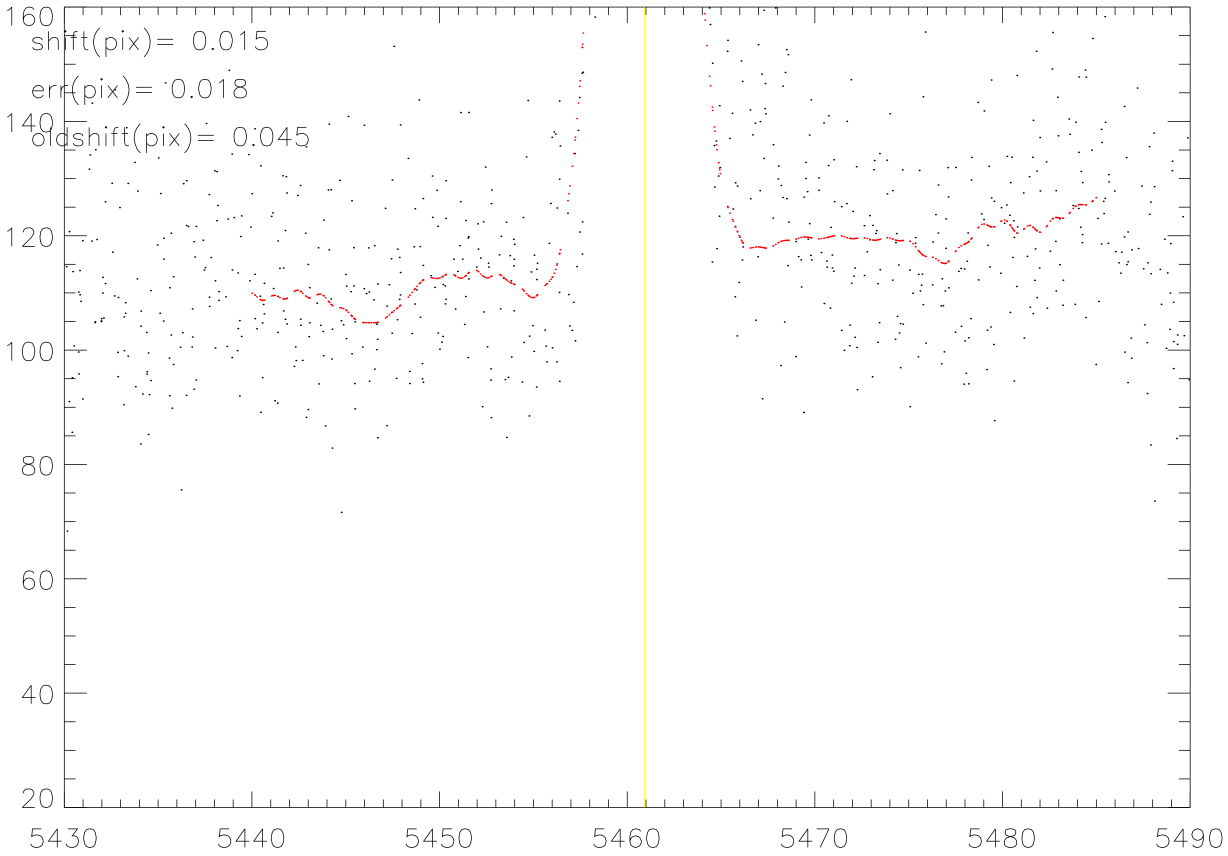


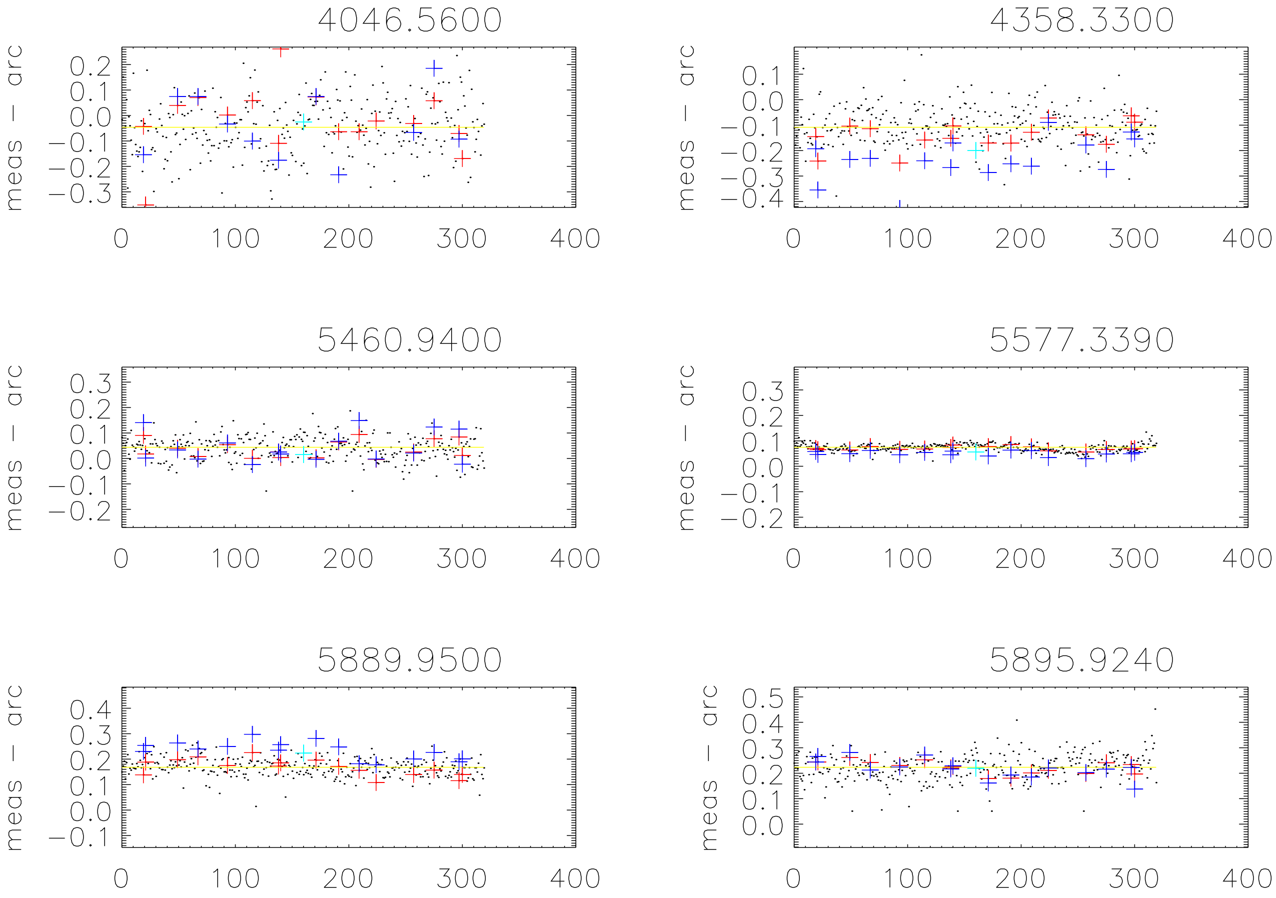
PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b1-00022196.fit

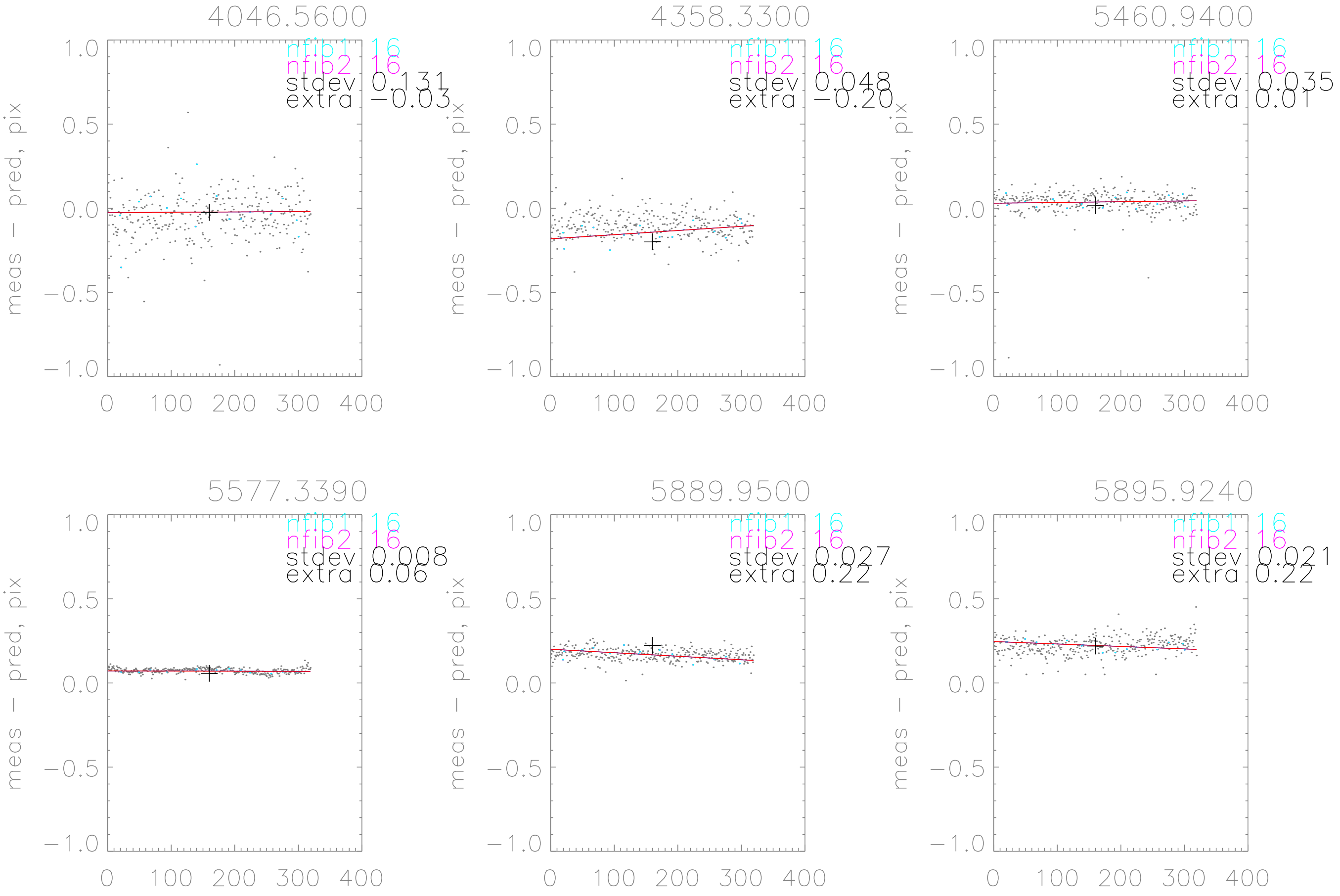

4046.5600
off: −0.20
sig: 0.067
0
20
40
60
80
−4
−2
0
2
4
4358.3300
off: −0.23
sig: 0.023
−100
0
100
200
300
5460.9400
off: 0.05
sig: 0.017
−100
0
100
200
300
400
5577.3390
off: 0.06
sig: 0.003
−5.0×10³
0
5.0×10³
1.0×10⁴
1.5×10⁴
2.0×10⁴
5889.9500
off: 0.23
sig: 0.009
−200
0
200
400
600
800
5895.9240
off: 0.22
sig: 0.011
−200
0
200
400
600

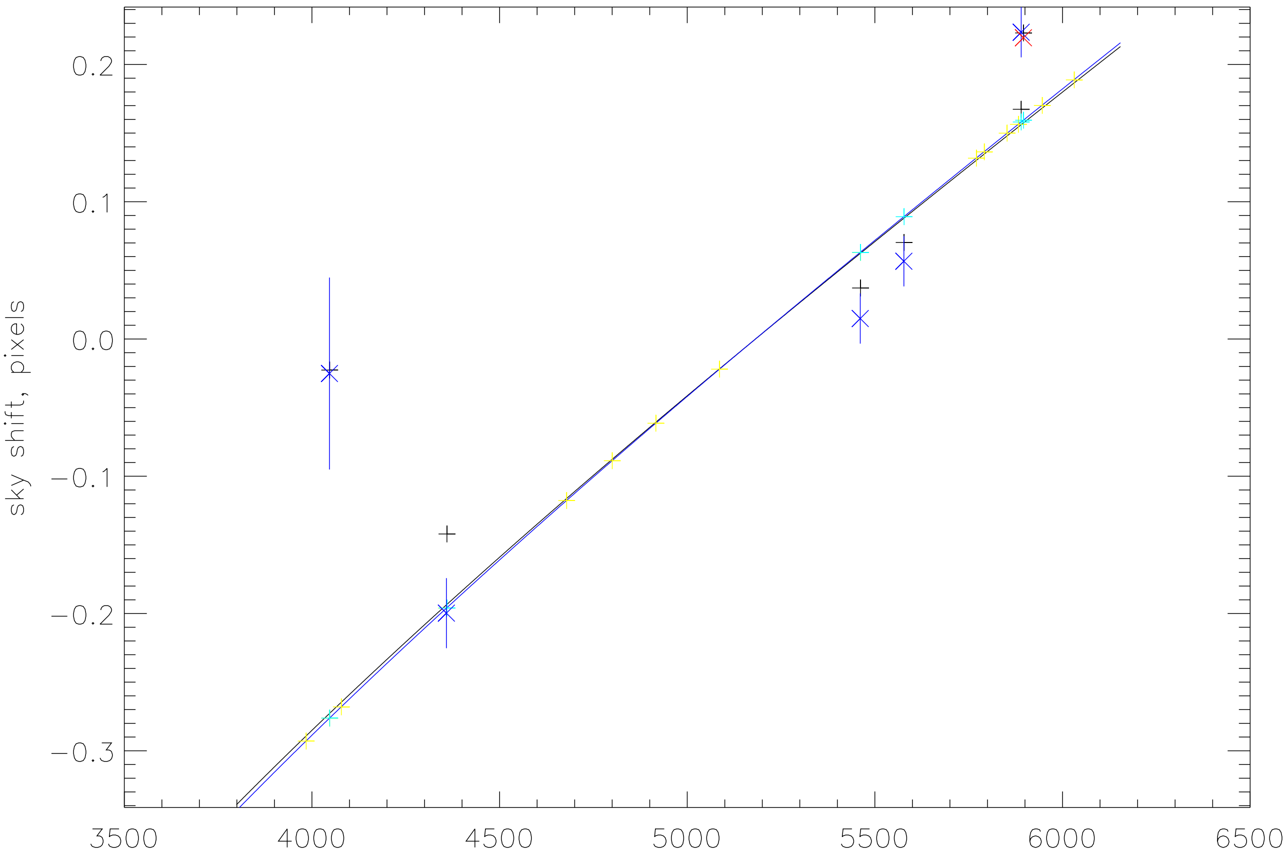

shift(pix)=−0.025
err(pix)= 0.070
oldshift(pix)=−0.197
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

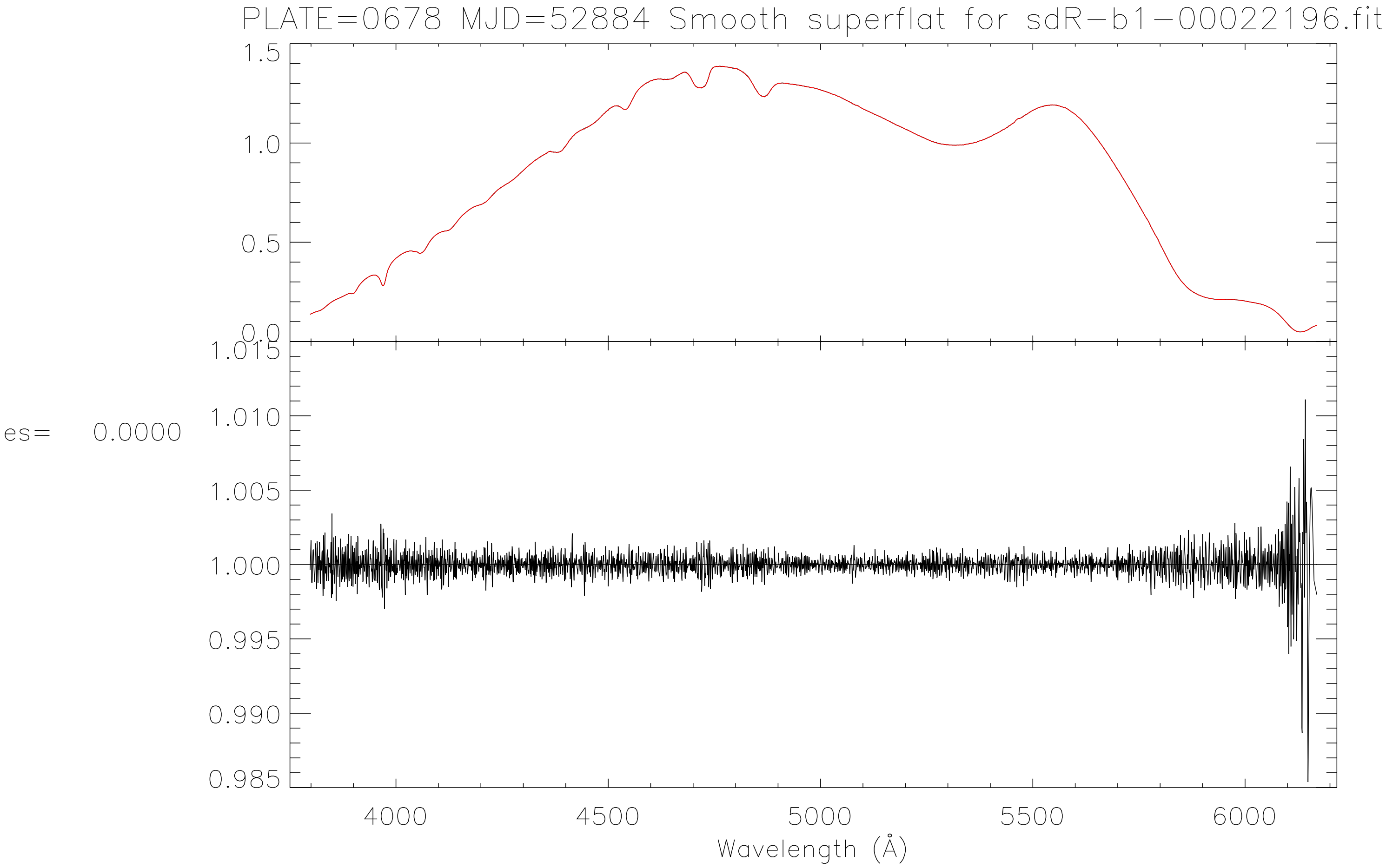

shift(pix)=−0.200
err(pix)= 0.026
oldshift(pix)=−0.231
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)= 0.015
err(pix)= 0.018
oldshift(pix)= 0.045
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

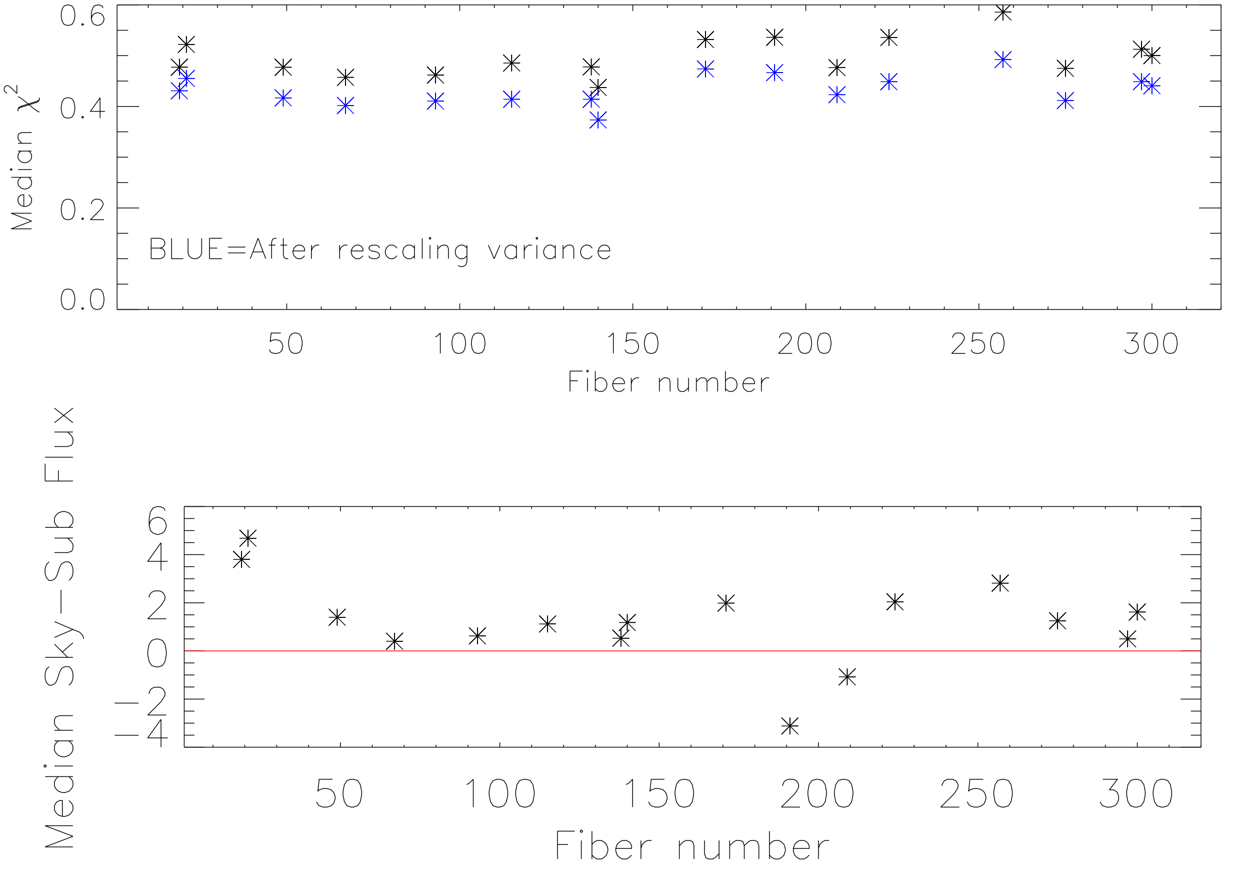

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400

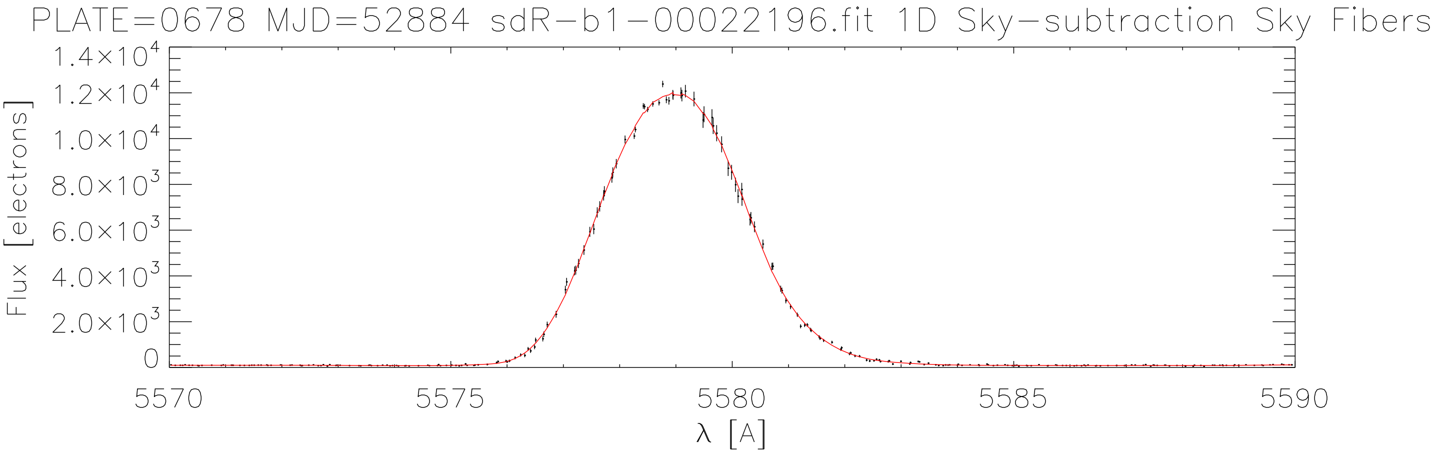

4046.5600
nfib1 16
nfib2 16
stdev 0.131
extra −0.03
4358.3300
nfib1 16
nfib2 16
stdev 0.048
extra −0.20
5460.9400
nfib1 16
nfib2 16
stdev 0.035
extra 0.01
5577.3390
nfib1 16
nfib2 16
stdev 0.008
extra 0.06
5889.9500
nfib1 16
nfib2 16
stdev 0.027
extra 0.22
5895.9240
nfib1 16
nfib2 16
stdev 0.021
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

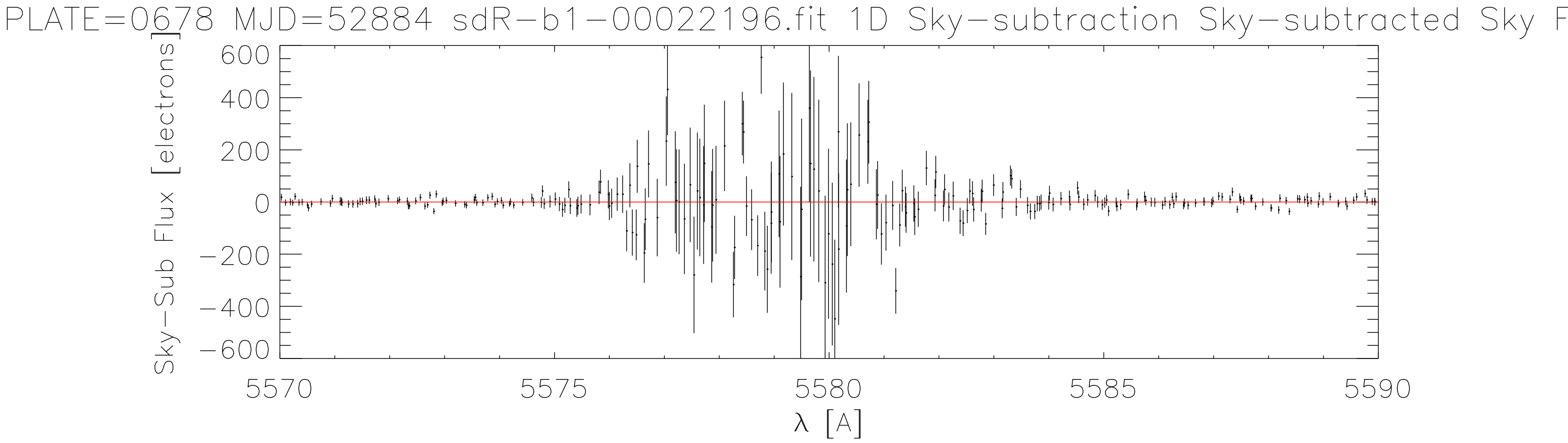

sky shift, pixels
0.2
0.1
0.0
−0.1
−0.2
−0.3
3500
4000
4500
5000
5500
6000
6500


PLATE=0678 MJD=52884 Smooth superflat for sdR-b1-00022196.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= 0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

PLATE=0678 MJD=52884 sdR-b1-00022196.fit 1D Sky-subtraction Sky Fiber

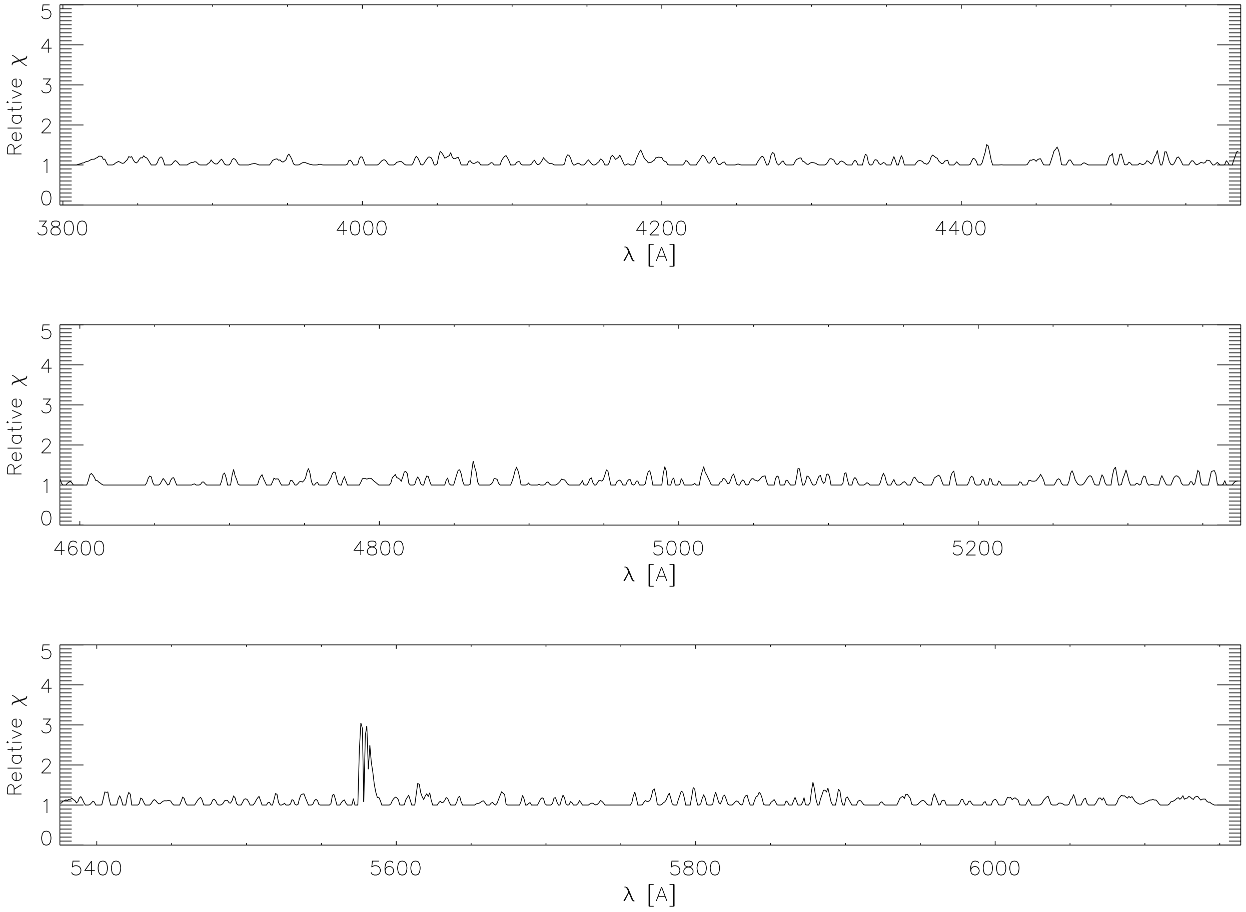


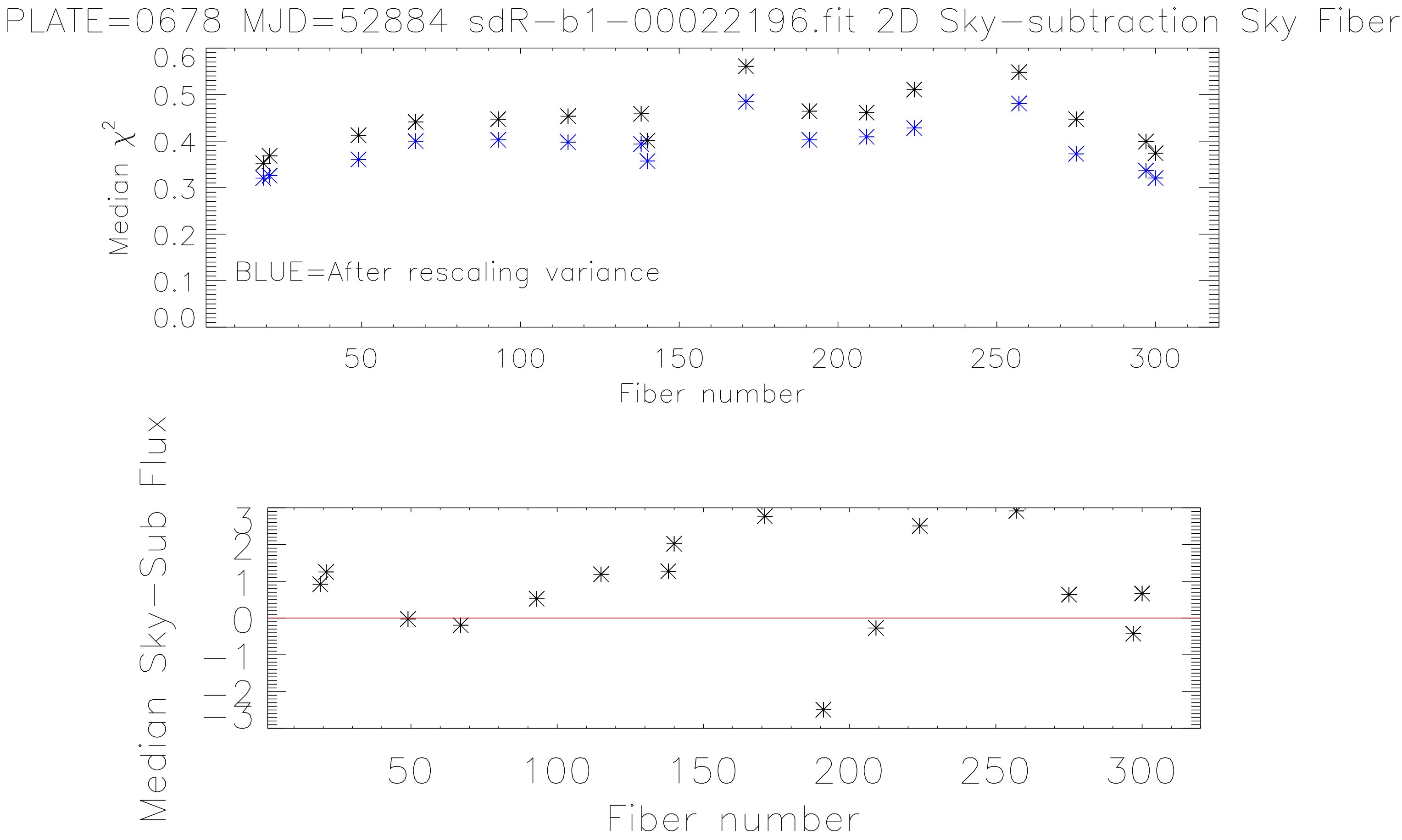

PLATE=0678 MJD=52884 sdR-b1-00022196.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10^4
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

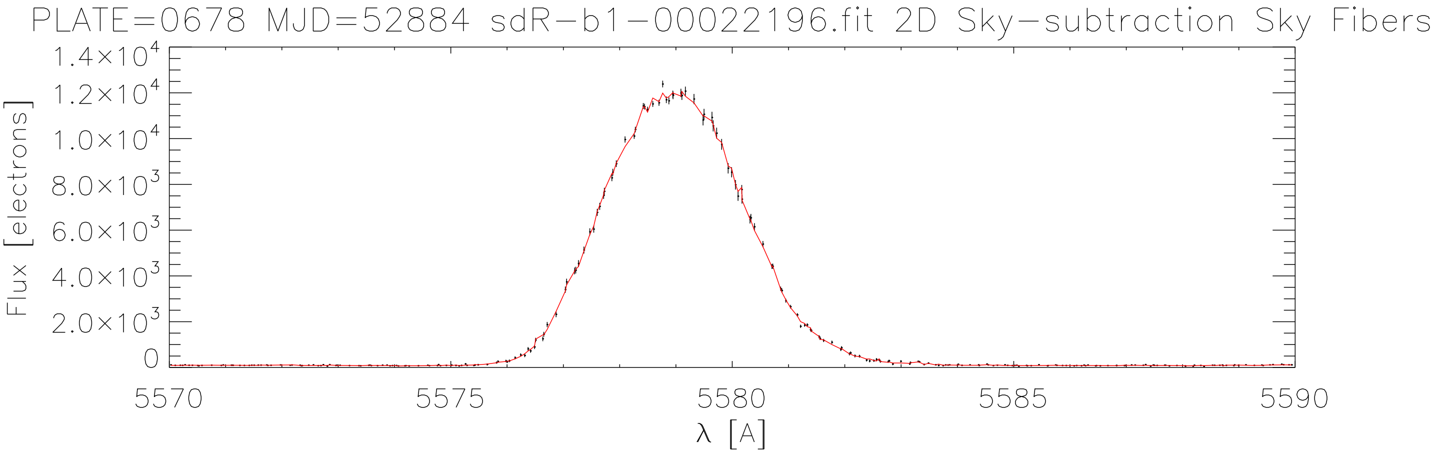

PLATE=0678 MJD=52884 sdR-b1-00022196.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

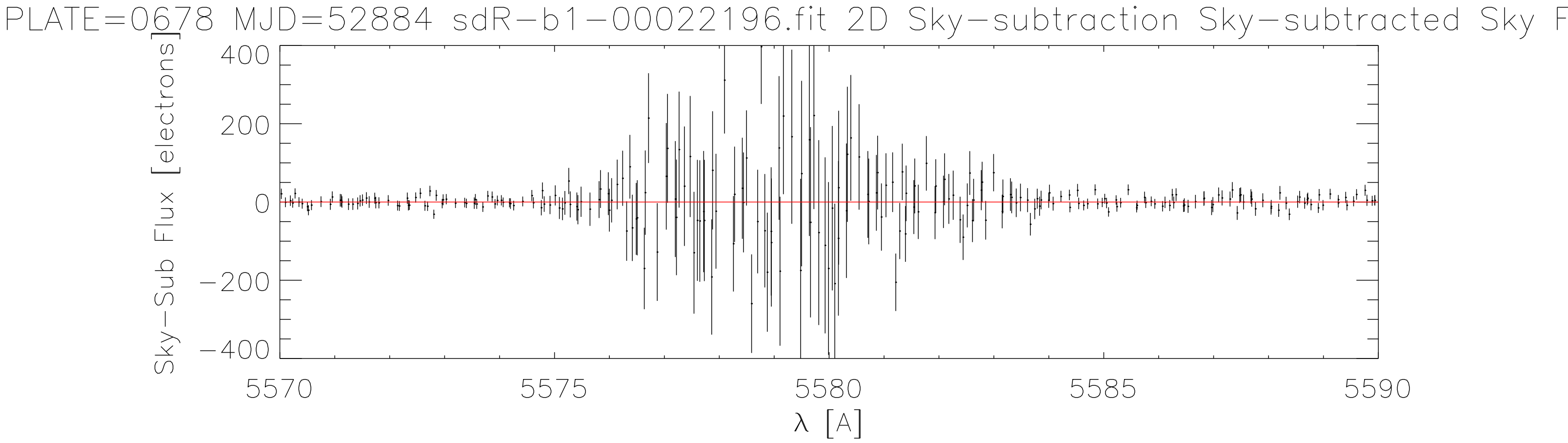
Number of sky fibers = 16

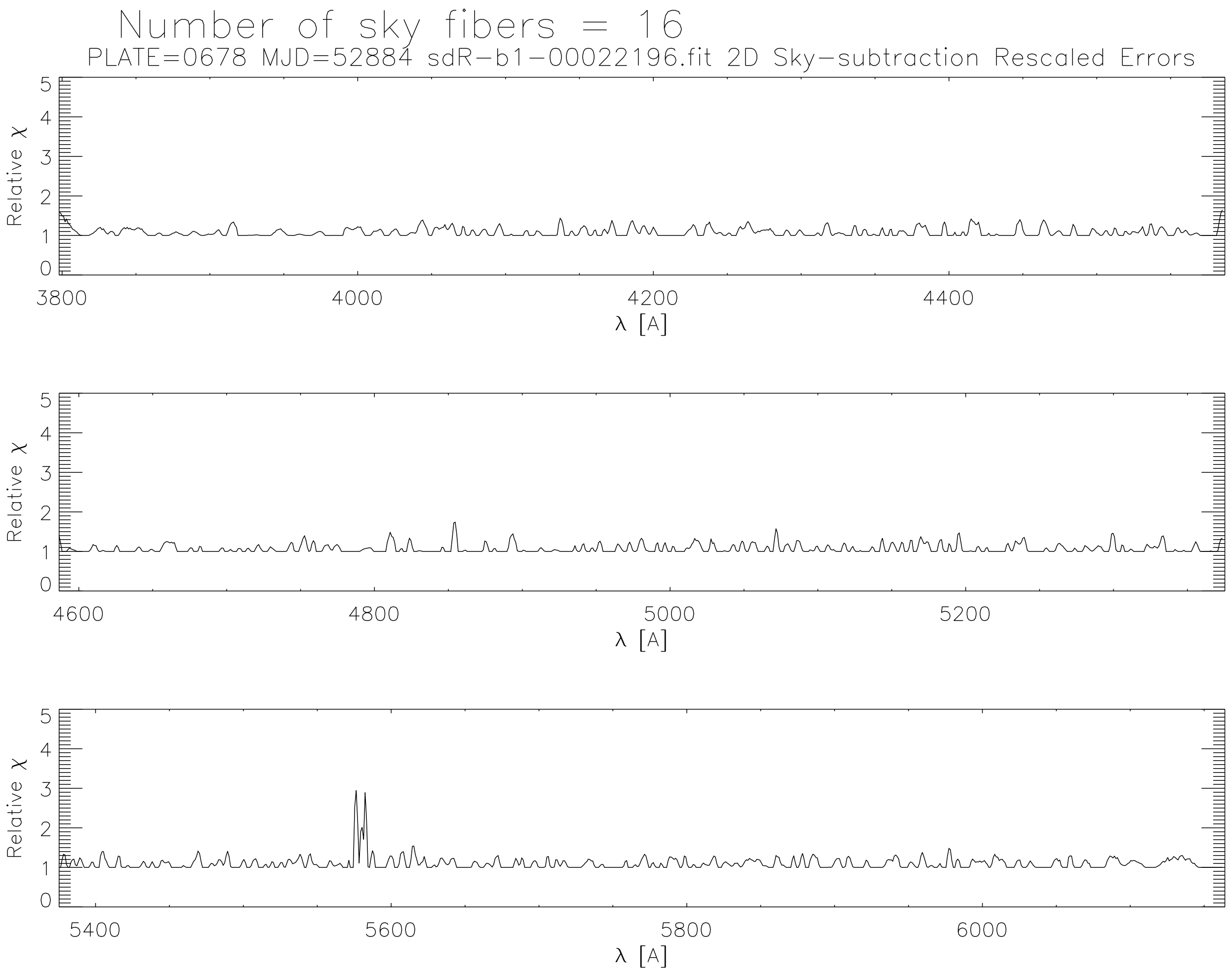
PLATE=0678 MJD=52884 sdR-b1-00022196.fit 1D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-b1-00022196.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
3
2
1
0
-1
-2
-3
50
100
150
200
250
300
Fiber number

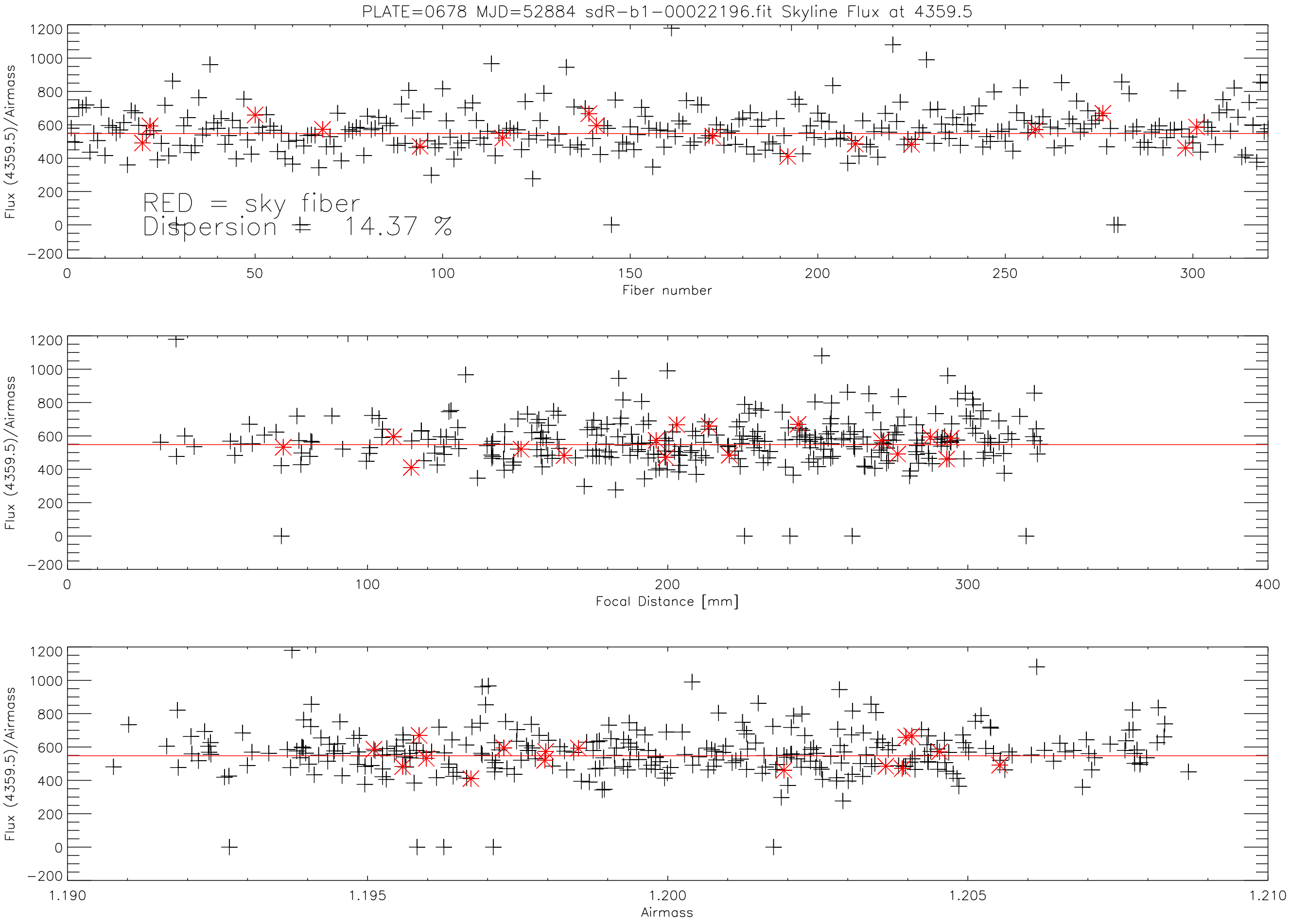

PLATE=0678 MJD=52884 sdR-b1-00022196.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.4×10⁴
1.2×10⁴
1.0×10⁴
8.0×10³
6.0×10³
4.0×10³
2.0×10³
0
5570
5575
5580
5585
5590
λ [A]

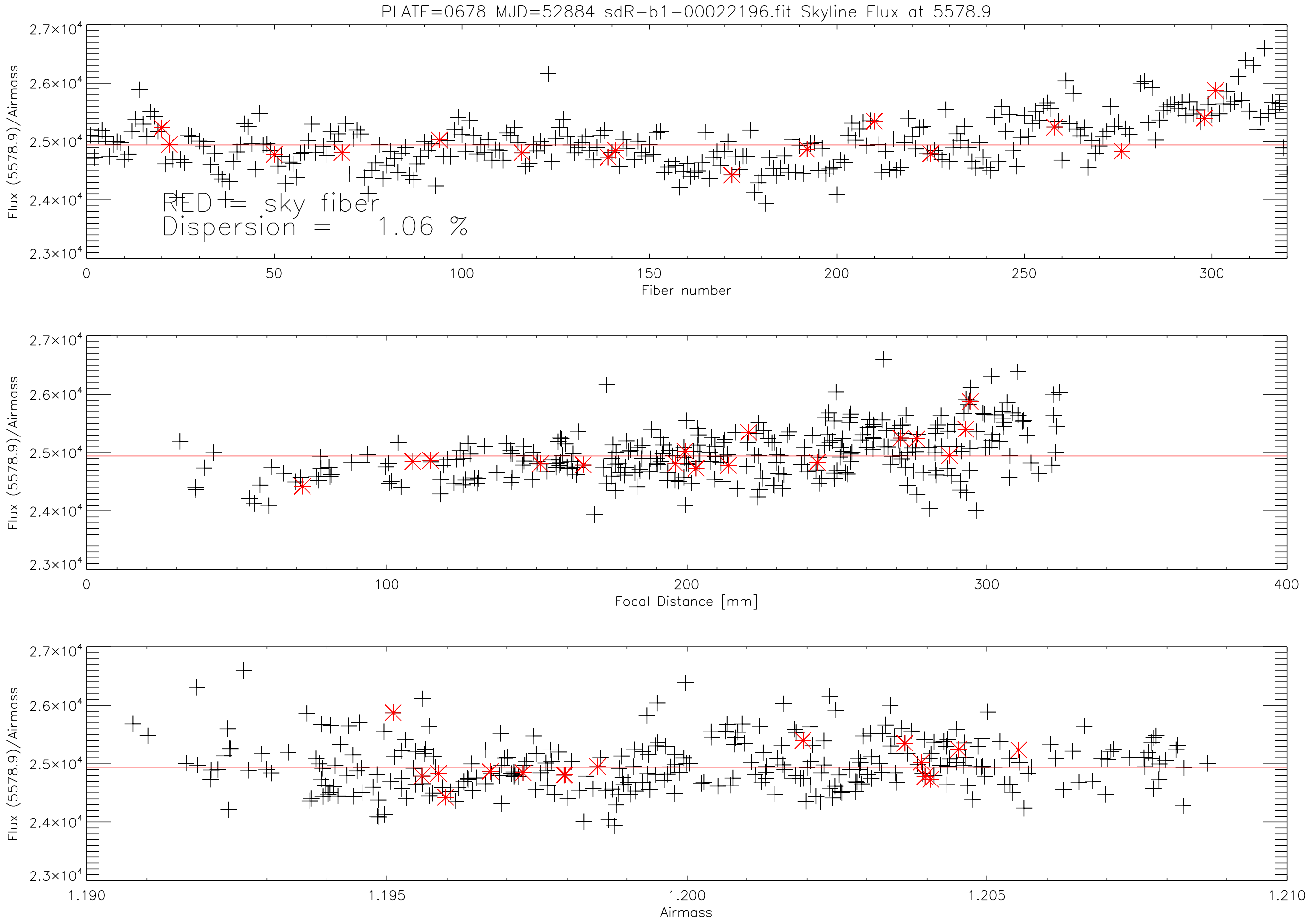

PLATE=0678 MJD=52884 sdR-b1-00022196.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]



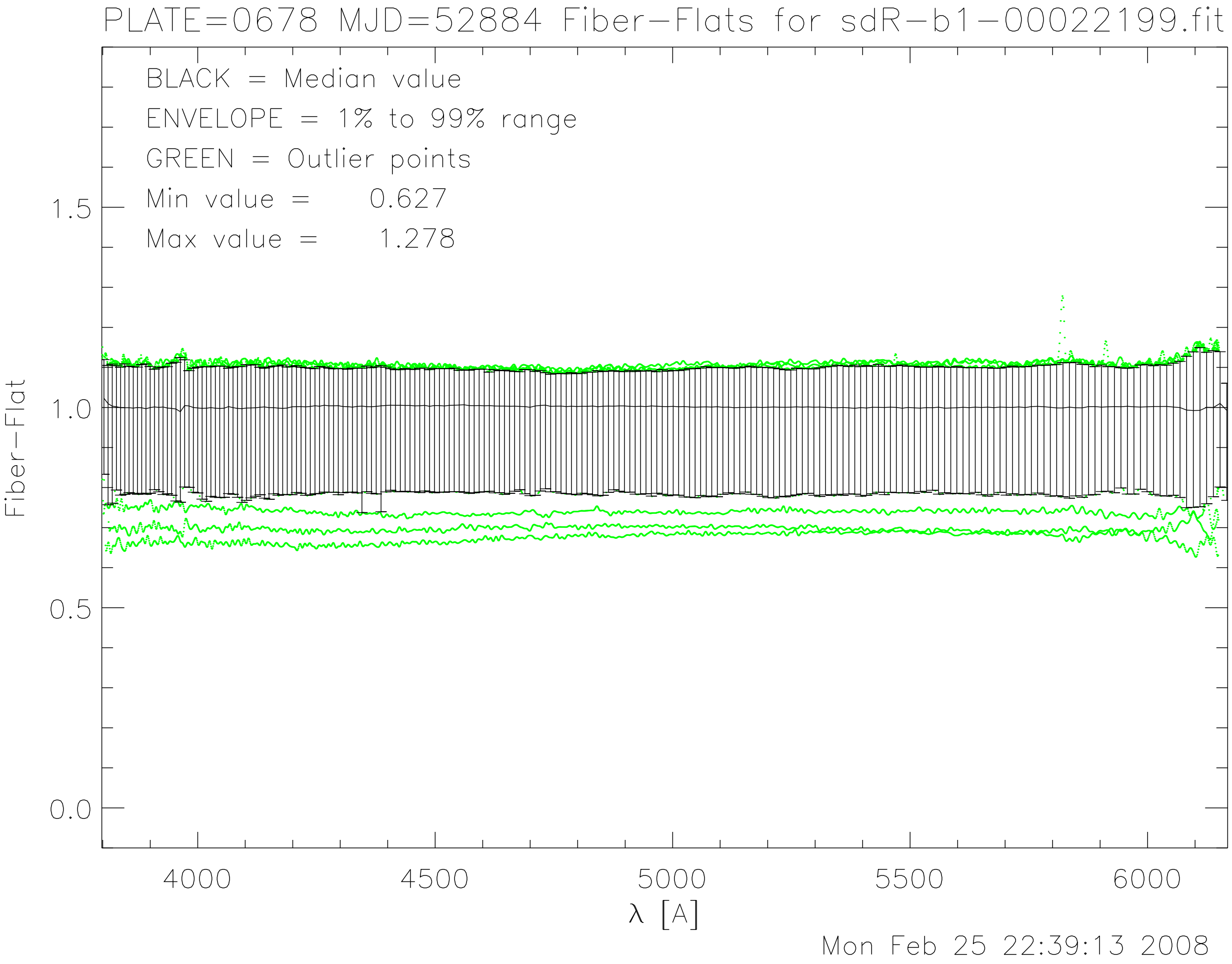
Number of sky fibers = 16

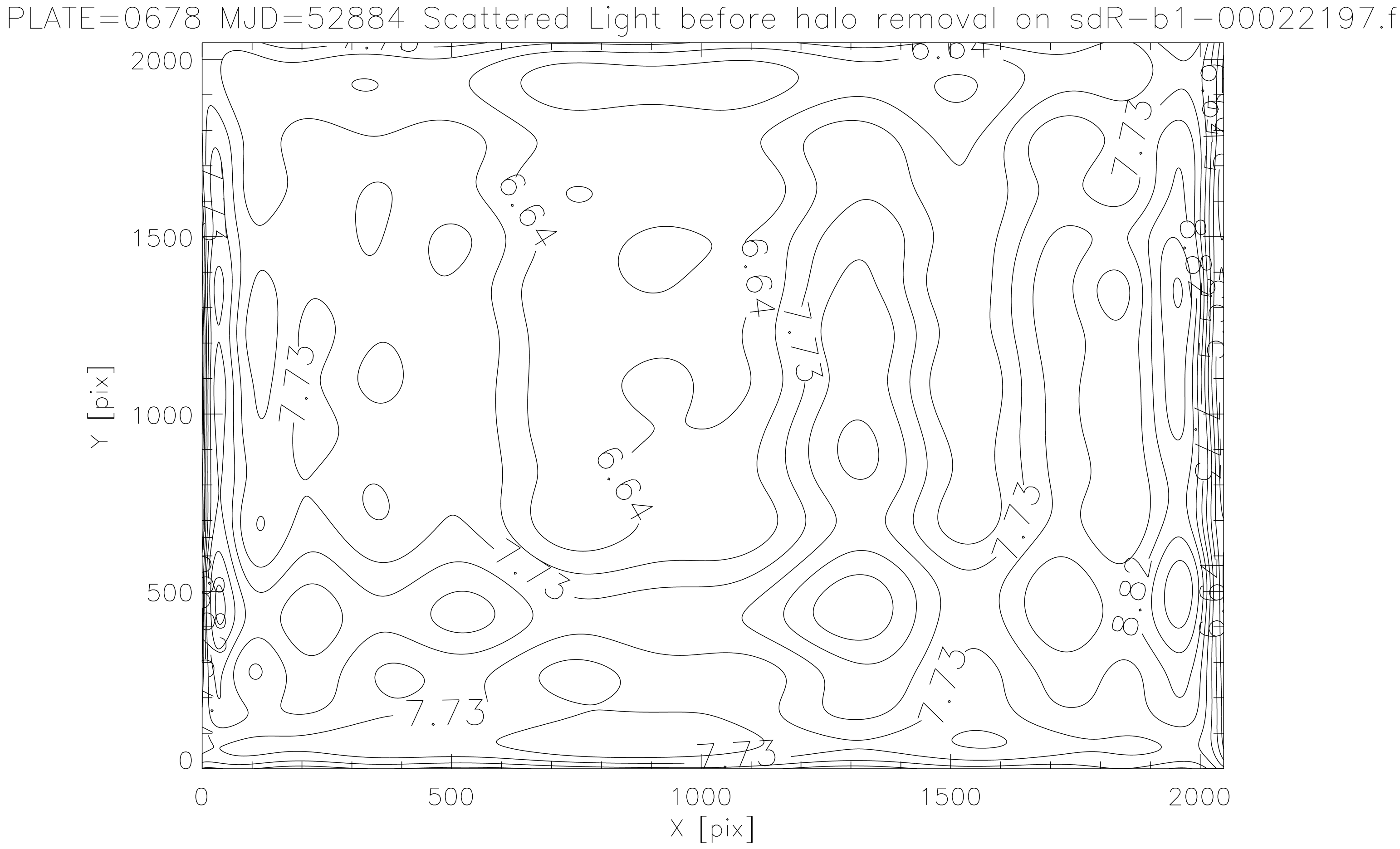
PLATE=0678 MJD=52884 sdR-b1-00022196.fit 2D Sky-subtraction Rescaled Errors


PLATE=0678 MJD=52884 sdR-b1-00022196.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.37 %
Fiber number
0
50
100
150
200
250
300
-200
0
200
400
600
800
1000
1200
Focal Distance [mm]
0
100
200
300
400
Airmass
1.190
1.195
1.200
1.205
1.210

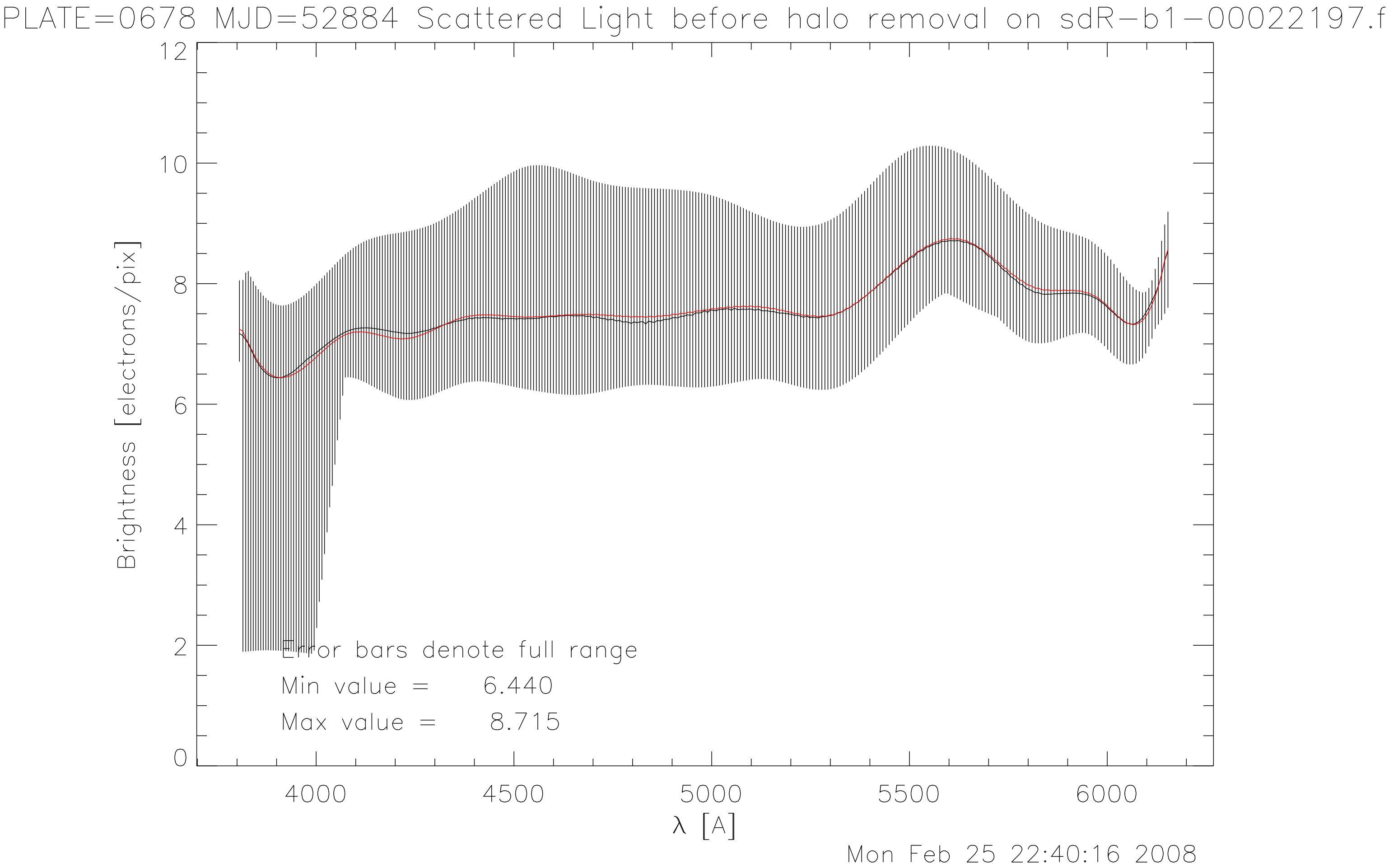


PLATE=0678 MJD=52884 sdR-b1-00022196.fit Skyline Flux at 5578.9

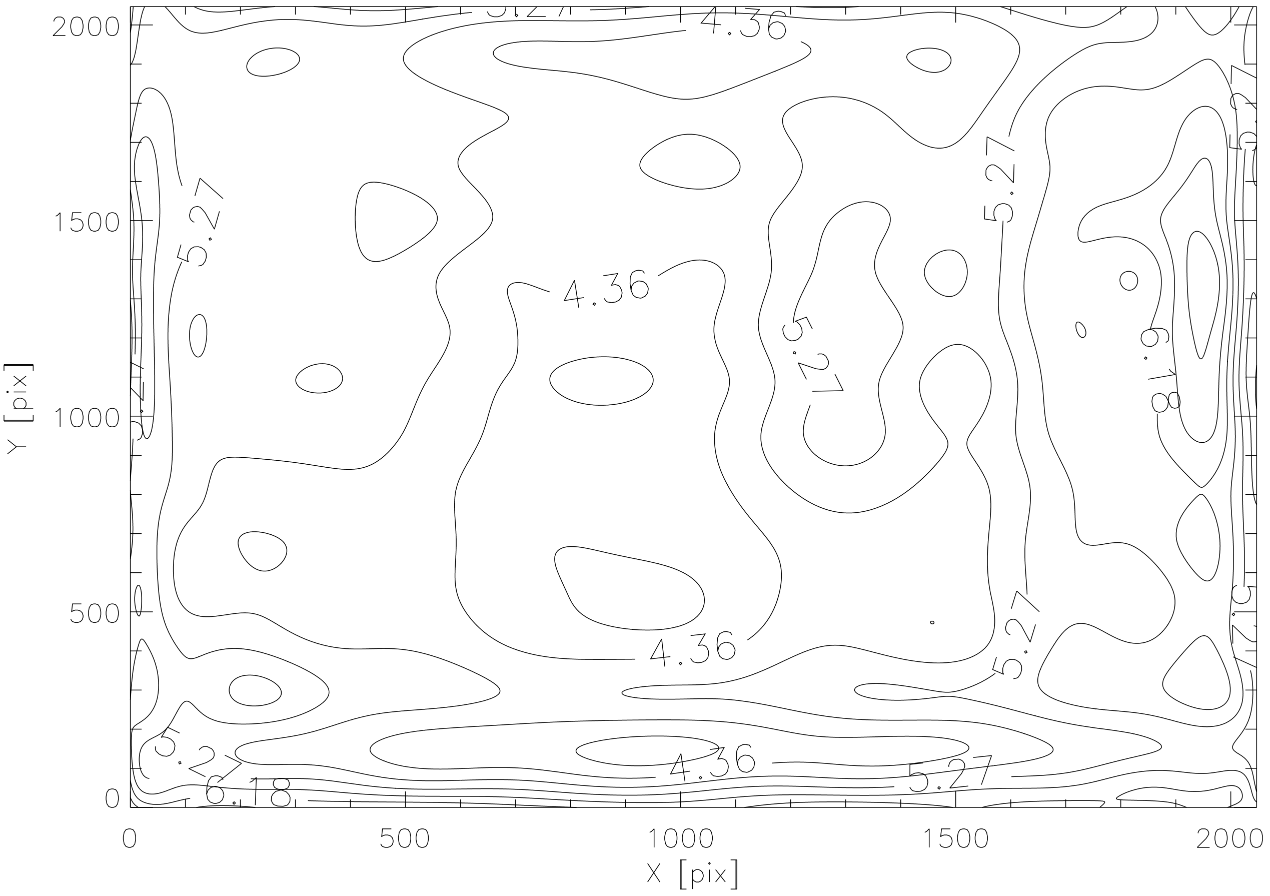

PLATE=0678 MJD=52884 Fiber-Flats for sdR-b1-00022199.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.627
Max value = 1.278
Fiber-Flat
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:39:13 2008

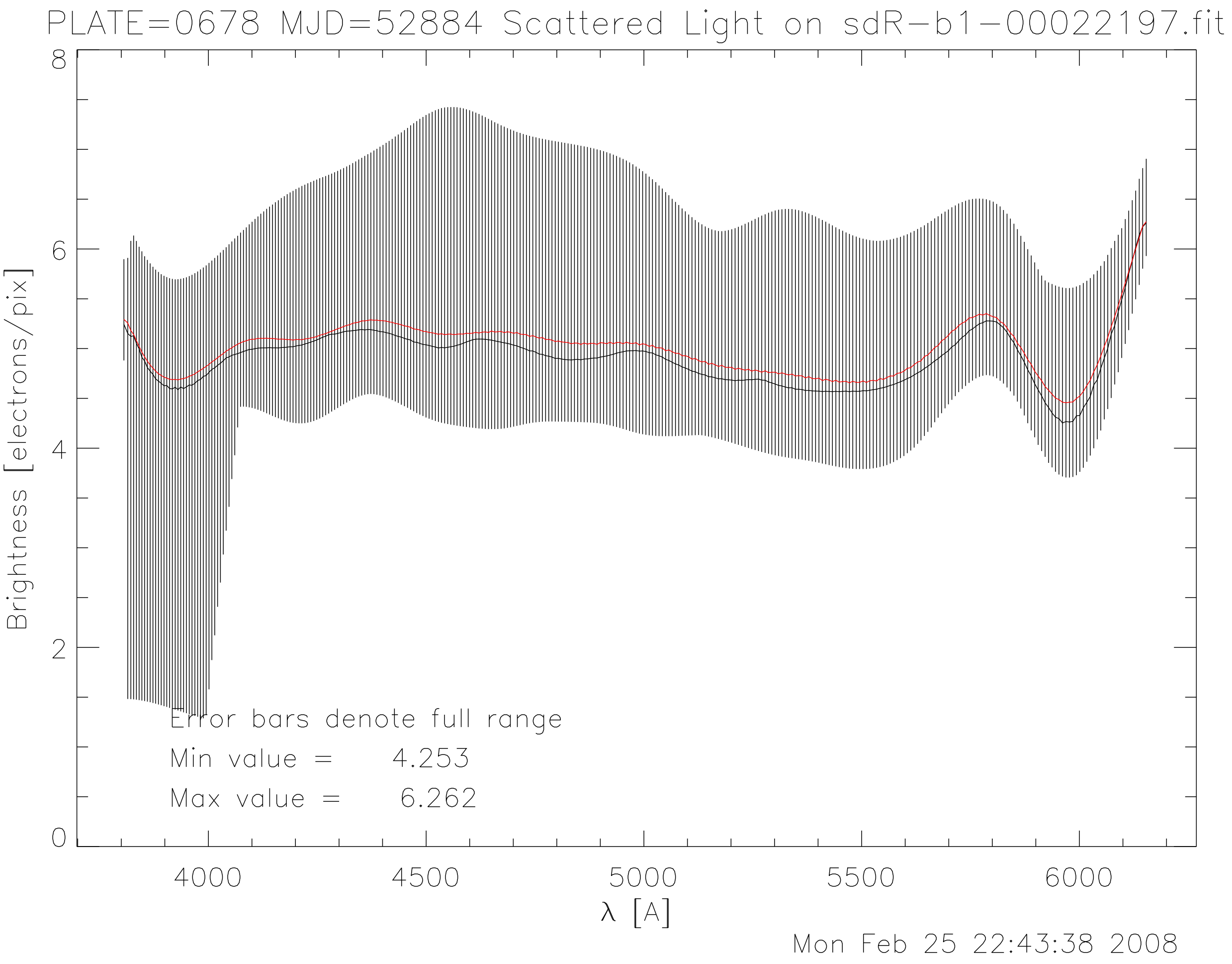


PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022197.f

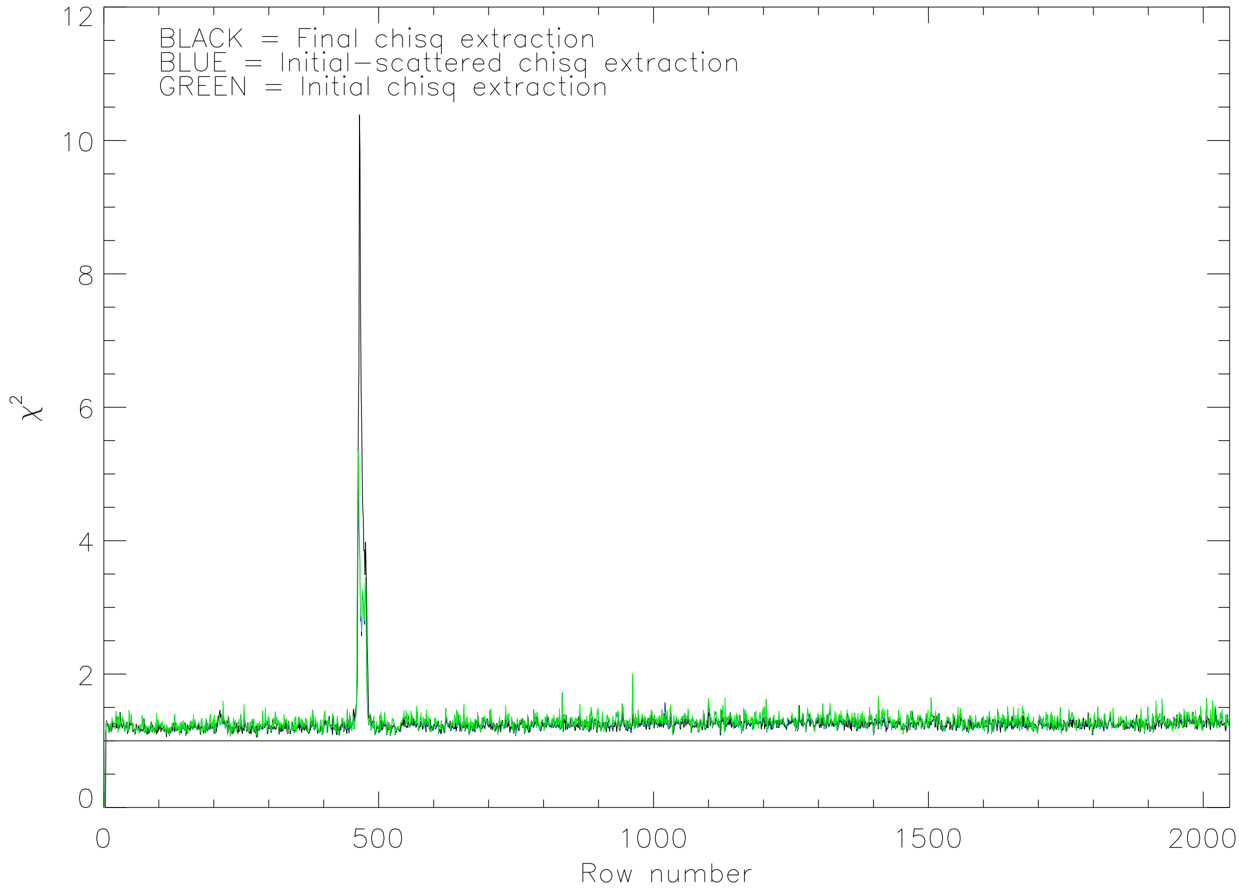

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022197.f
Brightness [electrons/pix]
0
2
4
6
8
10
12
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.440
Max value = 8.715
Mon Feb 25 22:40:16 2008

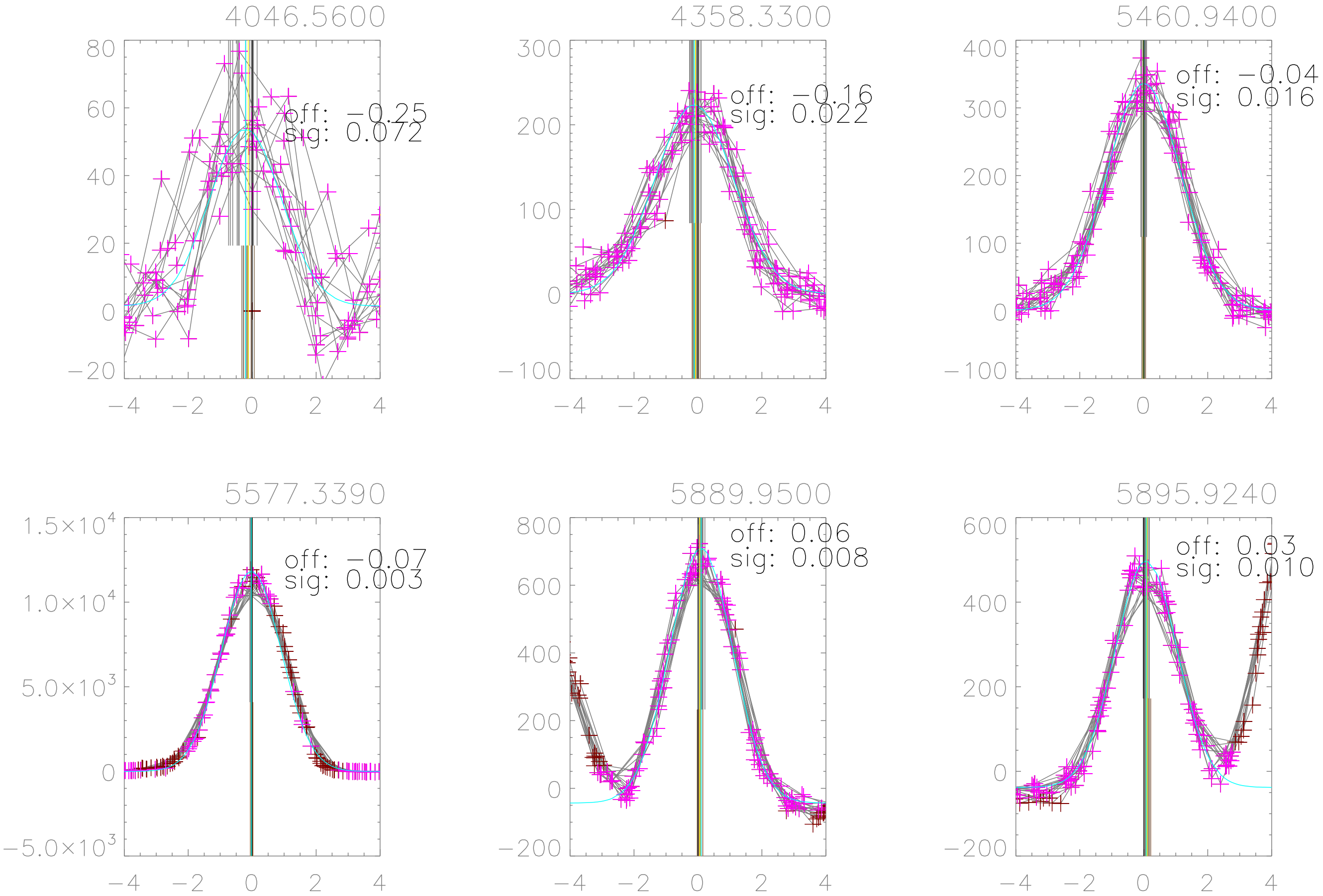
PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022197.fit

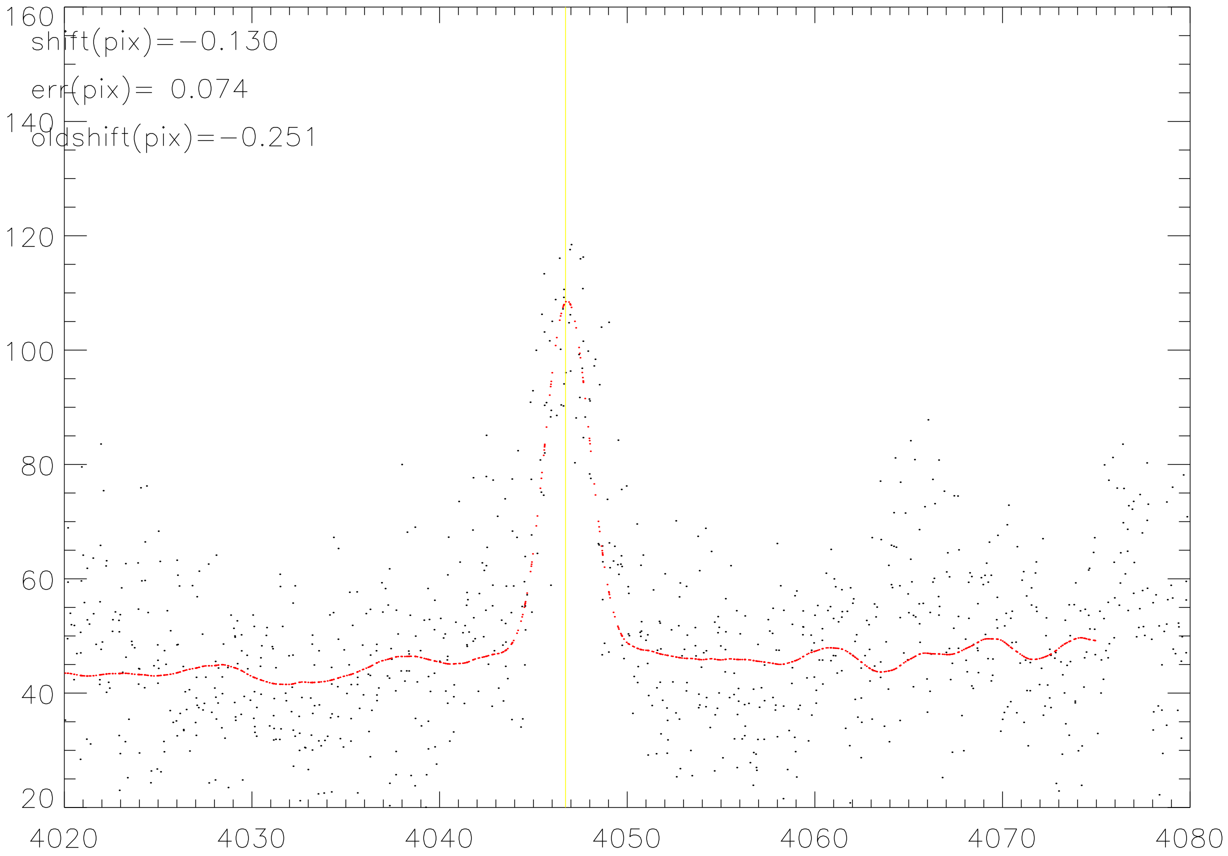



PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022197.fit
Brightness [electrons/pix]
0
2
4
6
8
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.253
Max value = 6.262
Mon Feb 25 22:43:38 2008

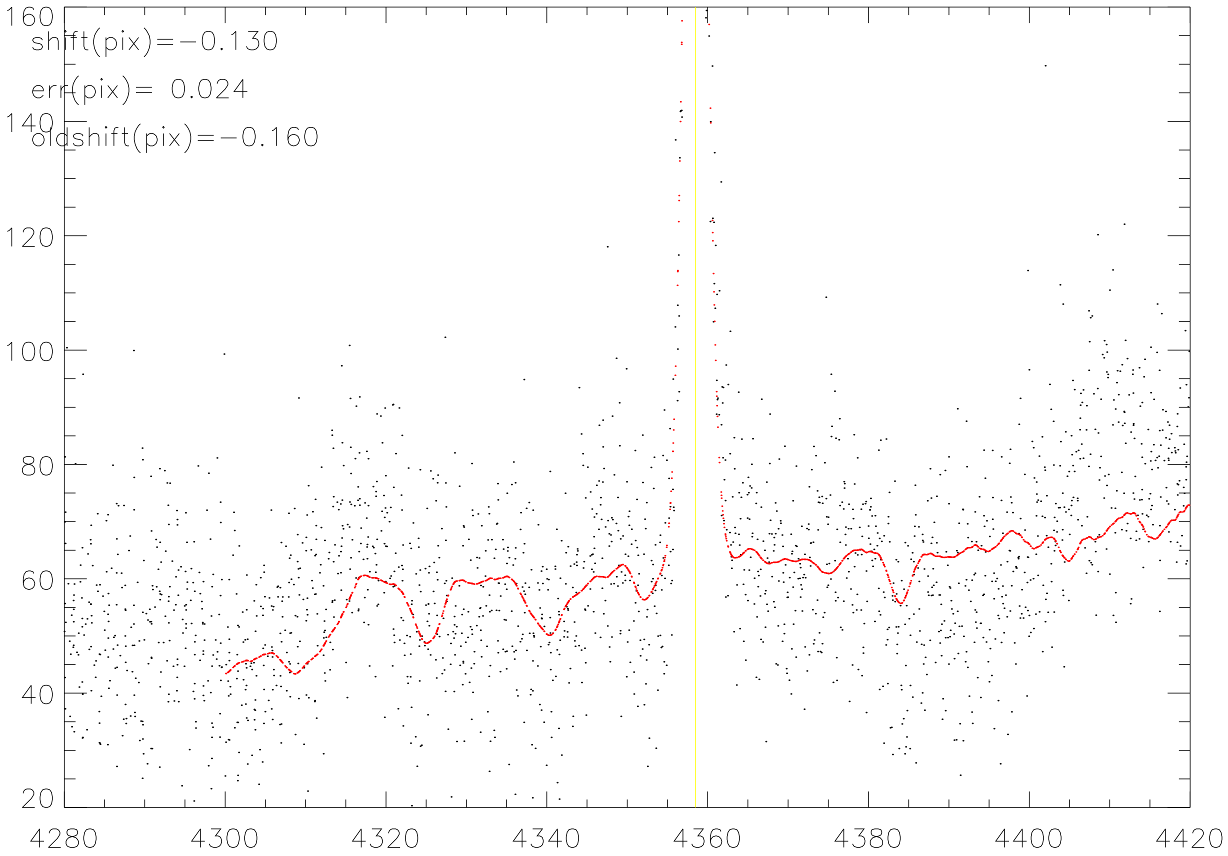
PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b1-00022197.fit

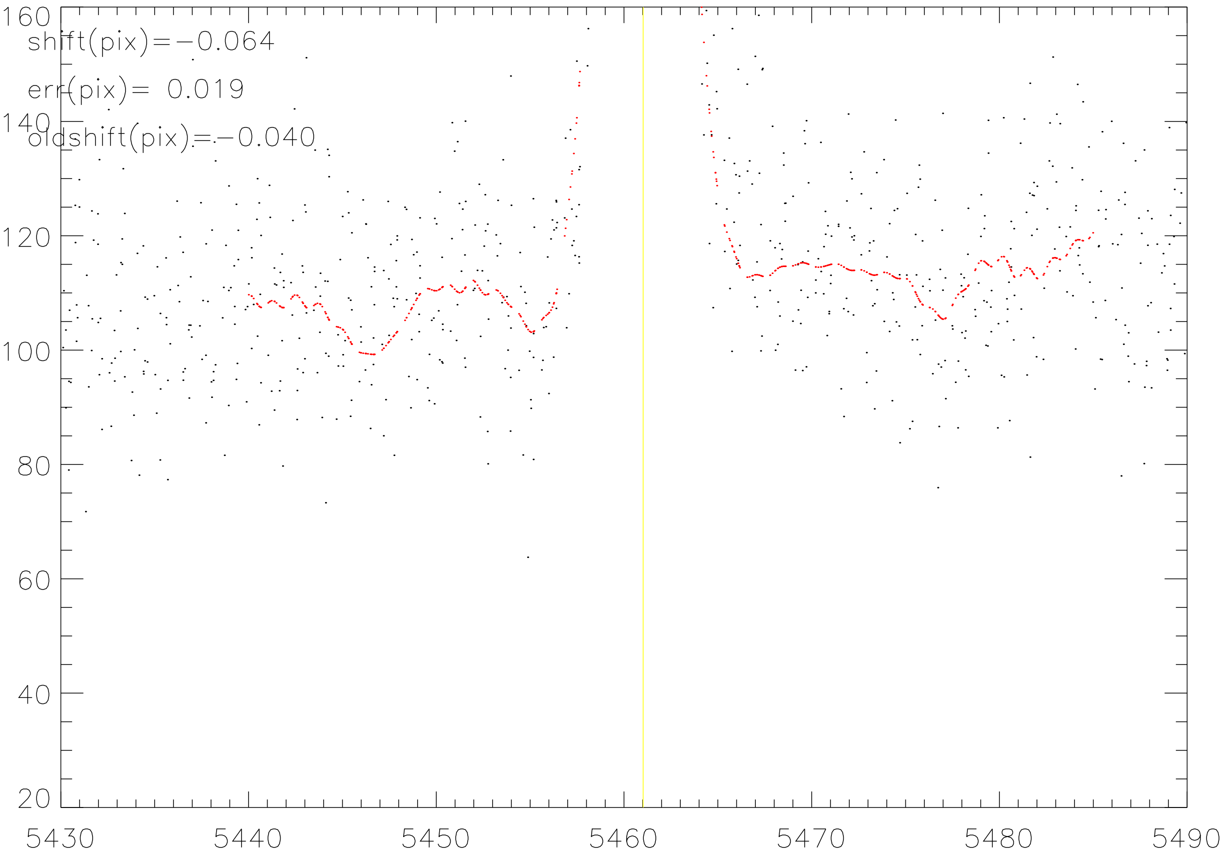


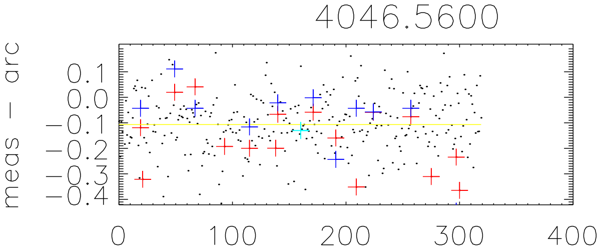

4046.5600
off: −0.25
sig: 0.072
4358.3300
off: −0.16
sig: 0.022
5460.9400
off: −0.04
sig: 0.016
5577.3390
off: −0.07
sig: 0.003
5889.9500
off: 0.06
sig: 0.008
5895.9240
off: 0.03
sig: 0.010
80
60
40
20
0
−20
300
200
100
0
−100
400
300
200
100
0
−100
1.5×10^4
1.0×10^4
5.0×10^3
0
−5.0×10^3
800
600
400
200
0
−200
600
400
200
0
−200
−4
−2
0
2
4

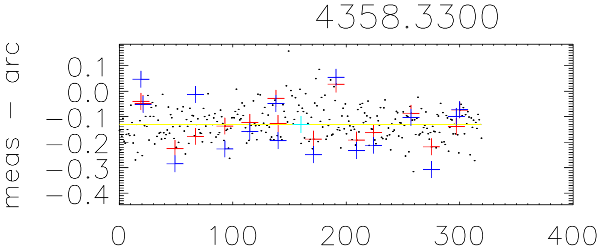


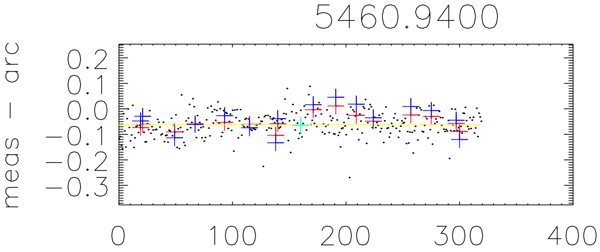
shift(pix)=-0.130
err(pix)= 0.074
oldshift(pix)=-0.251
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

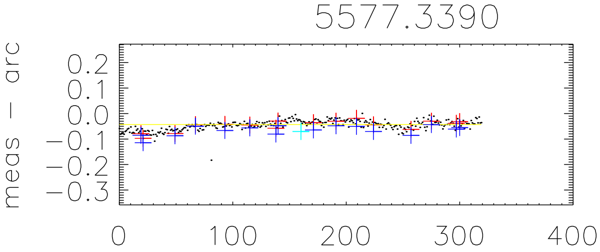

shift(pix)=−0.130
err(pix)= 0.024
oldshift(pix)=−0.160
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

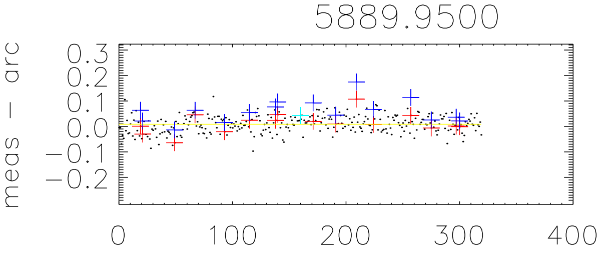

shift(pix)=−0.064
err(pix)= 0.019
oldshift(pix)=−0.040
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

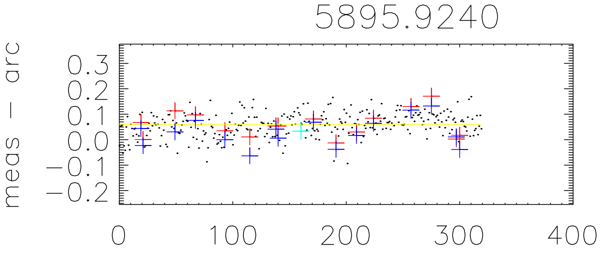

4046.5600

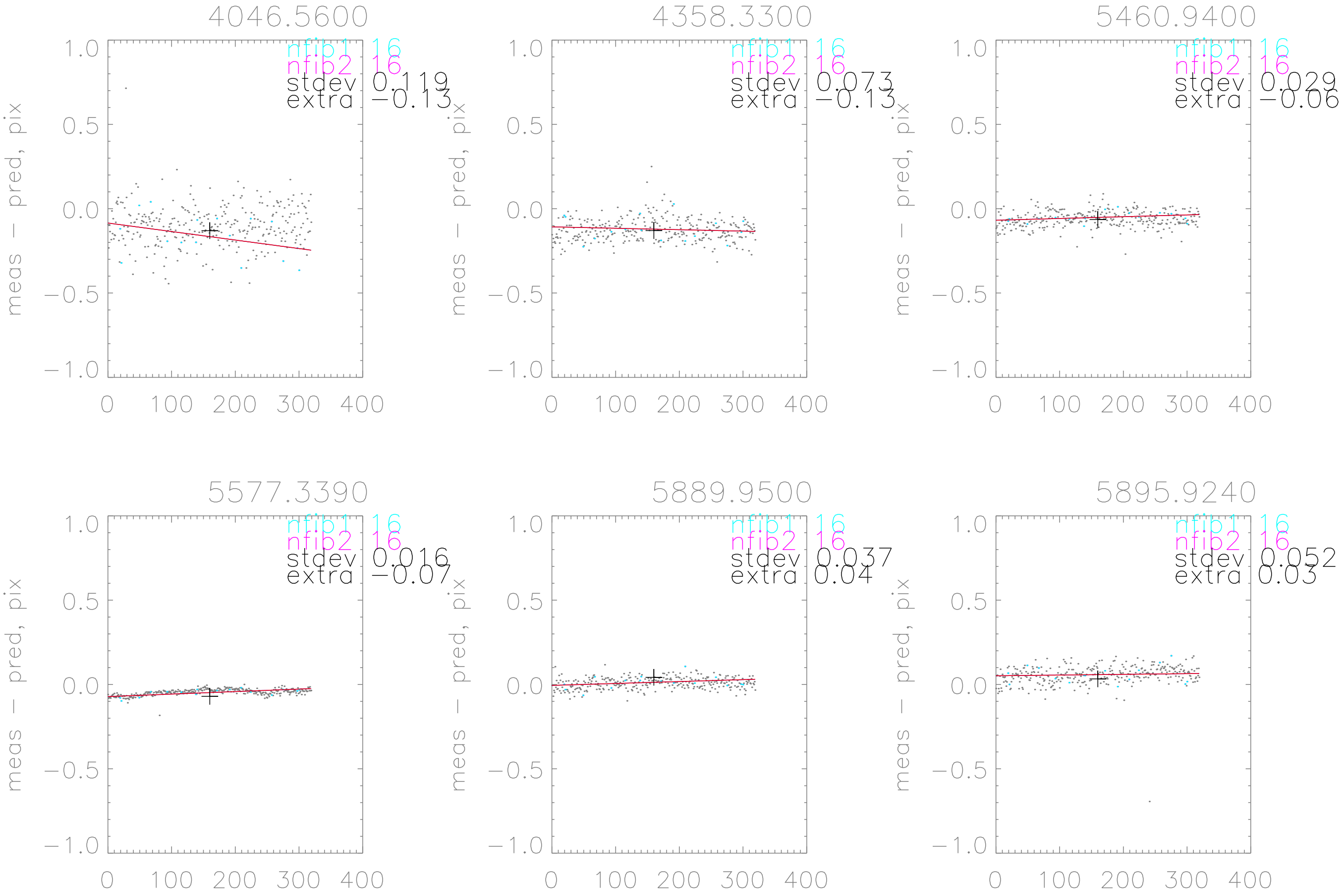

4358.3300

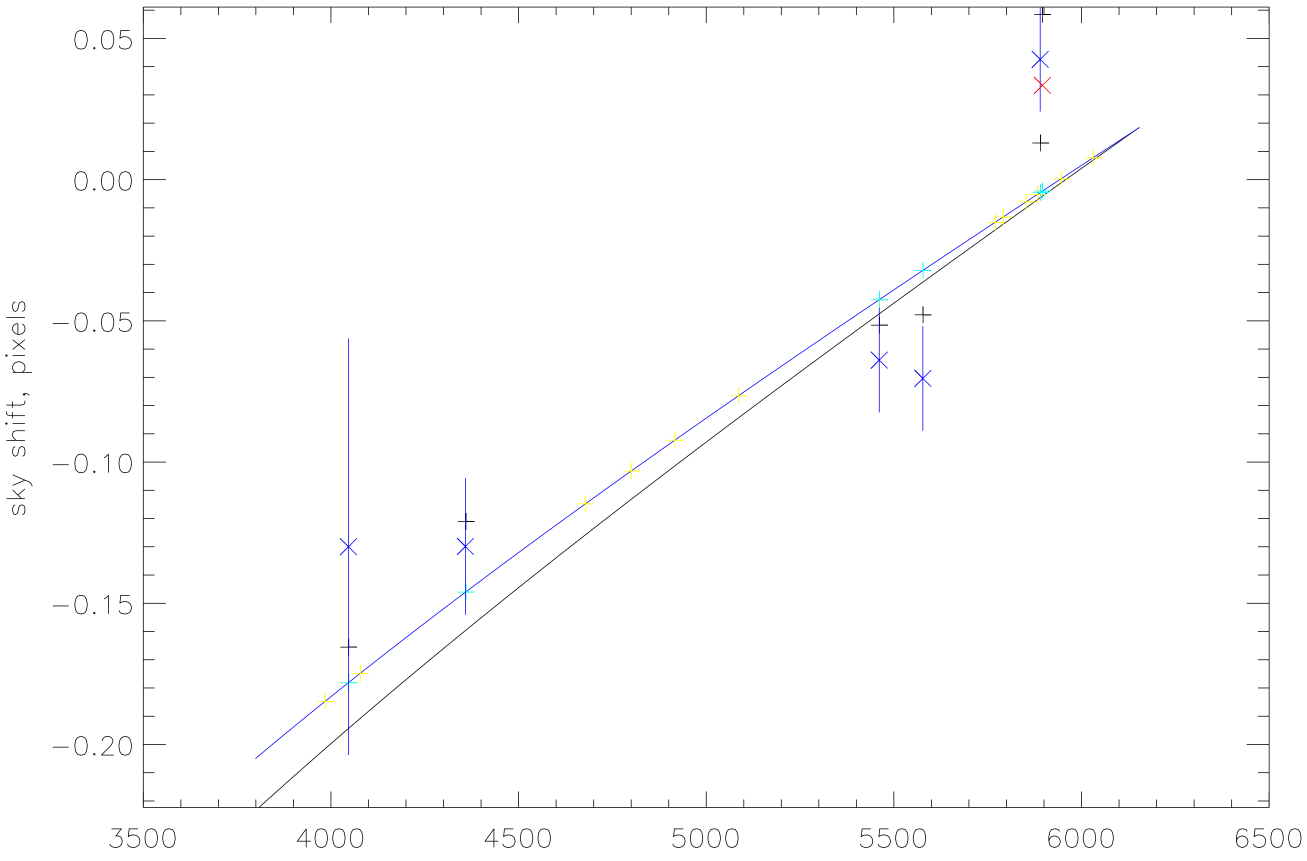

5460.9400

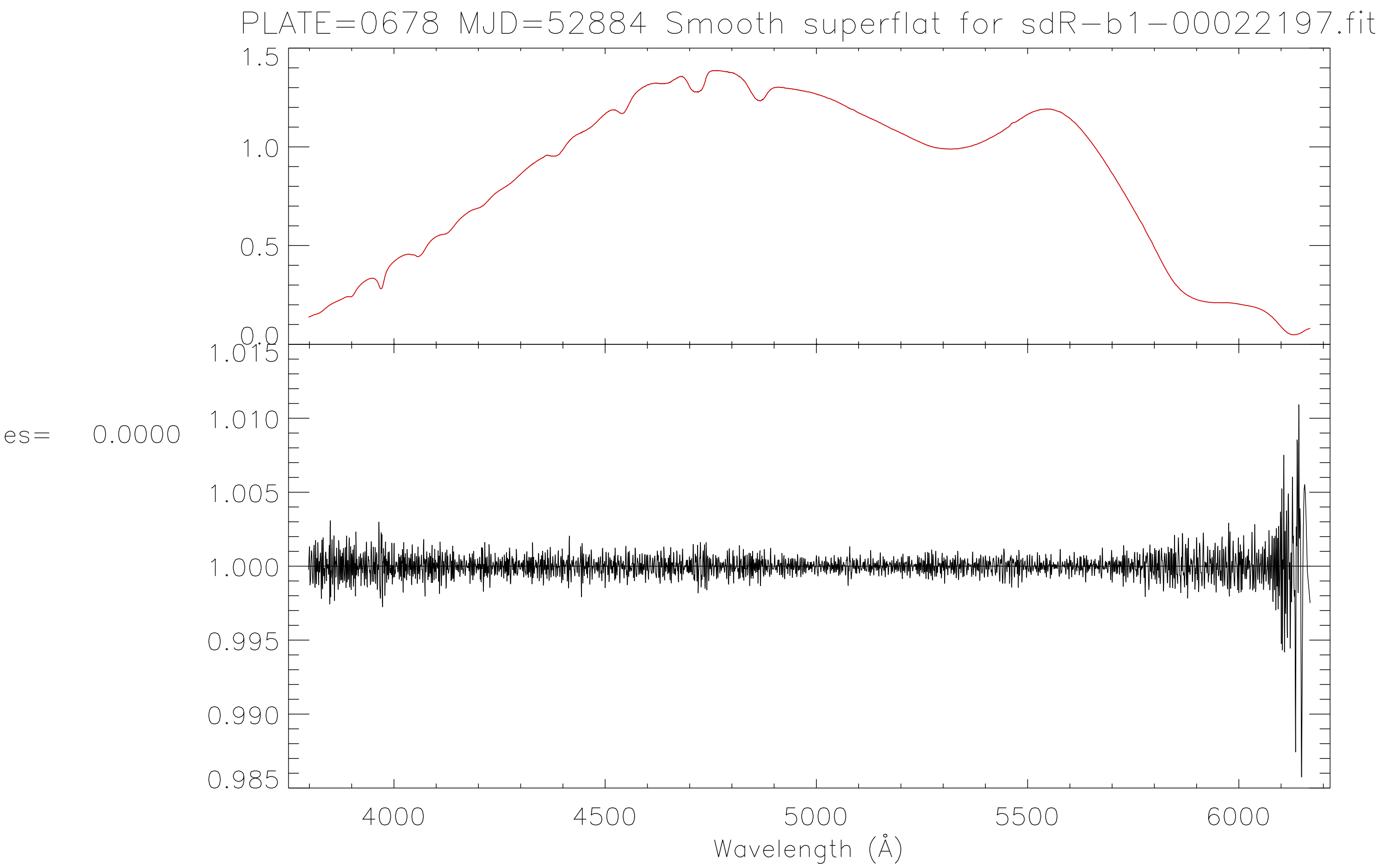

5577.3390

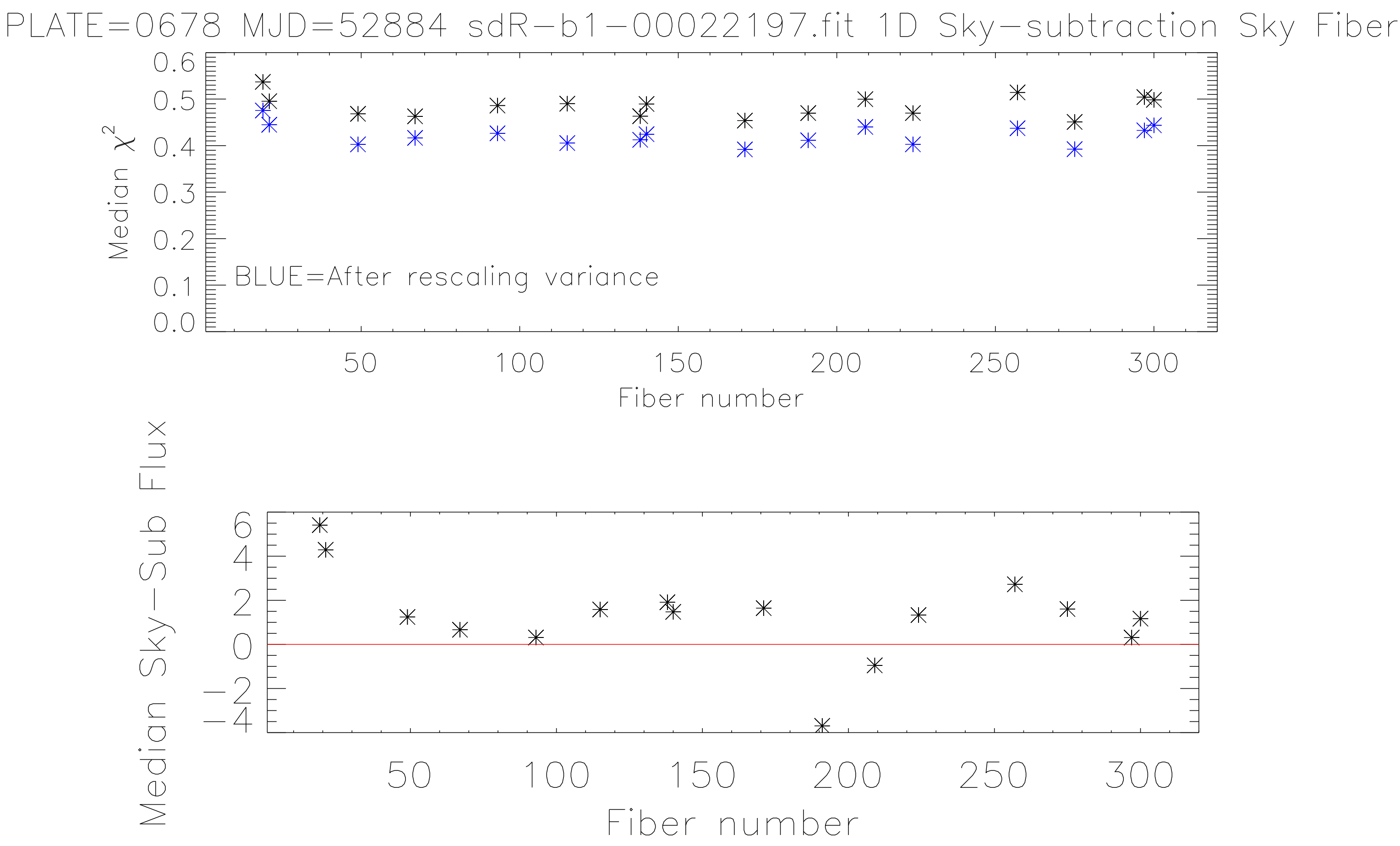

5889.9500

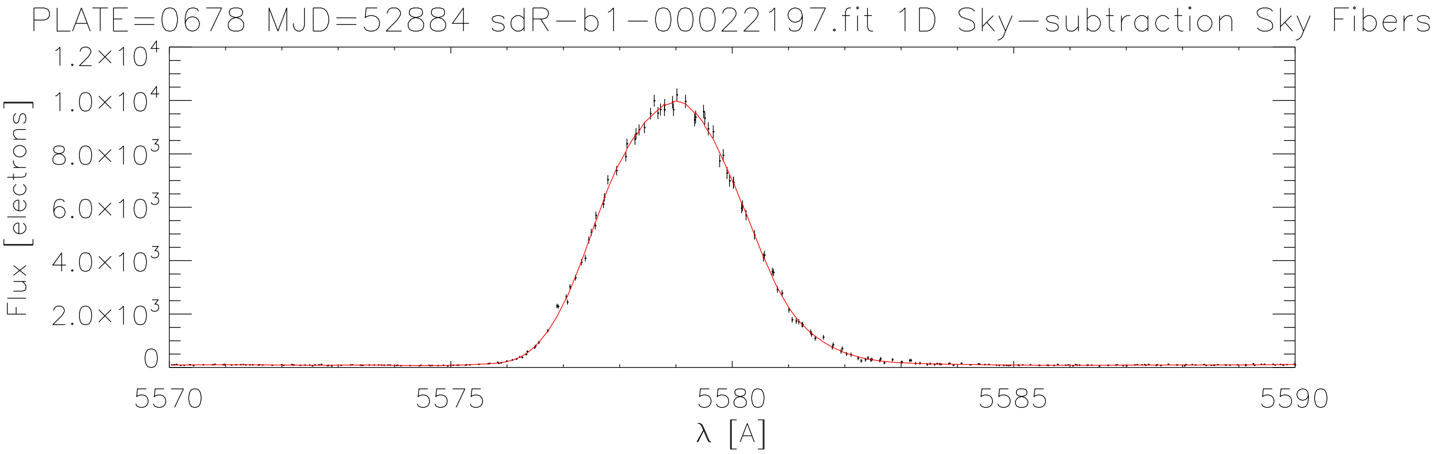

5895.9240

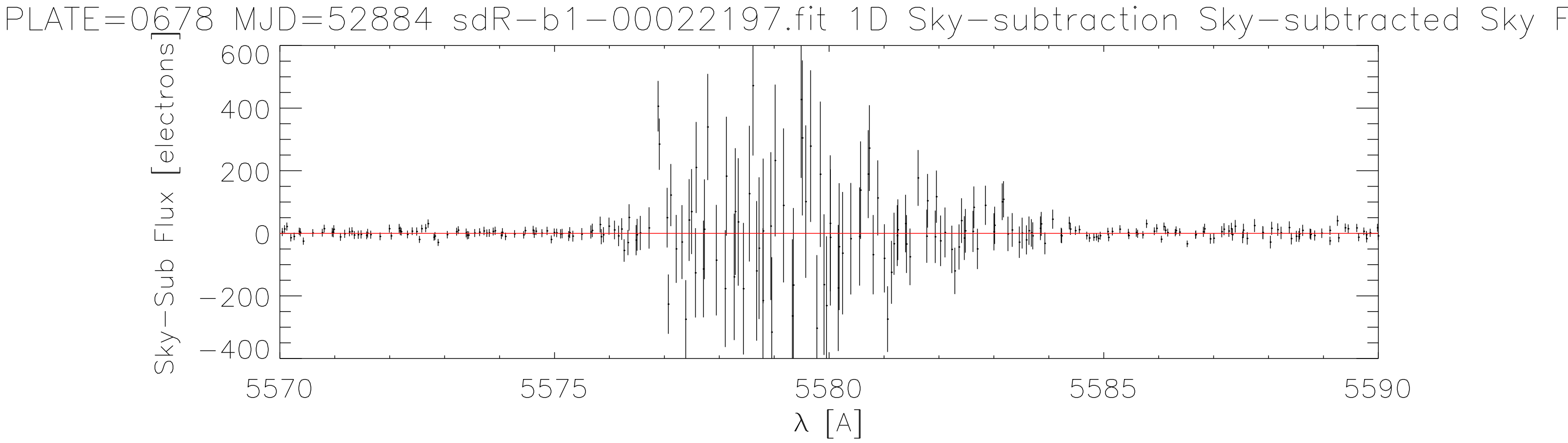

4046.5600
nfib1 16
nfib2 16
stdev 0.119
extra −0.13
4358.3300
nfib1 16
nfib2 16
stdev 0.073
extra −0.13
5460.9400
nfib1 16
nfib2 16
stdev 0.029
extra −0.06
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra −0.07
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra 0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.052
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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


PLATE=0678 MJD=52884 Smooth superflat for sdR-b1-00022197.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= 0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

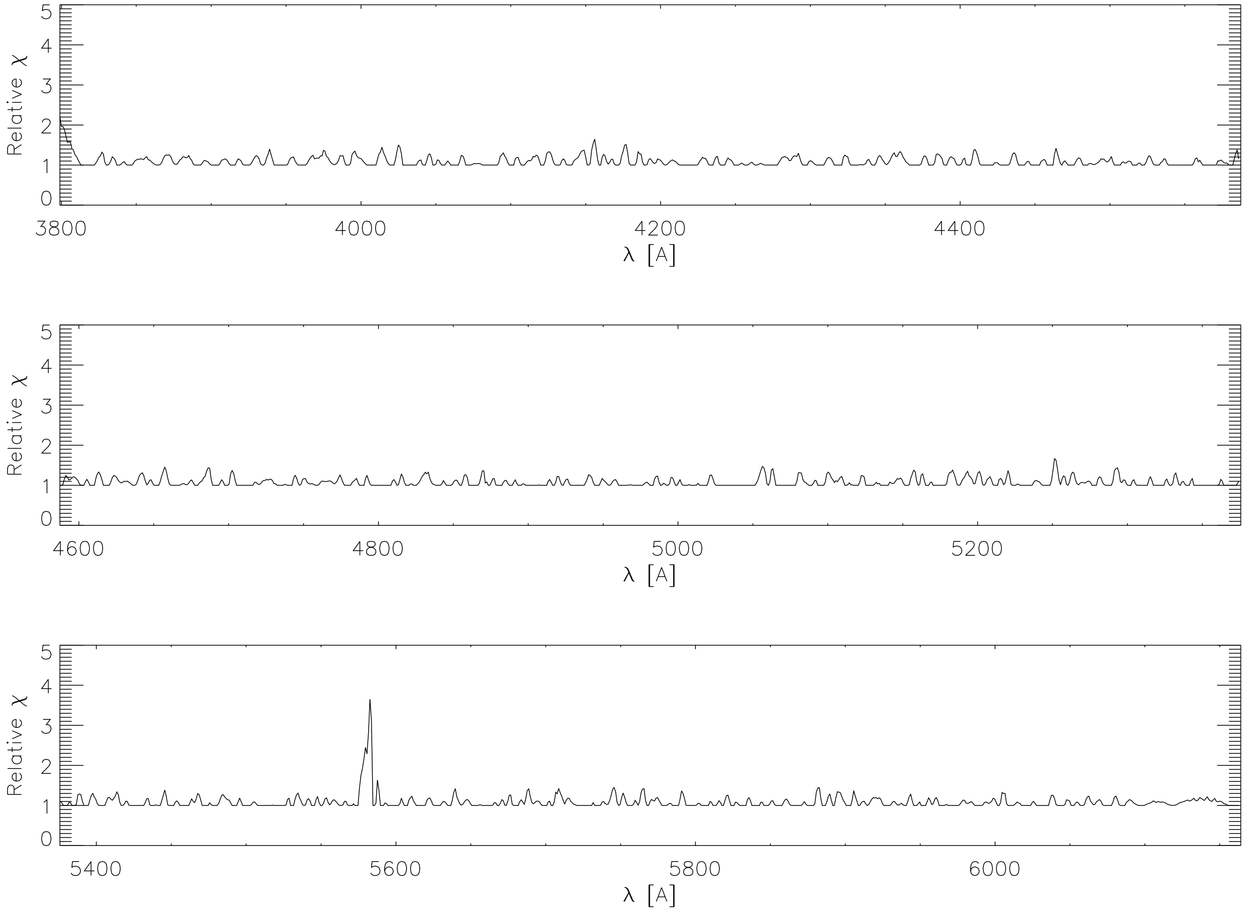

PLATE=0678 MJD=52884 sdR-b1-00022197.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

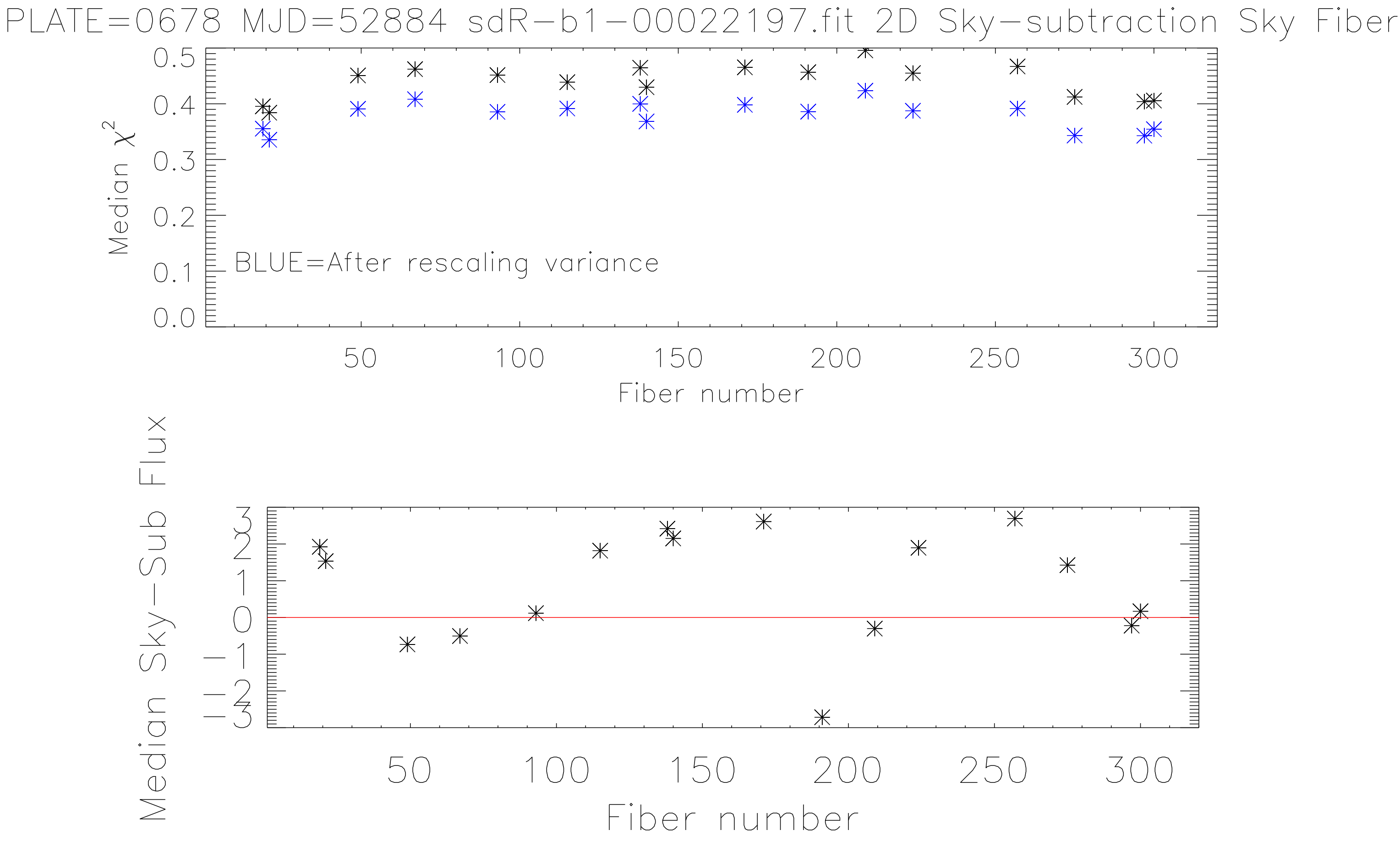

PLATE=0678 MJD=52884 sdR-b1-00022197.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10⁴
1.0×10⁴
8.0×10³
6.0×10³
4.0×10³
2.0×10³
0
5570
5575
5580
5585
5590
λ [A]


PLATE=0678 MJD=52884 sdR-b1-00022197.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

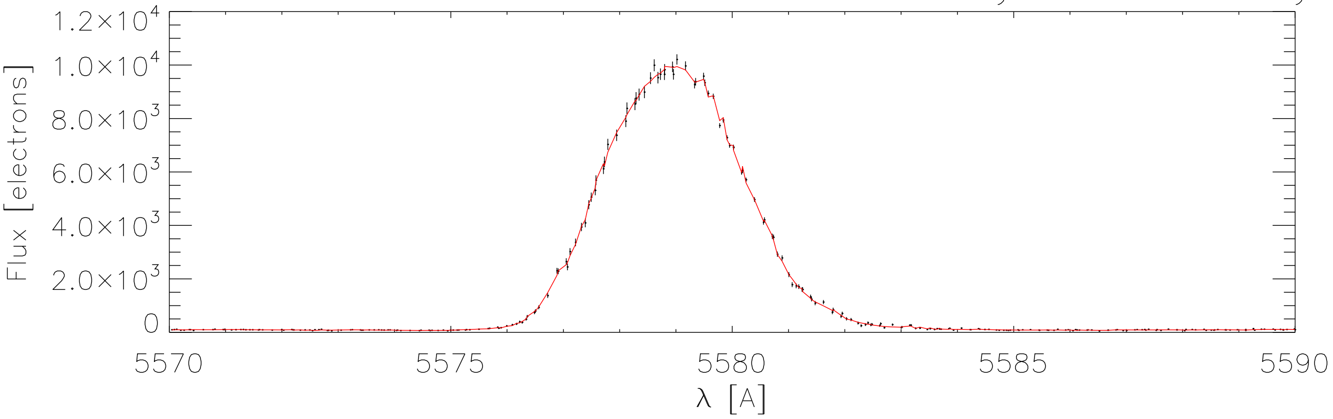
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b1-00022197.fit 1D Sky-subtraction Rescaled Errors

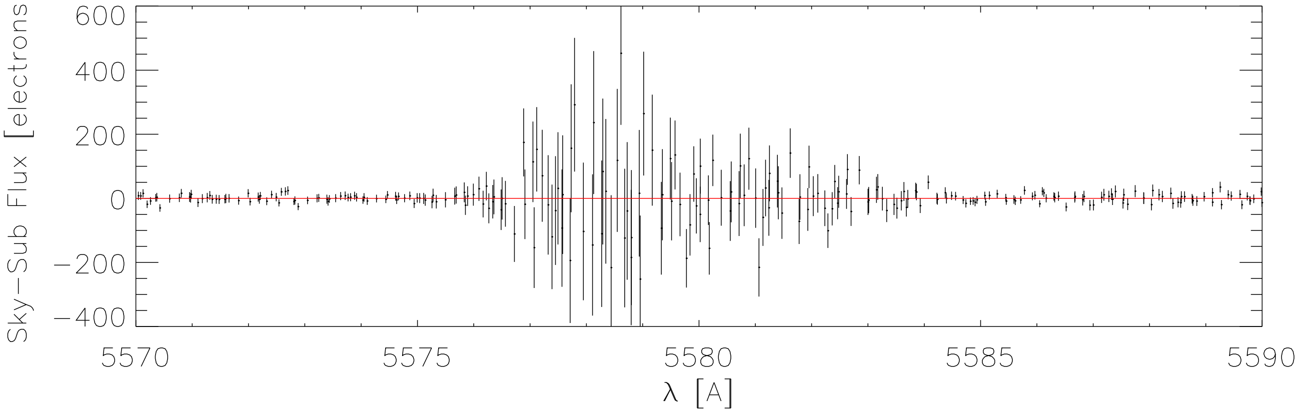


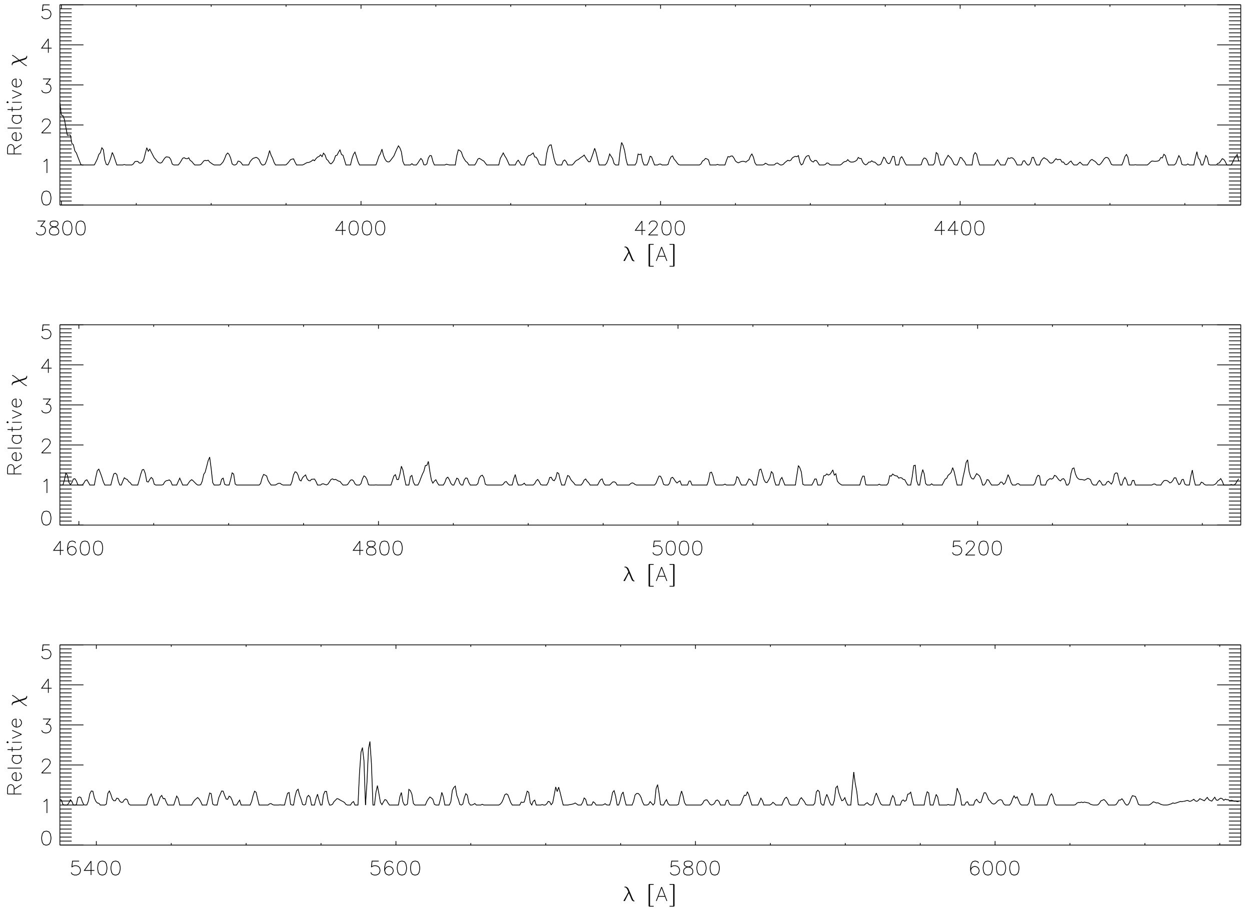

PLATE=0678 MJD=52884 sdR-b1-00022197.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

PLATE=0678 MJD=52884 sdR-b1-00022197.fit 2D Sky-subtraction Sky Fibers



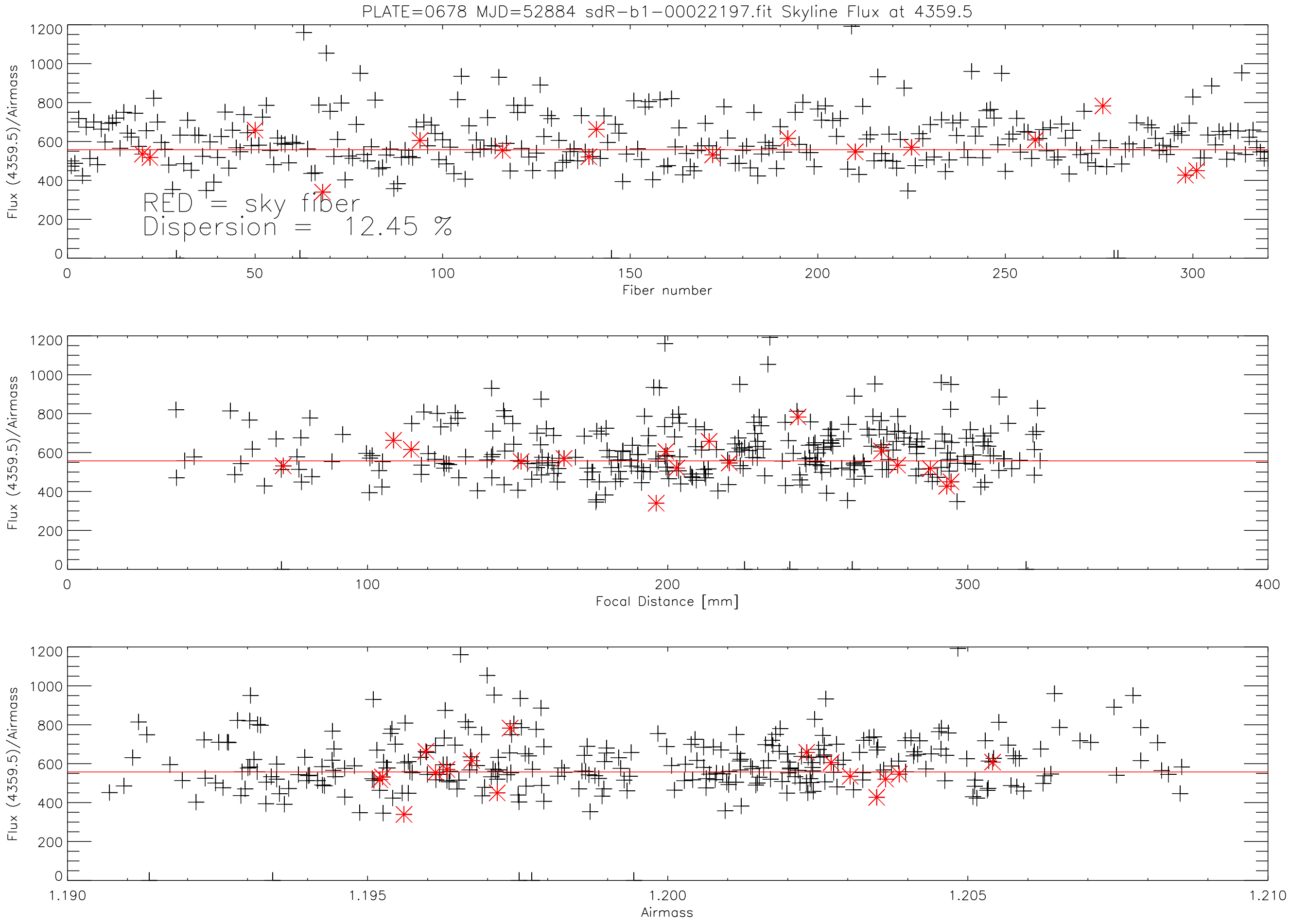
PLATE=0678 MJD=52884 sdR-b1-00022197.fit 2D Sky-subtraction Sky-subtracted Sky F

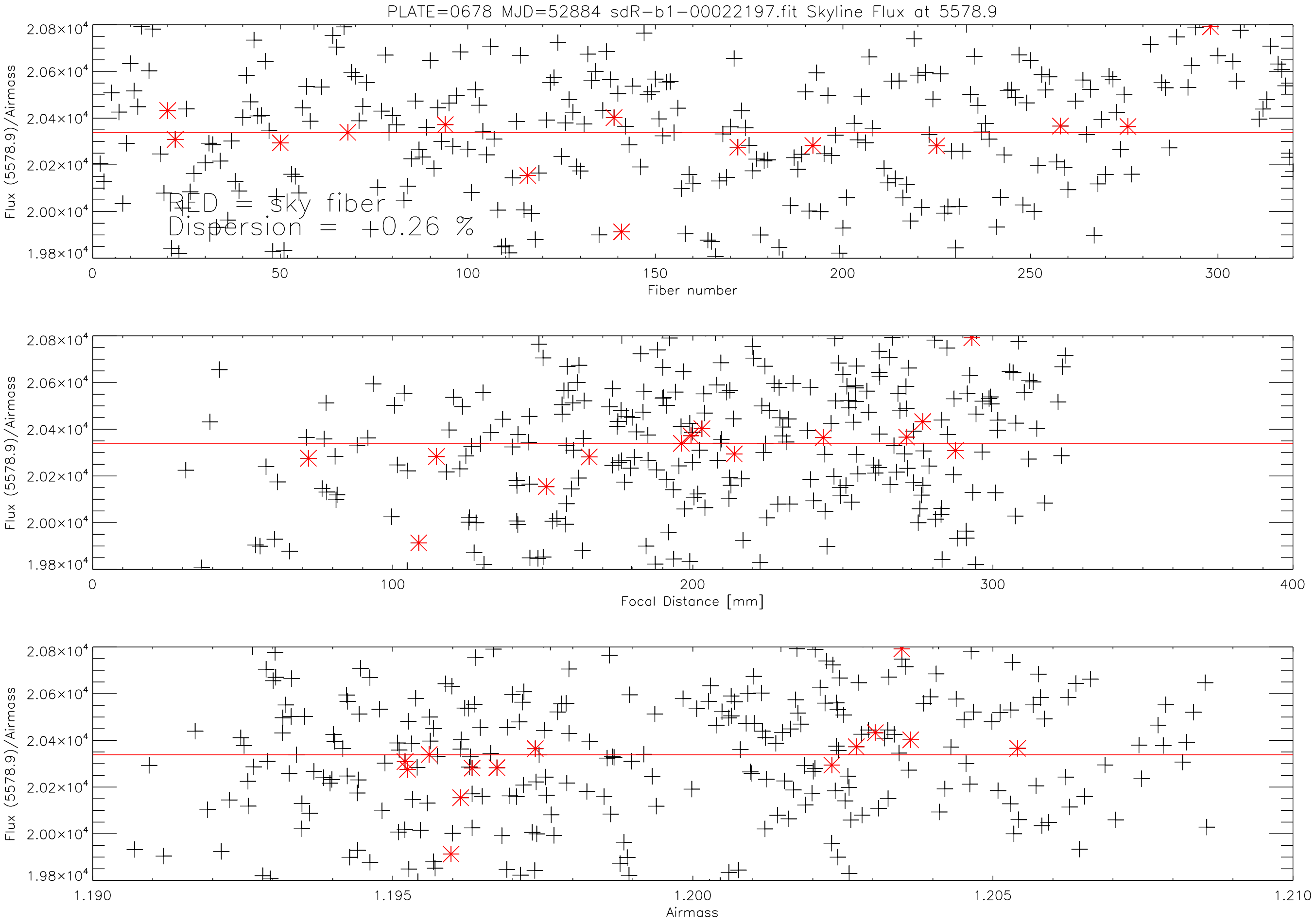


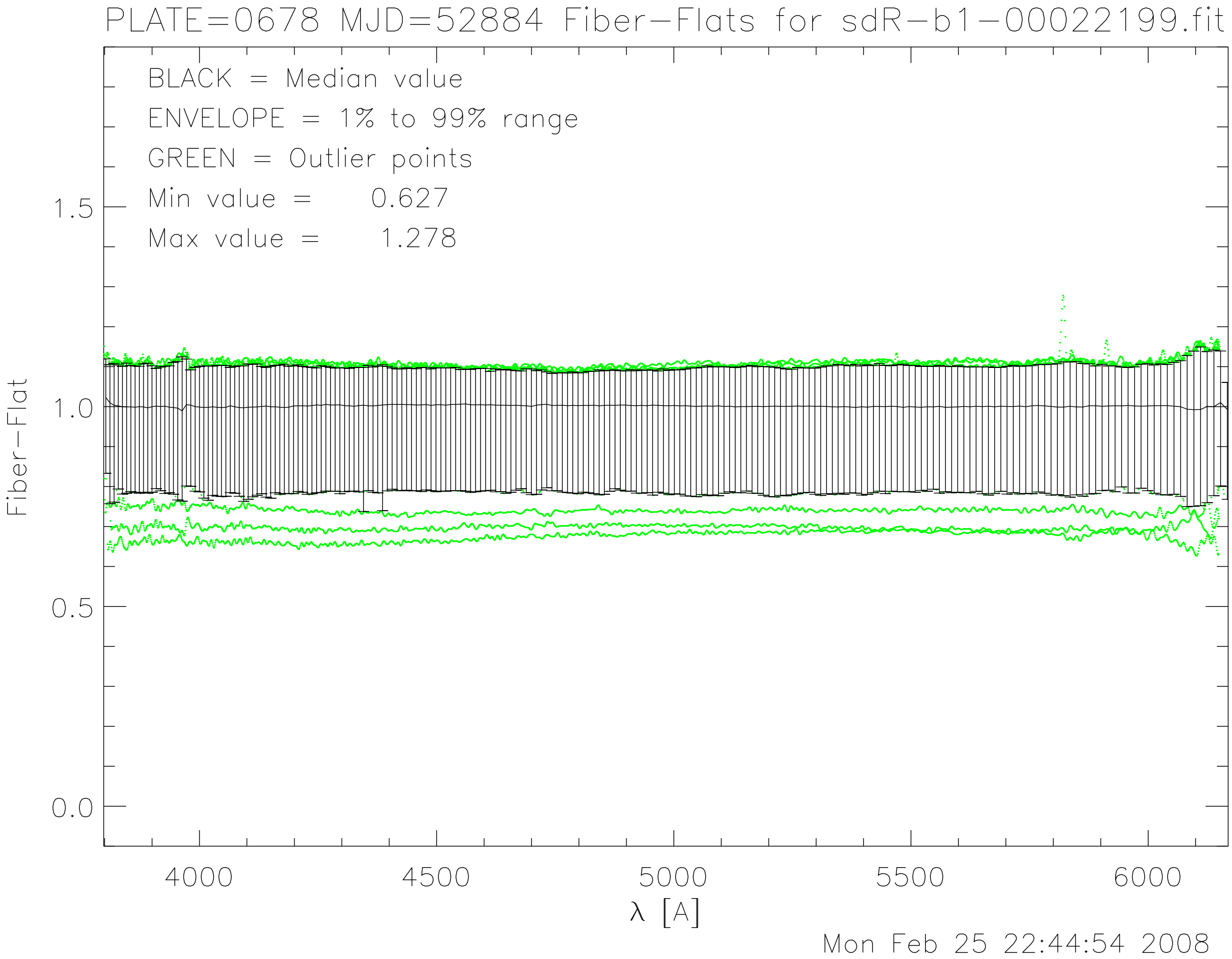


Number of sky fibers = 16

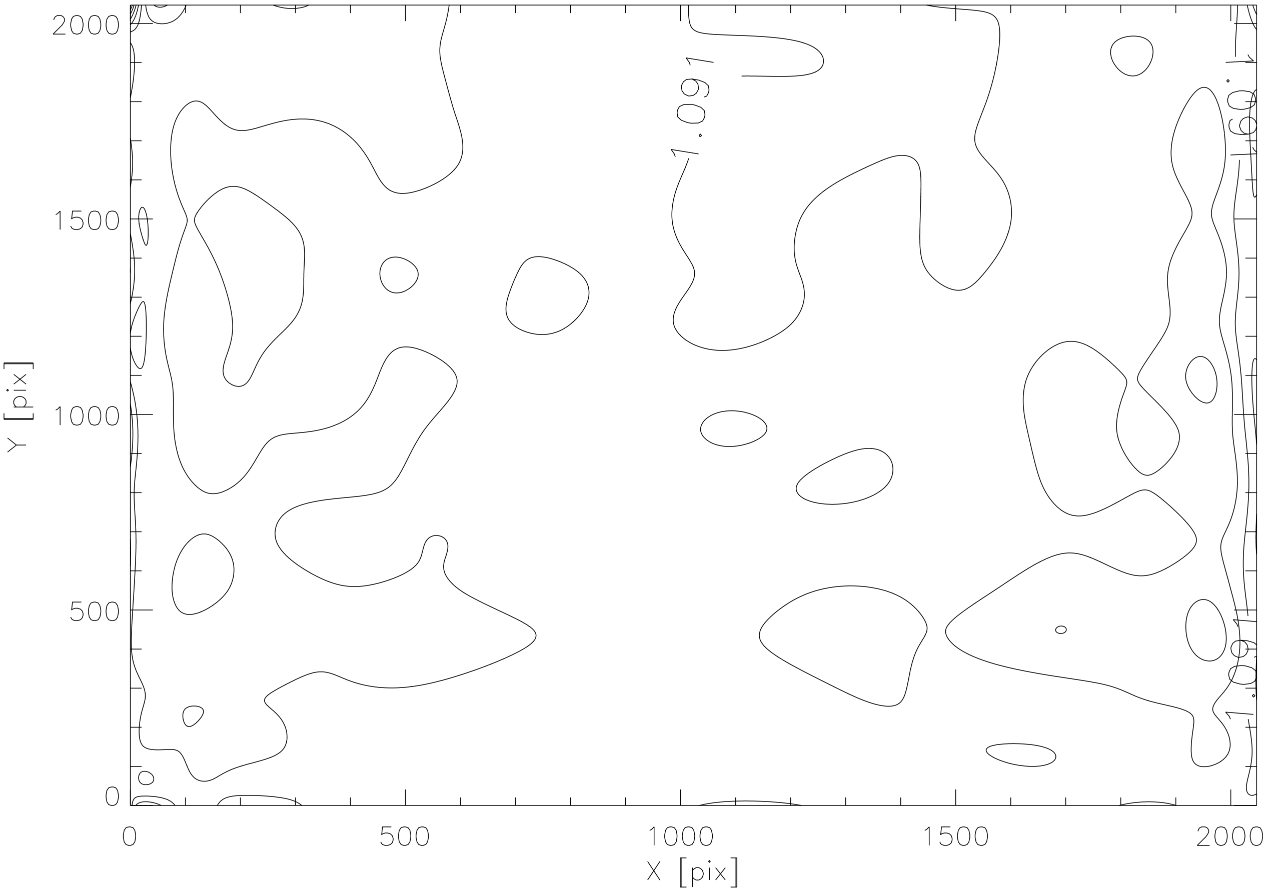
PLATE=0678 MJD=52884 sdR-b1-00022197.fit 2D Sky-subtraction Rescaled Errors

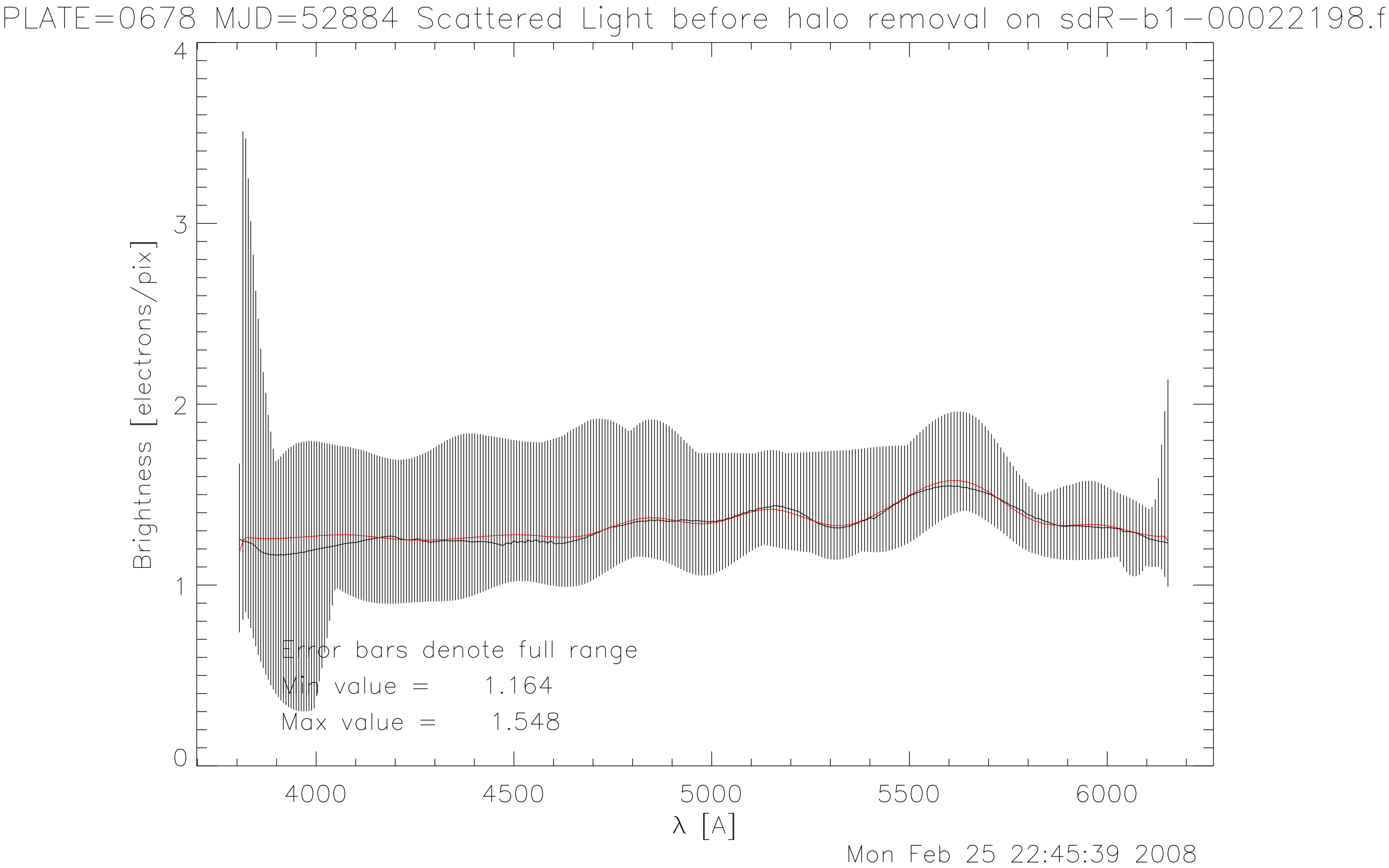

PLATE=0678 MJD=52884 sdR-b1-00022197.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 12.45 %
Flux (4359.5)/Airmass
0
200
400
600
800
1000
1200
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.190
1.195
1.200
1.205
1.210

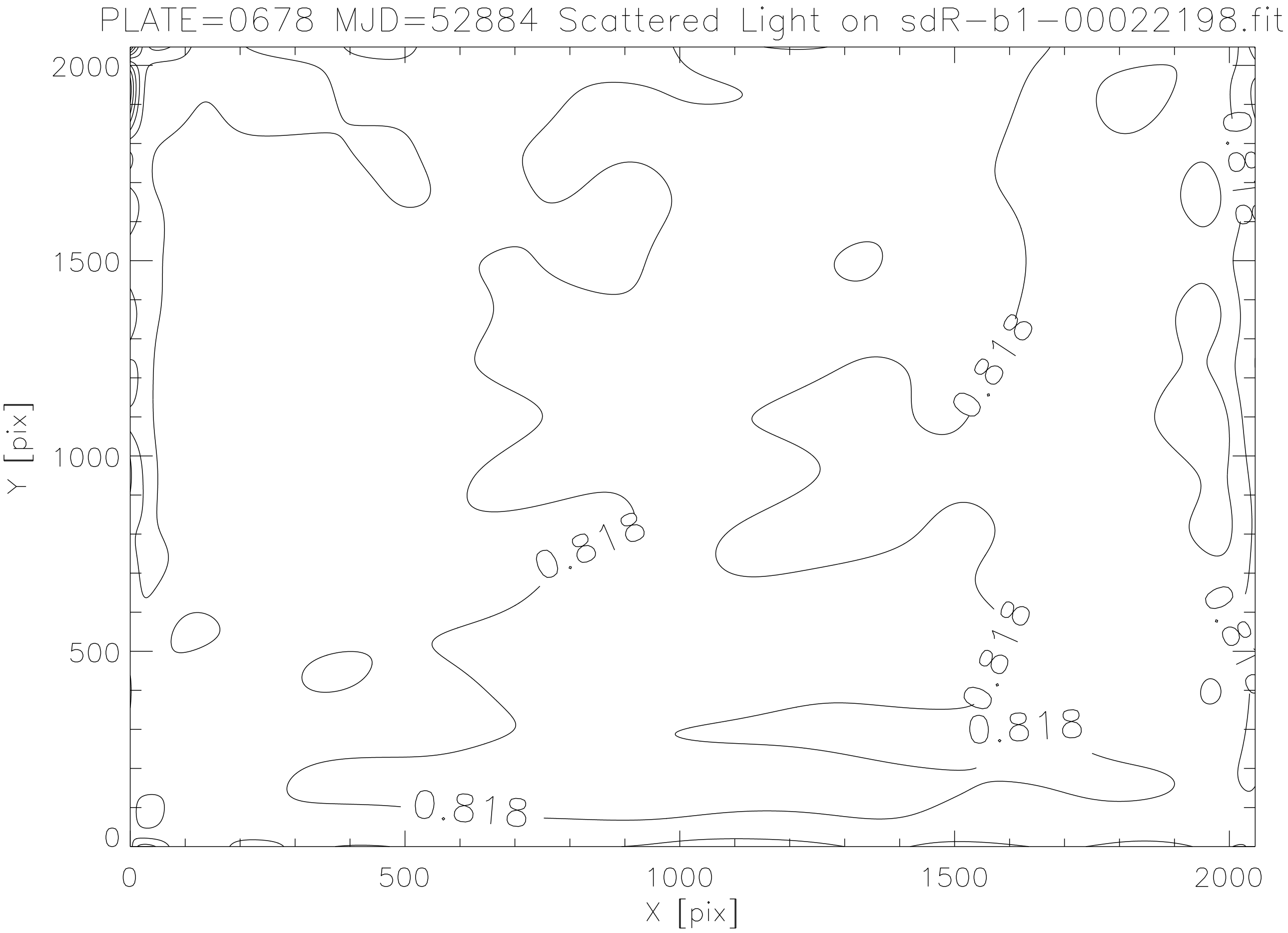

PLATE=0678 MJD=52884 sdR-b1-00022197.fit Skyline Flux at 5578.9


PLATE=0678 MJD=52884 Fiber−Flats for sdR−b1−00022199.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.627
Max value = 1.278
1.5
1.0
0.5
0.0
Fiber−Flat
4000
4500
5000
5500
6000
λ [A]
Mon Feb 25 22:44:54 2008

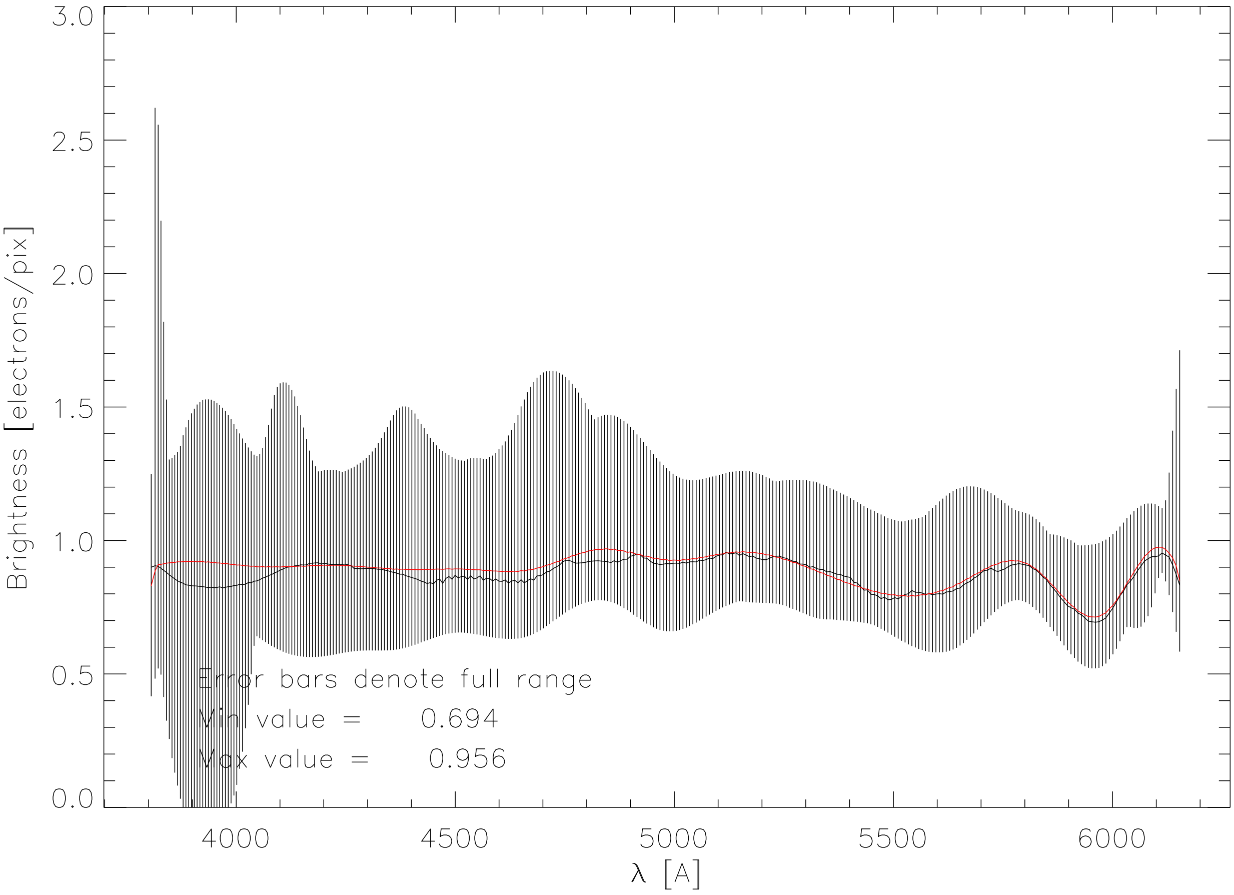
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022198.f



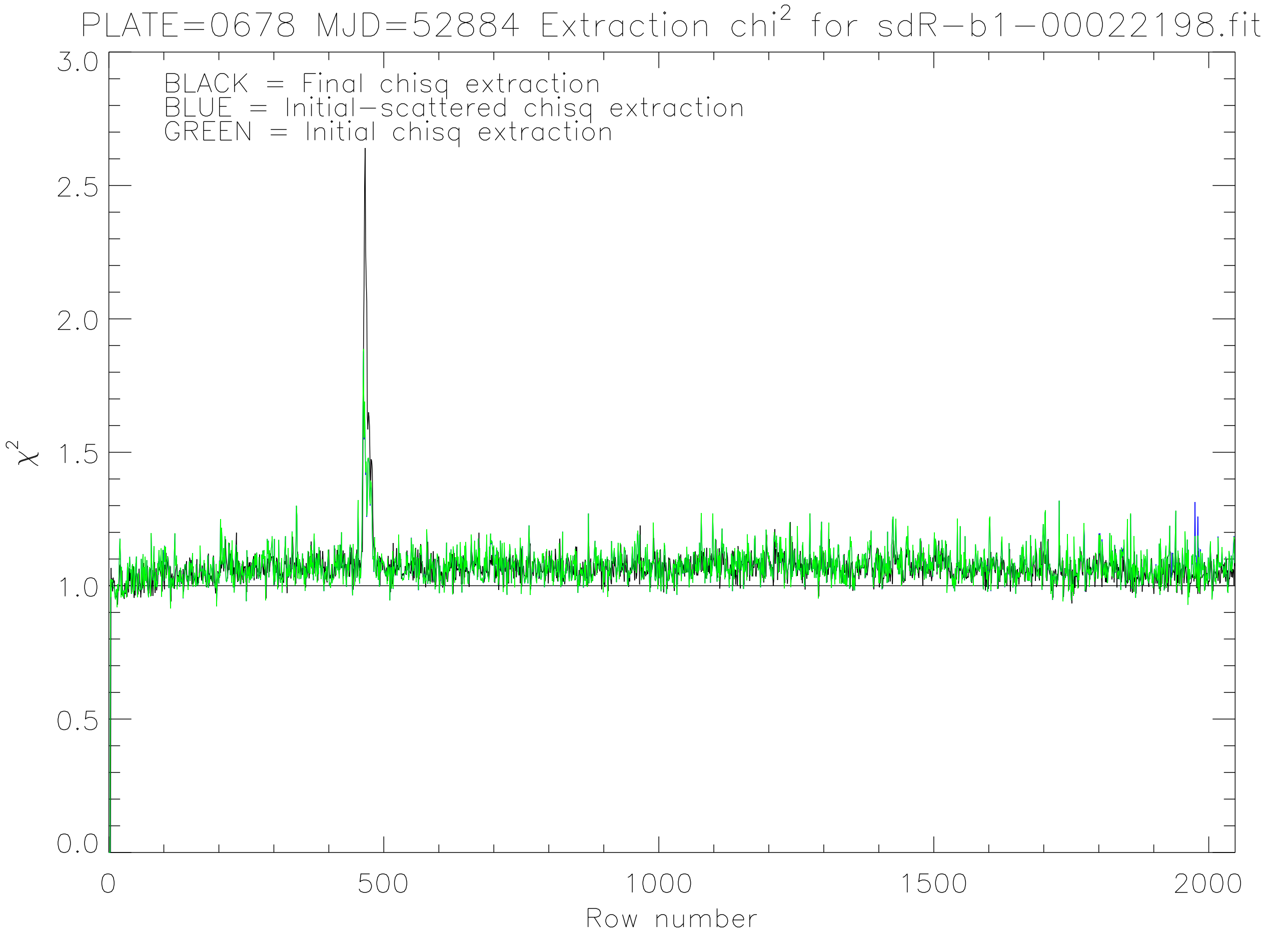

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b1-00022198.f
Brightness [electrons/pix]
0
1
2
3
4
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 1.164
Max value = 1.548
Mon Feb 25 22:45:39 2008

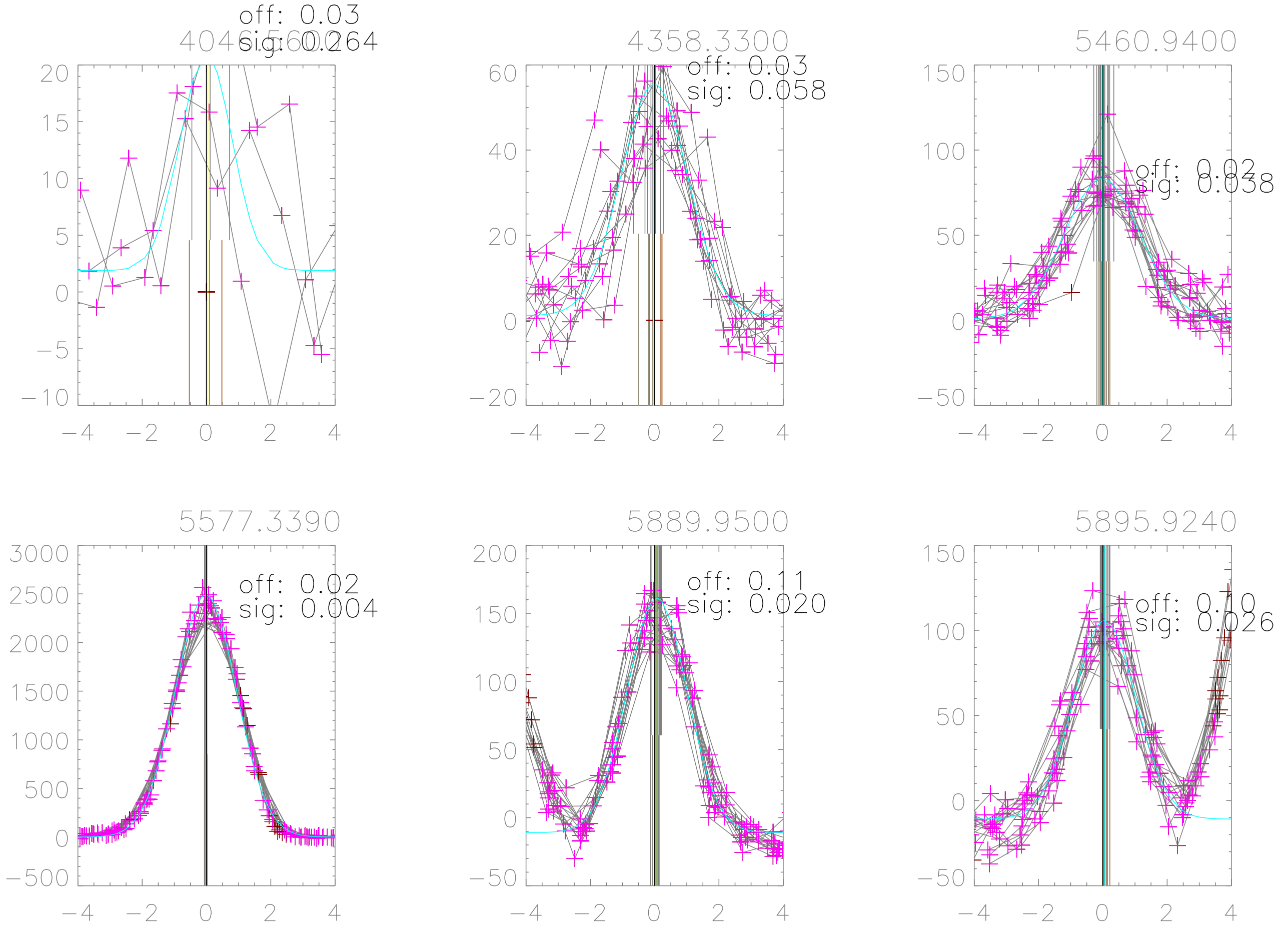

PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022198.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
0.818
0.818
0.818
0.818
0.818
0.818
0.818
0.818

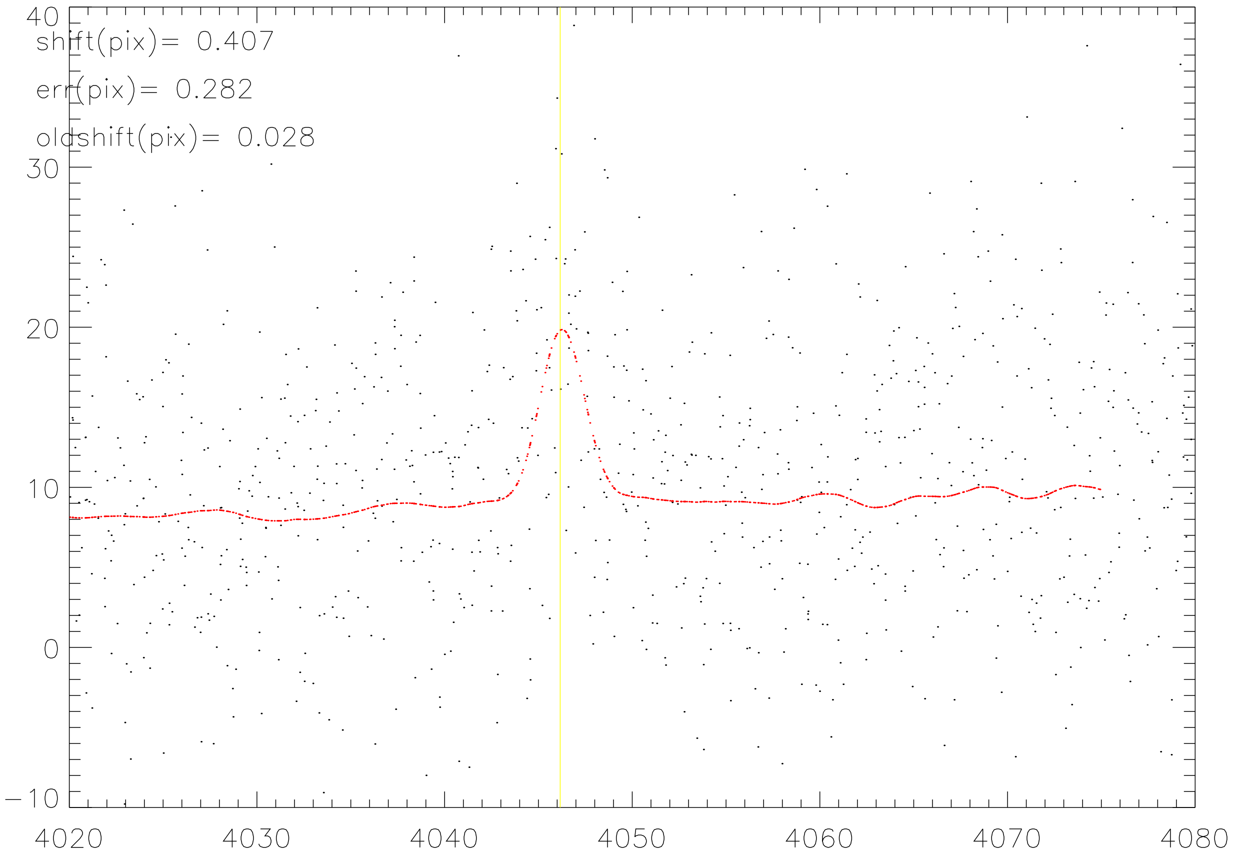
PLATE=0678 MJD=52884 Scattered Light on sdR-b1-00022198.fit

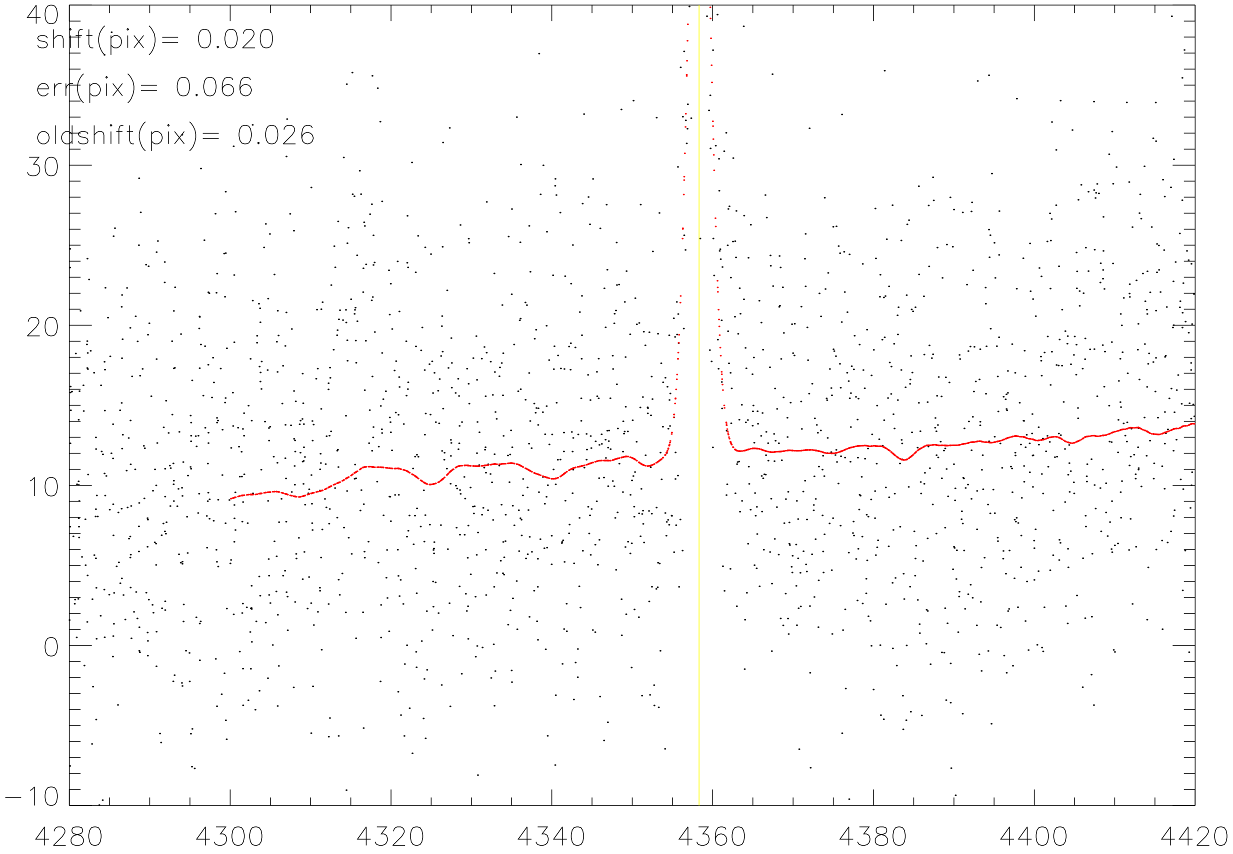


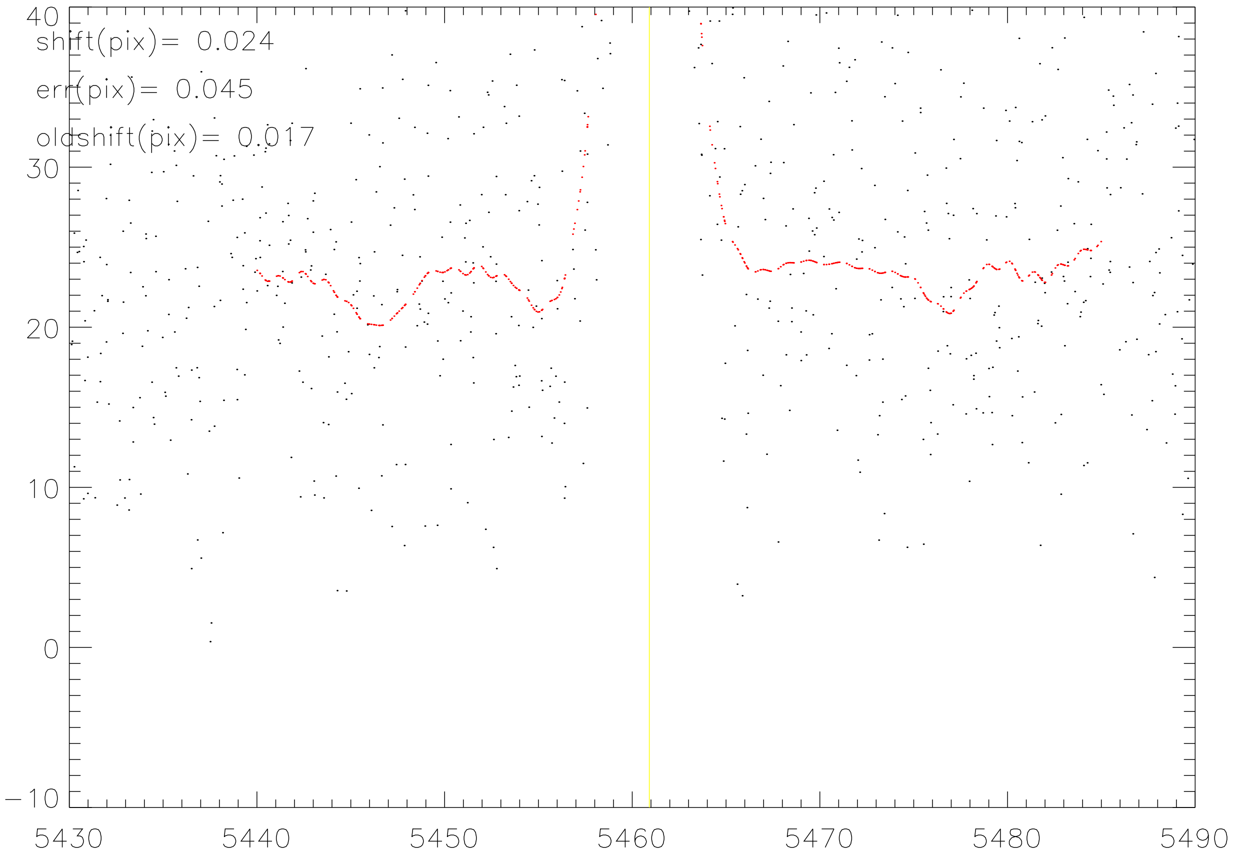
Mon Feb 25 22:48:50 2008

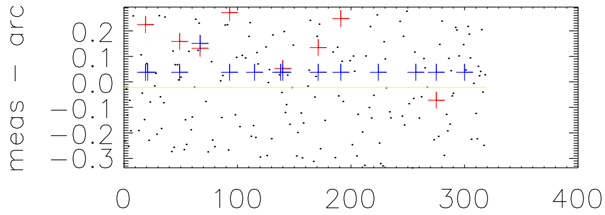

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b1-00022198.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

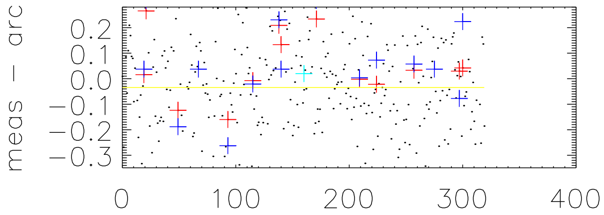

4046.5600
off: 0.03
sig: 0.264
4358.3300
off: 0.03
sig: 0.058
5460.9400
off: 0.02
sig: 0.038
5577.3390
off: 0.02
sig: 0.004
5889.9500
off: 0.11
sig: 0.020
5895.9240
off: 0.10
sig: 0.026
−4
−2
0
2
4

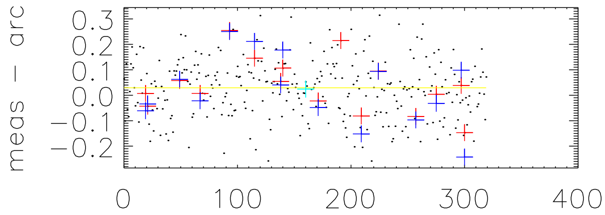

shift(pix)= 0.407
err(pix)= 0.282
oldshift(pix)= 0.028
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

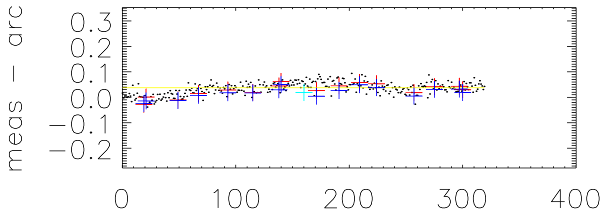

shift(pix)= 0.020
err(pix)= 0.066
oldshift(pix)= 0.026
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

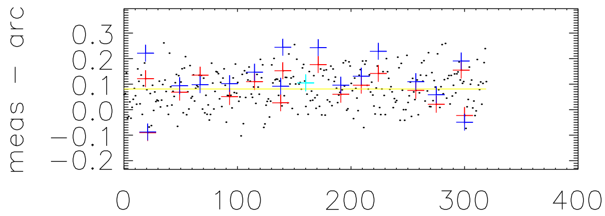

shift(pix)= 0.024
err(pix)= 0.045
oldshift(pix)= 0.017
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

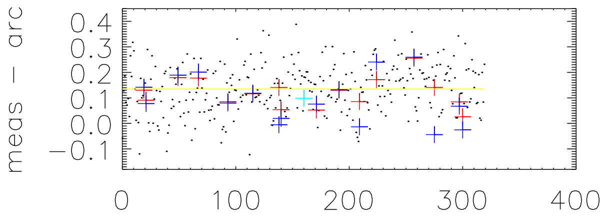

4046.5600

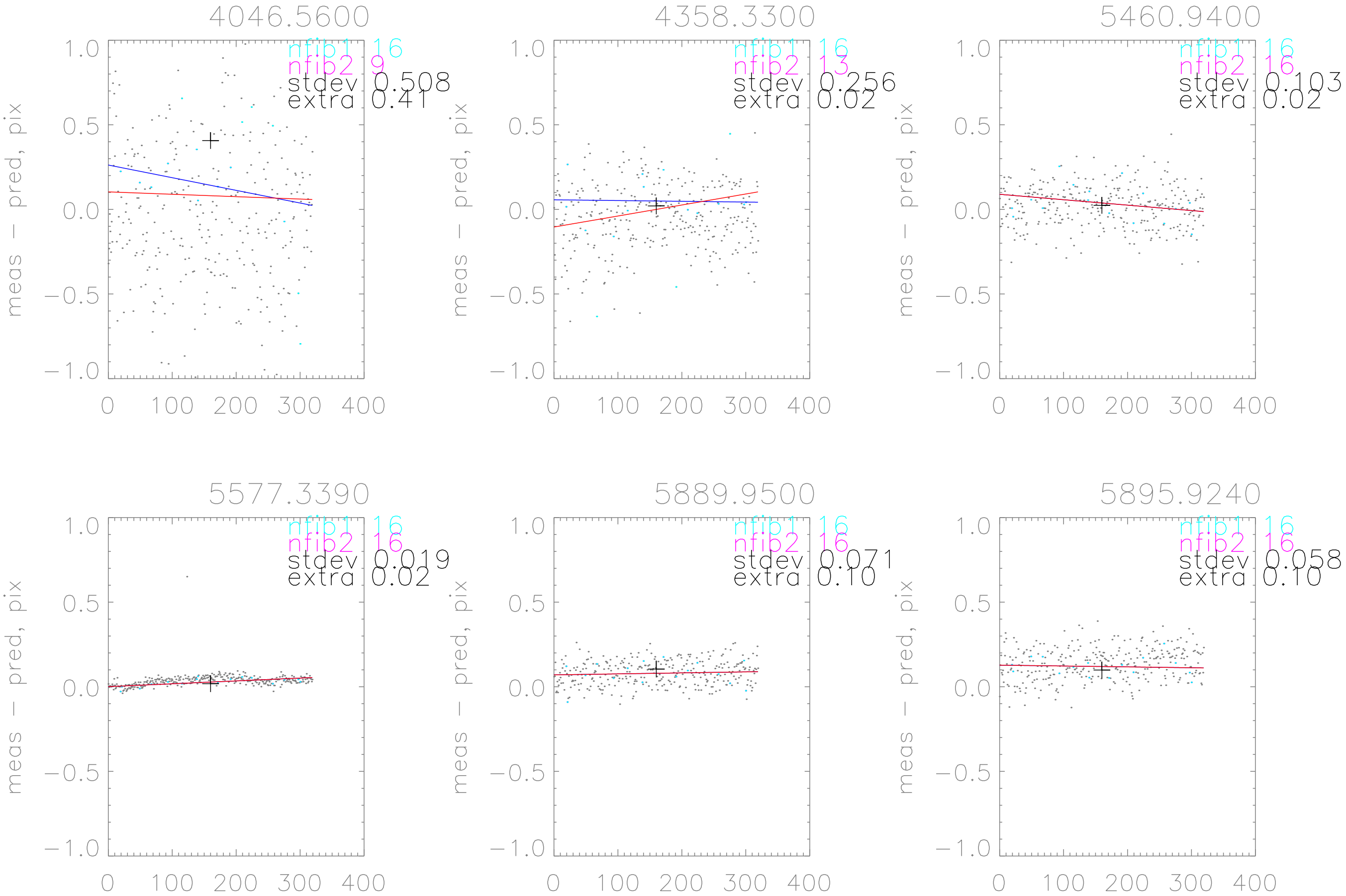

4358.3300

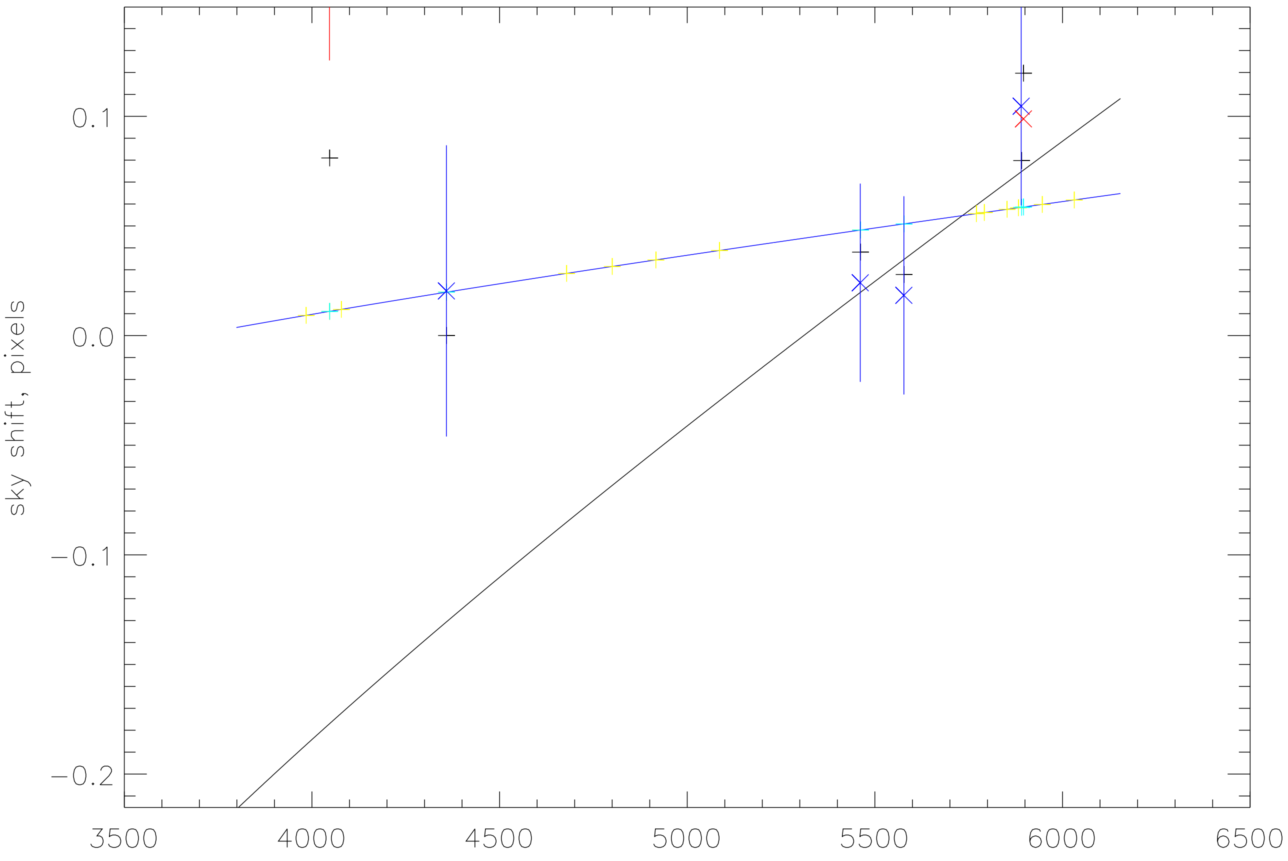

5460.9400

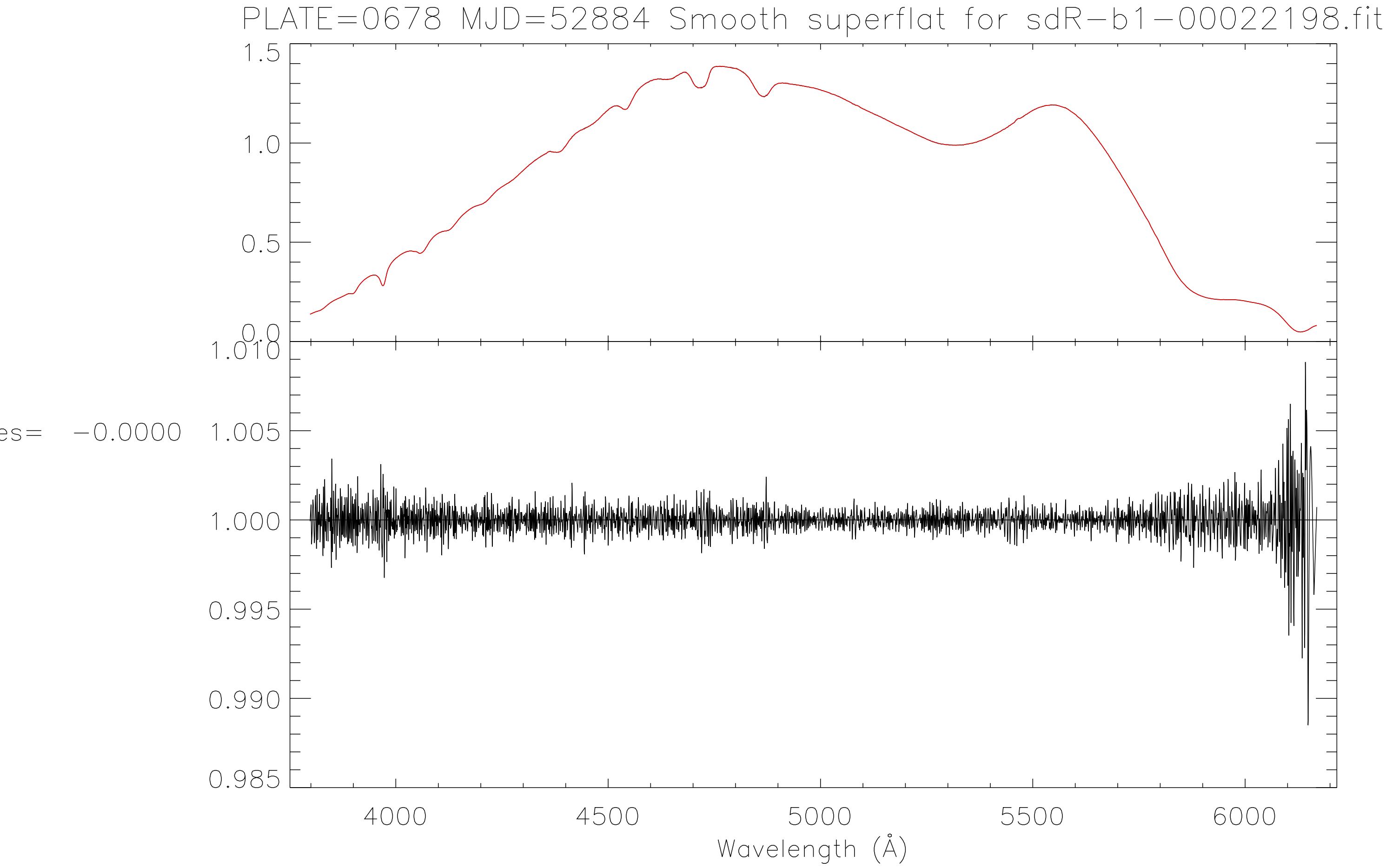

5577.3390

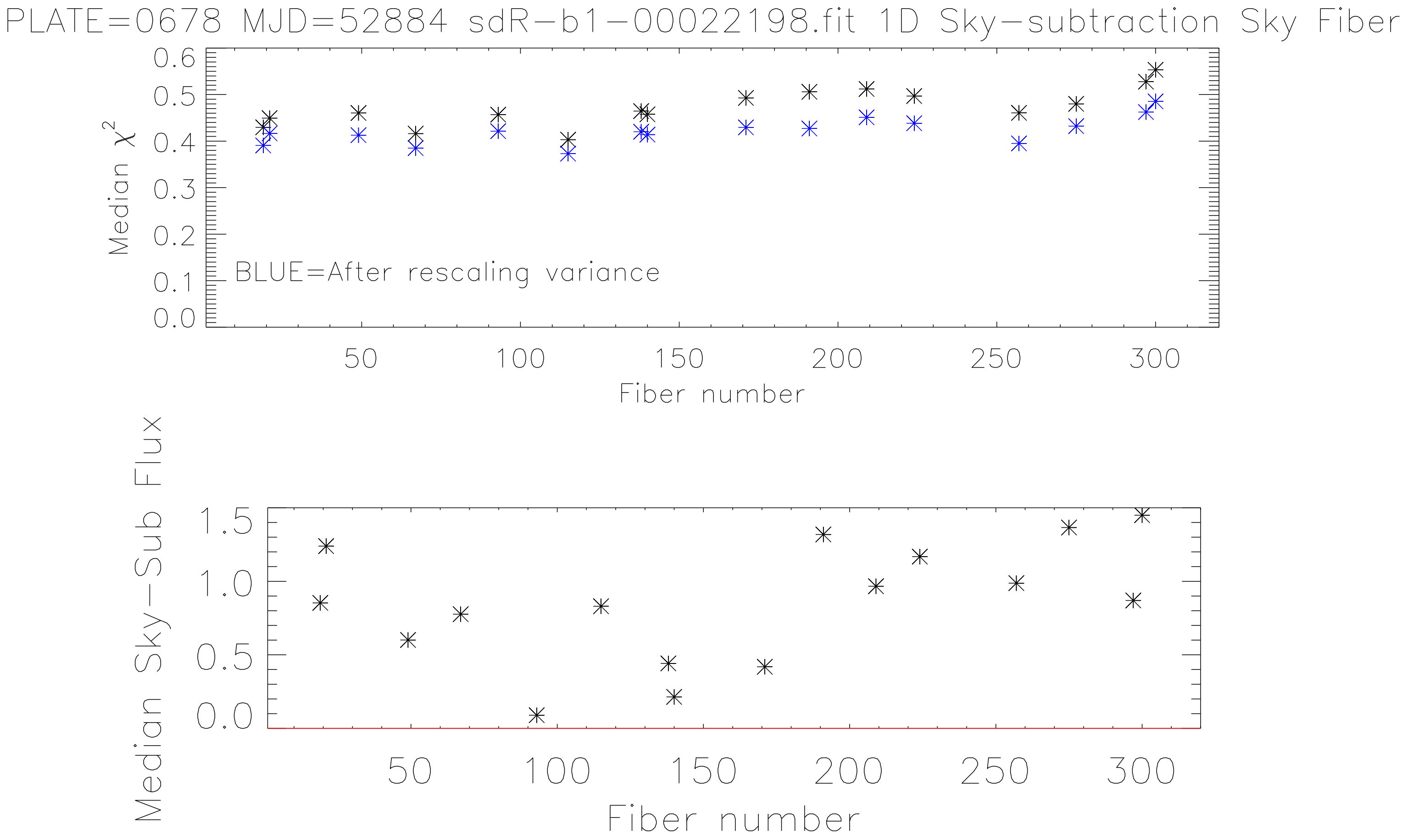

5889.9500

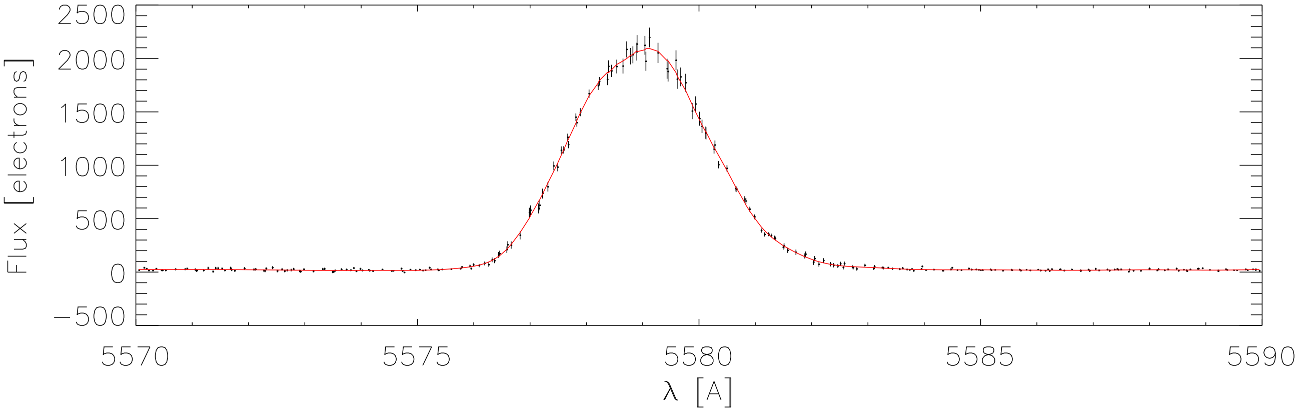

5895.9240


4046.5600
nfib1 16
nfib2 9
stdev 0.508
extra 0.41
4358.3300
nfib1 16
nfib2 13
stdev 0.256
extra 0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.103
extra 0.02
5577.3390
nfib1 16
nfib2 16
stdev 0.019
extra 0.02
5889.9500
nfib1 16
nfib2 16
stdev 0.071
extra 0.10
5895.9240
nfib1 16
nfib2 16
stdev 0.058
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

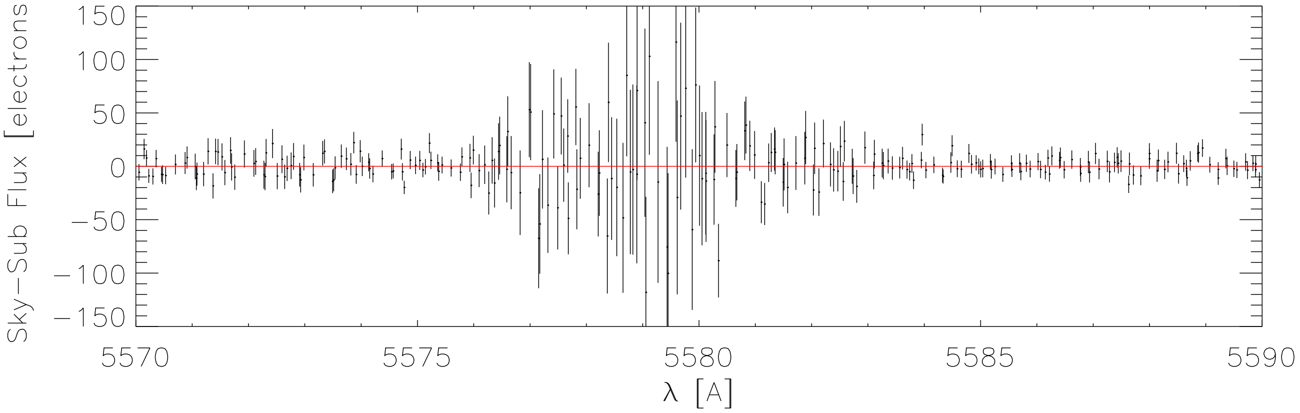

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500


PLATE=0678 MJD=52884 Smooth superflat for sdR-b1-00022198.fit
1.5
1.0
0.5
0.0
1.010
es= −0.0000
1.005
1.000
0.995
0.990
0.985
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=0678 MJD=52884 sdR-b1-00022198.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
1.5
1.0
0.5
0.0
50
100
150
200
250
300
Fiber number



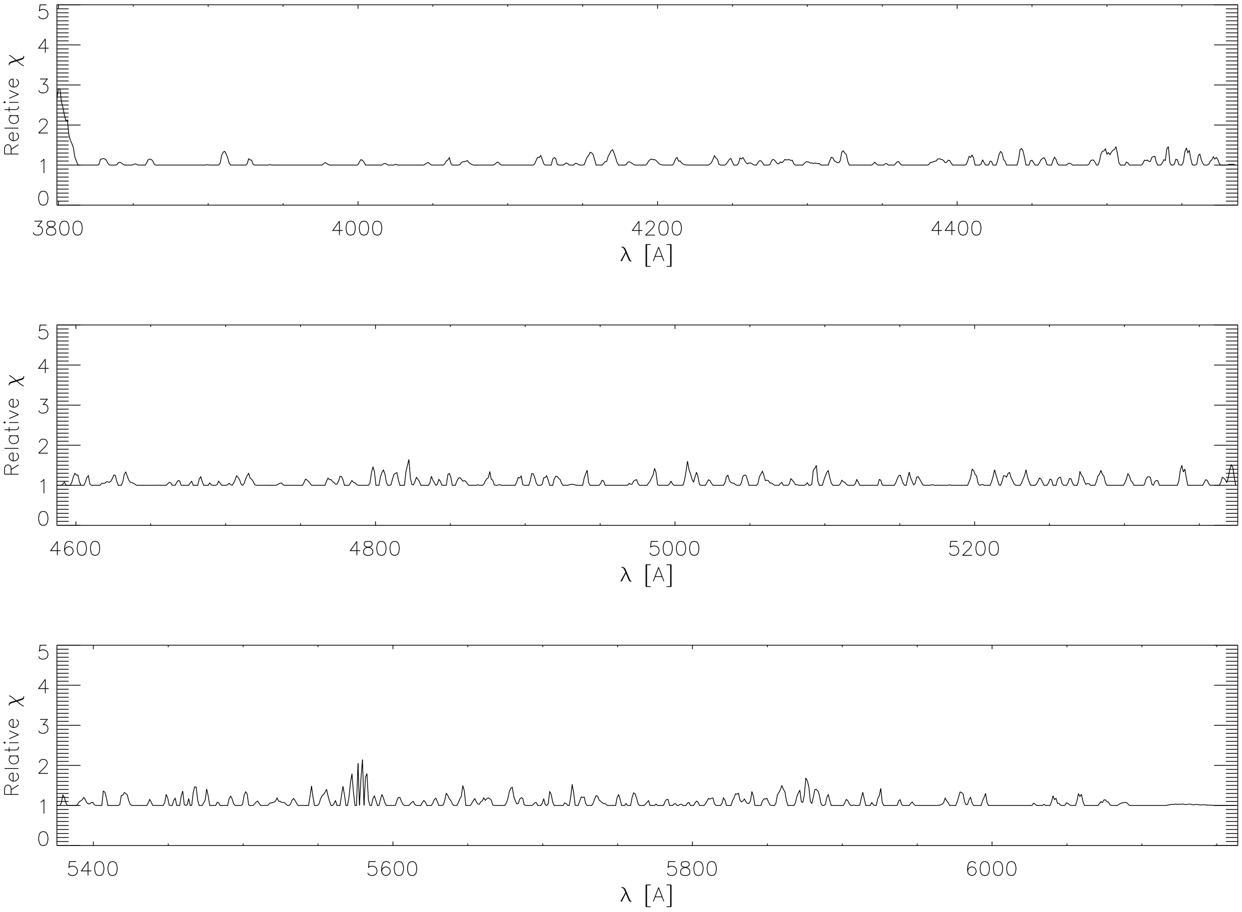
PLATE=0678 MJD=52884 sdR-b1-00022198.fit 1D Sky-subtraction Sky Fibers

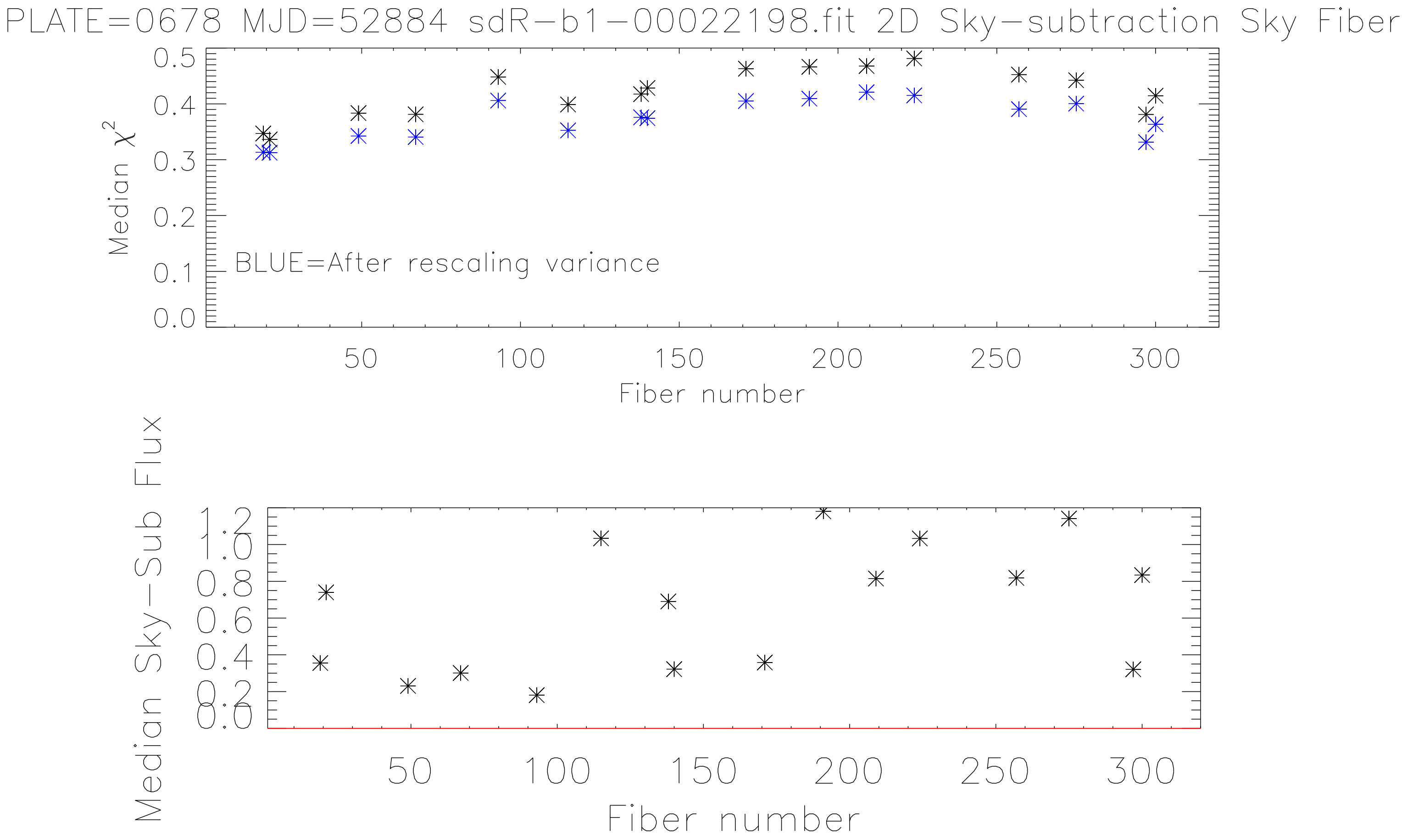


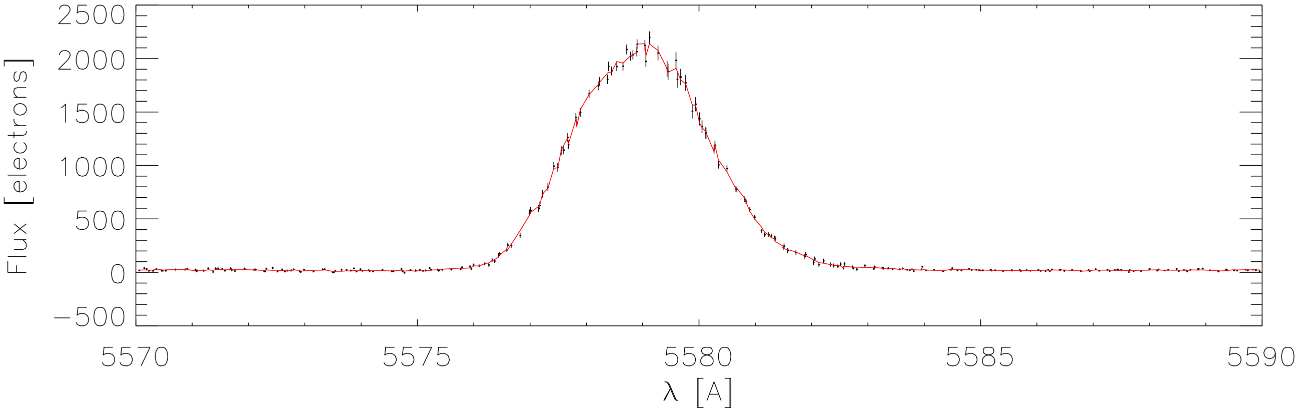
PLATE=0678 MJD=52884 sdR-b1-00022198.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 16

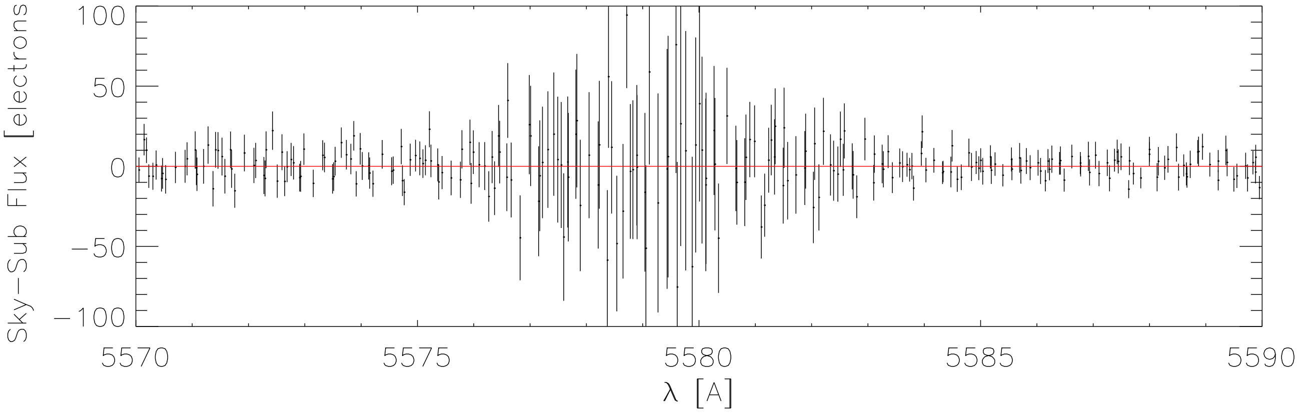
PLATE=0678 MJD=52884 sdR-b1-00022198.fit 1D Sky-subtraction Rescaled Errors



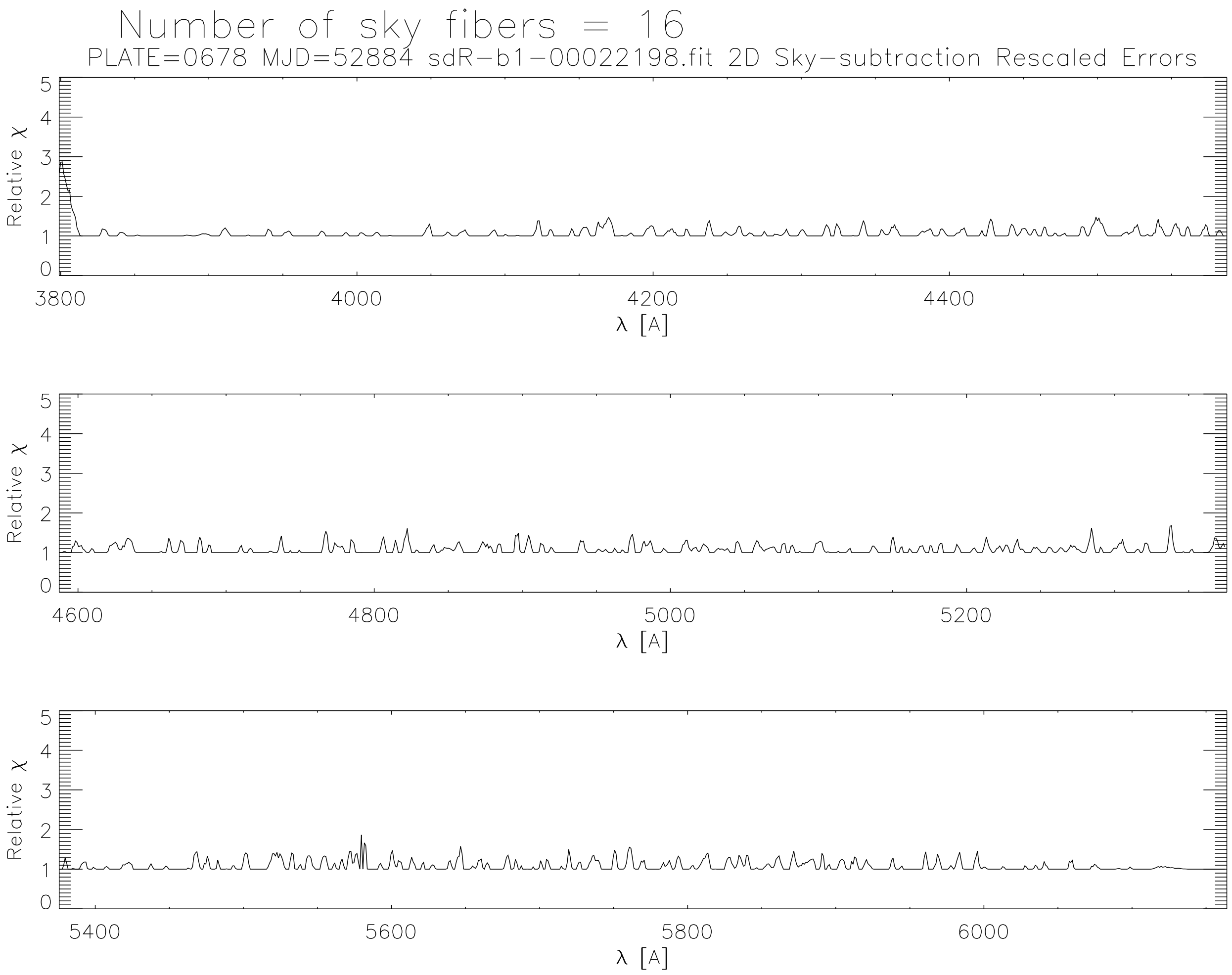

PLATE=0678 MJD=52884 sdR-b1-00022198.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0.0
0.2
0.4
0.6
0.8
1.0
1.2
50
100
150
200
250
300
Fiber number

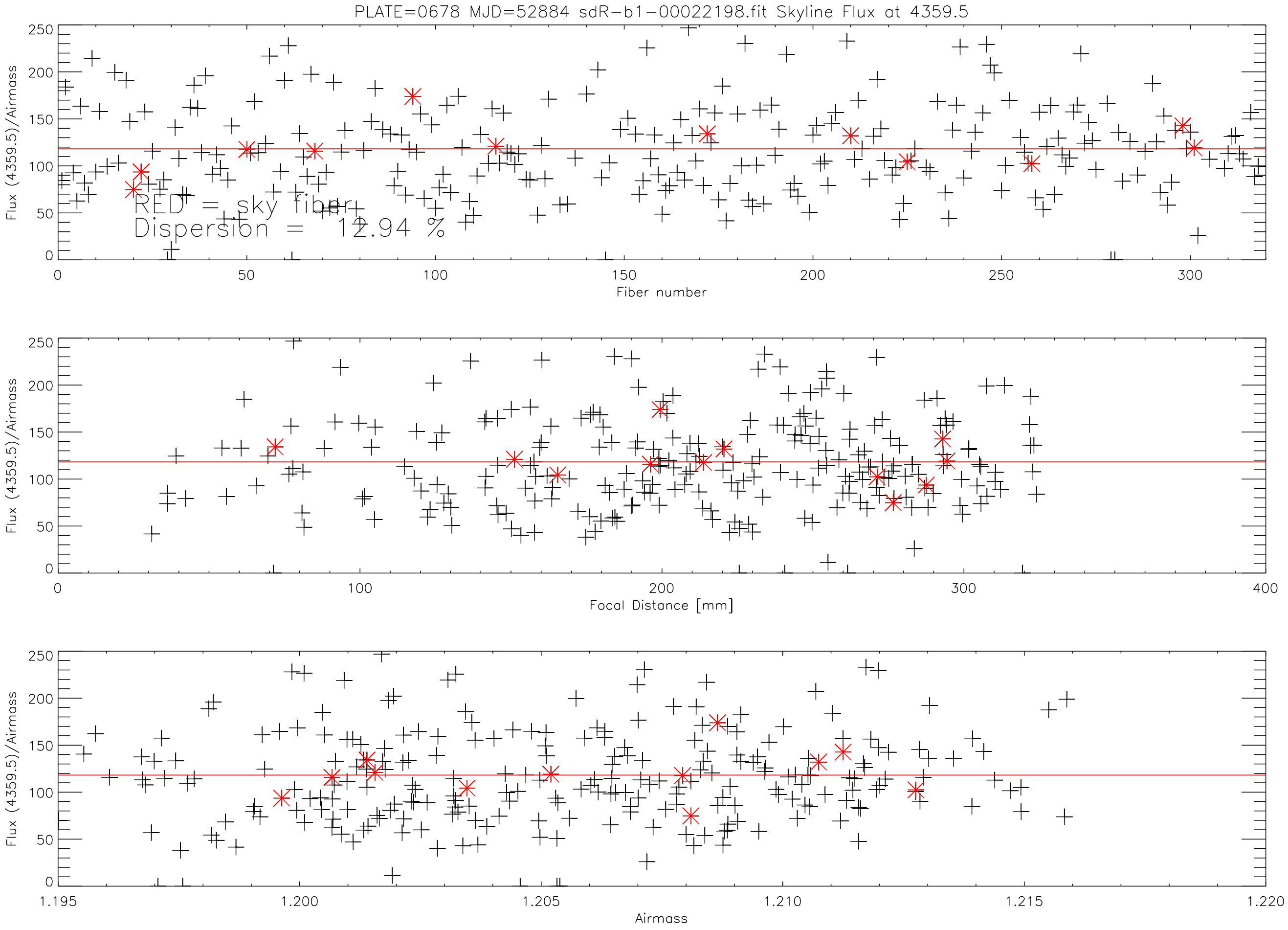


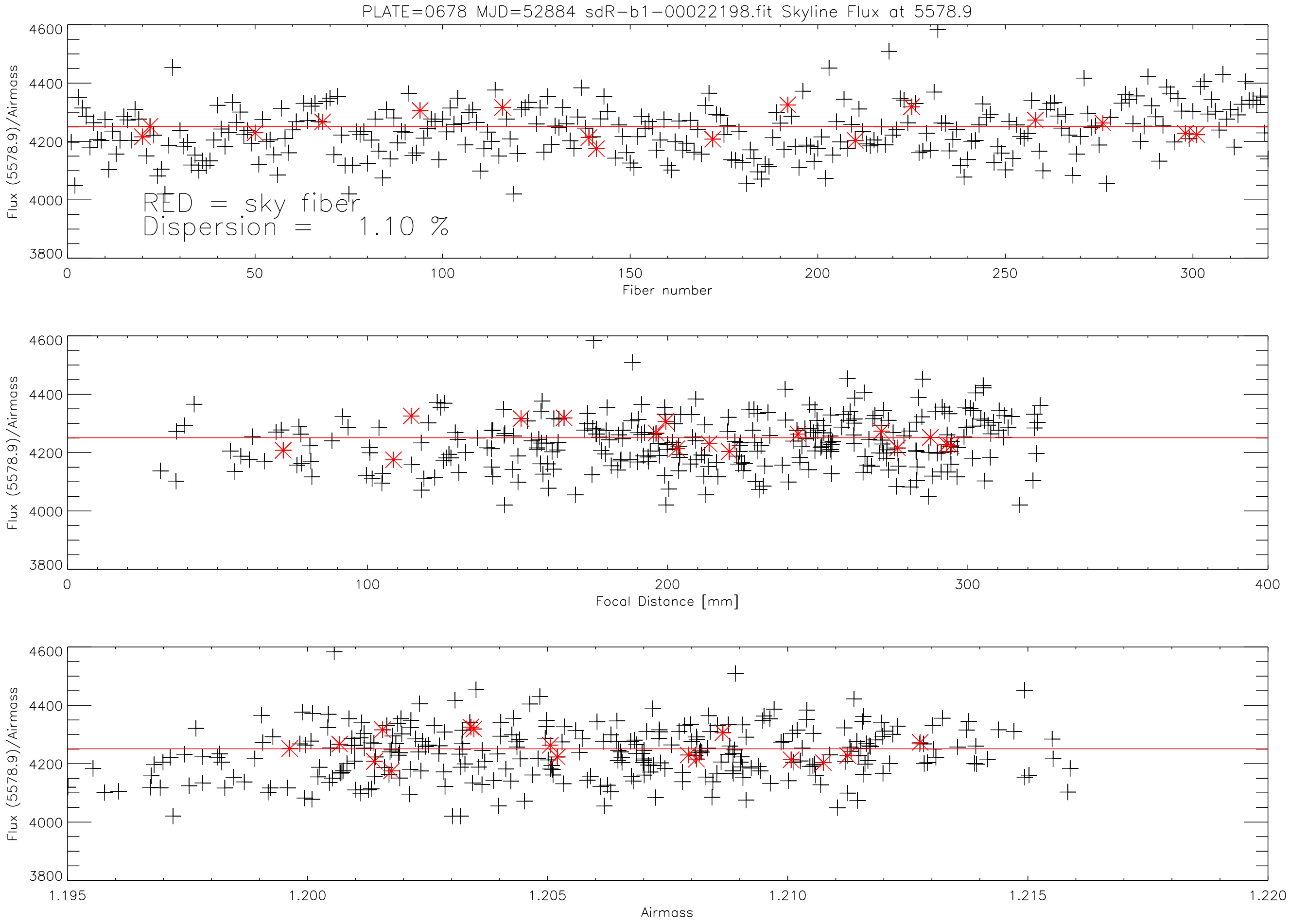
PLATE=0678 MJD=52884 sdR-b1-00022198.fit 2D Sky-subtraction Sky Fibers

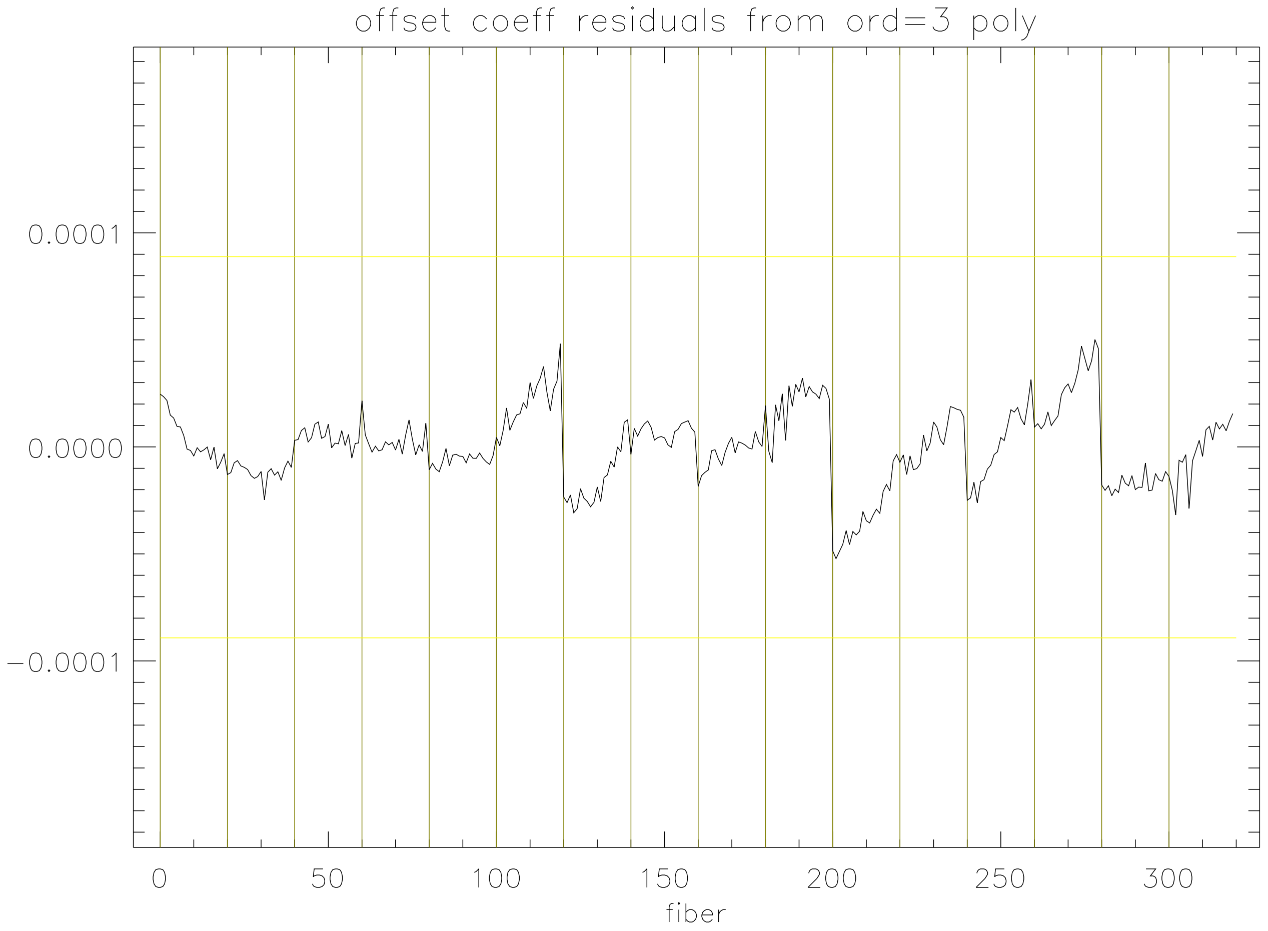


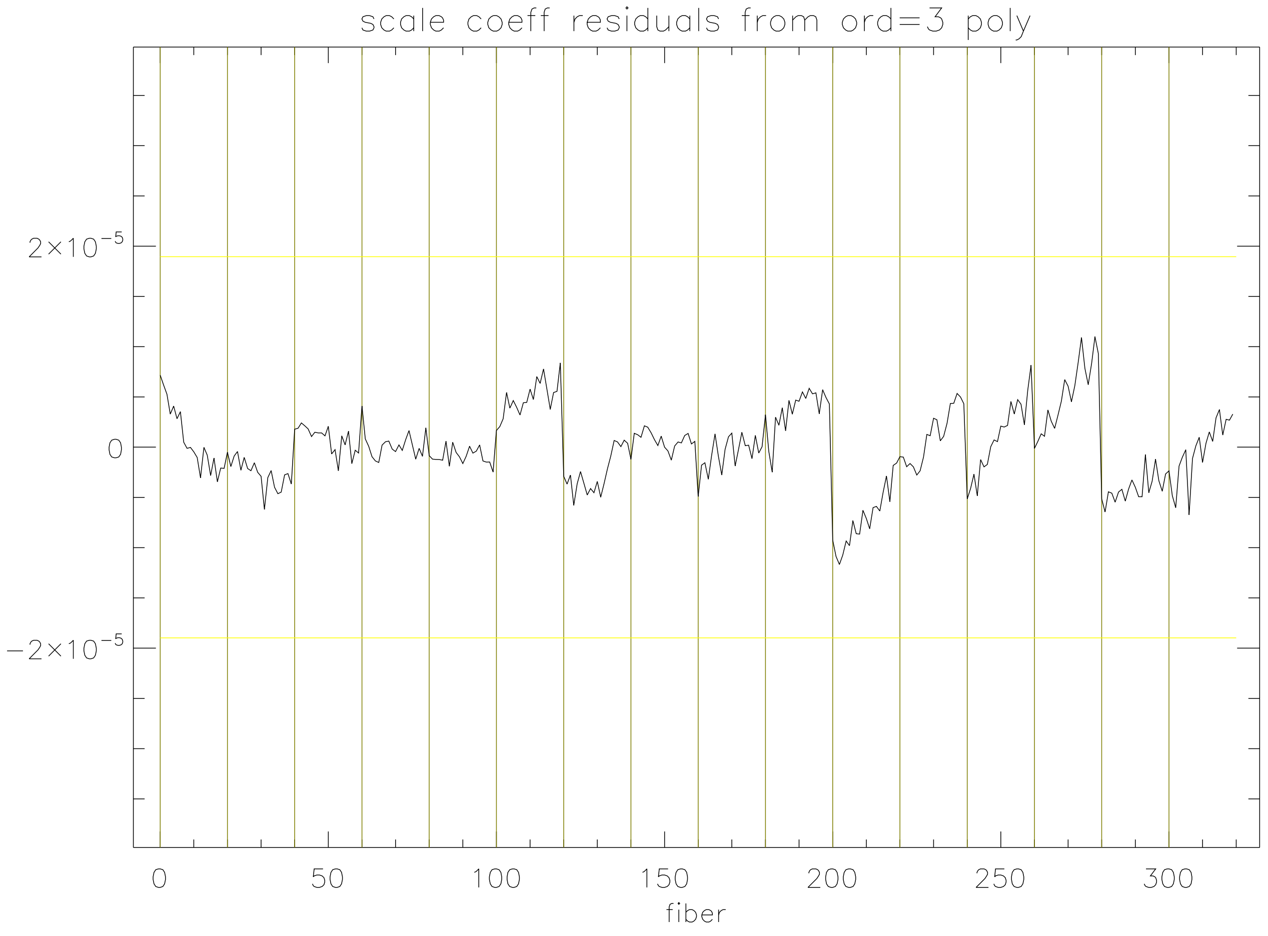
PLATE=0678 MJD=52884 sdR-b1-00022198.fit 2D Sky-subtraction Sky-subtracted Sky F

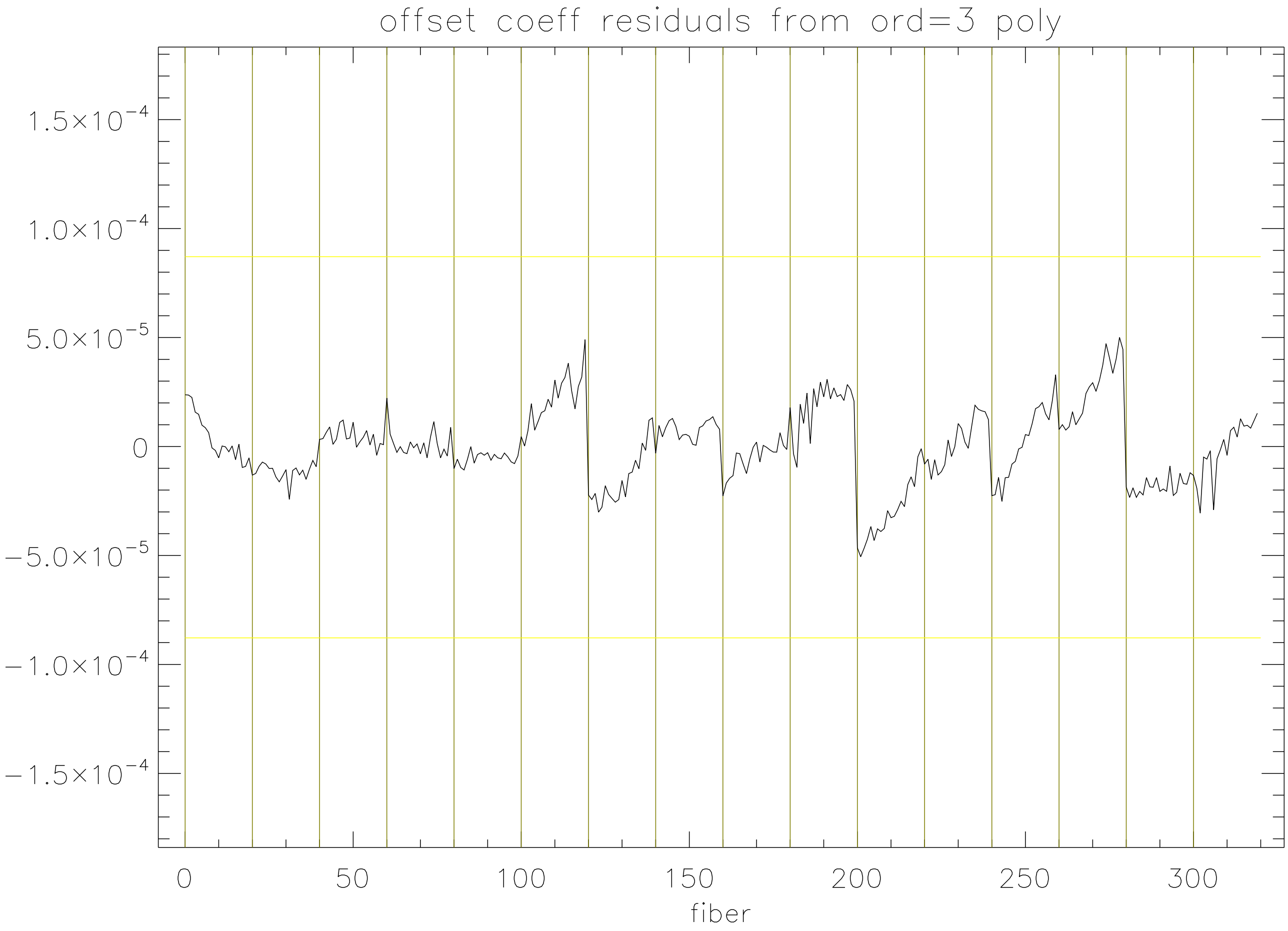

Number of sky fibers = 16
PLATE=0678 MJD=52884 sdR-b1-00022198.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

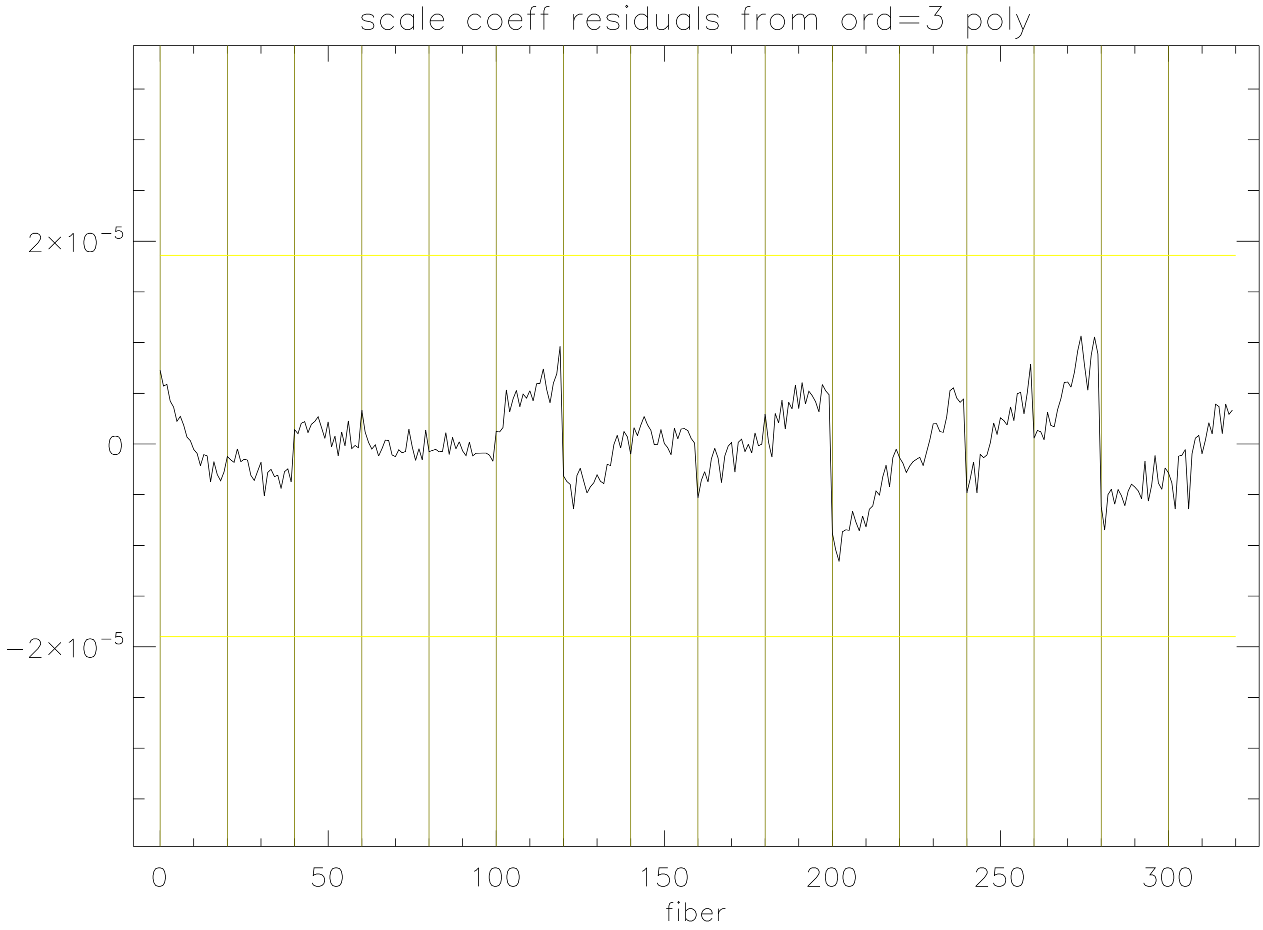

PLATE=0678 MJD=52884 sdR-b1-00022198.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
0
50
100
150
200
250
Fiber number
0
50
100
150
200
250
300
RED = sky fiber
Dispersion = 12.94 %
Flux (4359.5)/Airmass
Focal Distance [mm]
0
100
200
300
400
Flux (4359.5)/Airmass
Airmass
1.195
1.200
1.205
1.210
1.215
1.220

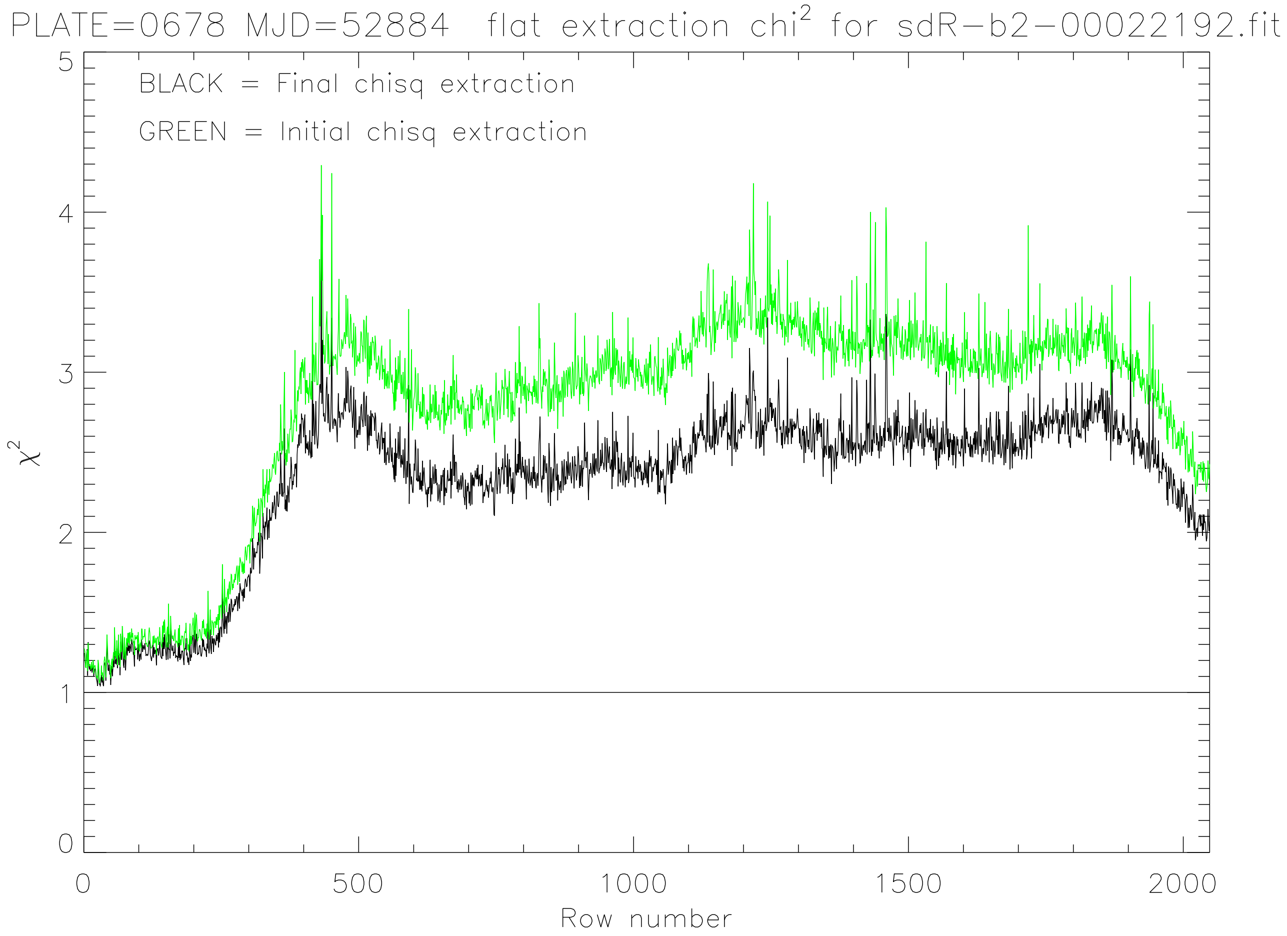

PLATE=0678 MJD=52884 sdR-b1-00022198.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
4600
4400
4200
4000
3800
RED = sky fiber
Dispersion = 1.10 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
4600
4400
4200
4000
3800
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
4600
4400
4200
4000
3800
1.195
1.200
1.205
1.210
1.215
1.220
Airmass

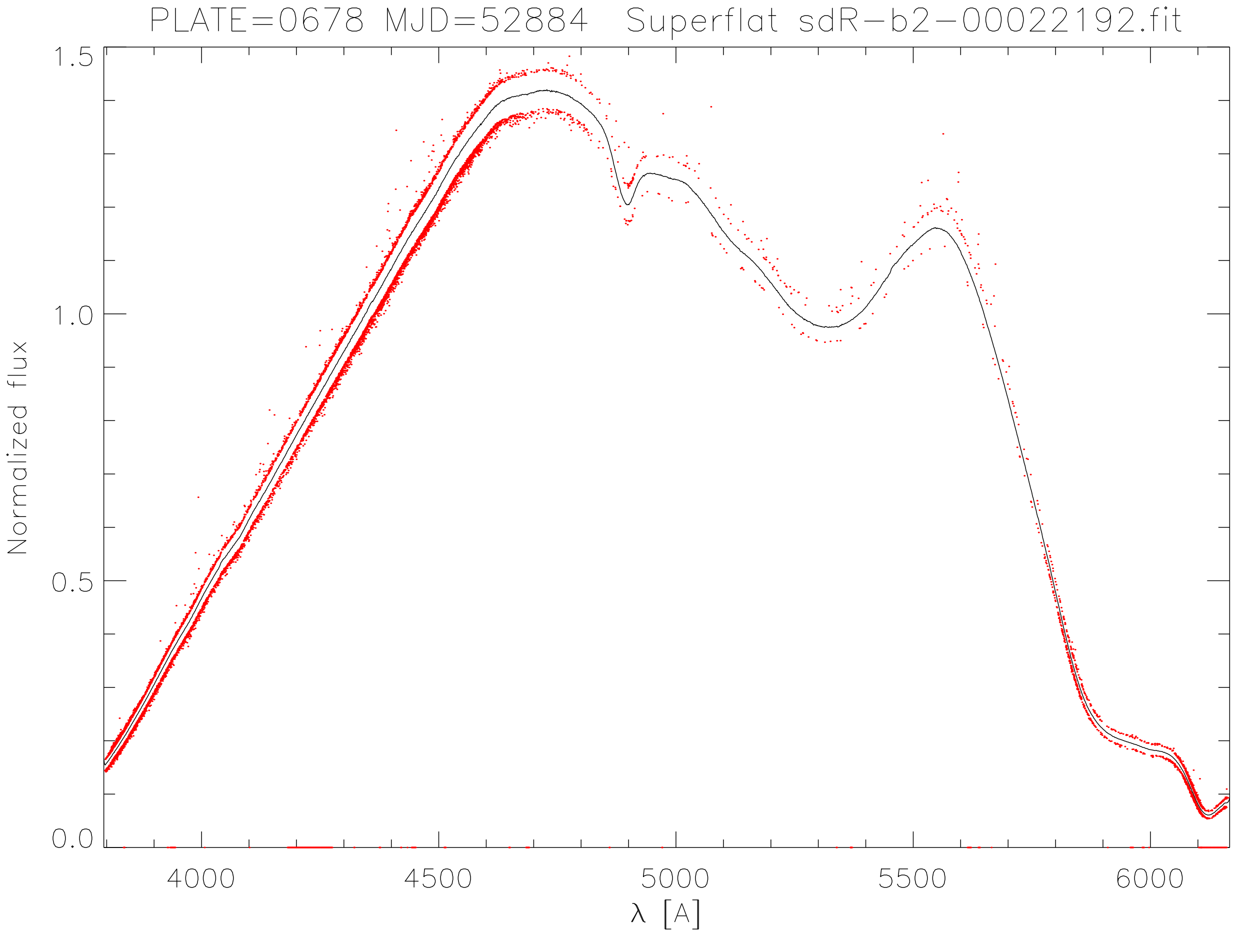

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber

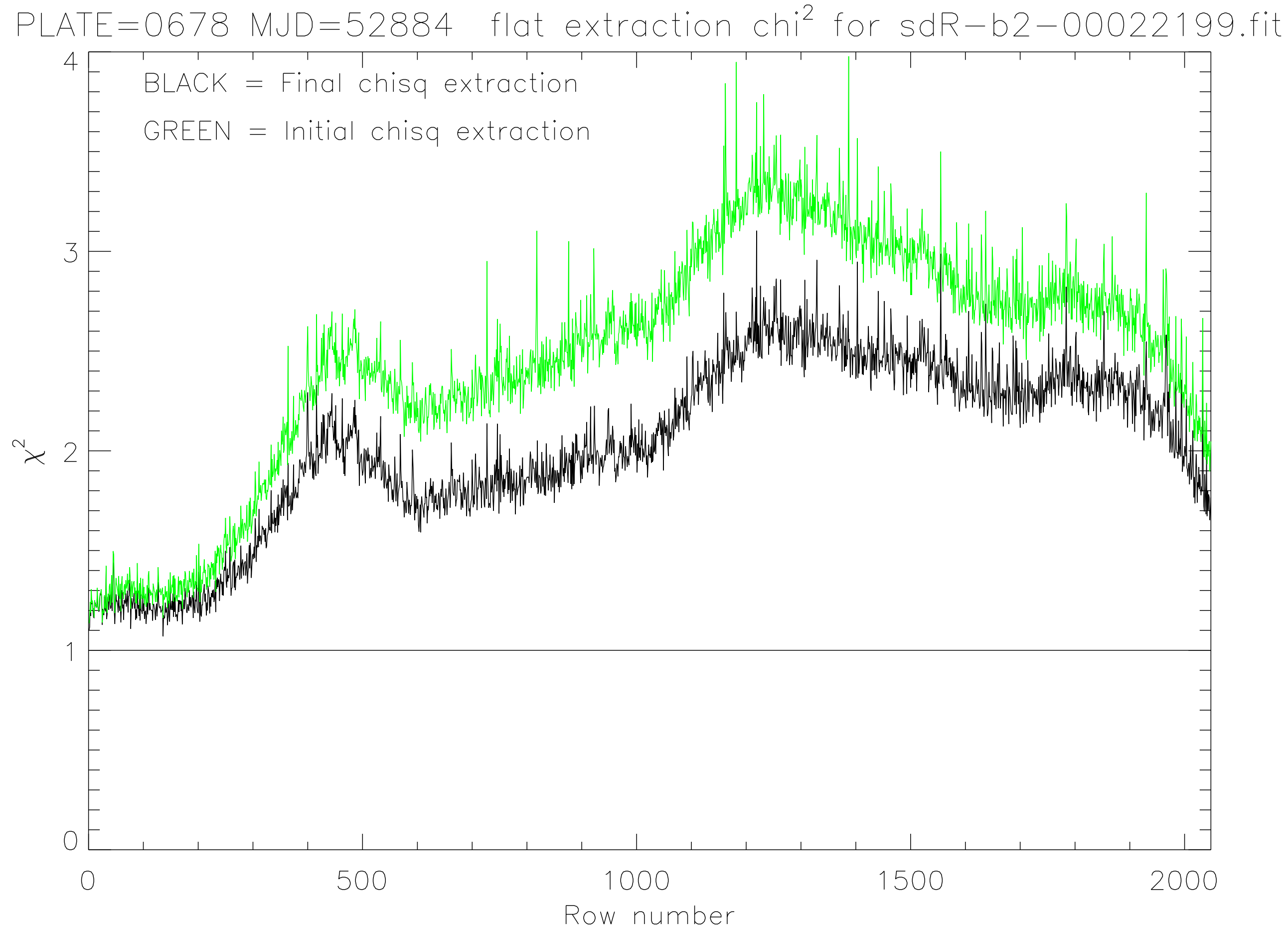

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

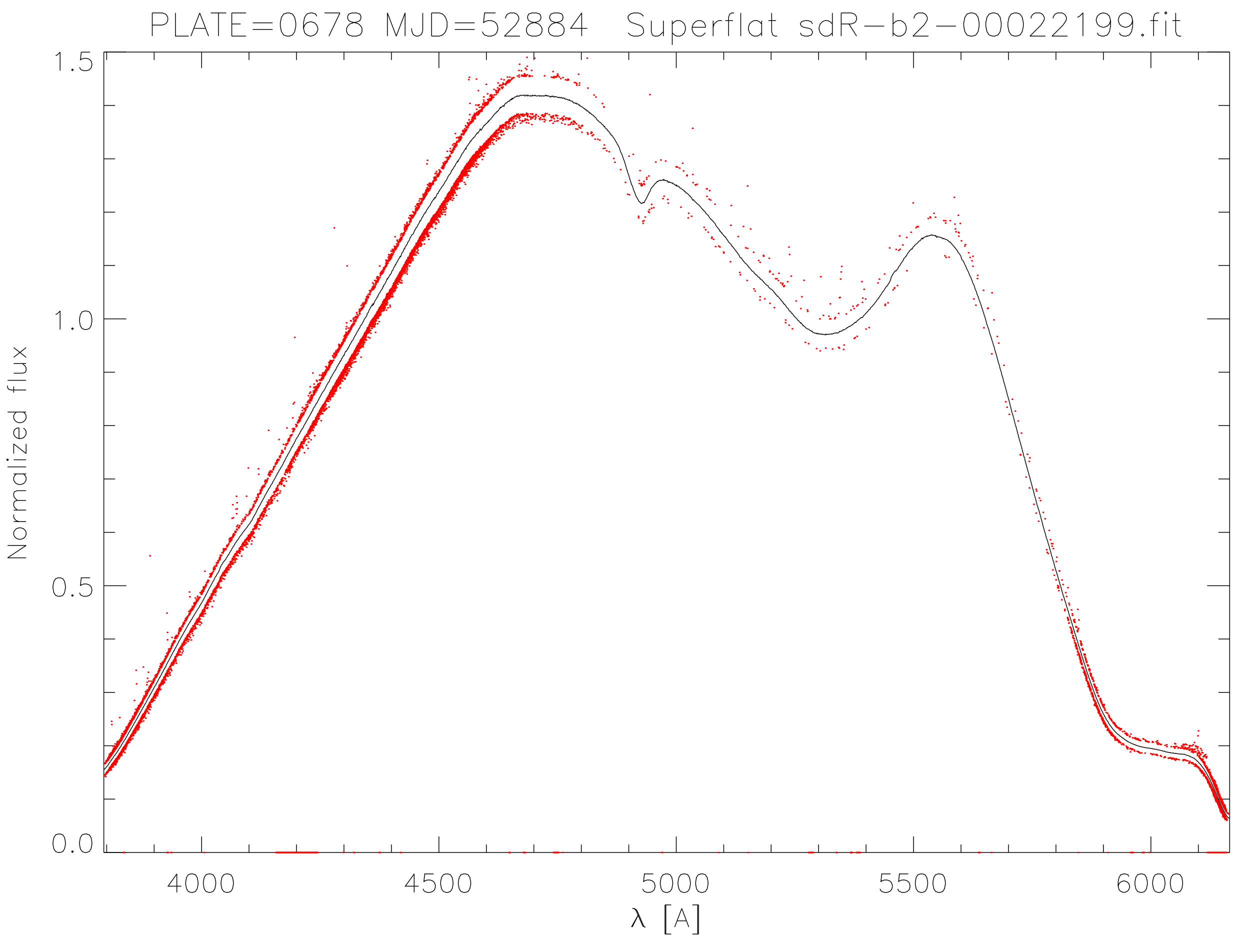

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

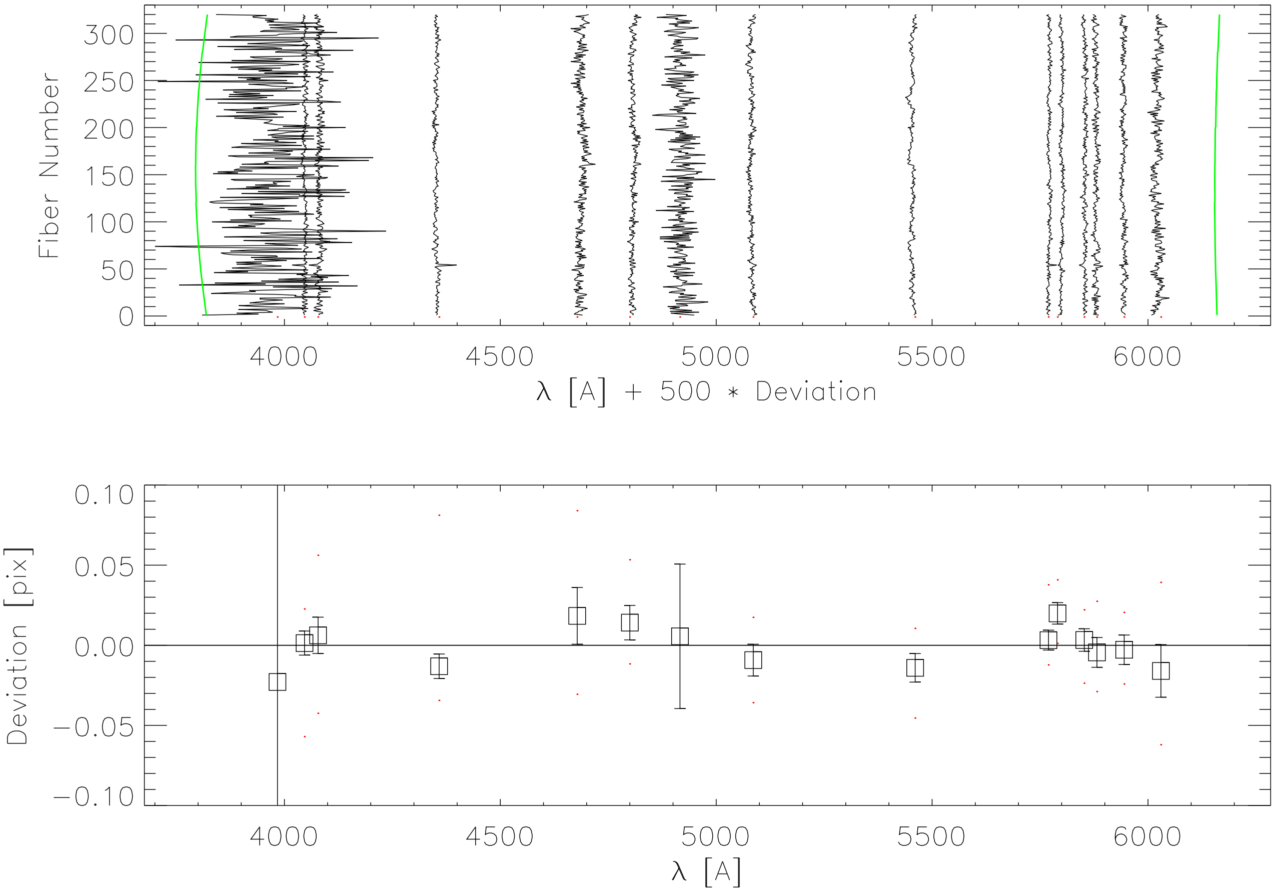

scale coeff residuals from ord=3 poly
2×10⁻⁵
0
−2×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-b2-00022192.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number


PLATE=0678 MJD=52884 Superflat sdR-b2-00022192.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

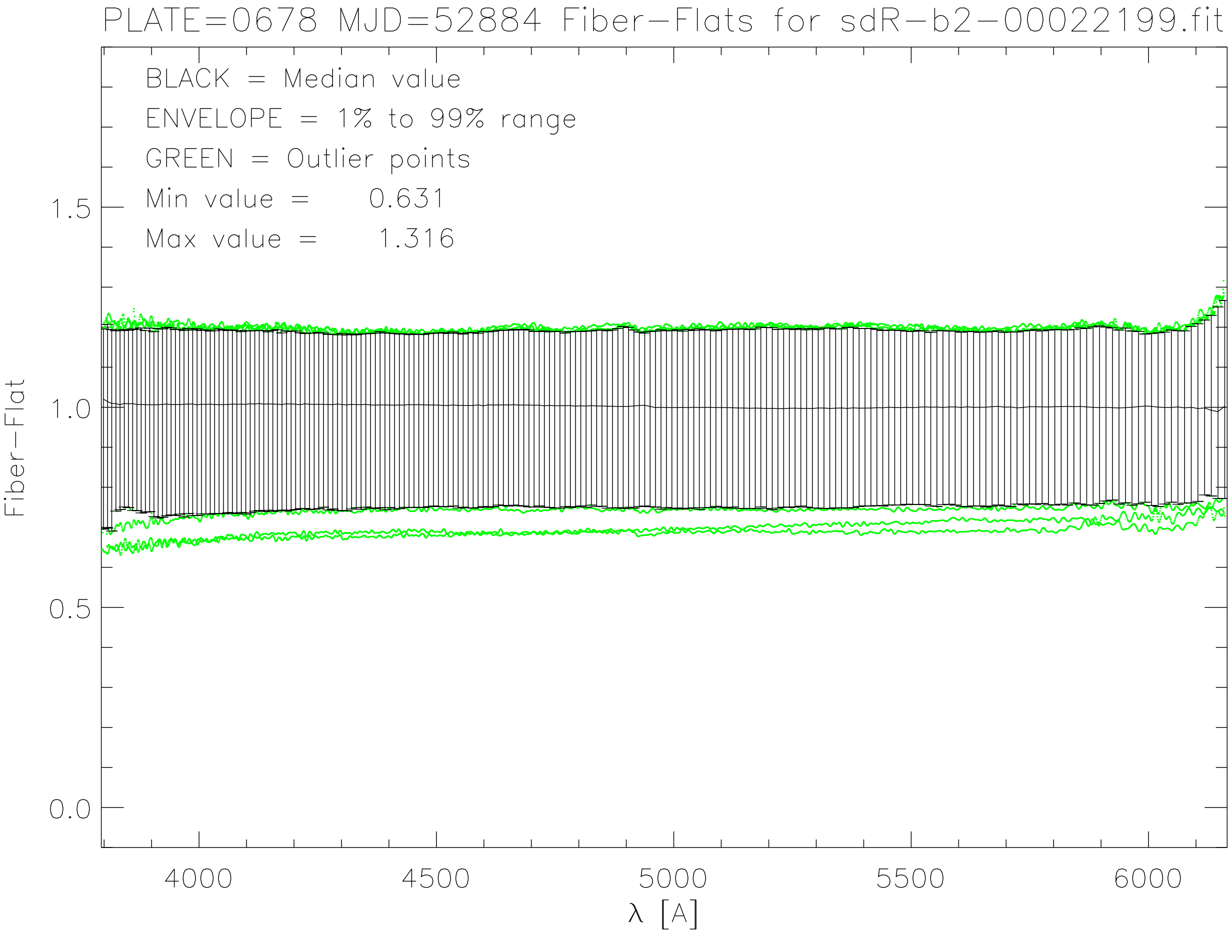

PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-b2-00022199.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number


PLATE=0678 MJD=52884 Superflat sdR-b2-00022199.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

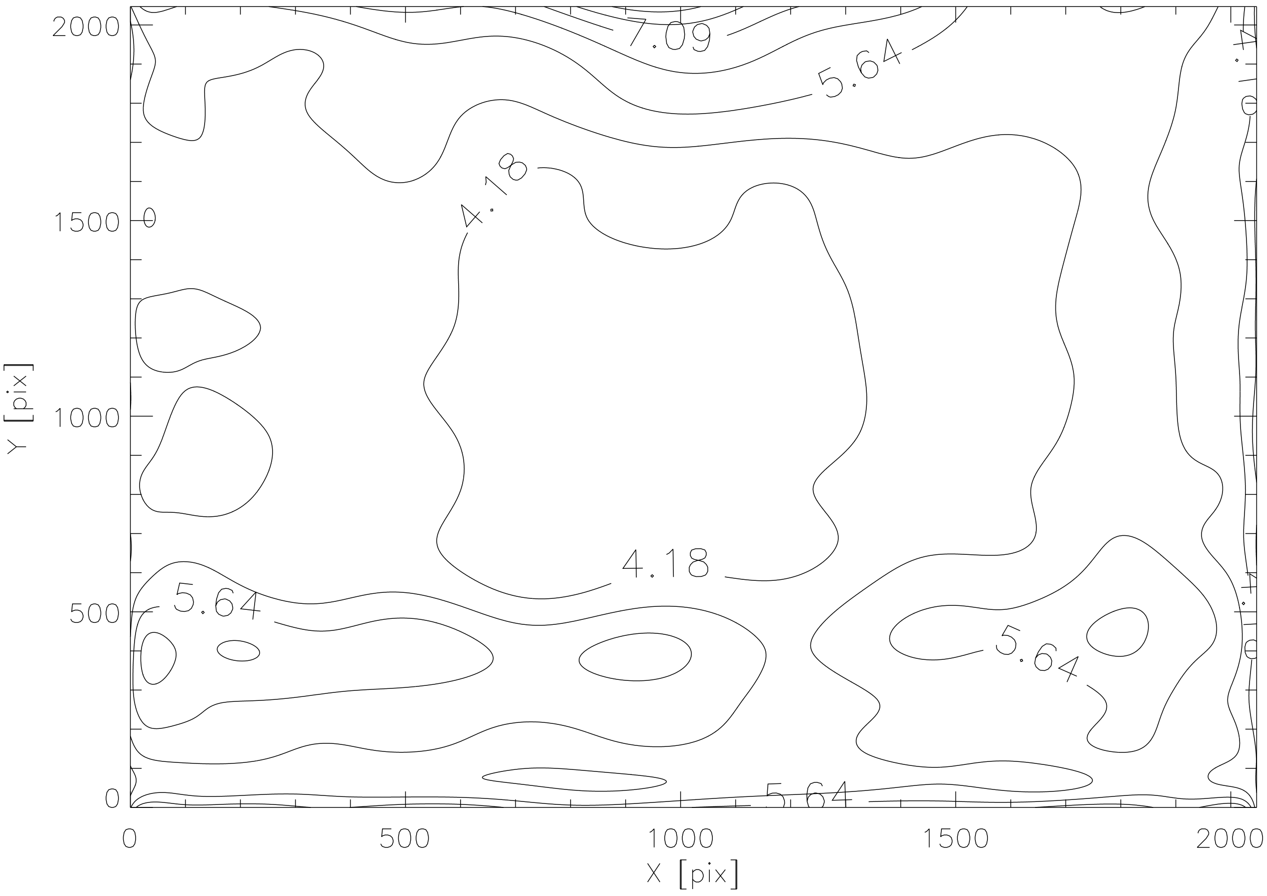


PLATE=0678 MJD=52884 Arcline Fit for sdR-b2-00022200.fit

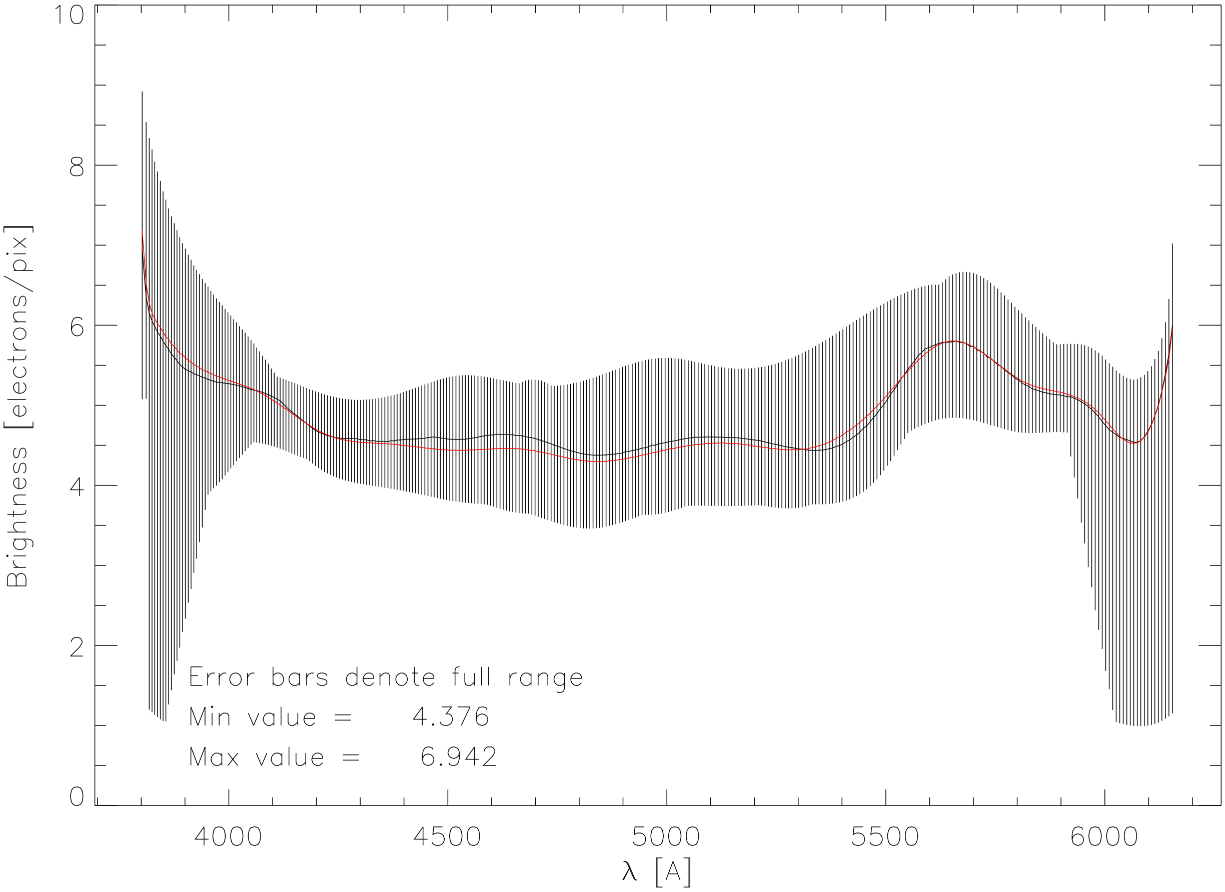
Mon Feb 25 23:01:18 2008



Mon Feb 25 23:01:28 2008

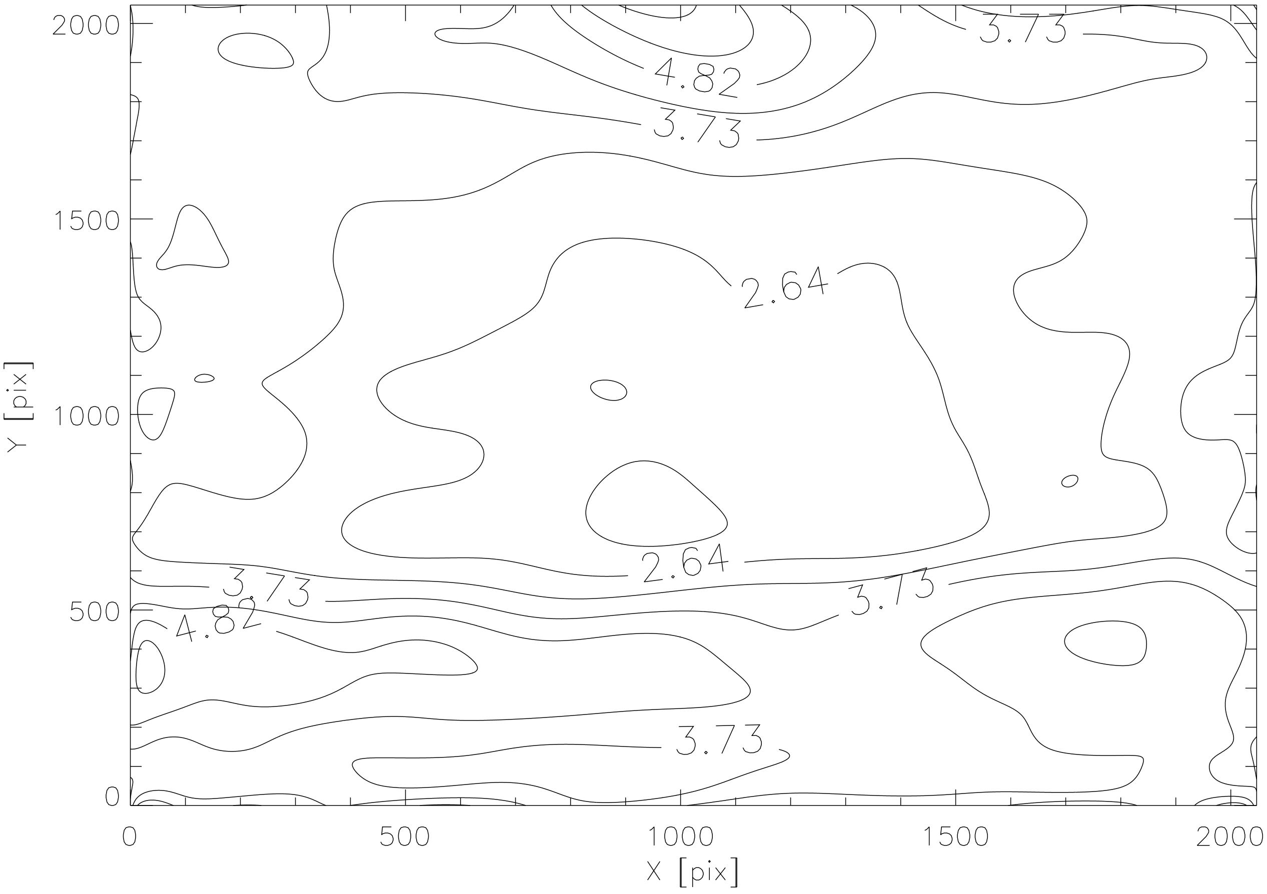


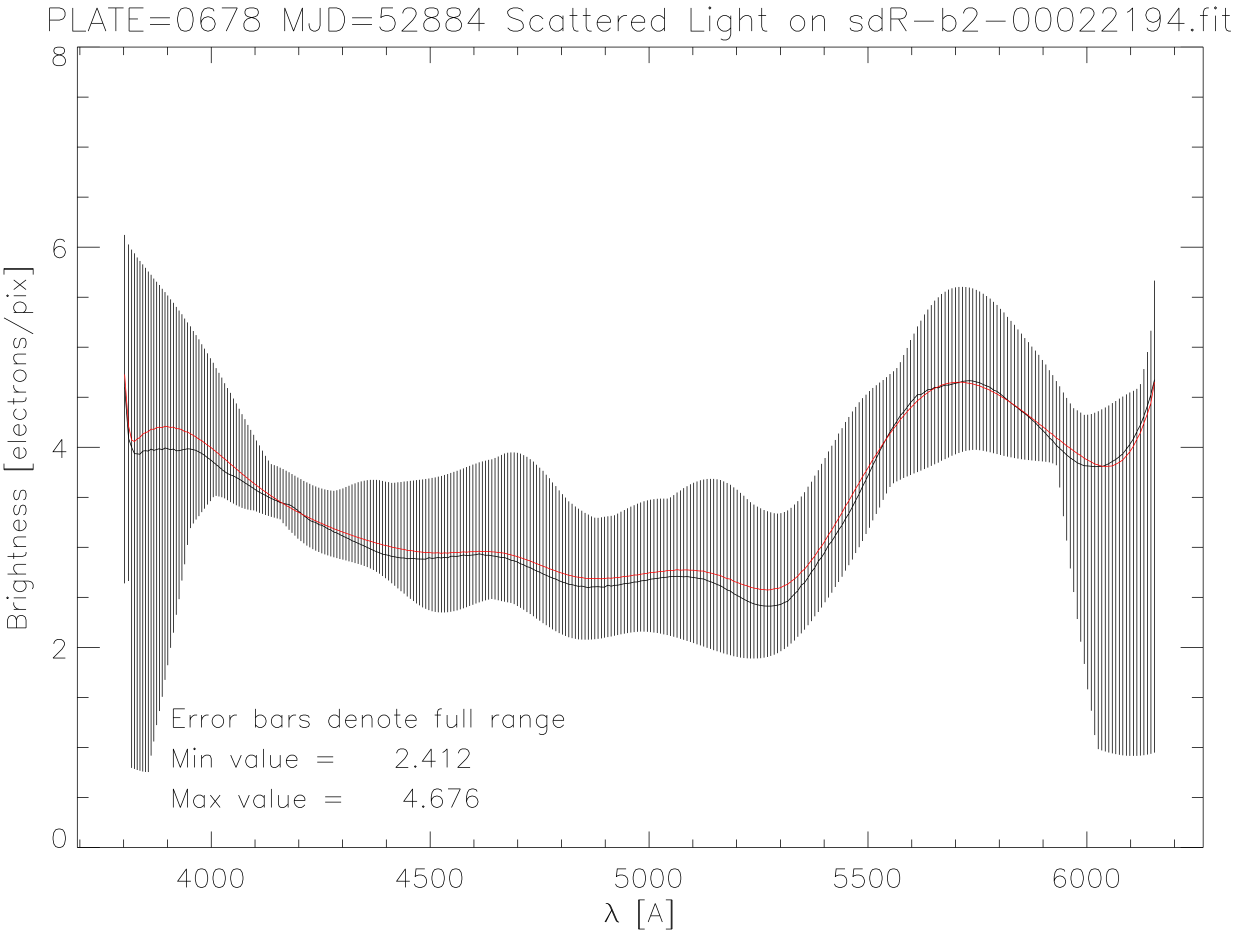
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022194.f


PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022194.f

Mon Feb 25 23:02:20 2008

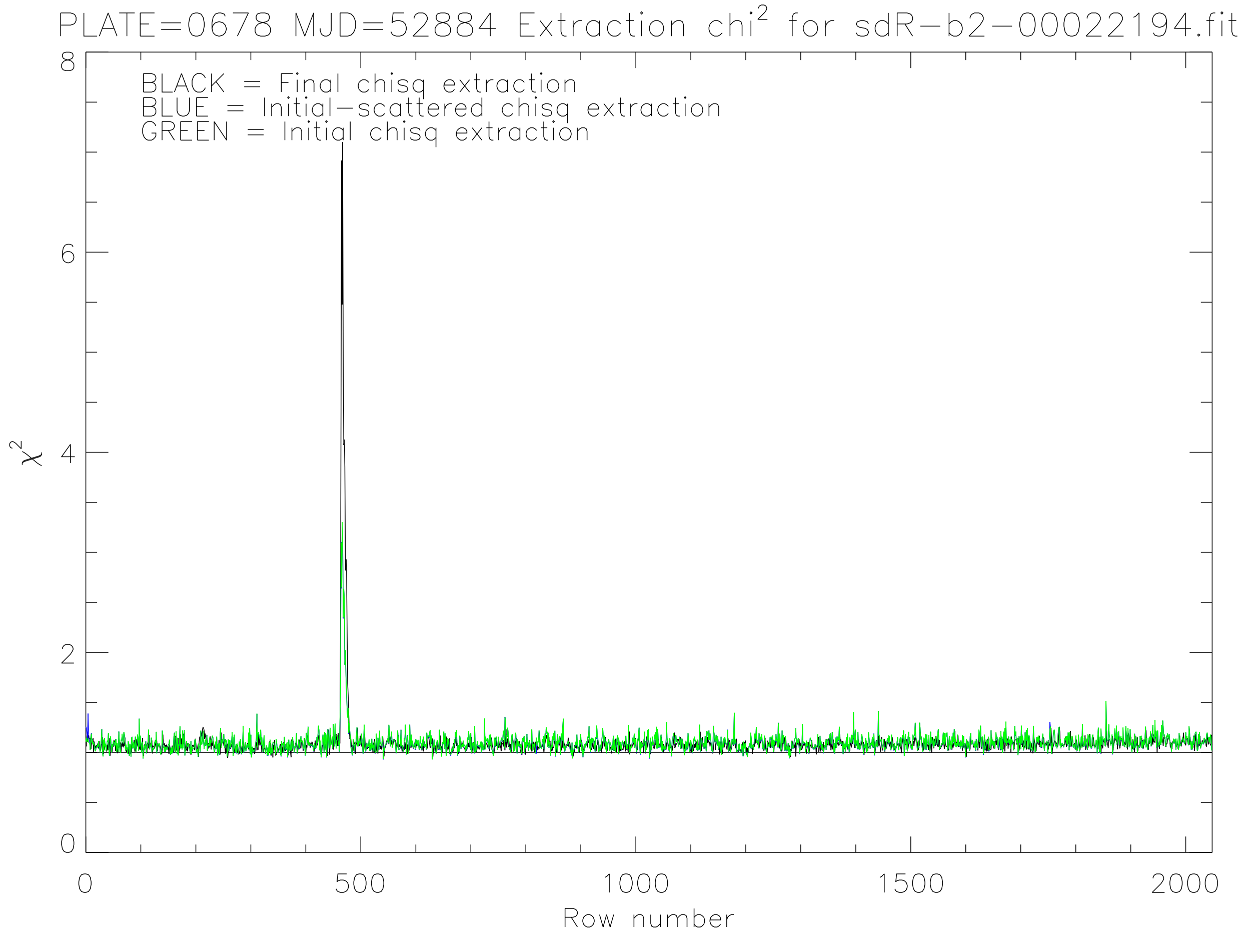
PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022194.fit

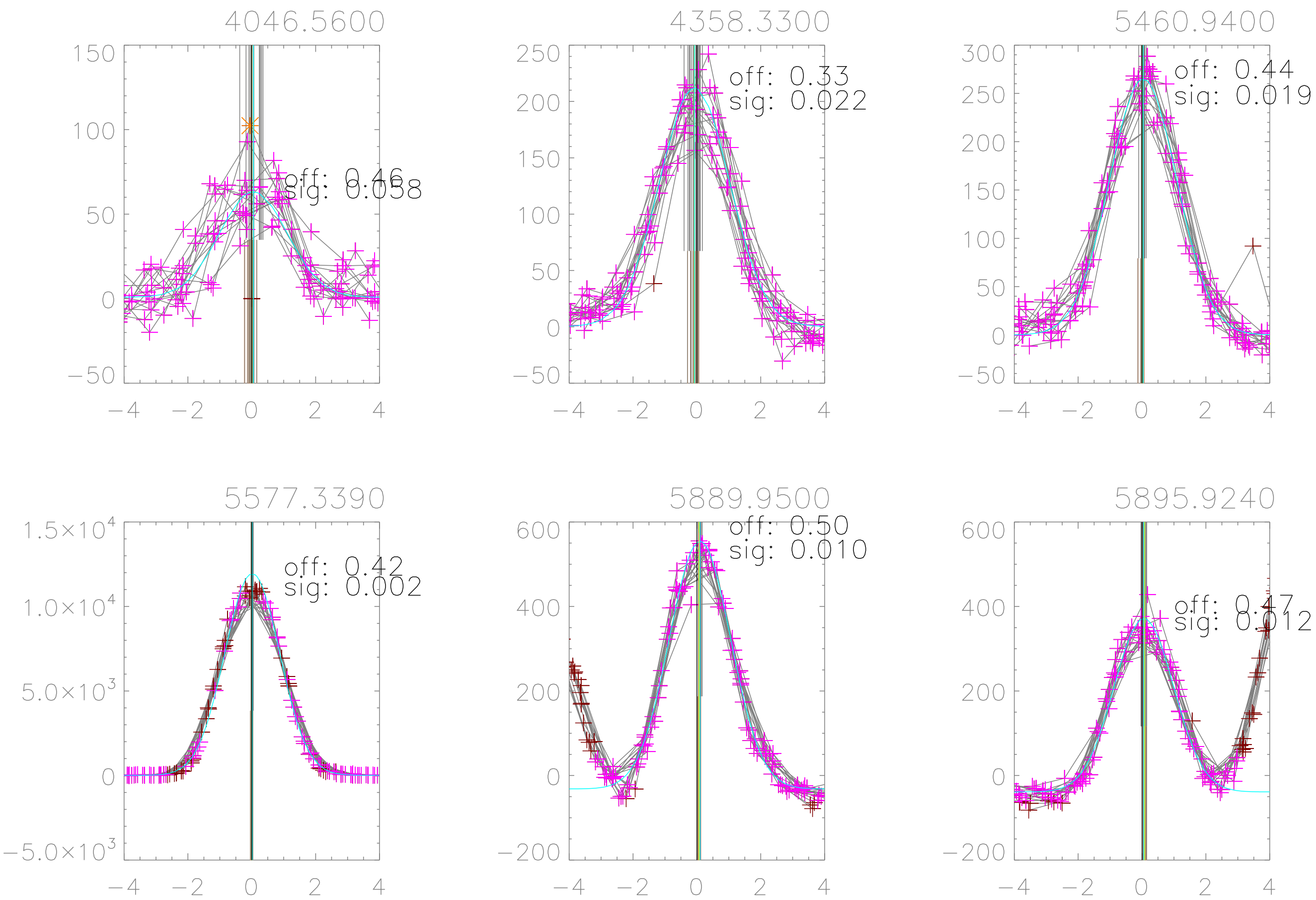


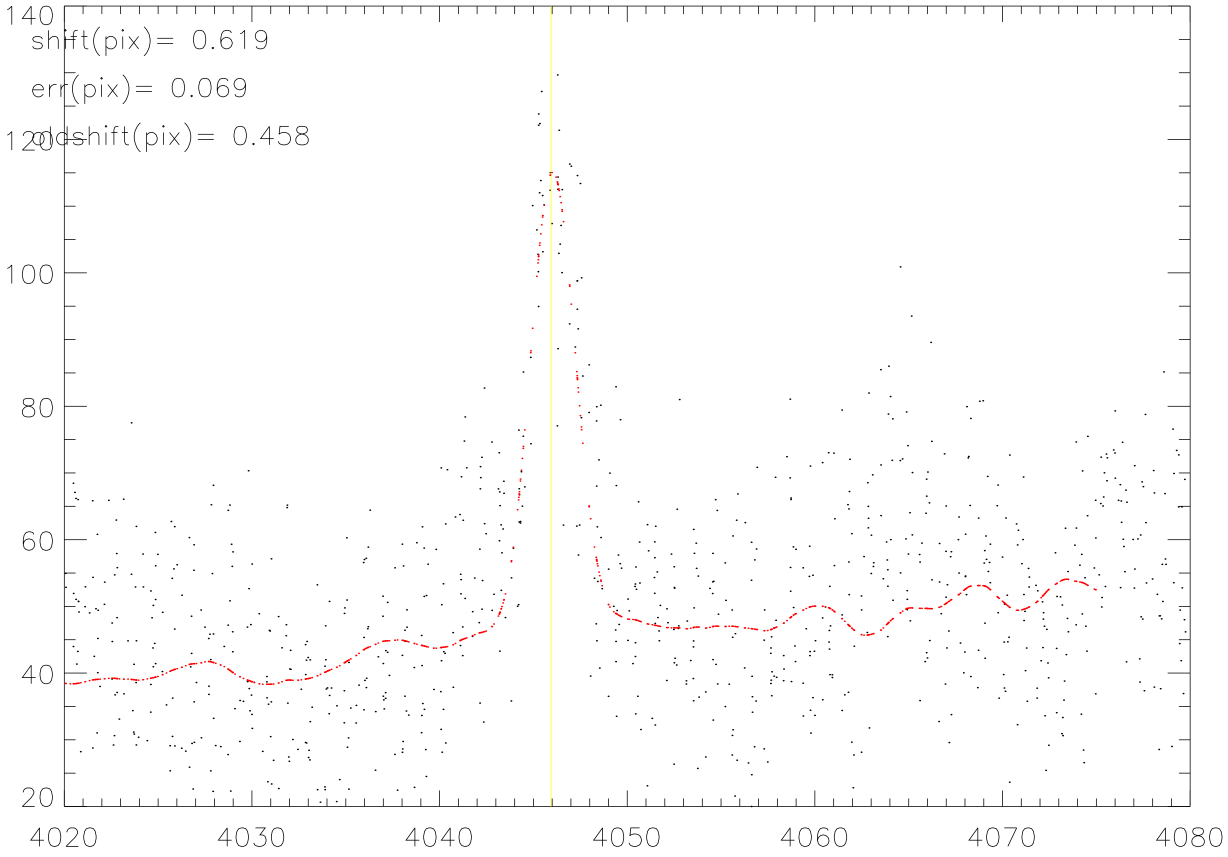


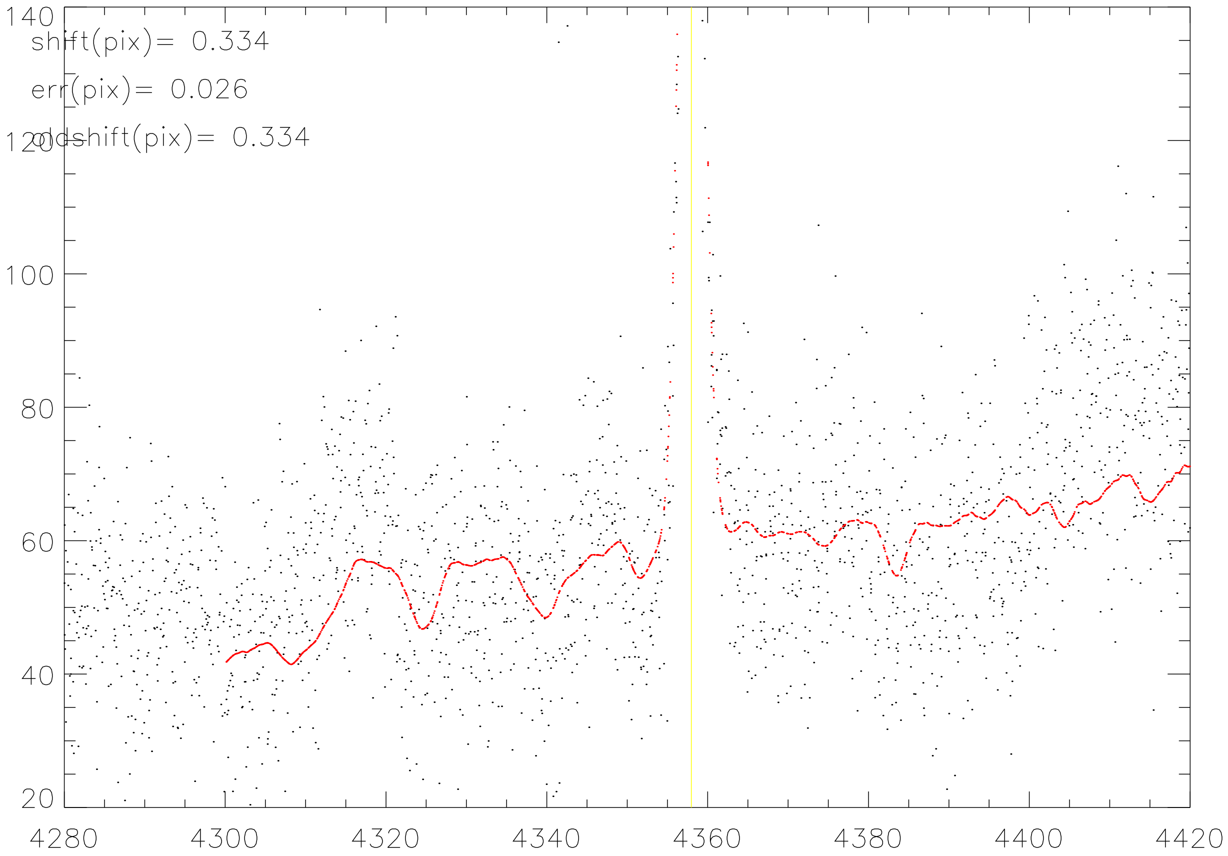
PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022194.fit

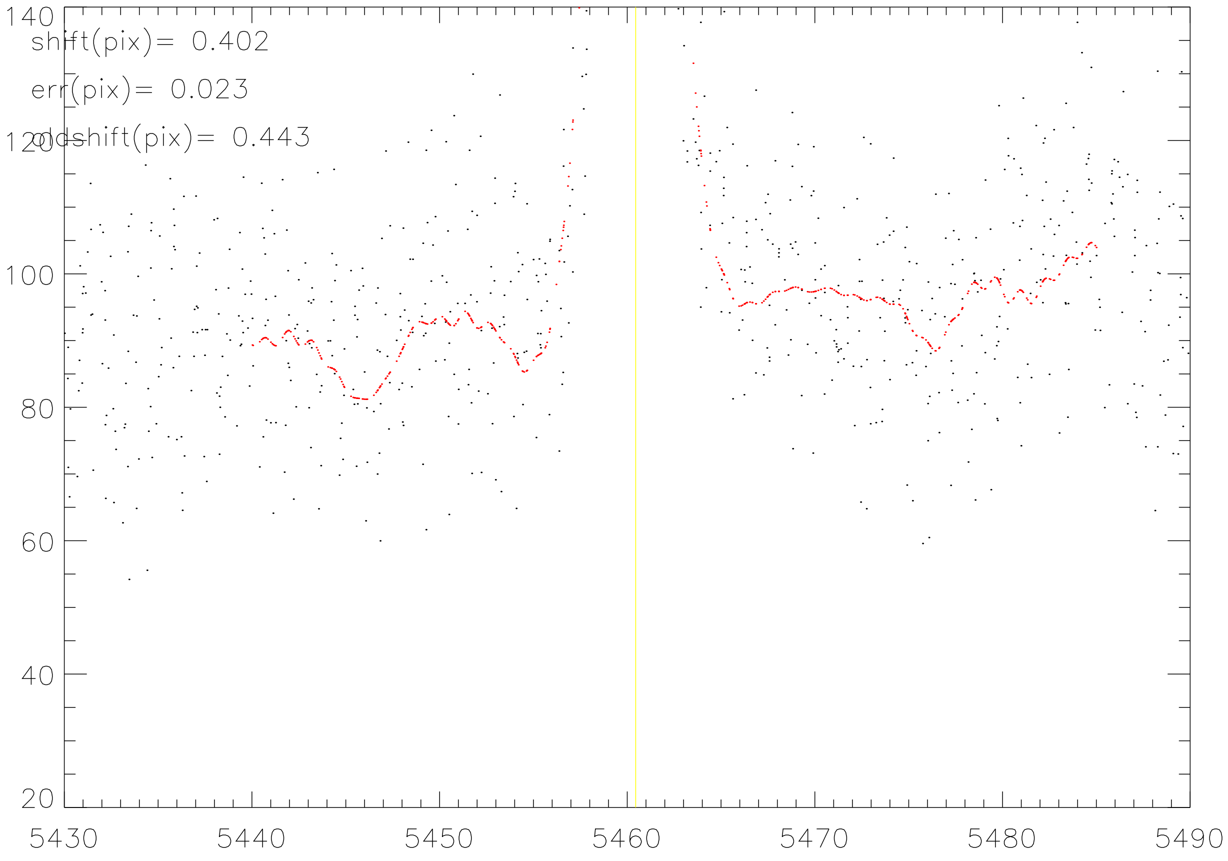
Mon Feb 25 23:05:38 2008


PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b2-00022194.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

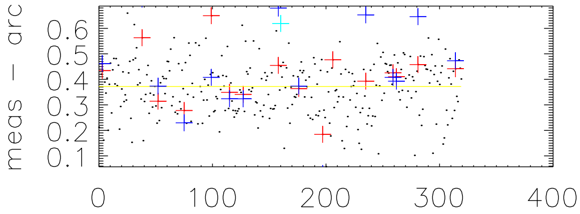

4046.5600
off: 0.46
sig: 0.058
4358.3300
off: 0.33
sig: 0.022
5460.9400
off: 0.44
sig: 0.019
5577.3390
off: 0.42
sig: 0.002
5889.9500
off: 0.50
sig: 0.010
5895.9240
off: 0.47
sig: 0.012
150
100
50
0
−50
250
200
300
1.5×10⁴
1.0×10⁴
5.0×10³
−5.0×10³
600
400
−200
−4
−2
2
4


shift(pix)= 0.619
err(pix)= 0.069
oldshift(pix)= 0.458
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

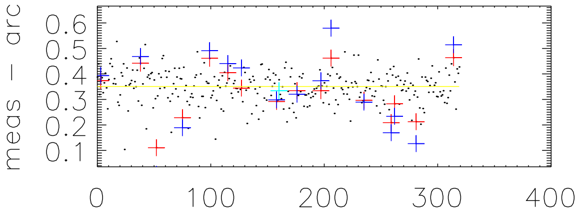

shift(pix)= 0.334
err(pix)= 0.026
oldshift(pix)= 0.334
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)= 0.402
err(pix)= 0.023
oldshift(pix)= 0.443
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

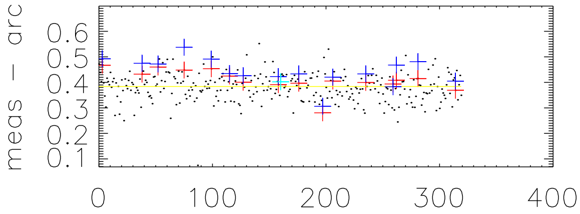
4046.5600



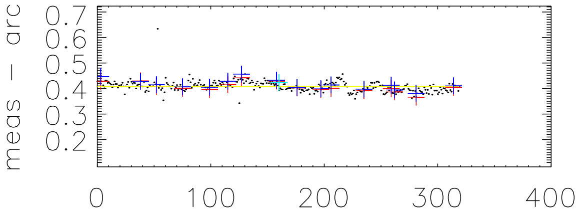
4358.3300



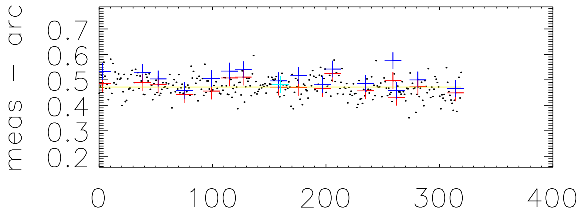
5460.9400



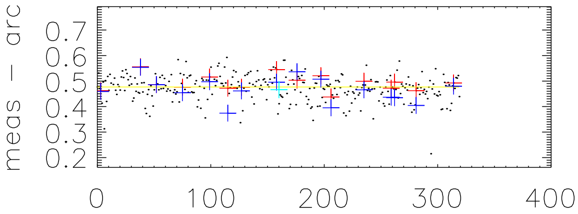
5577.3390

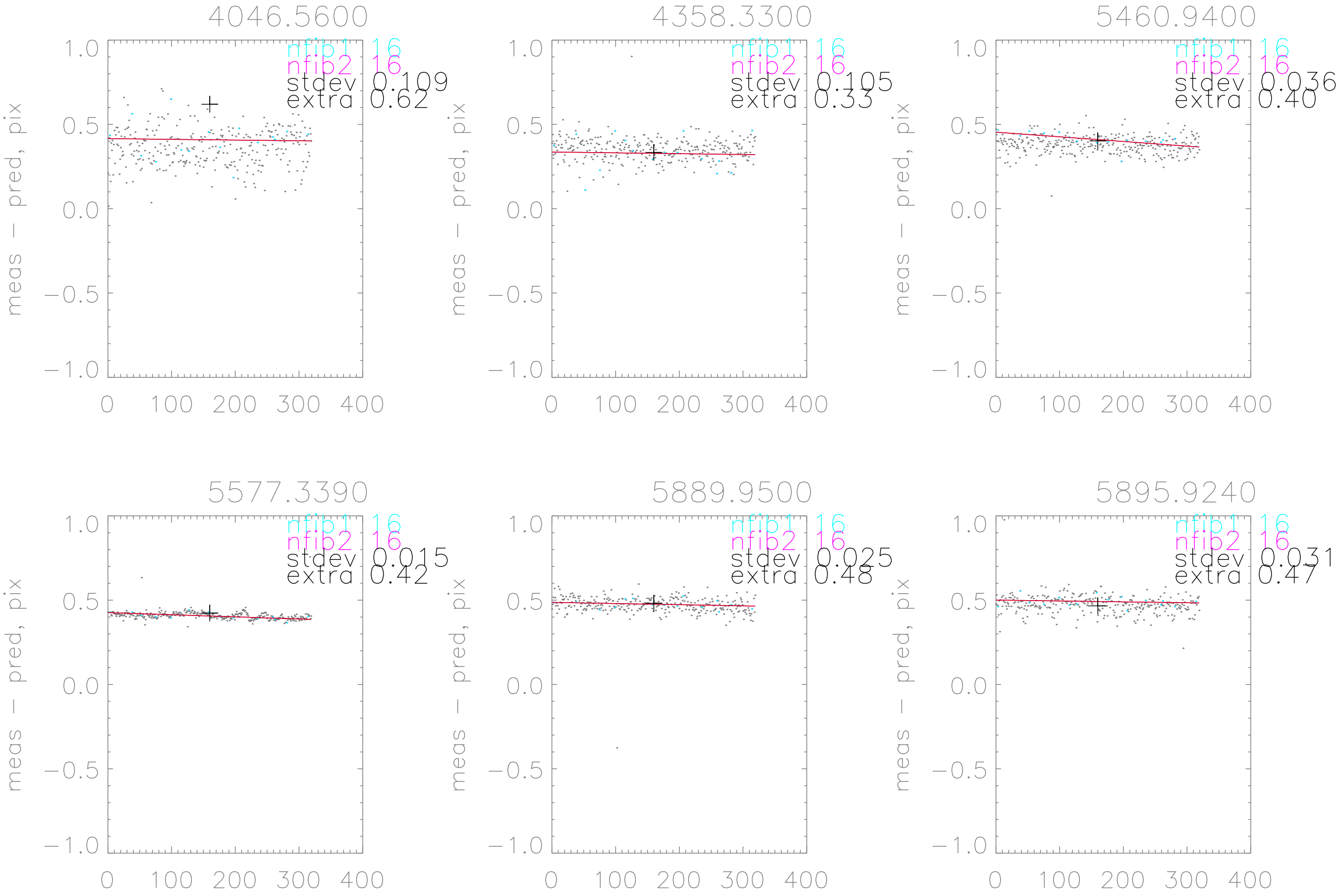


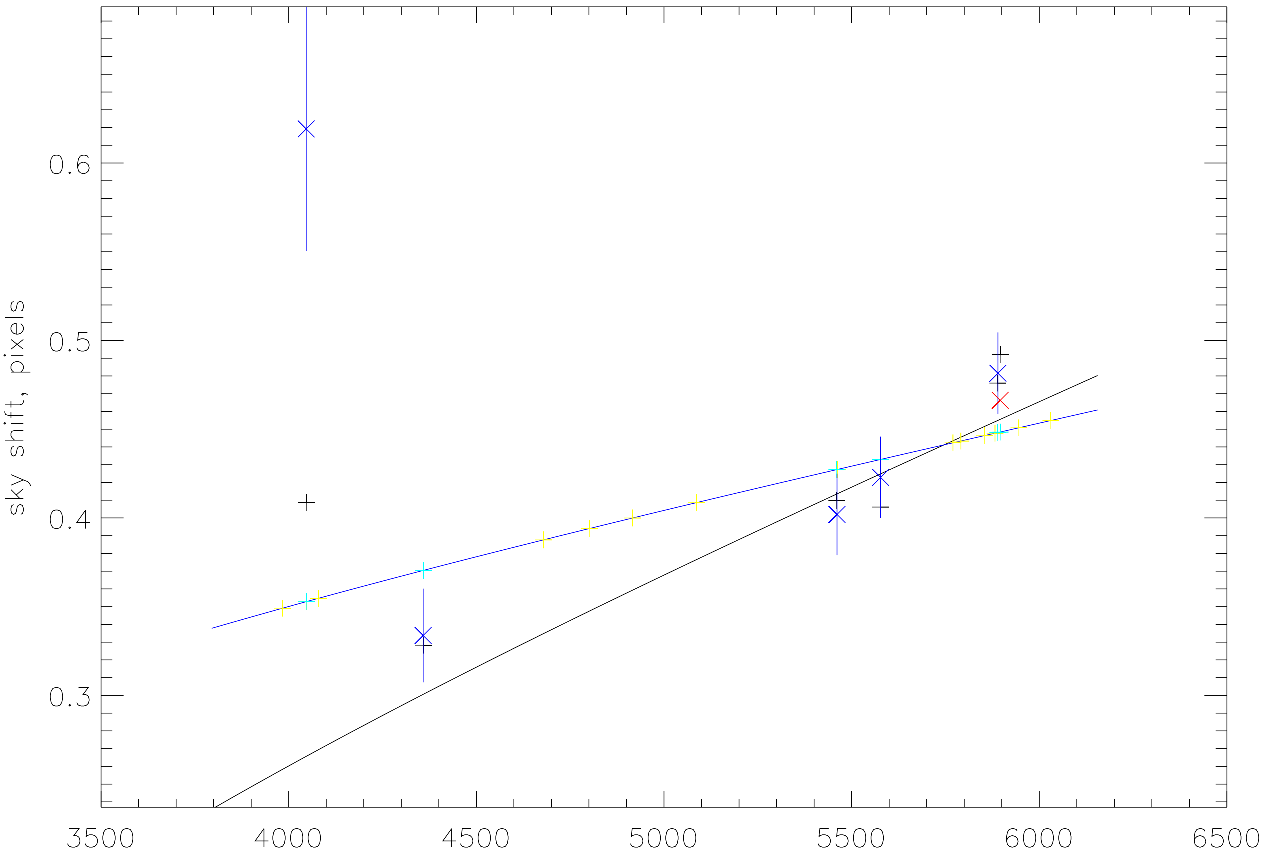
5889.9500

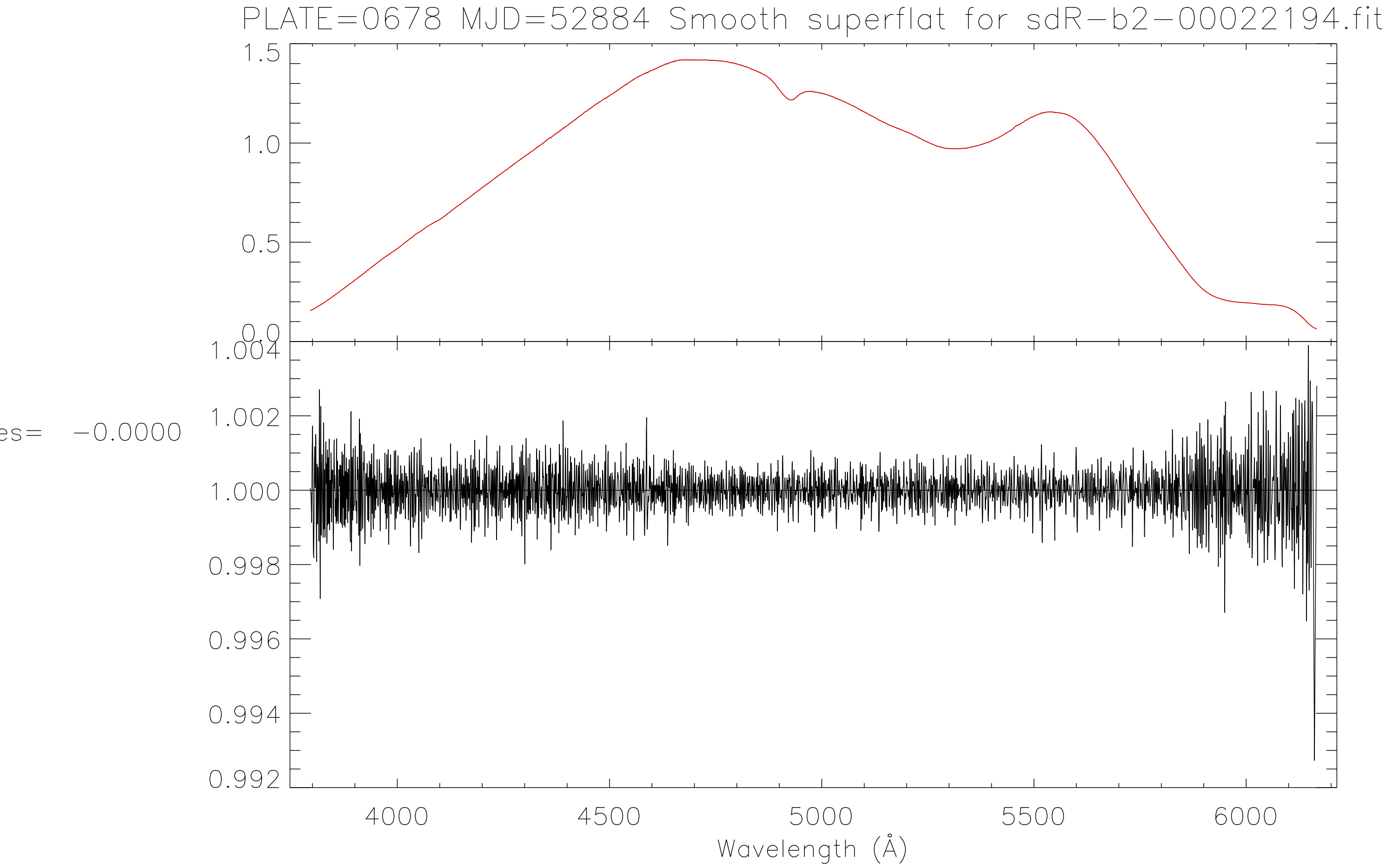


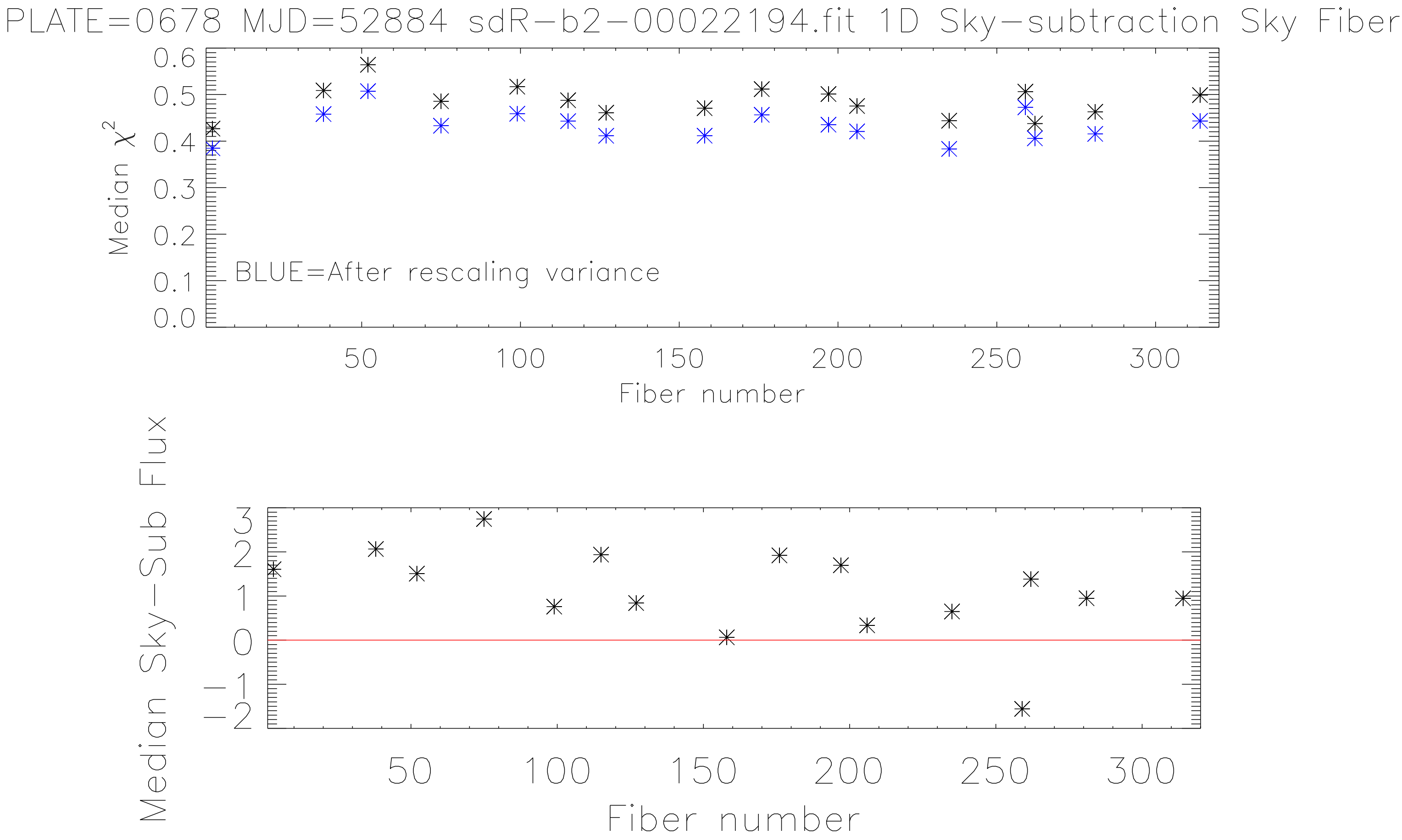
5895.9240

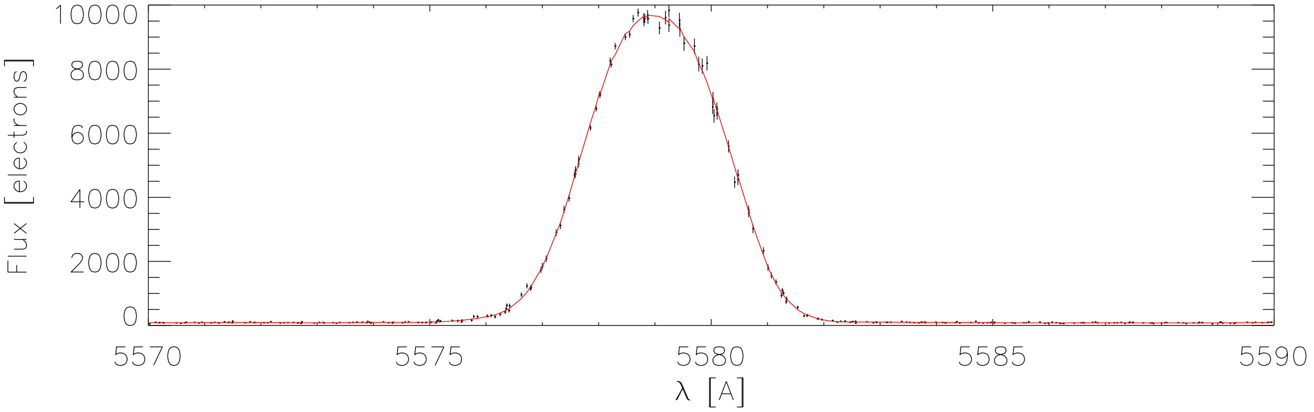


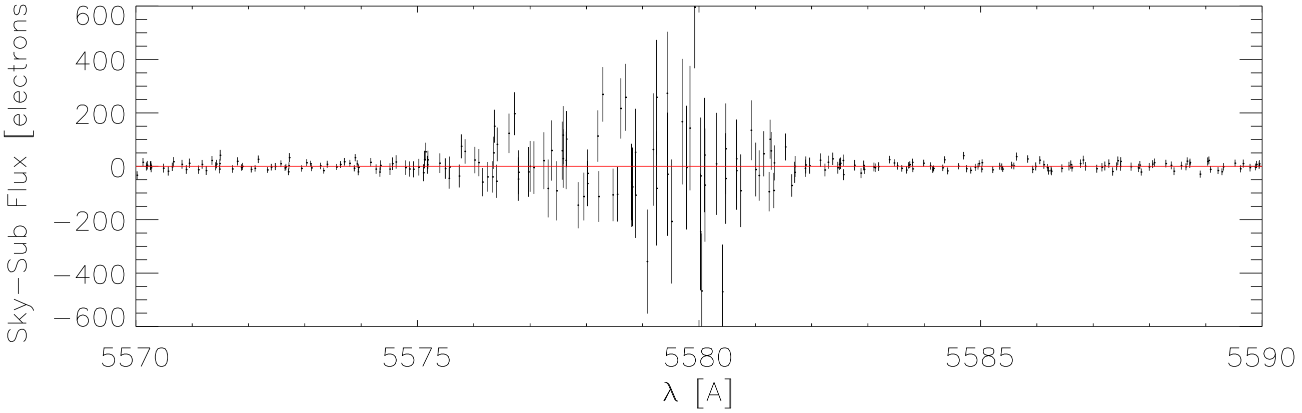

4046.5600
nfib1 16
nfib2 16
stdev 0.109
extra 0.62
4358.3300
nfib1 16
nfib2 16
stdev 0.105
extra 0.33
5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra 0.40
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.42
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra 0.48
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra 0.47
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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


PLATE=0678 MJD=52884 Smooth superflat for sdR-b2-00022194.fit
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
0.992
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

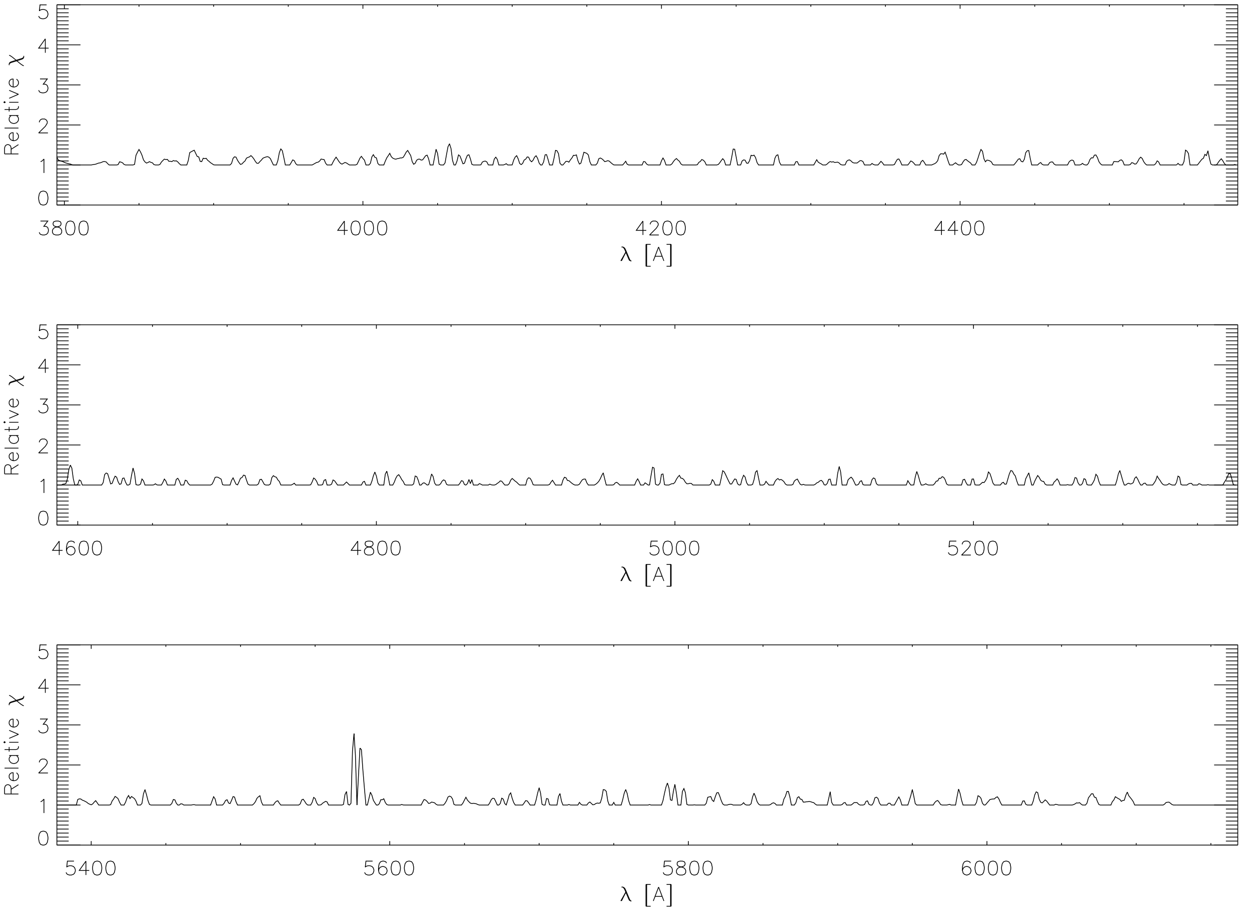

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

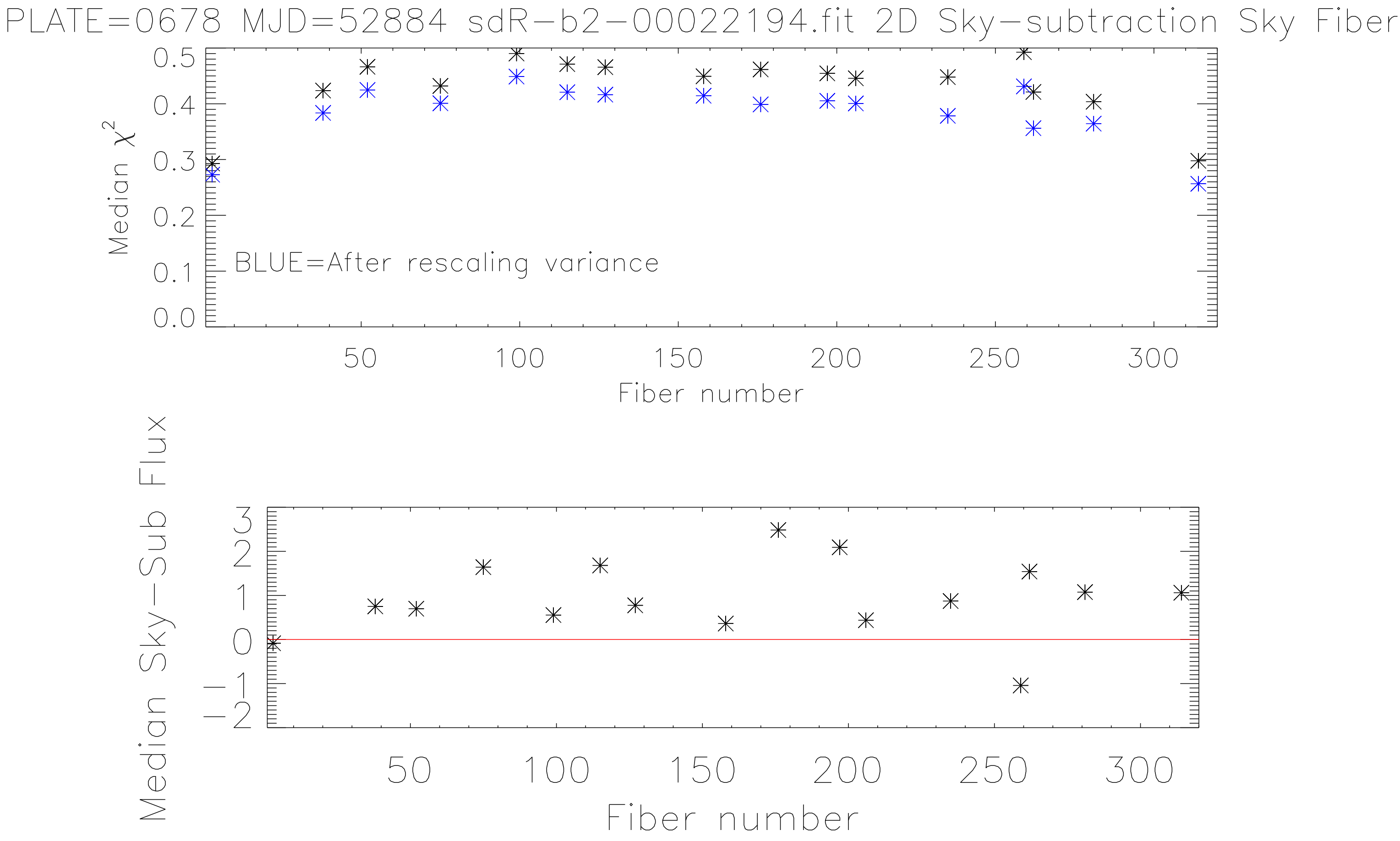

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 1D Sky-subtraction Sky Fibers

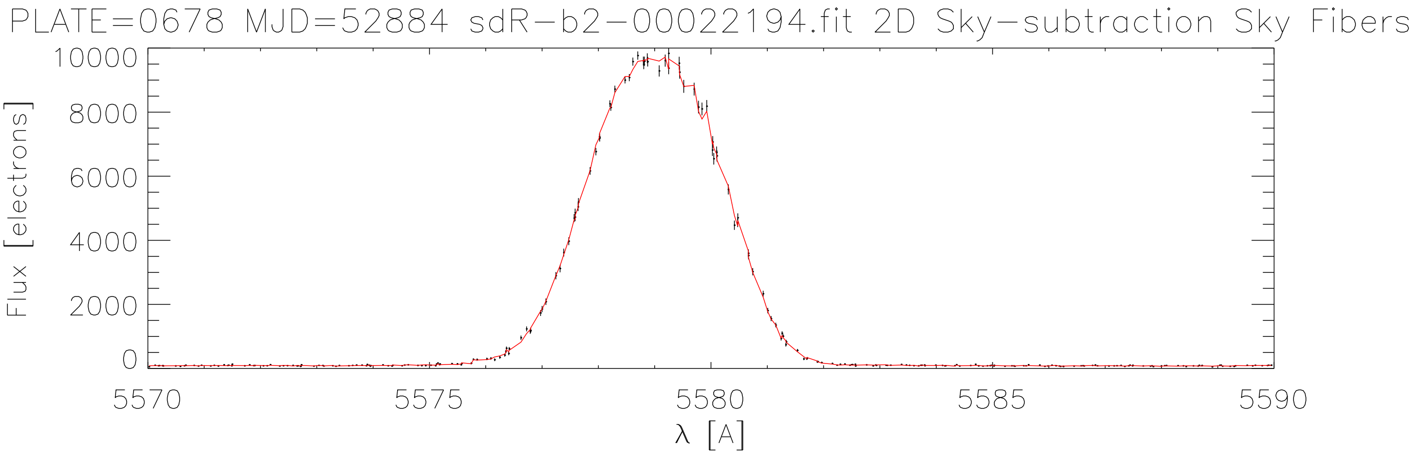

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 1D Sky-subtraction Sky-subtracted Sky F

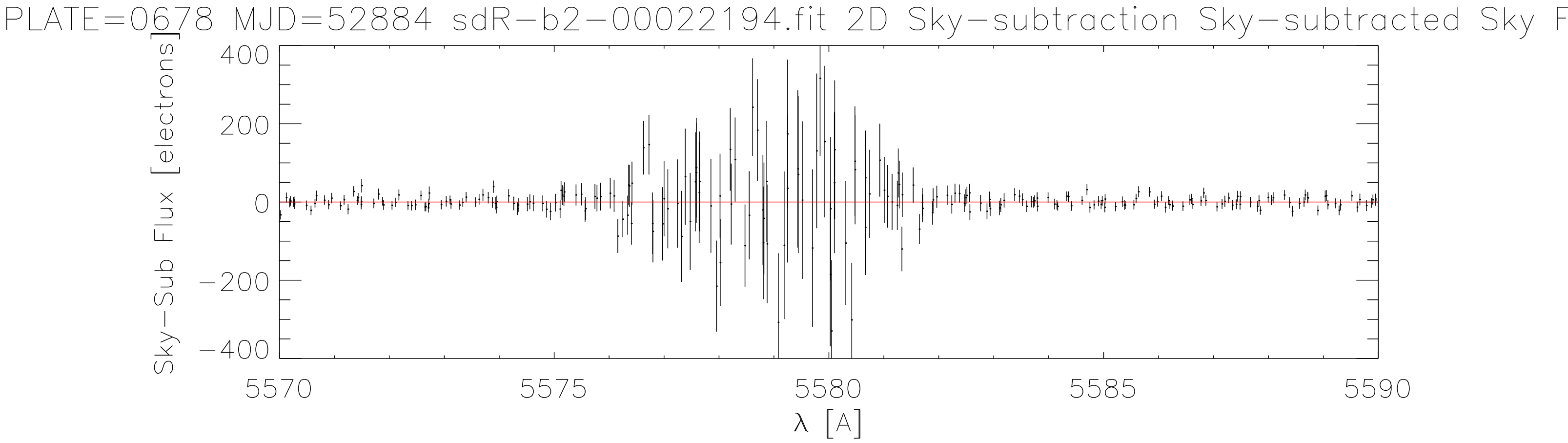
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 1D Sky-subtraction Rescaled Errors



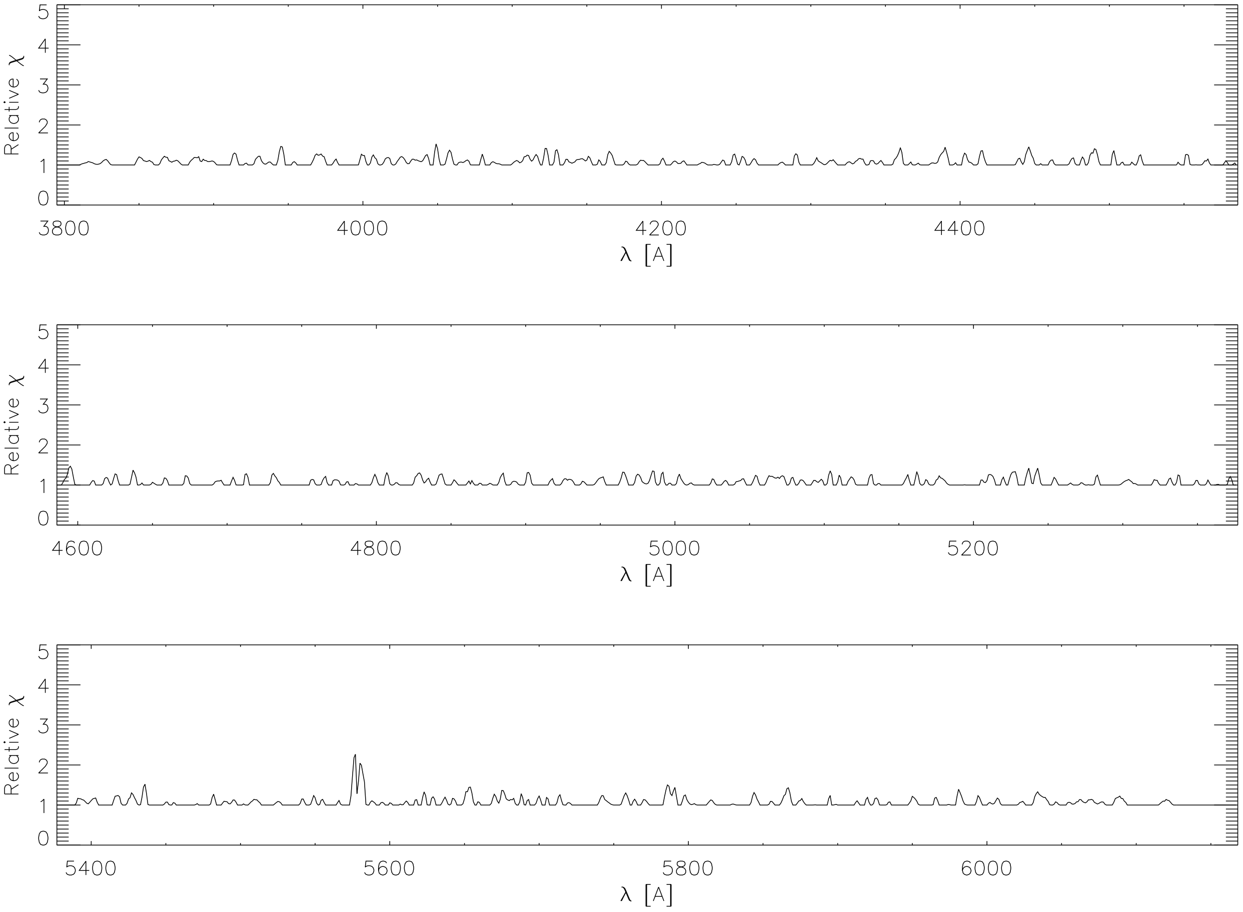

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−2
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

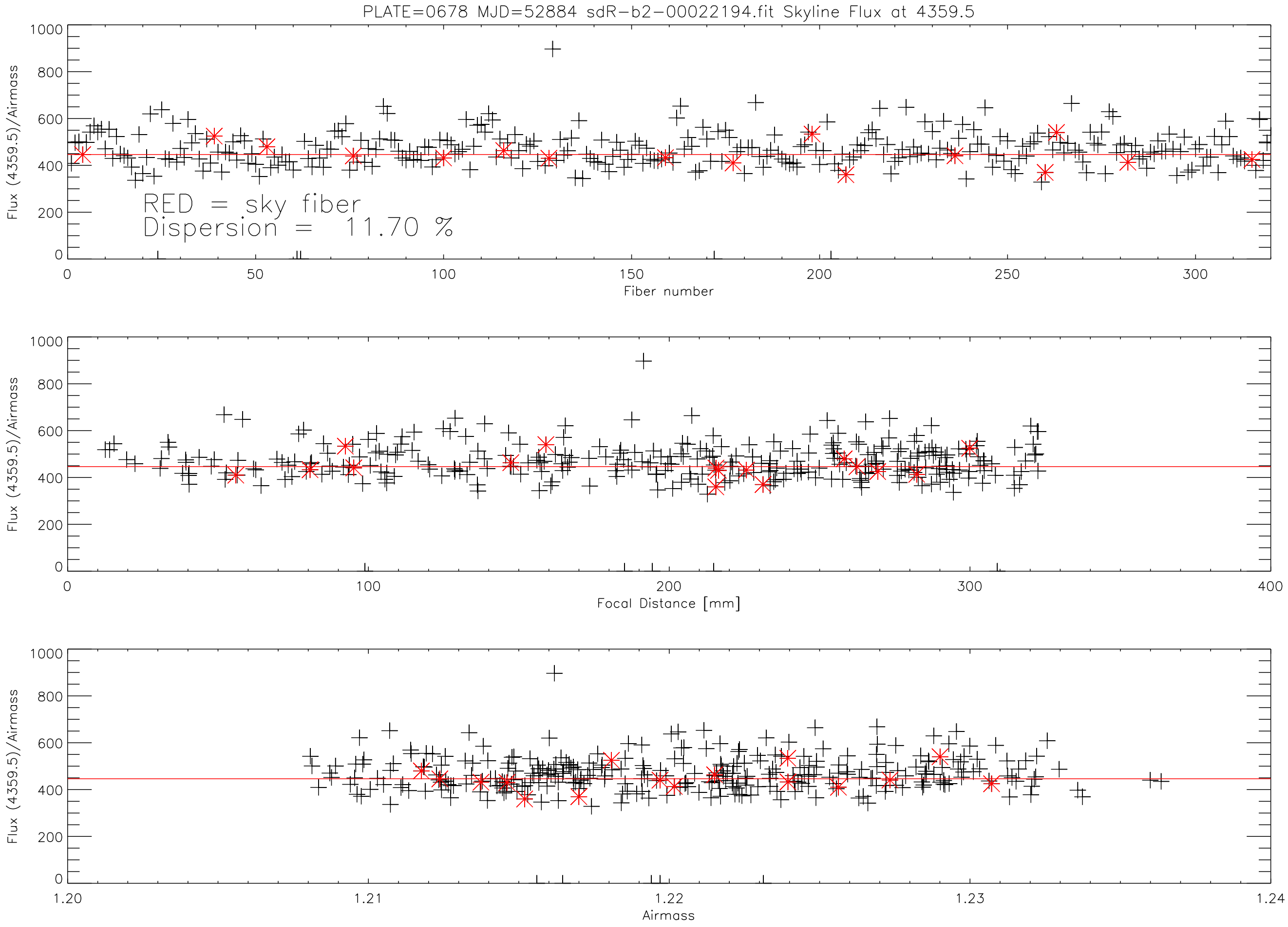

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
10000
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

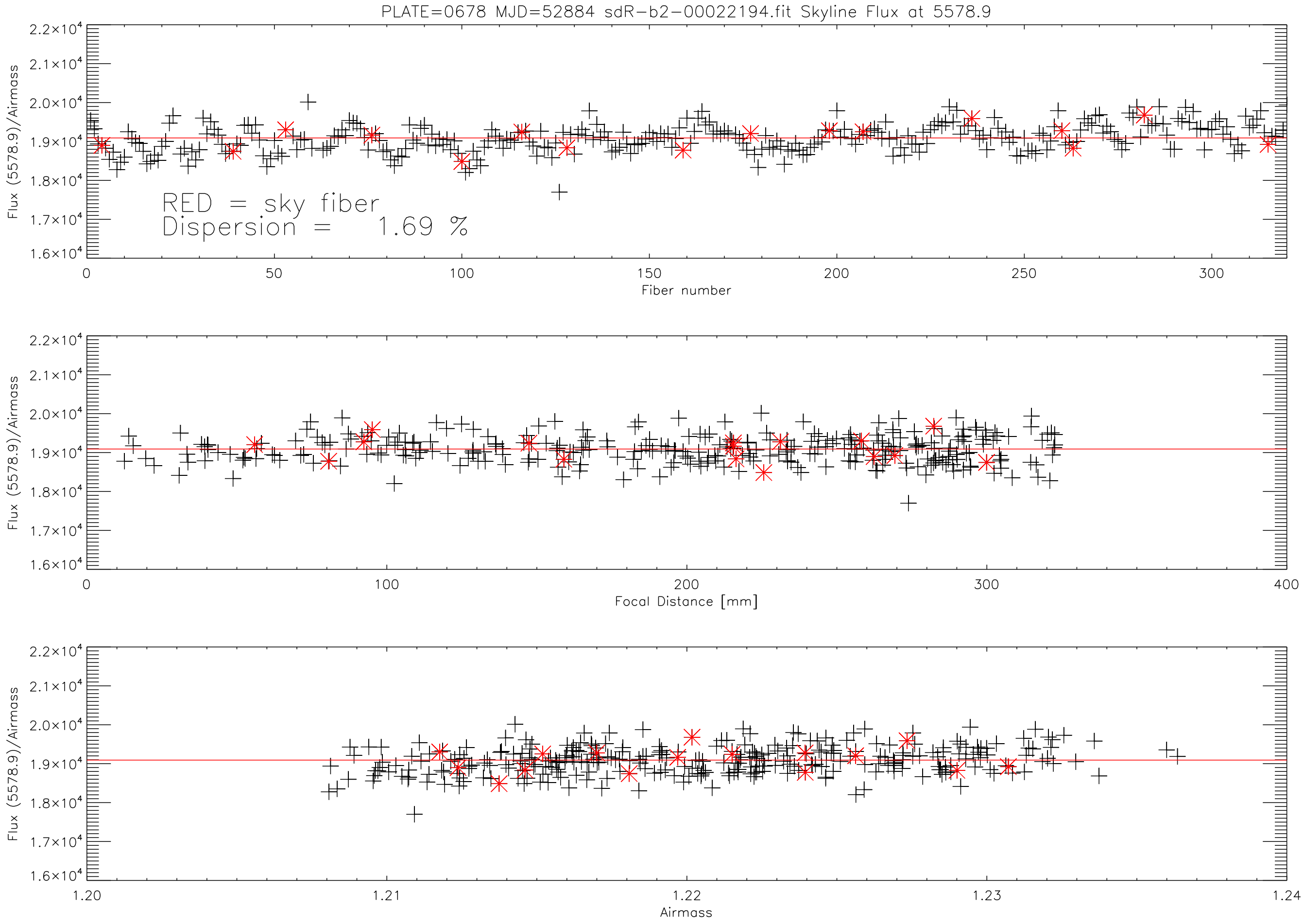

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

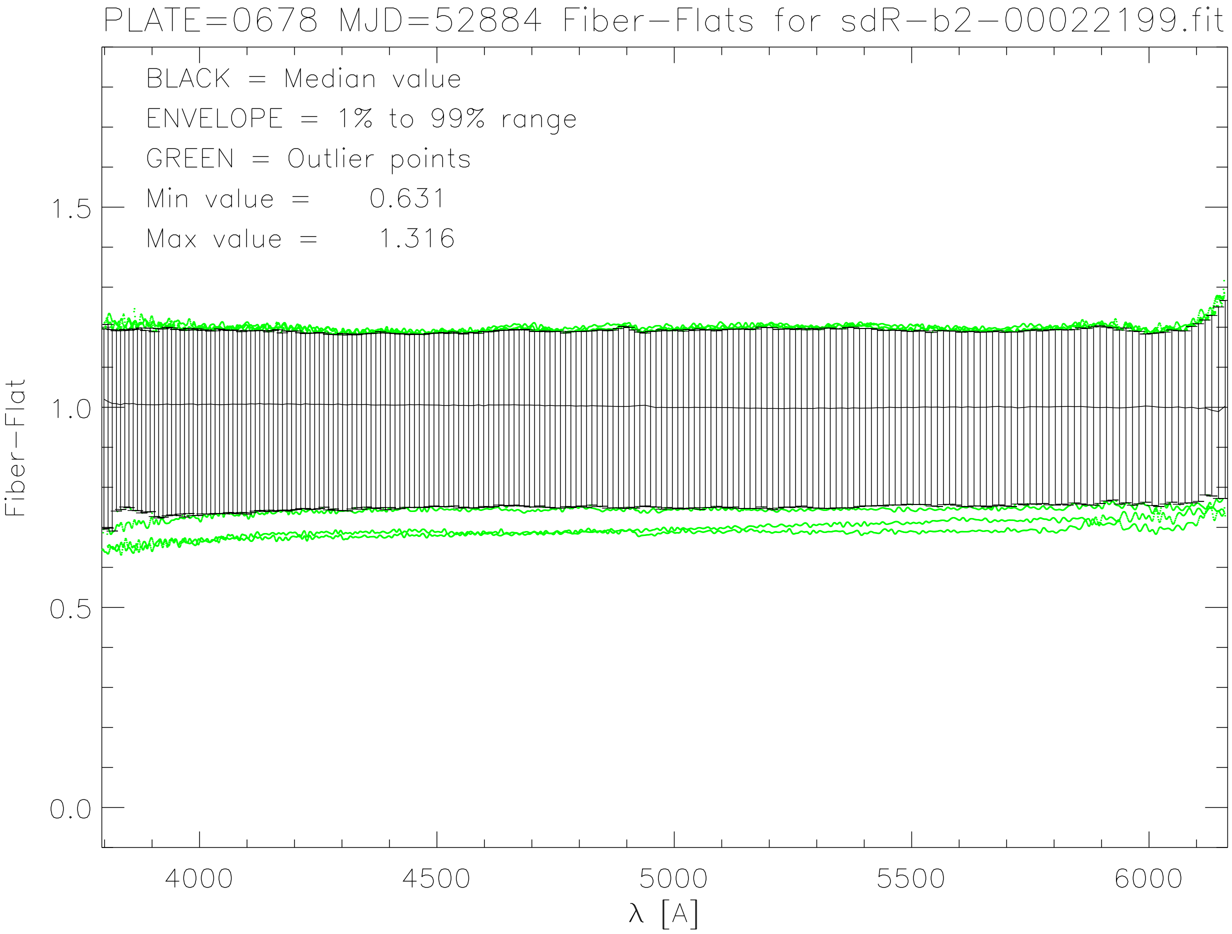
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b2-00022194.fit 2D Sky-subtraction Rescaled Errors

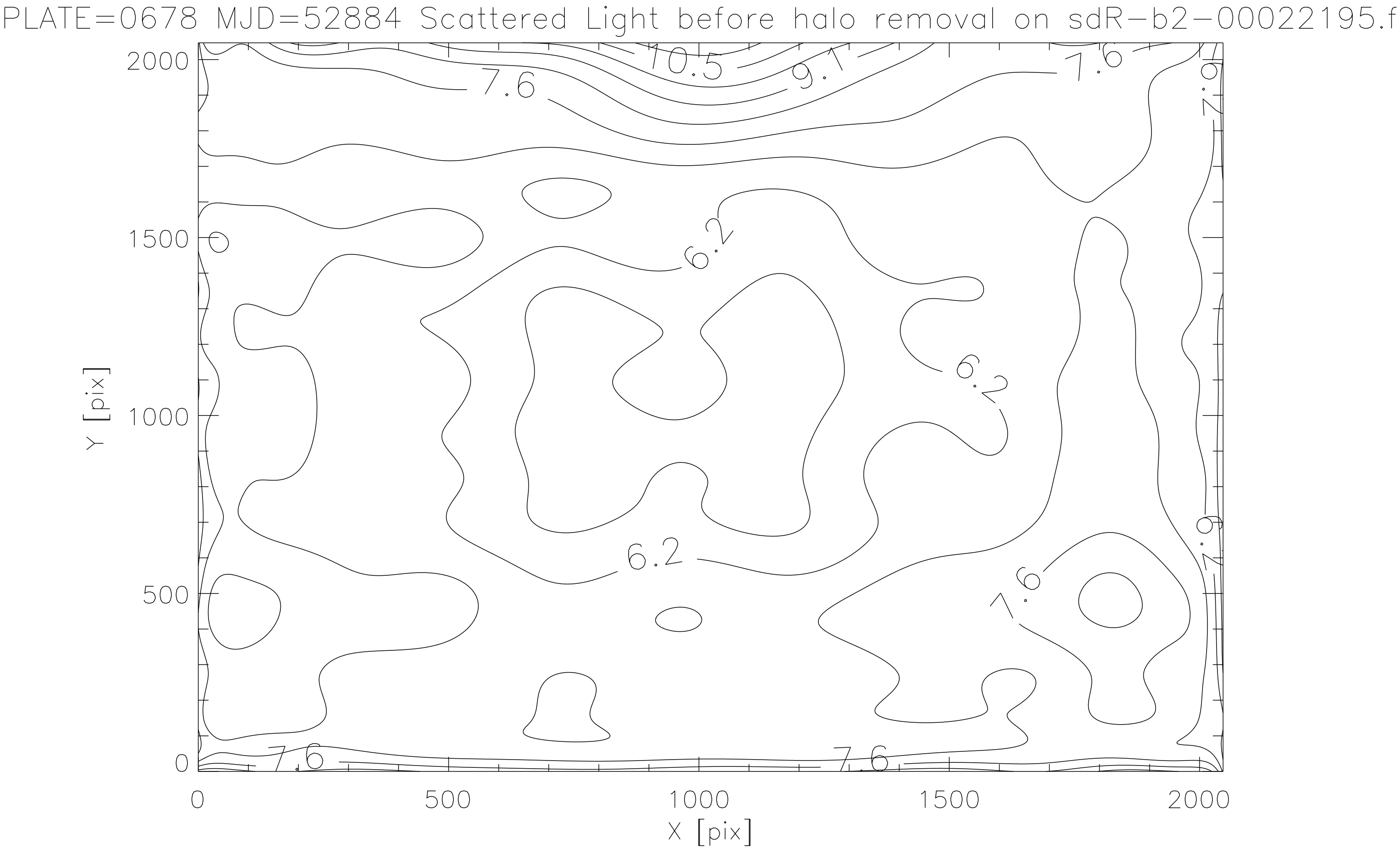



PLATE=0678 MJD=52884 sdR-b2-00022194.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1000
800
600
400
200
0
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 11.70 %
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.20
1.21
1.22
1.23
1.24
Airmass

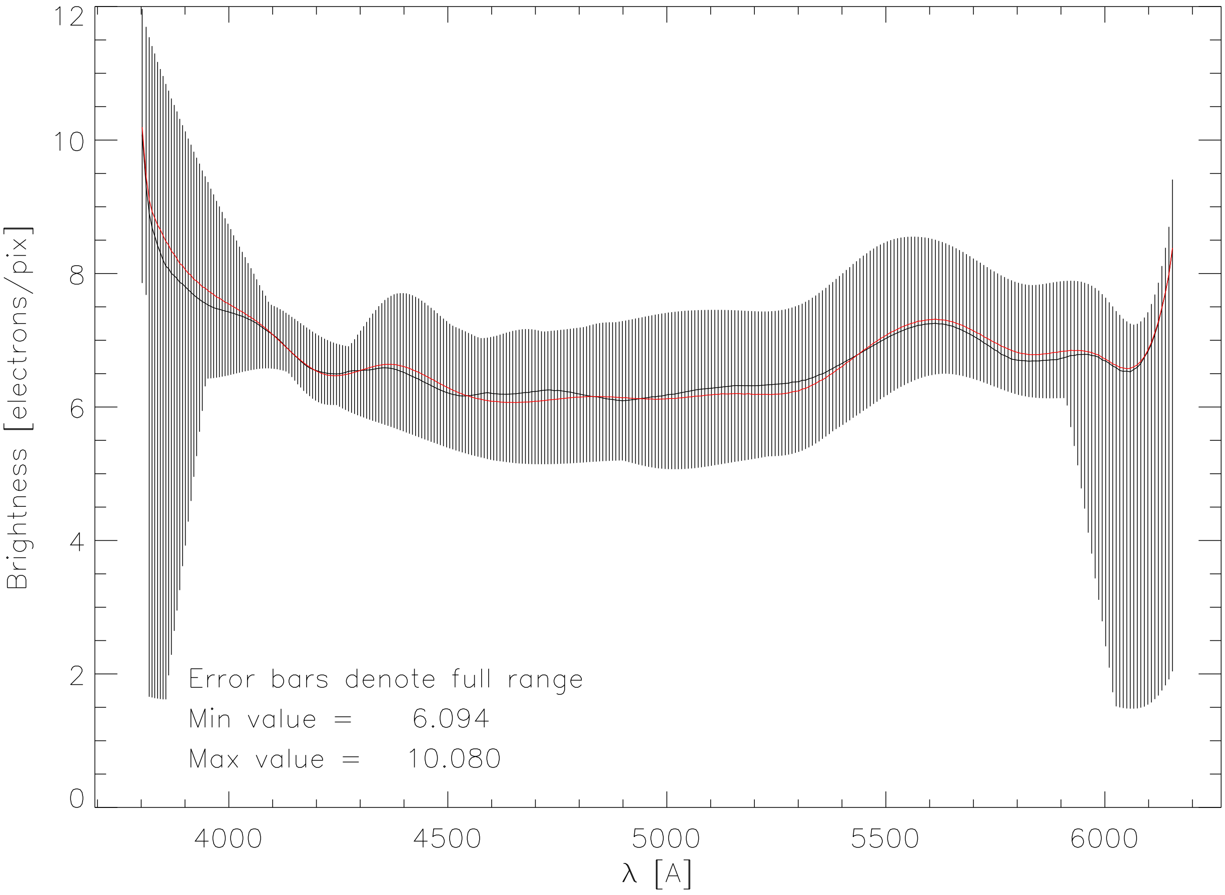

PLATE=0678 MJD=52884 sdR-b2-00022194.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.2×10⁴
2.1×10⁴
2.0×10⁴
1.9×10⁴
1.8×10⁴
1.7×10⁴
1.6×10⁴
RED = sky fiber
Dispersion = 1.69 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.20
1.21
1.22
1.23
1.24
Airmass



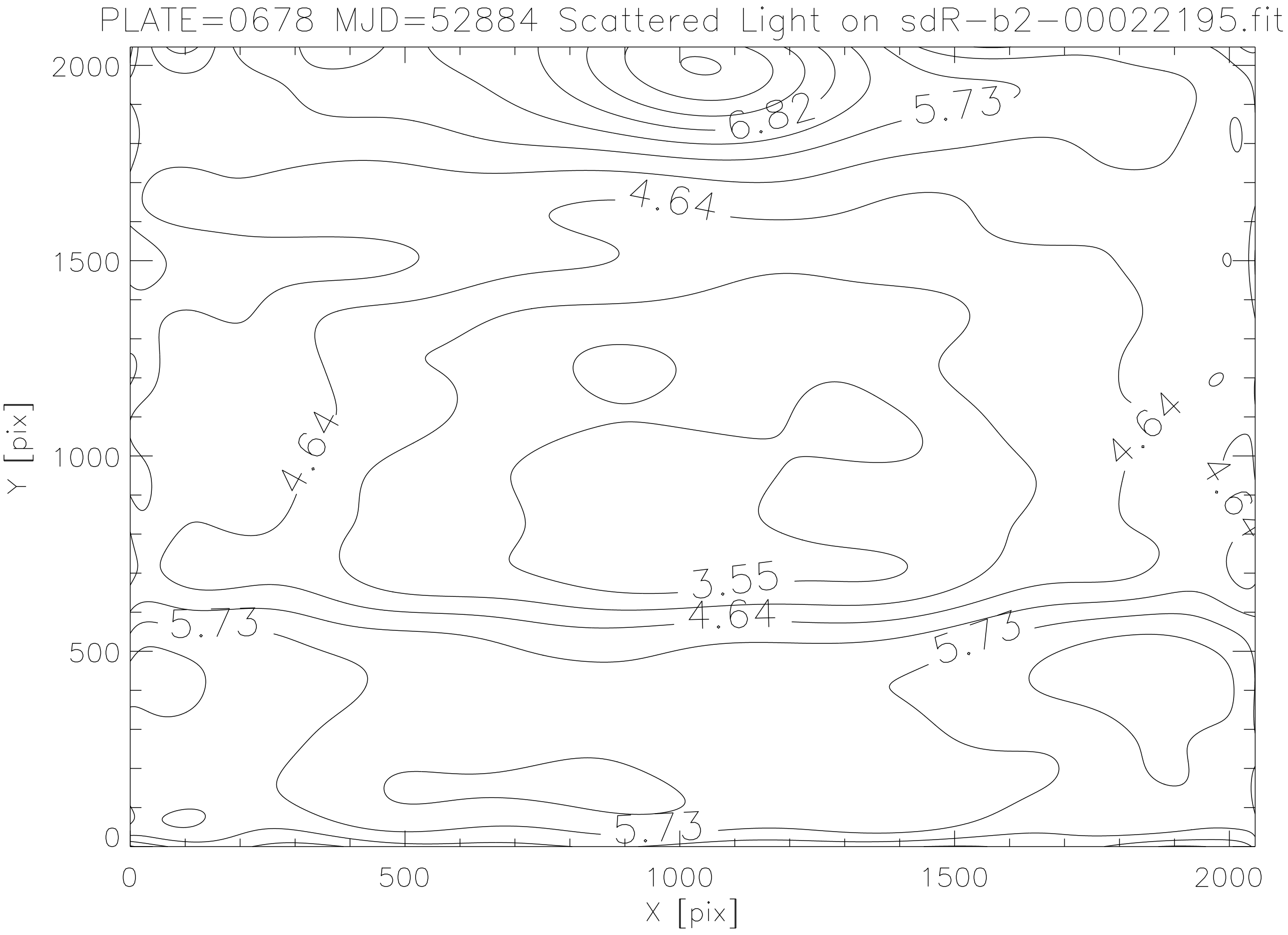
Mon Feb 25 23:06:50 2008


PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022195.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
10.5
9.1
7.6
7.6
7.6
6.2
6.2
6.2
7.6
7.6
7.6
7.9
7.9

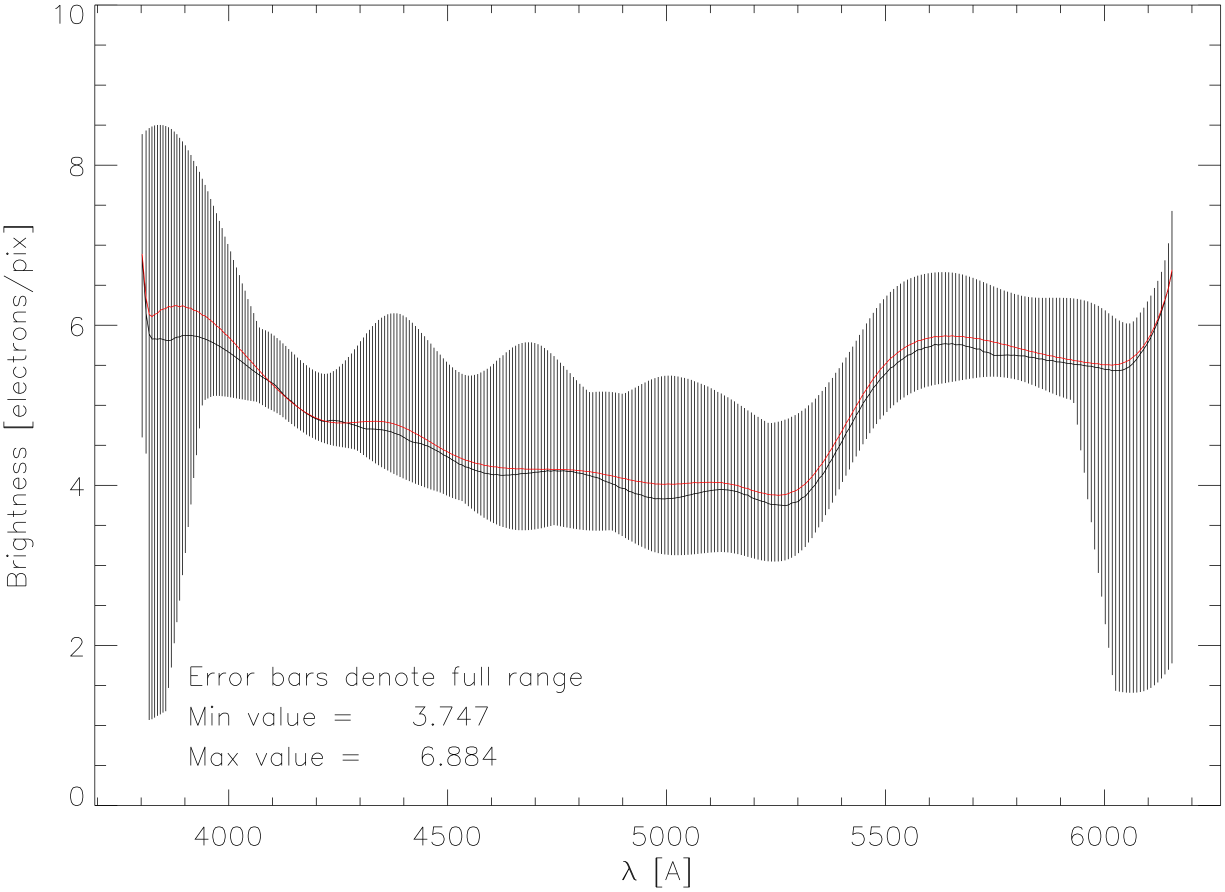
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022195.f



Mon Feb 25 23:07:48 2008

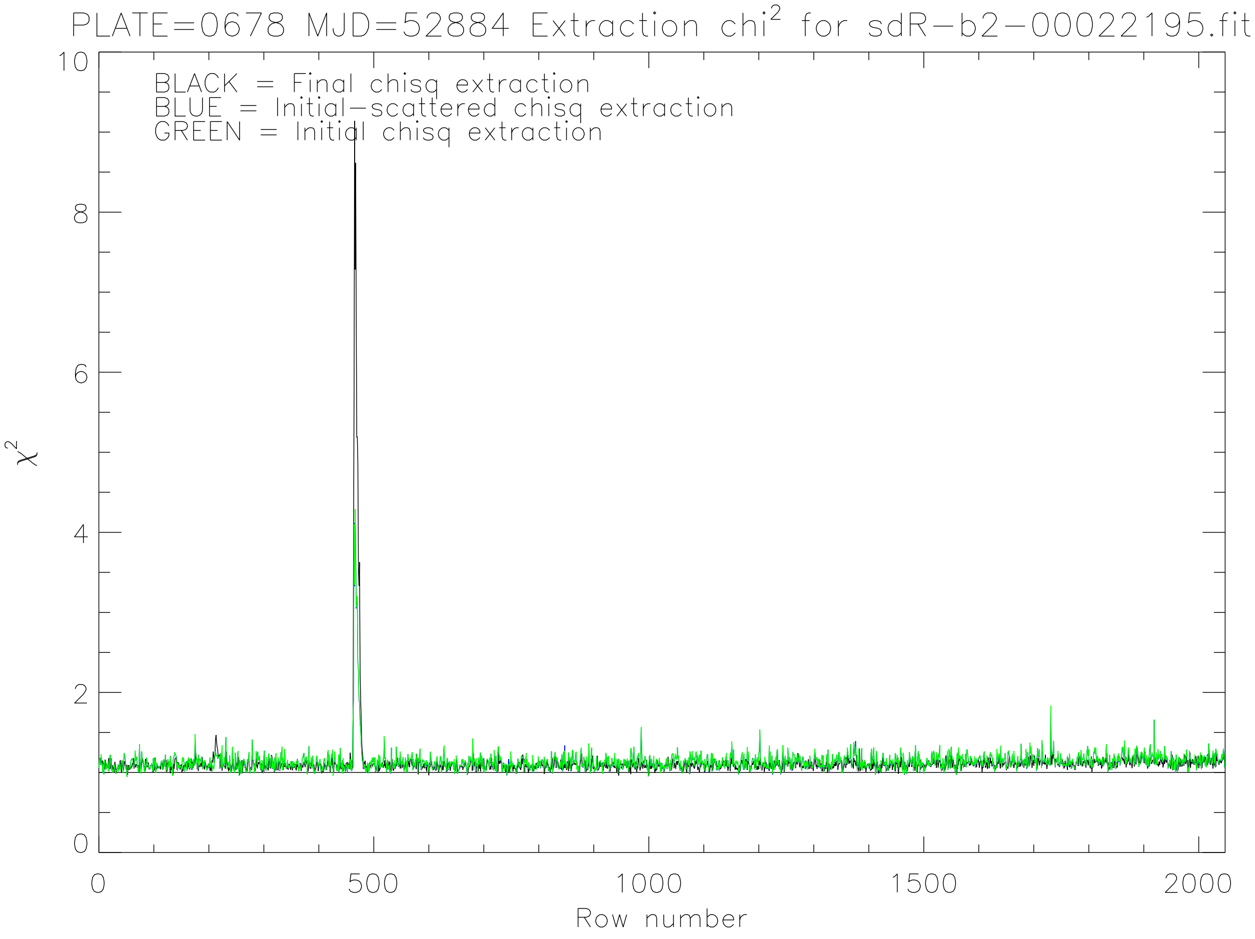

PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022195.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.82
5.73
4.64
3.55
4.64
5.73
5.73
5.73
4.64
4.64
4.64

PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022195.fit

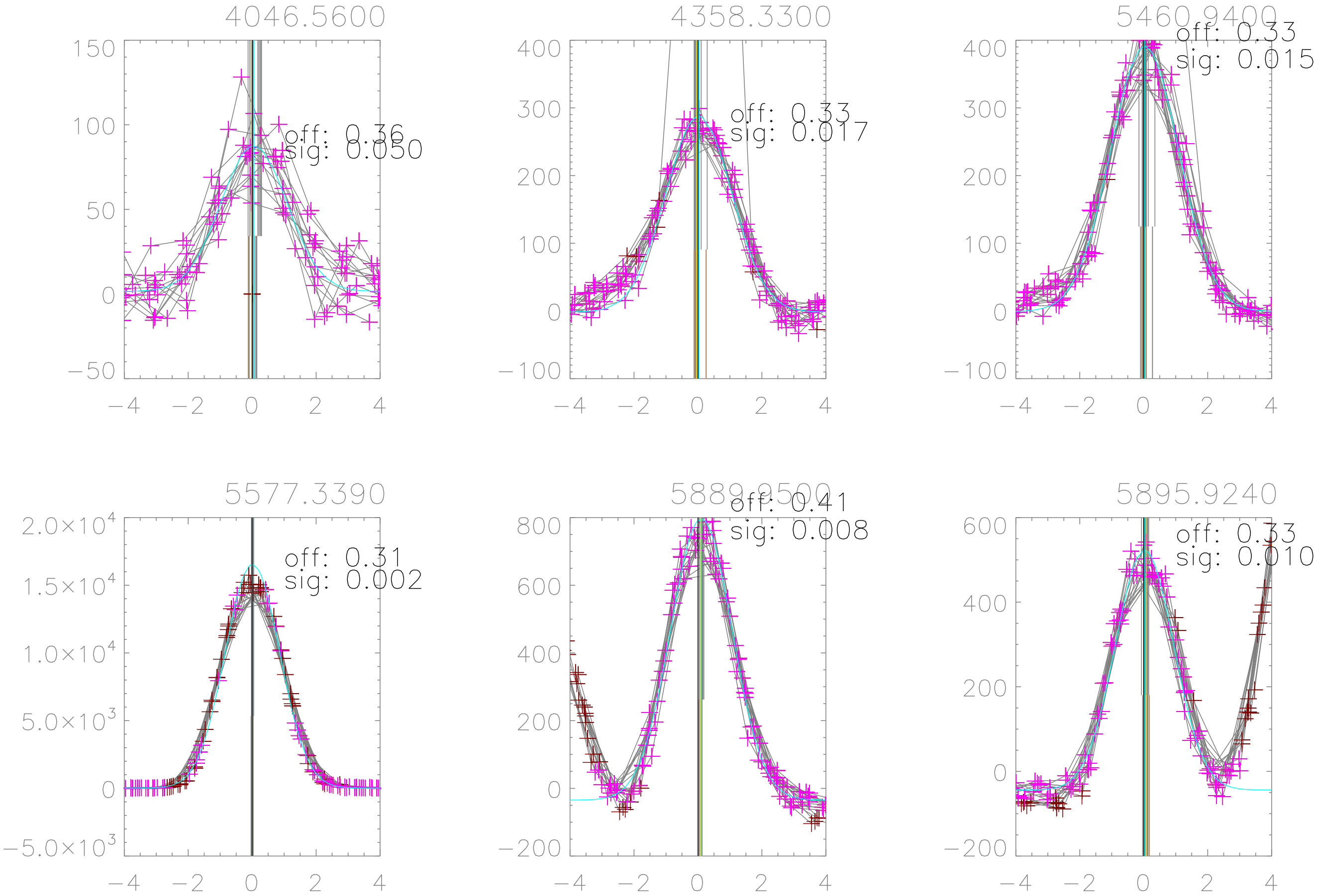


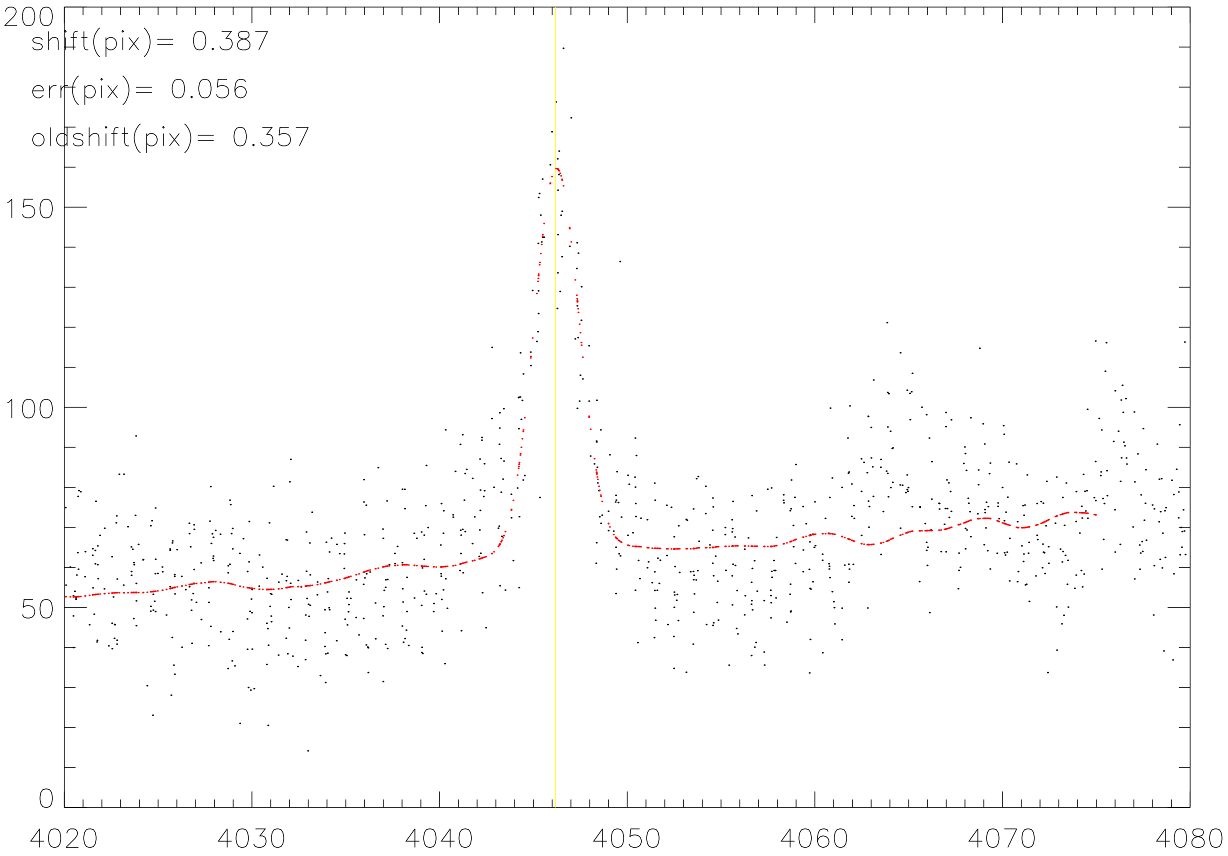
Error bars denote full range
Min value = 3.747
Max value = 6.884

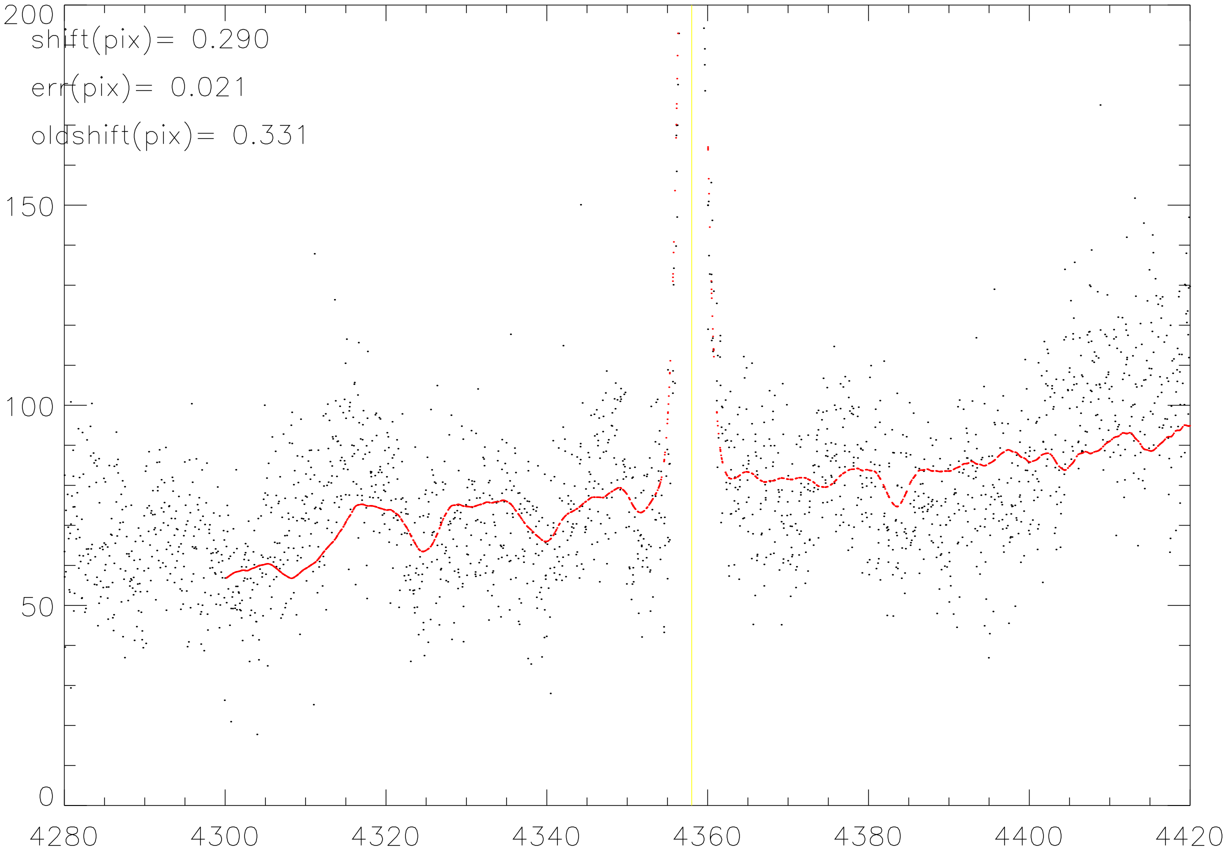
Mon Feb 25 23:11:10 2008



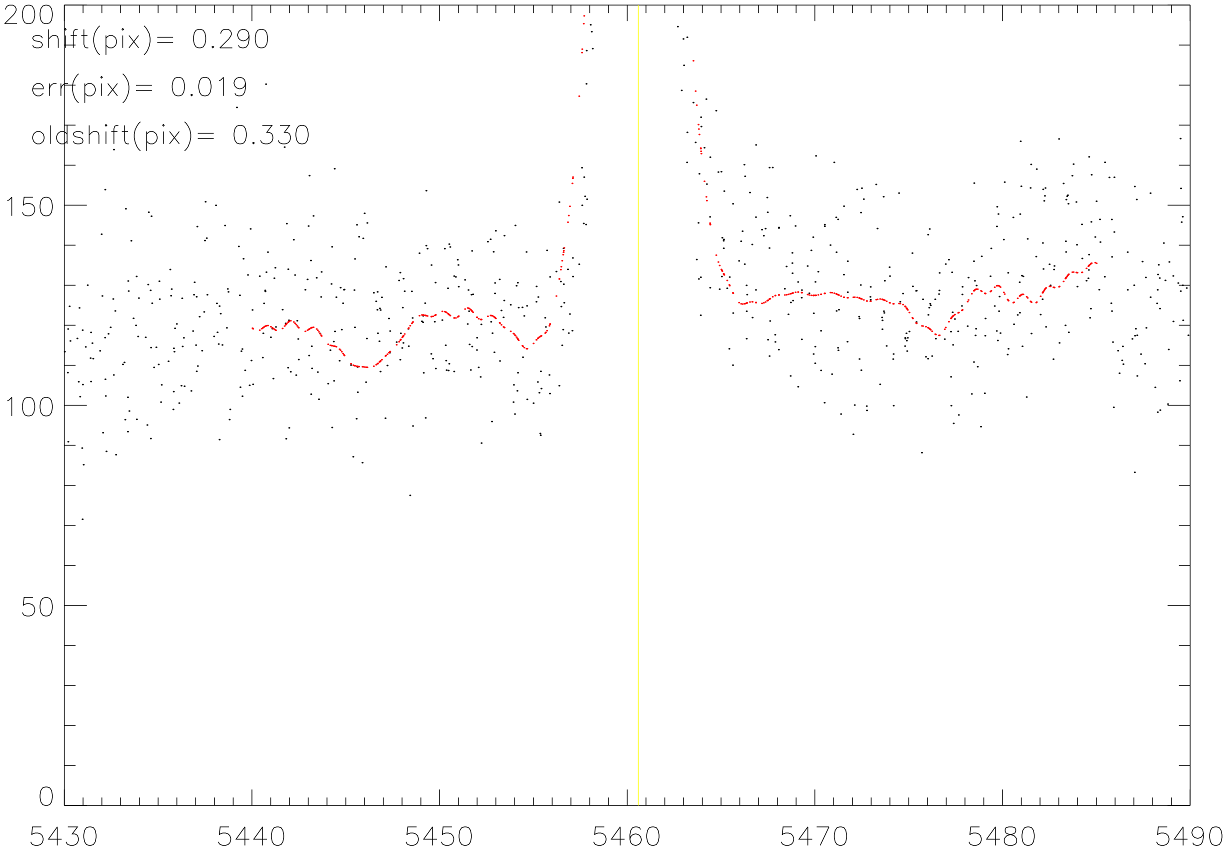
PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b2-00022195.fit

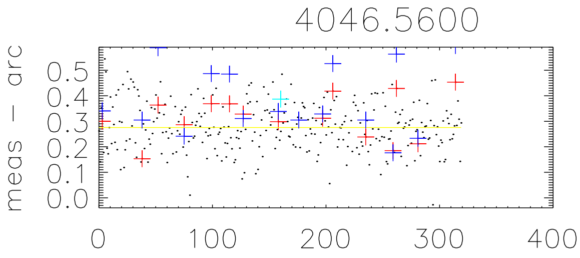

4046.5600
off: 0.36
sig: 0.050
4358.3300
off: 0.33
sig: 0.017
5460.9400
off: 0.33
sig: 0.015
5577.3390
off: 0.31
sig: 0.002
5889.9500
off: 0.41
sig: 0.008
5895.9240
off: 0.33
sig: 0.010
150
100
50
0
−50
400
300
200
100
0
−100
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
−5.0×10^3
800
600
400
200
0
−200
−4
−2
0
2
4

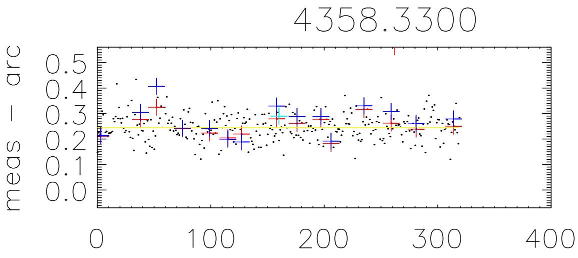

shift(pix)= 0.387
err(pix)= 0.056
oldshift(pix)= 0.357
0
50
100
150
200
4020
4030
4040
4050
4060
4070
4080

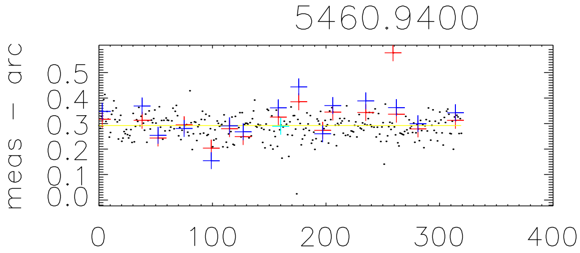


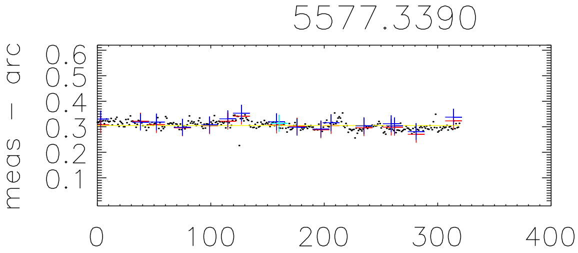
shift(pix)= 0.290
err(pix)= 0.021
oldshift(pix)= 0.331
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

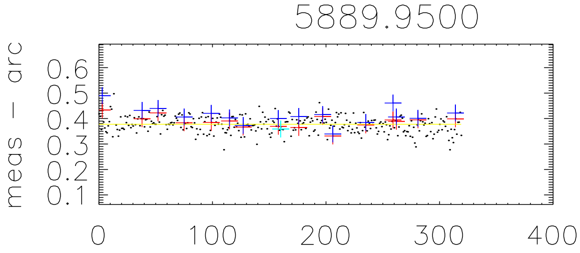

shift(pix)= 0.290
err(pix)= 0.019
oldshift(pix)= 0.330
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

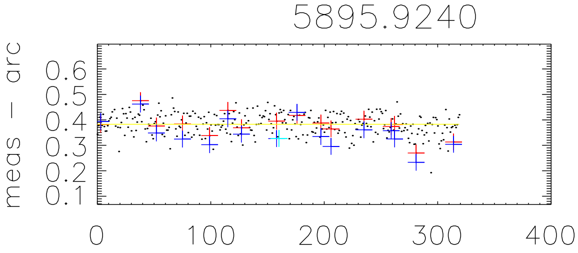

4046.5600
meas - arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

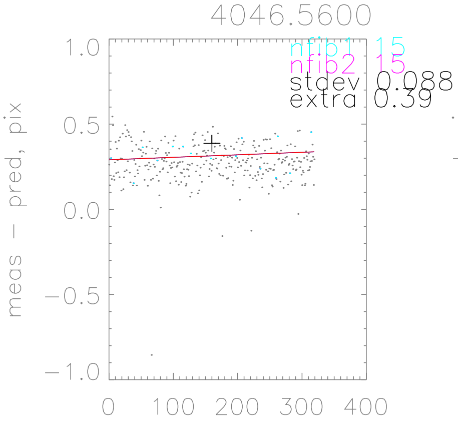

4358.3300
meas - arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

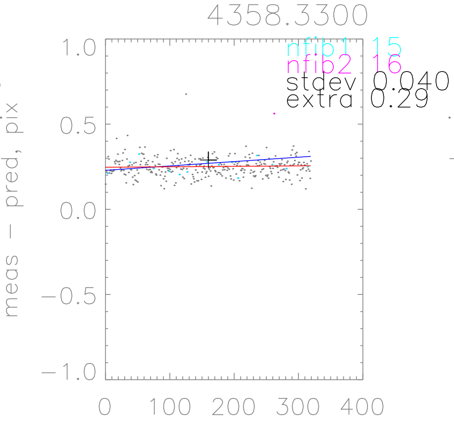

5460.9400
meas - arc
0.0
0.1
0.2
0.3
0.4
0.5
0
100
200
300
400

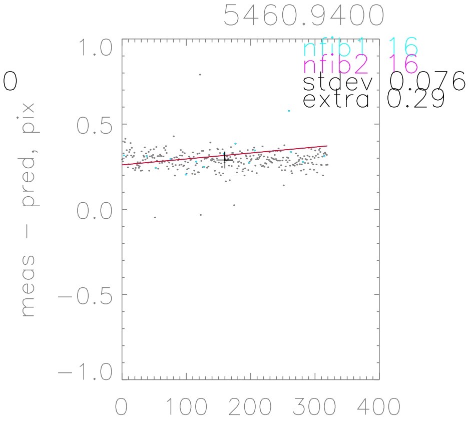

5577.3390
meas - arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

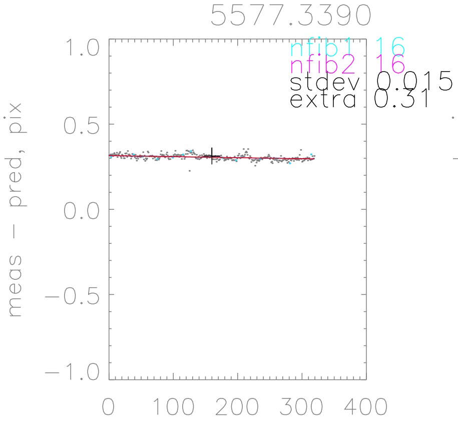

5889.9500
meas - arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

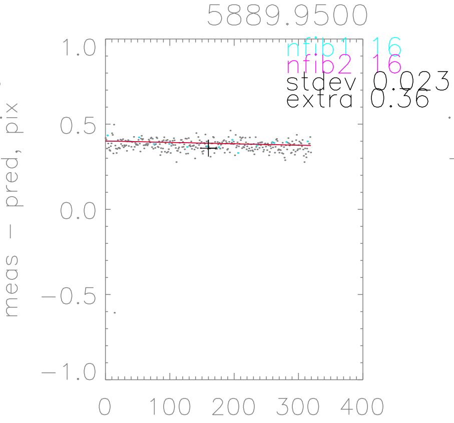

5895.9240
meas - arc
0.1
0.2
0.3
0.4
0.5
0.6
0
100
200
300
400

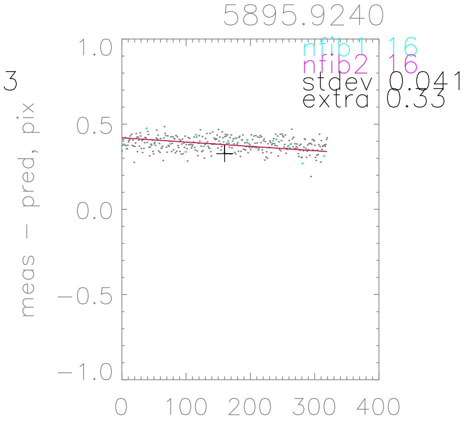

4046.5600
nfib1 15
nfib2 15
stdev 0.088
extra 0.39
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

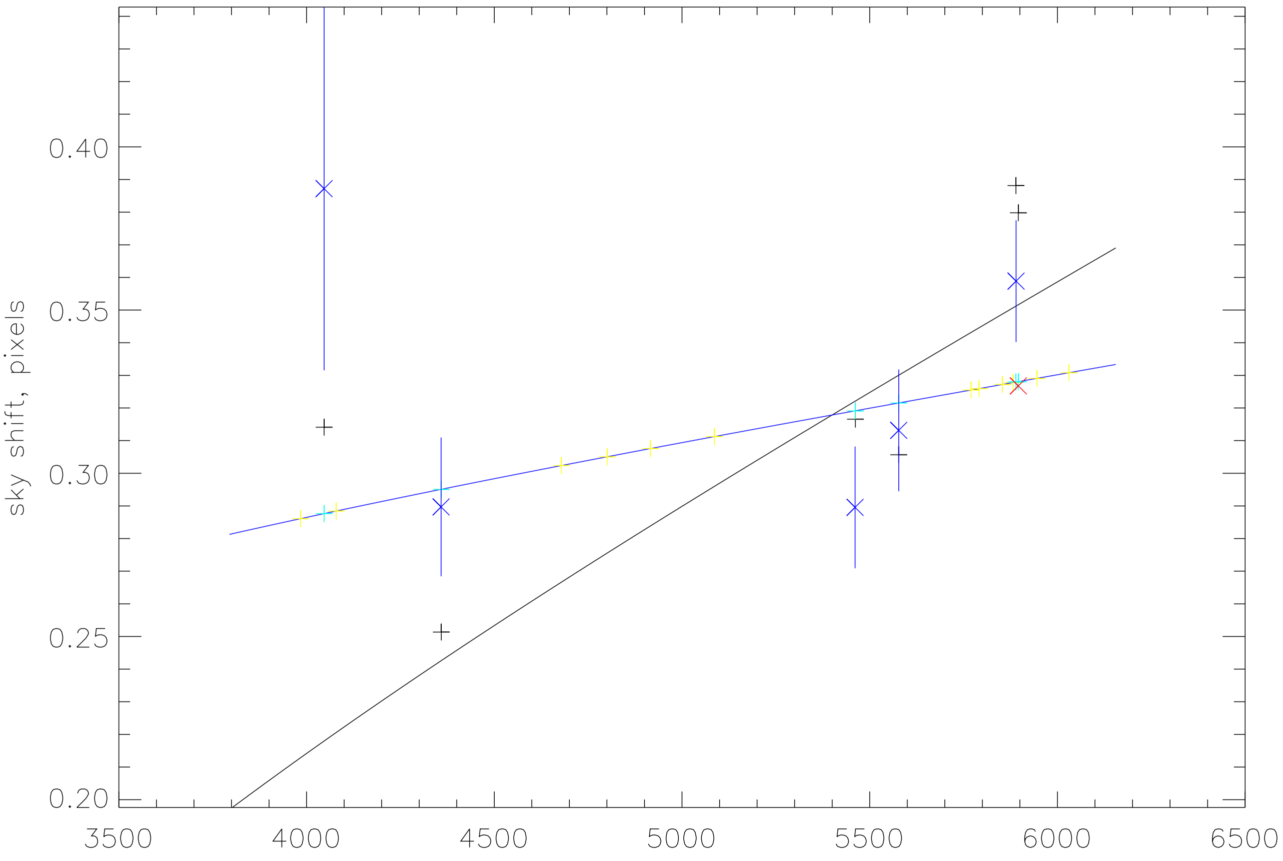

4358.3300
nfib1 15
nfib2 16
stdev 0.040
extra 0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

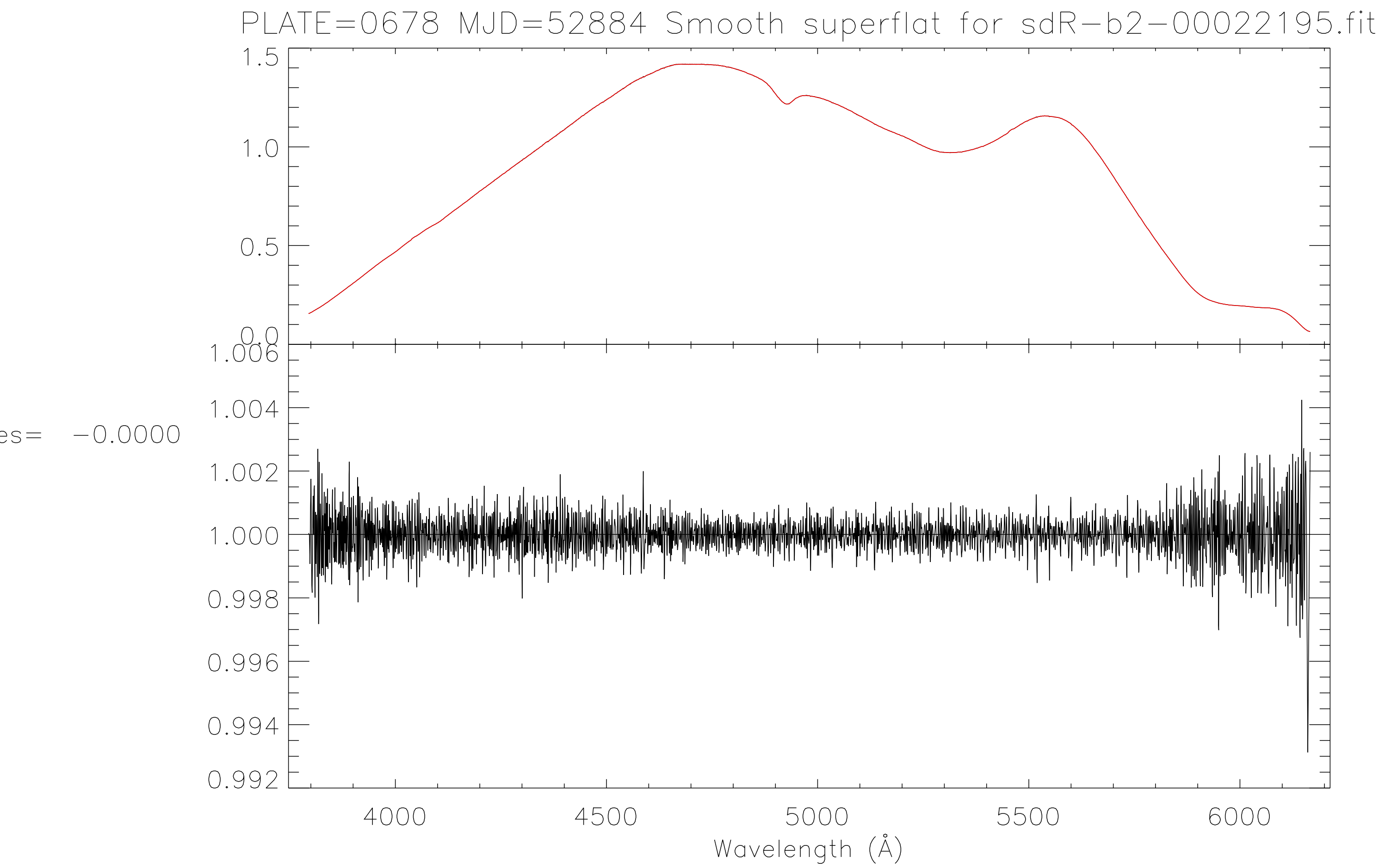

5460.9400
nfib1 16
nfib2 16
stdev 0.076
extra 0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

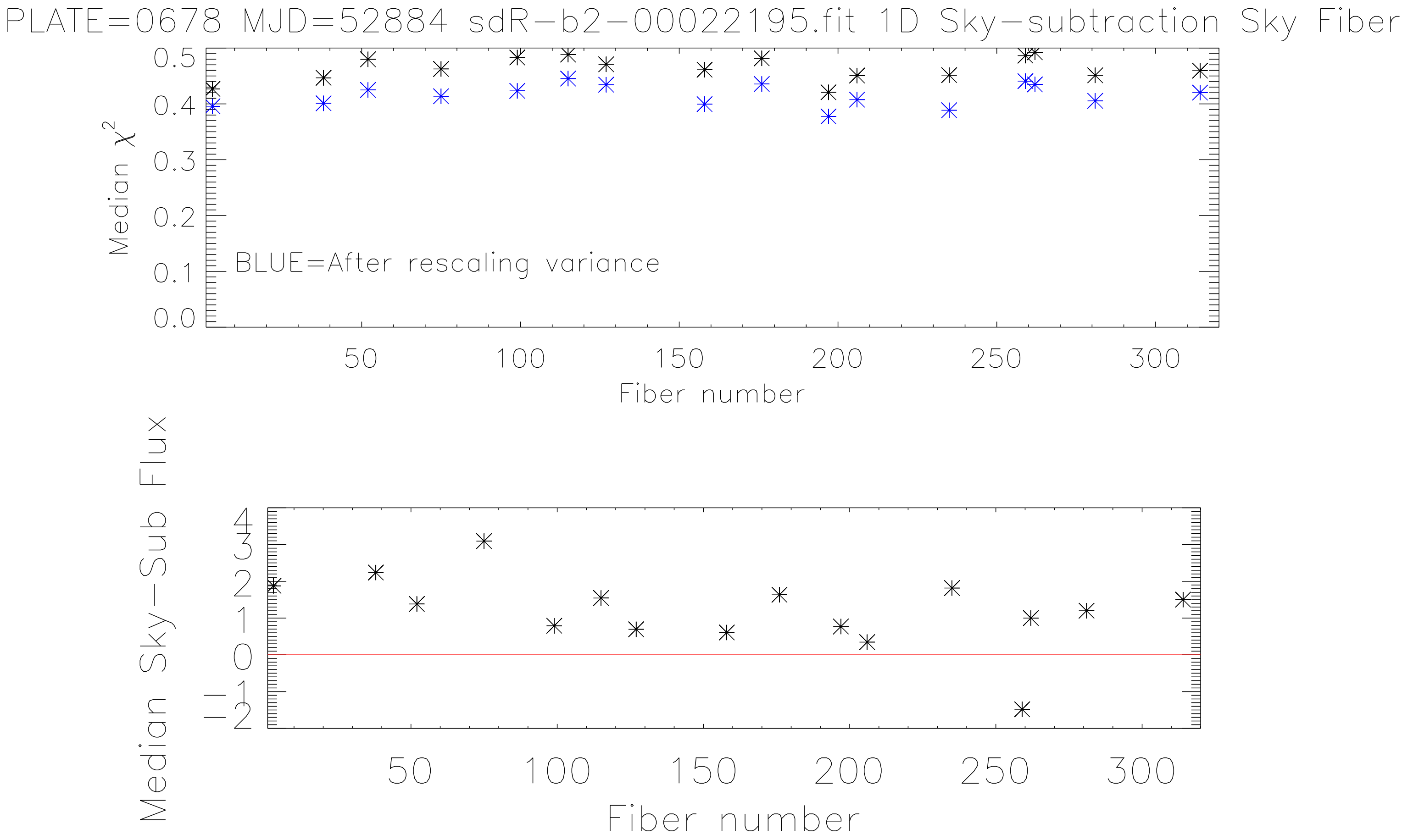

5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.31
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

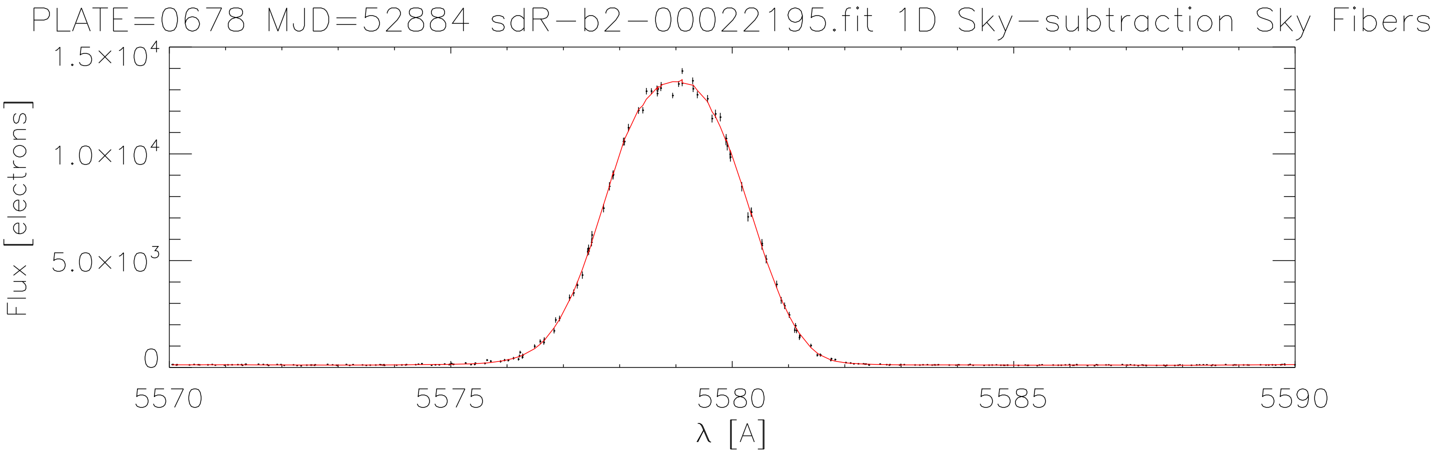

5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.36
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

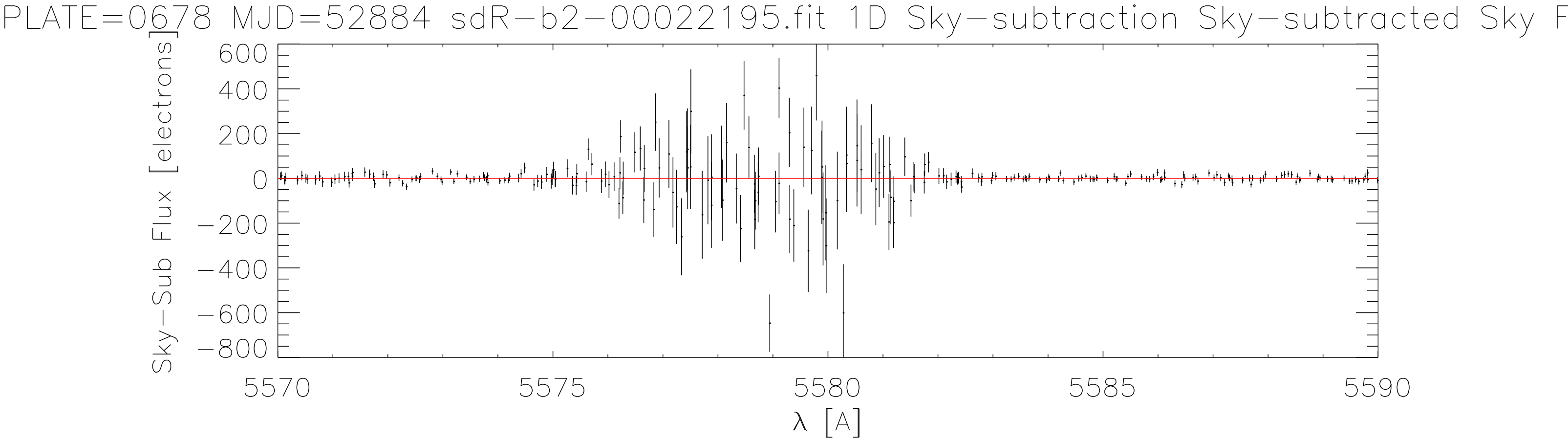

5895.9240
nfib1 16
nfib2 16
stdev 0.041
extra 0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

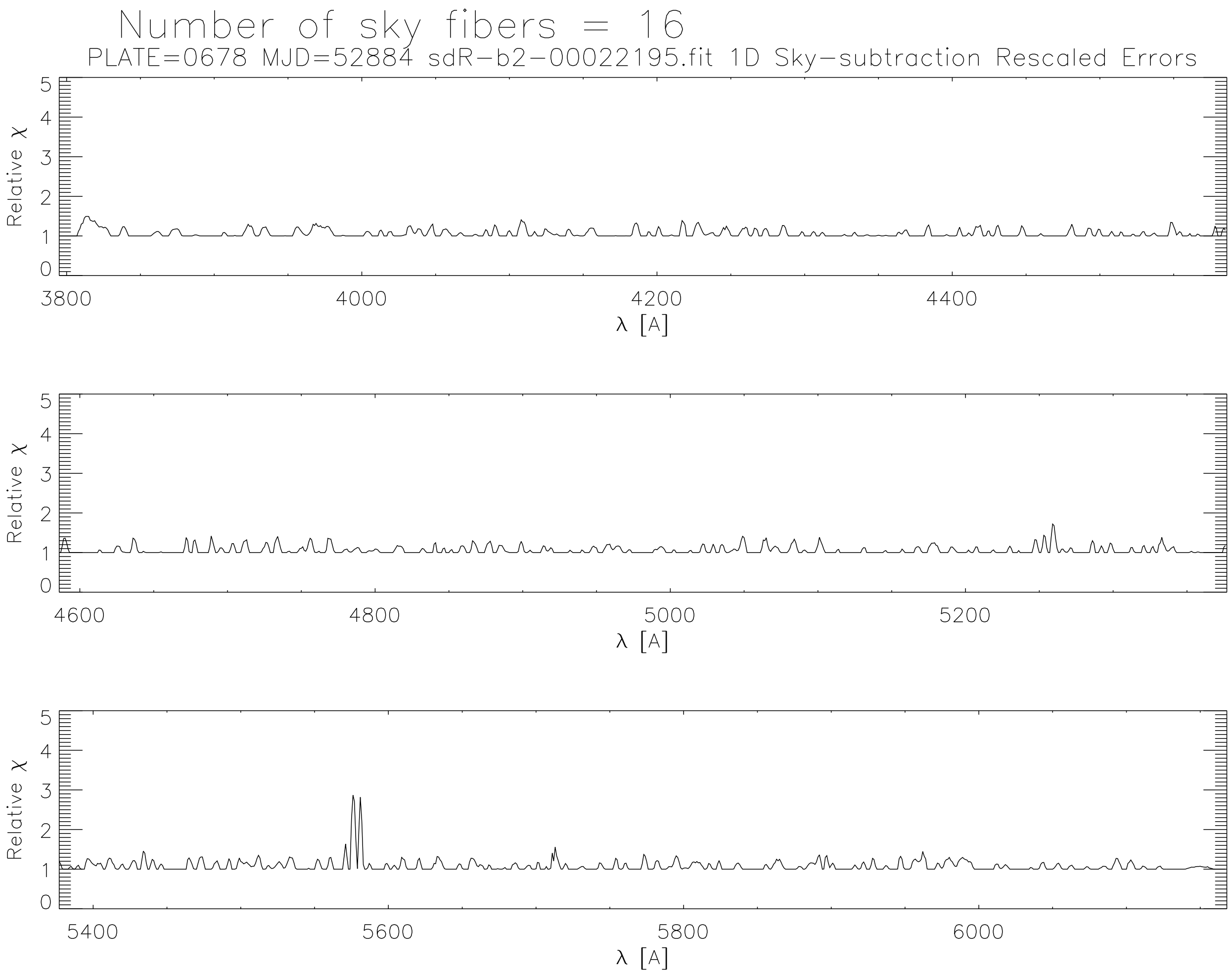

sky shift, pixels
0.20
0.25
0.30
0.35
0.40
3500
4000
4500
5000
5500
6000
6500


PLATE=0678 MJD=52884 Smooth superflat for sdR-b2-00022195.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=0678 MJD=52884 sdR-b2-00022195.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

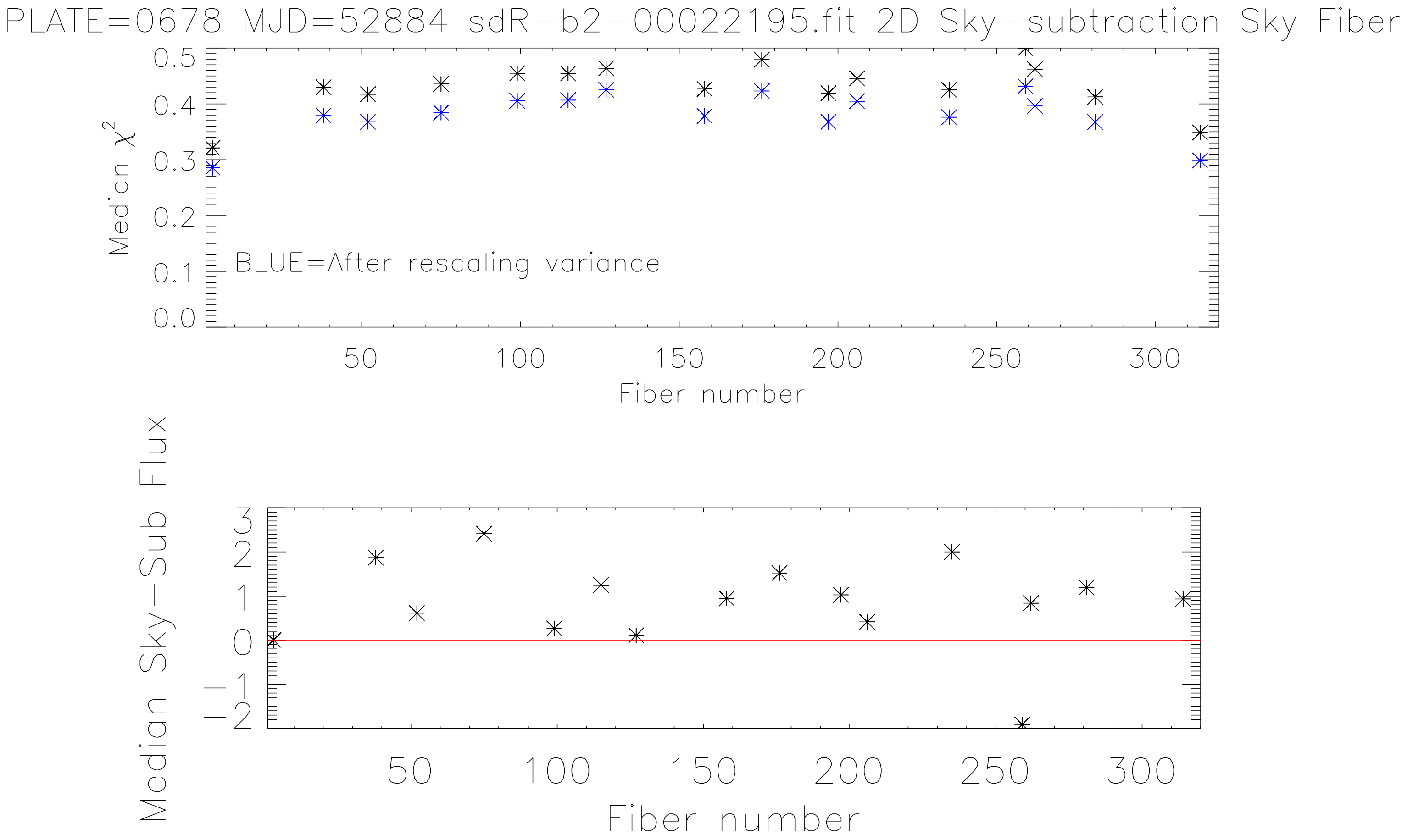

PLATE=0678 MJD=52884 sdR-b2-00022195.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

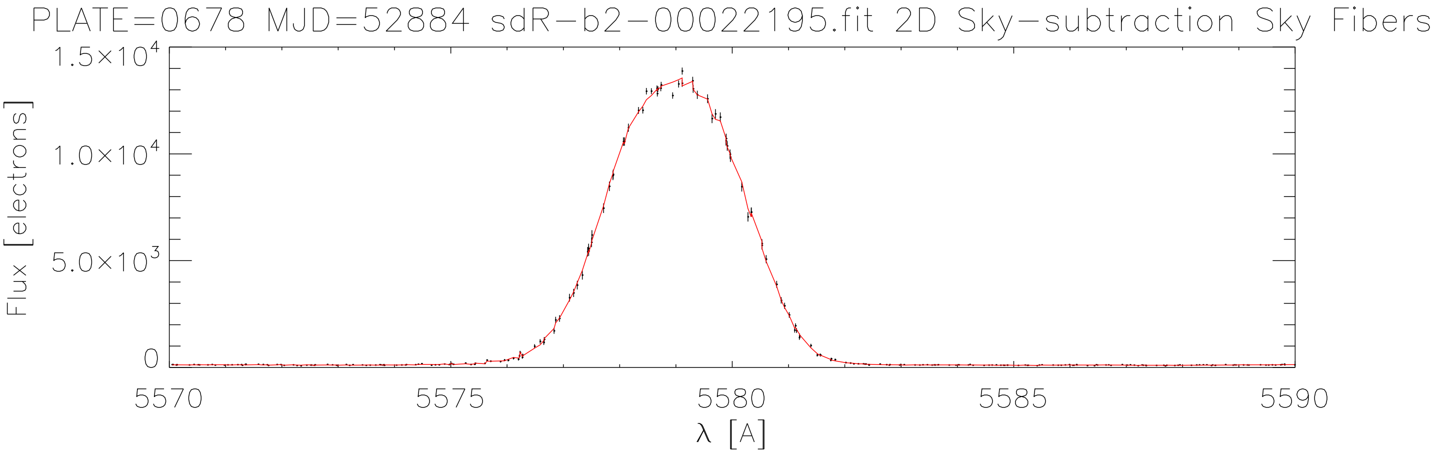

PLATE=0678 MJD=52884 sdR-b2-00022195.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

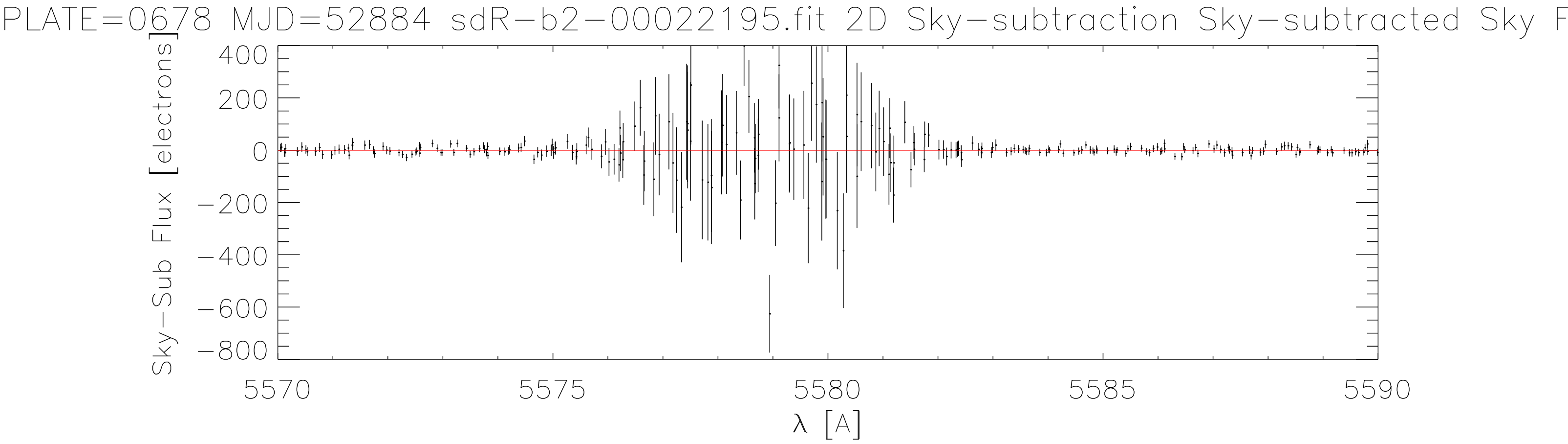


Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b2-00022195.fit 1D Sky-subtraction Rescaled Errors

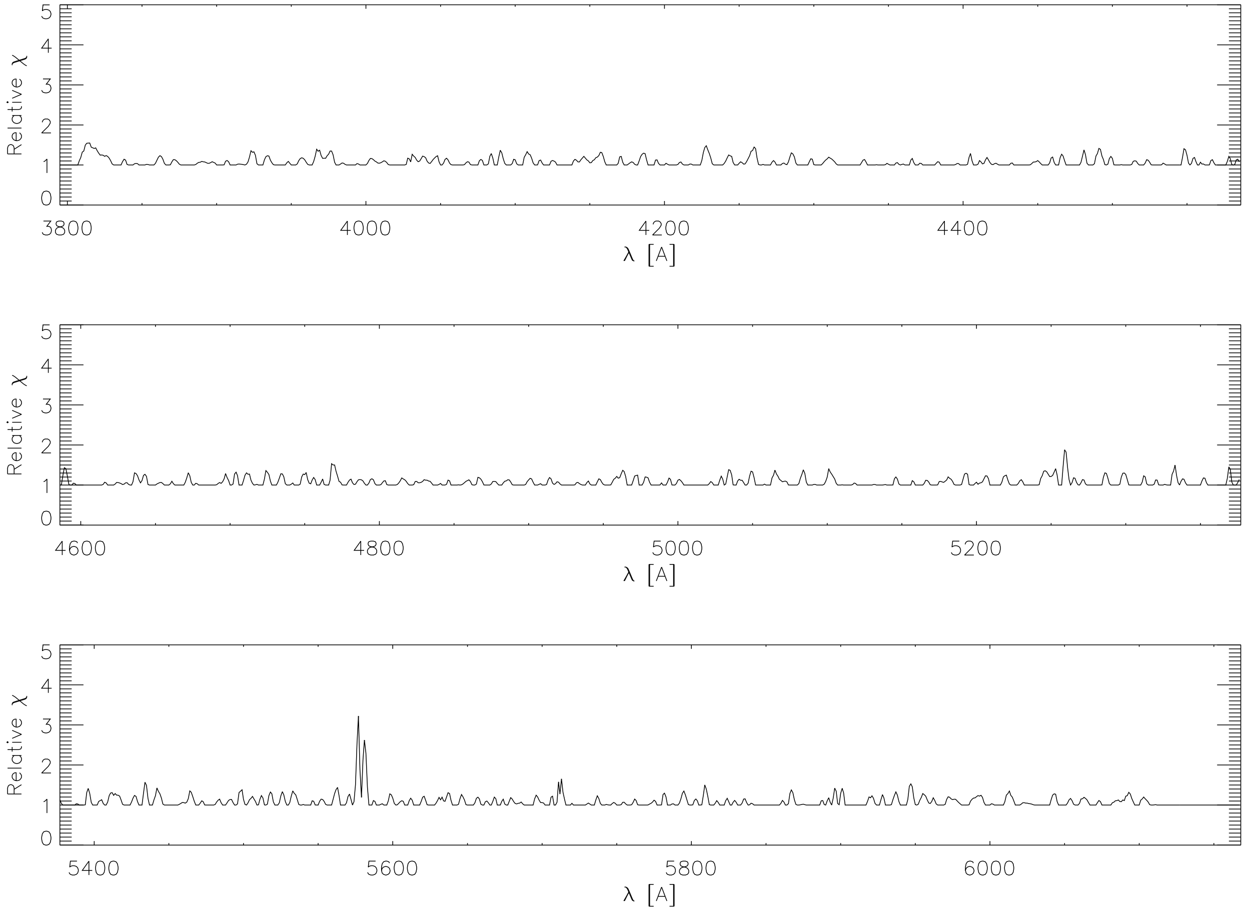

PLATE=0678 MJD=52884 sdR-b2-00022195.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

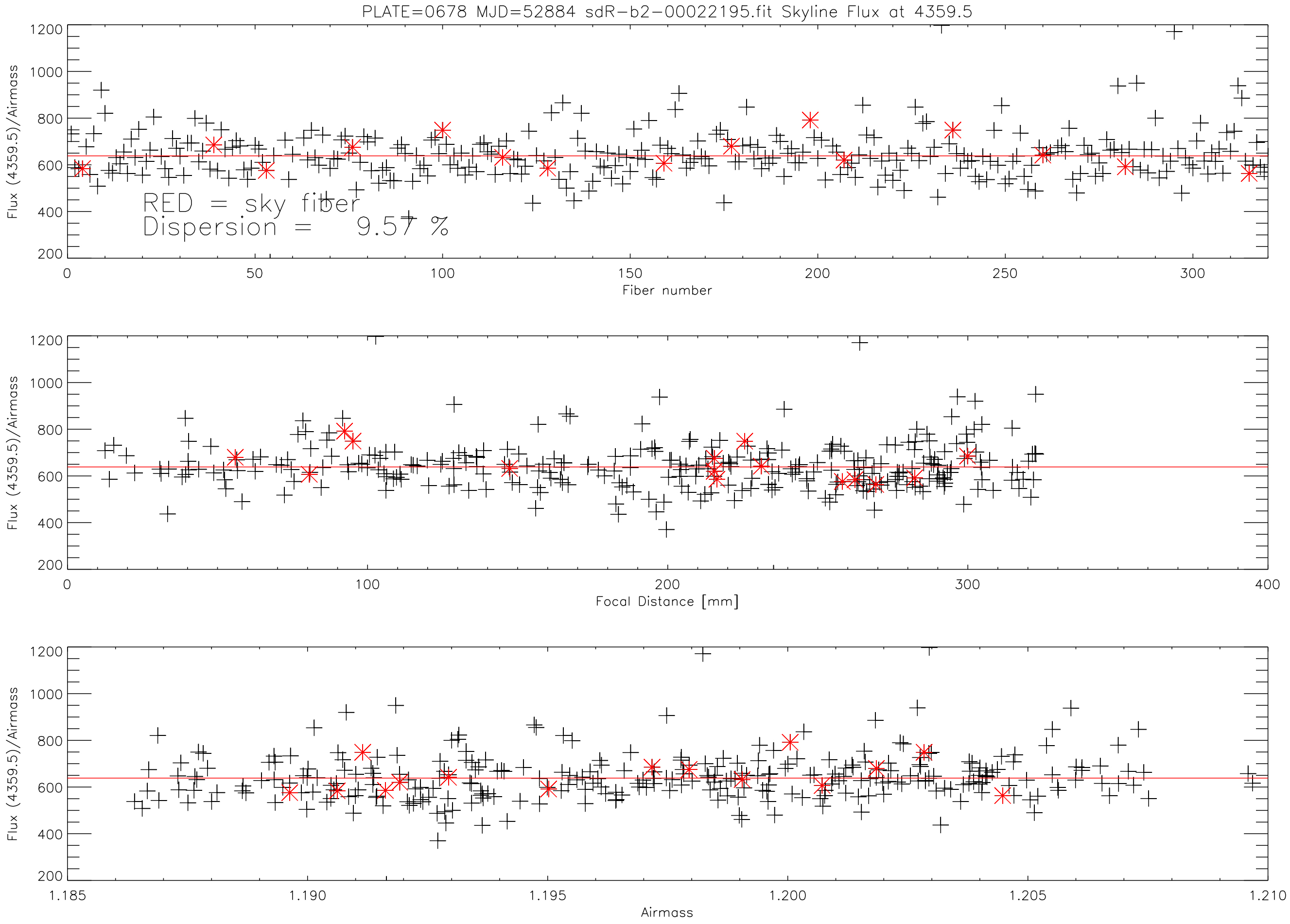

PLATE=0678 MJD=52884 sdR-b2-00022195.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

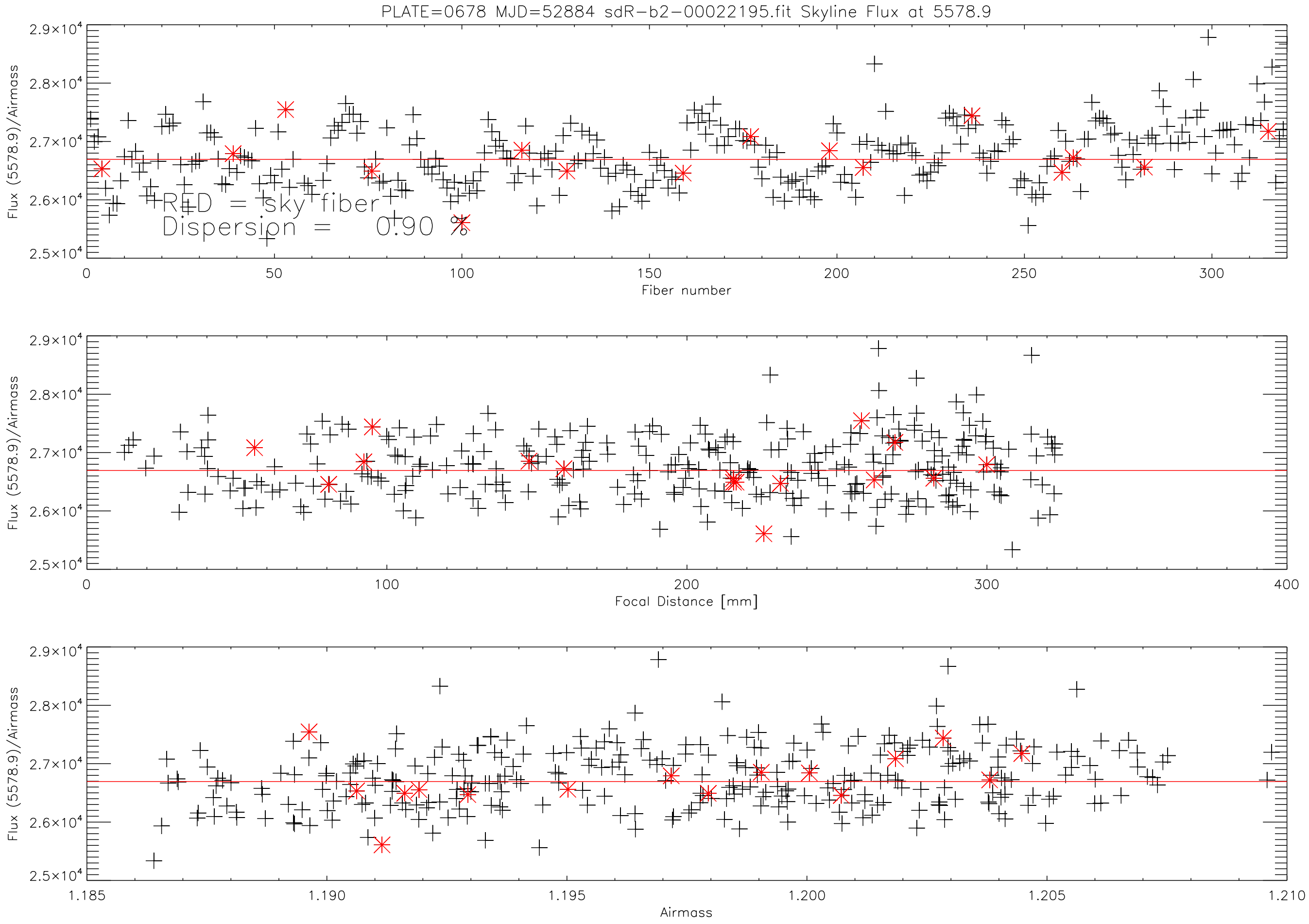

PLATE=0678 MJD=52884 sdR-b2-00022195.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 16

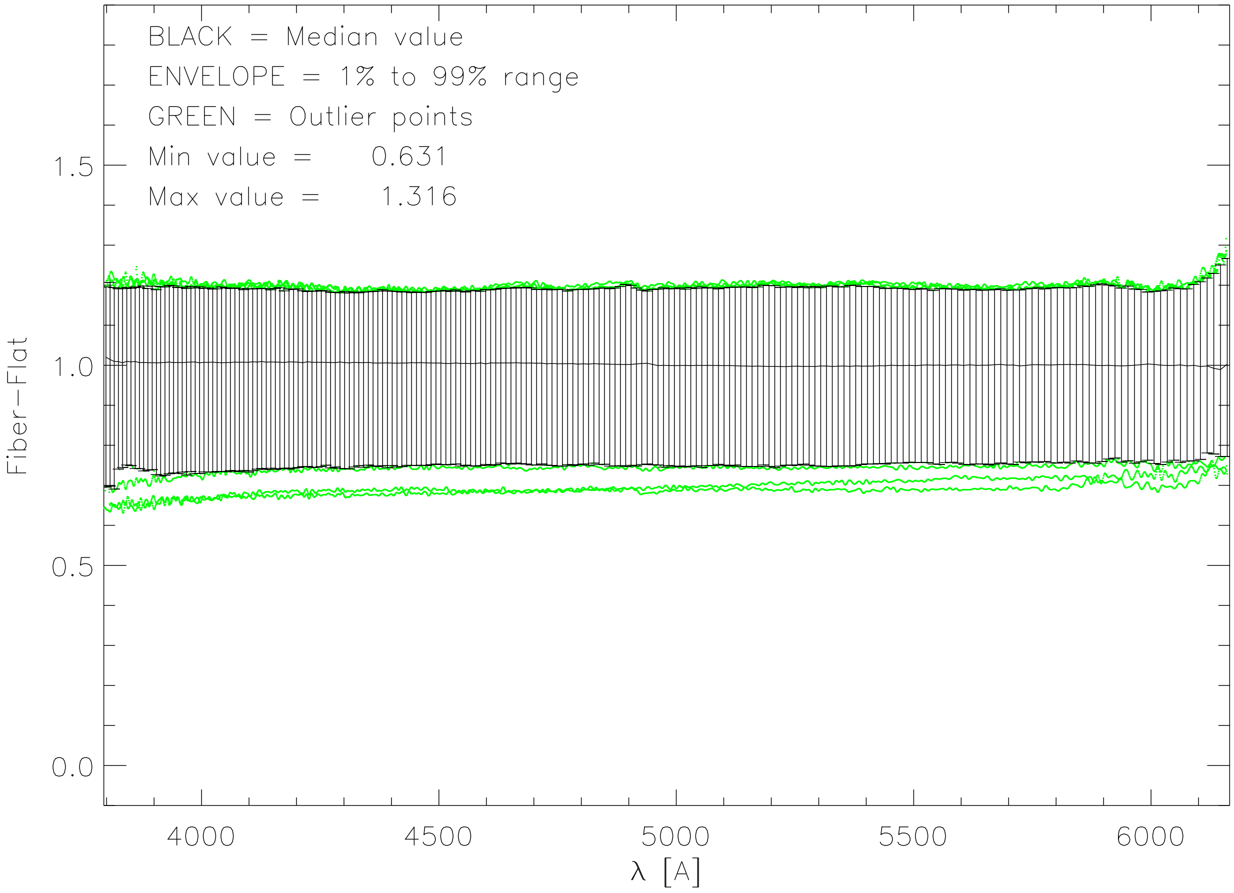
PLATE=0678 MJD=52884 sdR-b2-00022195.fit 2D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-b2-00022195.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
RED = sky fiber
Dispersion = 9.57 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
1.185
1.190
1.195
1.200
1.205
1.210
Airmass

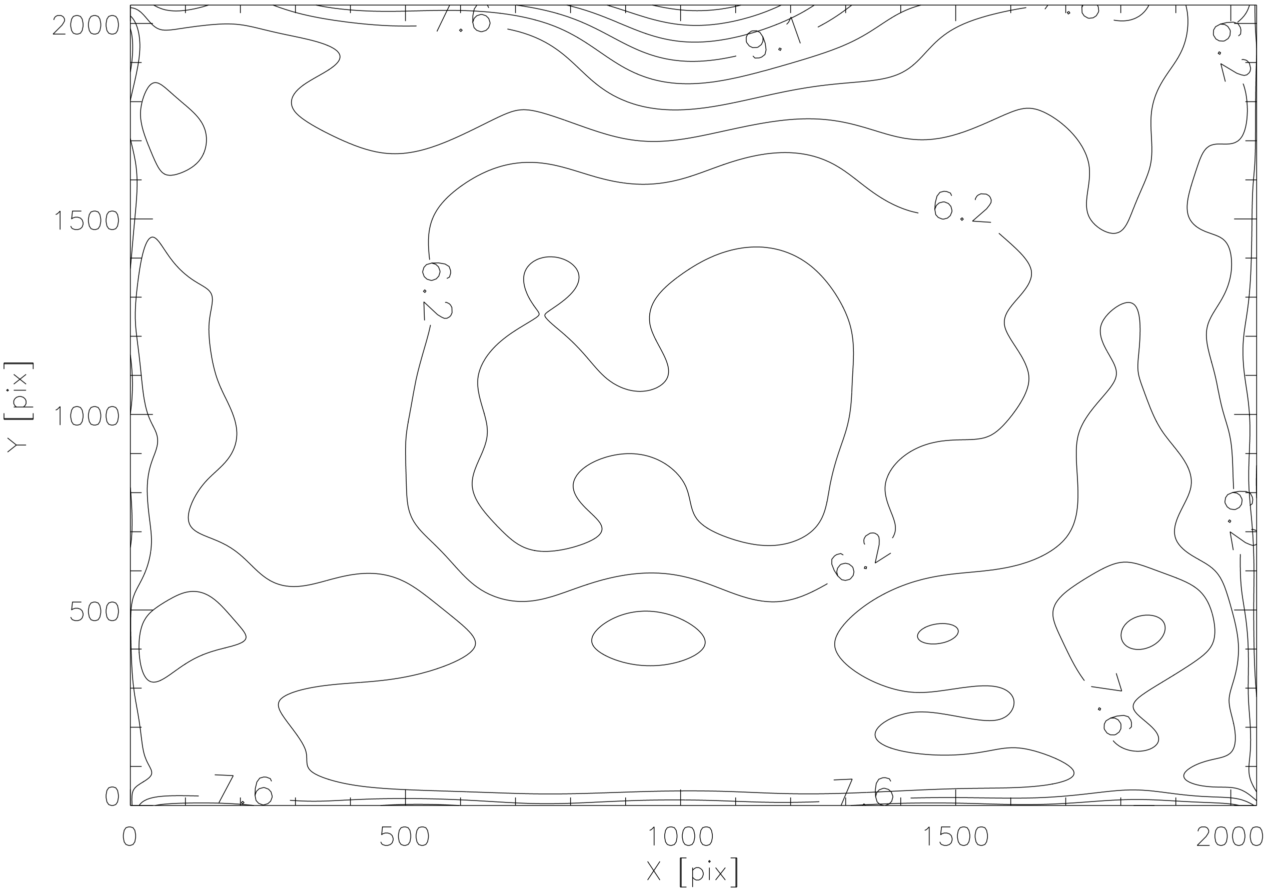

PLATE=0678 MJD=52884 sdR-b2-00022195.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 0.90 %
Flux (5578.9)/Airmass
2.5×10^4
2.6×10^4
2.7×10^4
2.8×10^4
2.9×10^4
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.185
1.190
1.195
1.200
1.205
1.210
Airmass

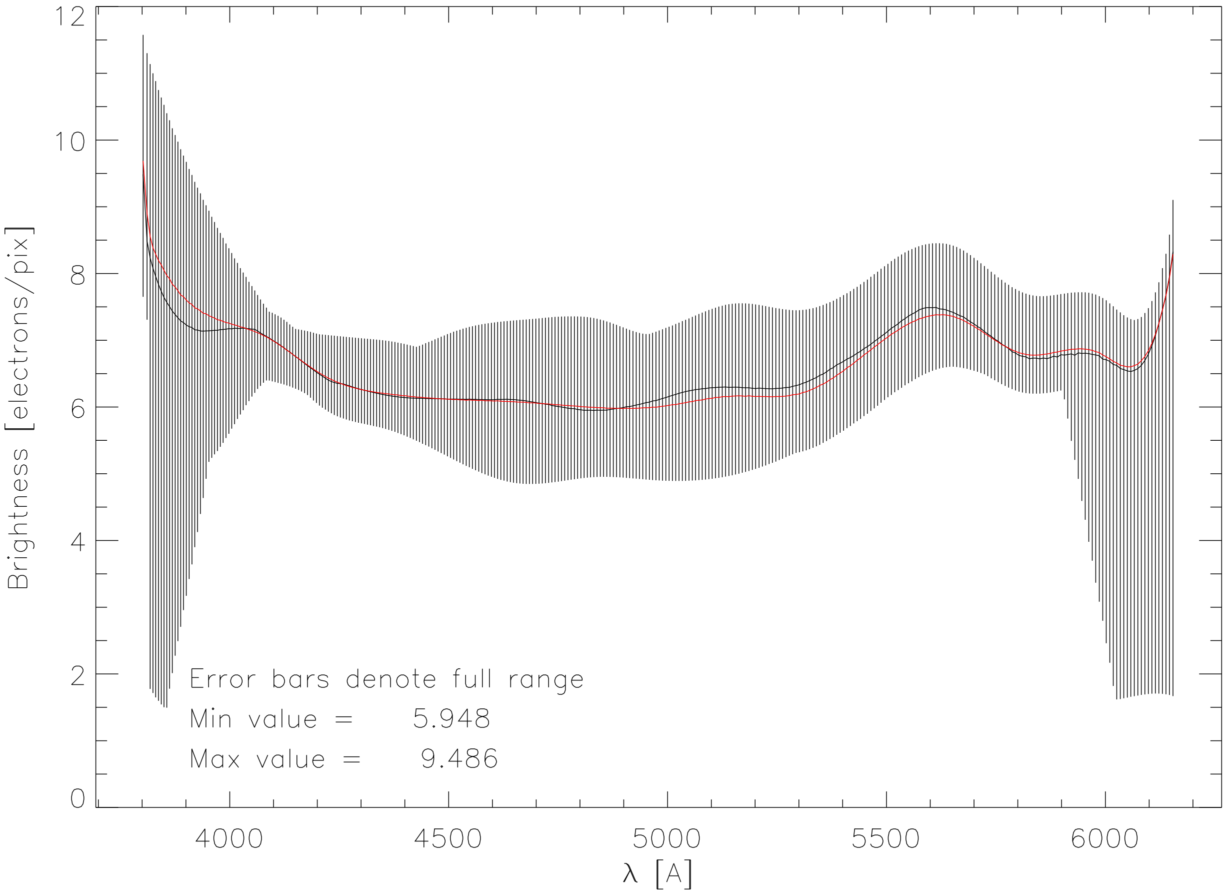
PLATE=0678 MJD=52884 Fiber−Flats for sdR−b2−00022199.fit



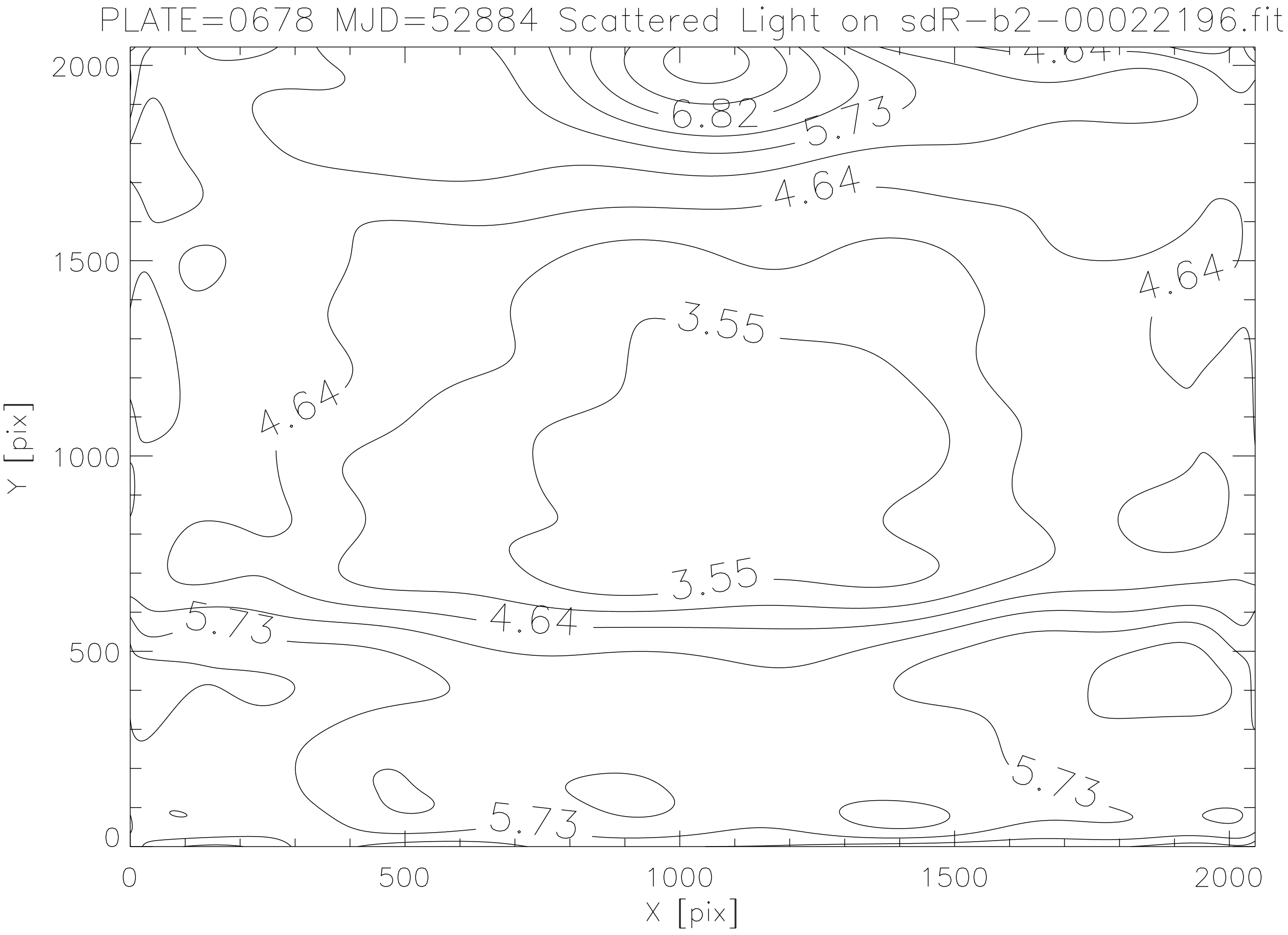
Mon Feb 25 23:12:24 2008

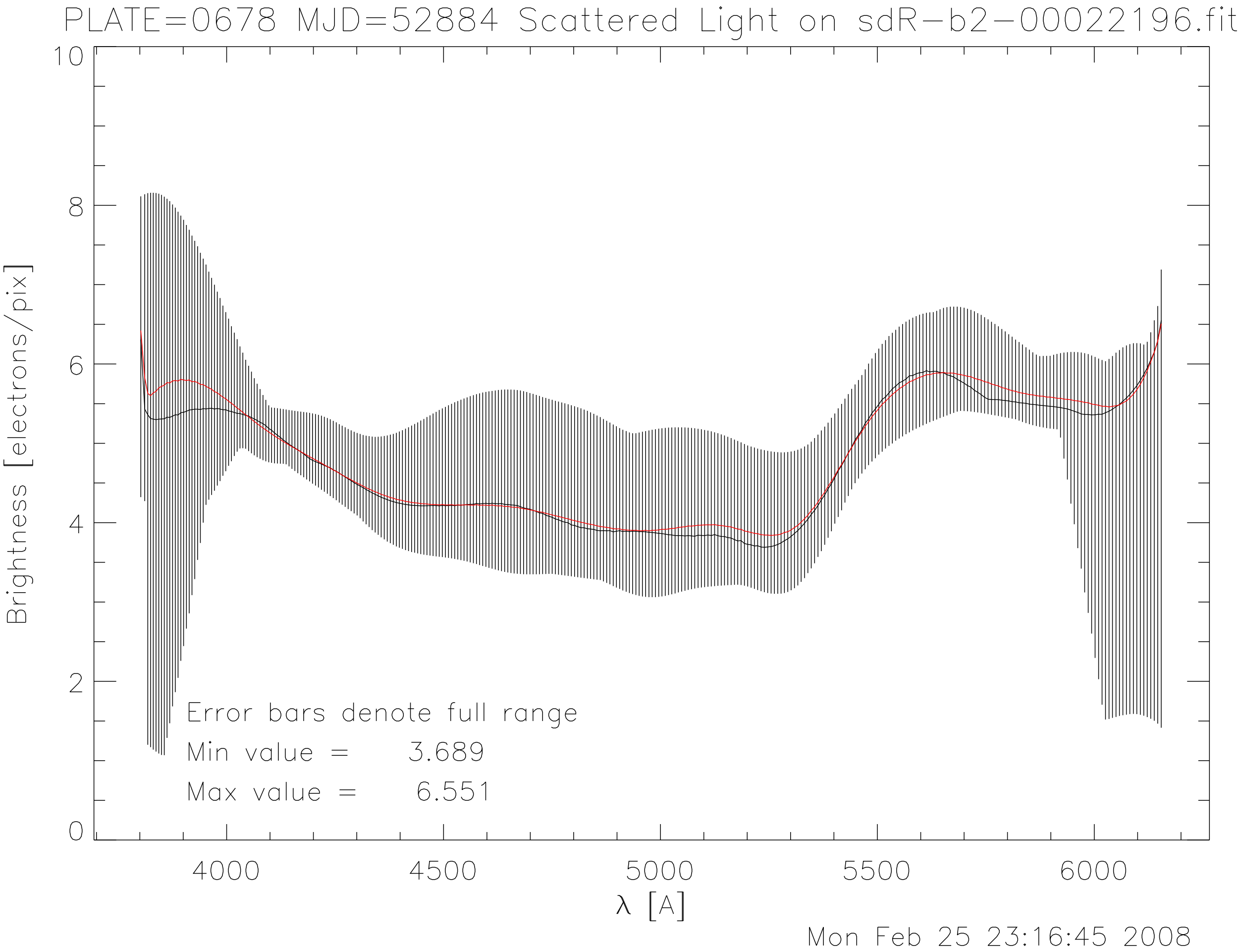
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022196.f

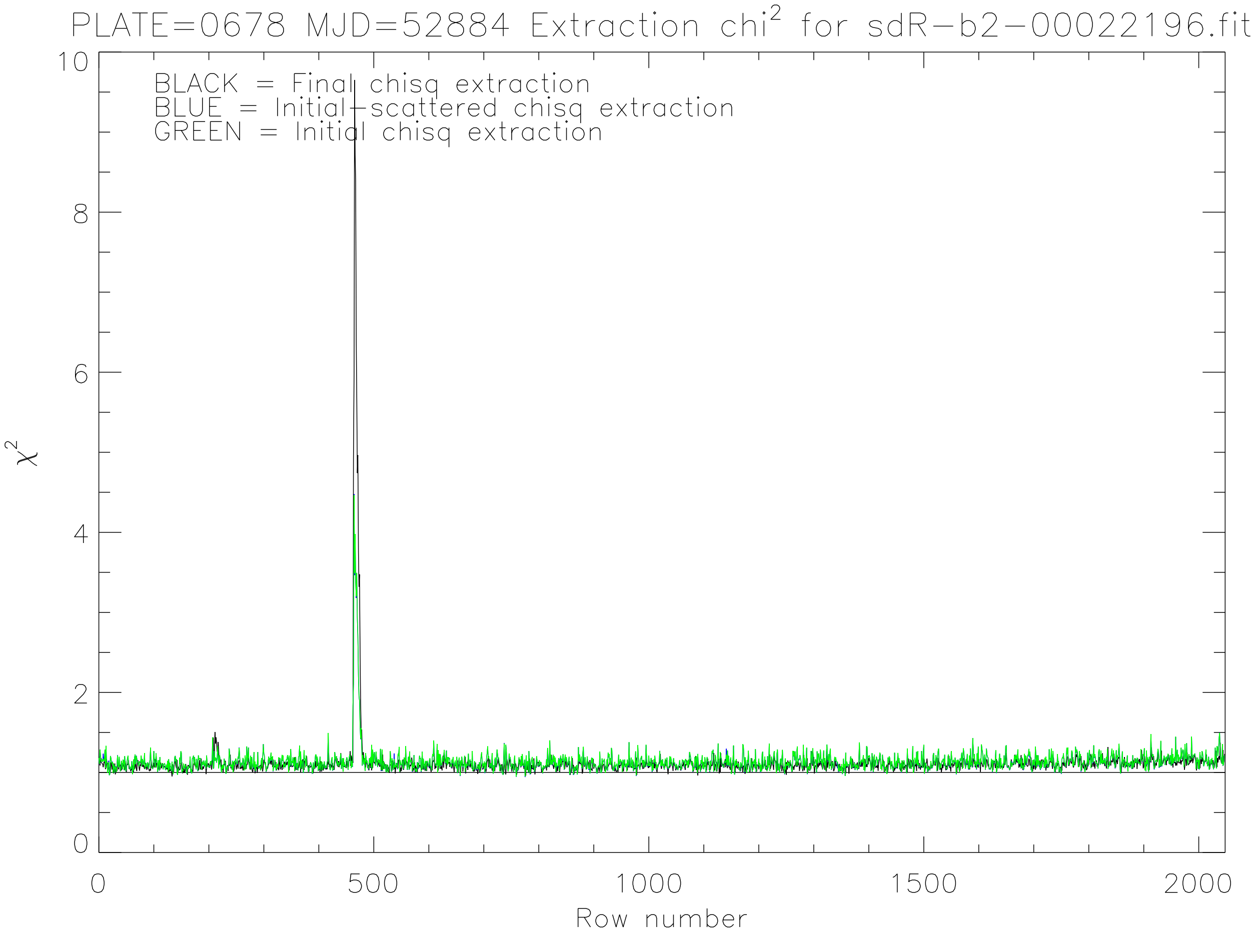



PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022196.f

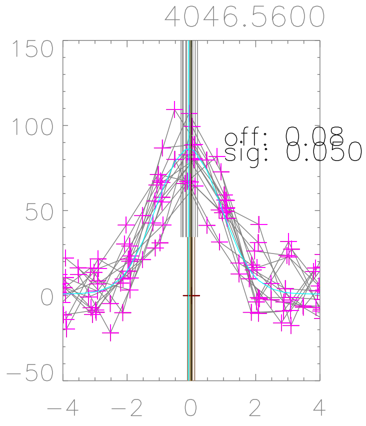
Mon Feb 25 23:13:21 2008

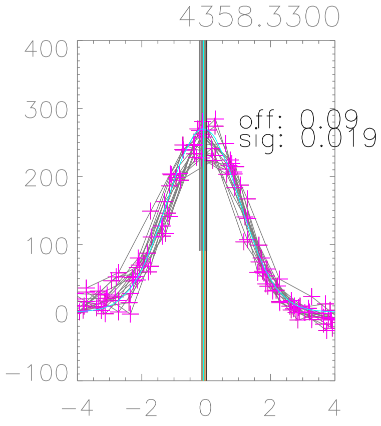

PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022196.fit
4.64
6.82
5.73
4.64
4.64
3.55
4.64
3.55
5.73
4.64
5.73
5.73
Y [pix]
0
500
1000
1500
2000
X [pix]
0
500
1000
1500
2000

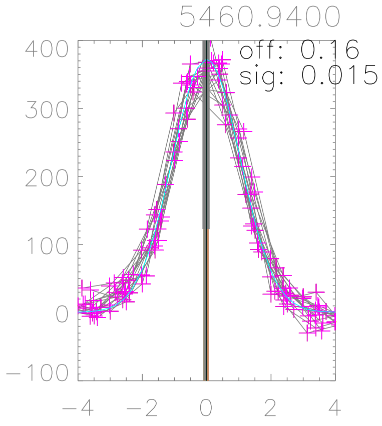

PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022196.fit
Brightness [electrons/pix]
0
2
4
6
8
10
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.689
Max value = 6.551
Mon Feb 25 23:16:45 2008

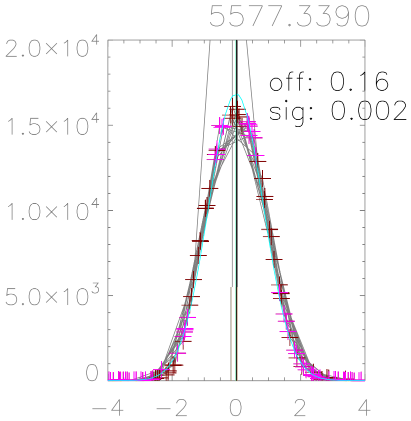


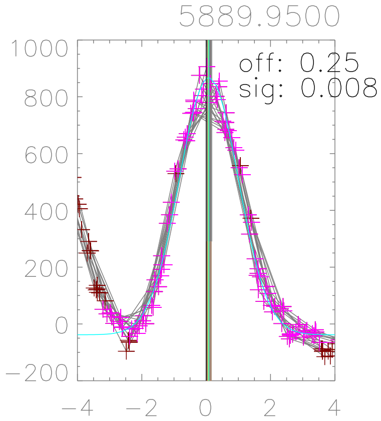
PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b2-00022196.fit

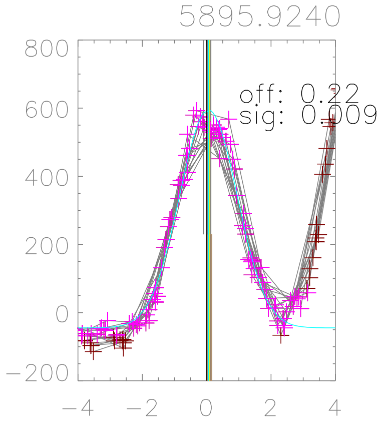

4046.5600
off: 0.08
sig: 0.050
150
100
50
0
−50
−4
−2
0
2
4

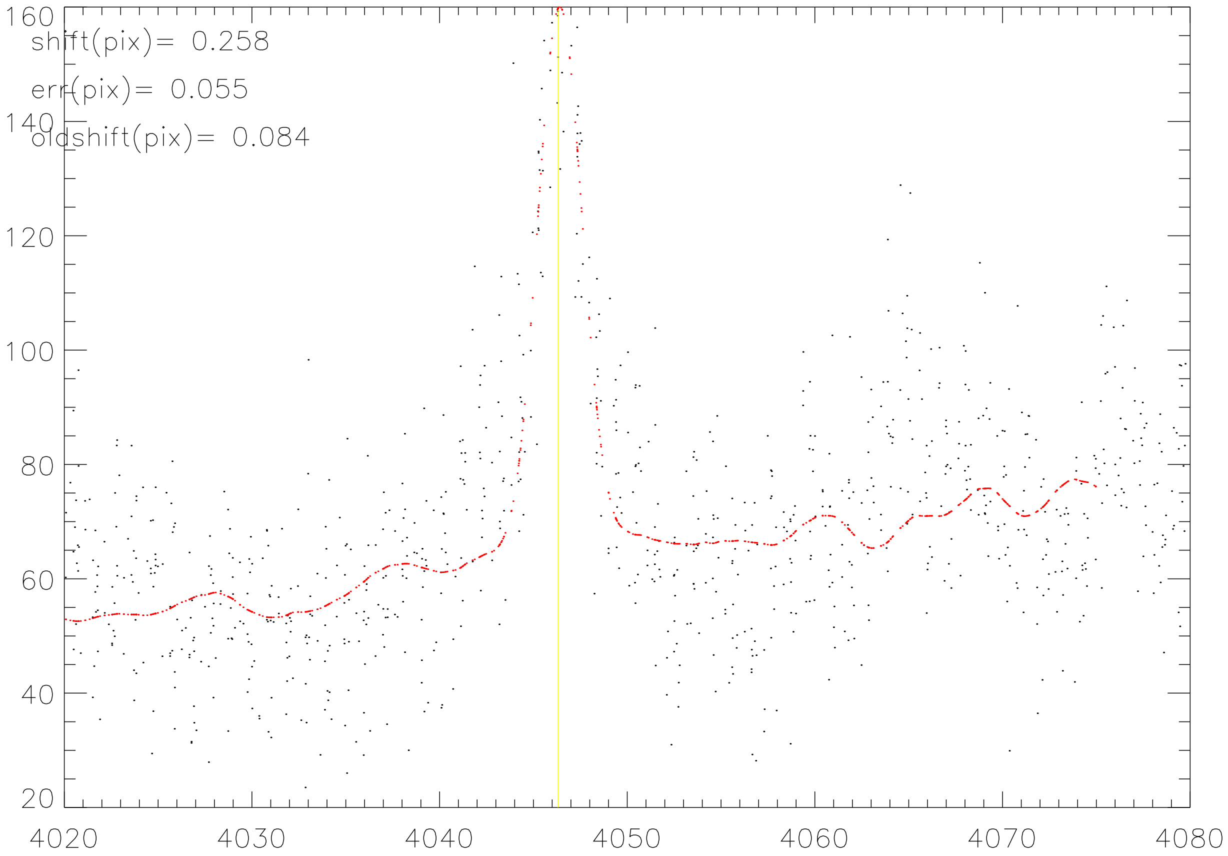

4358.3300
off: 0.09
sig: 0.019
400
300
200
100
0
−100
−4
−2
0
2
4

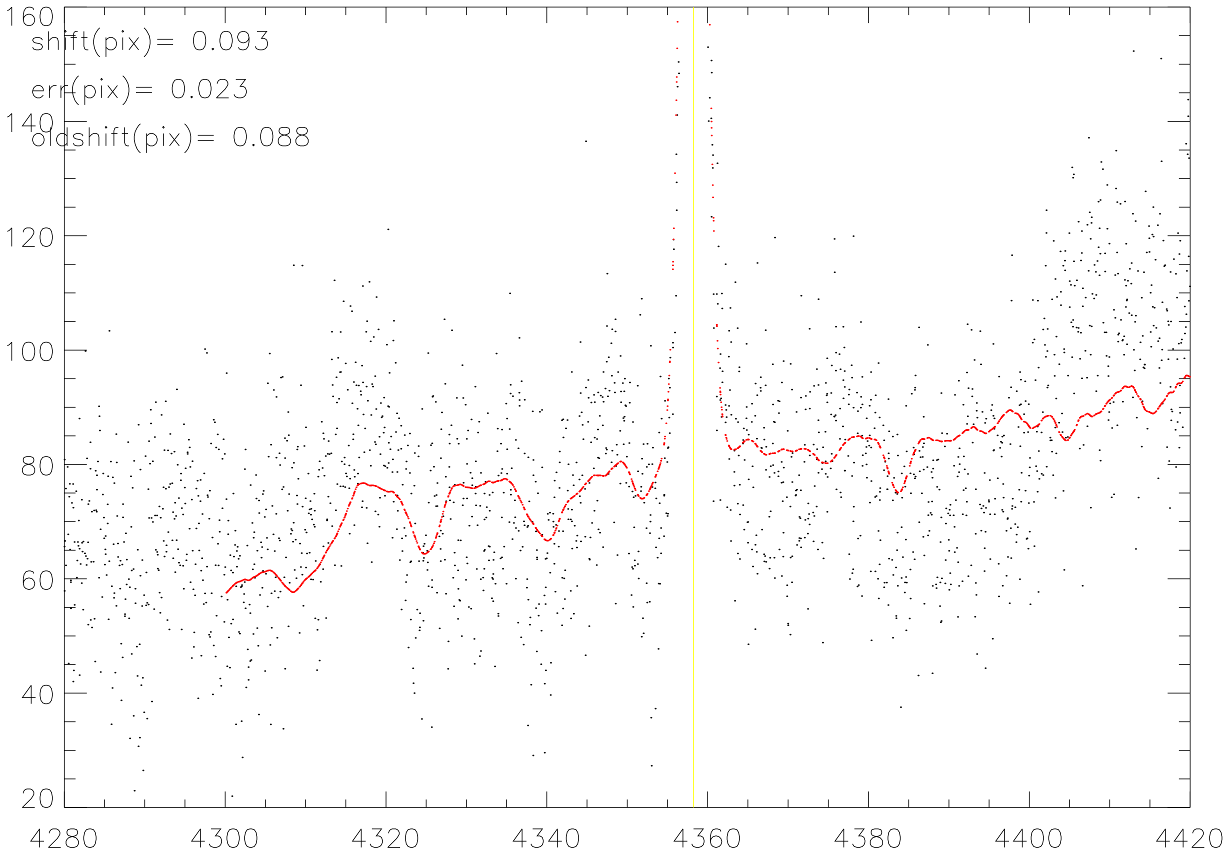

5460.9400
off: 0.16
sig: 0.015
400
300
200
100
0
−100
−4
−2
0
2
4

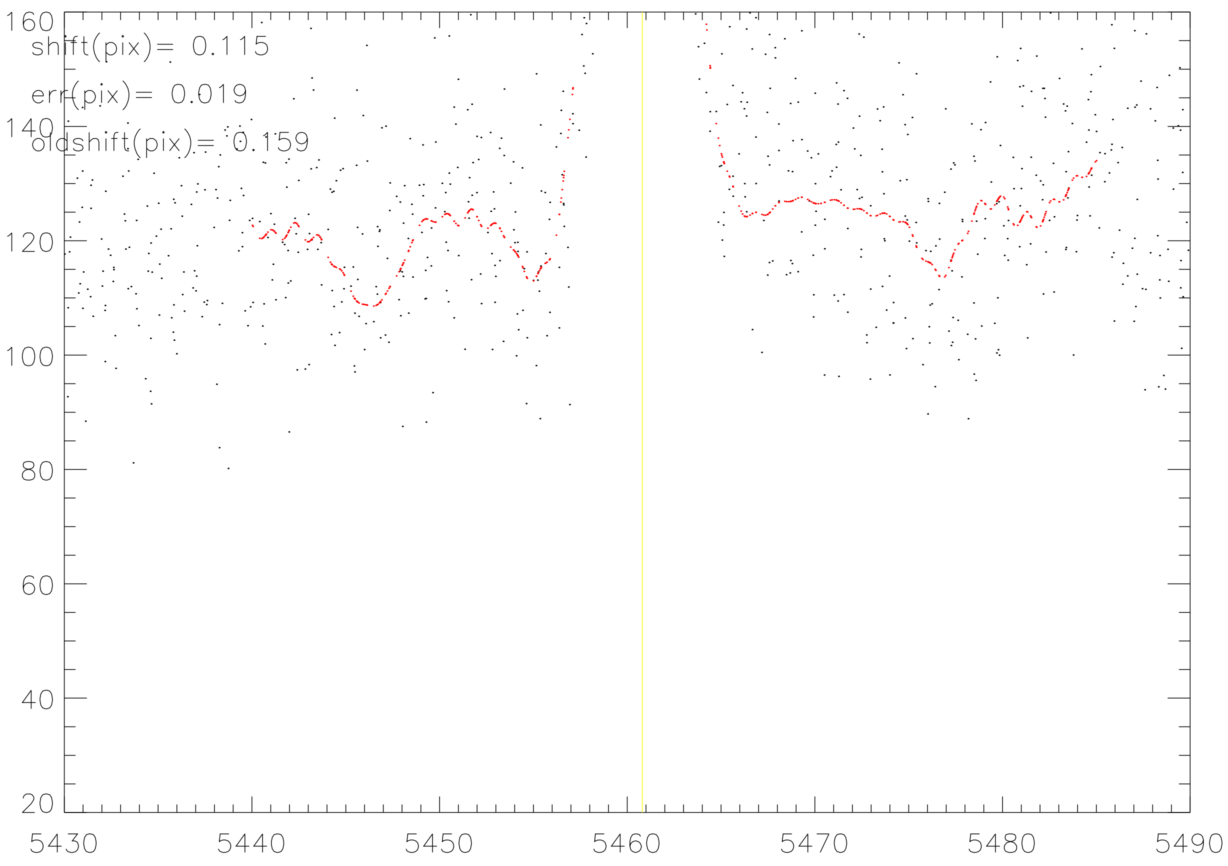

5577.3390
off: 0.16
sig: 0.002
2.0×10^4
1.5×10^4
1.0×10^4
5.0×10^3
0
−4
−2
0
2
4

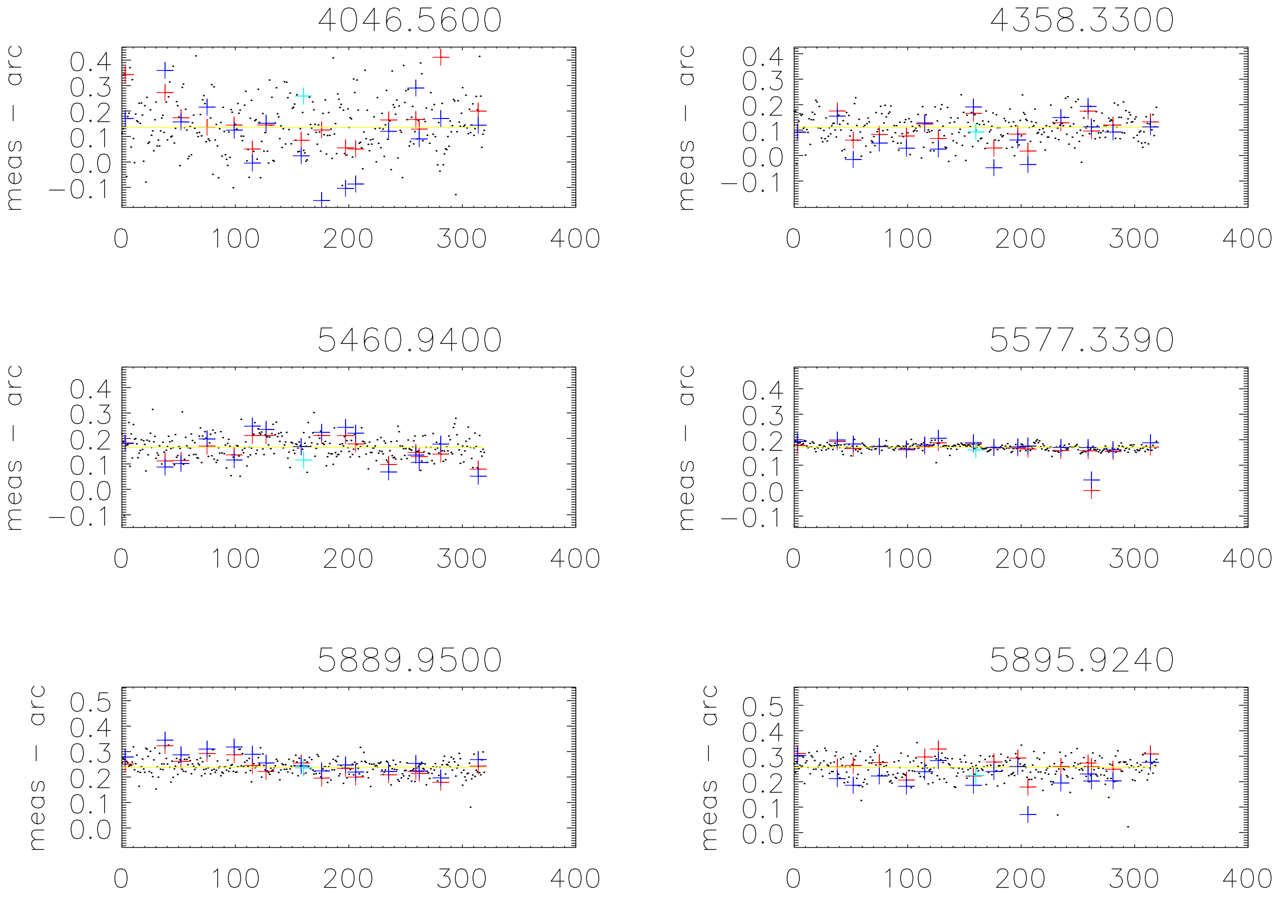

5889.9500
off: 0.25
sig: 0.008
1000
800
600
400
200
0
−200
−4
−2
0
2
4

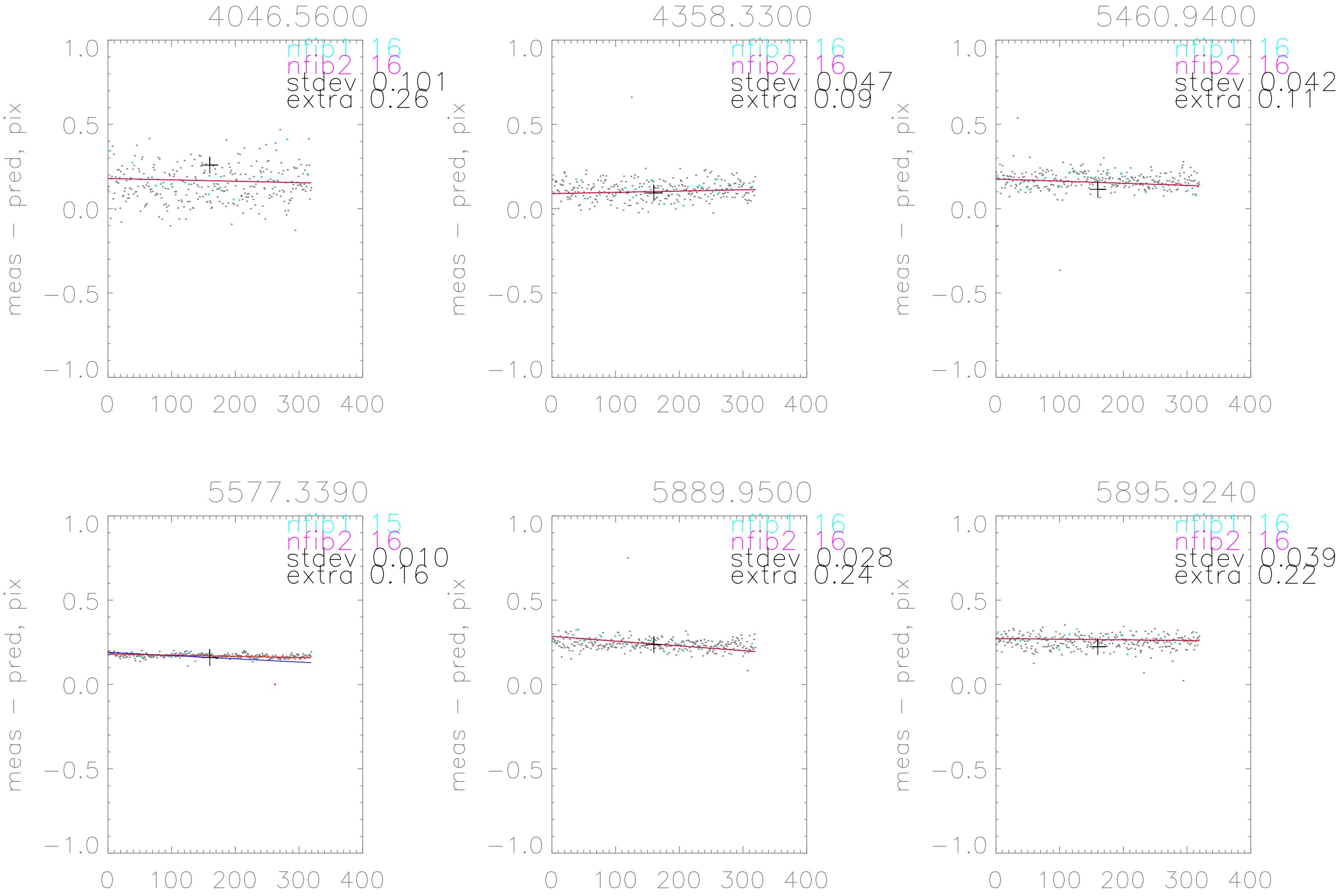

5895.9240
off: 0.22
sig: 0.009
800
600
400
200
0
−200
−4
−2
0
2
4

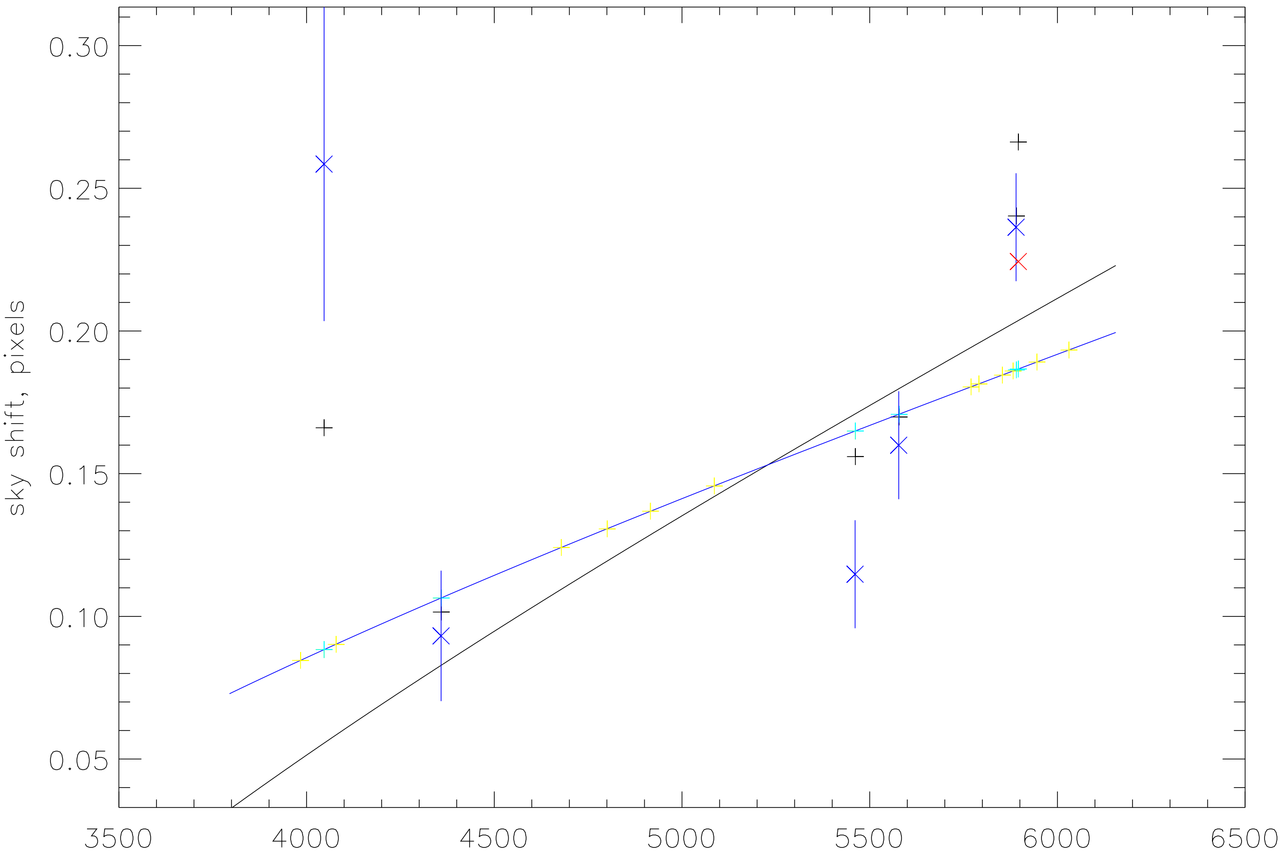

shift(pix)= 0.258
err(pix)= 0.055
oldshift(pix)= 0.084
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

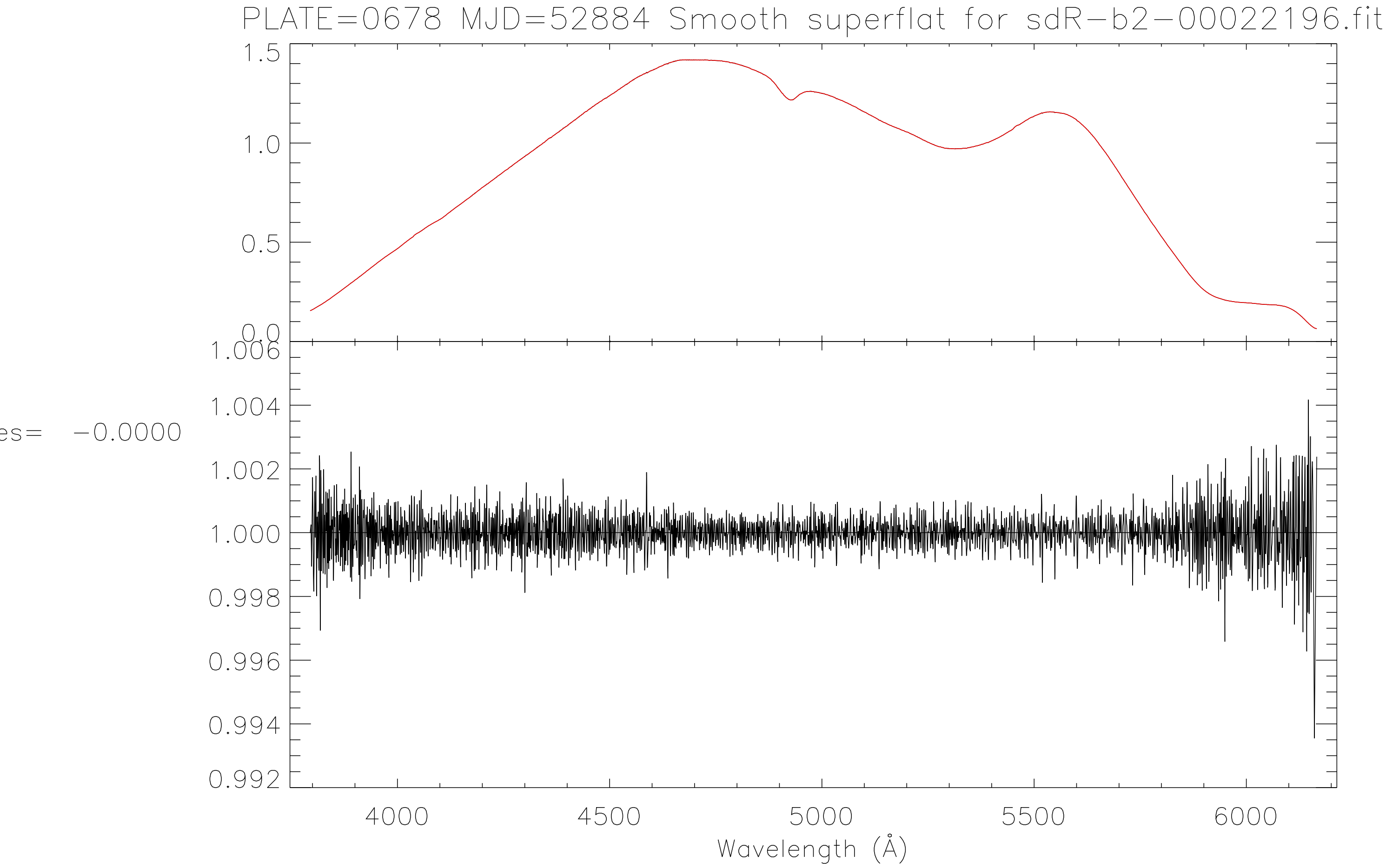

shift(pix)= 0.093
err(pix)= 0.023
oldshift(pix)= 0.088
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

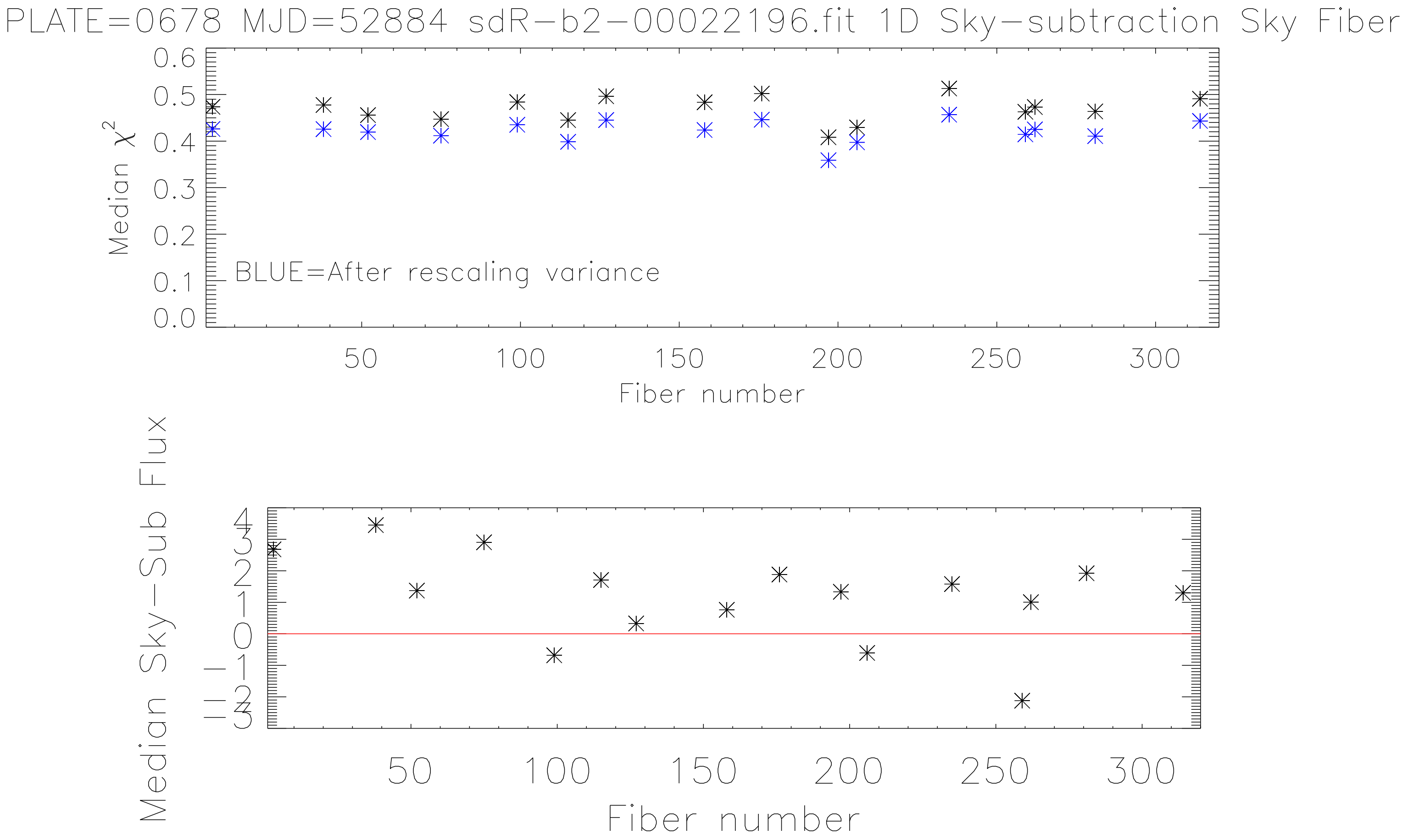

shift(pix)= 0.115
err(pix)= 0.019
oldshift(pix)= 0.159
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

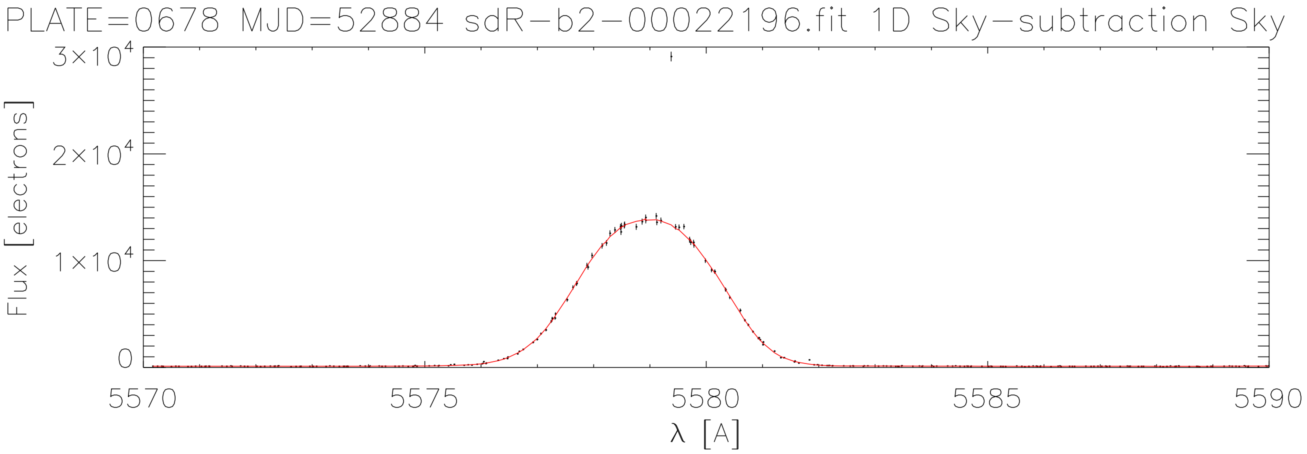

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.101
extra 0.26
4358.3300
nfib1 16
nfib2 16
stdev 0.047
extra 0.09
5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra 0.11
5577.3390
nfib1 15
nfib2 16
stdev 0.010
extra 0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.028
extra 0.24
5895.9240
nfib1 16
nfib2 16
stdev 0.039
extra 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

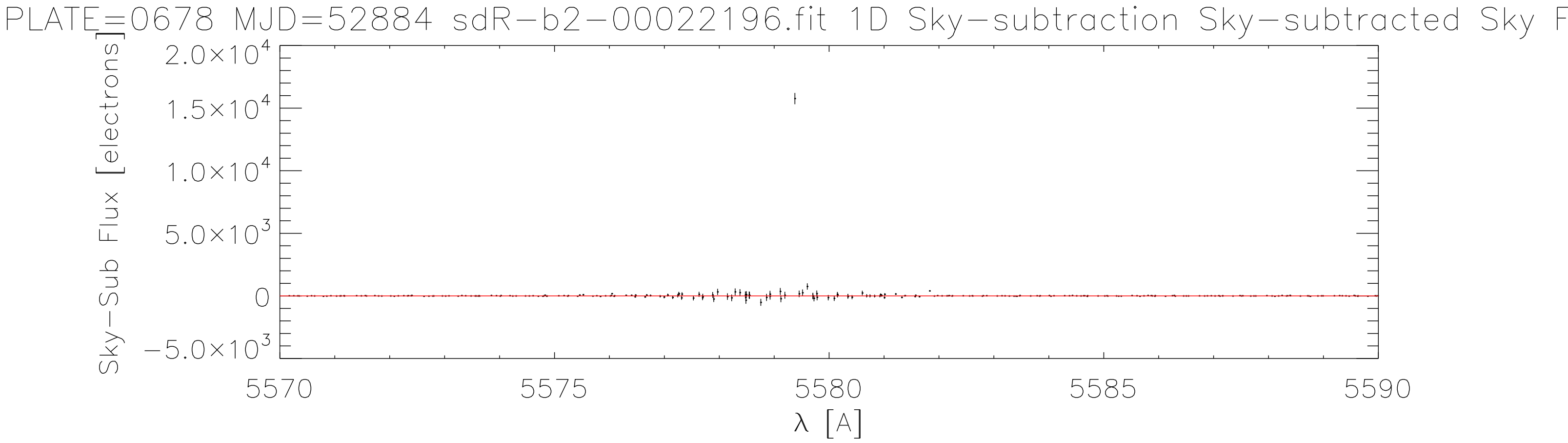

sky shift, pixels
0.30
0.25
0.20
0.15
0.10
0.05
3500
4000
4500
5000
5500
6000
6500


PLATE=0678 MJD=52884 Smooth superflat for sdR-b2-00022196.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=0678 MJD=52884 sdR-b2-00022196.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number



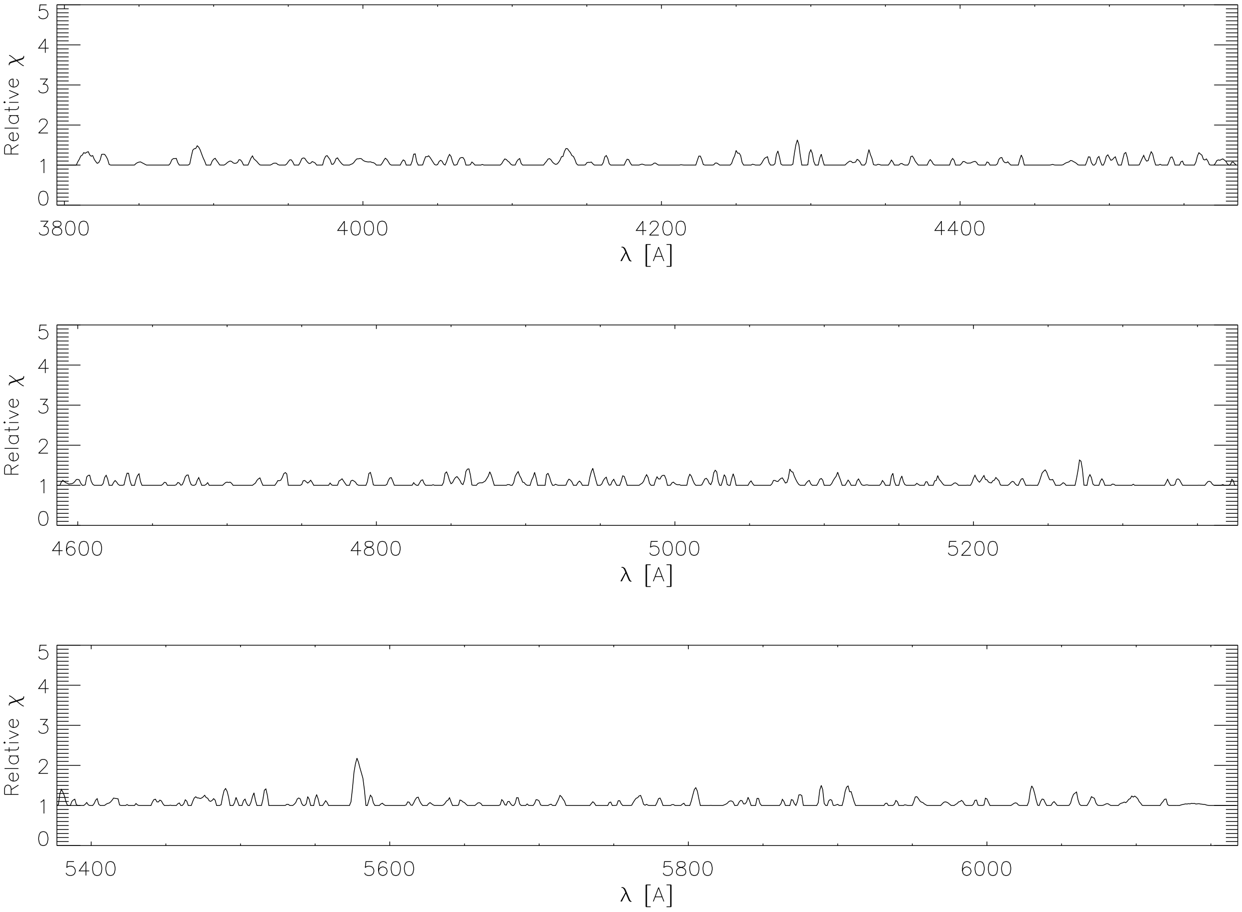
PLATE=0678 MJD=52884 sdR-b2-00022196.fit 1D Sky-subtraction Sky Fibers

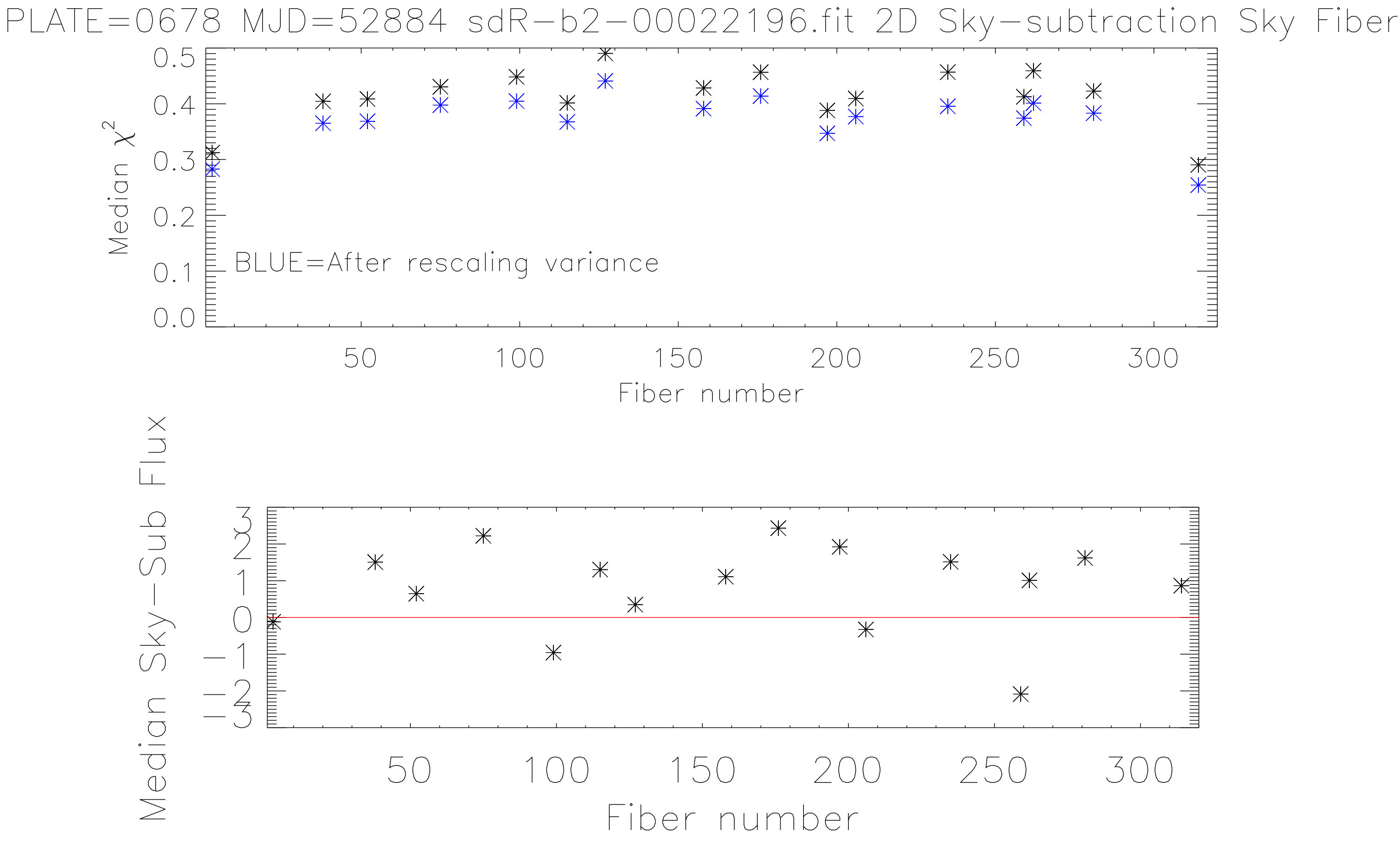


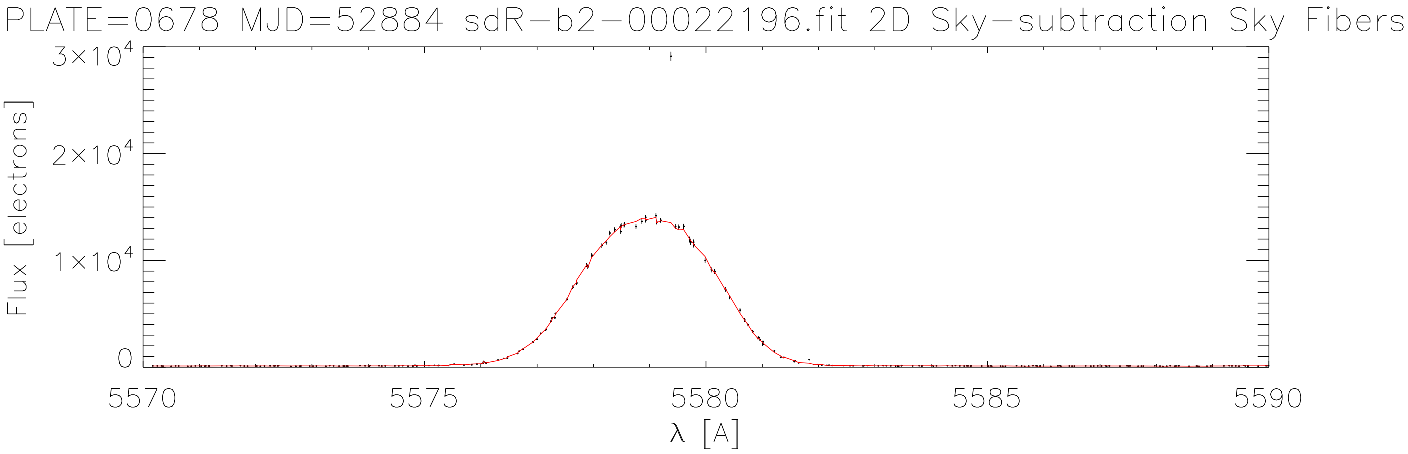
PLATE=0678 MJD=52884 sdR-b2-00022196.fit 1D Sky-subtraction Sky-subtracted Sky F

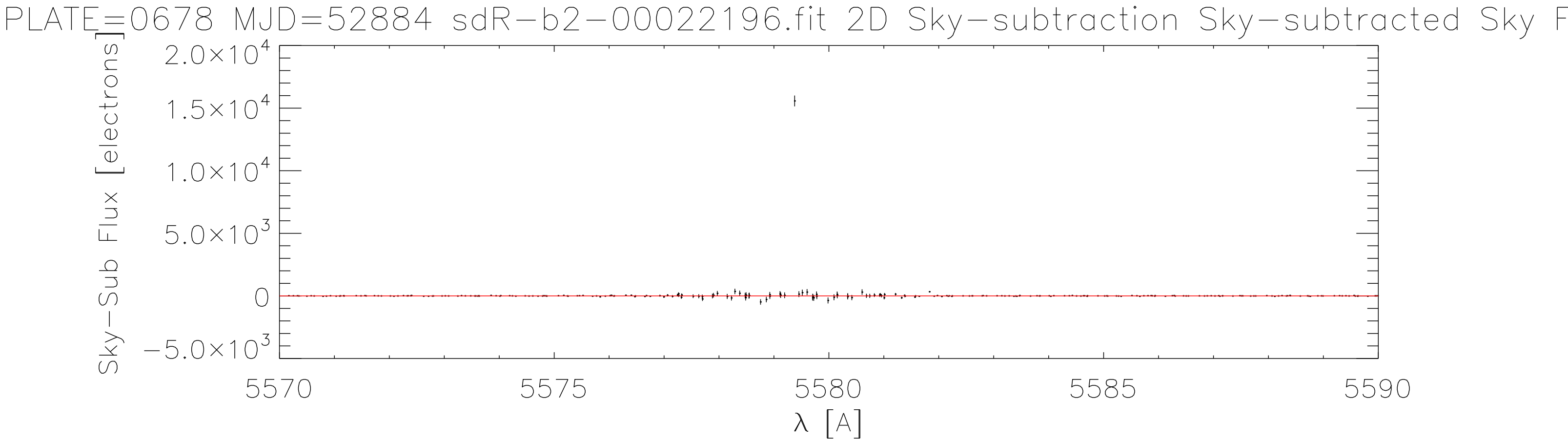
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b2-00022196.fit 1D Sky-subtraction Rescaled Errors



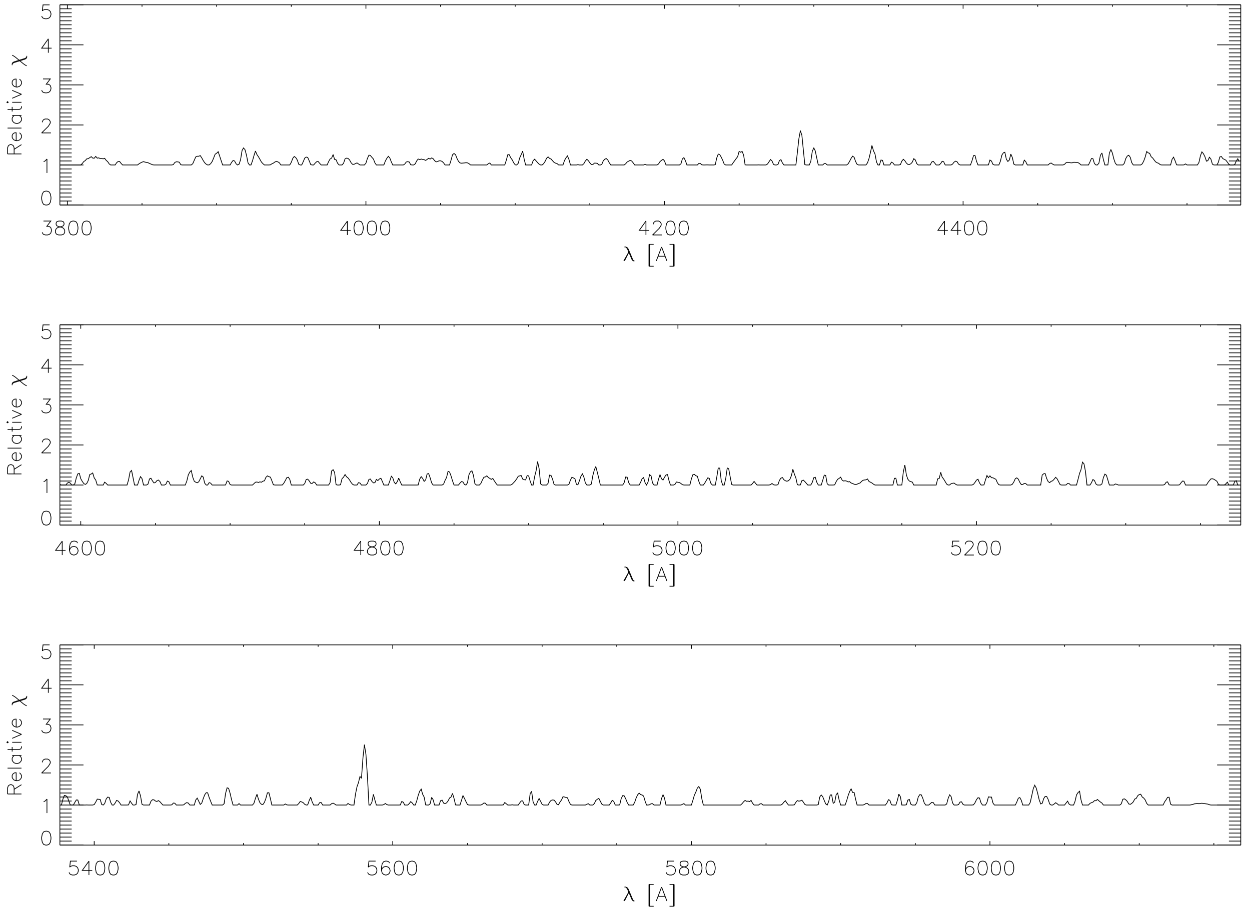

PLATE=0678 MJD=52884 sdR-b2-00022196.fit 2D Sky-subtraction Sky Fiber
Median χ²
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

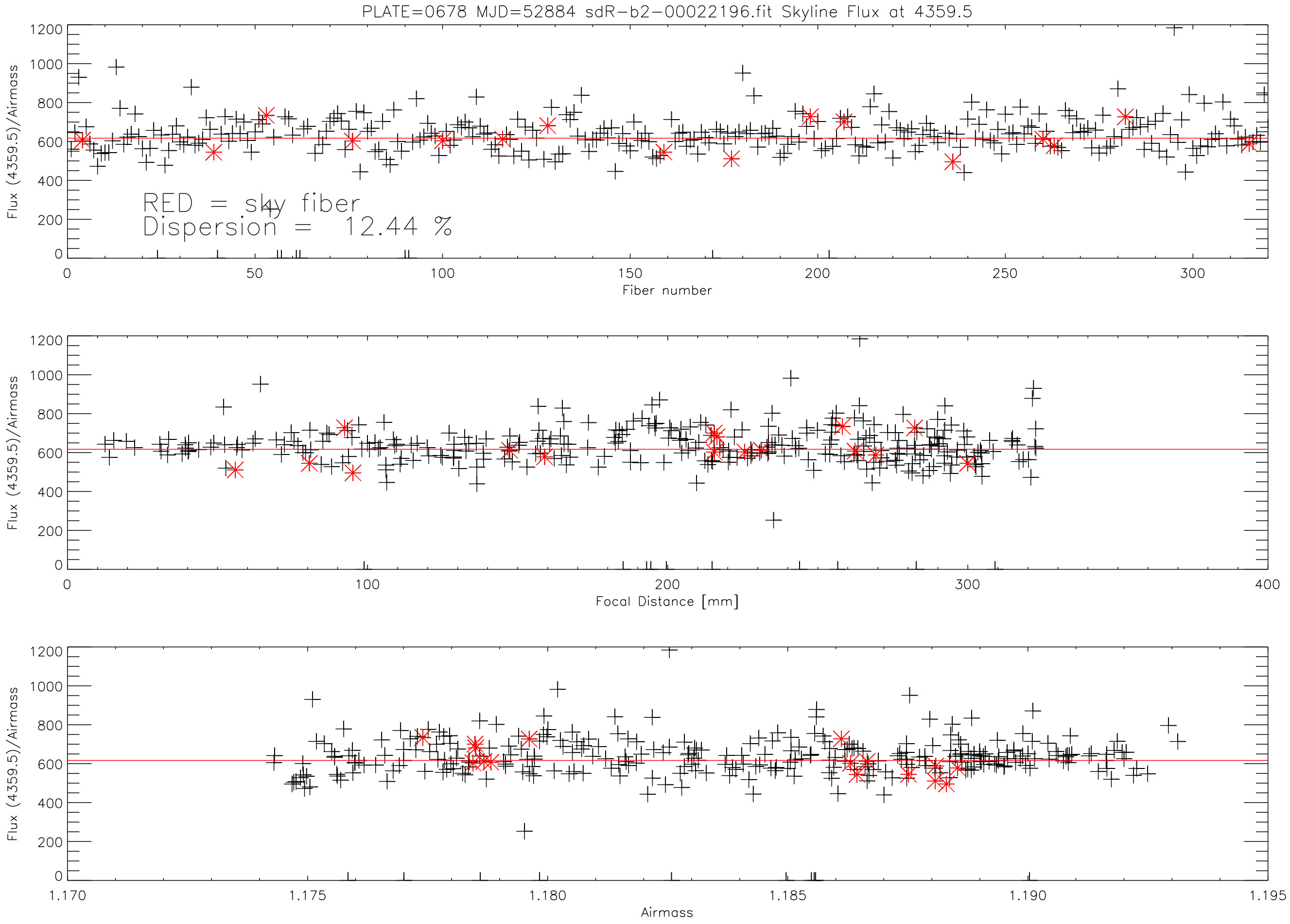

PLATE=0678 MJD=52884 sdR-b2-00022196.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3×10⁴
2×10⁴
1×10⁴
0
5570
5575
5580
5585
5590
λ [A]

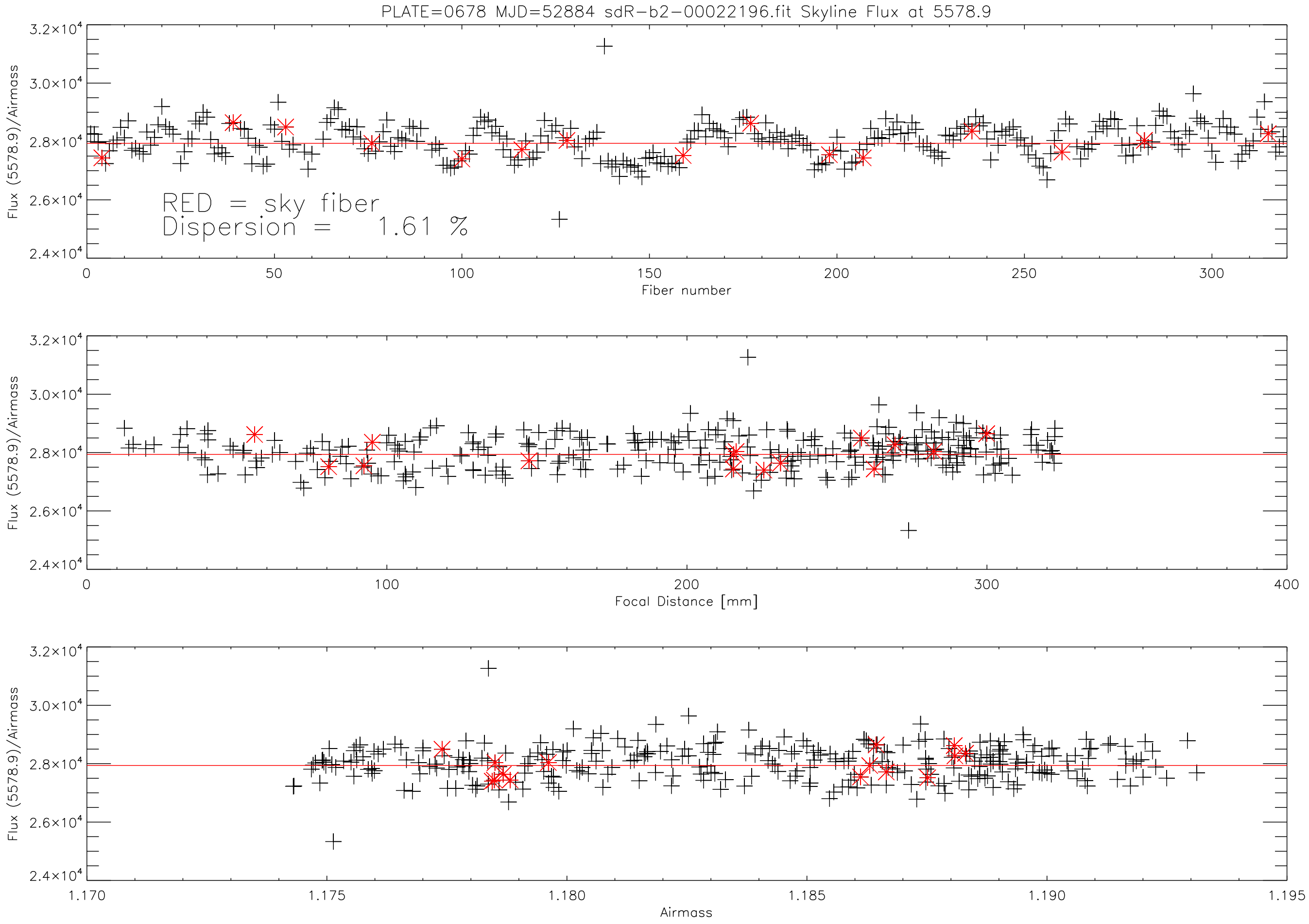

PLATE=0678 MJD=52884 sdR-b2-00022196.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2.0×10⁴
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
5570
5575
5580
5585
5590
λ [A]

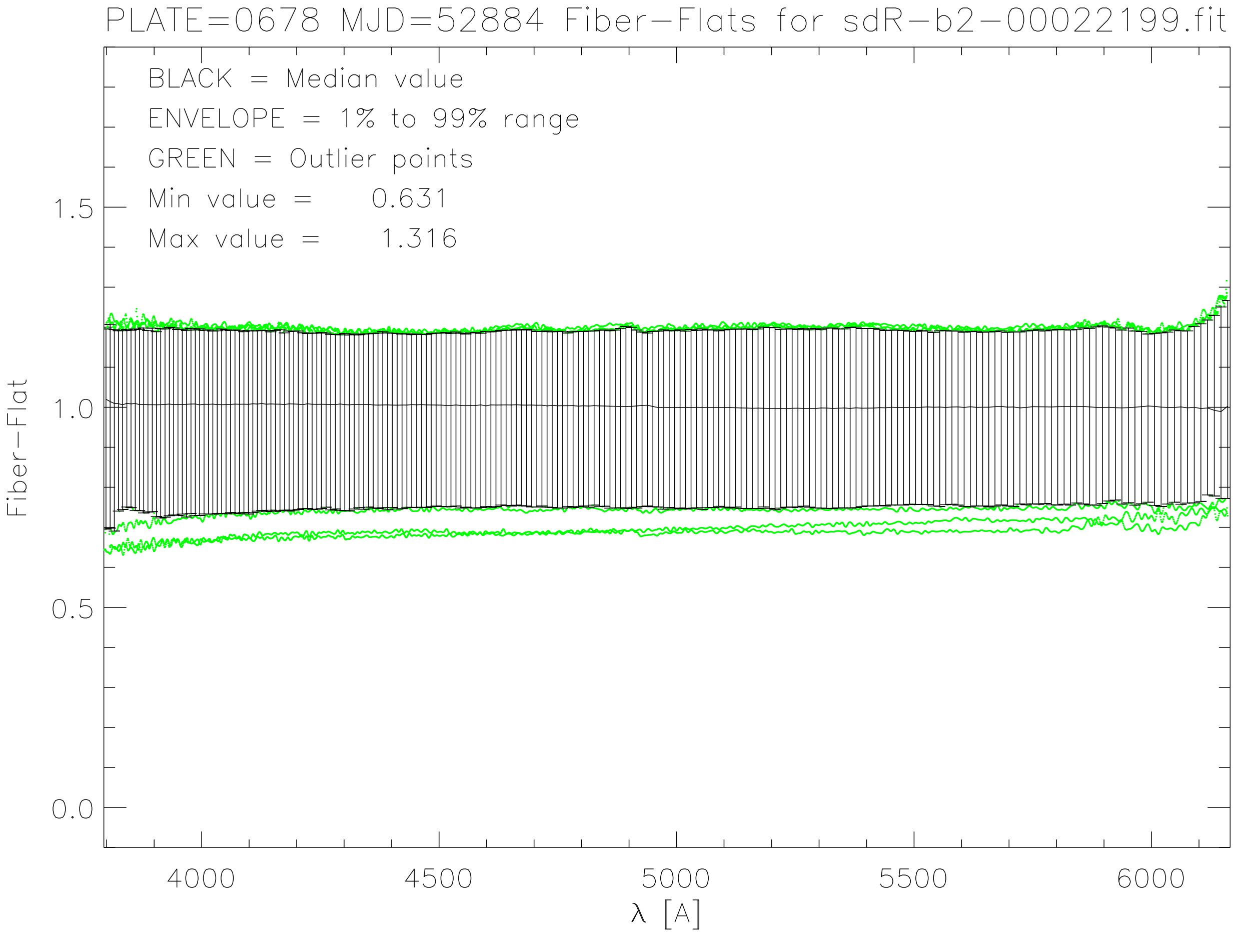
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b2-00022196.fit 2D Sky-subtraction Rescaled Errors



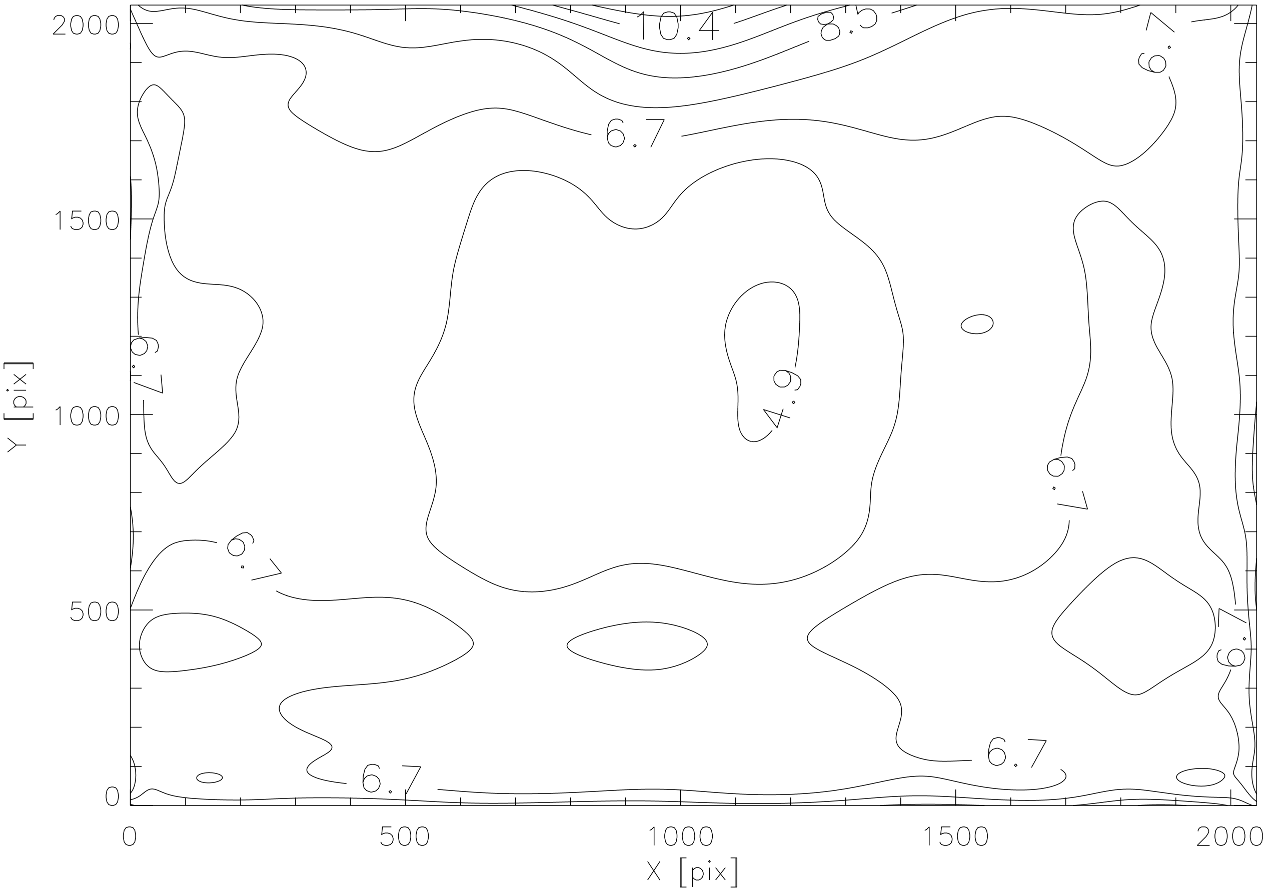

PLATE=0678 MJD=52884 sdR-b2-00022196.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
0
200
400
600
800
1000
1200
RED = sky fiber
Dispersion = 12.44 %
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.170
1.175
1.180
1.185
1.190
1.195


PLATE=0678 MJD=52884 sdR-b2-00022196.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.61 %
Flux (5578.9)/Airmass
3.2×10⁴
3.0×10⁴
2.8×10⁴
2.6×10⁴
2.4×10⁴
0
50
100
150
200
250
300
Fiber number
400
Focal Distance [mm]
1.170
1.175
1.180
1.185
1.190
1.195
Airmass

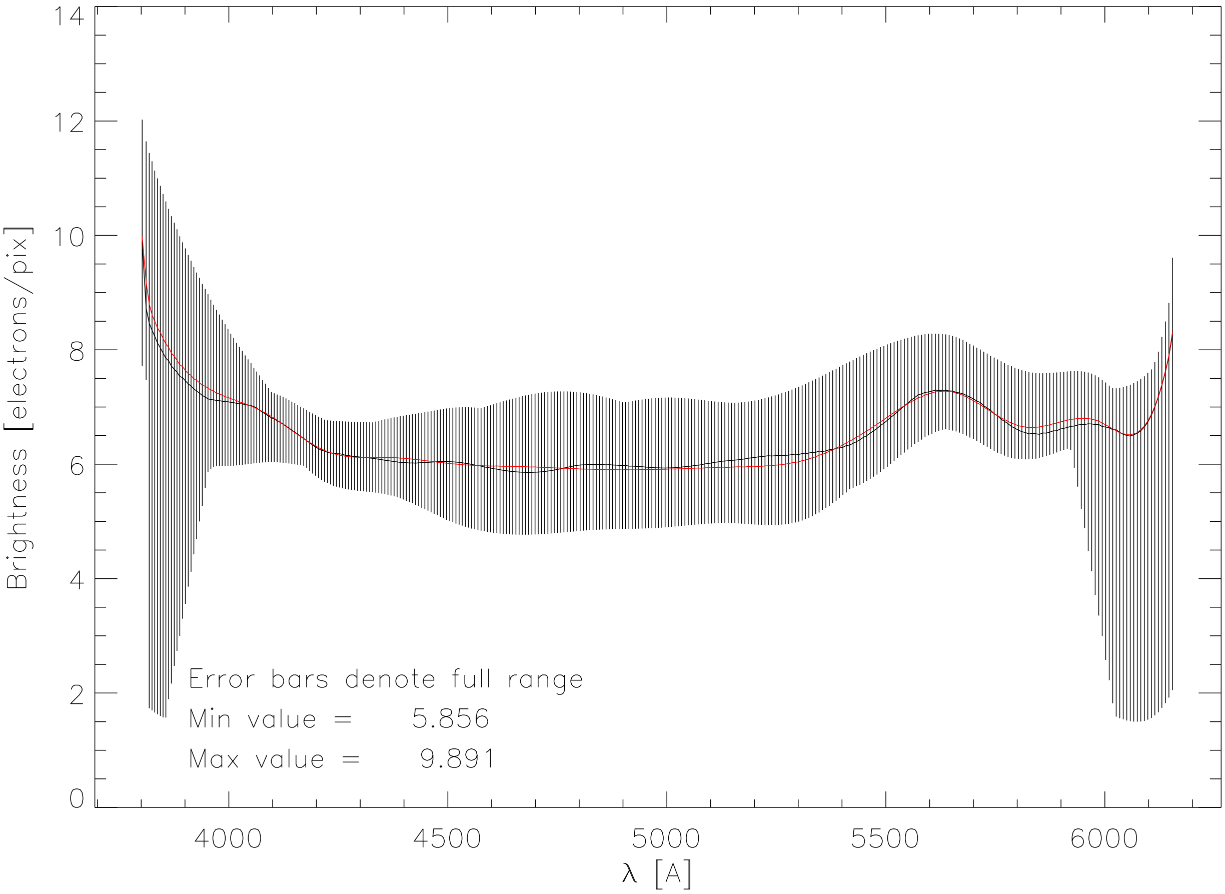


Mon Feb 25 23:18:00 2008

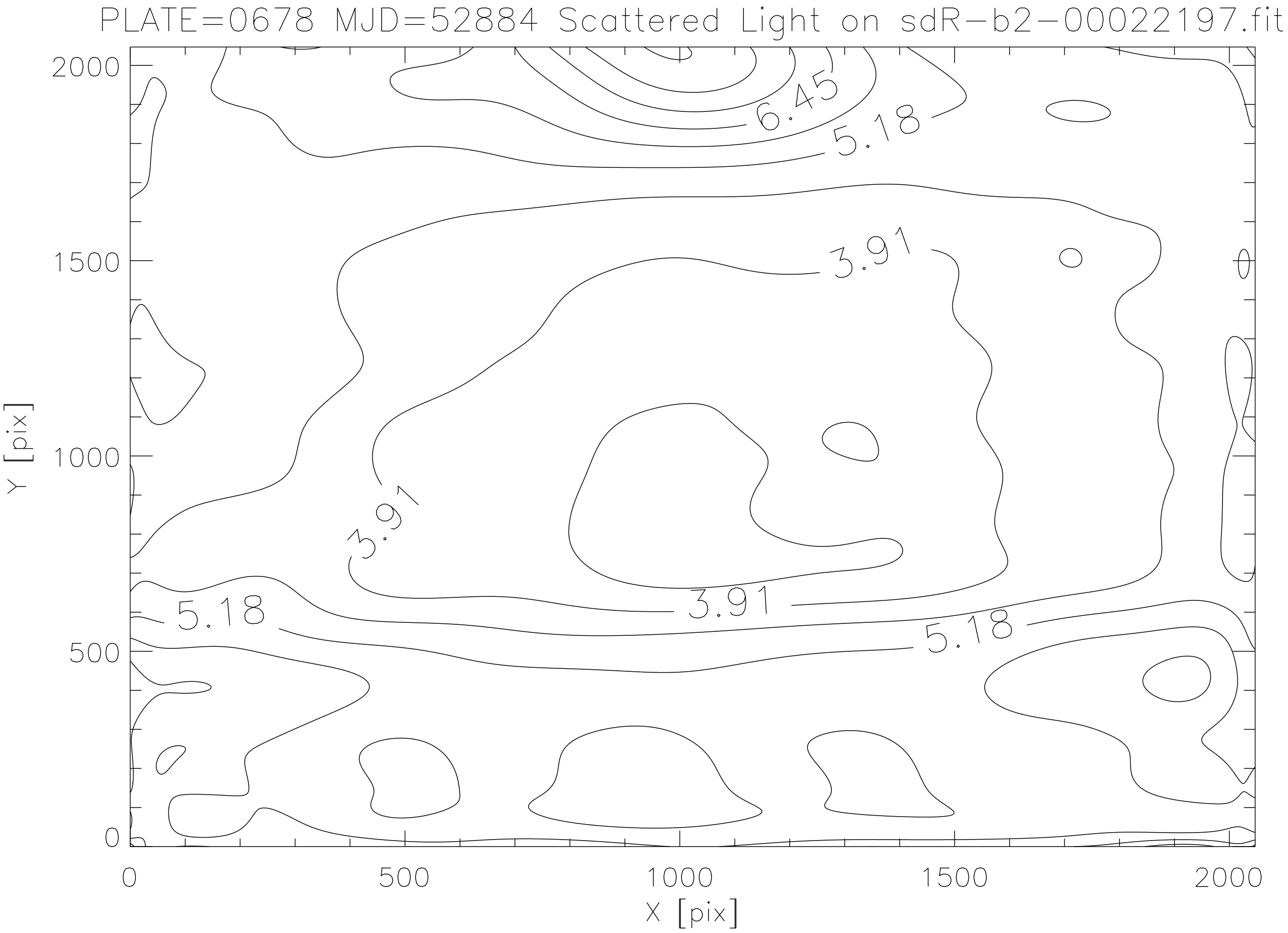
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022197.f

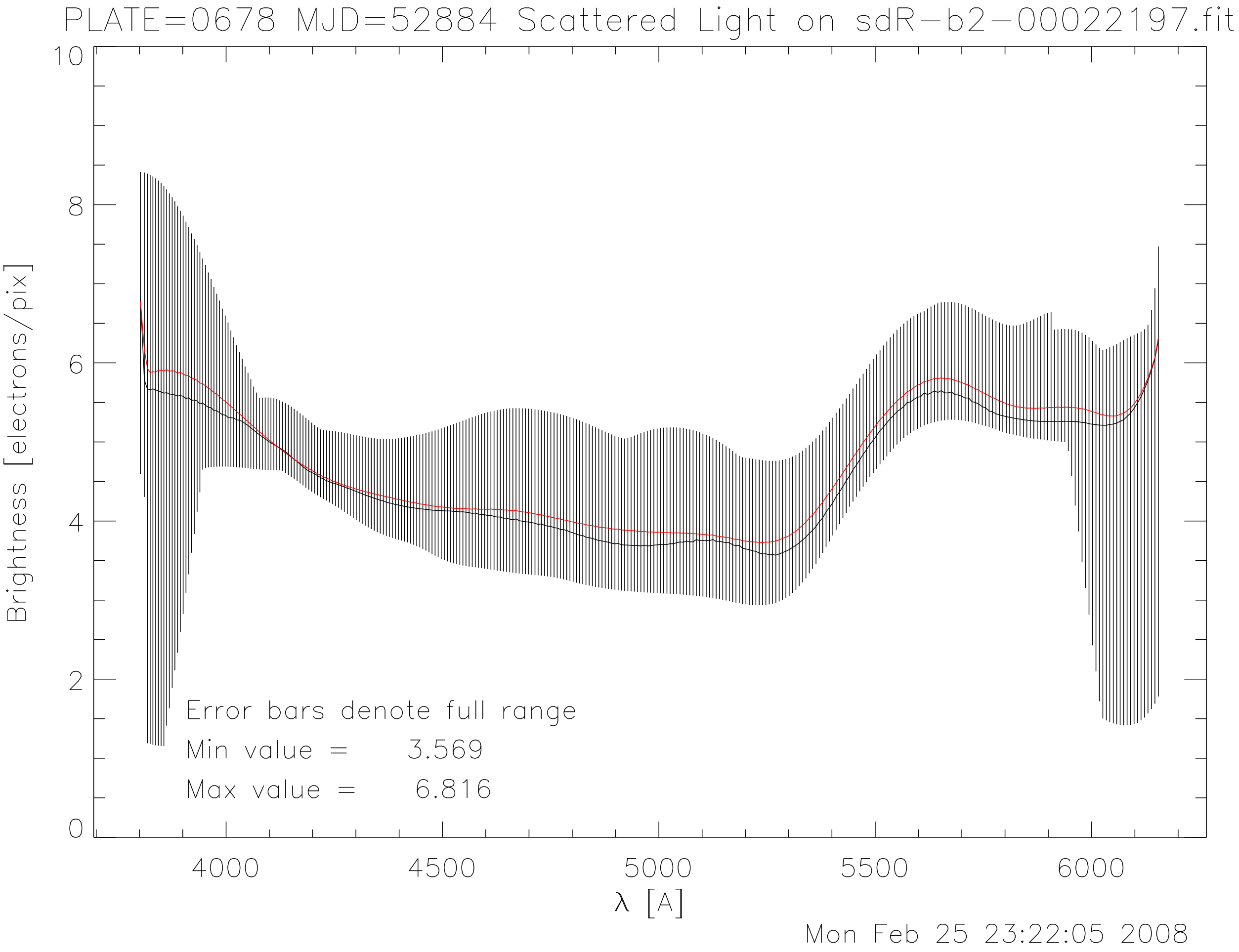


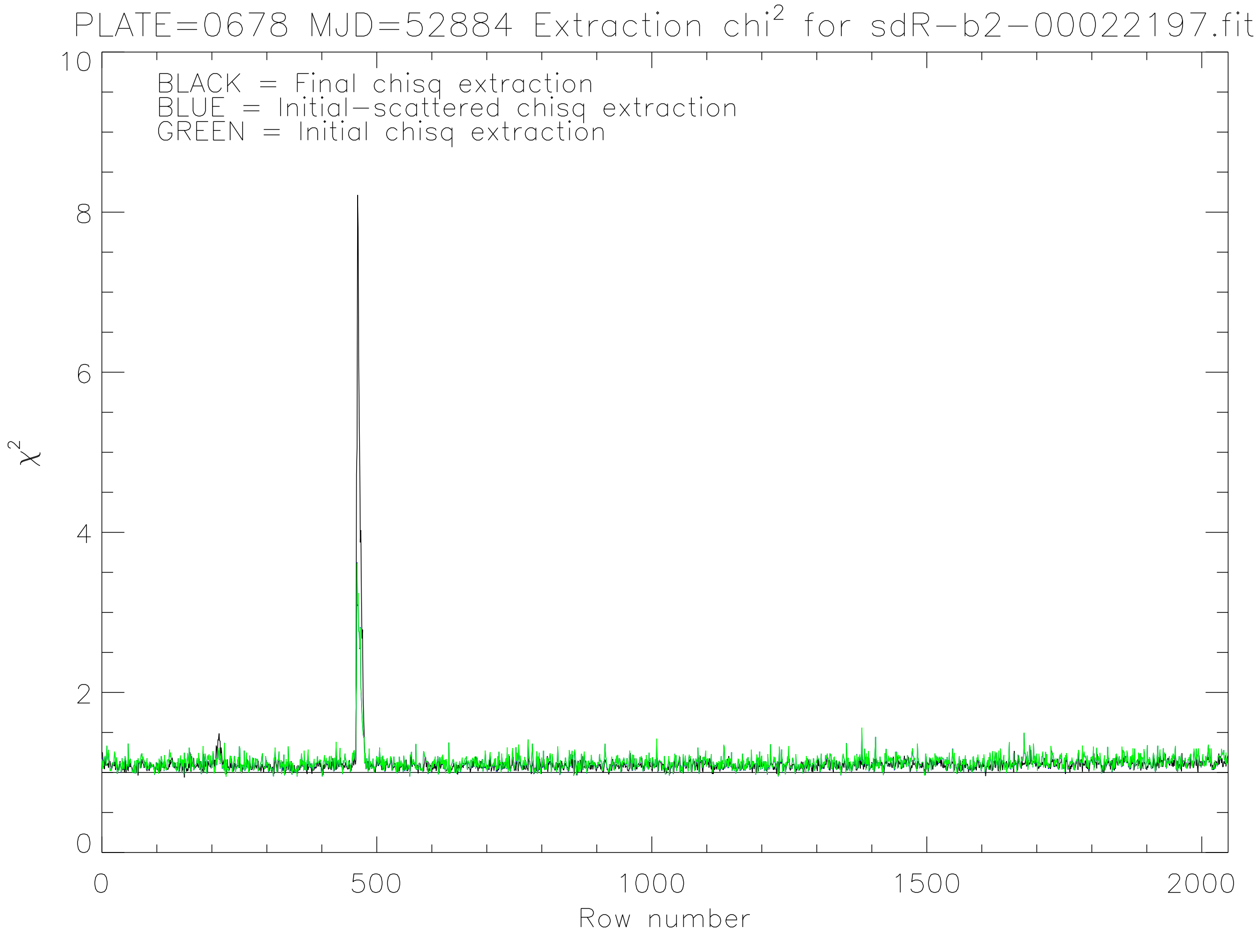
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022197.f

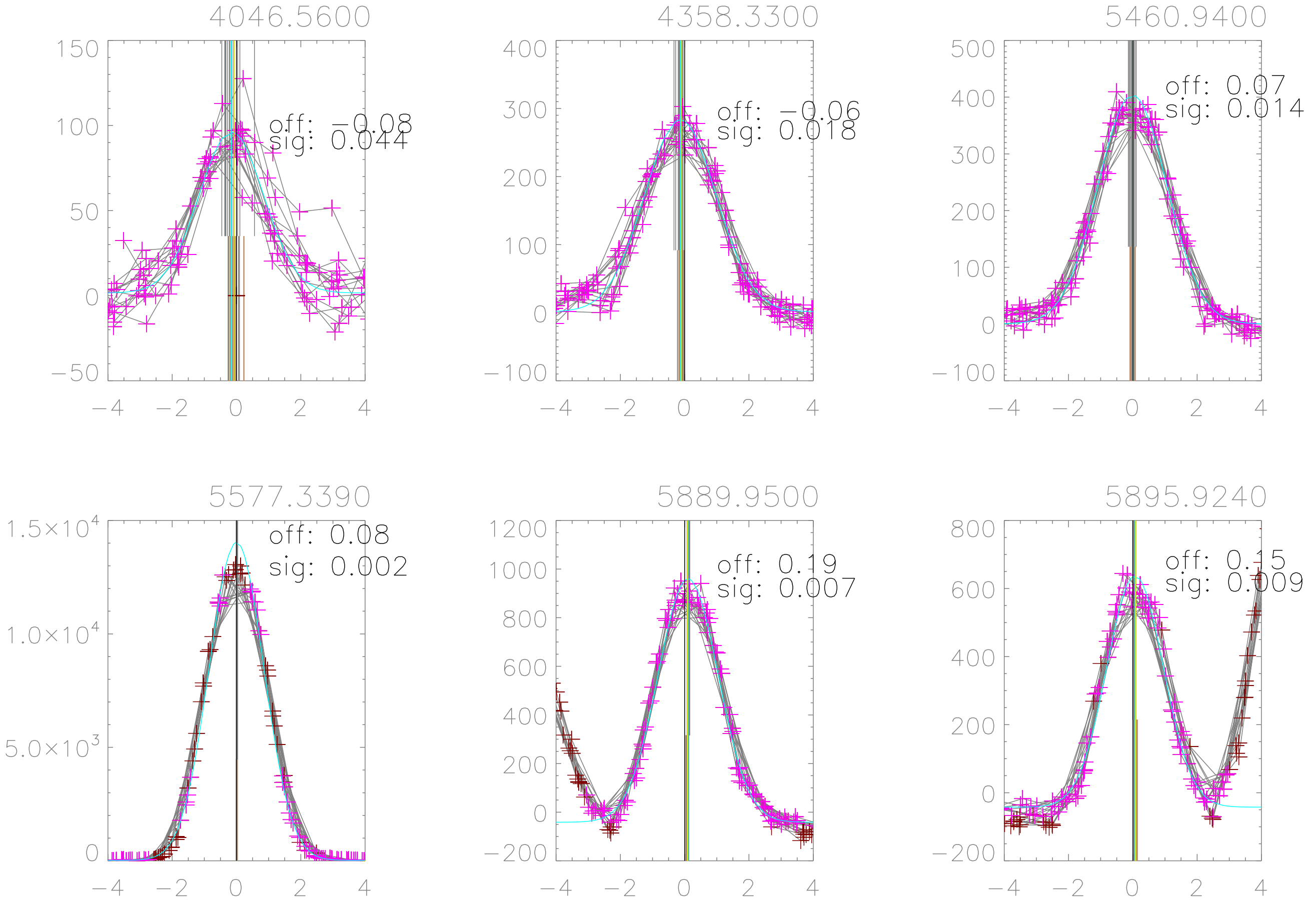


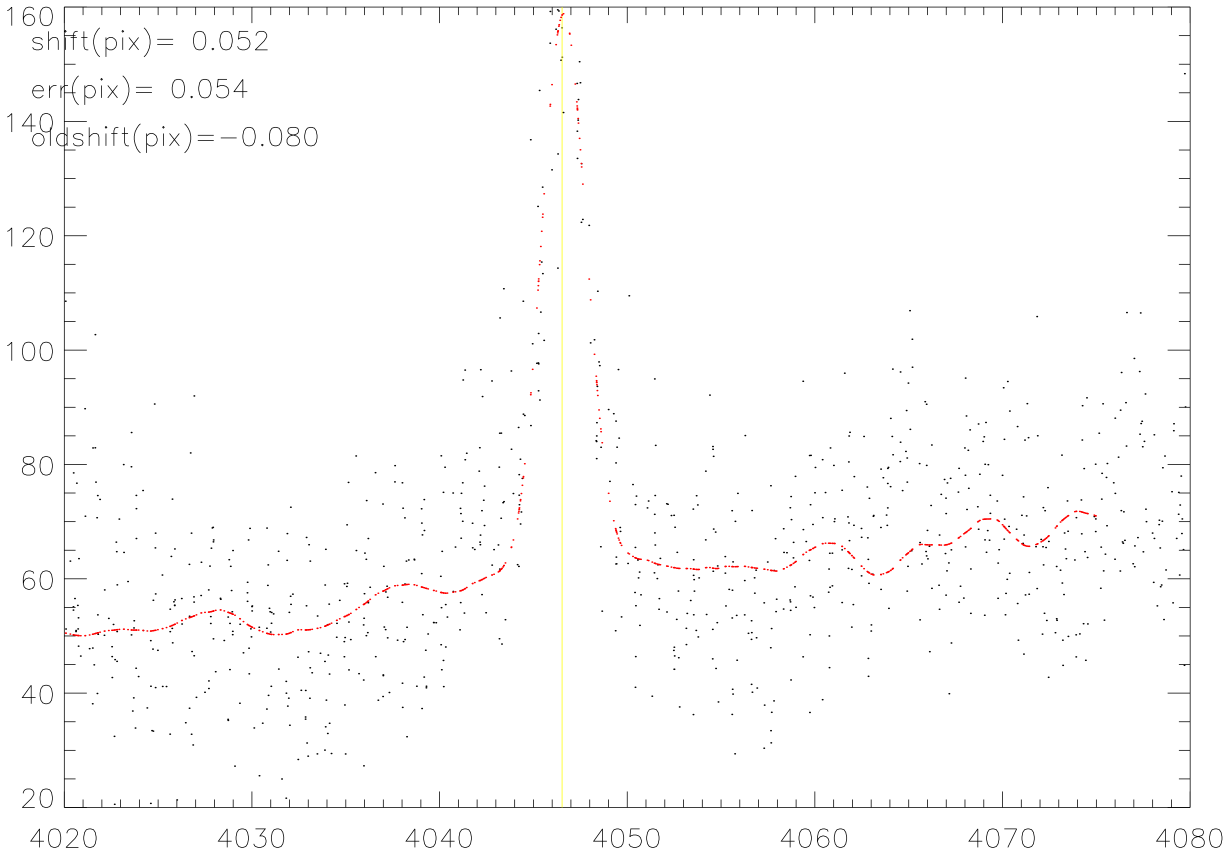
Mon Feb 25 23:18:55 2008

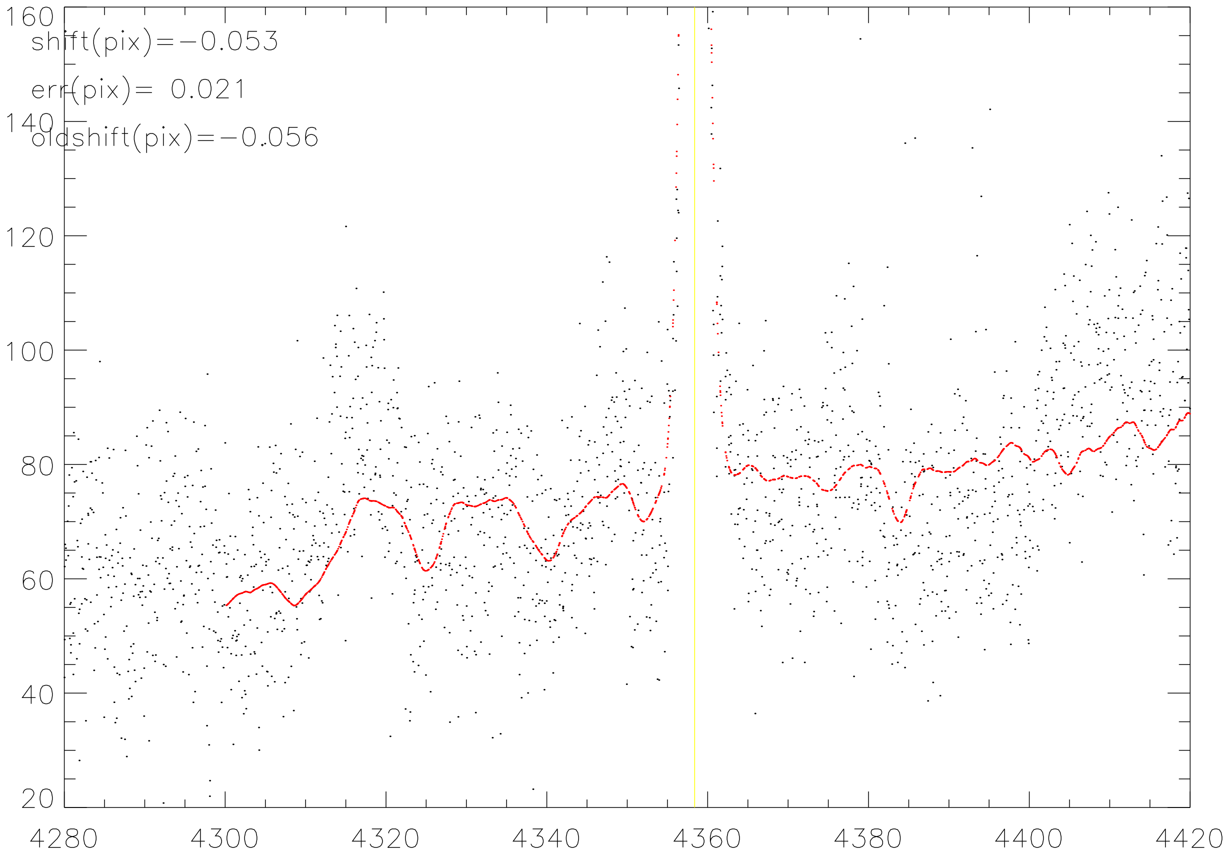

PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022197.fit


PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022197.fit
Brightness [electrons/pix]
0
2
4
6
8
10
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.569
Max value = 6.816
Mon Feb 25 23:22:05 2008

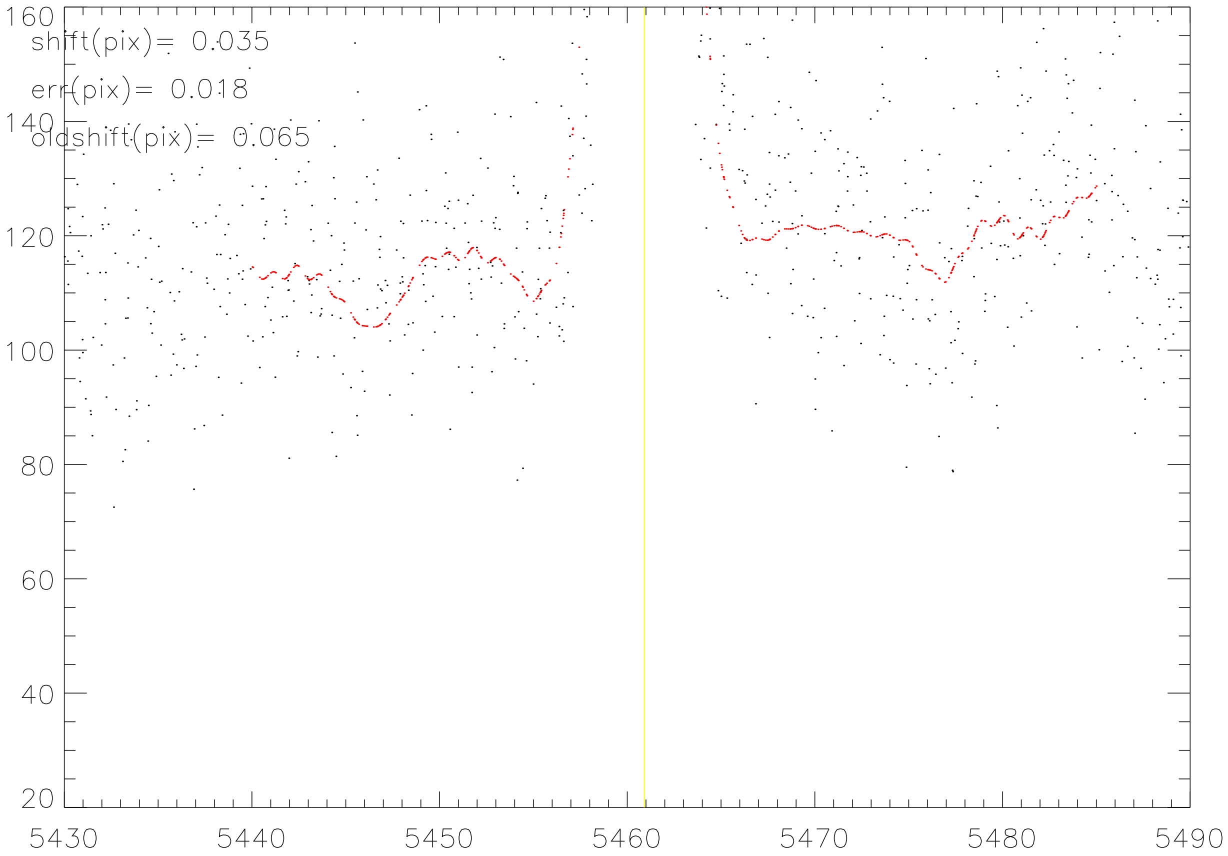

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b2-00022197.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

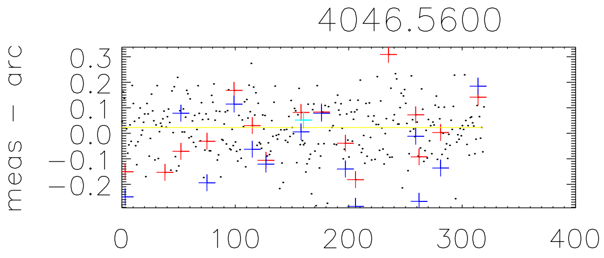

4046.5600
off: −0.08
sig: 0.044
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.06
sig: 0.018
400
300
200
100
0
−100
5460.9400
off: 0.07
sig: 0.014
500
400
300
200
100
0
−100
5577.3390
off: 0.08
sig: 0.002
1.5×10^4
1.0×10^4
5.0×10^3
0
5889.9500
off: 0.19
sig: 0.007
1200
1000
800
600
400
200
0
−200
5895.9240
off: 0.15
sig: 0.009
800
600
400
200
0
−200

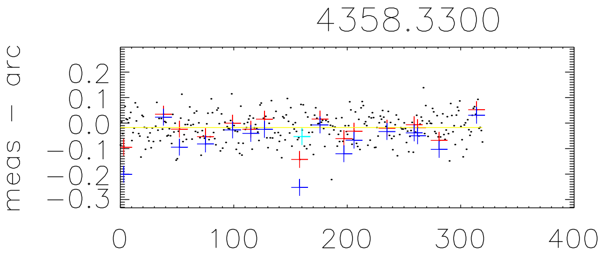

shift(pix)= 0.052
err(pix)= 0.054
oldshift(pix)=−0.080
160
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

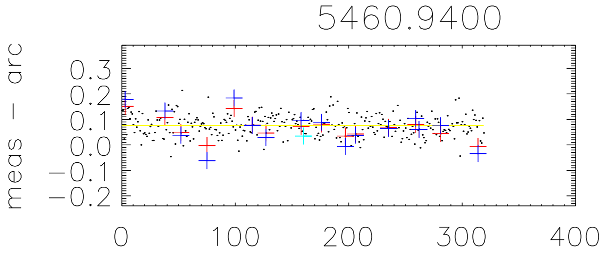


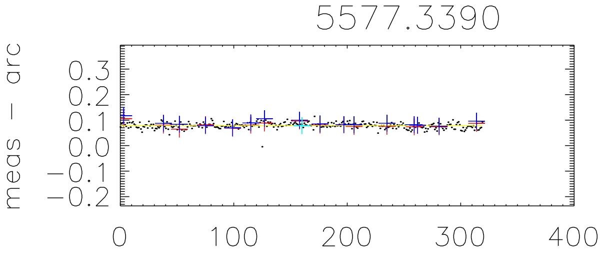
shift(pix)=−0.053
err(pix)= 0.021
oldshift(pix)=−0.056
160
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

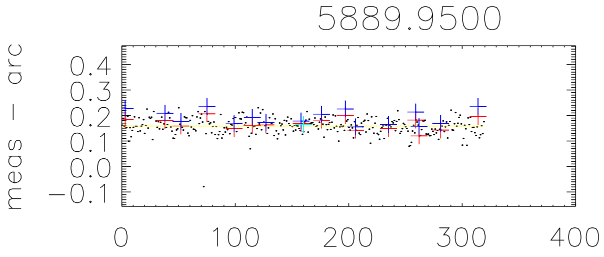

shift(pix)= 0.035
err(pix)= 0.018
oldshift(pix)= 0.065
160
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

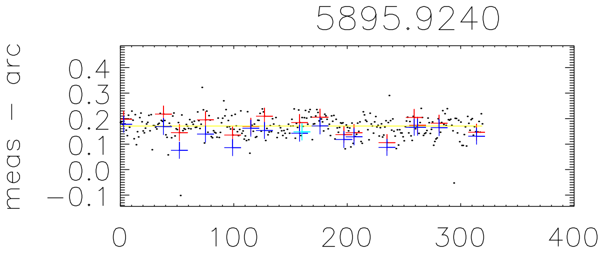

4046.5600

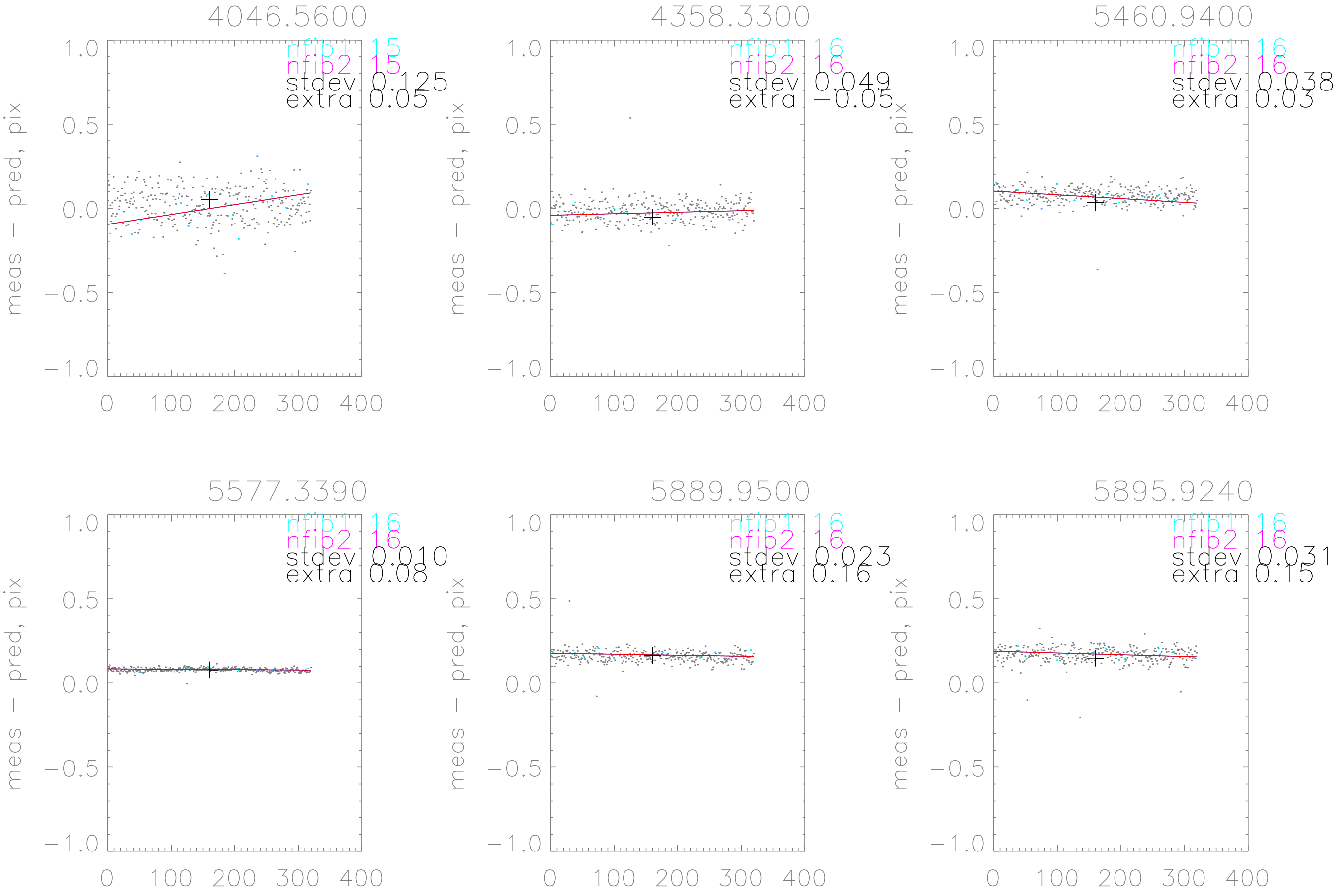

4358.3300

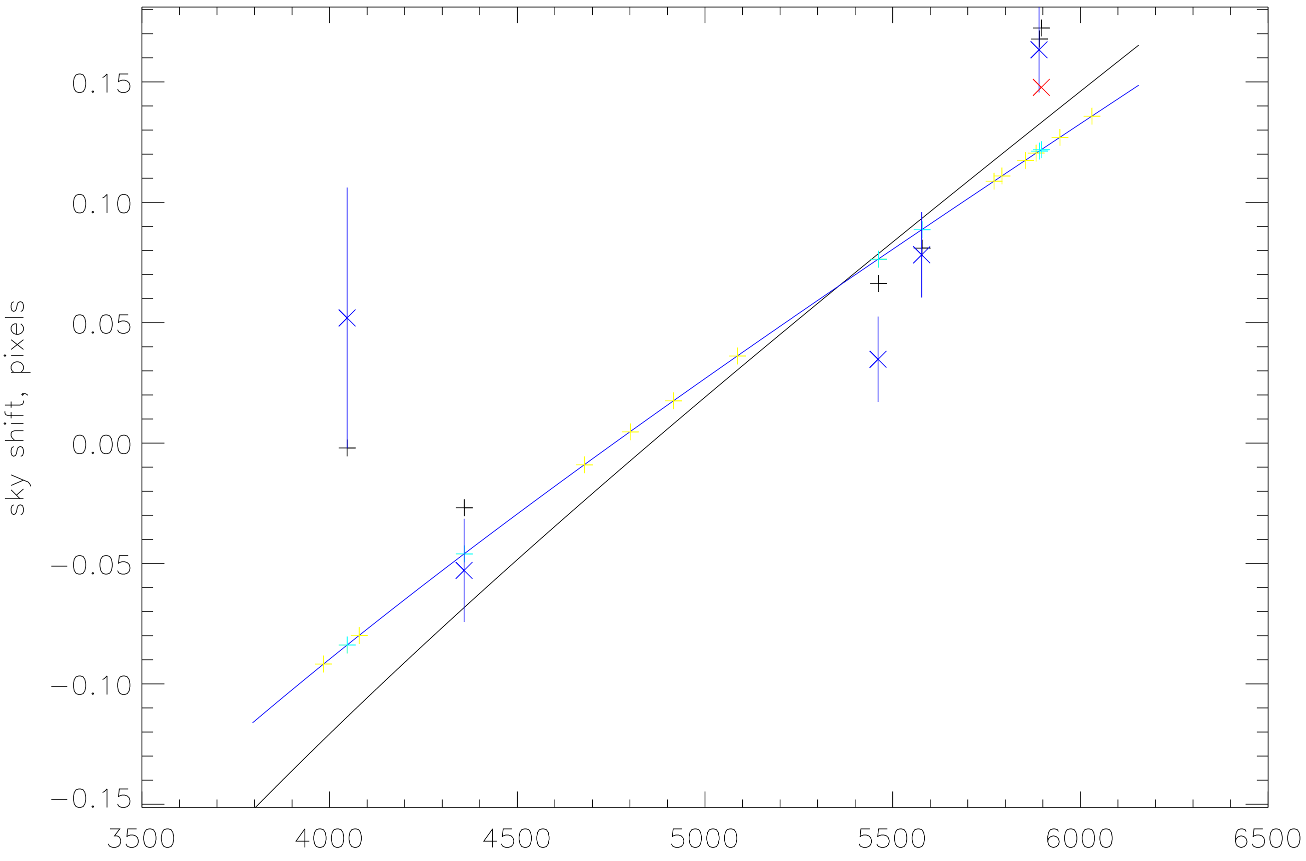

5460.9400

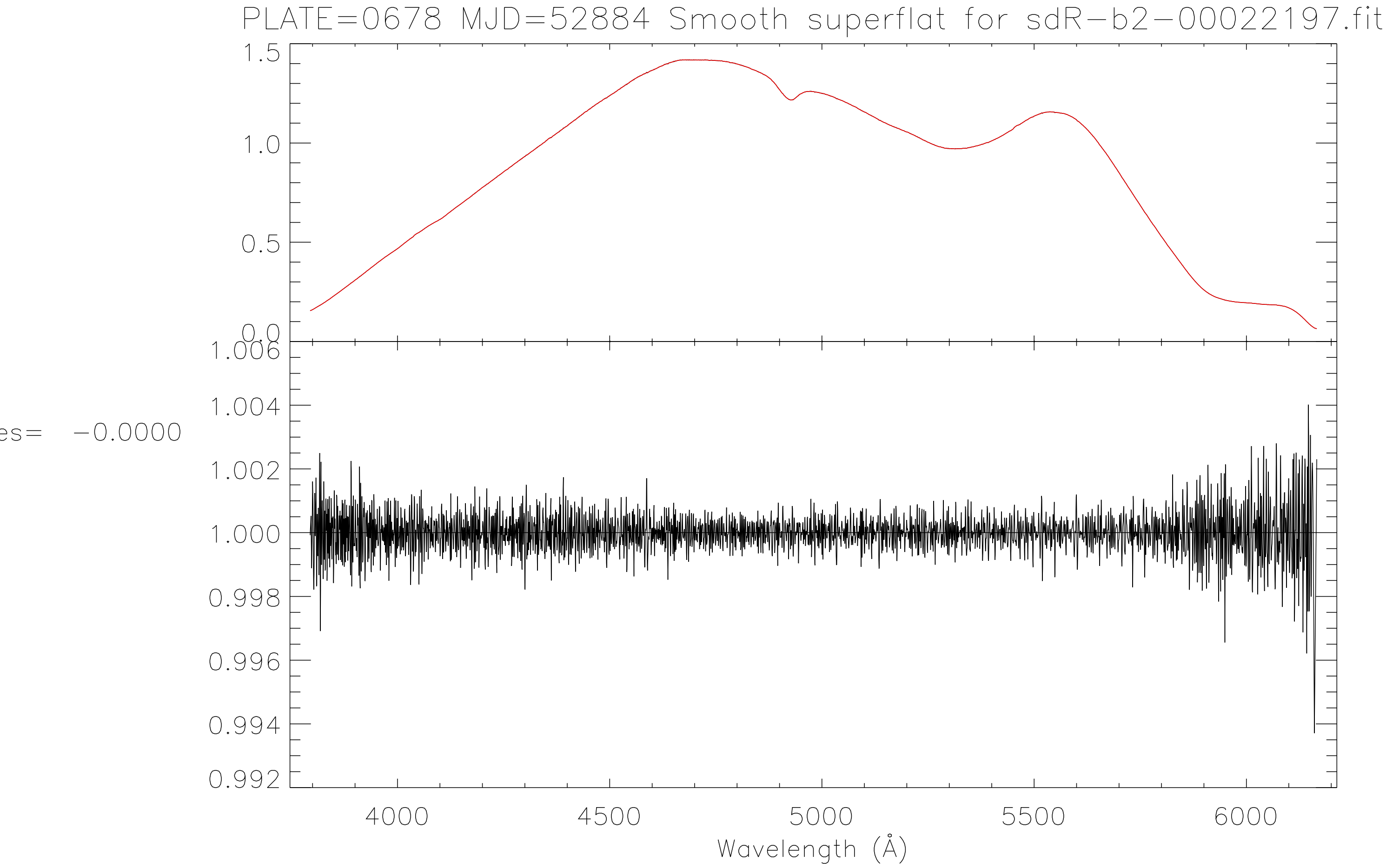

5577.3390

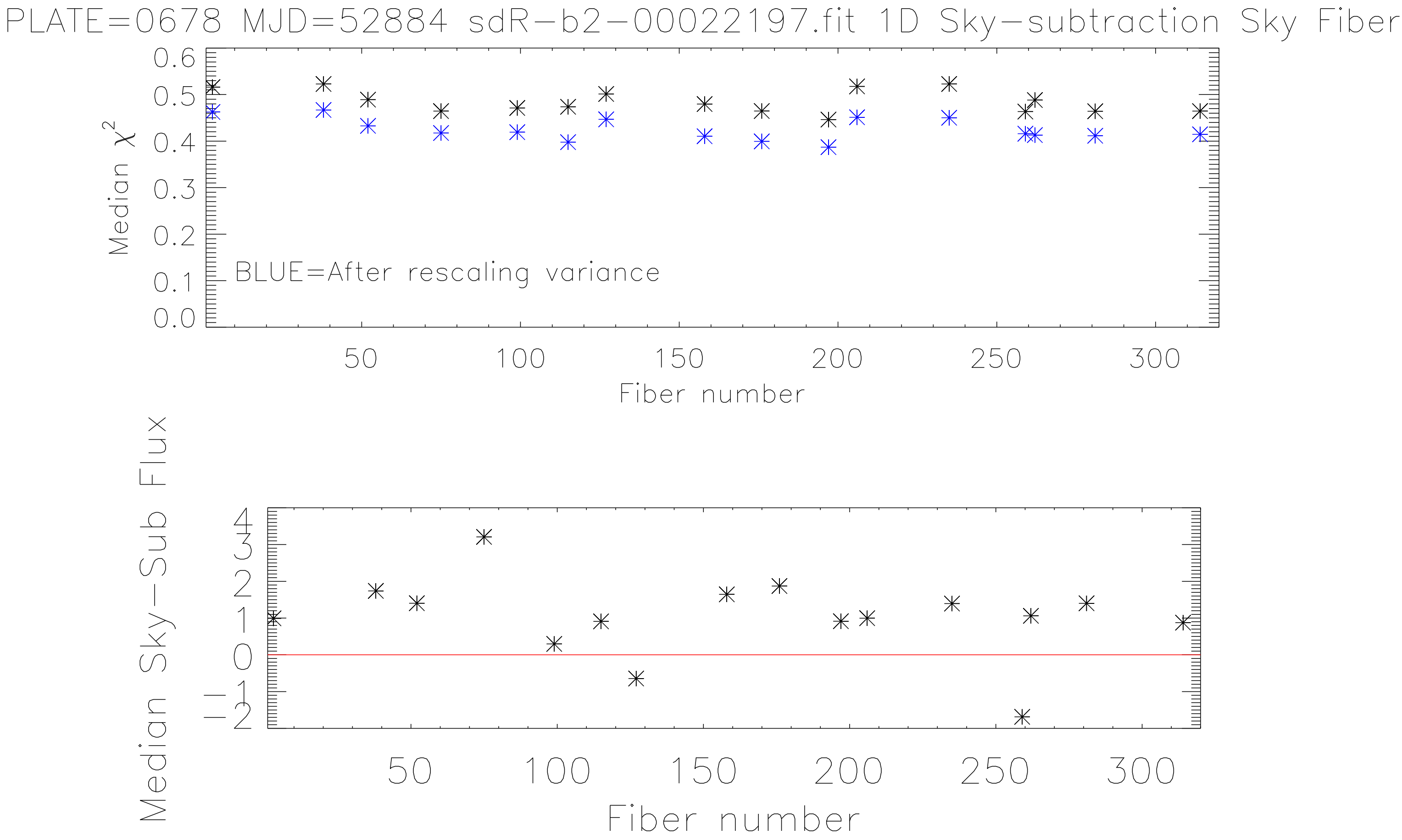

5889.9500

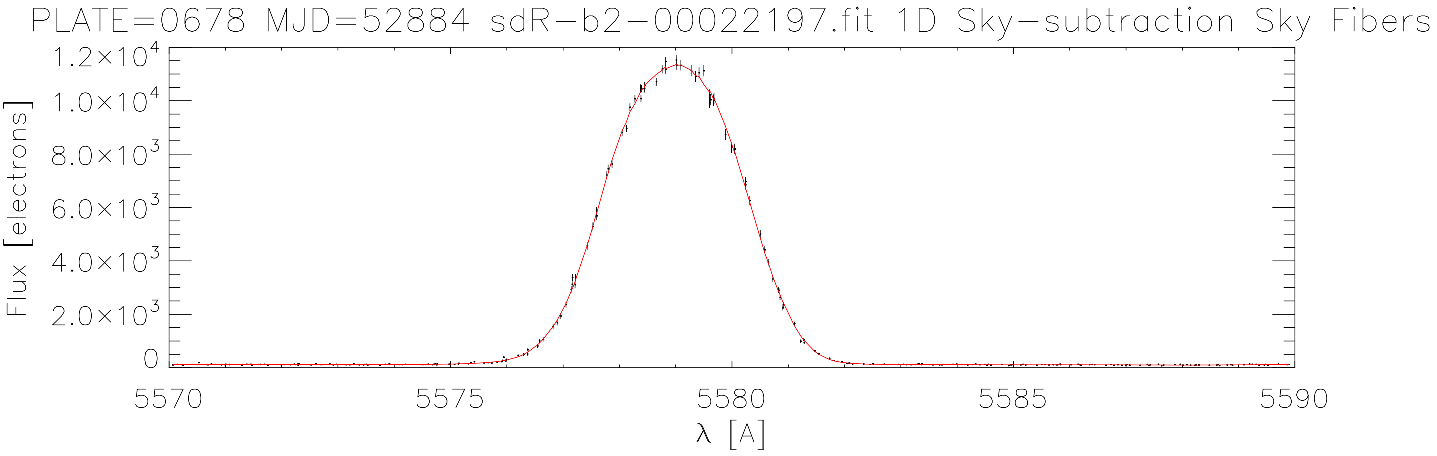

5895.9240

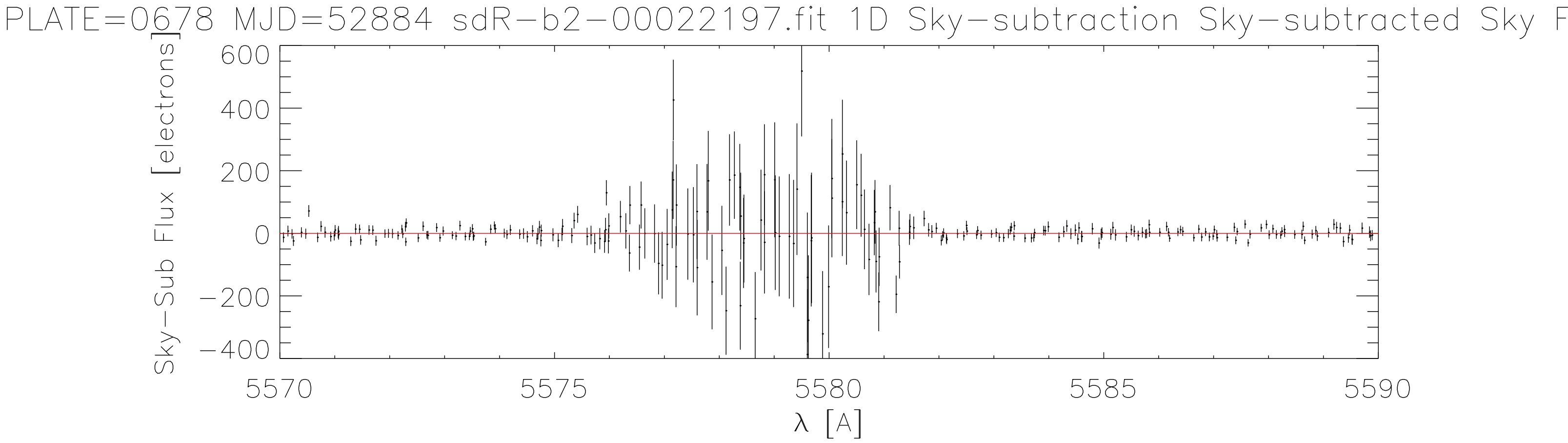

4046.5600
nfib1 15
nfib2 15
stdev 0.125
extra 0.05
4358.3300
nfib1 16
nfib2 16
stdev 0.049
extra −0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.038
extra 0.03
5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra 0.08
5889.9500
nfib1 16
nfib2 16
stdev 0.023
extra 0.16
5895.9240
nfib1 16
nfib2 16
stdev 0.031
extra 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

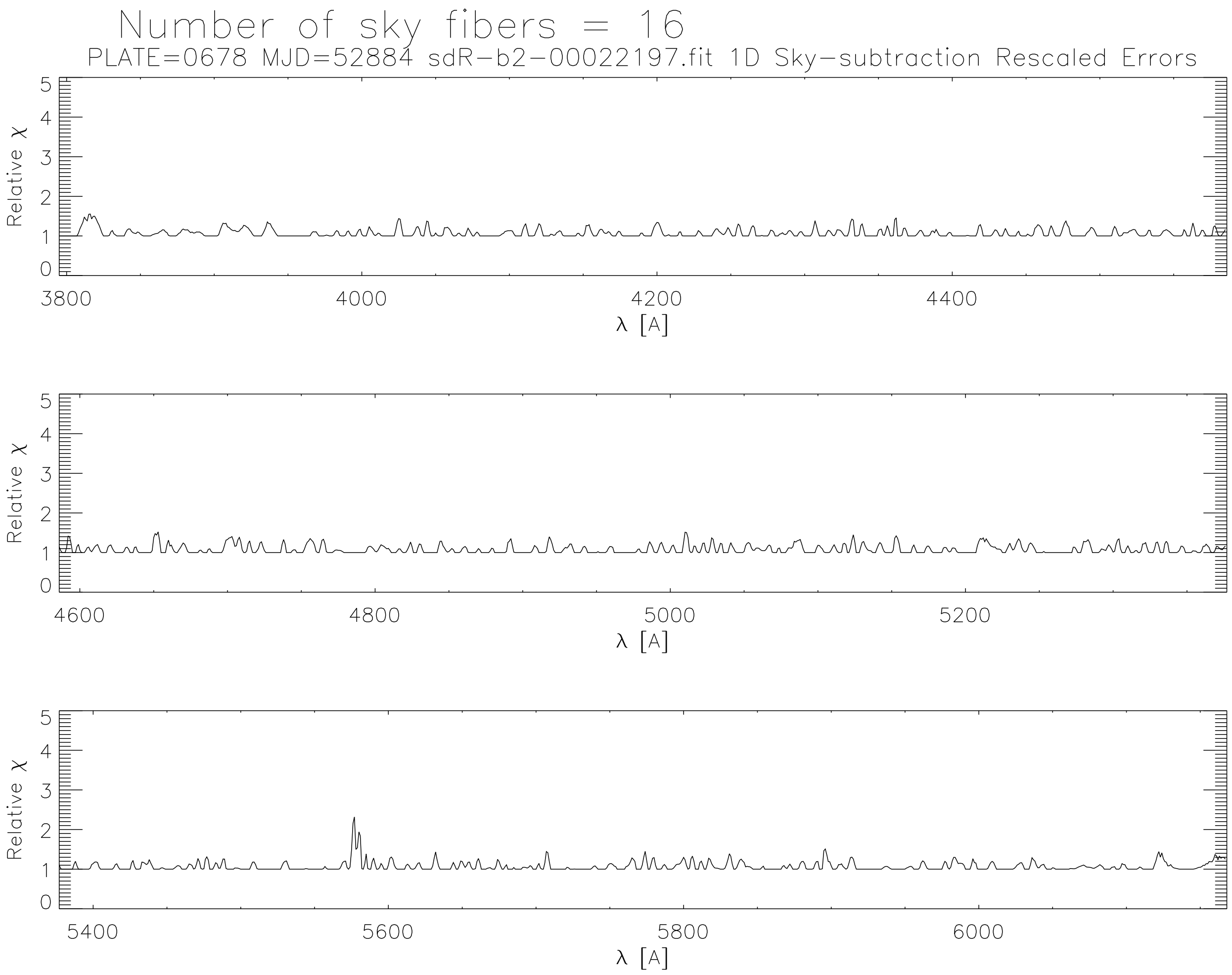

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500

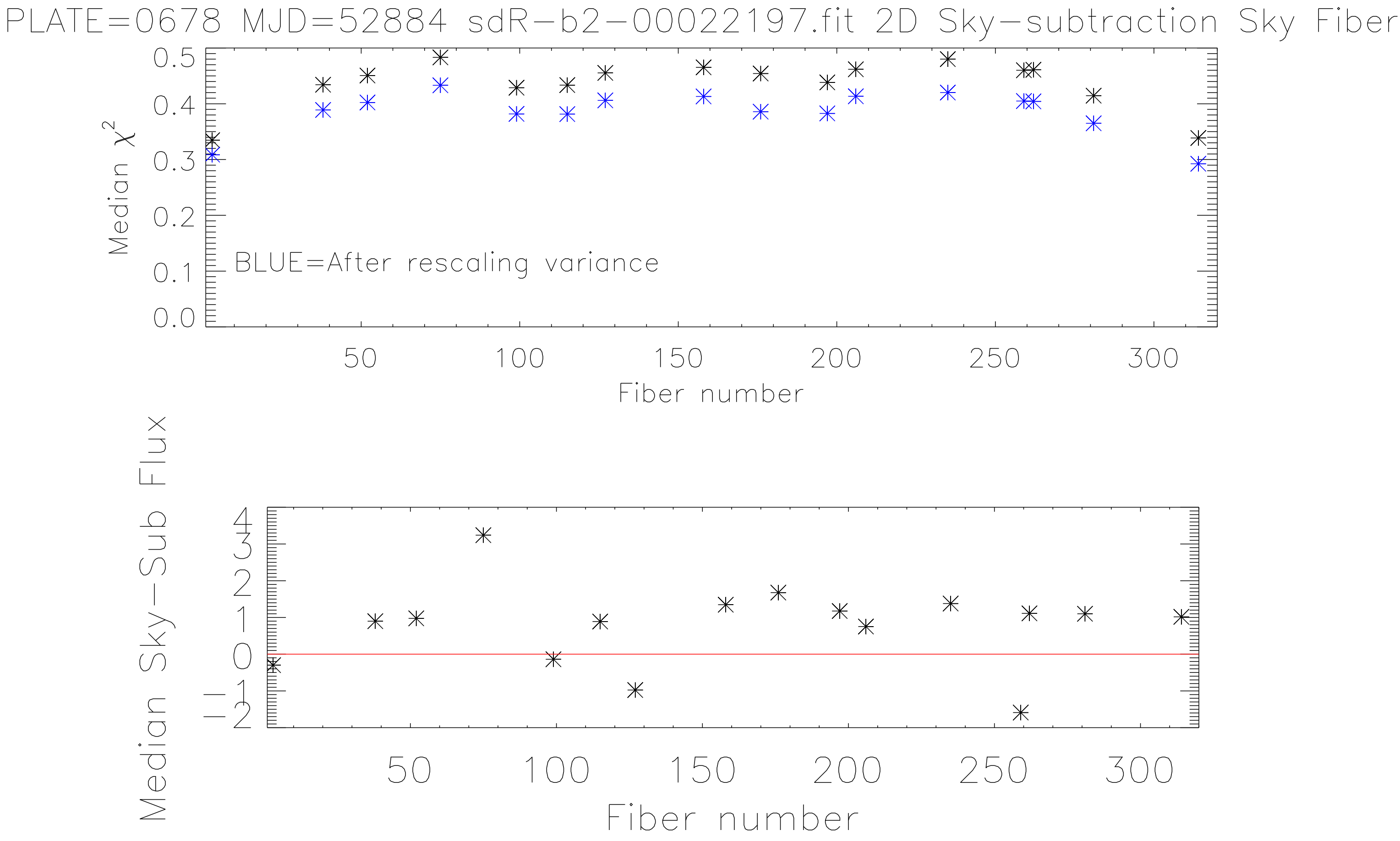

PLATE=0678 MJD=52884 Smooth superflat for sdR-b2-00022197.fit
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
0.992
es=   −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

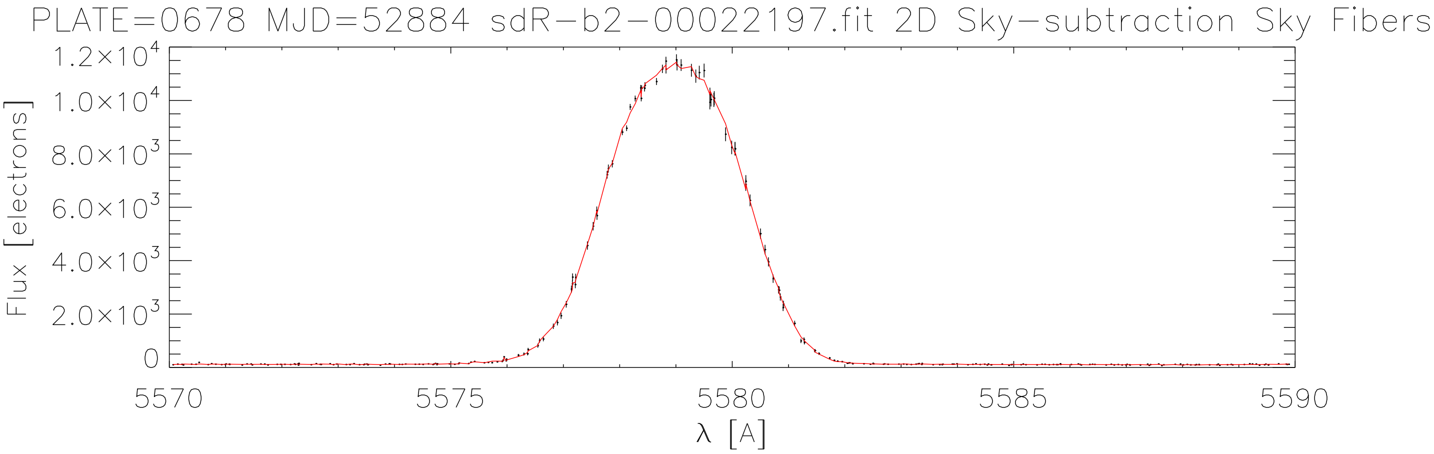

PLATE=0678 MJD=52884 sdR-b2-00022197.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

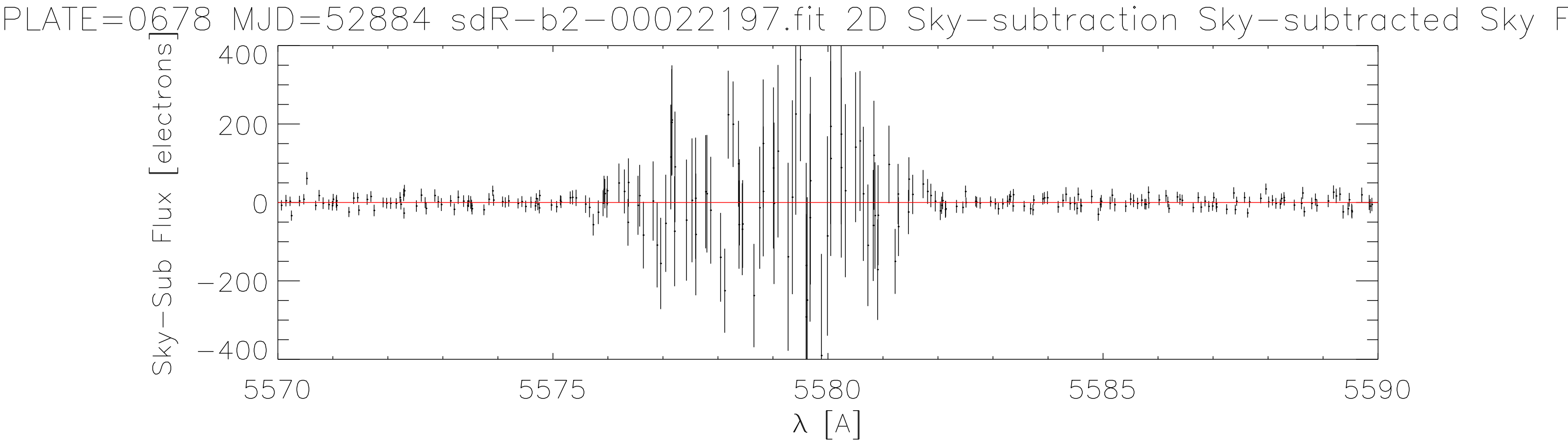

PLATE=0678 MJD=52884 sdR-b2-00022197.fit 1D Sky-subtraction Sky Fibers


PLATE=0678 MJD=52884 sdR-b2-00022197.fit 1D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 16
PLATE=0678 MJD=52884 sdR-b2-00022197.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

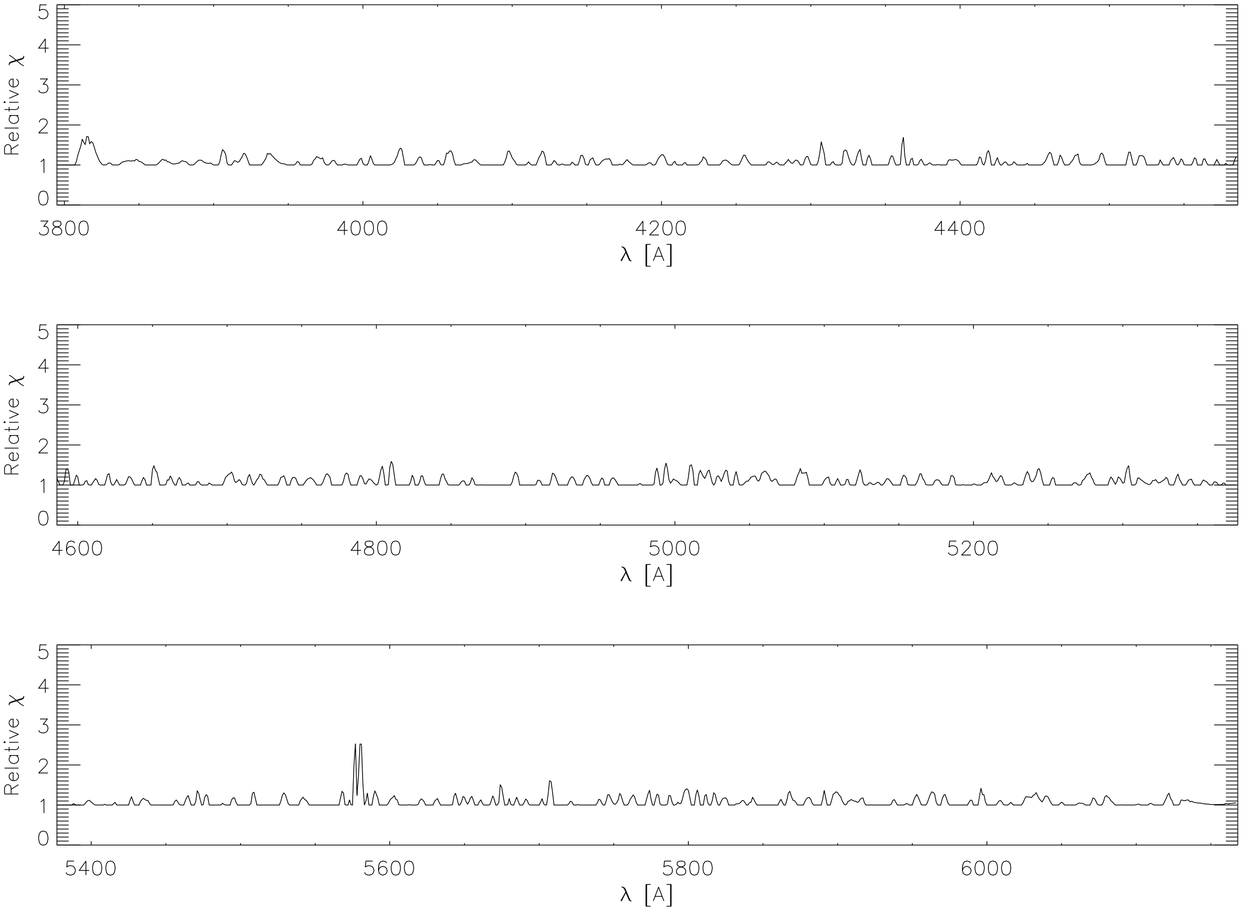

PLATE=0678 MJD=52884 sdR-b2-00022197.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

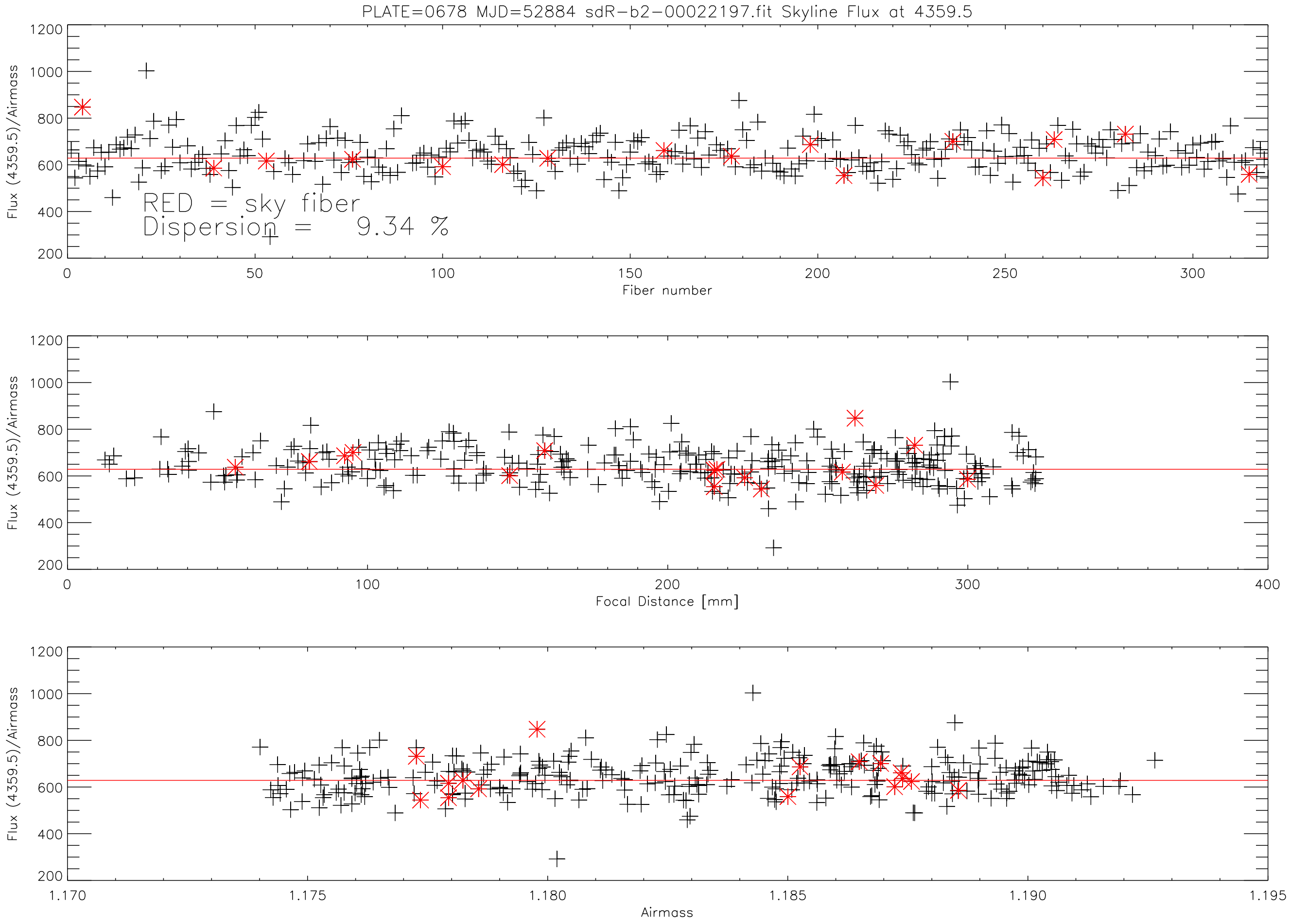

PLATE=0678 MJD=52884 sdR-b2-00022197.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

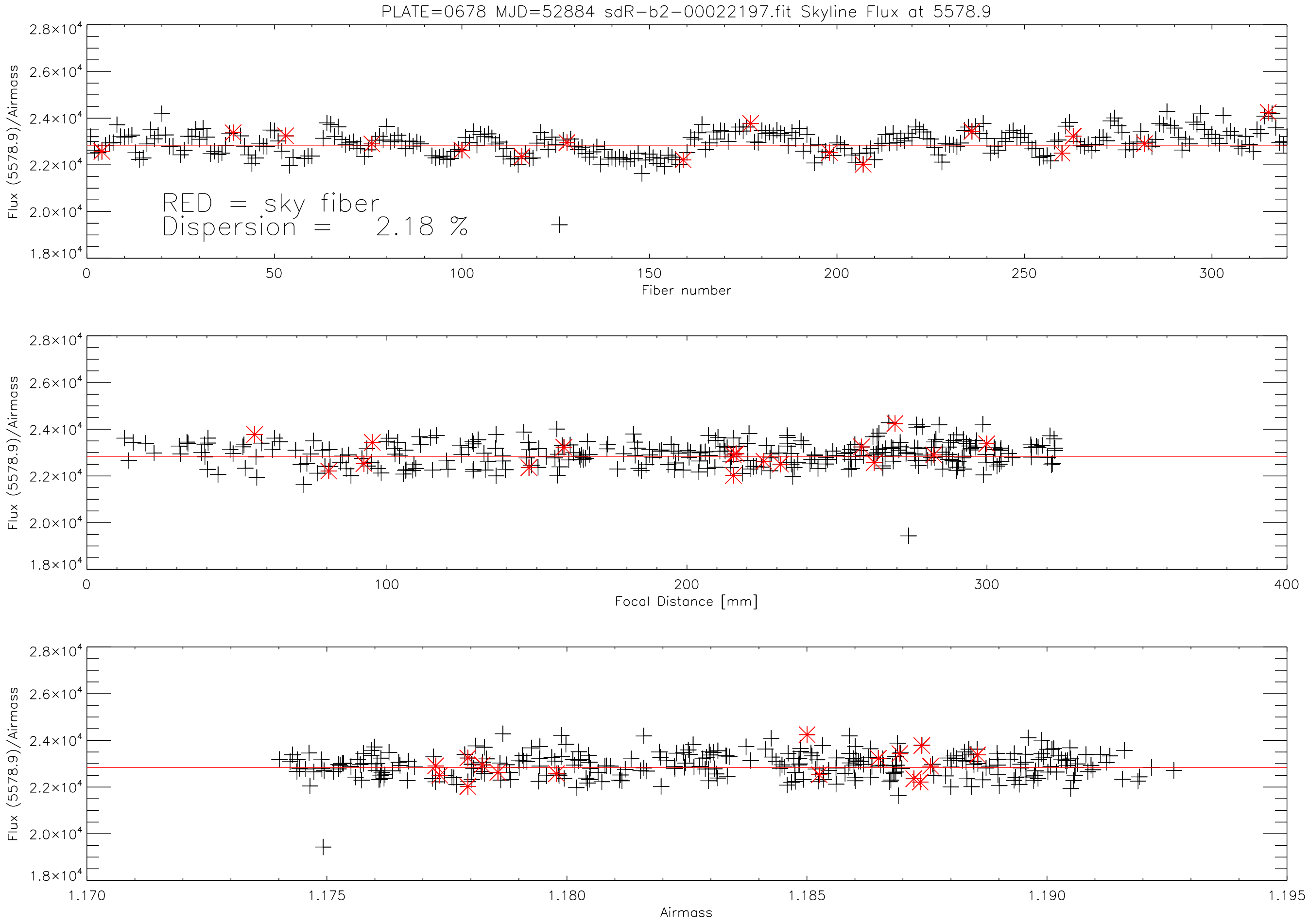

PLATE=0678 MJD=52884 sdR-b2-00022197.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

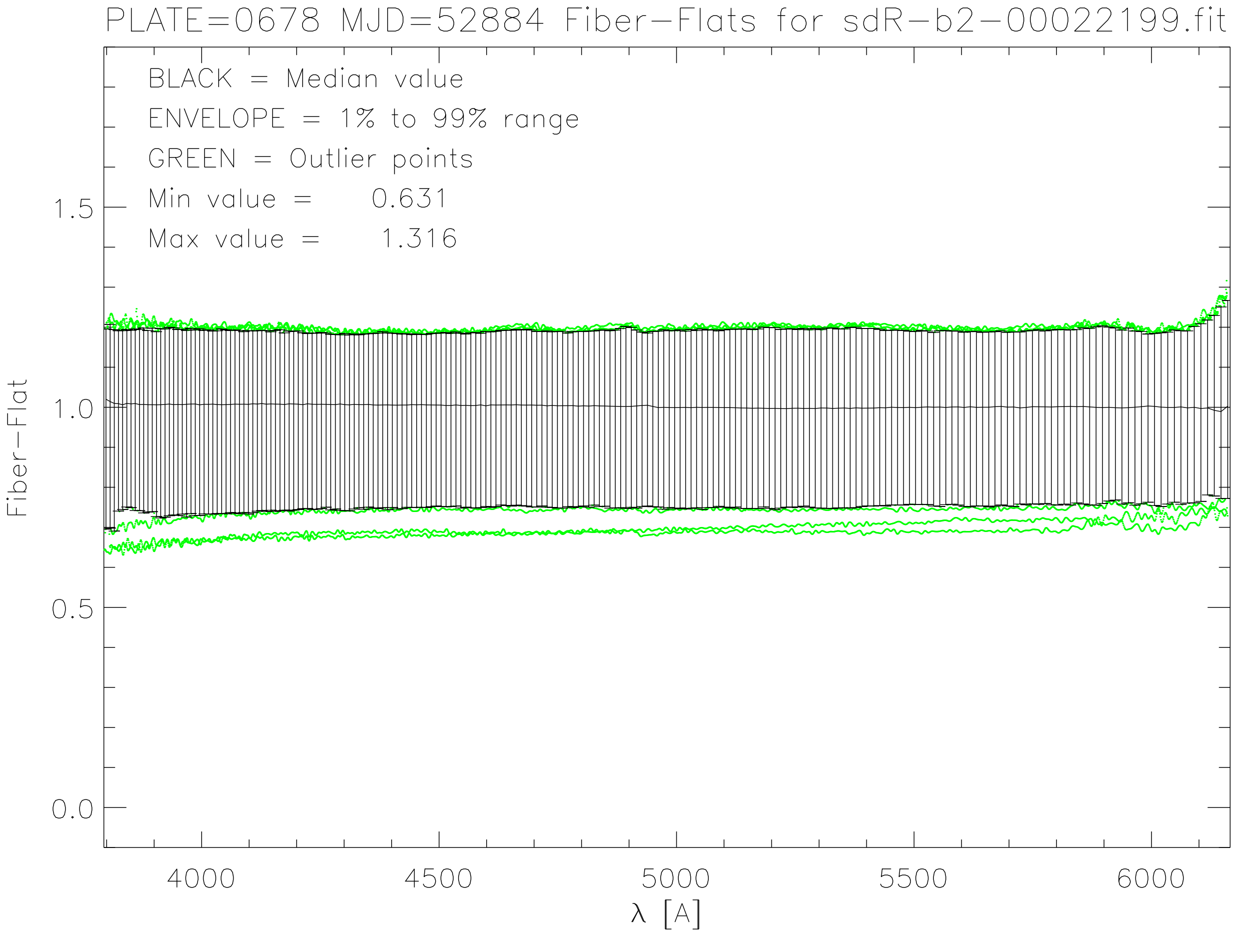
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-b2-00022197.fit 2D Sky-subtraction Rescaled Errors

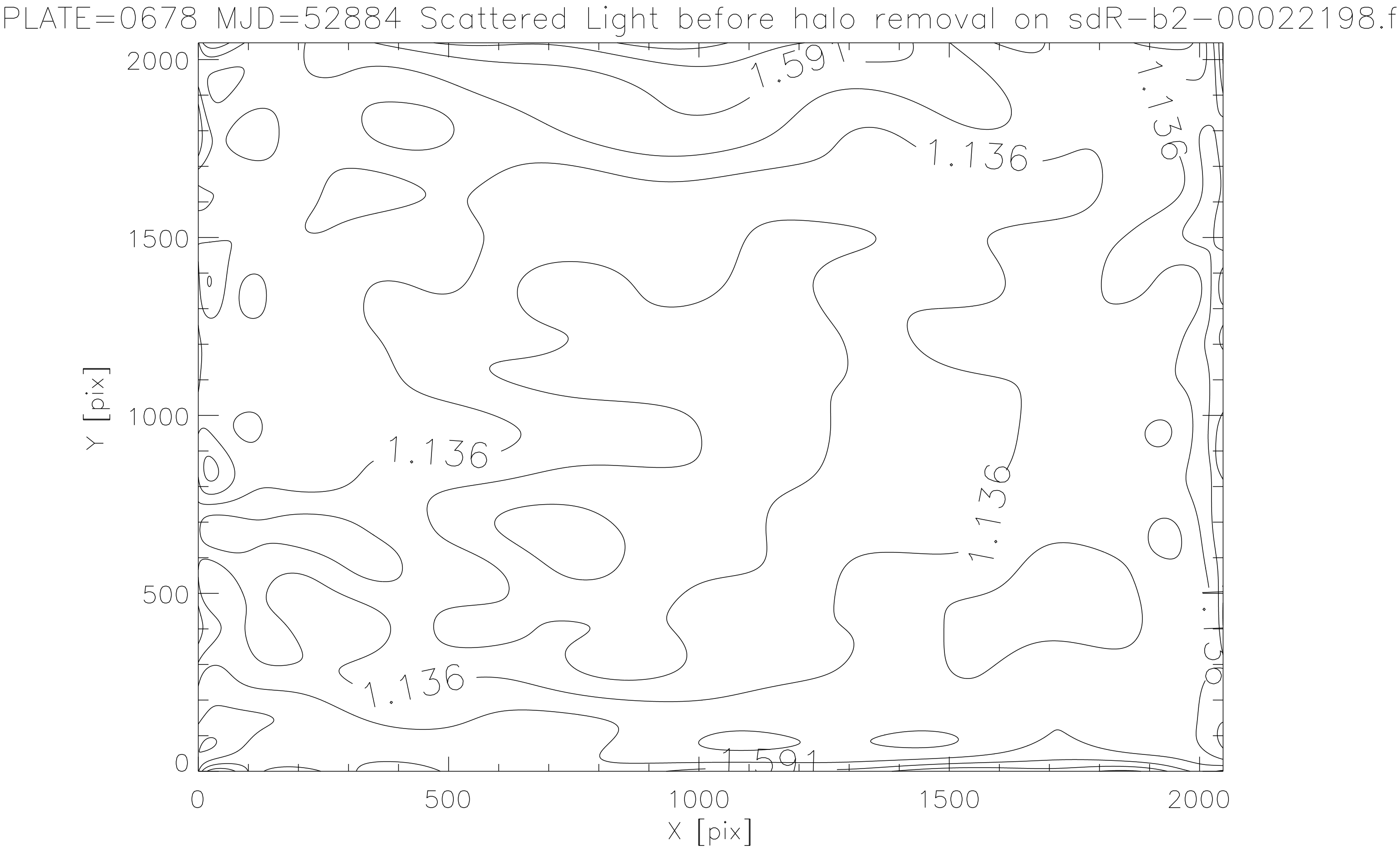



PLATE=0678 MJD=52884 sdR-b2-00022197.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
RED = sky fiber
Dispersion = 9.34 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.170
1.175
1.180
1.185
1.190
1.195
Airmass

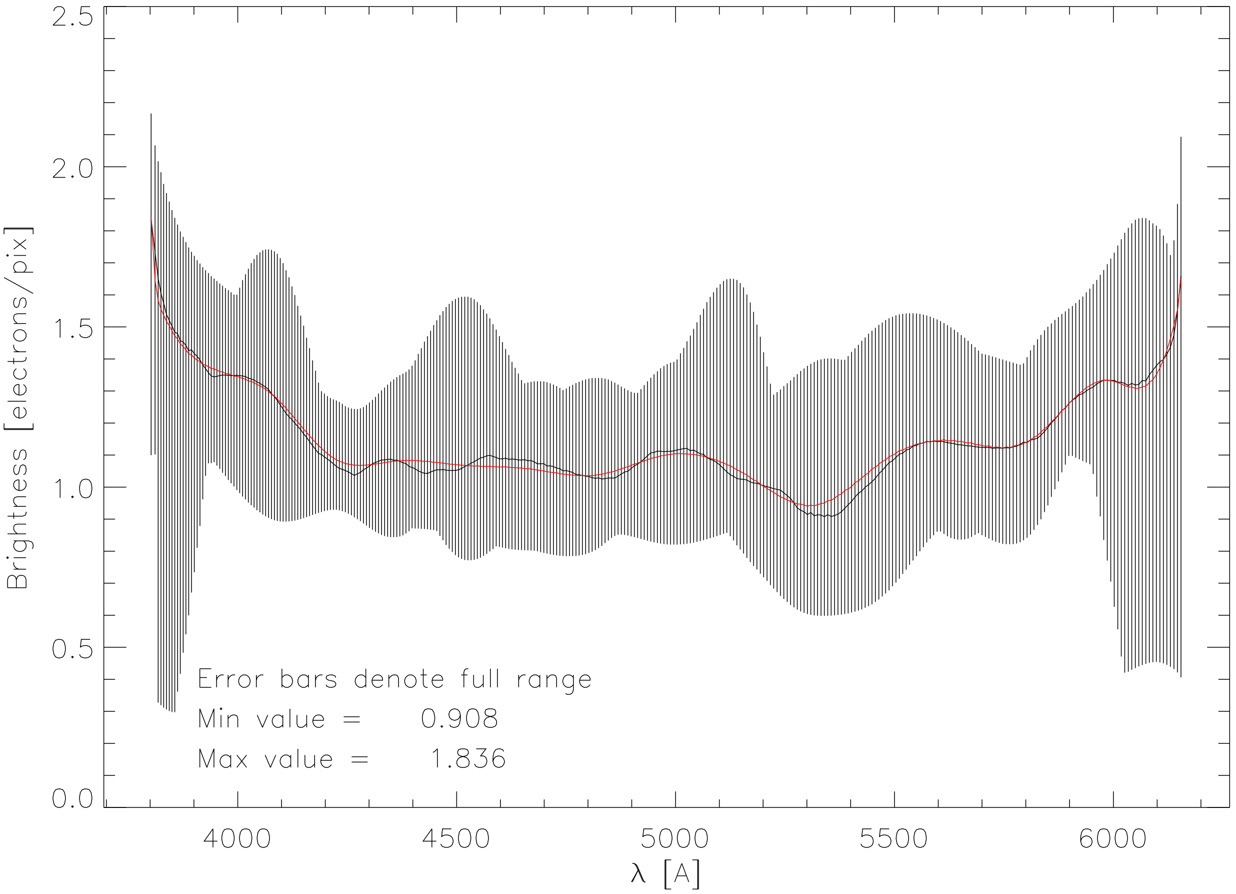

PLATE=0678 MJD=52884 sdR-b2-00022197.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.8×10⁴
2.6×10⁴
2.4×10⁴
2.2×10⁴
2.0×10⁴
1.8×10⁴
RED = sky fiber
Dispersion = 2.18 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
2.8×10⁴
2.6×10⁴
2.4×10⁴
2.2×10⁴
2.0×10⁴
1.8×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
2.8×10⁴
2.6×10⁴
2.4×10⁴
2.2×10⁴
2.0×10⁴
1.8×10⁴
1.170
1.175
1.180
1.185
1.190
1.195
Airmass



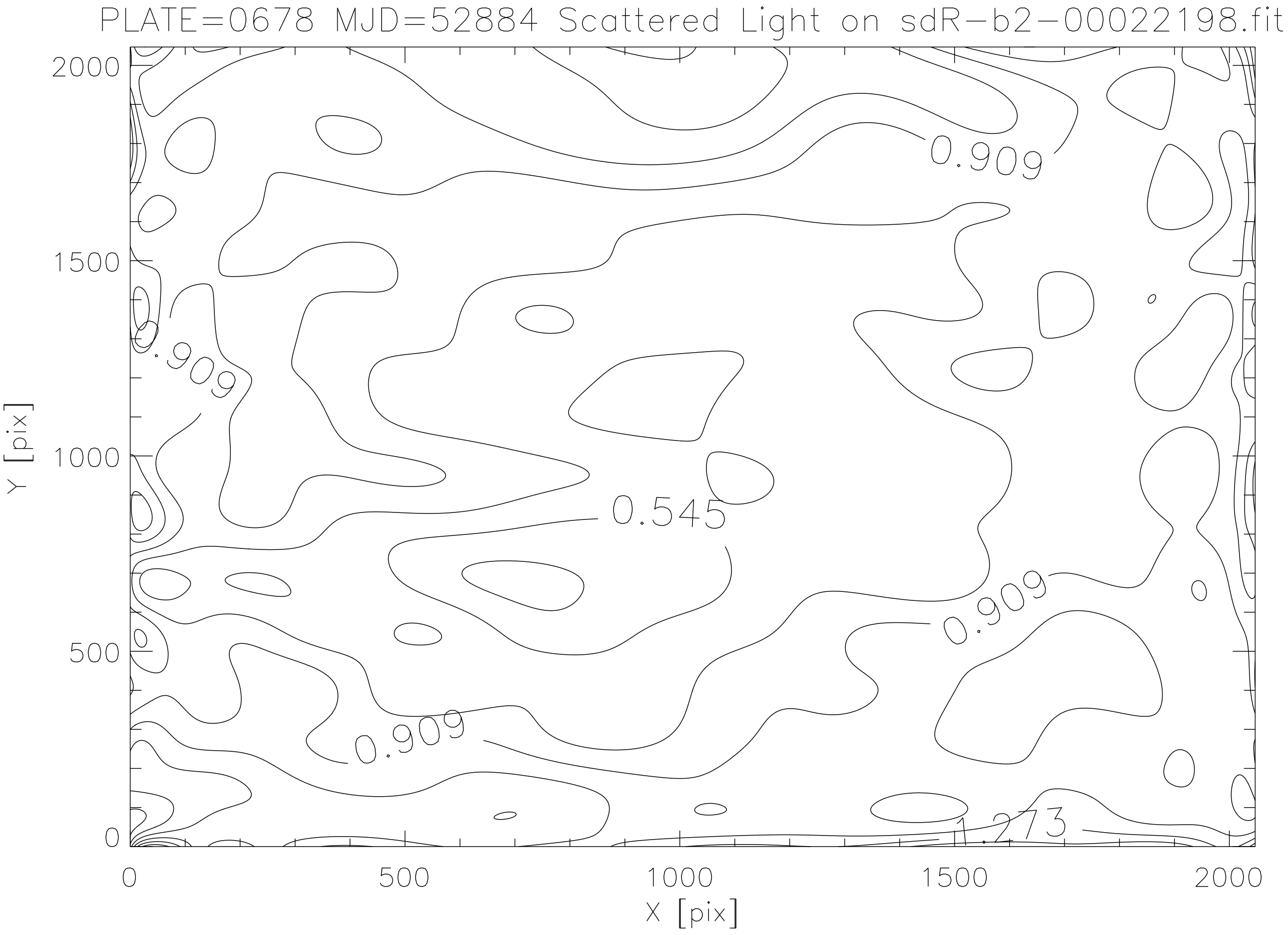
Mon Feb 25 23:23:20 2008



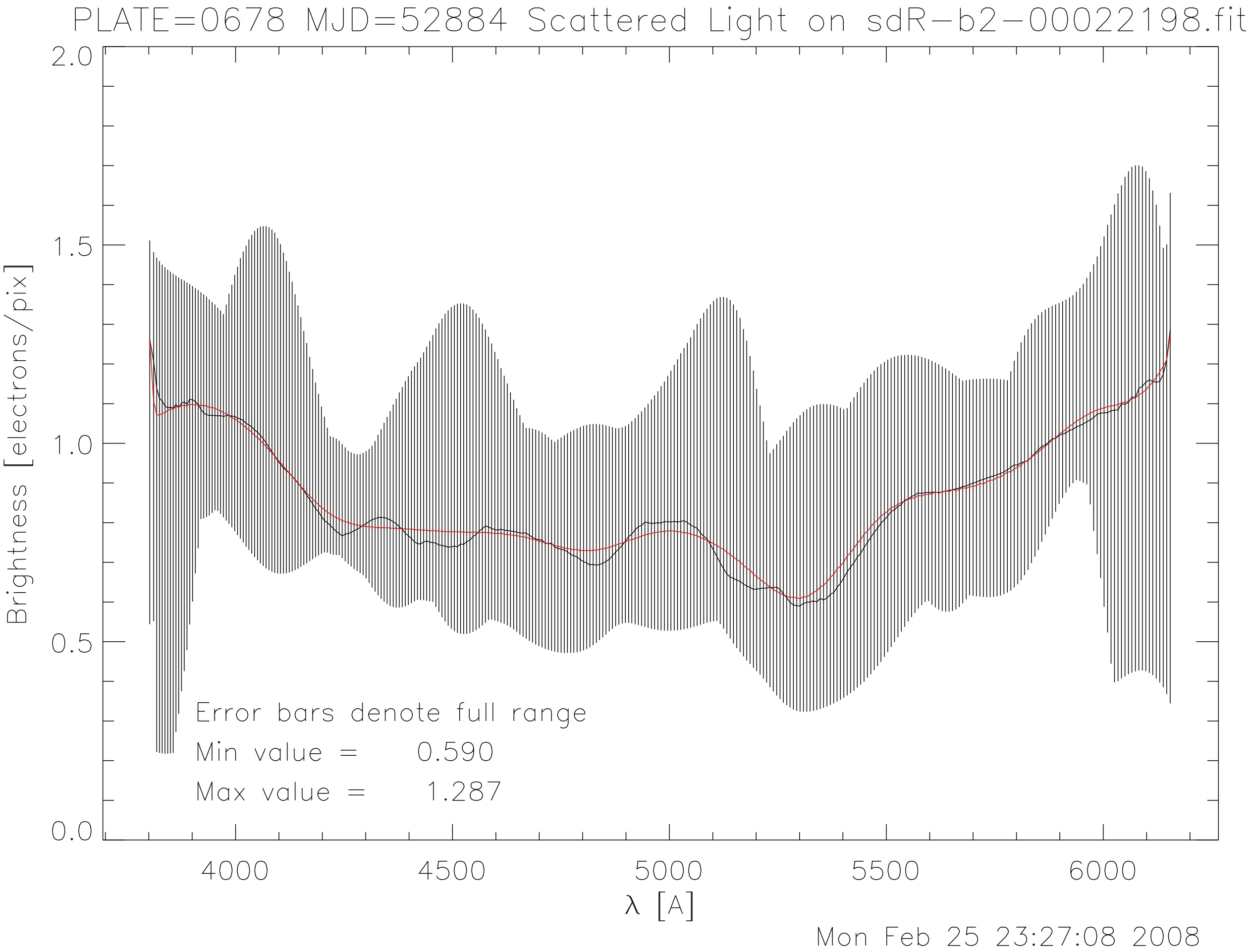
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022198.f

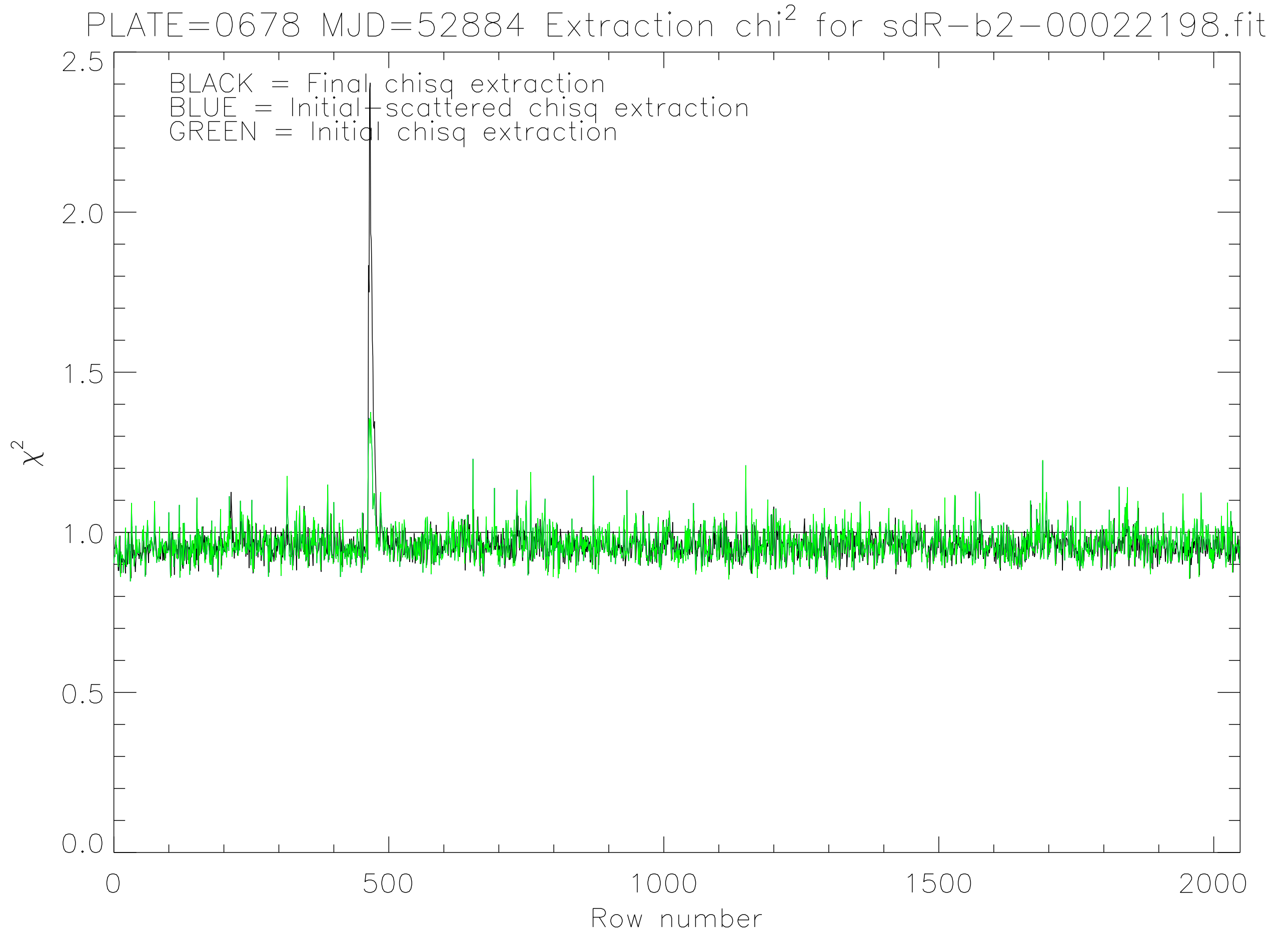

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-b2-00022198.f

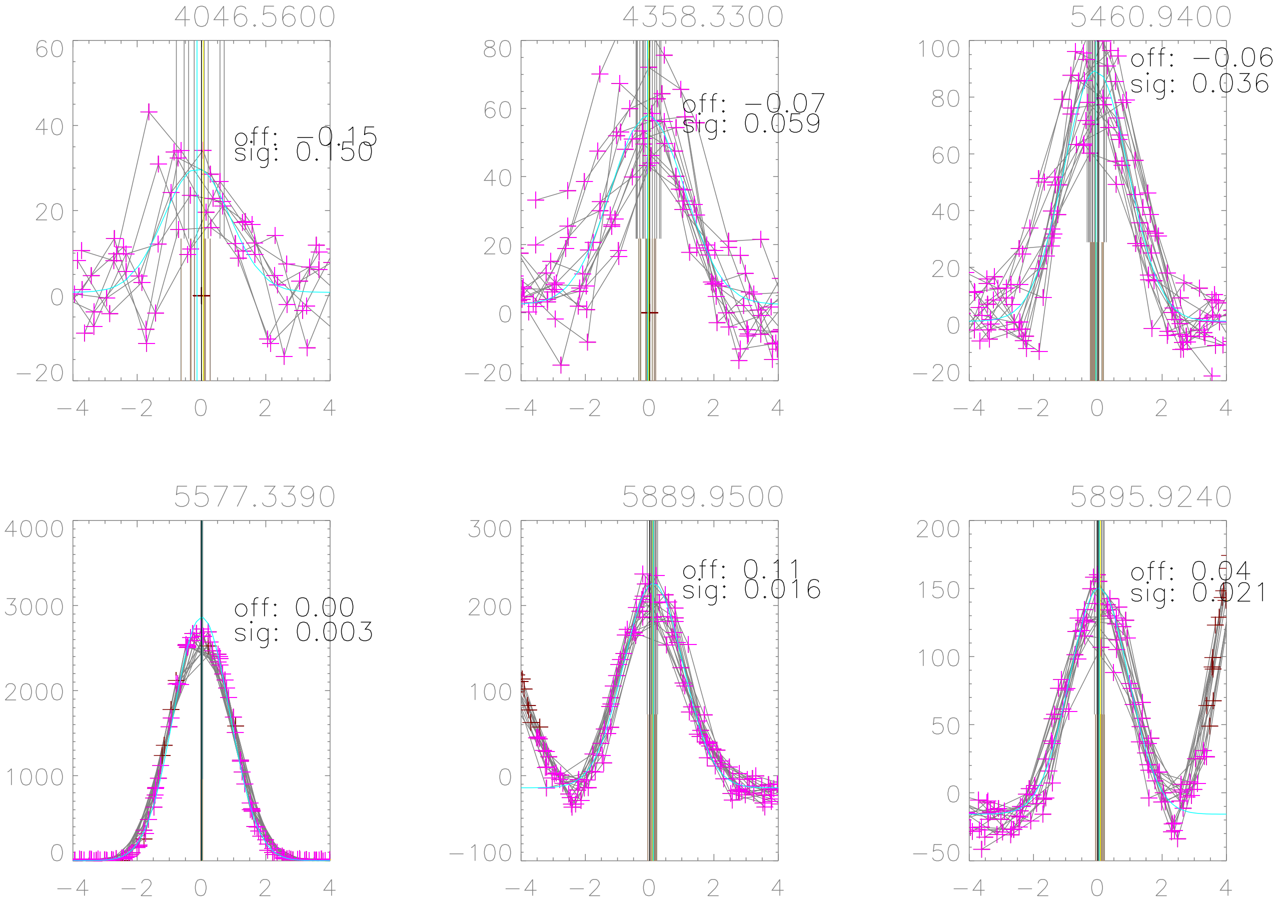
Mon Feb 25 23:24:01 2008

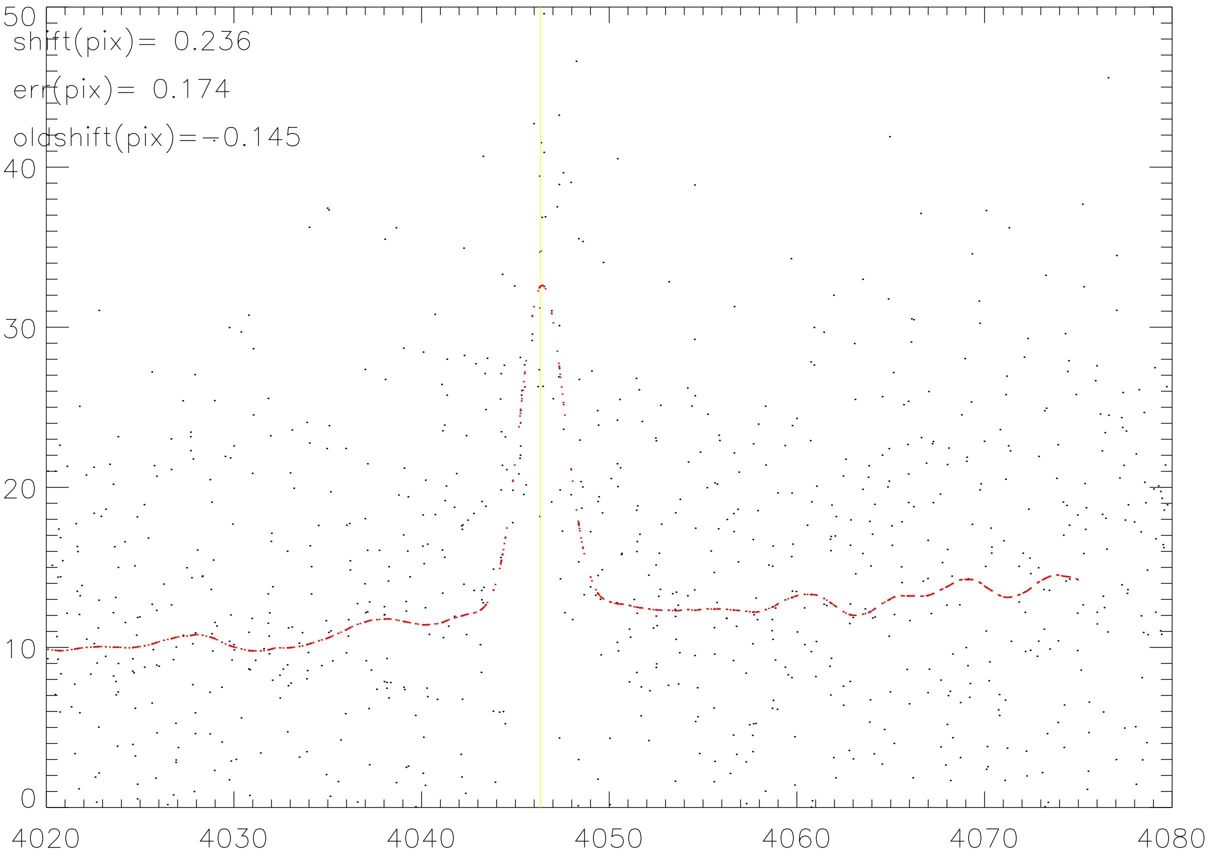


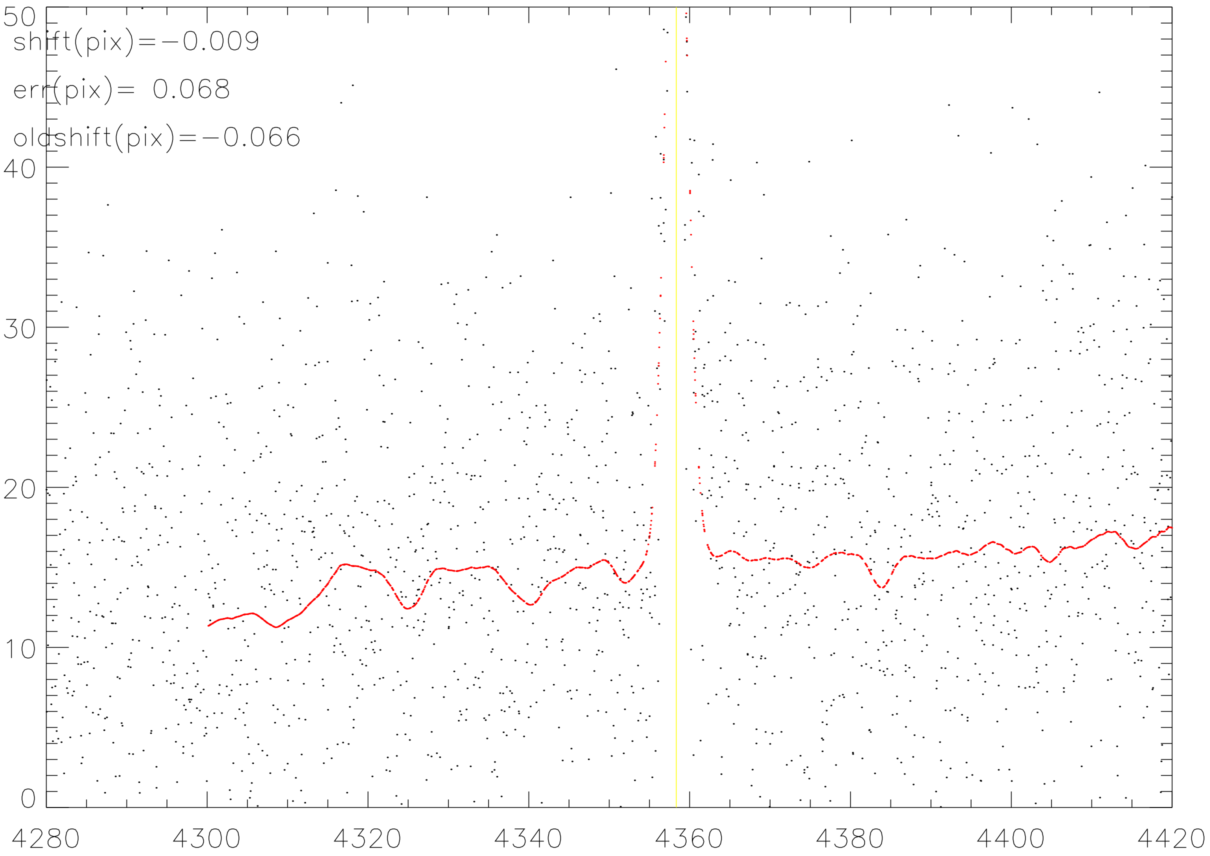
PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022198.fit

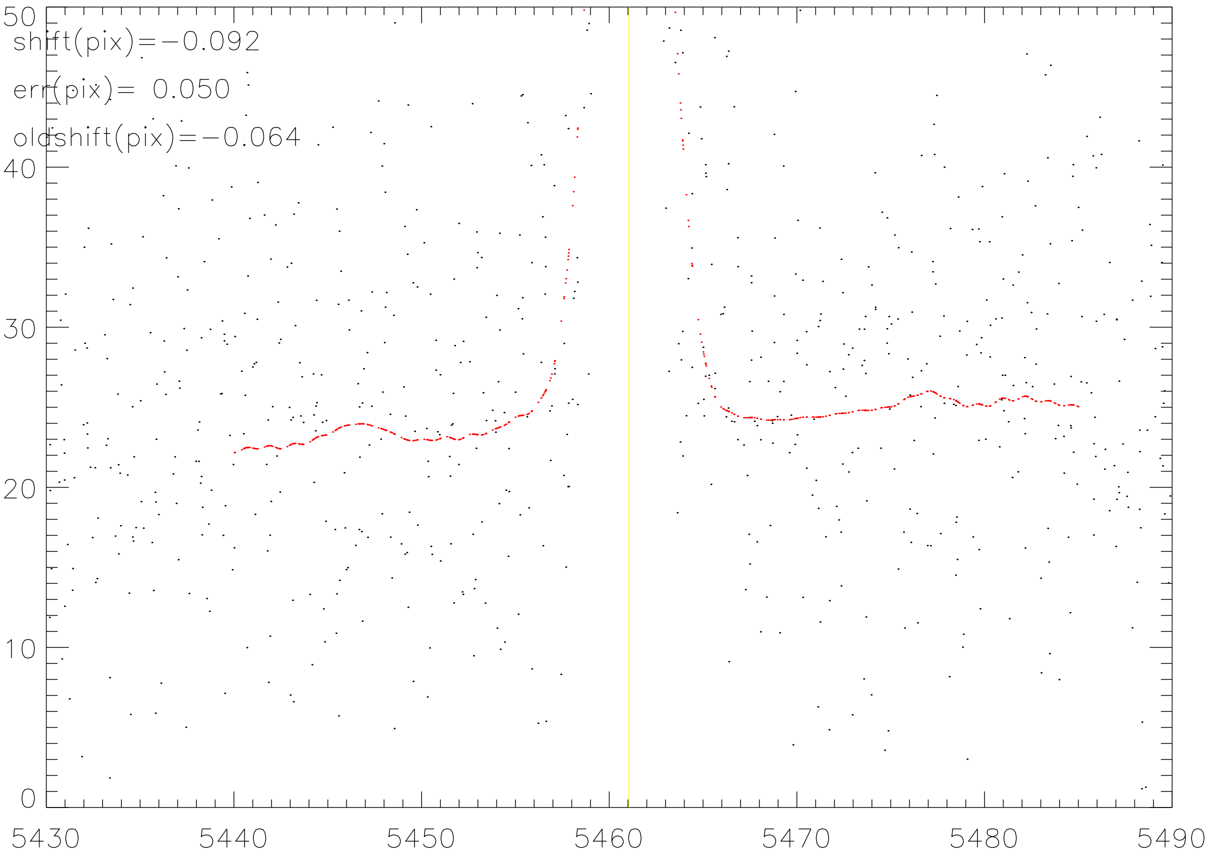

PLATE=0678 MJD=52884 Scattered Light on sdR-b2-00022198.fit
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 0.590
Max value = 1.287
Mon Feb 25 23:27:08 2008

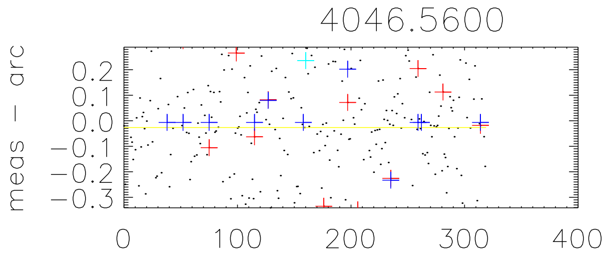

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-b2-00022198.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

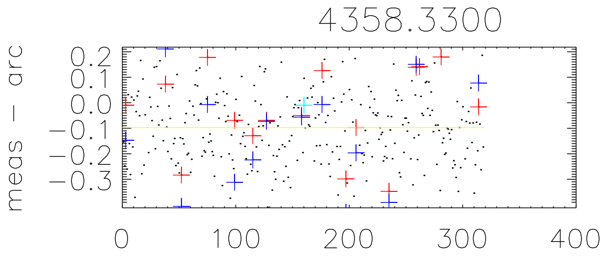

4046.5600
off: −0.15
sig: 0.150
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.07
sig: 0.059
80
60
40
20
0
−20
5460.9400
off: −0.06
sig: 0.036
100
80
60
40
20
0
−20
5577.3390
off: 0.00
sig: 0.003
4000
3000
2000
1000
0
5889.9500
off: 0.11
sig: 0.016
300
200
100
0
−100
5895.9240
off: 0.04
sig: 0.021
200
150
100
50
0
−50

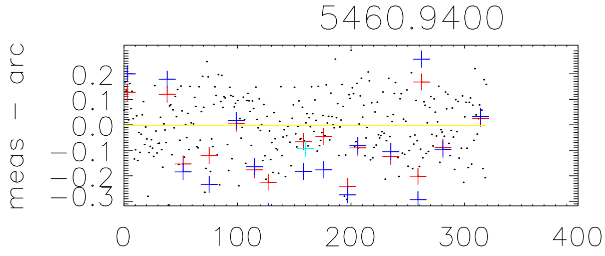

shift(pix)= 0.236
err(pix)= 0.174
oldshift(pix)=−0.145
0
10
20
30
40
50
4020
4030
4040
4050
4060
4070
4080

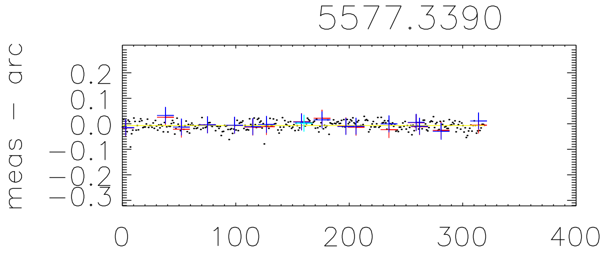

shift(pix)=−0.009
err(pix)= 0.068
oldshift(pix)=−0.066
0
10
20
30
40
50
4280
4300
4320
4340
4360
4380
4400
4420

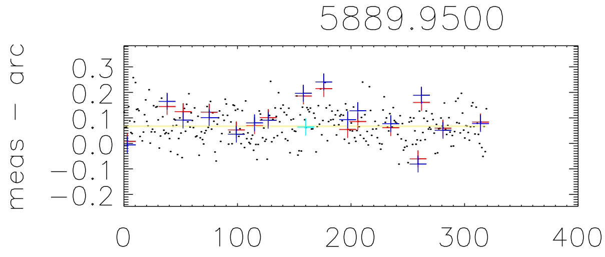

shift(pix)=−0.092
err(pix)= 0.050
oldshift(pix)=−0.064
50
40
30
20
10
0
5430
5440
5450
5460
5470
5480
5490

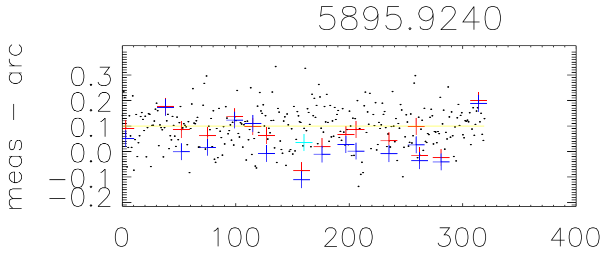

4046.5600

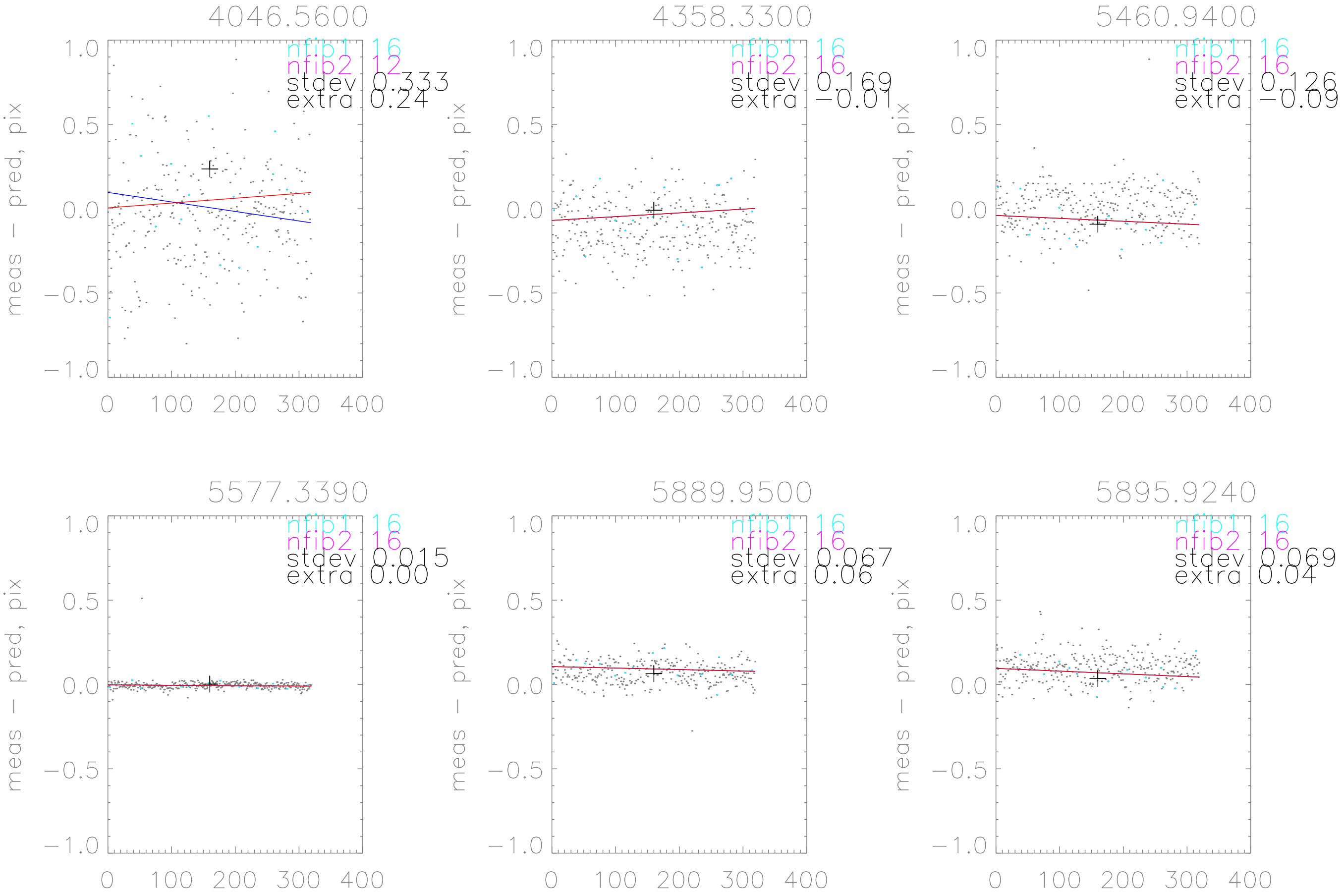

4358.3300

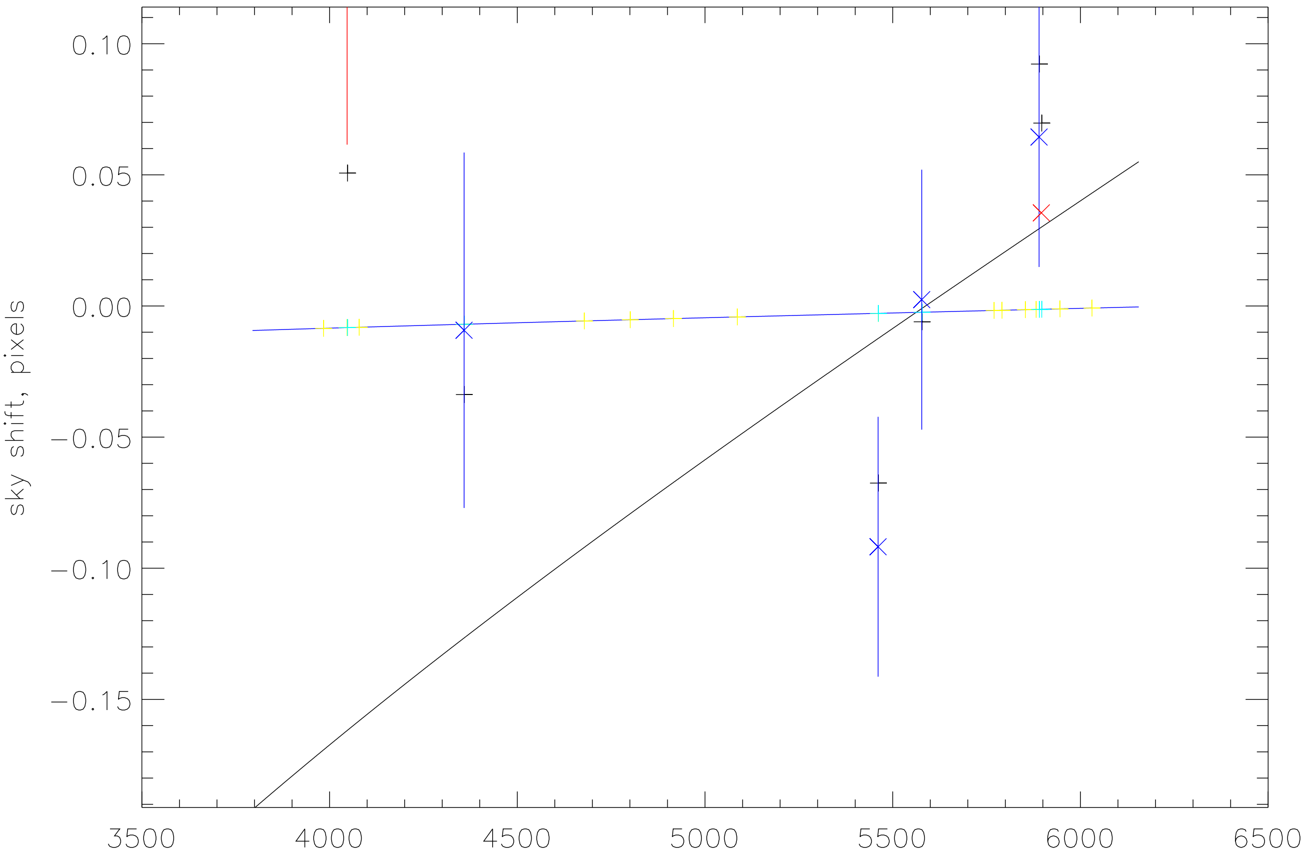

5460.9400

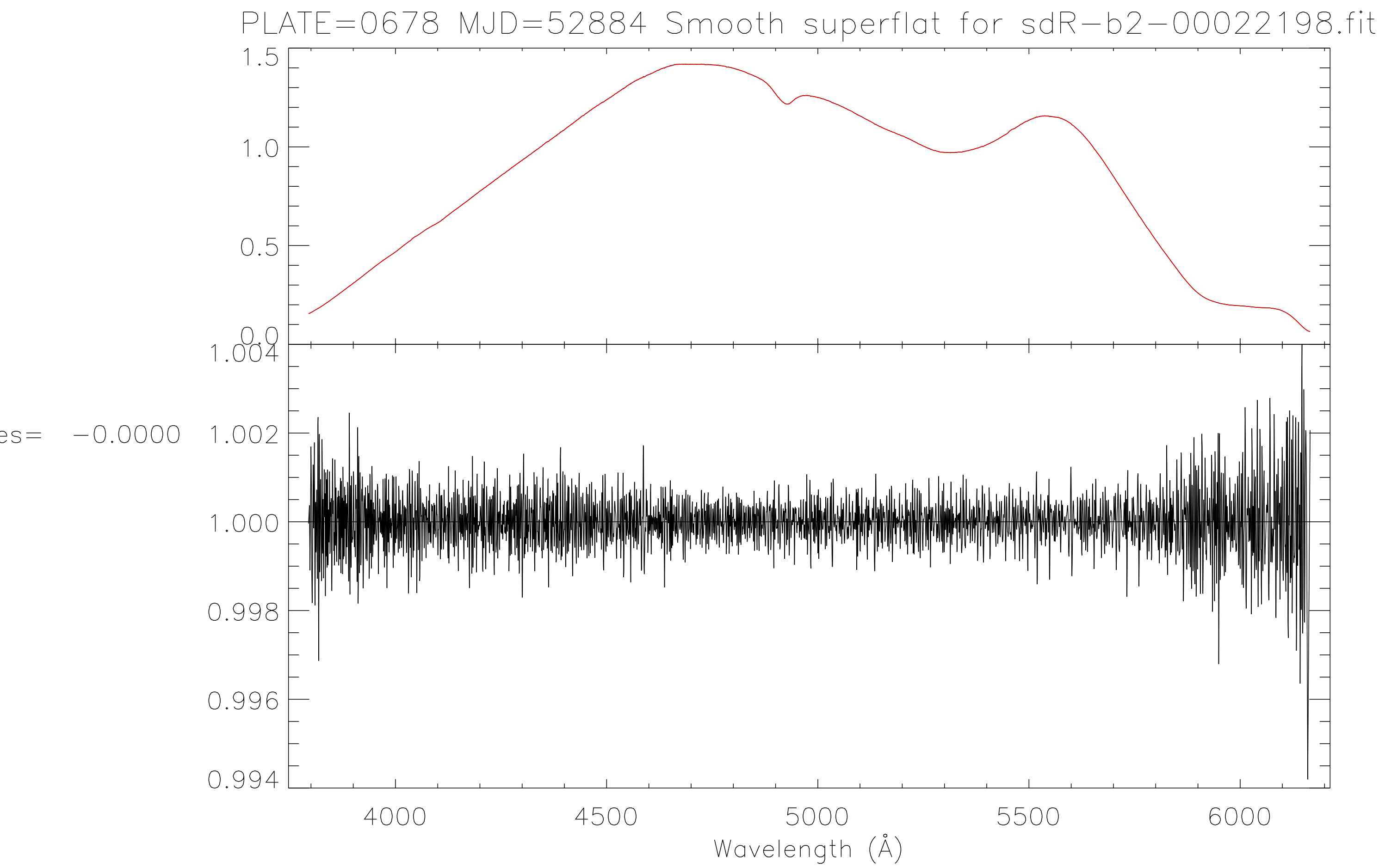

5577.3390

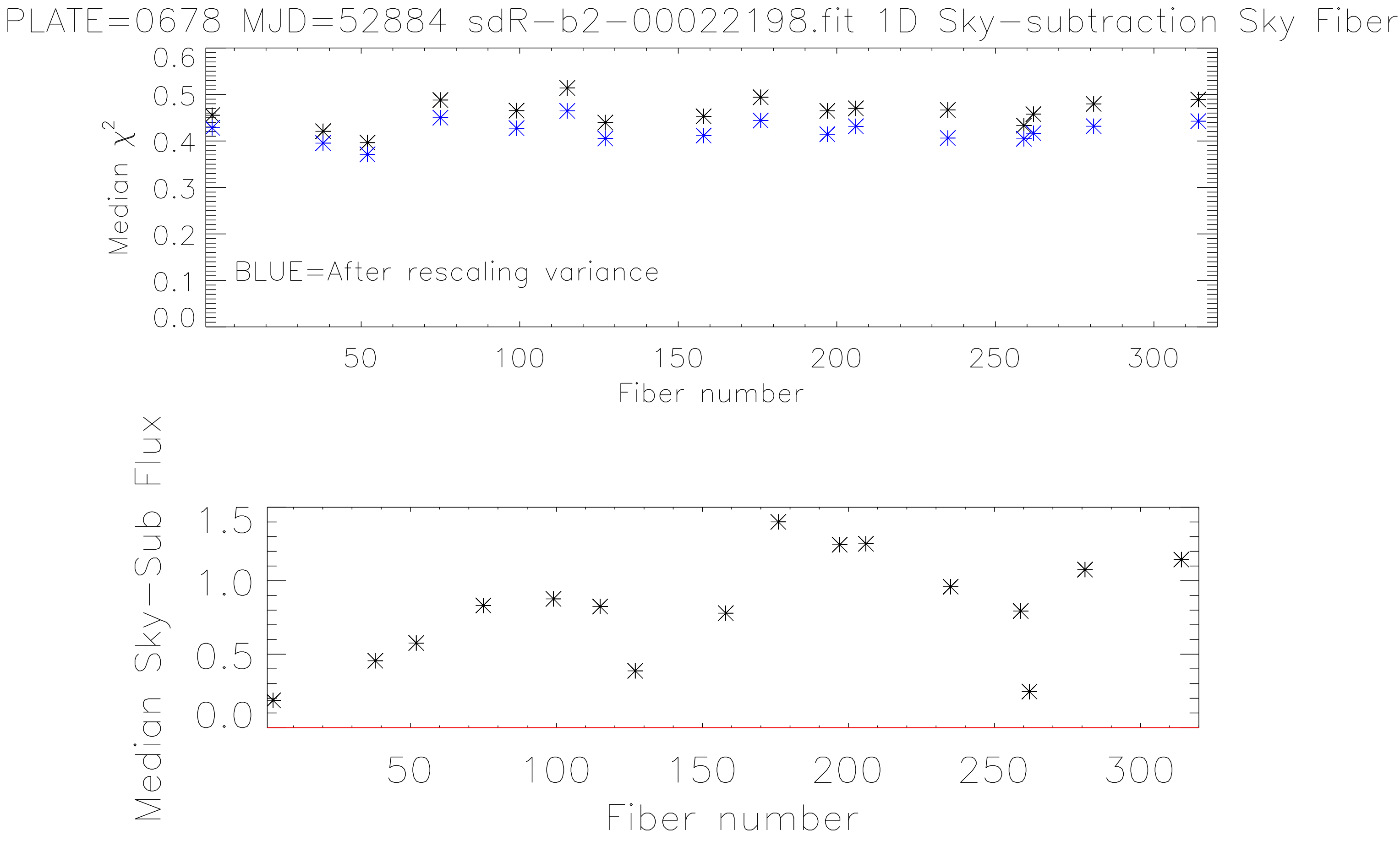

5889.9500


5895.9240

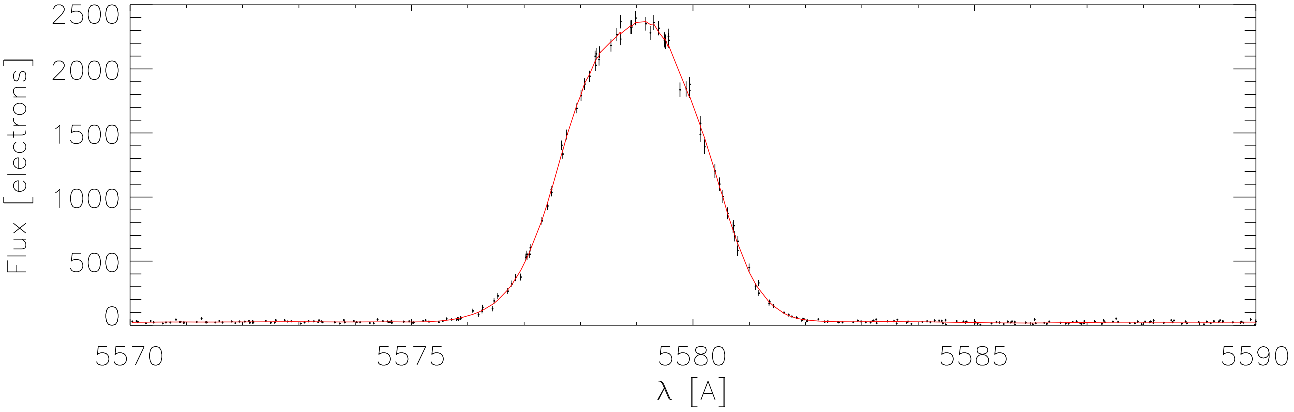

4046.5600
nfib1 16
nfib2 12
stdev 0.333
extra 0.24
4358.3300
nfib1 16
nfib2 16
stdev 0.169
extra −0.01
5460.9400
nfib1 16
nfib2 16
stdev 0.126
extra −0.09
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra 0.00
5889.9500
nfib1 16
nfib2 16
stdev 0.067
extra 0.06
5895.9240
nfib1 16
nfib2 16
stdev 0.069
extra 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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

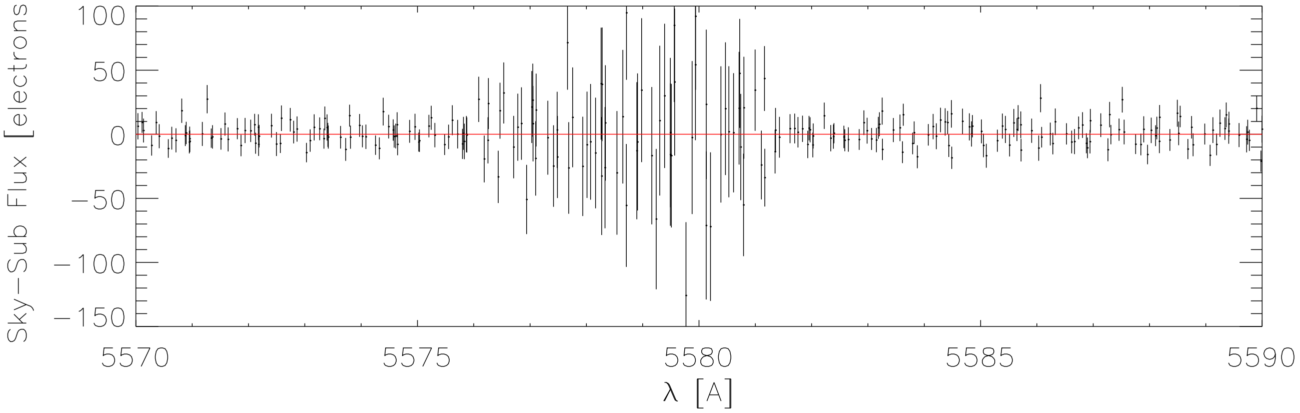

PLATE=0678 MJD=52884 Smooth superflat for sdR-b2-00022198.fit
1.5
1.0
0.5
0.0
1.004
es= -0.0000
1.002
1.000
0.998
0.996
0.994
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=0678 MJD=52884 sdR-b2-00022198.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
0.0
0.5
1.0
1.5
50
100
150
200
250
300
Fiber number

PLATE=0678 MJD=52884 sdR-b2-00022198.fit 1D Sky-subtraction Sky Fibers

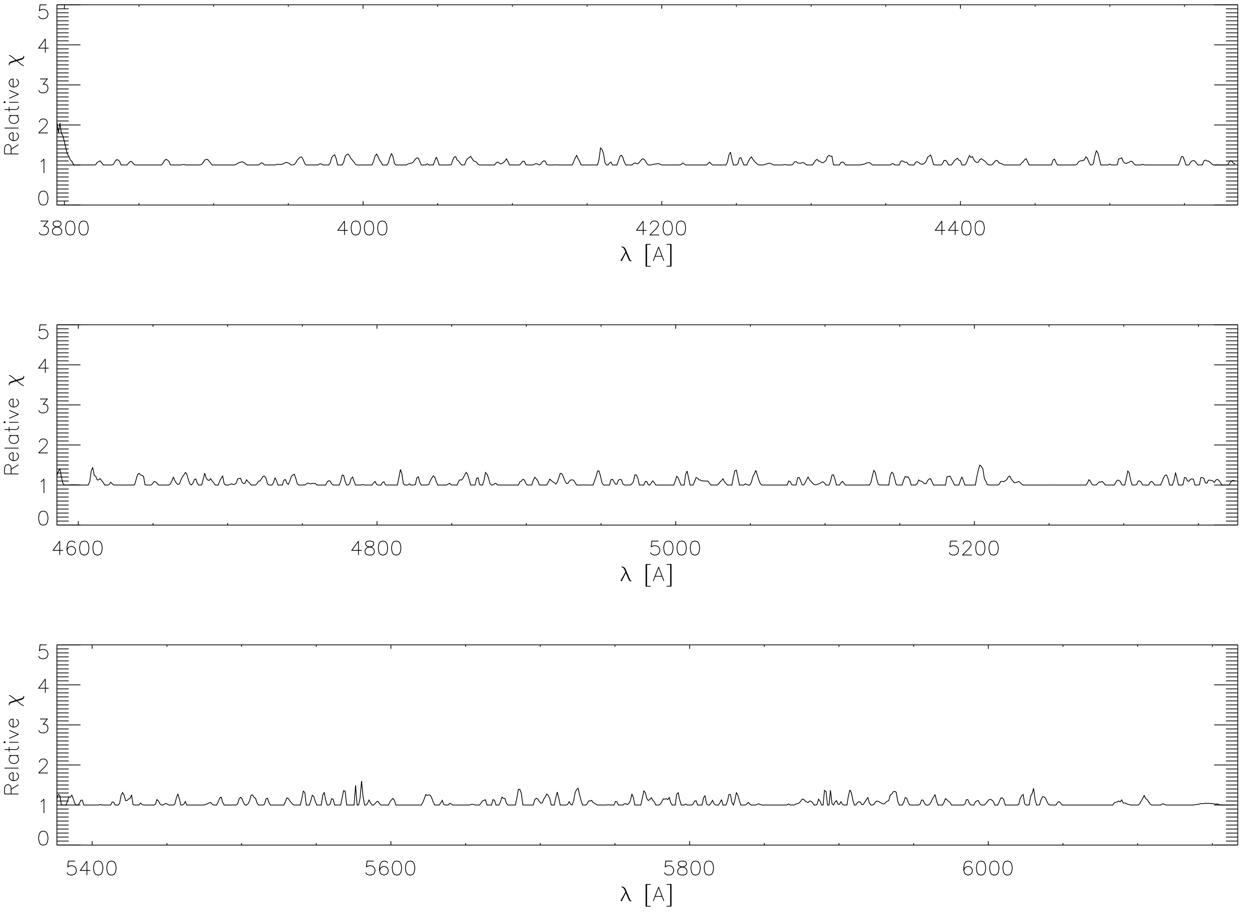


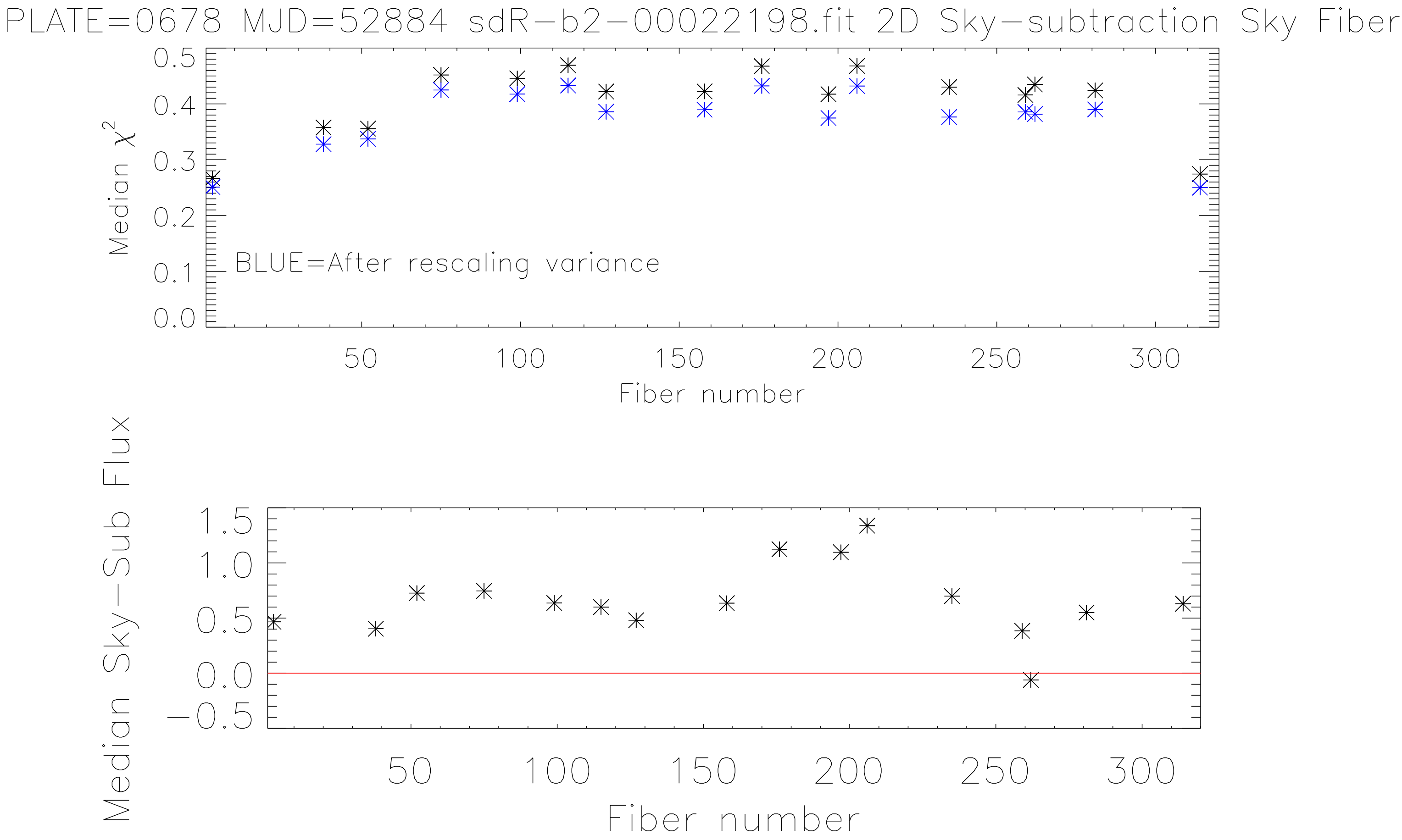
PLATE=0678 MJD=52884 sdR-b2-00022198.fit 1D Sky-subtraction Sky-subtracted Sky F

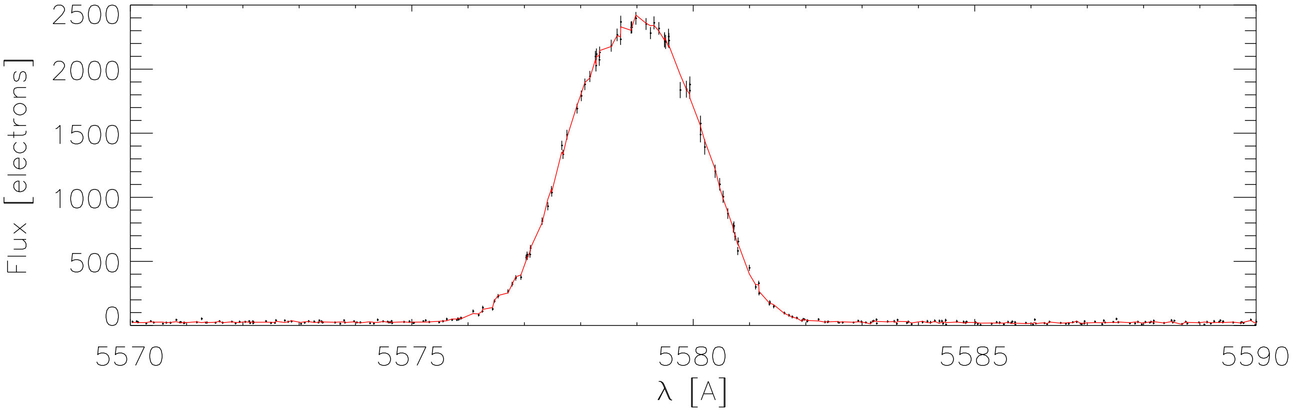


Number of sky fibers = 16

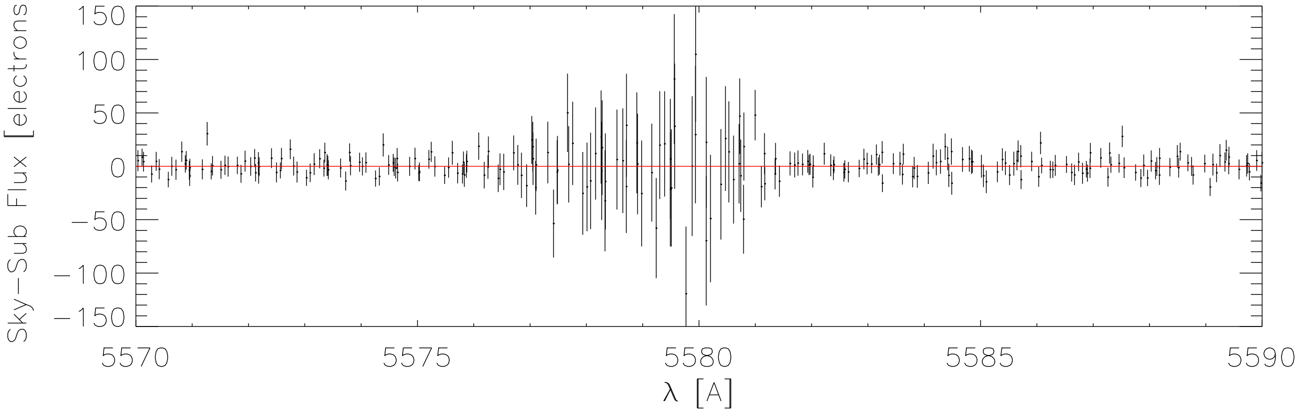
PLATE=0678 MJD=52884 sdR-b2-00022198.fit 1D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-b2-00022198.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
1.5
1.0
0.5
0.0
−0.5
50
100
150
200
250
300
Fiber number



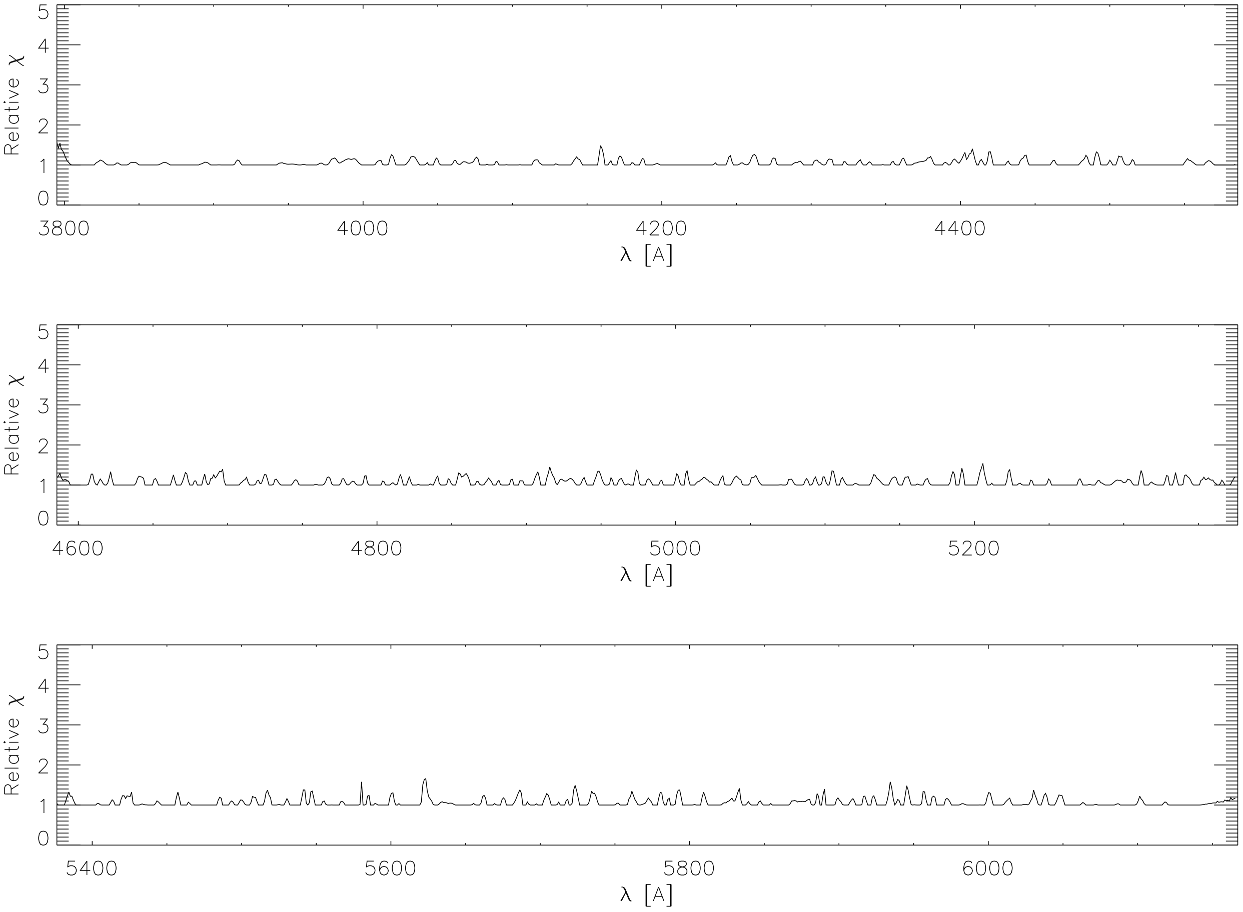
PLATE=0678 MJD=52884 sdR-b2-00022198.fit 2D Sky-subtraction Sky Fibers

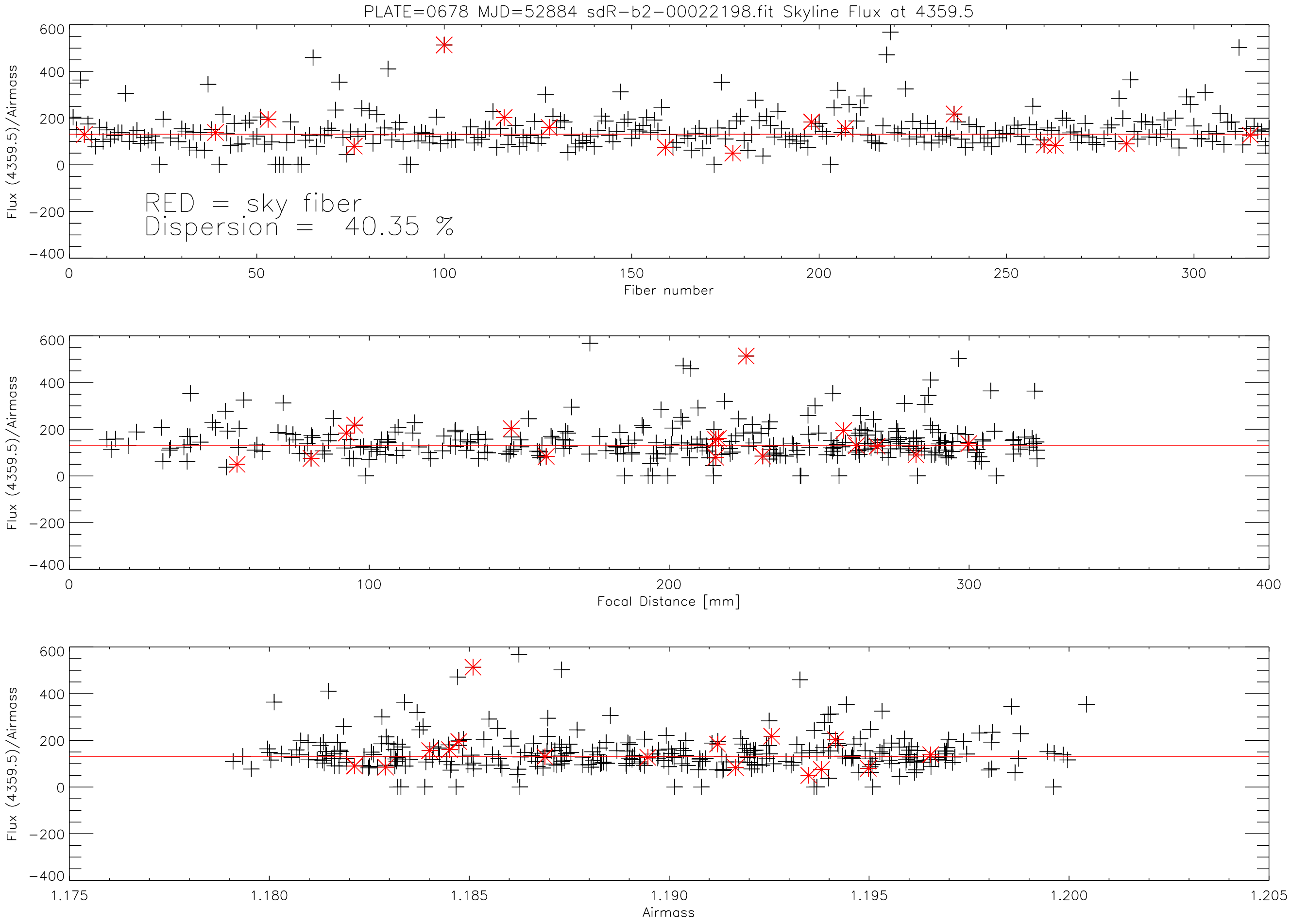


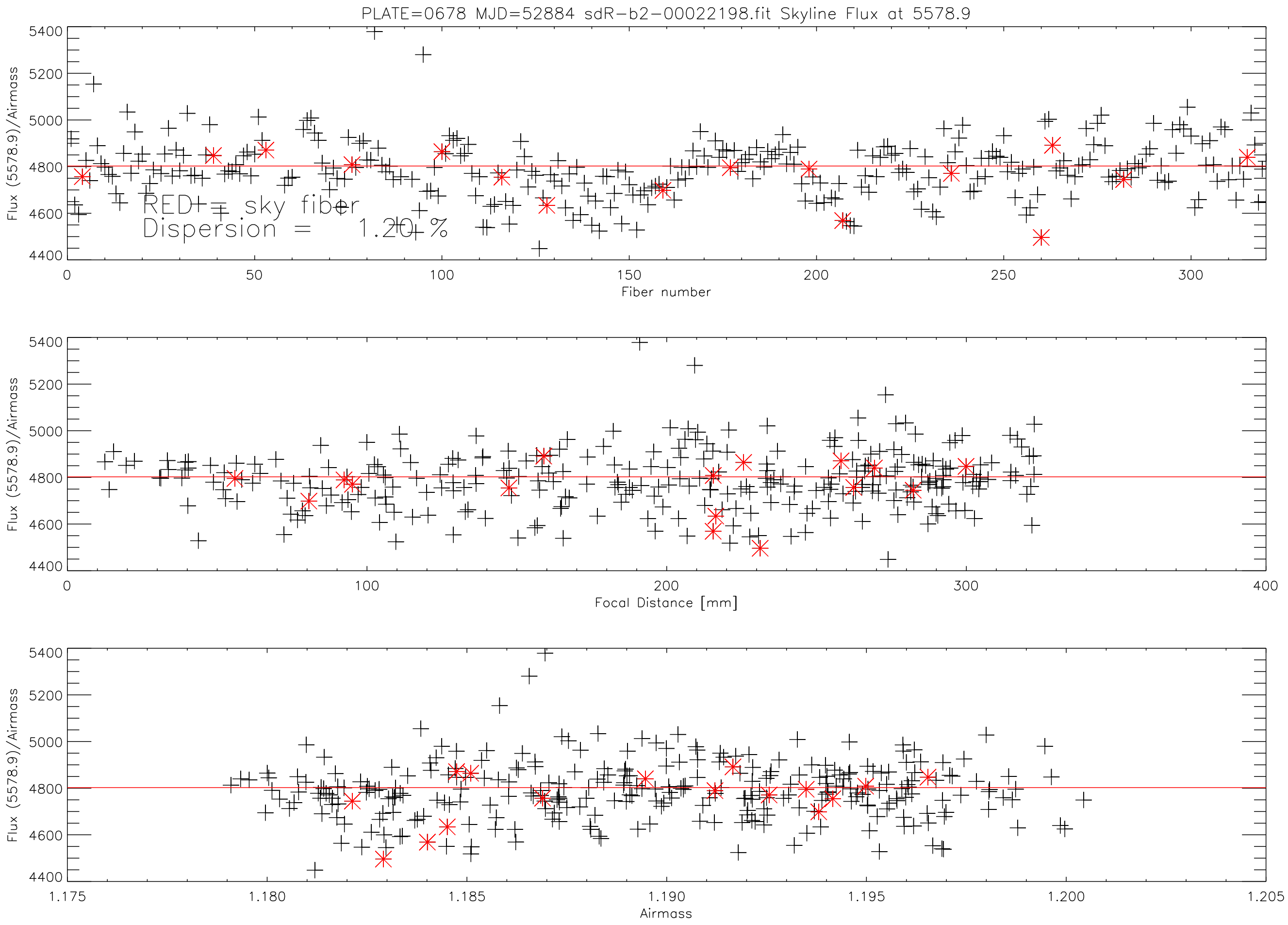
PLATE=0678 MJD=52884 sdR-b2-00022198.fit 2D Sky-subtraction Sky-subtracted Sky F

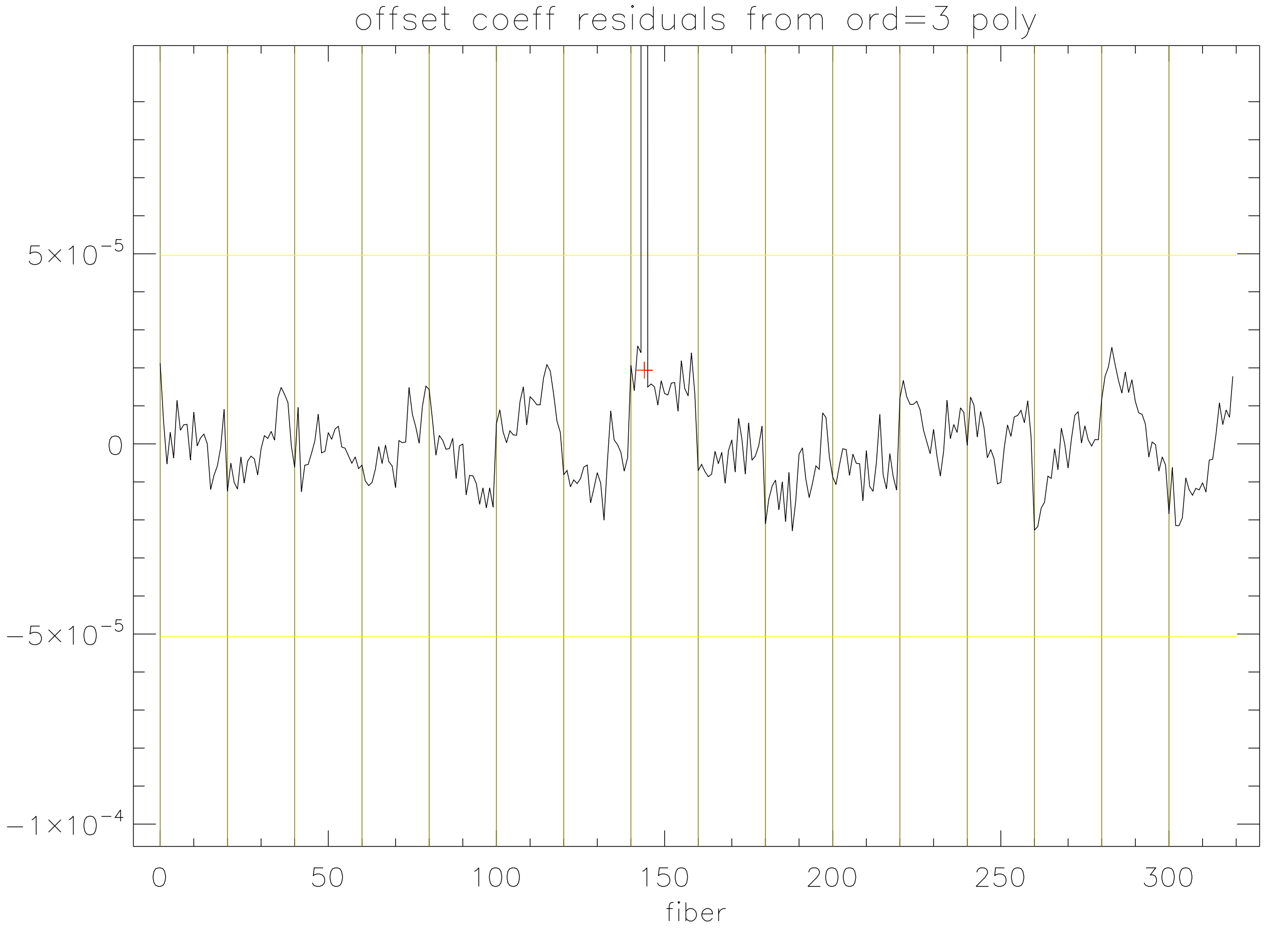
Number of sky fibers = 16

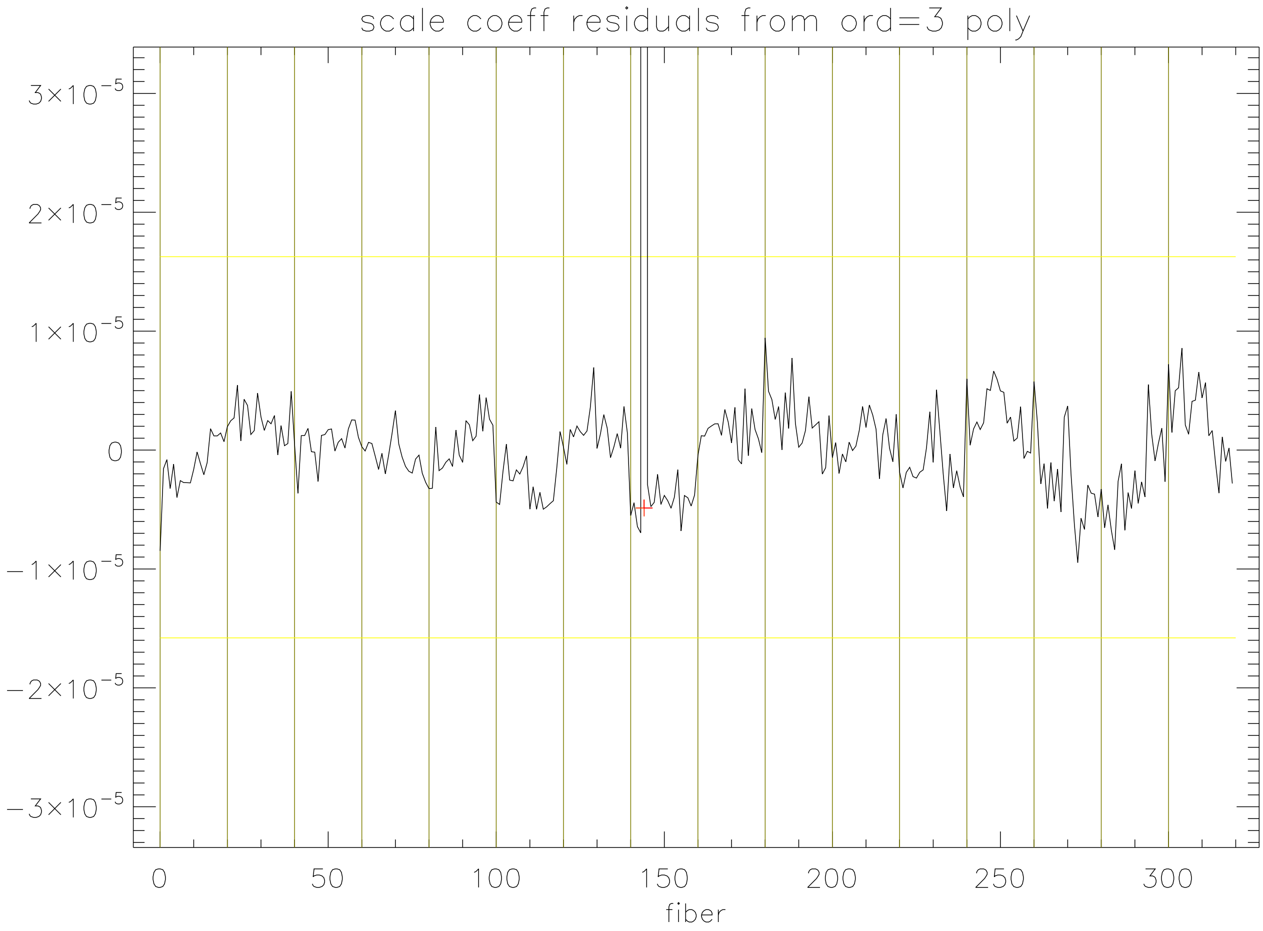
PLATE=0678 MJD=52884 sdR-b2-00022198.fit 2D Sky-subtraction Rescaled Errors

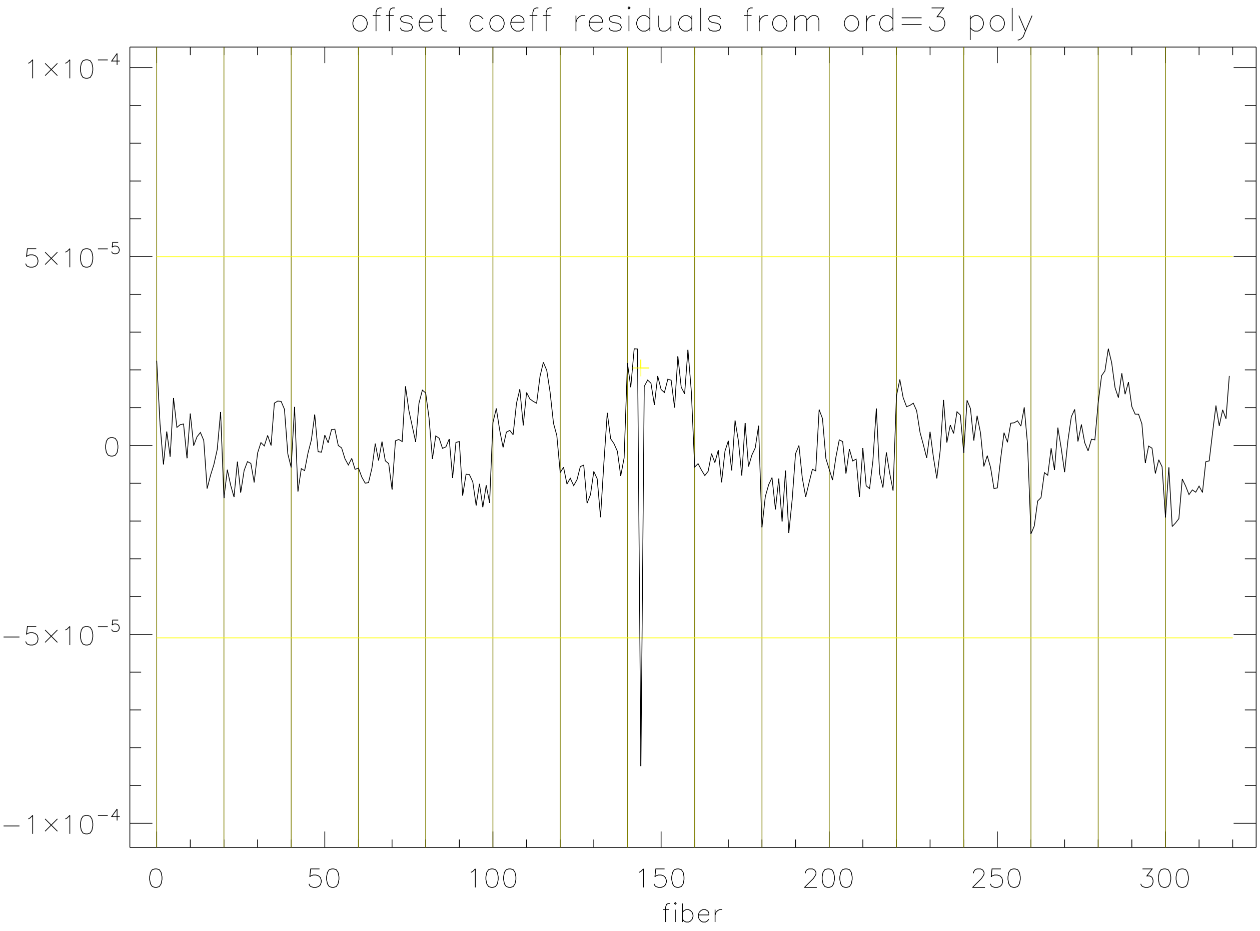


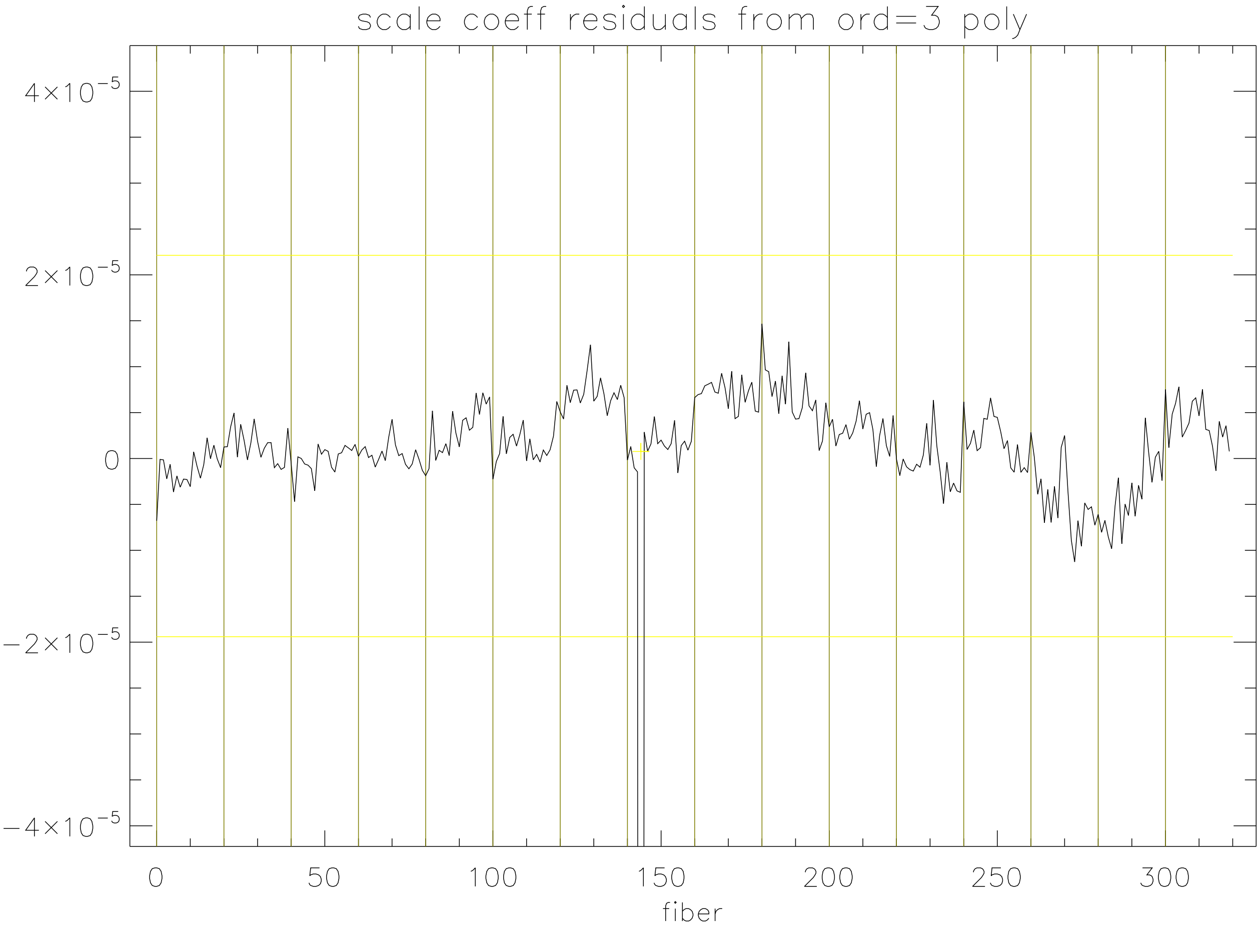

PLATE=0678 MJD=52884 sdR-b2-00022198.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
600
400
200
0
-200
-400
RED = sky fiber
Dispersion = 40.35 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
600
400
200
0
-200
-400
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
600
400
200
0
-200
-400
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass

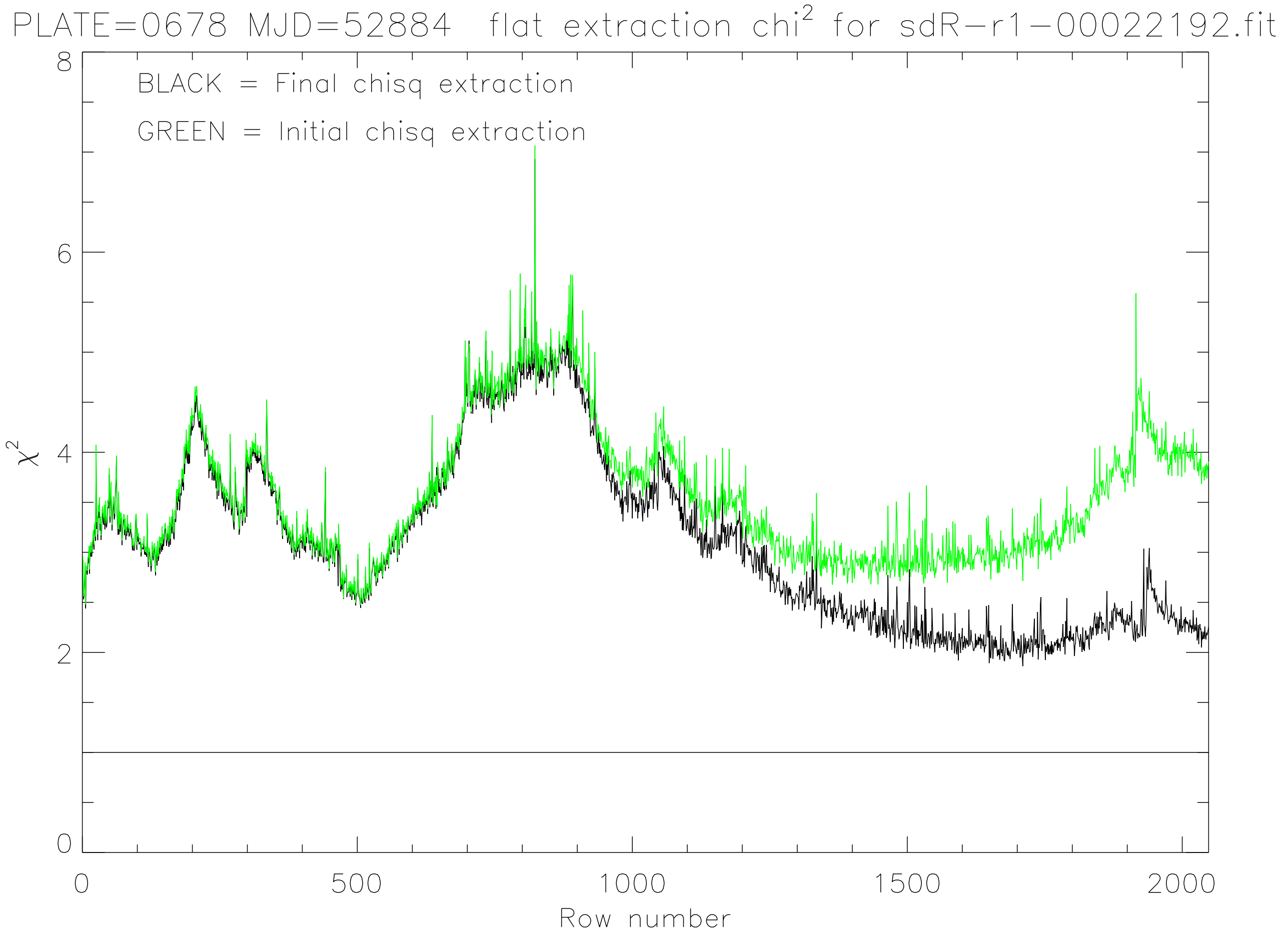

PLATE=0678 MJD=52884 sdR-b2-00022198.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.20 %
Flux (5578.9)/Airmass
5400
5200
5000
4800
4600
4400
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
5400
5200
5000
4800
4600
4400
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
5400
5200
5000
4800
4600
4400
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass

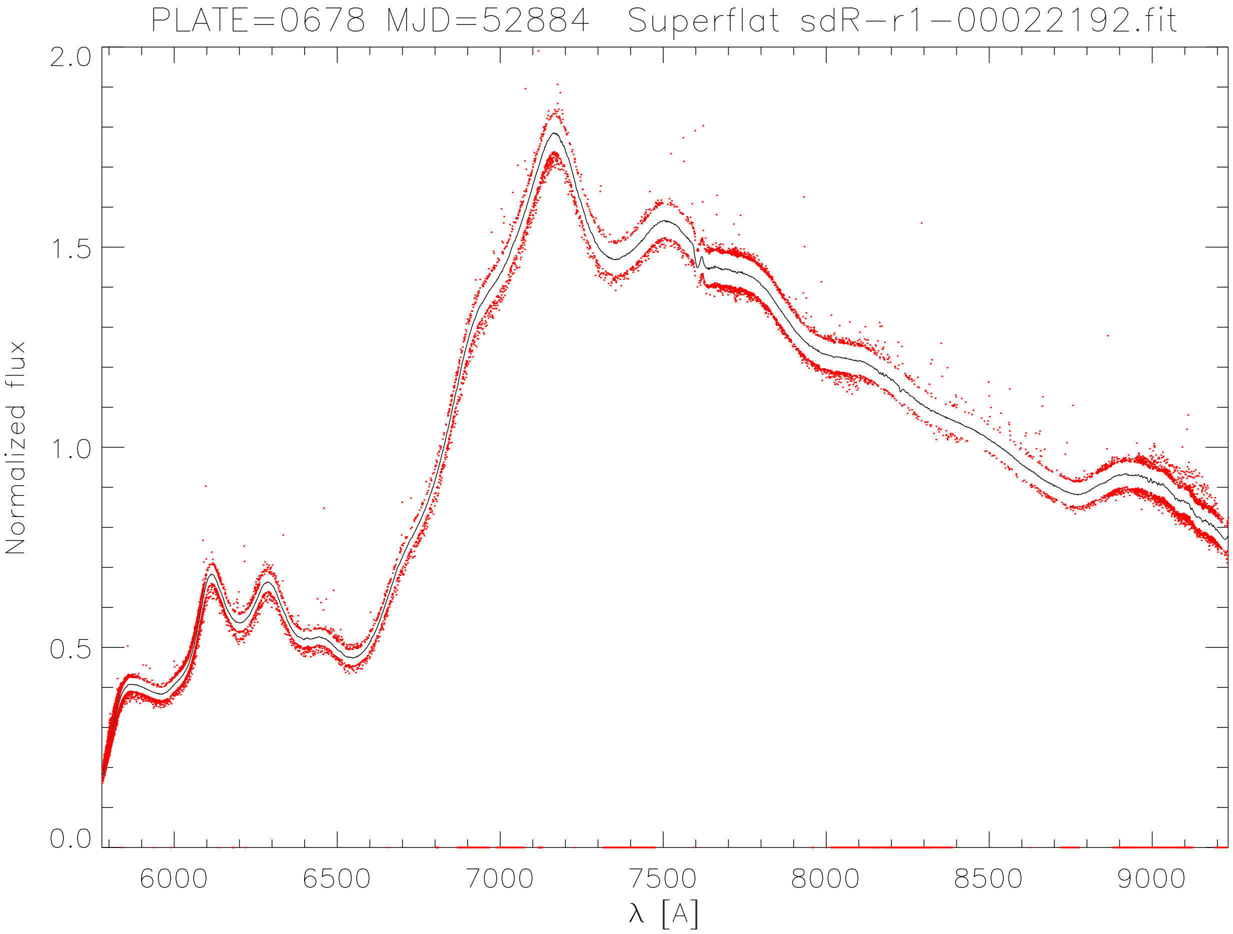

offset coeff residuals from ord=3 poly
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

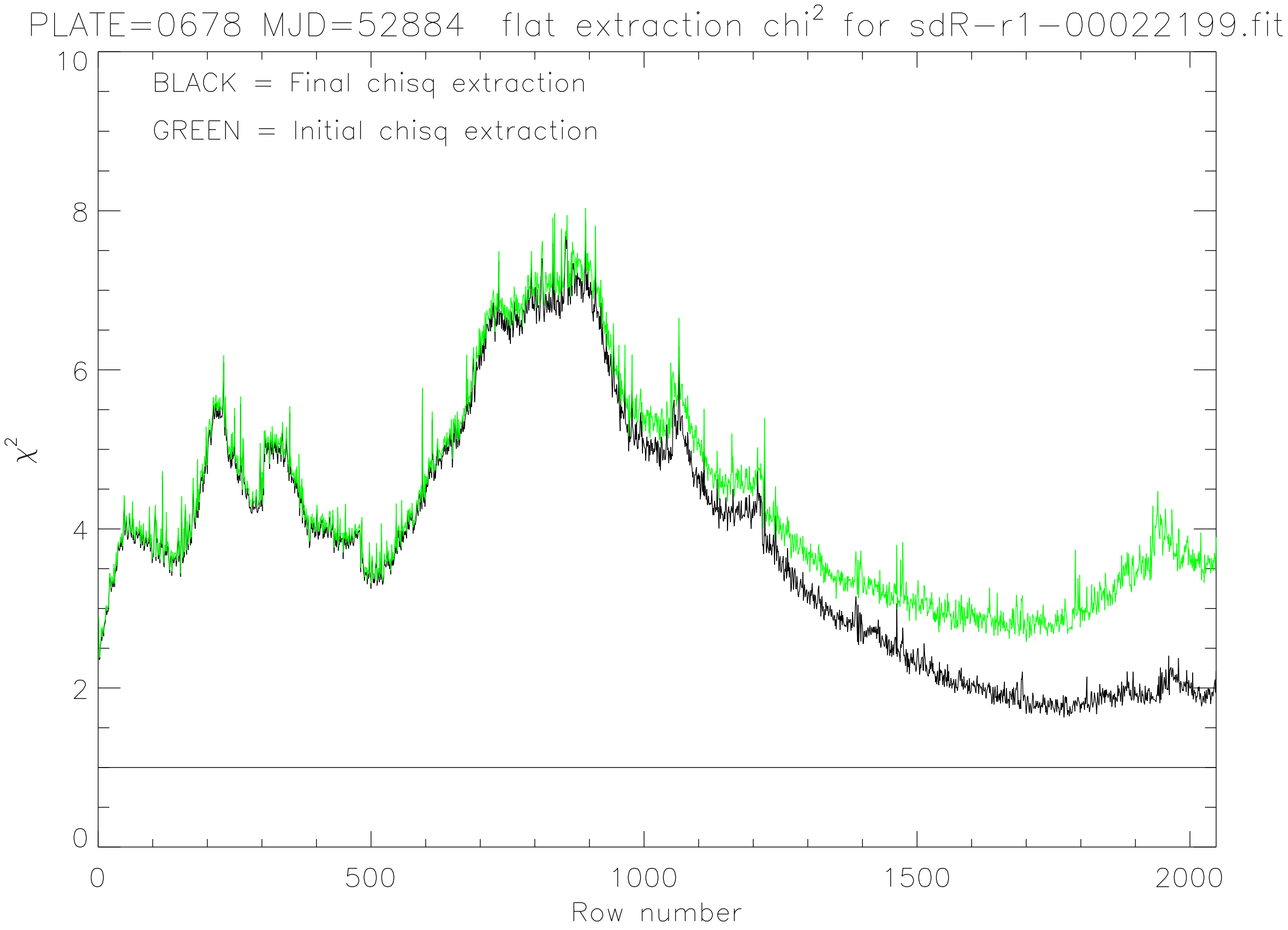

scale coeff residuals from ord=3 poly
3×10^-5
2×10^-5
1×10^-5
0
−1×10^-5
−2×10^-5
−3×10^-5
0
50
100
150
200
250
300
fiber

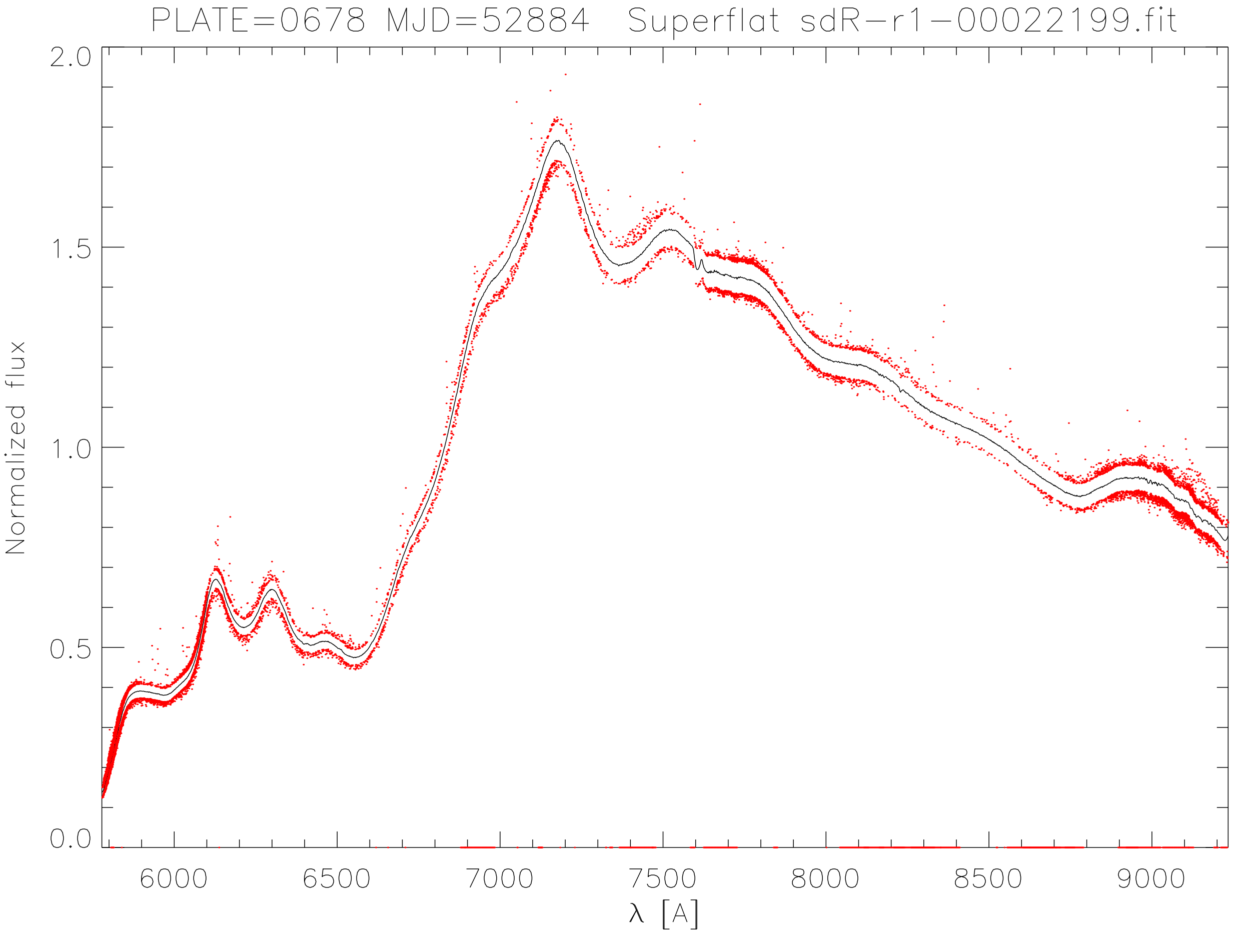

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

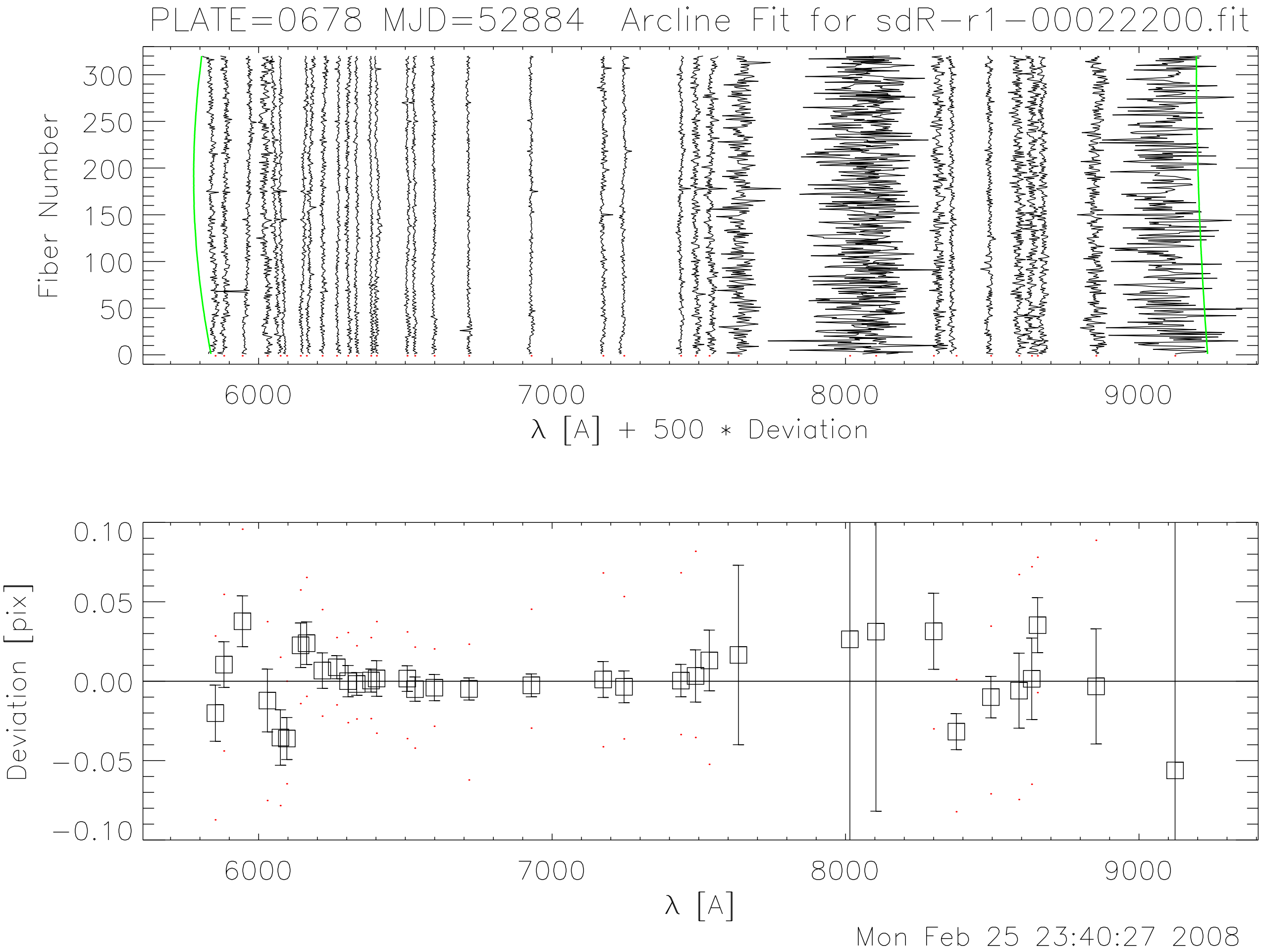

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
-2×10^{-5}
-4×10^{-5}
0
50
100
150
200
250
300
fiber


PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-r1-00022192.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

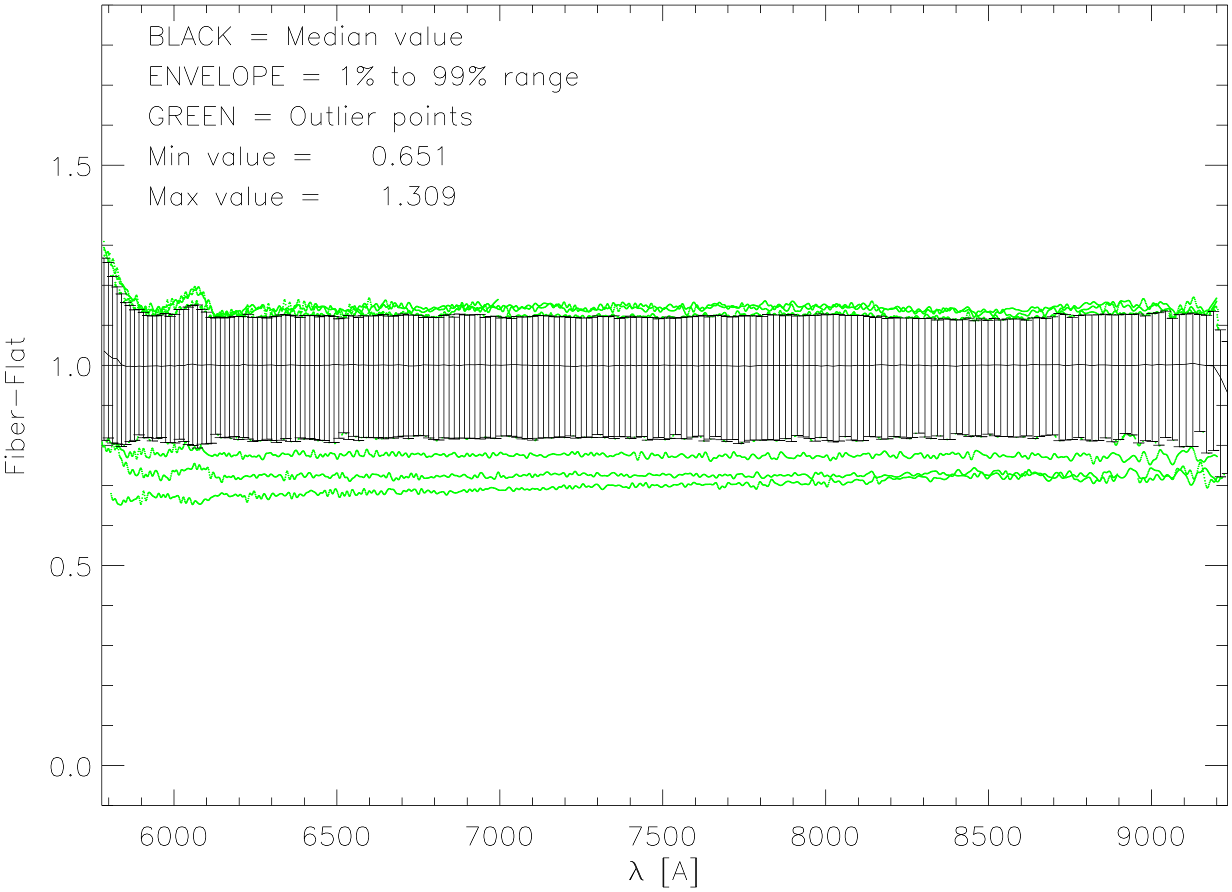

PLATE=0678 MJD=52884 Superflat sdR-r1-00022192.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-r1-00022199.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

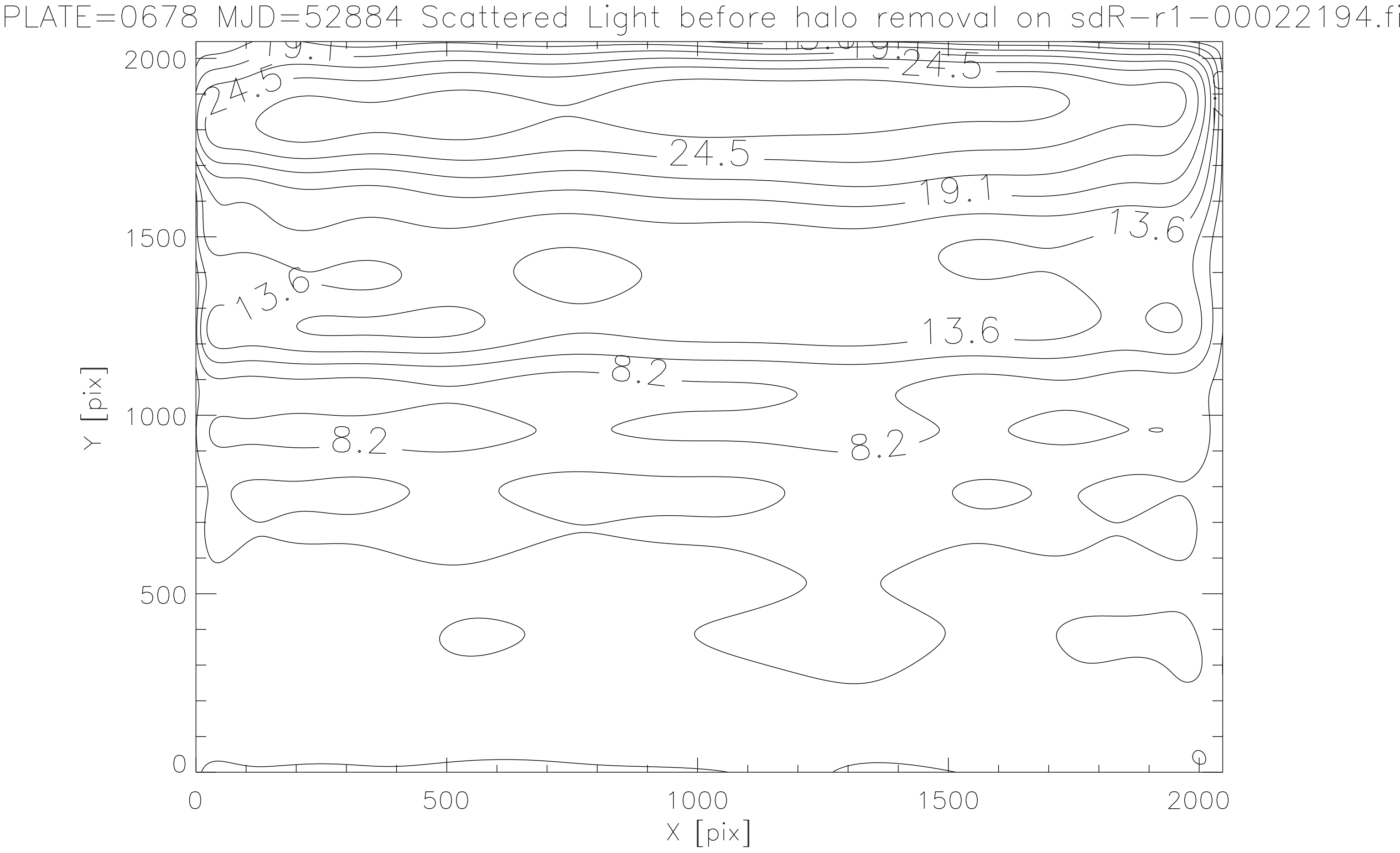

PLATE=0678 MJD=52884 Superflat sdR-r1-00022199.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

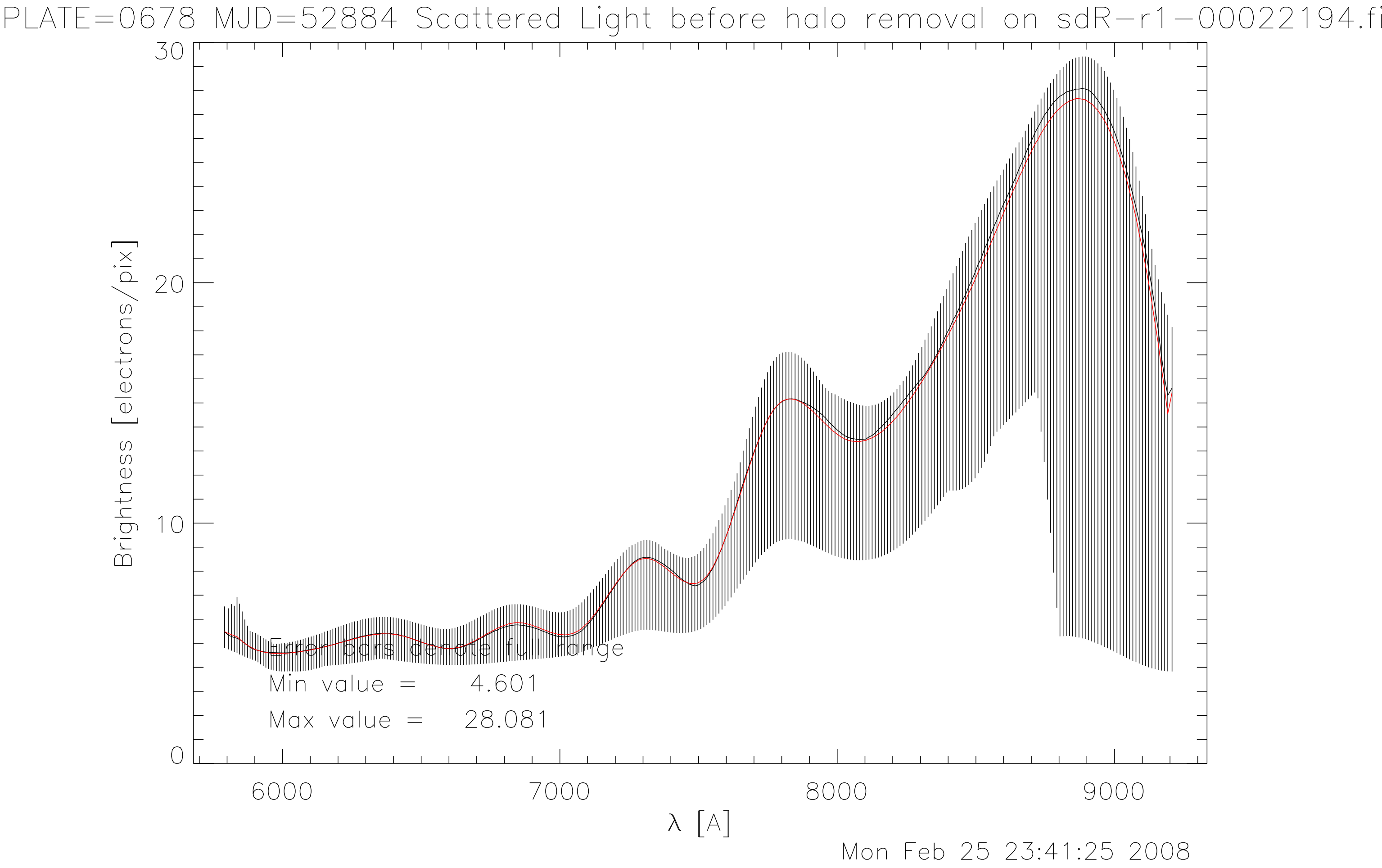

PLATE=0678 MJD=52884 Arcline Fit for sdR-r1-00022200.fit
Fiber Number
0
50
100
150
200
250
300
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
−0.10
−0.05
0.00
0.05
0.10
6000
7000
8000
9000
λ [A]
Mon Feb 25 23:40:27 2008

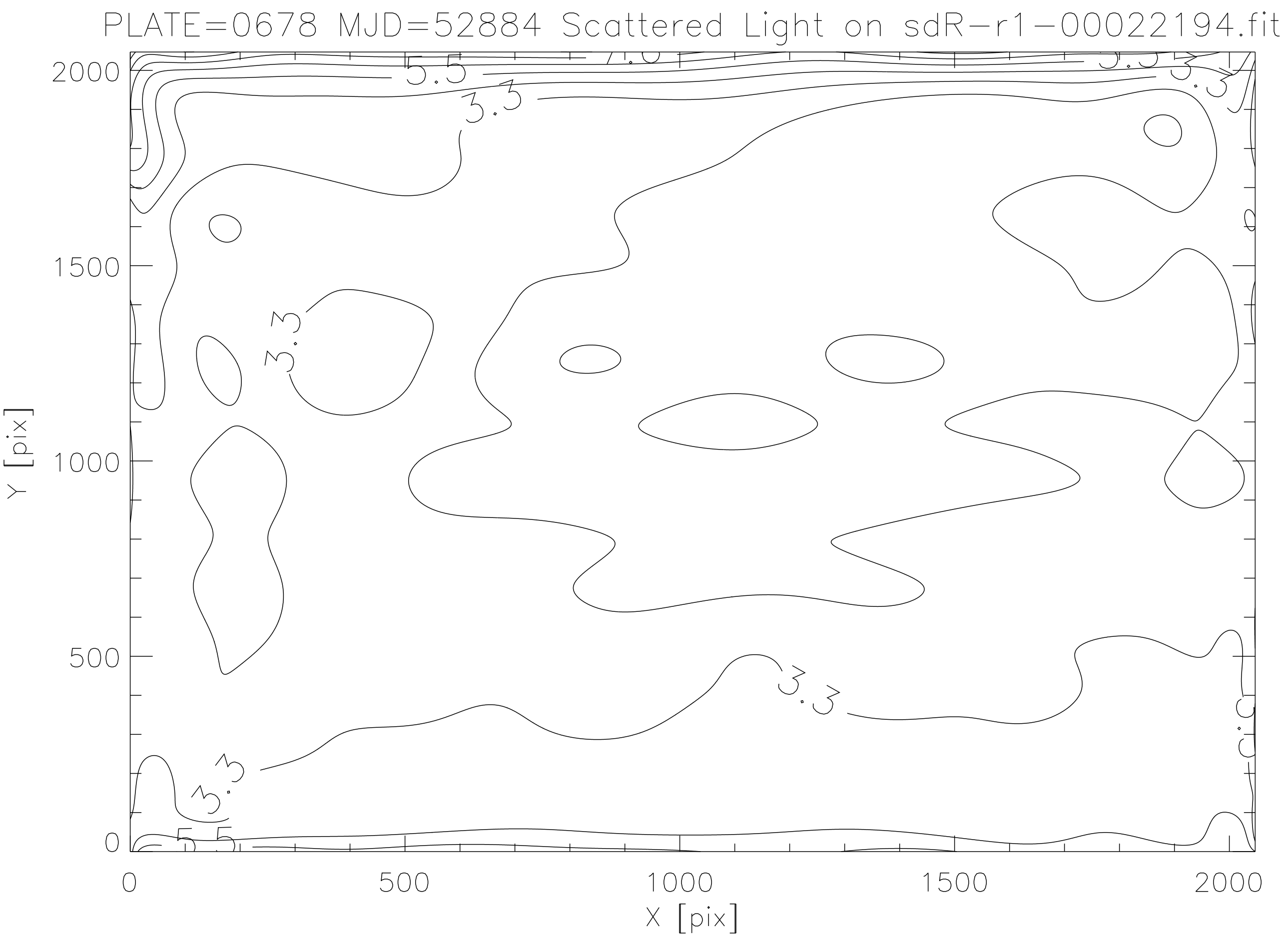
PLATE=0678 MJD=52884 Fiber-Flats for sdR-r1-00022199.fit



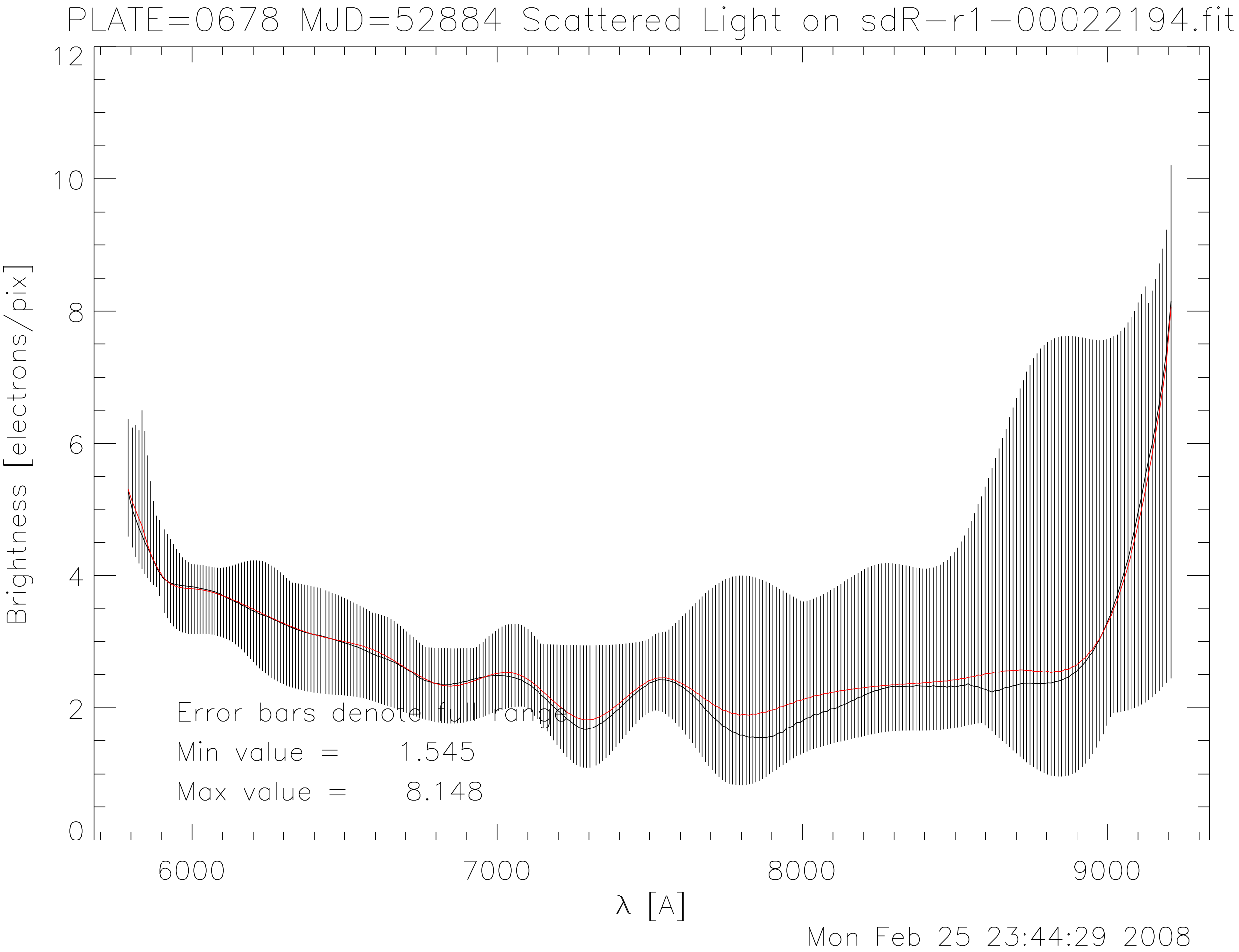
Mon Feb 25 23:40:36 2008

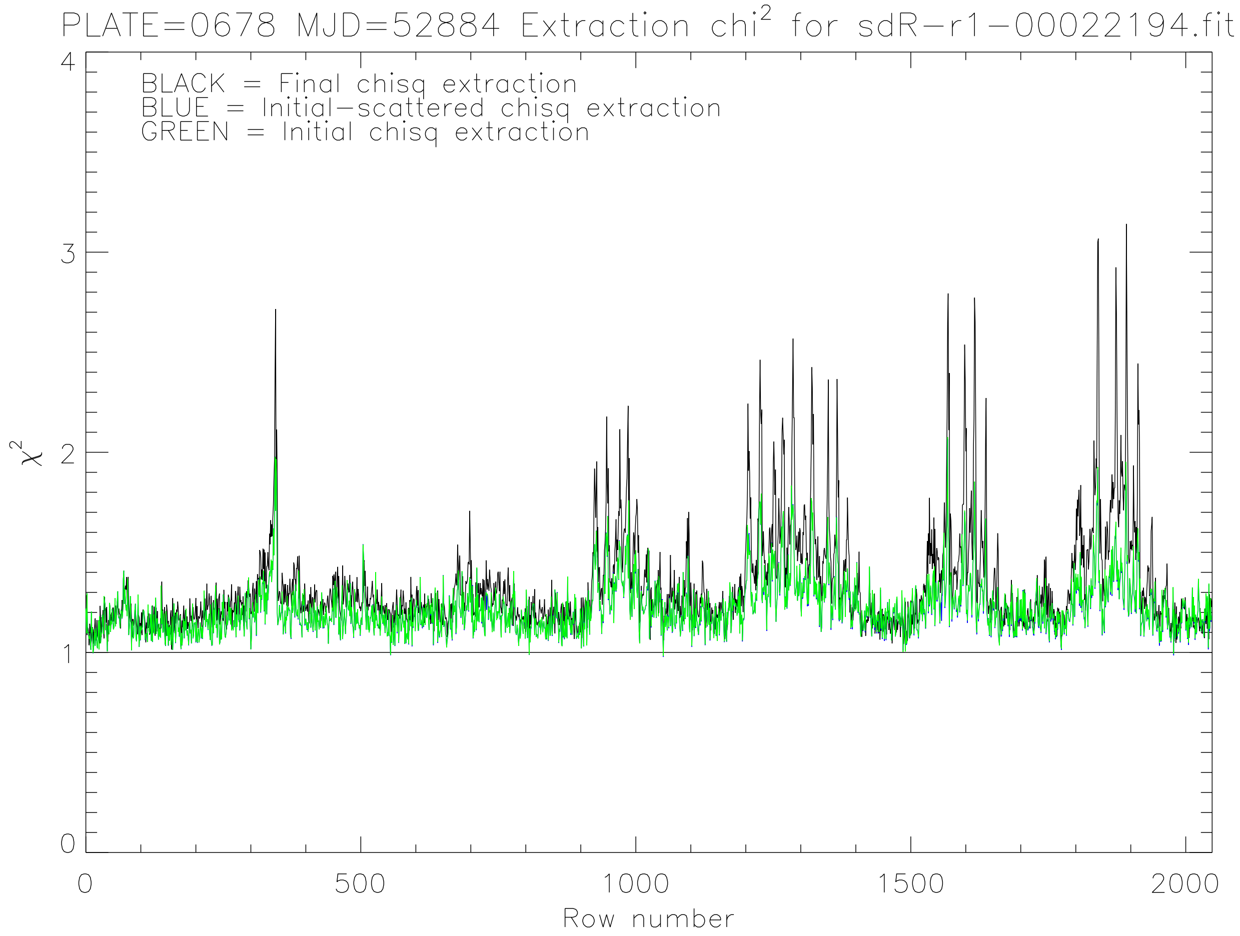

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022194.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
19.1
24.5
24.5
24.5
19.1
13.6
13.6
13.6
8.2
8.2
8.2

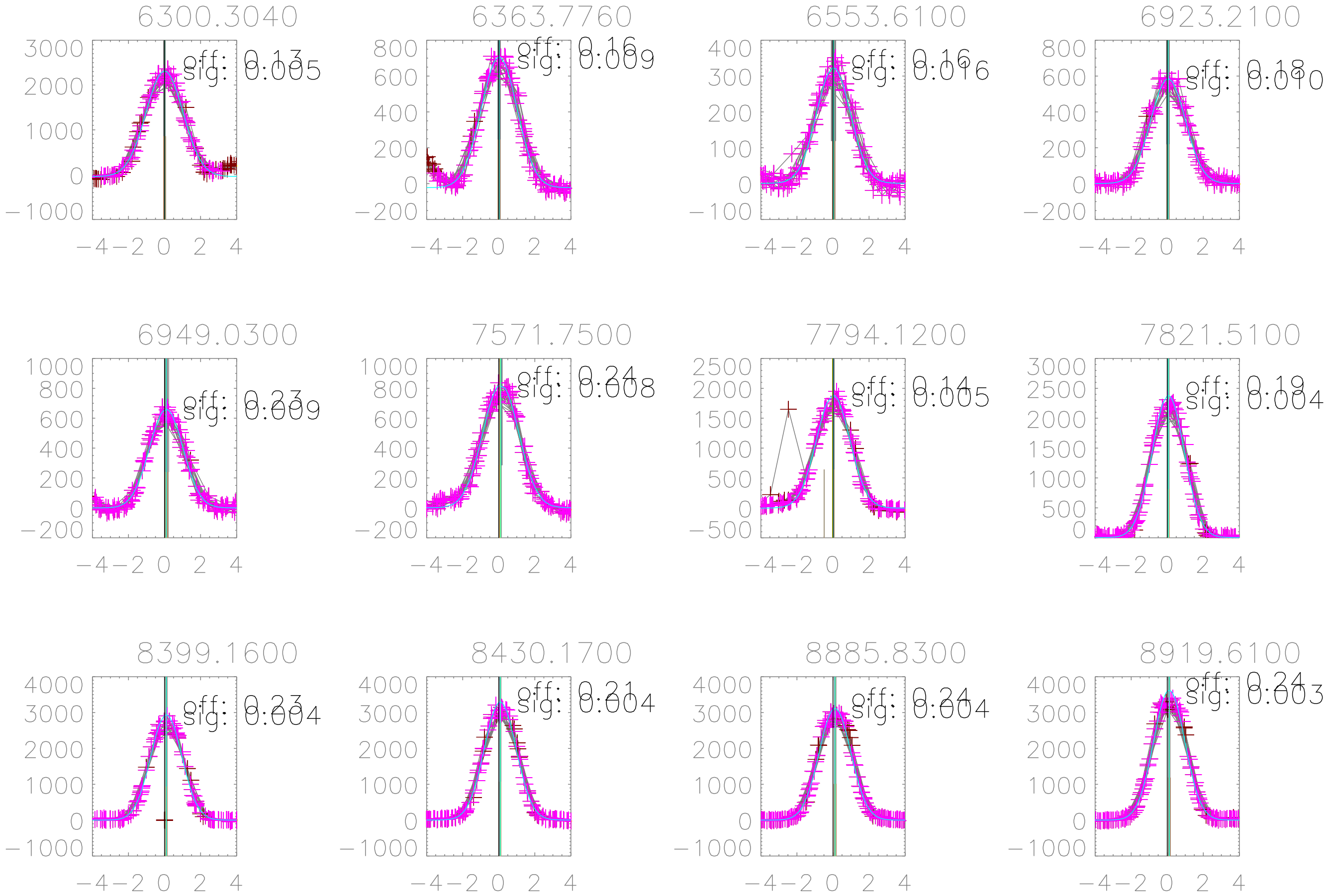

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022194.fi
Brightness [electrons/pix]
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.601
Max value = 28.081
Mon Feb 25 23:41:25 2008

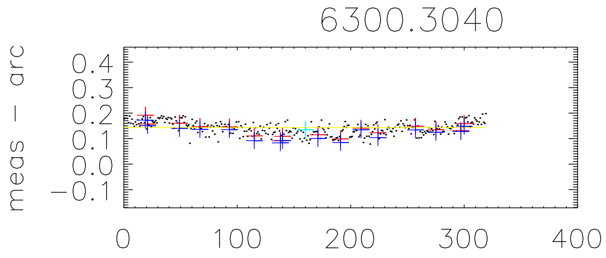


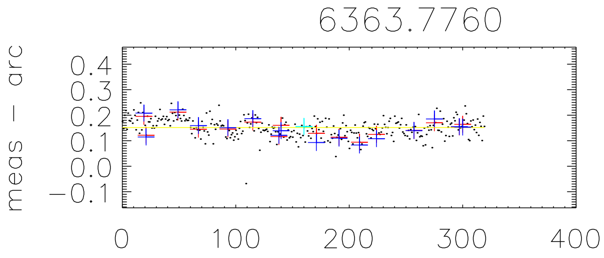
PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022194.fit

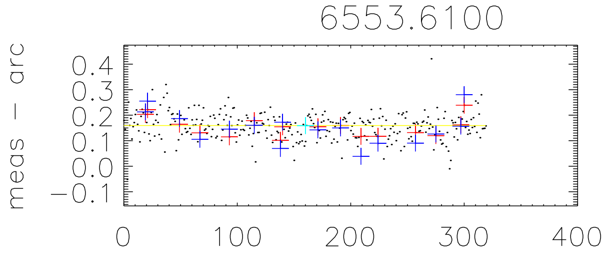

PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022194.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 1.545
Max value = 8.148
Mon Feb 25 23:44:29 2008

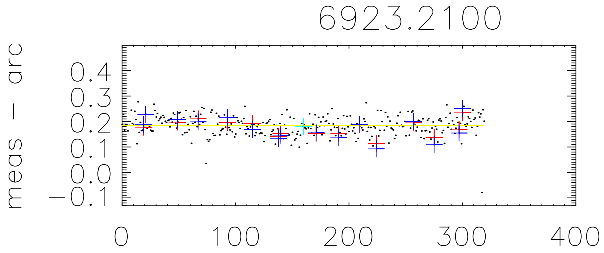

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r1-00022194.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

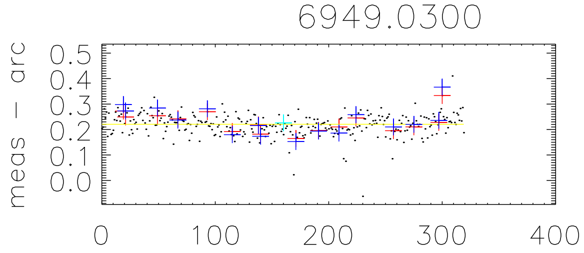

6300.3040
off: 0.13
sig: 0.005
6363.7760
off: 0.16
sig: 0.009
6553.6100
off: 0.16
sig: 0.016
6923.2100
off: 0.18
sig: 0.010
6949.0300
off: 0.23
sig: 0.009
7571.7500
off: 0.24
sig: 0.008
7794.1200
off: 0.14
sig: 0.005
7821.5100
off: 0.19
sig: 0.004
8399.1600
off: 0.23
sig: 0.004
8430.1700
off: 0.21
sig: 0.004
8885.8300
off: 0.24
sig: 0.004
8919.6100
off: 0.24
sig: 0.003
−4 −2 0 2 4

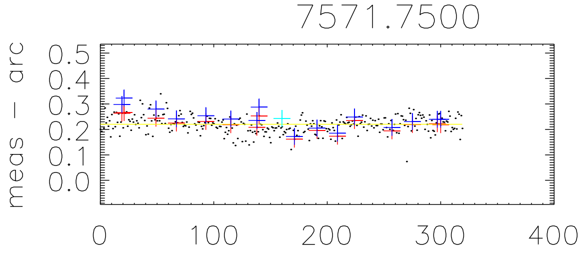

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

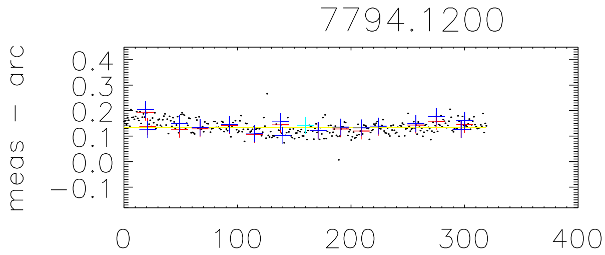

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

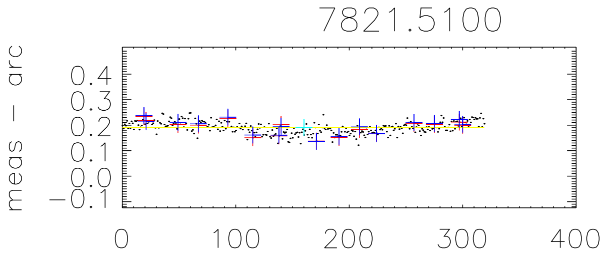

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

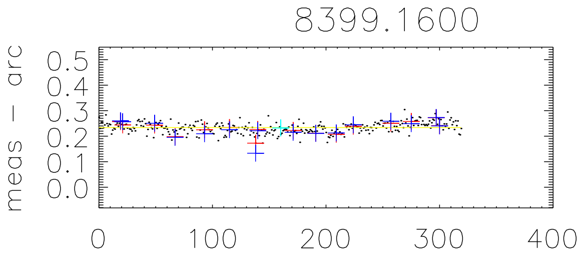

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

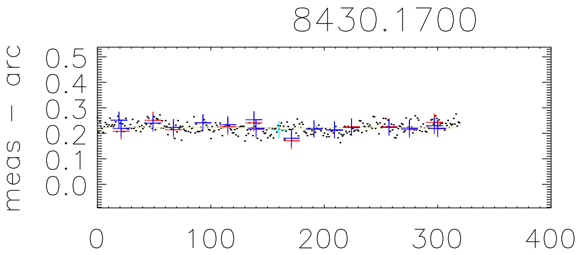

6949.0300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

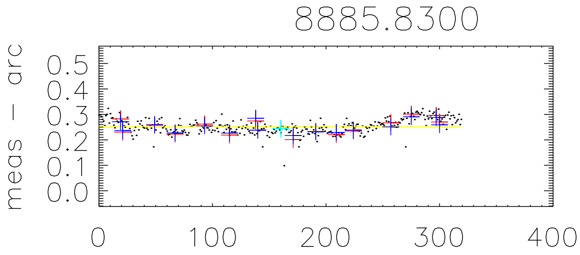

7571.7500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

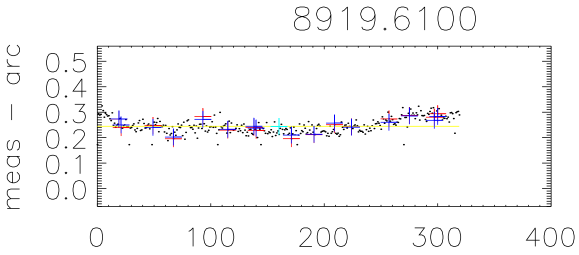

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

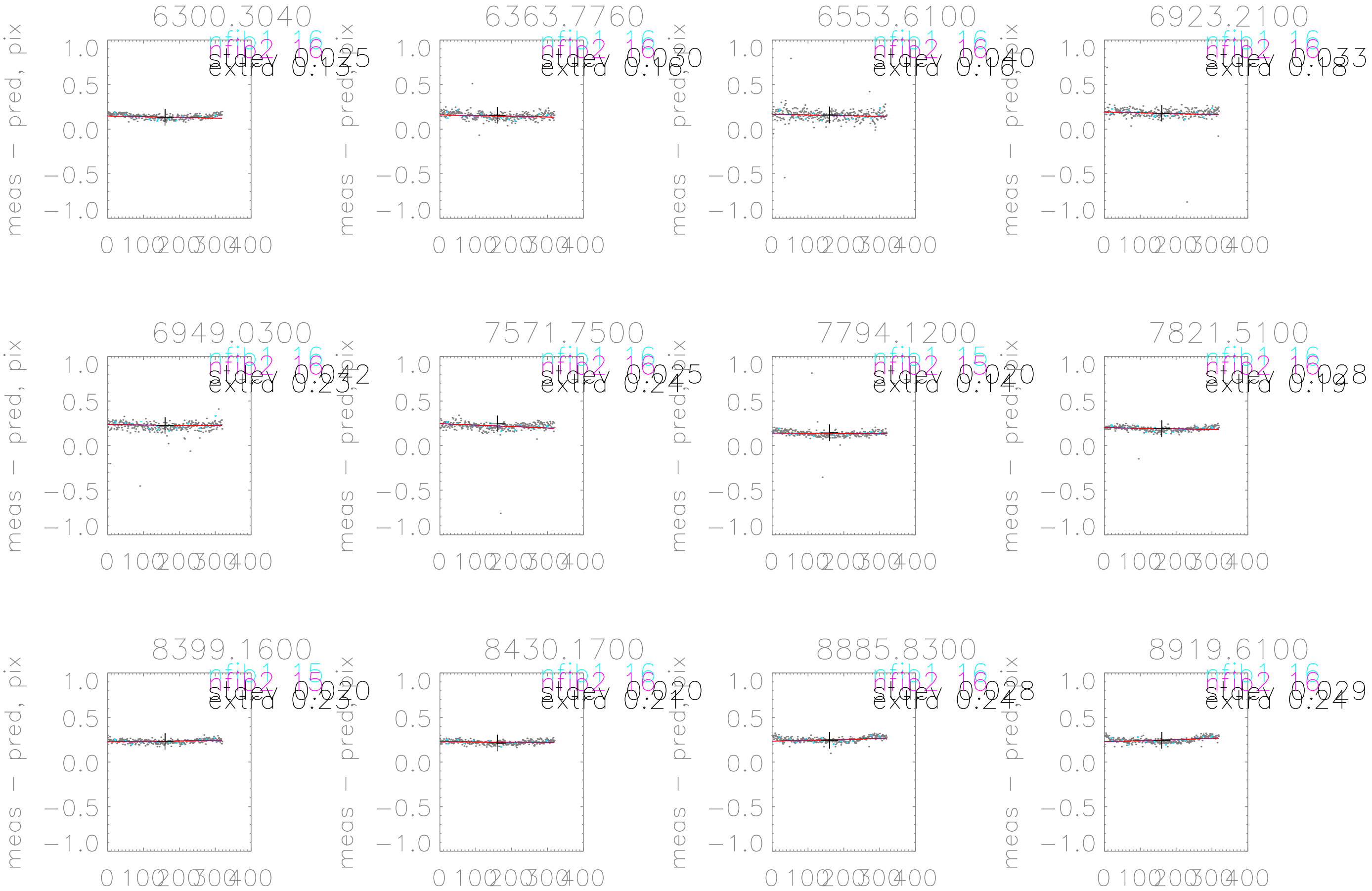

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

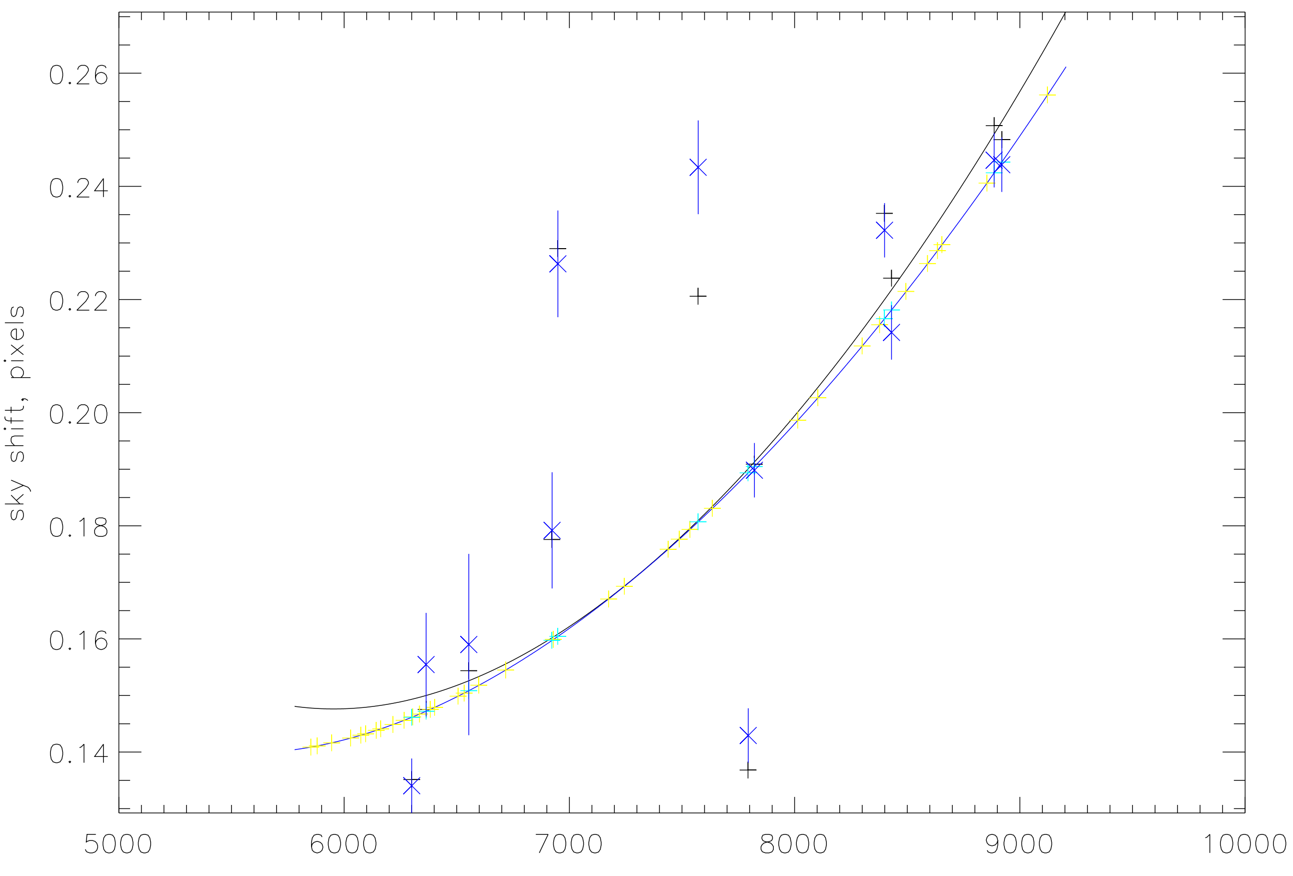

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

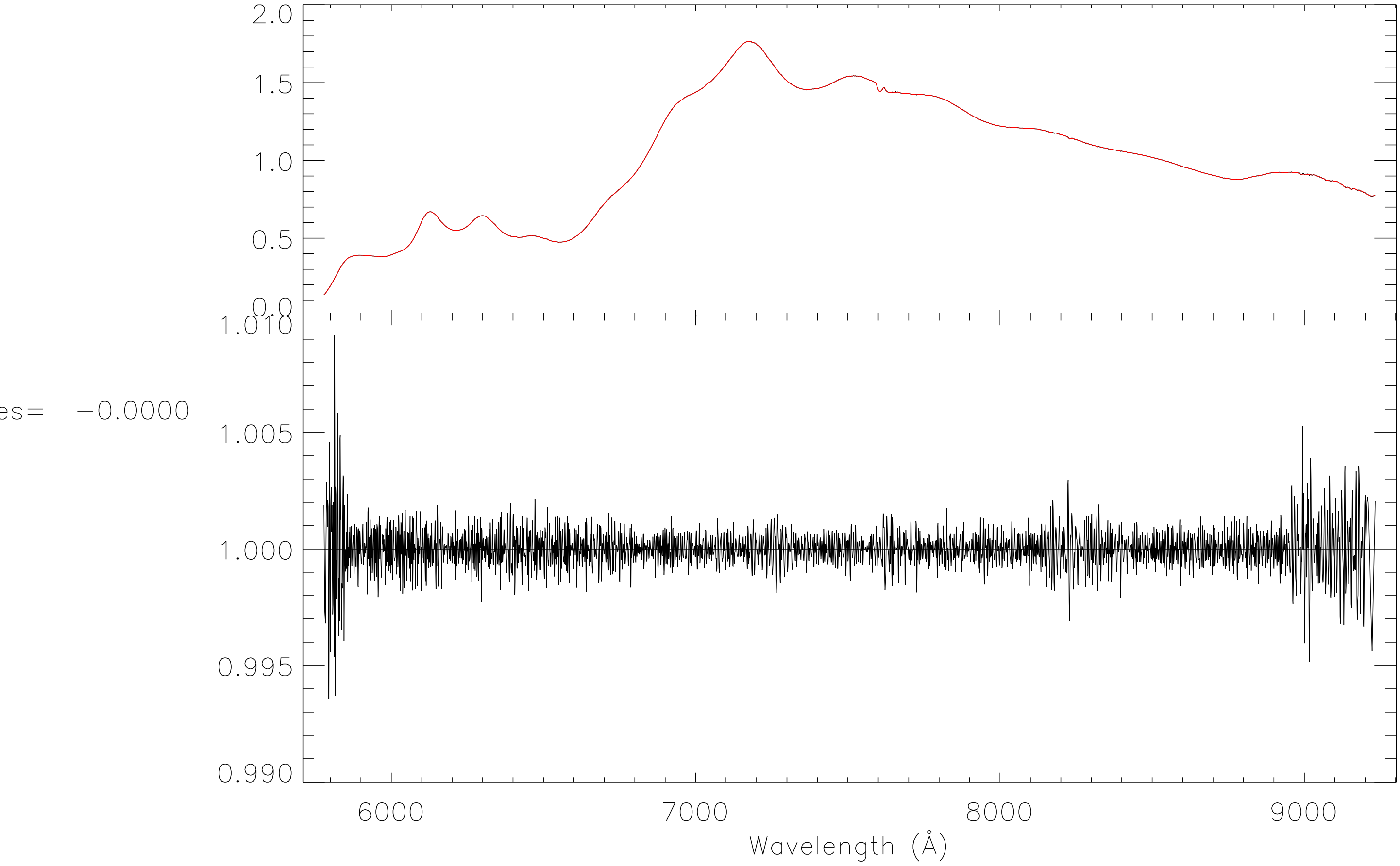

8885.8300
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

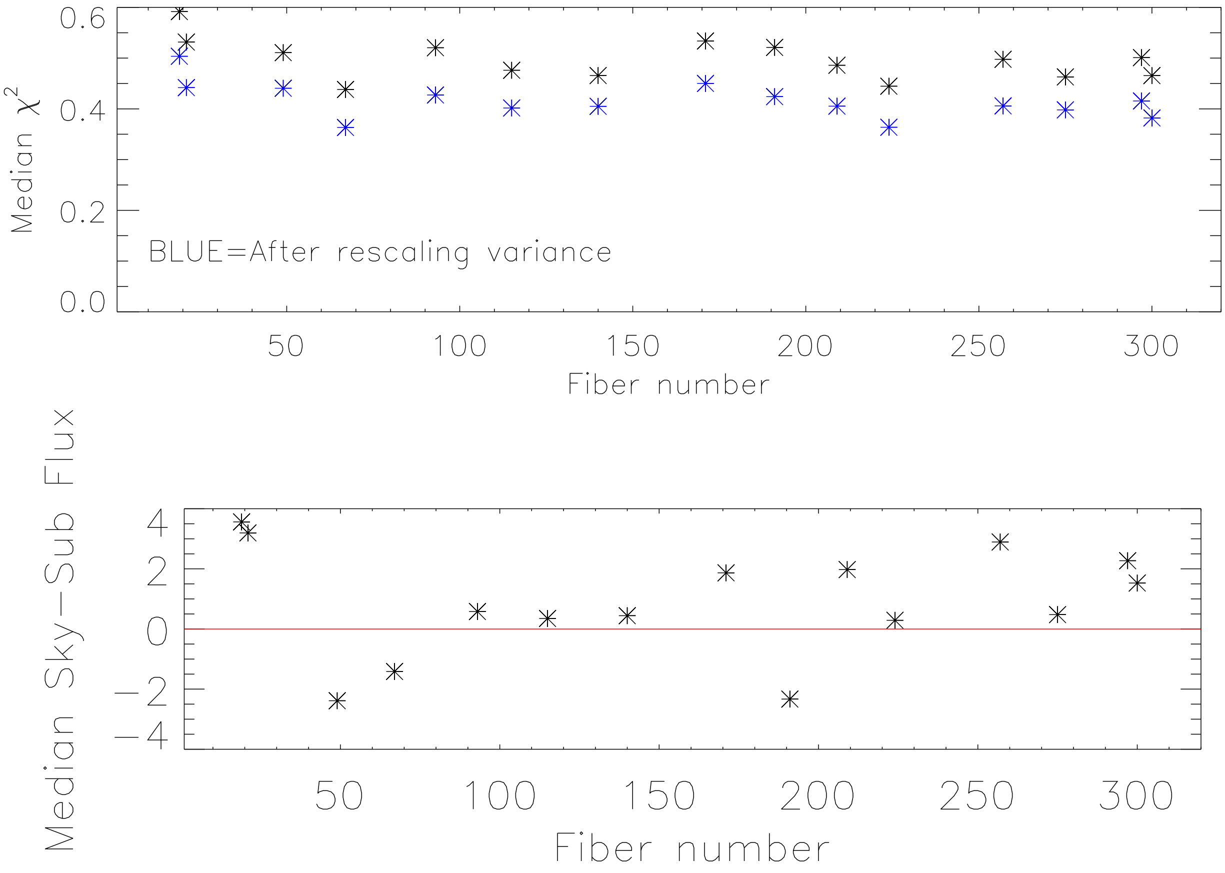

6300.3040
nfib1 16
nfib2 16
stdev 0.025
extrd 0.13
6363.7760
nfib1 16
nfib2 16
stdev 0.030
extrd 0.16
6553.6100
nfib1 16
nfib2 16
stdev 0.040
extrd 0.16
6923.2100
nfib1 16
nfib2 16
stdev 0.033
extrd 0.18
6949.0300
nfib1 16
nfib2 16
stdev 0.042
extrd 0.23
7571.7500
nfib1 16
nfib2 16
stdev 0.025
extrd 0.24
7794.1200
nfib1 15
nfib2 15
stdev 0.020
extrd 0.14
7821.5100
nfib1 16
nfib2 16
stdev 0.028
extrd 0.19
8399.1600
nfib1 15
nfib2 15
stdev 0.020
extrd 0.23
8430.1700
nfib1 16
nfib2 16
stdev 0.020
extrd 0.21
8885.8300
nfib1 16
nfib2 16
stdev 0.028
extrd 0.24
8919.6100
nfib1 16
nfib2 16
stdev 0.029
extrd 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.14
0.16
0.18
0.20
0.22
0.24
0.26
5000
6000
7000
8000
9000
10000

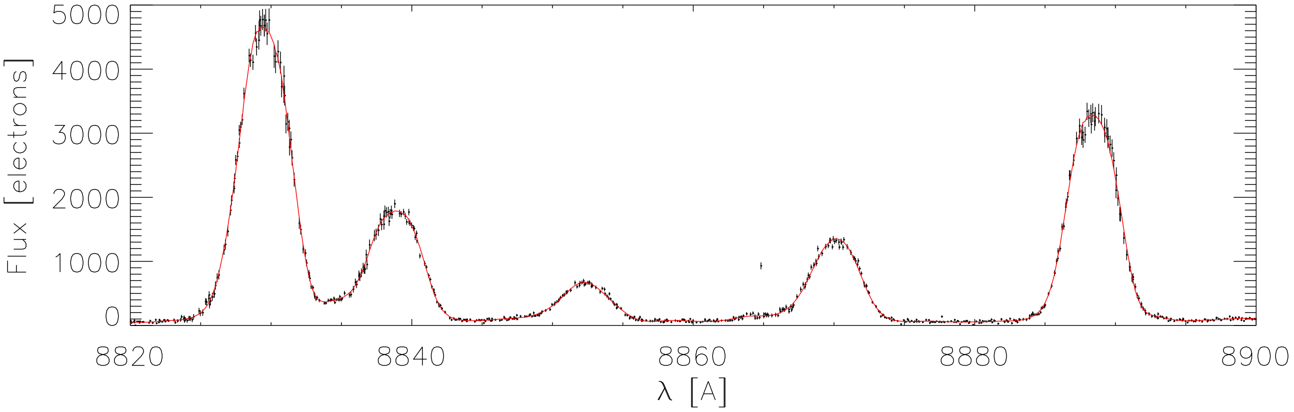
PLATE=0678 MJD=52884 Smooth superflat for sdR-r1-00022194.fit



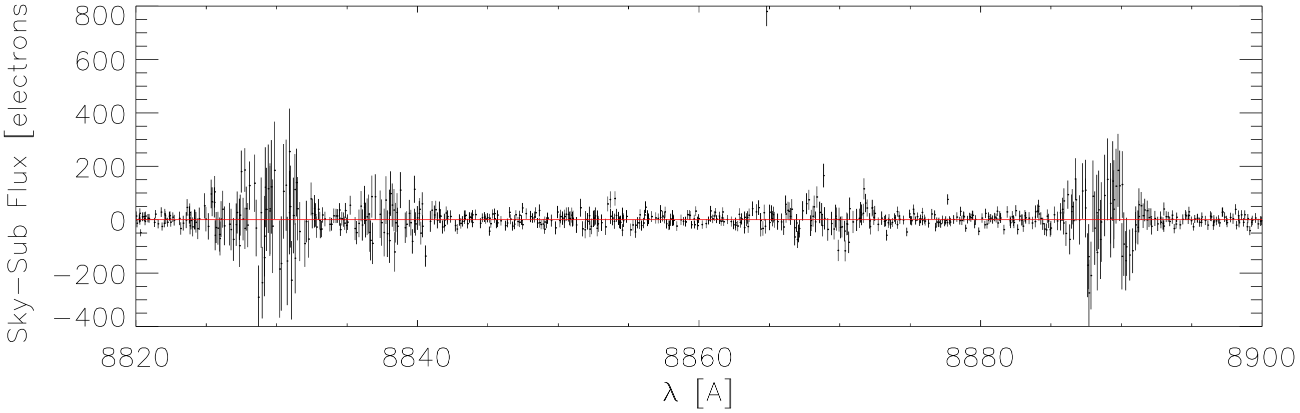
PLATE=0678 MJD=52884 sdR-r1-00022194.fit 1D Sky-subtraction Sky Fiber



PLATE=0678 MJD=52884 sdR-r1-00022194.fit 1D Sky-subtraction Sky Fibers

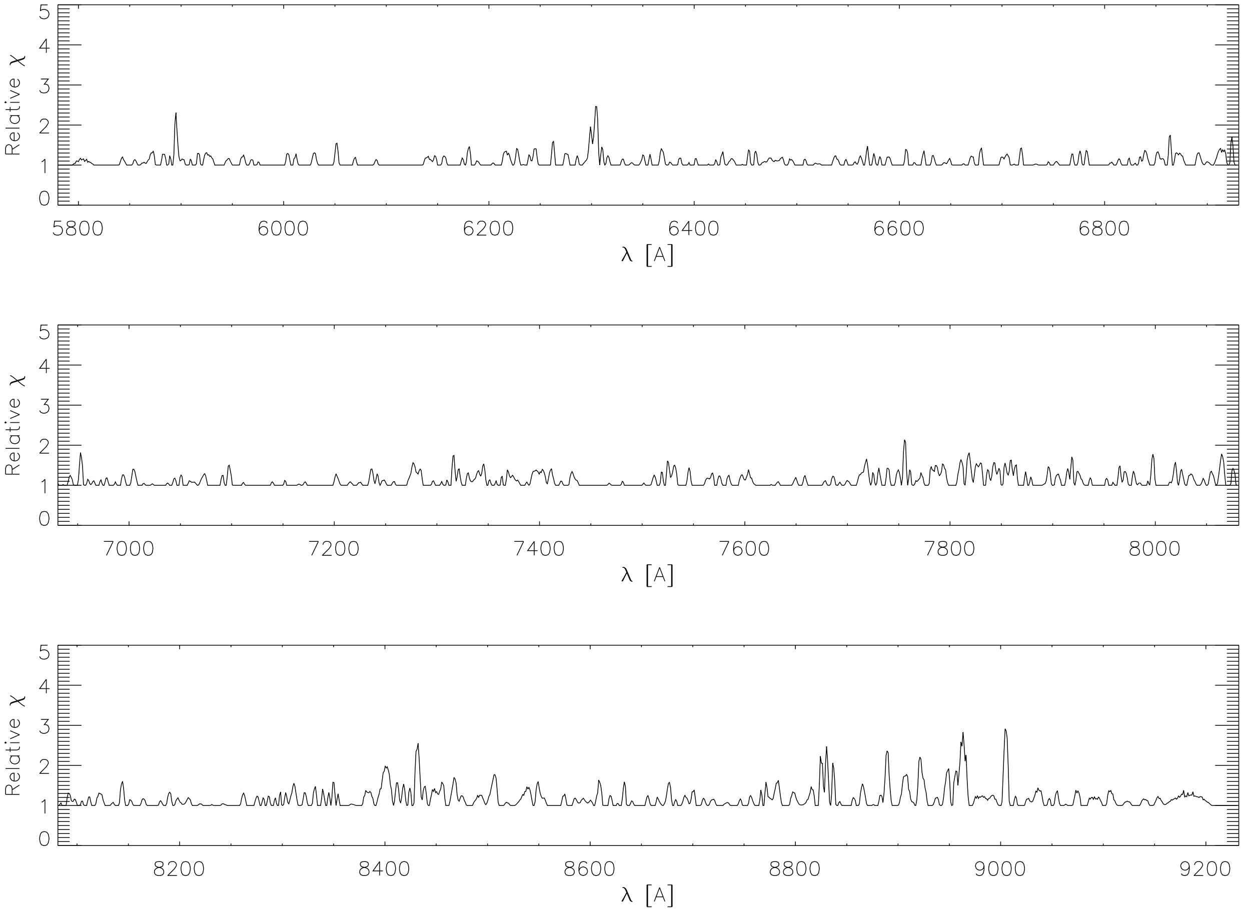


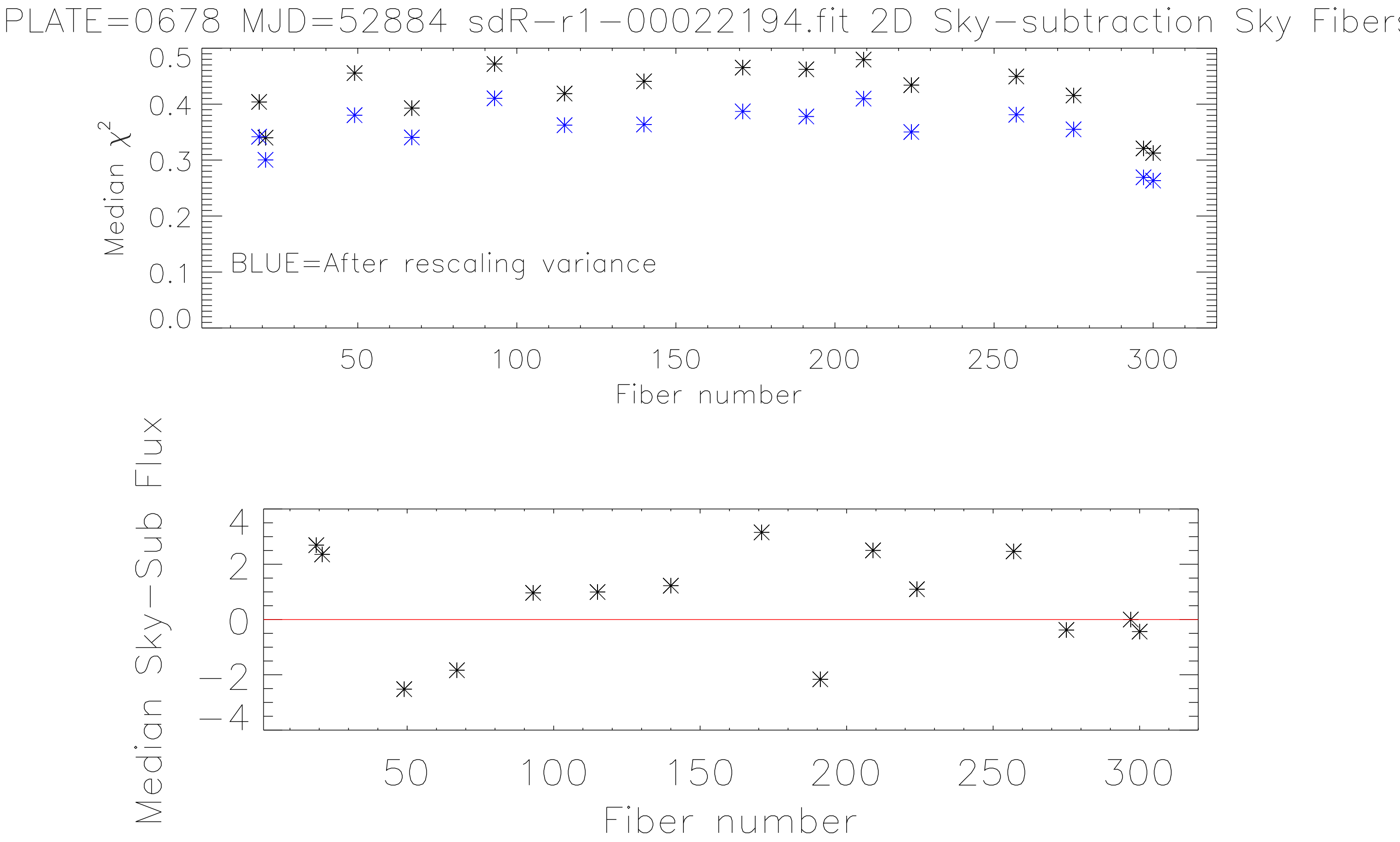
PLATE=0678 MJD=52884 sdR-r1-00022194.fit 1D Sky-subtraction Sky-subtracted Sky F

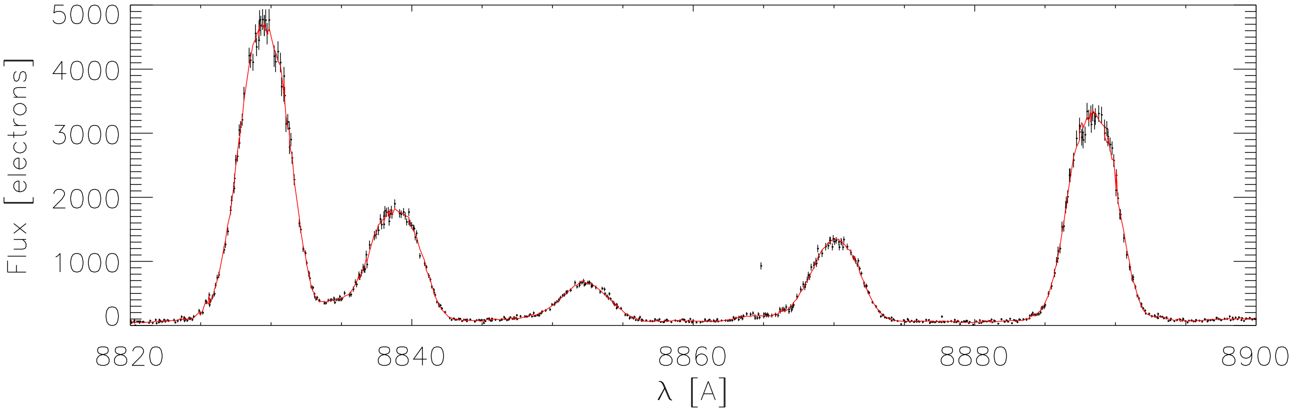


Number of sky fibers = 15

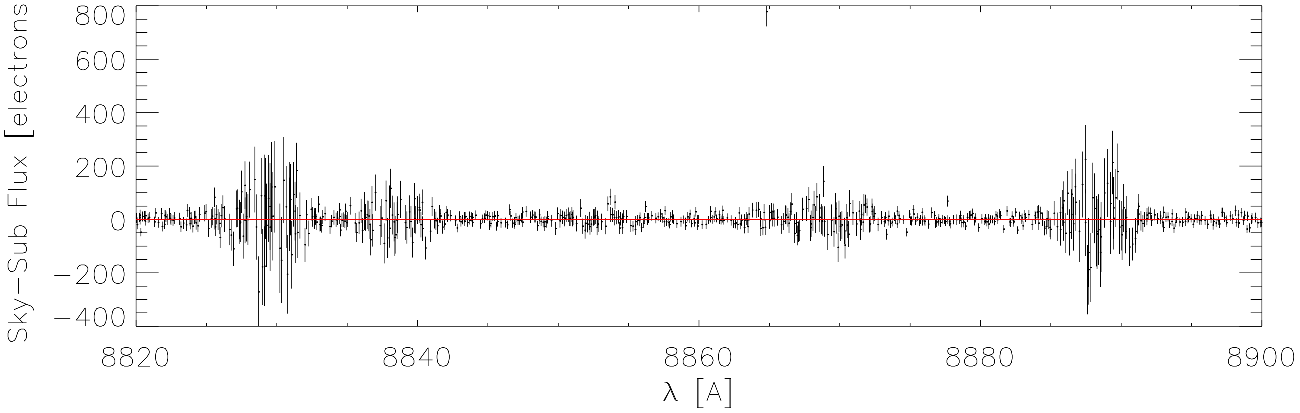
PLATE=0678 MJD=52884 sdR-r1-00022194.fit 1D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-r1-00022194.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number



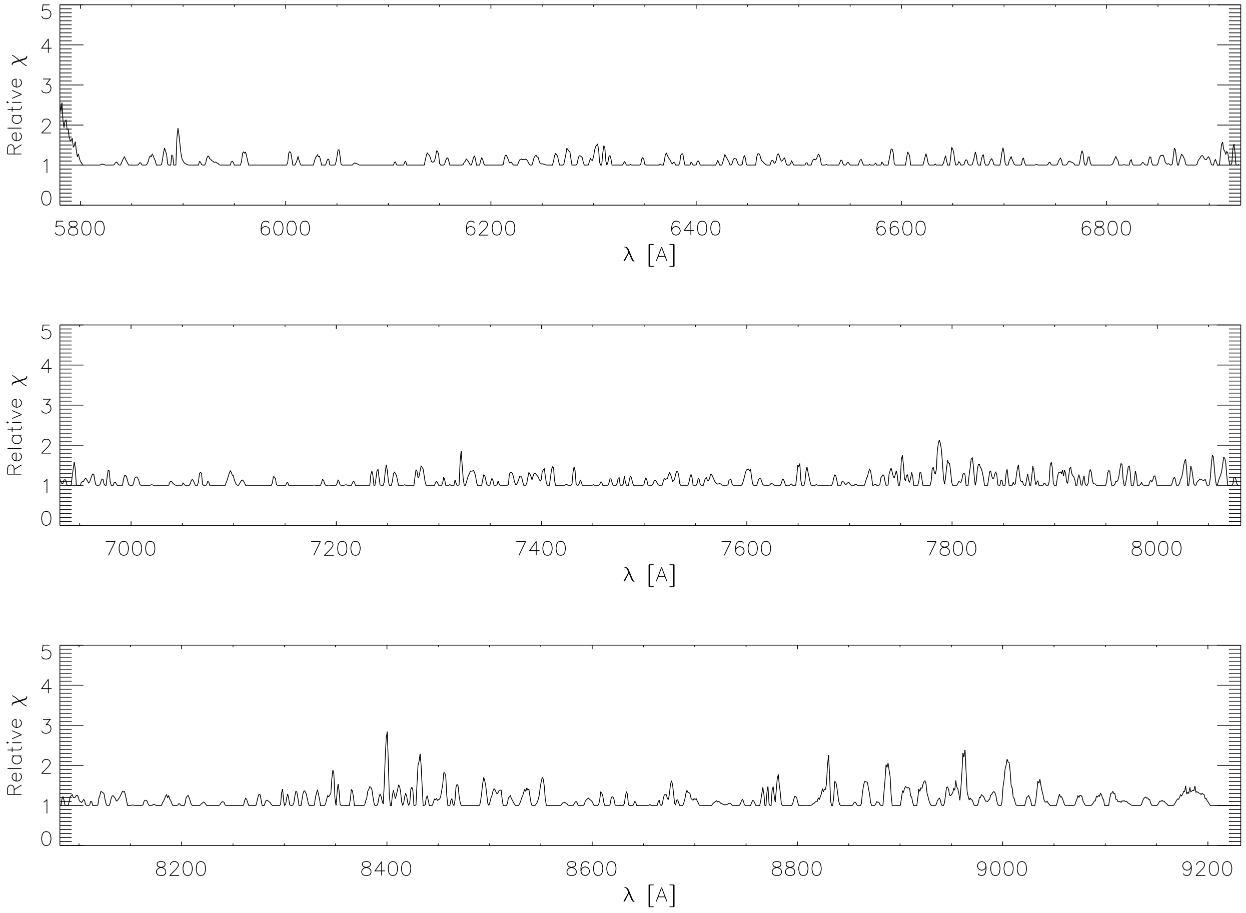
PLATE=0678 MJD=52884 sdR-r1-00022194.fit 2D Sky-subtraction Sky Fibers

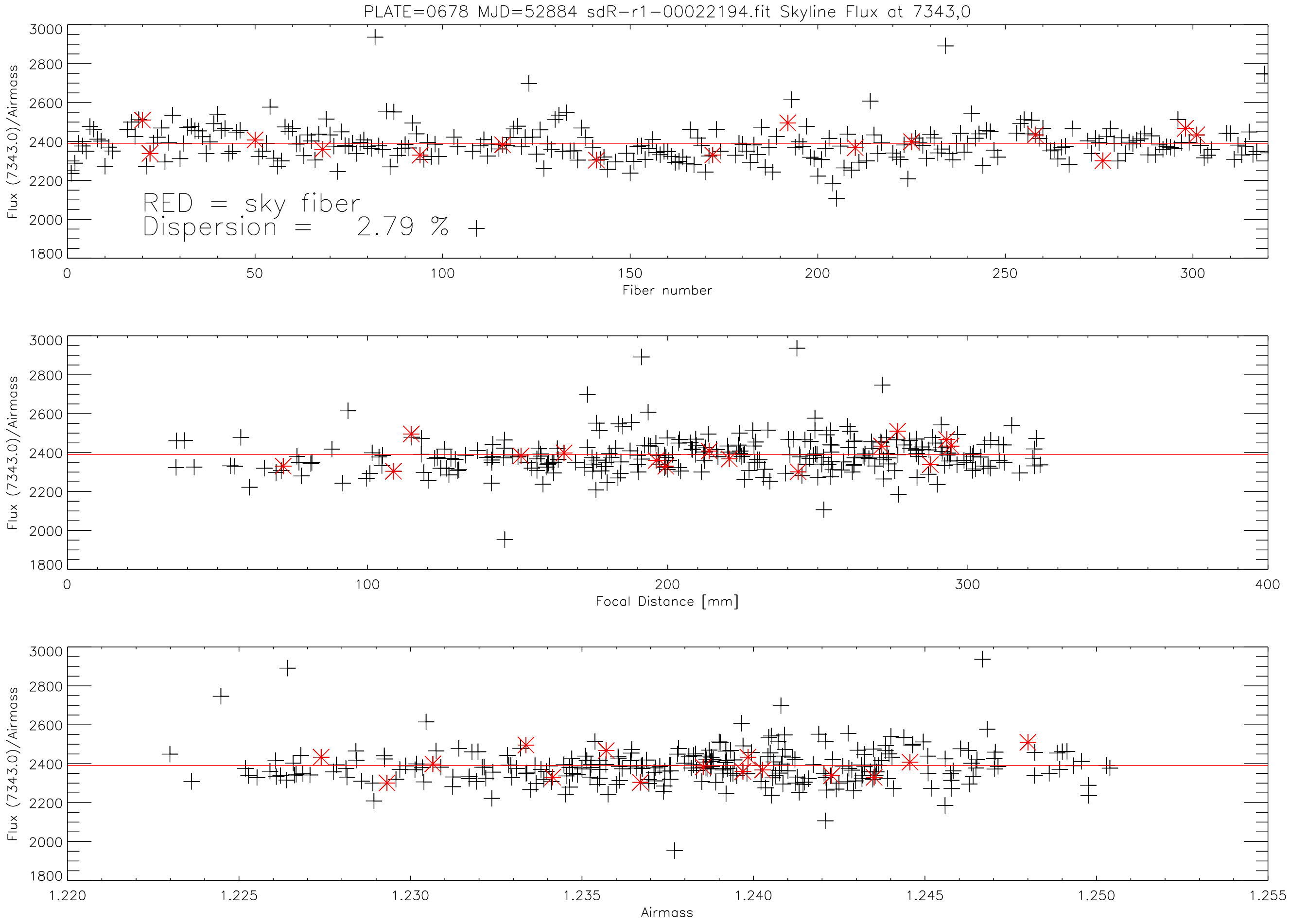


PLATE=0678 MJD=52884 sdR-r1-00022194.fit 2D Sky-subtraction Sky-subtracted Sky F

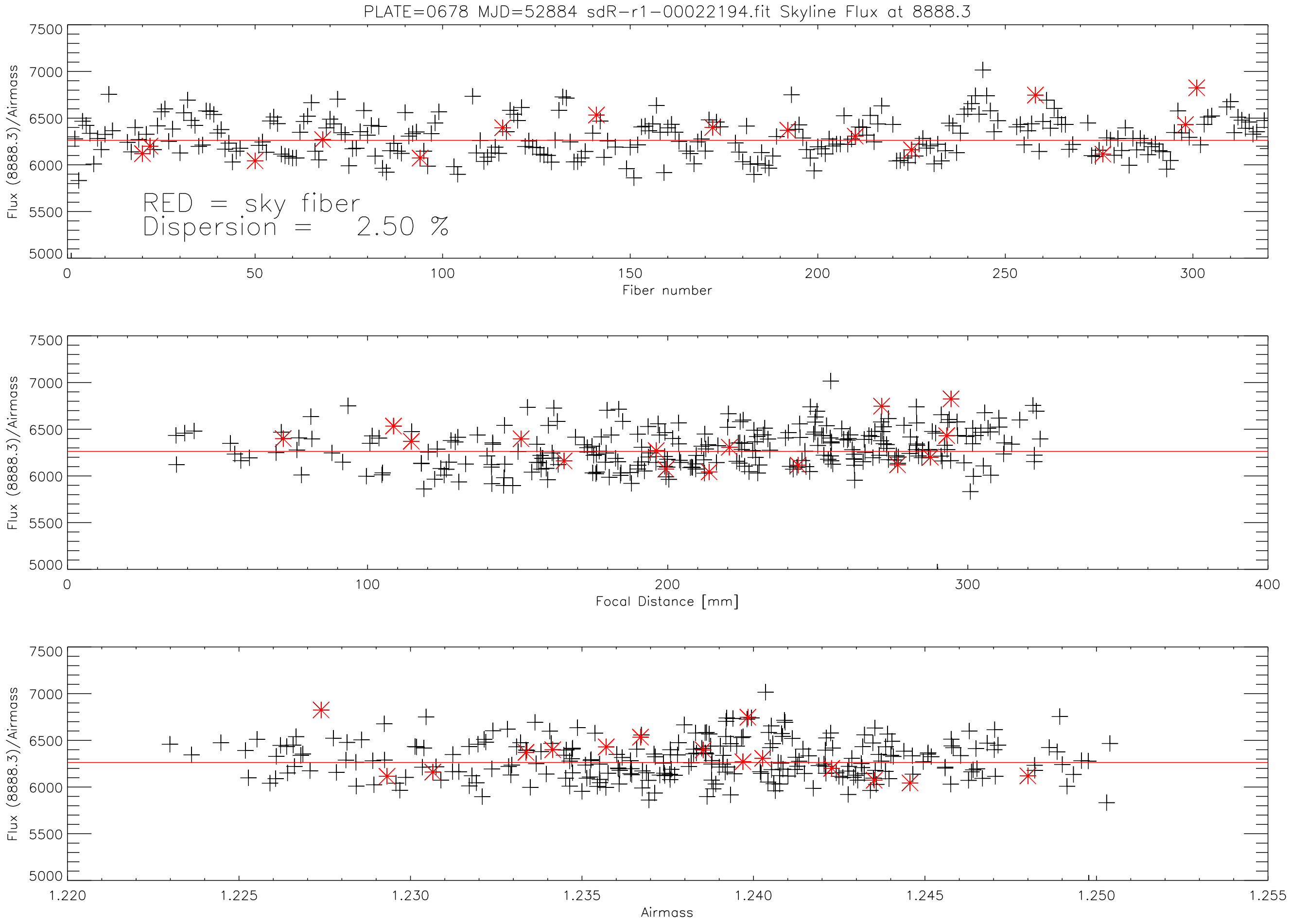
Number of sky fibers = 15

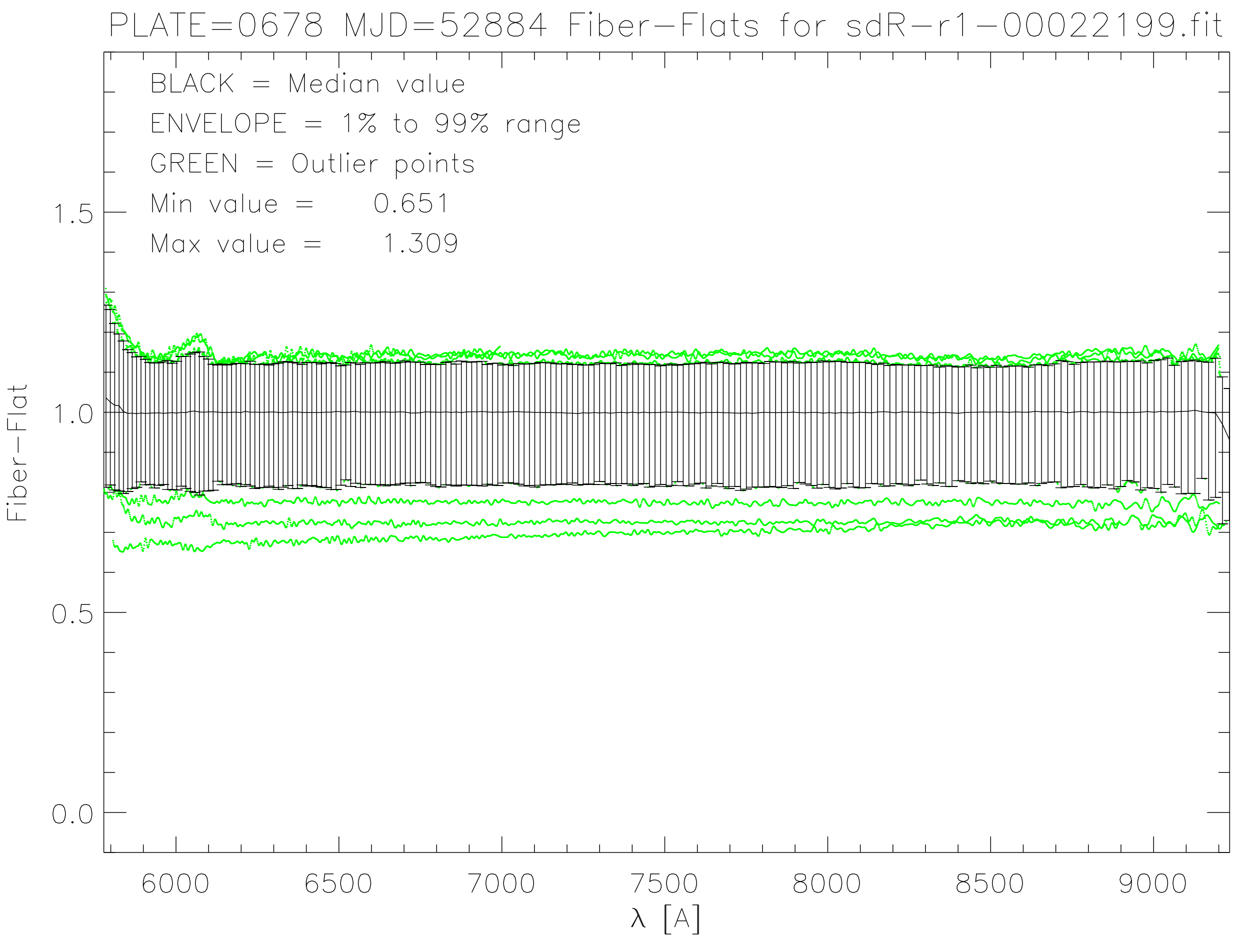
PLATE=0678 MJD=52884 sdR-r1-00022194.fit 2D Sky-subtraction Rescaled Errors



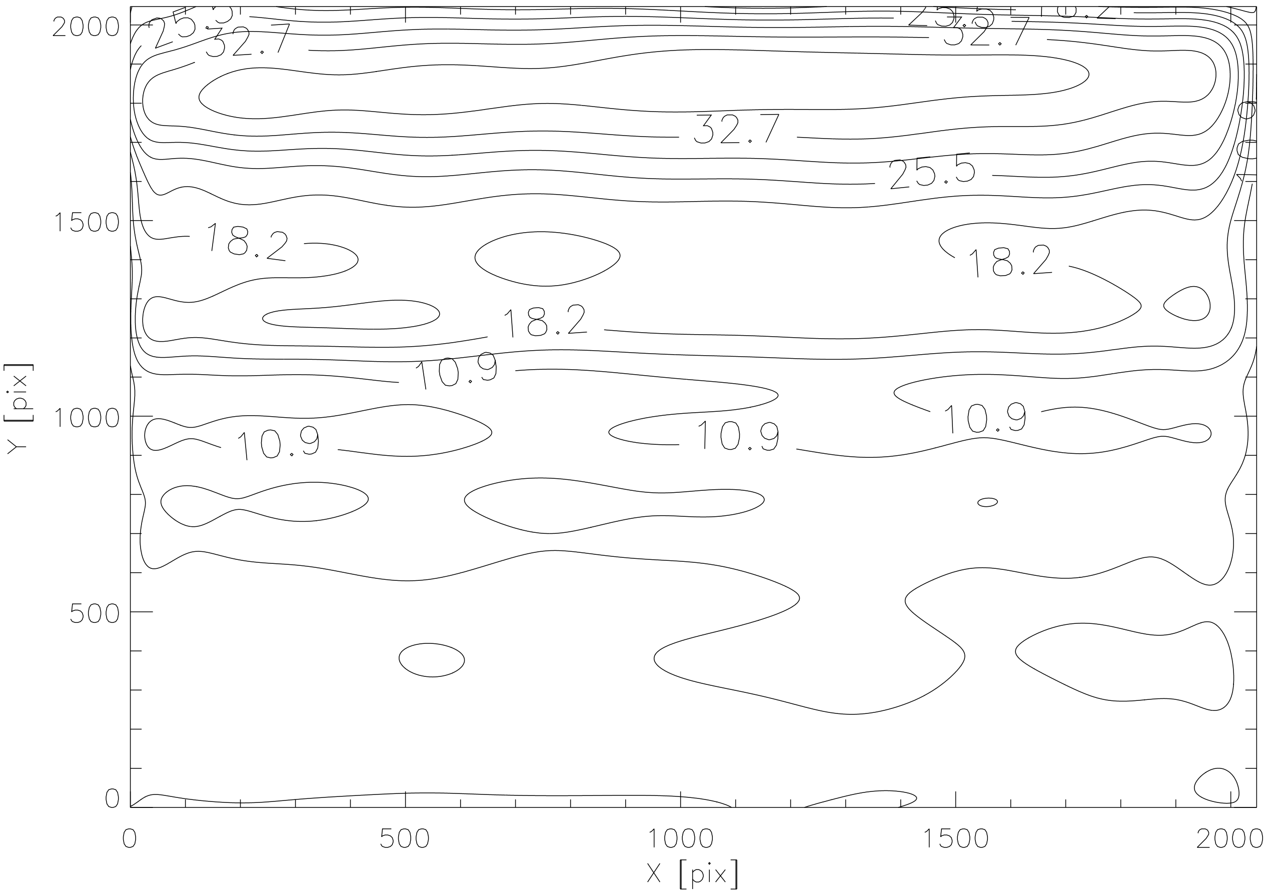


PLATE=0678 MJD=52884 sdR−r1−00022194.fit Skyline Flux at 7343,0


PLATE=0678 MJD=52884 sdR-r1-00022194.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
7500
7000
6500
6000
5500
5000
RED = sky fiber
Dispersion = 2.50 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
7500
7000
6500
6000
5500
5000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
7500
7000
6500
6000
5500
5000
1.220
1.225
1.230
1.235
1.240
1.245
1.250
1.255
Airmass

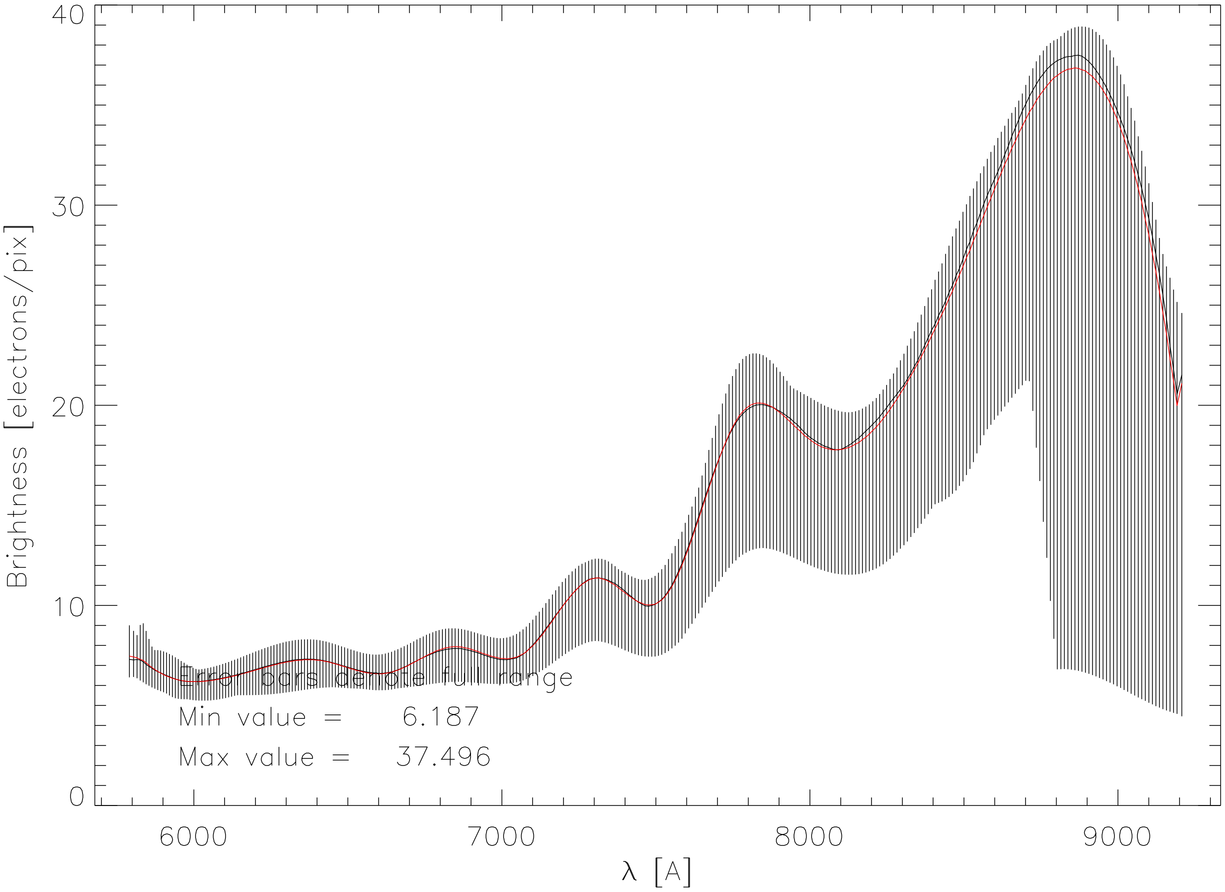


Mon Feb 25 23:45:40 2008

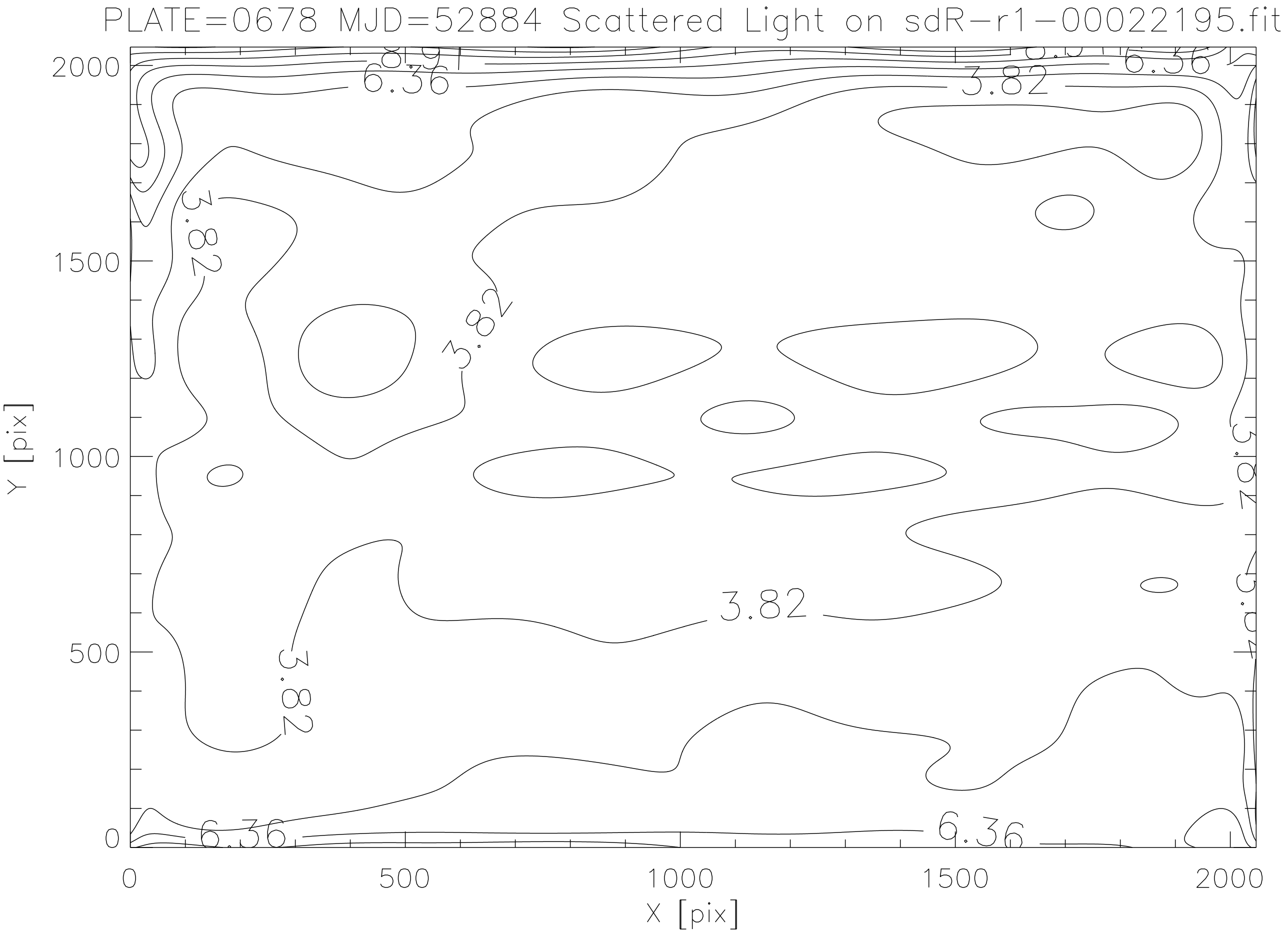


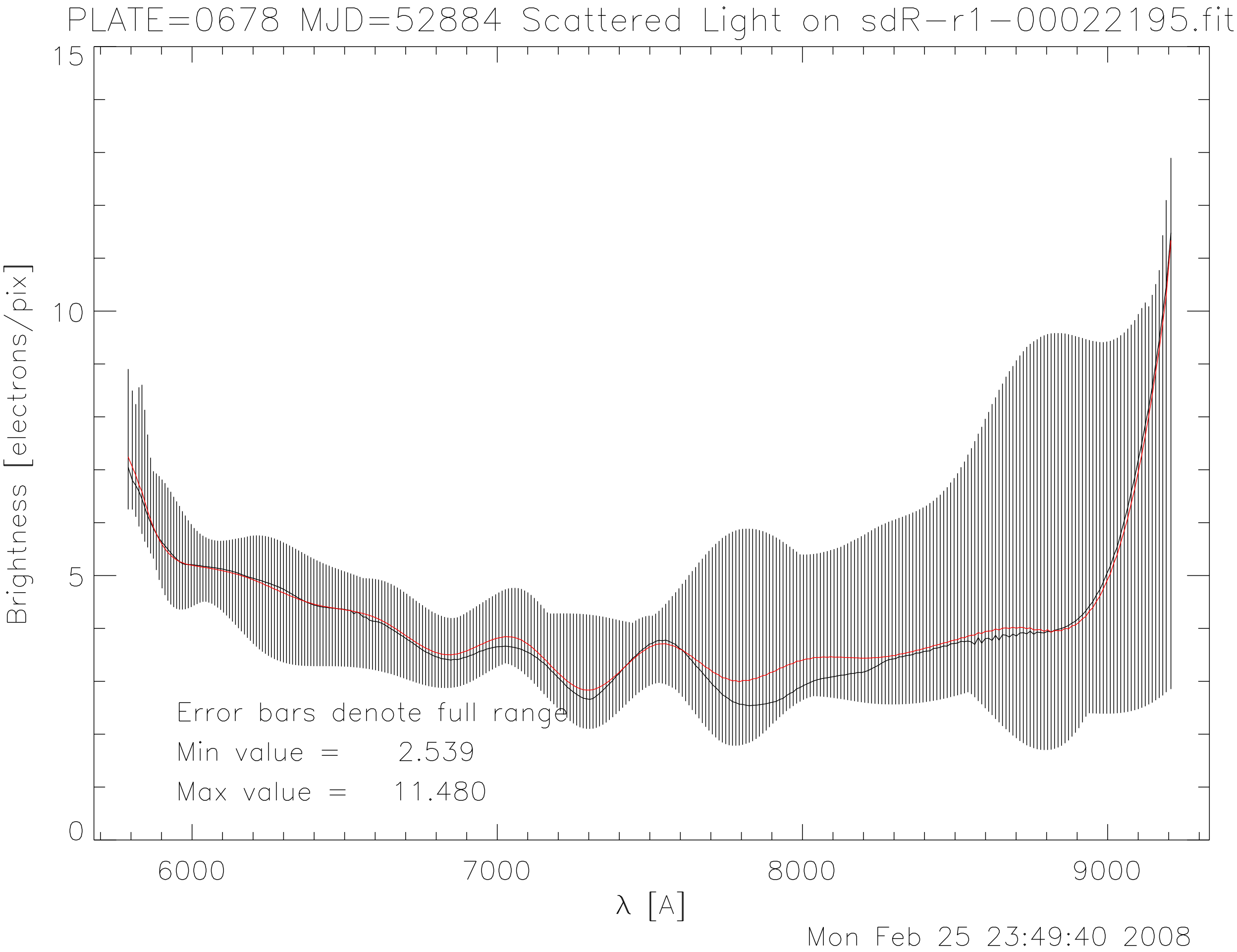
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022195.fi

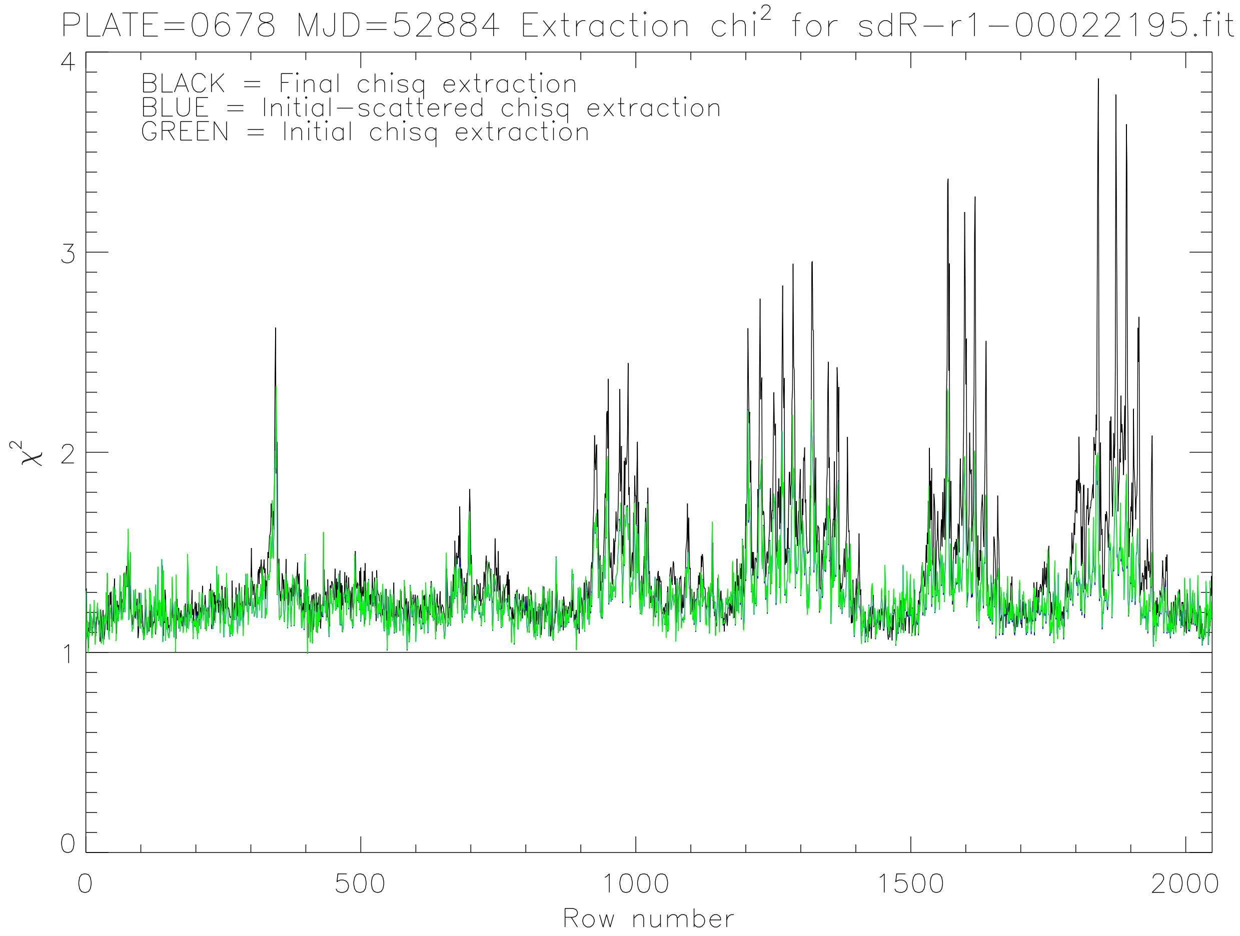
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022195.fi

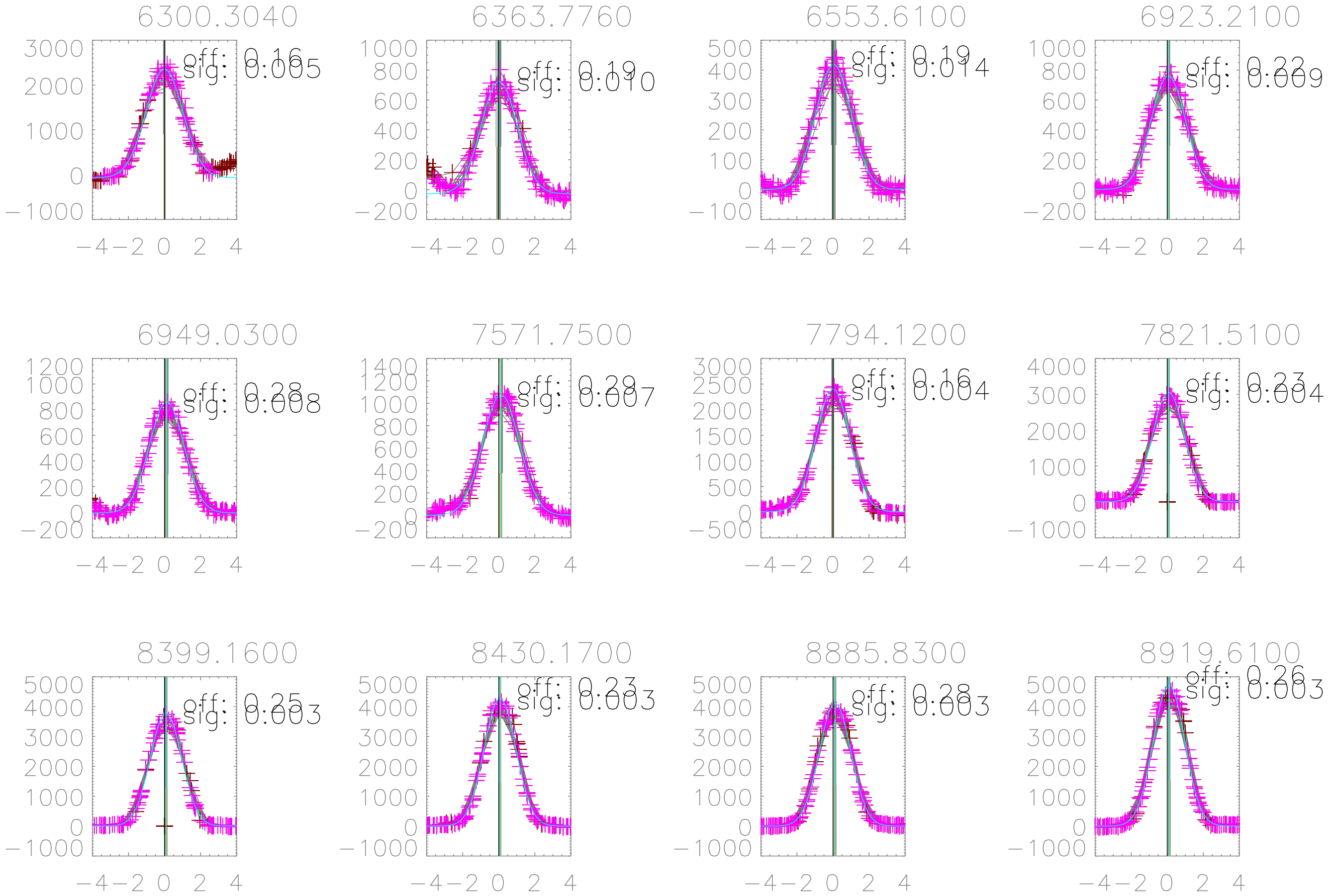


Mon Feb 25 23:46:33 2008

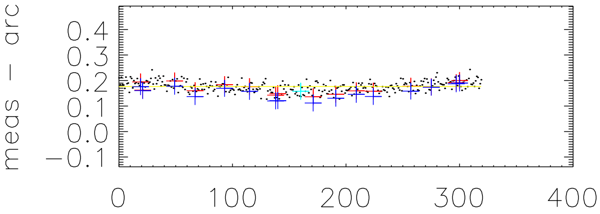

PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022195.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
6.36
3.82
3.82
3.82
3.82
3.82
3.82
6.36
6.36
6.36
6.36

PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022195.fit
15
10
5
0
Brightness [electrons/pix]
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.539
Max value = 11.480
Mon Feb 25 23:49:40 2008

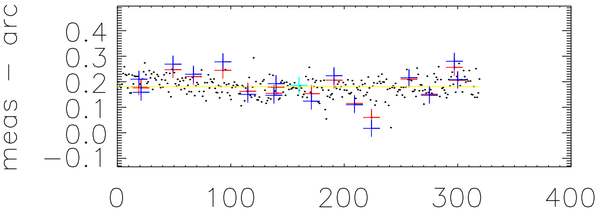

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r1-00022195.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number


6300.3040
off: 0.16
sig: 0.005
6363.7760
off: 0.19
sig: 0.010
6553.6100
off: 0.19
sig: 0.014
6923.2100
off: 0.22
sig: 0.009
6949.0300
off: 0.28
sig: 0.008
7571.7500
off: 0.29
sig: 0.007
7794.1200
off: 0.16
sig: 0.004
7821.5100
off: 0.23
sig: 0.004
8399.1600
off: 0.25
sig: 0.003
8430.1700
off: 0.23
sig: 0.003
8885.8300
off: 0.28
sig: 0.003
8919.6100
off: 0.26
sig: 0.003
−4 −2 0 2 4

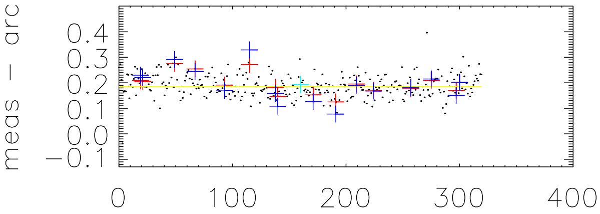
6300.3040



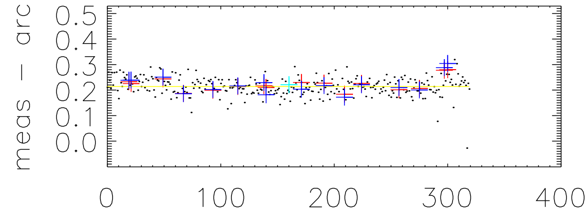
6363.7760



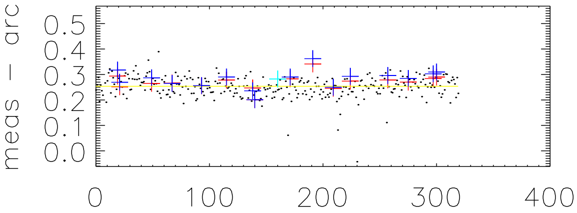
6553.6100



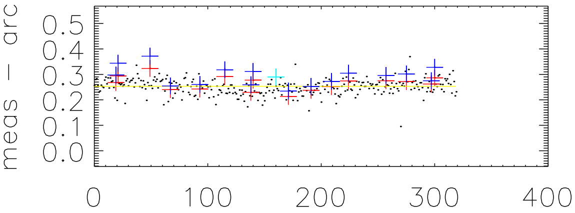
6923.2100

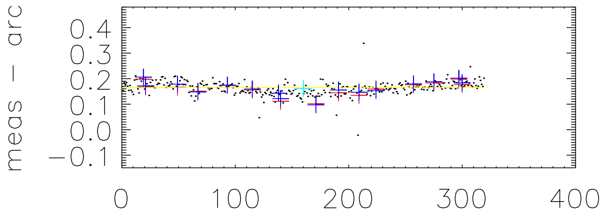


6949.0300

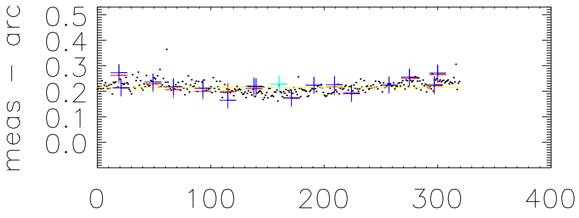


7571.7500

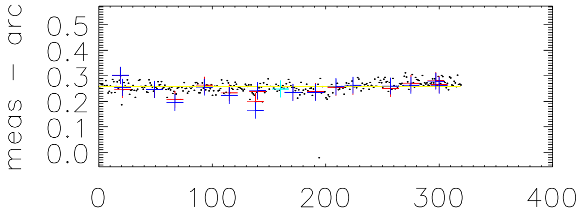




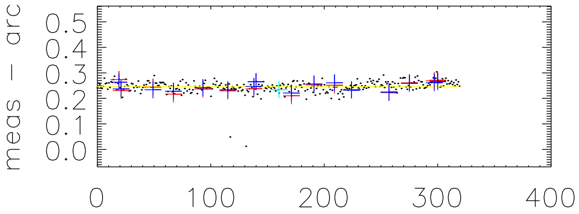
7794.1200



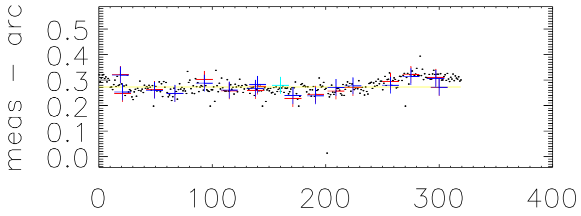
7821.5100



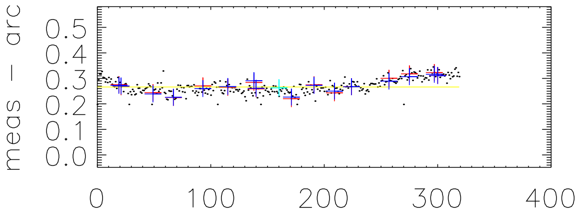
8399.1600



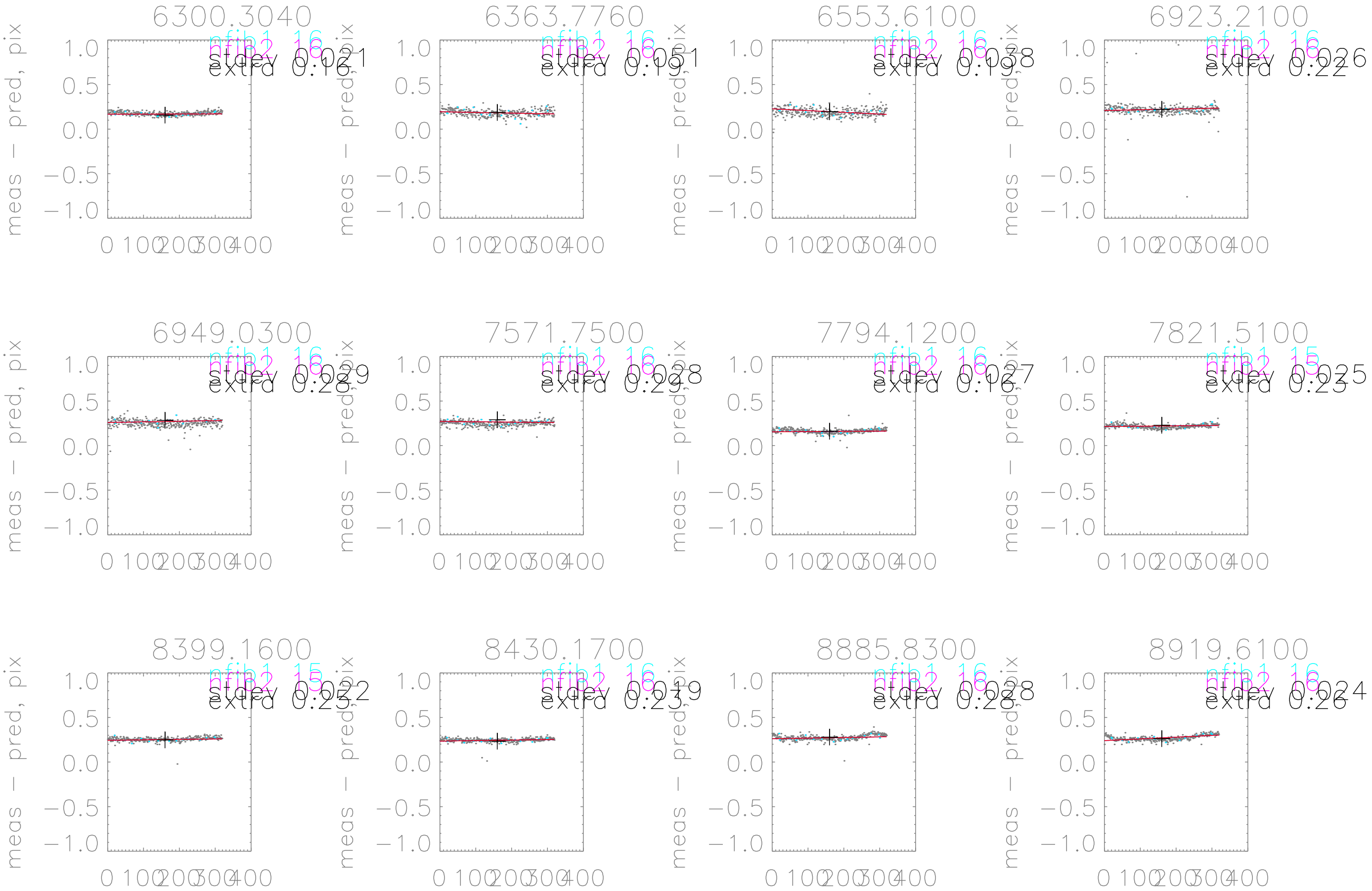
8430.1700

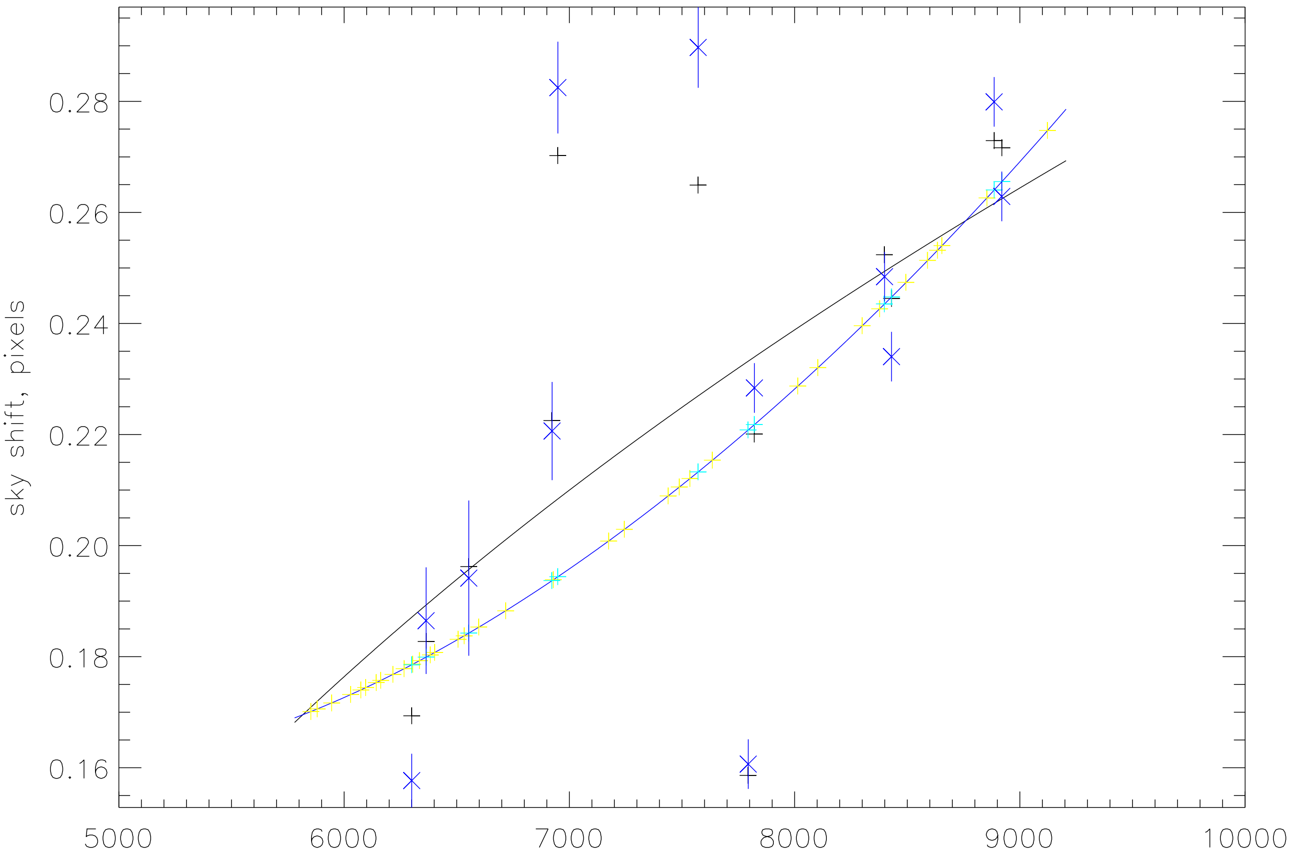


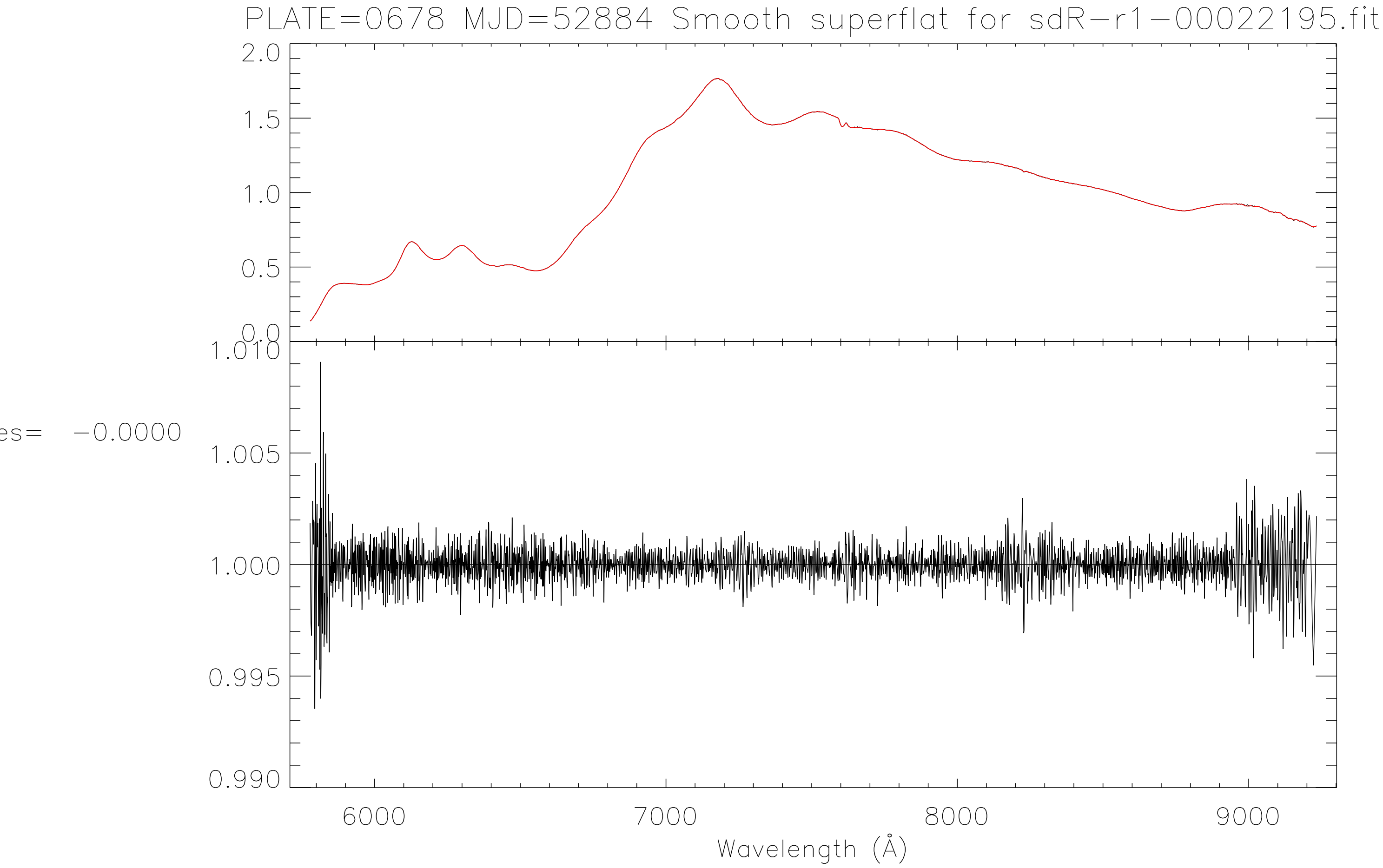
8885.8300

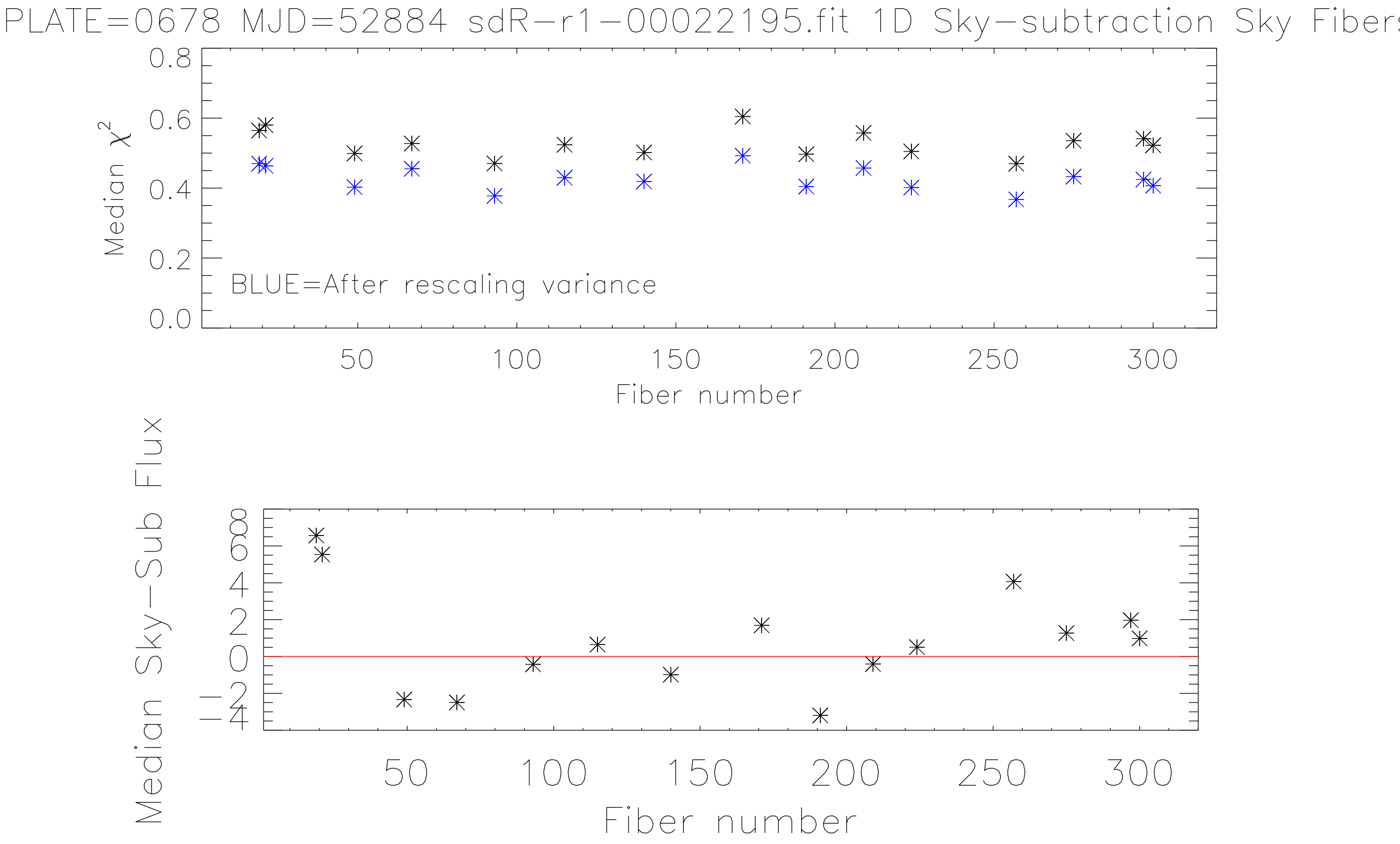


8919.6100

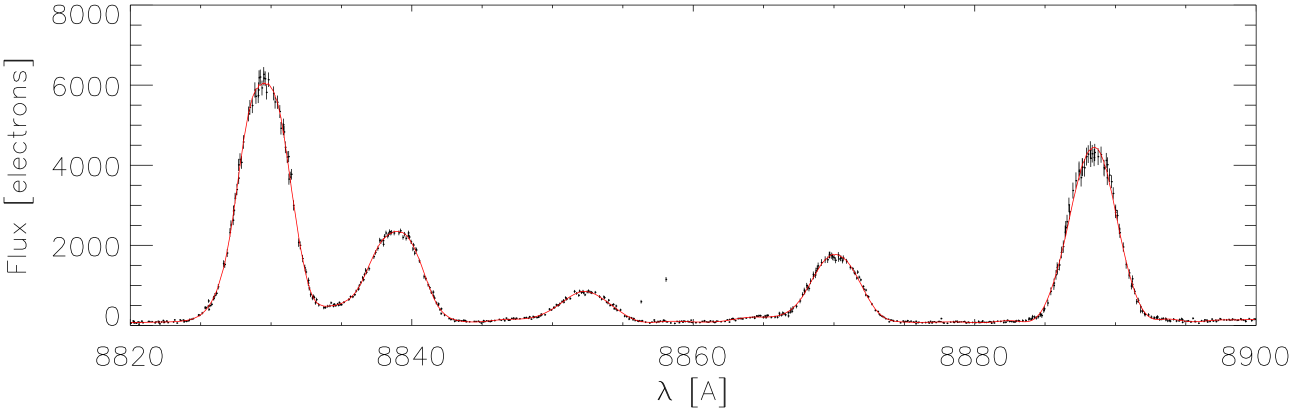

6300.3040
nfib1 16
nfib2 16
stdev 0.021
extrd 0.16
6363.7760
nfib1 16
nfib2 16
stdev 0.051
extrd 0.19
6553.6100
nfib1 16
nfib2 16
stdev 0.038
extrd 0.19
6923.2100
nfib1 16
nfib2 16
stdev 0.026
extrd 0.22
6949.0300
nfib1 16
nfib2 16
stdev 0.029
extrd 0.28
7571.7500
nfib1 16
nfib2 16
stdev 0.028
extrd 0.29
7794.1200
nfib1 16
nfib2 16
stdev 0.027
extrd 0.16
7821.5100
nfib1 15
nfib2 15
stdev 0.025
extrd 0.23
8399.1600
nfib1 15
nfib2 15
stdev 0.022
extrd 0.25
8430.1700
nfib1 16
nfib2 16
stdev 0.019
extrd 0.23
8885.8300
nfib1 16
nfib2 16
stdev 0.028
extrd 0.28
8919.6100
nfib1 16
nfib2 16
stdev 0.024
extrd 0.26
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.16
0.18
0.20
0.22
0.24
0.26
0.28
5000
6000
7000
8000
9000
10000

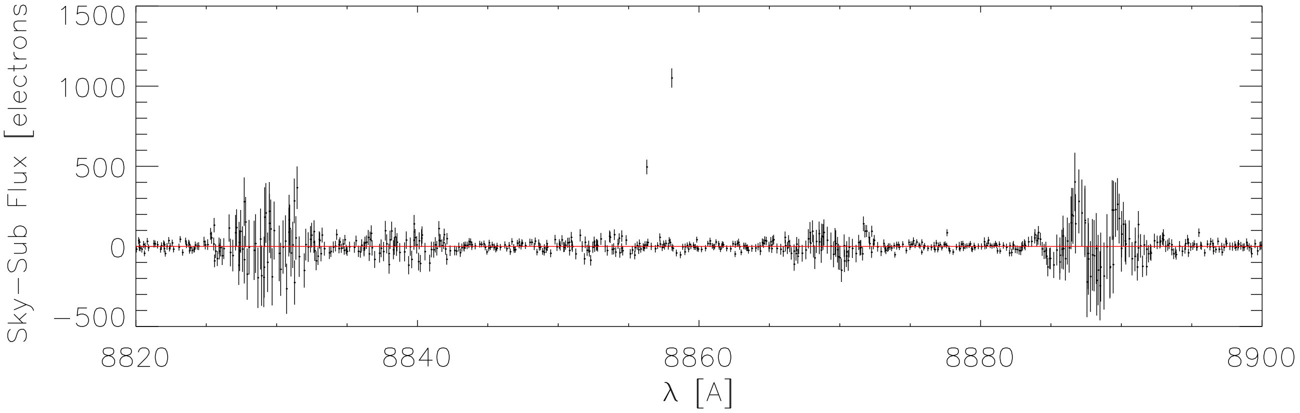

PLATE=0678 MJD=52884 Smooth superflat for sdR-r1-00022195.fit
2.0
1.5
1.0
0.5
0.0
1.010
es= −0.0000
1.005
1.000
0.995
0.990
6000
7000
8000
9000
Wavelength (Å)


PLATE=0678 MJD=52884 sdR-r1-00022195.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number

PLATE=0678 MJD=52884 sdR-r1-00022195.fit 1D Sky-subtraction Sky Fibers

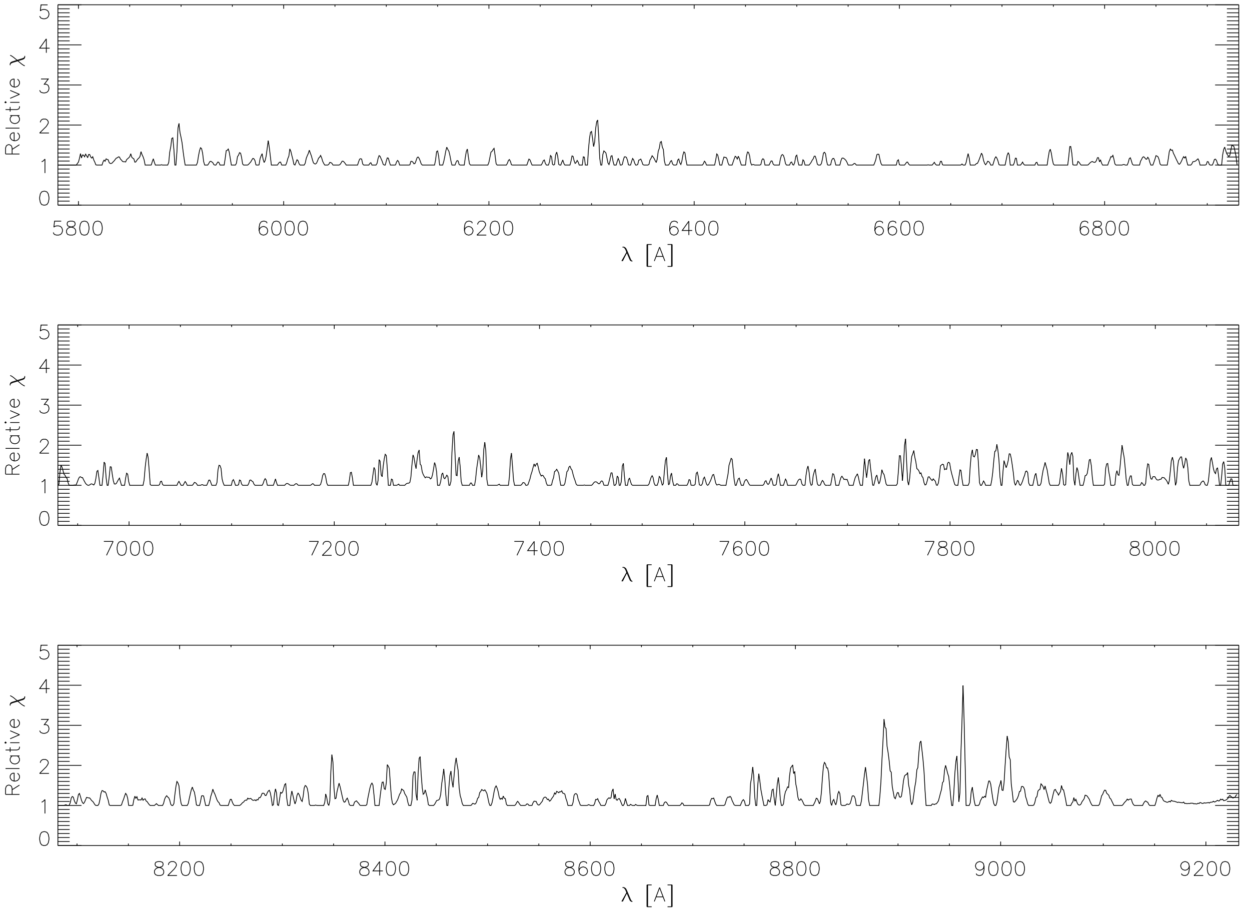


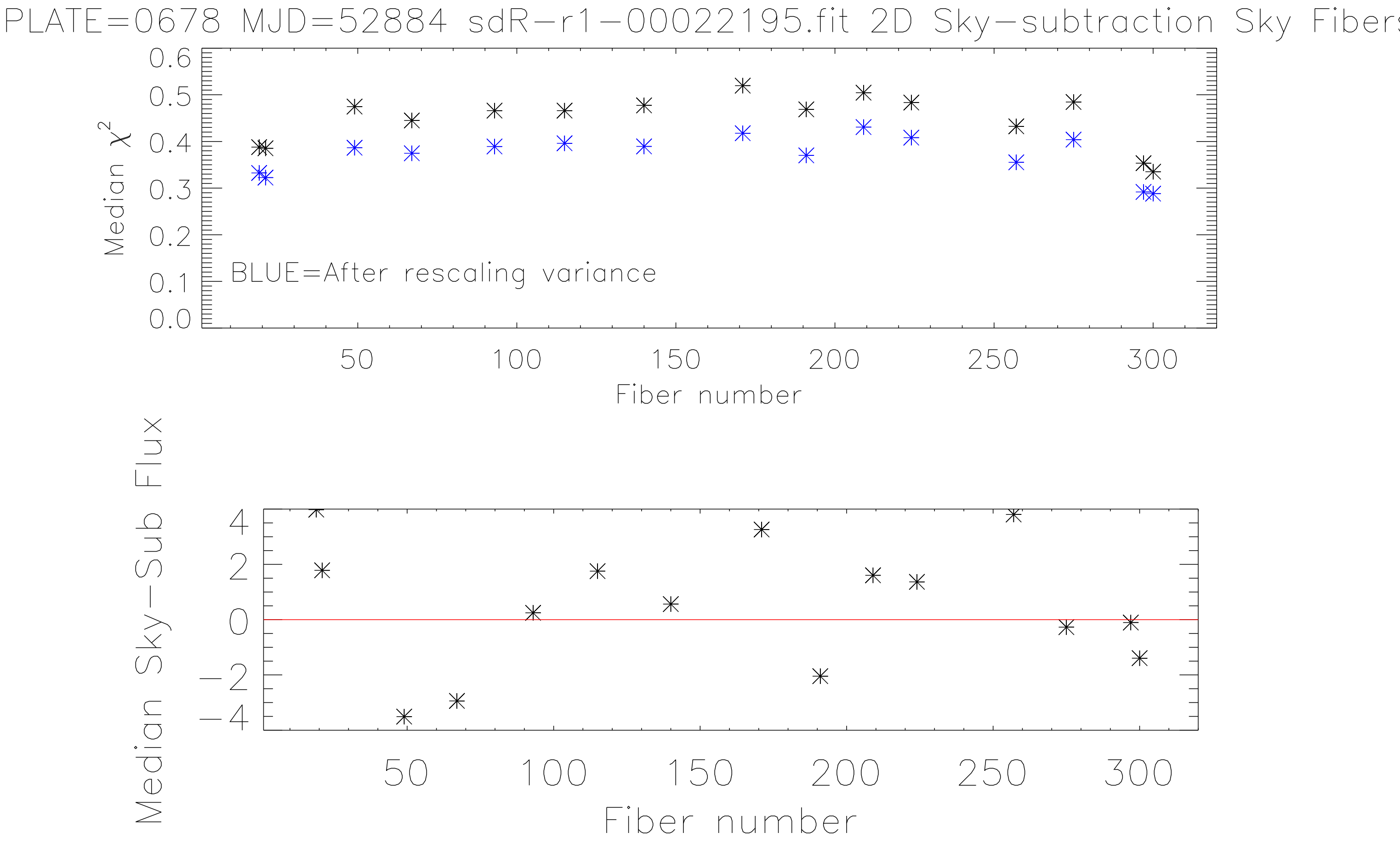
PLATE=0678 MJD=52884 sdR-r1-00022195.fit 1D Sky-subtraction Sky-subtracted Sky F

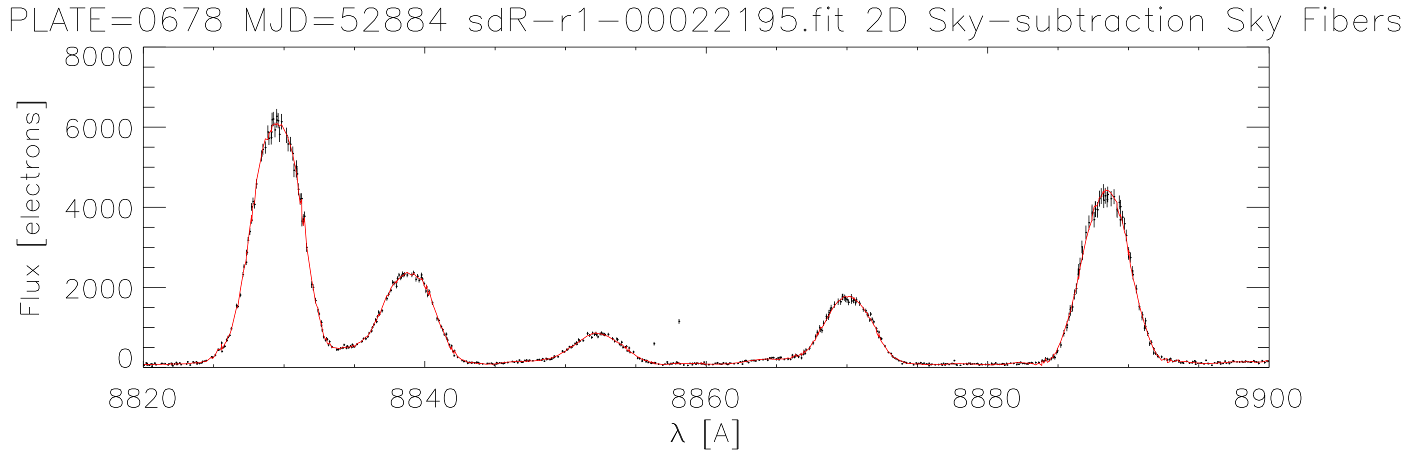


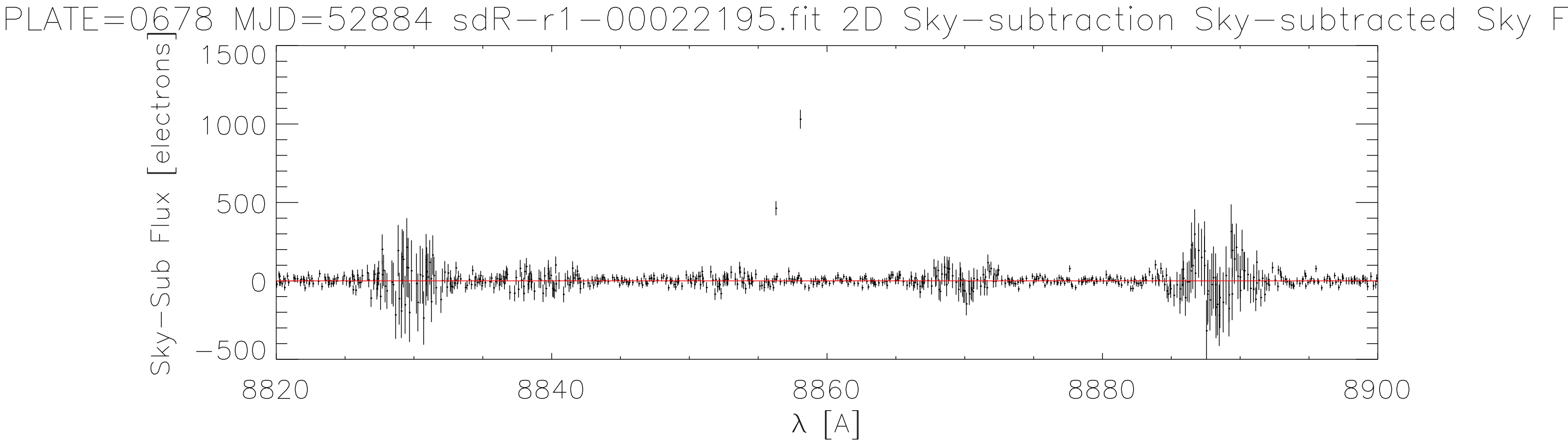
Number of sky fibers = 15

PLATE=0678 MJD=52884 sdR-r1-00022195.fit 1D Sky-subtraction Rescaled Errors



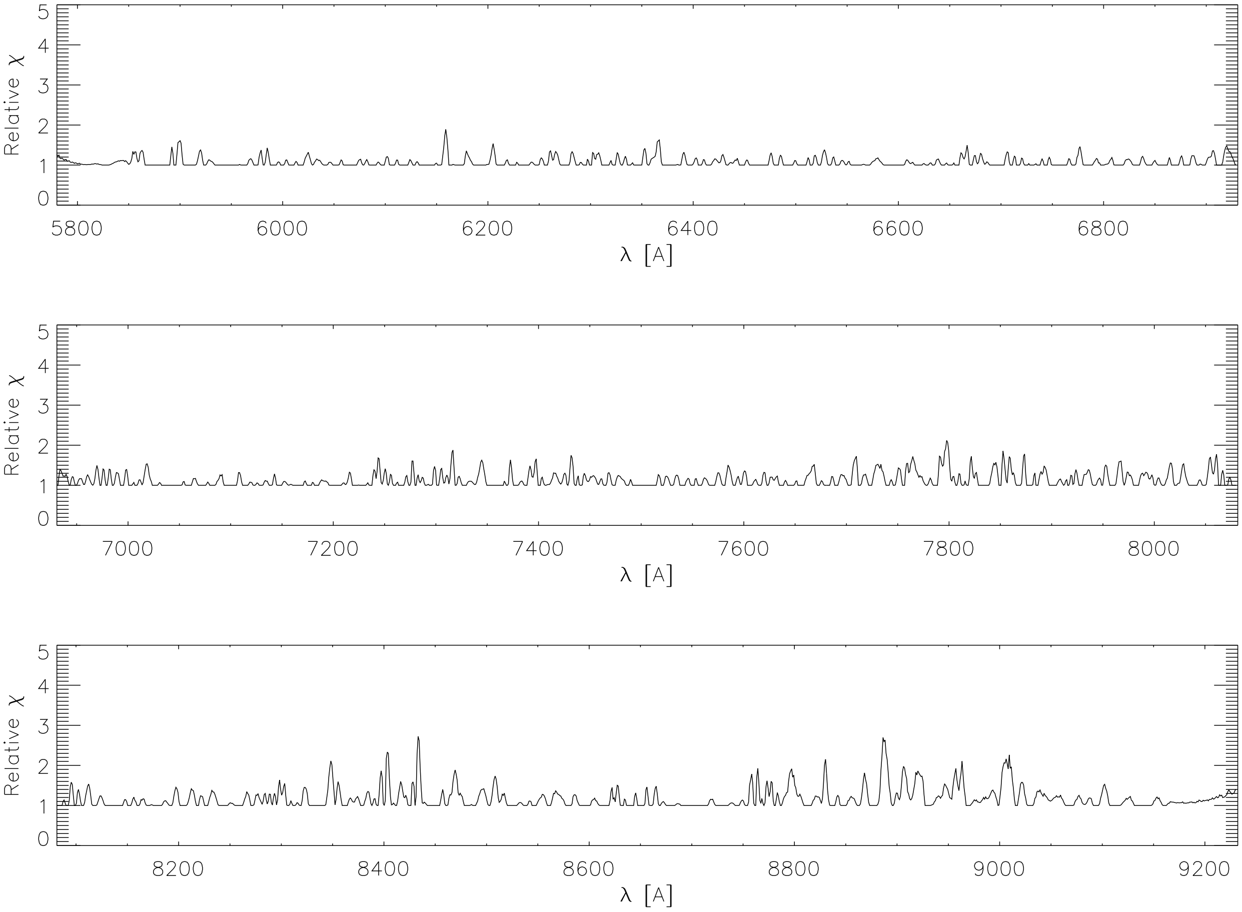

PLATE=0678 MJD=52884 sdR-r1-00022195.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

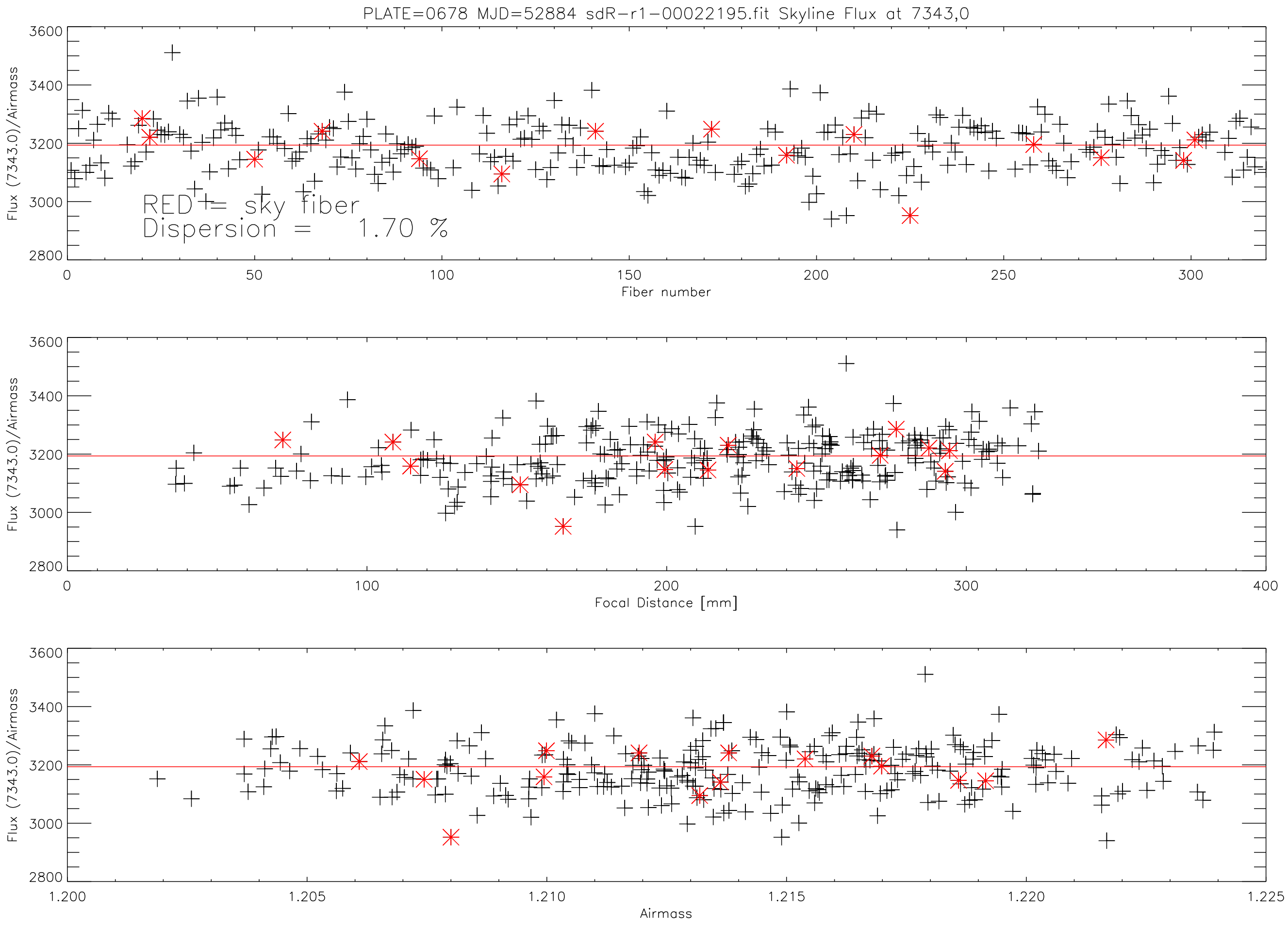

PLATE=0678 MJD=52884 sdR-r1-00022195.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

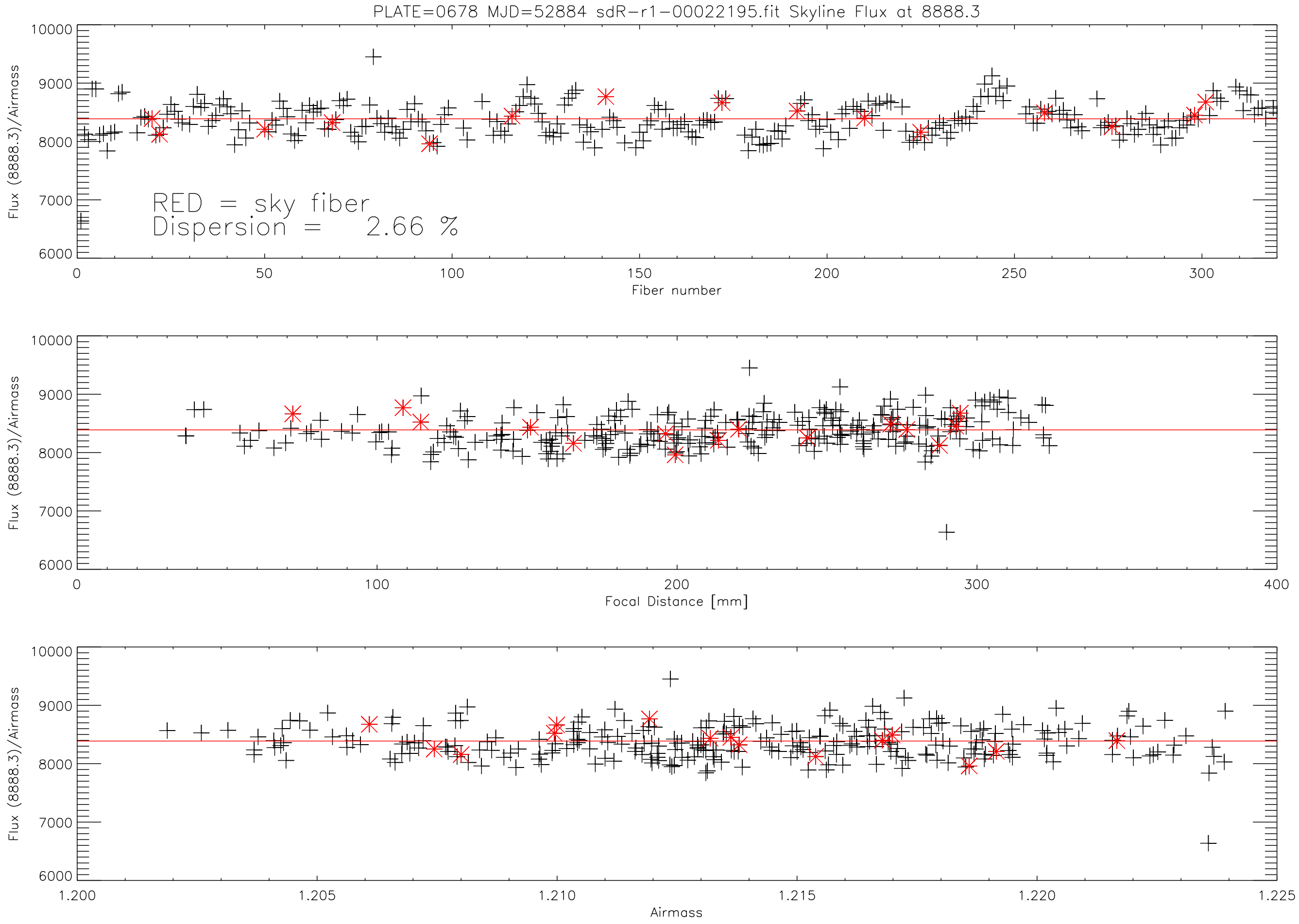

PLATE=0678 MJD=52884 sdR-r1-00022195.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

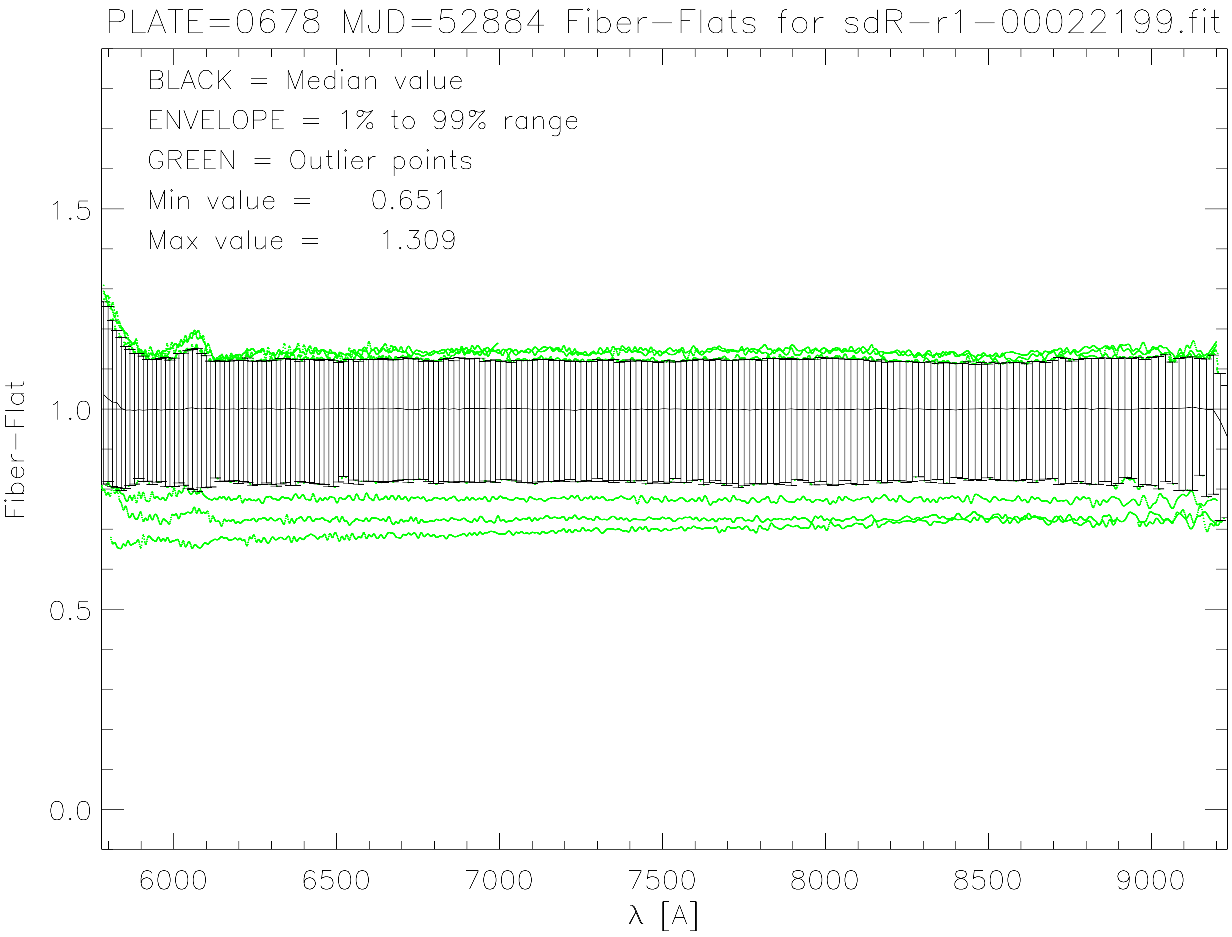
Number of sky fibers = 15

PLATE=0678 MJD=52884 sdR-r1-00022195.fit 2D Sky-subtraction Rescaled Errors



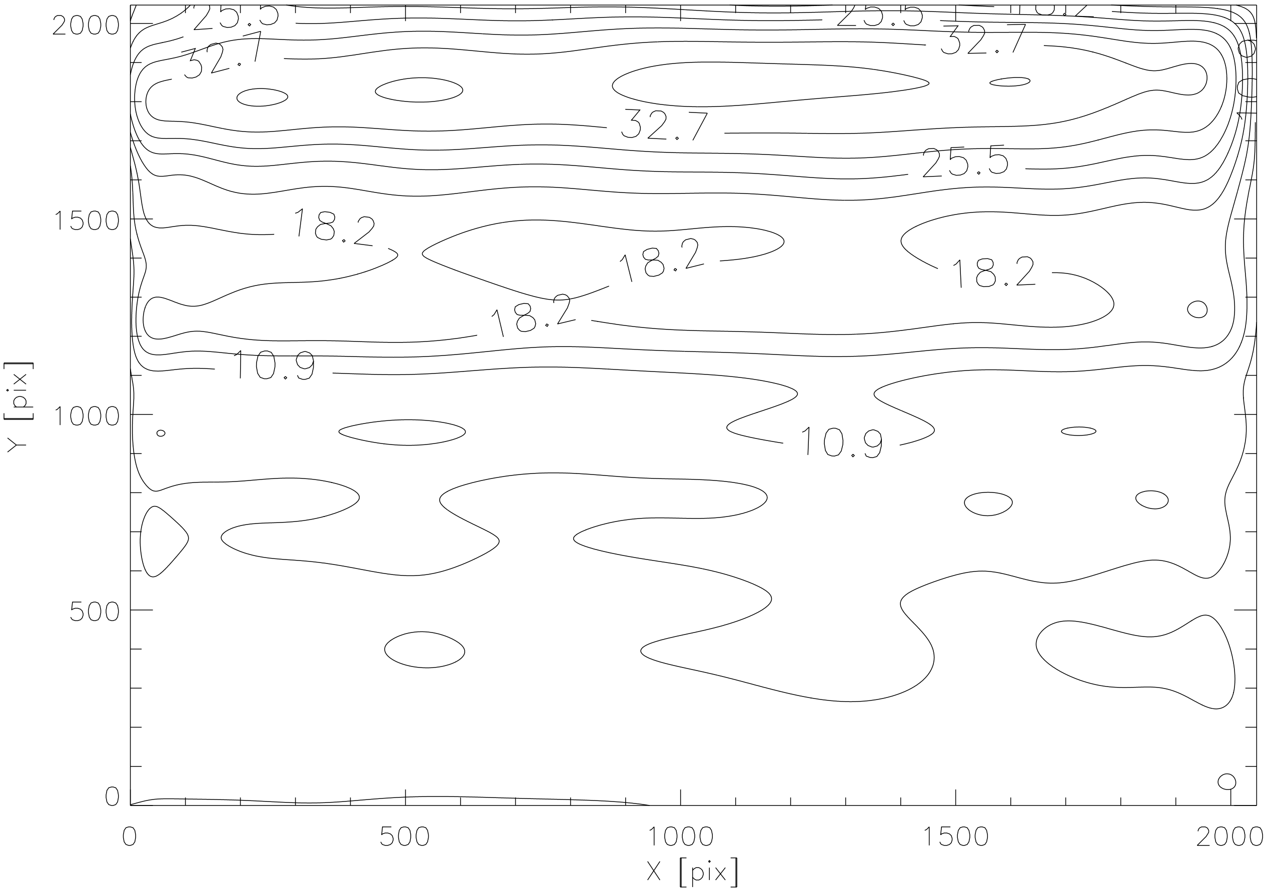

PLATE=0678 MJD=52884 sdR-r1-00022195.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
RED = sky fiber
Dispersion = 1.70 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
1.200
1.205
1.210
1.215
1.220
1.225
Airmass

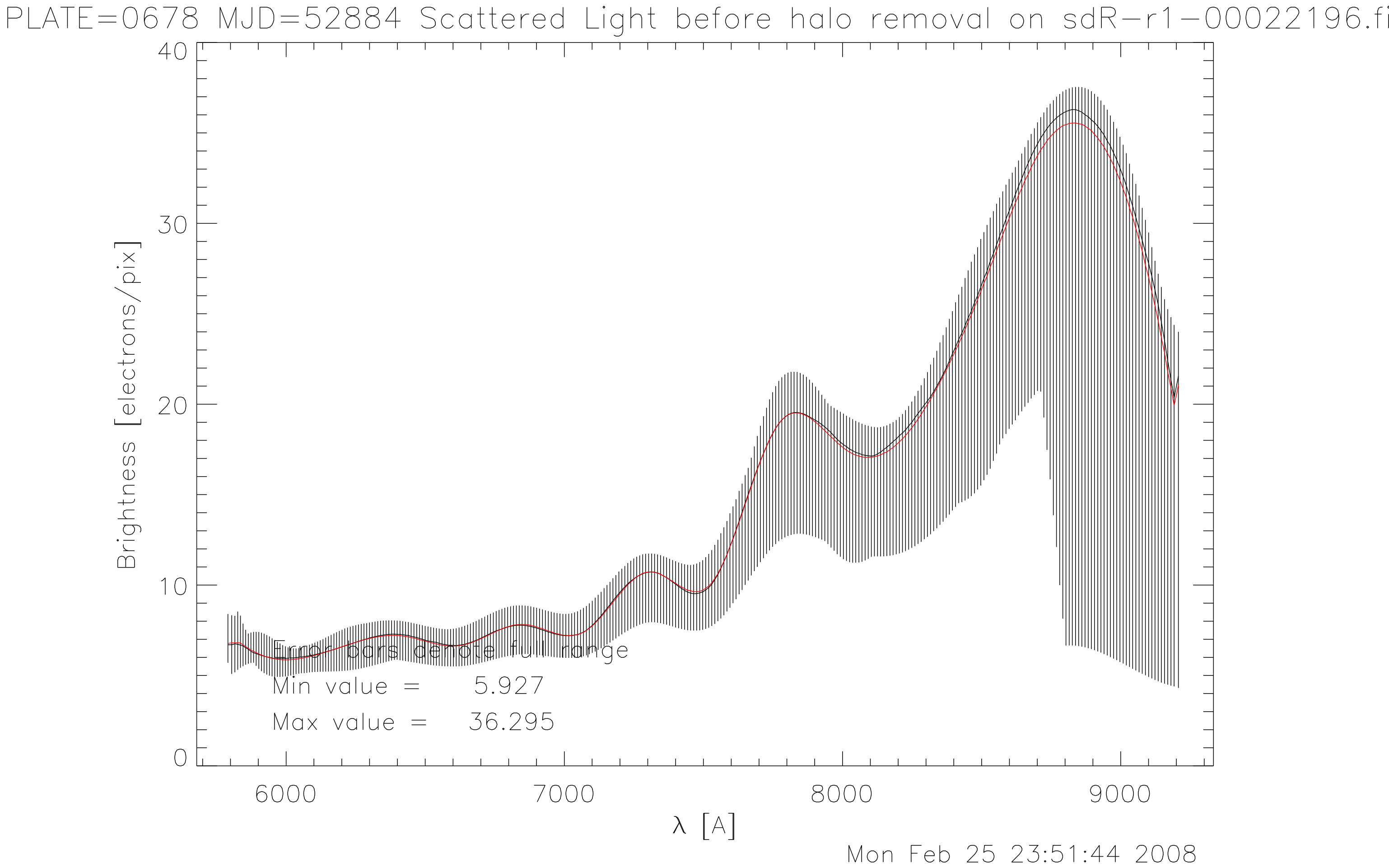

PLATE=0678 MJD=52884 sdR-r1-00022195.fit Skyline Flux at 8888.3

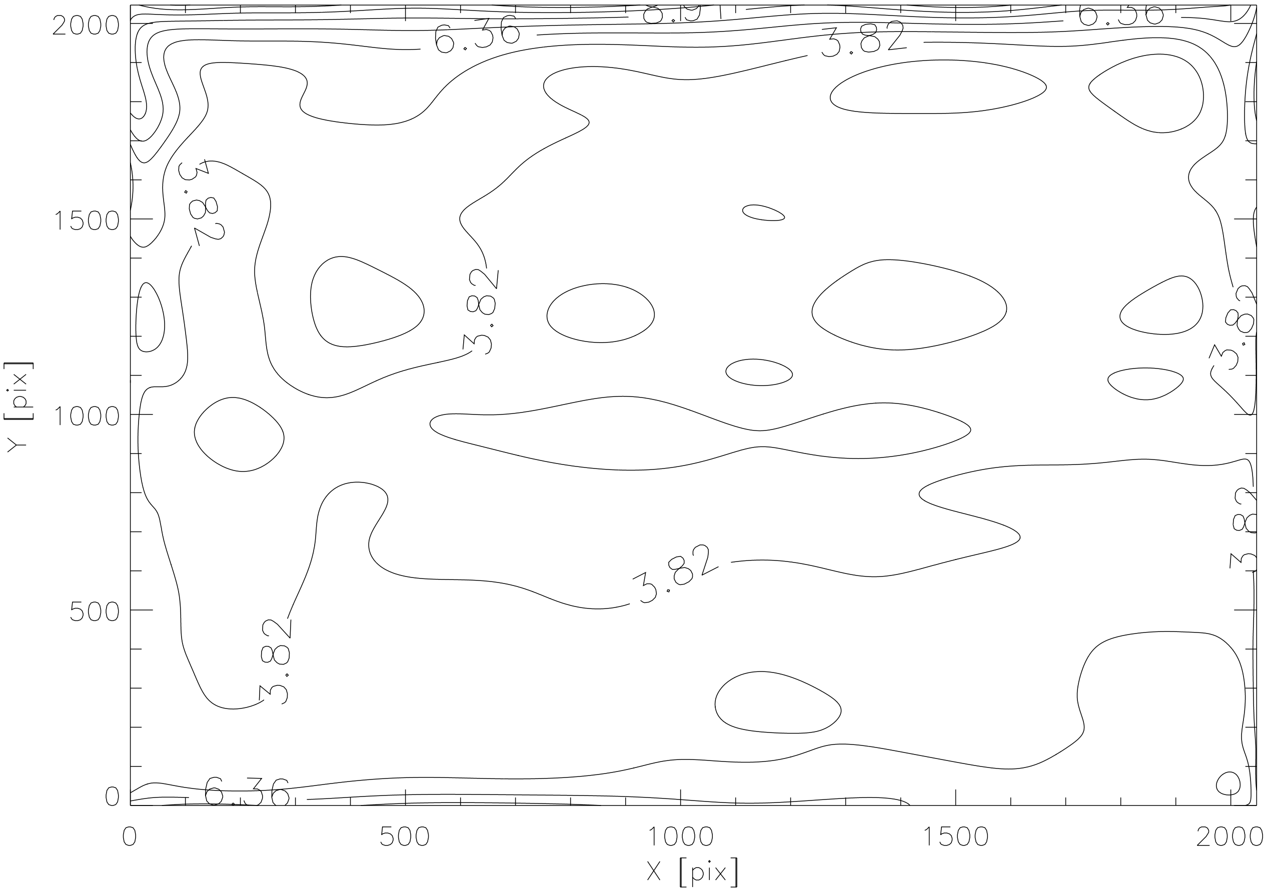


Mon Feb 25 23:50:51 2008

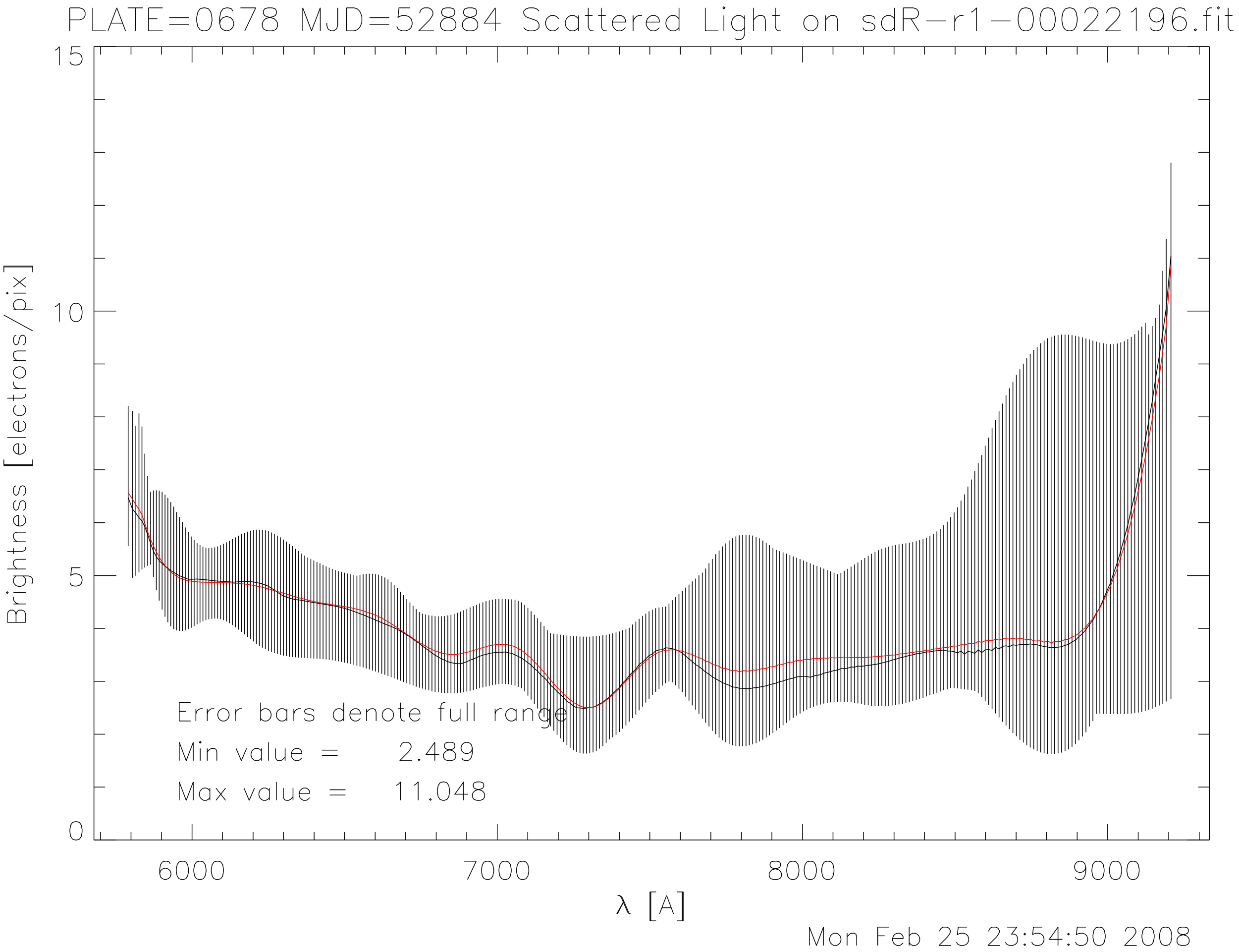
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022196.fi

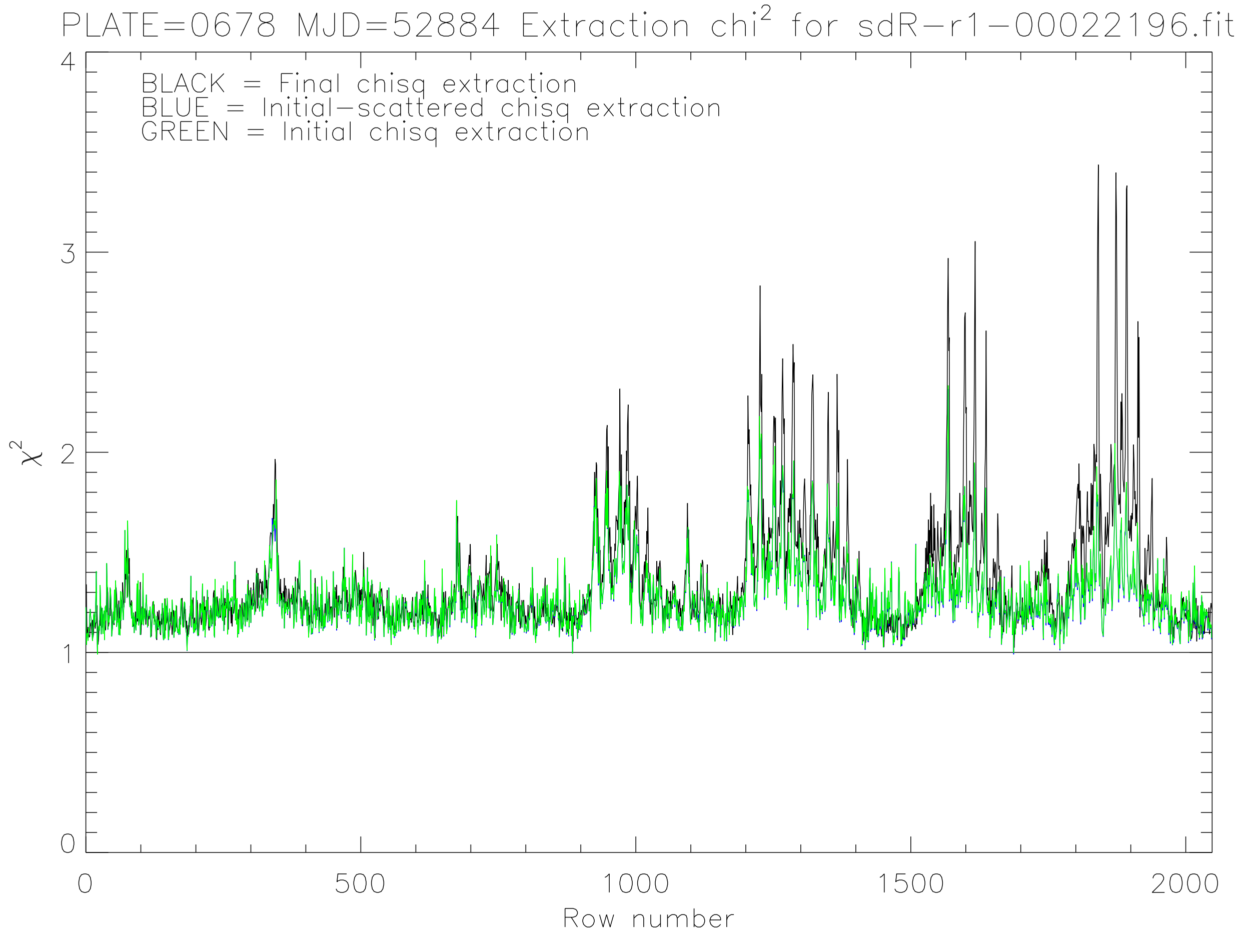


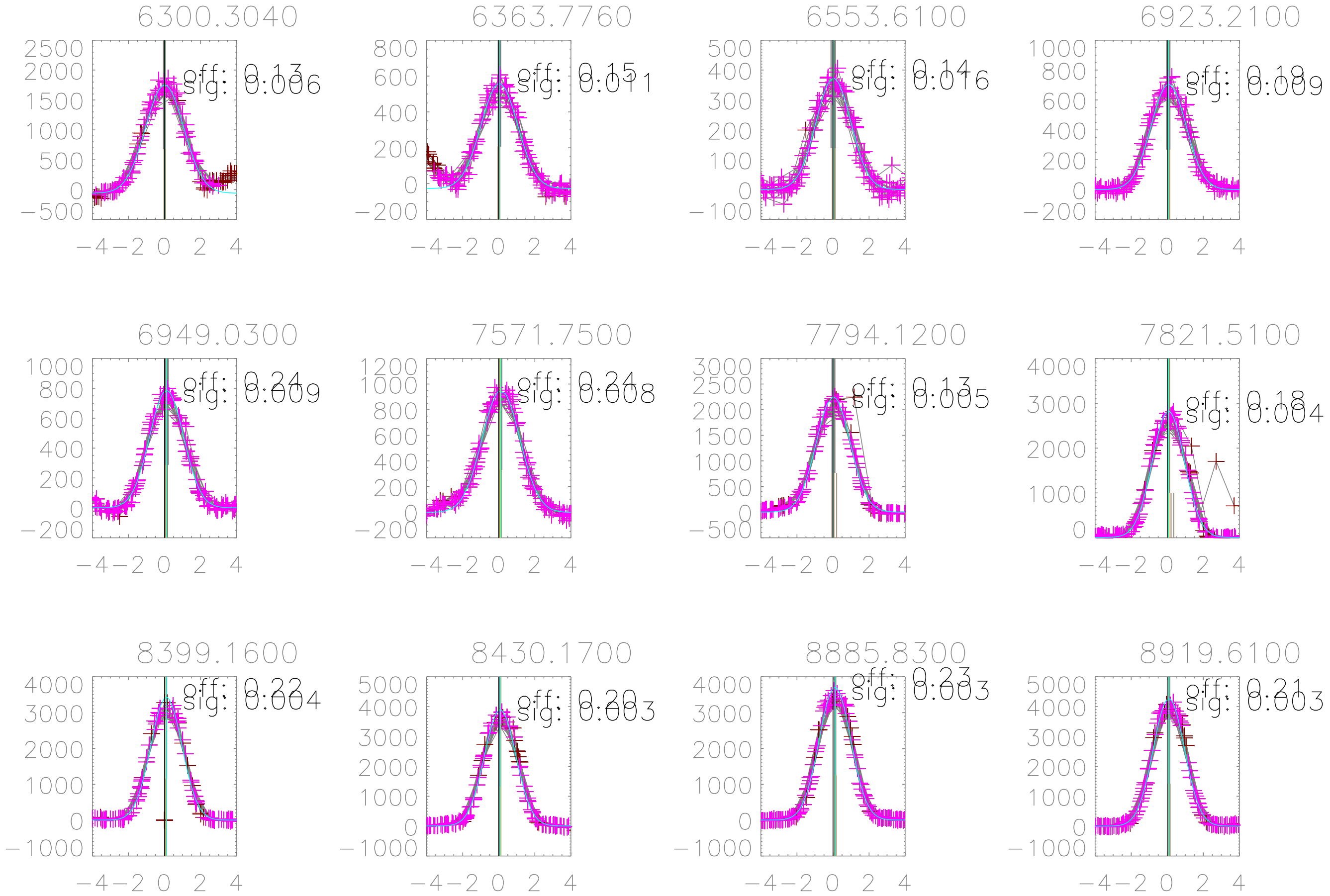

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022196.fi
Brightness [electrons/pix]
0
10
20
30
40
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.927
Max value = 36.295
Mon Feb 25 23:51:44 2008

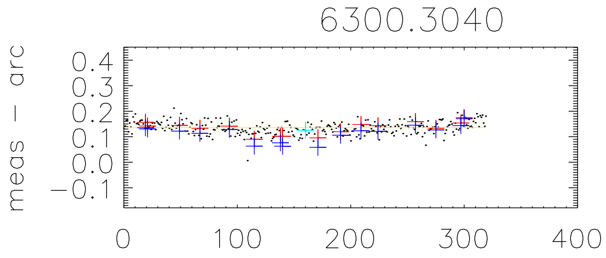


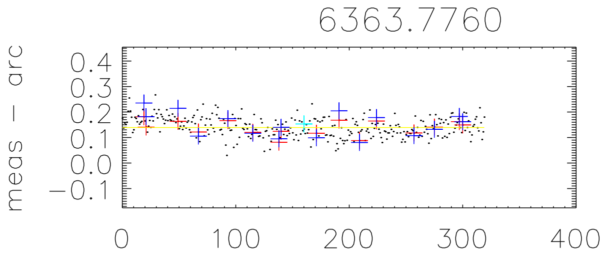
PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022196.fit

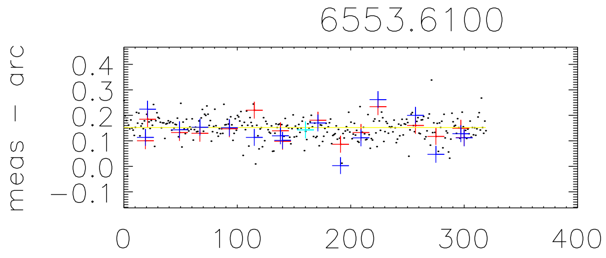

PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022196.fit
Brightness [electrons/pix]
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.489
Max value = 11.048
Mon Feb 25 23:54:50 2008

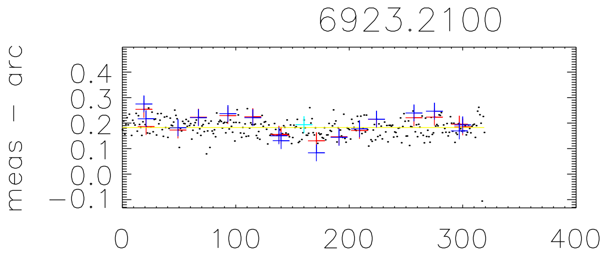

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r1-00022196.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

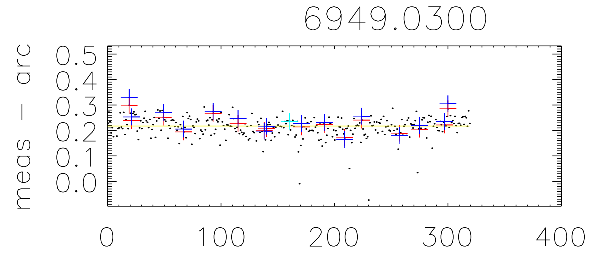

6300.3040
off: 0.13
sig: 0.006
6363.7760
off: 0.15
sig: 0.011
6553.6100
off: 0.14
sig: 0.016
6923.2100
off: 0.19
sig: 0.009
6949.0300
off: 0.24
sig: 0.009
7571.7500
off: 0.24
sig: 0.008
7794.1200
off: 0.13
sig: 0.005
7821.5100
off: 0.18
sig: 0.004
8399.1600
off: 0.22
sig: 0.004
8430.1700
off: 0.20
sig: 0.003
8885.8300
off: 0.23
sig: 0.003
8919.6100
off: 0.21
sig: 0.003
−4 −2 0 2 4

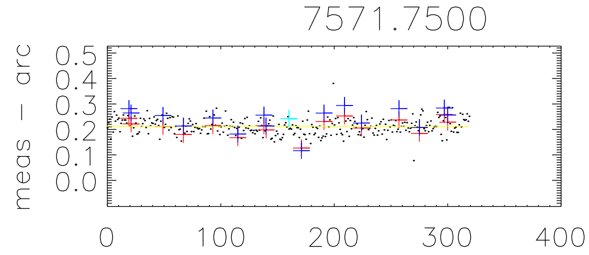

6300.3040

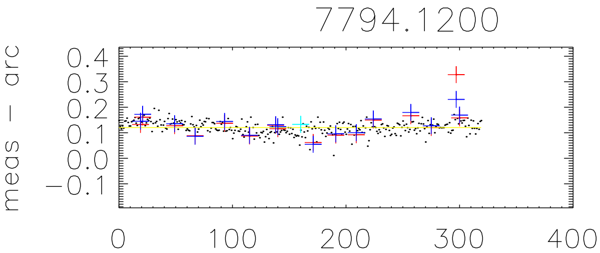

6363.7760

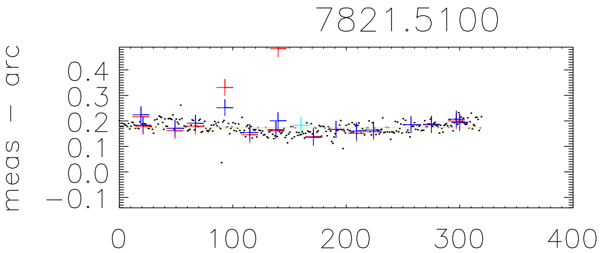

6553.6100

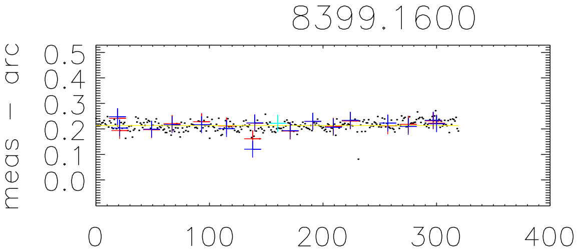

6923.2100

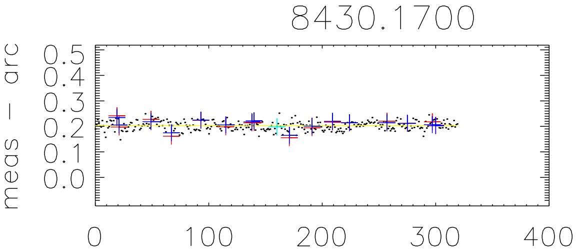

6949.0300

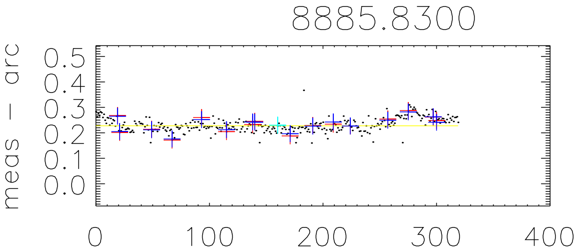

7571.7500

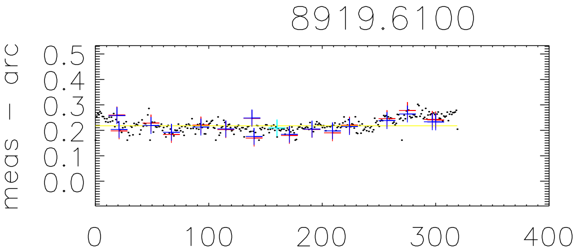

7794.1200
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

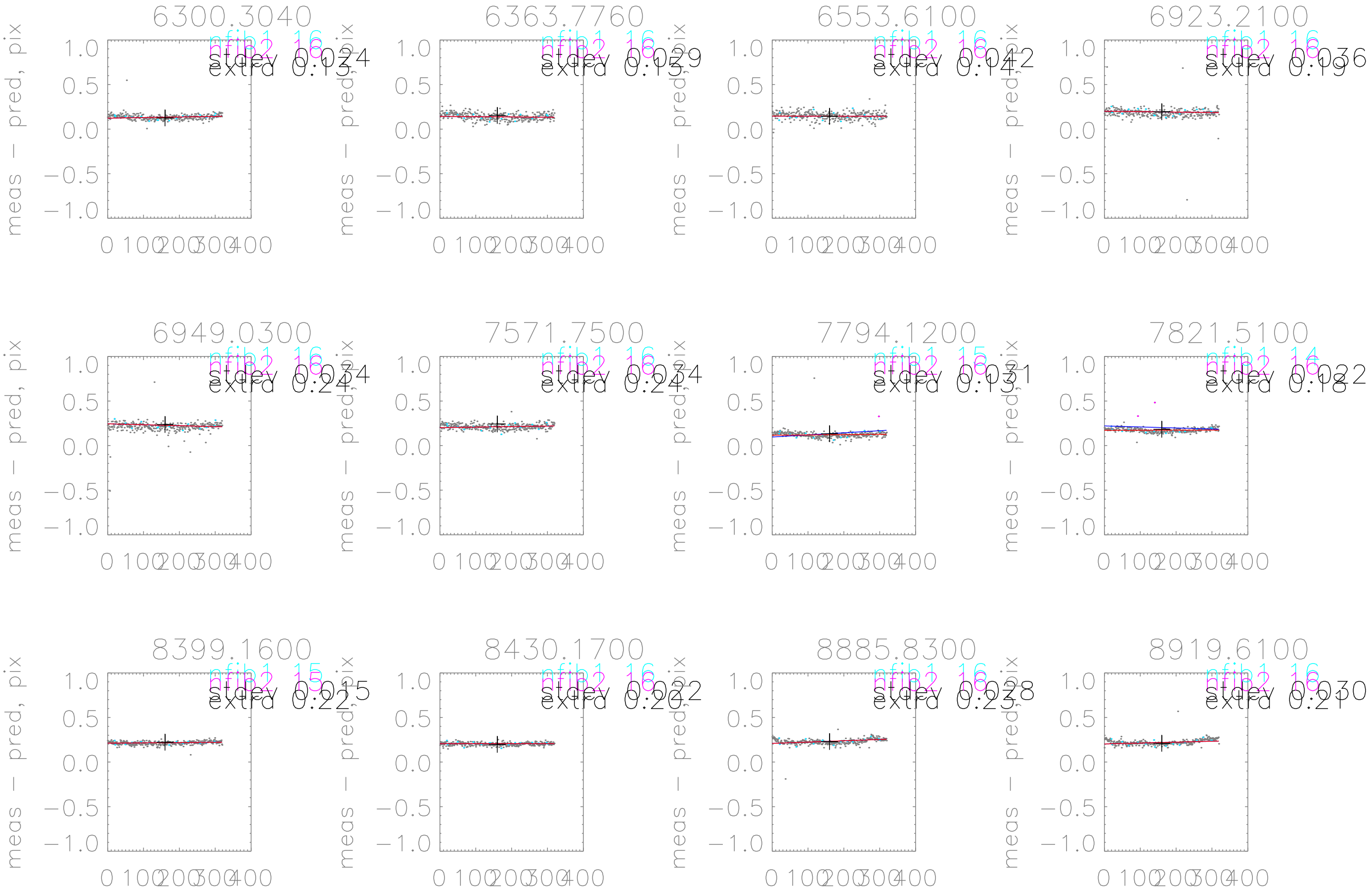

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

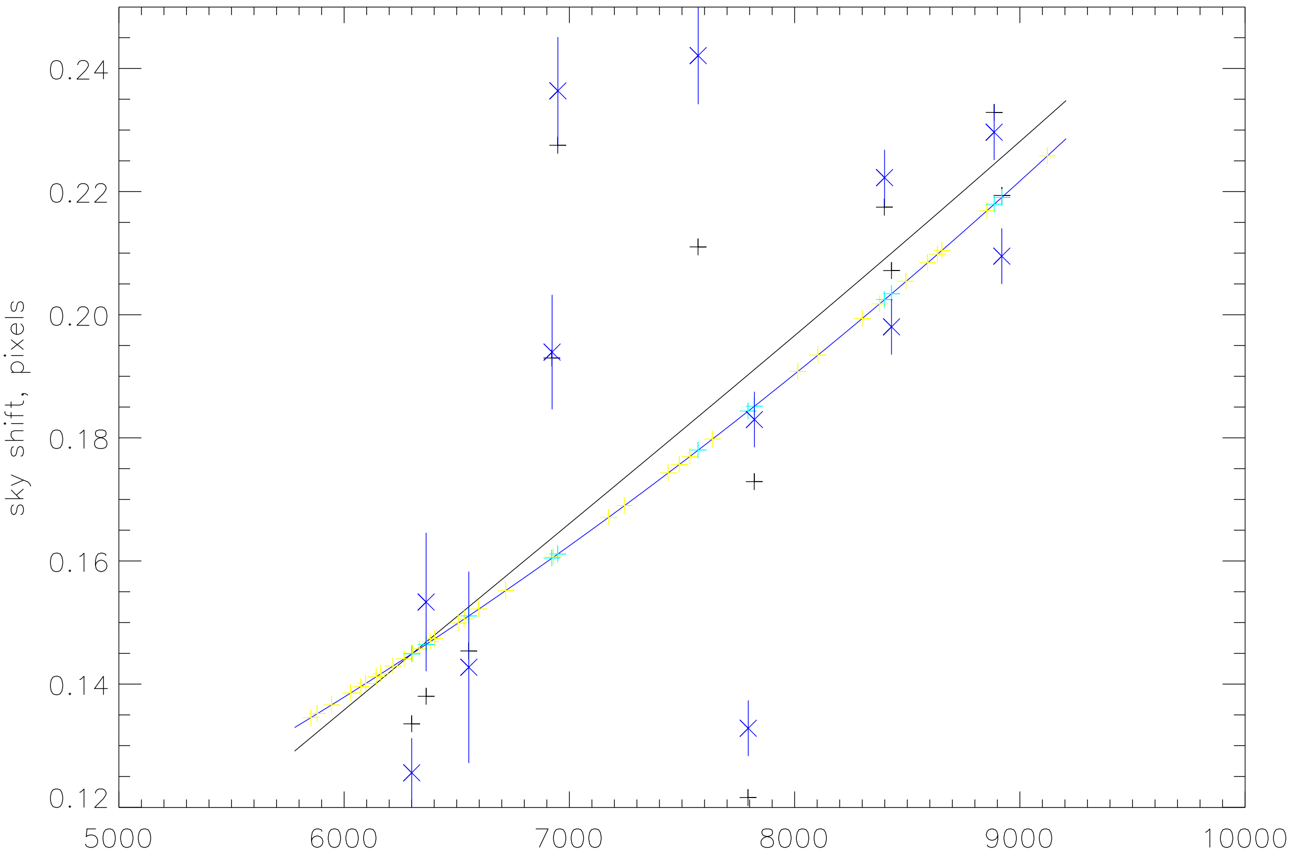

8399.1600
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

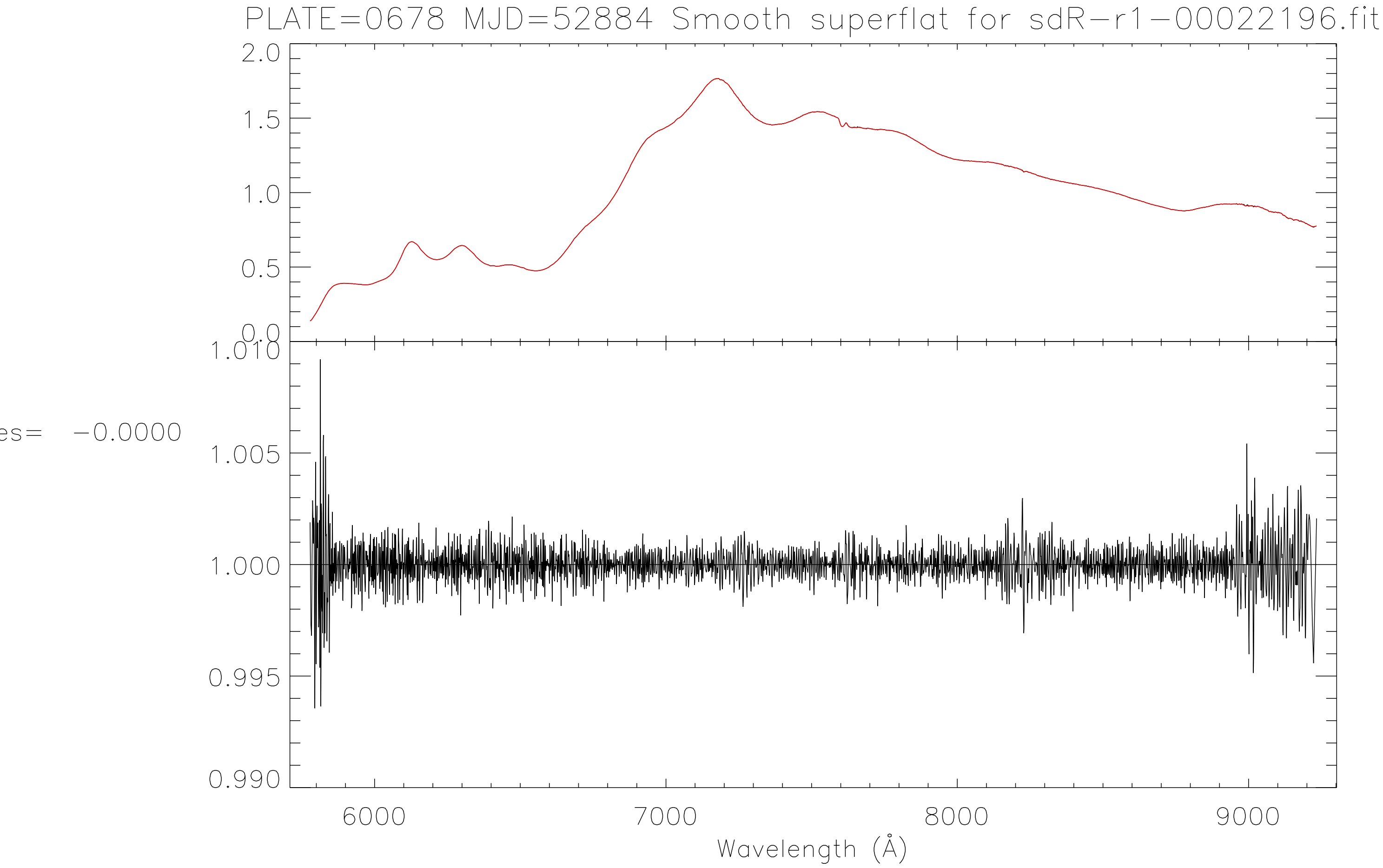

8430.1700
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

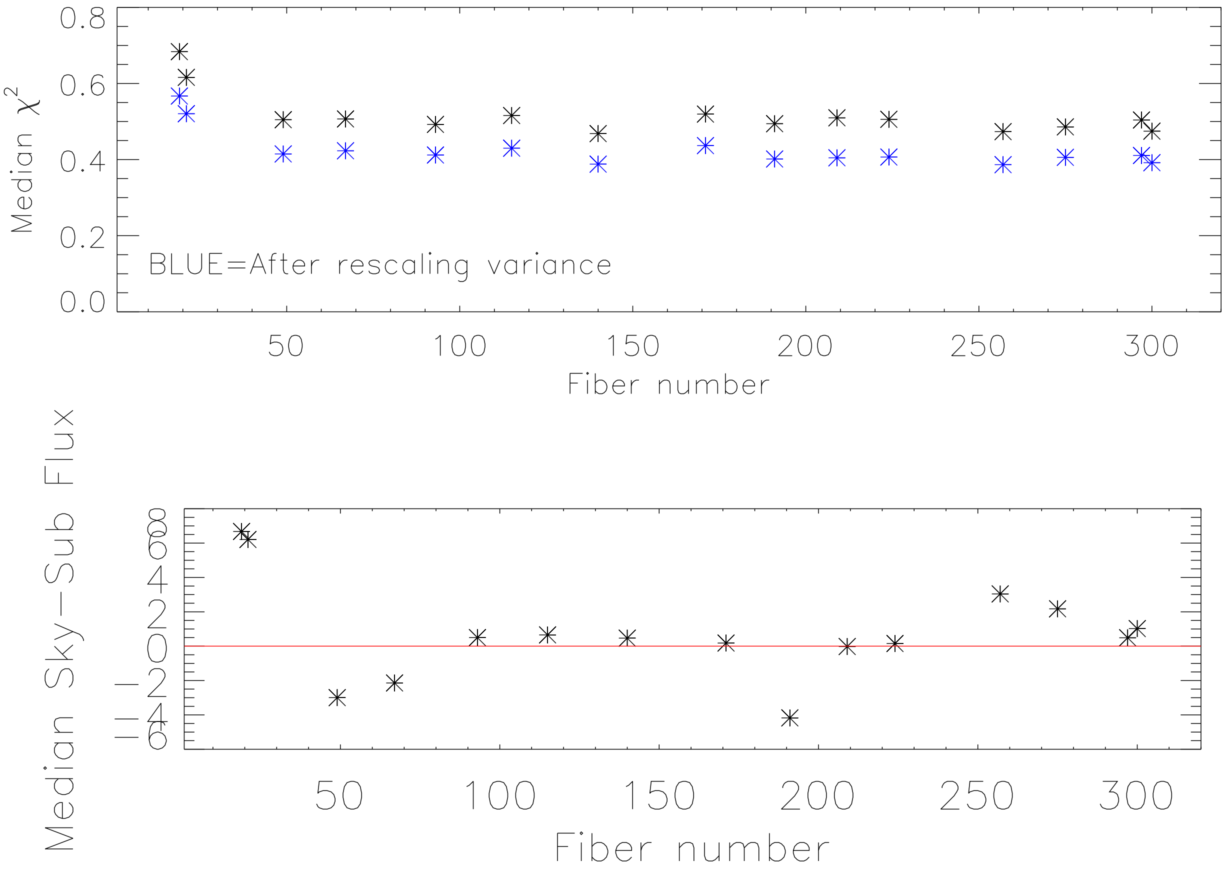

8919.6100
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

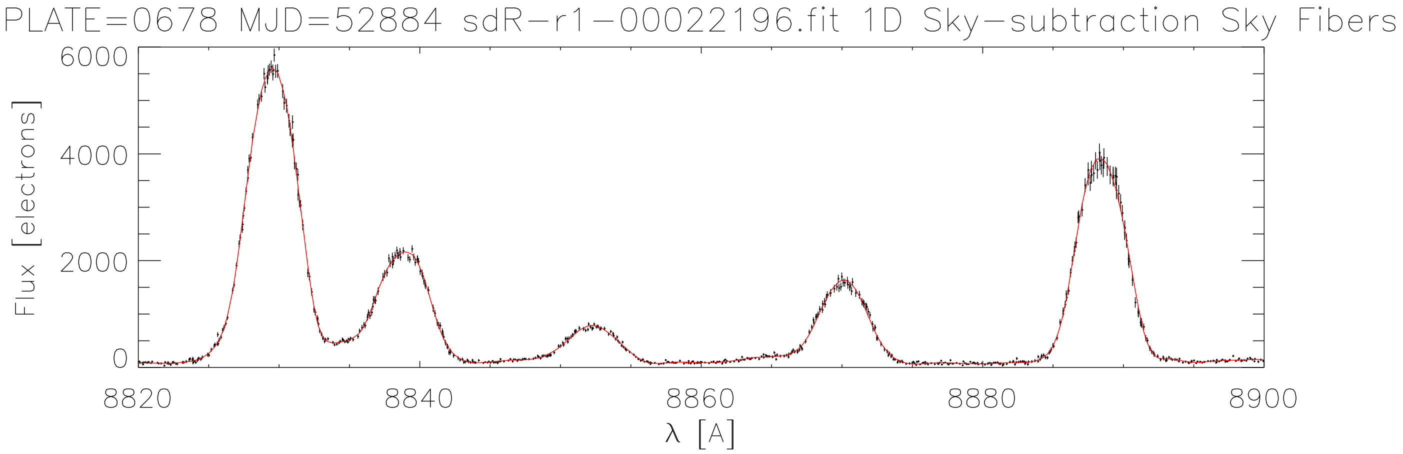

6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd 0.13
6363.7760
nfib1 16
nfib2 16
stdev 0.029
extrd 0.15
6553.6100
nfib1 16
nfib2 16
stdev 0.042
extrd 0.14
6923.2100
nfib1 16
nfib2 16
stdev 0.036
extrd 0.19
6949.0300
nfib1 16
nfib2 16
stdev 0.034
extrd 0.24
7571.7500
nfib1 16
nfib2 16
stdev 0.034
extrd 0.24
7794.1200
nfib1 15
nfib2 15
stdev 0.031
extrd 0.13
7821.5100
nfib1 14
nfib2 16
stdev 0.022
extrd 0.18
8399.1600
nfib1 15
nfib2 15
stdev 0.015
extrd 0.22
8430.1700
nfib1 16
nfib2 16
stdev 0.022
extrd 0.20
8885.8300
nfib1 16
nfib2 16
stdev 0.028
extrd 0.23
8919.6100
nfib1 16
nfib2 16
stdev 0.030
extrd 0.21
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

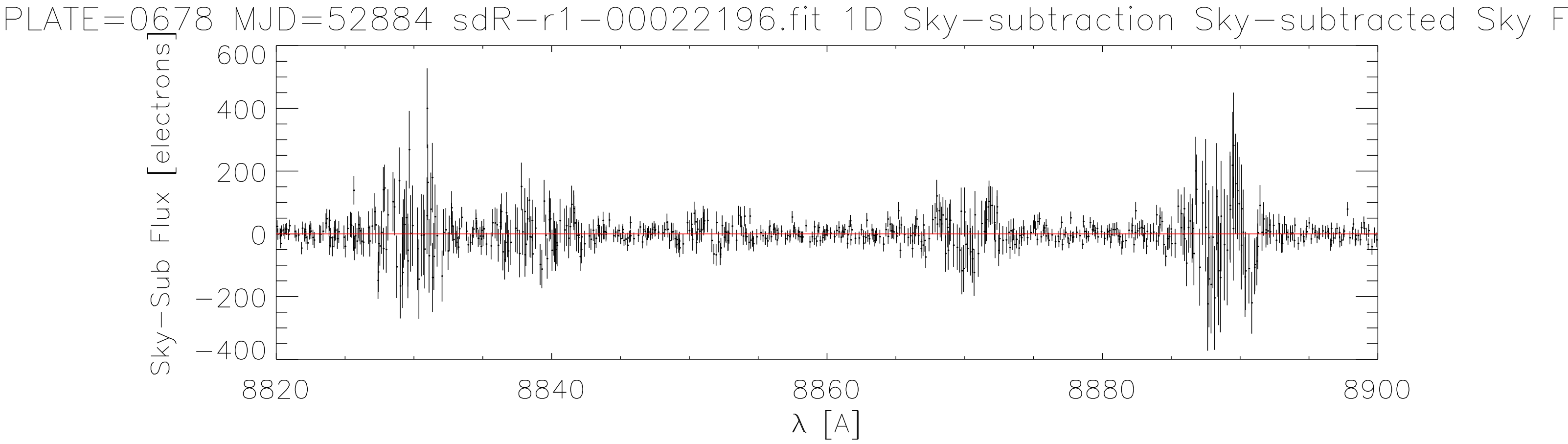

sky shift, pixels
0.24
0.22
0.20
0.18
0.16
0.14
0.12
5000
6000
7000
8000
9000
10000


PLATE=0678 MJD=52884 Smooth superflat for sdR-r1-00022196.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

PLATE=0678 MJD=52884 sdR-r1-00022196.fit 1D Sky-subtraction Sky Fiber

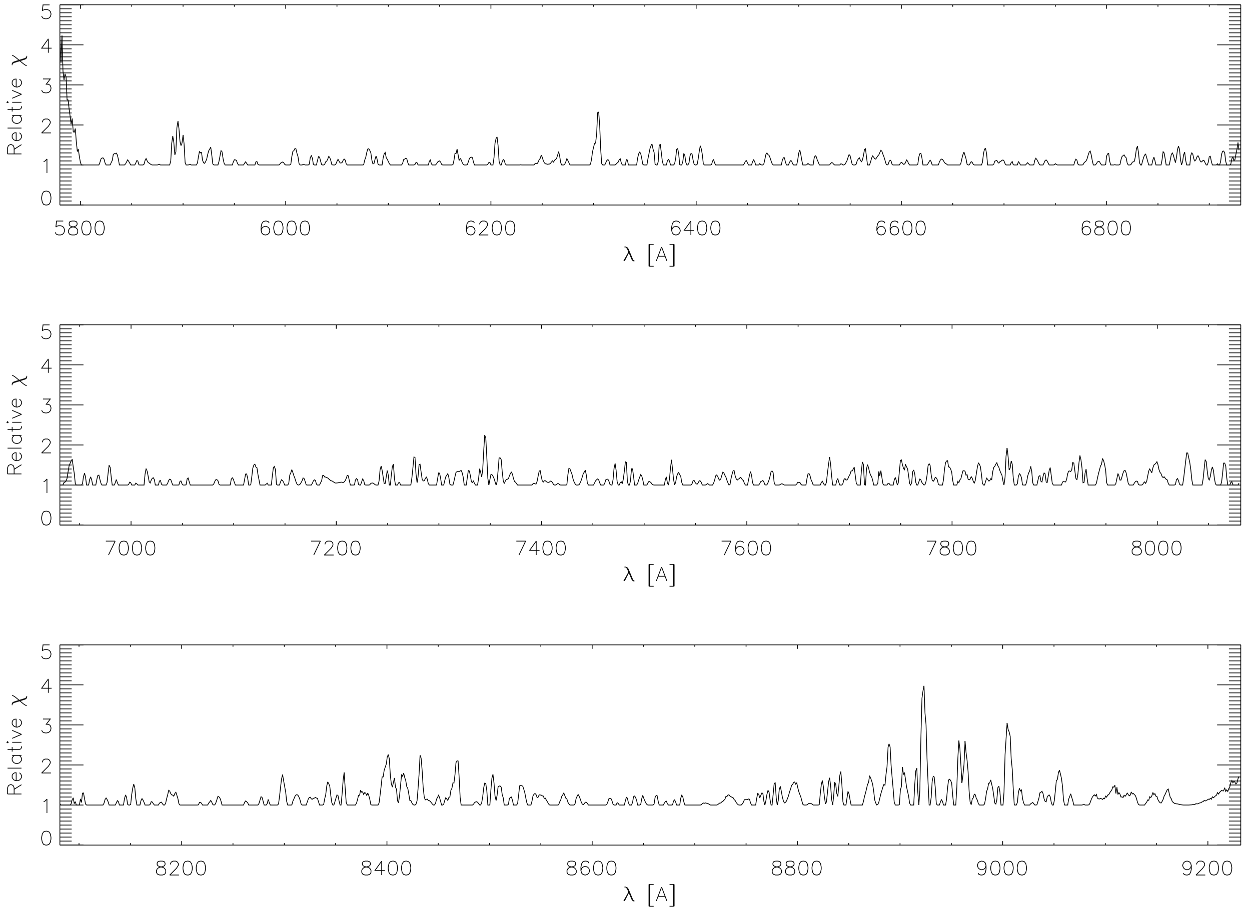


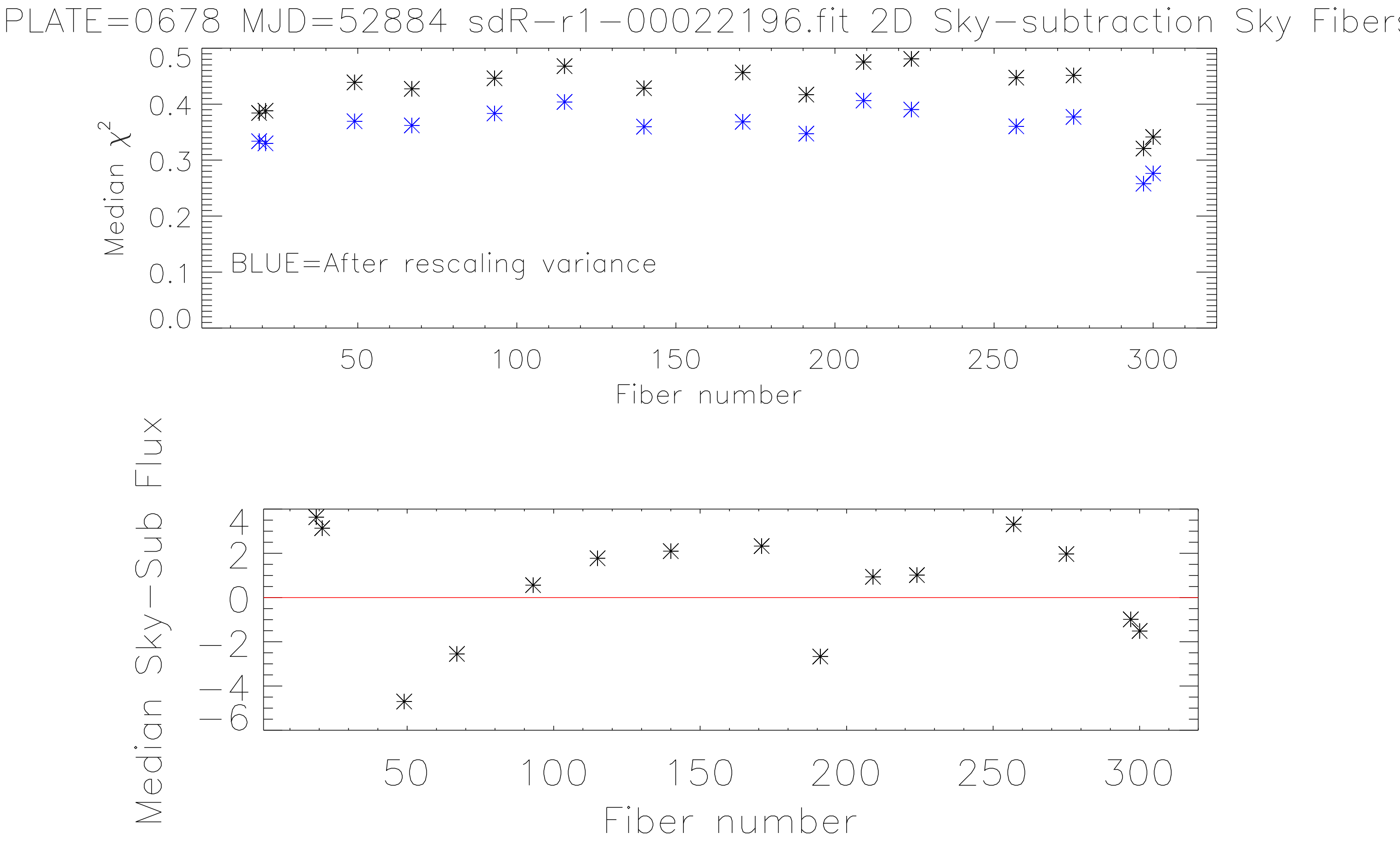

PLATE=0678 MJD=52884 sdR-r1-00022196.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

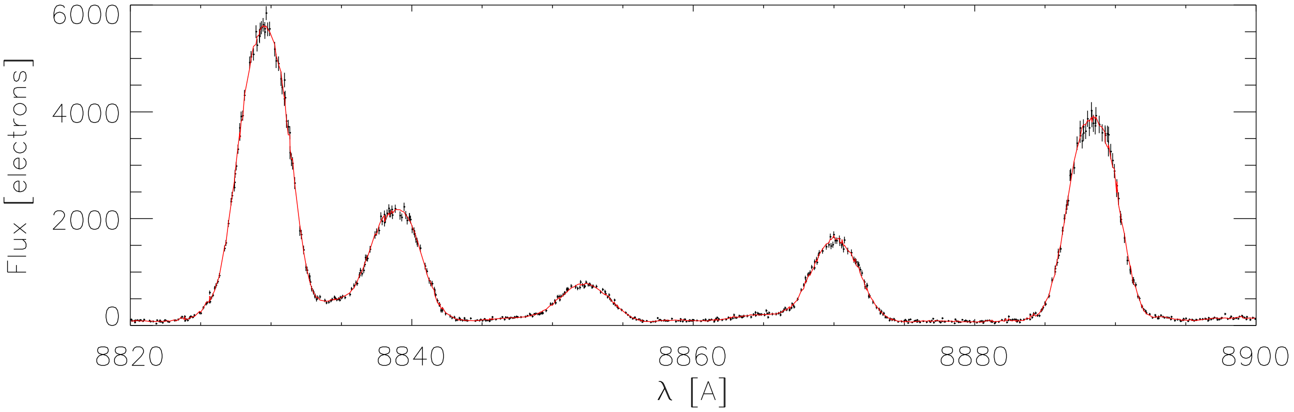

PLATE=0678 MJD=52884 sdR-r1-00022196.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

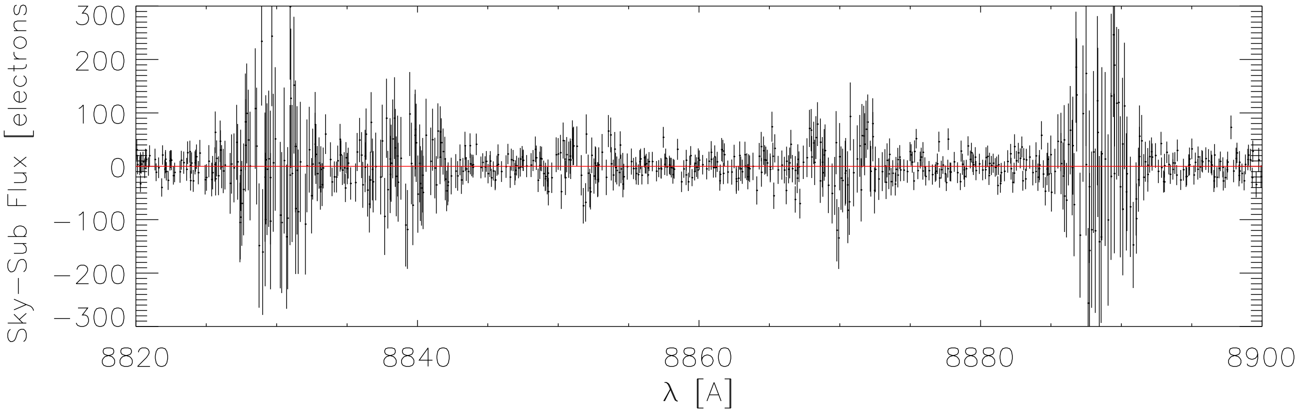
Number of sky fibers = 15

PLATE=0678 MJD=52884 sdR-r1-00022196.fit 1D Sky-subtraction Rescaled Errors



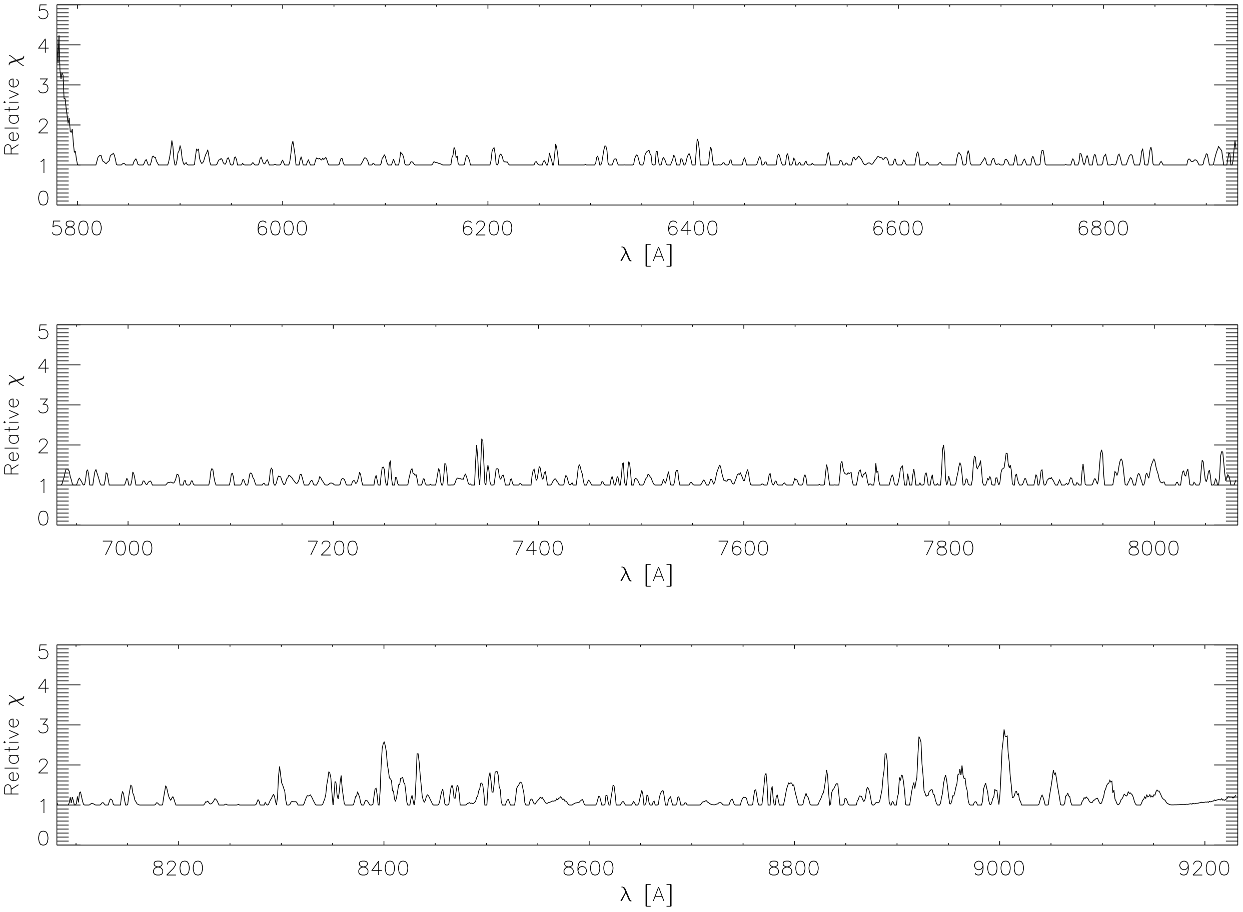

PLATE=0678 MJD=52884 sdR-r1-00022196.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
−6
50
100
150
200
250
300
Fiber number


PLATE=0678 MJD=52884 sdR-r1-00022196.fit 2D Sky-subtraction Sky Fibers

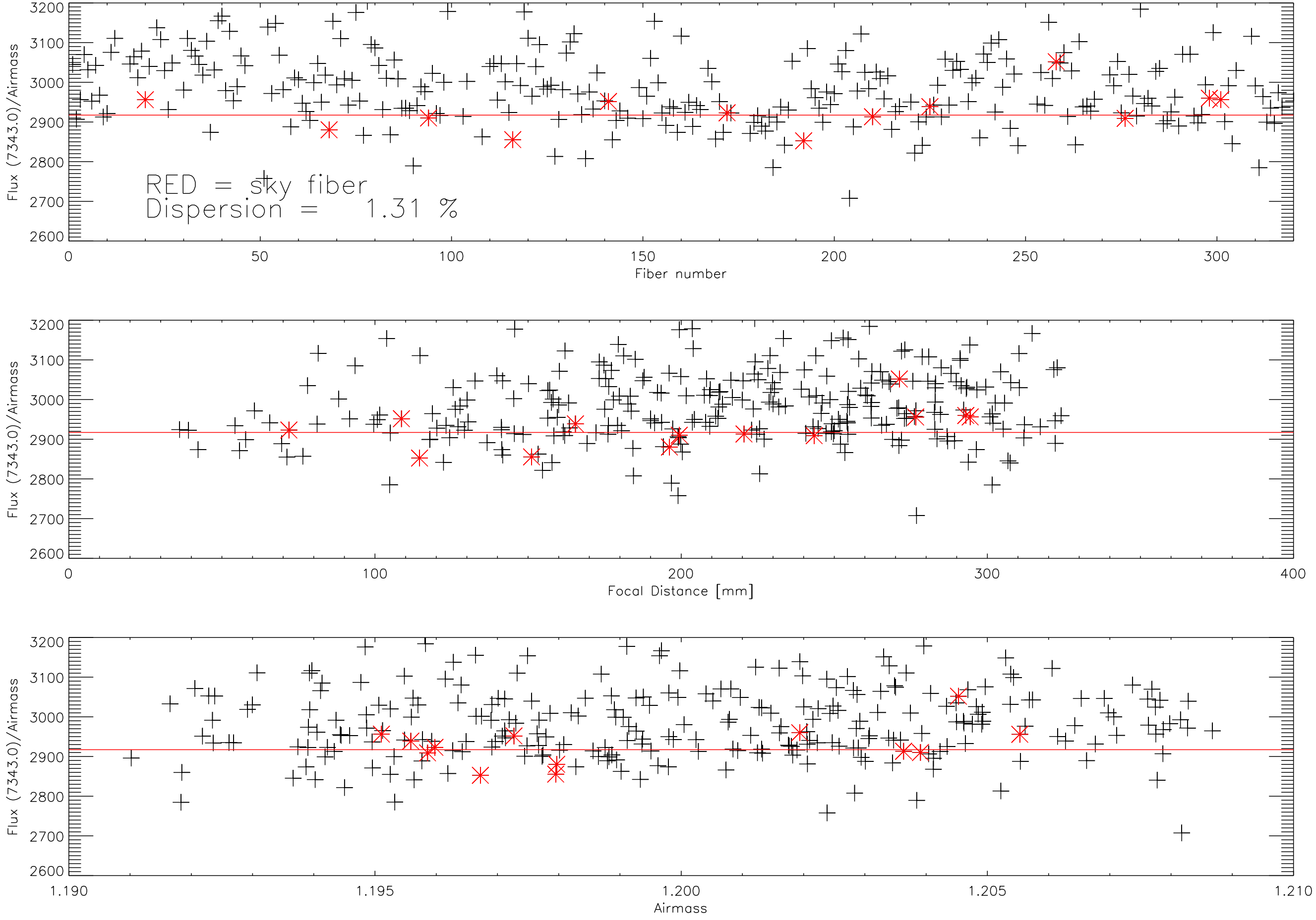

PLATE=0678 MJD=52884 sdR-r1-00022196.fit 2D Sky-subtraction Sky-subtracted Sky F

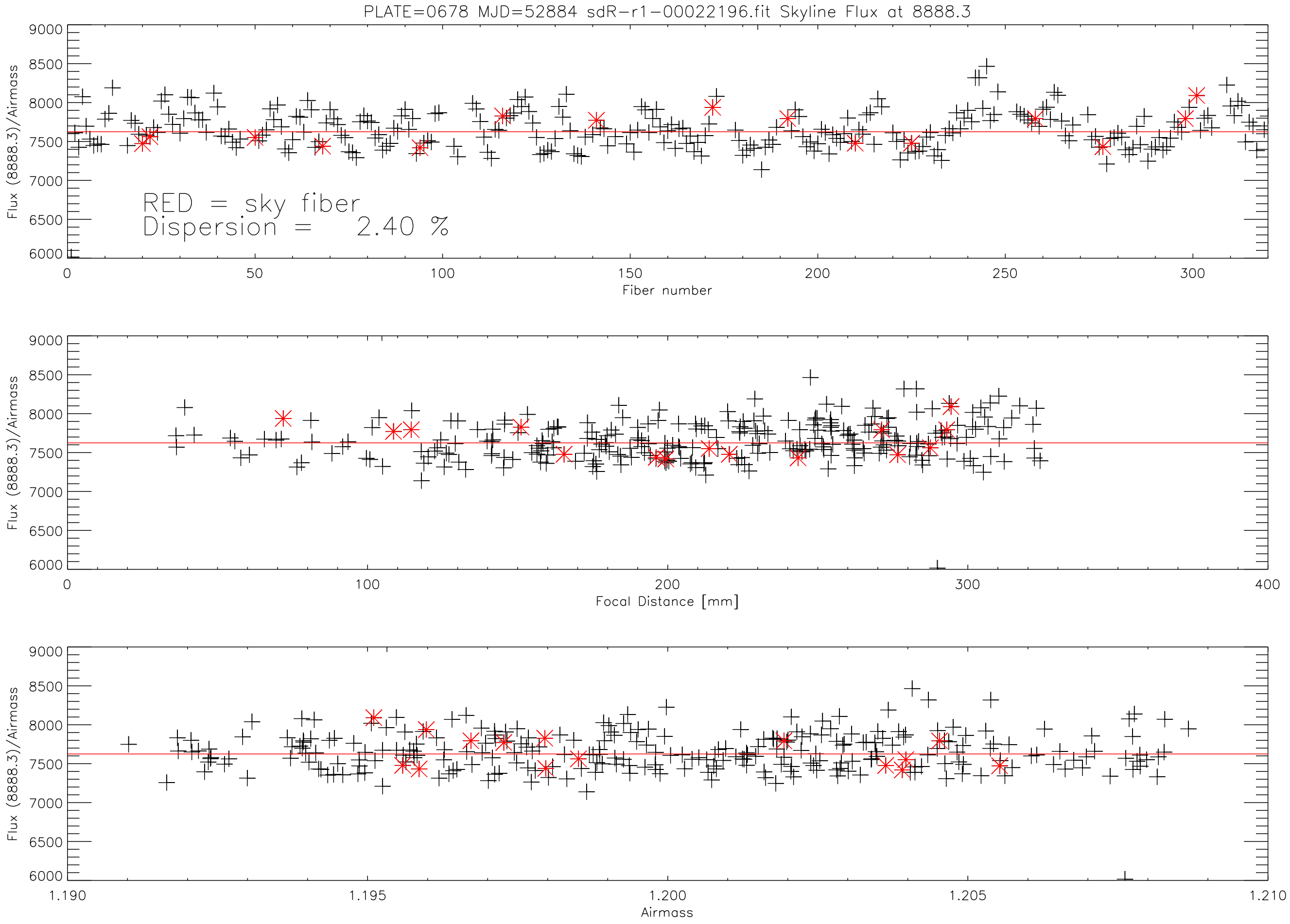
Number of sky fibers = 15

PLATE=0678 MJD=52884 sdR-r1-00022196.fit 2D Sky-subtraction Rescaled Errors

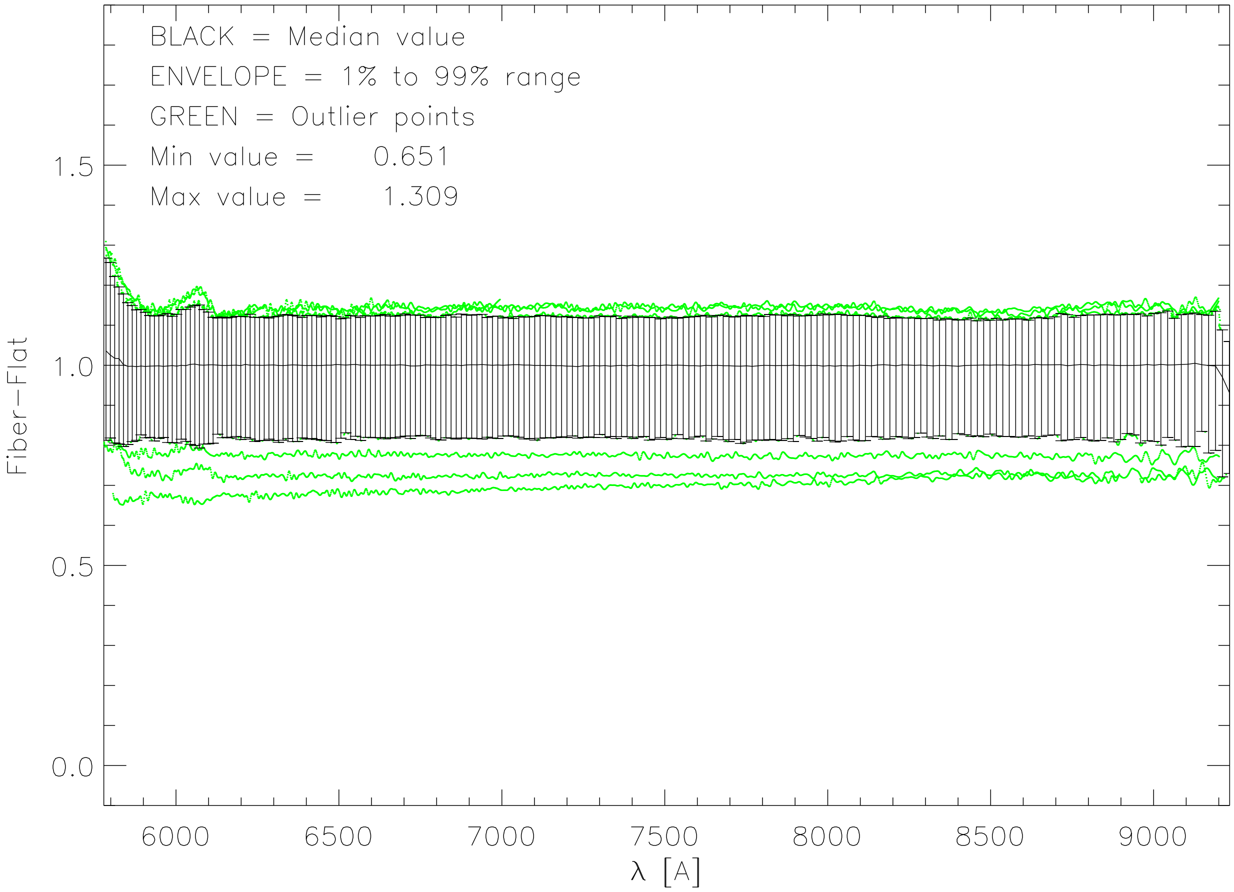


PLATE=0678 MJD=52884 sdR-r1-00022196.fit Skyline Flux at 7343,0

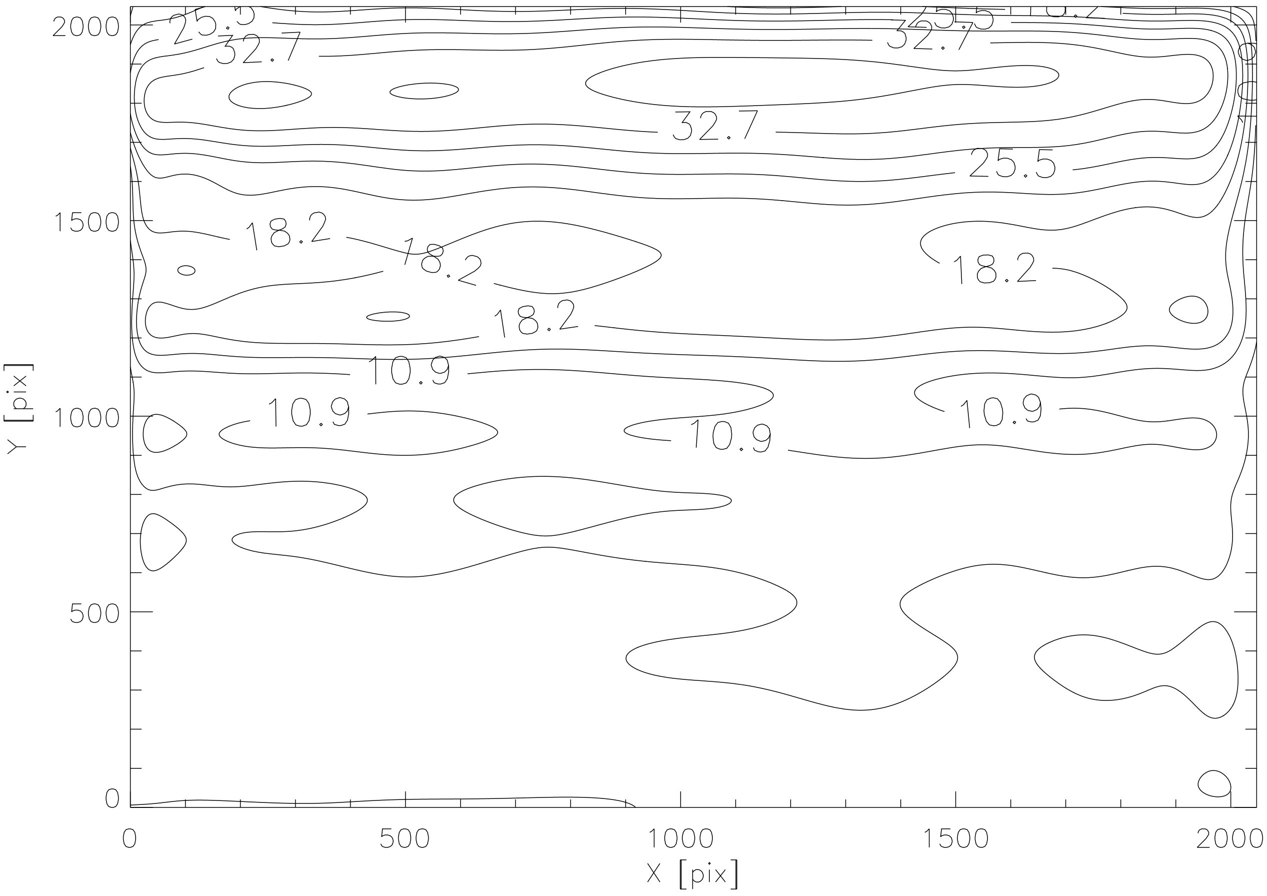


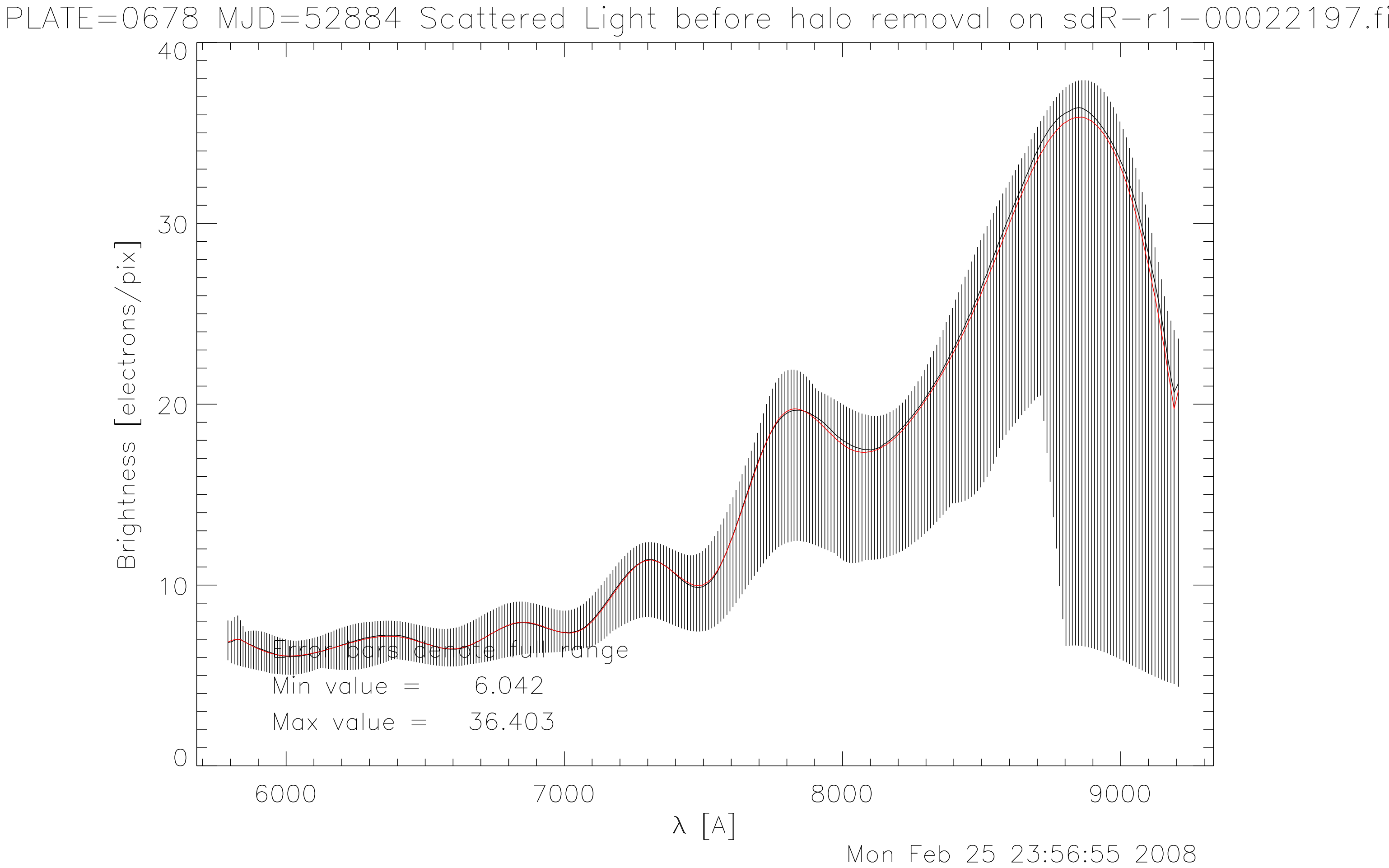

PLATE=0678 MJD=52884 sdR-r1-00022196.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
9000
8500
8000
7500
7000
6500
6000
RED = sky fiber
Dispersion = 2.40 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
9000
8500
8000
7500
7000
6500
6000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
9000
8500
8000
7500
7000
6500
6000
1.190
1.195
1.200
1.205
1.210
Airmass

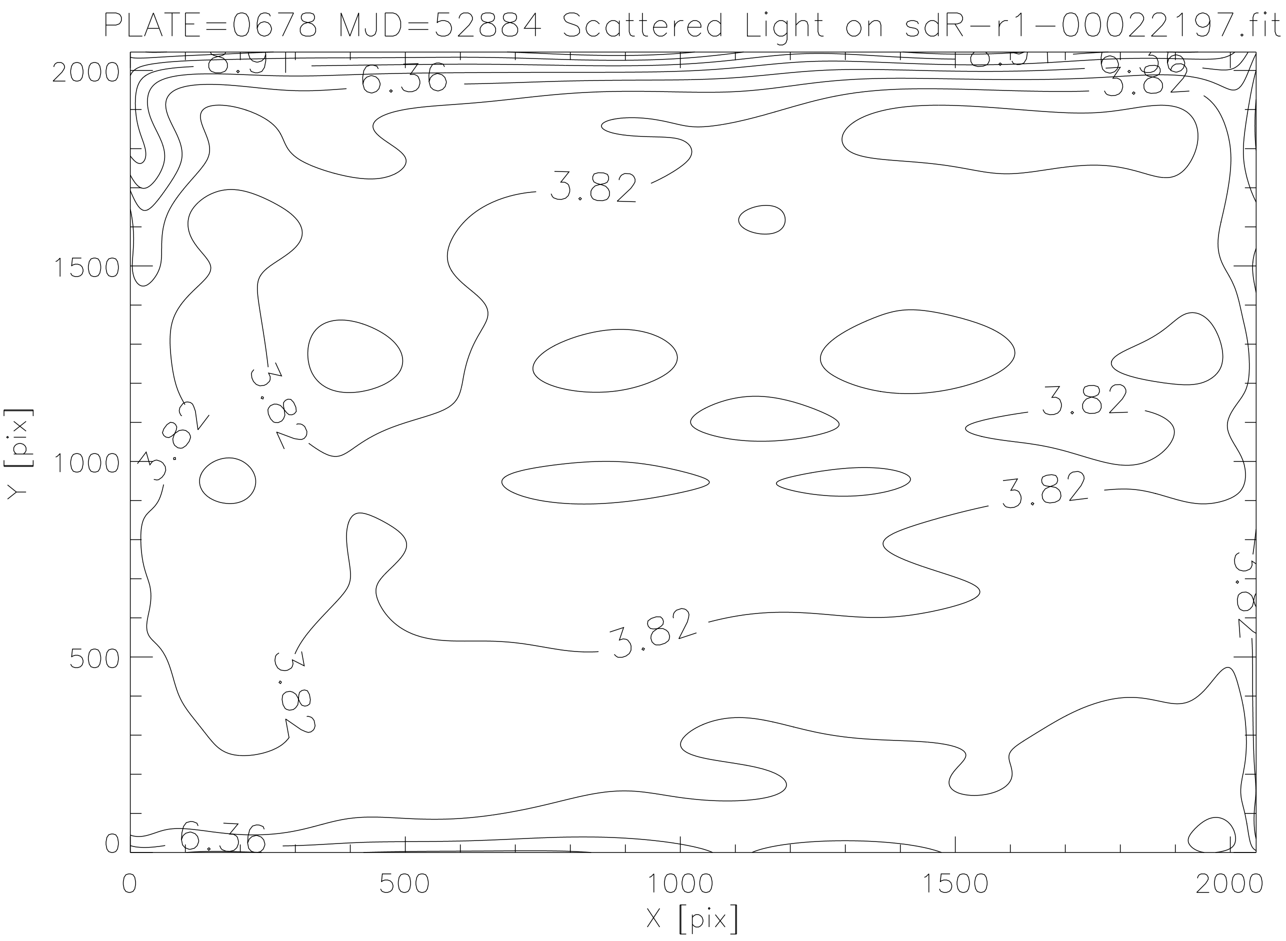
PLATE=0678 MJD=52884 Fiber−Flats for sdR−r1−00022199.fit



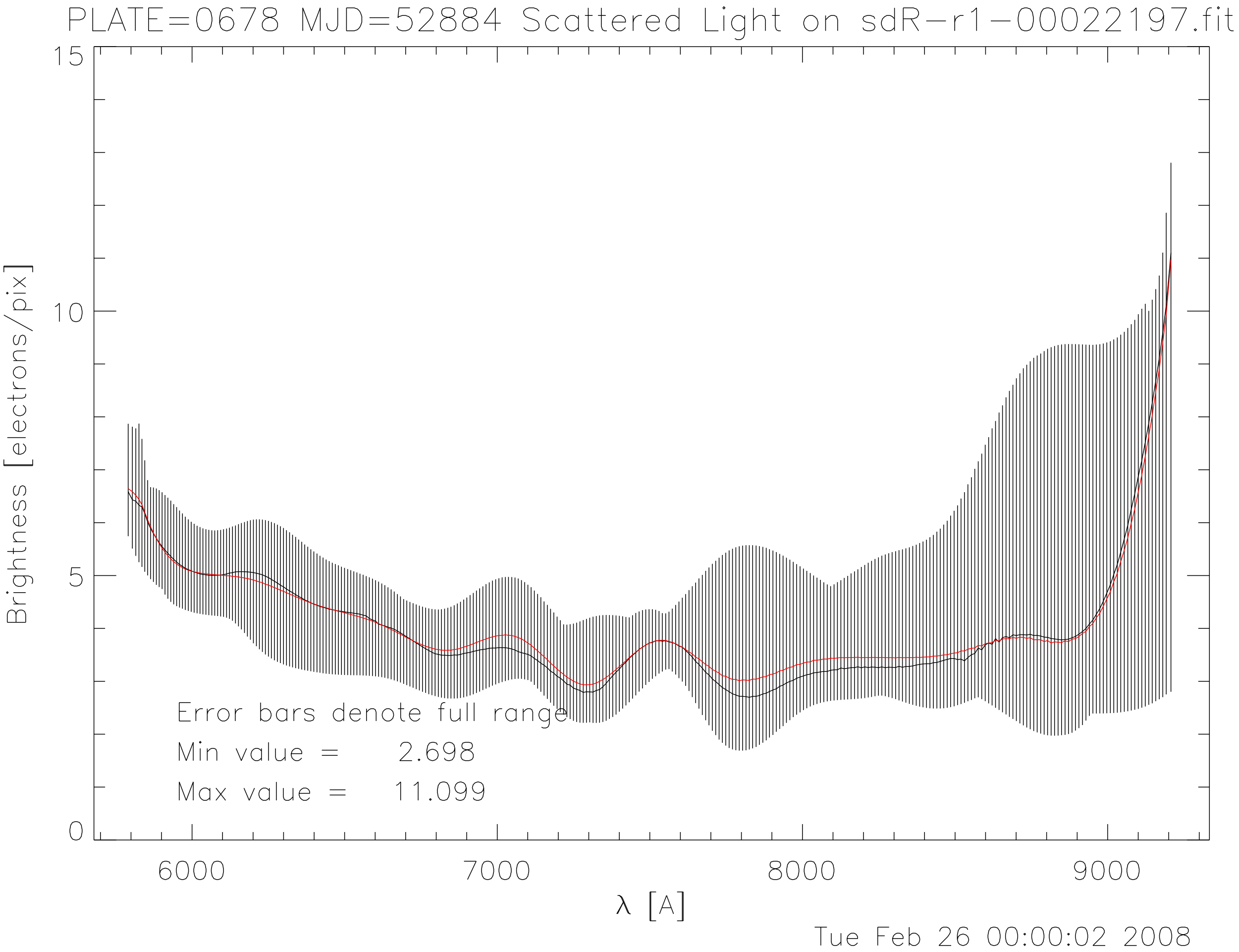
Mon Feb 25 23:56:00 2008

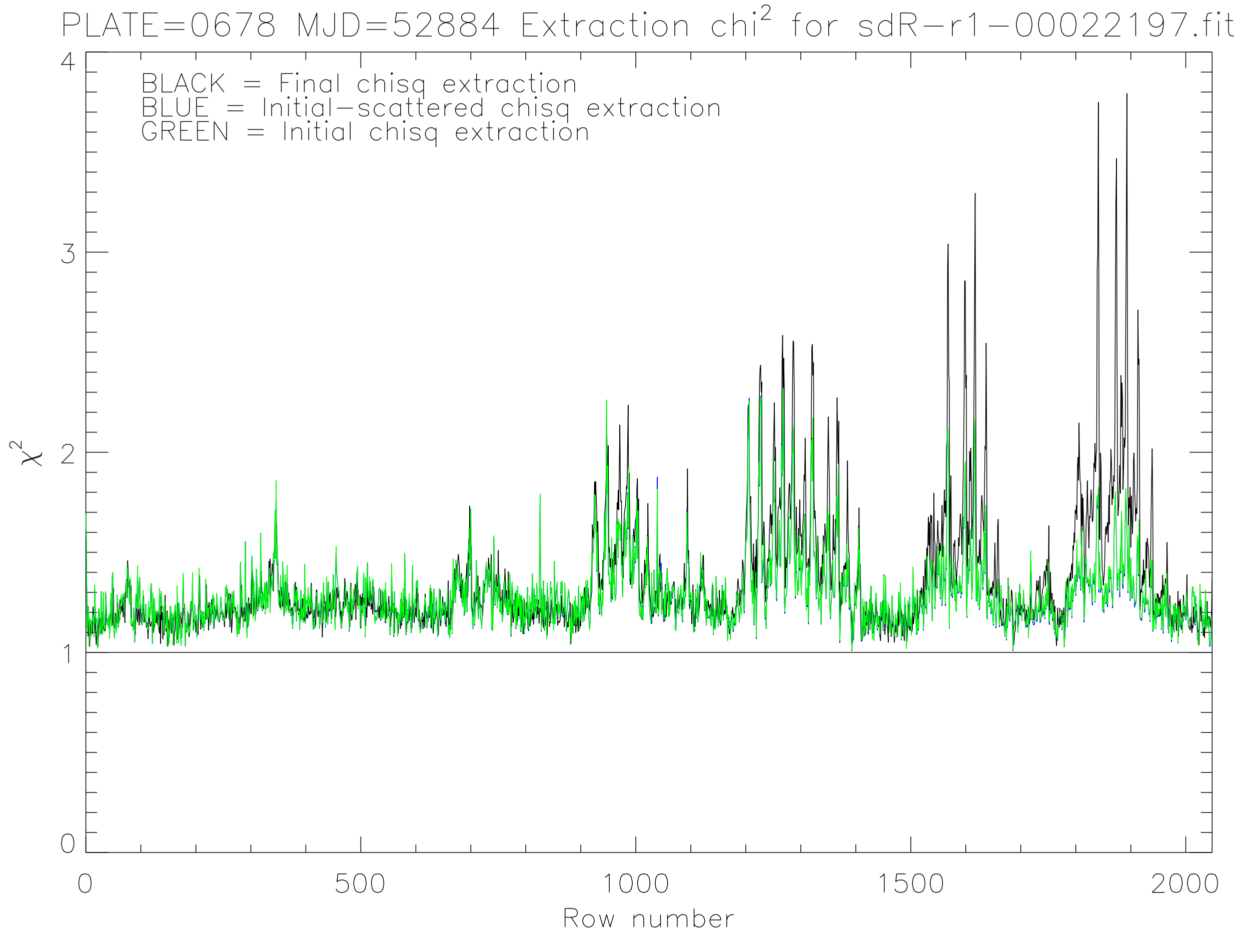

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022197.fi

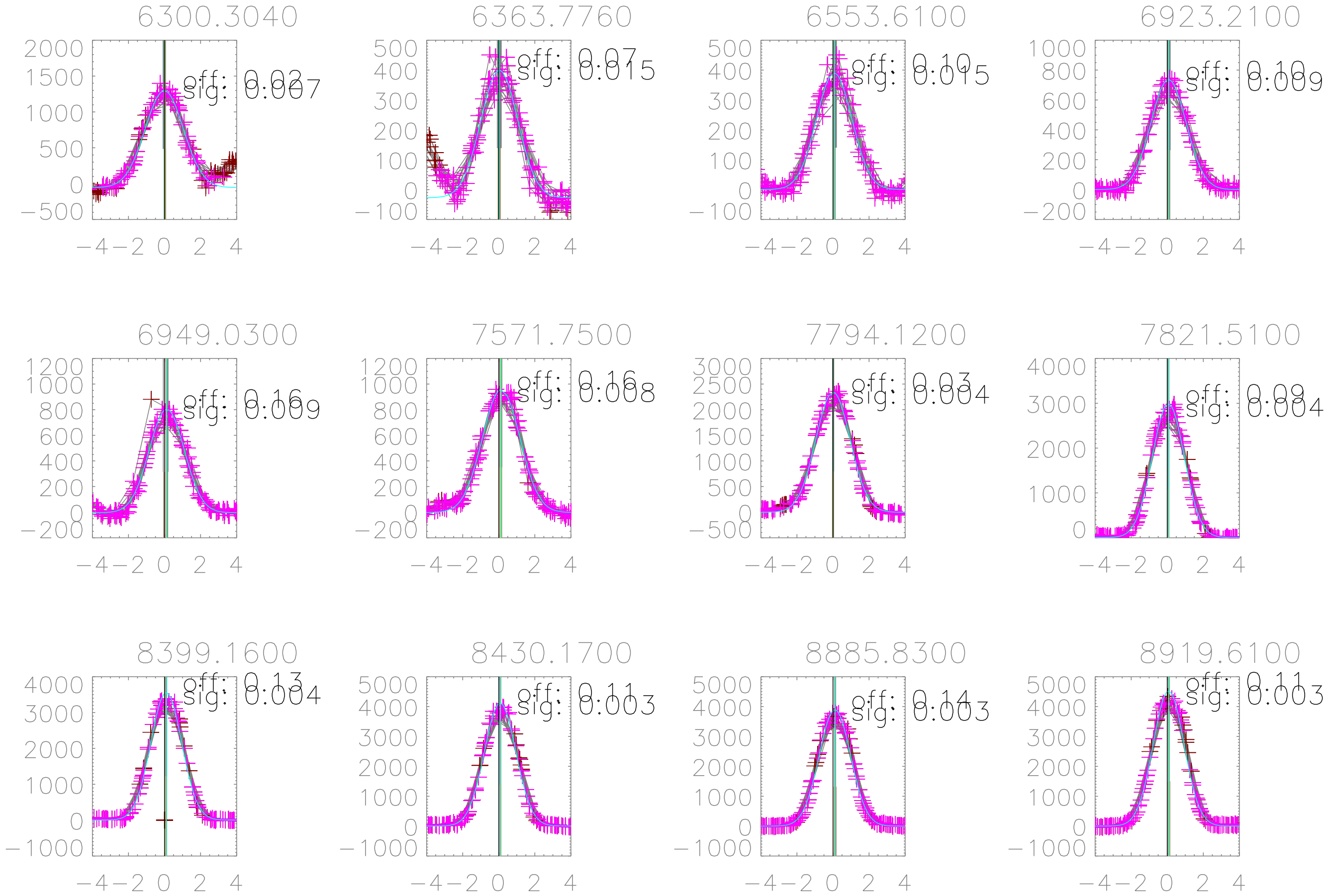

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022197.fi
Brightness [electrons/pix]
λ [A]
0
10
20
30
40
6000
7000
8000
9000
Error bars denote full range
Min value = 6.042
Max value = 36.403
Mon Feb 25 23:56:55 2008

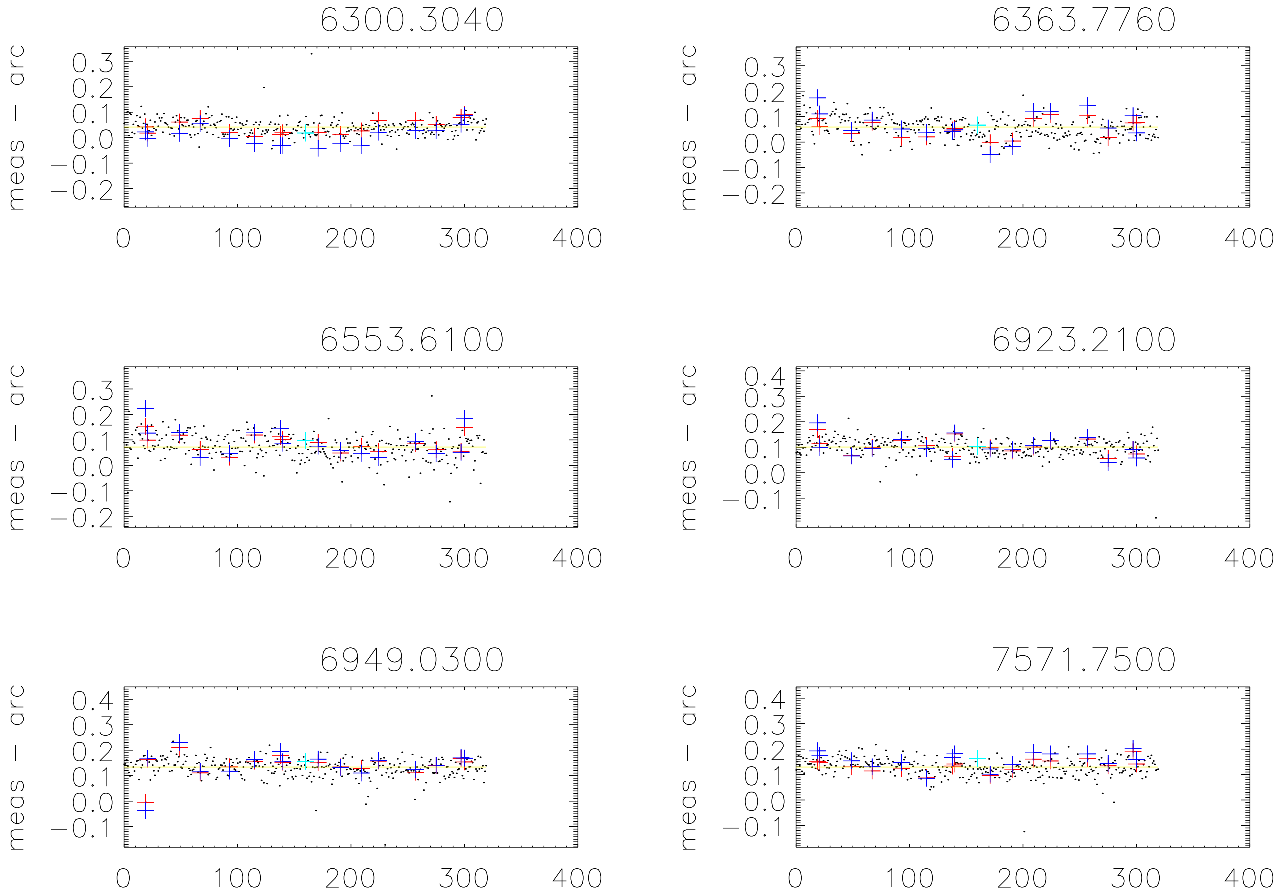


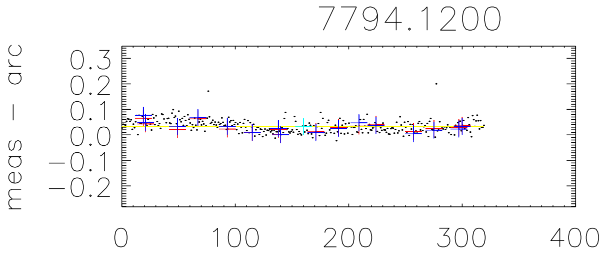
PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022197.fit

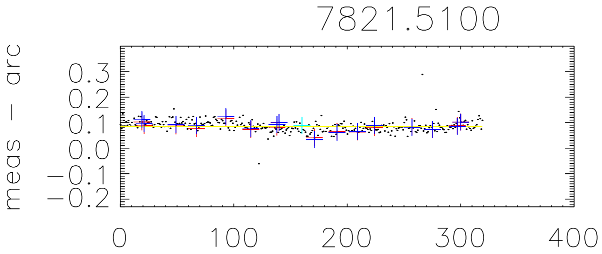

PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022197.fit
Brightness [electrons/pix]
λ [A]
0
5
10
15
6000
7000
8000
9000
Error bars denote full range
Min value = 2.698
Max value = 11.099
Tue Feb 26 00:00:02 2008

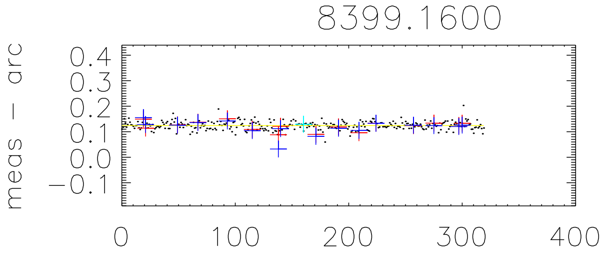

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r1-00022197.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

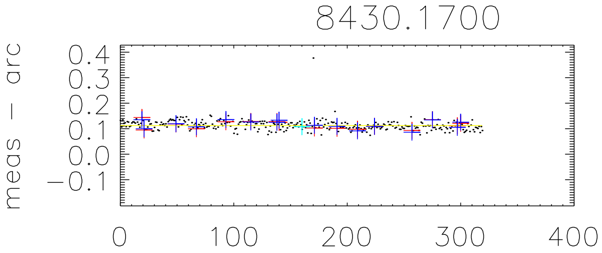

6300.3040
off: 0.02
sig: 0.007
6363.7760
off: 0.07
sig: 0.015
6553.6100
off: 0.10
sig: 0.015
6923.2100
off: 0.10
sig: 0.009
6949.0300
off: 0.16
sig: 0.009
7571.7500
off: 0.16
sig: 0.008
7794.1200
off: 0.03
sig: 0.004
7821.5100
off: 0.09
sig: 0.004
8399.1600
off: 0.13
sig: 0.004
8430.1700
off: 0.11
sig: 0.003
8885.8300
off: 0.14
sig: 0.003
8919.6100
off: 0.11
sig: 0.003
−4 −2 0 2 4

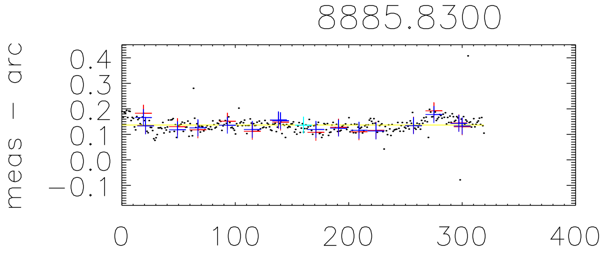

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

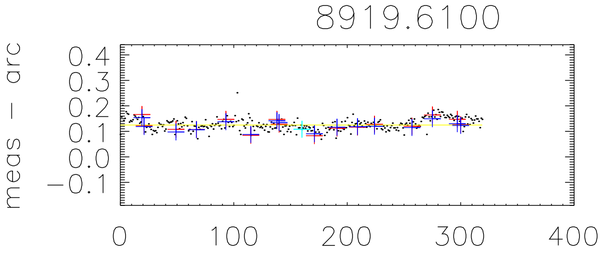

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

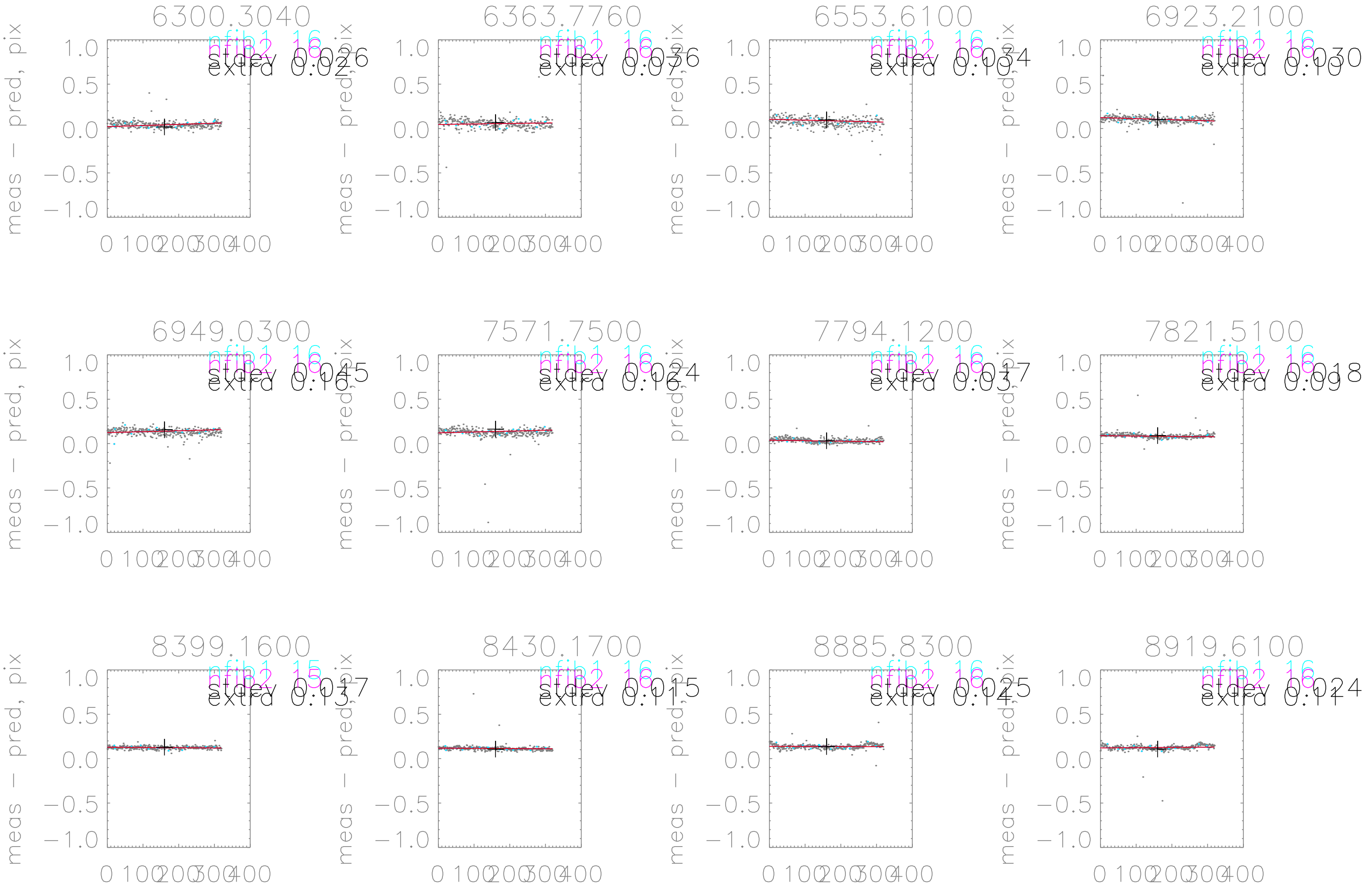

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

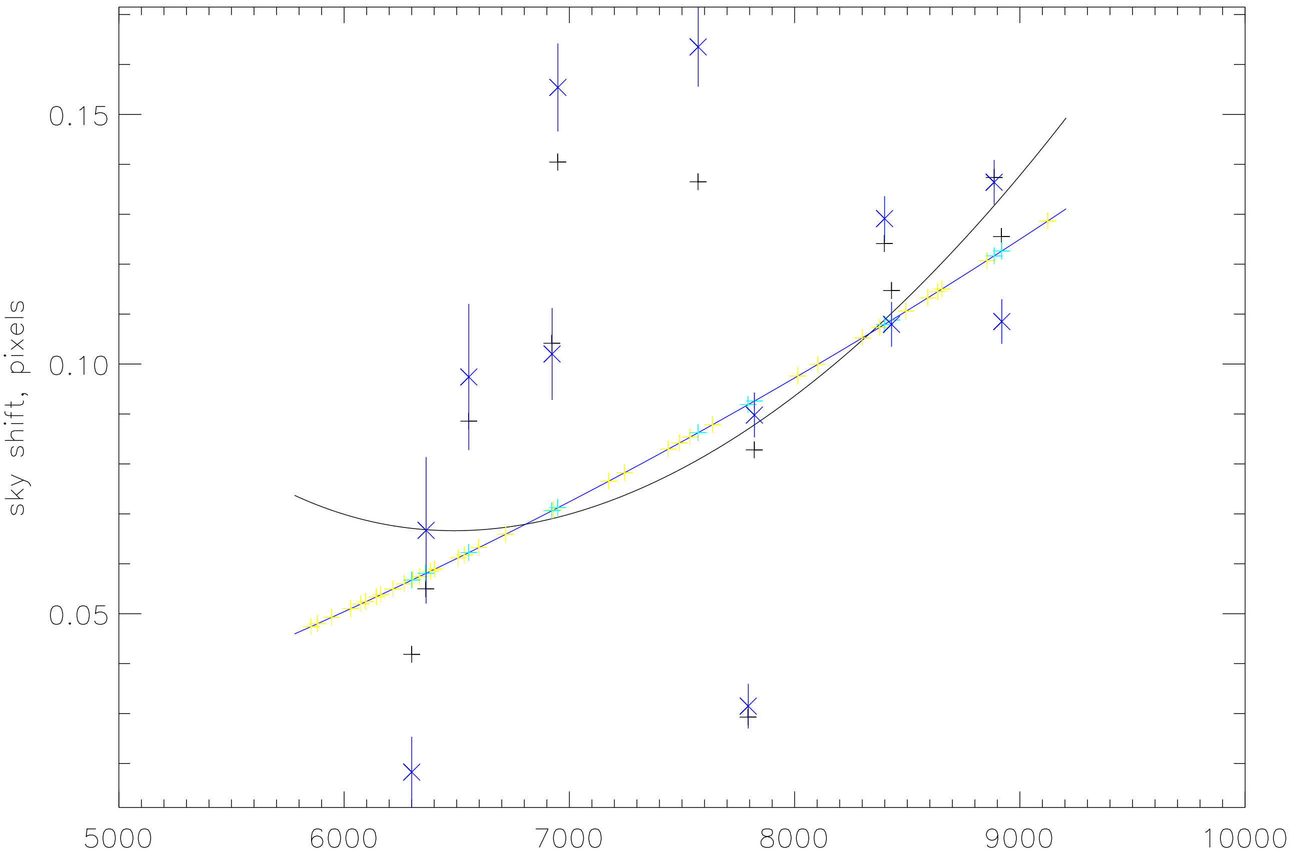

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

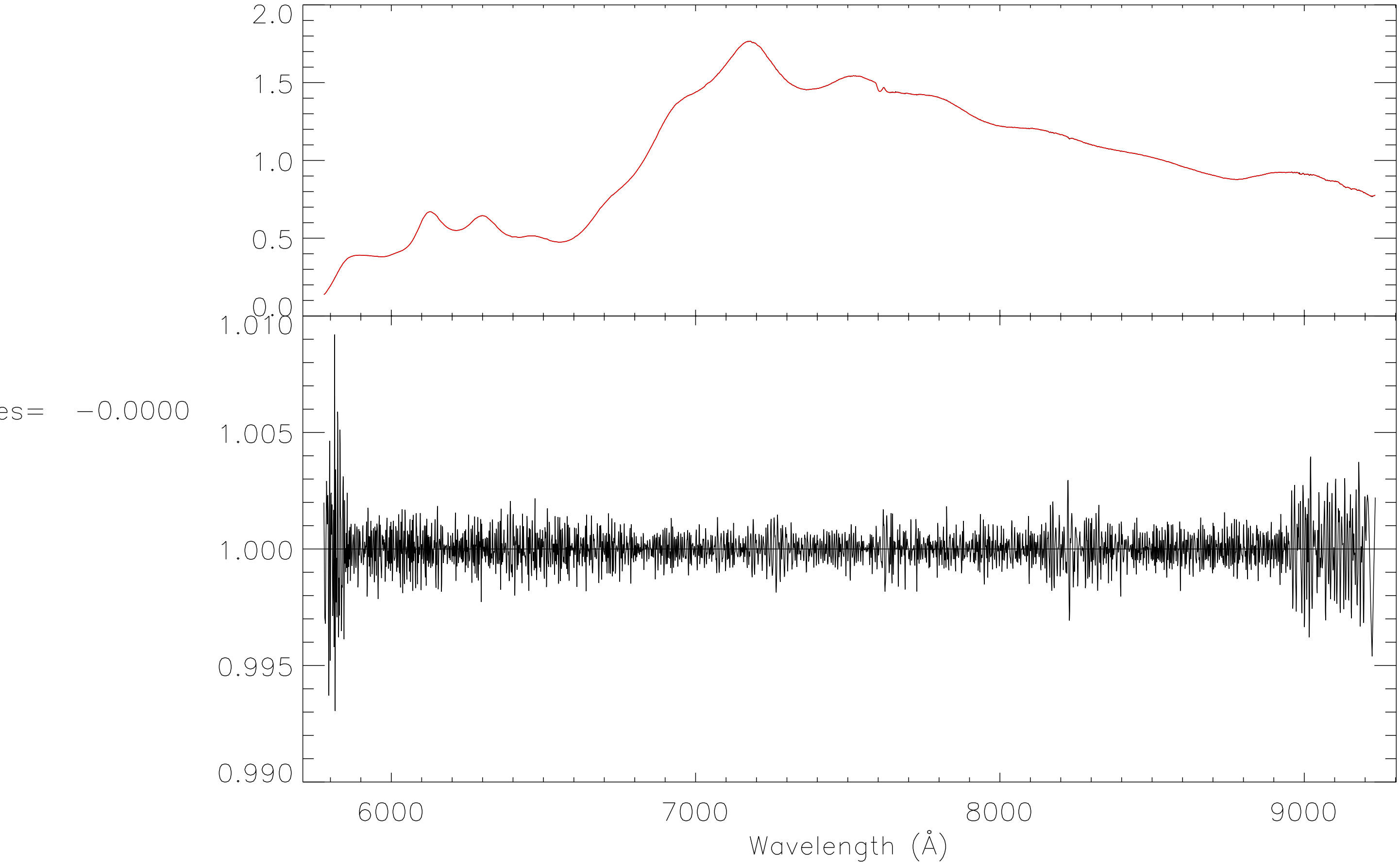

8885.8300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

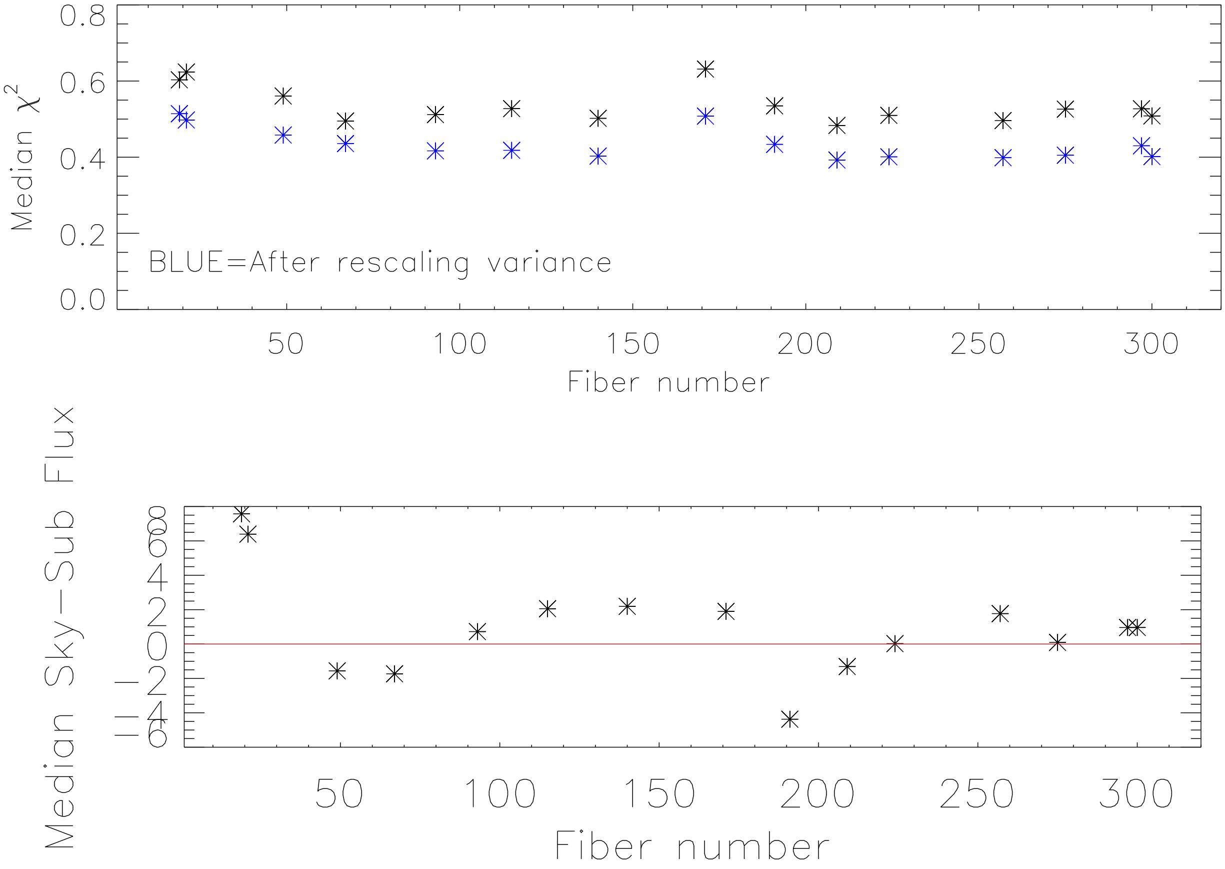

6300.3040
nfib1 16
nfib2 16
stdev 0.026
extrd 0.02
6363.7760
nfib1 16
nfib2 16
stdev 0.036
extrd 0.07
6553.6100
nfib1 16
nfib2 16
stdev 0.034
extrd 0.10
6923.2100
nfib1 16
nfib2 16
stdev 0.030
extrd 0.10
6949.0300
nfib1 16
nfib2 16
stdev 0.045
extrd 0.16
7571.7500
nfib1 16
nfib2 16
stdev 0.024
extrd 0.16
7794.1200
nfib1 16
nfib2 16
stdev 0.017
extrd 0.03
7821.5100
nfib1 16
nfib2 16
stdev 0.018
extrd 0.09
8399.1600
nfib1 15
nfib2 15
stdev 0.017
extrd 0.13
8430.1700
nfib1 16
nfib2 16
stdev 0.015
extrd 0.11
8885.8300
nfib1 16
nfib2 16
stdev 0.025
extrd 0.14
8919.6100
nfib1 16
nfib2 16
stdev 0.024
extrd 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

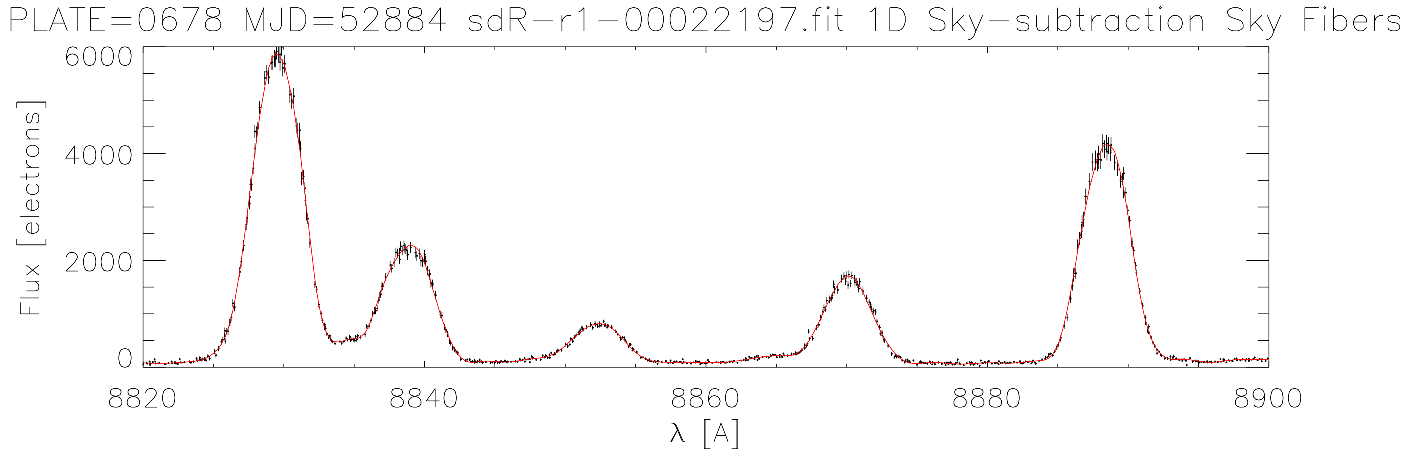

sky shift, pixels
0.05
0.10
0.15
5000
6000
7000
8000
9000
10000

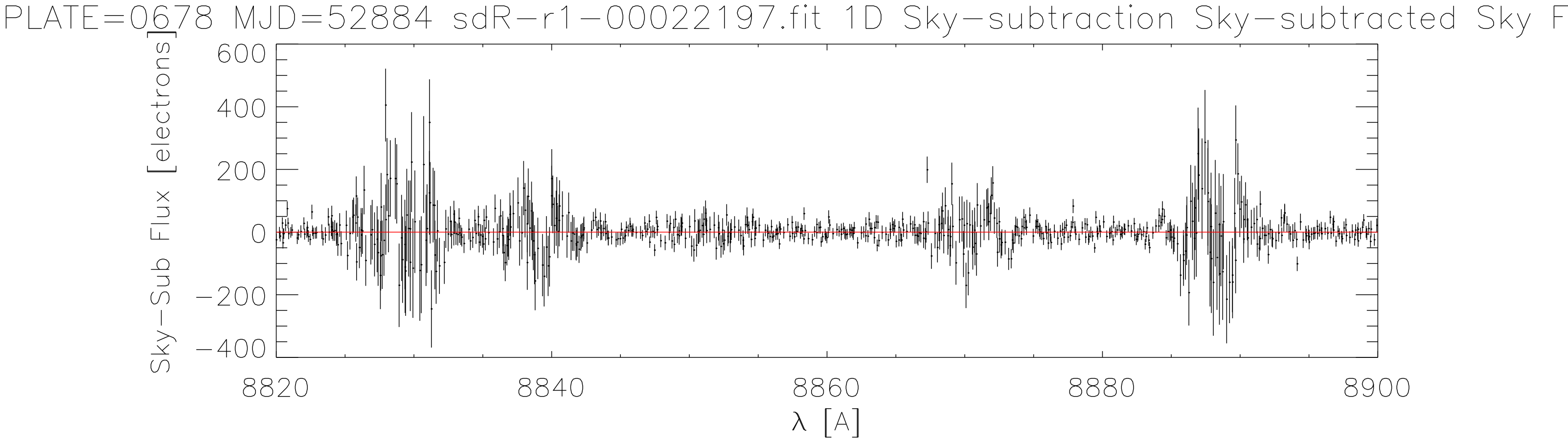
PLATE=0678 MJD=52884 Smooth superflat for sdR-r1-00022197.fit



PLATE=0678 MJD=52884 sdR-r1-00022197.fit 1D Sky-subtraction Sky Fibers

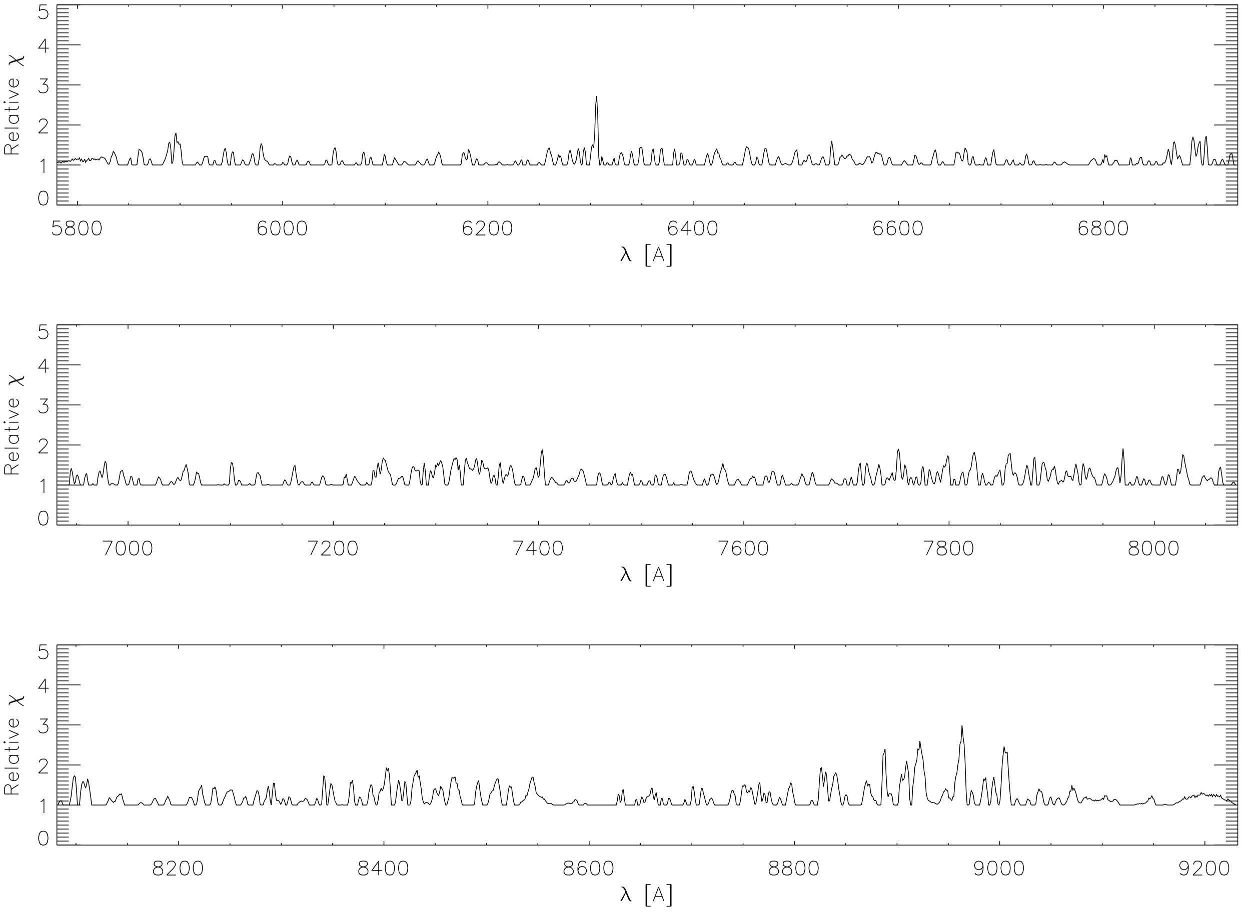



PLATE=0678 MJD=52884 sdR-r1-00022197.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

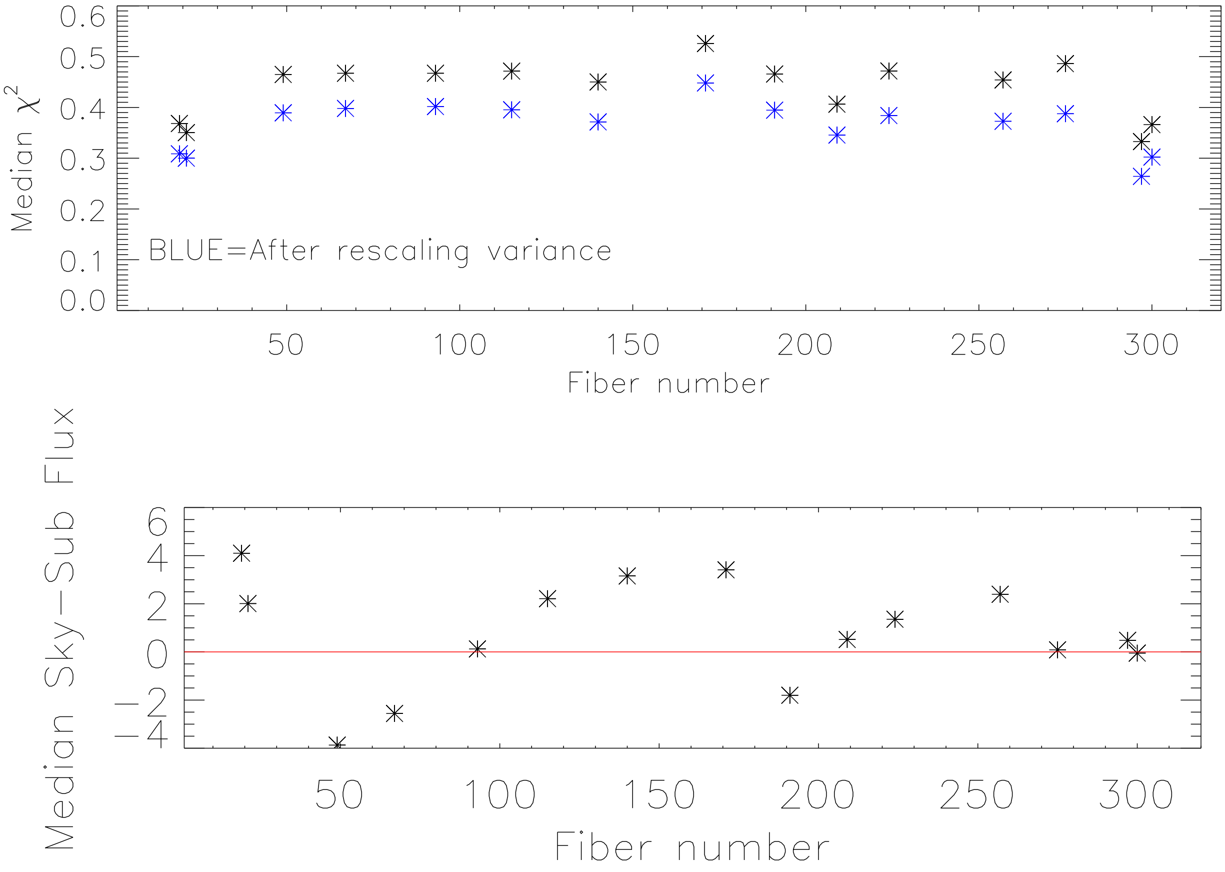

PLATE=0678 MJD=52884 sdR-r1-00022197.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

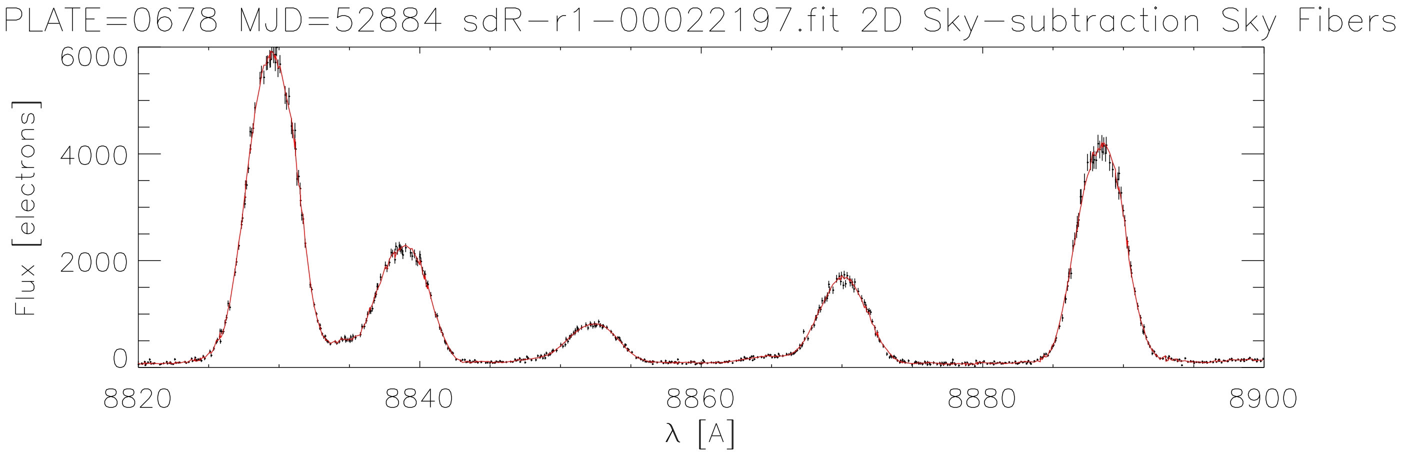
Number of sky fibers = 15

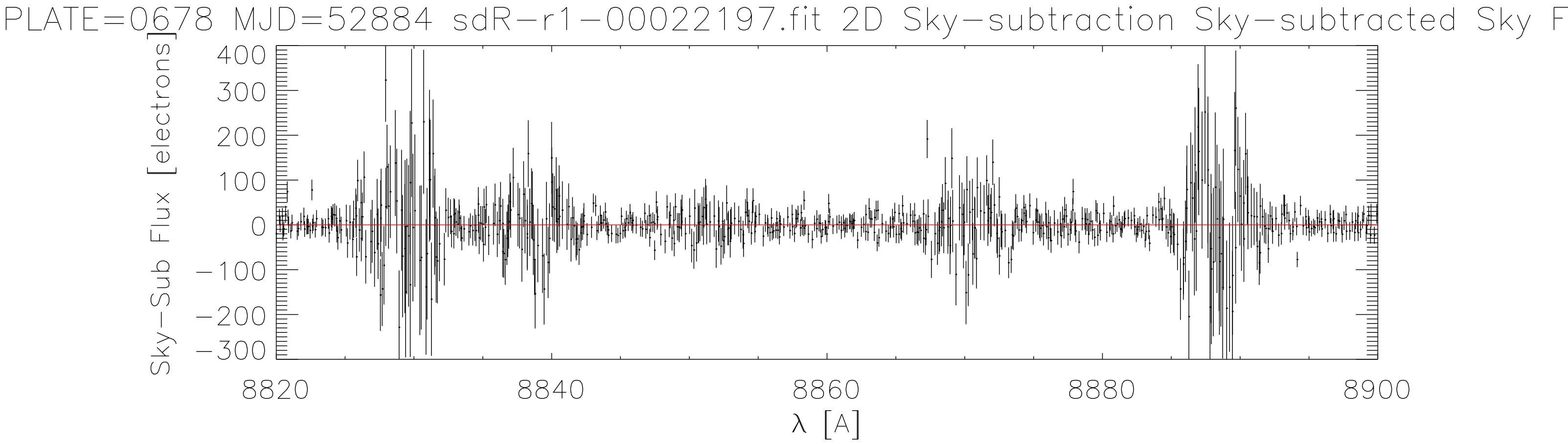
PLATE=0678 MJD=52884 sdR-r1-00022197.fit 1D Sky-subtraction Rescaled Errors



PLATE=0678 MJD=52884 sdR-r1-00022197.fit 2D Sky-subtraction Sky Fibers

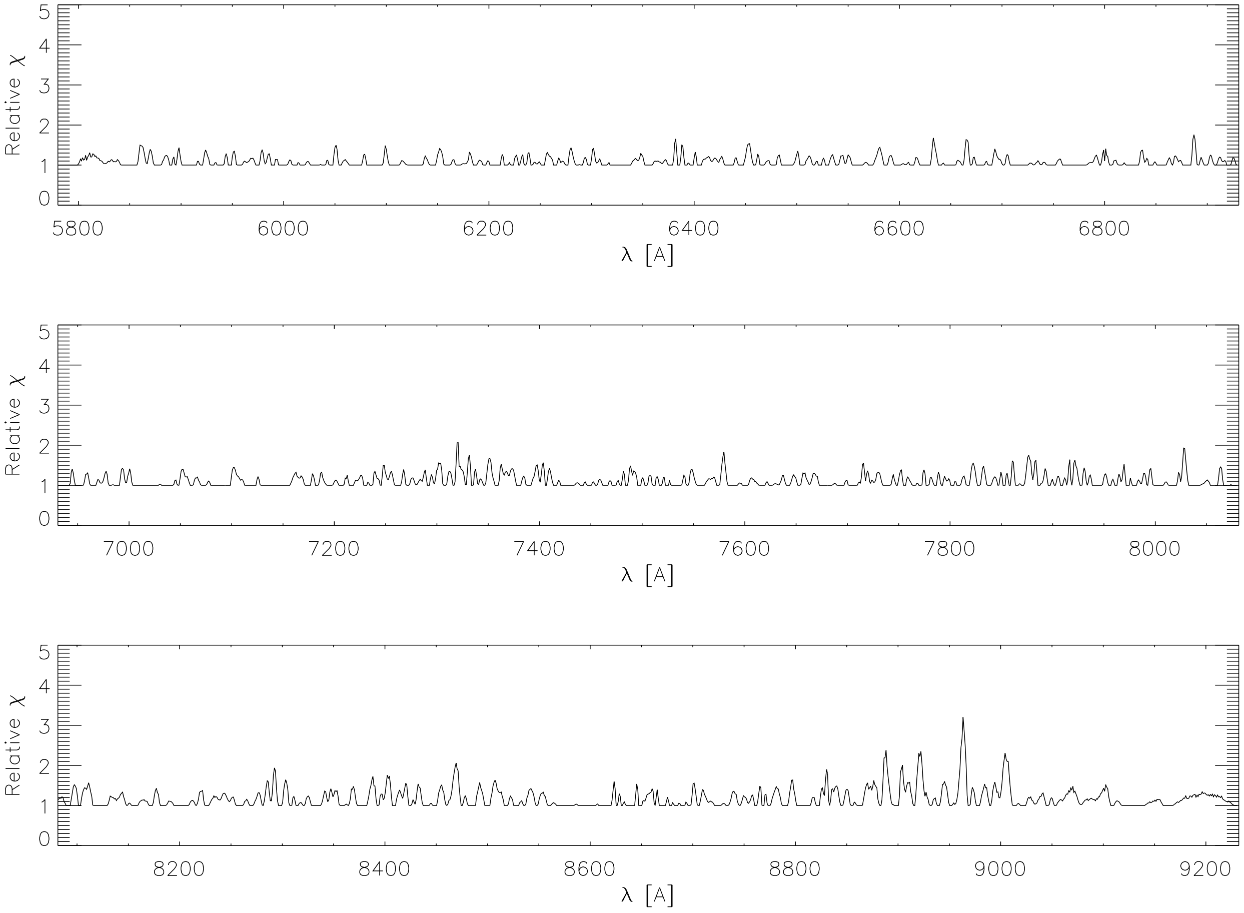


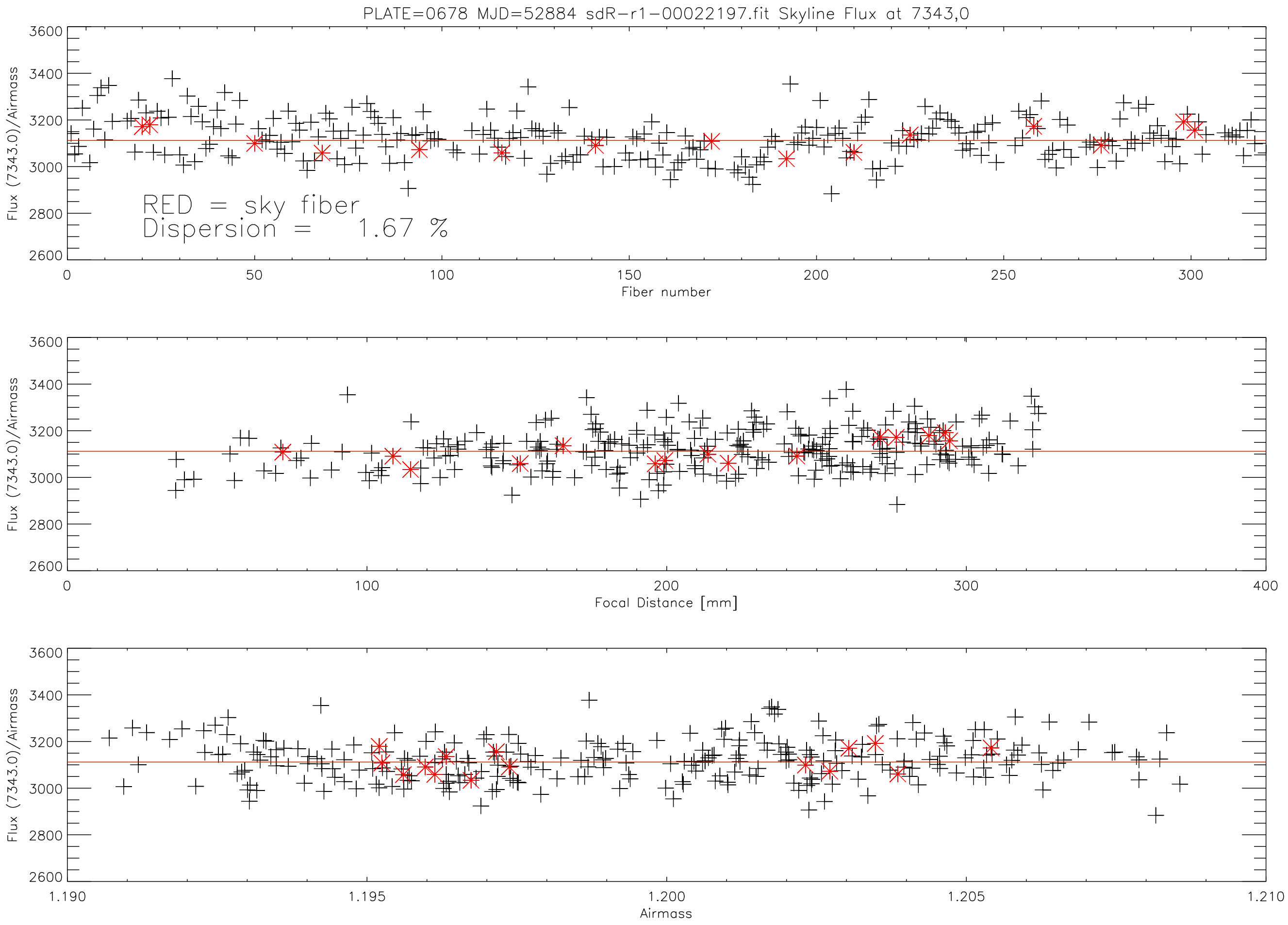

PLATE=0678 MJD=52884 sdR-r1-00022197.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

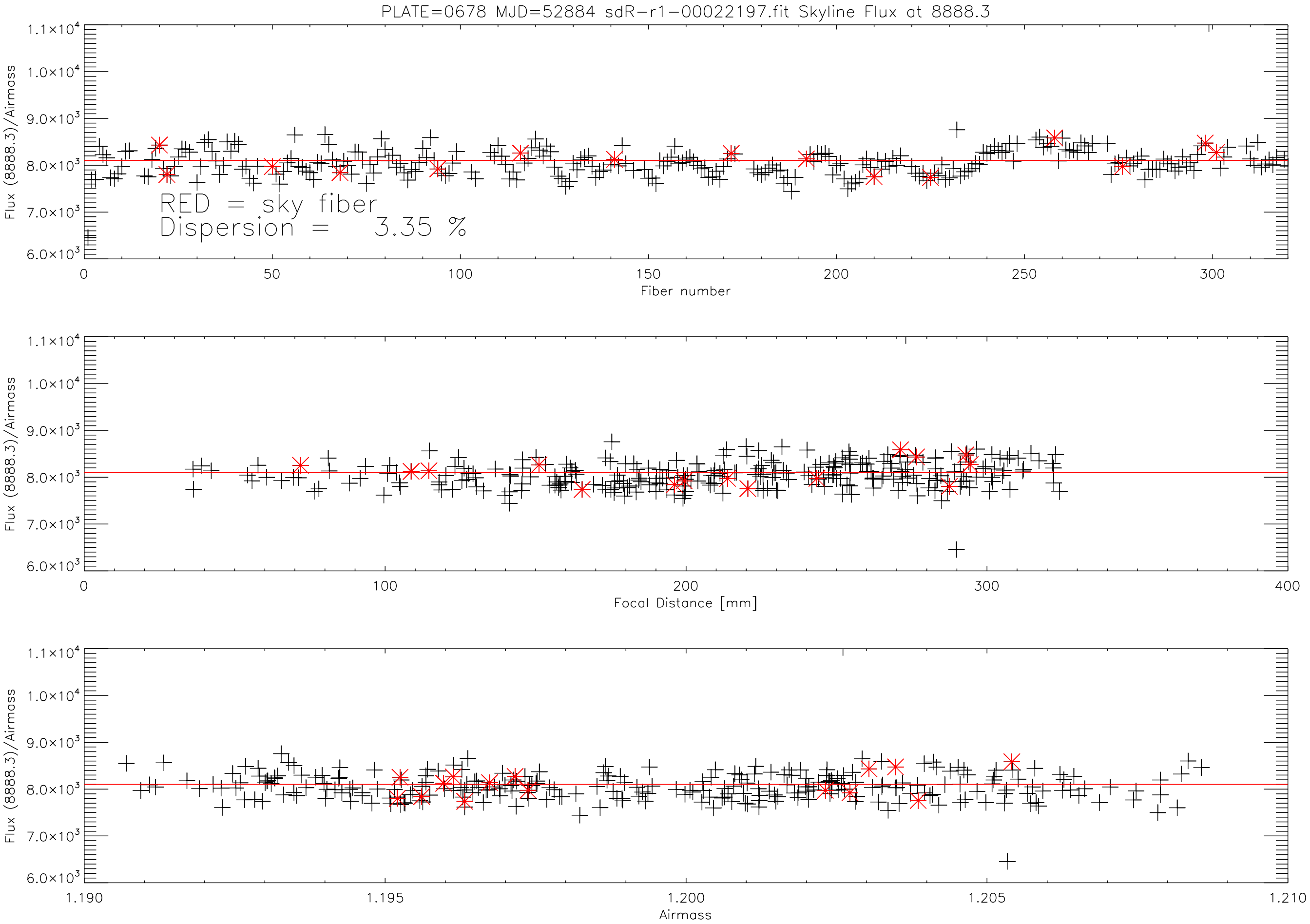

PLATE=0678 MJD=52884 sdR-r1-00022197.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

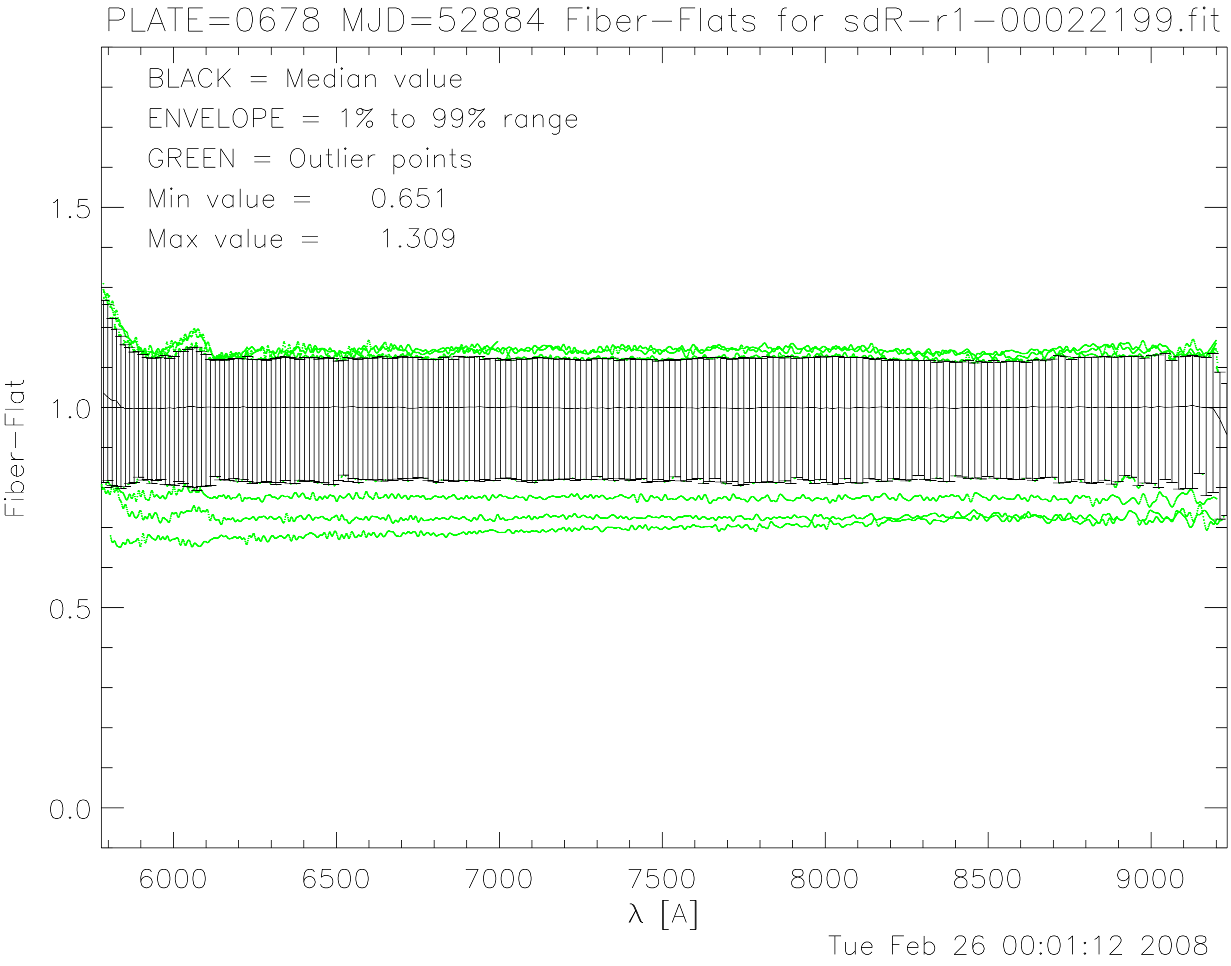
Number of sky fibers = 15

PLATE=0678 MJD=52884 sdR-r1-00022197.fit 2D Sky-subtraction Rescaled Errors

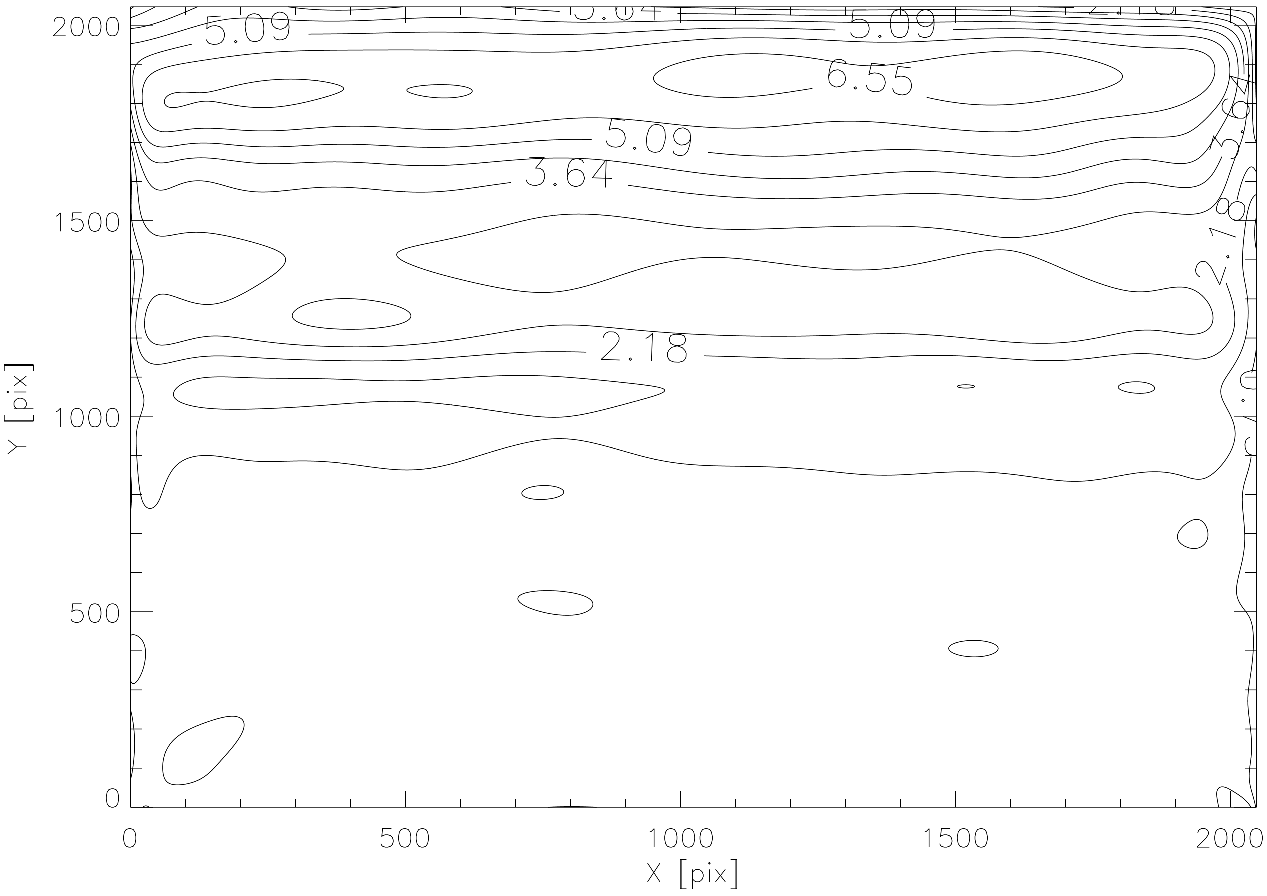


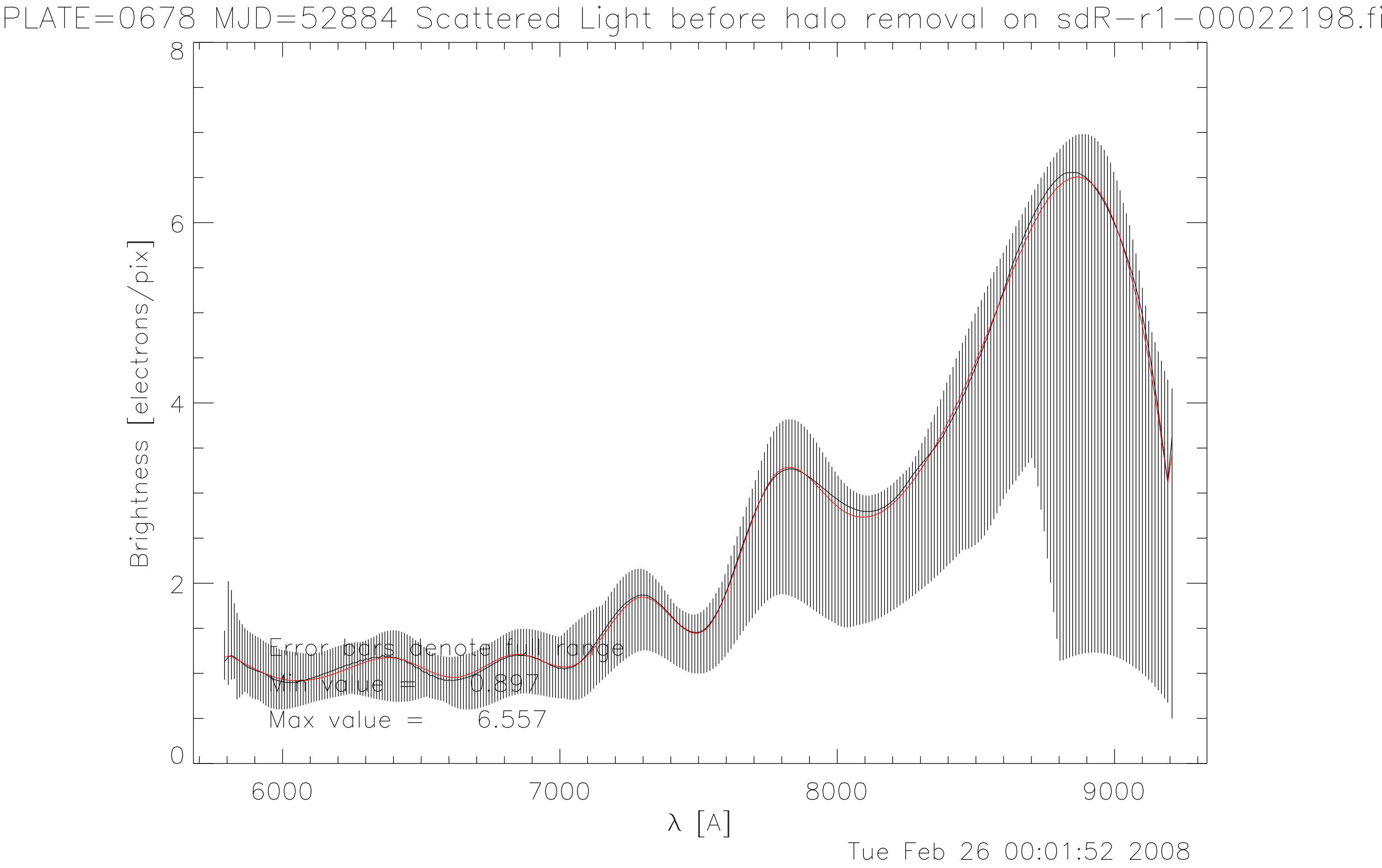

PLATE=0678 MJD=52884 sdR-r1-00022197.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
RED = sky fiber
Dispersion = 1.67 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
1.190
1.195
1.200
1.205
1.210
Airmass

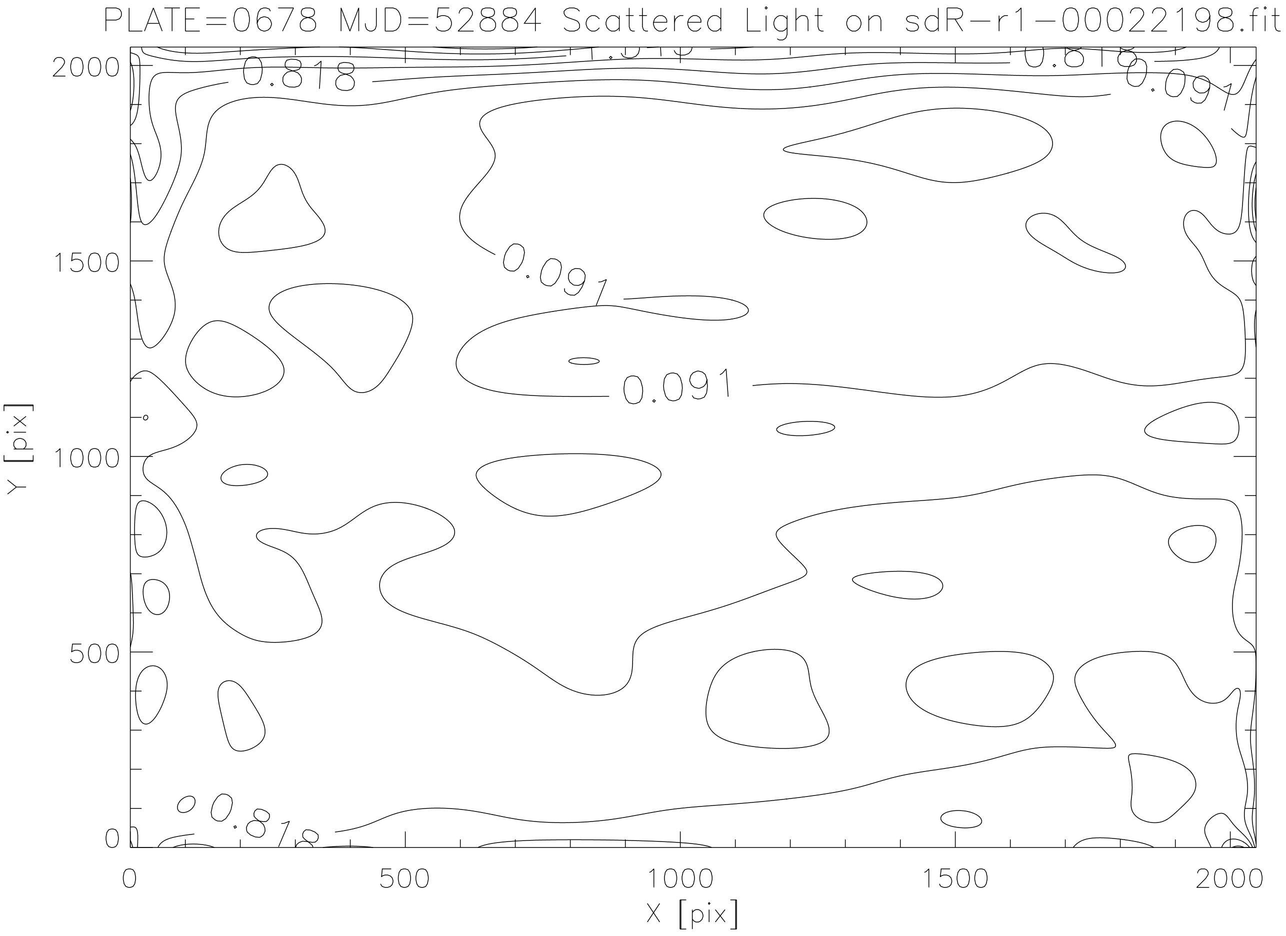

PLATE=0678 MJD=52884 sdR-r1-00022197.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.1×10⁴
1.0×10⁴
9.0×10³
8.0×10³
7.0×10³
6.0×10³
RED = sky fiber
Dispersion = 3.35 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.190
1.195
1.200
1.205
1.210
Airmass

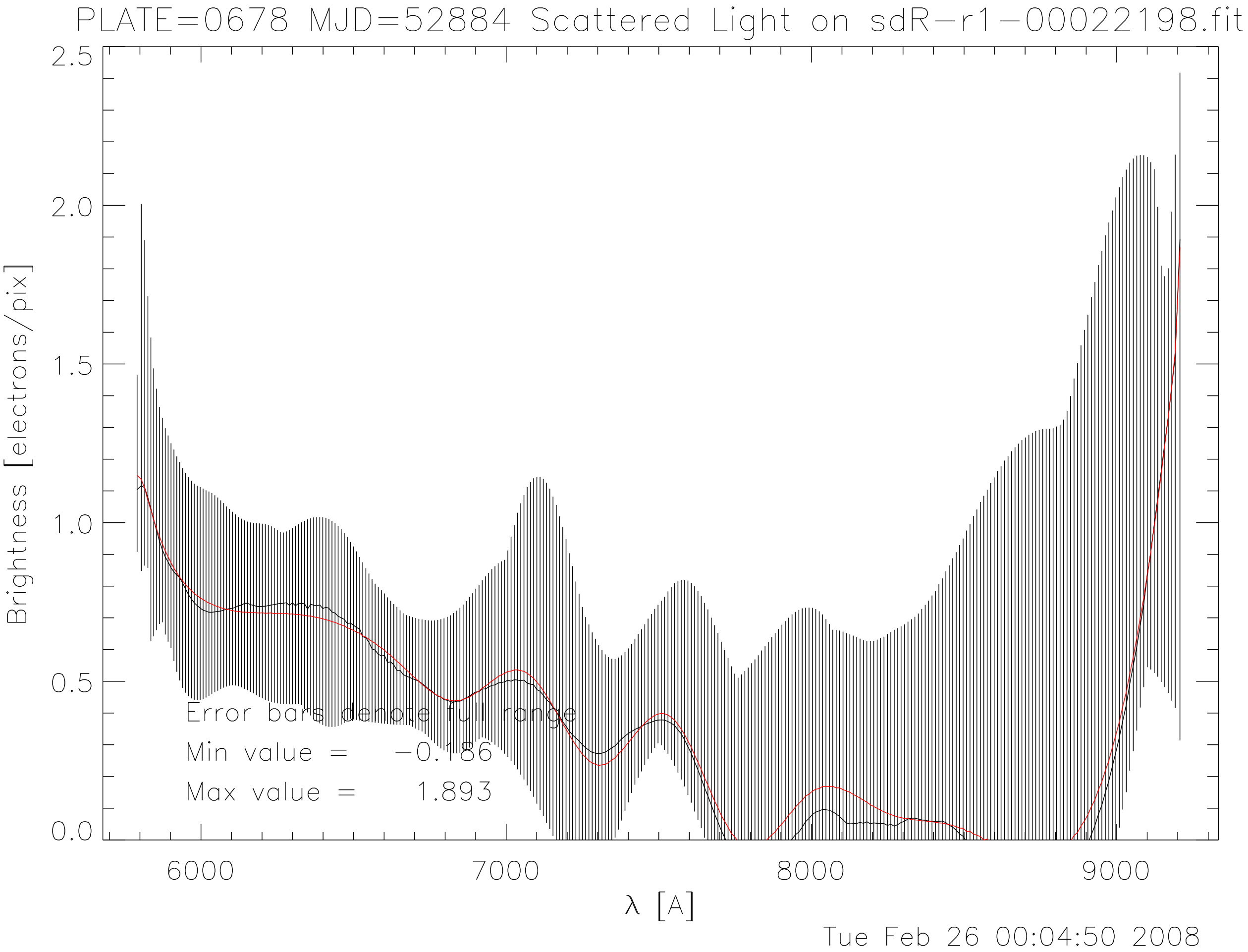

PLATE=0678 MJD=52884 Fiber−Flats for sdR−r1−00022199.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.651
Max value = 1.309
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:01:12 2008

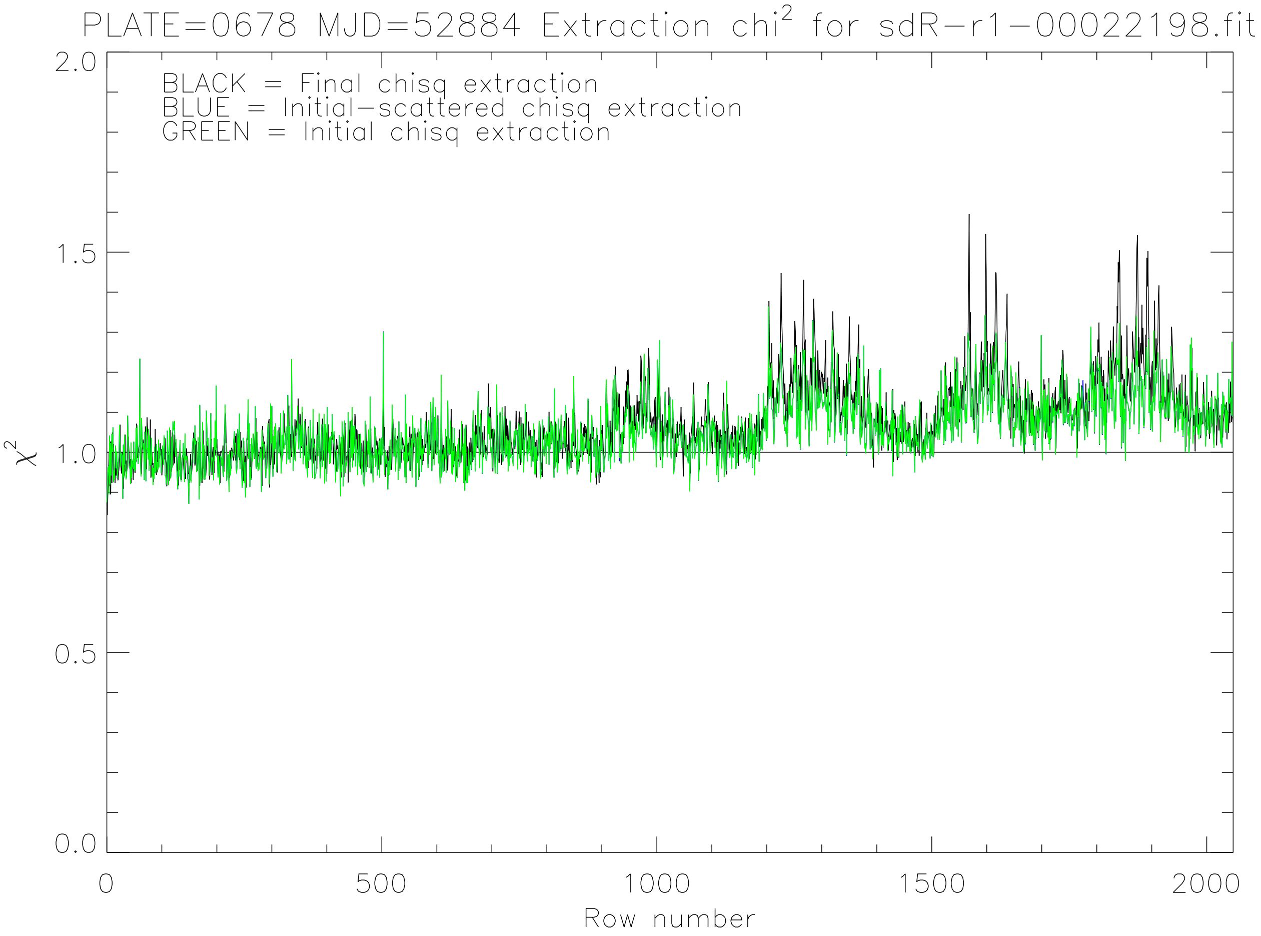
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022198.fi

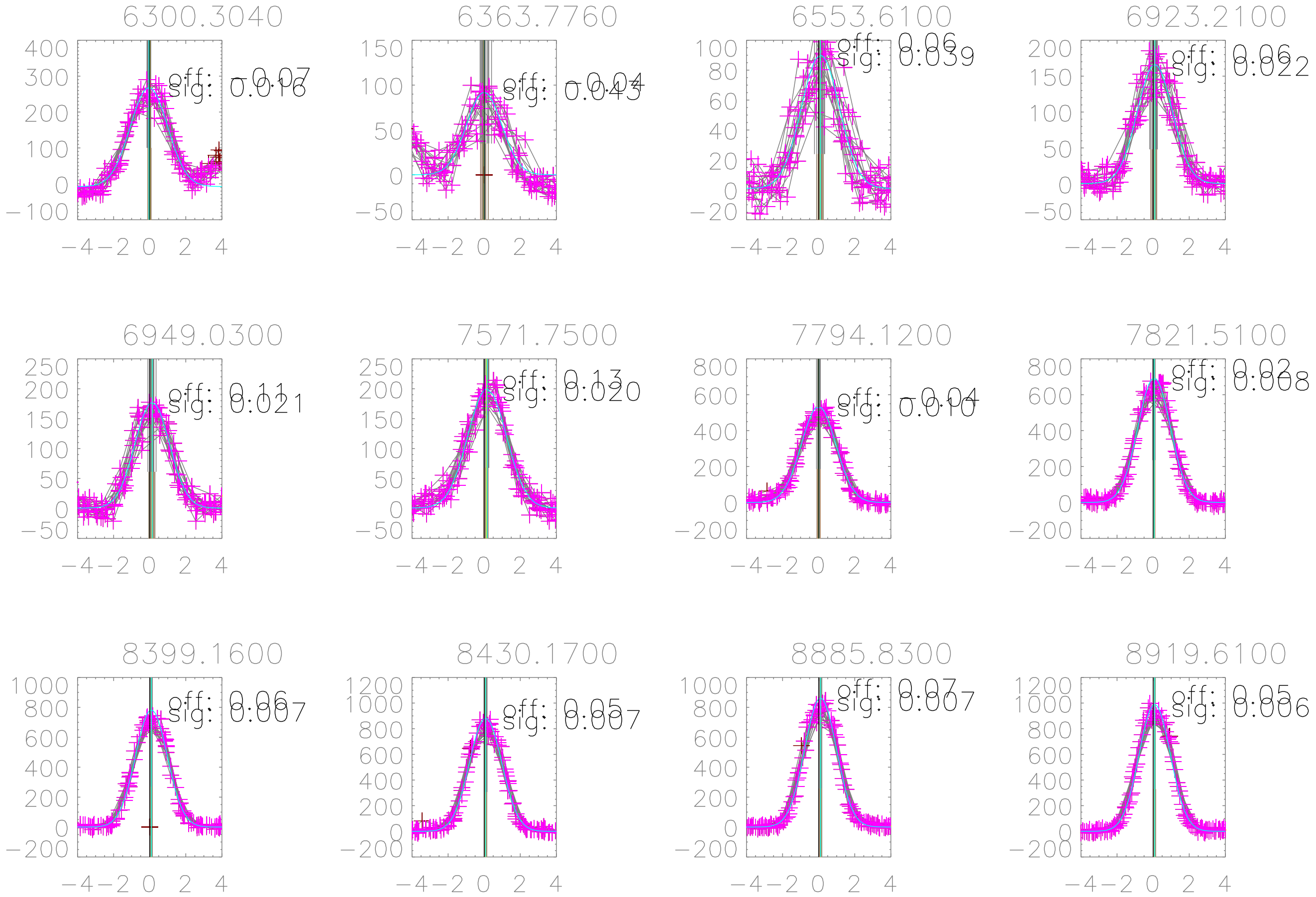


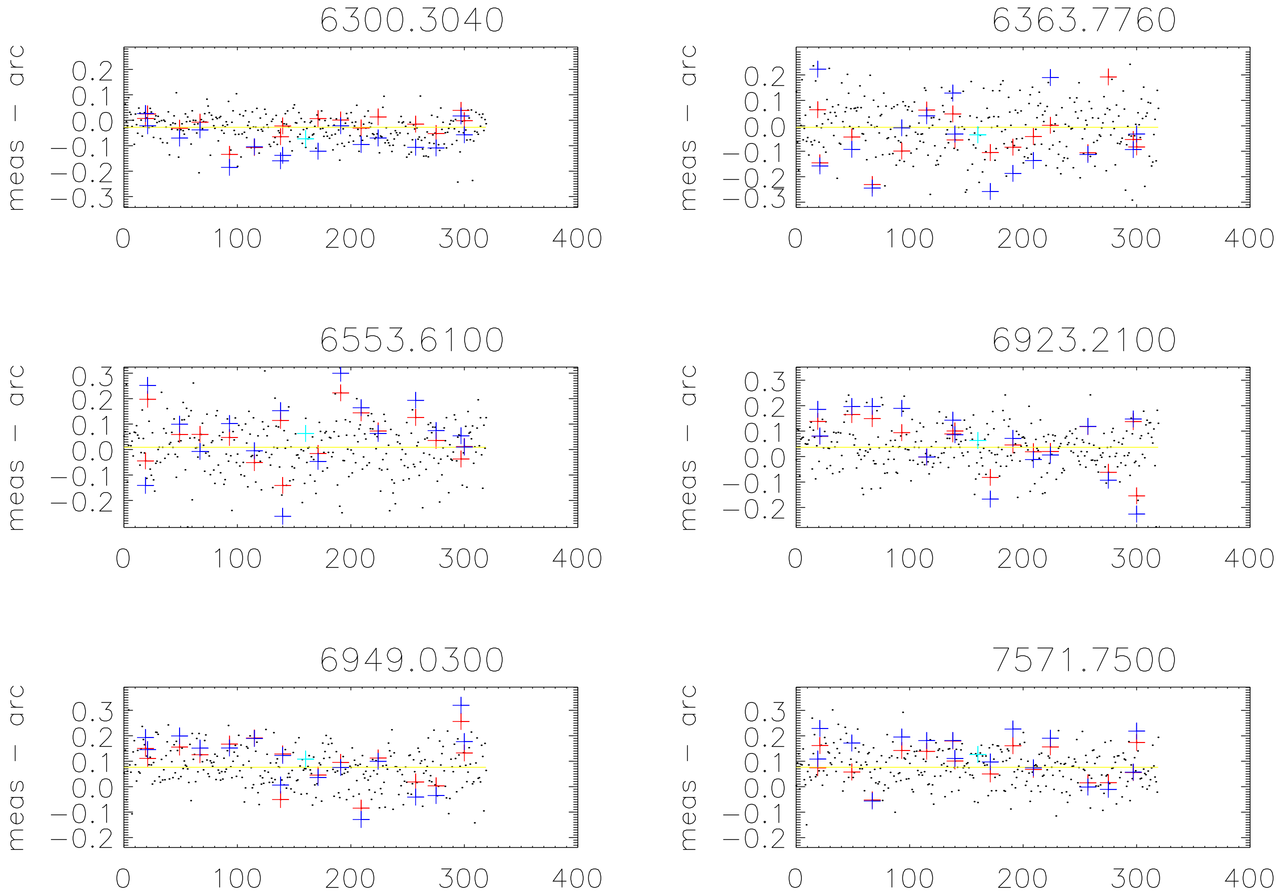

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r1-00022198.fi
Brightness [electrons/pix]
0
2
4
6
8
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.897
Max value = 6.557
Tue Feb 26 00:01:52 2008


PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022198.fit
0.818
0.818
0.091
0.091
0.091
0.818
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

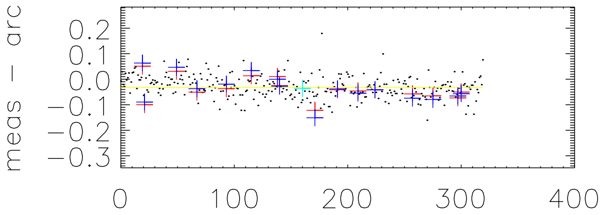

PLATE=0678 MJD=52884 Scattered Light on sdR-r1-00022198.fit
Brightness [electrons/pix]
2.5
2.0
1.5
1.0
0.5
0.0
Error bars denote full range
Min value = -0.186
Max value = 1.893
6000
7000
8000
9000
λ [A]
Tue Feb 26 00:04:50 2008


PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r1-00022198.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
0
500
1000
1500
2000
Row number

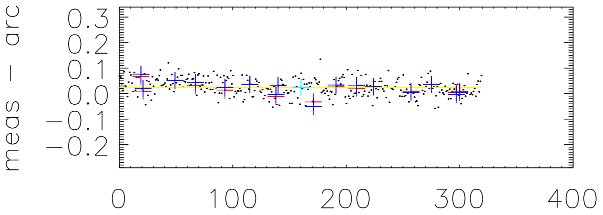

6300.3040
off: −0.07
sig: 0.016
6363.7760
off: −0.04
sig: 0.043
6553.6100
off: 0.06
sig: 0.039
6923.2100
off: 0.06
sig: 0.022
6949.0300
off: 0.11
sig: 0.021
7571.7500
off: 0.13
sig: 0.020
7794.1200
off: −0.04
sig: 0.010
7821.5100
off: 0.02
sig: 0.008
8399.1600
off: 0.06
sig: 0.007
8430.1700
off: 0.05
sig: 0.007
8885.8300
off: 0.07
sig: 0.007
8919.6100
off: 0.05
sig: 0.006
−4 −2 0 2 4


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

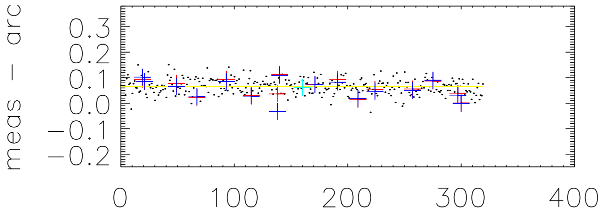
7794.1200



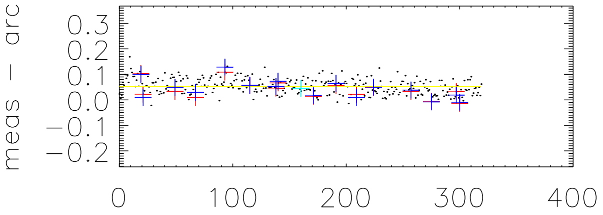
7821.5100



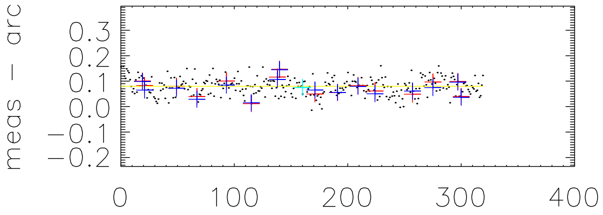
8399.1600



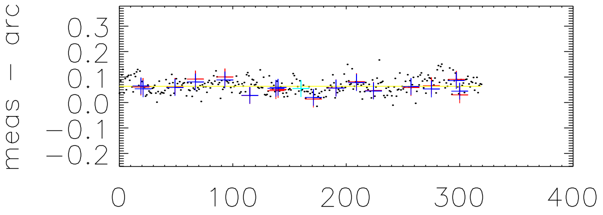
8430.1700

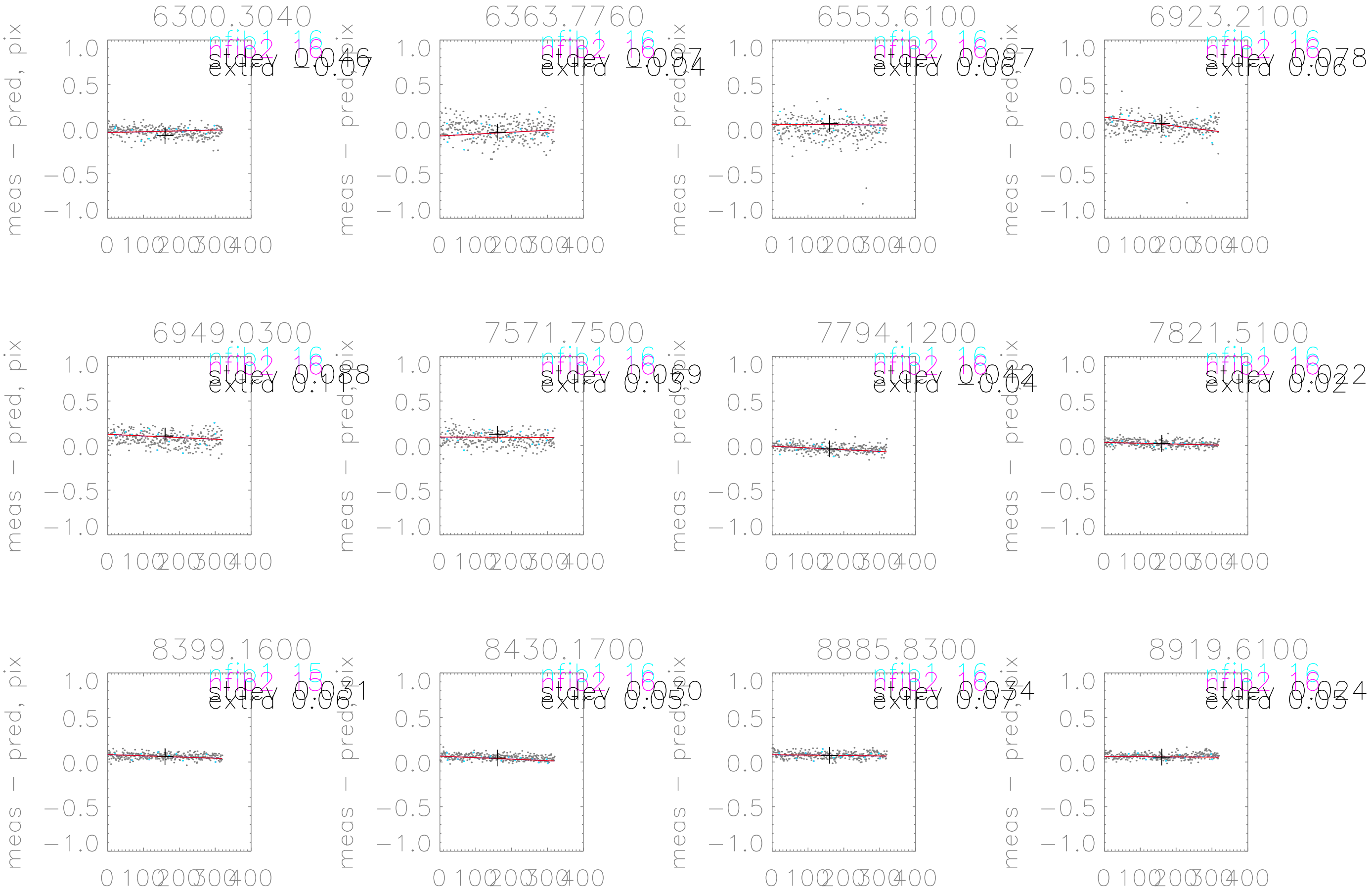


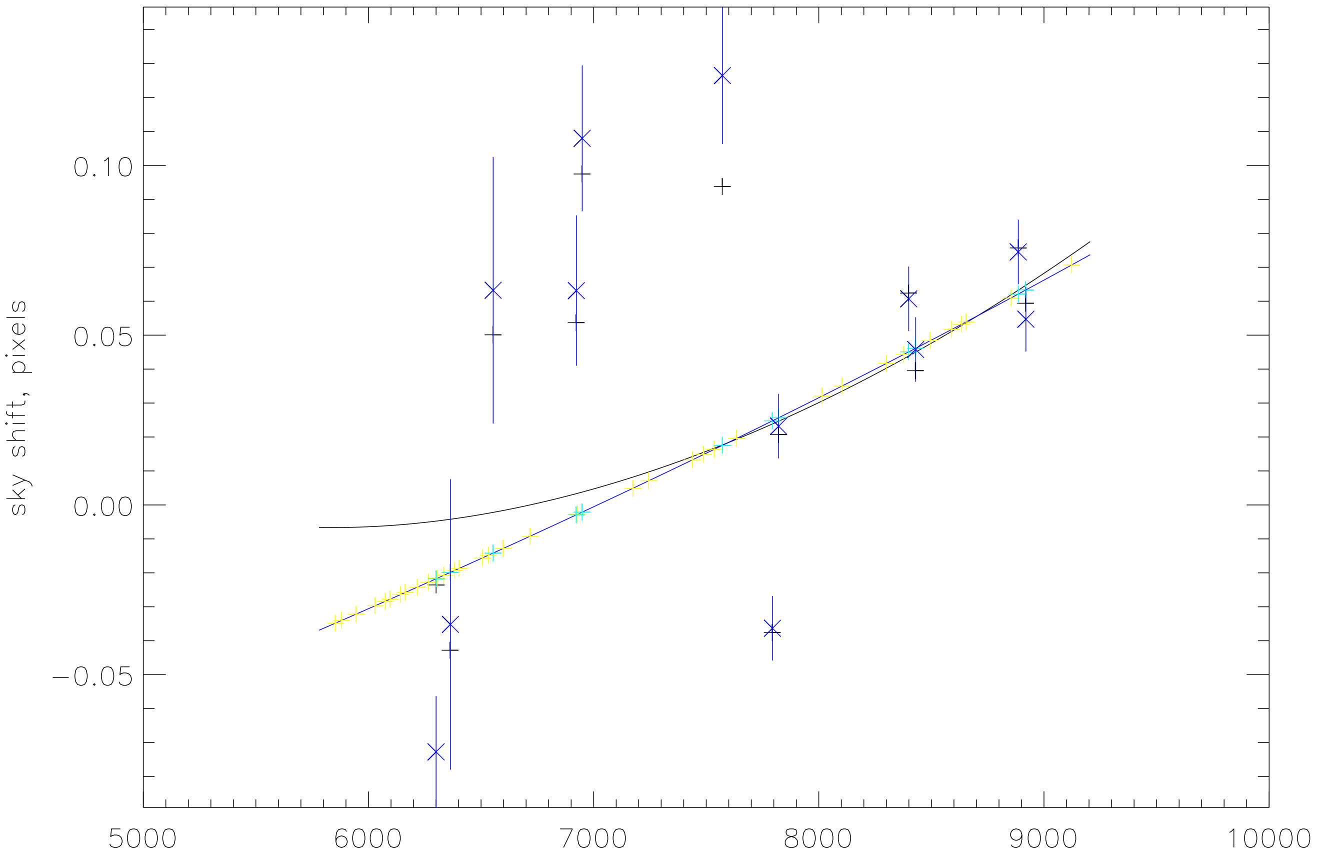
8885.8300

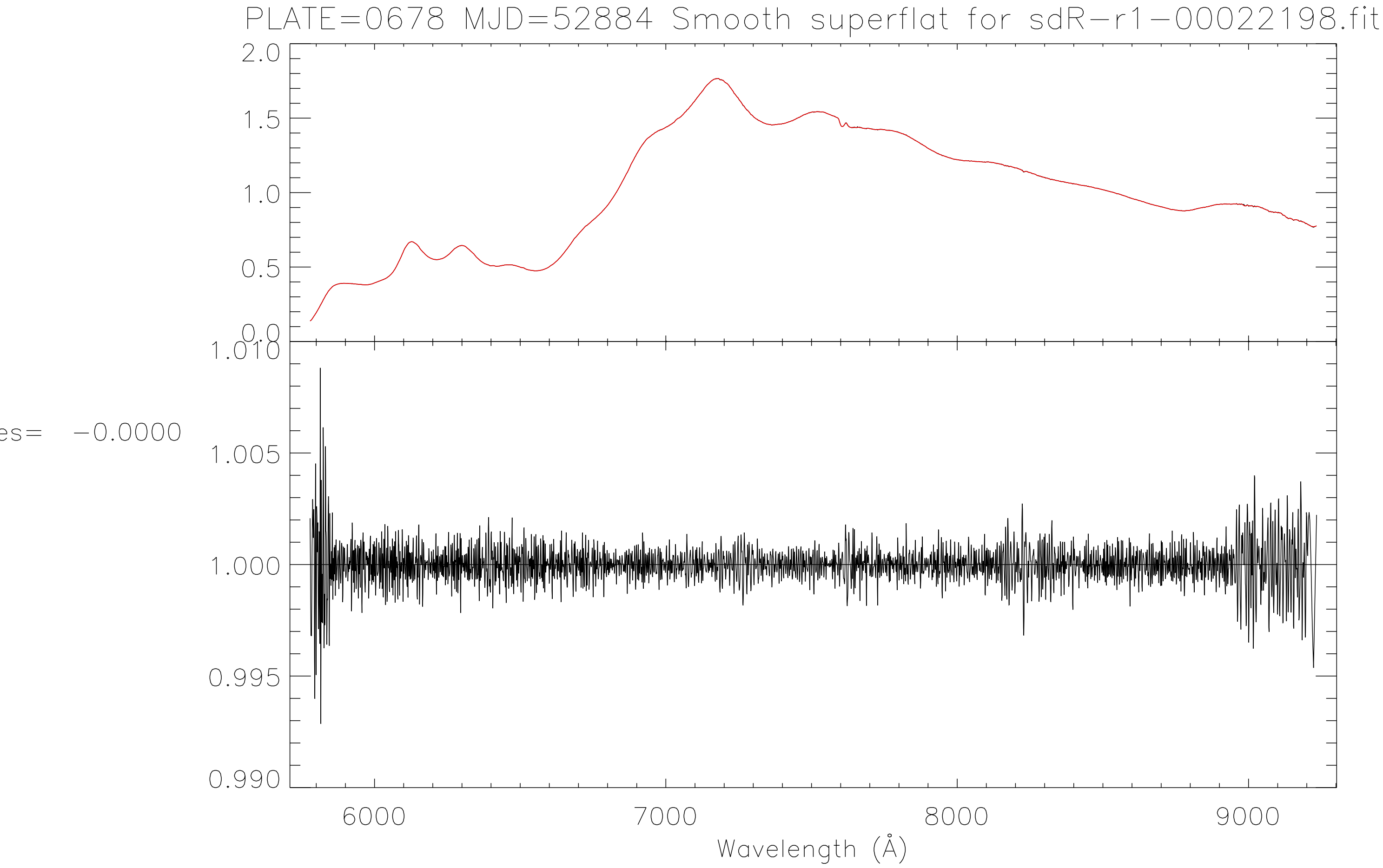


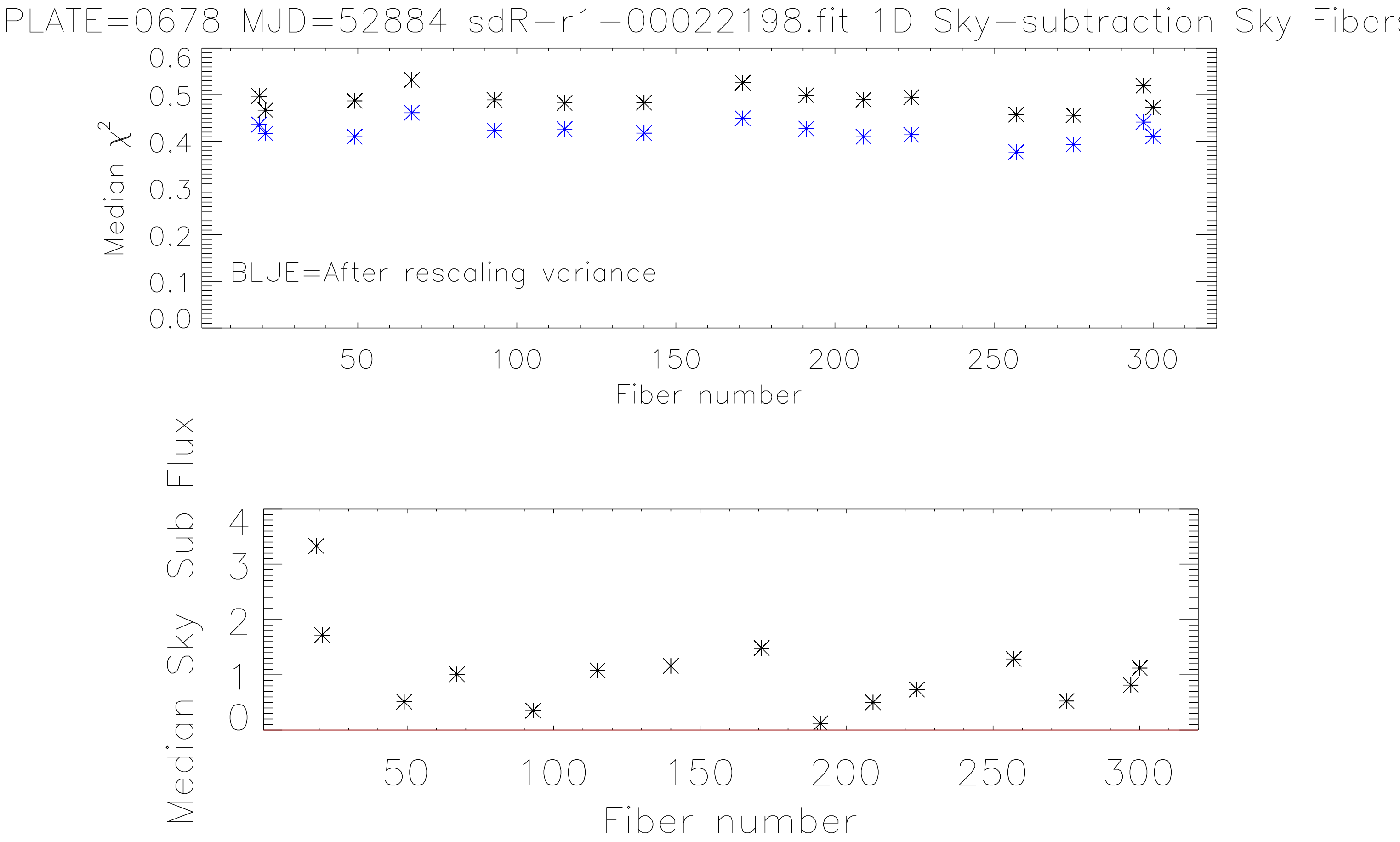
8919.6100

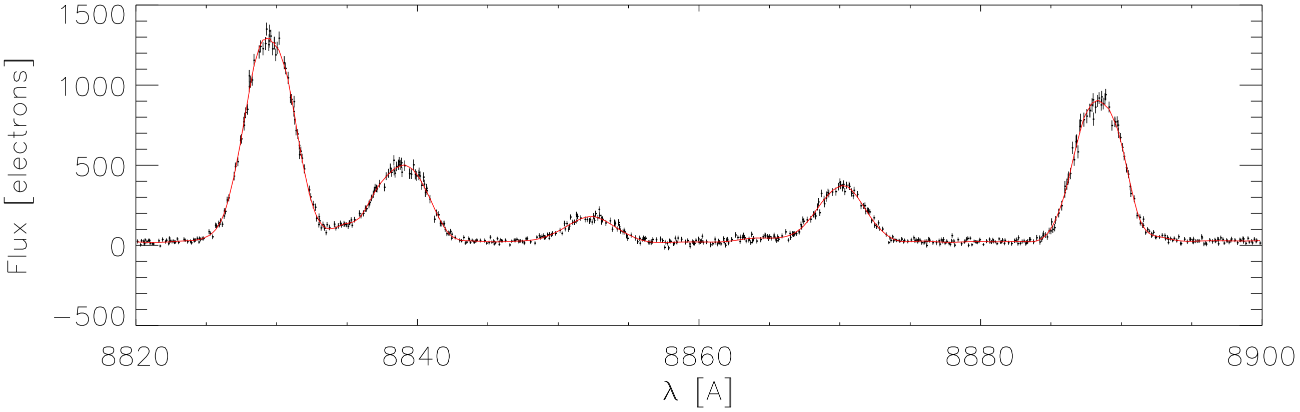


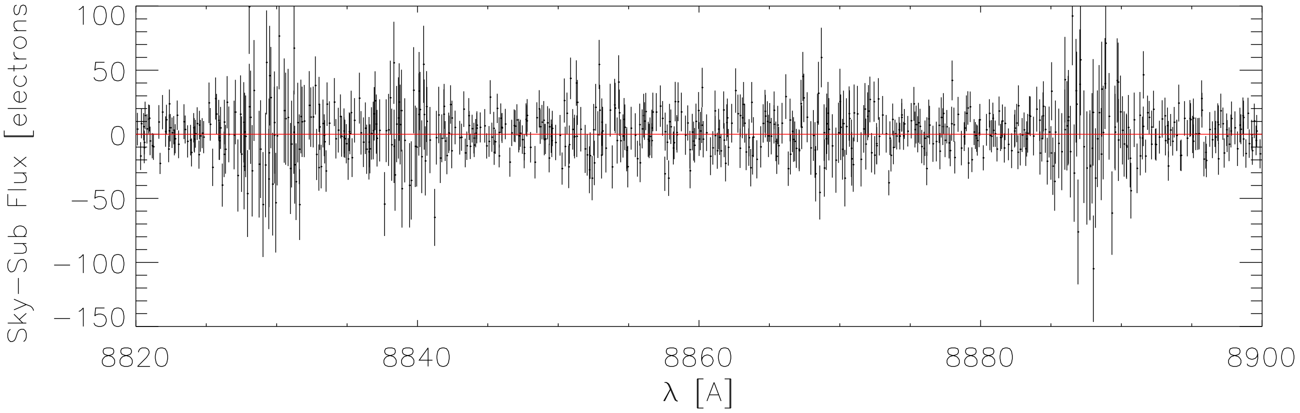

6300.3040
nfib1 16
nfib2 16
stdev 0.046
extrd −0.07
6363.7760
nfib1 16
nfib2 16
stdev 0.097
extrd −0.04
6553.6100
nfib1 16
nfib2 16
stdev 0.087
extrd 0.06
6923.2100
nfib1 16
nfib2 16
stdev 0.078
extrd 0.06
6949.0300
nfib1 16
nfib2 16
stdev 0.088
extrd 0.11
7571.7500
nfib1 16
nfib2 16
stdev 0.069
extrd 0.13
7794.1200
nfib1 16
nfib2 16
stdev 0.042
extrd −0.04
7821.5100
nfib1 16
nfib2 16
stdev 0.022
extrd 0.02
8399.1600
nfib1 15
nfib2 15
stdev 0.031
extrd 0.06
8430.1700
nfib1 16
nfib2 16
stdev 0.030
extrd 0.05
8885.8300
nfib1 16
nfib2 16
stdev 0.034
extrd 0.07
8919.6100
nfib1 16
nfib2 16
stdev 0.024
extrd 0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

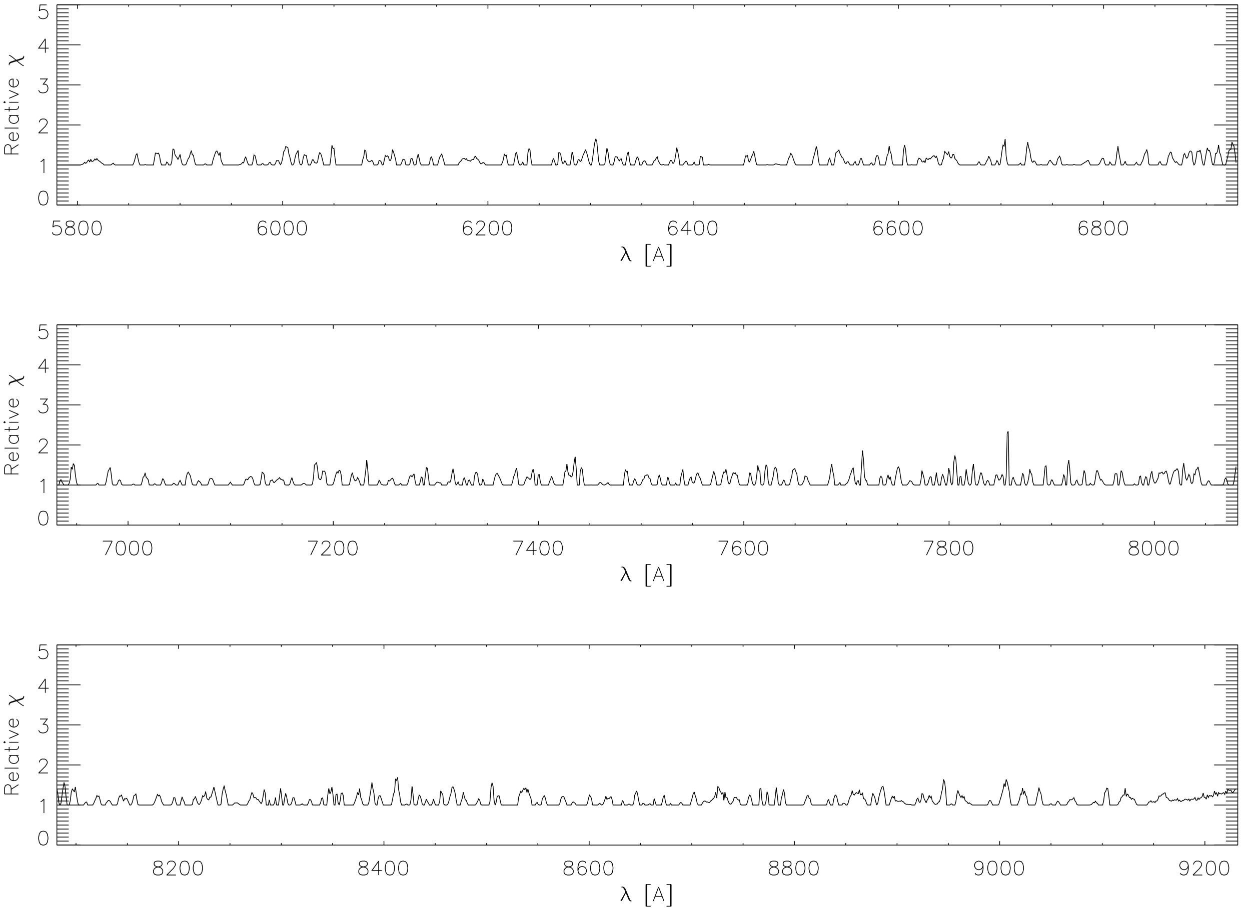

sky shift, pixels
0.10
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000


PLATE=0678 MJD=52884 Smooth superflat for sdR-r1-00022198.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es=   −0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=0678 MJD=52884 sdR-r1-00022198.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
0
1
2
3
4
50
100
150
200
250
300
Fiber number

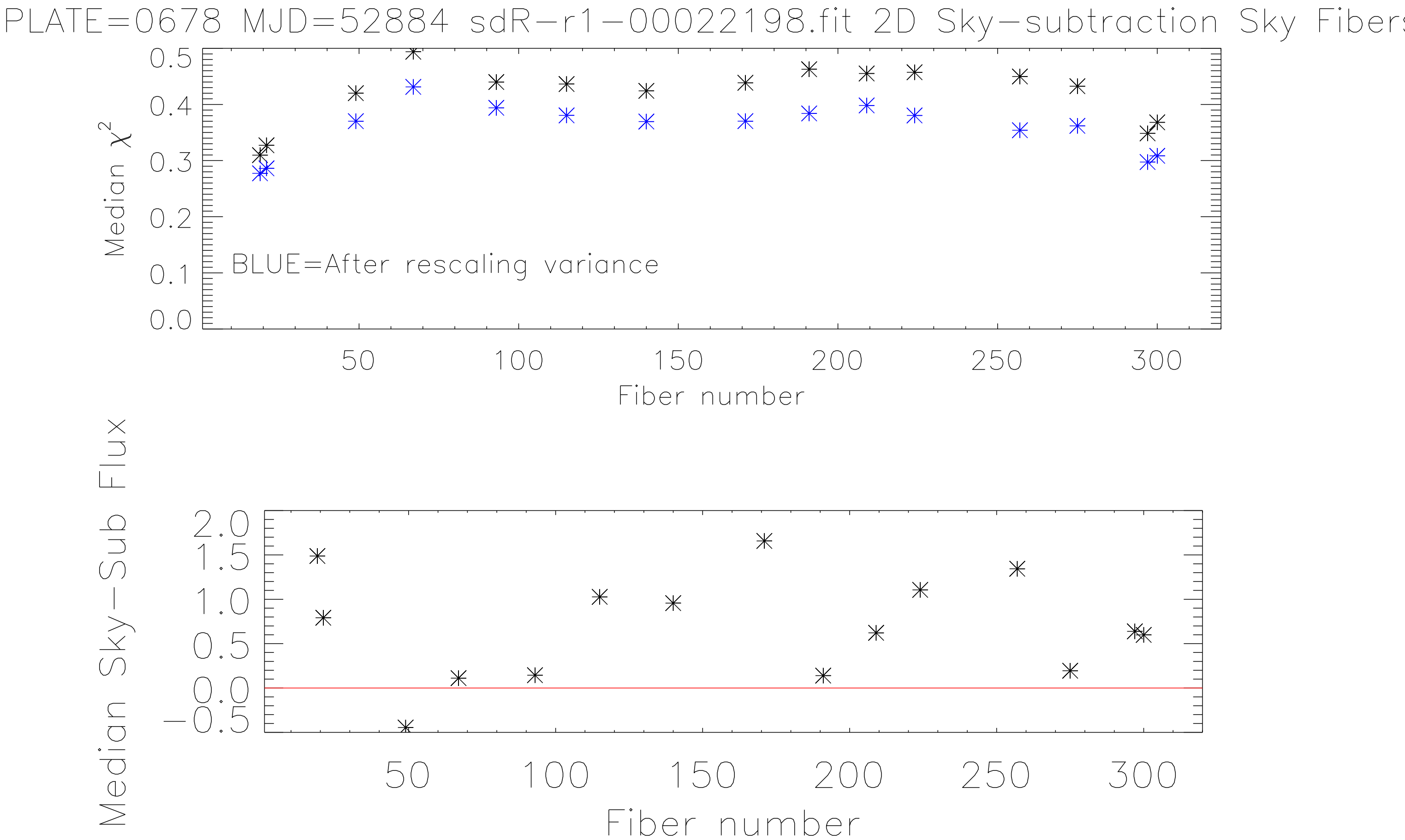

PLATE=0678 MJD=52884 sdR-r1-00022198.fit 1D Sky-subtraction Sky Fibers

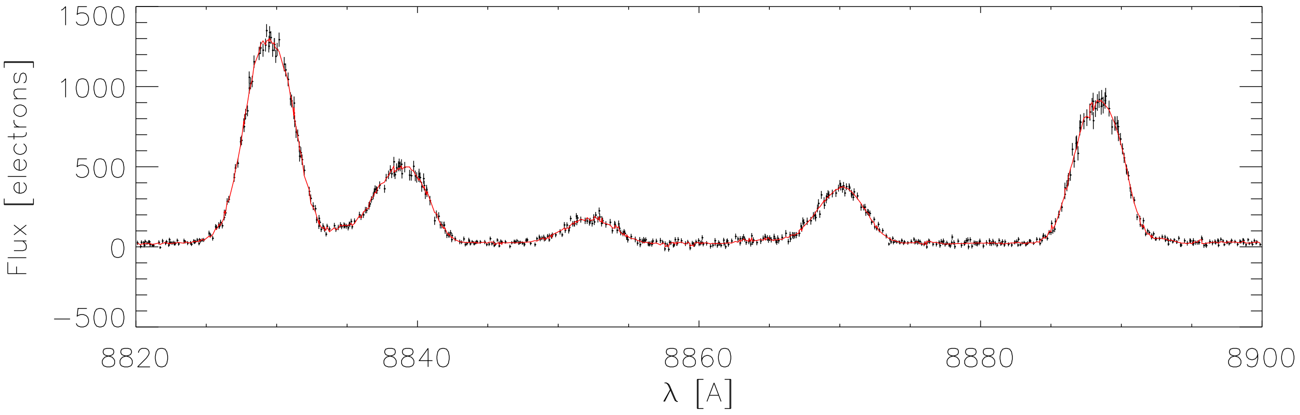

PLATE=0678 MJD=52884 sdR-r1-00022198.fit 1D Sky-subtraction Sky-subtracted Sky F

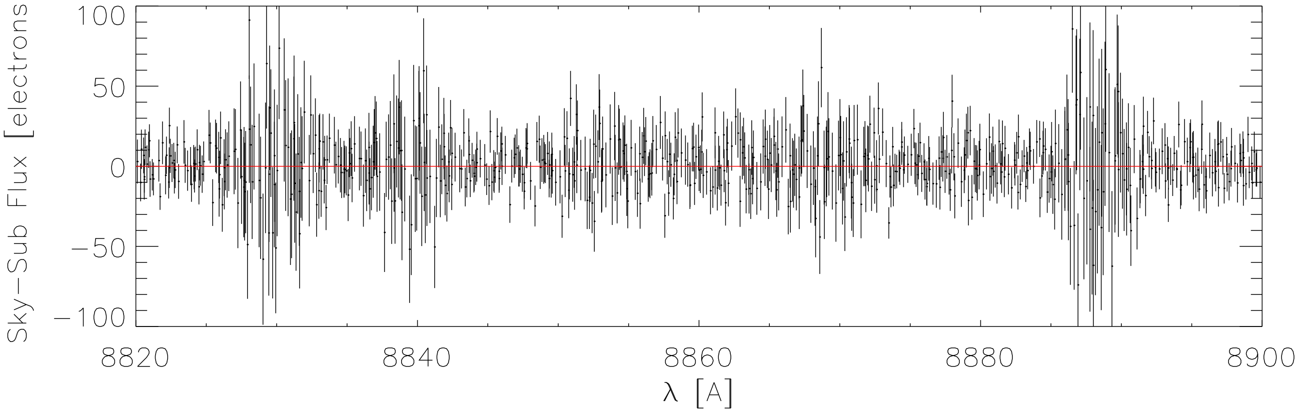


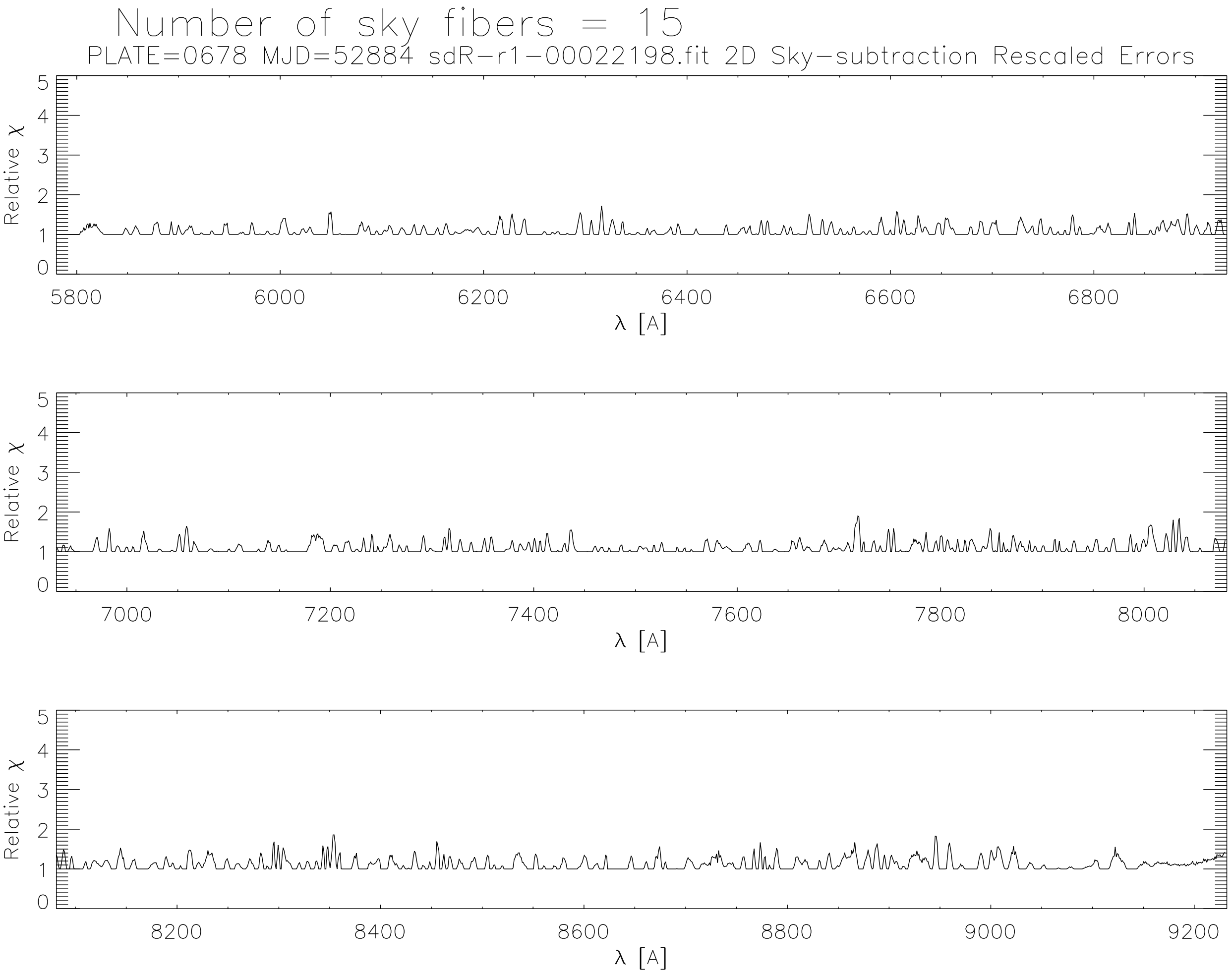
Number of sky fibers = 15

PLATE=0678 MJD=52884 sdR-r1-00022198.fit 1D Sky-subtraction Rescaled Errors

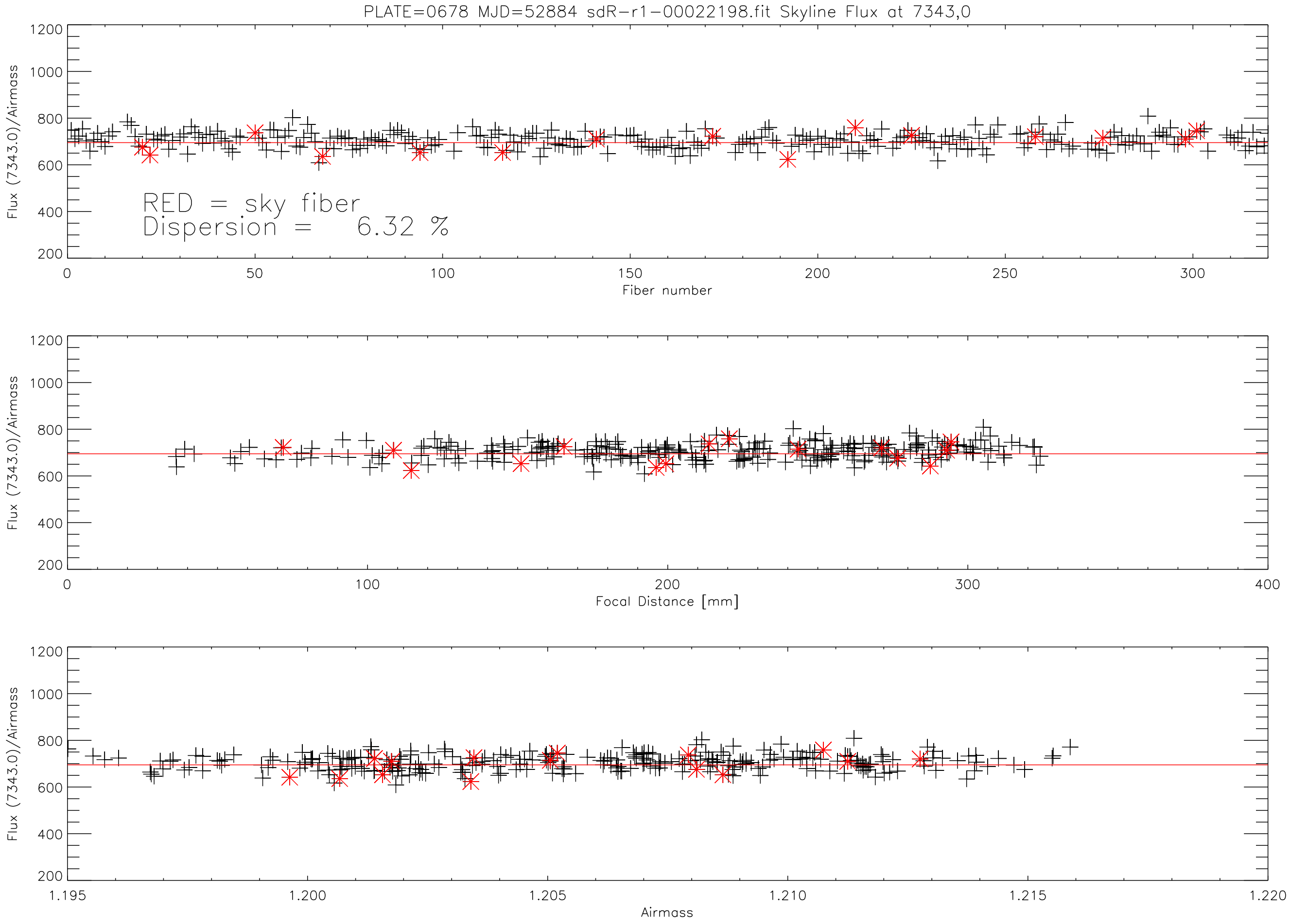

PLATE=0678 MJD=52884 sdR-r1-00022198.fit 2D Sky-subtraction Sky Fibers
Median χ^2
BLUE=After rescaling variance
0.0
0.1
0.2
0.3
0.4
0.5
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−0.5
0.0
0.5
1.0
1.5
2.0
50
100
150
200
250
300
Fiber number

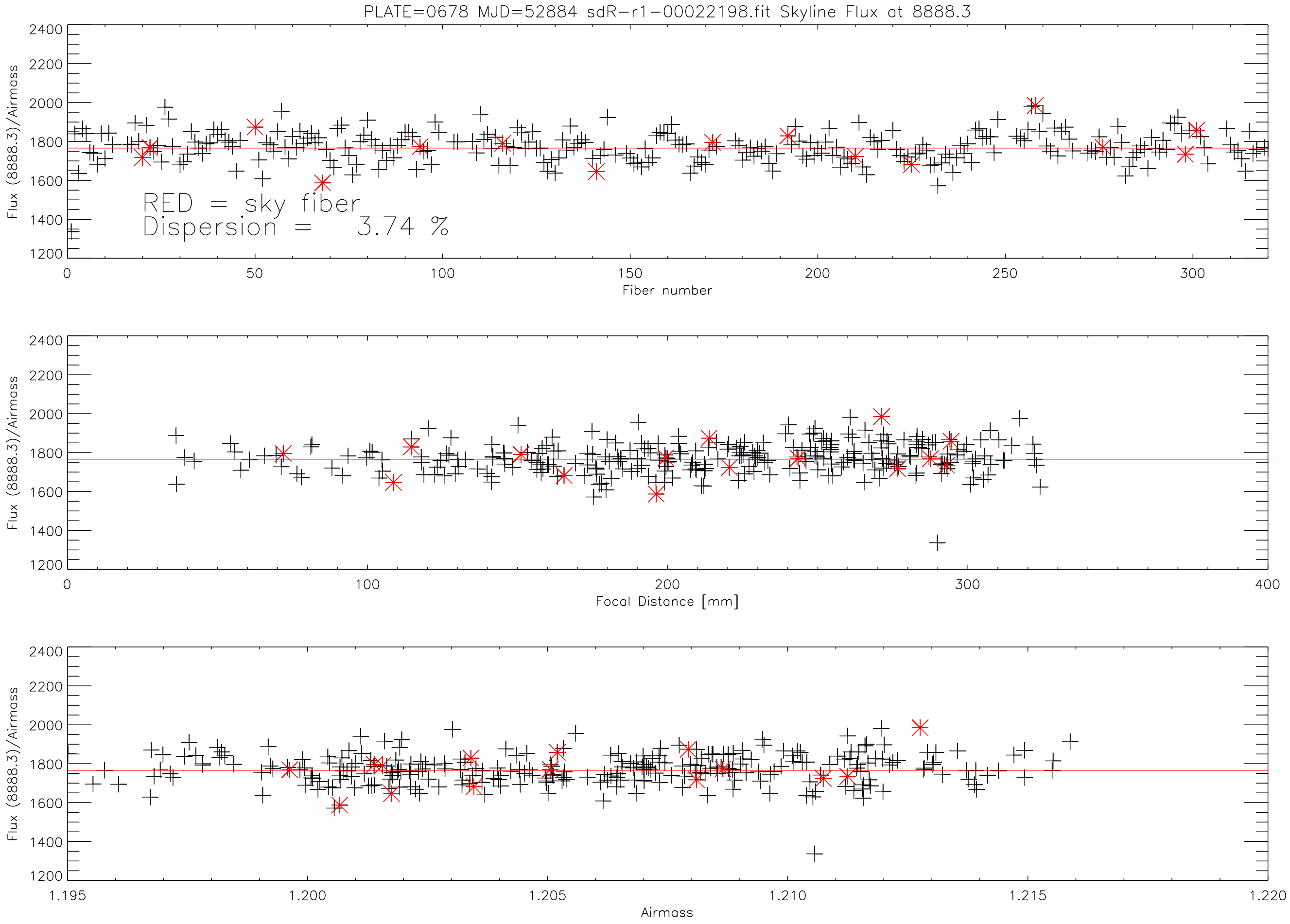

PLATE=0678 MJD=52884 sdR-r1-00022198.fit 2D Sky-subtraction Sky Fibers

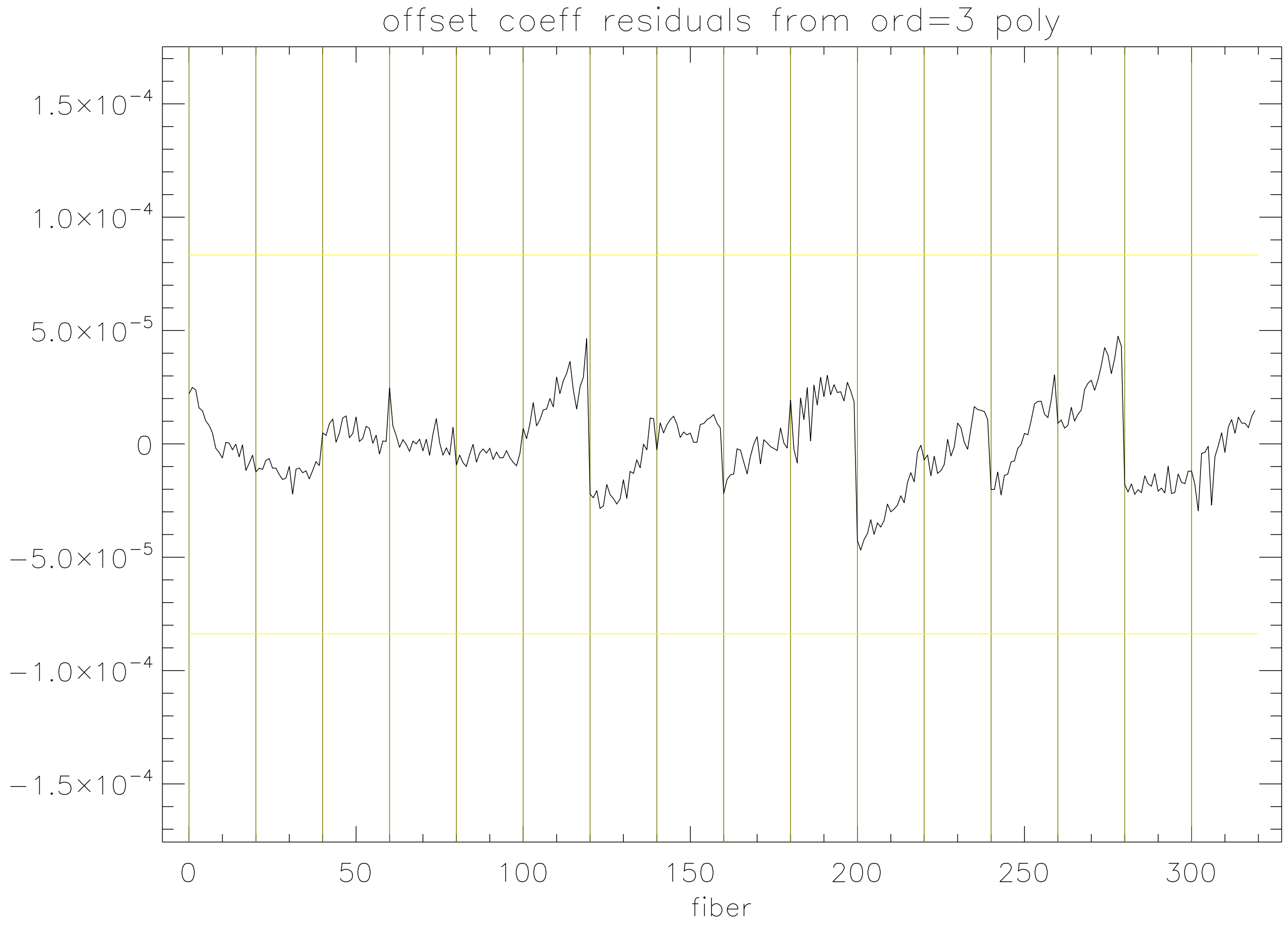

PLATE=0678 MJD=52884 sdR-r1-00022198.fit 2D Sky-subtraction Sky-subtracted Sky F

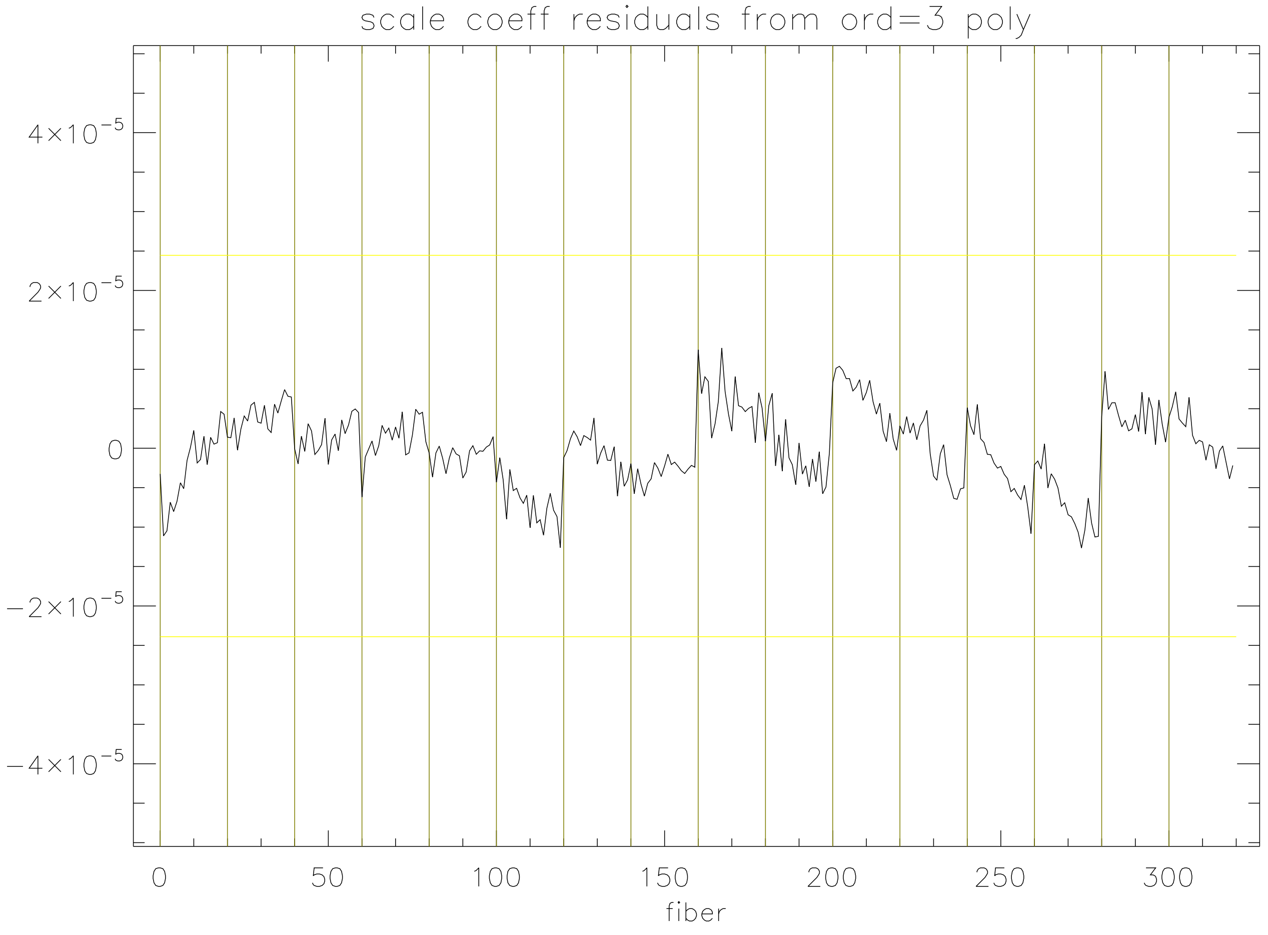

Number of sky fibers = 15

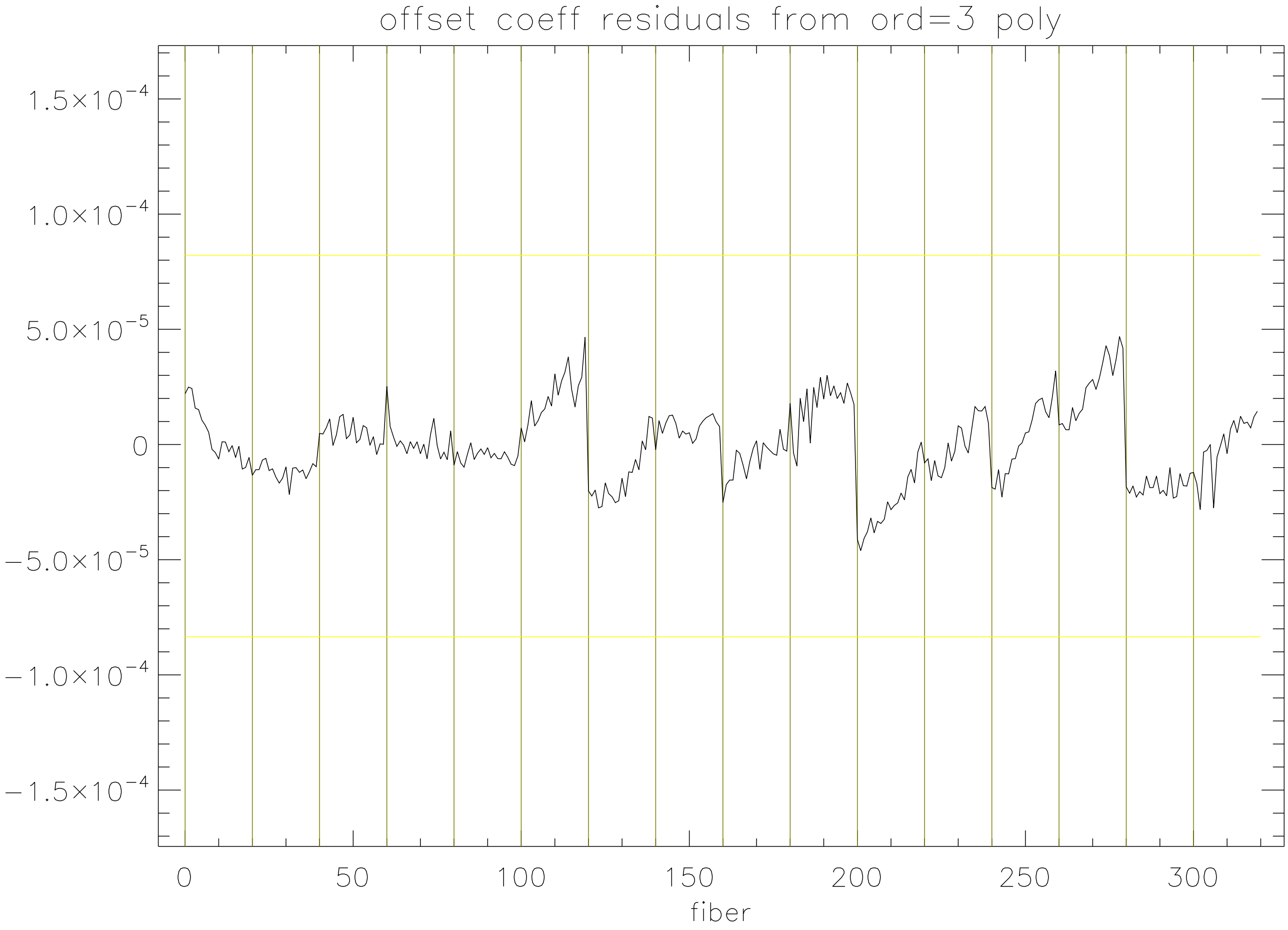
PLATE=0678 MJD=52884 sdR-r1-00022198.fit 2D Sky-subtraction Rescaled Errors

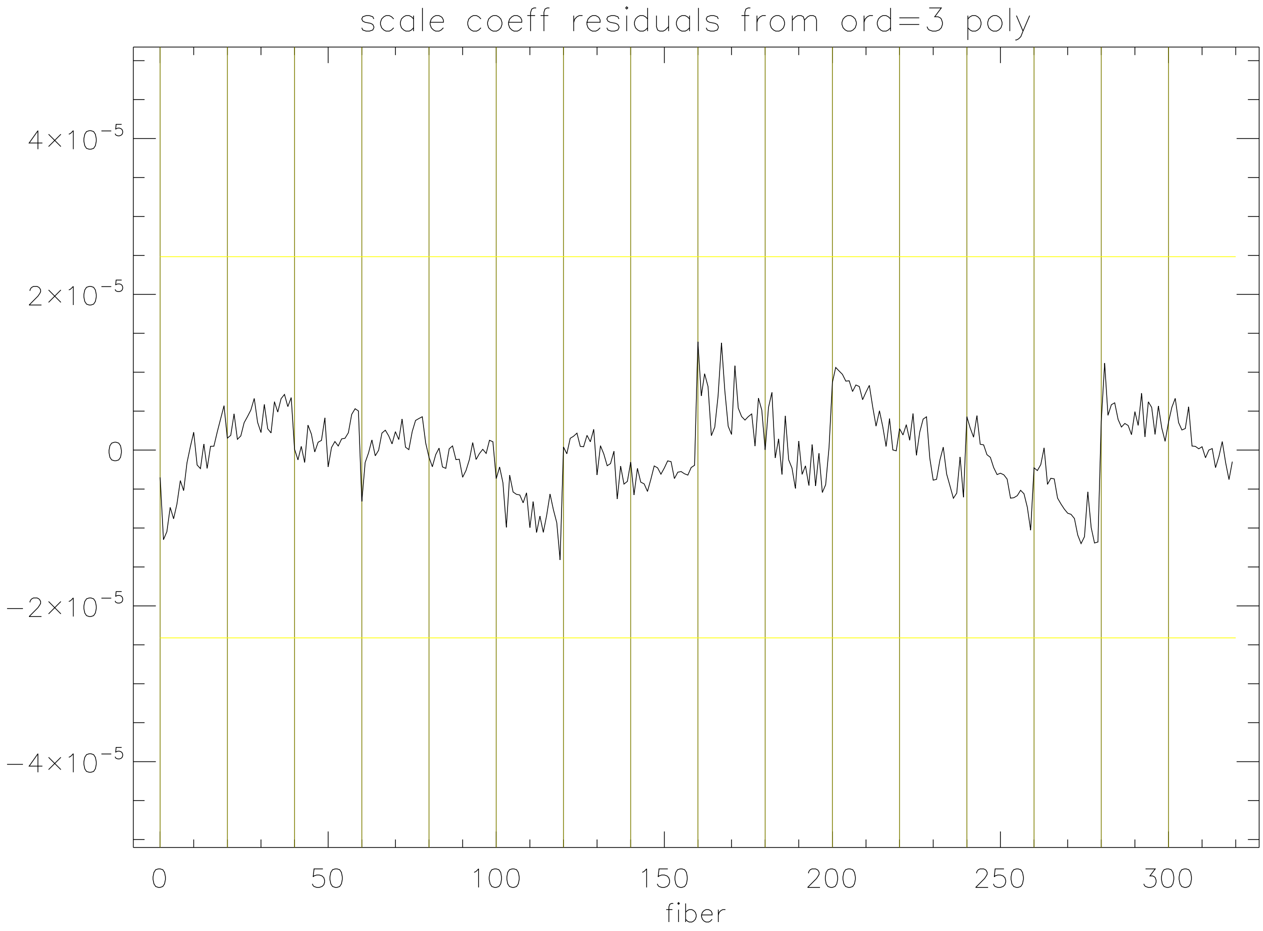

PLATE=0678 MJD=52884 sdR-r1-00022198.fit Skyline Flux at 7343,0

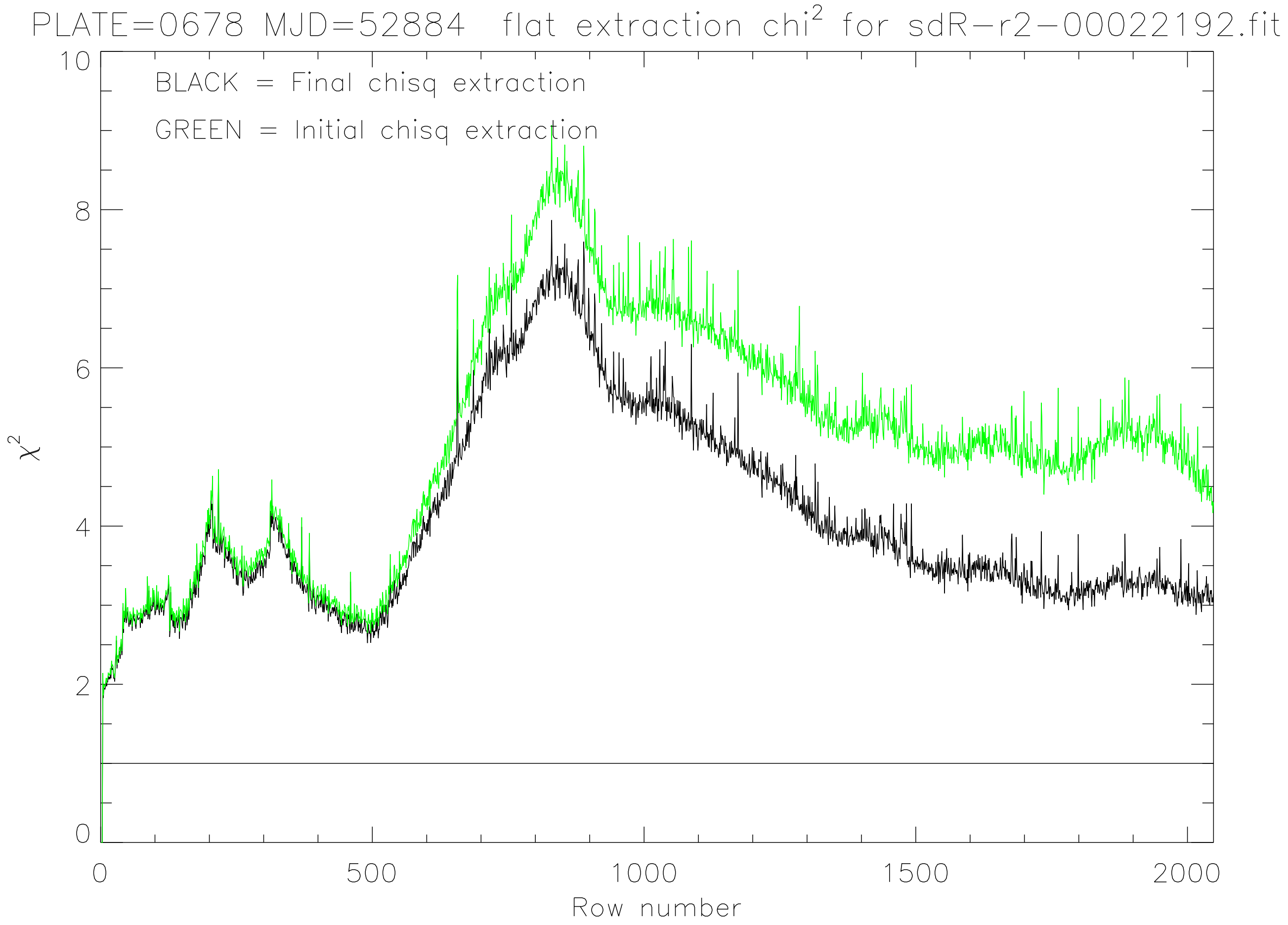

PLATE=0678 MJD=52884 sdR-r1-00022198.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
2400
2200
2000
1800
1600
1400
1200
RED = sky fiber
Dispersion = 3.74 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.195
1.200
1.205
1.210
1.215
1.220
Airmass

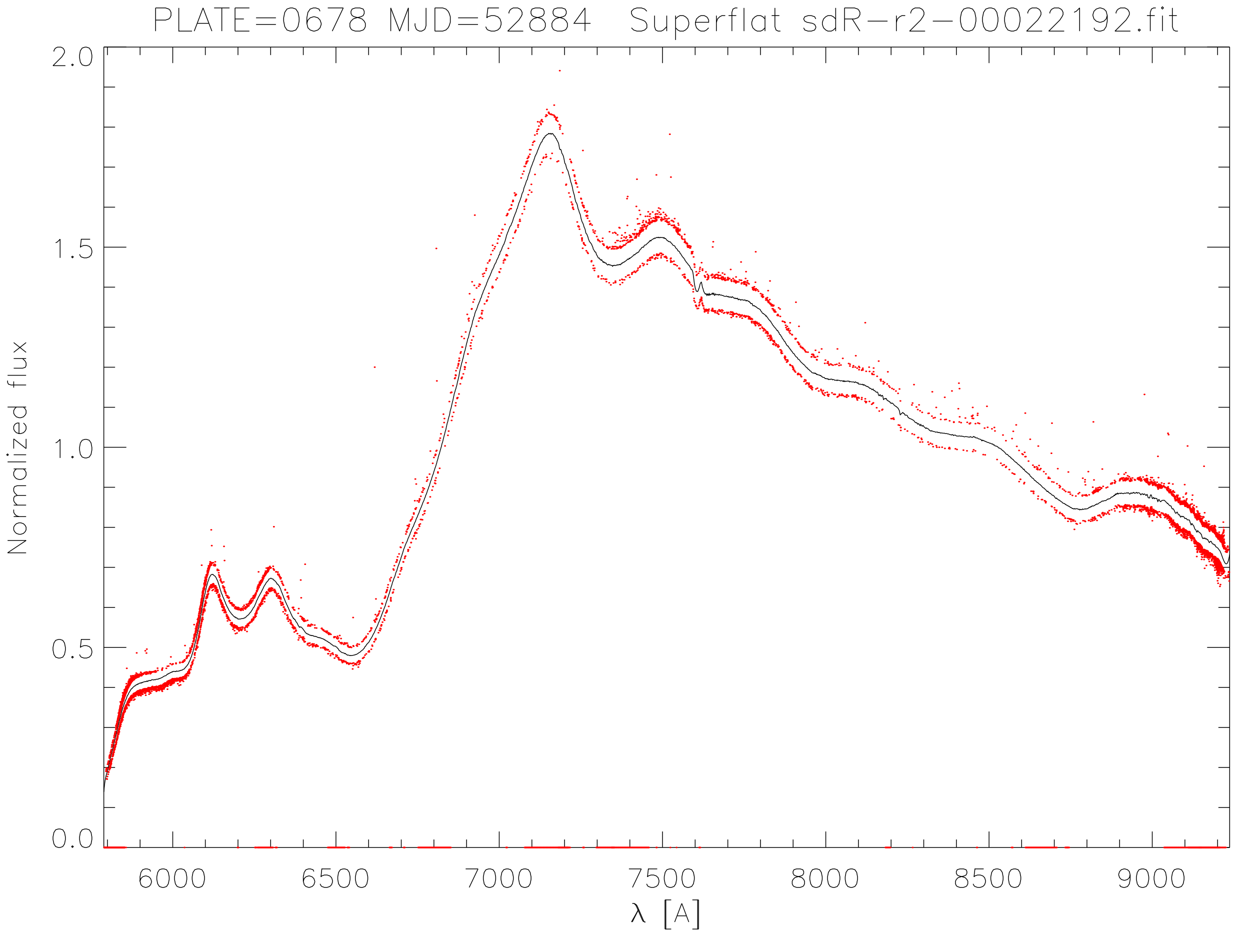

offset coeff residuals from ord=3 poly
1.5×10⁻⁴
1.0×10⁻⁴
5.0×10⁻⁵
0
−5.0×10⁻⁵
−1.0×10⁻⁴
−1.5×10⁻⁴
0
50
100
150
200
250
300
fiber

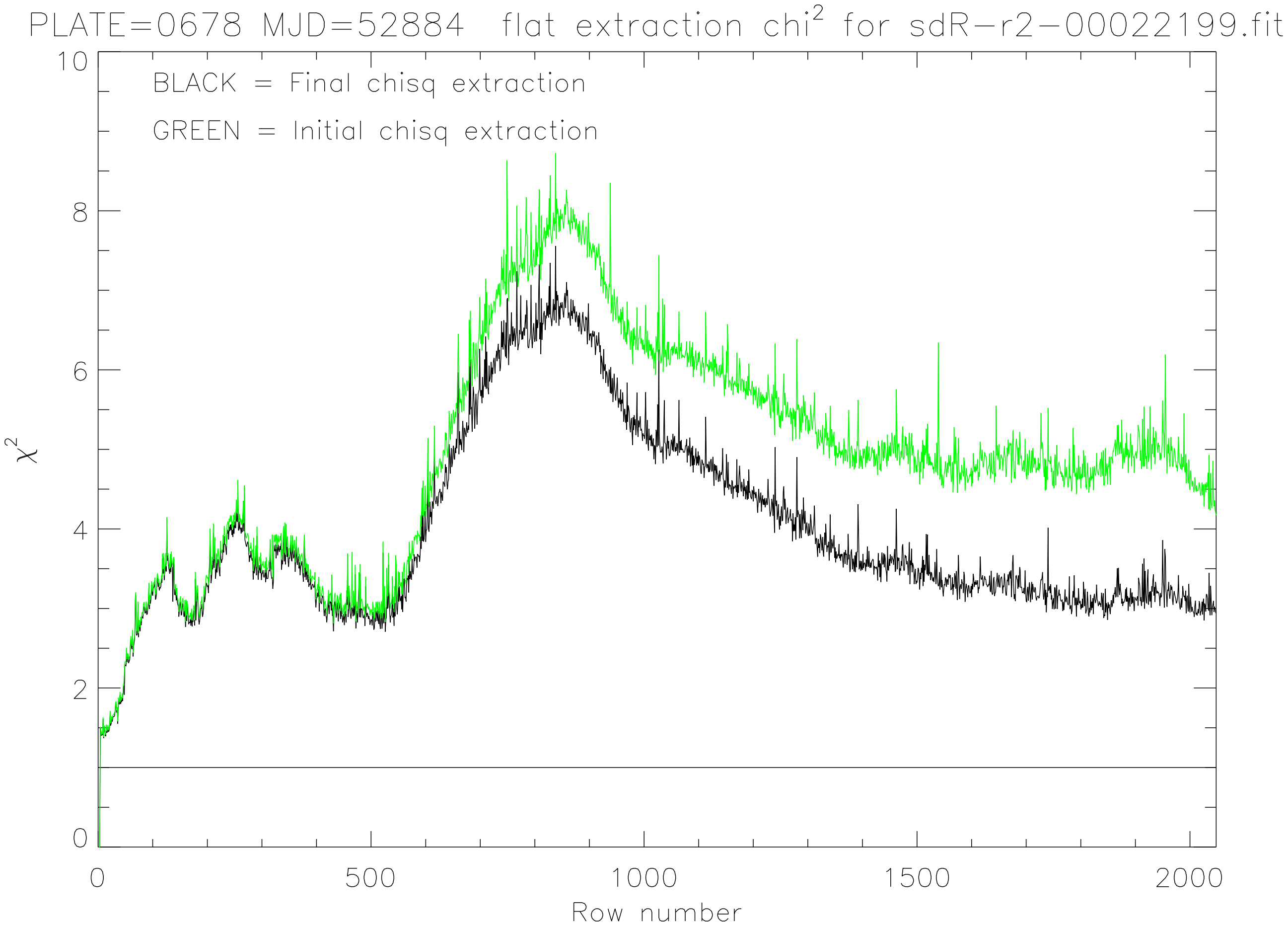

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

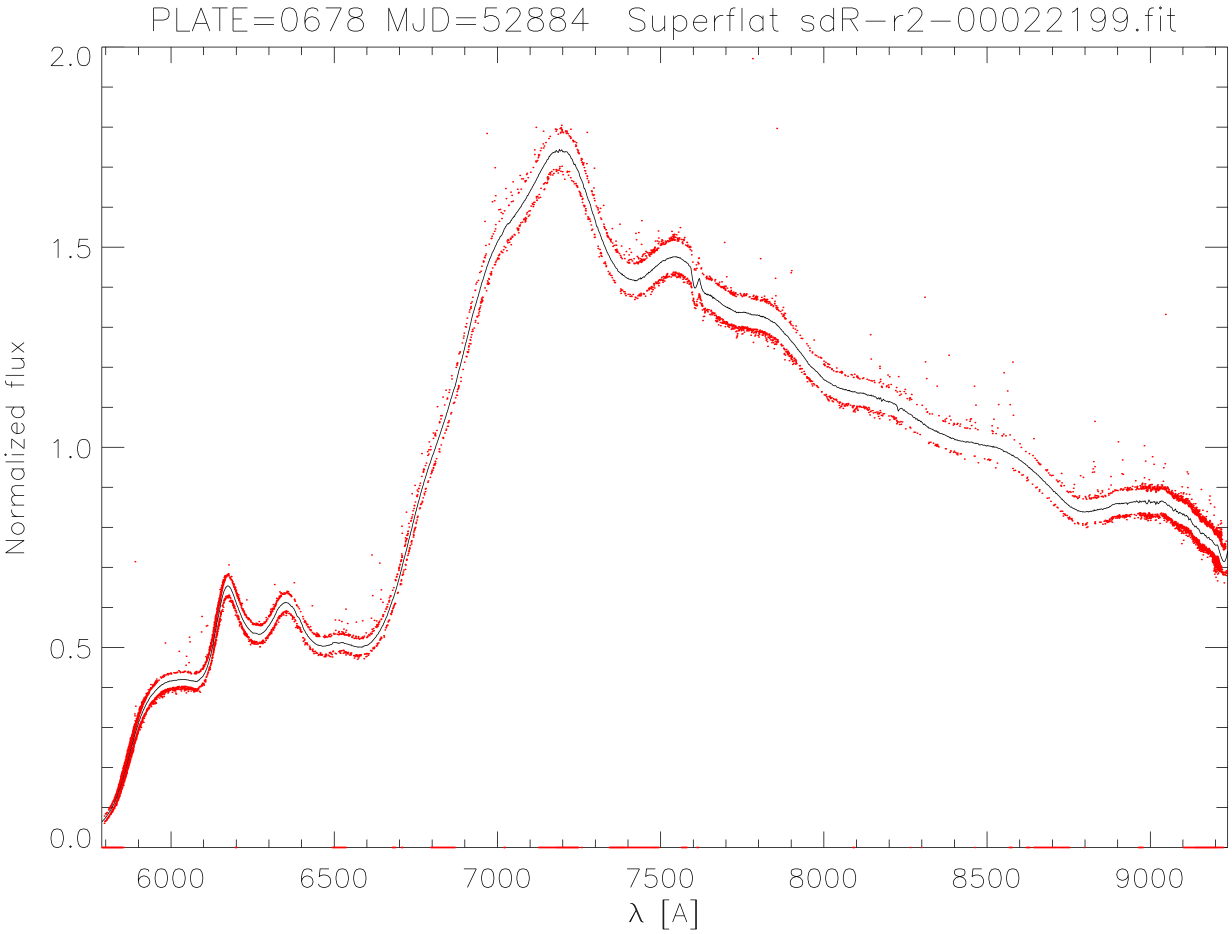

offset coeff residuals from ord=3 poly
1.5×10^-4
1.0×10^-4
5.0×10^-5
0
−5.0×10^-5
−1.0×10^-4
−1.5×10^-4
0
50
100
150
200
250
300
fiber

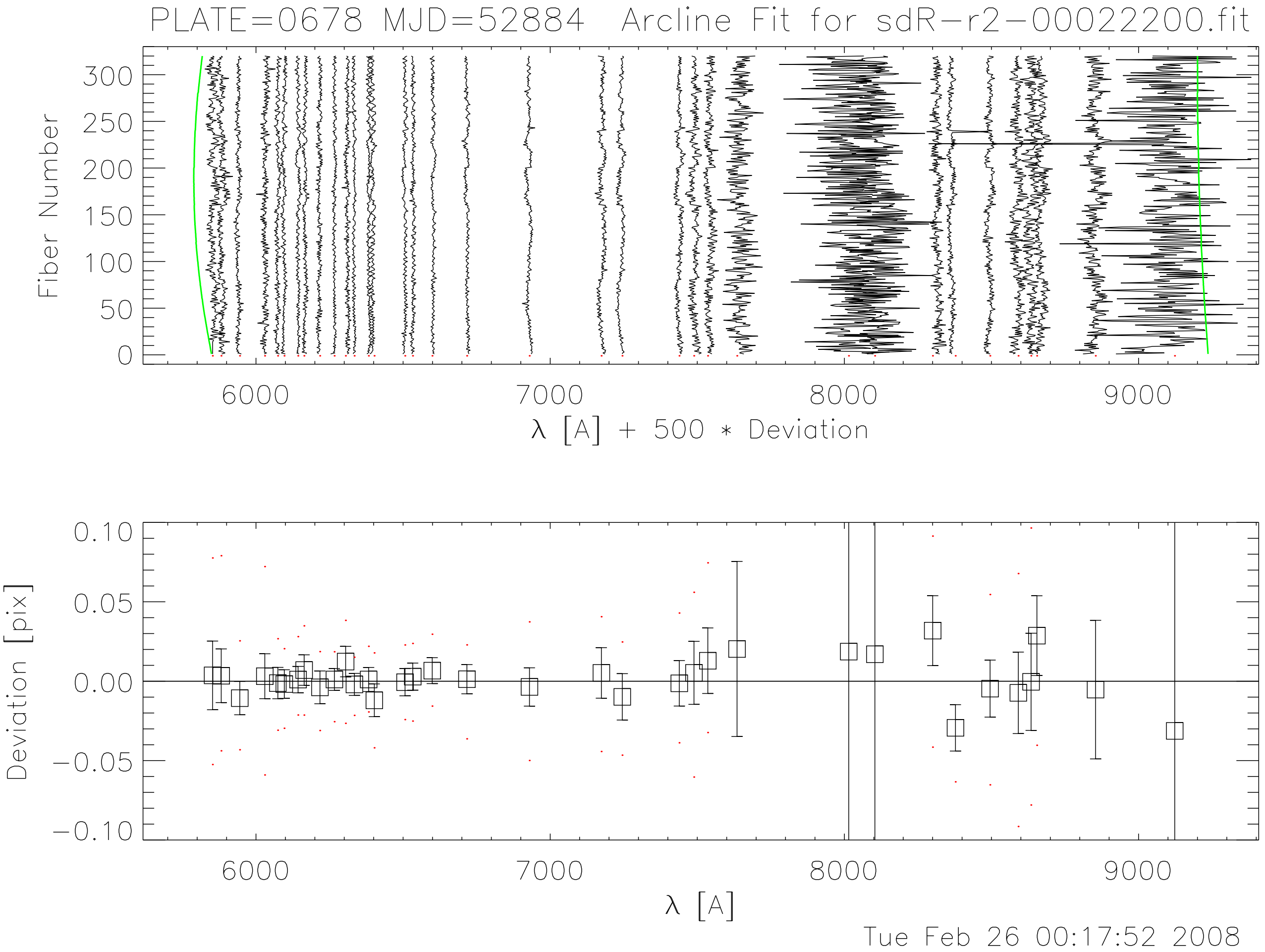

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
−2×10^{-5}
−4×10^{-5}
0
50
100
150
200
250
300
fiber

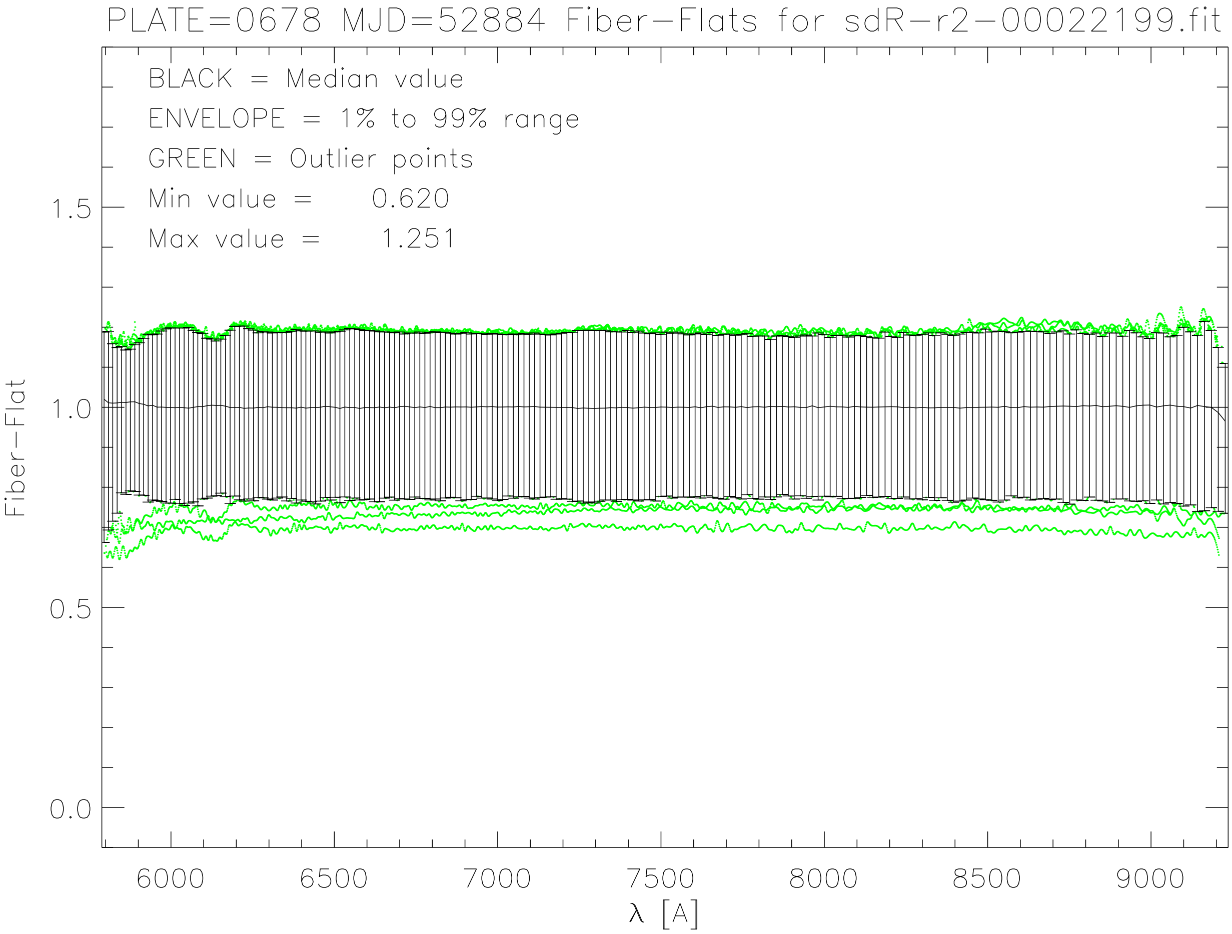

PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-r2-00022192.fit


PLATE=0678 MJD=52884 Superflat sdR-r2-00022192.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000


PLATE=0678 MJD=52884 flat extraction chi^2 for sdR-r2-00022199.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

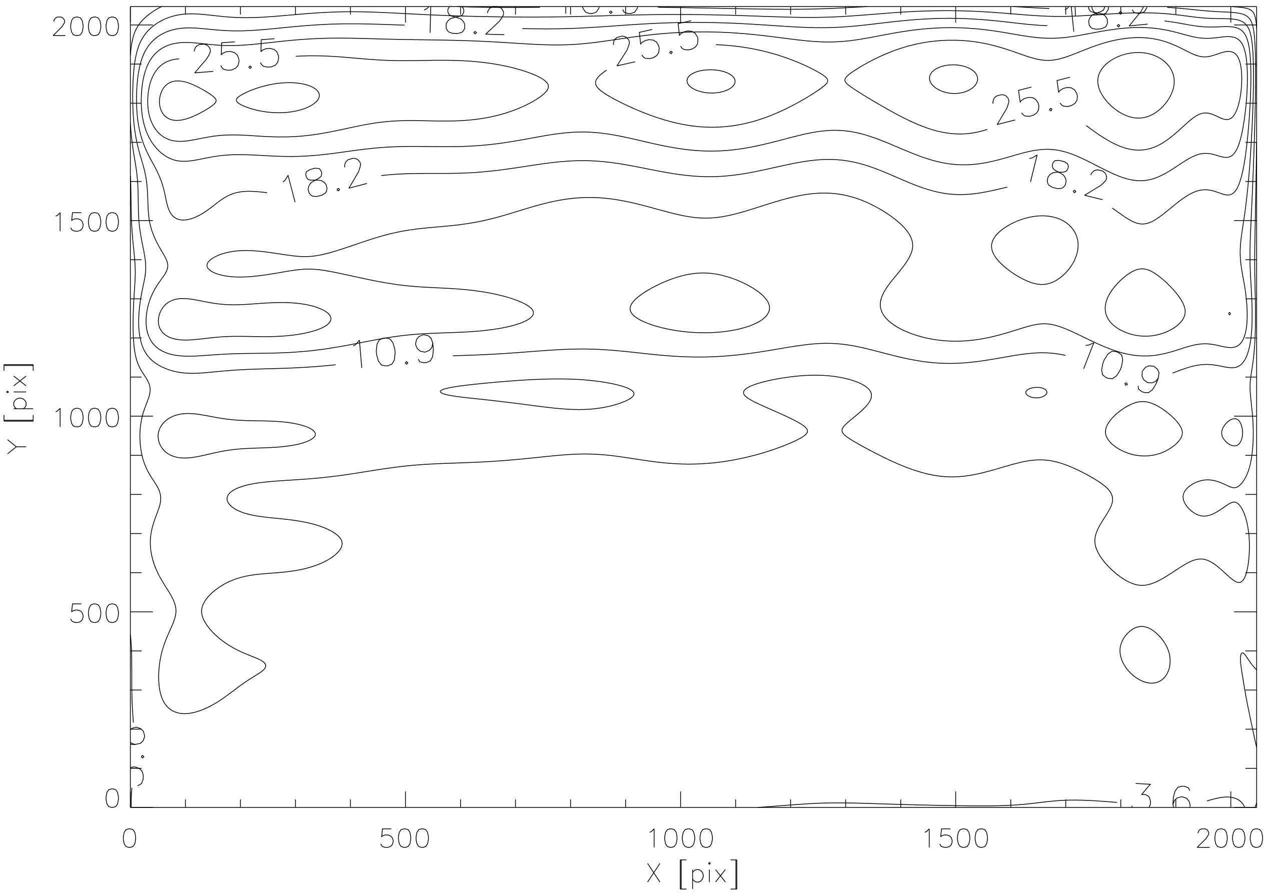

PLATE=0678 MJD=52884 Superflat sdR-r2-00022199.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=0678 MJD=52884 Arcline Fit for sdR-r2-00022200.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]
Tue Feb 26 00:17:52 2008

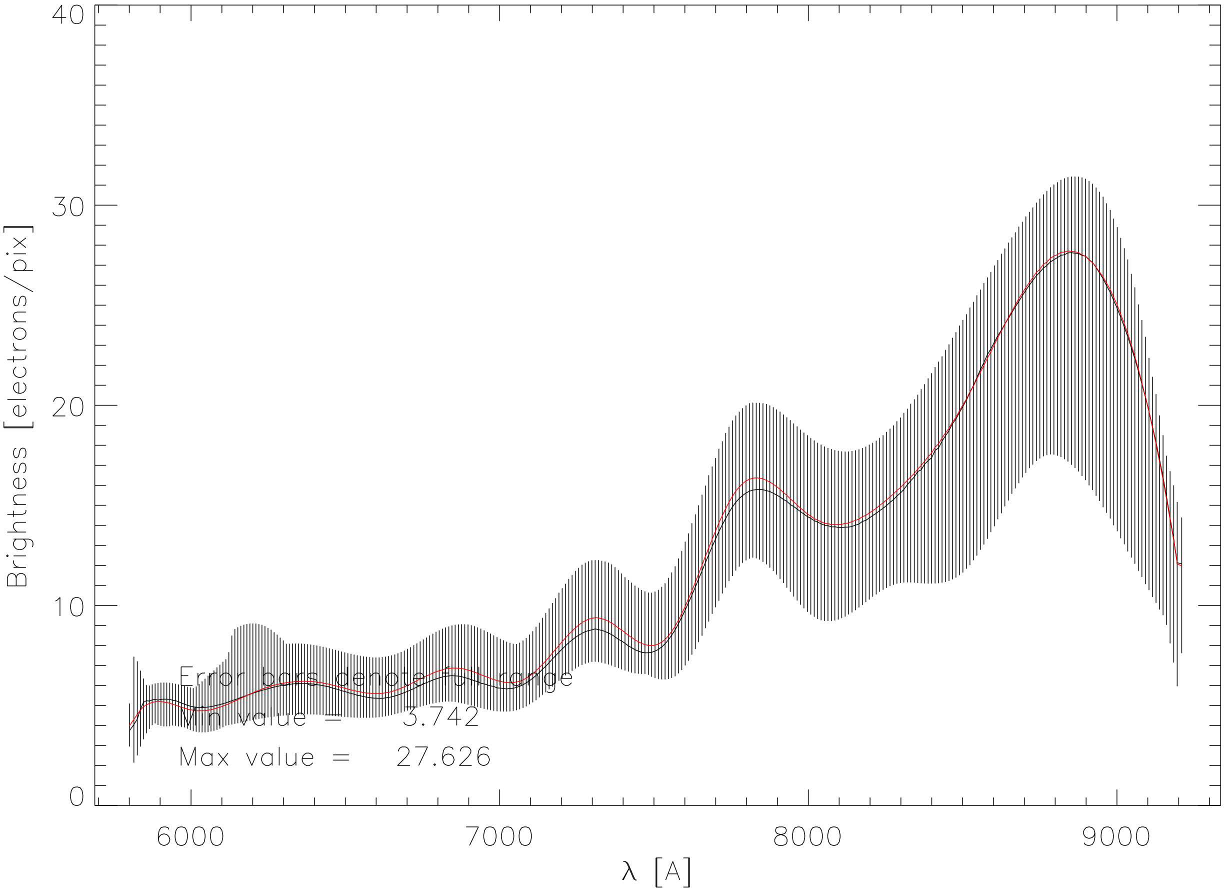


Tue Feb 26 00:18:01 2008

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022194.fi

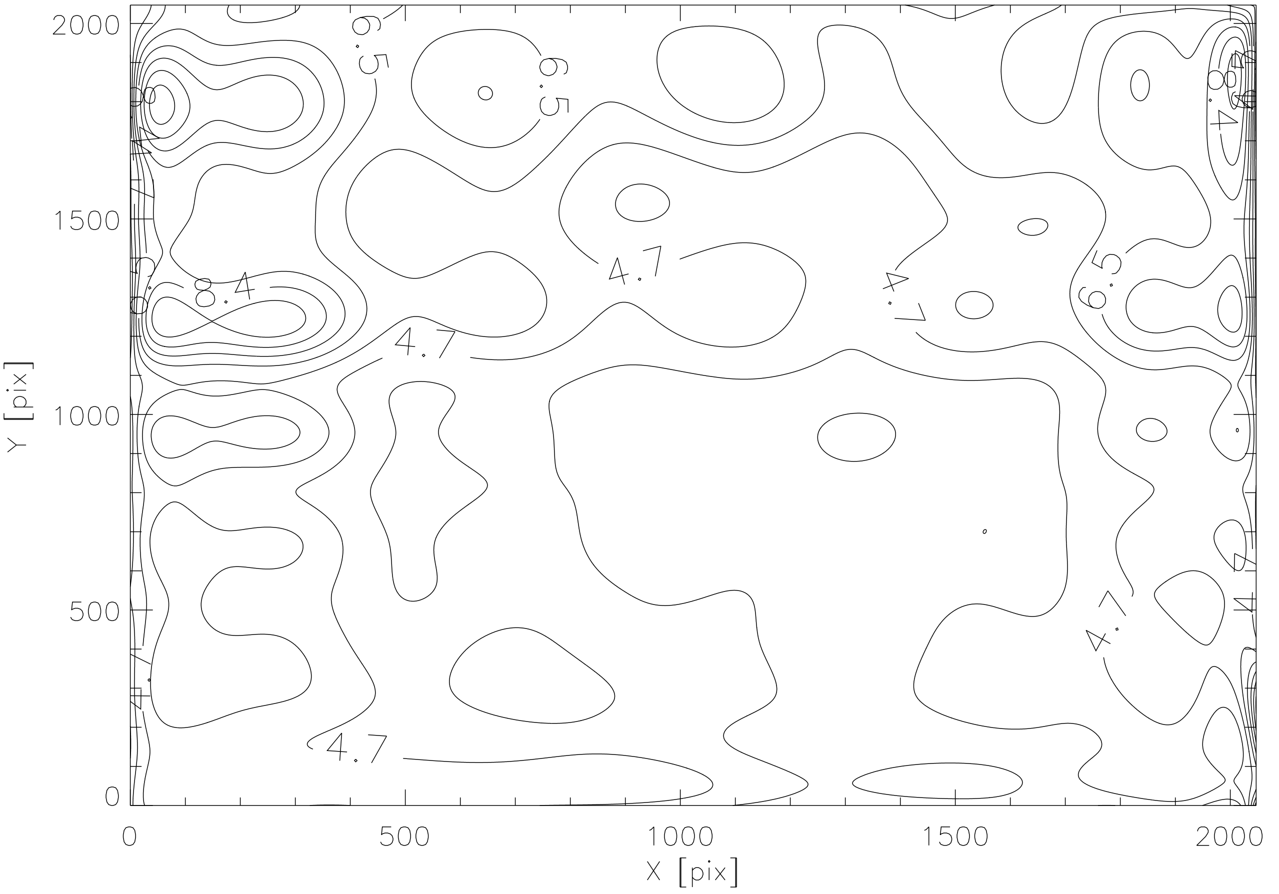


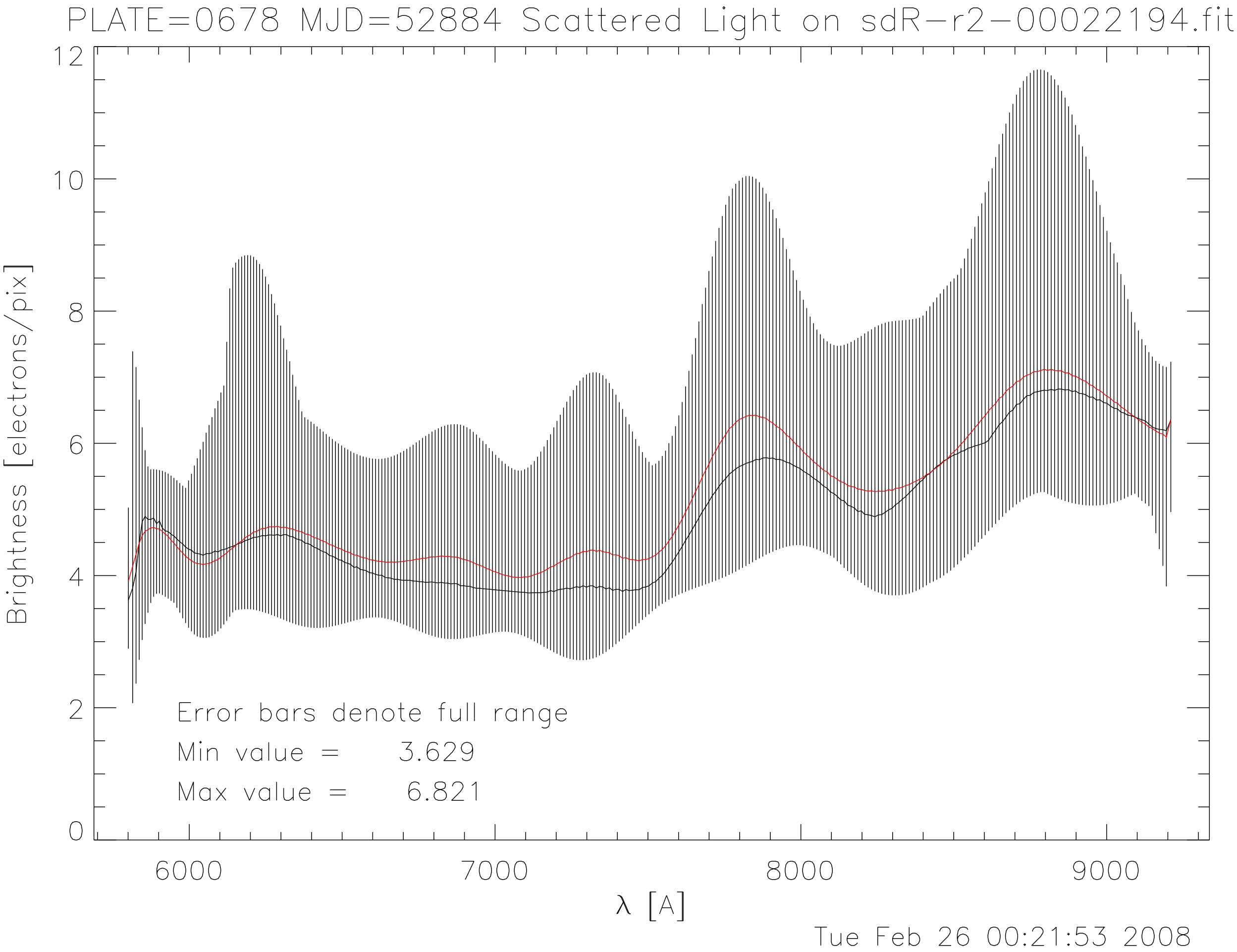
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022194.fi

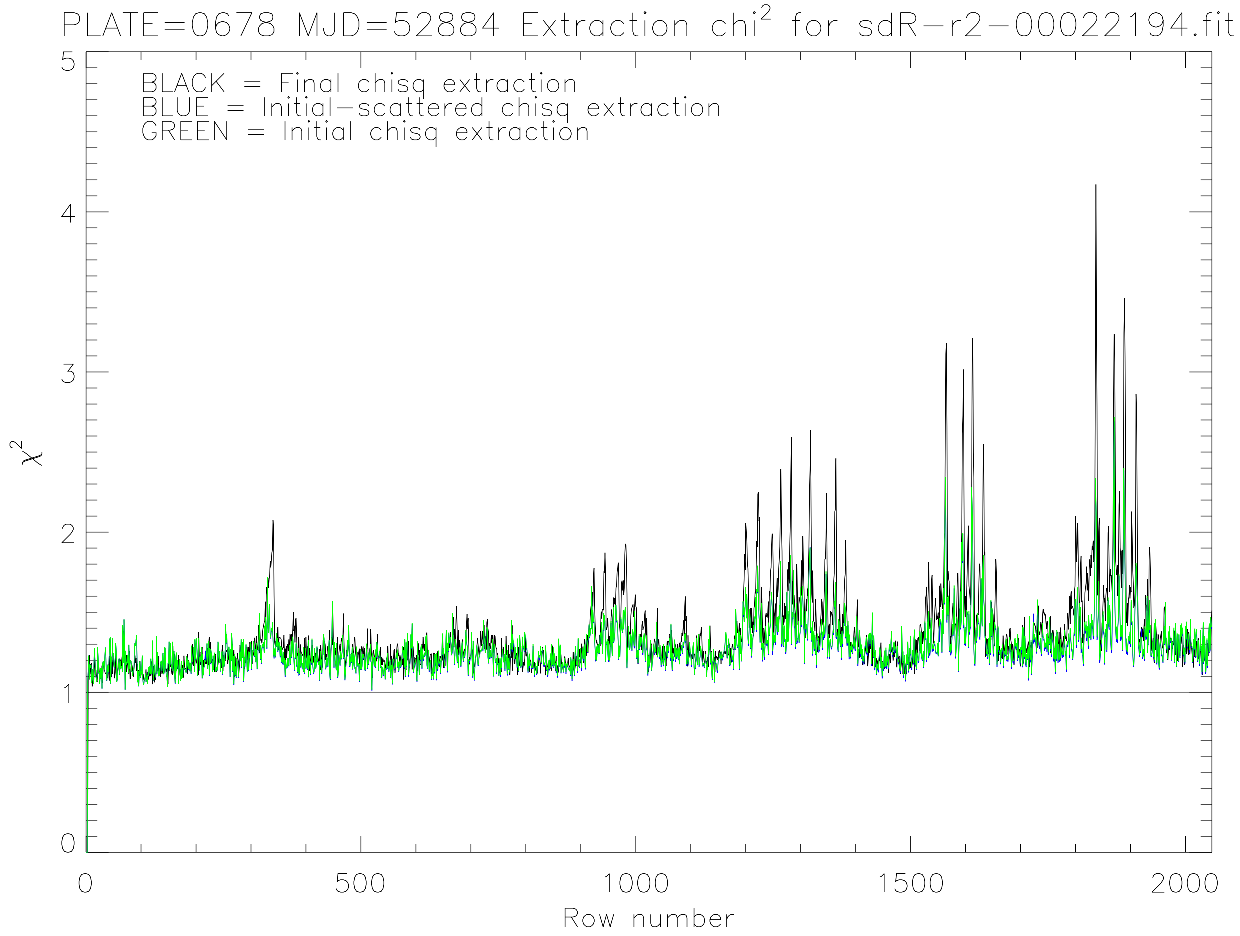


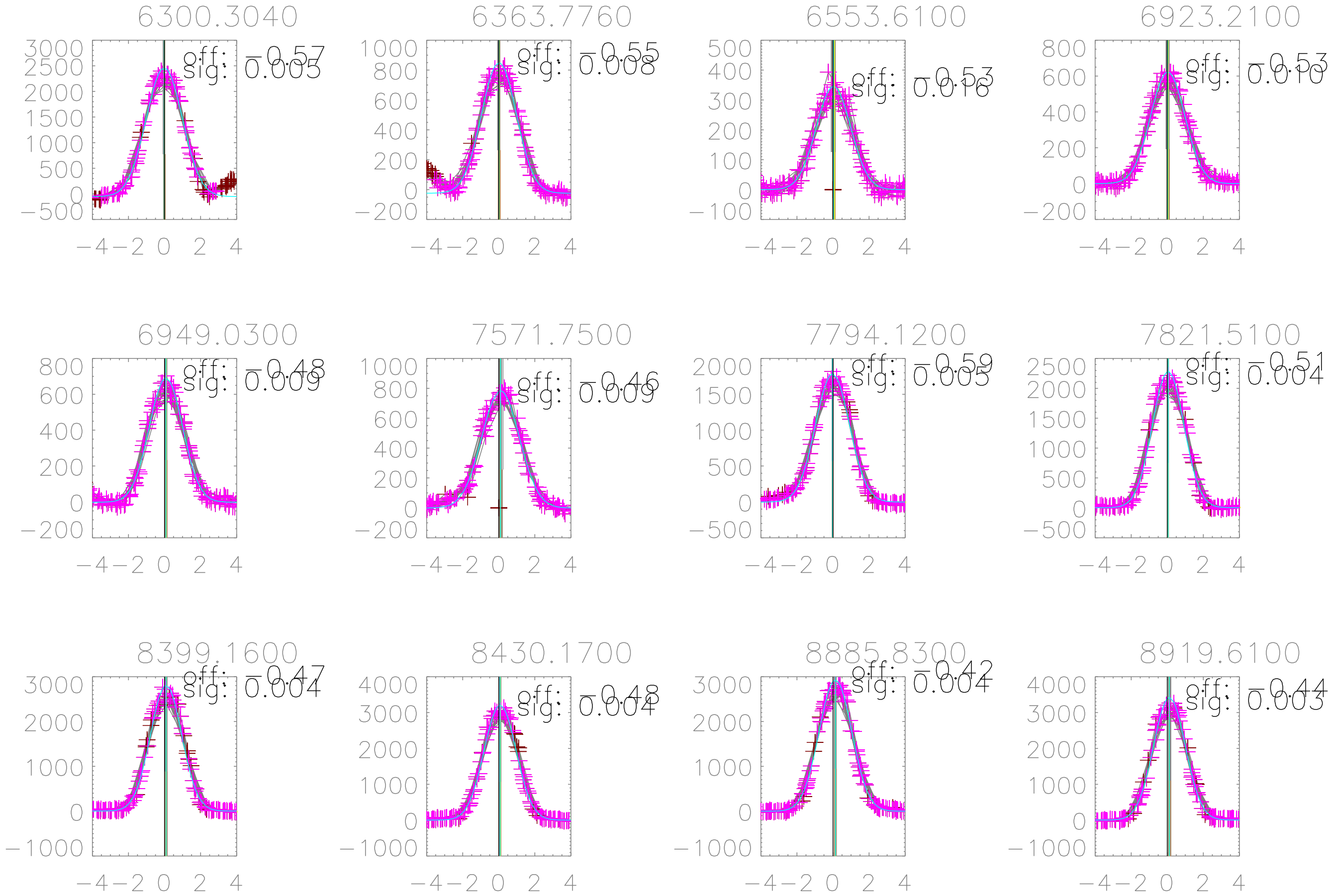
Tue Feb 26 00:18:52 2008

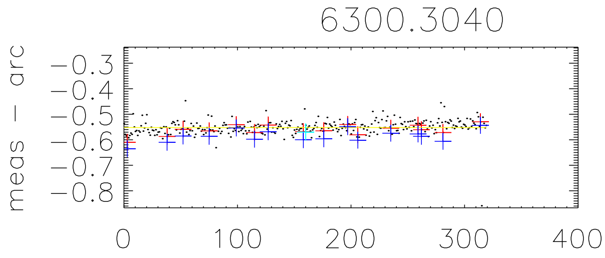
PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022194.fit

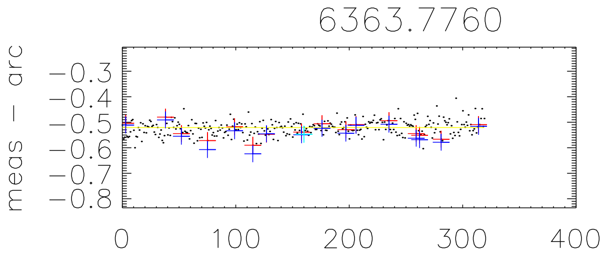


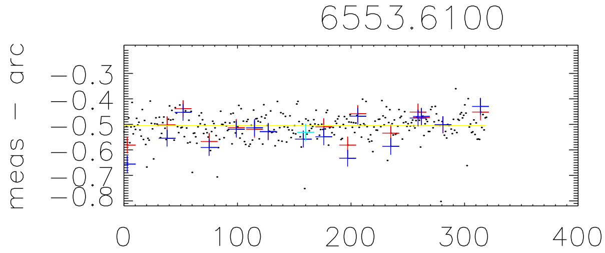

PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022194.fit
Brightness [electrons/pix]
λ [A]
0
2
4
6
8
10
12
6000
7000
8000
9000
Error bars denote full range
Min value = 3.629
Max value = 6.821
Tue Feb 26 00:21:53 2008

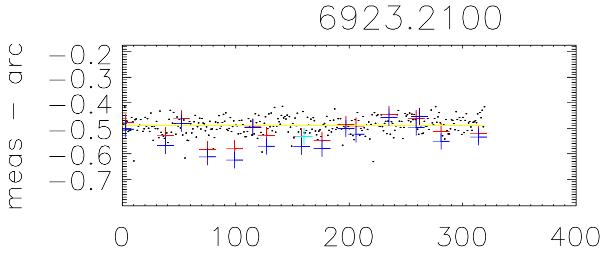

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r2-00022194.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

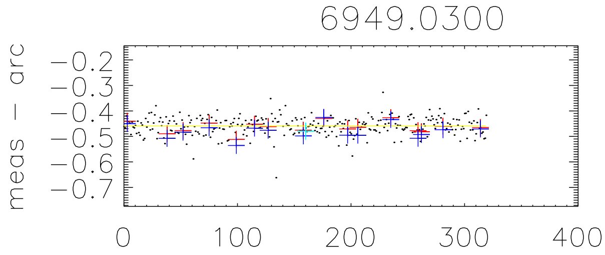

6300.3040
off: −0.57
sig: 0.005
6363.7760
off: −0.55
sig: 0.008
6553.6100
off: −0.53
sig: 0.016
6923.2100
off: −0.53
sig: 0.010
6949.0300
off: −0.48
sig: 0.009
7571.7500
off: −0.46
sig: 0.009
7794.1200
off: −0.59
sig: 0.005
7821.5100
off: −0.51
sig: 0.004
8399.1600
off: −0.47
sig: 0.004
8430.1700
off: −0.48
sig: 0.004
8885.8300
off: −0.42
sig: 0.004
8919.6100
off: −0.44
sig: 0.003
−4 −2 0 2 4

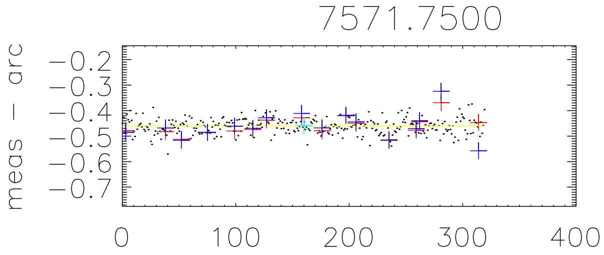

6300.3040

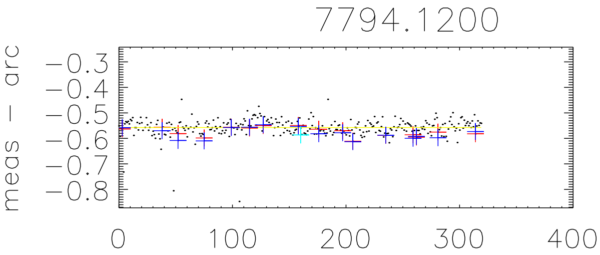

6363.7760

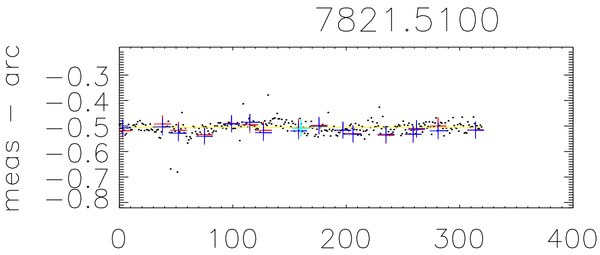

6553.6100

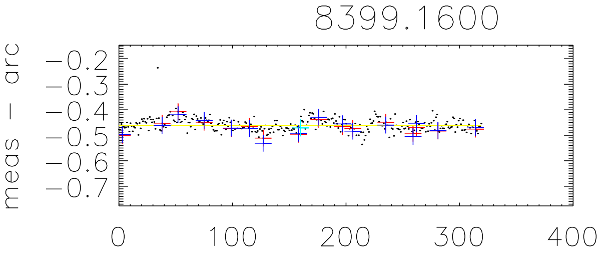

6923.2100

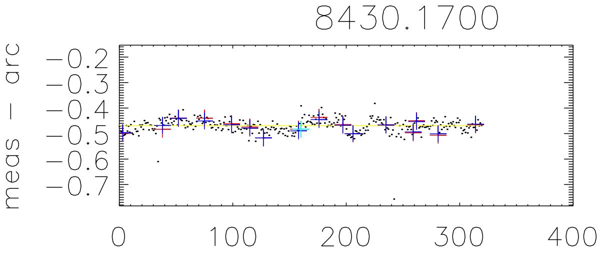

6949.0300

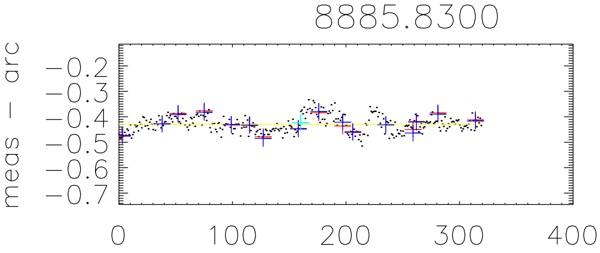

7571.7500

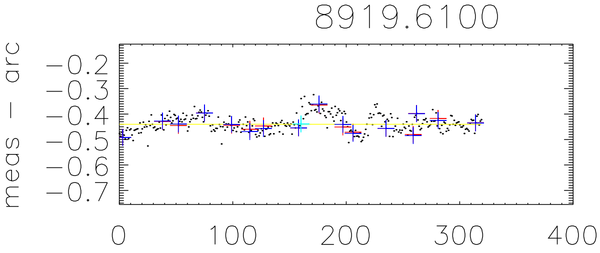

7794.1200

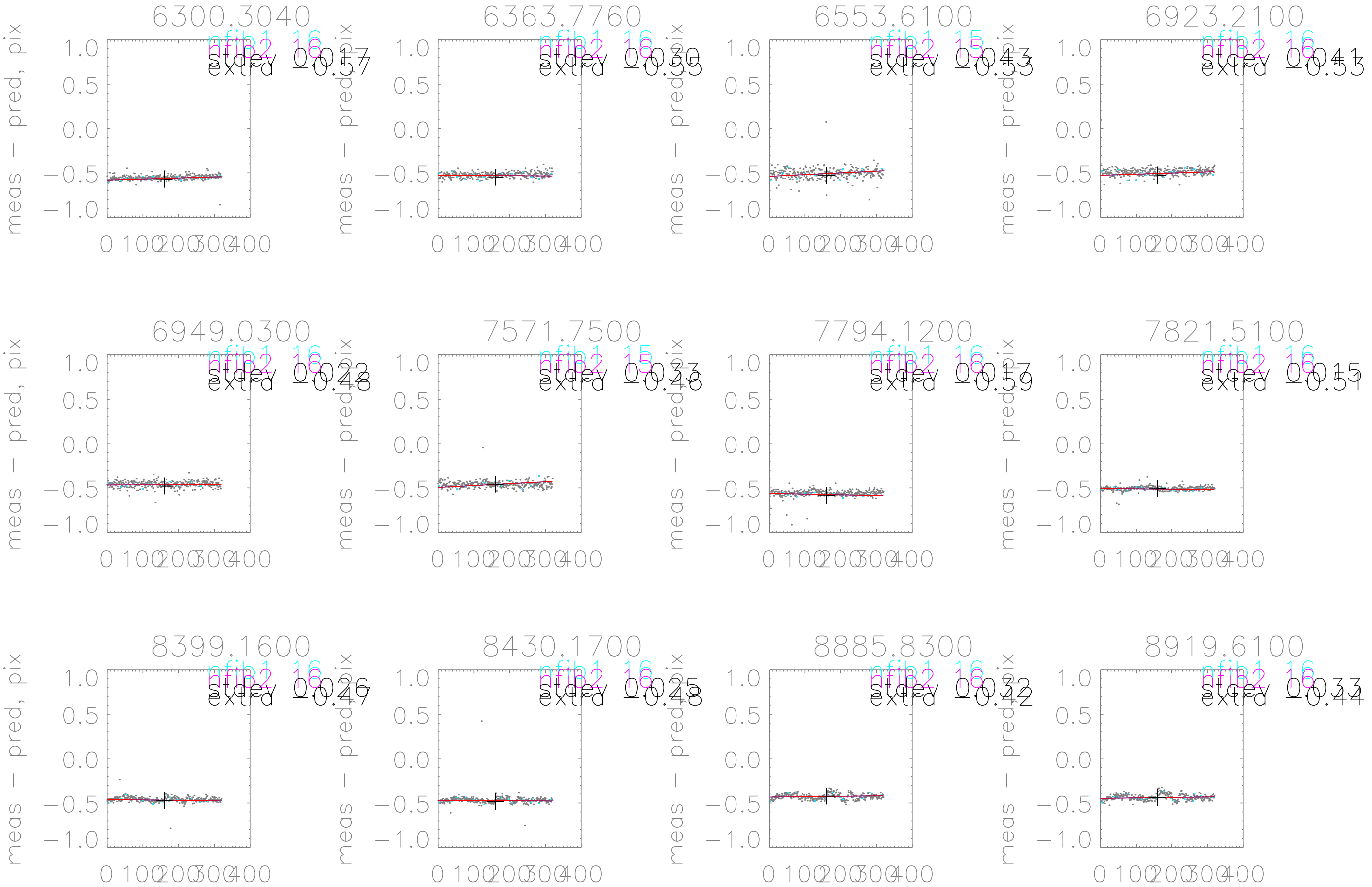

7821.5100

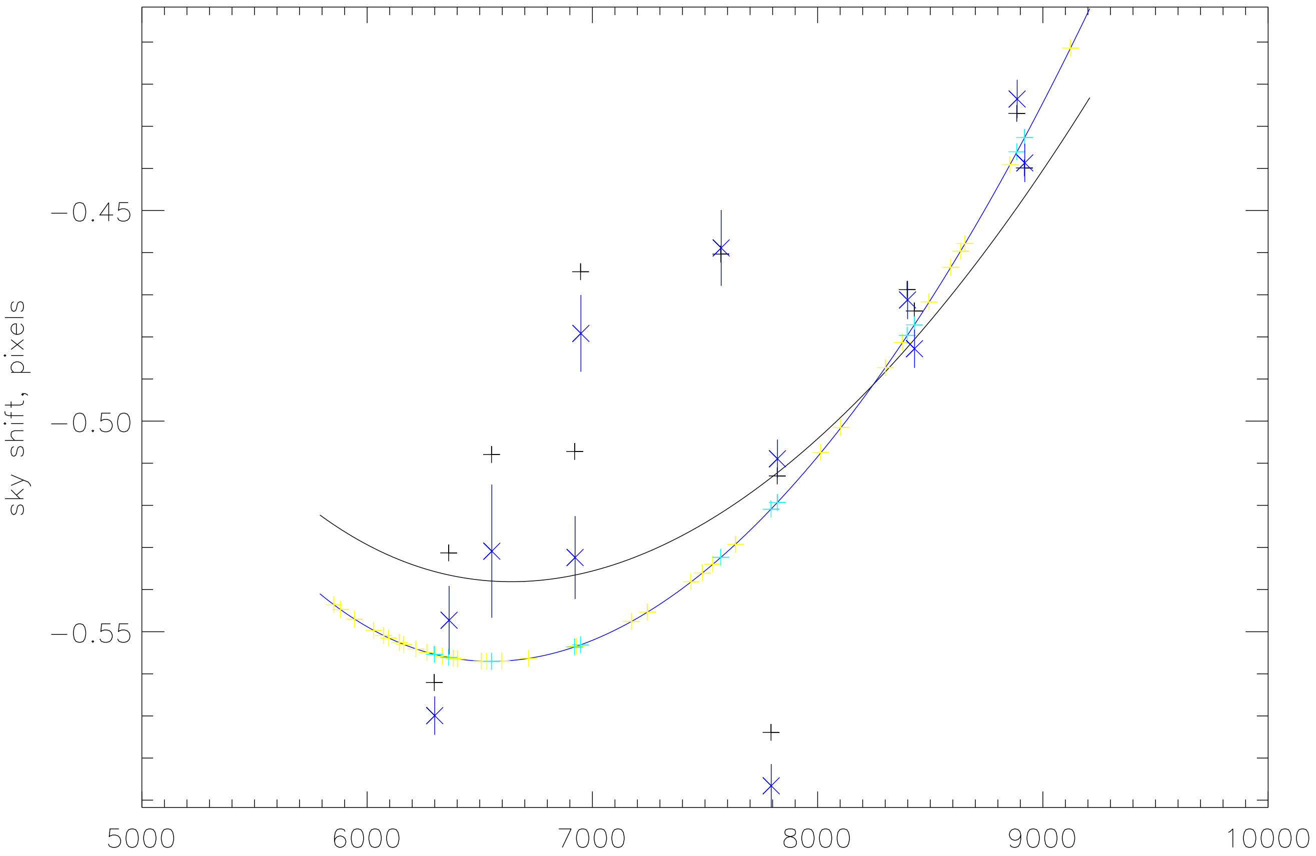

8399.1600

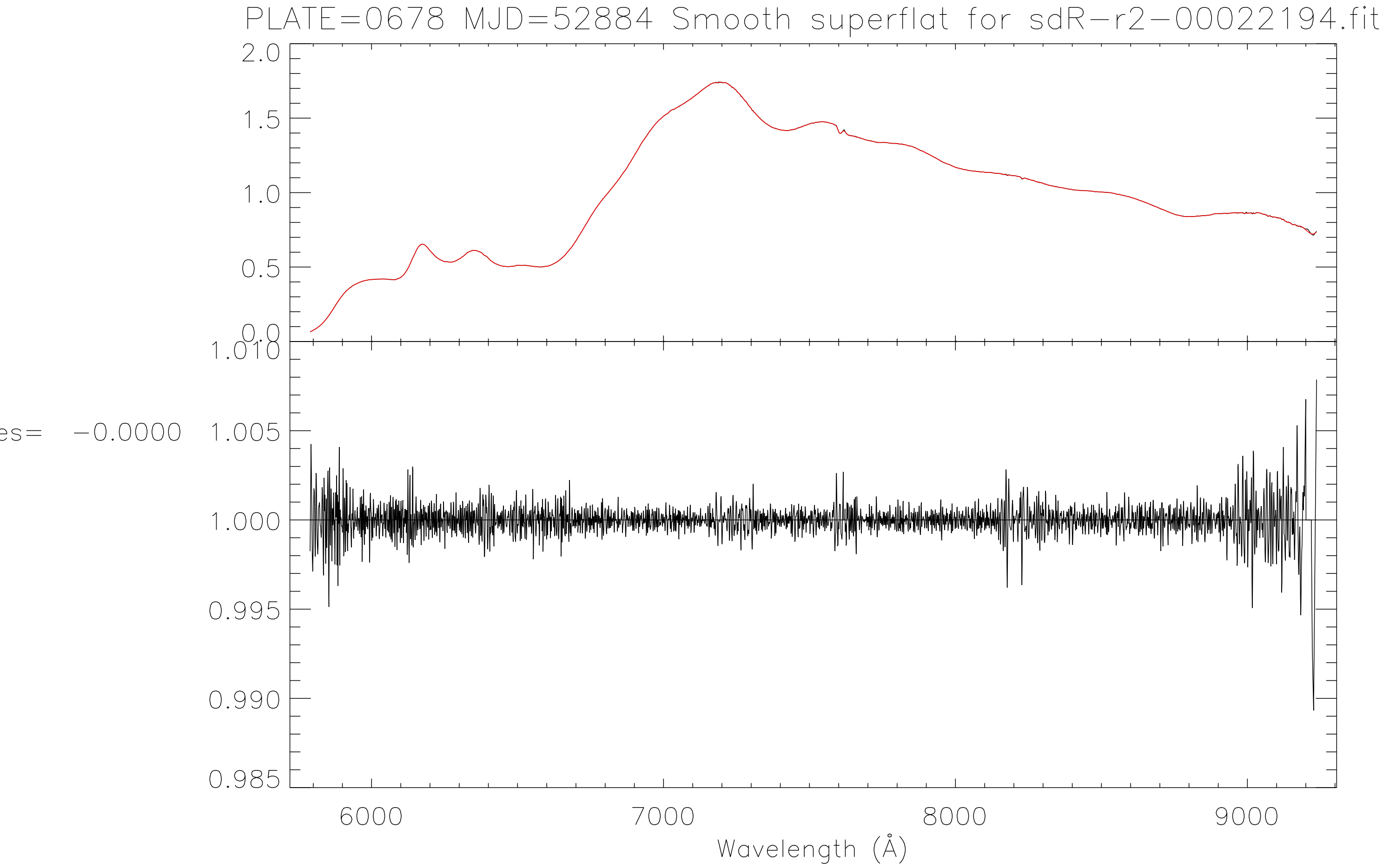

8430.1700

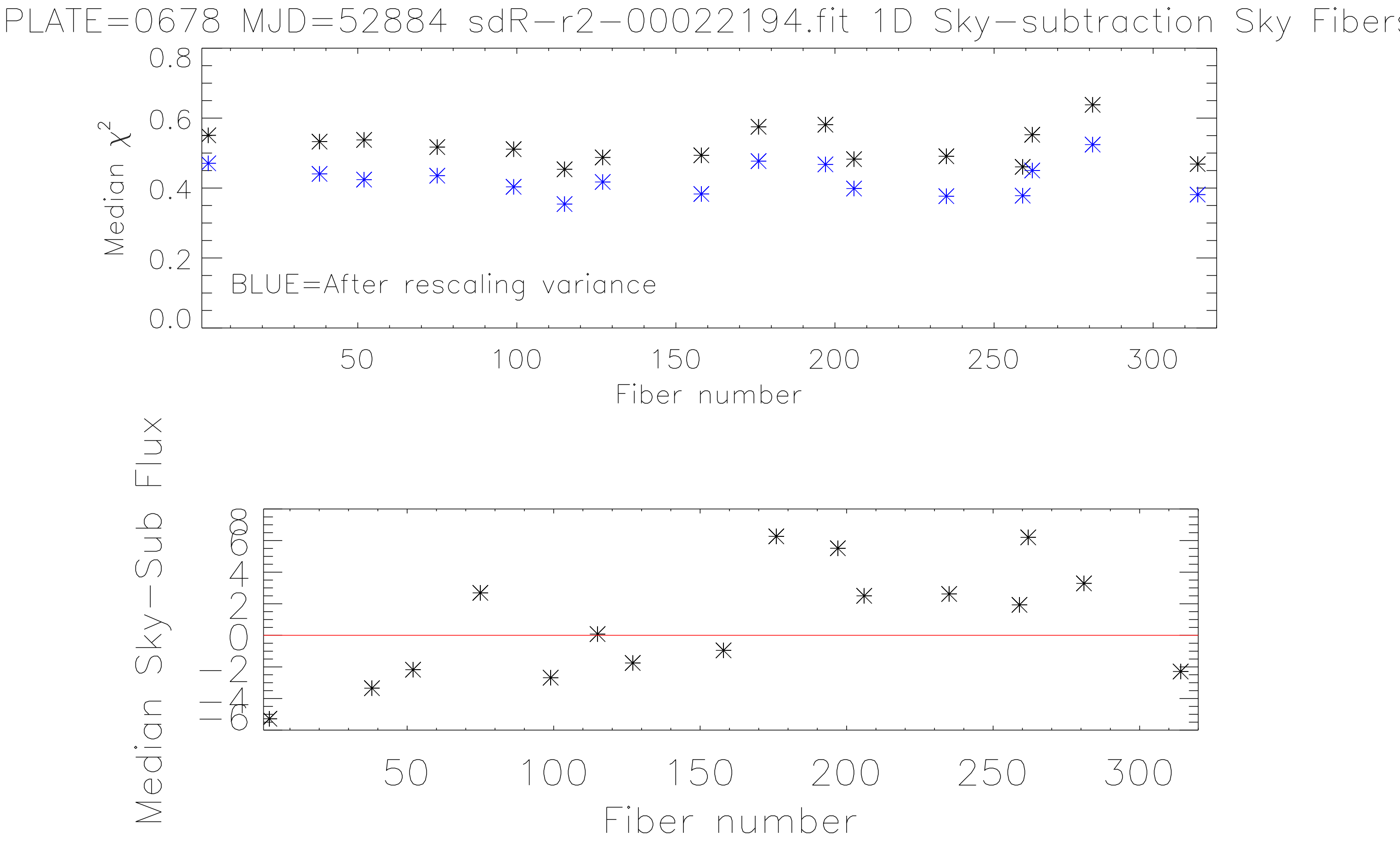

8885.8300


8919.6100


6300.3040
nfib1 16
nfib2 16
stdev 0.017
extrd −0.57
6363.7760
nfib1 16
nfib2 16
stdev 0.030
extrd −0.55
6553.6100
nfib1 15
nfib2 15
stdev 0.043
extrd −0.53
6923.2100
nfib1 16
nfib2 16
stdev 0.041
extrd −0.53
6949.0300
nfib1 16
nfib2 16
stdev 0.022
extrd −0.48
7571.7500
nfib1 15
nfib2 15
stdev 0.033
extrd −0.46
7794.1200
nfib1 16
nfib2 16
stdev 0.017
extrd −0.59
7821.5100
nfib1 16
nfib2 16
stdev 0.015
extrd −0.51
8399.1600
nfib1 16
nfib2 16
stdev 0.026
extrd −0.47
8430.1700
nfib1 16
nfib2 16
stdev 0.025
extrd −0.48
8885.8300
nfib1 16
nfib2 16
stdev 0.032
extrd −0.42
8919.6100
nfib1 16
nfib2 16
stdev 0.033
extrd −0.44
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

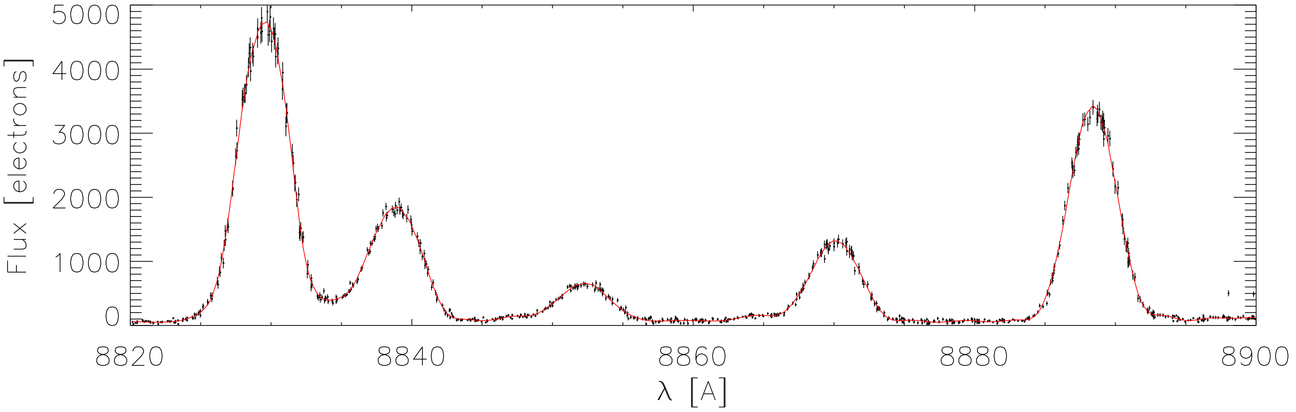

sky shift, pixels
−0.45
−0.50
−0.55
5000
6000
7000
8000
9000
10000


PLATE=0678 MJD=52884 Smooth superflat for sdR-r2-00022194.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

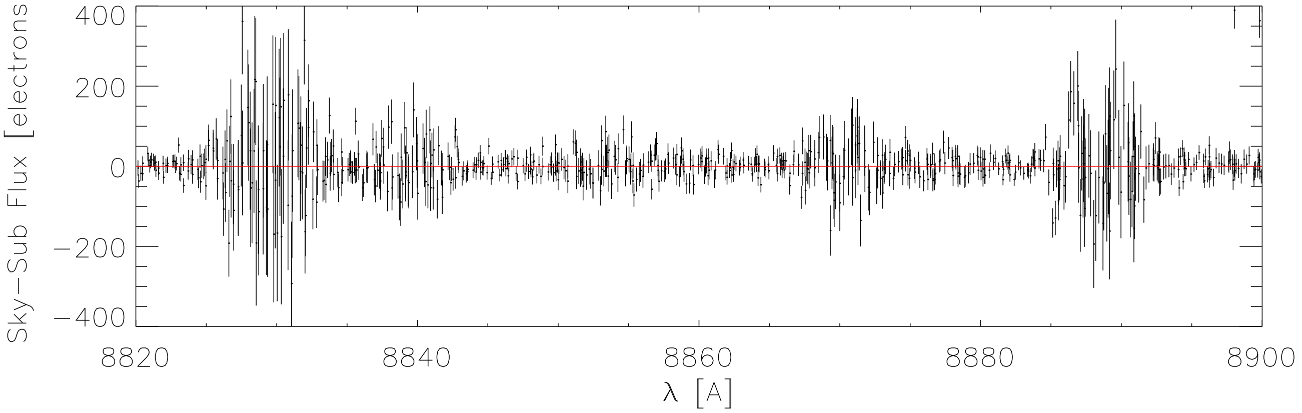


PLATE=0678 MJD=52884 sdR-r2-00022194.fit 1D Sky-subtraction Sky Fibers

PLATE=0678 MJD=52884 sdR-r2-00022194.fit 1D Sky-subtraction Sky Fibers

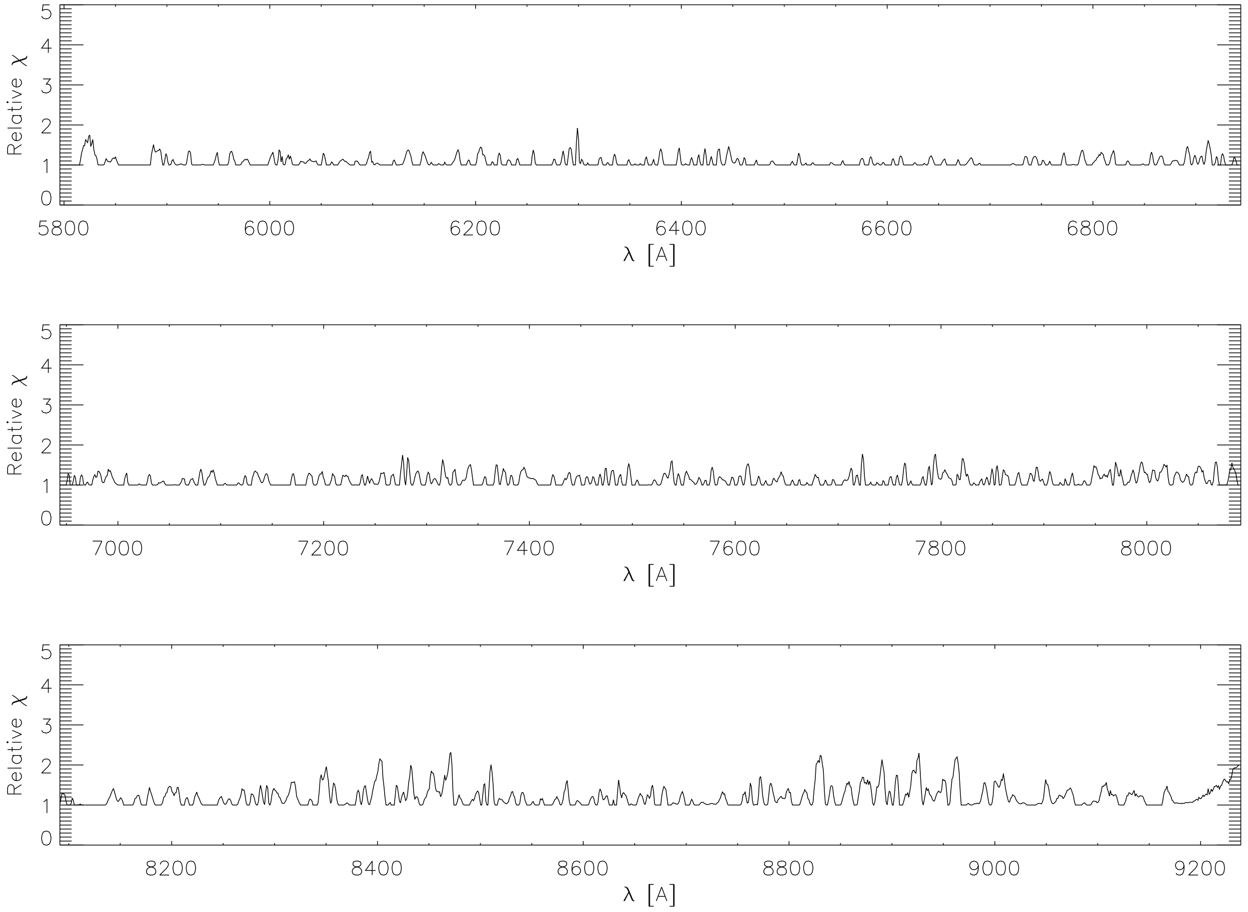


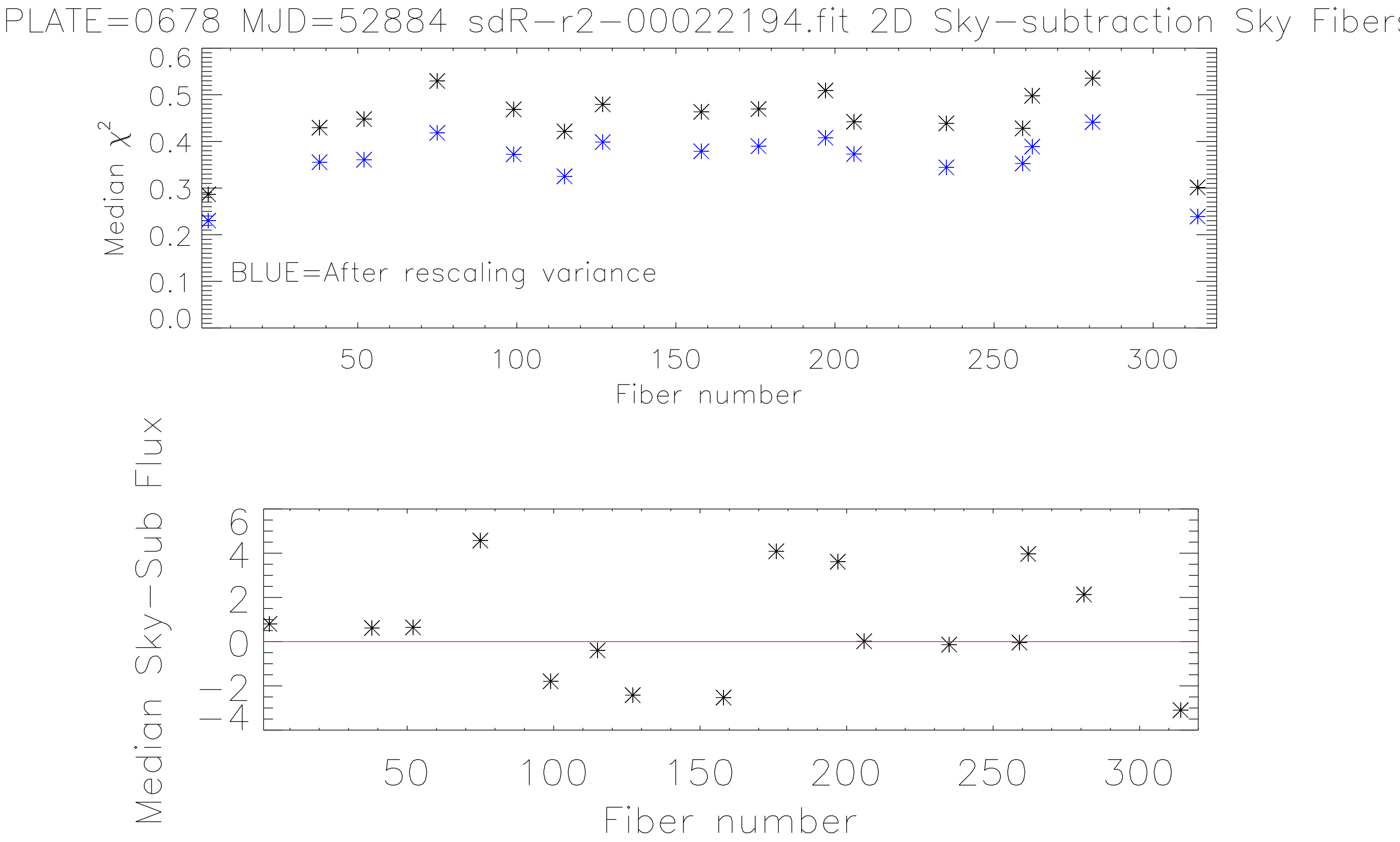
PLATE=0678 MJD=52884 sdR-r2-00022194.fit 1D Sky-subtraction Sky-subtracted Sky F



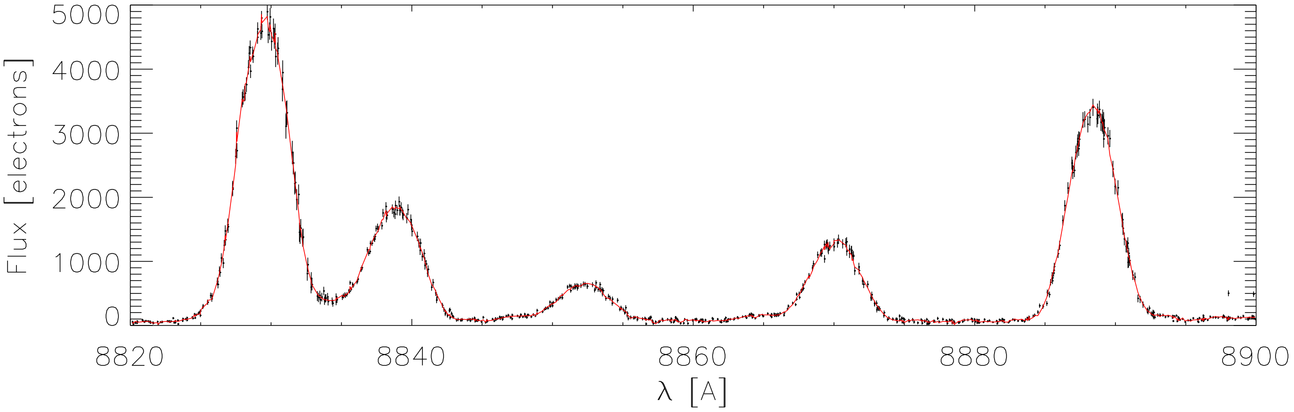
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-r2-00022194.fit 1D Sky-subtraction Rescaled Errors

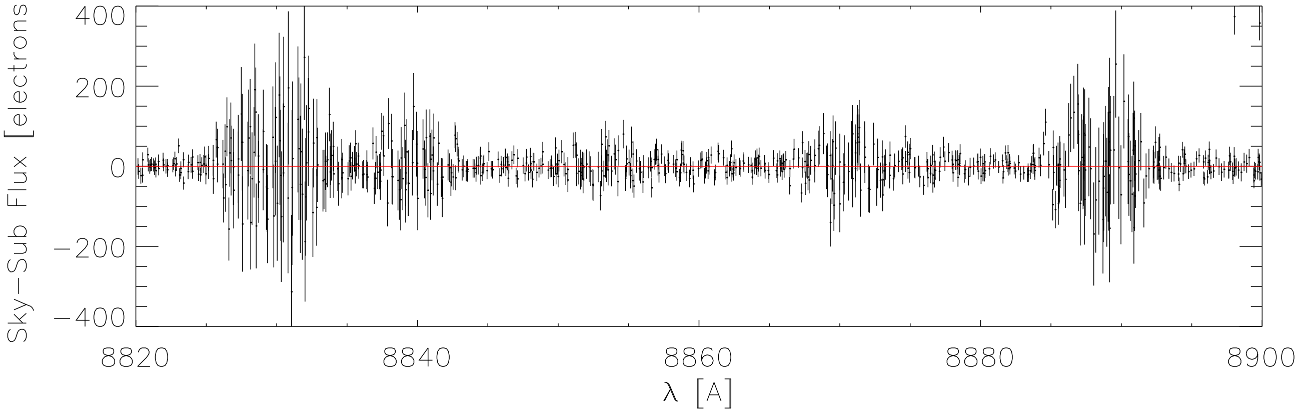



PLATE=0678 MJD=52884 sdR-r2-00022194.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

PLATE=0678 MJD=52884 sdR-r2-00022194.fit 2D Sky-subtraction Sky Fibers

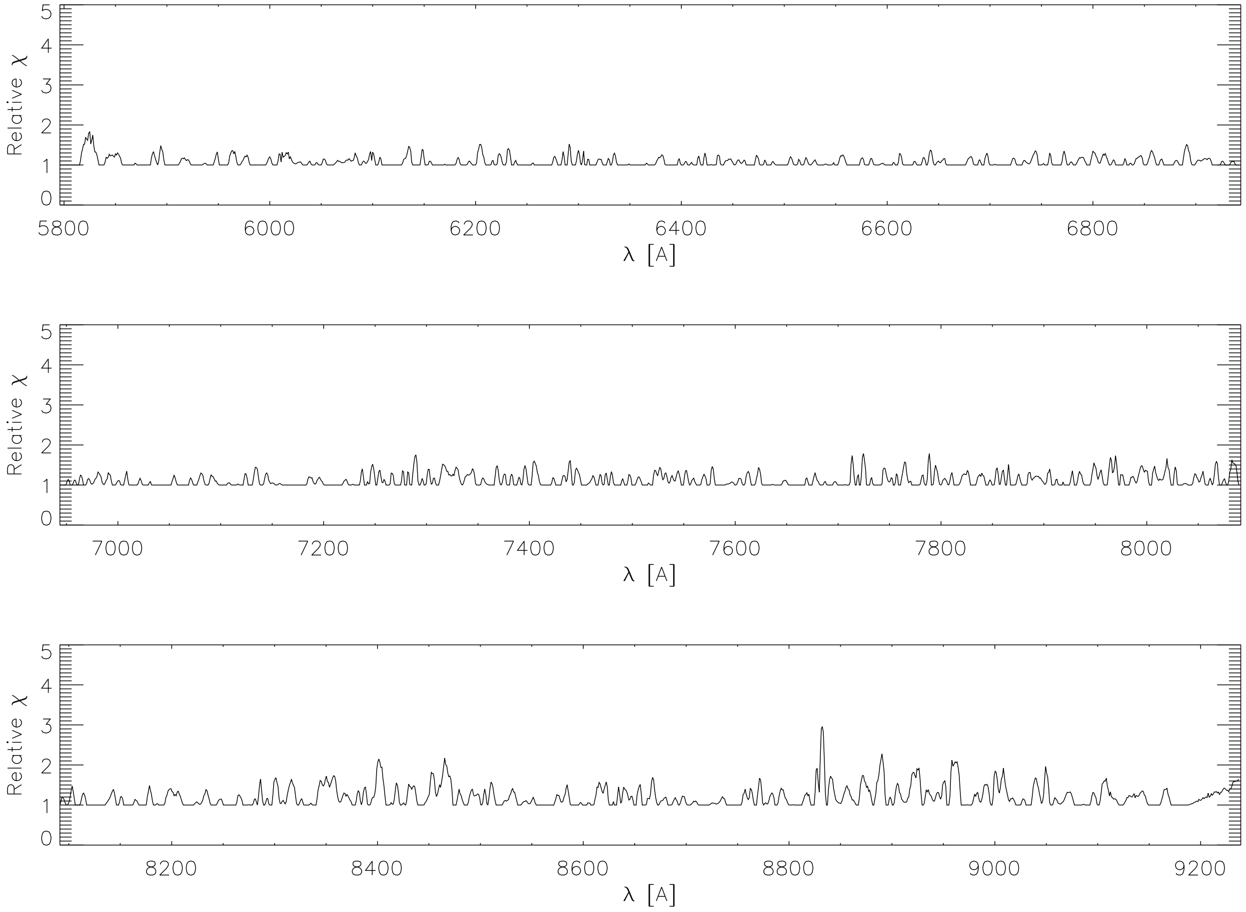


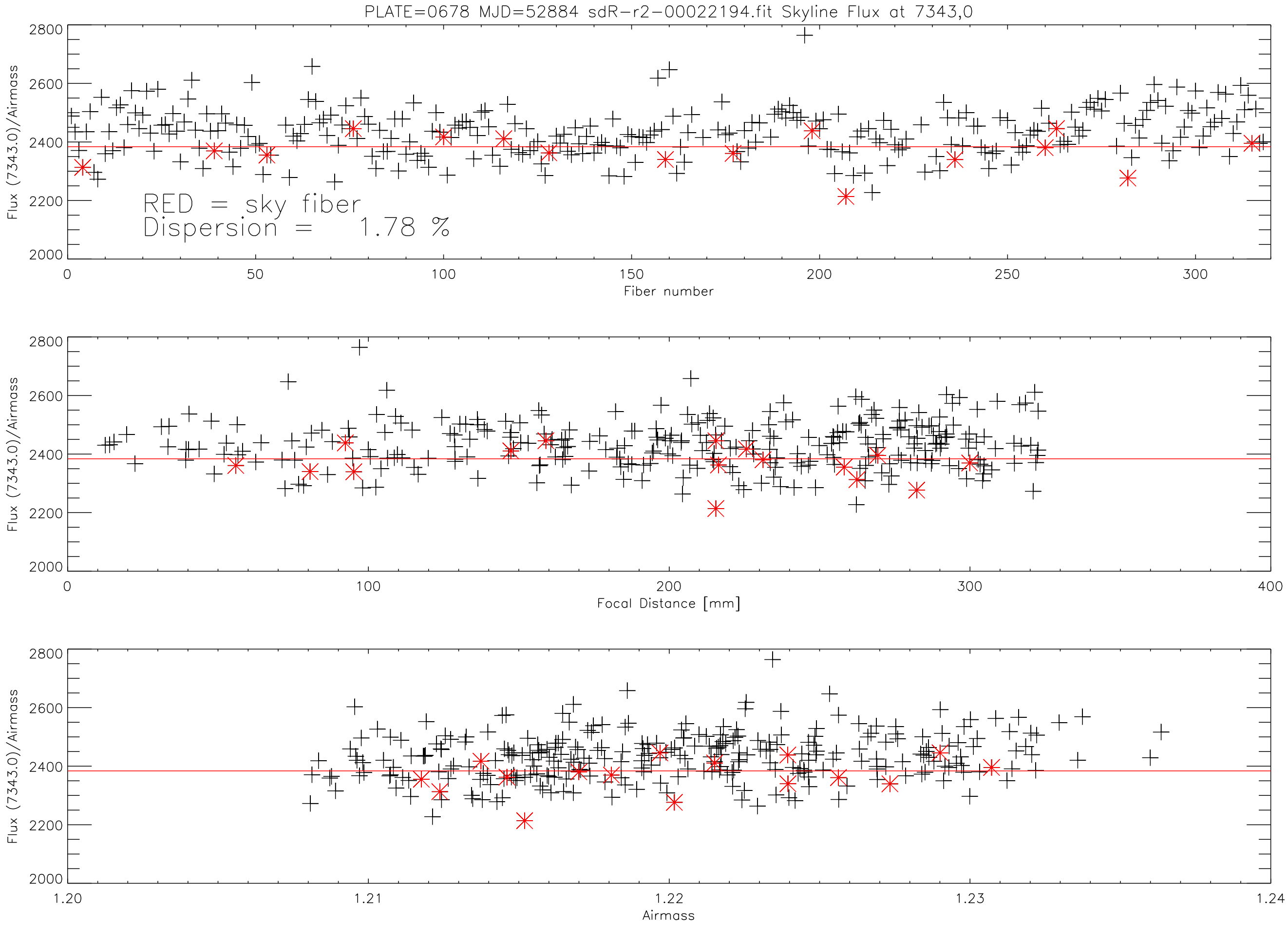
PLATE=0678 MJD=52884 sdR-r2-00022194.fit 2D Sky-subtraction Sky-subtracted Sky F

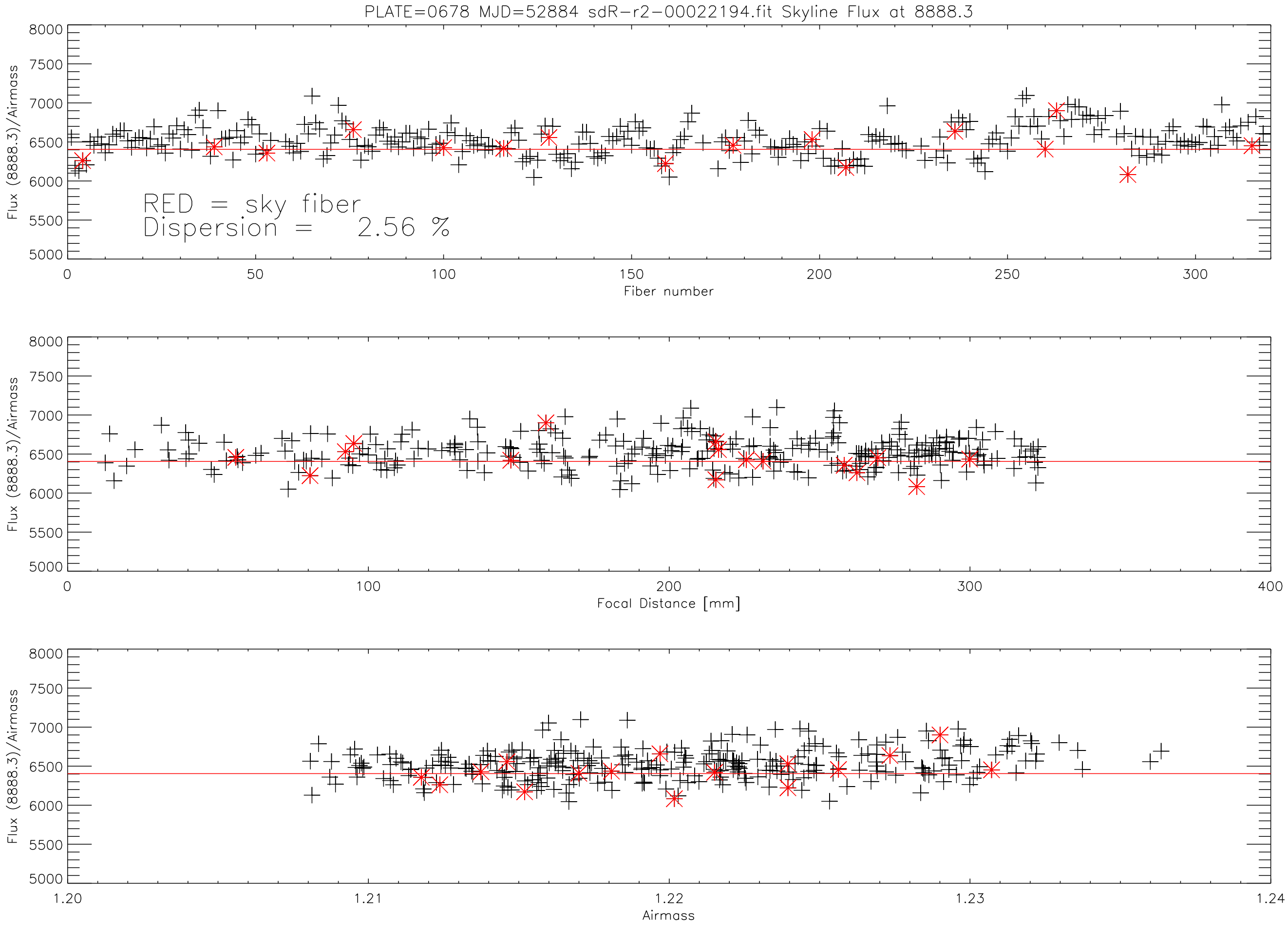


Number of sky fibers = 16

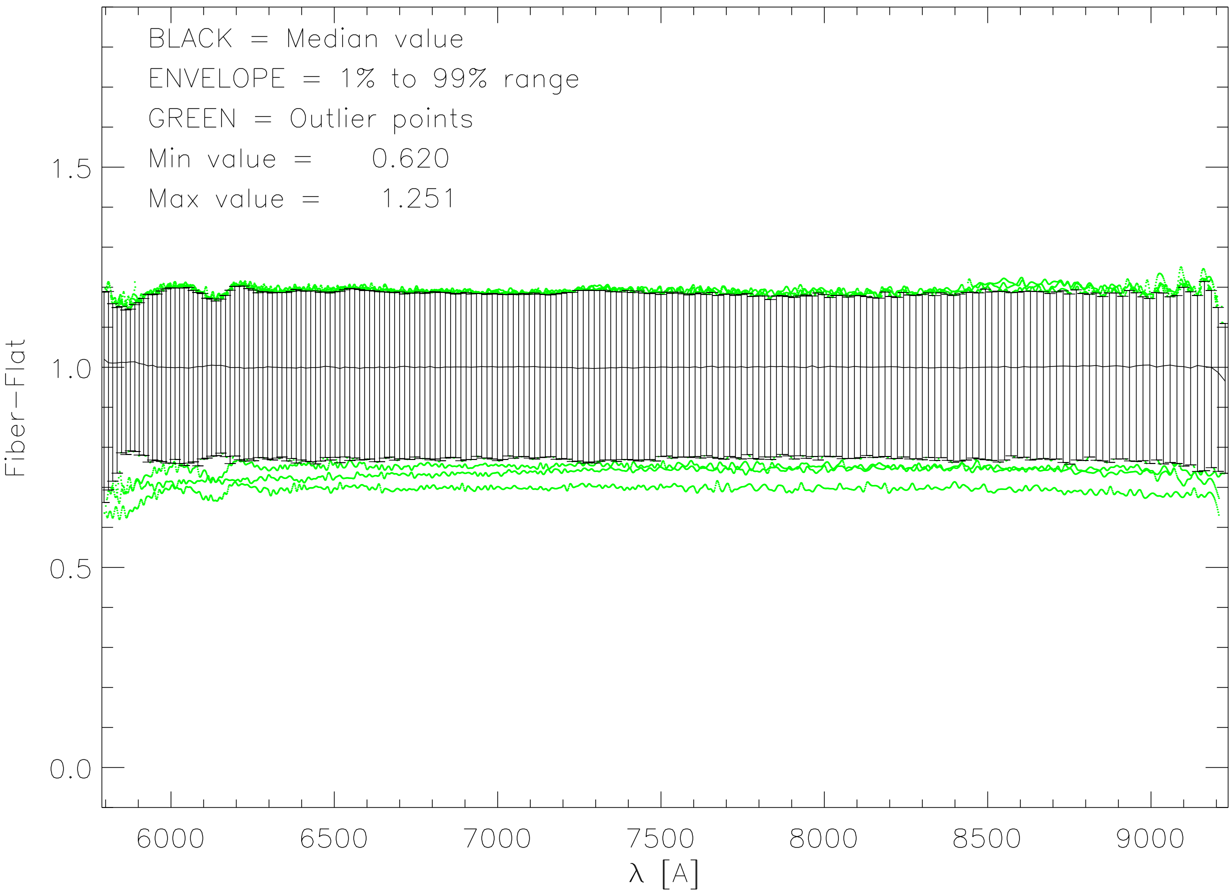
PLATE=0678 MJD=52884 sdR-r2-00022194.fit 2D Sky-subtraction Rescaled Errors



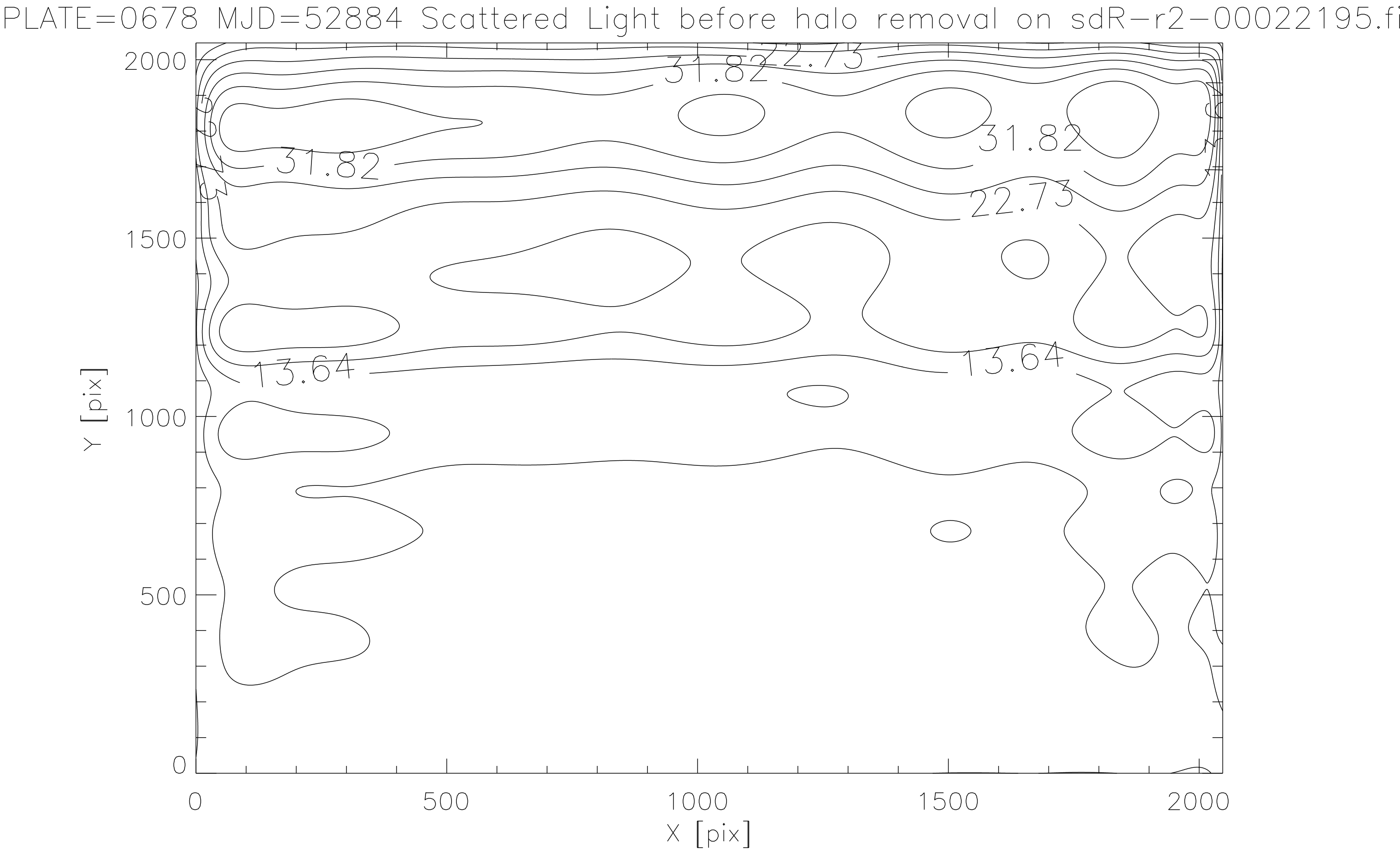

PLATE=0678 MJD=52884 sdR−r2−00022194.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2800
2600
2400
2200
2000
RED = sky fiber
Dispersion = 1.78 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2800
2600
2400
2200
2000
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2800
2600
2400
2200
2000
1.20
1.21
1.22
1.23
1.24
Airmass


PLATE=0678 MJD=52884 sdR-r2-00022194.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 2.56 %
Flux (8888.3)/Airmass
8000
7500
7000
6500
6000
5500
5000
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.20
1.21
1.22
1.23
1.24
Airmass

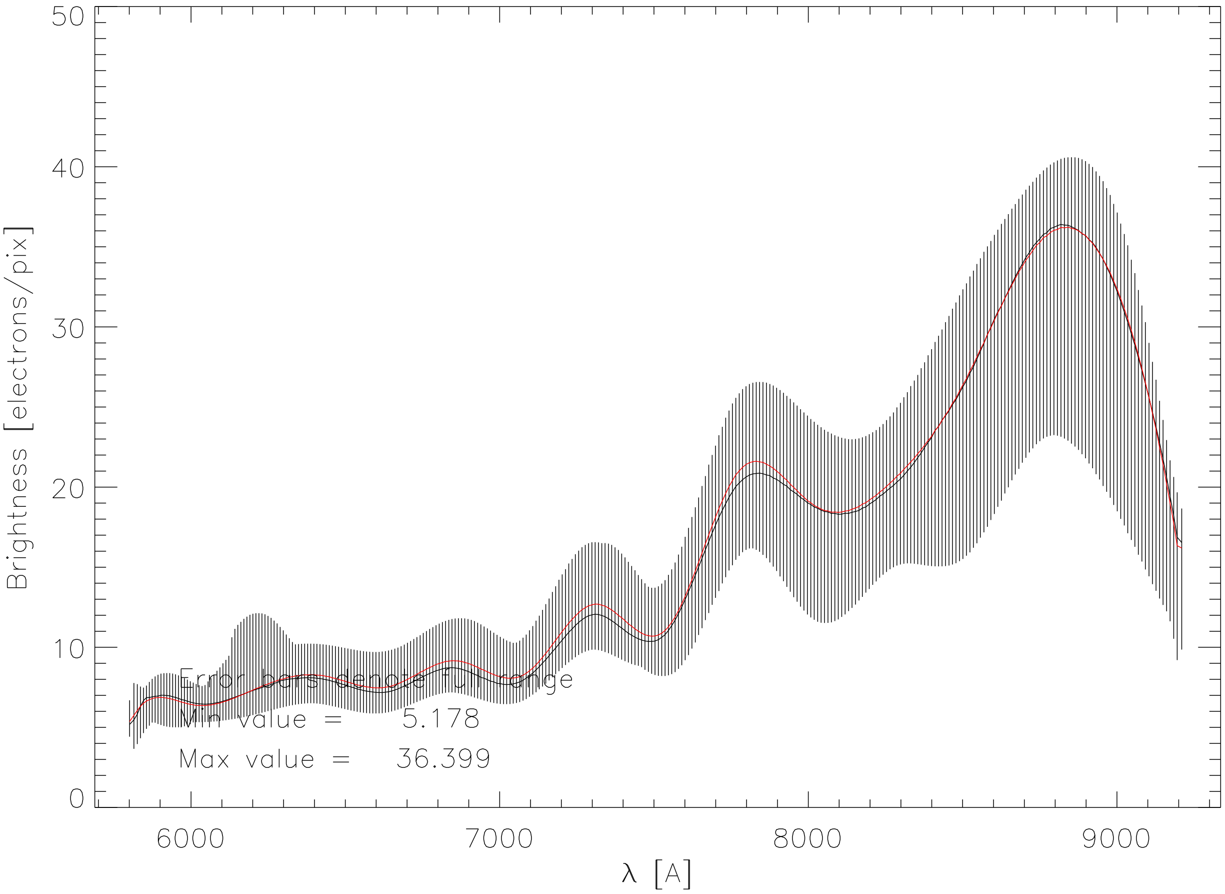
PLATE=0678 MJD=52884 Fiber−Flats for sdR−r2−00022199.fit



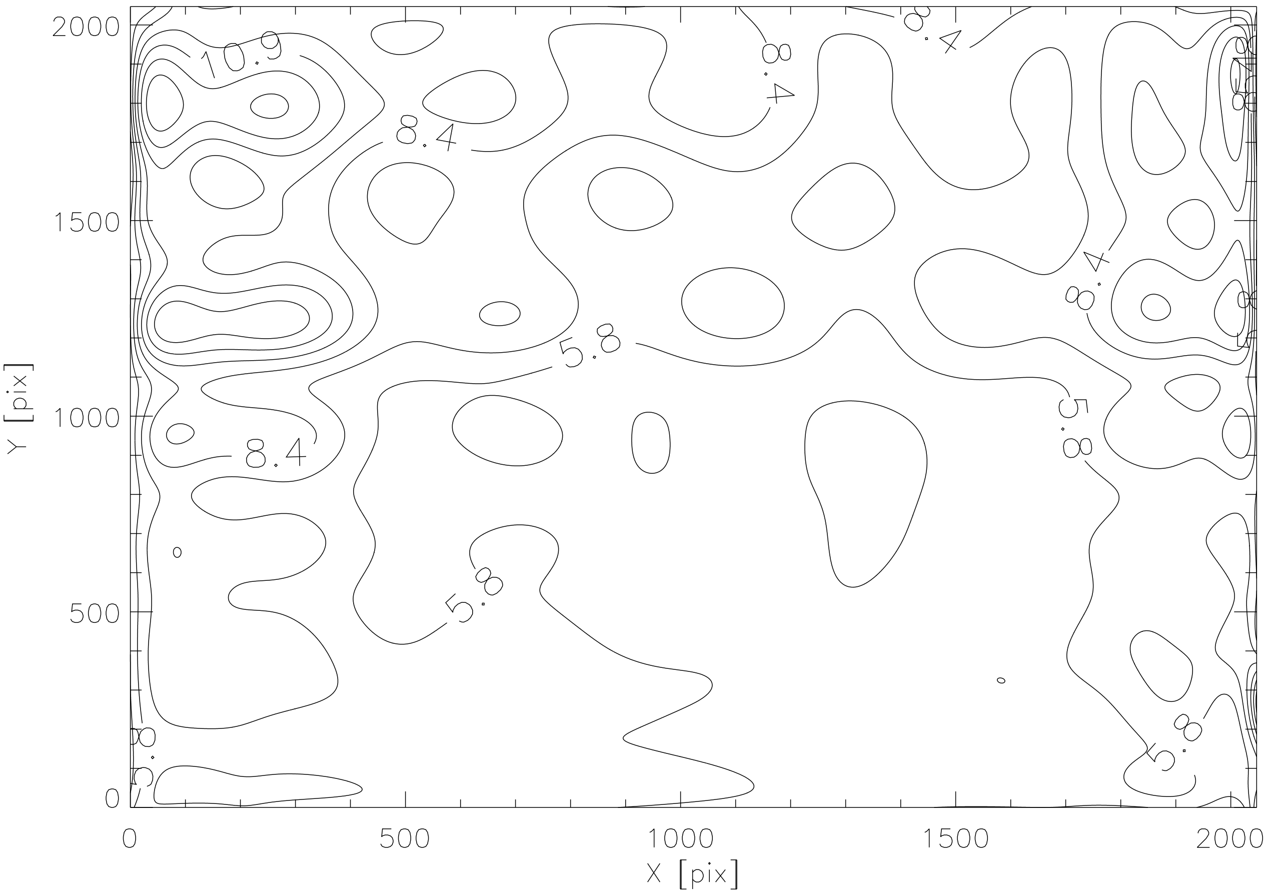
Tue Feb 26 00:23:02 2008


PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022195.fi
22.73
31.82
31.82
31.82
22.73
13.64
13.64
Y [pix]
2000
1500
1000
500
0
X [pix]
0
500
1000
1500
2000

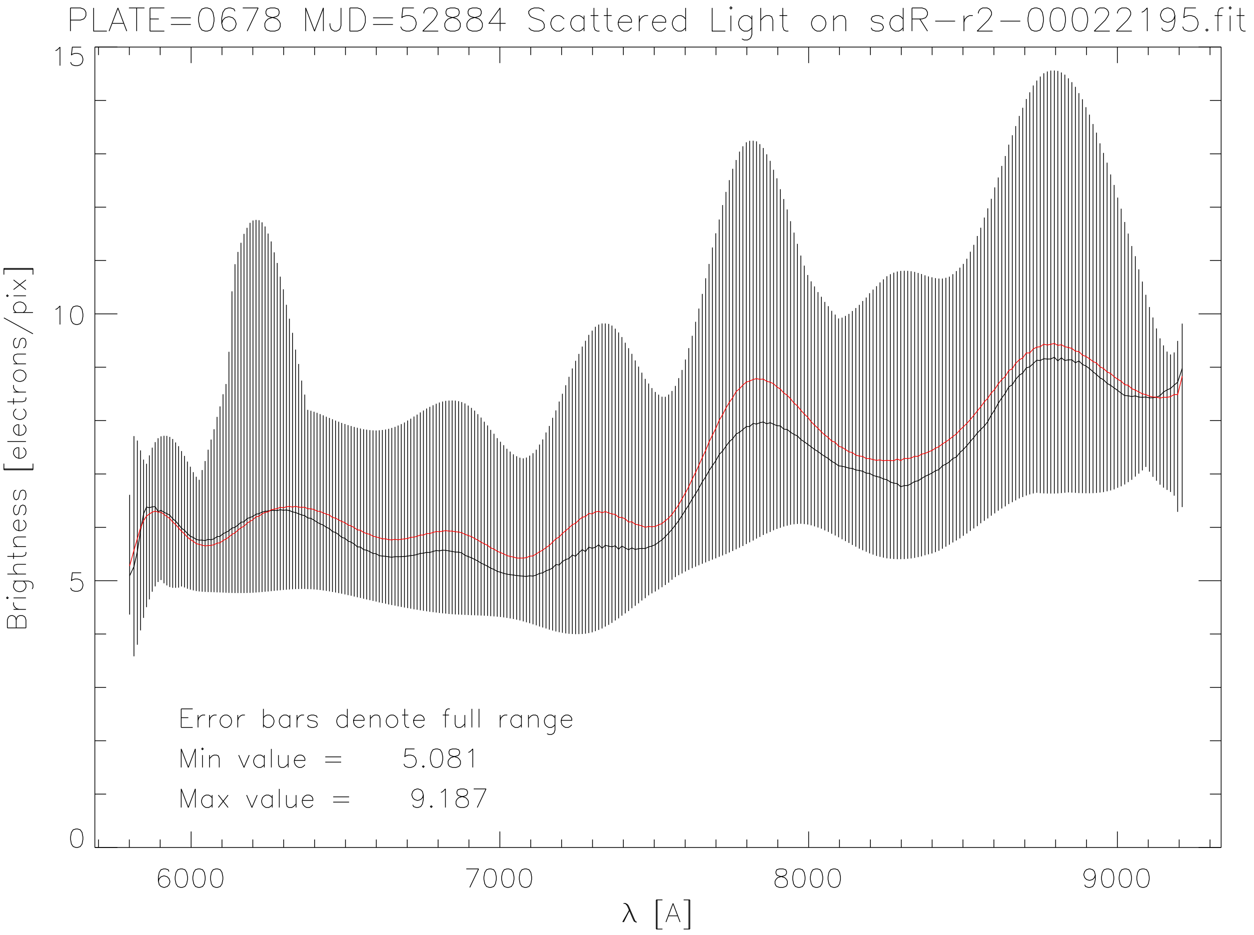
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022195.fi



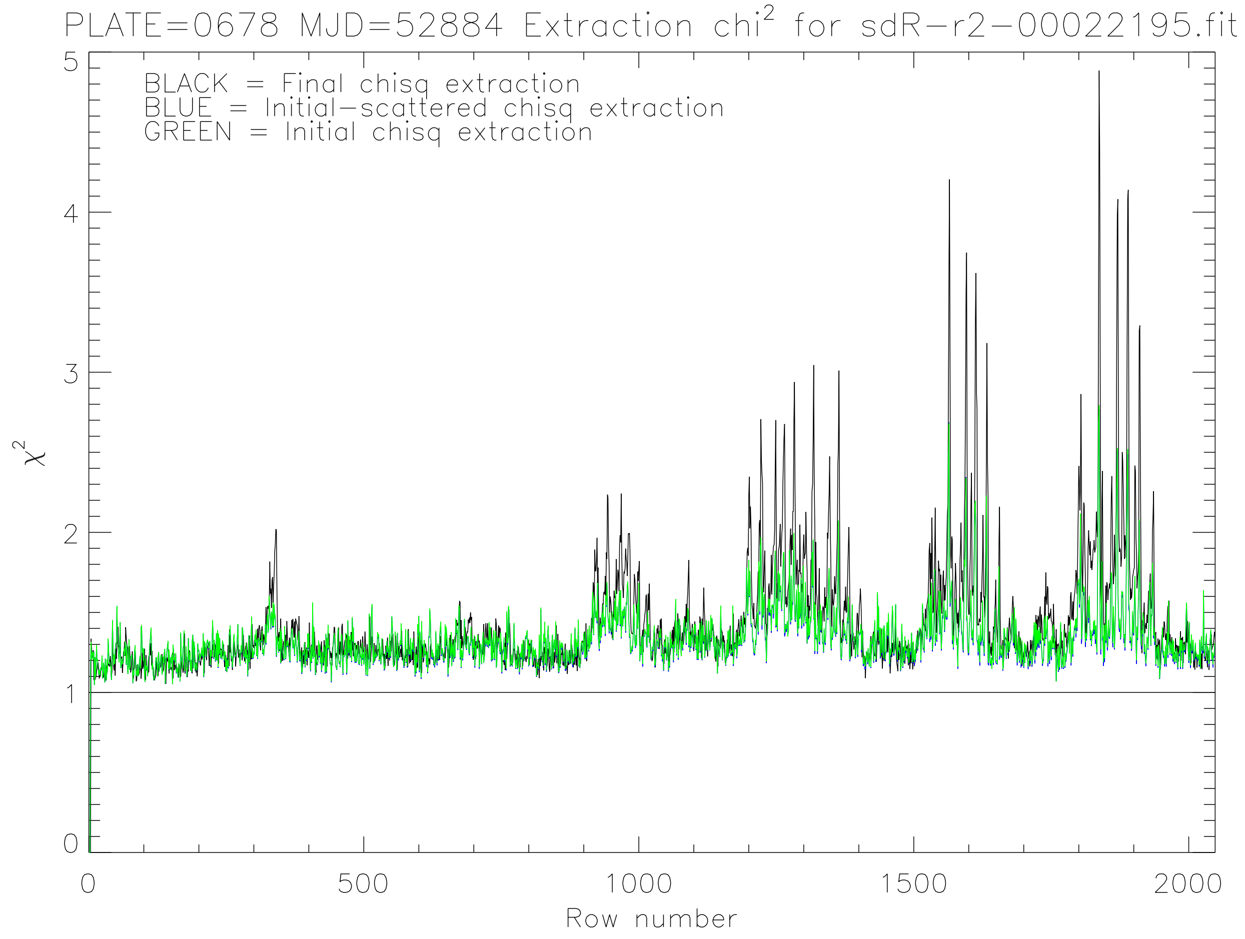
Tue Feb 26 00:23:58 2008

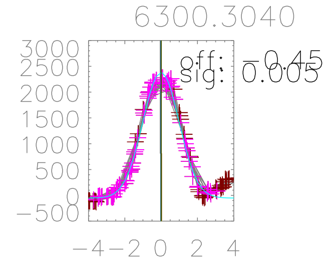


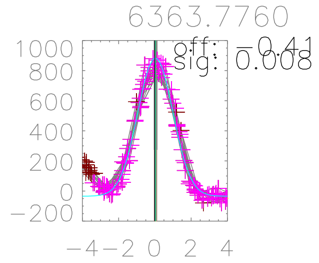
PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022195.fit

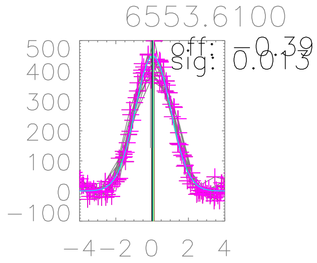


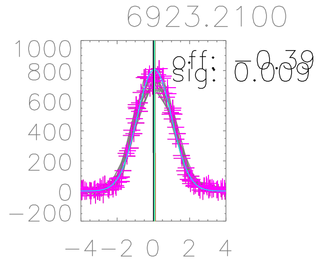
Tue Feb 26 00:27:00 2008

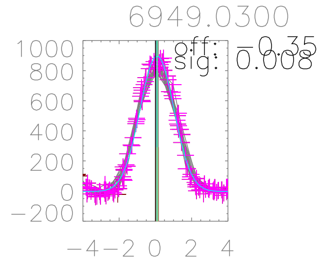

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r2-00022195.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

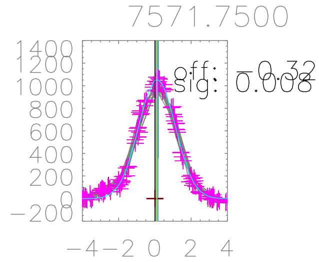

6300.3040
off: −0.45
sig: 0.005
3000 2500 2000 1500 1000 500 0 −500
−4 −2 0 2 4

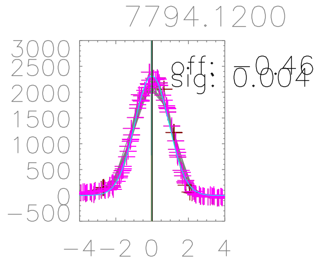

6363.7760
off: −0.41
sig: 0.008
1000 800 600 400 200 0 −200
−4 −2 0 2 4

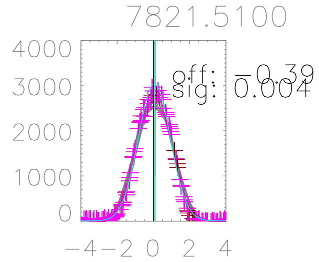

6553.6100
off: −0.39
sig: 0.013
500 400 300 200 100 0 −100
−4 −2 0 2 4

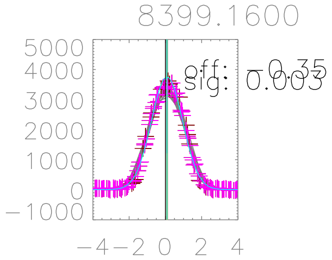

6923.2100
off: −0.39
sig: 0.009
1000 800 600 400 200 0 −200
−4 −2 0 2 4

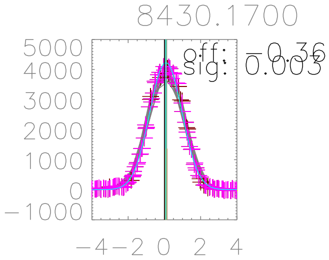

6949.0300
off: −0.35
sig: 0.008
1000 800 600 400 200 0 −200
−4 −2 0 2 4

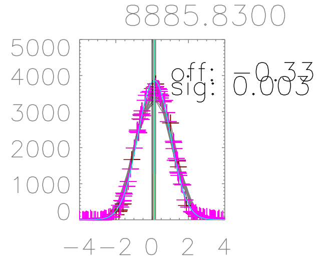

7571.7500
off: −0.32
sig: 0.008
1400 1200 1000 800 600 400 200 0 −200
−4 −2 0 2 4

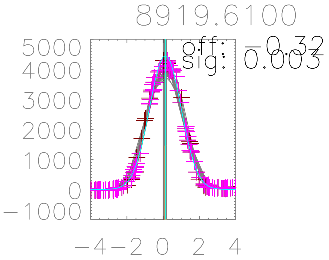

7794.1200
off: −0.46
sig: 0.004
3000 2500 2000 1500 1000 500 0 −500
−4 −2 0 2 4

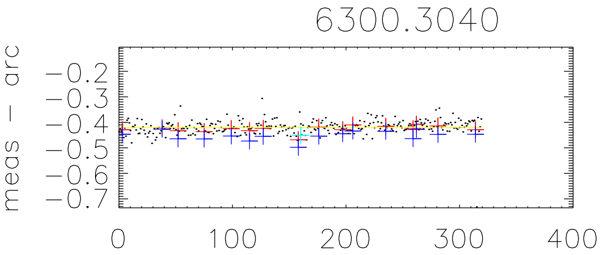

7821.5100
off: −0.39
sig: 0.004
4000 3000 2000 1000 0
−4 −2 0 2 4

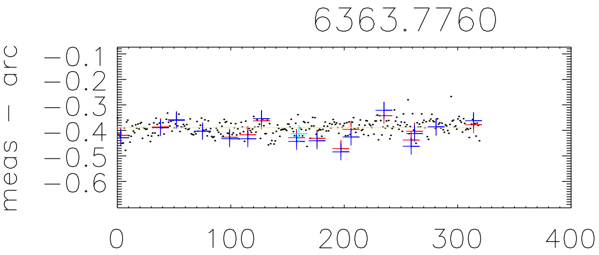

8399.1600
off: −0.35
sig: 0.003
5000 4000 3000 2000 1000 0 −1000
−4 −2 0 2 4

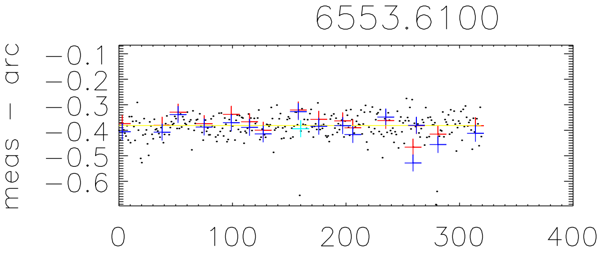

8430.1700
off: −0.36
sig: 0.003
5000 4000 3000 2000 1000 0 −1000
−4 −2 0 2 4

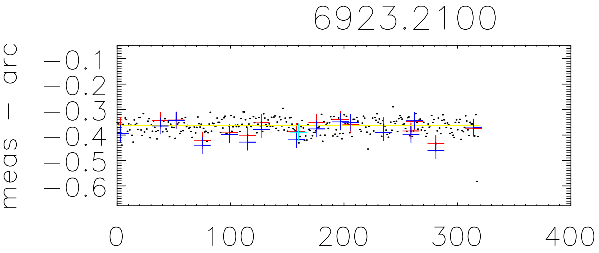

8885.8300
off: −0.33
sig: 0.003
5000 4000 3000 2000 1000 0
−4 −2 0 2 4

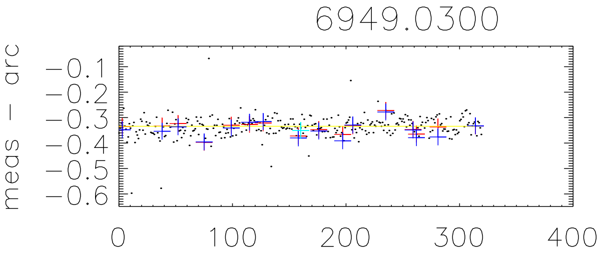

8919.6100
off: −0.32
sig: 0.003
5000 4000 3000 2000 1000 0 −1000
−4 −2 0 2 4

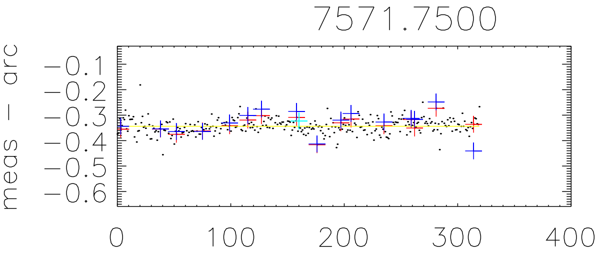

6300.3040
meas - arc
−0.2
−0.3
−0.4
−0.5
−0.6
−0.7
0
100
200
300
400

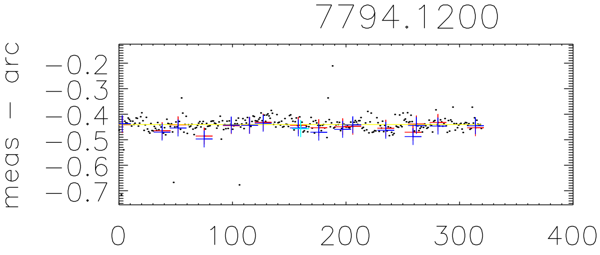

6363.7760
meas - arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

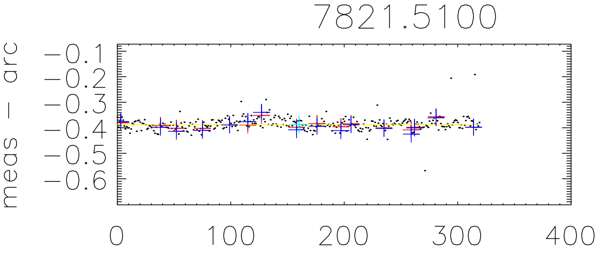

6553.6100
meas - arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

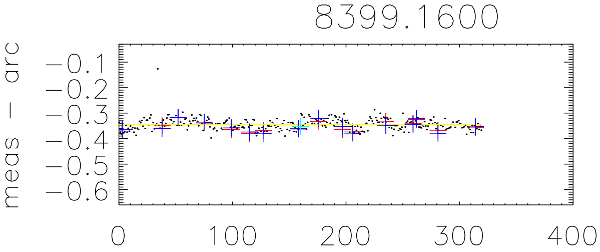

6923.2100
meas - arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

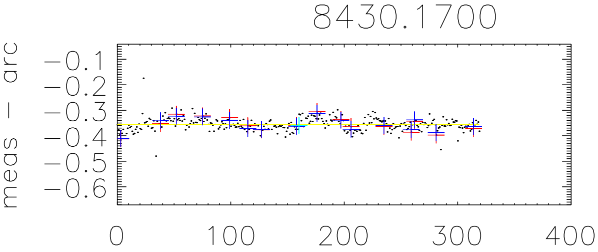

6949.0300
meas - arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

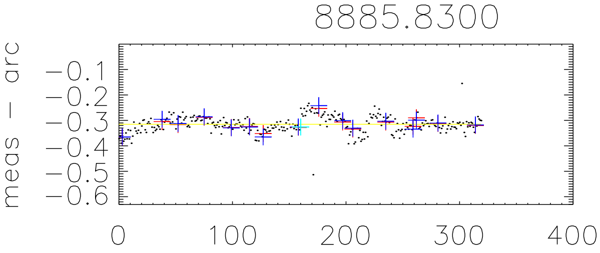

7571.7500
meas - arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0
100
200
300
400

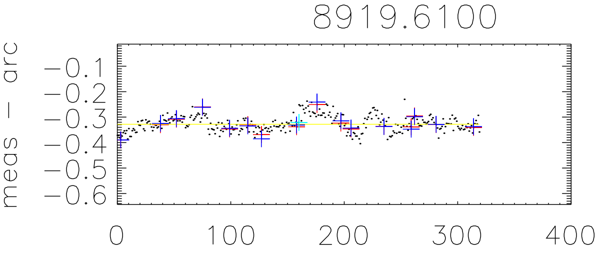

7794.1200

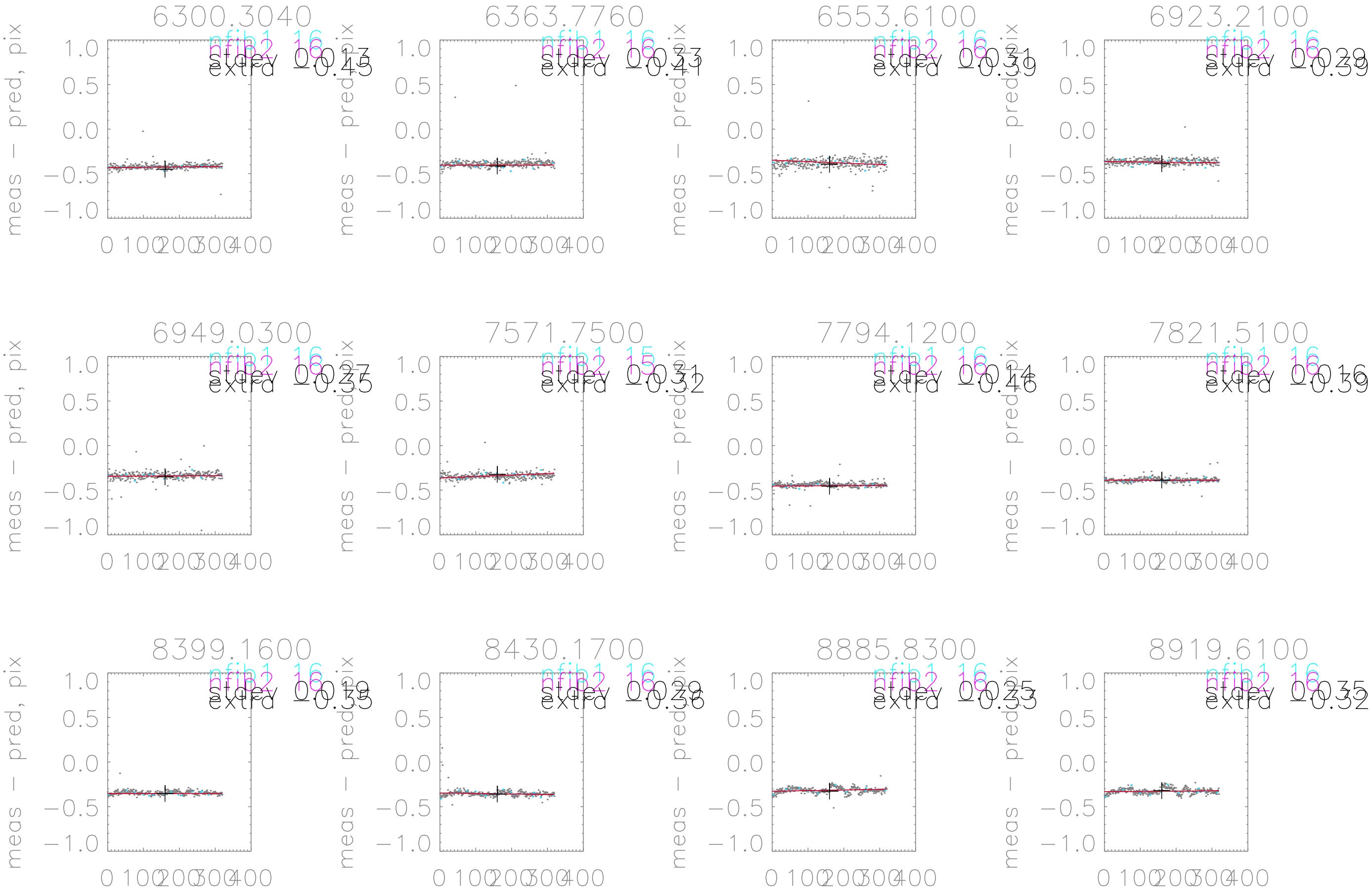

7821.5100

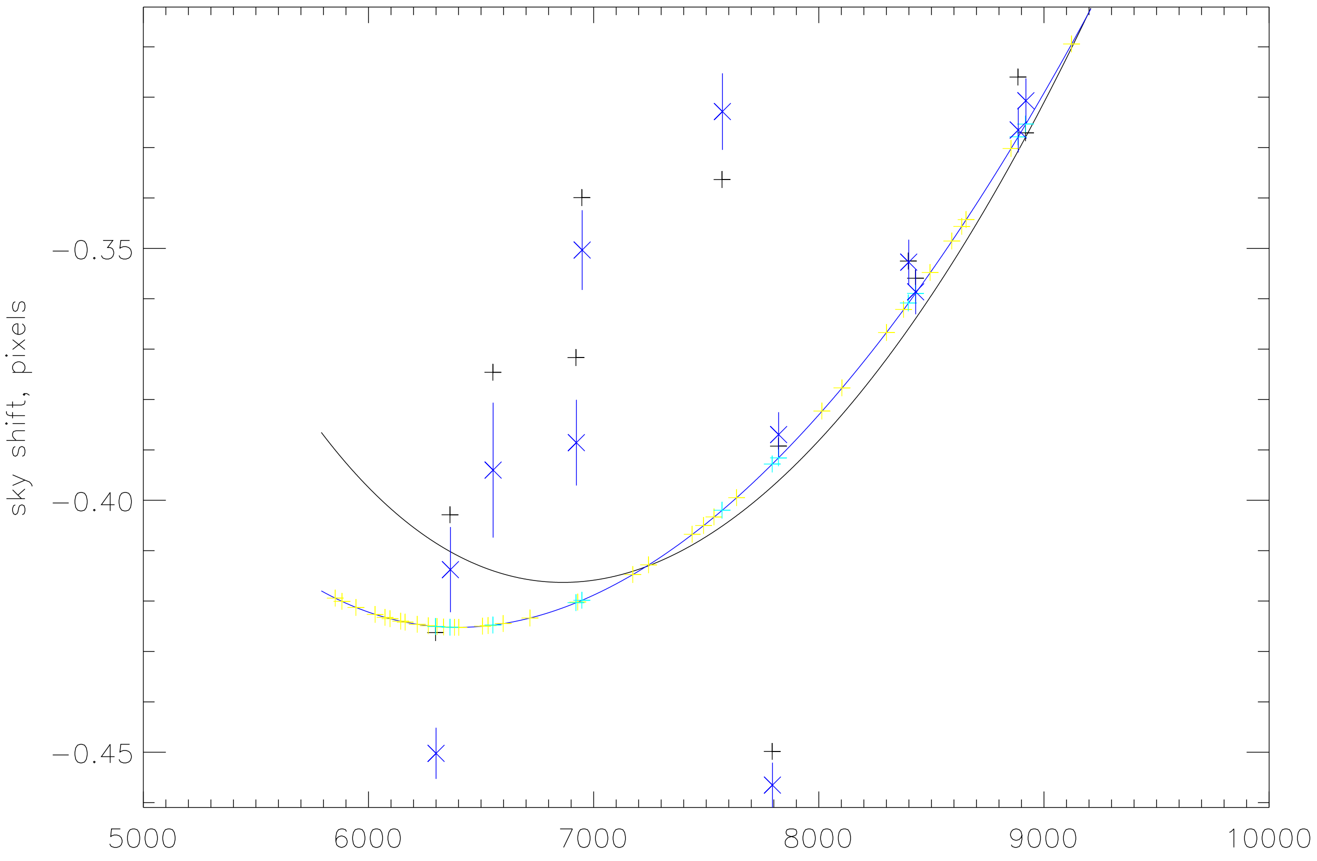

8399.1600

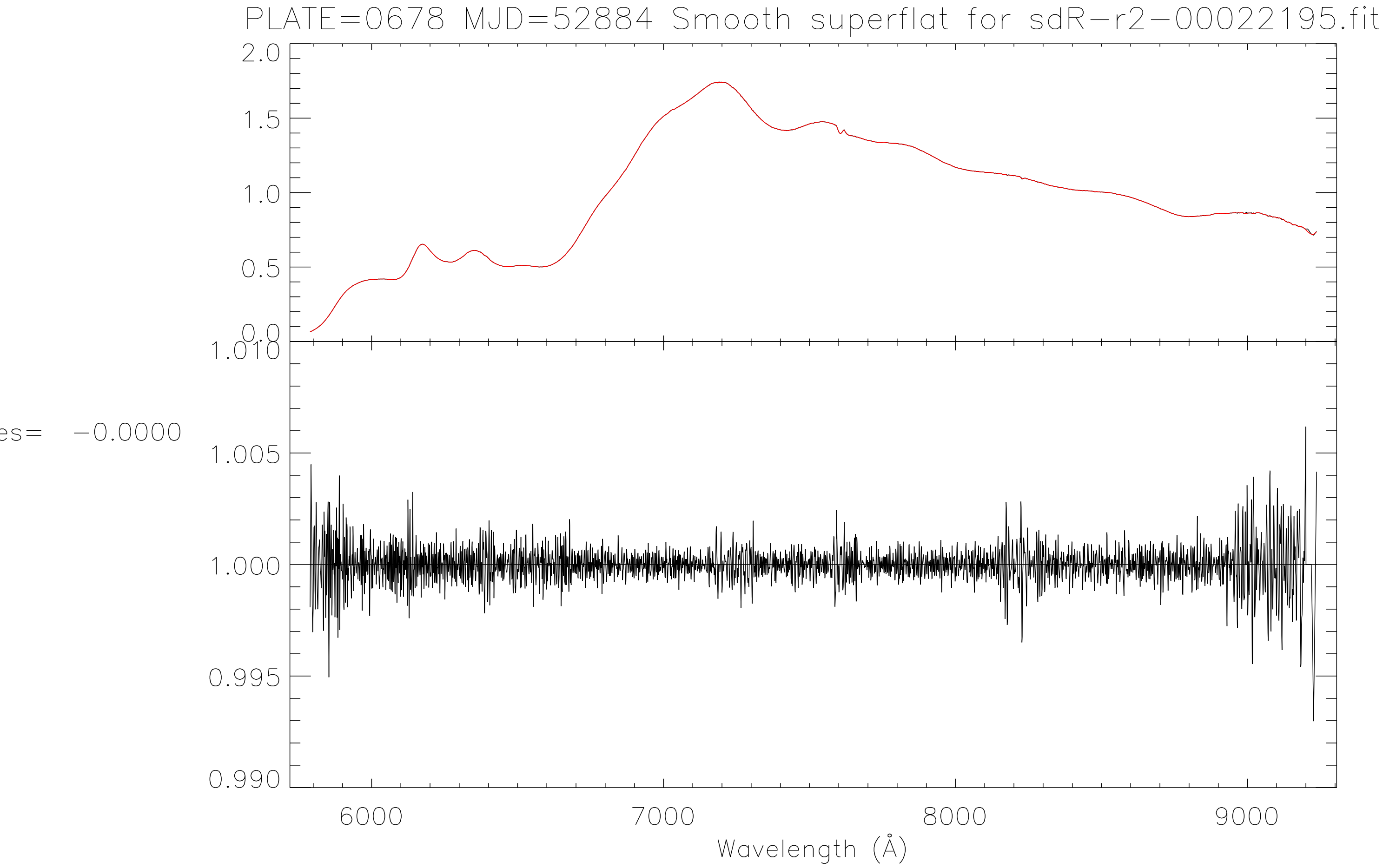

8430.1700

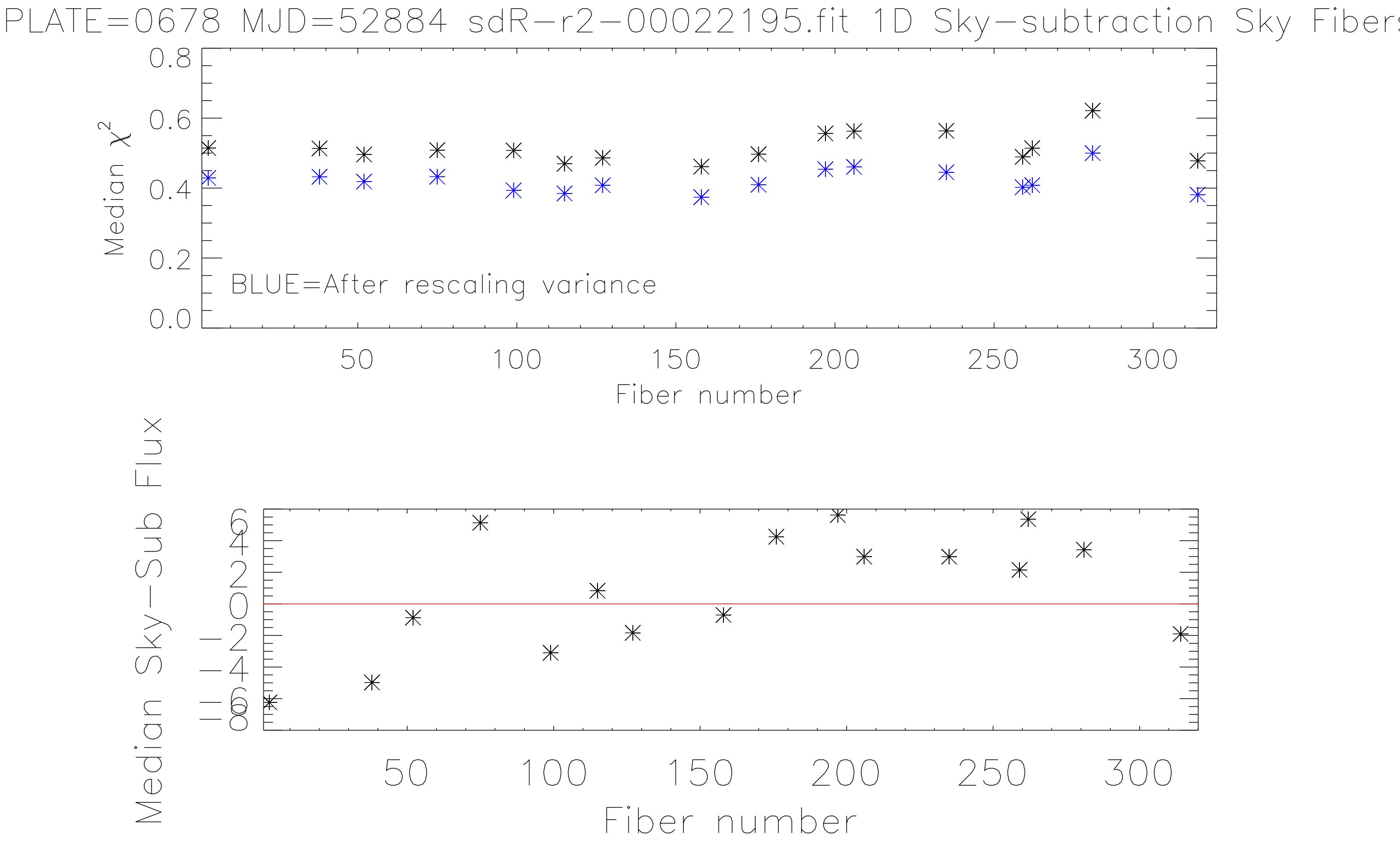

8885.8300

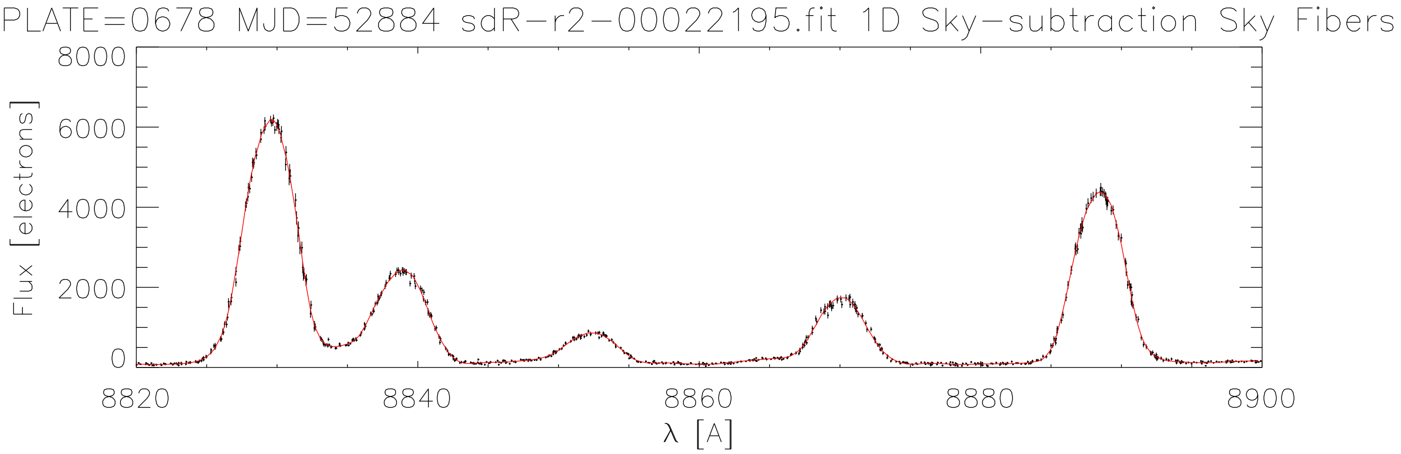

8919.6100

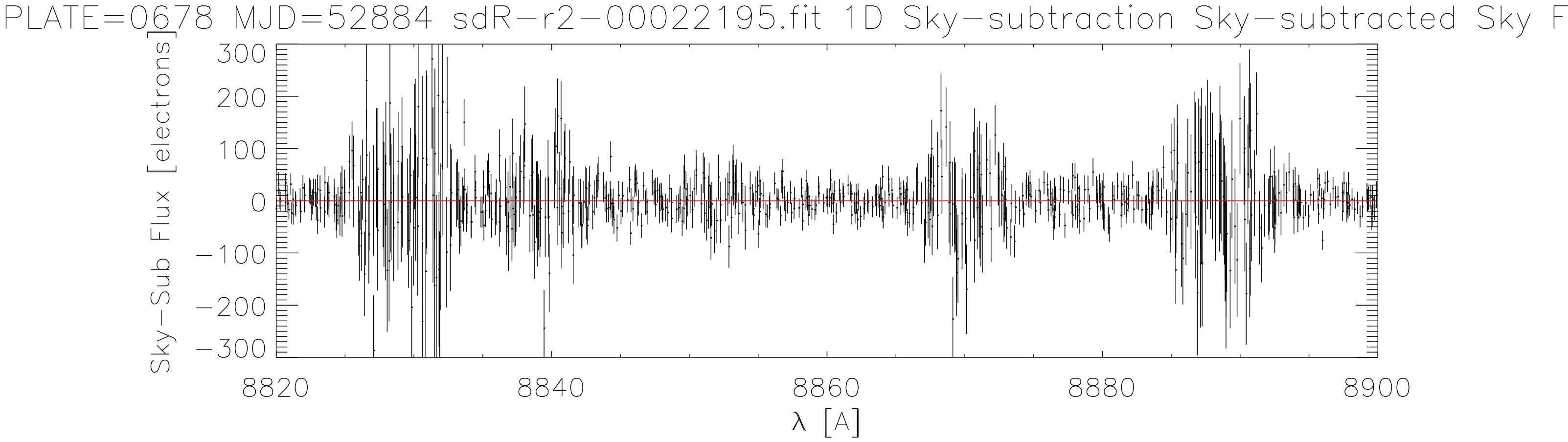

6300.3040
nfib1 16
nfib2 16
stdev 0.013
extrd −0.45
6363.7760
nfib1 16
nfib2 16
stdev 0.033
extrd −0.41
6553.6100
nfib1 16
nfib2 16
stdev 0.031
extrd −0.39
6923.2100
nfib1 16
nfib2 16
stdev 0.029
extrd −0.39
6949.0300
nfib1 16
nfib2 16
stdev 0.027
extrd −0.35
7571.7500
nfib1 15
nfib2 15
stdev 0.031
extrd −0.32
7794.1200
nfib1 16
nfib2 16
stdev 0.014
extrd −0.46
7821.5100
nfib1 16
nfib2 16
stdev 0.016
extrd −0.39
8399.1600
nfib1 16
nfib2 16
stdev 0.019
extrd −0.35
8430.1700
nfib1 16
nfib2 16
stdev 0.029
extrd −0.36
8885.8300
nfib1 16
nfib2 16
stdev 0.025
extrd −0.33
8919.6100
nfib1 16
nfib2 16
stdev 0.035
extrd −0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

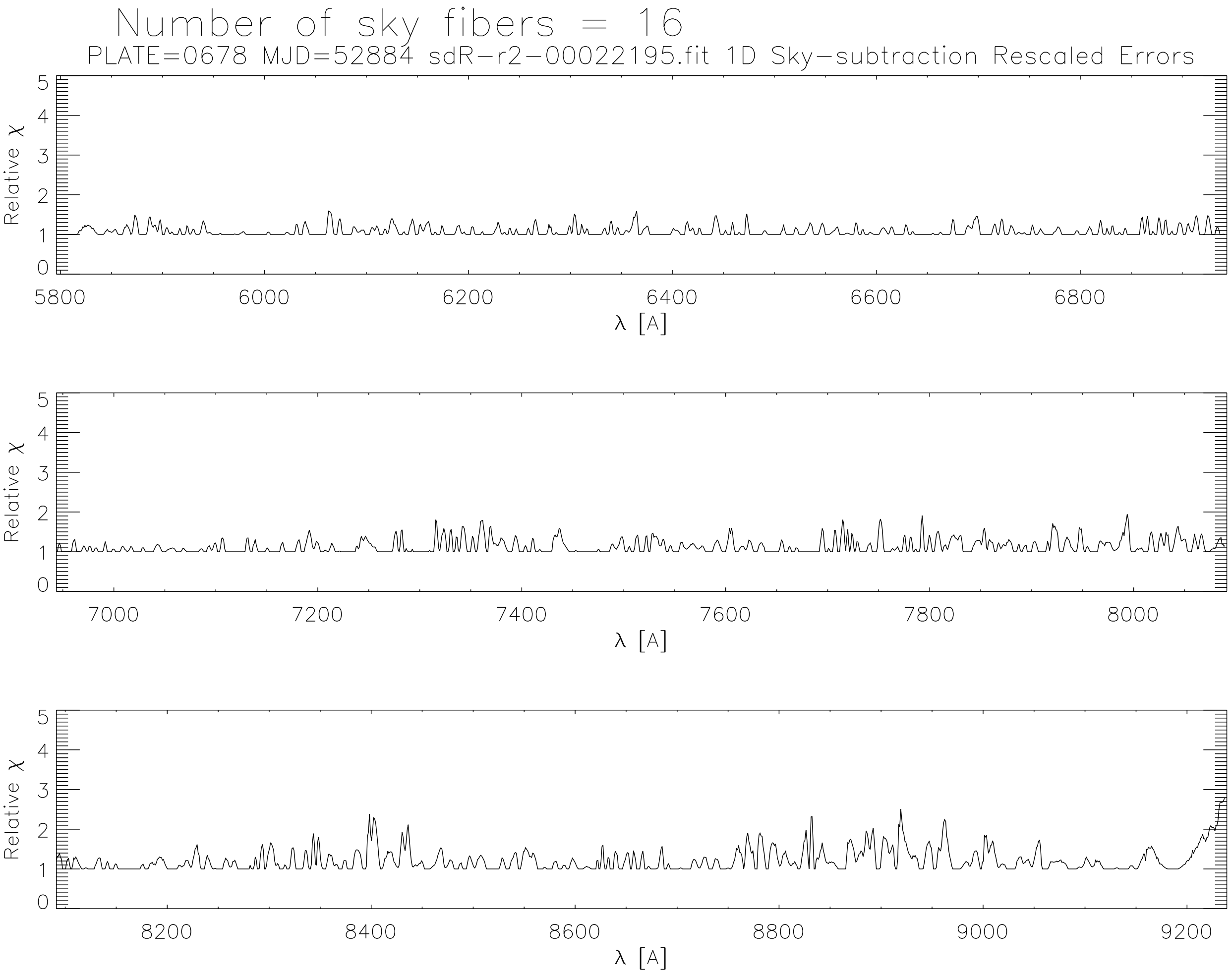

sky shift, pixels
−0.35
−0.40
−0.45
5000
6000
7000
8000
9000
10000


PLATE=0678 MJD=52884 Smooth superflat for sdR-r2-00022195.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

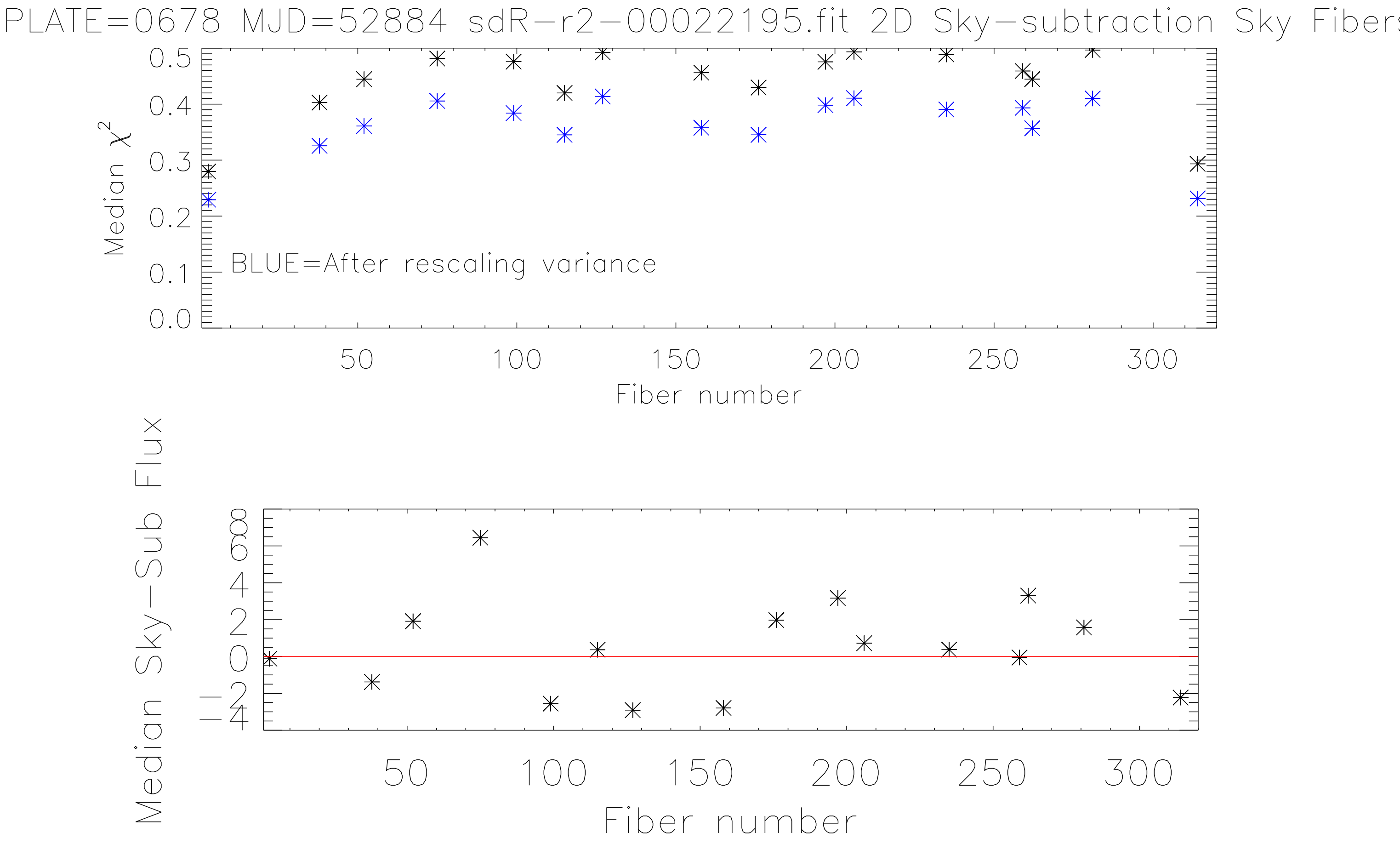

PLATE=0678 MJD=52884 sdR-r2-00022195.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-8
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

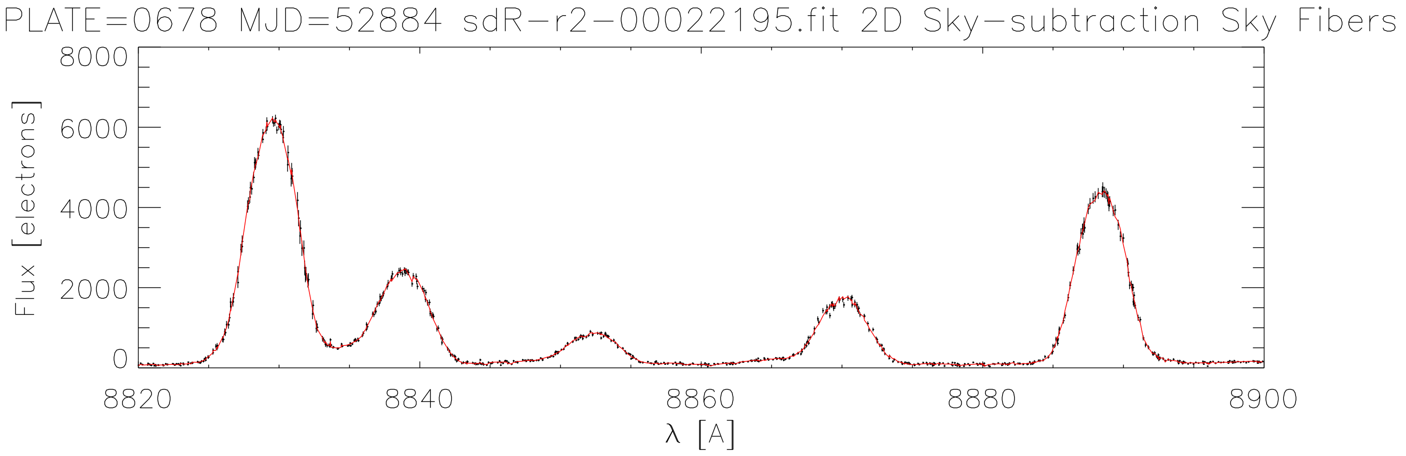

PLATE=0678 MJD=52884 sdR-r2-00022195.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=0678 MJD=52884 sdR-r2-00022195.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

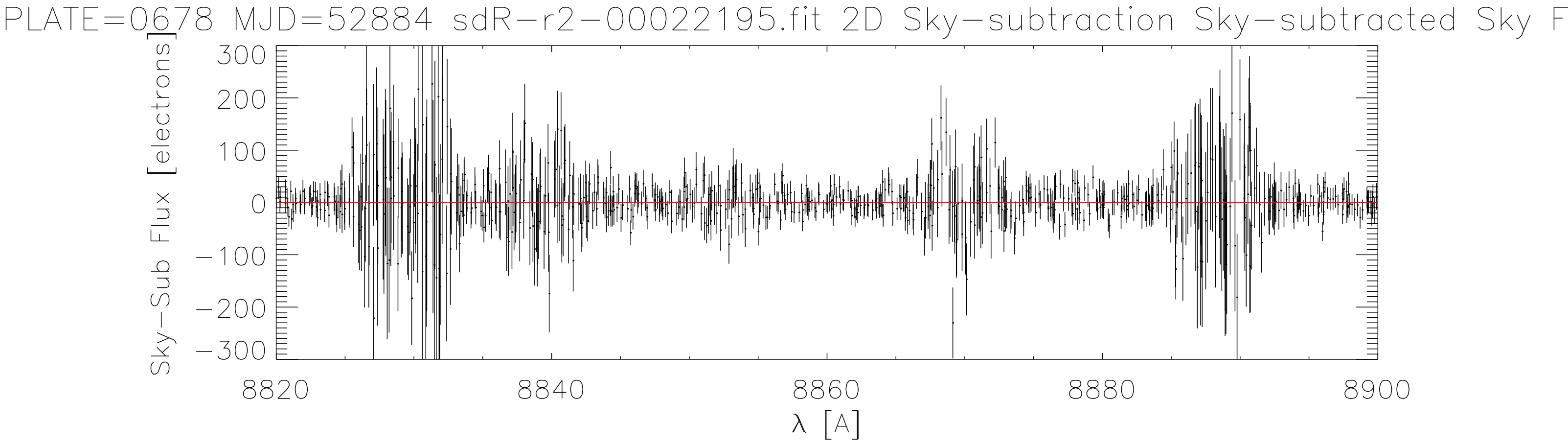

Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-r2-00022195.fit 1D Sky-subtraction Rescaled Errors


PLATE=0678 MJD=52884 sdR-r2-00022195.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number



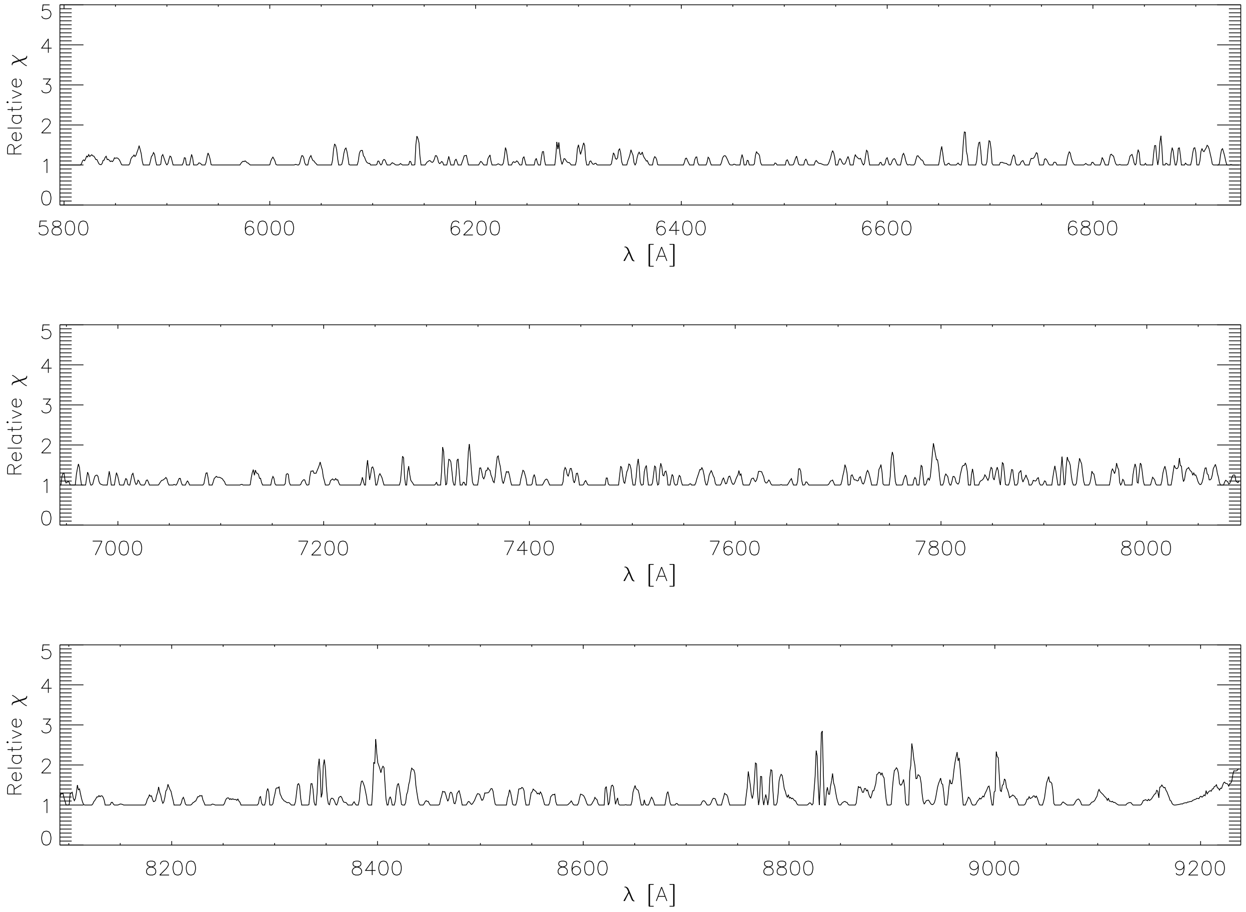
PLATE=0678 MJD=52884 sdR-r2-00022195.fit 2D Sky-subtraction Sky Fibers

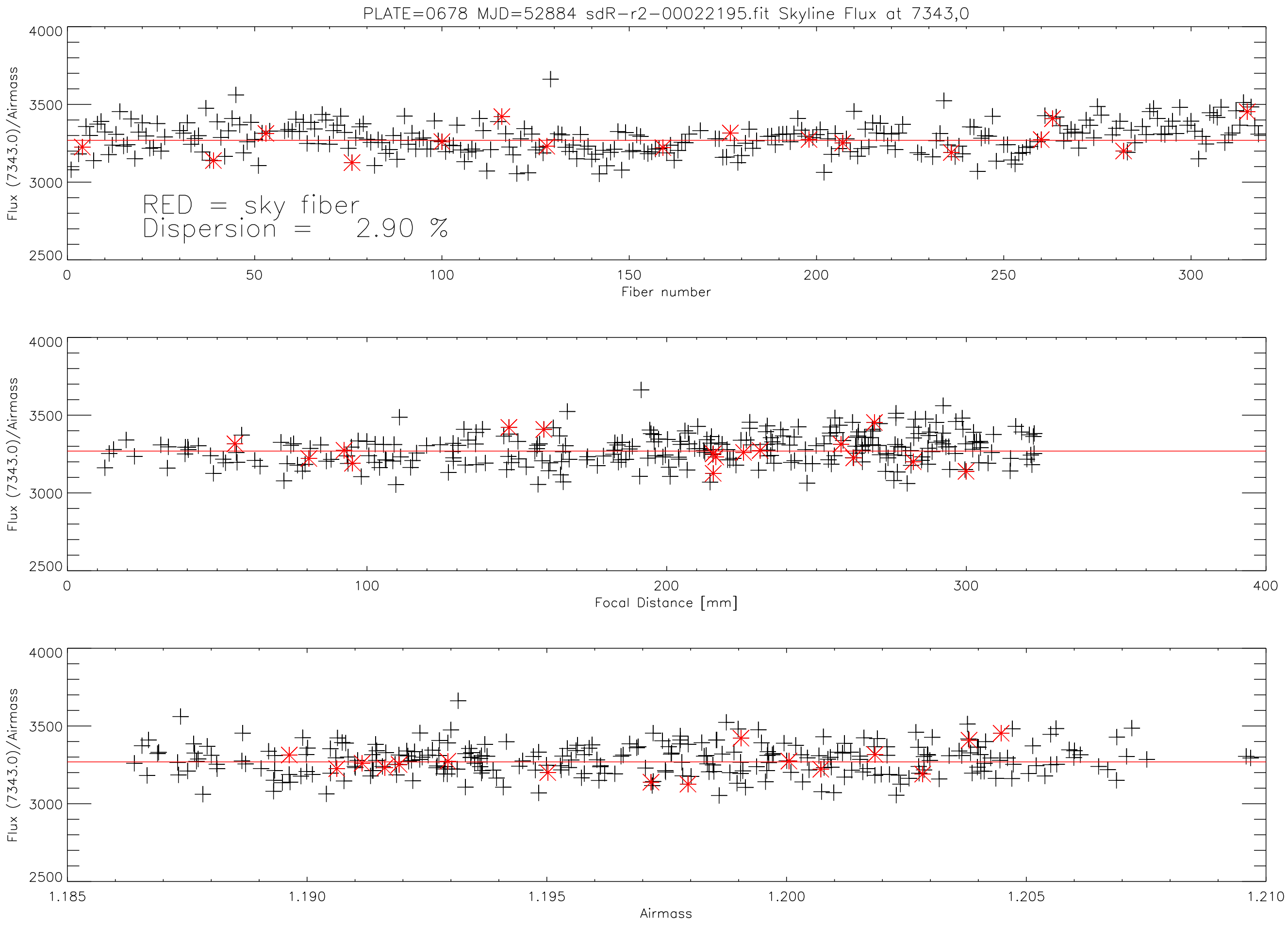


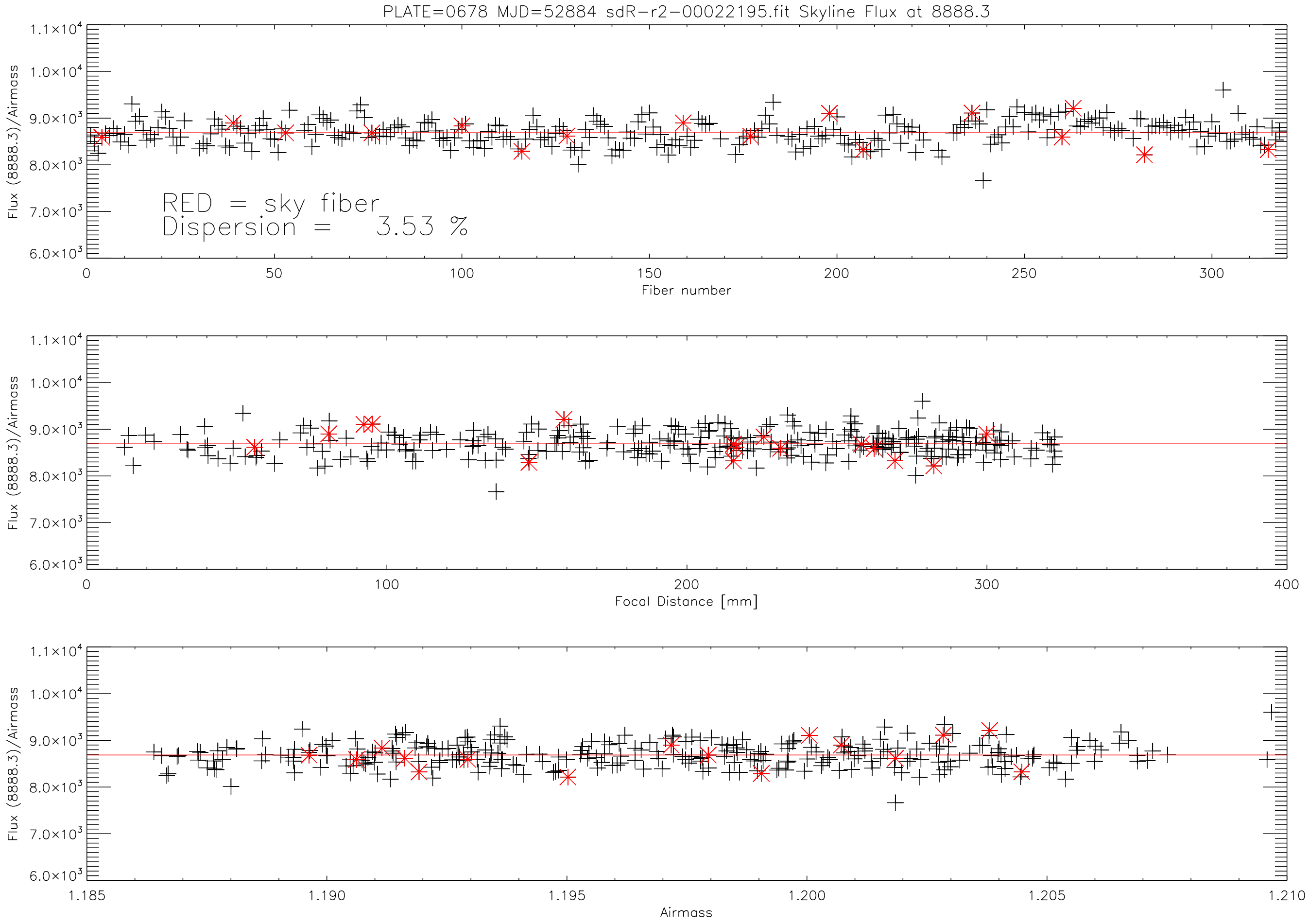
PLATE=0678 MJD=52884 sdR-r2-00022195.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 16

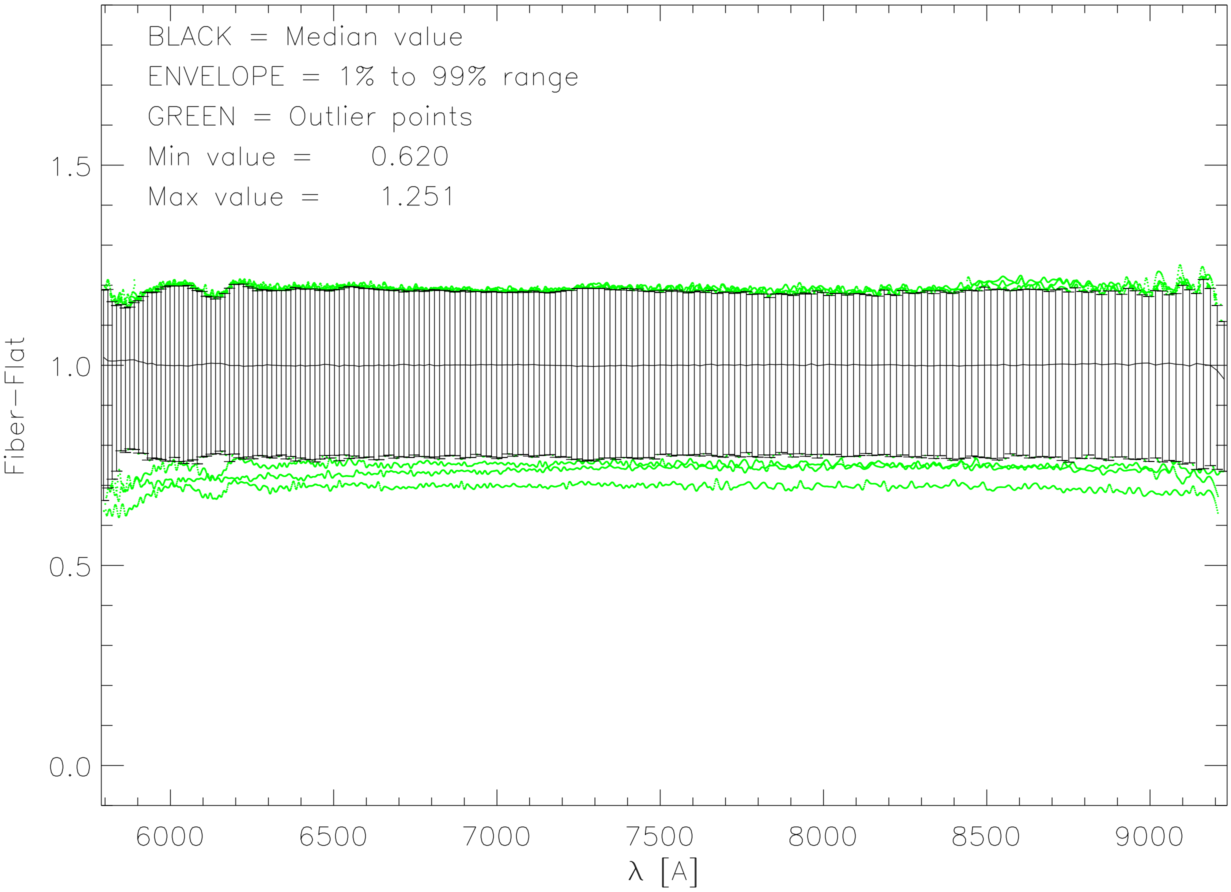
PLATE=0678 MJD=52884 sdR-r2-00022195.fit 2D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-r2-00022195.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
4000
3500
3000
2500
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 2.90 %
Flux (7343.0)/Airmass
4000
3500
3000
2500
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
4000
3500
3000
2500
1.185
1.190
1.195
1.200
1.205
1.210
Airmass

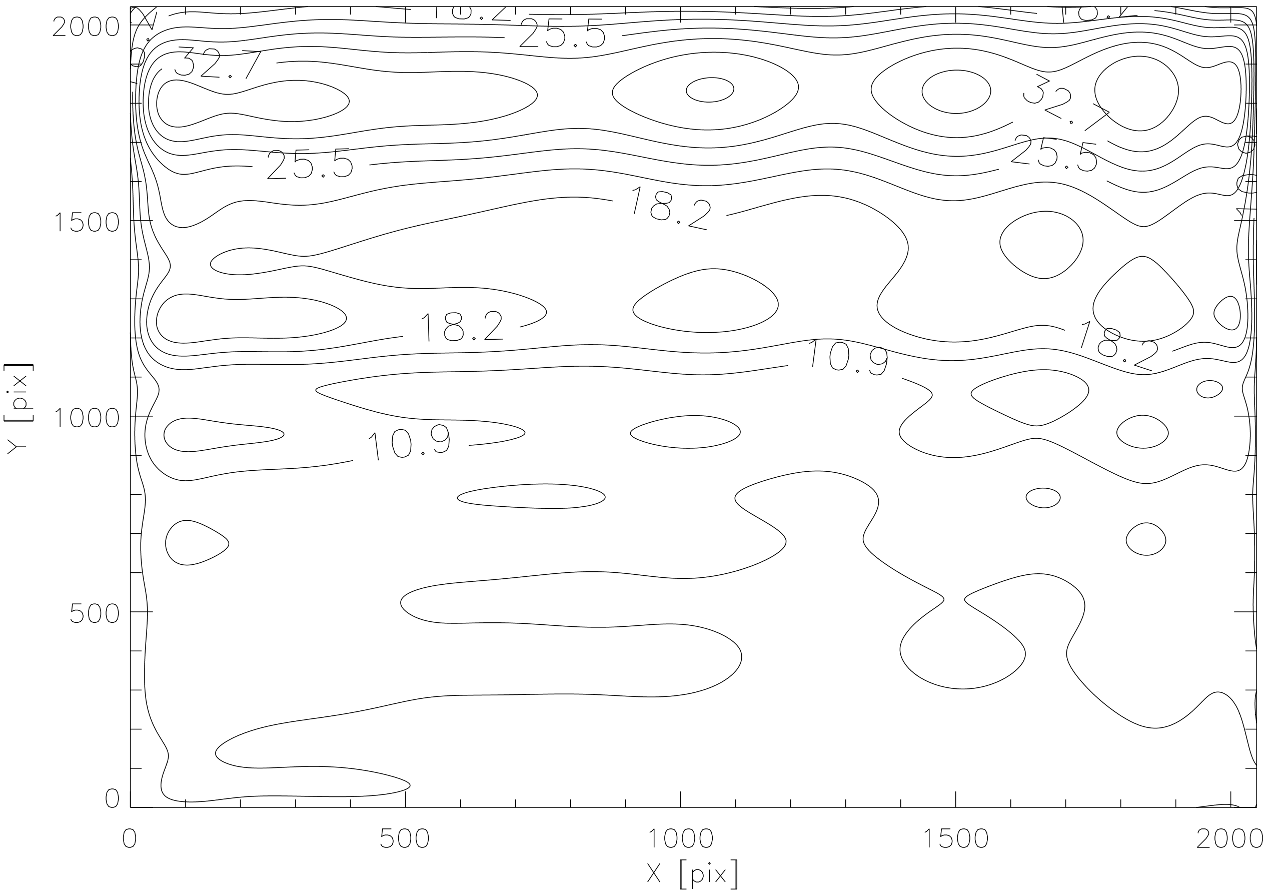

PLATE=0678 MJD=52884 sdR-r2-00022195.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.1×10^4
1.0×10^4
9.0×10^3
8.0×10^3
7.0×10^3
6.0×10^3
RED = sky fiber
Dispersion = 3.53 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.185
1.190
1.195
1.200
1.205
1.210
Airmass

PLATE=0678 MJD=52884 Fiber-Flats for sdR-r2-00022199.fit

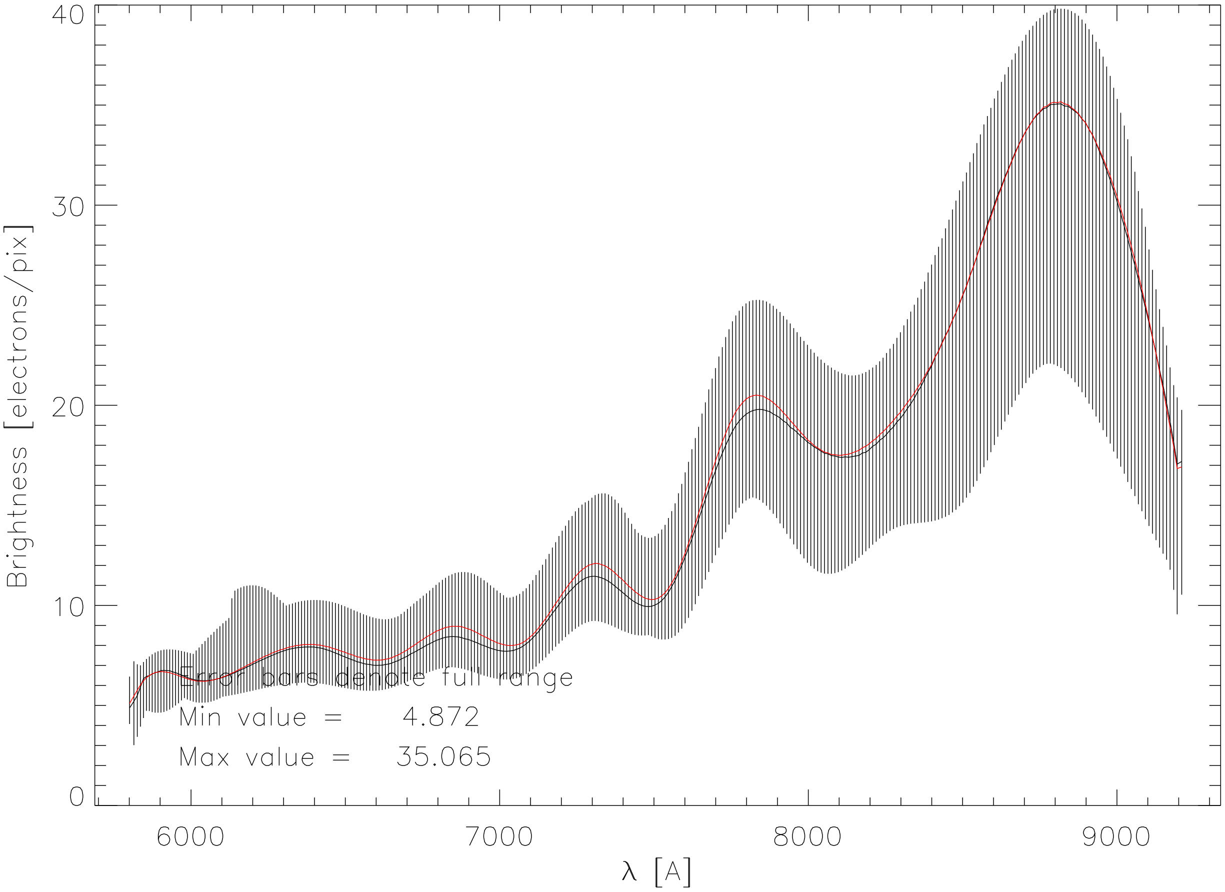


Tue Feb 26 00:28:13 2008

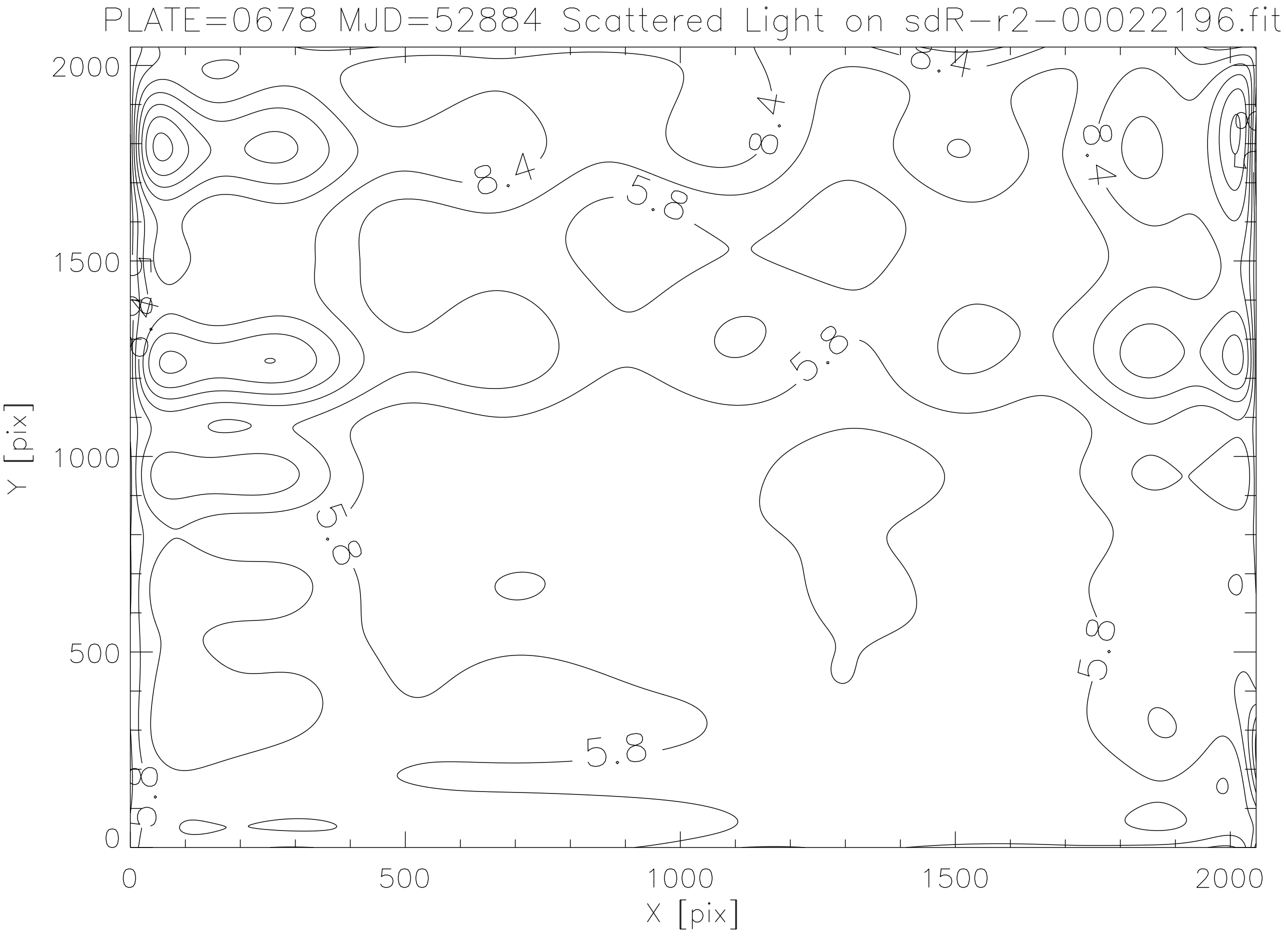
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022196.fi

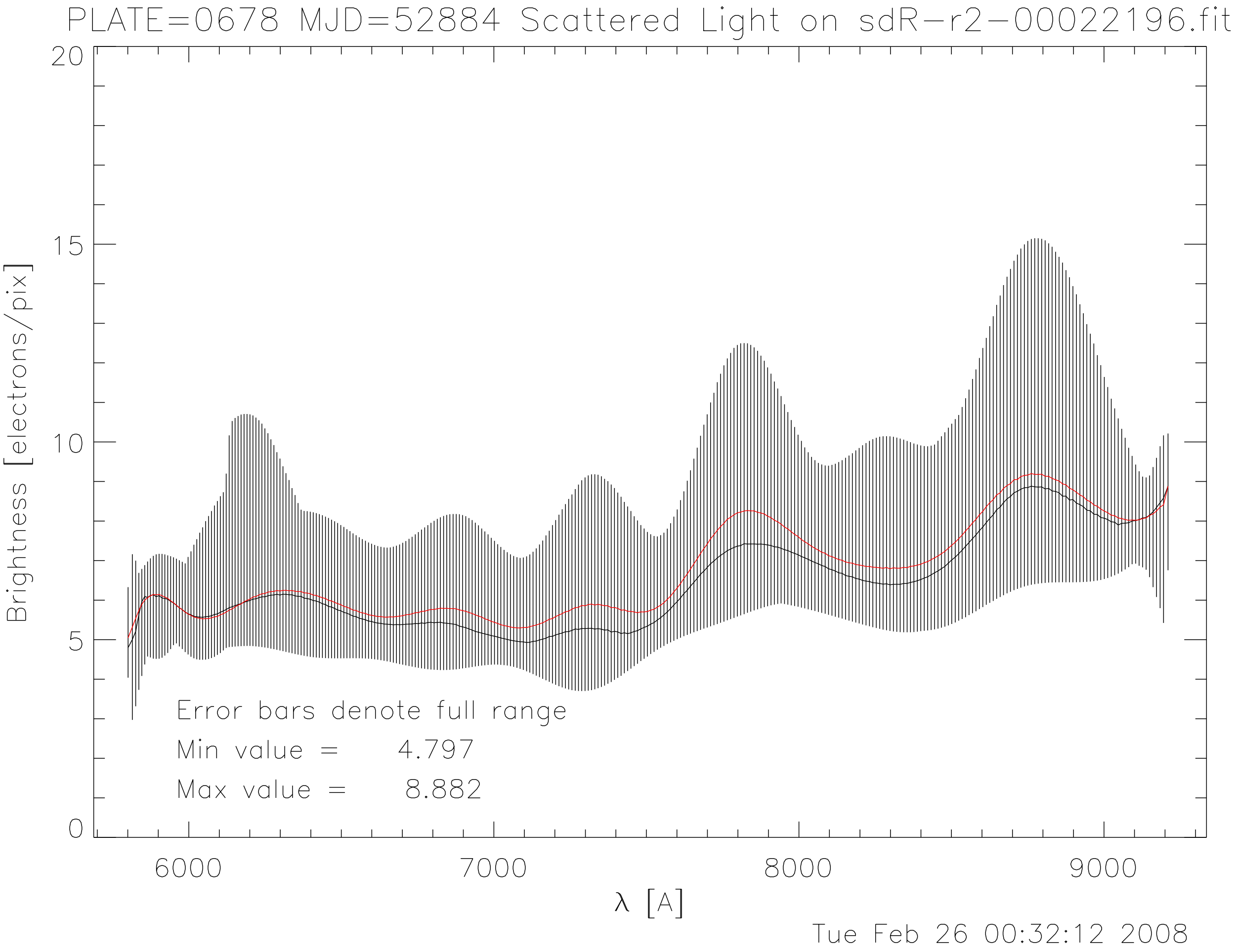


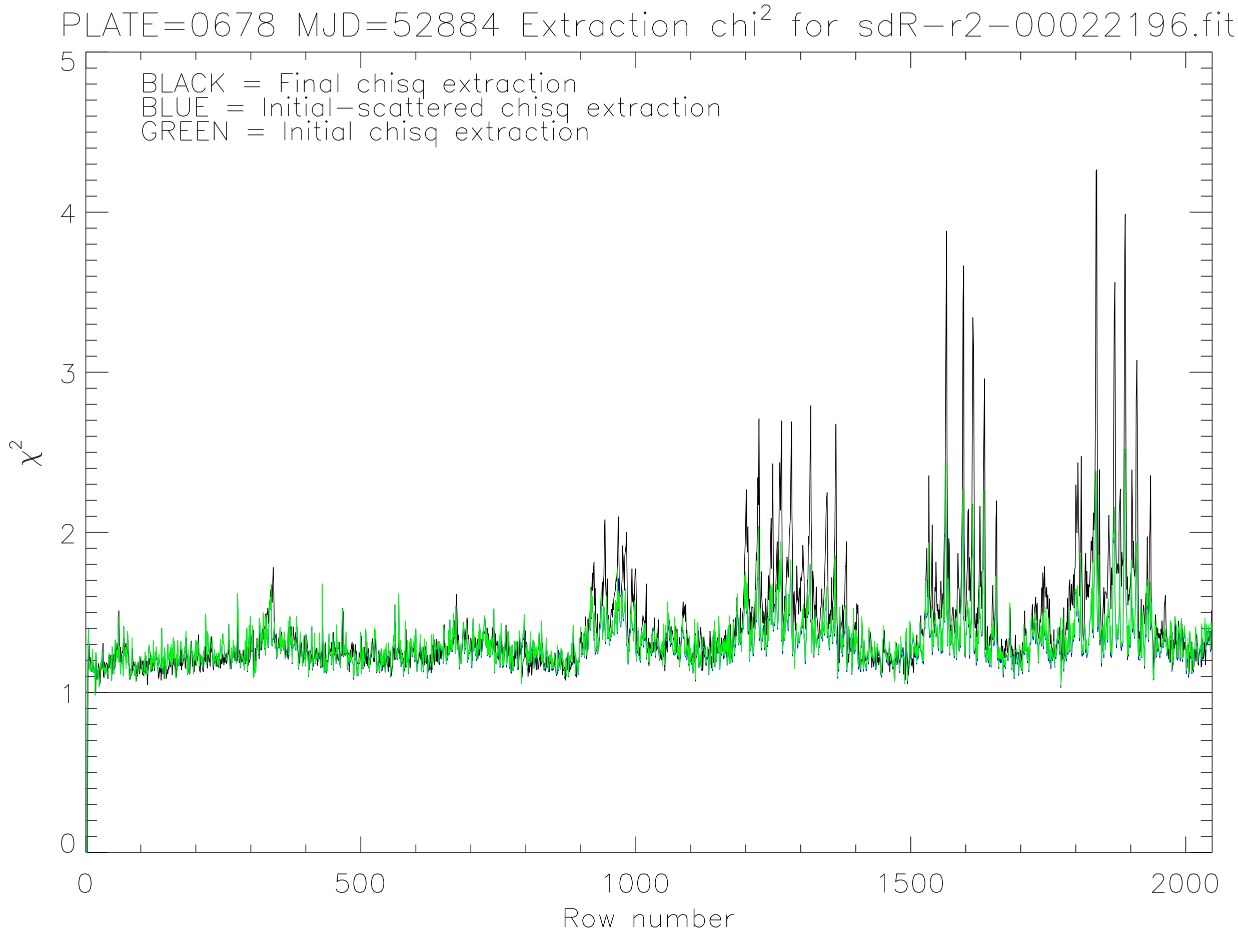
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022196.fi

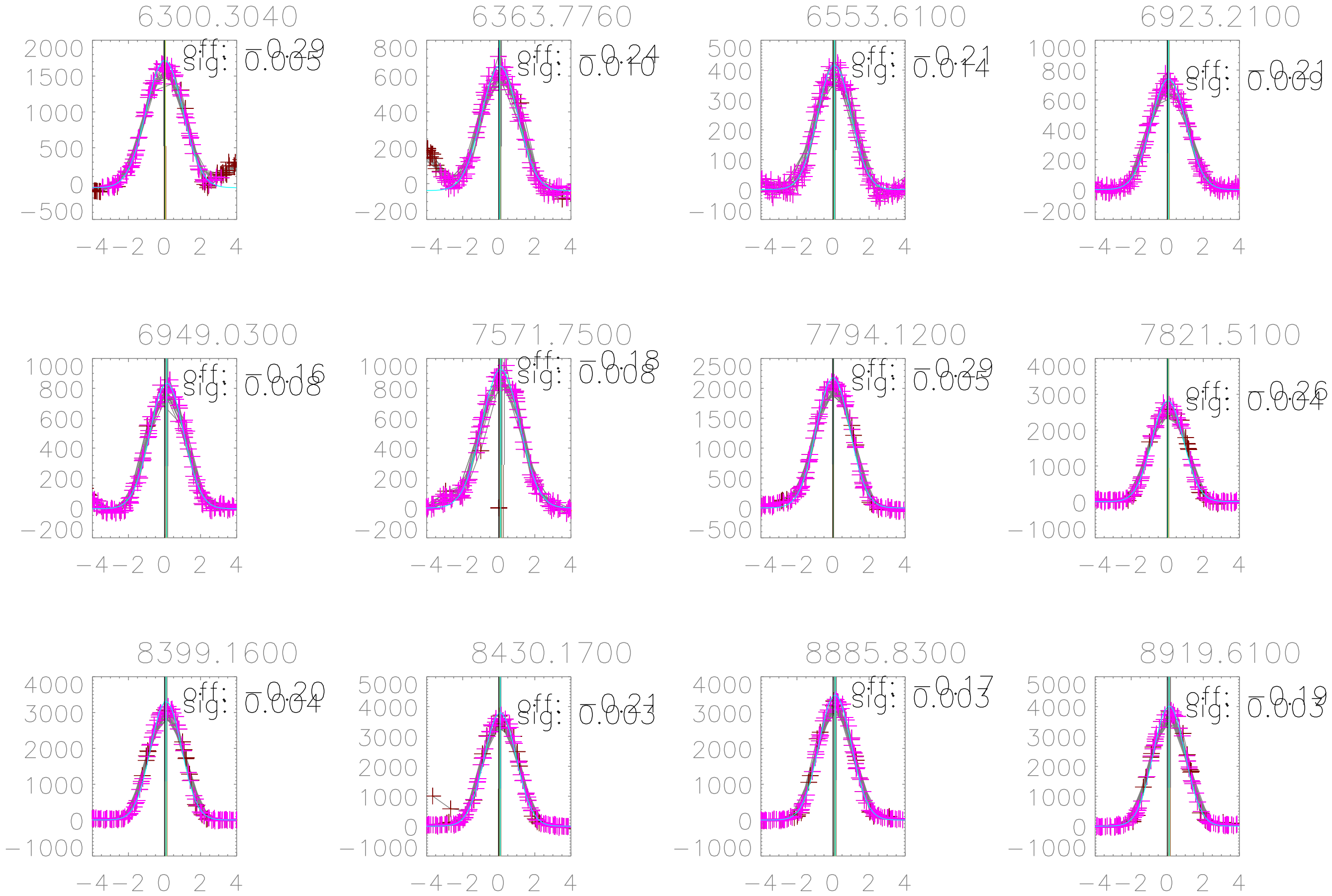


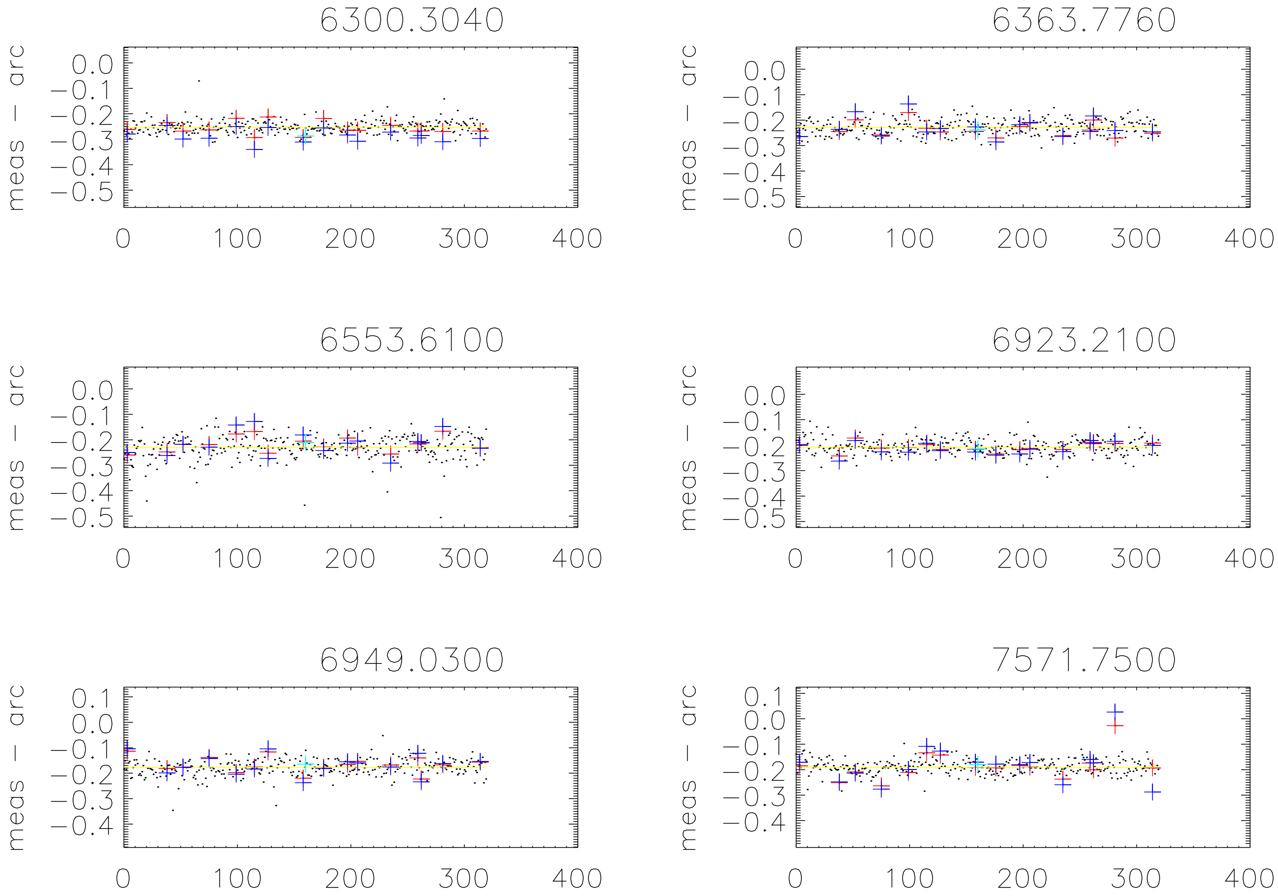
Tue Feb 26 00:29:09 2008


PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022196.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
8.4
5.8


PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022196.fit
Brightness [electrons/pix]
0
5
10
15
20
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.797
Max value = 8.882
Tue Feb 26 00:32:12 2008


PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r2-00022196.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
1
2
3
4
5
0
500
1000
1500
2000


6300.3040
off: −0.29
sig: 0.005
2000 1500 1000 500 0 −500
6363.7760
off: −0.24
sig: 0.010
800 600 400 200 0 −200
6553.6100
off: −0.21
sig: 0.014
500 400 300 200 100 0 −100
6923.2100
off: −0.21
sig: 0.009
1000 800 600 400 200 0 −200
6949.0300
off: −0.16
sig: 0.008
1000 800 600 400 200 0 −200
7571.7500
off: −0.18
sig: 0.008
1000 800 600 400 200 0 −200
7794.1200
off: −0.29
sig: 0.005
2500 2000 1500 1000 500 0 −500
7821.5100
off: −0.26
sig: 0.004
4000 3000 2000 1000 0 −1000
8399.1600
off: −0.20
sig: 0.004
4000 3000 2000 1000 0 −1000
8430.1700
off: −0.21
sig: 0.003
5000 4000 3000 2000 1000 0 −1000
8885.8300
off: −0.17
sig: 0.003
4000 3000 2000 1000 0 −1000
8919.6100
off: −0.19
sig: 0.003
5000 4000 3000 2000 1000 0 −1000
−4 −2 0 2 4



6300.3040

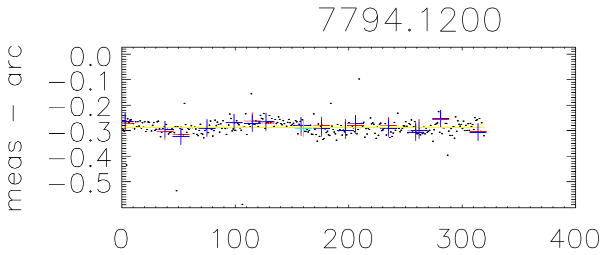
6363.7760

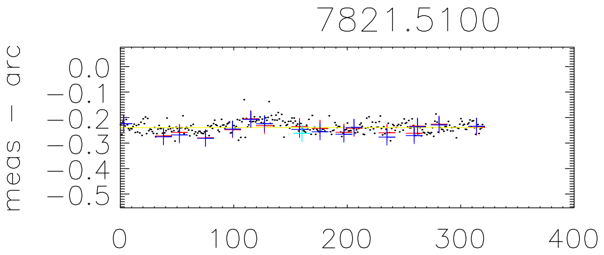
6553.6100

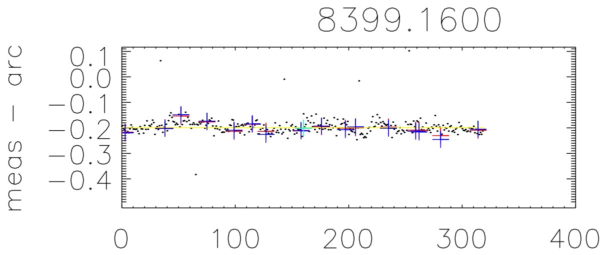
6923.2100

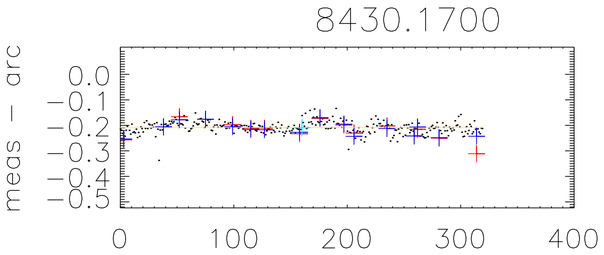
6949.0300

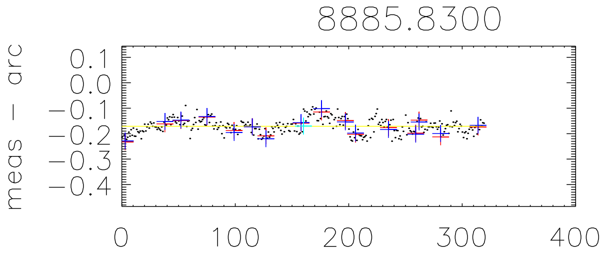
7571.7500

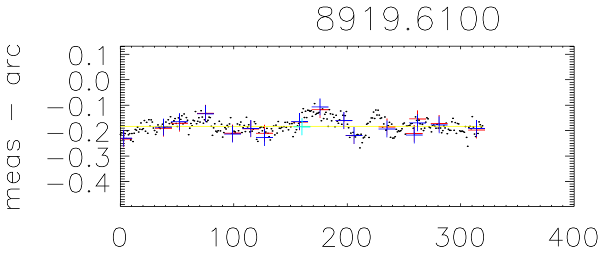

7794.1200
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

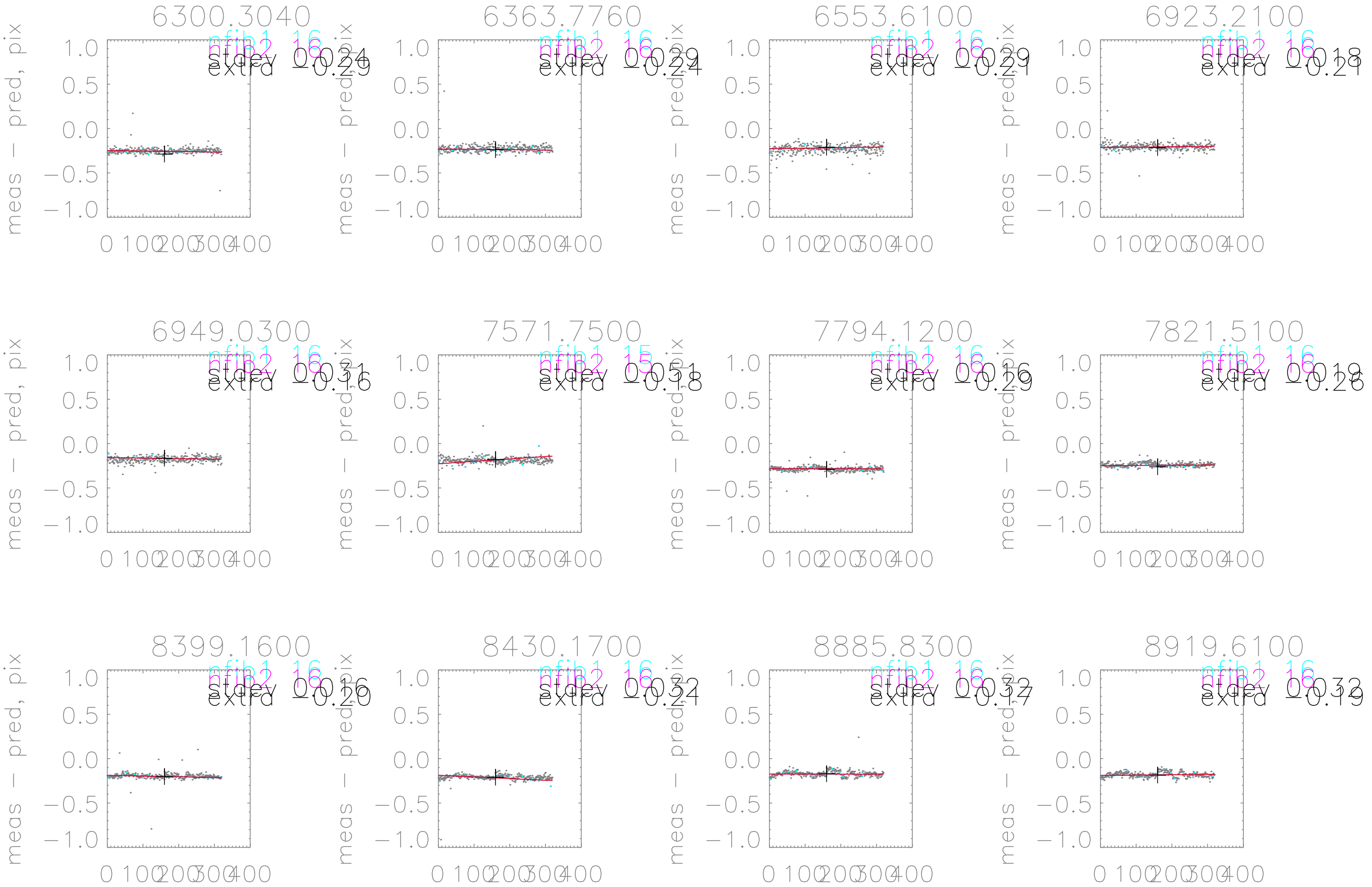

7821.5100
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

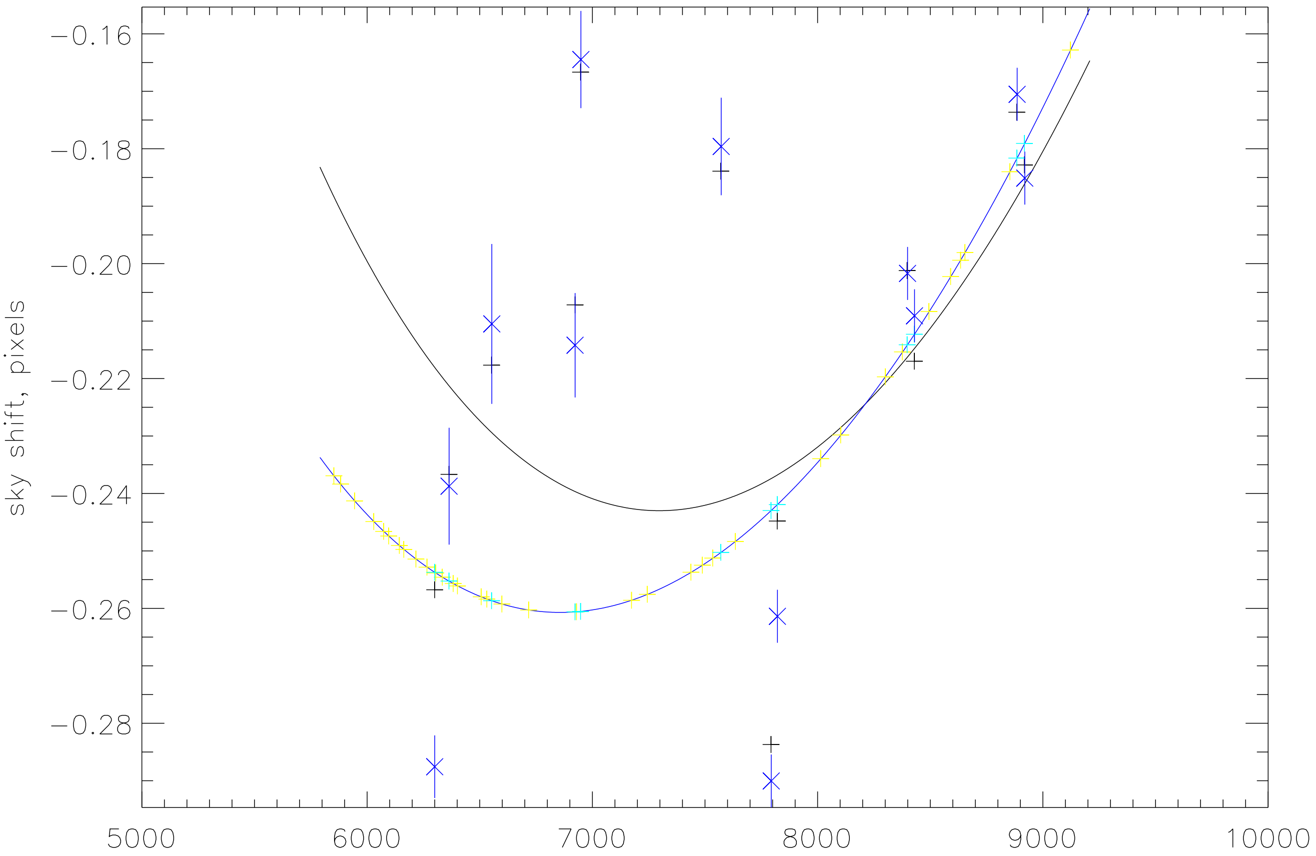

8399.1600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

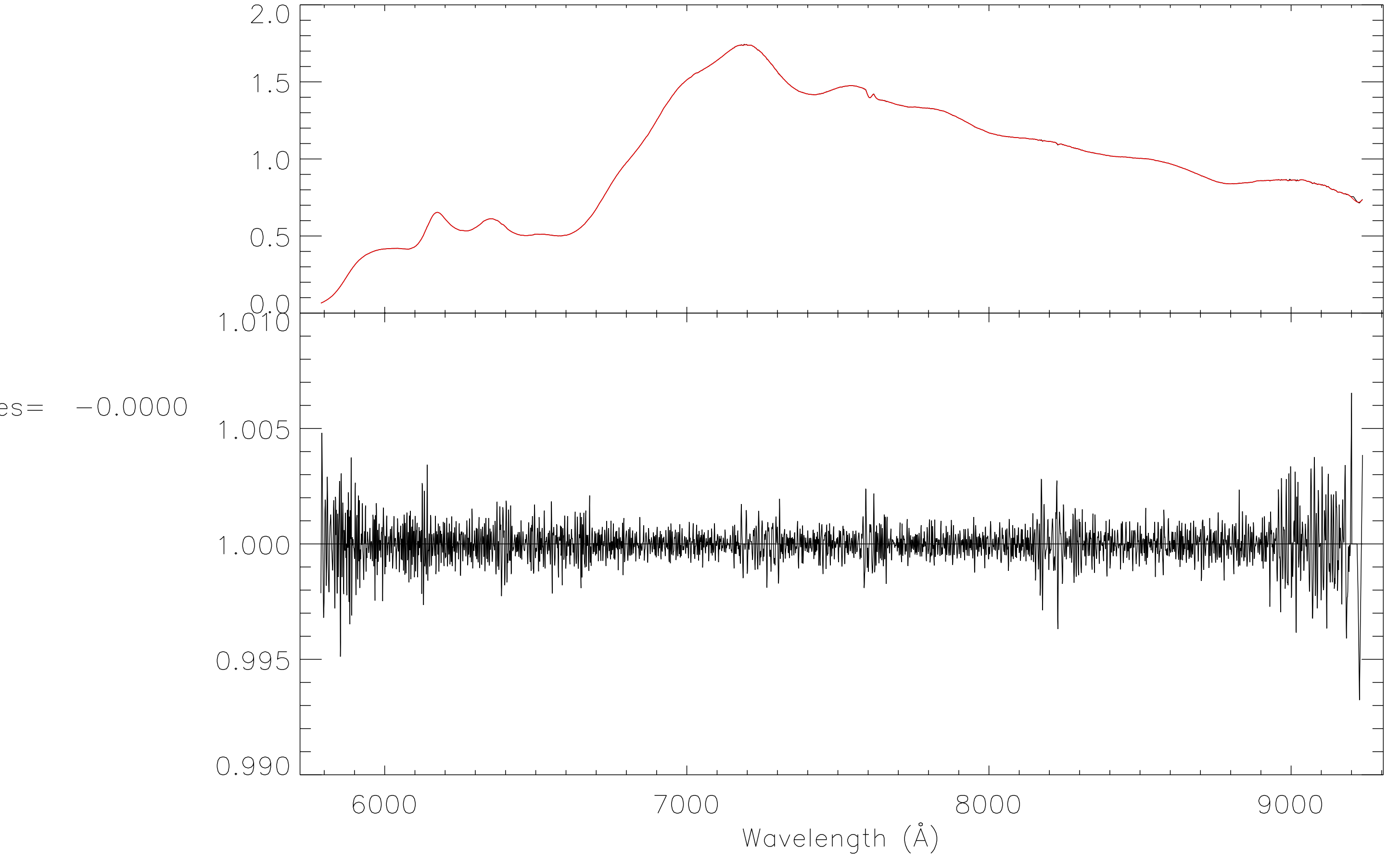

8885.8300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

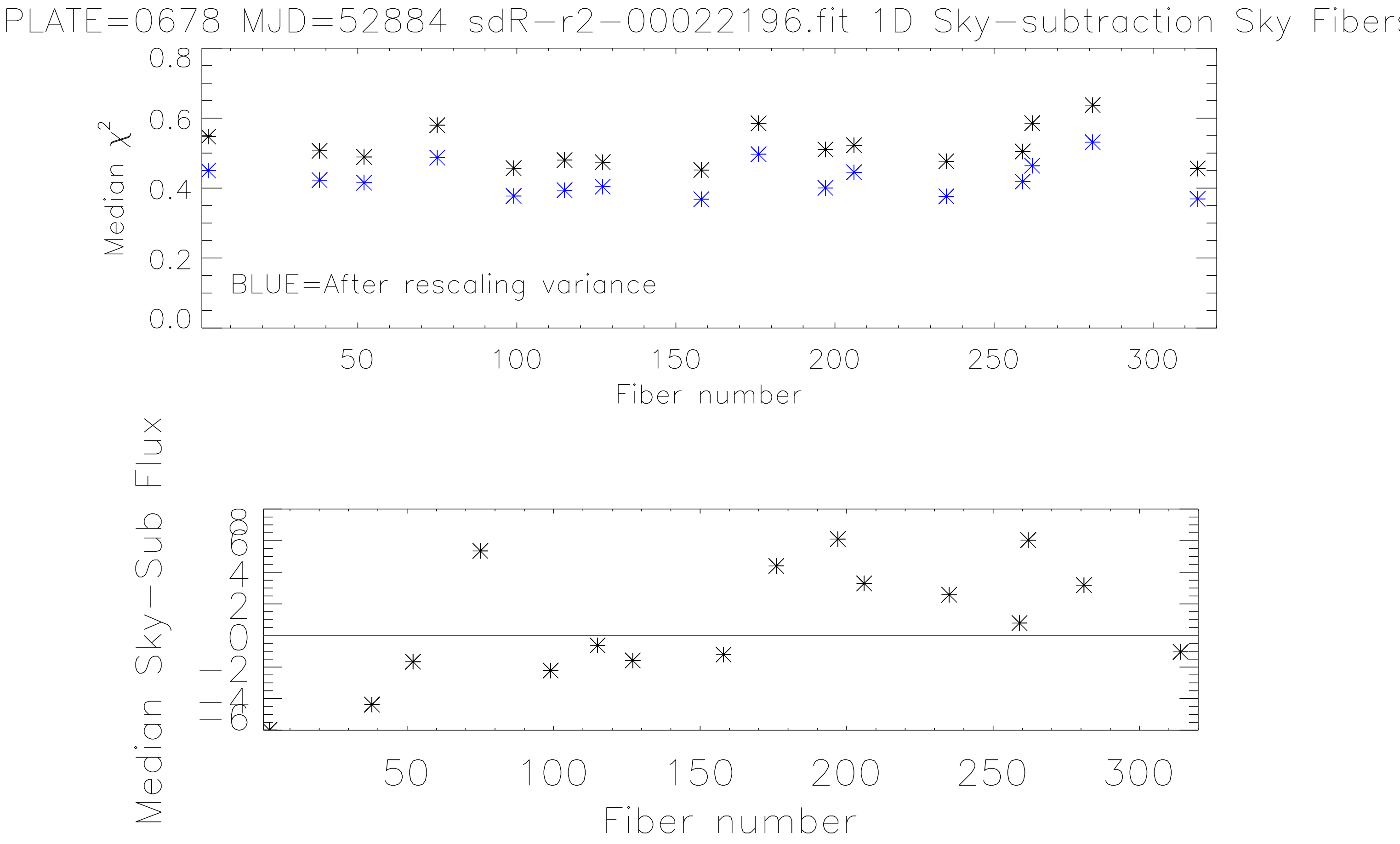

8919.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

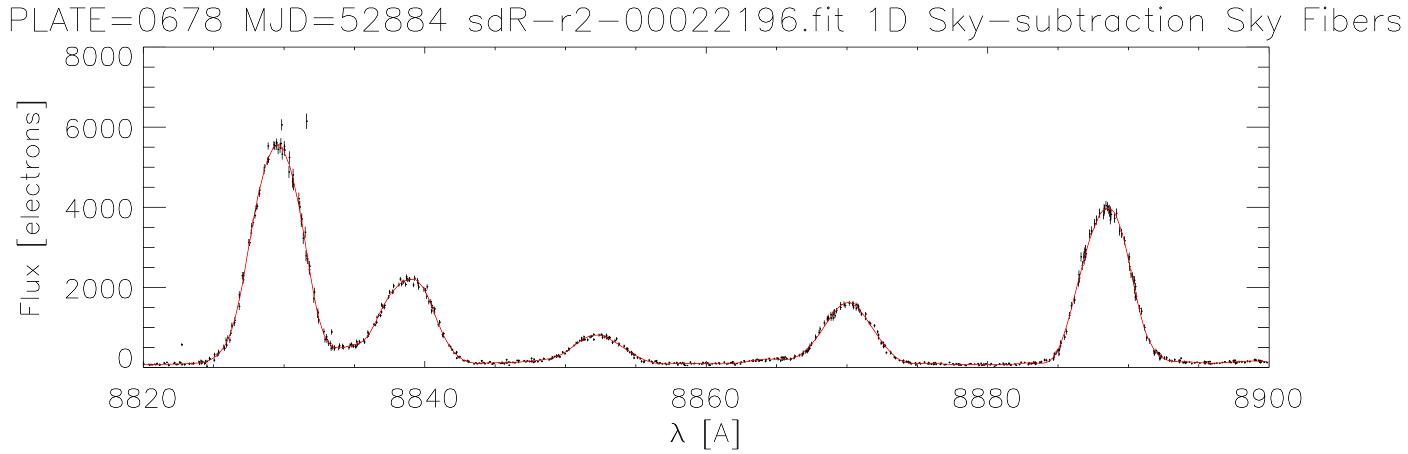

6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd −0.29
6363.7760
nfib1 16
nfib2 16
stdev 0.029
extrd −0.24
6553.6100
nfib1 16
nfib2 16
stdev 0.029
extrd −0.21
6923.2100
nfib1 16
nfib2 16
stdev 0.018
extrd −0.21
6949.0300
nfib1 16
nfib2 16
stdev 0.031
extrd −0.16
7571.7500
nfib1 15
nfib2 15
stdev 0.051
extrd −0.18
7794.1200
nfib1 16
nfib2 16
stdev 0.016
extrd −0.29
7821.5100
nfib1 16
nfib2 16
stdev 0.019
extrd −0.26
8399.1600
nfib1 16
nfib2 16
stdev 0.016
extrd −0.20
8430.1700
nfib1 16
nfib2 16
stdev 0.032
extrd −0.21
8885.8300
nfib1 16
nfib2 16
stdev 0.032
extrd −0.17
8919.6100
nfib1 16
nfib2 16
stdev 0.032
extrd −0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

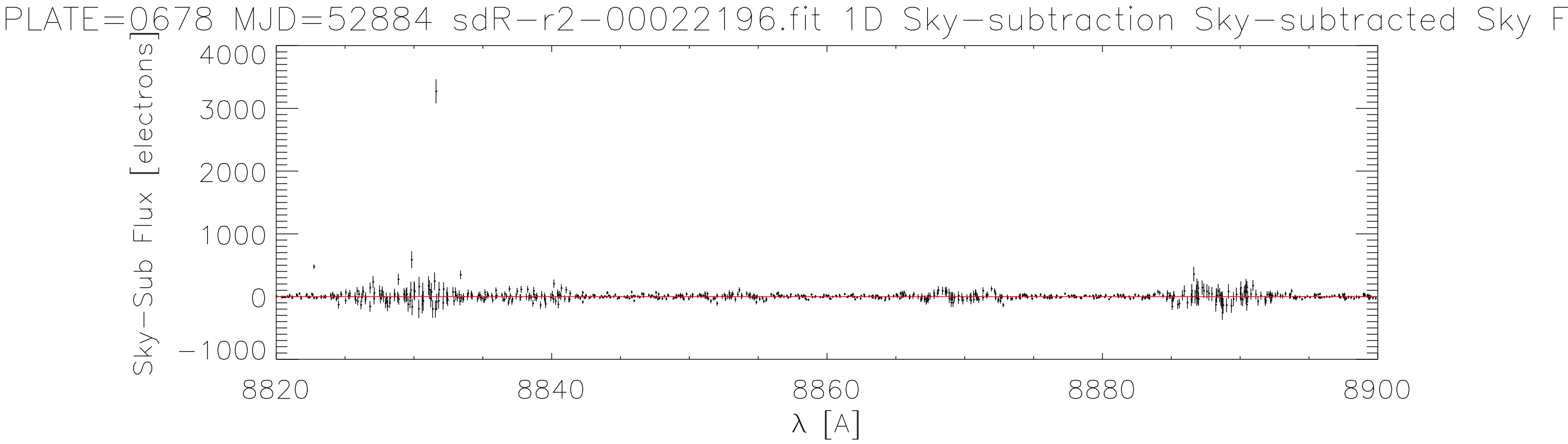

sky shift, pixels
−0.16
−0.18
−0.20
−0.22
−0.24
−0.26
−0.28
5000
6000
7000
8000
9000
10000

PLATE=0678 MJD=52884 Smooth superflat for sdR-r2-00022196.fit



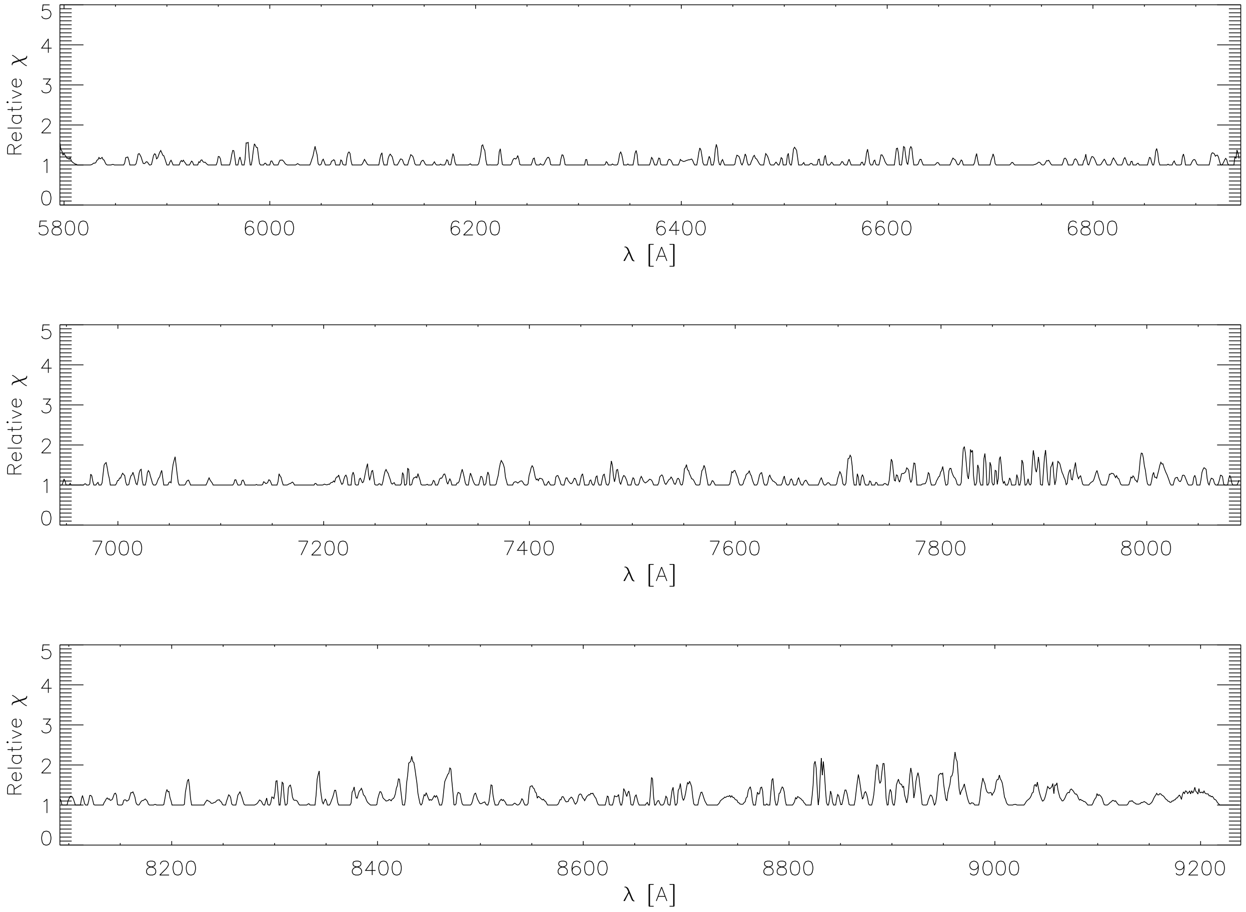

PLATE=0678 MJD=52884 sdR-r2-00022196.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
8
6
4
2
0
-2
-4
-6
50
100
150
200
250
300
Fiber number

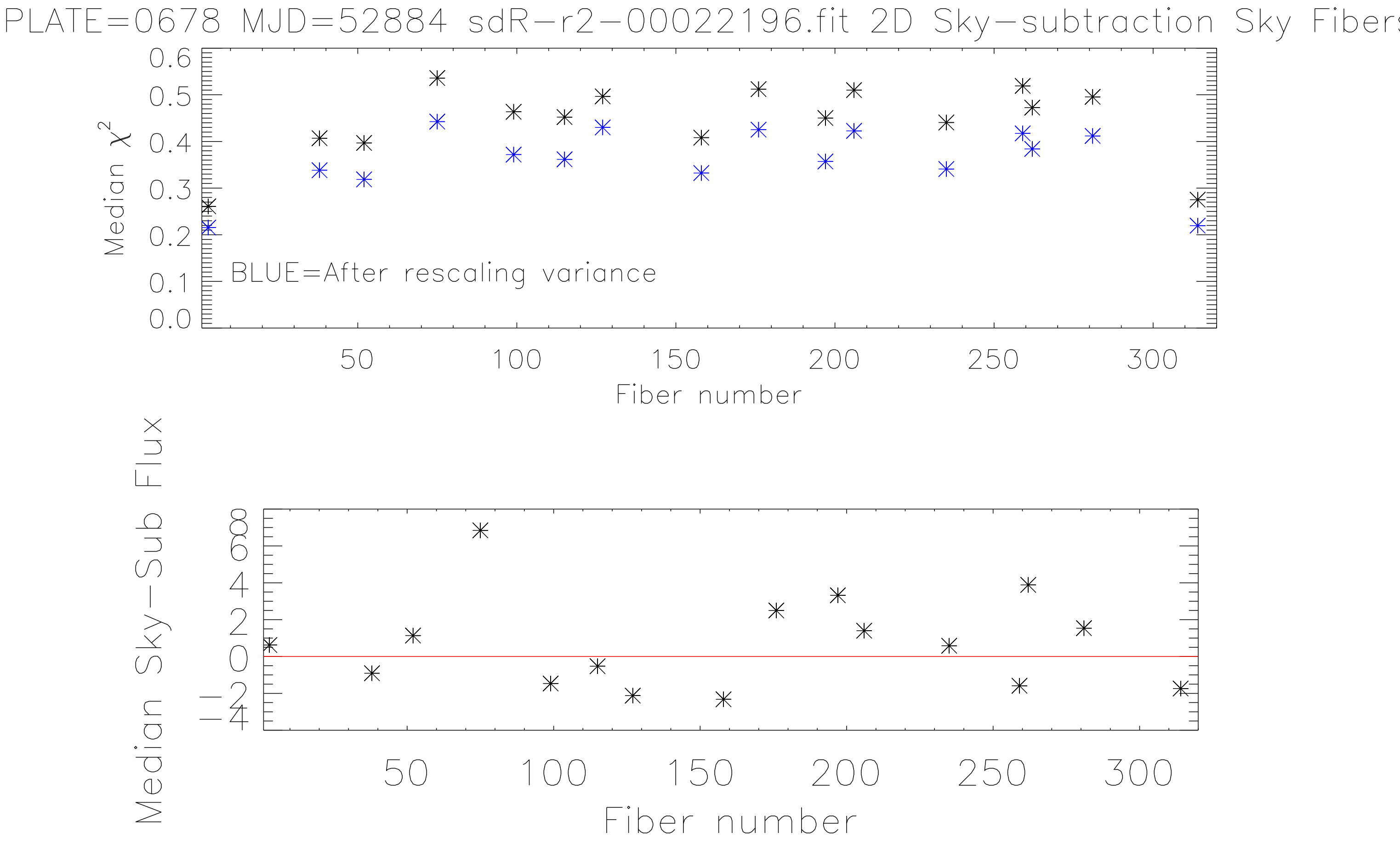

PLATE=0678 MJD=52884 sdR-r2-00022196.fit 1D Sky-subtraction Sky Fibers

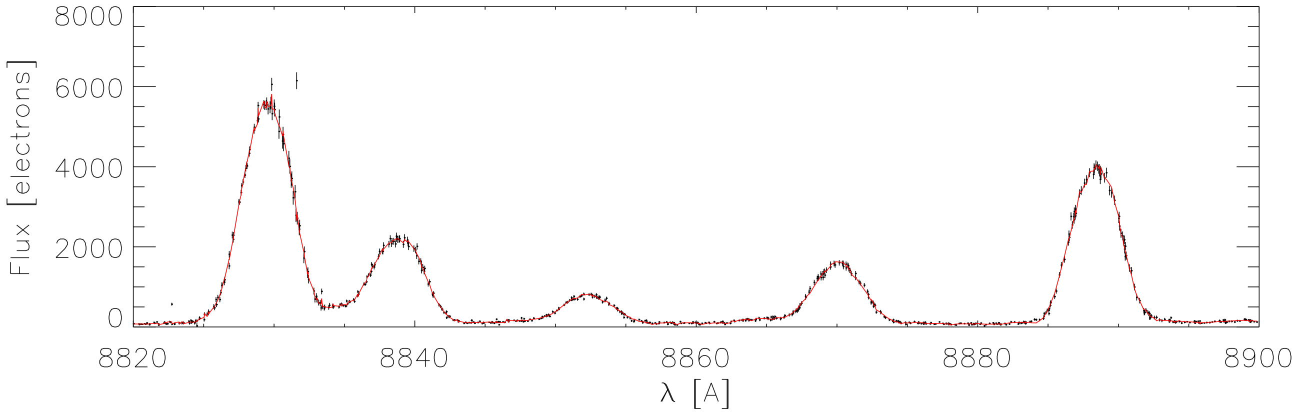

PLATE=0678 MJD=52884 sdR-r2-00022196.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 16

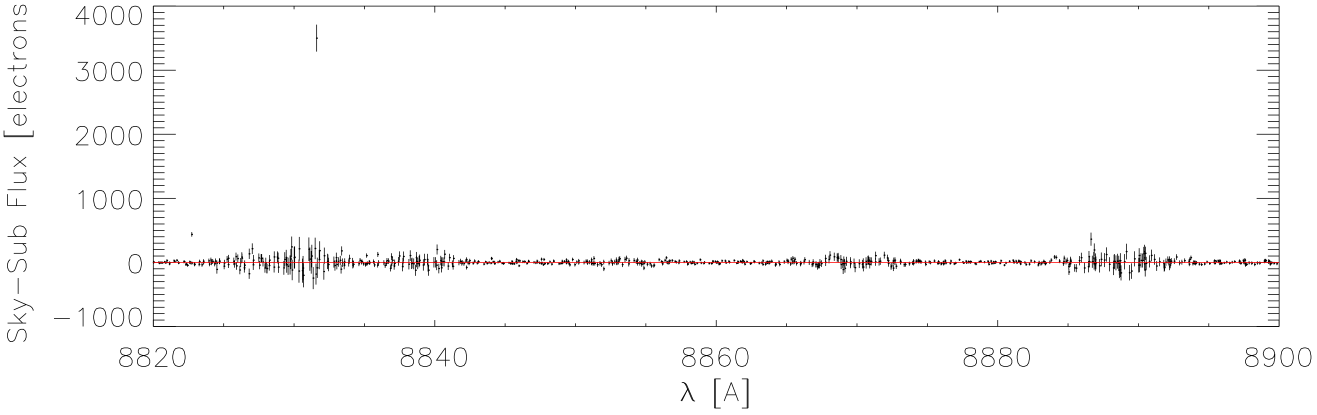
PLATE=0678 MJD=52884 sdR-r2-00022196.fit 1D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-r2-00022196.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
8
50
100
150
200
250
300
Fiber number



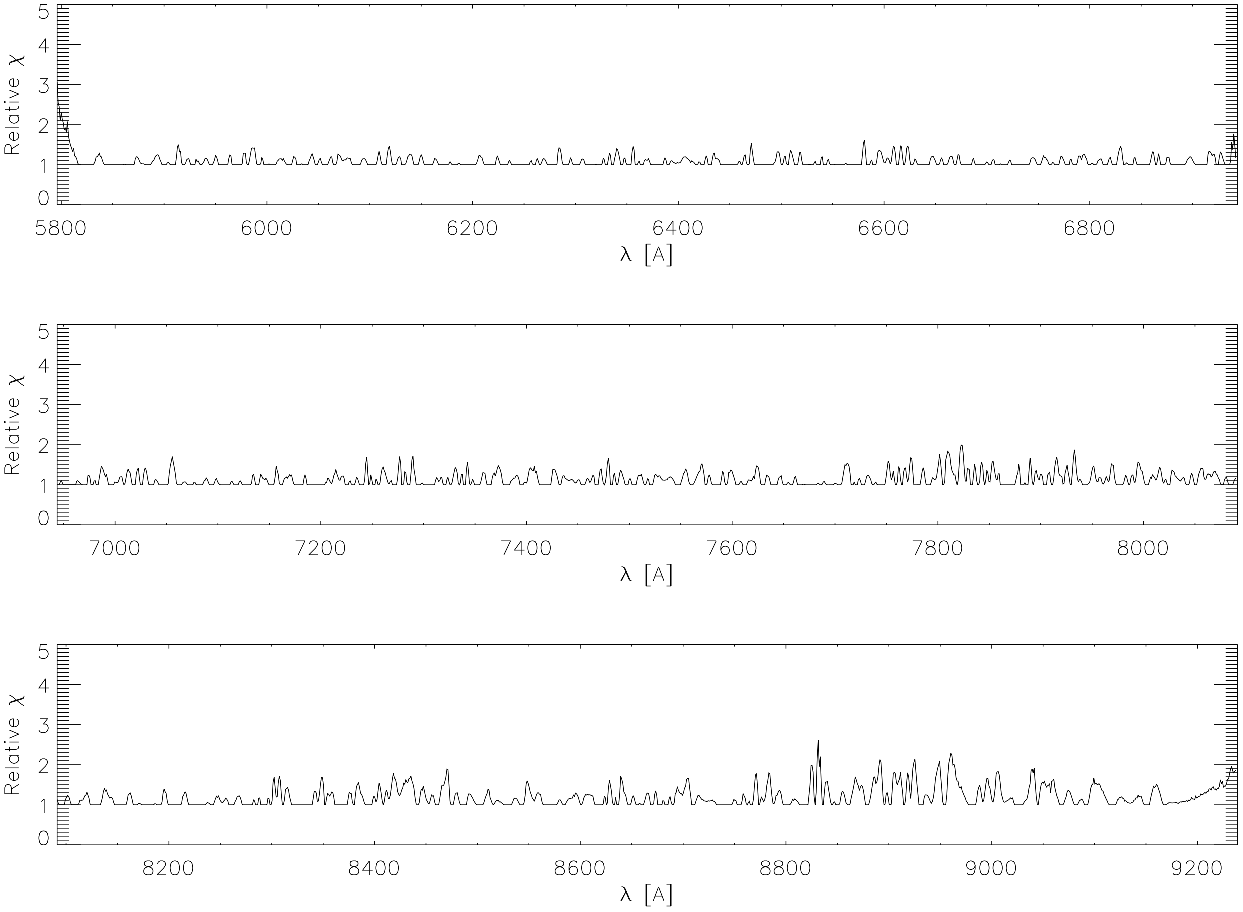
PLATE=0678 MJD=52884 sdR-r2-00022196.fit 2D Sky-subtraction Sky Fibers

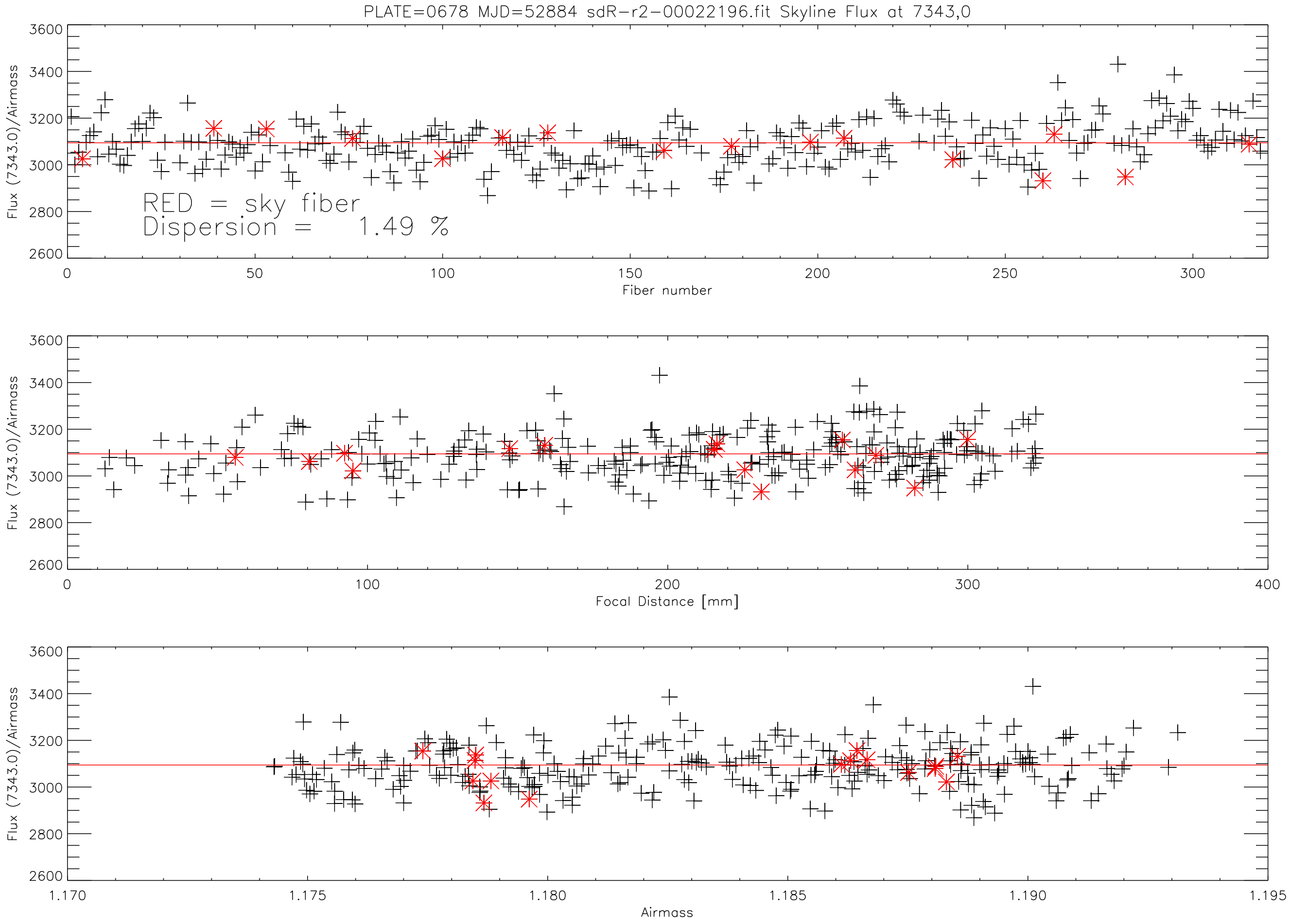


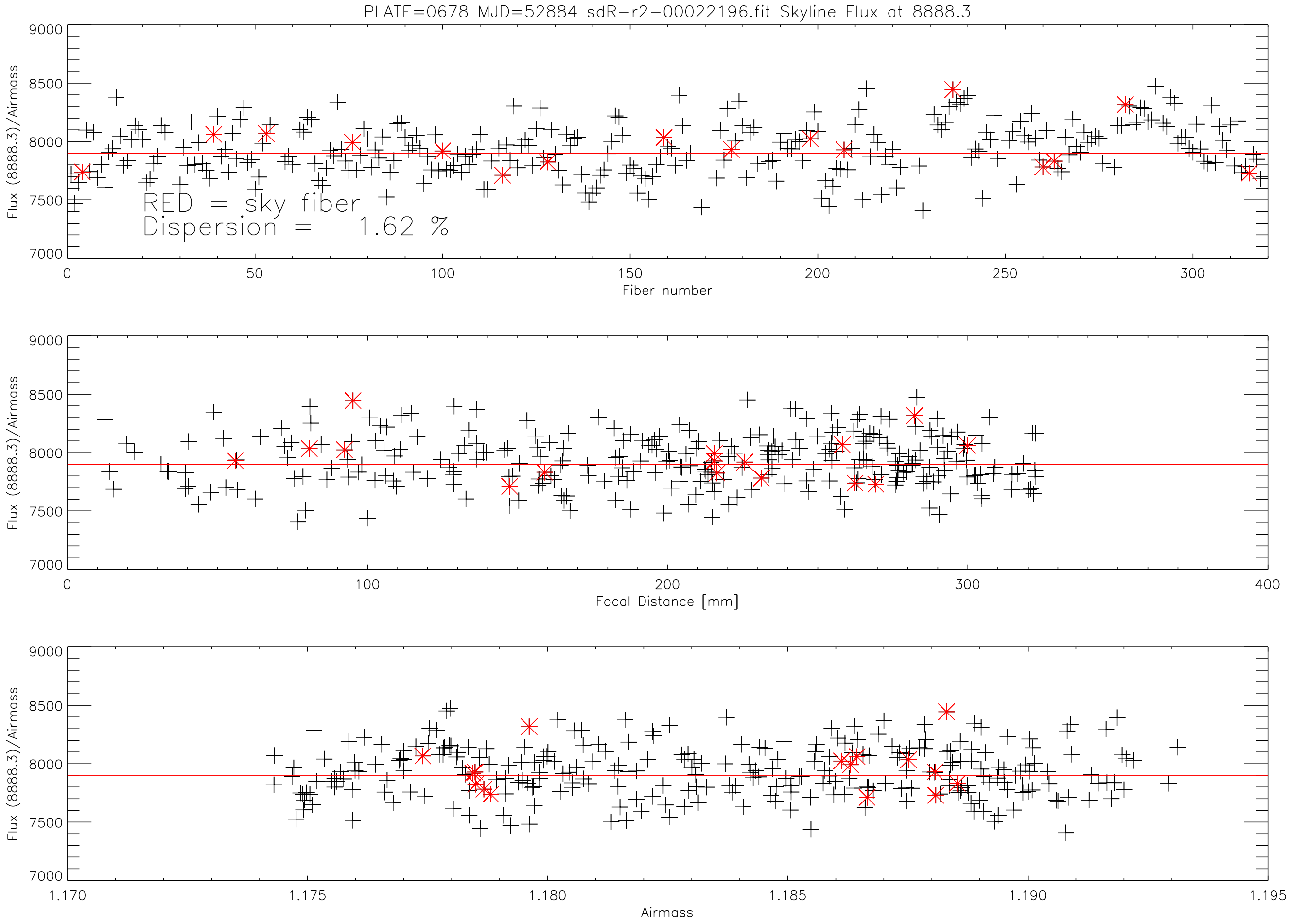
PLATE=0678 MJD=52884 sdR-r2-00022196.fit 2D Sky-subtraction Sky-subtracted Sky F

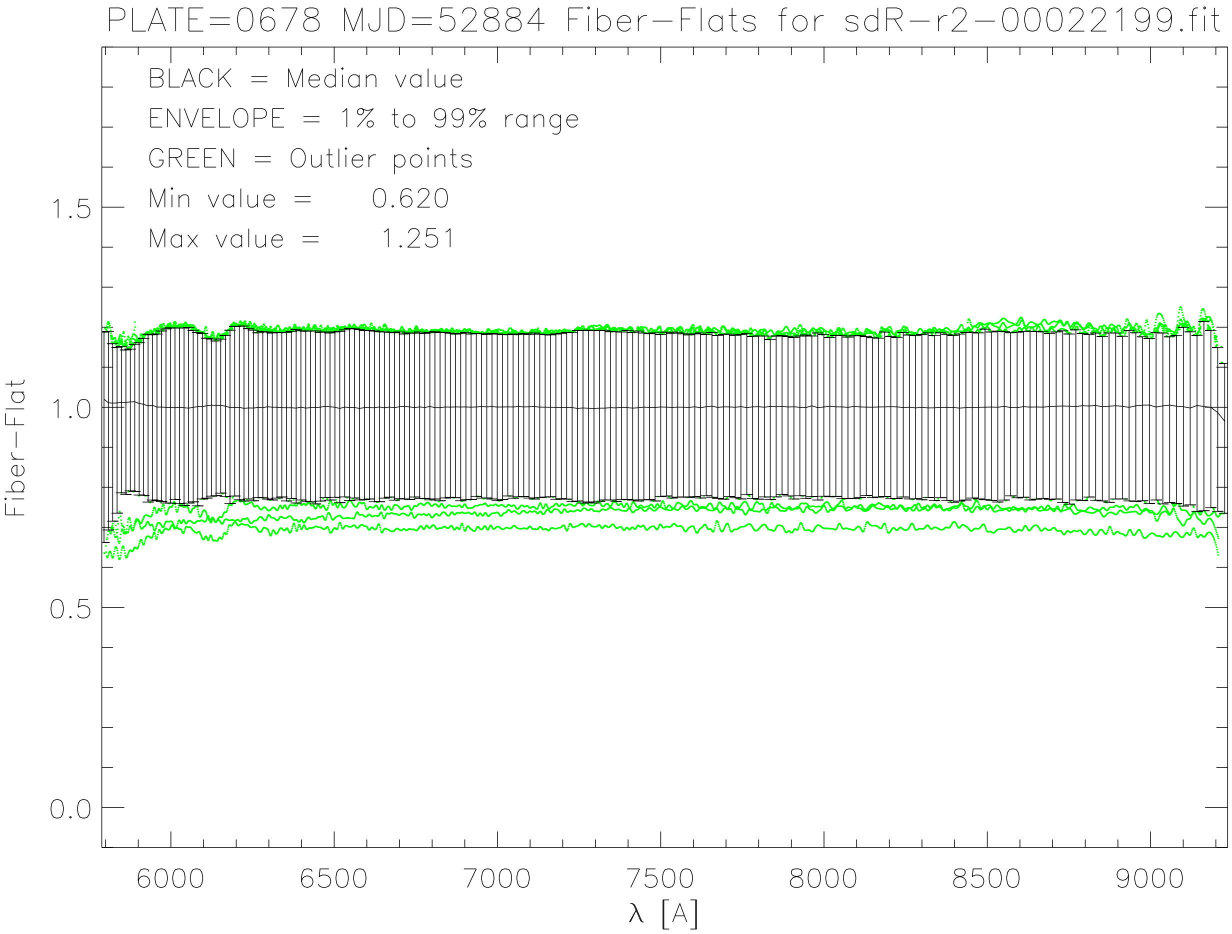
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-r2-00022196.fit 2D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-r2-00022196.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
RED = sky fiber
Dispersion = 1.49 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3600
3400
3200
3000
2800
2600
1.170
1.175
1.180
1.185
1.190
1.195
Airmass

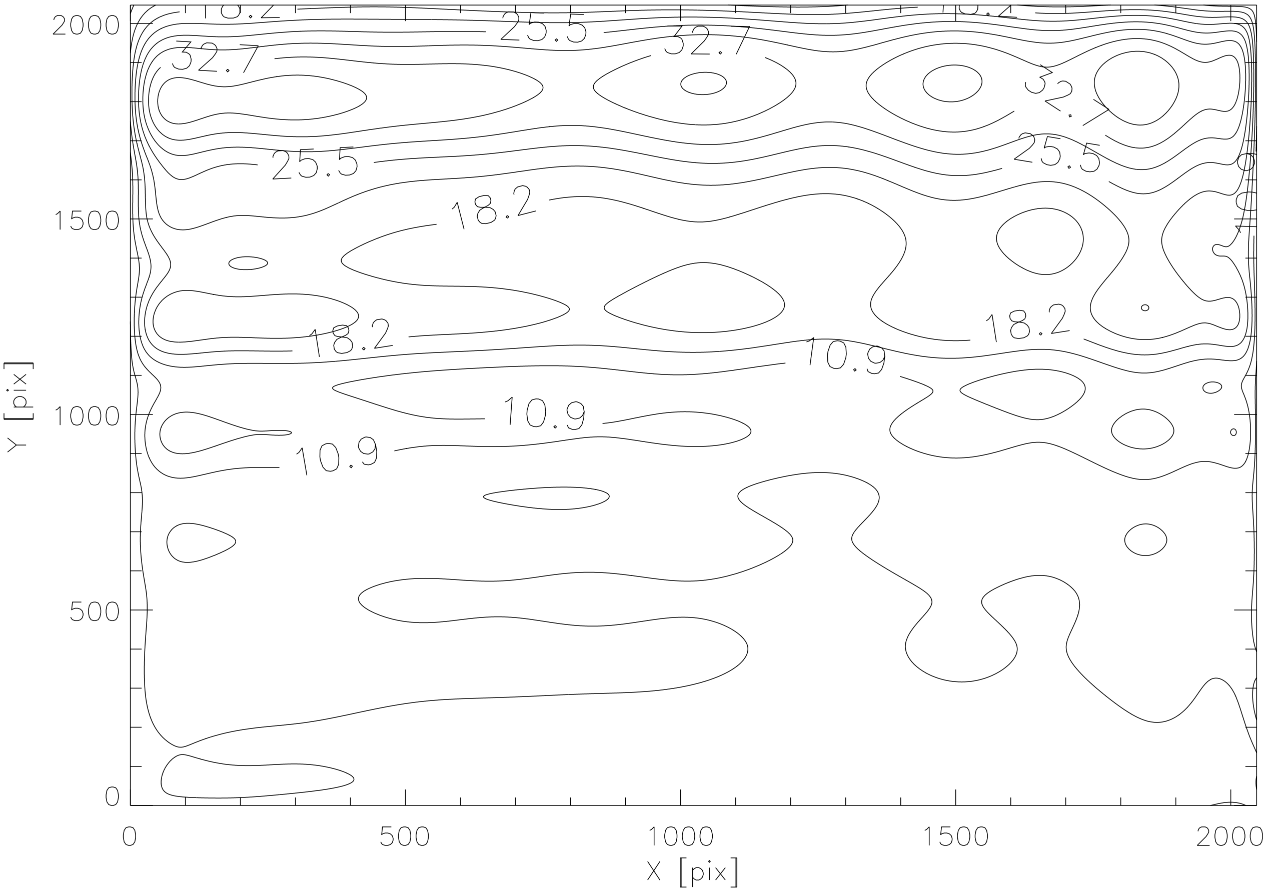

PLATE=0678 MJD=52884 sdR-r2-00022196.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
9000
8500
8000
7500
7000
RED = sky fiber
Dispersion = 1.62 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
9000
8500
8000
7500
7000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
9000
8500
8000
7500
7000
1.170
1.175
1.180
1.185
1.190
1.195
Airmass



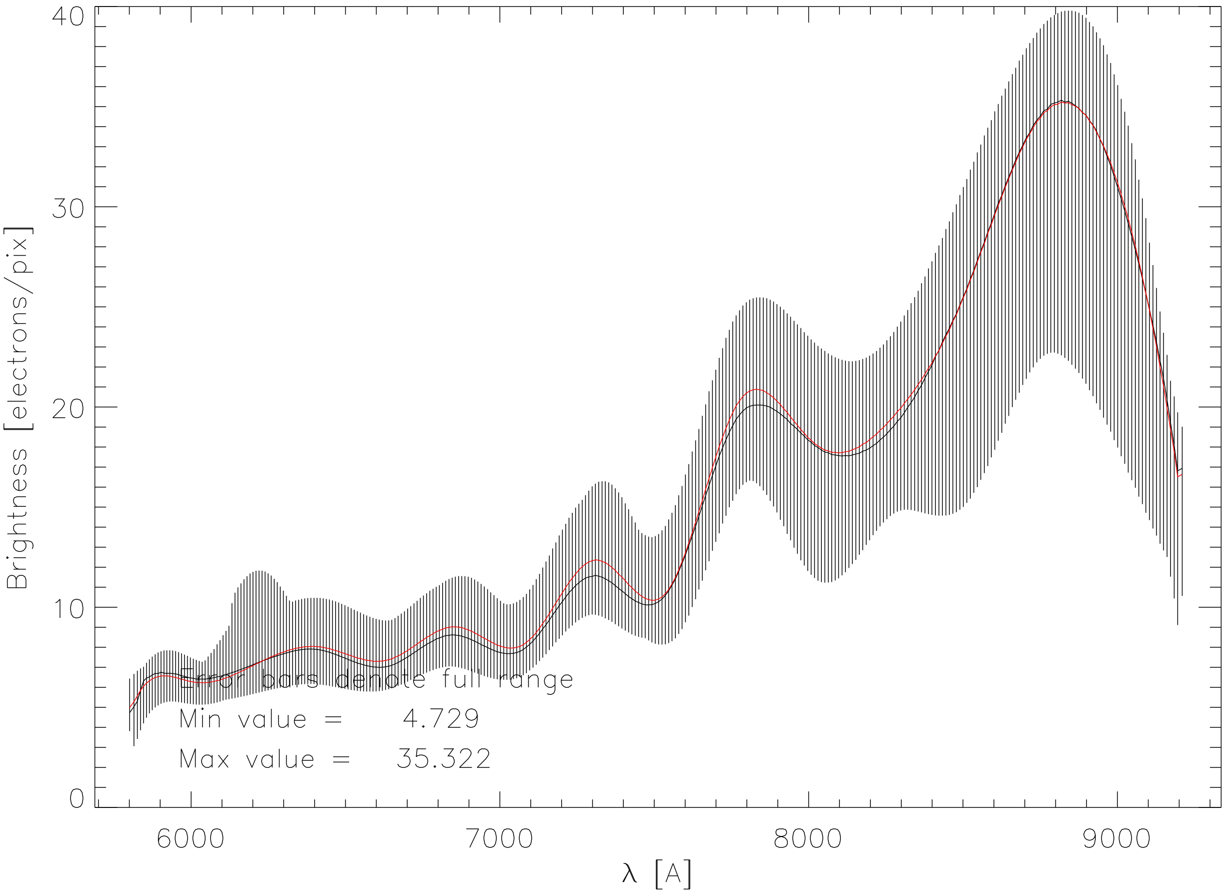
PLATE=0678 MJD=52884 Fiber−Flats for sdR−r2−00022199.fit

Tue Feb 26 00:33:26 2008

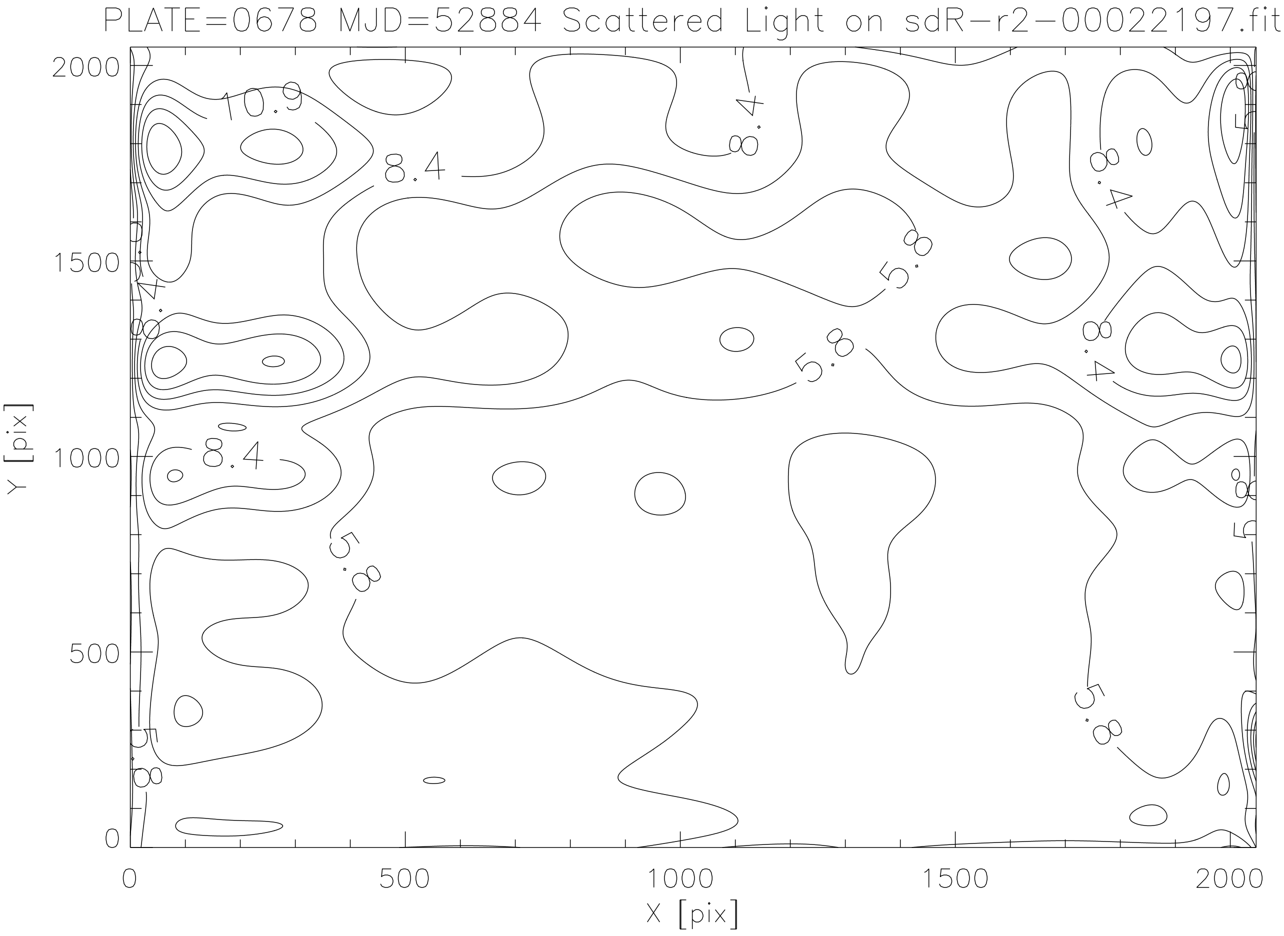
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022197.fi



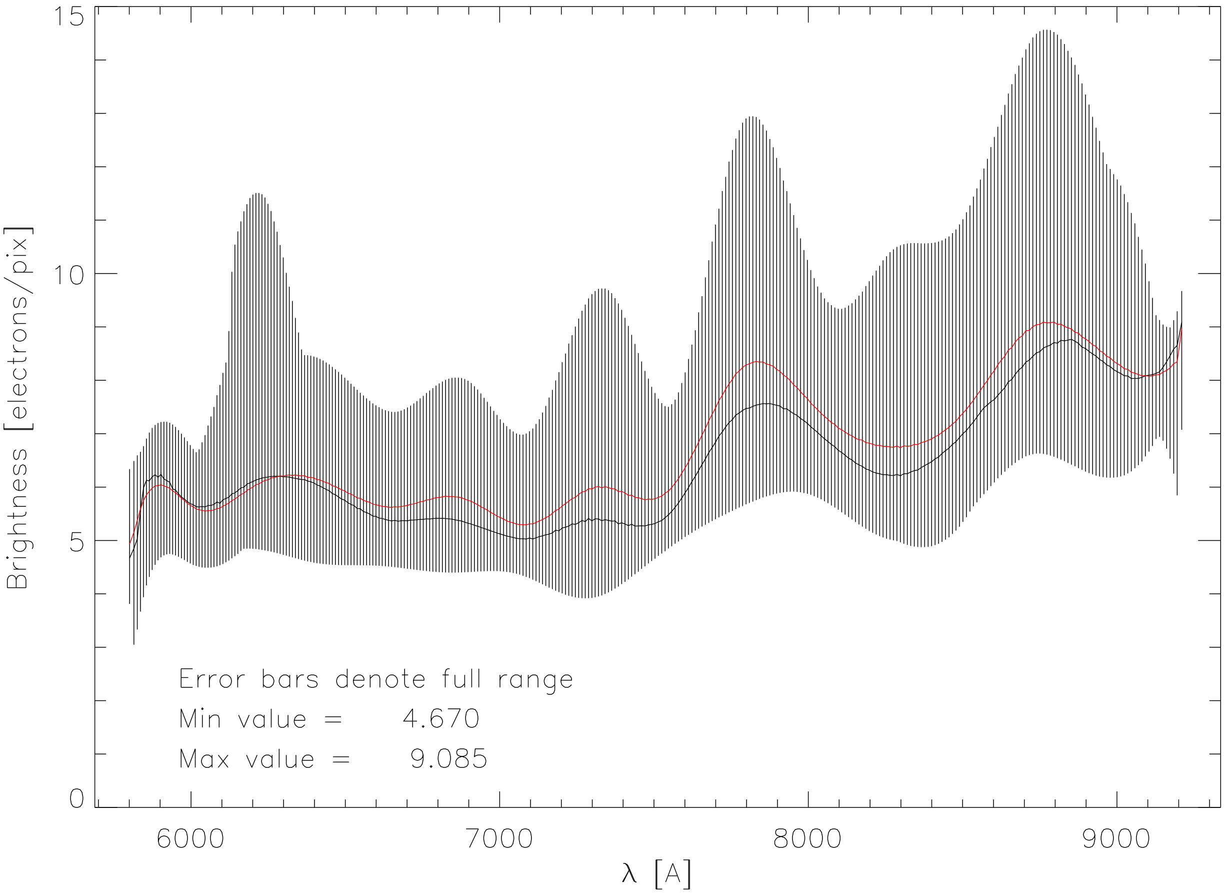
PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022197.fi



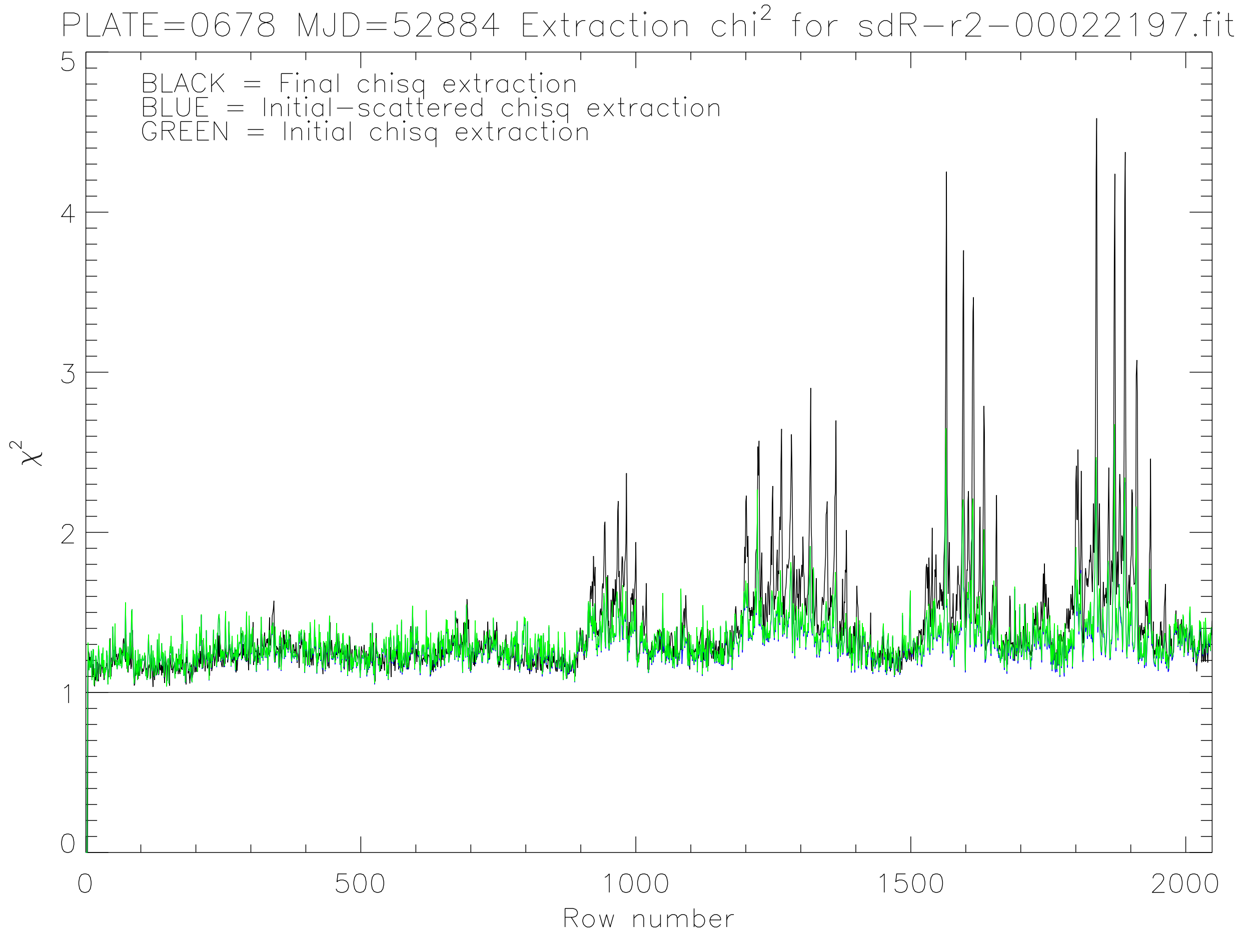
Tue Feb 26 00:34:20 2008

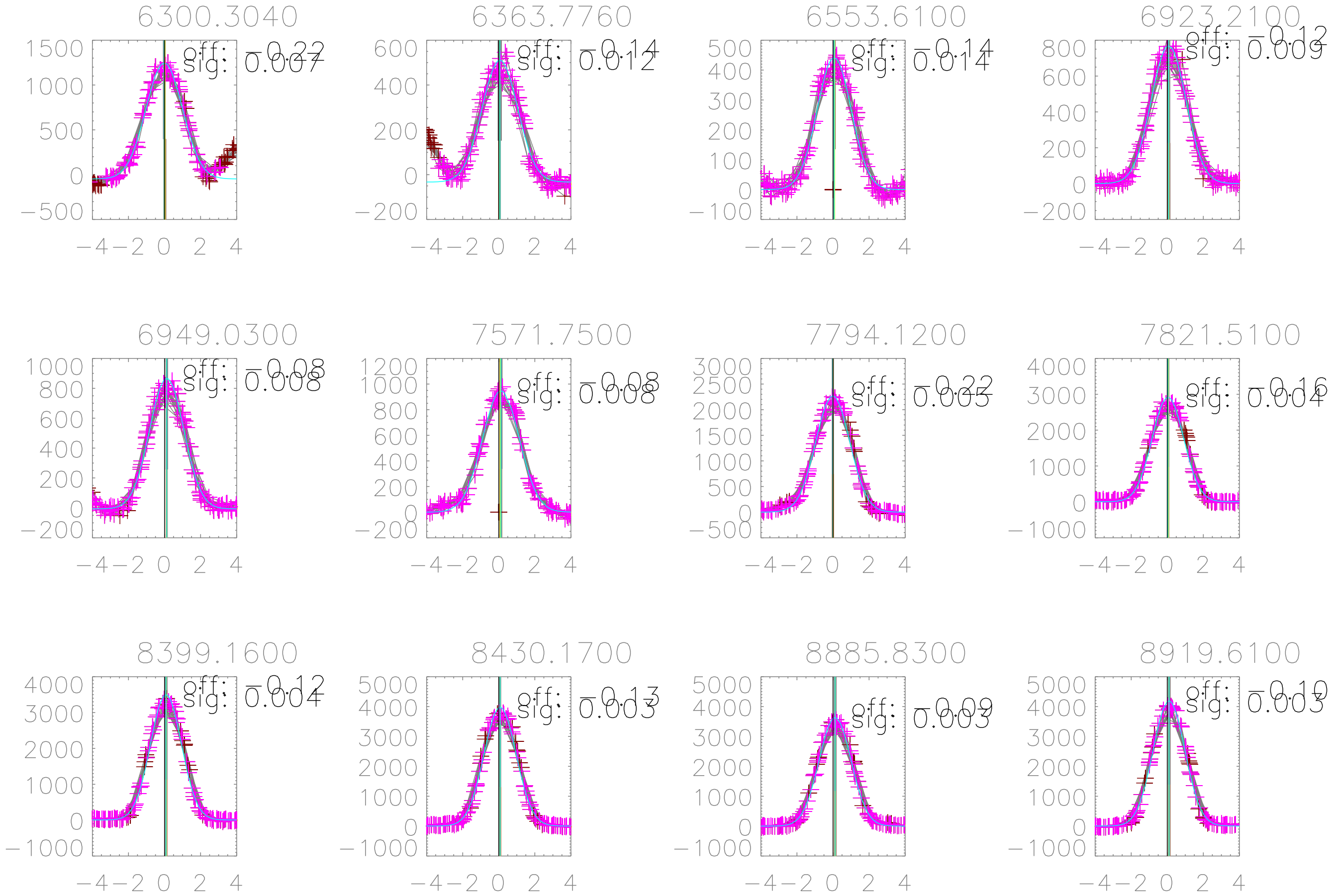

PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022197.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
10.9
8.4
8.4
8.4
8.4
8.4
8.4
5.8
5.8
5.8
5.8
5.8
5.8

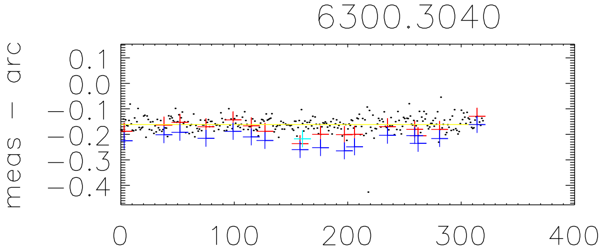
PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022197.fit

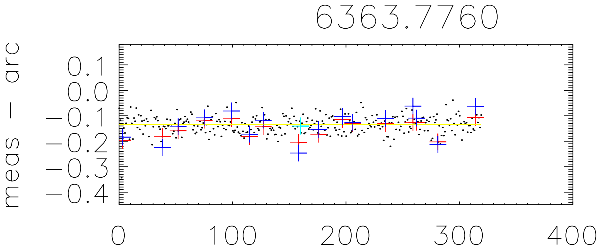


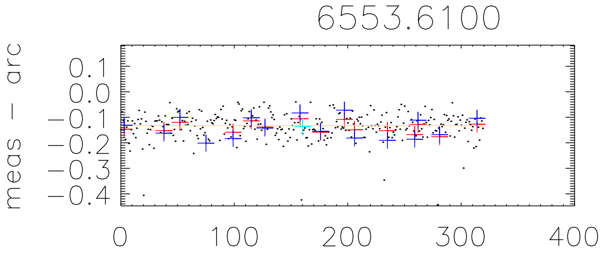
Tue Feb 26 00:37:34 2008

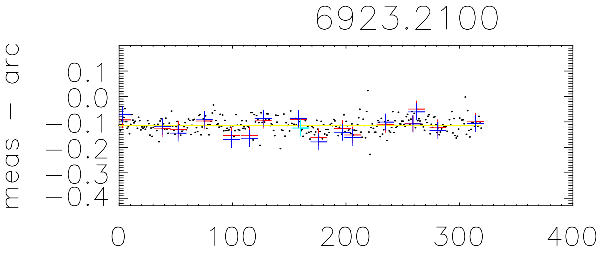

PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r2-00022197.fit

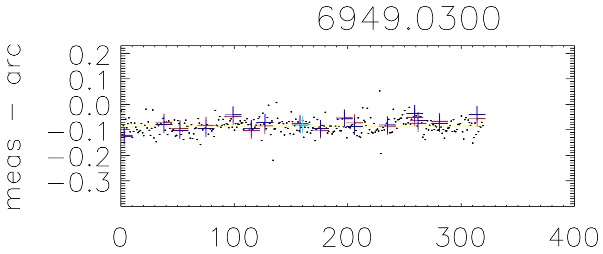

6300.3040
off: −0.22
sig: 0.007
6363.7760
off: −0.14
sig: 0.012
6553.6100
off: −0.14
sig: 0.014
6923.2100
off: −0.12
sig: 0.009
6949.0300
off: −0.08
sig: 0.008
7571.7500
off: −0.08
sig: 0.008
7794.1200
off: −0.22
sig: 0.005
7821.5100
off: −0.16
sig: 0.004
8399.1600
off: −0.12
sig: 0.004
8430.1700
off: −0.13
sig: 0.003
8885.8300
off: −0.09
sig: 0.003
8919.6100
off: −0.10
sig: 0.003
−4 −2 0 2 4

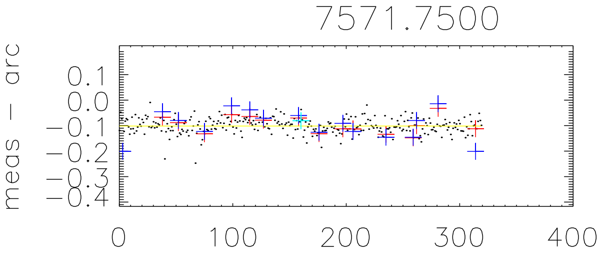

6300.3040
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

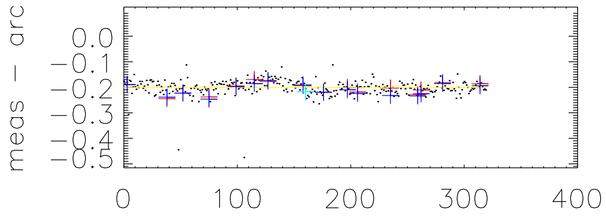

6553.6100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400


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

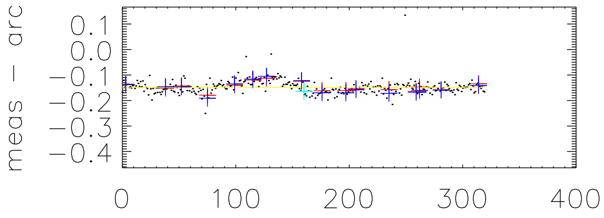

6949.0300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

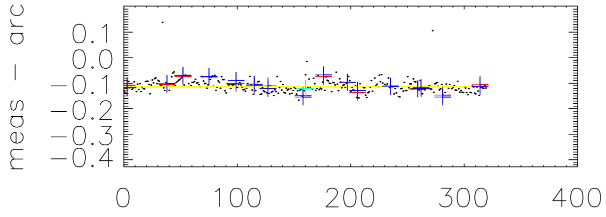
7794.1200



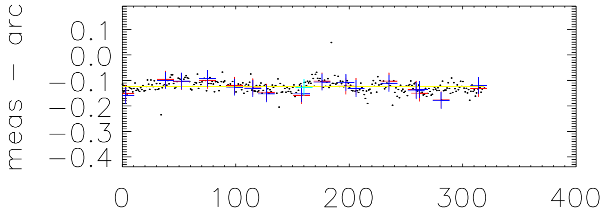
7821.5100



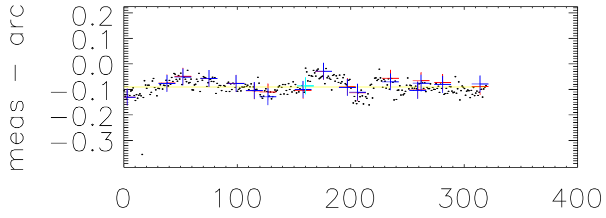
8399.1600



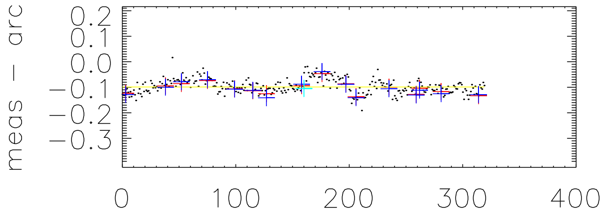
8430.1700

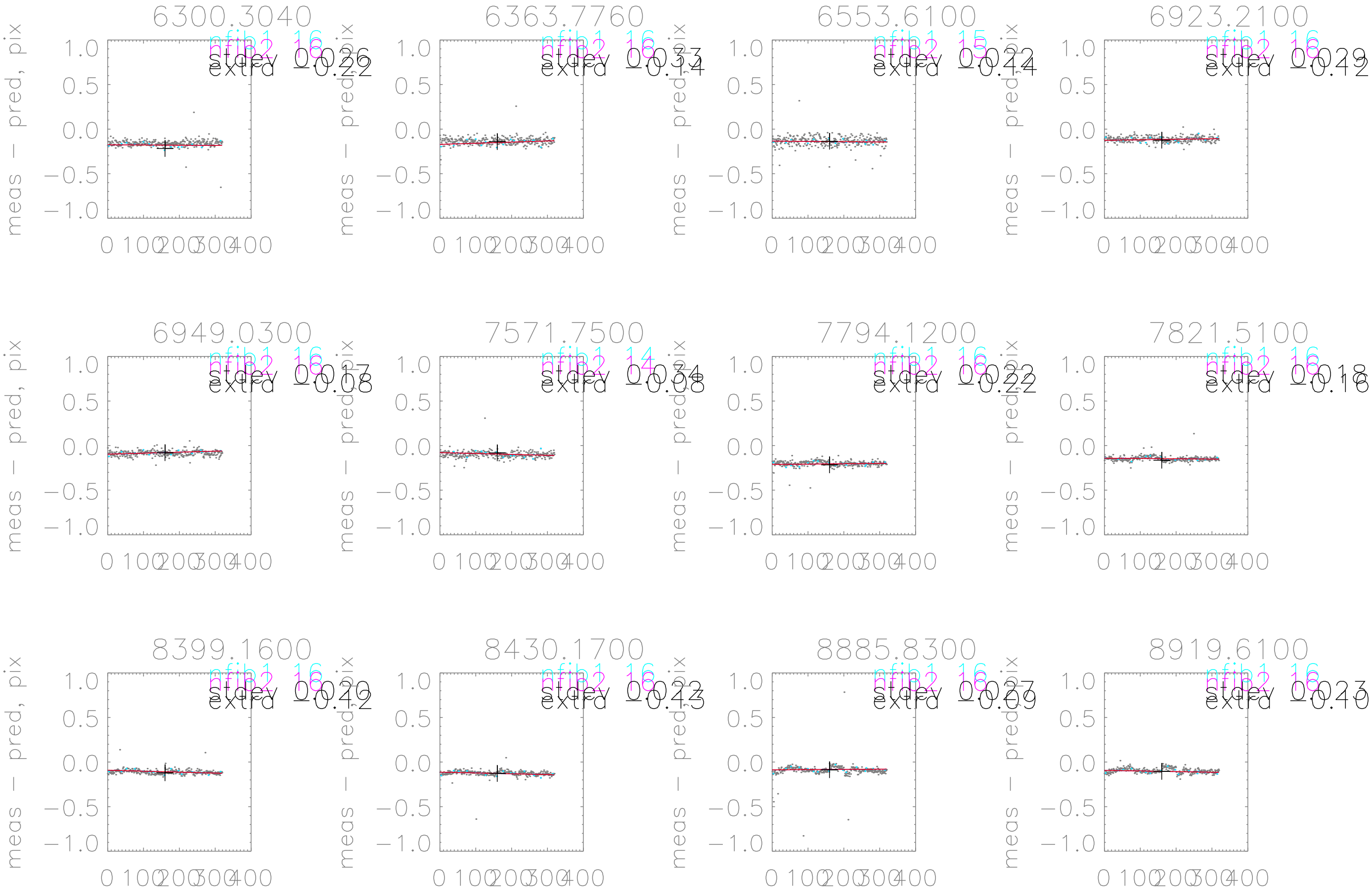


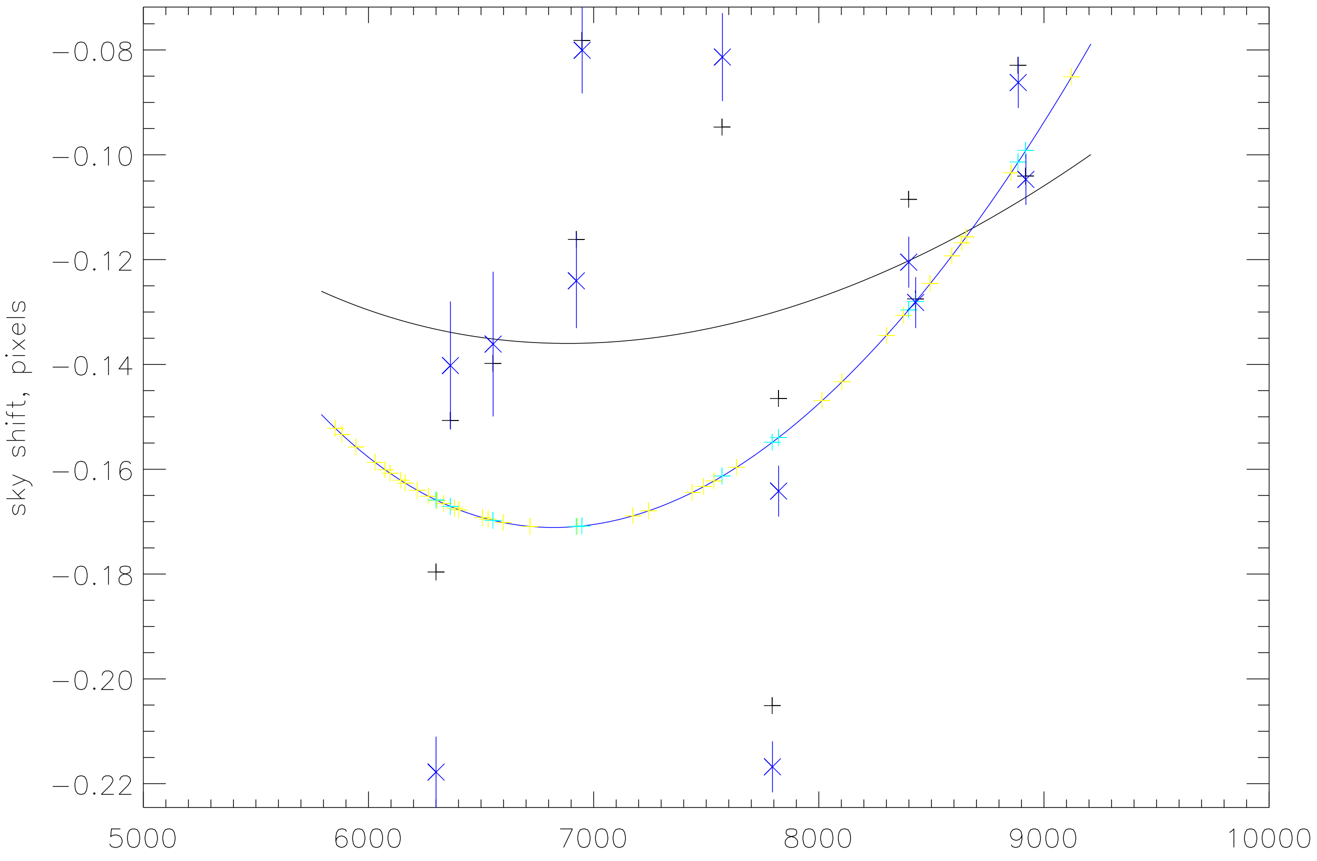
8885.8300

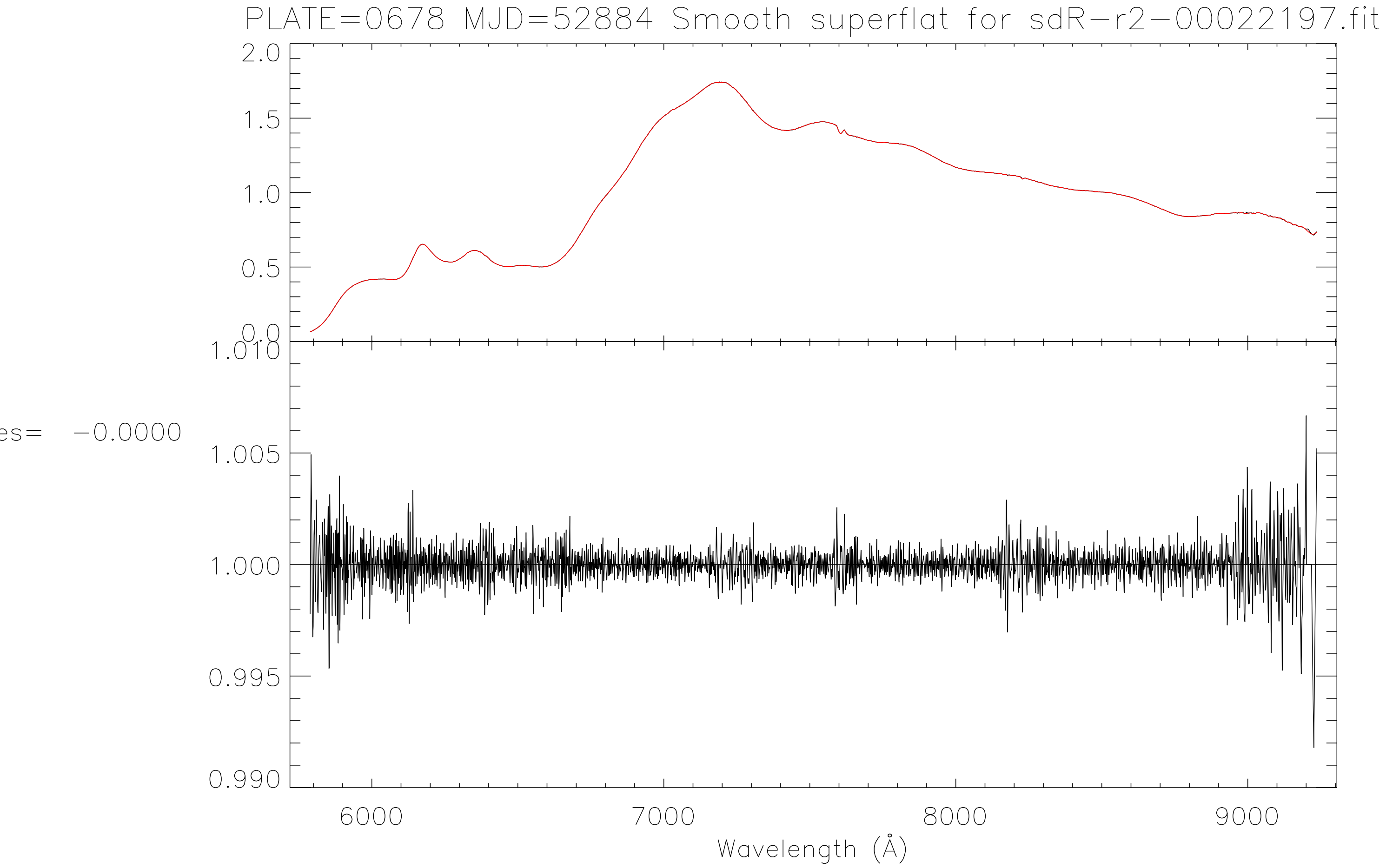


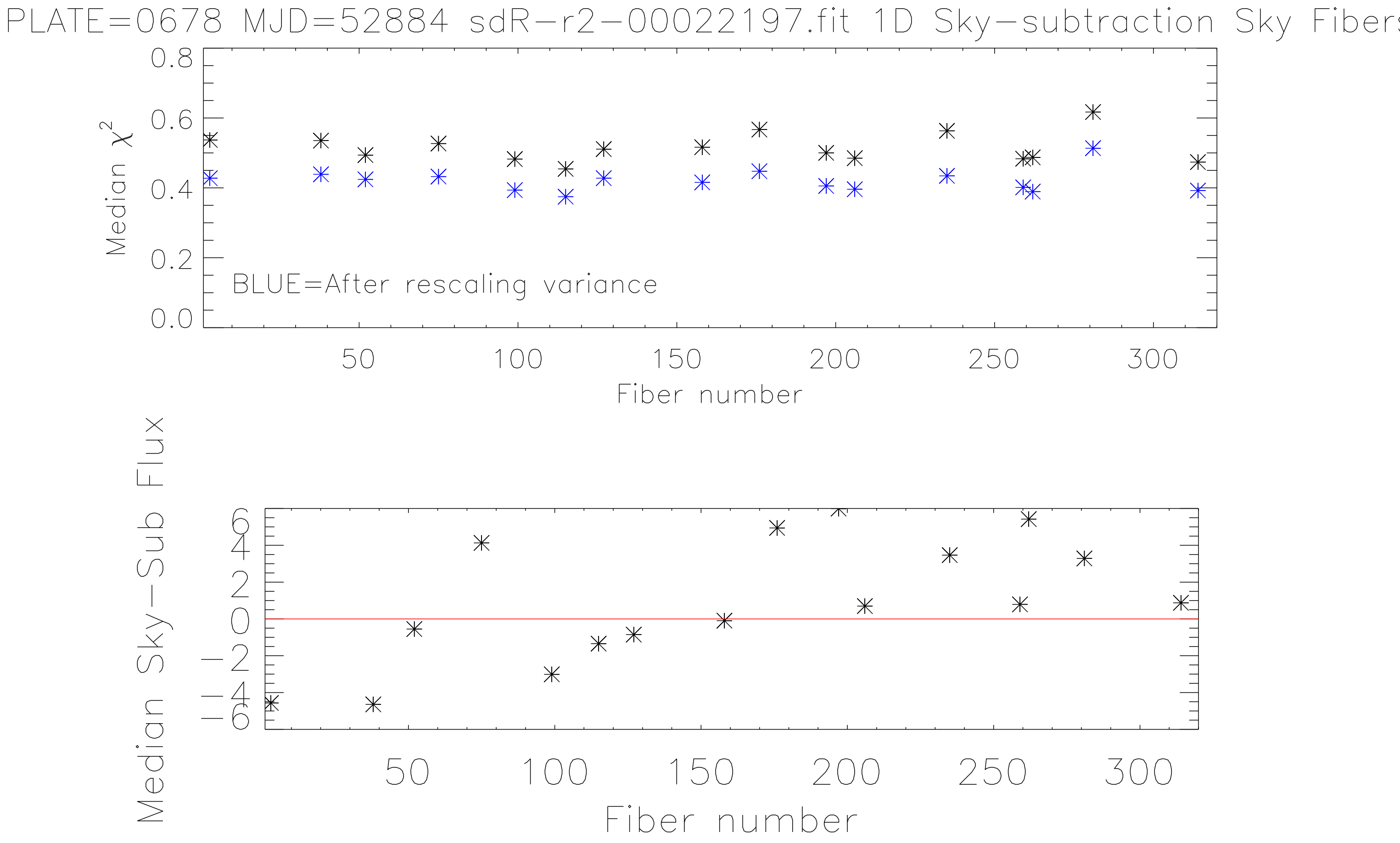
8919.6100

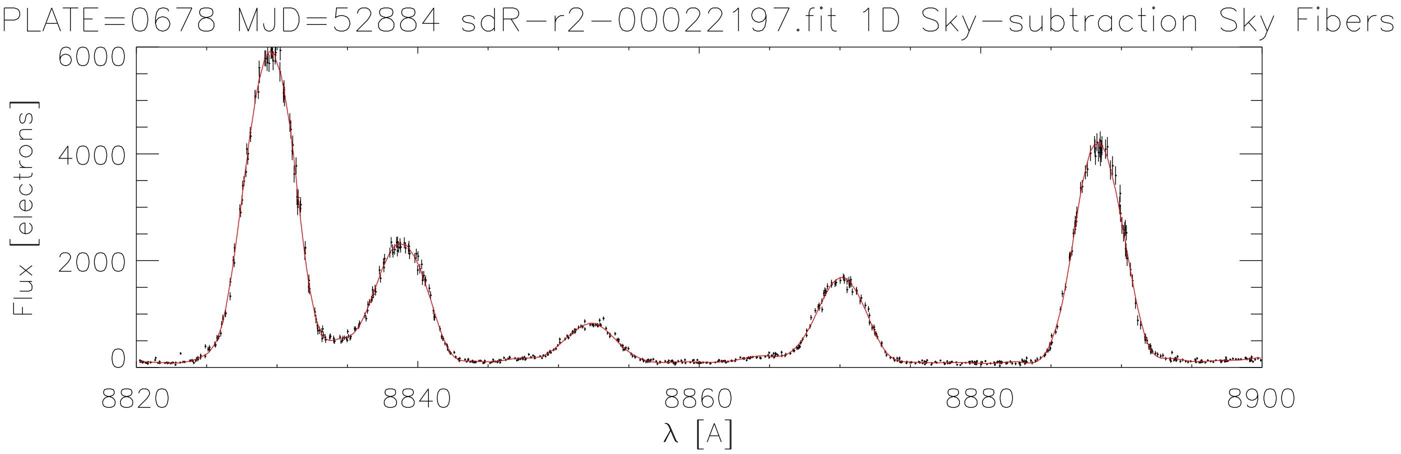



6300.3040
nfib1 16
nfib2 16
stdev 0.026
extrd −0.22
6363.7760
nfib1 16
nfib2 16
stdev 0.033
extrd −0.14
6553.6100
nfib1 15
nfib2 15
stdev 0.022
extrd −0.14
6923.2100
nfib1 16
nfib2 16
stdev 0.029
extrd −0.12
6949.0300
nfib1 16
nfib2 16
stdev 0.017
extrd −0.08
7571.7500
nfib1 14
nfib2 14
stdev 0.034
extrd −0.08
7794.1200
nfib1 16
nfib2 16
stdev 0.022
extrd −0.22
7821.5100
nfib1 16
nfib2 16
stdev 0.018
extrd −0.16
8399.1600
nfib1 16
nfib2 16
stdev 0.020
extrd −0.12
8430.1700
nfib1 16
nfib2 16
stdev 0.022
extrd −0.13
8885.8300
nfib1 16
nfib2 16
stdev 0.027
extrd −0.09
8919.6100
nfib1 16
nfib2 16
stdev 0.023
extrd −0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

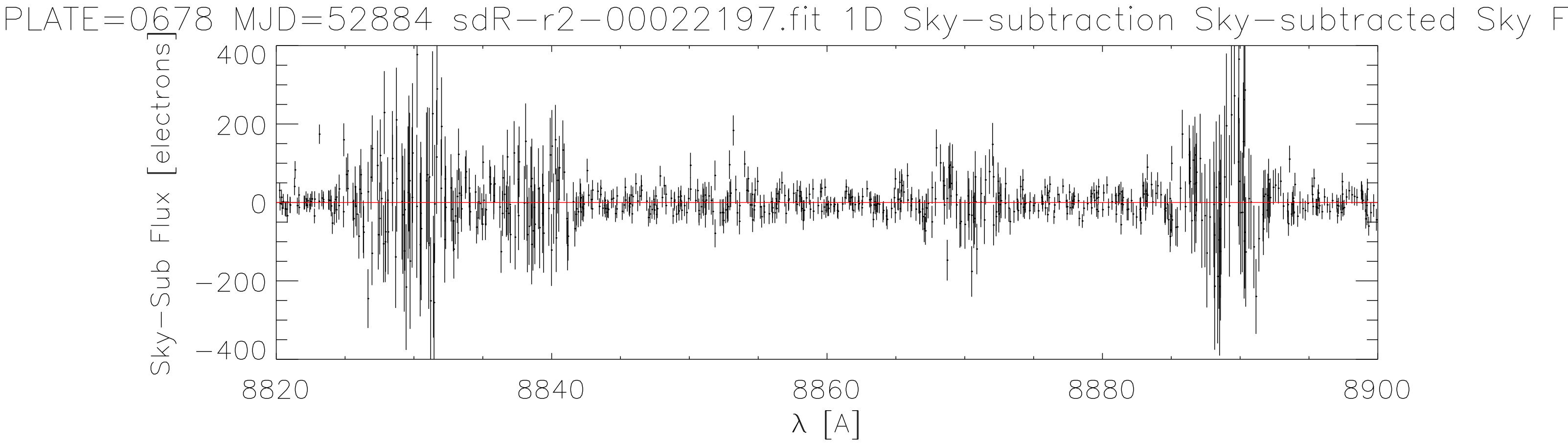

sky shift, pixels
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
−0.22
5000
6000
7000
8000
9000
10000


PLATE=0678 MJD=52884 Smooth superflat for sdR-r2-00022197.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=0678 MJD=52884 sdR-r2-00022197.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number



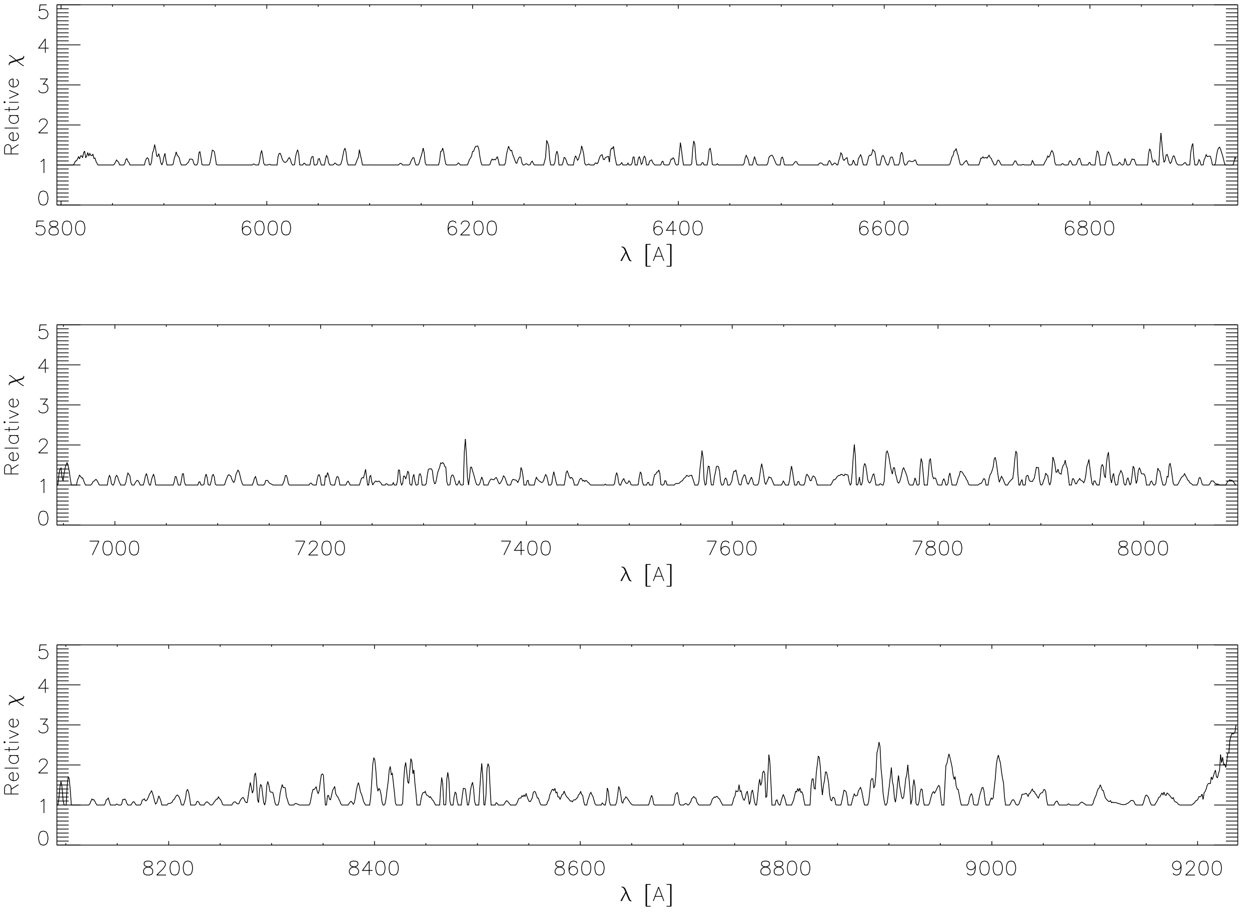
PLATE=0678 MJD=52884 sdR-r2-00022197.fit 1D Sky-subtraction Sky Fibers

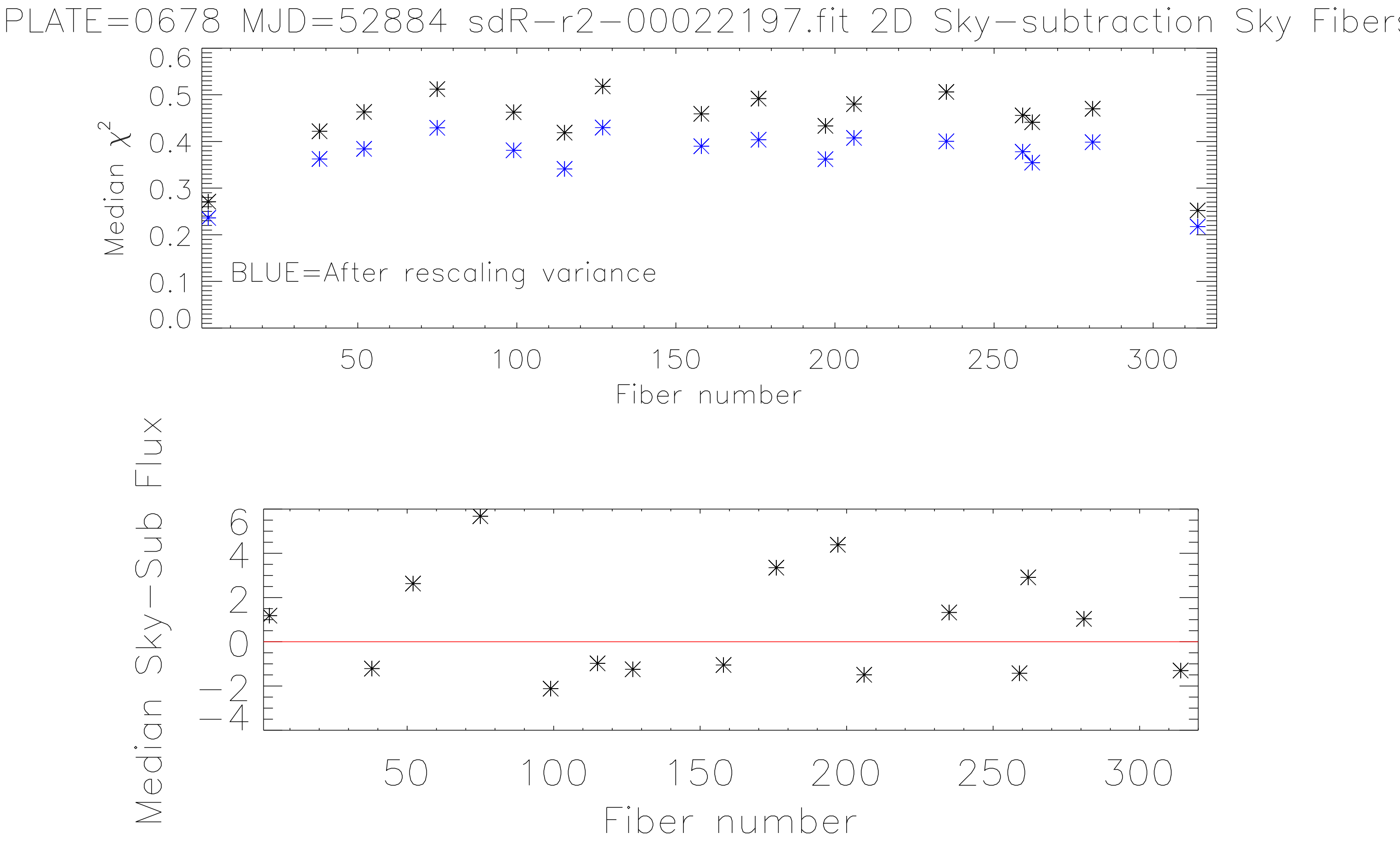


PLATE=0678 MJD=52884 sdR-r2-00022197.fit 1D Sky-subtraction Sky-subtracted Sky F

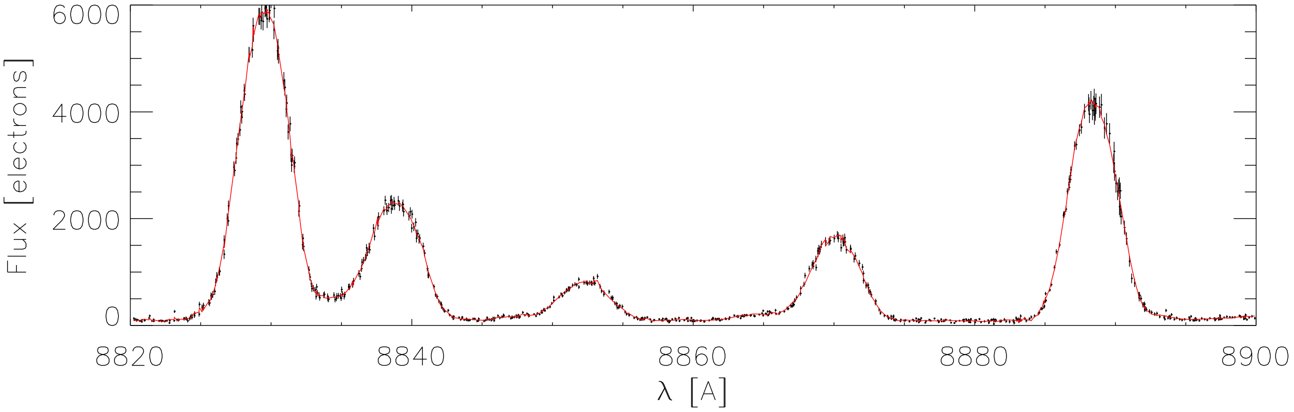
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-r2-00022197.fit 1D Sky-subtraction Rescaled Errors

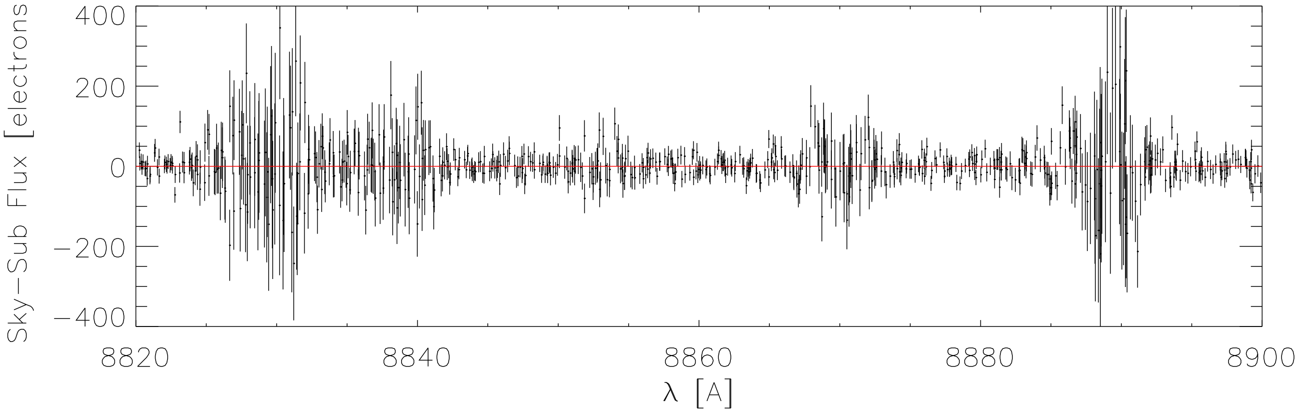


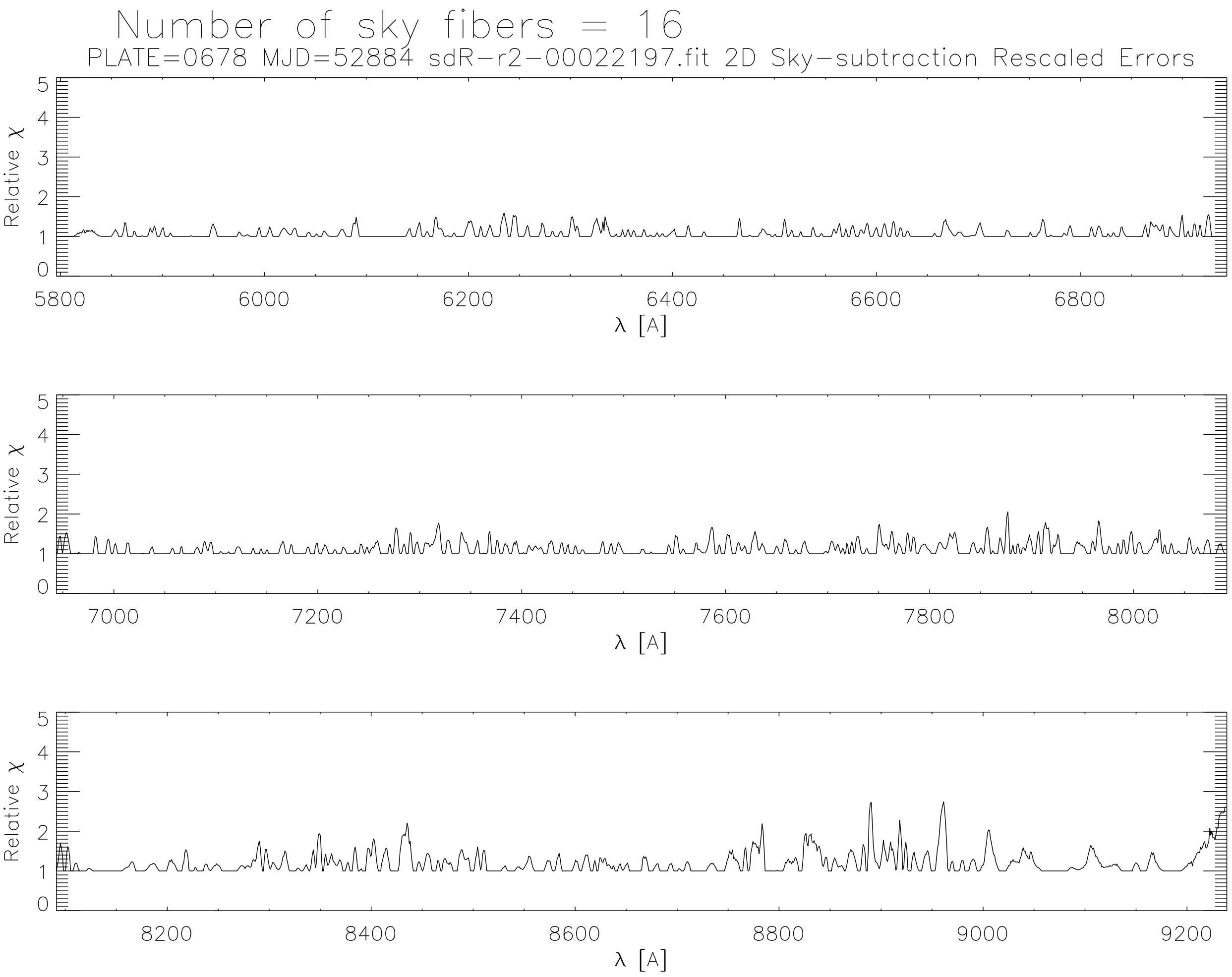

PLATE=0678 MJD=52884 sdR-r2-00022197.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

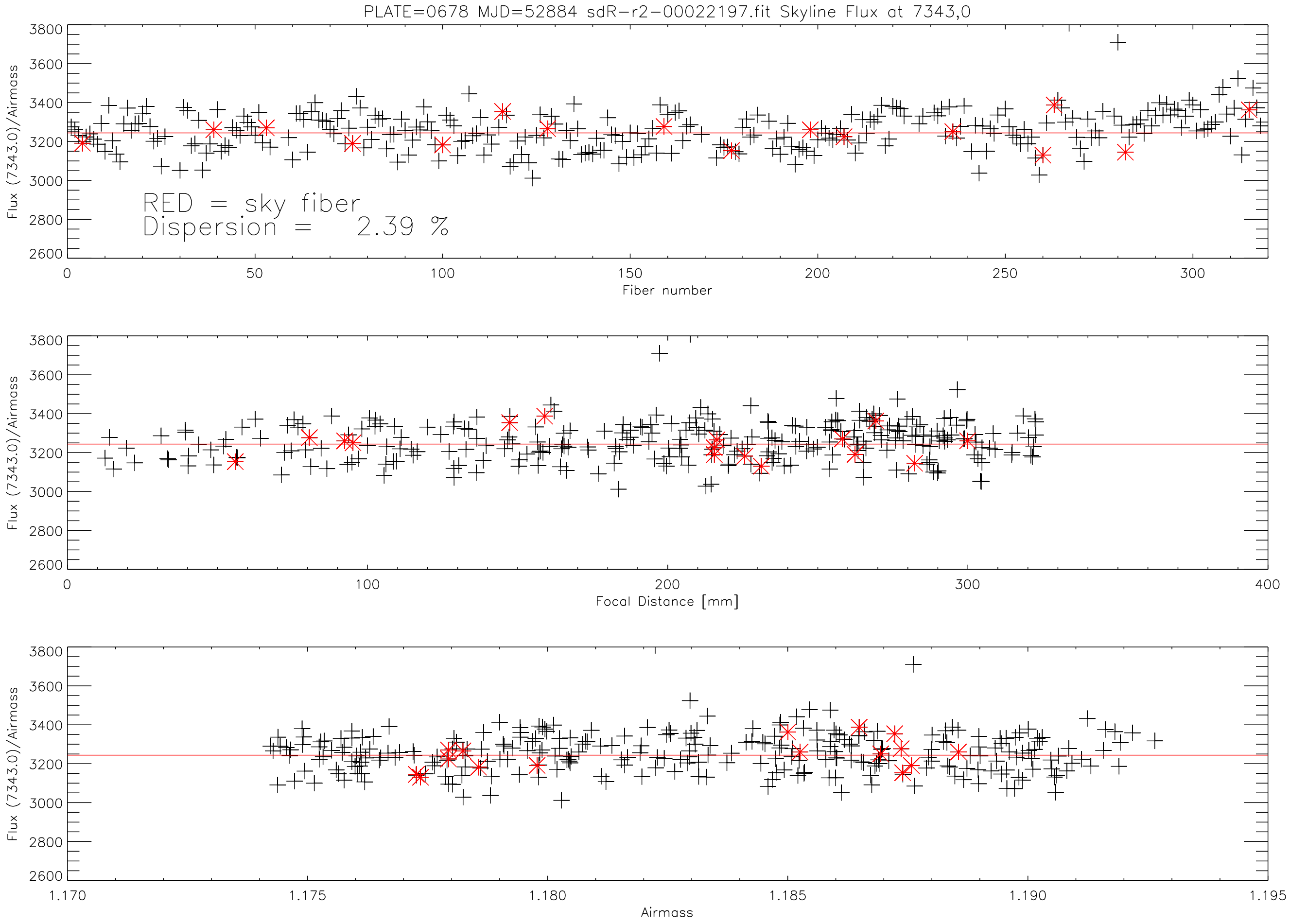
PLATE=0678 MJD=52884 sdR-r2-00022197.fit 2D Sky-subtraction Sky Fibers

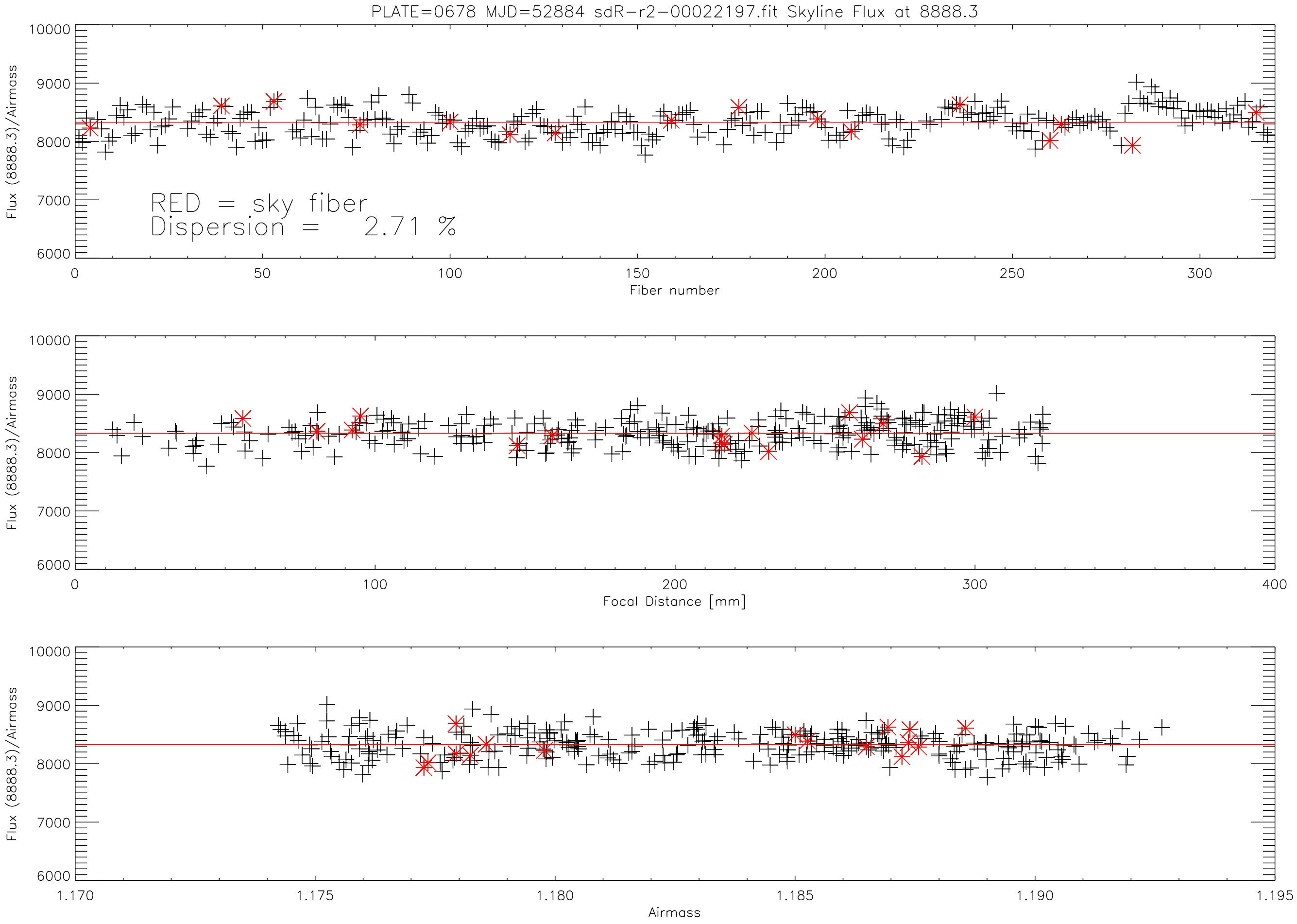


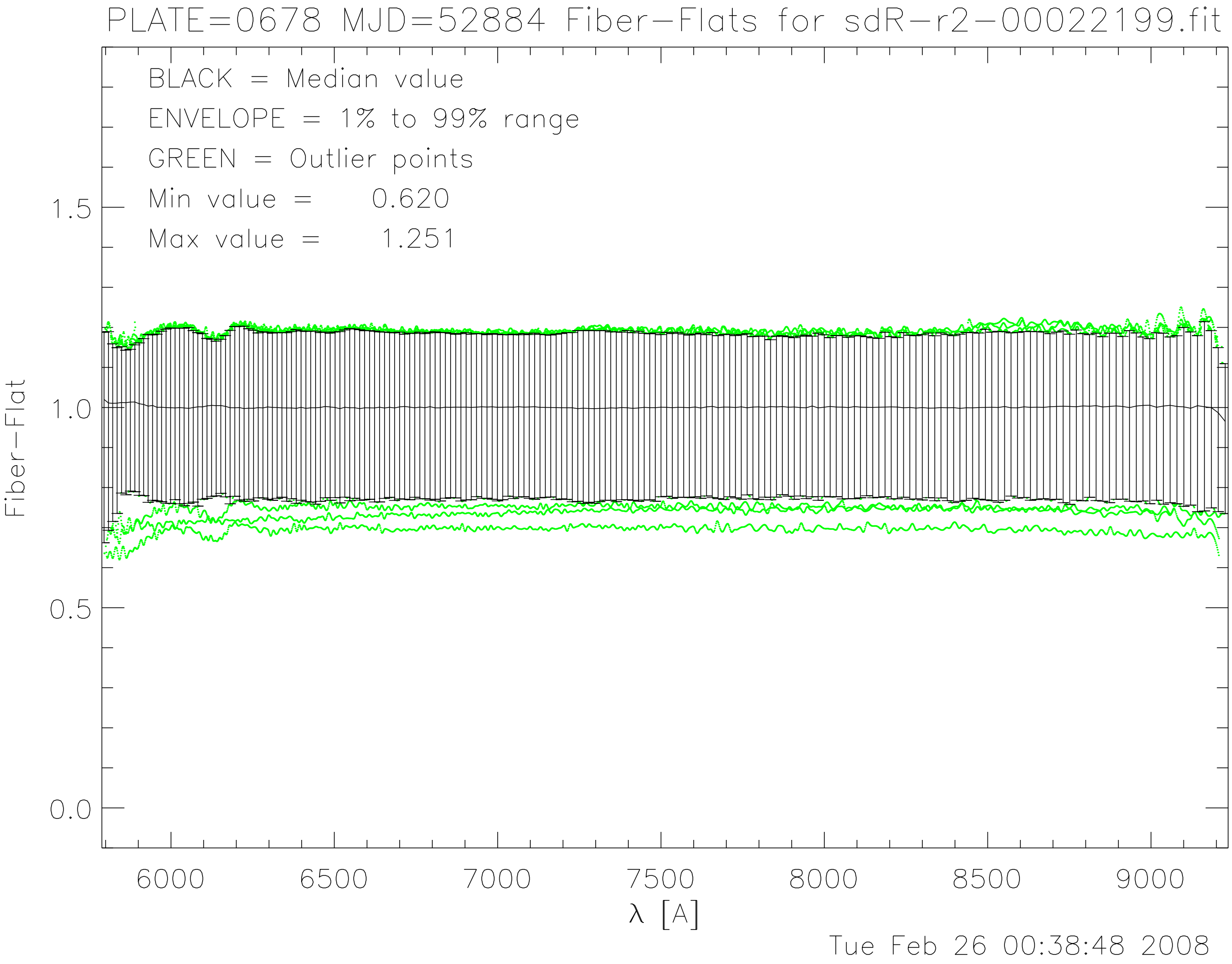
PLATE=0678 MJD=52884 sdR-r2-00022197.fit 2D Sky-subtraction Sky-subtracted Sky F

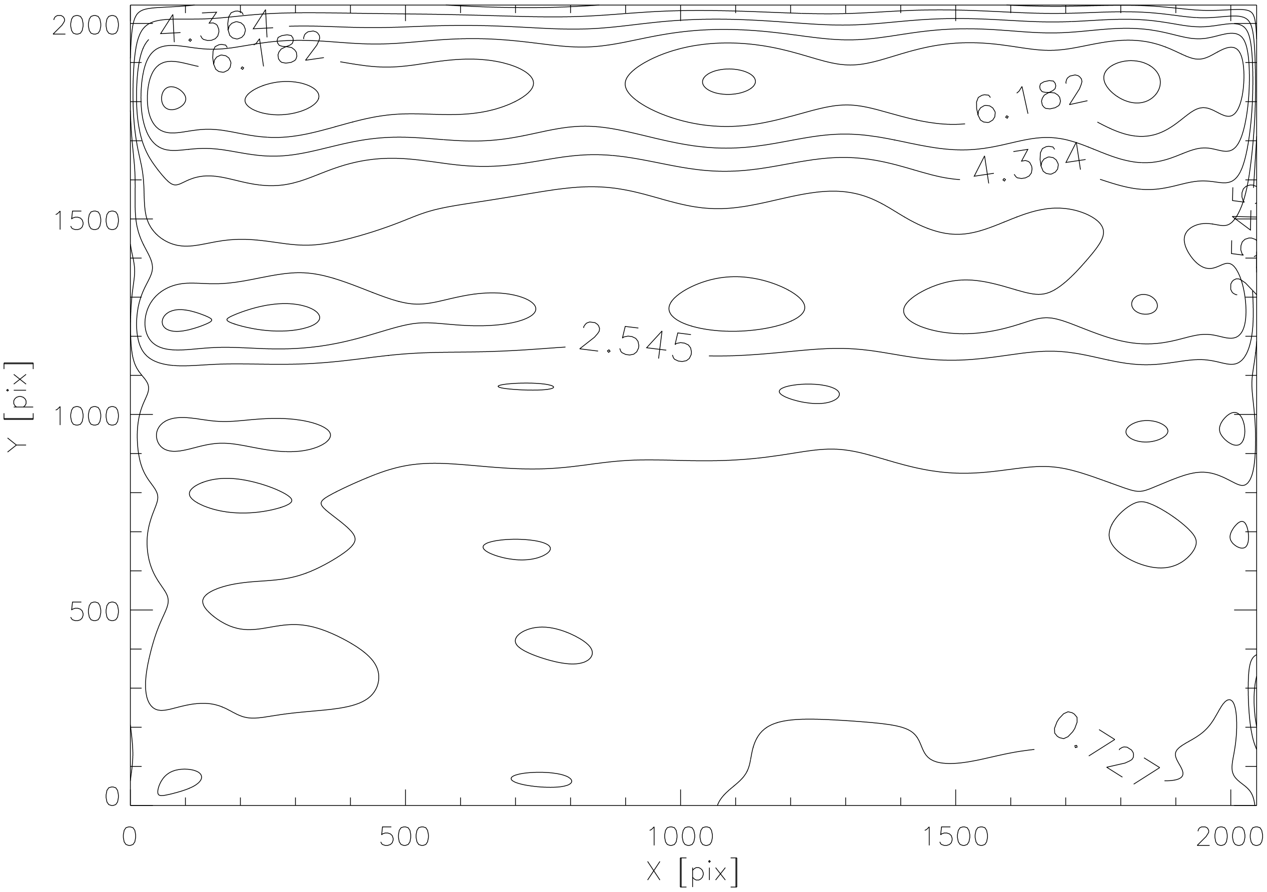



Number of sky fibers = 16
PLATE=0678 MJD=52884 sdR-r2-00022197.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]


PLATE=0678 MJD=52884 sdR-r2-00022197.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3800
3600
3400
3200
3000
2800
2600
RED = sky fiber
Dispersion = 2.39 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3800
3600
3400
3200
3000
2800
2600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3800
3600
3400
3200
3000
2800
2600
1.170
1.175
1.180
1.185
1.190
1.195
Airmass

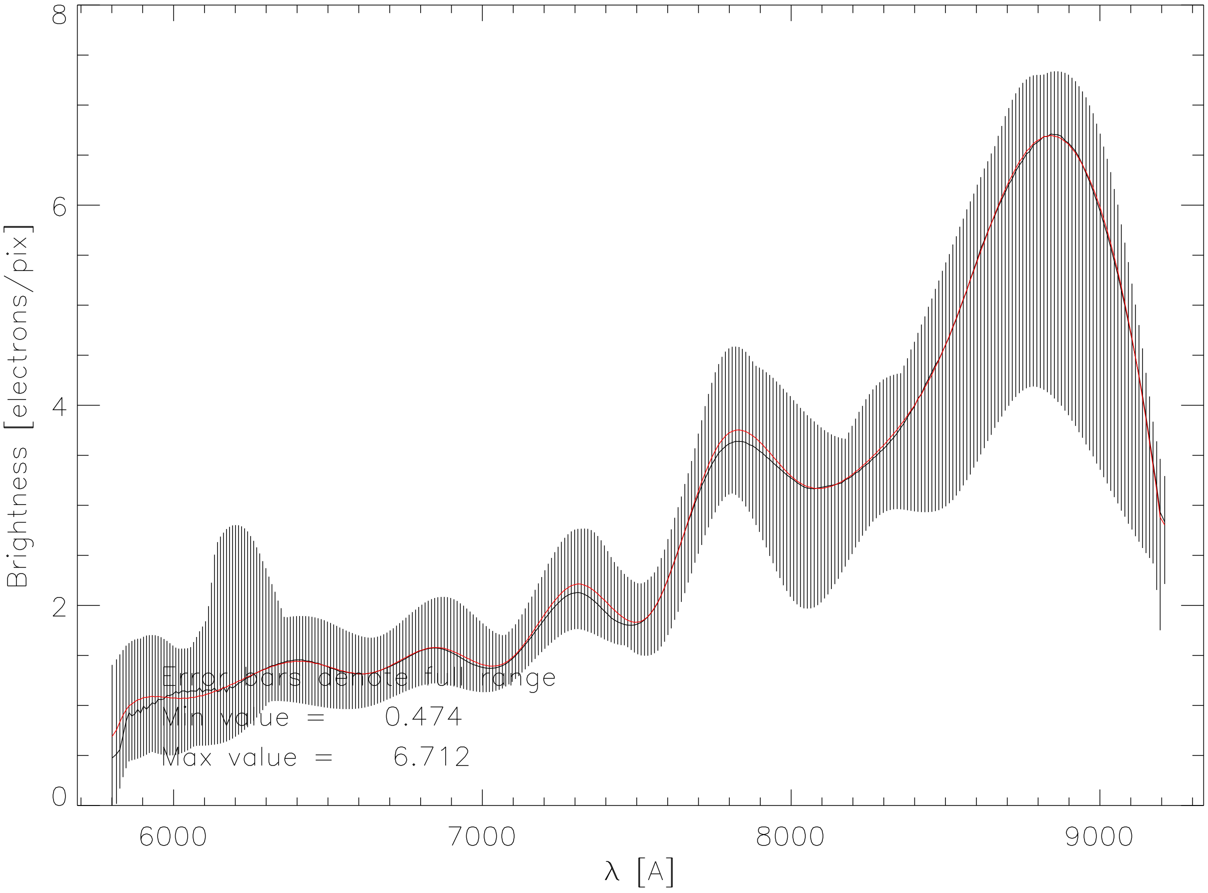

PLATE=0678 MJD=52884 sdR-r2-00022197.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
10000
9000
8000
7000
6000
RED = sky fiber
Dispersion = 2.71 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
10000
9000
8000
7000
6000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
10000
9000
8000
7000
6000
1.170
1.175
1.180
1.185
1.190
1.195
Airmass


PLATE=0678 MJD=52884 Fiber−Flats for sdR−r2−00022199.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.620
Max value = 1.251
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 00:38:48 2008

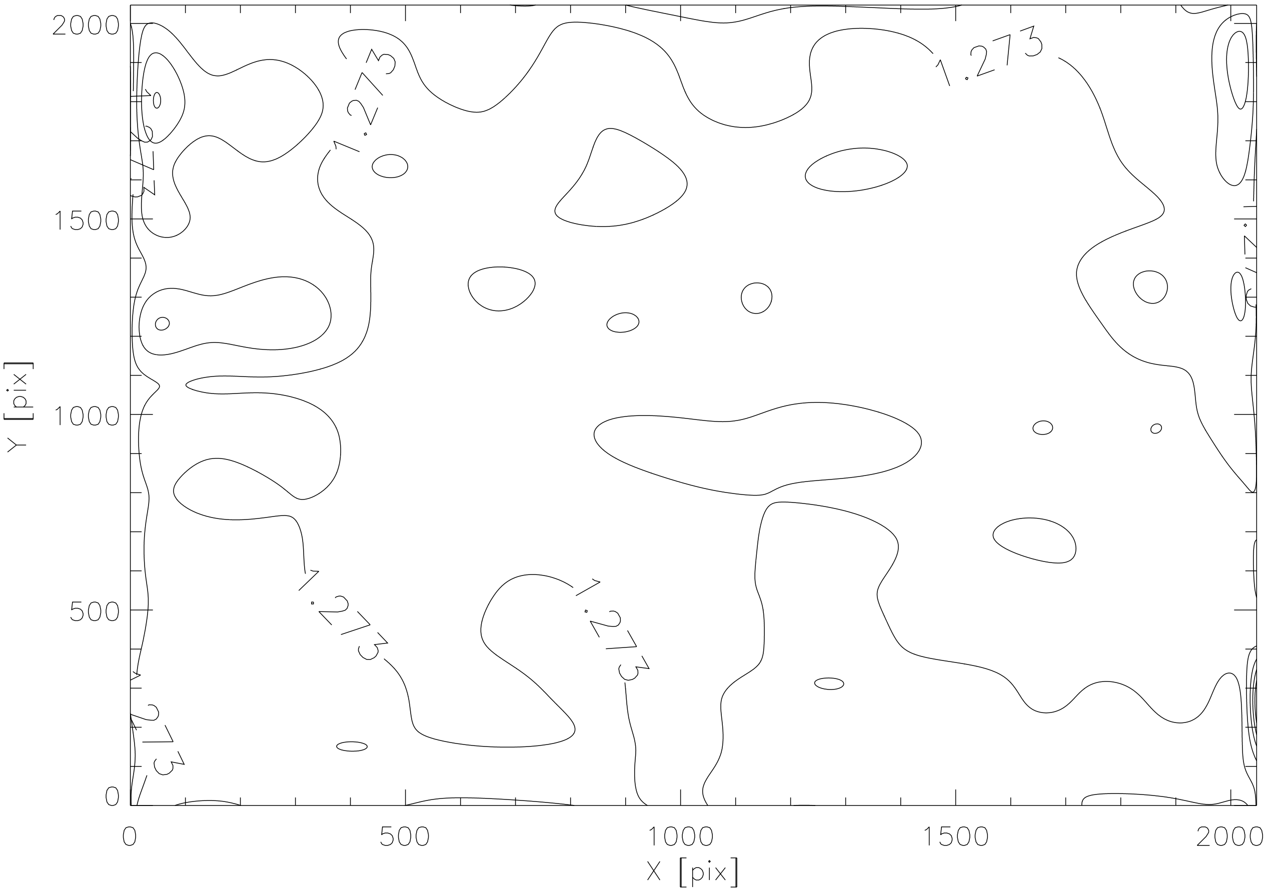


PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022198.fi

PLATE=0678 MJD=52884 Scattered Light before halo removal on sdR-r2-00022198.fi

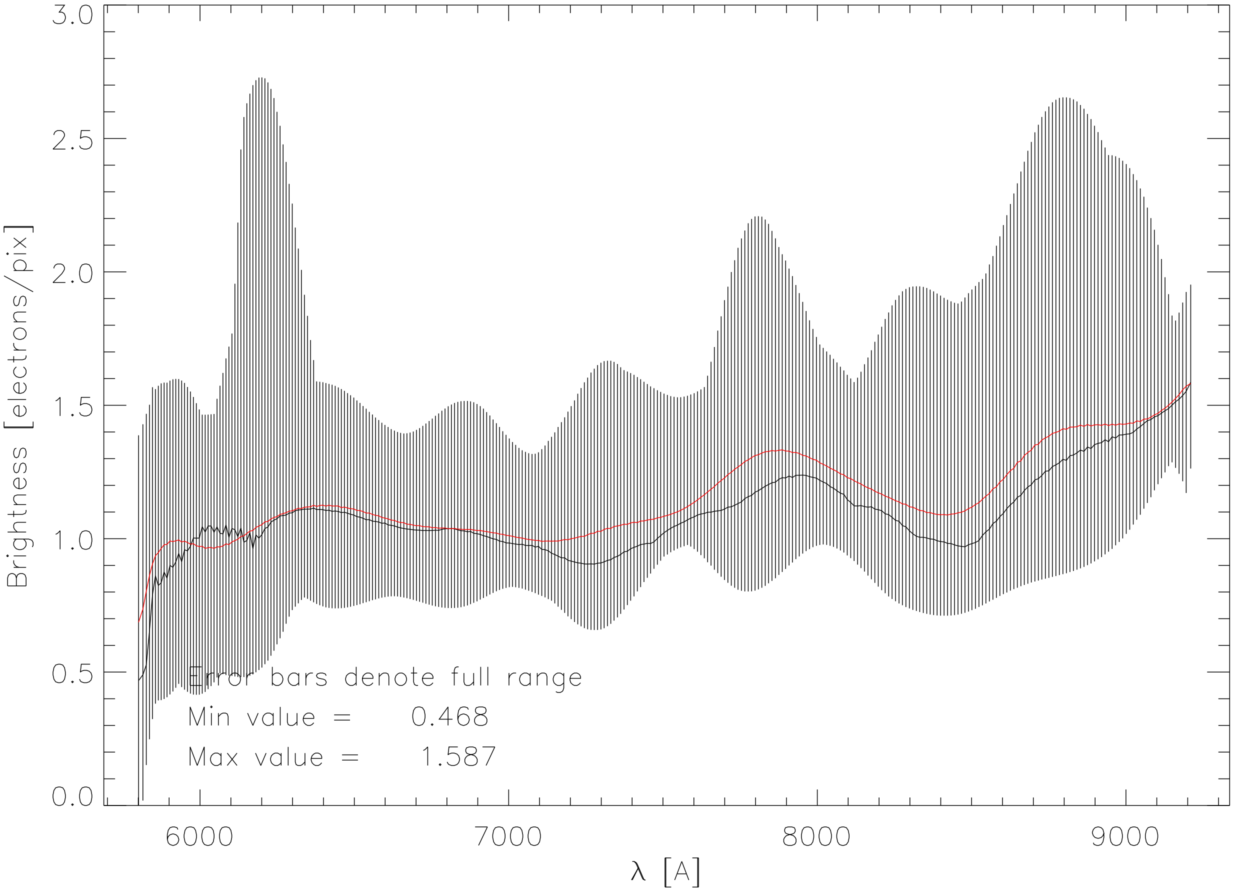


Tue Feb 26 00:39:28 2008

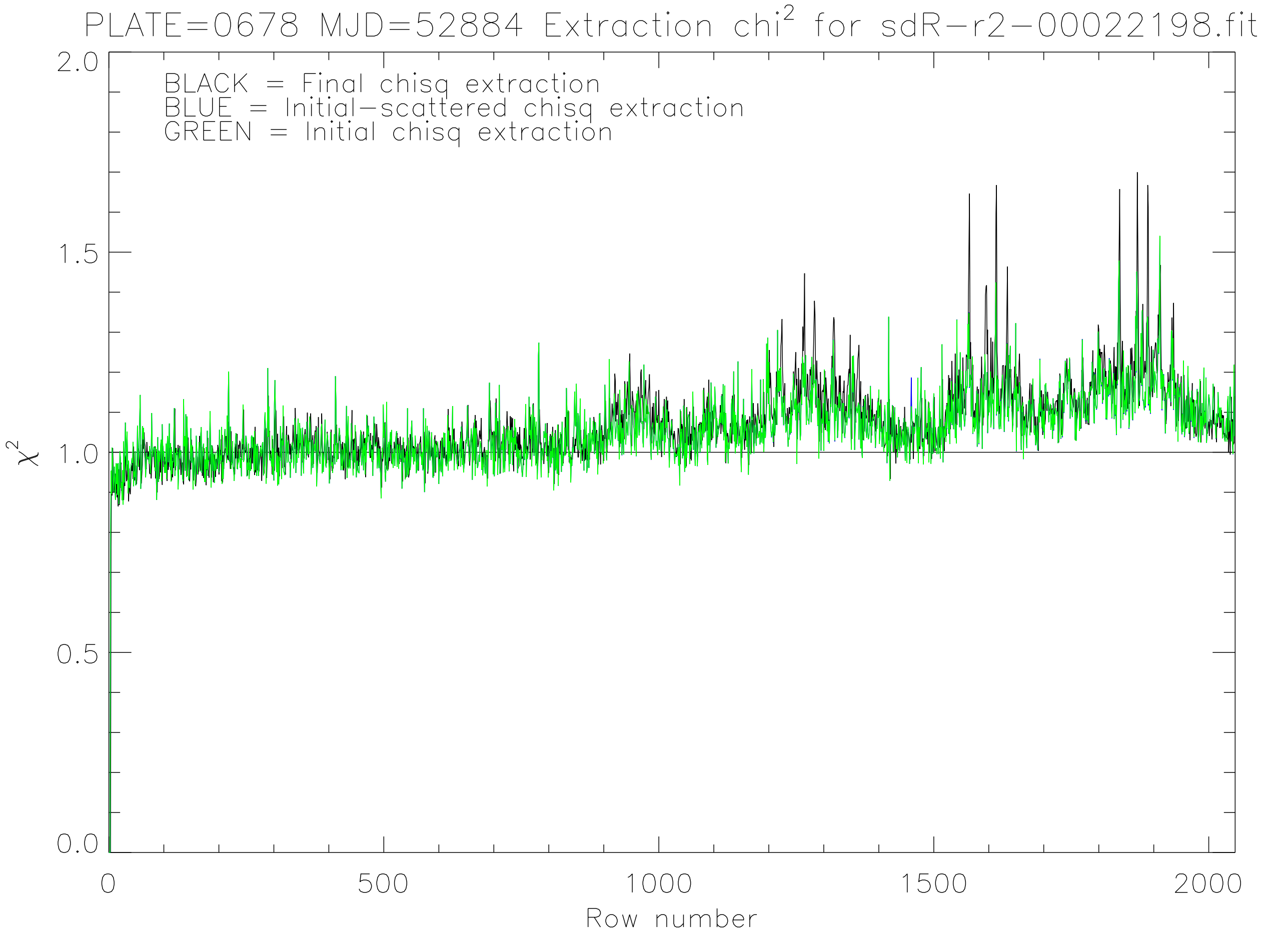


PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022198.fit

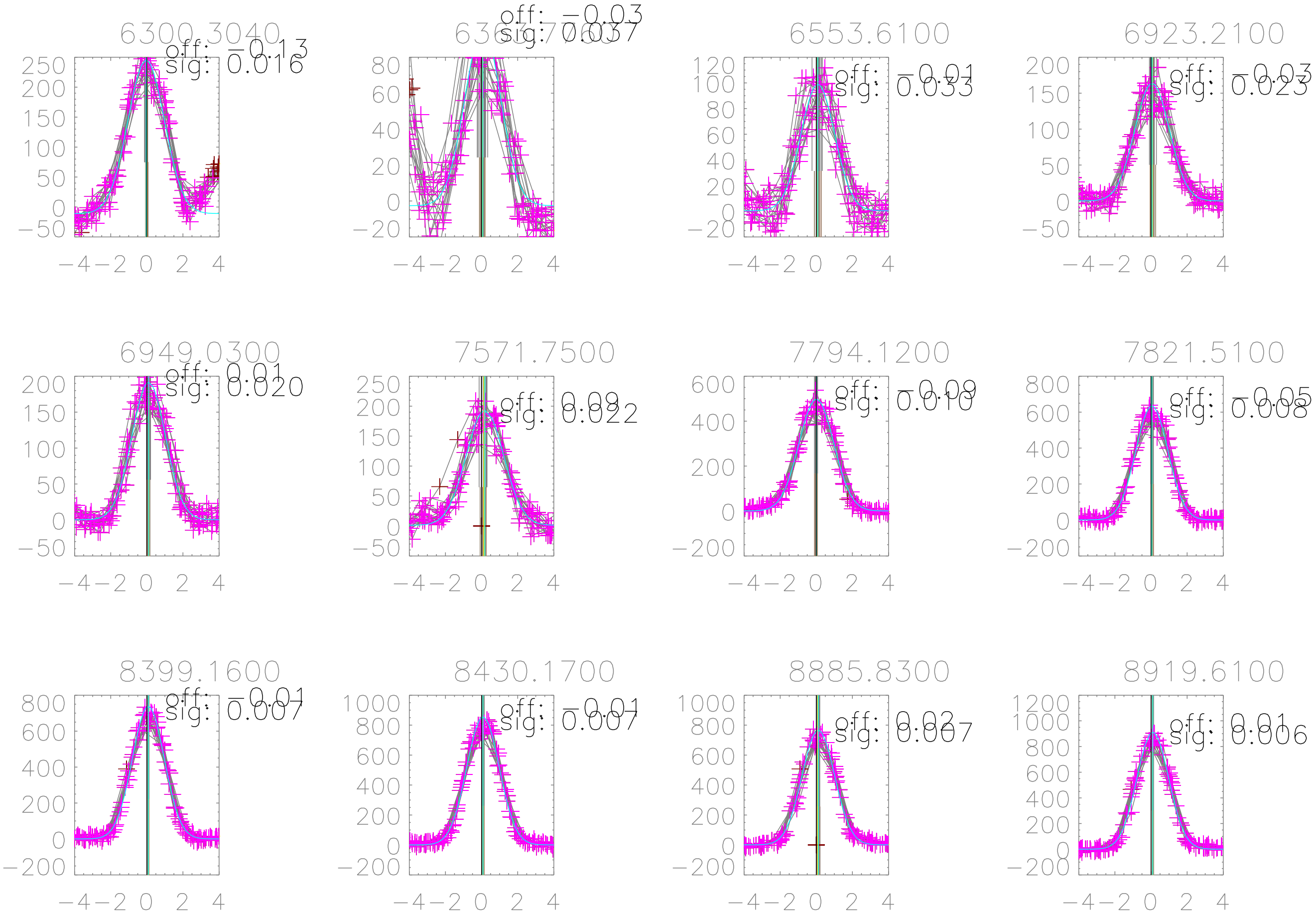
PLATE=0678 MJD=52884 Scattered Light on sdR-r2-00022198.fit

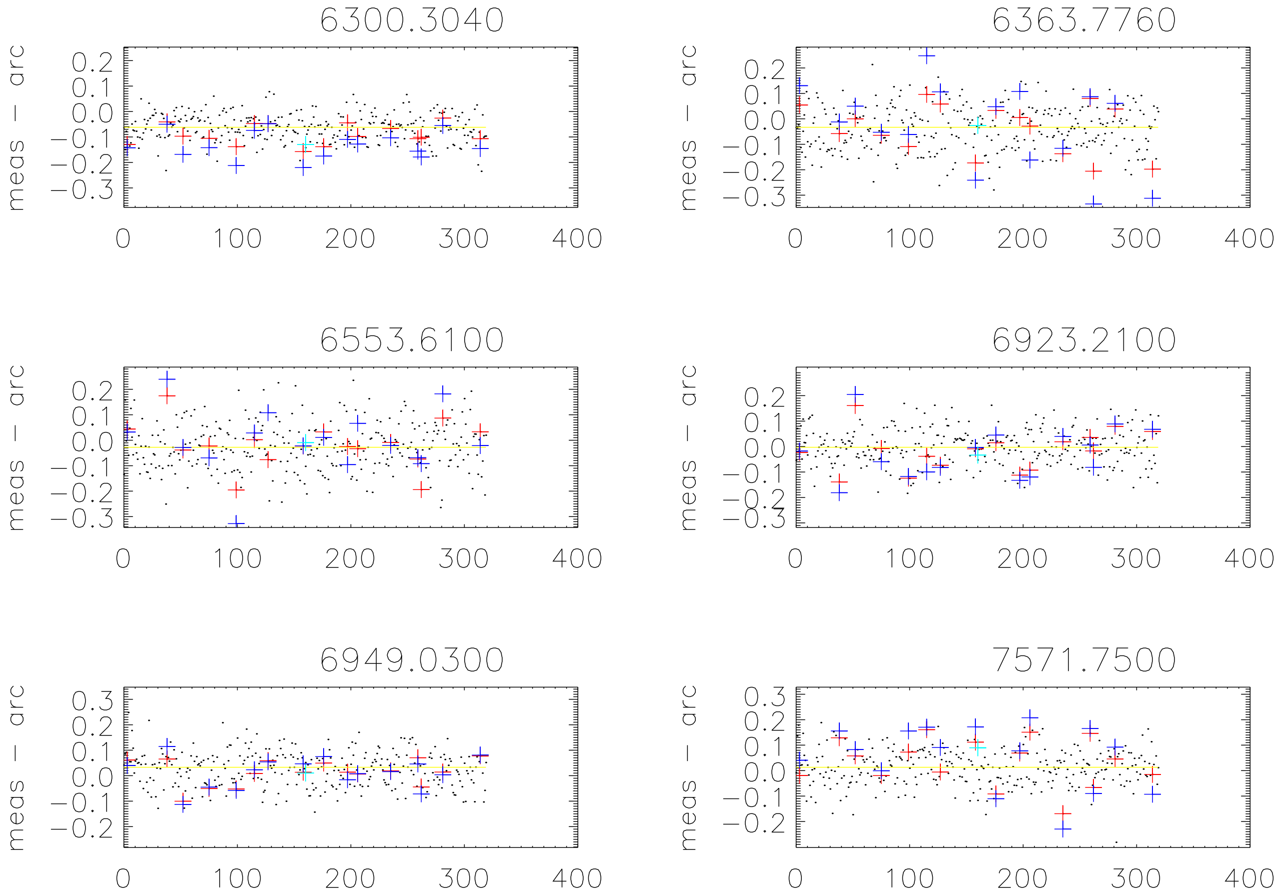


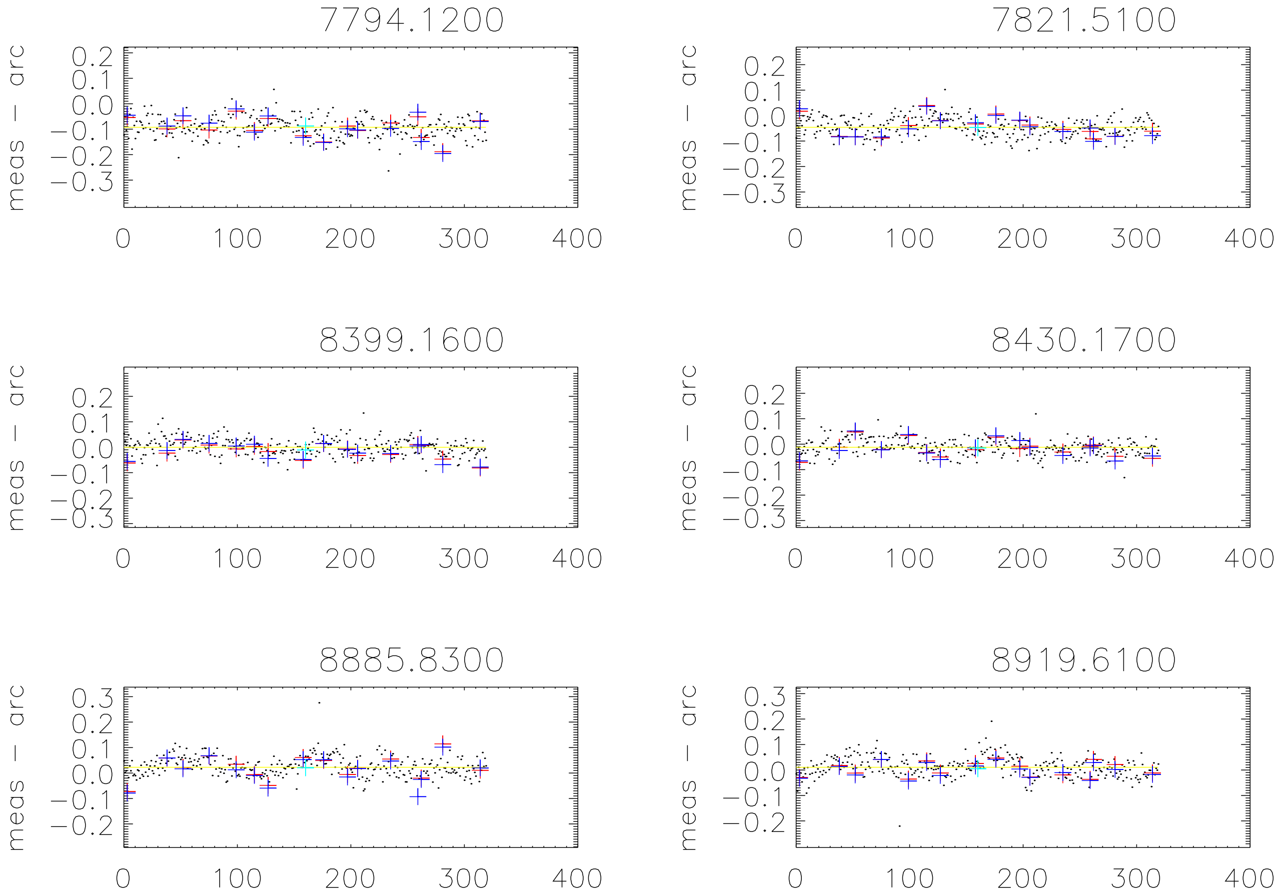
Tue Feb 26 00:42:21 2008

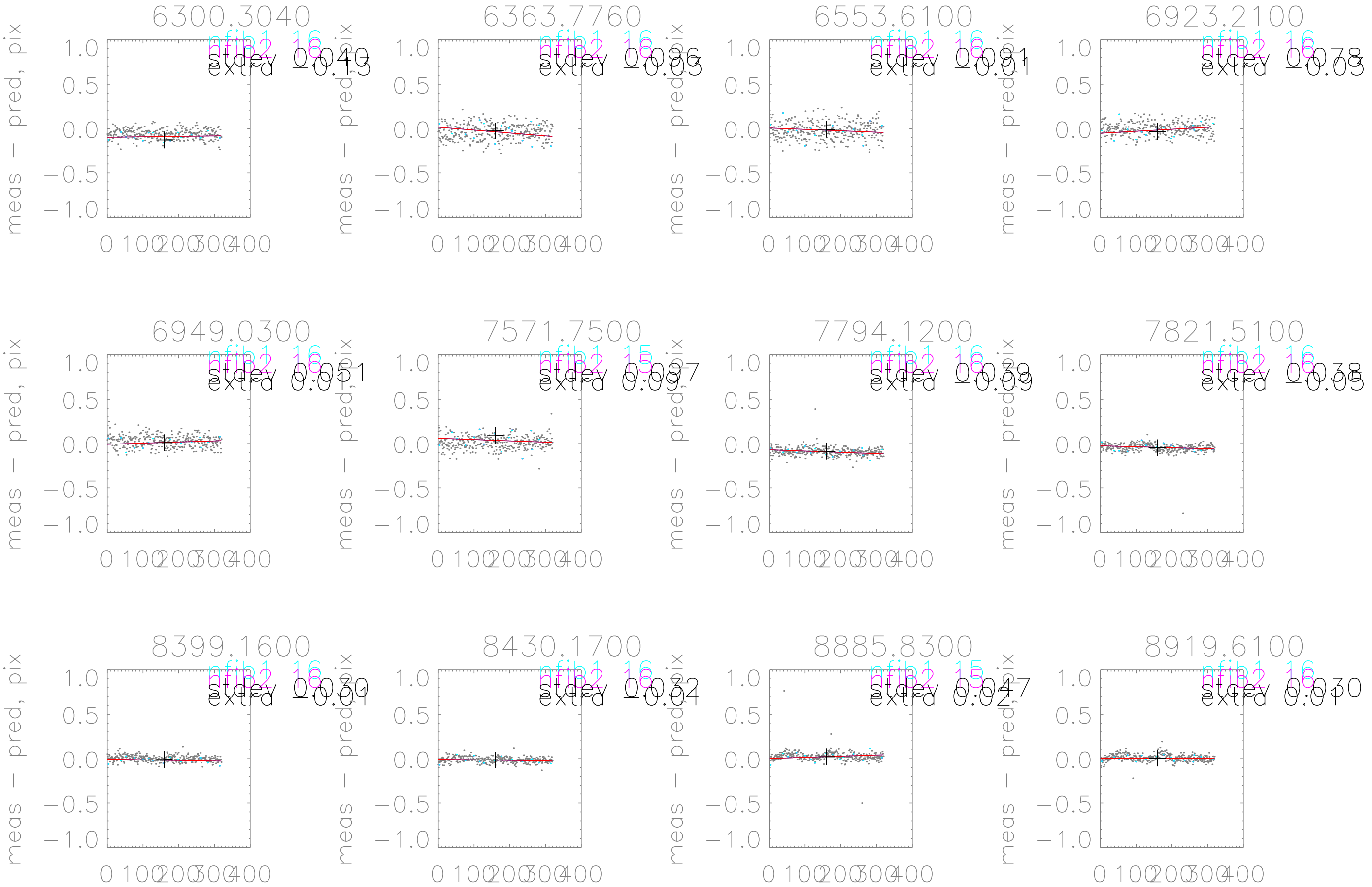


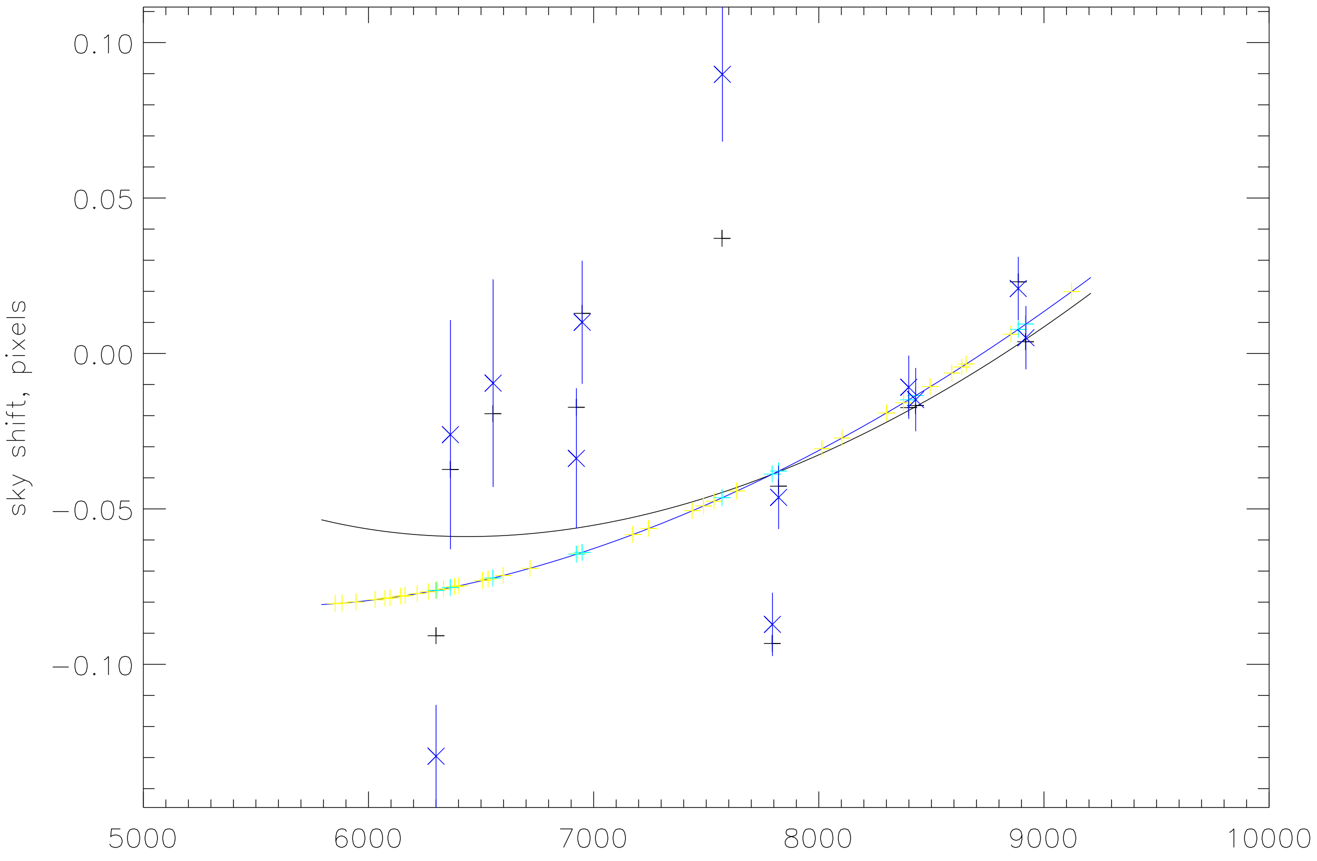
PLATE=0678 MJD=52884 Extraction chi^2 for sdR-r2-00022198.fit

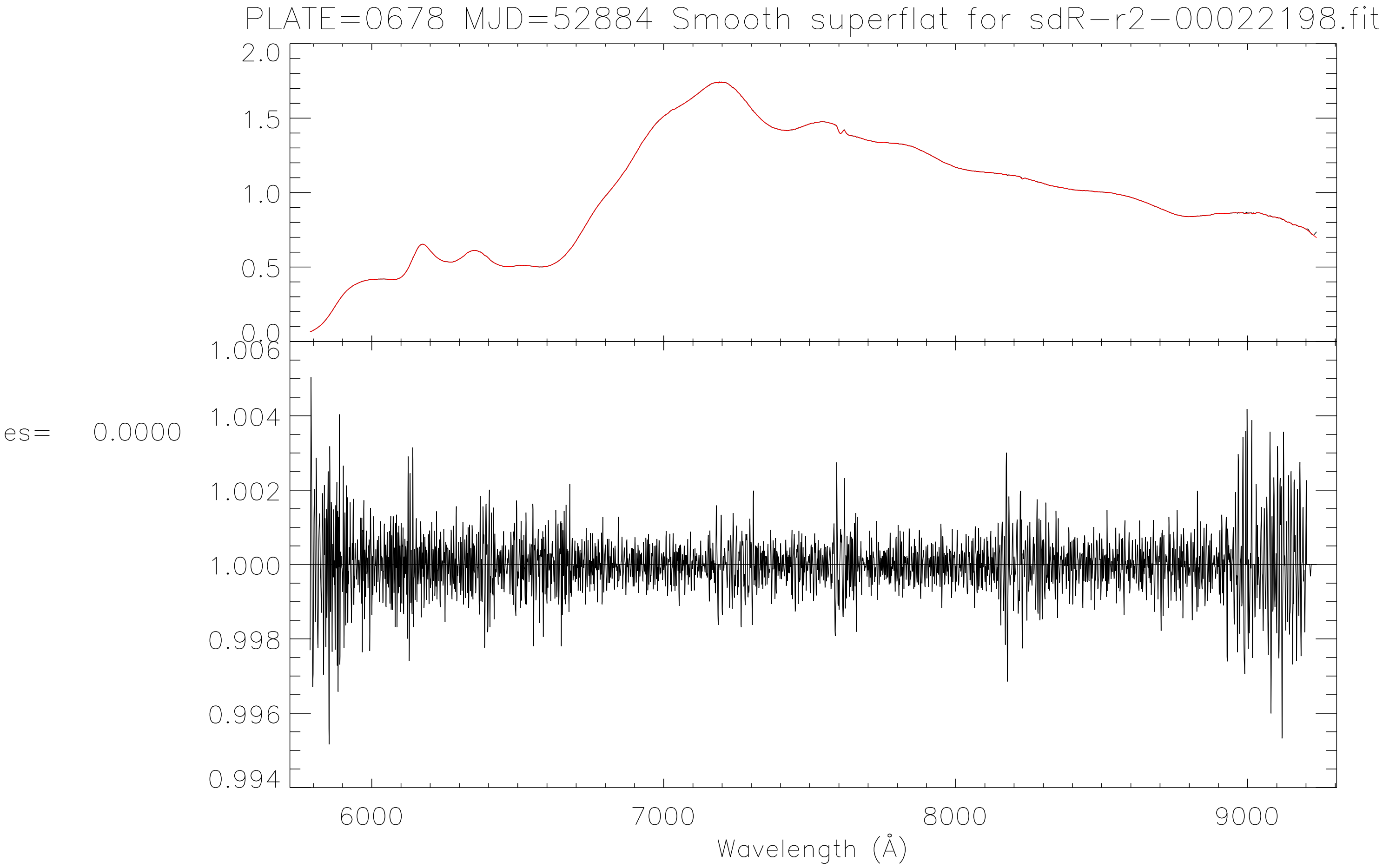

6300.3040
off: −0.13
sig: 0.016
6363.7760
off: −0.03
sig: 0.037
6553.6100
off: −0.01
sig: 0.033
6923.2100
off: −0.03
sig: 0.023
6949.0300
off: 0.01
sig: 0.020
7571.7500
off: 0.09
sig: 0.022
7794.1200
off: −0.09
sig: 0.010
7821.5100
off: −0.05
sig: 0.008
8399.1600
off: −0.01
sig: 0.007
8430.1700
off: −0.01
sig: 0.007
8885.8300
off: 0.02
sig: 0.007
8919.6100
off: 0.01
sig: 0.006
−4 −2 0 2 4

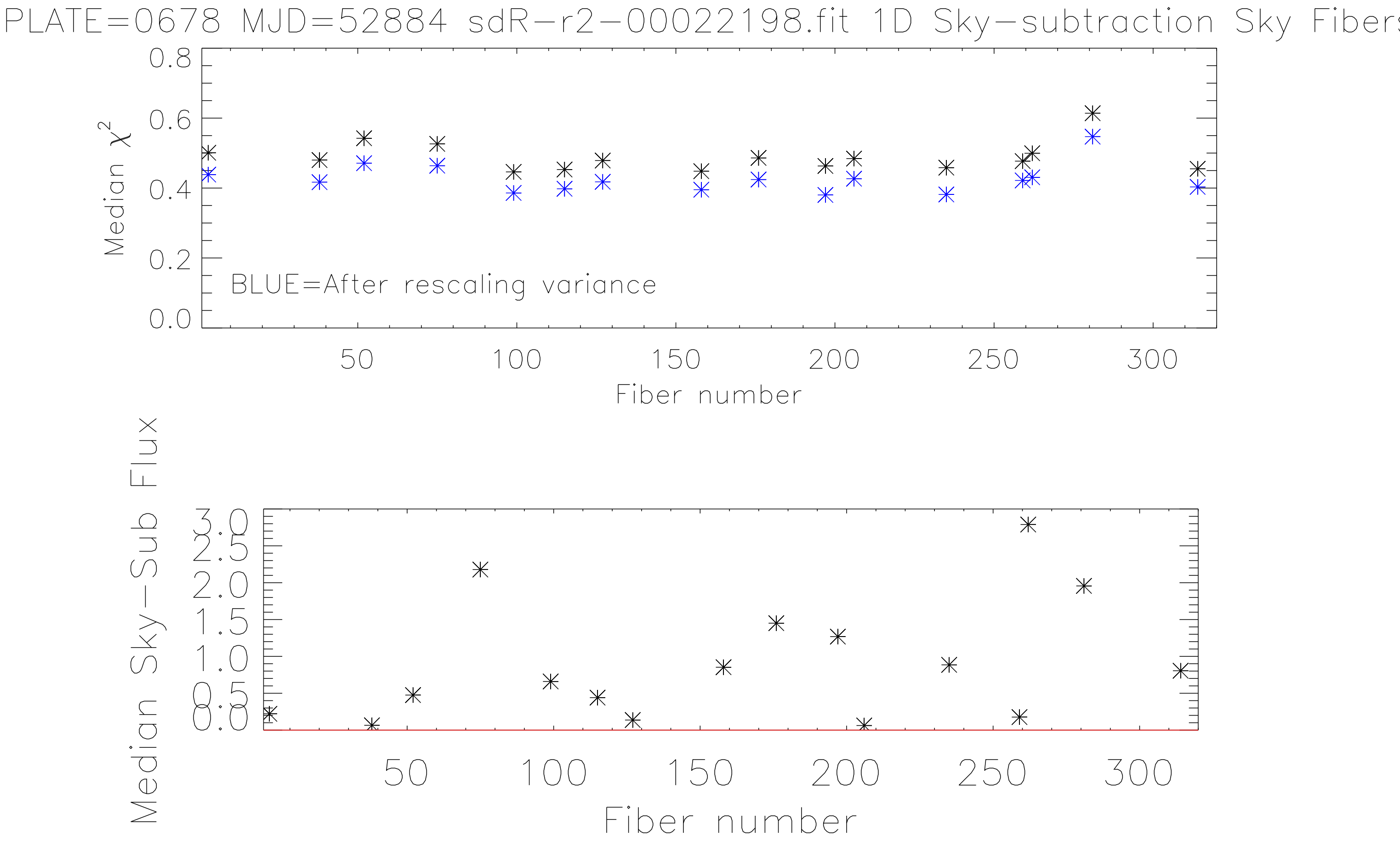

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

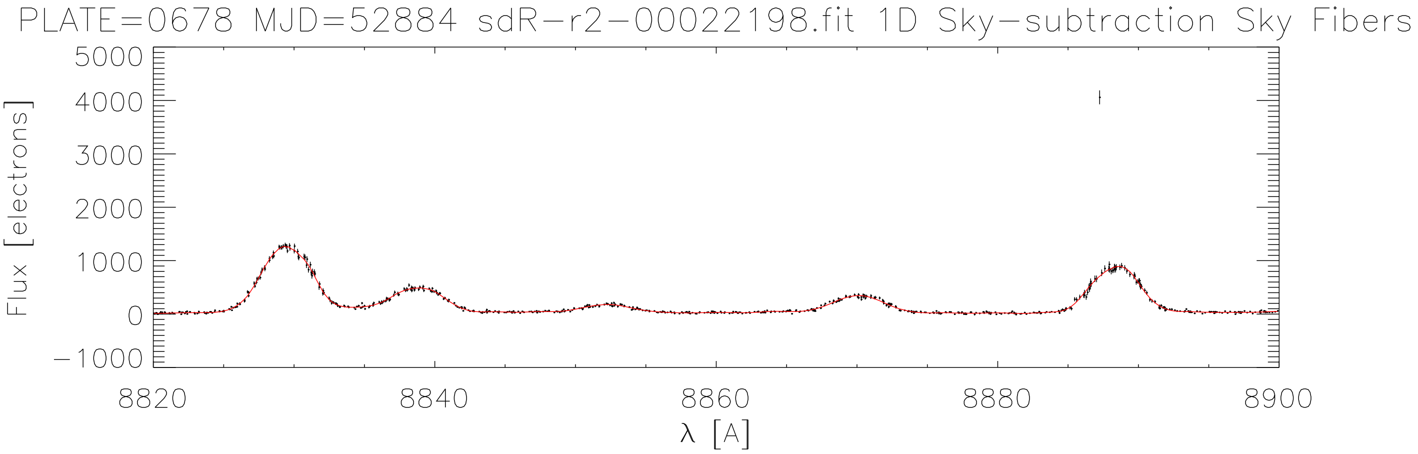

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


6300.3040
nfib1 16
nfib2 16
stdev 0.040
extrd −0.13
6363.7760
nfib1 16
nfib2 16
stdev 0.096
extrd −0.03
6553.6100
nfib1 16
nfib2 16
stdev 0.091
extrd −0.01
6923.2100
nfib1 16
nfib2 16
stdev 0.078
extrd −0.03
6949.0300
nfib1 16
nfib2 16
stdev 0.051
extrd 0.01
7571.7500
nfib1 15
nfib2 15
stdev 0.097
extrd 0.09
7794.1200
nfib1 16
nfib2 16
stdev 0.039
extrd −0.09
7821.5100
nfib1 16
nfib2 16
stdev 0.038
extrd −0.05
8399.1600
nfib1 16
nfib2 16
stdev 0.030
extrd −0.01
8430.1700
nfib1 16
nfib2 16
stdev 0.032
extrd −0.04
8885.8300
nfib1 15
nfib2 15
stdev 0.047
extrd 0.02
8919.6100
nfib1 16
nfib2 16
stdev 0.030
extrd 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

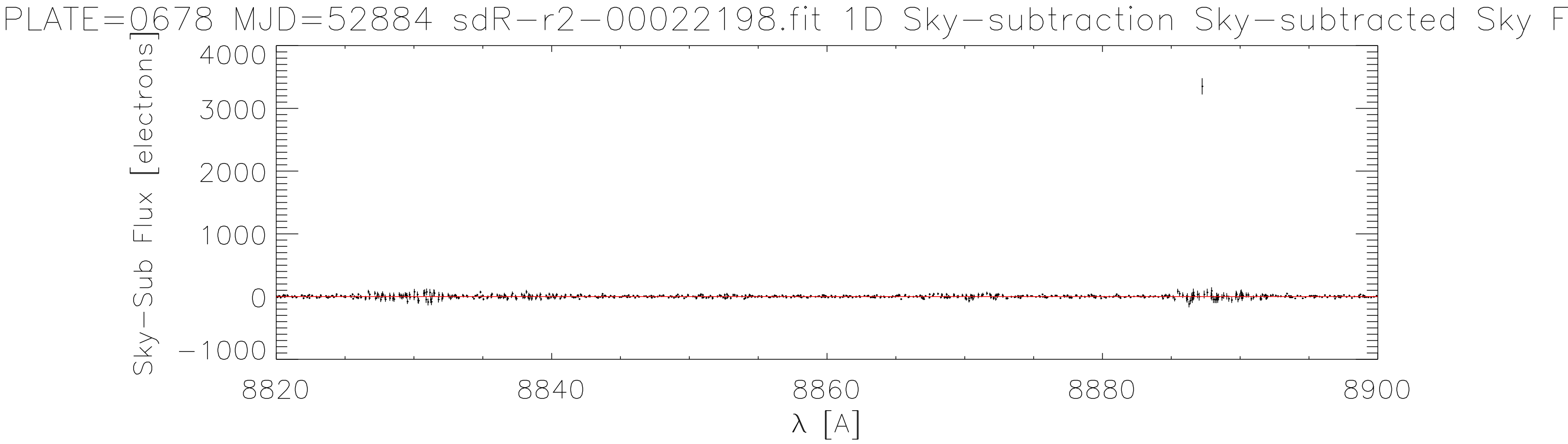

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000


PLATE=0678 MJD=52884 Smooth superflat for sdR-r2-00022198.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)

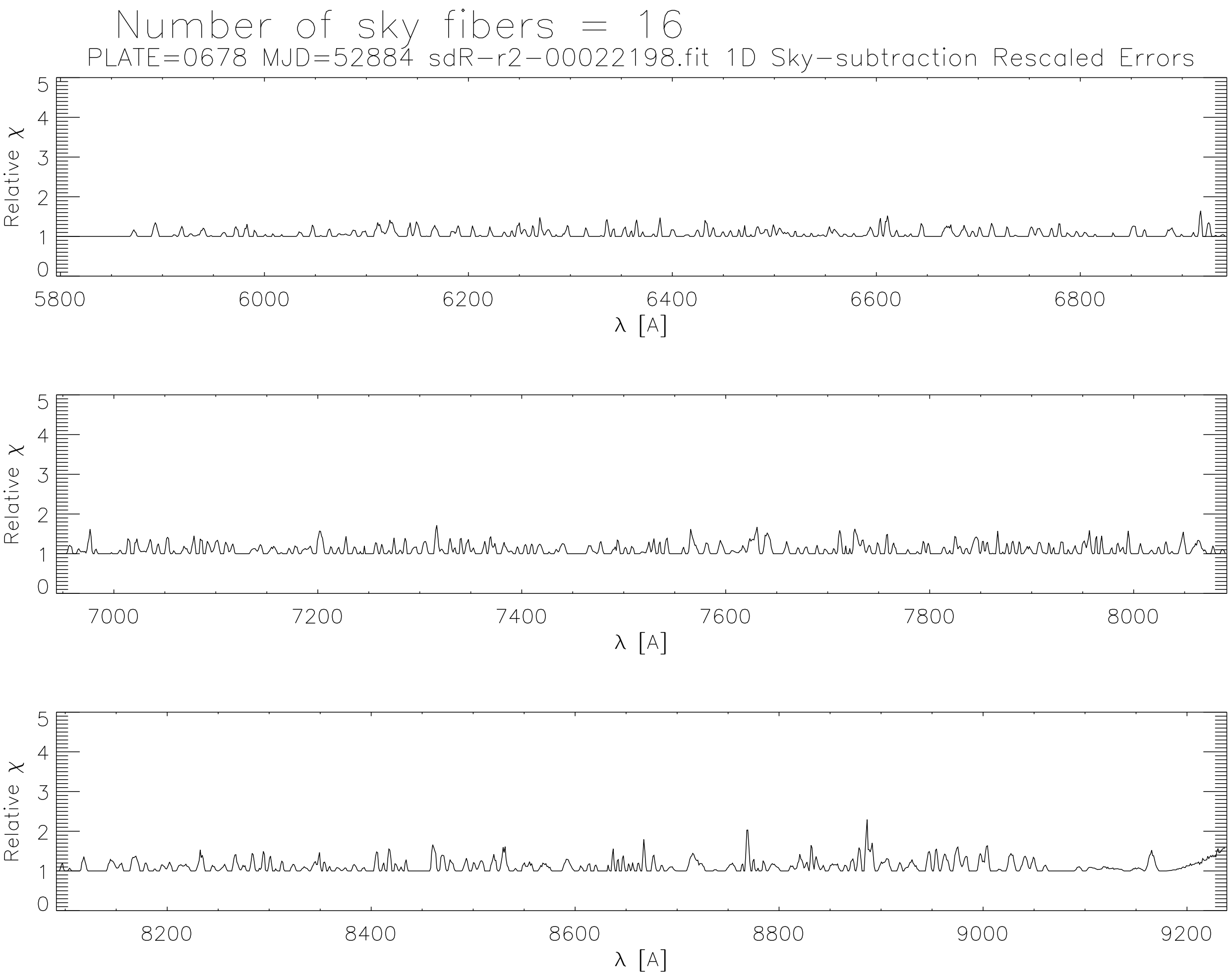

PLATE=0678 MJD=52884 sdR-r2-00022198.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0.0
0.5
1.0
1.5
2.0
2.5
3.0
50
100
150
200
250
300
Fiber number



PLATE=0678 MJD=52884 sdR-r2-00022198.fit 1D Sky-subtraction Sky Fibers

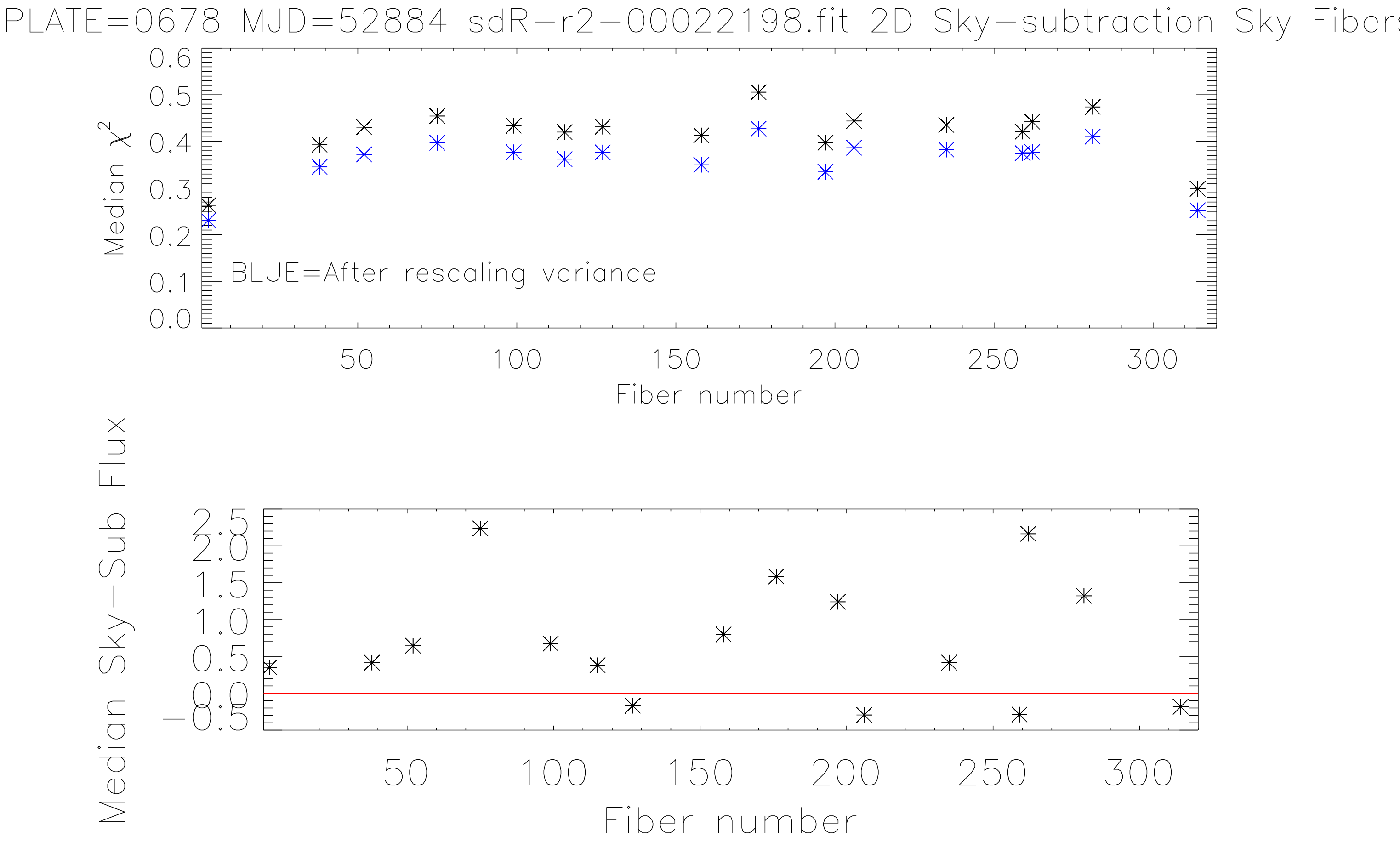


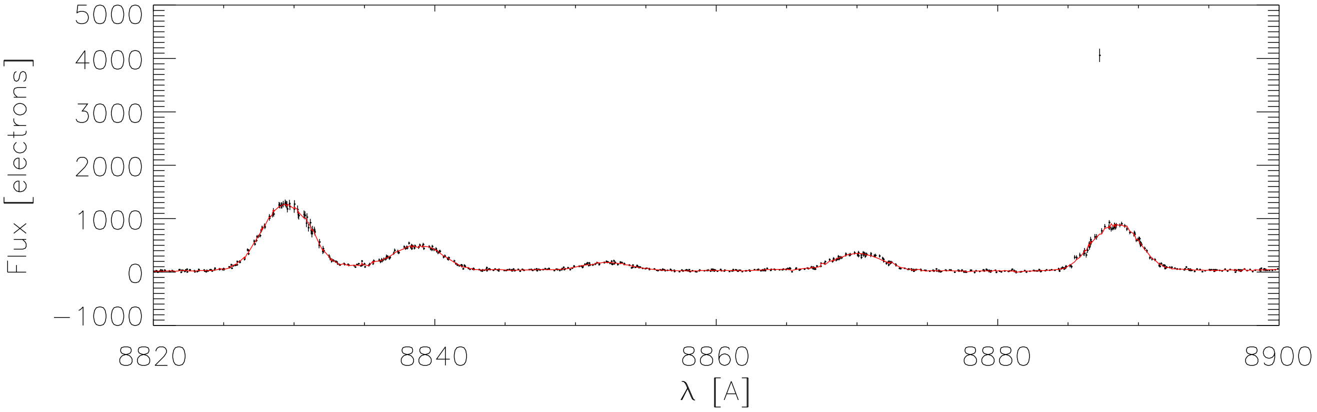
PLATE=0678 MJD=52884 sdR-r2-00022198.fit 1D Sky-subtraction Sky-subtracted Sky F



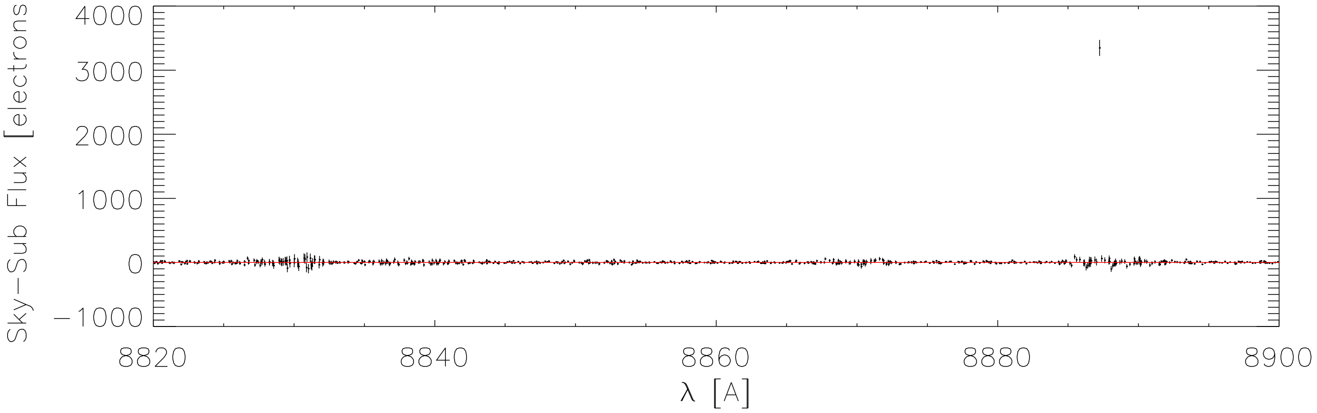
Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-r2-00022198.fit 1D Sky-subtraction Rescaled Errors


PLATE=0678 MJD=52884 sdR-r2-00022198.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−0.5
0.0
0.5
1.0
1.5
2.0
2.5
50
100
150
200
250
300
Fiber number



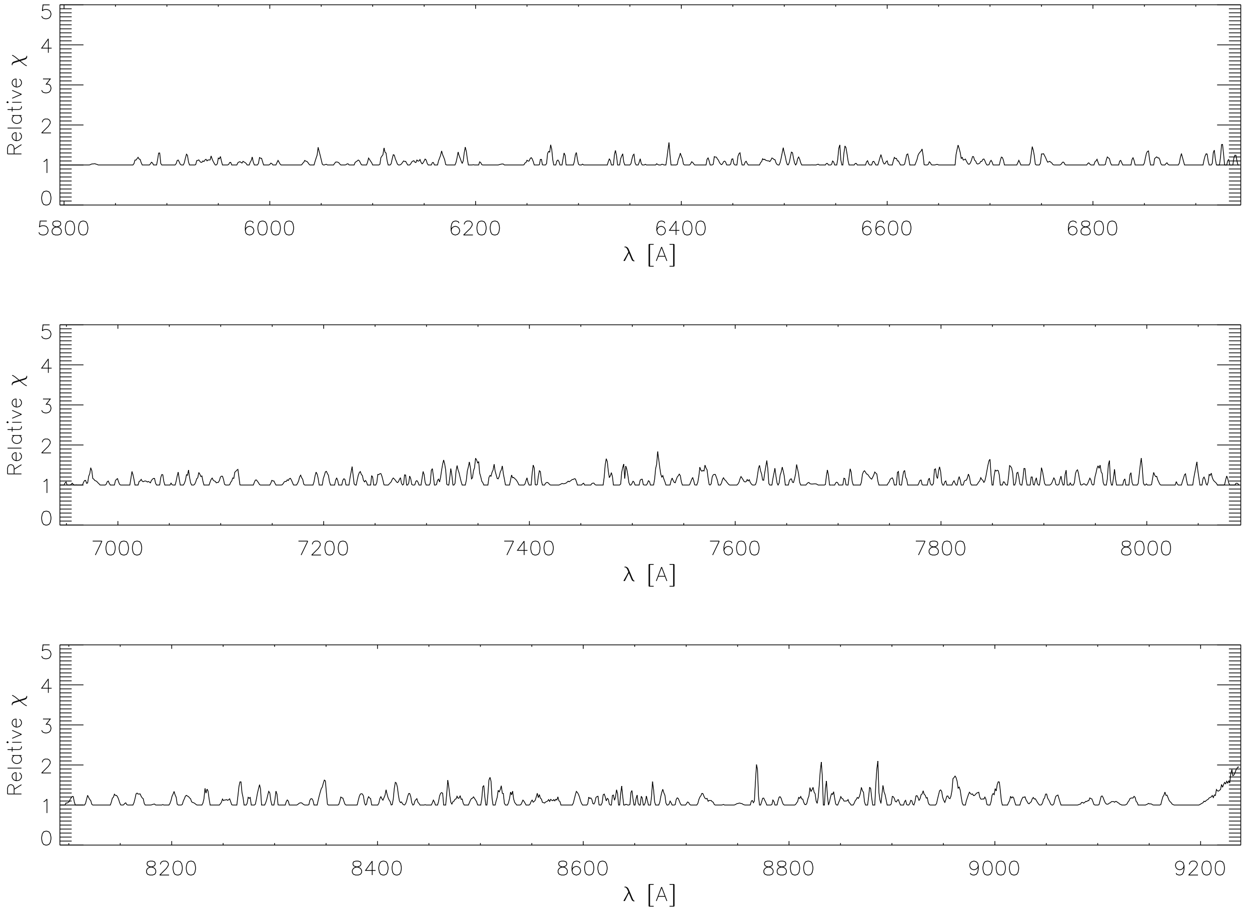
PLATE=0678 MJD=52884 sdR-r2-00022198.fit 2D Sky-subtraction Sky Fibers

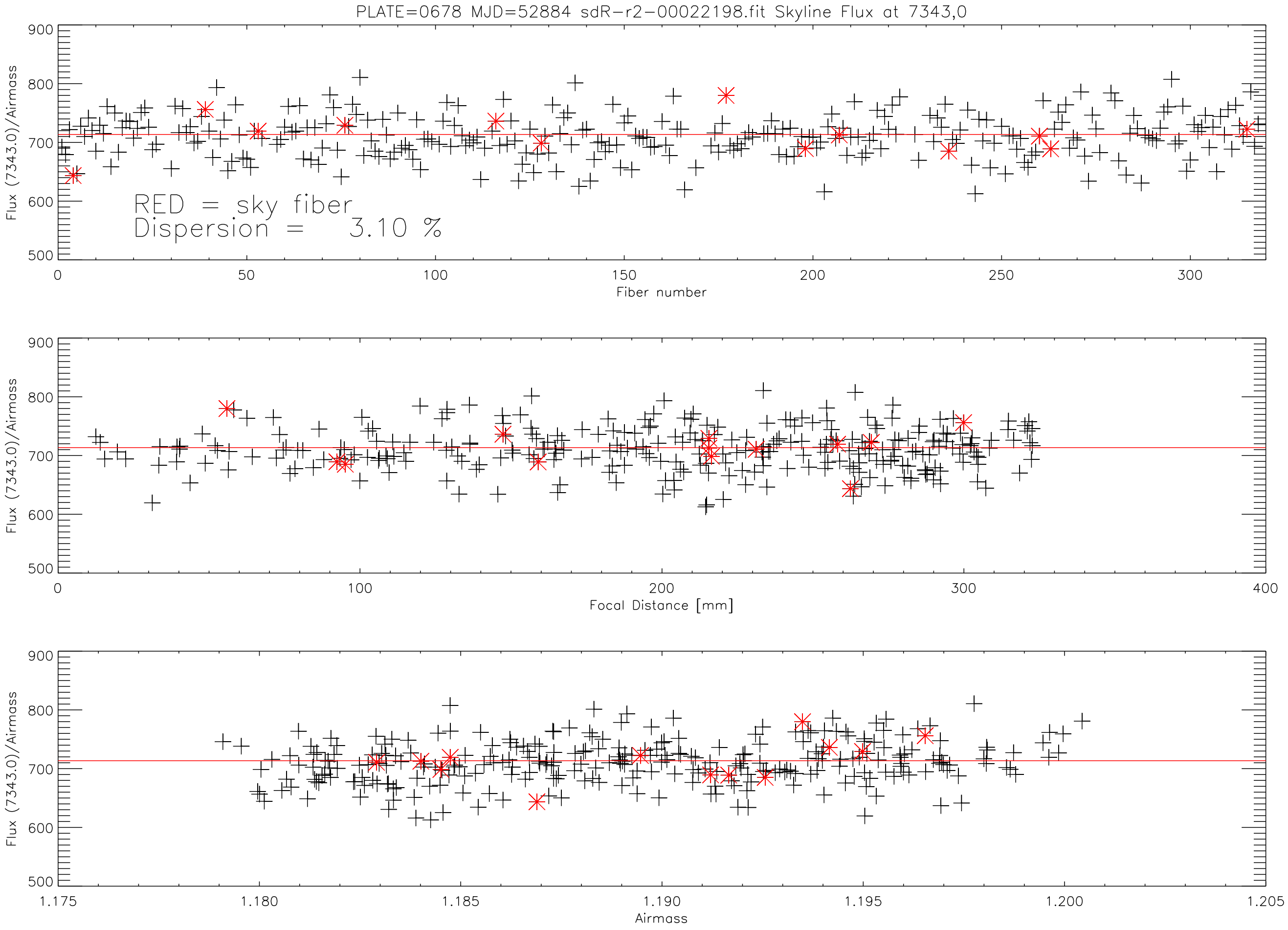


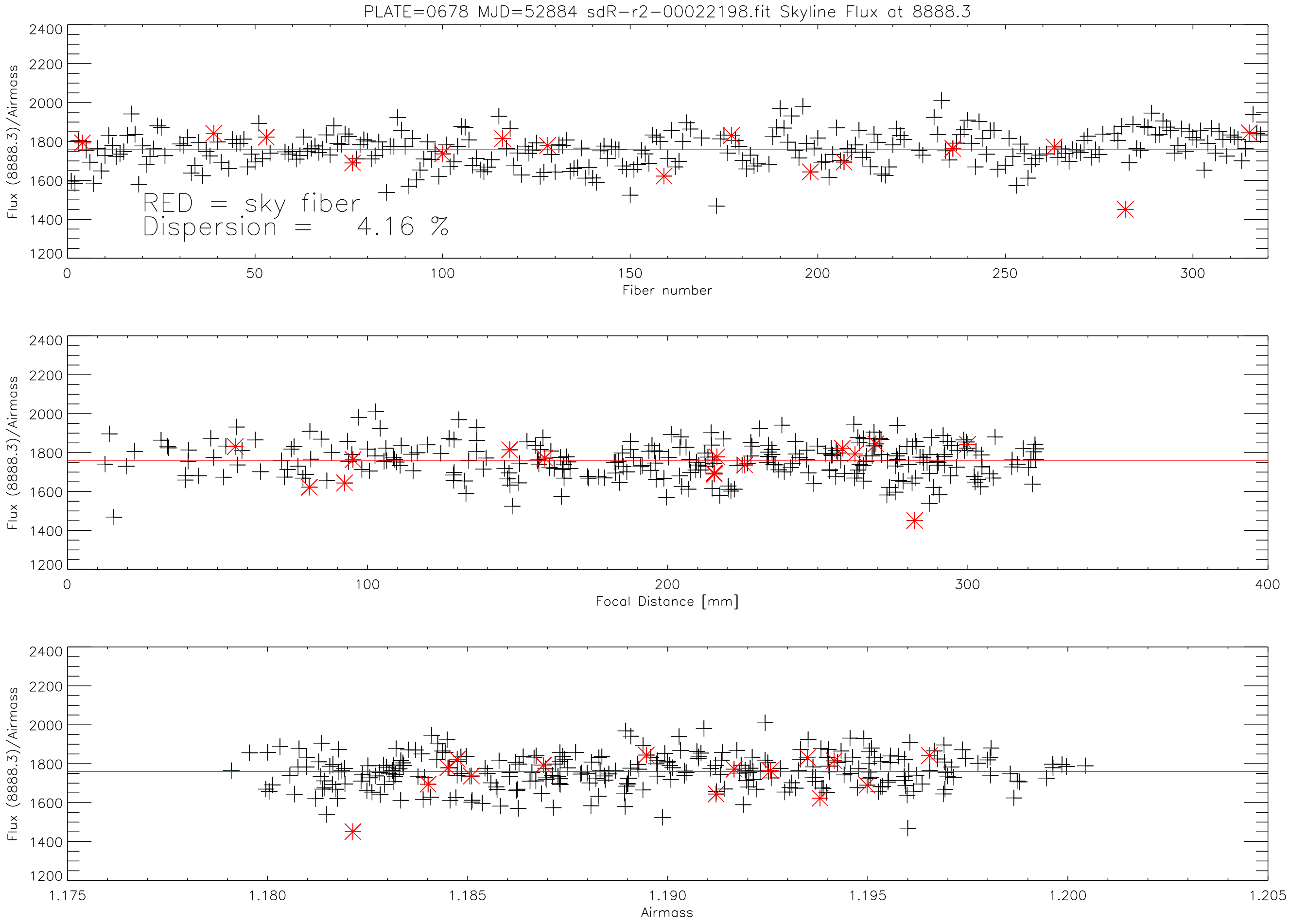
PLATE=0678 MJD=52884 sdR-r2-00022198.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 16

PLATE=0678 MJD=52884 sdR-r2-00022198.fit 2D Sky-subtraction Rescaled Errors




PLATE=0678 MJD=52884 sdR-r2-00022198.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
900
800
700
600
500
RED = sky fiber
Dispersion = 3.10 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
900
800
700
600
500
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
900
800
700
600
500
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass


PLATE=0678 MJD=52884 sdR-r2-00022198.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
2400
2200
2000
1800
1600
1400
1200
RED = sky fiber
Dispersion = 4.16 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
2400
2200
2000
1800
1600
1400
1200
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
2400
2200
2000
1800
1600
1400
1200
1.175
1.180
1.185
1.190
1.195
1.200
1.205
Airmass