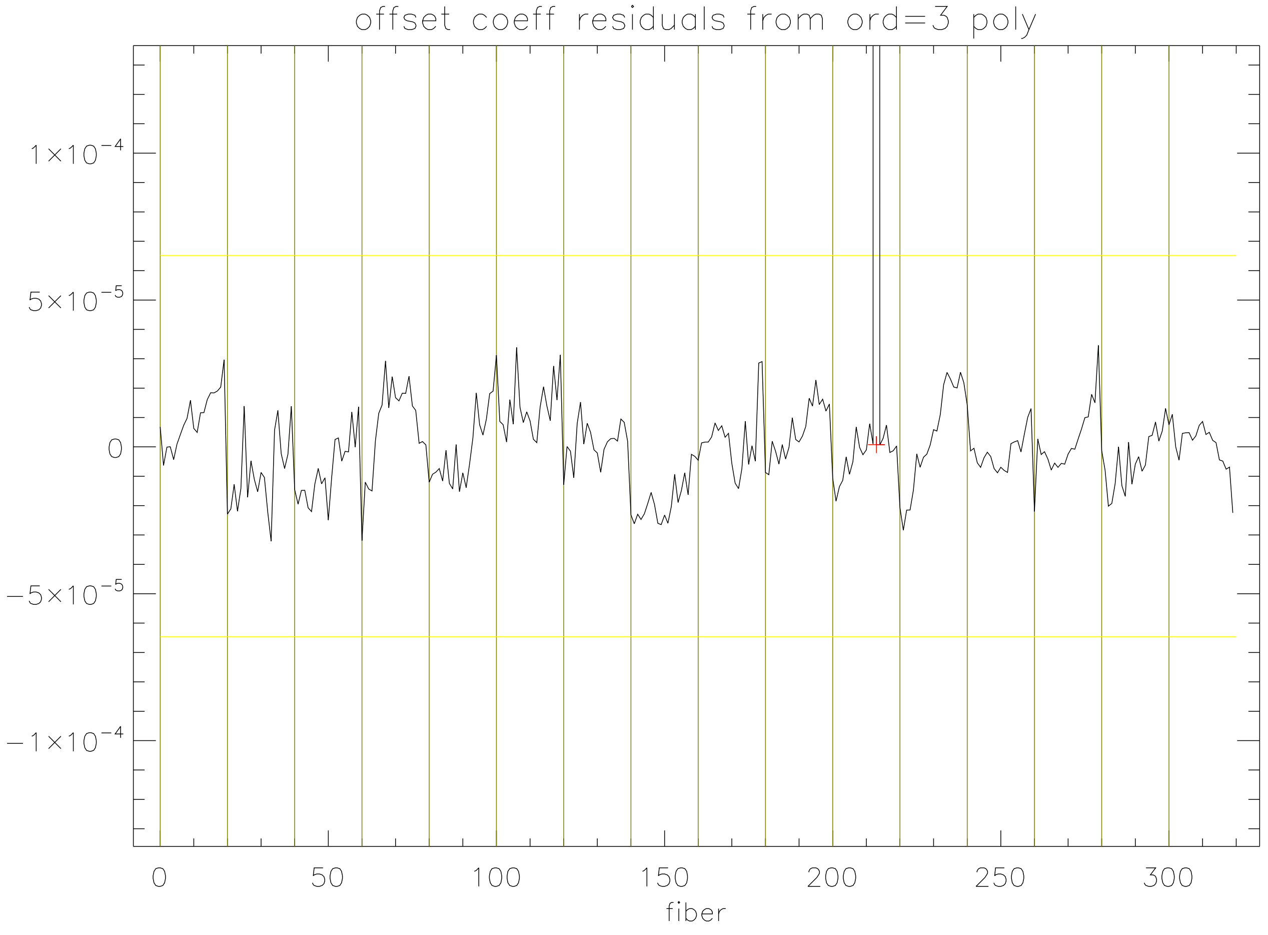
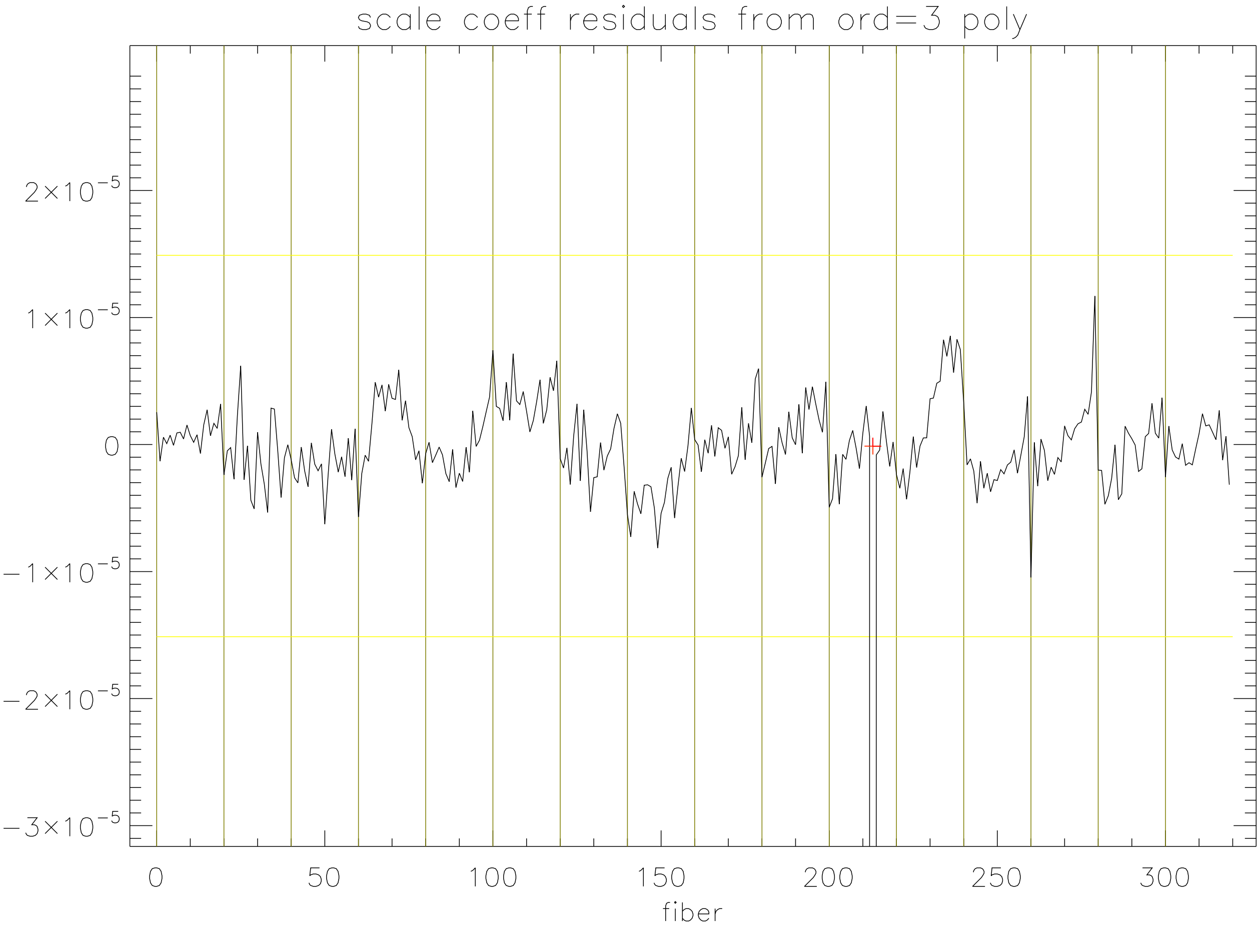
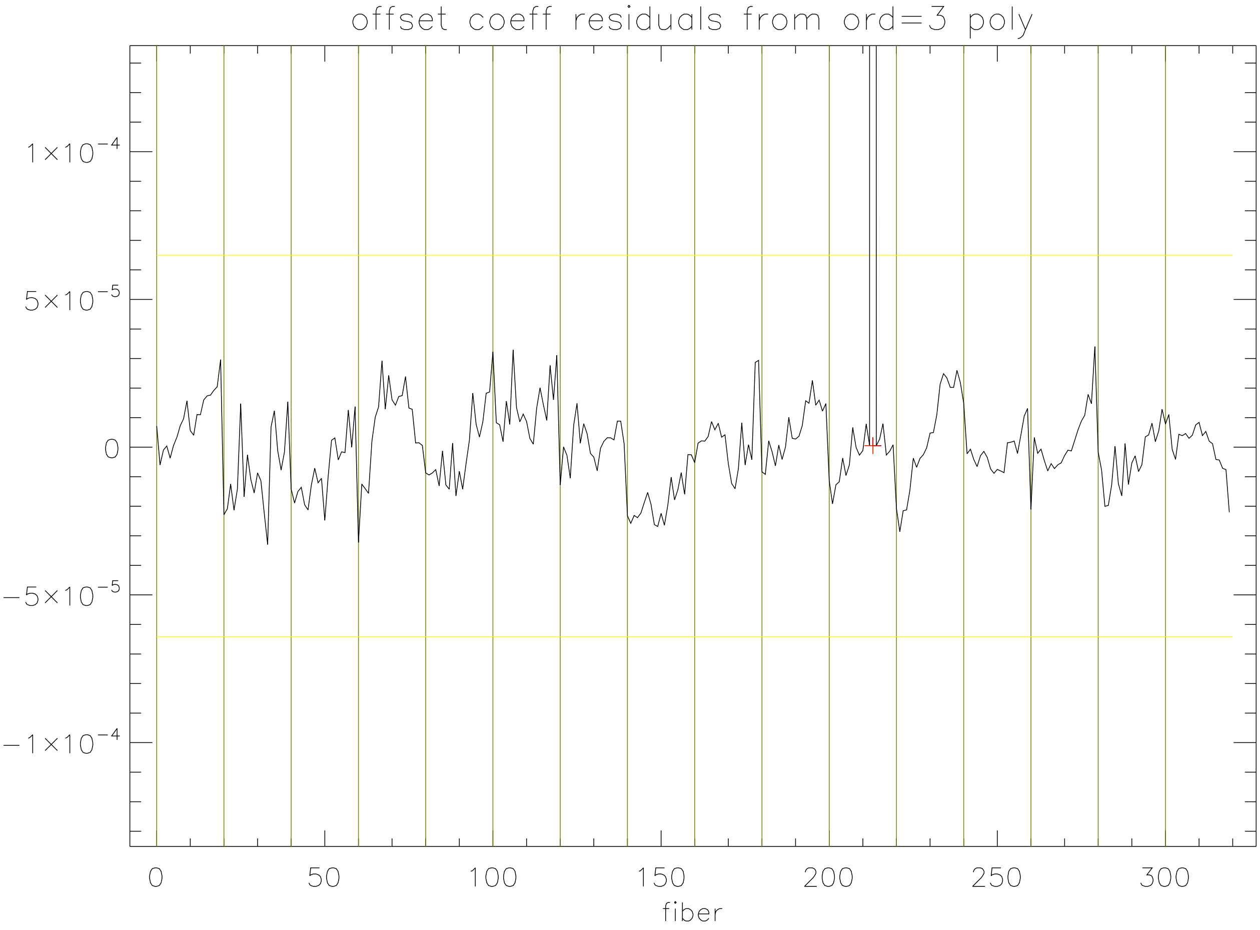
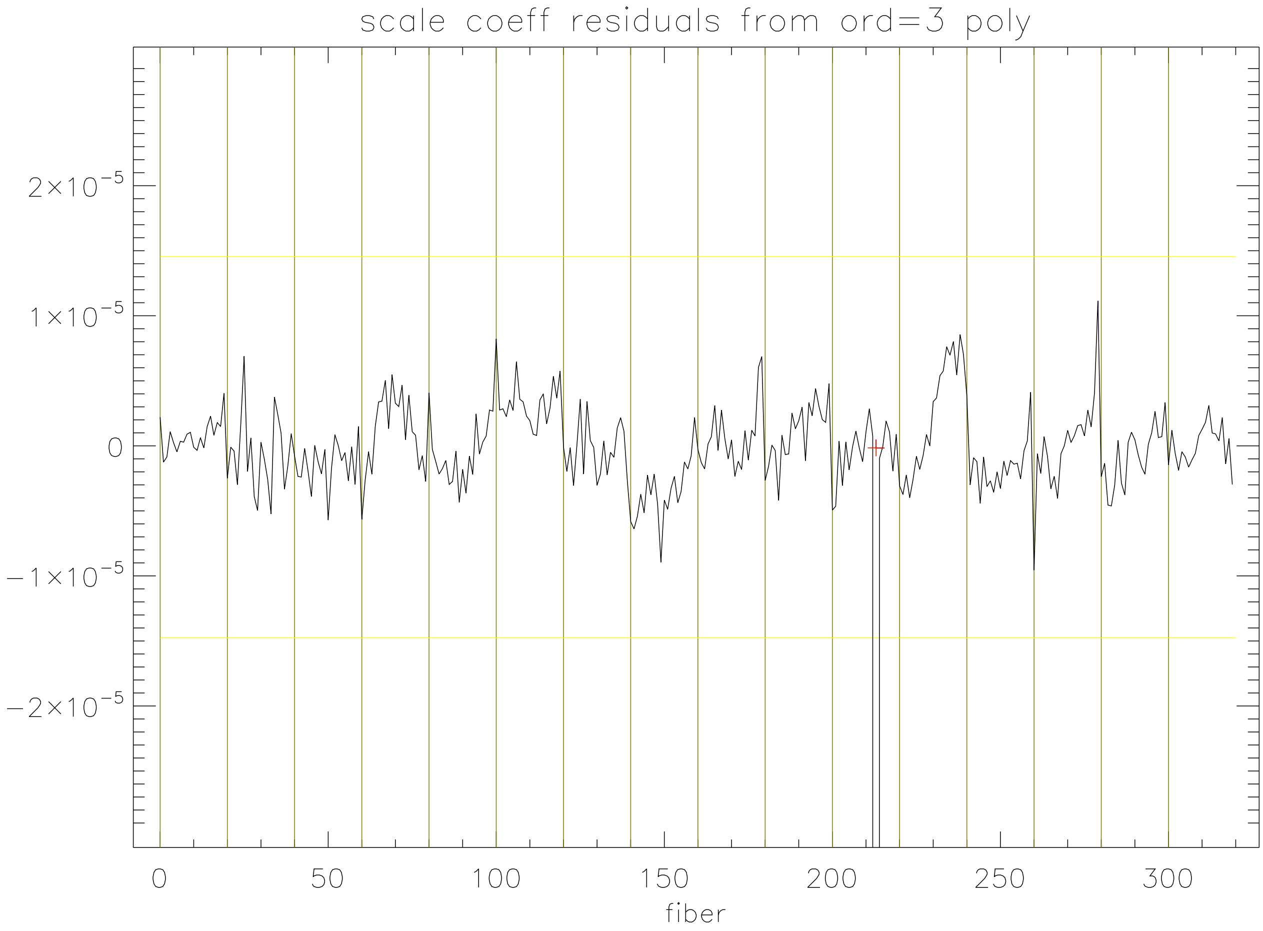
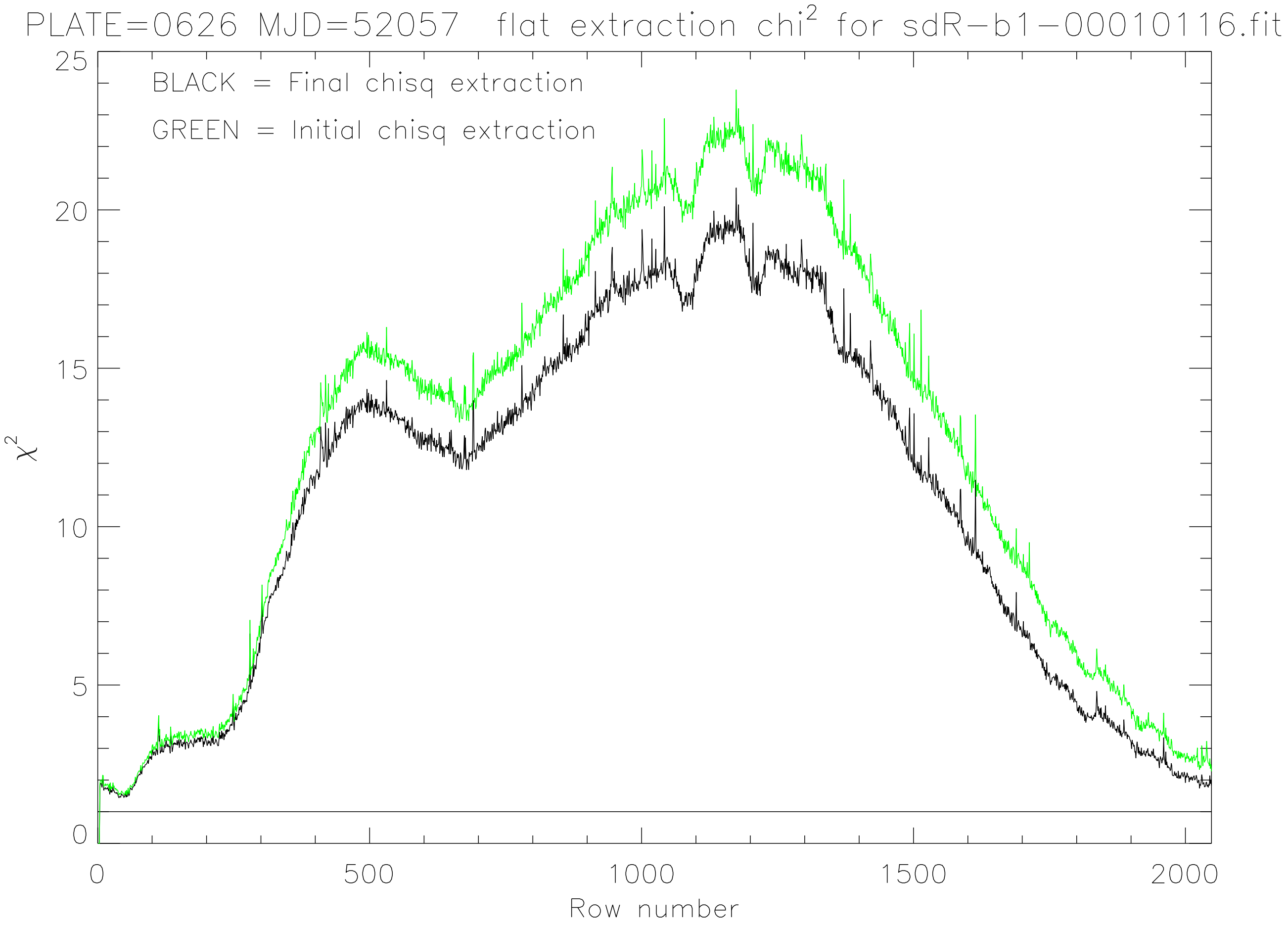
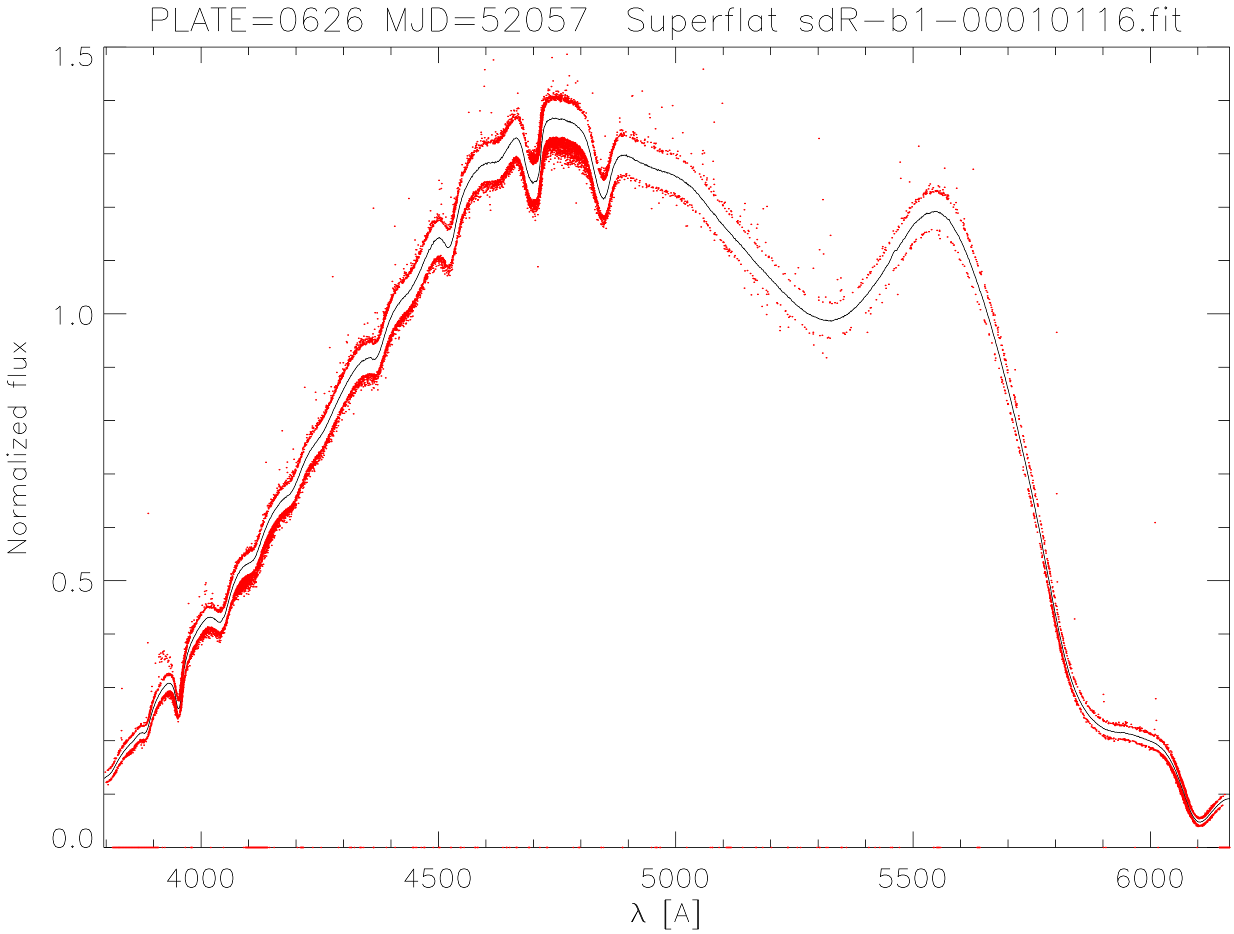

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

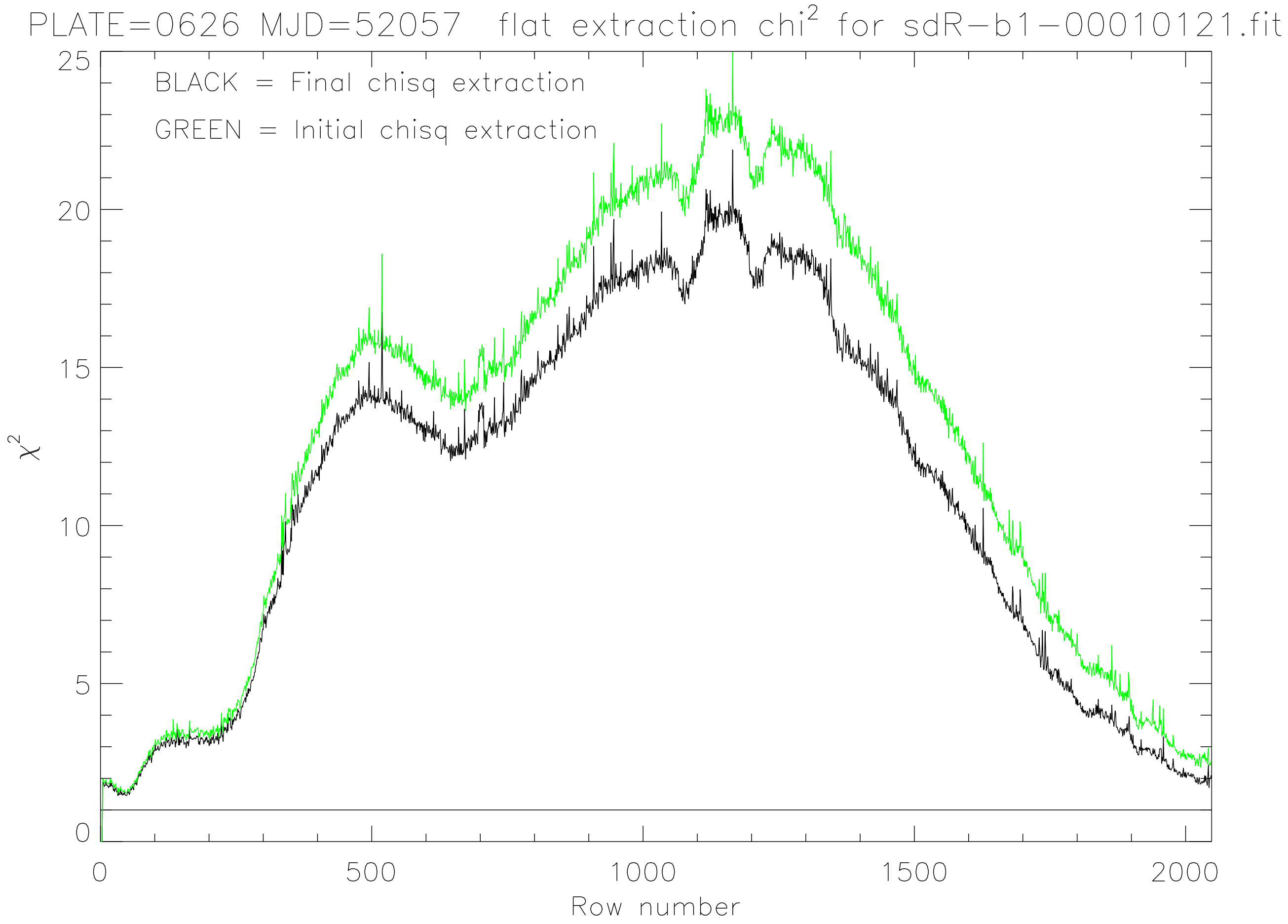

scale coeff residuals from ord=3 poly
2×10^{-5}
1×10^{-5}
0
-1×10^{-5}
-2×10^{-5}
-3×10^{-5}
0
50
100
150
200
250
300
fiber

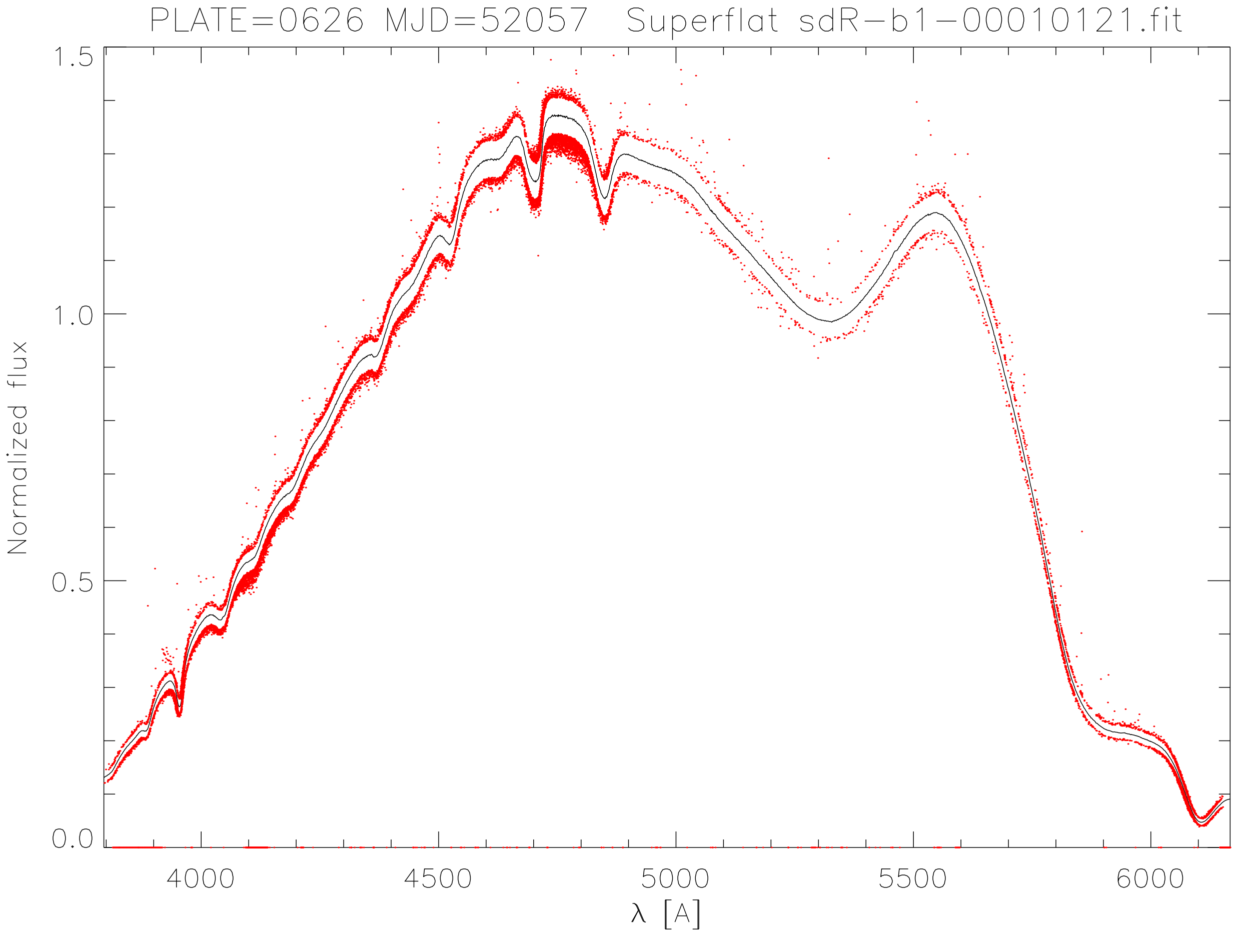

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

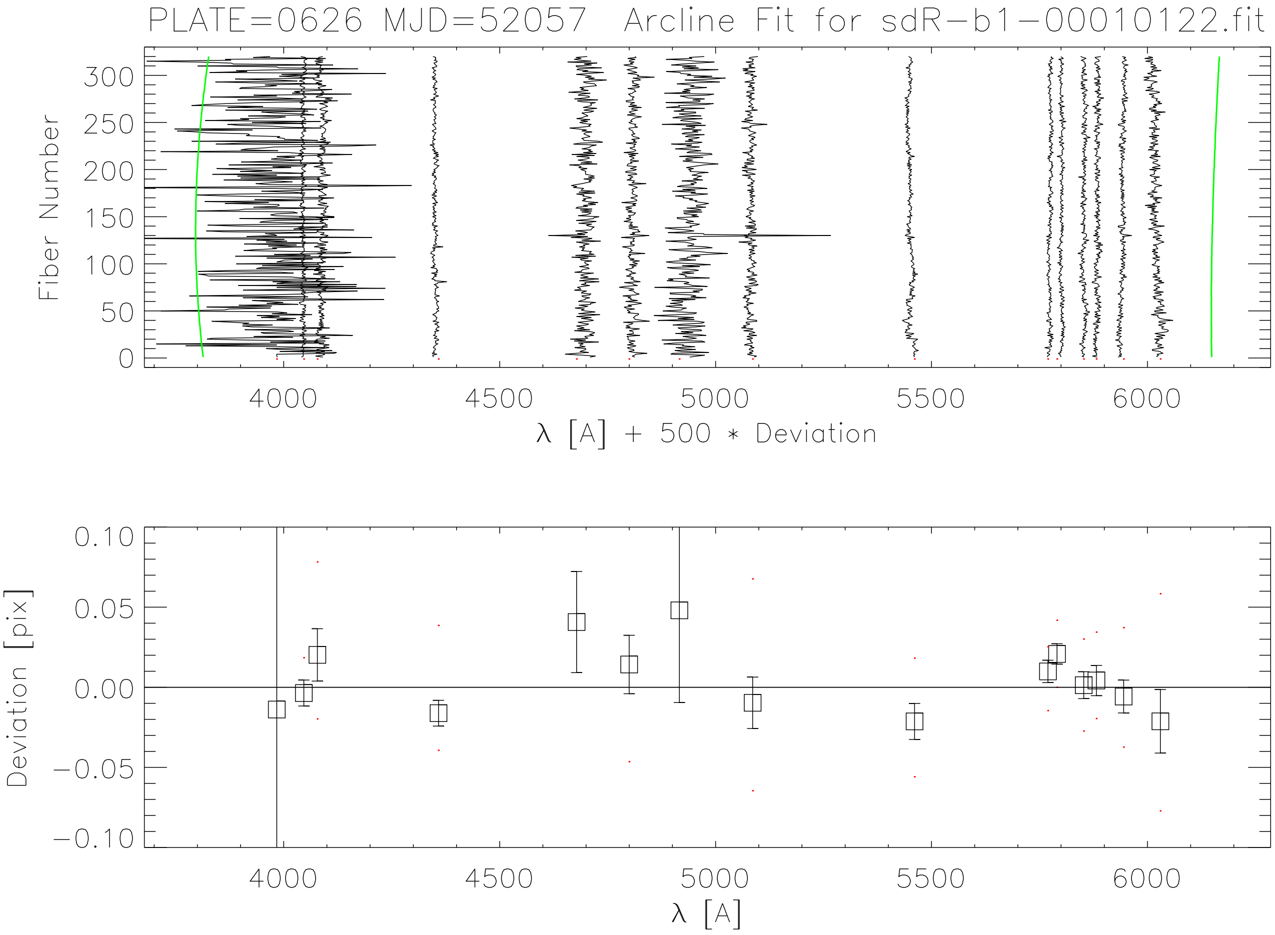

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-b1-00010116.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=0626 MJD=52057 Superflat sdR-b1-00010116.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

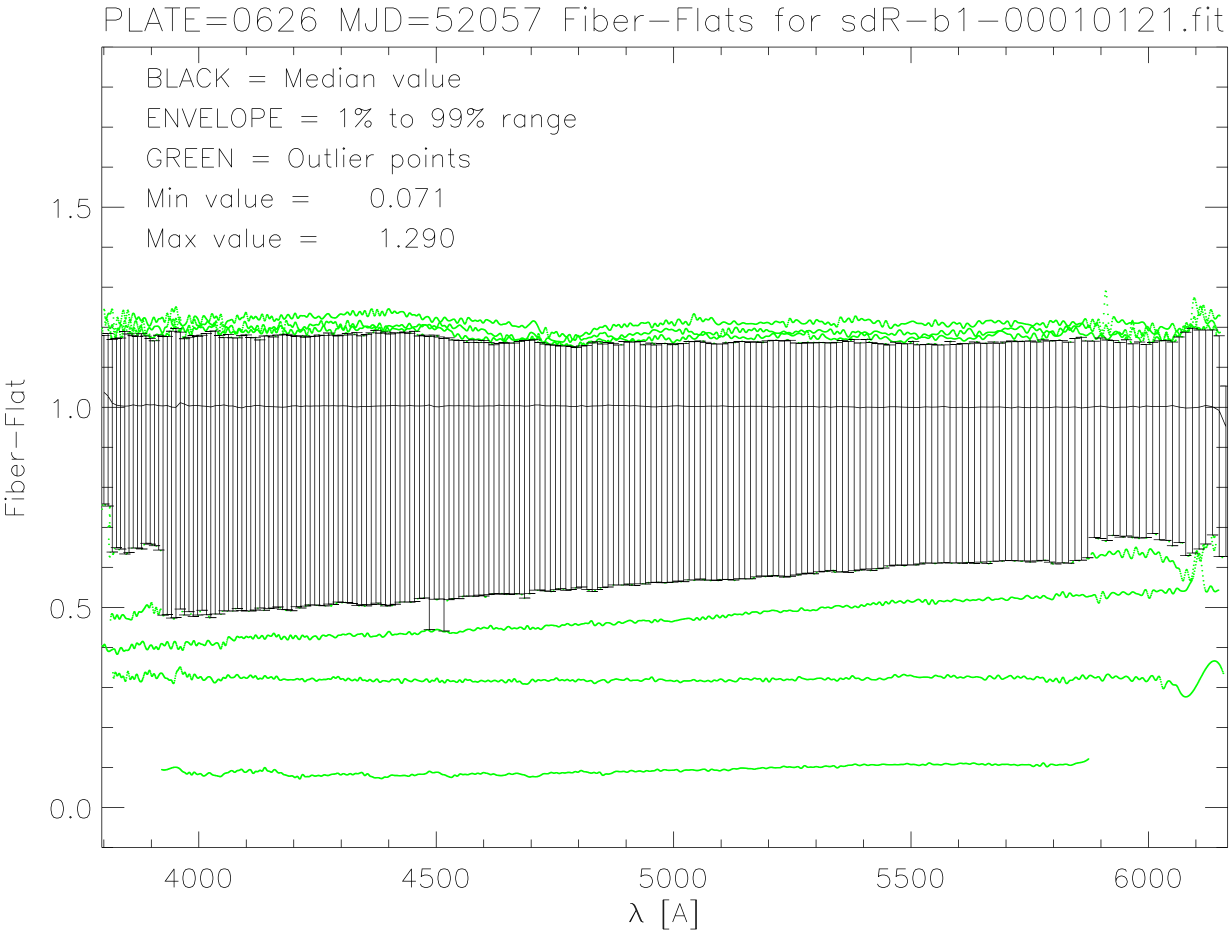

PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-b1-00010121.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
20
25
0
500
1000
1500
2000
Row number


PLATE=0626 MJD=52057 Superflat sdR-b1-00010121.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]

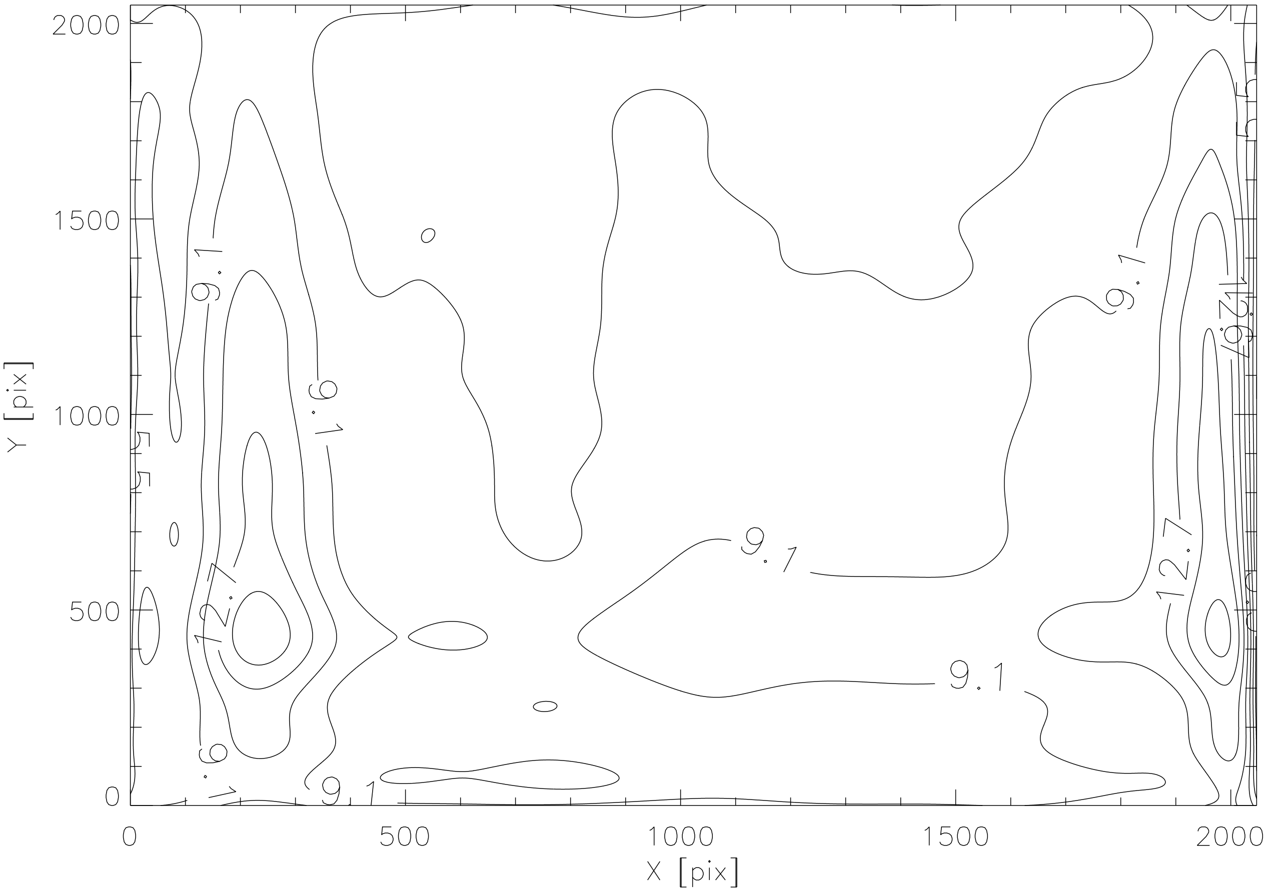


PLATE=0626 MJD=52057 Arcline Fit for sdR-b1-00010122.fit

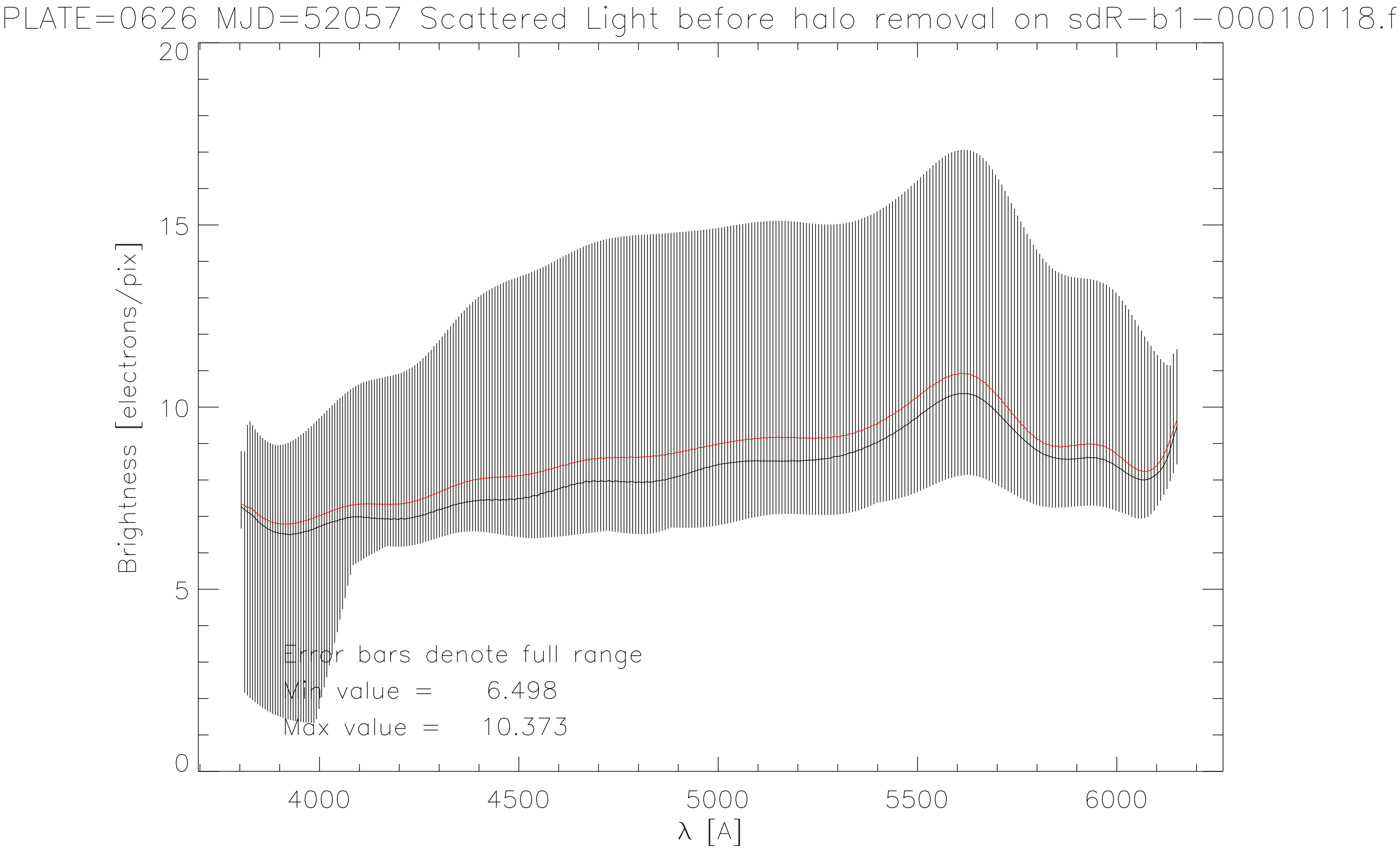
Tue Feb 26 05:43:04 2008



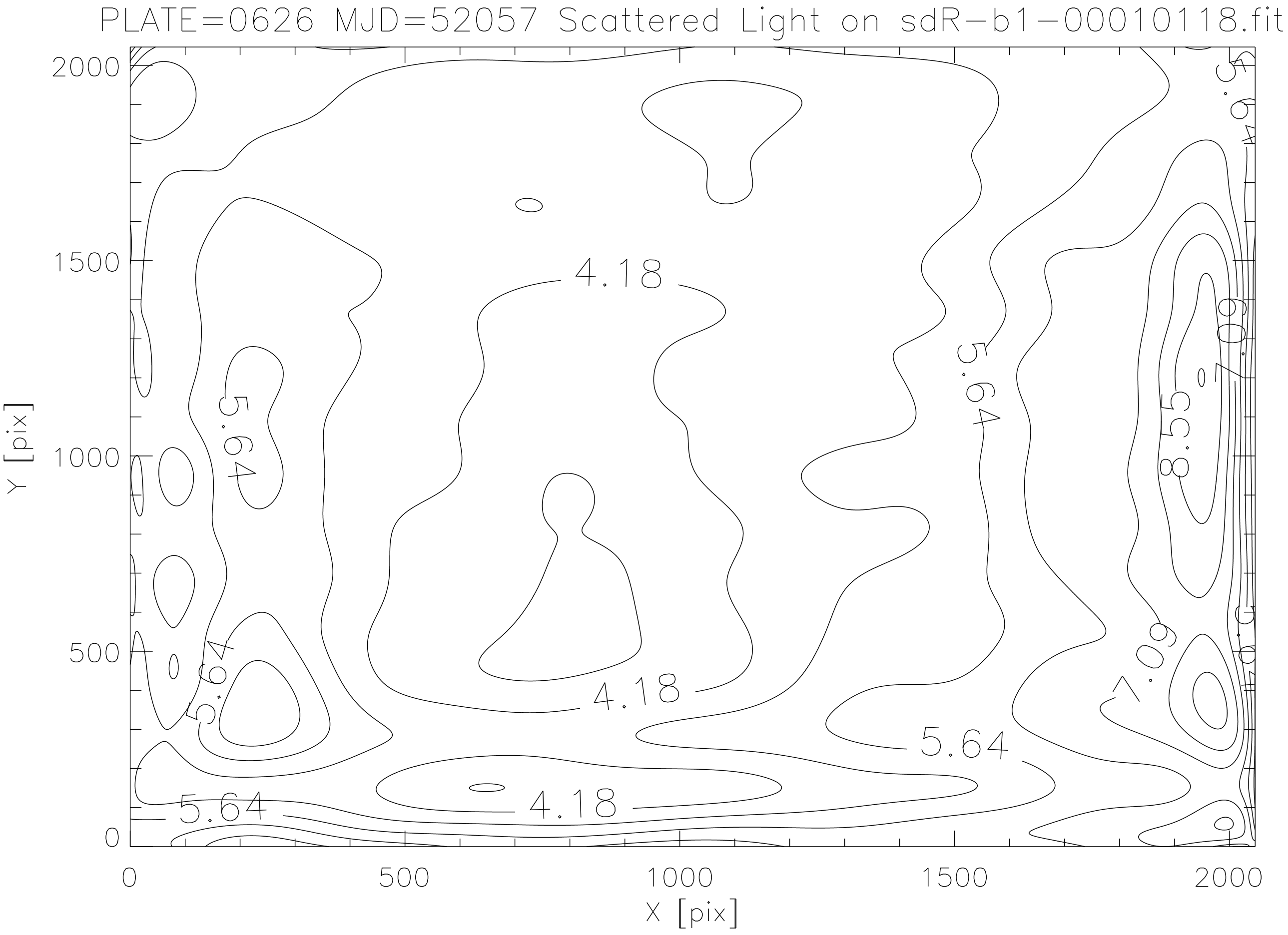
Tue Feb 26 05:43:12 2008



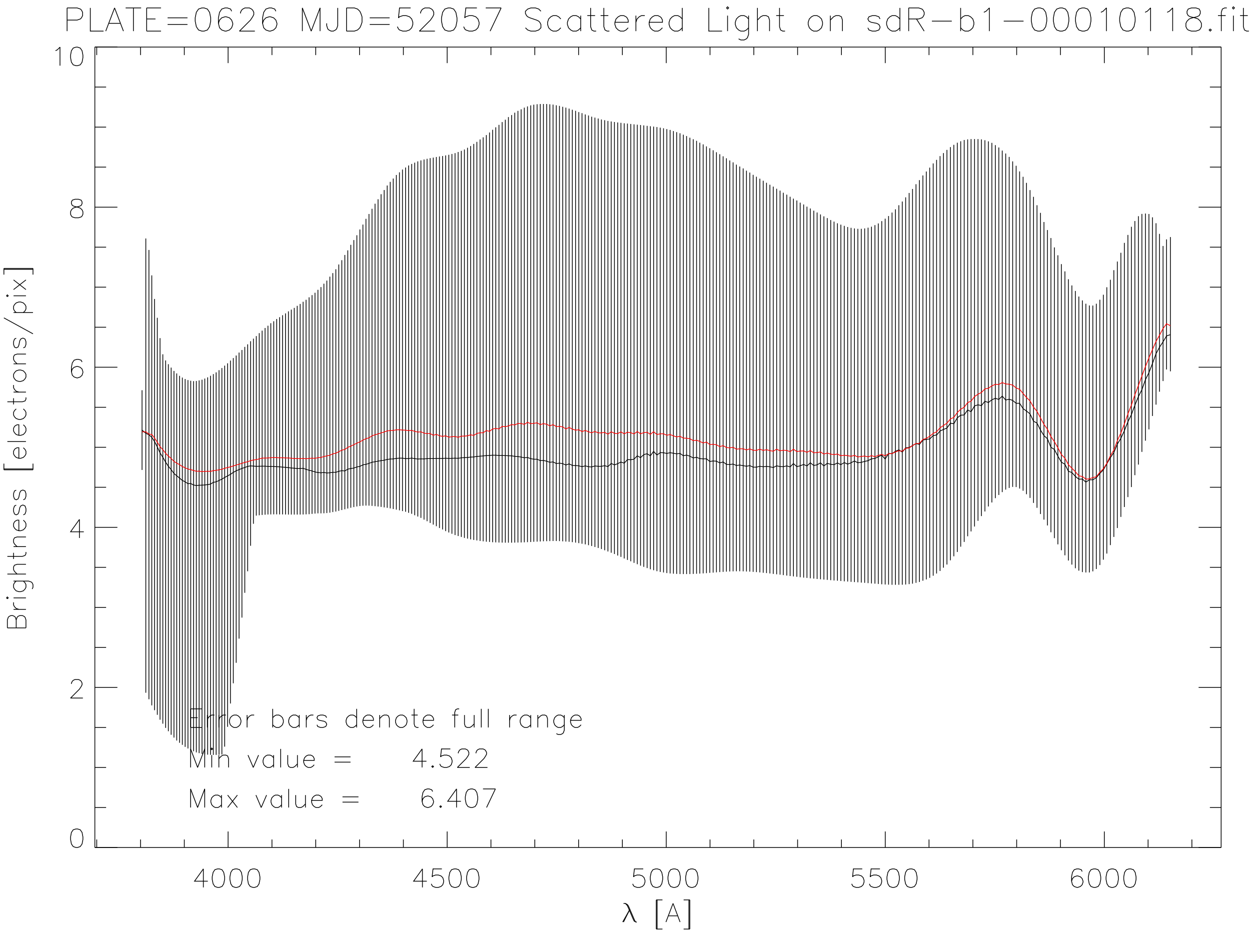
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b1-00010118.f



Tue Feb 26 05:44:09 2008

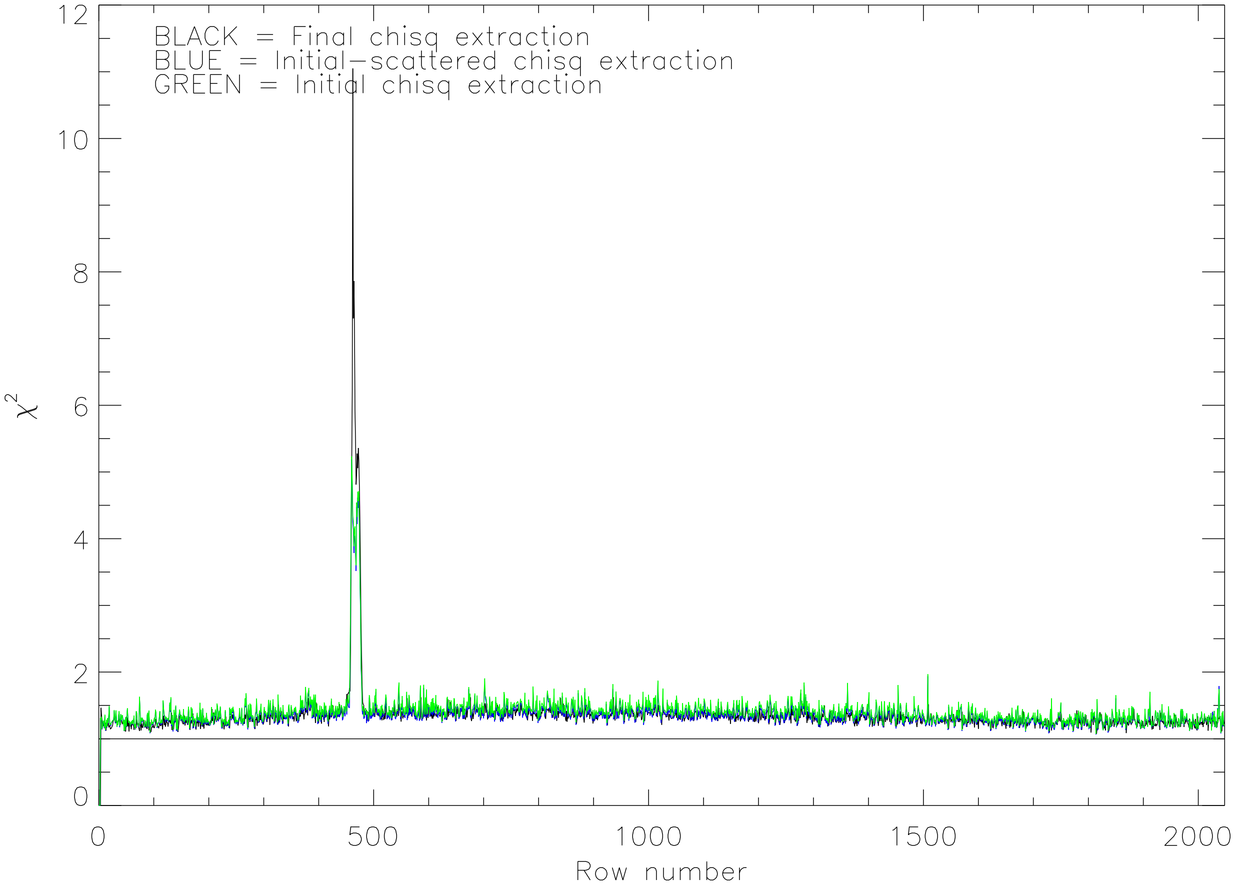


PLATE=0626 MJD=52057 Scattered Light on sdR-b1-00010118.fit

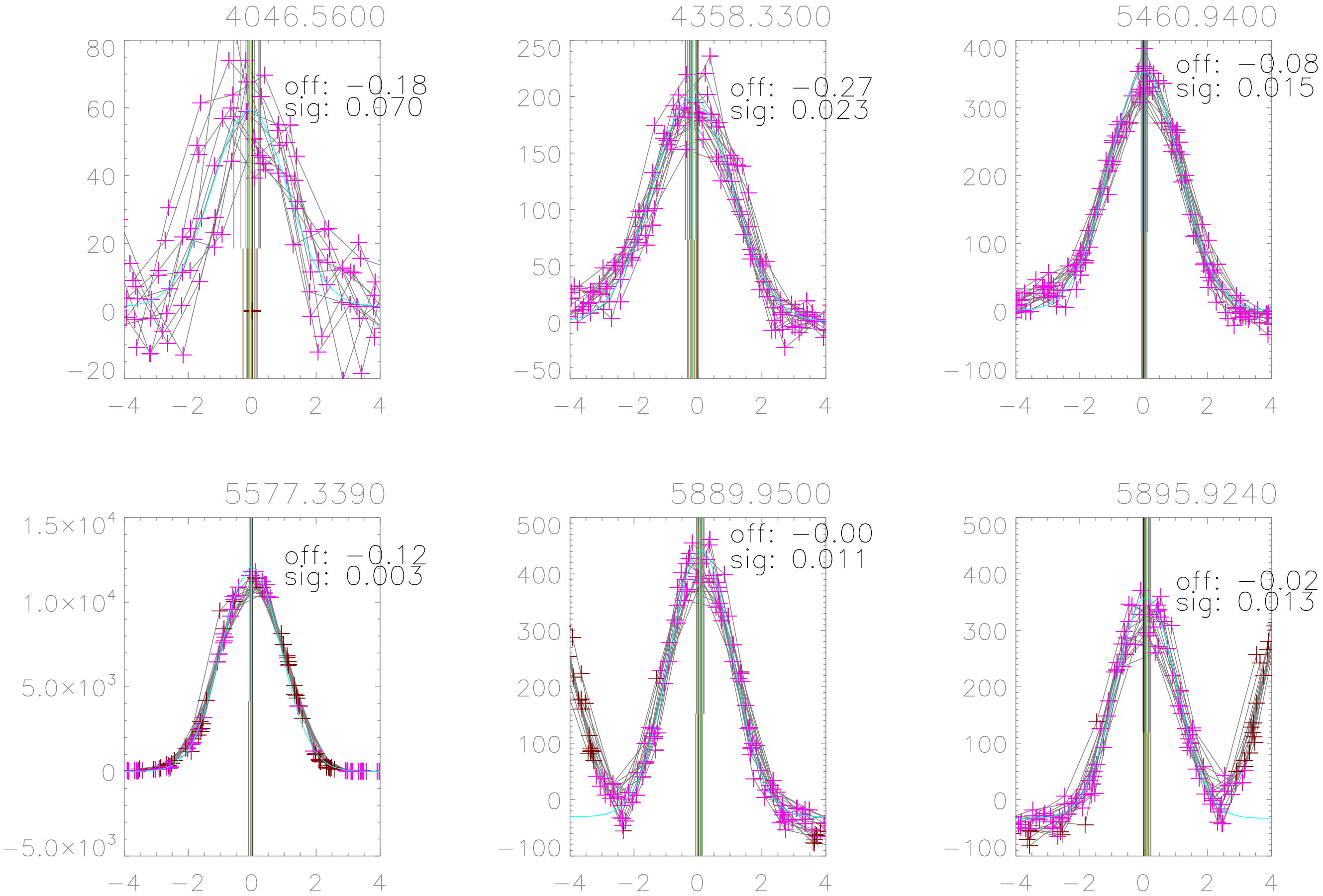


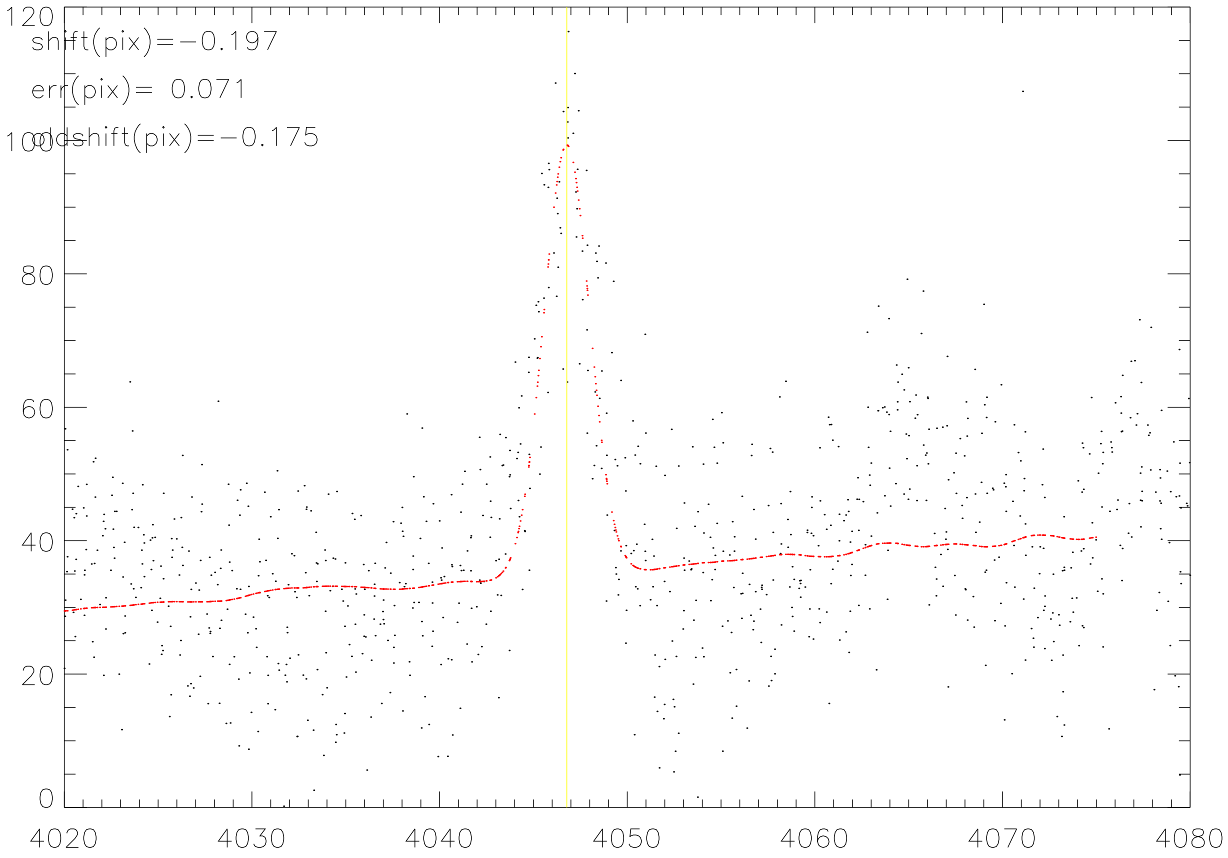
PLATE=0626 MJD=52057 Scattered Light on sdR-b1-00010118.fit

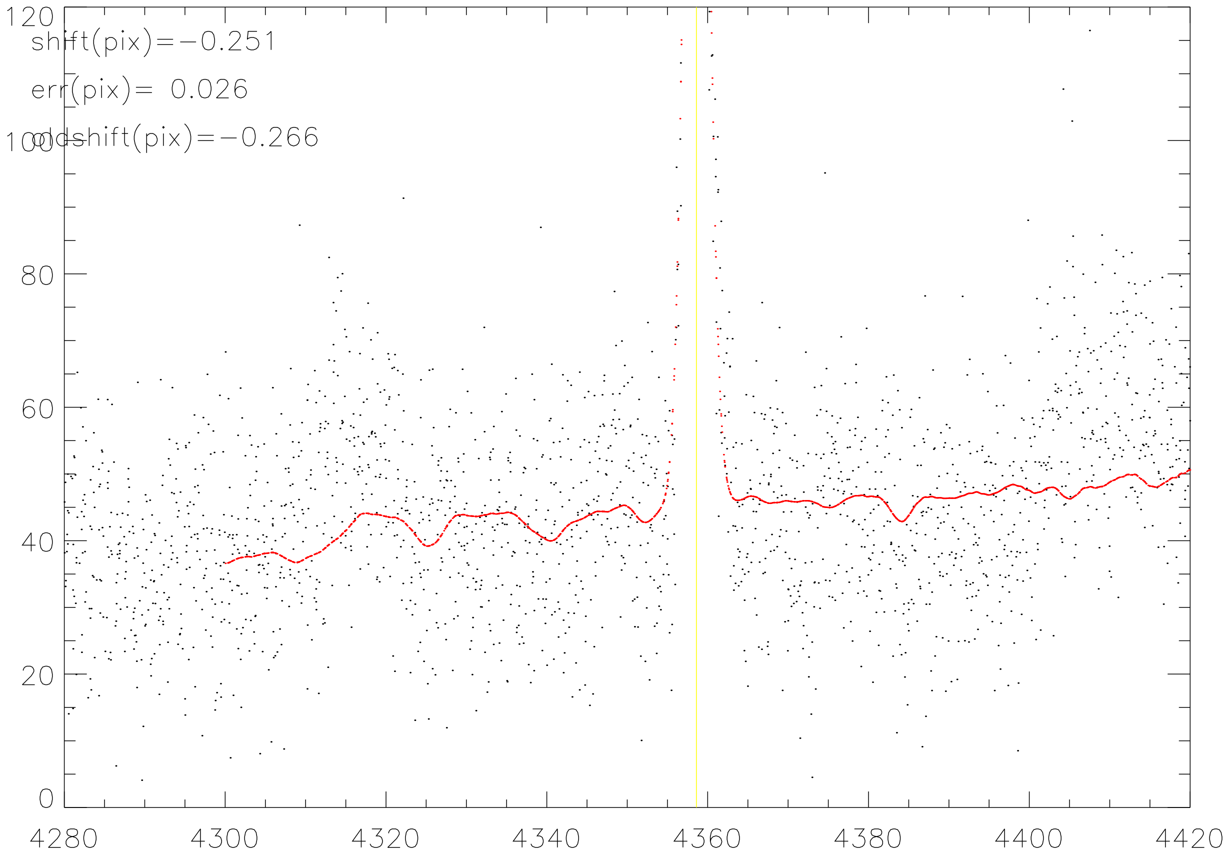
Tue Feb 26 05:47:13 2008

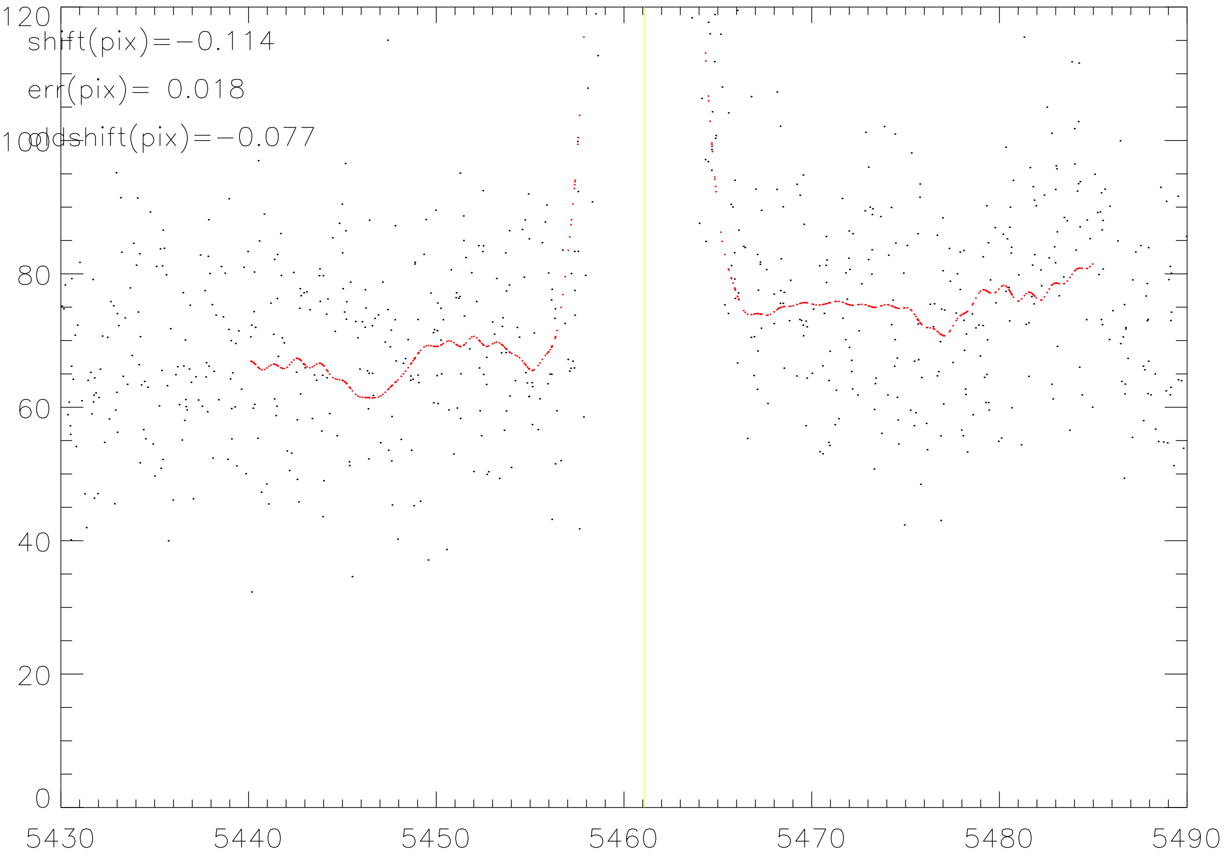


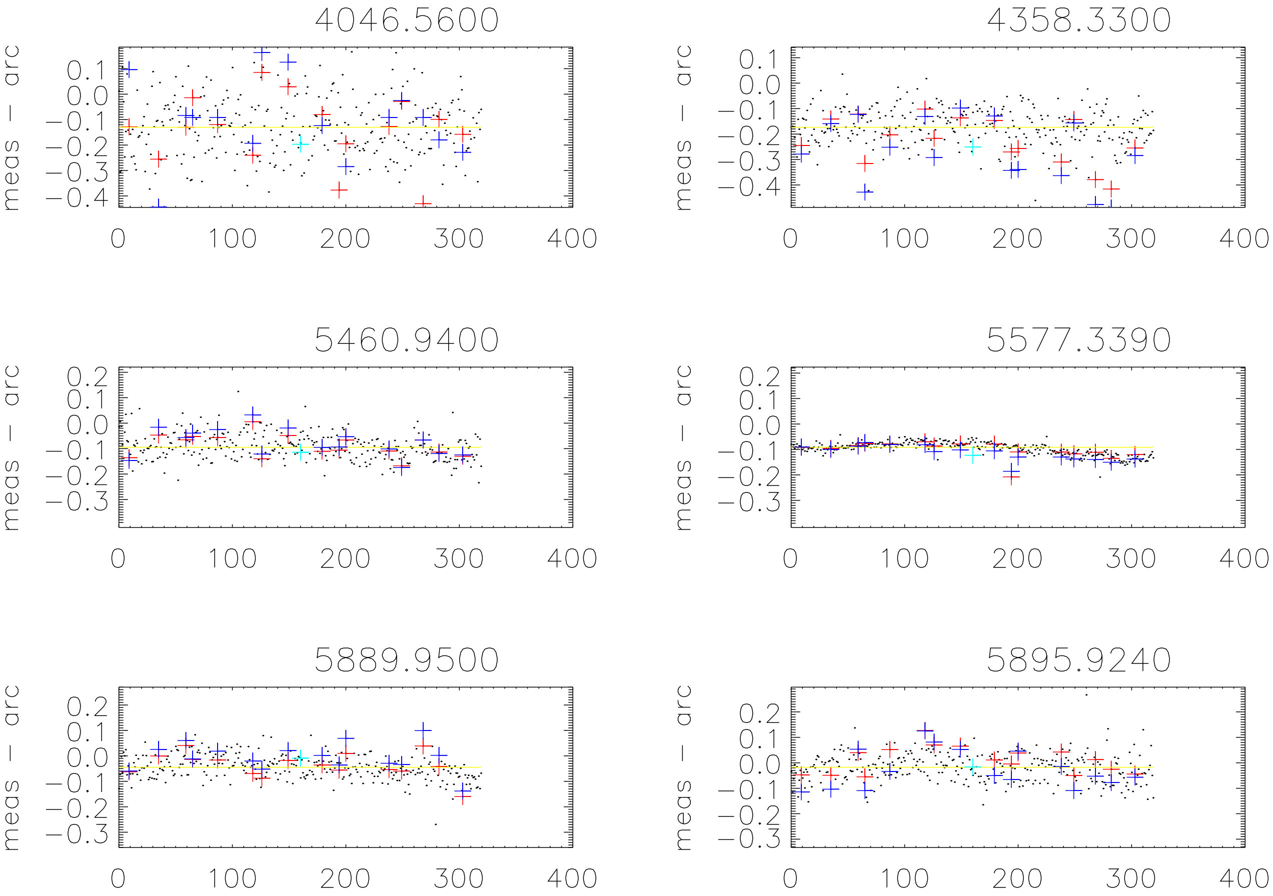
PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b1-00010118.fit

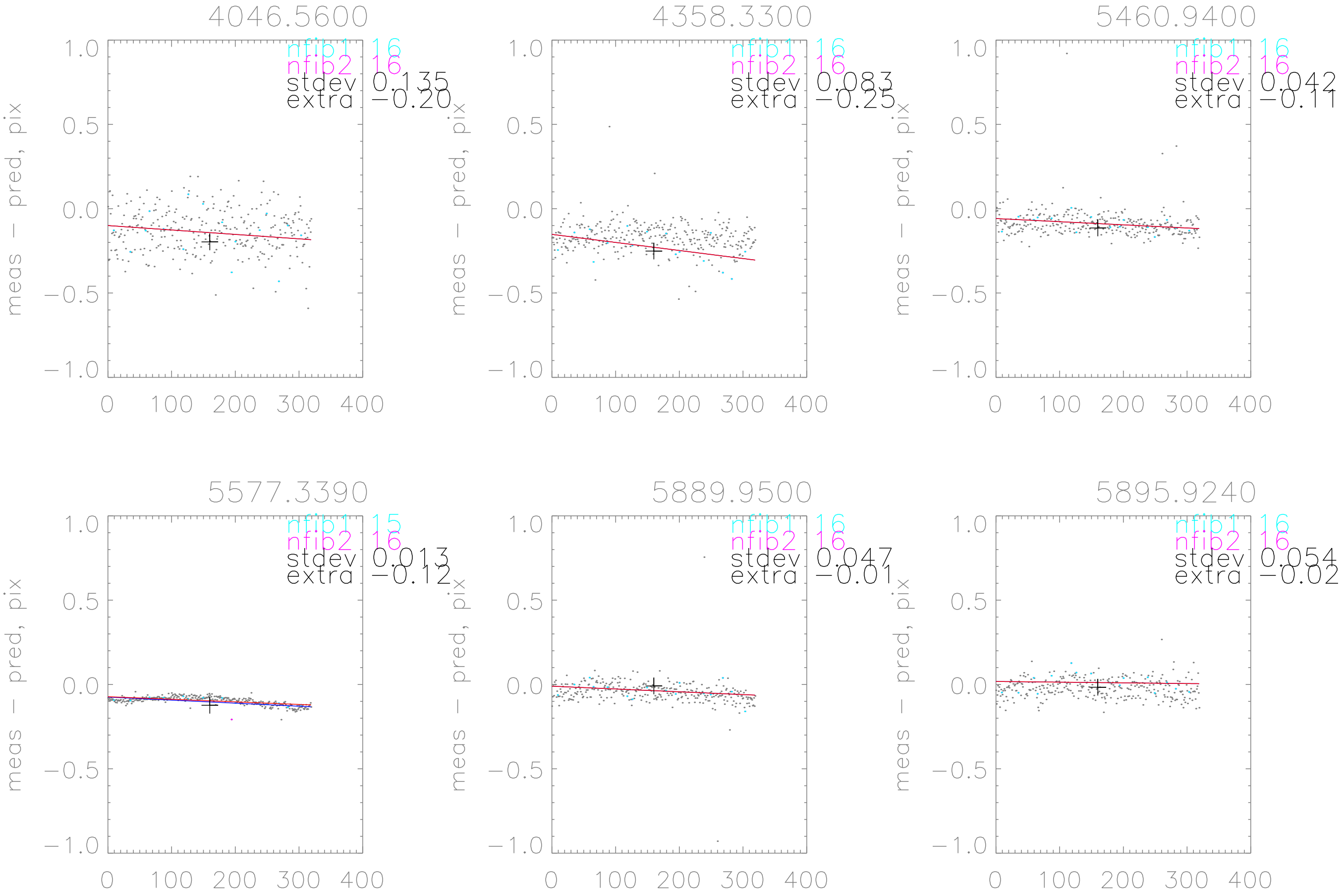

4046.5600
off: −0.18
sig: 0.070
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.27
sig: 0.023
250
200
150
100
50
0
−50
−4
−2
0
2
4
5460.9400
off: −0.08
sig: 0.015
400
300
200
100
0
−100
−4
−2
0
2
4
5577.3390
off: −0.12
sig: 0.003
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
−4
−2
0
2
4
5889.9500
off: −0.00
sig: 0.011
500
400
300
200
100
0
−100
−4
−2
0
2
4
5895.9240
off: −0.02
sig: 0.013
500
400
300
200
100
0
−100
−4
−2
0
2
4

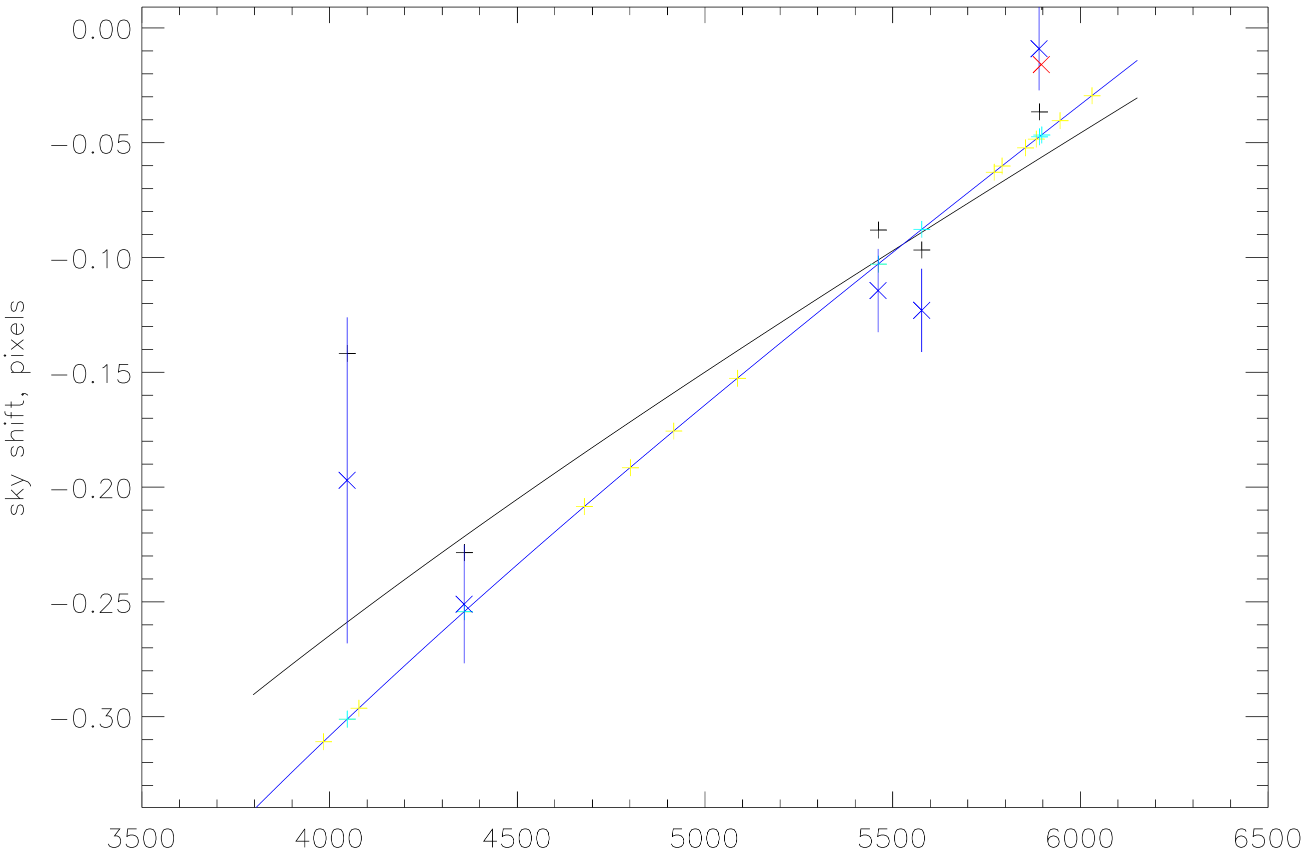

shift(pix)=−0.197
err(pix)= 0.071
oldshift(pix)=−0.175
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

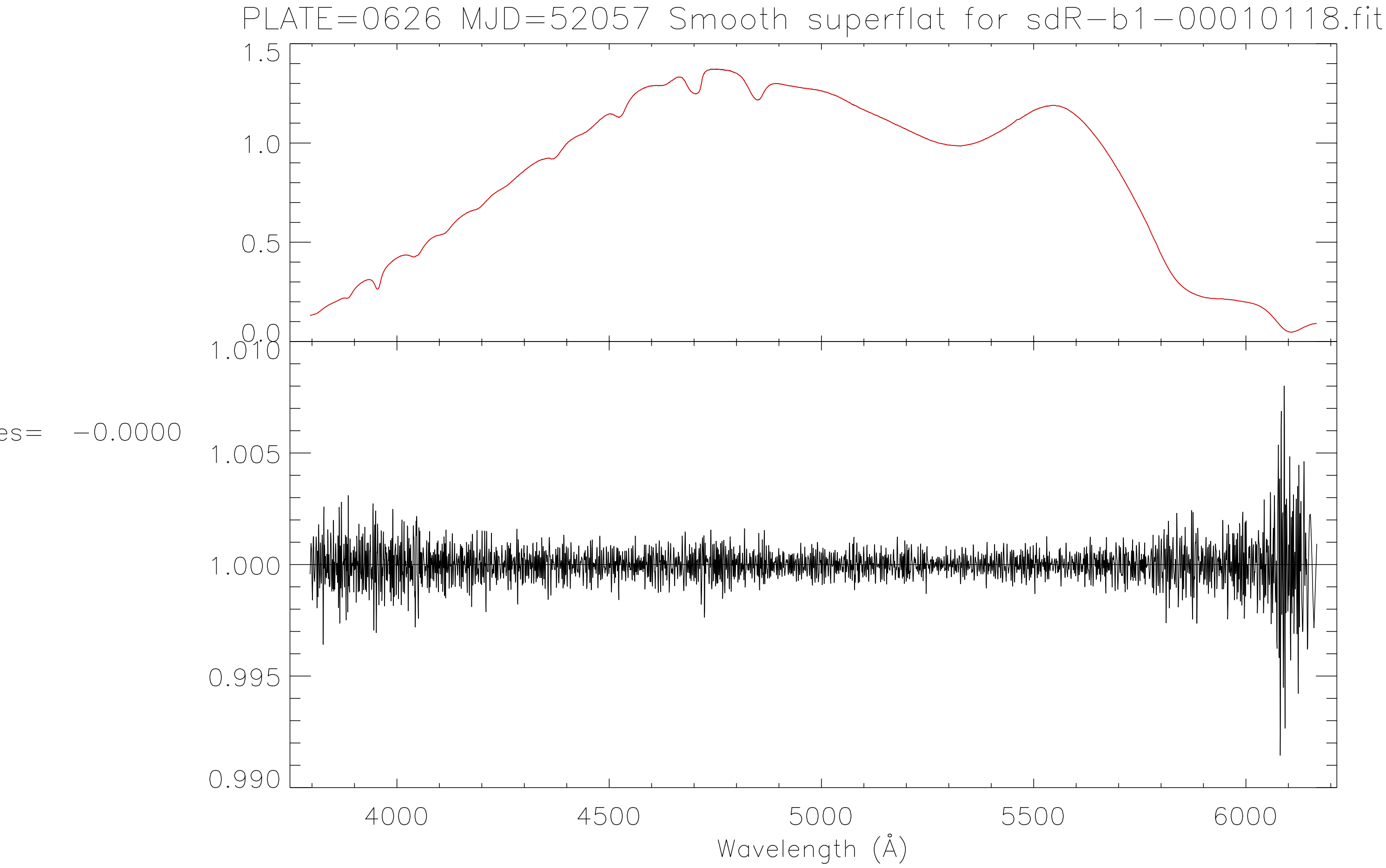

shift(pix)=−0.251
err(pix)= 0.026
oldshift(pix)=−0.266
0
20
40
60
80
100
120
4280
4300
4320
4340
4360
4380
4400
4420

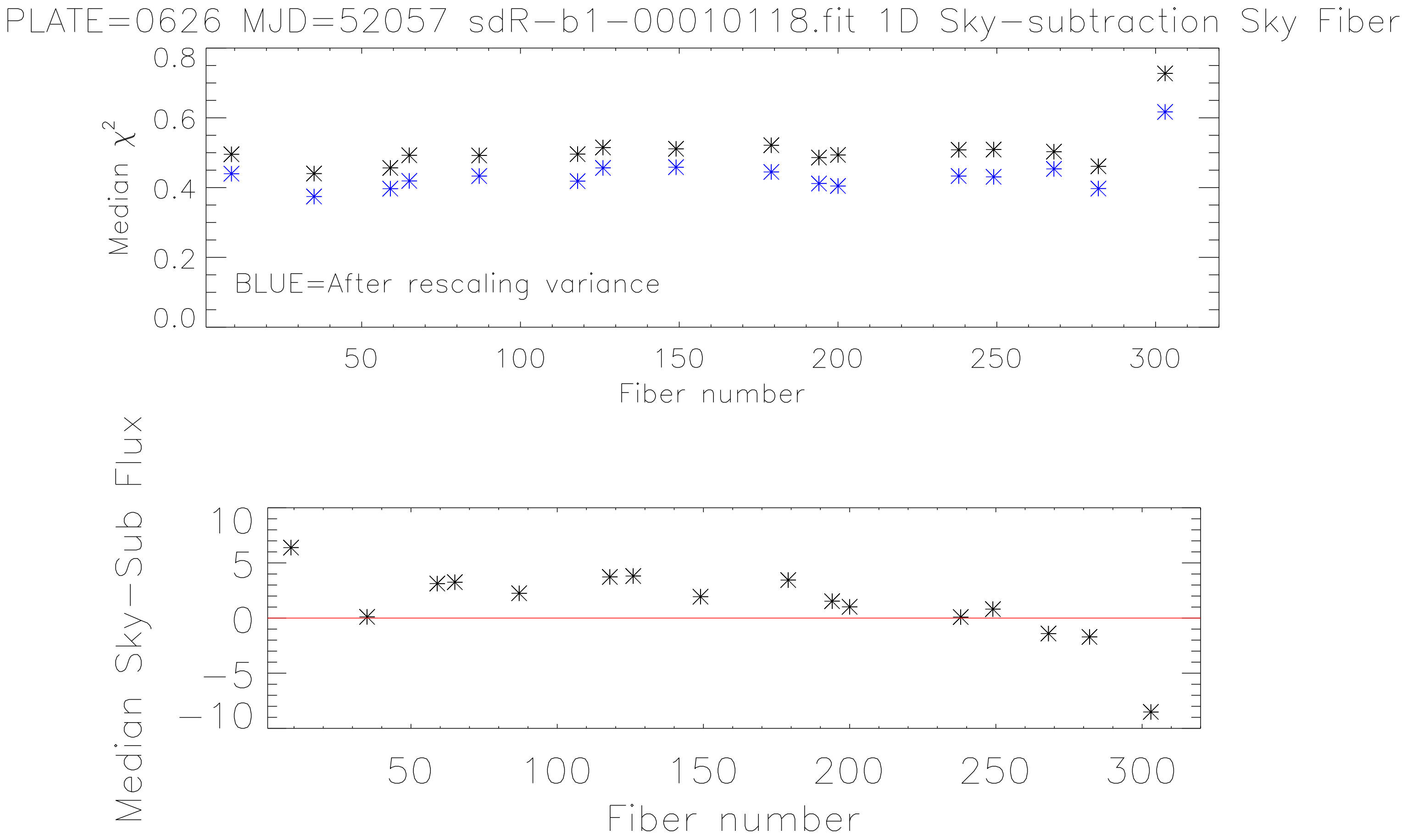

shift(pix)=−0.114
err(pix)= 0.018
oldshift(pix)=−0.077
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

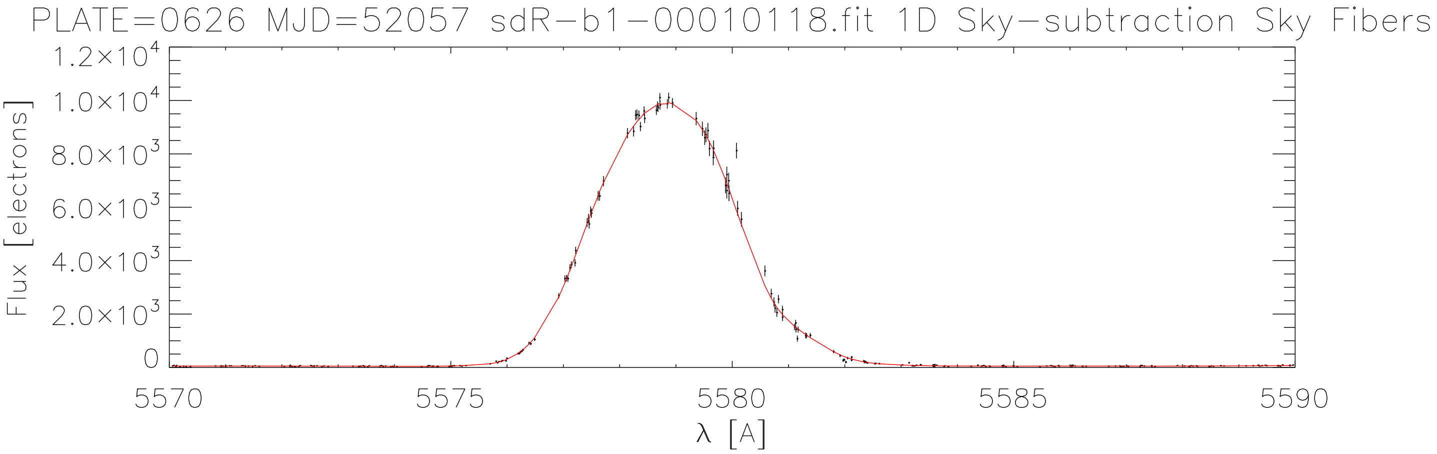

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas - arc
0
100
200
300
400

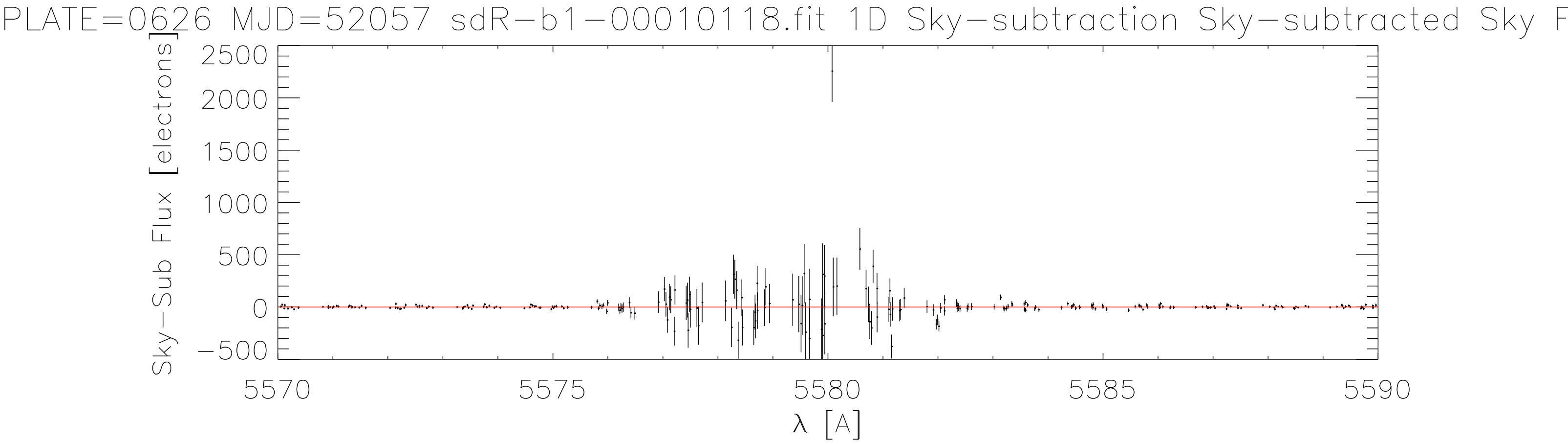

4046.5600
nfib1 16
nfib2 16
stdev 0.135
extra −0.20
4358.3300
nfib1 16
nfib2 16
stdev 0.083
extra −0.25
5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra −0.11
5577.3390
nfib1 15
nfib2 16
stdev 0.013
extra −0.12
5889.9500
nfib1 16
nfib2 16
stdev 0.047
extra −0.01
5895.9240
nfib1 16
nfib2 16
stdev 0.054
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
−0.30
3500
4000
4500
5000
5500
6000
6500


PLATE=0626 MJD=52057 Smooth superflat for sdR-b1-00010118.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

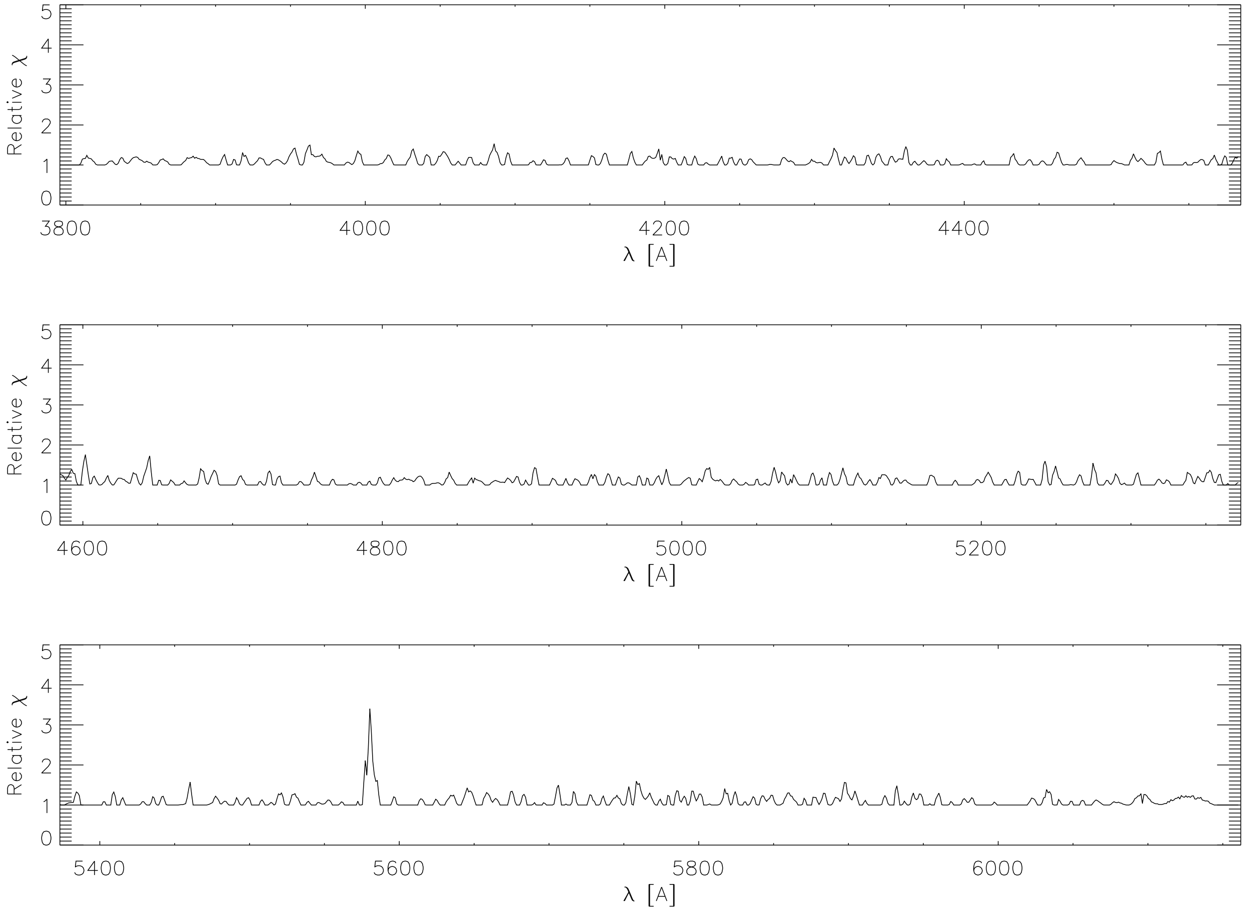

PLATE=0626 MJD=52057 sdR-b1-00010118.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

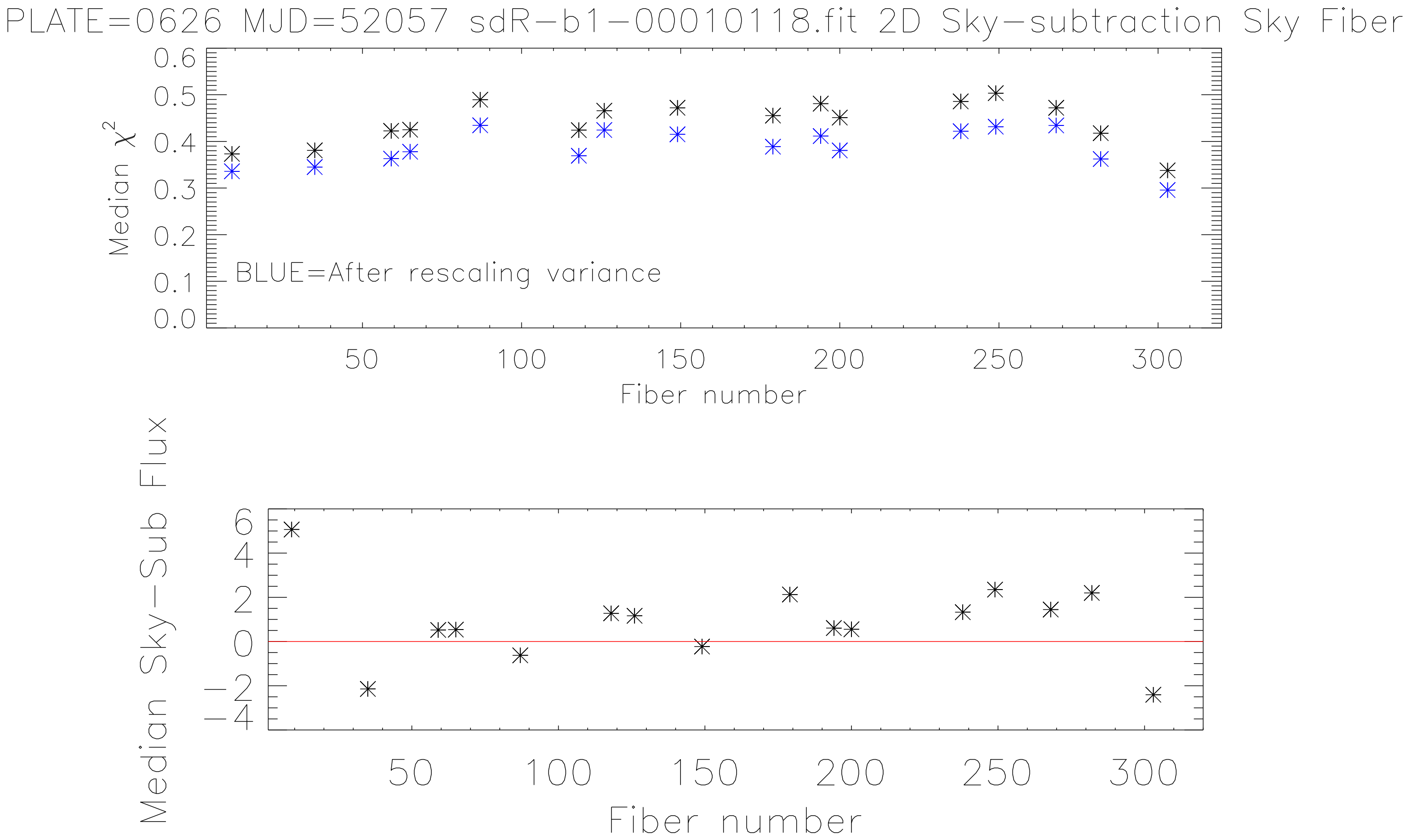

PLATE=0626 MJD=52057 sdR-b1-00010118.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.2×10^4
1.0×10^4
8.0×10^3
6.0×10^3
4.0×10^3
2.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

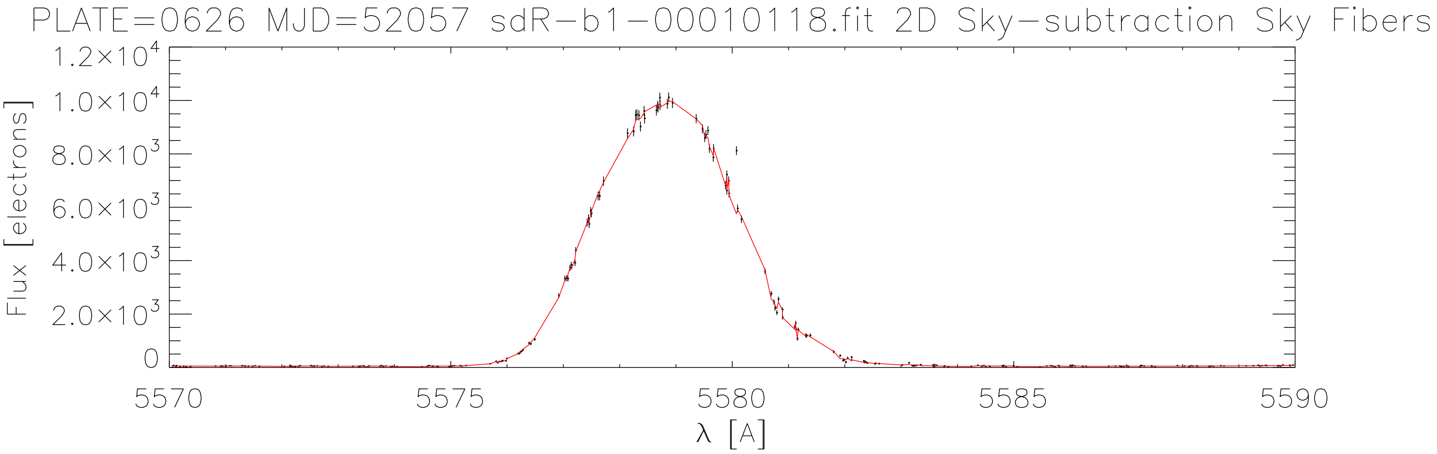

PLATE=0626 MJD=52057 sdR-b1-00010118.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

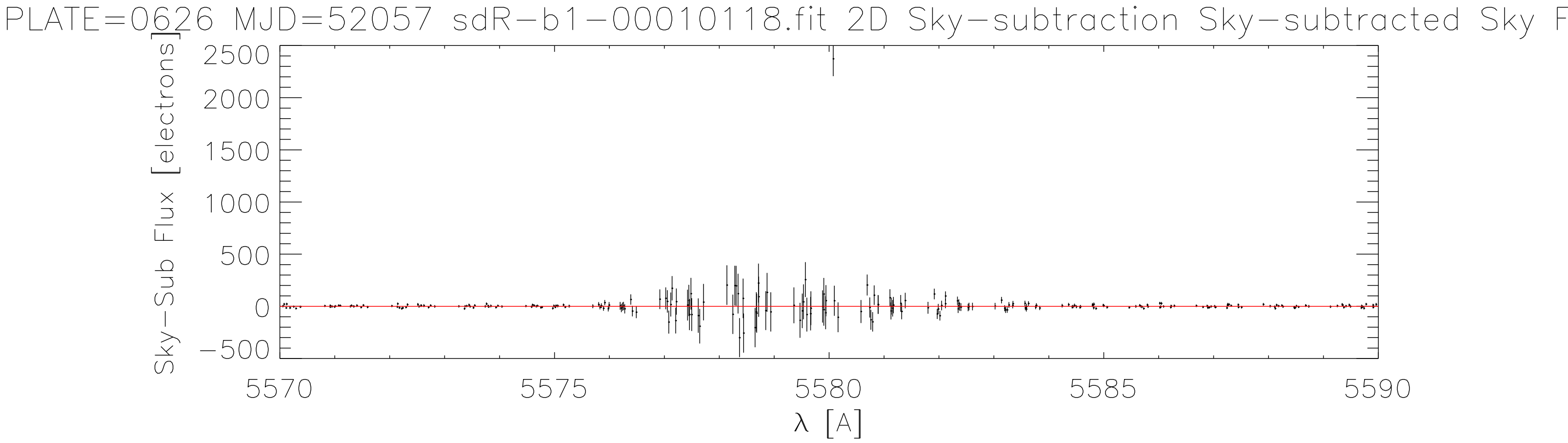
Number of sky fibers = 16

PLATE=0626 MJD=52057 sdR-b1-00010118.fit 1D Sky-subtraction Rescaled Errors



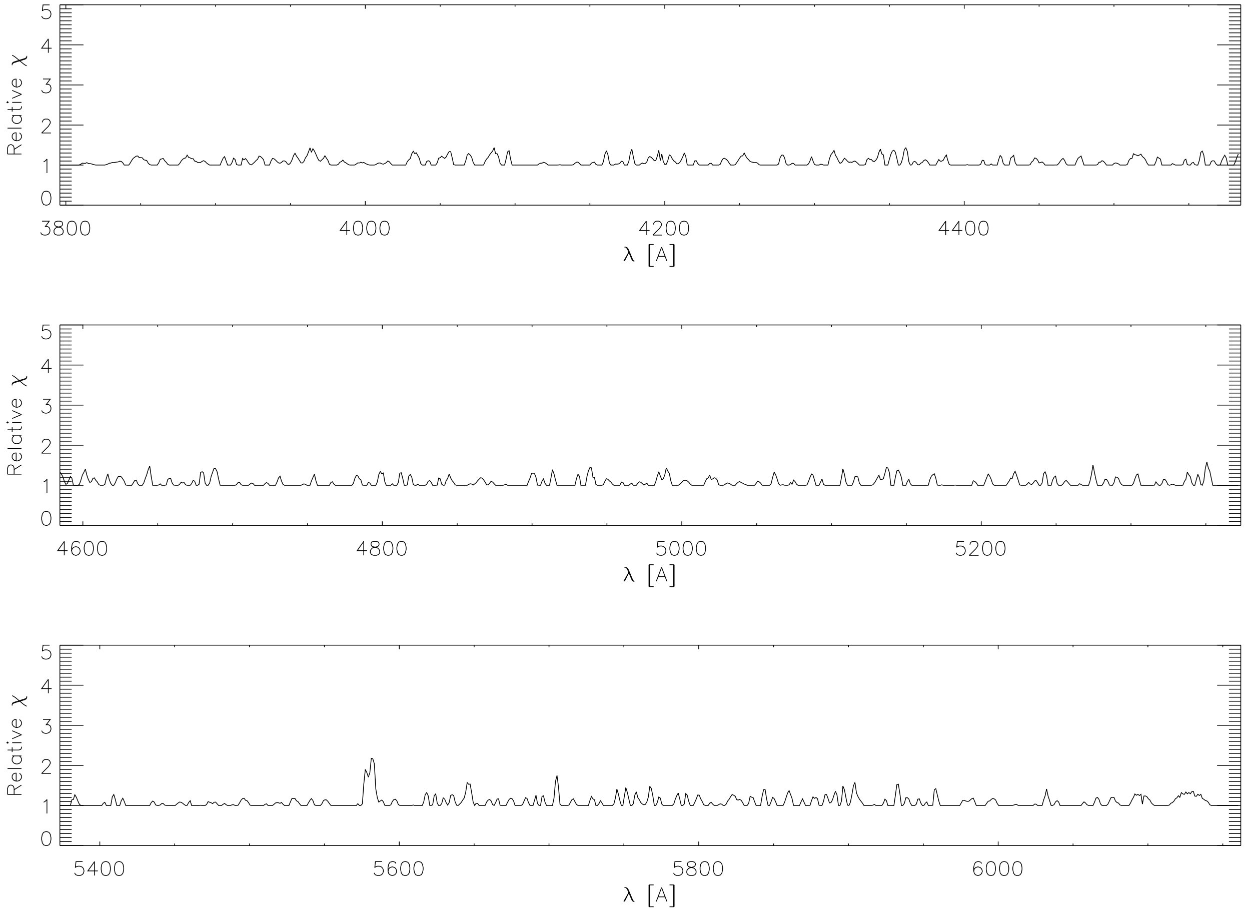

PLATE=0626 MJD=52057 sdR-b1-00010118.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
-2
-4
50
100
150
200
250
300
Fiber number

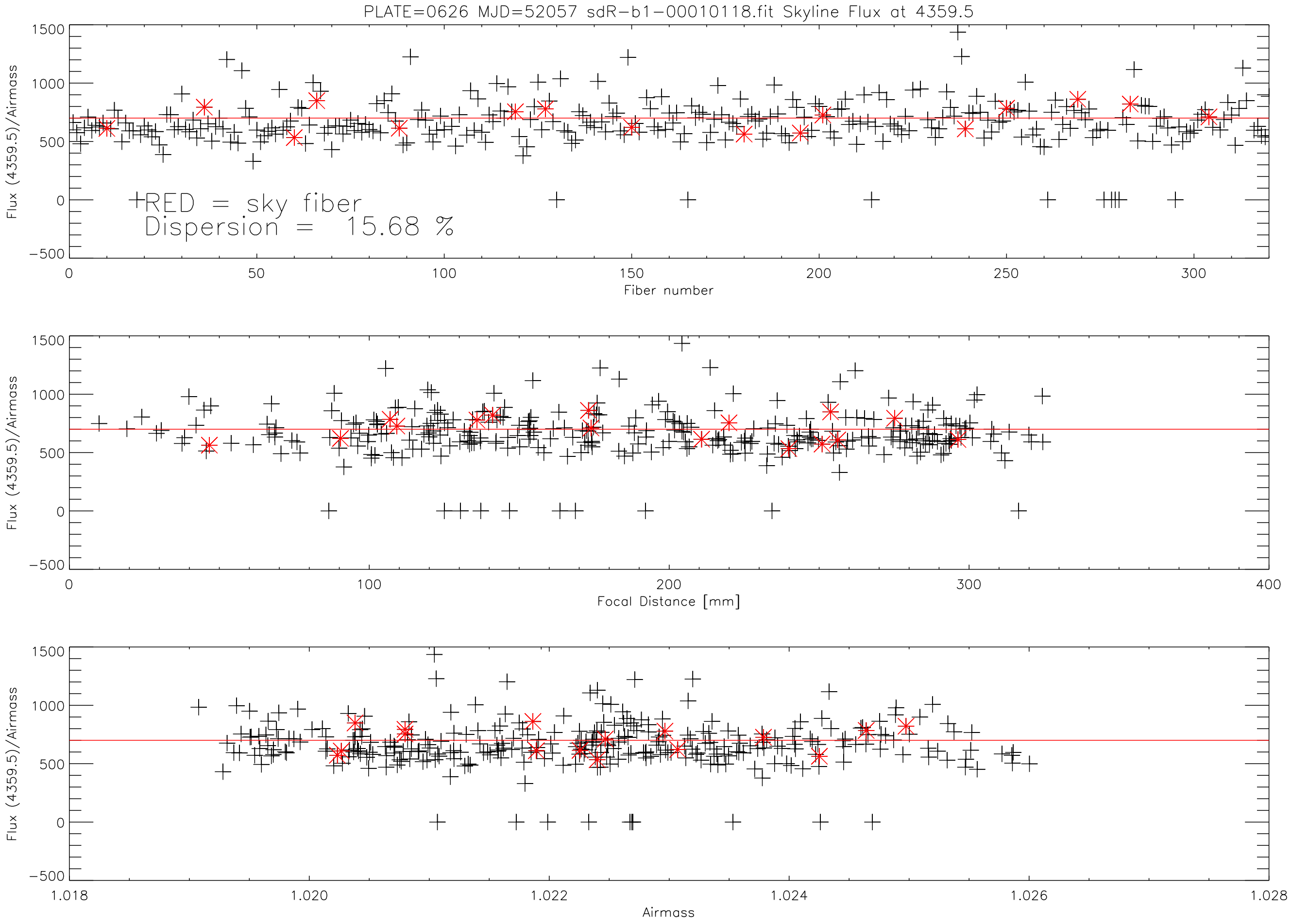

PLATE=0626 MJD=52057 sdR−b1−00010118.fit 2D Sky−subtraction Sky Fibers
Flux [electrons]
1.2×10⁴
1.0×10⁴
8.0×10³
6.0×10³
4.0×10³
2.0×10³
0
5570
5575
5580
5585
5590
λ [A]

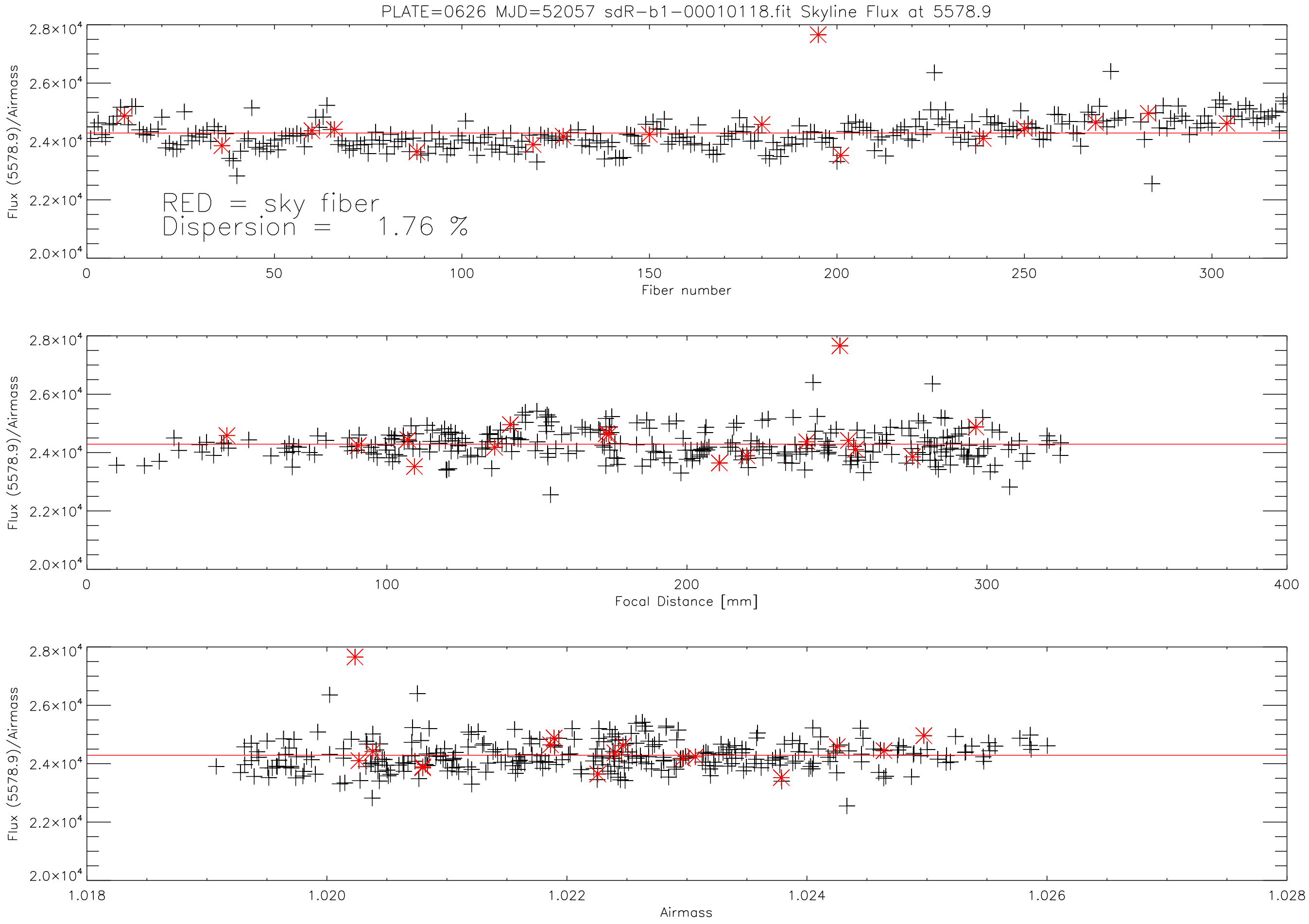

PLATE=0626 MJD=52057 sdR−b1−00010118.fit 2D Sky−subtraction Sky−subtracted Sky F
Sky−Sub Flux [electrons]
2500
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

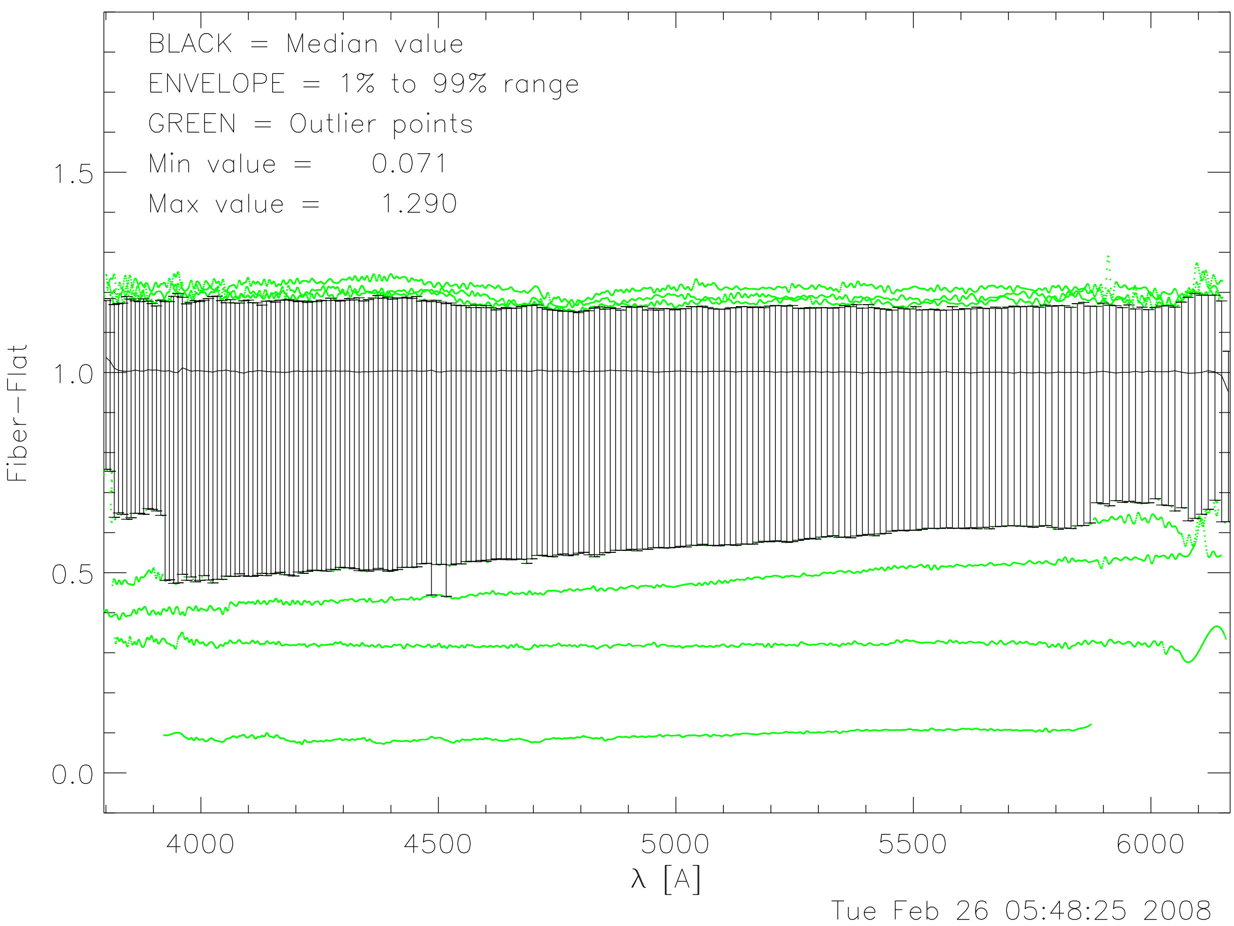
Number of sky fibers = 16

PLATE=0626 MJD=52057 sdR-b1-00010118.fit 2D Sky-subtraction Rescaled Errors

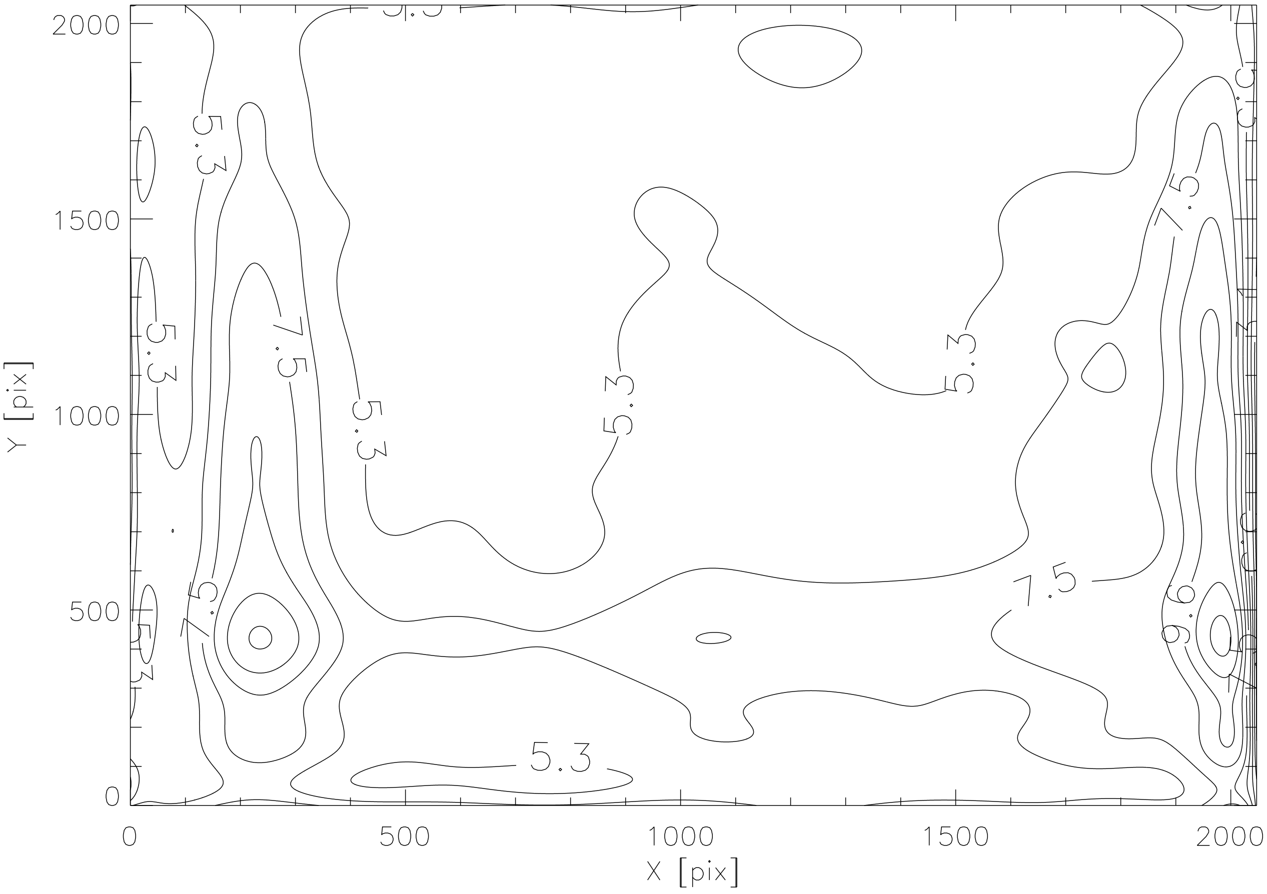


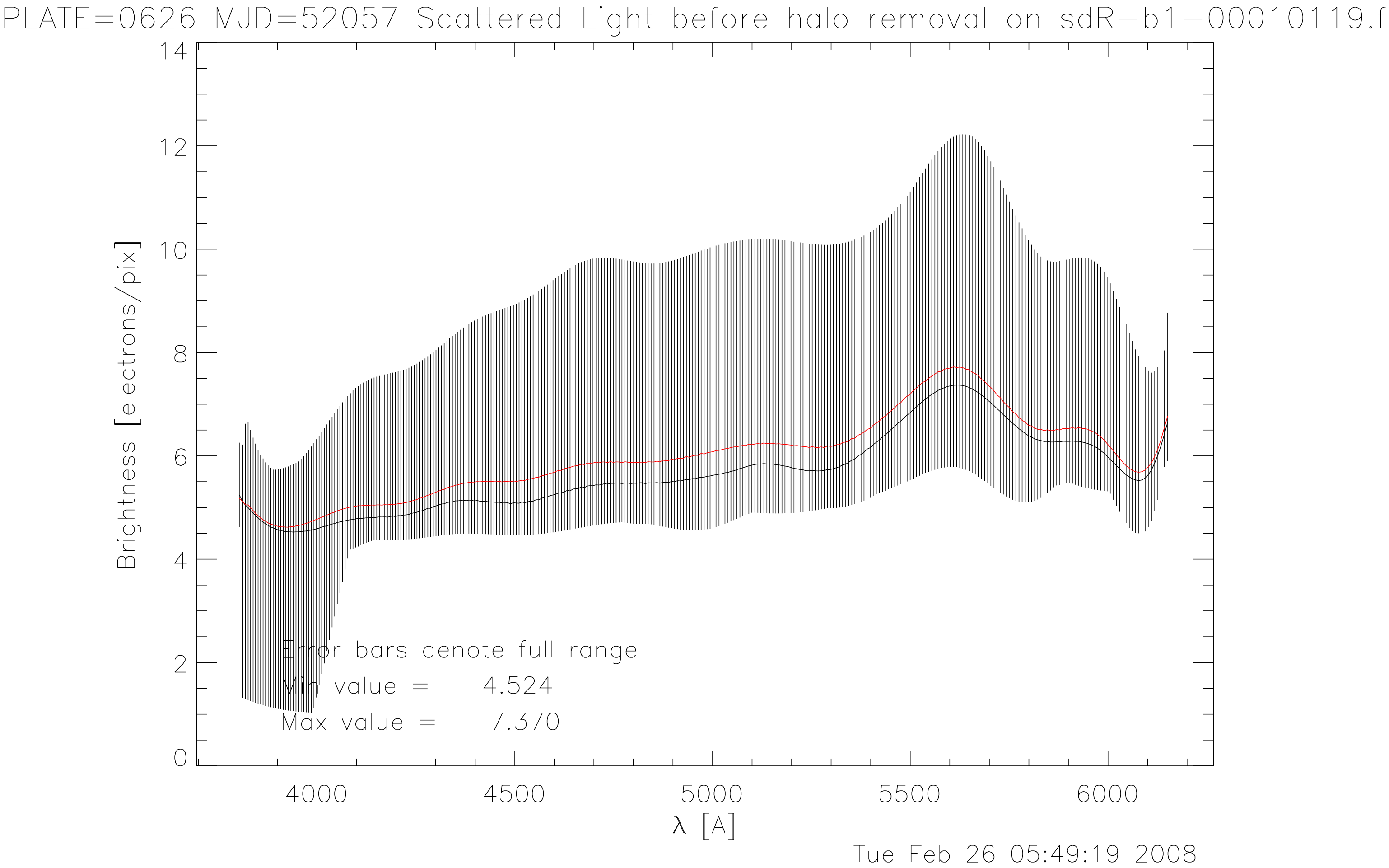

PLATE=0626 MJD=52057 sdR-b1-00010118.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1500
1000
500
0
-500
RED = sky fiber
Dispersion = 15.68 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1500
1000
500
0
-500
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1500
1000
500
0
-500
1.018
1.020
1.022
1.024
1.026
1.028
Airmass


PLATE=0626 MJD=52057 sdR-b1-00010118.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
RED = sky fiber
Dispersion = 1.76 %
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
1.018
1.020
1.022
1.024
1.026
1.028
Airmass


PLATE=0626 MJD=52057 Fiber-Flats for sdR-b1-00010121.fit

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b1-00010119.f

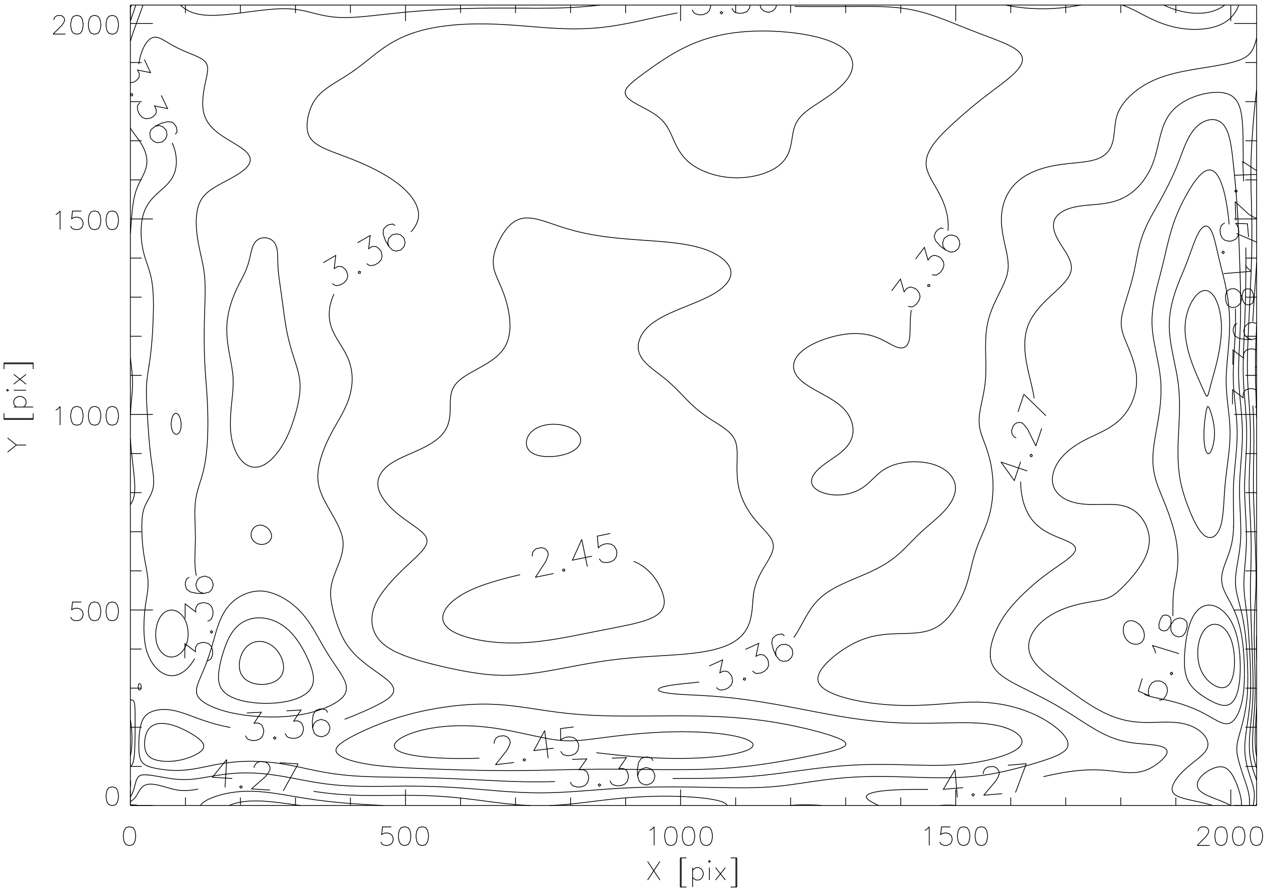


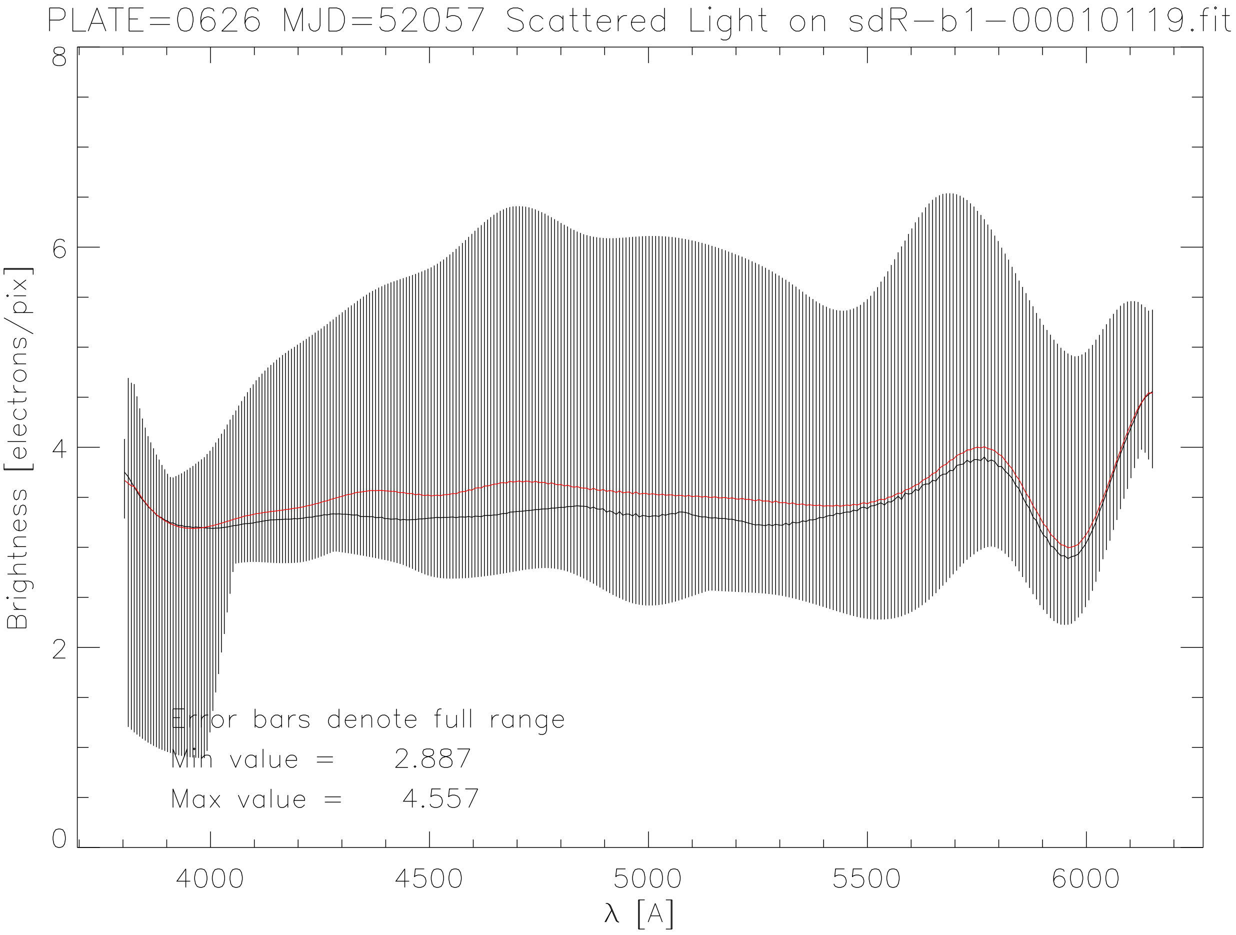


PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b1-00010119.f

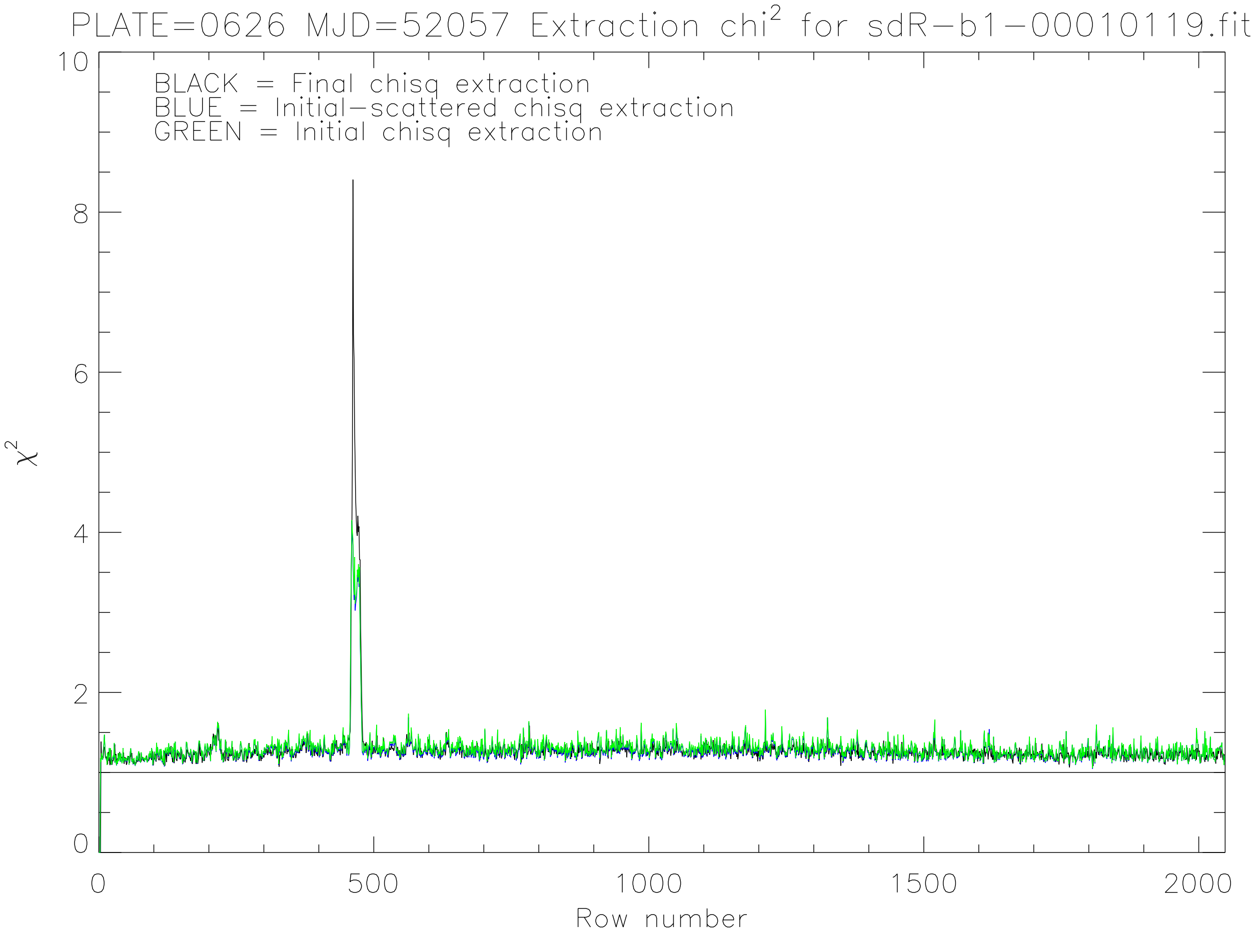
Tue Feb 26 05:49:19 2008

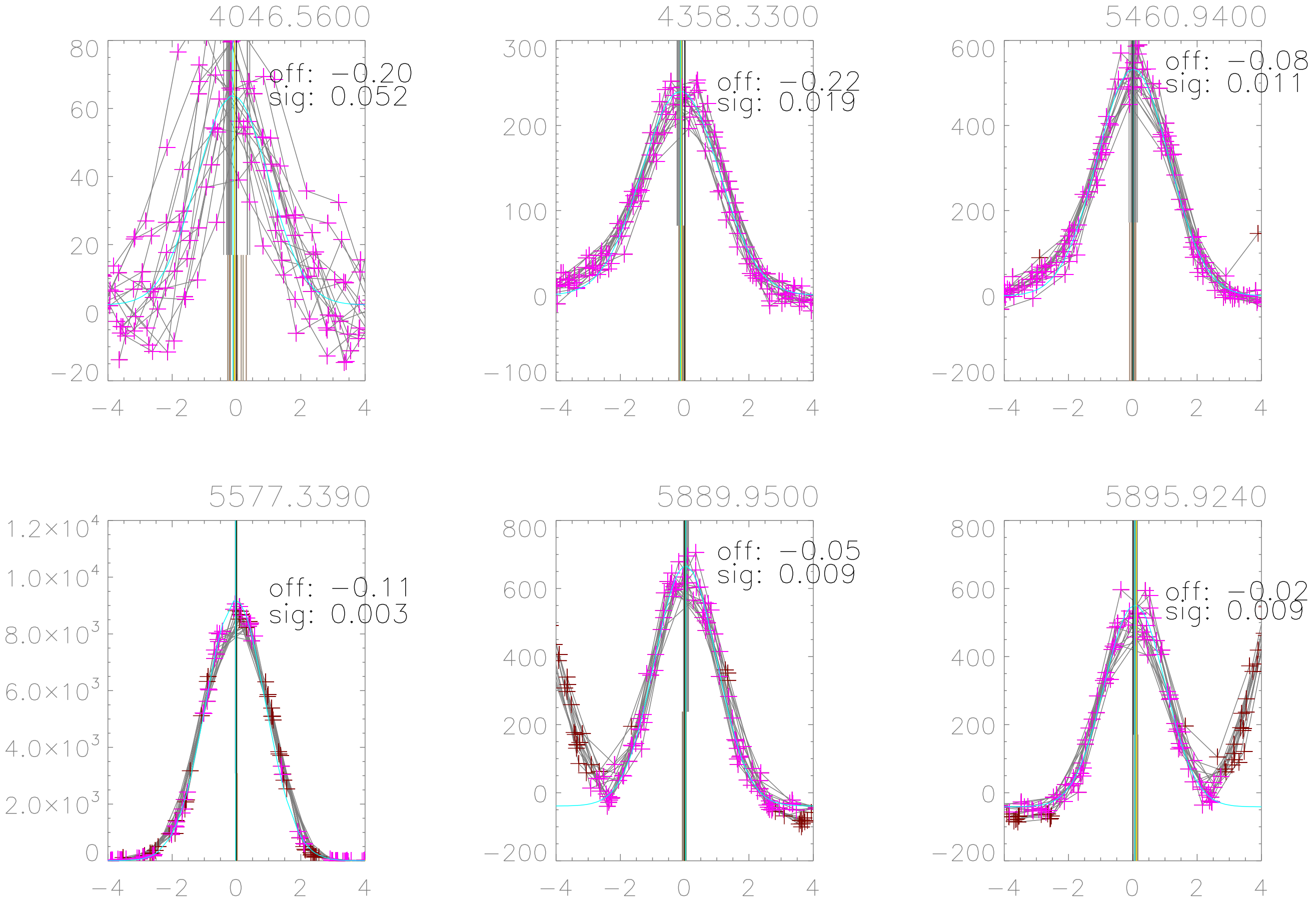
PLATE=0626 MJD=52057 Scattered Light on sdR-b1-00010119.fit

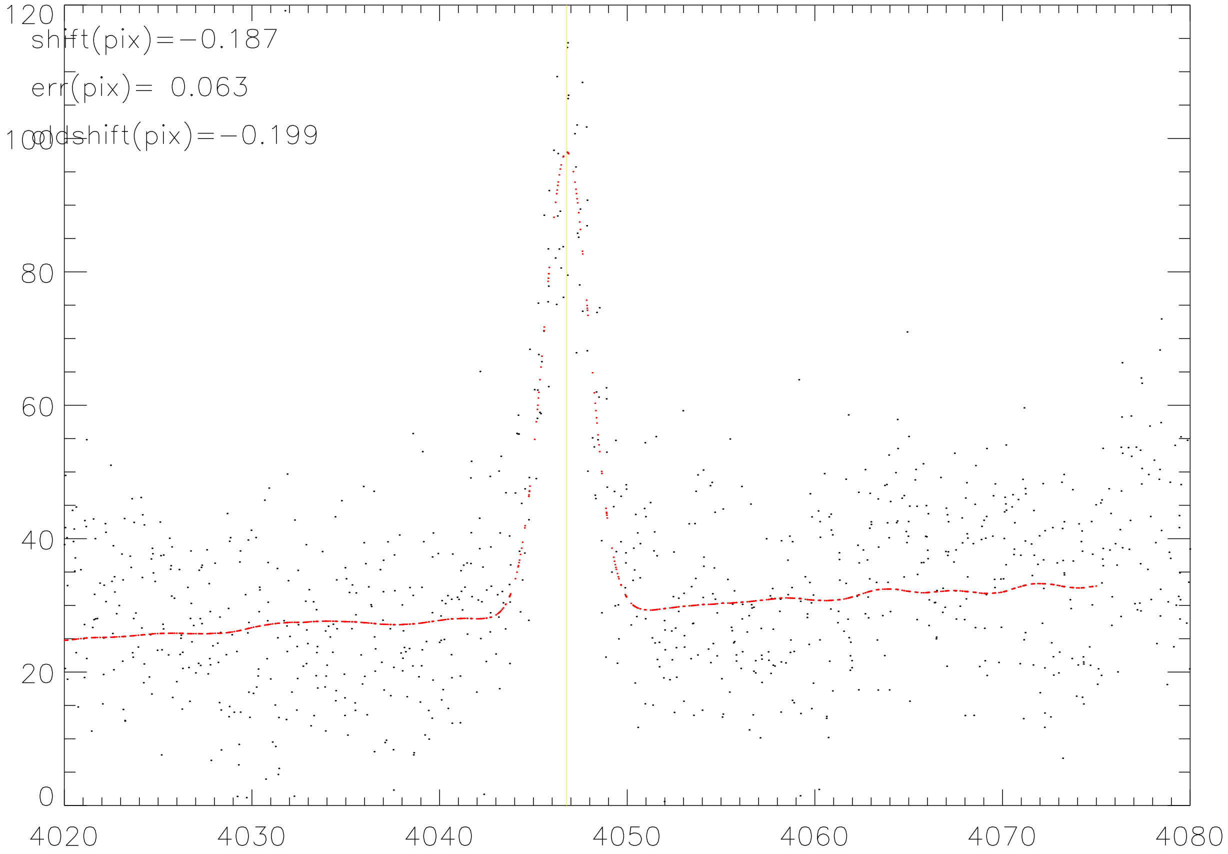


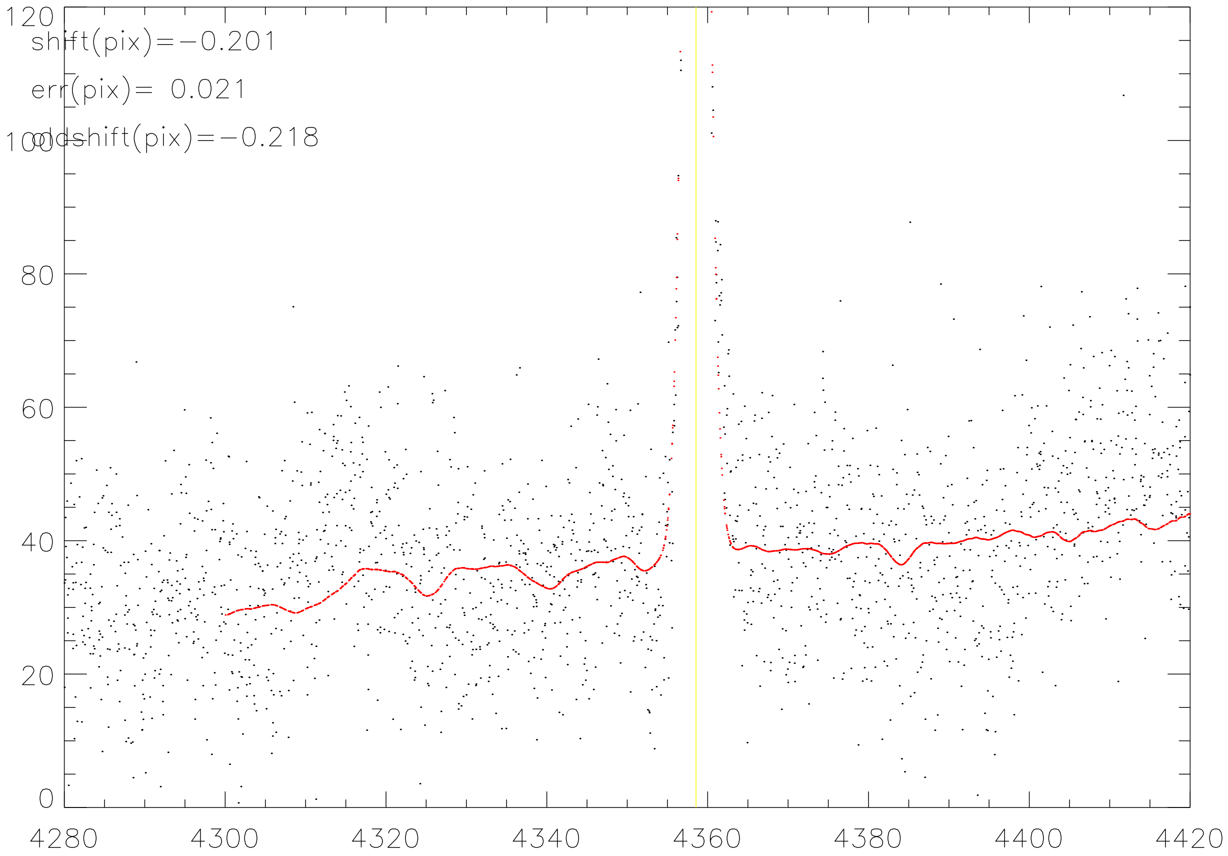


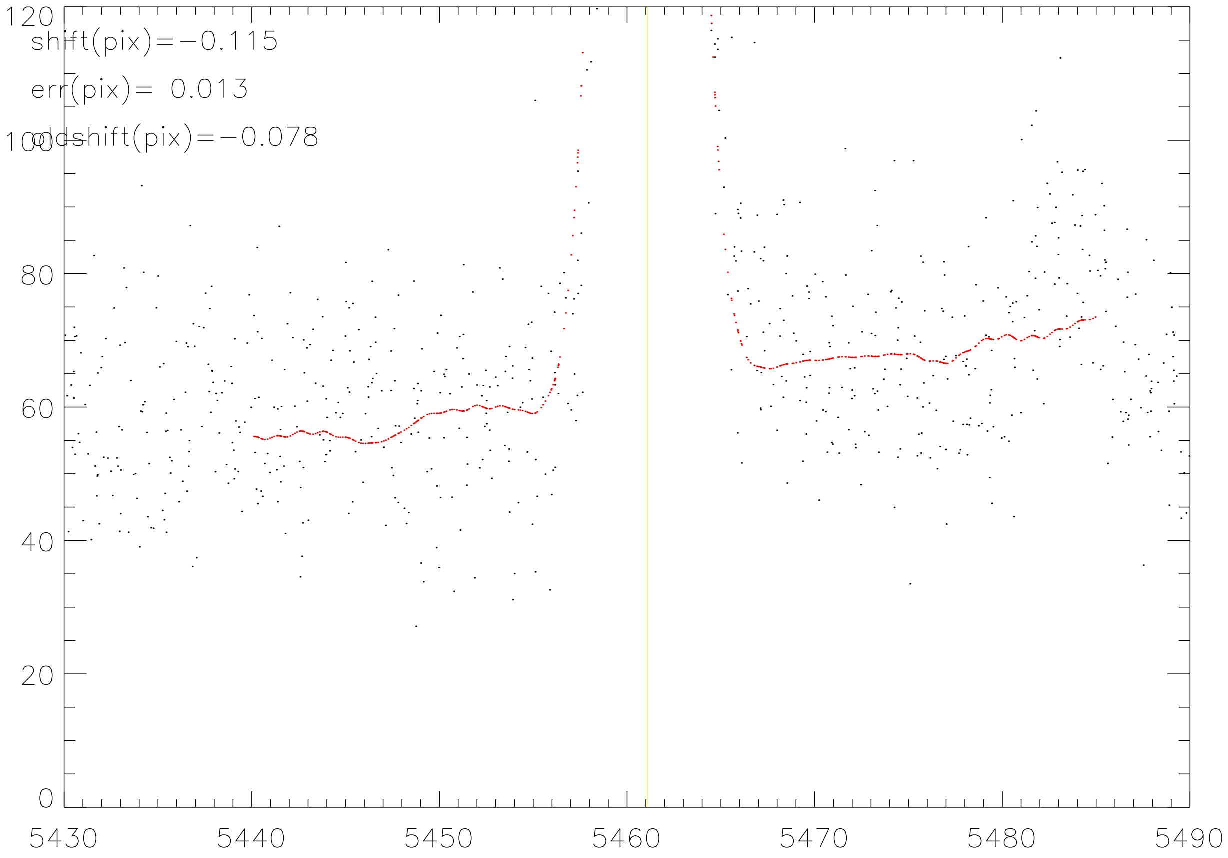
Tue Feb 26 05:52:20 2008


PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b1-00010119.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

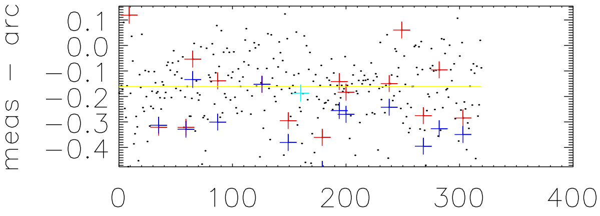

4046.5600
off: −0.20
sig: 0.052
−20
0
20
40
60
80
4358.3300
off: −0.22
sig: 0.019
−100
0
100
200
300
5460.9400
off: −0.08
sig: 0.011
−200
0
200
400
600
5577.3390
off: −0.11
sig: 0.003
0
2.0×10³
4.0×10³
6.0×10³
8.0×10³
1.0×10⁴
1.2×10⁴
5889.9500
off: −0.05
sig: 0.009
−200
0
200
400
600
800
5895.9240
off: −0.02
sig: 0.009
−200
0
200
400
600
800
−4
−2
0
2
4


shift(pix)=−0.187
err(pix)= 0.063
oldshift(pix)=−0.199
0
20
40
60
80
100
120
4020
4030
4040
4050
4060
4070
4080

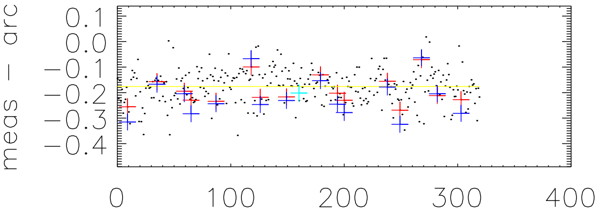

shift(pix)=−0.201
err(pix)= 0.021
oldshift(pix)=−0.218
0
20
40
60
80
100
120
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)=−0.115
err(pix)= 0.013
oldshift(pix)=−0.078
0
20
40
60
80
100
120
5430
5440
5450
5460
5470
5480
5490

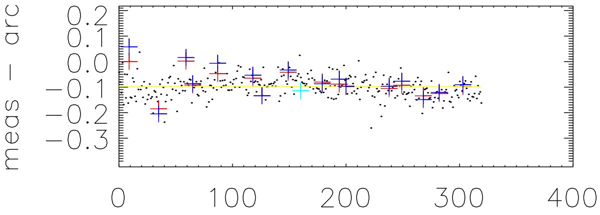
4046.5600



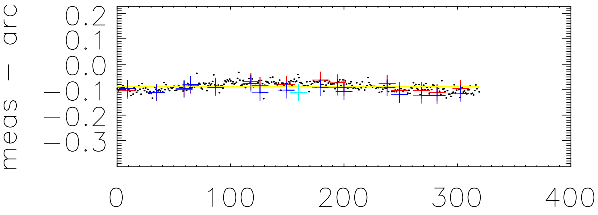
4358.3300



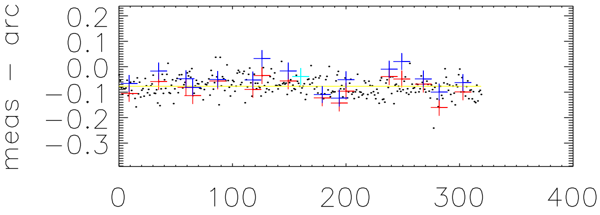
5460.9400



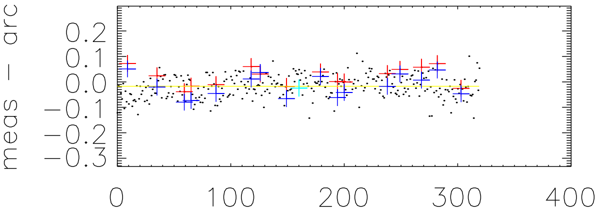
5577.3390

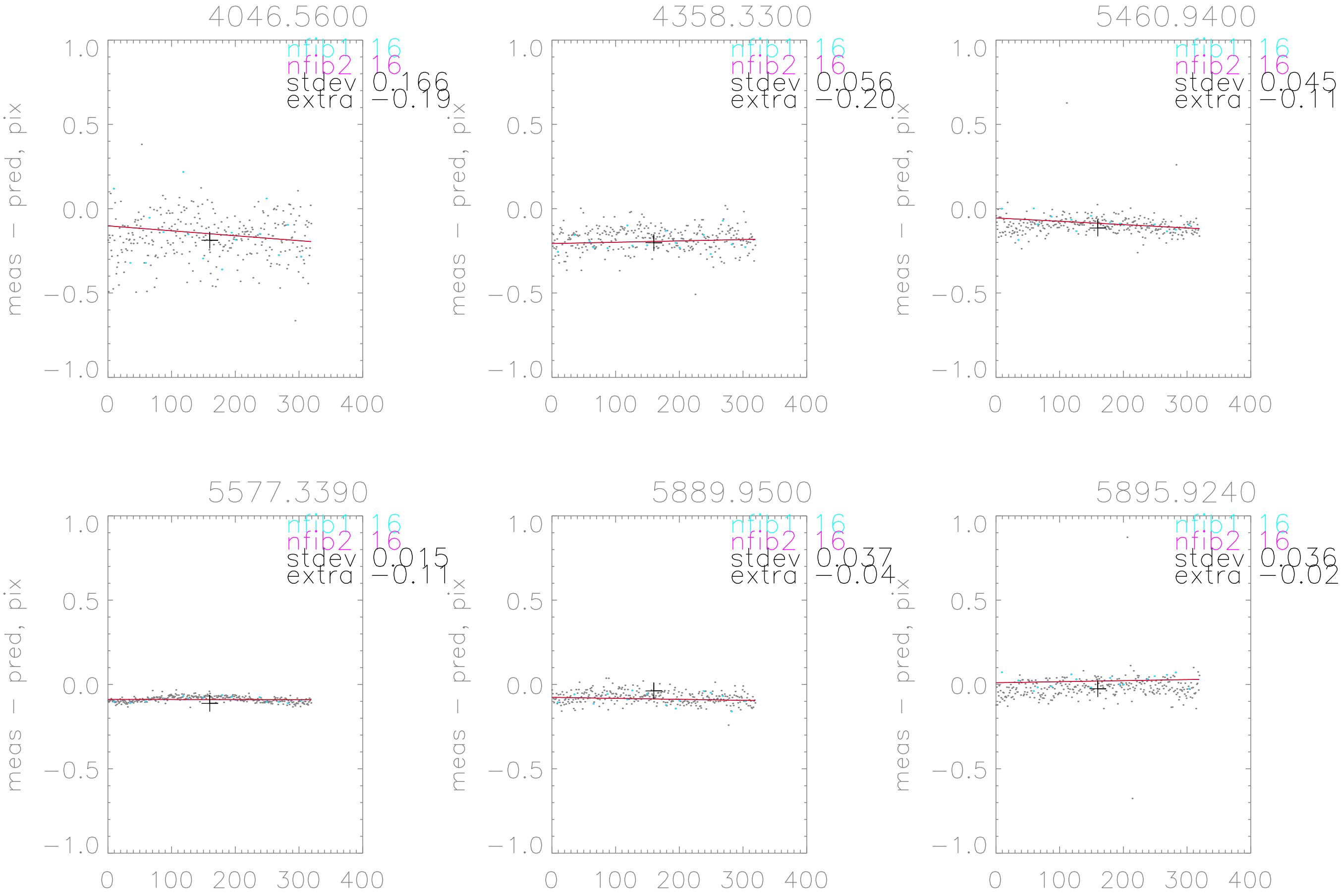


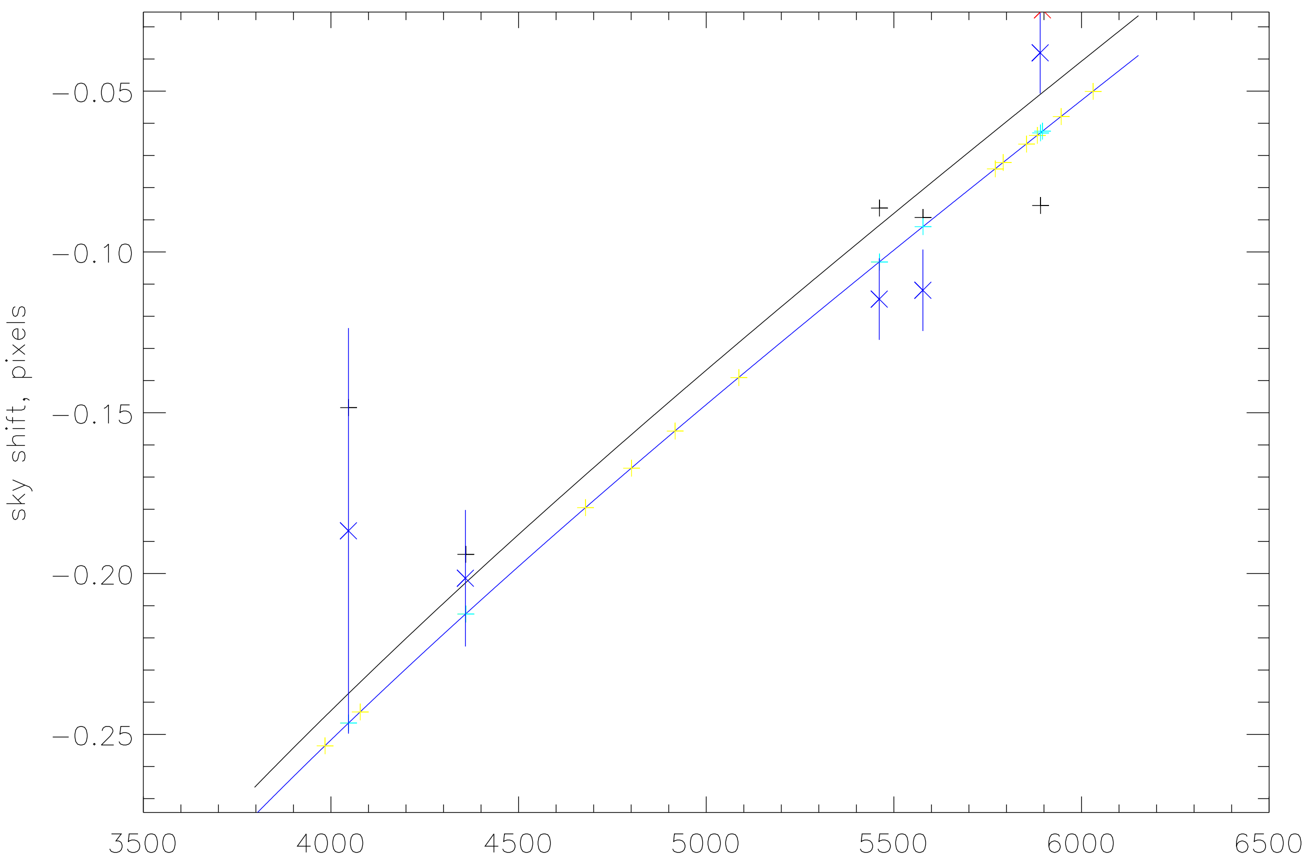
5889.9500

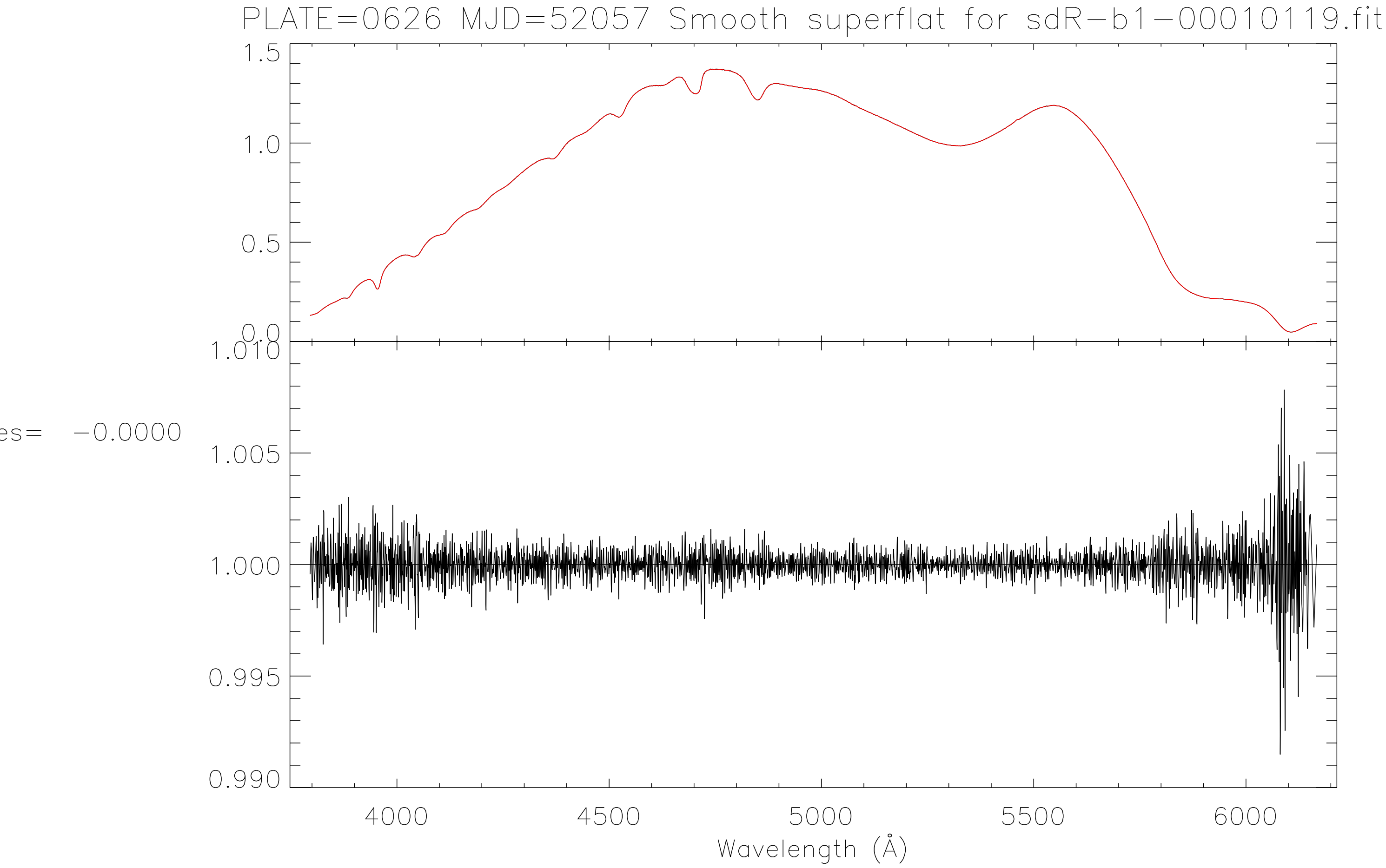


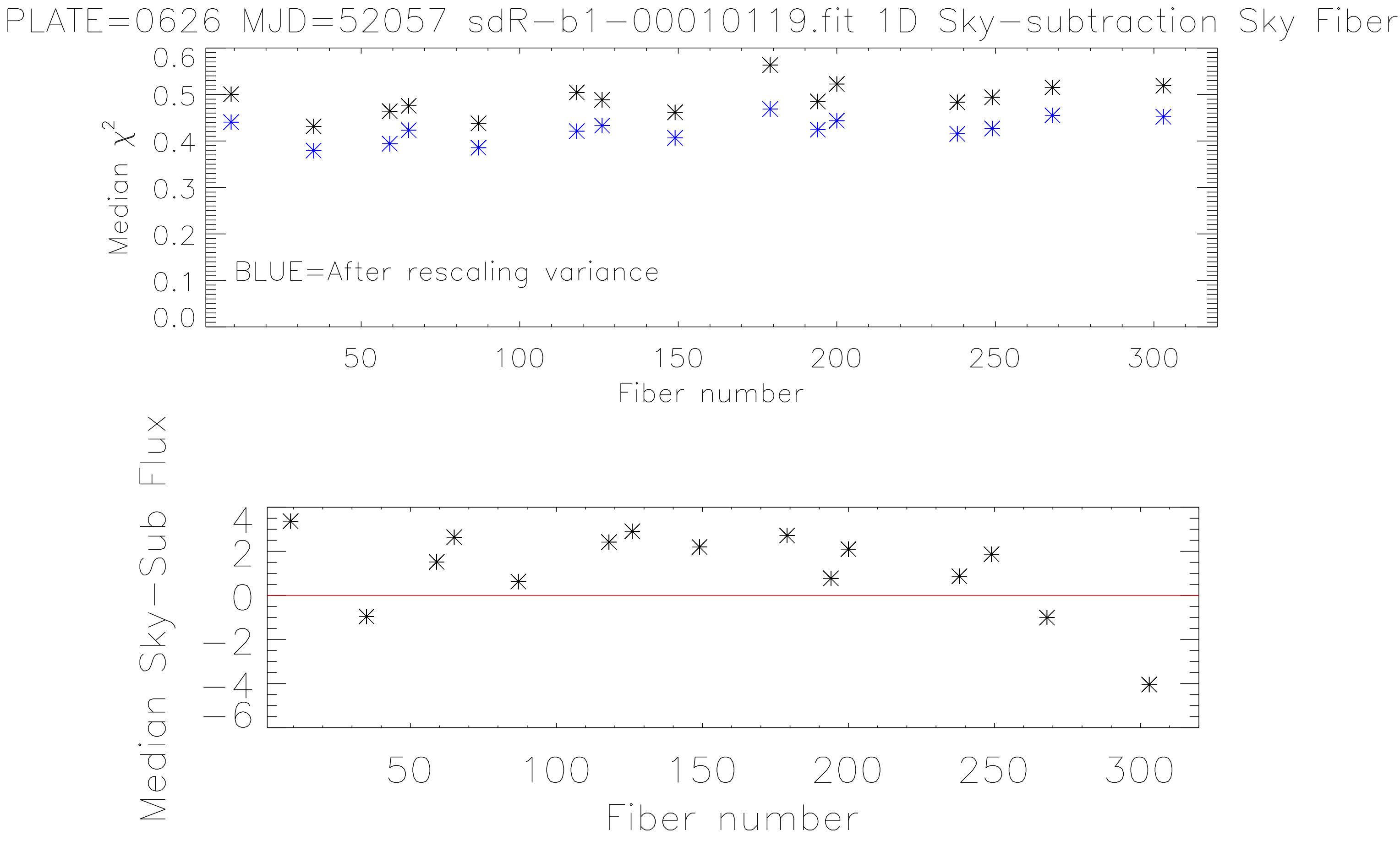
5895.9240




4046.5600
nfib1 16
nfib2 16
stdev 0.166
extra −0.19
4358.3300
nfib1 16
nfib2 16
stdev 0.056
extra −0.20
5460.9400
nfib1 16
nfib2 16
stdev 0.045
extra −0.11
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.11
5889.9500
nfib1 16
nfib2 16
stdev 0.037
extra −0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.036
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

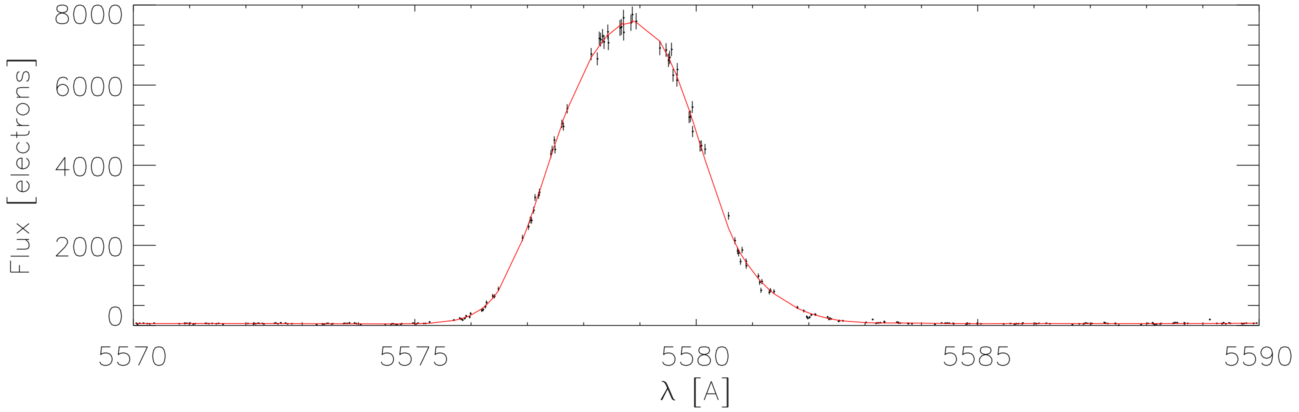

sky shift, pixels
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500


PLATE=0626 MJD=52057 Smooth superflat for sdR-b1-00010119.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es=   −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

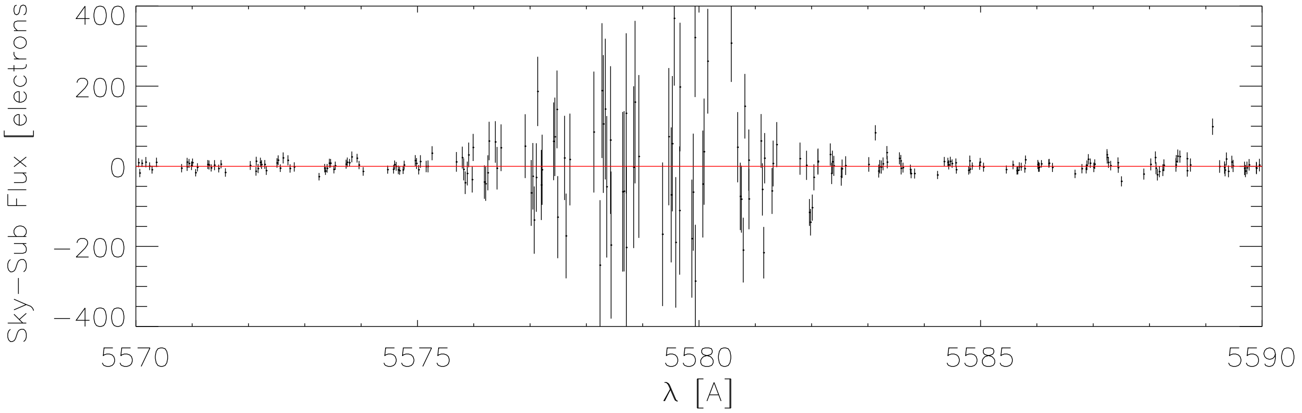


PLATE=0626 MJD=52057 sdR-b1-00010119.fit 1D Sky-subtraction Sky Fiber

PLATE=0626 MJD=52057 sdR-b1-00010119.fit 1D Sky-subtraction Sky Fibers

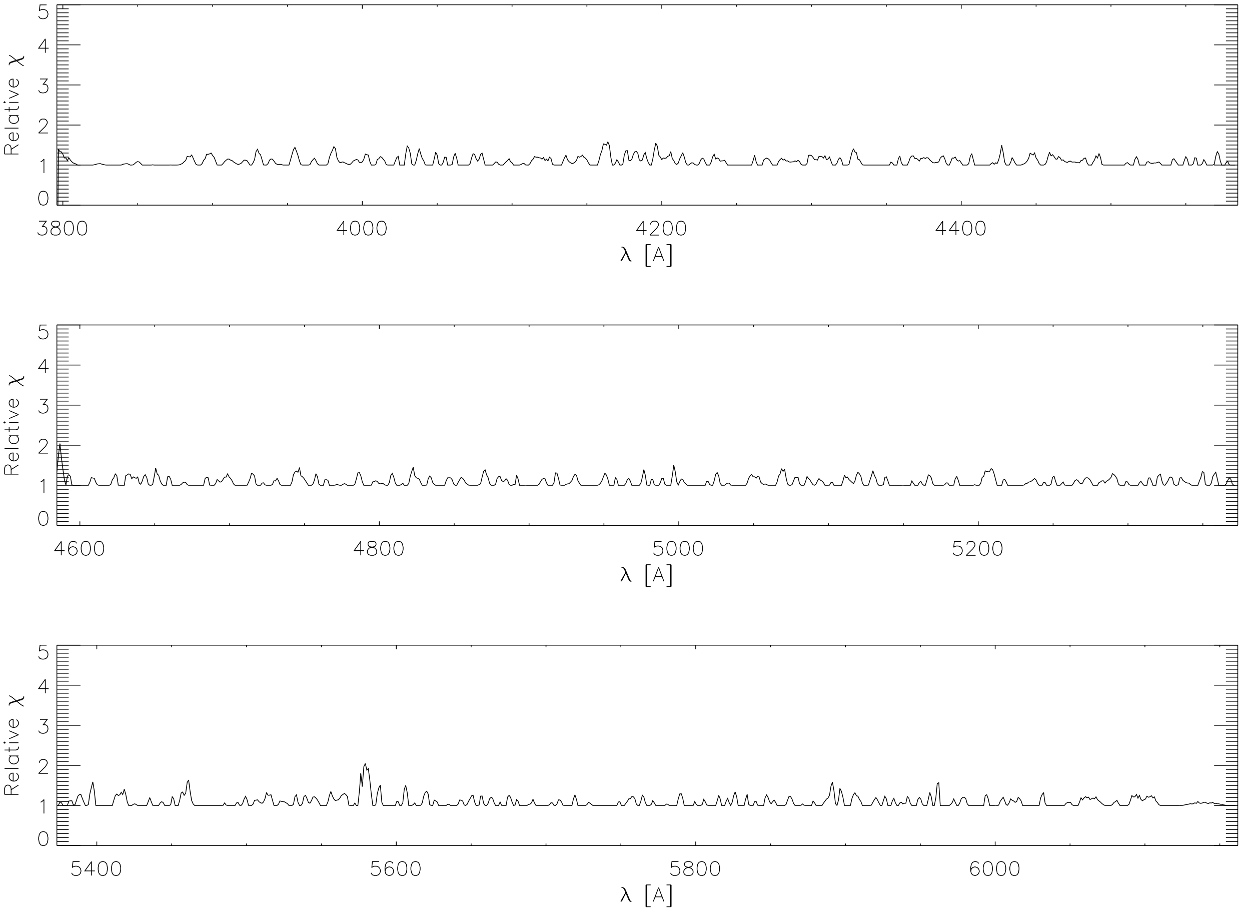


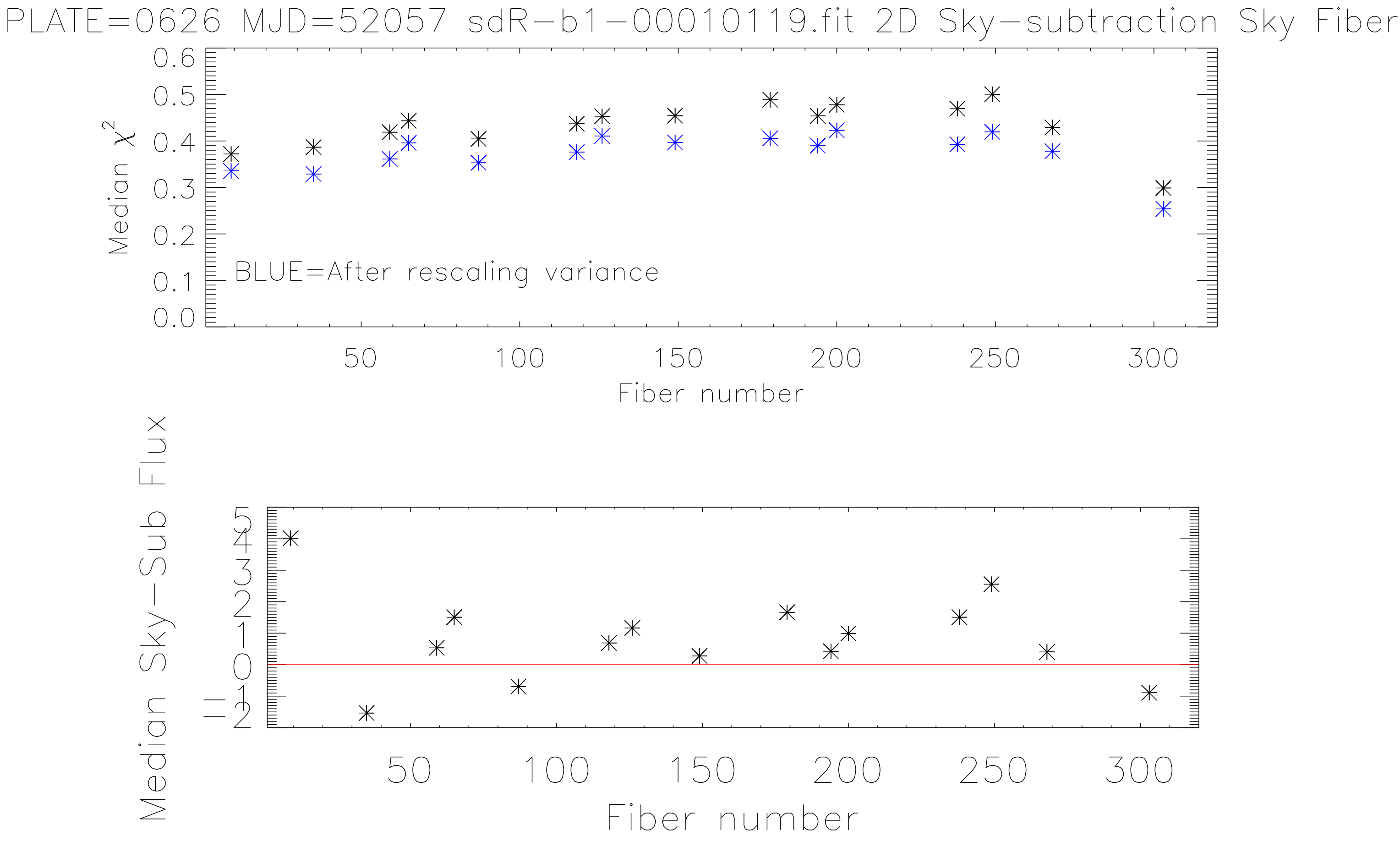
PLATE=0626 MJD=52057 sdR-b1-00010119.fit 1D Sky-subtraction Sky-subtracted Sky F

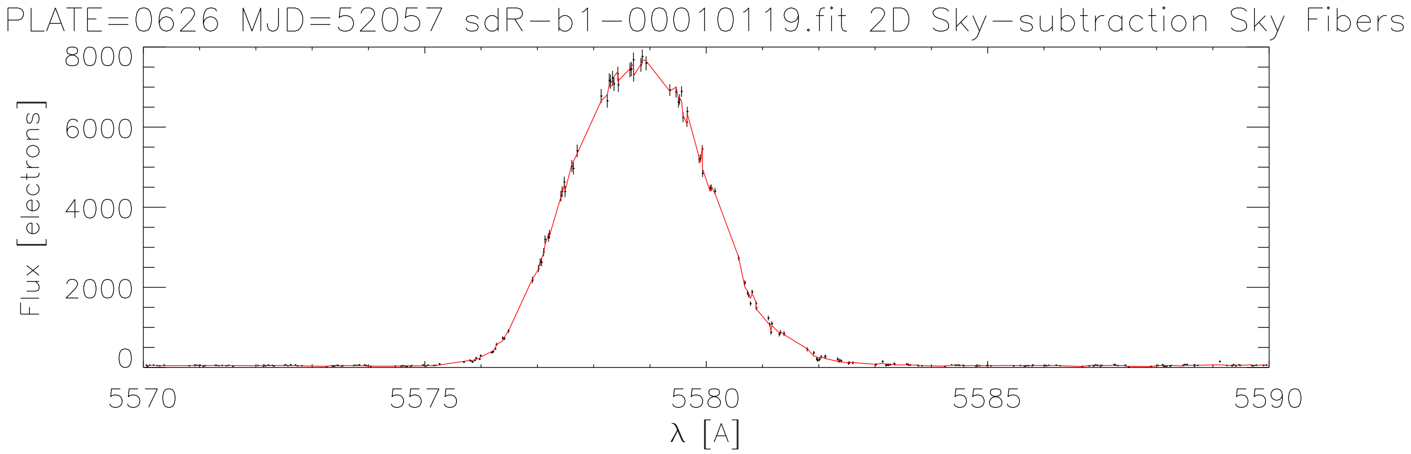


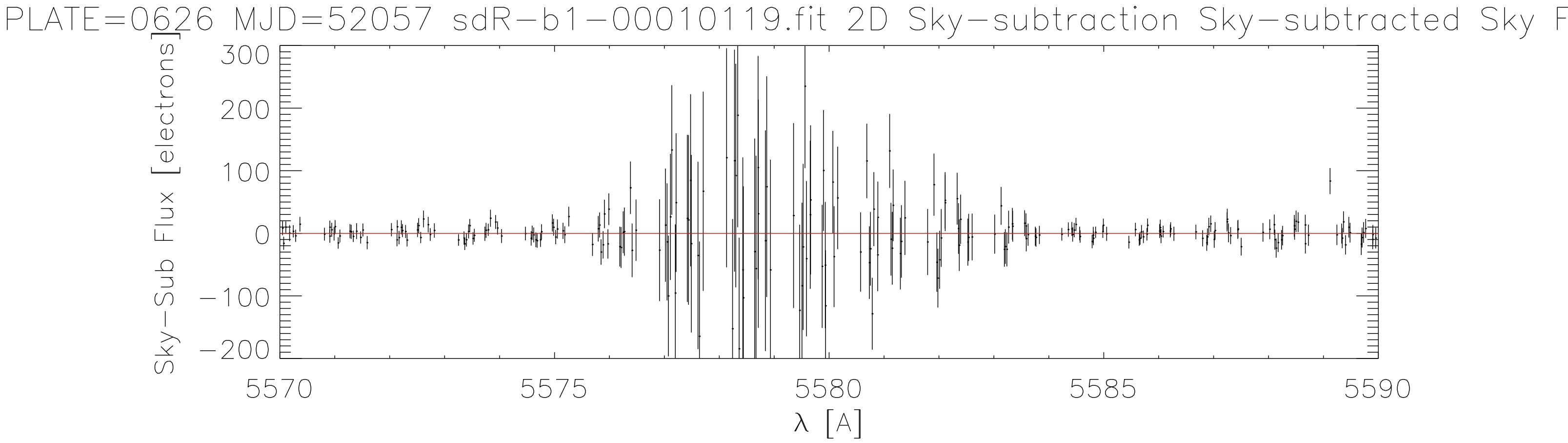
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b1-00010119.fit 1D Sky-subtraction Rescaled Errors



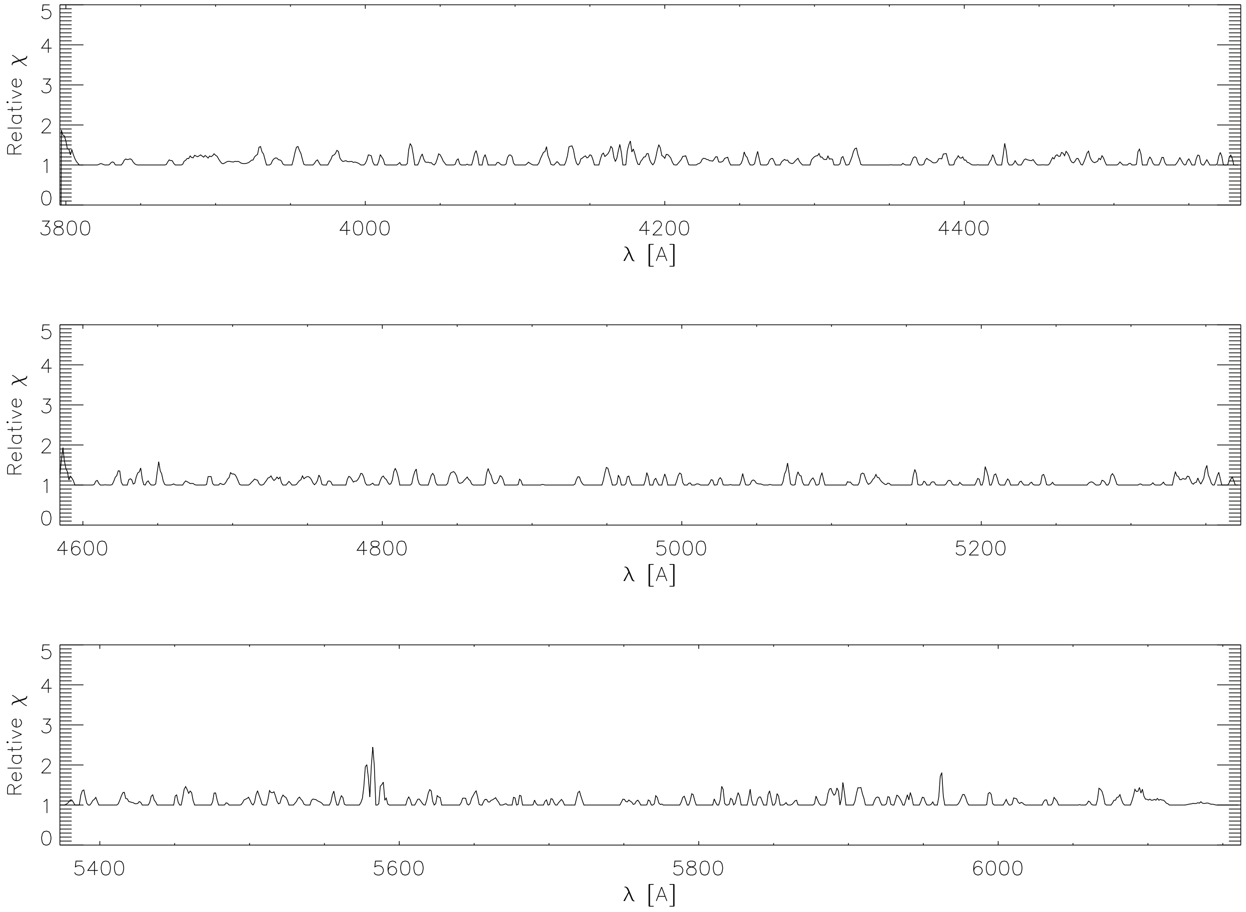

PLATE=0626 MJD=52057 sdR-b1-00010119.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
5
50
100
150
200
250
300
Fiber number

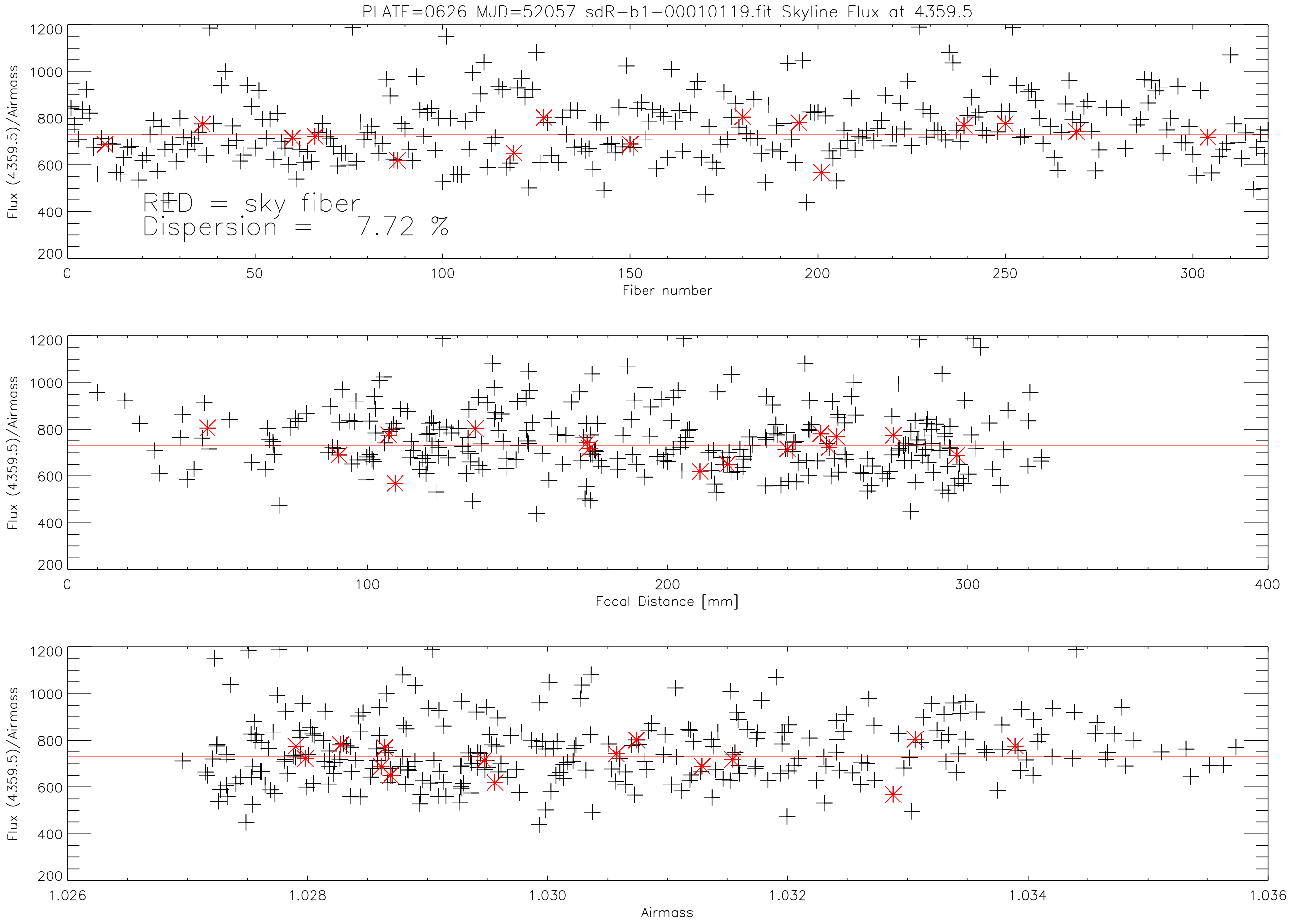

PLATE=0626 MJD=52057 sdR-b1-00010119.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

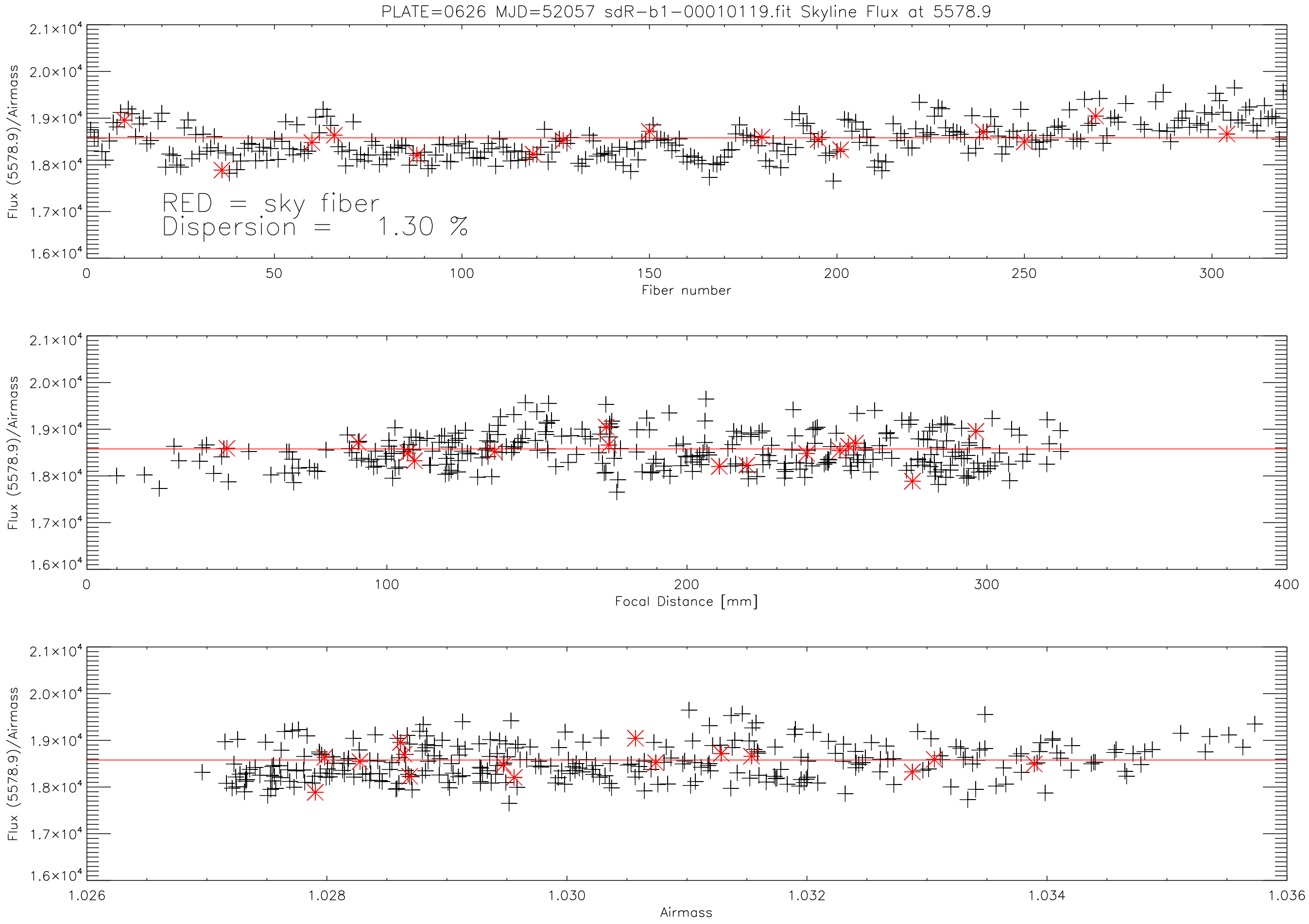

PLATE=0626 MJD=52057 sdR-b1-00010119.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

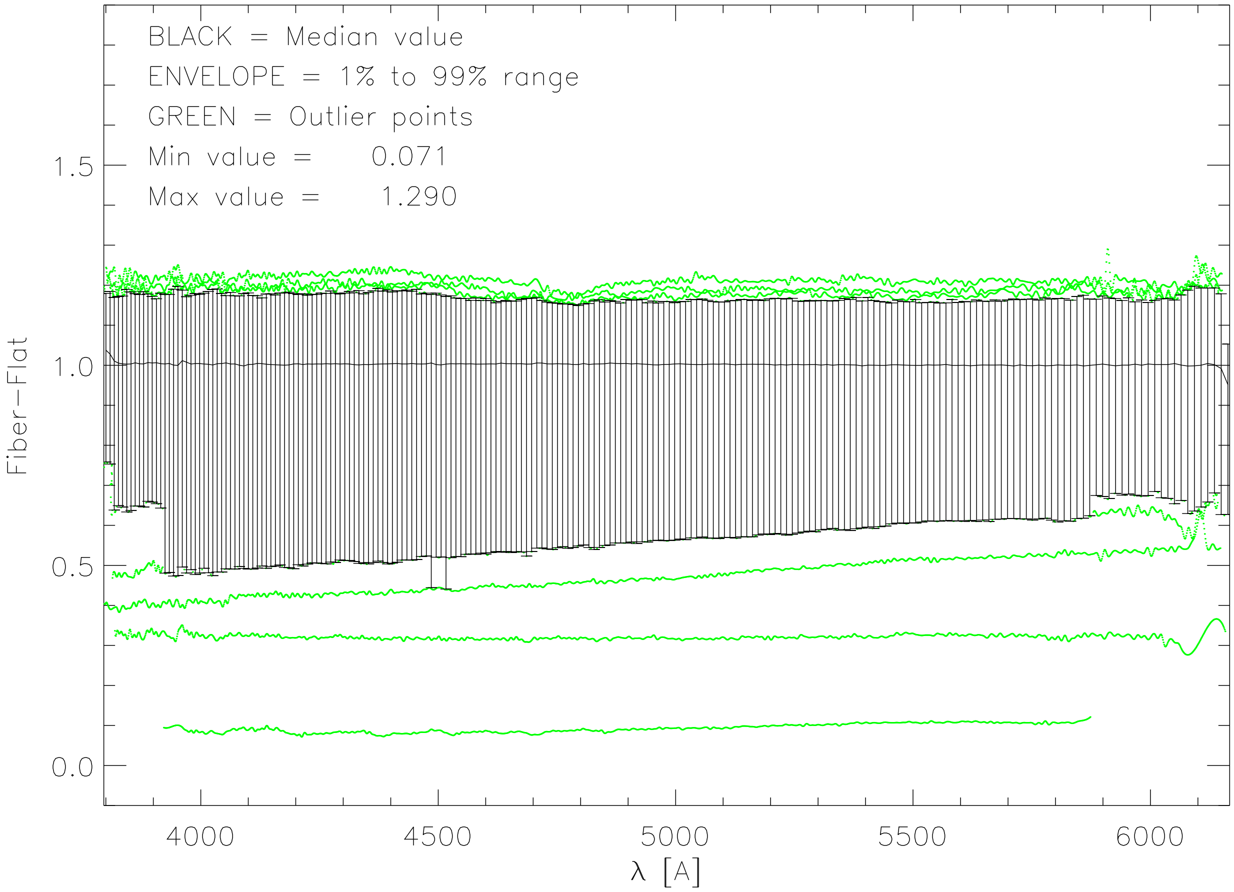
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b1-00010119.fit 2D Sky-subtraction Rescaled Errors



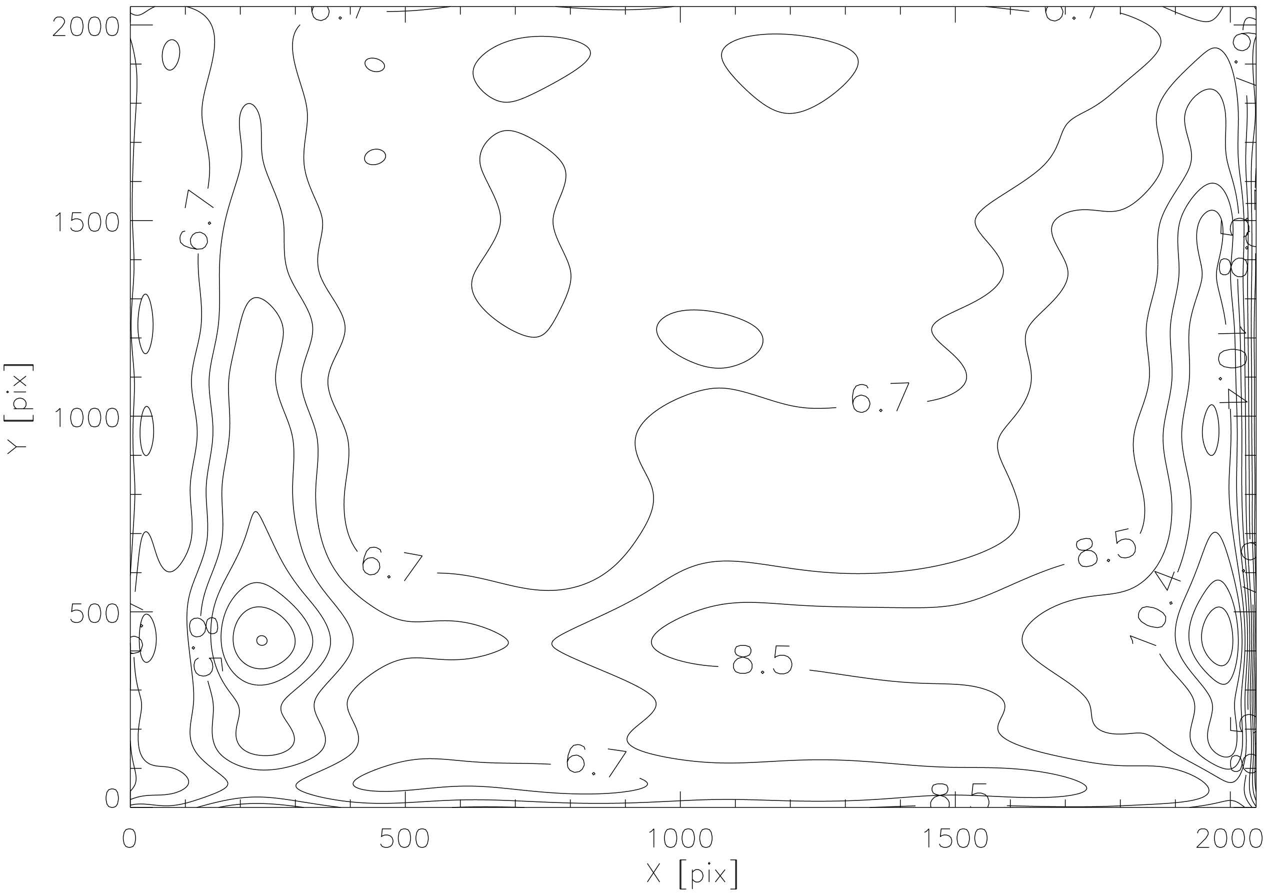

PLATE=0626 MJD=52057 sdR-b1-00010119.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
RED = sky fiber
Dispersion = 7.72 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
1.026
1.028
1.030
1.032
1.034
1.036
Airmass


PLATE=0626 MJD=52057 sdR-b1-00010119.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.1×10⁴
2.0×10⁴
1.9×10⁴
1.8×10⁴
1.7×10⁴
1.6×10⁴
RED = sky fiber
Dispersion = 1.30 %
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
1.026
1.028
1.030
1.032
1.034
1.036
Airmass

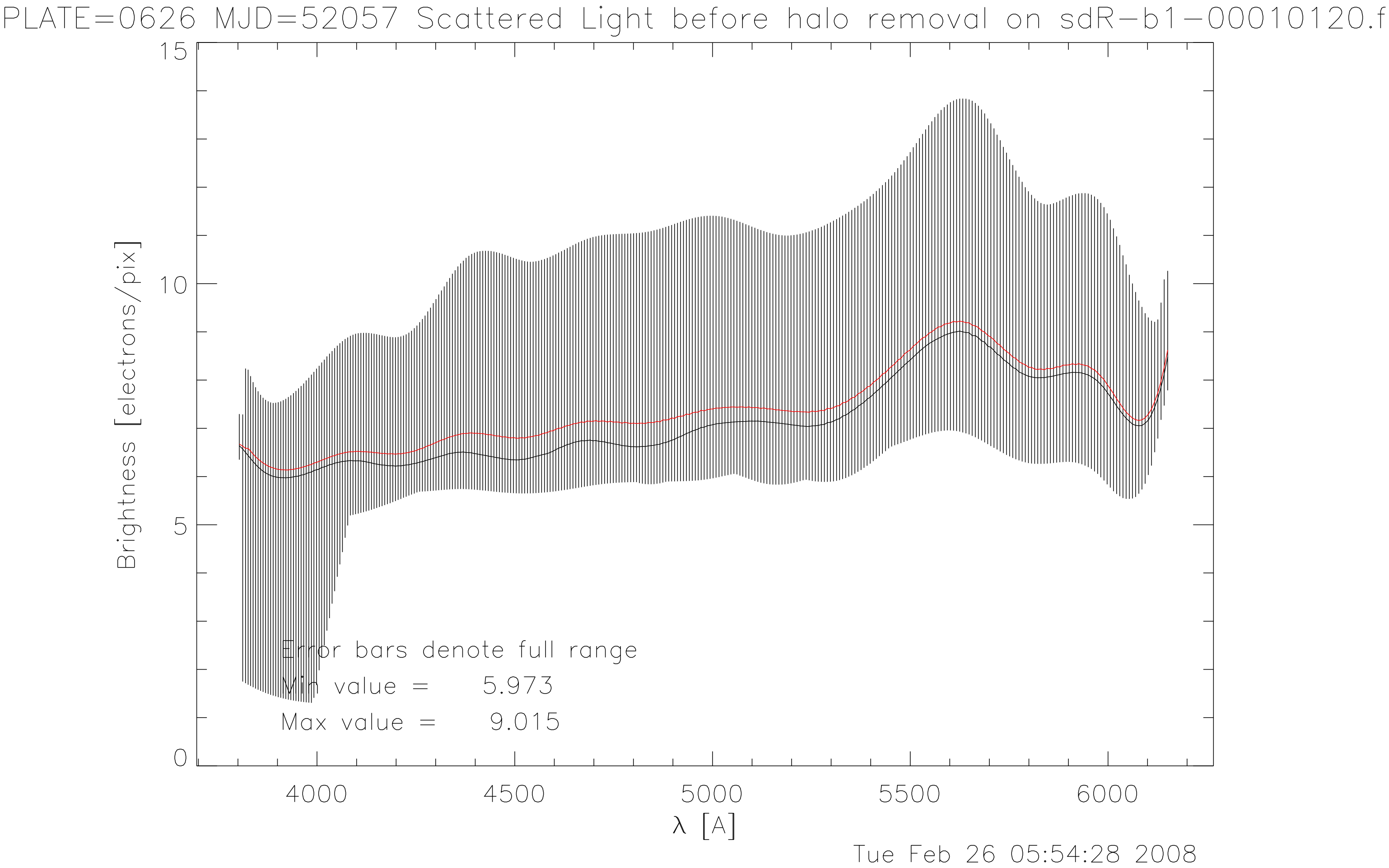


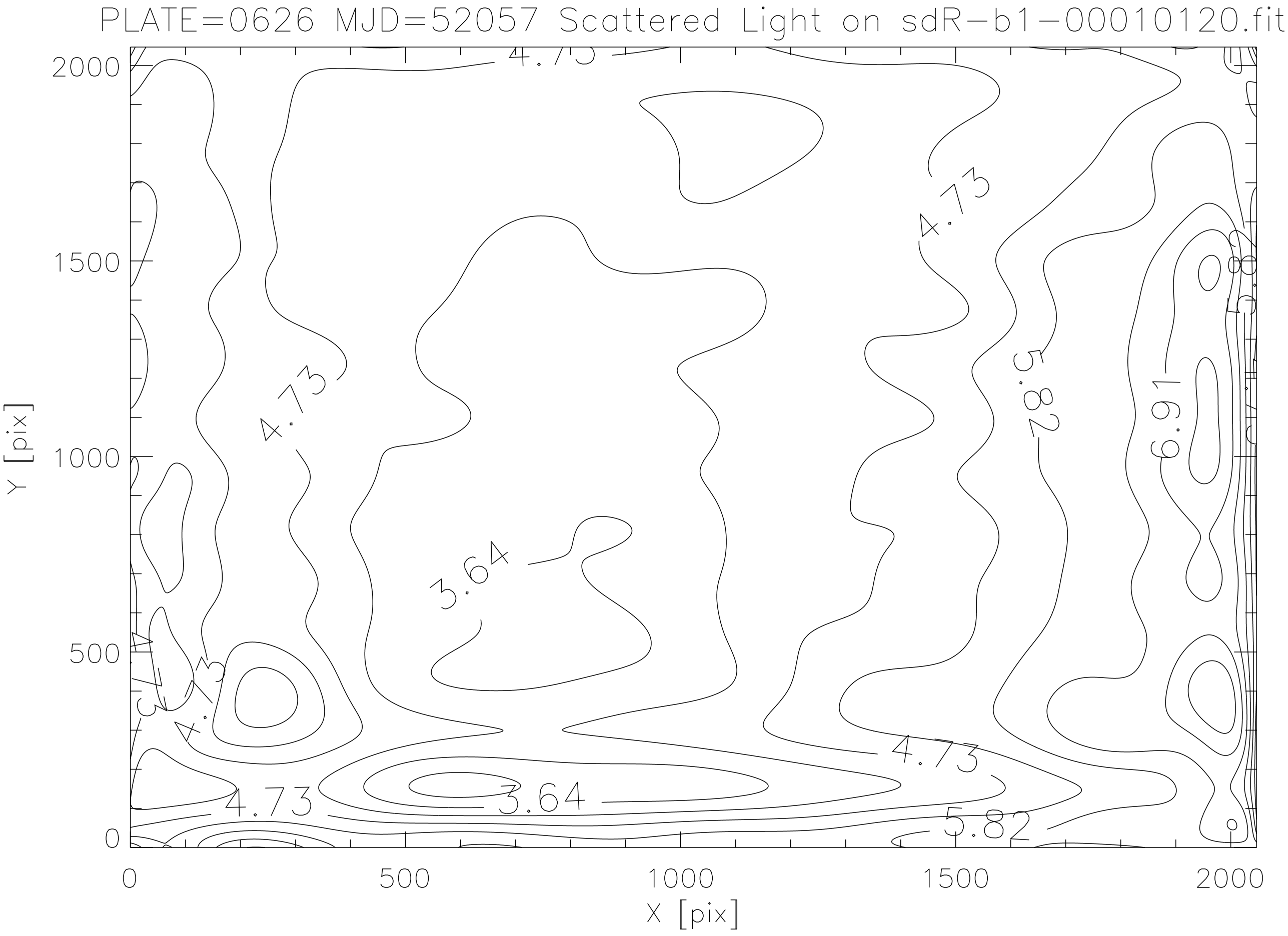
PLATE=0626 MJD=52057 Fiber-Flats for sdR-b1-00010121.fit

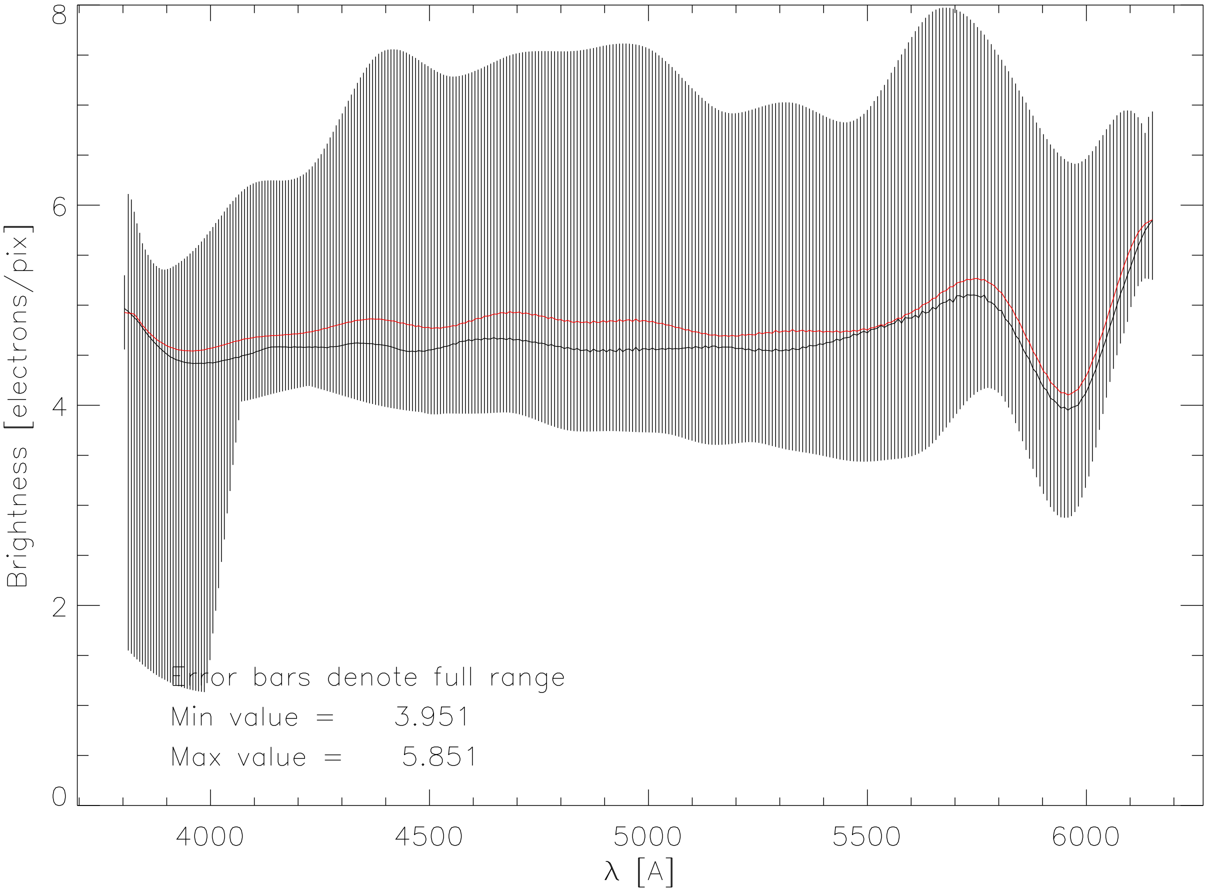
Tue Feb 26 05:53:31 2008



PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b1-00010120.f

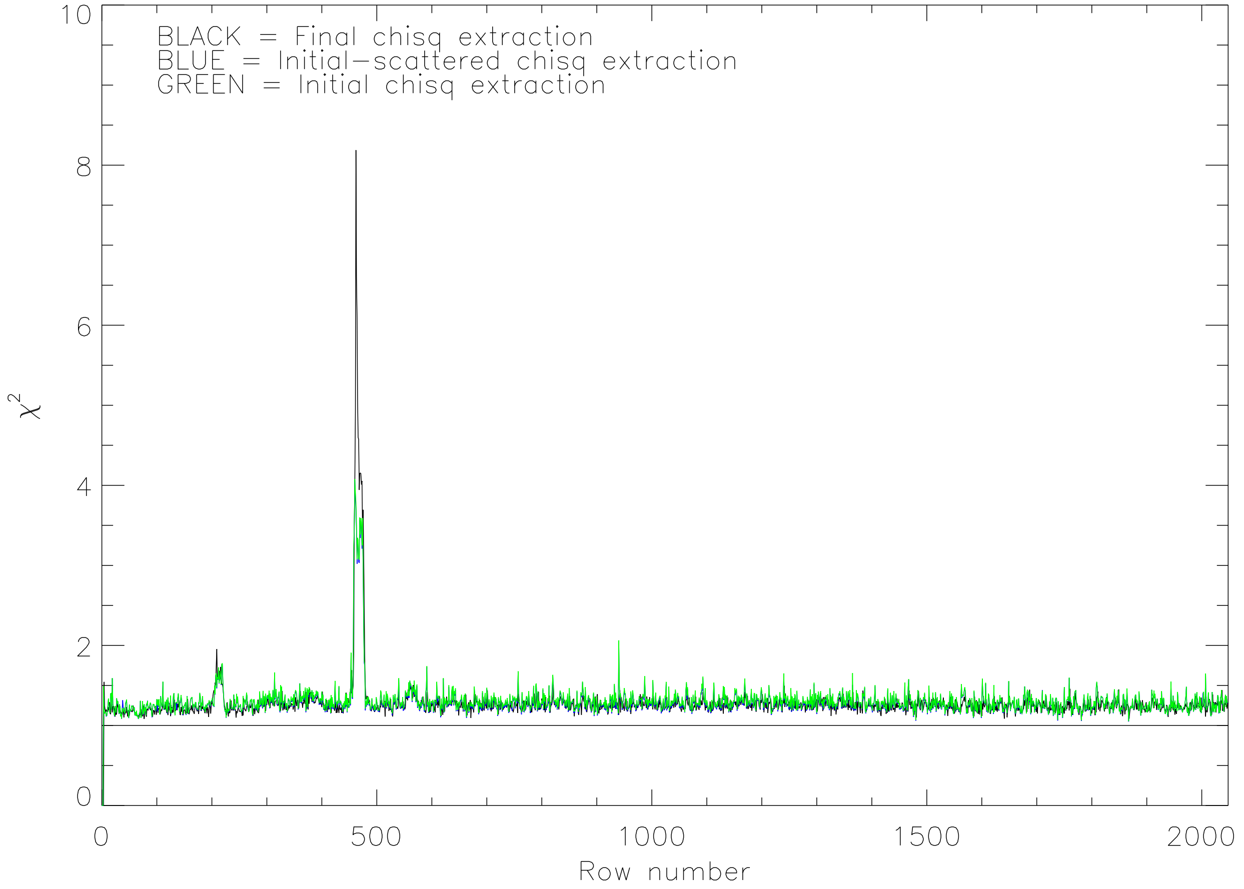

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b1-00010120.f
Brightness [electrons/pix]
0
5
10
15
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.973
Max value = 9.015
Tue Feb 26 05:54:28 2008

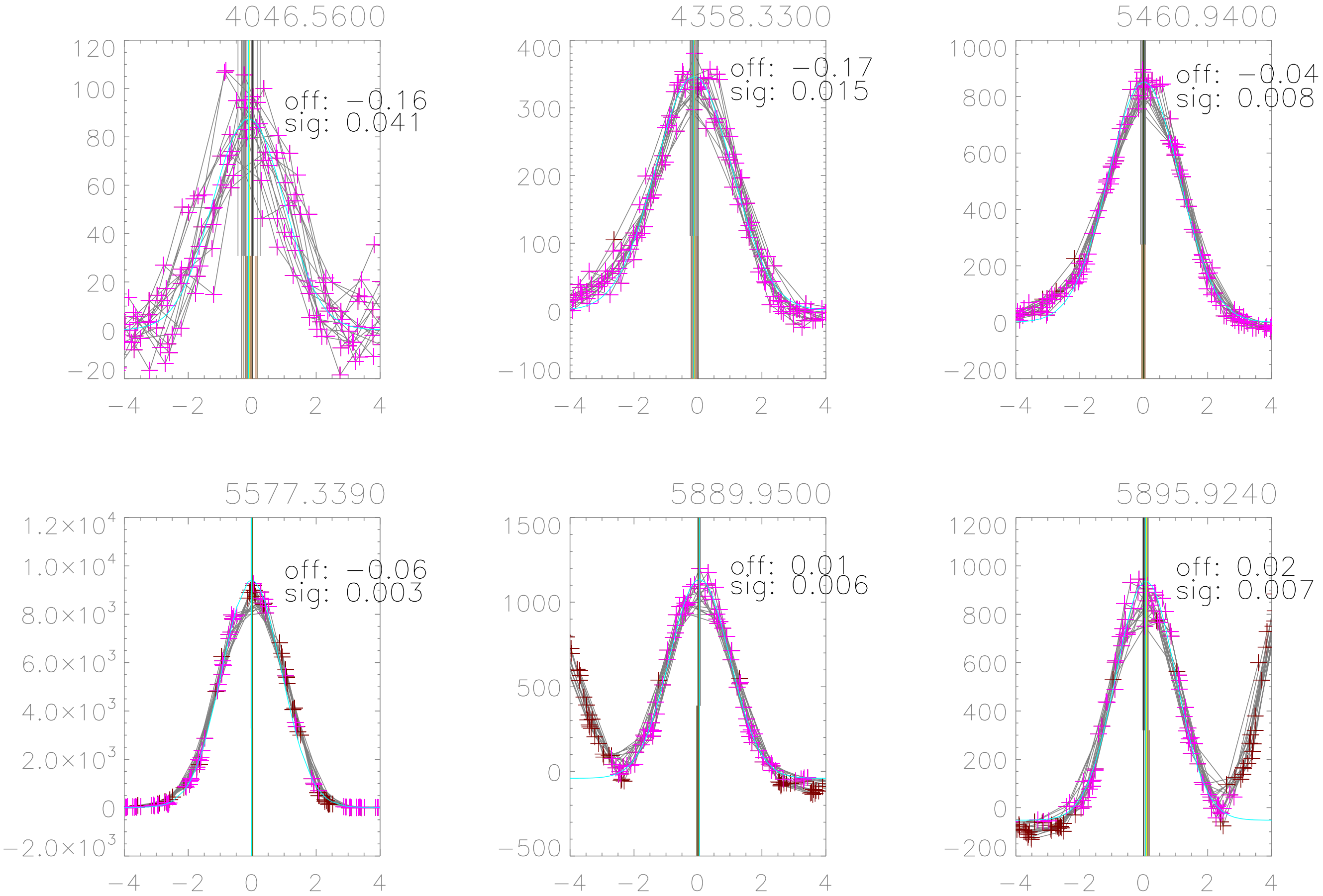

PLATE=0626 MJD=52057 Scattered Light on sdR-b1-00010120.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
4.73
3.64
5.82
6.91

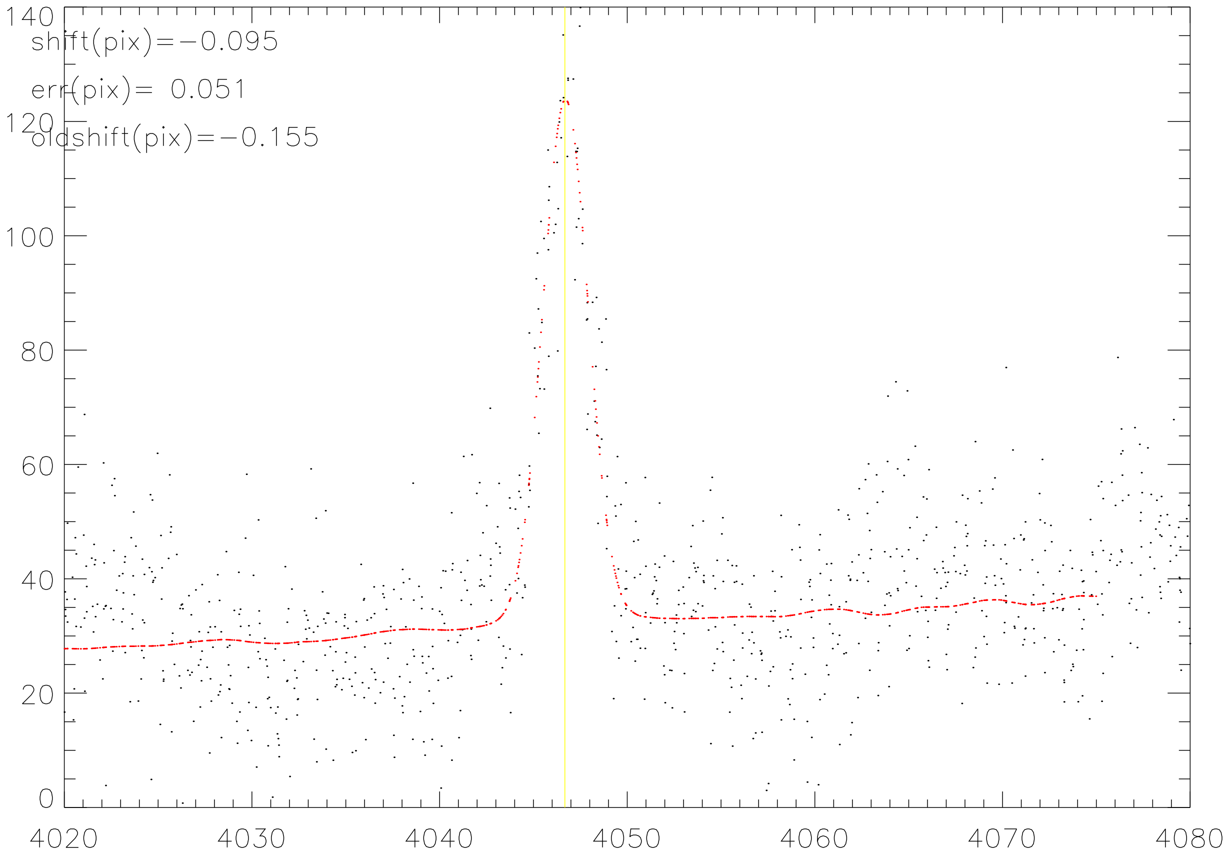


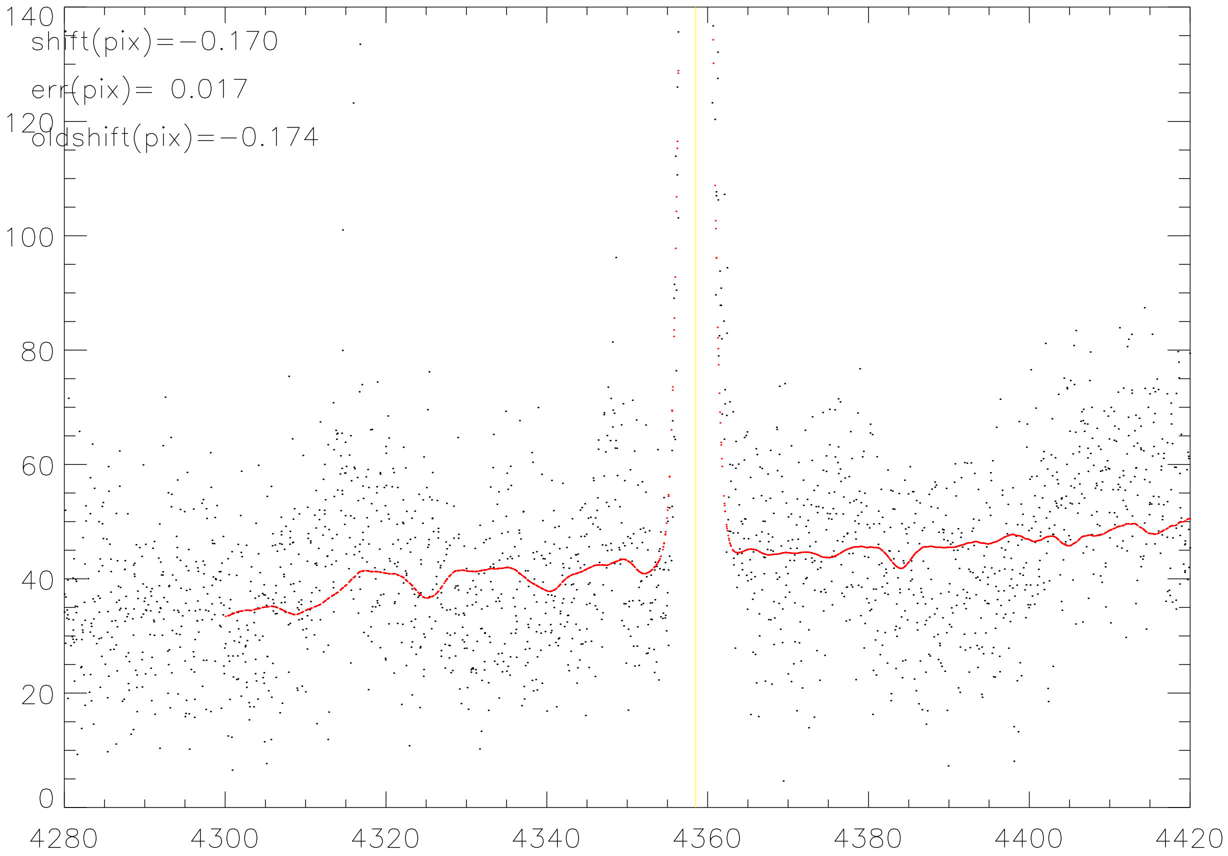
PLATE=0626 MJD=52057 Scattered Light on sdR-b1-00010120.fit

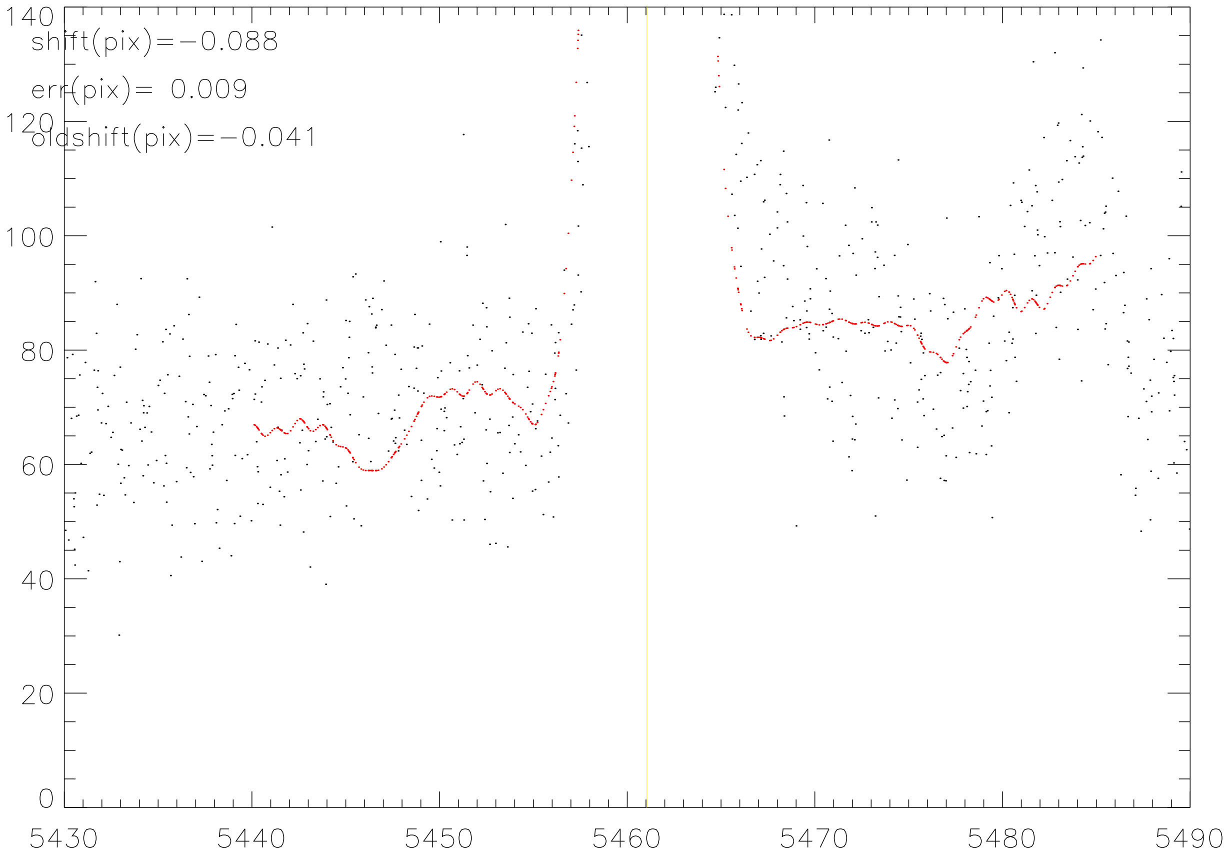
Tue Feb 26 05:57:31 2008

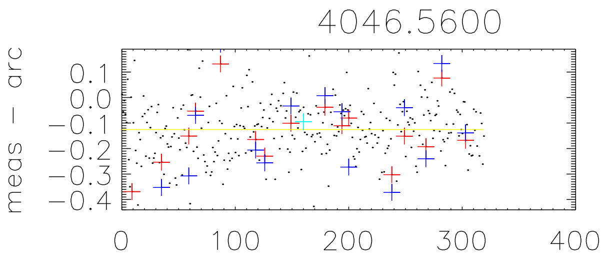

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b1-00010120.fit

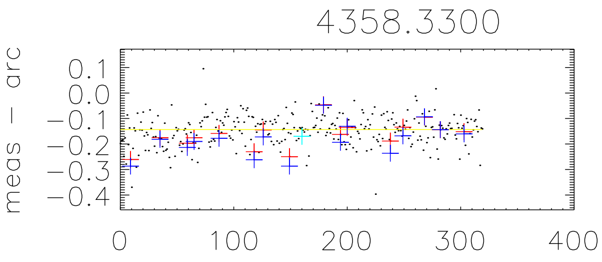

4046.5600
off: −0.16
sig: 0.041
4358.3300
off: −0.17
sig: 0.015
5460.9400
off: −0.04
sig: 0.008
5577.3390
off: −0.06
sig: 0.003
5889.9500
off: 0.01
sig: 0.006
5895.9240
off: 0.02
sig: 0.007
120
100
80
60
40
20
0
−20
400
300
200
100
0
−100
1000
800
600
400
200
0
−200
1.2×10⁴
1.0×10⁴
8.0×10³
6.0×10³
4.0×10³
2.0×10³
0
−2.0×10³
1500
1000
500
0
−500
1200
1000
800
600
400
200
0
−200
−4
−2
0
2
4

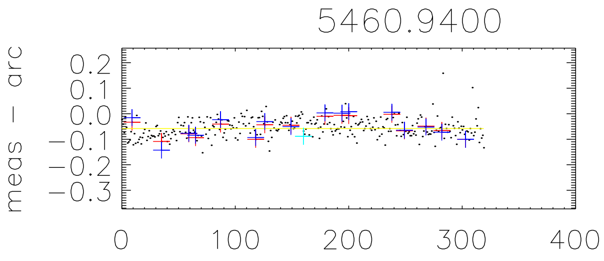

shift(pix)=−0.095
err(pix)= 0.051
oldshift(pix)=−0.155
0
20
40
60
80
100
120
140
4020
4030
4040
4050
4060
4070
4080

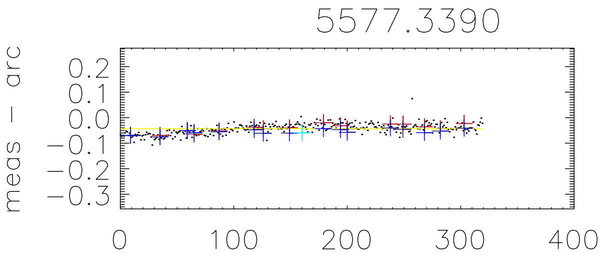

shift(pix)=−0.170
err(pix)= 0.017
oldshift(pix)=−0.174
0
20
40
60
80
100
120
140
4280
4300
4320
4340
4360
4380
4400
4420

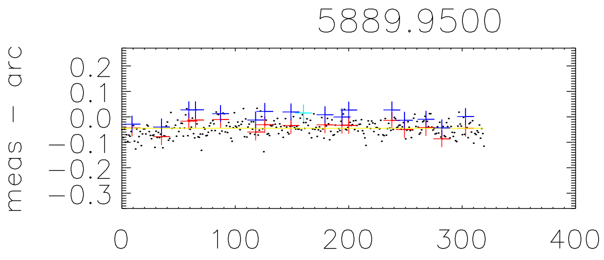

shift(pix)=−0.088
err(pix)= 0.009
oldshift(pix)=−0.041
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

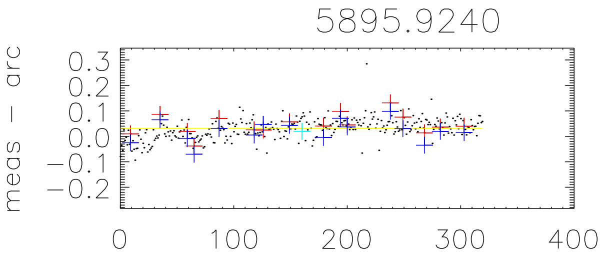

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

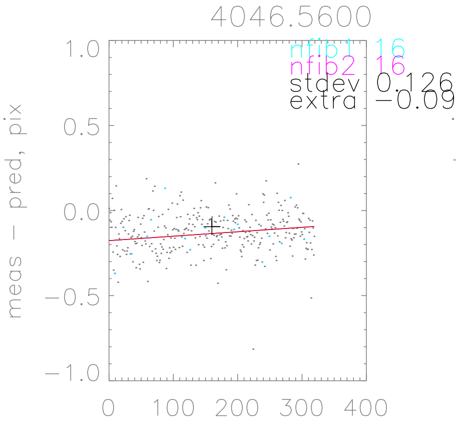

4358.3300
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

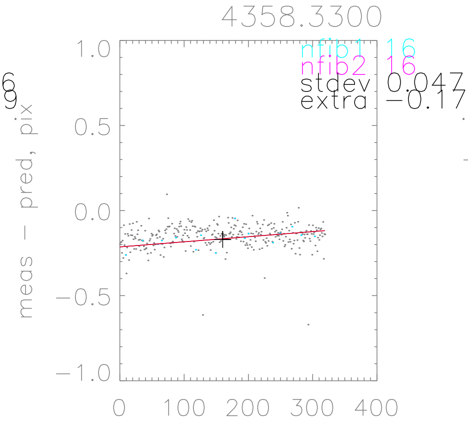

5460.9400
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

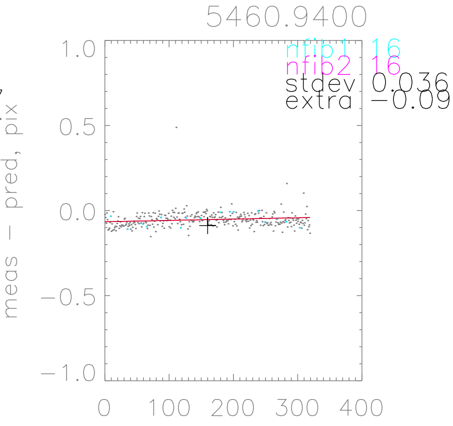

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

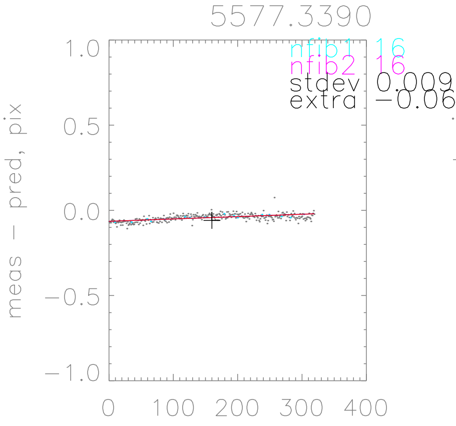

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

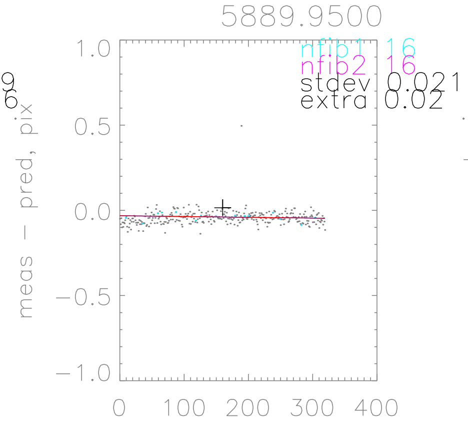

5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

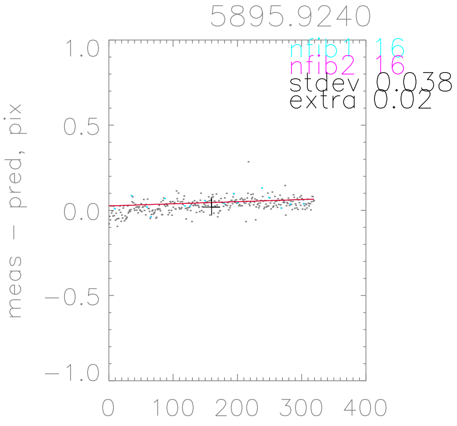

4046.5600
nfib1 16
nfib2 16
stdev 0.126
extra −0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

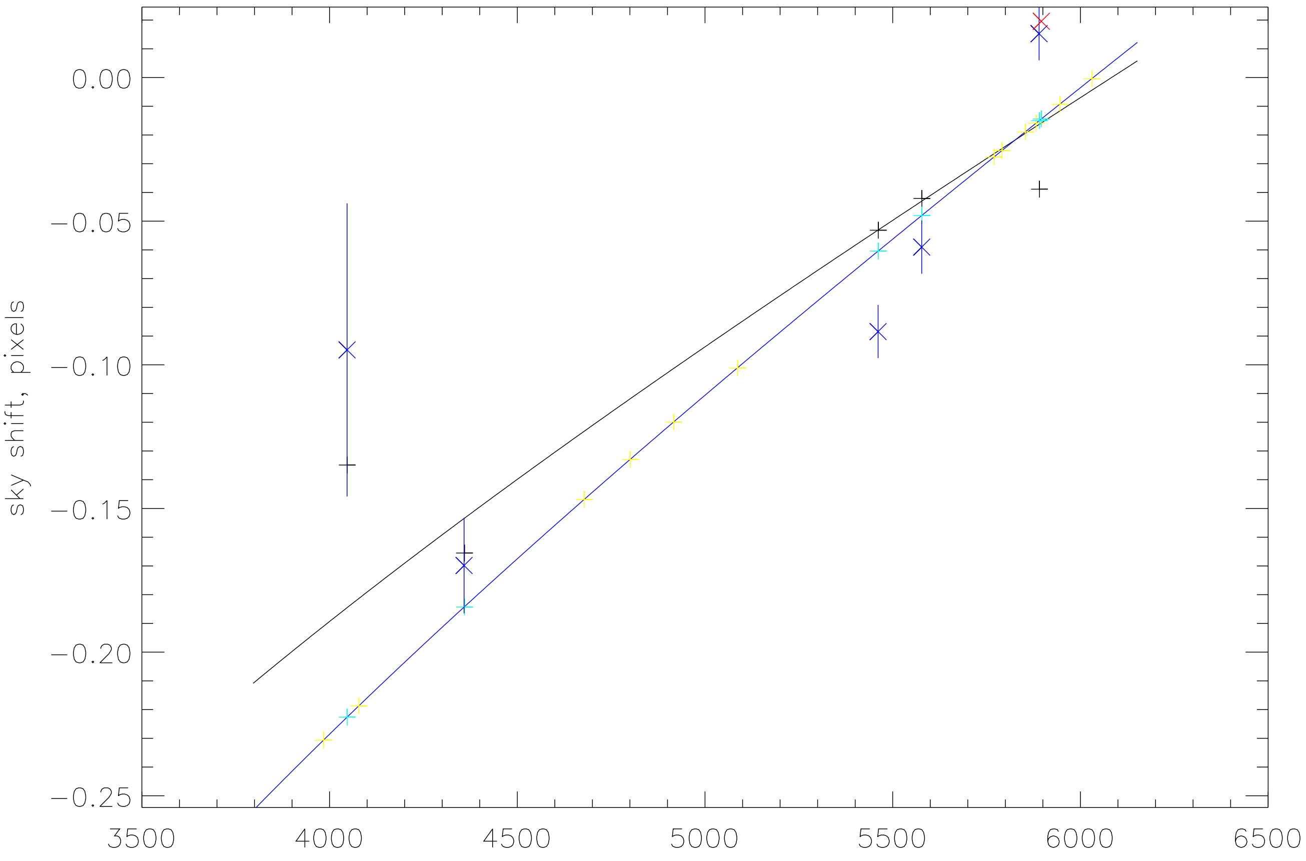

4358.3300
nfib1 16
nfib2 16
stdev 0.047
extra −0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

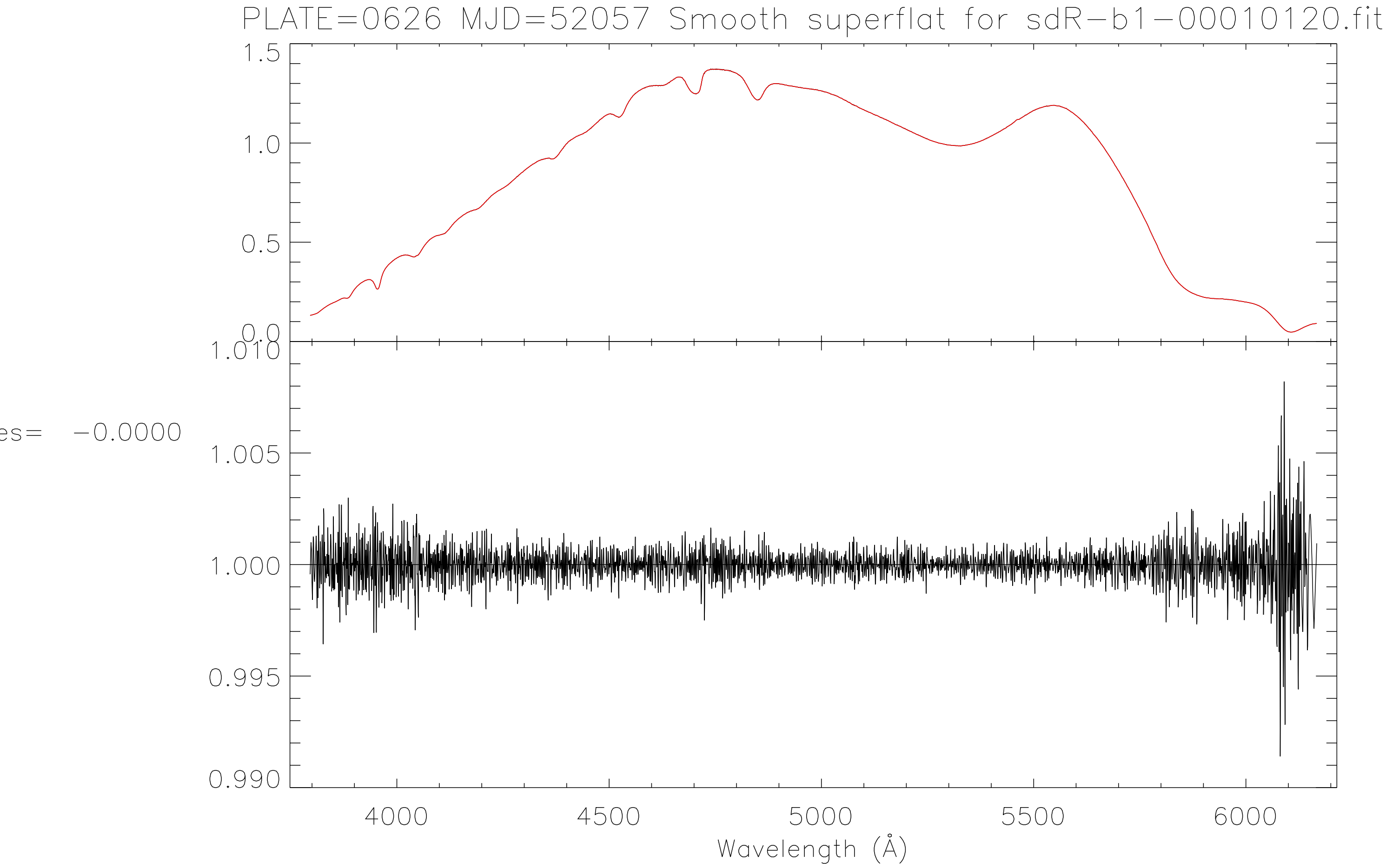

5460.9400
nfib1 16
nfib2 16
stdev 0.036
extra −0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

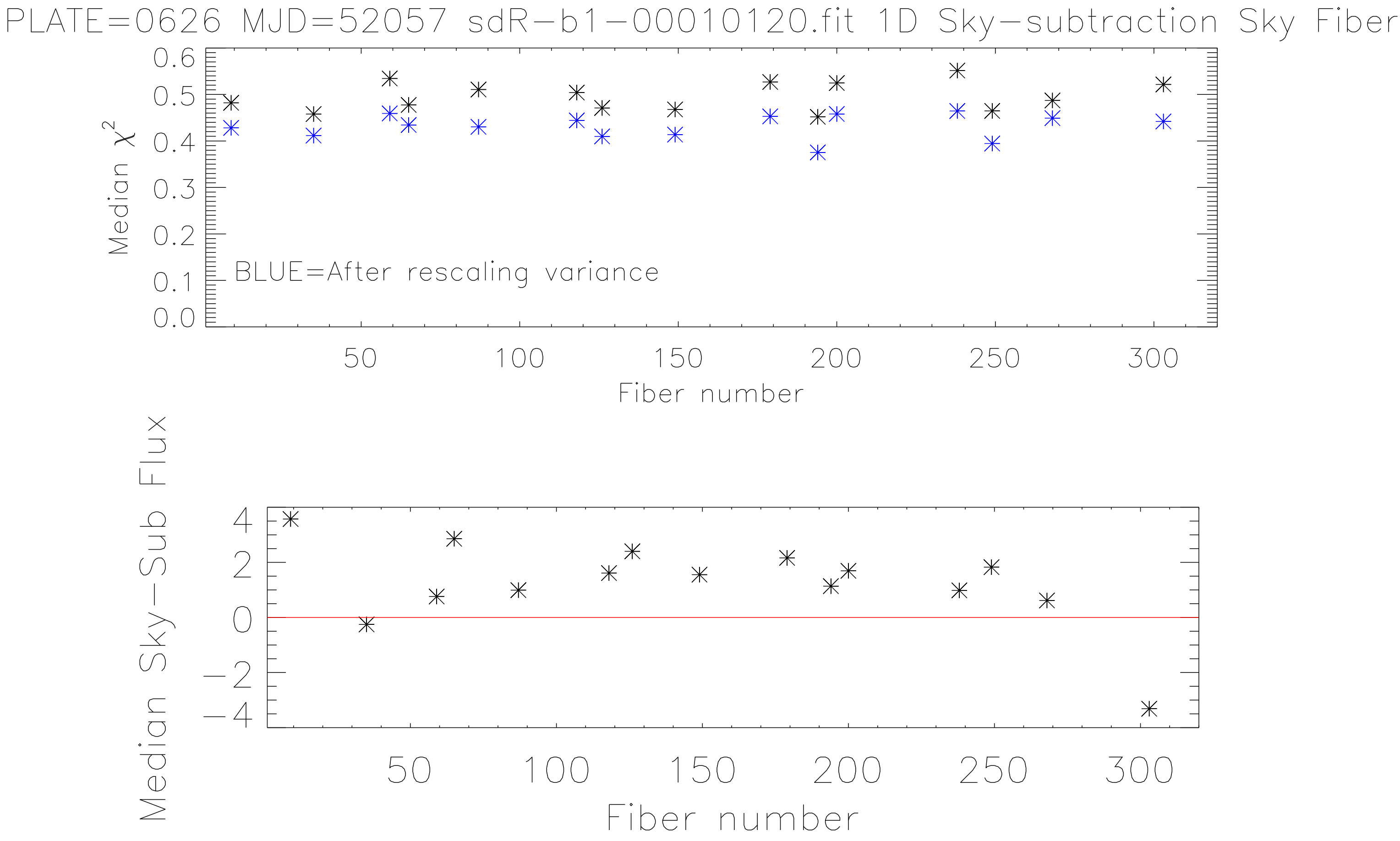

5577.3390
nfib1 16
nfib2 16
stdev 0.009
extra −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

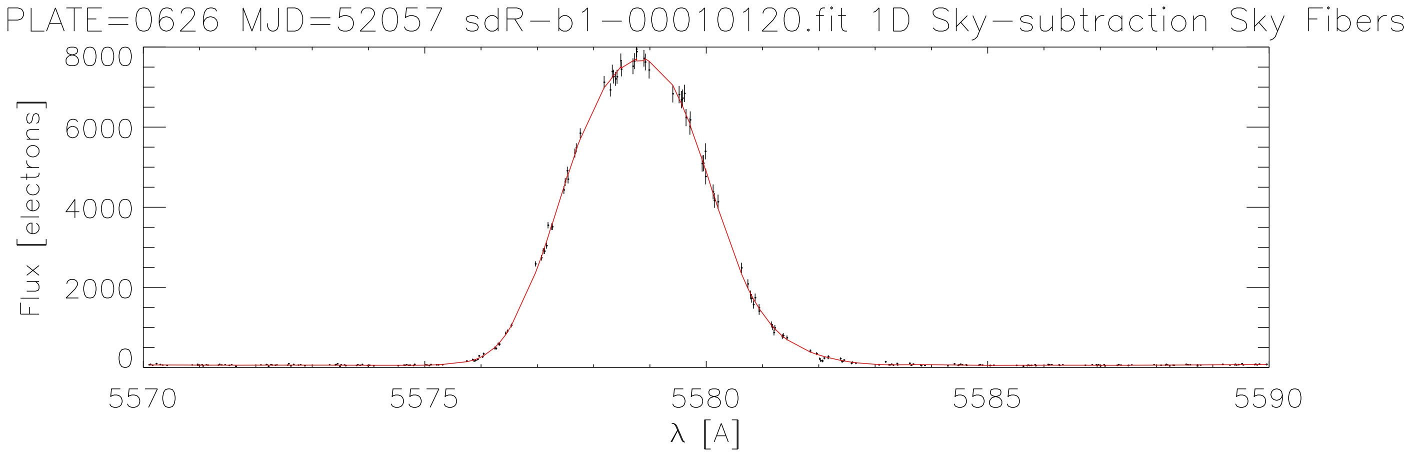

5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

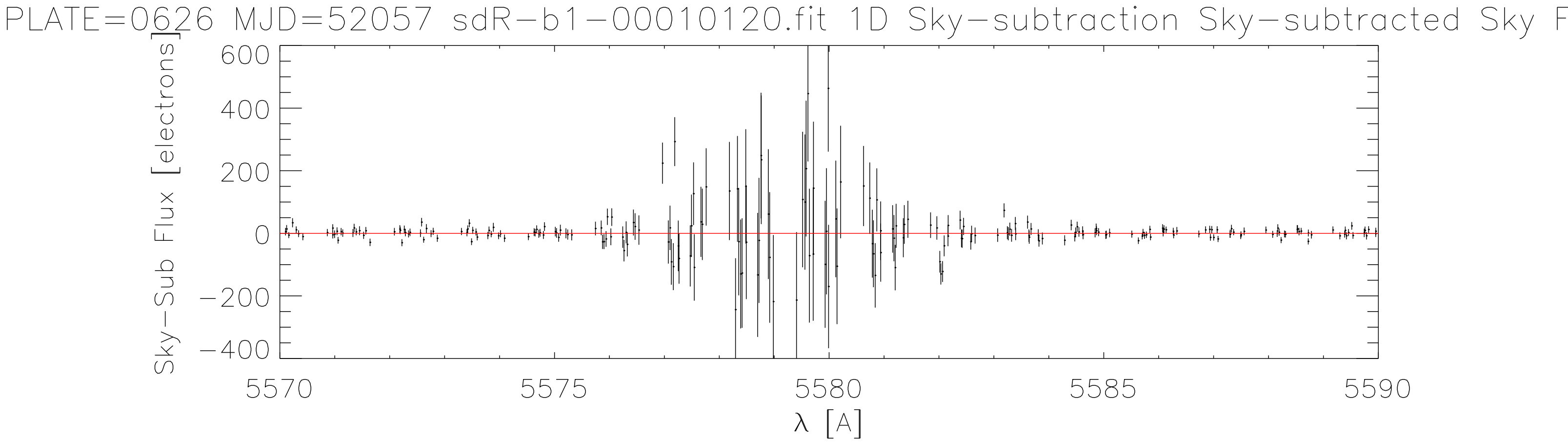

5895.9240
nfib1 16
nfib2 16
stdev 0.038
extra 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

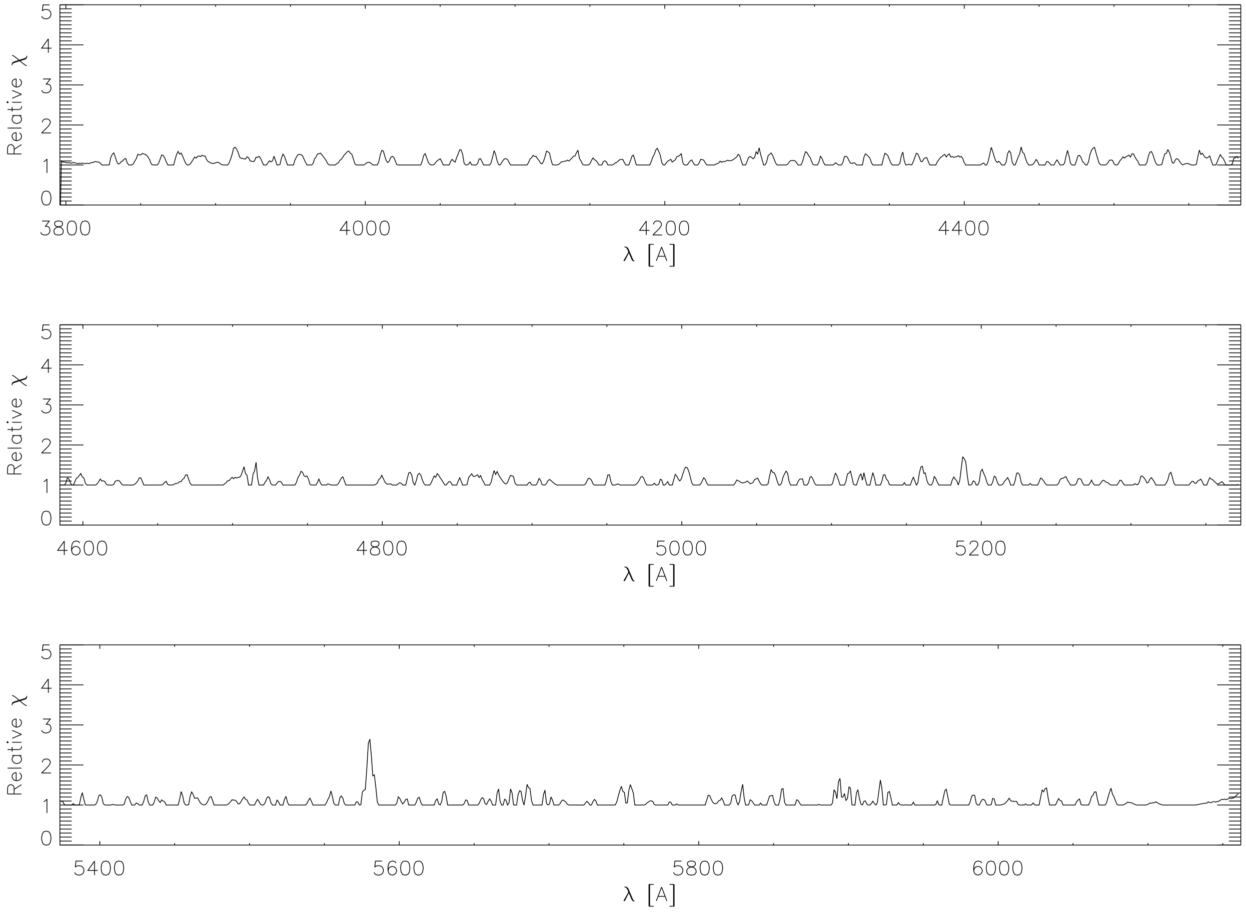

sky shift, pixels
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500


PLATE=0626 MJD=52057 Smooth superflat for sdR-b1-00010120.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=0626 MJD=52057 sdR-b1-00010120.fit 1D Sky-subtraction Sky Fiber

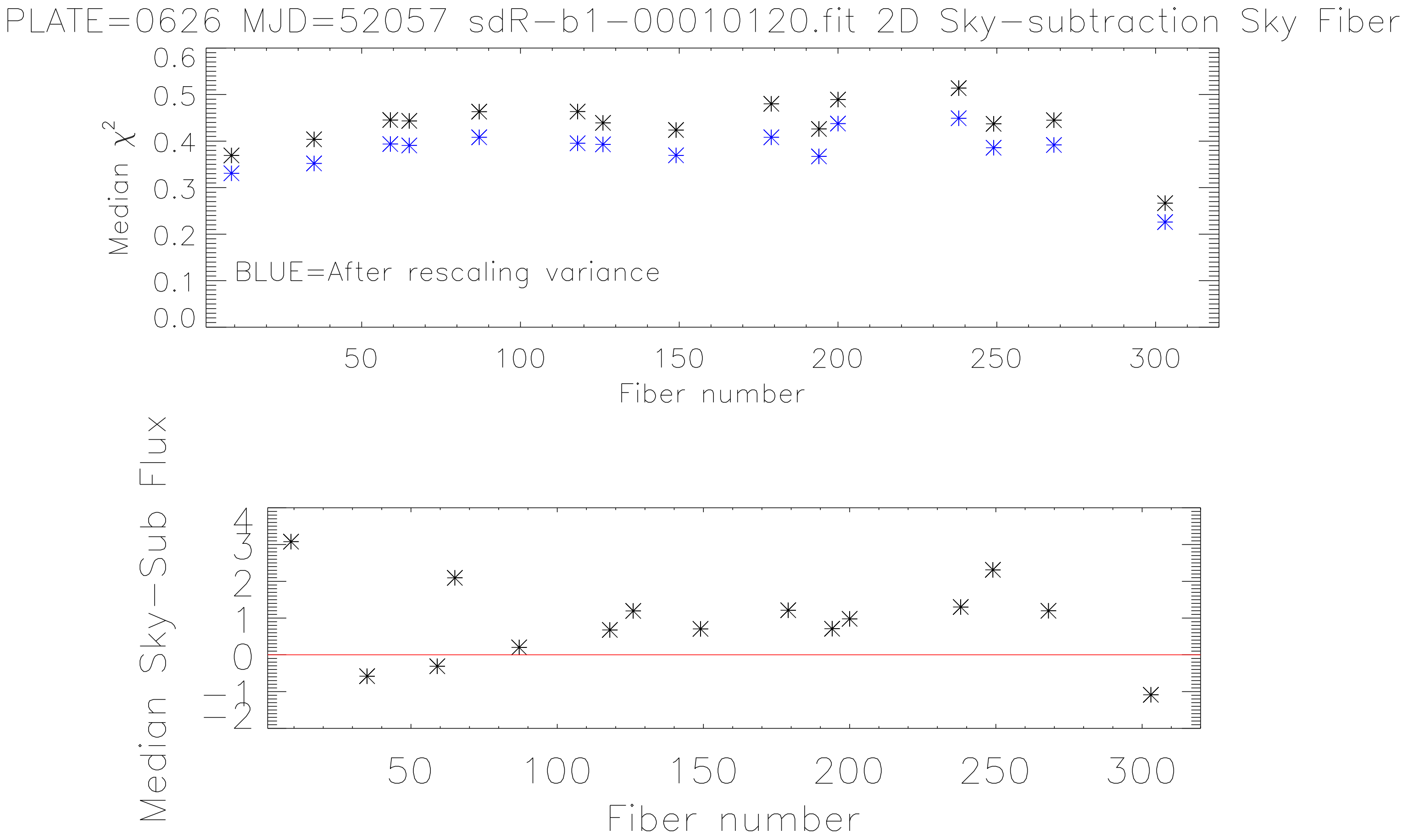

PLATE=0626 MJD=52057 sdR-b1-00010120.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

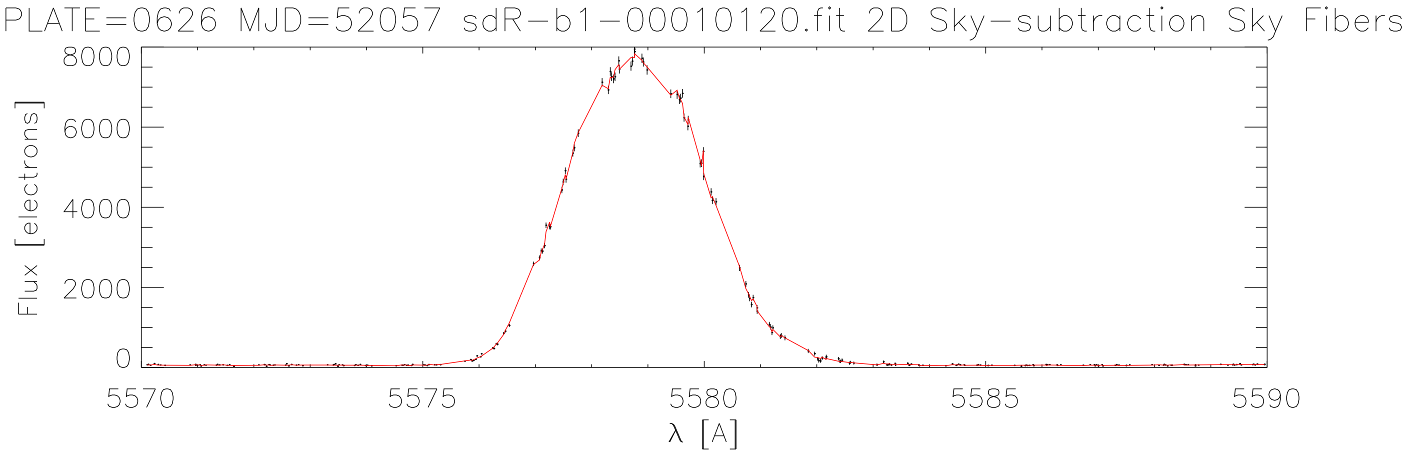

PLATE=0626 MJD=52057 sdR-b1-00010120.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

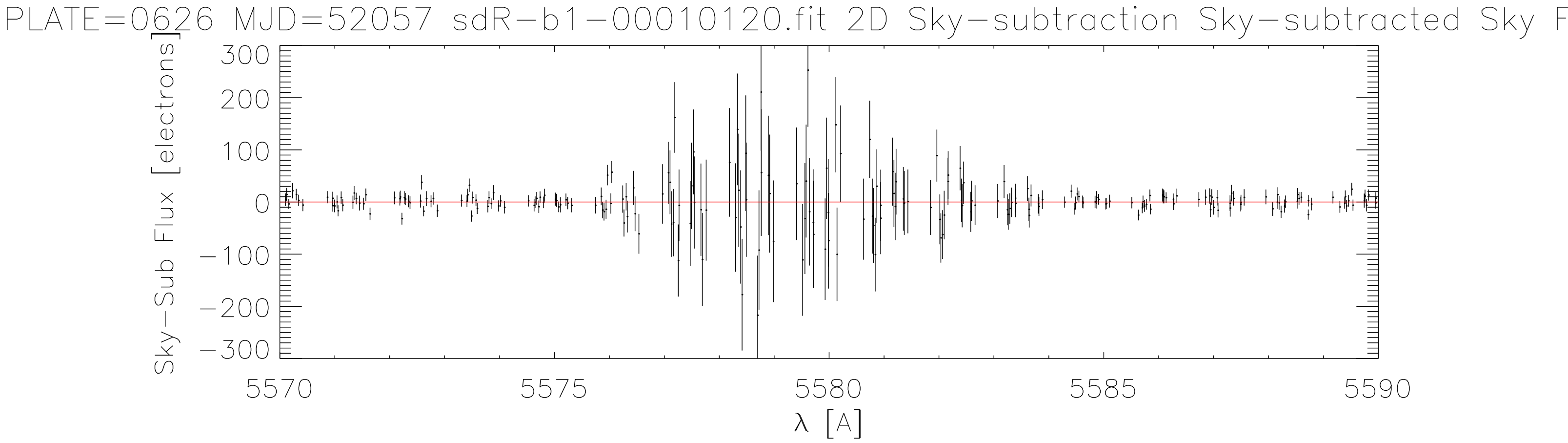


Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b1-00010120.fit 1D Sky-subtraction Rescaled Errors

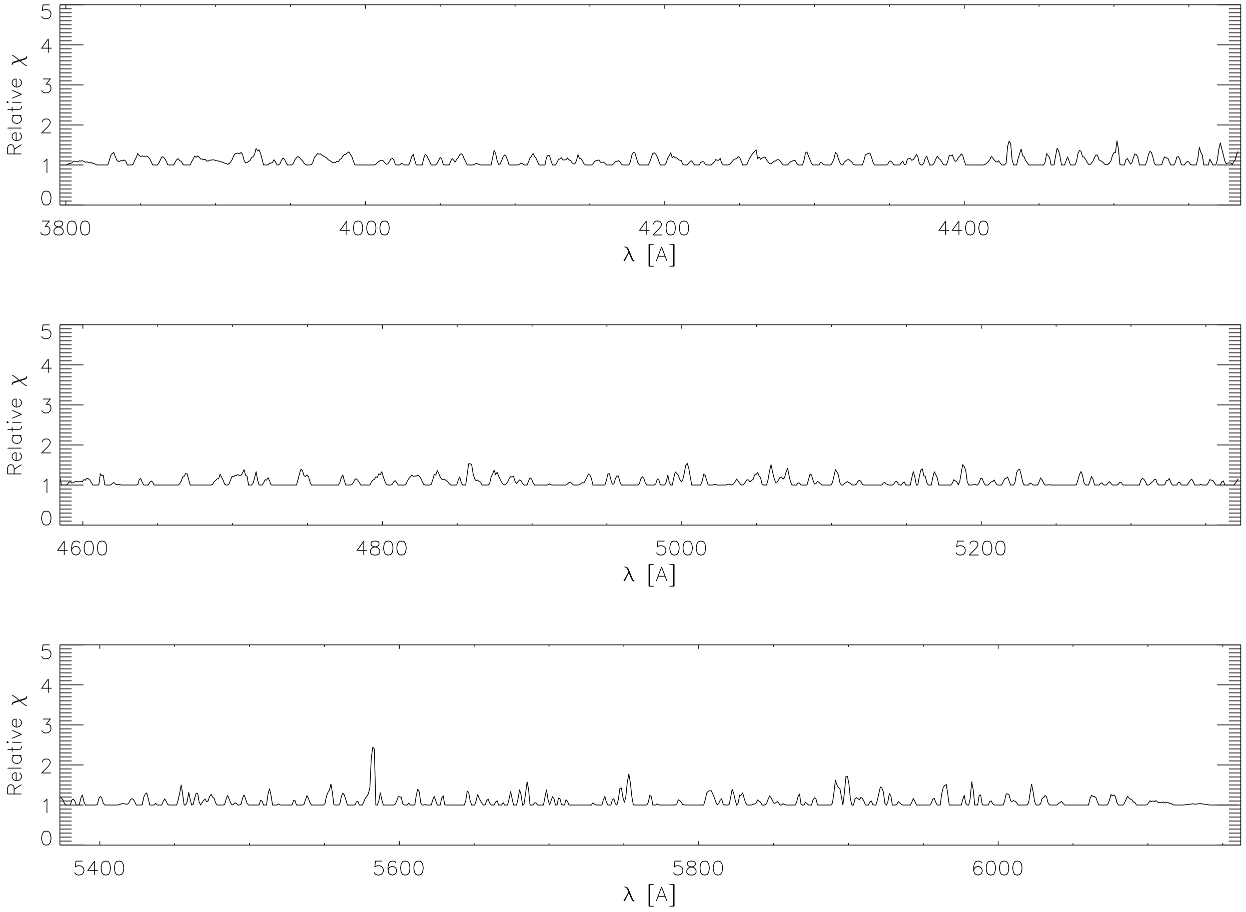

PLATE=0626 MJD=52057 sdR-b1-00010120.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

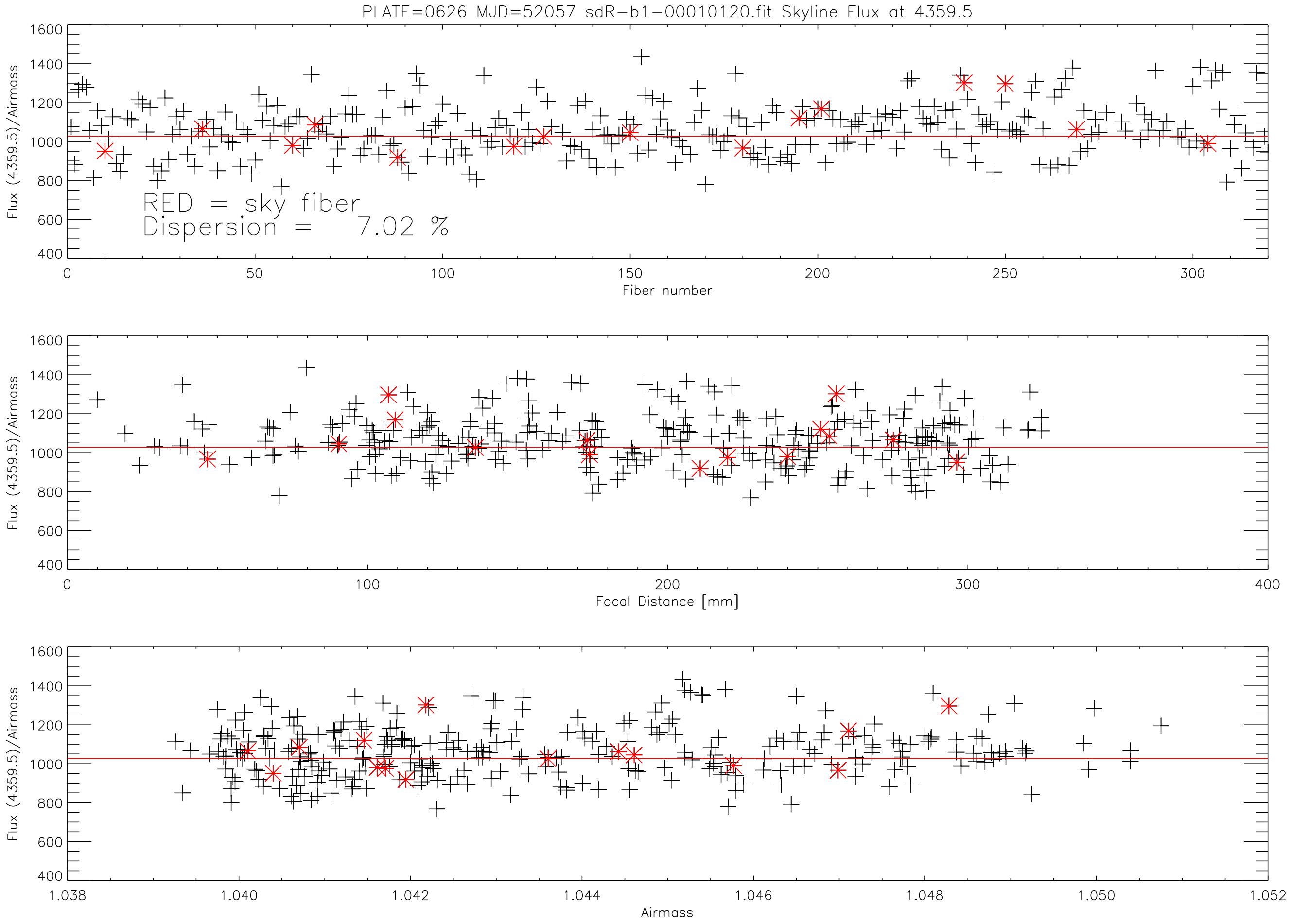

PLATE=0626 MJD=52057 sdR-b1-00010120.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

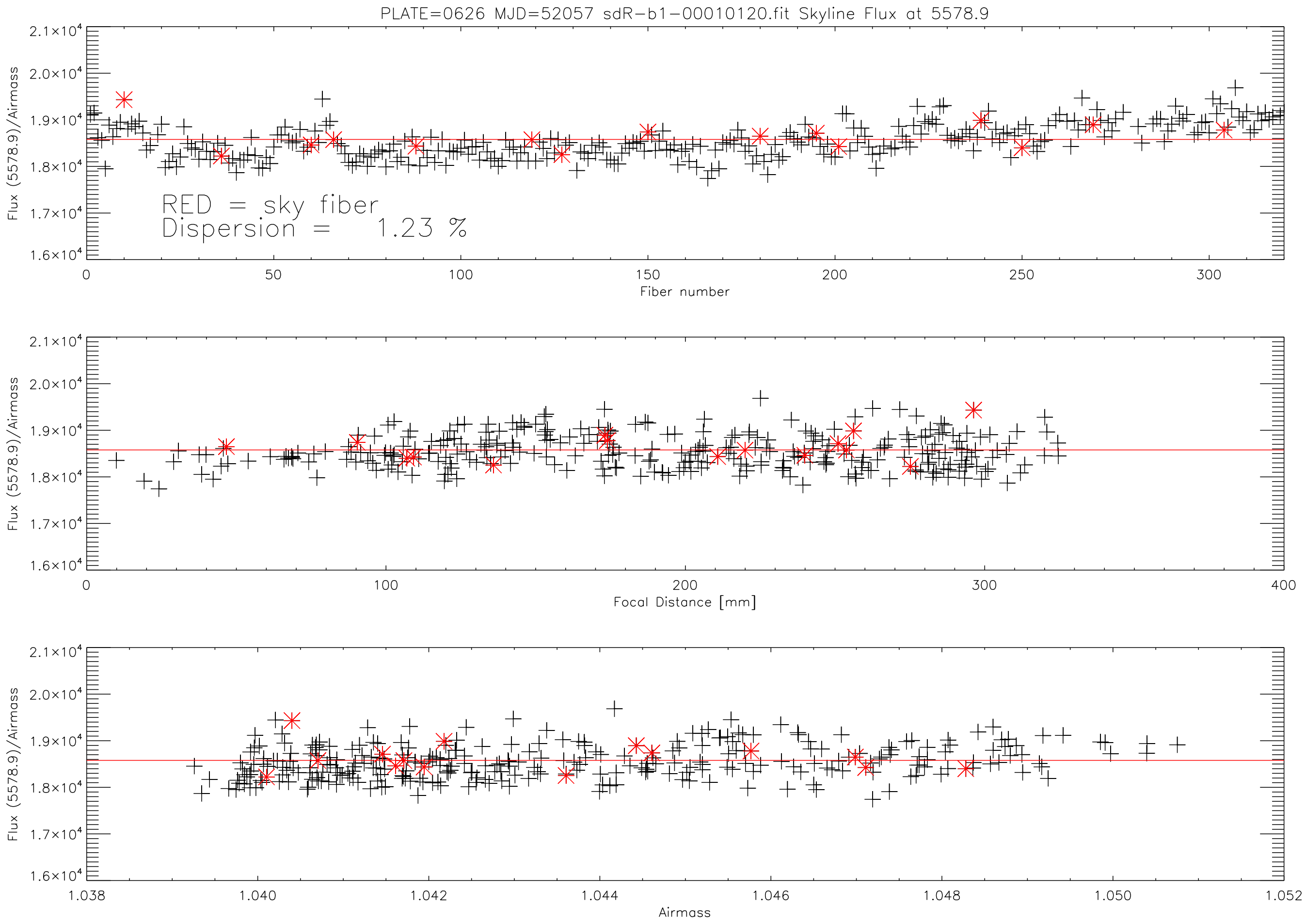

PLATE=0626 MJD=52057 sdR-b1-00010120.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

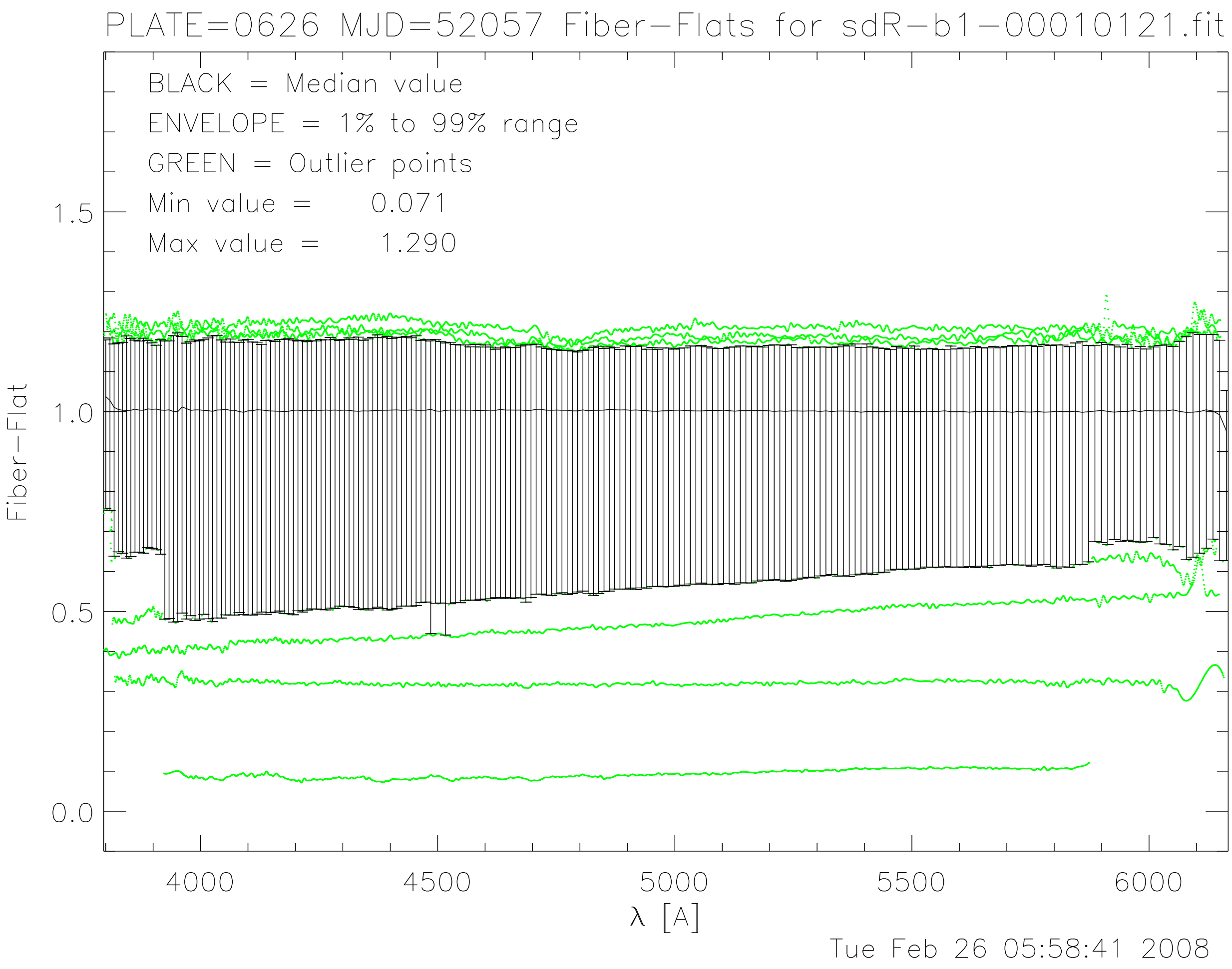
Number of sky fibers = 15

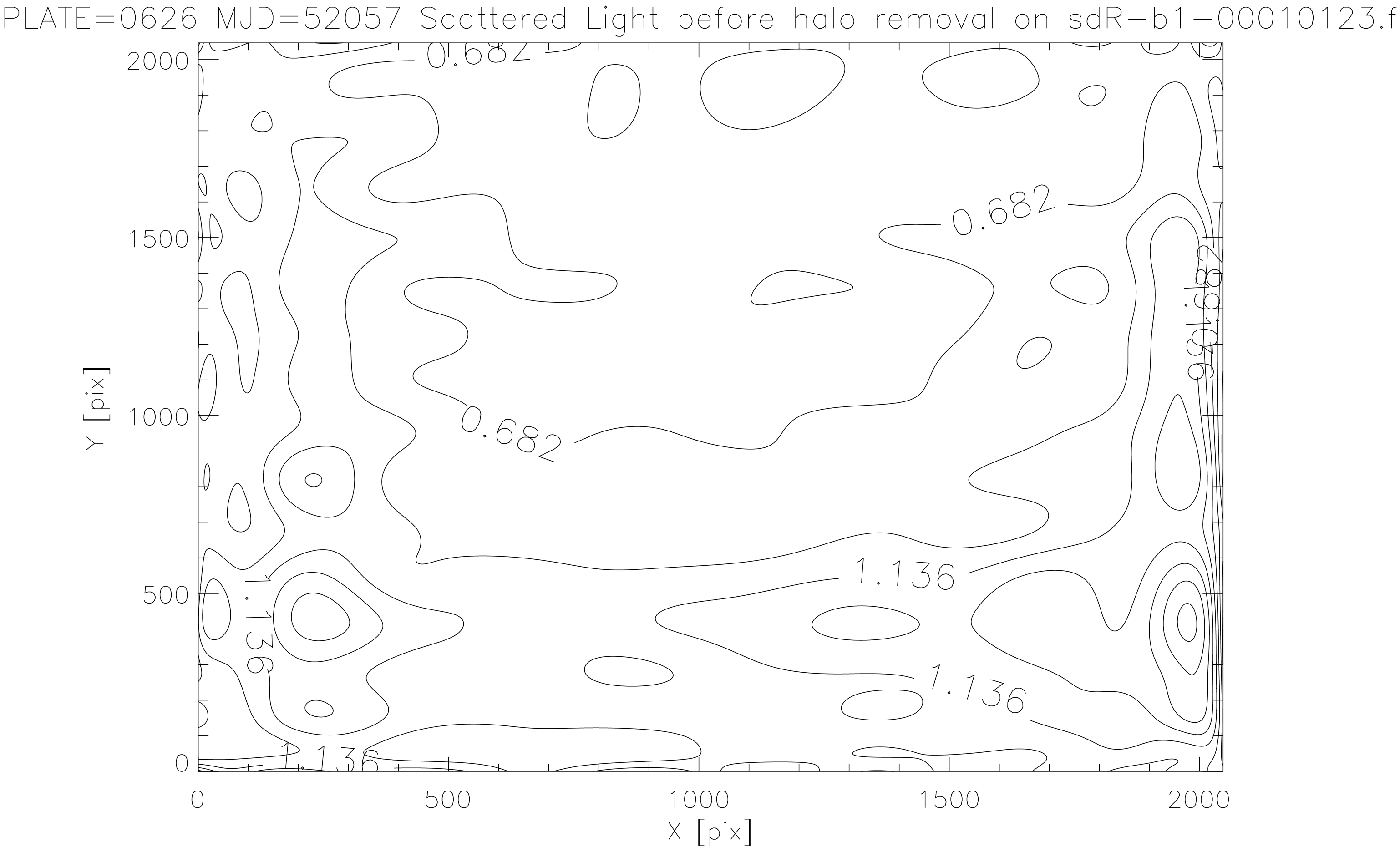
PLATE=0626 MJD=52057 sdR-b1-00010120.fit 2D Sky-subtraction Rescaled Errors



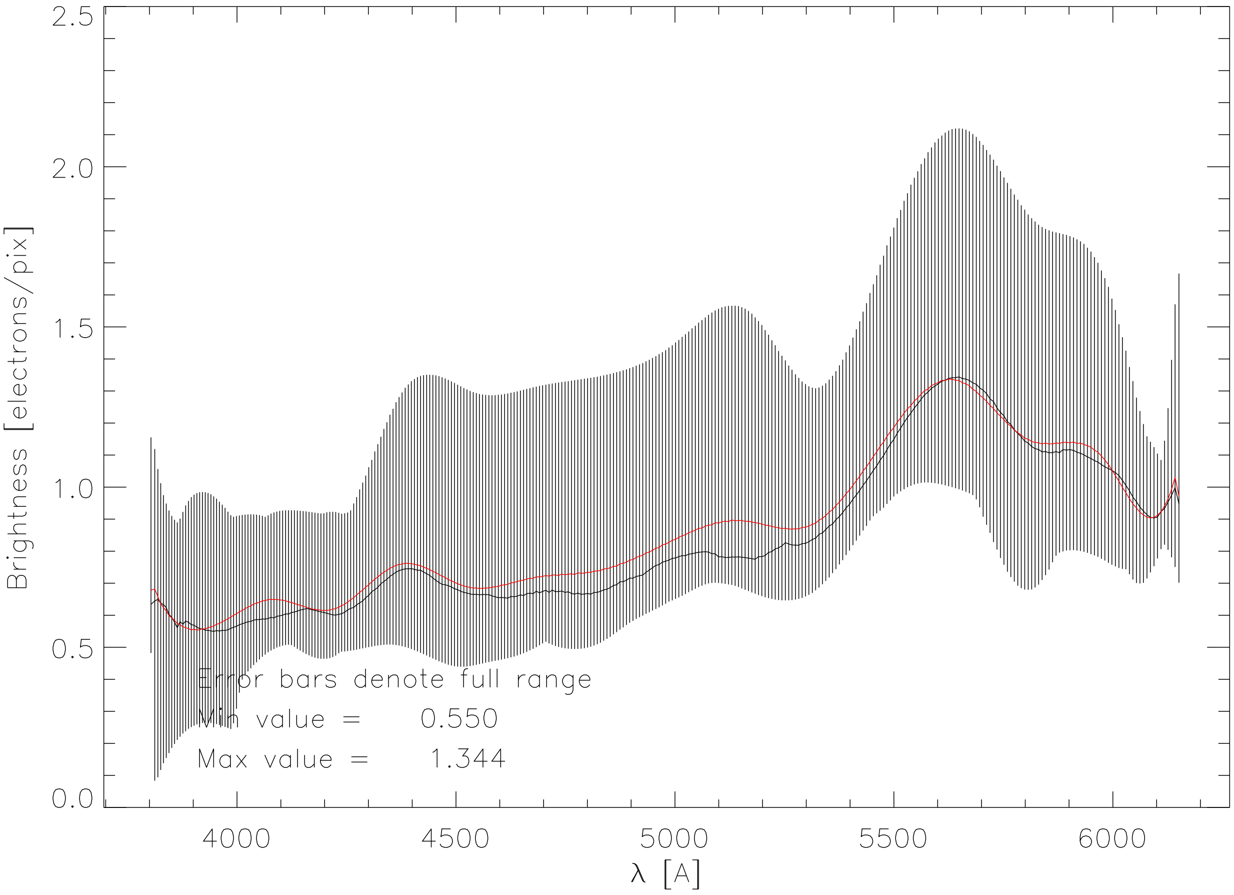

PLATE=0626 MJD=52057 sdR-b1-00010120.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 7.02 %
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
1.038
1.040
1.042
1.044
1.046
1.048
1.050
1.052
Airmass


PLATE=0626 MJD=52057 sdR-b1-00010120.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.23 %
Flux (5578.9)/Airmass
2.1×10^4
2.0×10^4
1.9×10^4
1.8×10^4
1.7×10^4
1.6×10^4
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.038
1.040
1.042
1.044
1.046
1.048
1.050
1.052
Airmass


PLATE=0626 MJD=52057 Fiber−Flats for sdR−b1−00010121.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.071
Max value = 1.290
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 05:58:41 2008


PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b1-00010123.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
0.682
0.682
0.682
0.682
1.136
1.136
1.136
1.136

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b1-00010123.f

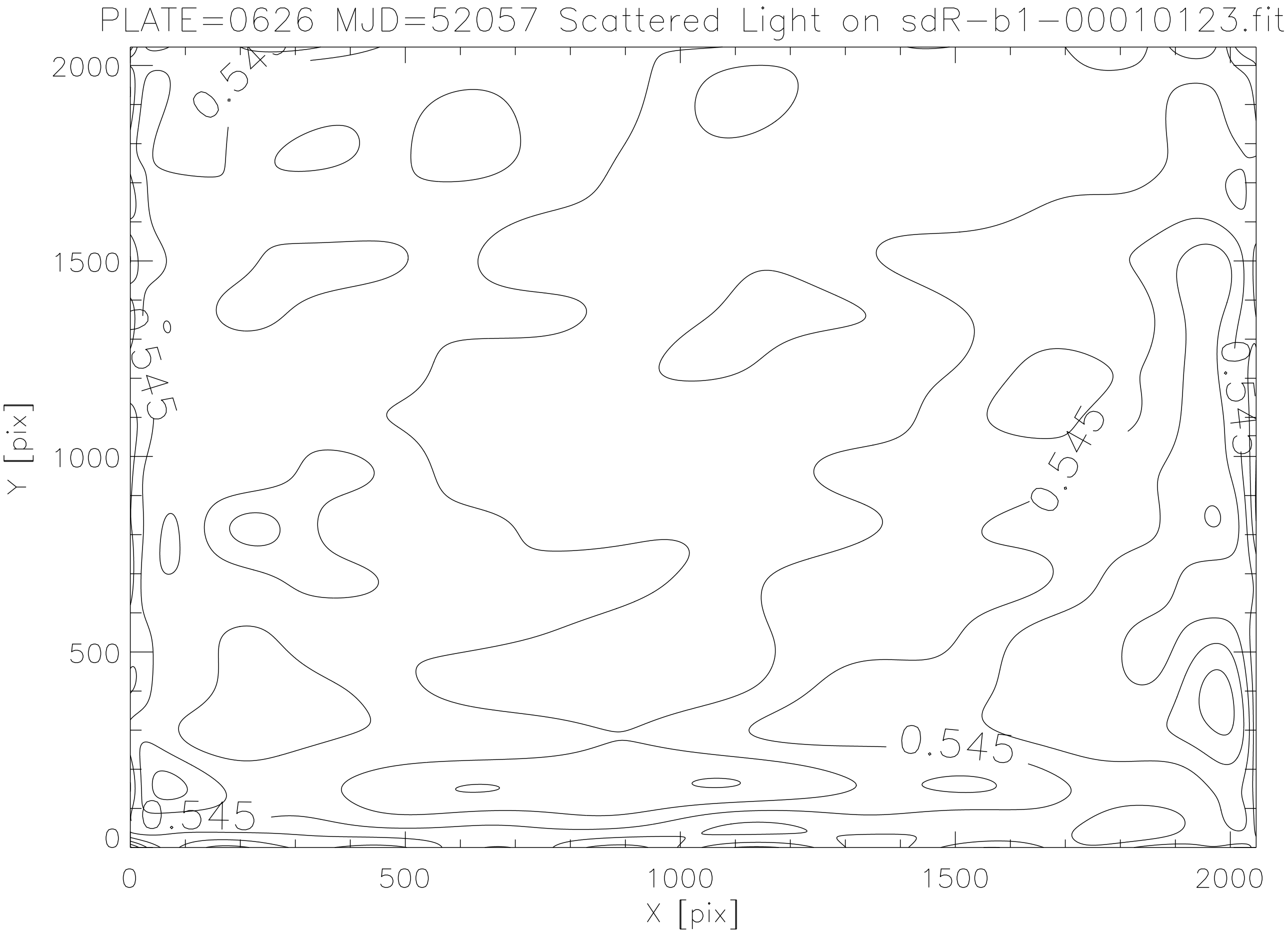


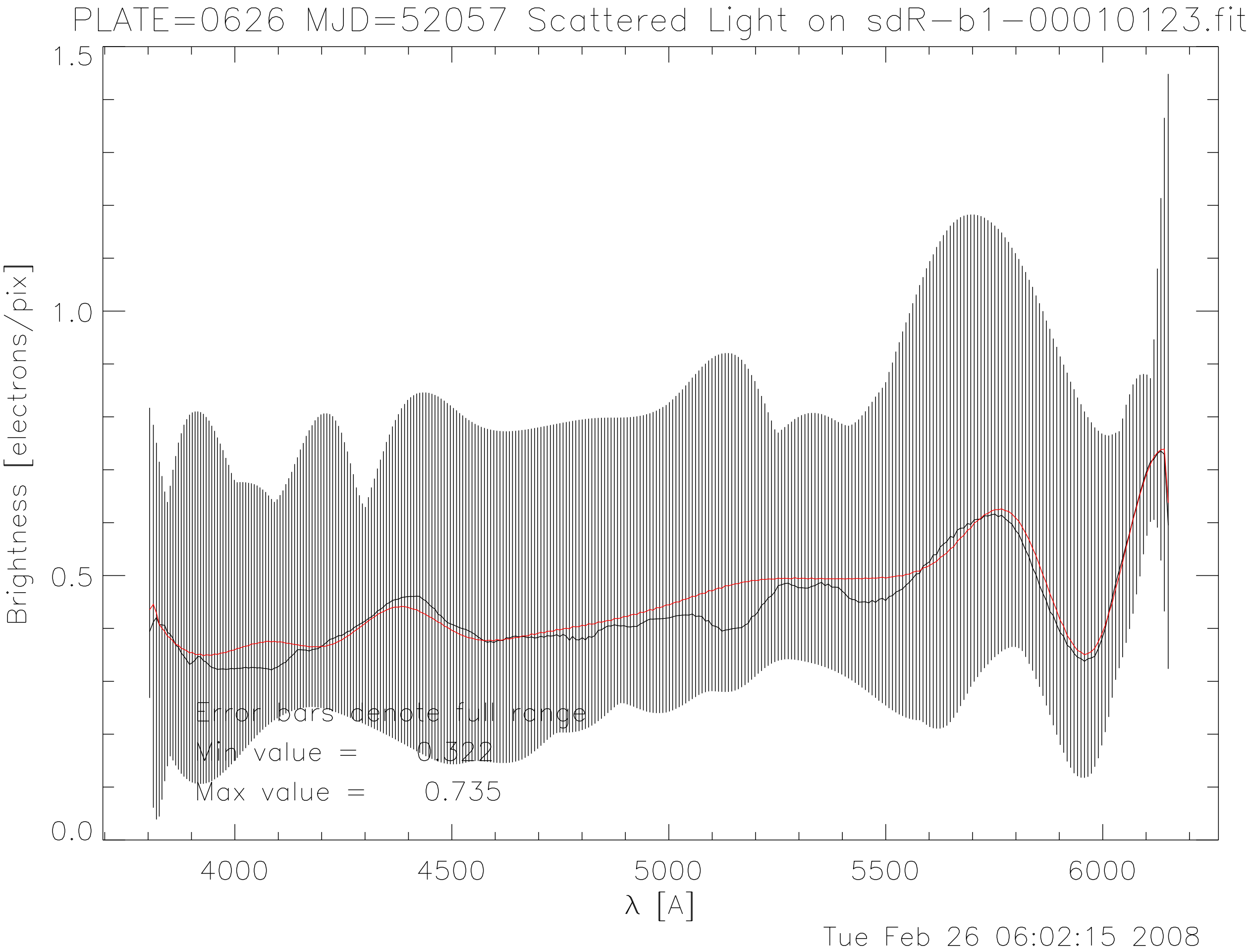
Error bars denote full range

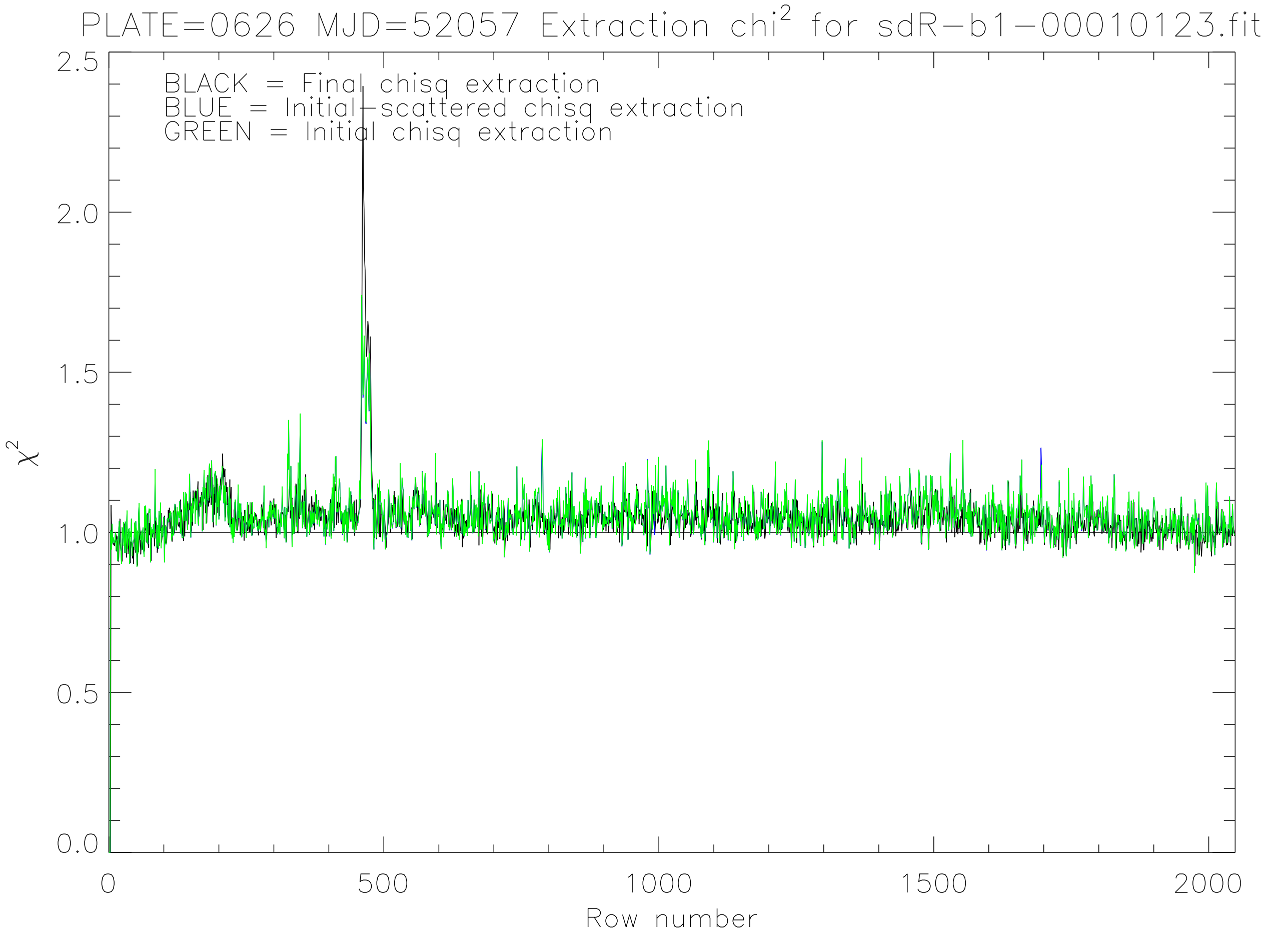
Min value = 0.550

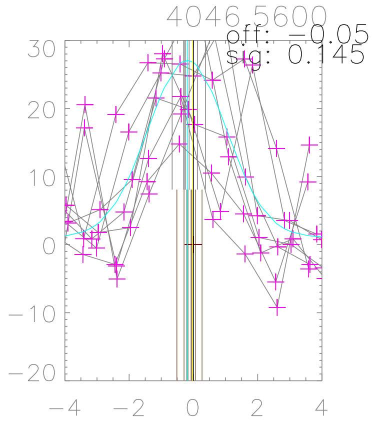
Max value = 1.344

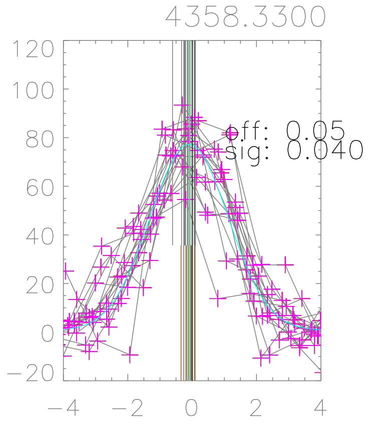
Tue Feb 26 05:59:23 2008

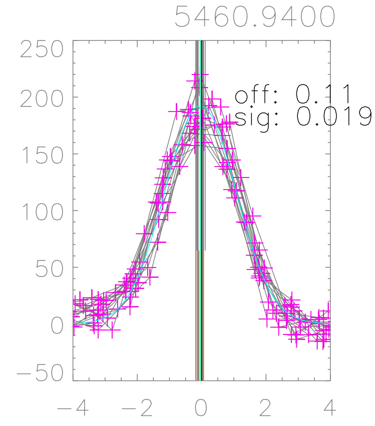

PLATE=0626 MJD=52057 Scattered Light on sdR-b1-00010123.fit
Y [pix]
0
500
1000
1500
2000
X [pix]
0
500
1000
1500
2000
0.545
0.545
0.545
0.545
0.545
0.545

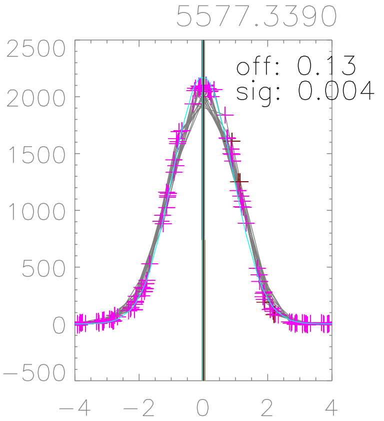

PLATE=0626 MJD=52057 Scattered Light on sdR-b1-00010123.fit
Brightness [electrons/pix]
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 0.322
Max value = 0.735
Tue Feb 26 06:02:15 2008

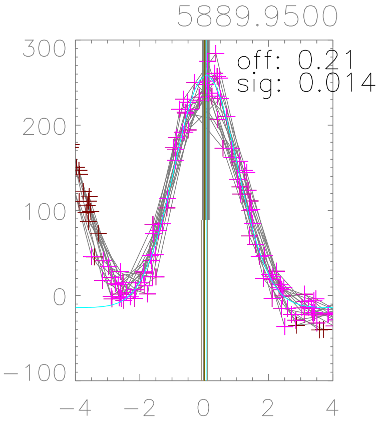

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b1-00010123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
500
1000
1500
2000
Row number

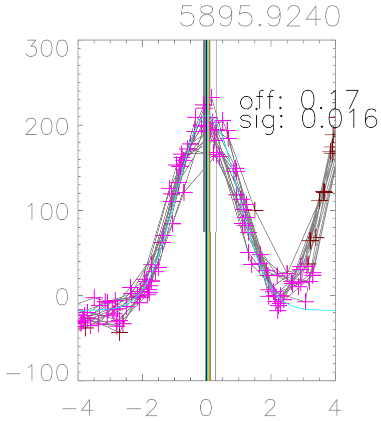

4046.5600
off: −0.05
sig: 0.145
30
20
10
0
−10
−20
−4
−2
0
2
4

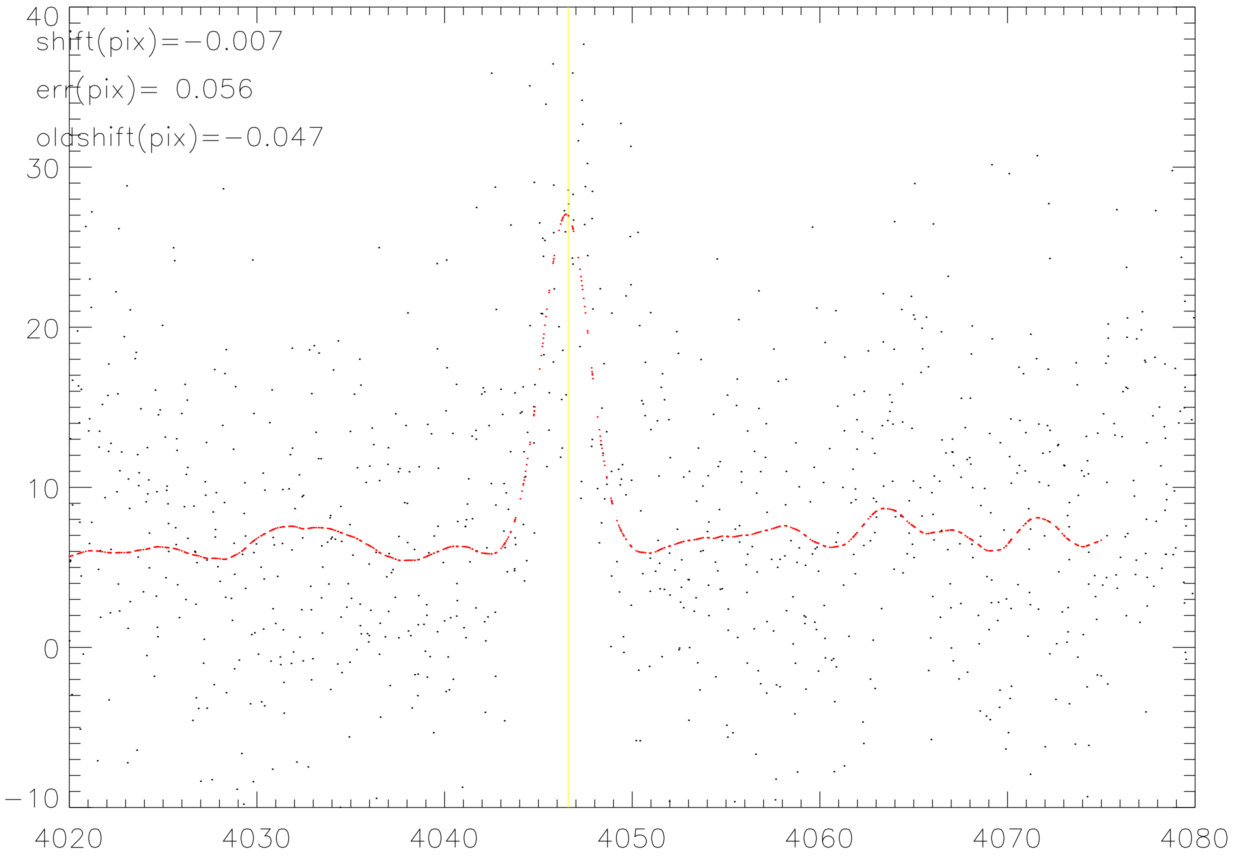

4358.3300
off: 0.05
sig: 0.040
120
100
80
60
40
20
0
−20
−4
−2
0
2
4

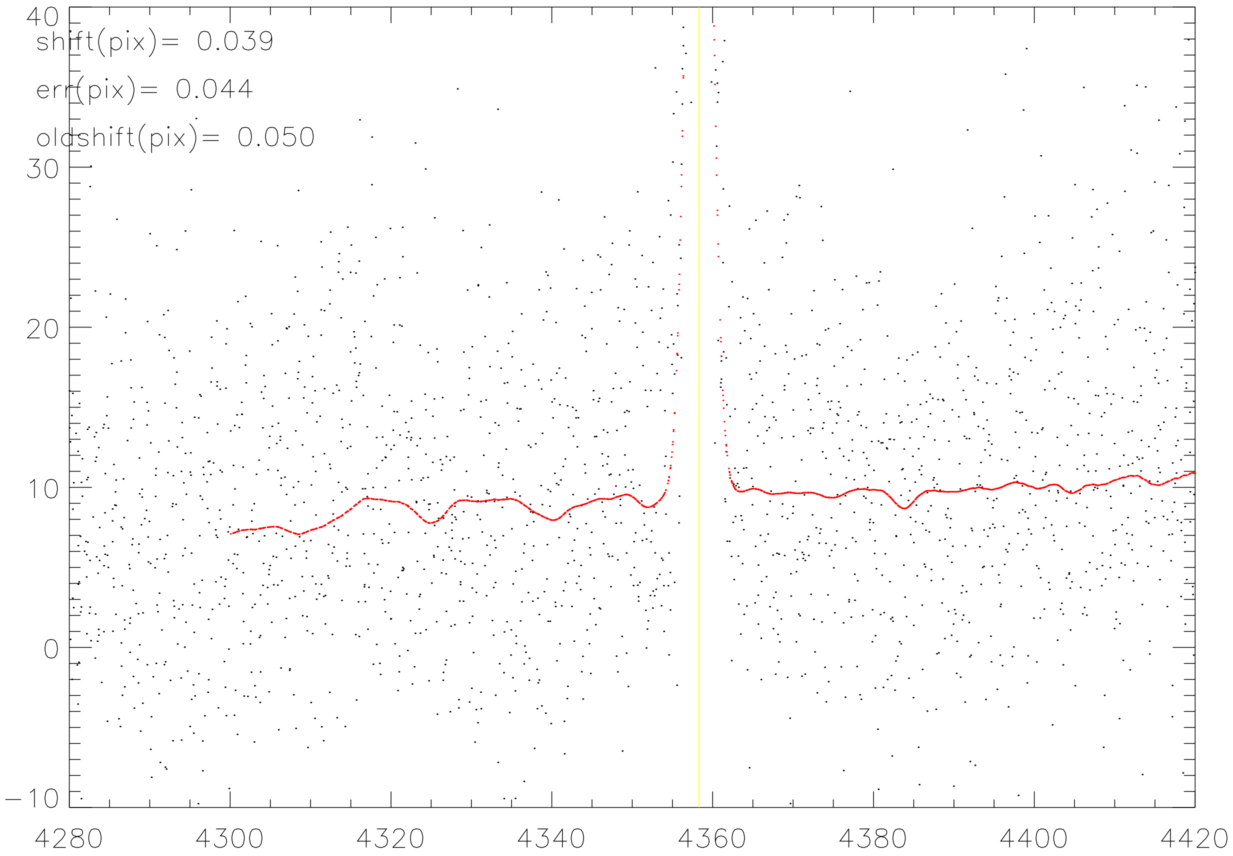

5460.9400
off: 0.11
sig: 0.019
250
200
150
100
50
0
−50
−4
−2
0
2
4

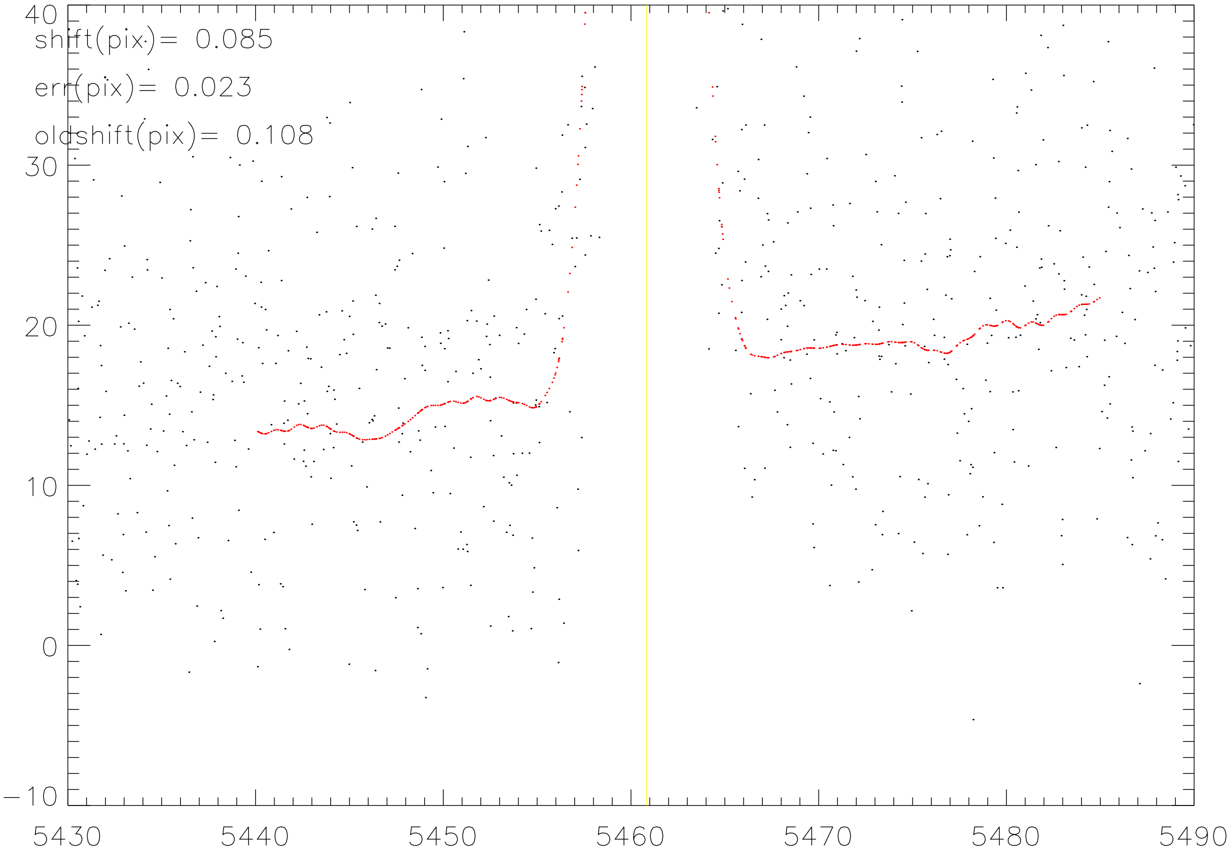

5577.3390
off: 0.13
sig: 0.004
2500
2000
1500
1000
500
0
−500
−4
−2
0
2
4

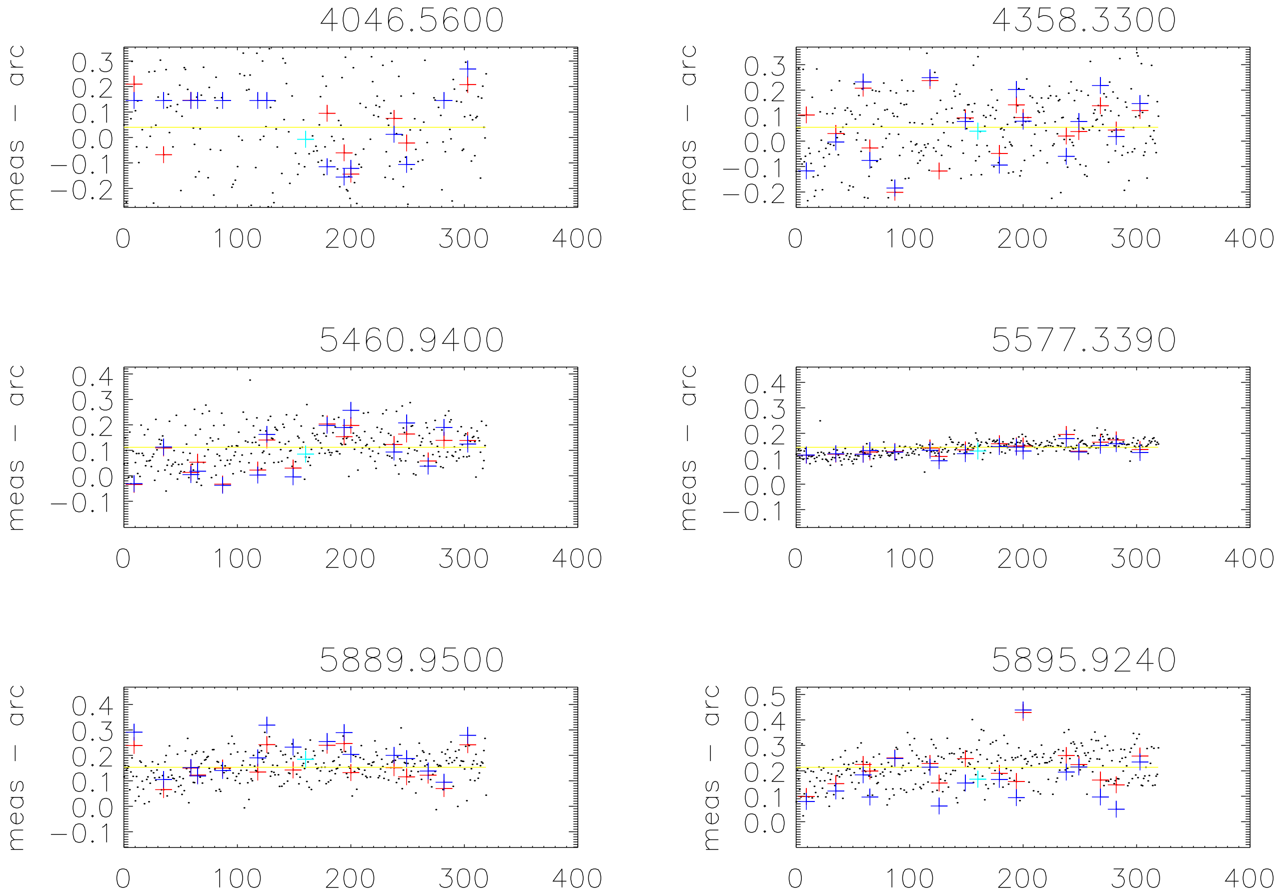

5889.9500
off: 0.21
sig: 0.014
300
200
100
0
−100
−4
−2
0
2
4

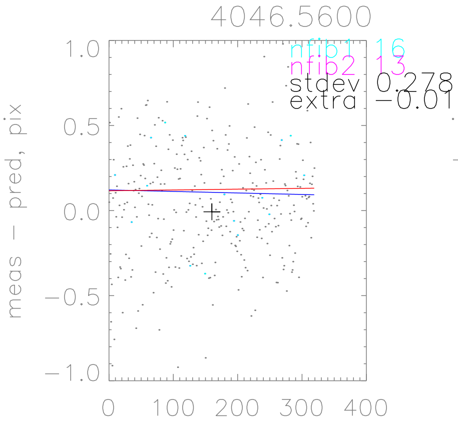

5895.9240
off: 0.17
sig: 0.016
300
200
100
0
−100
−4
−2
0
2
4

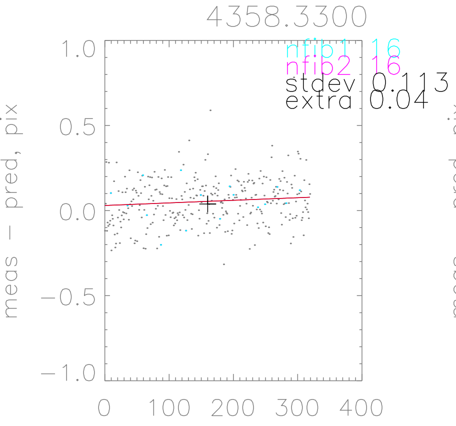

shift(pix)=−0.007
err(pix)= 0.056
oldshift(pix)=−0.047
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

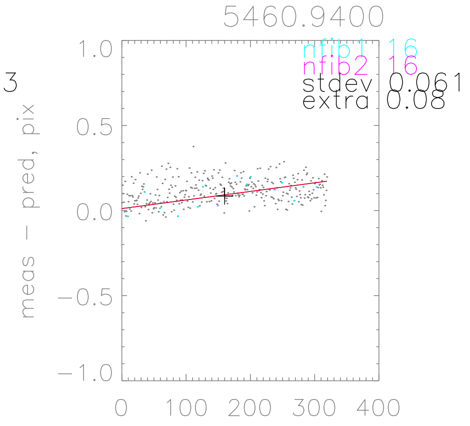

shift(pix)= 0.039
err(pix)= 0.044
oldshift(pix)= 0.050
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

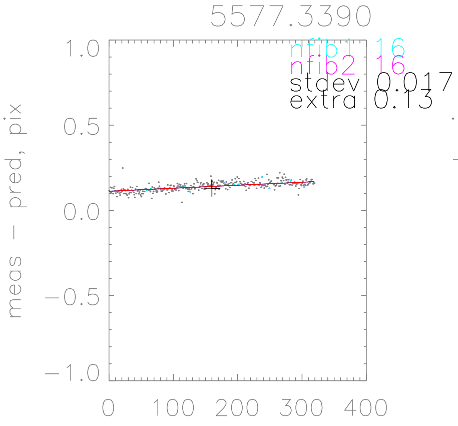

shift(pix)= 0.085
err(pix)= 0.023
oldshift(pix)= 0.108
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

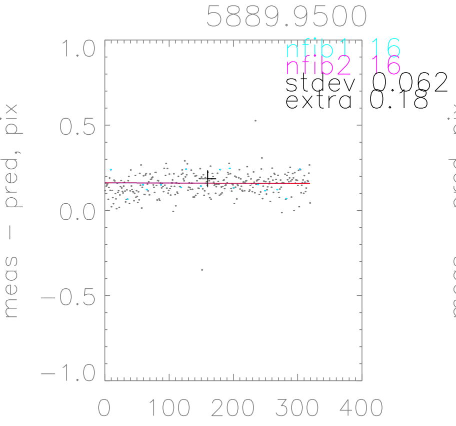

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400
−0.2
−0.1
0.0
0.1
0.2
0.3
0.4
0.5

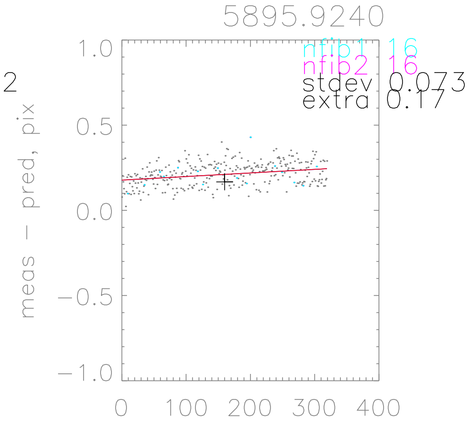

4046.5600
nfib1 16
nfib2 13
stdev 0.278
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

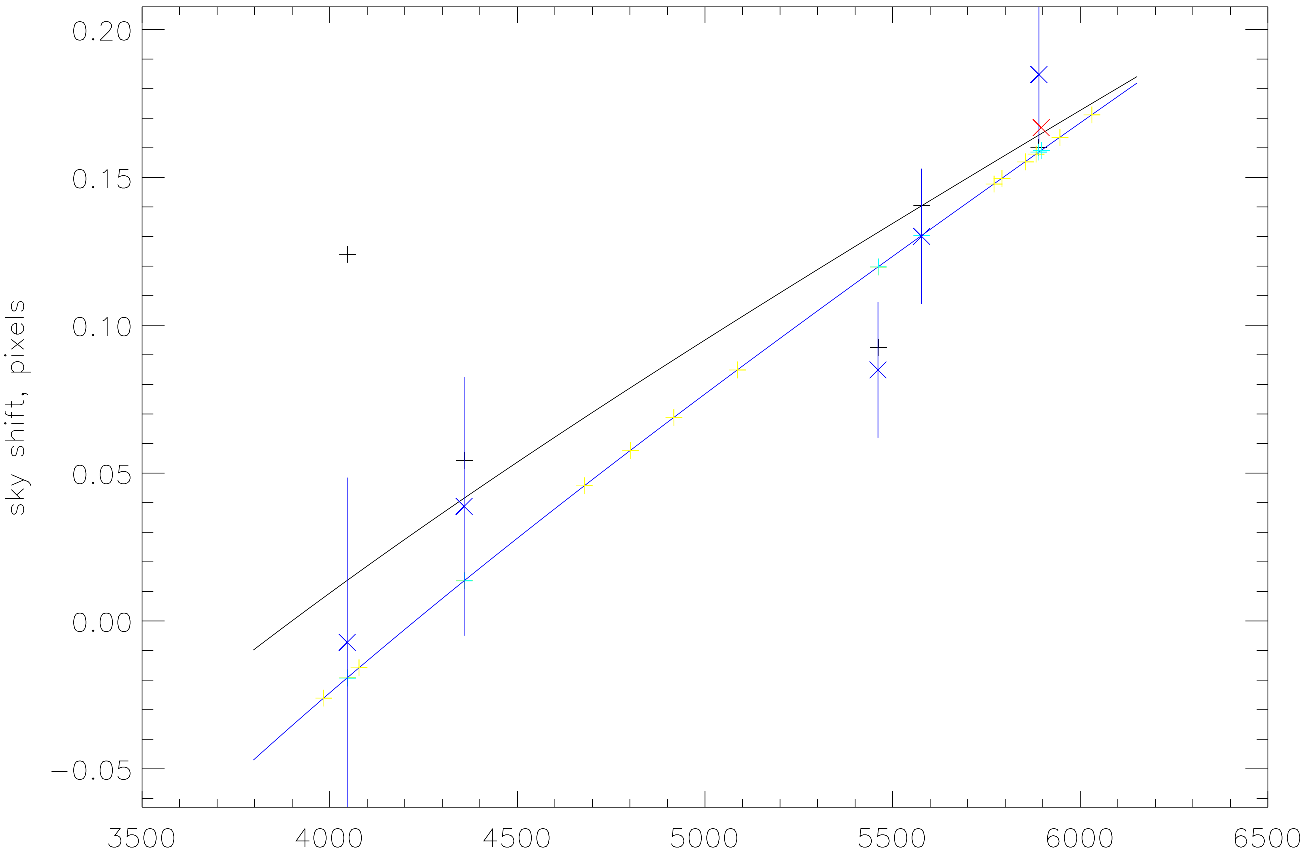

4358.3300
nfib1 16
nfib2 16
stdev 0.113
extra 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

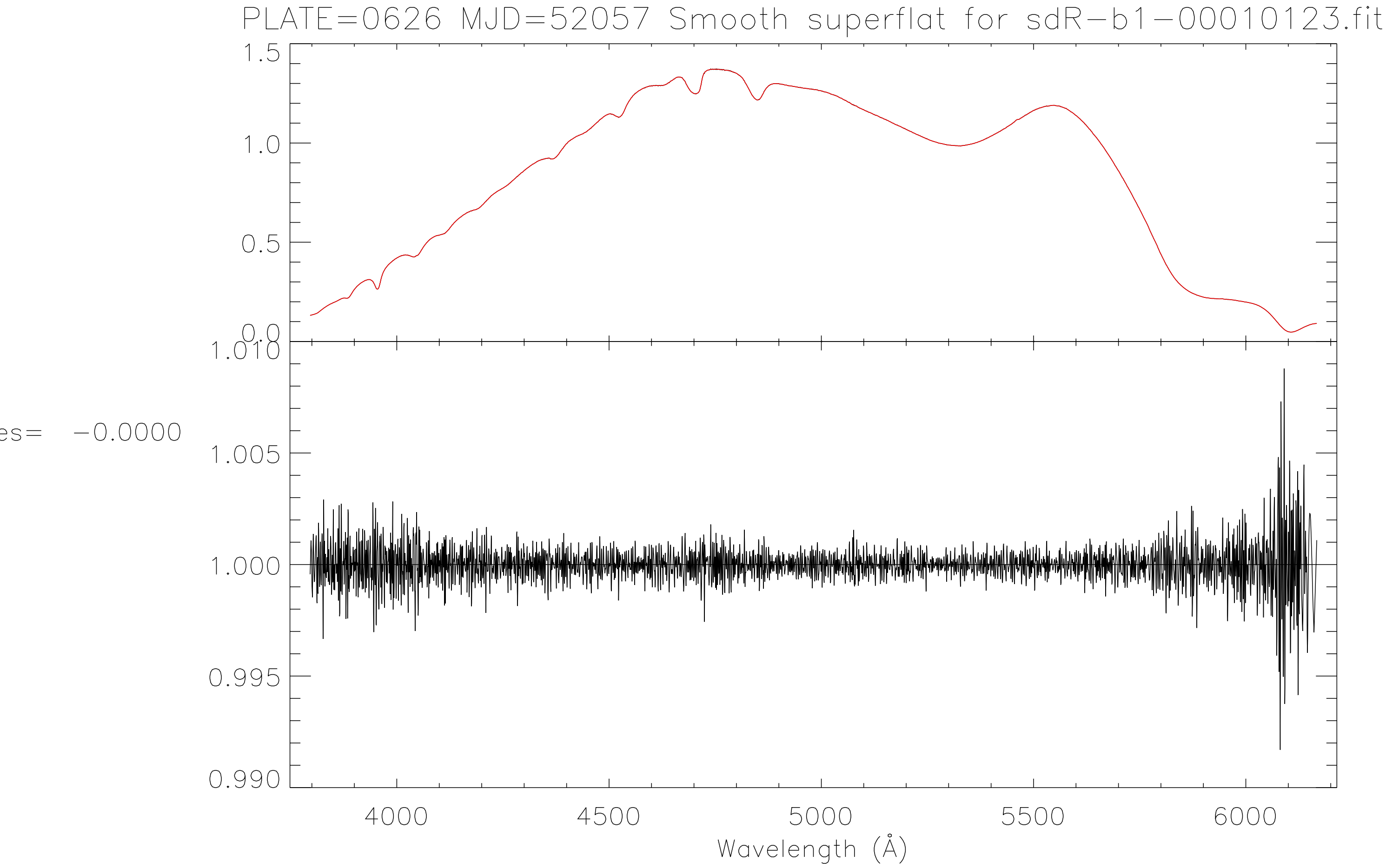

5460.9400
nfib1 16
nfib2 16
stdev 0.061
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

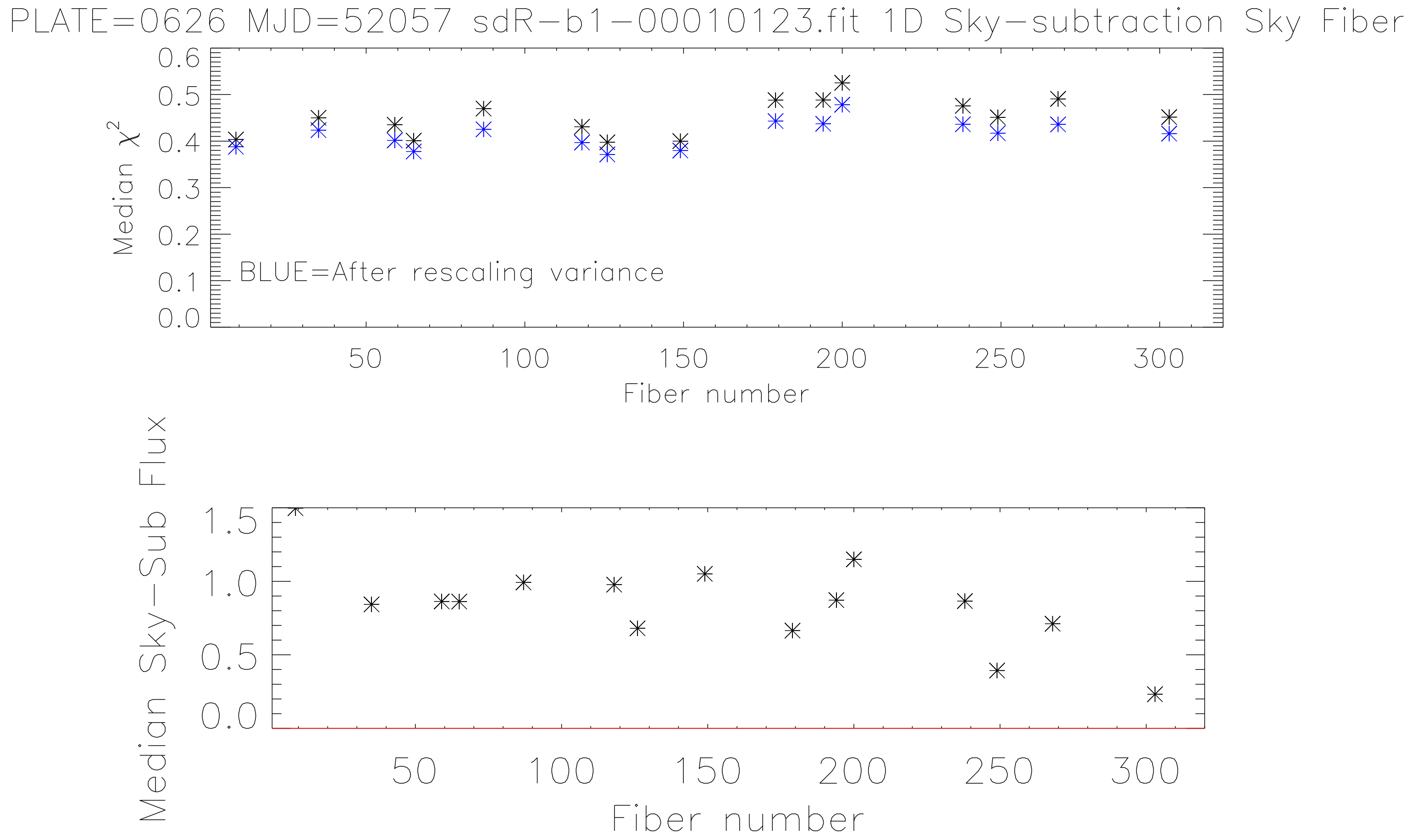

5577.3390
nfib1 16
nfib2 16
stdev 0.017
extra 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


5889.9500
nfib1 16
nfib2 16
stdev 0.062
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

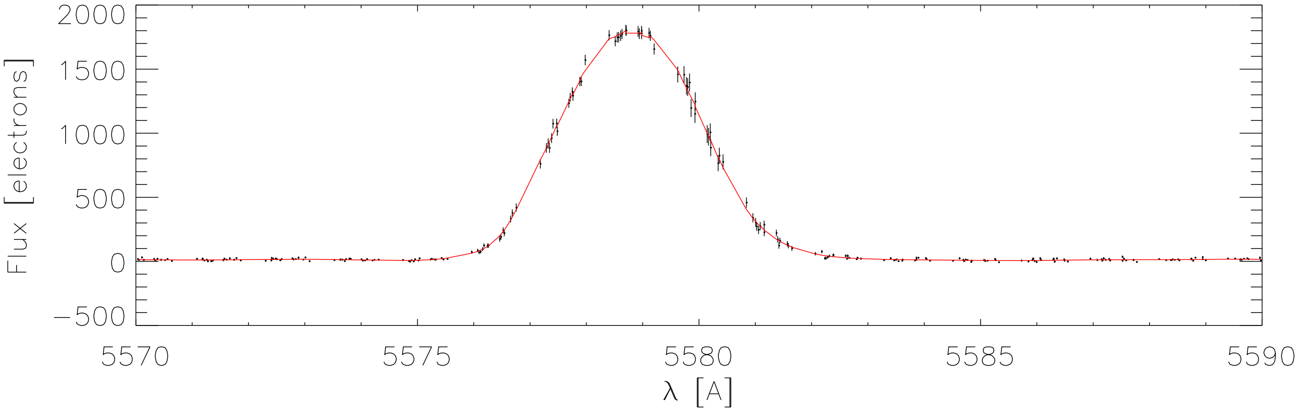

5895.9240
nfib1 16
nfib2 16
stdev 0.073
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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

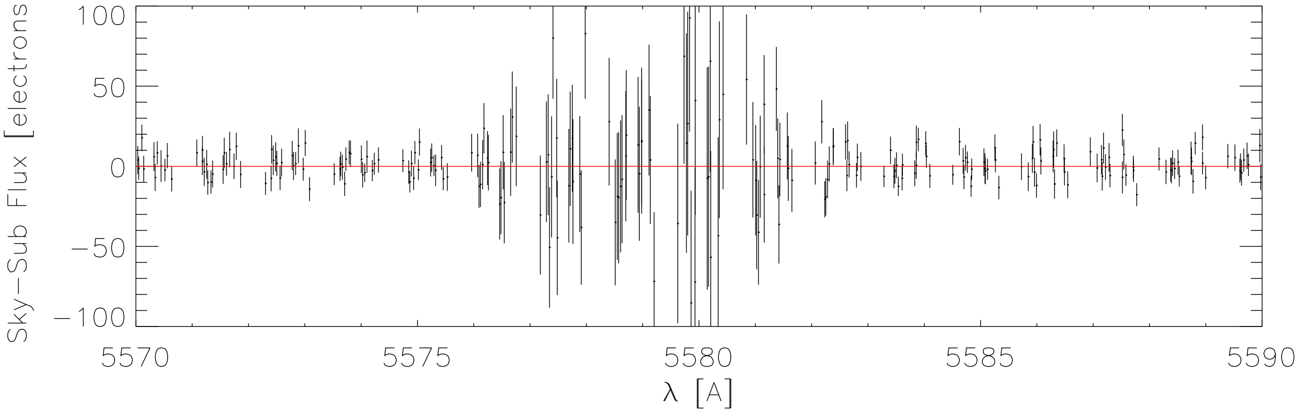

PLATE=0626 MJD=52057 Smooth superflat for sdR-b1-00010123.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

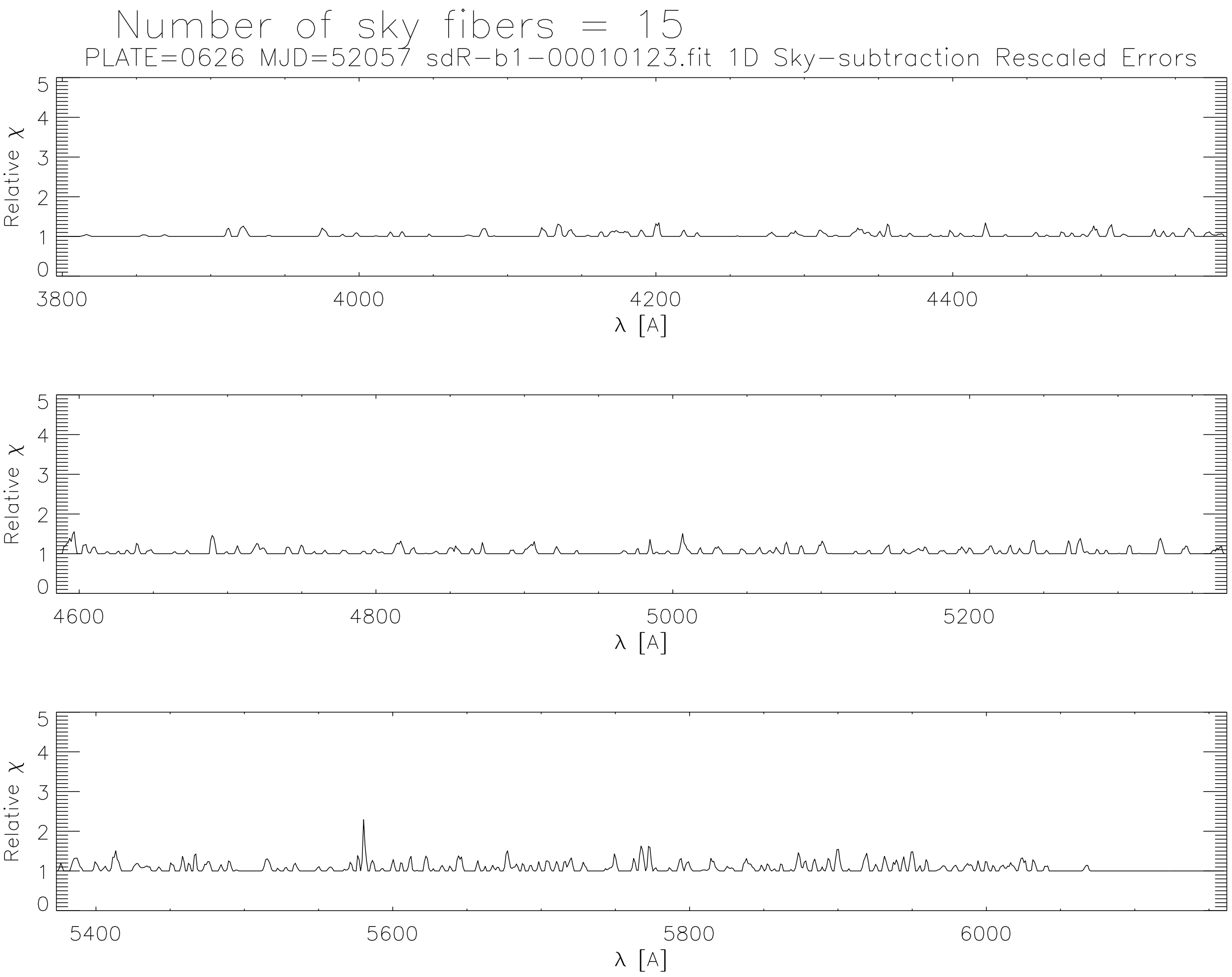

PLATE=0626 MJD=52057 sdR-b1-00010123.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
0.0
0.5
1.0
1.5
50
100
150
200
250
300
Fiber number

PLATE=0626 MJD=52057 sdR-b1-00010123.fit 1D Sky-subtraction Sky Fibers

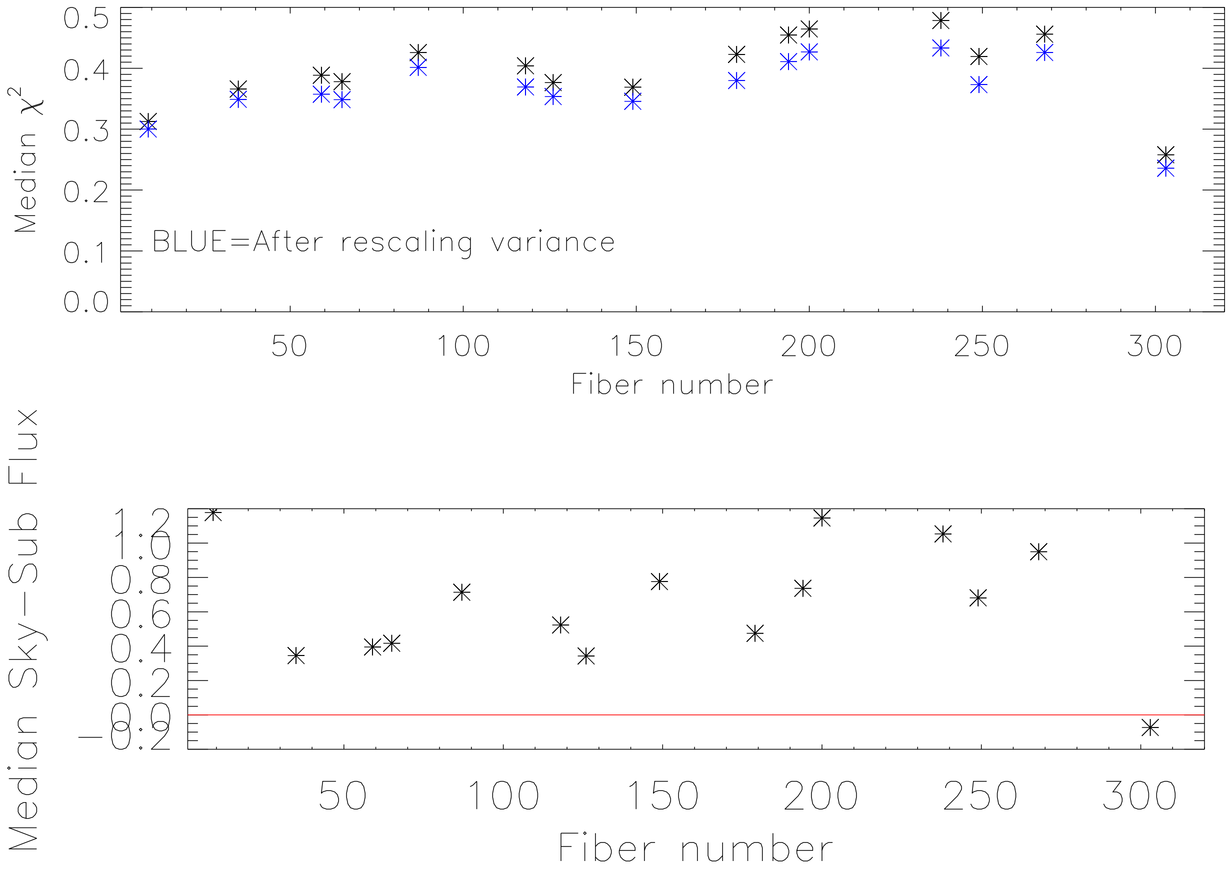


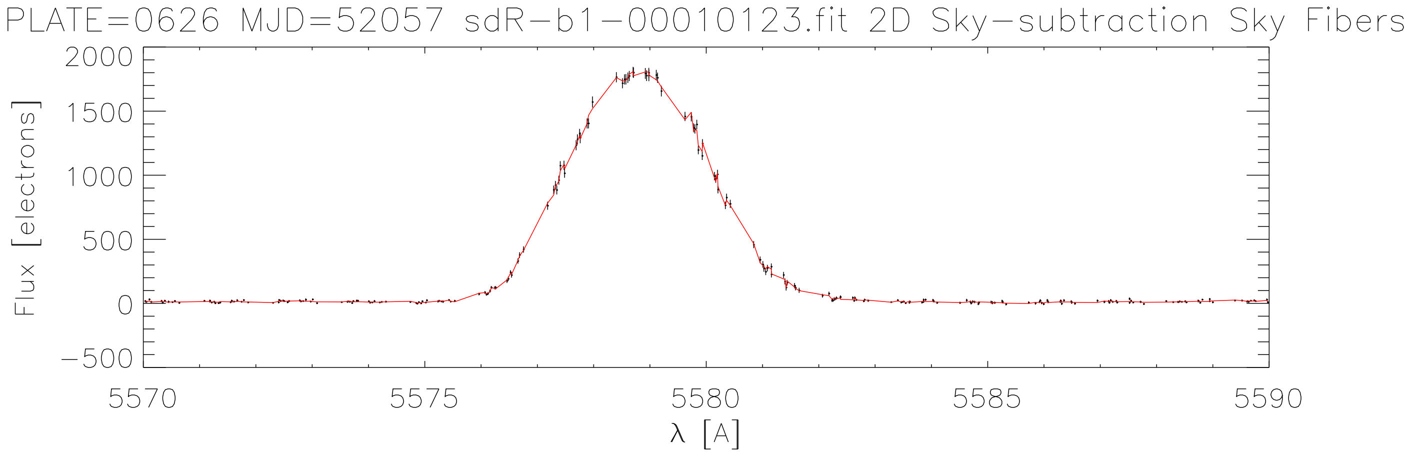
PLATE=0626 MJD=52057 sdR-b1-00010123.fit 1D Sky-subtraction Sky-subtracted Sky F

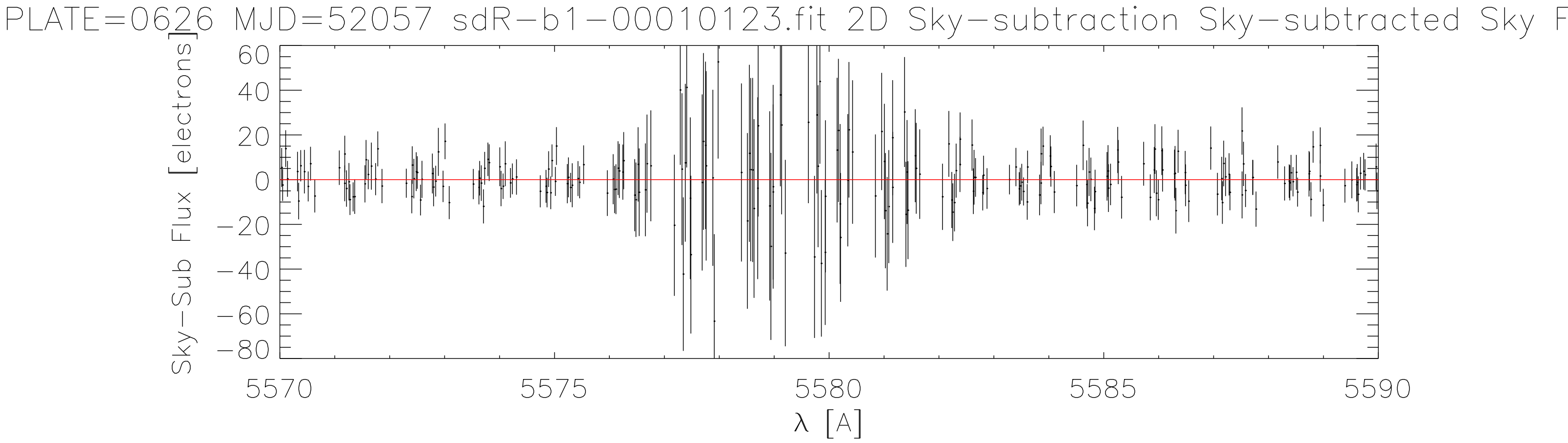



Number of sky fibers = 15
PLATE=0626 MJD=52057 sdR-b1-00010123.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

PLATE=0626 MJD=52057 sdR-b1-00010123.fit 2D Sky-subtraction Sky Fiber

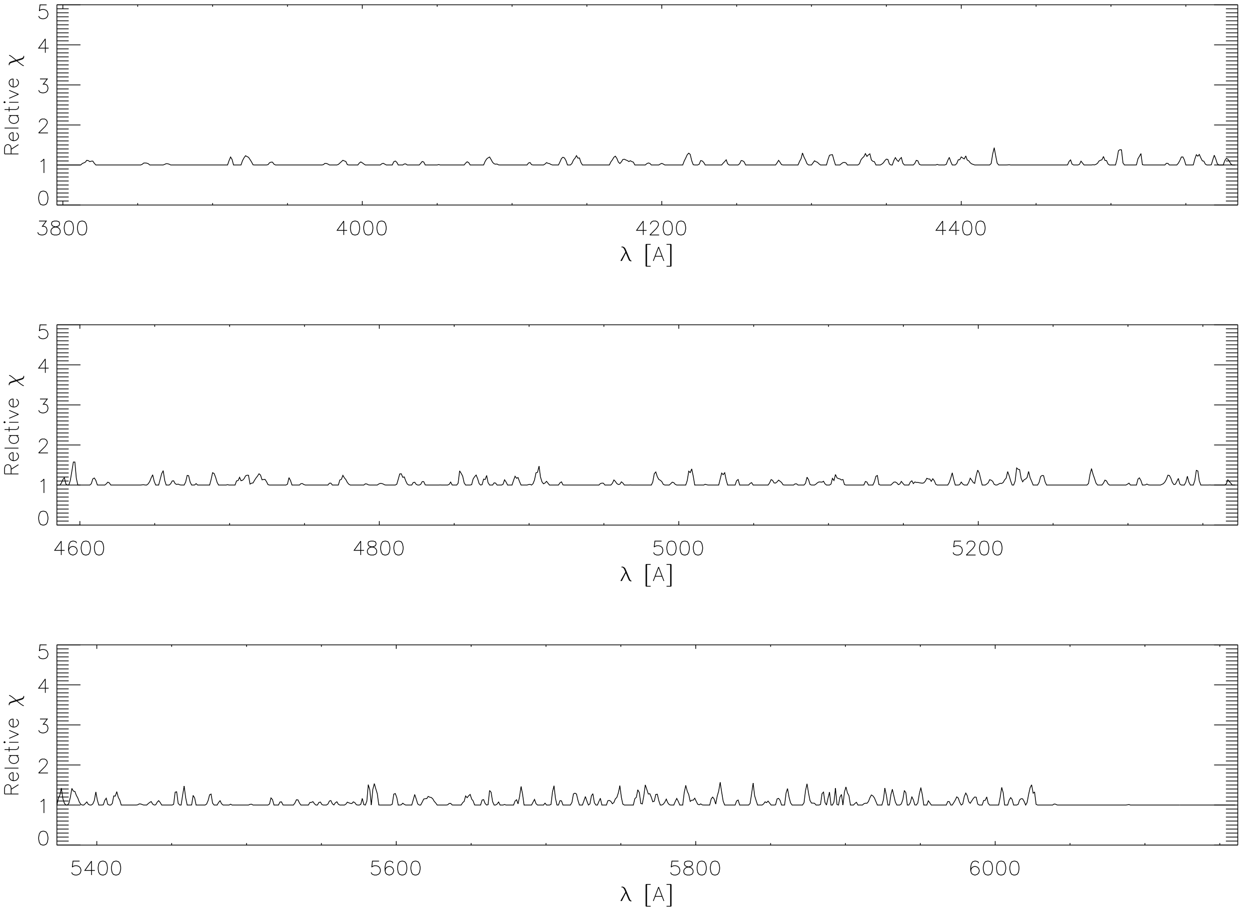


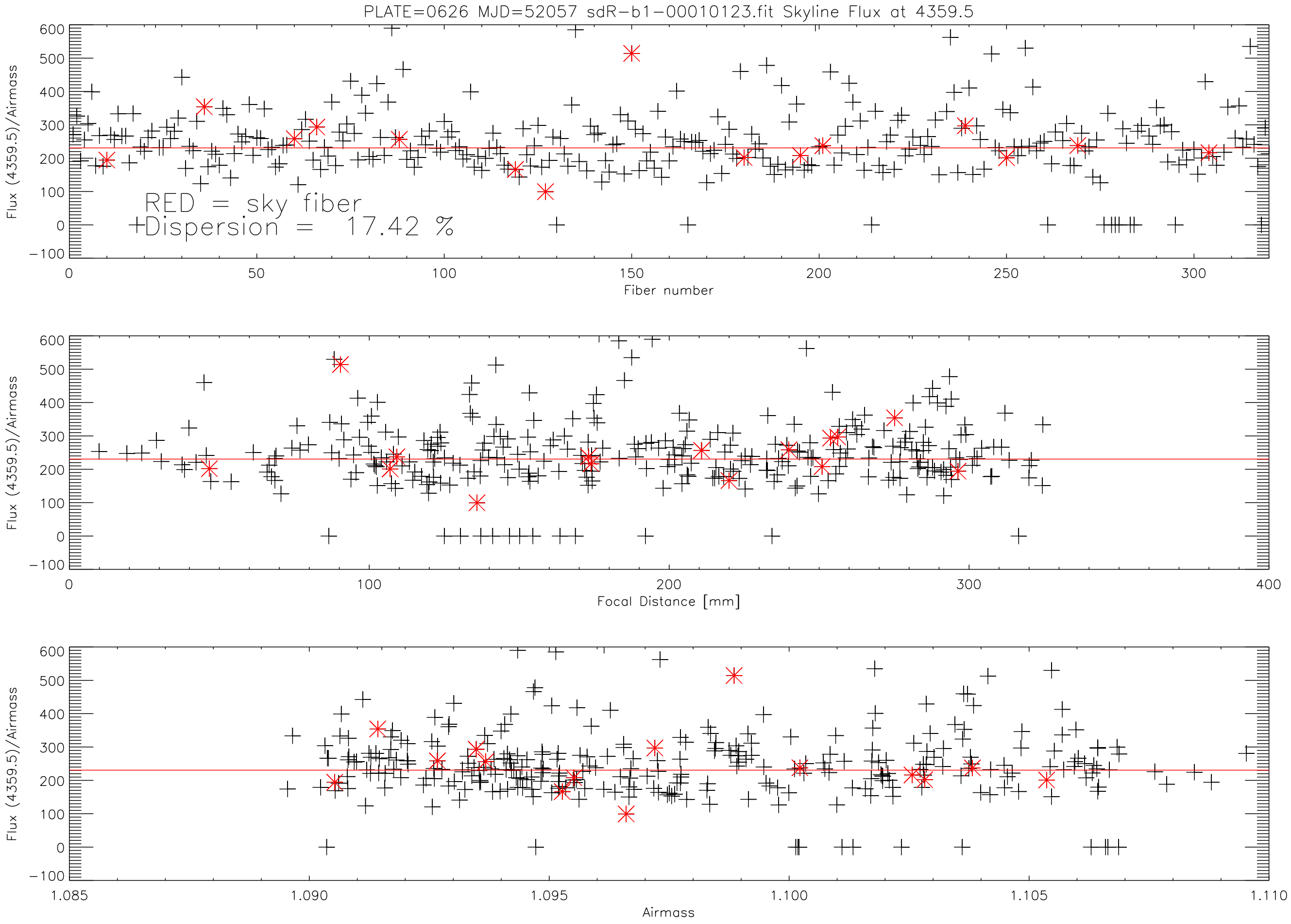

PLATE=0626 MJD=52057 sdR-b1-00010123.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

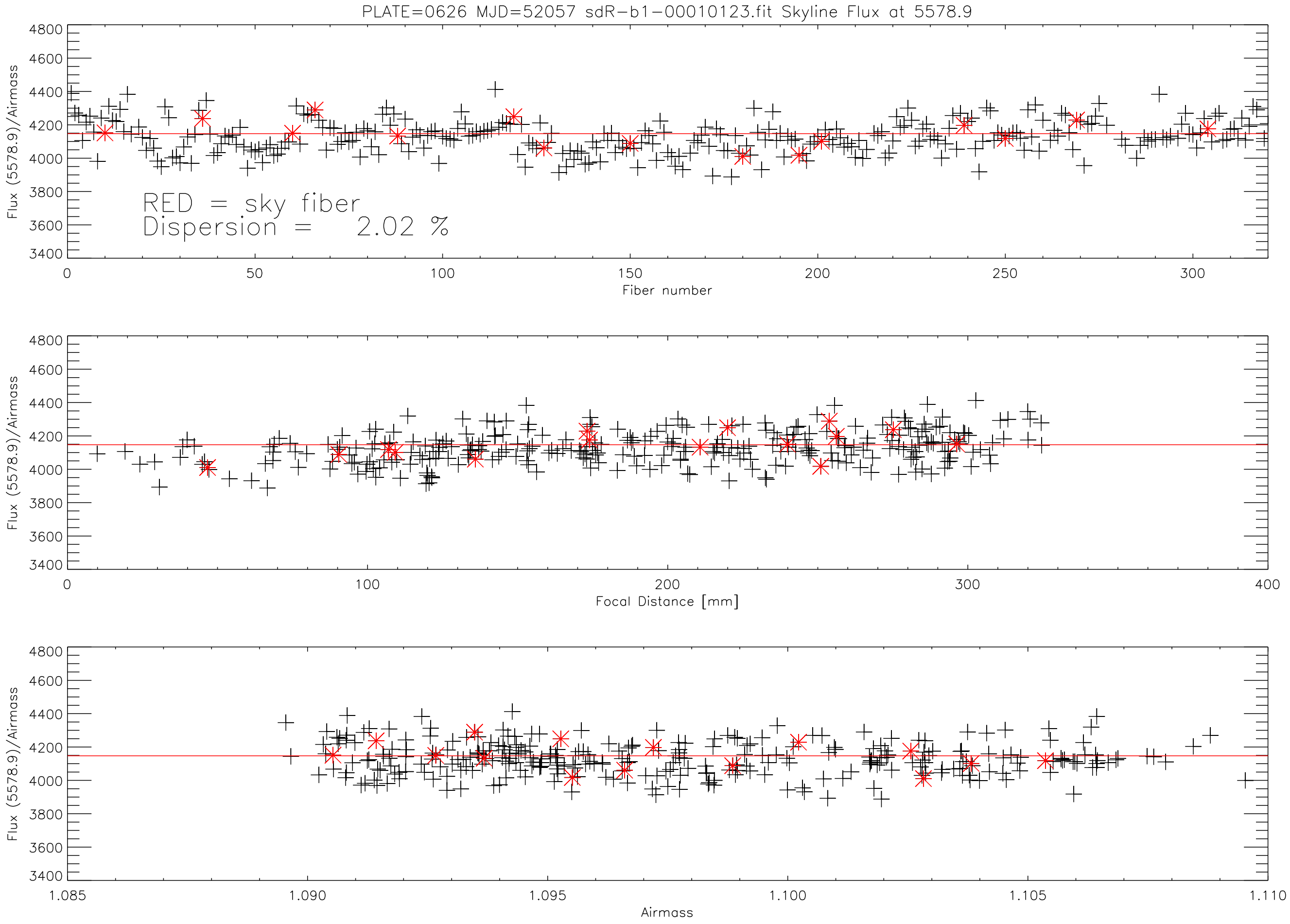

PLATE=0626 MJD=52057 sdR-b1-00010123.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
−20
−40
−60
−80
5570
5575
5580
5585
5590
λ [A]

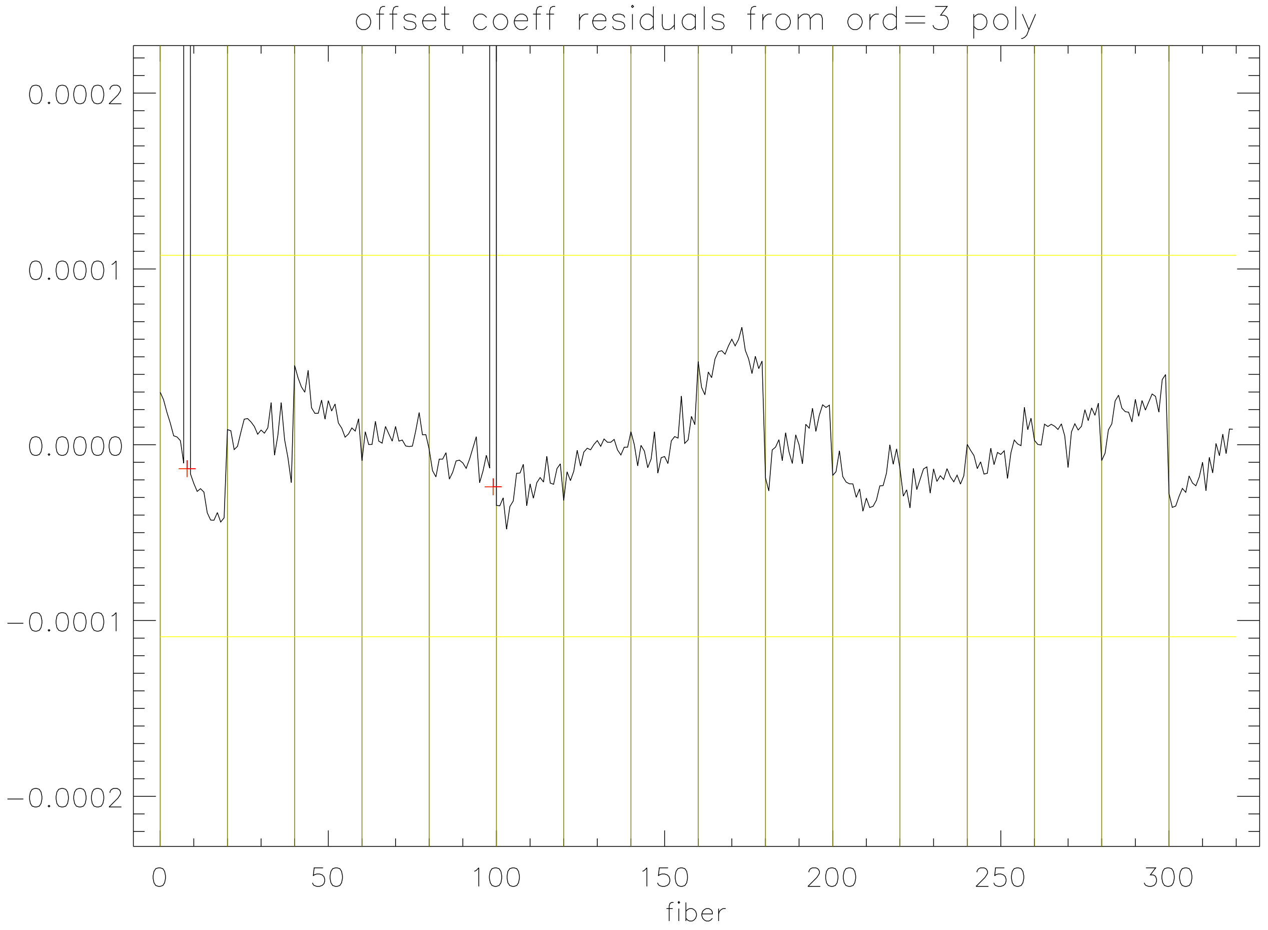
Number of sky fibers = 15

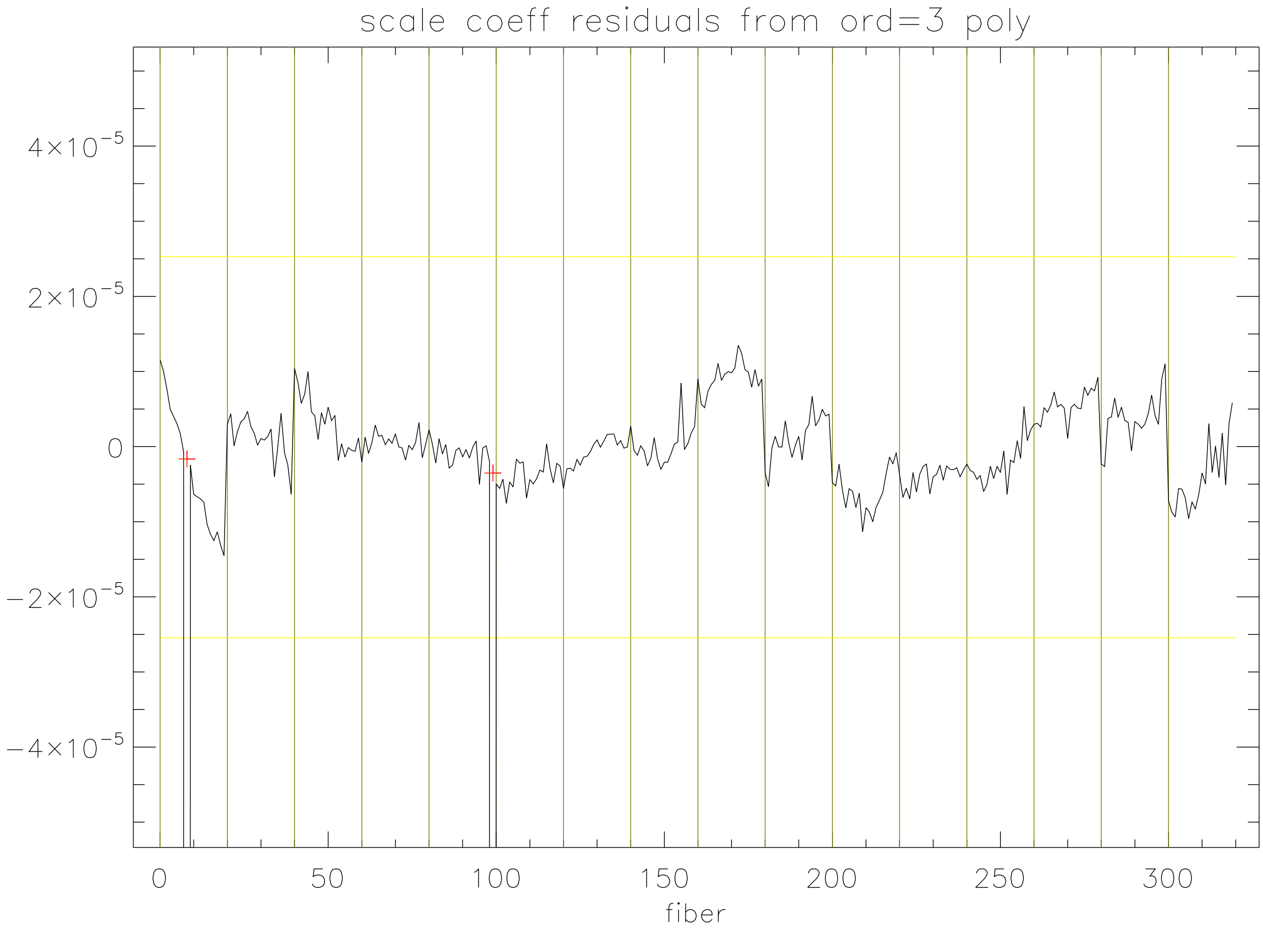
PLATE=0626 MJD=52057 sdR-b1-00010123.fit 2D Sky-subtraction Rescaled Errors

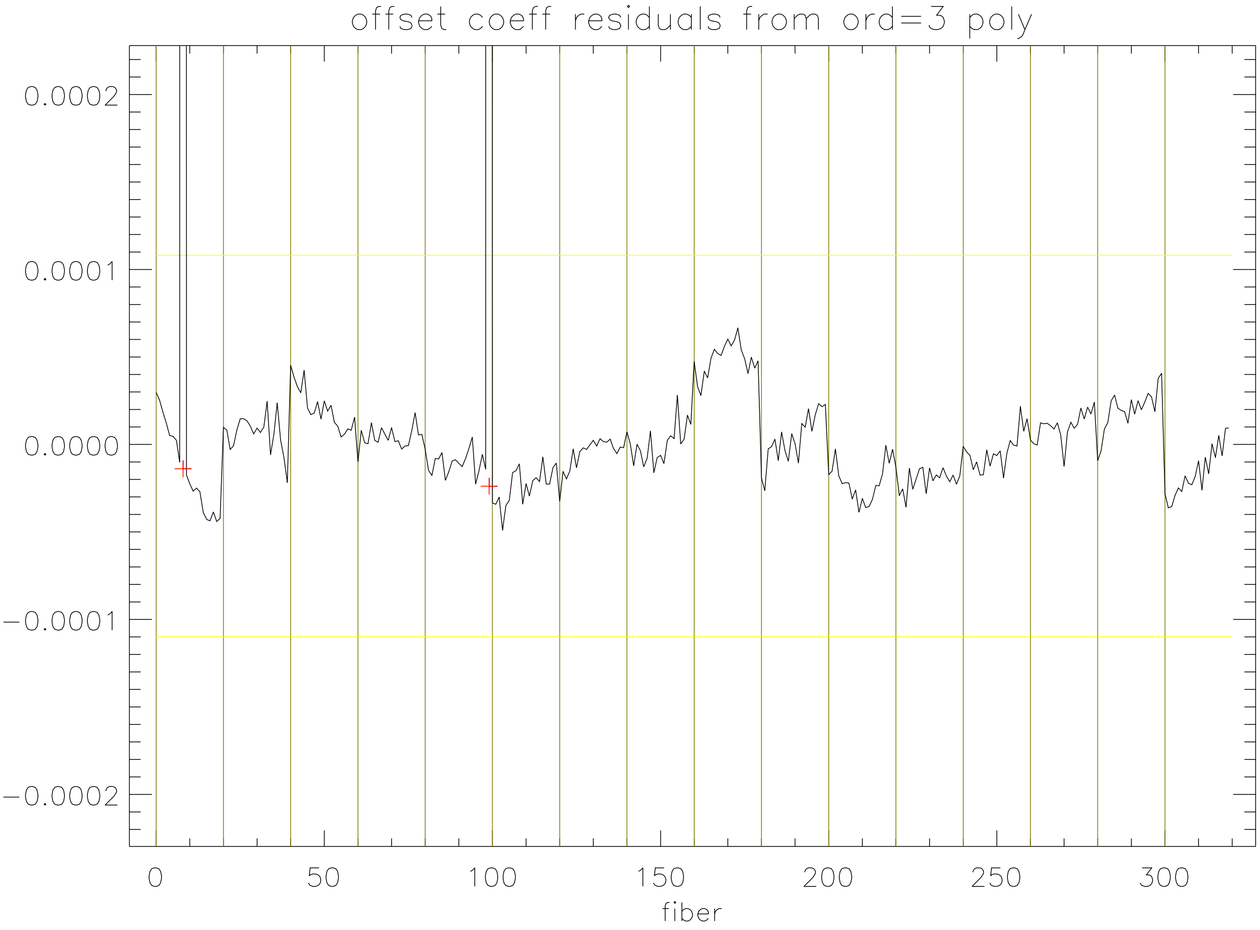


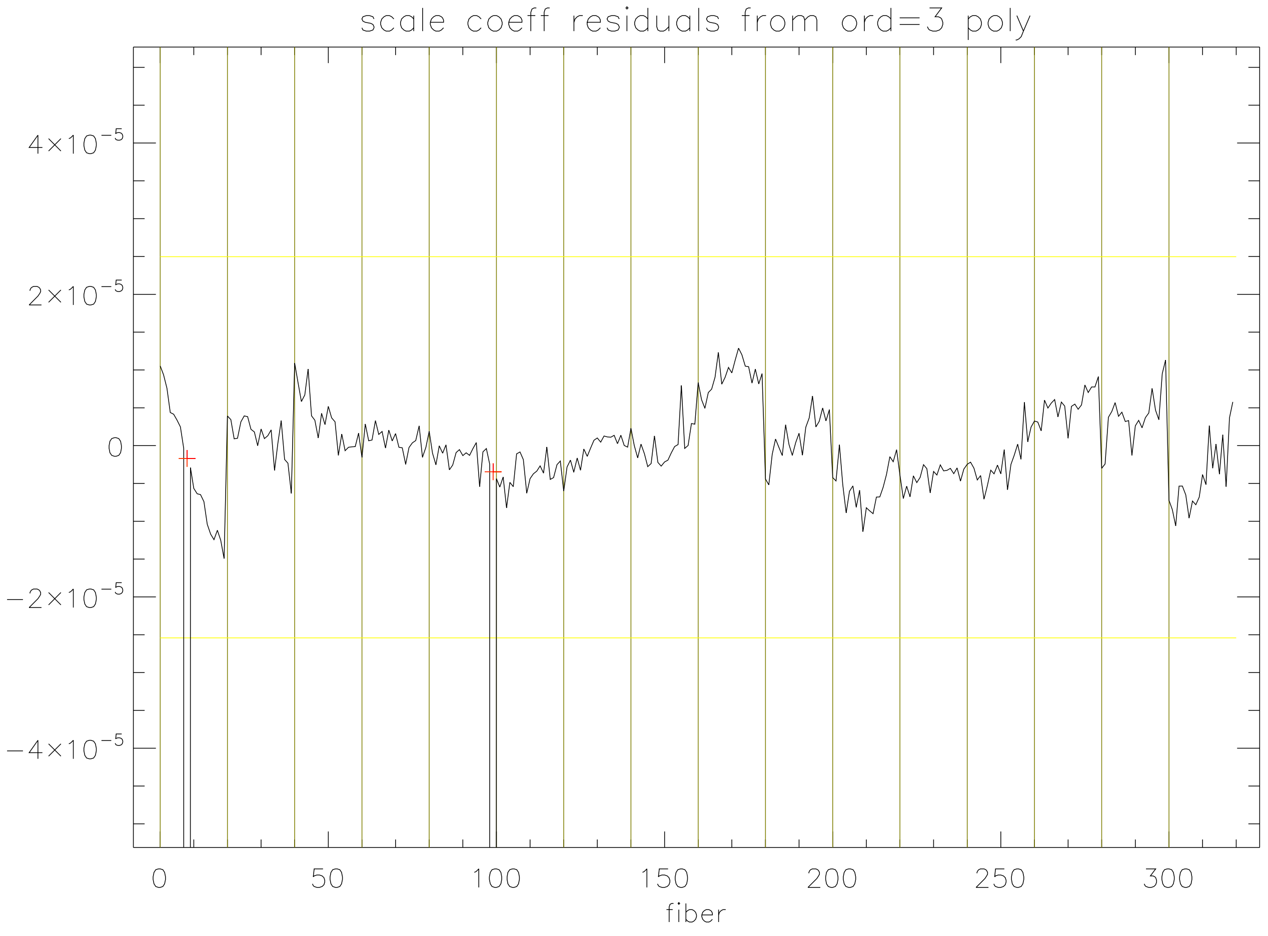

PLATE=0626 MJD=52057 sdR-b1-00010123.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
600
500
400
300
200
100
0
-100
RED = sky fiber
Dispersion = 17.42 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
600
500
400
300
200
100
0
-100
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
600
500
400
300
200
100
0
-100
1.085
1.090
1.095
1.100
1.105
1.110
Airmass

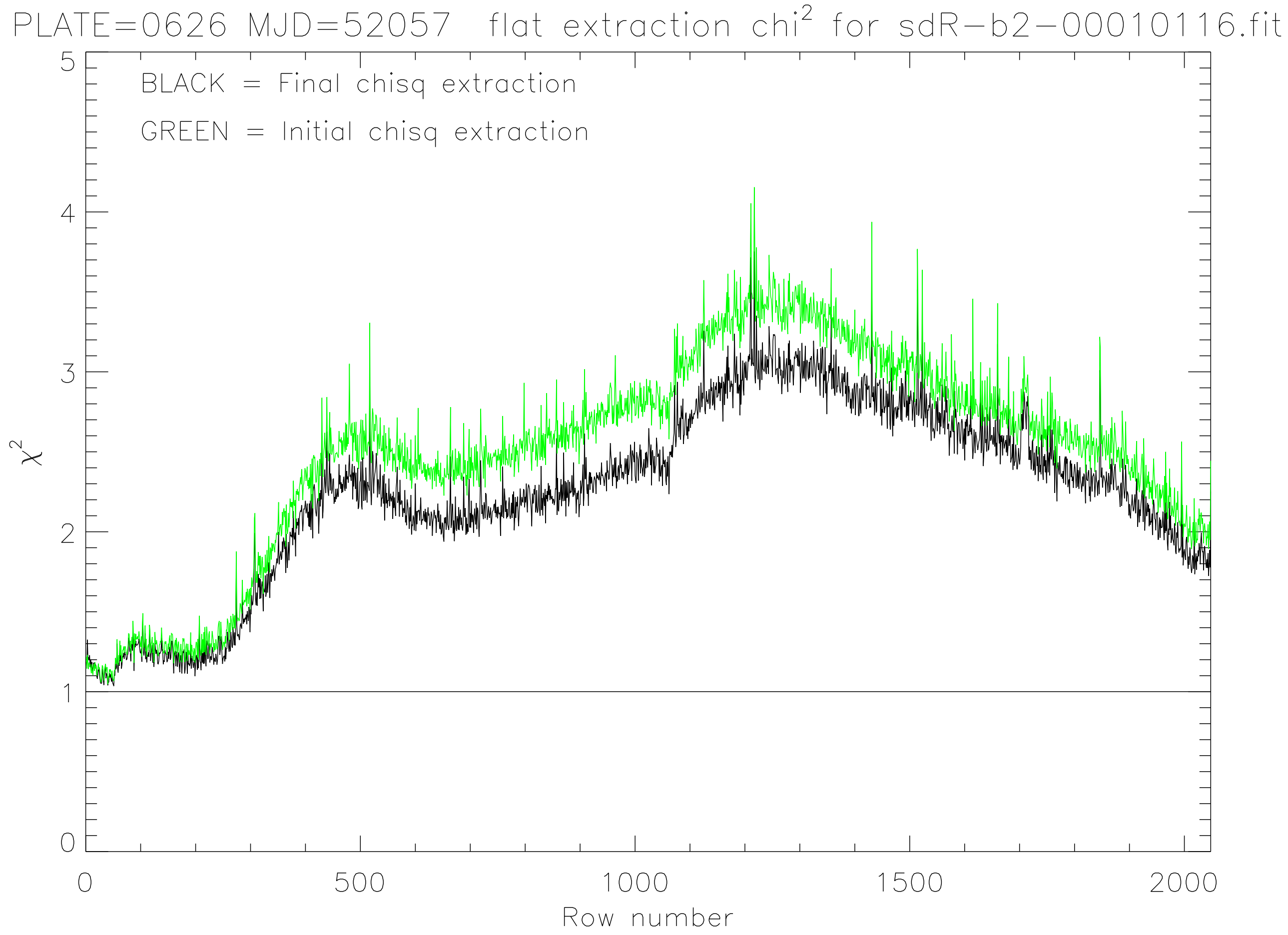

PLATE=0626 MJD=52057 sdR-b1-00010123.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
3400
3600
3800
4000
4200
4400
4600
4800
RED = sky fiber
Dispersion = 2.02 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.085
1.090
1.095
1.100
1.105
1.110
Airmass

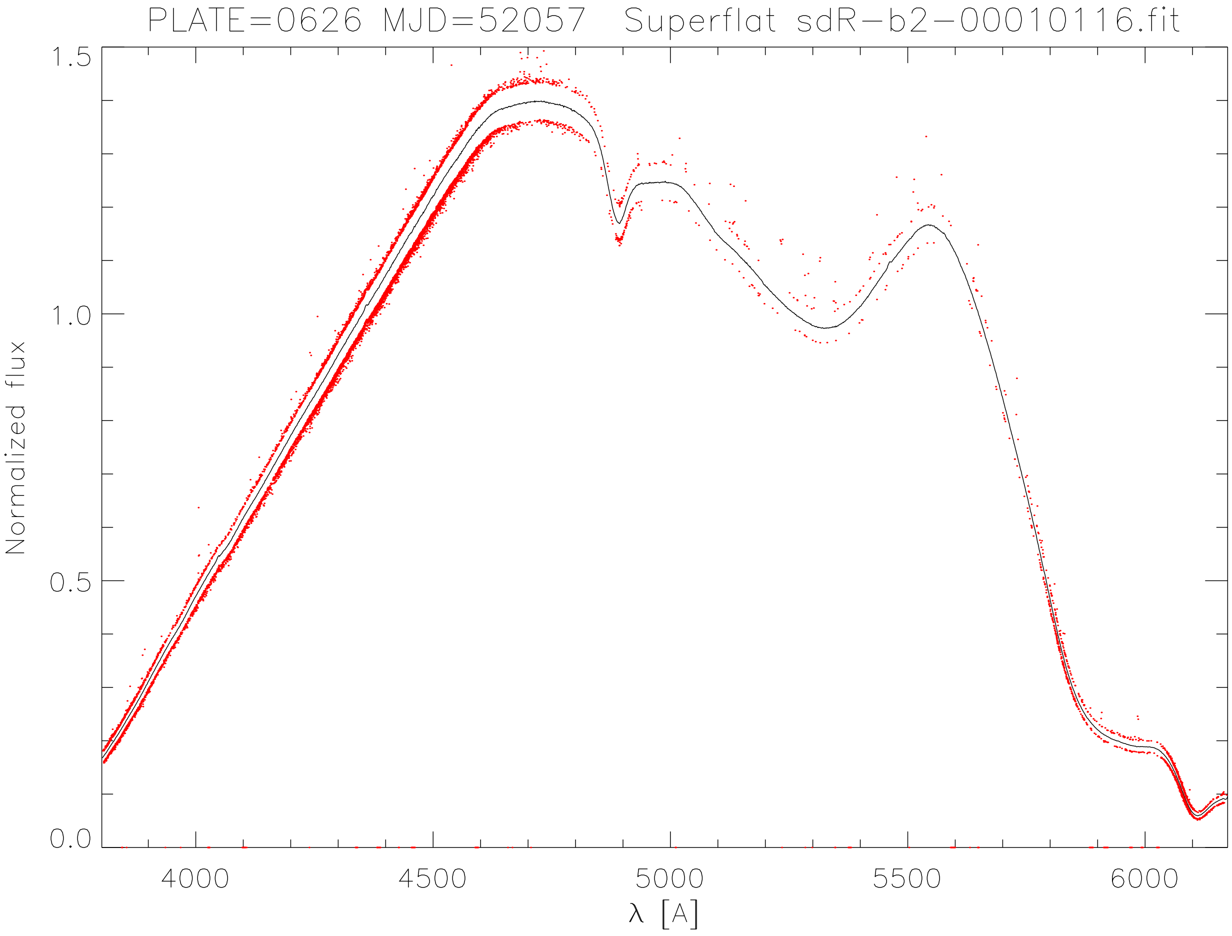

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

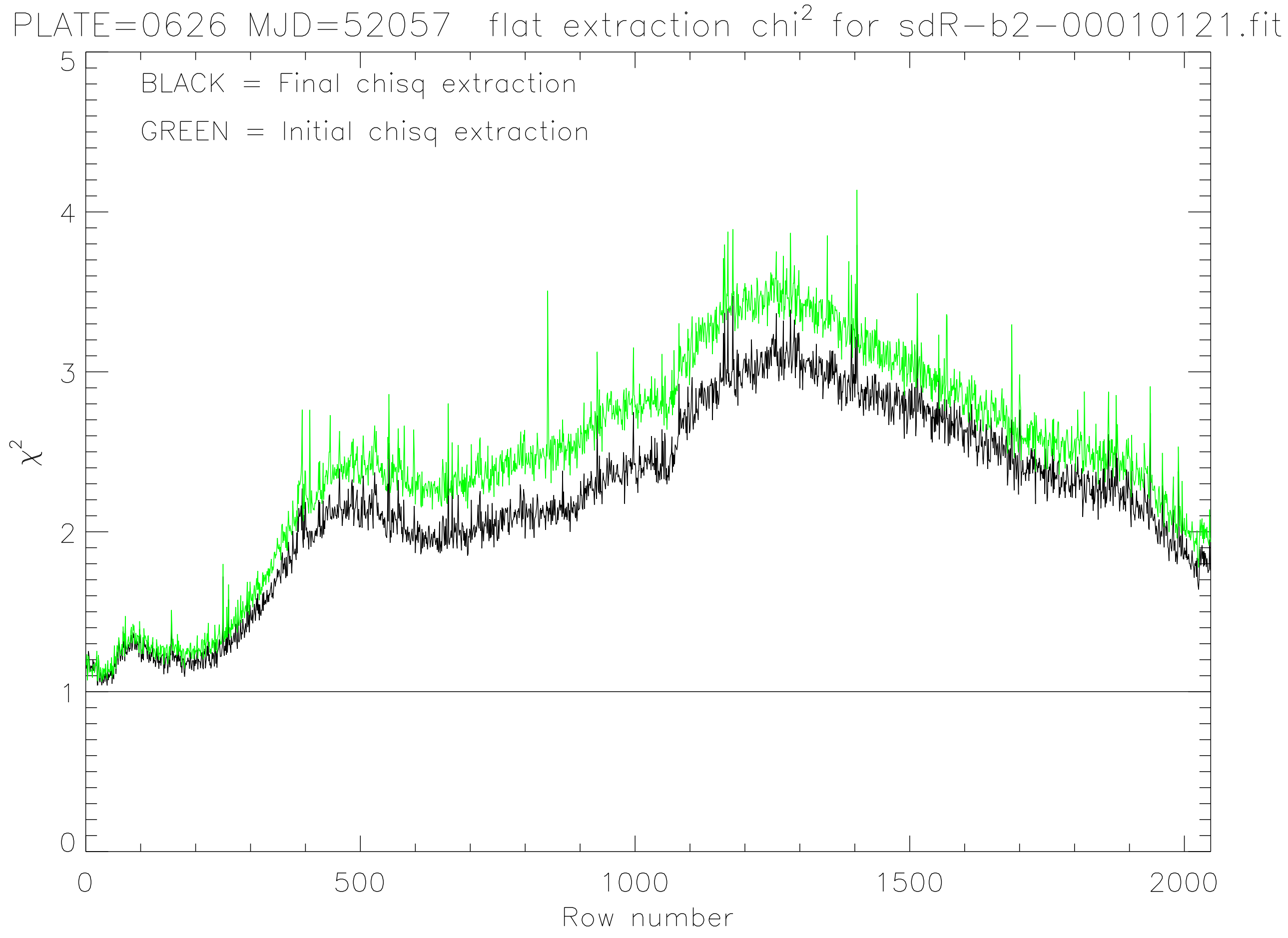

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

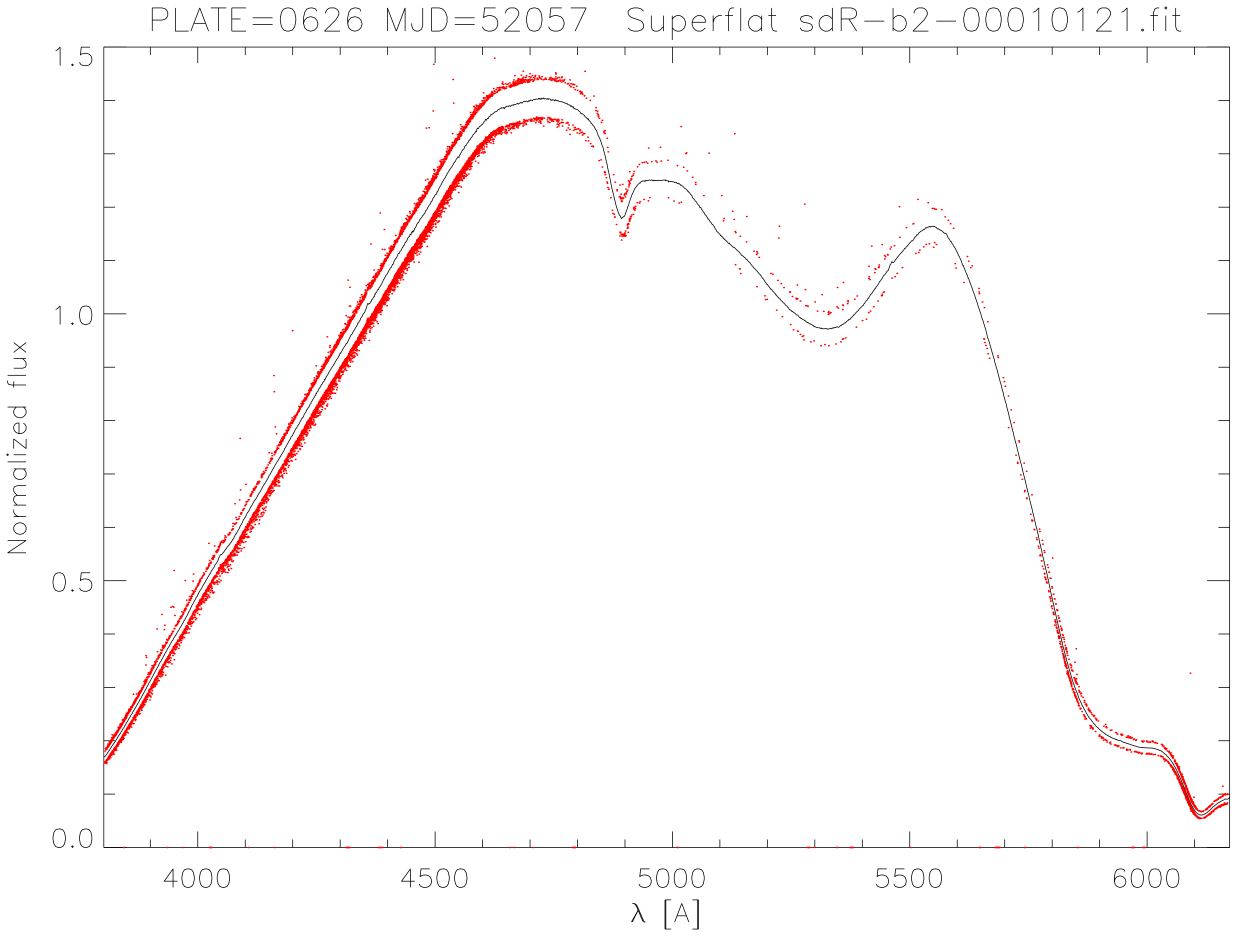

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

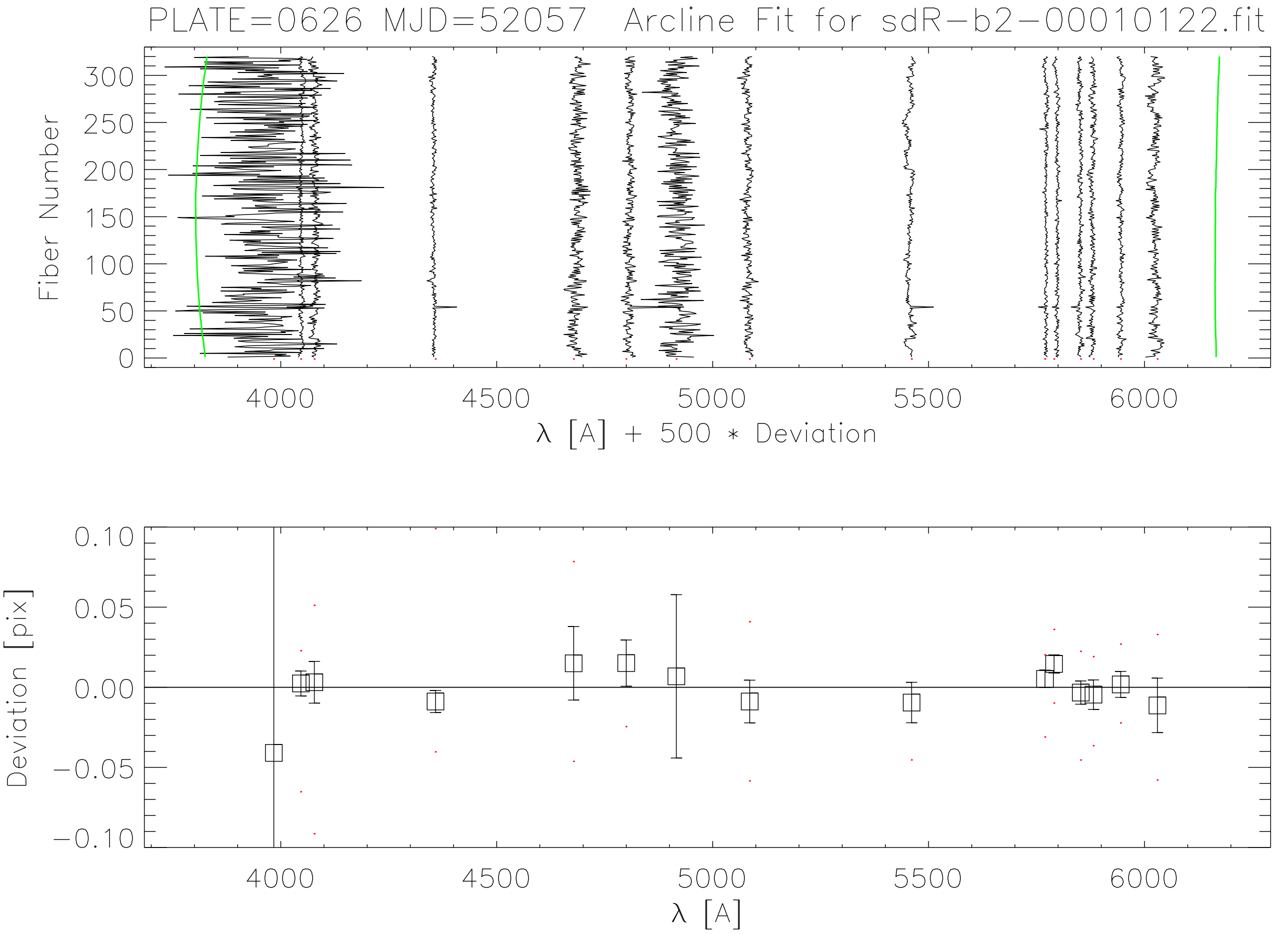

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-b2-00010116.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

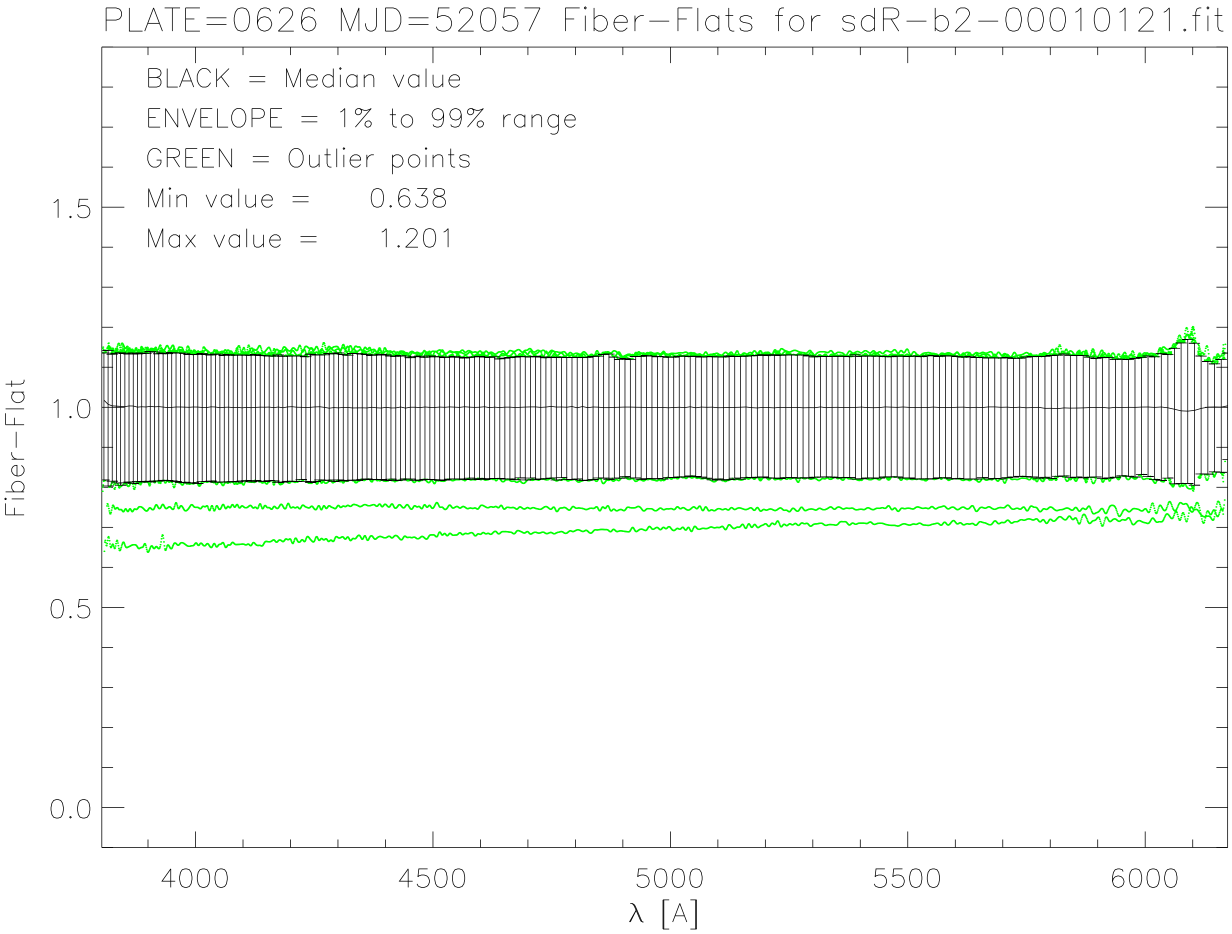

PLATE=0626 MJD=52057 Superflat sdR-b2-00010116.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]


PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-b2-00010121.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

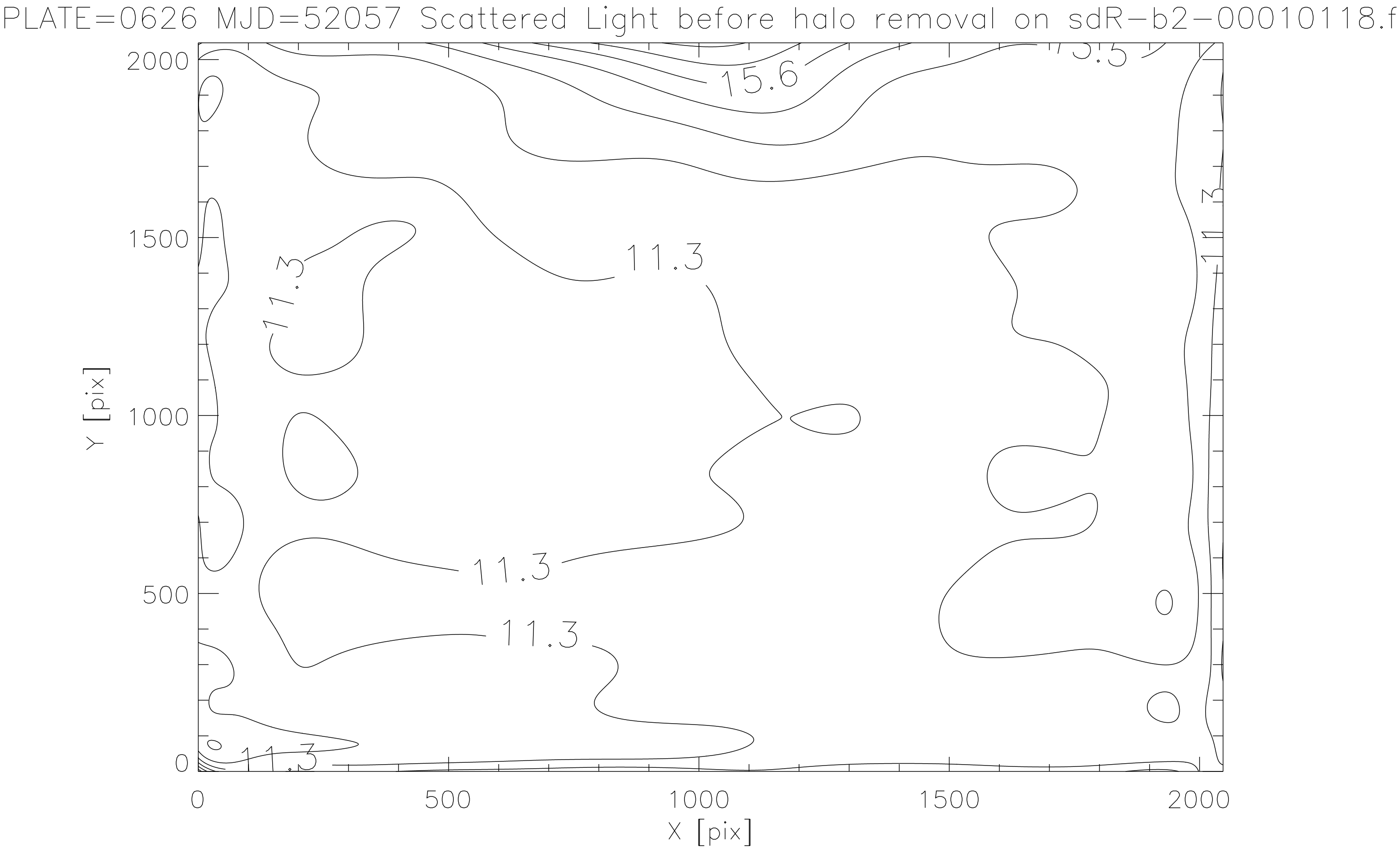

PLATE=0626 MJD=52057 Superflat sdR-b2-00010121.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]



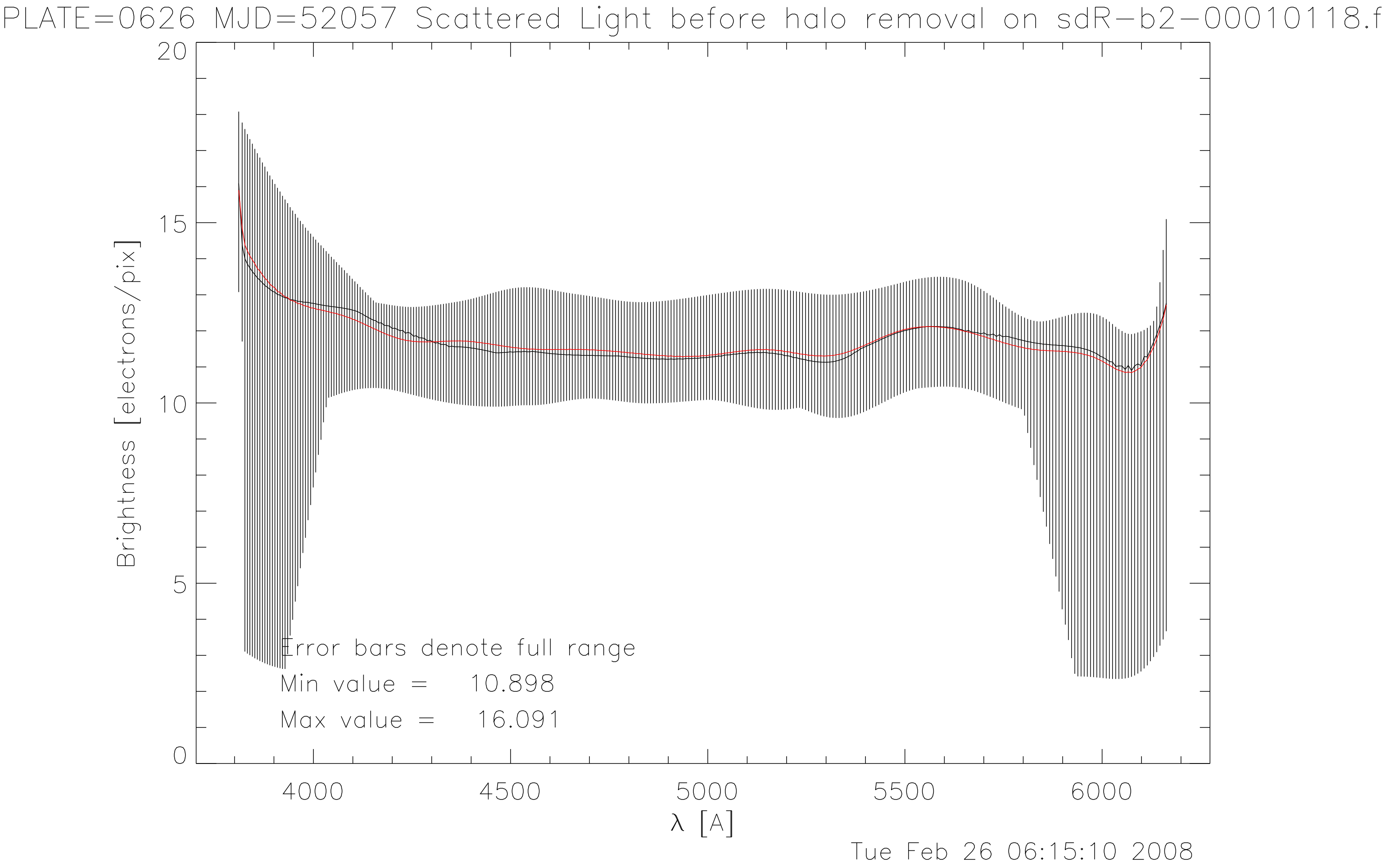
Tue Feb 26 06:14:09 2008



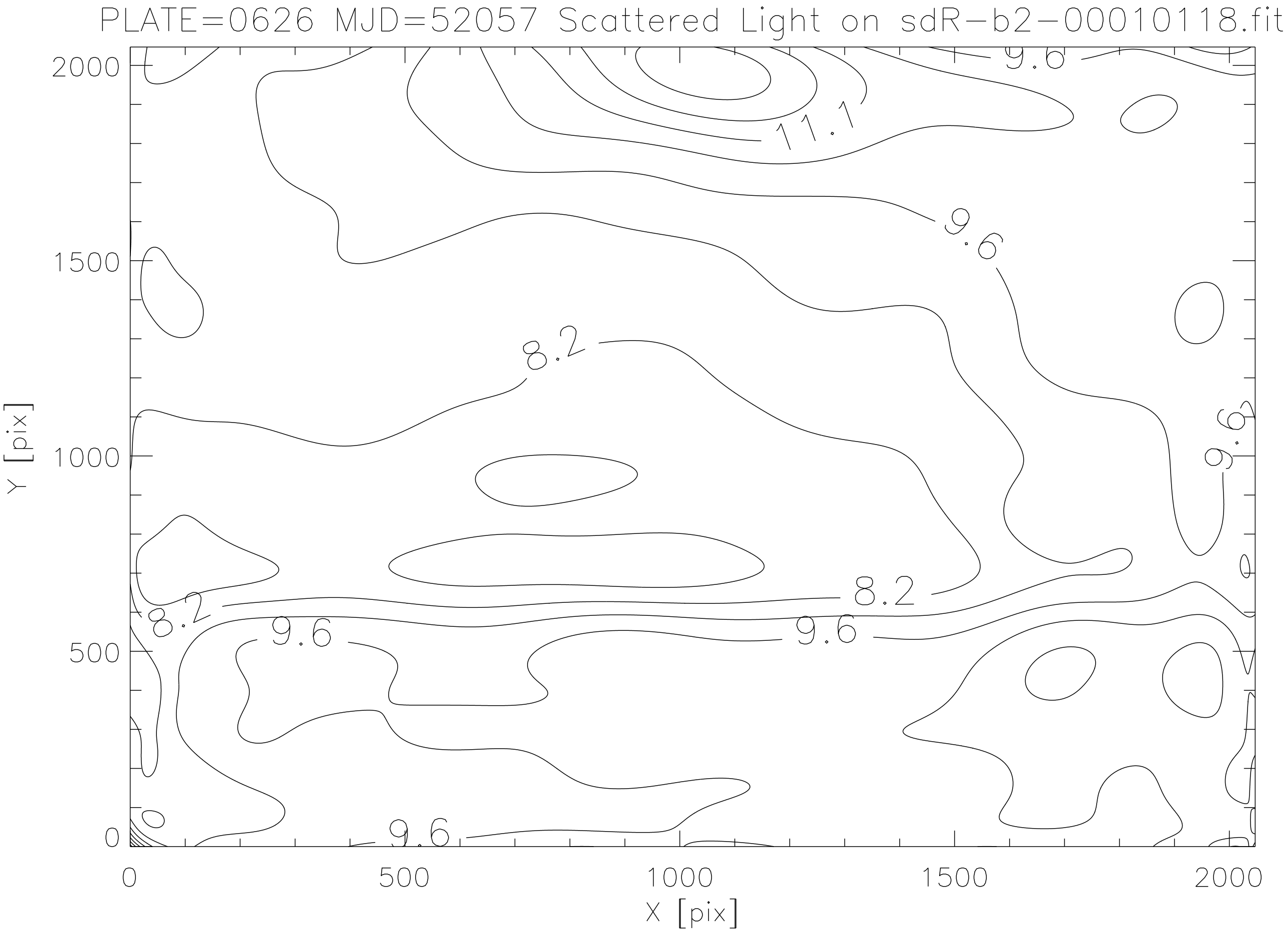
Tue Feb 26 06:14:17 2008



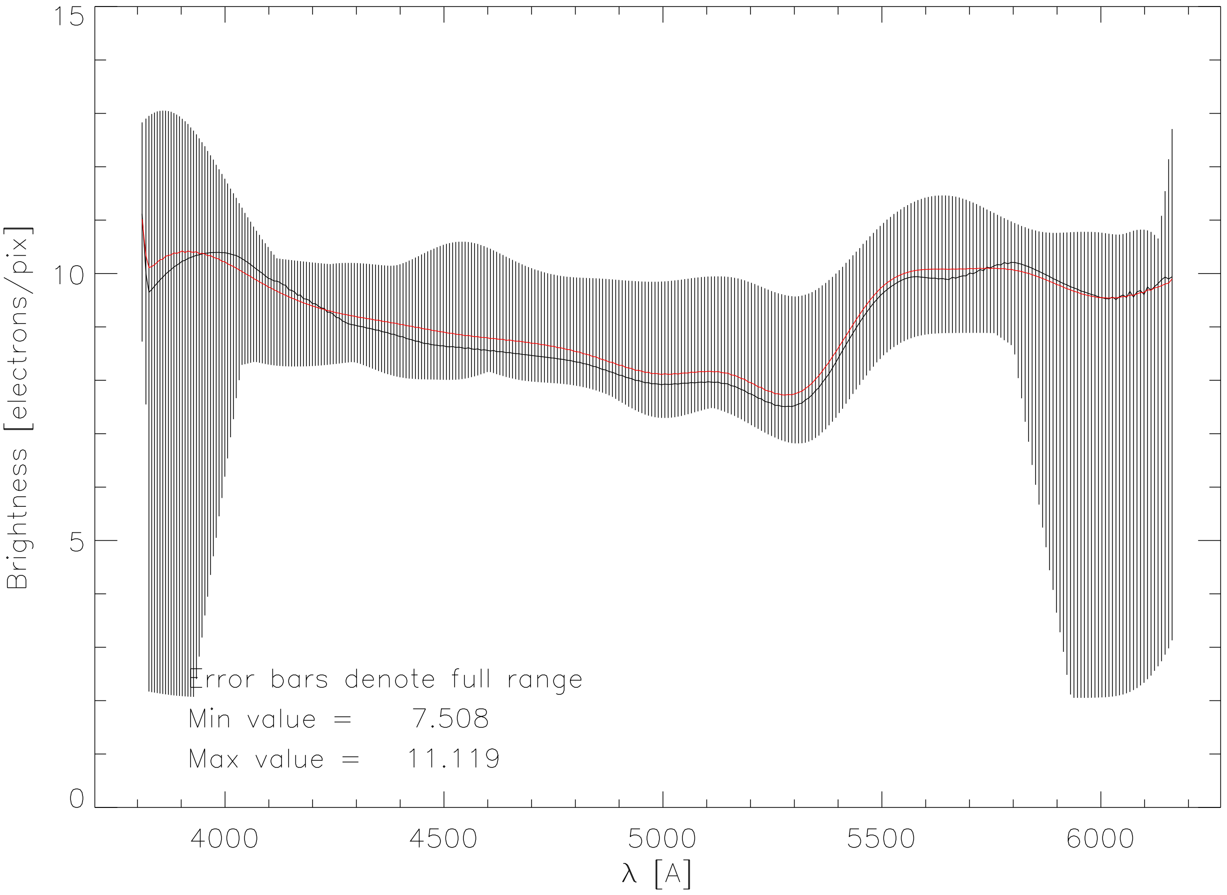
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010118.f



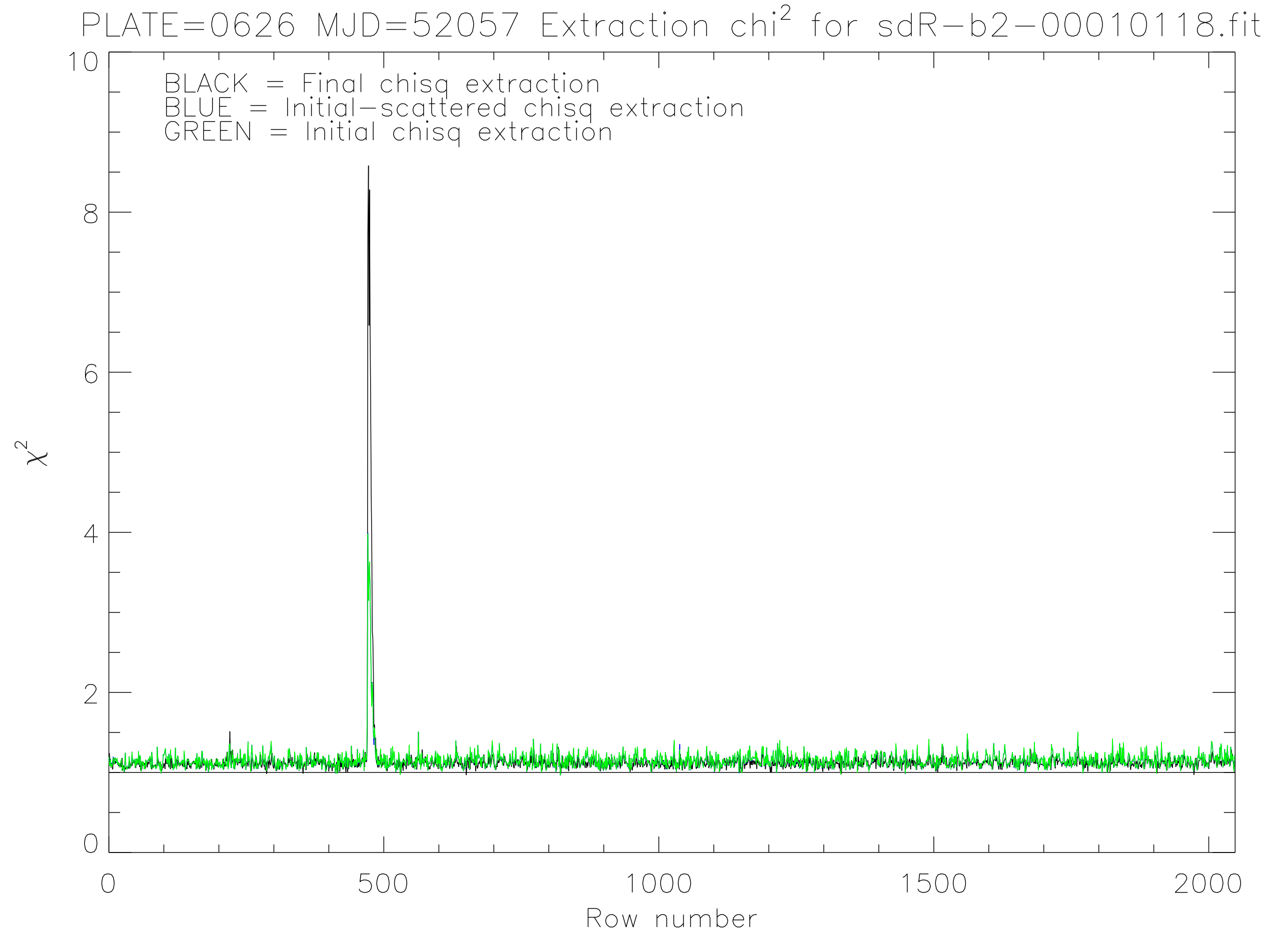
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010118.f

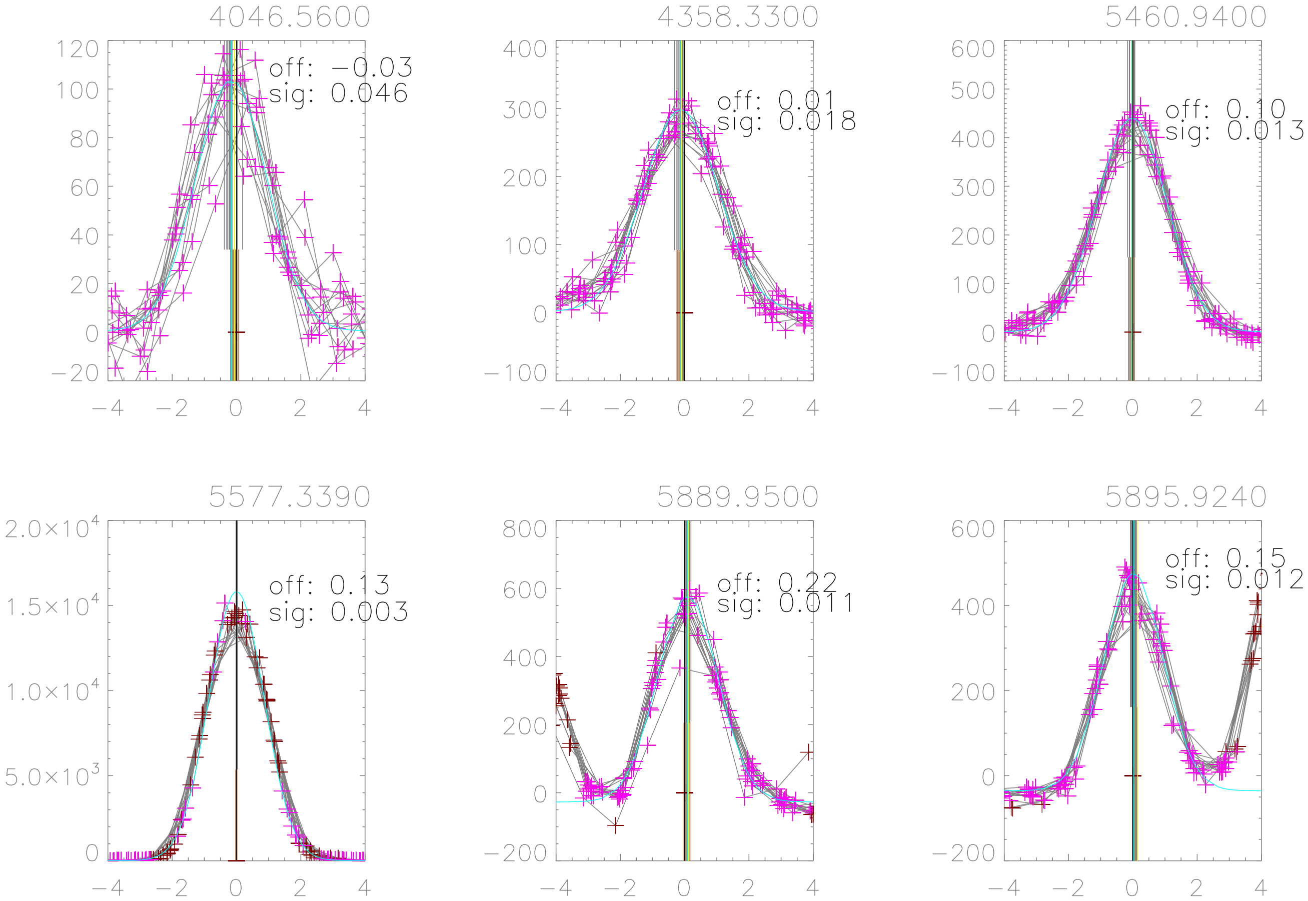

PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010118.fit
9.6
11.1
9.6
8.2
9.6
8.2
8.2
9.6
9.6
9.6
0
500
1000
1500
2000
0
500
1000
1500
2000
X [pix]
Y [pix]

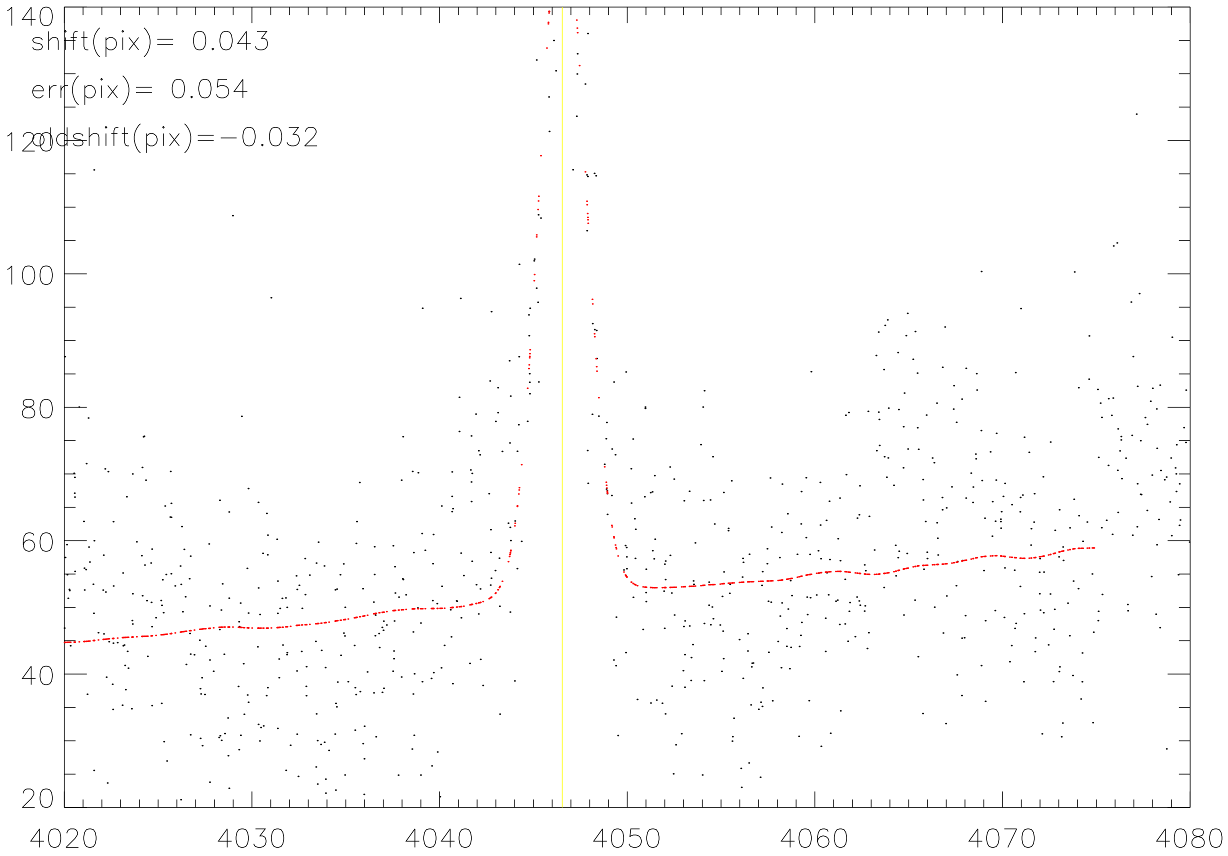
PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010118.fit

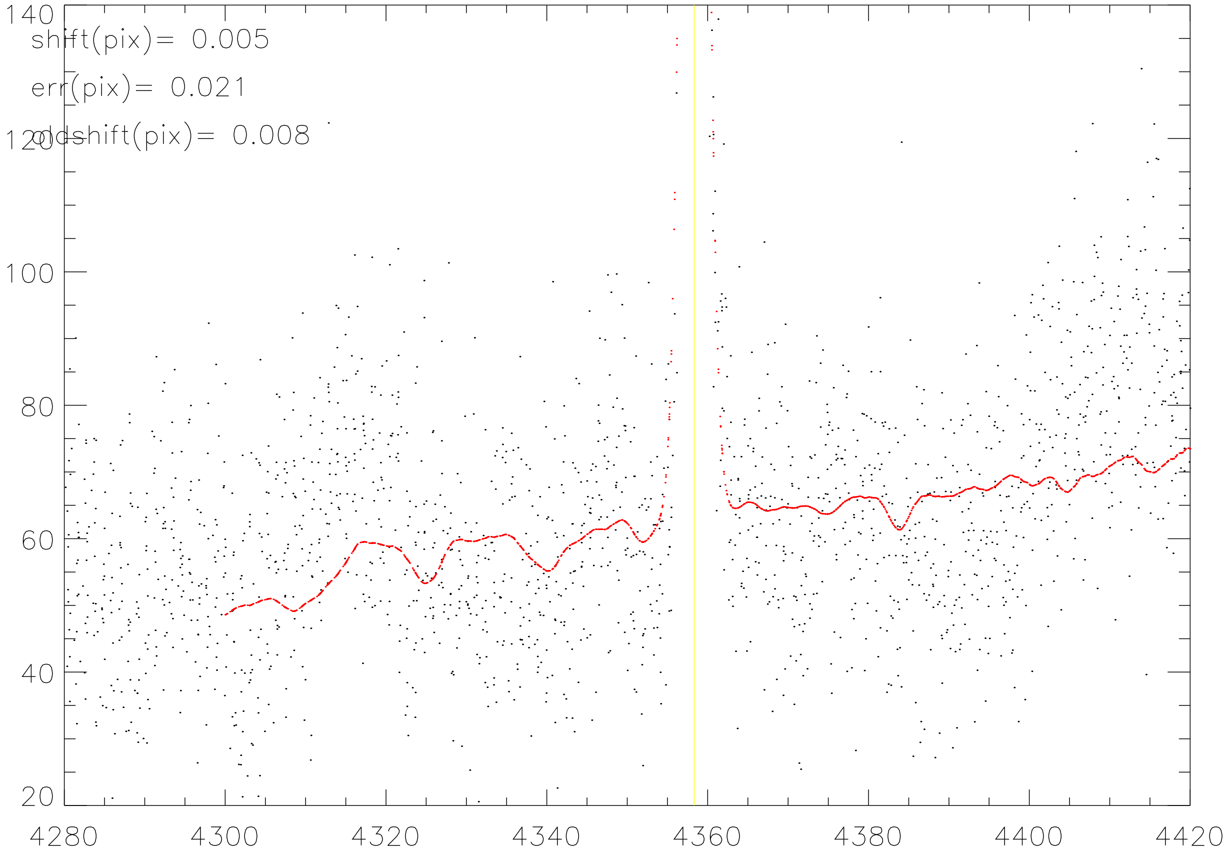


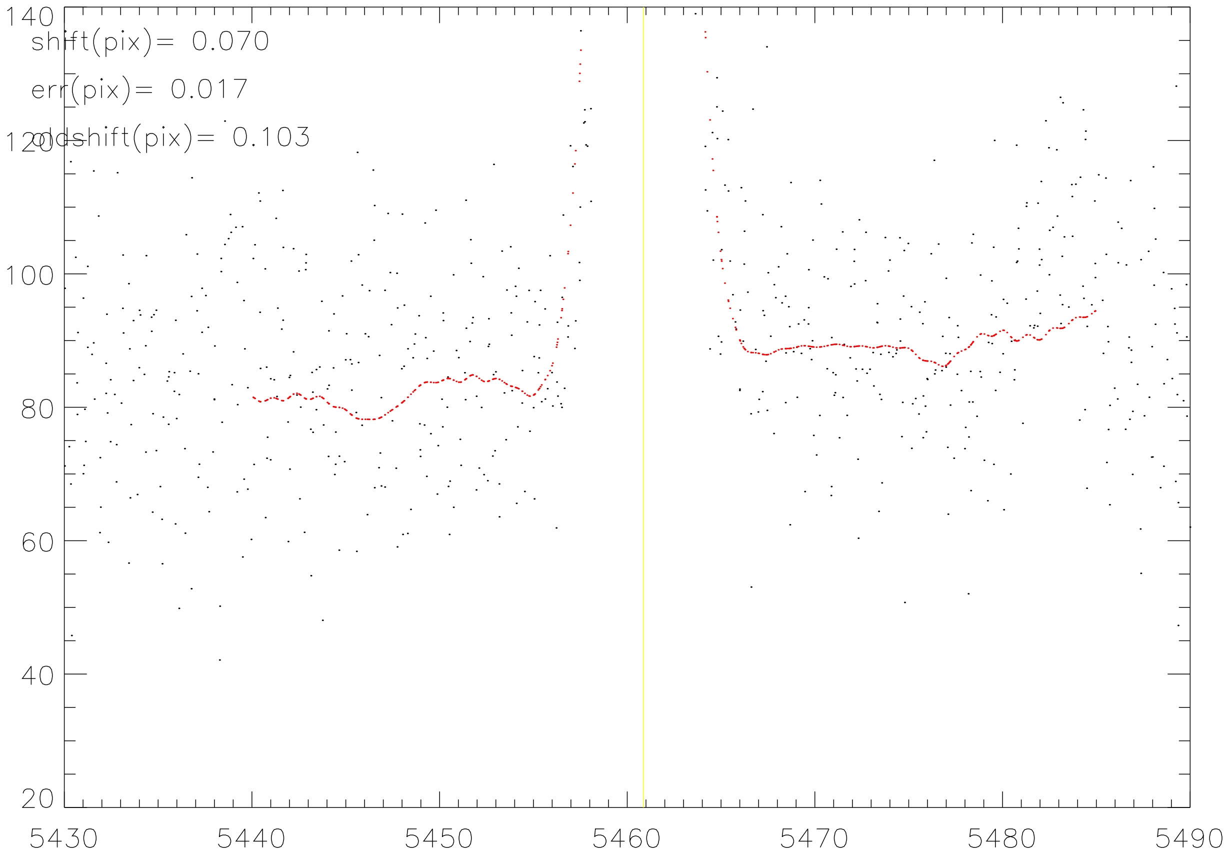
Tue Feb 26 06:18:15 2008

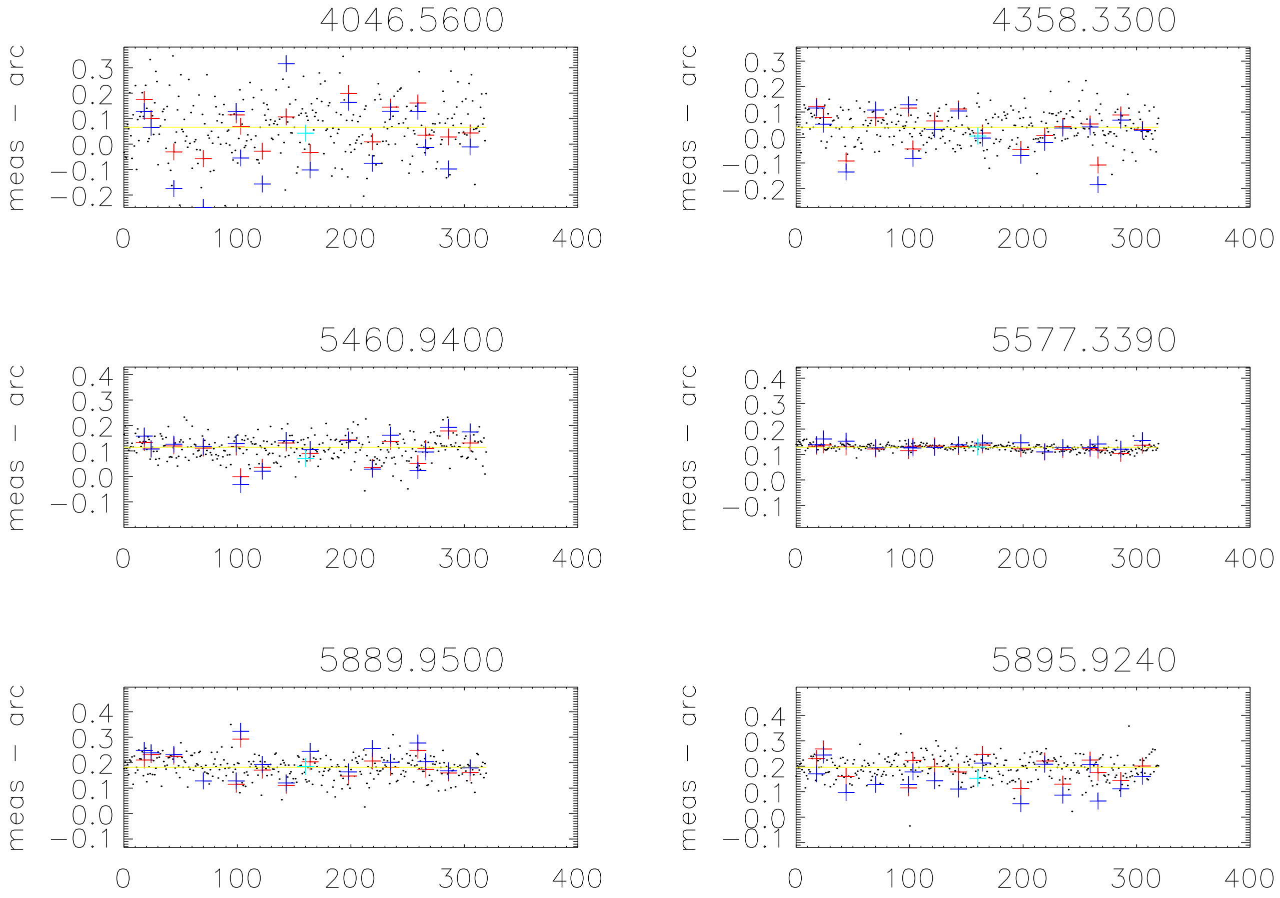

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b2-00010118.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

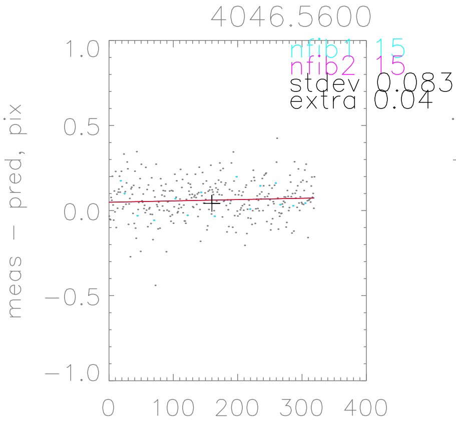

4046.5600
off: −0.03
sig: 0.046
120
100
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: 0.01
sig: 0.018
400
300
200
100
0
−100
5460.9400
off: 0.10
sig: 0.013
600
500
400
300
200
100
0
−100
5577.3390
off: 0.13
sig: 0.003
2.0×10⁴
1.5×10⁴
1.0×10⁴
5.0×10³
0
5889.9500
off: 0.22
sig: 0.011
800
600
400
200
0
−200
5895.9240
off: 0.15
sig: 0.012
600
400
200
0
−200

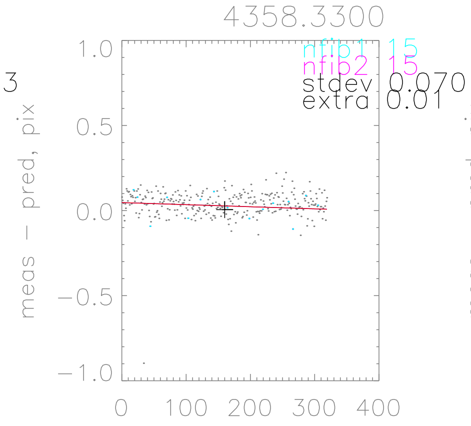

shift(pix)= 0.043
err(pix)= 0.054
oldshift(pix)=−0.032
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

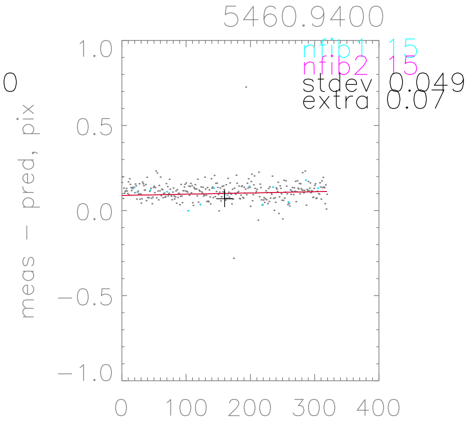

shift(pix)= 0.005
err(pix)= 0.021
oldshift(pix)= 0.008
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

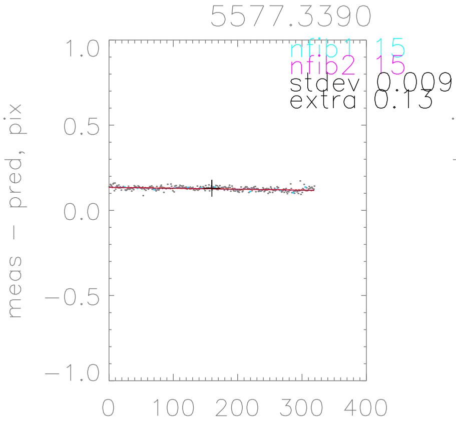

shift(pix)= 0.070
err(pix)= 0.017
oldshift(pix)= 0.103
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

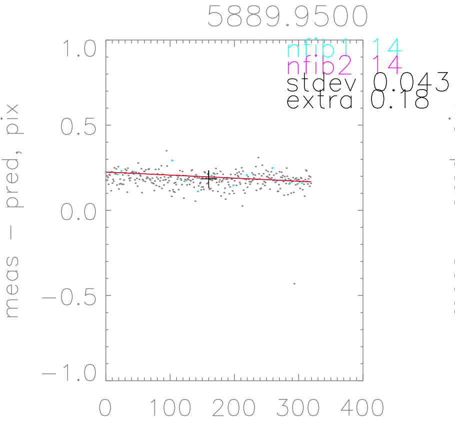

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0.4
0
100
200
300
400

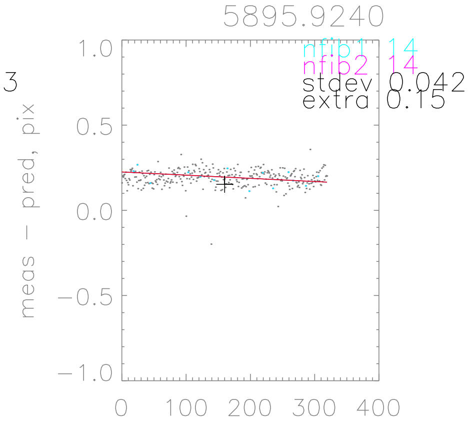

4046.5600
nfib1 15
nfib2 15
stdev 0.083
extra 0.04
meas – pred, pix
1.0
0.5
0.0
–0.5
–1.0
0
100
200
300
400

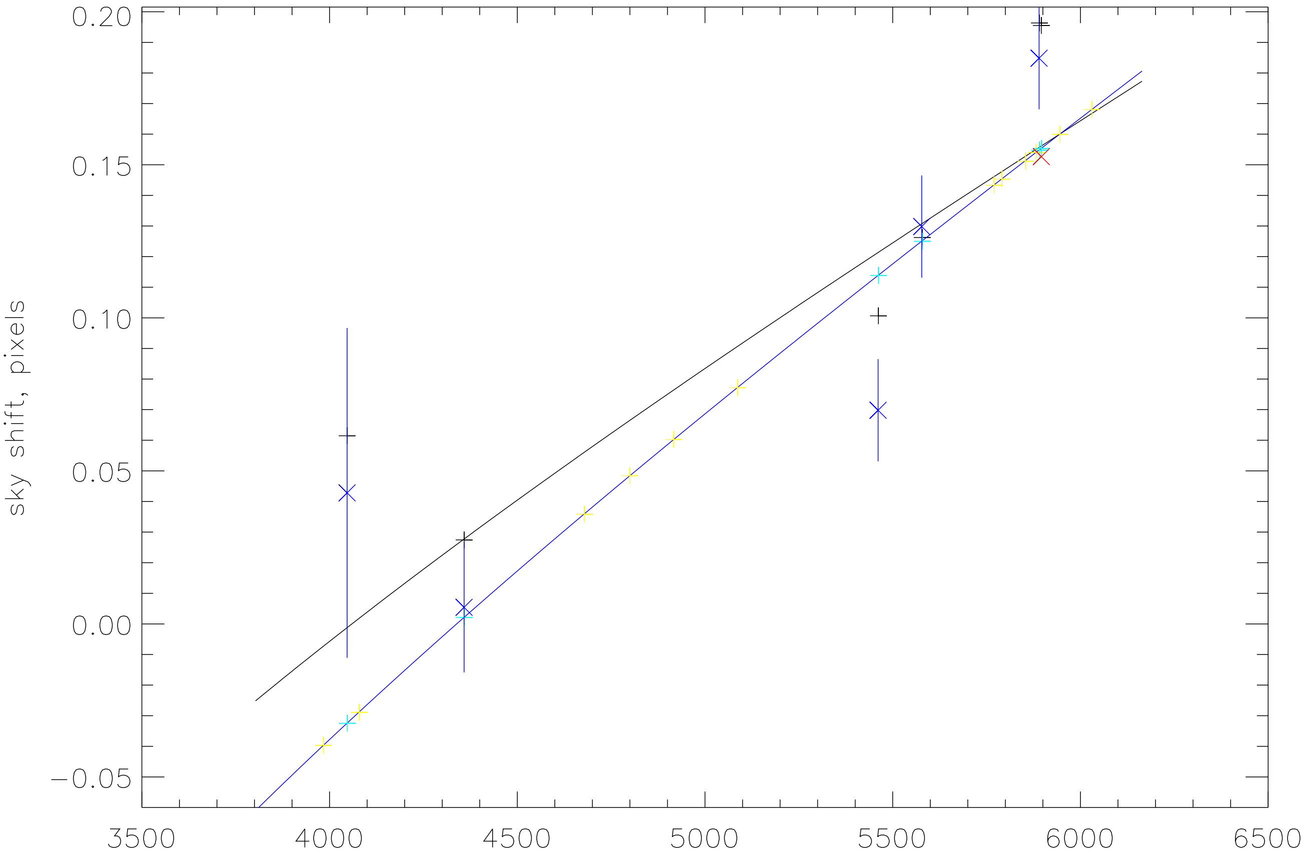

4358.3300
nfib1 15
nfib2 15
stdev 0.070
extra 0.01
meas – pred, pix
1.0
0.5
0.0
–0.5
–1.0
0
100
200
300
400

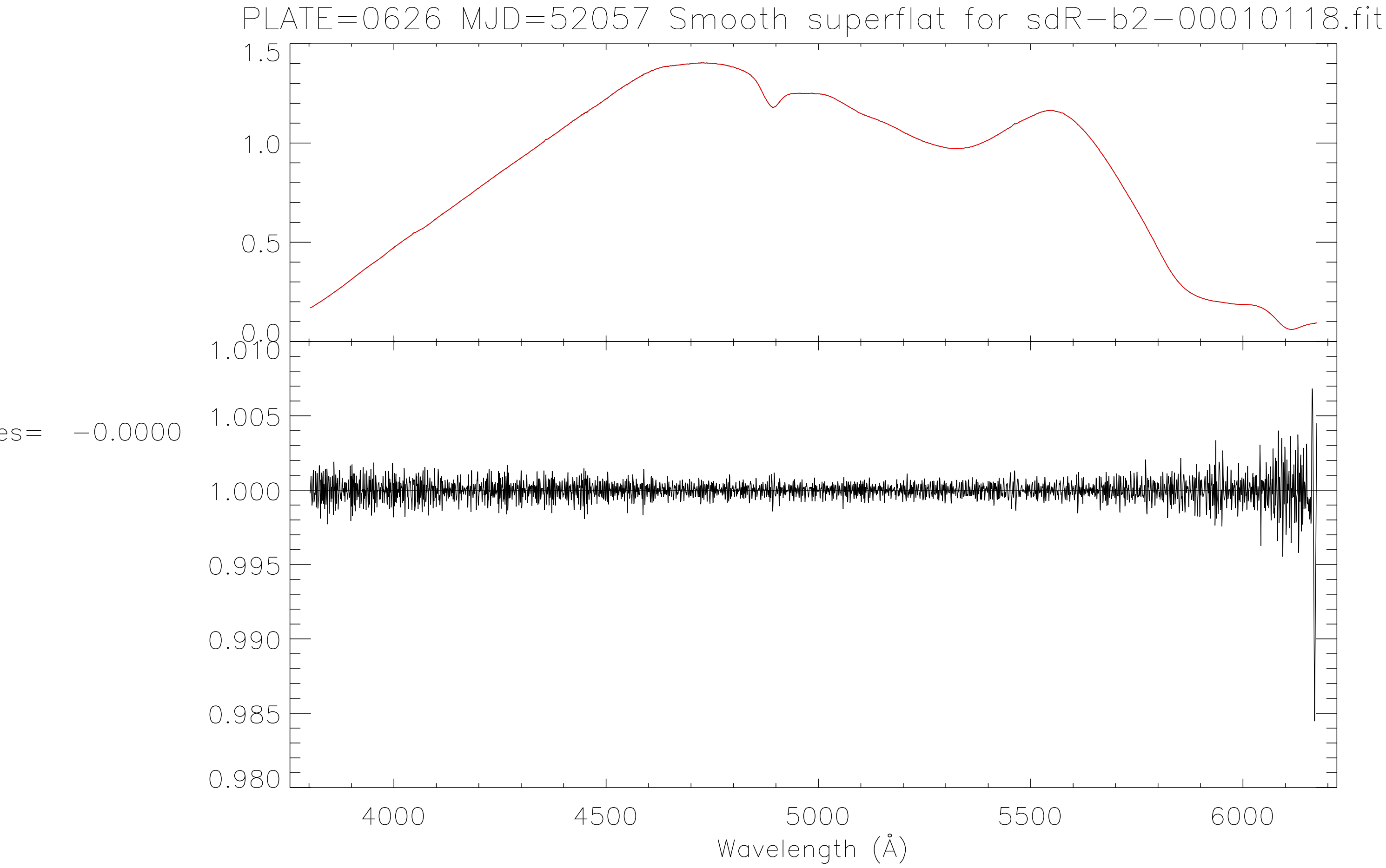

5460.9400
nfib1 15
nfib2 15
stdev 0.049
extra 0.07
meas – pred, pix
1.0
0.5
0.0
–0.5
–1.0
0
100
200
300
400

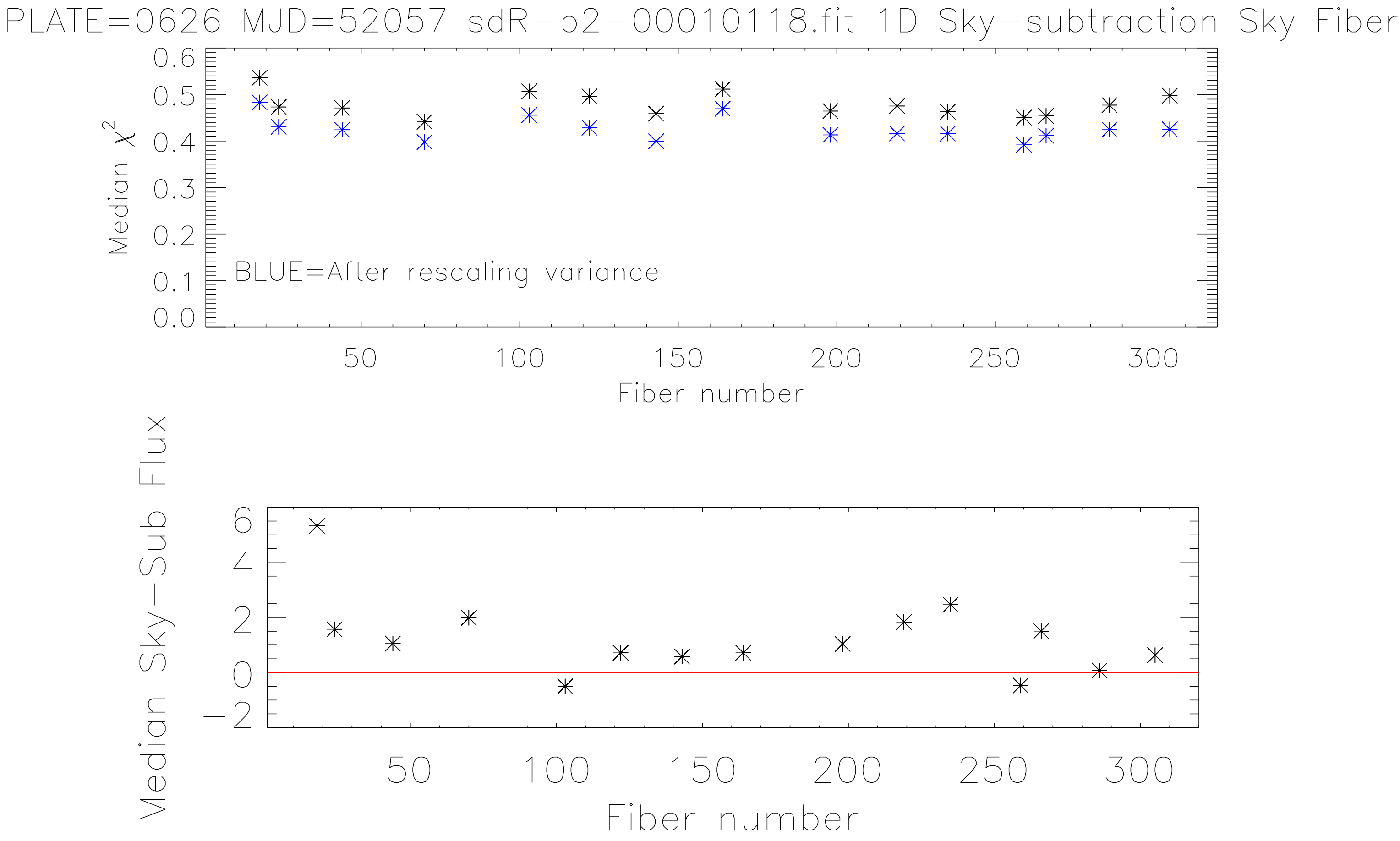

5577.3390
nfib1 15
nfib2 15
stdev 0.009
extra 0.13
meas – pred, pix
1.0
0.5
0.0
–0.5
–1.0
0
100
200
300
400

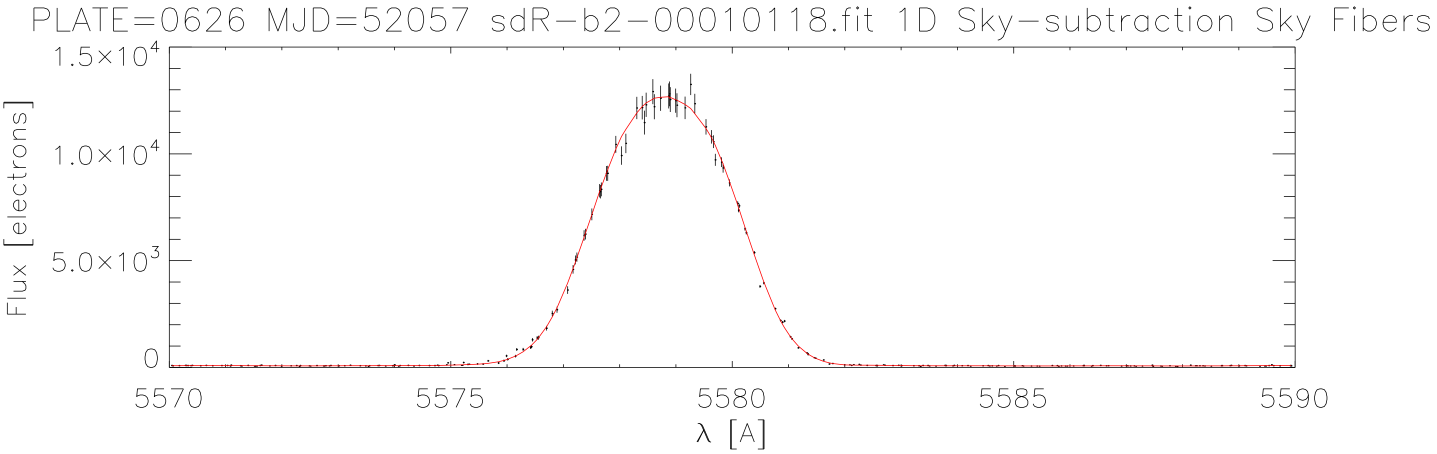

5889.9500
nfib1 14
nfib2 14
stdev 0.043
extra 0.18
meas – pred, pix
1.0
0.5
0.0
–0.5
–1.0
0
100
200
300
400

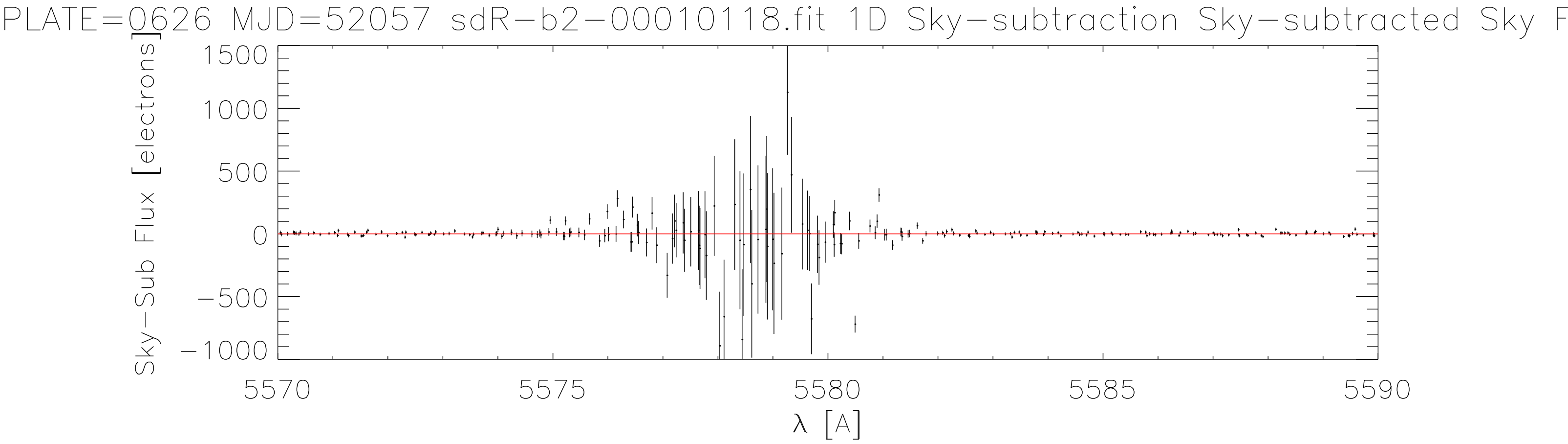

5895.9240
nfib1 14
nfib2 14
stdev 0.042
extra 0.15
meas – pred, pix
1.0
0.5
0.0
–0.5
–1.0
0
100
200
300
400


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


PLATE=0626 MJD=52057 Smooth superflat for sdR-b2-00010118.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= -0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

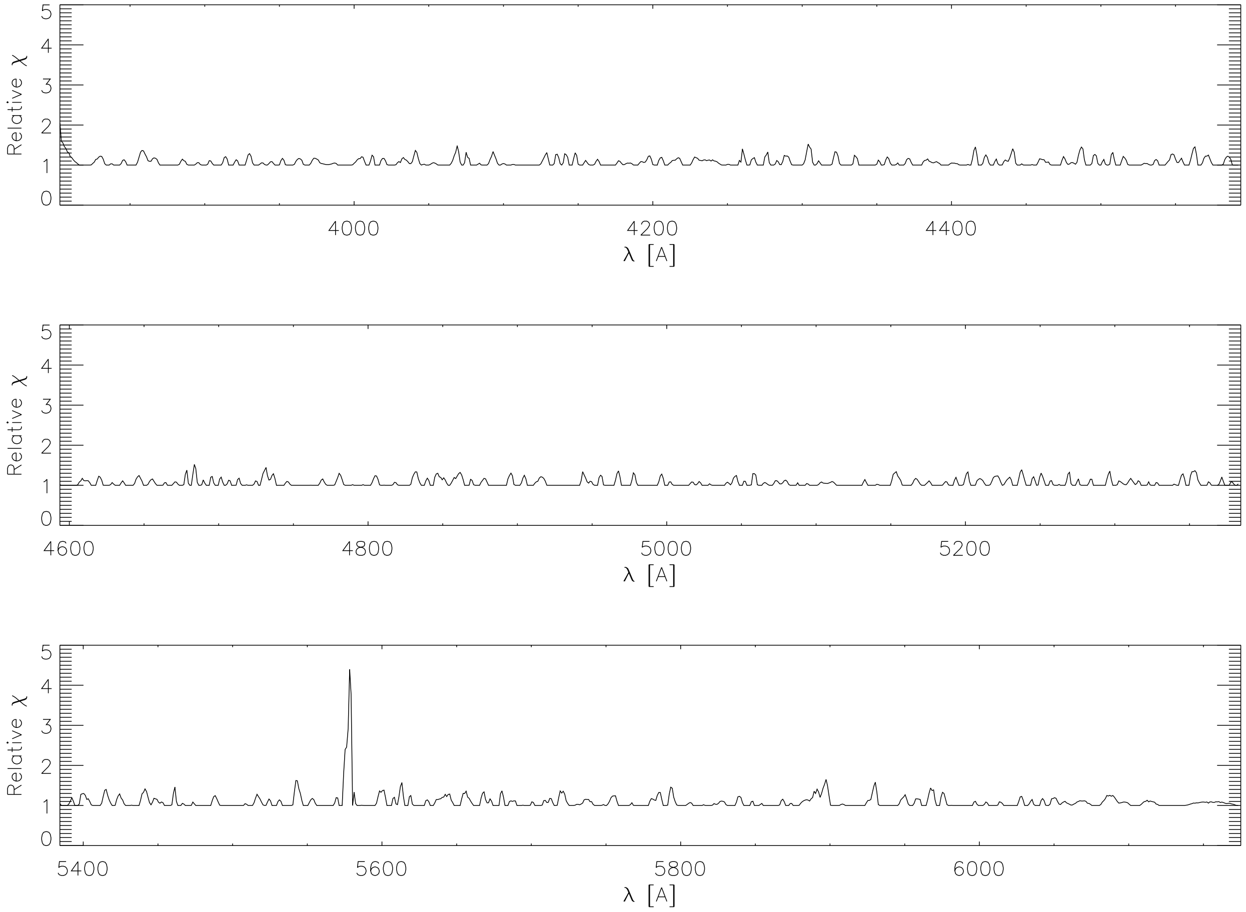

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
−2
50
100
150
200
250
300
Fiber number

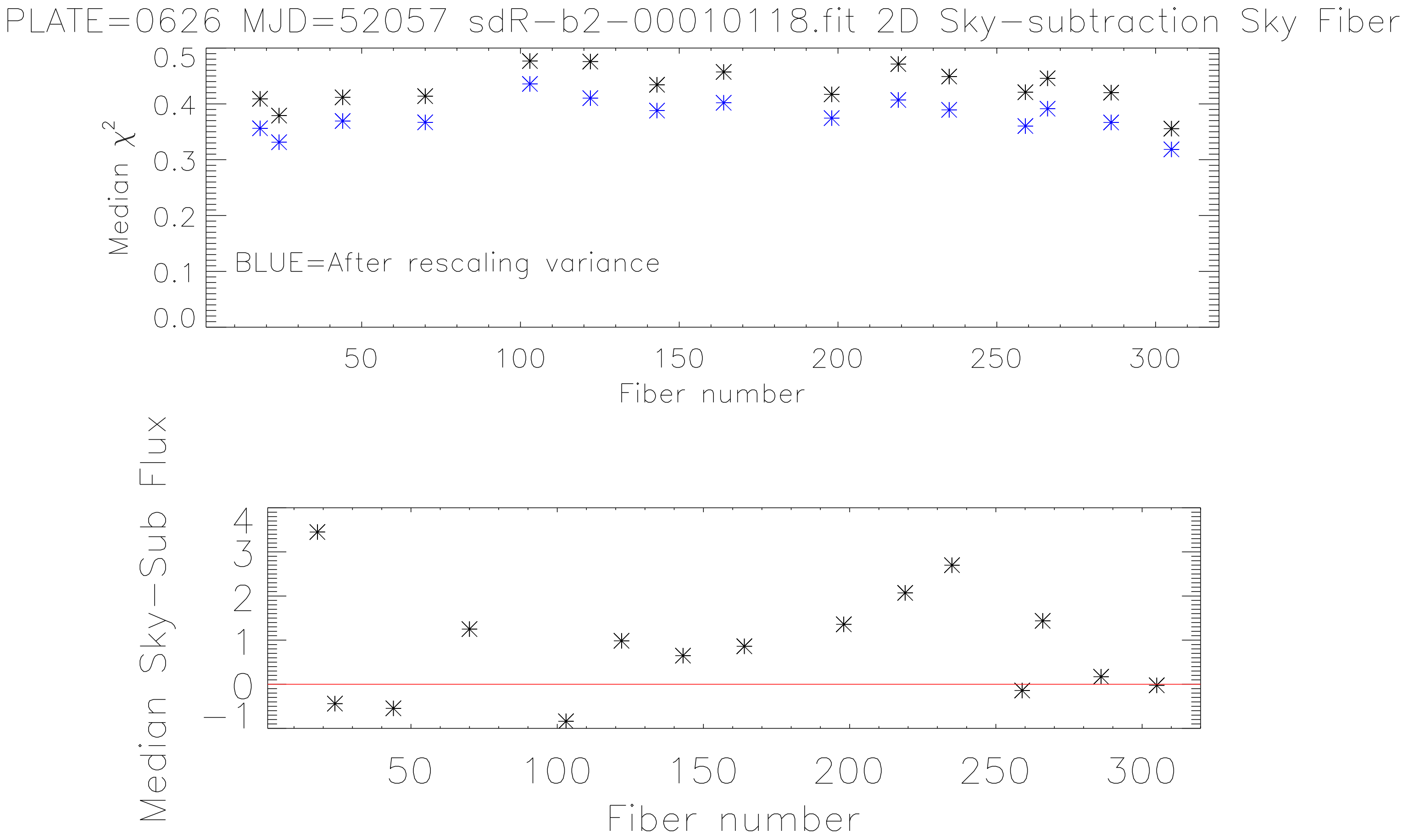

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
1.5×10^4
1.0×10^4
5.0×10^3
0
5570
5575
5580
5585
5590
λ [A]

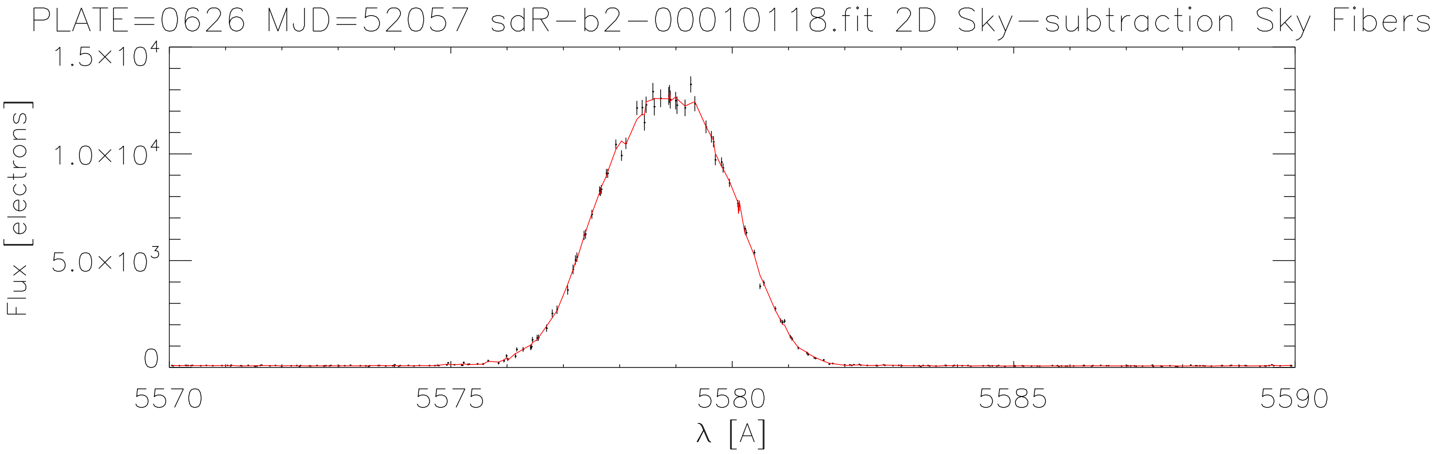

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
−1000
5570
5575
5580
5585
5590
λ [A]

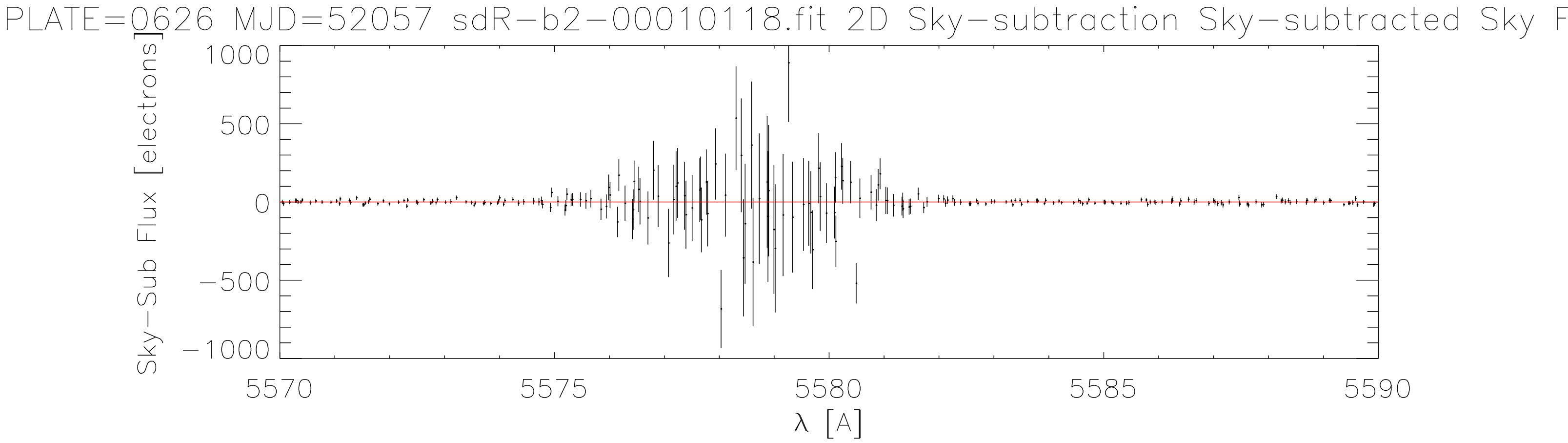
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 1D Sky-subtraction Rescaled Errors



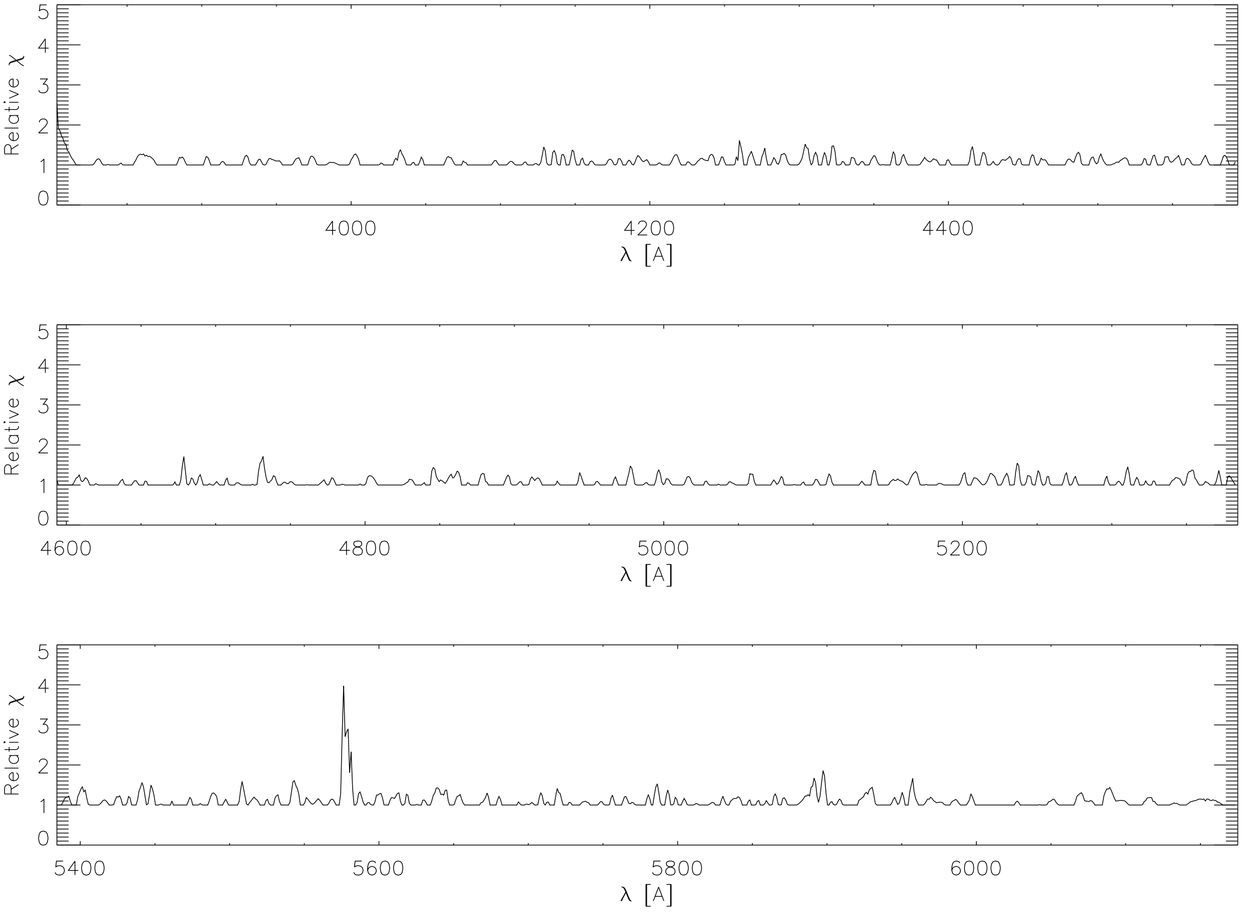

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

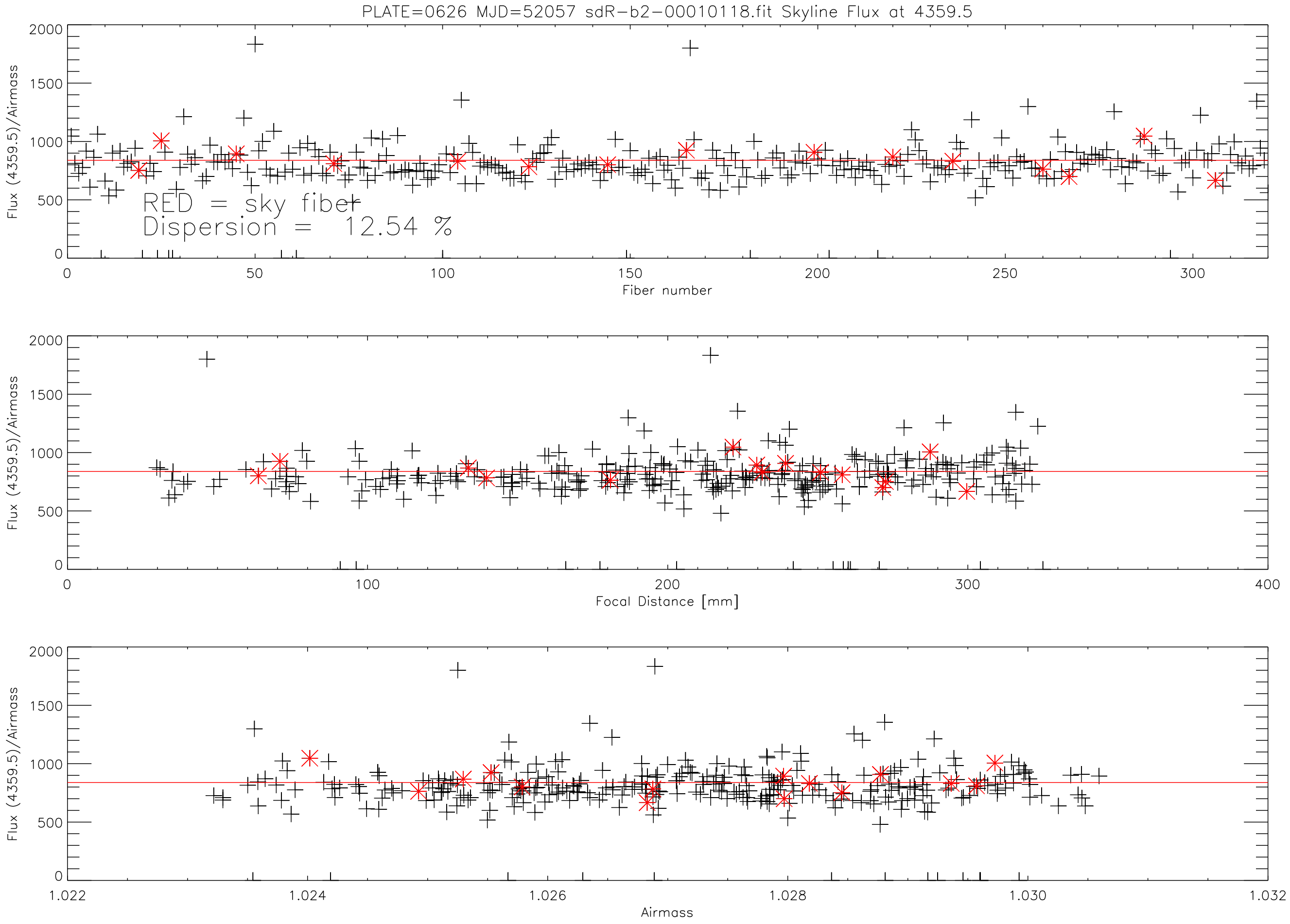

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 2D Sky-subtraction Sky Fibers

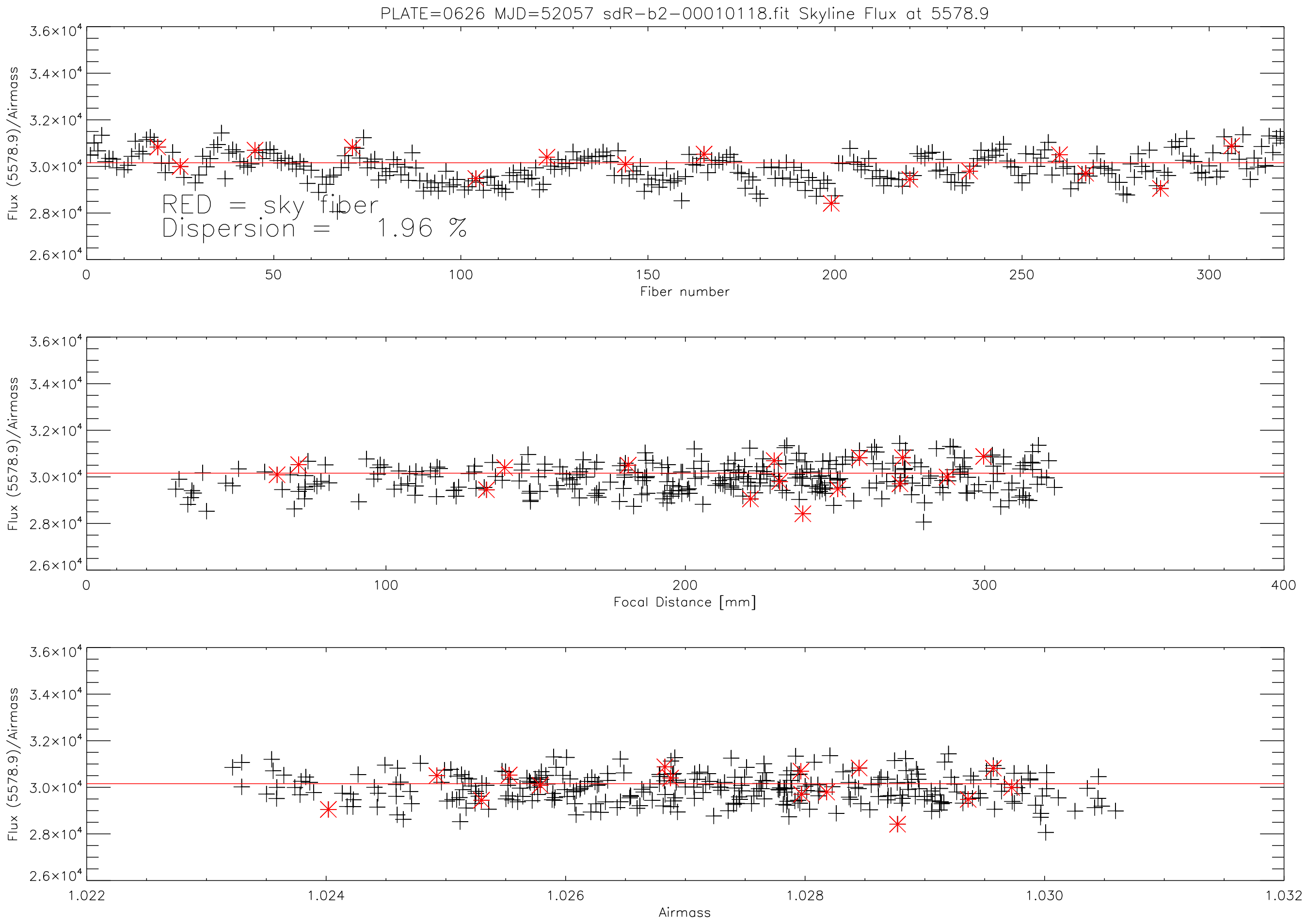

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 2D Sky-subtraction Sky-subtracted Sky F

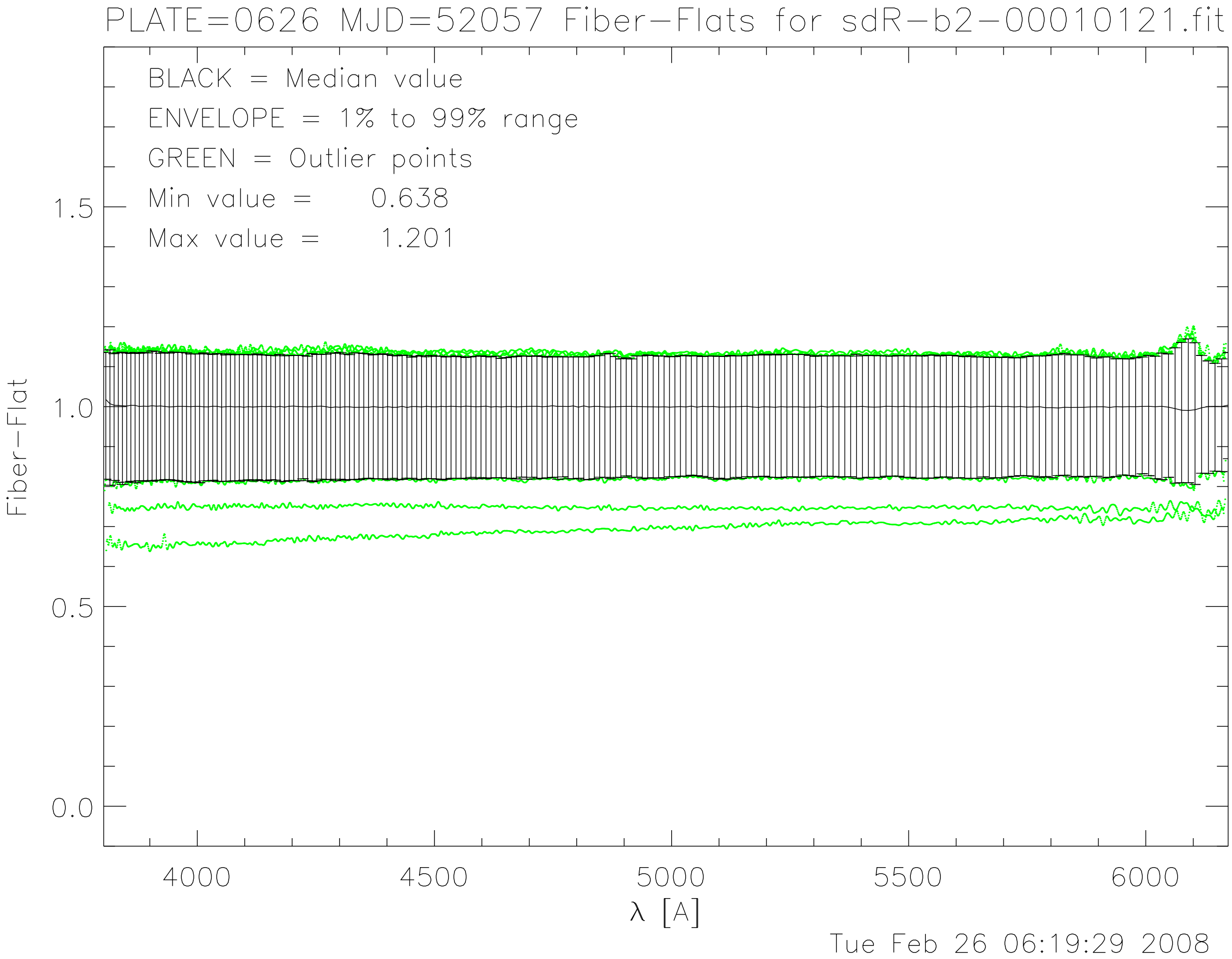
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b2-00010118.fit 2D Sky-subtraction Rescaled Errors

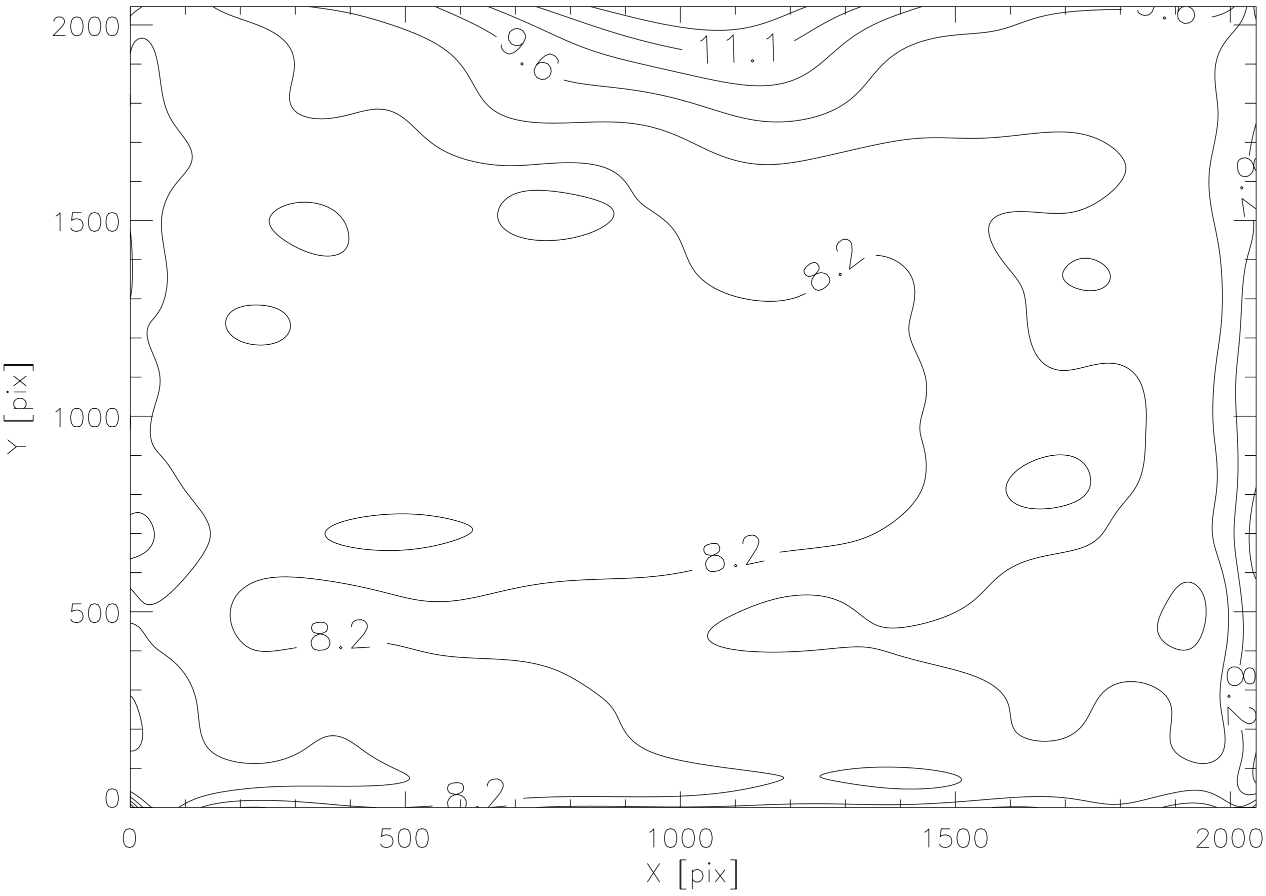


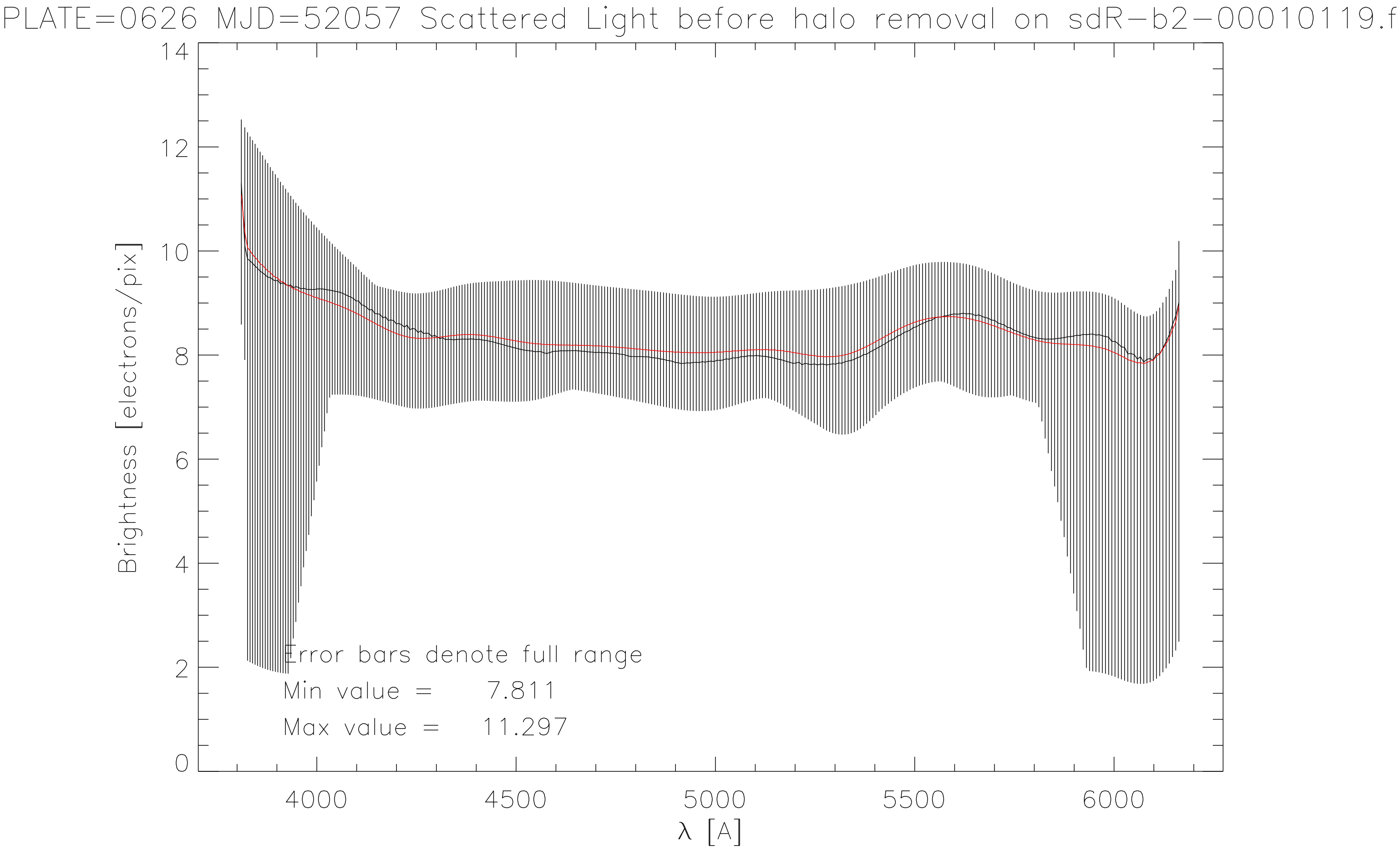

PLATE=0626 MJD=52057 sdR-b2-00010118.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2000
1500
1000
500
0
RED = sky fiber
Dispersion = 12.54 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2000
1500
1000
500
0
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2000
1500
1000
500
0
1.022
1.024
1.026
1.028
1.030
1.032
Airmass


PLATE=0626 MJD=52057 sdR-b2-00010118.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
3.6×10^4
3.4×10^4
3.2×10^4
3.0×10^4
2.8×10^4
2.6×10^4
RED = sky fiber
Dispersion = 1.96 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
3.6×10^4
3.4×10^4
3.2×10^4
3.0×10^4
2.8×10^4
2.6×10^4
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
3.6×10^4
3.4×10^4
3.2×10^4
3.0×10^4
2.8×10^4
2.6×10^4
1.022
1.024
1.026
1.028
1.030
1.032
Airmass

PLATE=0626 MJD=52057 Fiber−Flats for sdR−b2−00010121.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.638
Max value = 1.201
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Tue Feb 26 06:19:29 2008

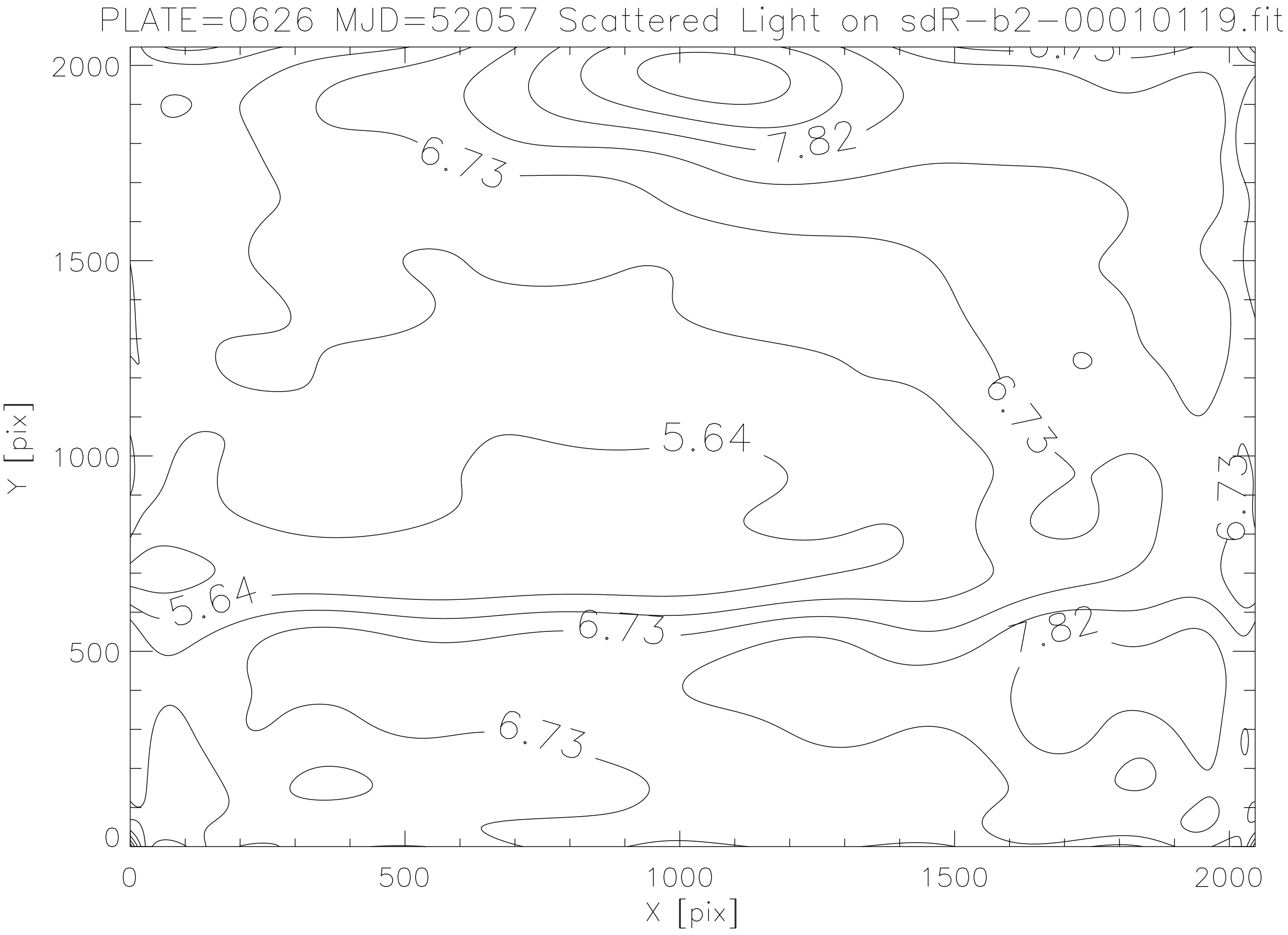
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010119.f

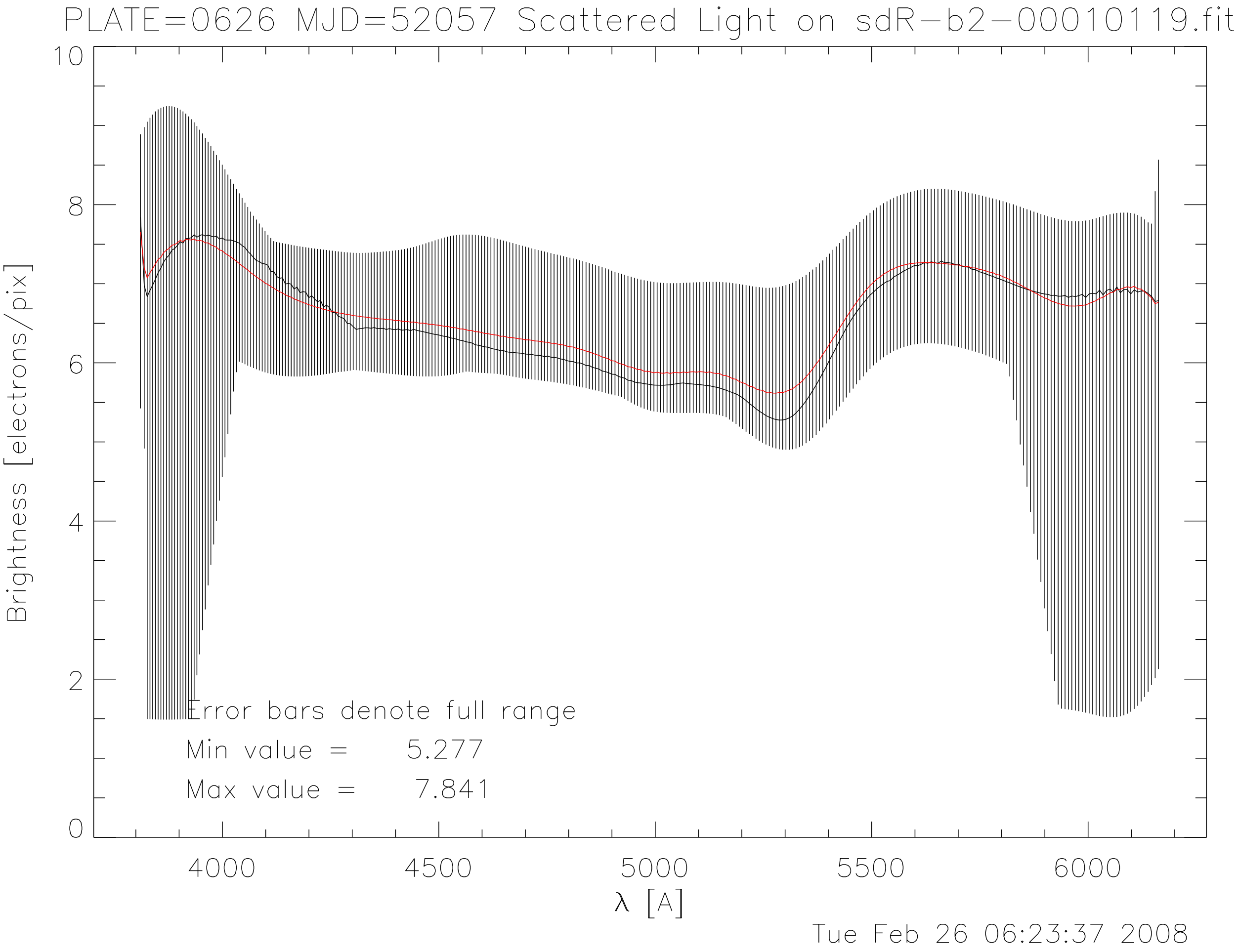


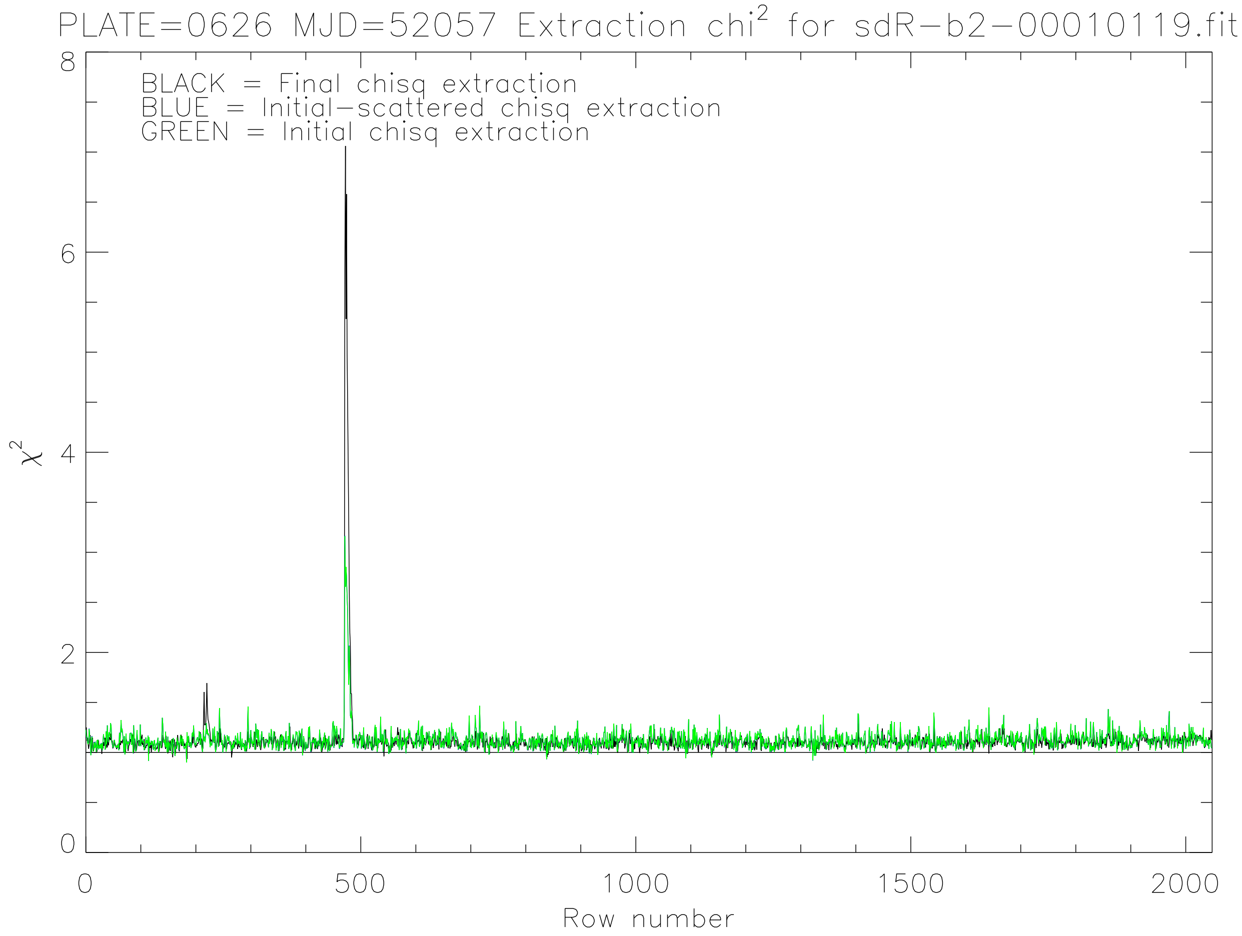


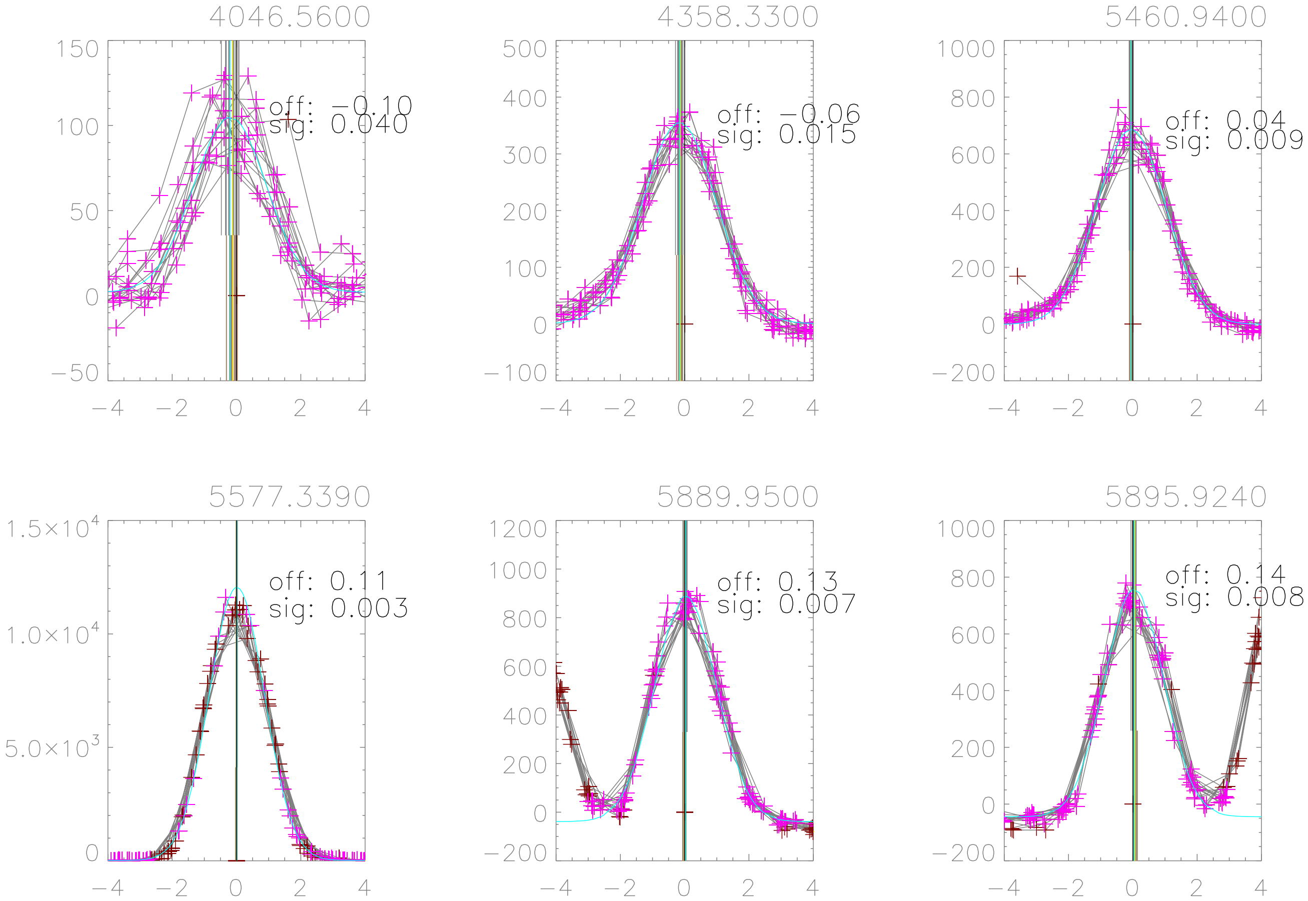
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010119.f

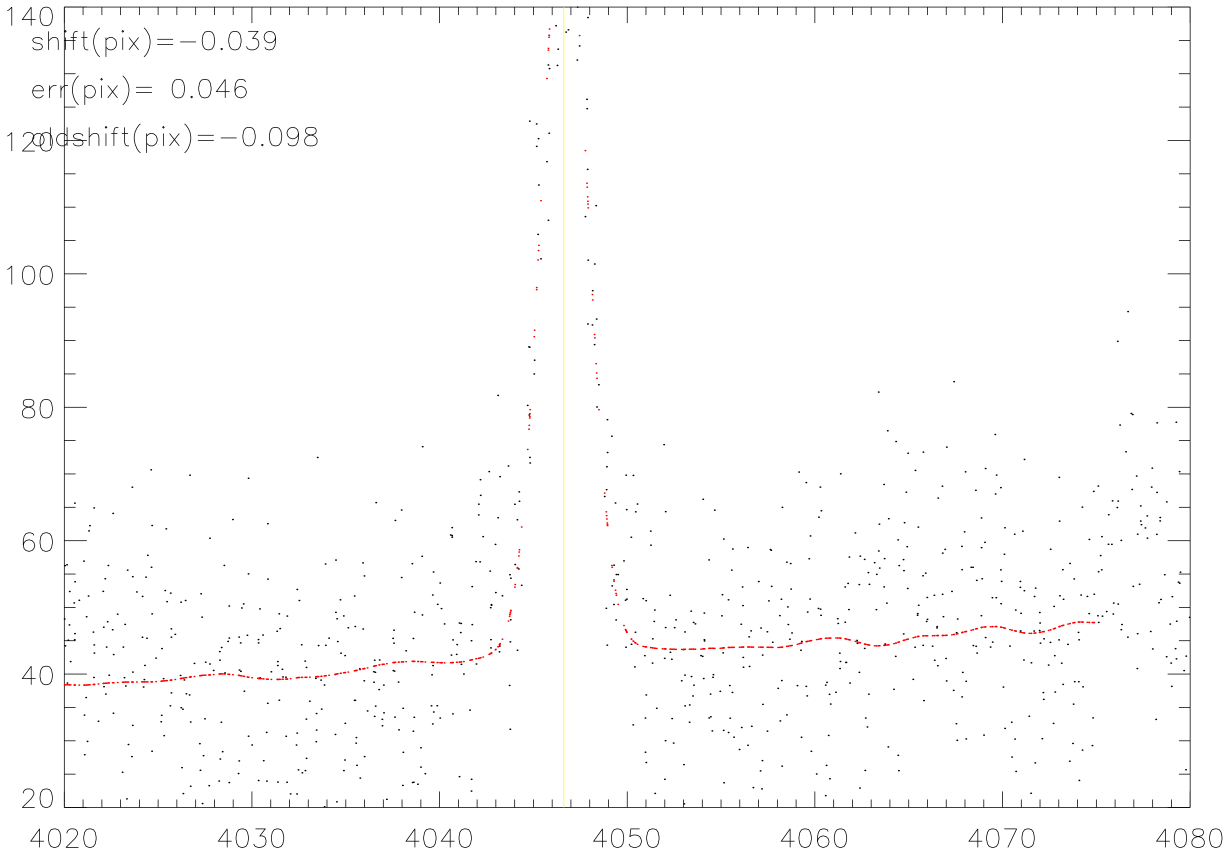
Tue Feb 26 06:20:20 2008

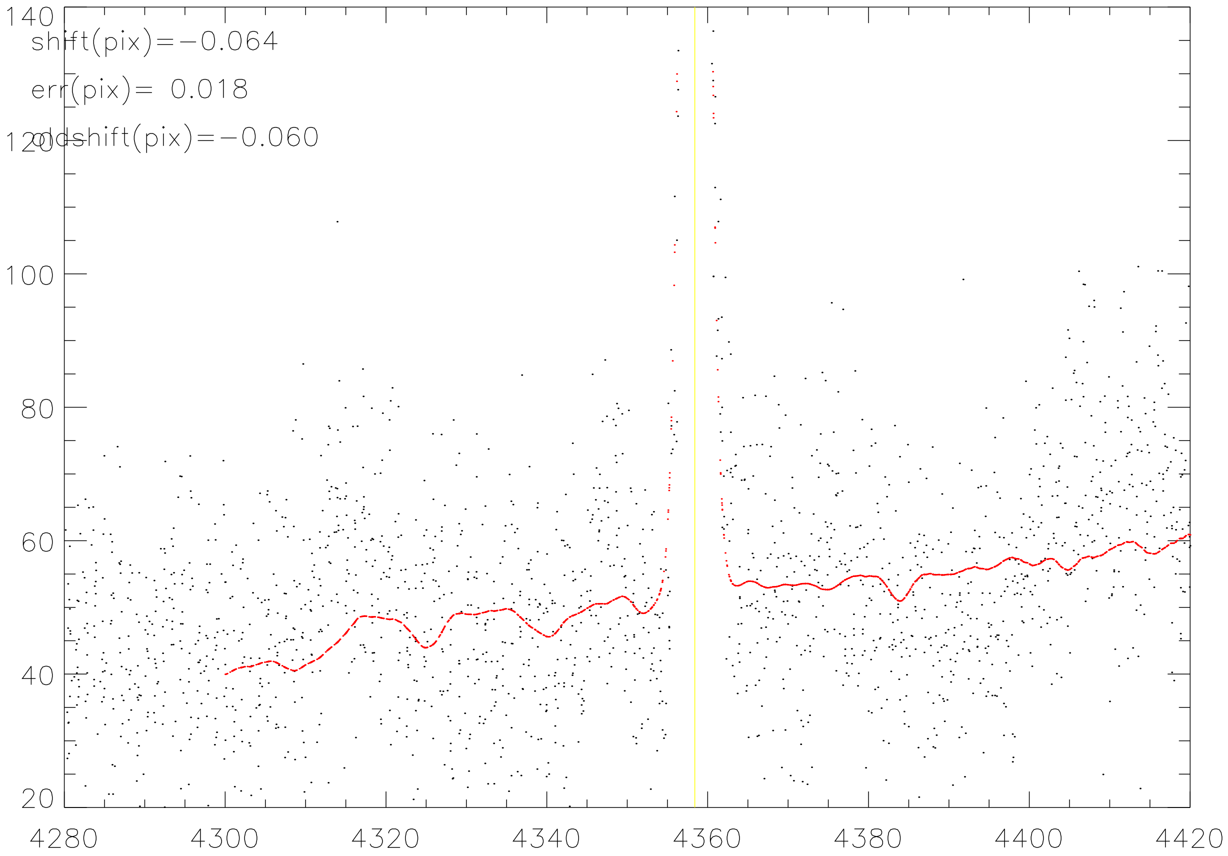

PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010119.fit

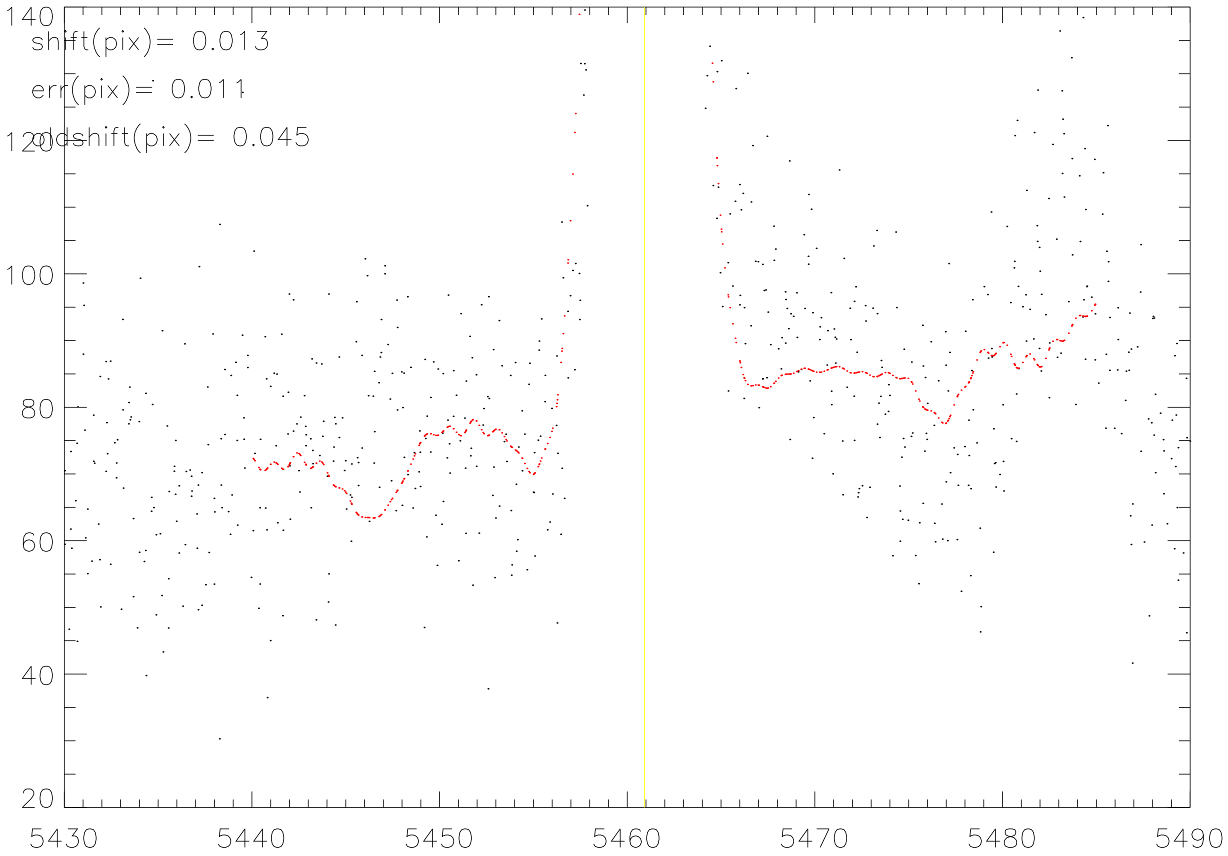

PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010119.fit
Brightness [electrons/pix]
λ [A]
0
2
4
6
8
10
4000
4500
5000
5500
6000
Error bars denote full range
Min value = 5.277
Max value = 7.841
Tue Feb 26 06:23:37 2008

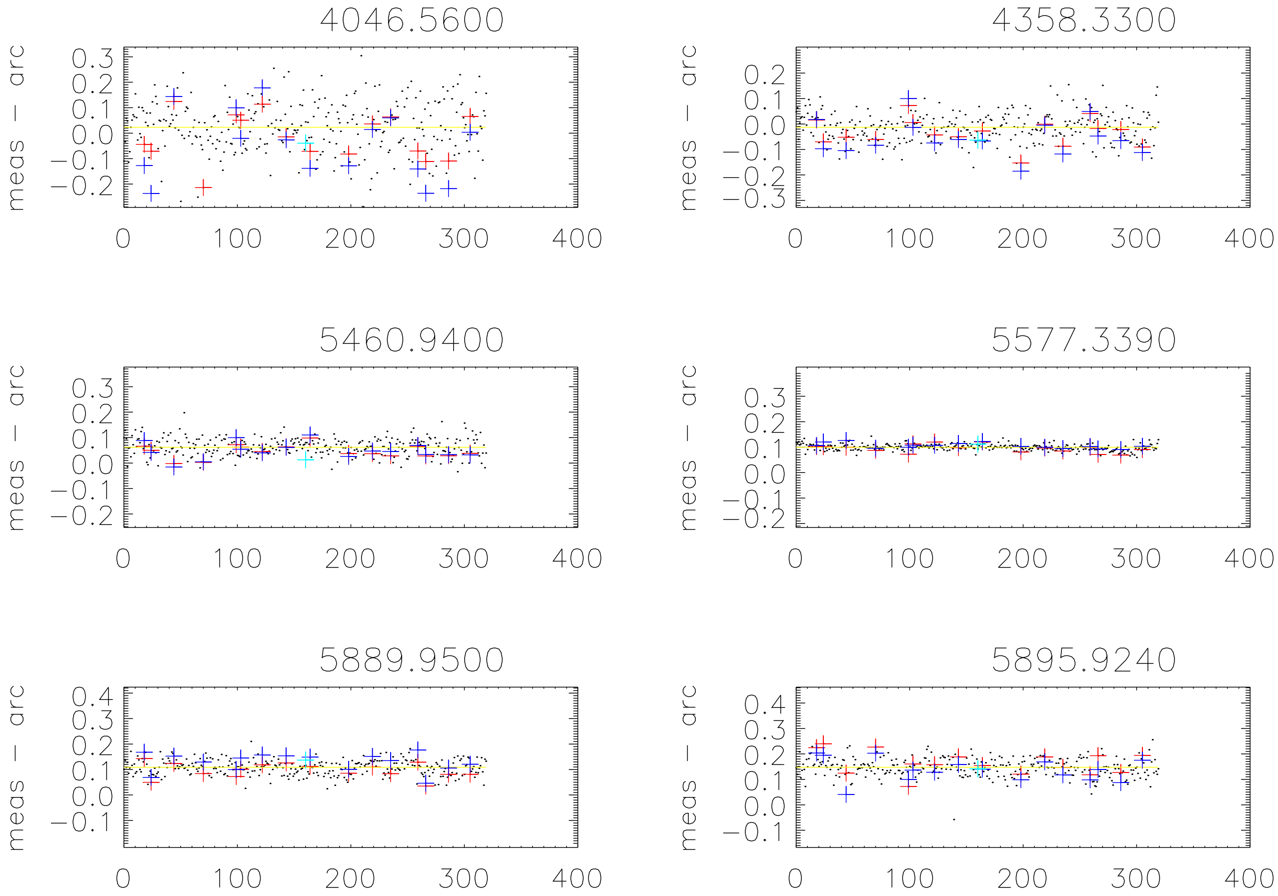

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b2-00010119.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

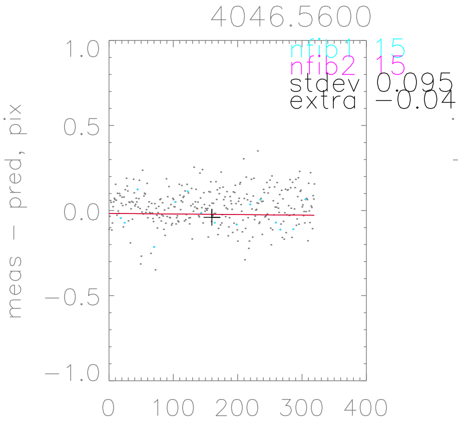

4046.5600
off: −0.10
sig: 0.040
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.06
sig: 0.015
500
400
300
200
100
0
−100
5460.9400
off: 0.04
sig: 0.009
1000
800
600
400
200
0
−200
5577.3390
off: 0.11
sig: 0.003
1.5×10^4
1.0×10^4
5.0×10^3
0
5889.9500
off: 0.13
sig: 0.007
1200
1000
800
600
400
200
0
−200
5895.9240
off: 0.14
sig: 0.008
1000
800
600
400
200
0
−200

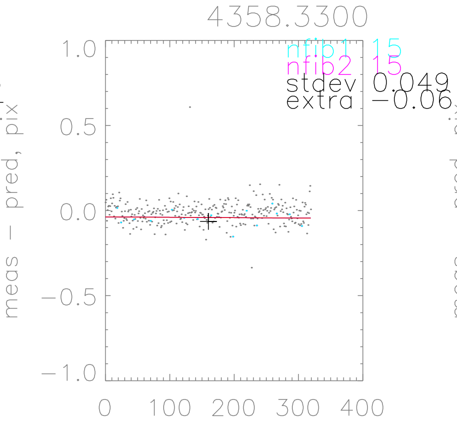

shift(pix)=−0.039
err(pix)= 0.046
oldshift(pix)=−0.098
140
120
100
80
60
40
20
4020
4030
4040
4050
4060
4070
4080

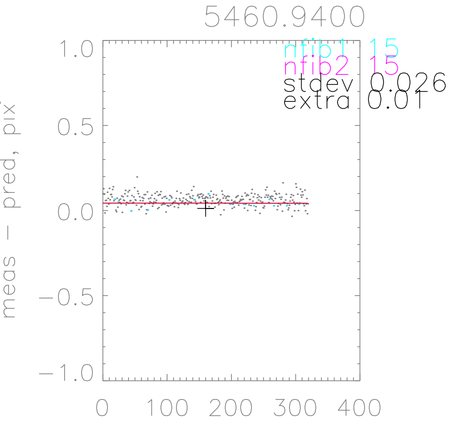

shift(pix)=−0.064
err(pix)= 0.018
oldshift(pix)=−0.060
140
120
100
80
60
40
20
4280
4300
4320
4340
4360
4380
4400
4420

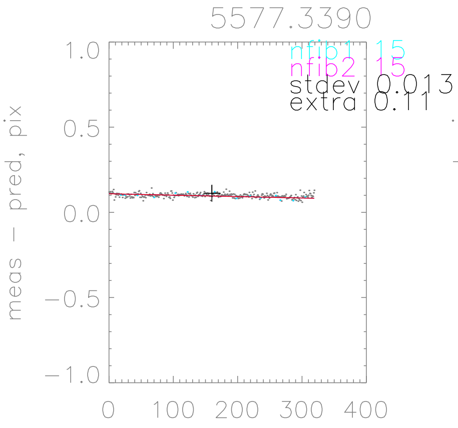

shift(pix)= 0.013
err(pix)= 0.011
oldshift(pix)= 0.045
140
120
100
80
60
40
20
5430
5440
5450
5460
5470
5480
5490

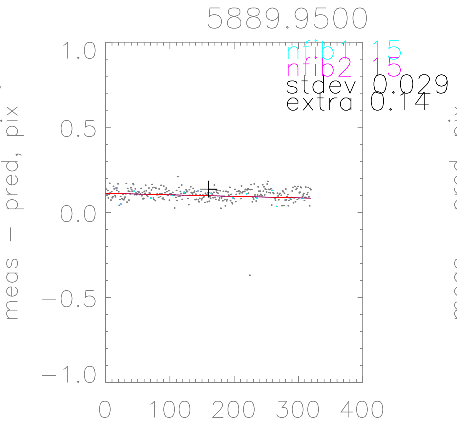

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas – arc
0
100
200
300
400
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0.4

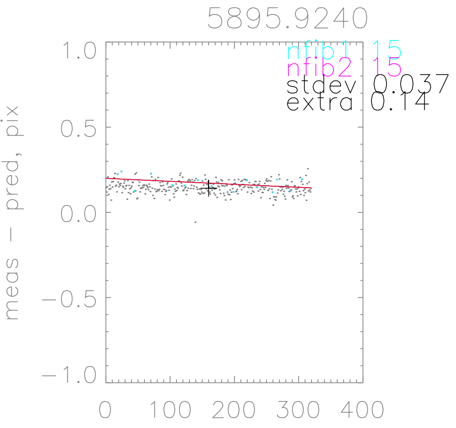

4046.5600
nfib1 15
nfib2 15
stdev 0.095
extra −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

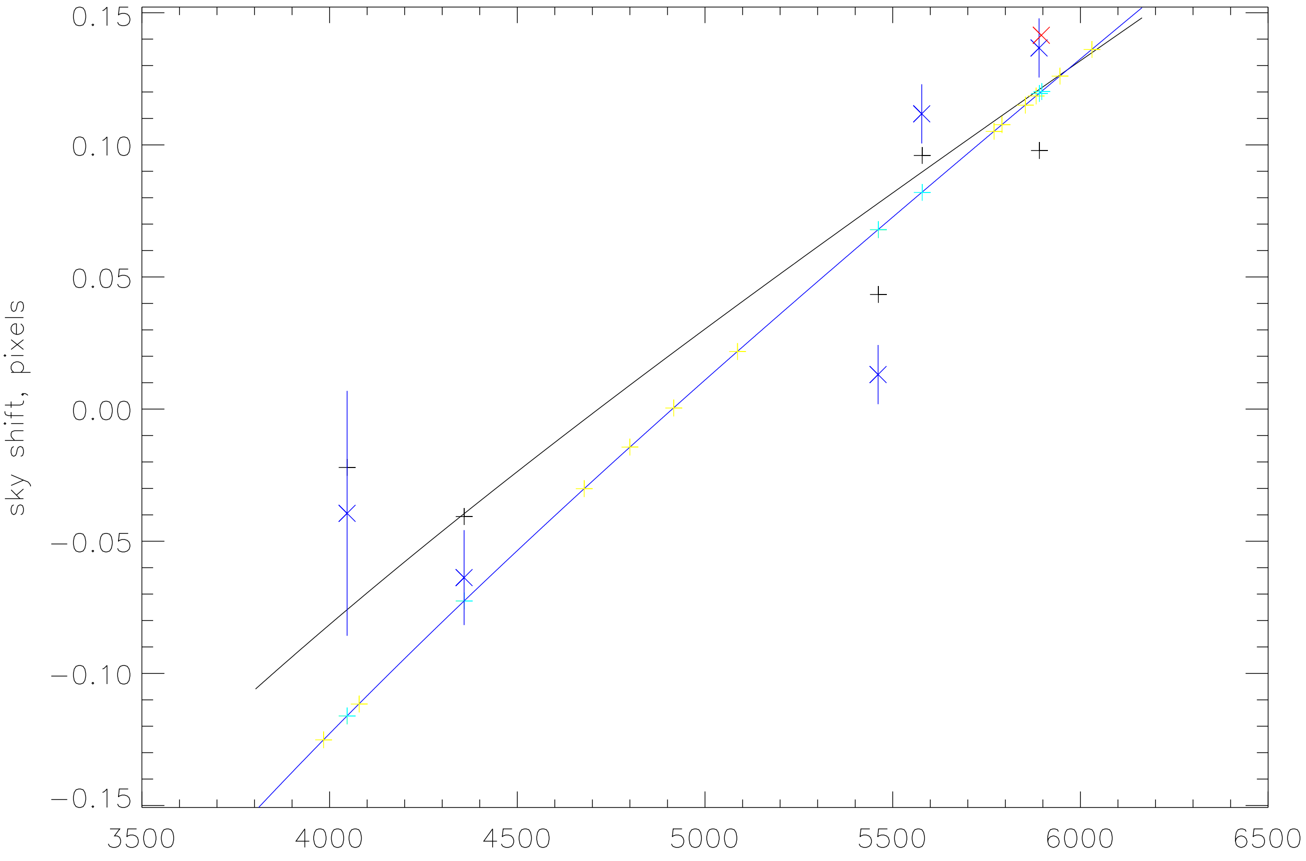

4358.3300
nfib1 15
nfib2 15
stdev 0.049
extra −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

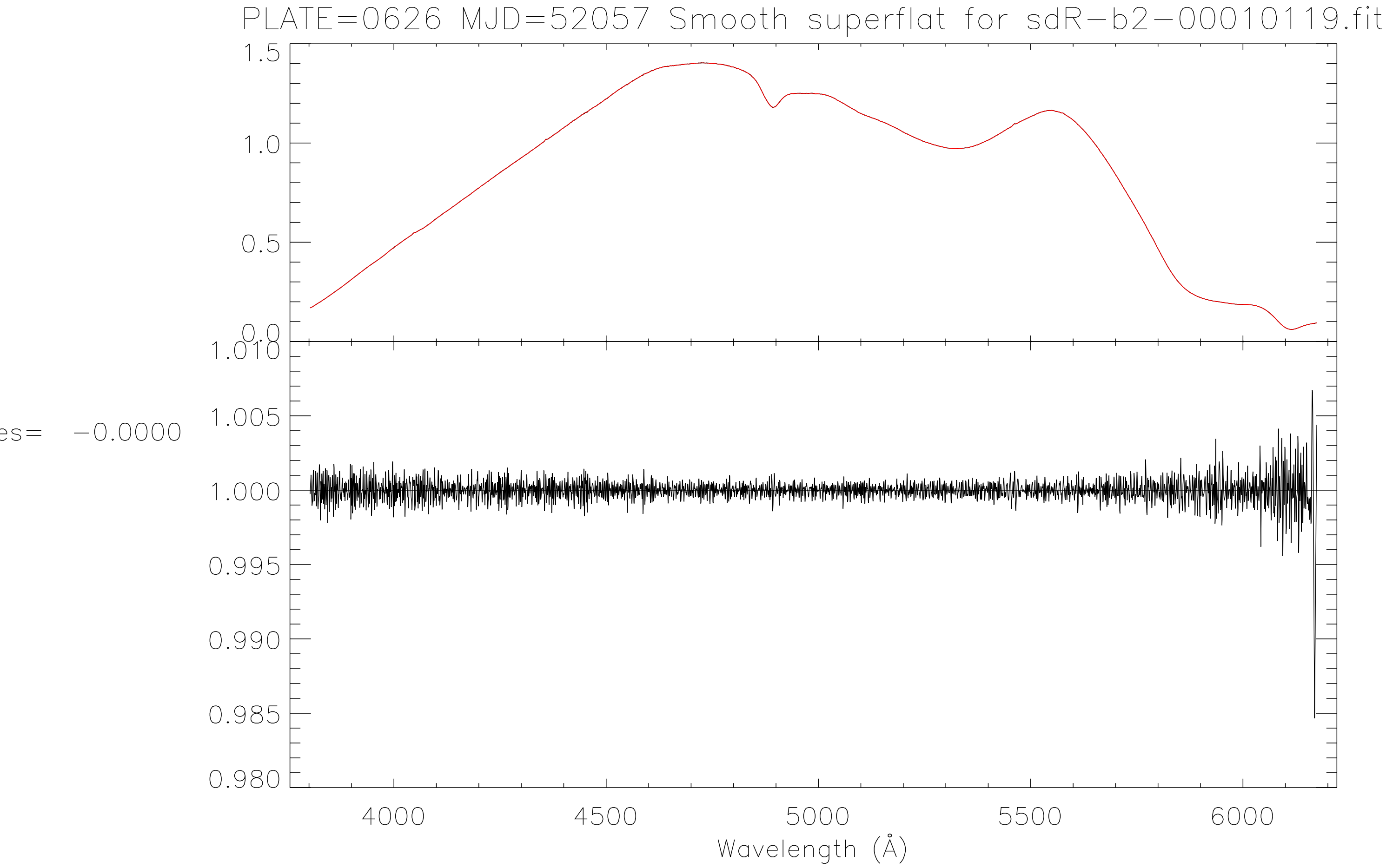

5460.9400
nfib1 15
nfib2 15
stdev 0.026
extra 0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

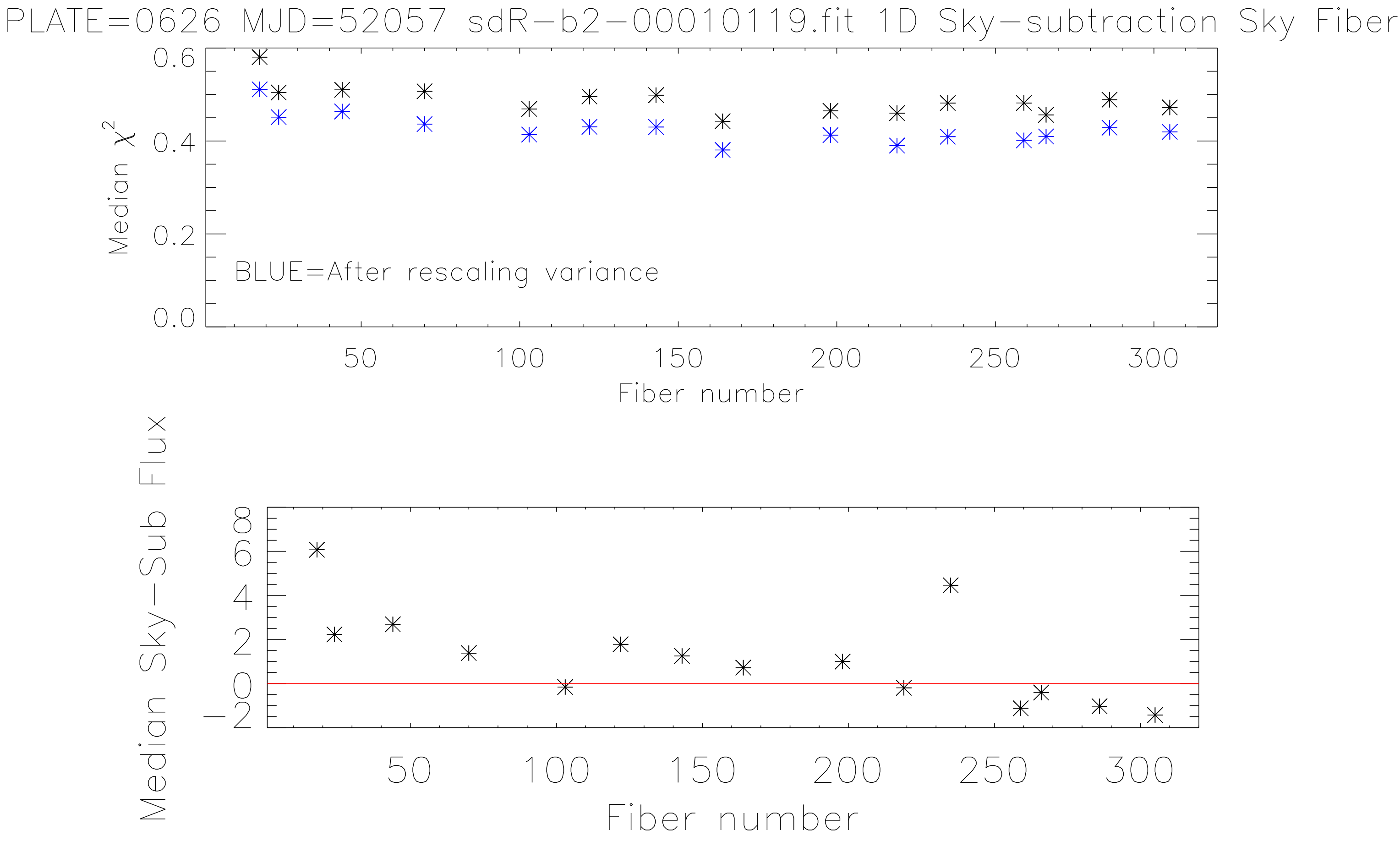

5577.3390
nfib1 15
nfib2 15
stdev 0.013
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

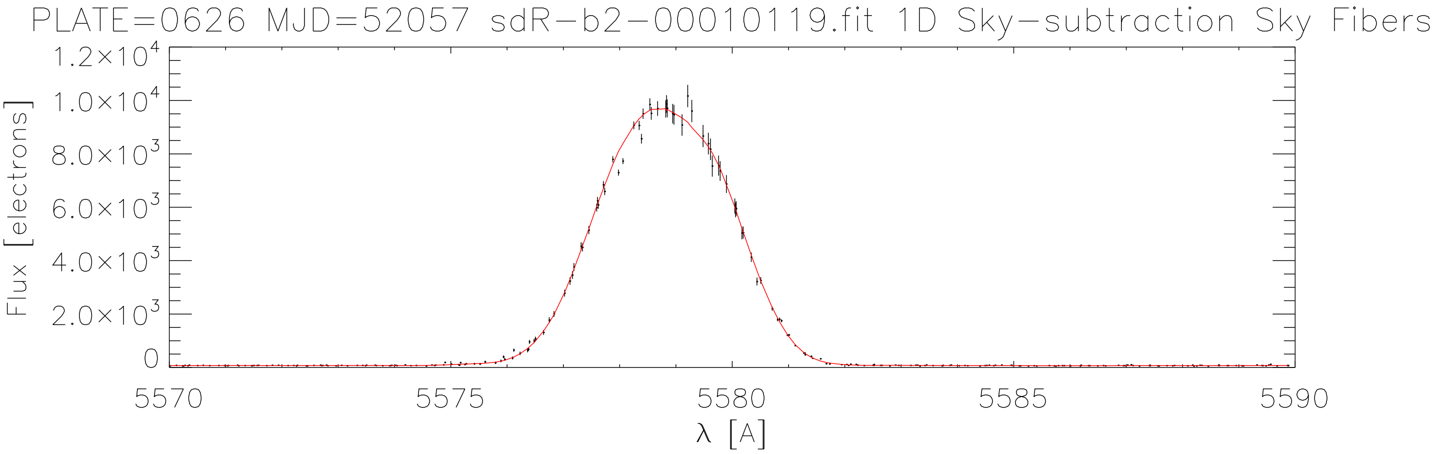

5889.9500
nfib1 15
nfib2 15
stdev 0.029
extra 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

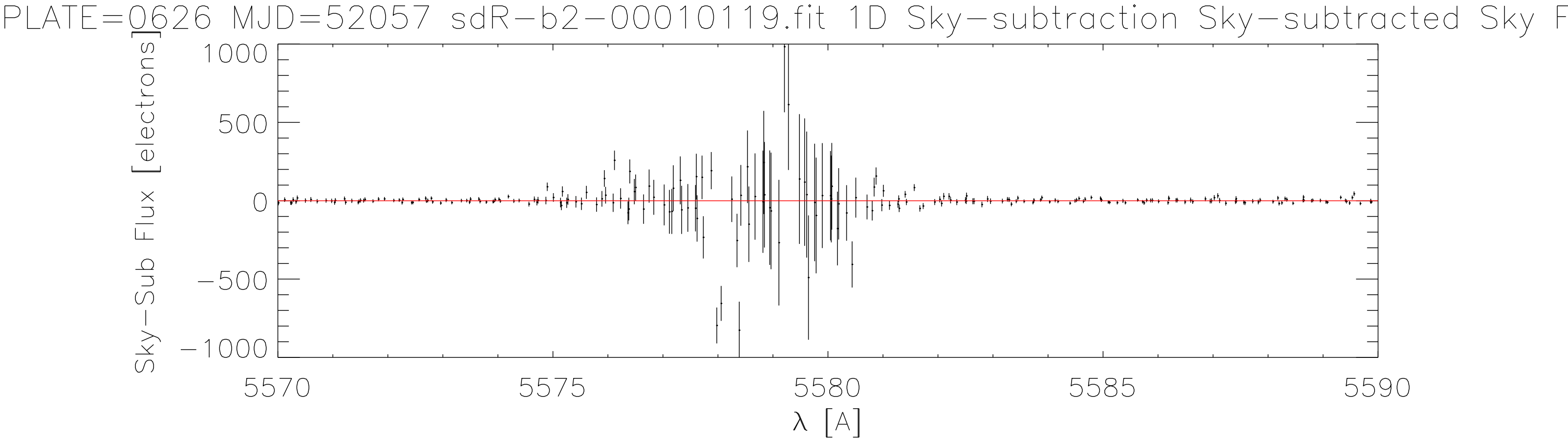

5895.9240
nfib1 15
nfib2 15
stdev 0.037
extra 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

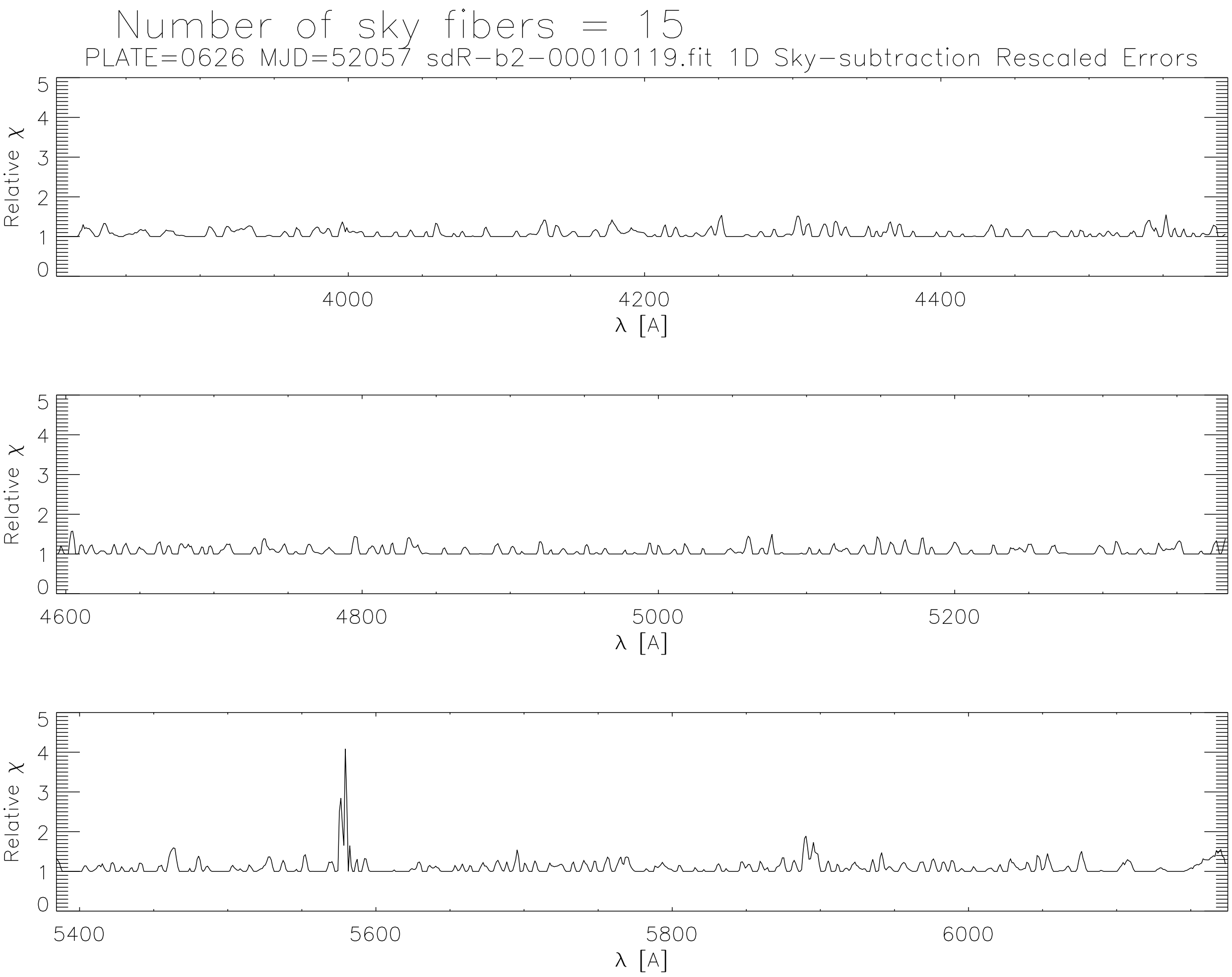

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500


PLATE=0626 MJD=52057 Smooth superflat for sdR-b2-00010119.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

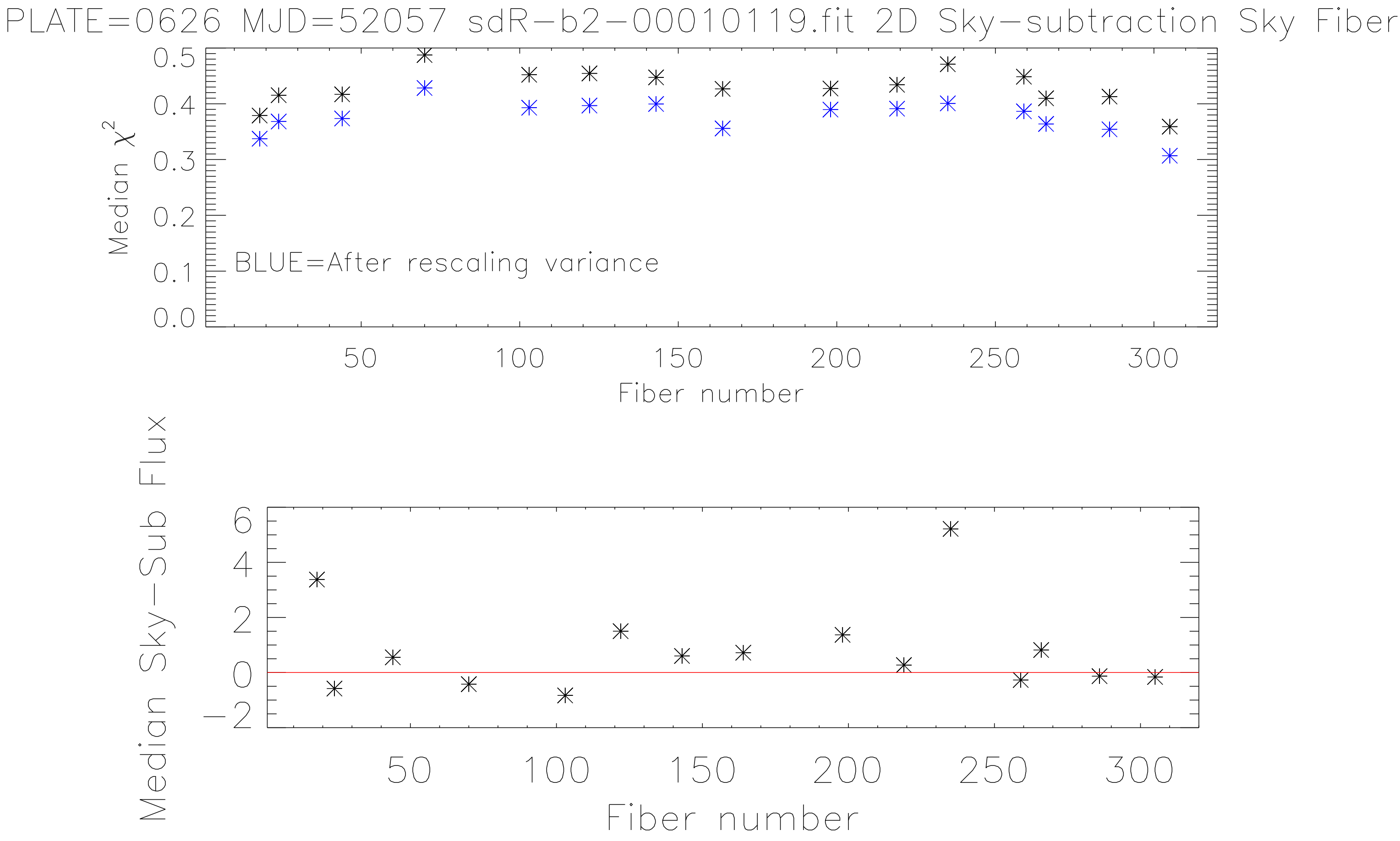

PLATE=0626 MJD=52057 sdR-b2-00010119.fit 1D Sky-subtraction Sky Fiber

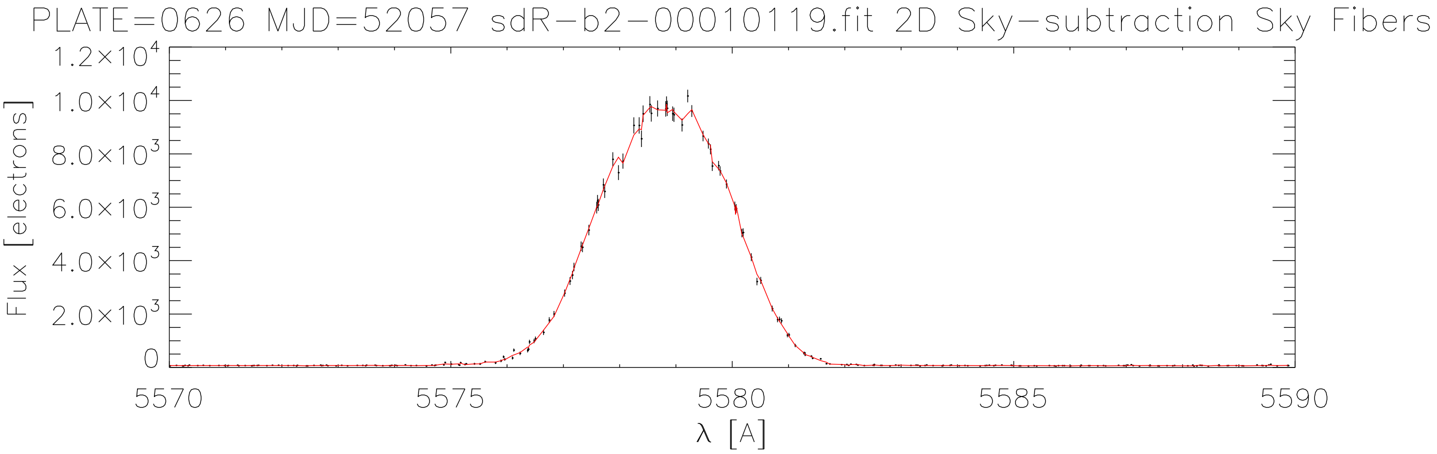

PLATE=0626 MJD=52057 sdR-b2-00010119.fit 1D Sky-subtraction Sky Fibers

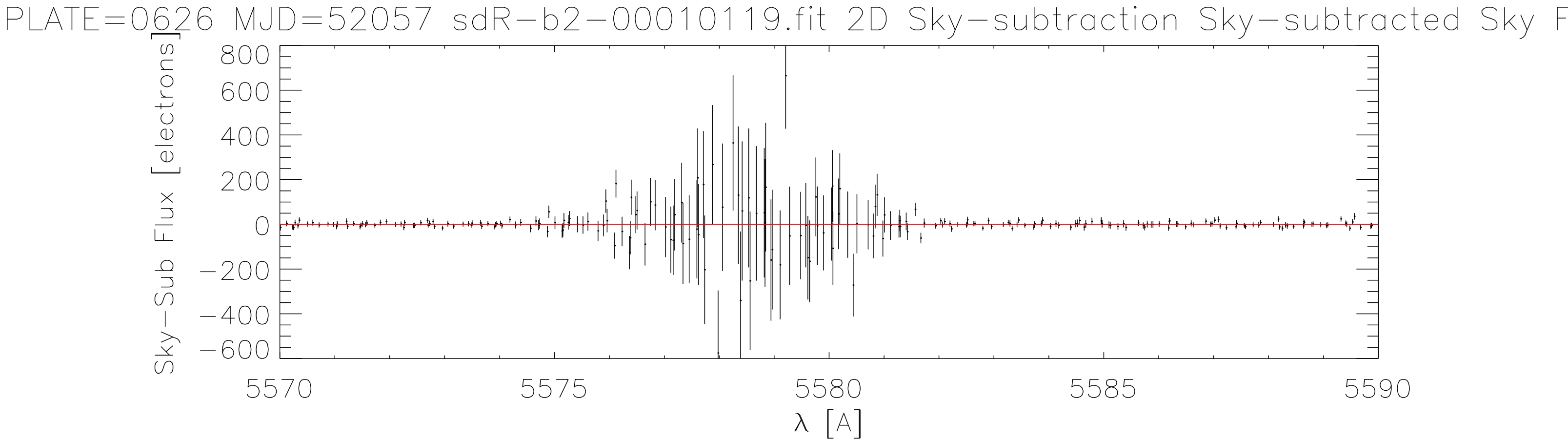

PLATE=0626 MJD=52057 sdR-b2-00010119.fit 1D Sky-subtraction Sky-subtracted Sky F

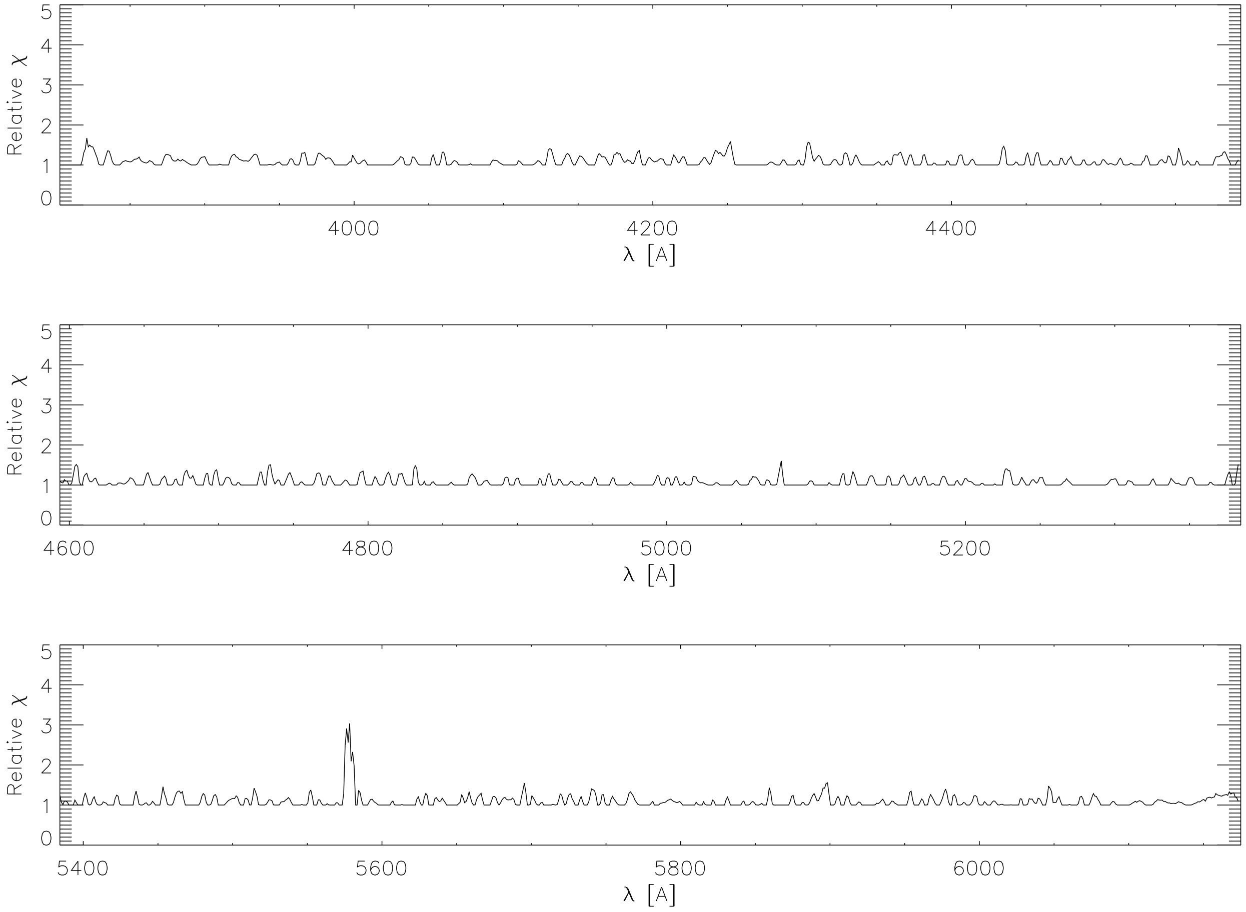

Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b2-00010119.fit 1D Sky-subtraction Rescaled Errors


PLATE=0626 MJD=52057 sdR-b2-00010119.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

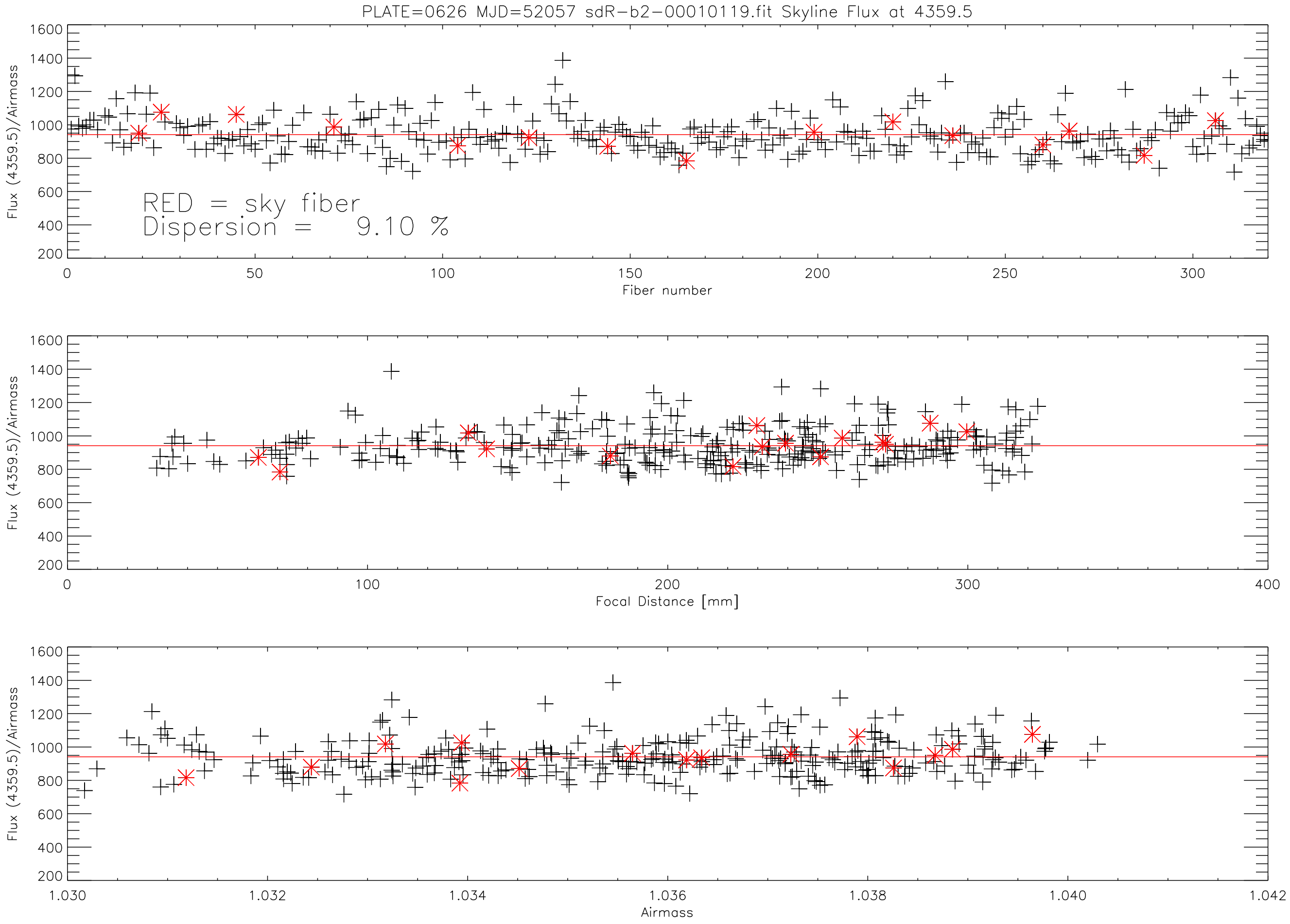

PLATE=0626 MJD=52057 sdR-b2-00010119.fit 2D Sky-subtraction Sky Fibers

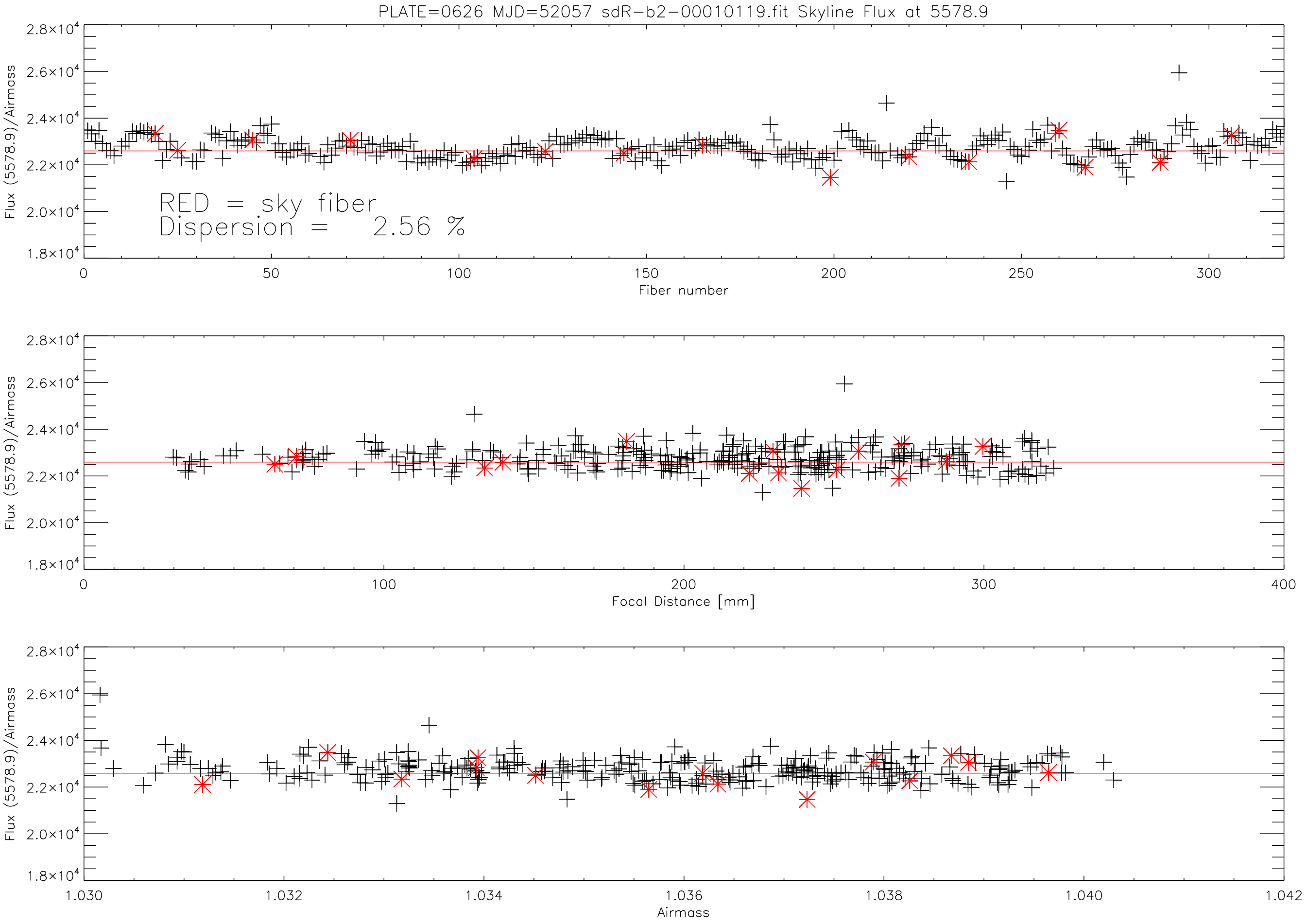

PLATE=0626 MJD=52057 sdR-b2-00010119.fit 2D Sky-subtraction Sky-subtracted Sky F

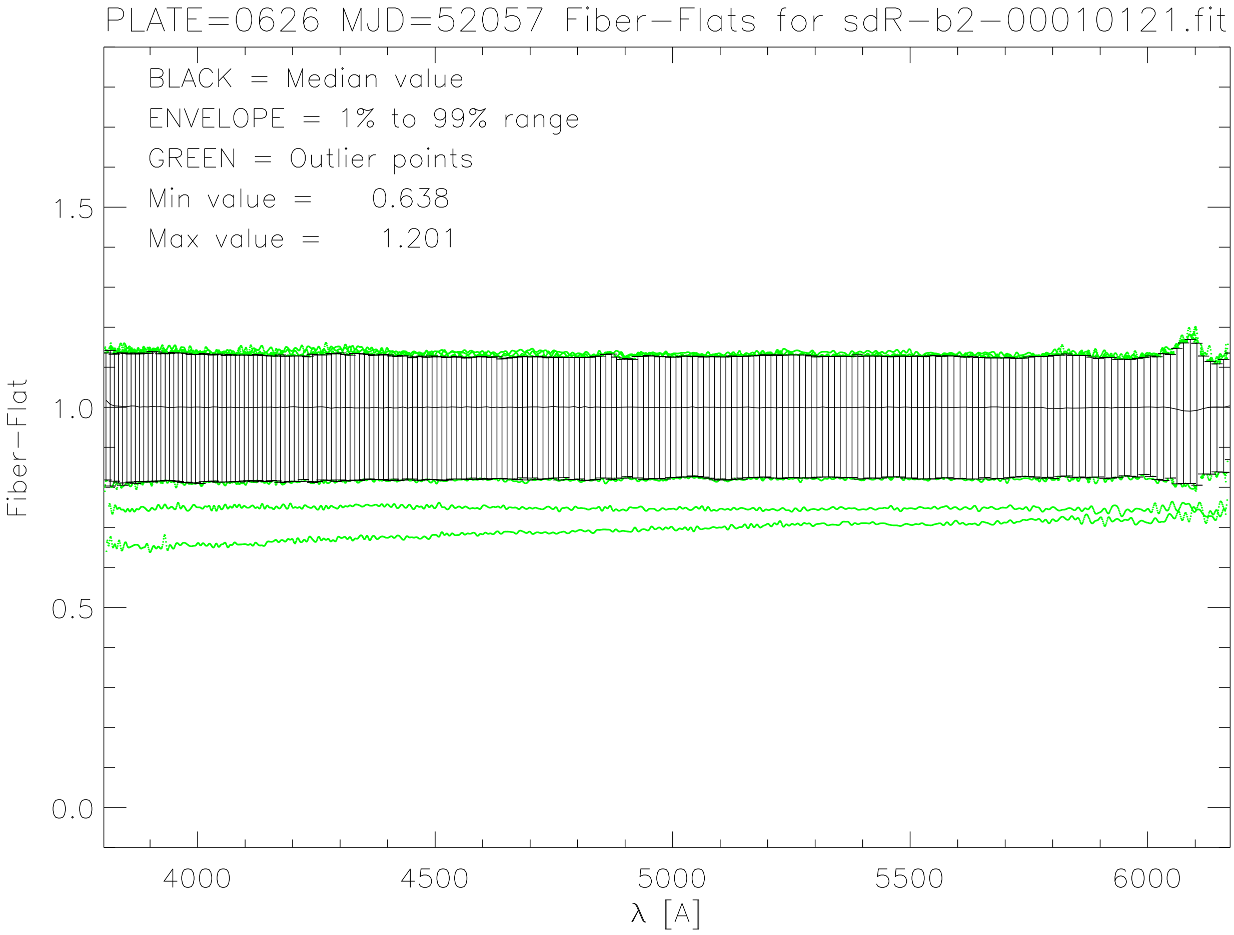


Number of sky fibers = 15

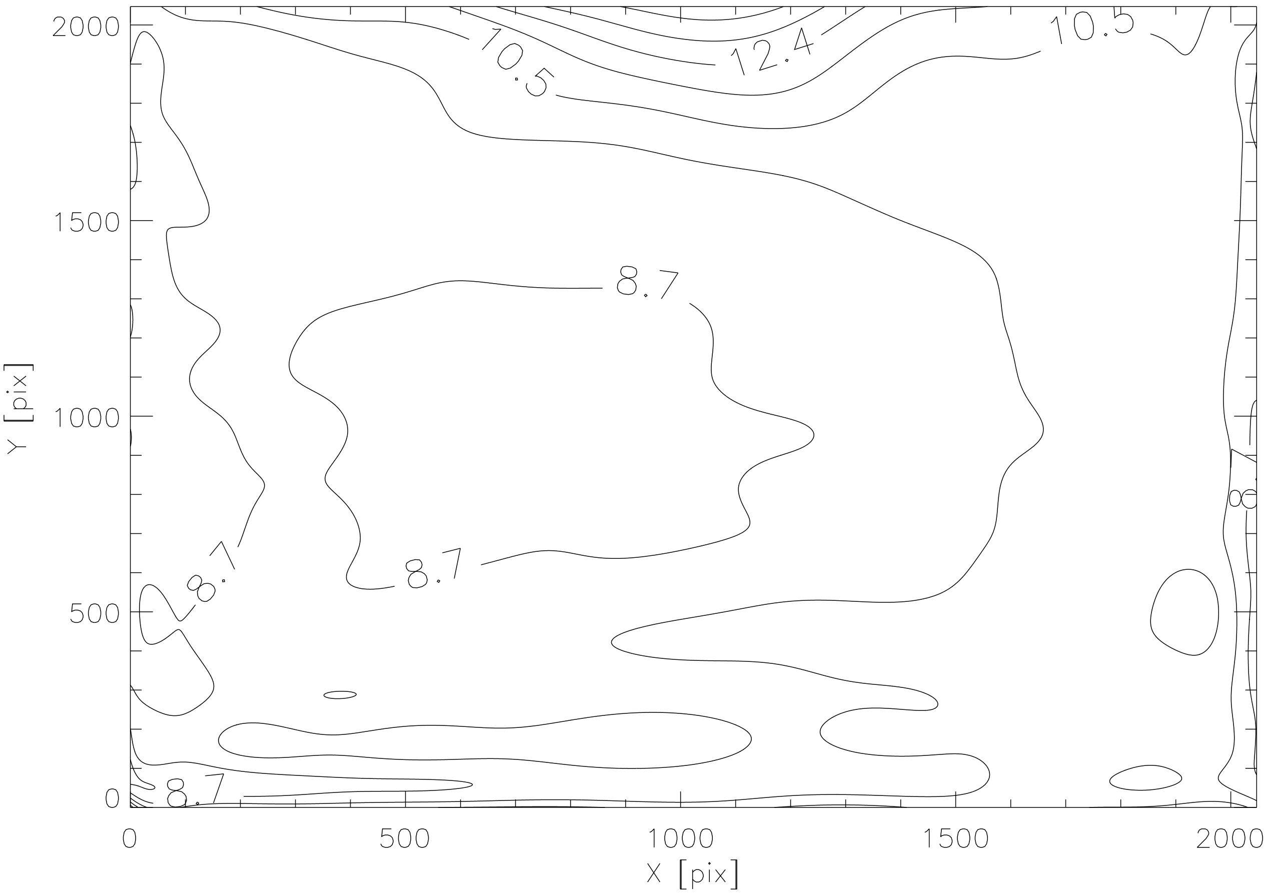
PLATE=0626 MJD=52057 sdR-b2-00010119.fit 2D Sky-subtraction Rescaled Errors

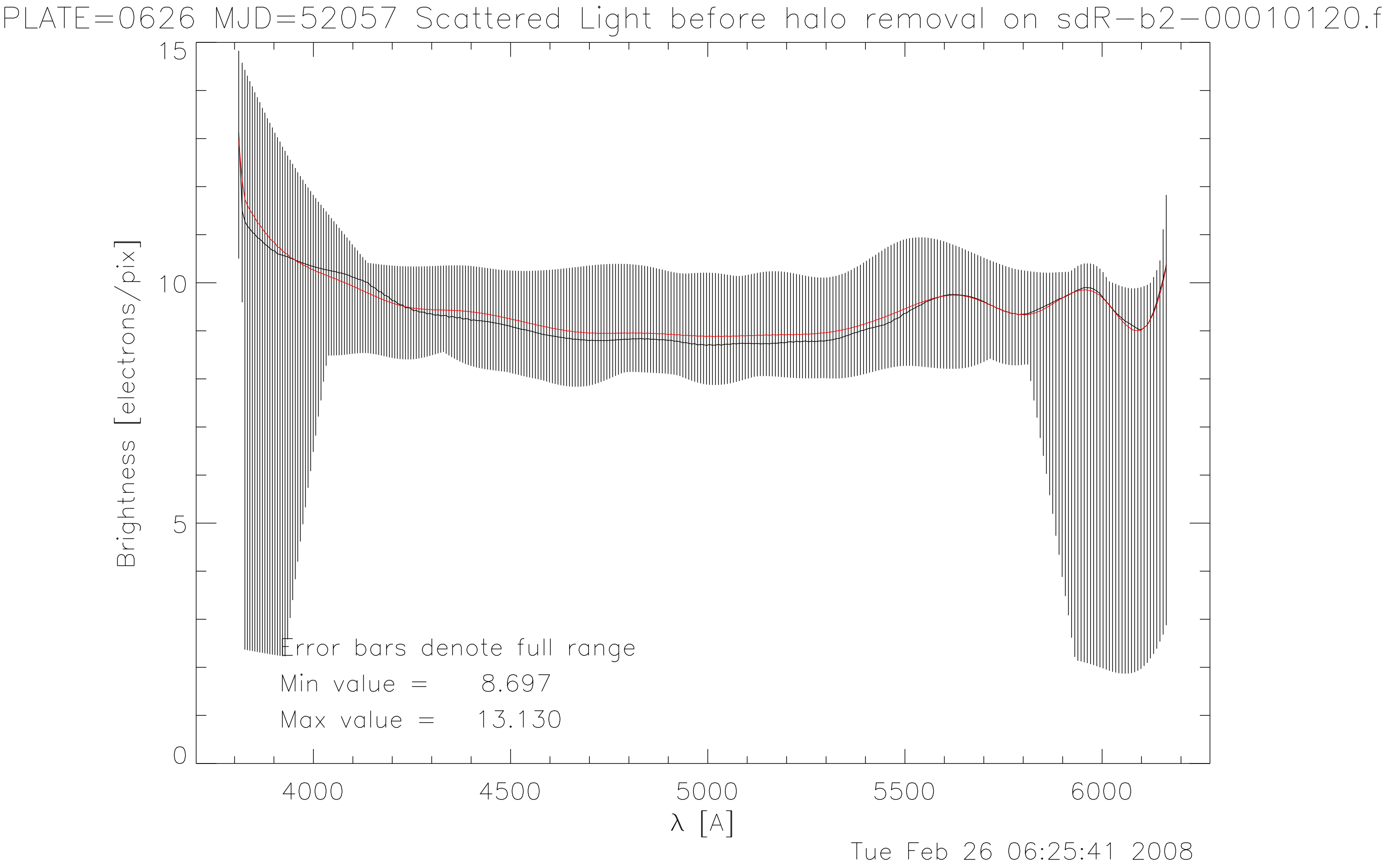

PLATE=0626 MJD=52057 sdR-b2-00010119.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
200
RED = sky fiber
Dispersion = 9.10 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
200
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
400
200
1.030
1.032
1.034
1.036
1.038
1.040
1.042
Airmass

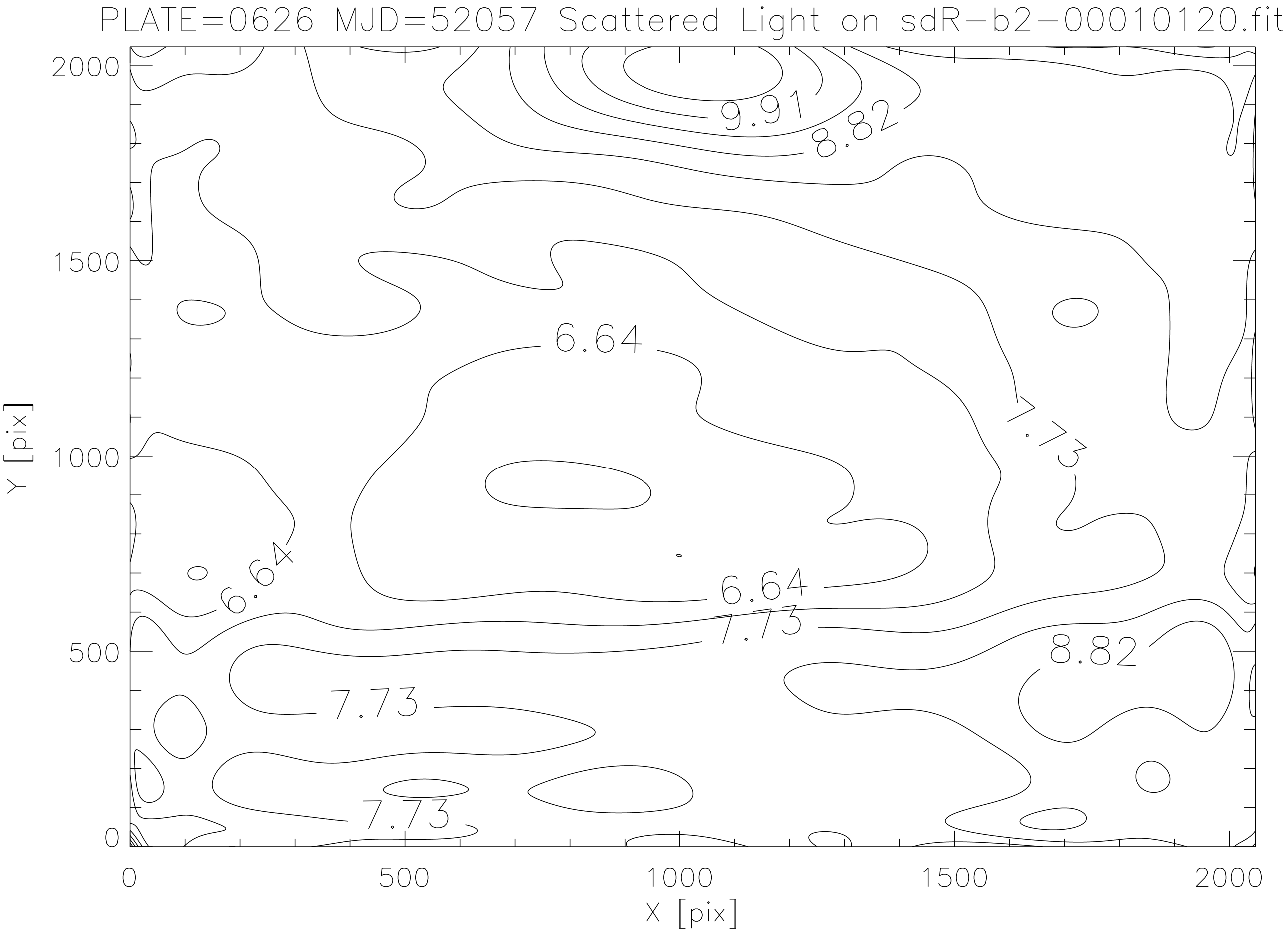

PLATE=0626 MJD=52057 sdR-b2-00010119.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 2.56 %
Flux (5578.9)/Airmass
1.8×10^4
2.0×10^4
2.2×10^4
2.4×10^4
2.6×10^4
2.8×10^4
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.030
1.032
1.034
1.036
1.038
1.040
1.042
Airmass

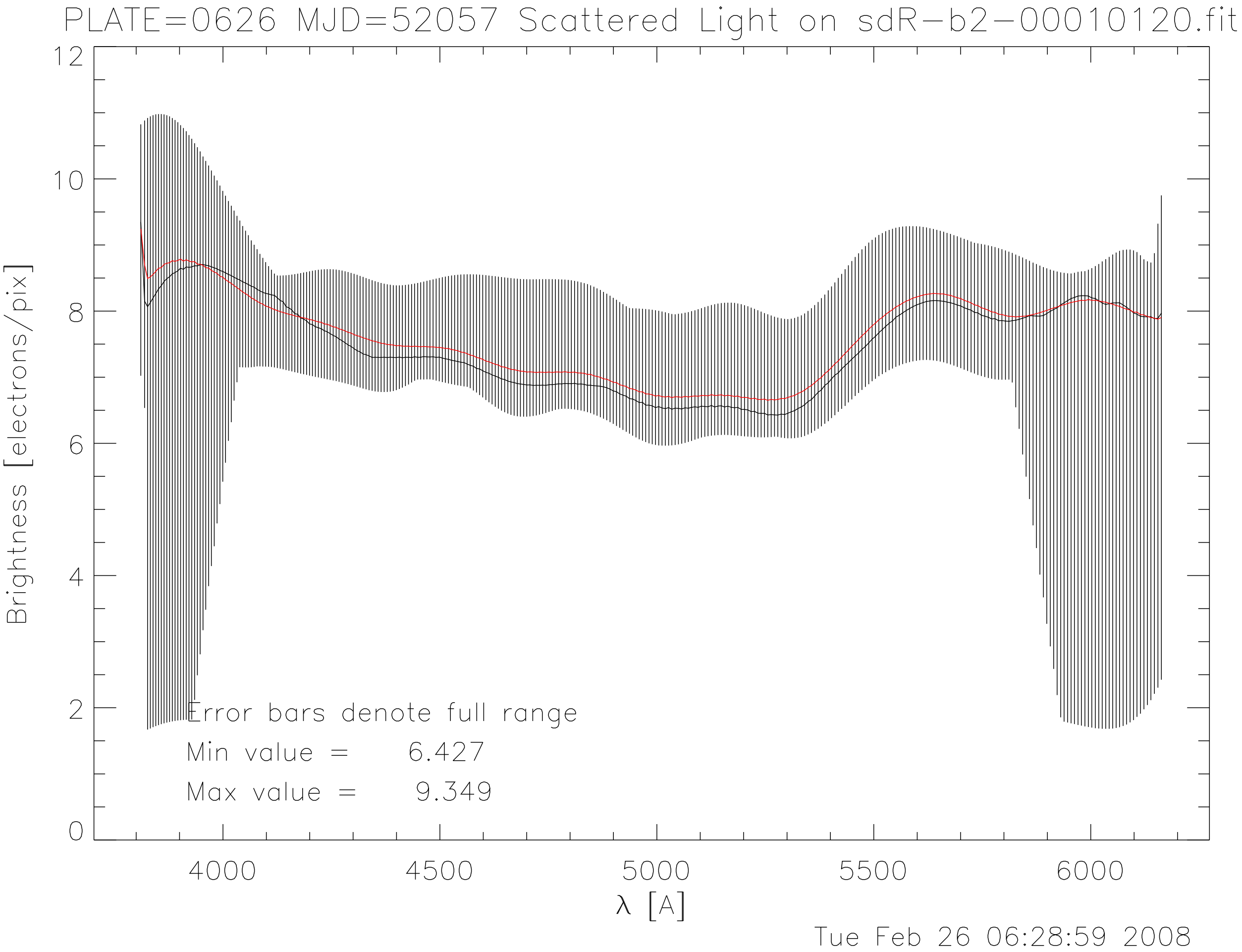


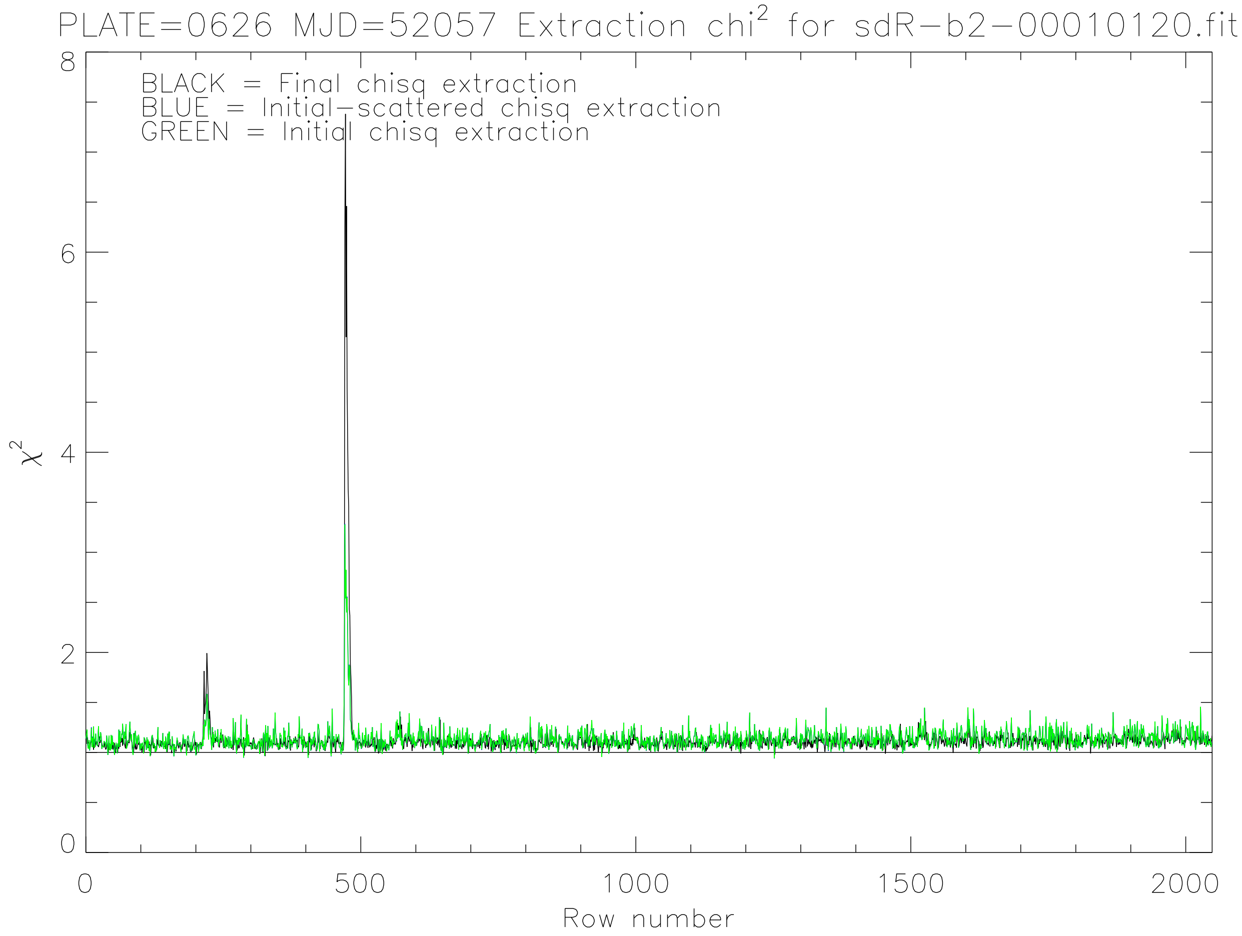
Tue Feb 26 06:24:48 2008

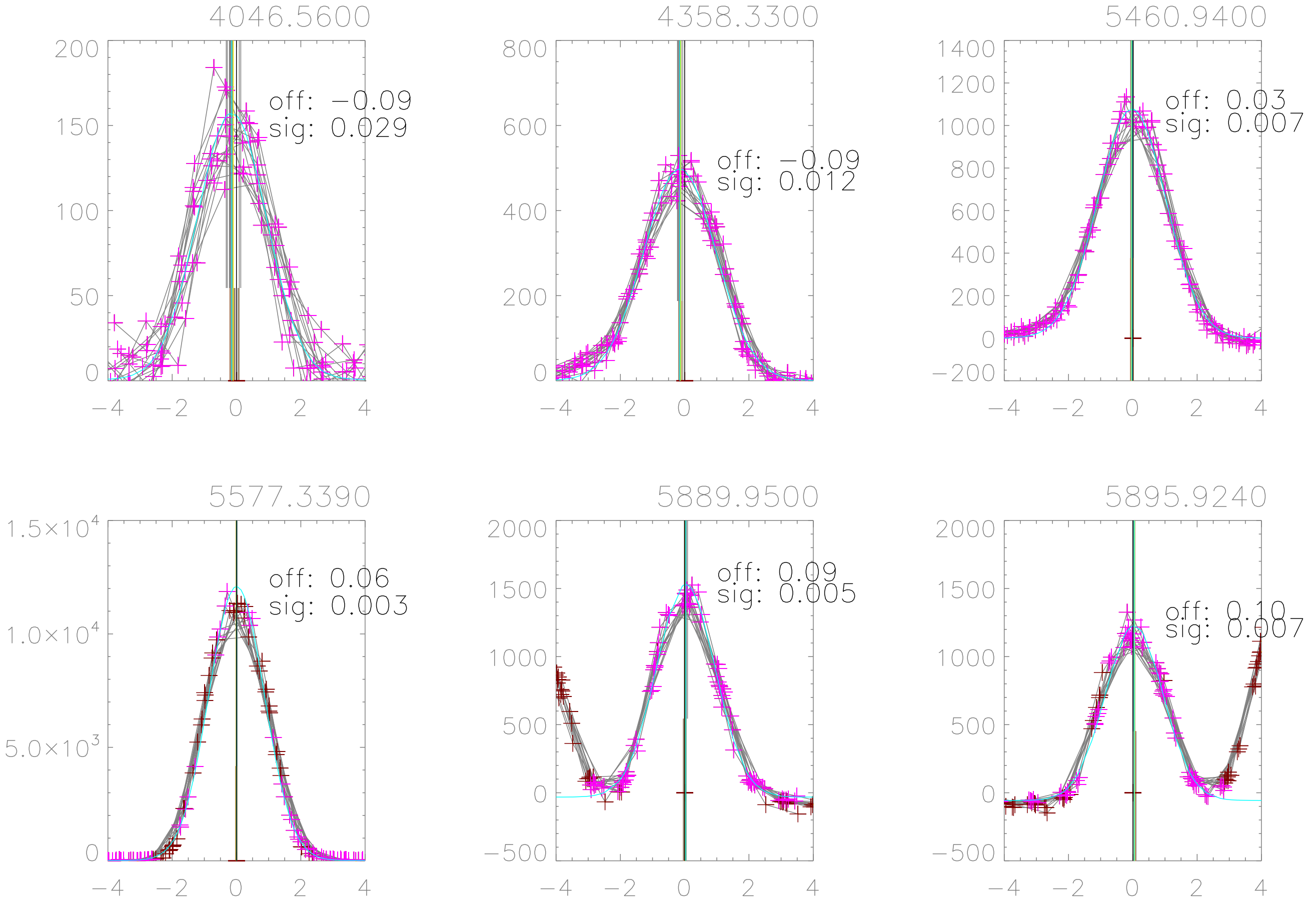

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010120.f

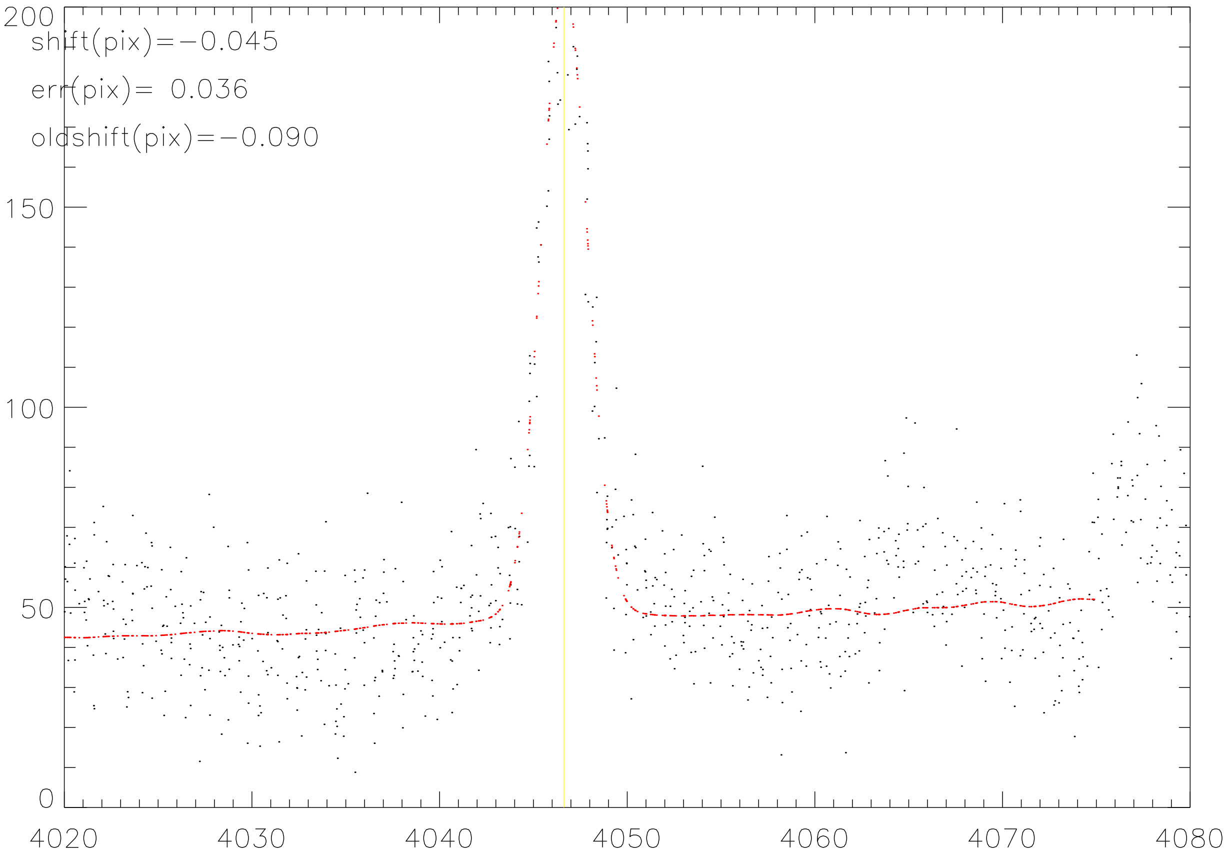

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010120.f
15
10
5
0
Brightness [electrons/pix]
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.697
Max value = 13.130
Tue Feb 26 06:25:41 2008

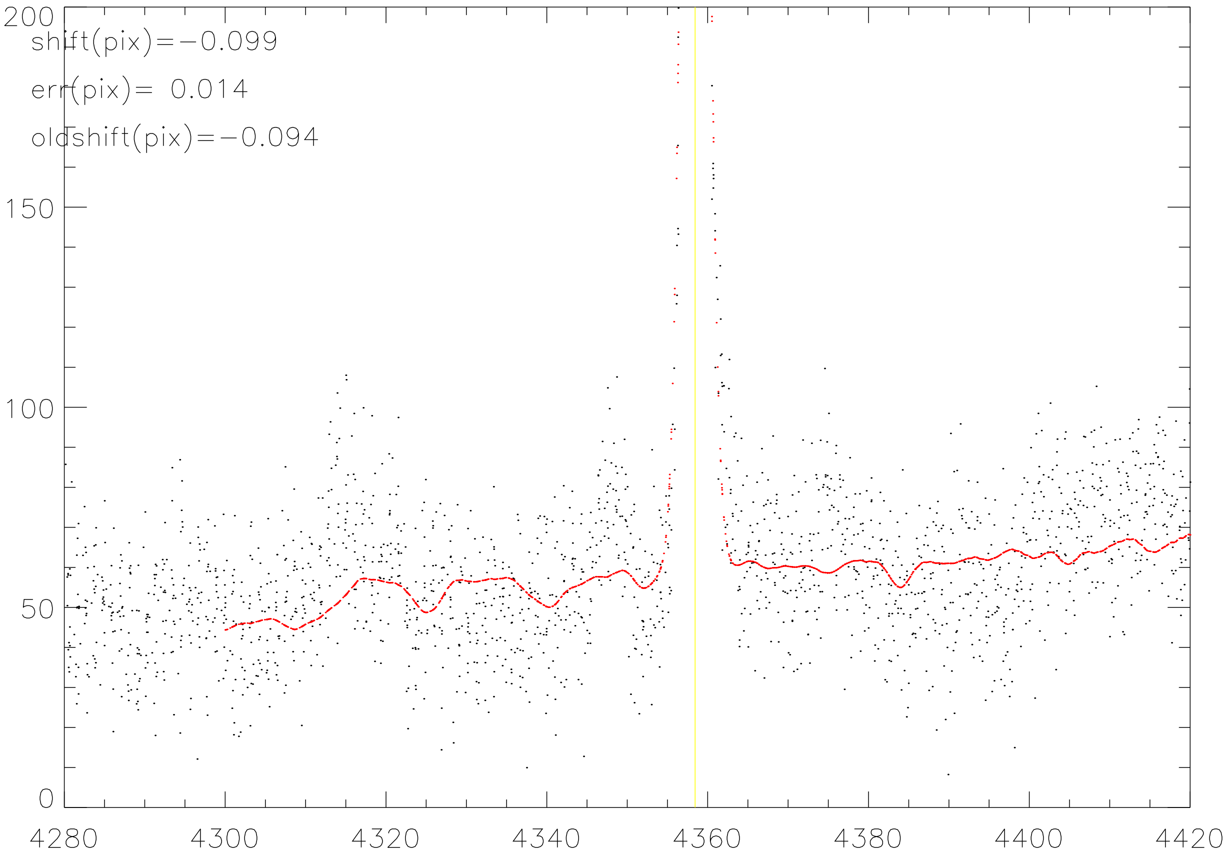

PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010120.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
9.91
8.82
6.64
7.73
6.64
6.64
7.73
8.82
7.73
7.73

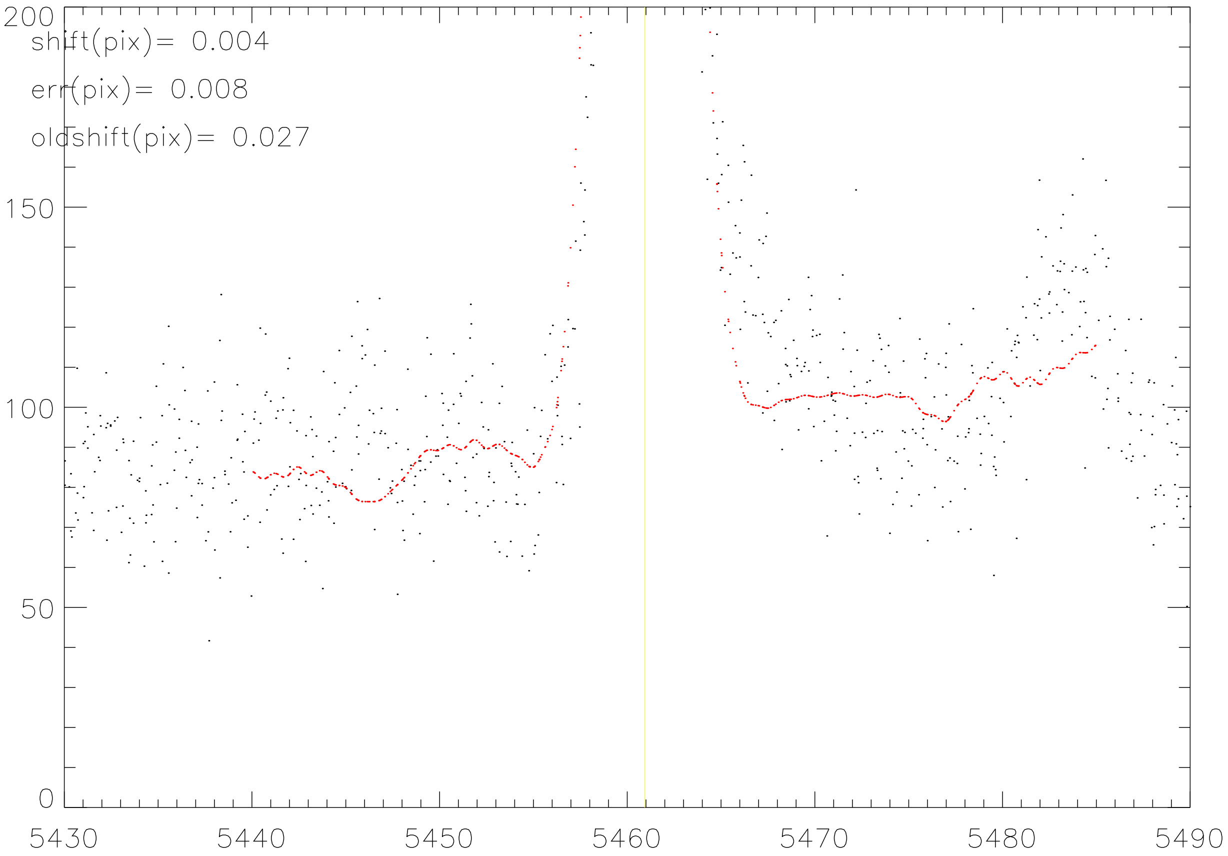

PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010120.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 6.427
Max value = 9.349
Tue Feb 26 06:28:59 2008

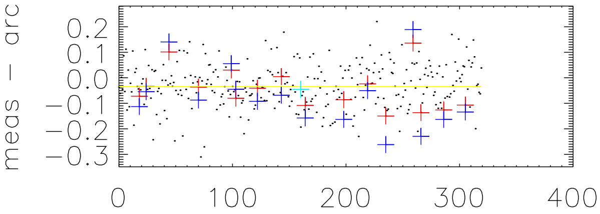

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b2-00010120.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
0
500
1000
1500
2000
Row number

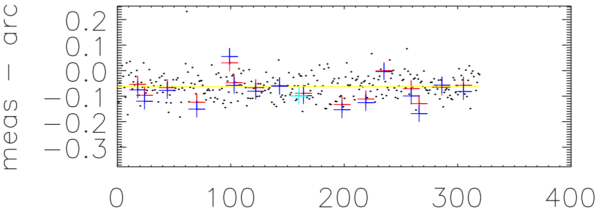

4046.5600
off: −0.09
sig: 0.029
4358.3300
off: −0.09
sig: 0.012
5460.9400
off: 0.03
sig: 0.007
5577.3390
off: 0.06
sig: 0.003
5889.9500
off: 0.09
sig: 0.005
5895.9240
off: 0.10
sig: 0.007
−4
−2
0
2
4
0
50
100
150
200
200
400
600
800
−200
1000
1200
1400
5.0×10³
1.0×10⁴
1.5×10⁴
−500
500
1500
2000

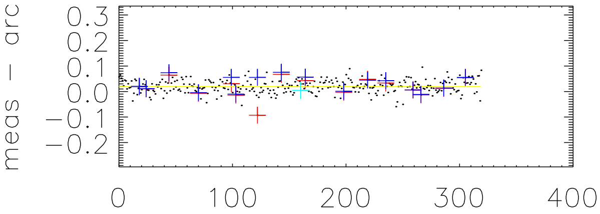

shift(pix)=−0.045
err(pix)= 0.036
oldshift(pix)=−0.090
0
50
100
150
200
4020
4030
4040
4050
4060
4070
4080

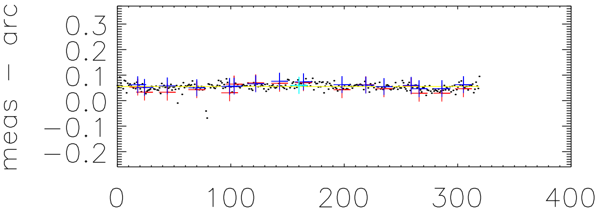

shift(pix)=−0.099
err(pix)= 0.014
oldshift(pix)=−0.094
0
50
100
150
200
4280
4300
4320
4340
4360
4380
4400
4420

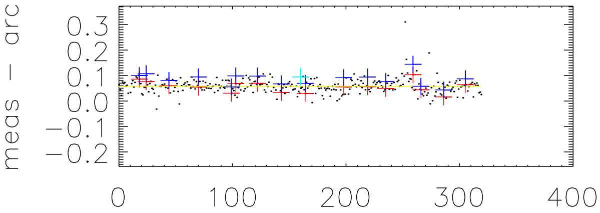

shift(pix)= 0.004
err(pix)= 0.008
oldshift(pix)= 0.027
0
50
100
150
200
5430
5440
5450
5460
5470
5480
5490

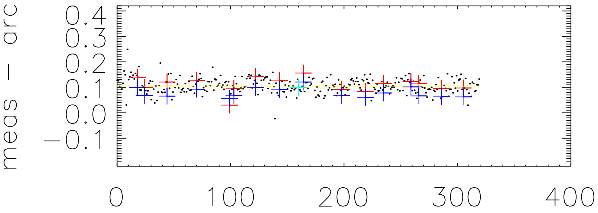

4046.5600

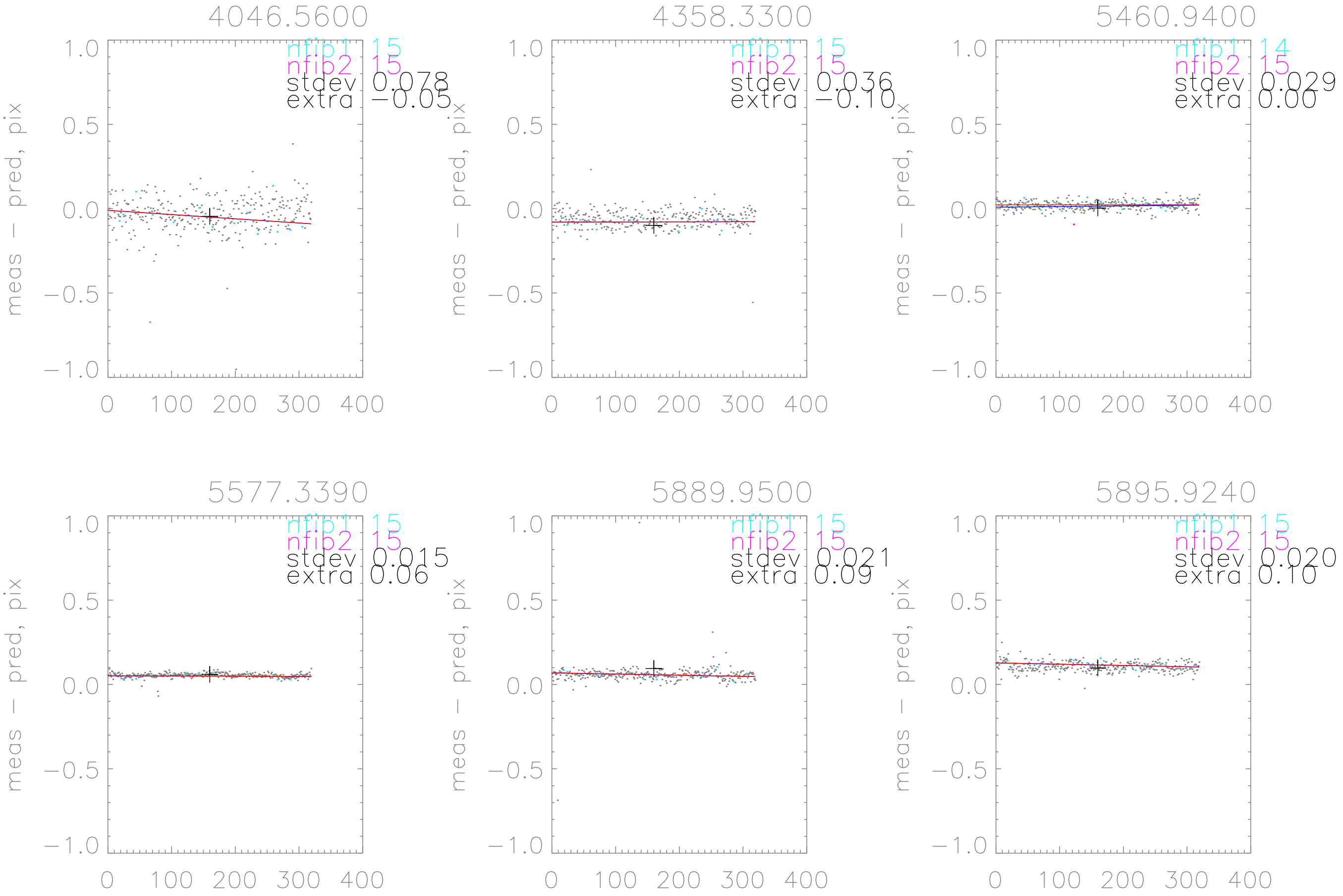

4358.3300

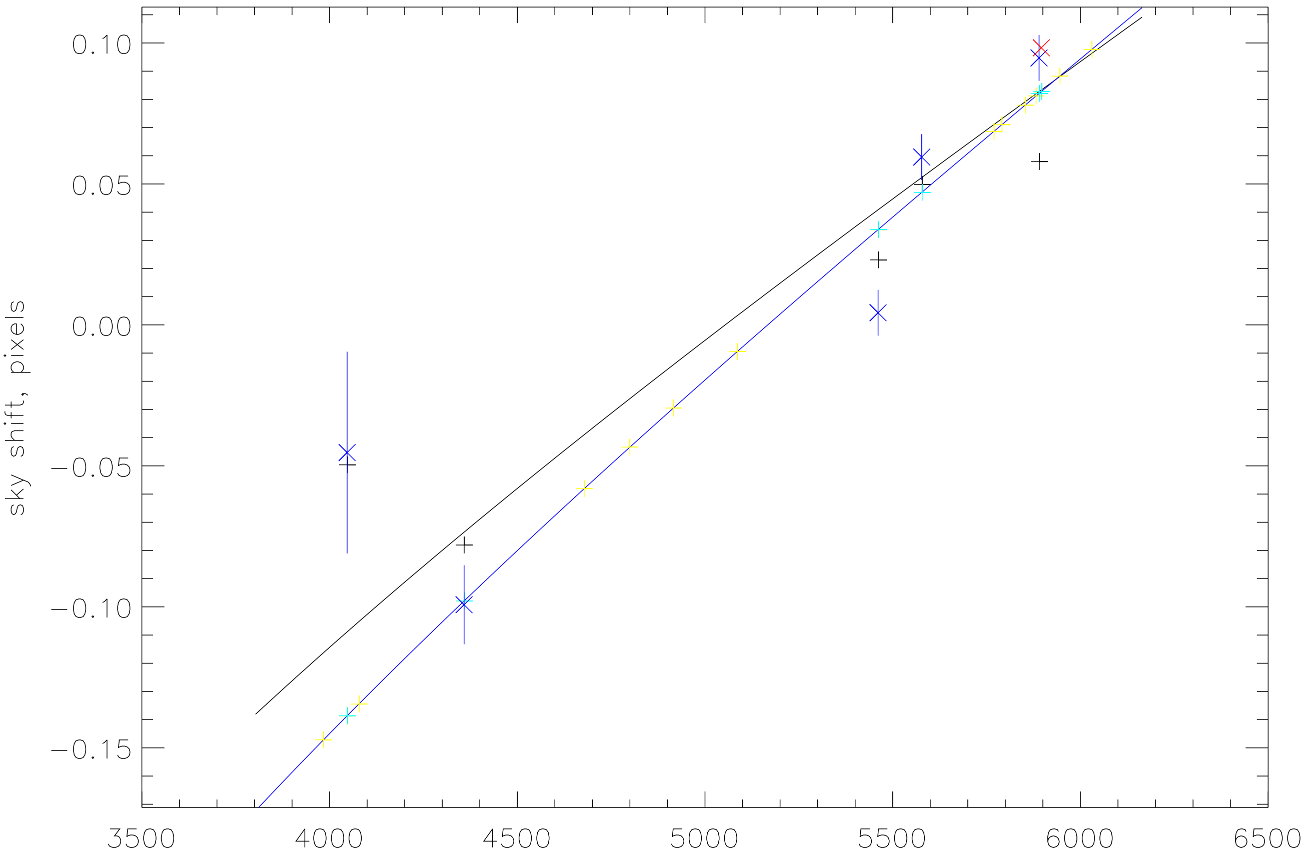

5460.9400

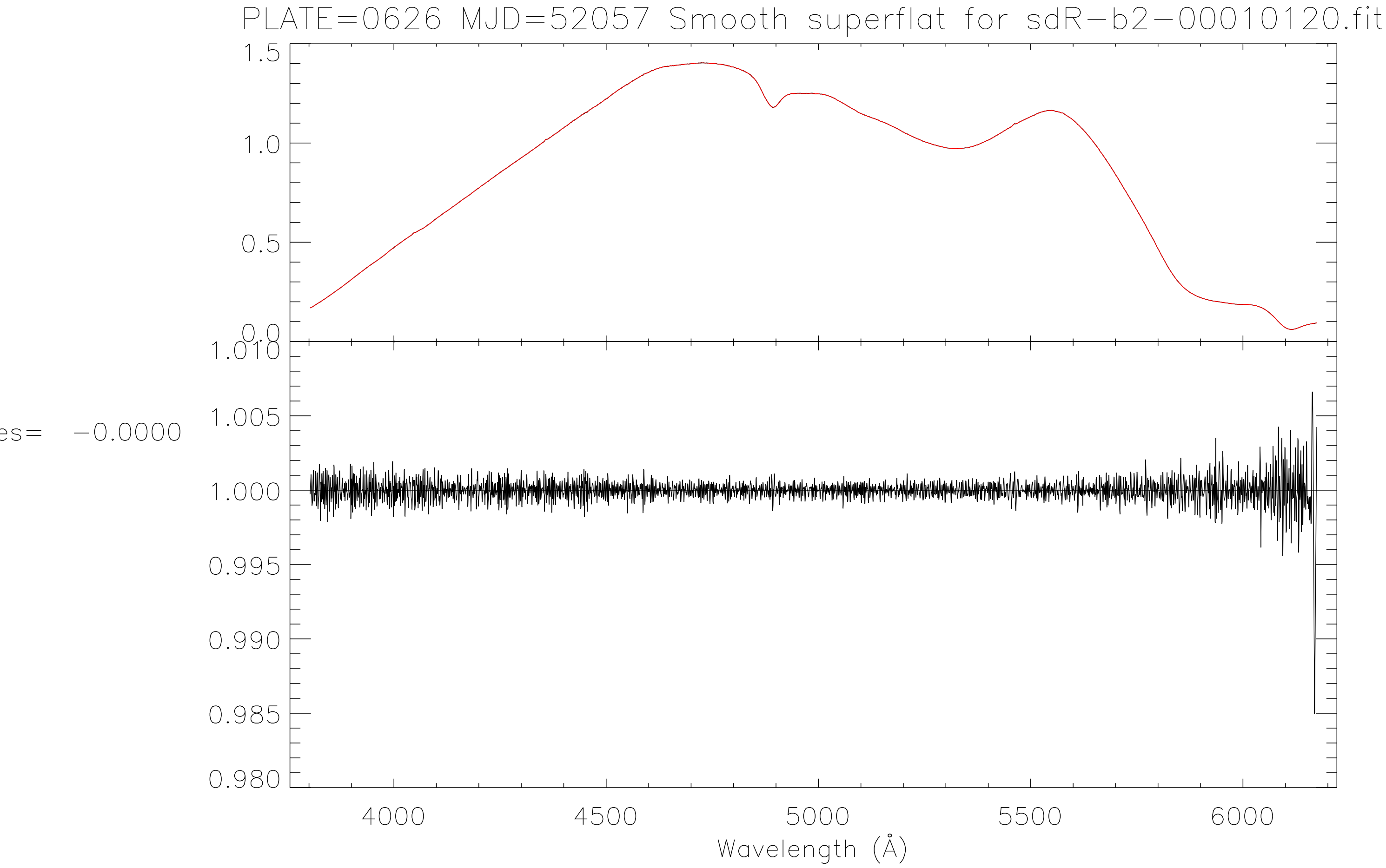

5577.3390

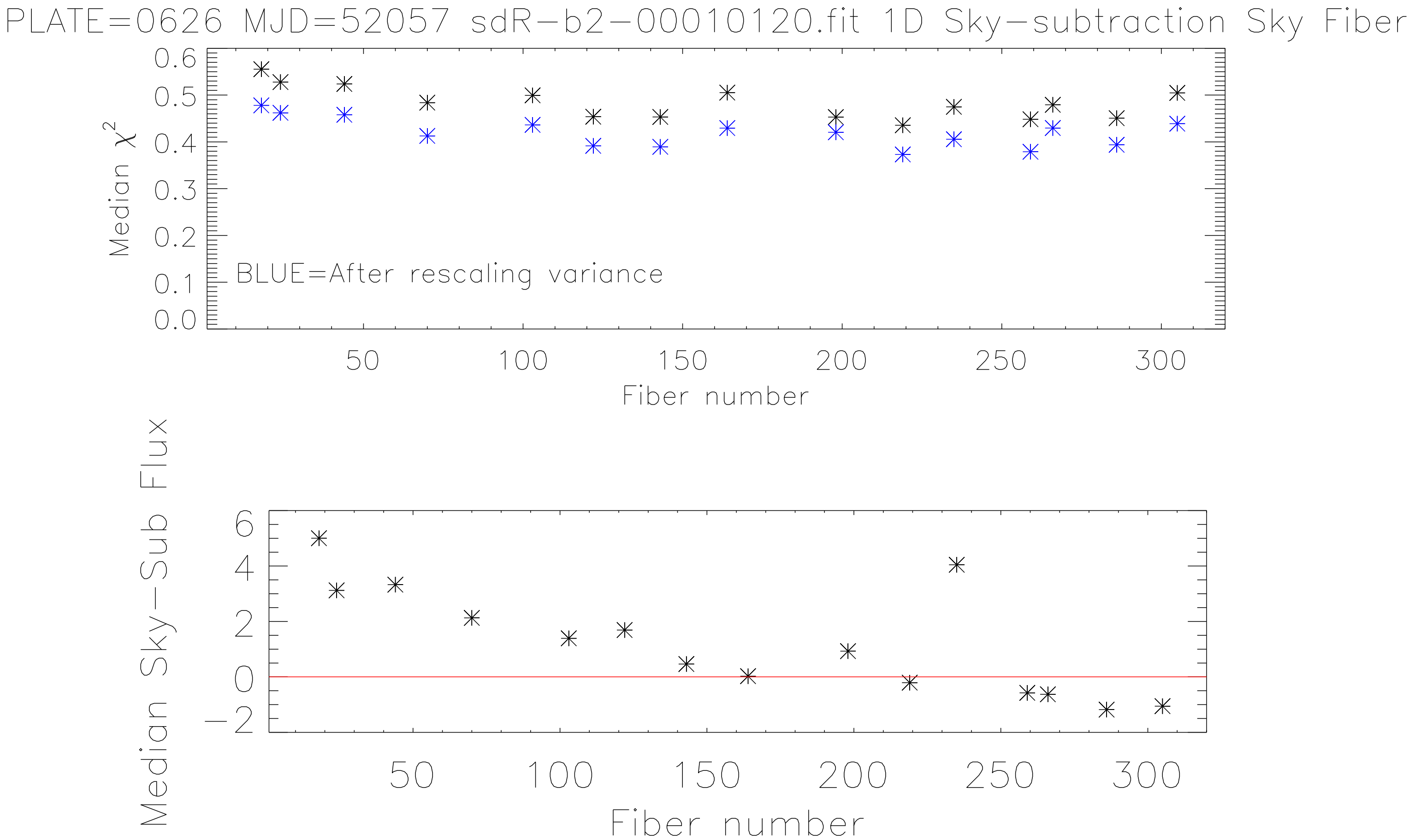

5889.9500

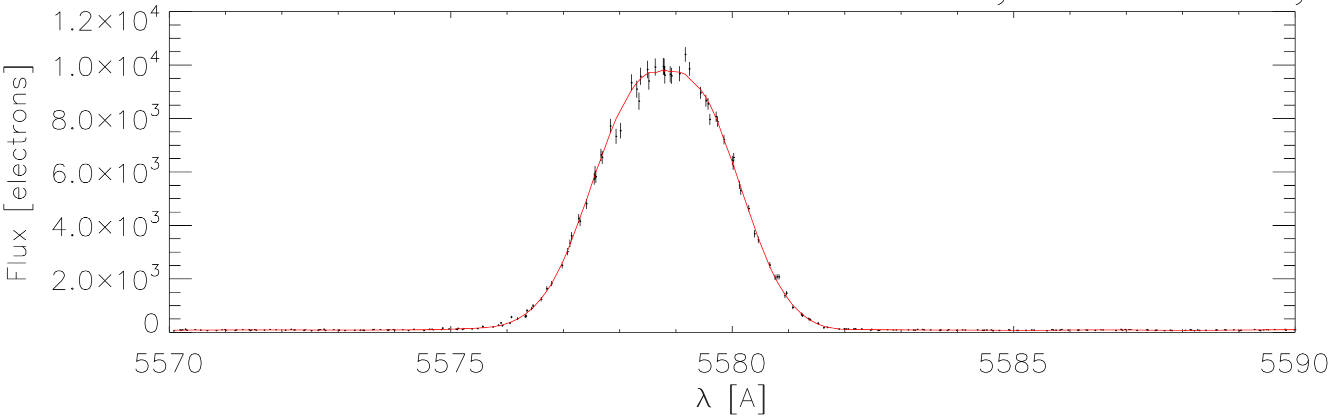

5895.9240


4046.5600
nfib1 15
nfib2 15
stdev 0.078
extra −0.05
4358.3300
nfib1 15
nfib2 15
stdev 0.036
extra −0.10
5460.9400
nfib1 14
nfib2 15
stdev 0.029
extra 0.00
5577.3390
nfib1 15
nfib2 15
stdev 0.015
extra 0.06
5889.9500
nfib1 15
nfib2 15
stdev 0.021
extra 0.09
5895.9240
nfib1 15
nfib2 15
stdev 0.020
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

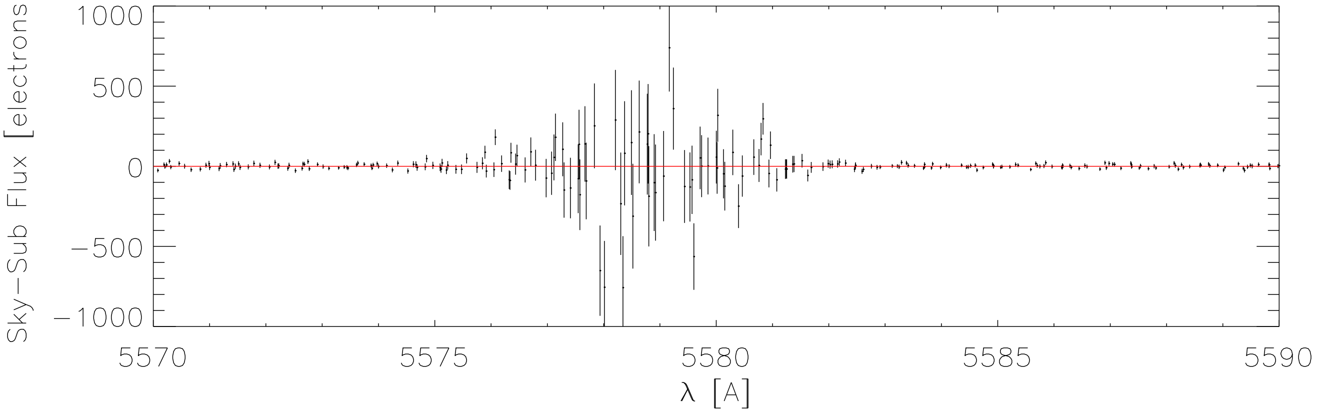

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
3500
4000
4500
5000
5500
6000
6500


PLATE=0626 MJD=52057 Smooth superflat for sdR-b2-00010120.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es=   −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

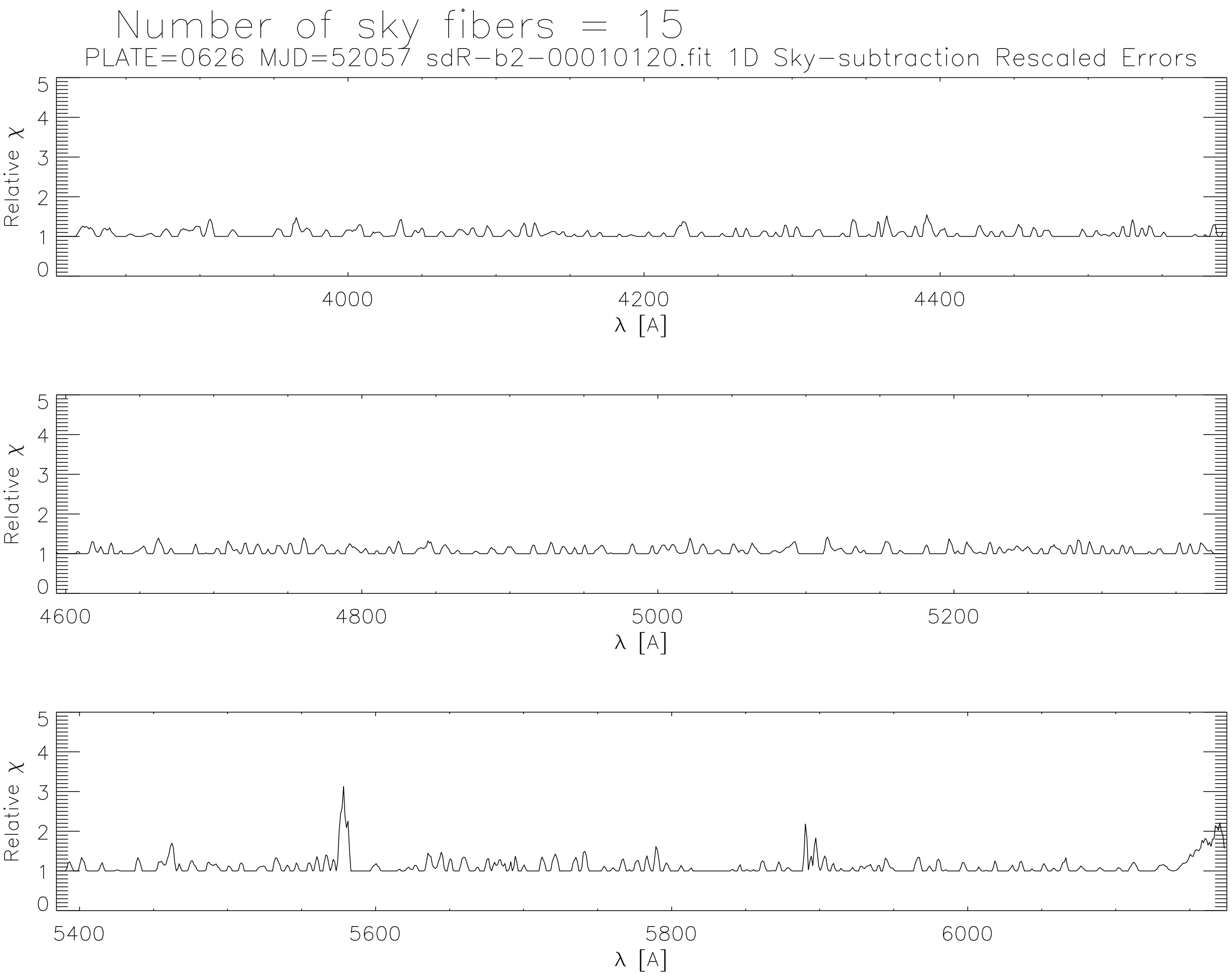

PLATE=0626 MJD=52057 sdR-b2-00010120.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
0
2
4
6
50
100
150
200
250
300
Fiber number



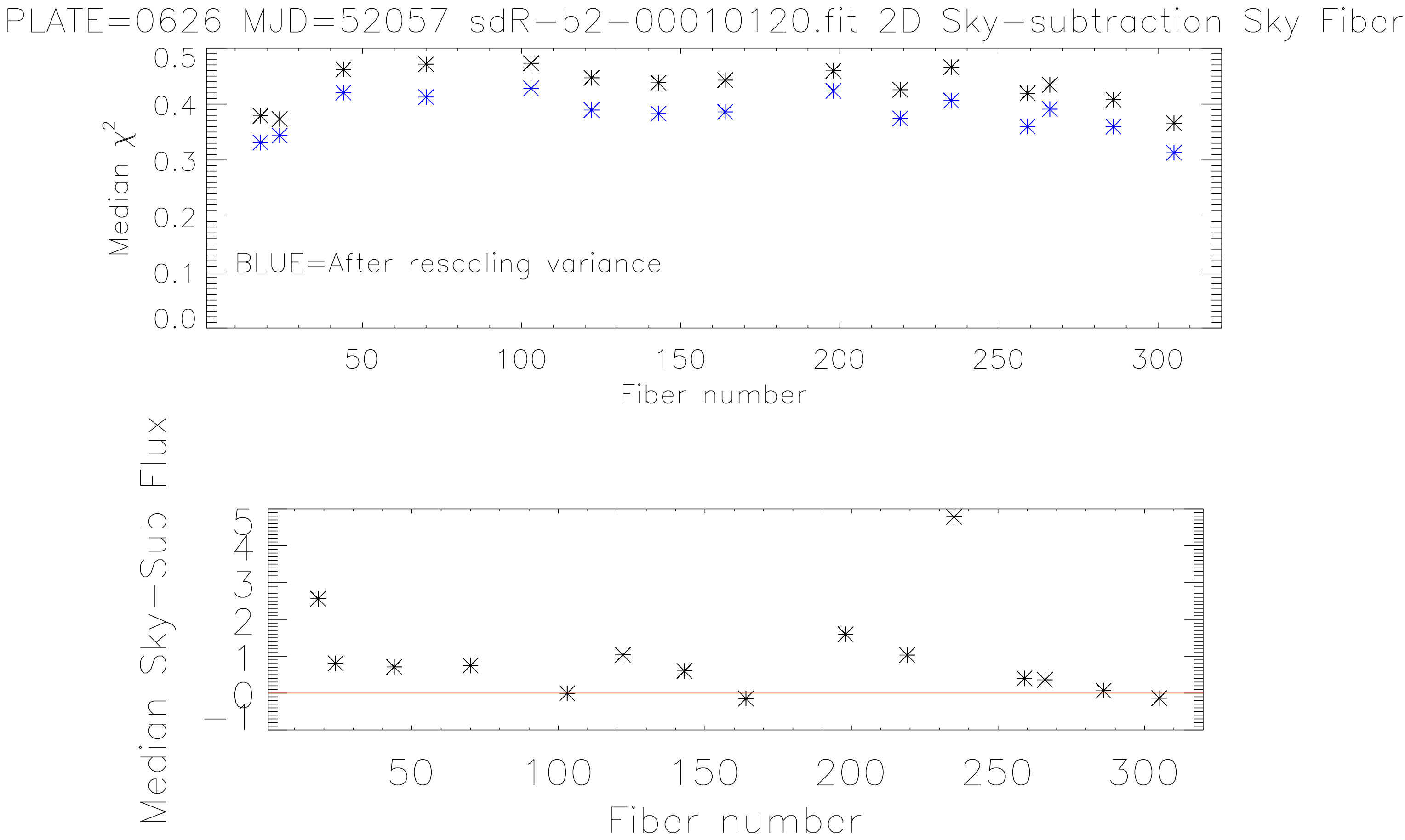
PLATE=0626 MJD=52057 sdR-b2-00010120.fit 1D Sky-subtraction Sky Fibers



PLATE=0626 MJD=52057 sdR-b2-00010120.fit 1D Sky-subtraction Sky-subtracted Sky F

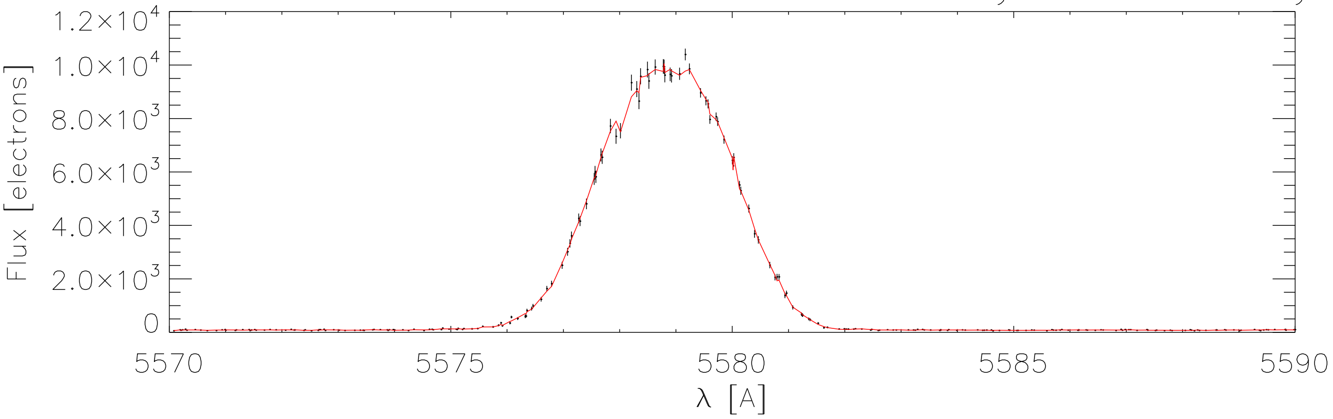

Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b2-00010120.fit 1D Sky-subtraction Rescaled Errors

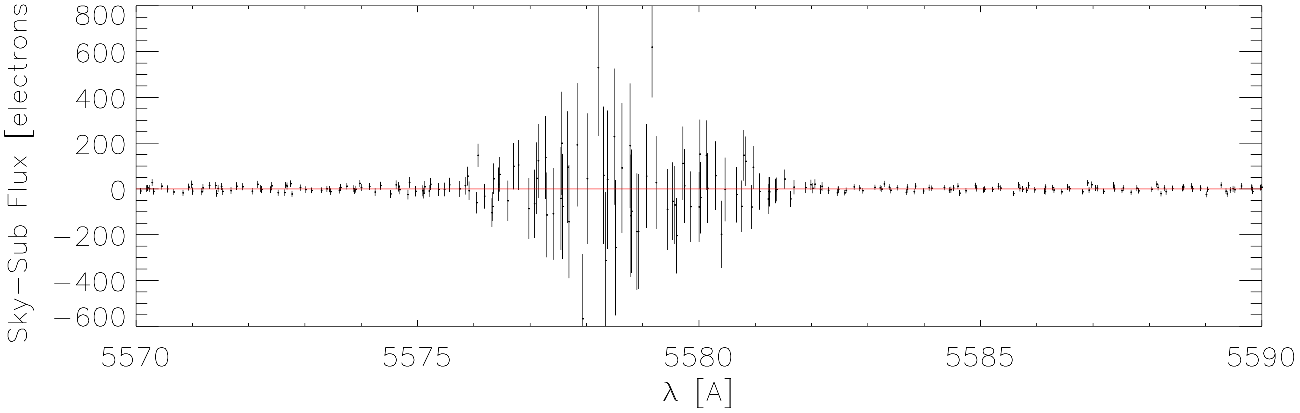


PLATE=0626 MJD=52057 sdR-b2-00010120.fit 2D Sky-subtraction Sky Fiber

PLATE=0626 MJD=52057 sdR-b2-00010120.fit 2D Sky-subtraction Sky Fibers

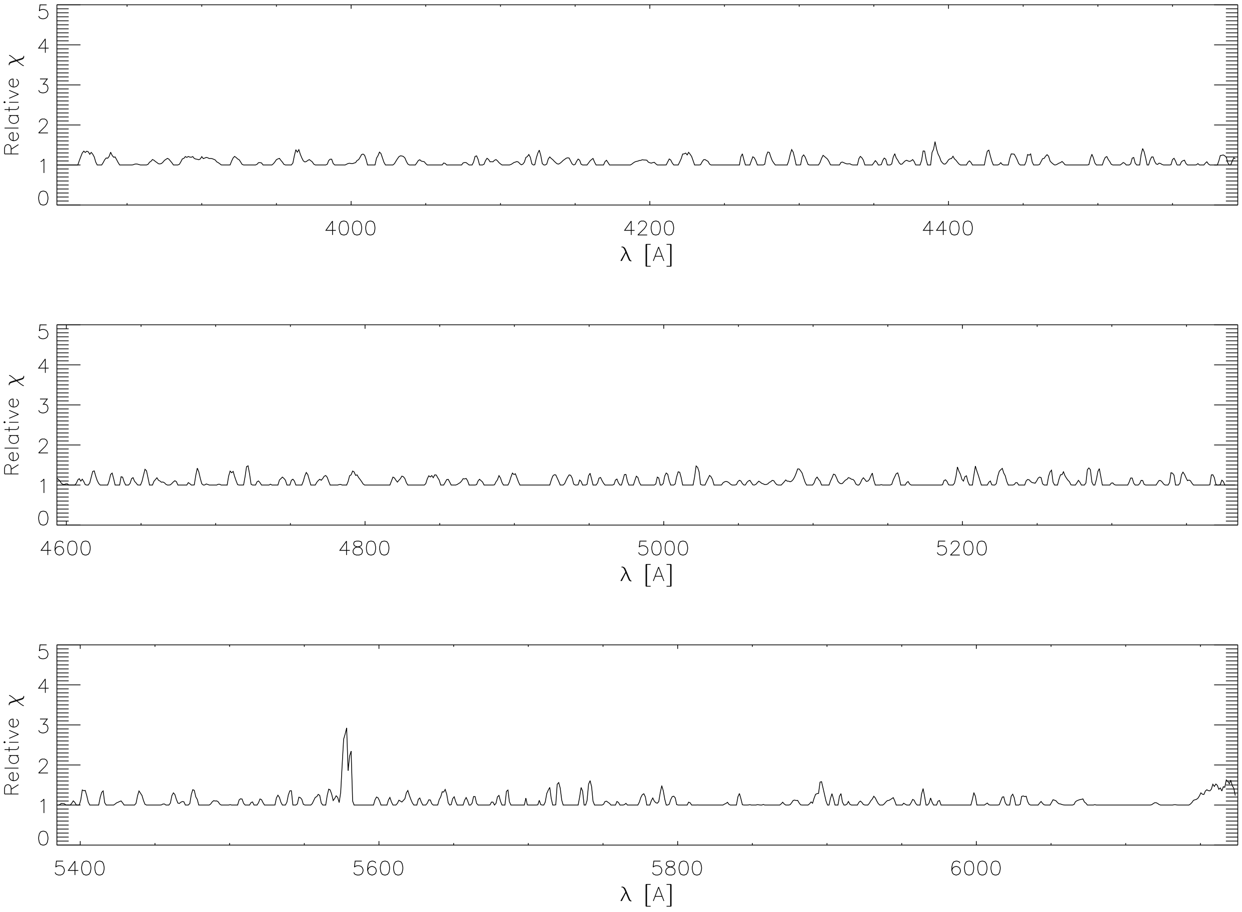


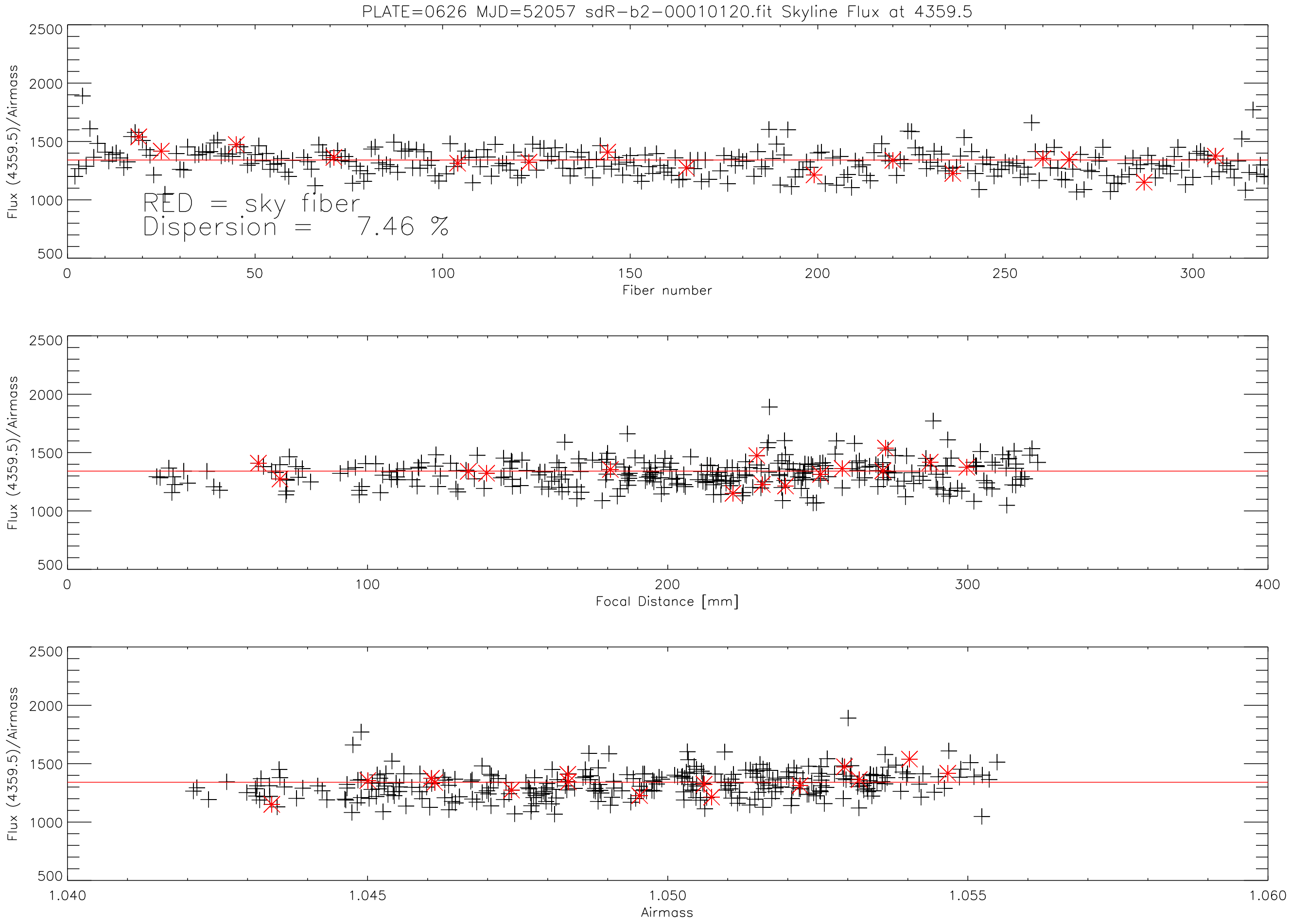
PLATE=0626 MJD=52057 sdR-b2-00010120.fit 2D Sky-subtraction Sky-subtracted Sky F

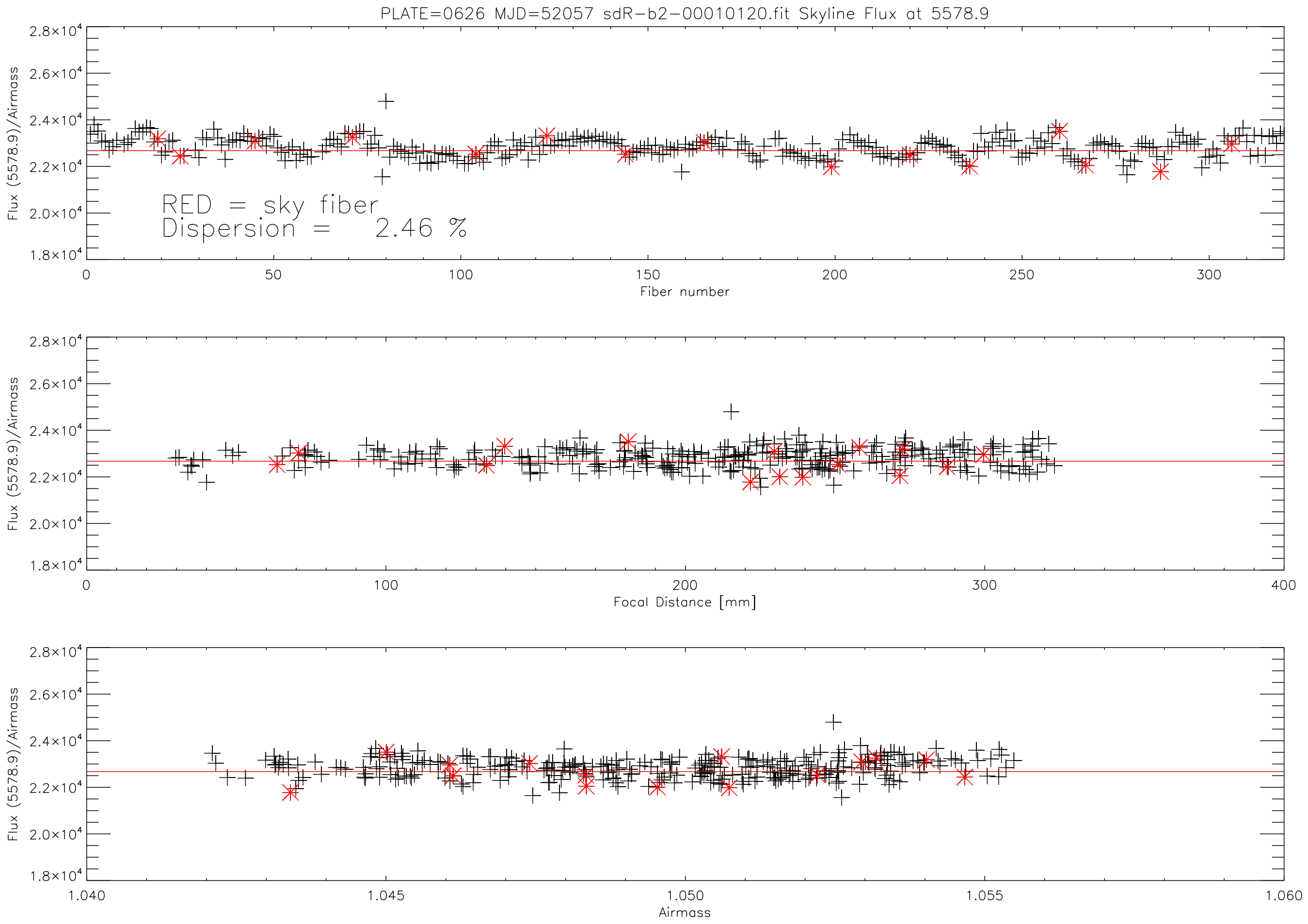


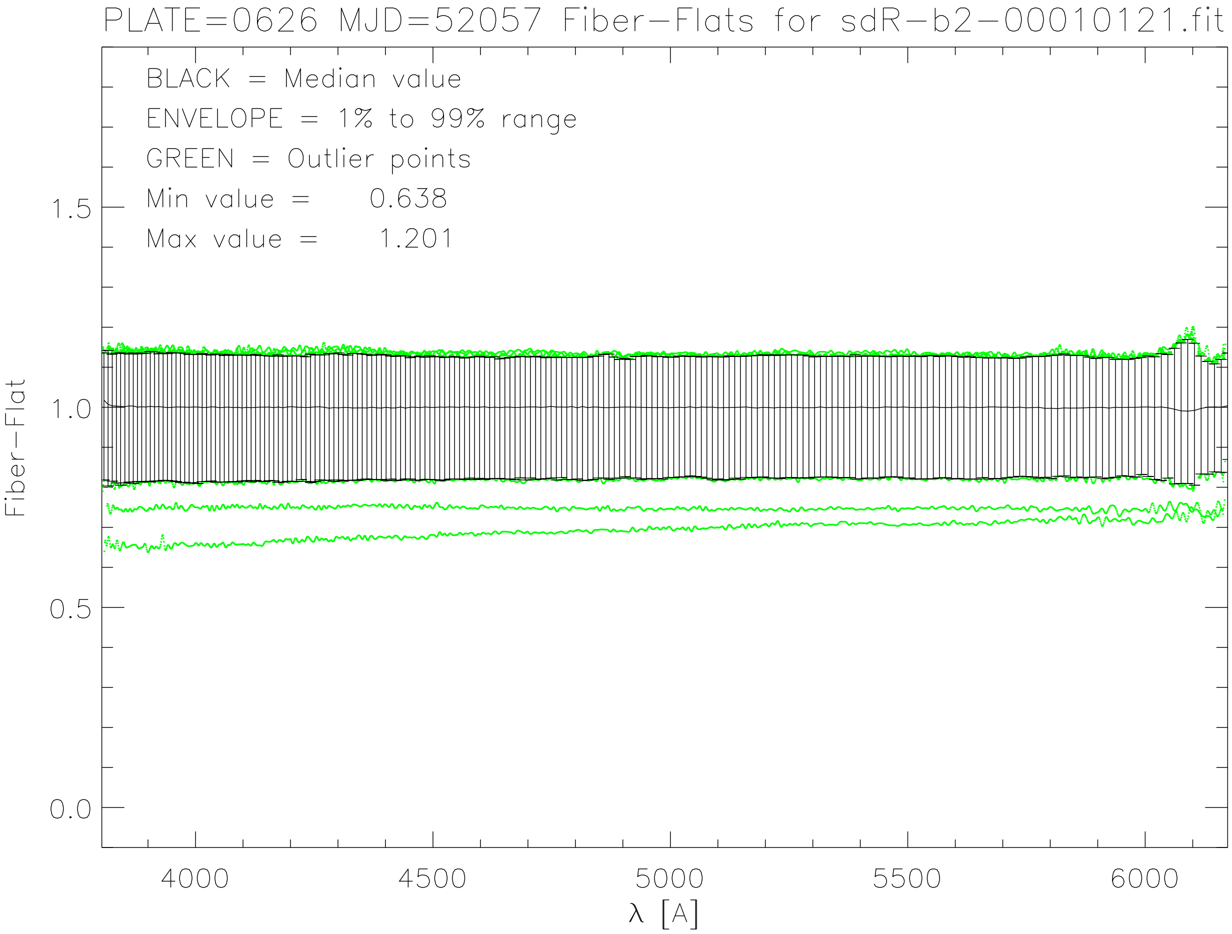
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b2-00010120.fit 2D Sky-subtraction Rescaled Errors



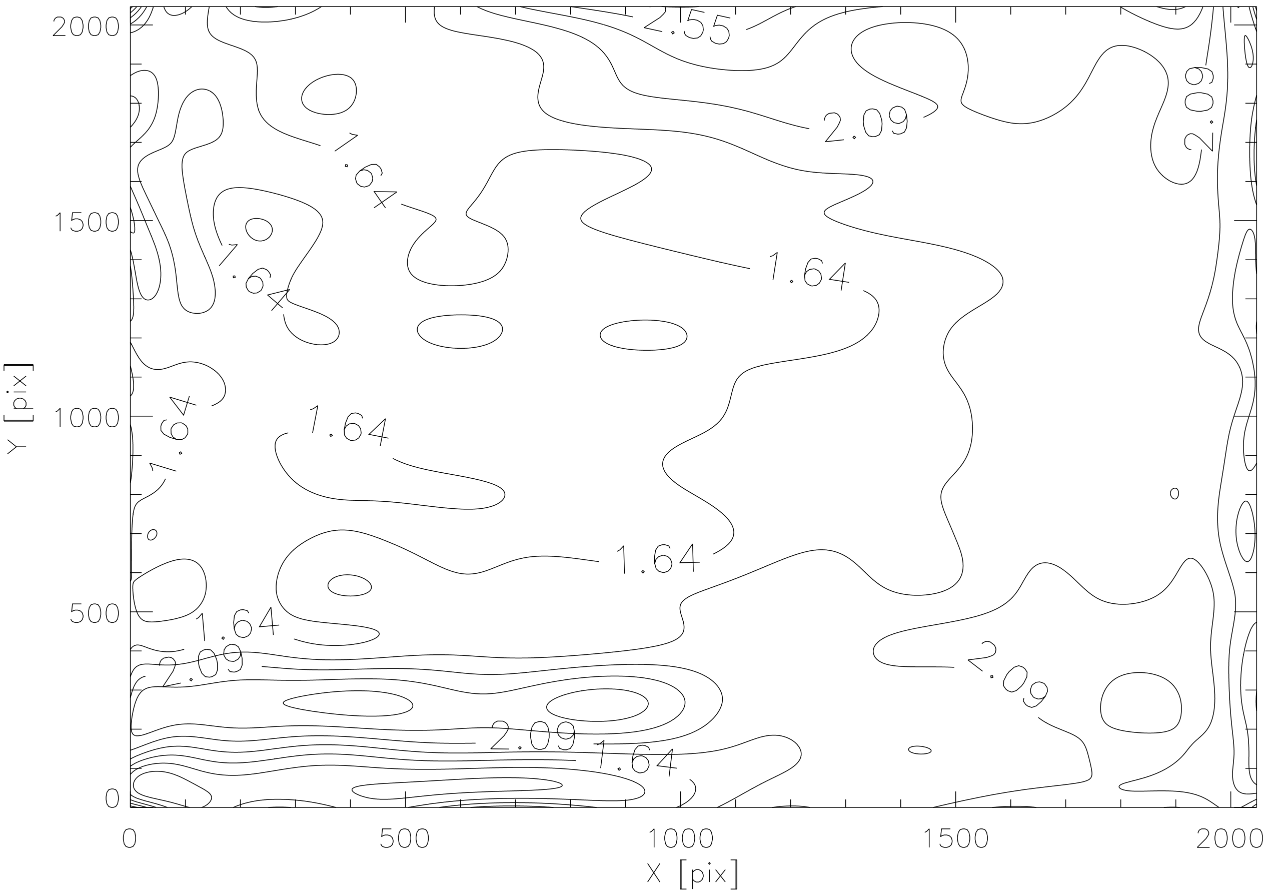

PLATE=0626 MJD=52057 sdR-b2-00010120.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 7.46 %
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2500
2000
1500
1000
500
1.040
1.045
1.050
1.055
1.060
Airmass


PLATE=0626 MJD=52057 sdR-b2-00010120.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
2.8×10^4
2.6×10^4
2.4×10^4
2.2×10^4
2.0×10^4
1.8×10^4
RED = sky fiber
Dispersion = 2.46 %
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.040
1.045
1.050
1.055
1.060
Airmass



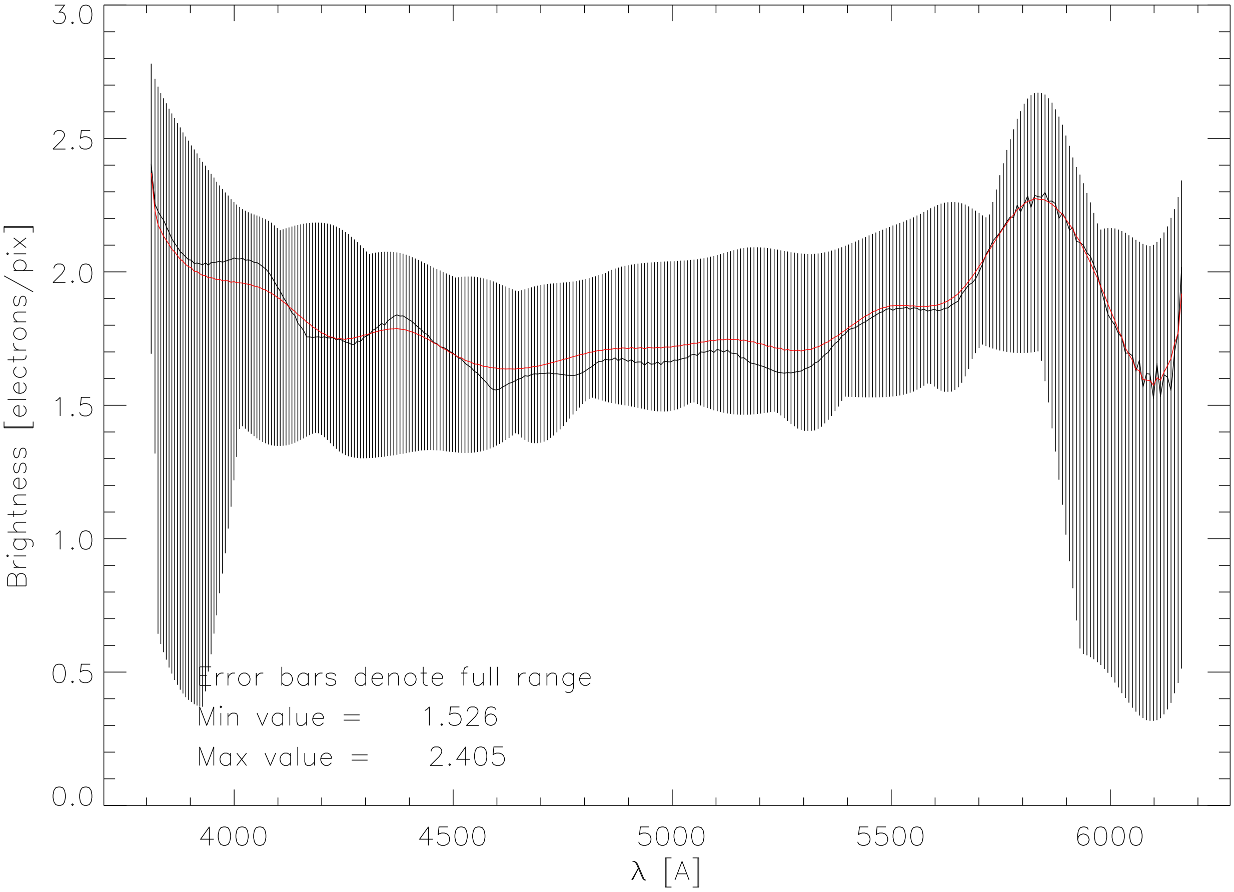
PLATE=0626 MJD=52057 Fiber-Flats for sdR-b2-00010121.fit

Tue Feb 26 06:30:13 2008

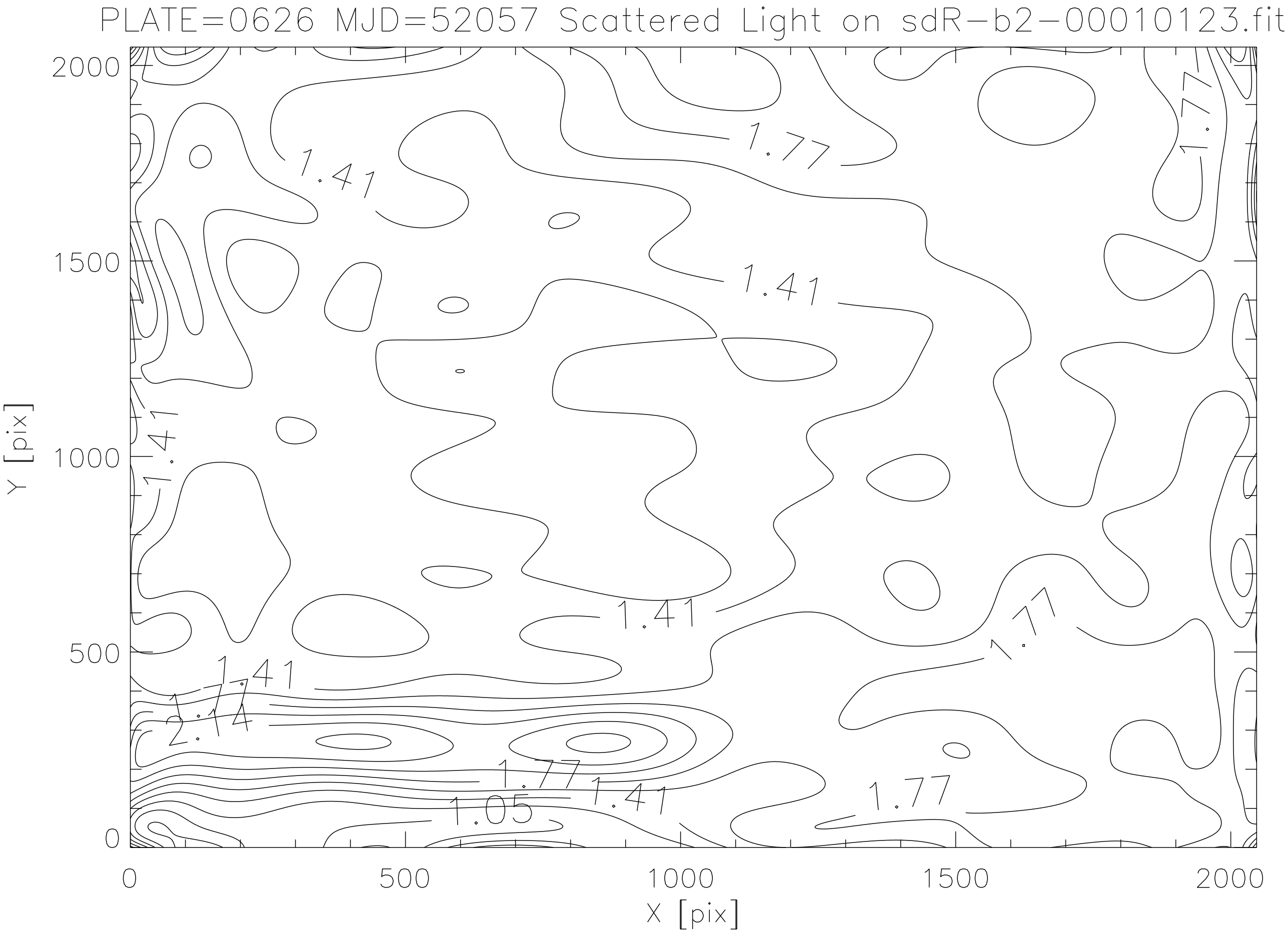


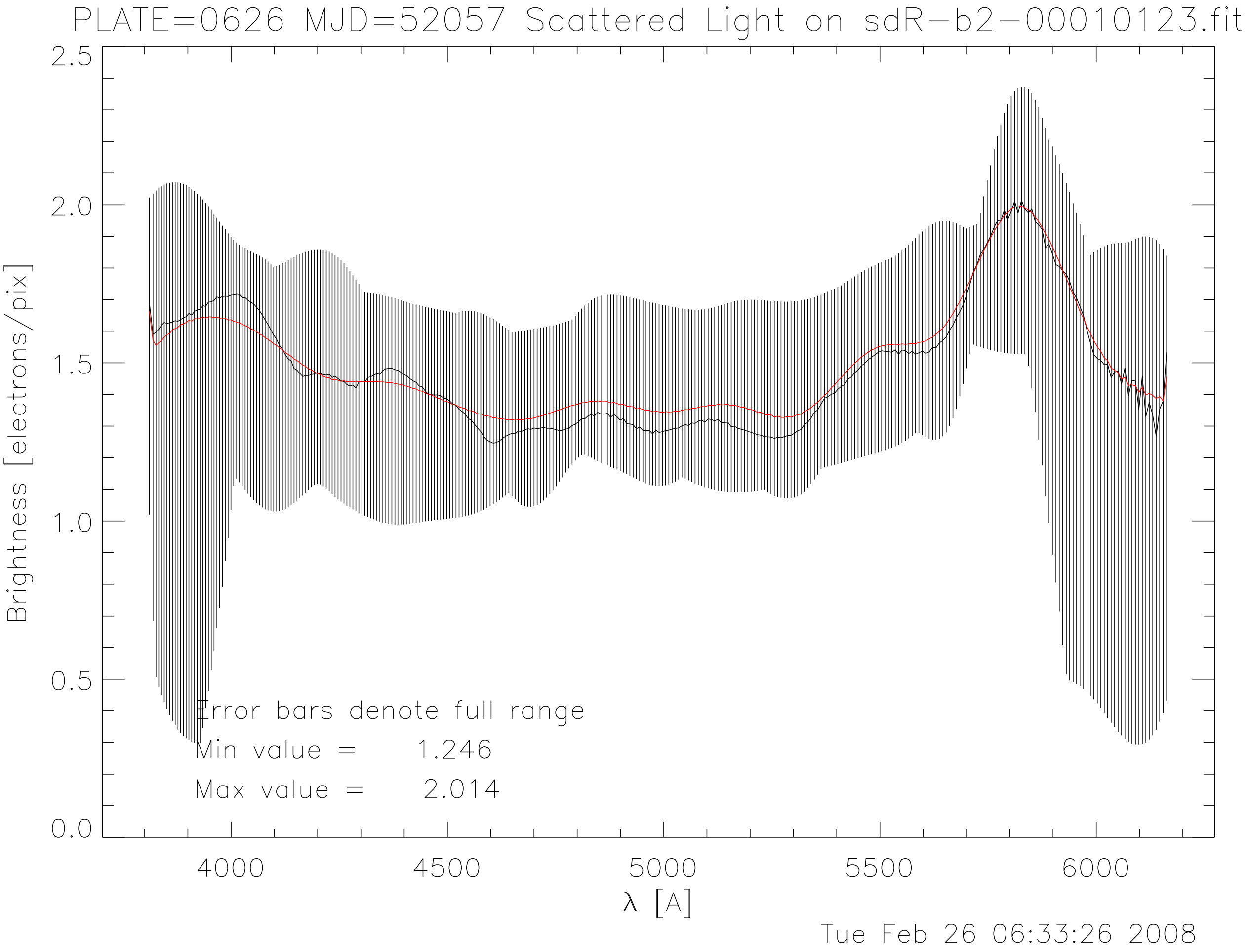
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010123.f

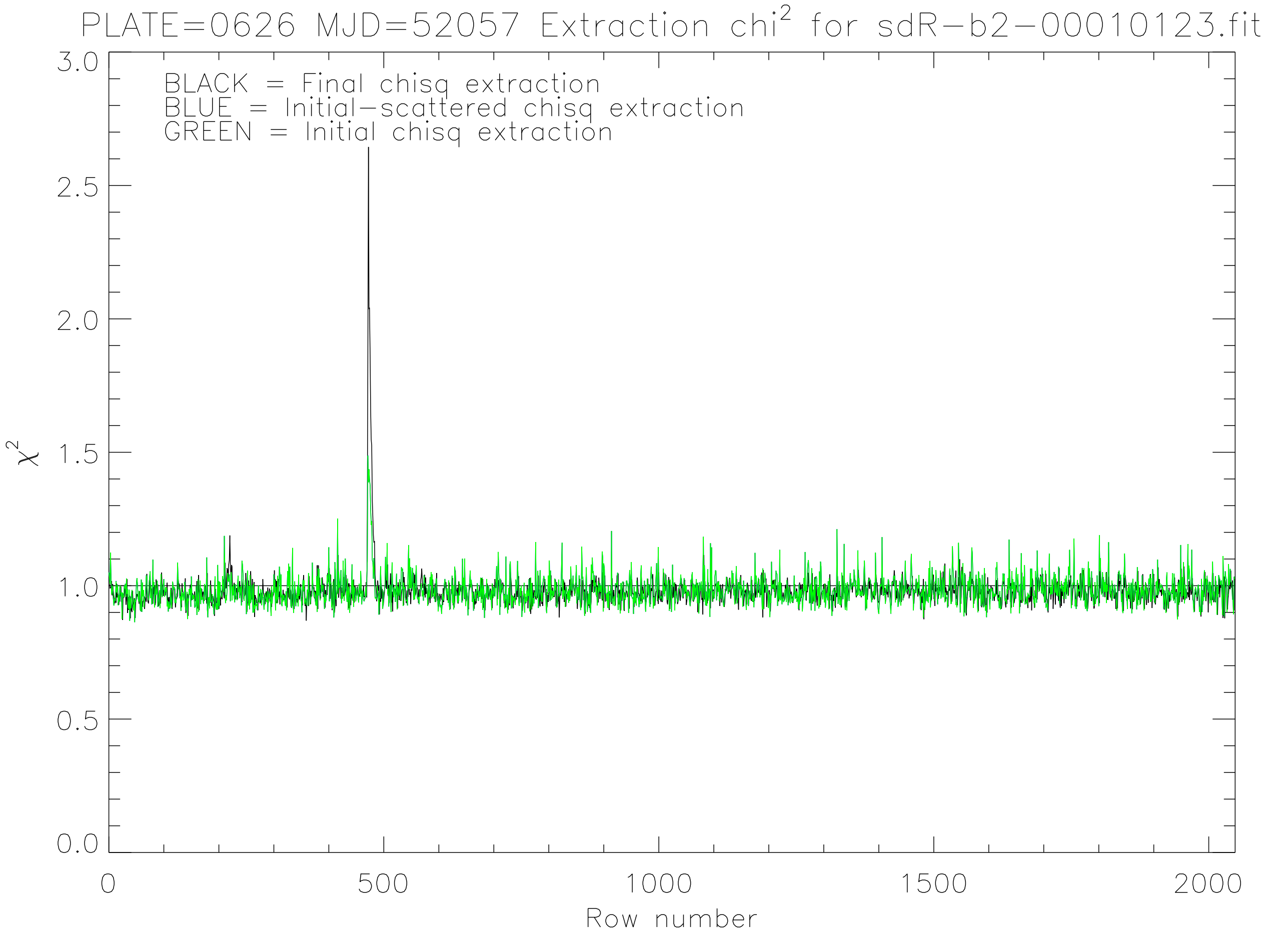
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-b2-00010123.f

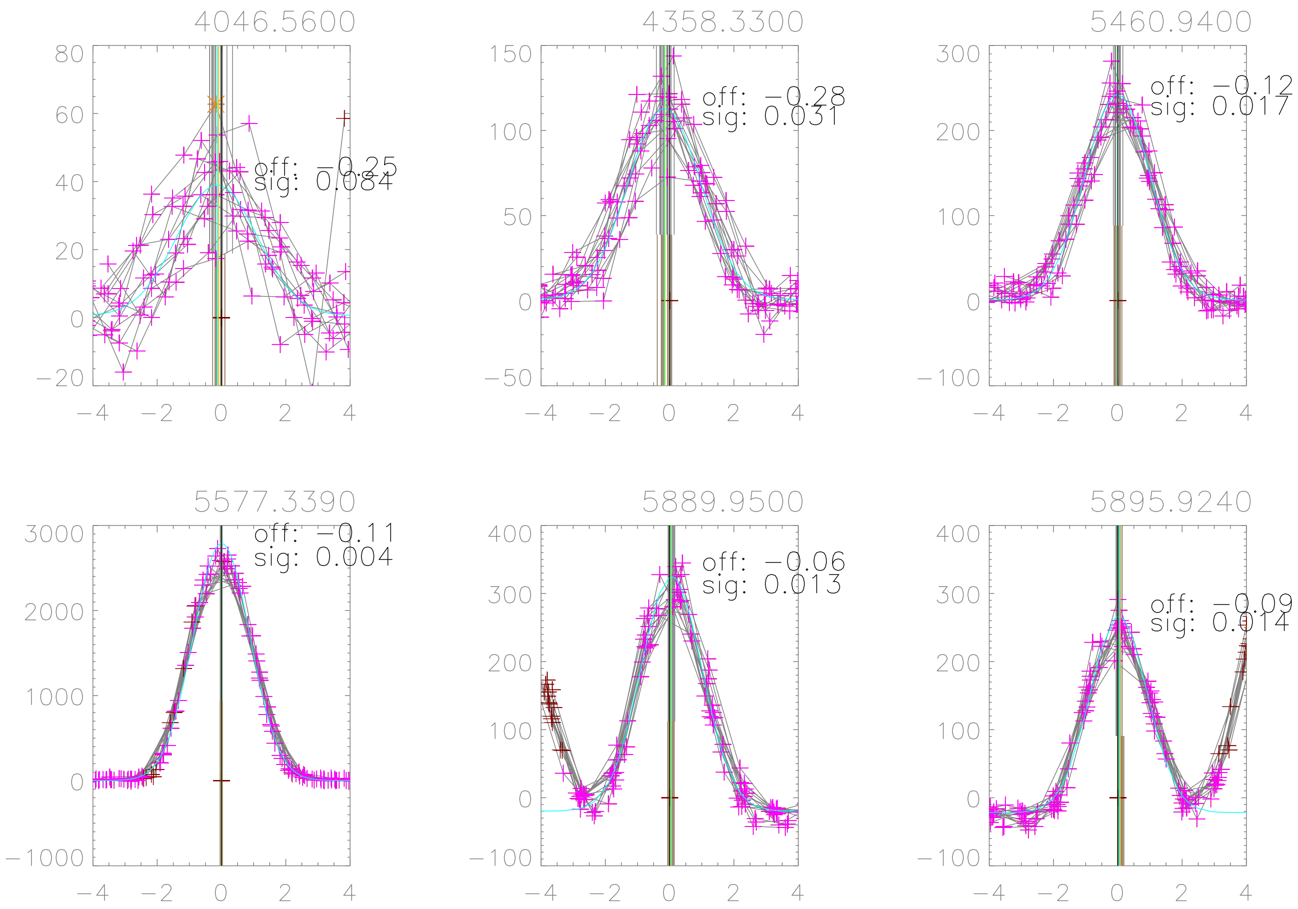


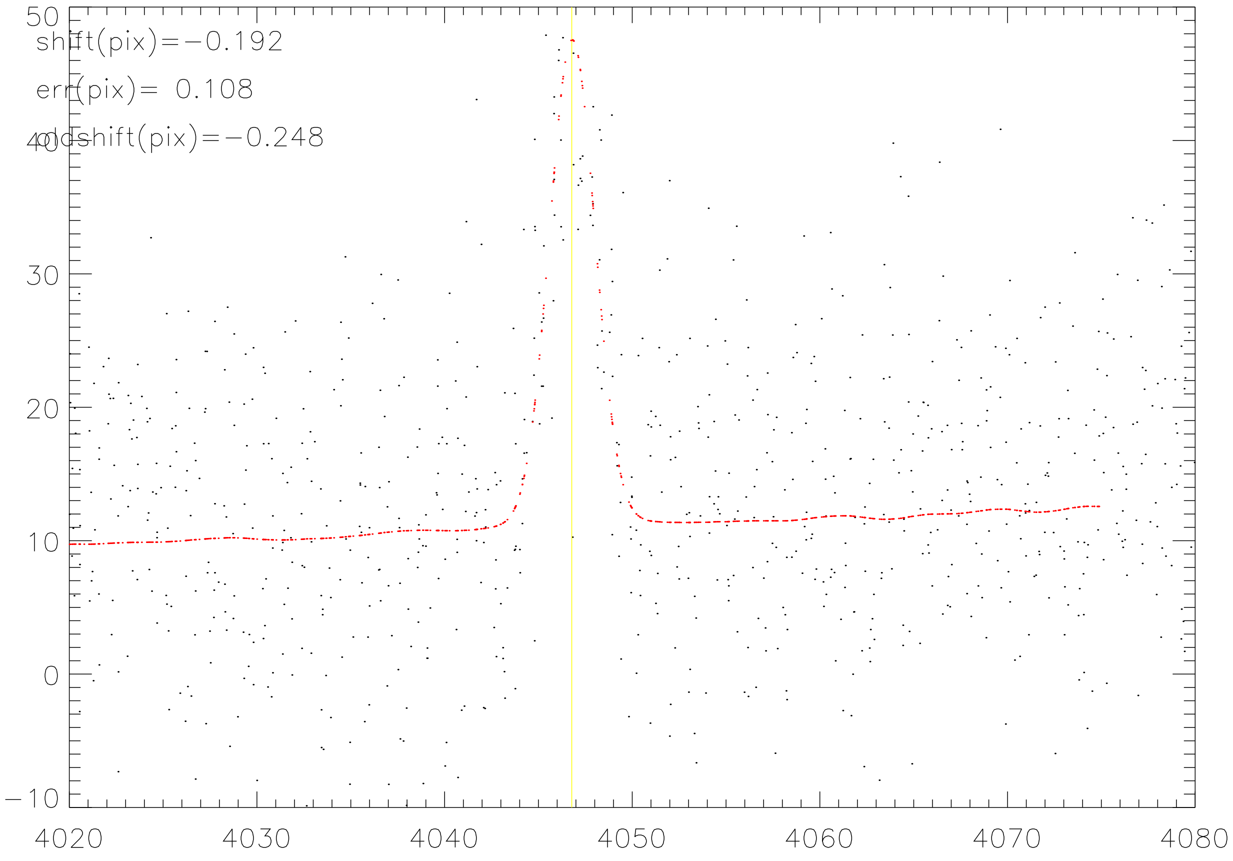
Tue Feb 26 06:30:52 2008

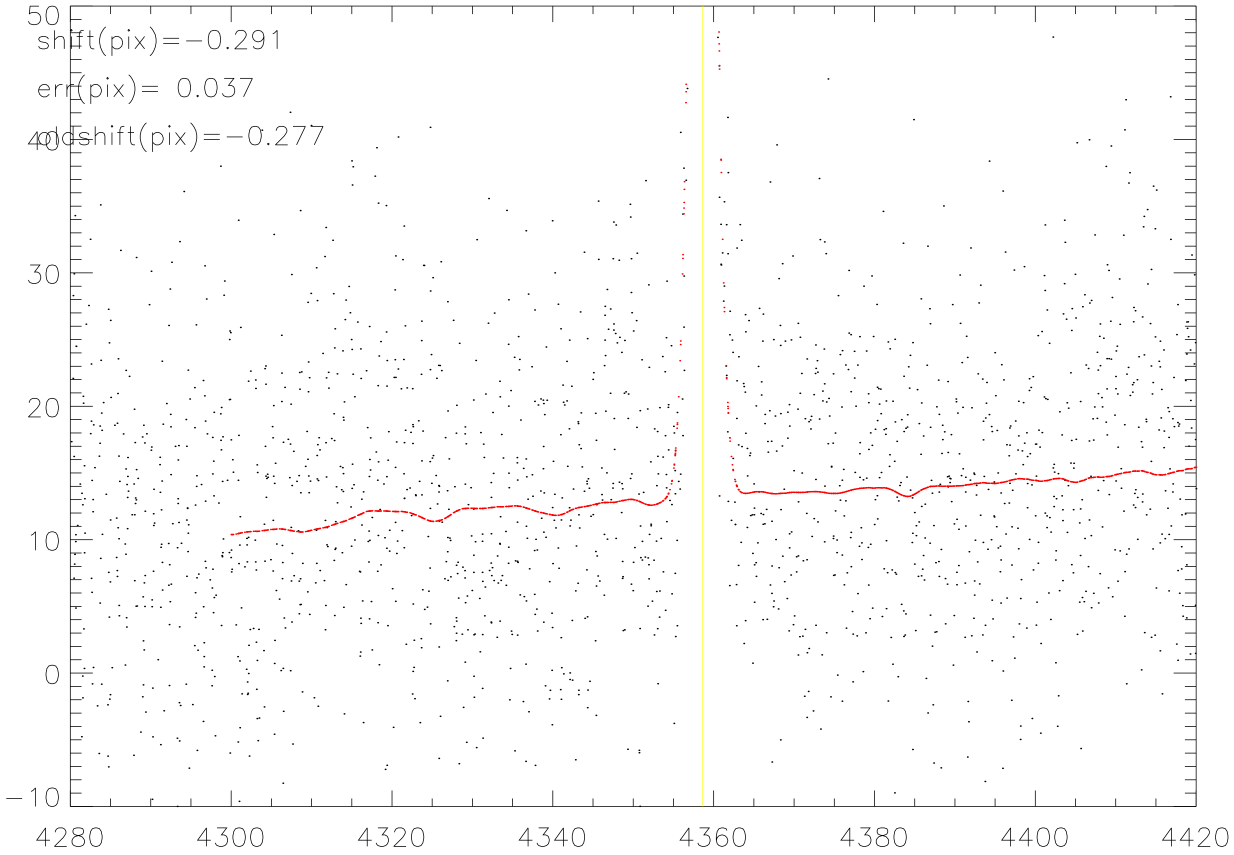

PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010123.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
1.41
1.77
2.14
1.05

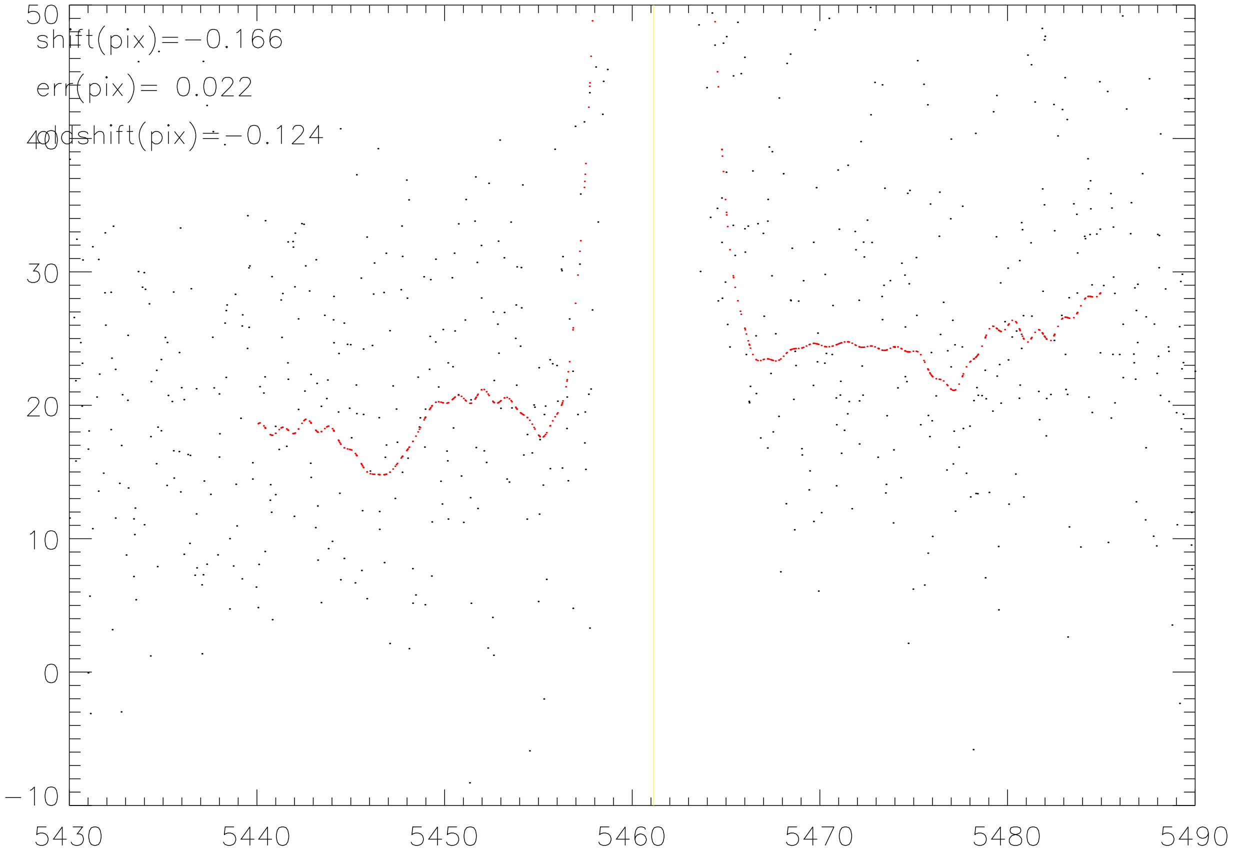

PLATE=0626 MJD=52057 Scattered Light on sdR-b2-00010123.fit
Brightness [electrons/pix]
0.0
0.5
1.0
1.5
2.0
2.5
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 1.246
Max value = 2.014
Tue Feb 26 06:33:26 2008

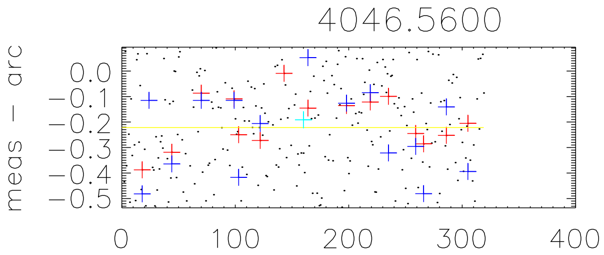

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-b2-00010123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
3.0
0
500
1000
1500
2000
Row number

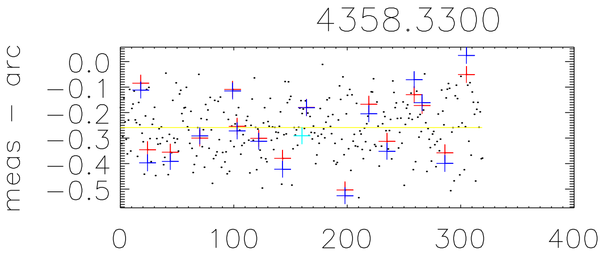

4046.5600
off: −0.25
sig: 0.084
4358.3300
off: −0.28
sig: 0.031
5460.9400
off: −0.12
sig: 0.017
5577.3390
off: −0.11
sig: 0.004
5889.9500
off: −0.06
sig: 0.013
5895.9240
off: −0.09
sig: 0.014
80
60
40
20
0
−20
150
100
50
0
−50
300
200
100
0
−100
3000
2000
1000
0
−1000
400
300
200
100
0
−100
400
300
200
100
0
−100
−4
−2
0
2
4

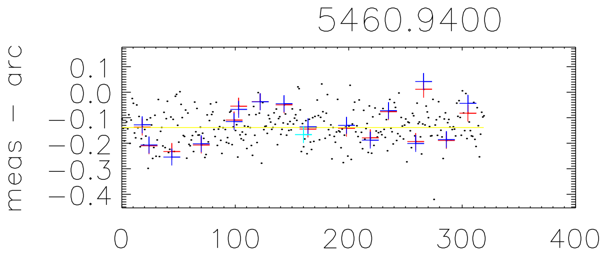

shift(pix)=−0.192
err(pix)= 0.108
oldshift(pix)=−0.248
50
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

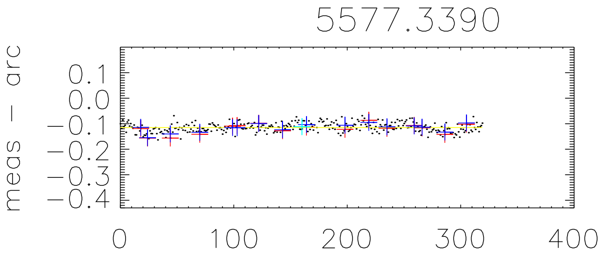

shift(pix)=−0.291
err(pix)= 0.037
oldshift(pix)=−0.277
50
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

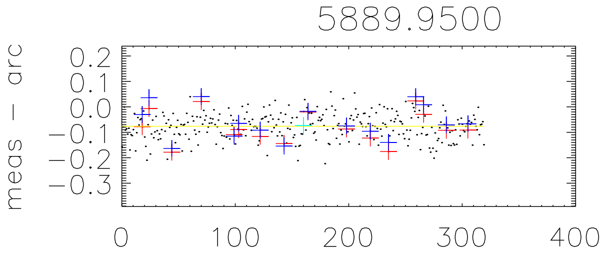

shift(pix)=−0.166
err(pix)= 0.022
oldshift(pix)=−0.124
50
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

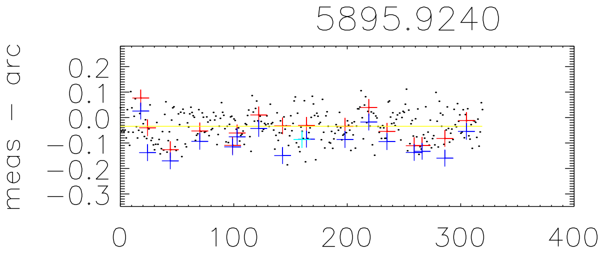

4046.5600
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

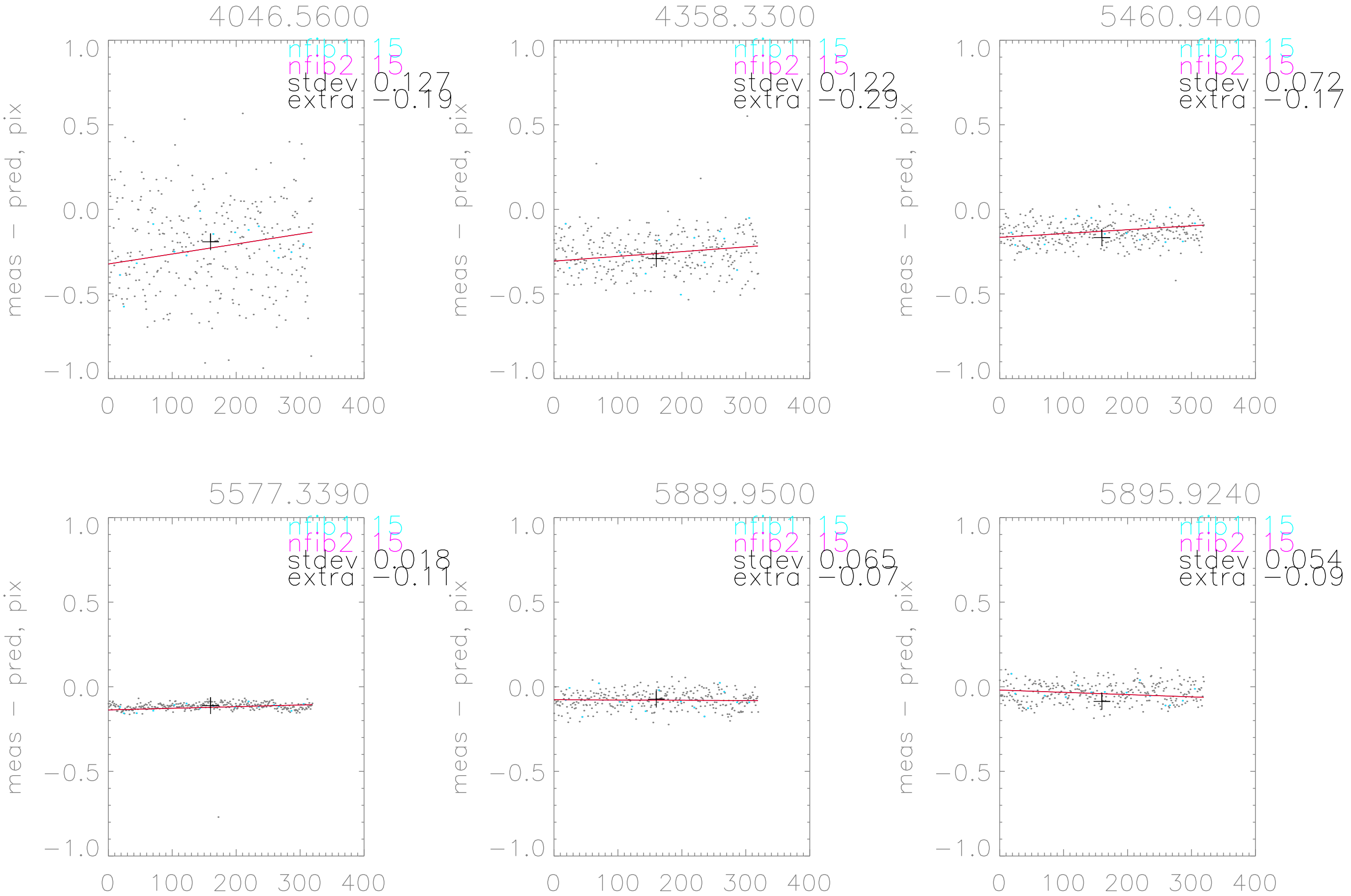

4358.3300
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

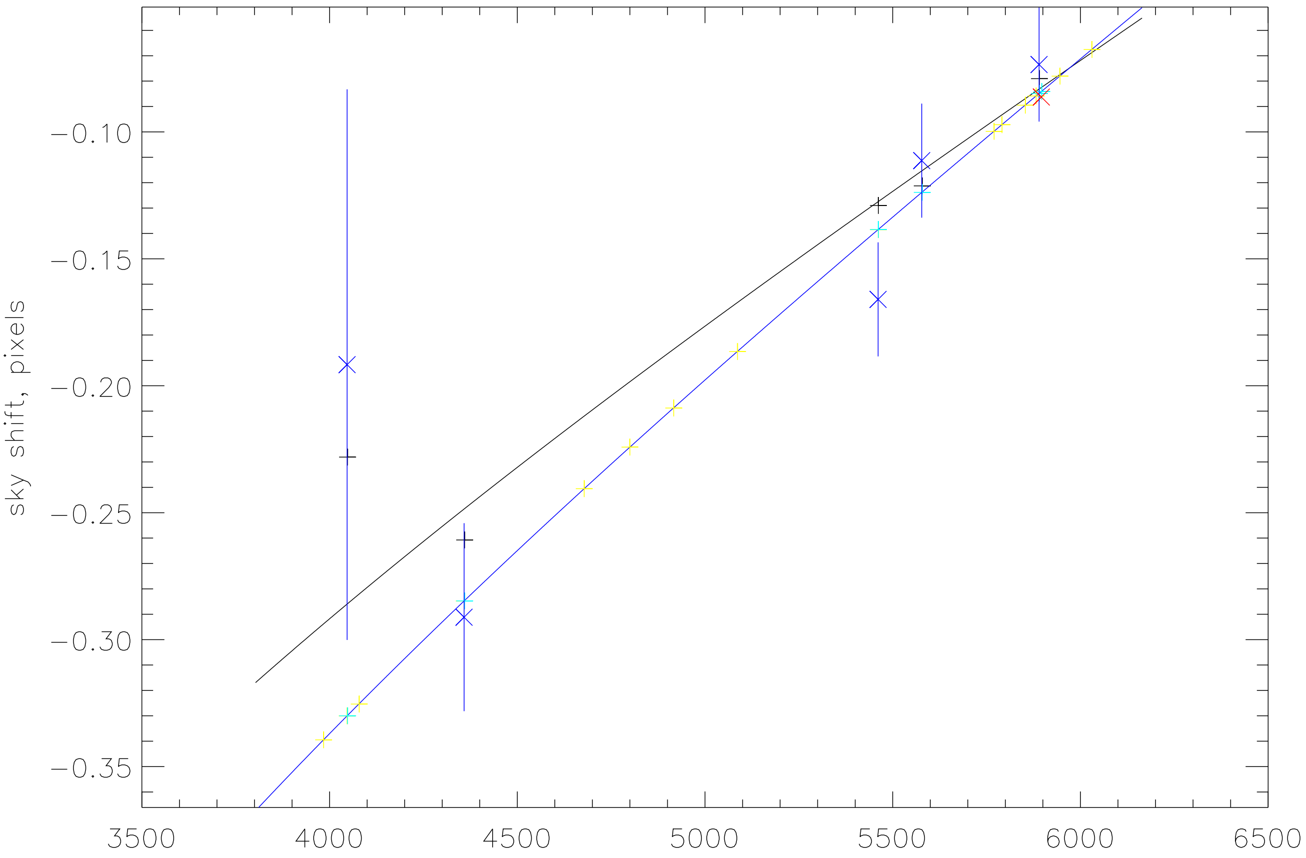

5460.9400
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

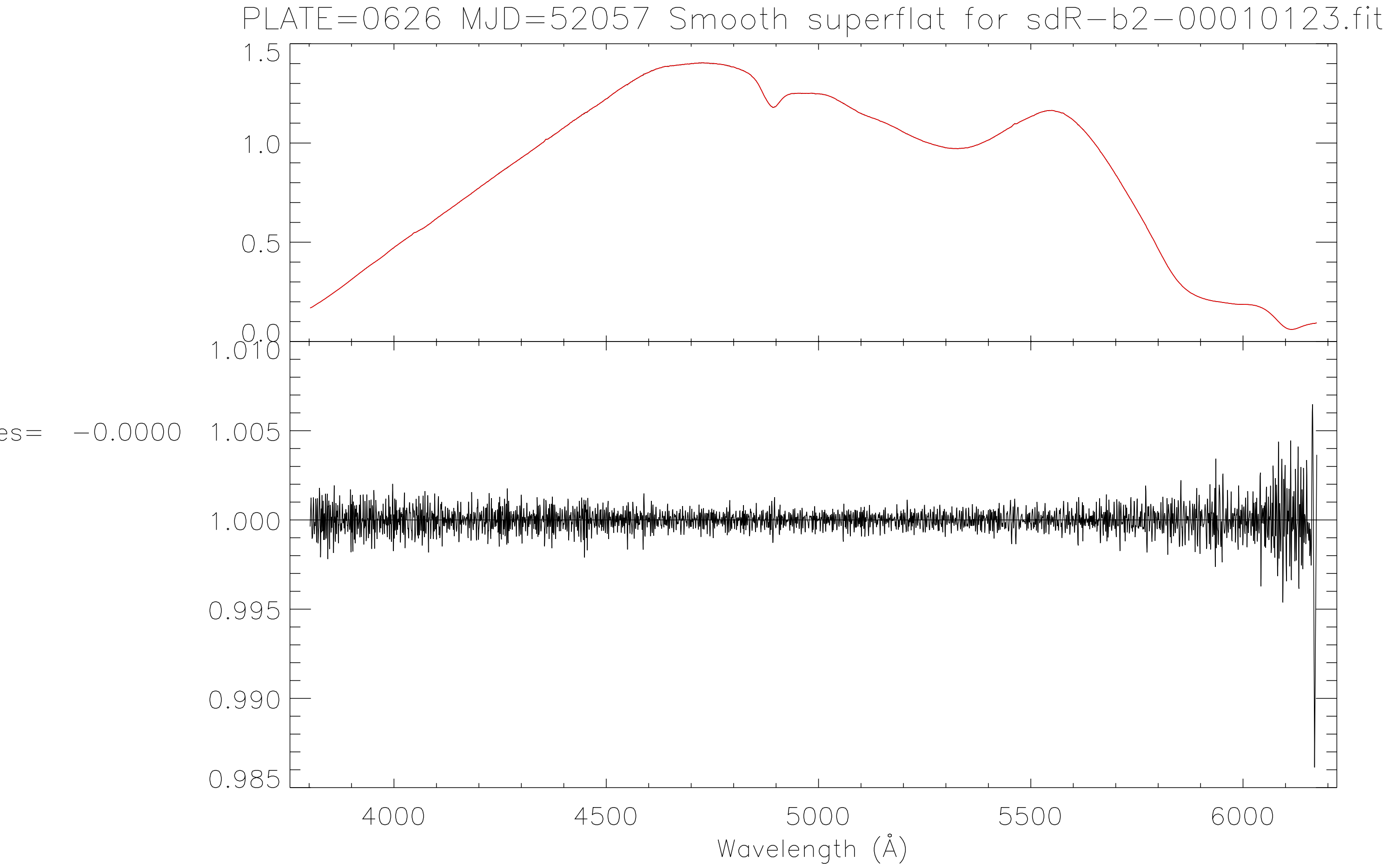

5577.3390
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

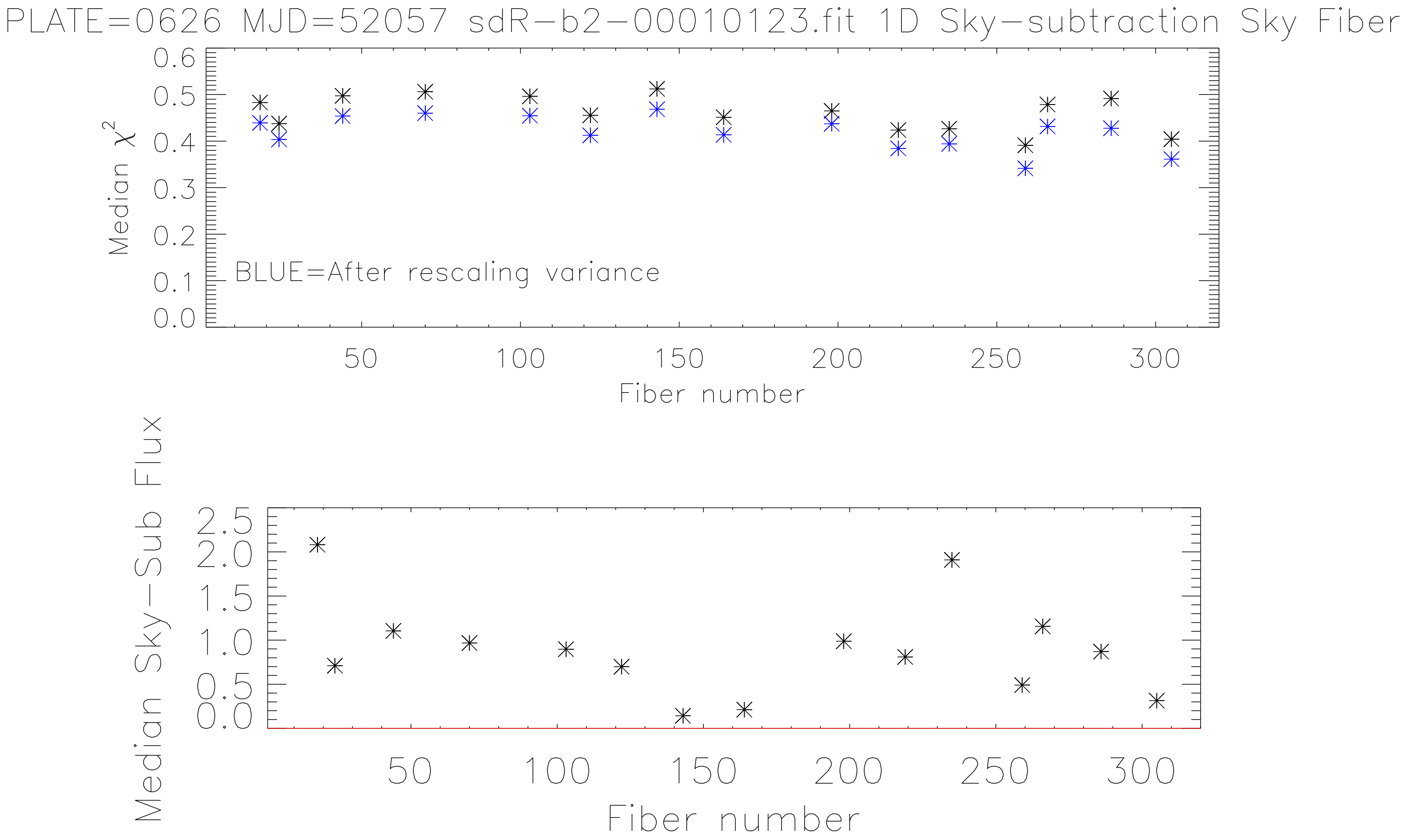

5889.9500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

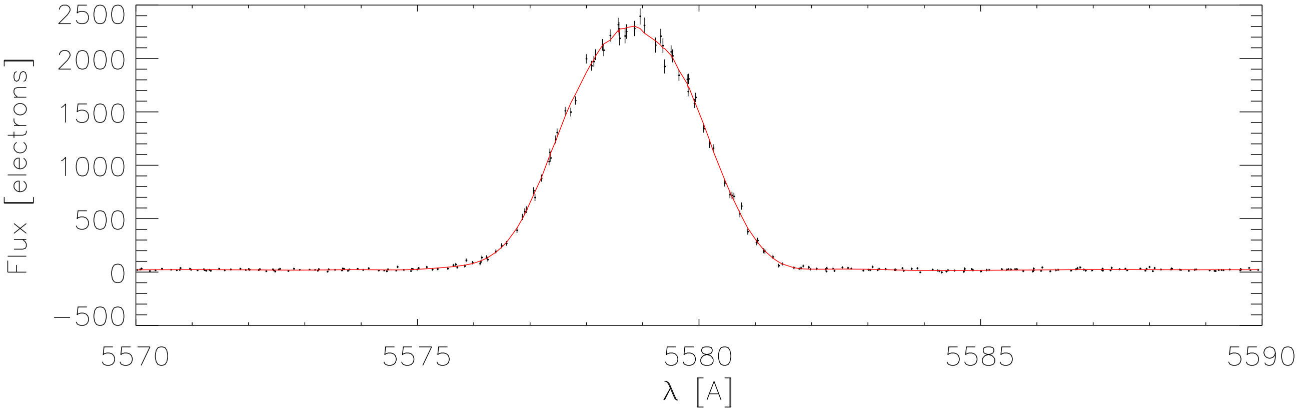

4046.5600
nfib1 15
nfib2 15
stdev 0.127
extra −0.19
4358.3300
nfib1 15
nfib2 15
stdev 0.122
extra −0.29
5460.9400
nfib1 15
nfib2 15
stdev 0.072
extra −0.17
5577.3390
nfib1 15
nfib2 15
stdev 0.018
extra −0.11
5889.9500
nfib1 15
nfib2 15
stdev 0.065
extra −0.07
5895.9240
nfib1 15
nfib2 15
stdev 0.054
extra −0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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

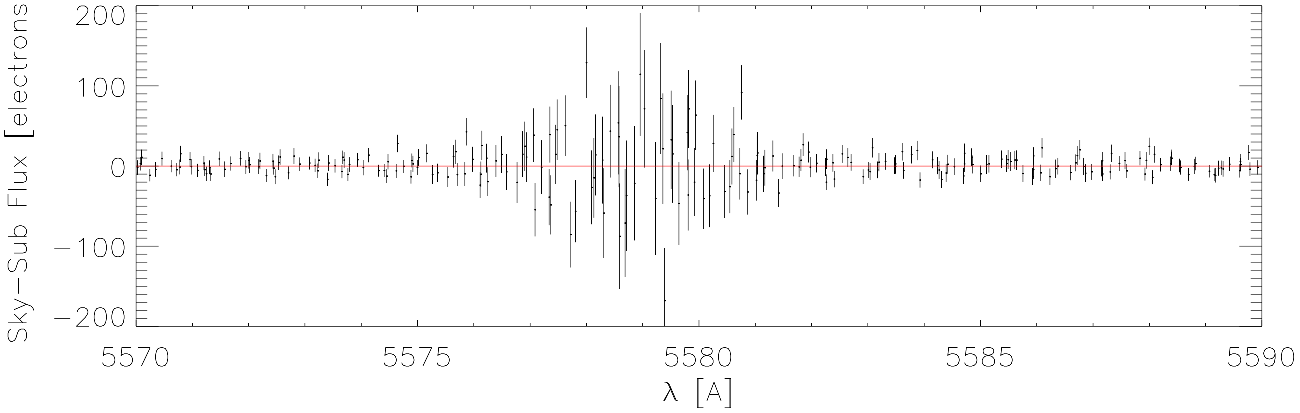

PLATE=0626 MJD=52057 Smooth superflat for sdR-b2-00010123.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=0626 MJD=52057 sdR-b2-00010123.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
2.5
2.0
1.5
1.0
0.5
0.0
50
100
150
200
250
300
Fiber number

PLATE=0626 MJD=52057 sdR-b2-00010123.fit 1D Sky-subtraction Sky Fibers

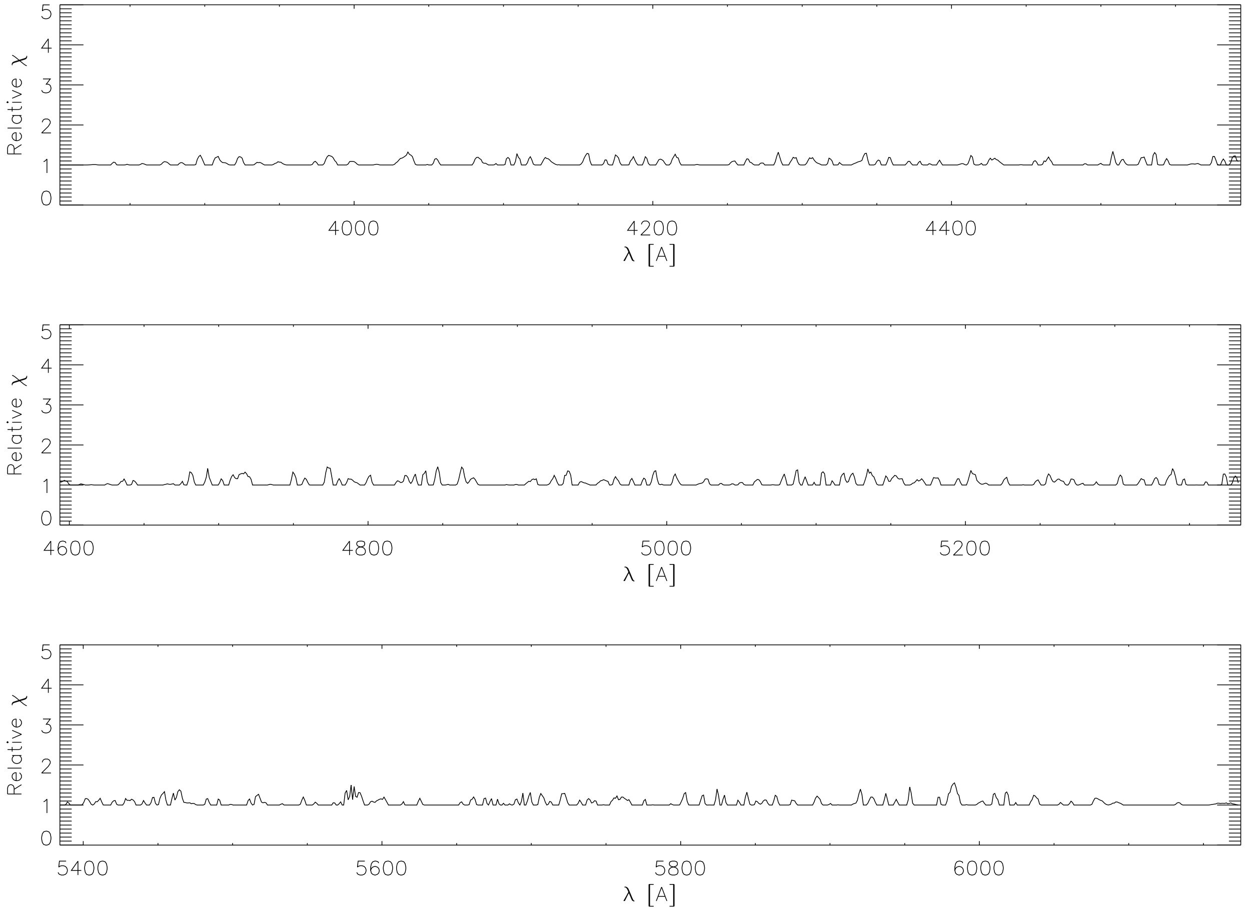


PLATE=0626 MJD=52057 sdR-b2-00010123.fit 1D Sky-subtraction Sky-subtracted Sky F

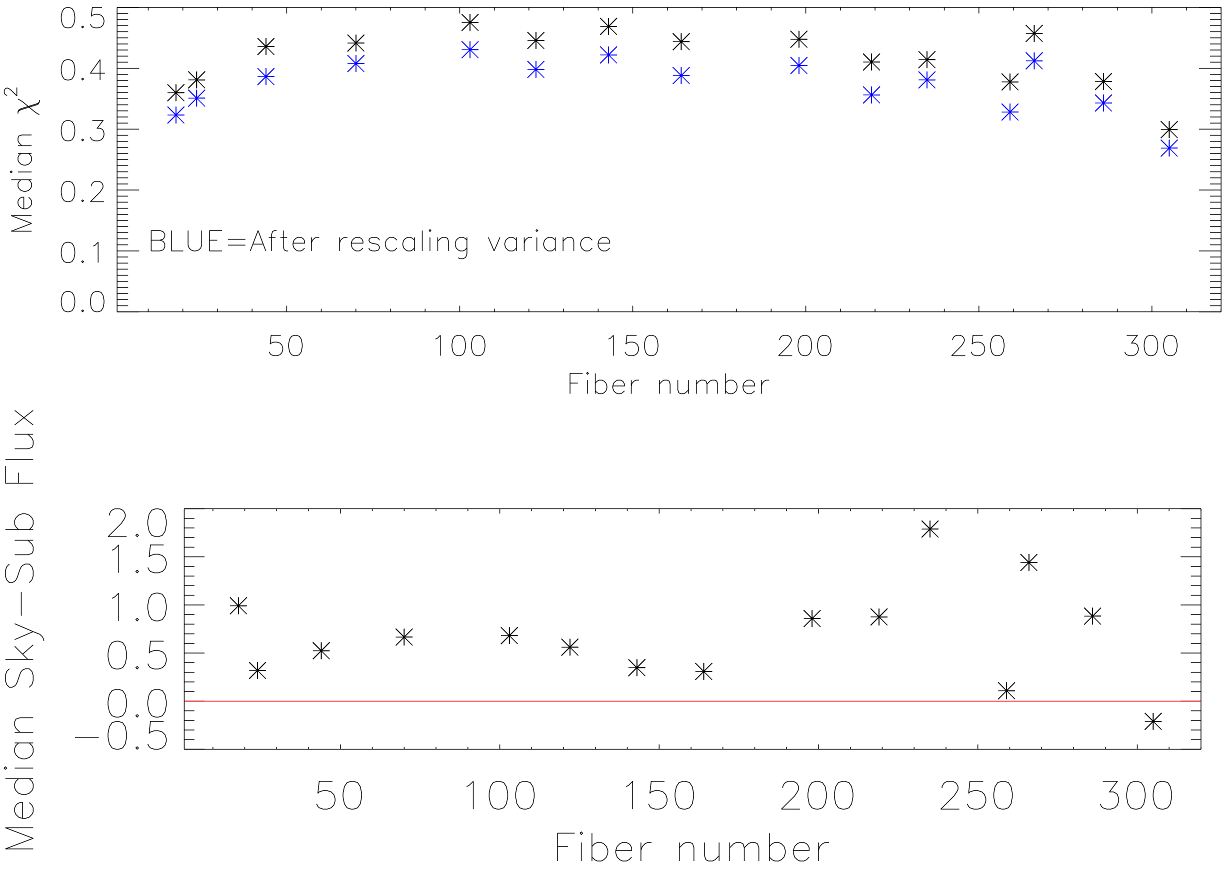


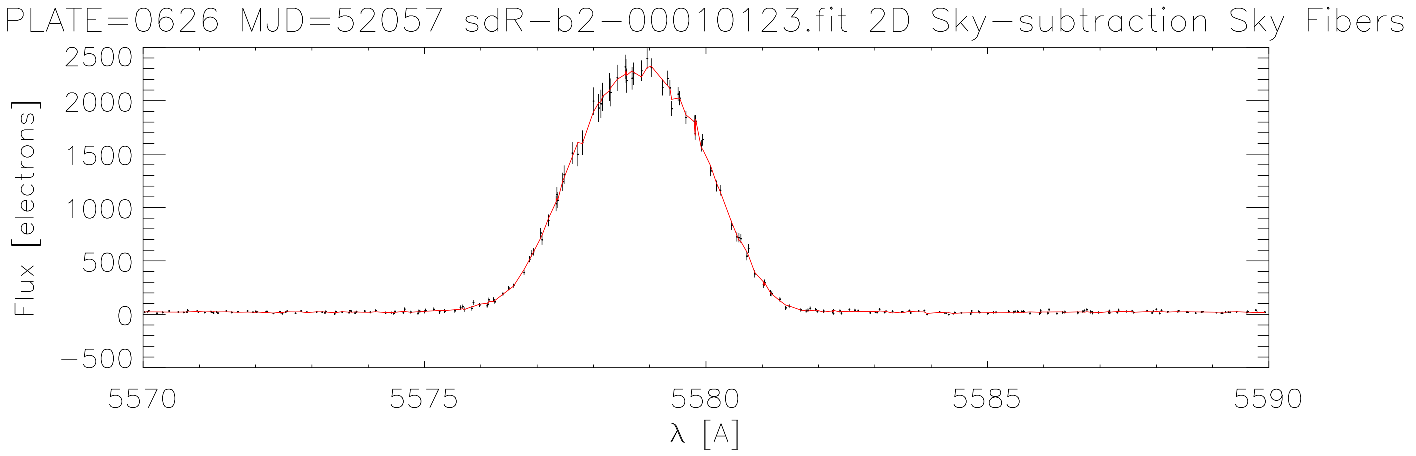
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-b2-00010123.fit 1D Sky-subtraction Rescaled Errors

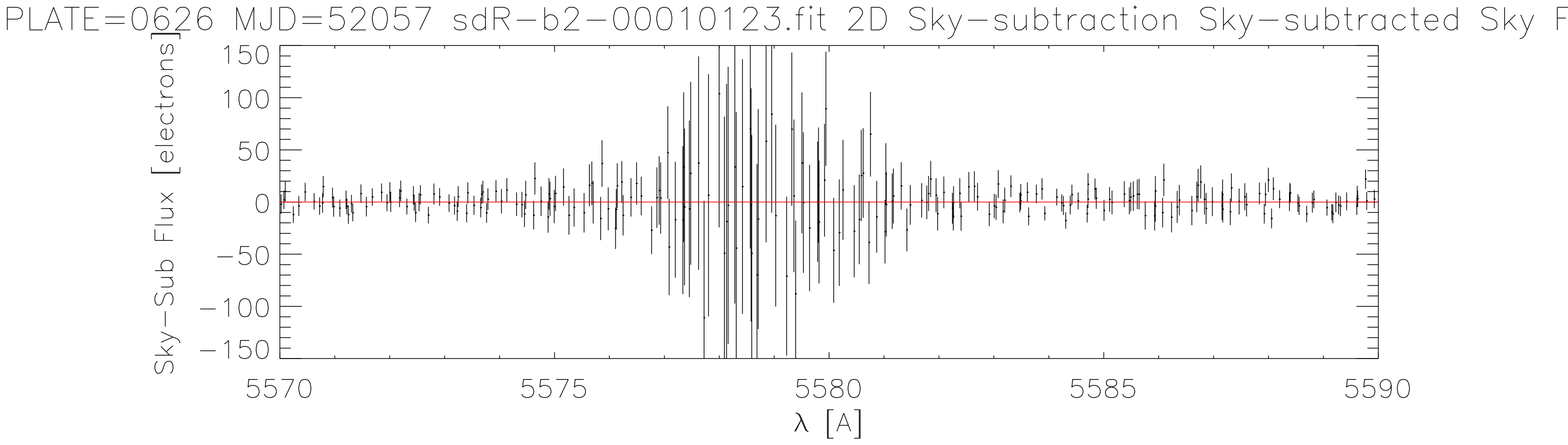


PLATE=0626 MJD=52057 sdR-b2-00010123.fit 2D Sky-subtraction Sky Fiber

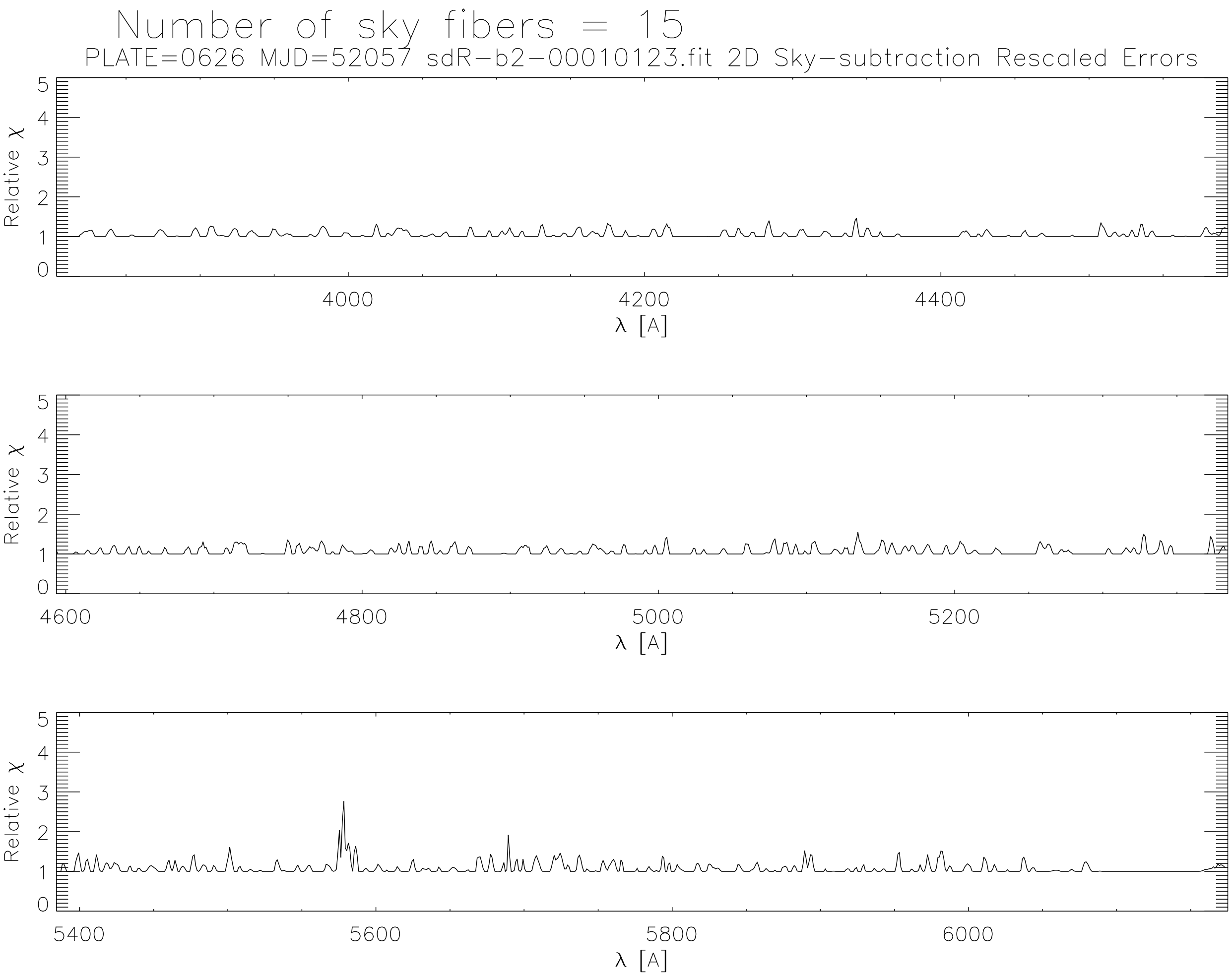




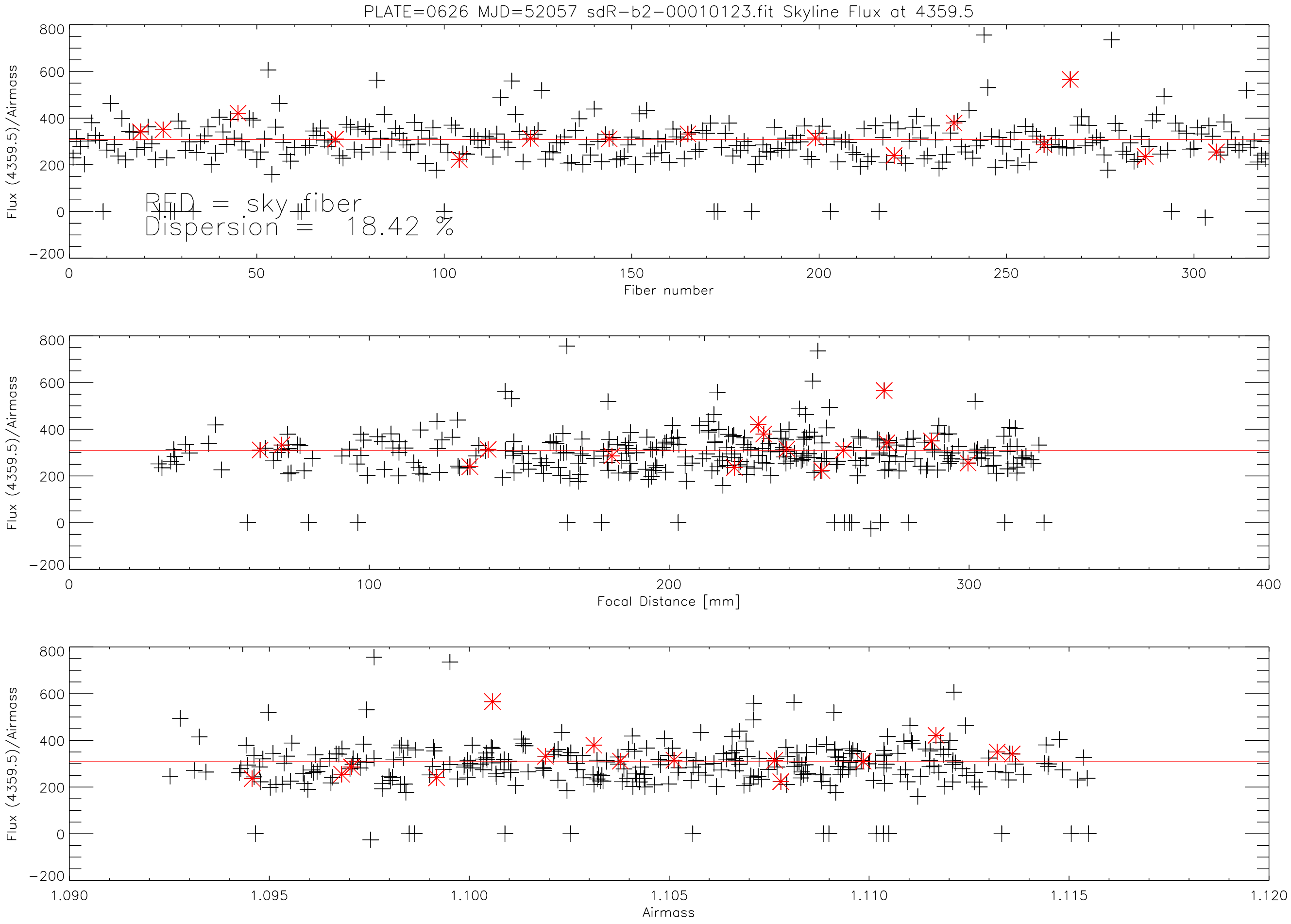
PLATE=0626 MJD=52057 sdR-b2-00010123.fit 2D Sky-subtraction Sky Fibers

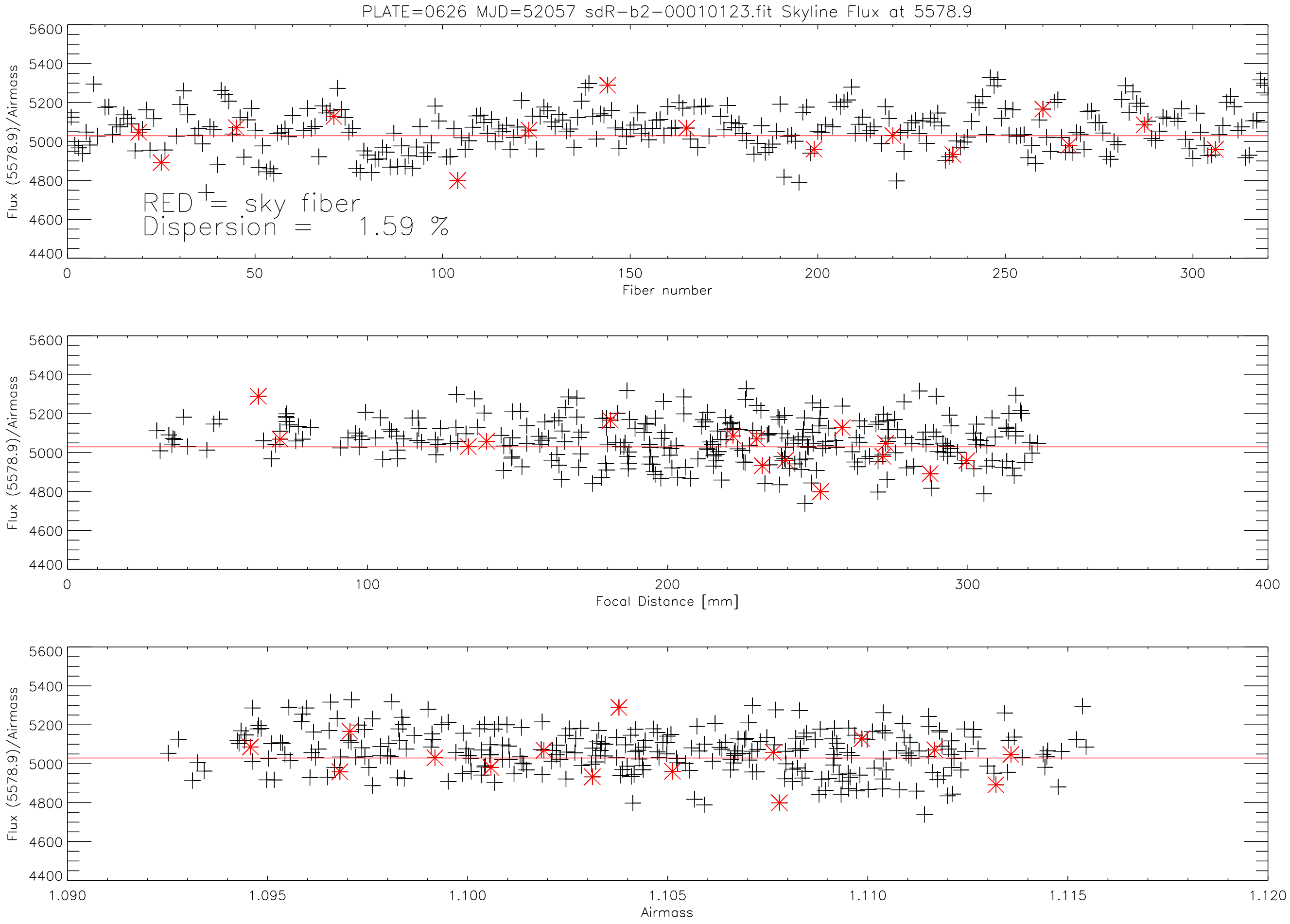


PLATE=0626 MJD=52057 sdR-b2-00010123.fit 2D Sky-subtraction Sky-subtracted Sky F

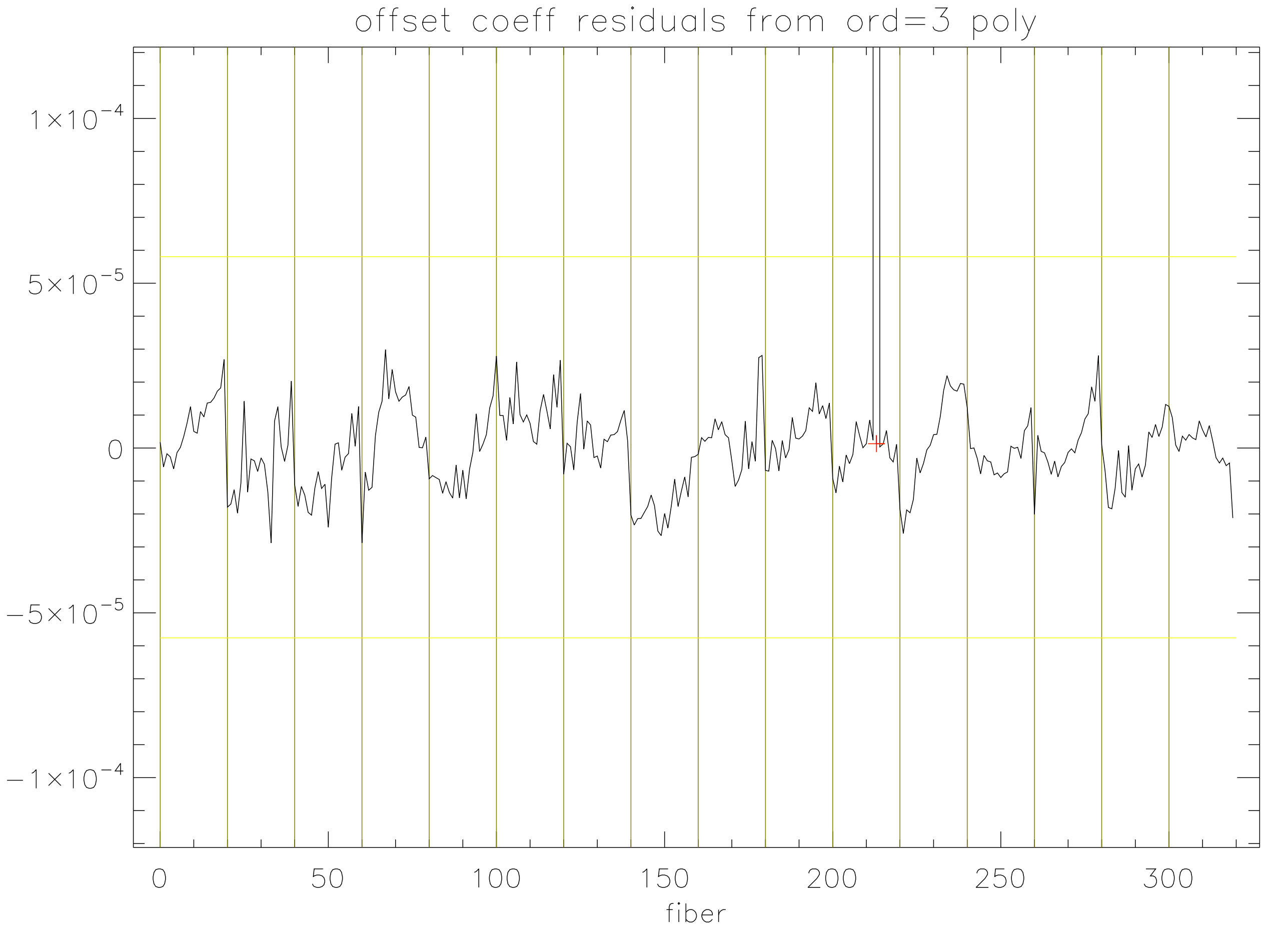

Number of sky fibers = 15

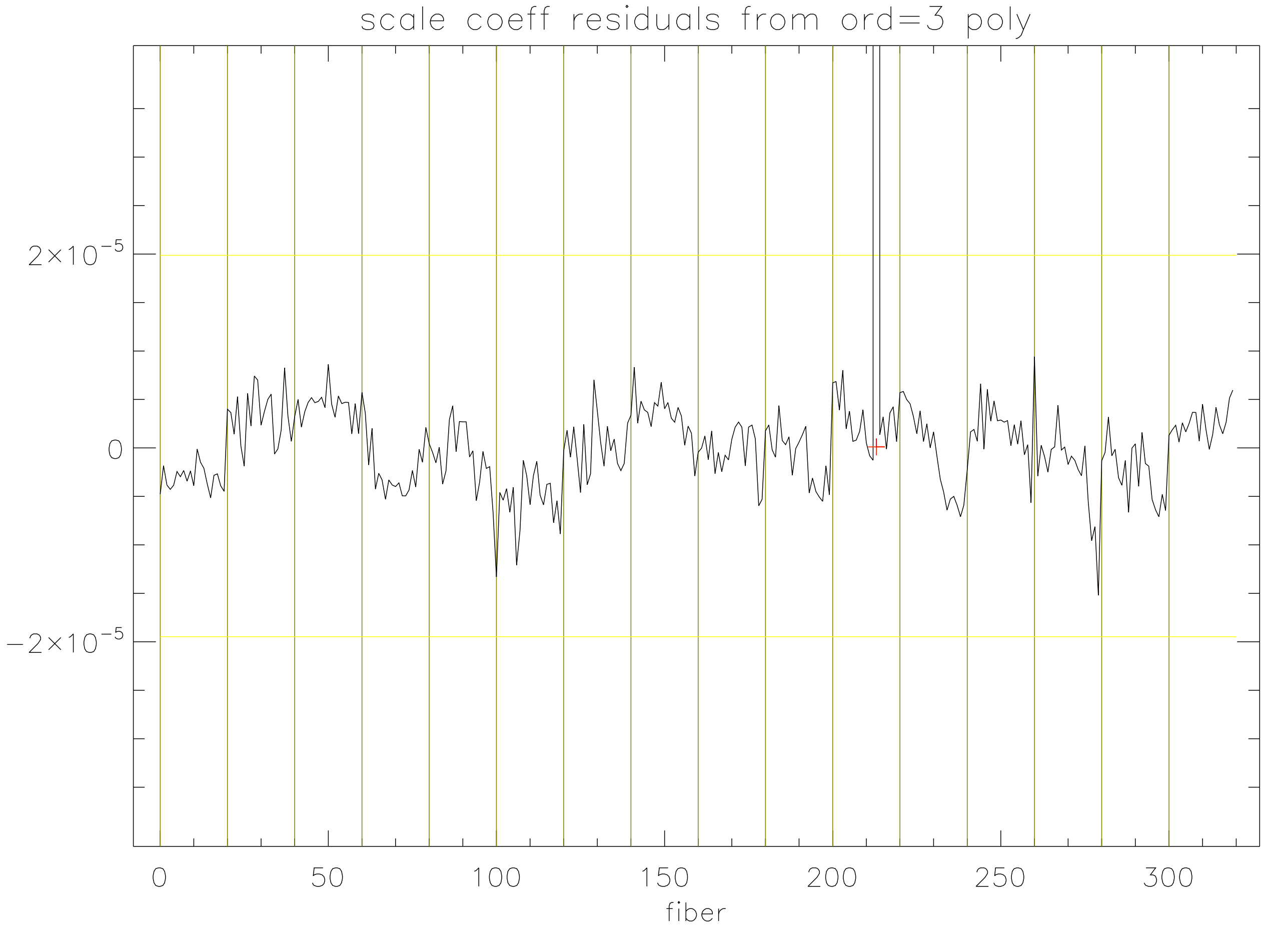
PLATE=0626 MJD=52057 sdR-b2-00010123.fit 2D Sky-subtraction Rescaled Errors

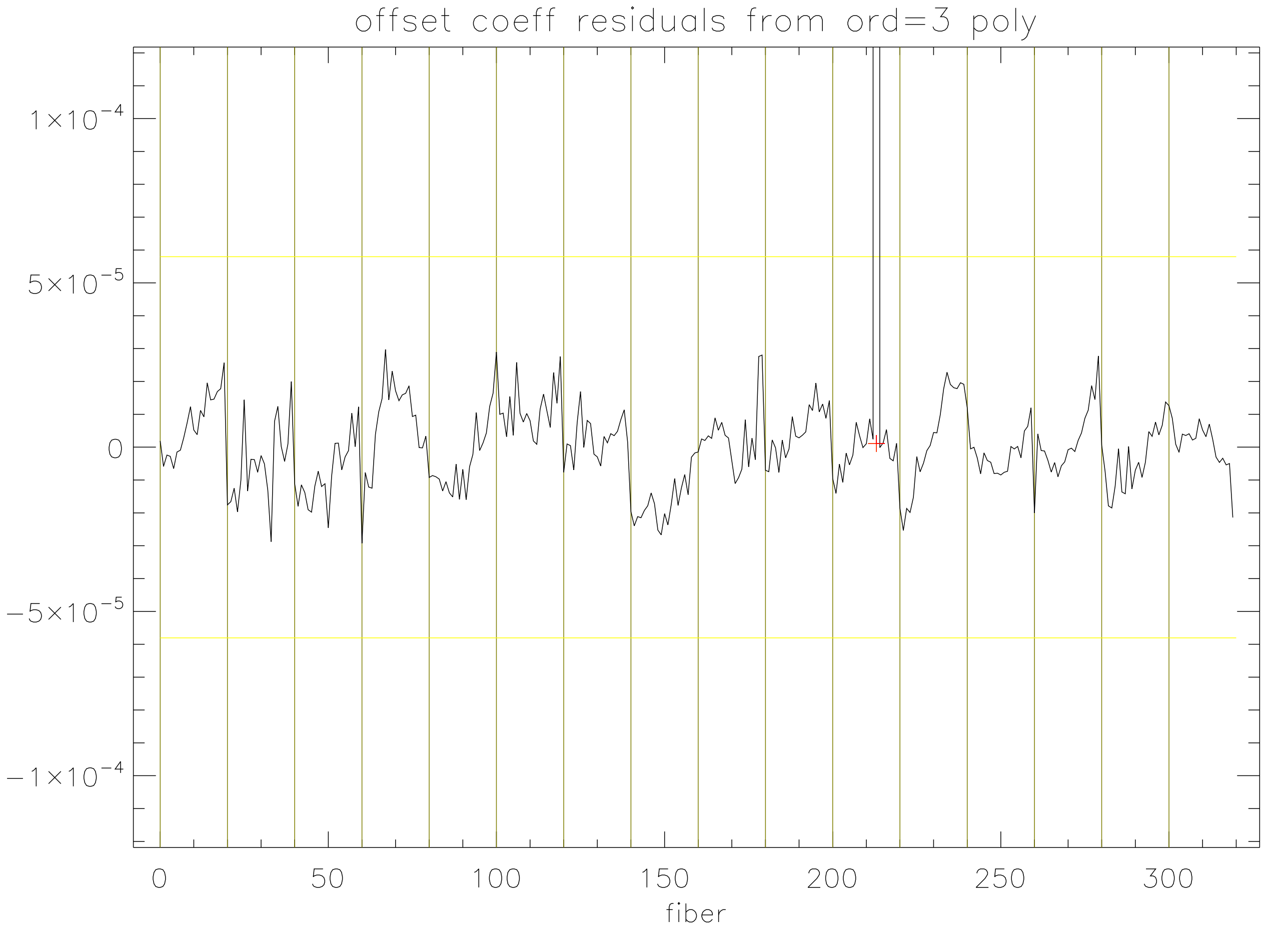

PLATE=0626 MJD=52057 sdR-b2-00010123.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
800
600
400
200
0
−200
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 18.42 %
Flux (4359.5)/Airmass
800
600
400
200
0
−200
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
800
600
400
200
0
−200
1.090
1.095
1.100
1.105
1.110
1.115
1.120
Airmass

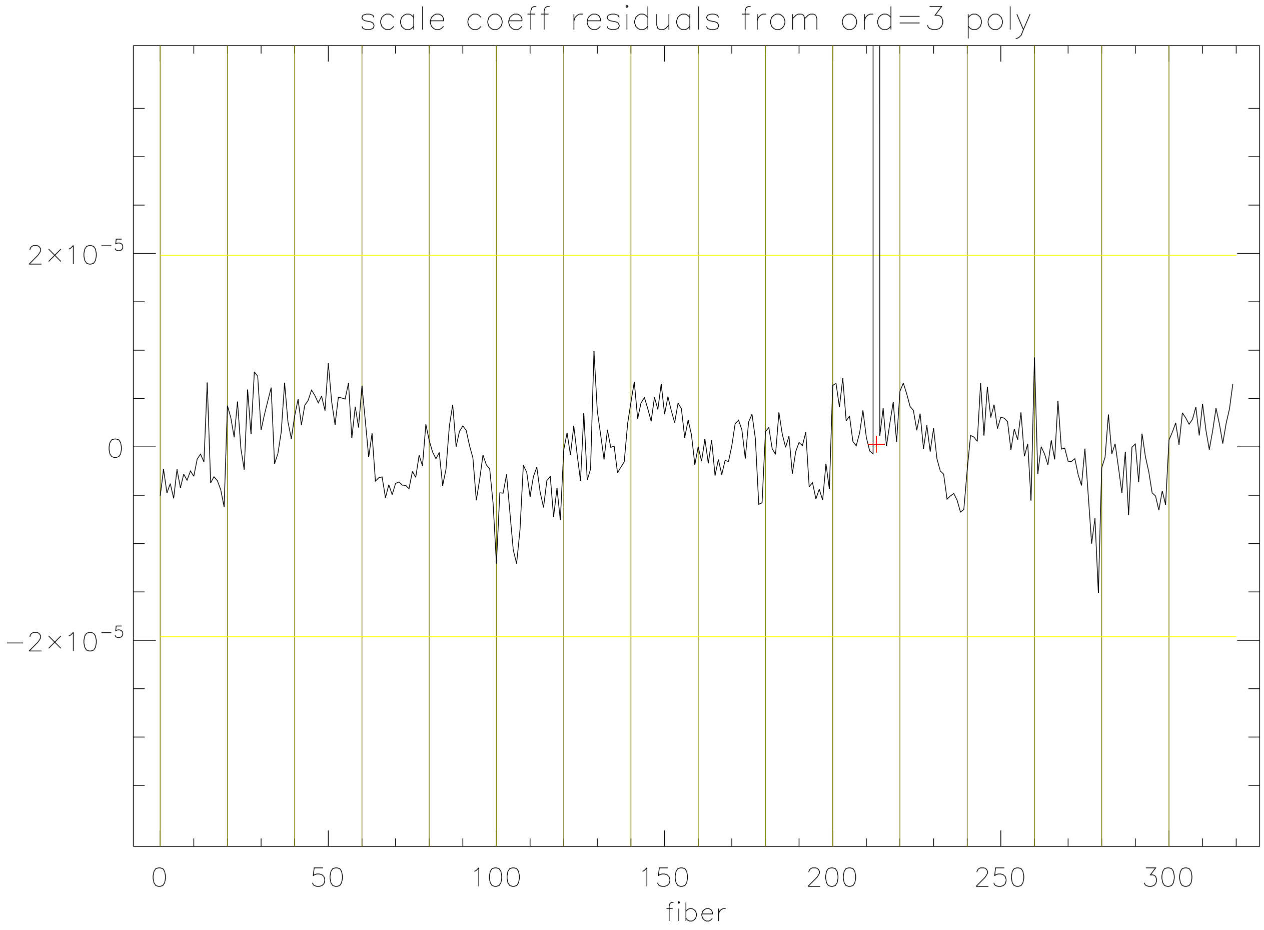


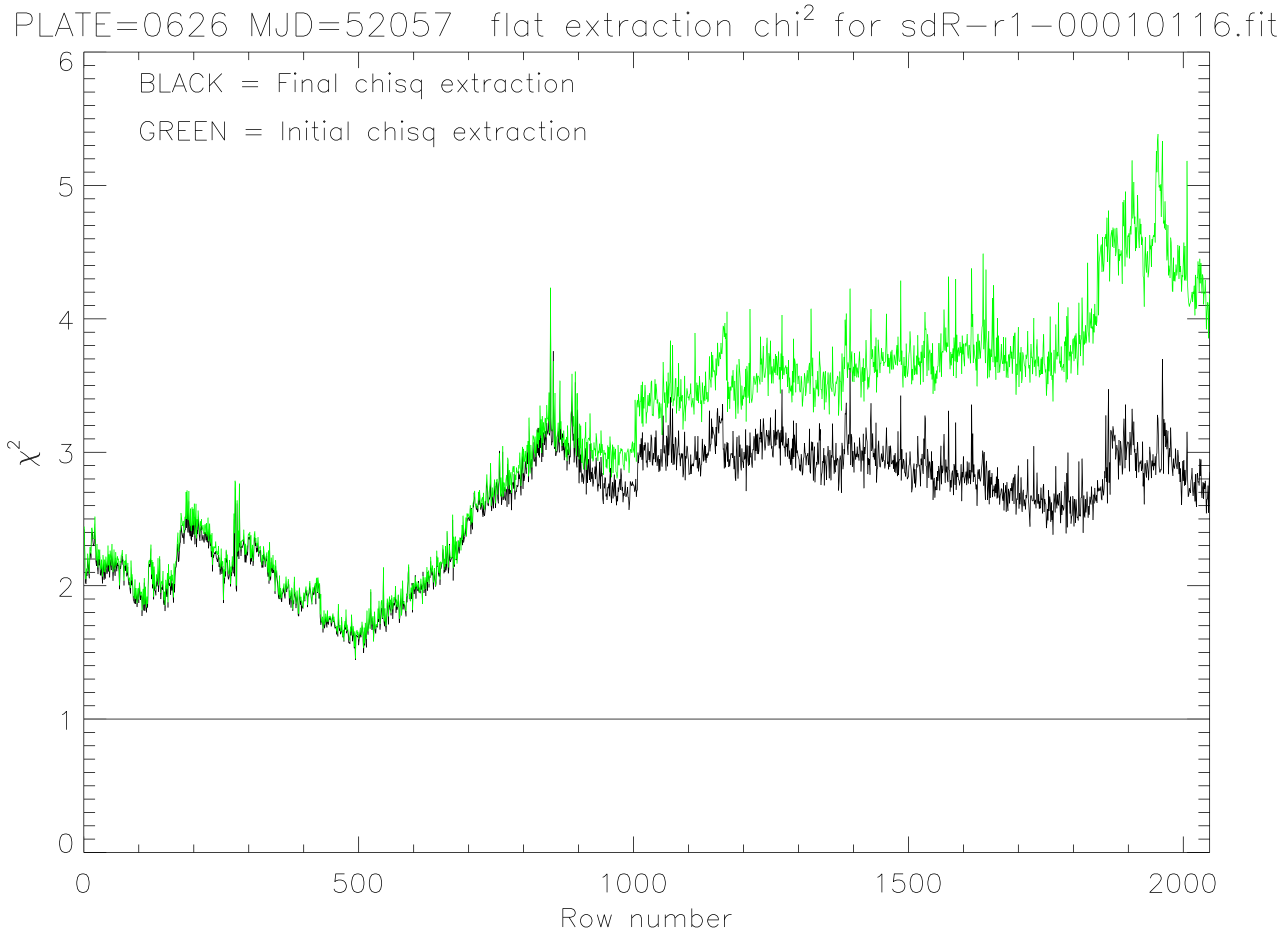
PLATE=0626 MJD=52057 sdR-b2-00010123.fit Skyline Flux at 5578.9


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

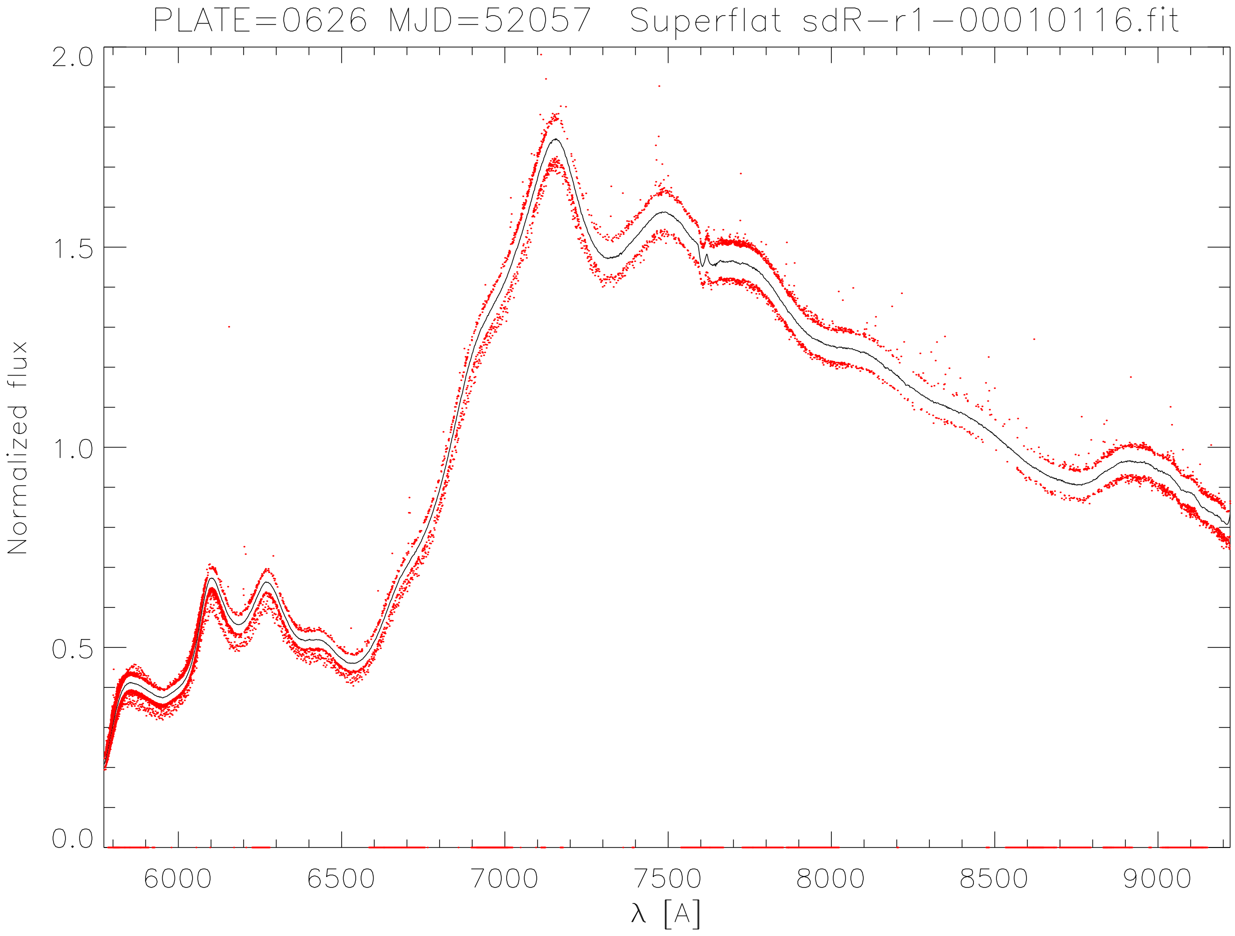

scale coeff residuals from ord=3 poly
2×10^{-5}
0
−2×10^{-5}
0
50
100
150
200
250
300
fiber

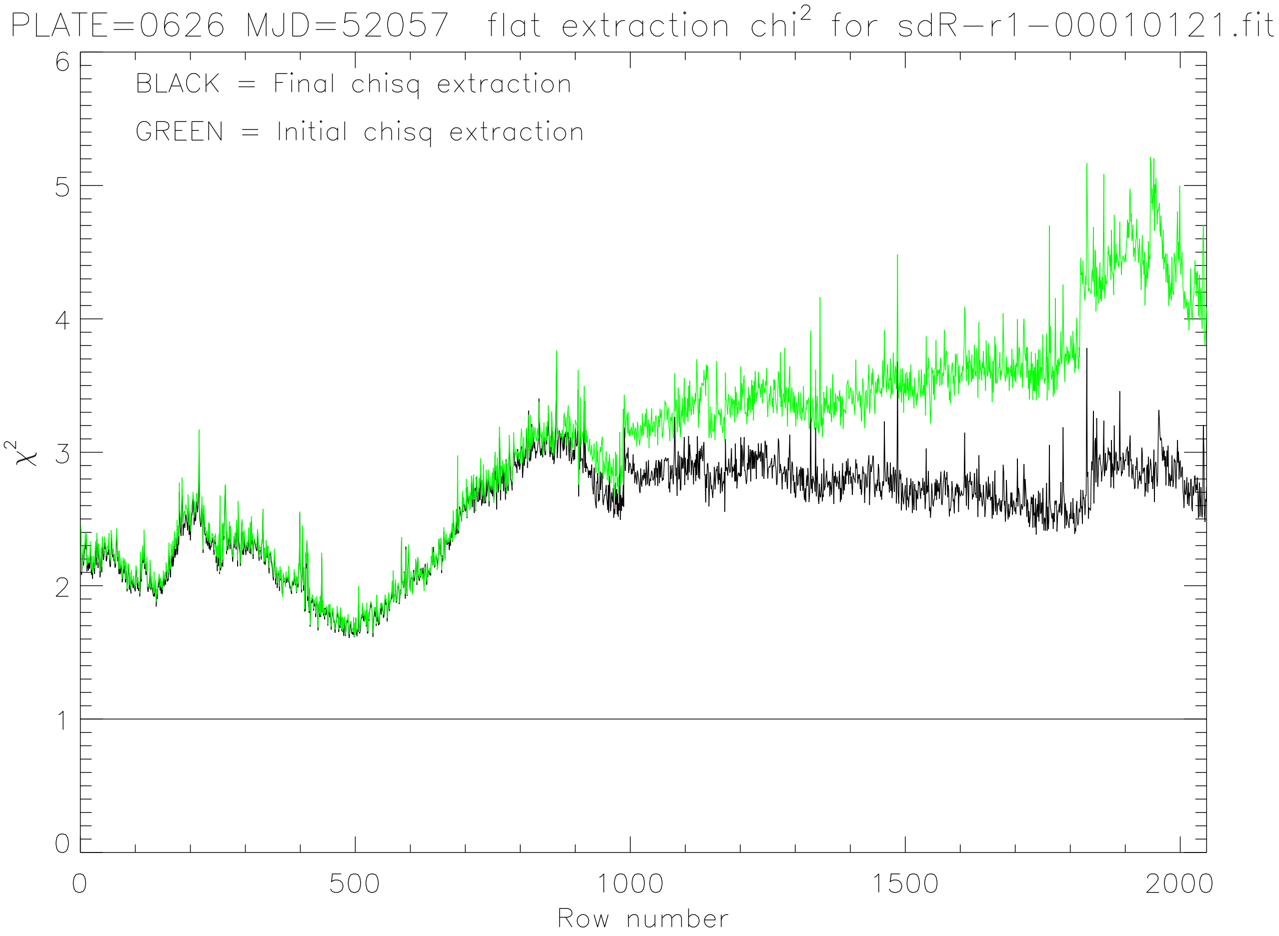

offset coeff residuals from ord=3 poly
1×10^{-4}
5×10^{-5}
0
-5×10^{-5}
-1×10^{-4}
0
50
100
150
200
250
300
fiber

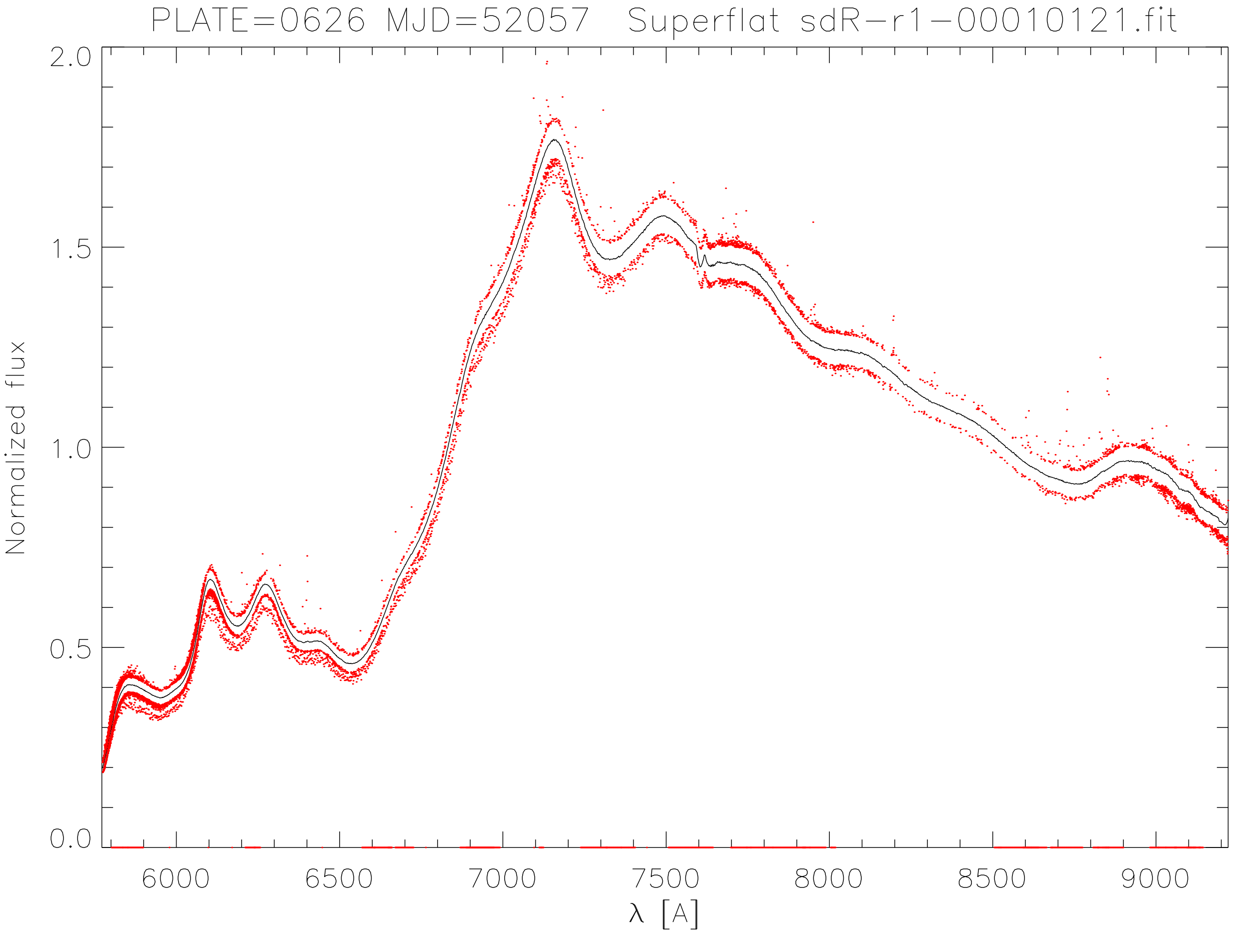

scale coeff residuals from ord=3 poly
2×10^{-5}
0
−2×10^{-5}
0
50
100
150
200
250
300
fiber

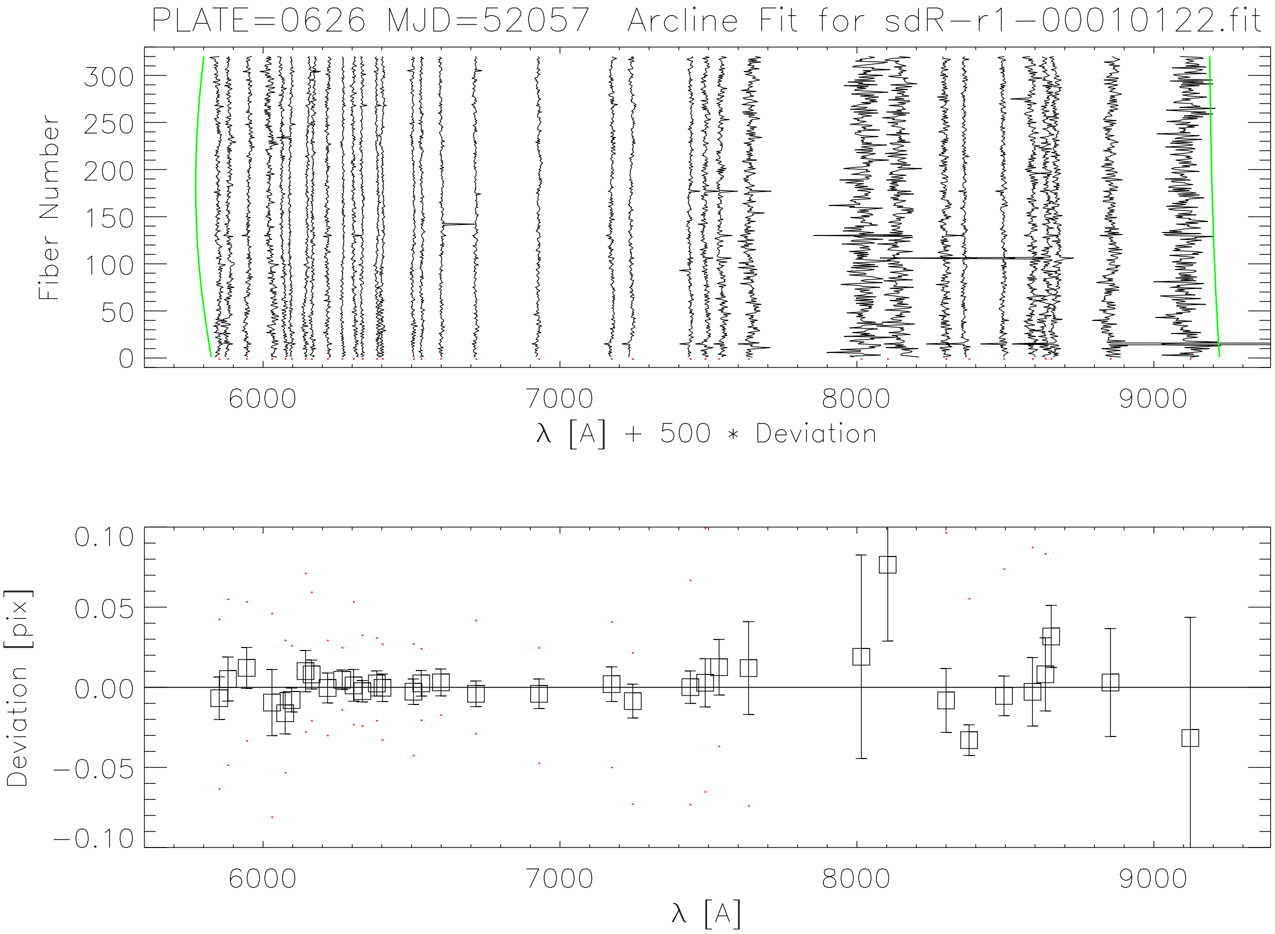


PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-r1-00010116.fit


PLATE=0626 MJD=52057 Superflat sdR-r1-00010116.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

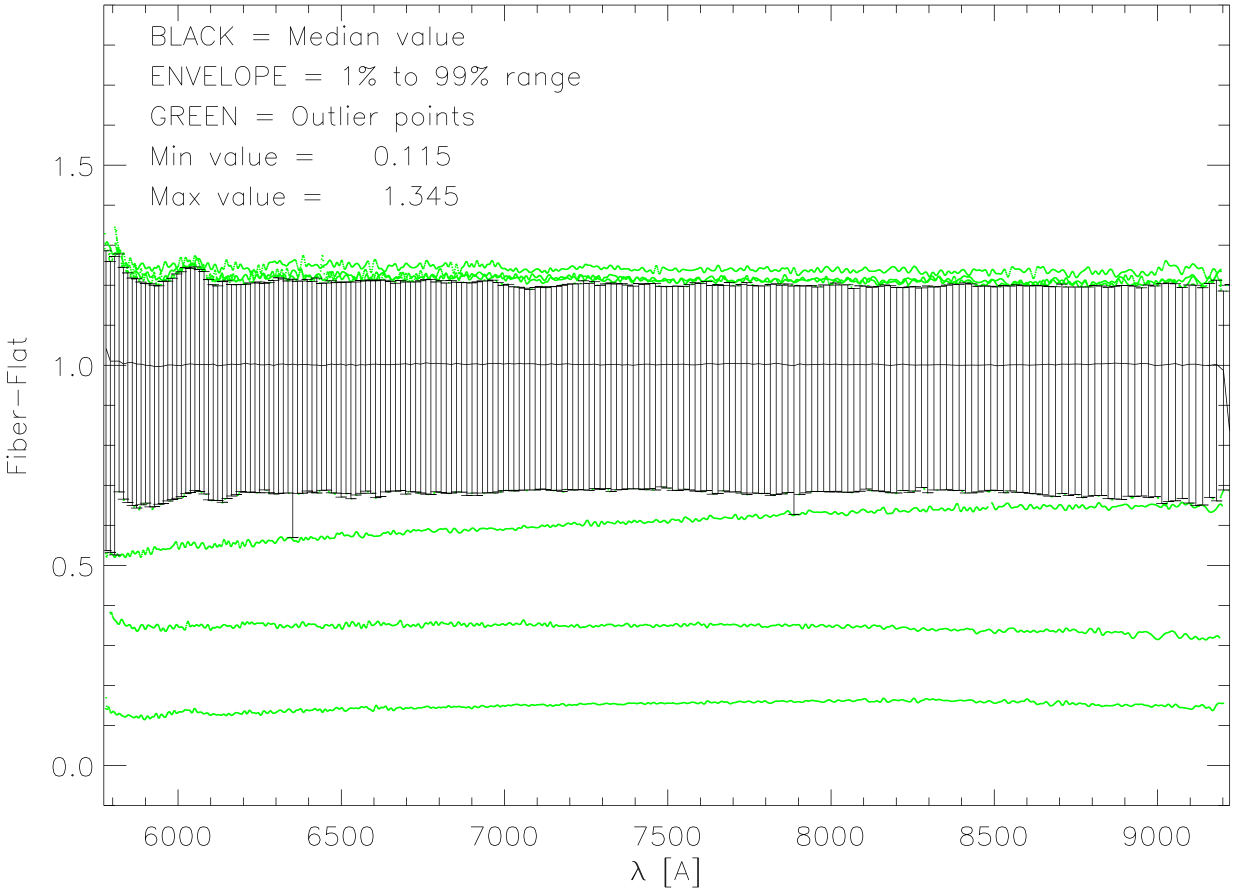

PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-r1-00010121.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number


PLATE=0626 MJD=52057 Superflat sdR-r1-00010121.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

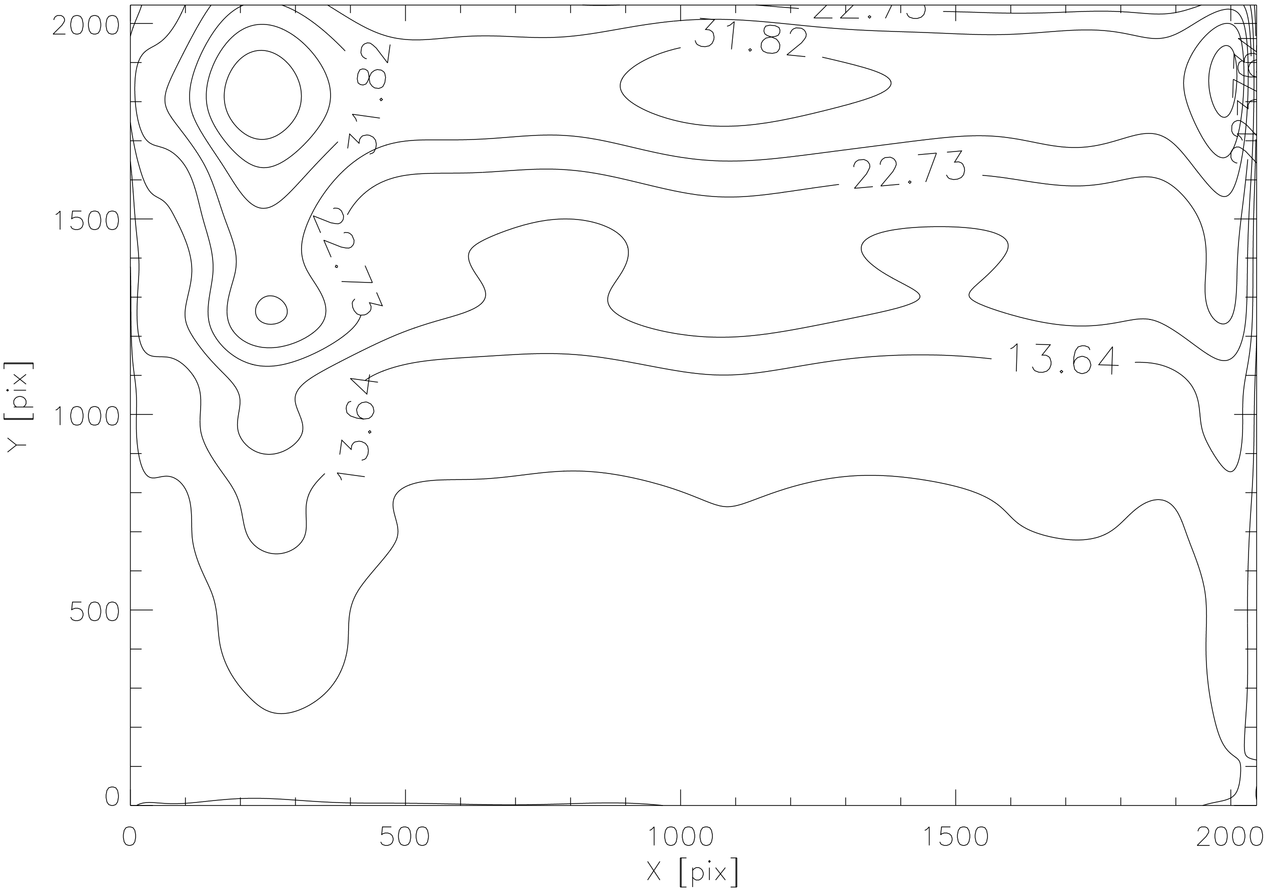


Tue Feb 26 06:45:30 2008

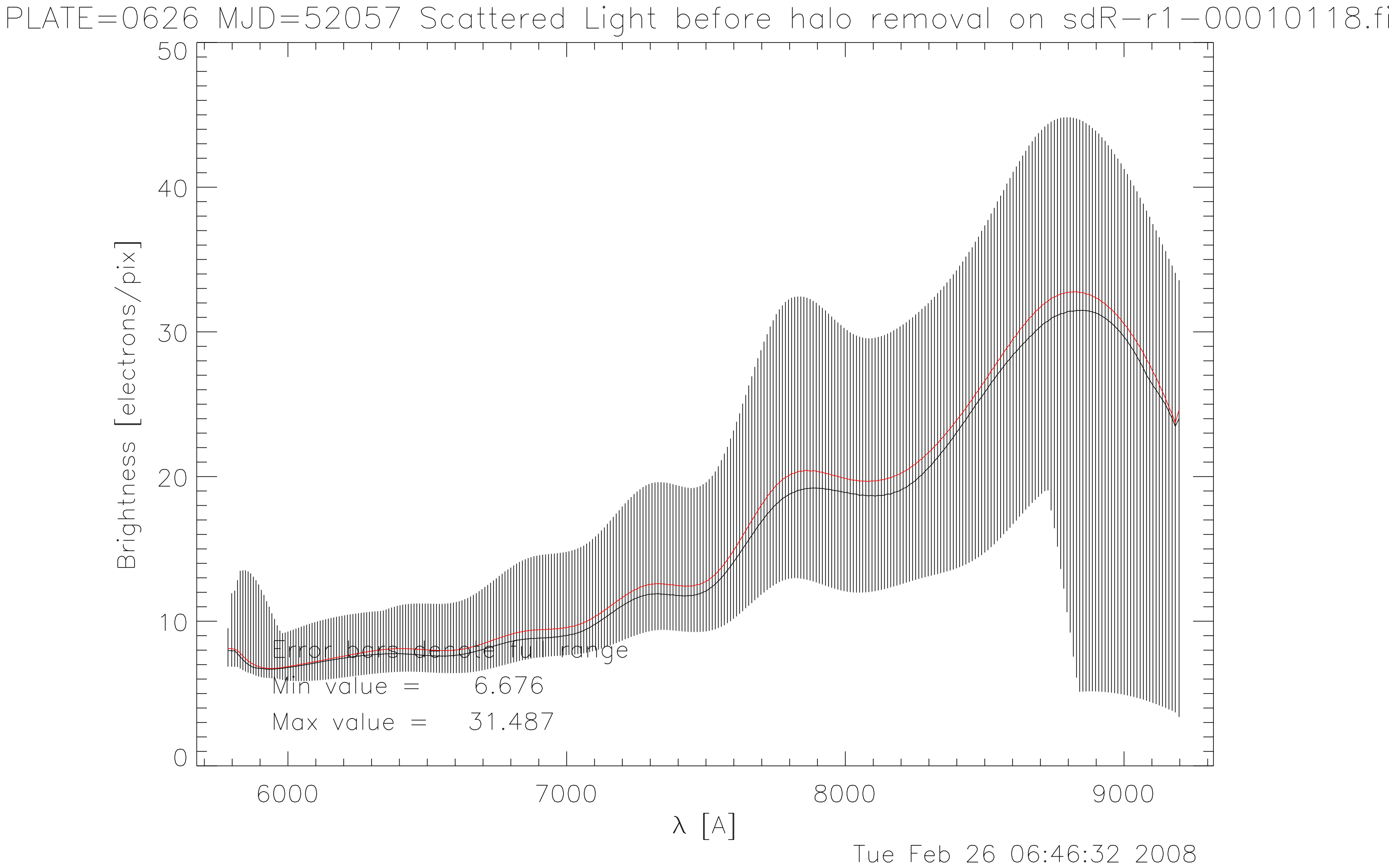
PLATE=0626 MJD=52057 Fiber-Flats for sdR-r1-00010121.fit

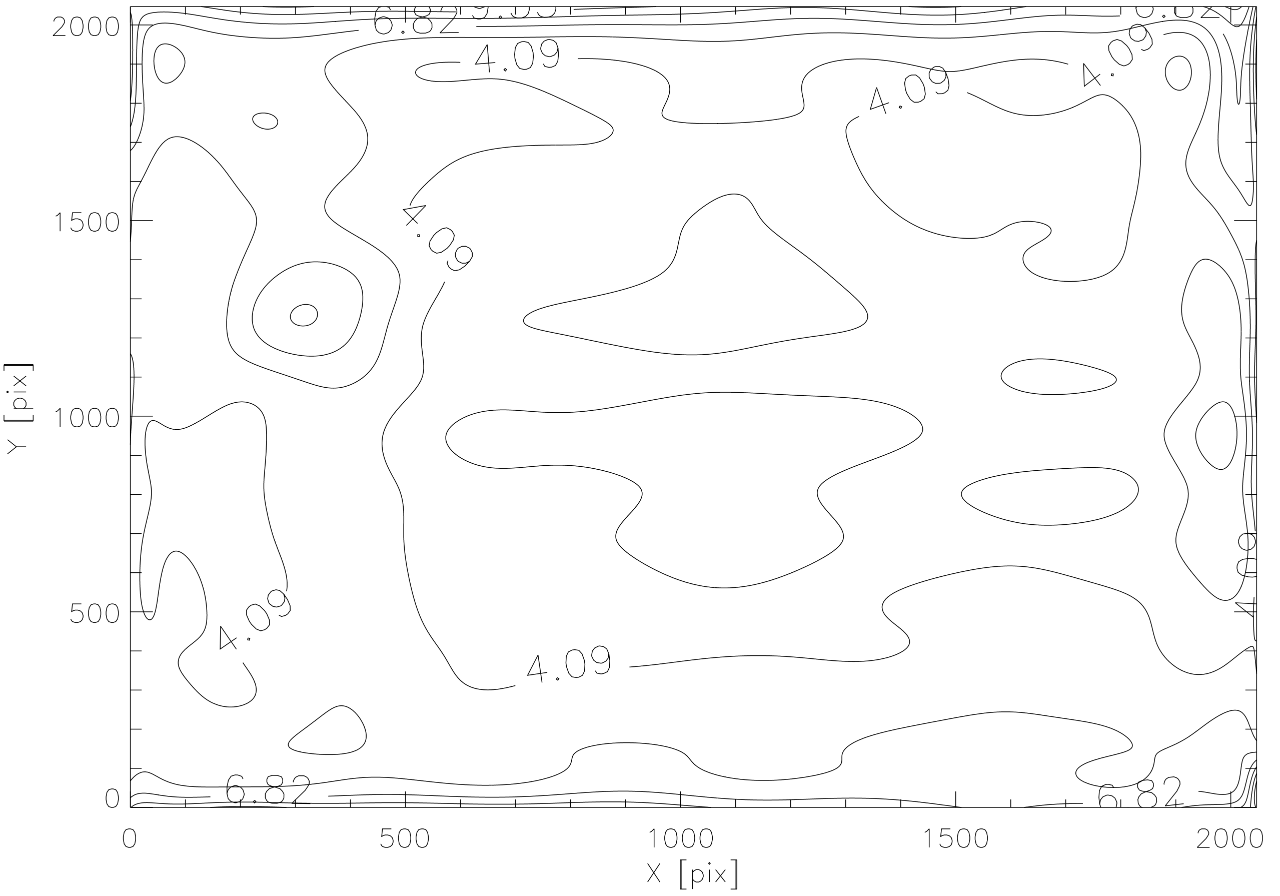


Tue Feb 26 06:45:38 2008

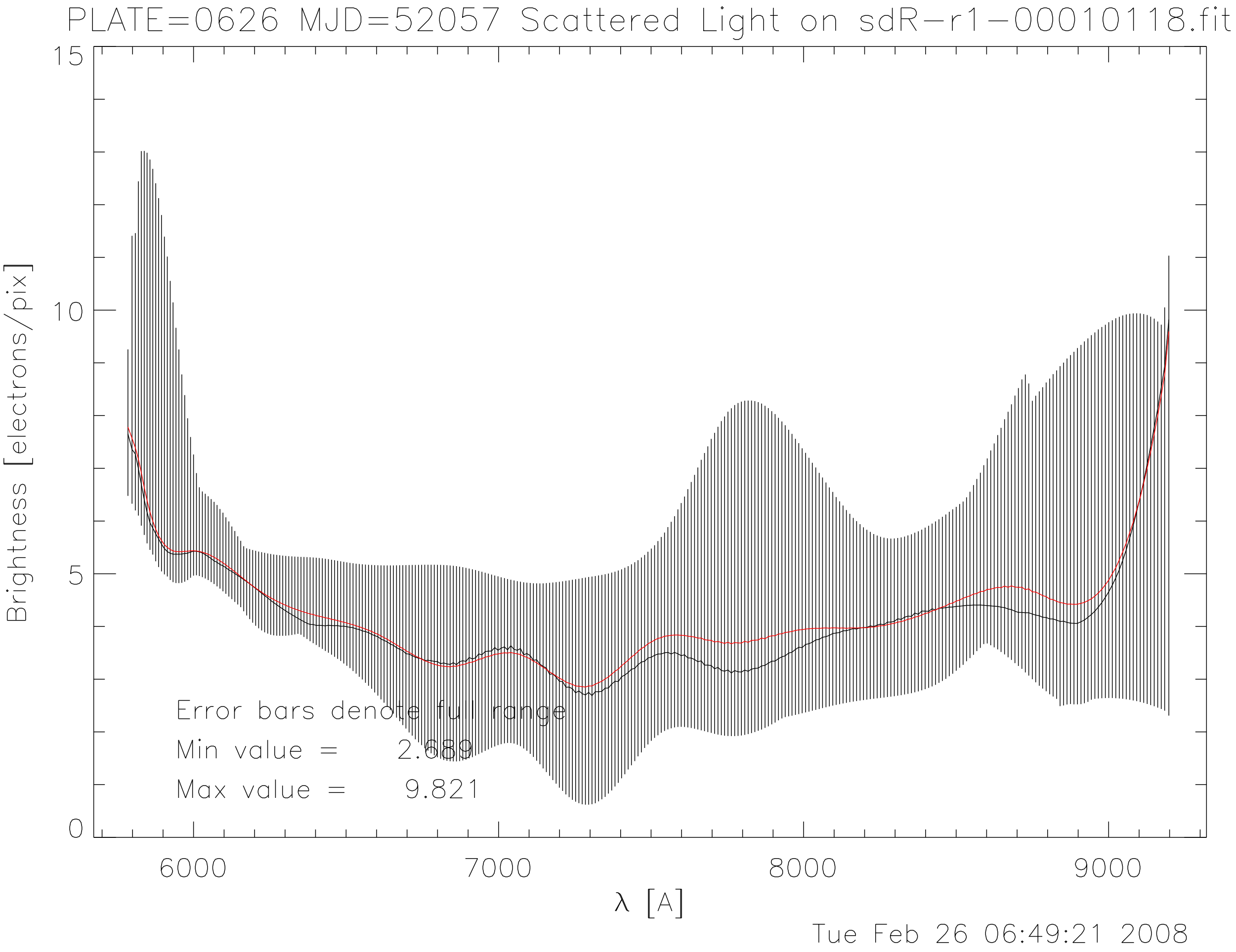


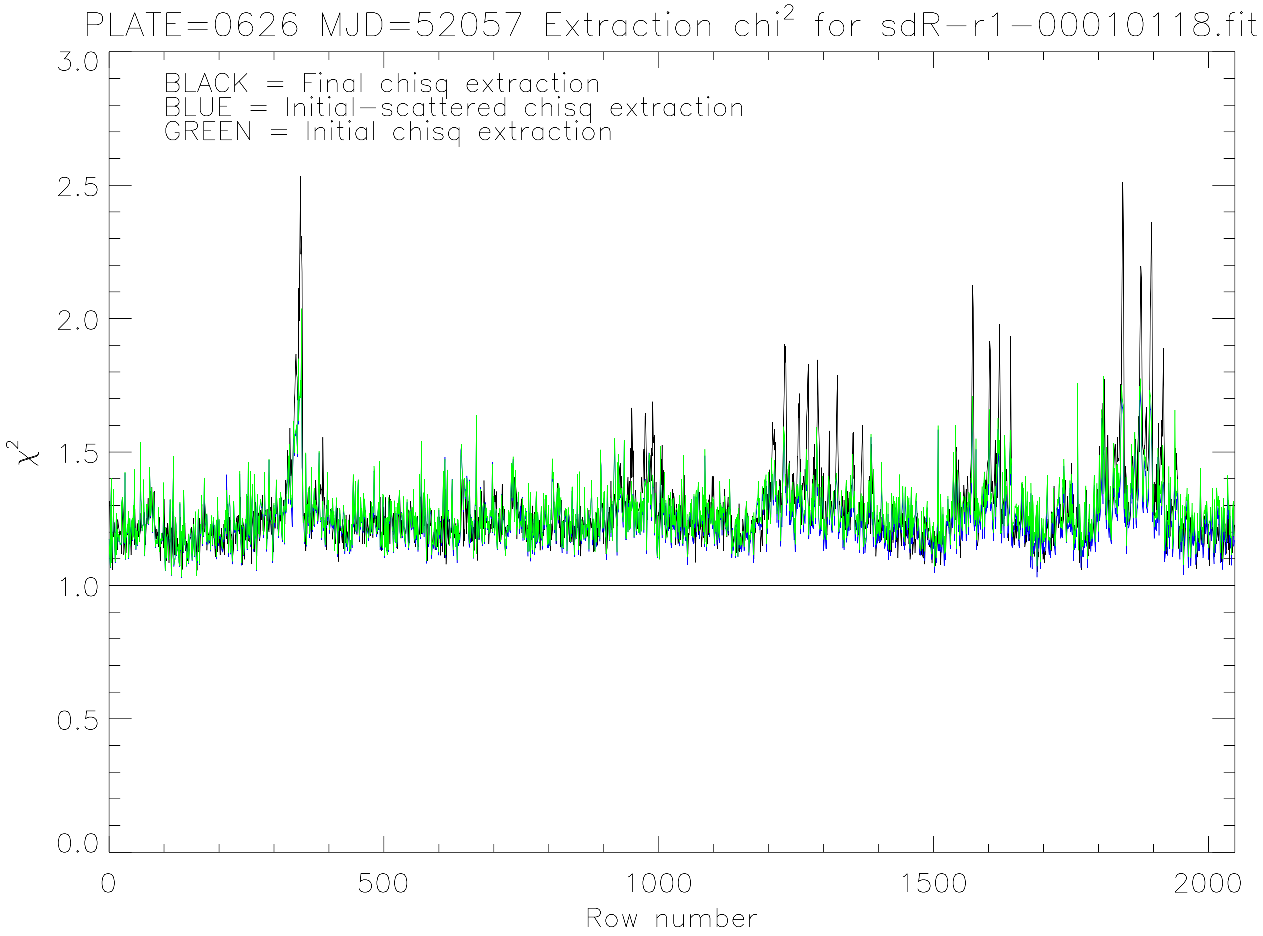
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010118.fi

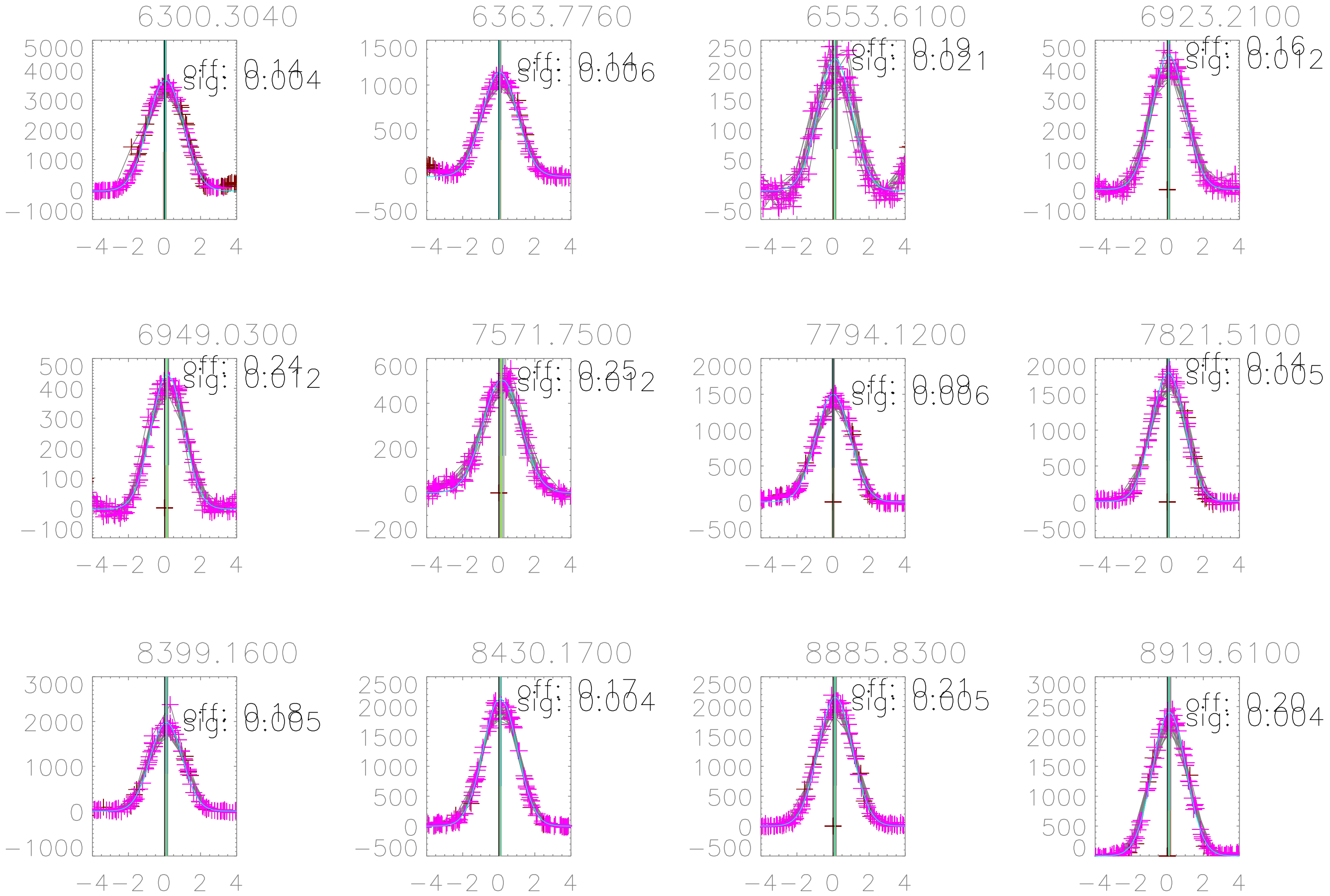

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010118.fi
Brightness [electrons/pix]
50
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.676
Max value = 31.487
Tue Feb 26 06:46:32 2008

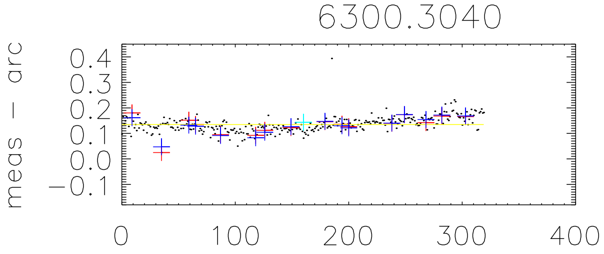


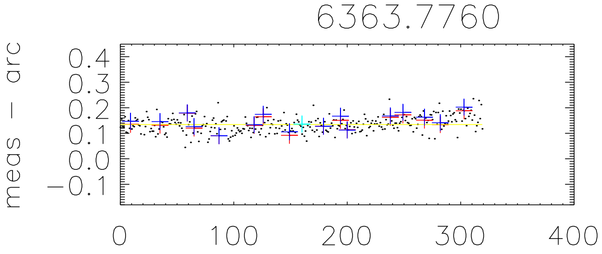
PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010118.fit

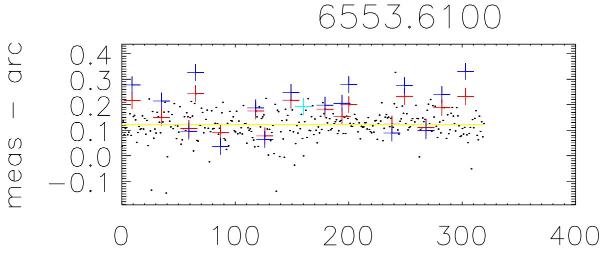

PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010118.fit
Brightness [electrons/pix]
0
5
10
15
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.689
Max value = 9.821
Tue Feb 26 06:49:21 2008

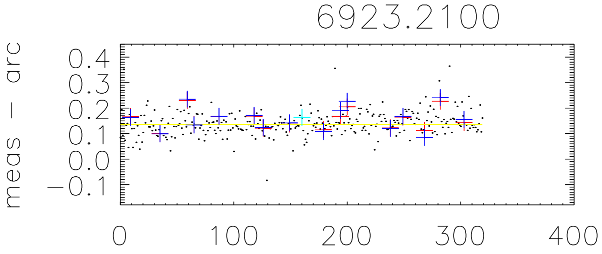

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r1-00010118.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

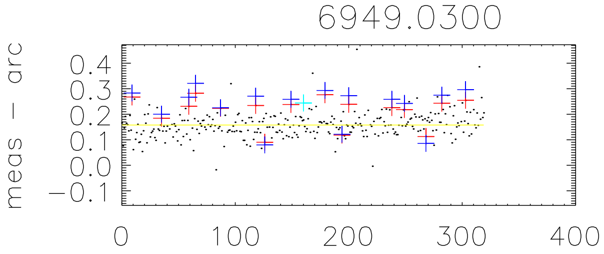

6300.3040
off: 0.14
sig: 0.004
5000
4000
3000
2000
1000
0
−1000
6363.7760
off: 0.14
sig: 0.006
1500
1000
500
0
−500
6553.6100
off: 0.19
sig: 0.021
250
200
150
100
50
0
−50
6923.2100
off: 0.16
sig: 0.012
500
400
300
200
100
0
−100
6949.0300
off: 0.24
sig: 0.012
500
400
300
200
100
0
−100
7571.7500
off: 0.25
sig: 0.012
600
400
200
0
−200
7794.1200
off: 0.09
sig: 0.006
2000
1500
1000
500
0
−500
7821.5100
off: 0.14
sig: 0.005
2000
1500
1000
500
0
−500
8399.1600
off: 0.18
sig: 0.005
3000
2000
1000
0
−1000
8430.1700
off: 0.17
sig: 0.004
2500
2000
1500
1000
500
0
−500
8885.8300
off: 0.21
sig: 0.005
2500
2000
1500
1000
500
0
−500
8919.6100
off: 0.20
sig: 0.004
3000
2500
2000
1500
1000
500
0
−4 −2 0 2 4

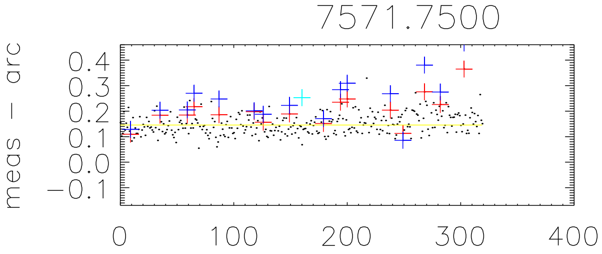

6300.3040
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

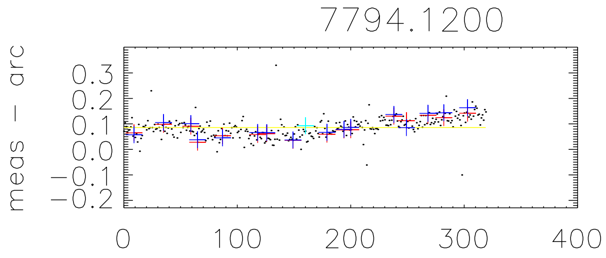

6363.7760
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

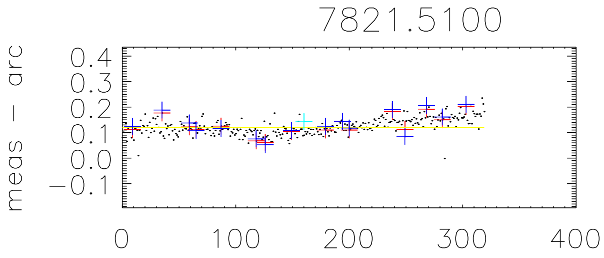

6553.6100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

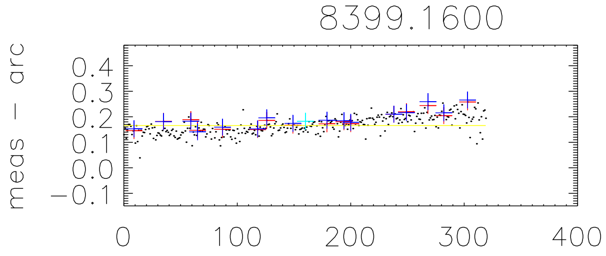

6923.2100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

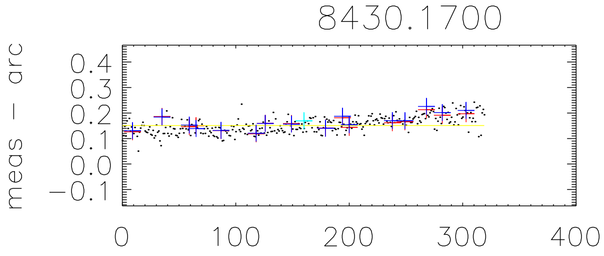

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

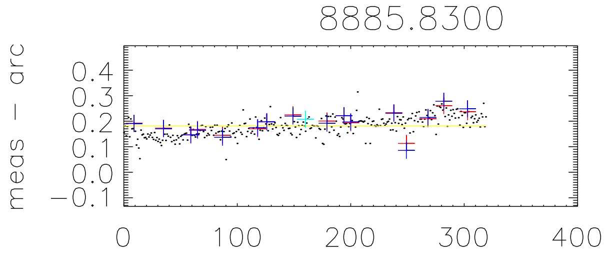

7571.7500
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

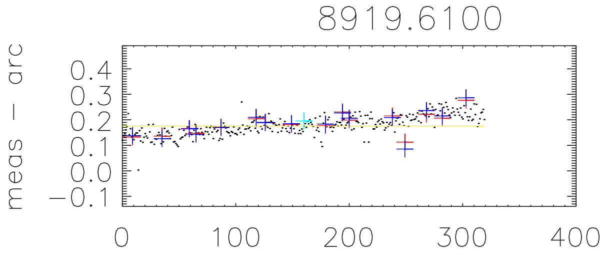

7794.1200
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

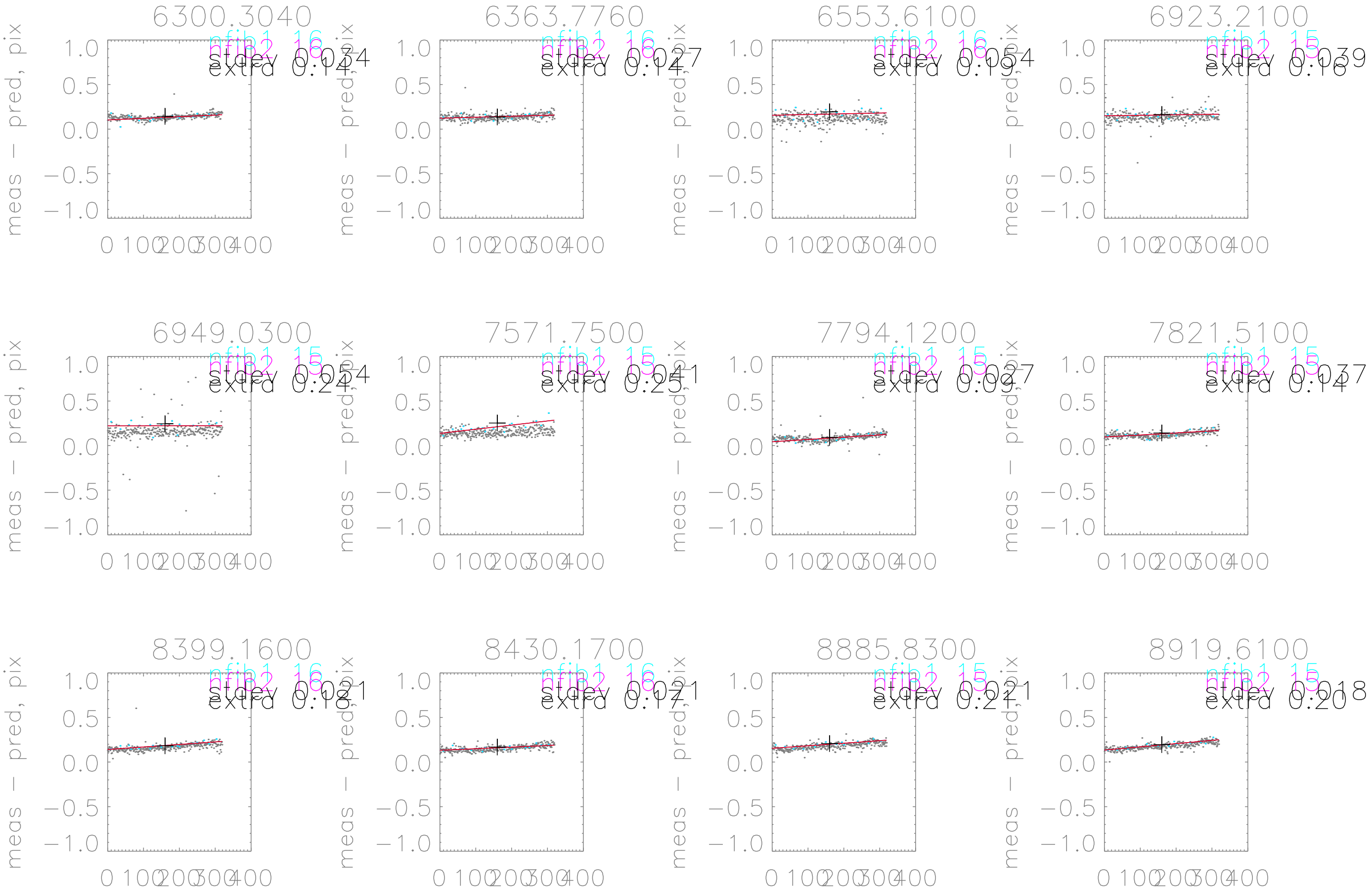

7821.5100
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

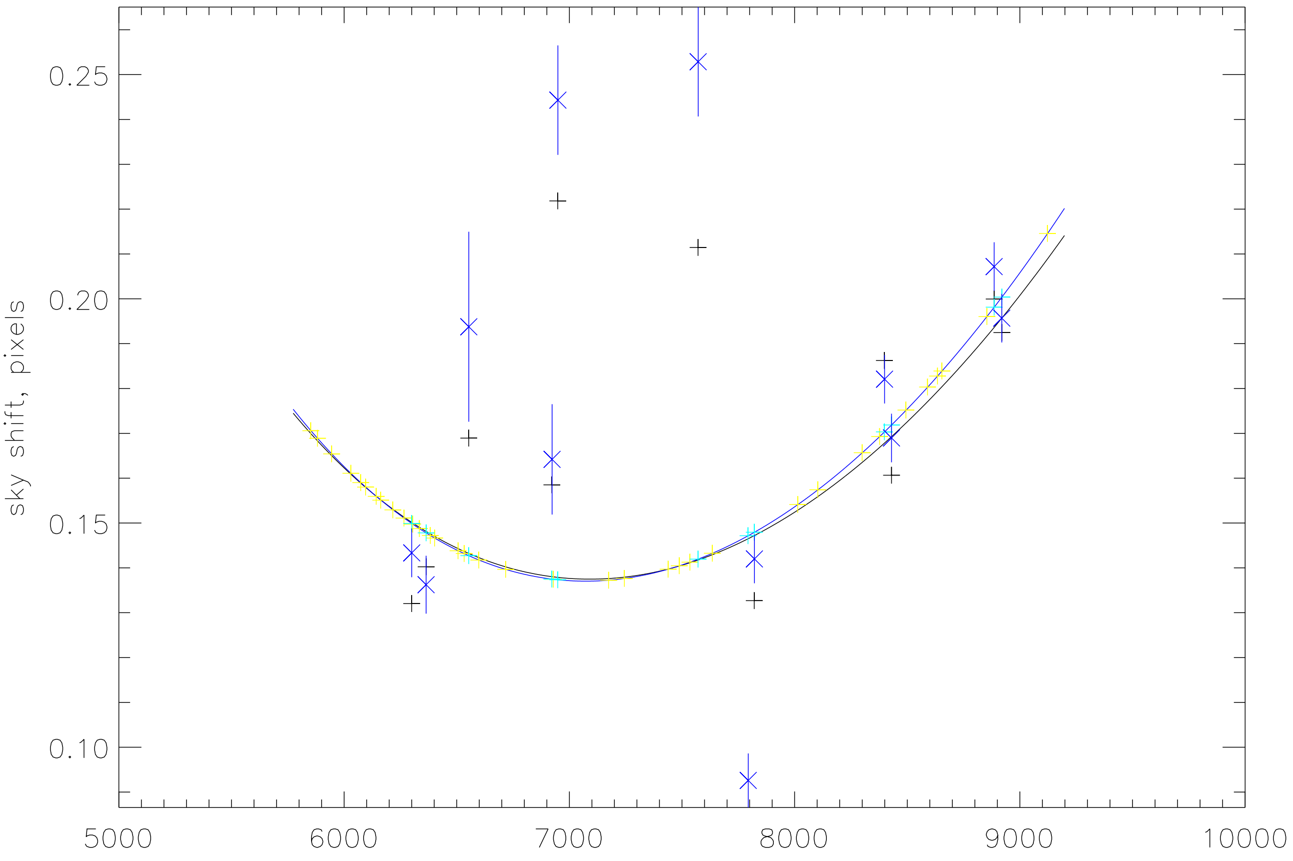

8399.1600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

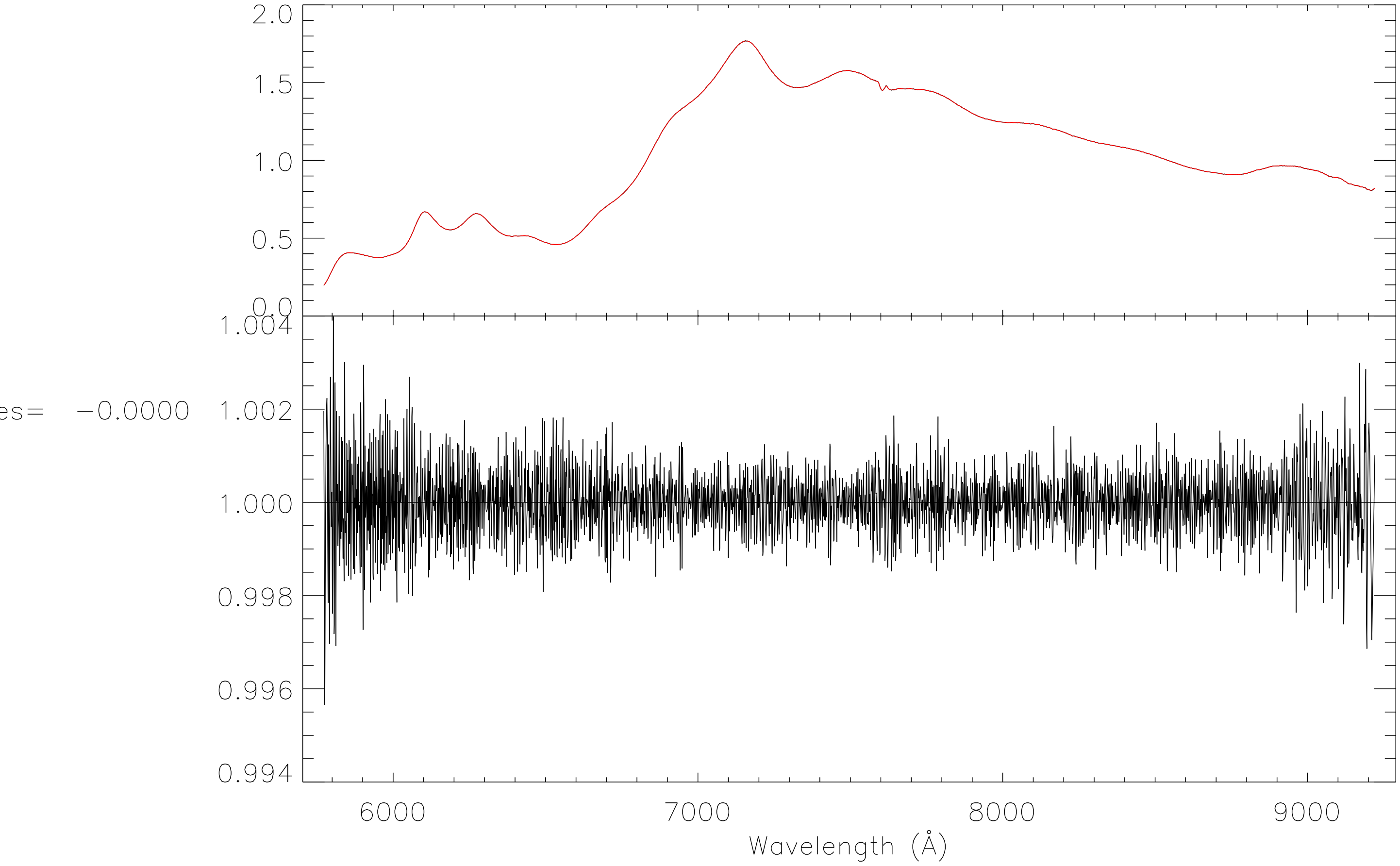

8430.1700
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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


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

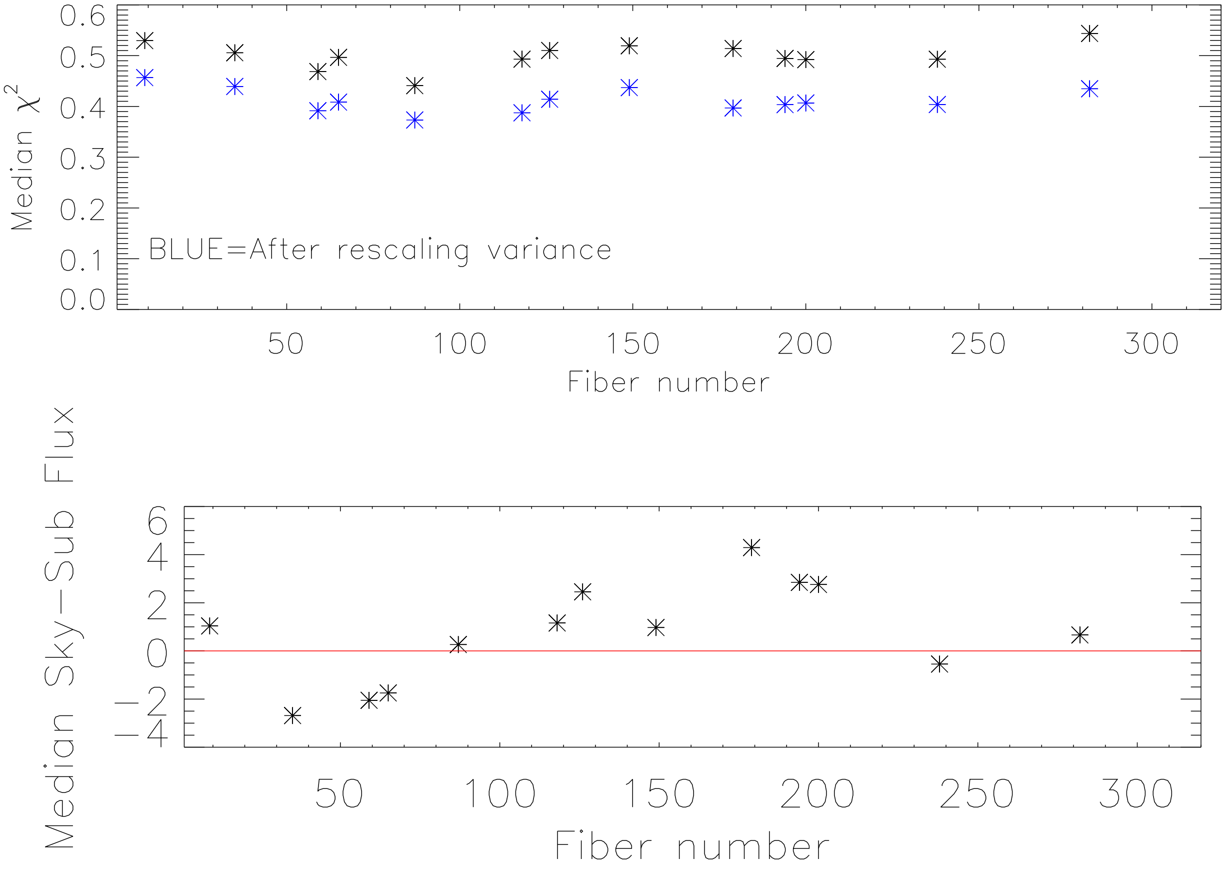

6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd 0.14
6363.7760
nfib1 16
nfib2 16
stdev 0.027
extrd 0.14
6553.6100
nfib1 16
nfib2 16
stdev 0.054
extrd 0.19
6923.2100
nfib1 15
nfib2 15
stdev 0.039
extrd 0.16
6949.0300
nfib1 15
nfib2 15
stdev 0.054
extrd 0.24
7571.7500
nfib1 15
nfib2 15
stdev 0.041
extrd 0.25
7794.1200
nfib1 15
nfib2 15
stdev 0.027
extrd 0.09
7821.5100
nfib1 15
nfib2 15
stdev 0.037
extrd 0.14
8399.1600
nfib1 16
nfib2 16
stdev 0.021
extrd 0.18
8430.1700
nfib1 16
nfib2 16
stdev 0.021
extrd 0.17
8885.8300
nfib1 15
nfib2 15
stdev 0.021
extrd 0.21
8919.6100
nfib1 15
nfib2 15
stdev 0.018
extrd 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

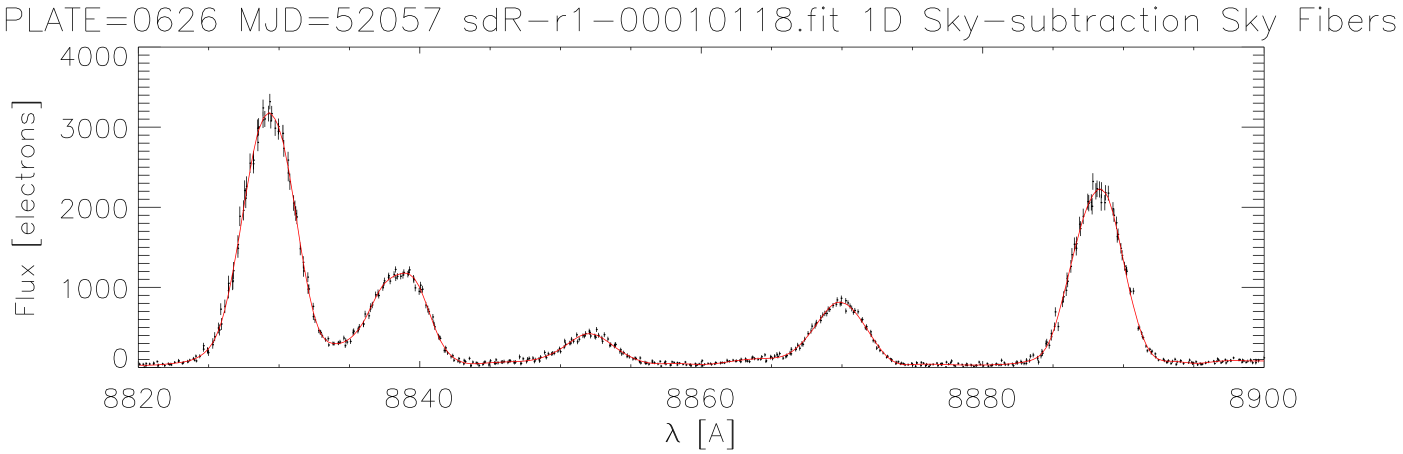

sky shift, pixels
0.25
0.20
0.15
0.10
5000
6000
7000
8000
9000
10000

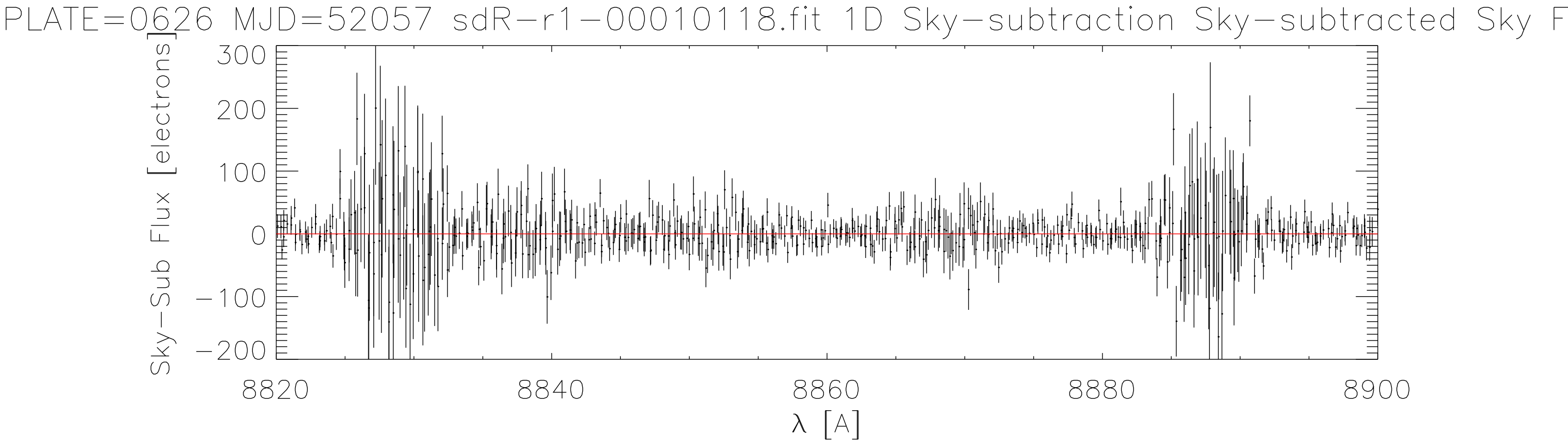


PLATE=0626 MJD=52057 Smooth superflat for sdR-r1-00010118.fit

PLATE=0626 MJD=52057 sdR-r1-00010118.fit 1D Sky-subtraction Sky Fiber

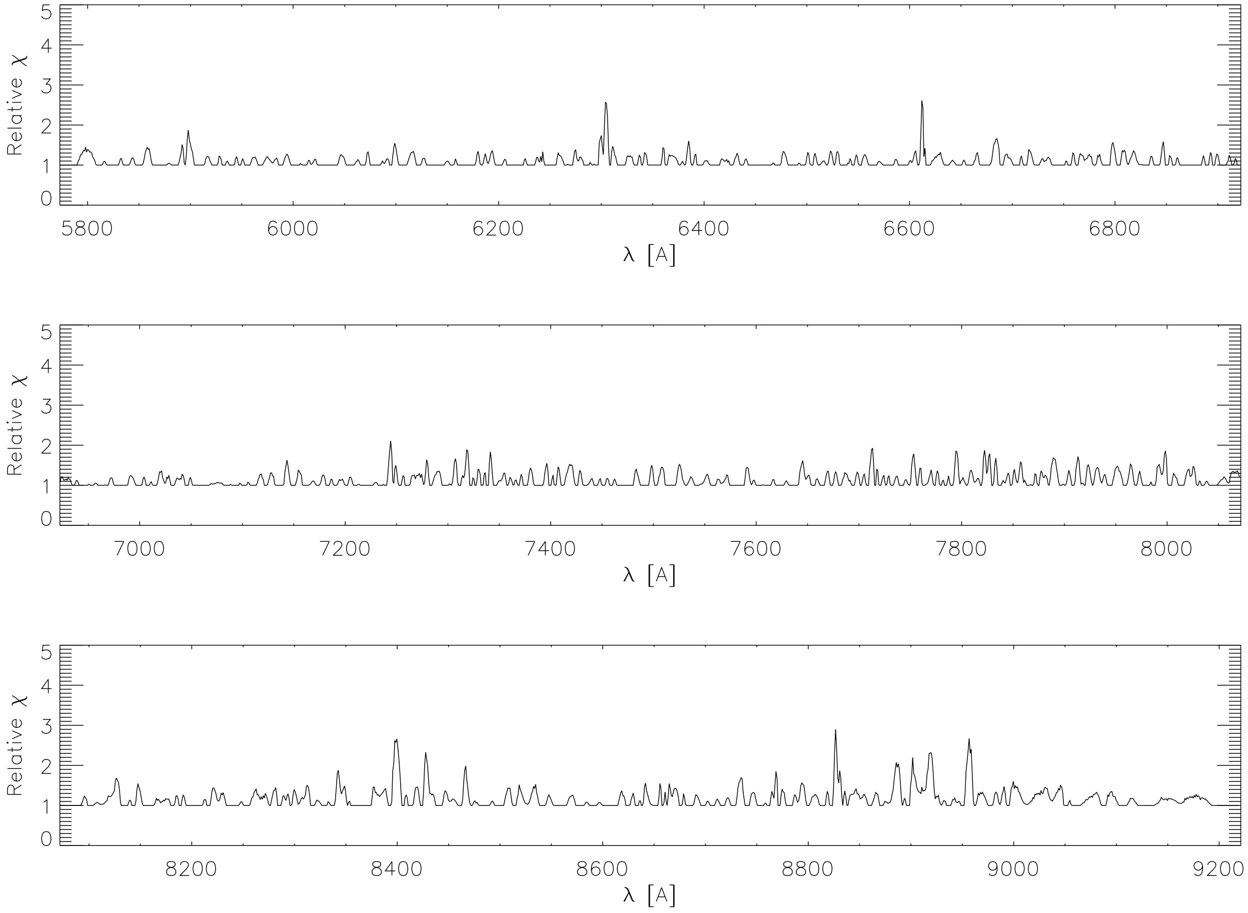


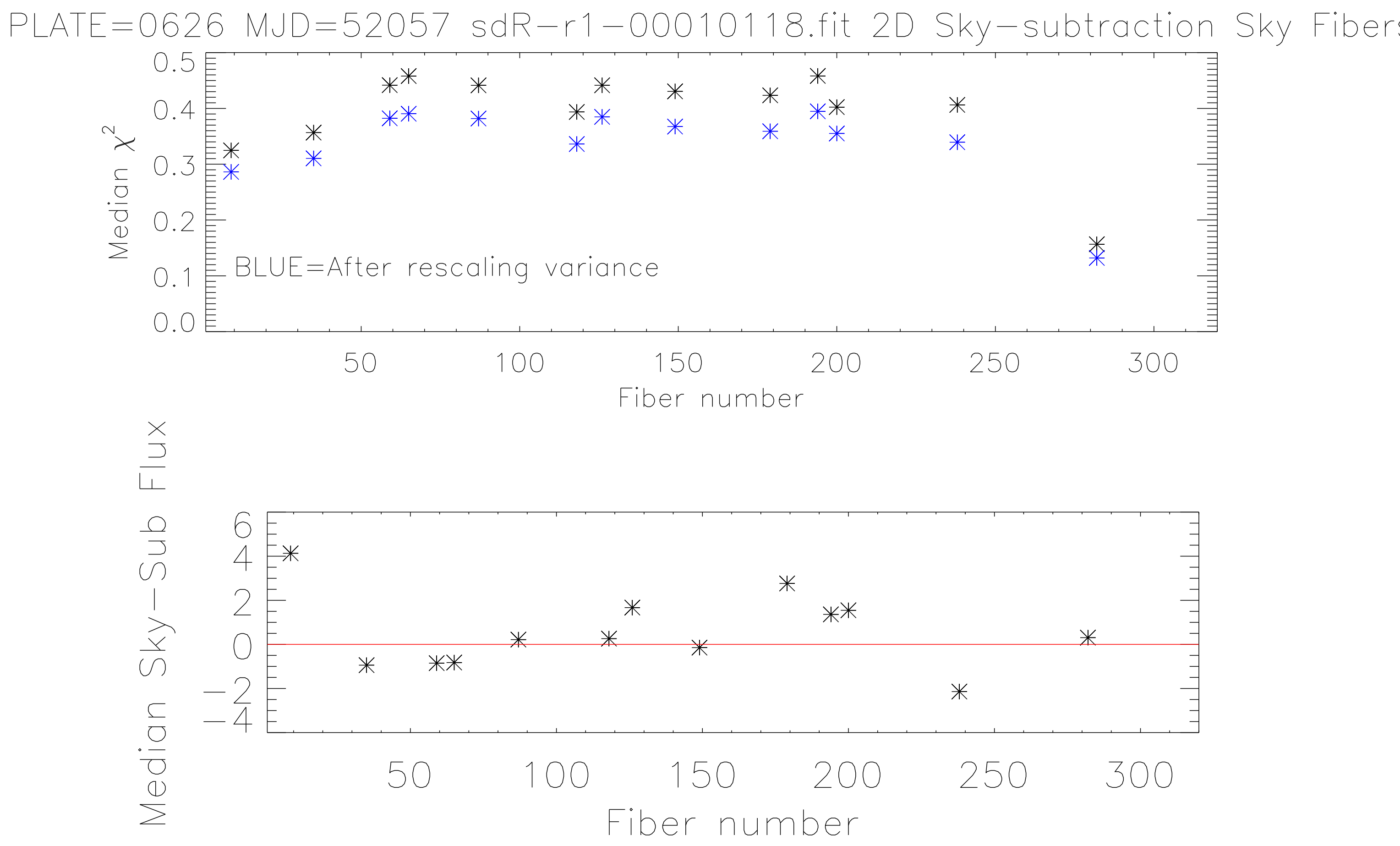

PLATE=0626 MJD=52057 sdR-r1-00010118.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

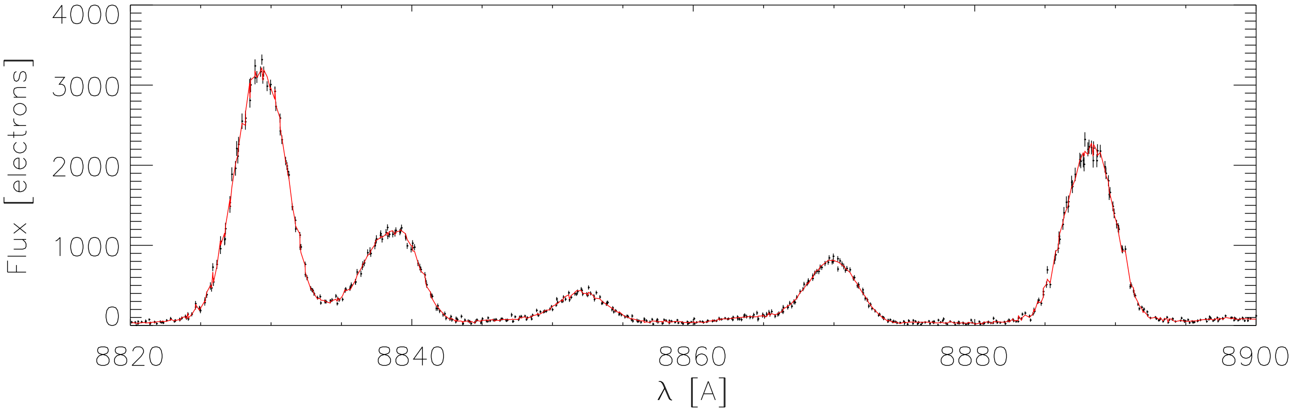

PLATE=0626 MJD=52057 sdR-r1-00010118.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 13

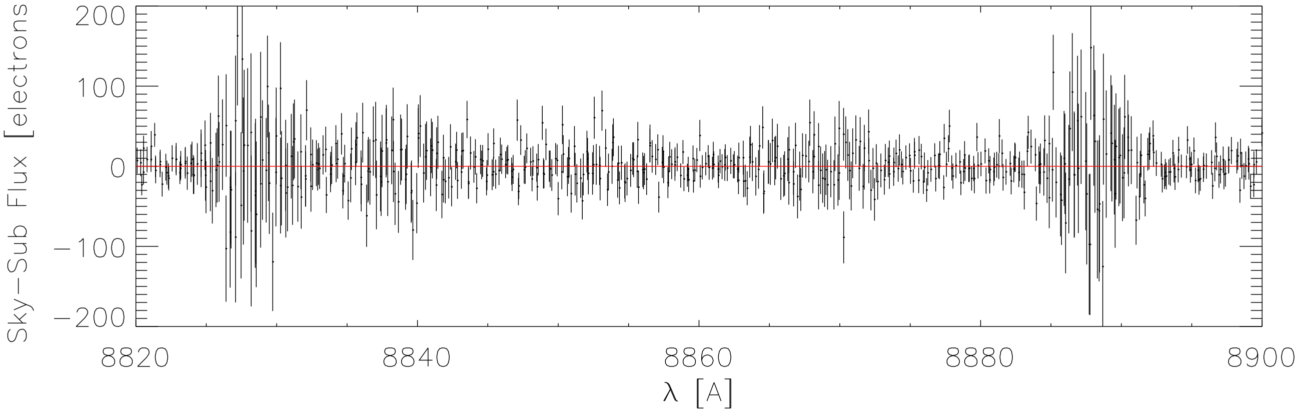
PLATE=0626 MJD=52057 sdR-r1-00010118.fit 1D Sky-subtraction Rescaled Errors




PLATE=0626 MJD=52057 sdR-r1-00010118.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



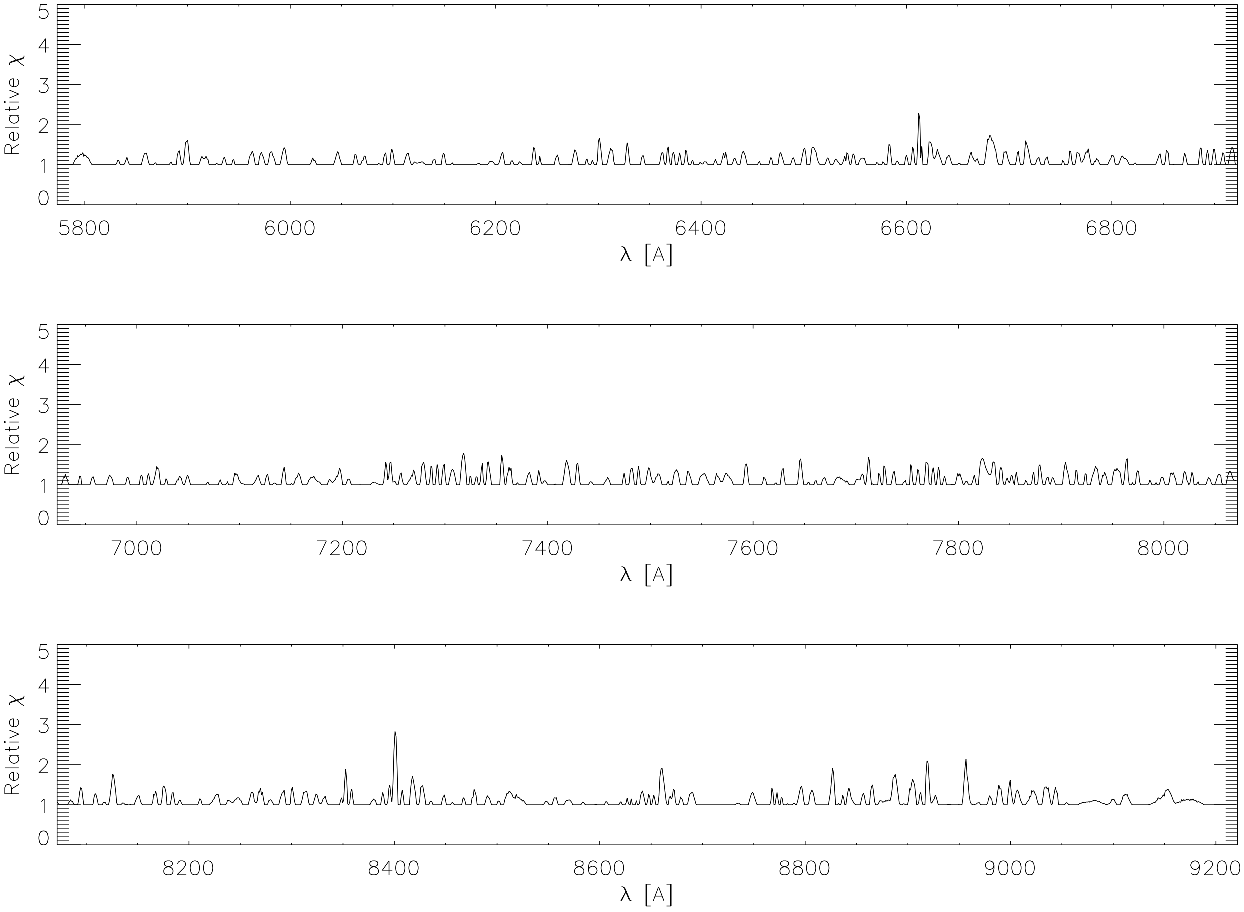
PLATE=0626 MJD=52057 sdR-r1-00010118.fit 2D Sky-subtraction Sky Fibers

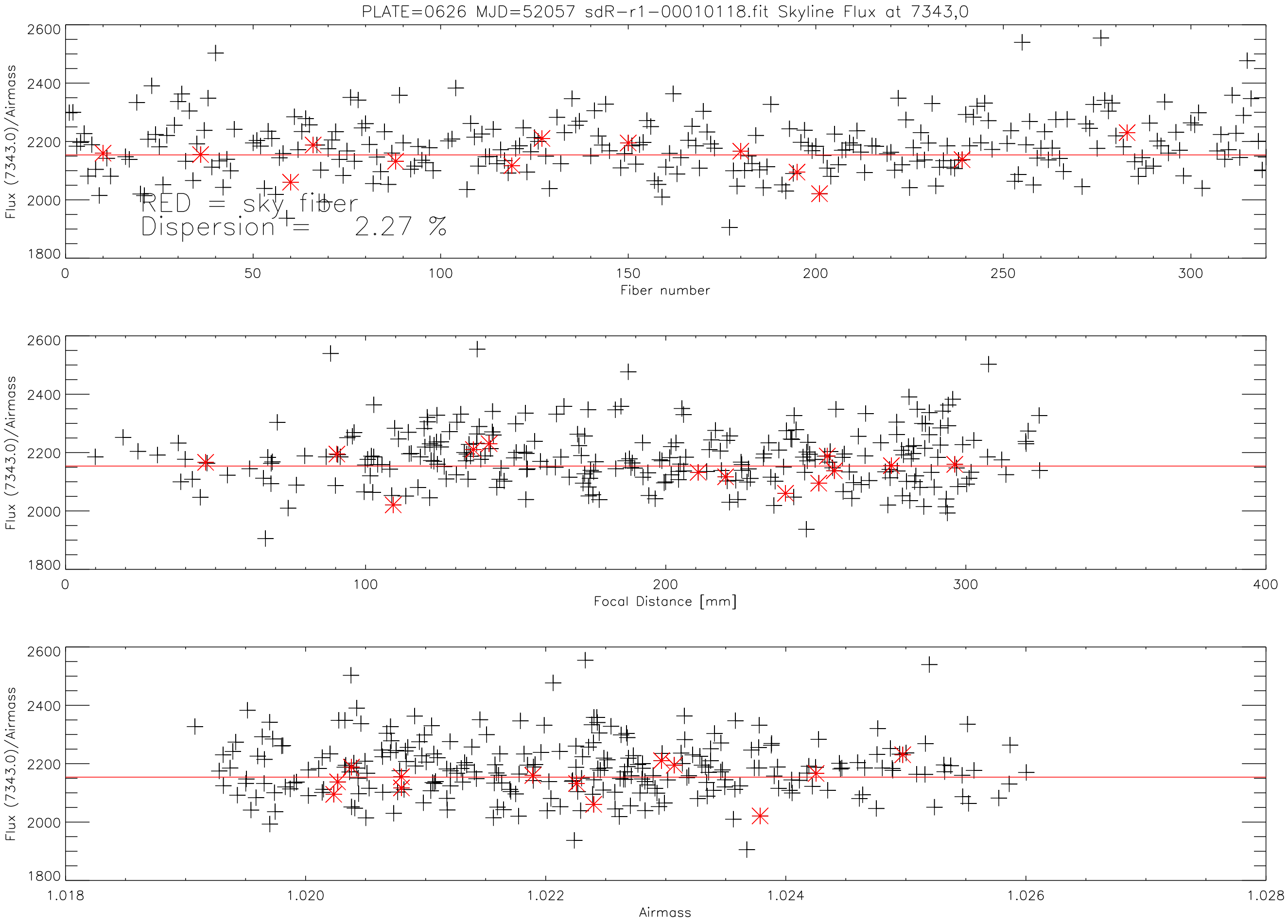


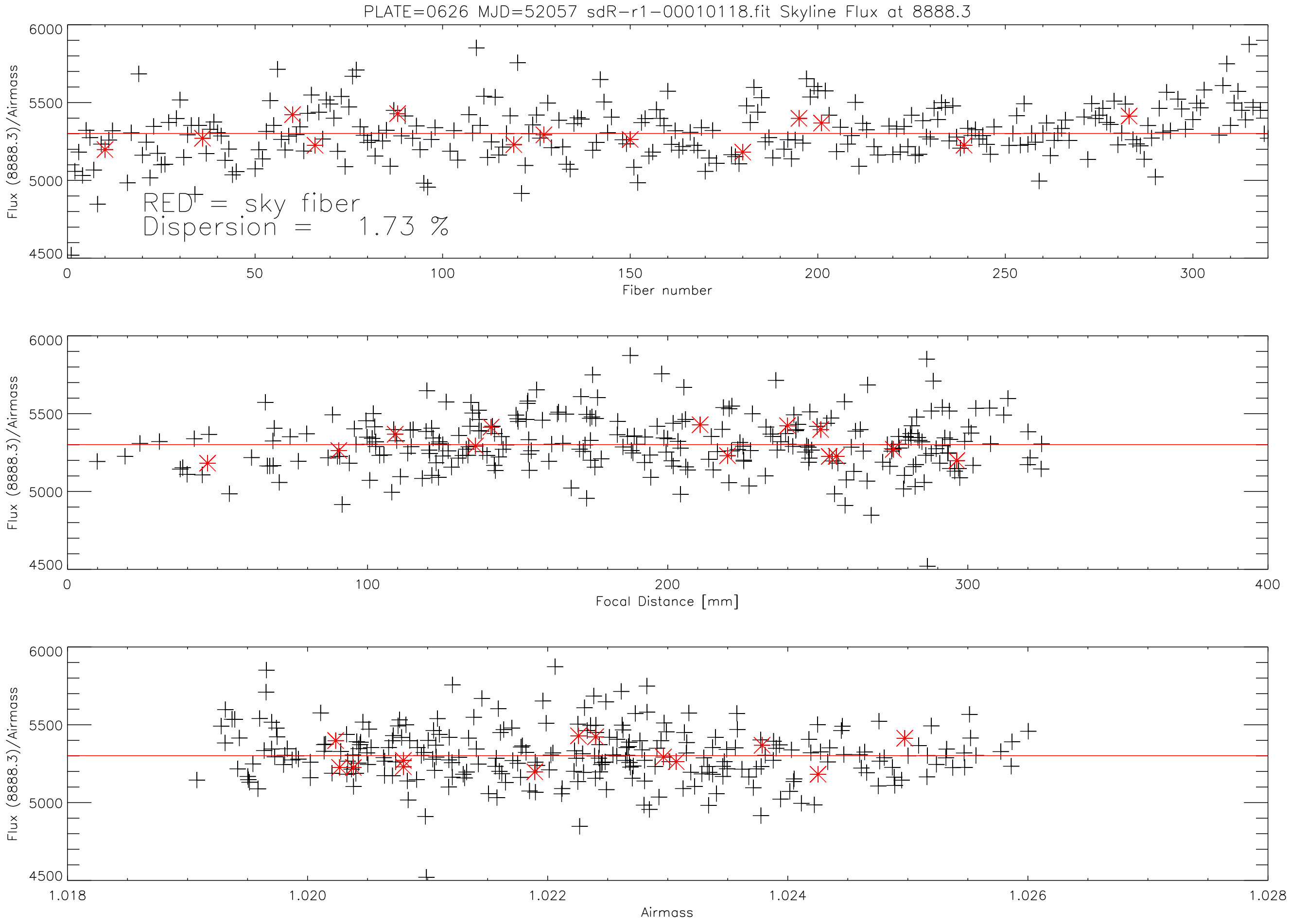
PLATE=0626 MJD=52057 sdR-r1-00010118.fit 2D Sky-subtraction Sky-subtracted Sky F

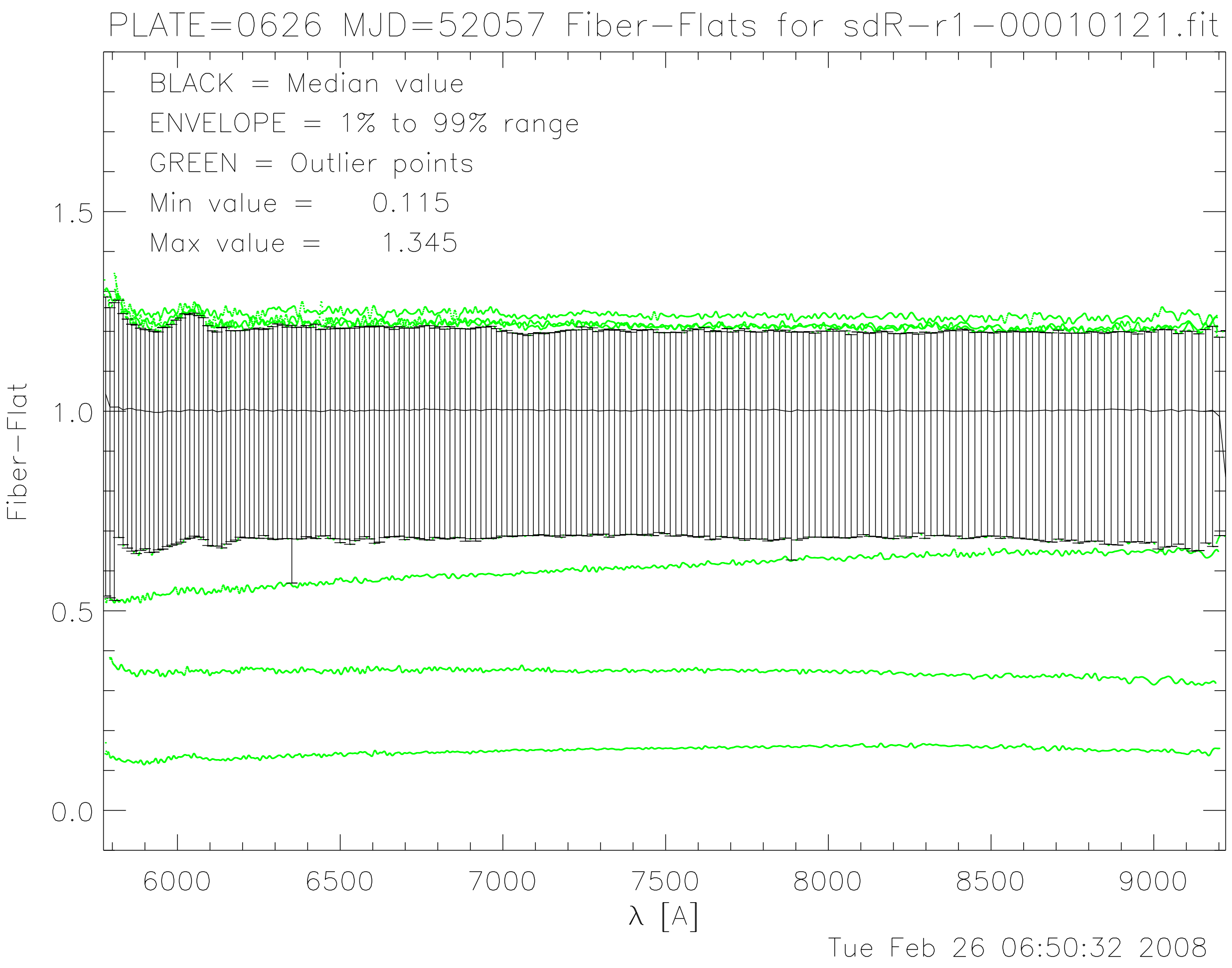
Number of sky fibers = 13

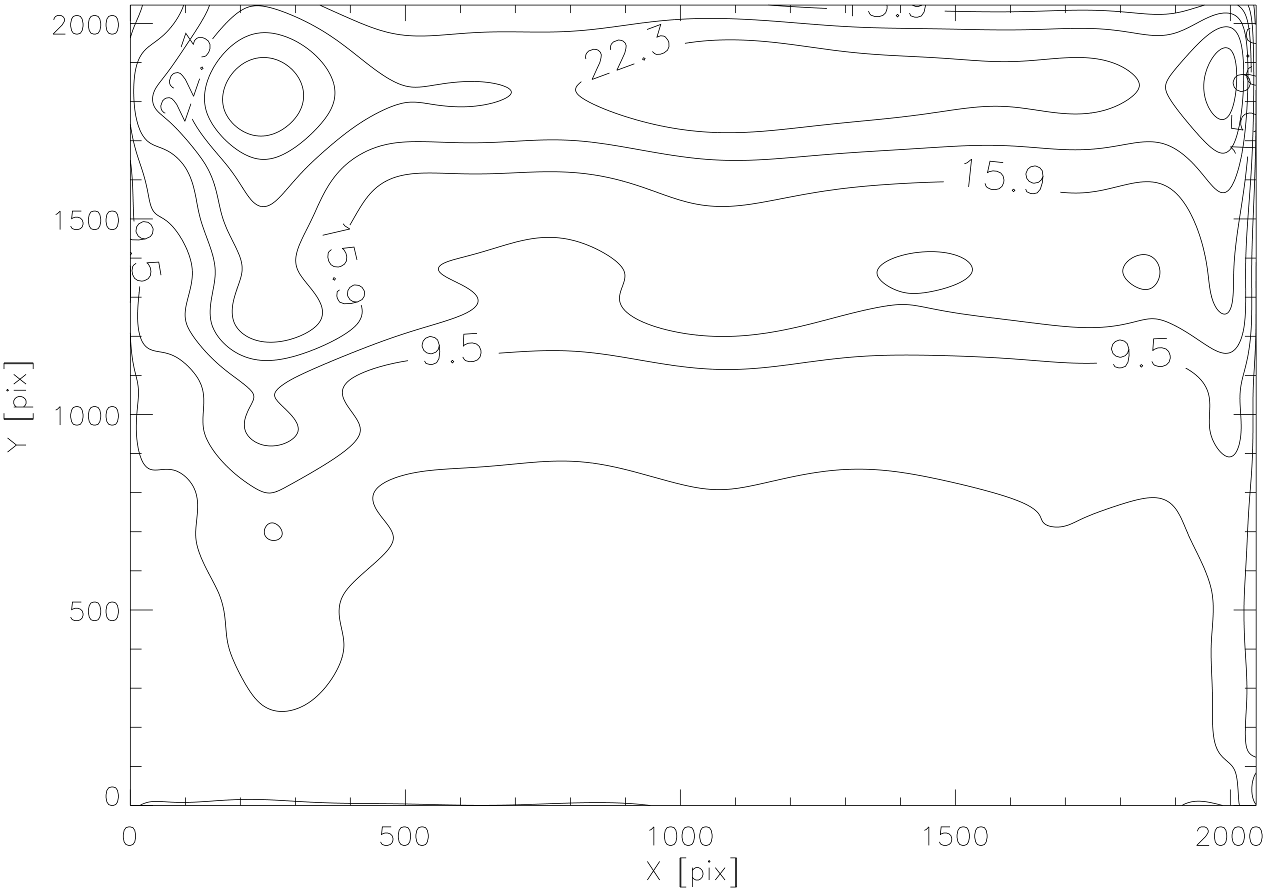
PLATE=0626 MJD=52057 sdR-r1-00010118.fit 2D Sky-subtraction Rescaled Errors



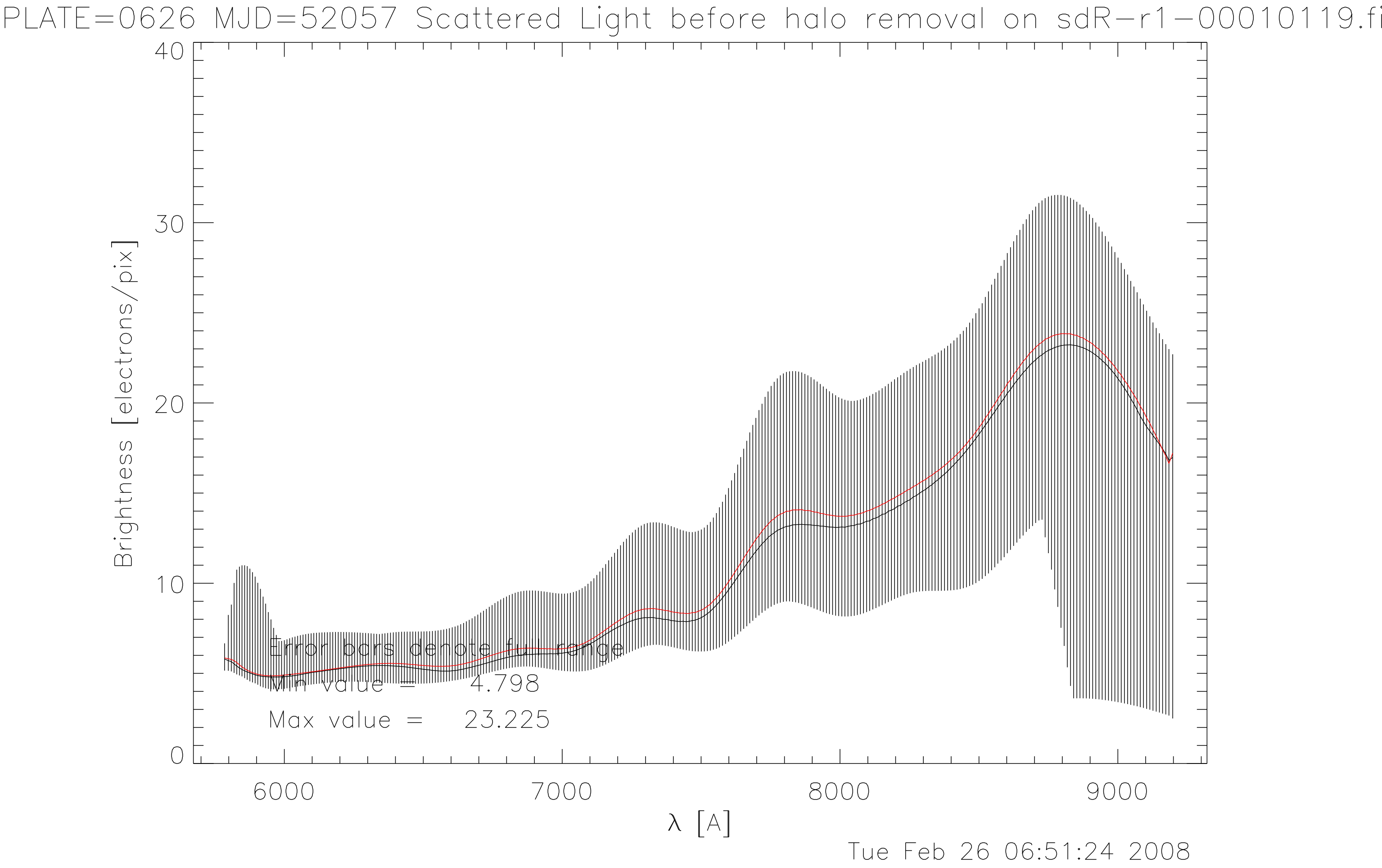

PLATE=0626 MJD=52057 sdR-r1-00010118.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1800
2000
2200
2400
2600
RED = sky fiber
Dispersion = 2.27 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
1800
2000
2200
2400
2600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1800
2000
2200
2400
2600
1.018
1.020
1.022
1.024
1.026
1.028
Airmass

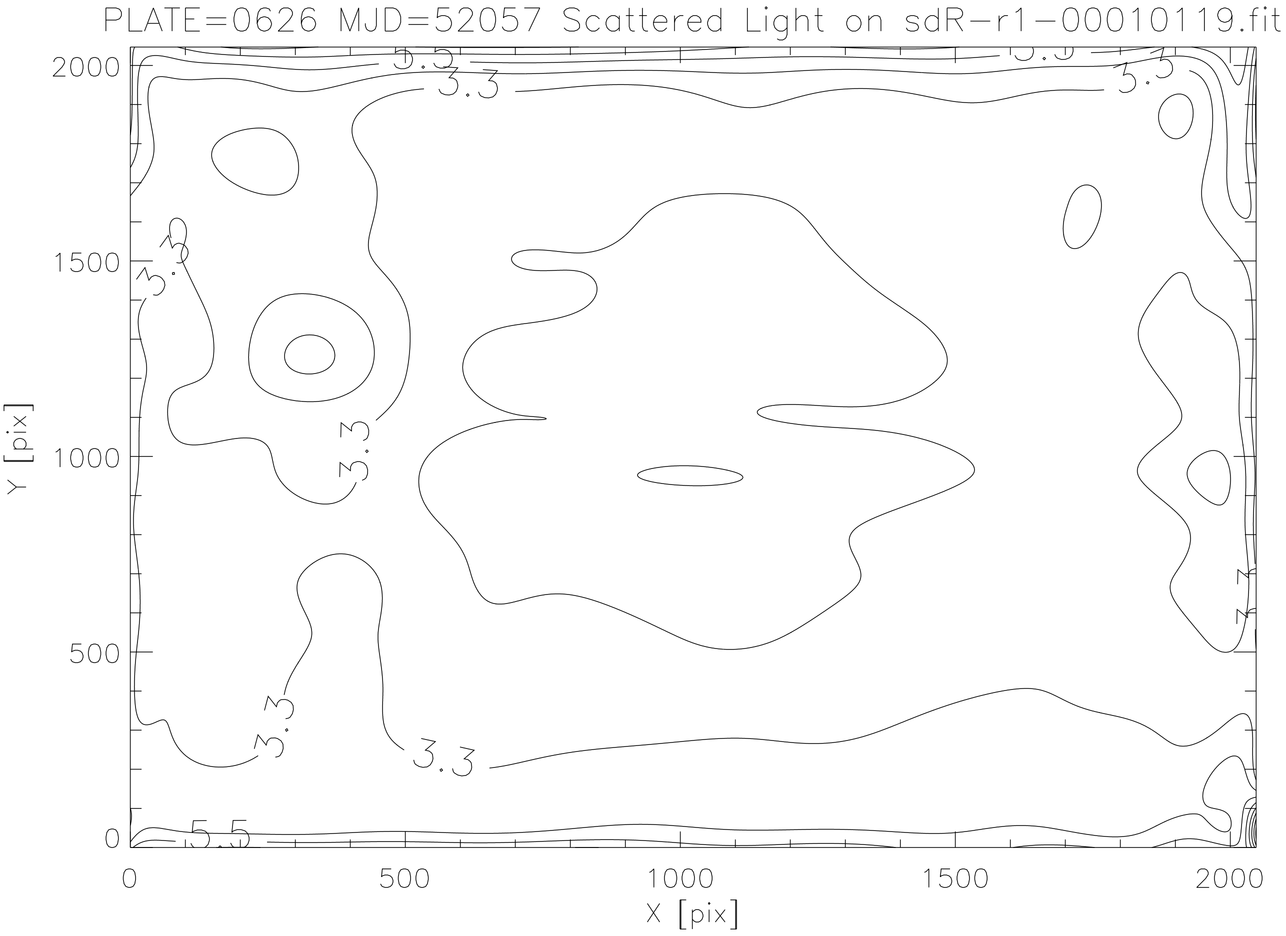

PLATE=0626 MJD=52057 sdR-r1-00010118.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
6000
5500
5000
4500
RED = sky fiber
Dispersion = 1.73 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
6000
5500
5000
4500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
6000
5500
5000
4500
1.018
1.020
1.022
1.024
1.026
1.028
Airmass


PLATE=0626 MJD=52057 Fiber−Flats for sdR−r1−00010121.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.115
Max value = 1.345
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 06:50:32 2008

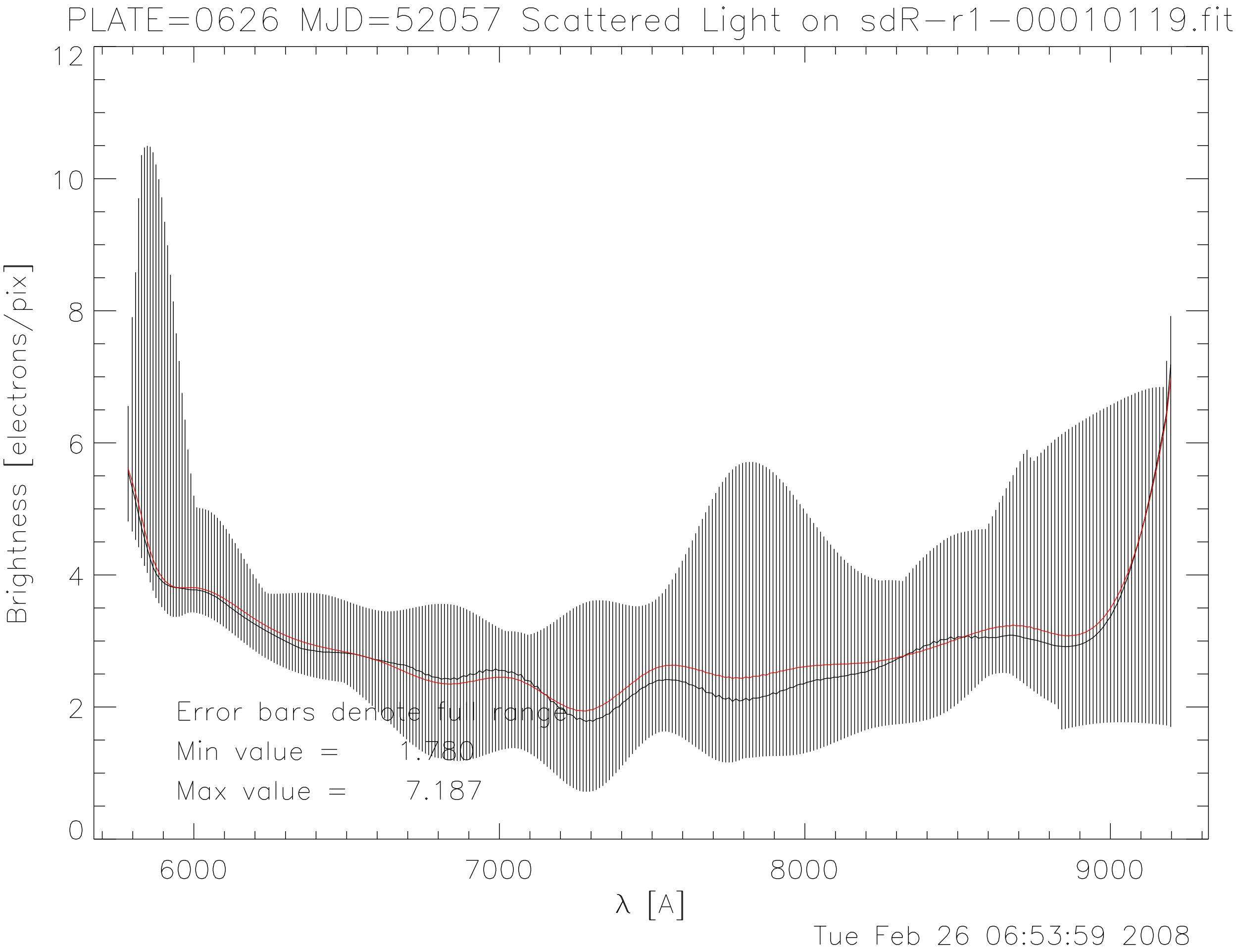


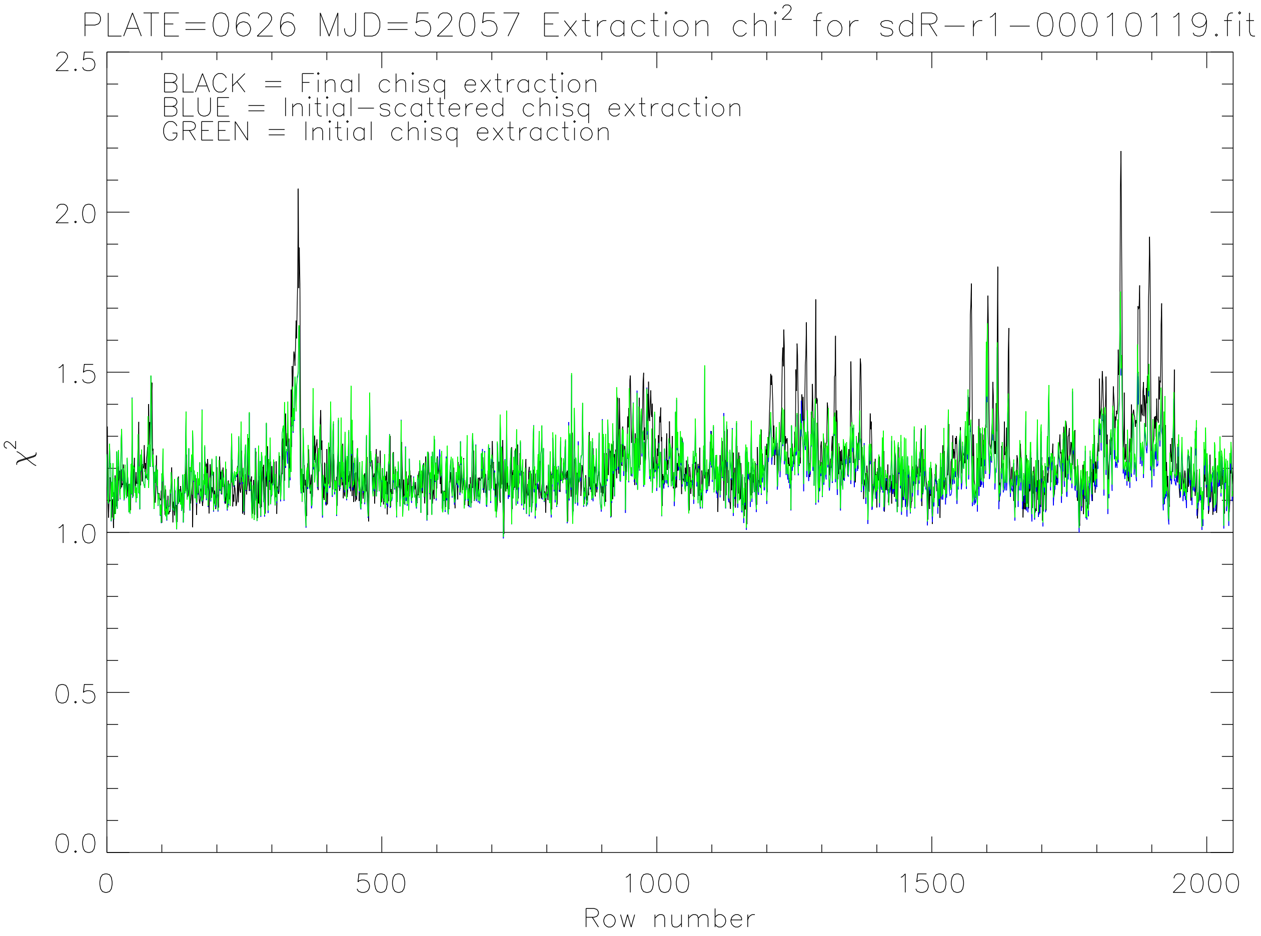
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010119.fi

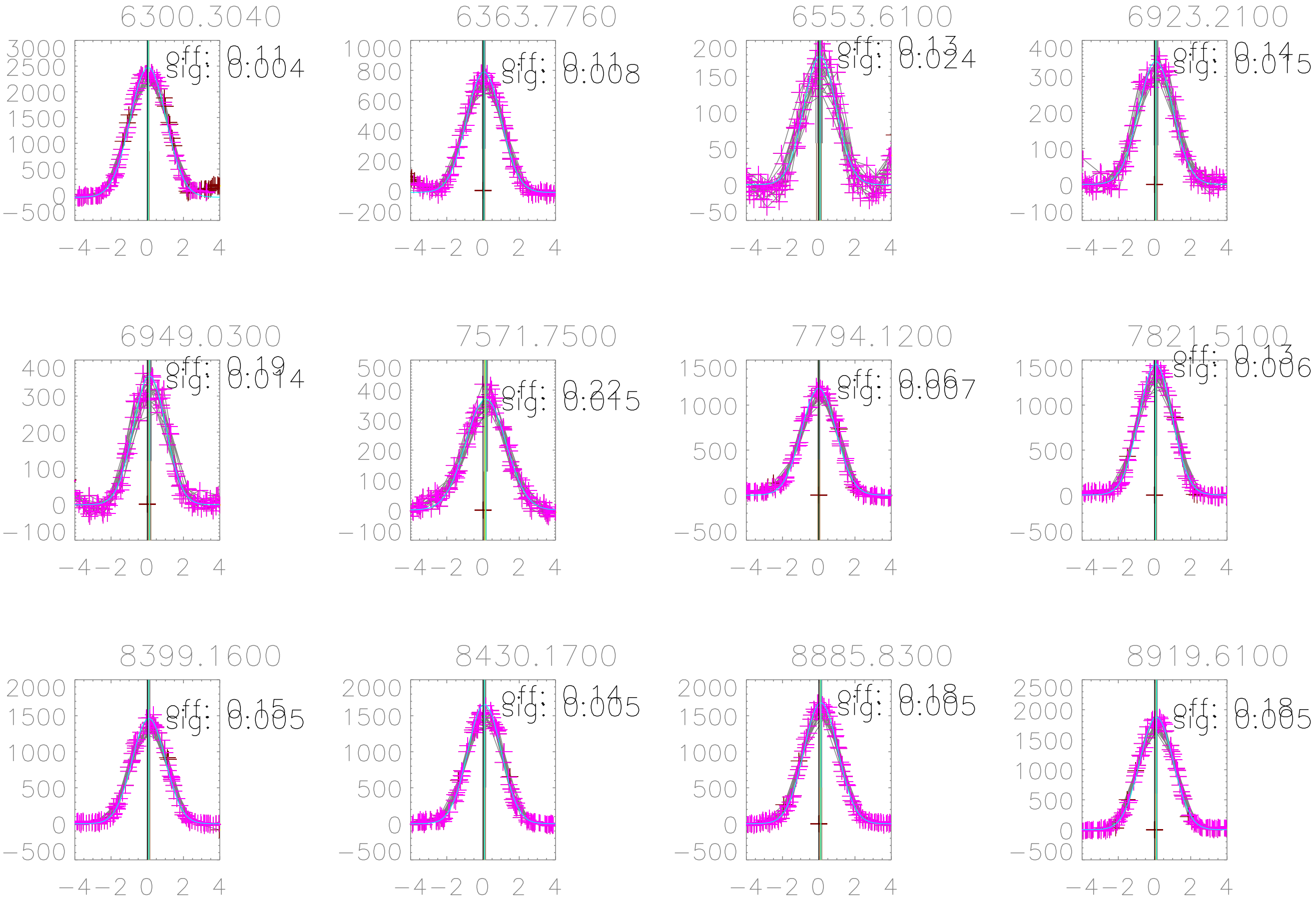

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010119.fi
Brightness [electrons/pix]
0
10
20
30
40
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.798
Max value = 23.225
Tue Feb 26 06:51:24 2008

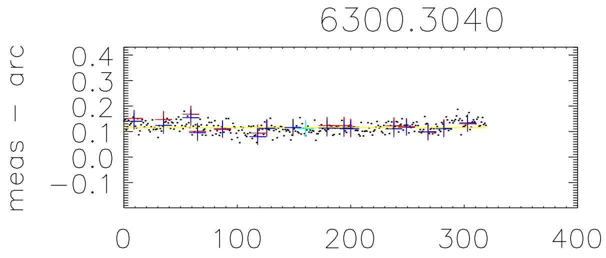


PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010119.fit
Y [pix]
0
500
1000
1500
2000
X [pix]
0
500
1000
1500
2000
3.3
3.3
3.3
3.3
3.3
3.3
3.3
5.5
5.5
5.5

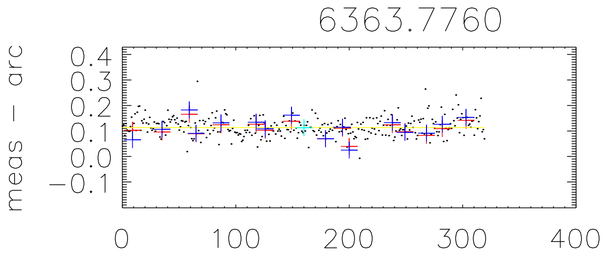

PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010119.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 1.780
Max value = 7.187
Tue Feb 26 06:53:59 2008

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r1-00010119.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

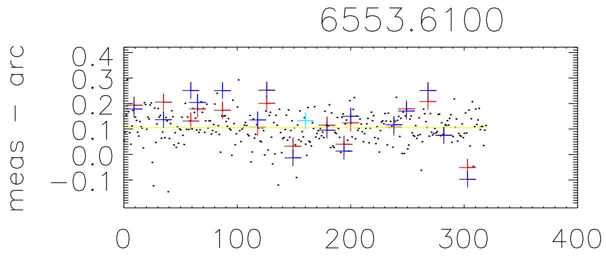

6300.3040
off: 0.11
sig: 0.004
6363.7760
off: 0.11
sig: 0.008
6553.6100
off: 0.13
sig: 0.024
6923.2100
off: 0.14
sig: 0.015
6949.0300
off: 0.19
sig: 0.014
7571.7500
off: 0.22
sig: 0.015
7794.1200
off: 0.06
sig: 0.007
7821.5100
off: 0.13
sig: 0.006
8399.1600
off: 0.15
sig: 0.005
8430.1700
off: 0.14
sig: 0.005
8885.8300
off: 0.18
sig: 0.005
8919.6100
off: 0.18
sig: 0.005
−4 −2 0 2 4



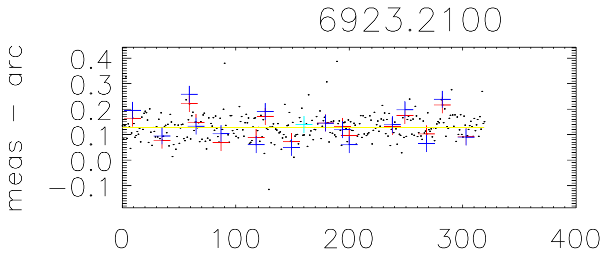
6300.3040



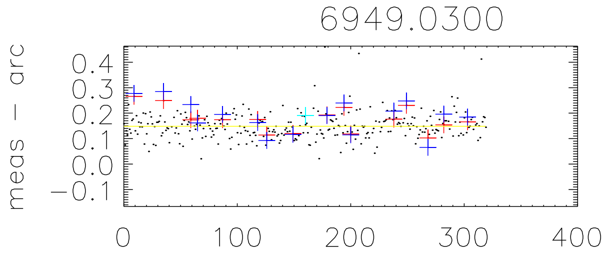
6363.7760



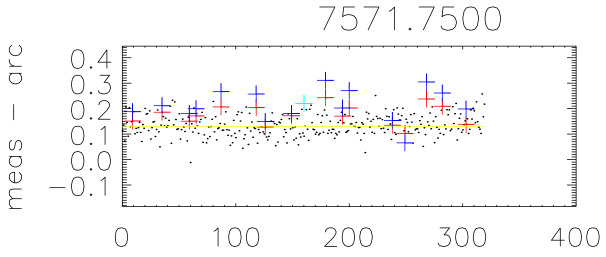
6553.6100



6923.2100

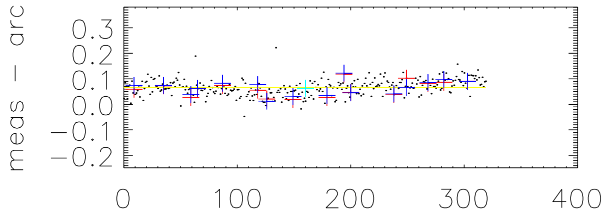


6949.0300

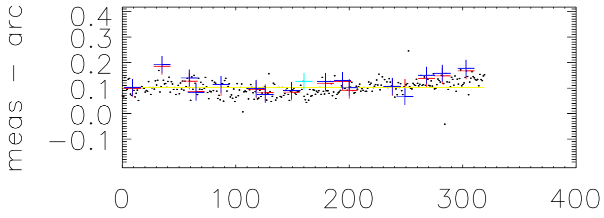


7571.7500

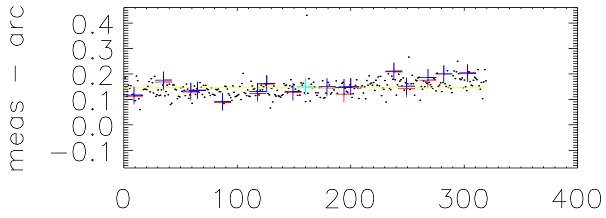
7794.1200



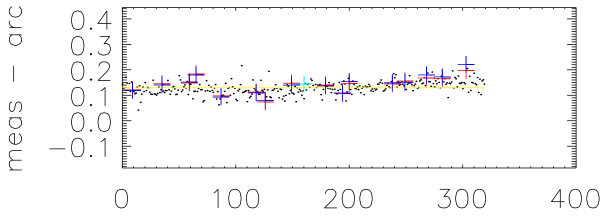
7821.5100



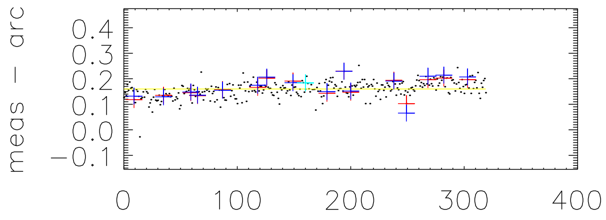
8399.1600



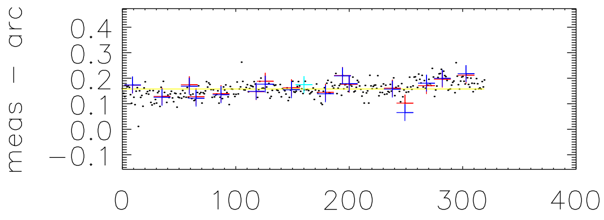
8430.1700

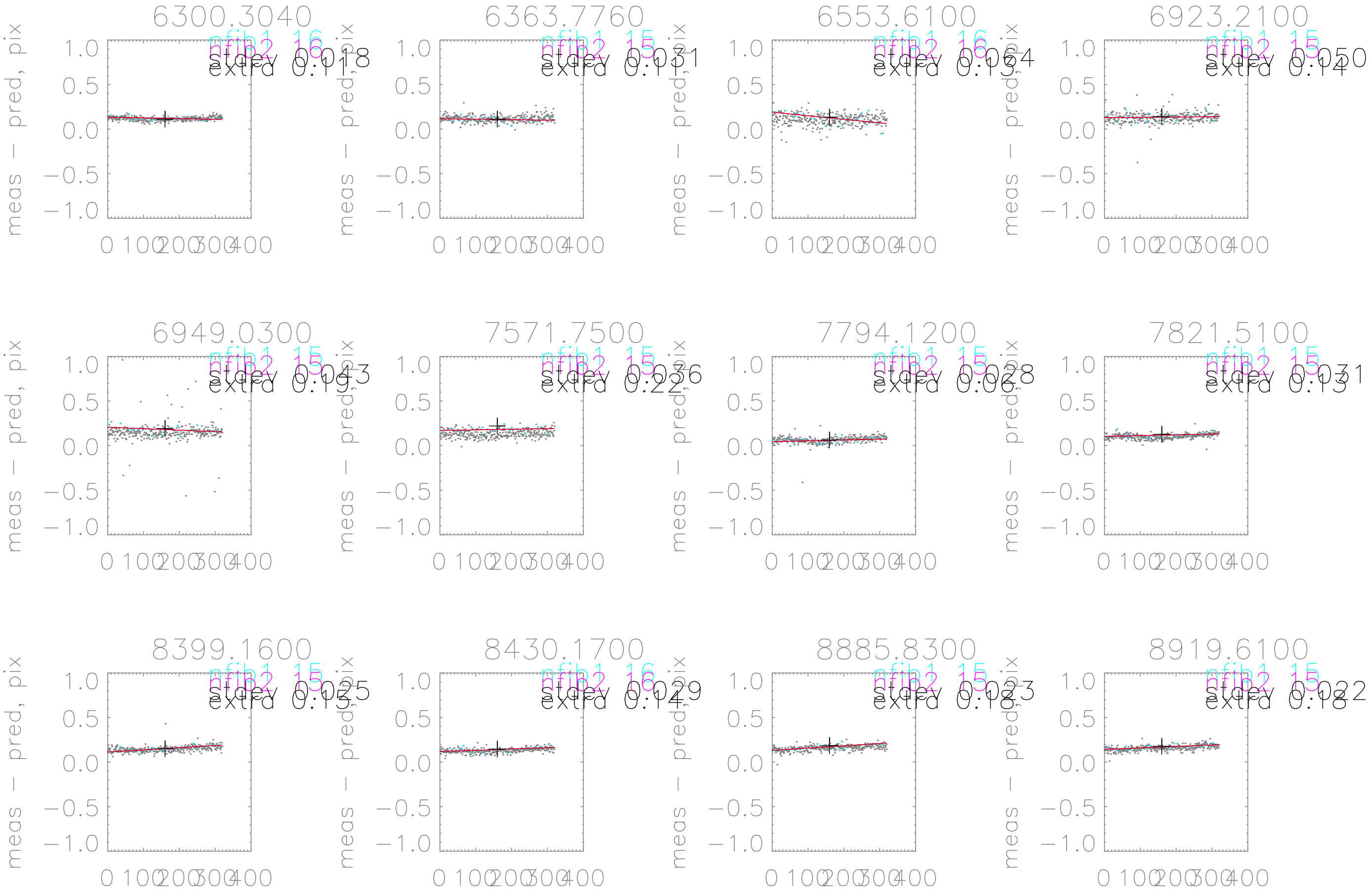


8885.8300

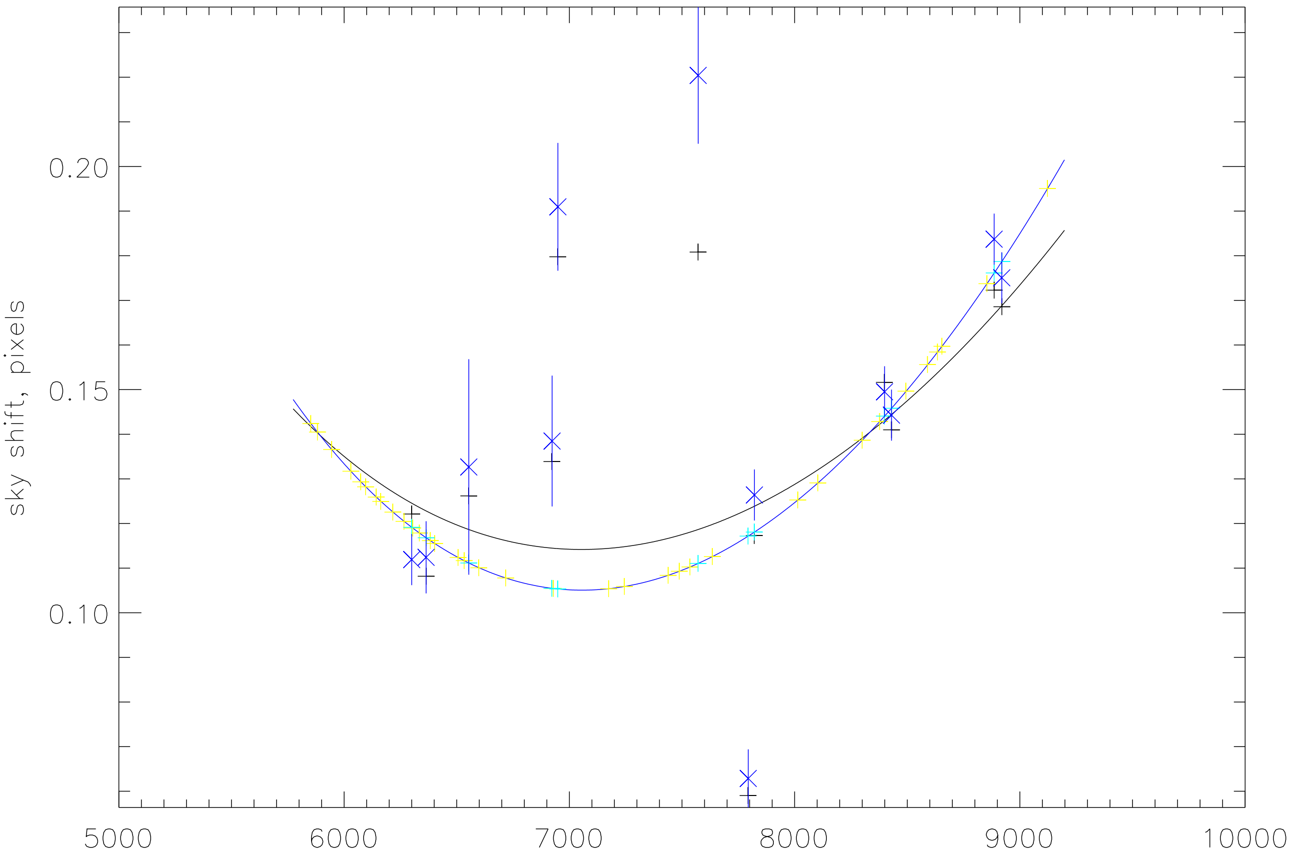


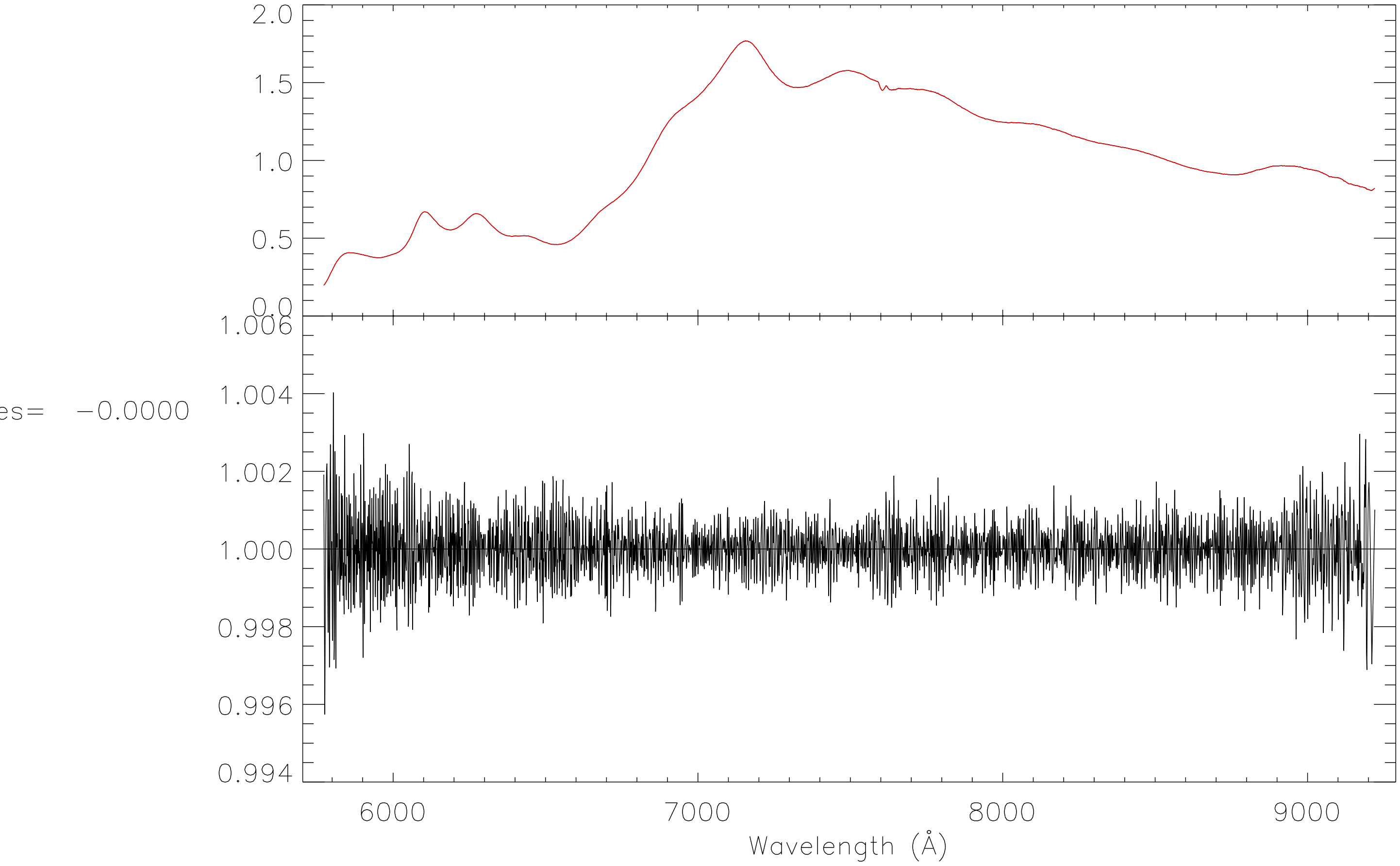
8919.6100



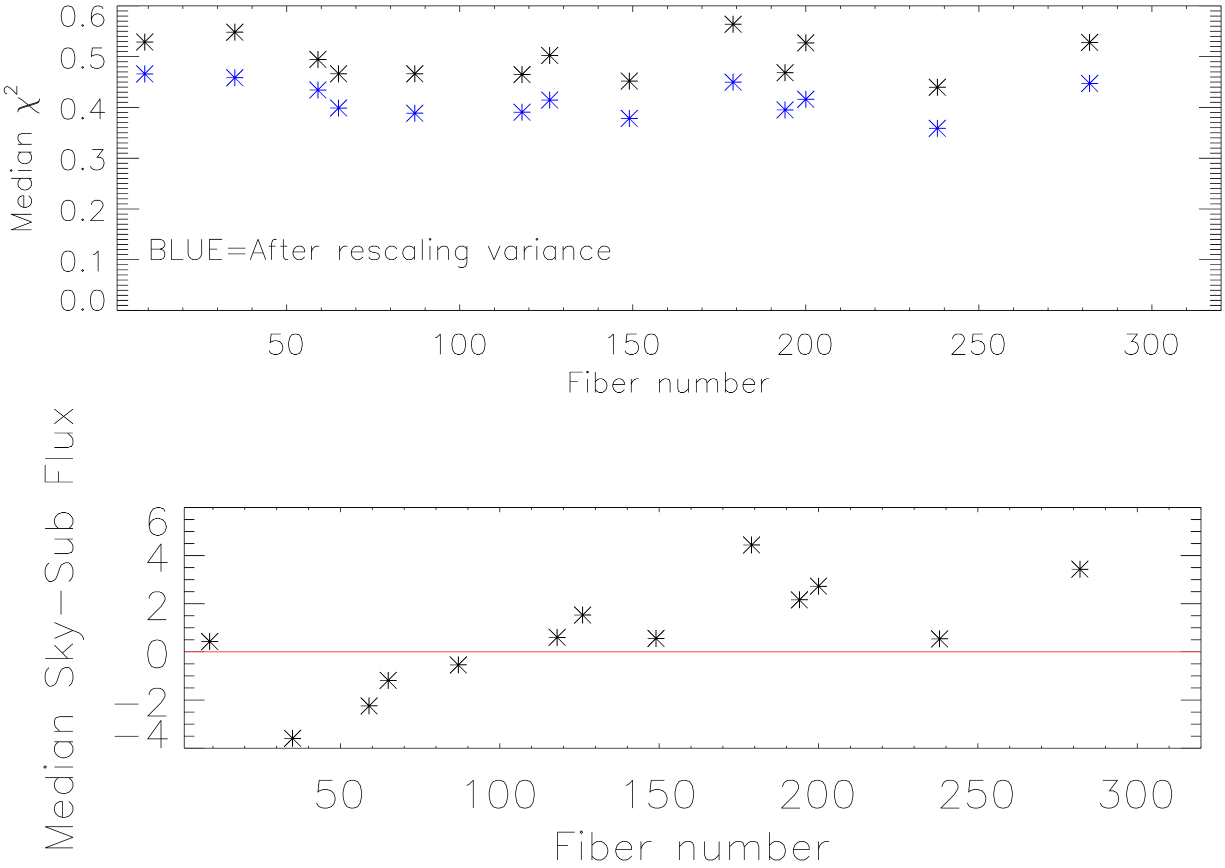


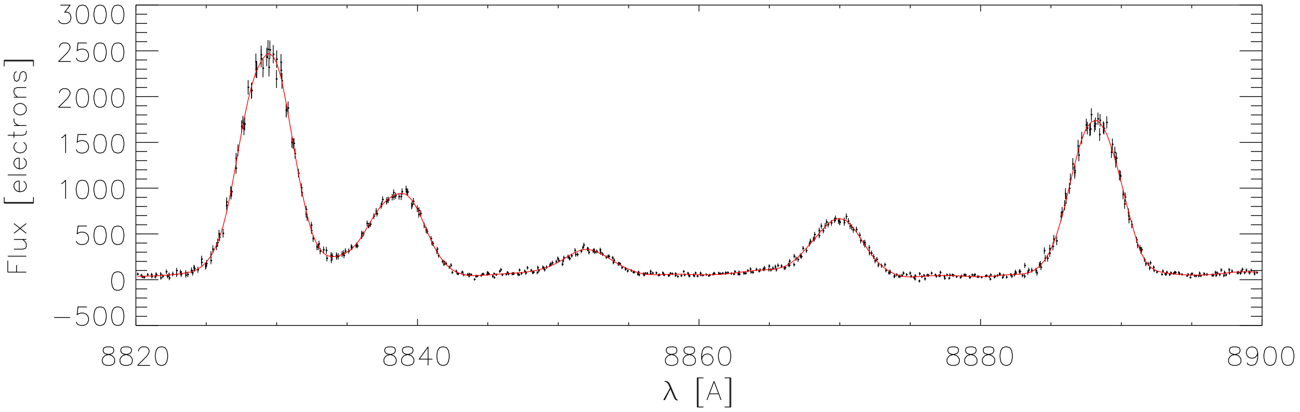
6300.3040
nfib1 16
nfib2 16
stdev 0.018
extrd 0.11
6363.7760
nfib1 15
nfib2 15
stdev 0.031
extrd 0.11
6553.6100
nfib1 16
nfib2 16
stdev 0.064
extrd 0.13
6923.2100
nfib1 15
nfib2 15
stdev 0.050
extrd 0.14
6949.0300
nfib1 15
nfib2 15
stdev 0.043
extrd 0.19
7571.7500
nfib1 15
nfib2 15
stdev 0.036
extrd 0.22
7794.1200
nfib1 15
nfib2 15
stdev 0.028
extrd 0.06
7821.5100
nfib1 15
nfib2 15
stdev 0.031
extrd 0.13
8399.1600
nfib1 15
nfib2 15
stdev 0.025
extrd 0.15
8430.1700
nfib1 16
nfib2 16
stdev 0.029
extrd 0.14
8885.8300
nfib1 15
nfib2 15
stdev 0.023
extrd 0.18
8919.6100
nfib1 15
nfib2 15
stdev 0.022
extrd 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

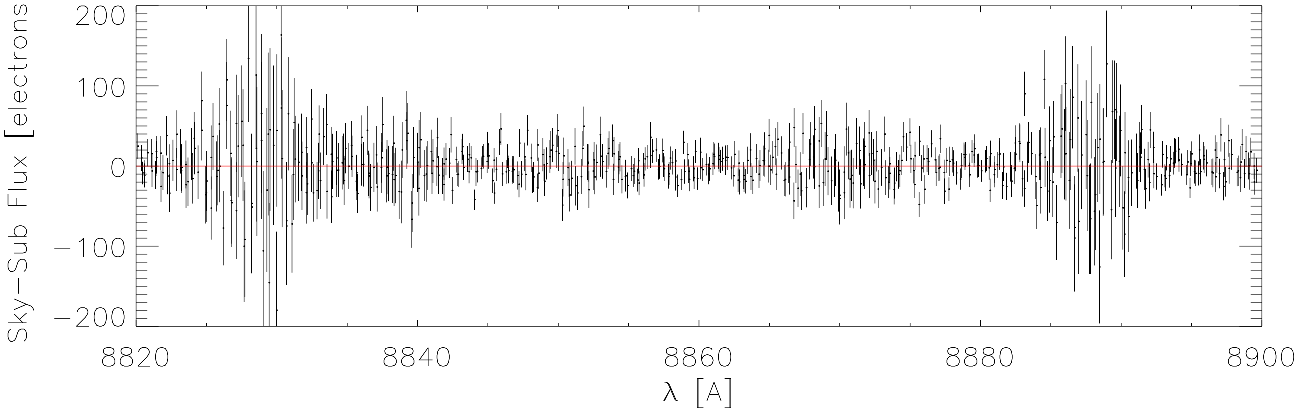

sky shift, pixels
0.10
0.15
0.20
5000
6000
7000
8000
9000
10000

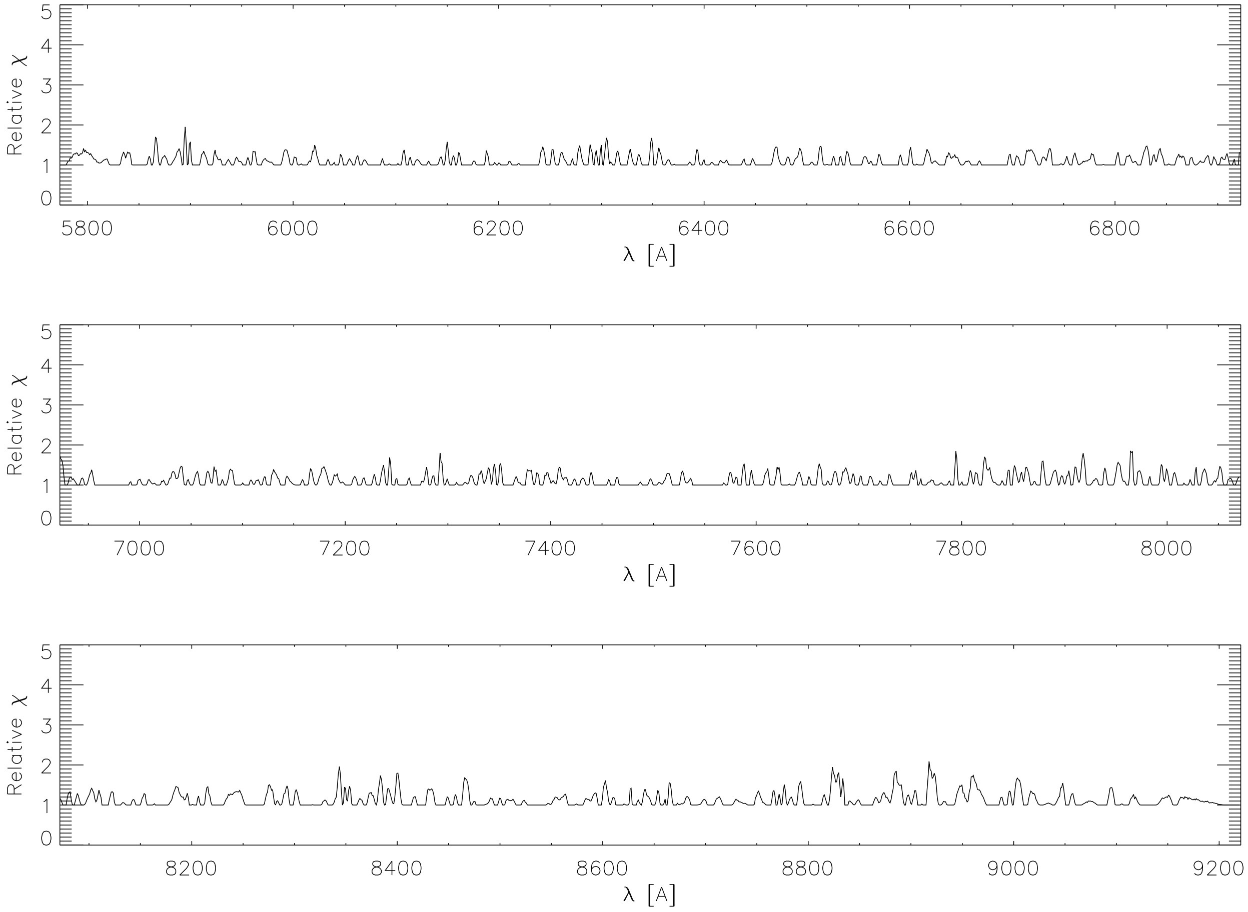

PLATE=0626 MJD=52057 Smooth superflat for sdR-r1-00010119.fit

PLATE=0626 MJD=52057 sdR-r1-00010119.fit 1D Sky-subtraction Sky Fibers



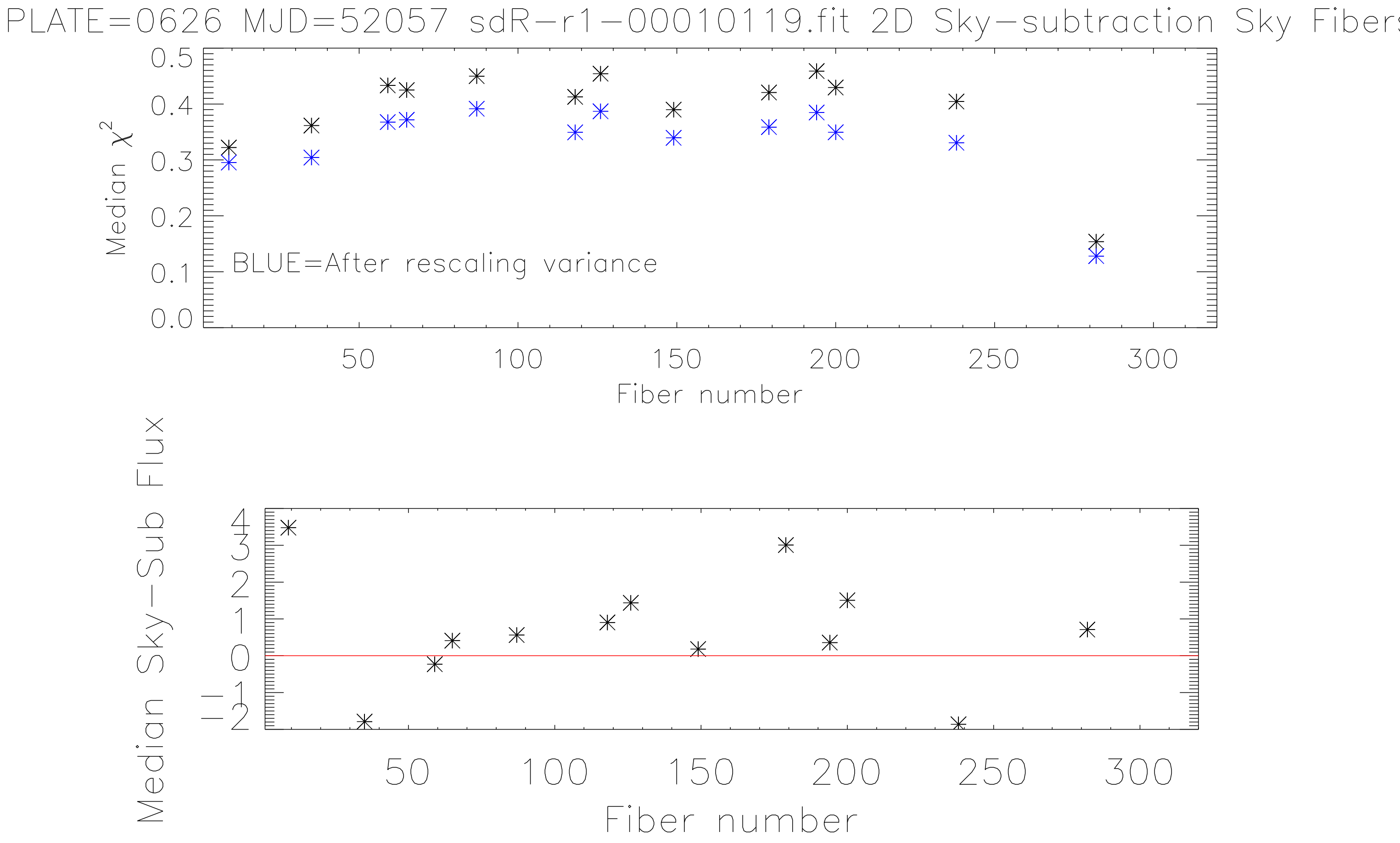

PLATE=0626 MJD=52057 sdR-r1-00010119.fit 1D Sky-subtraction Sky Fibers

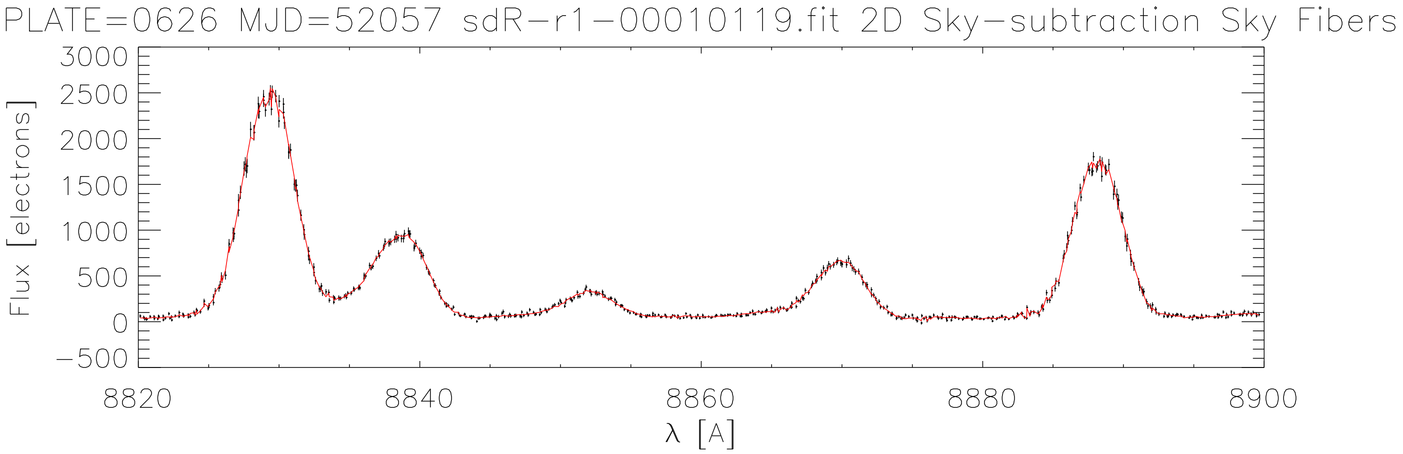

PLATE=0626 MJD=52057 sdR-r1-00010119.fit 1D Sky-subtraction Sky-subtracted Sky F



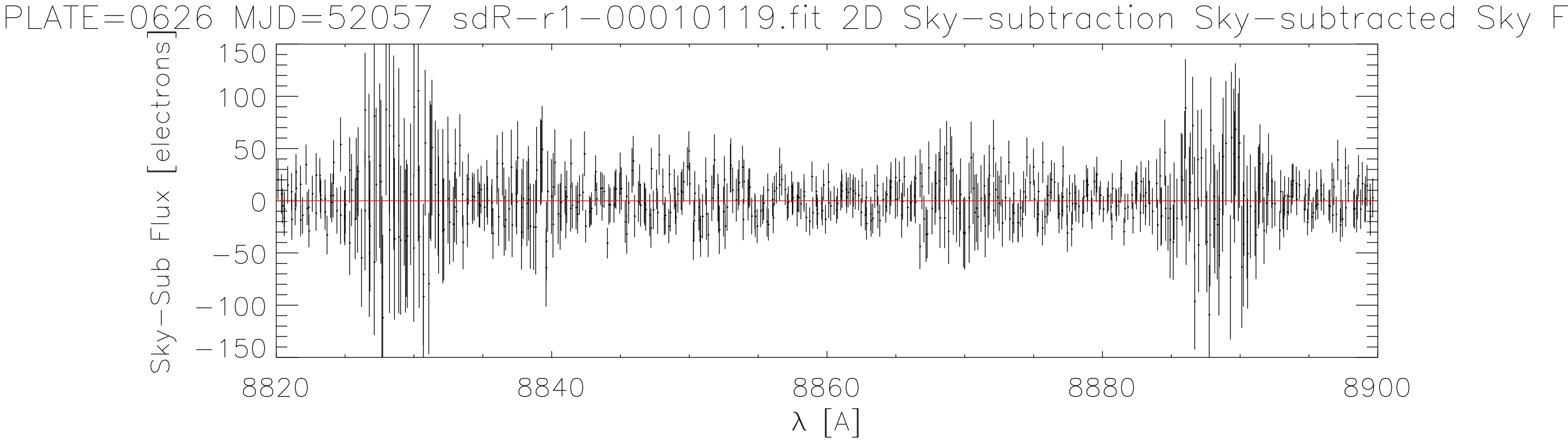
Number of sky fibers = 13

PLATE=0626 MJD=52057 sdR-r1-00010119.fit 1D Sky-subtraction Rescaled Errors


PLATE=0626 MJD=52057 sdR-r1-00010119.fit 2D Sky-subtraction Sky Fibers
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
4
3
2
1
0
-1
-2
50
100
150
200
250
300
Fiber number



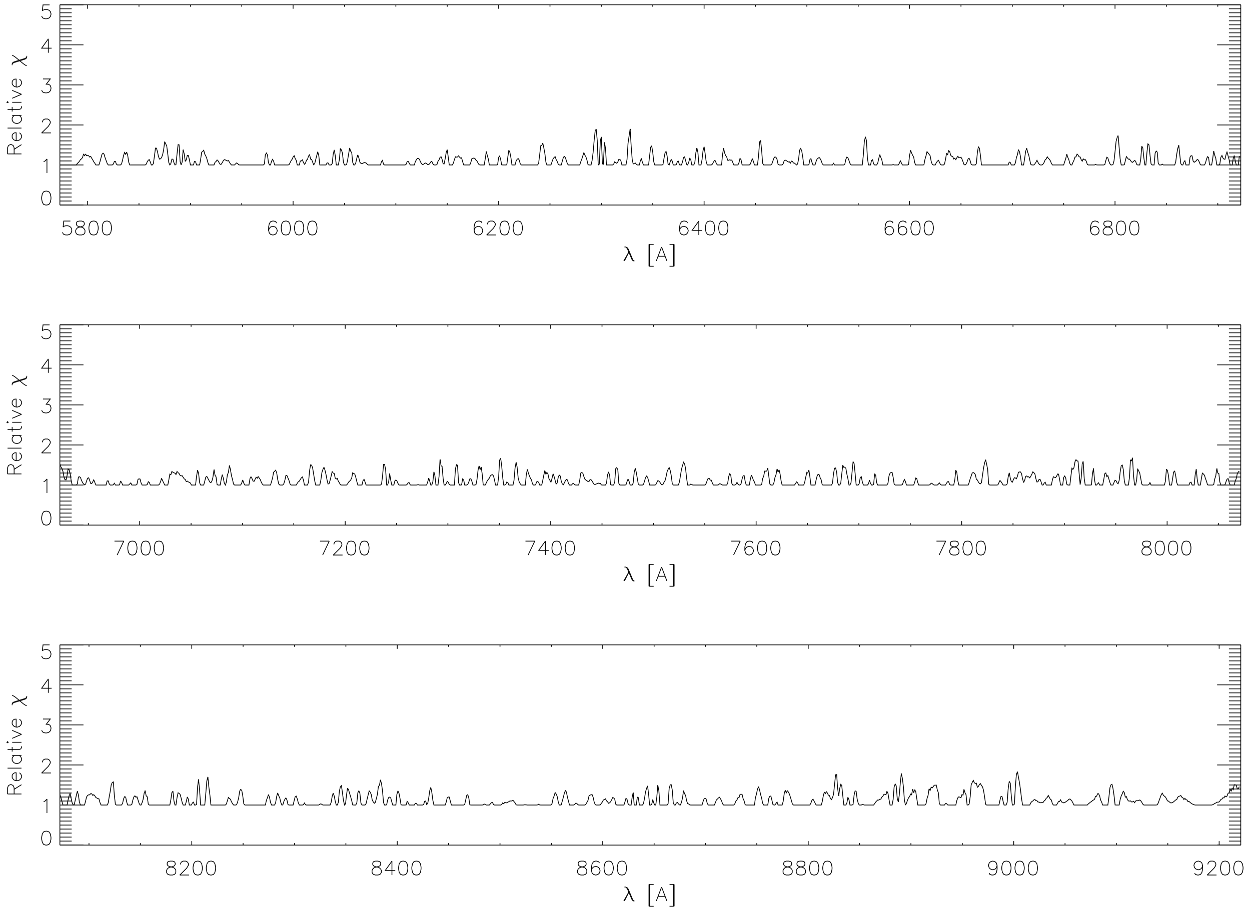
PLATE=0626 MJD=52057 sdR-r1-00010119.fit 2D Sky-subtraction Sky Fibers

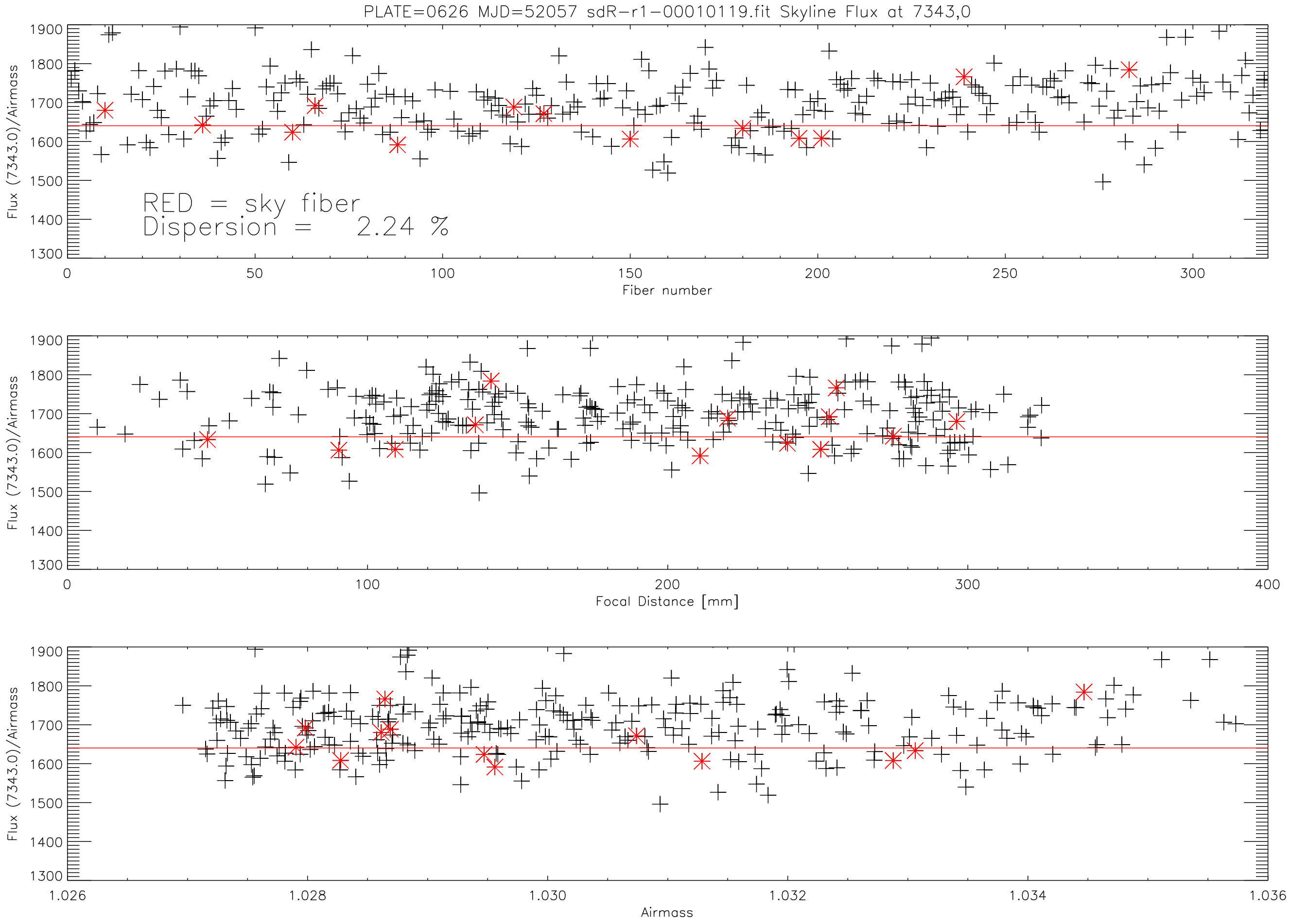


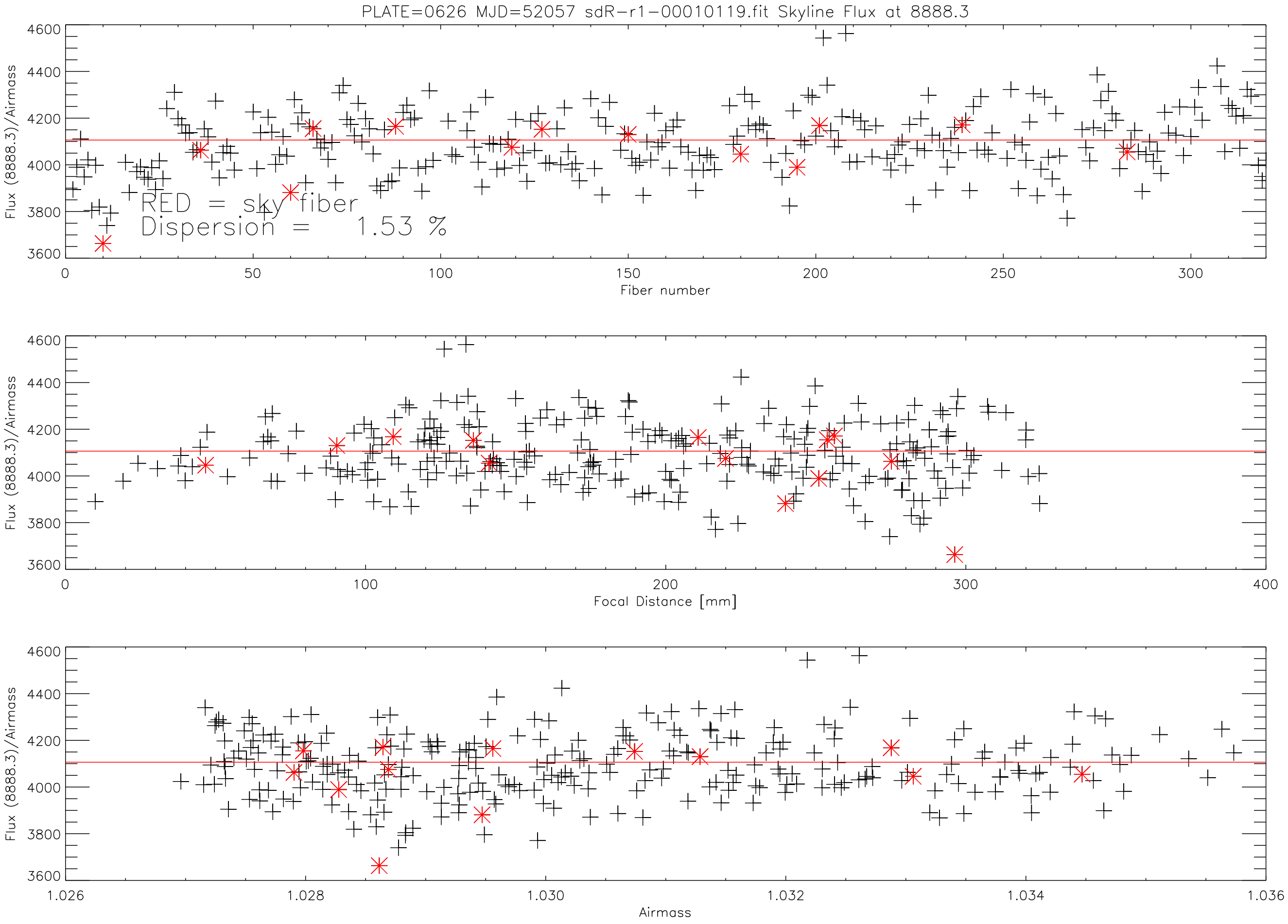
PLATE=0626 MJD=52057 sdR-r1-00010119.fit 2D Sky-subtraction Sky-subtracted Sky F

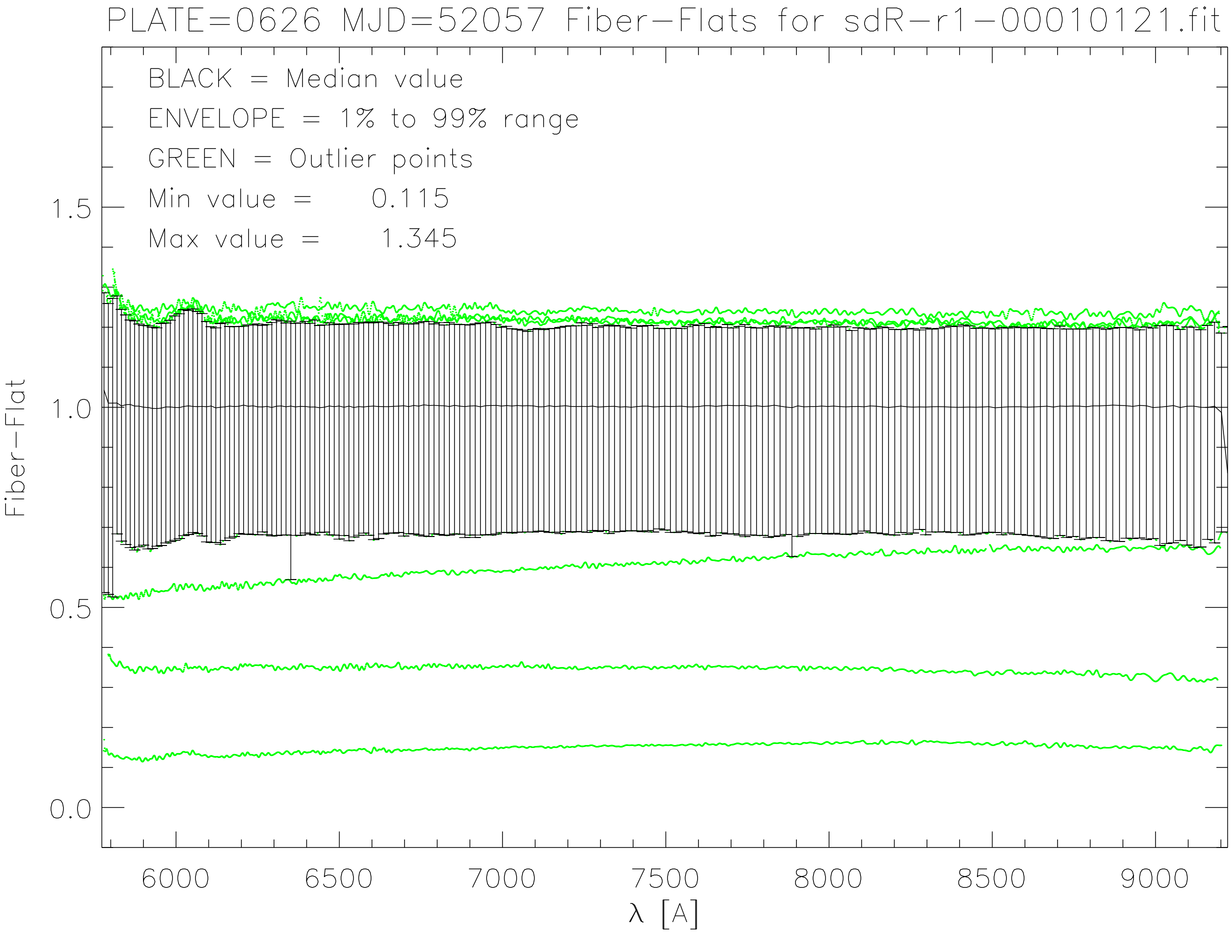
Number of sky fibers = 13

PLATE=0626 MJD=52057 sdR-r1-00010119.fit 2D Sky-subtraction Rescaled Errors

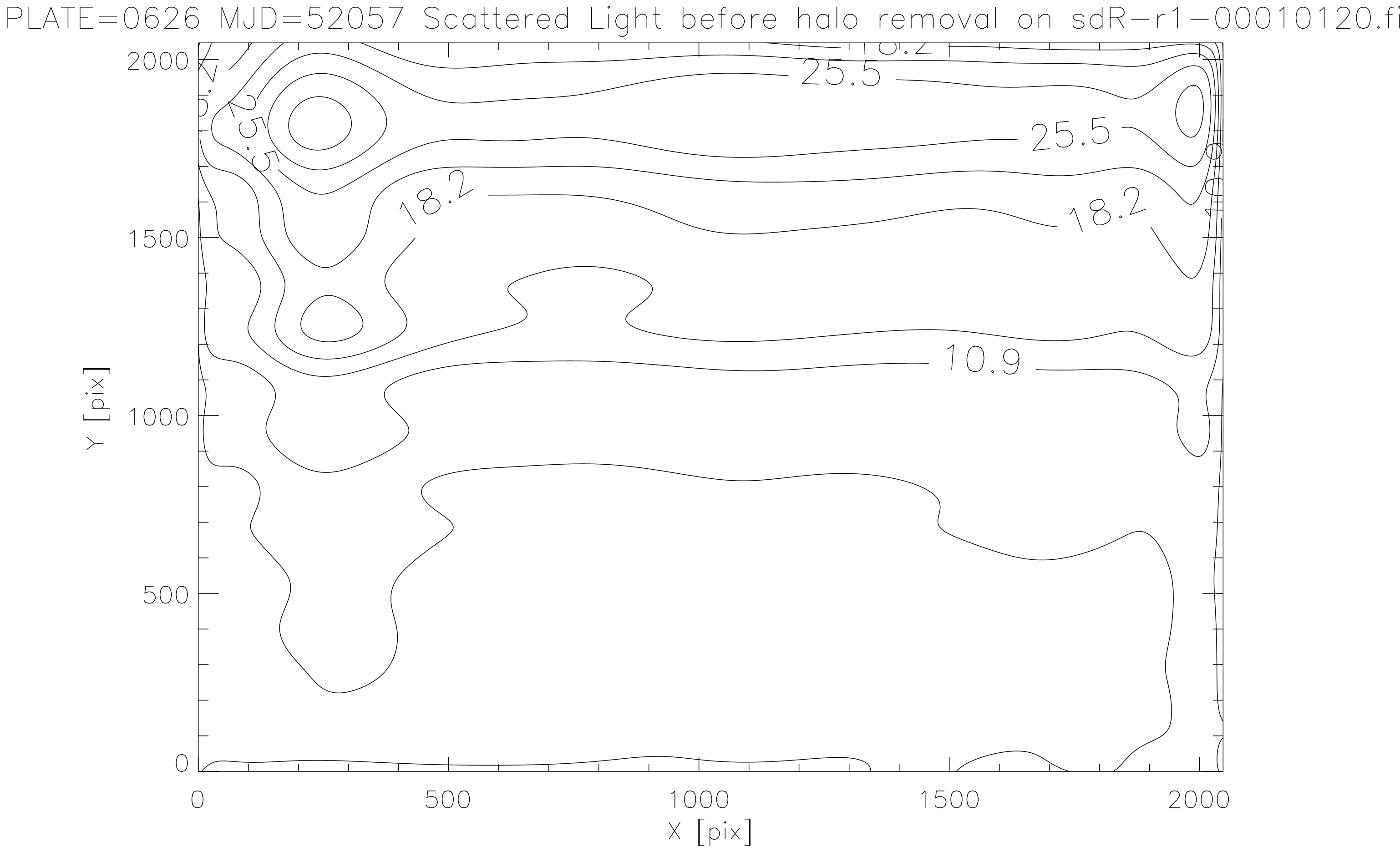



PLATE=0626 MJD=52057 sdR-r1-00010119.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.24 %
Flux (7343.0)/Airmass
1300
1400
1500
1600
1700
1800
1900
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.026
1.028
1.030
1.032
1.034
1.036
Airmass

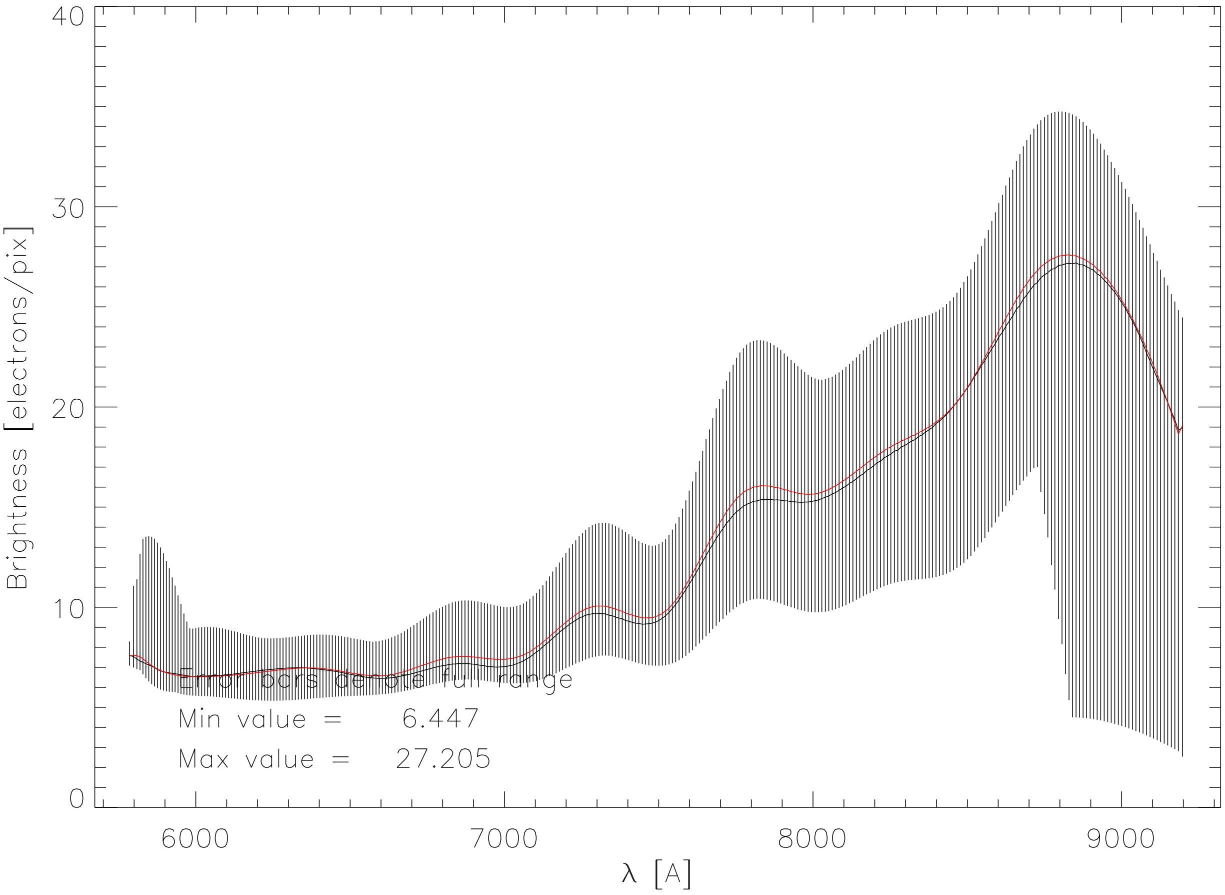

PLATE=0626 MJD=52057 sdR-r1-00010119.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.53 %
Fiber number
Focal Distance [mm]
Airmass
3600
3800
4000
4200
4400
4600
0
50
100
150
200
250
300
400
1.026
1.028
1.030
1.032
1.034
1.036



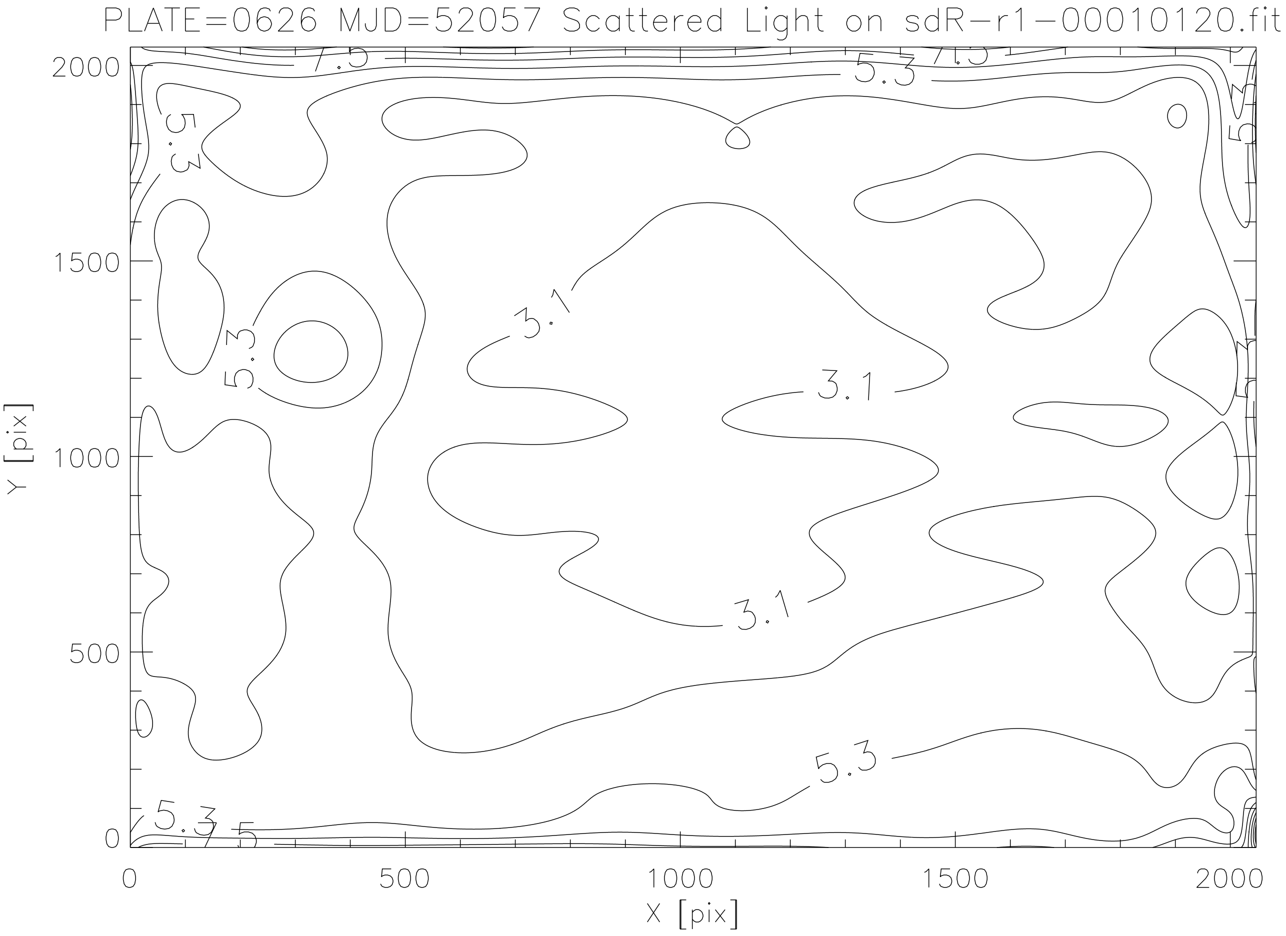
Tue Feb 26 06:55:03 2008

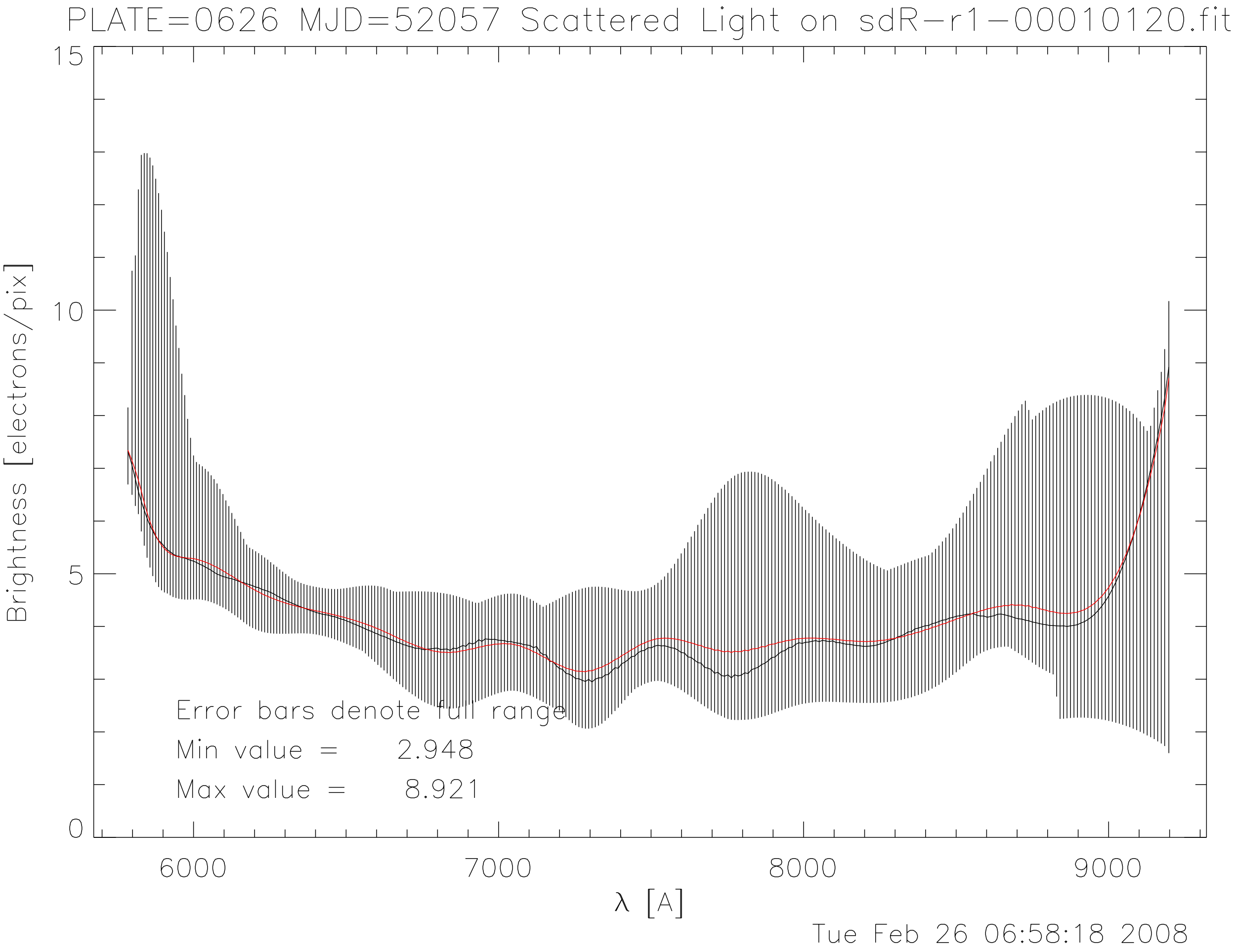

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010120.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
25.5
25.5
25.5
18.2
18.2
18.2
10.9

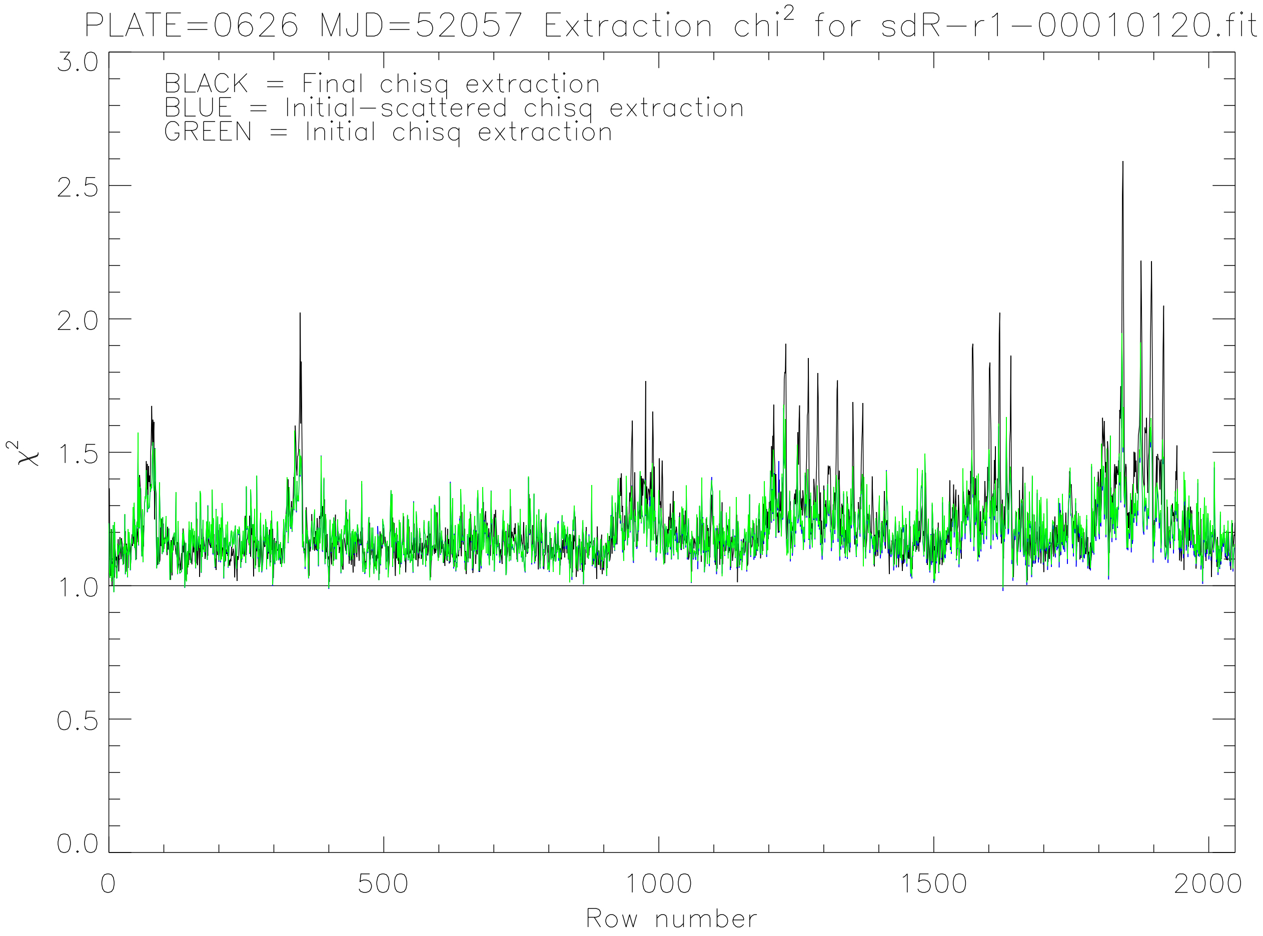
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010120.fi

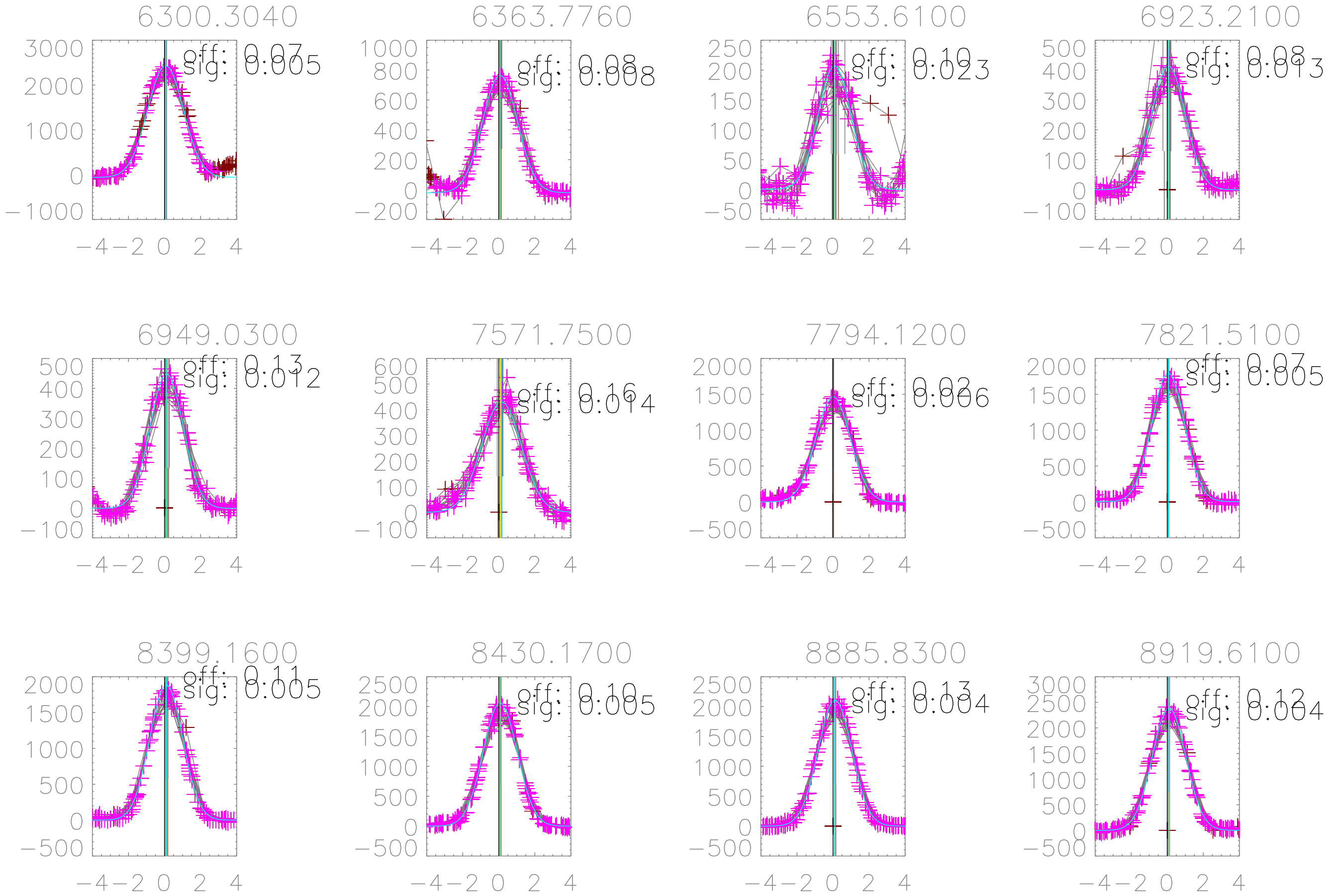


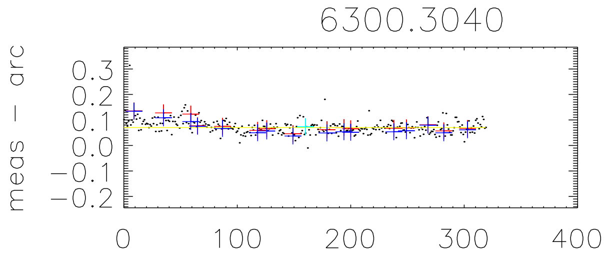
Tue Feb 26 06:55:52 2008

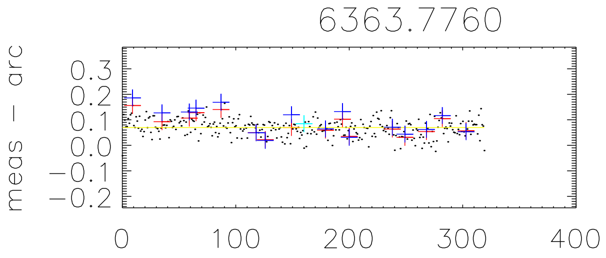

PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010120.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
7.5
5.3
7.5
5.3
5.3
5.3
3.1
3.1
3.1
5.3
5.3
7.5
5.3

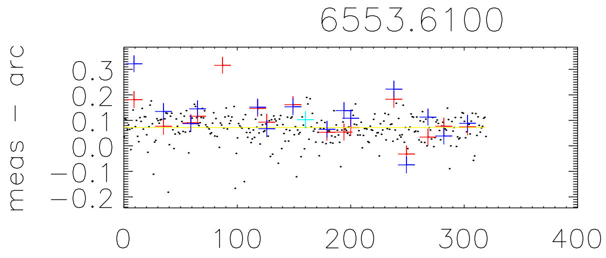

PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010120.fit
15
10
5
0
Brightness [electrons/pix]
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.948
Max value = 8.921
Tue Feb 26 06:58:18 2008

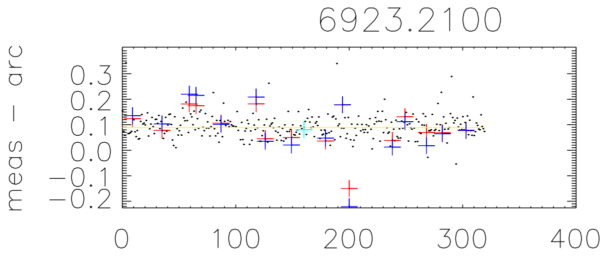

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r1-00010120.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
3.0
2.5
2.0
1.5
1.0
0.5
0.0
χ^2
0
500
1000
1500
2000
Row number

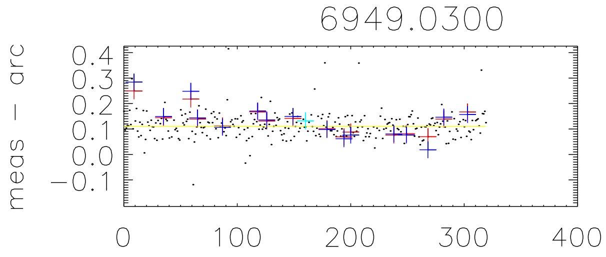

6300.3040
off: 0.07
sig: 0.005
6363.7760
off: 0.08
sig: 0.008
6553.6100
off: 0.10
sig: 0.023
6923.2100
off: 0.08
sig: 0.013
6949.0300
off: 0.13
sig: 0.012
7571.7500
off: 0.16
sig: 0.014
7794.1200
off: 0.02
sig: 0.006
7821.5100
off: 0.07
sig: 0.005
8399.1600
off: 0.11
sig: 0.005
8430.1700
off: 0.10
sig: 0.005
8885.8300
off: 0.13
sig: 0.004
8919.6100
off: 0.12
sig: 0.004
−4 −2 0 2 4

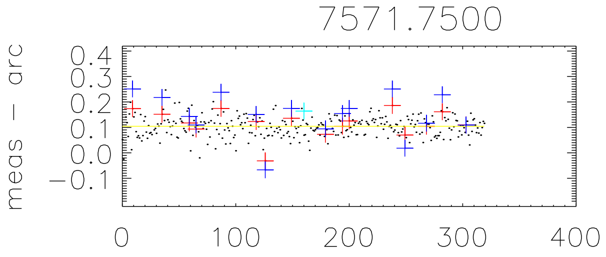

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

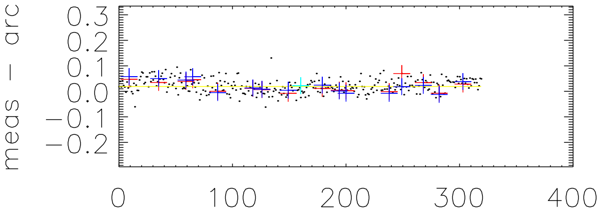

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


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

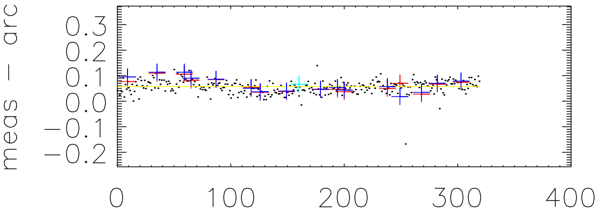

6949.0300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

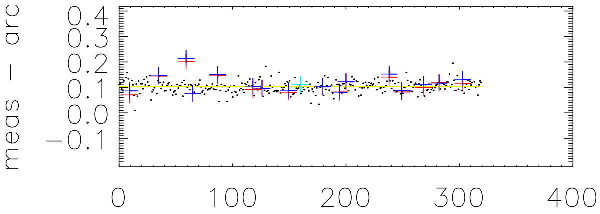
7794.1200



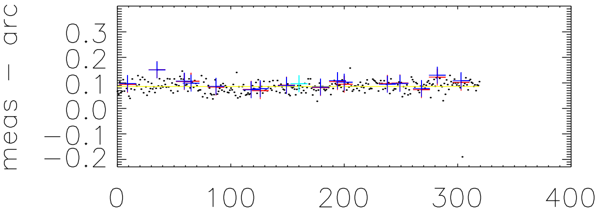
7821.5100



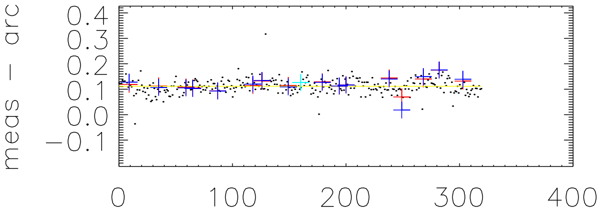
8399.1600



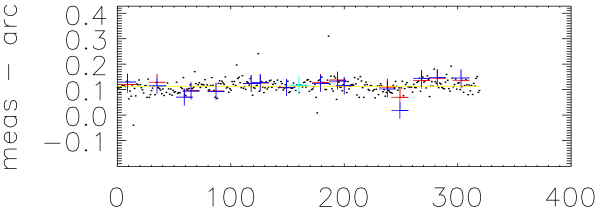
8430.1700

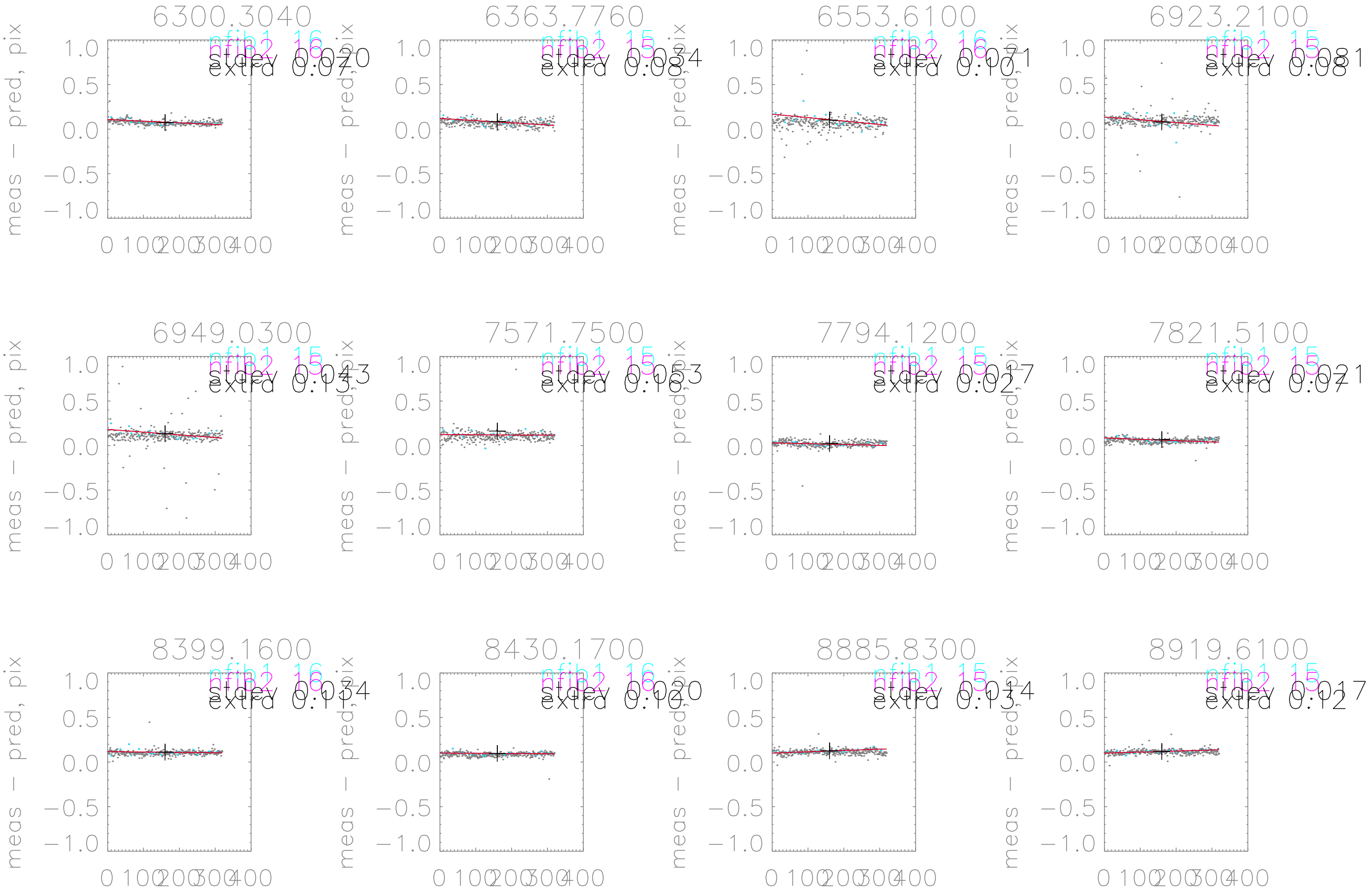


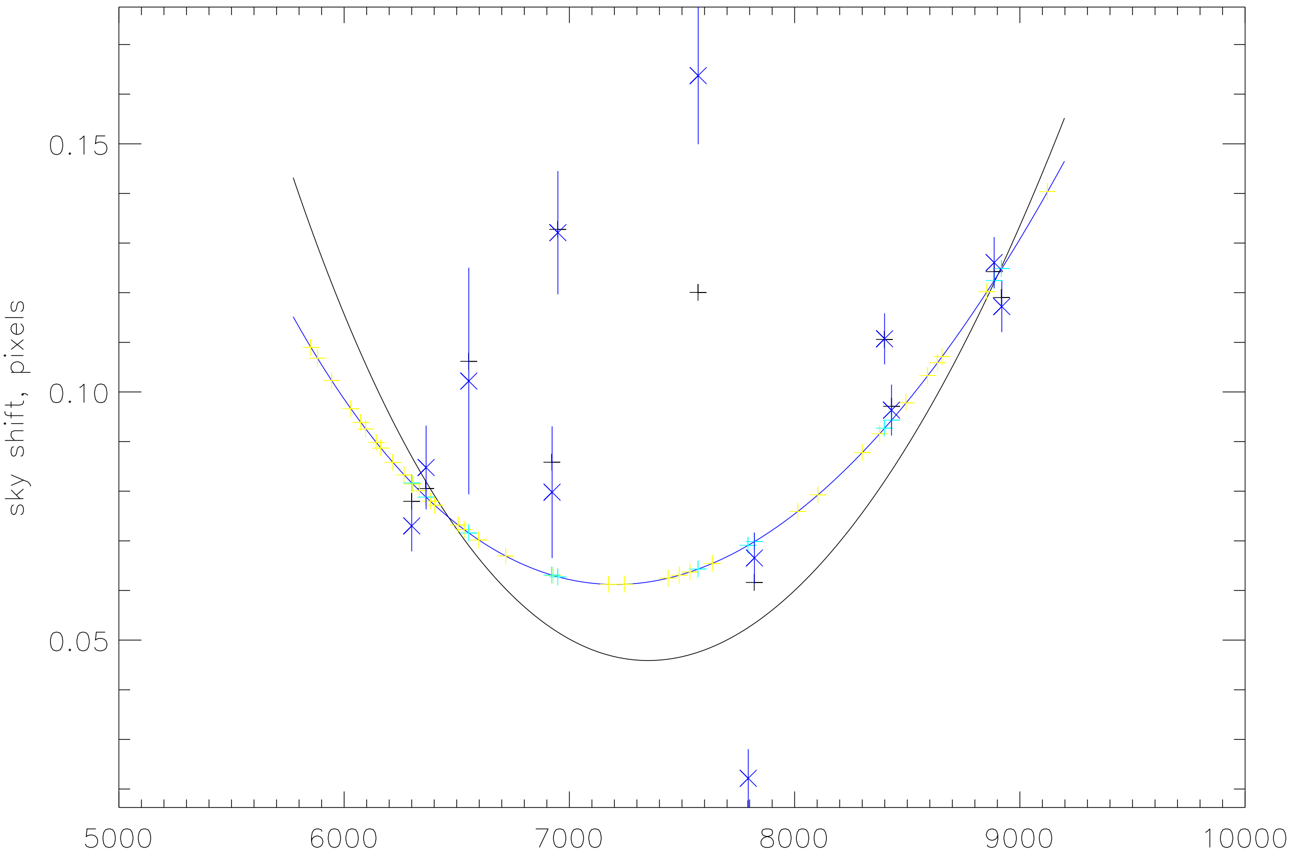
8885.8300

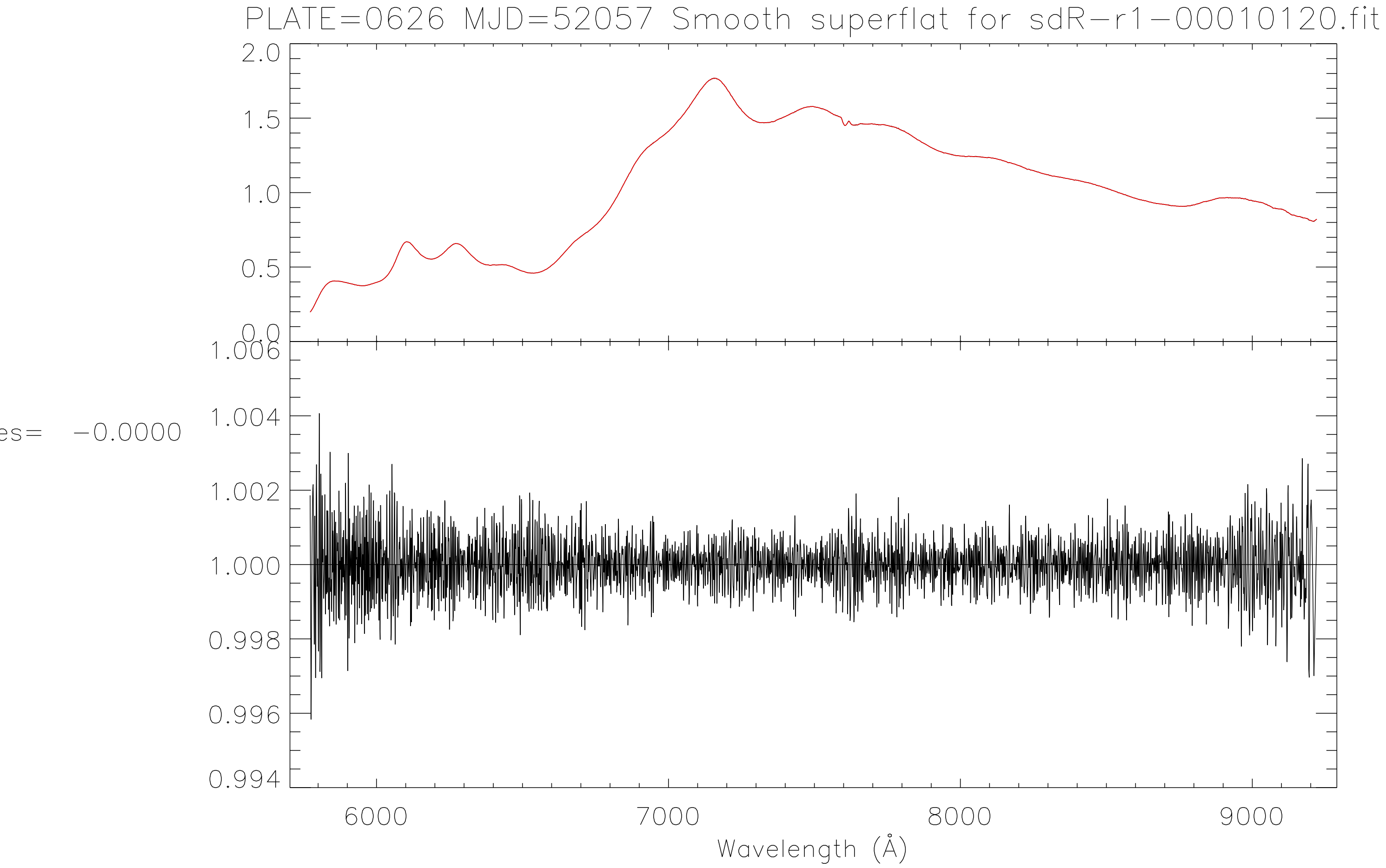


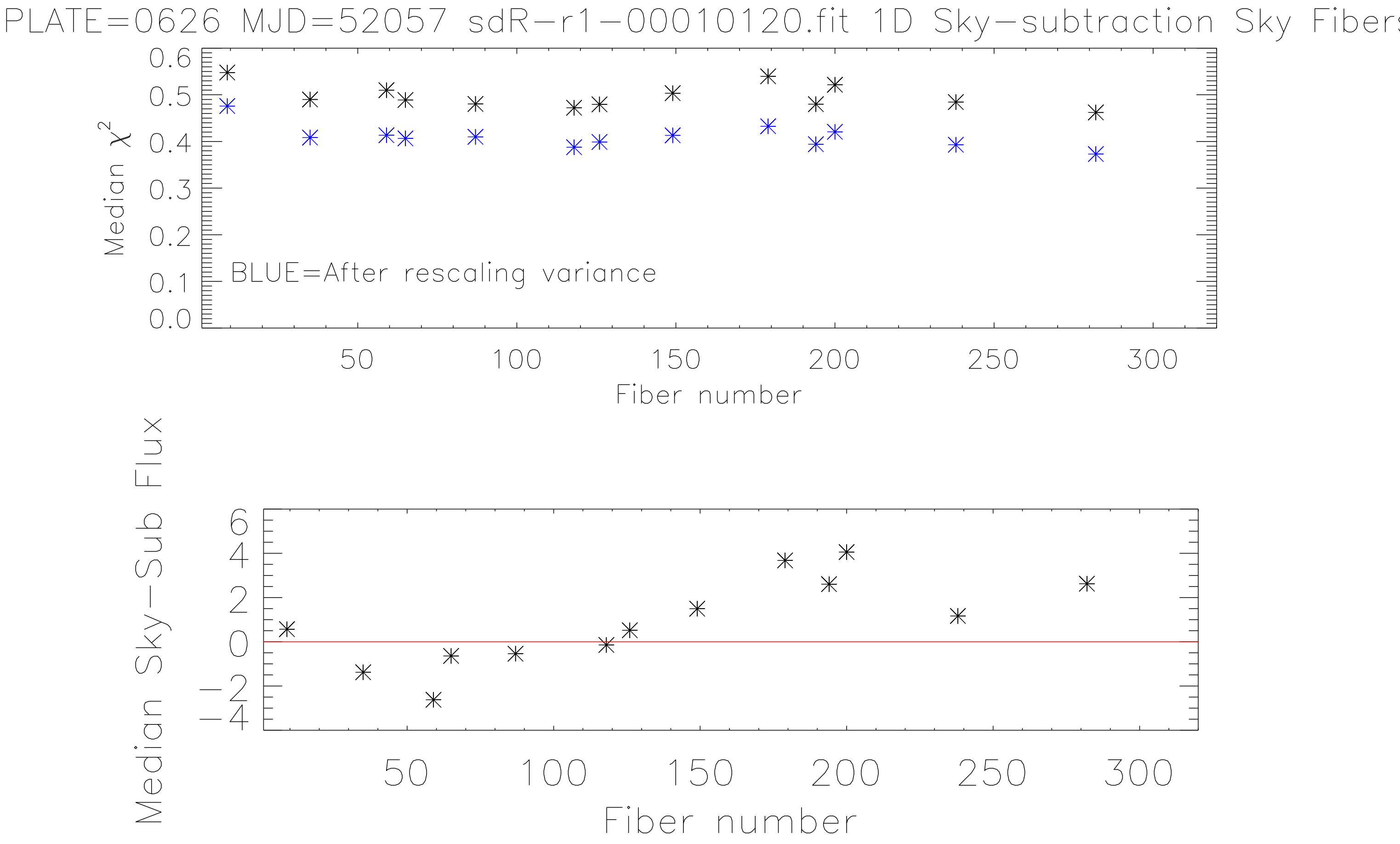
8919.6100

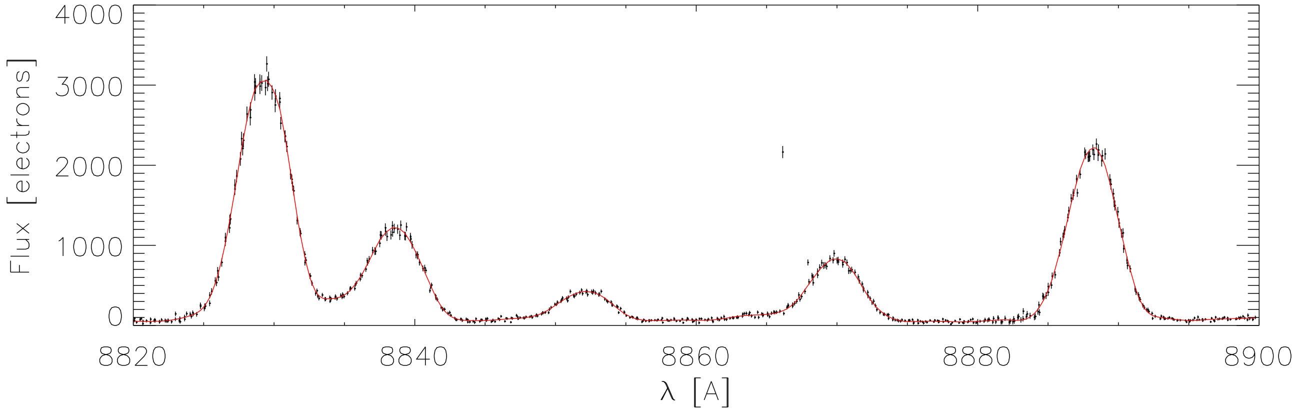


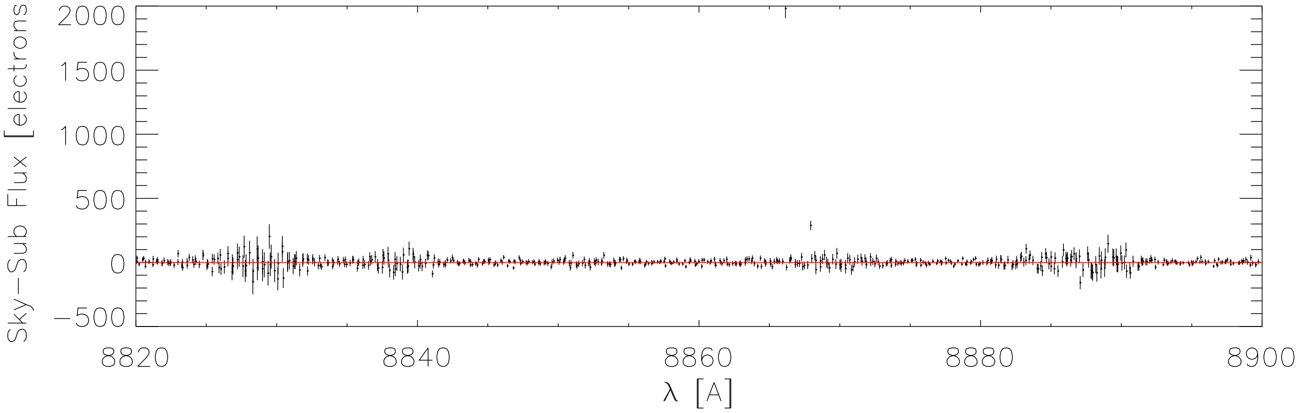

6300.3040
nfib1 16
nfib2 16
stdev 0.020
extrd 0.07
6363.7760
nfib1 15
nfib2 15
stdev 0.034
extrd 0.08
6553.6100
nfib1 16
nfib2 15
stdev 0.071
extrd 0.10
6923.2100
nfib1 15
nfib2 15
stdev 0.081
extrd 0.08
6949.0300
nfib1 15
nfib2 15
stdev 0.043
extrd 0.13
7571.7500
nfib1 15
nfib2 15
stdev 0.053
extrd 0.16
7794.1200
nfib1 15
nfib2 15
stdev 0.017
extrd 0.02
7821.5100
nfib1 15
nfib2 15
stdev 0.021
extrd 0.07
8399.1600
nfib1 16
nfib2 16
stdev 0.034
extrd 0.11
8430.1700
nfib1 16
nfib2 16
stdev 0.020
extrd 0.10
8885.8300
nfib1 15
nfib2 15
stdev 0.014
extrd 0.13
8919.6100
nfib1 15
nfib2 15
stdev 0.017
extrd 0.12
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
5000
6000
7000
8000
9000
10000


PLATE=0626 MJD=52057 Smooth superflat for sdR-r1-00010120.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)

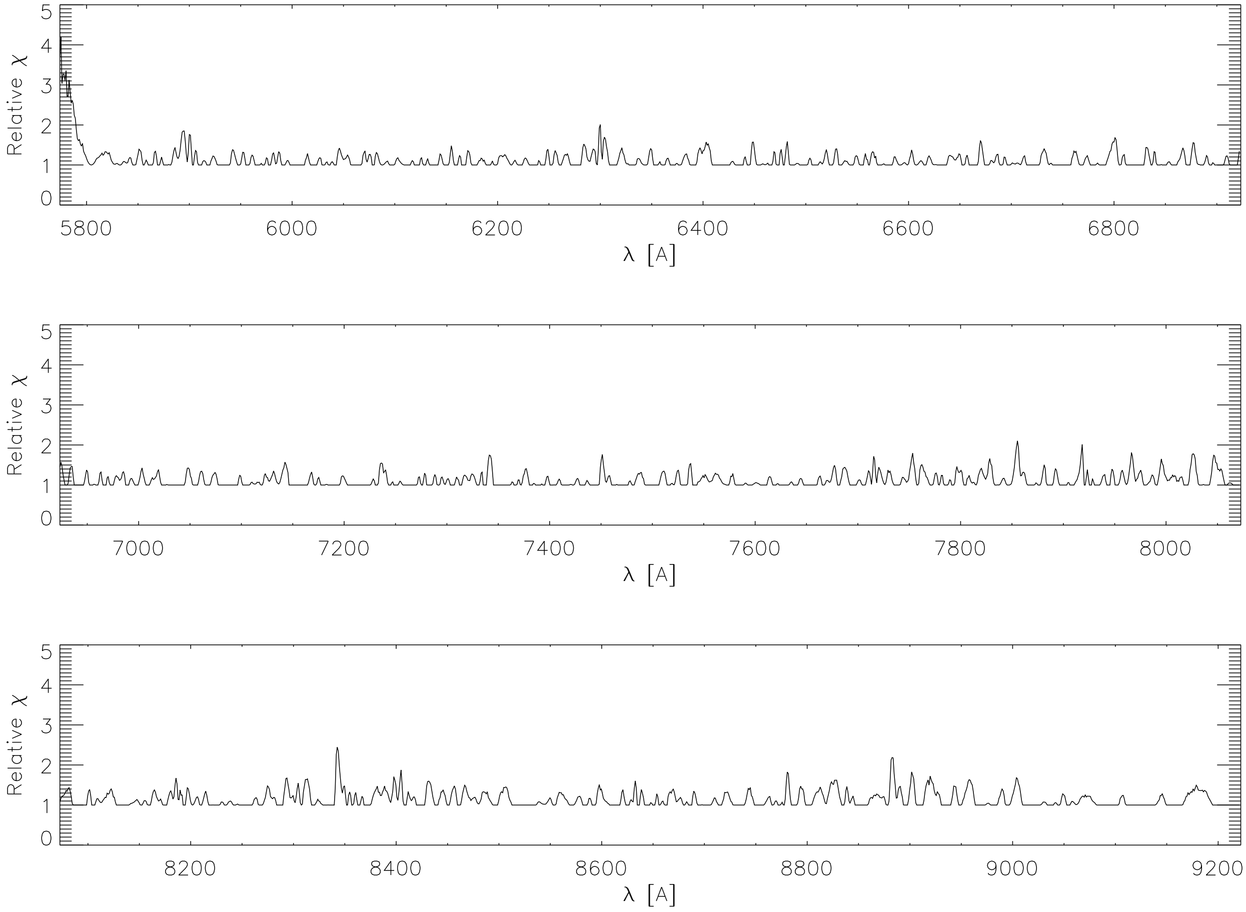

PLATE=0626 MJD=52057 sdR-r1-00010120.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

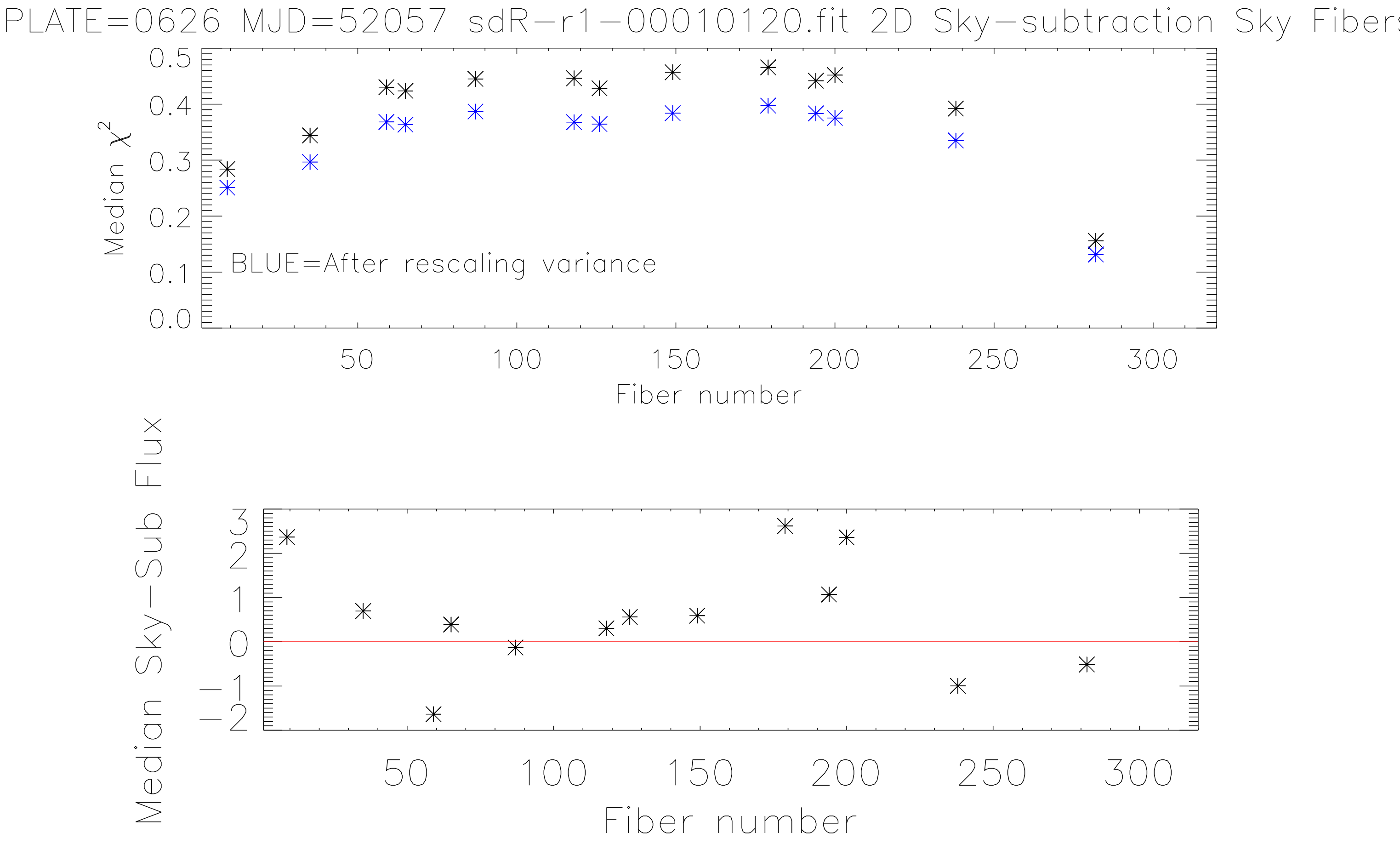

PLATE=0626 MJD=52057 sdR-r1-00010120.fit 1D Sky-subtraction Sky Fibers

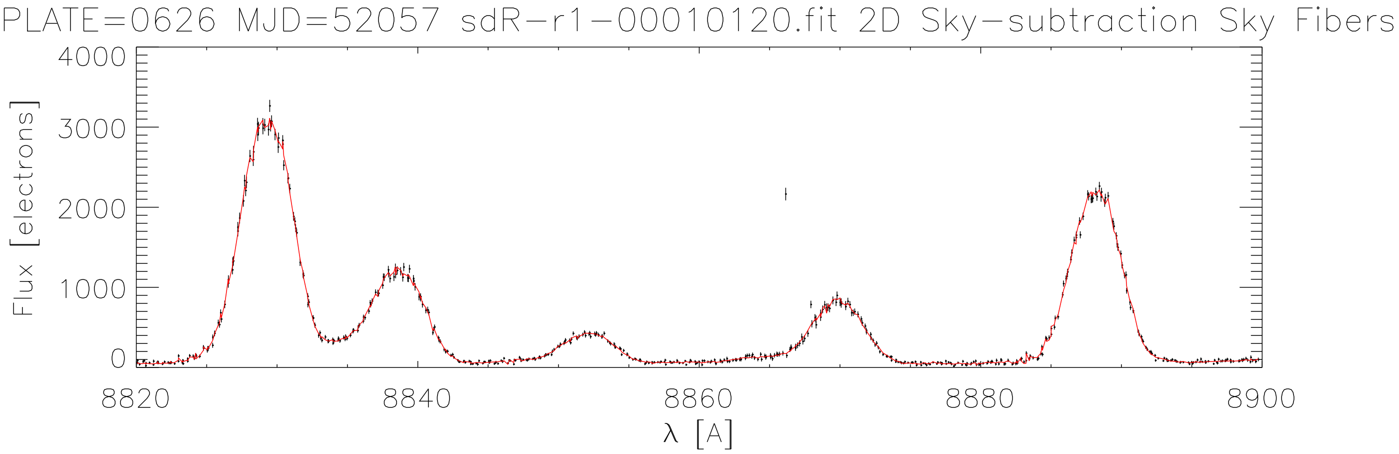

PLATE=0626 MJD=52057 sdR-r1-00010120.fit 1D Sky-subtraction Sky-subtracted Sky F

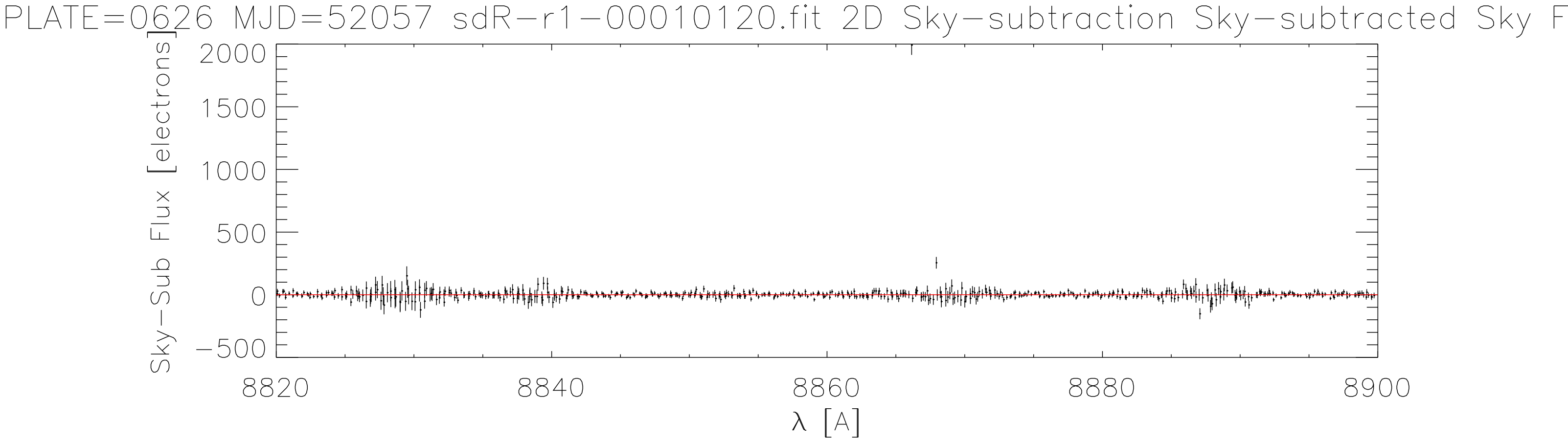
Number of sky fibers = 13

PLATE=0626 MJD=52057 sdR-r1-00010120.fit 1D Sky-subtraction Rescaled Errors



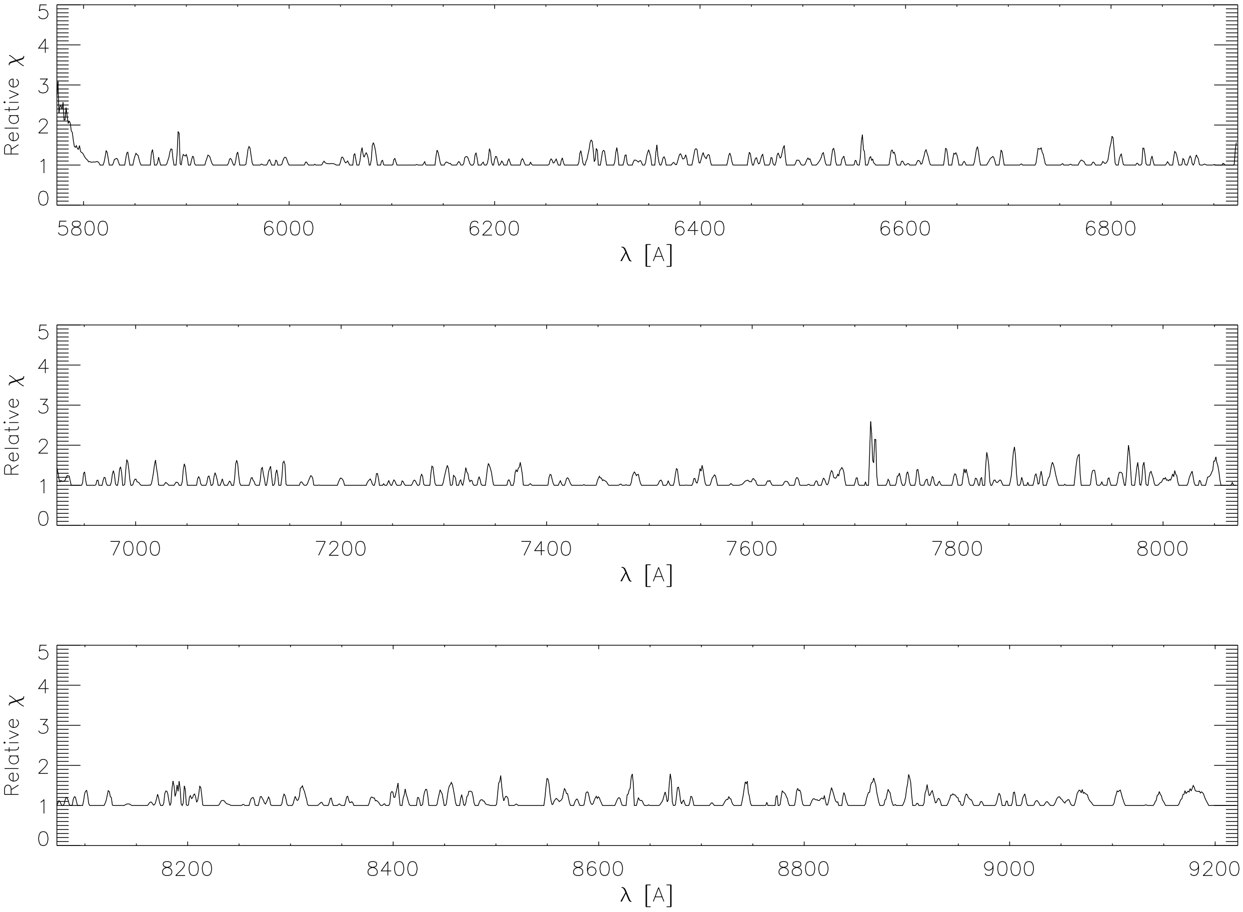

PLATE=0626 MJD=52057 sdR-r1-00010120.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

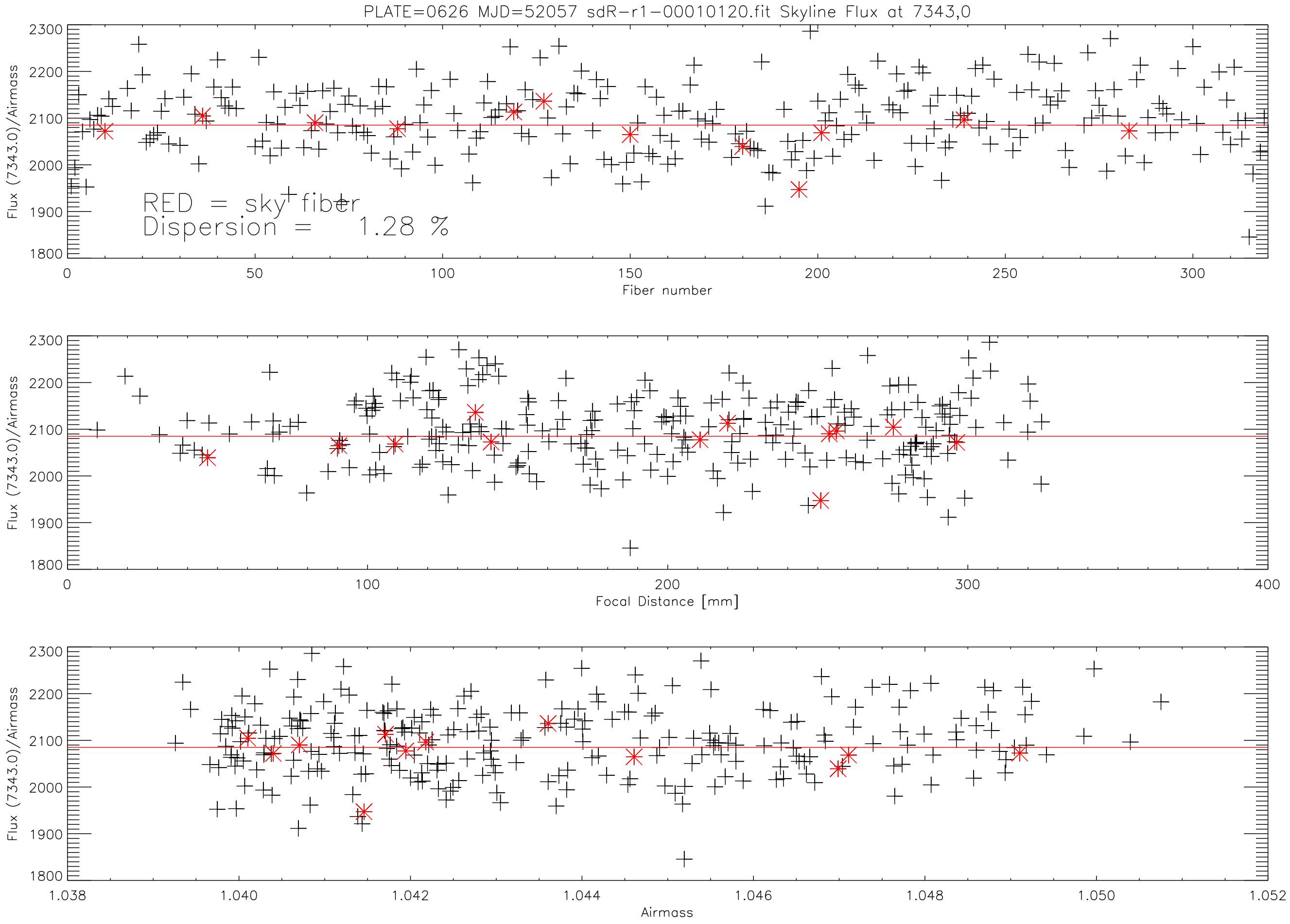

PLATE=0626 MJD=52057 sdR-r1-00010120.fit 2D Sky-subtraction Sky Fibers


PLATE=0626 MJD=52057 sdR-r1-00010120.fit 2D Sky-subtraction Sky-subtracted Sky F

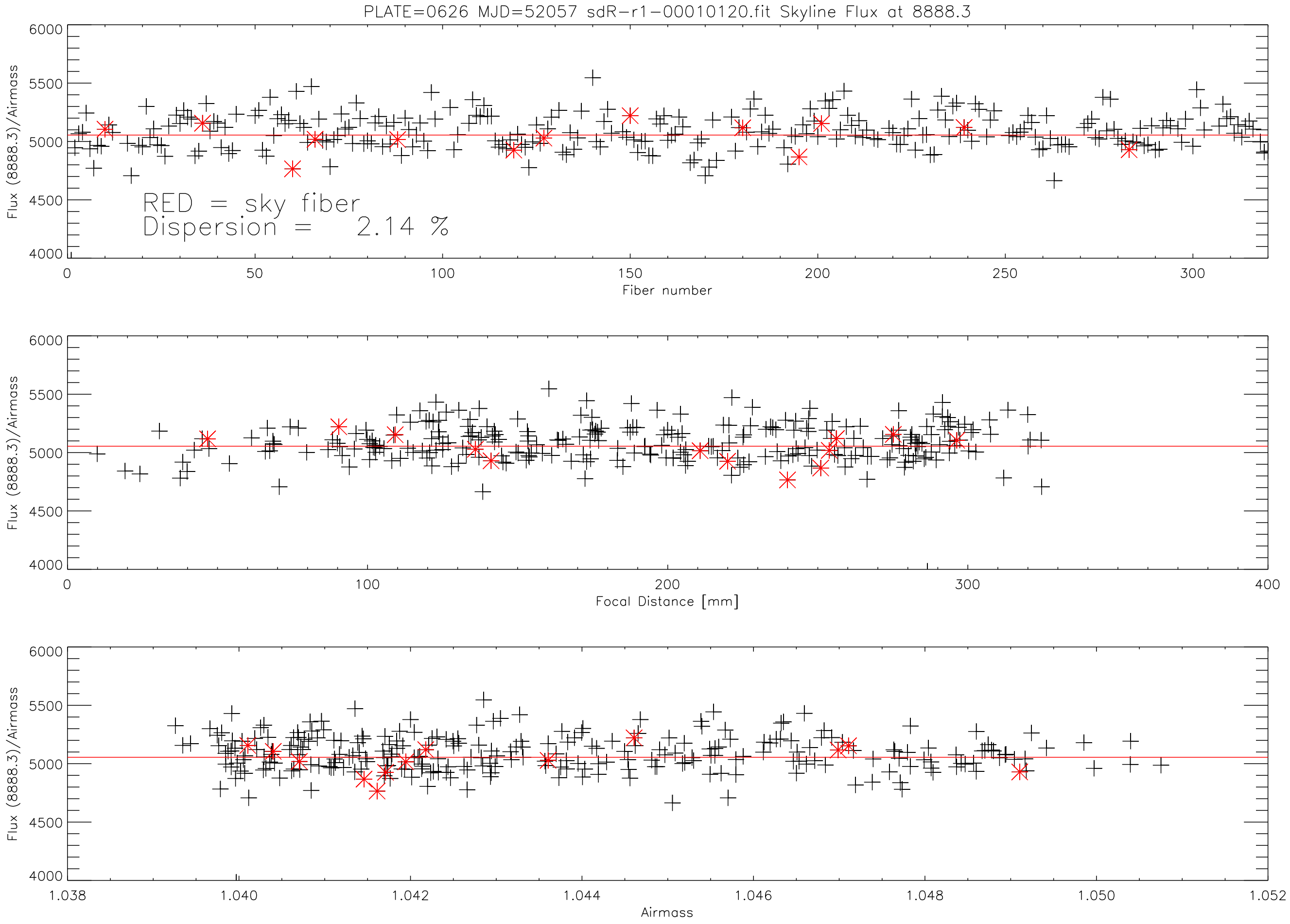
Number of sky fibers = 13

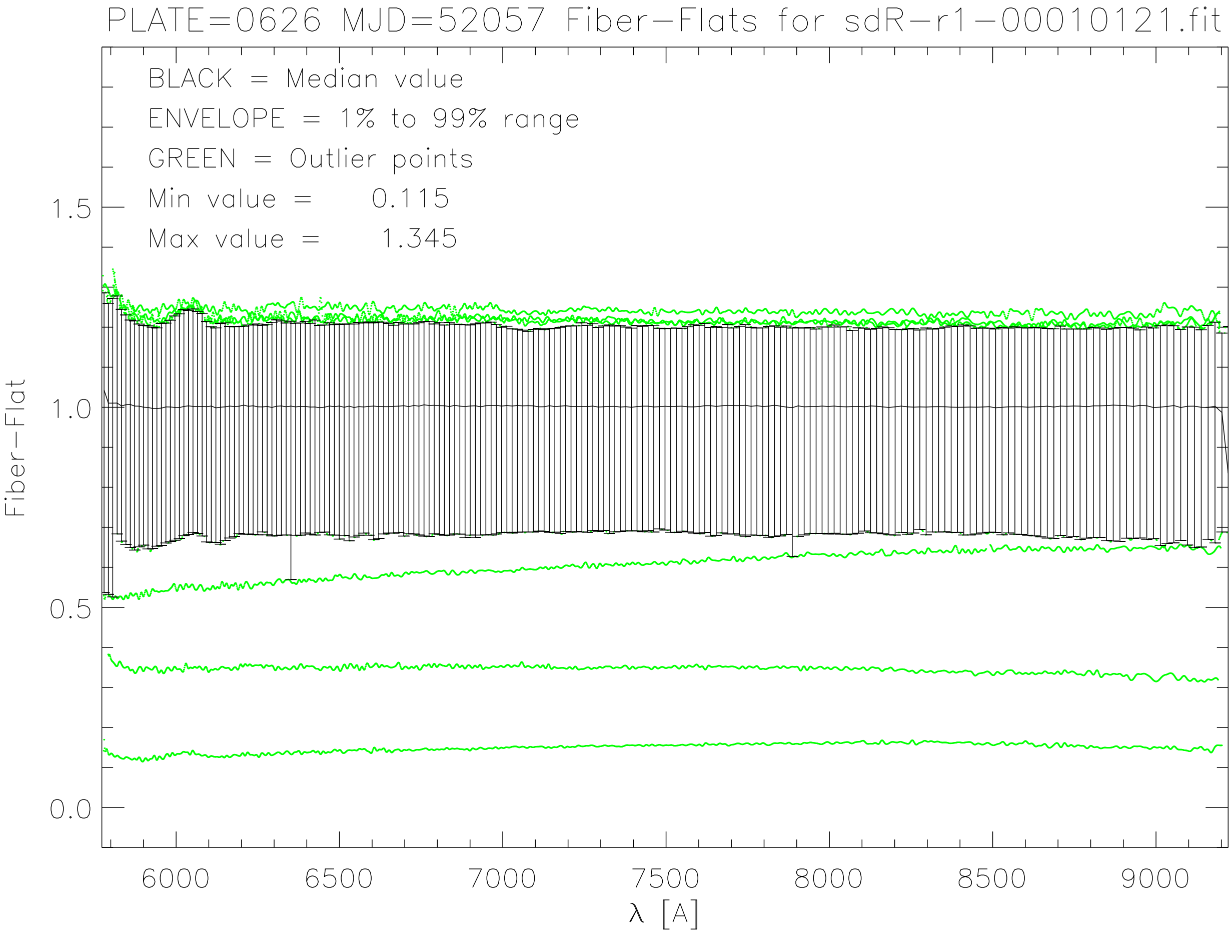
PLATE=0626 MJD=52057 sdR-r1-00010120.fit 2D Sky-subtraction Rescaled Errors





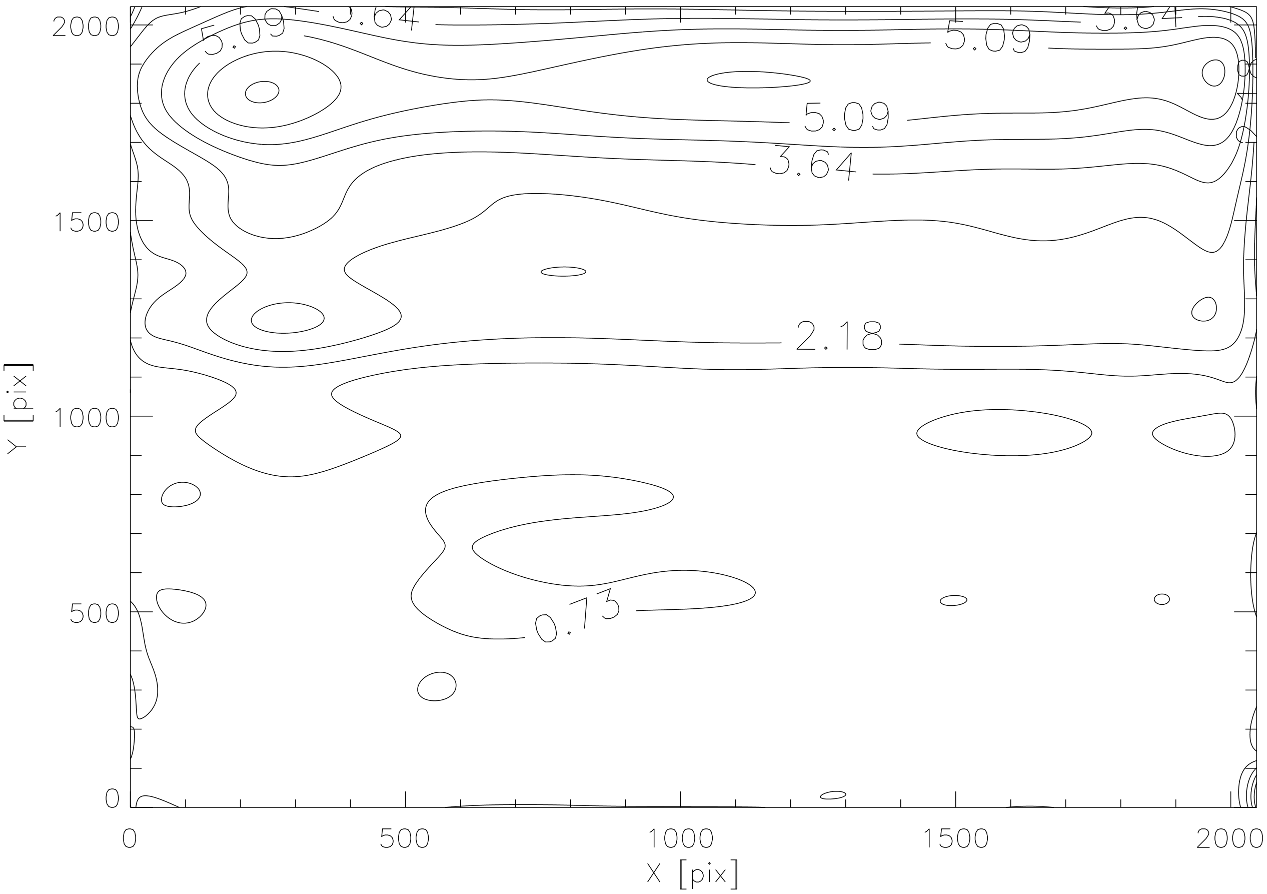
PLATE=0626 MJD=52057 sdR−r1−00010120.fit Skyline Flux at 7343,0

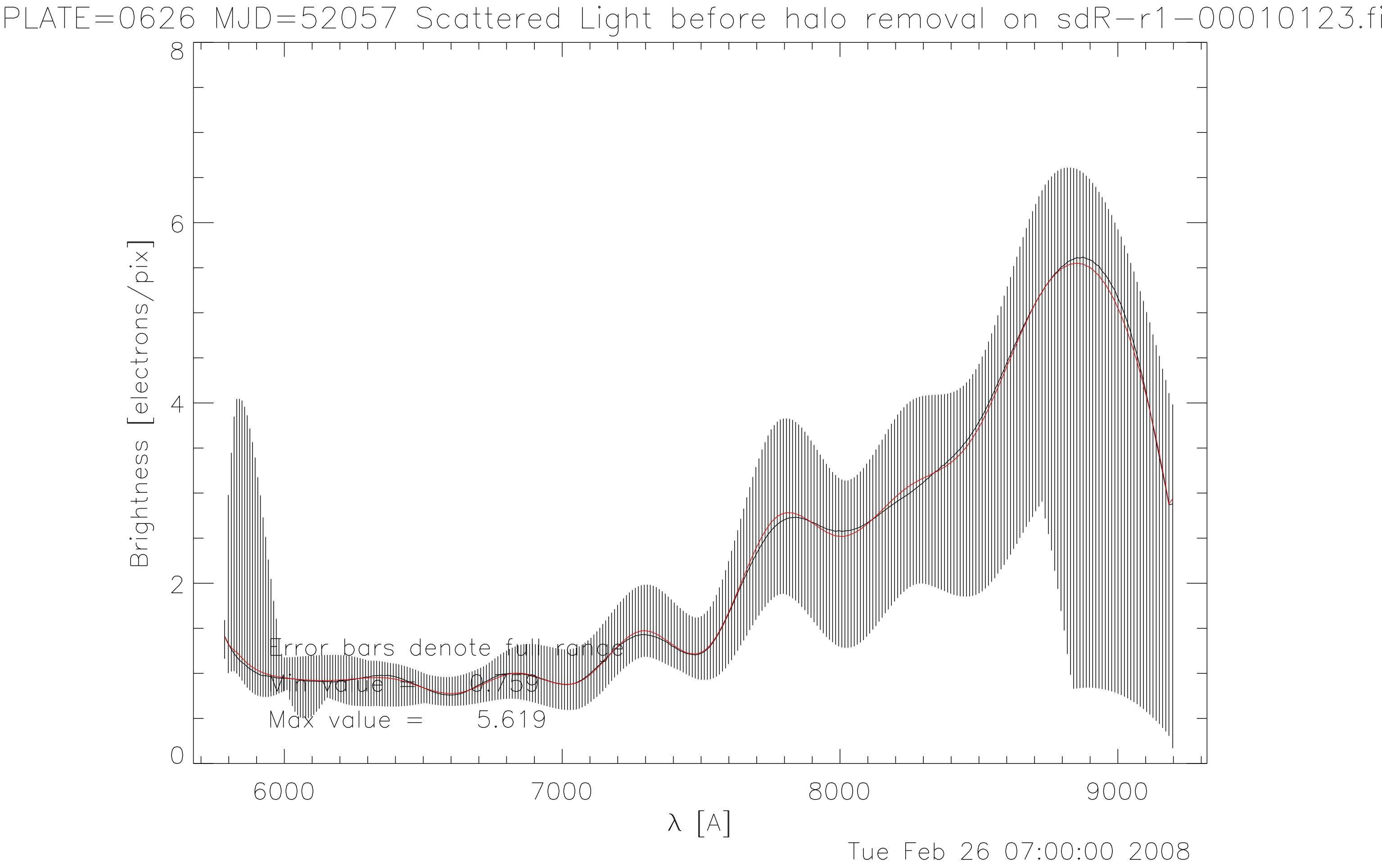

PLATE=0626 MJD=52057 sdR-r1-00010120.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 2.14 %
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
1.038
1.040
1.042
1.044
1.046
1.048
1.050
1.052
Airmass



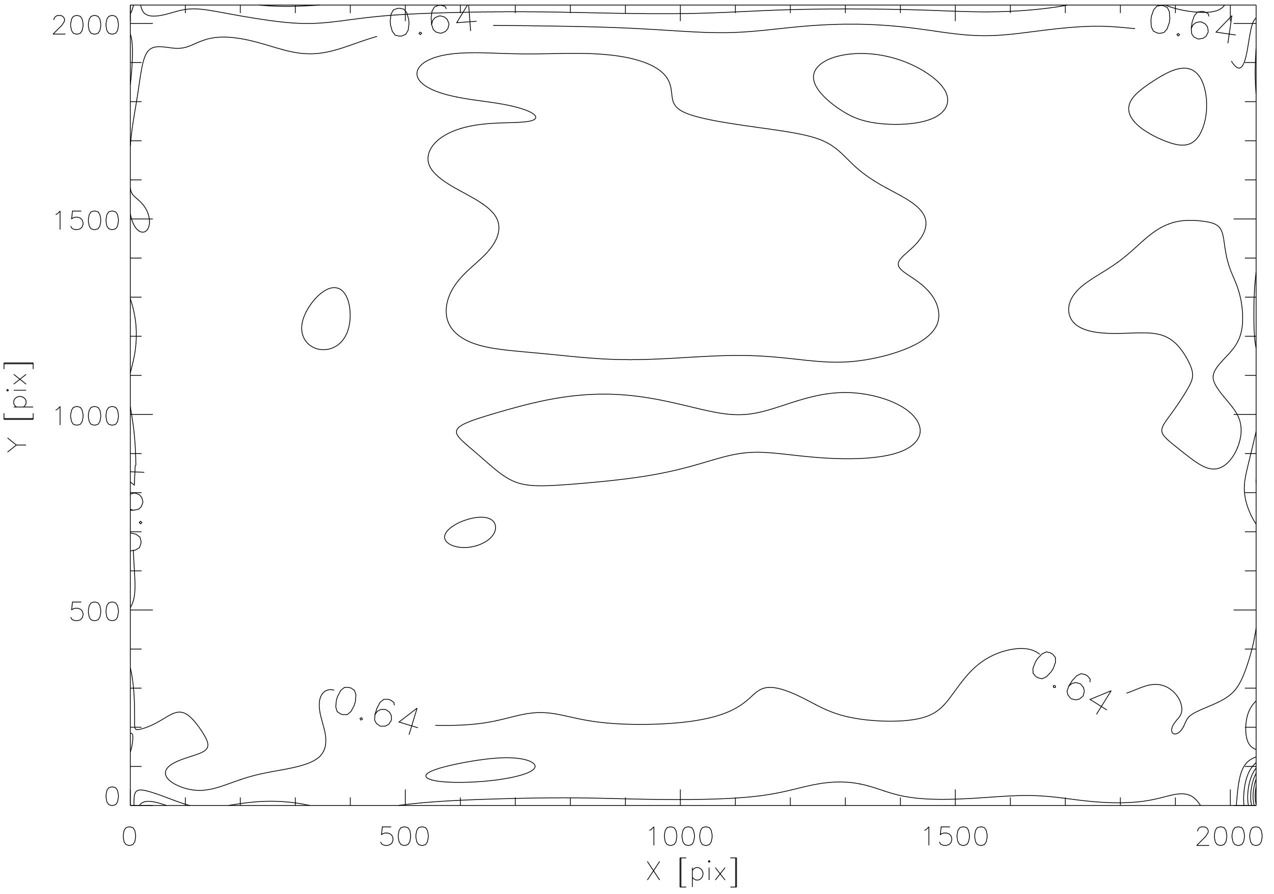
Tue Feb 26 06:59:25 2008

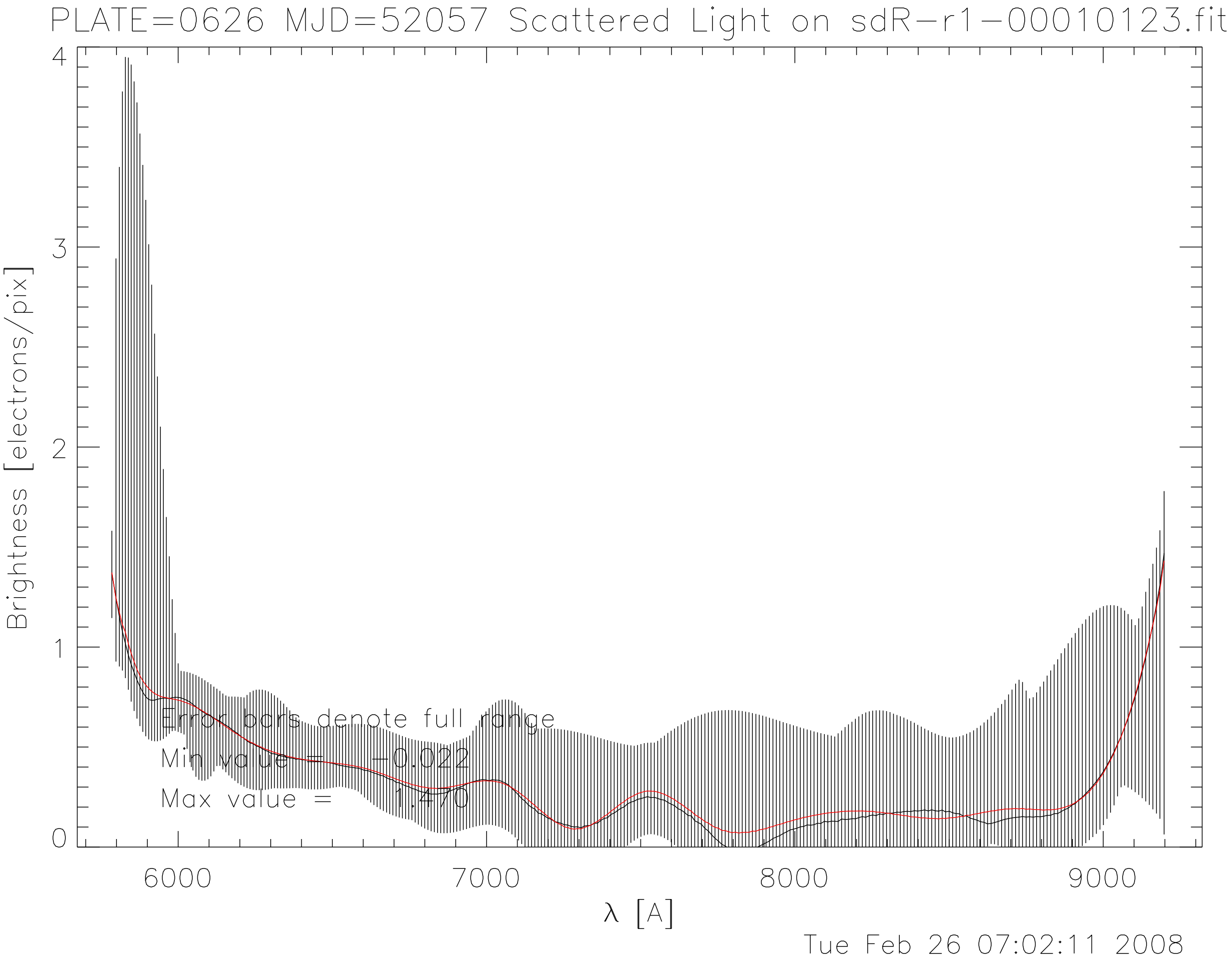
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010123.fi

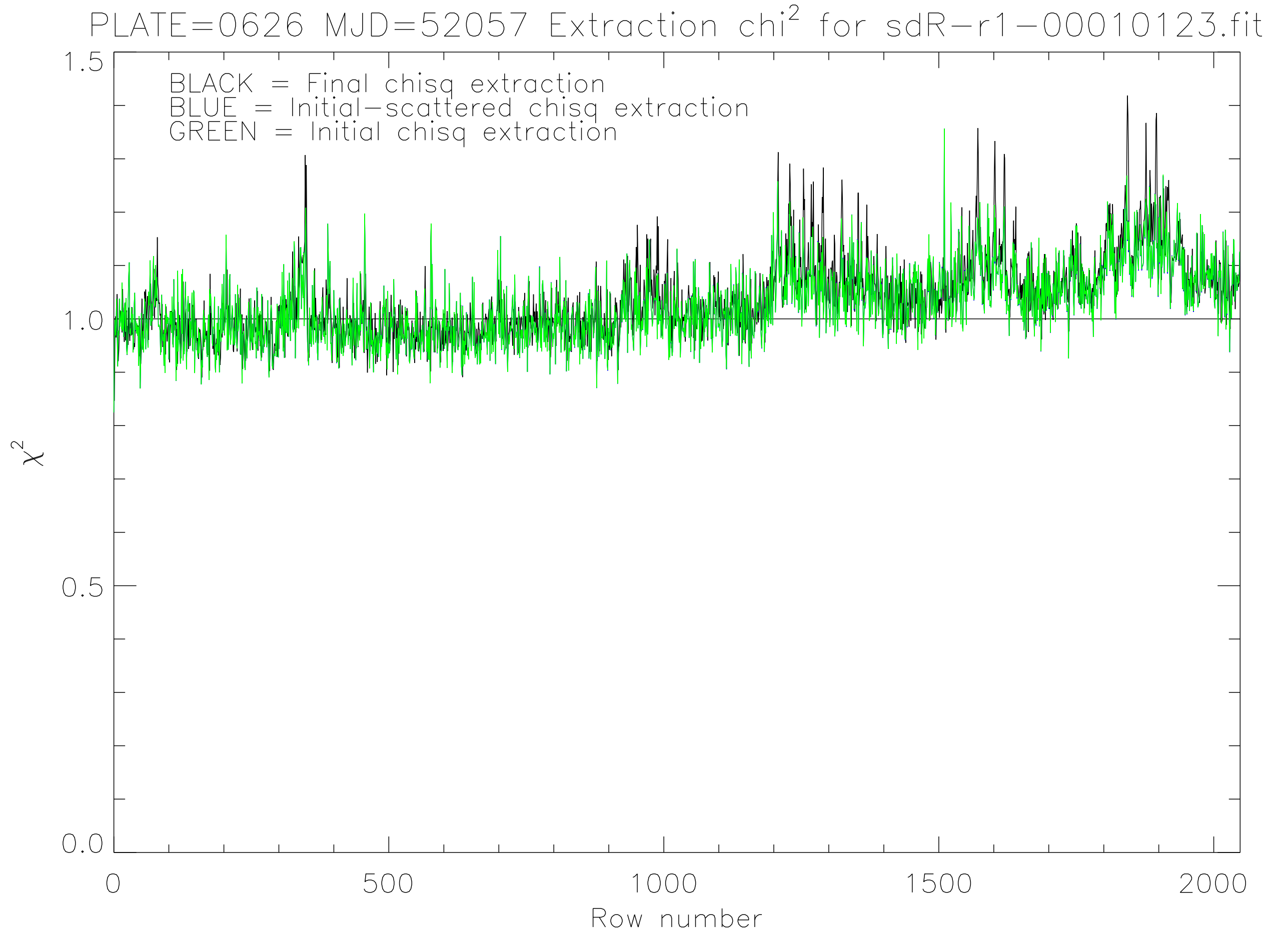


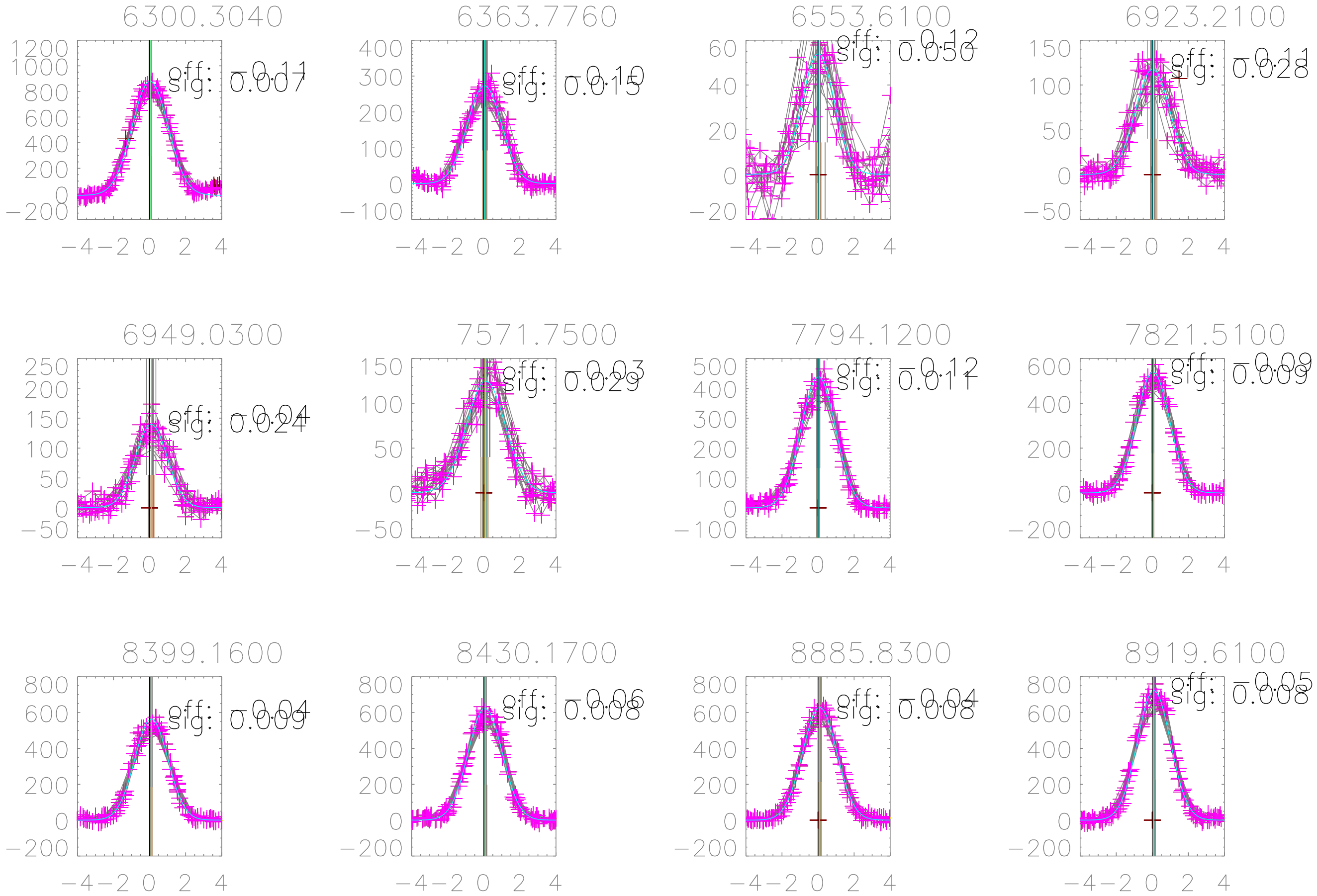

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r1-00010123.fi
Brightness [electrons/pix]
0
2
4
6
8
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.759
Max value = 5.619
Tue Feb 26 07:00:00 2008

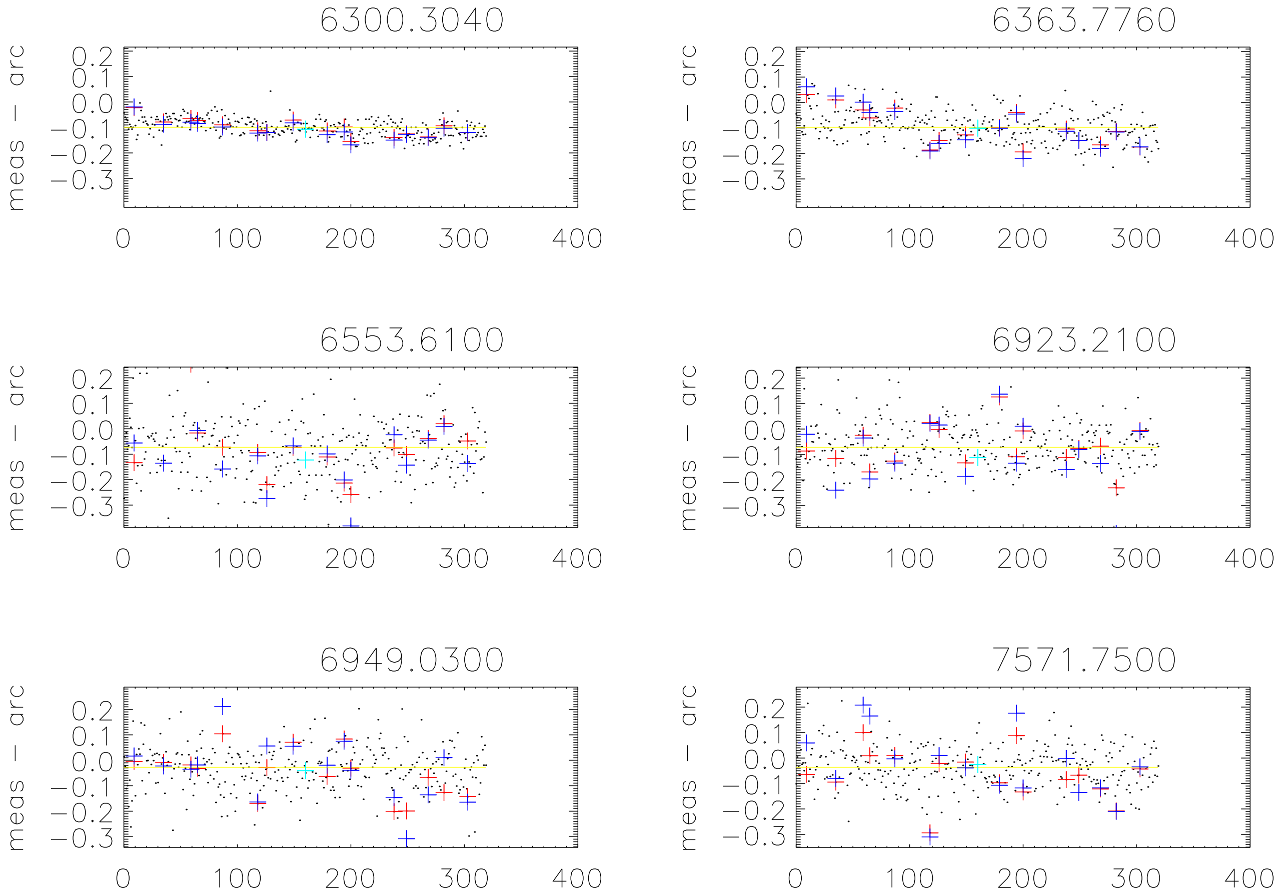
PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010123.fit

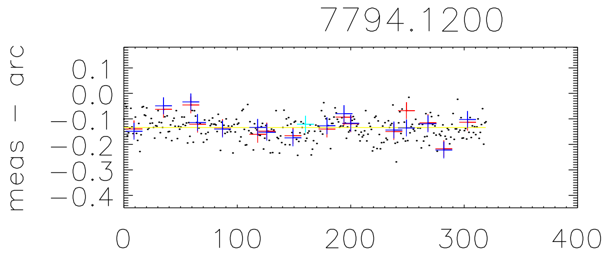


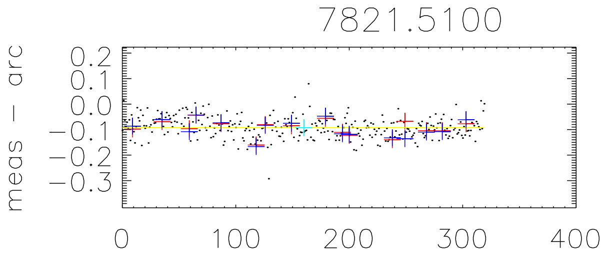

PLATE=0626 MJD=52057 Scattered Light on sdR-r1-00010123.fit
Brightness [electrons/pix]
0
1
2
3
4
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = -0.022
Max value = 1.470
Tue Feb 26 07:02:11 2008

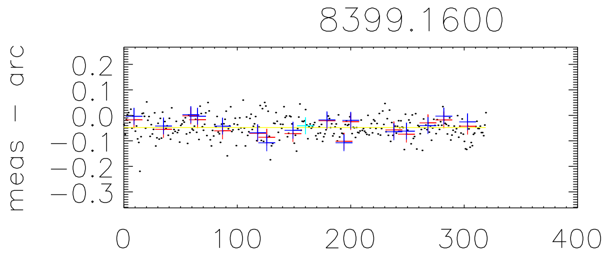

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r1-00010123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
0
500
1000
1500
2000
Row number

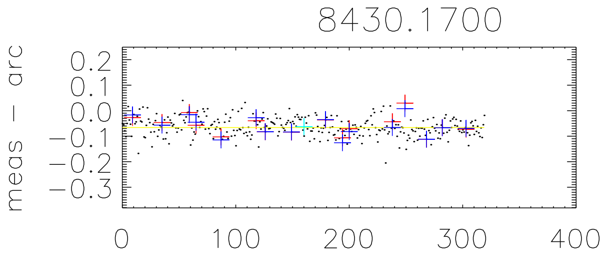

6300.3040
off: −0.11
sig: 0.007
6363.7760
off: −0.10
sig: 0.015
6553.6100
off: −0.12
sig: 0.050
6923.2100
off: −0.11
sig: 0.028
6949.0300
off: −0.04
sig: 0.024
7571.7500
off: −0.03
sig: 0.029
7794.1200
off: −0.12
sig: 0.011
7821.5100
off: −0.09
sig: 0.009
8399.1600
off: −0.04
sig: 0.009
8430.1700
off: −0.06
sig: 0.008
8885.8300
off: −0.04
sig: 0.008
8919.6100
off: −0.05
sig: 0.008
−4 −2 0 2 4

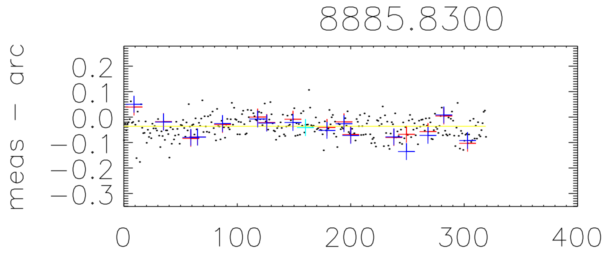

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

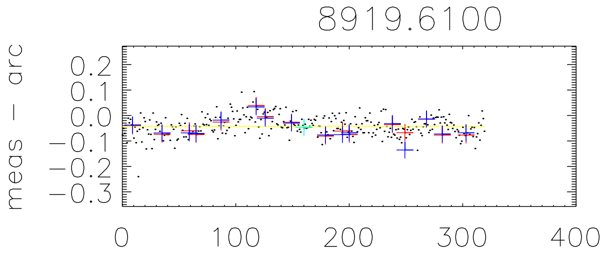

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

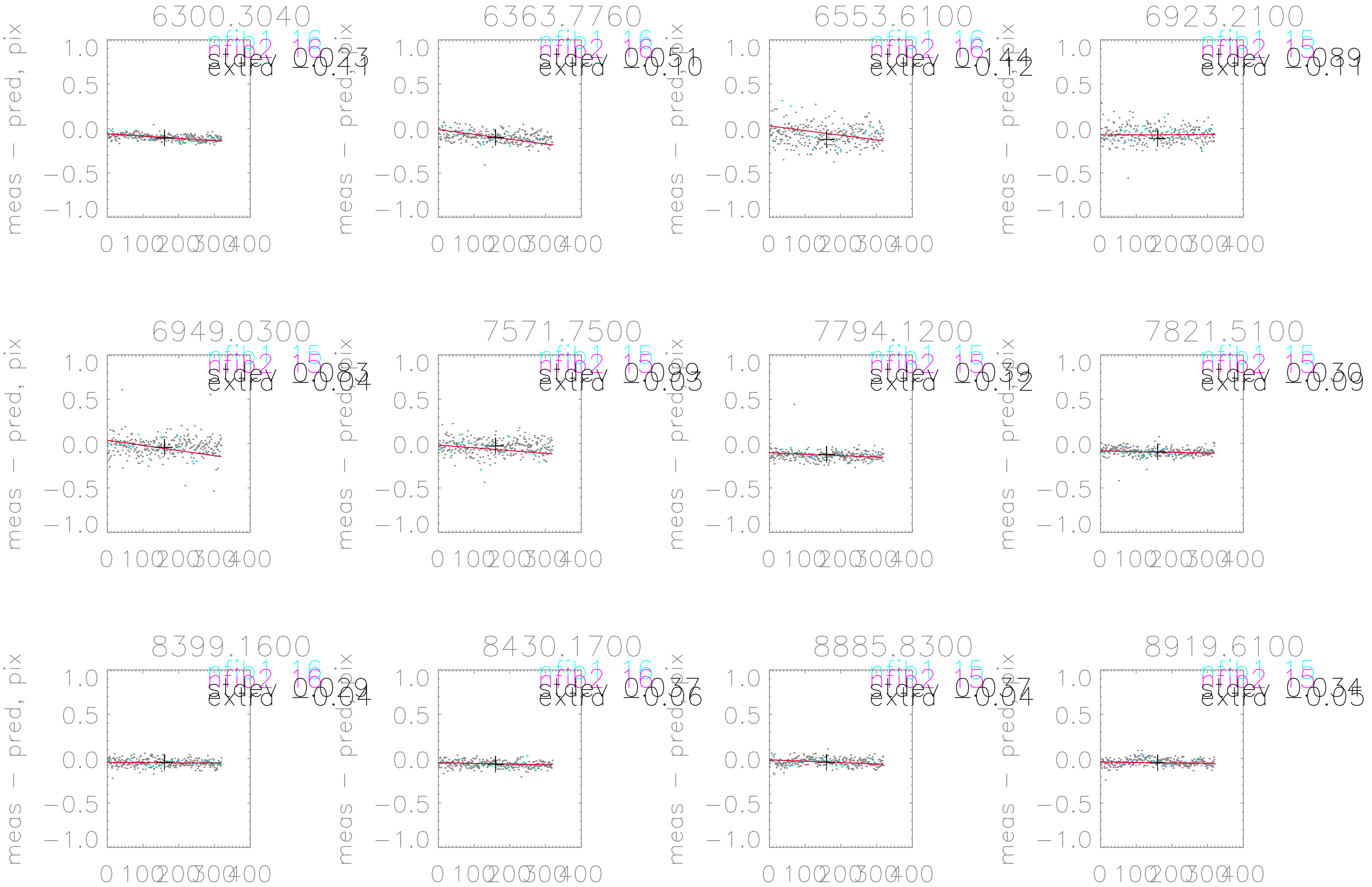

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

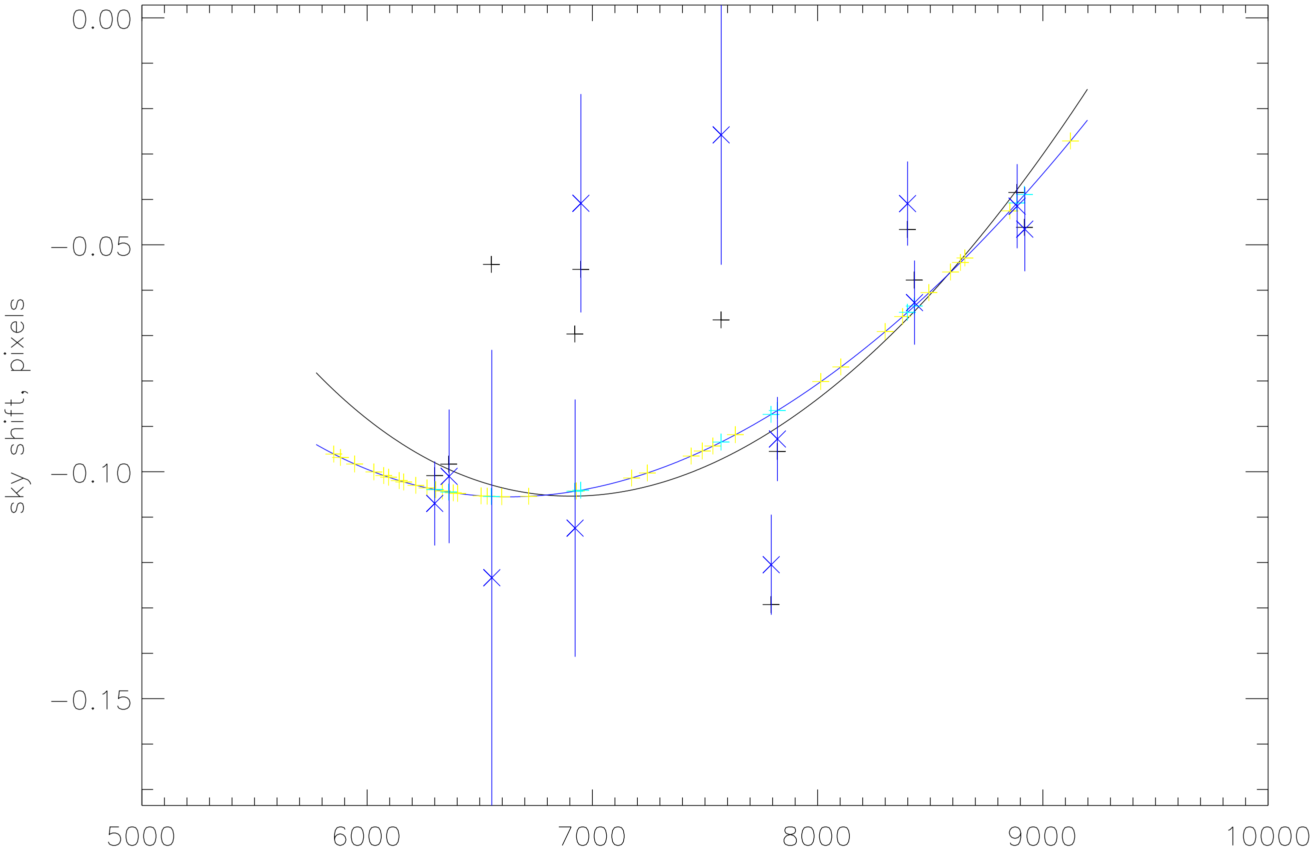

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

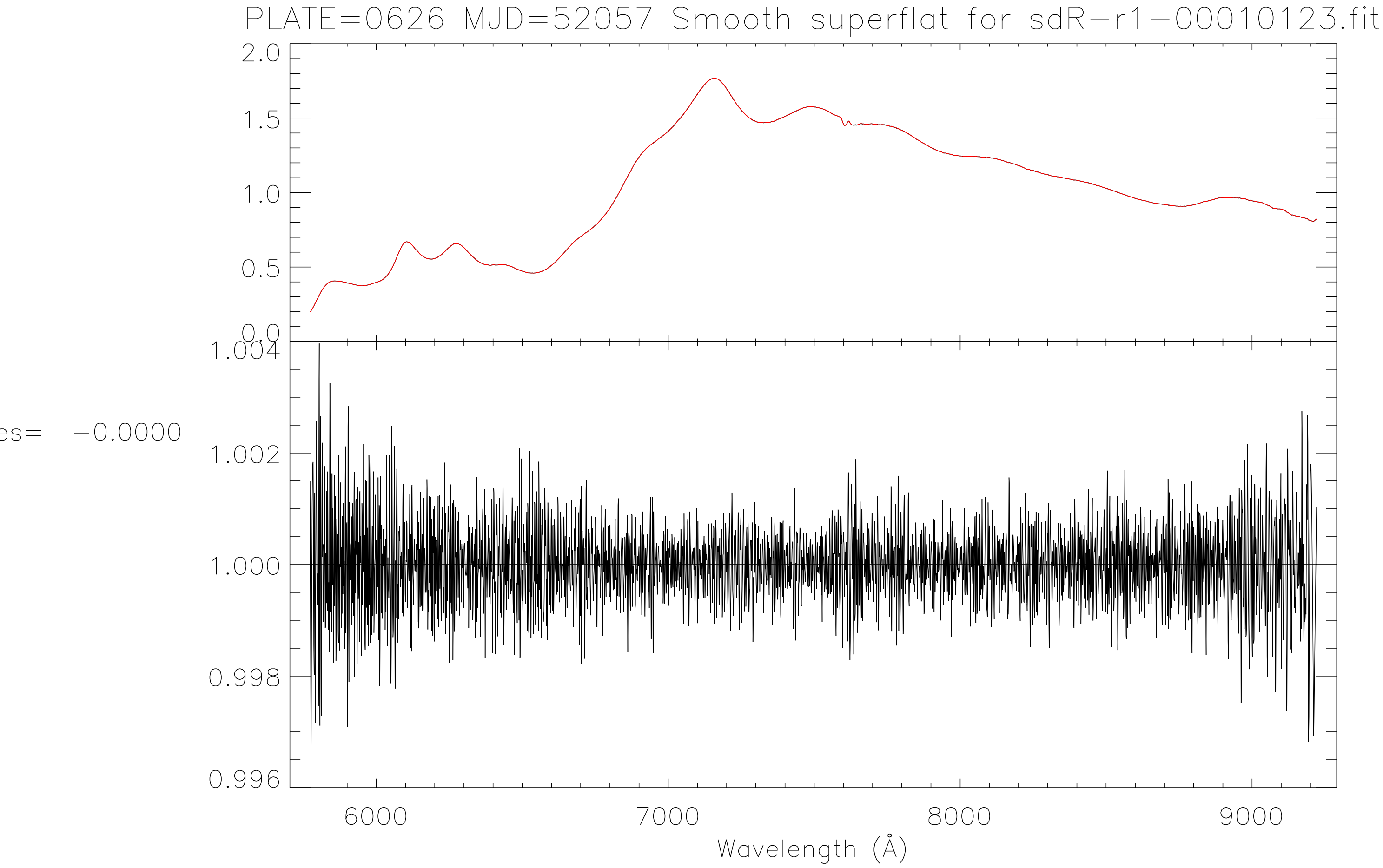

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


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

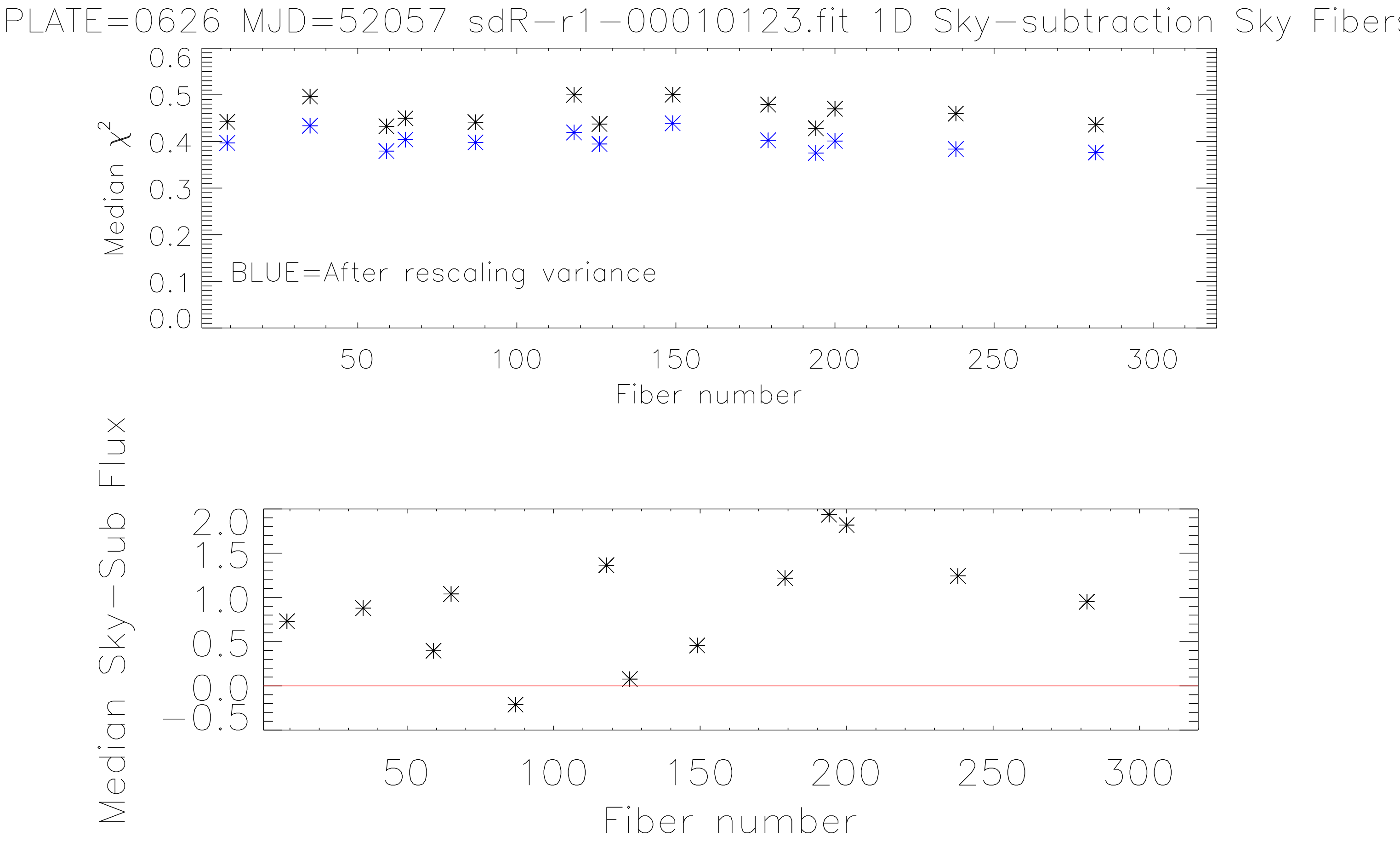

6300.3040
nfib1 16
nfib2 16
stdev 0.023
extrd −0.11
6363.7760
nfib1 16
nfib2 16
stdev 0.051
extrd −0.10
6553.6100
nfib1 16
nfib2 16
stdev 0.144
extrd −0.12
6923.2100
nfib1 15
nfib2 15
stdev 0.089
extrd −0.11
6949.0300
nfib1 15
nfib2 15
stdev 0.083
extrd −0.04
7571.7500
nfib1 15
nfib2 15
stdev 0.099
extrd −0.03
7794.1200
nfib1 15
nfib2 15
stdev 0.039
extrd −0.12
7821.5100
nfib1 15
nfib2 15
stdev 0.030
extrd −0.09
8399.1600
nfib1 16
nfib2 16
stdev 0.029
extrd −0.04
8430.1700
nfib1 16
nfib2 16
stdev 0.037
extrd −0.06
8885.8300
nfib1 15
nfib2 15
stdev 0.037
extrd −0.04
8919.6100
nfib1 15
nfib2 15
stdev 0.034
extrd −0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400



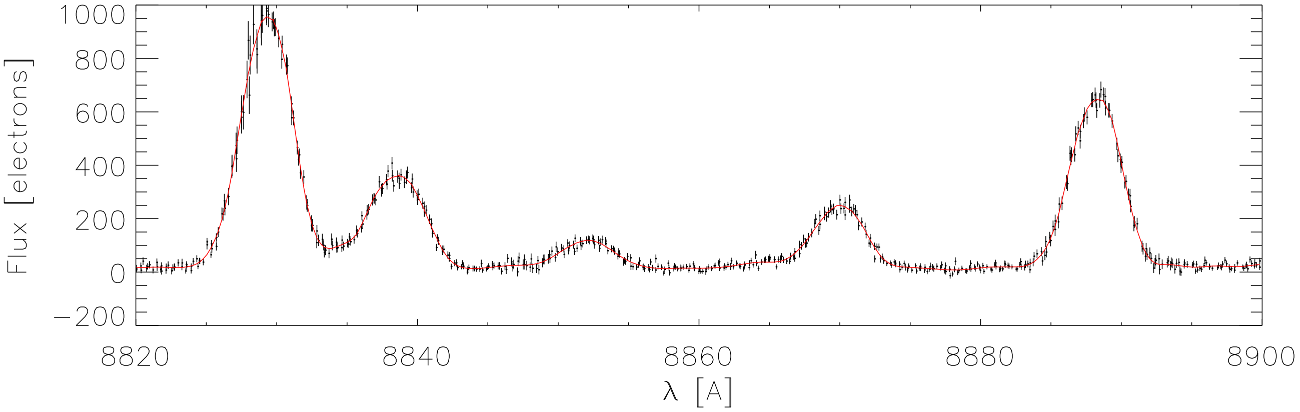
sky shift, pixels
0.00
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000



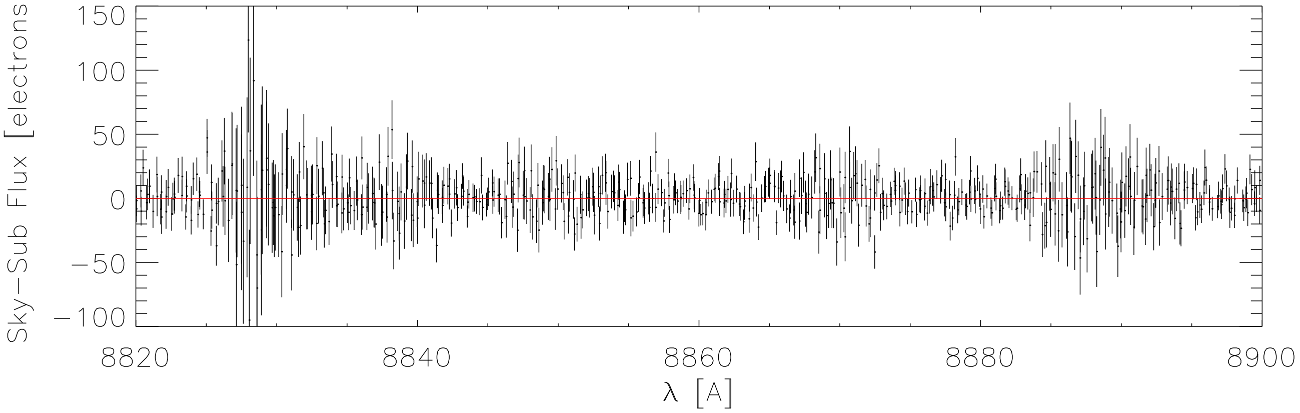
PLATE=0626 MJD=52057 Smooth superflat for sdR-r1-00010123.fit


PLATE=0626 MJD=52057 sdR-r1-00010123.fit 1D 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
-0.5
0.0
0.5
1.0
1.5
2.0
50
100
150
200
250
300
Fiber number

PLATE=0626 MJD=52057 sdR-r1-00010123.fit 1D Sky-subtraction Sky Fibers

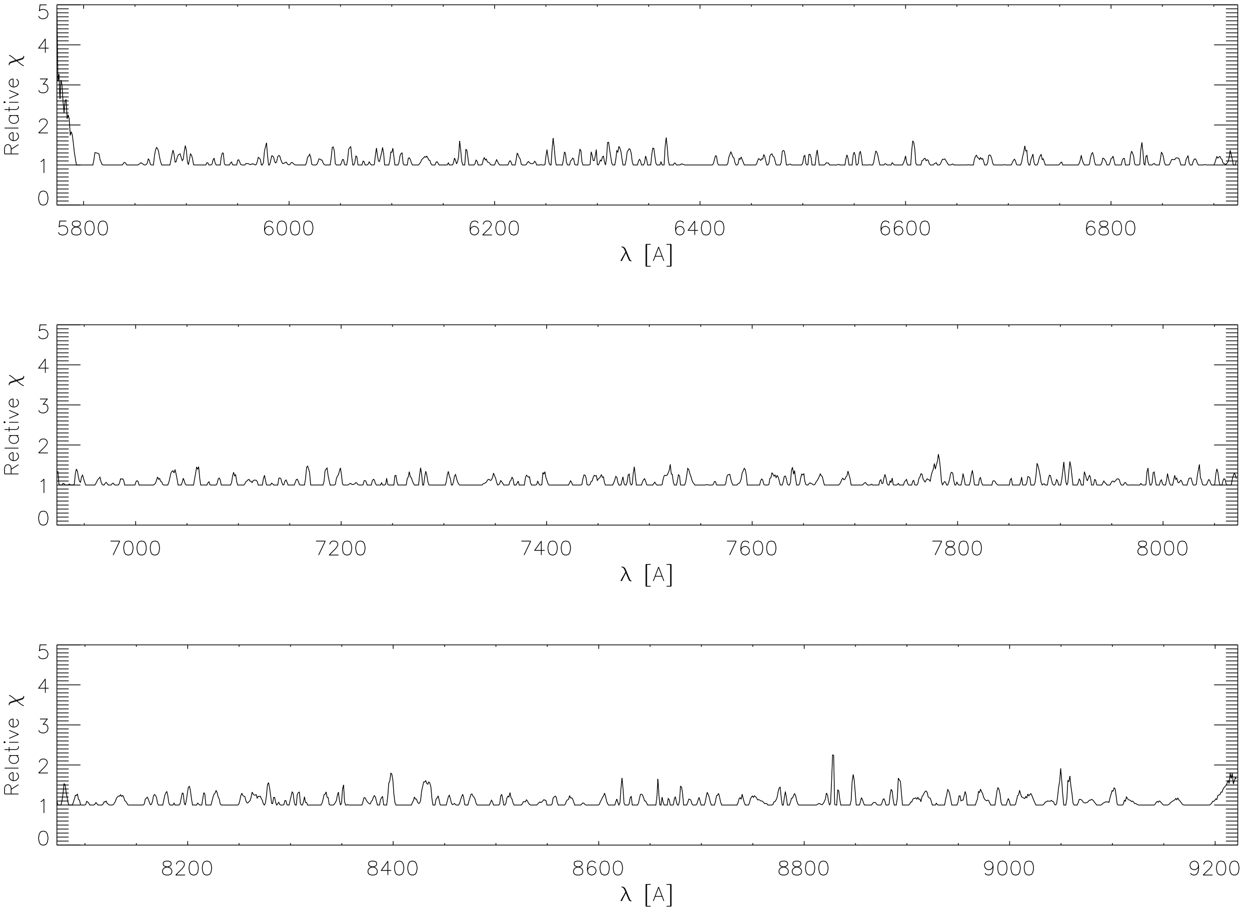


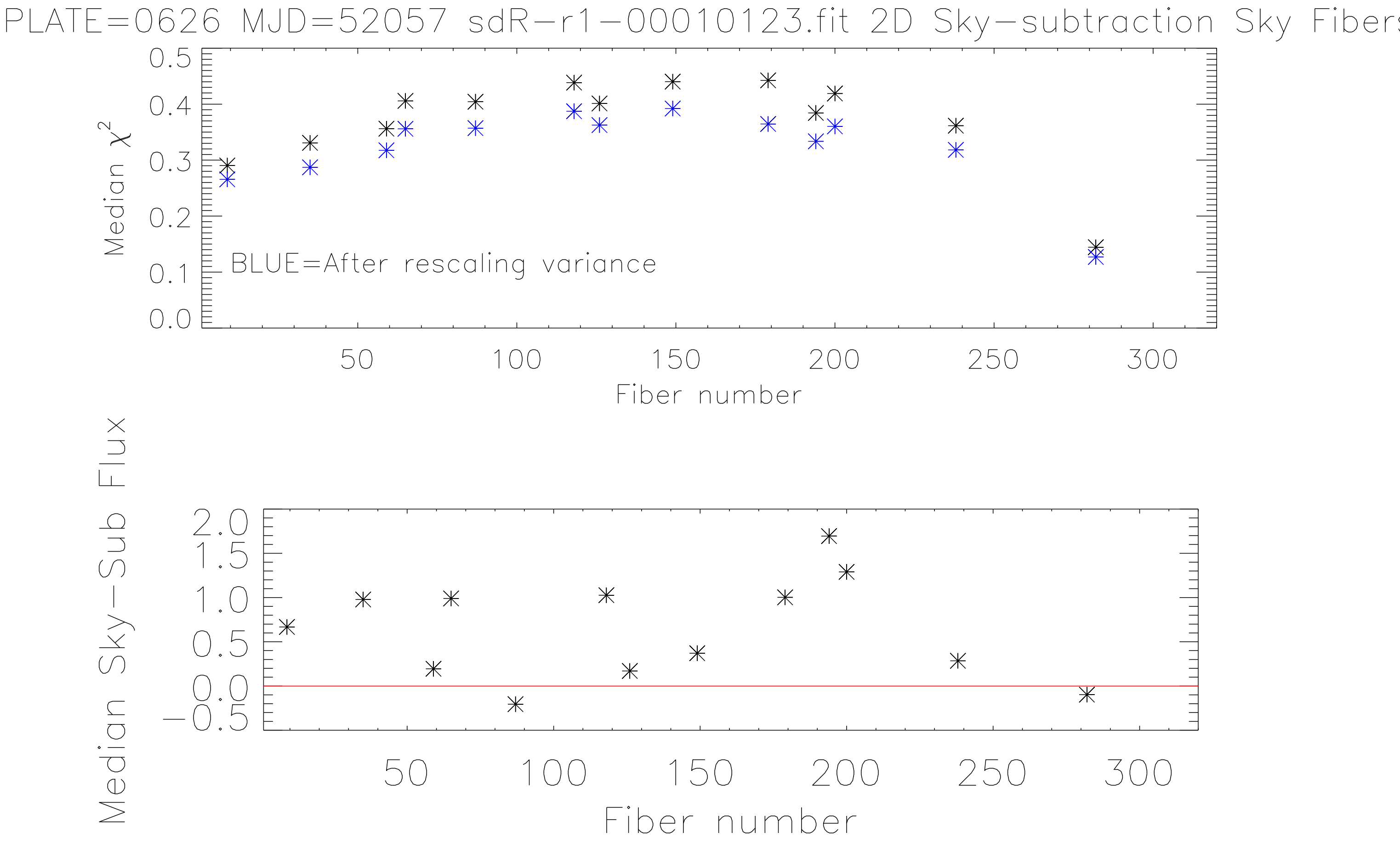
PLATE=0626 MJD=52057 sdR-r1-00010123.fit 1D Sky-subtraction Sky-subtracted Sky F

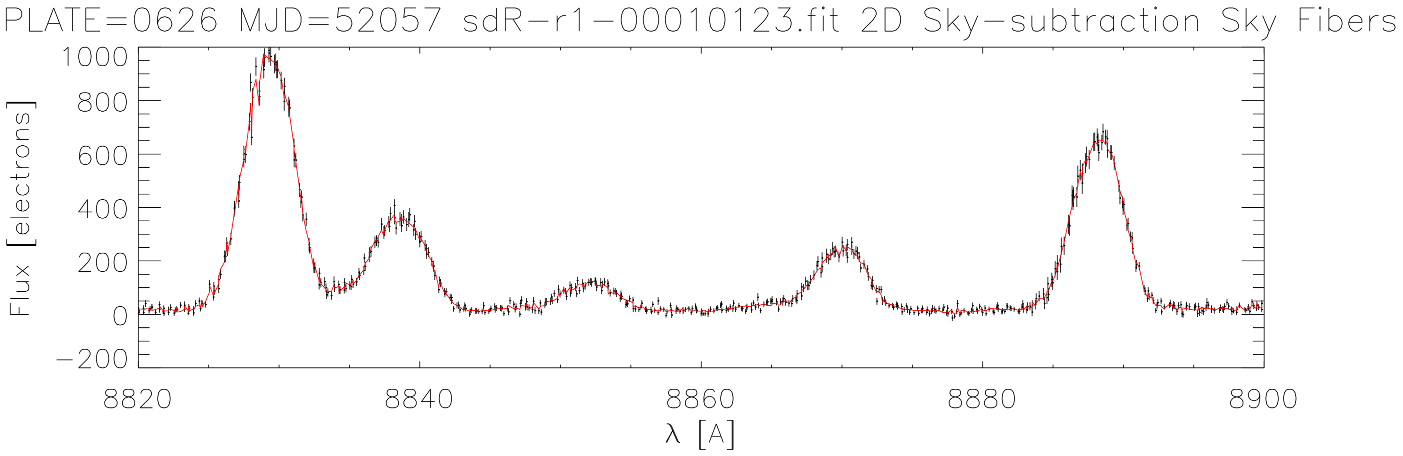


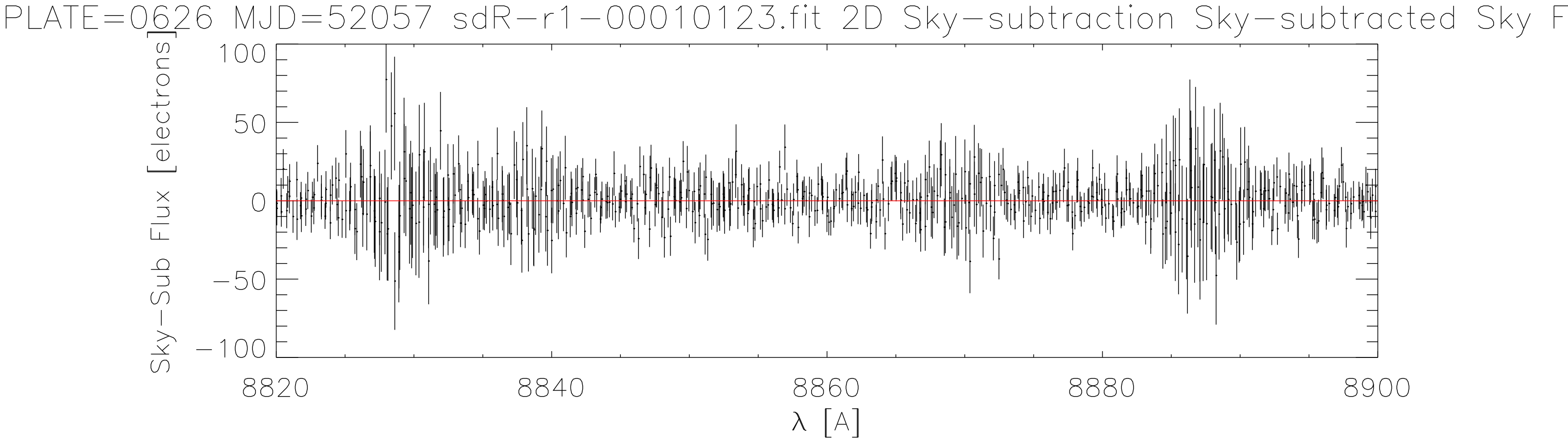
Number of sky fibers = 13

PLATE=0626 MJD=52057 sdR-r1-00010123.fit 1D Sky-subtraction Rescaled Errors



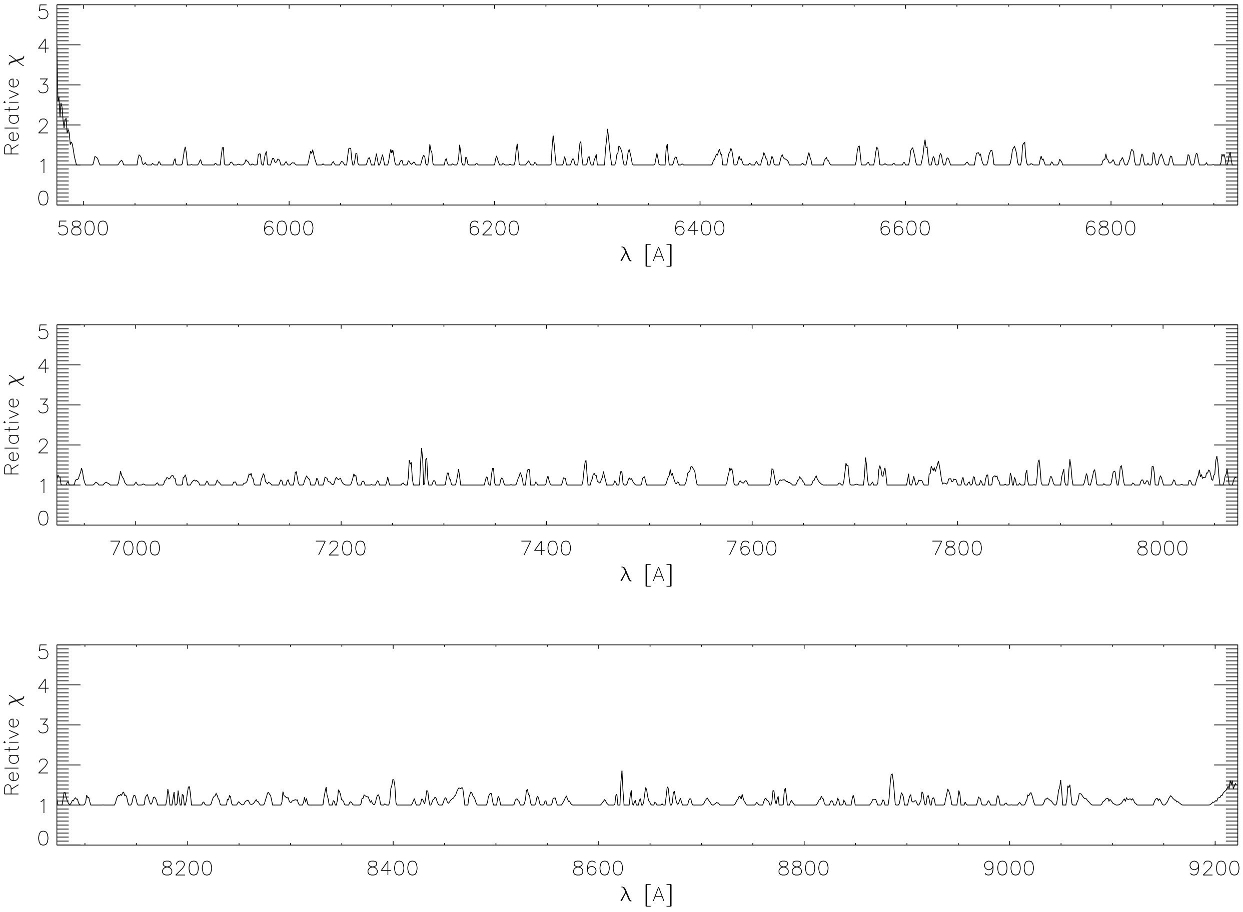

PLATE=0626 MJD=52057 sdR-r1-00010123.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2.0
1.5
1.0
0.5
0.0
-0.5
50
100
150
200
250
300
Fiber number

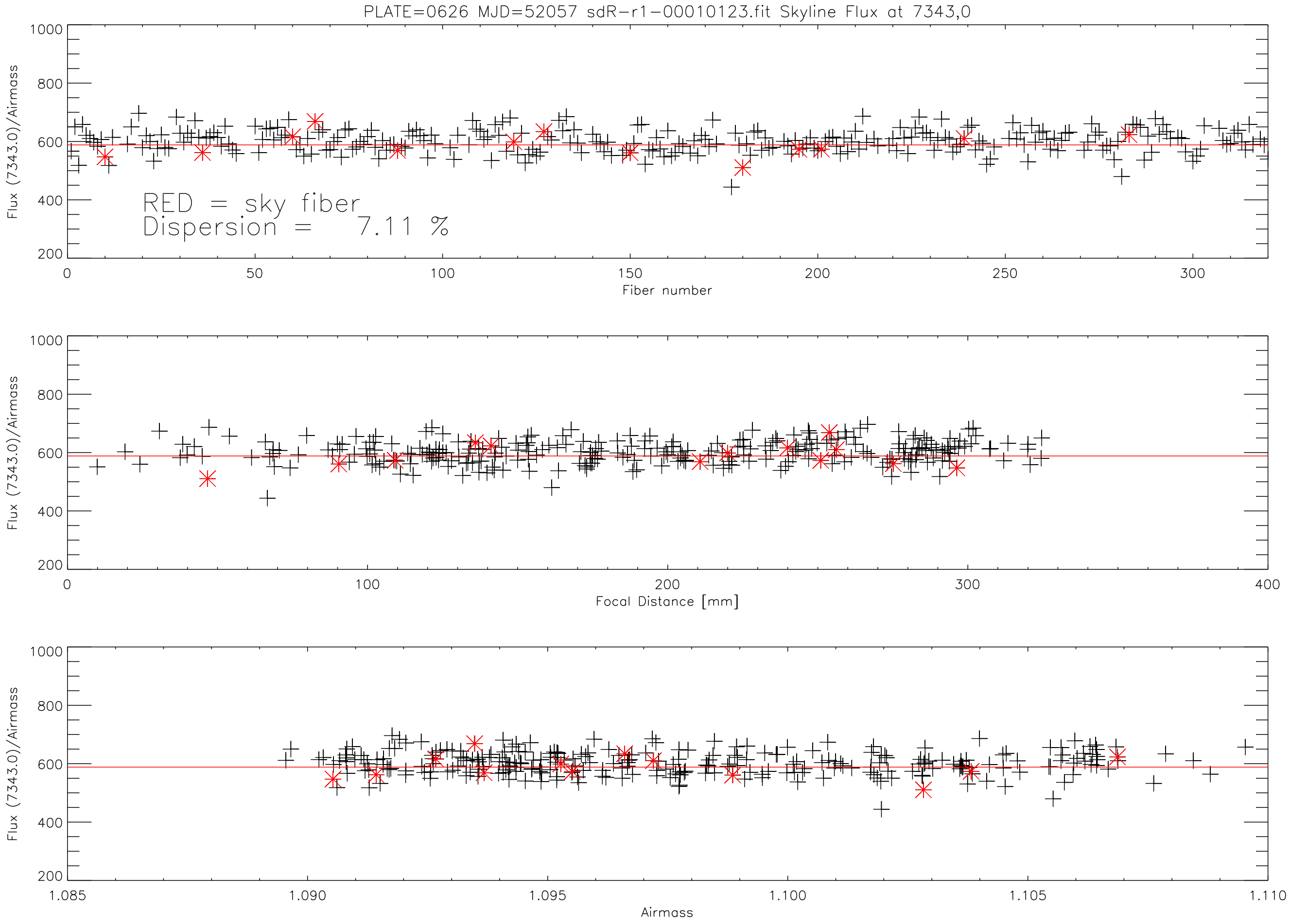

PLATE=0626 MJD=52057 sdR-r1-00010123.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1000
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

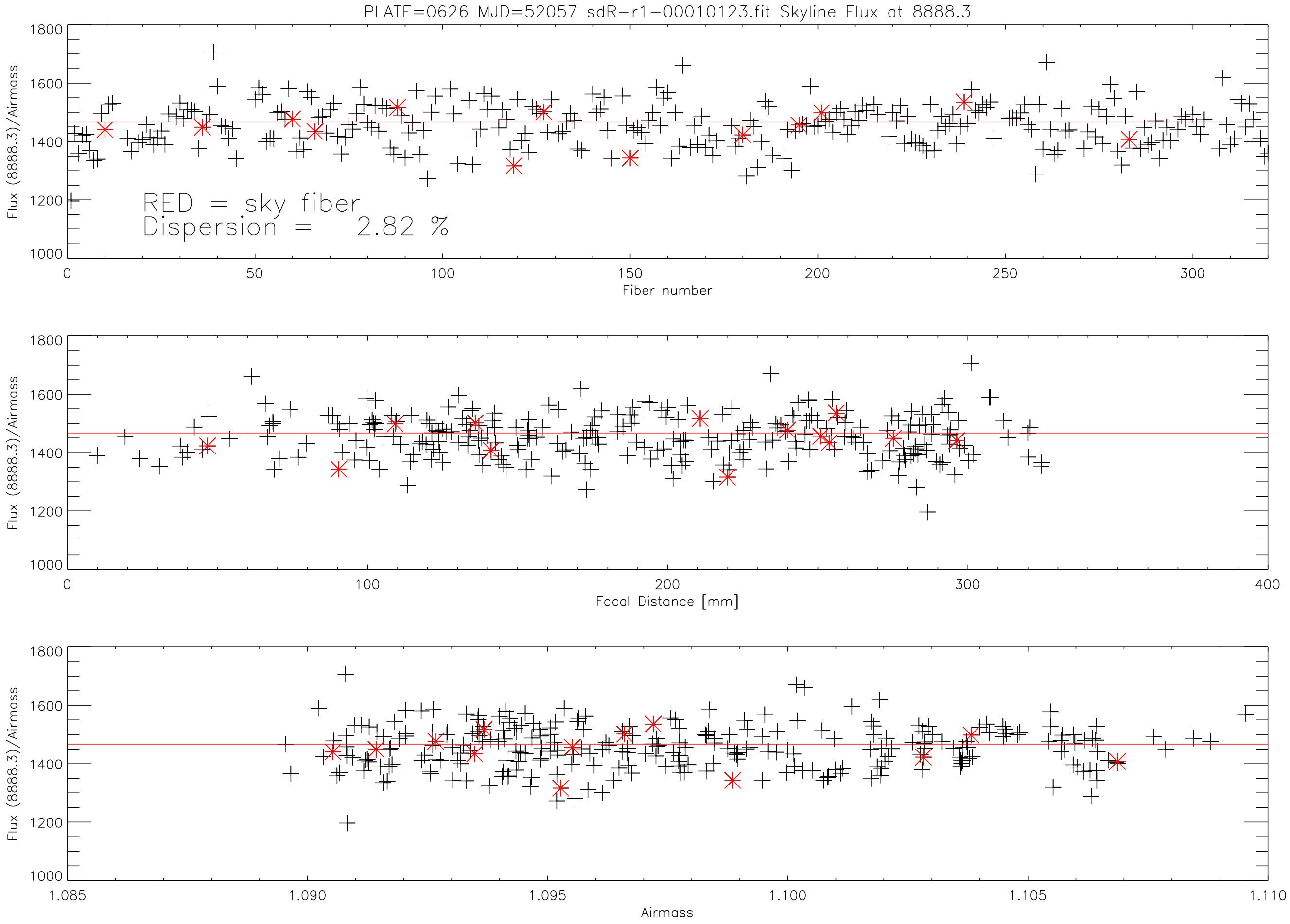

PLATE=0626 MJD=52057 sdR-r1-00010123.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
-50
-100
8820
8840
8860
8880
8900
λ [A]

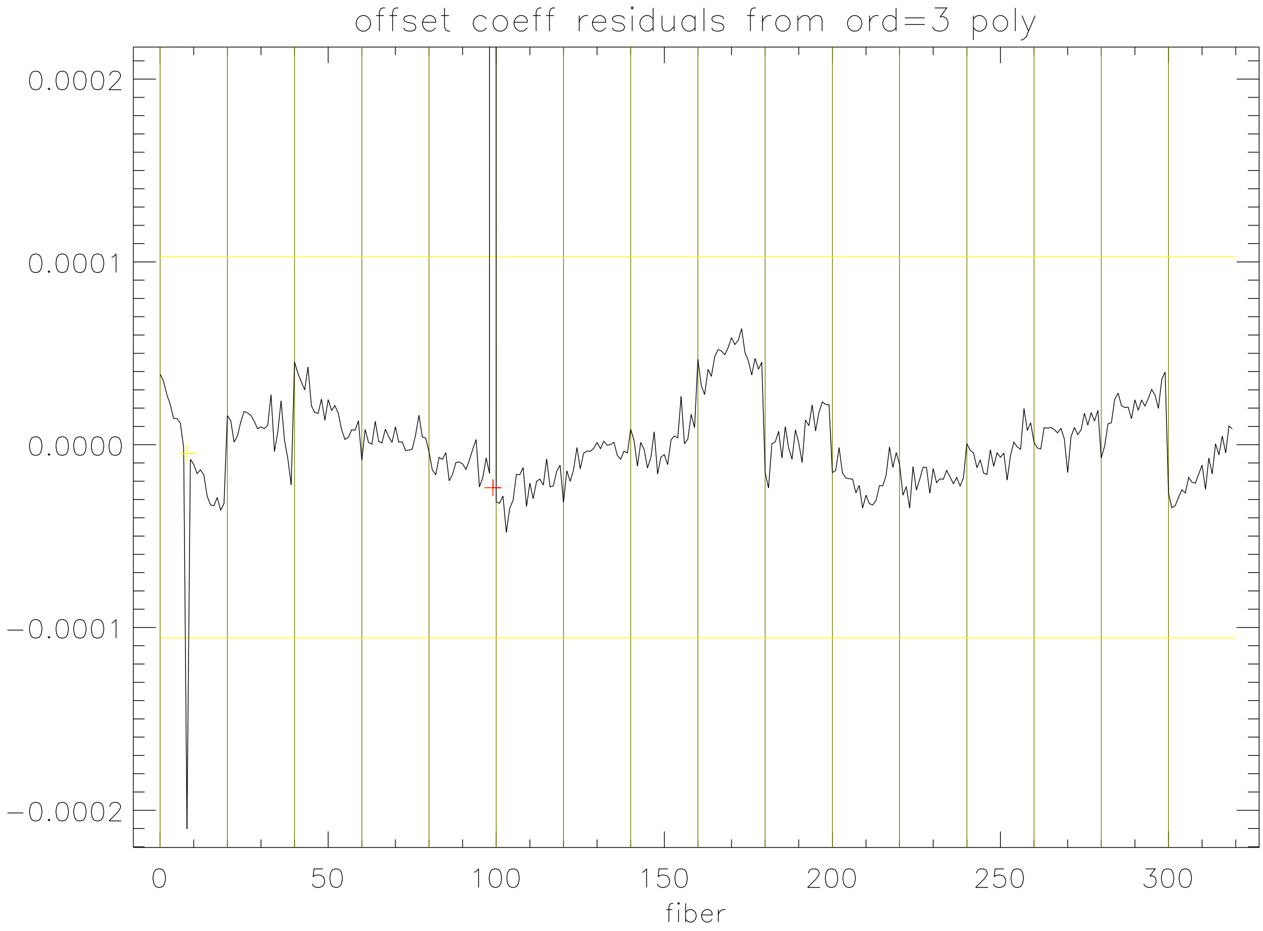
Number of sky fibers = 13

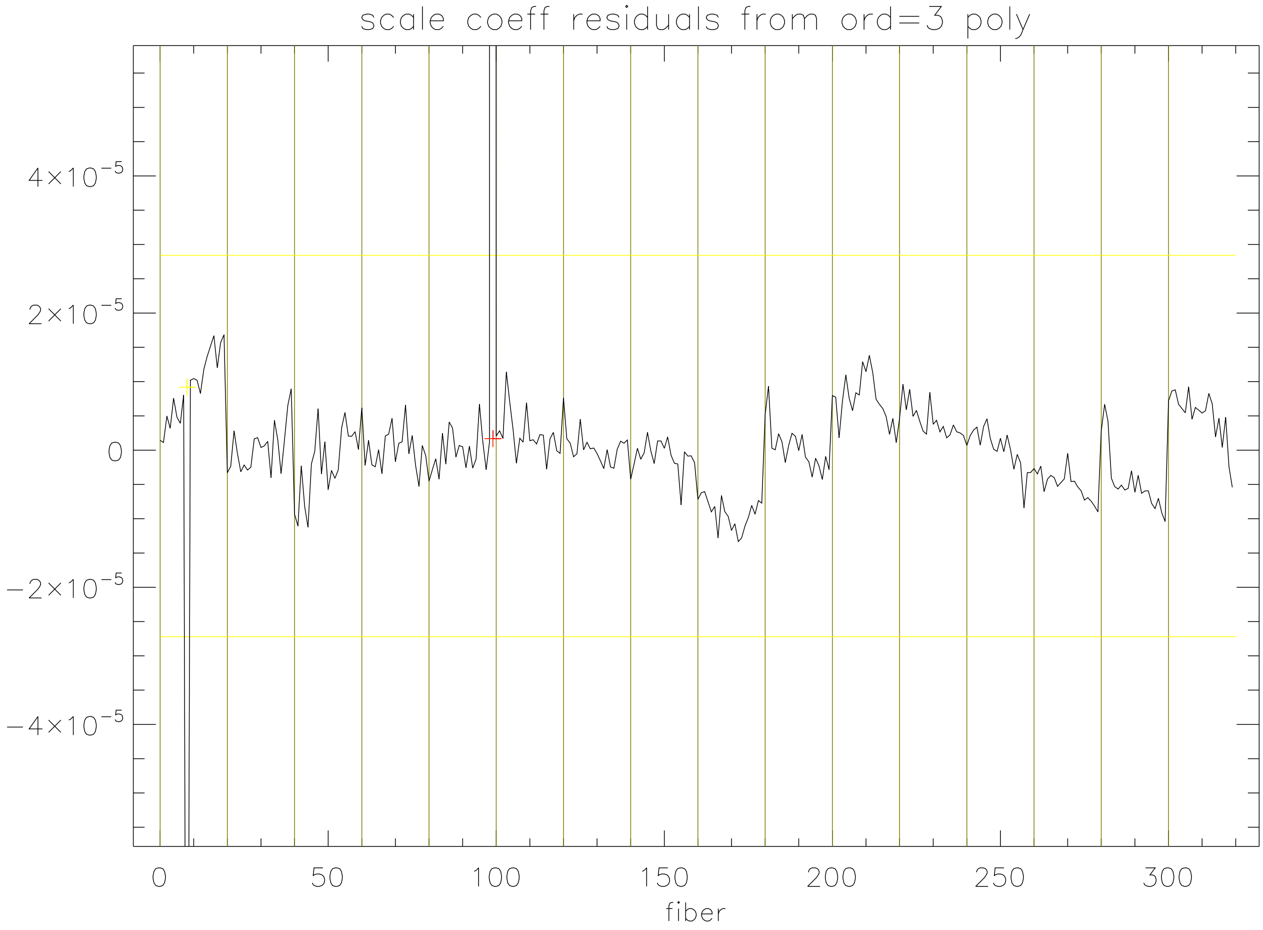
PLATE=0626 MJD=52057 sdR-r1-00010123.fit 2D Sky-subtraction Rescaled Errors

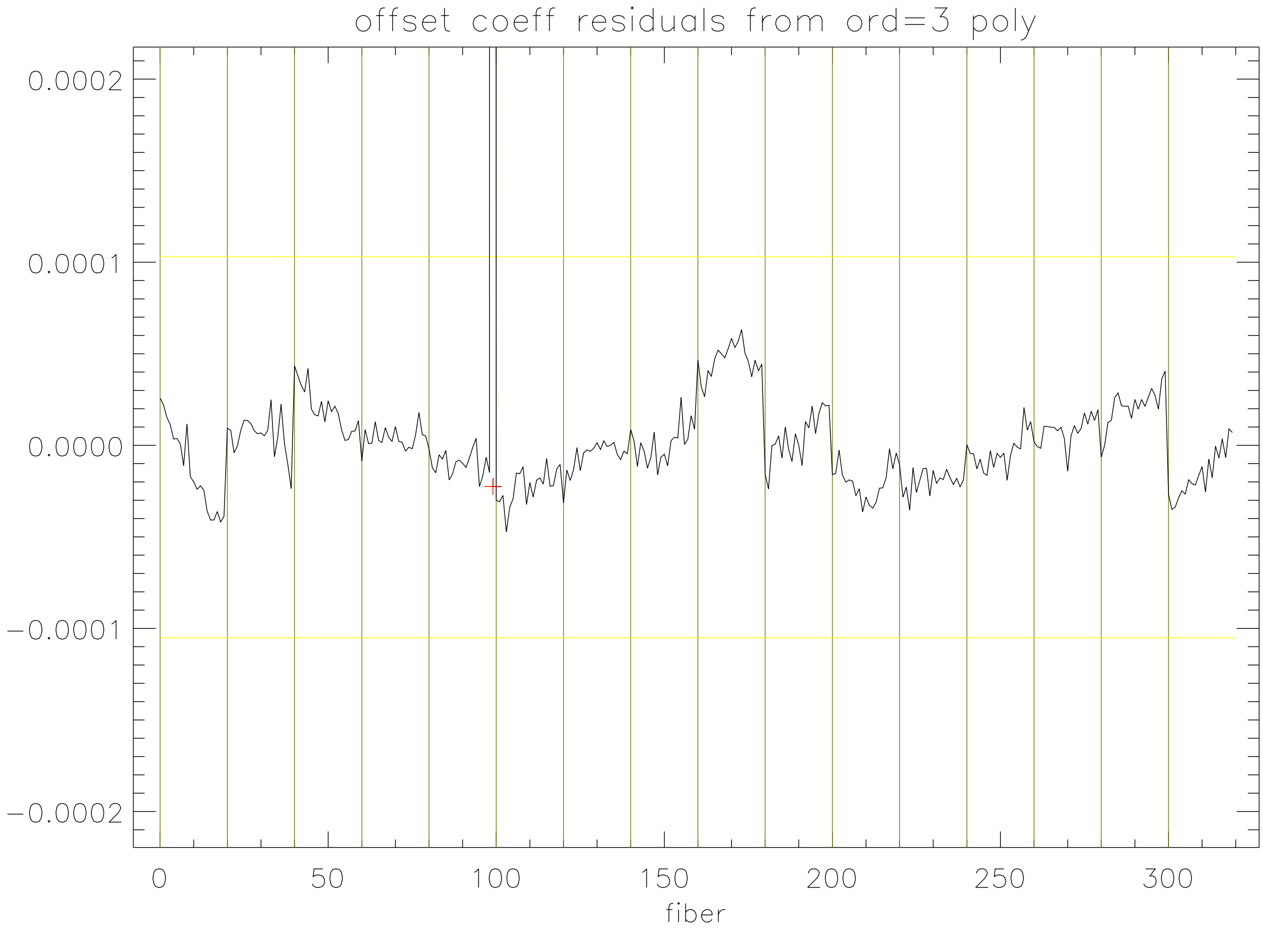


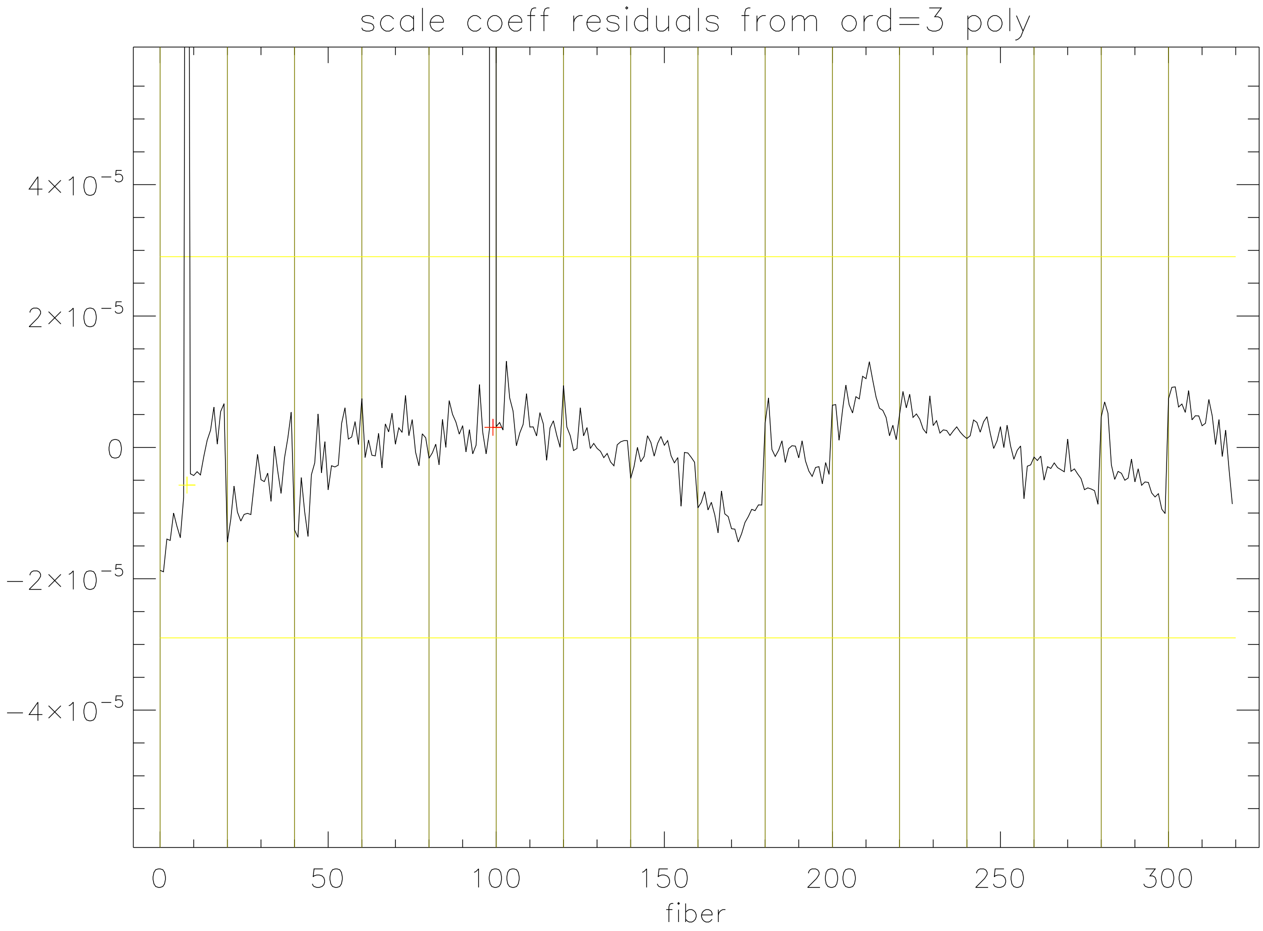

PLATE=0626 MJD=52057 sdR−r1−00010123.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1000
800
600
400
200
RED = sky fiber
Dispersion = 7.11 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
1000
800
600
400
200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1000
800
600
400
200
1.085
1.090
1.095
1.100
1.105
1.110
Airmass

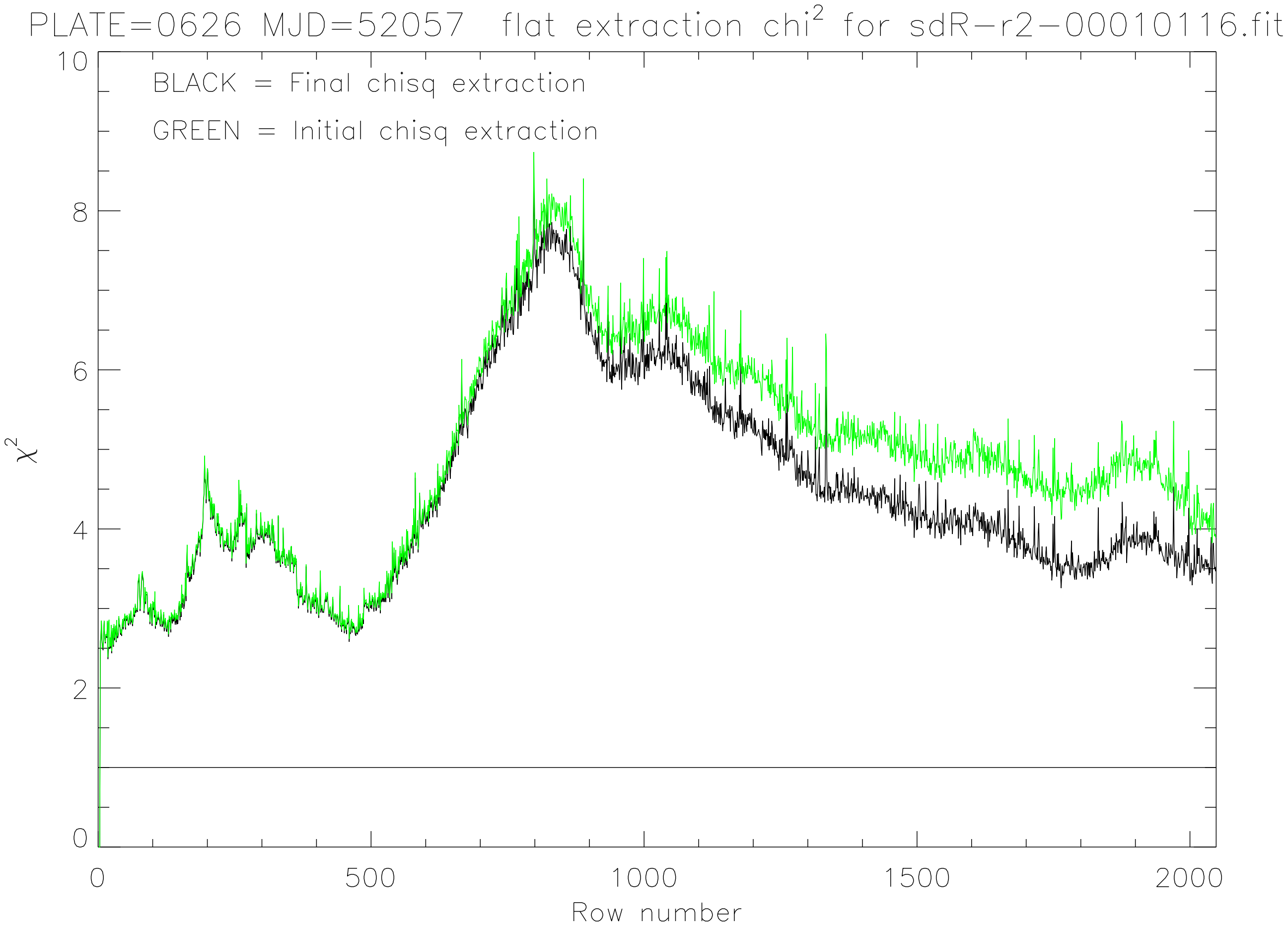

PLATE=0626 MJD=52057 sdR-r1-00010123.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1800
1600
1400
1200
1000
RED = sky fiber
Dispersion = 2.82 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1800
1600
1400
1200
1000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1800
1600
1400
1200
1000
1.085
1.090
1.095
1.100
1.105
1.110
Airmass

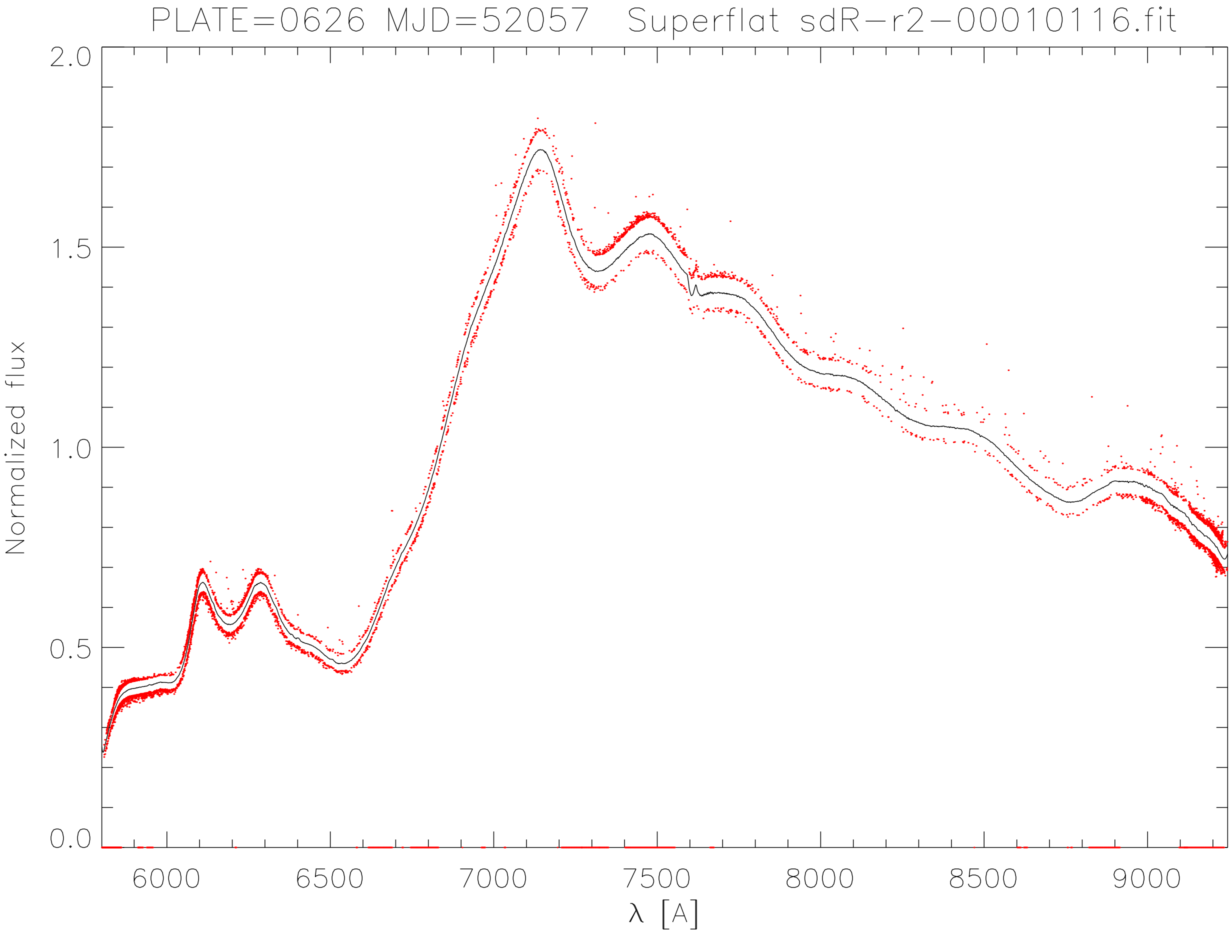

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

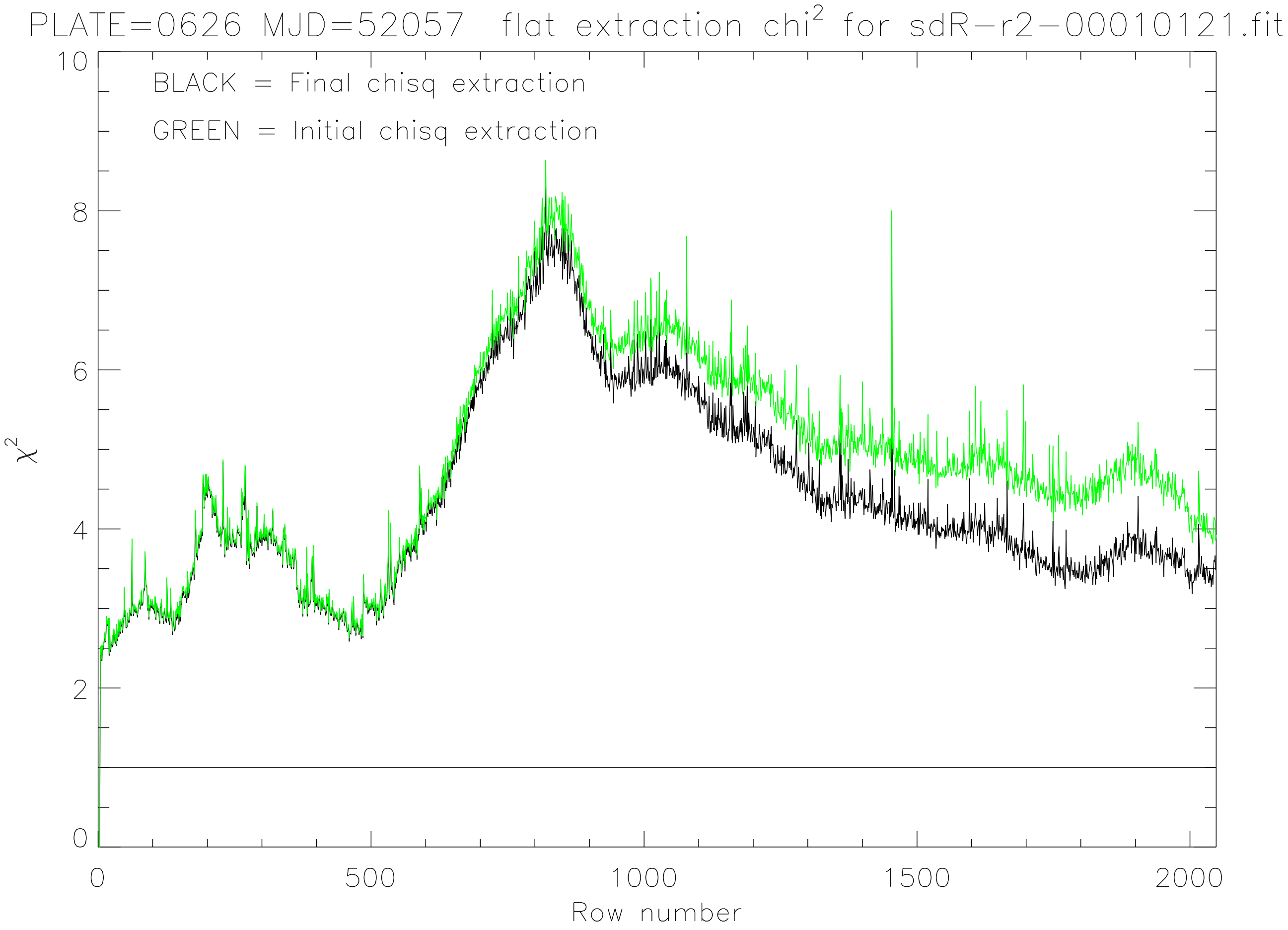

scale coeff residuals from ord=3 poly
4×10^-5
2×10^-5
0
−2×10^-5
−4×10^-5
0
50
100
150
200
250
300
fiber

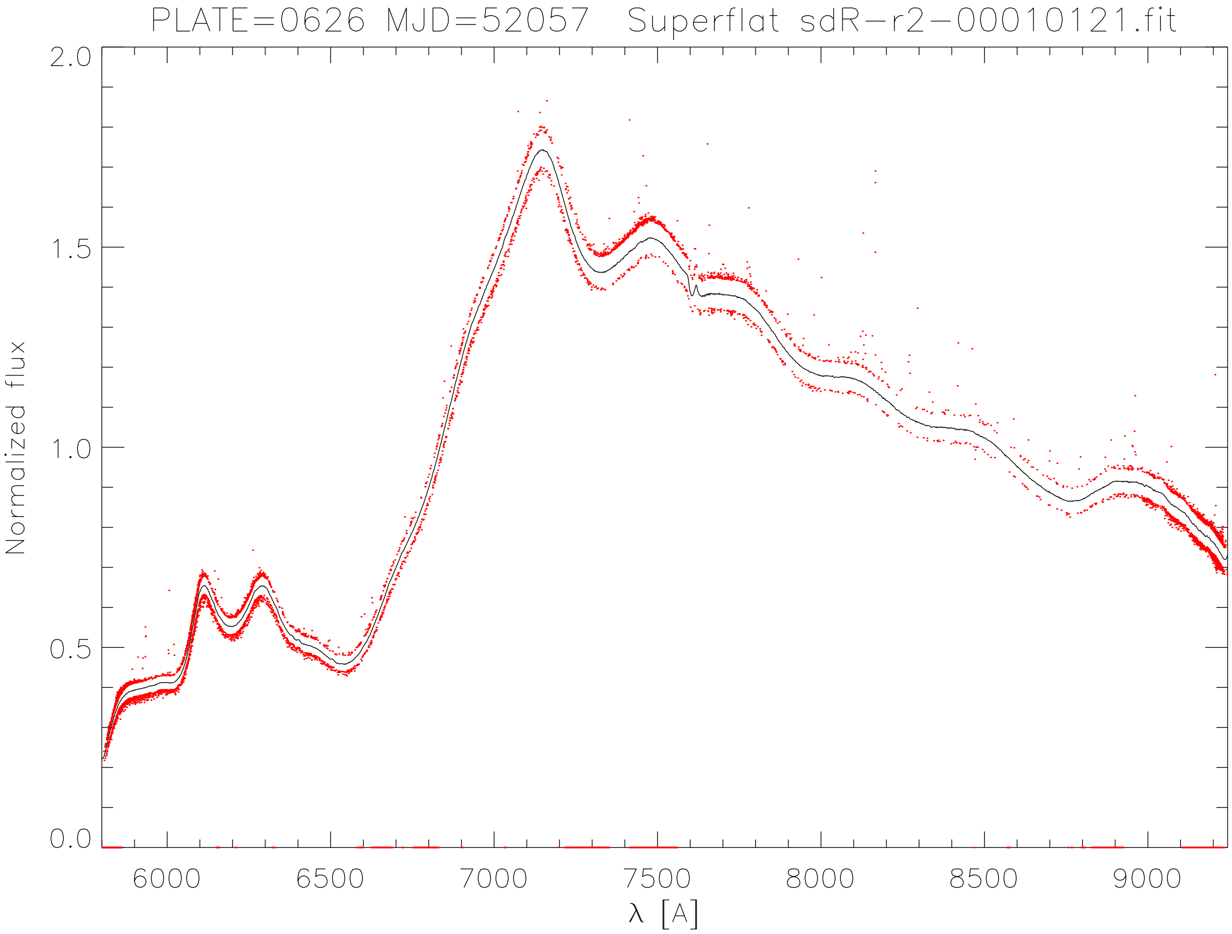

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

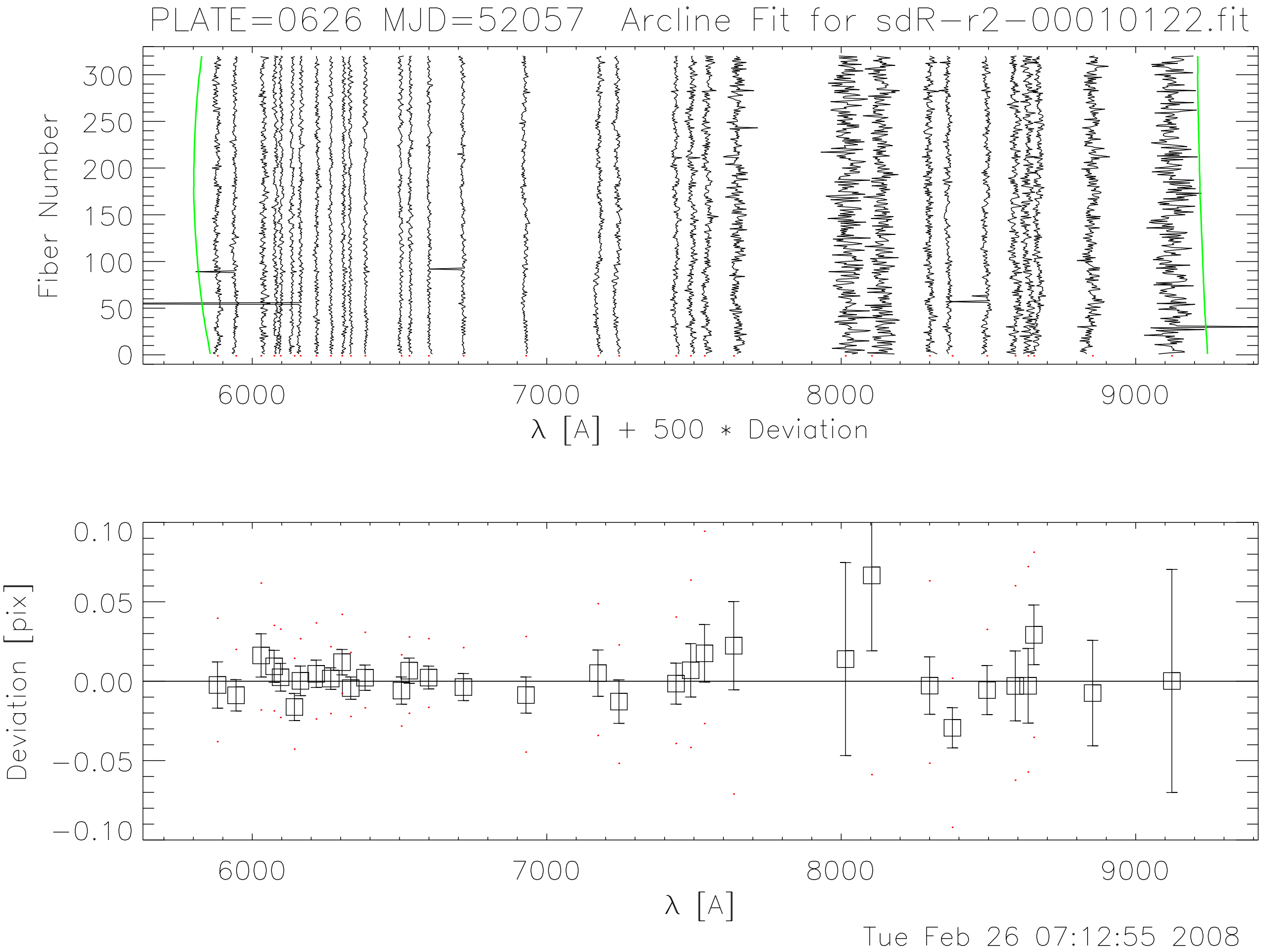

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

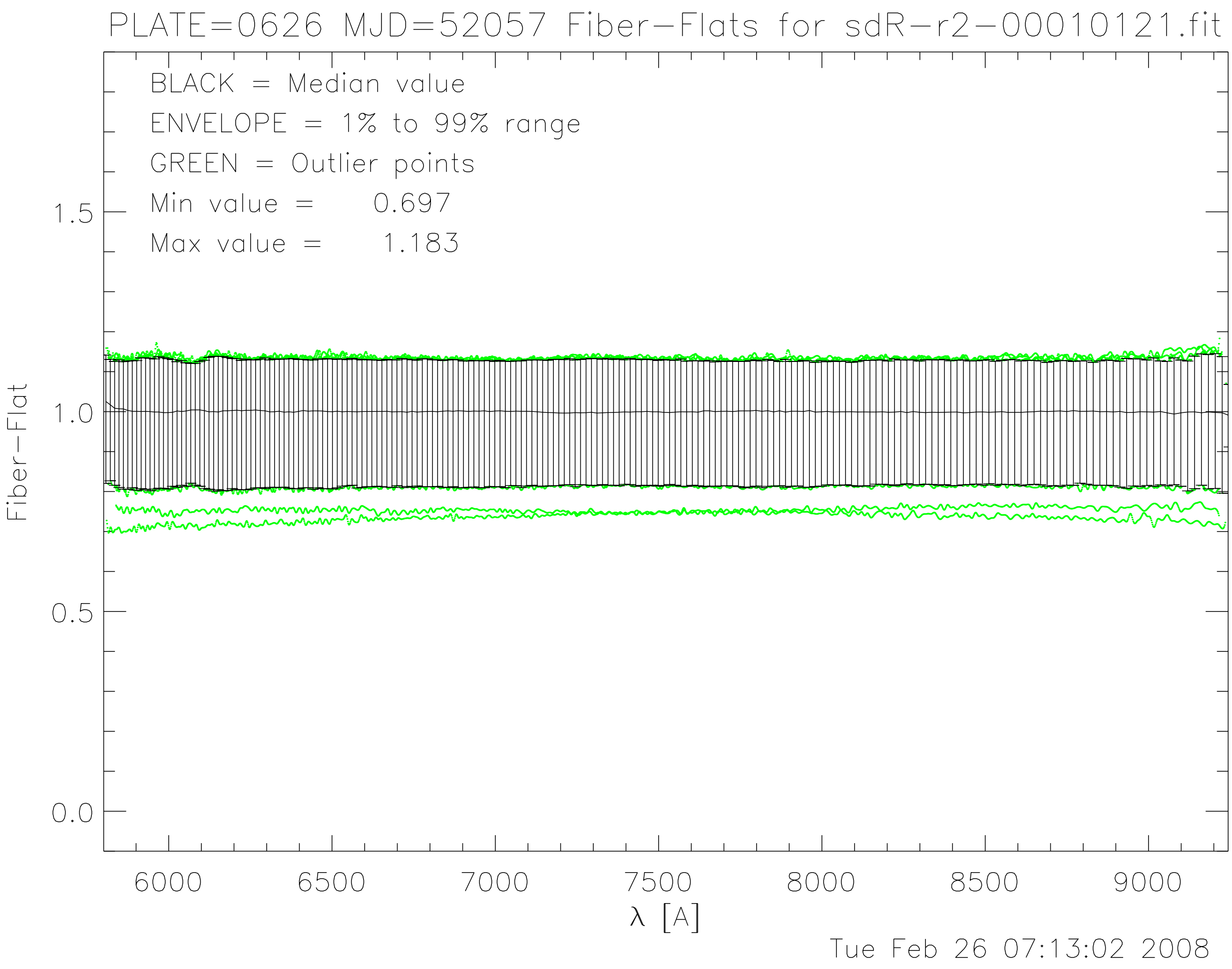

PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-r2-00010116.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number

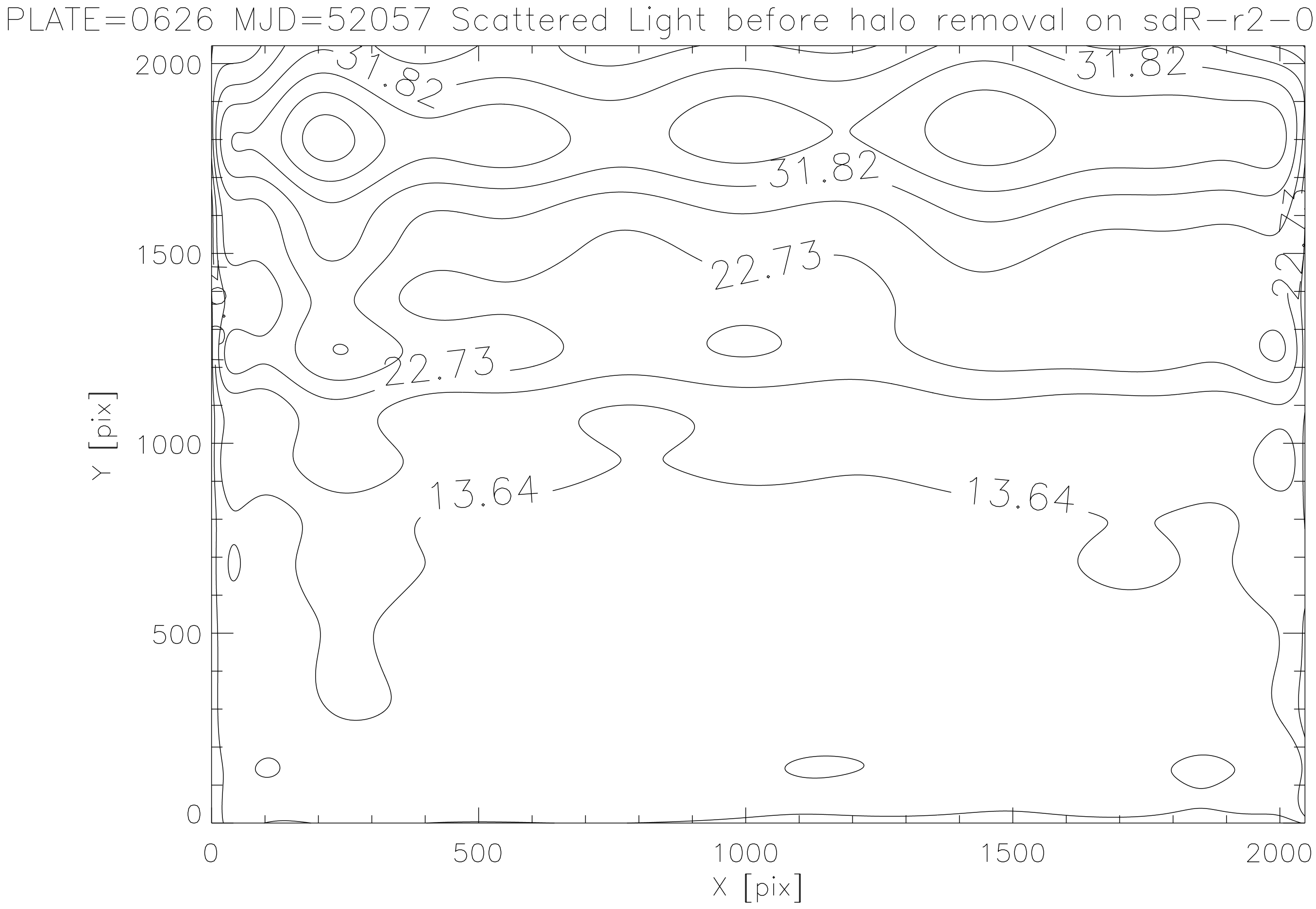

PLATE=0626 MJD=52057 Superflat sdR-r2-00010116.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

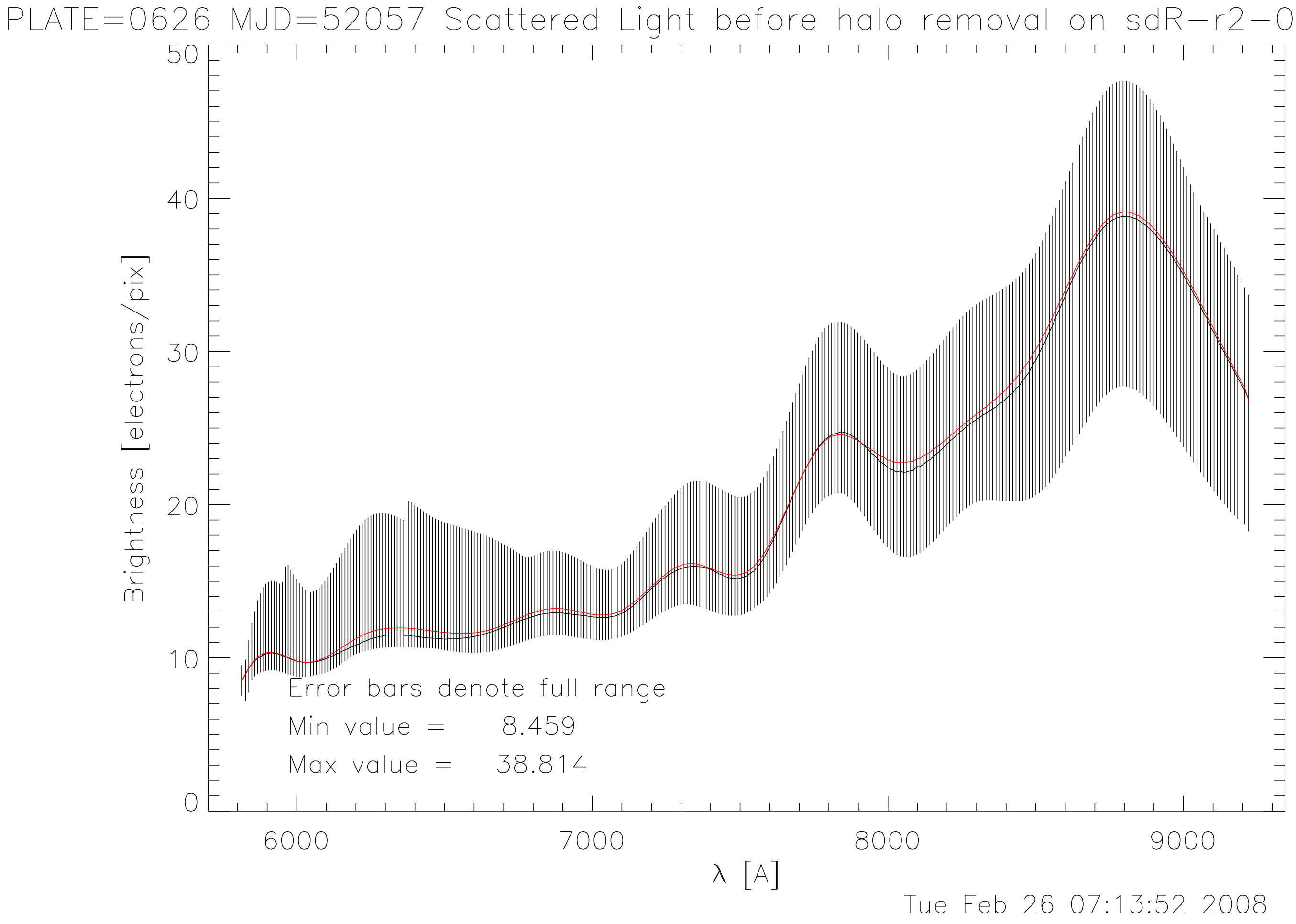

PLATE=0626 MJD=52057 flat extraction chi^2 for sdR-r2-00010121.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number


PLATE=0626 MJD=52057 Superflat sdR-r2-00010121.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

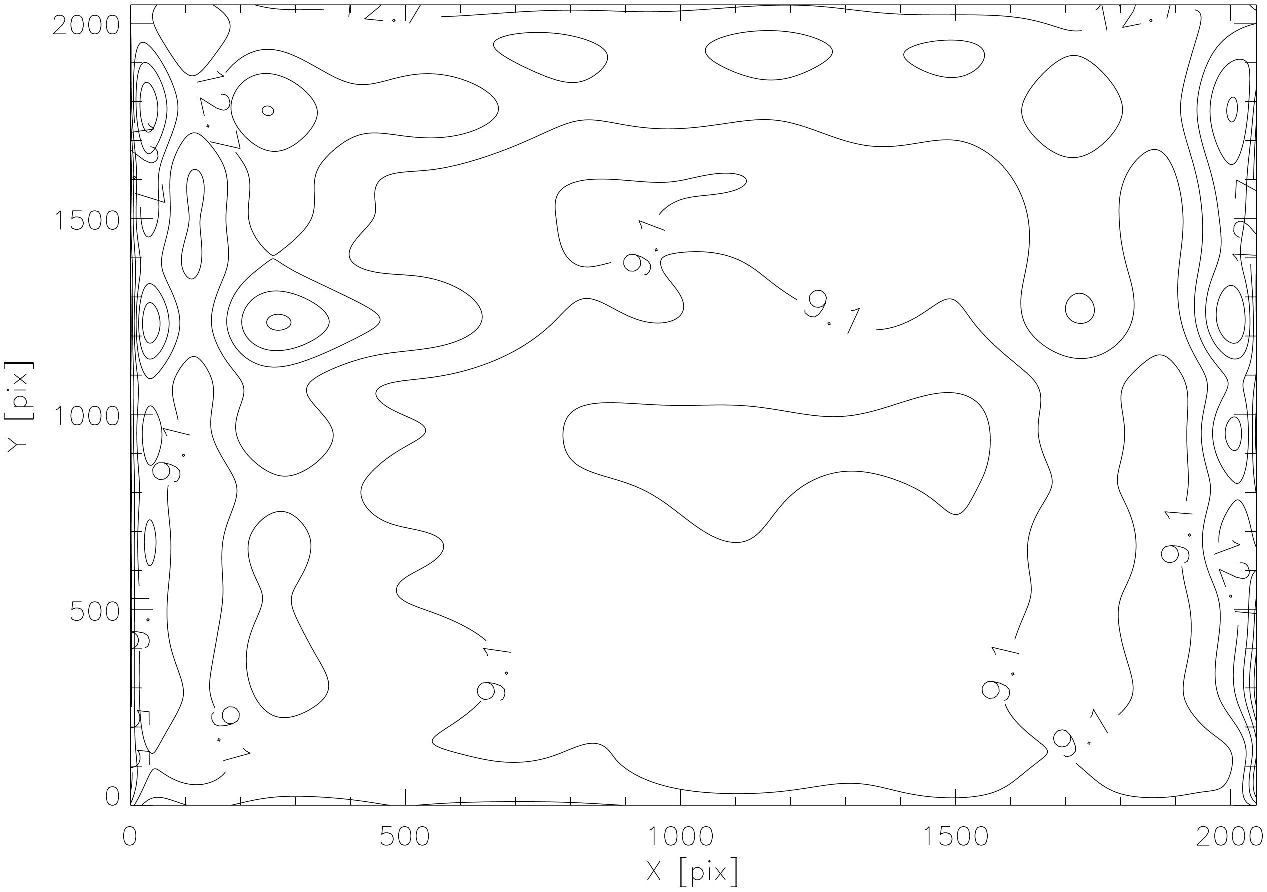

PLATE=0626 MJD=52057 Arcline Fit for sdR-r2-00010122.fit
Fiber Number
0
50
100
150
200
250
300
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Tue Feb 26 07:12:55 2008

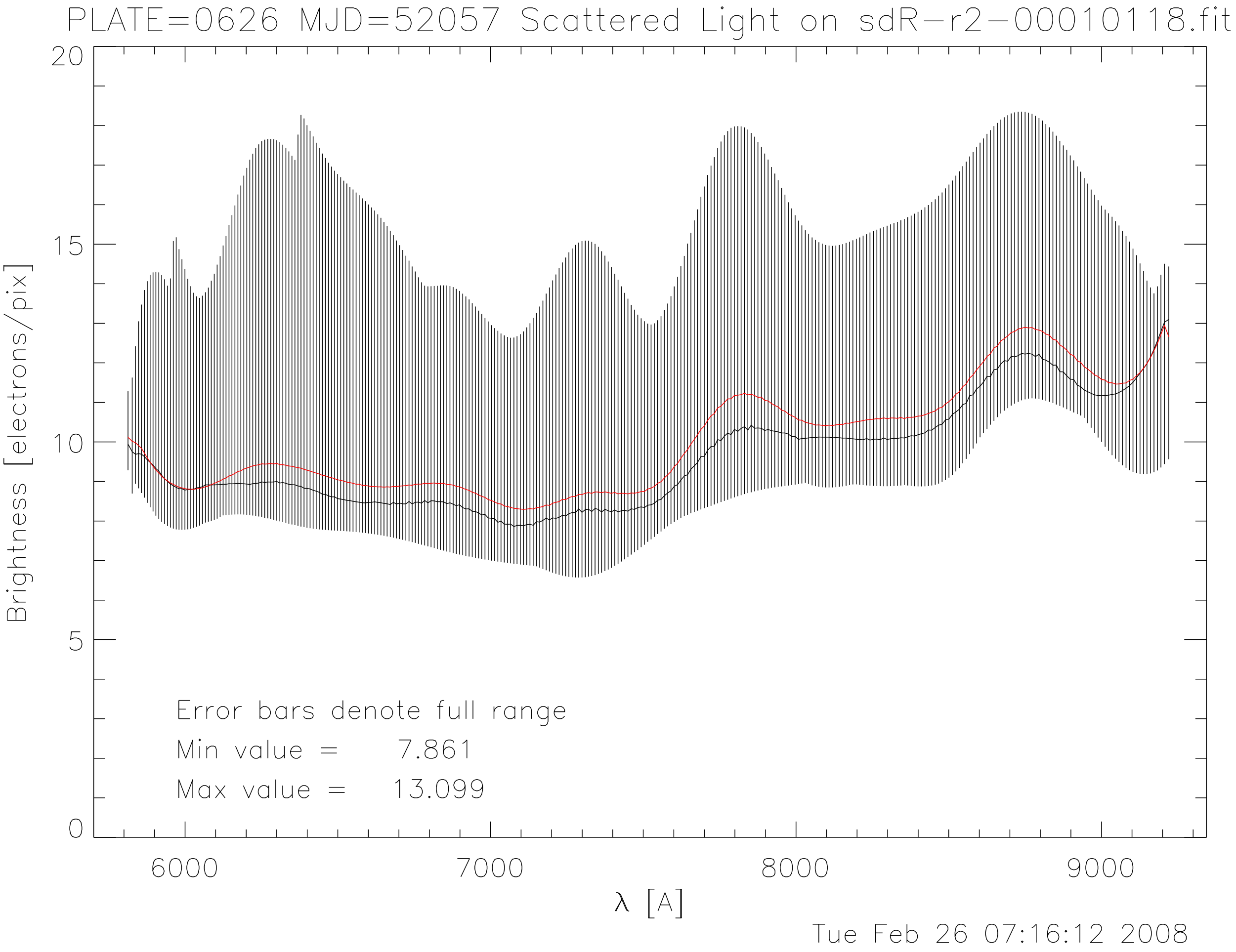

PLATE=0626 MJD=52057 Fiber−Flats for sdR−r2−00010121.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.697
Max value = 1.183
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 07:13:02 2008

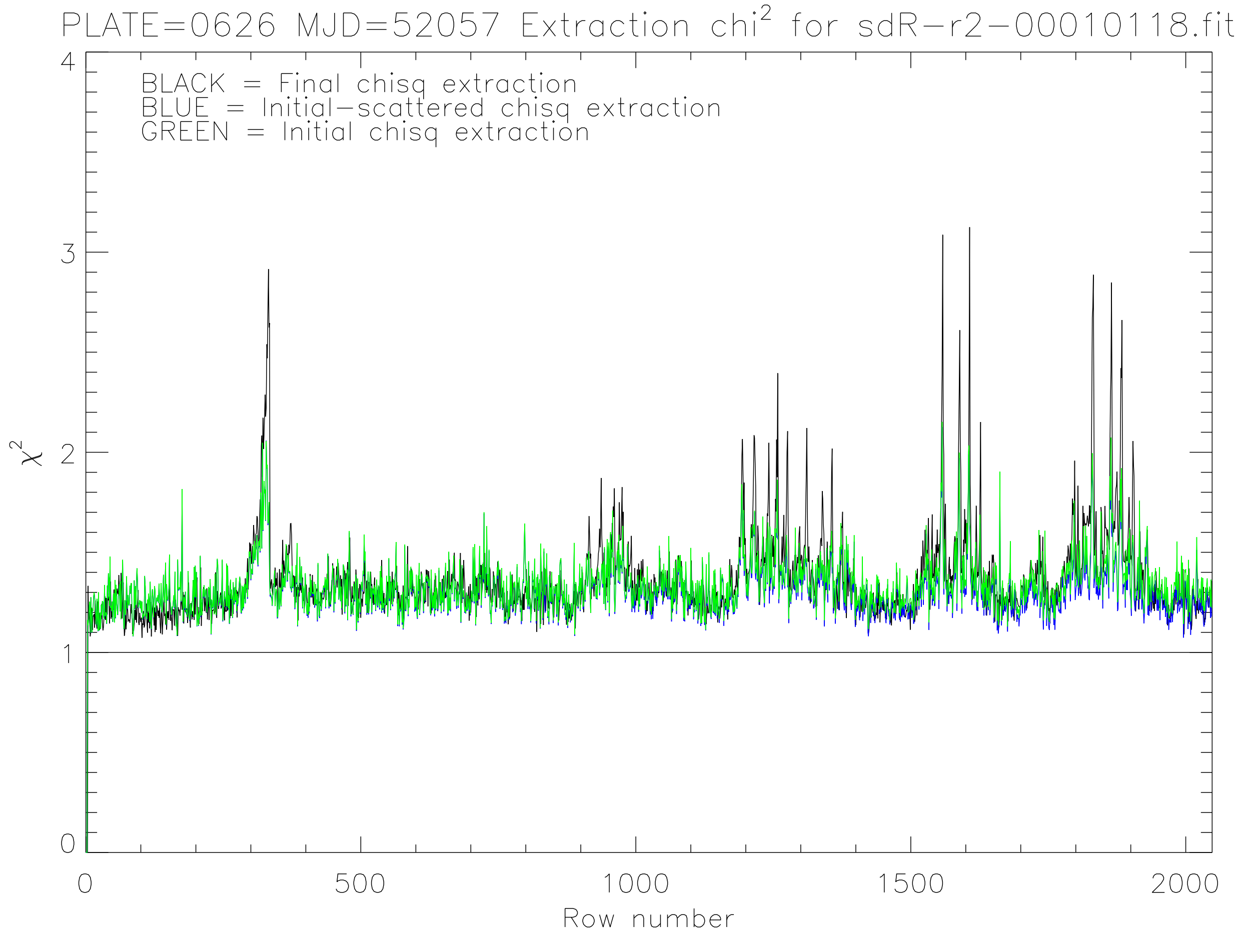

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010118.fi
31.82
31.82
31.82
31.82
22.73
22.73
22.7
13.64
13.64
Y [pix]
2000
1500
1000
500
0
X [pix]
0
500
1000
1500
2000

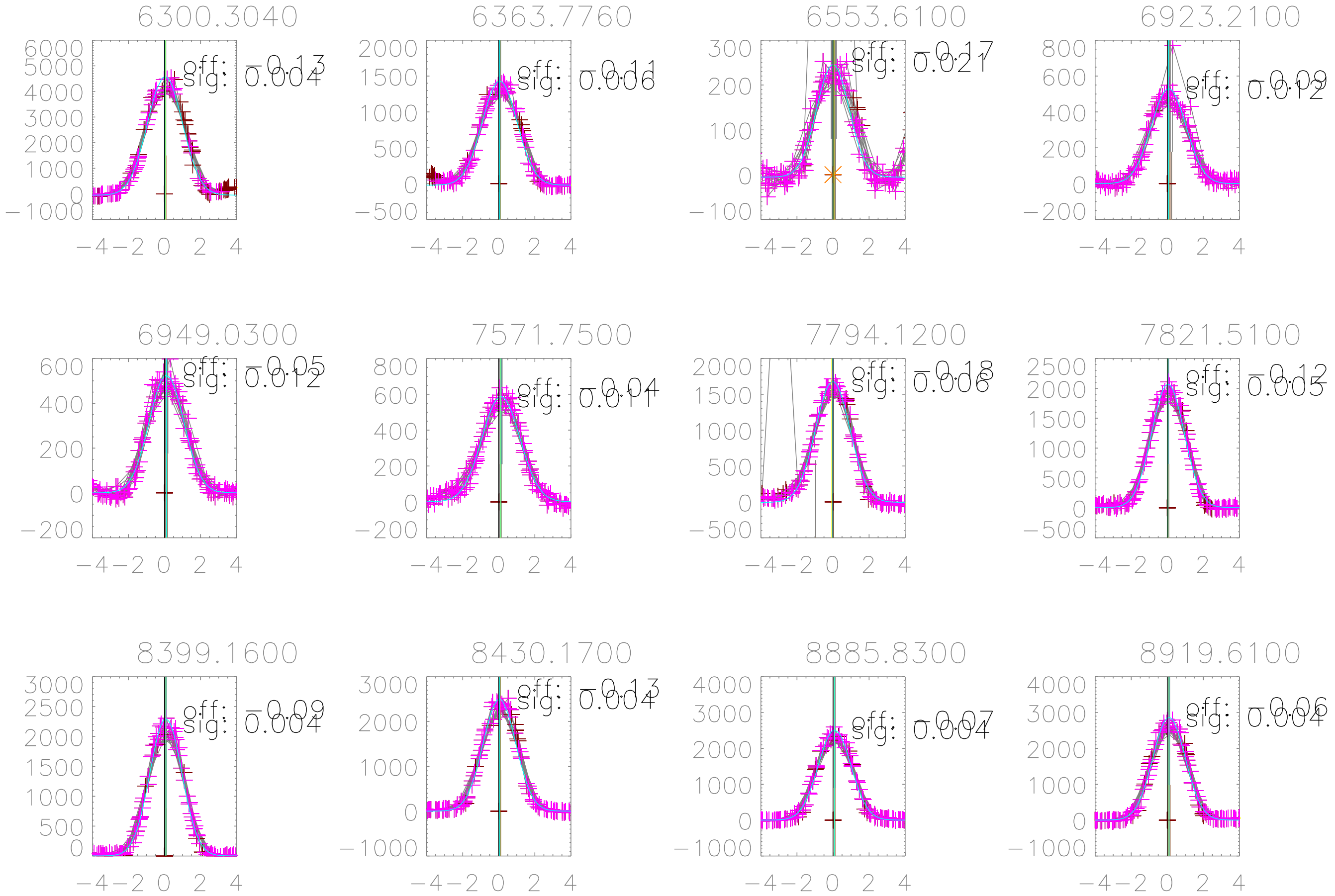

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010118.fi
Brightness [electrons/pix]
0
10
20
30
40
50
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   8.459
Max value =   38.814
Tue Feb 26 07:13:52 2008

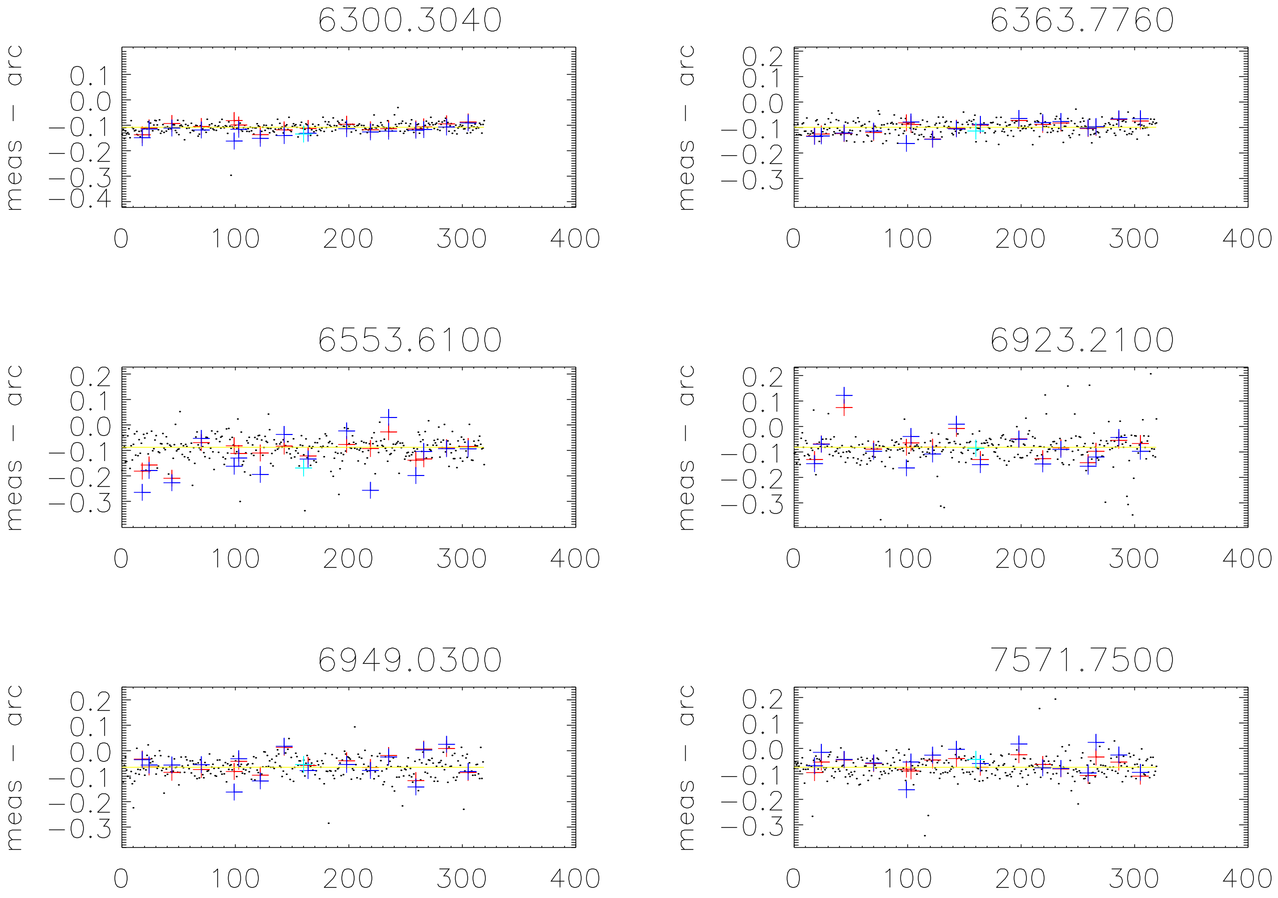
PLATE=0626 MJD=52057 Scattered Light on sdR-r2-00010118.fit

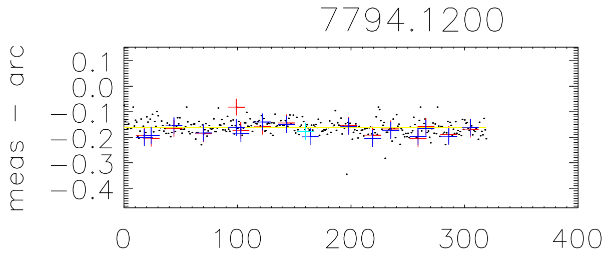


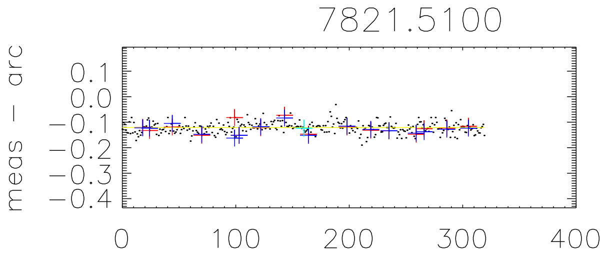

PLATE=0626 MJD=52057 Scattered Light on sdR-r2-00010118.fit
Brightness [electrons/pix]
λ [A]
0
5
10
15
20
6000
7000
8000
9000
Error bars denote full range
Min value = 7.861
Max value = 13.099
Tue Feb 26 07:16:12 2008

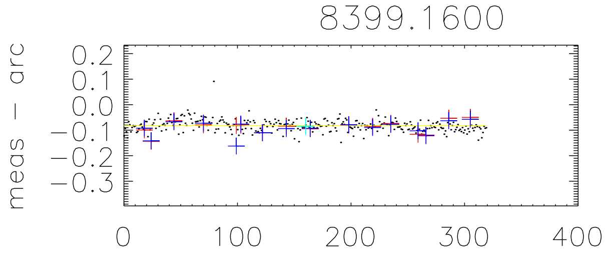

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r2-00010118.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

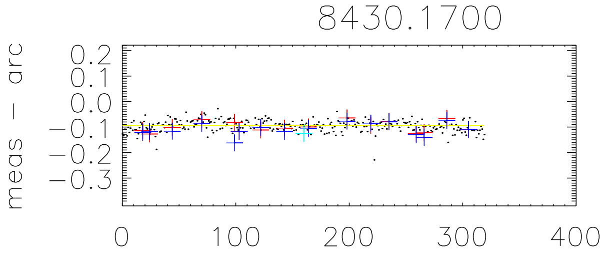

6300.3040
off: −0.13
sig: 0.004
6363.7760
off: −0.11
sig: 0.006
6553.6100
off: −0.17
sig: 0.021
6923.2100
off: −0.09
sig: 0.012
6949.0300
off: −0.05
sig: 0.012
7571.7500
off: −0.04
sig: 0.011
7794.1200
off: −0.18
sig: 0.006
7821.5100
off: −0.12
sig: 0.005
8399.1600
off: −0.09
sig: 0.004
8430.1700
off: −0.13
sig: 0.004
8885.8300
off: −0.07
sig: 0.004
8919.6100
off: −0.06
sig: 0.004
−4 −2 0 2 4

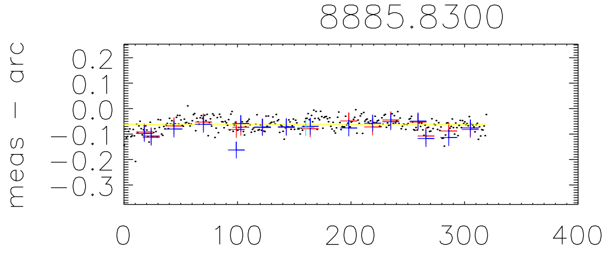

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

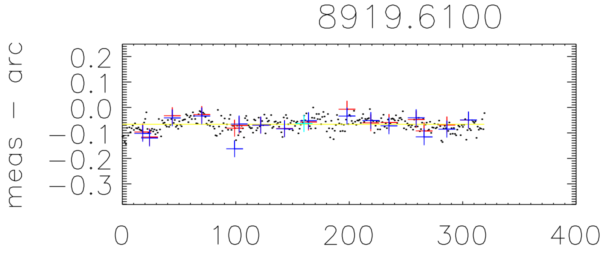

7794.1200
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

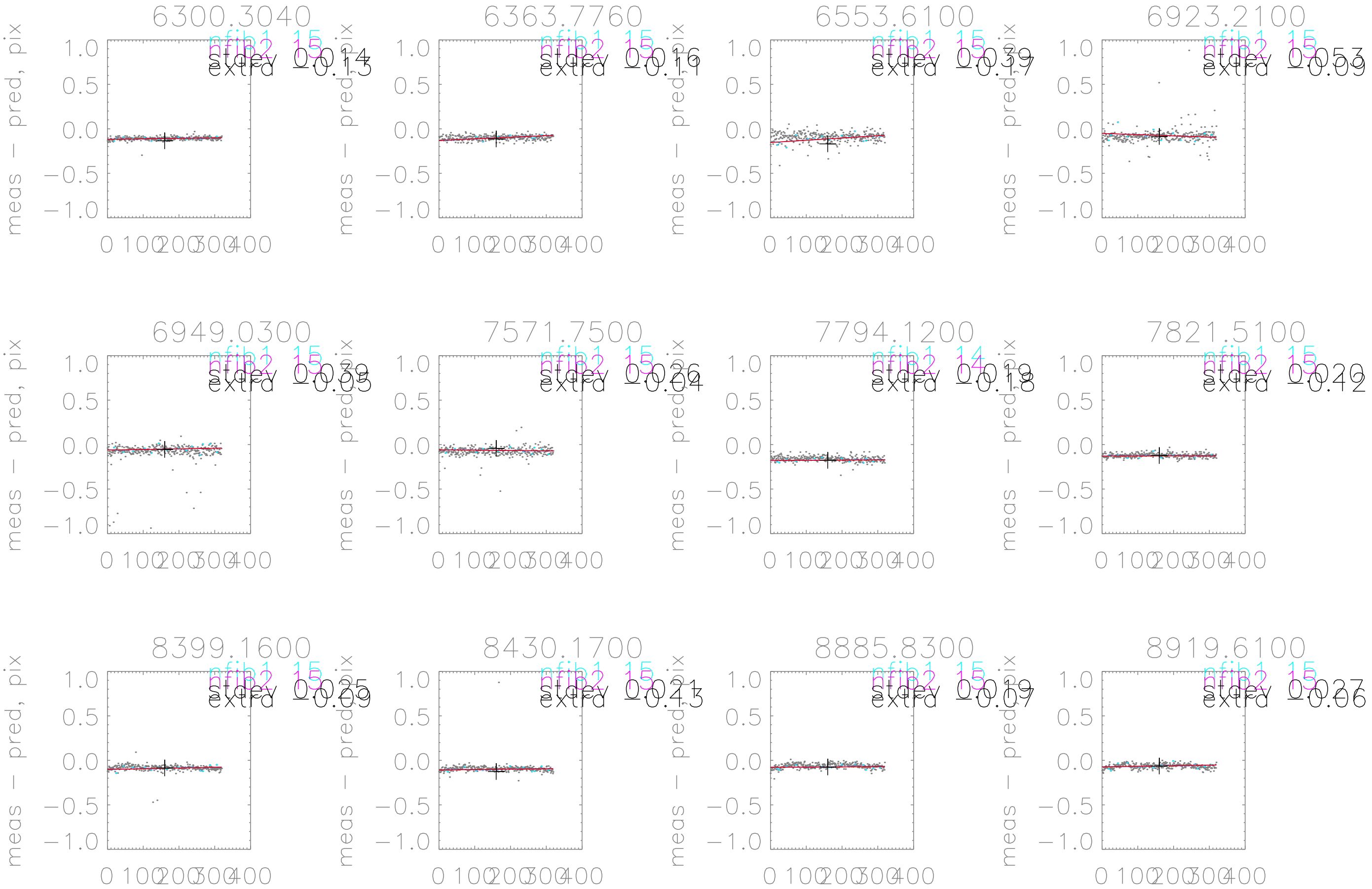

7821.5100
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

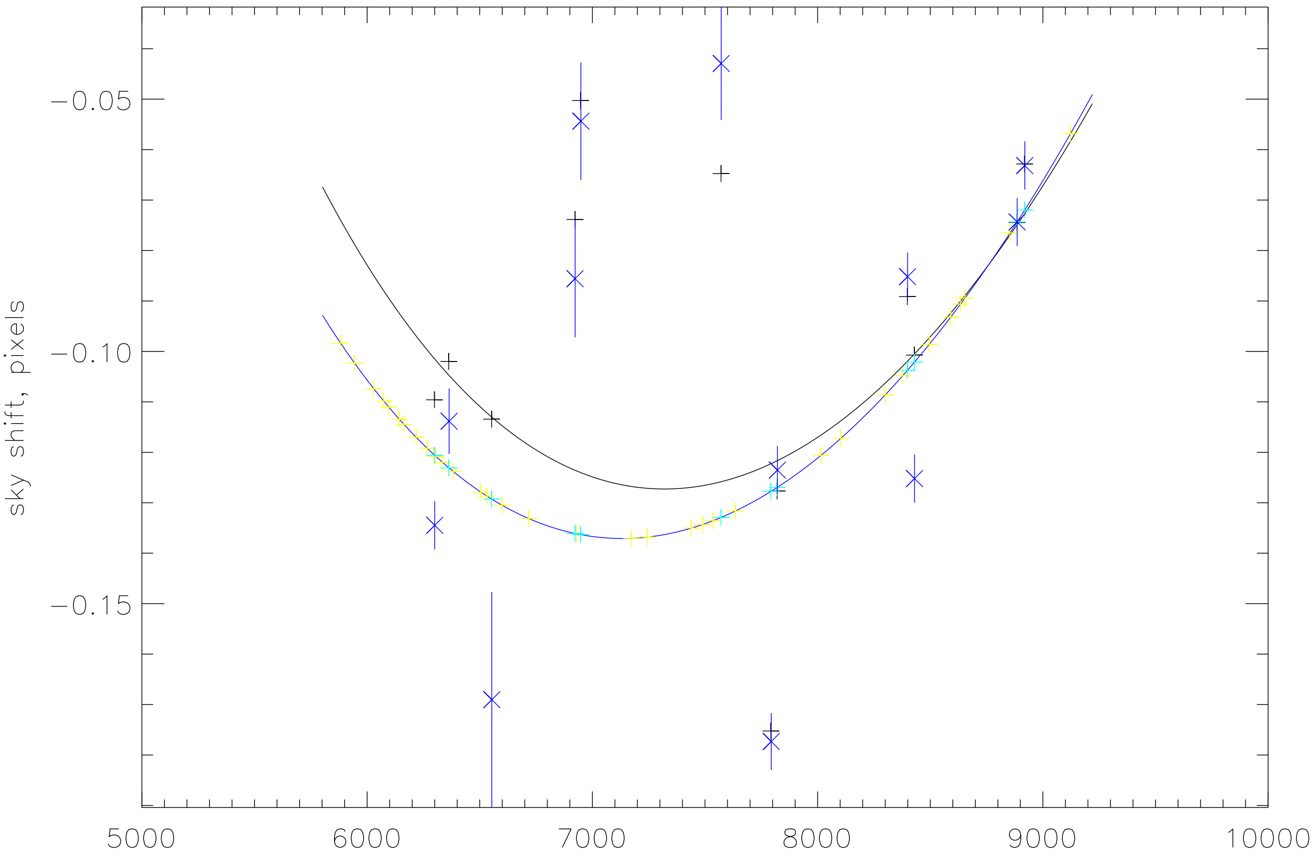

8399.1600
meas - arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

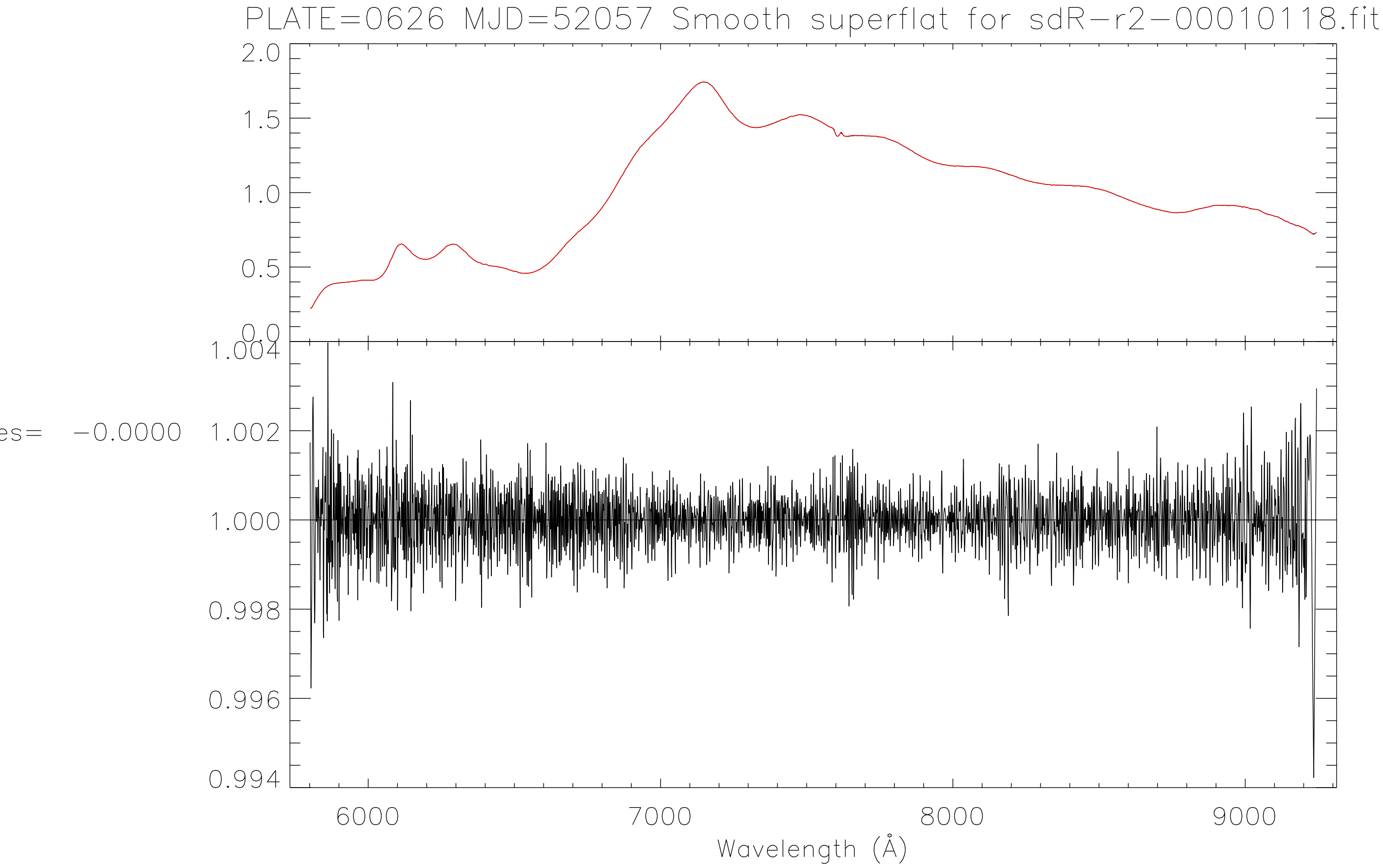

8430.1700
meas - arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

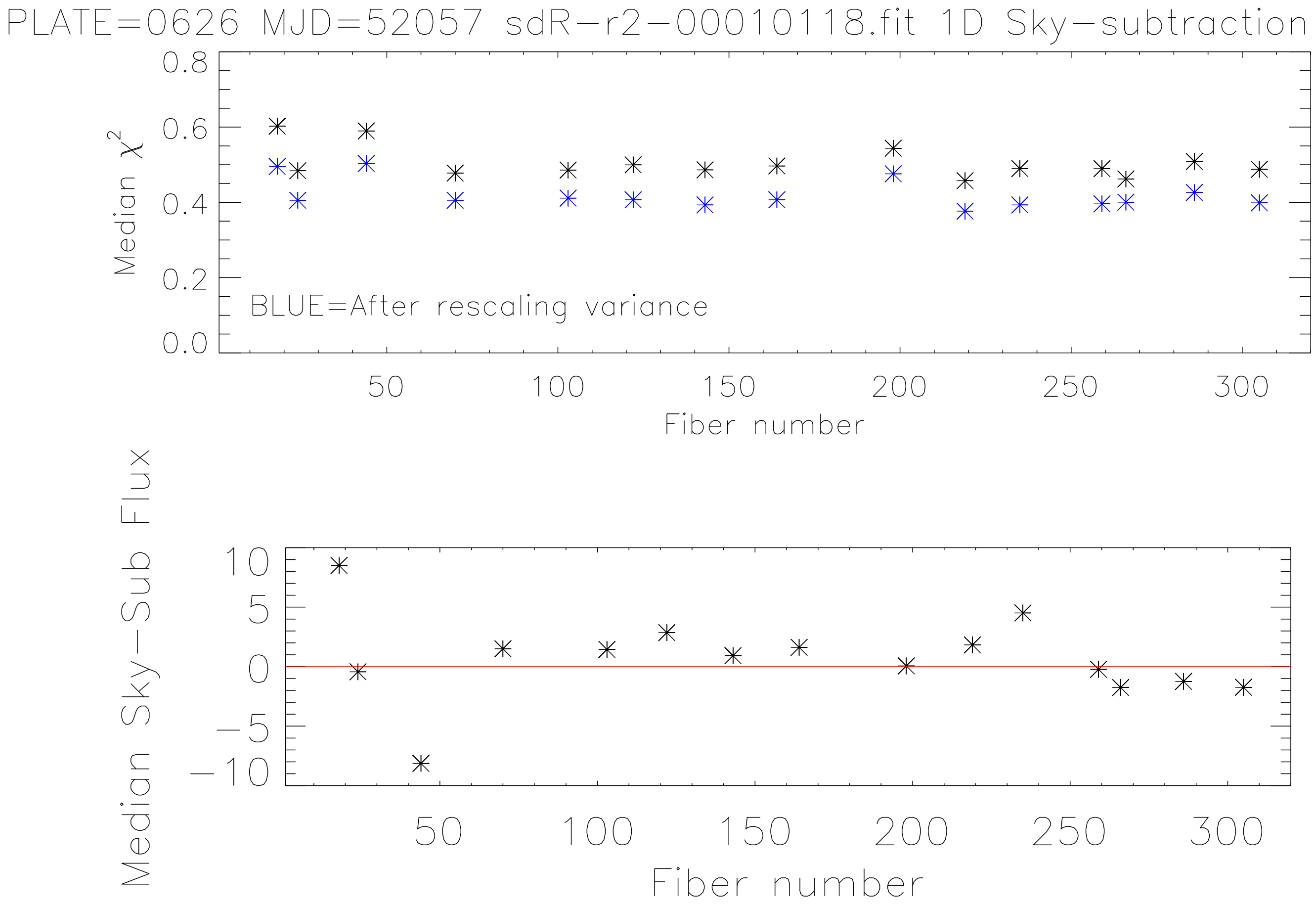

8885.8300
meas - arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

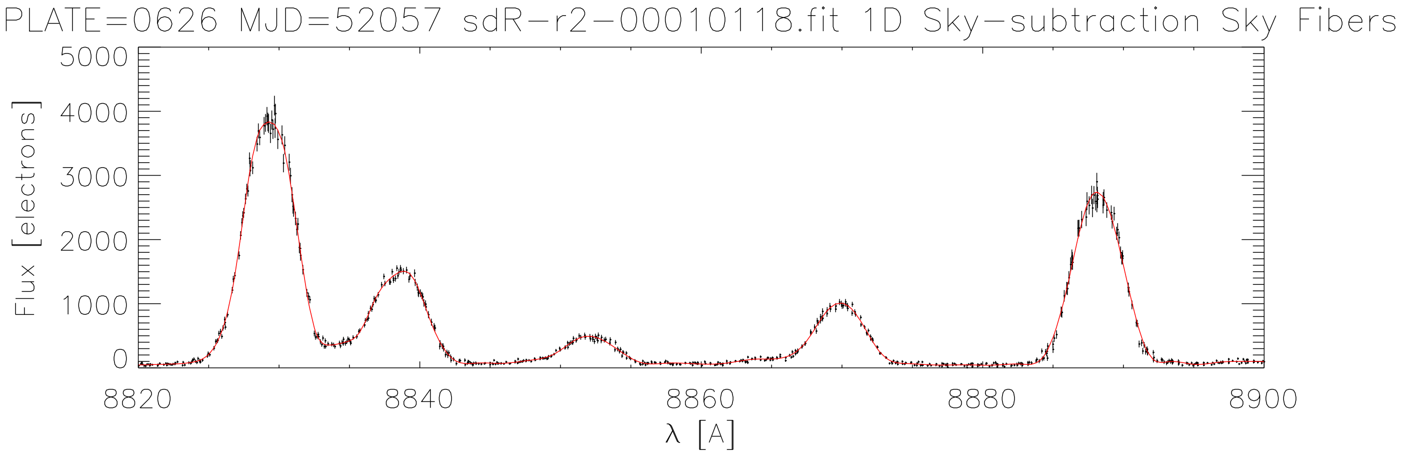

8919.6100
meas - arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


6300.3040
nfib1 15
nfib2 15
stdev 0.014
extrd −0.13
6363.7760
nfib1 15
nfib2 15
stdev 0.016
extrd −0.11
6553.6100
nfib1 15
nfib2 15
stdev 0.039
extrd −0.17
6923.2100
nfib1 15
nfib2 15
stdev 0.053
extrd −0.09
6949.0300
nfib1 15
nfib2 15
stdev 0.039
extrd −0.05
7571.7500
nfib1 15
nfib2 15
stdev 0.026
extrd −0.04
7794.1200
nfib1 14
nfib2 14
stdev 0.019
extrd −0.18
7821.5100
nfib1 15
nfib2 15
stdev 0.020
extrd −0.12
8399.1600
nfib1 15
nfib2 15
stdev 0.025
extrd −0.09
8430.1700
nfib1 15
nfib2 15
stdev 0.021
extrd −0.13
8885.8300
nfib1 15
nfib2 15
stdev 0.019
extrd −0.07
8919.6100
nfib1 15
nfib2 15
stdev 0.027
extrd −0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

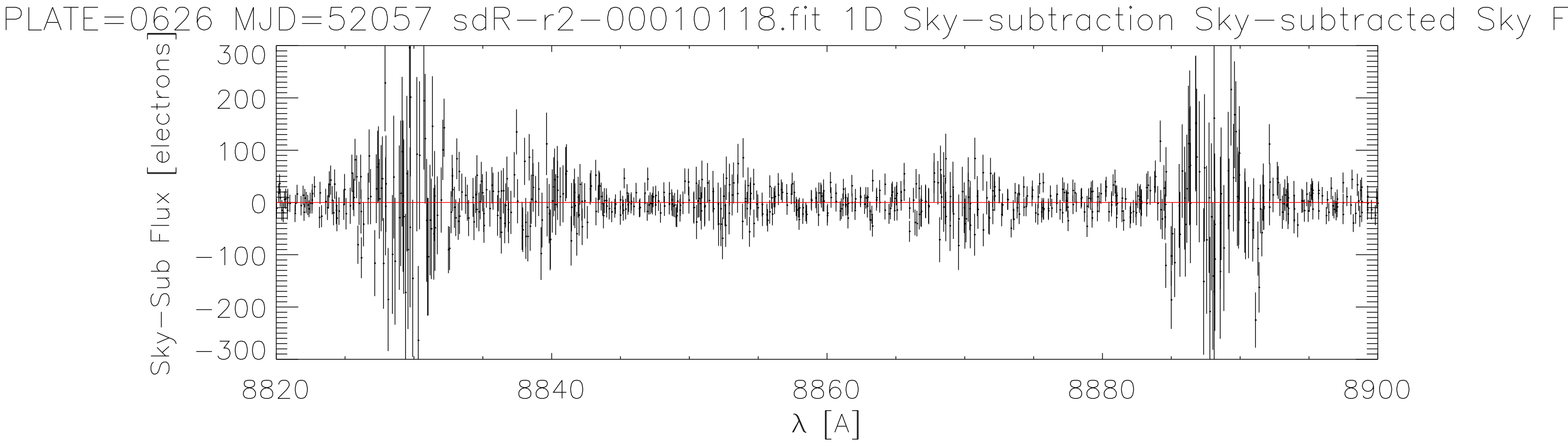

sky shift, pixels
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000


PLATE=0626 MJD=52057 Smooth superflat for sdR-r2-00010118.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=0626 MJD=52057 sdR-r2-00010118.fit 1D Sky-subtraction Sky Fiber
Median χ²
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
50
100
150
200
250
300
Fiber number



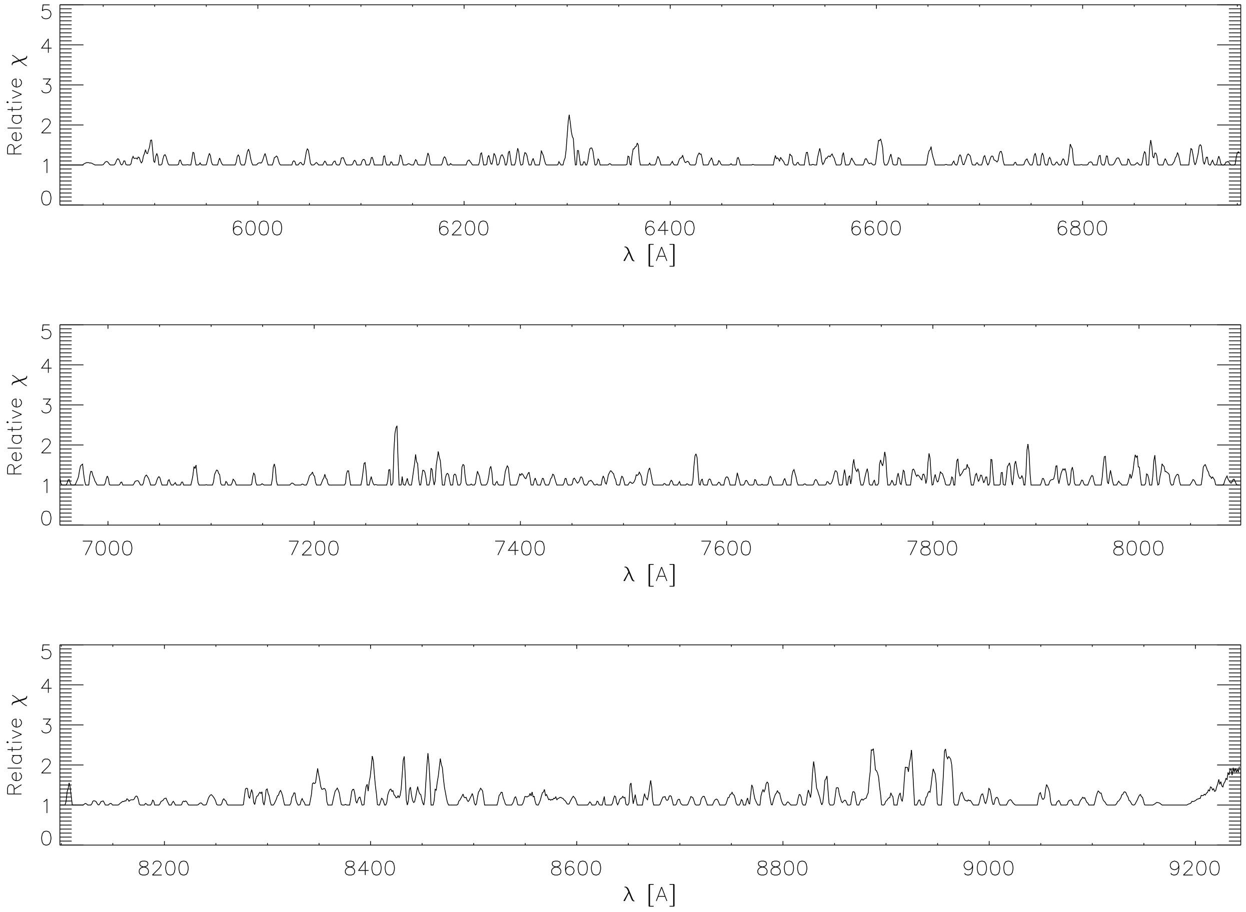
PLATE=0626 MJD=52057 sdR-r2-00010118.fit 1D Sky-subtraction Sky Fibers

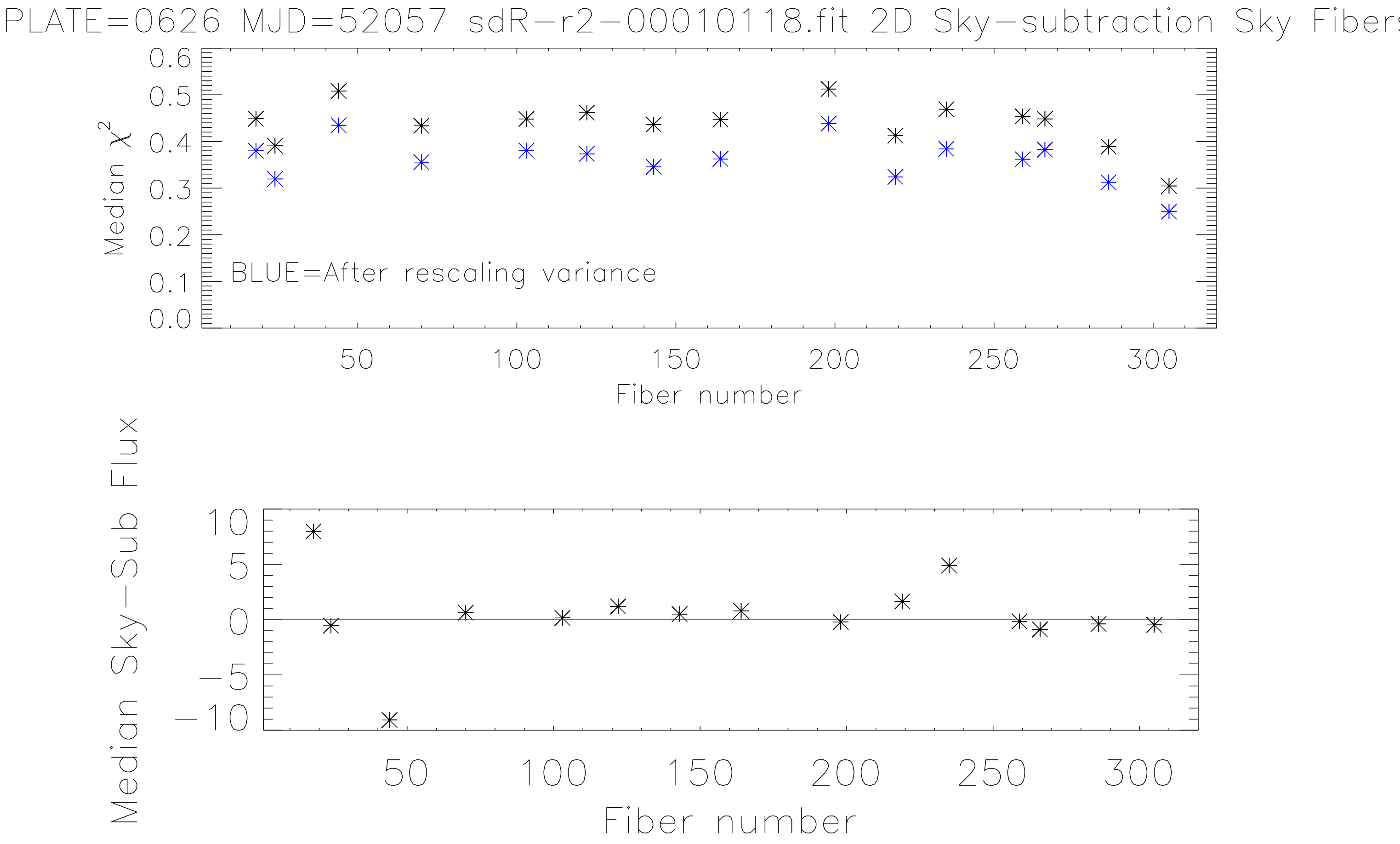


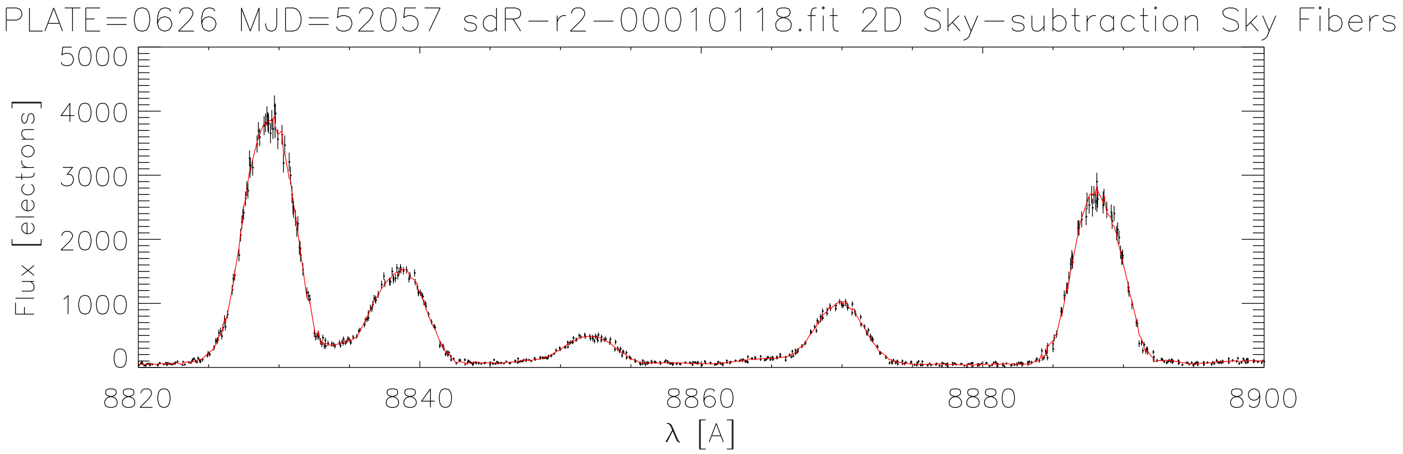
PLATE=0626 MJD=52057 sdR-r2-00010118.fit 1D Sky-subtraction Sky-subtracted Sky F

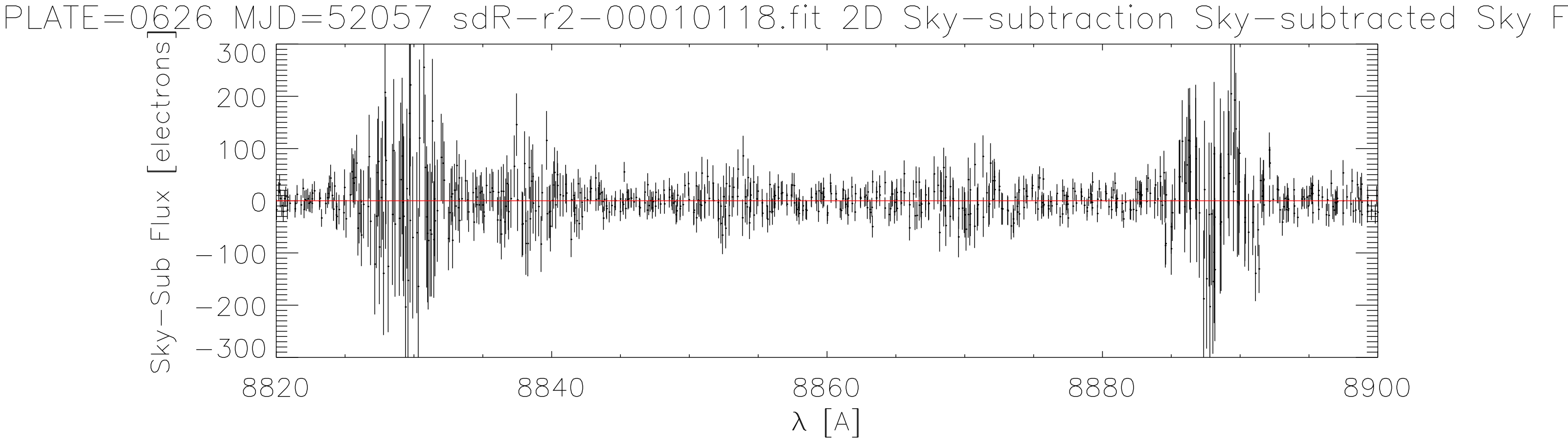
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-r2-00010118.fit 1D Sky-subtraction Rescaled Errors



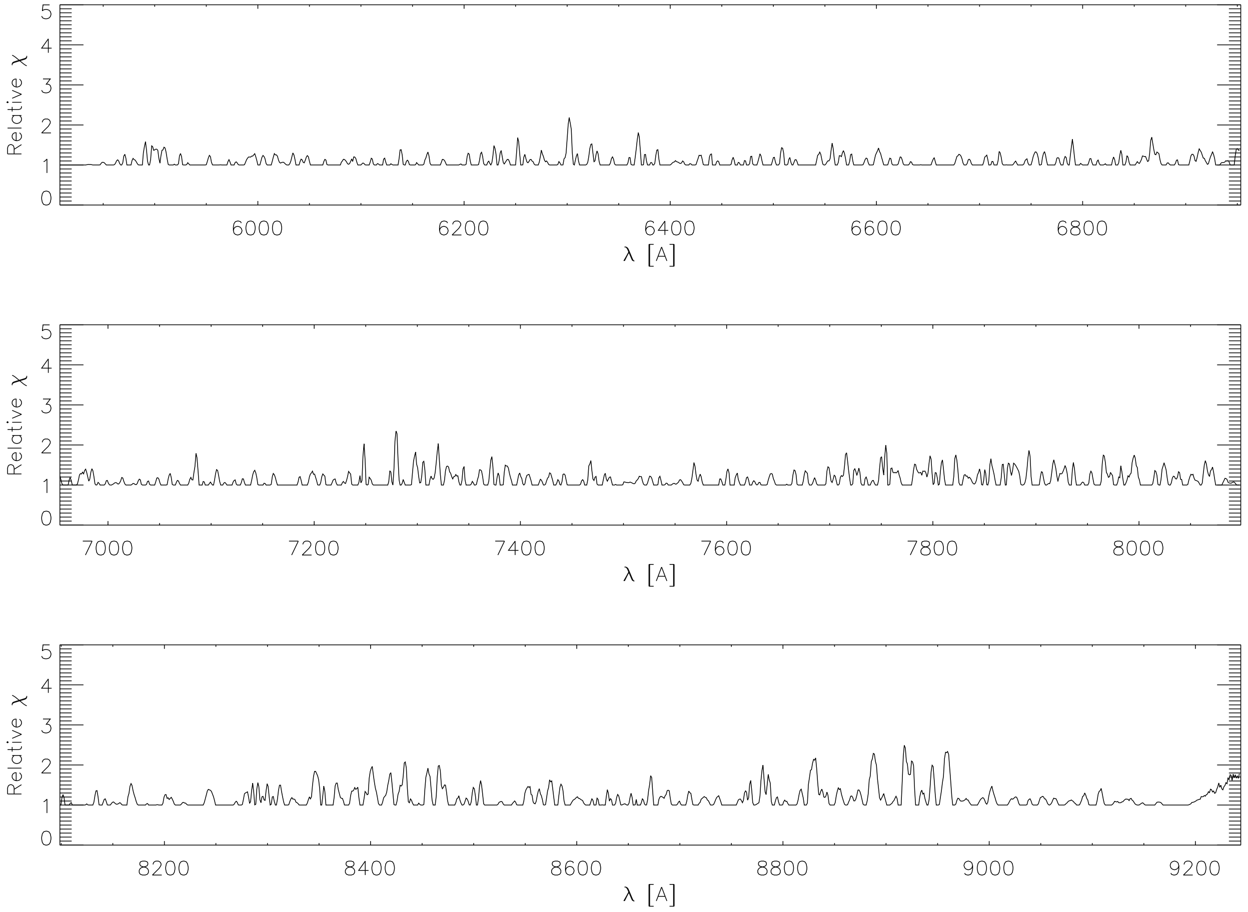

PLATE=0626 MJD=52057 sdR-r2-00010118.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

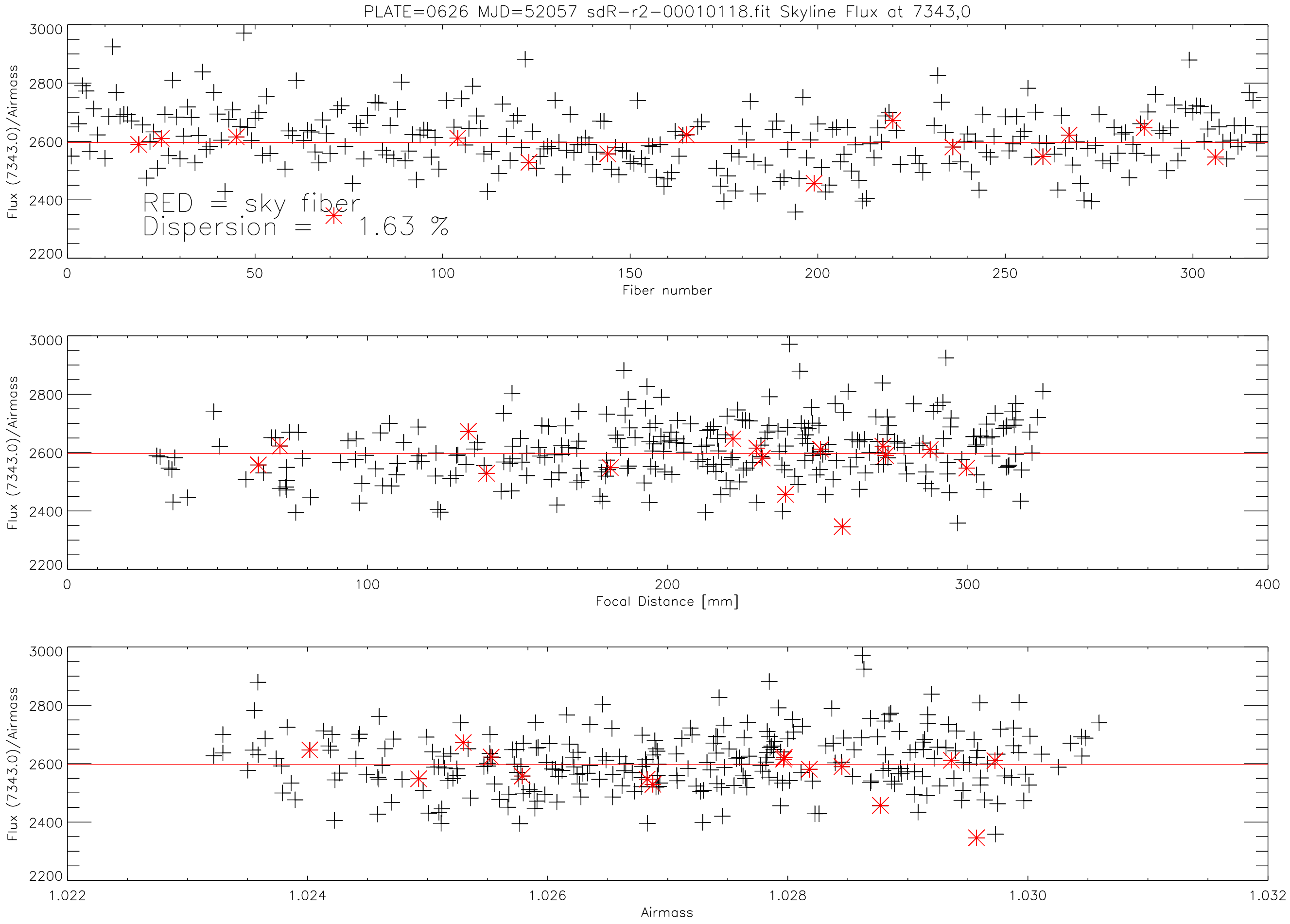

PLATE=0626 MJD=52057 sdR-r2-00010118.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

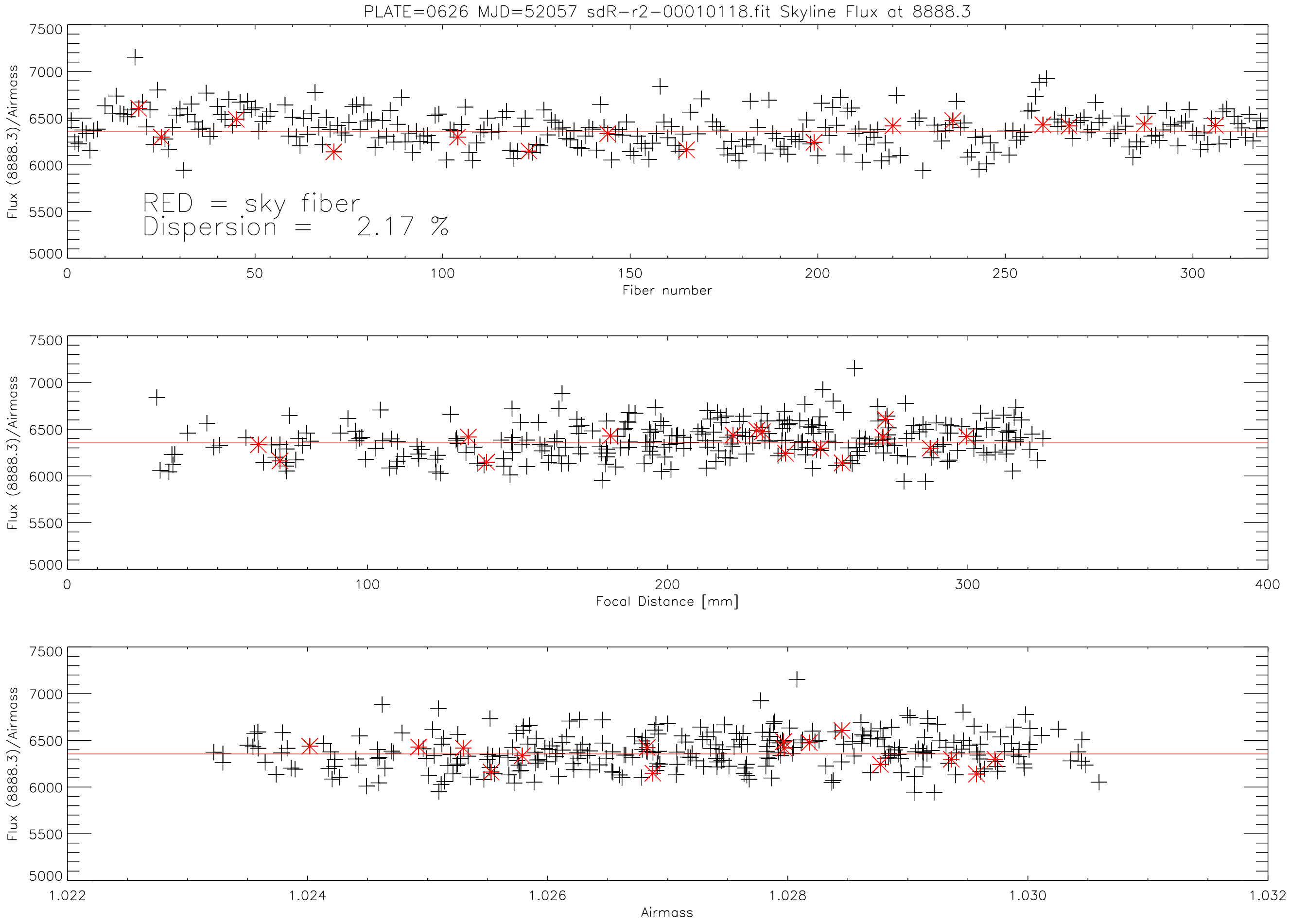

PLATE=0626 MJD=52057 sdR-r2-00010118.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

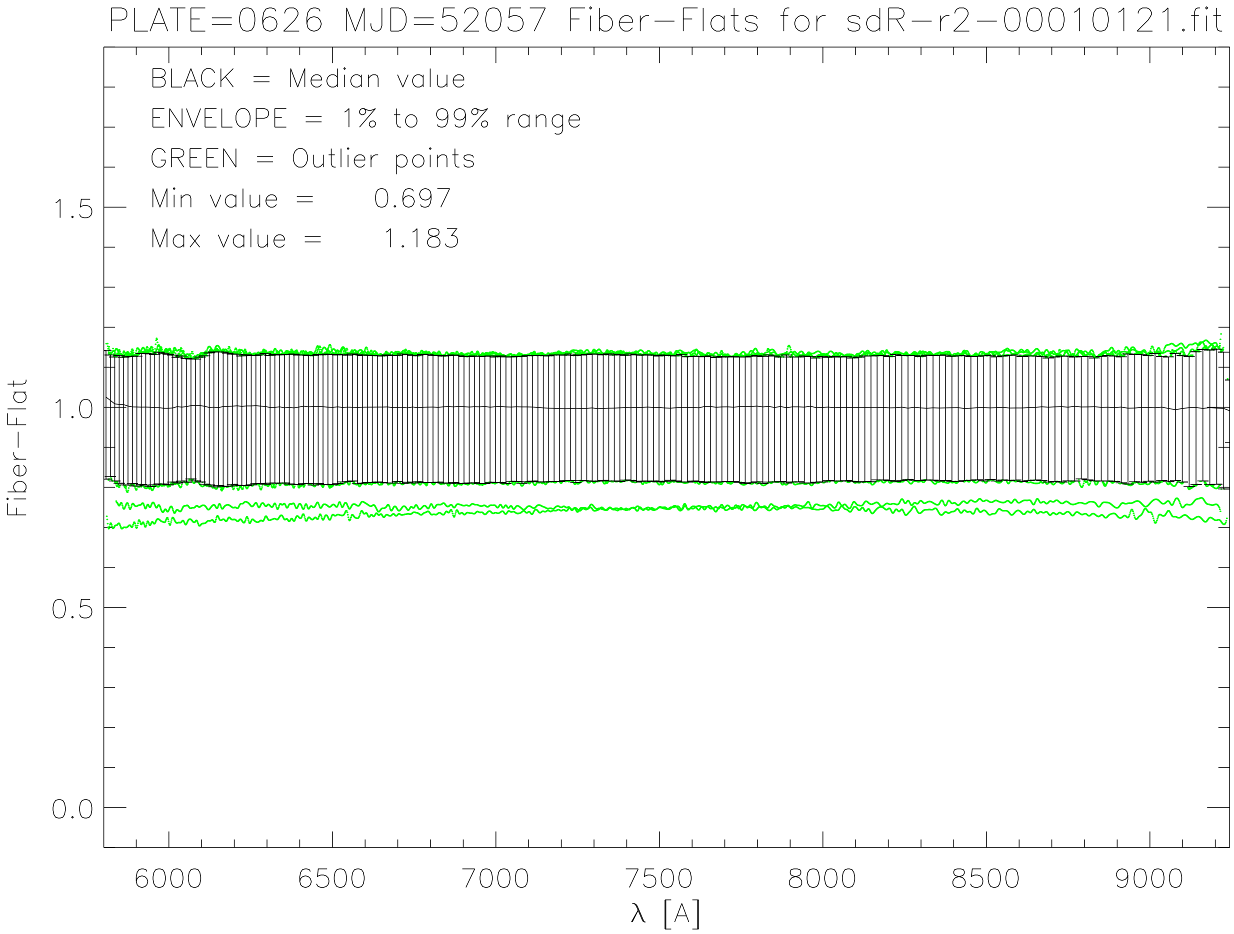
Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-r2-00010118.fit 2D Sky-subtraction Rescaled Errors

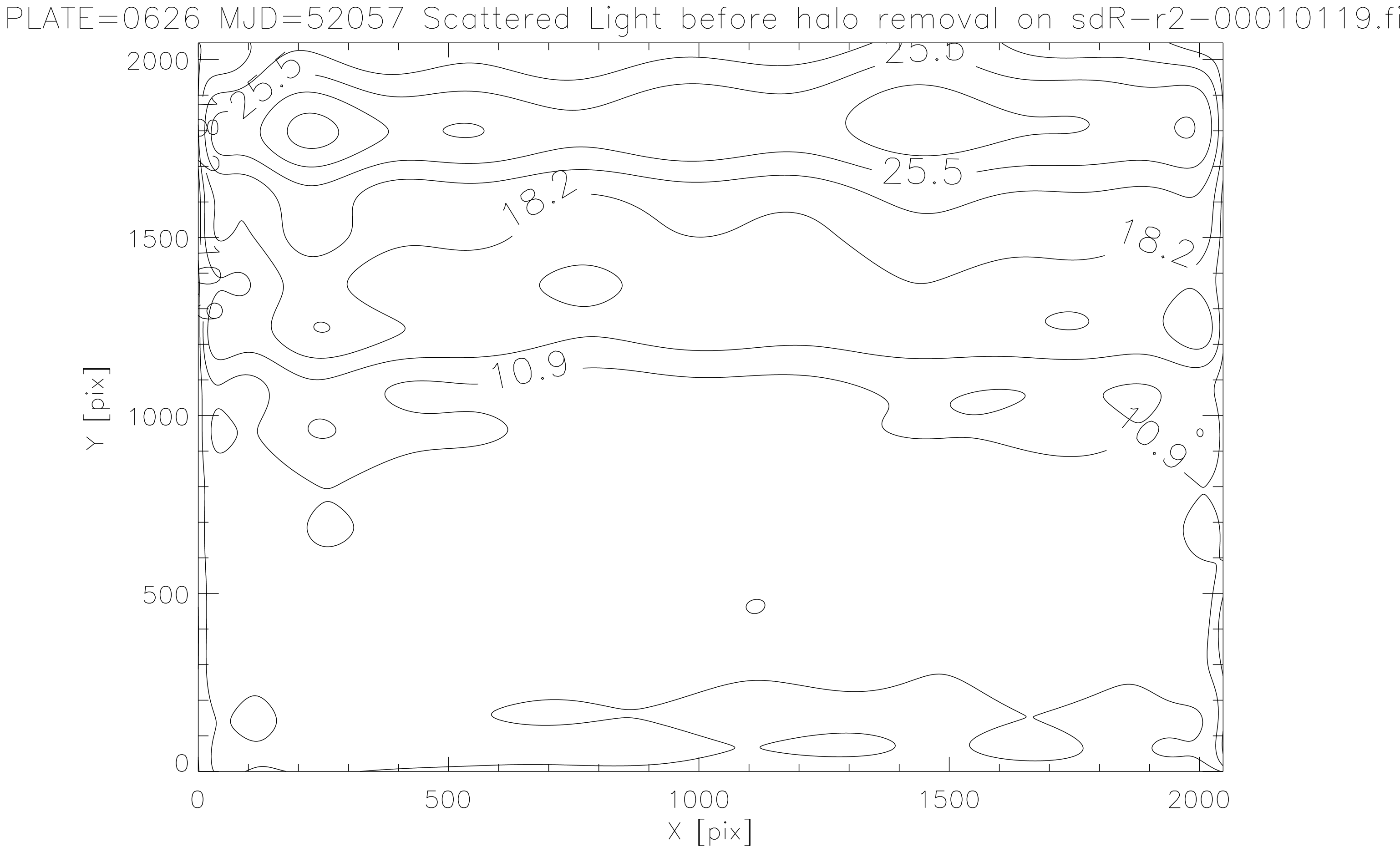


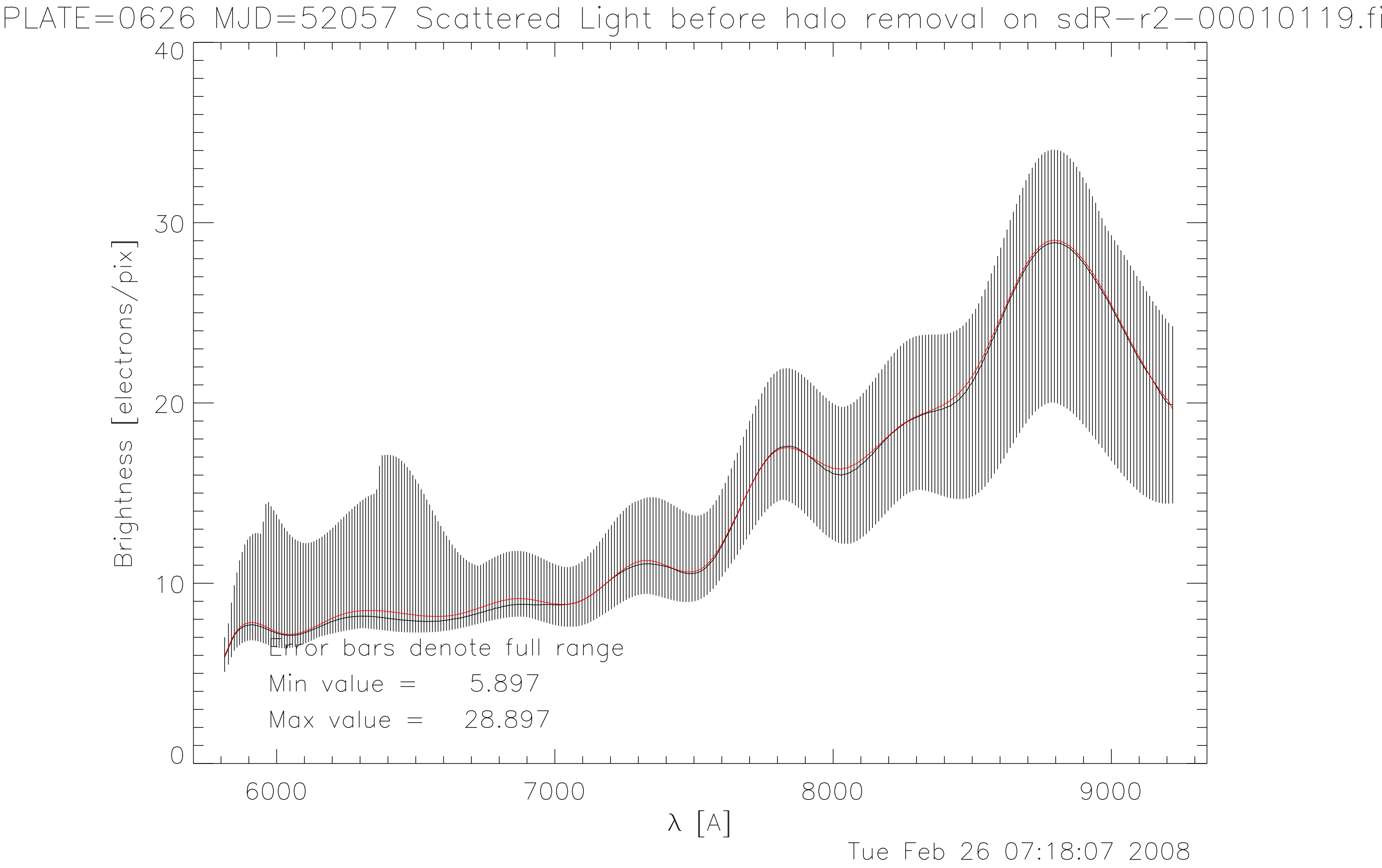

PLATE=0626 MJD=52057 sdR-r2-00010118.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
RED = sky fiber
Dispersion = 1.63 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
1.022
1.024
1.026
1.028
1.030
1.032
Airmass

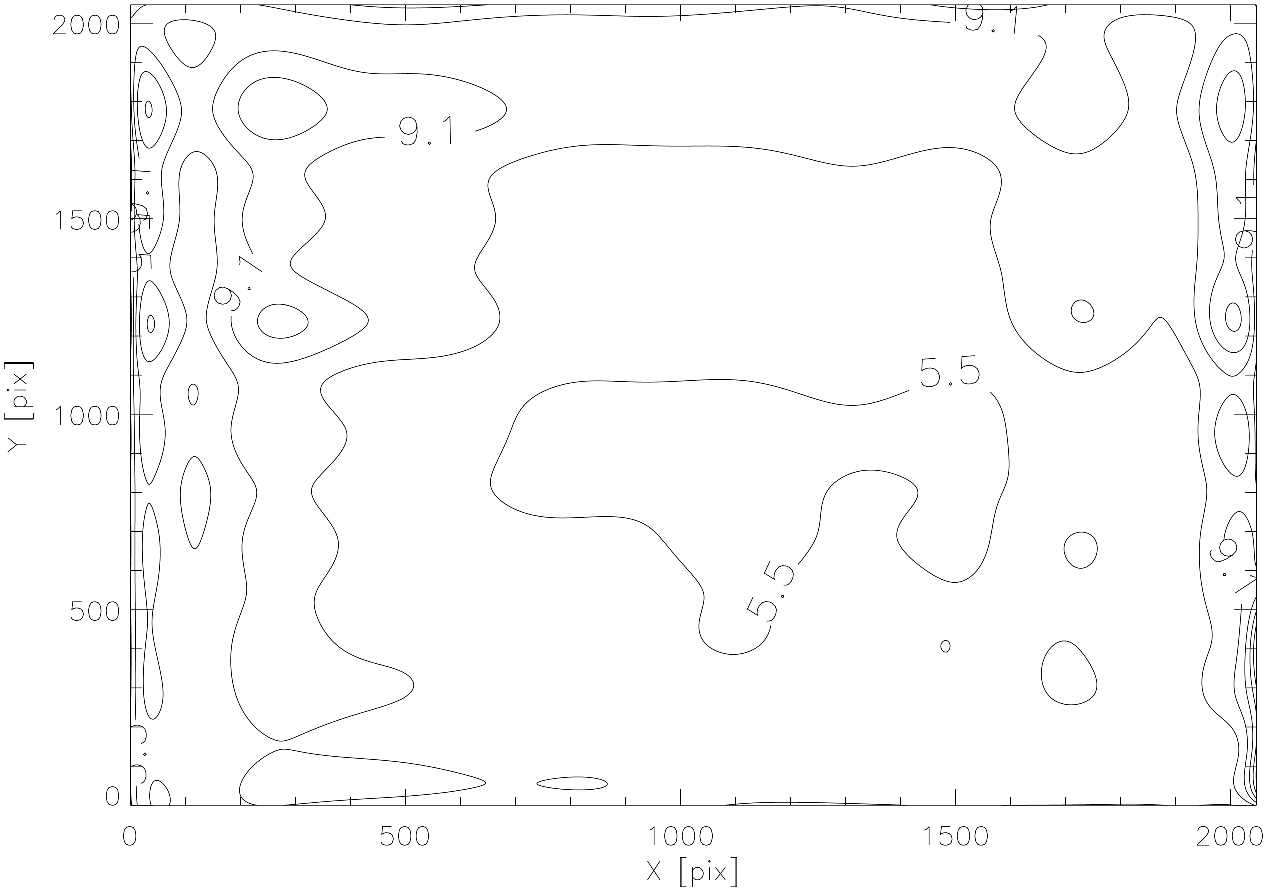

PLATE=0626 MJD=52057 sdR-r2-00010118.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
7500
7000
6500
6000
5500
5000
RED = sky fiber
Dispersion = 2.17 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.022
1.024
1.026
1.028
1.030
1.032
Airmass



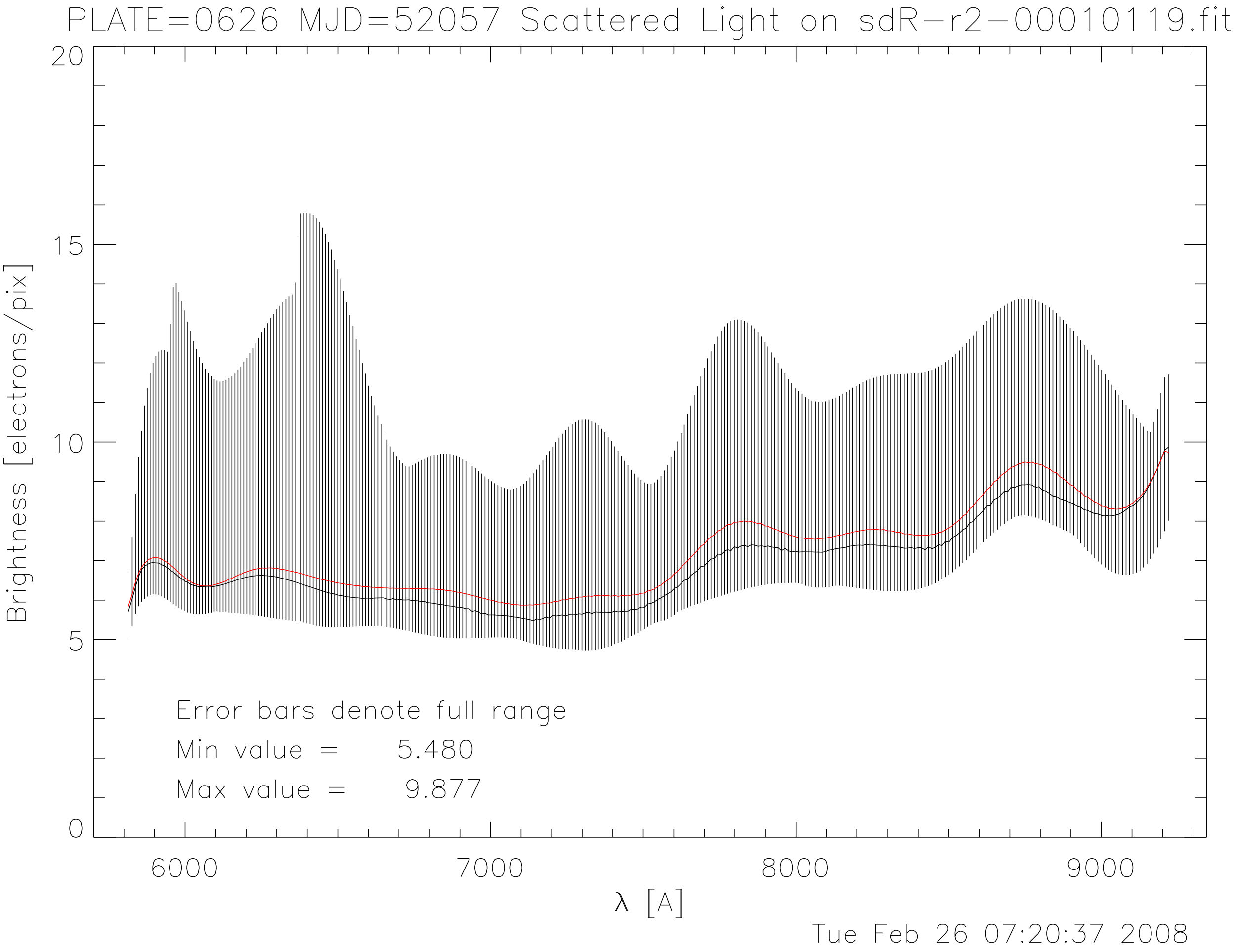
Tue Feb 26 07:17:19 2008

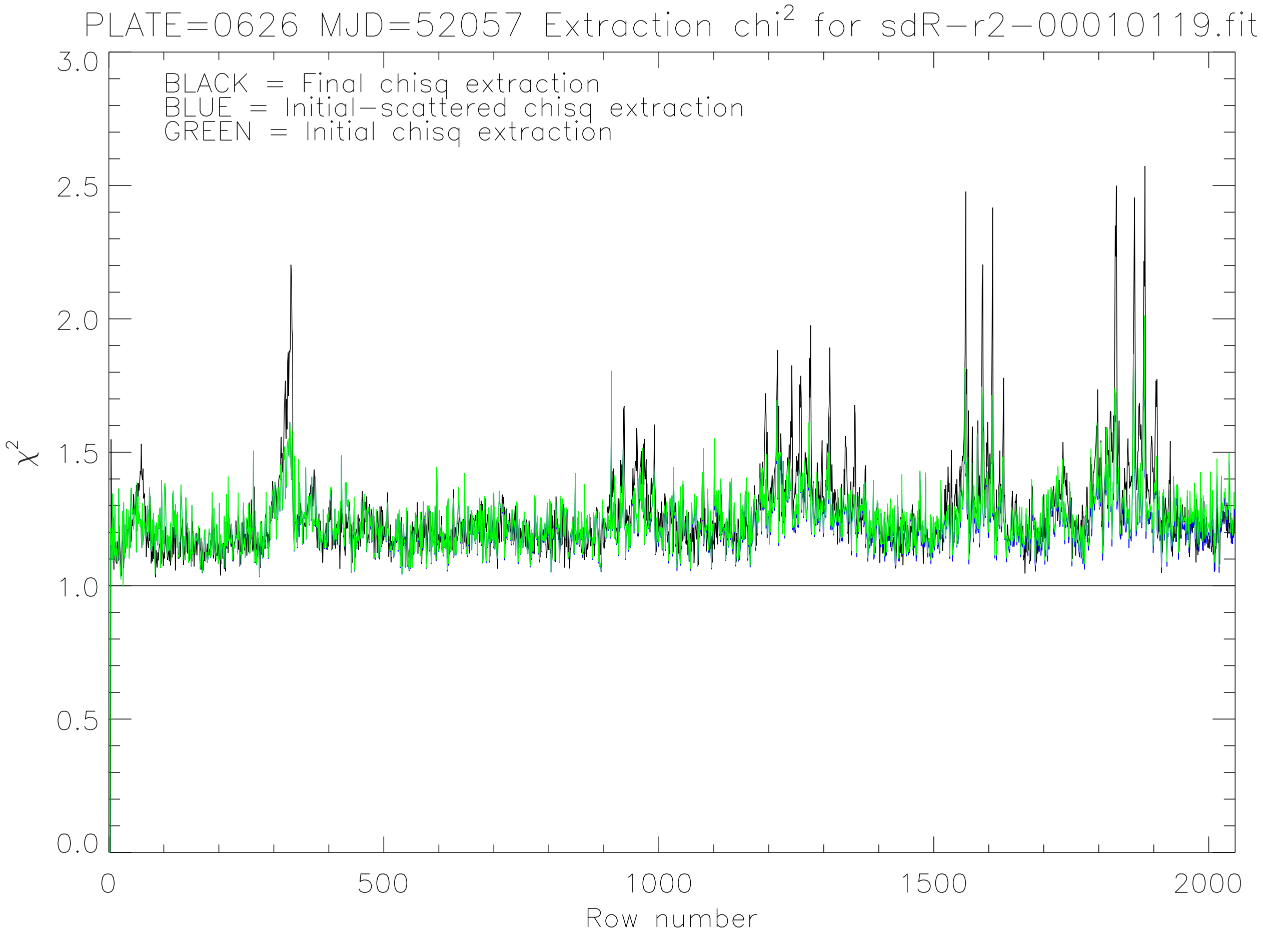

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010119.fi
25.5
25.5
25.5
18.2
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000

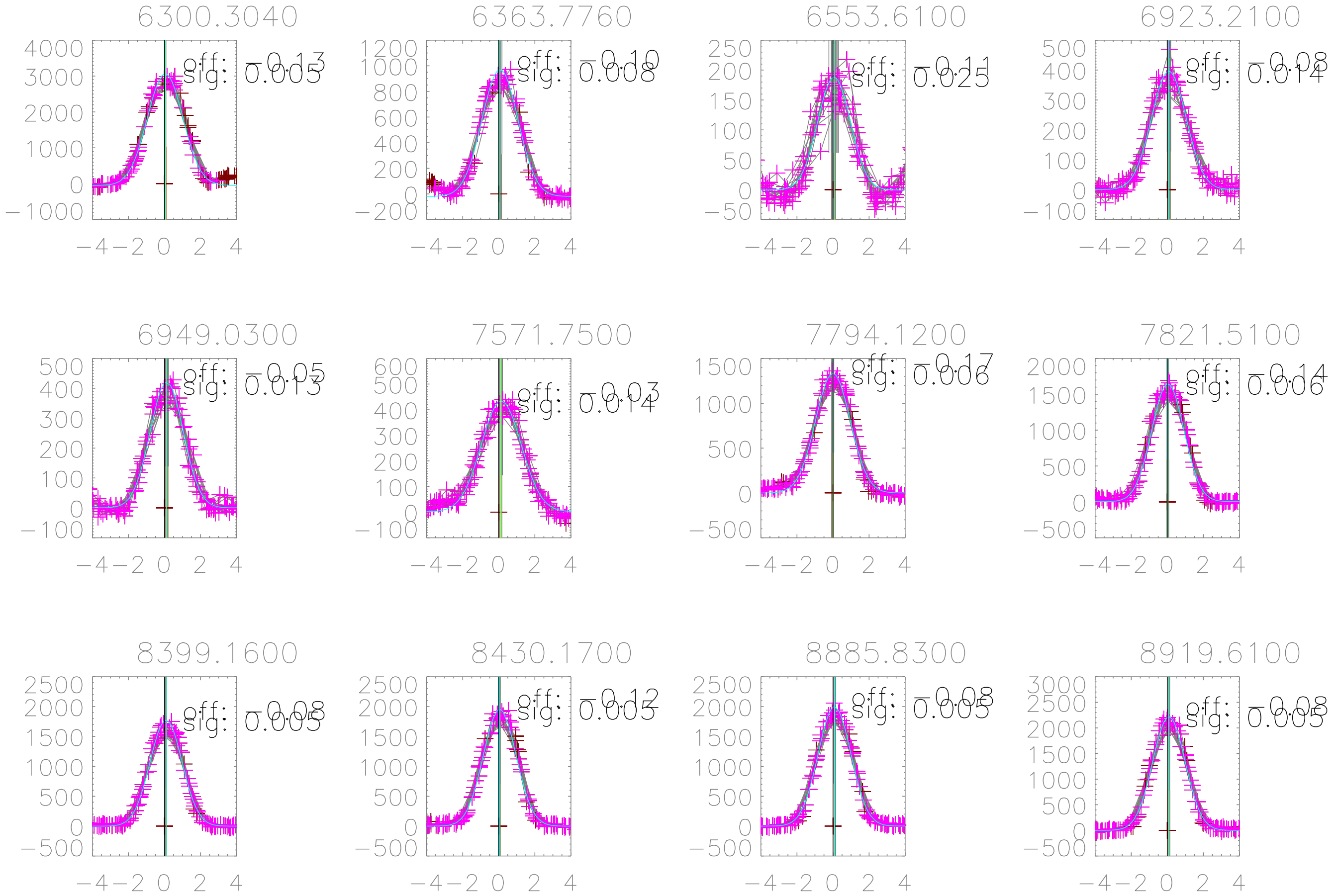

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010119.fi
Brightness [electrons/pix]
0
10
20
30
40
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.897
Max value = 28.897
Tue Feb 26 07:18:07 2008

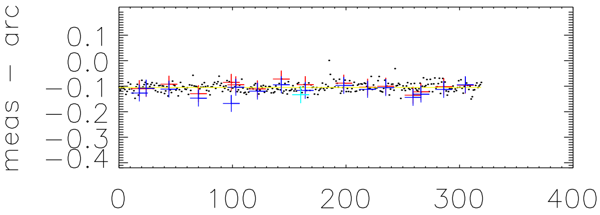


PLATE=0626 MJD=52057 Scattered Light on sdR-r2-00010119.fit

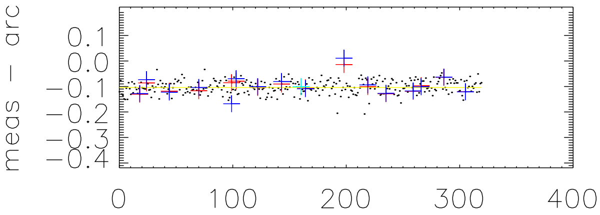

PLATE=0626 MJD=52057 Scattered Light on sdR-r2-00010119.fit
Brightness [electrons/pix]
0
5
10
15
20
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.480
Max value = 9.877
Tue Feb 26 07:20:37 2008


PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r2-00010119.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

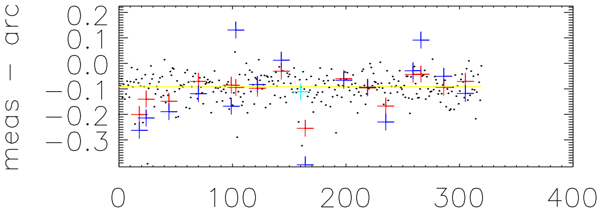

6300.3040
off: −0.13
sig: 0.005
6363.7760
off: −0.10
sig: 0.008
6553.6100
off: −0.11
sig: 0.025
6923.2100
off: −0.08
sig: 0.014
6949.0300
off: −0.05
sig: 0.013
7571.7500
off: −0.03
sig: 0.014
7794.1200
off: −0.17
sig: 0.006
7821.5100
off: −0.14
sig: 0.006
8399.1600
off: −0.08
sig: 0.005
8430.1700
off: −0.12
sig: 0.005
8885.8300
off: −0.08
sig: 0.005
8919.6100
off: −0.08
sig: 0.005
−4 −2 0 2 4



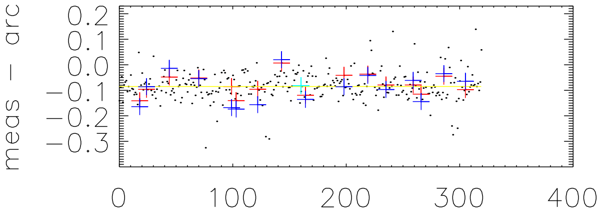
6300.3040



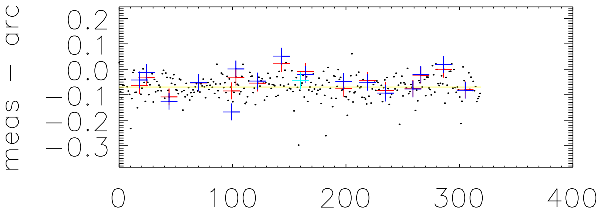
6363.7760



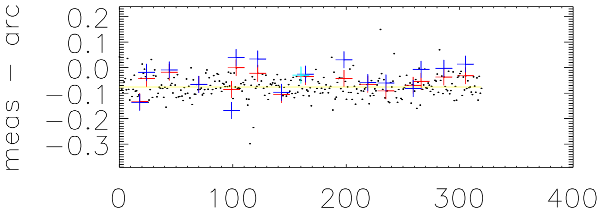
6553.6100



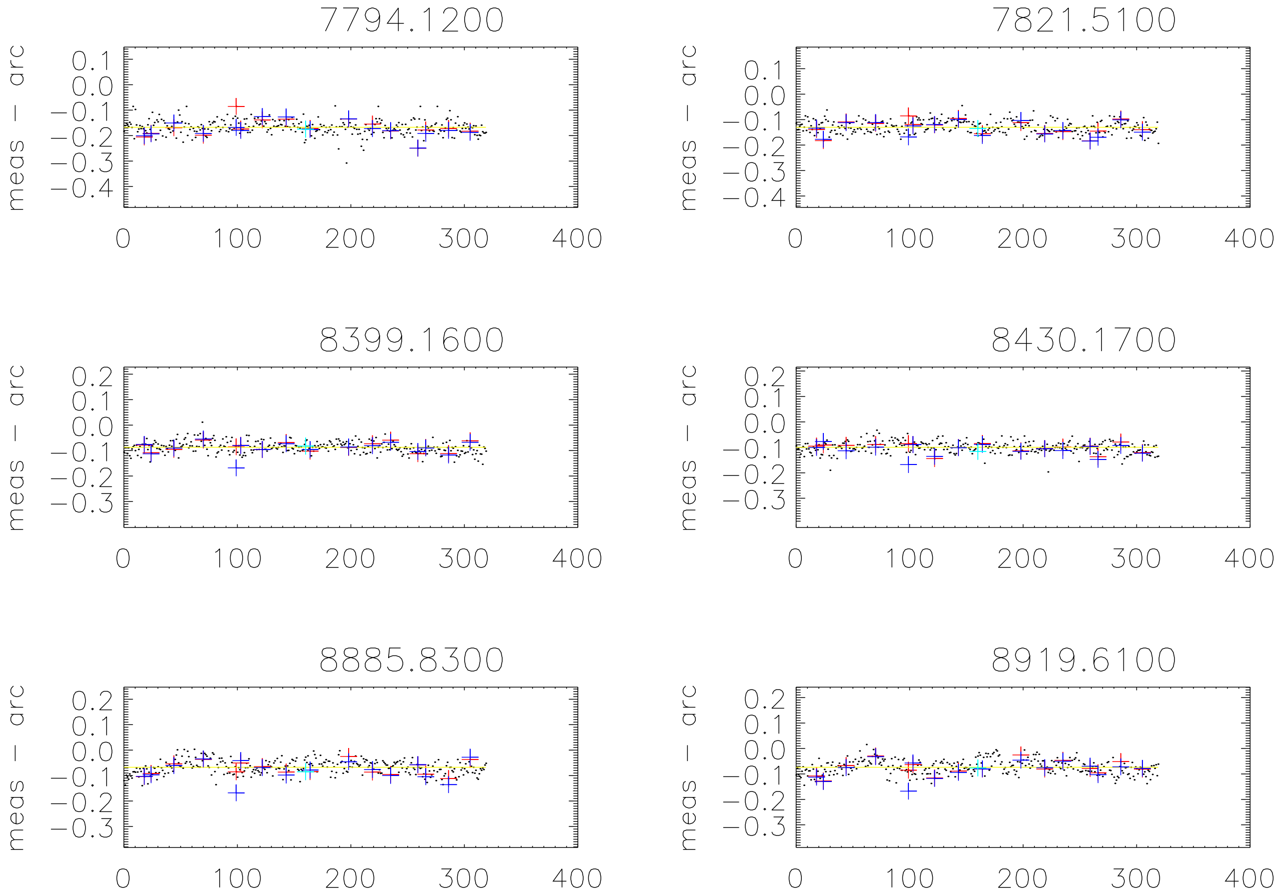
6923.2100

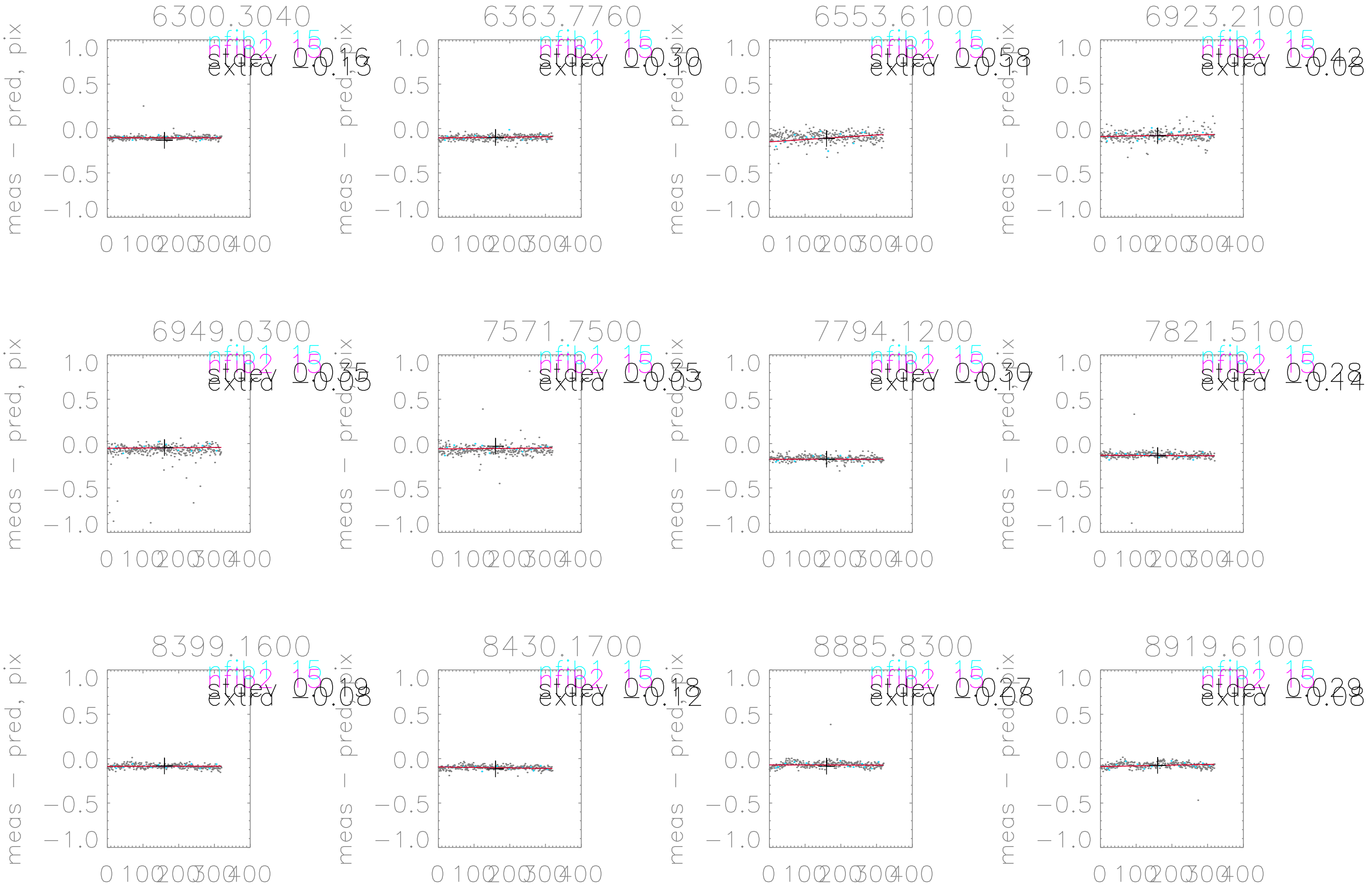


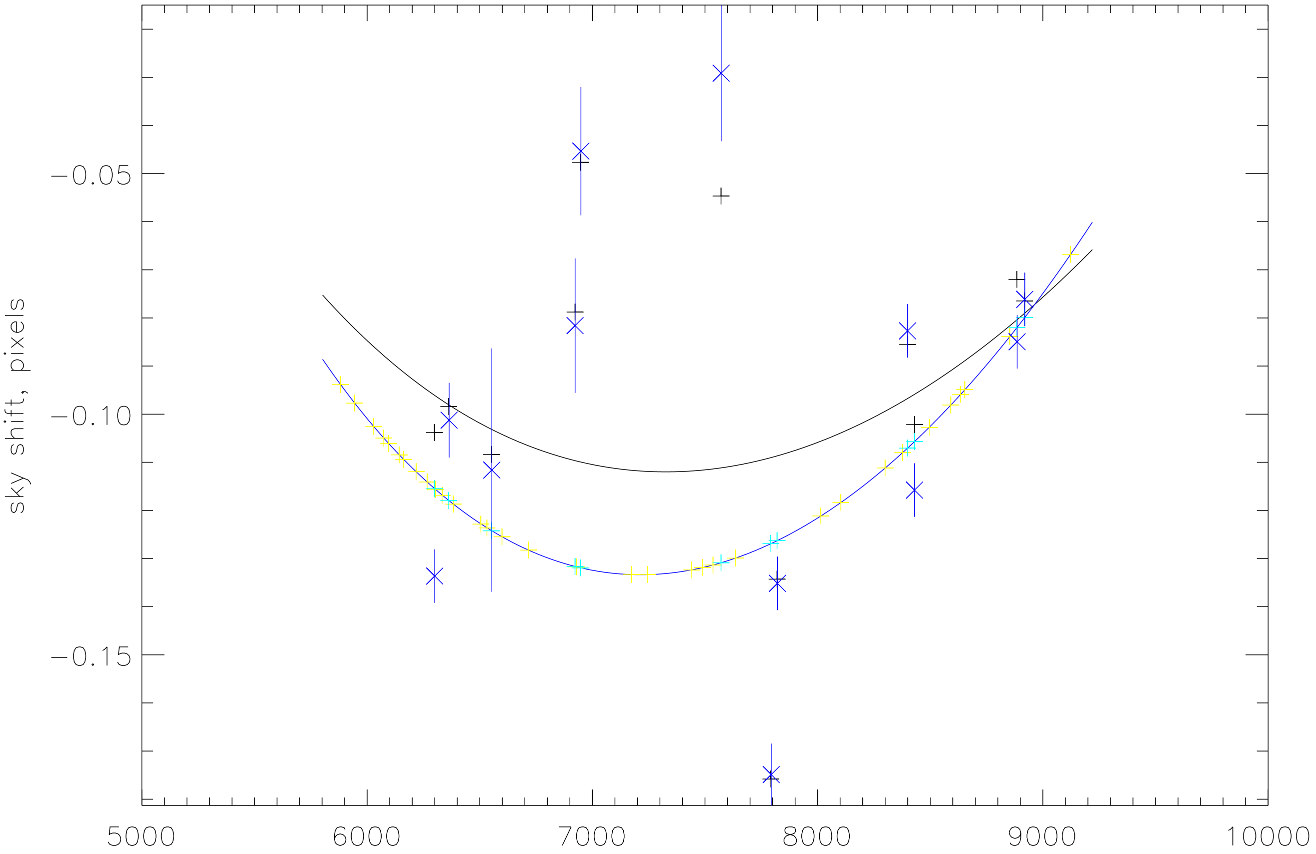
6949.0300

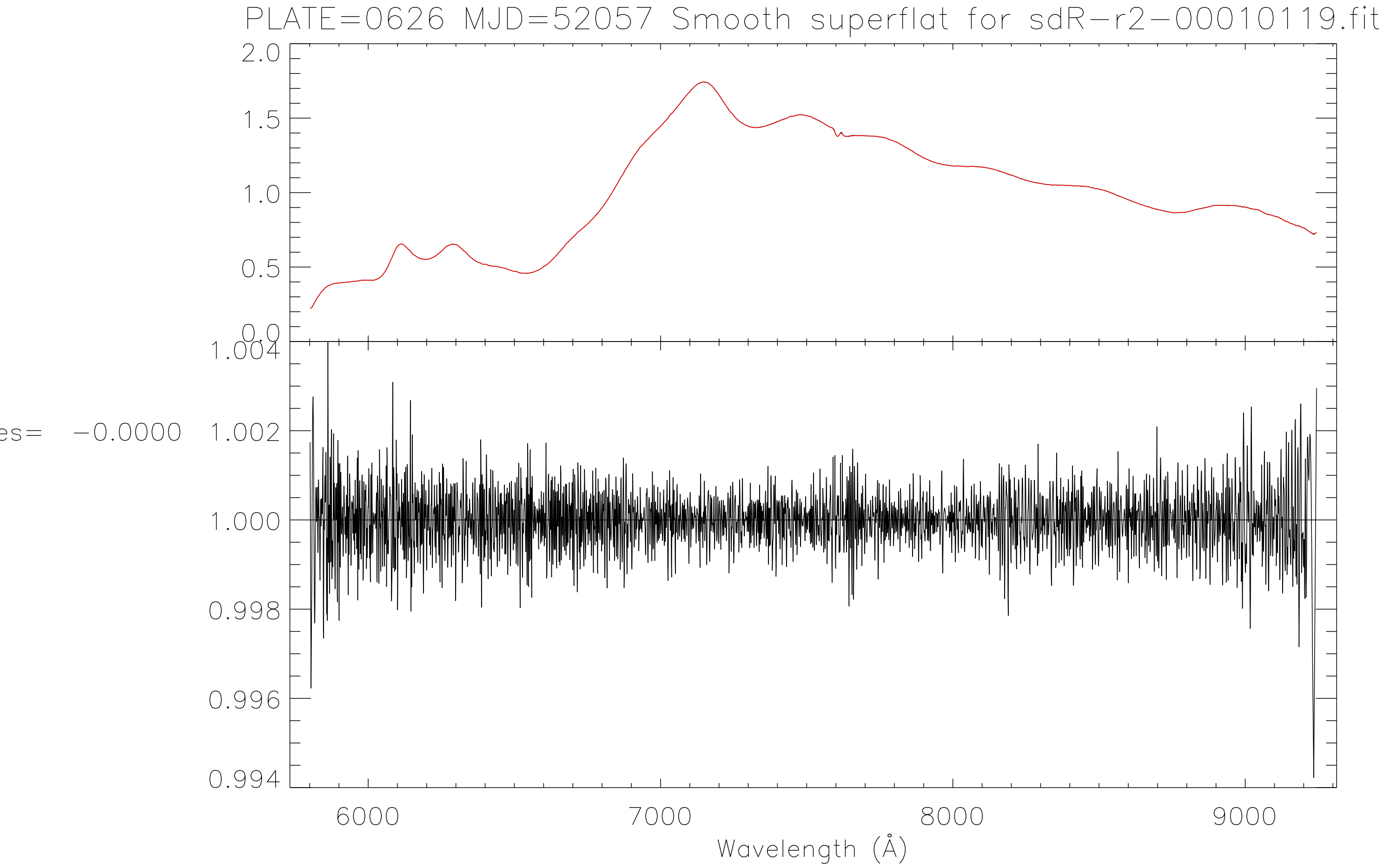


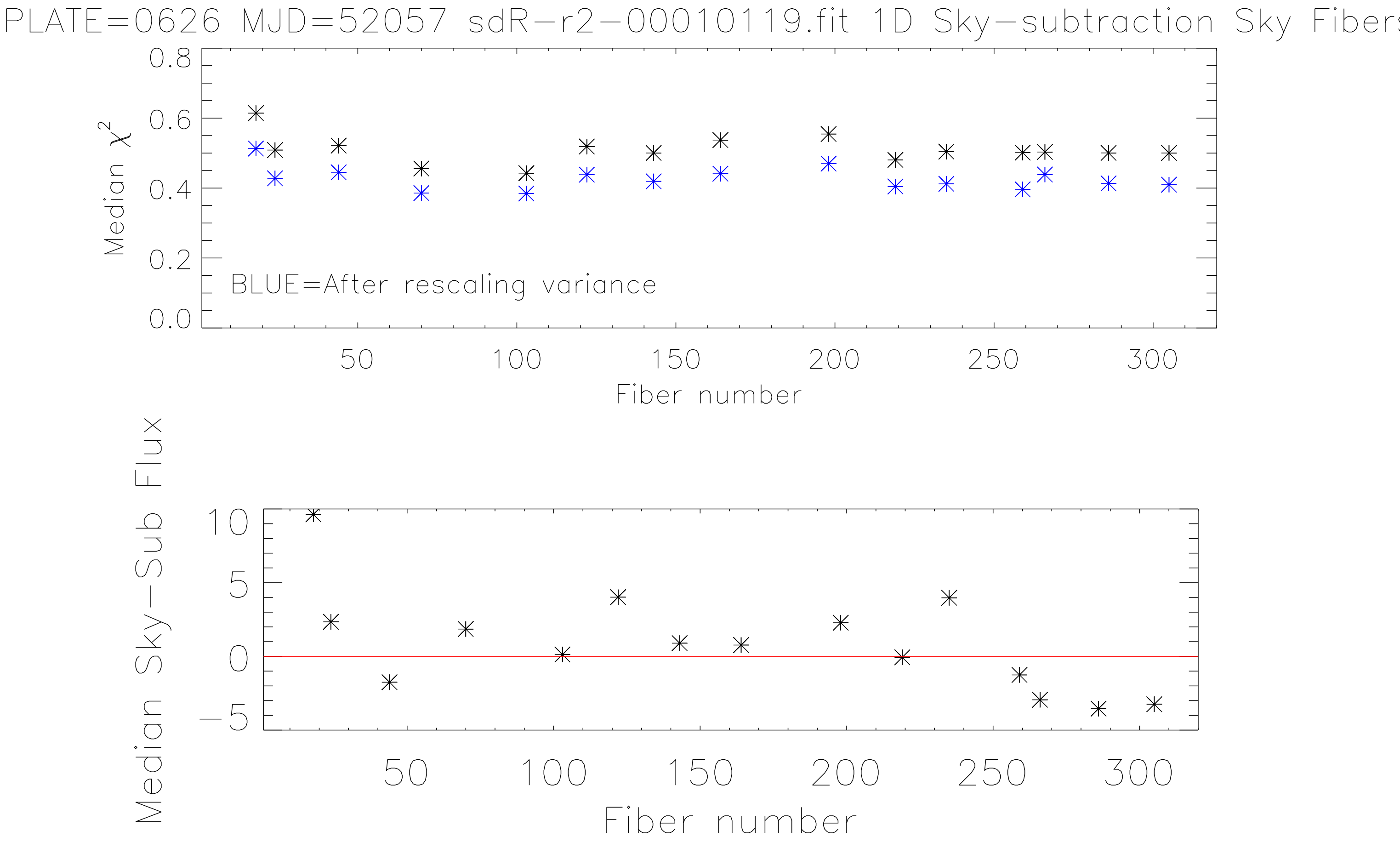
7571.7500

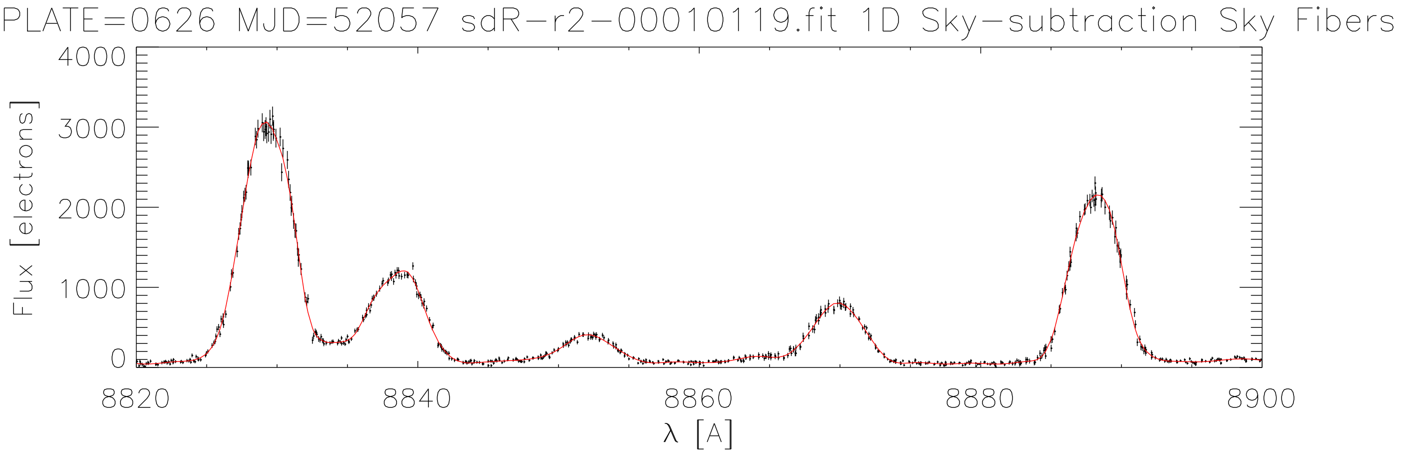

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

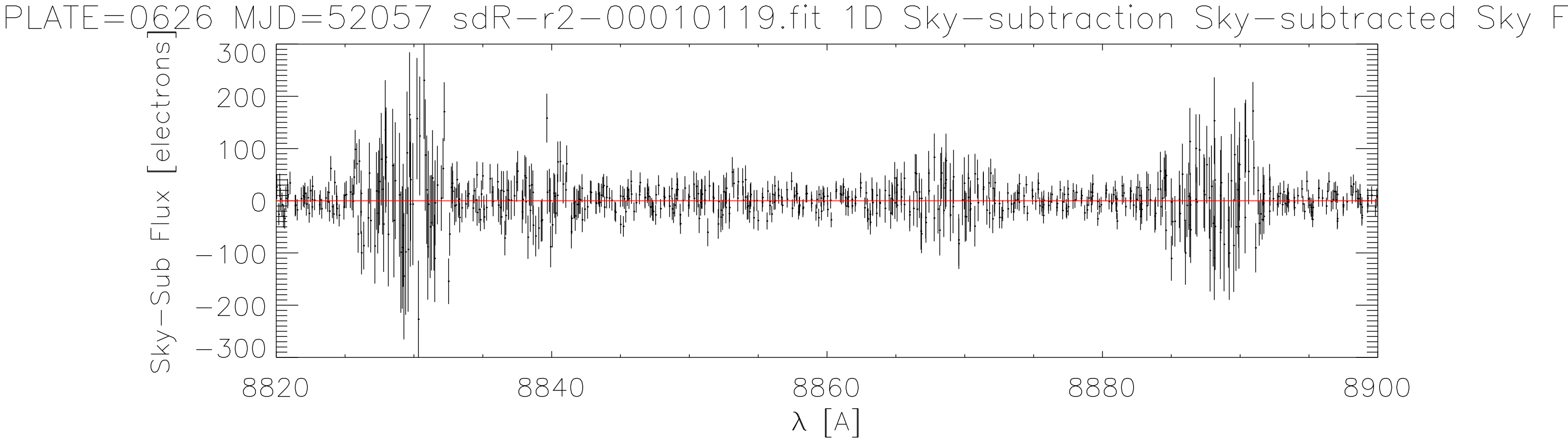

6300.3040
nfib1 15
nfib2 15
stdev 0.016
extrd −0.13
6363.7760
nfib1 15
nfib2 15
stdev 0.030
extrd −0.10
6553.6100
nfib1 15
nfib2 15
stdev 0.058
extrd −0.11
6923.2100
nfib1 15
nfib2 15
stdev 0.042
extrd −0.08
6949.0300
nfib1 15
nfib2 15
stdev 0.035
extrd −0.05
7571.7500
nfib1 15
nfib2 15
stdev 0.035
extrd −0.03
7794.1200
nfib1 15
nfib2 15
stdev 0.030
extrd −0.17
7821.5100
nfib1 15
nfib2 15
stdev 0.028
extrd −0.14
8399.1600
nfib1 15
nfib2 15
stdev 0.019
extrd −0.08
8430.1700
nfib1 15
nfib2 15
stdev 0.018
extrd −0.12
8885.8300
nfib1 15
nfib2 15
stdev 0.027
extrd −0.08
8919.6100
nfib1 15
nfib2 15
stdev 0.029
extrd −0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

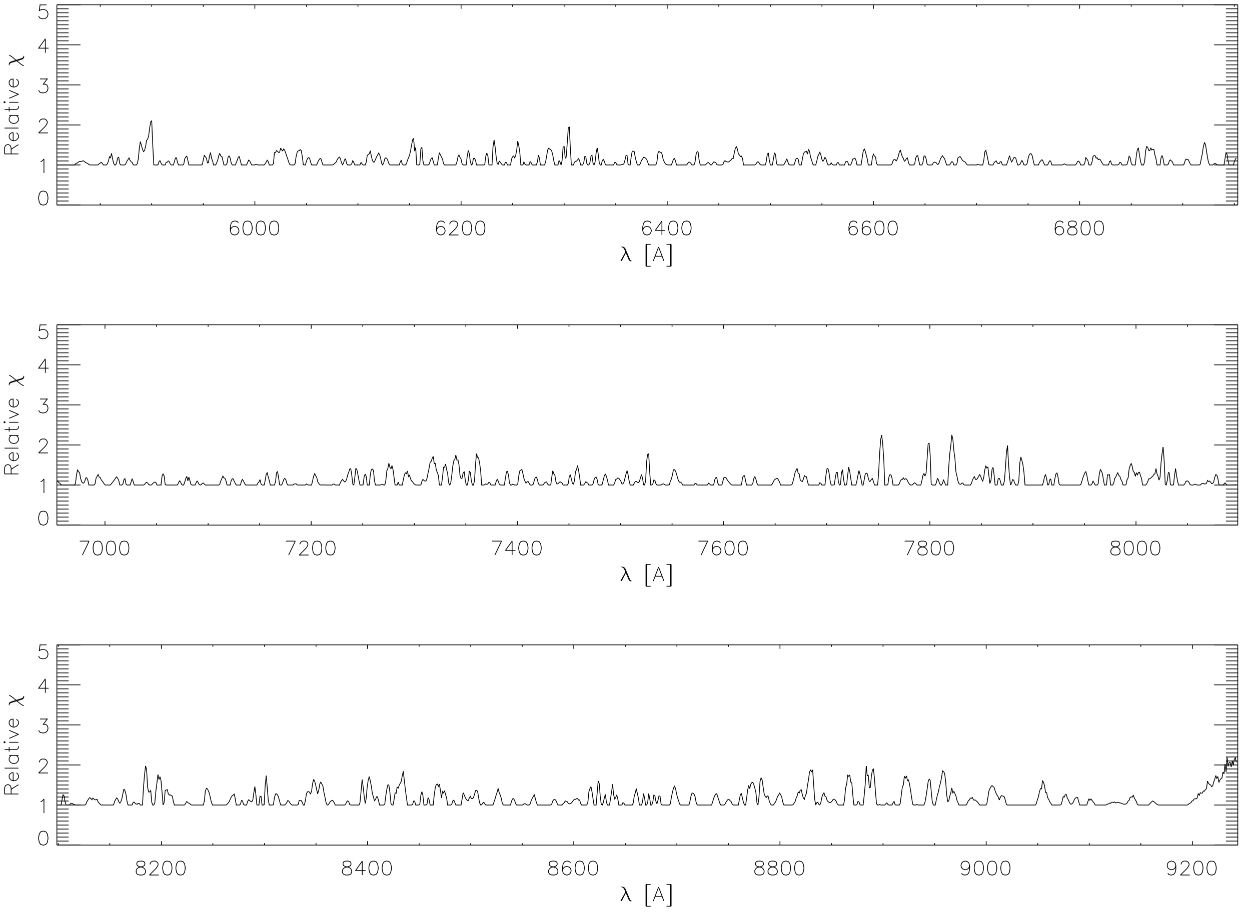

sky shift, pixels
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000


PLATE=0626 MJD=52057 Smooth superflat for sdR-r2-00010119.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=0626 MJD=52057 sdR-r2-00010119.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
10
5
0
−5
50
100
150
200
250
300
Fiber number

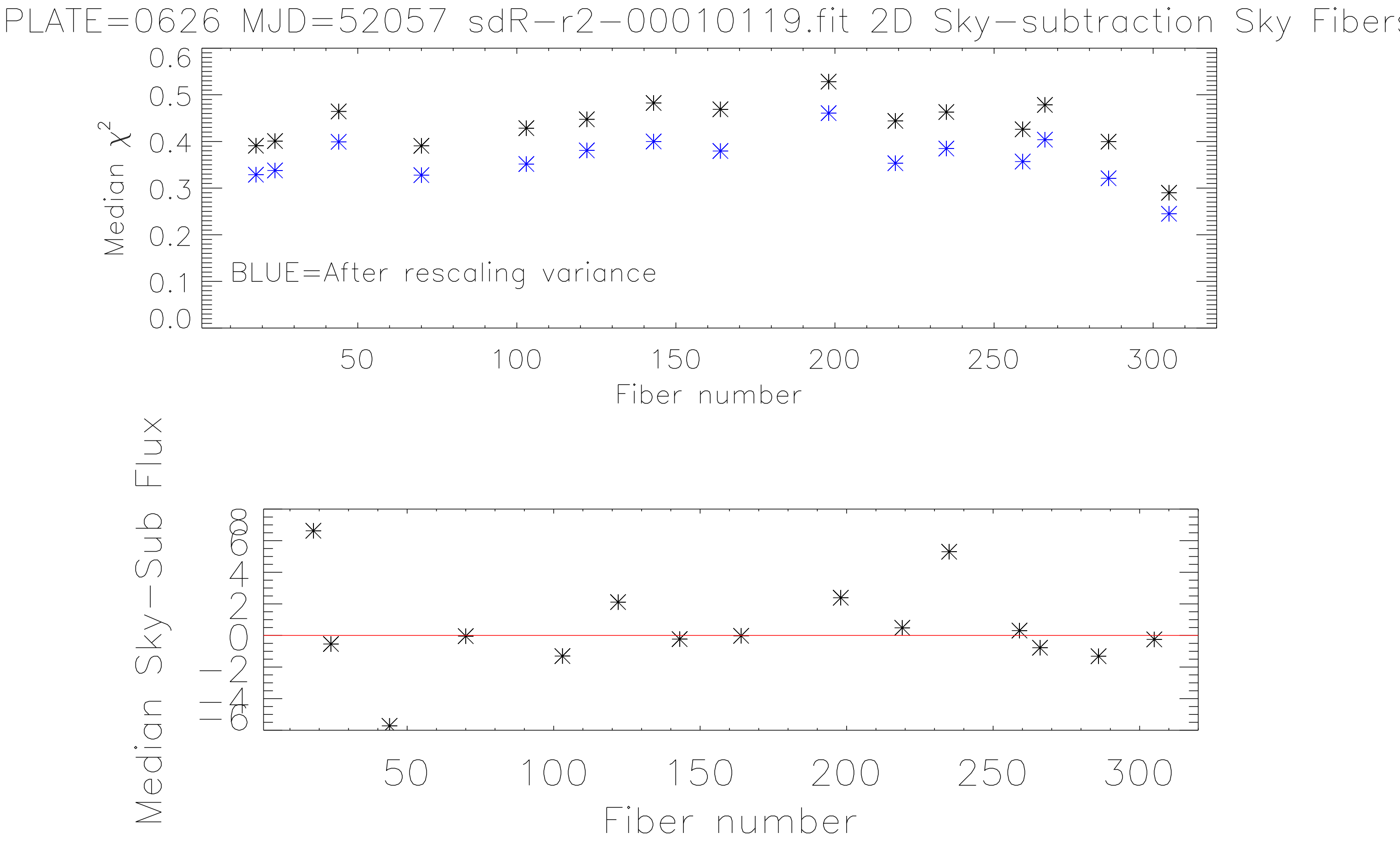

PLATE=0626 MJD=52057 sdR-r2-00010119.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

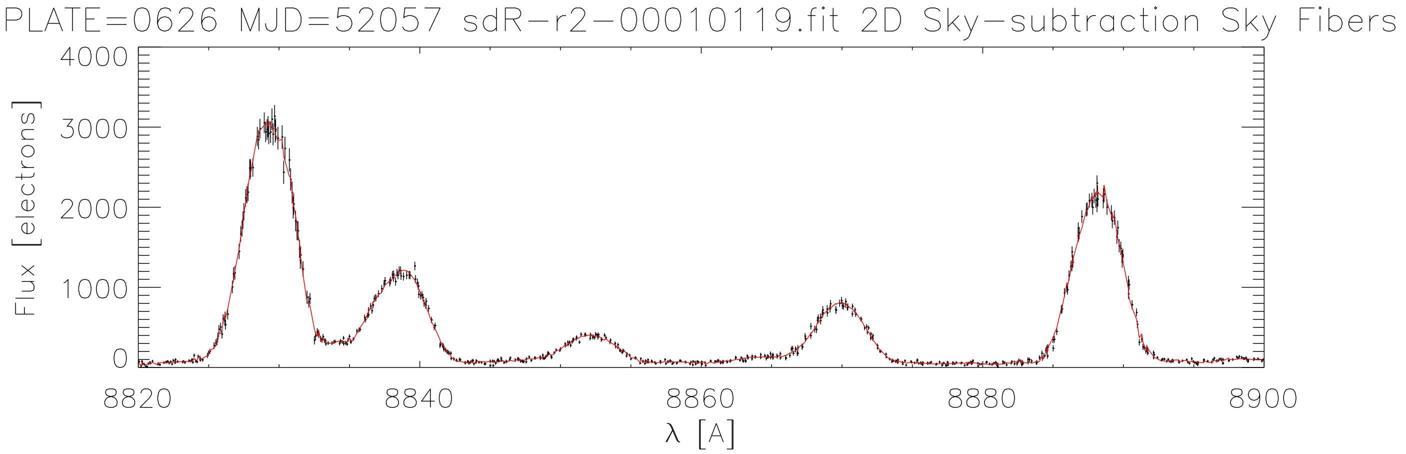

PLATE=0626 MJD=52057 sdR-r2-00010119.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

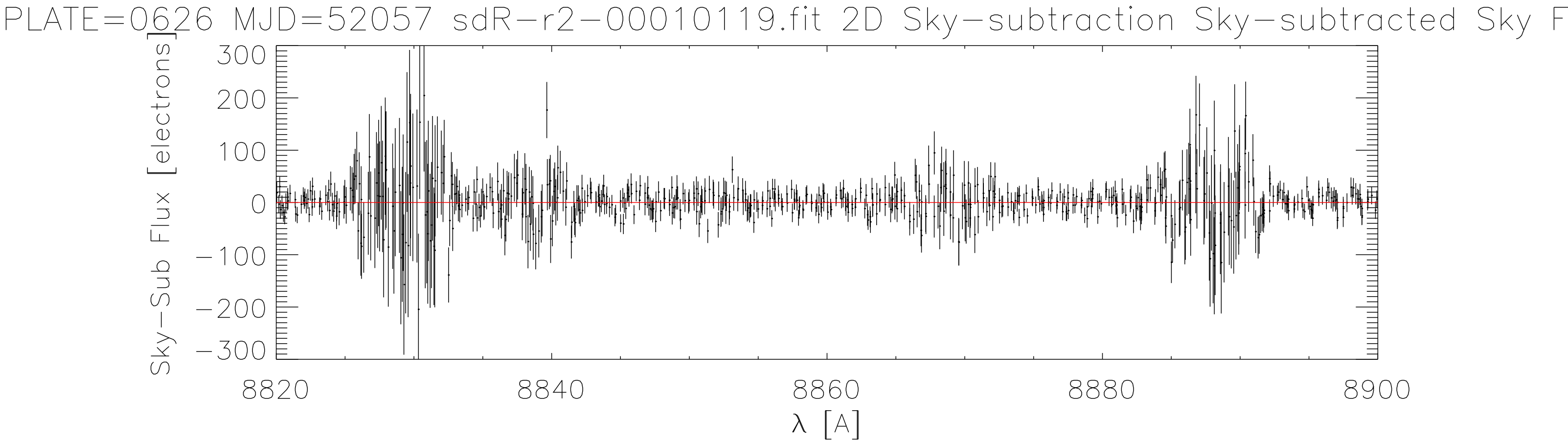


Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-r2-00010119.fit 1D Sky-subtraction Rescaled Errors

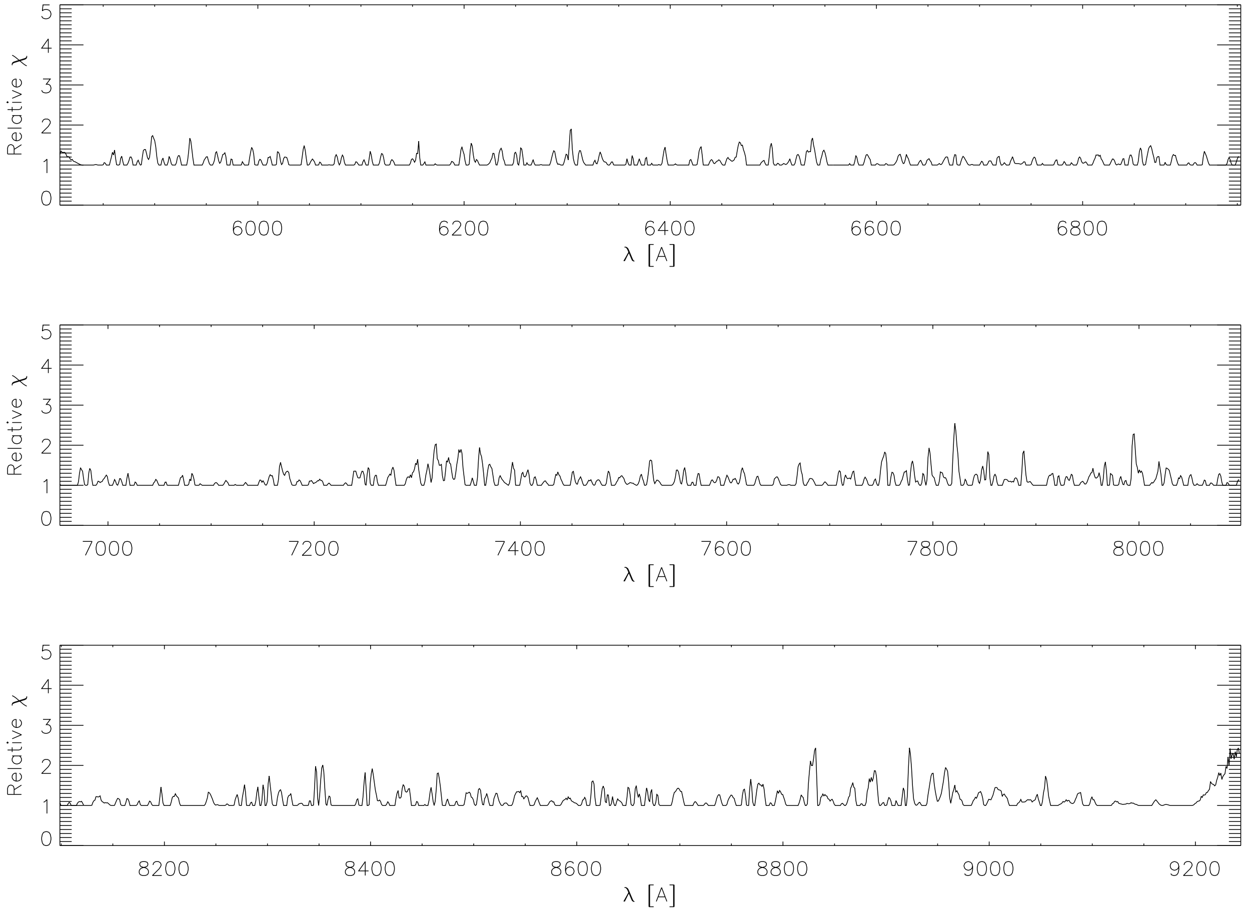

PLATE=0626 MJD=52057 sdR-r2-00010119.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
8
6
4
2
0
-2
-4
-6
50
100
150
200
250
300
Fiber number

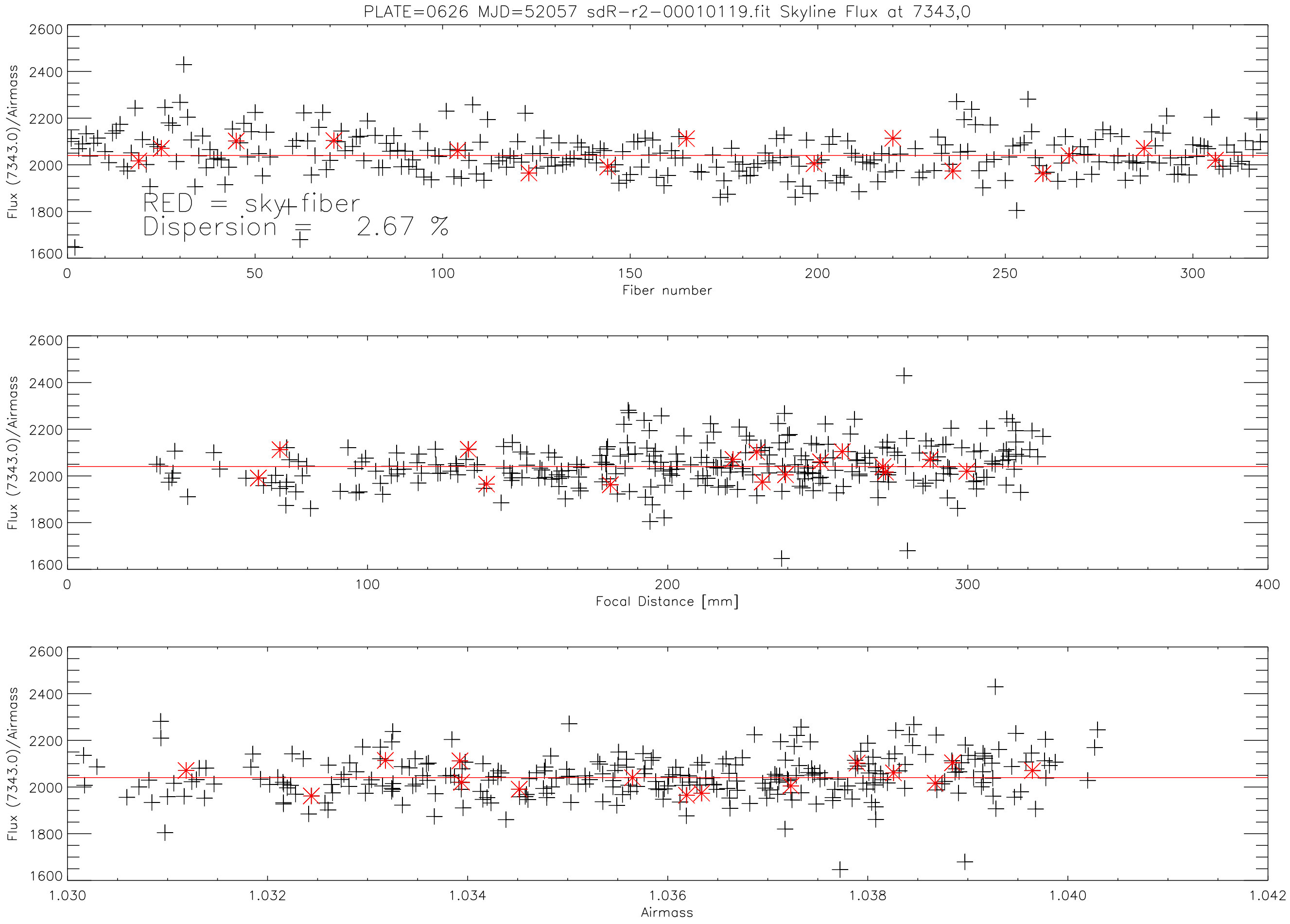

PLATE=0626 MJD=52057 sdR-r2-00010119.fit 2D Sky-subtraction Sky Fibers

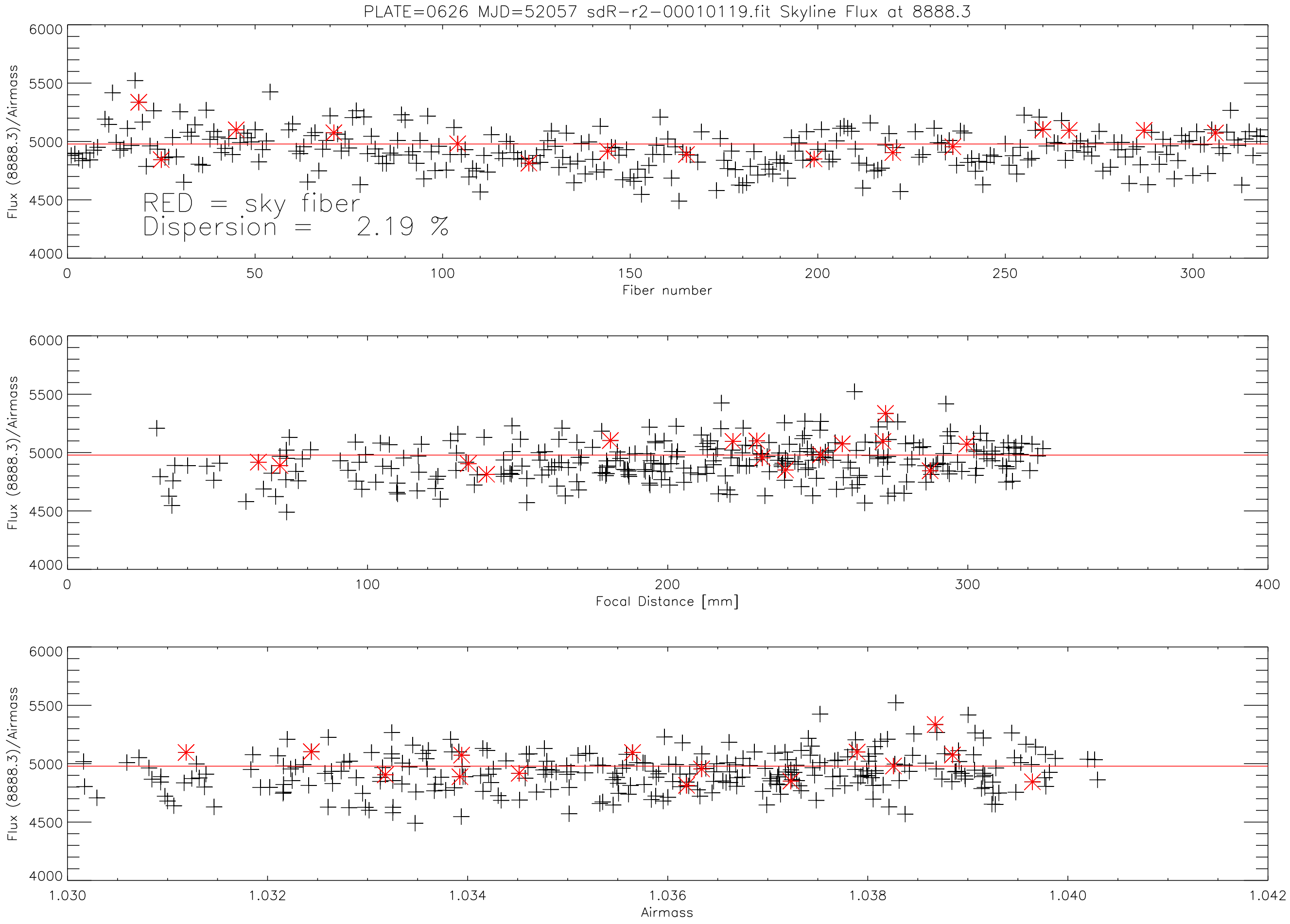

PLATE=0626 MJD=52057 sdR-r2-00010119.fit 2D Sky-subtraction Sky-subtracted Sky F

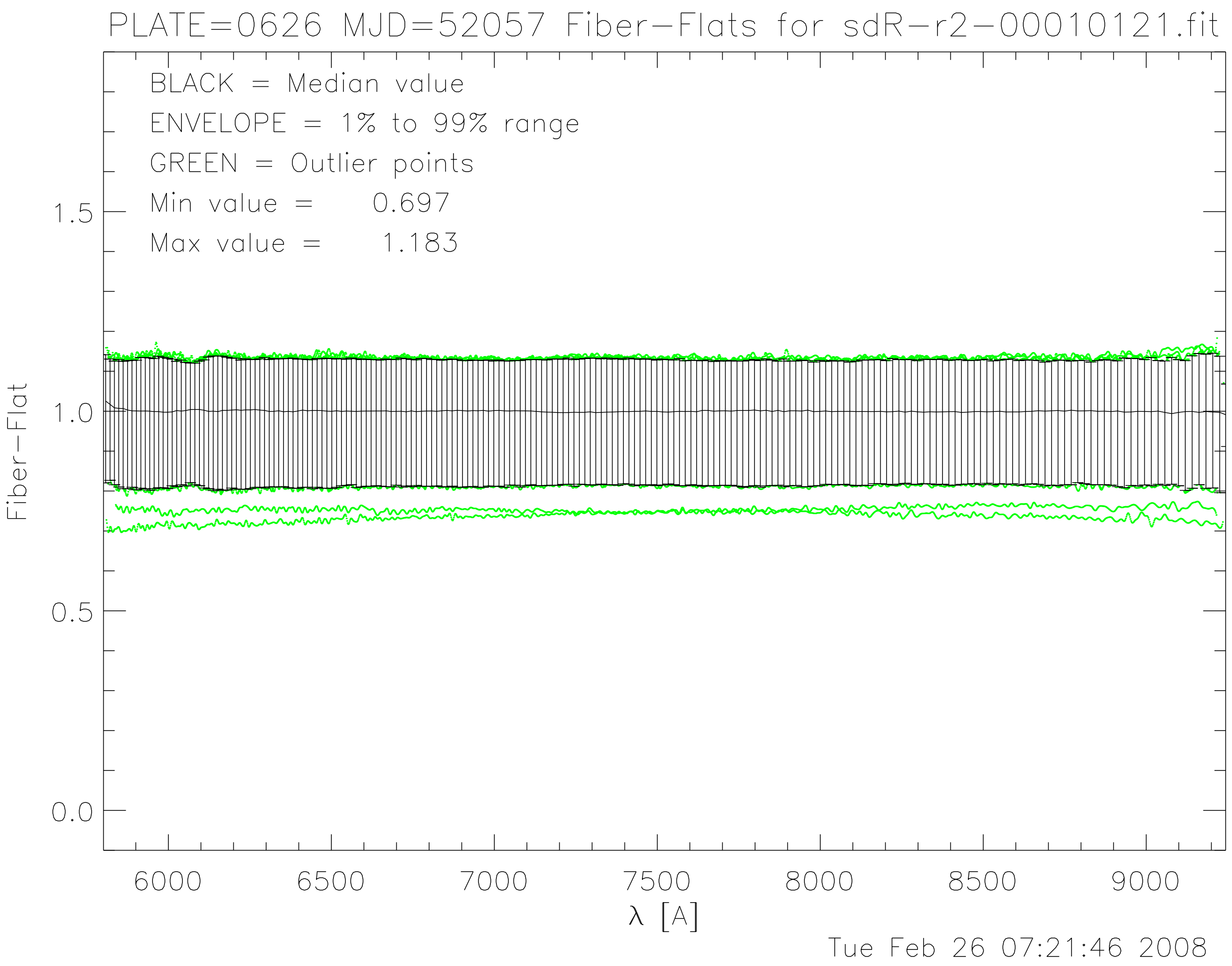
Number of sky fibers = 15

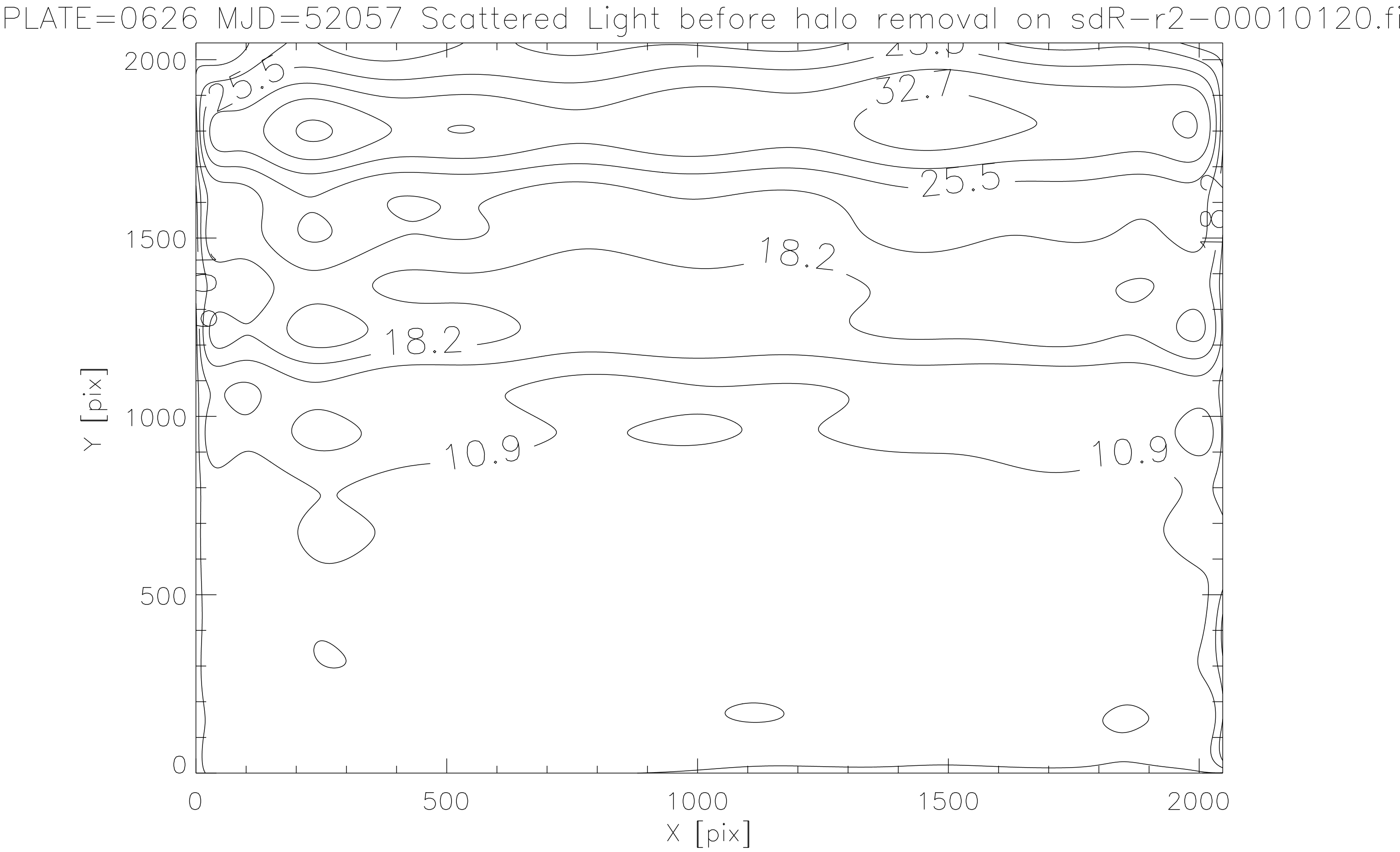
PLATE=0626 MJD=52057 sdR-r2-00010119.fit 2D Sky-subtraction Rescaled Errors

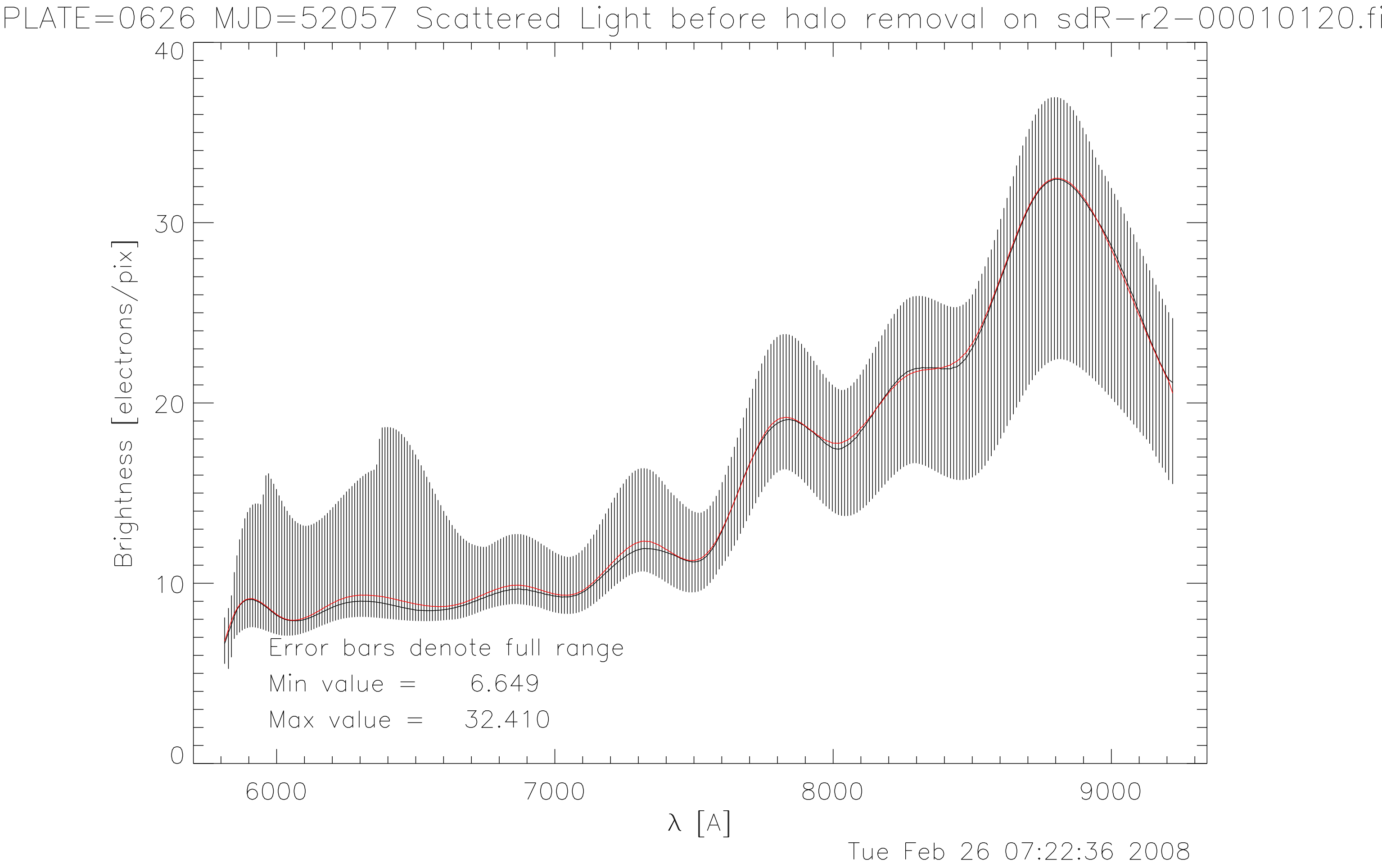


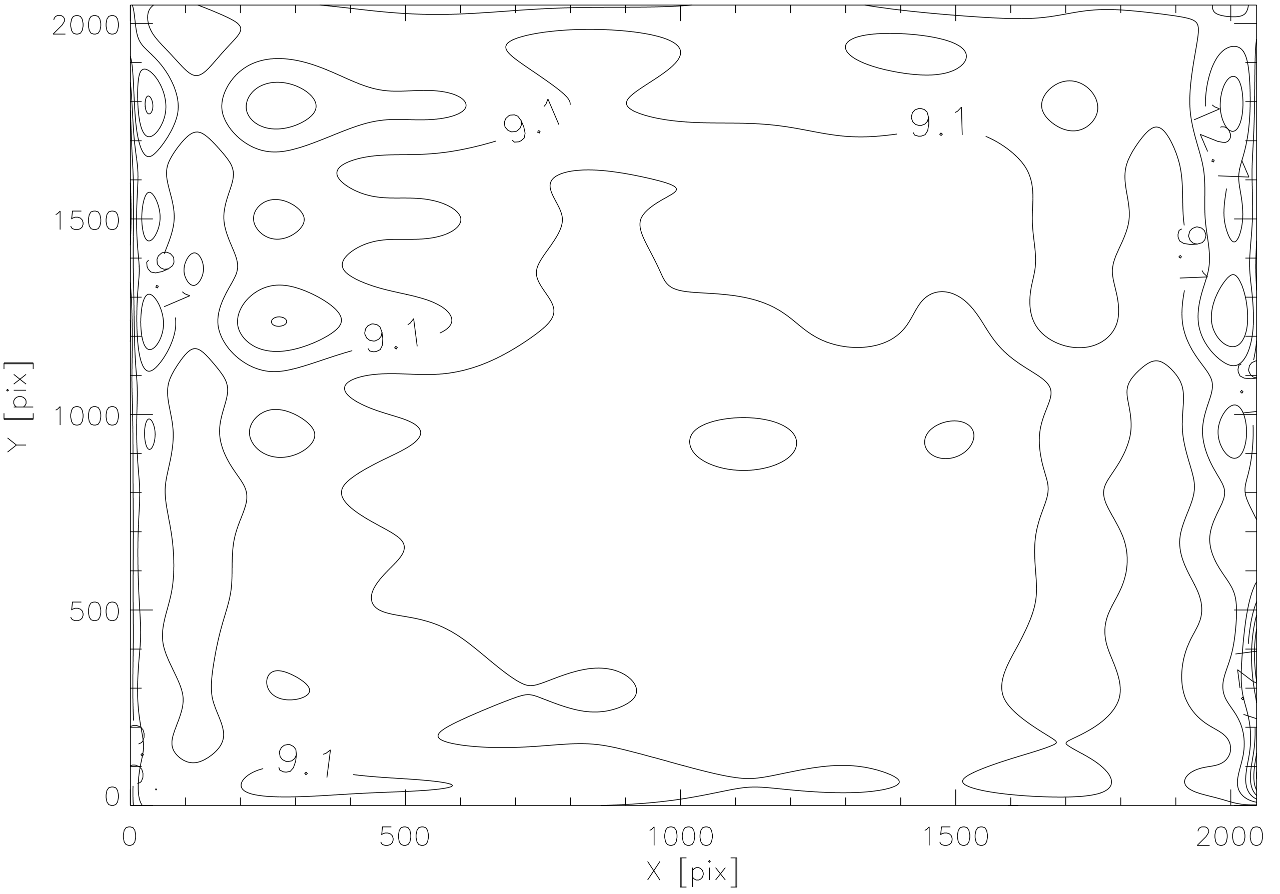

PLATE=0626 MJD=52057 sdR-r2-00010119.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2600
2400
2200
2000
1800
1600
RED = sky fiber
Dispersion = 2.67 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2600
2400
2200
2000
1800
1600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2600
2400
2200
2000
1800
1600
1.030
1.032
1.034
1.036
1.038
1.040
1.042
Airmass


PLATE=0626 MJD=52057 sdR-r2-00010119.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 2.19 %
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
1.030
1.032
1.034
1.036
1.038
1.040
1.042
Airmass

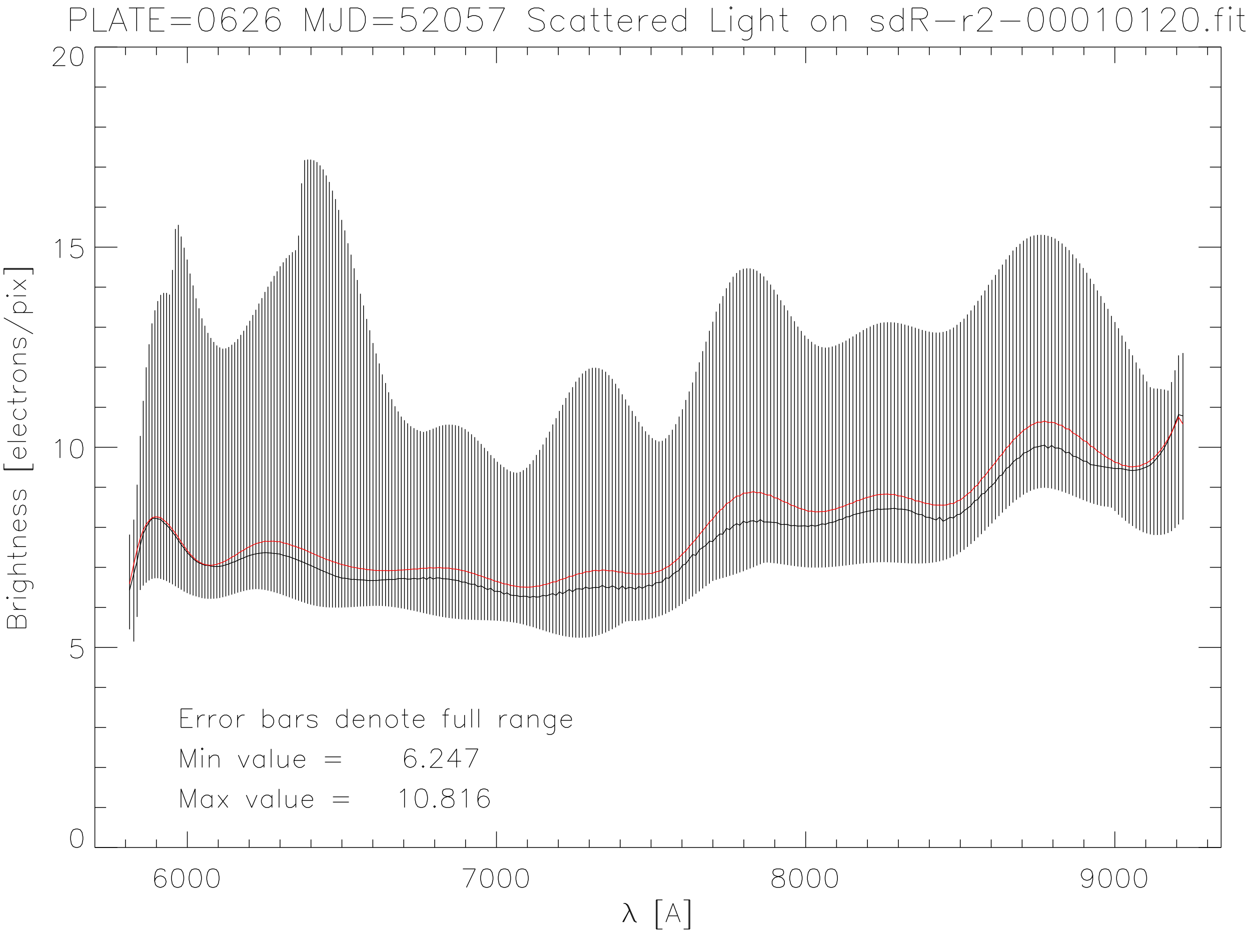

PLATE=0626 MJD=52057 Fiber−Flats for sdR−r2−00010121.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.697
Max value = 1.183
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Tue Feb 26 07:21:46 2008


PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010120.fi
25.5
32.7
25.5
18.2
18.2
10.9
10.9
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000

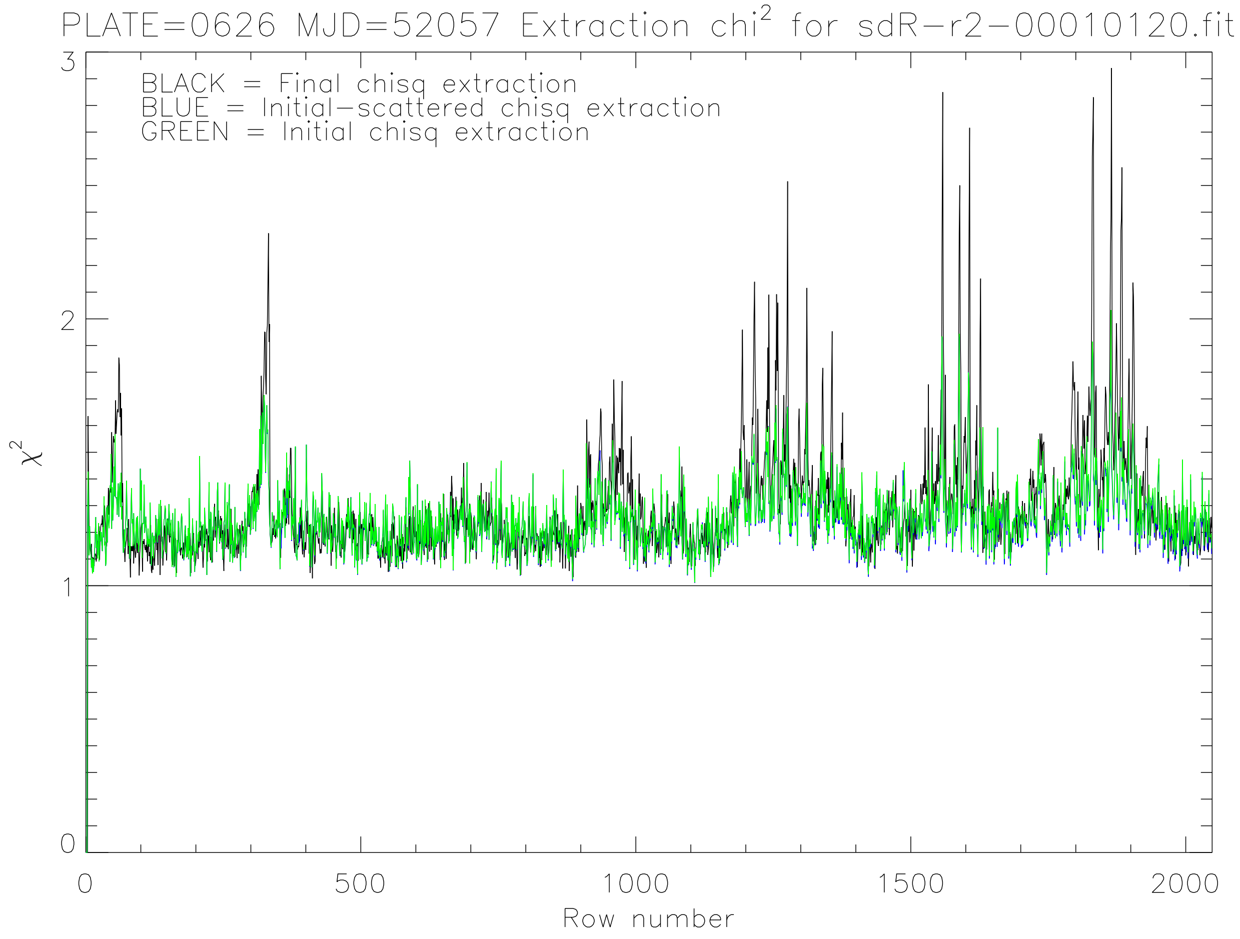

PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010120.fi
Brightness [electrons/pix]
0
10
20
30
40
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   6.649
Max value =   32.410
Tue Feb 26 07:22:36 2008

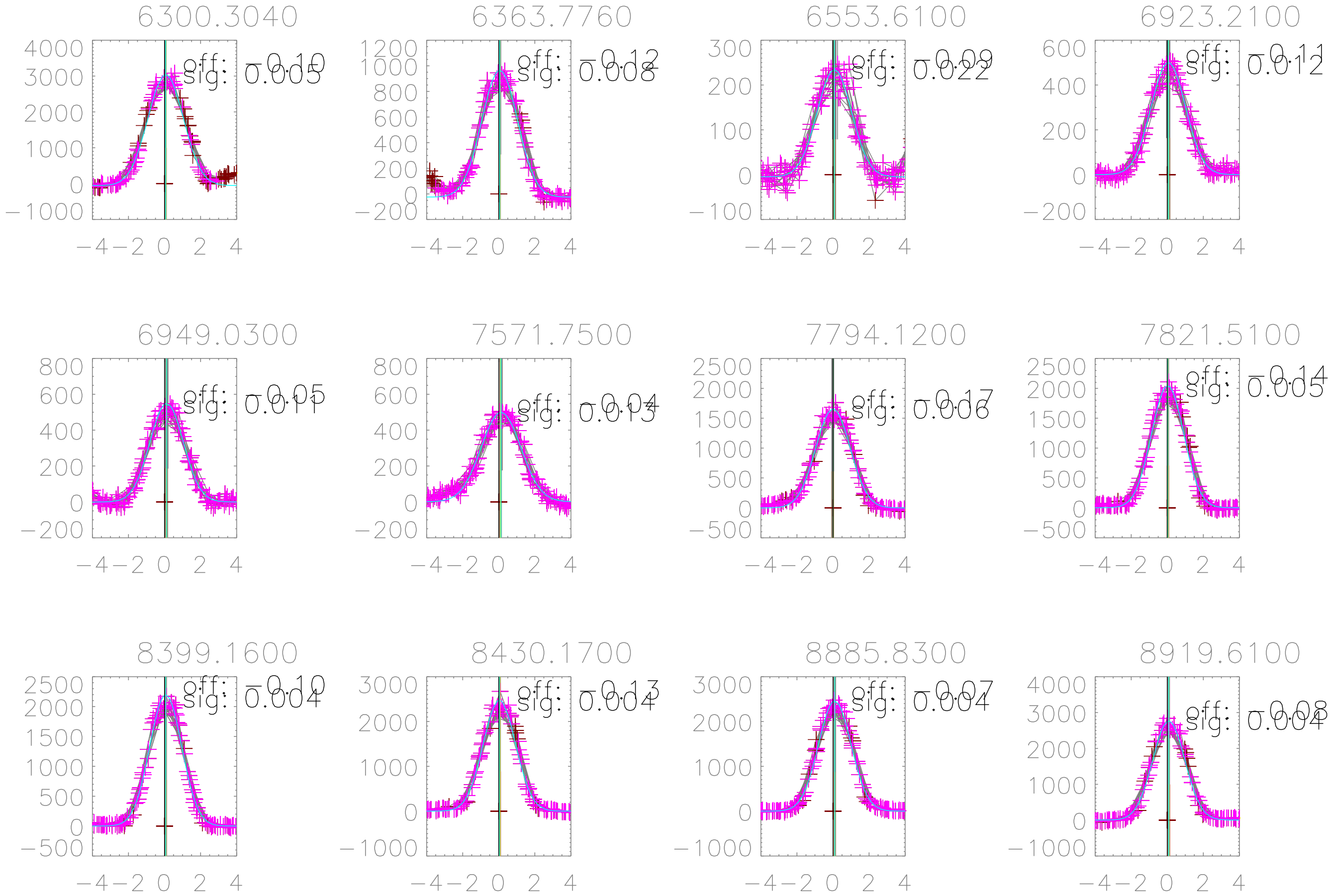


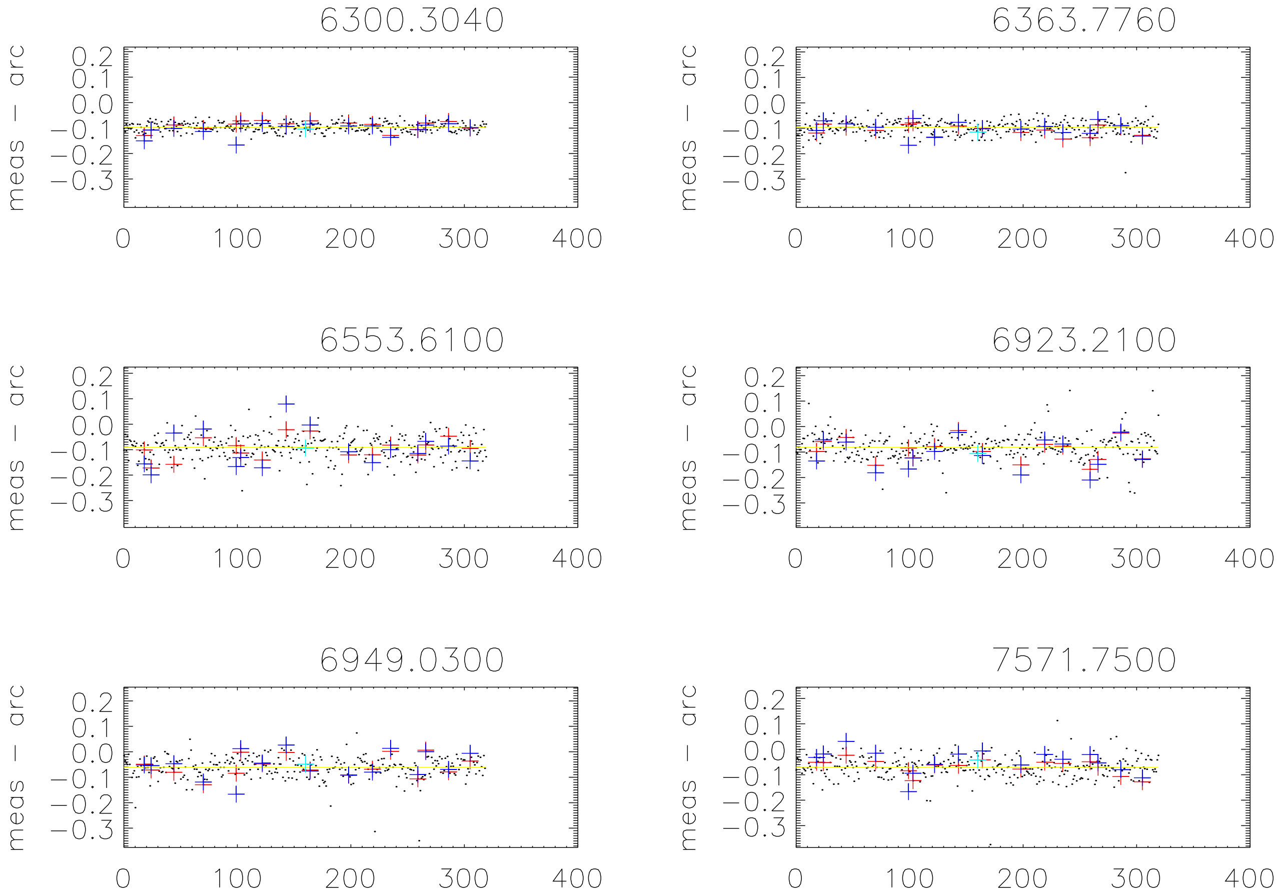
PLATE=0626 MJD=52057 Scattered Light on sdR-r2-00010120.fit

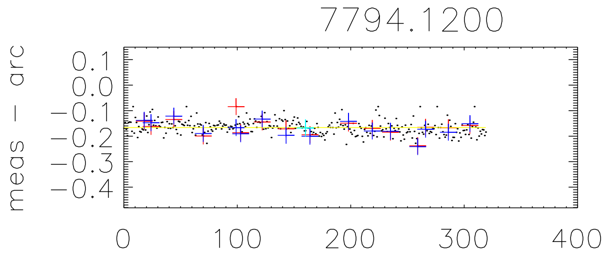


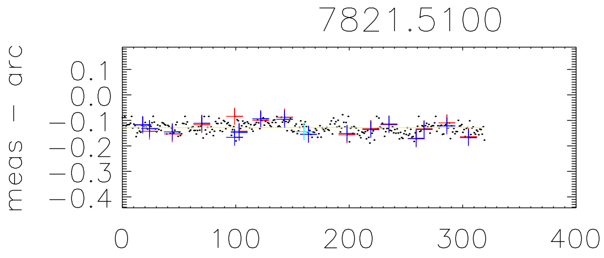
Tue Feb 26 07:25:20 2008

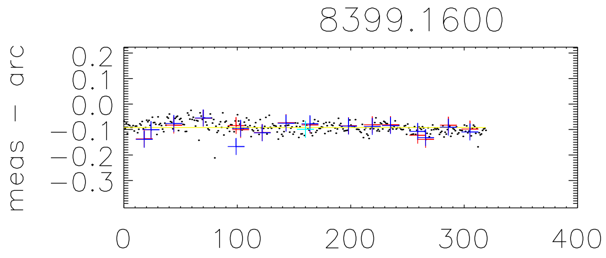

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r2-00010120.fit

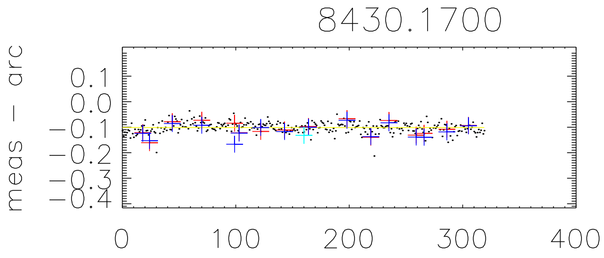

6300.3040
off: −0.10
sig: 0.005
6363.7760
off: −0.12
sig: 0.008
6553.6100
off: −0.09
sig: 0.022
6923.2100
off: −0.11
sig: 0.012
6949.0300
off: −0.05
sig: 0.011
7571.7500
off: −0.04
sig: 0.013
7794.1200
off: −0.17
sig: 0.006
7821.5100
off: −0.14
sig: 0.005
8399.1600
off: −0.10
sig: 0.004
8430.1700
off: −0.13
sig: 0.004
8885.8300
off: −0.07
sig: 0.004
8919.6100
off: −0.08
sig: 0.004
−4 −2 0 2 4

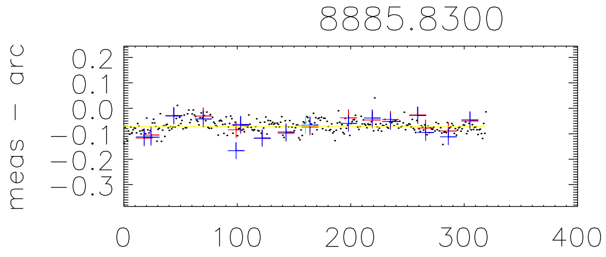

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

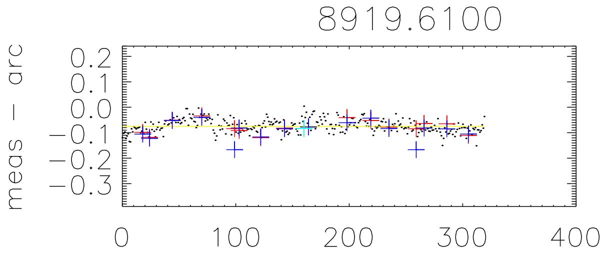

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

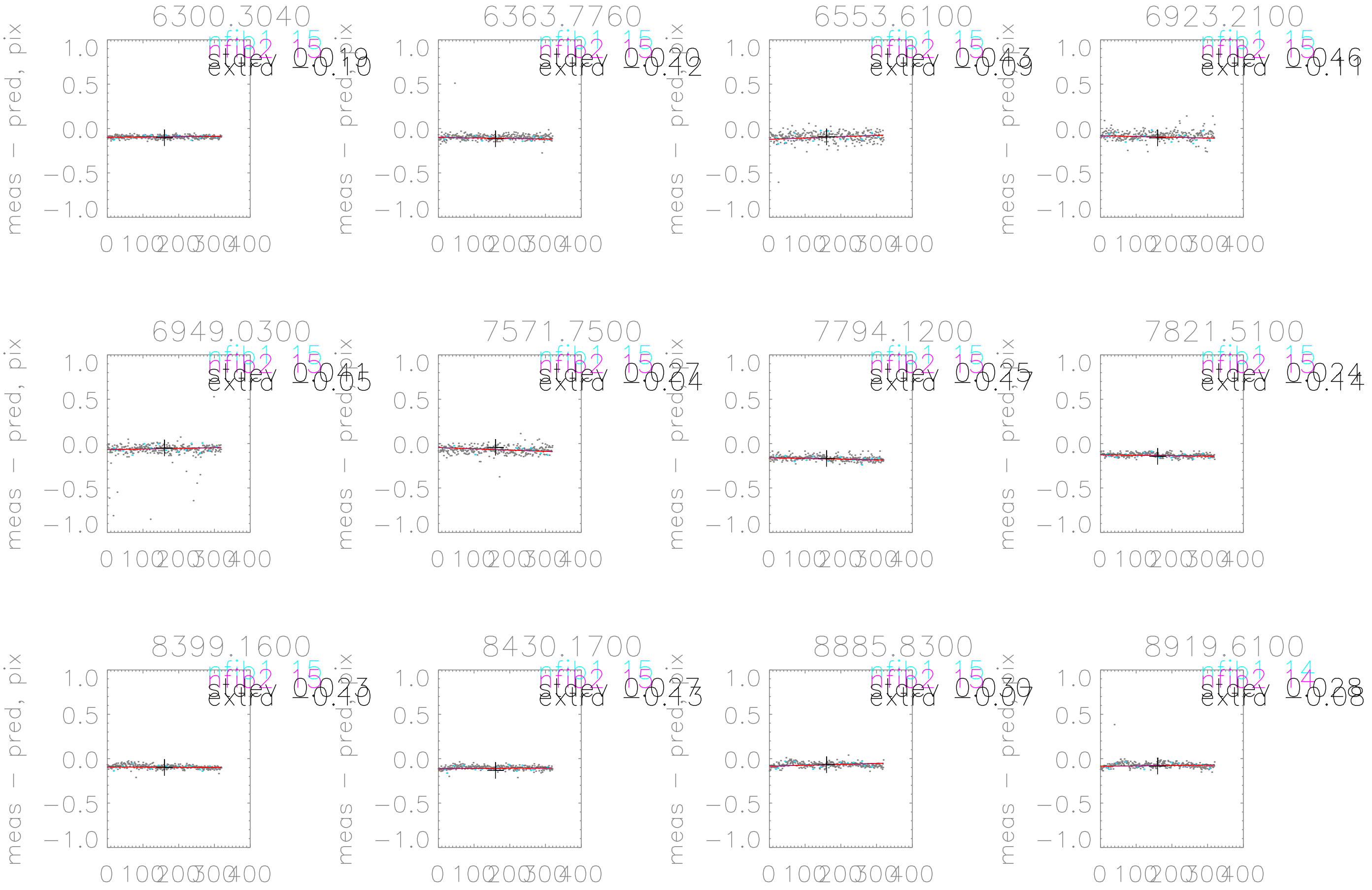

7821.5100
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

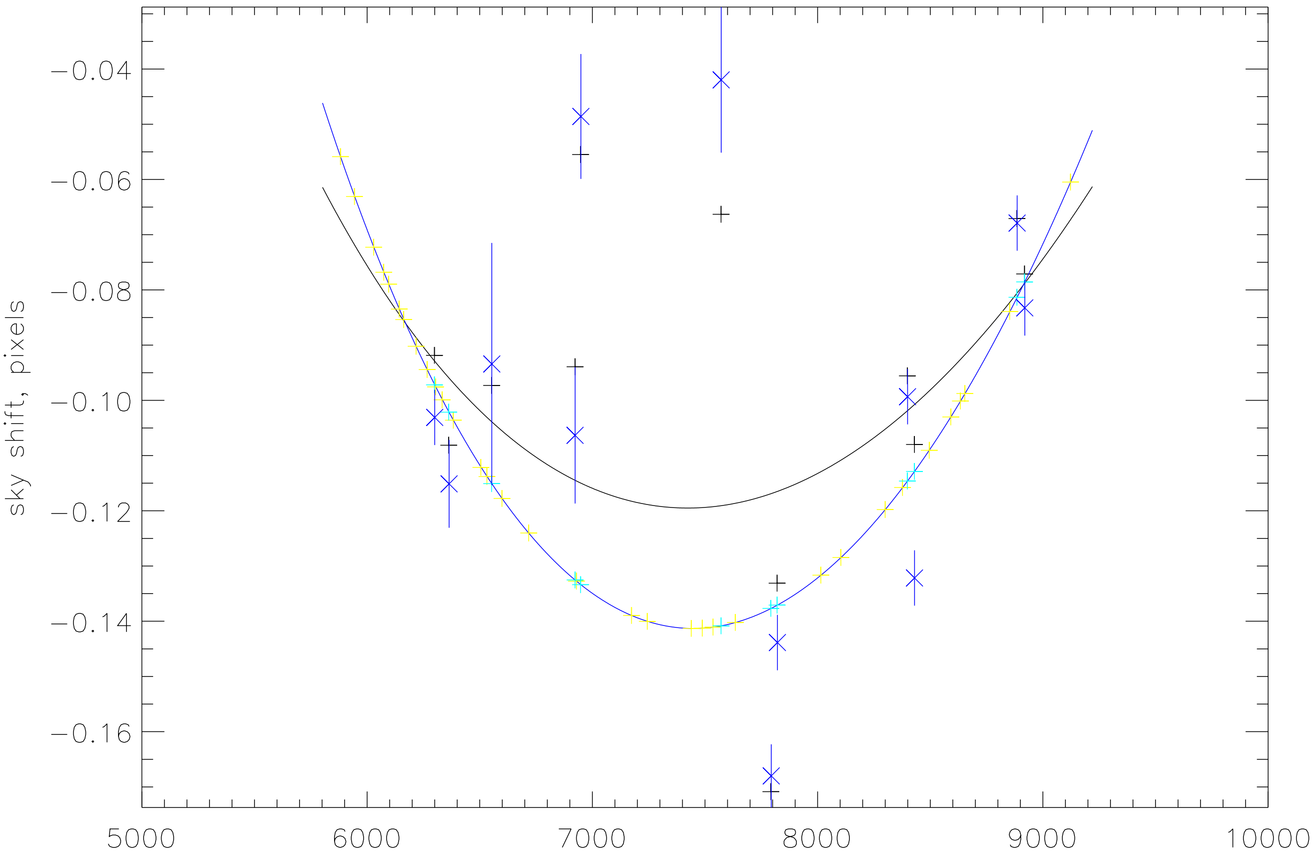

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

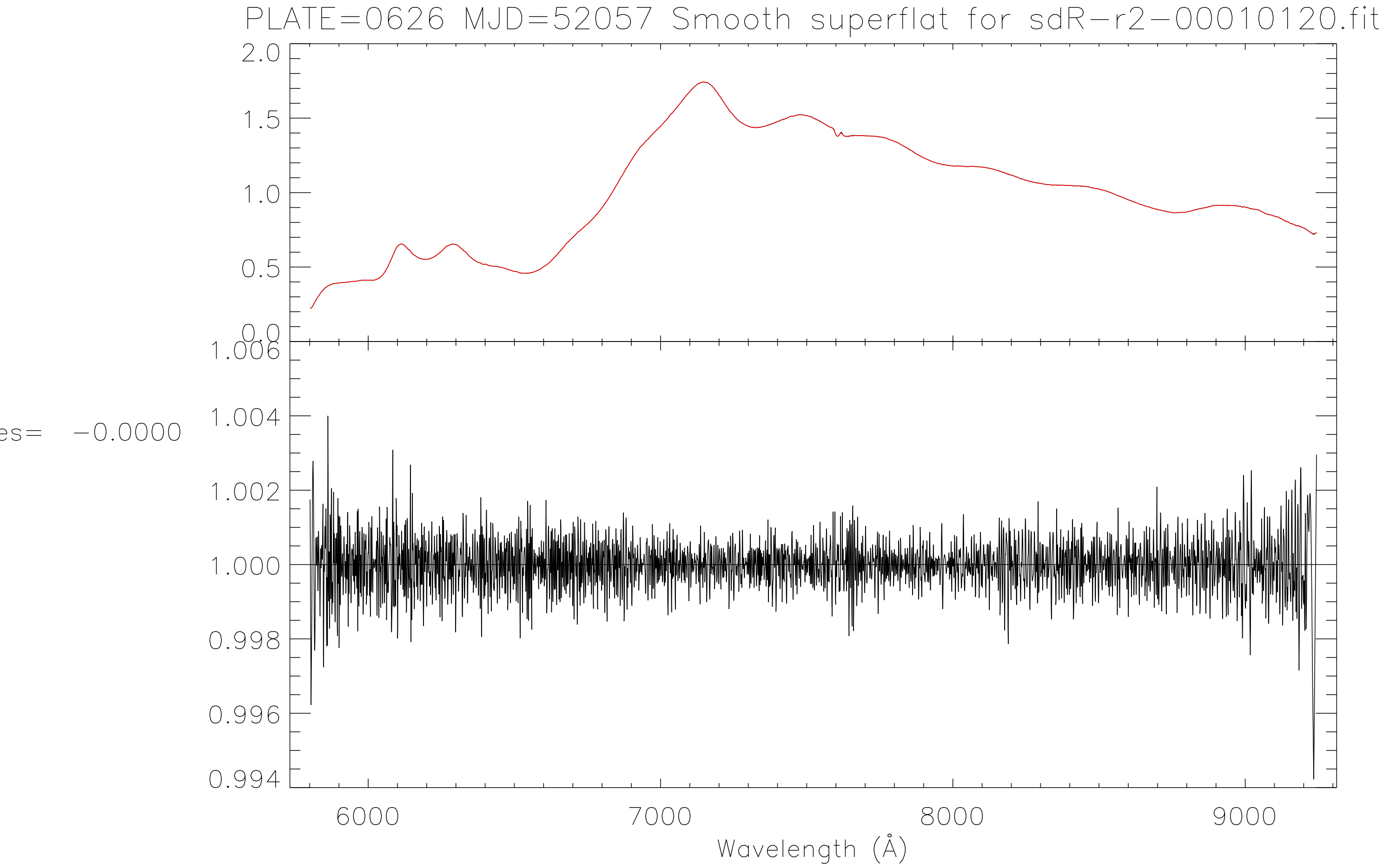

8430.1700
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

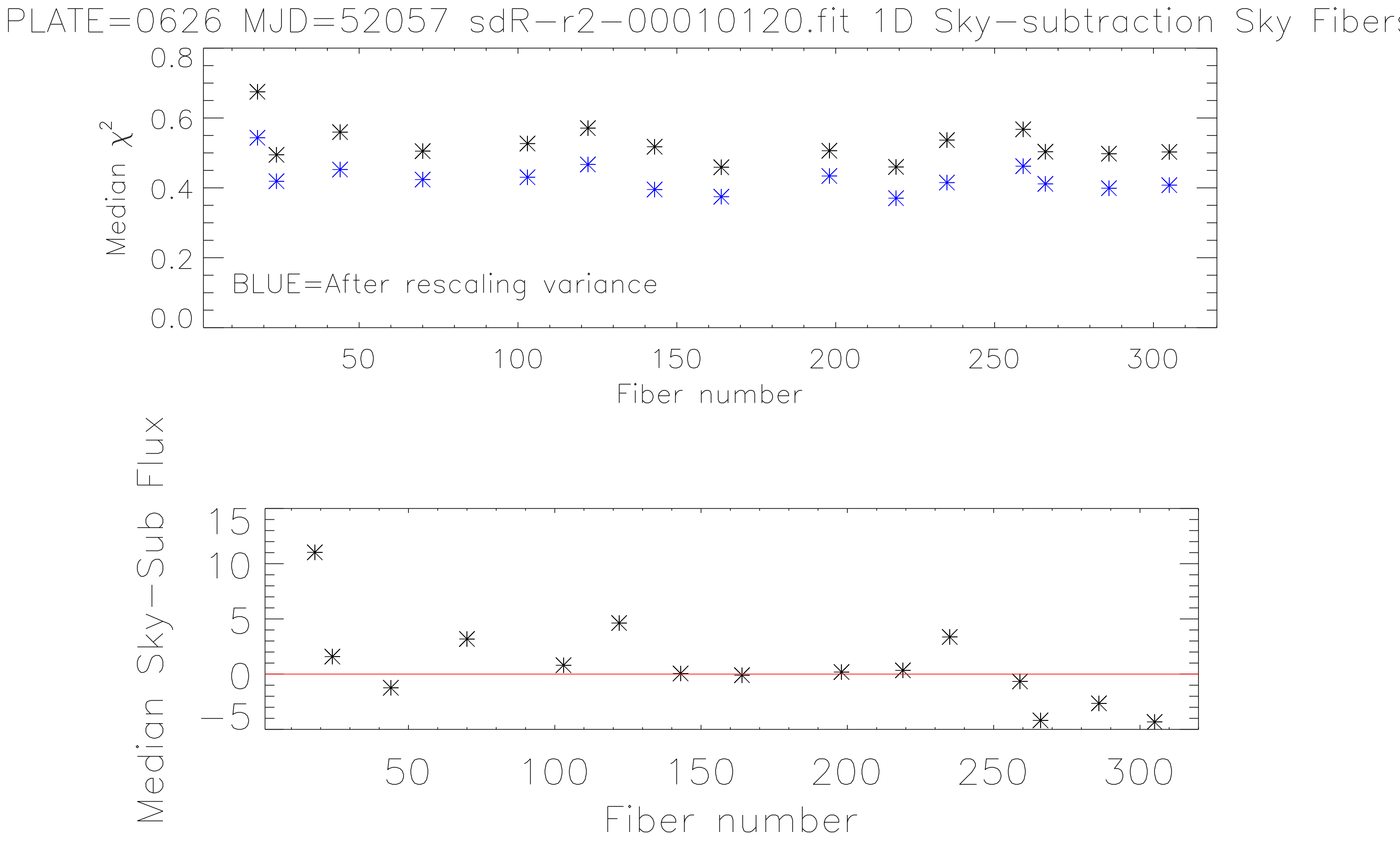

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

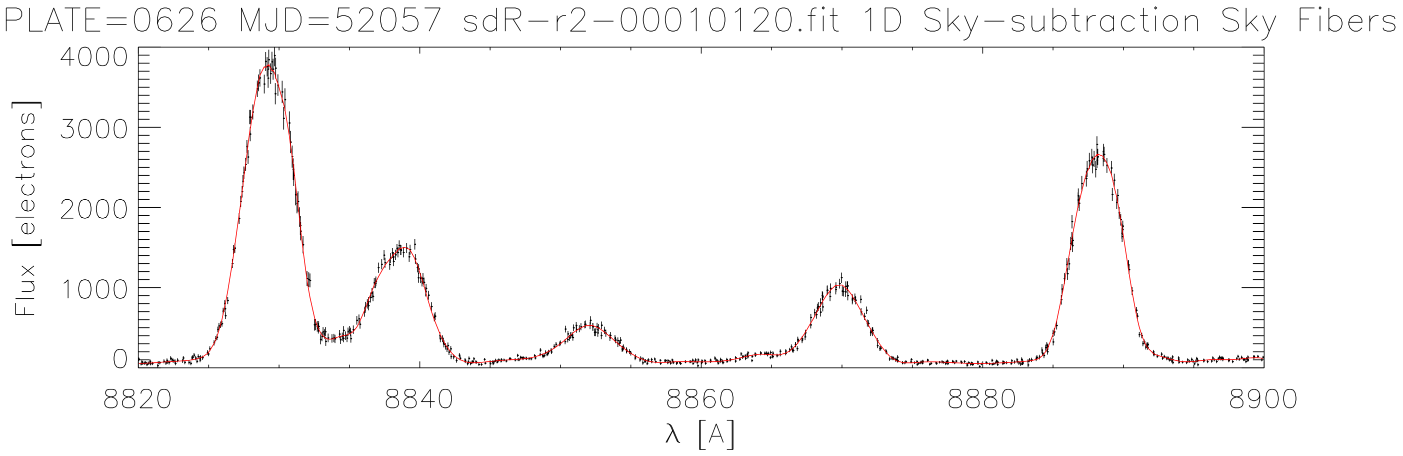

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

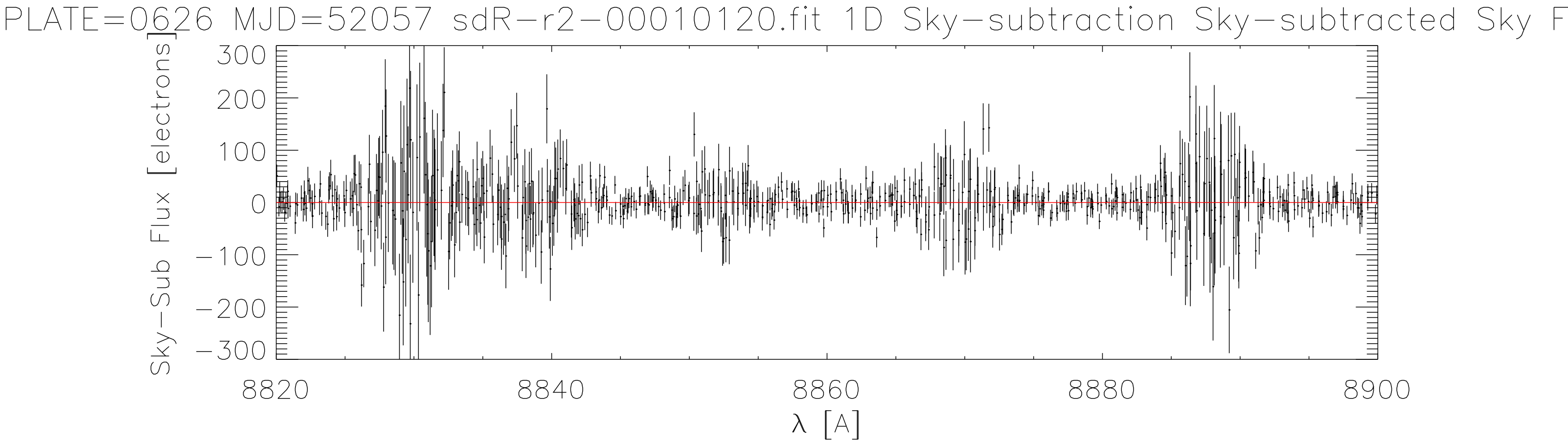

6300.3040
nfib1 15
nfib2 15
stdev 0.019
extrd −0.10
6363.7760
nfib1 15
nfib2 15
stdev 0.020
extrd −0.12
6553.6100
nfib1 15
nfib2 15
stdev 0.043
extrd −0.09
6923.2100
nfib1 15
nfib2 15
stdev 0.046
extrd −0.11
6949.0300
nfib1 15
nfib2 15
stdev 0.041
extrd −0.05
7571.7500
nfib1 15
nfib2 15
stdev 0.027
extrd −0.04
7794.1200
nfib1 15
nfib2 15
stdev 0.025
extrd −0.17
7821.5100
nfib1 15
nfib2 15
stdev 0.024
extrd −0.14
8399.1600
nfib1 15
nfib2 15
stdev 0.023
extrd −0.10
8430.1700
nfib1 15
nfib2 15
stdev 0.027
extrd −0.13
8885.8300
nfib1 15
nfib2 15
stdev 0.030
extrd −0.07
8919.6100
nfib1 14
nfib2 14
stdev 0.028
extrd −0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
−0.04
−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
5000
6000
7000
8000
9000
10000

PLATE=0626 MJD=52057 Smooth superflat for sdR-r2-00010120.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)

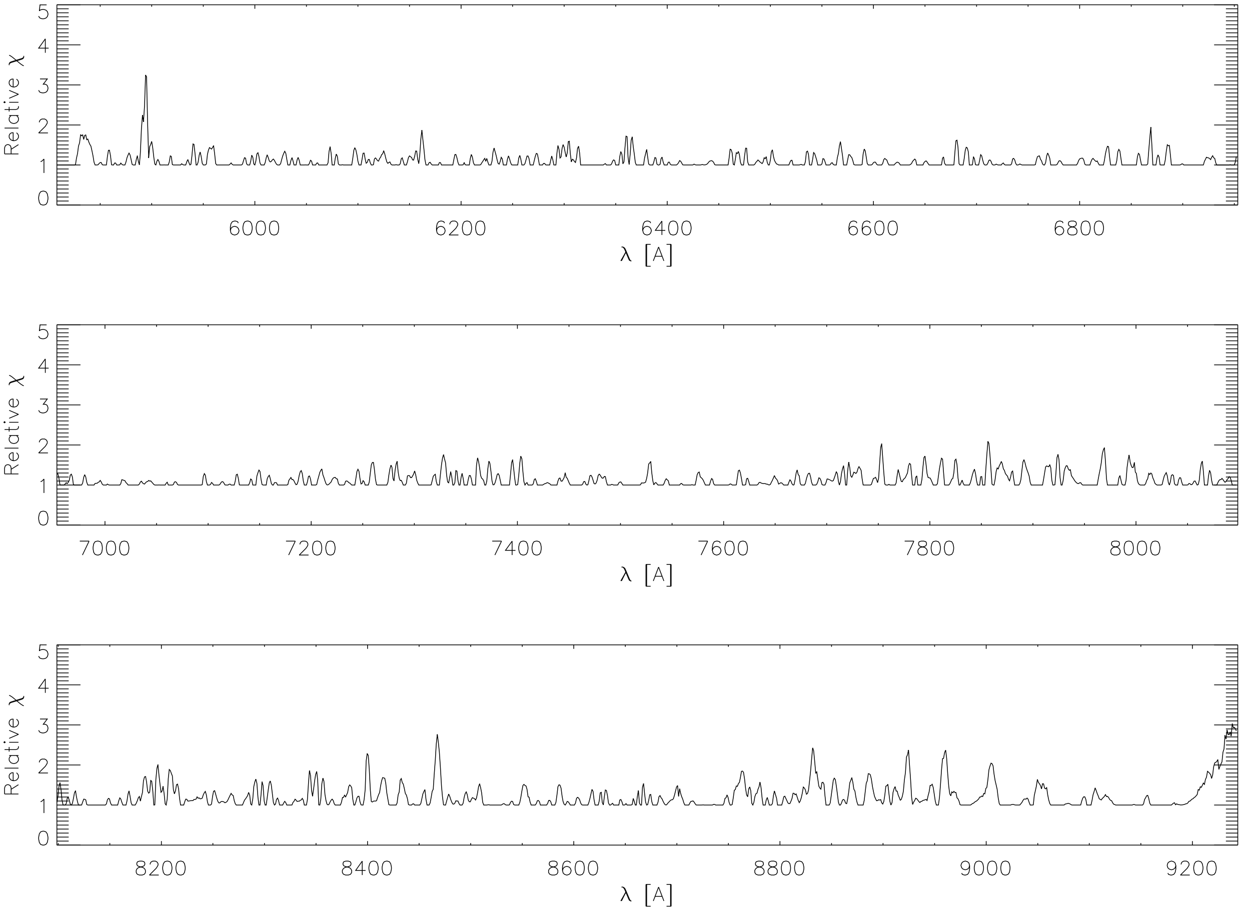

PLATE=0626 MJD=52057 sdR-r2-00010120.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
50
100
150
200
250
300
Fiber number

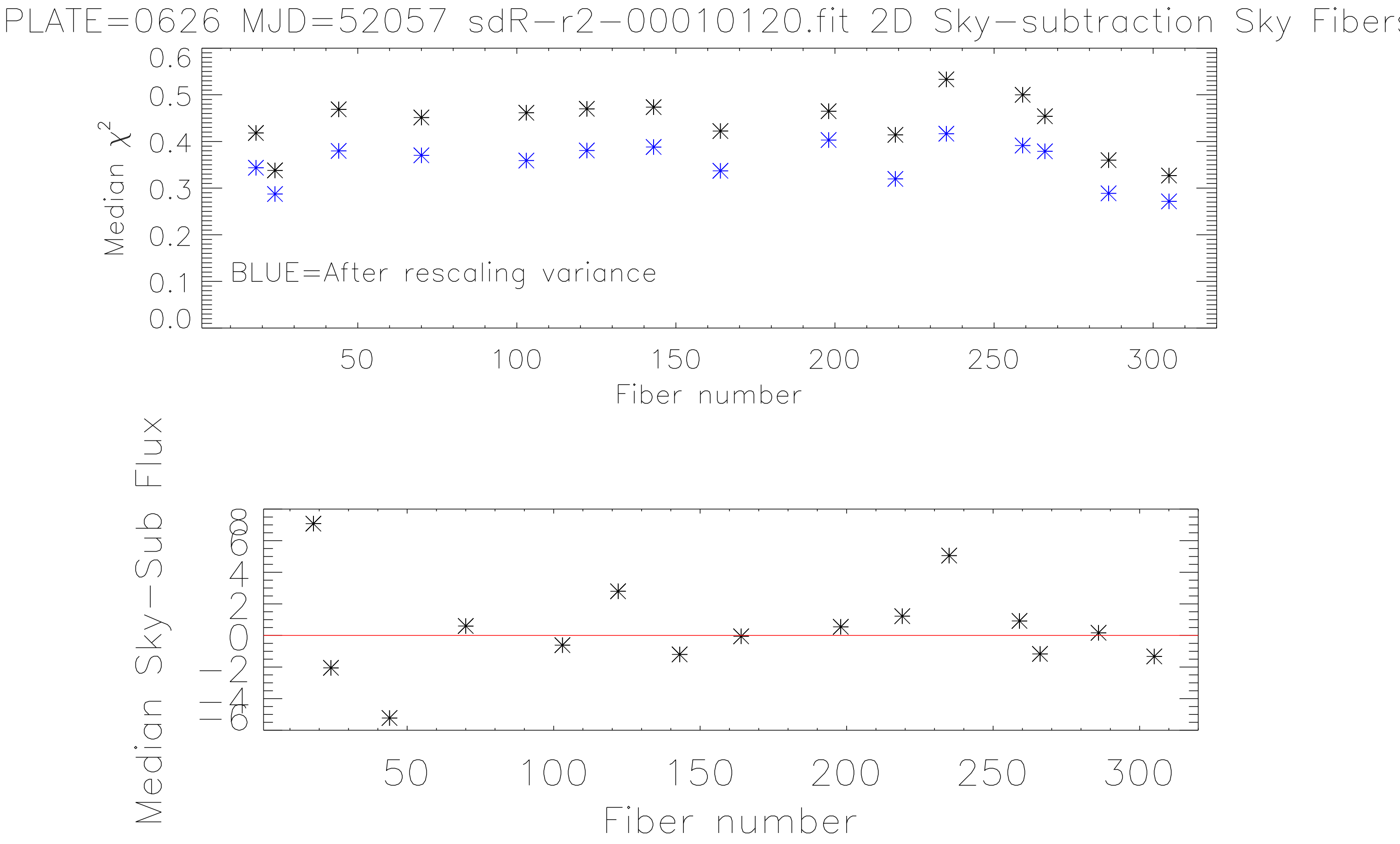

PLATE=0626 MJD=52057 sdR-r2-00010120.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

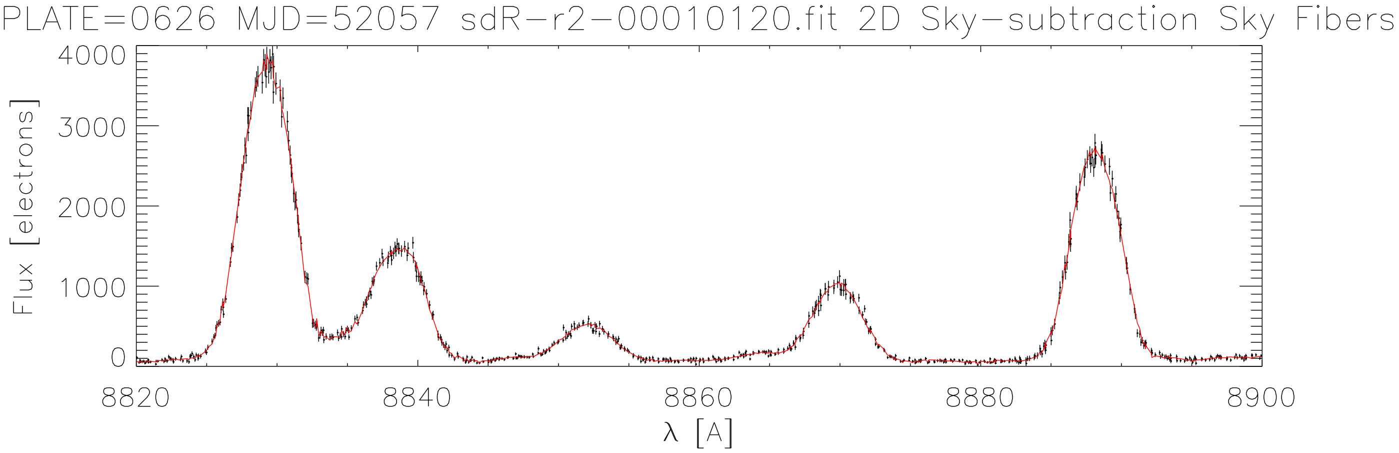

PLATE=0626 MJD=52057 sdR-r2-00010120.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 15

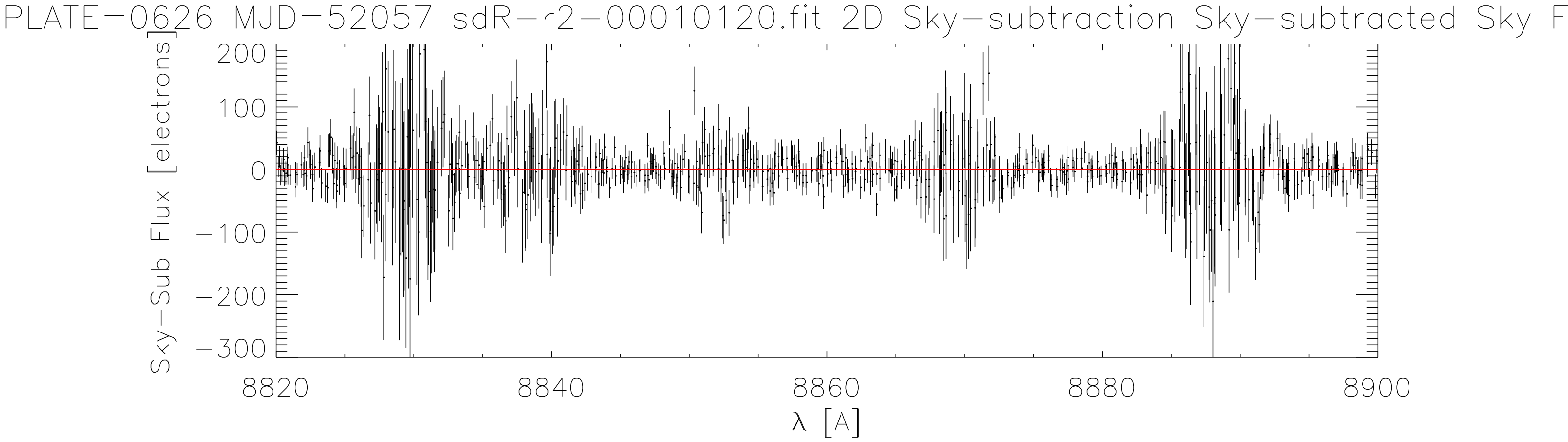
PLATE=0626 MJD=52057 sdR-r2-00010120.fit 1D Sky-subtraction Rescaled Errors




PLATE=0626 MJD=52057 sdR-r2-00010120.fit 2D Sky-subtraction Sky Fibers
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
8
6
4
2
0
-2
-4
-6
50
100
150
200
250
300
Fiber number



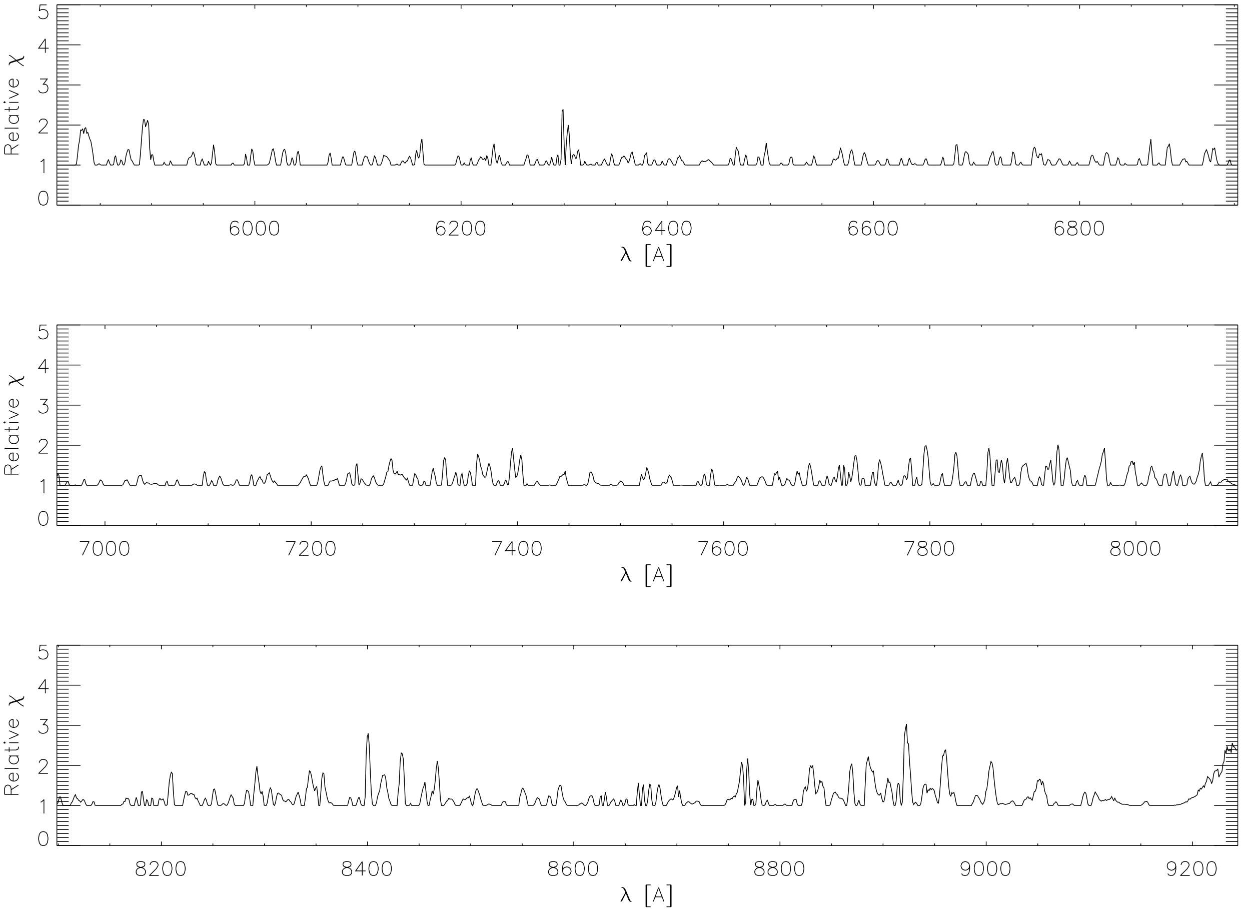
PLATE=0626 MJD=52057 sdR-r2-00010120.fit 2D Sky-subtraction Sky Fibers

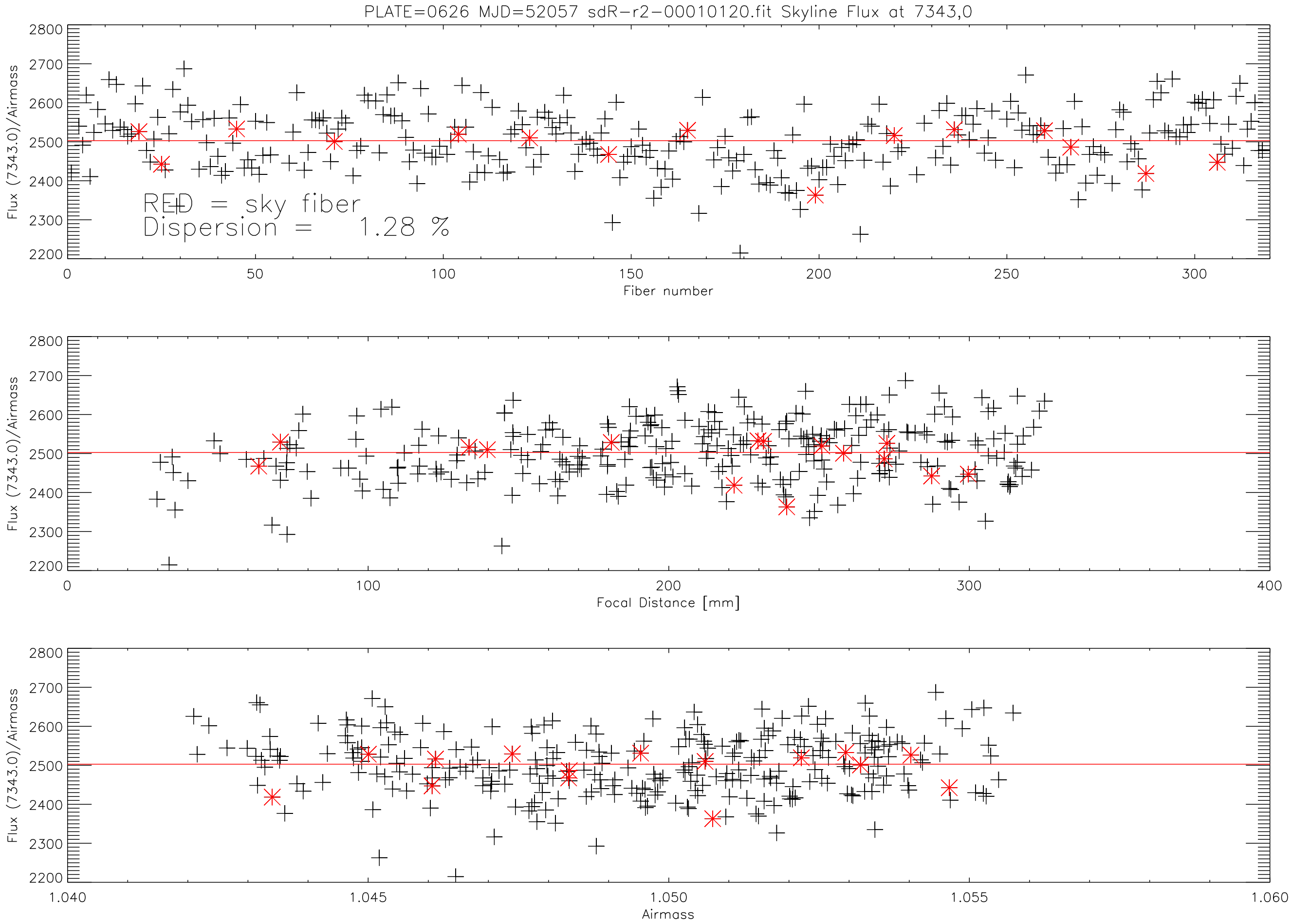


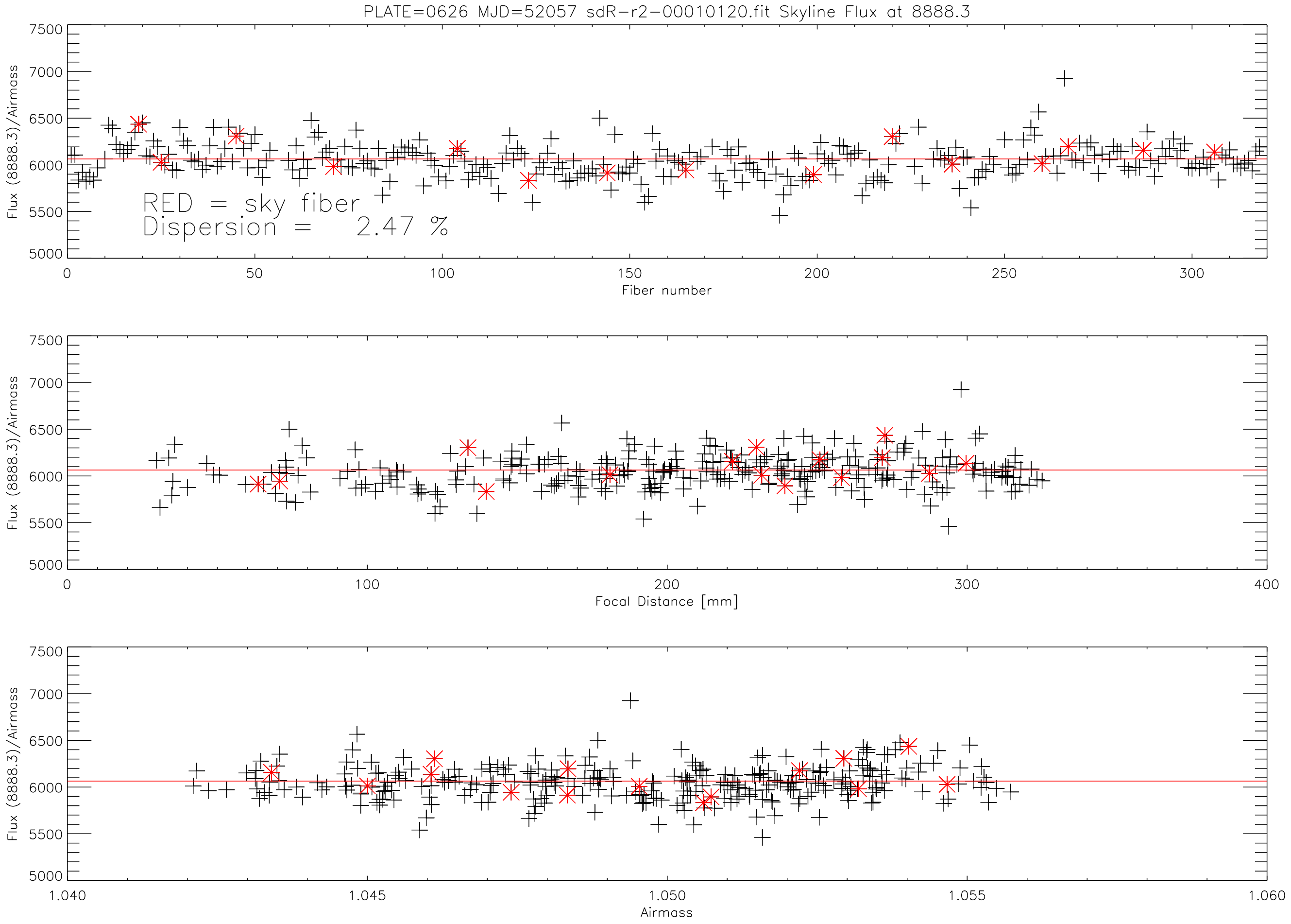
PLATE=0626 MJD=52057 sdR-r2-00010120.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 15

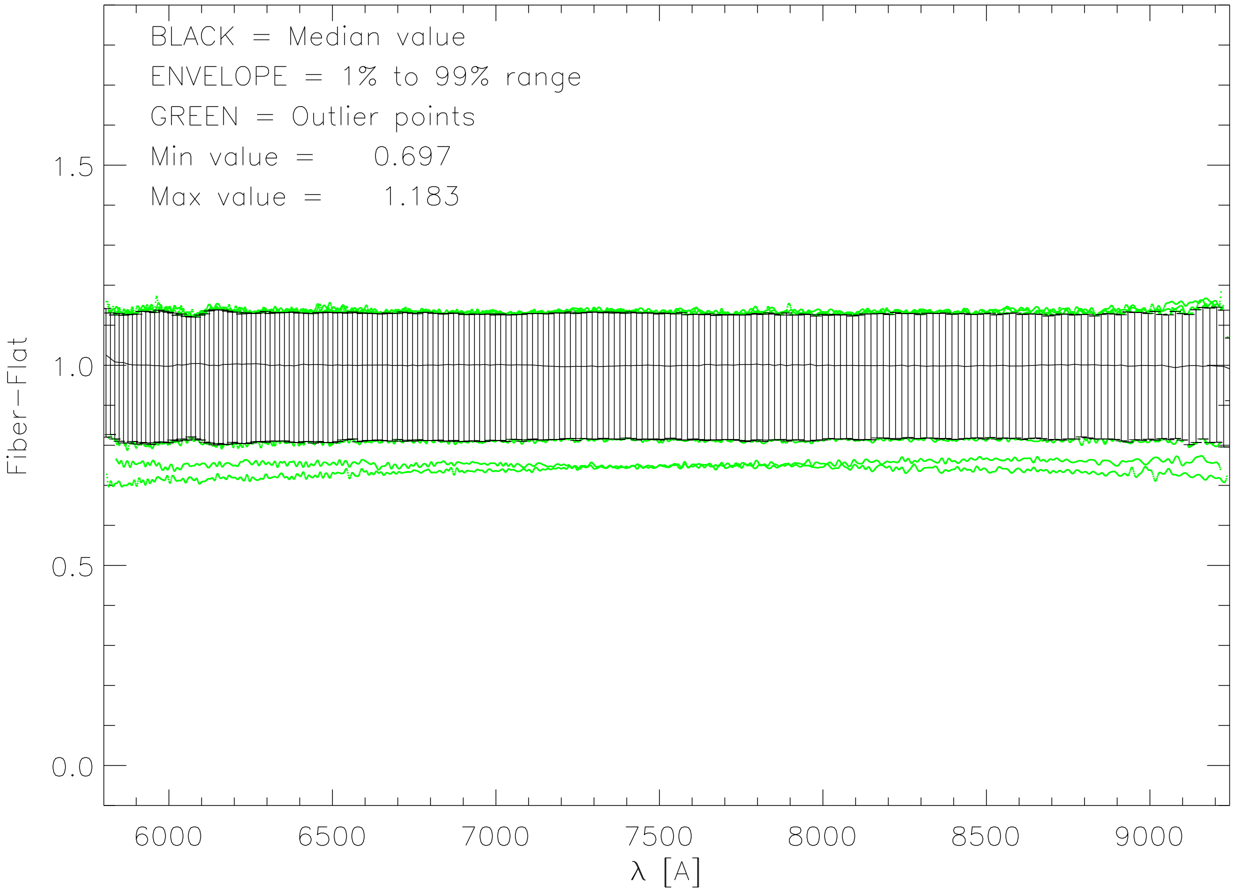
PLATE=0626 MJD=52057 sdR-r2-00010120.fit 2D Sky-subtraction Rescaled Errors



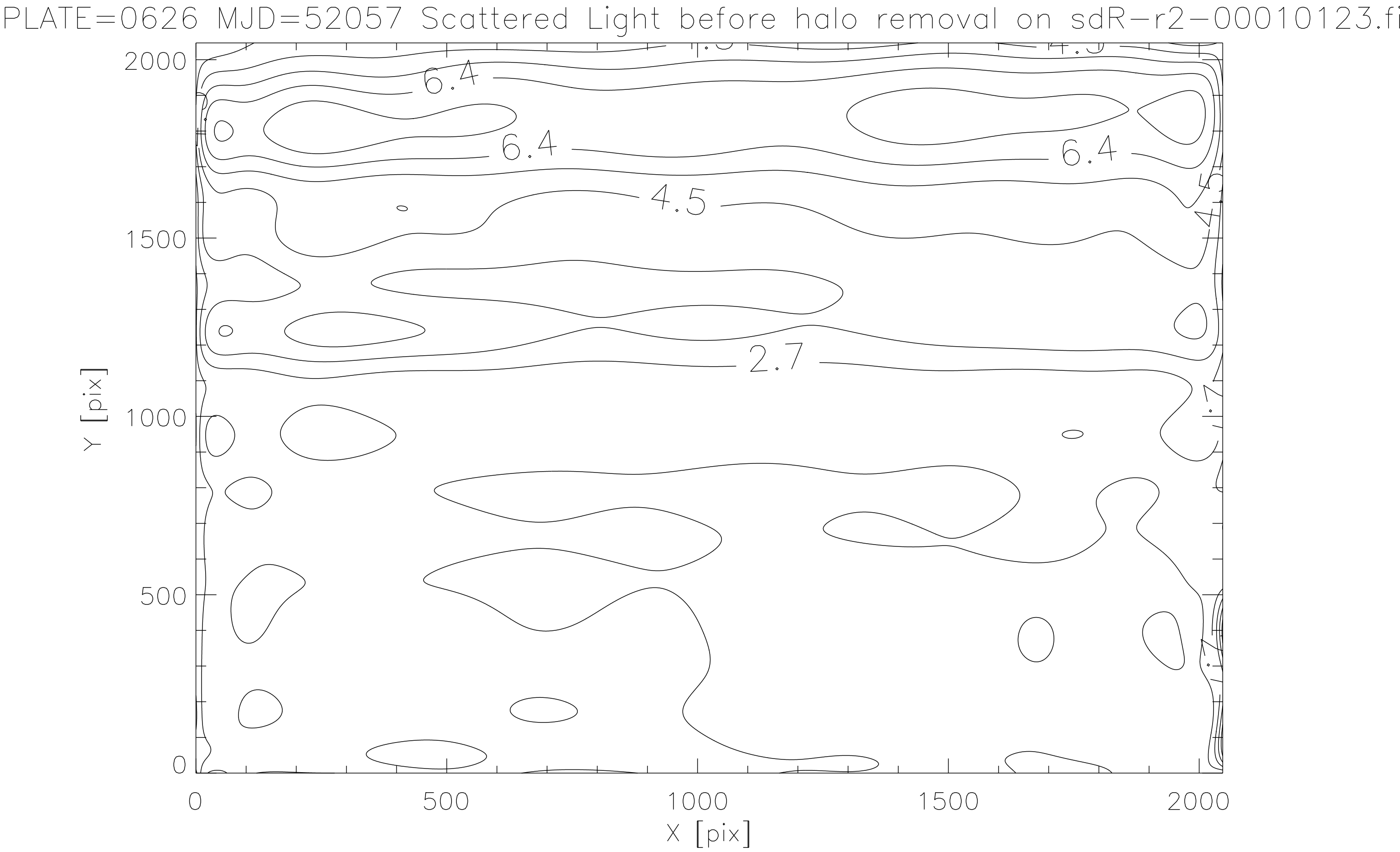

PLATE=0626 MJD=52057 sdR-r2-00010120.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2800
2700
2600
2500
2400
2300
2200
RED = sky fiber
Dispersion = 1.28 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2800
2700
2600
2500
2400
2300
2200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2800
2700
2600
2500
2400
2300
2200
1.040
1.045
1.050
1.055
1.060
Airmass


PLATE=0626 MJD=52057 sdR-r2-00010120.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
7500
7000
6500
6000
5500
5000
RED = sky fiber
Dispersion = 2.47 %
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
1.040
1.045
1.050
1.055
1.060
Airmass

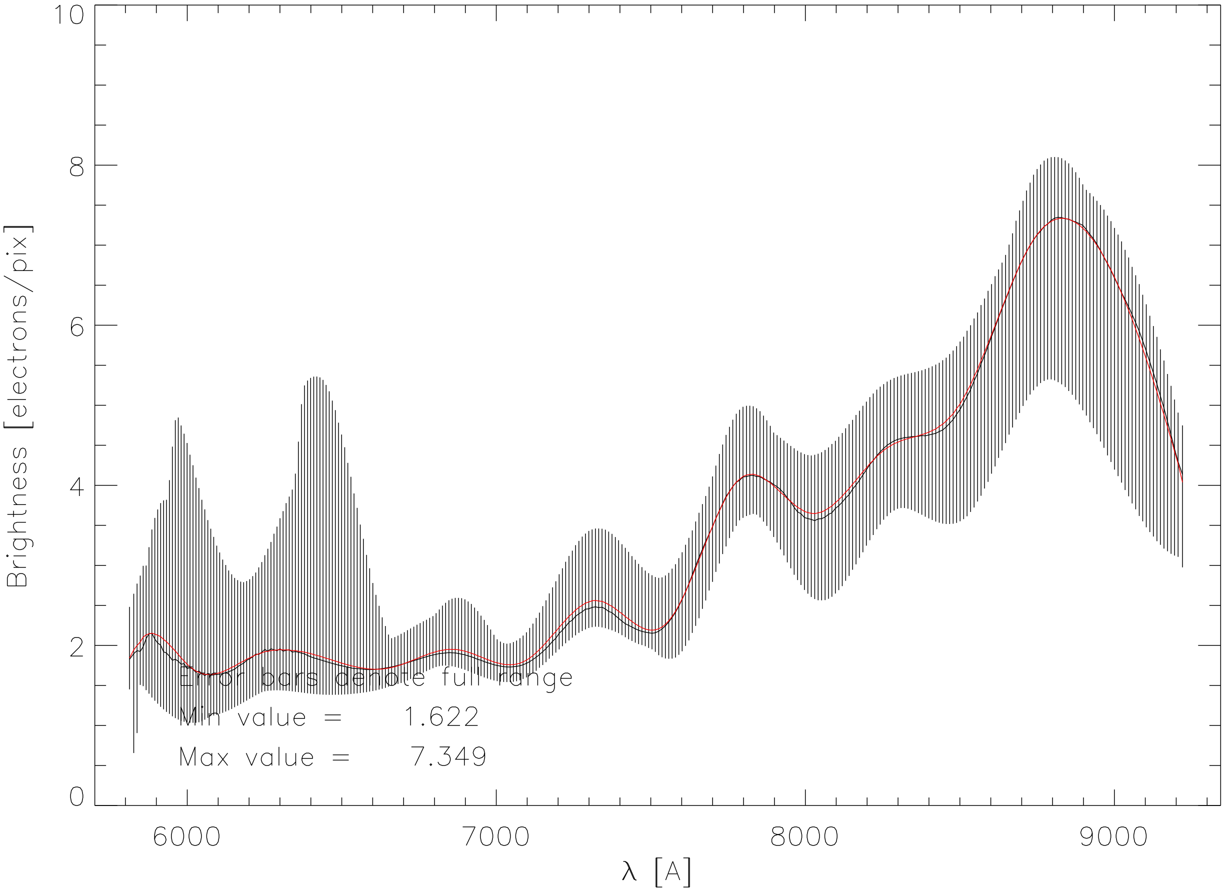
PLATE=0626 MJD=52057 Fiber-Flats for sdR-r2-00010121.fit



Tue Feb 26 07:26:33 2008

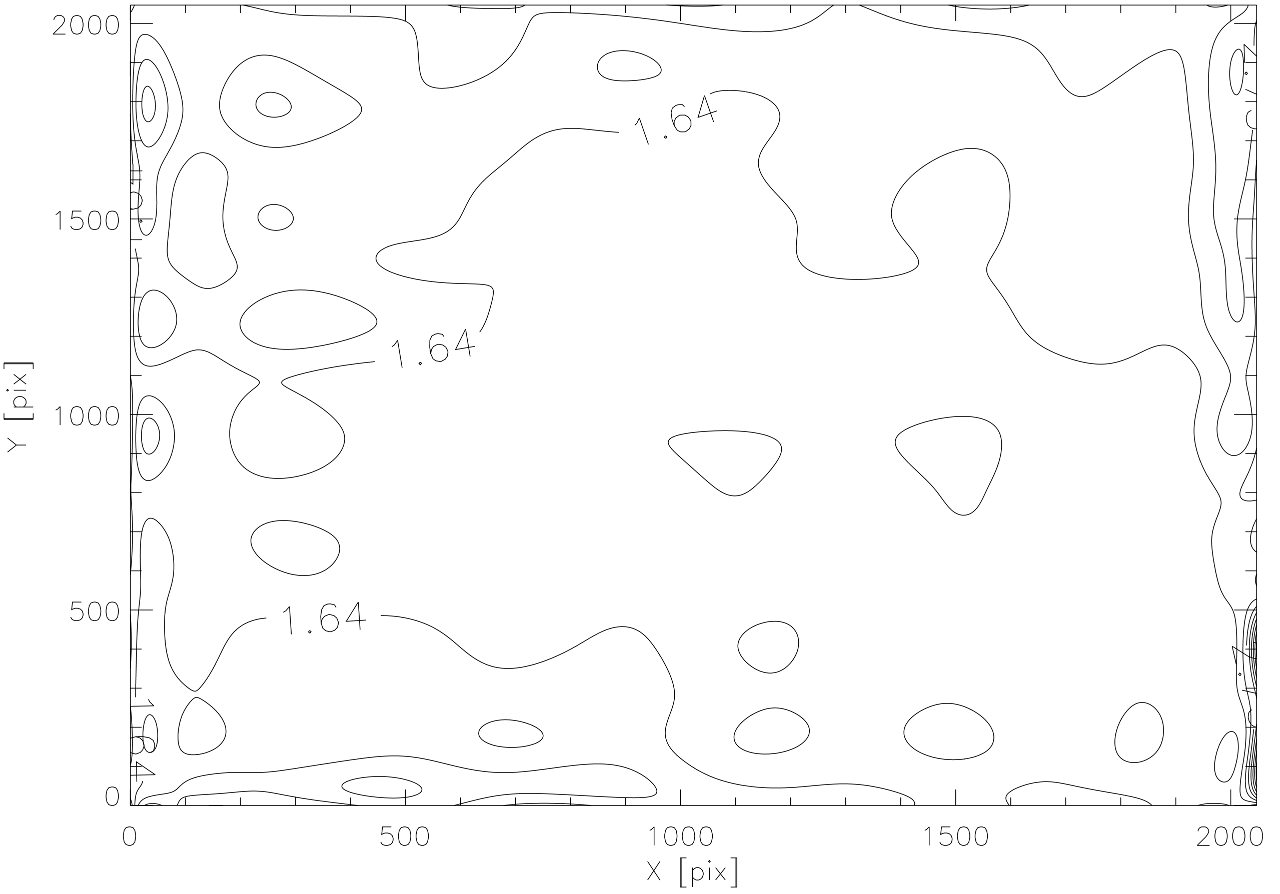


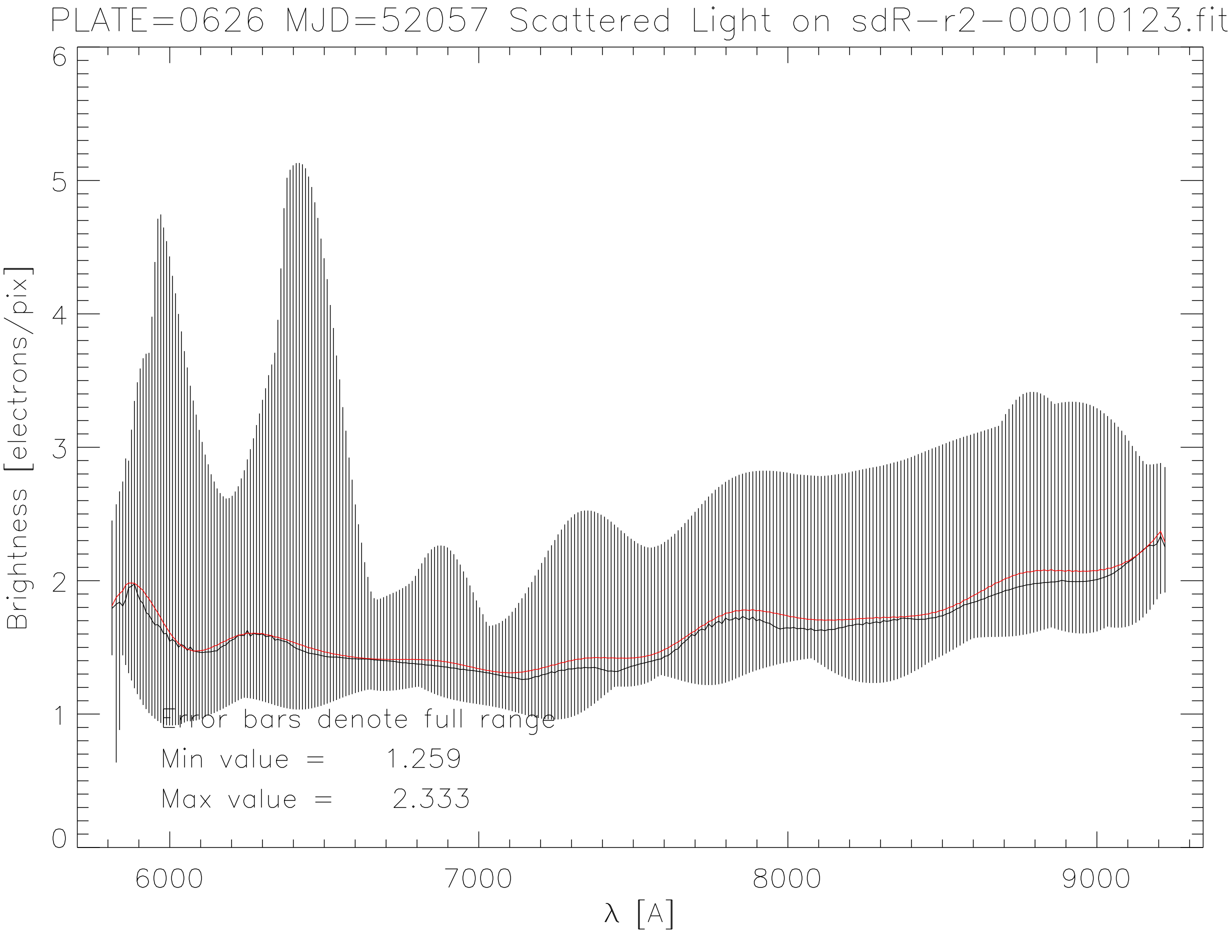
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010123.fi



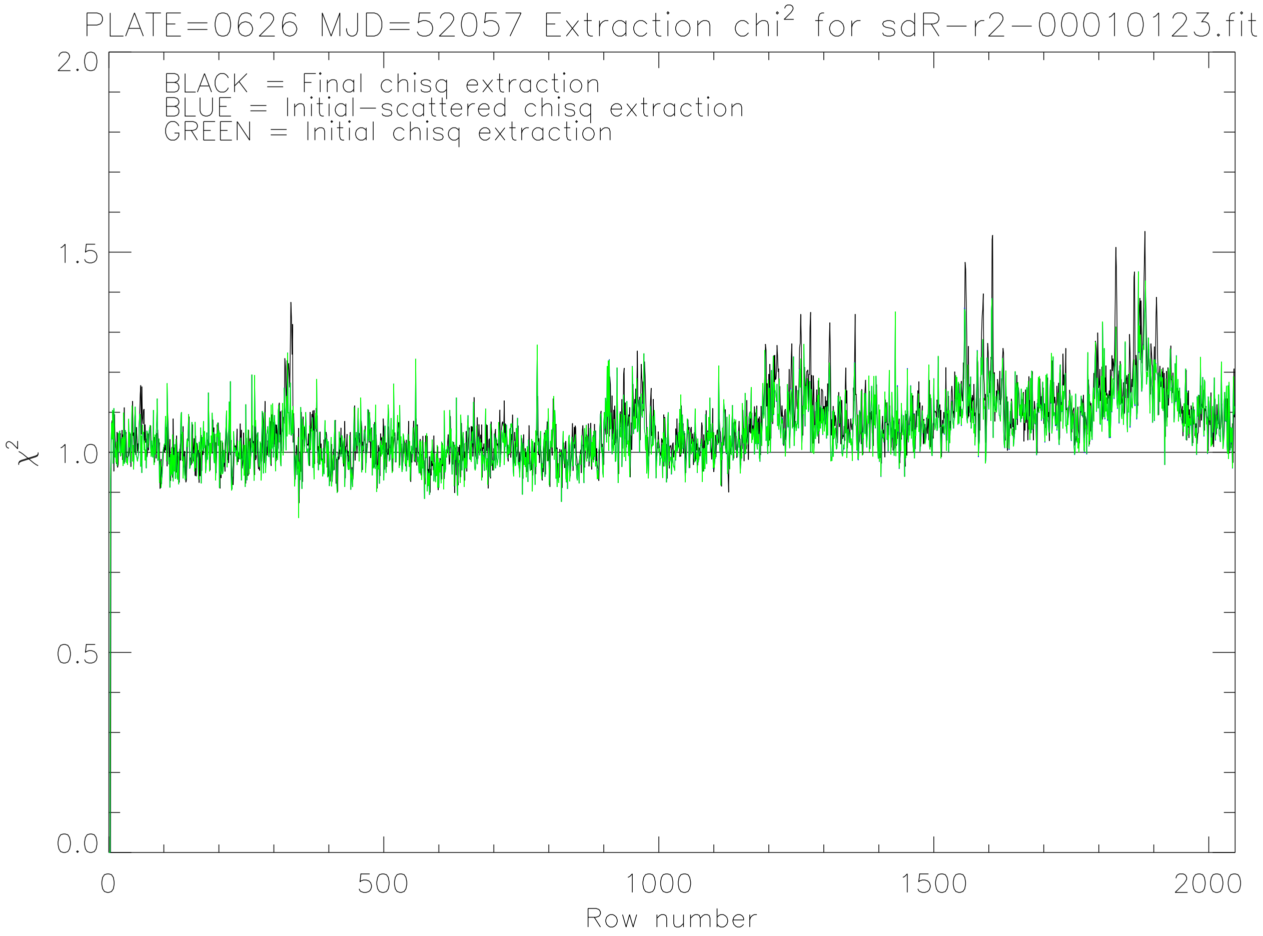
PLATE=0626 MJD=52057 Scattered Light before halo removal on sdR-r2-00010123.fi

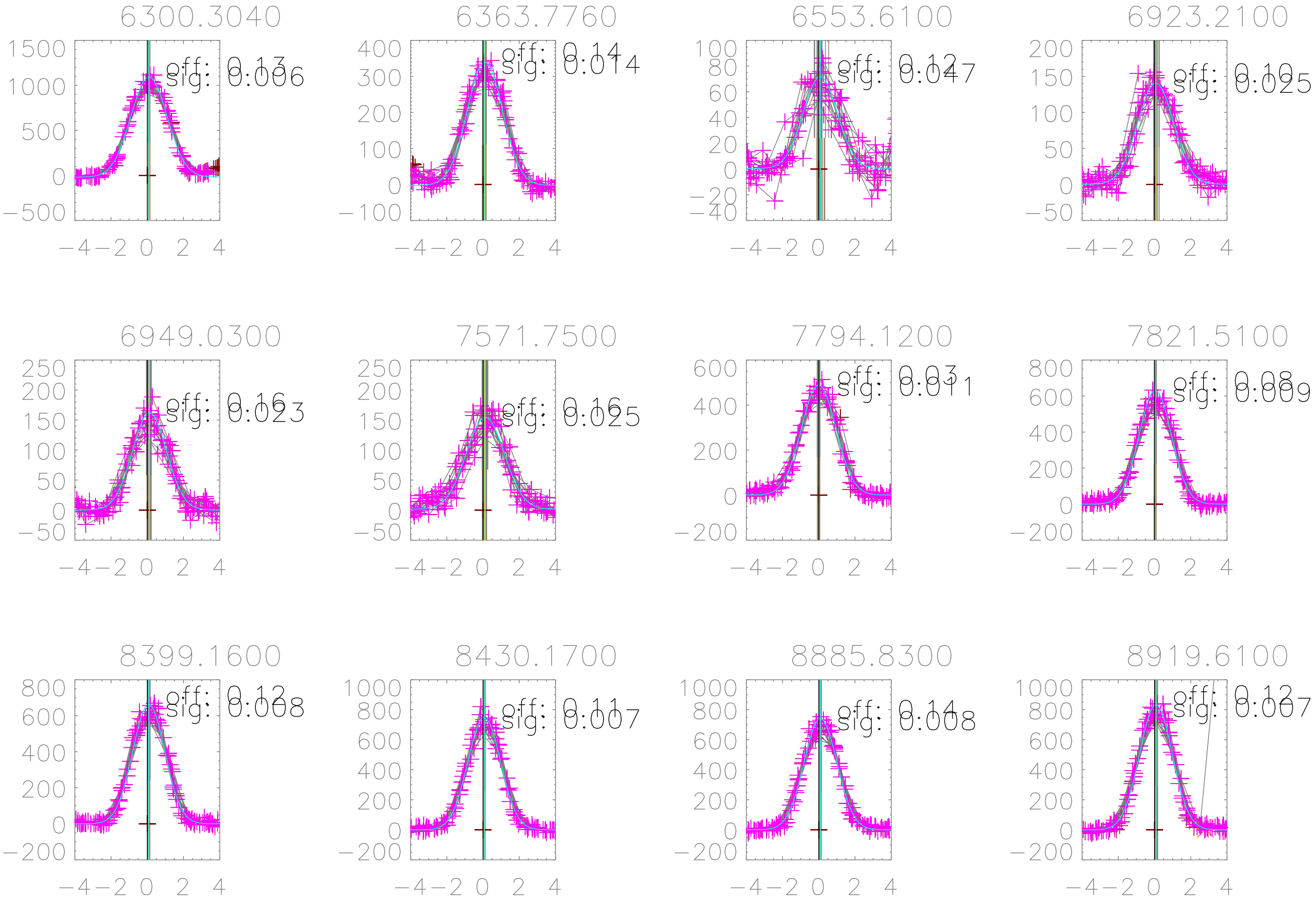
Tue Feb 26 07:27:14 2008

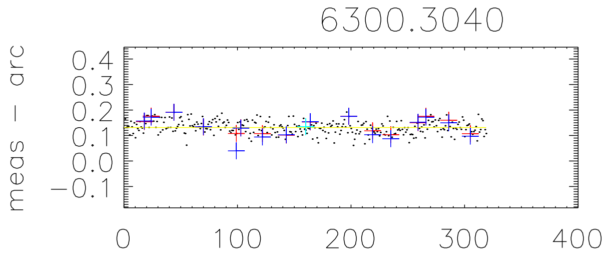

PLATE=0626 MJD=52057 Scattered Light on sdR-r2-00010123.fit

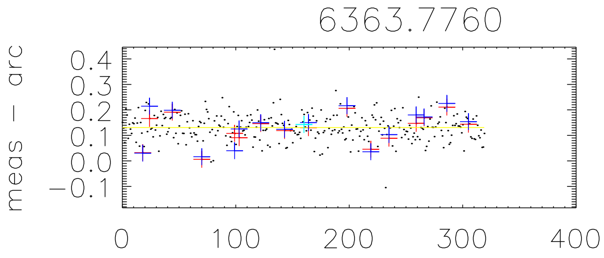


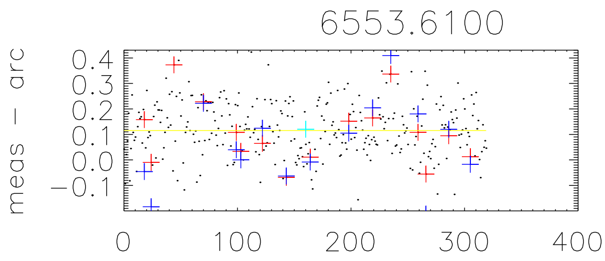
Tue Feb 26 07:29:53 2008

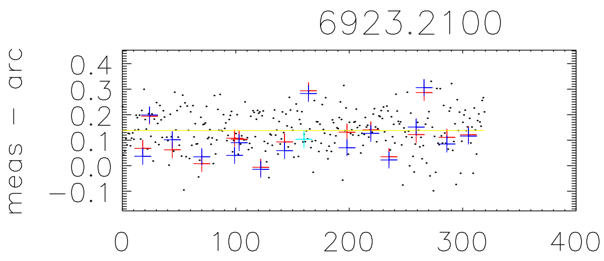

PLATE=0626 MJD=52057 Extraction chi^2 for sdR-r2-00010123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
0
500
1000
1500
2000
Row number

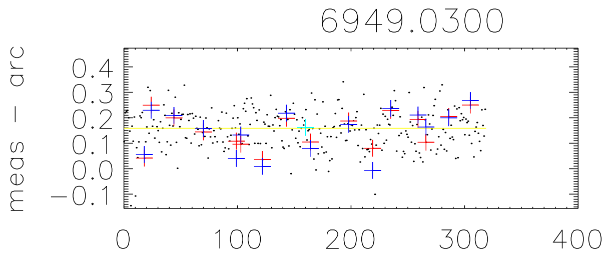

6300.3040
off: 0.13
sig: 0.006
6363.7760
off: 0.14
sig: 0.014
6553.6100
off: 0.12
sig: 0.047
6923.2100
off: 0.10
sig: 0.025
6949.0300
off: 0.16
sig: 0.023
7571.7500
off: 0.16
sig: 0.025
7794.1200
off: 0.03
sig: 0.011
7821.5100
off: 0.08
sig: 0.009
8399.1600
off: 0.12
sig: 0.008
8430.1700
off: 0.11
sig: 0.007
8885.8300
off: 0.14
sig: 0.008
8919.6100
off: 0.12
sig: 0.007
−4 −2 0 2 4

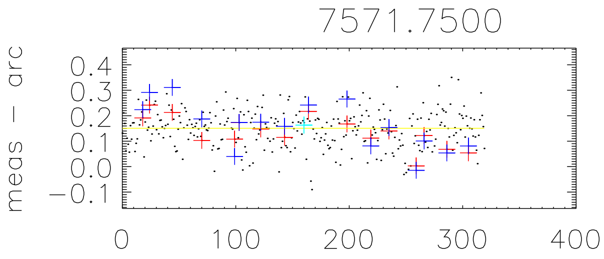

6300.3040

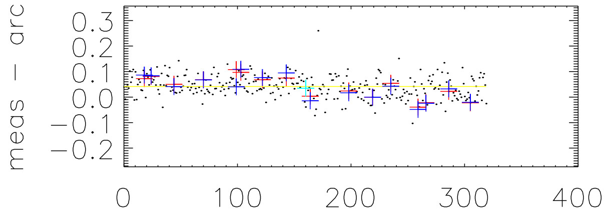

6363.7760

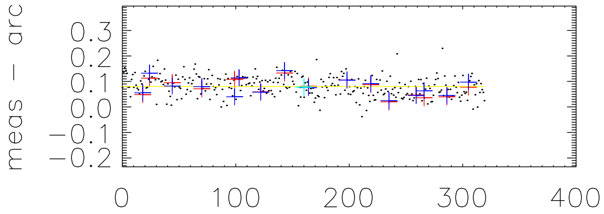

6553.6100

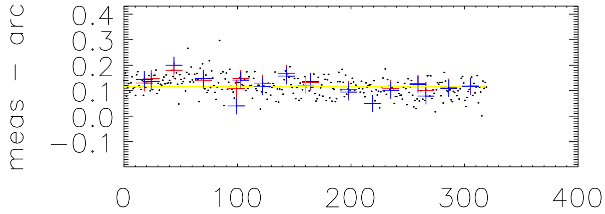

6923.2100

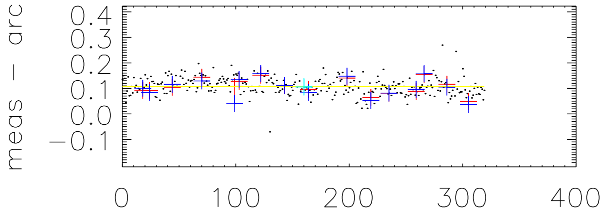

6949.0300

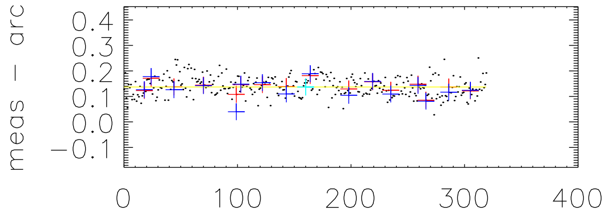

7571.7500

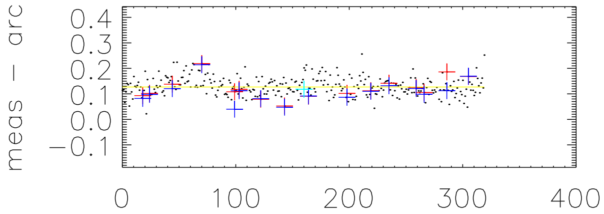

7794.1200

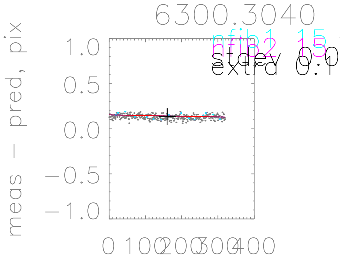

7821.5100

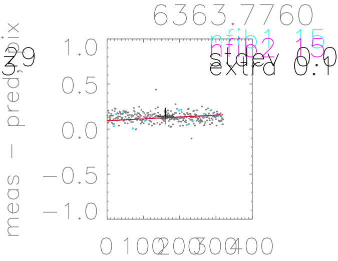

8399.1600

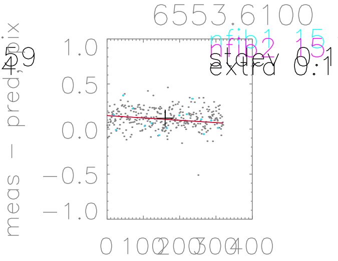

8430.1700

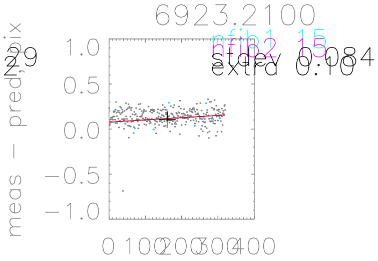

8885.8300

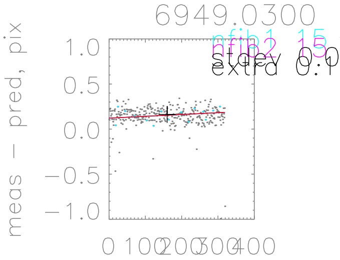

8919.6100

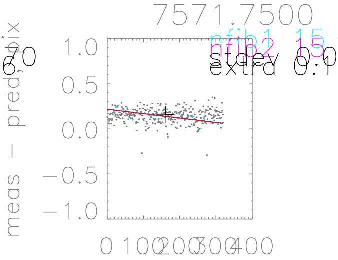

6300.3040
nfib1 15
nfib2 15
stdev 0.029
extrd 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

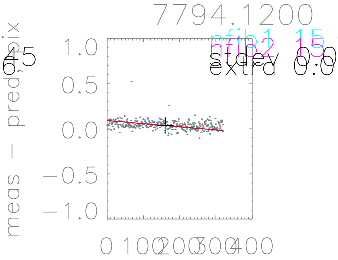

6363.7760
nfib1 15
nfib2 15
stdev 0.059
extrd 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

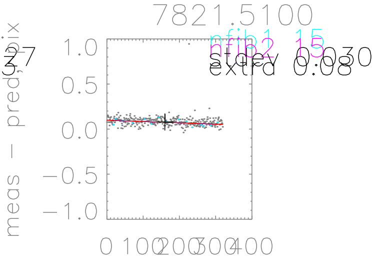

6553.6100
nfib1 15
nfib2 15
stdev 0.129
extrd 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

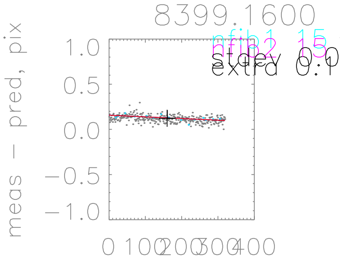

6923.2100
nfib1 15
nfib2 15
stdev 0.084
extrd 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

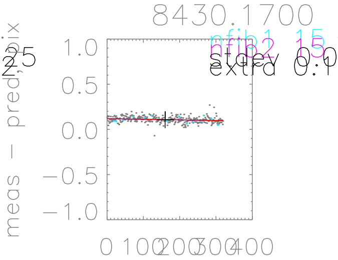

6949.0300
nfib1 15
nfib2 15
stdev 0.070
extrd 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

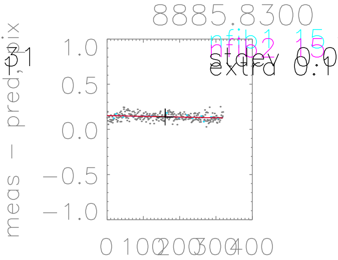

7571.7500
nfib1 15
nfib2 15
stdev 0.045
extrd 0.16
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

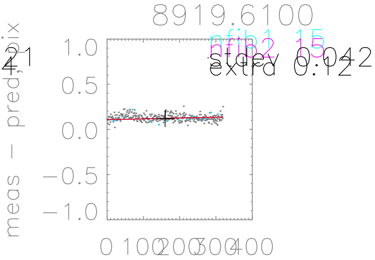

7794.1200
nfib1 15
nfib2 15
stdev 0.027
extrd 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

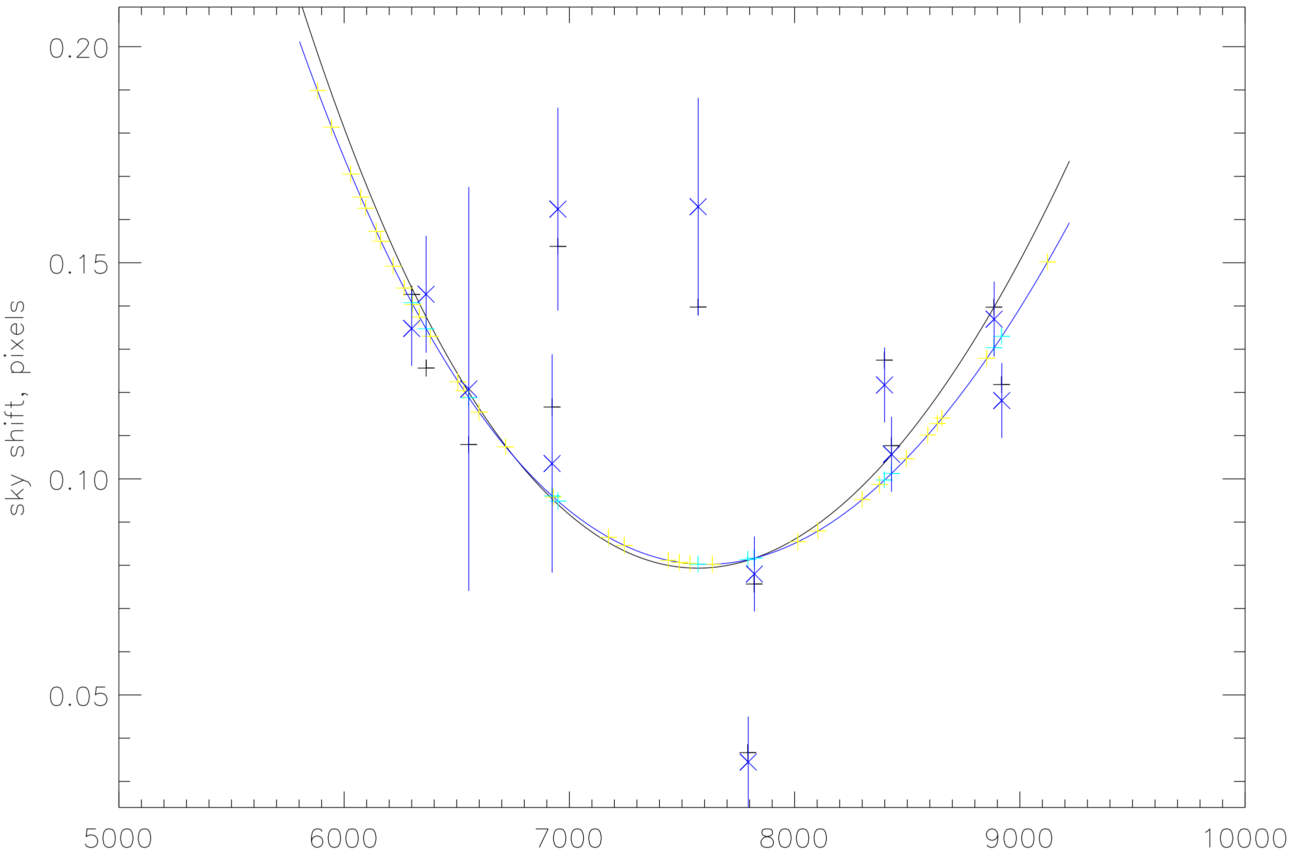

7821.5100
nfib1 15
nfib2 15
stdev 0.030
extrd 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

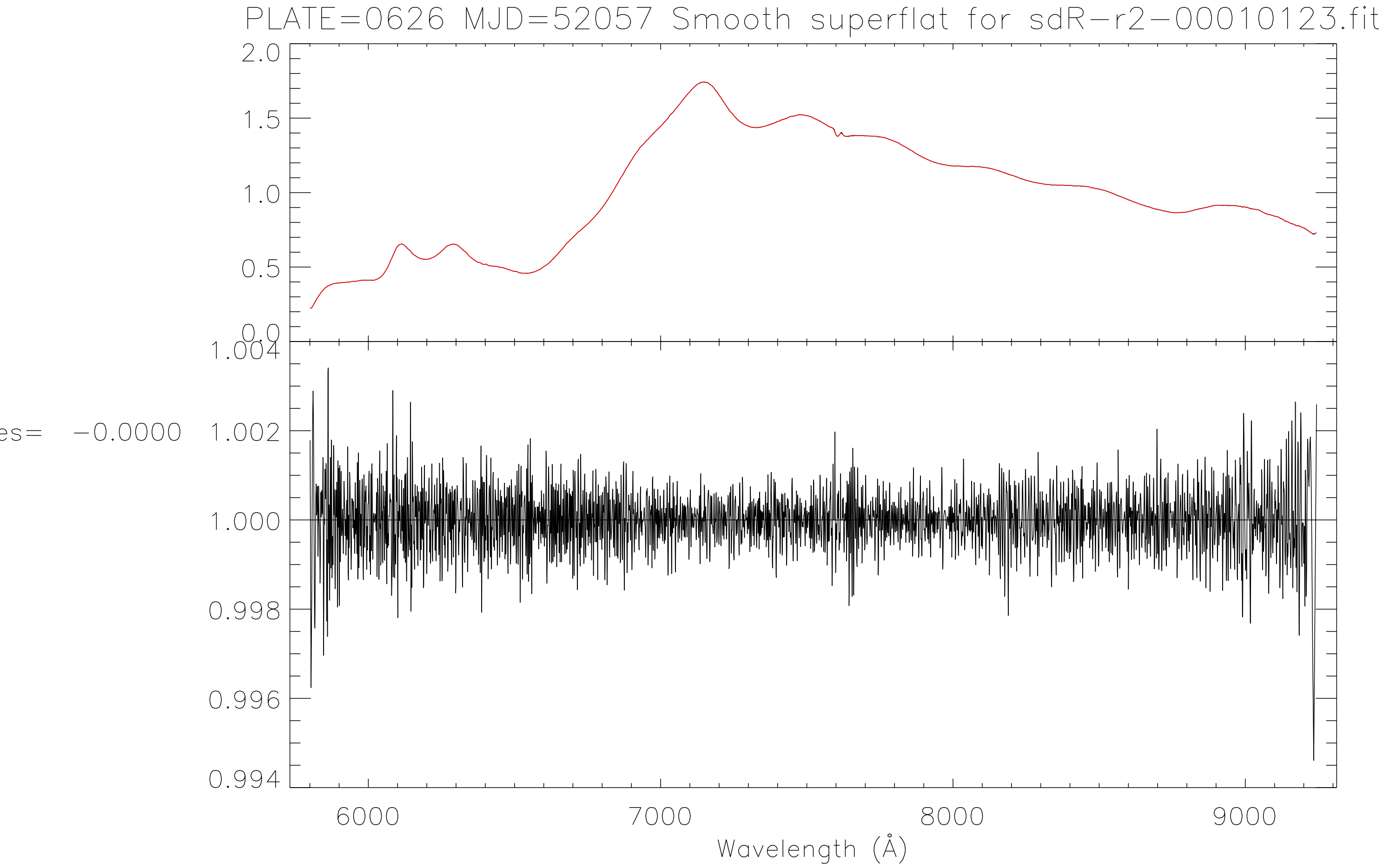

8399.1600
nfib1 15
nfib2 15
stdev 0.025
extrd 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

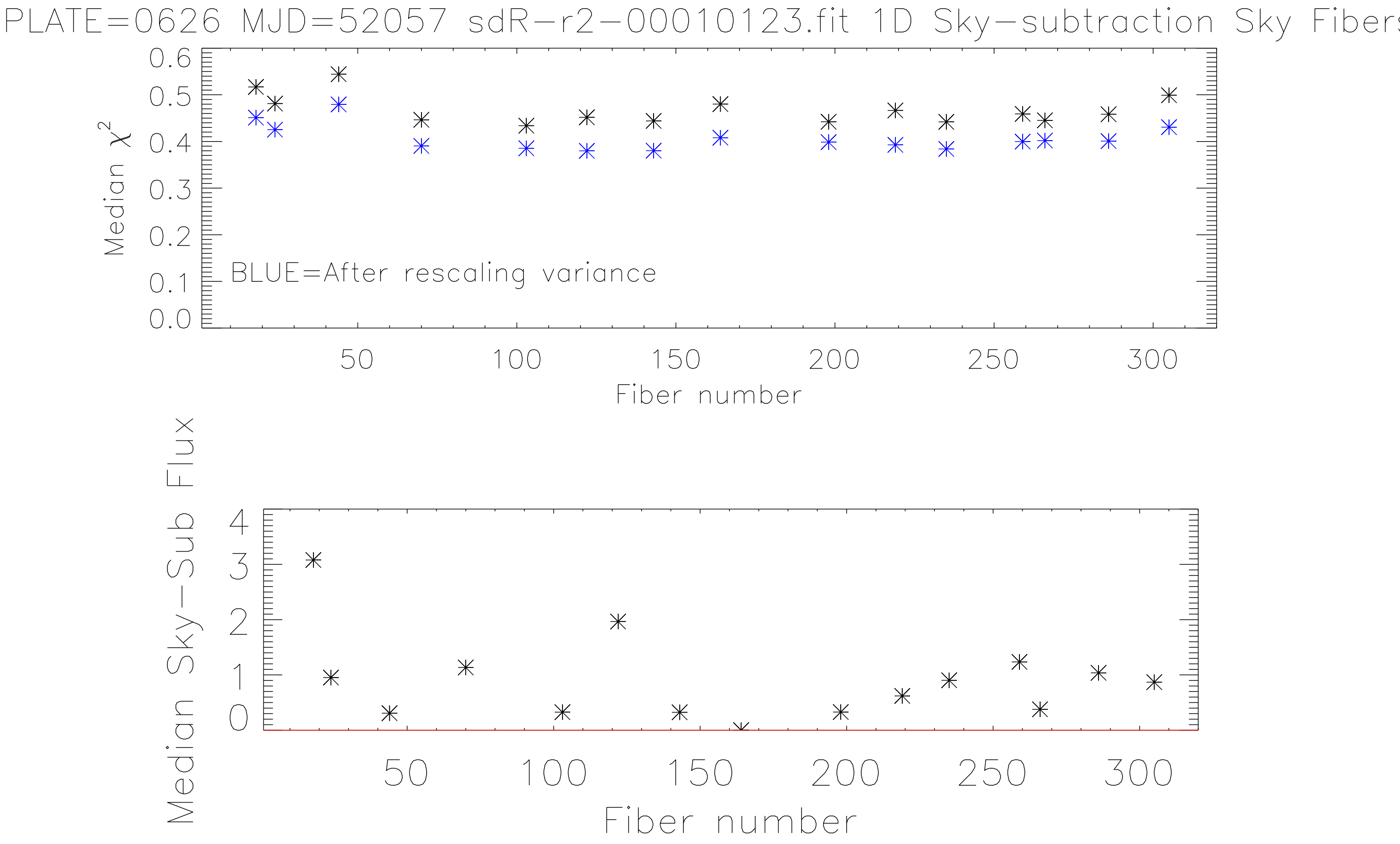

8430.1700
nfib1 15
nfib2 15
stdev 0.031
extrd 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

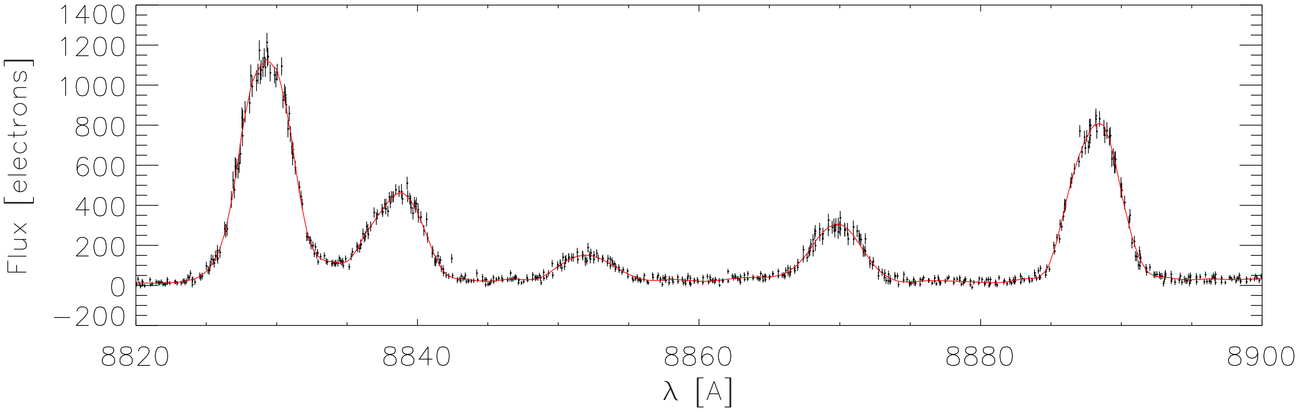

8885.8300
nfib1 15
nfib2 15
stdev 0.021
extrd 0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


8919.6100
nfib1 15
nfib2 15
stdev 0.042
extrd 0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

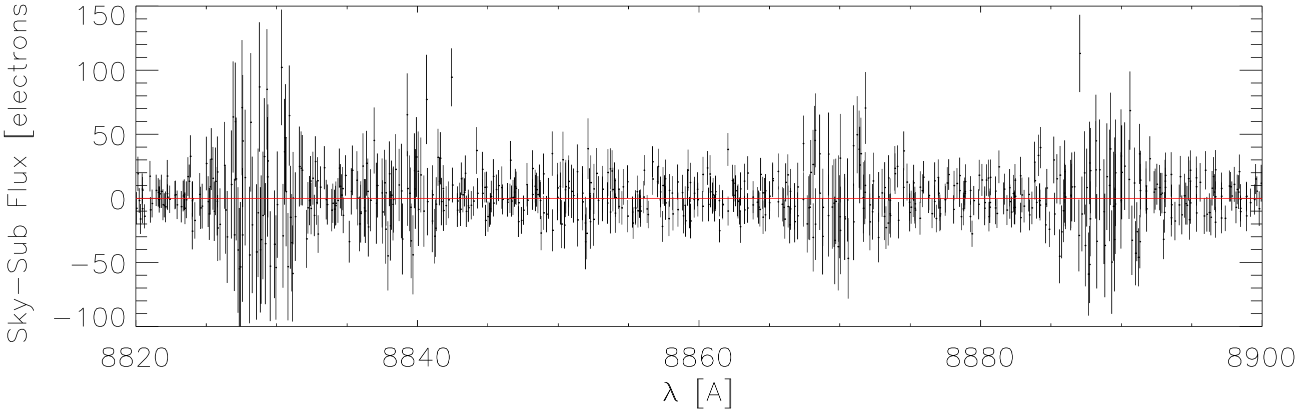

sky shift, pixels
0.20
0.15
0.10
0.05
5000
6000
7000
8000
9000
10000


PLATE=0626 MJD=52057 Smooth superflat for sdR-r2-00010123.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
0.994
es=   −0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=0626 MJD=52057 sdR-r2-00010123.fit 1D 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
0
1
2
3
4
50
100
150
200
250
300
Fiber number



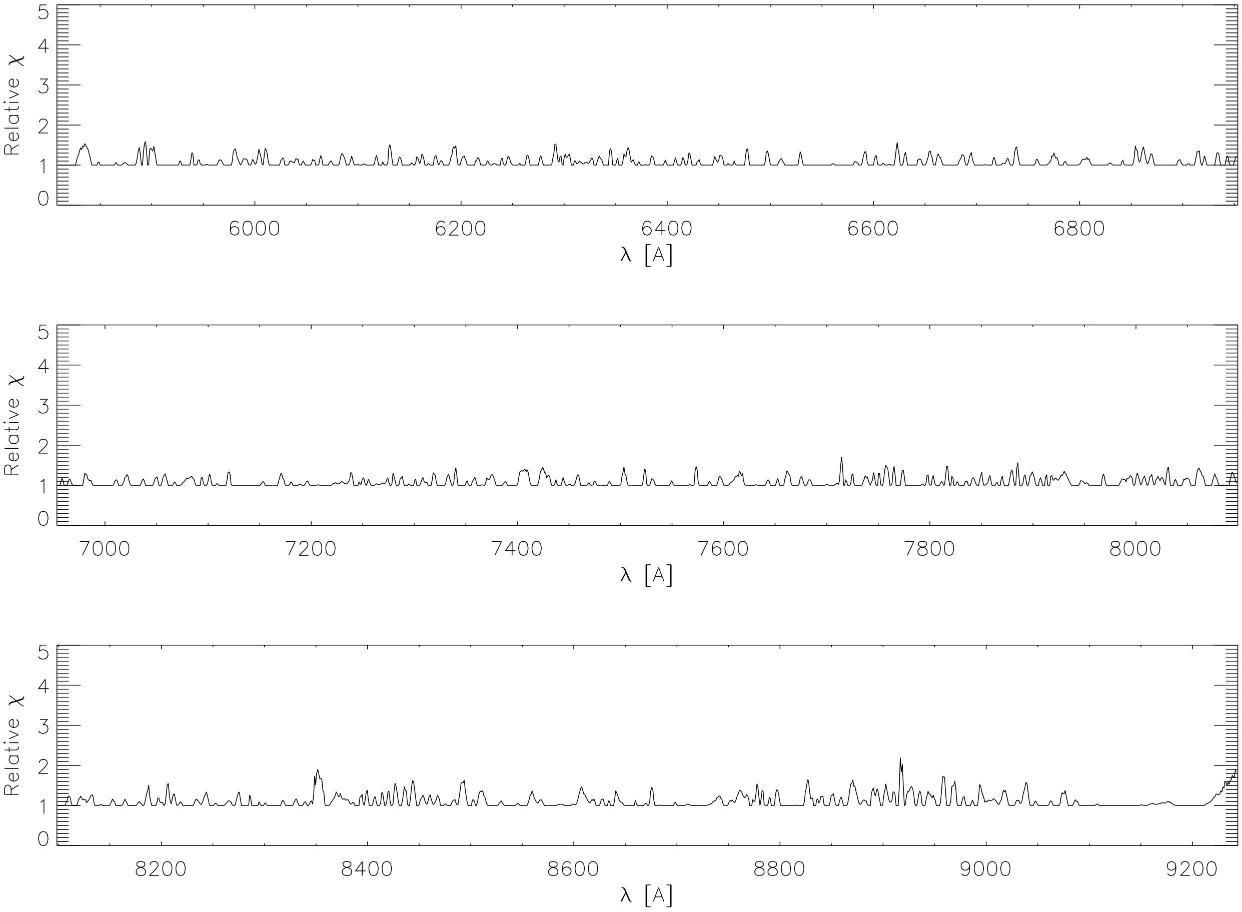
PLATE=0626 MJD=52057 sdR-r2-00010123.fit 1D Sky-subtraction Sky Fibers



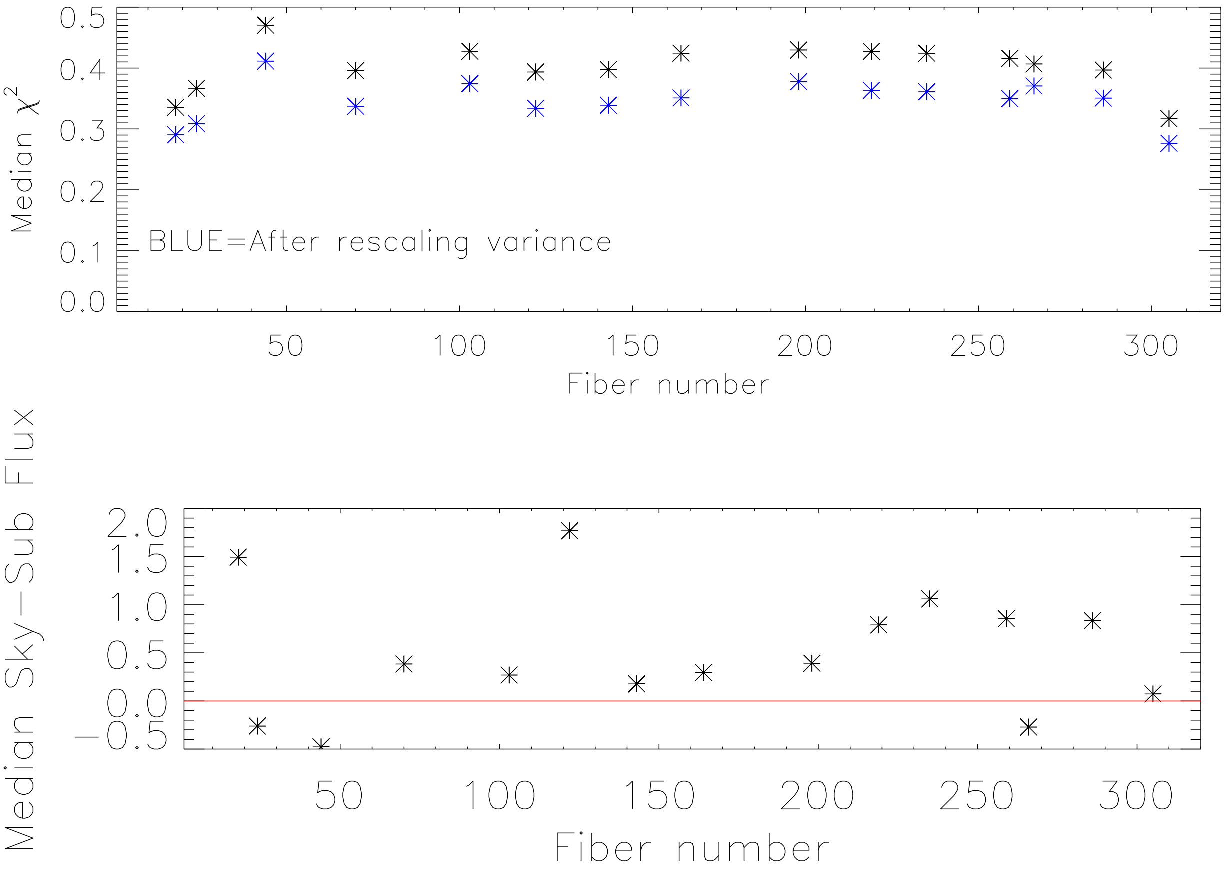
PLATE=0626 MJD=52057 sdR-r2-00010123.fit 1D Sky-subtraction Sky-subtracted Sky F

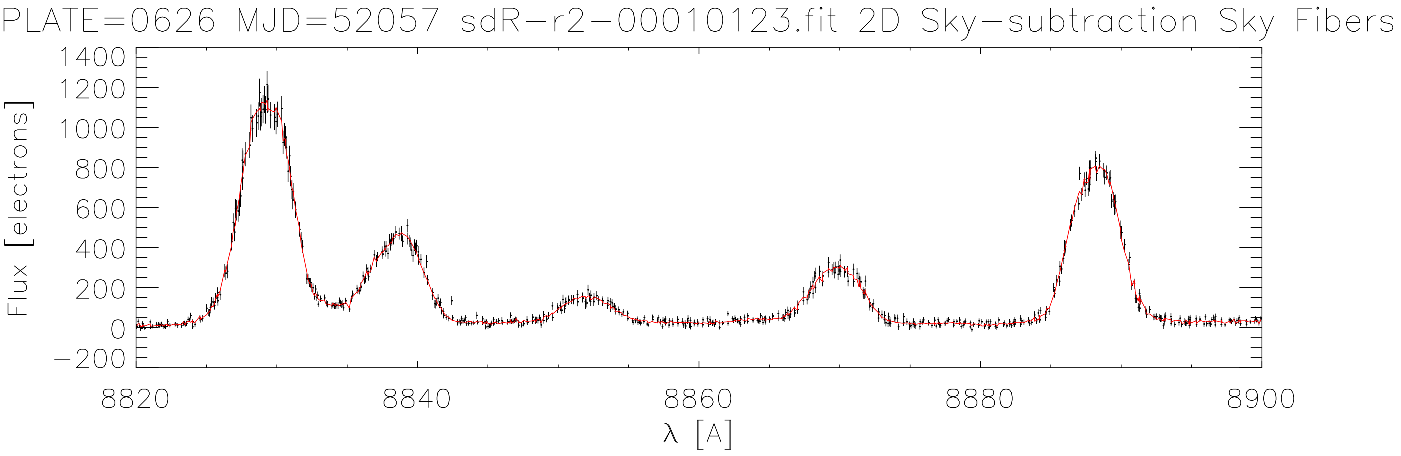
Number of sky fibers = 15

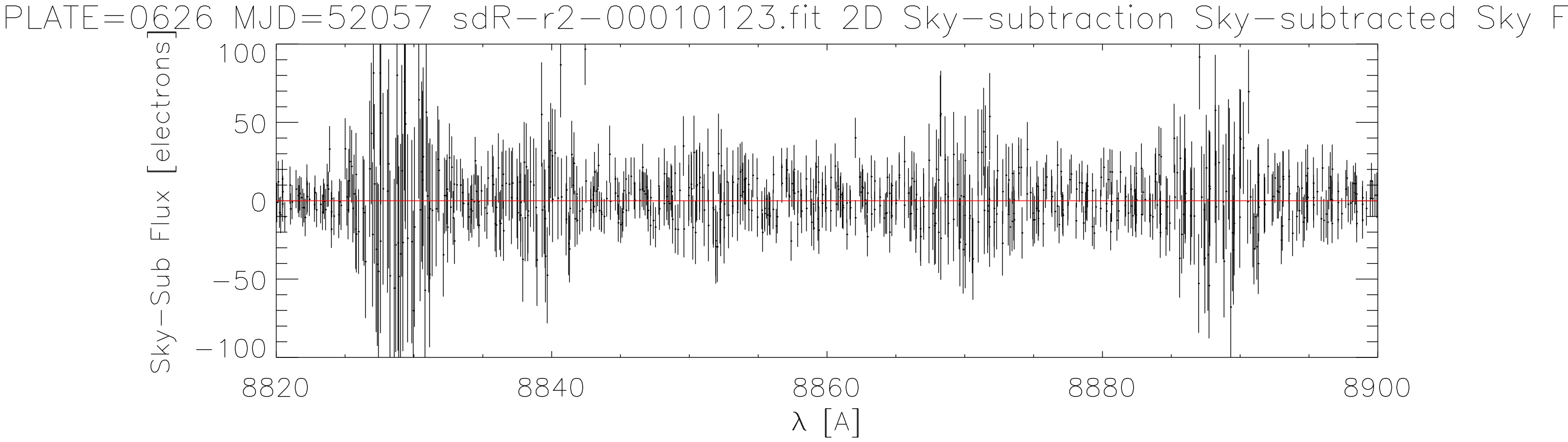
PLATE=0626 MJD=52057 sdR-r2-00010123.fit 1D Sky-subtraction Rescaled Errors



PLATE=0626 MJD=52057 sdR-r2-00010123.fit 2D Sky-subtraction Sky Fiber

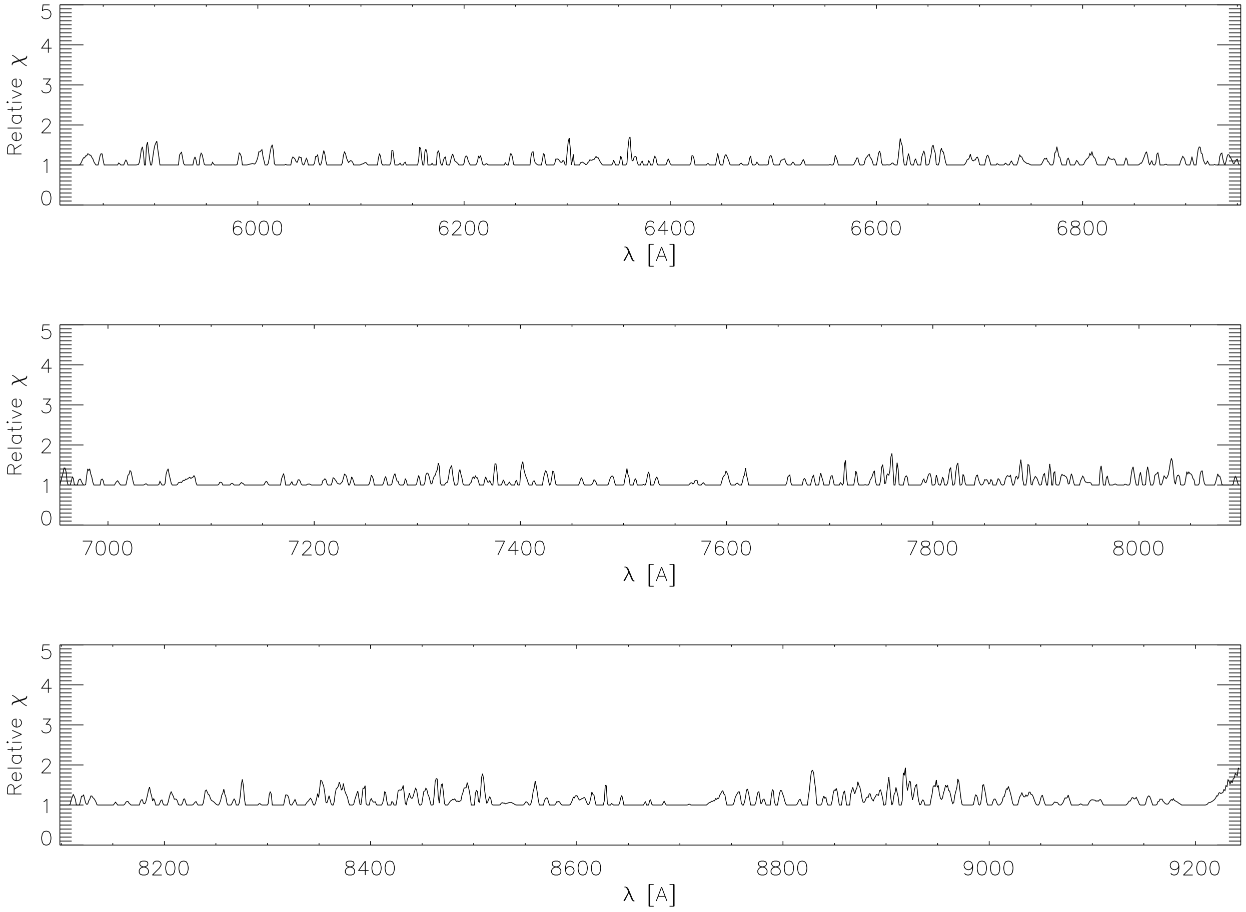


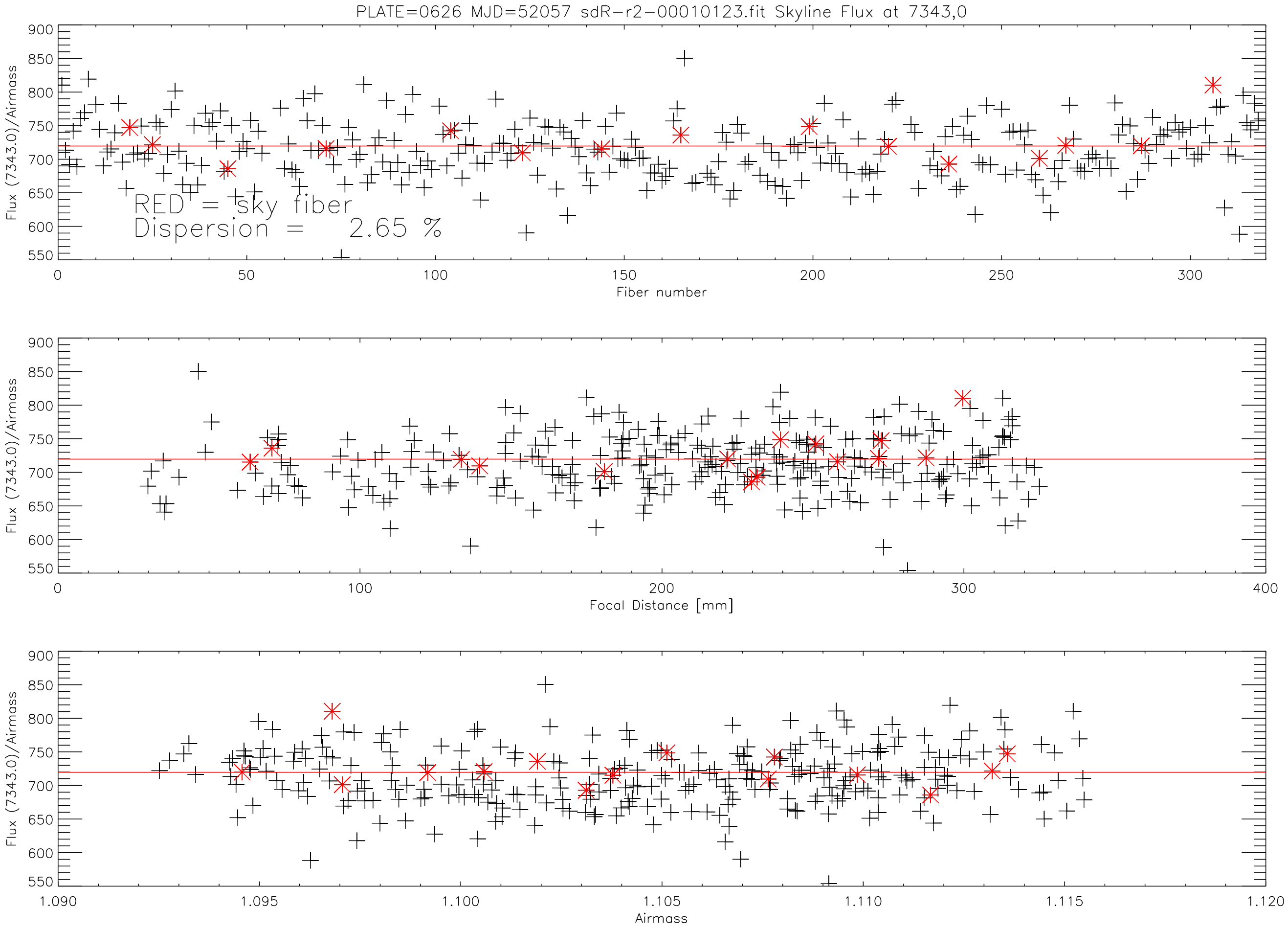

PLATE=0626 MJD=52057 sdR-r2-00010123.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1400
1200
1000
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

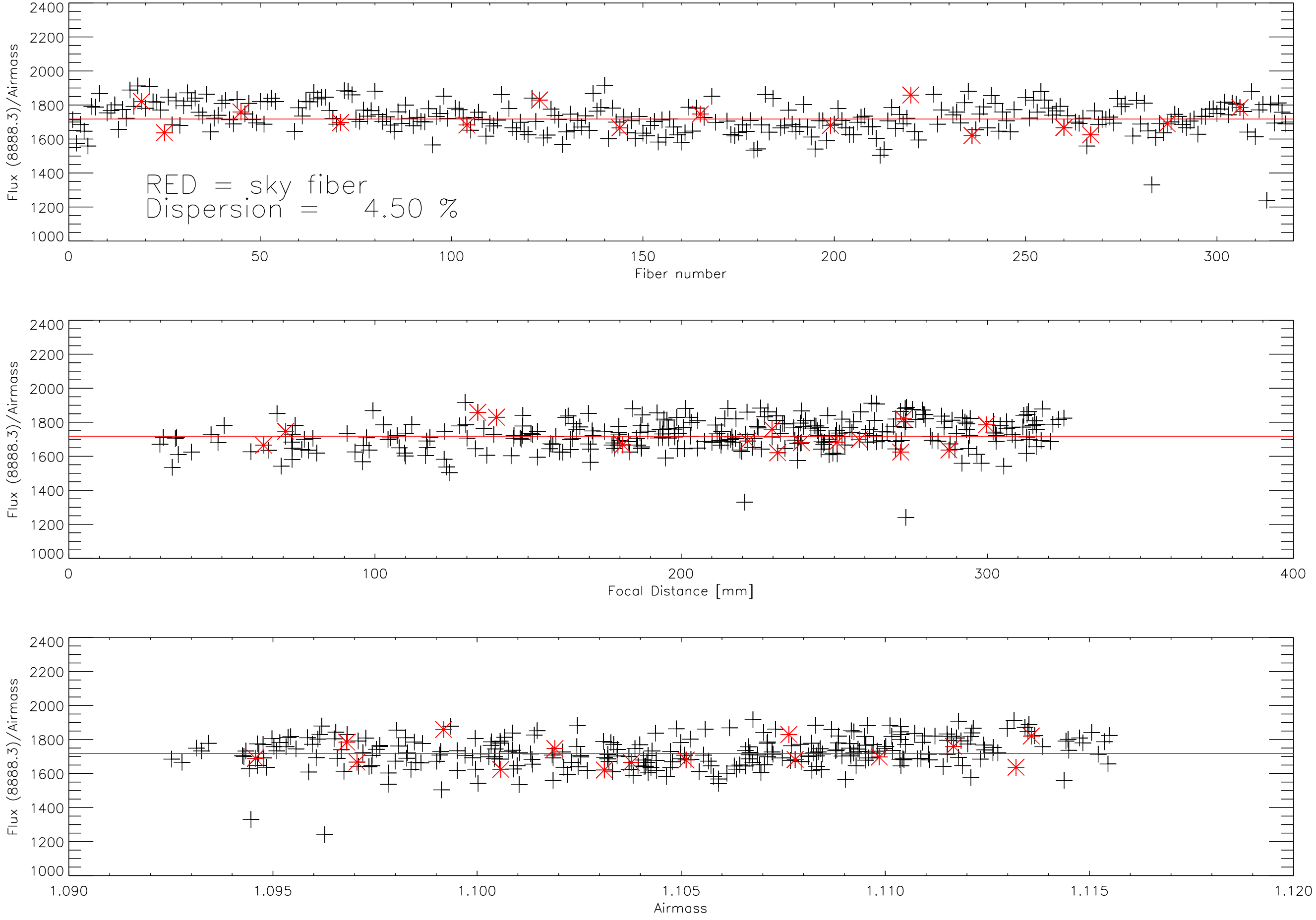

PLATE=0626 MJD=52057 sdR-r2-00010123.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 15

PLATE=0626 MJD=52057 sdR-r2-00010123.fit 2D Sky-subtraction Rescaled Errors




PLATE=0626 MJD=52057 sdR−r2−00010123.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.65 %
Flux (7343.0)/Airmass
900
850
800
750
700
650
600
550
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.090
1.095
1.100
1.105
1.110
1.115
1.120
Airmass

PLATE=0626 MJD=52057 sdR-r2-00010123.fit Skyline Flux at 8888.3