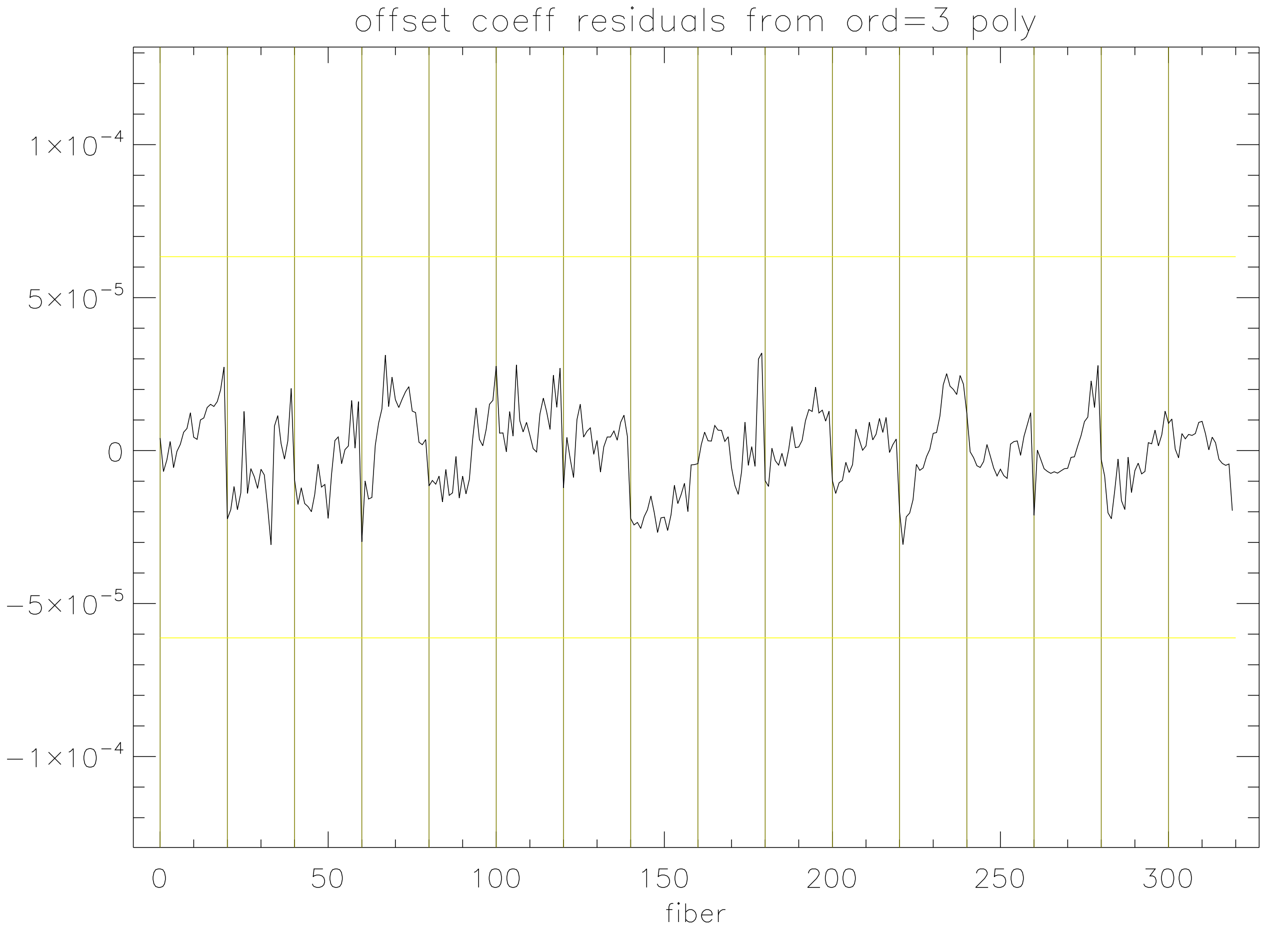
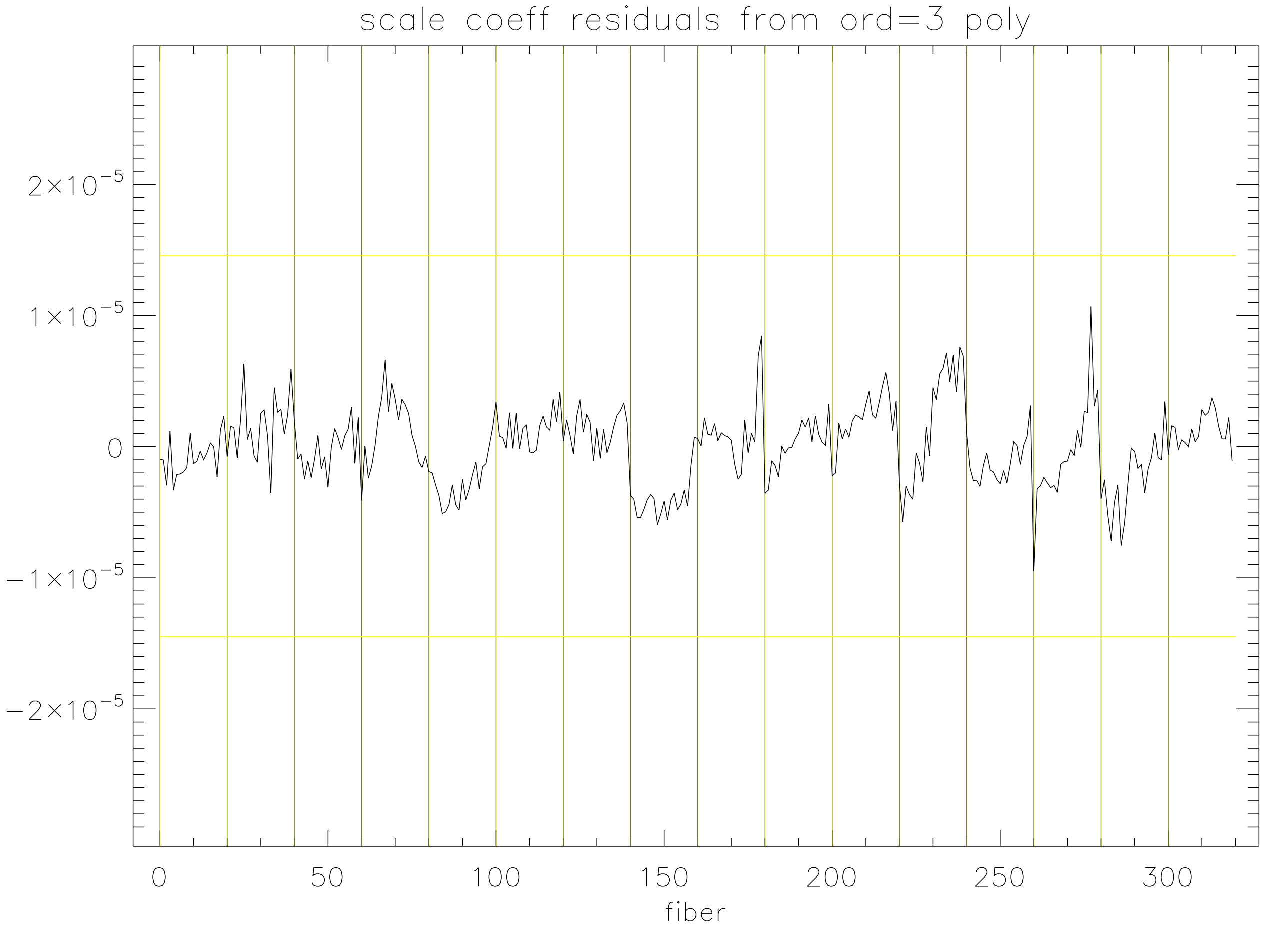
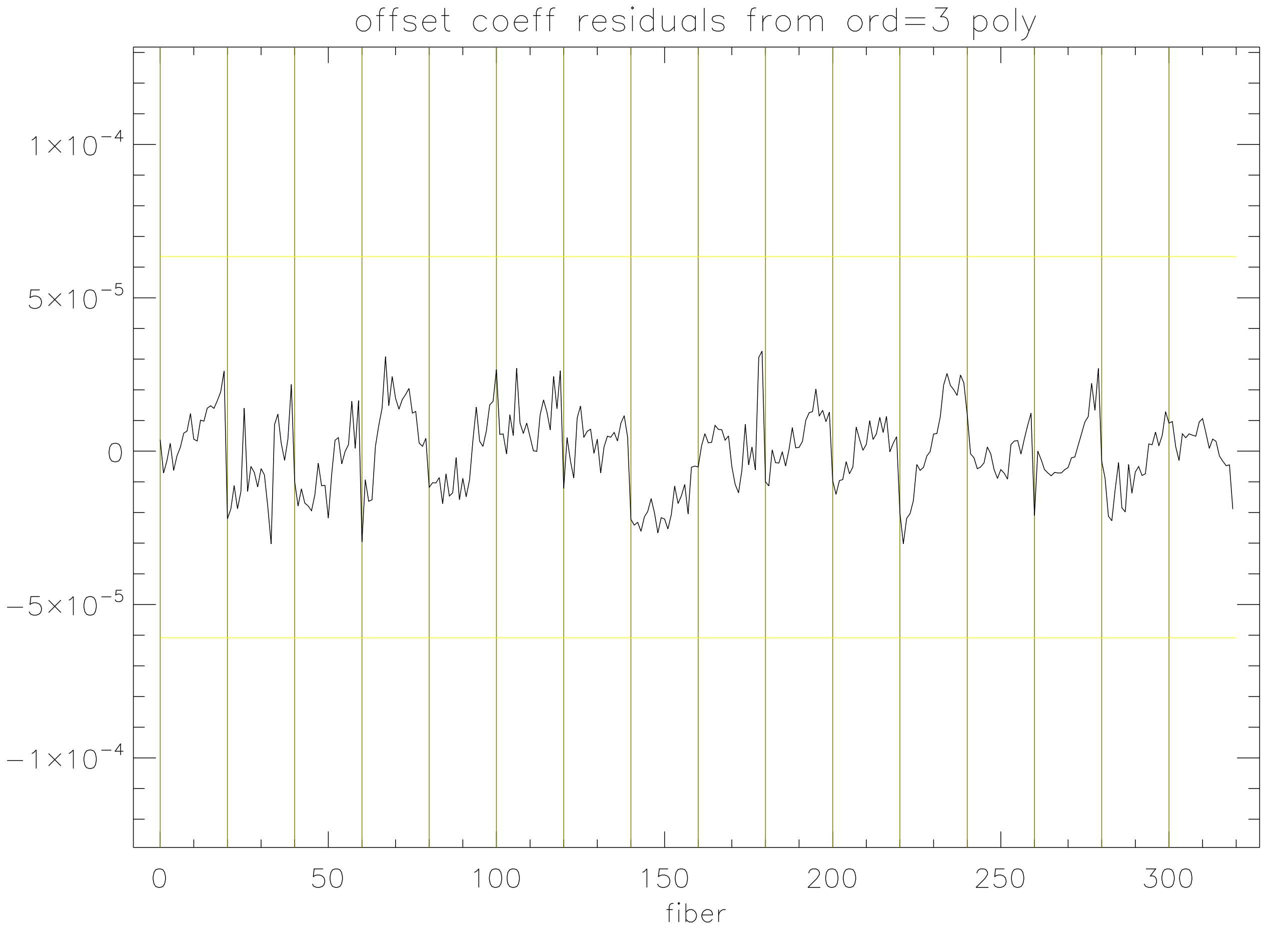
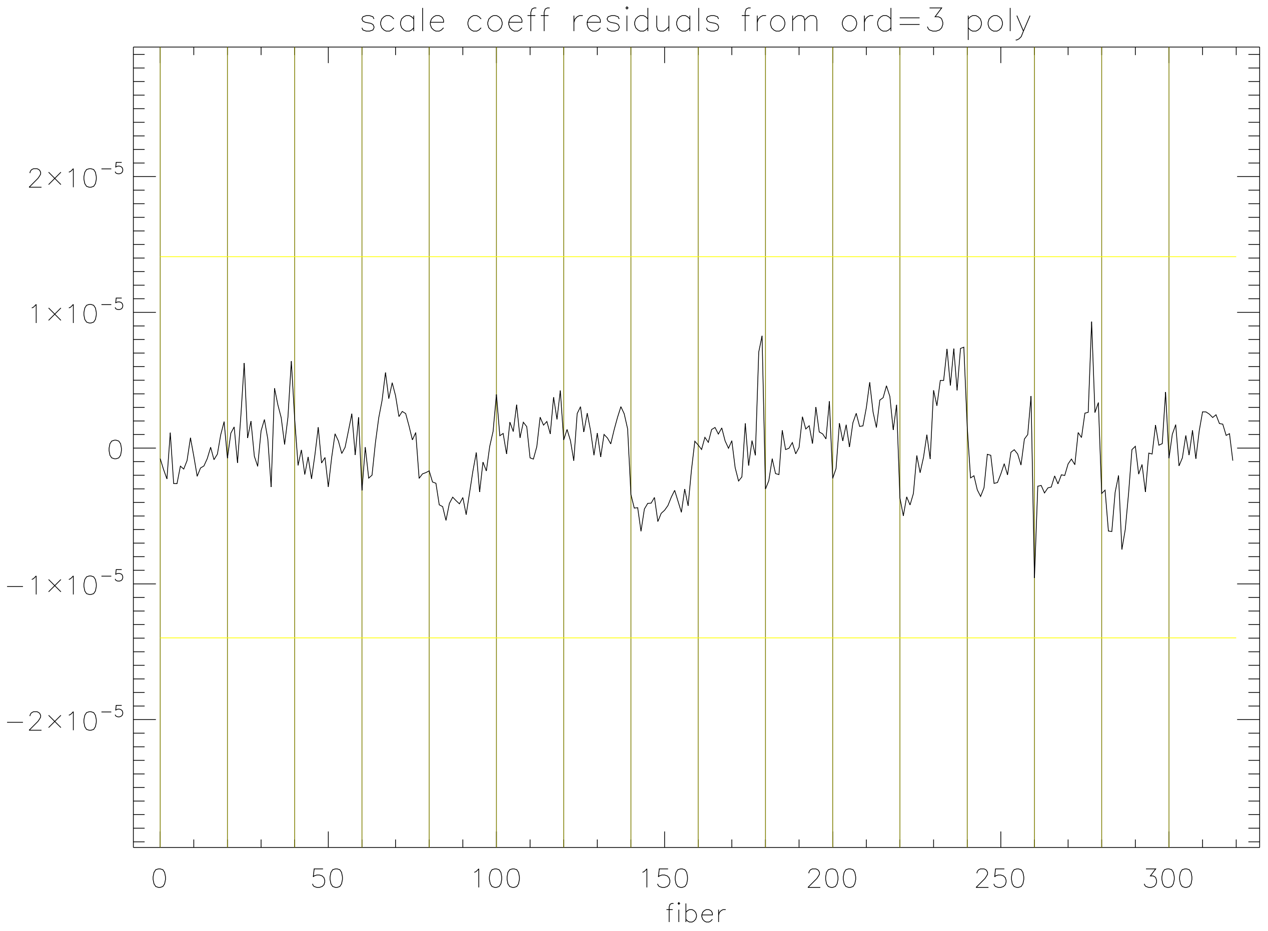
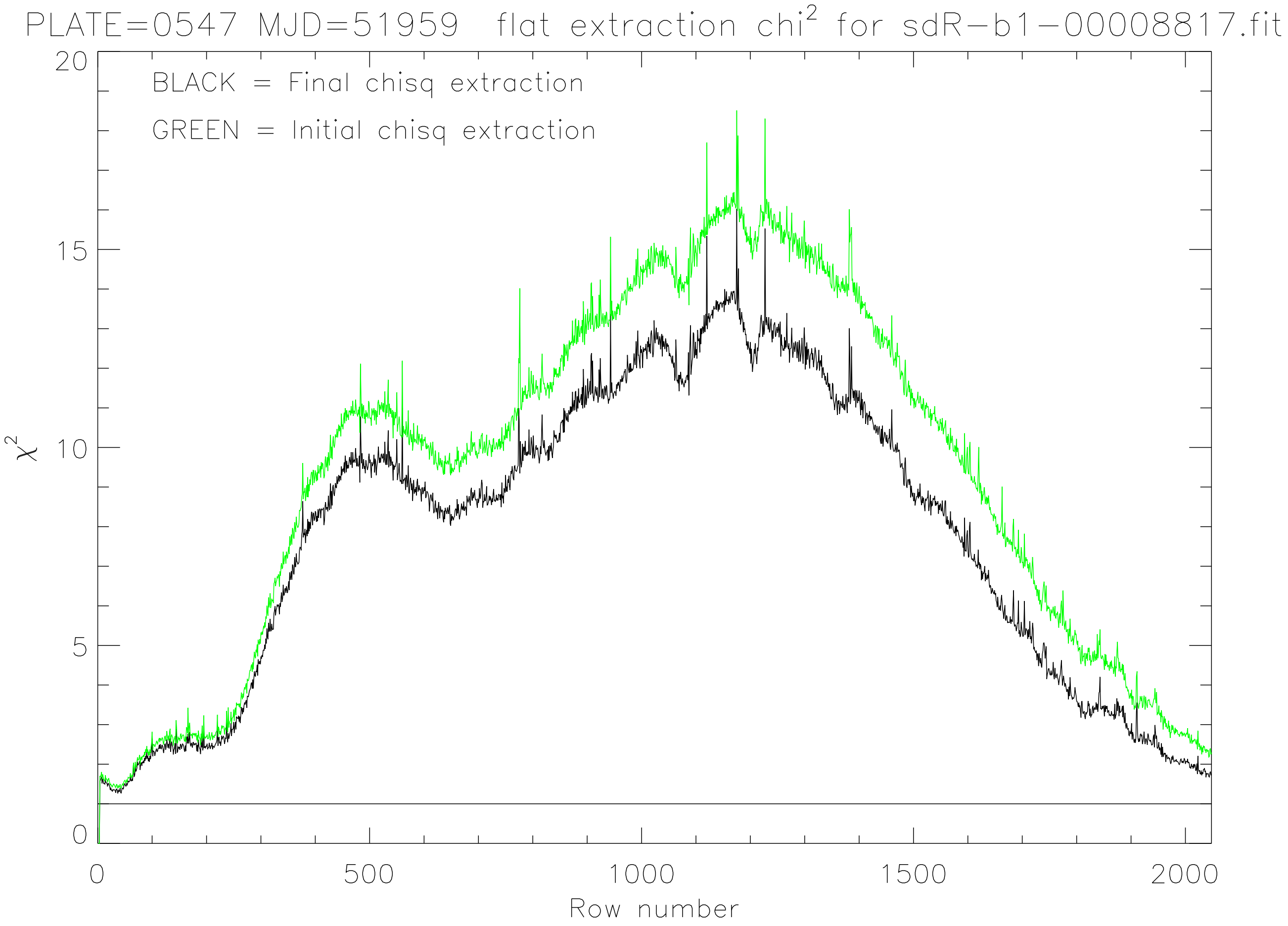
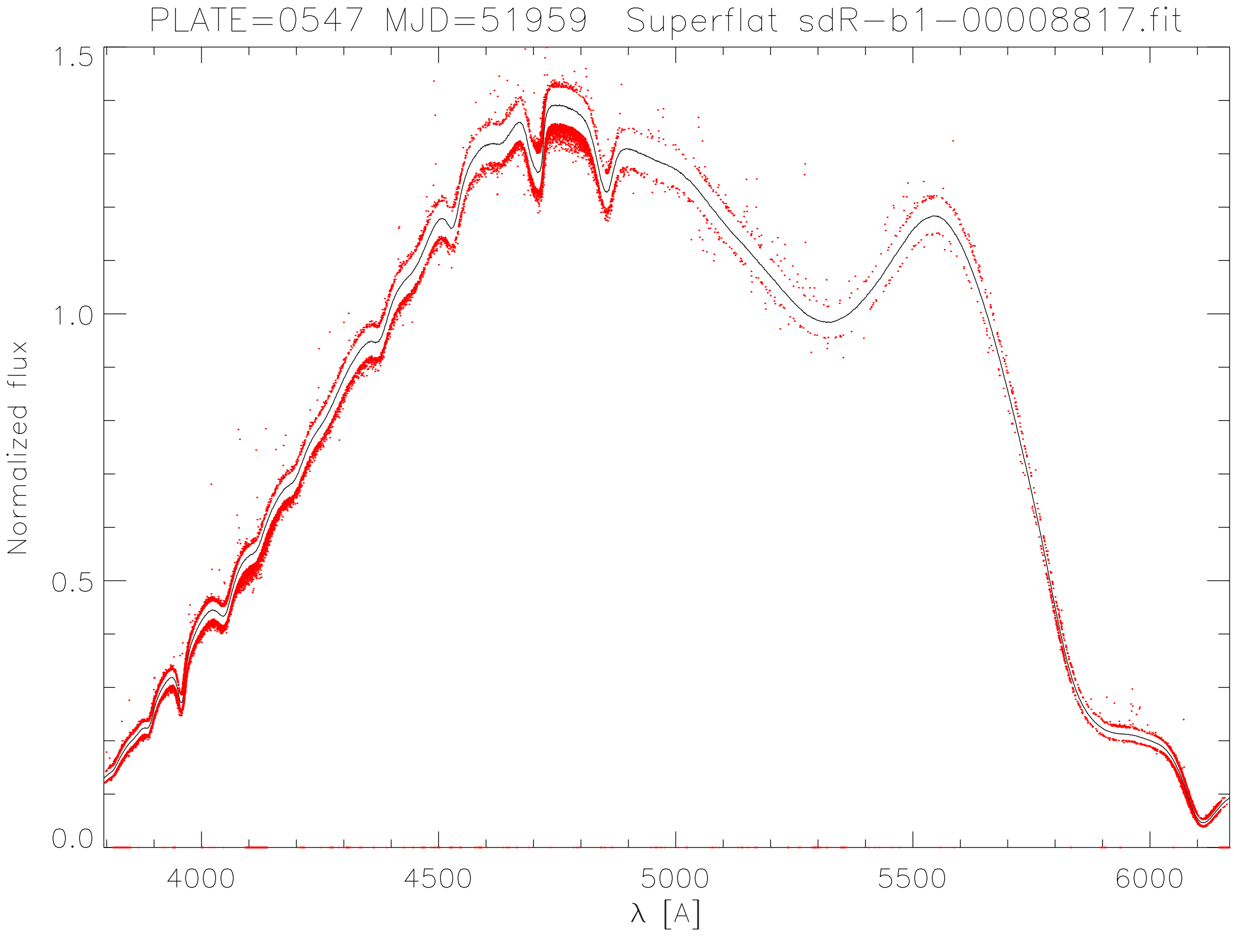

offset coeff residuals from ord=3 poly
1×10^{-4}
5×10^{-5}
0
-5×10^{-5}
-1×10^{-4}
0
50
100
150
200
250
300
fiber

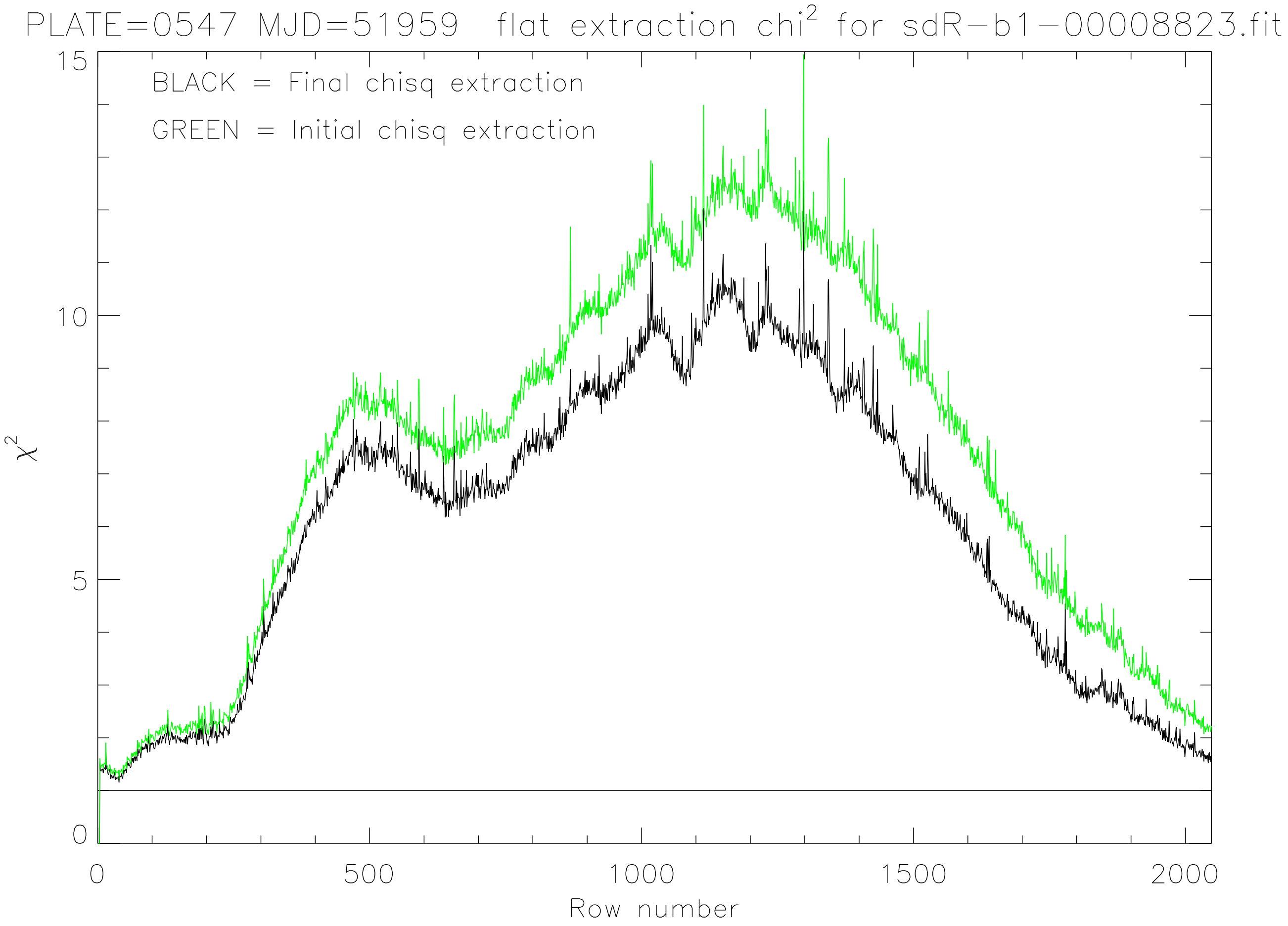

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

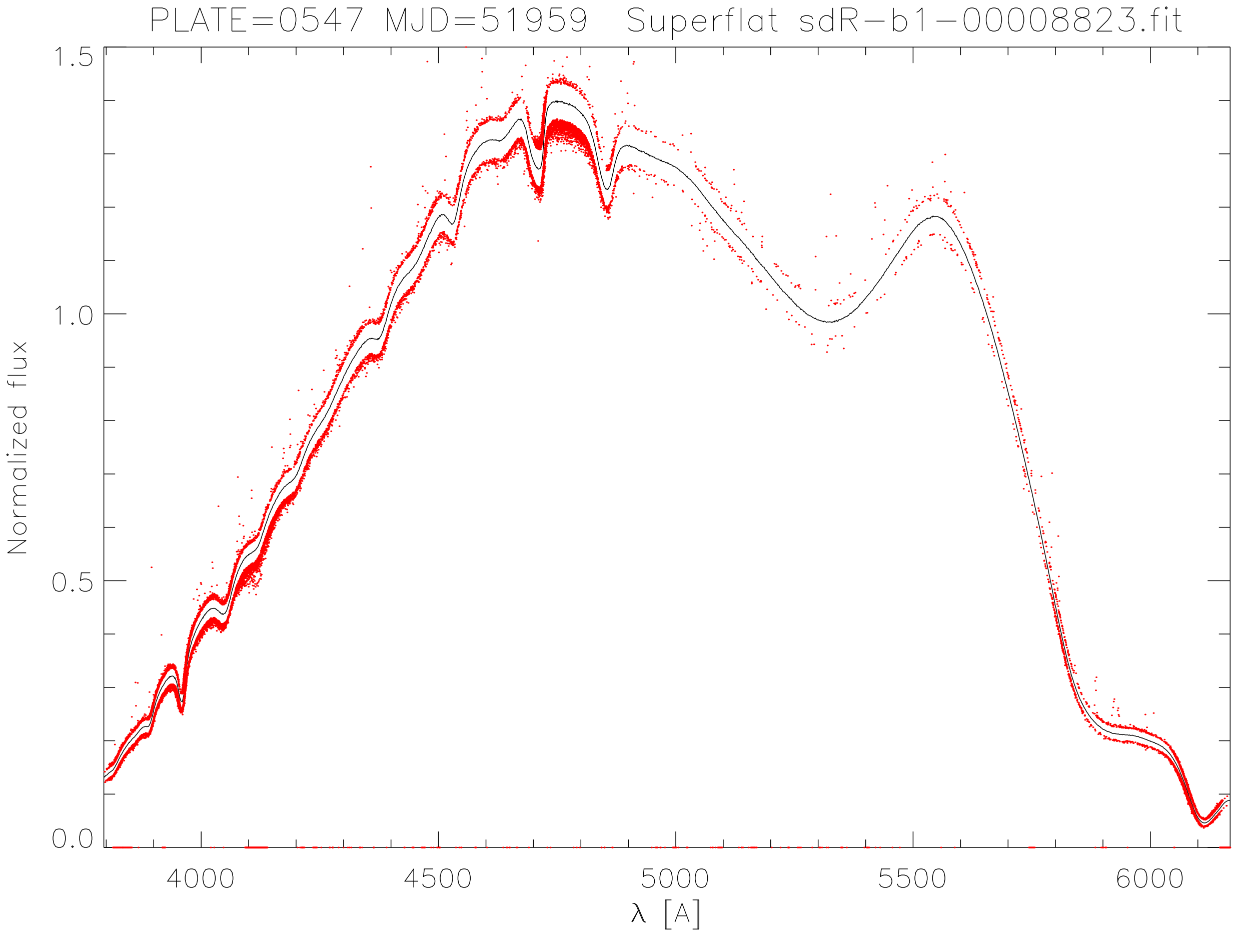

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

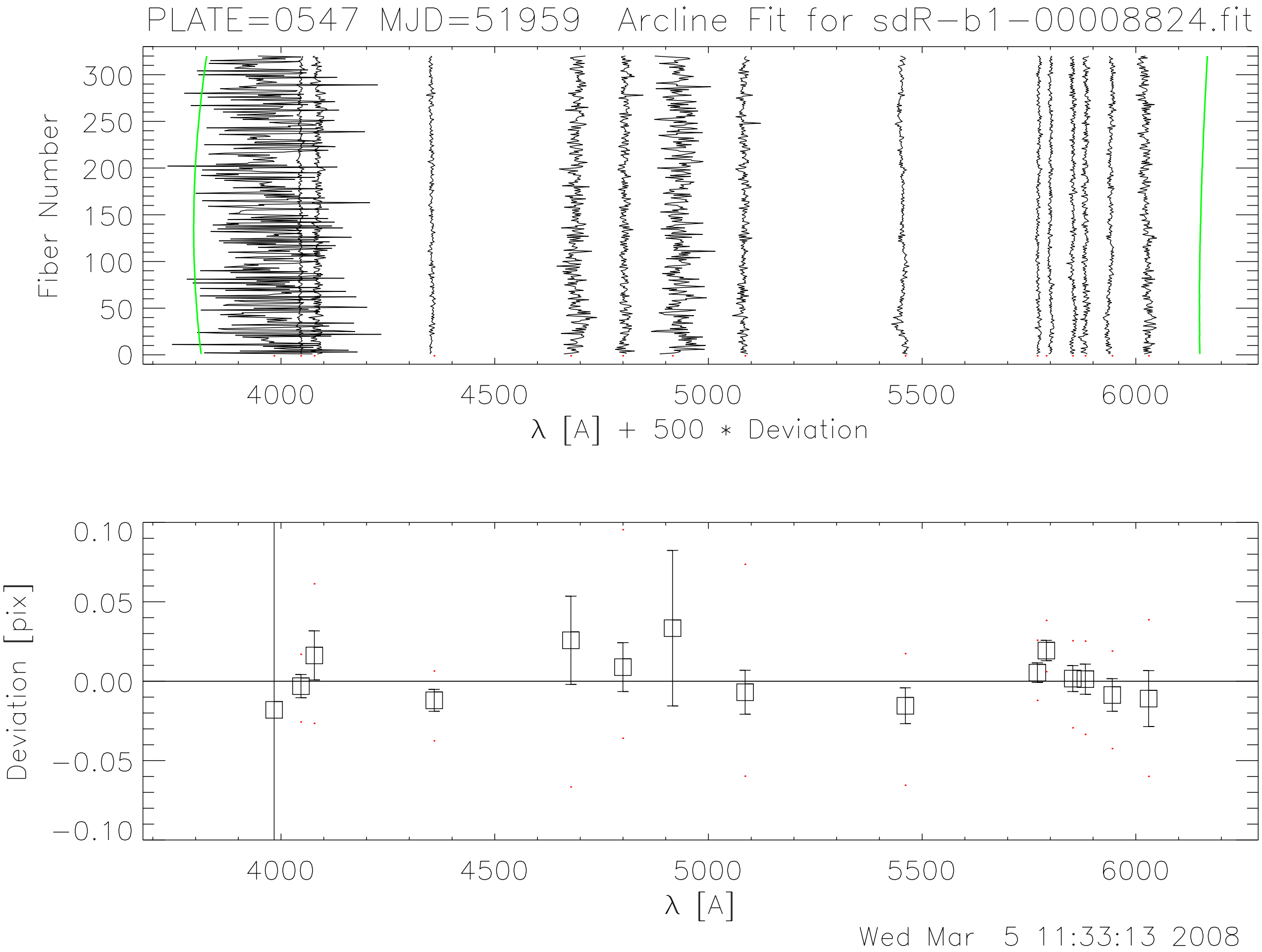

scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

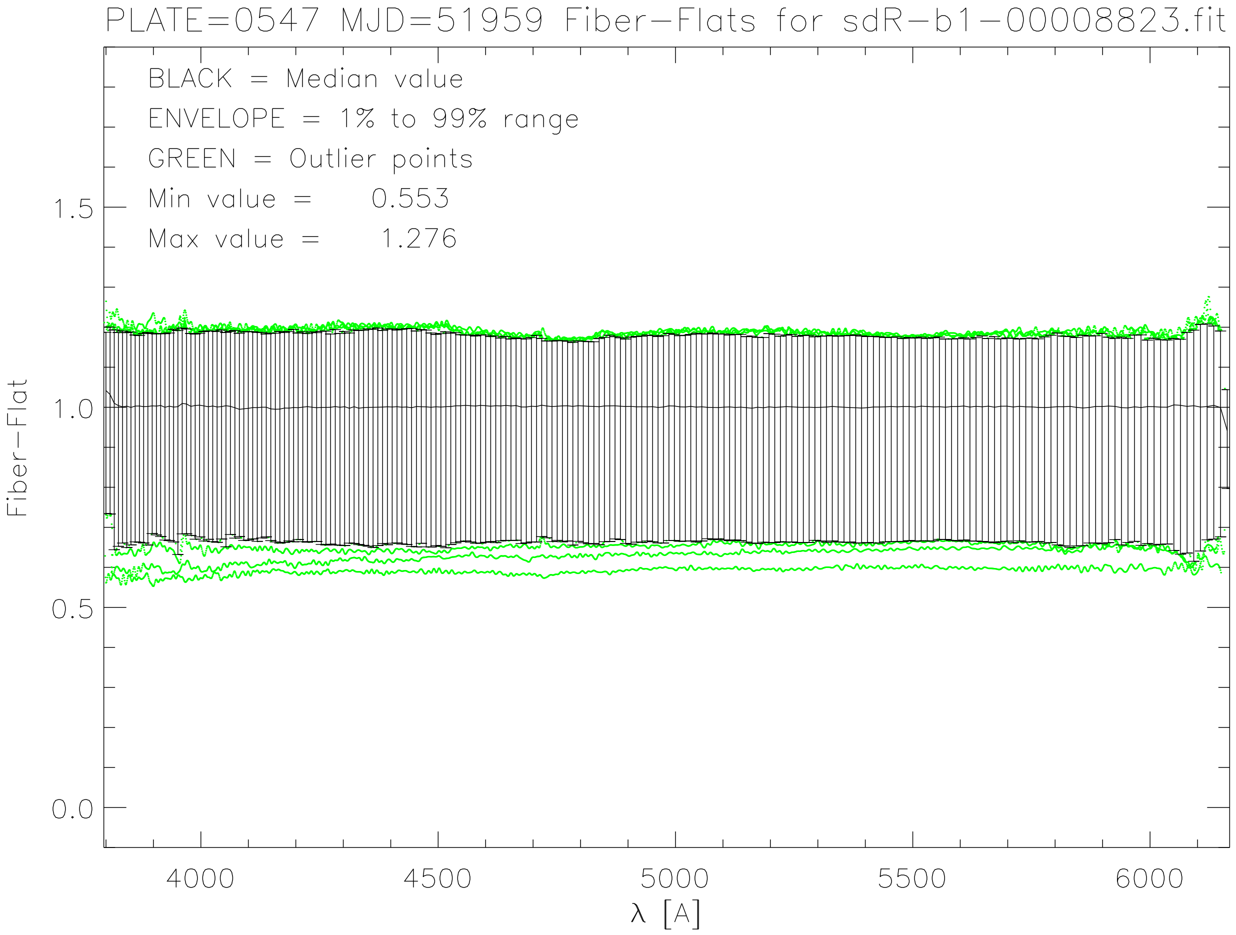

PLATE=0547 MJD=51959 flat extraction chi^2 for sdR-b1-00008817.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
Row number
0
5
10
15
20
0
500
1000
1500
2000


PLATE=0547 MJD=51959 Superflat sdR-b1-00008817.fit
Normalized flux
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000
λ [A]


PLATE=0547 MJD=51959 flat extraction chi^2 for sdR-b1-00008823.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number


PLATE=0547 MJD=51959 Superflat sdR-b1-00008823.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000

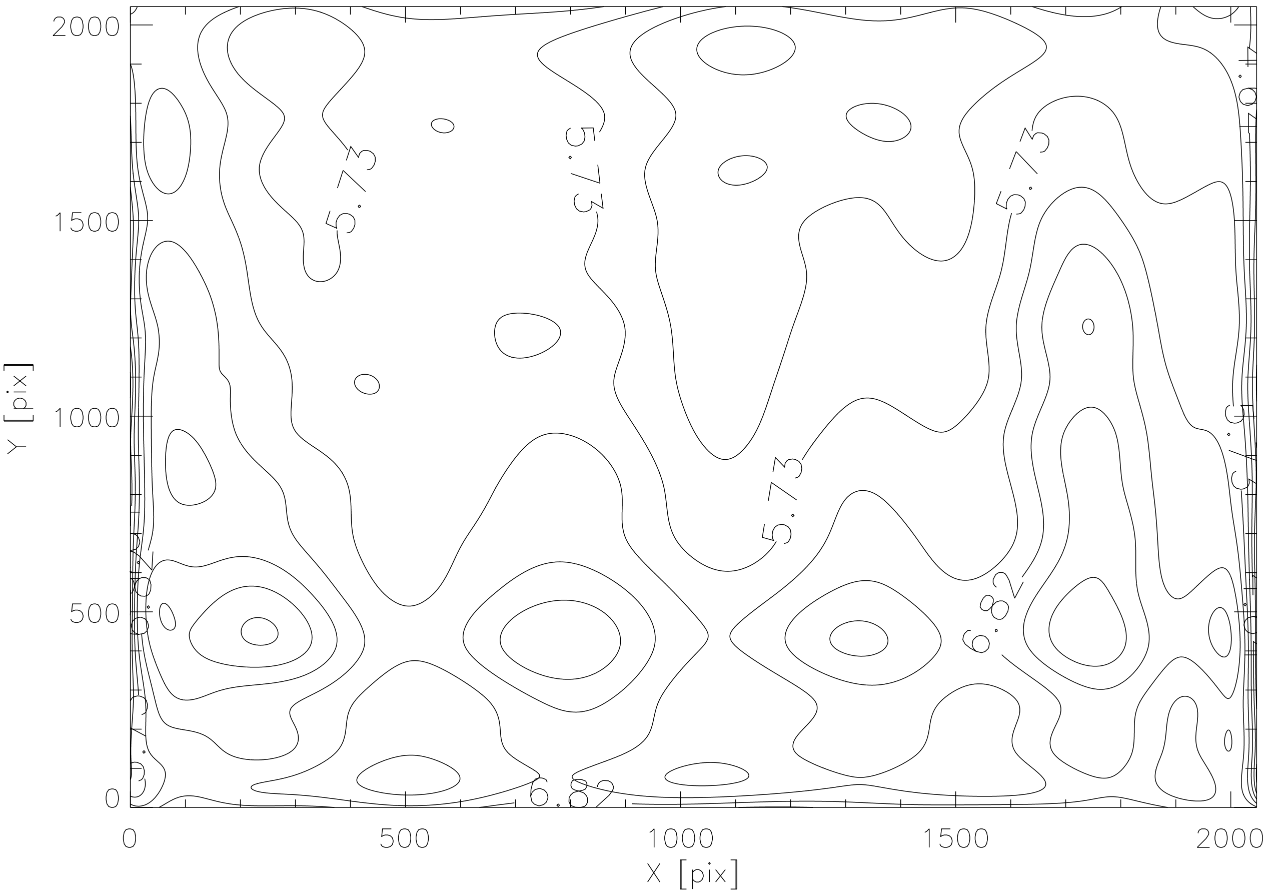

PLATE=0547 MJD=51959 Arcline Fit for sdR-b1-00008824.fit
Fiber Number
0
50
100
150
200
250
300
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
4000
4500
5000
5500
6000
λ [A]
Wed Mar 5 11:33:13 2008

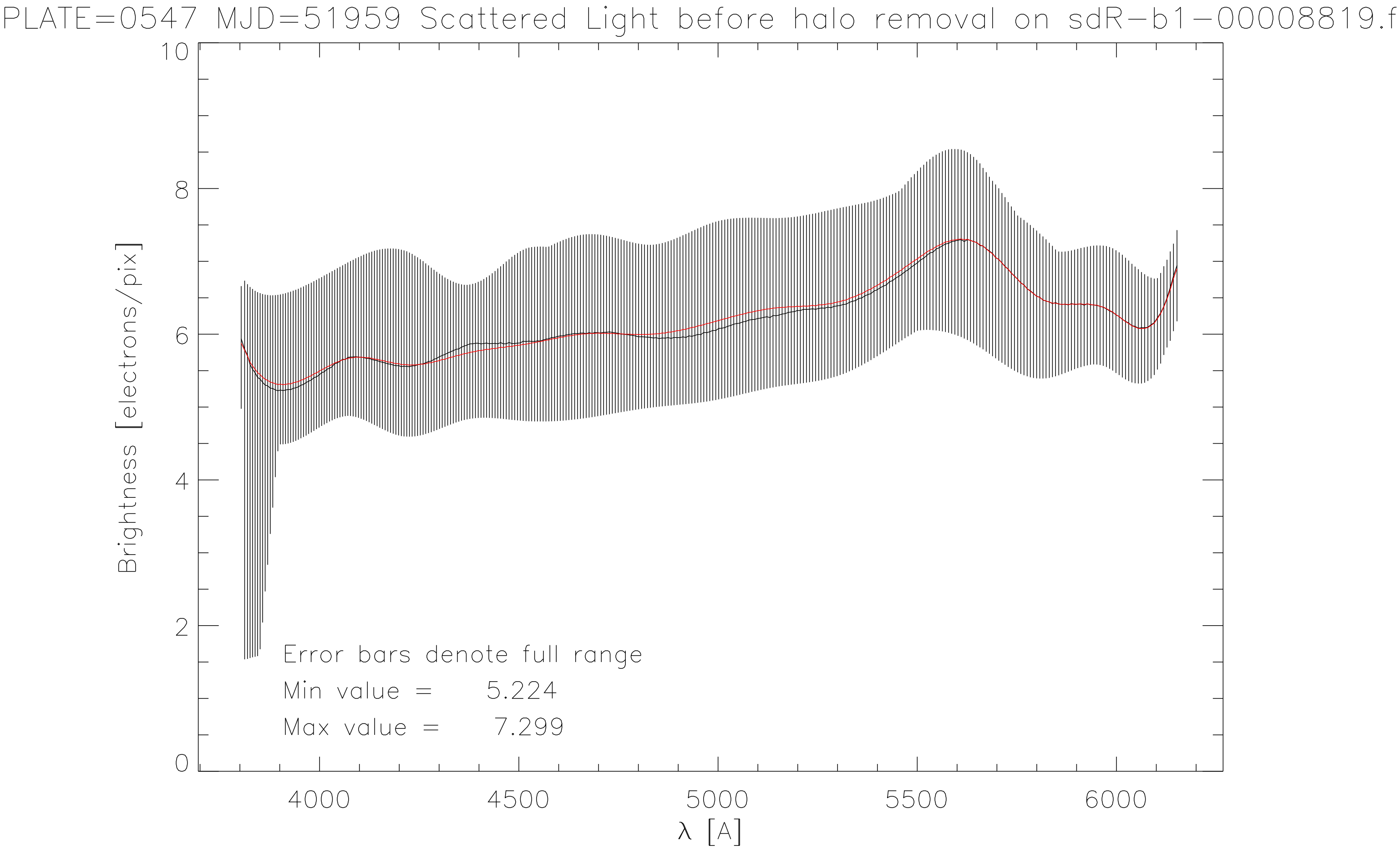


PLATE=0547 MJD=51959 Fiber–Flats for sdR–b1–00008823.fit

Wed Mar 5 11:33:20 2008

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008819.f





PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008819.f

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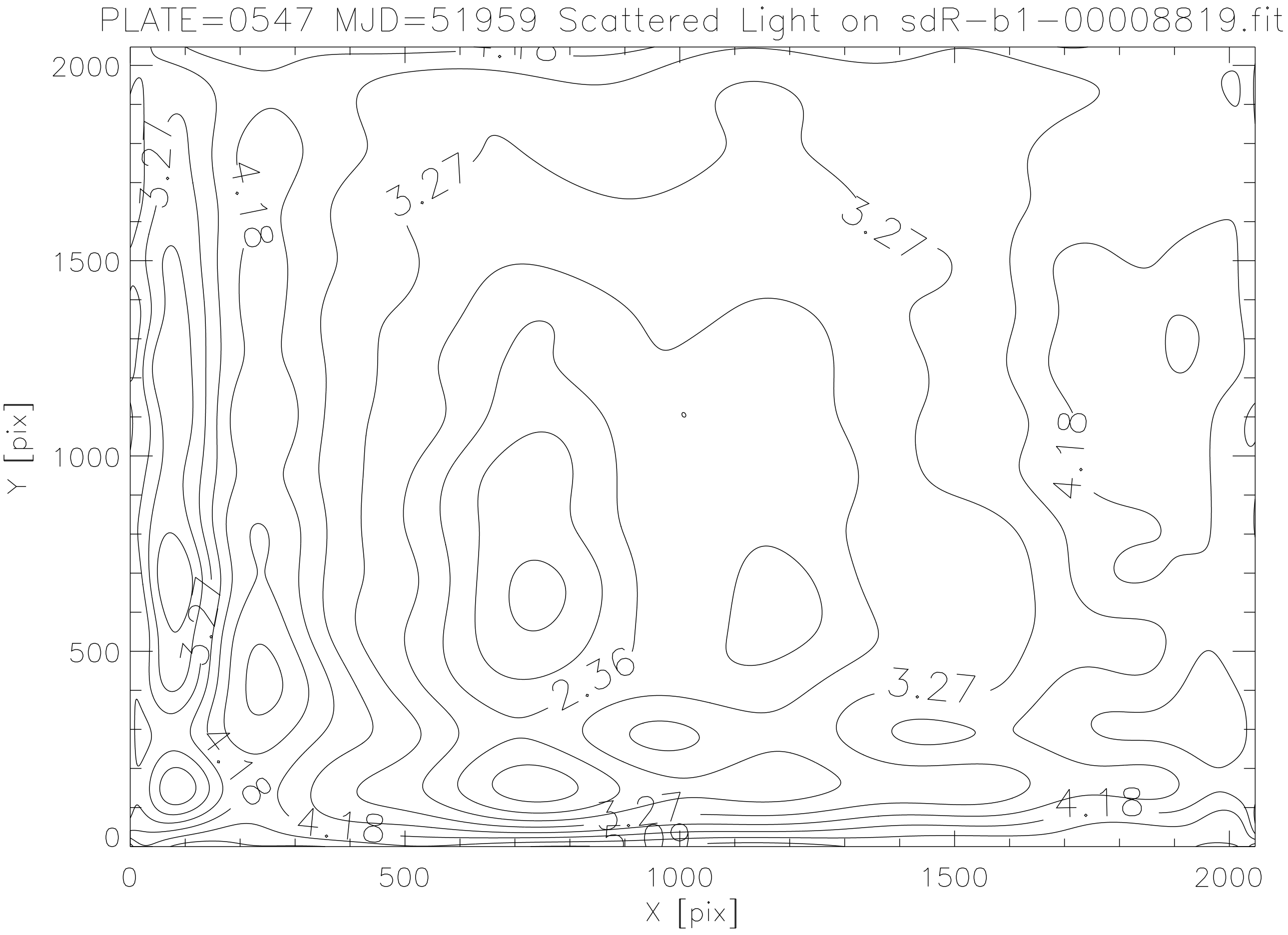
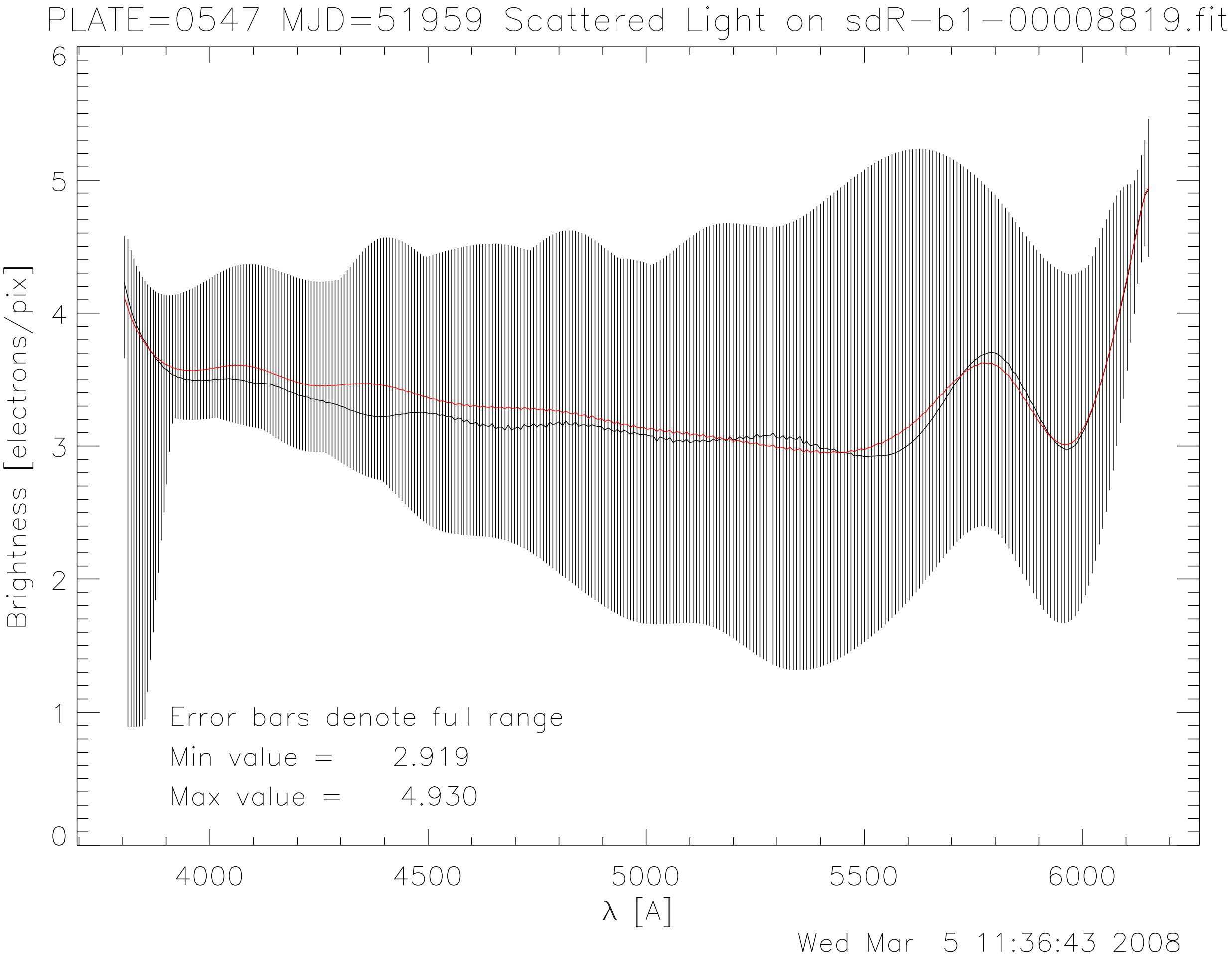
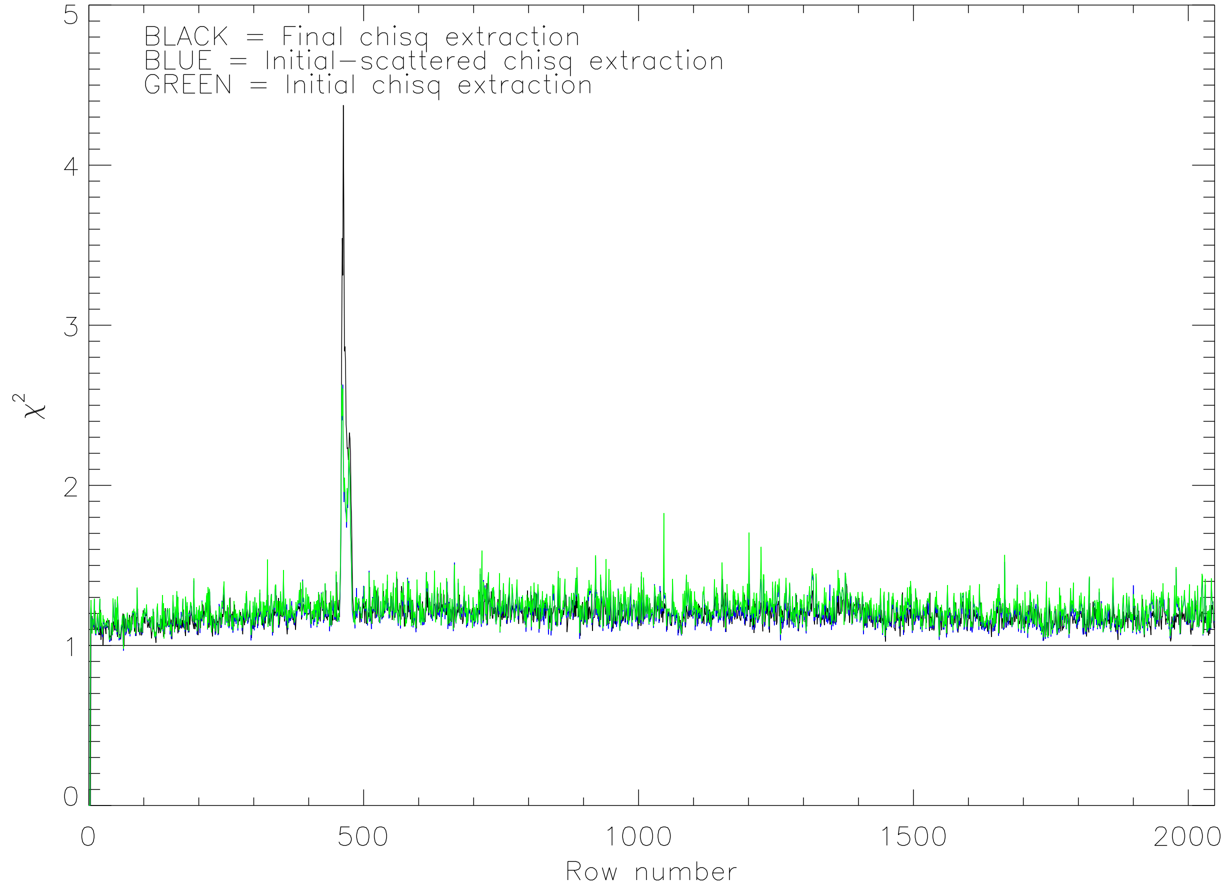
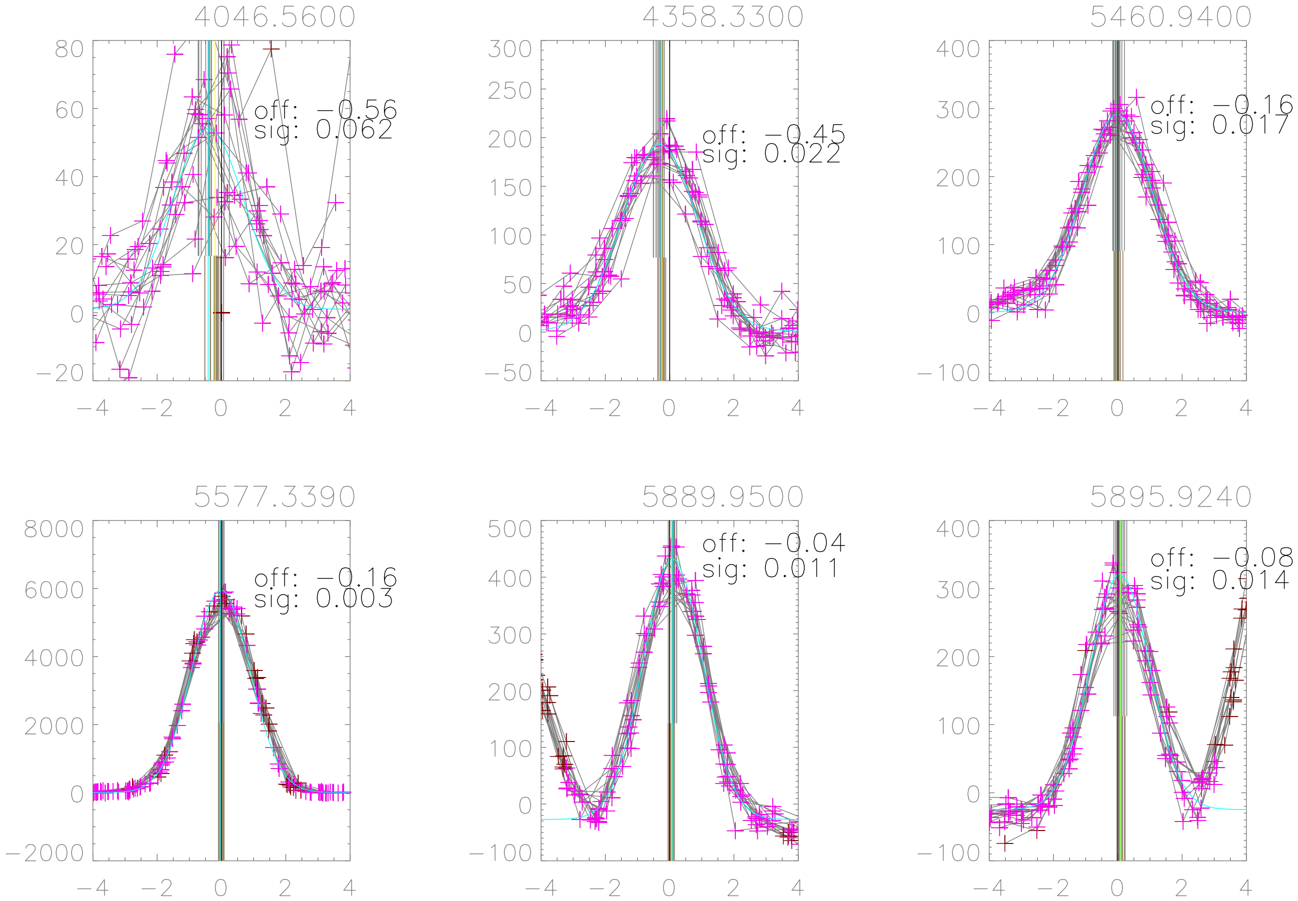


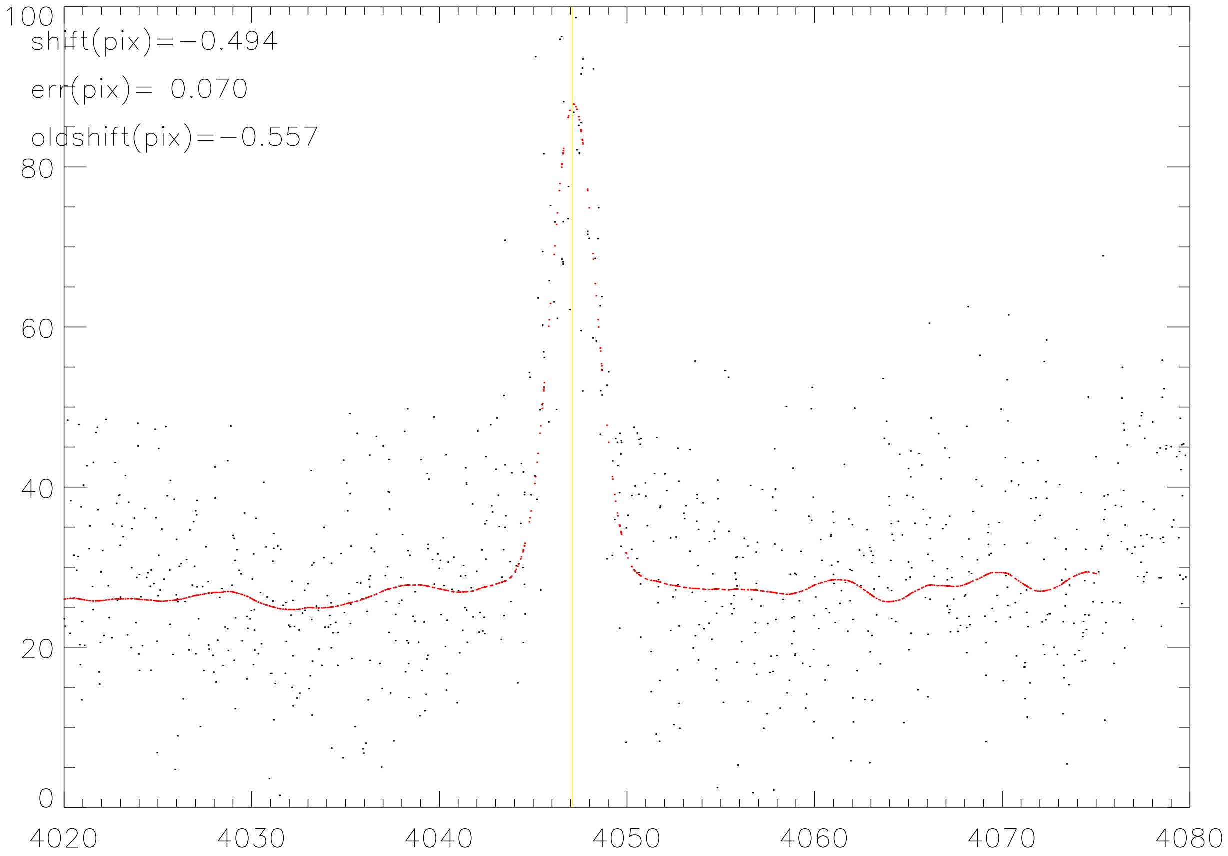
PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008819.fit

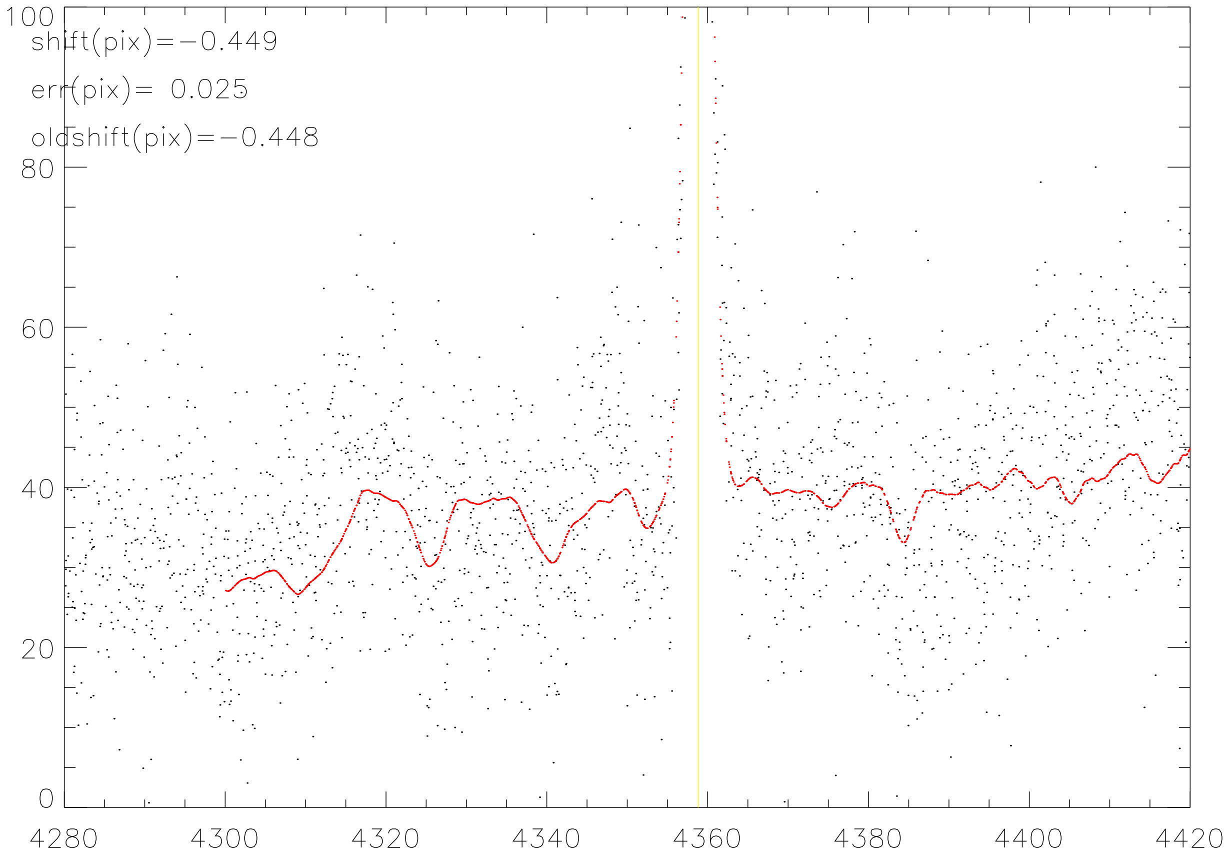

PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008819.fit
Brightness [electrons/pix]
0
1
2
3
4
5
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.919
Max value = 4.930
Wed Mar 5 11:36:43 2008



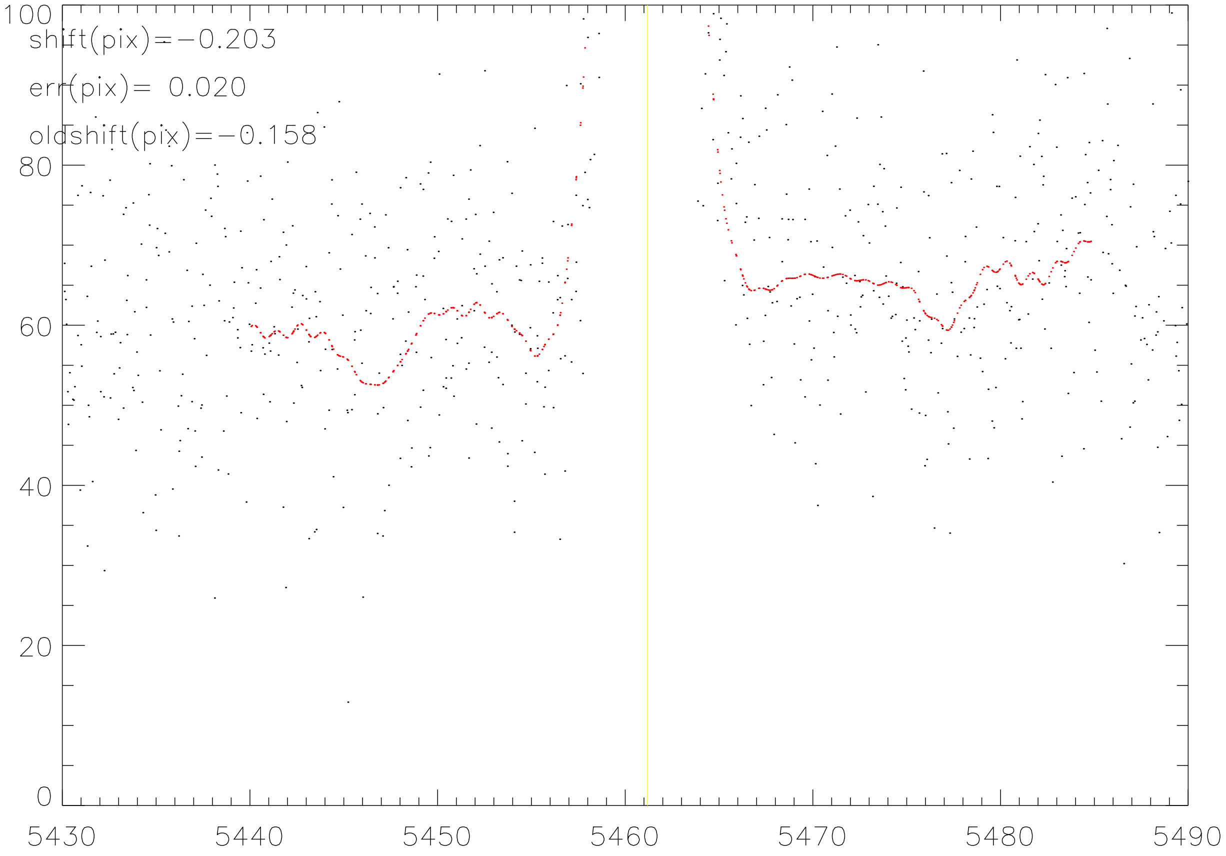
PLATE=0547 MJD=51959 Extraction chi^2 for sdR-b1-00008819.fit

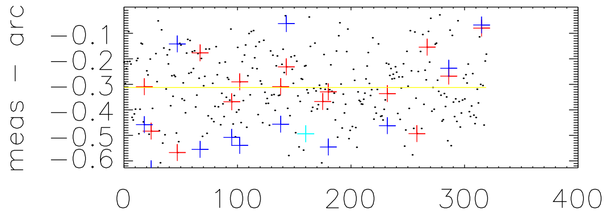

4046.5600
off: −0.56
sig: 0.062
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.45
sig: 0.022
300
250
200
150
100
50
0
−50
−4
−2
0
2
4
5460.9400
off: −0.16
sig: 0.017
400
300
200
100
0
−100
−4
−2
0
2
4
5577.3390
off: −0.16
sig: 0.003
8000
6000
4000
2000
0
−2000
−4
−2
0
2
4
5889.9500
off: −0.04
sig: 0.011
500
400
300
200
100
0
−100
−4
−2
0
2
4
5895.9240
off: −0.08
sig: 0.014
400
300
200
100
0
−100
−4
−2
0
2
4

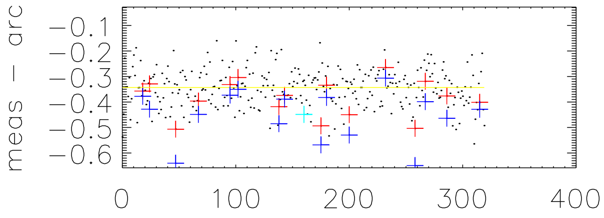

shift(pix)=−0.494
err(pix)= 0.070
oldshift(pix)=−0.557
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

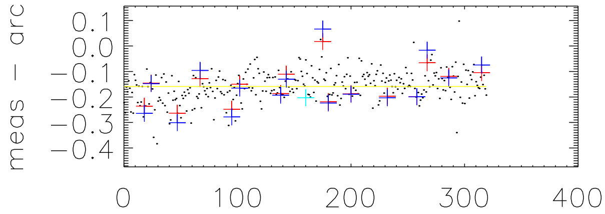


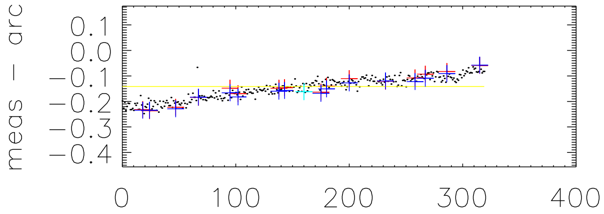
shift(pix)=−0.449
err(pix)= 0.025
oldshift(pix)=−0.448
0
20
40
60
80
100
4280
4300
4320
4340
4360
4380
4400
4420

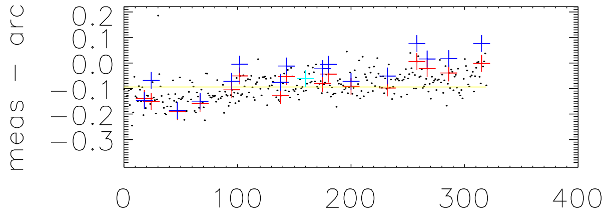

shift(pix)=−0.203
err(pix)= 0.020
oldshift(pix)=−0.158
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

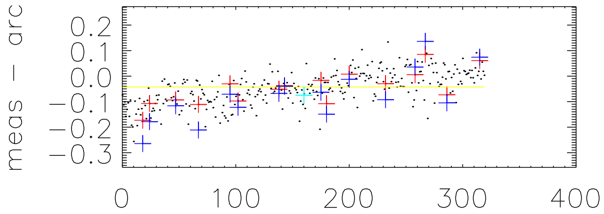

4046.5600

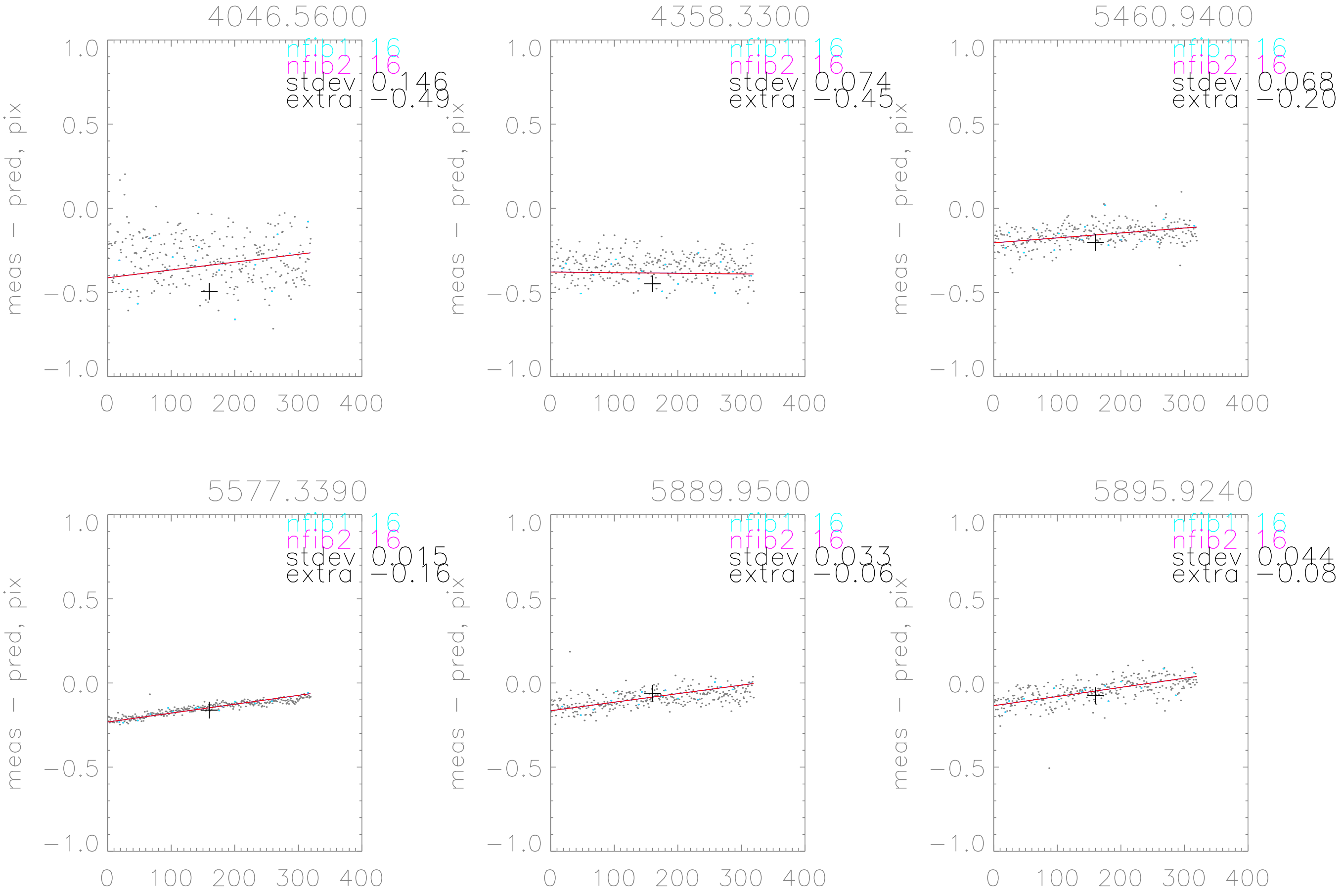

4358.3300

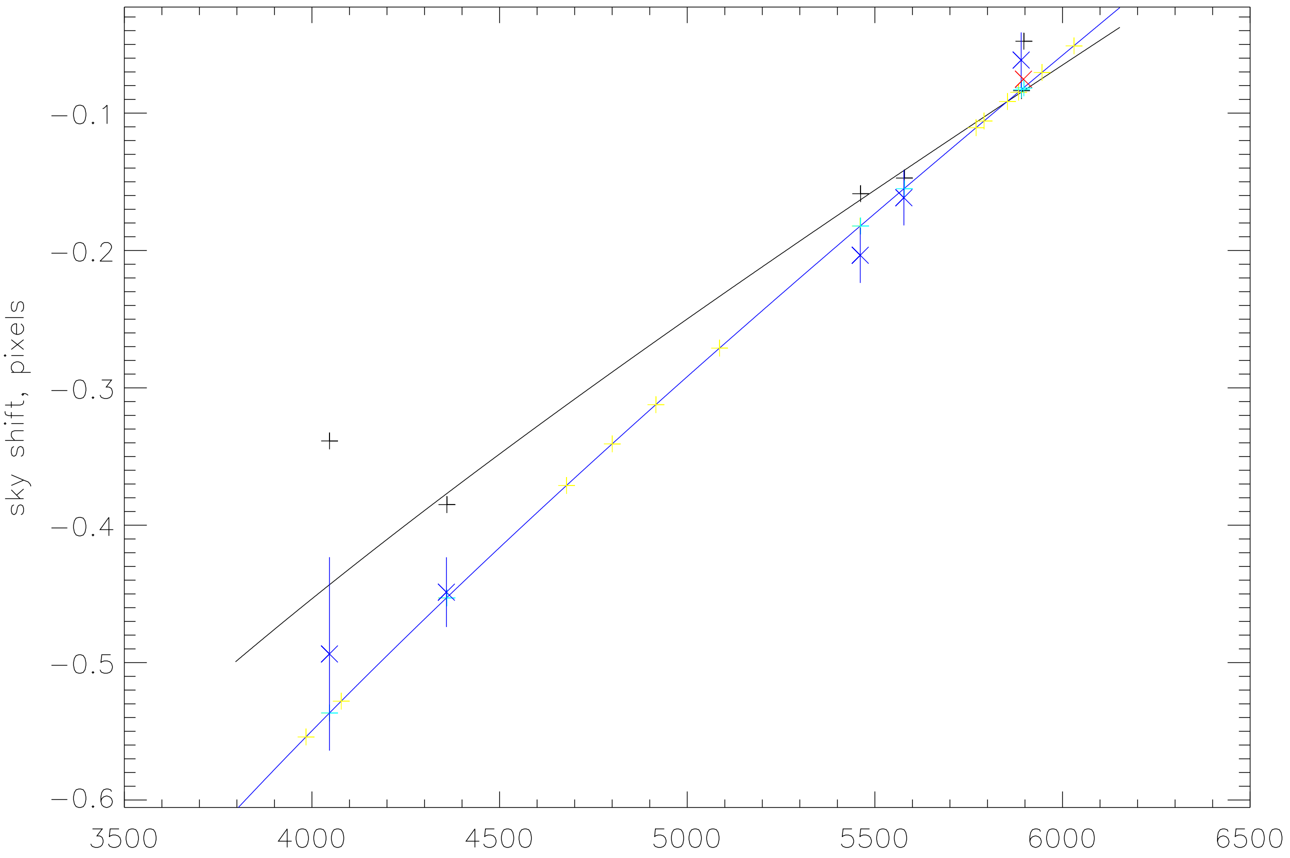

5460.9400

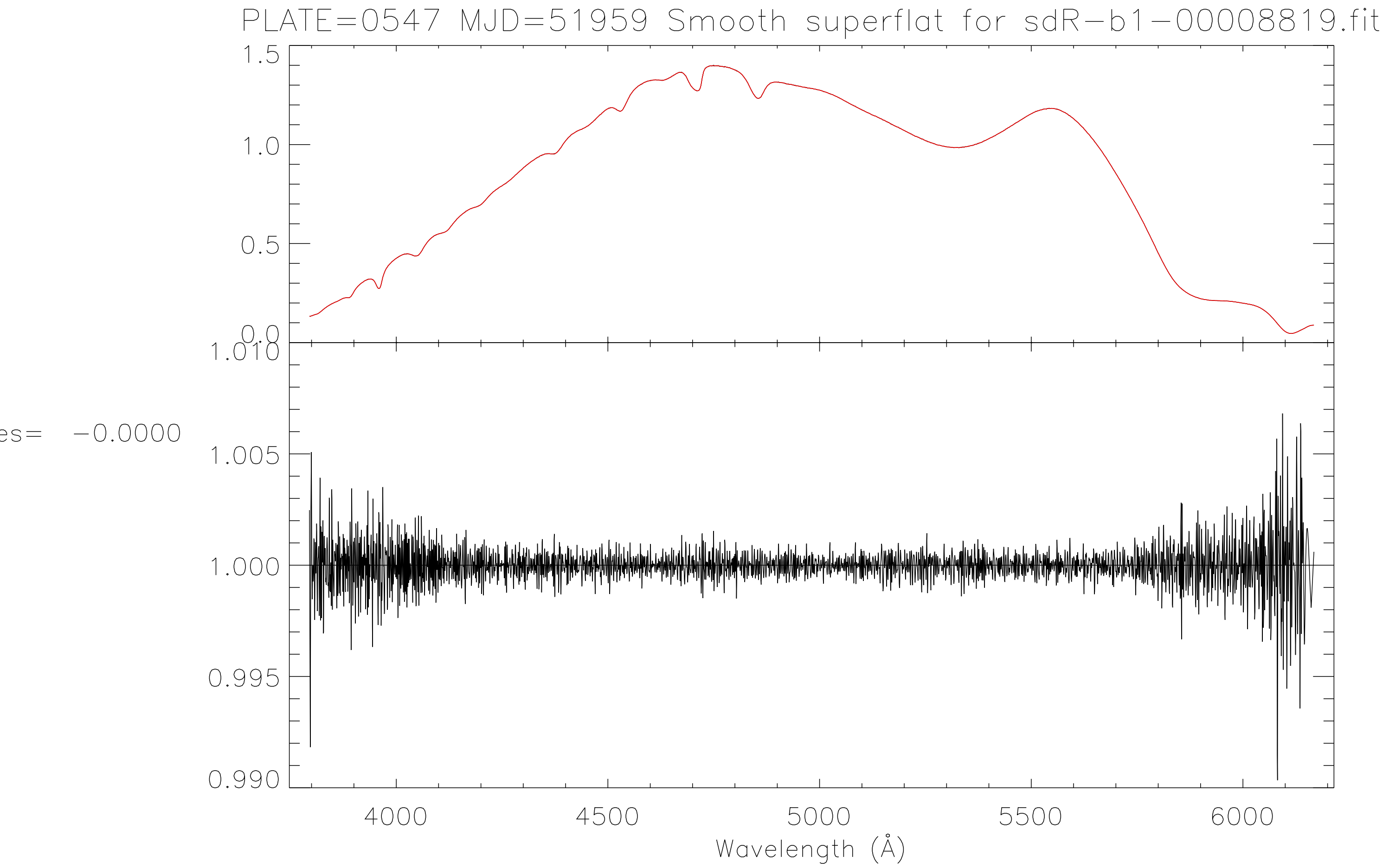

5577.3390

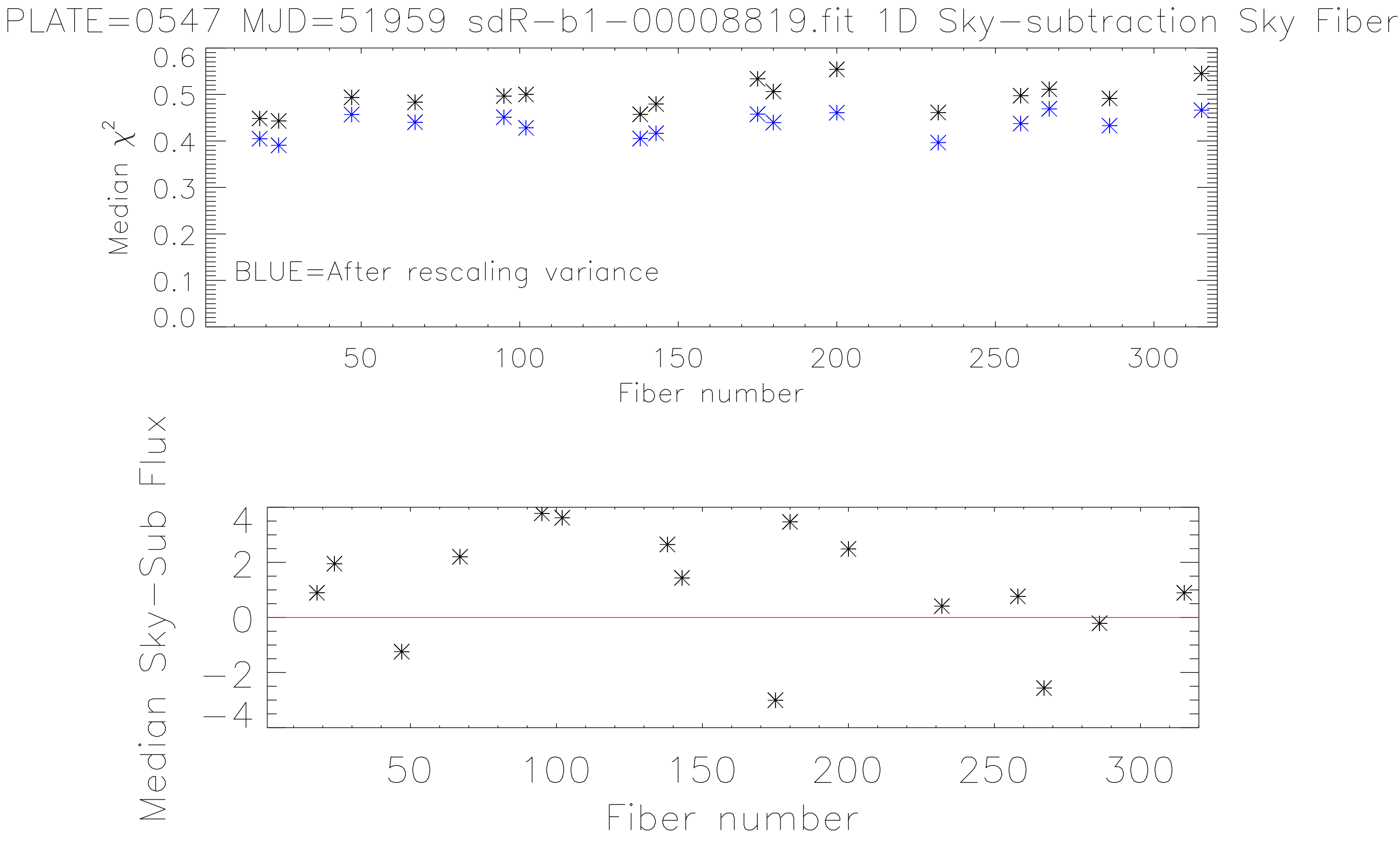

5889.9500

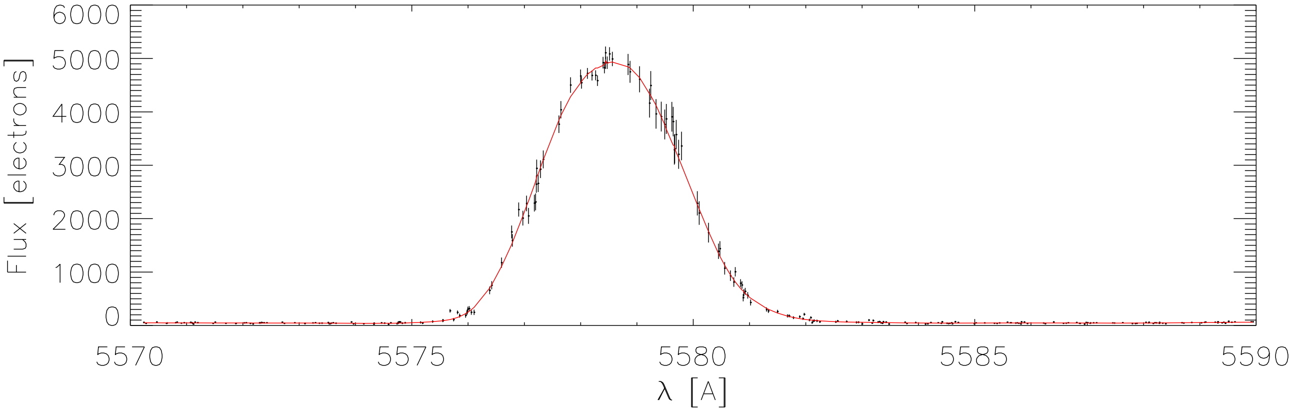

5895.9240

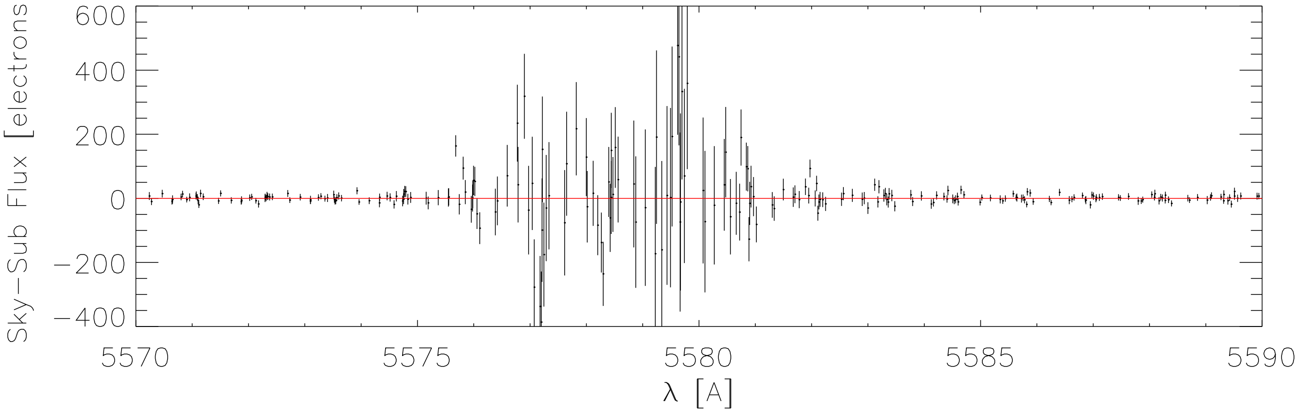

4046.5600
nfib1 16
nfib2 16
stdev 0.146
extra −0.49
4358.3300
nfib1 16
nfib2 16
stdev 0.074
extra −0.45
5460.9400
nfib1 16
nfib2 16
stdev 0.068
extra −0.20
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.16
5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra −0.06
5895.9240
nfib1 16
nfib2 16
stdev 0.044
extra −0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
3500
4000
4500
5000
5500
6000
6500


PLATE=0547 MJD=51959 Smooth superflat for sdR-b1-00008819.fit
1.5
1.0
0.5
0.0
1.010
es= −0.0000
1.005
1.000
0.995
0.990
4000
4500
5000
5500
6000
Wavelength (Å)

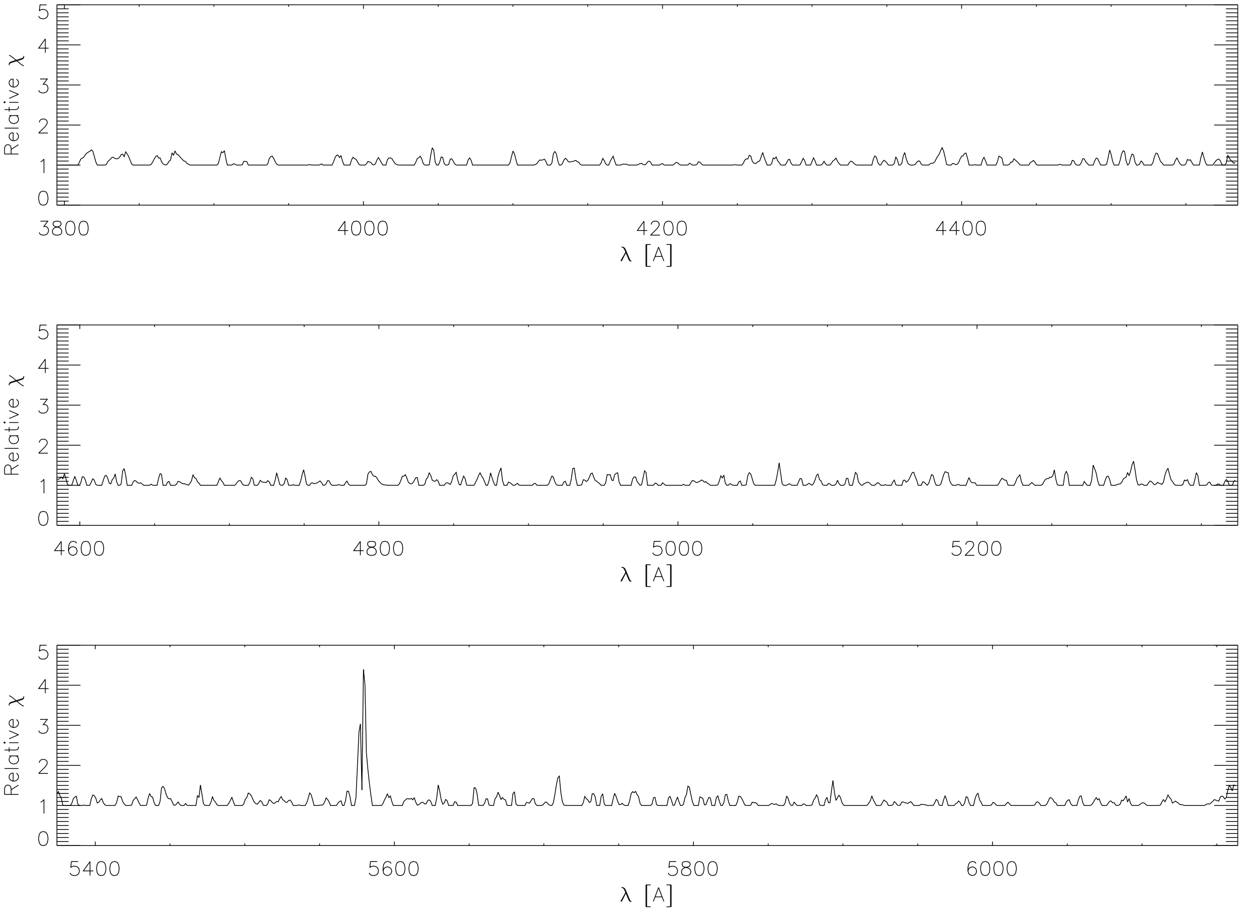

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

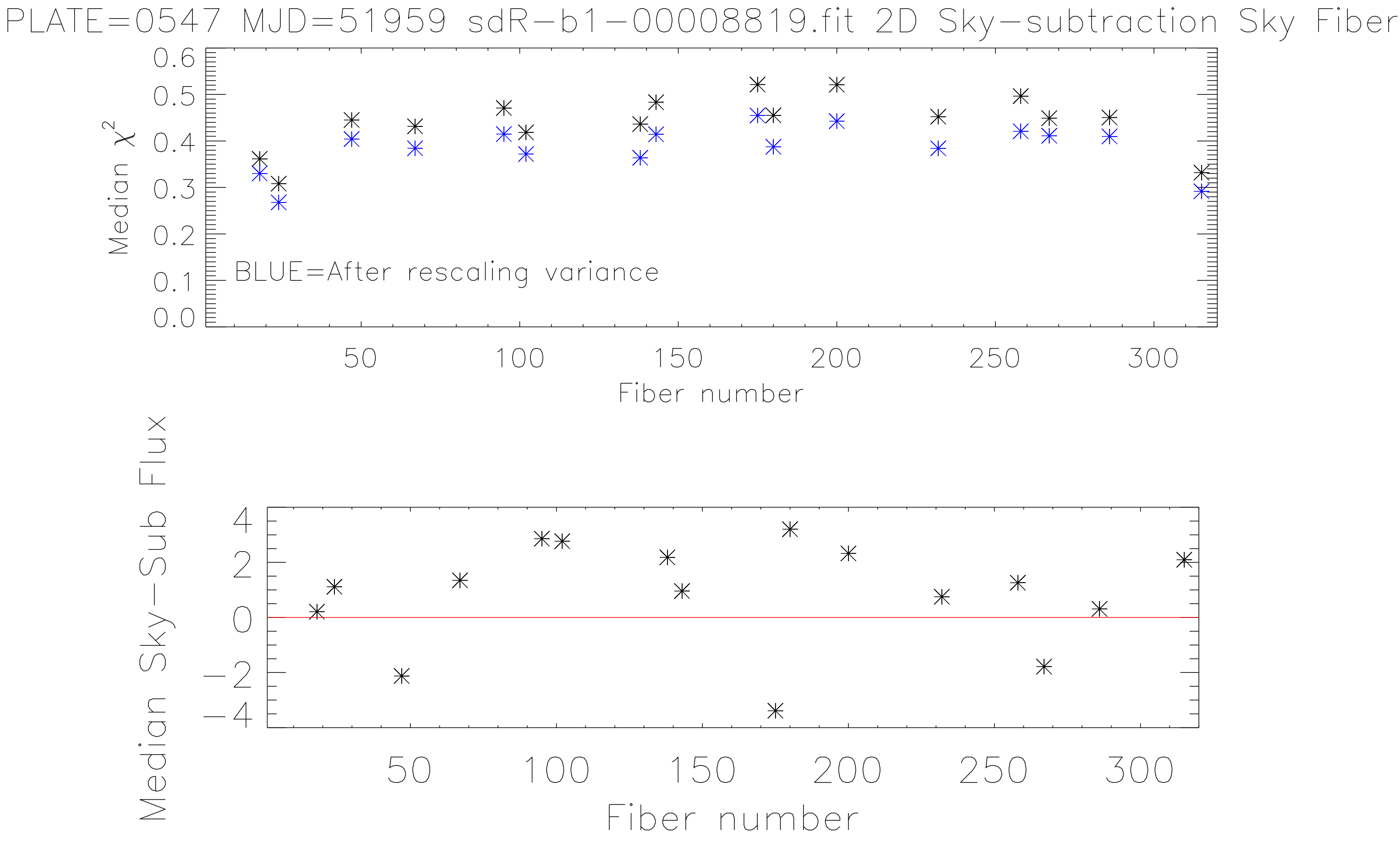

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 1D Sky-subtraction Sky Fibers

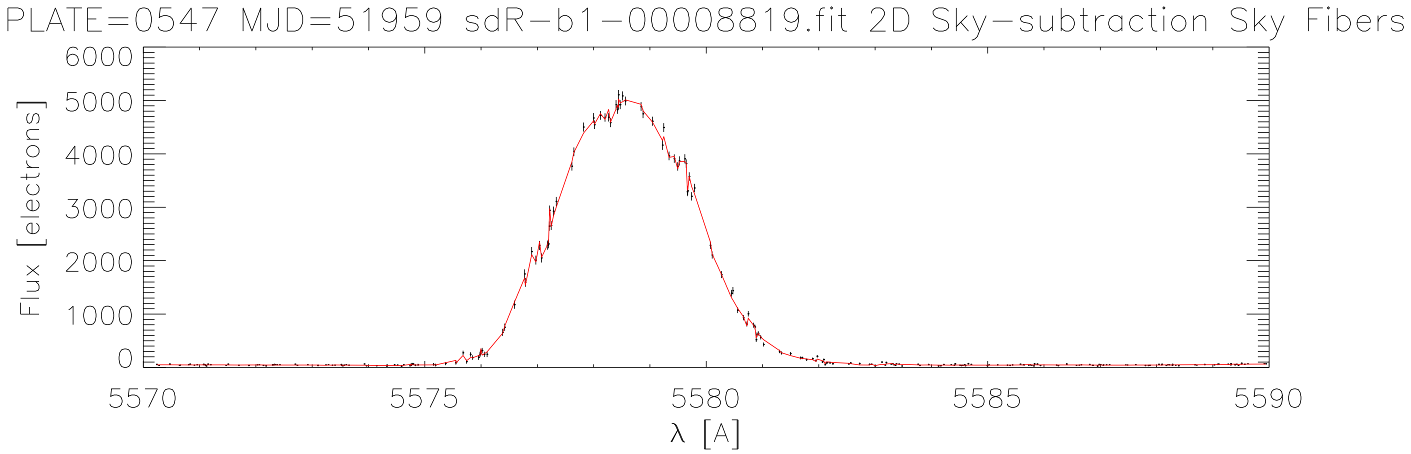

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 1D Sky-subtraction Sky-subtracted Sky F

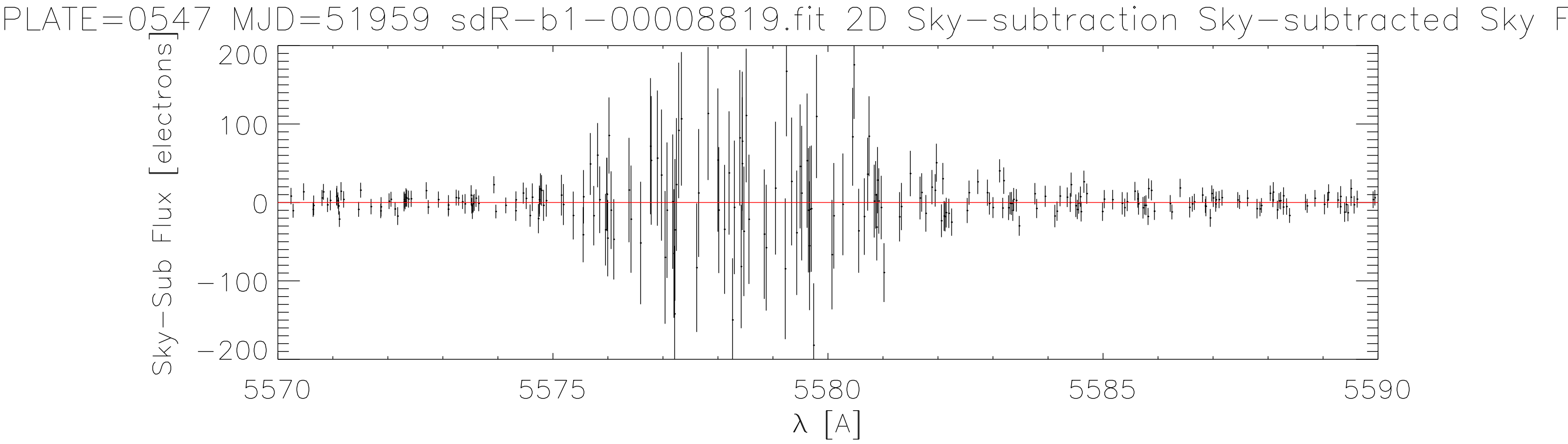
Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 1D Sky-subtraction Rescaled Errors



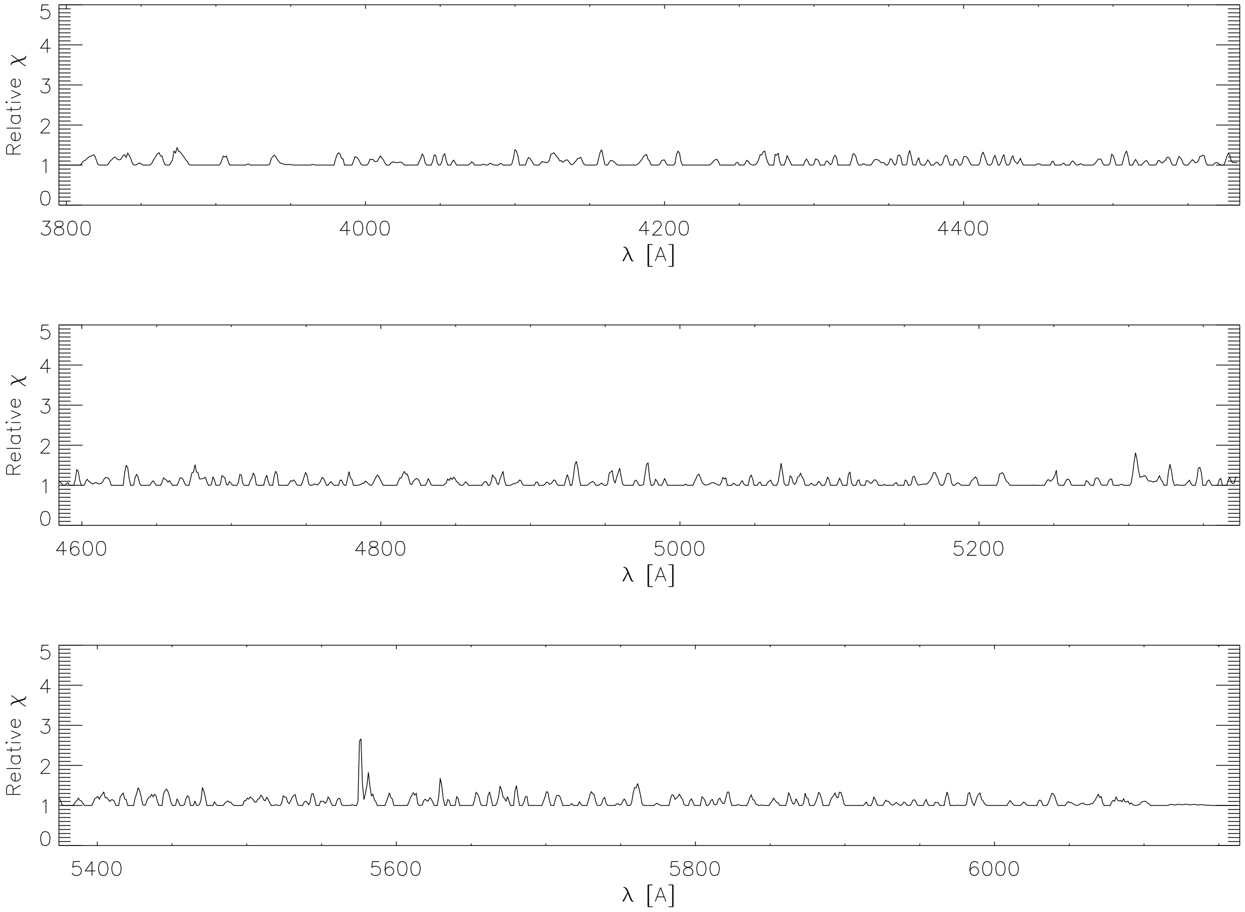

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number

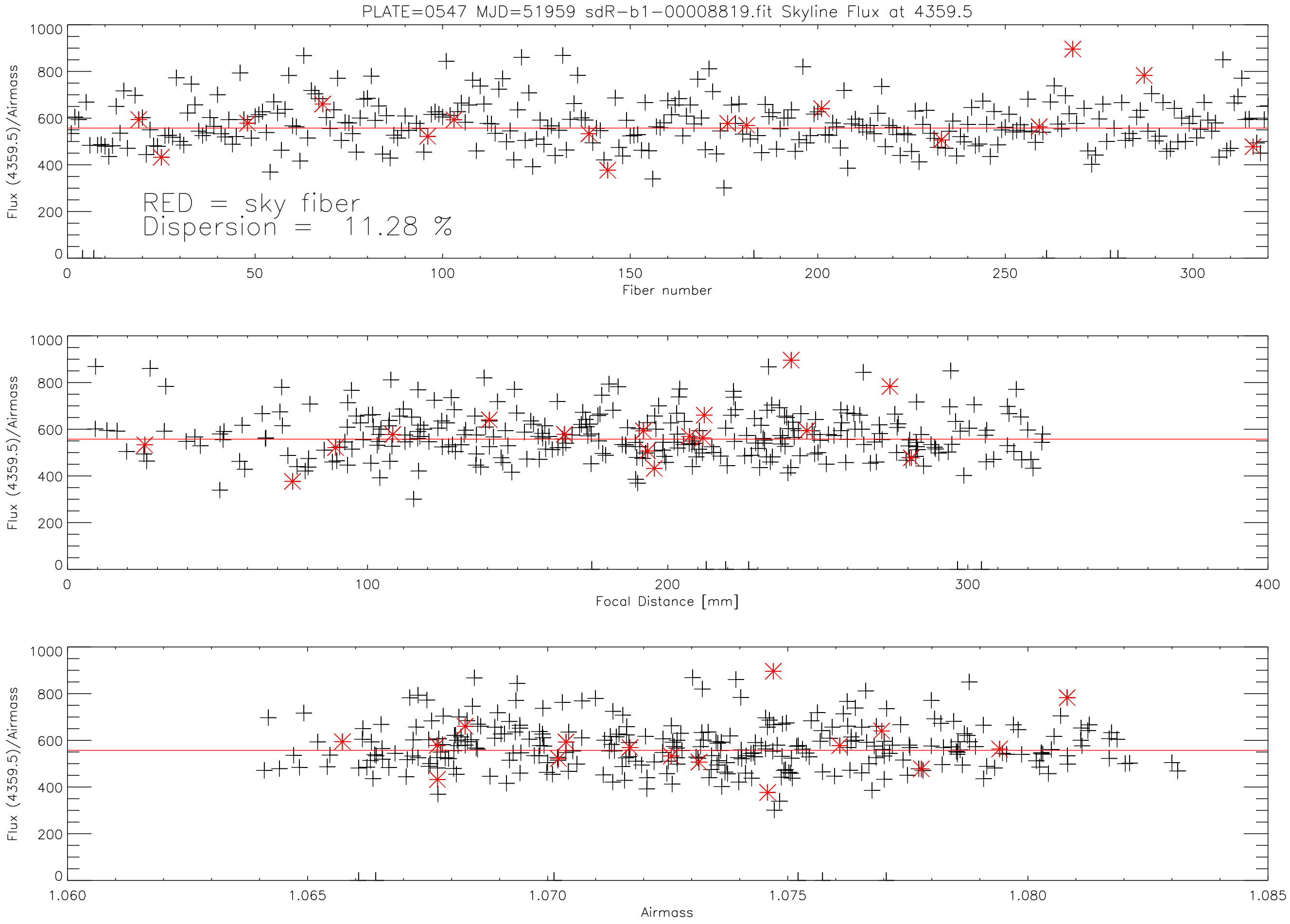

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

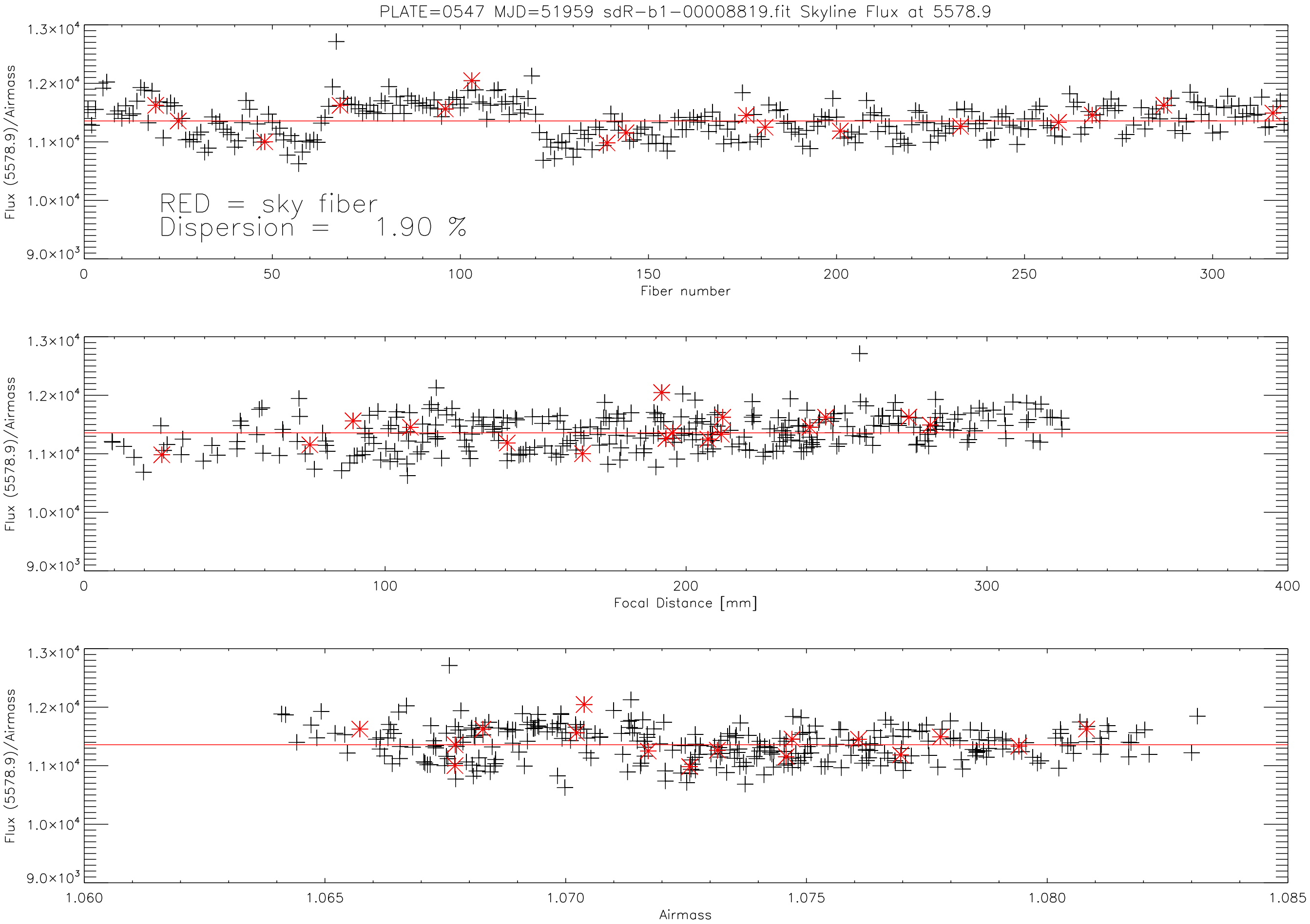

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

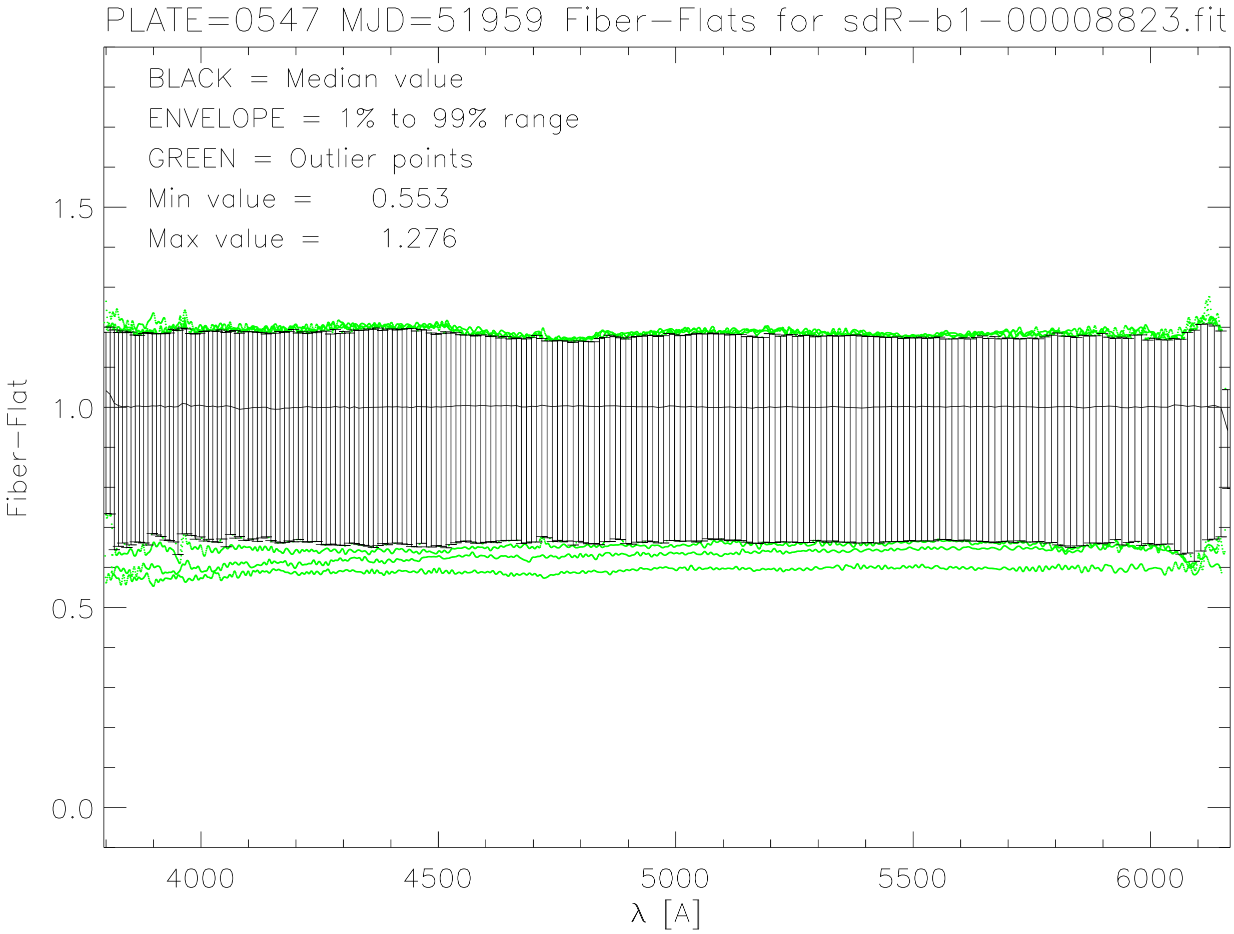
Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b1-00008819.fit 2D Sky-subtraction Rescaled Errors




PLATE=0547 MJD=51959 sdR-b1-00008819.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 11.28 %
Flux (4359.5)/Airmass
0
200
400
600
800
1000
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.060
1.065
1.070
1.075
1.080
1.085


PLATE=0547 MJD=51959 sdR-b1-00008819.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.3×10^4
1.2×10^4
1.1×10^4
1.0×10^4
9.0×10^3
RED = sky fiber
Dispersion = 1.90 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.3×10^4
1.2×10^4
1.1×10^4
1.0×10^4
9.0×10^3
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.3×10^4
1.2×10^4
1.1×10^4
1.0×10^4
9.0×10^3
1.060
1.065
1.070
1.075
1.080
1.085
Airmass



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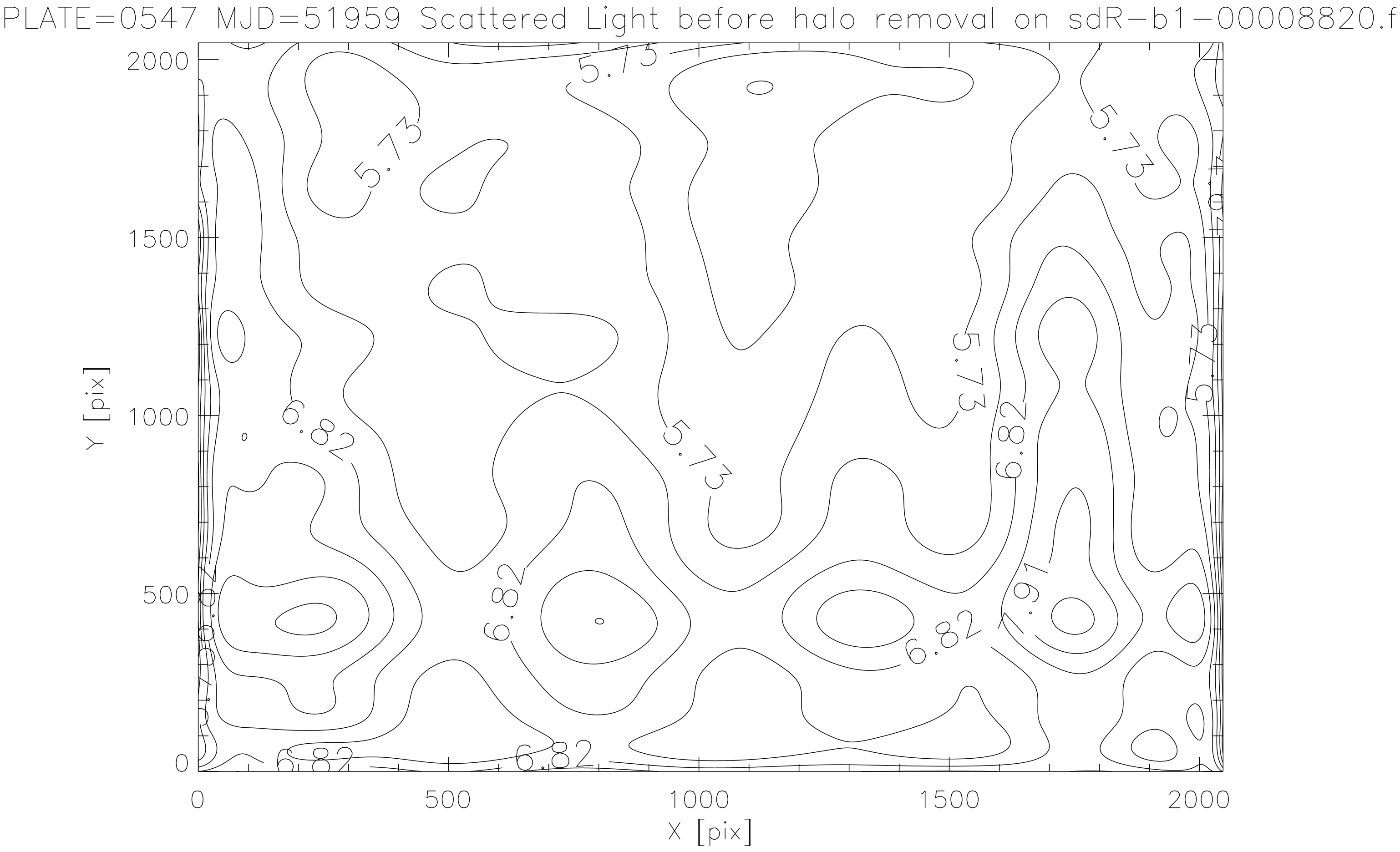
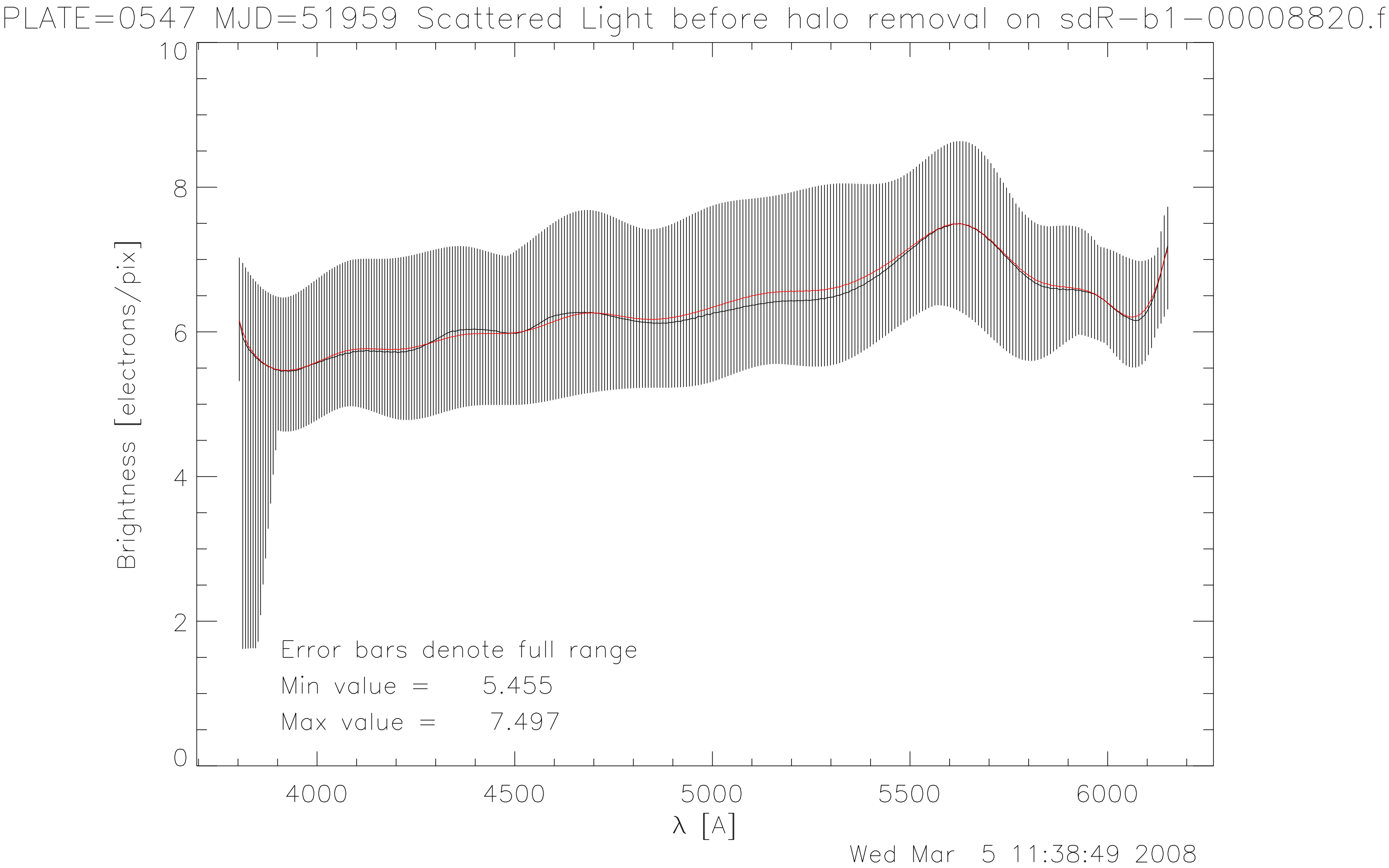
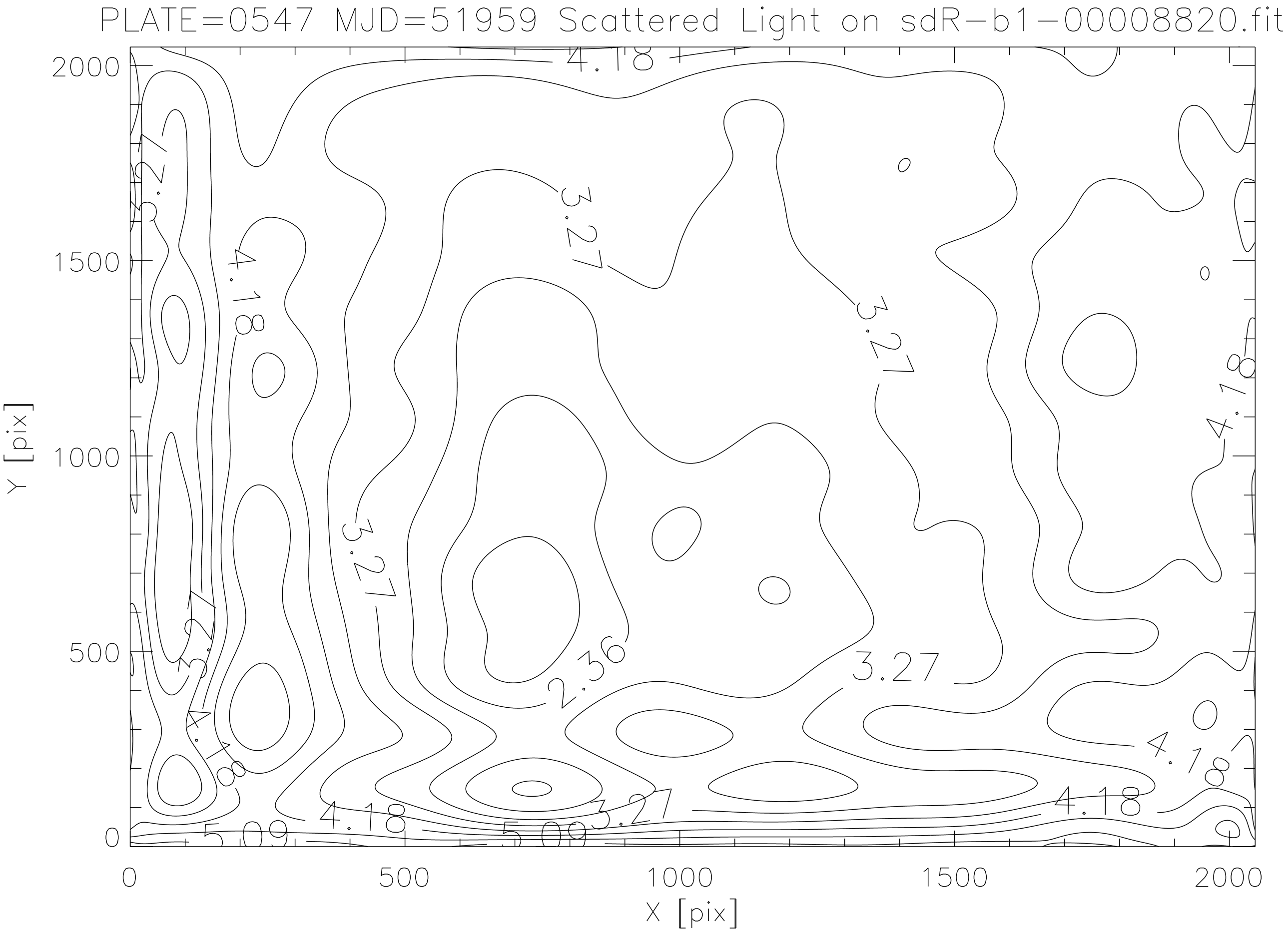
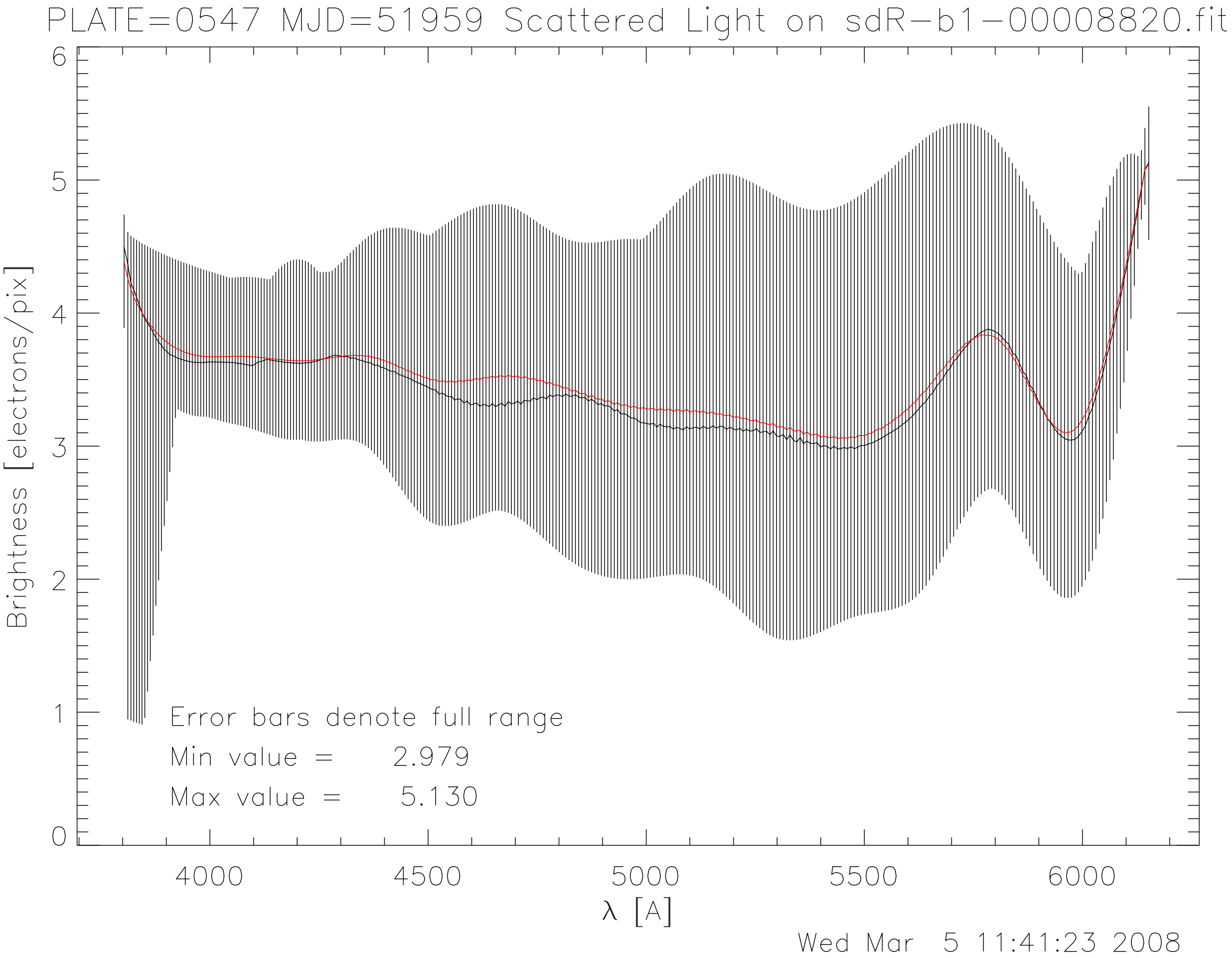
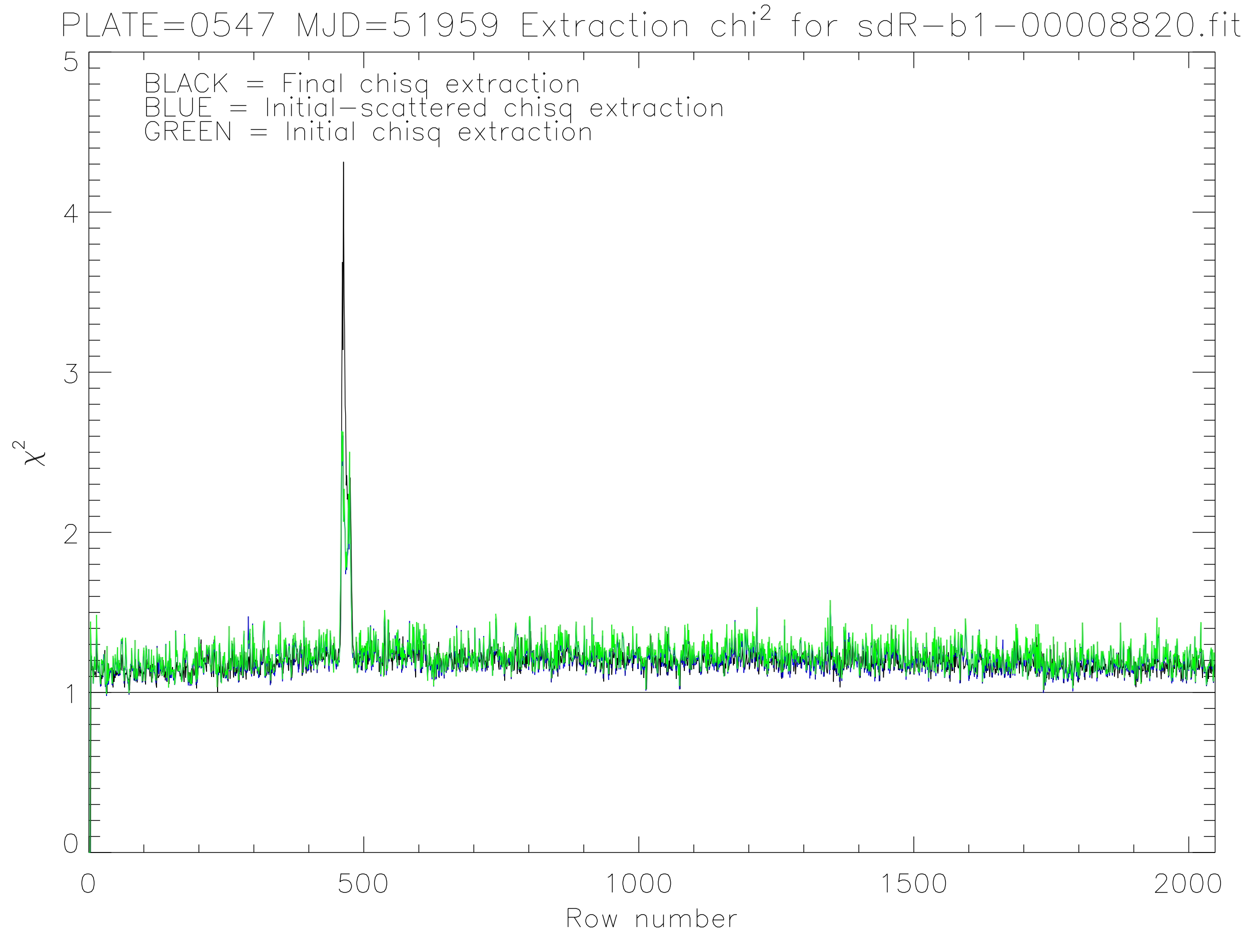


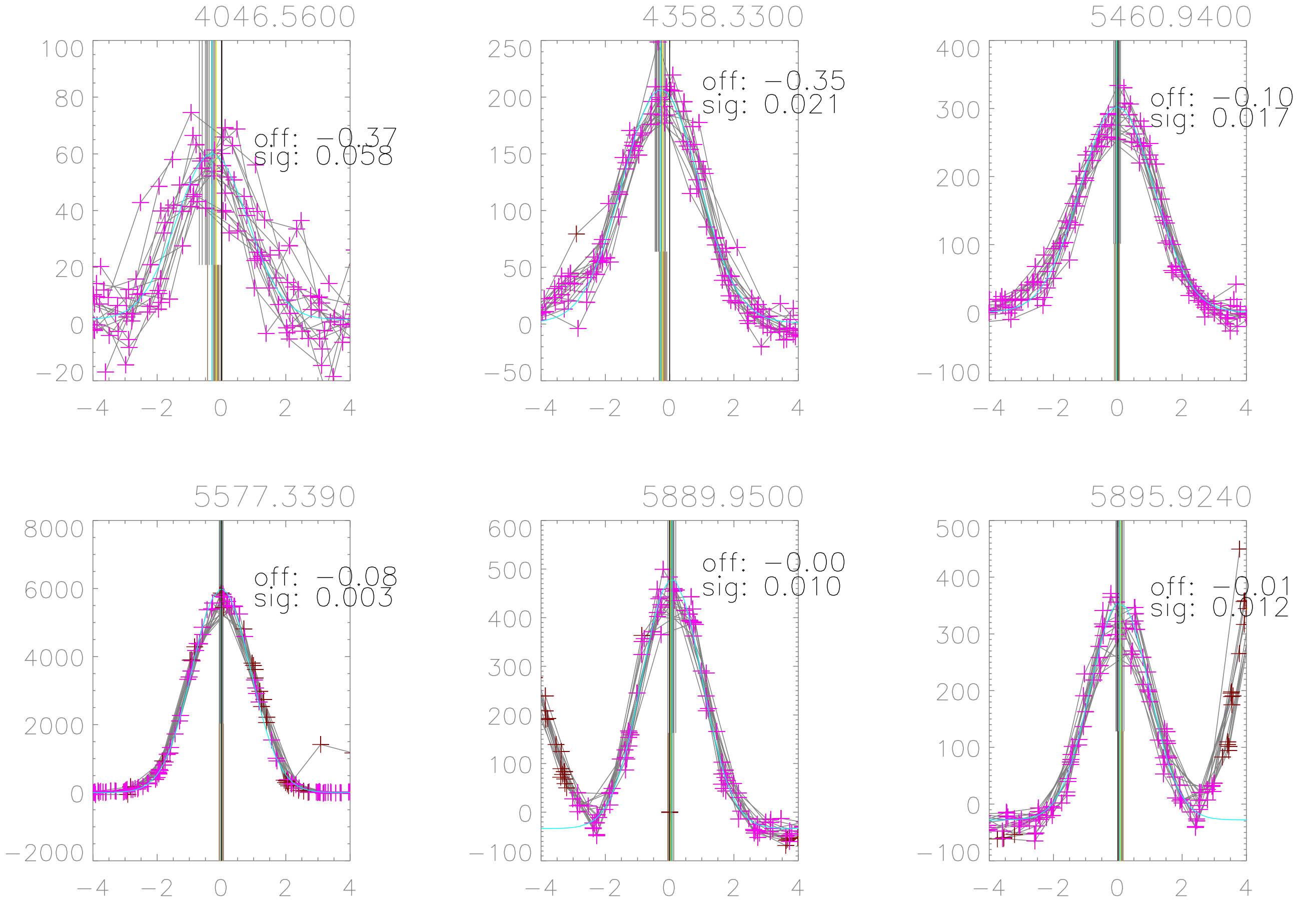
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008820.f

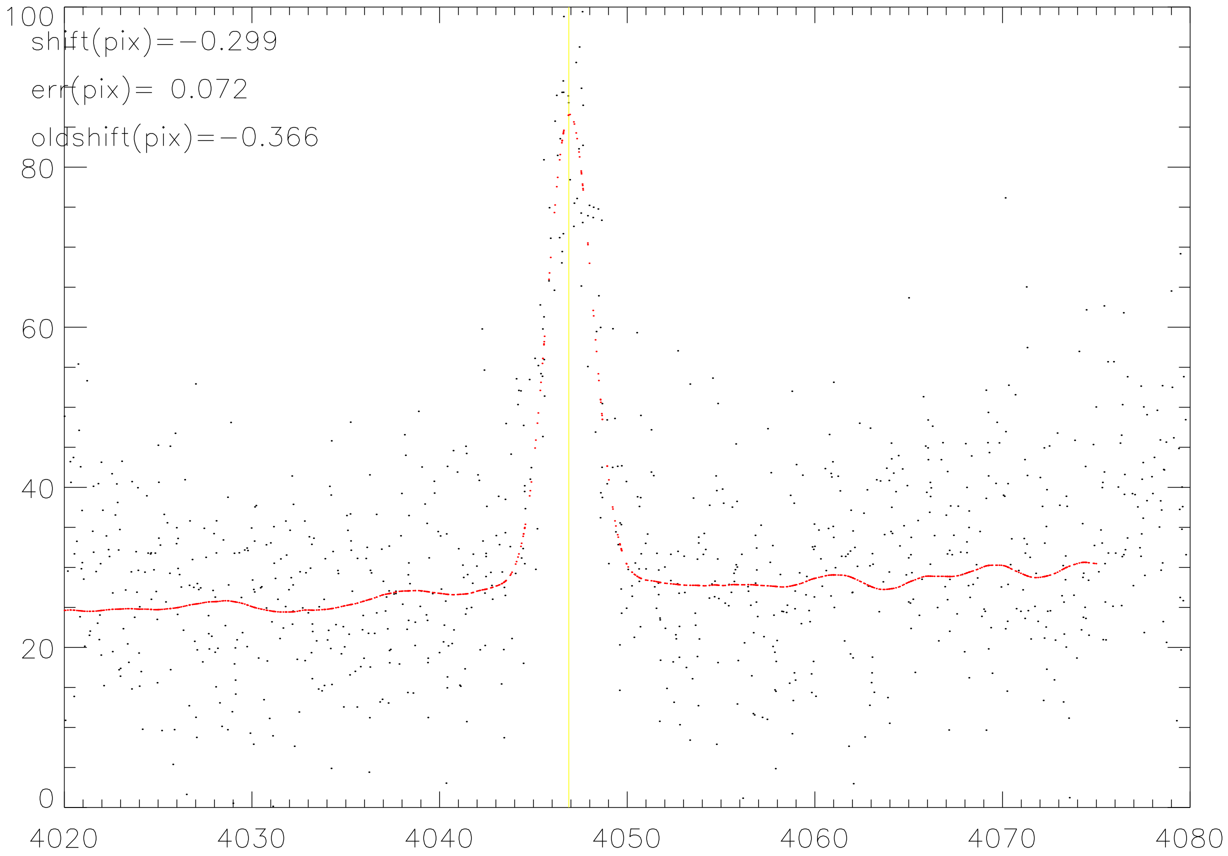

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008820.f
Brightness [electrons/pix]
0
2
4
6
8
10
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.455
Max value = 7.497
Wed Mar 5 11:38:49 2008

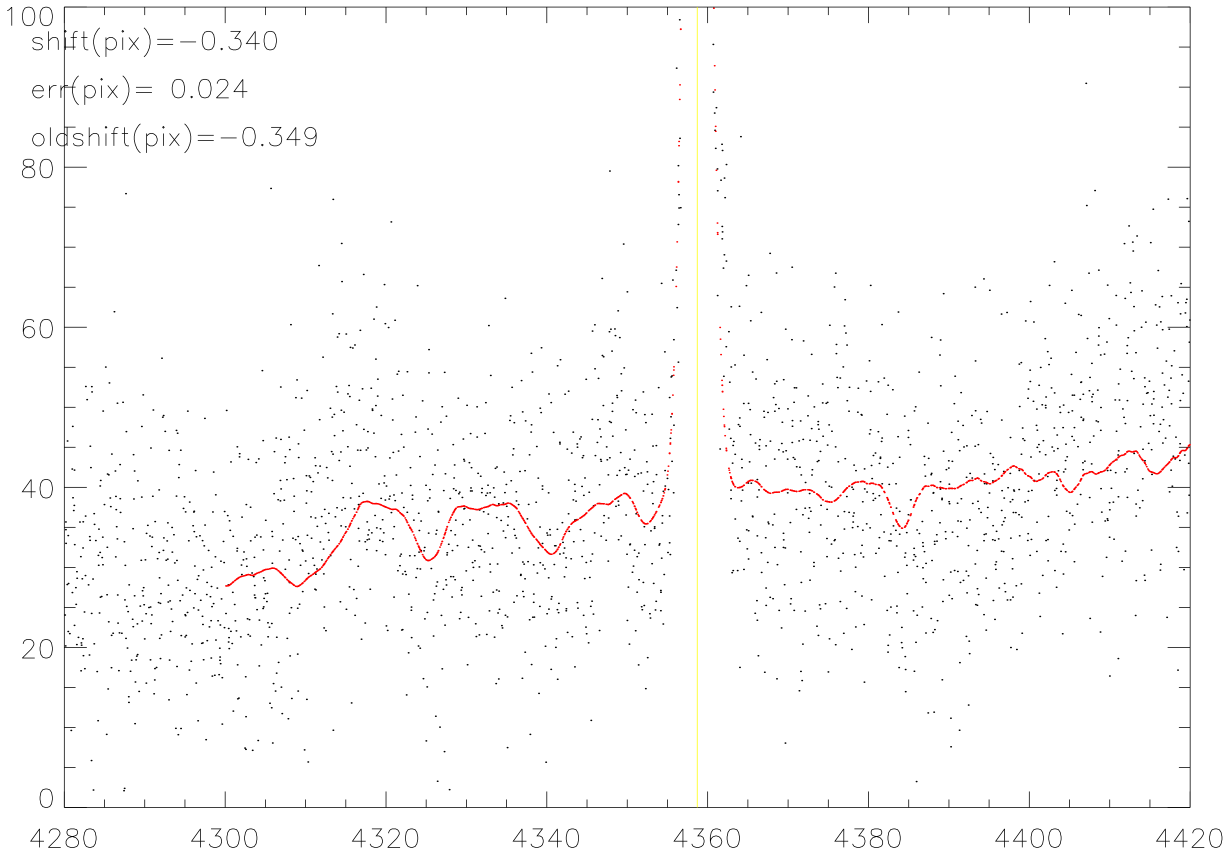

PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008820.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
2.36
3.27
4.18
5.09

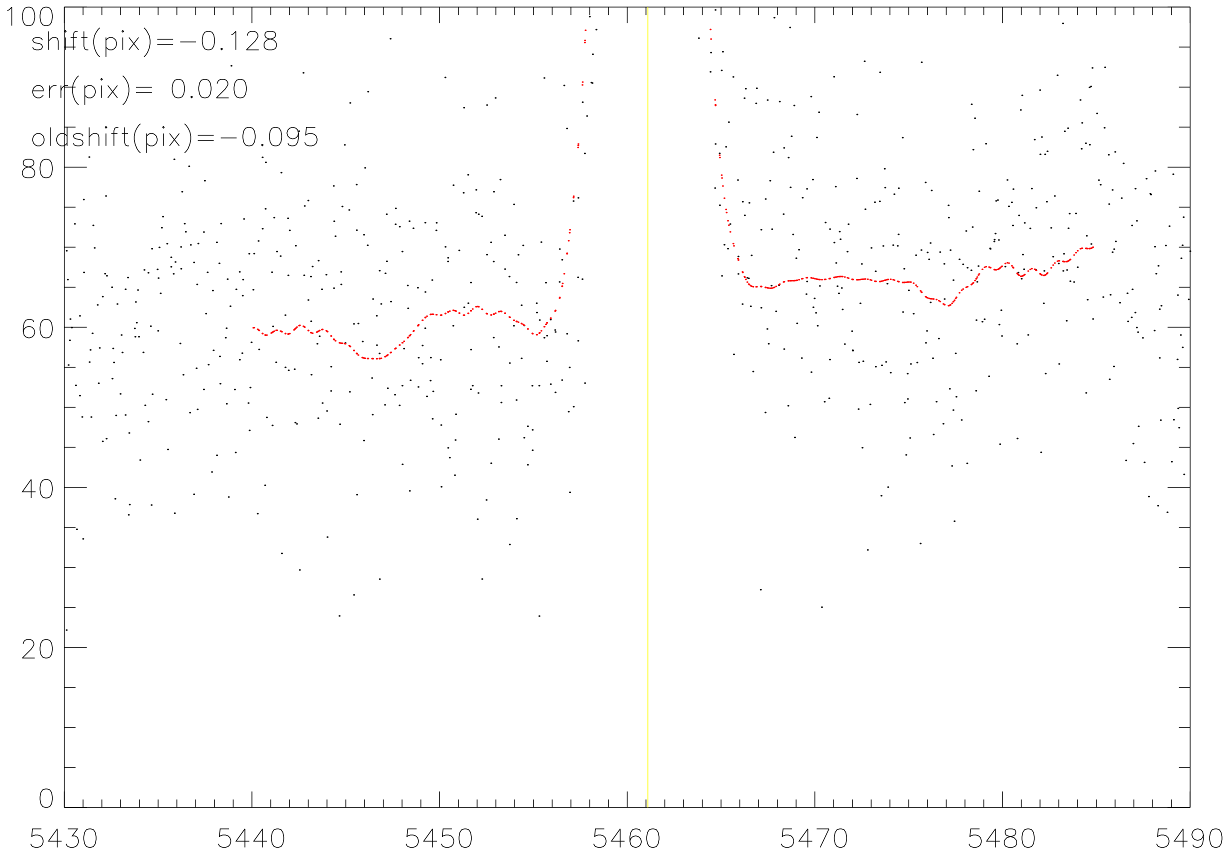

PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008820.fit
Brightness [electrons/pix]
0
1
2
3
4
5
6
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.979
Max value = 5.130
Wed Mar 5 11:41:23 2008

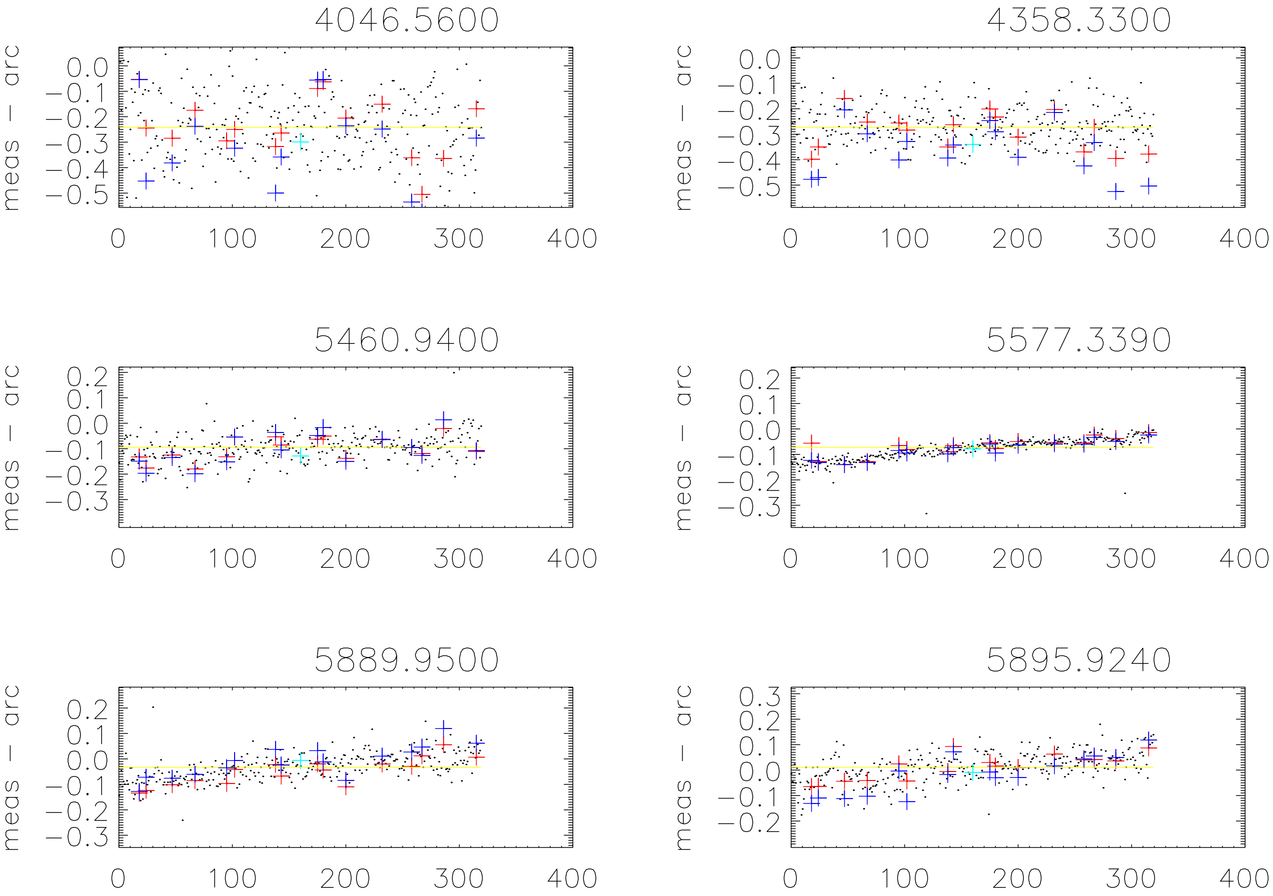

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-b1-00008820.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

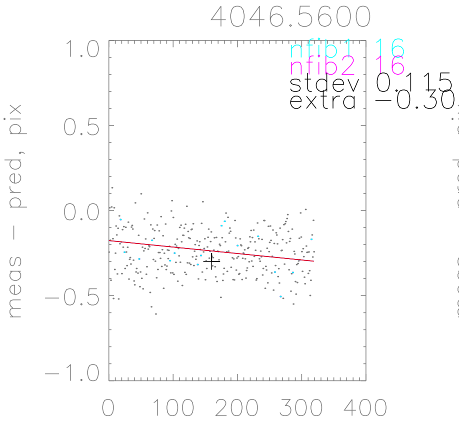

4046.5600
off: −0.37
sig: 0.058
100
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.35
sig: 0.021
250
200
150
100
50
0
−50
−4
−2
0
2
4
5460.9400
off: −0.10
sig: 0.017
400
300
200
100
0
−100
−4
−2
0
2
4
5577.3390
off: −0.08
sig: 0.003
8000
6000
4000
2000
0
−2000
−4
−2
0
2
4
5889.9500
off: −0.00
sig: 0.010
600
500
400
300
200
100
0
−100
−4
−2
0
2
4
5895.9240
off: −0.01
sig: 0.012
500
400
300
200
100
0
−100
−4
−2
0
2
4

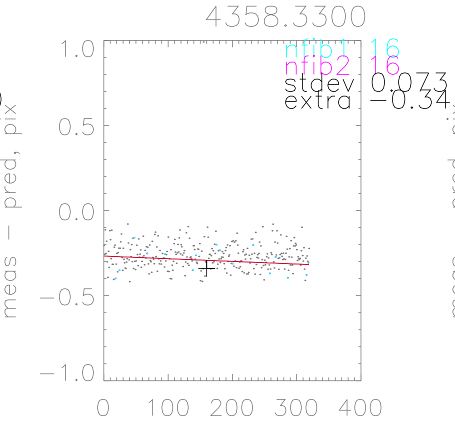

shift(pix)=−0.299
err(pix)= 0.072
oldshift(pix)=−0.366
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

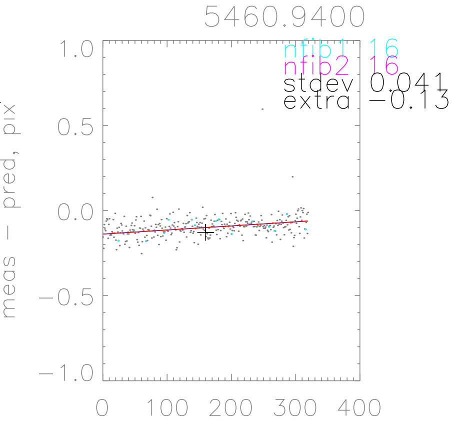

shift(pix)=−0.340
err(pix)= 0.024
oldshift(pix)=−0.349
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

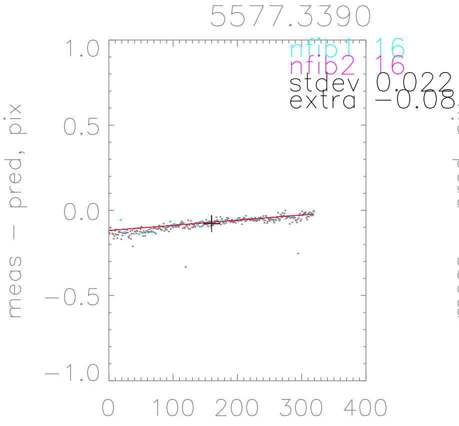

shift(pix)=−0.128
err(pix)= 0.020
oldshift(pix)=−0.095
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

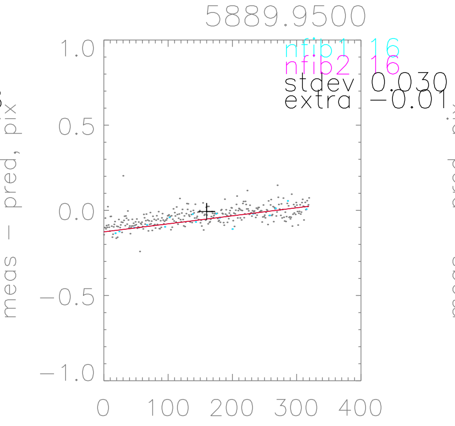

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0.3
0.2
0.1
0
100
200
300
400

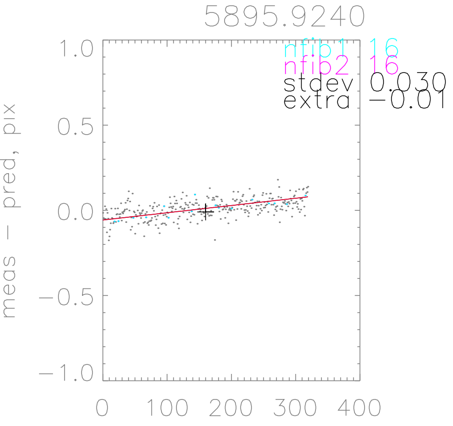

4046.5600
nfib1 16
nfib2 16
stdev 0.115
extra −0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

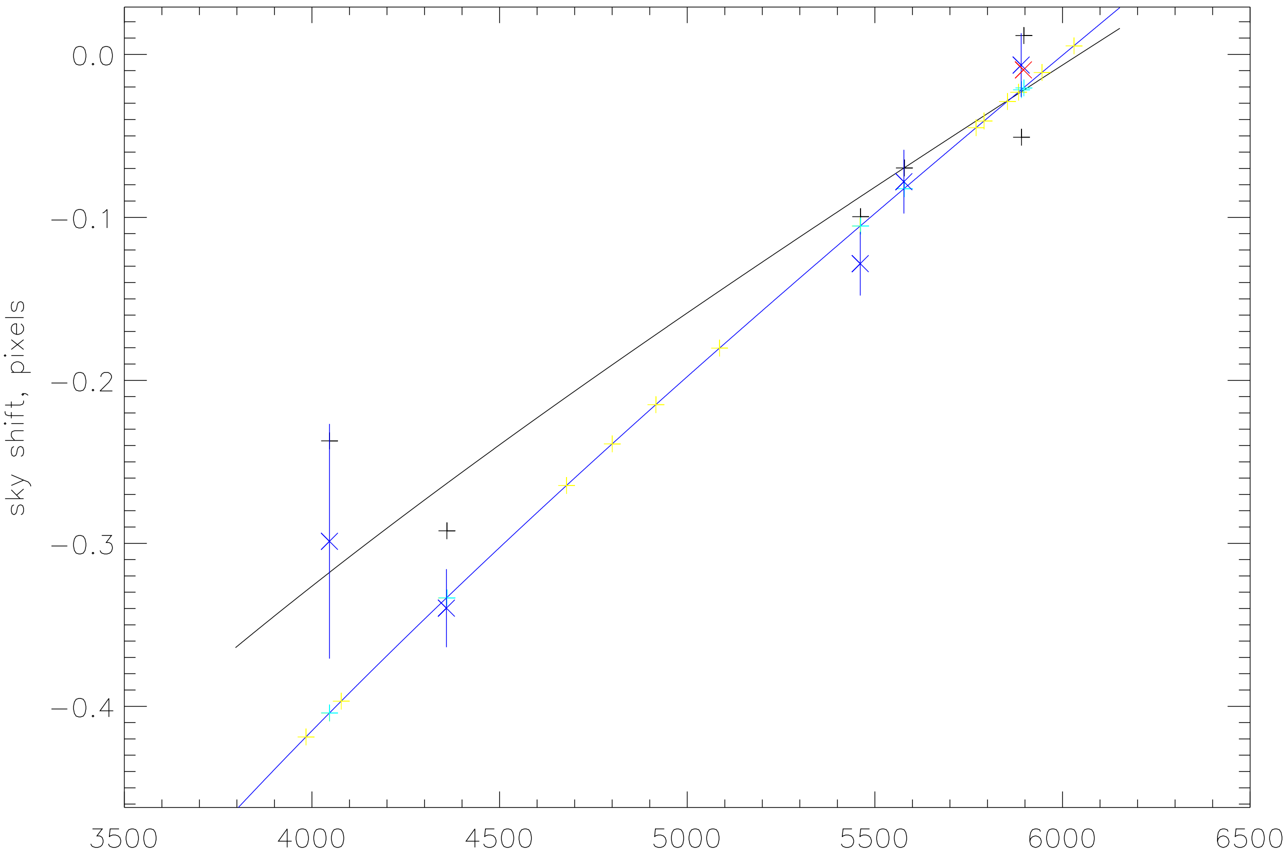

4358.3300
nfib1 16
nfib2 16
stdev 0.073
extra −0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

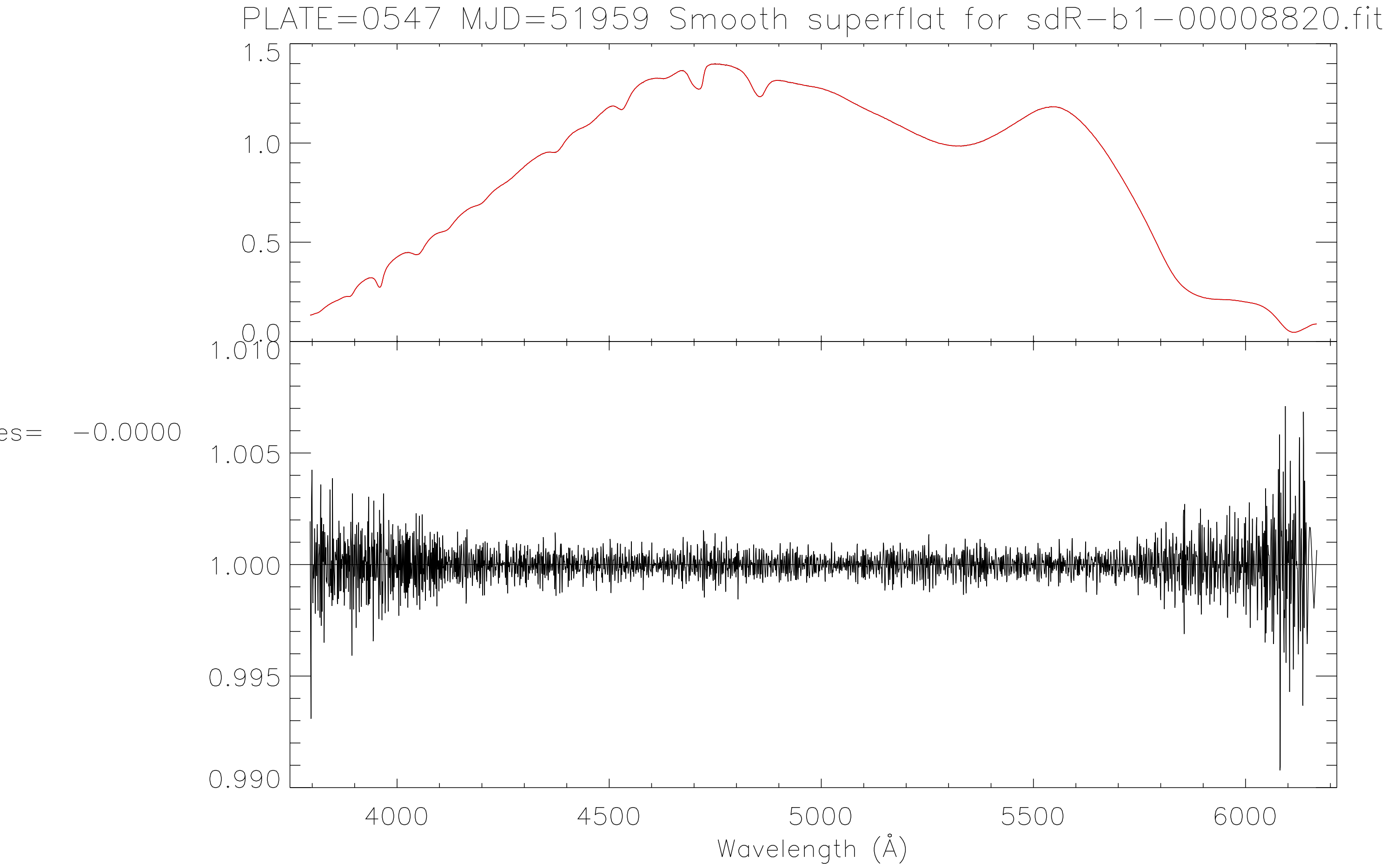

5460.9400
nfib1 16
nfib2 16
stdev 0.041
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

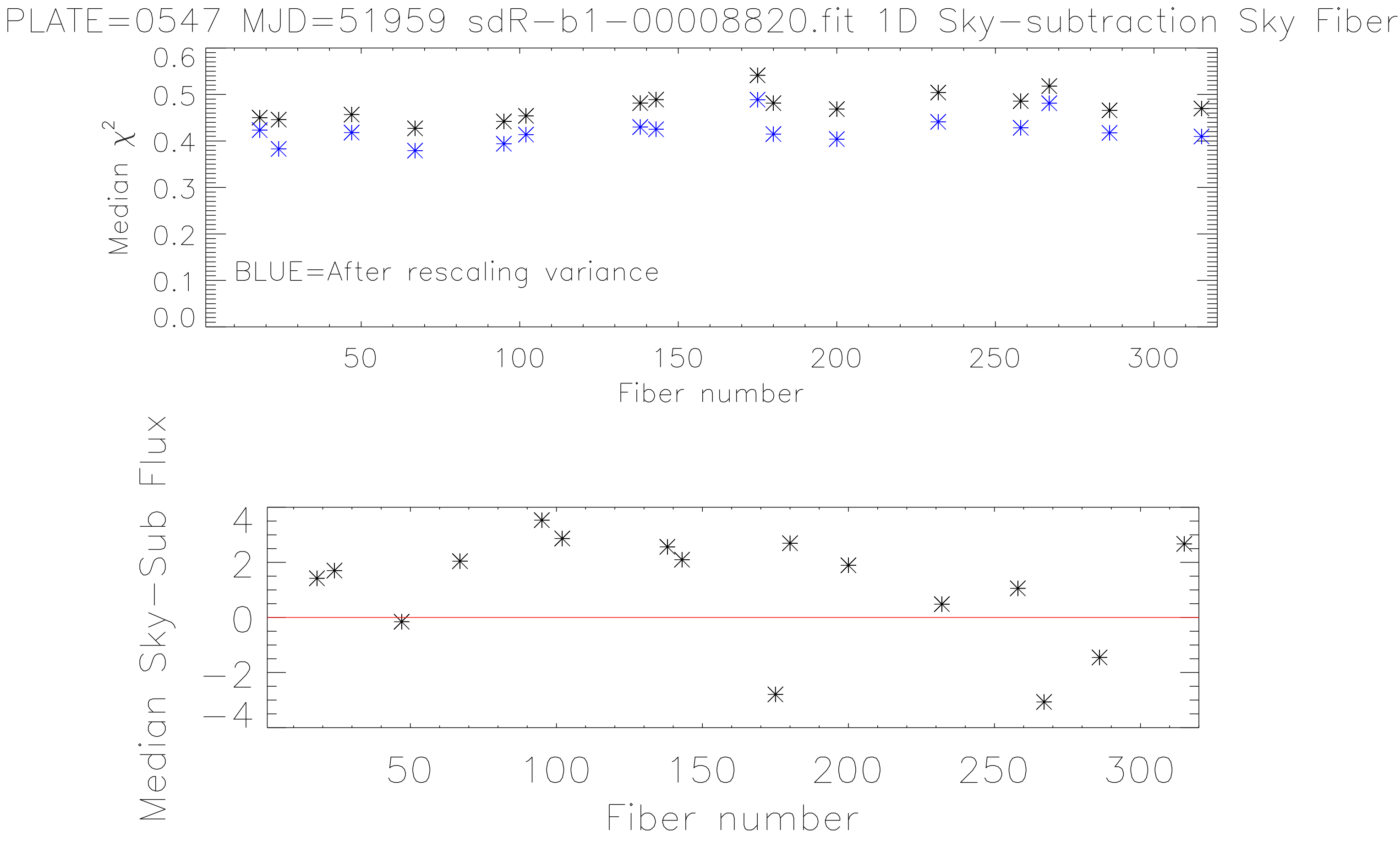

5577.3390
nfib1 16
nfib2 16
stdev 0.022
extra −0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

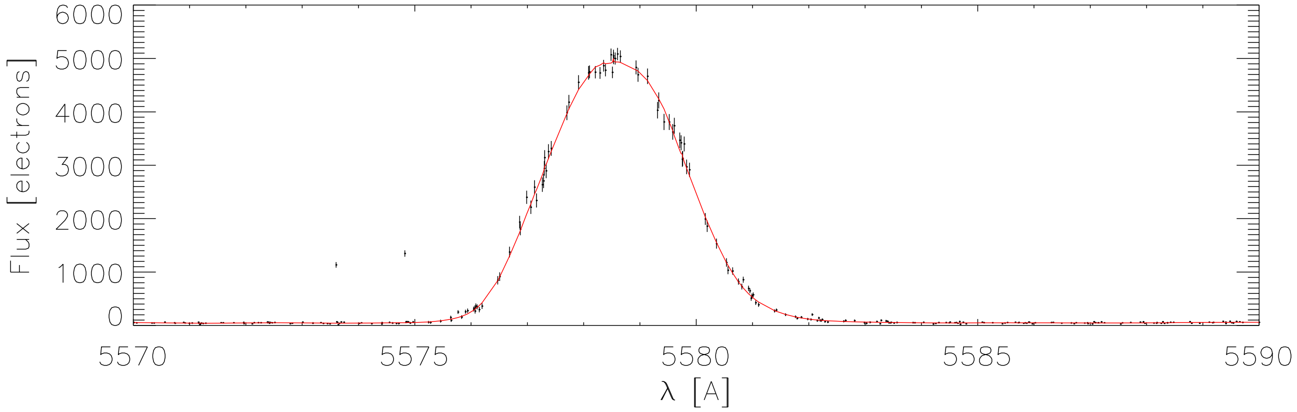

5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


5895.9240
nfib1 16
nfib2 16
stdev 0.030
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

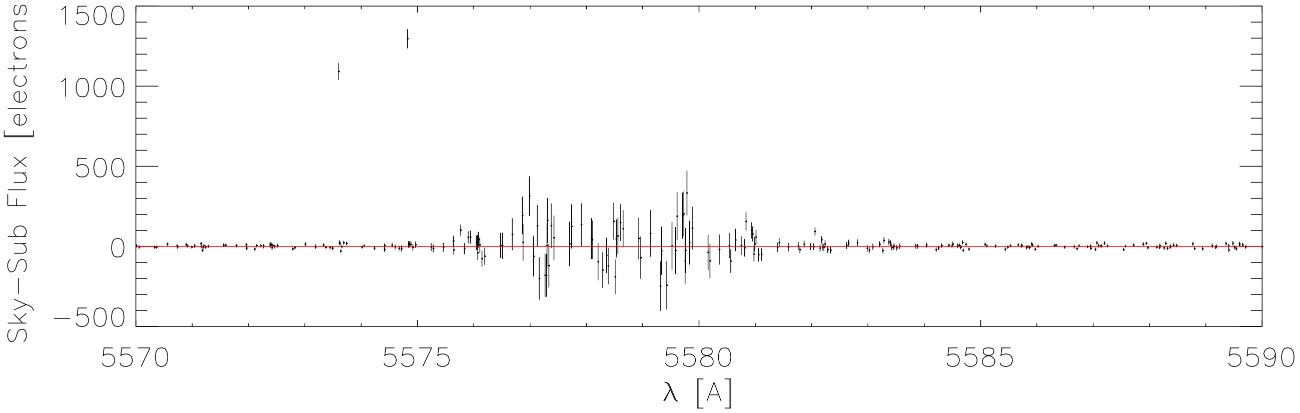

sky shift, pixels
0.0
−0.1
−0.2
−0.3
−0.4
3500
4000
4500
5000
5500
6000
6500


PLATE=0547 MJD=51959 Smooth superflat for sdR-b1-00008820.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)

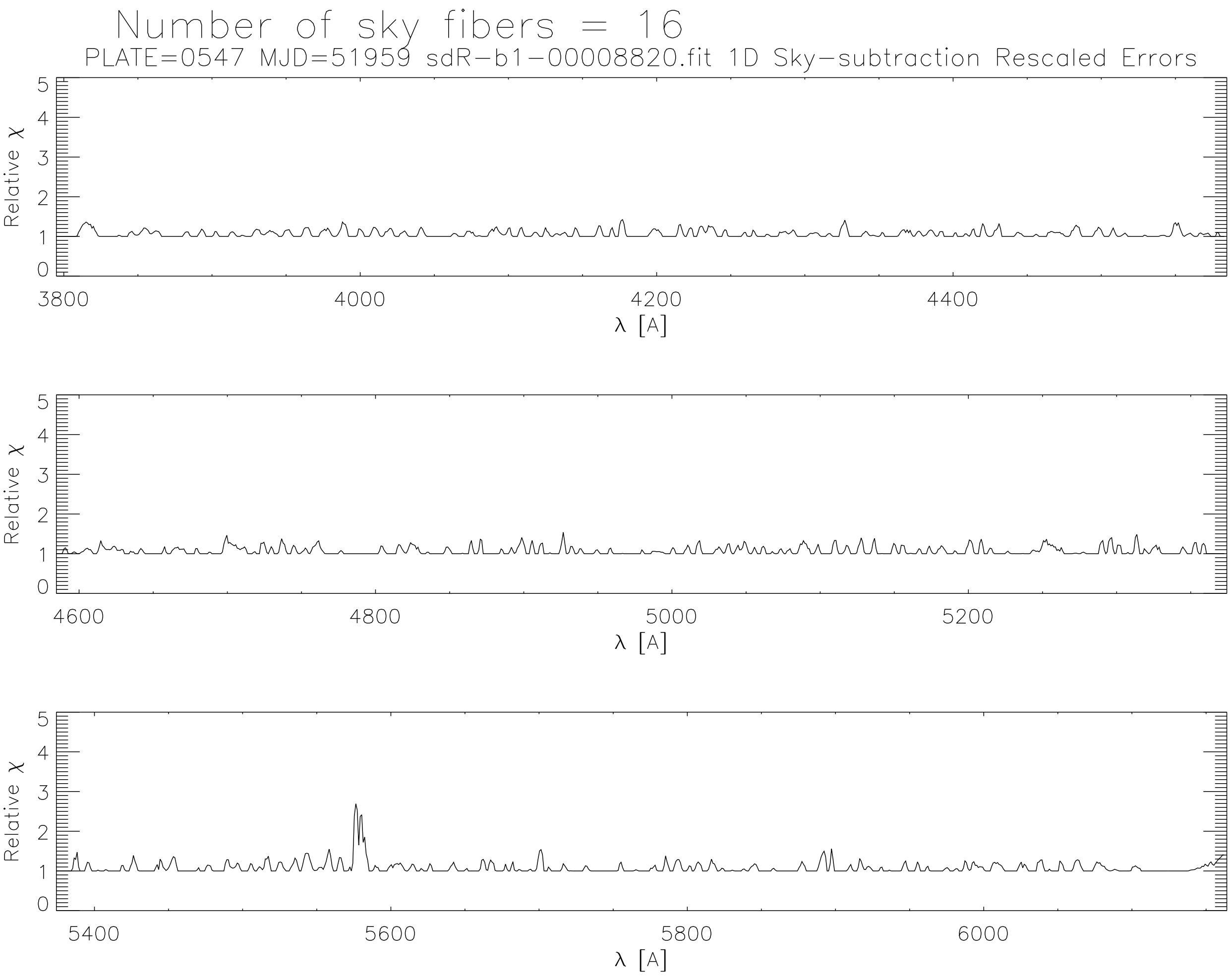

PLATE=0547 MJD=51959 sdR-b1-00008820.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number



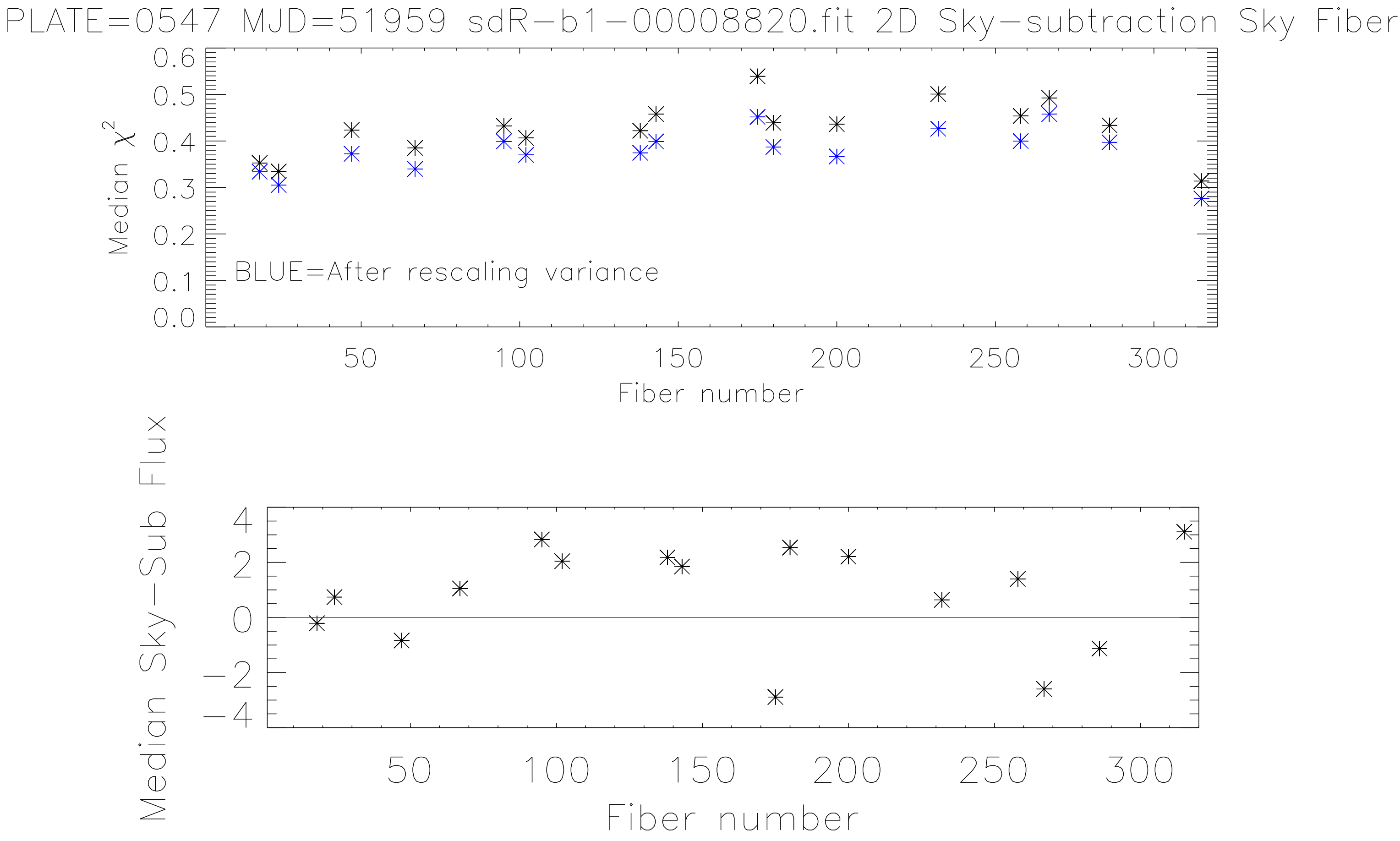
PLATE=0547 MJD=51959 sdR-b1-00008820.fit 1D Sky-subtraction Sky Fibers

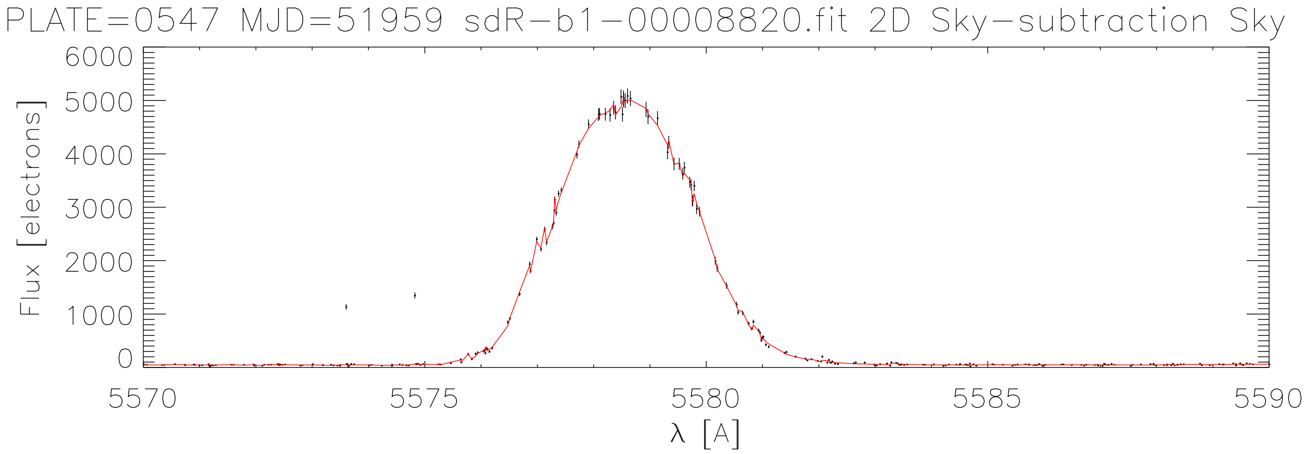


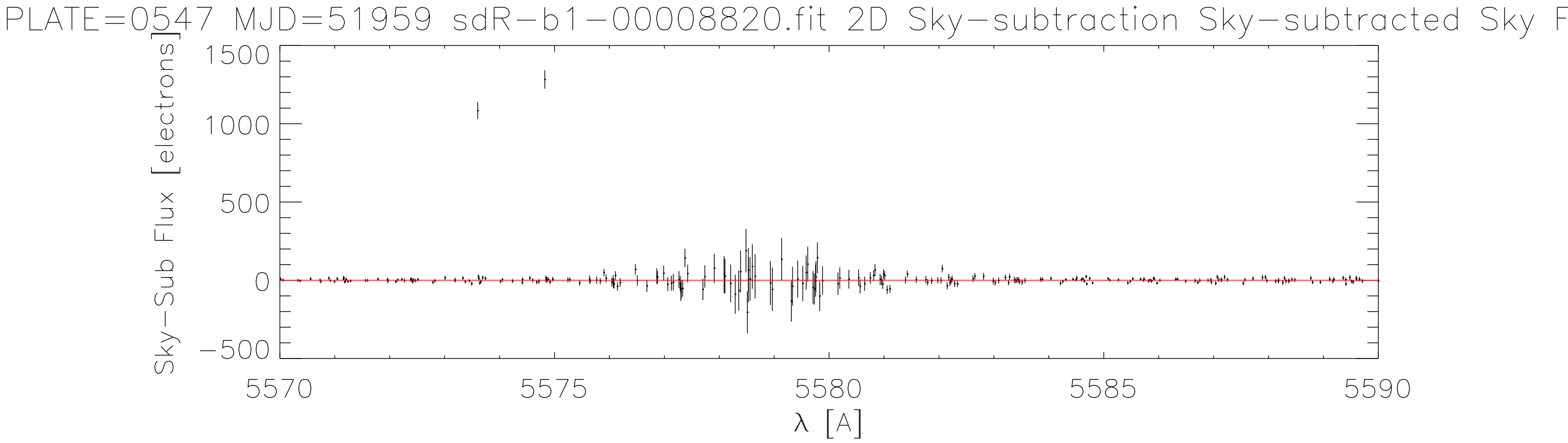
PLATE=0547 MJD=51959 sdR-b1-00008820.fit 1D Sky-subtraction Sky-subtracted Sky F

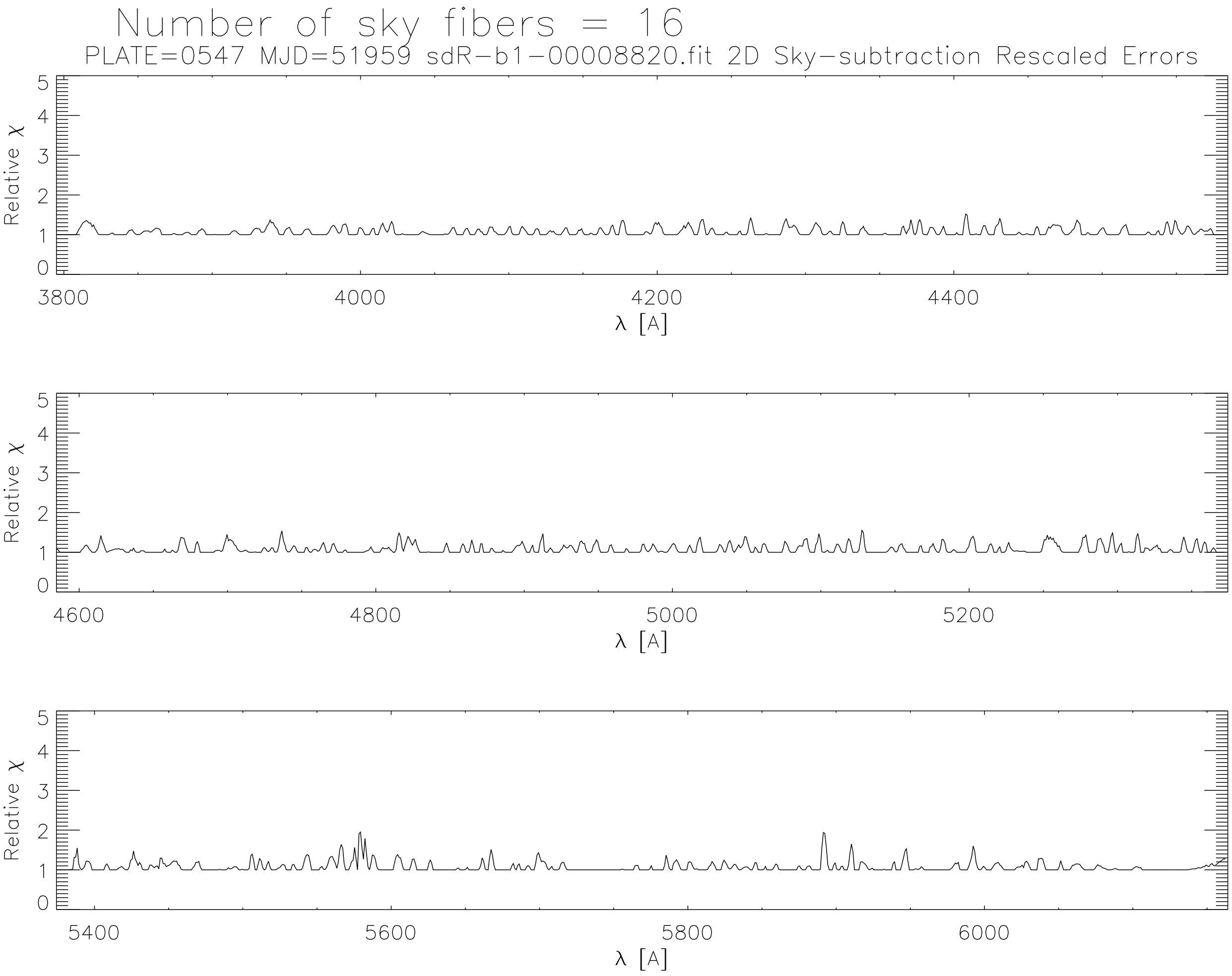

Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b1-00008820.fit 1D Sky-subtraction Rescaled Errors

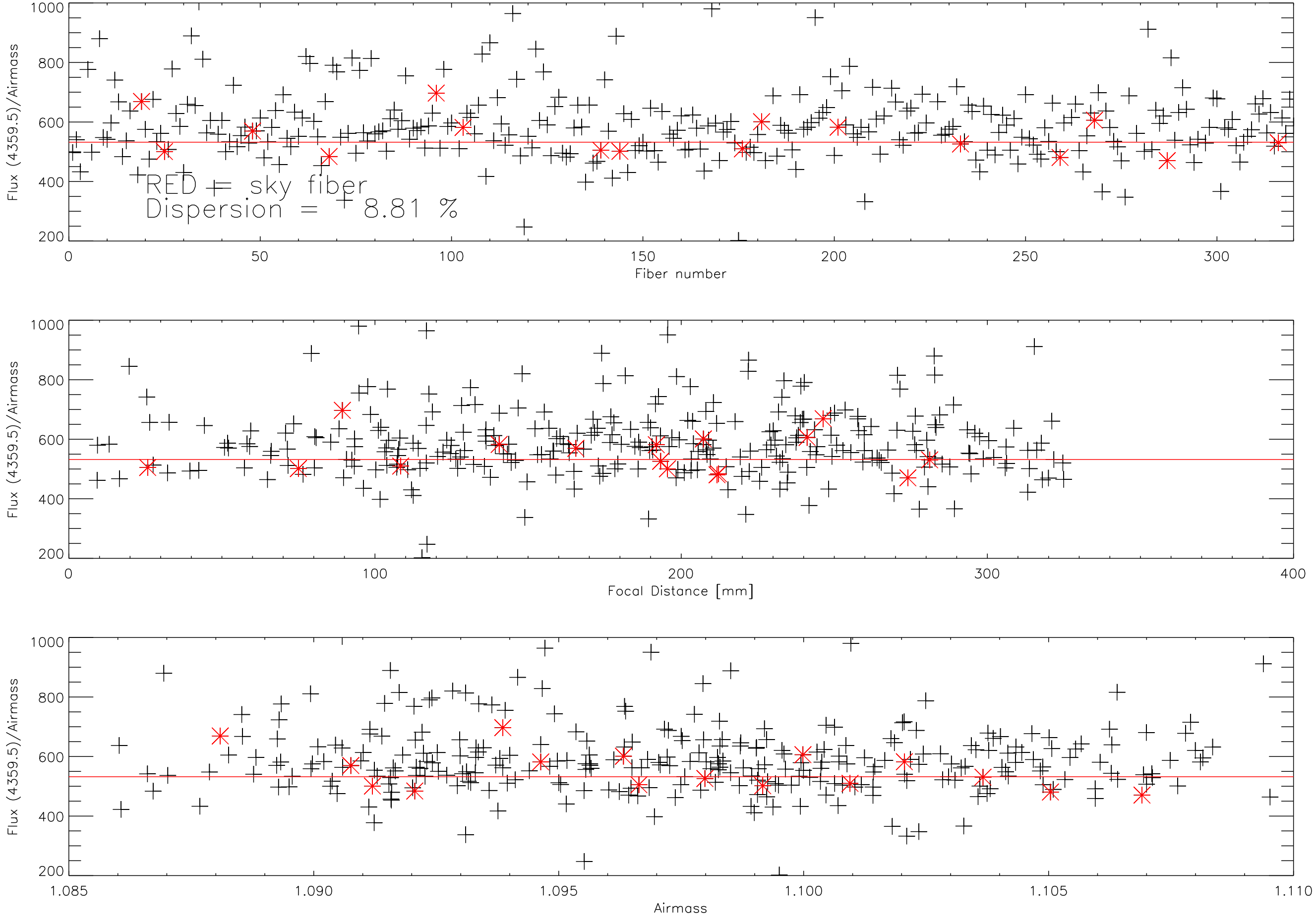

PLATE=0547 MJD=51959 sdR-b1-00008820.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

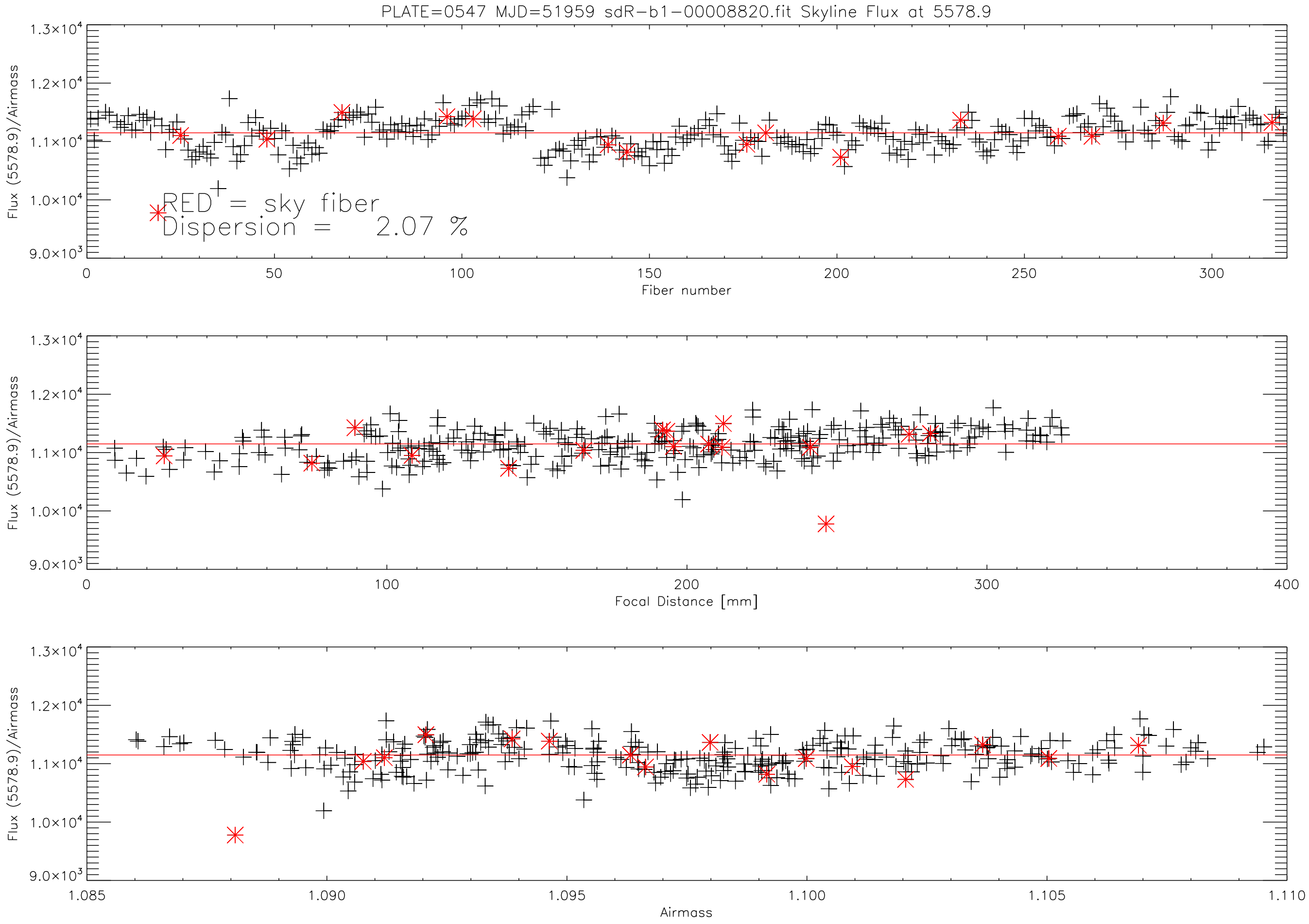

PLATE=0547 MJD=51959 sdR-b1-00008820.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=0547 MJD=51959 sdR-b1-00008820.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

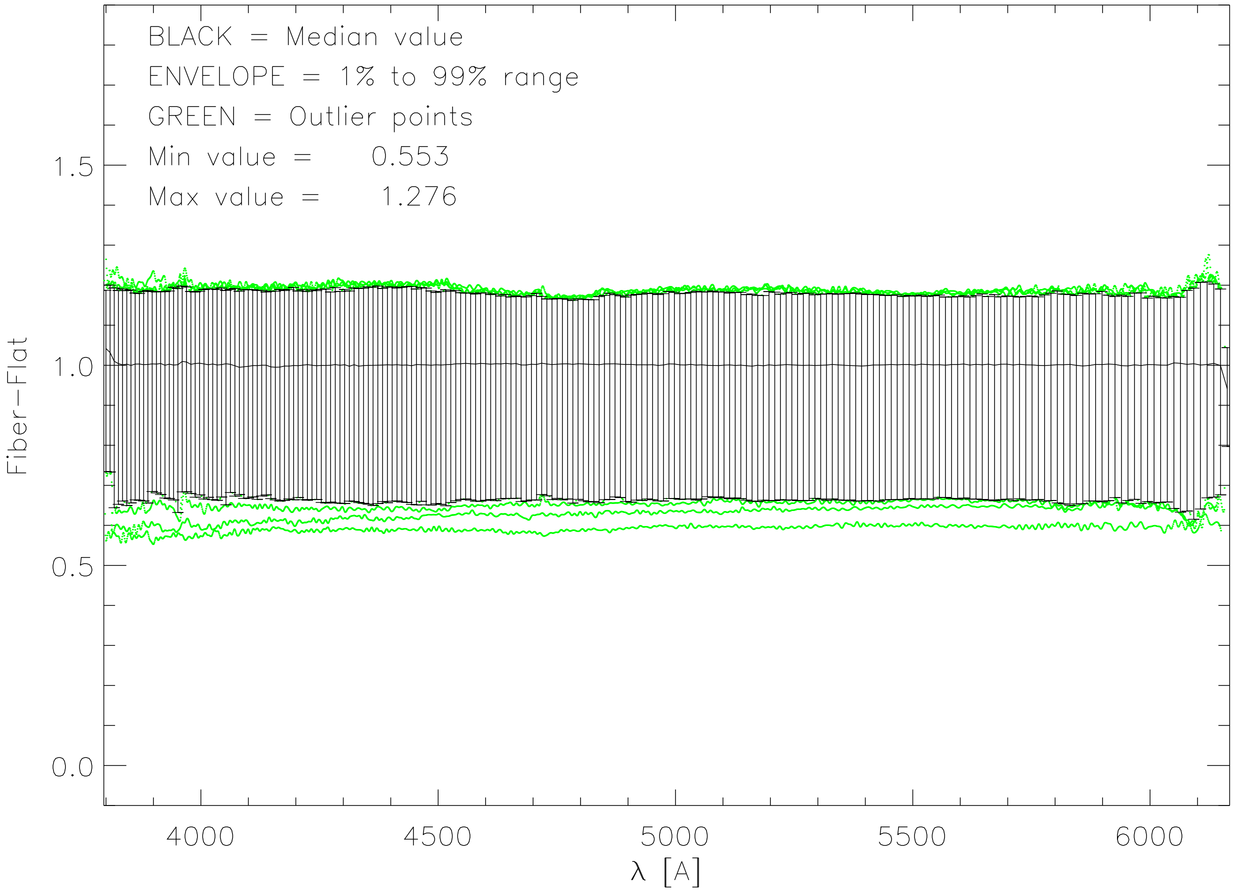

Number of sky fibers = 16
PLATE=0547 MJD=51959 sdR-b1-00008820.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

PLATE=0547 MJD=51959 sdR-b1-00008820.fit Skyline Flux at 4359.5




PLATE=0547 MJD=51959 sdR-b1-00008820.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 2.07 %
Flux (5578.9)/Airmass
1.3×10^4
1.2×10^4
1.1×10^4
1.0×10^4
9.0×10^3
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.085
1.090
1.095
1.100
1.105
1.110

PLATE=0547 MJD=51959 Fiber−Flats for sdR−b1−00008823.fit



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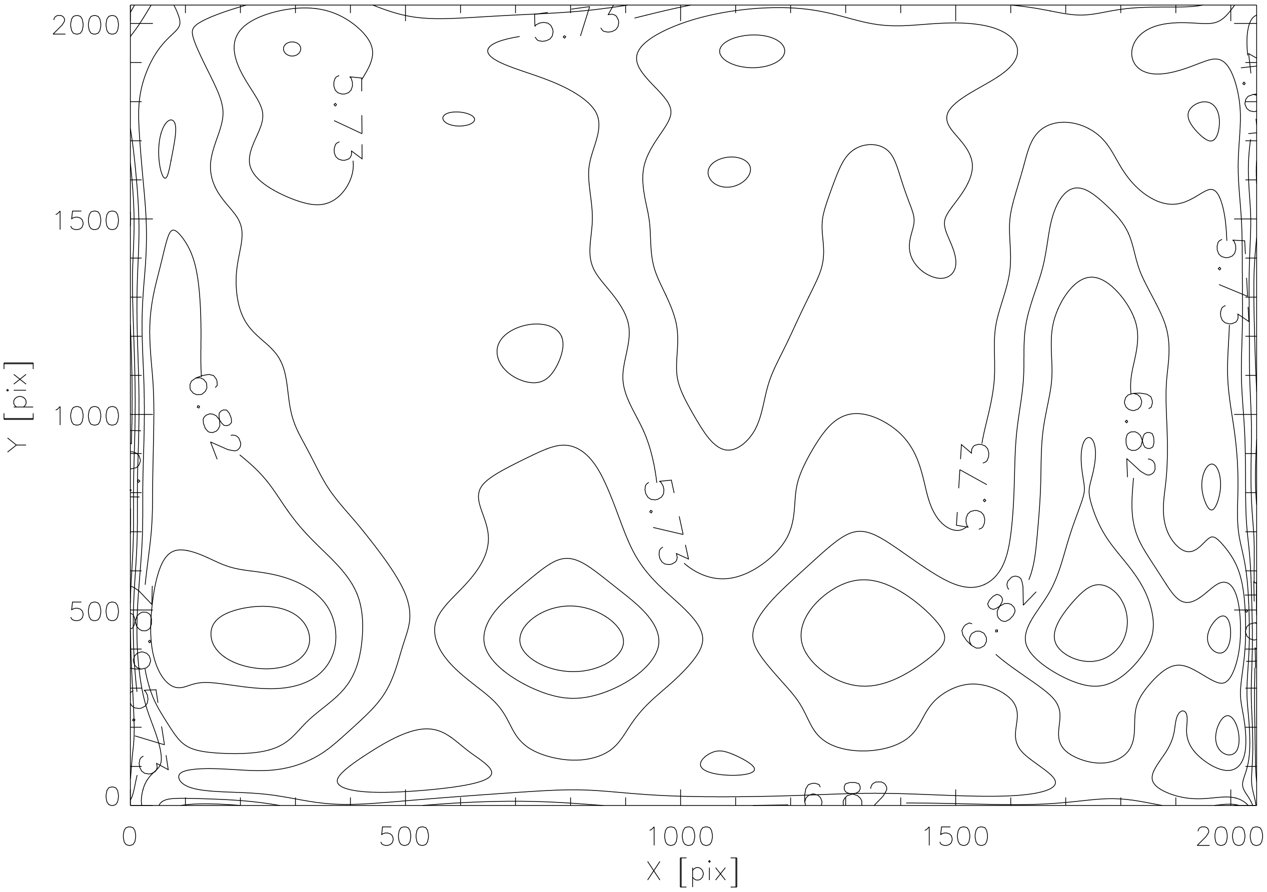
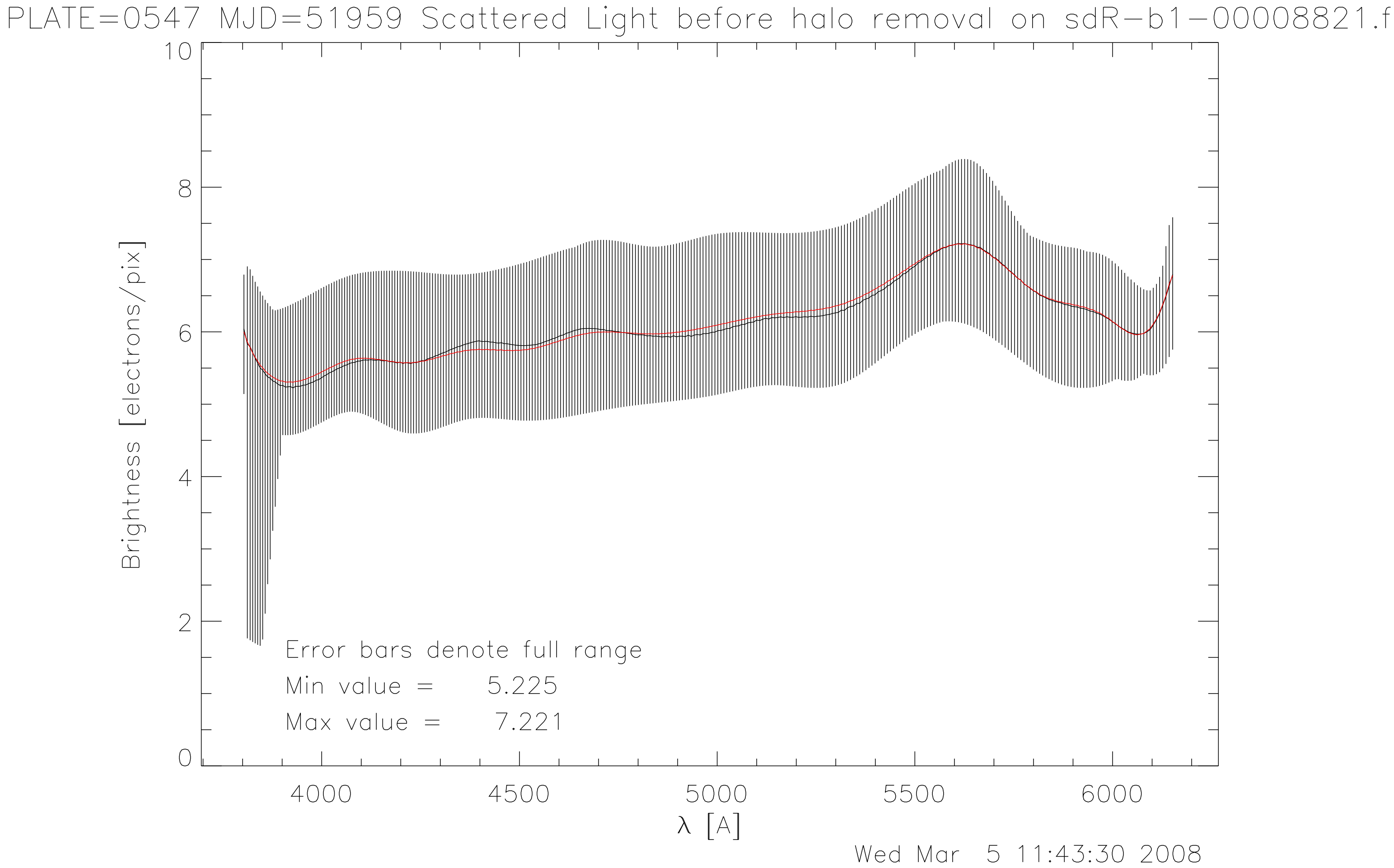
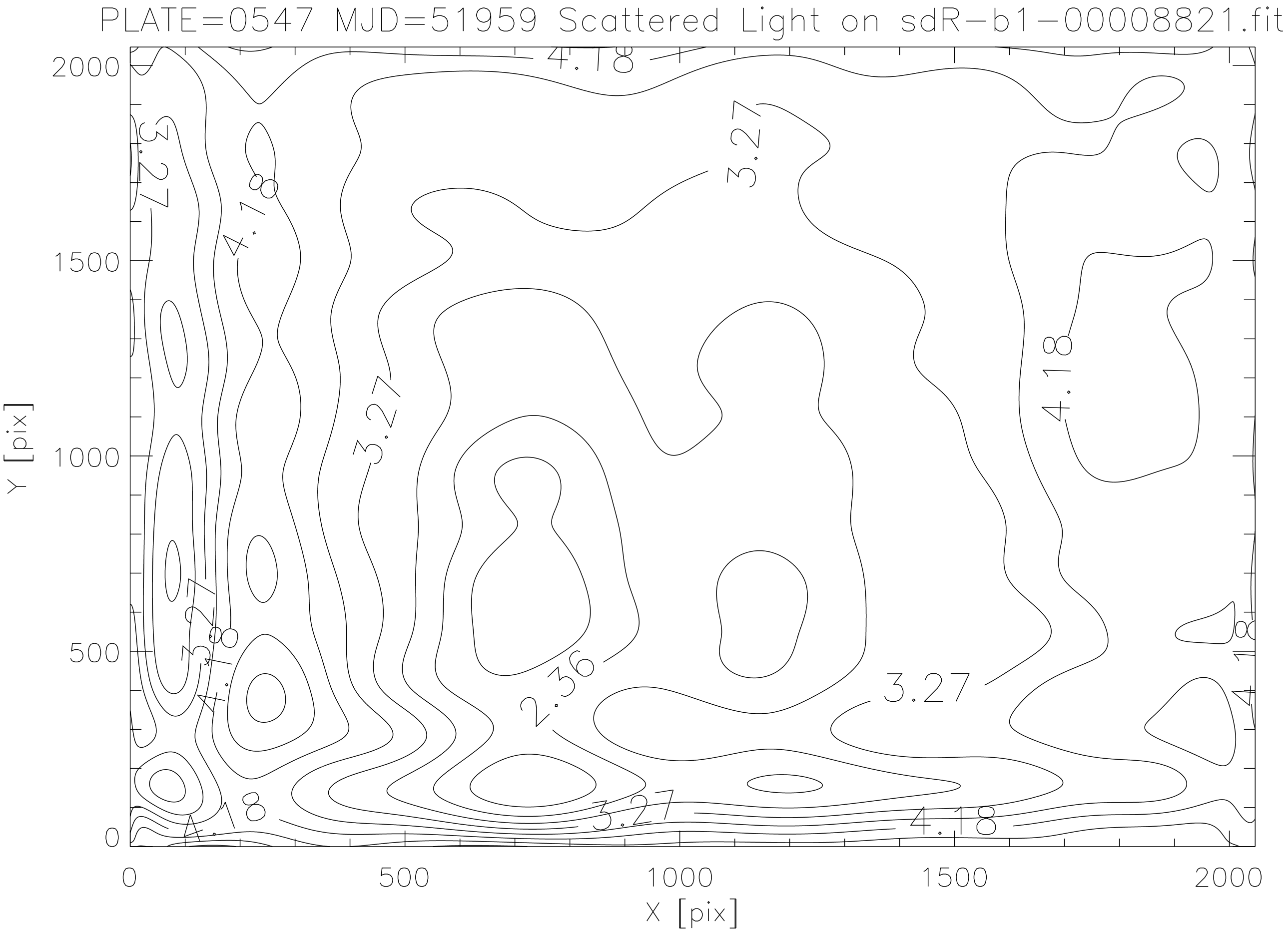
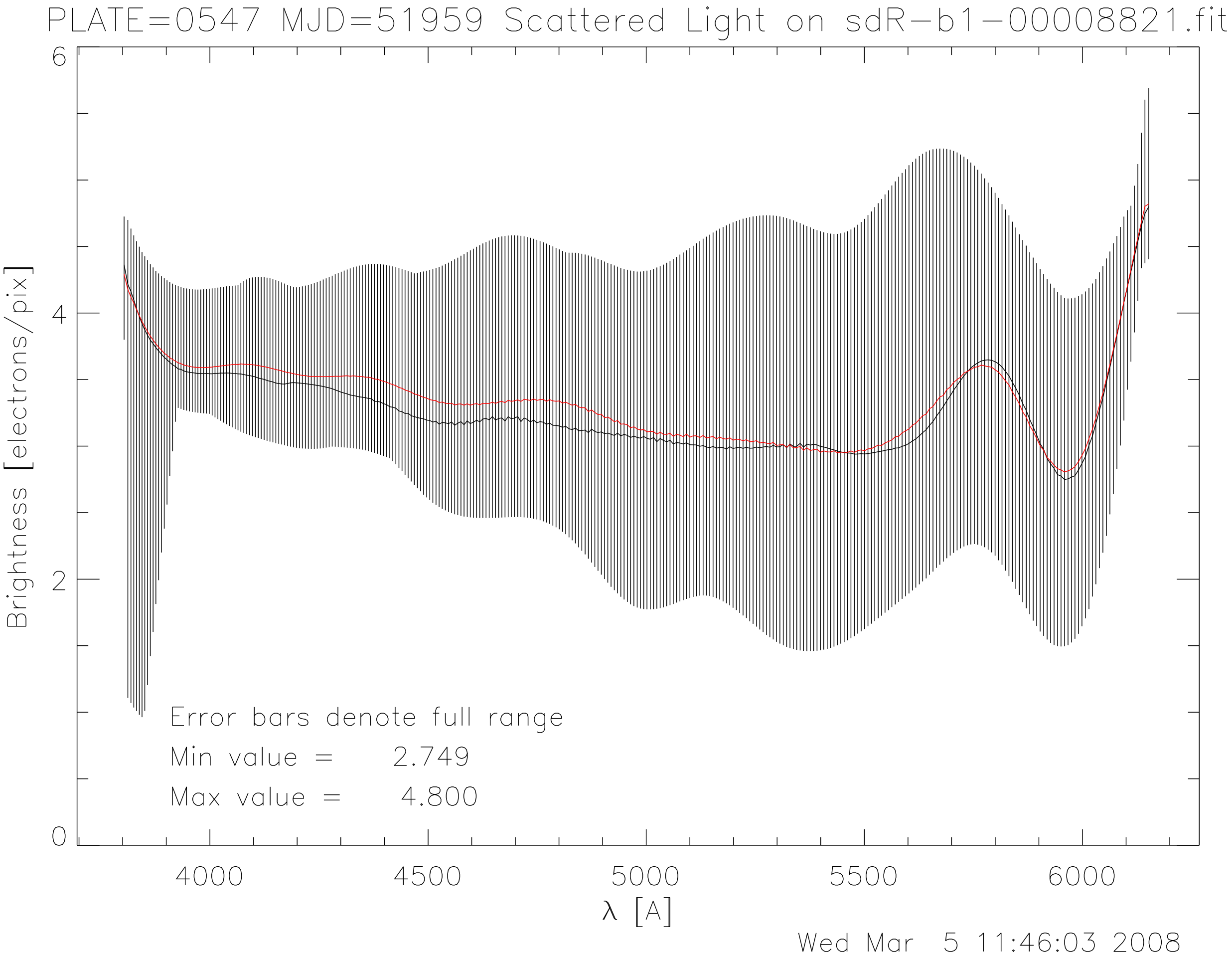


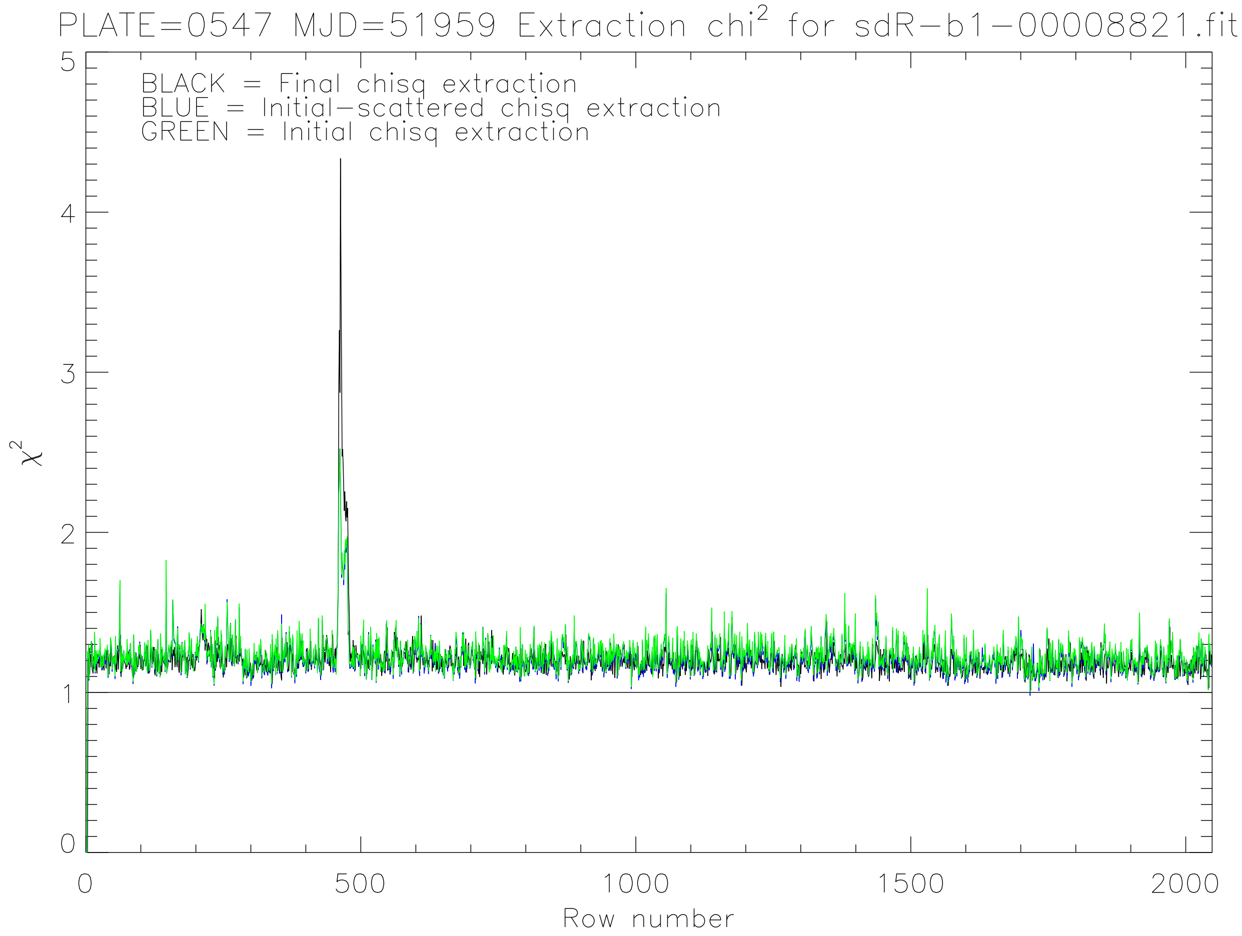
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008821.f

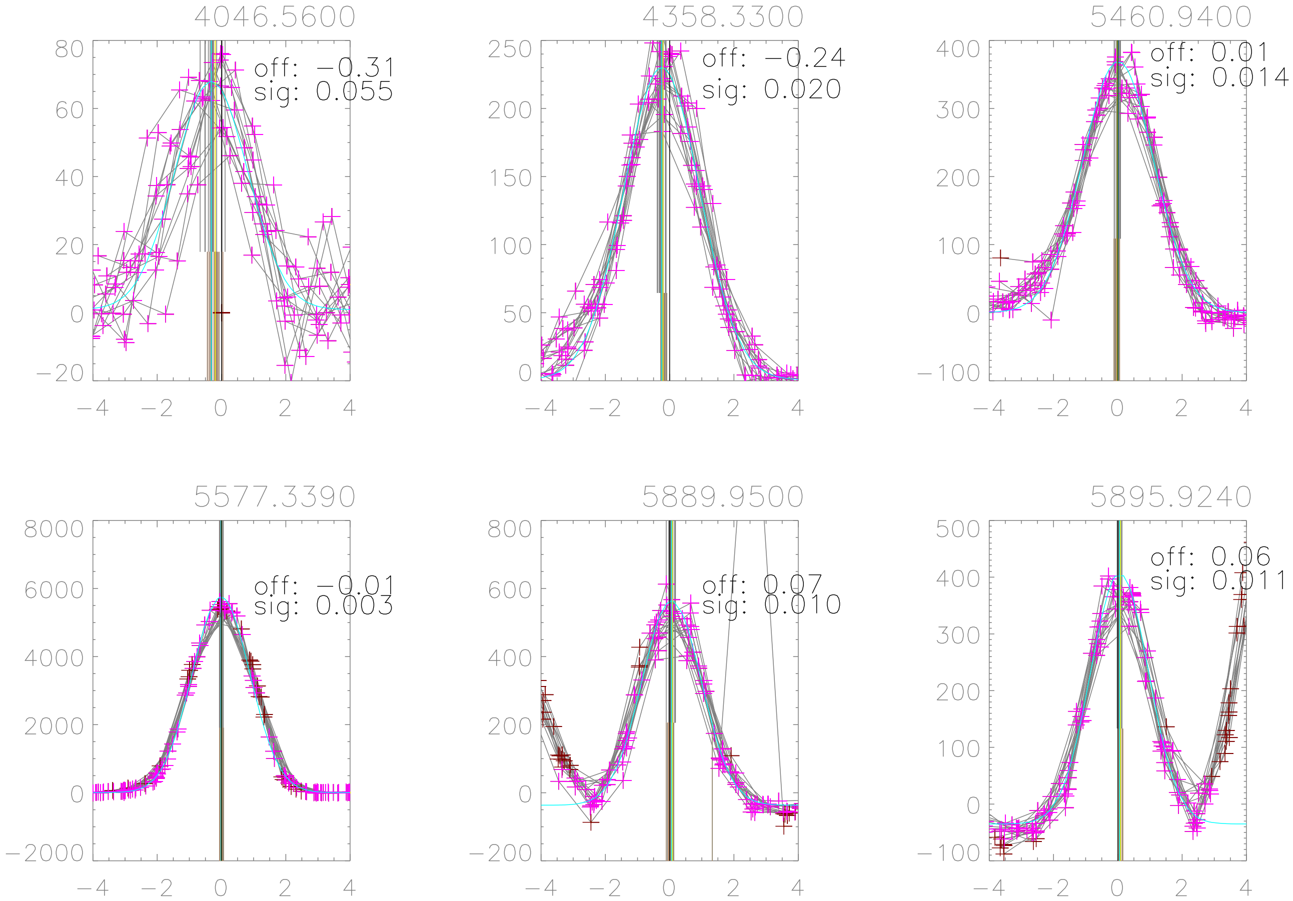

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008821.f
Brightness [electrons/pix]
0
2
4
6
8
10
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.225
Max value = 7.221
Wed Mar 5 11:43:30 2008

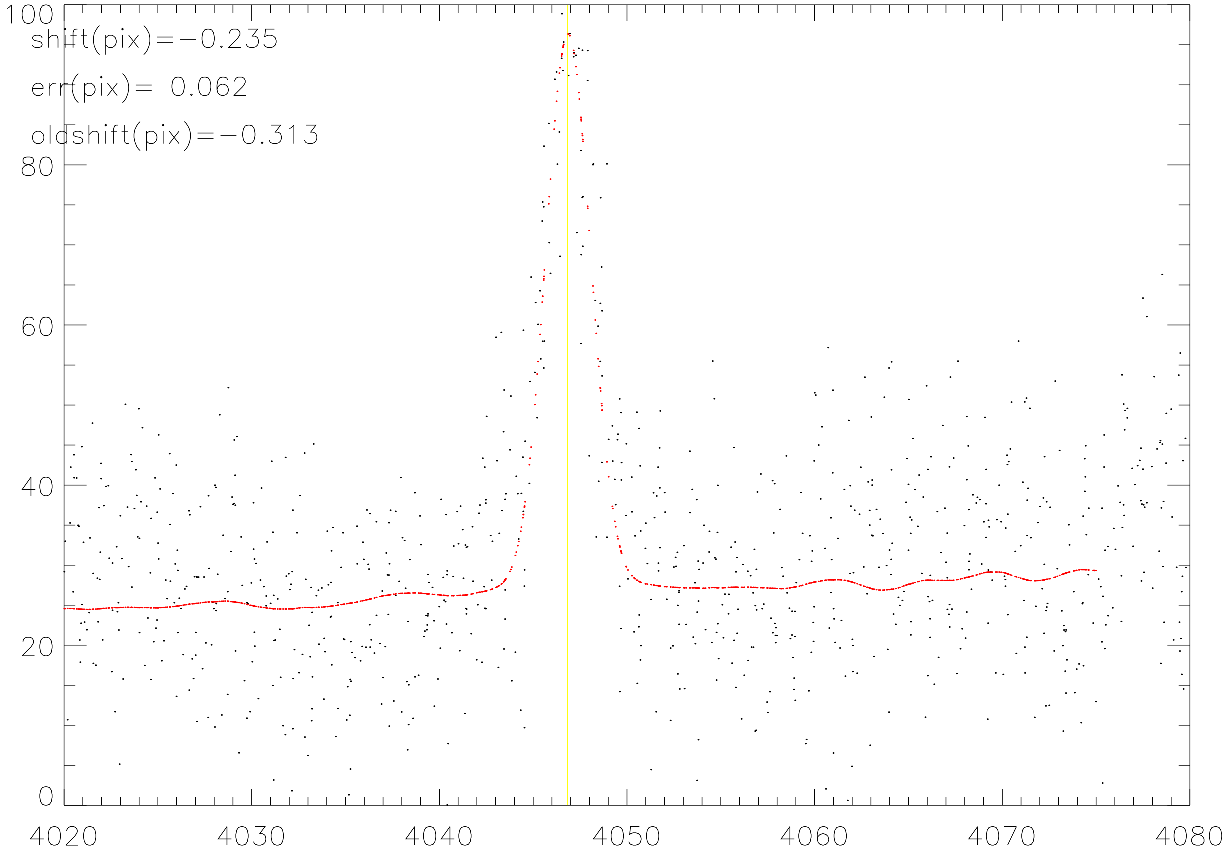


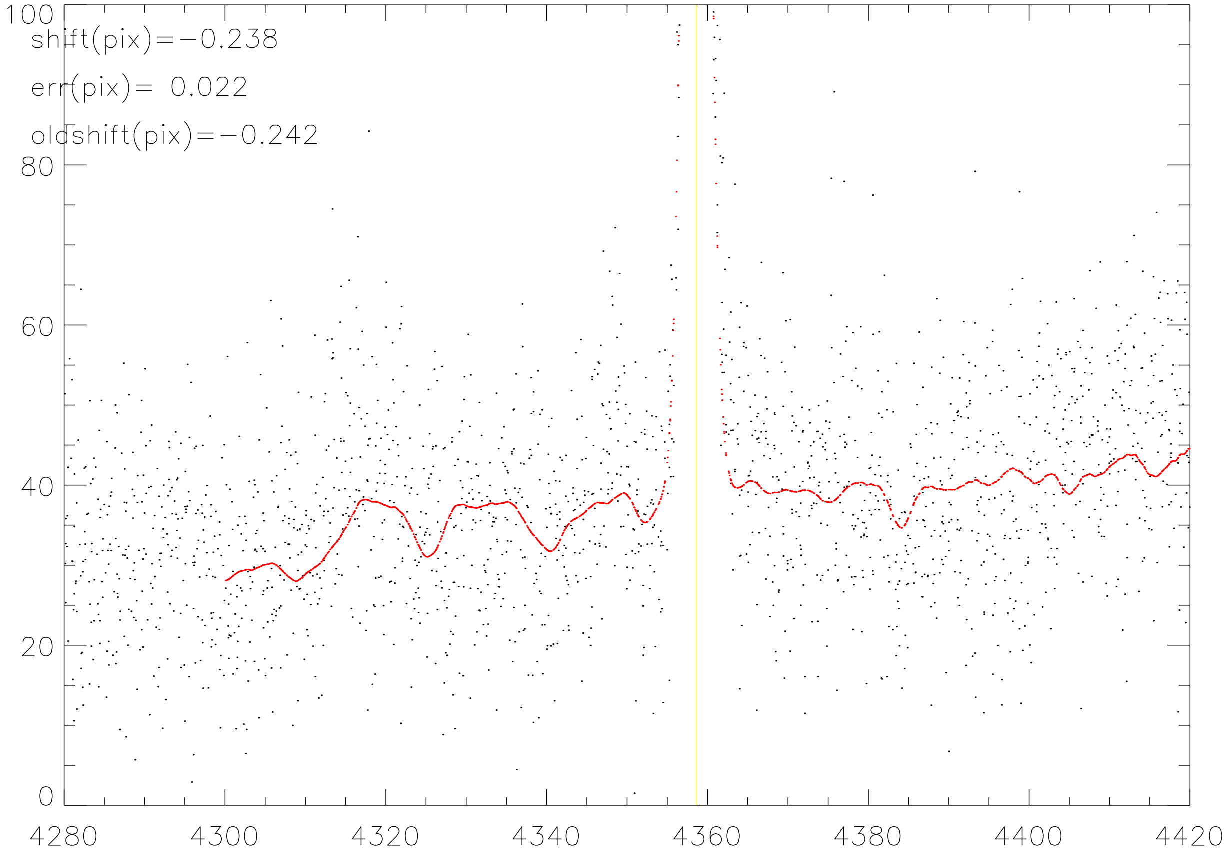
PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008821.fit

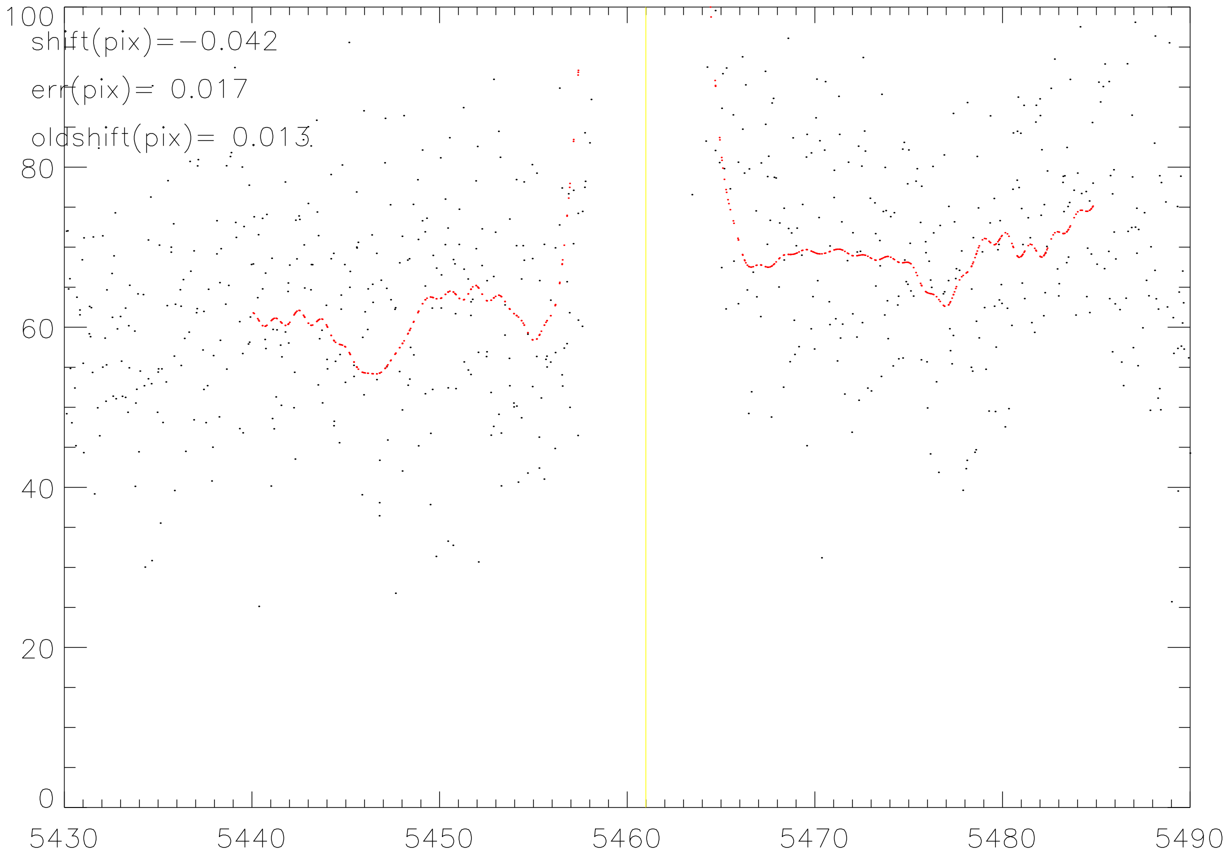

PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008821.fit
6
4
2
0
Brightness [electrons/pix]
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 2.749
Max value = 4.800
Wed Mar 5 11:46:03 2008

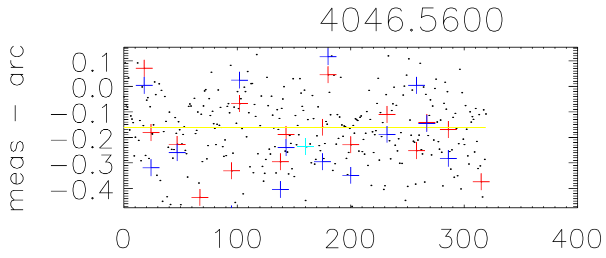

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-b1-00008821.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

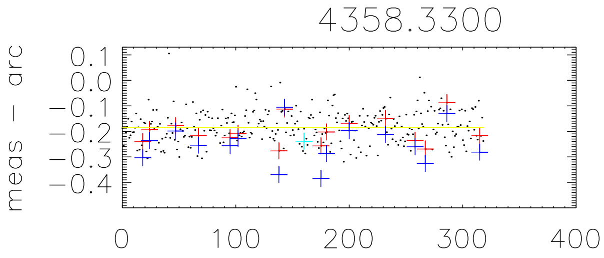

4046.5600
off: −0.31
sig: 0.055
4358.3300
off: −0.24
sig: 0.020
5460.9400
off: 0.01
sig: 0.014
5577.3390
off: −0.01
sig: 0.003
5889.9500
off: 0.07
sig: 0.010
5895.9240
off: 0.06
sig: 0.011
−4
−2
0
2
4

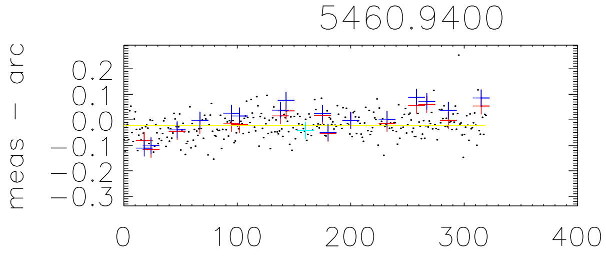

shift(pix)=−0.235
err(pix)= 0.062
oldshift(pix)=−0.313
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

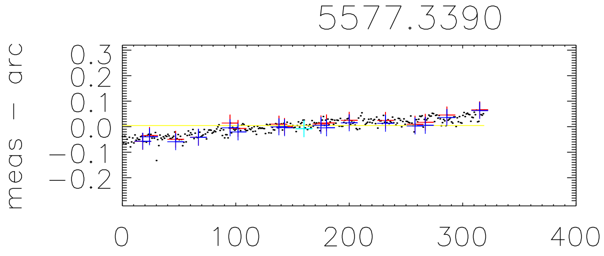

shift(pix)=−0.238
err(pix)= 0.022
oldshift(pix)=−0.242
0
20
40
60
80
100
4280
4300
4320
4340
4360
4380
4400
4420

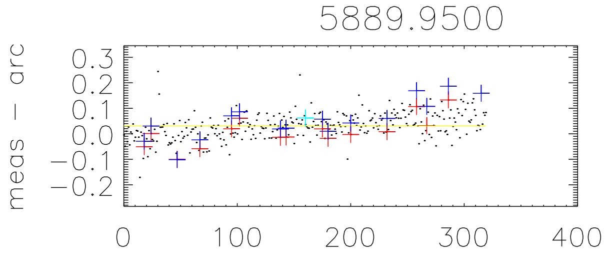

shift(pix)=−0.042
err(pix)= 0.017
oldshift(pix)= 0.013
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

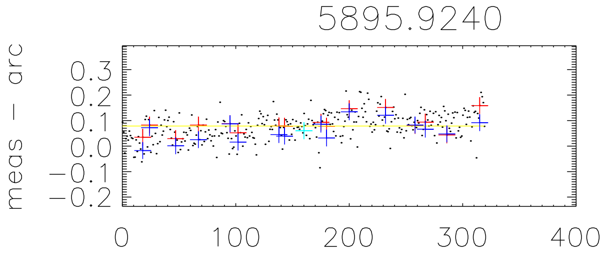

4046.5600
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

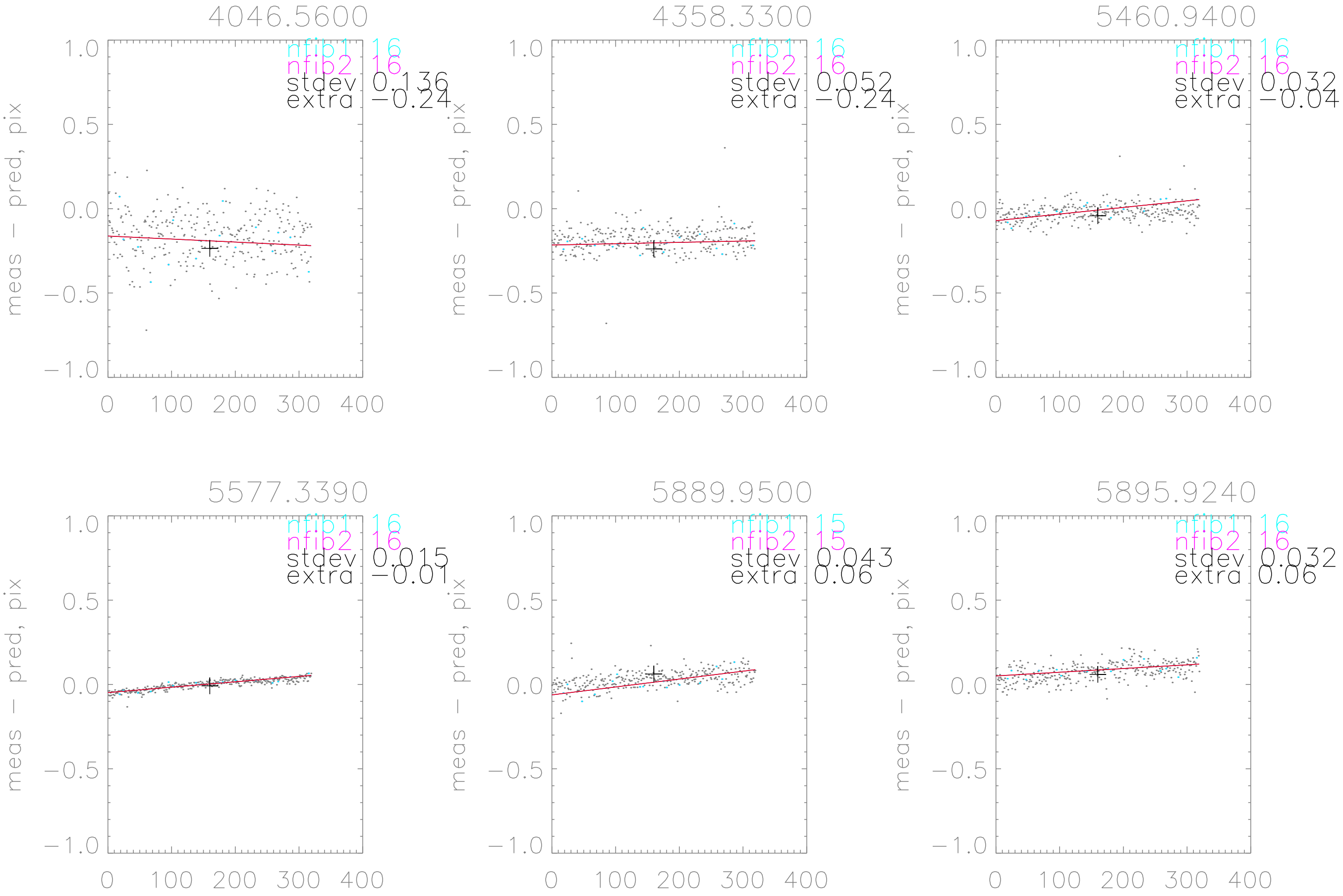

4358.3300
meas - arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

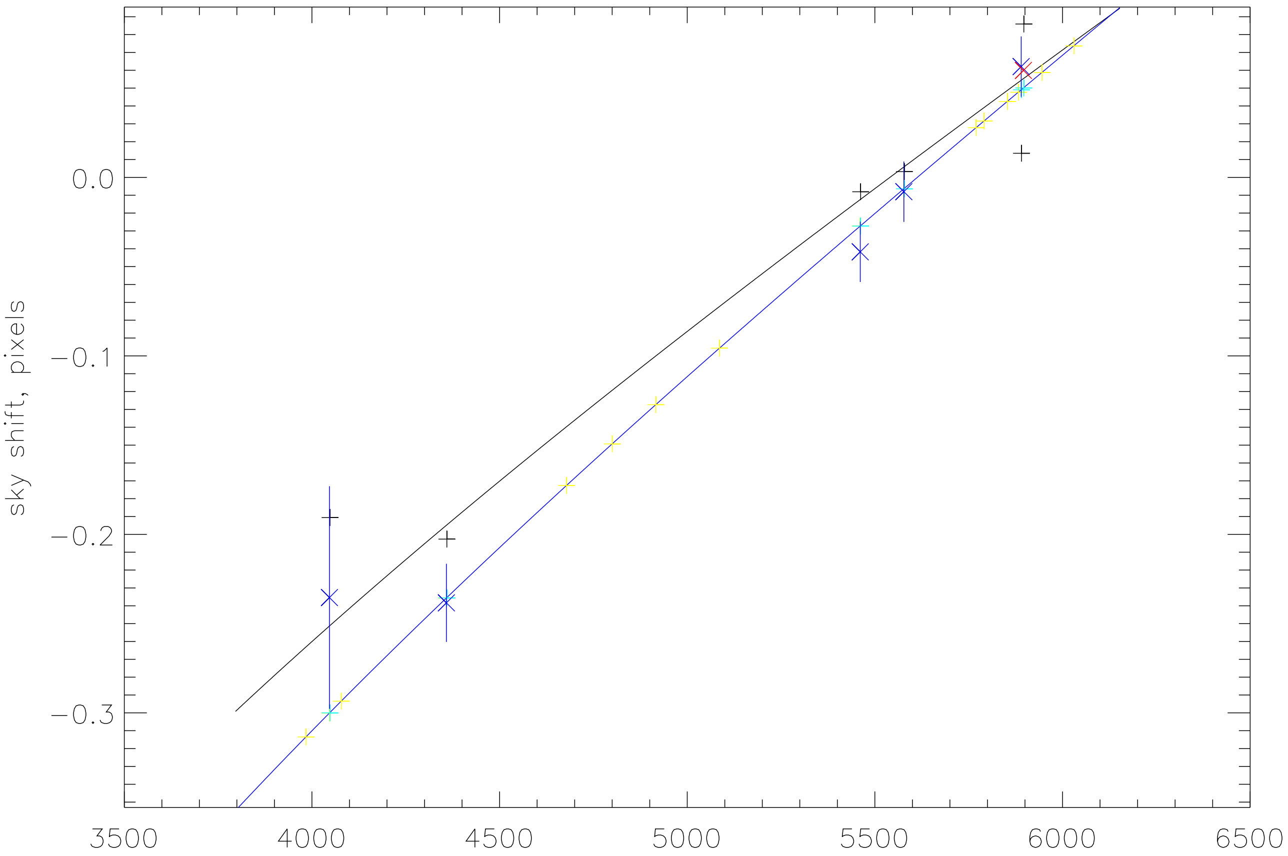

5460.9400
meas - arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

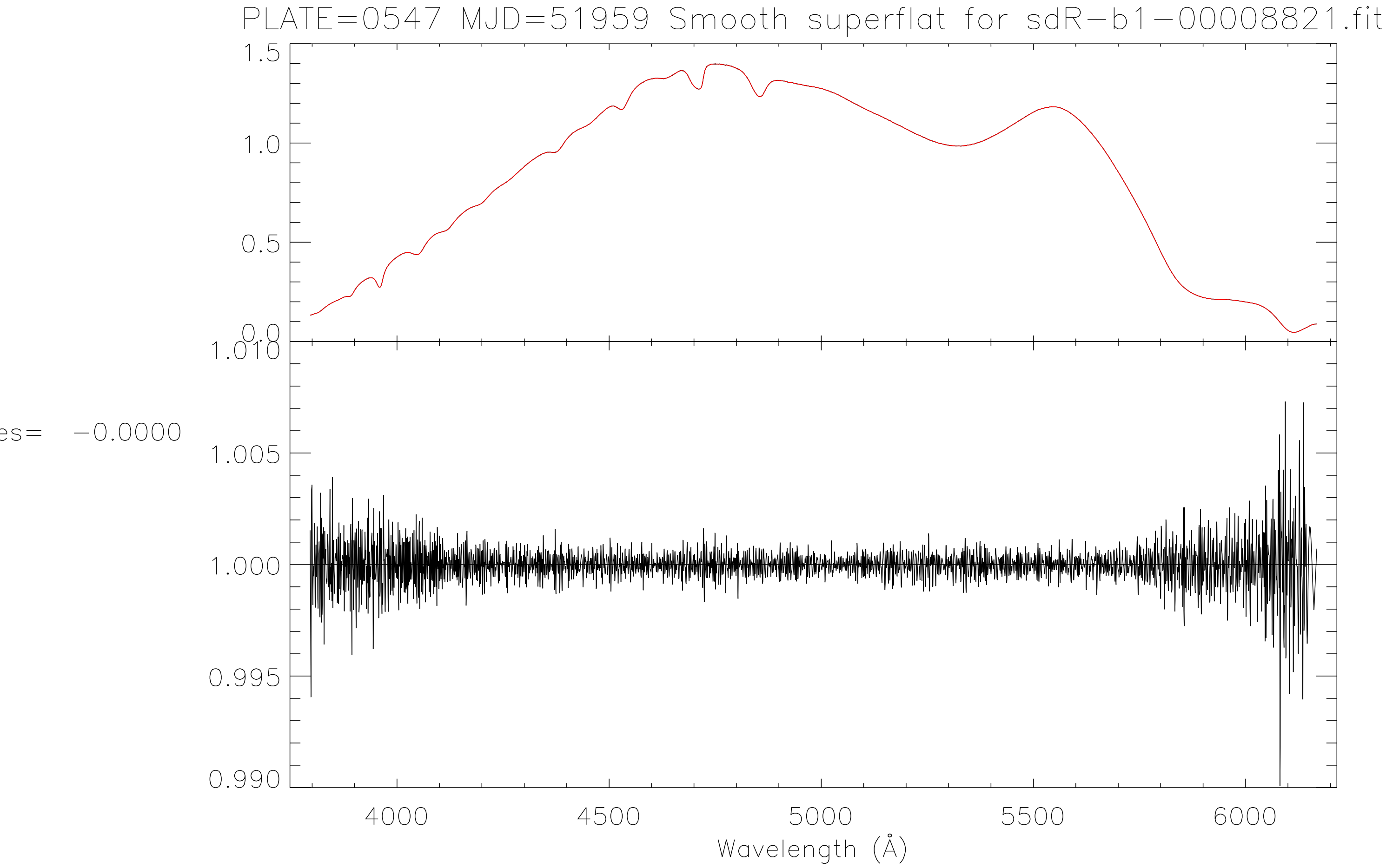

5577.3390
meas - arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

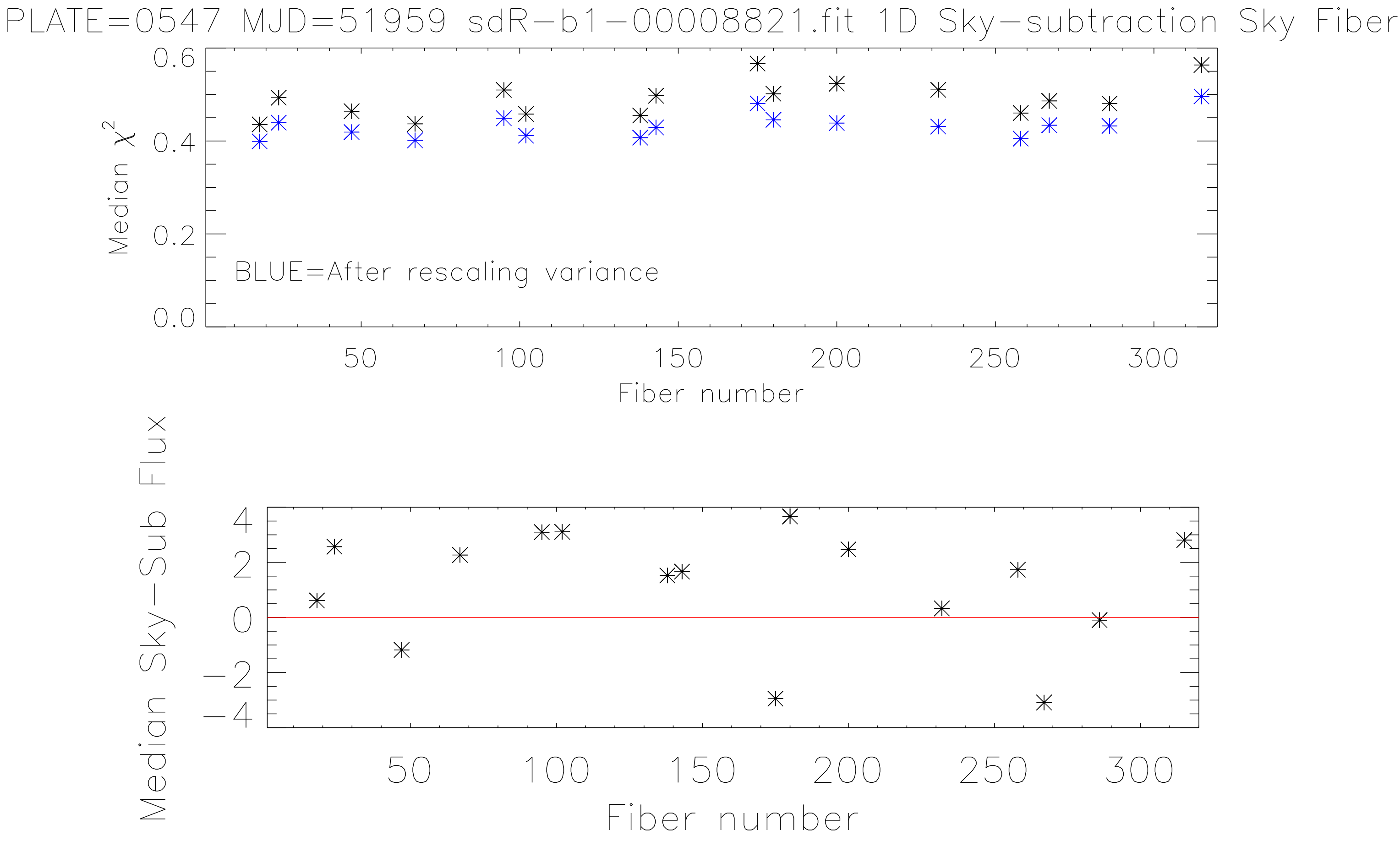

5889.9500
meas - arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

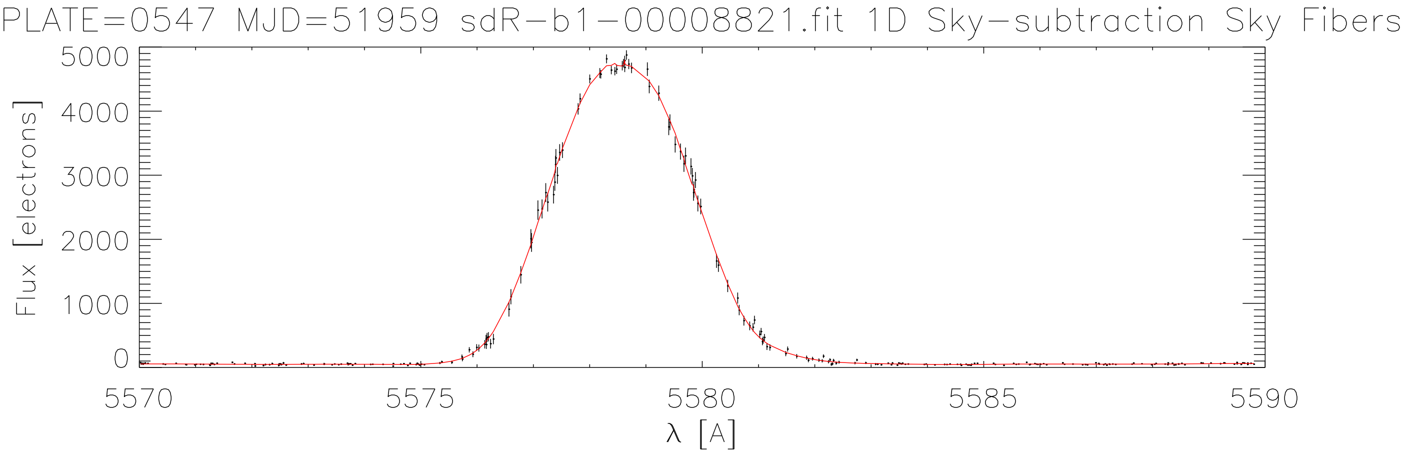

5895.9240
meas - arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

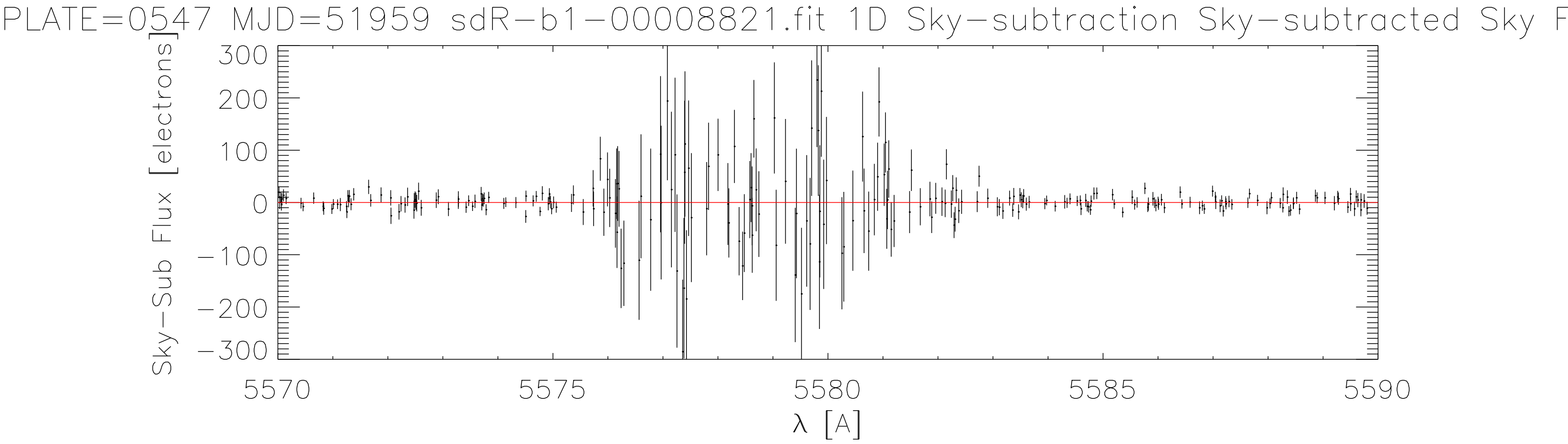

4046.5600
nfib1 16
nfib2 16
stdev 0.136
extra −0.24
4358.3300
nfib1 16
nfib2 16
stdev 0.052
extra −0.24
5460.9400
nfib1 16
nfib2 16
stdev 0.032
extra −0.04
5577.3390
nfib1 16
nfib2 16
stdev 0.015
extra −0.01
5889.9500
nfib1 15
nfib2 15
stdev 0.043
extra 0.06
5895.9240
nfib1 16
nfib2 16
stdev 0.032
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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


PLATE=0547 MJD=51959 Smooth superflat for sdR-b1-00008821.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)

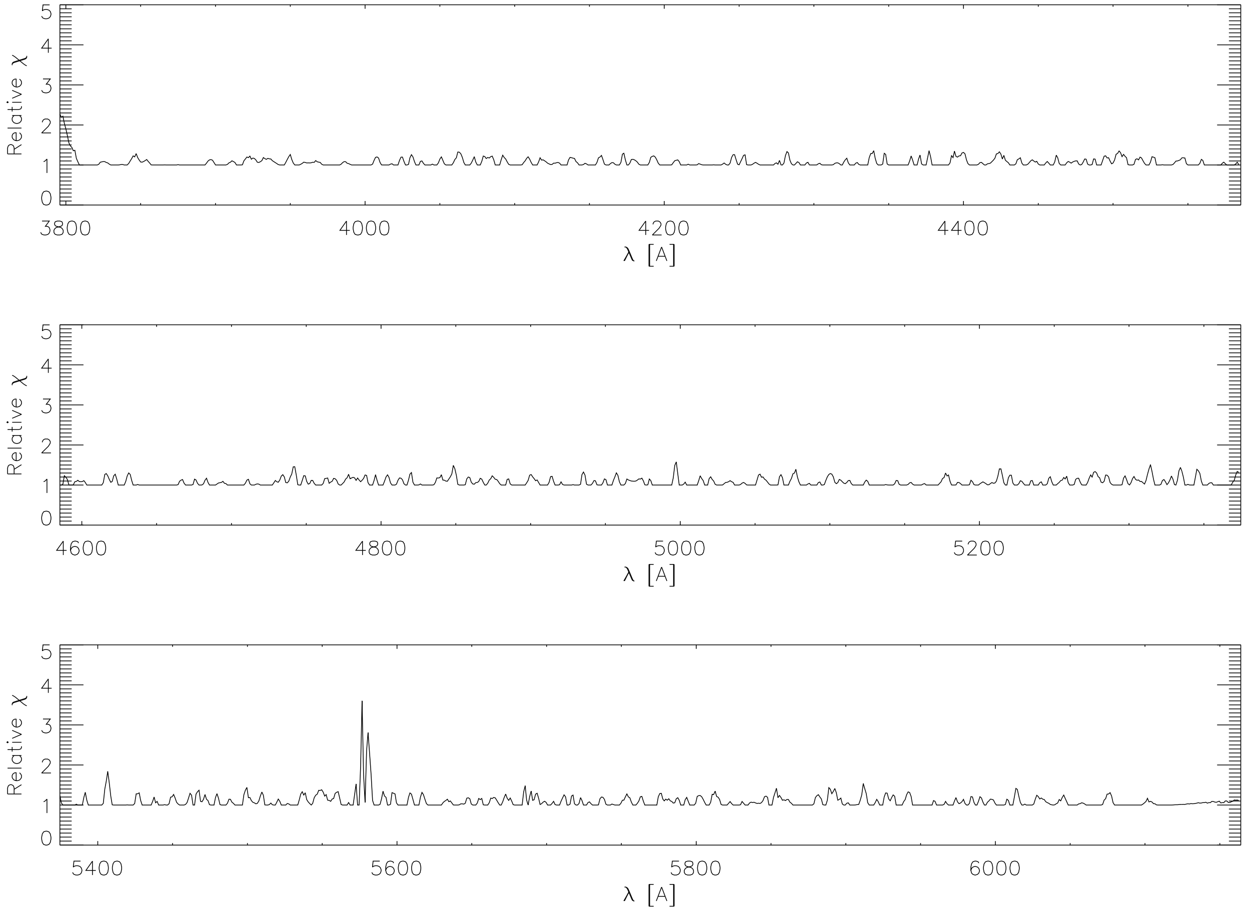

PLATE=0547 MJD=51959 sdR-b1-00008821.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number

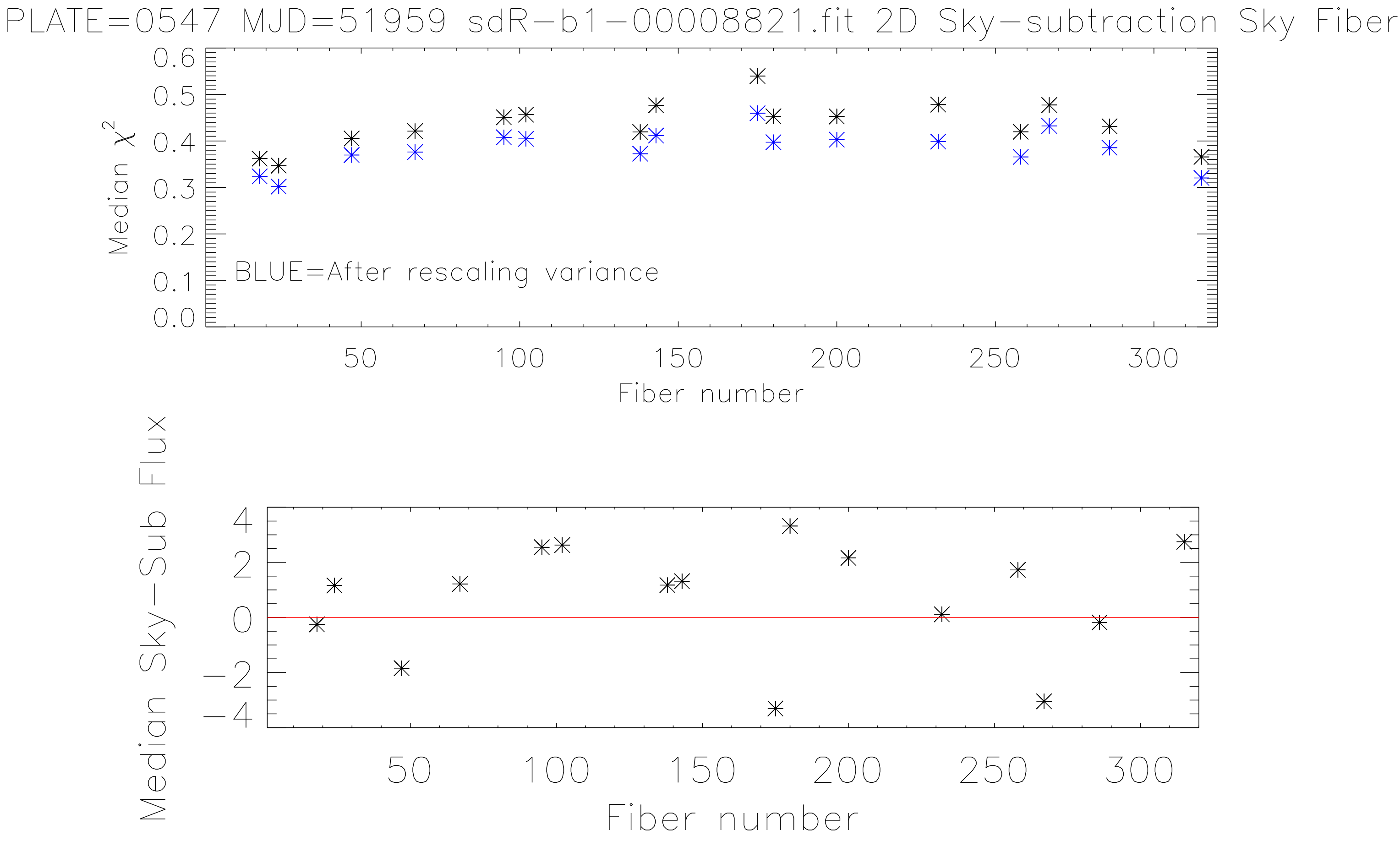

PLATE=0547 MJD=51959 sdR-b1-00008821.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
0
1000
2000
3000
4000
5000
5570
5575
5580
5585
5590
λ [A]


PLATE=0547 MJD=51959 sdR-b1-00008821.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

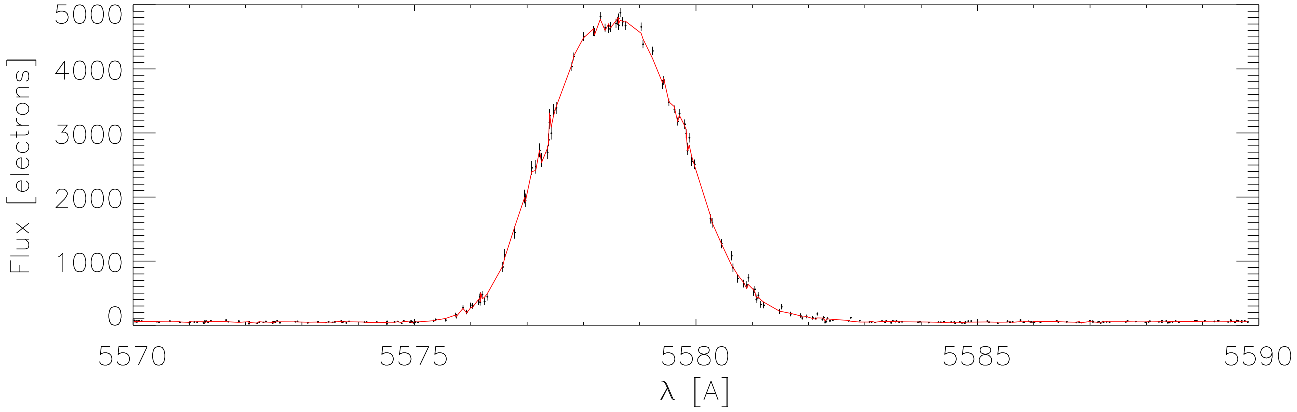
Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b1-00008821.fit 1D Sky-subtraction Rescaled Errors

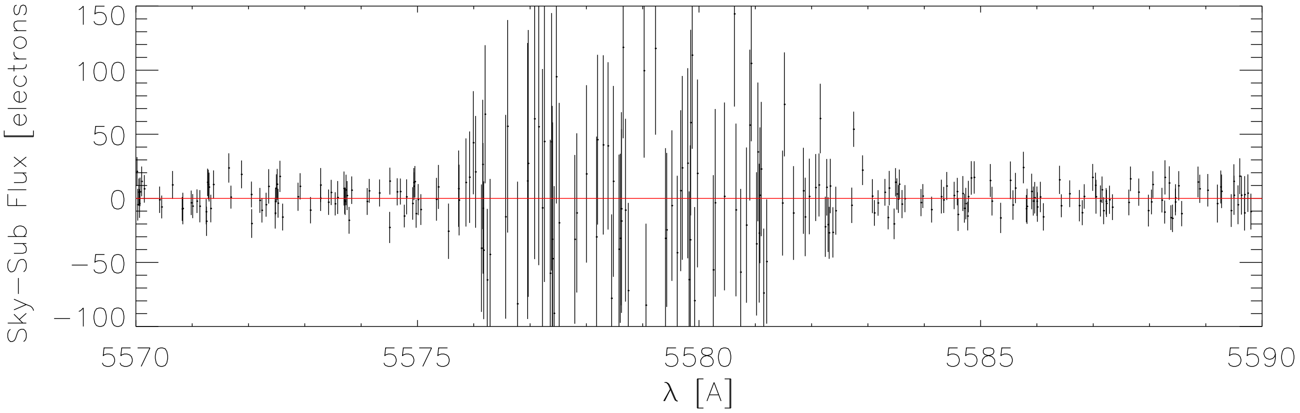


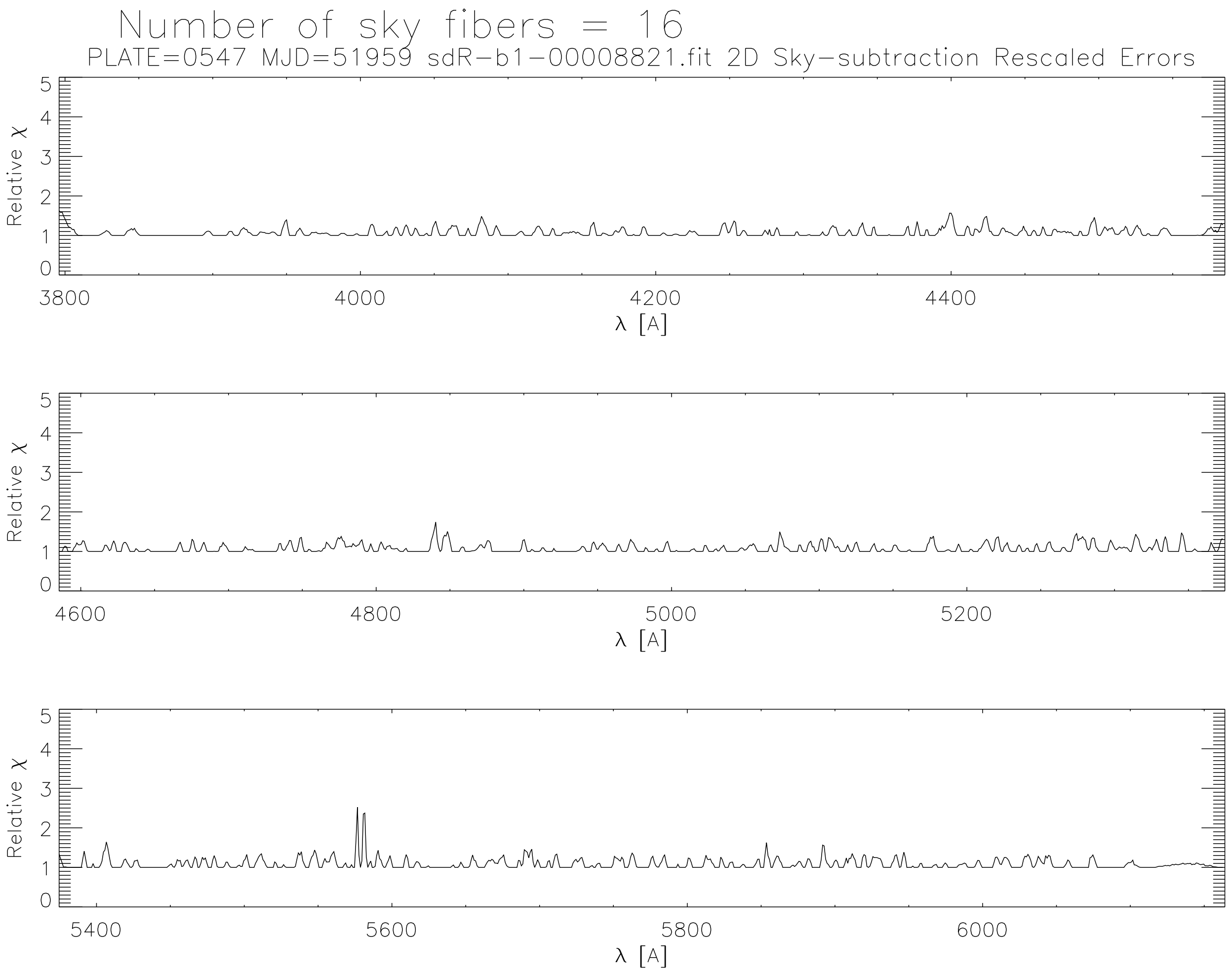

PLATE=0547 MJD=51959 sdR-b1-00008821.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

PLATE=0547 MJD=51959 sdR-b1-00008821.fit 2D Sky-subtraction Sky Fibers



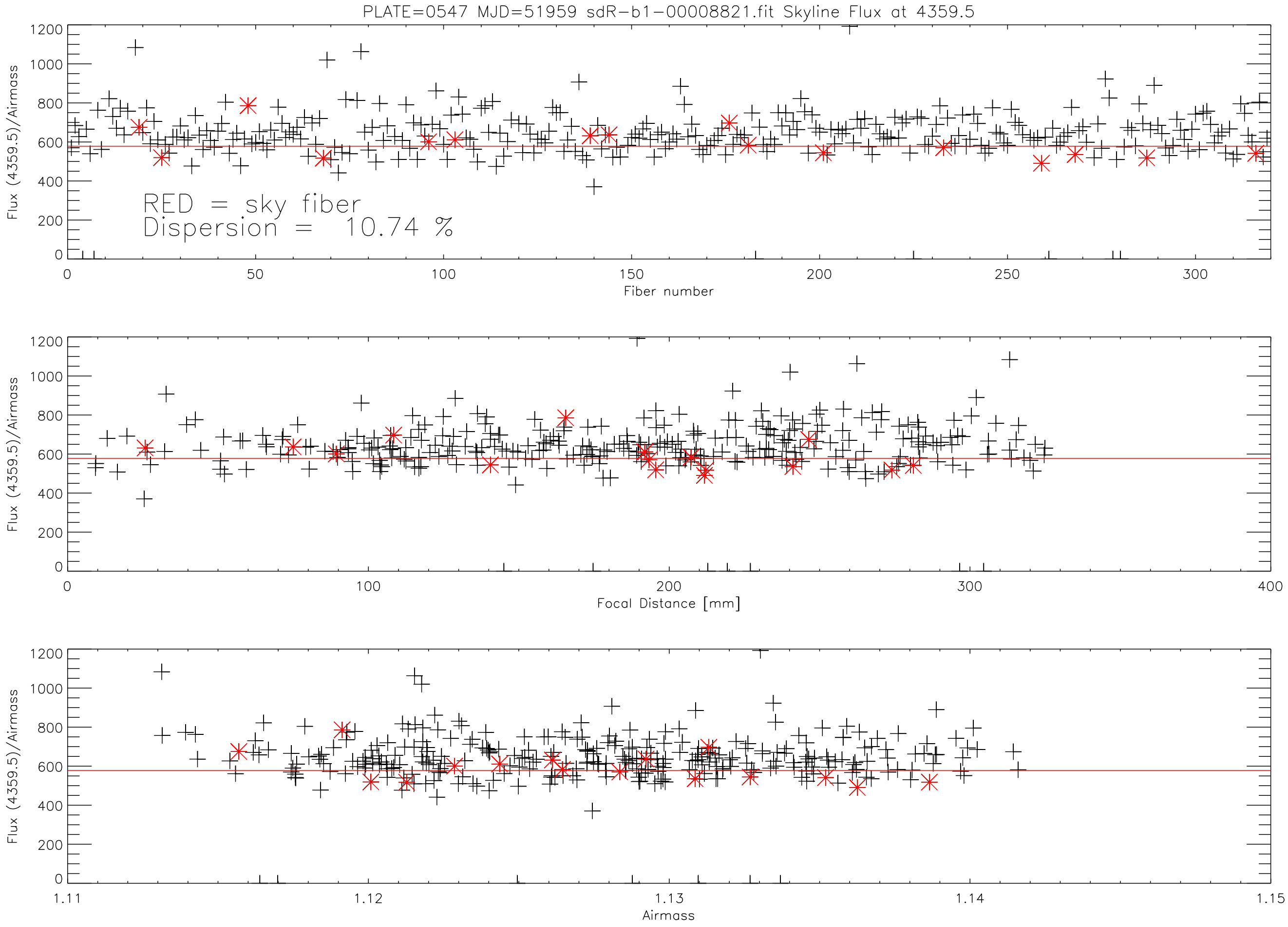
PLATE=0547 MJD=51959 sdR-b1-00008821.fit 2D Sky-subtraction Sky-subtracted Sky F

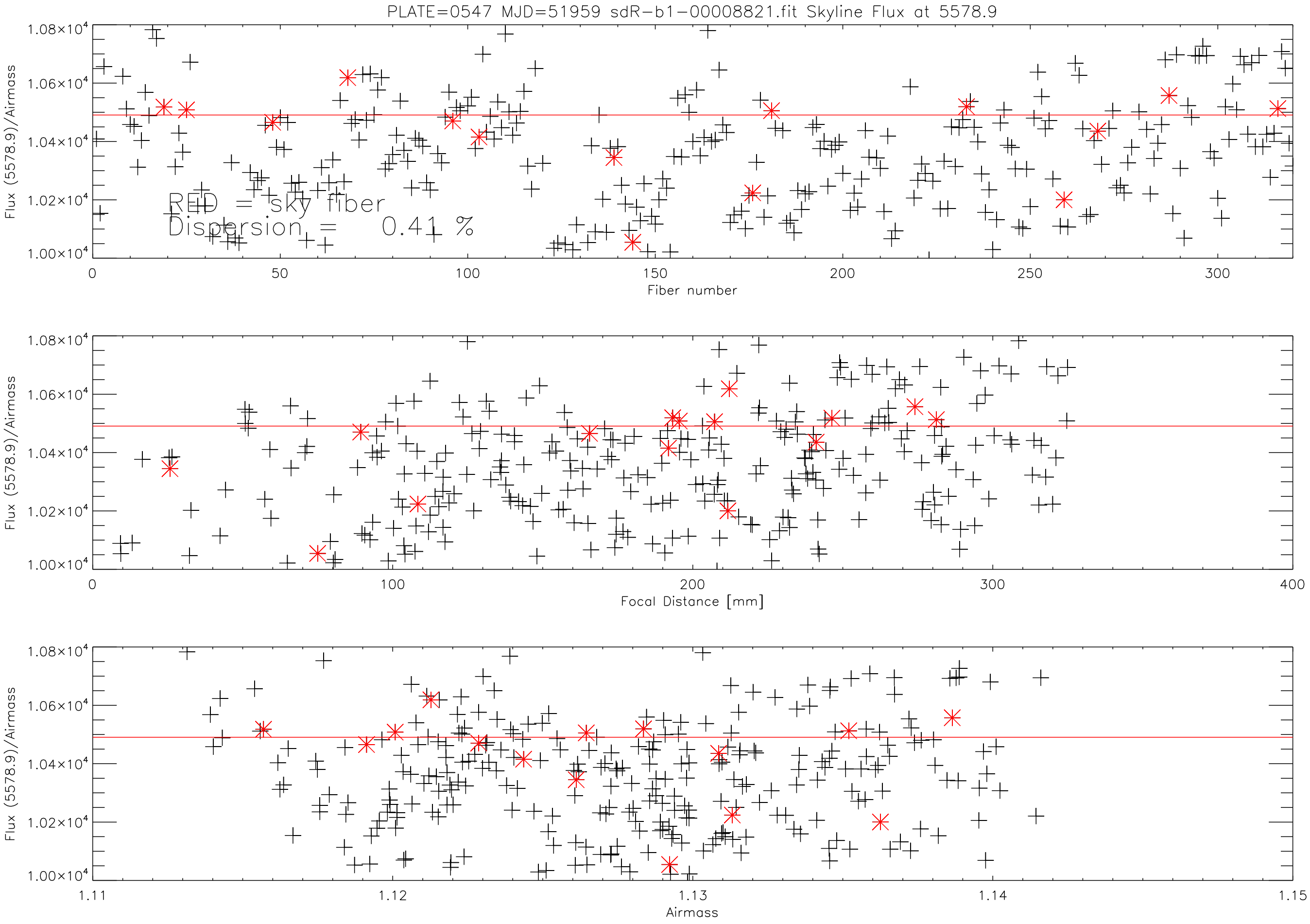




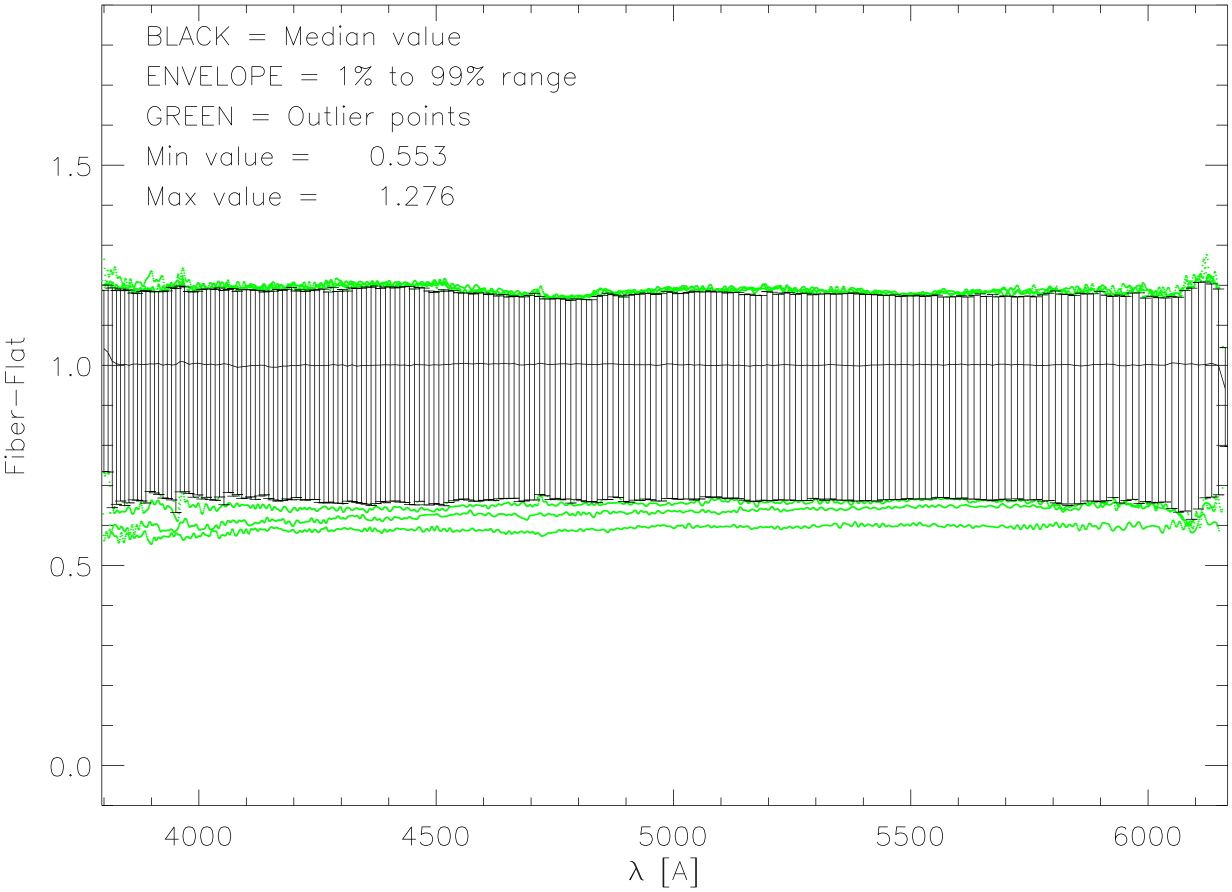
Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b1-00008821.fit 2D Sky-subtraction Rescaled Errors

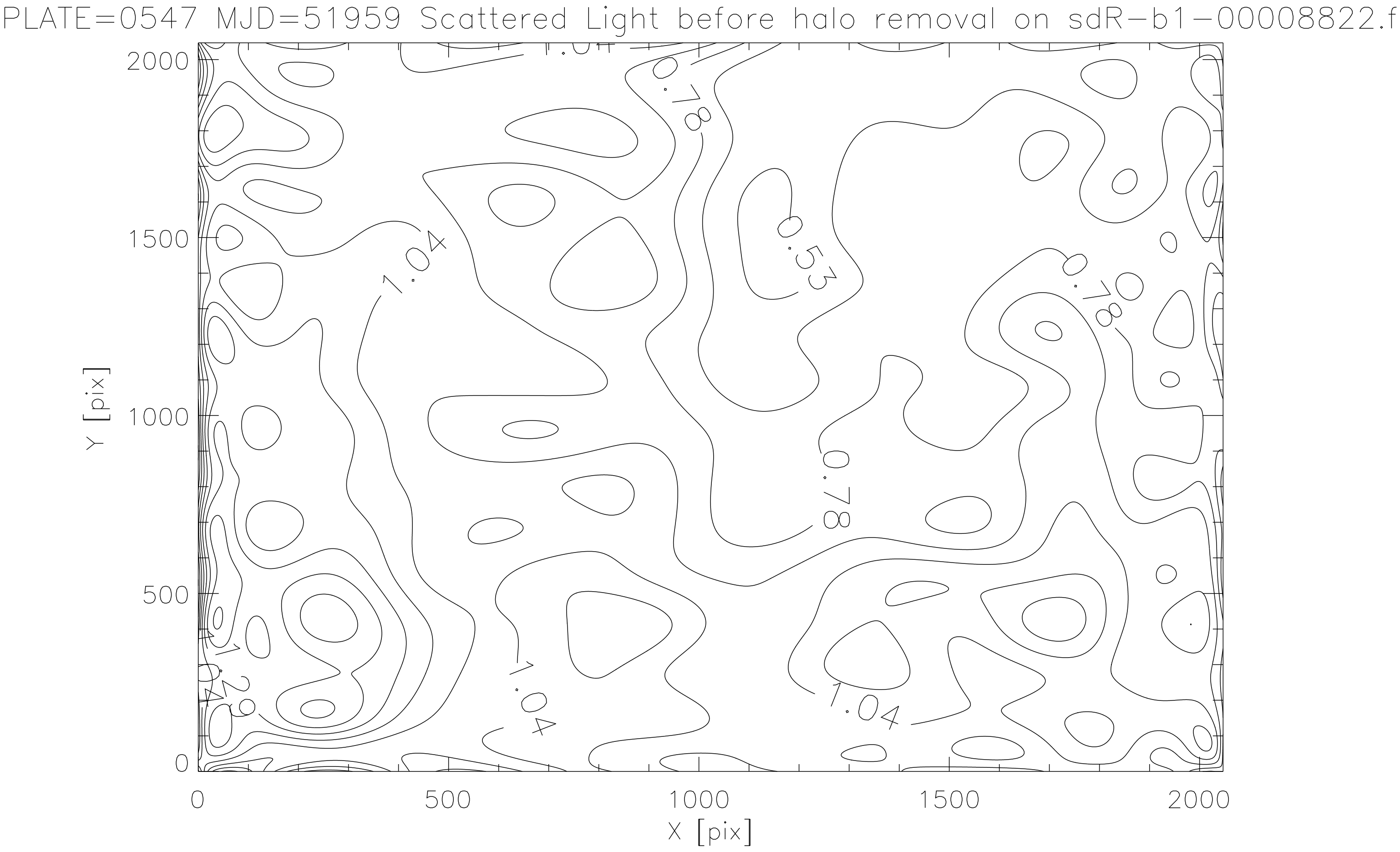

PLATE=0547 MJD=51959 sdR-b1-00008821.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
0
200
400
600
800
1000
1200
RED = sky fiber
Dispersion = 10.74 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
200
400
600
800
1000
1200
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
0
200
400
600
800
1000
1200
1.11
1.12
1.13
1.14
1.15
Airmass

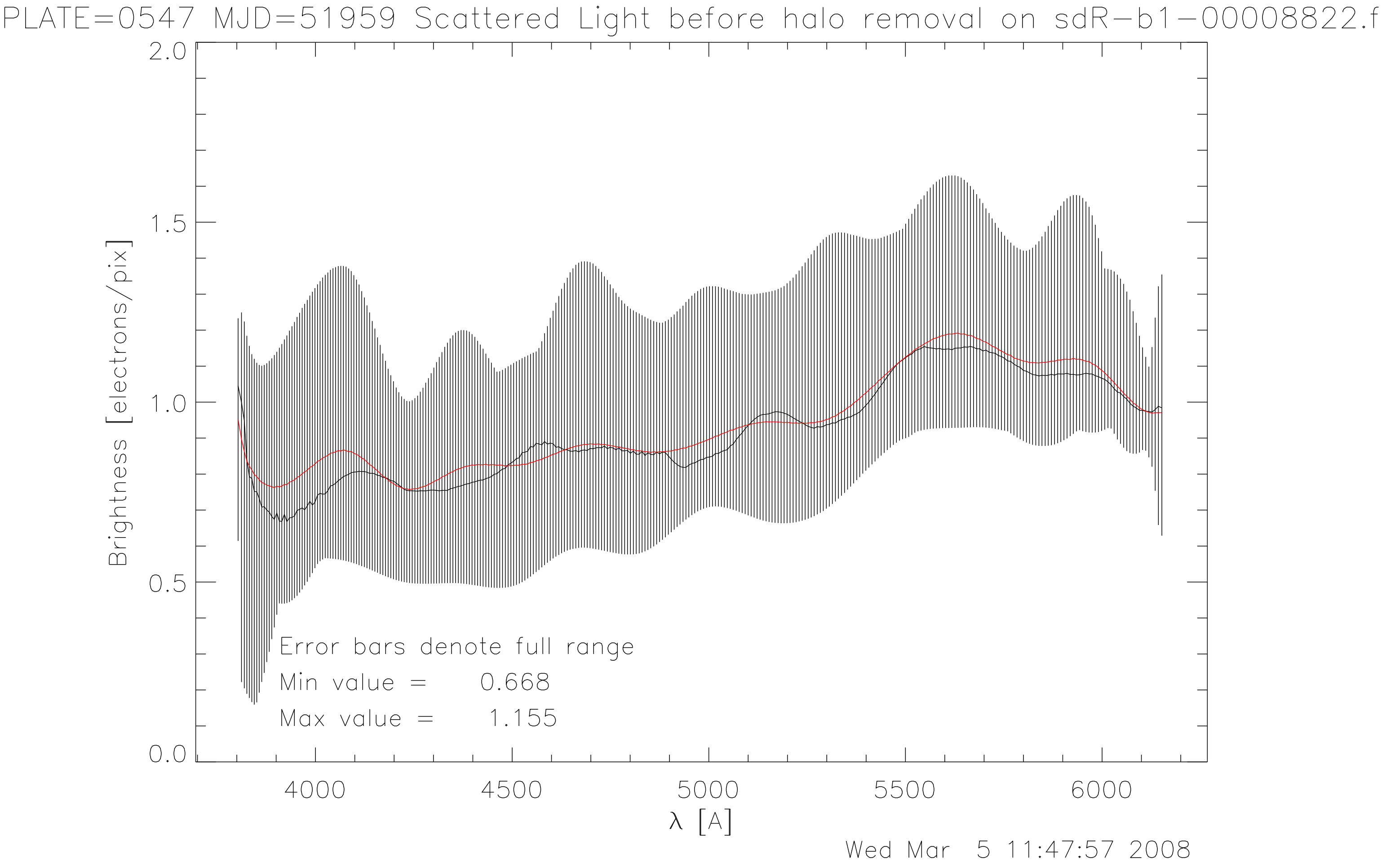

PLATE=0547 MJD=51959 sdR-b1-00008821.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.08×10⁴
1.06×10⁴
1.04×10⁴
1.02×10⁴
1.00×10⁴
RED = sky fiber
Dispersion = 0.41 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.08×10⁴
1.06×10⁴
1.04×10⁴
1.02×10⁴
1.00×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.08×10⁴
1.06×10⁴
1.04×10⁴
1.02×10⁴
1.00×10⁴
1.11
1.12
1.13
1.14
1.15
Airmass

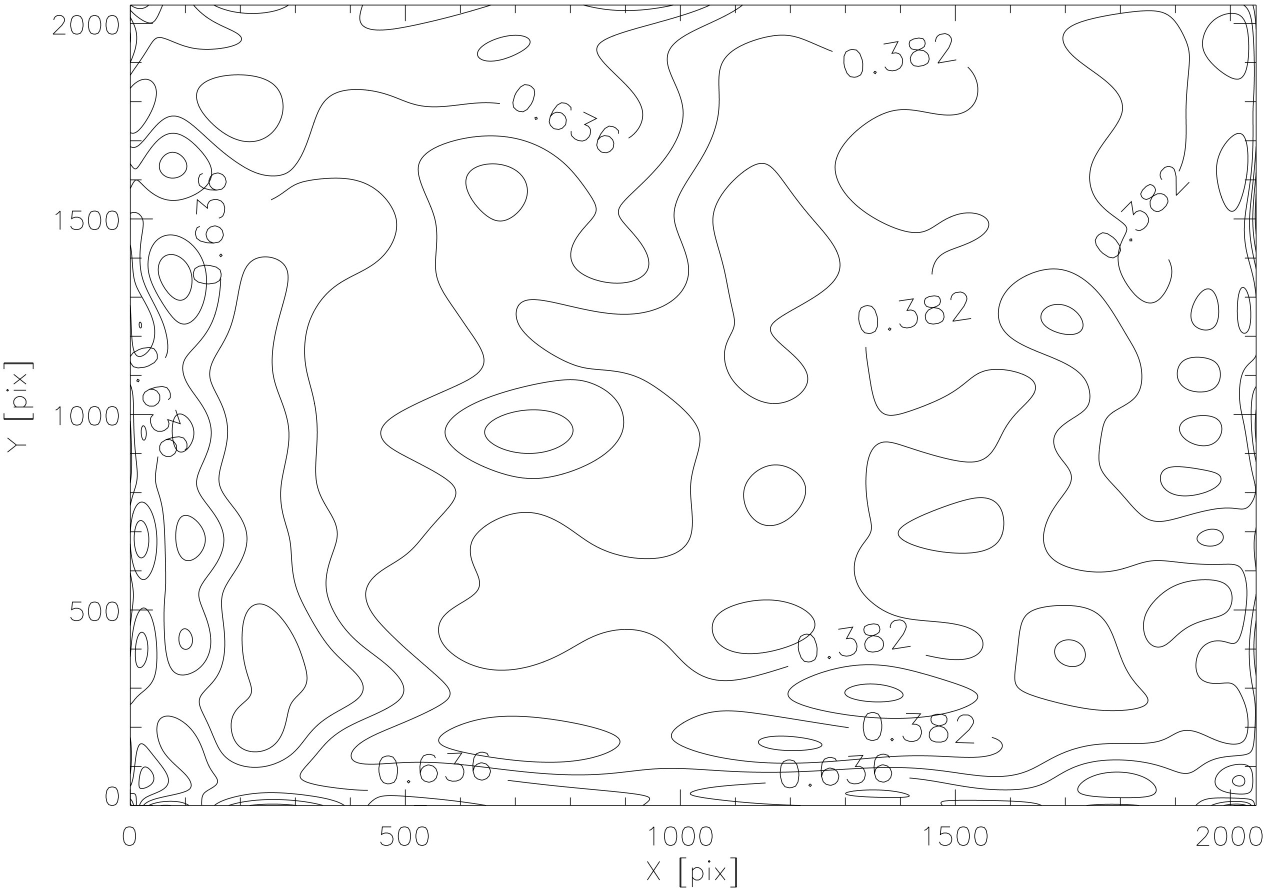
PLATE=0547 MJD=51959 Fiber−Flats for sdR−b1−00008823.fit

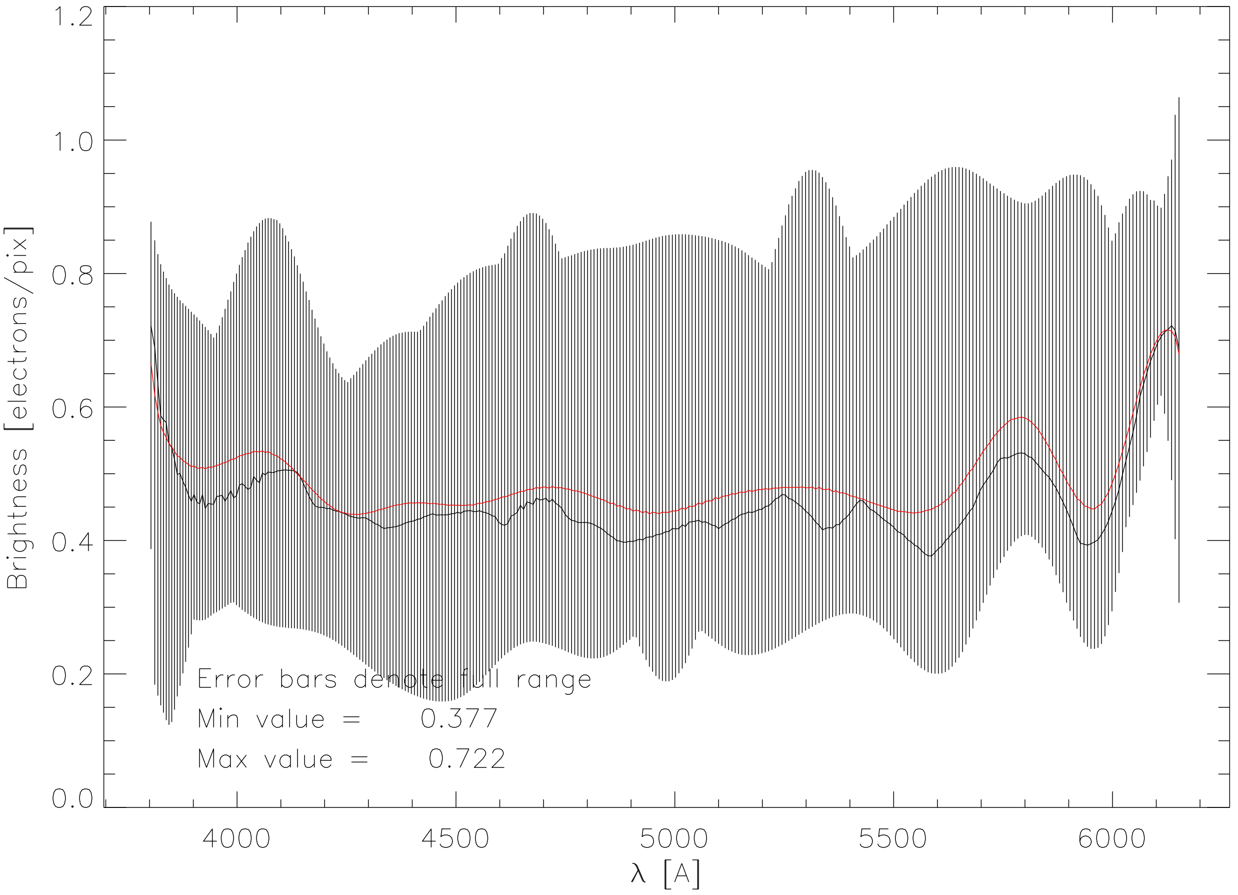


Wed Mar 5 11:47:18 2008

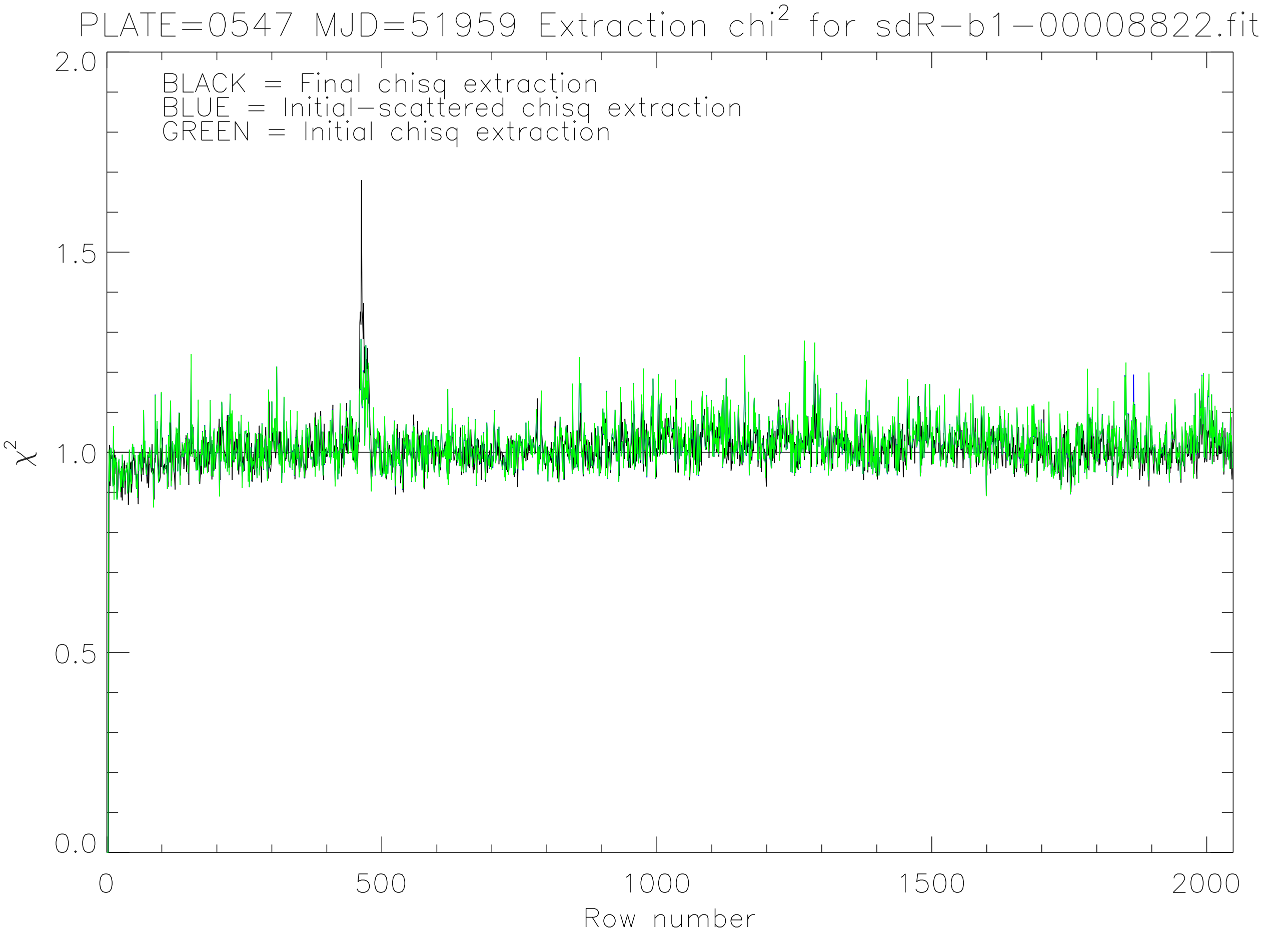

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008822.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
1.04
0.78
0.53
0.78
0.78
1.04
1.04
1.04
1.29

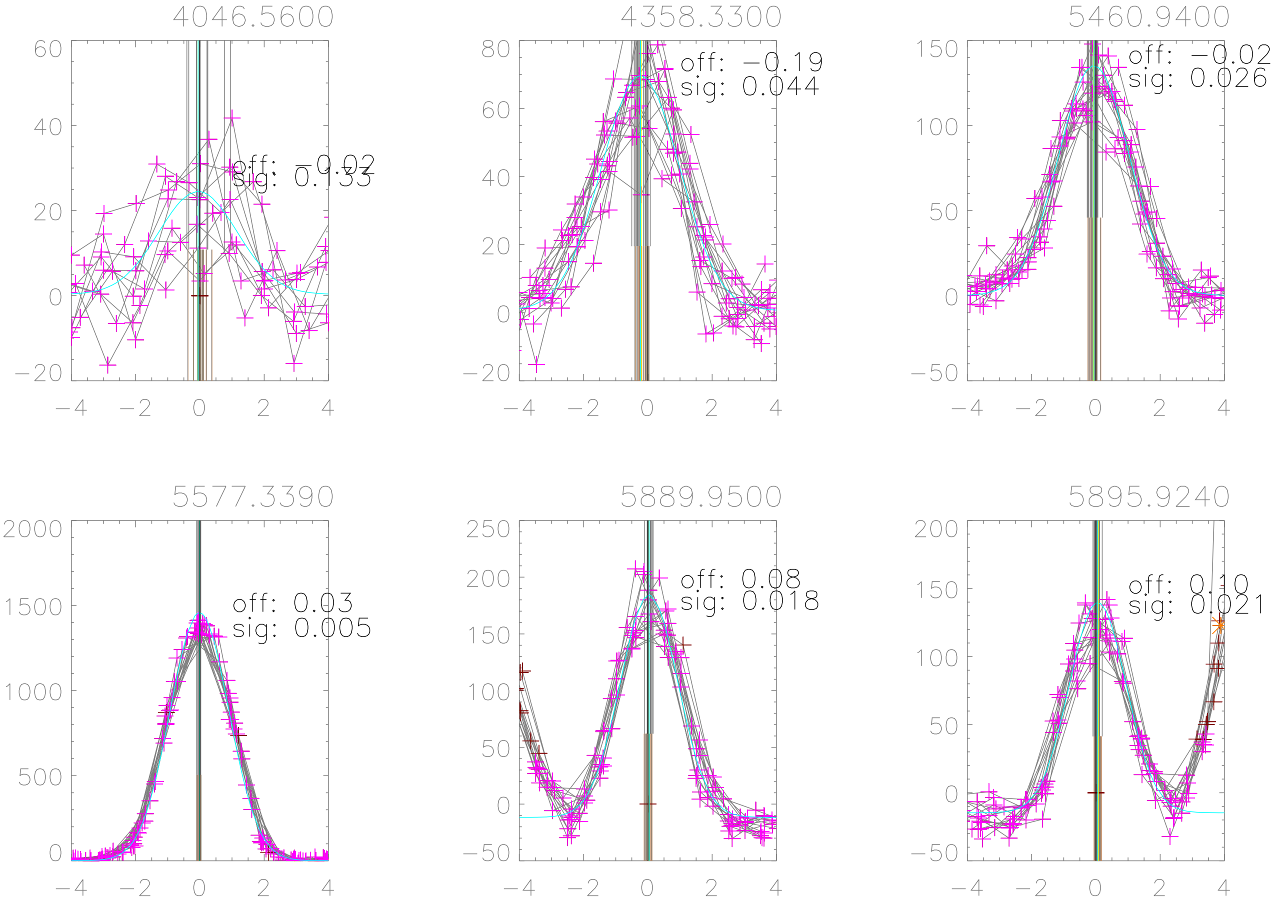

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b1-00008822.f
Brightness [electrons/pix]
2.0
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 0.668
Max value = 1.155
Wed Mar 5 11:47:57 2008

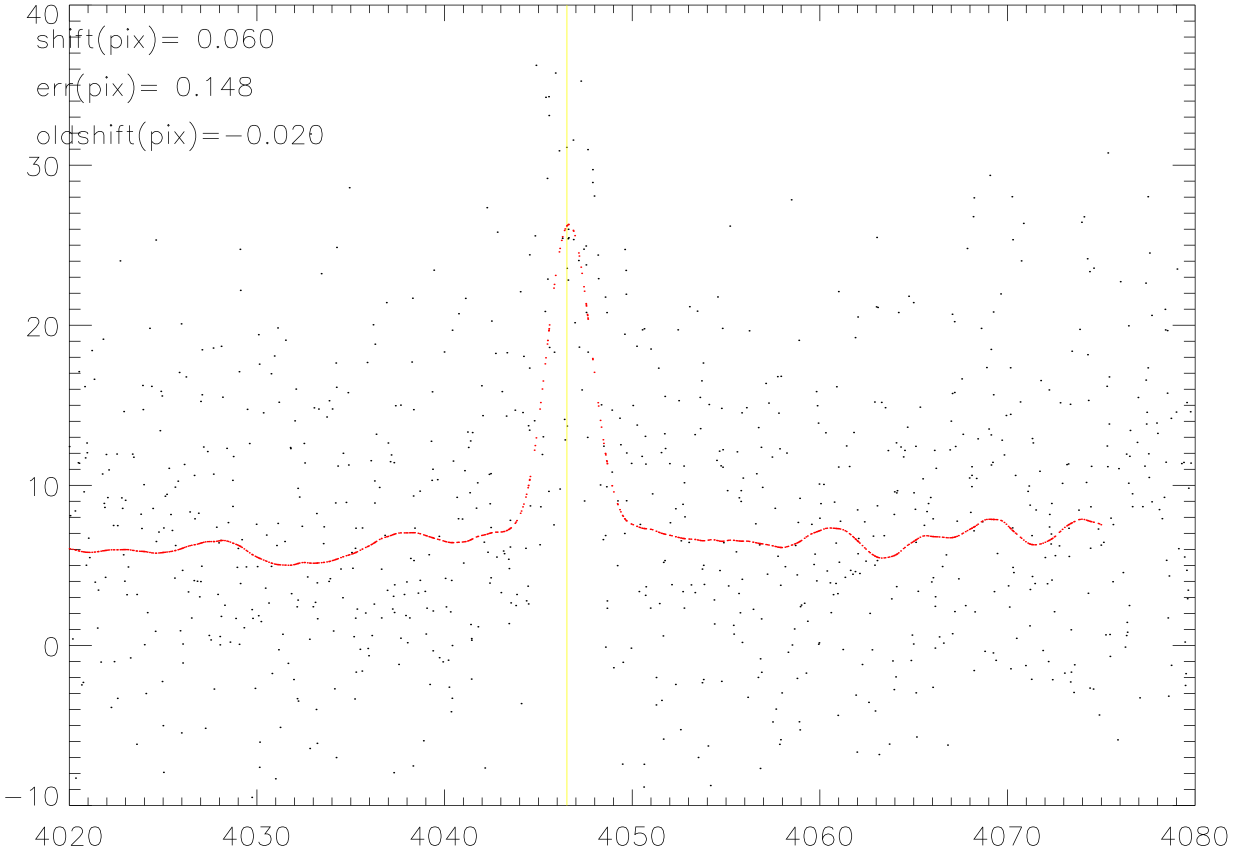

PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008822.fit

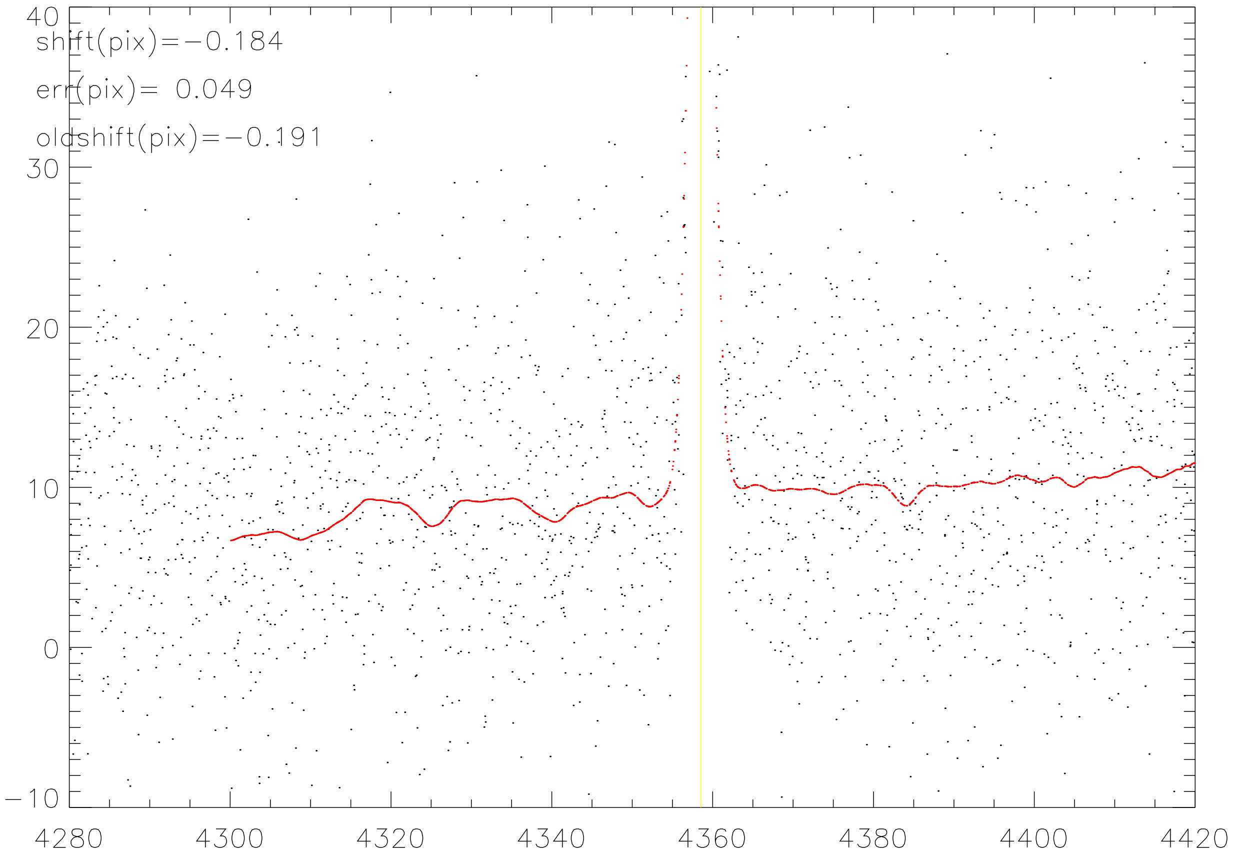

PLATE=0547 MJD=51959 Scattered Light on sdR-b1-00008822.fit

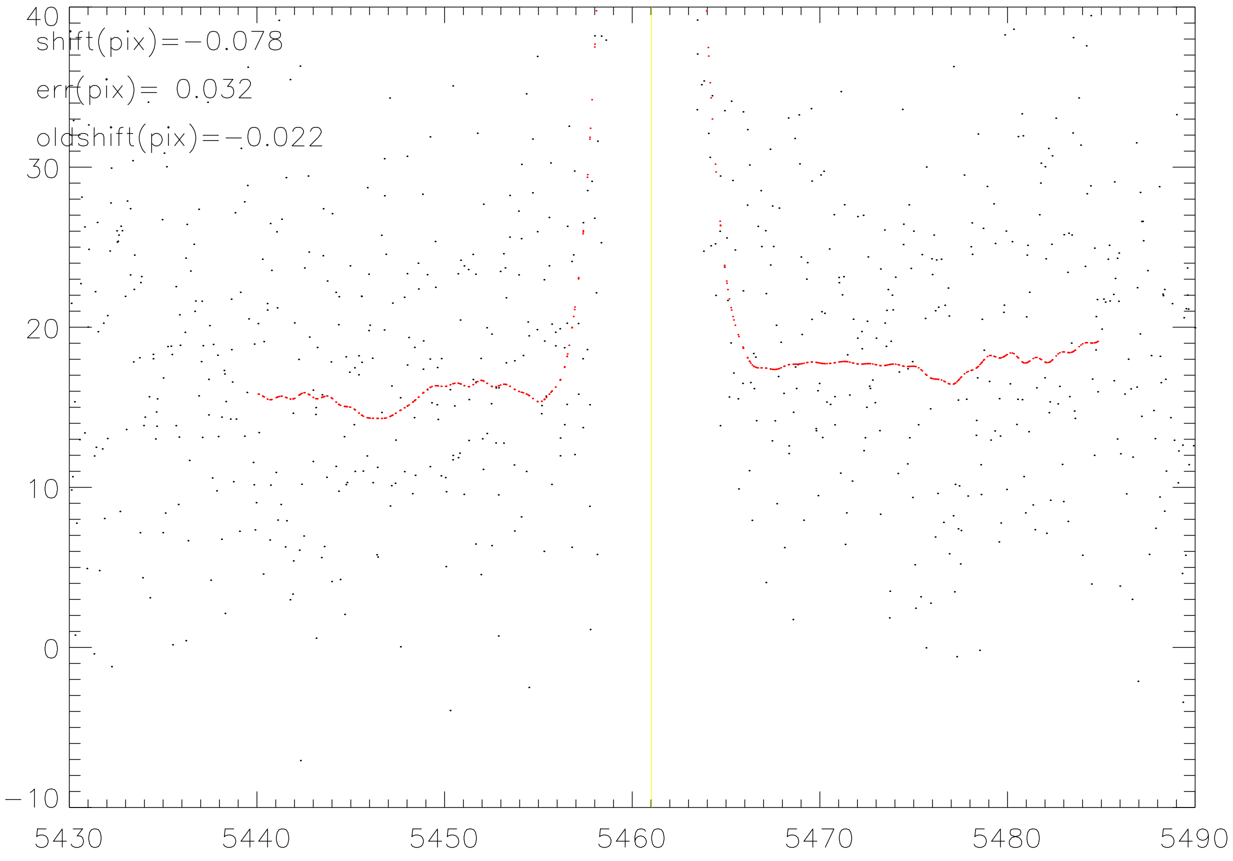
Wed Mar 5 11:50:18 2008

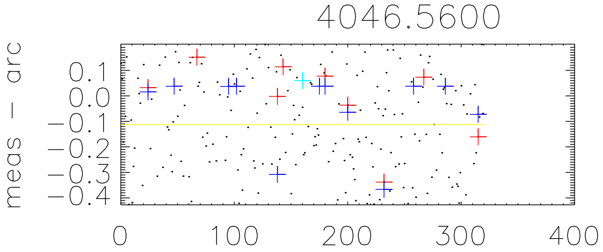

PLATE=0547 MJD=51959 Extraction χ^2 for sdR-b1-00008822.fit

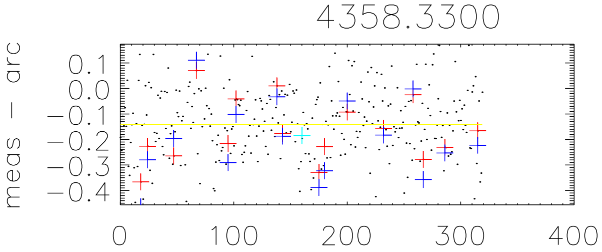

4046.5600
off: −0.02
sig: 0.133
4358.3300
off: −0.19
sig: 0.044
5460.9400
off: −0.02
sig: 0.026
5577.3390
off: 0.03
sig: 0.005
5889.9500
off: 0.08
sig: 0.018
5895.9240
off: 0.10
sig: 0.021
60
40
20
0
−20
80
150
100
50
−50
2000
1500
1000
500
250
200
−4
−2
2
4

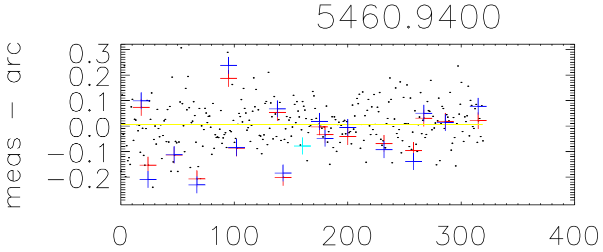

shift(pix)= 0.060
err(pix)= 0.148
oldshift(pix)=−0.020
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

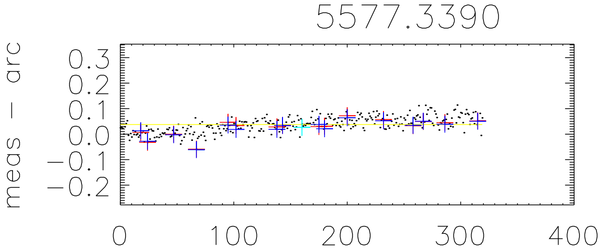

shift(pix)=−0.184
err(pix)= 0.049
oldshift(pix)=−0.191
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

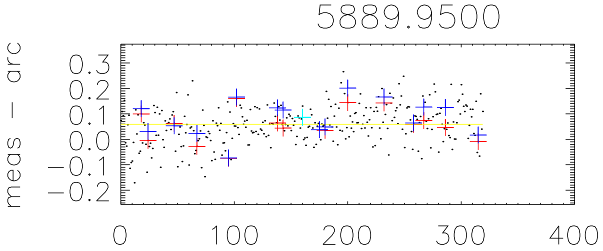

shift(pix)=−0.078
err(pix)= 0.032
oldshift(pix)=−0.022
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

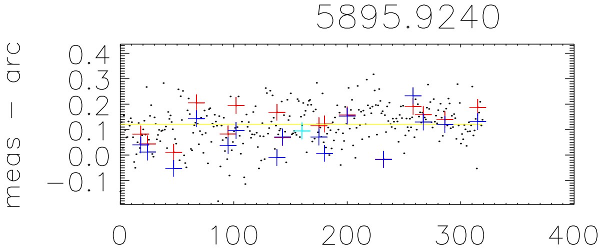

4046.5600

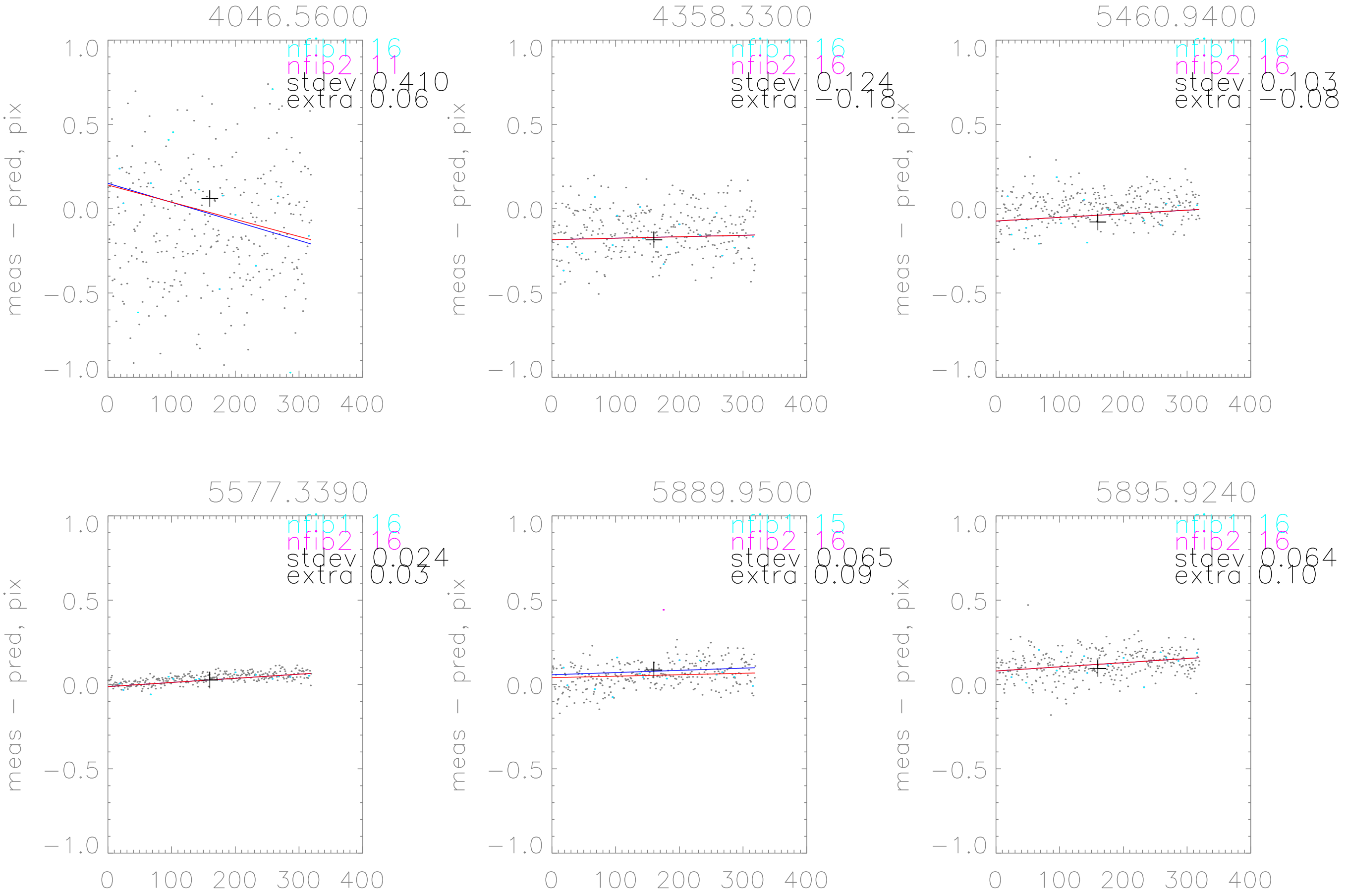

4358.3300

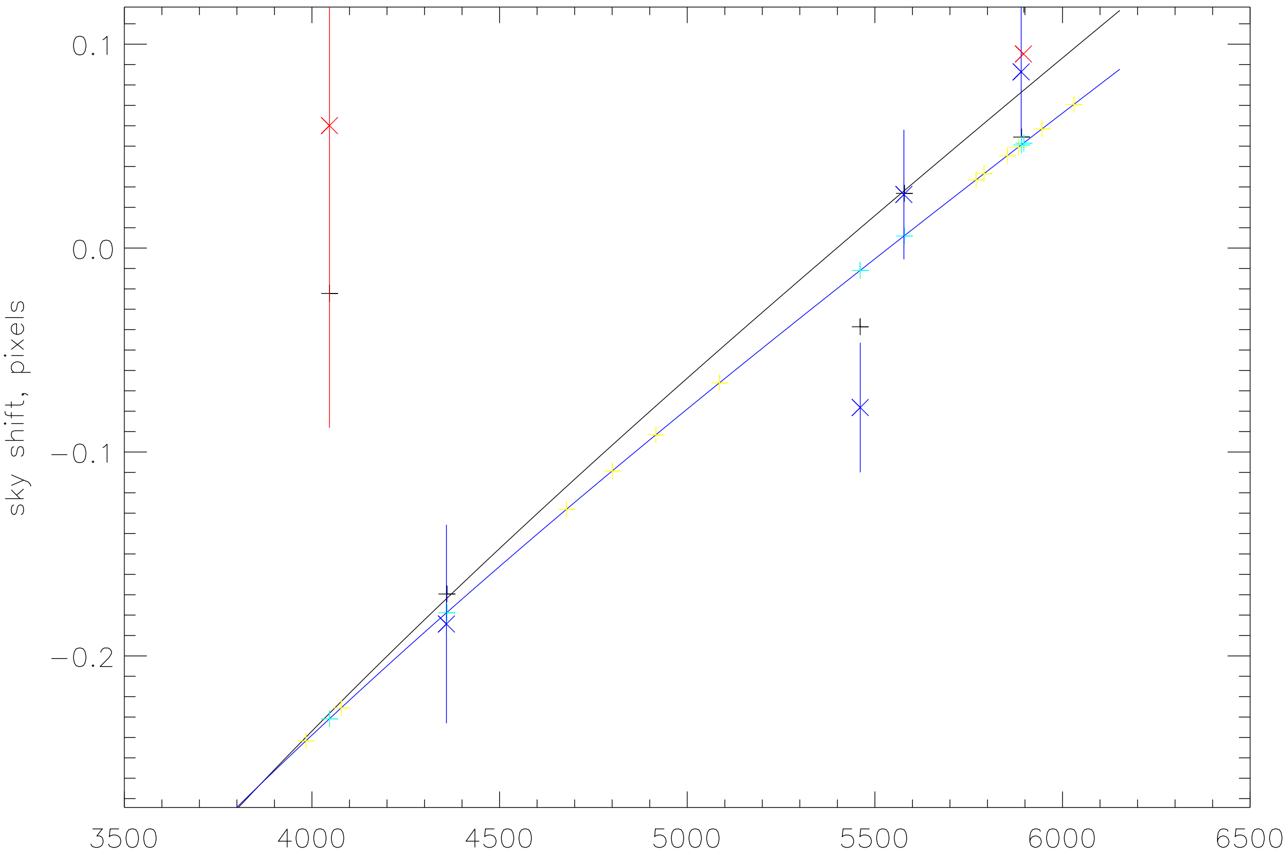

5460.9400

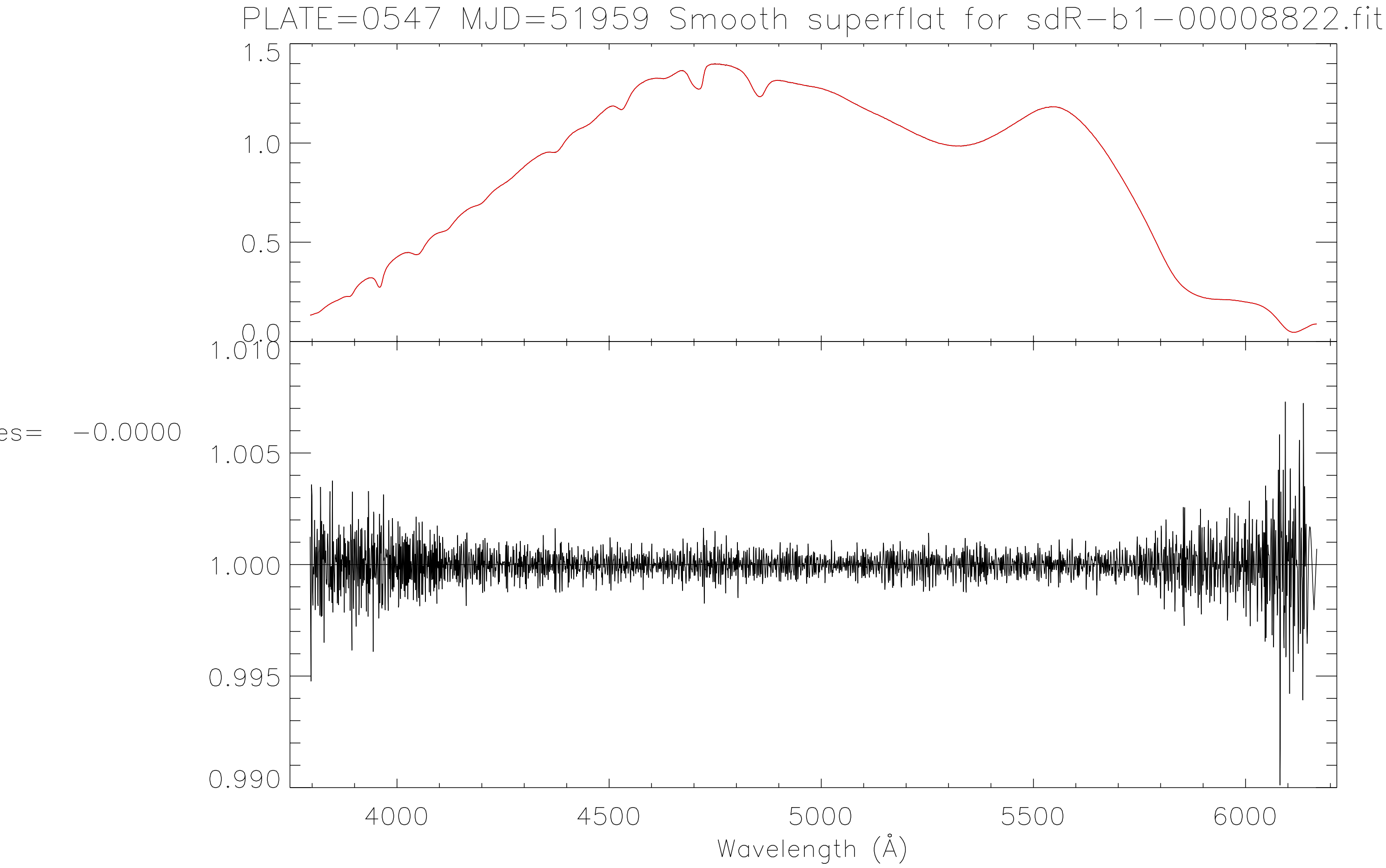

5577.3390

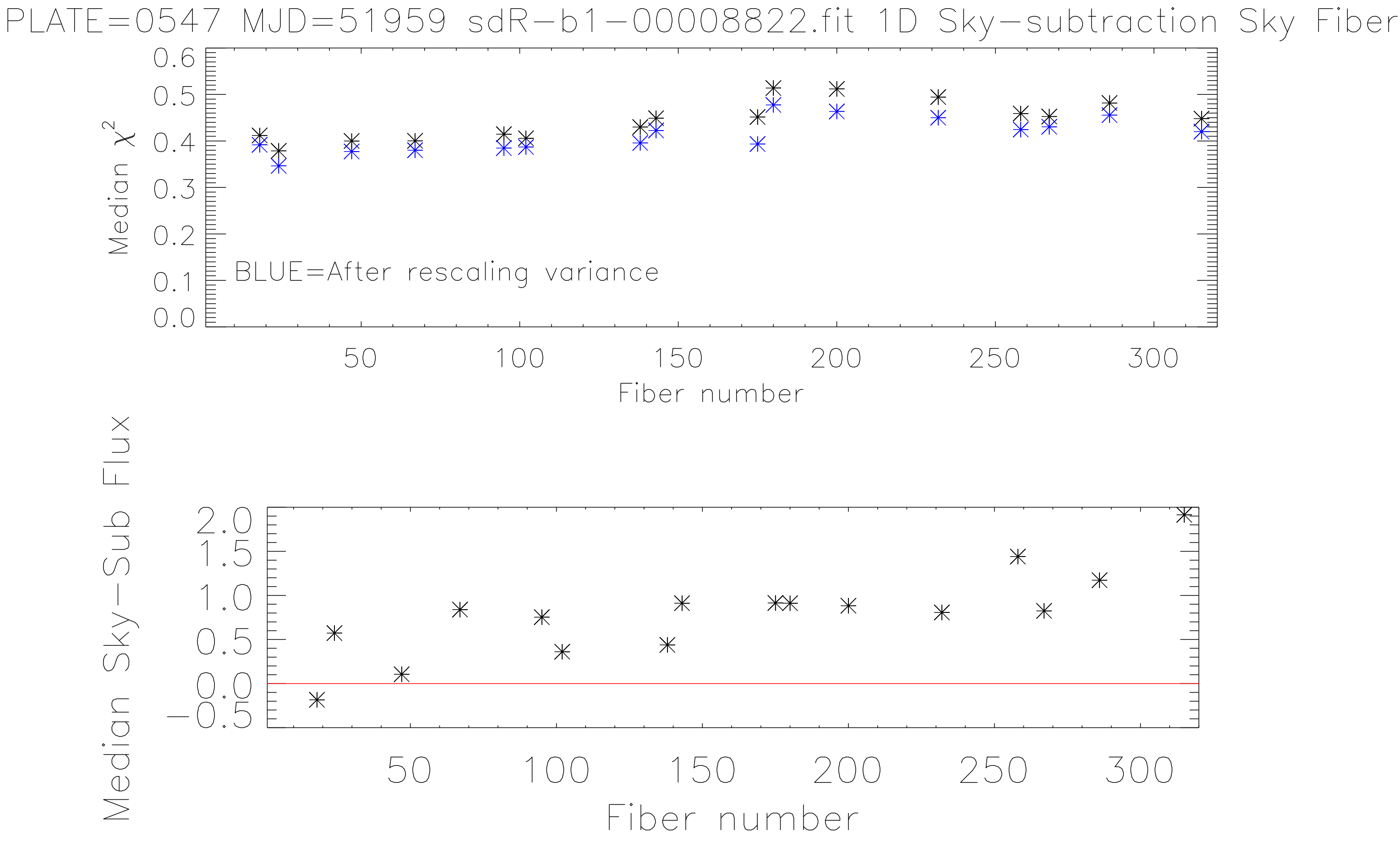

5889.9500

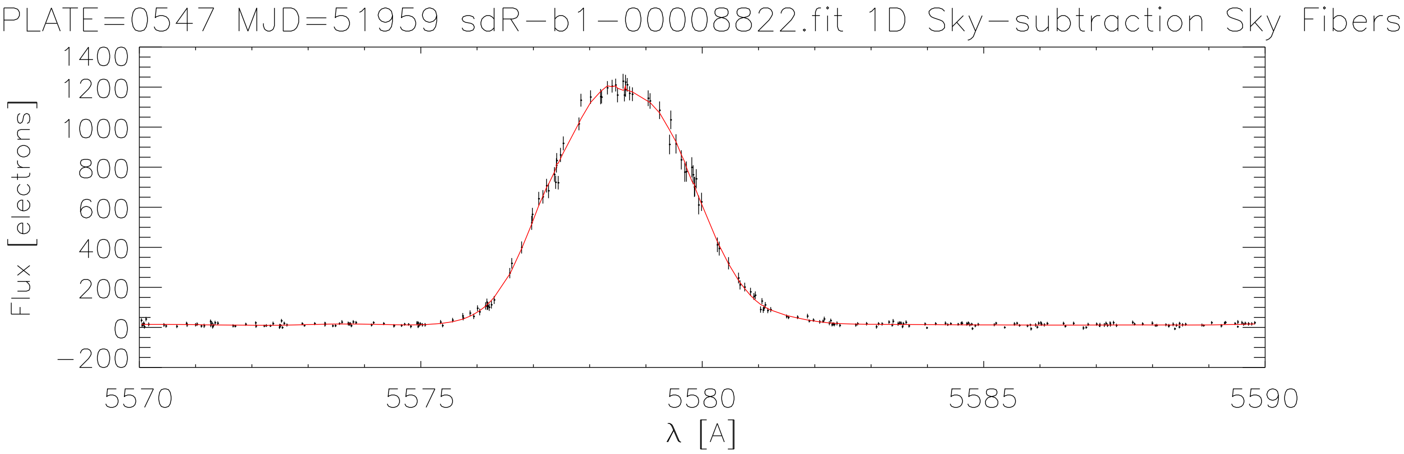

5895.9240


4046.5600
nfib1 16
nfib2 11
stdev 0.410
extra 0.06
4358.3300
nfib1 16
nfib2 16
stdev 0.124
extra −0.18
5460.9400
nfib1 16
nfib2 16
stdev 0.103
extra −0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.024
extra 0.03
5889.9500
nfib1 15
nfib2 16
stdev 0.065
extra 0.09
5895.9240
nfib1 16
nfib2 16
stdev 0.064
extra 0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

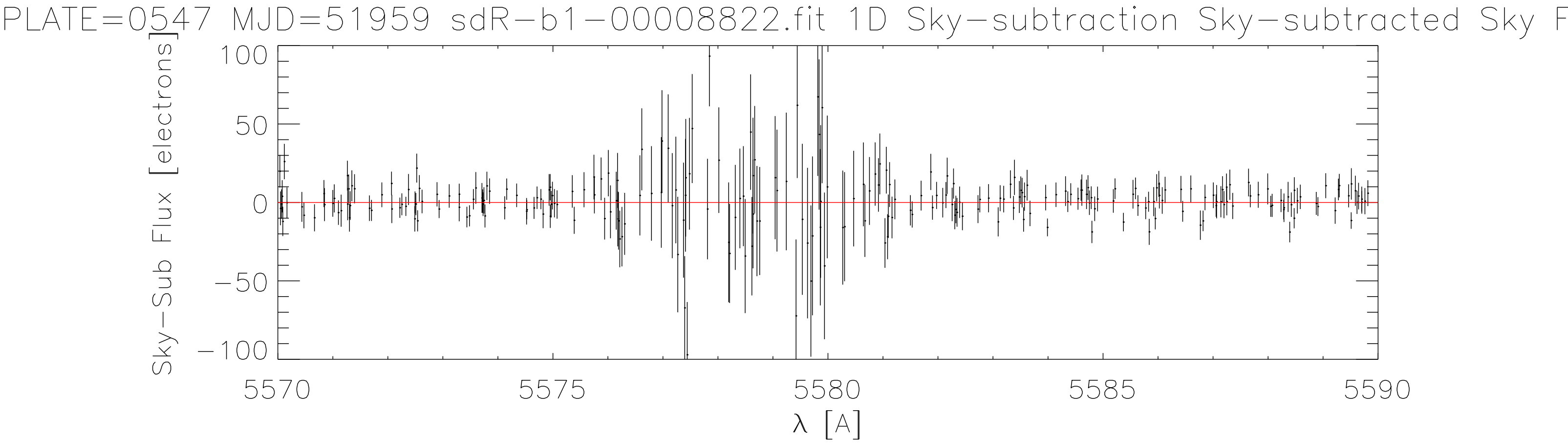

sky shift, pixels
0.1
0.0
−0.1
−0.2
3500
4000
4500
5000
5500
6000
6500


PLATE=0547 MJD=51959 Smooth superflat for sdR-b1-00008822.fit

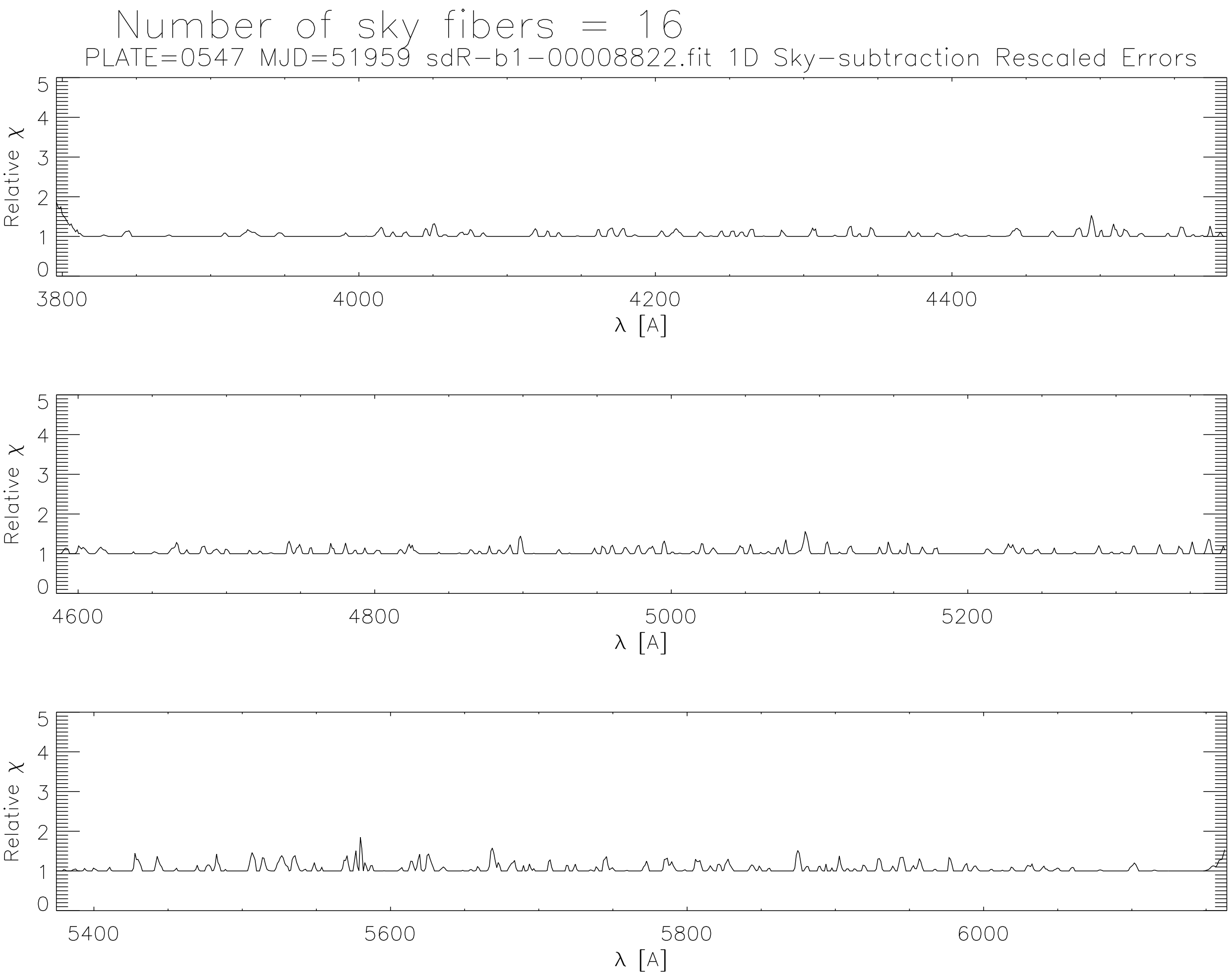

PLATE=0547 MJD=51959 sdR-b1-00008822.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2.0
1.5
1.0
0.5
0.0
−0.5
50
100
150
200
250
300
Fiber number



PLATE=0547 MJD=51959 sdR-b1-00008822.fit 1D Sky-subtraction Sky Fibers

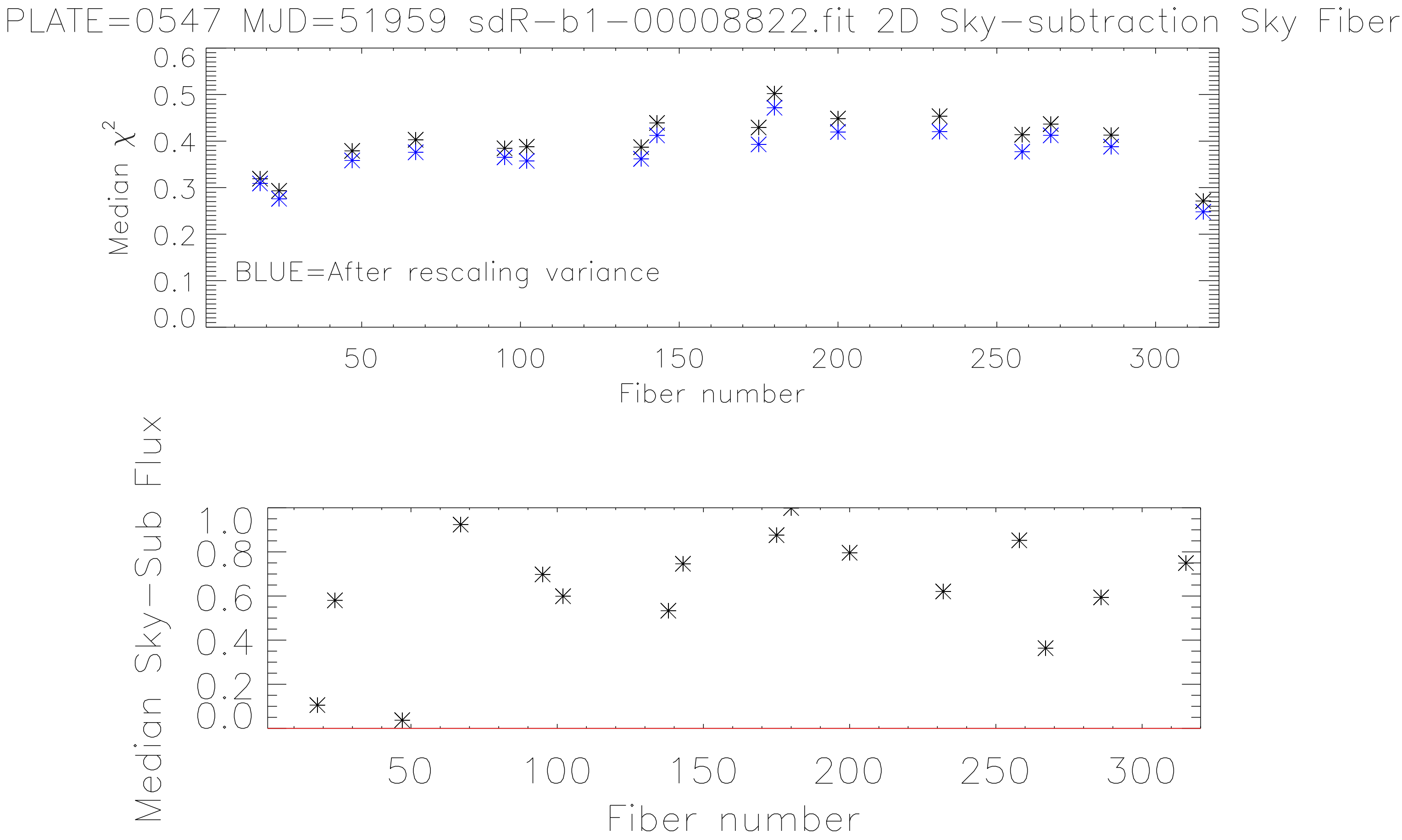


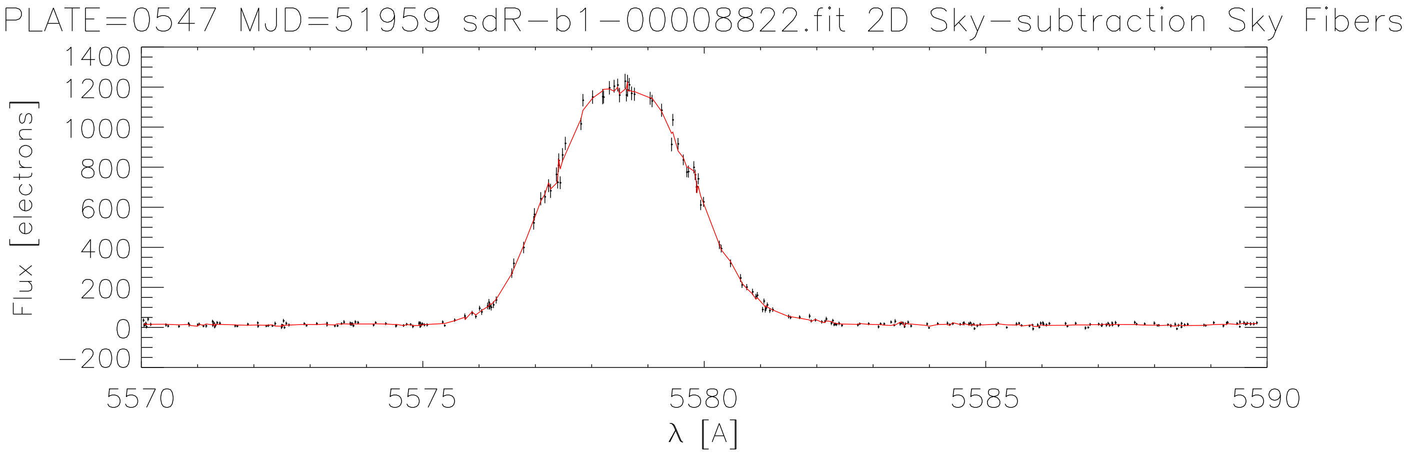
PLATE=0547 MJD=51959 sdR-b1-00008822.fit 1D Sky-subtraction Sky-subtracted Sky F

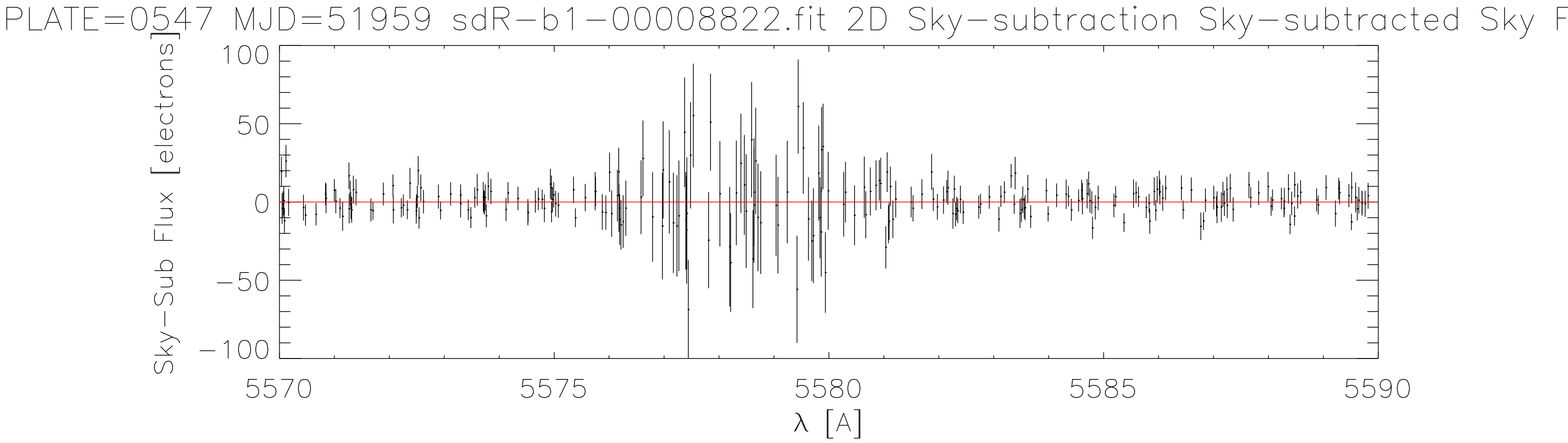


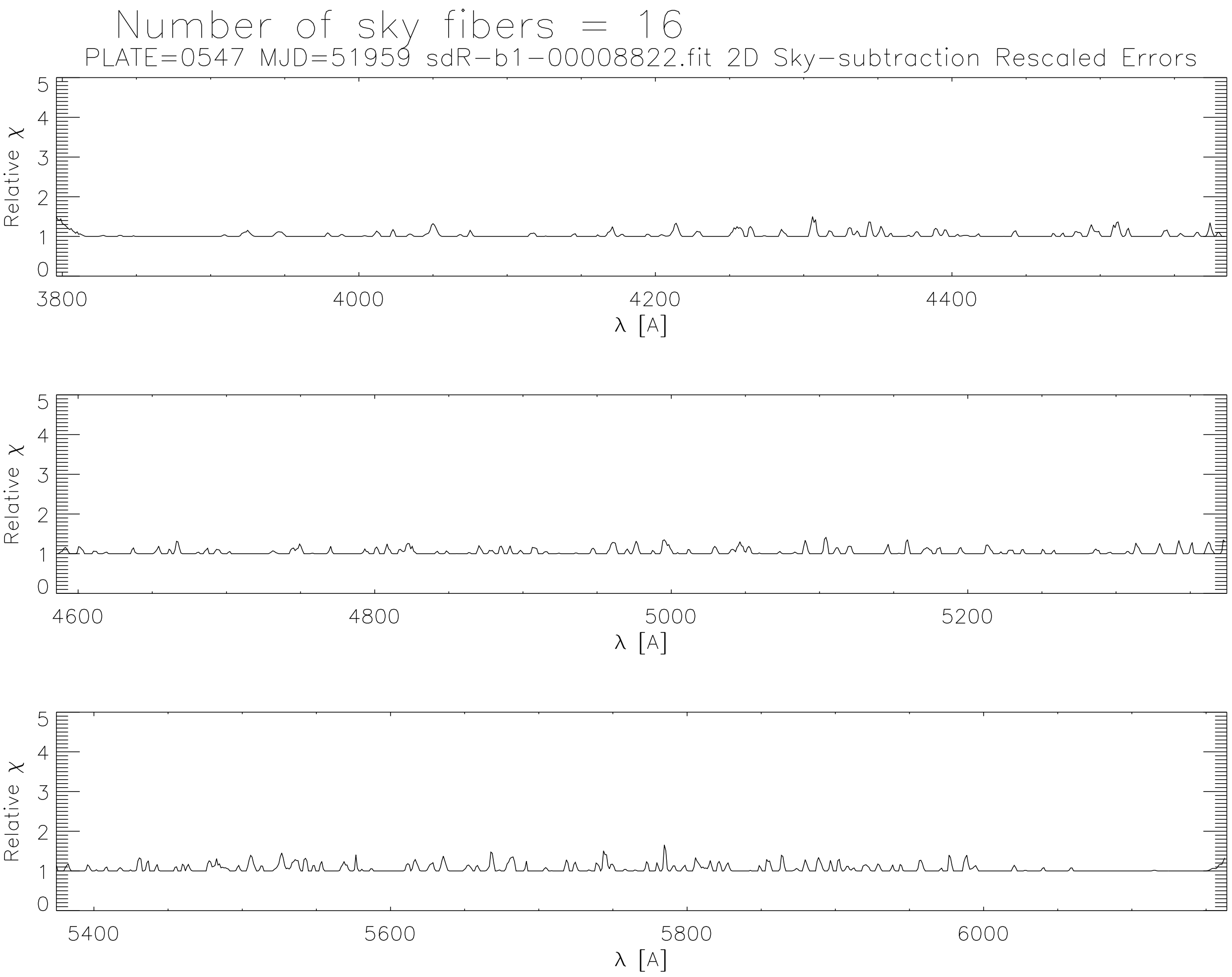
Number of sky fibers = 16

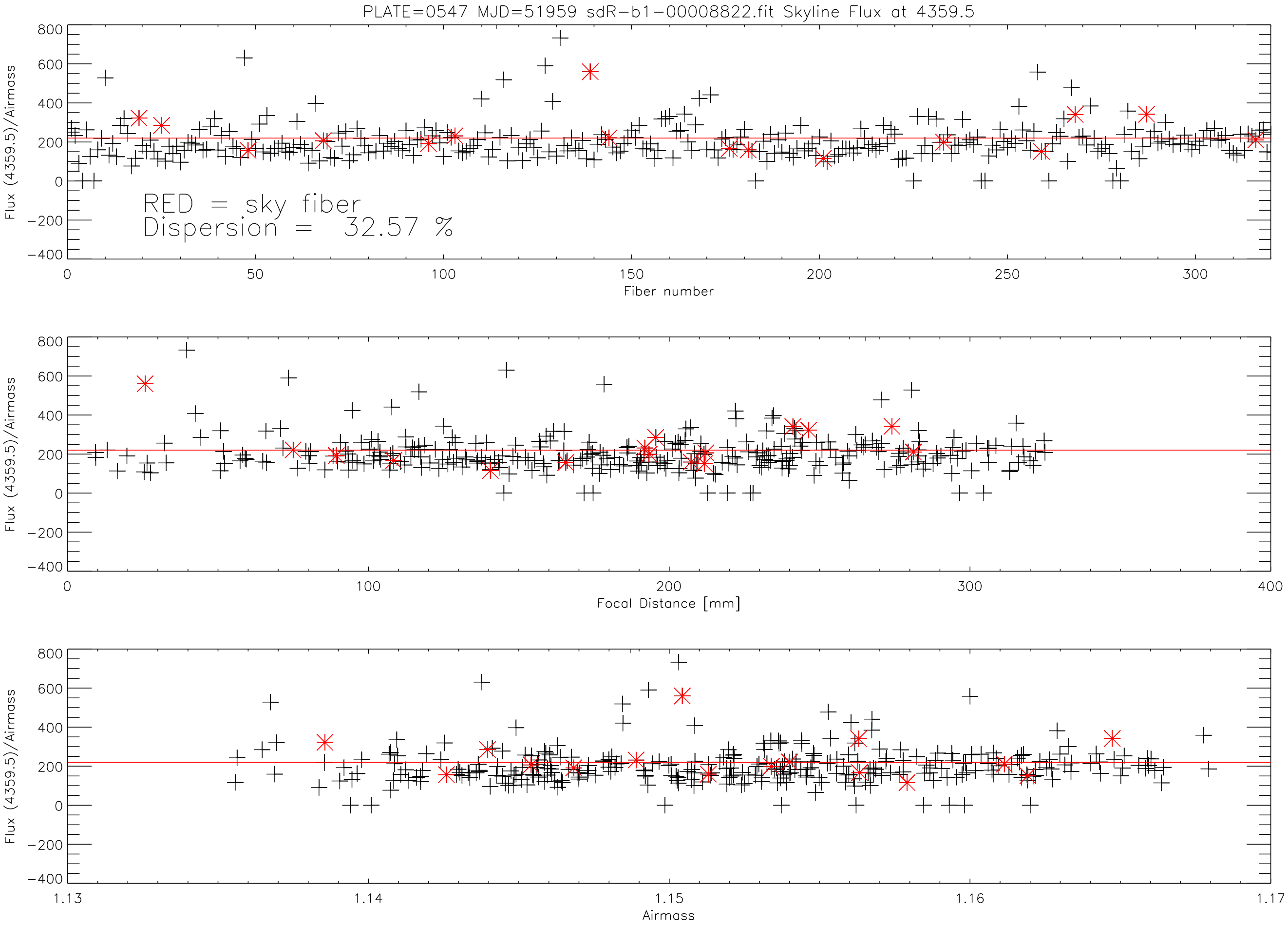
PLATE=0547 MJD=51959 sdR-b1-00008822.fit 1D Sky-subtraction Rescaled Errors


PLATE=0547 MJD=51959 sdR-b1-00008822.fit 2D Sky-subtraction Sky Fiber

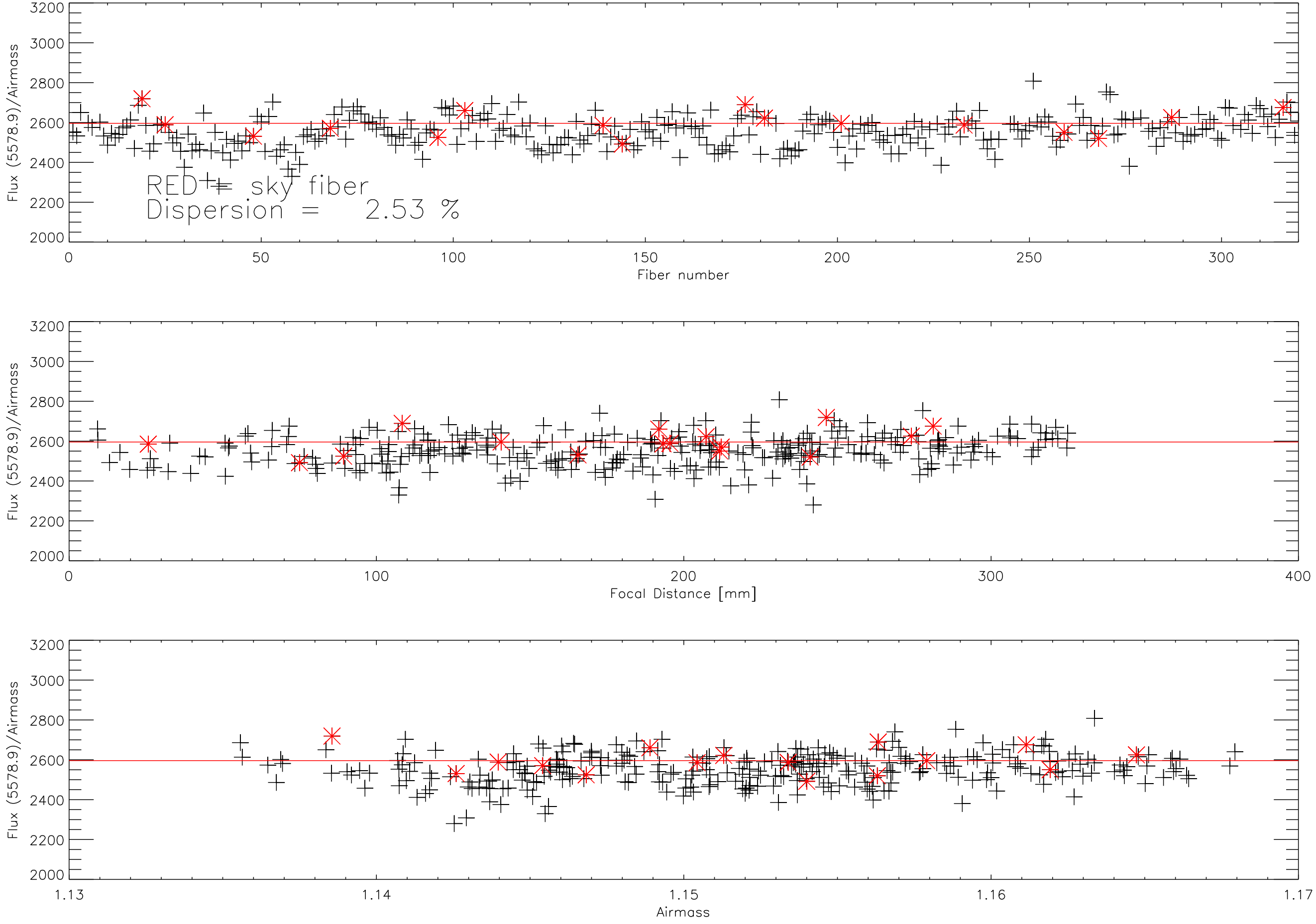

PLATE=0547 MJD=51959 sdR-b1-00008822.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
1400
1200
1000
800
600
400
200
0
−200
5570
5575
5580
5585
5590
λ [A]

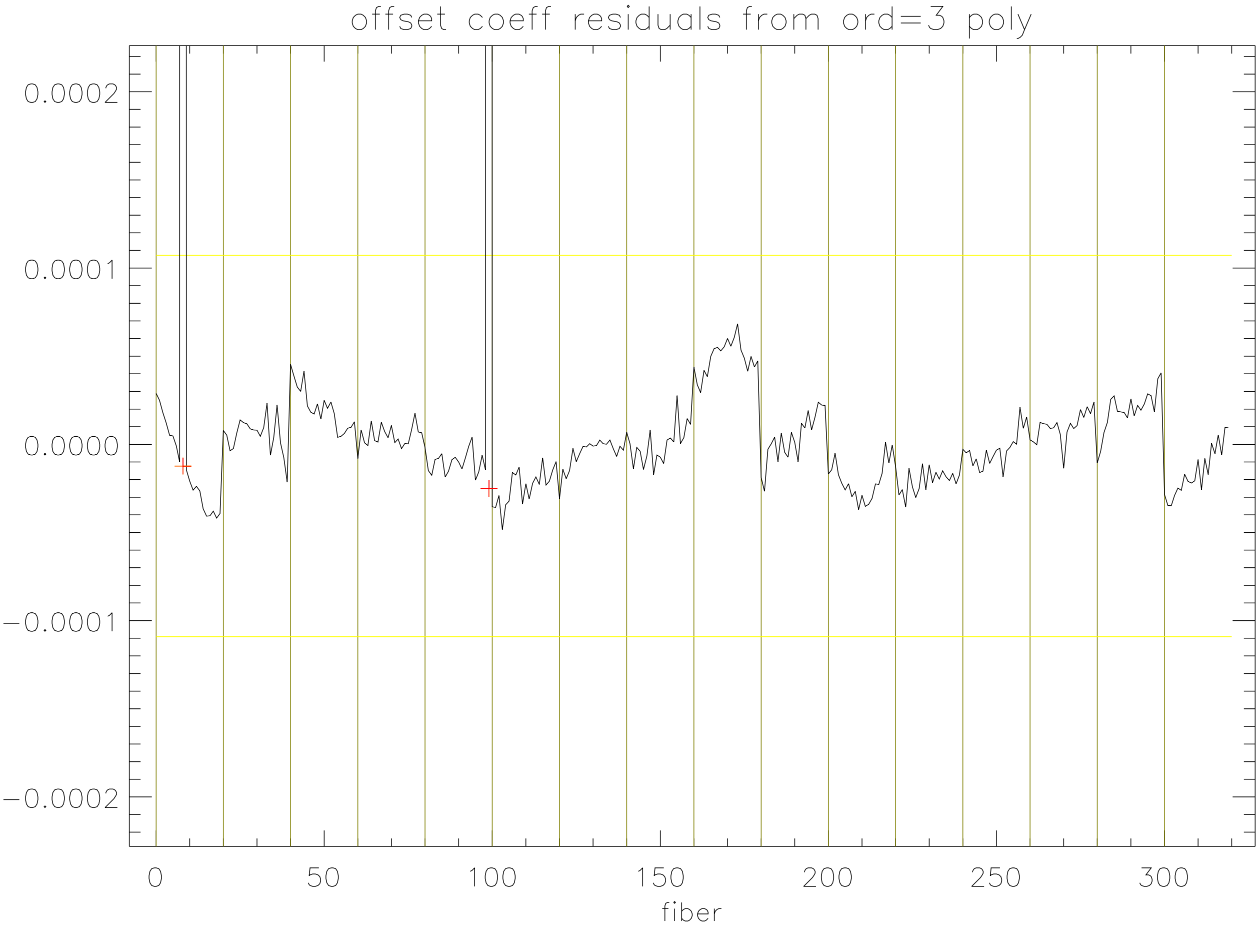

PLATE=0547 MJD=51959 sdR-b1-00008822.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

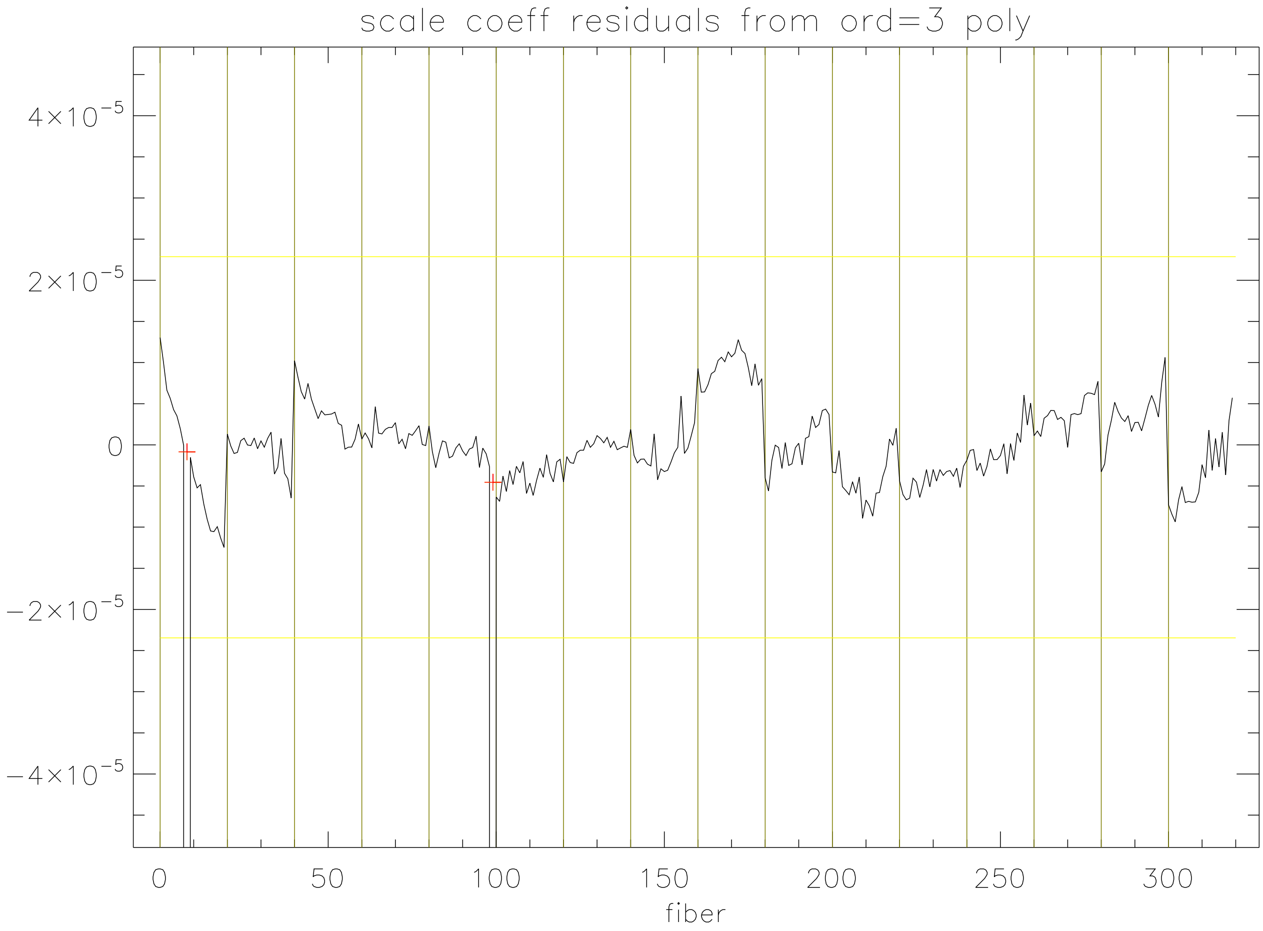

Number of sky fibers = 16
PLATE=0547 MJD=51959 sdR-b1-00008822.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
3800
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

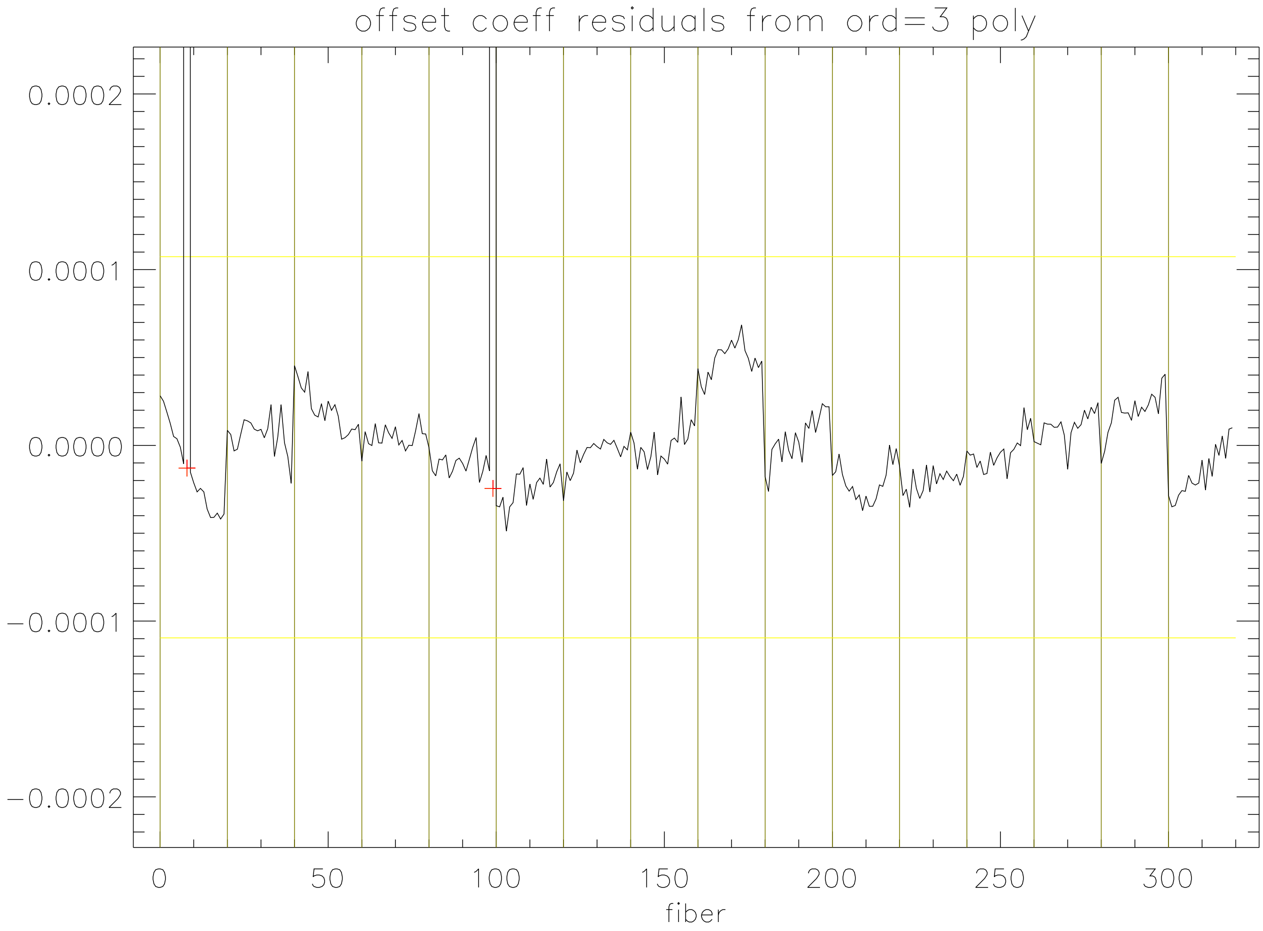

PLATE=0547 MJD=51959 sdR-b1-00008822.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
800
600
400
200
0
-200
-400
RED = sky fiber
Dispersion = 32.57 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.13
1.14
1.15
1.16
1.17
Airmass

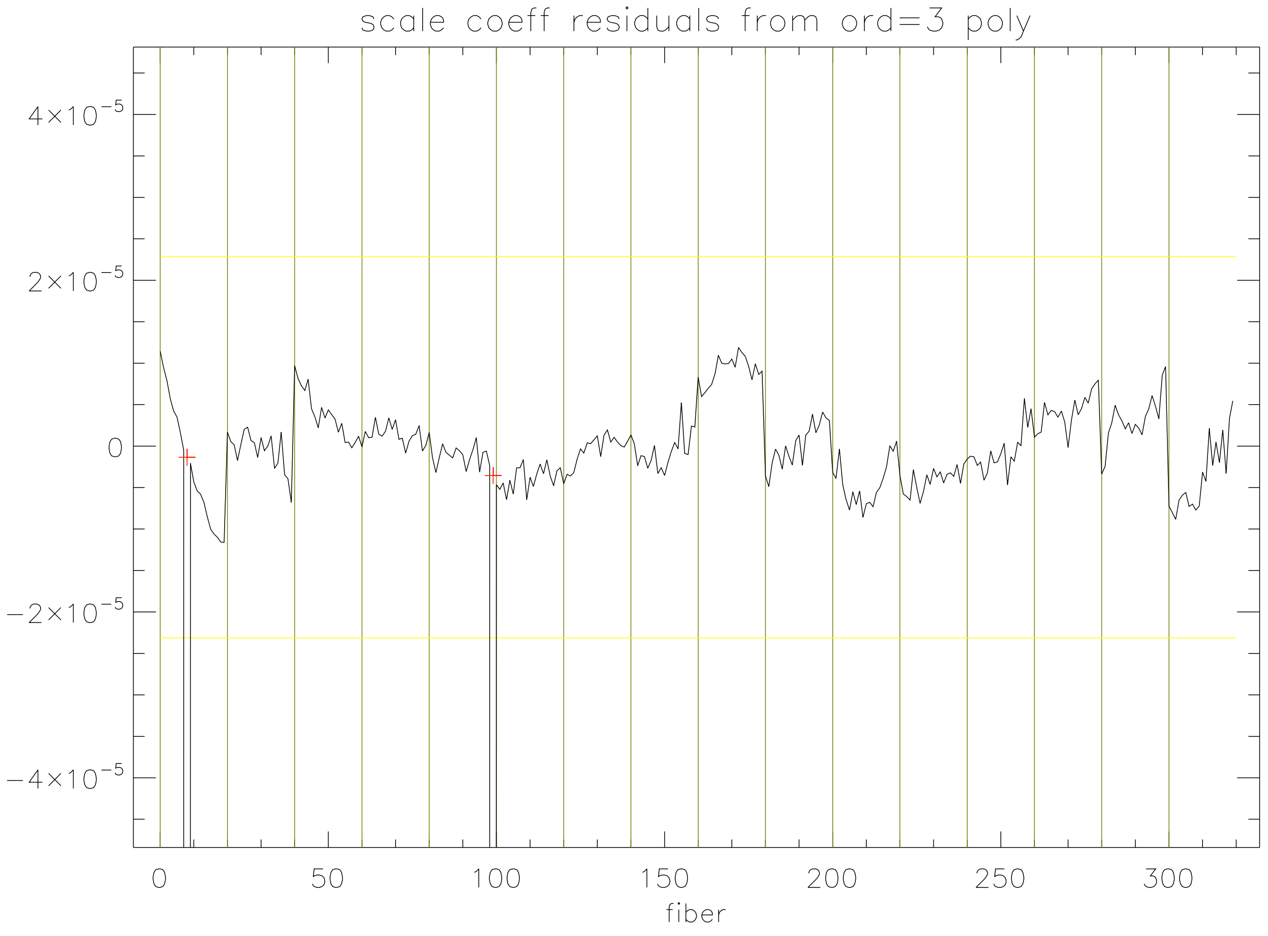
PLATE=0547 MJD=51959 sdR-b1-00008822.fit Skyline Flux at 5578.9

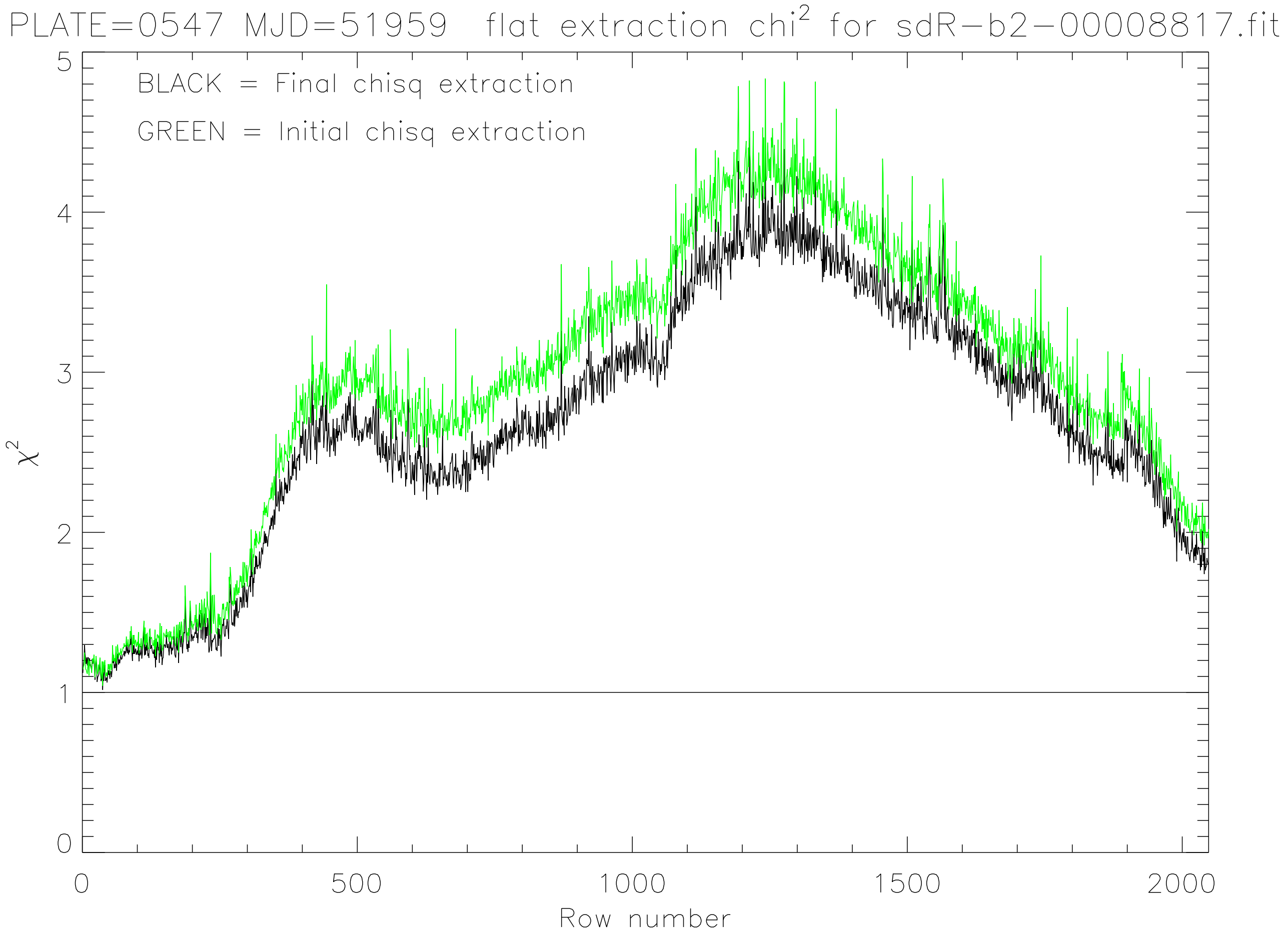


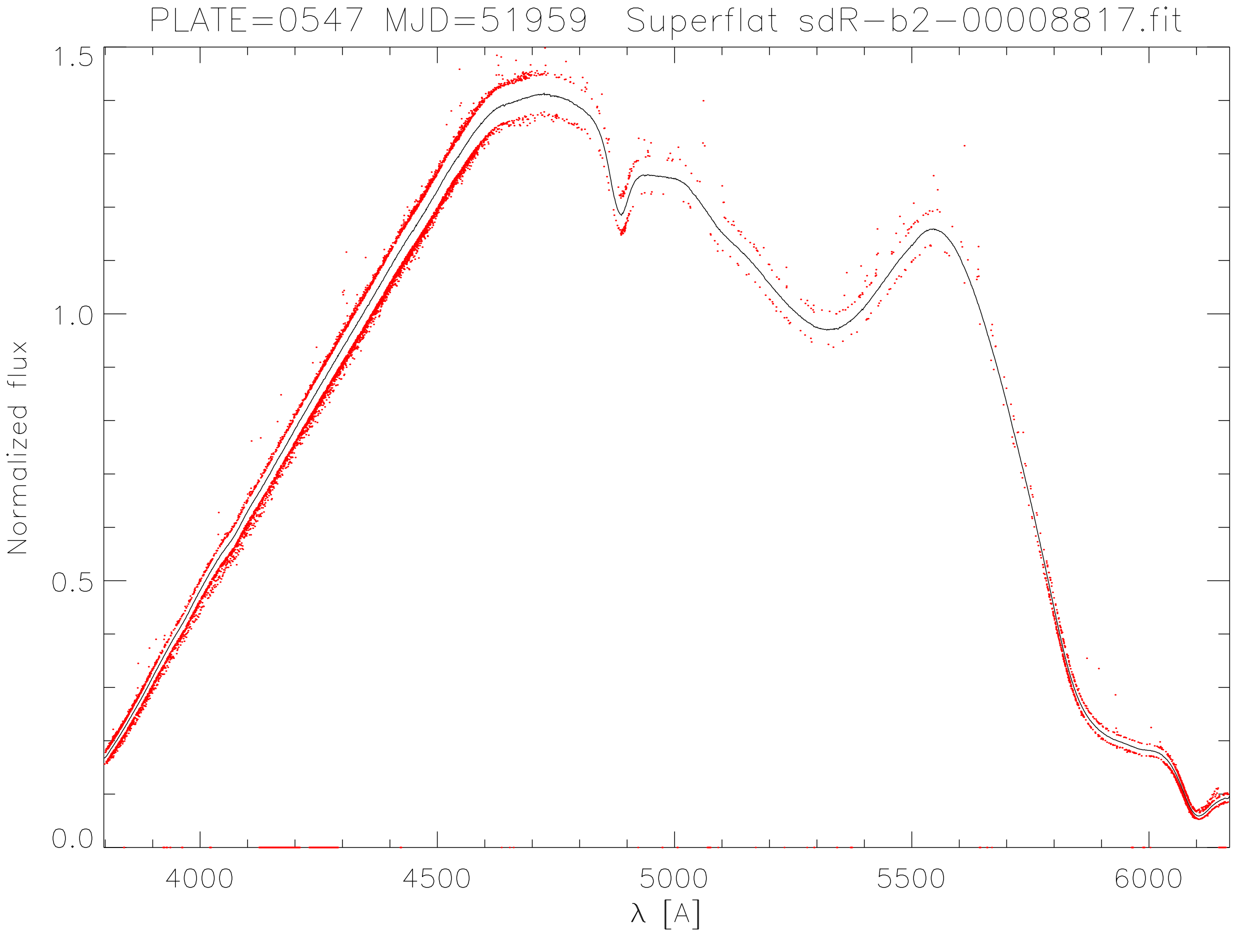

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

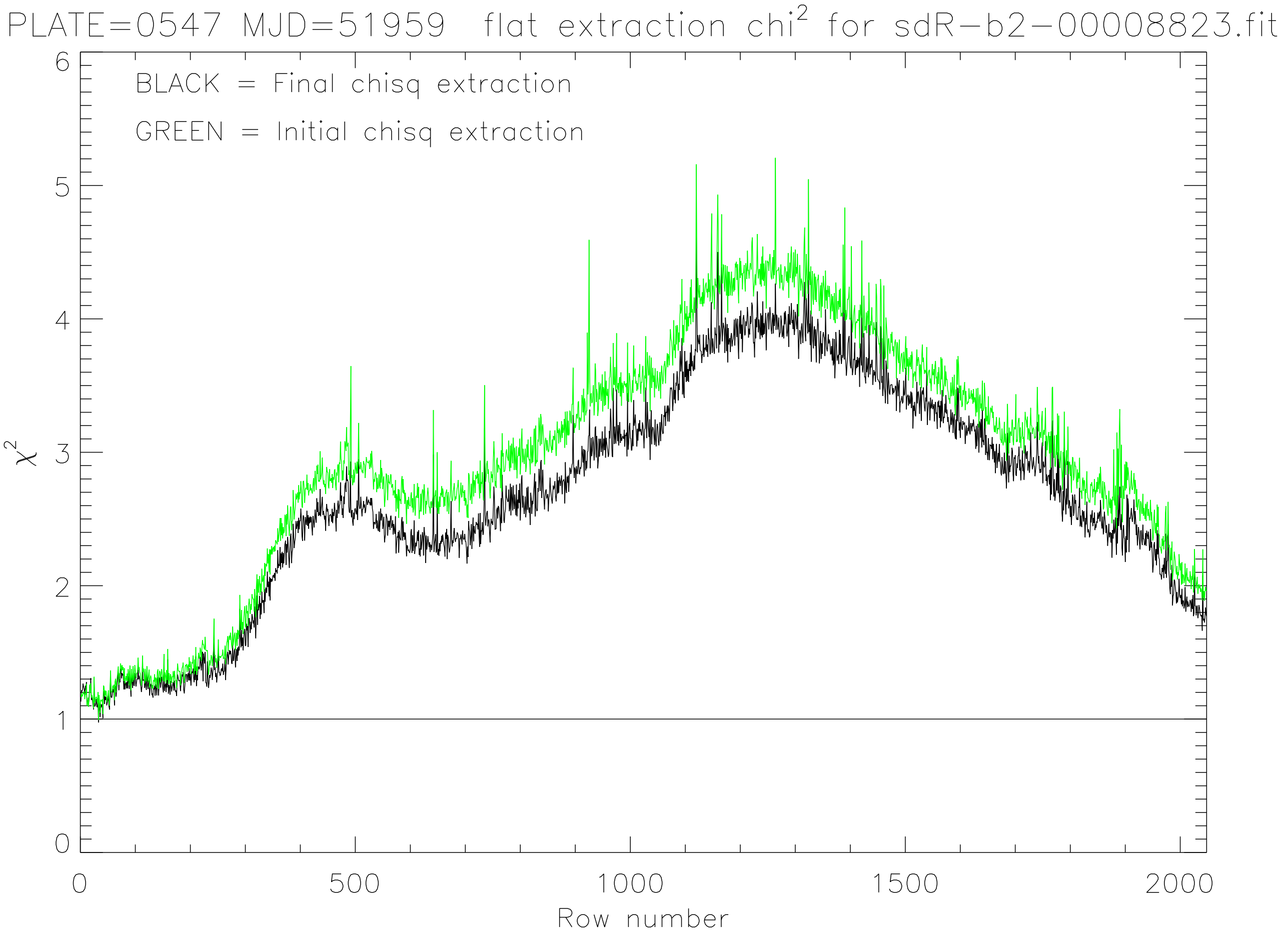

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber


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

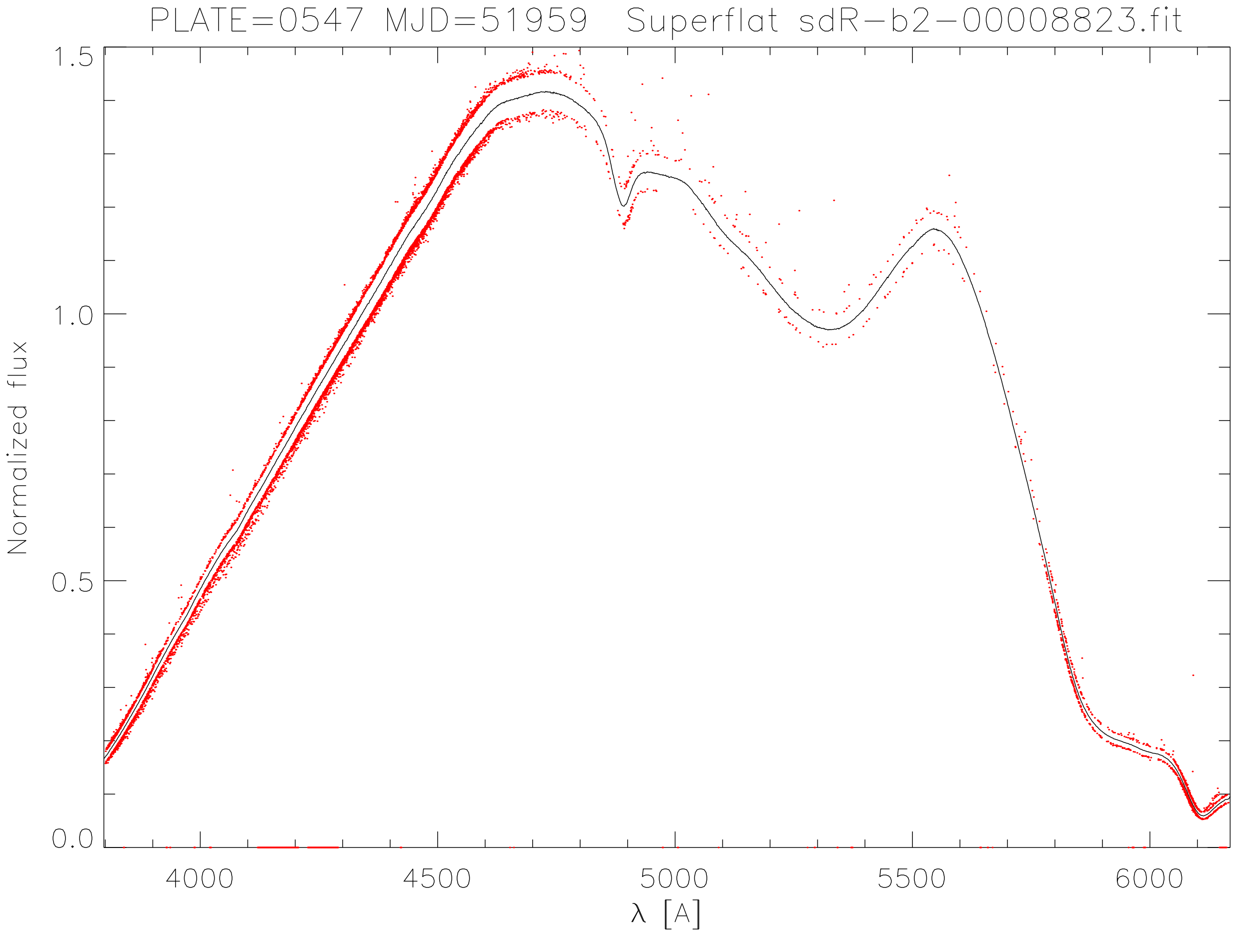

scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
−2×10^{-5}
−4×10^{-5}
0
50
100
150
200
250
300
fiber

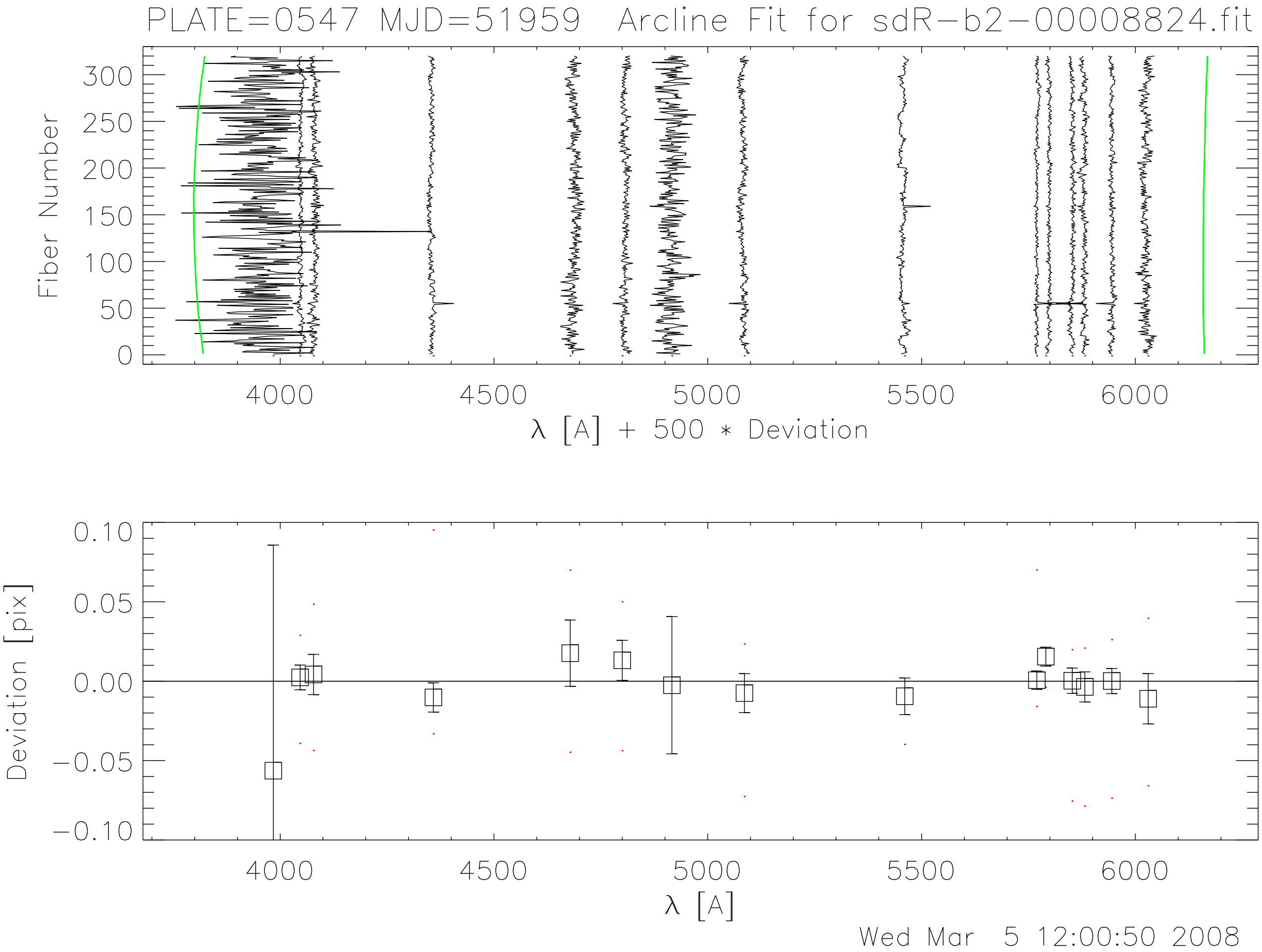

PLATE=0547 MJD=51959 flat extraction chi^2 for sdR-b2-00008817.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

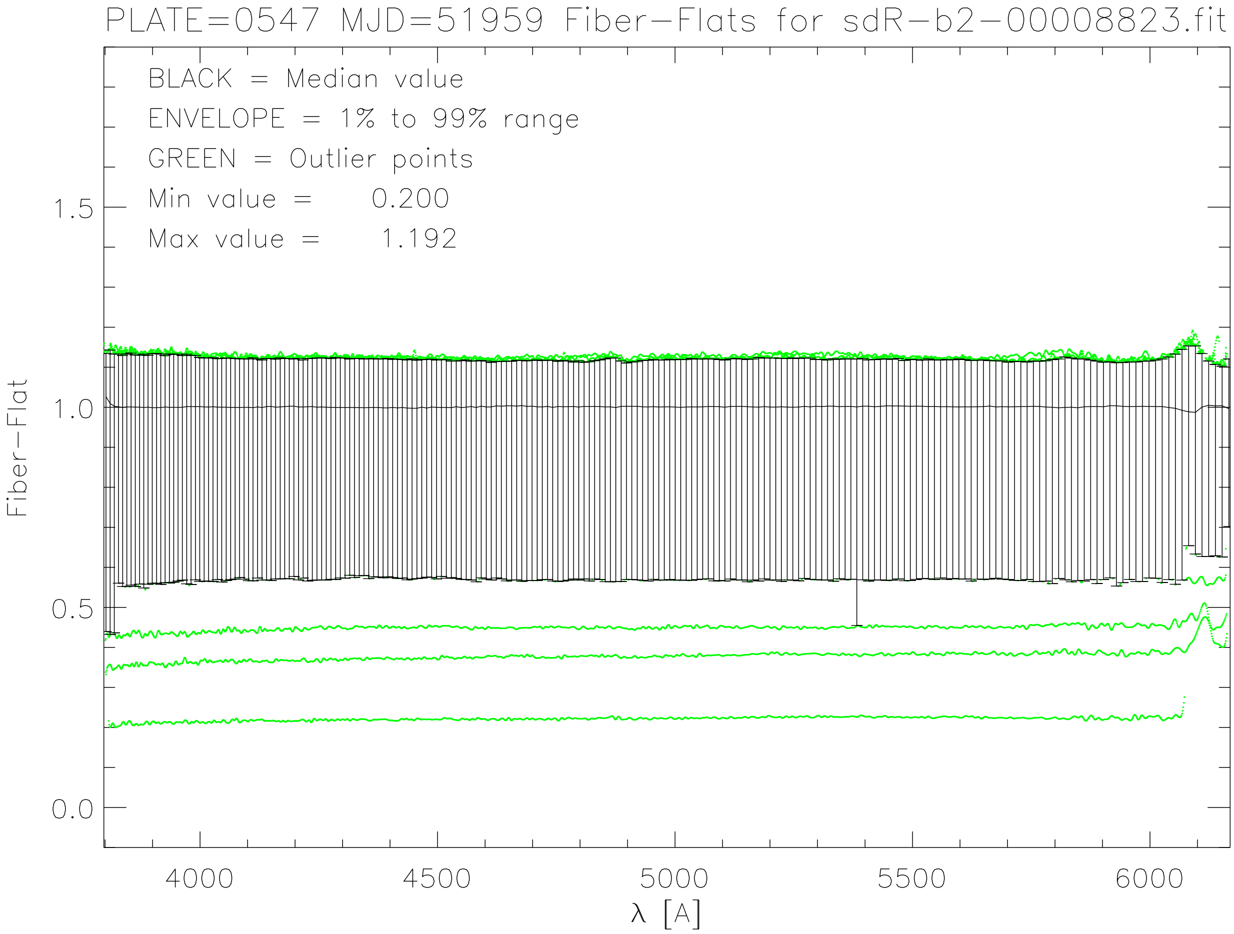

PLATE=0547 MJD=51959 Superflat sdR-b2-00008817.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]



PLATE=0547 MJD=51959 flat extraction χ^2 for sdR-b2-00008823.fit

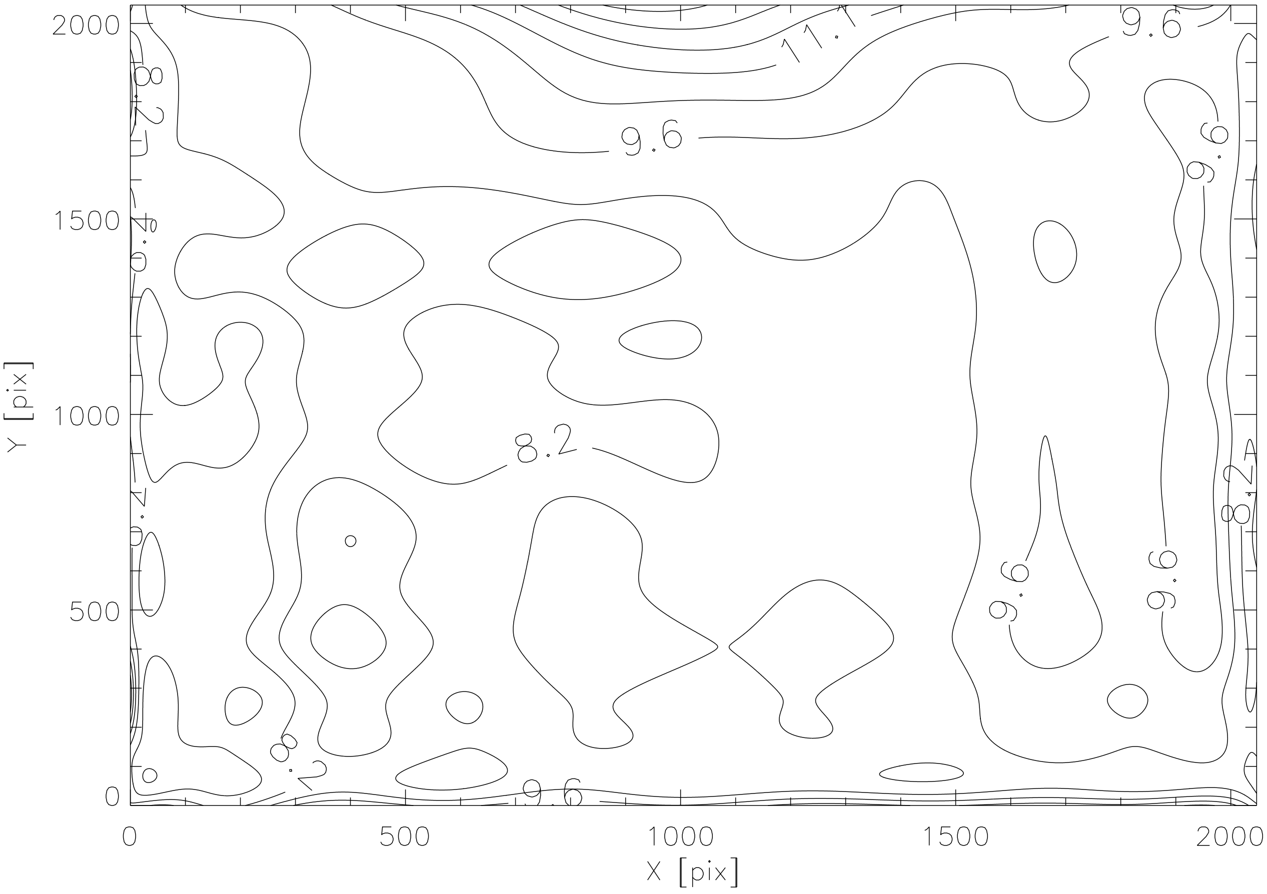

PLATE=0547 MJD=51959 Superflat sdR-b2-00008823.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
4000
4500
5000
5500
6000

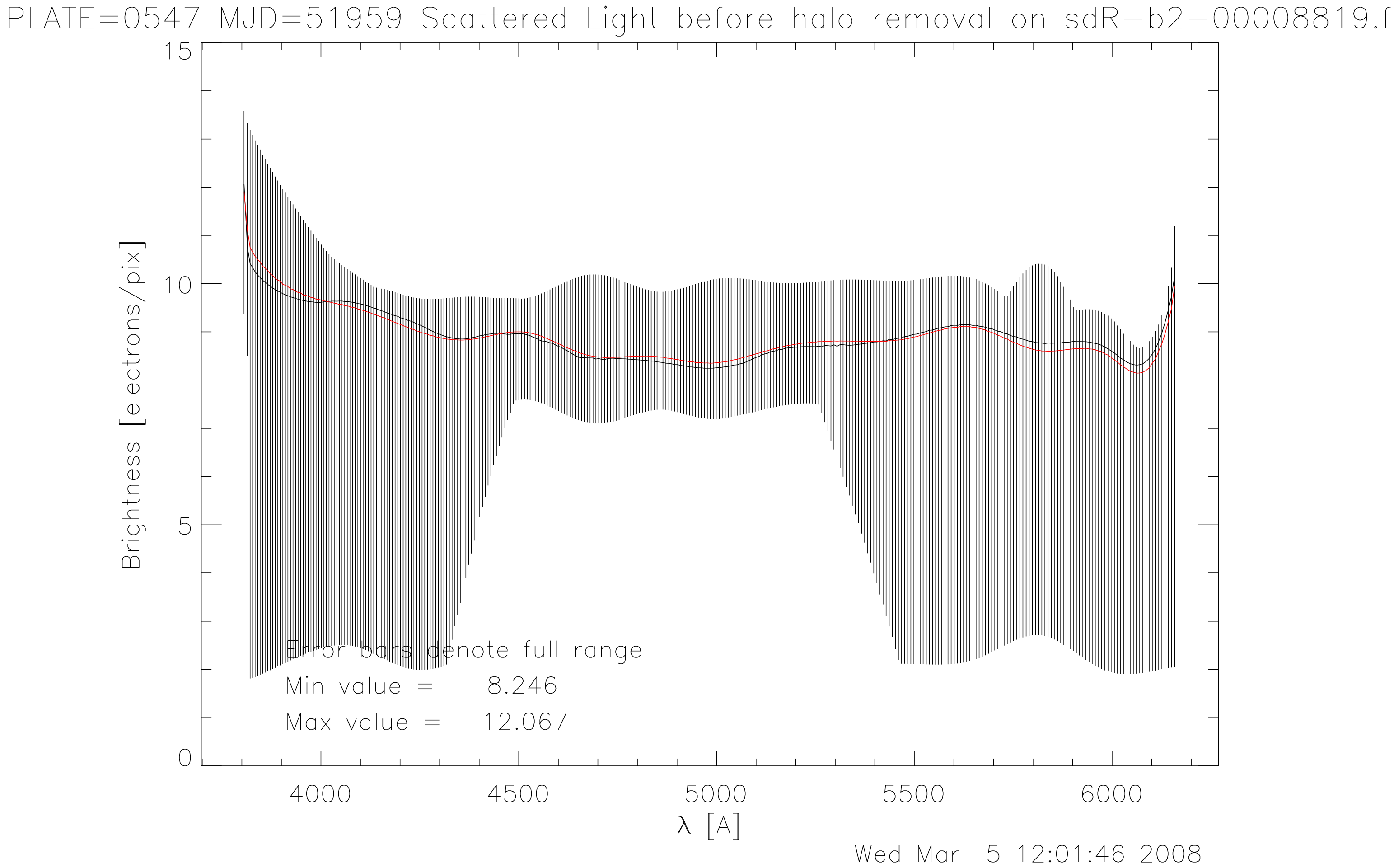

PLATE=0547 MJD=51959 Arcline Fit for sdR-b2-00008824.fit
Fiber Number
0
50
100
150
200
250
300
4000
4500
5000
5500
6000
λ [A] + 500 * Deviation
Deviation [pix]
−0.10
−0.05
0.00
0.05
0.10
4000
4500
5000
5500
6000
λ [A]
Wed Mar 5 12:00:50 2008

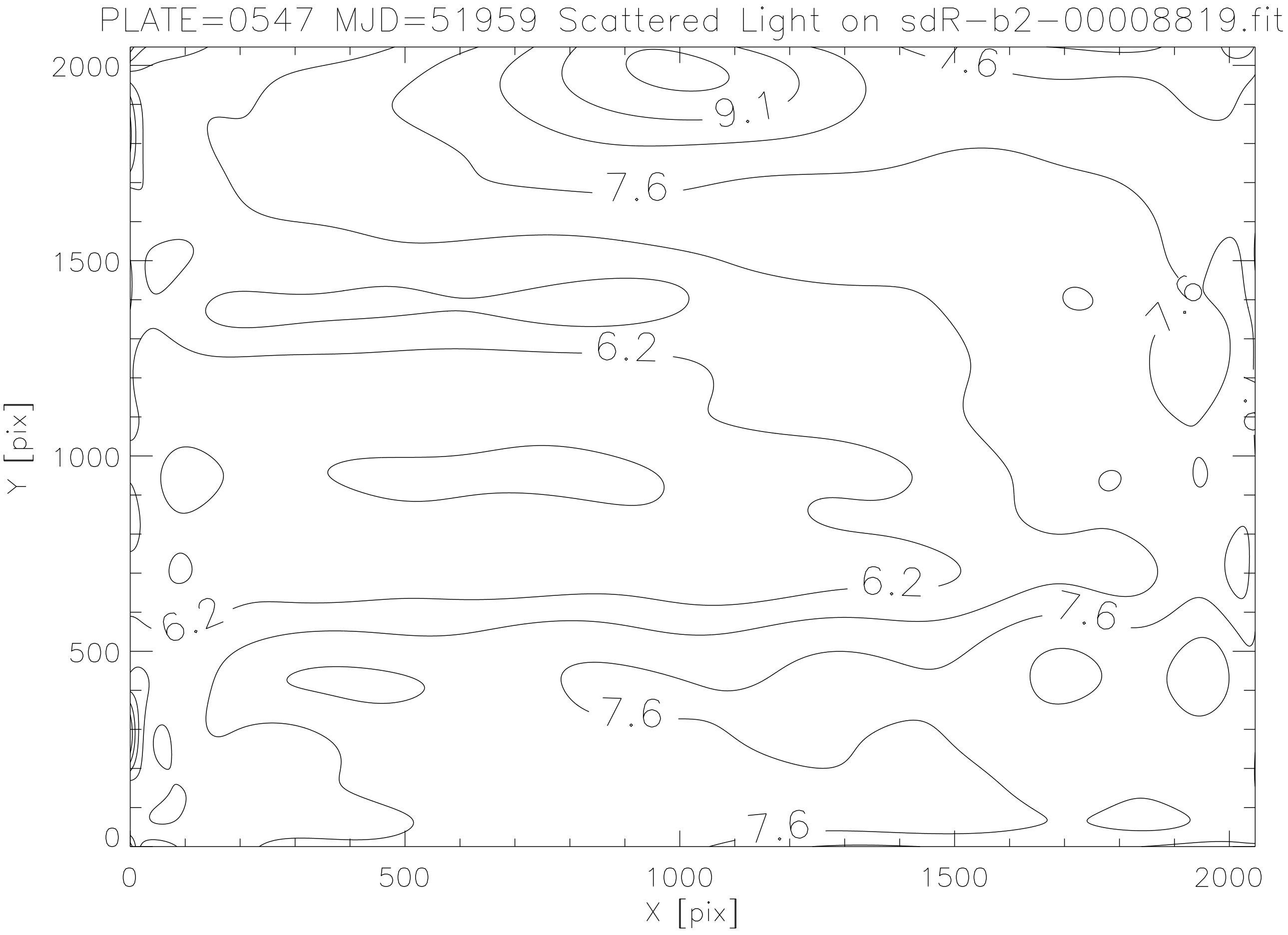


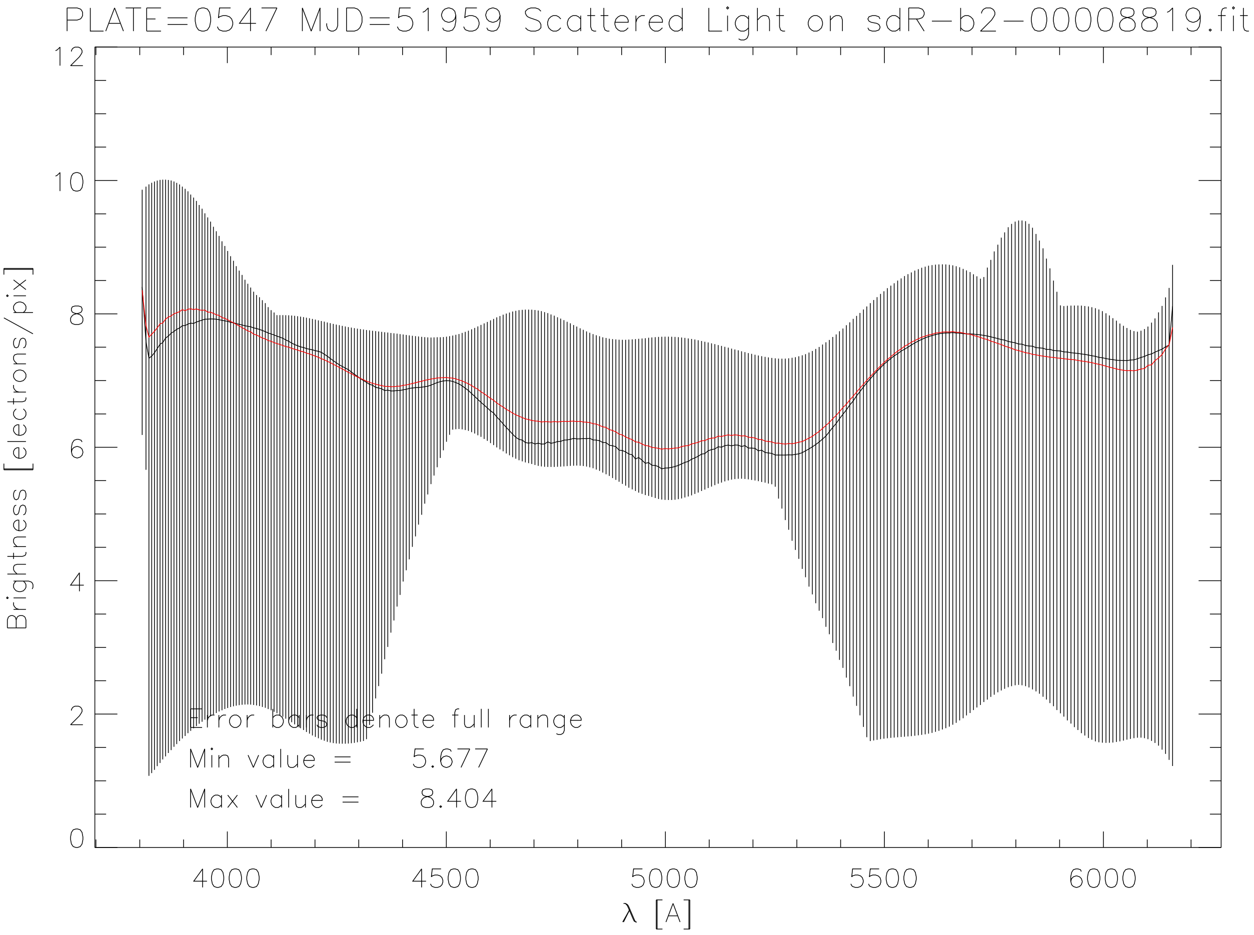
Wed Mar 5 12:00:57 2008

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008819.f

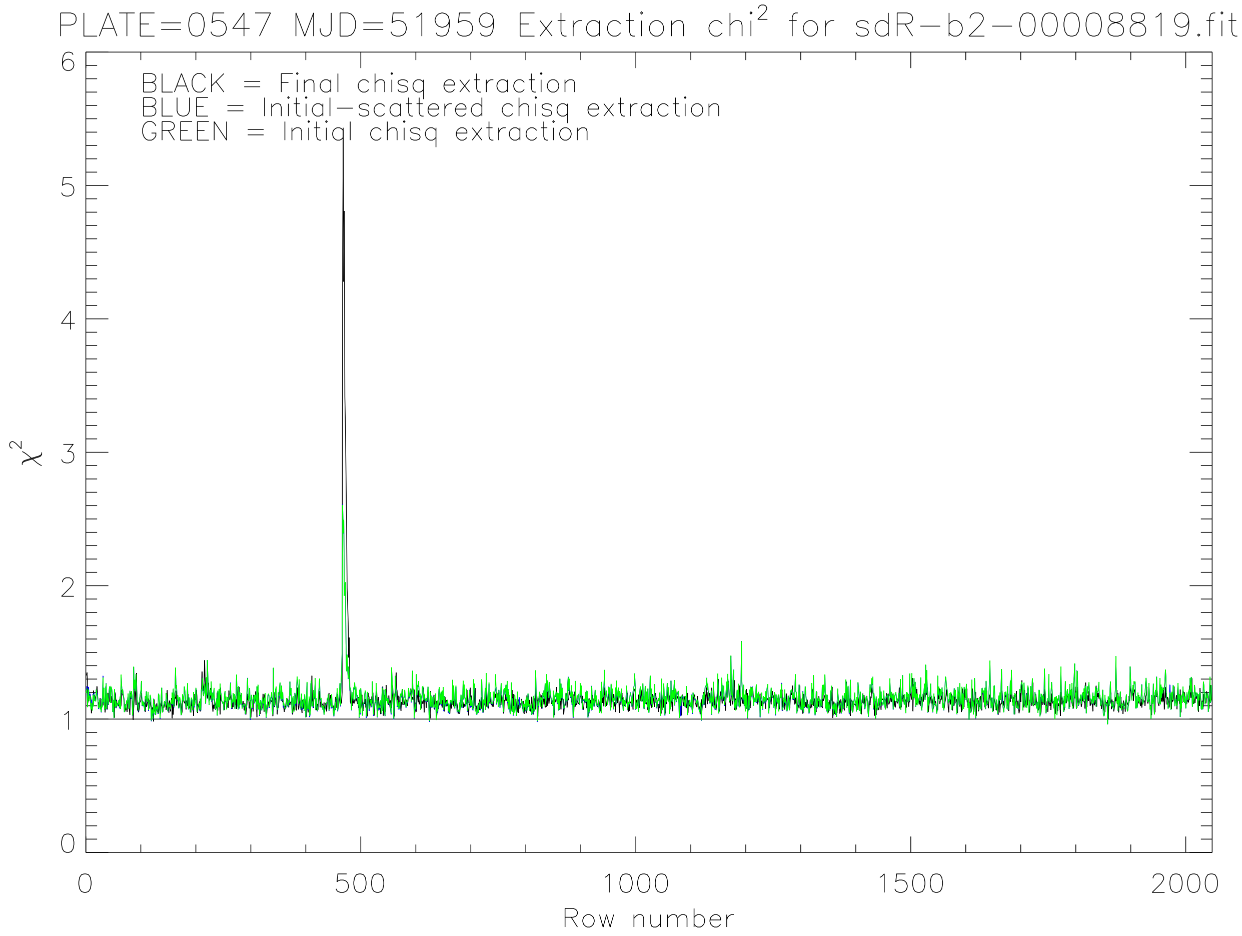


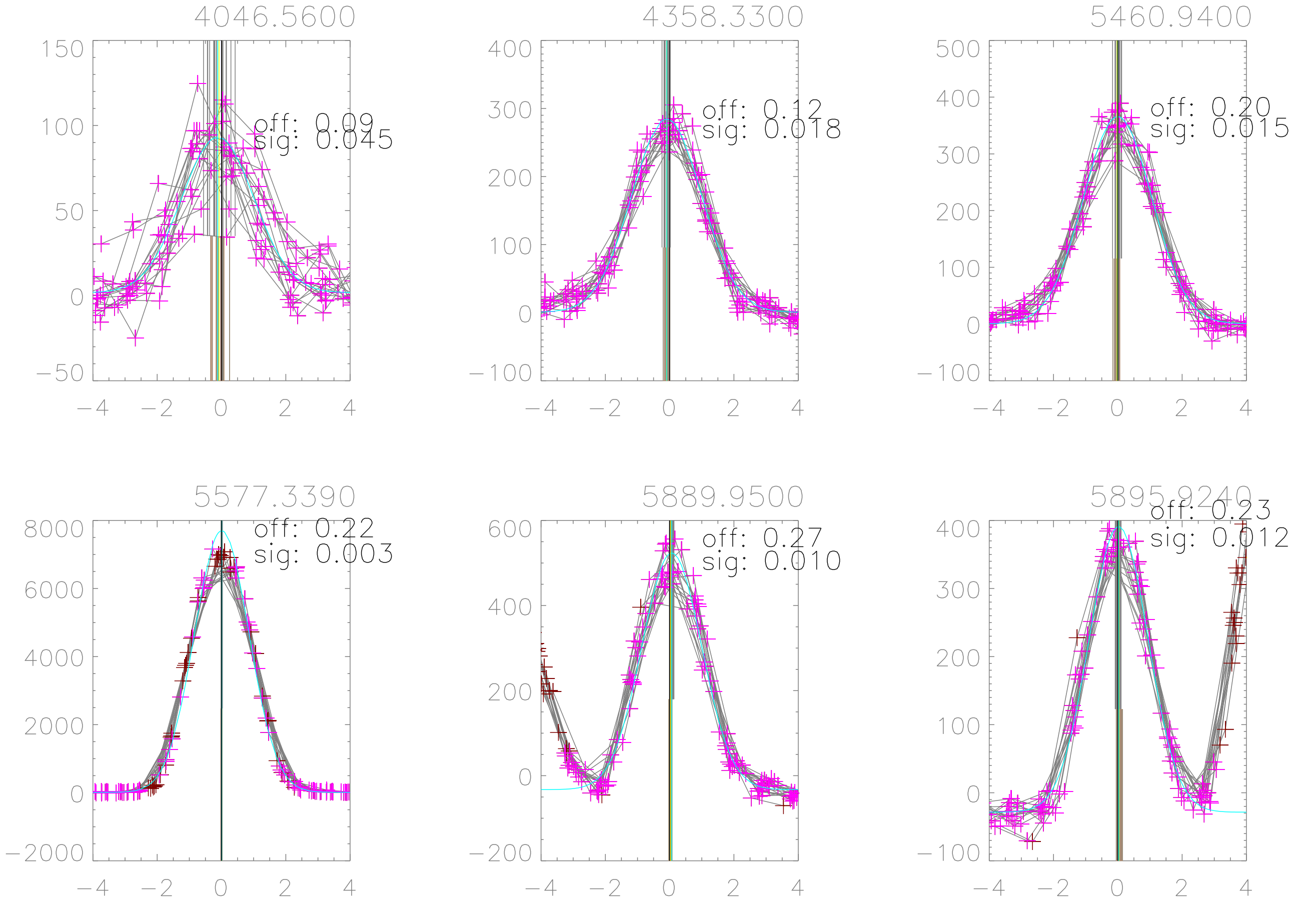

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008819.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.246
Max value = 12.067
Wed Mar 5 12:01:46 2008

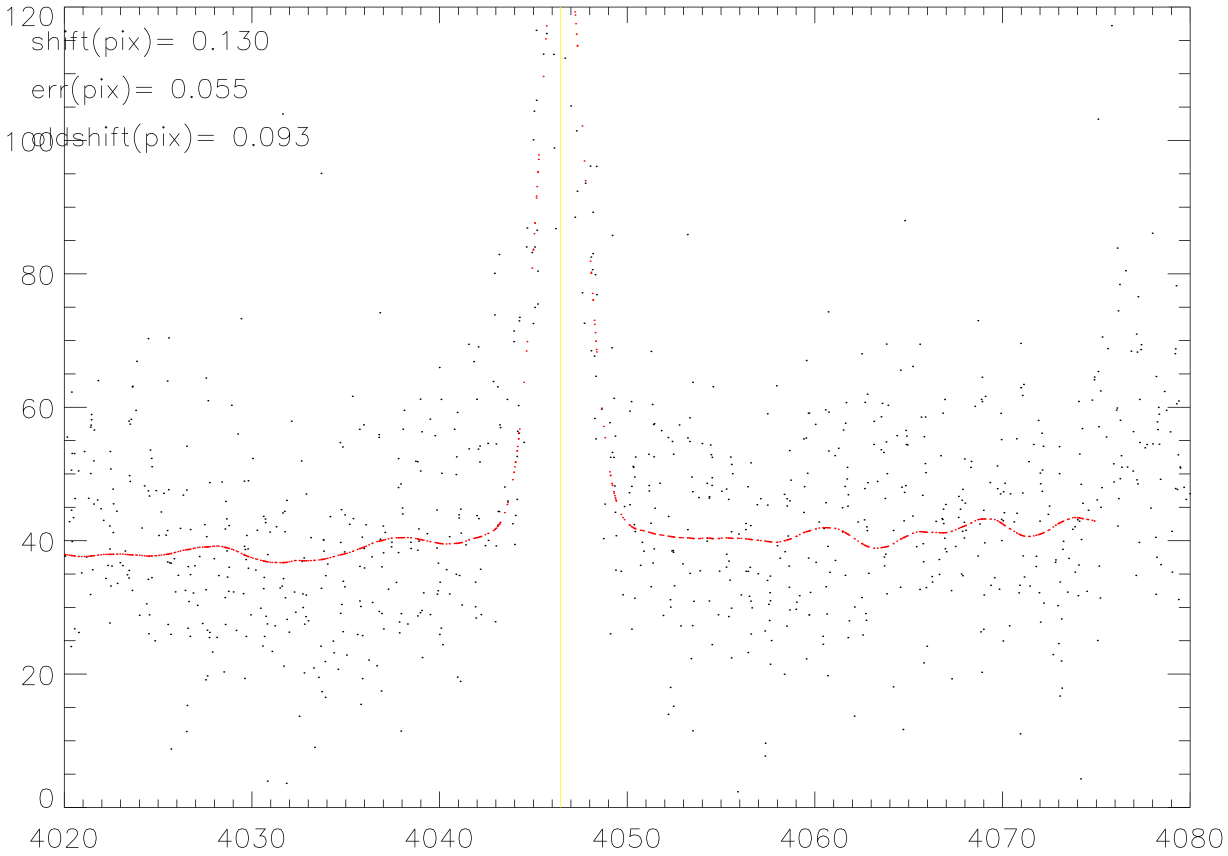

PLATE=0547 MJD=51959 Scattered Light on sdR-b2-00008819.fit
9.1
7.6
7.6
6.2
6.2
6.2
7.6
7.6
7.6
7.6
0
500
1000
1500
2000
X [pix]
Y [pix]

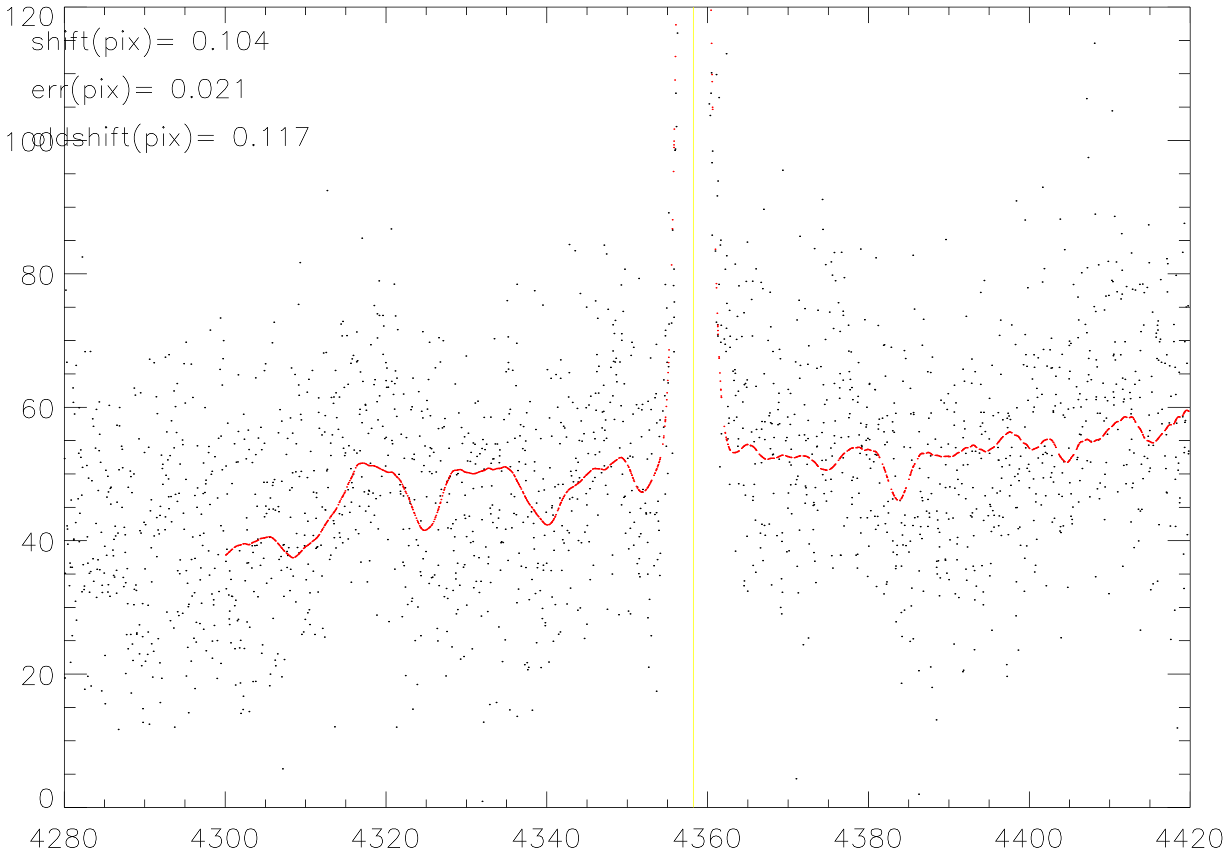


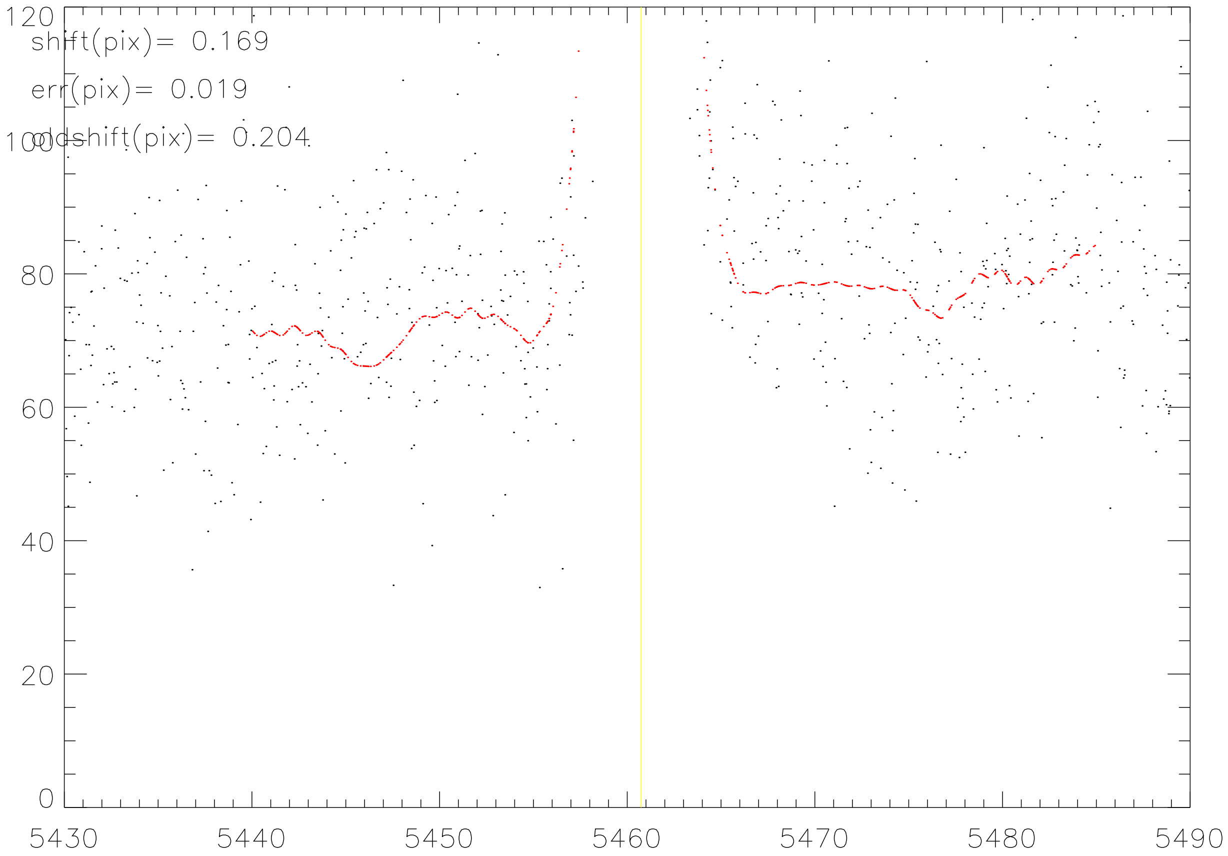
Wed Mar 5 12:04:14 2008

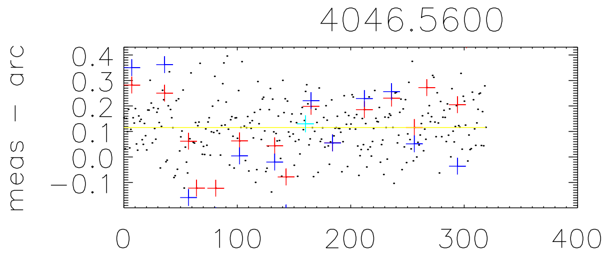

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-b2-00008819.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number

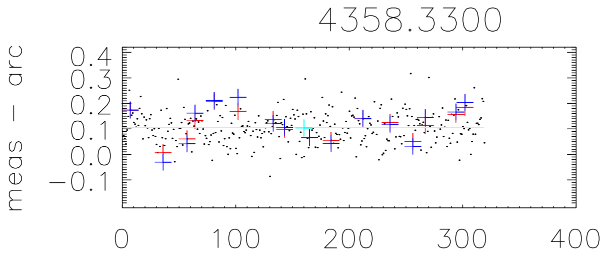

4046.5600
off: 0.09
sig: 0.045
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: 0.12
sig: 0.018
400
300
200
100
0
−100
5460.9400
off: 0.20
sig: 0.015
500
400
300
200
100
0
−100
5577.3390
off: 0.22
sig: 0.003
8000
6000
4000
2000
0
−2000
5889.9500
off: 0.27
sig: 0.010
600
400
200
0
−200
5895.9240
off: 0.23
sig: 0.012
400
300
200
100
0
−100

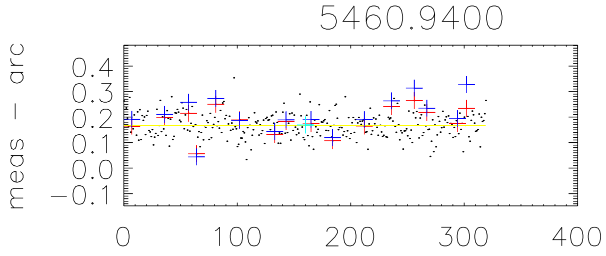

shift(pix)= 0.130
err(pix)= 0.055
oldshift(pix)= 0.093
0
20
40
60
80
100
120
4020
4030
4040
4050
4060
4070
4080

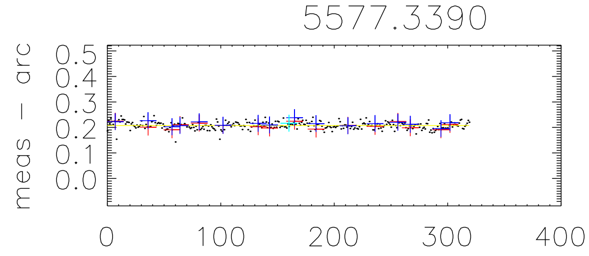

shift(pix)= 0.104
err(pix)= 0.021
oldshift(pix)= 0.117
0
20
40
60
80
100
120
4280
4300
4320
4340
4360
4380
4400
4420

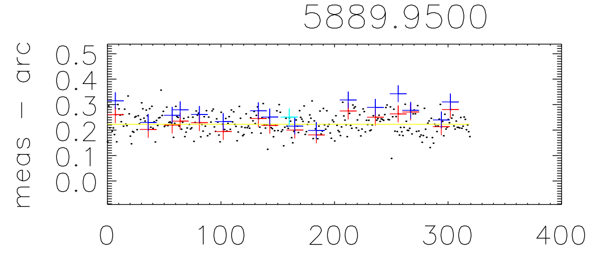

shift(pix)= 0.169
err(pix)= 0.019
oldshift(pix)= 0.204
0
20
40
60
80
100
120
5430
5440
5450
5460
5470
5480
5490

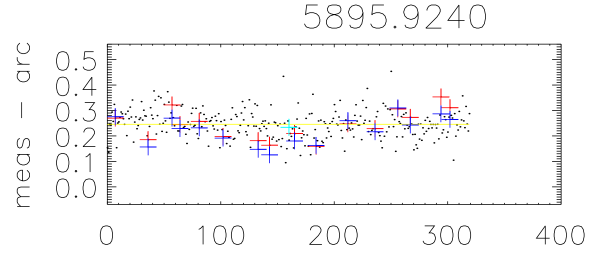

4046.5600
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

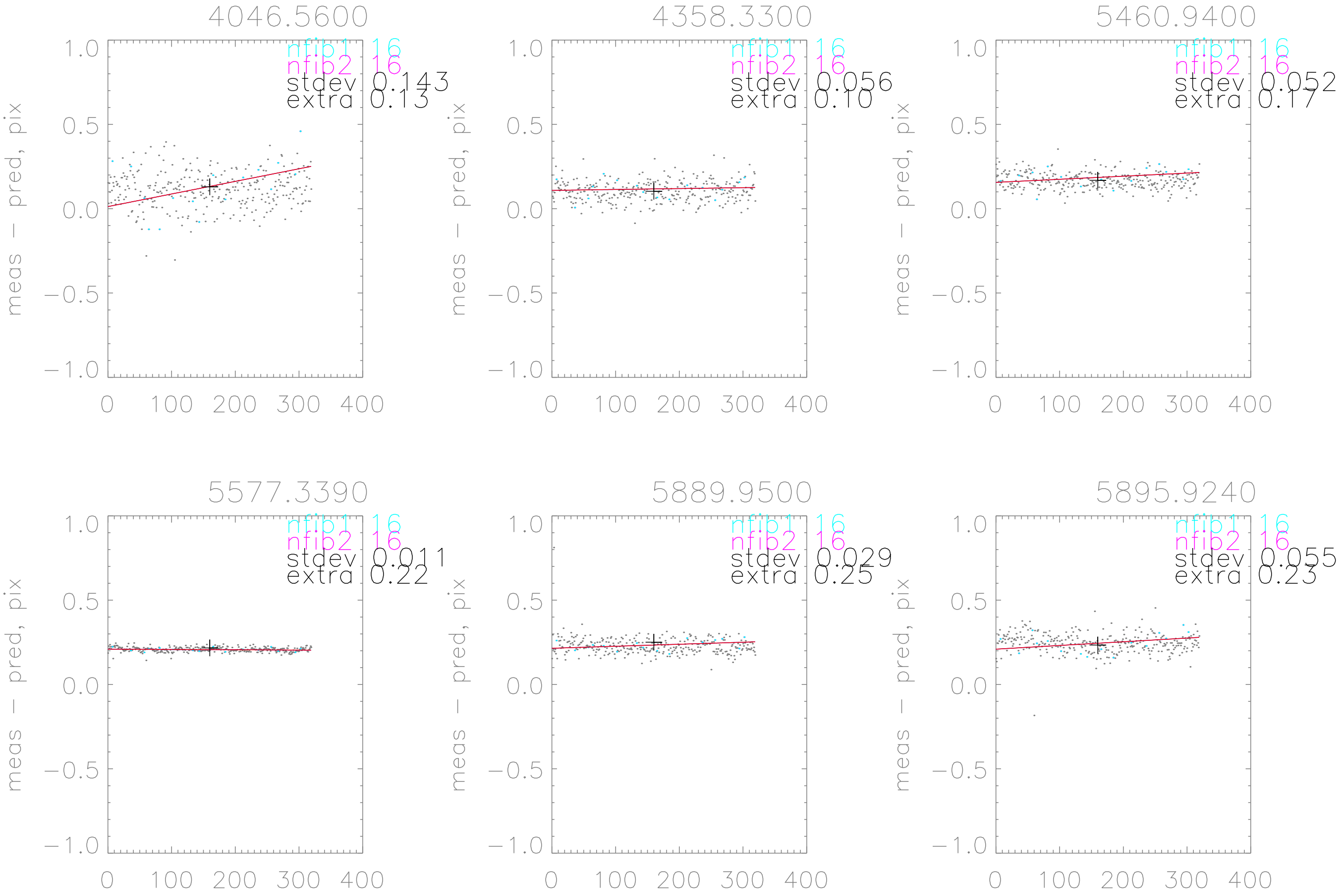

4358.3300
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400


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

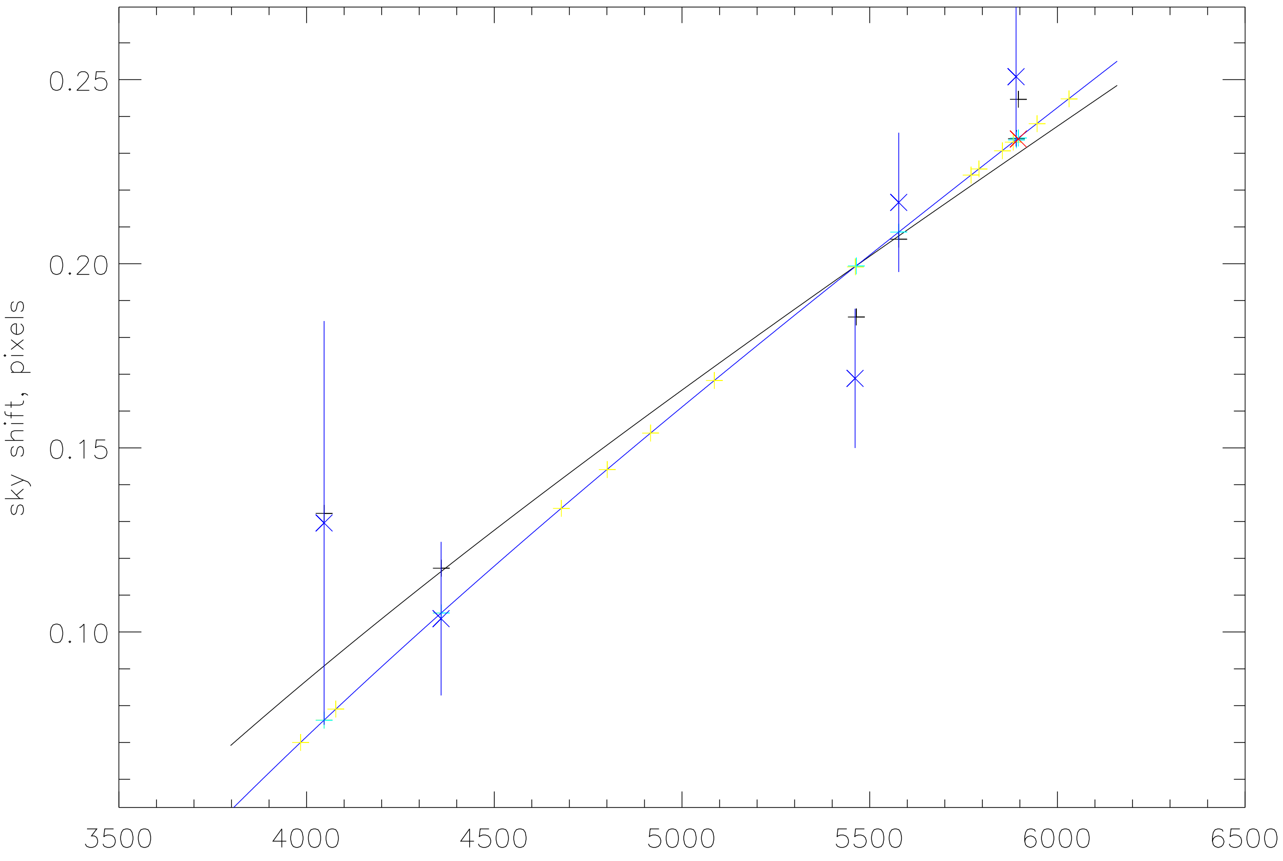

5577.3390
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

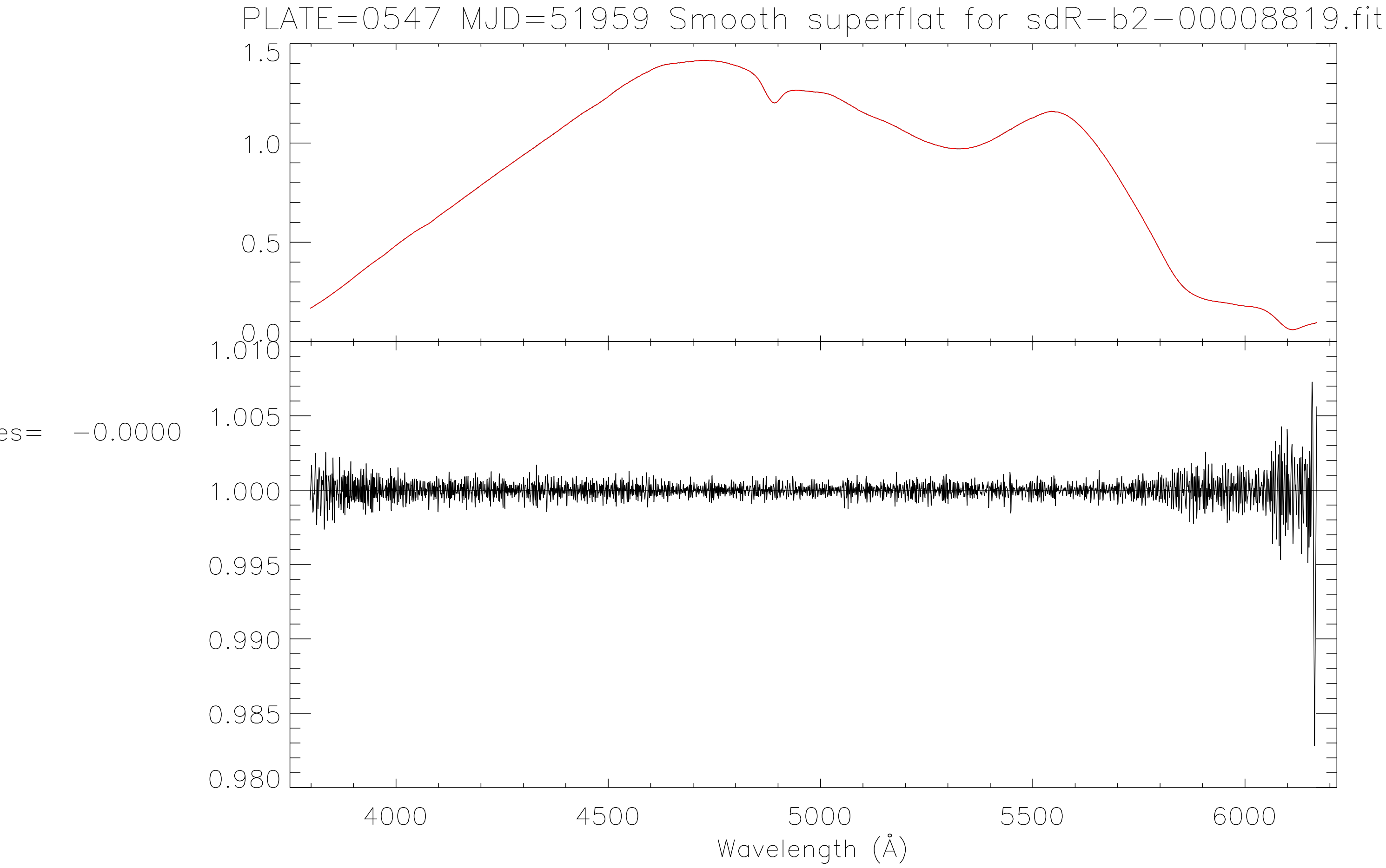

5889.9500
meas − arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400


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

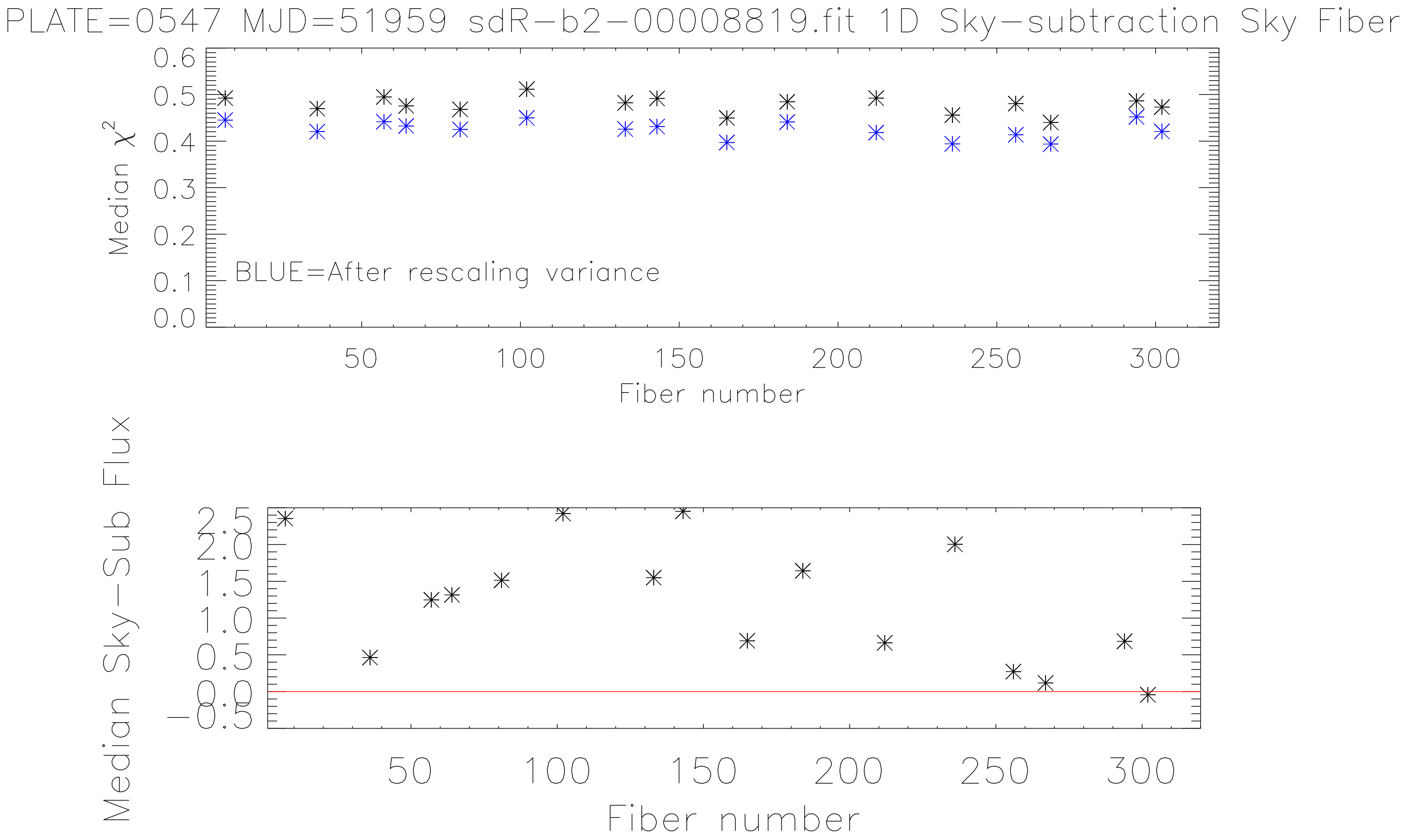


4046.5600
nfib1 16
nfib2 16
stdev 0.143
extra 0.13
4358.3300
nfib1 16
nfib2 16
stdev 0.056
extra 0.10
5460.9400
nfib1 16
nfib2 16
stdev 0.052
extra 0.17
5577.3390
nfib1 16
nfib2 16
stdev 0.011
extra 0.22
5889.9500
nfib1 16
nfib2 16
stdev 0.029
extra 0.25
5895.9240
nfib1 16
nfib2 16
stdev 0.055
extra 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

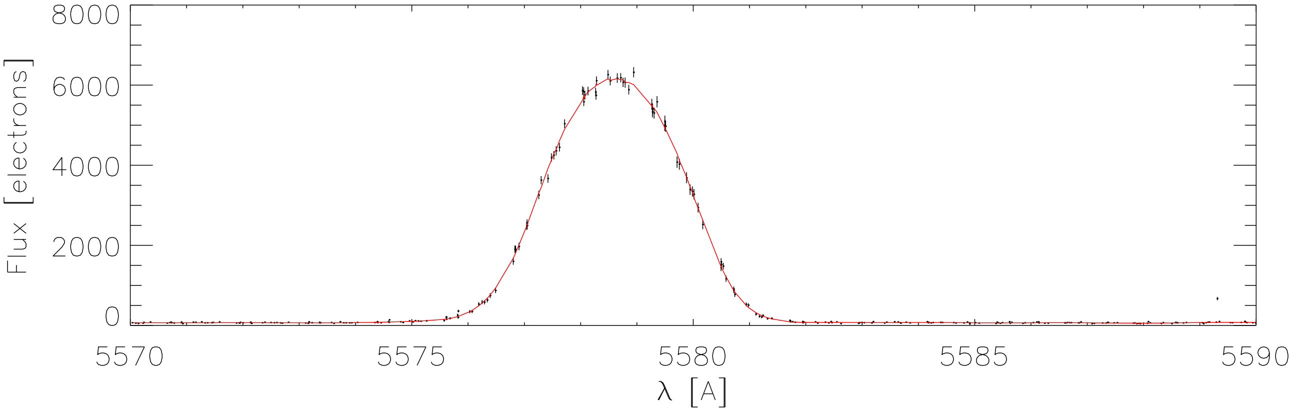

sky shift, pixels
0.25
0.20
0.15
0.10
3500
4000
4500
5000
5500
6000
6500



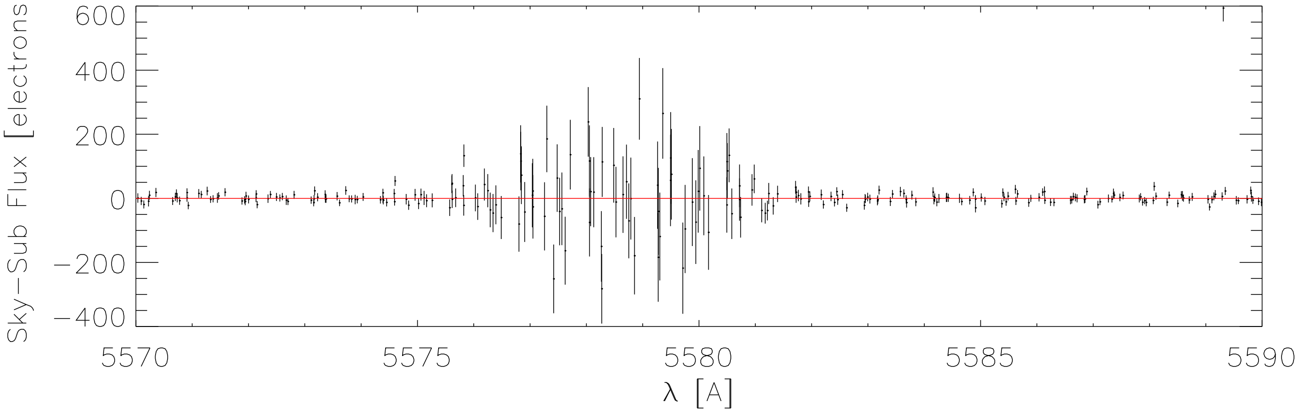
PLATE=0547 MJD=51959 Smooth superflat for sdR-b2-00008819.fit

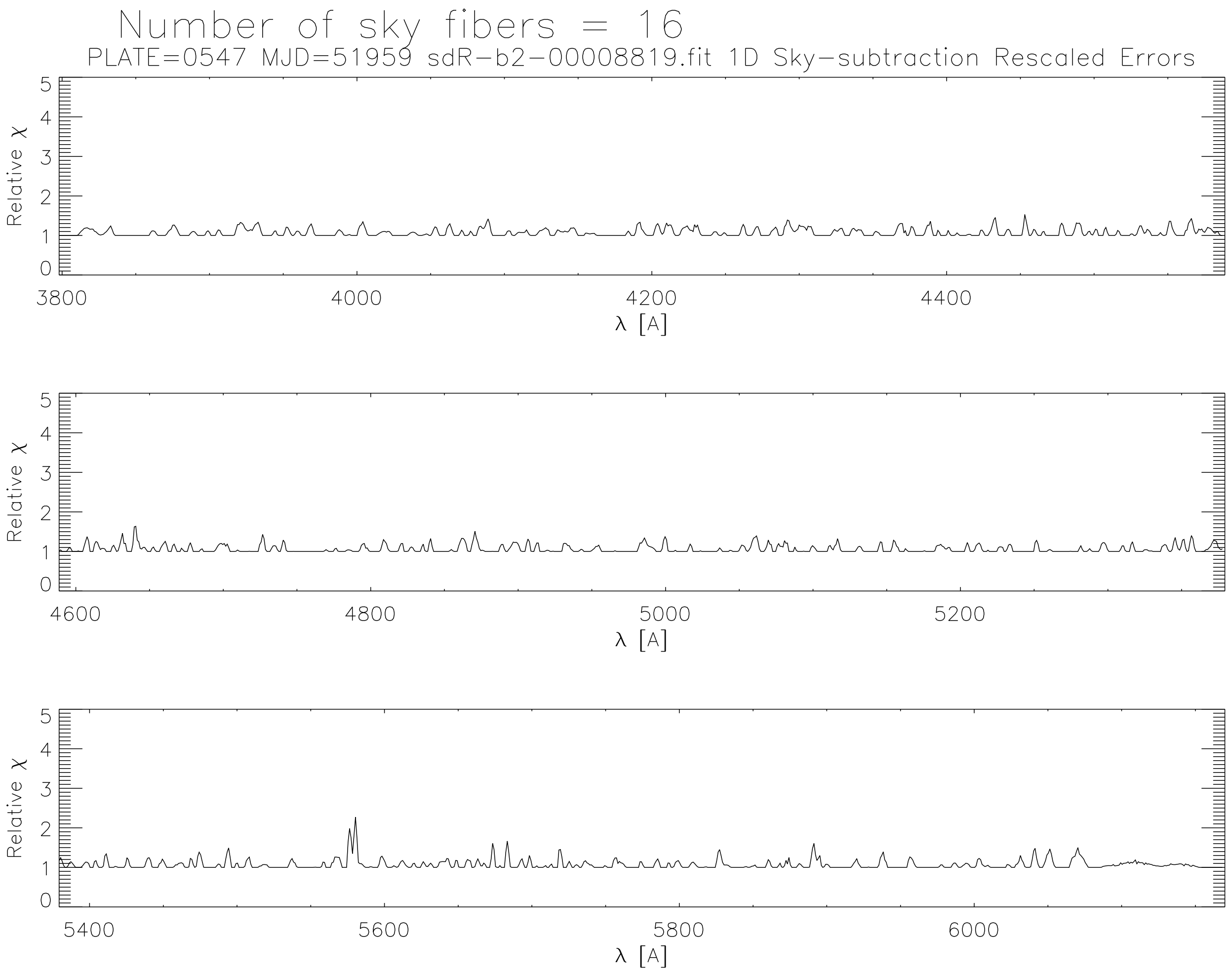

PLATE=0547 MJD=51959 sdR-b2-00008819.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
50
100
150
200
250
300
Fiber number

PLATE=0547 MJD=51959 sdR-b2-00008819.fit 1D Sky-subtraction Sky Fibers

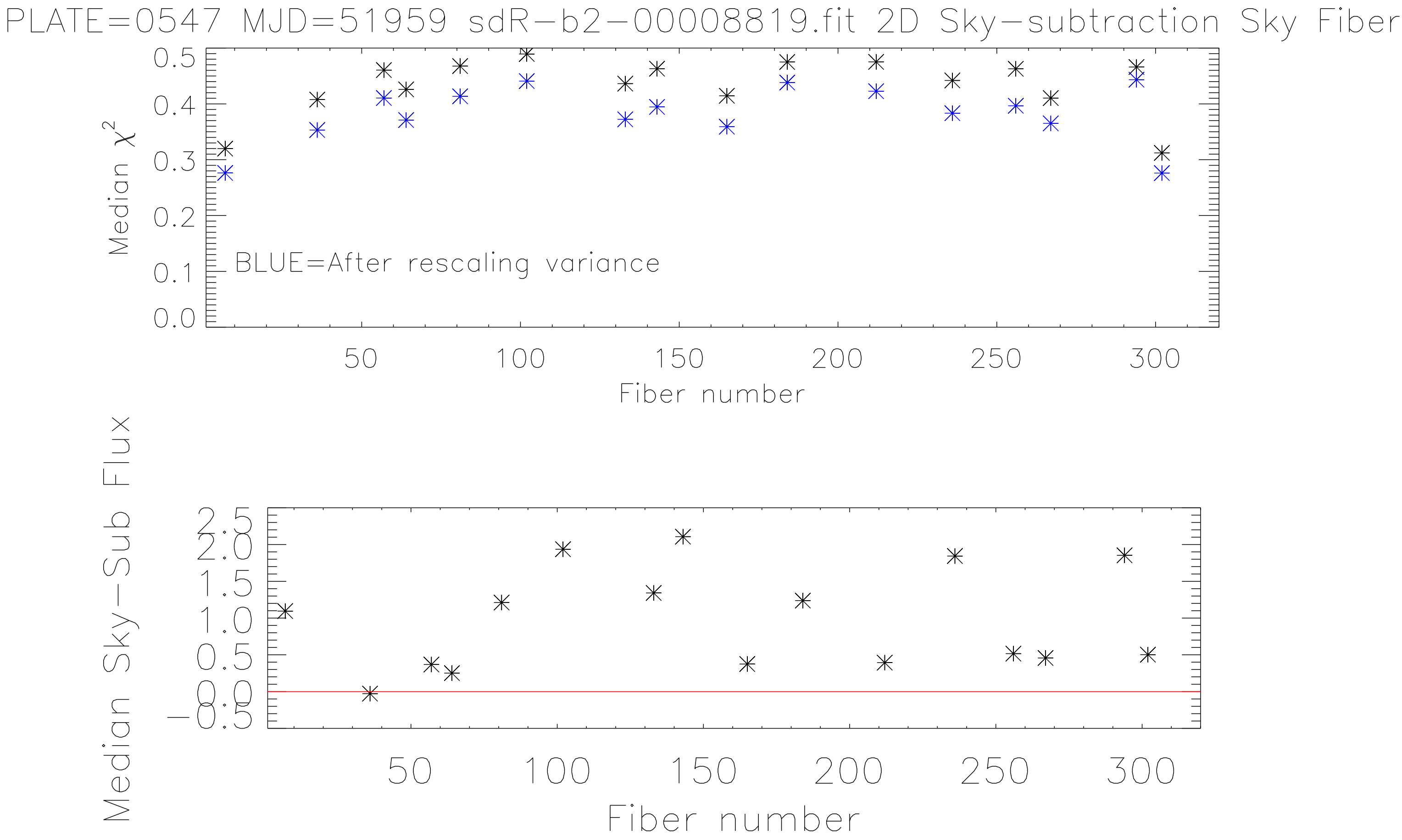


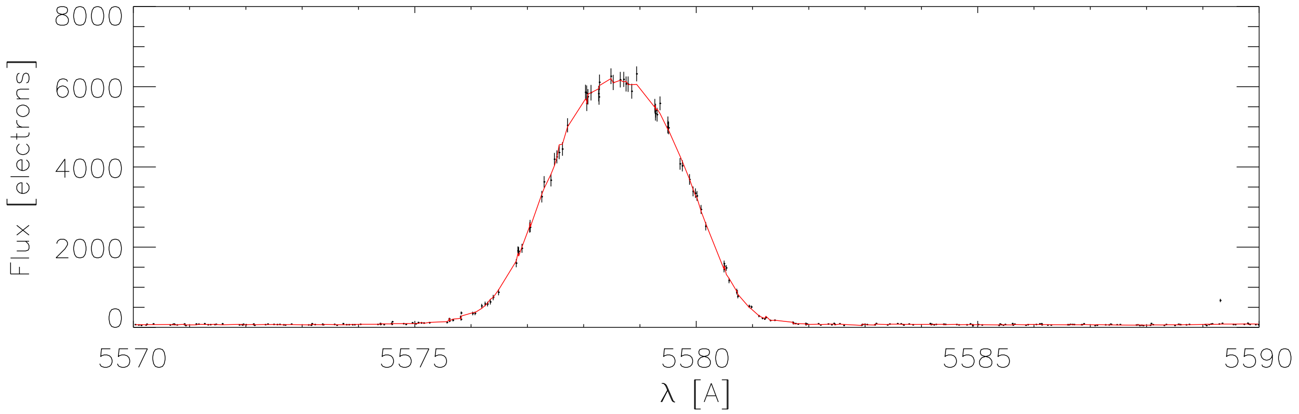
PLATE=0547 MJD=51959 sdR-b2-00008819.fit 1D Sky-subtraction Sky-subtracted Sky F



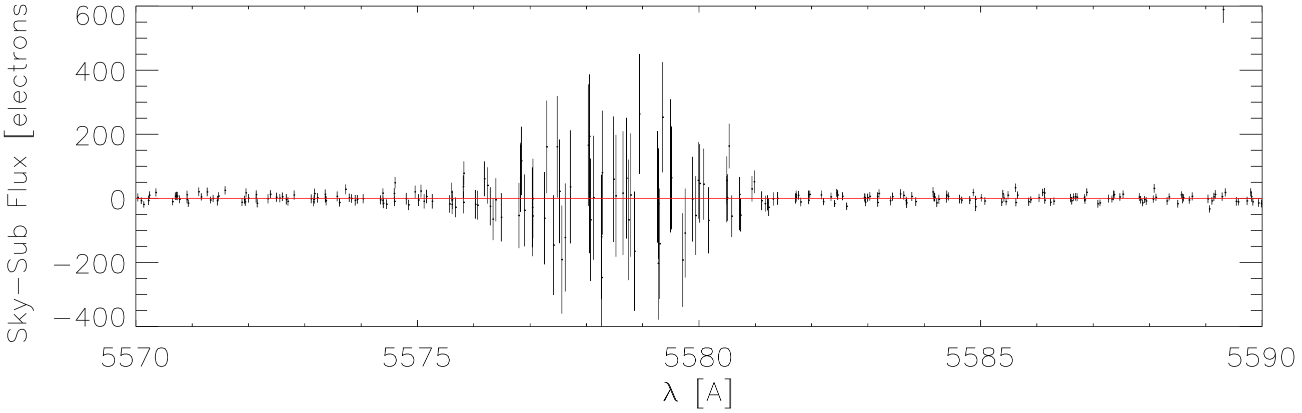

Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b2-00008819.fit 1D Sky-subtraction Rescaled Errors


PLATE=0547 MJD=51959 sdR-b2-00008819.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−0.5
0.0
0.5
1.0
1.5
2.0
2.5
50
100
150
200
250
300
Fiber number



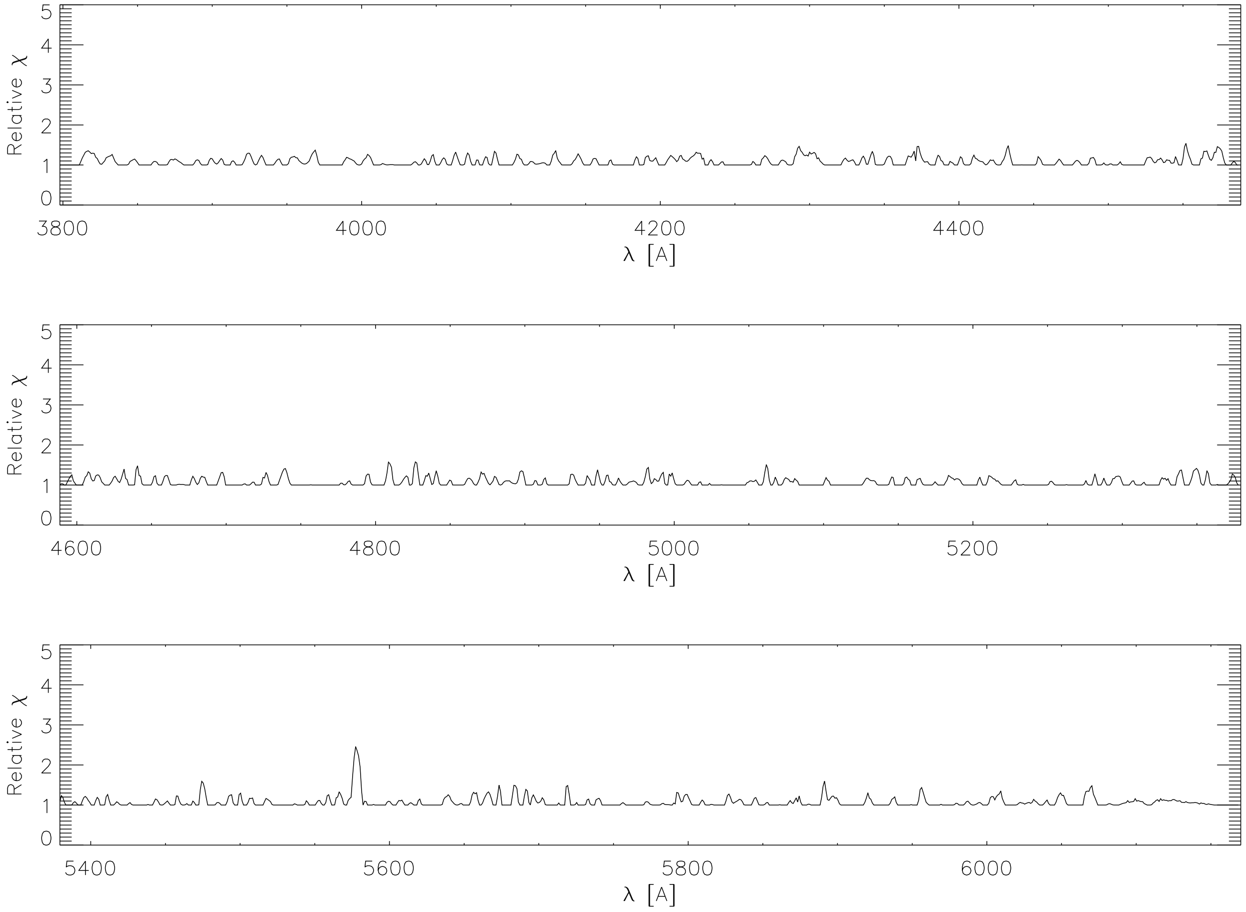
PLATE=0547 MJD=51959 sdR-b2-00008819.fit 2D Sky-subtraction Sky Fibers

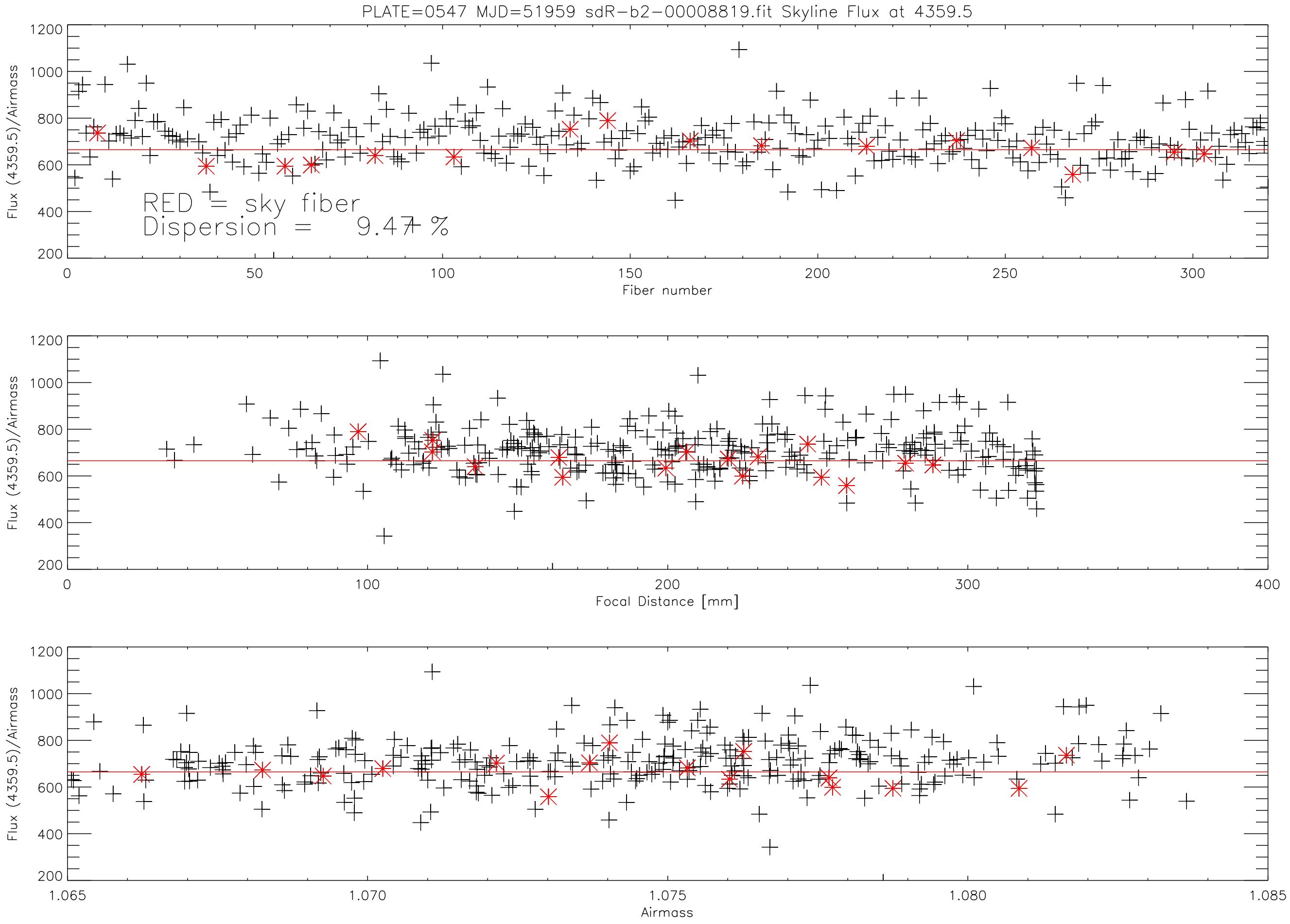


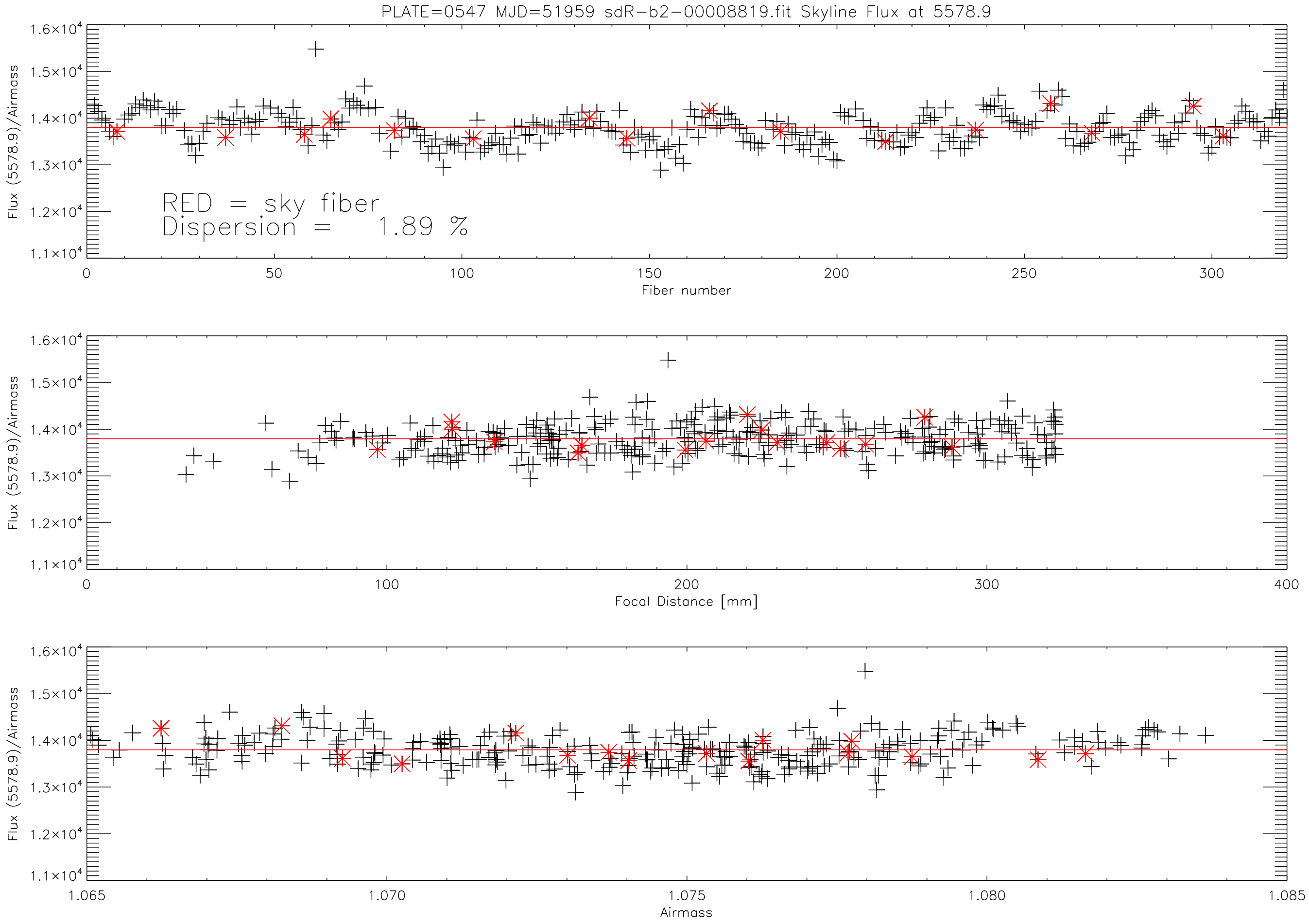
PLATE=0547 MJD=51959 sdR-b2-00008819.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 16

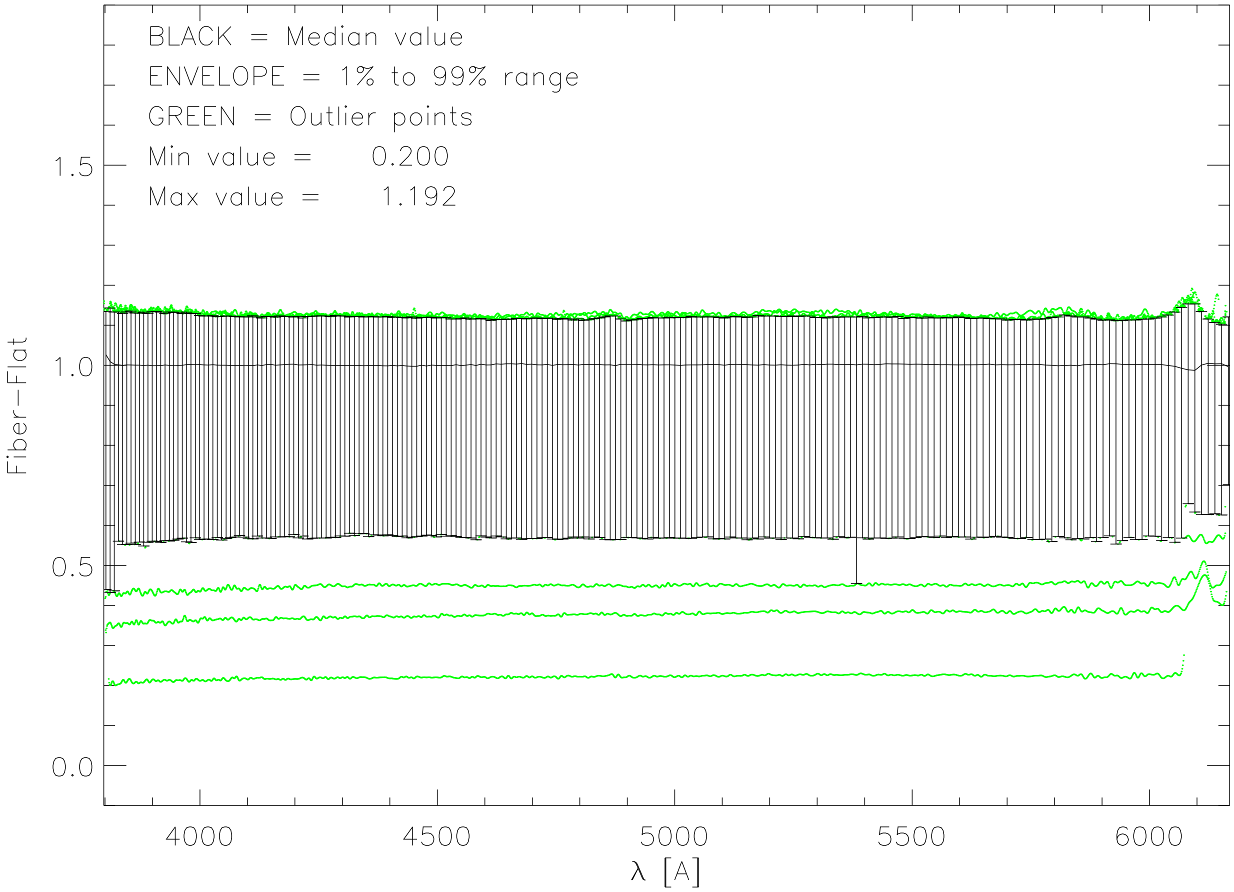
PLATE=0547 MJD=51959 sdR-b2-00008819.fit 2D Sky-subtraction Rescaled Errors




PLATE=0547 MJD=51959 sdR-b2-00008819.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.47 %
Fiber number
0
50
100
150
200
250
300
200
400
600
800
1000
1200
Focal Distance [mm]
0
100
200
300
400
Airmass
1.065
1.070
1.075
1.080
1.085


PLATE=0547 MJD=51959 sdR-b2-00008819.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
RED = sky fiber
Dispersion = 1.89 %
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
1.065
1.070
1.075
1.080
1.085
Airmass

PLATE=0547 MJD=51959 Fiber-Flats for sdR-b2-00008823.fit



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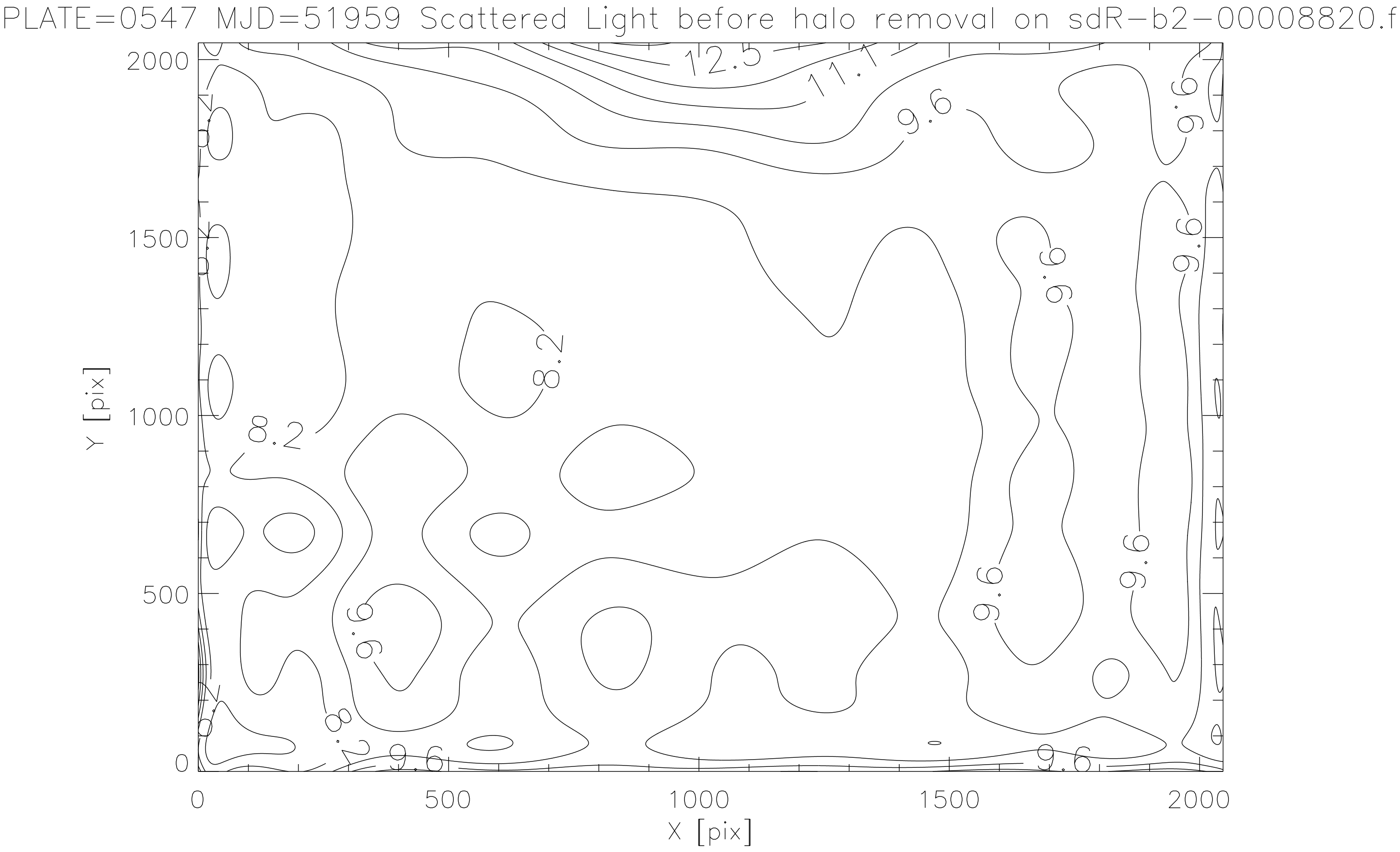
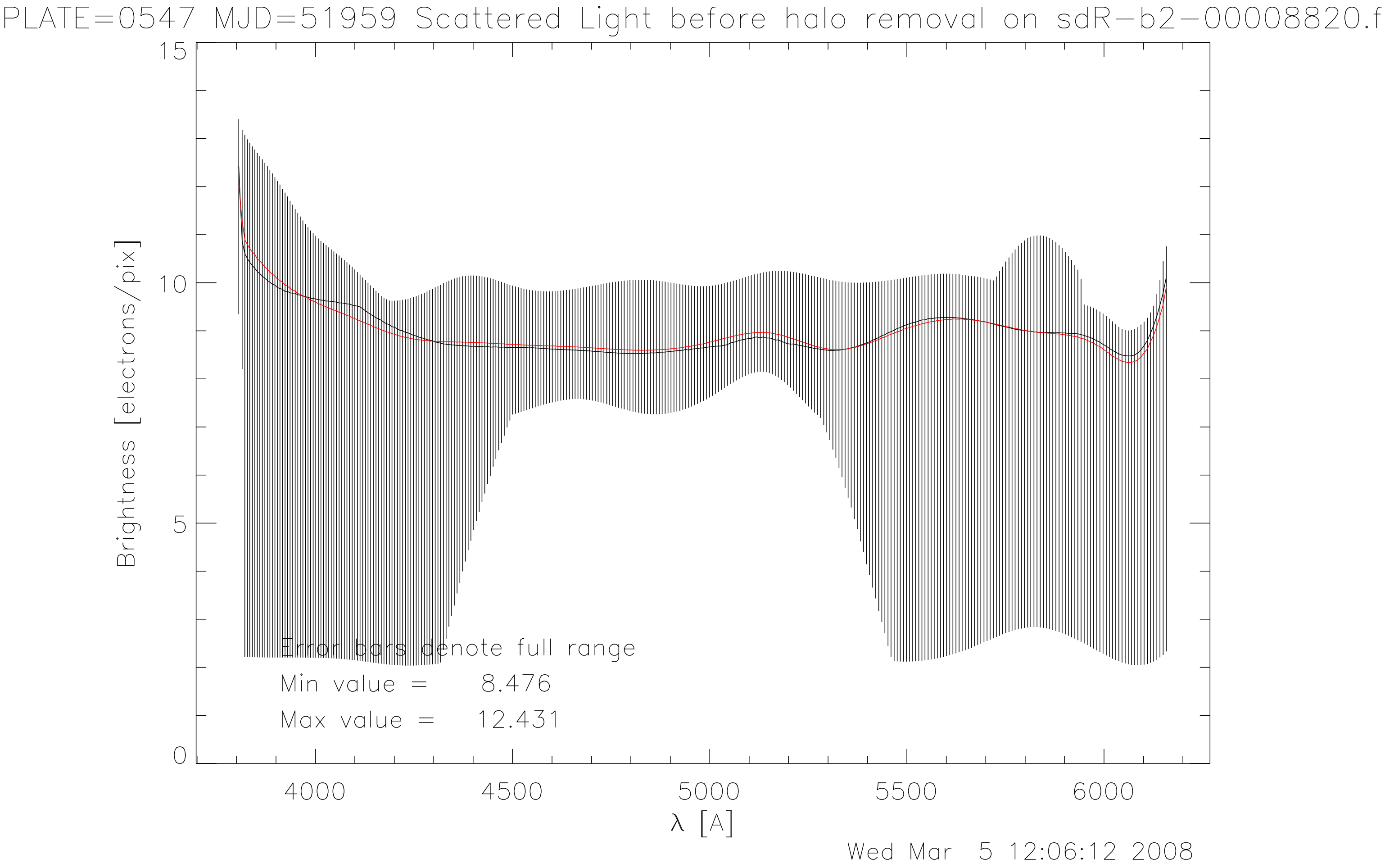
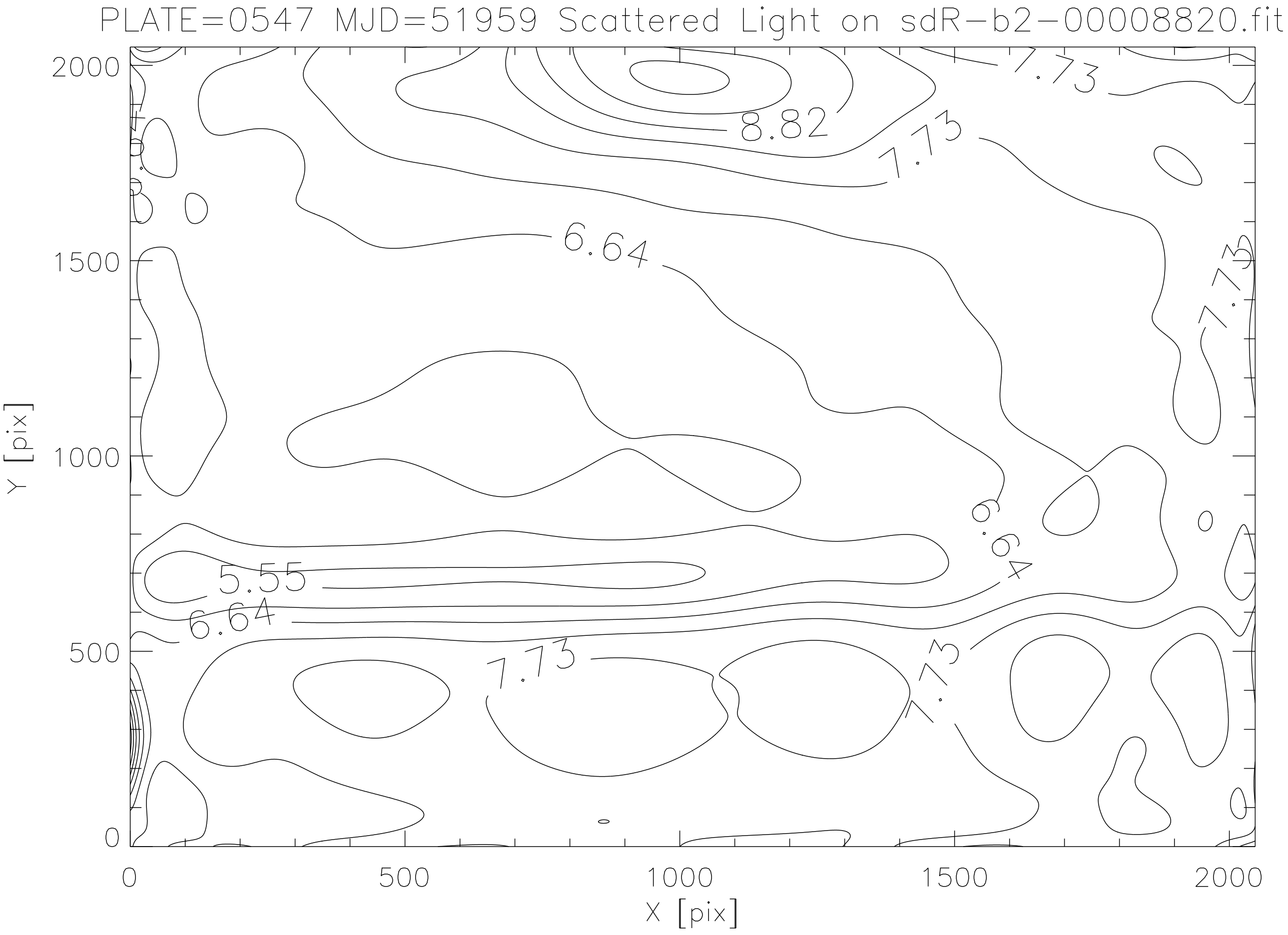
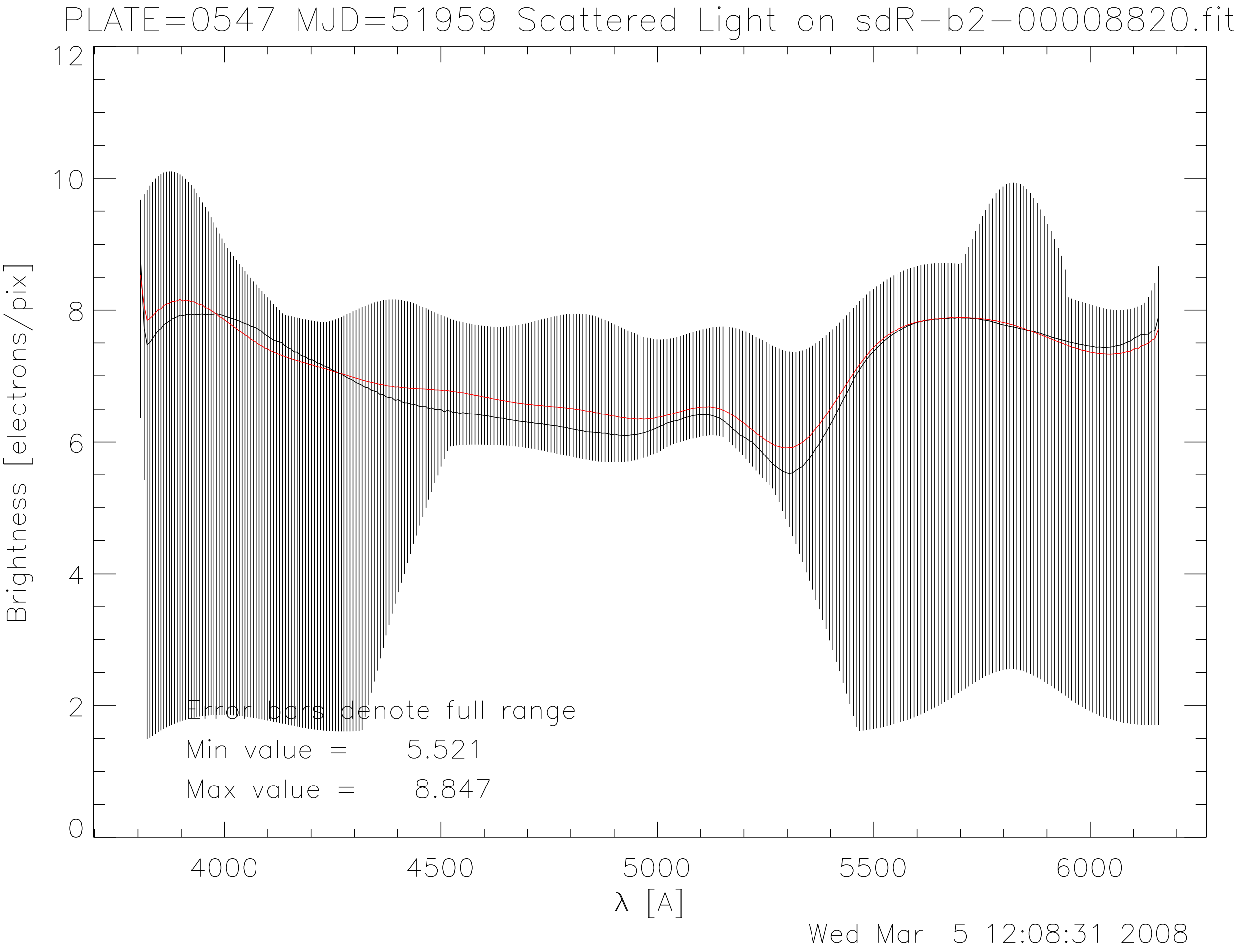
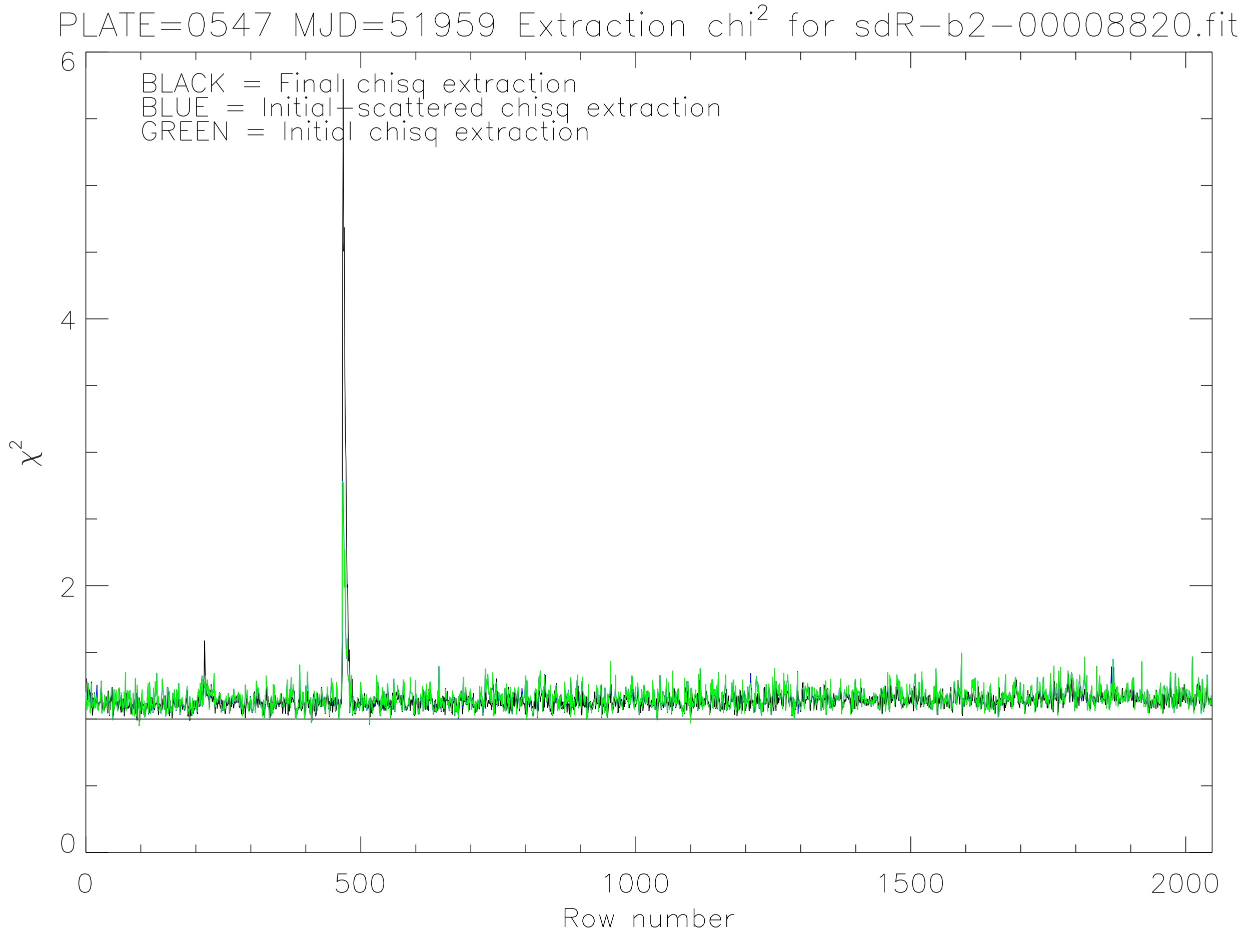


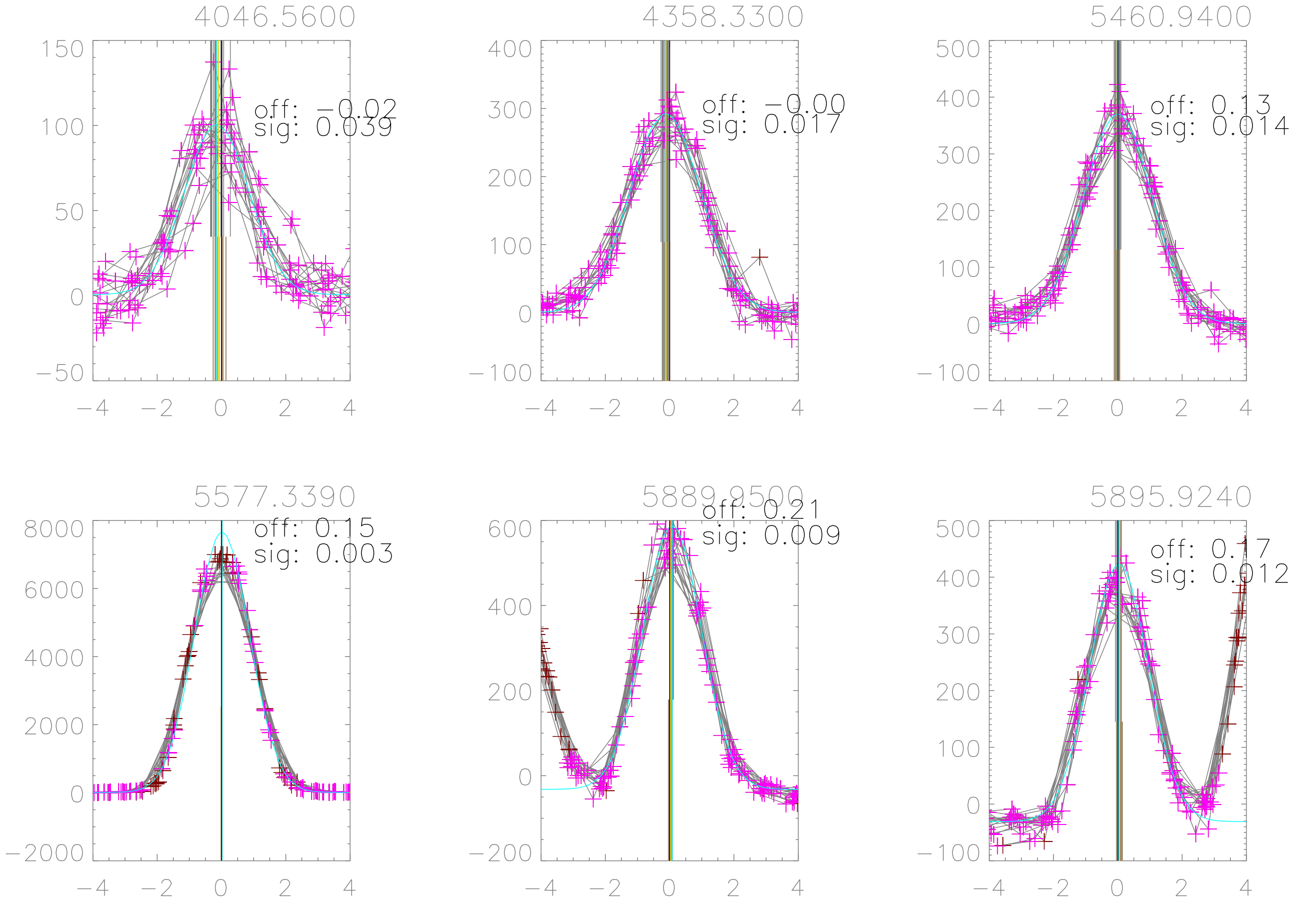
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008820.f

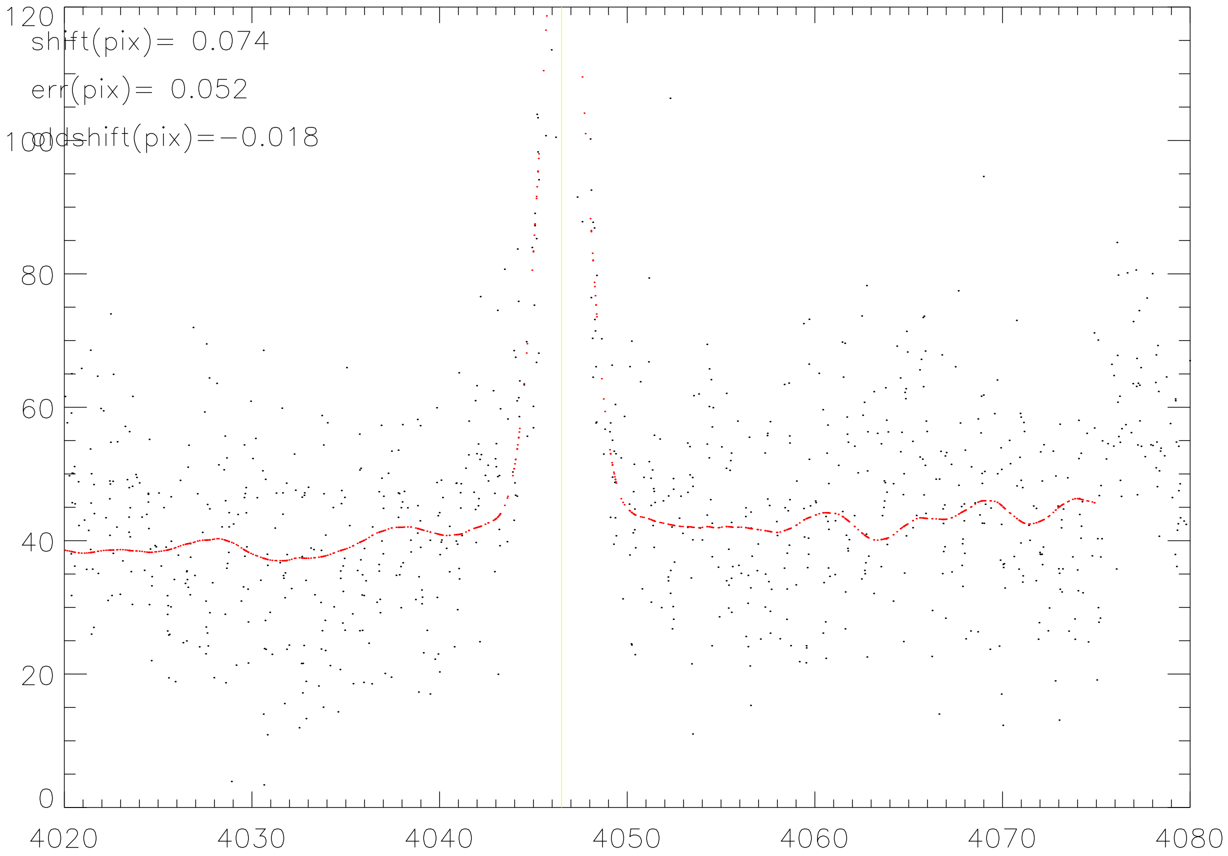

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008820.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.476
Max value = 12.431
Wed Mar 5 12:06:12 2008

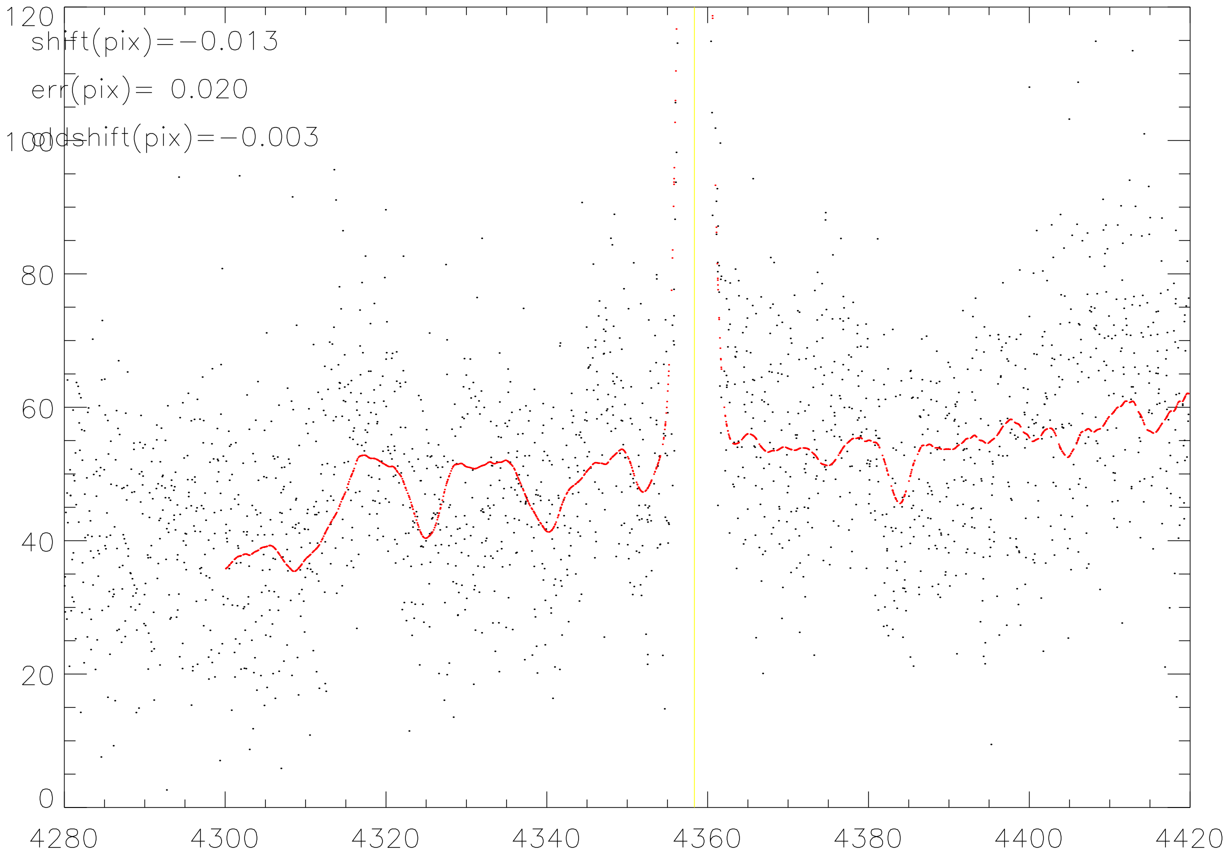

PLATE=0547 MJD=51959 Scattered Light on sdR-b2-00008820.fit
8.82
7.73
6.64
5.55
Y [pix]
X [pix]
0
500
1000
1500
2000

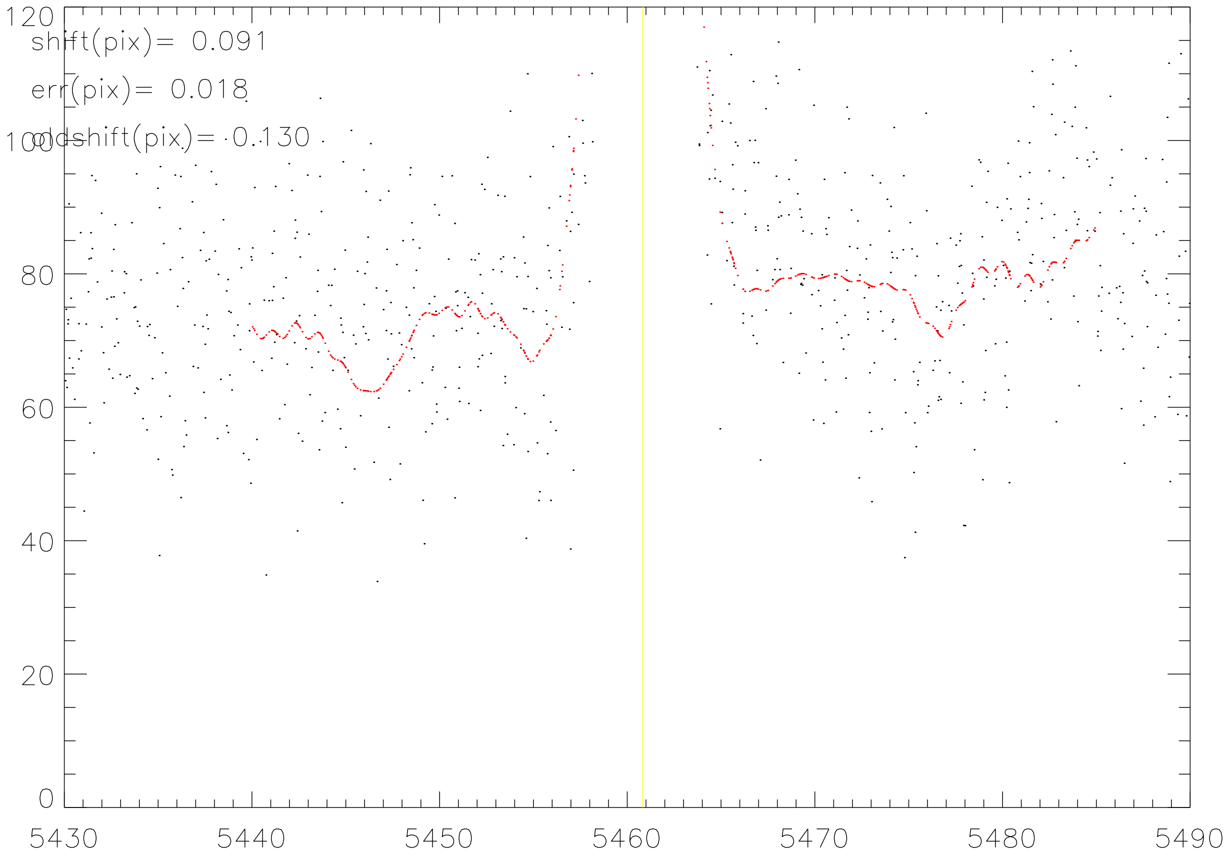

PLATE=0547 MJD=51959 Scattered Light on sdR-b2-00008820.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.521
Max value = 8.847
Wed Mar 5 12:08:31 2008

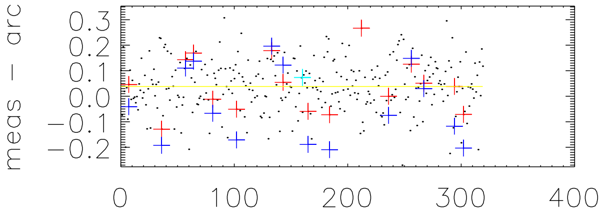

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-b2-00008820.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

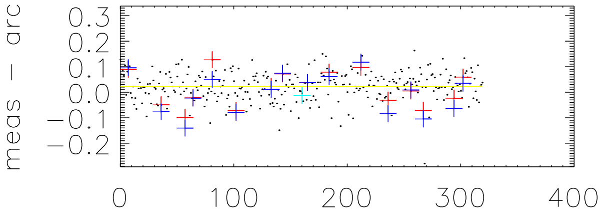

4046.5600
off: −0.02
sig: 0.039
150
100
50
0
−50
4358.3300
off: −0.00
sig: 0.017
400
300
200
100
0
−100
5460.9400
off: 0.13
sig: 0.014
500
400
300
200
100
0
−100
−4
−2
0
2
4
5577.3390
off: 0.15
sig: 0.003
8000
6000
4000
2000
0
−2000
5889.9500
off: 0.21
sig: 0.009
600
400
200
0
−200
5895.9240
off: 0.17
sig: 0.012
500
400
300
200
100
0
−100
−4
−2
0
2
4

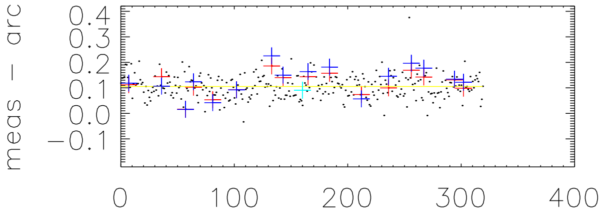

shift(pix)= 0.074
err(pix)= 0.052
oldshift(pix)=−0.018
0
20
40
60
80
100
120
4020
4030
4040
4050
4060
4070
4080

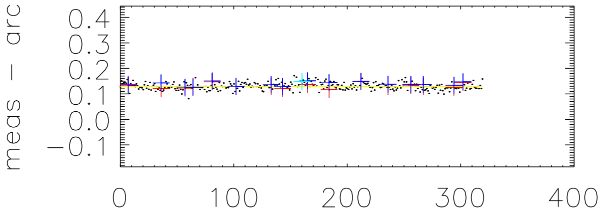

shift(pix)=−0.013
err(pix)= 0.020
oldshift(pix)=−0.003
0
20
40
60
80
100
120
4280
4300
4320
4340
4360
4380
4400
4420

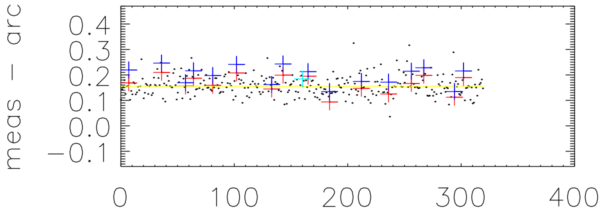

shift(pix)= 0.091
err(pix)= 0.018
oldshift(pix)= 0.130
0
20
40
60
80
100
120
5430
5440
5450
5460
5470
5480
5490

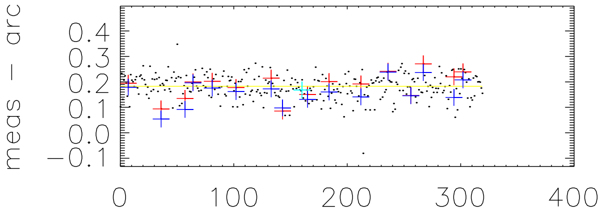

4046.5600

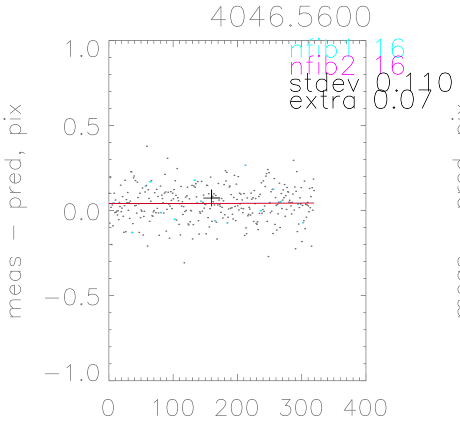

4358.3300

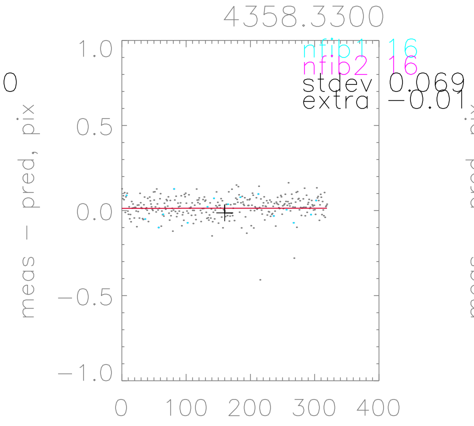

5460.9400

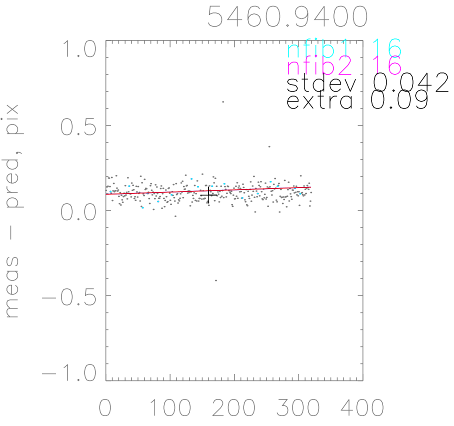

5577.3390

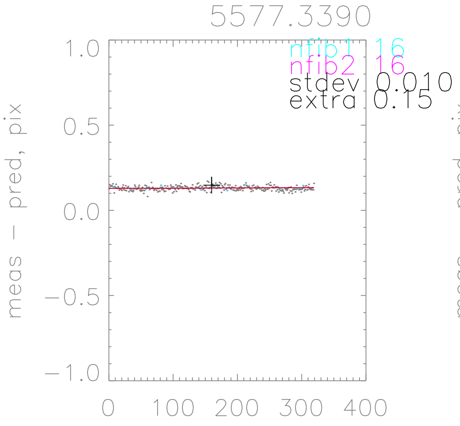

5889.9500

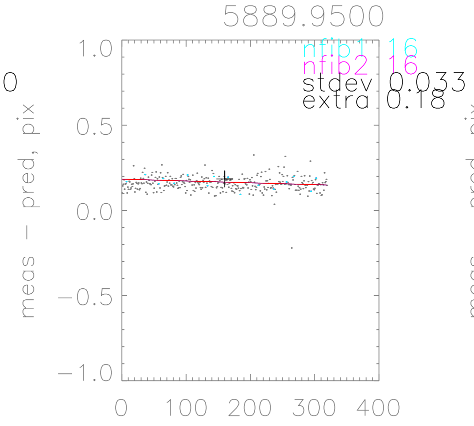

5895.9240

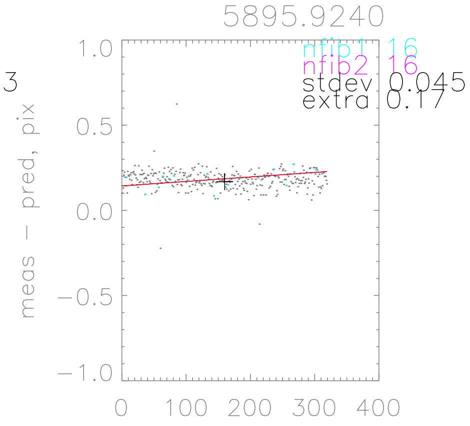

4046.5600
nfib1 16
nfib2 16
stdev 0.110
extra 0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

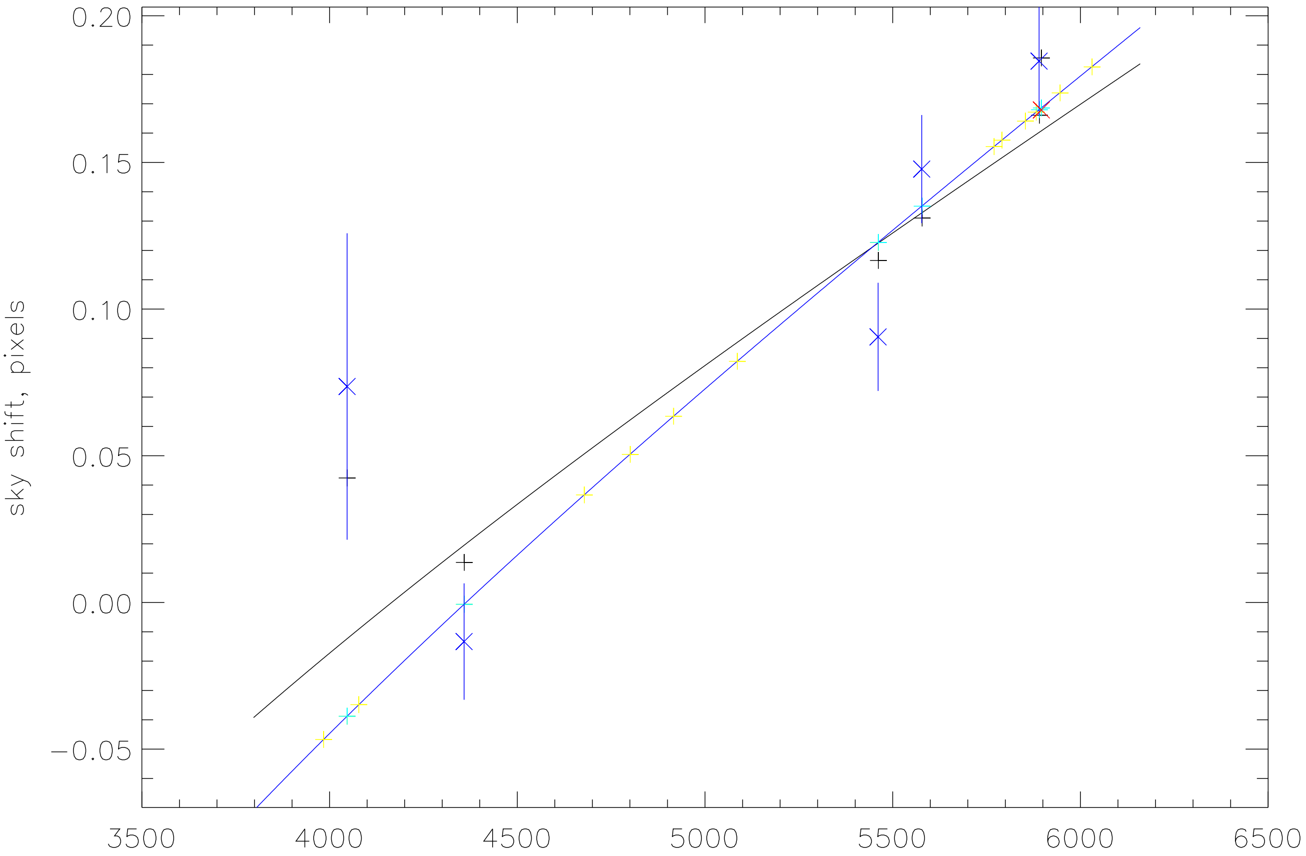

4358.3300
nfib1 16
nfib2 16
stdev 0.069
extra −0.01
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

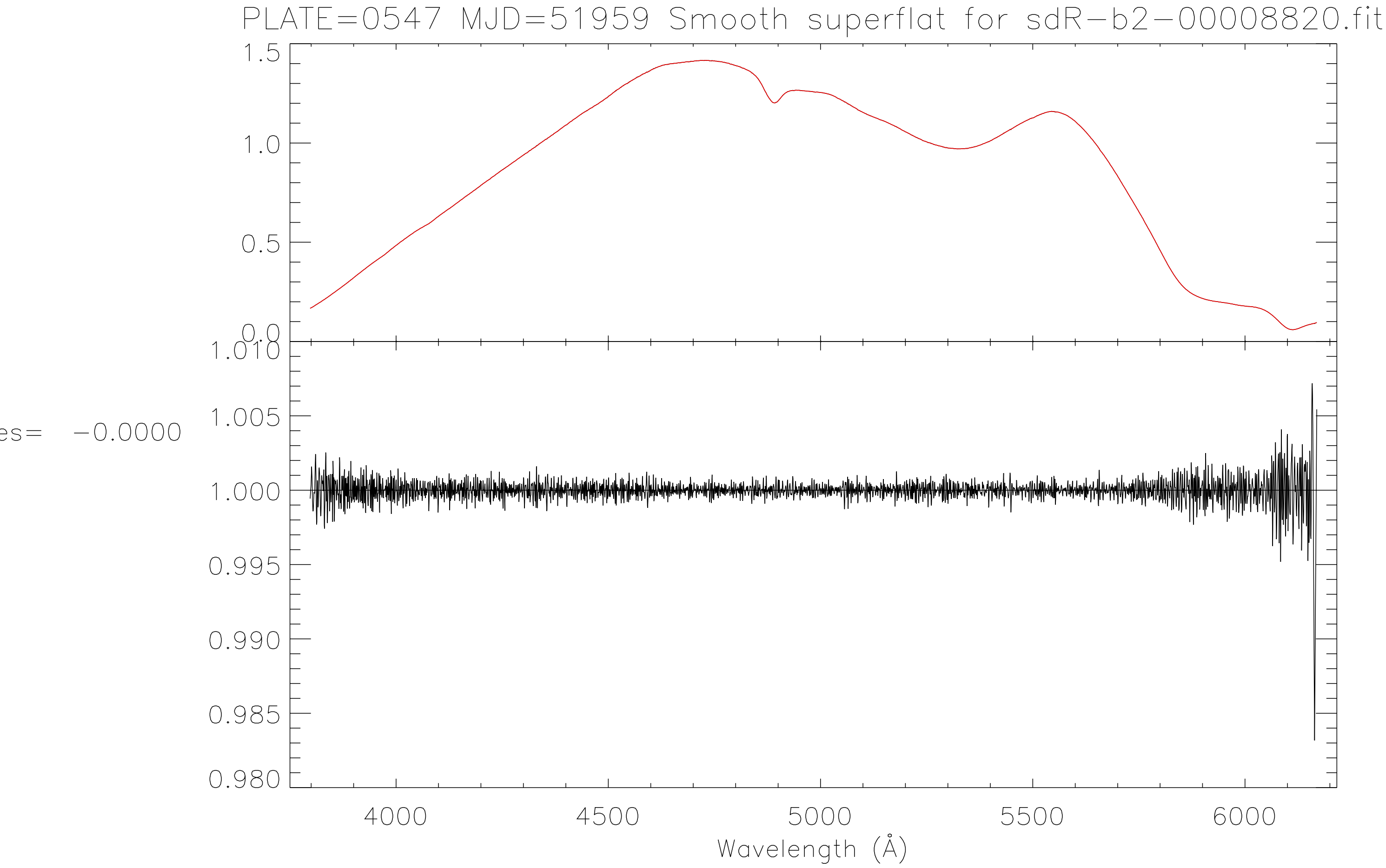

5460.9400
nfib1 16
nfib2 16
stdev 0.042
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

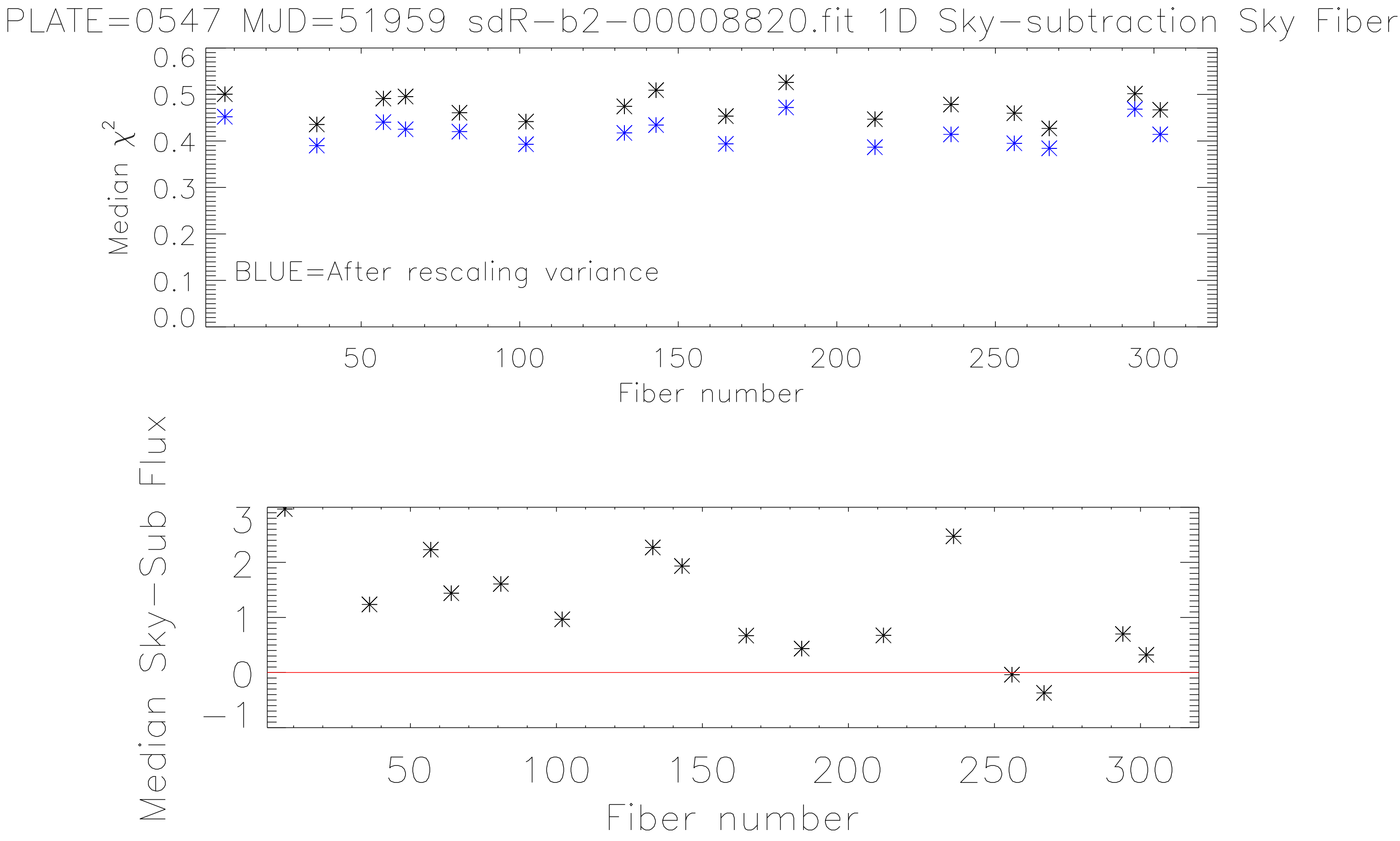

5577.3390
nfib1 16
nfib2 16
stdev 0.010
extra 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

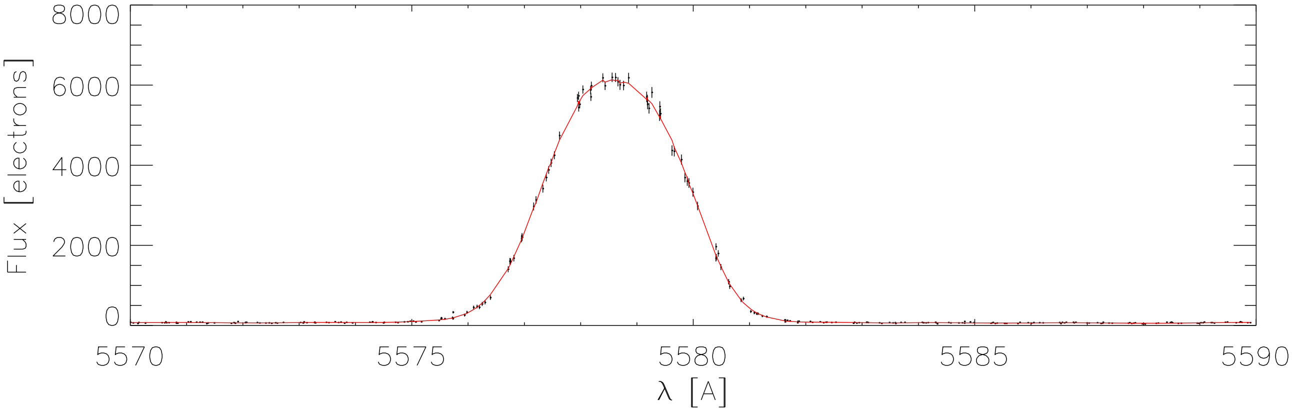

5889.9500
nfib1 16
nfib2 16
stdev 0.033
extra 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

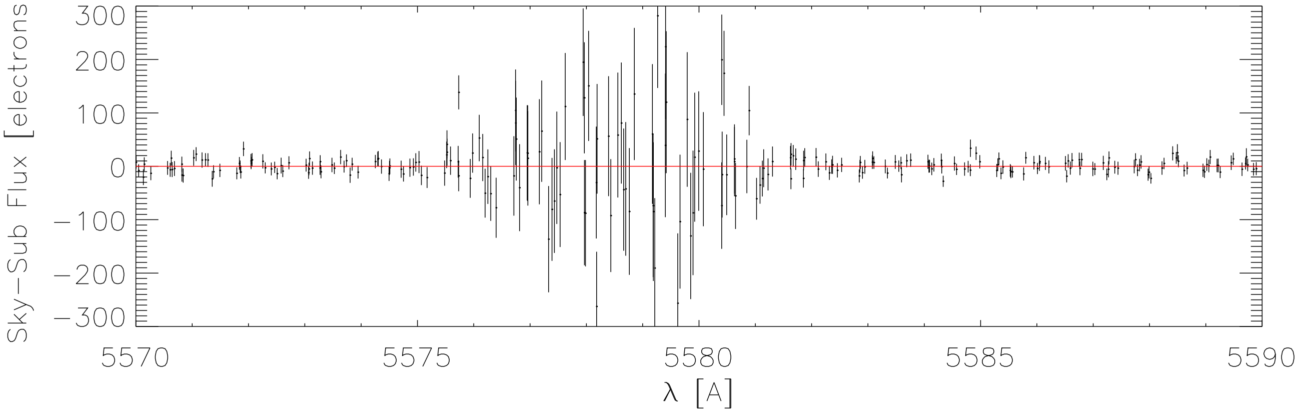

5895.9240
nfib1 16
nfib2 16
stdev 0.045
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

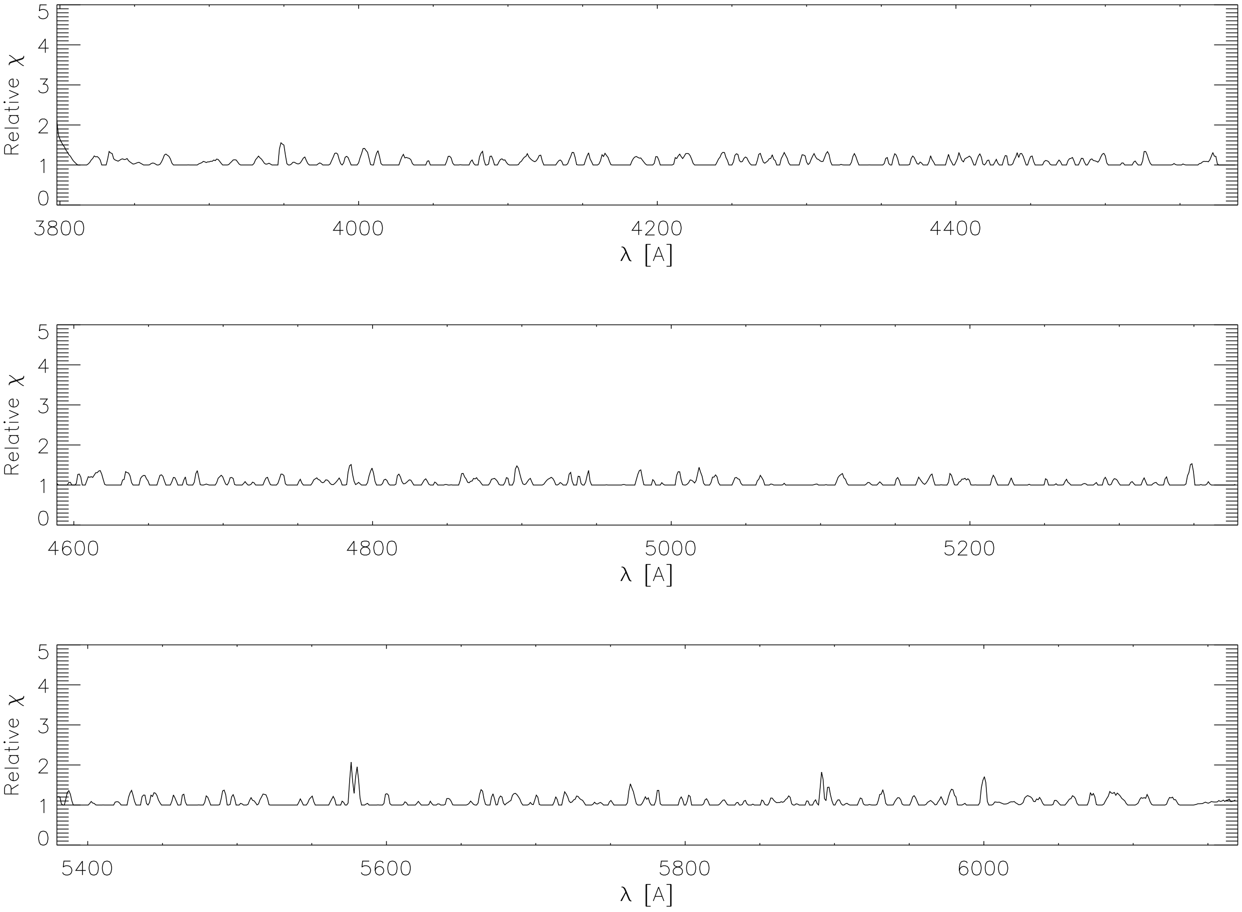

sky shift, pixels
0.20
0.15
0.10
0.05
0.00
−0.05
3500
4000
4500
5000
5500
6000
6500


PLATE=0547 MJD=51959 Smooth superflat for sdR-b2-00008820.fit


PLATE=0547 MJD=51959 sdR-b2-00008820.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
3
2
1
0
−1
50
100
150
200
250
300
Fiber number

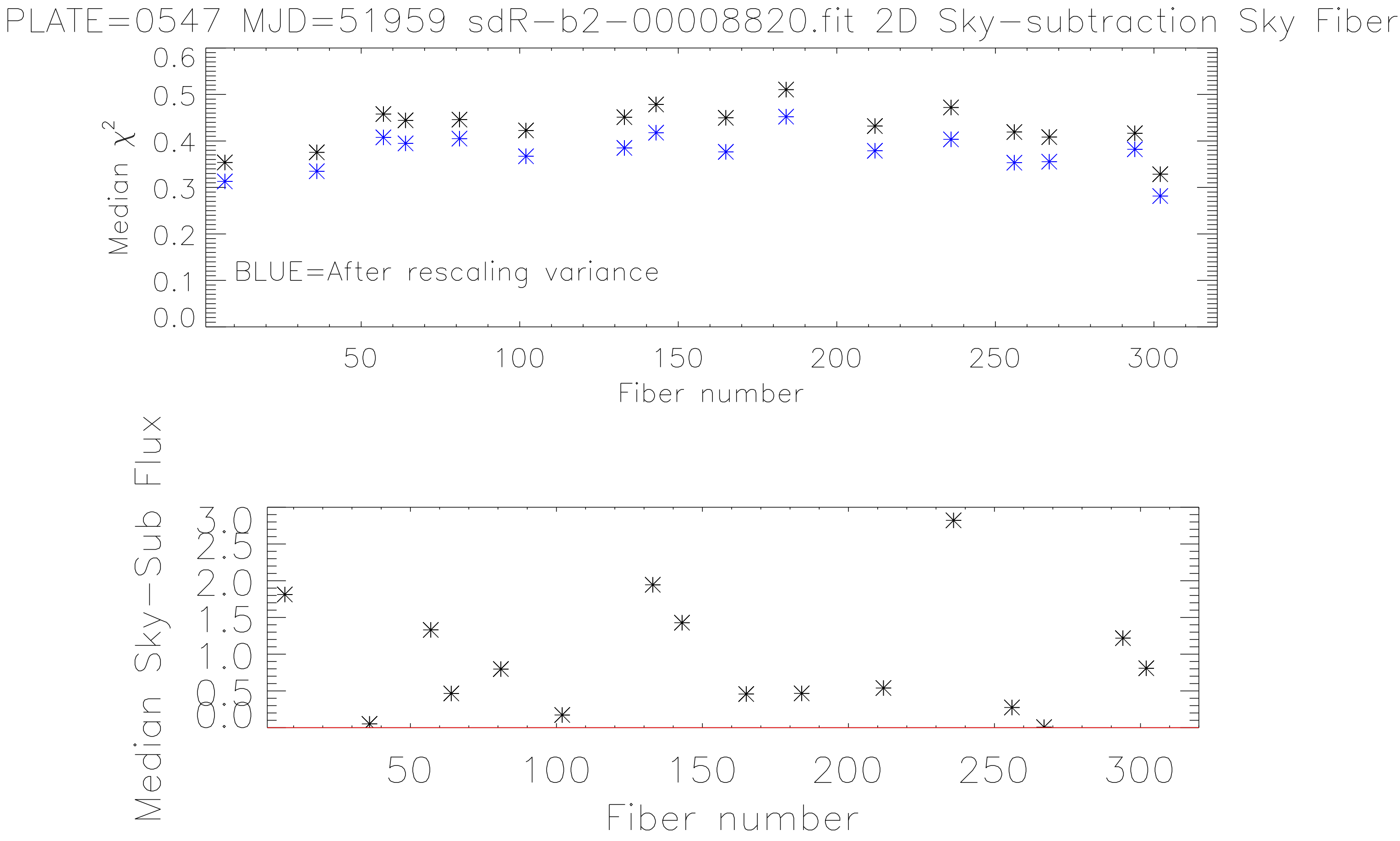

PLATE=0547 MJD=51959 sdR-b2-00008820.fit 1D Sky-subtraction Sky Fibers

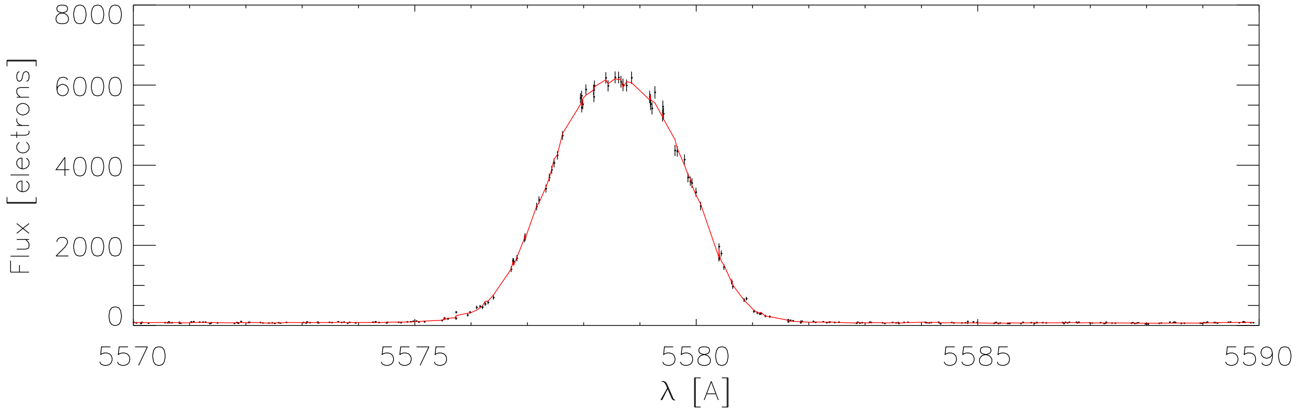

PLATE=0547 MJD=51959 sdR-b2-00008820.fit 1D Sky-subtraction Sky-subtracted Sky F



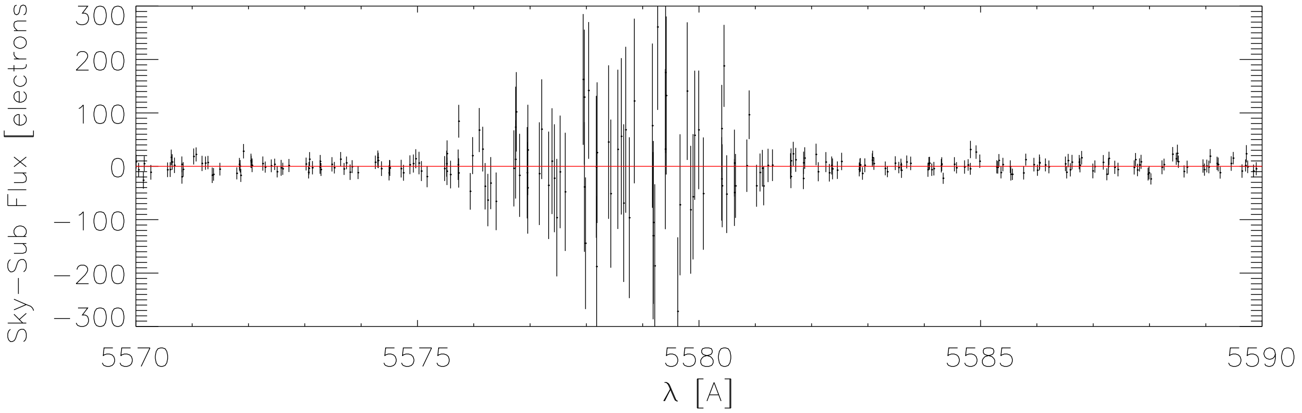
Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b2-00008820.fit 1D Sky-subtraction Rescaled Errors


PLATE=0547 MJD=51959 sdR-b2-00008820.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
3.0
2.5
2.0
1.5
1.0
0.5
0.0
50
100
150
200
250
300
Fiber number



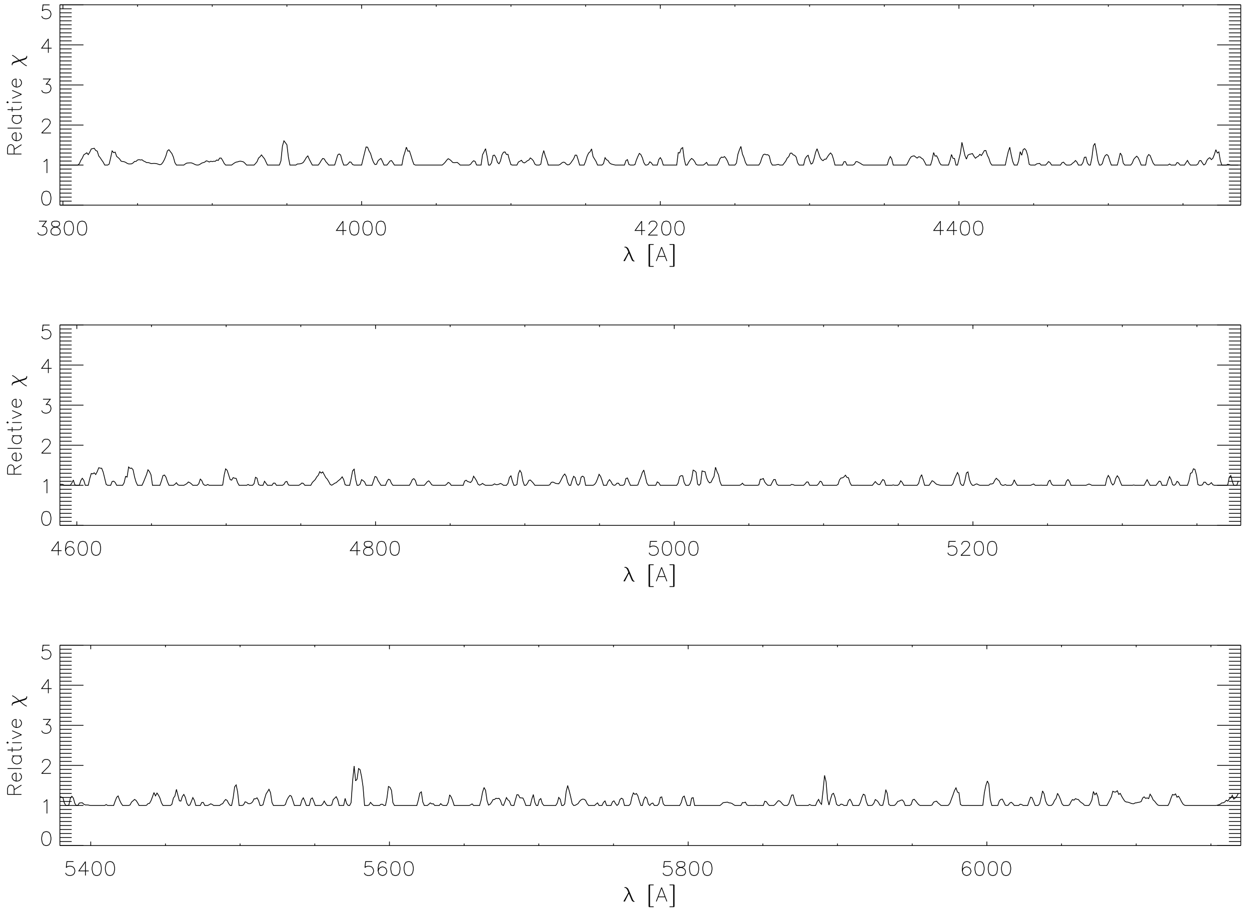
PLATE=0547 MJD=51959 sdR-b2-00008820.fit 2D Sky-subtraction Sky Fibers

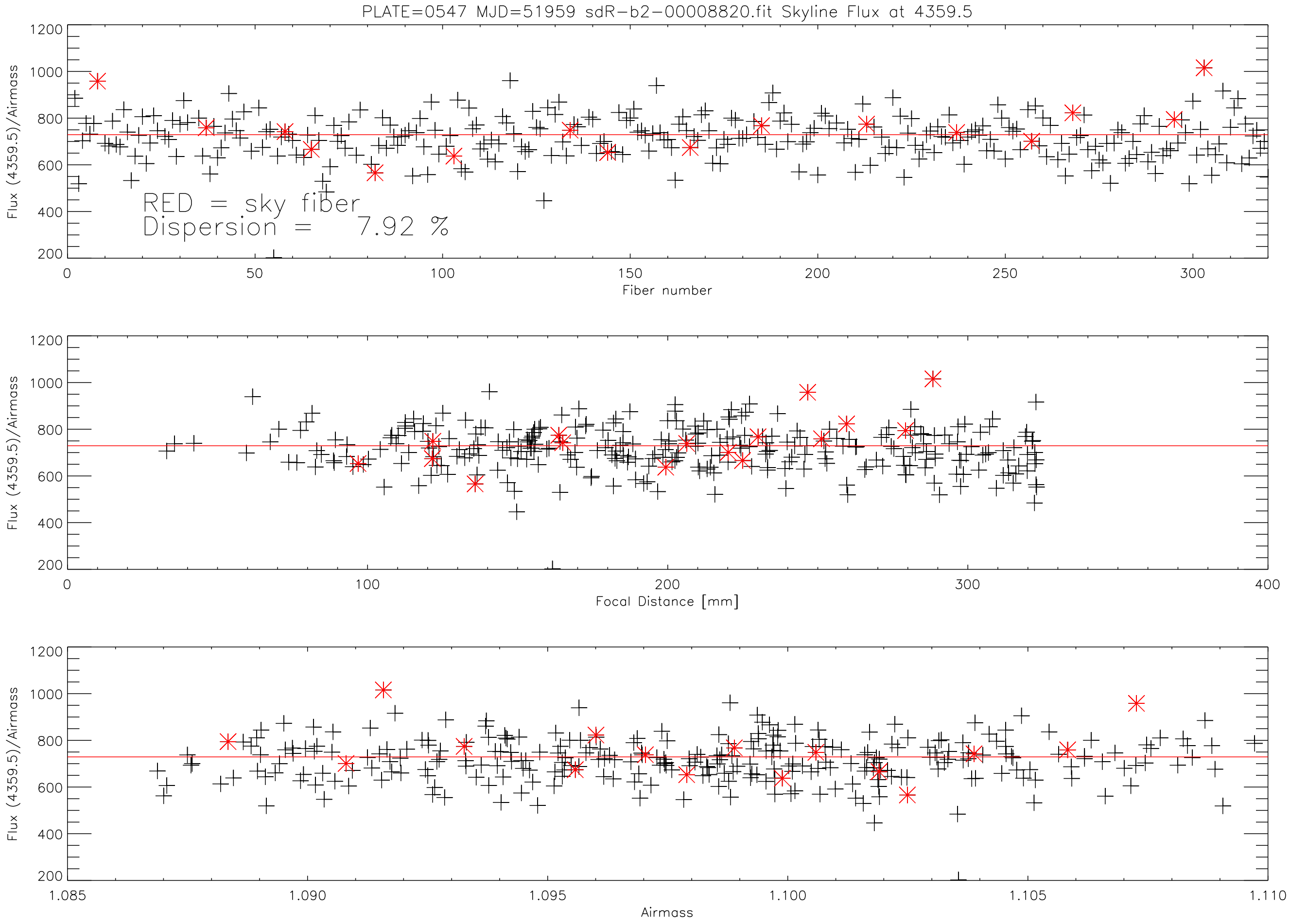


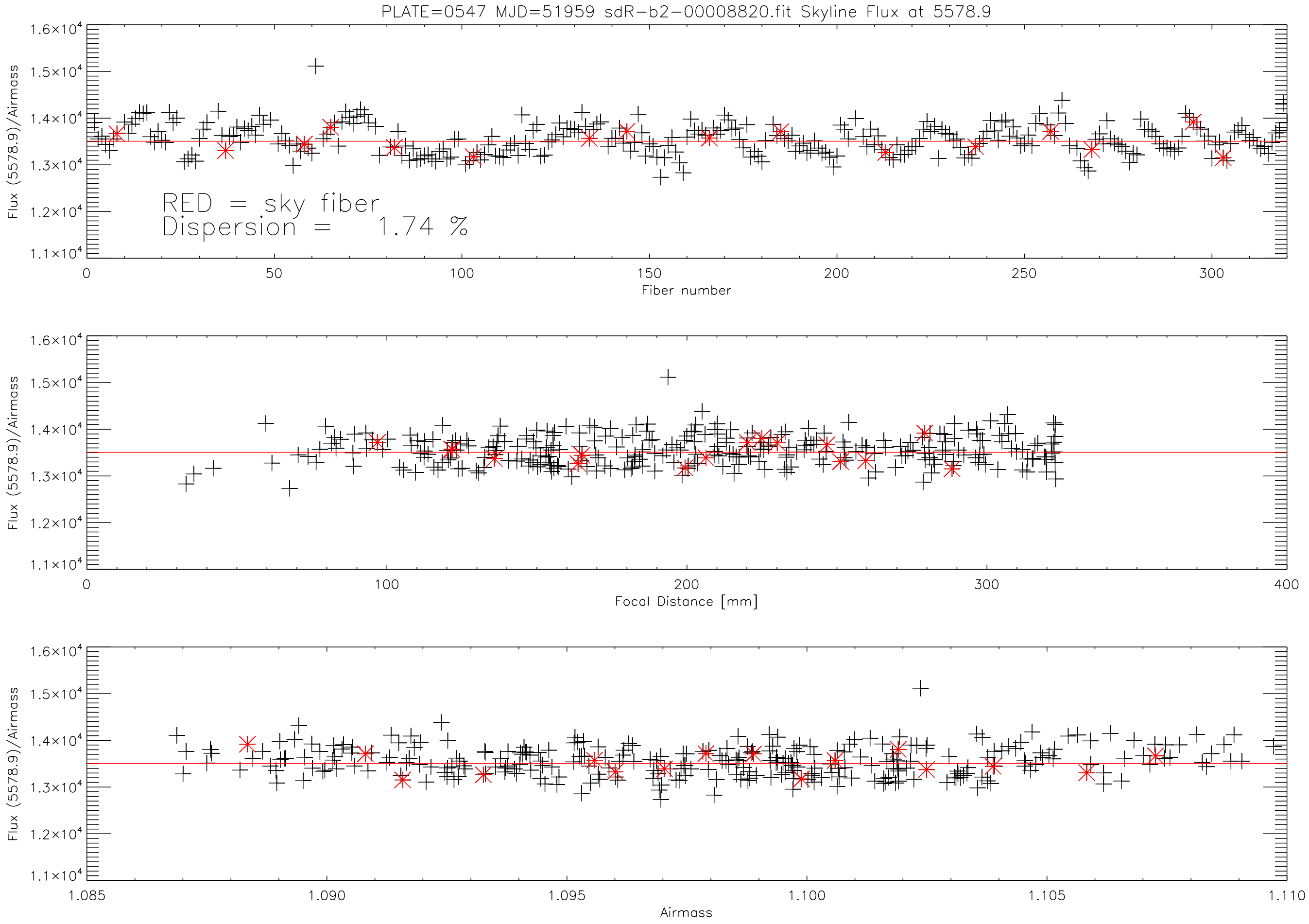
PLATE=0547 MJD=51959 sdR-b2-00008820.fit 2D Sky-subtraction Sky-subtracted Sky F

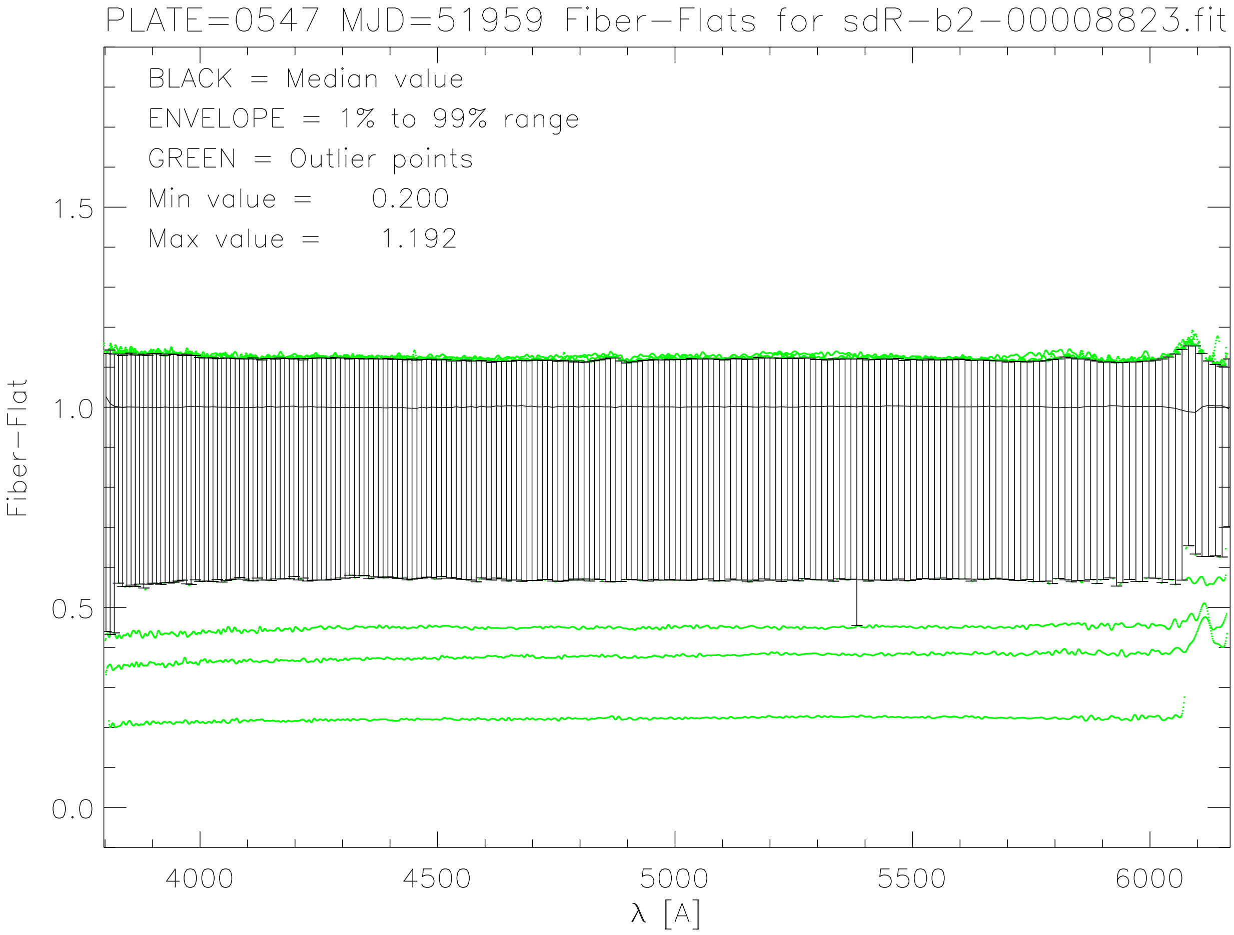
Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b2-00008820.fit 2D Sky-subtraction Rescaled Errors

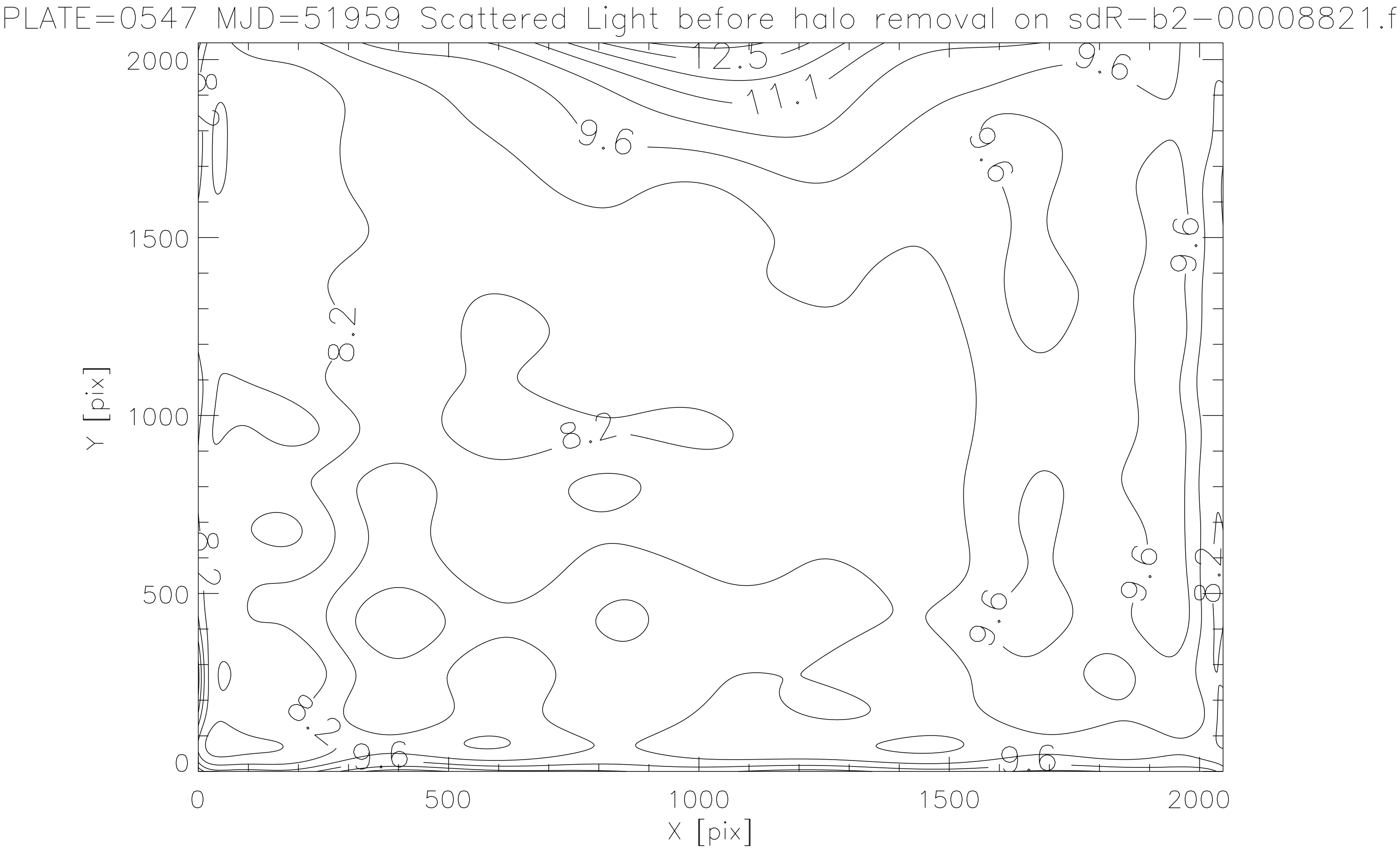


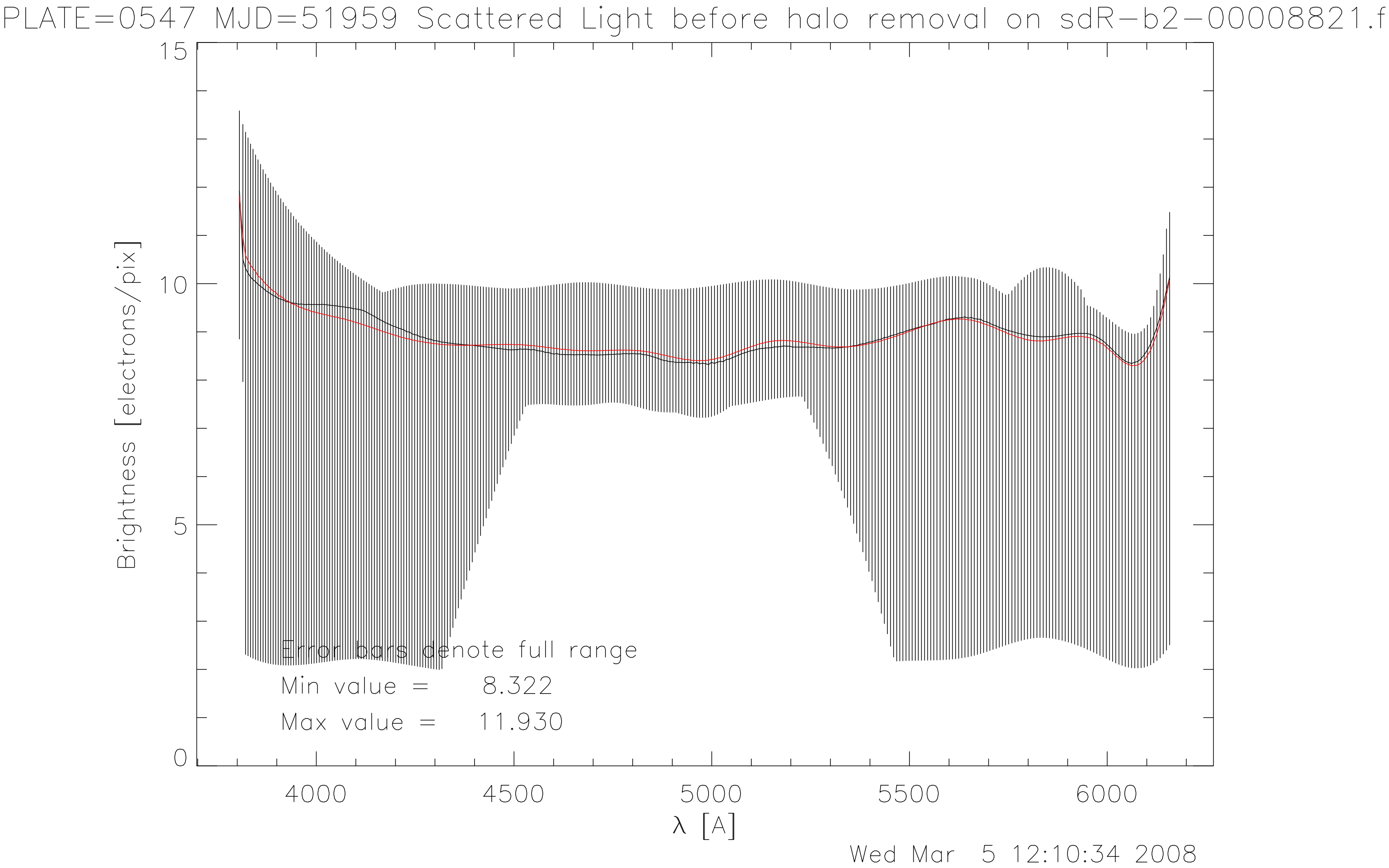

PLATE=0547 MJD=51959 sdR-b2-00008820.fit Skyline Flux at 4359.5

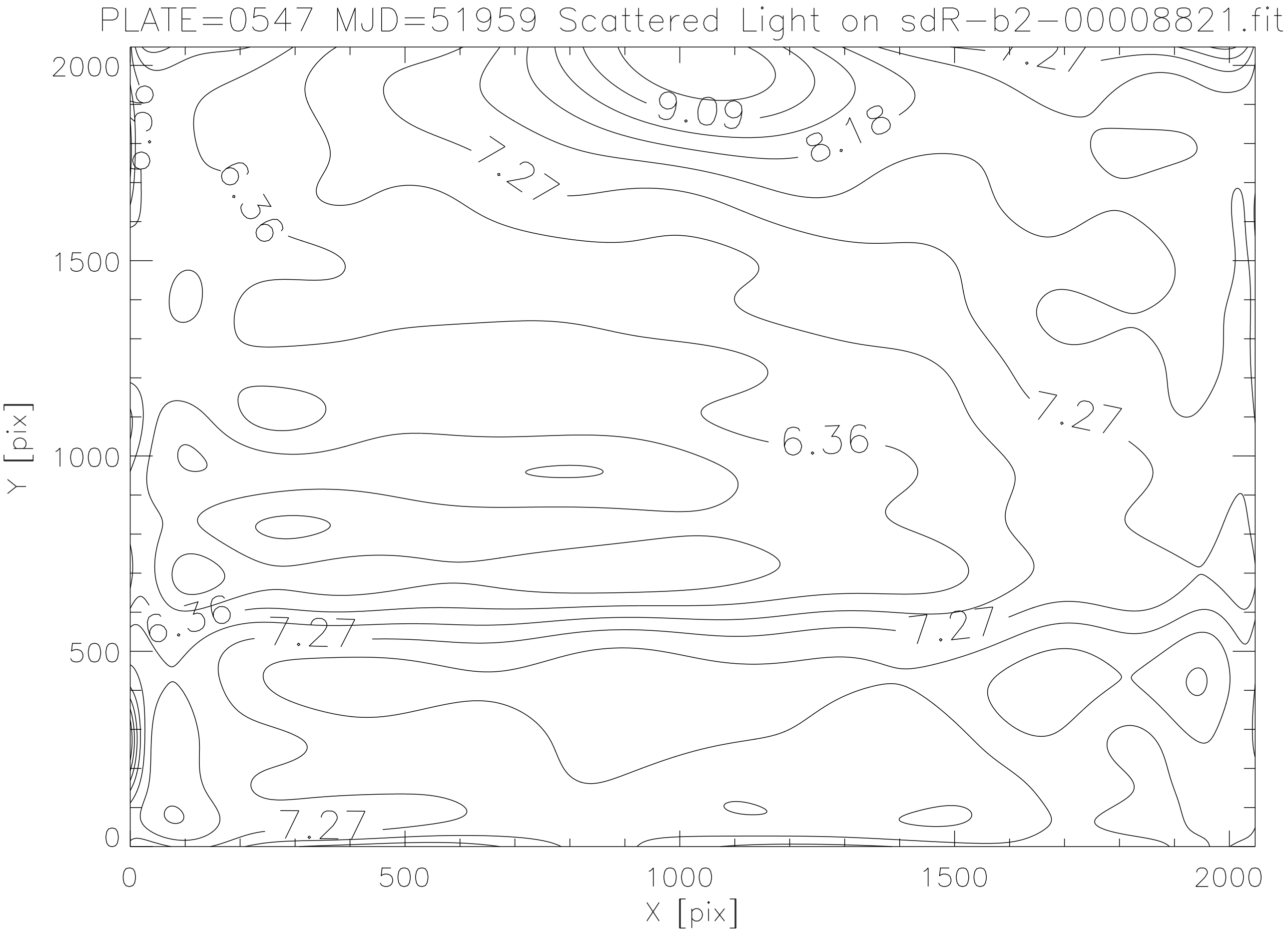

PLATE=0547 MJD=51959 sdR-b2-00008820.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
RED = sky fiber
Dispersion = 1.74 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.085
1.090
1.095
1.100
1.105
1.110
Airmass


PLATE=0547 MJD=51959 Fiber-Flats for sdR-b2-00008823.fit

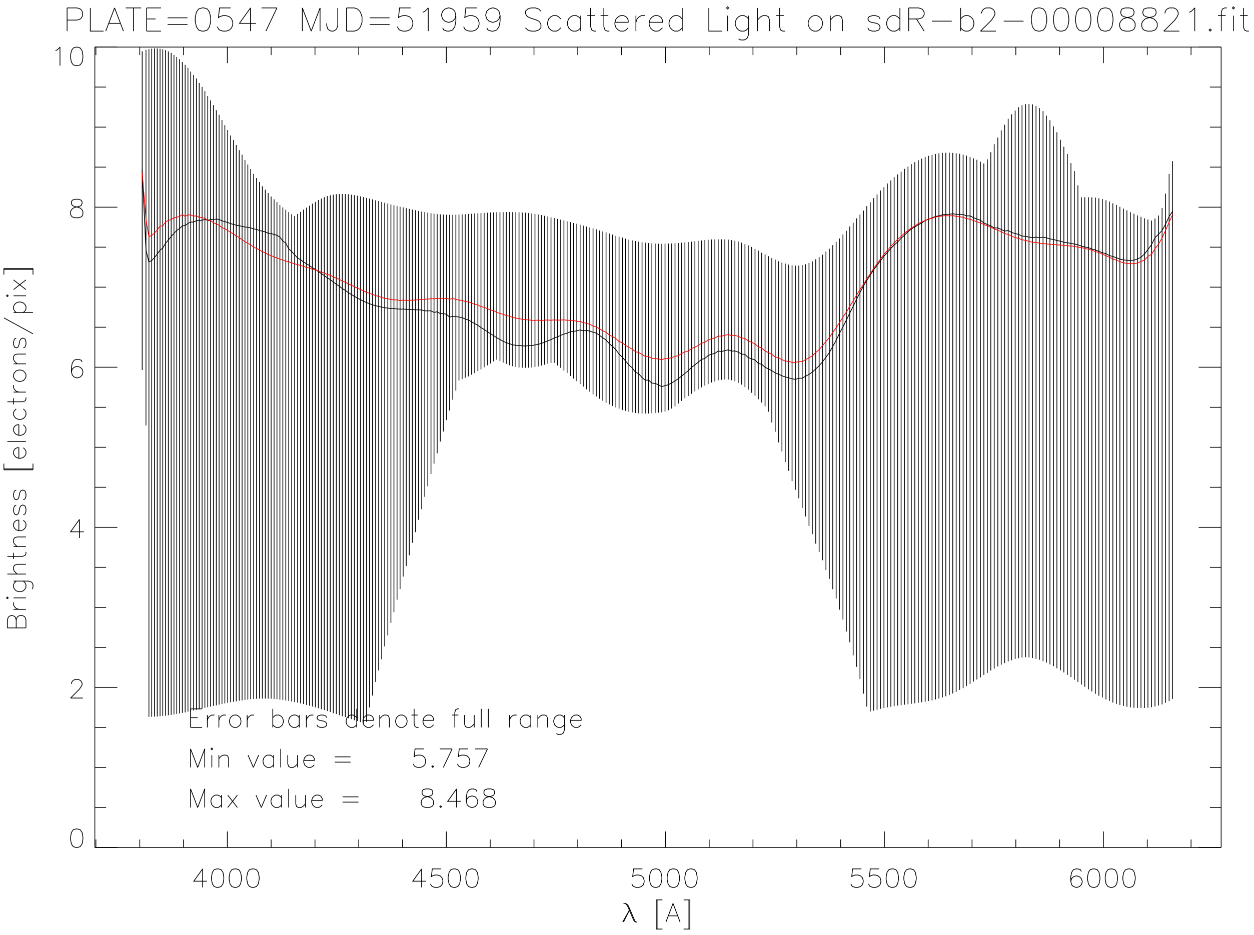
Wed Mar 5 12:09:45 2008


PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008821.f
12.5
11.1
9.6
9.6
9.6
9.6
9.6
9.6
9.6
9.6
8.2
8.2
8.2
8.2
8.2
8.2
2000
1500
1000
500
0
0
500
1000
1500
2000
Y [pix]
X [pix]

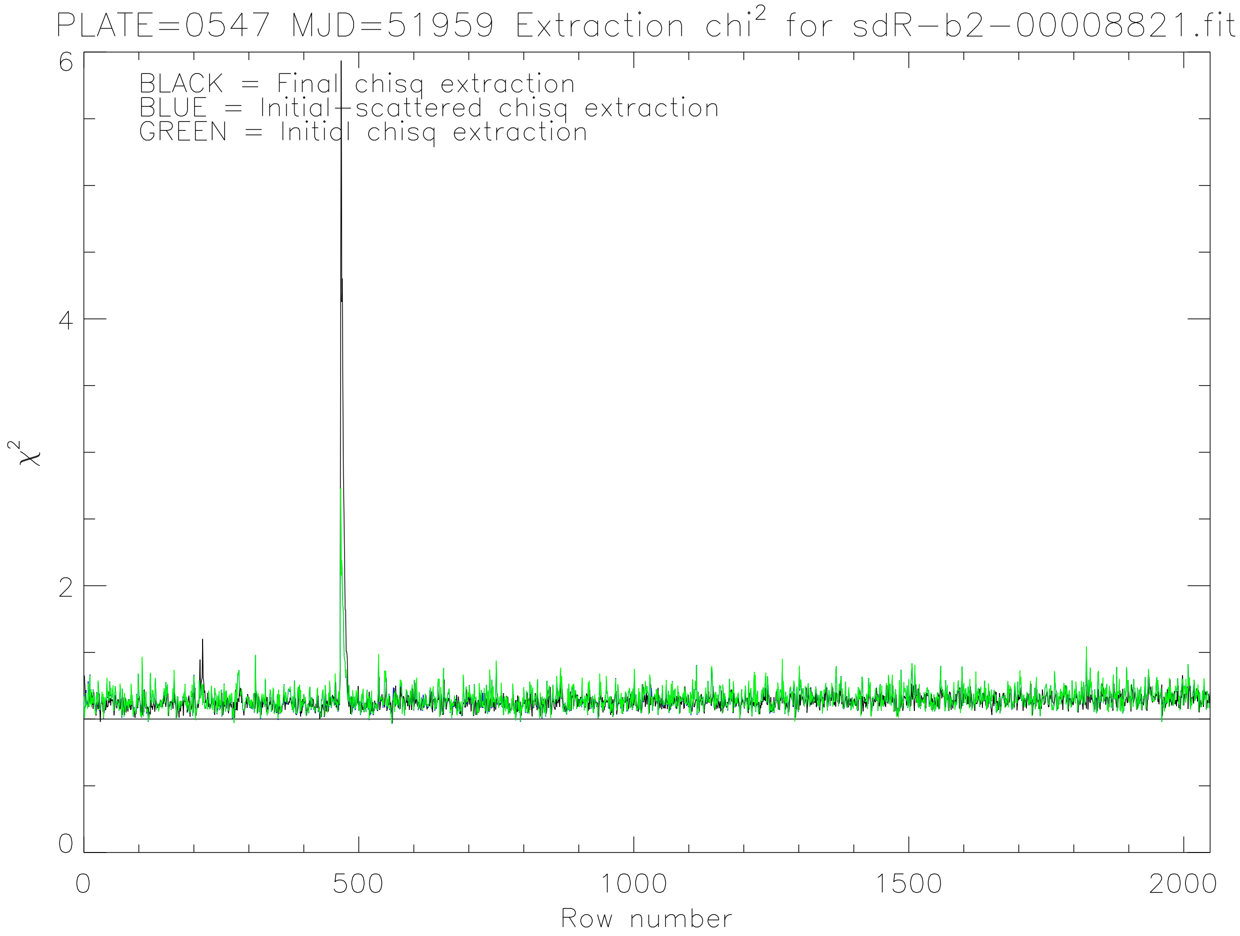

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008821.f
Brightness [electrons/pix]
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.322
Max value = 11.930
Wed Mar 5 12:10:34 2008

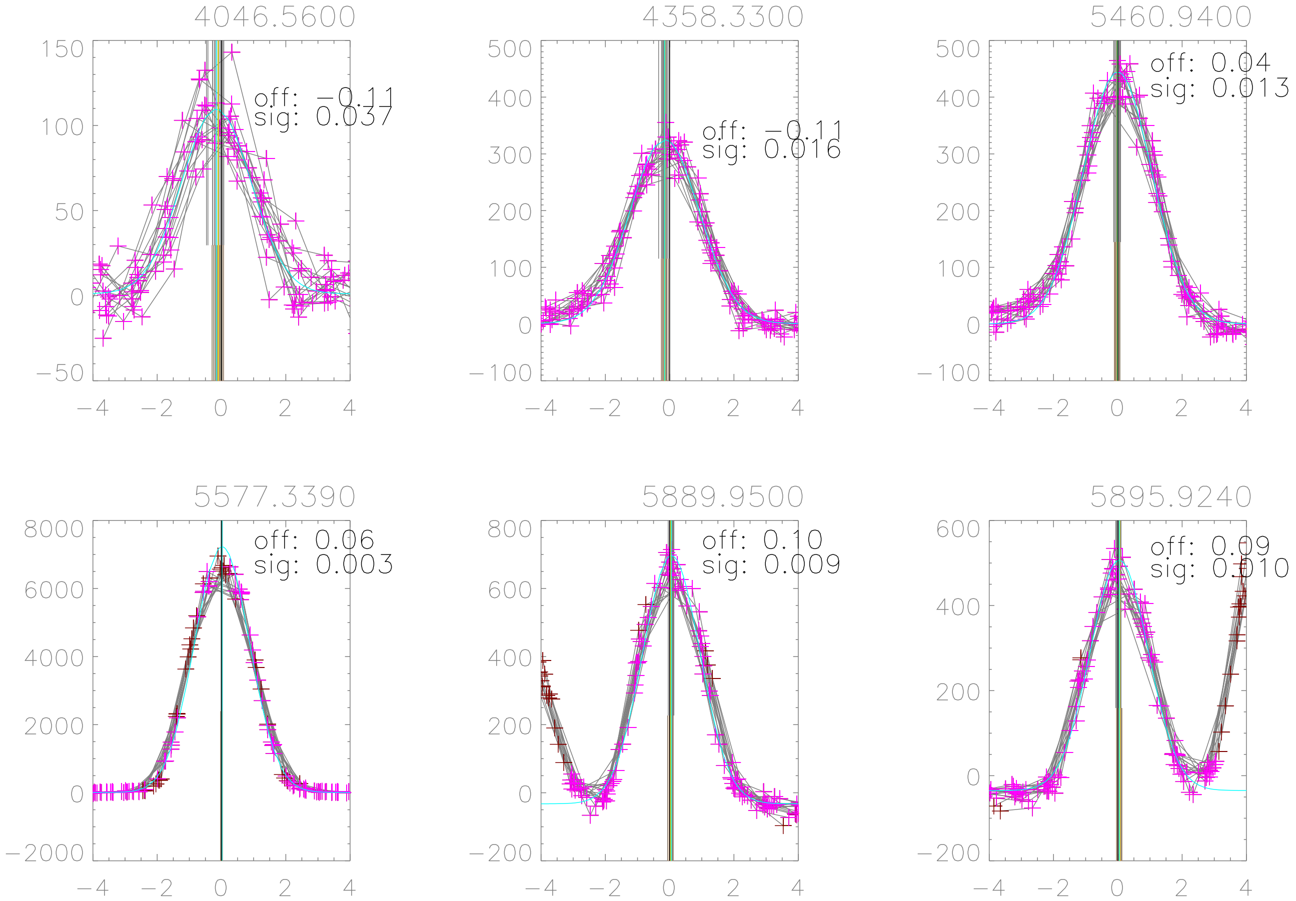


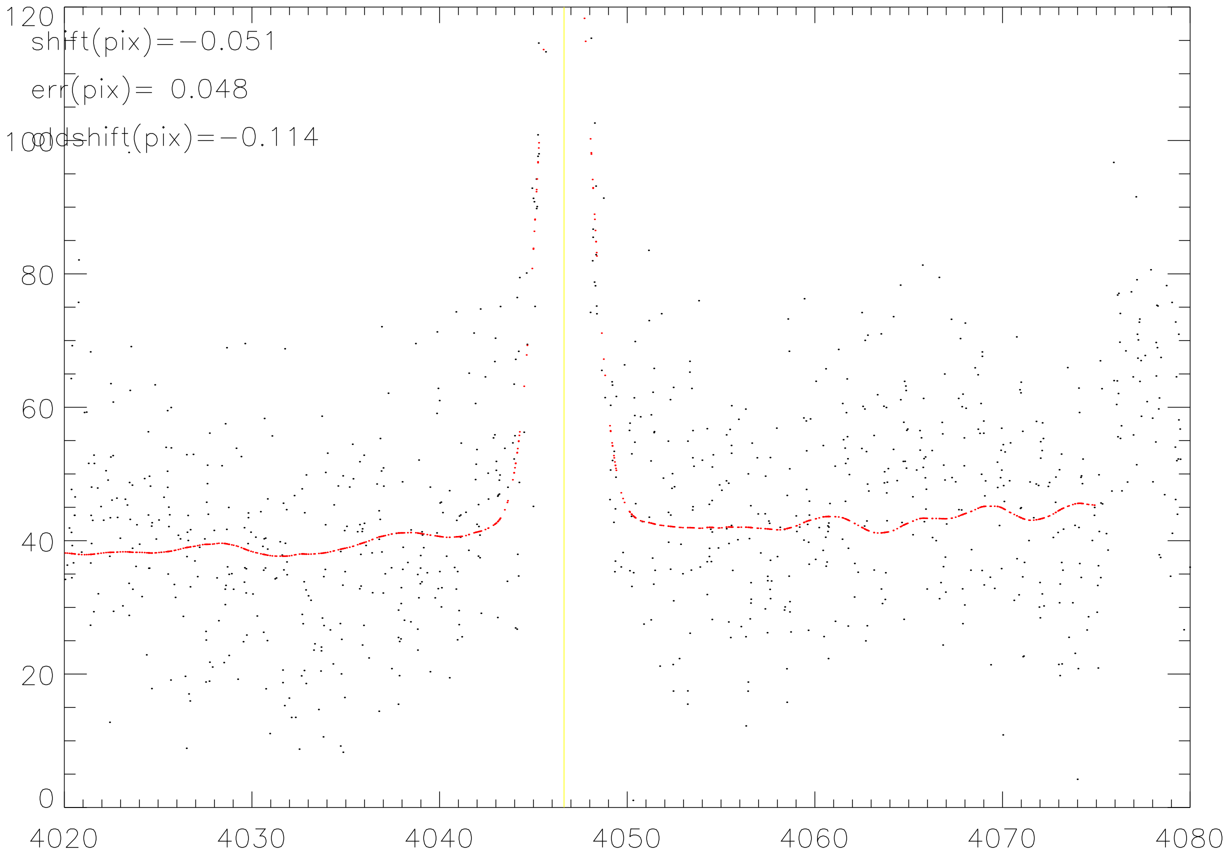
PLATE=0547 MJD=51959 Scattered Light on sdR-b2-00008821.fit

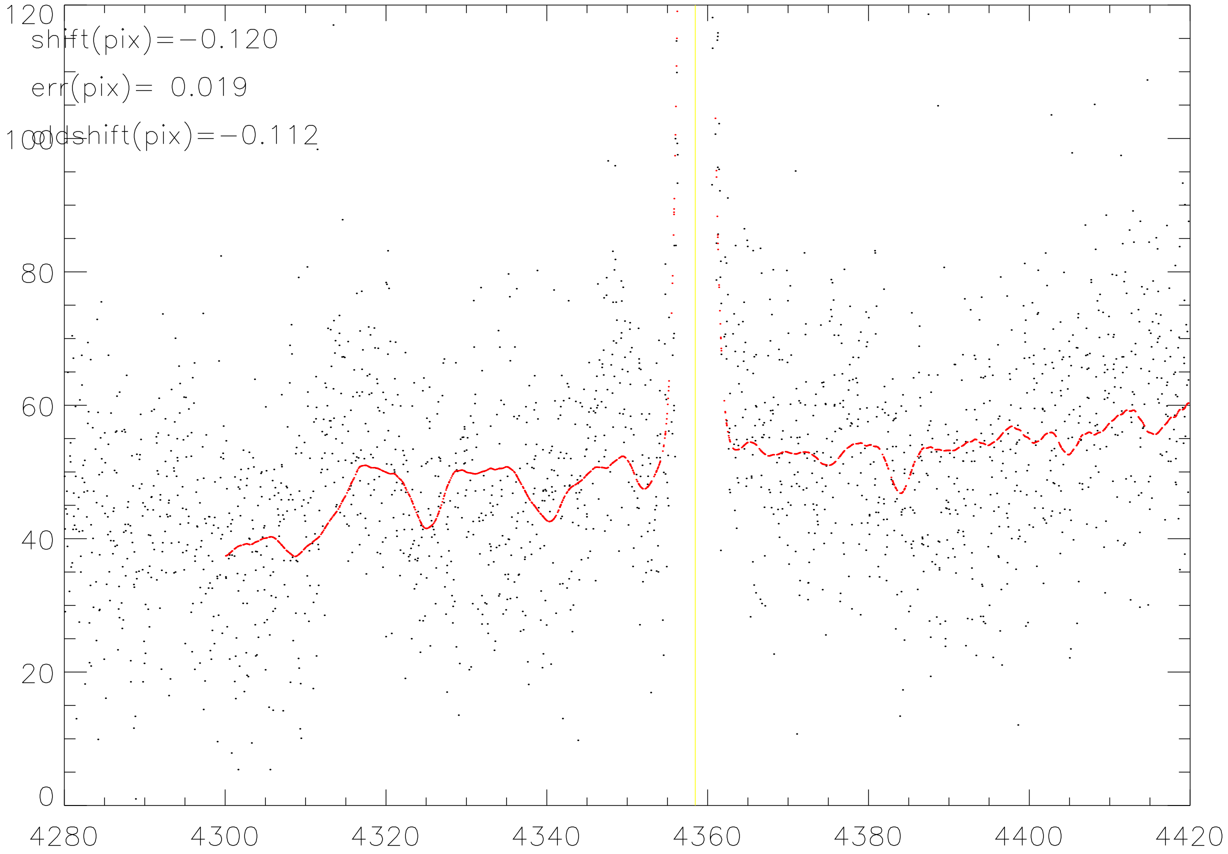


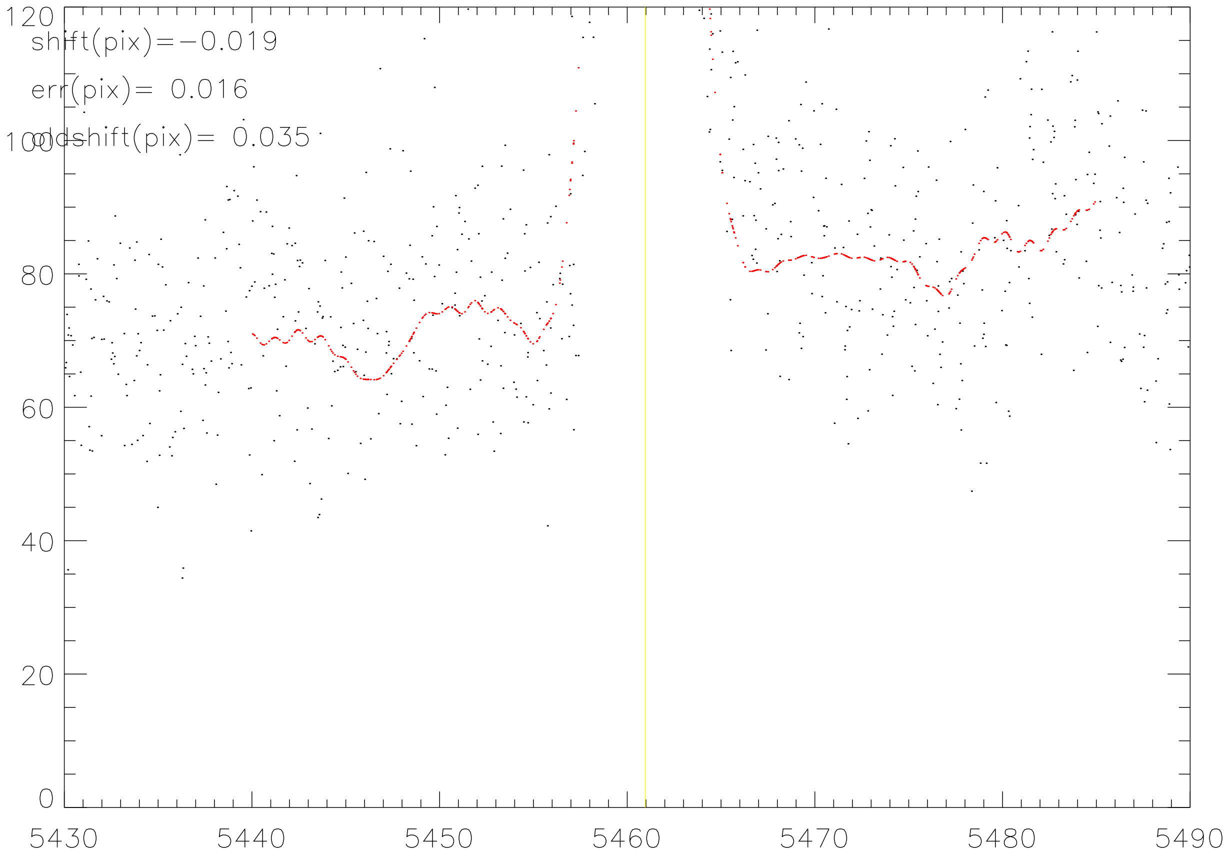
Wed Mar 5 12:12:52 2008

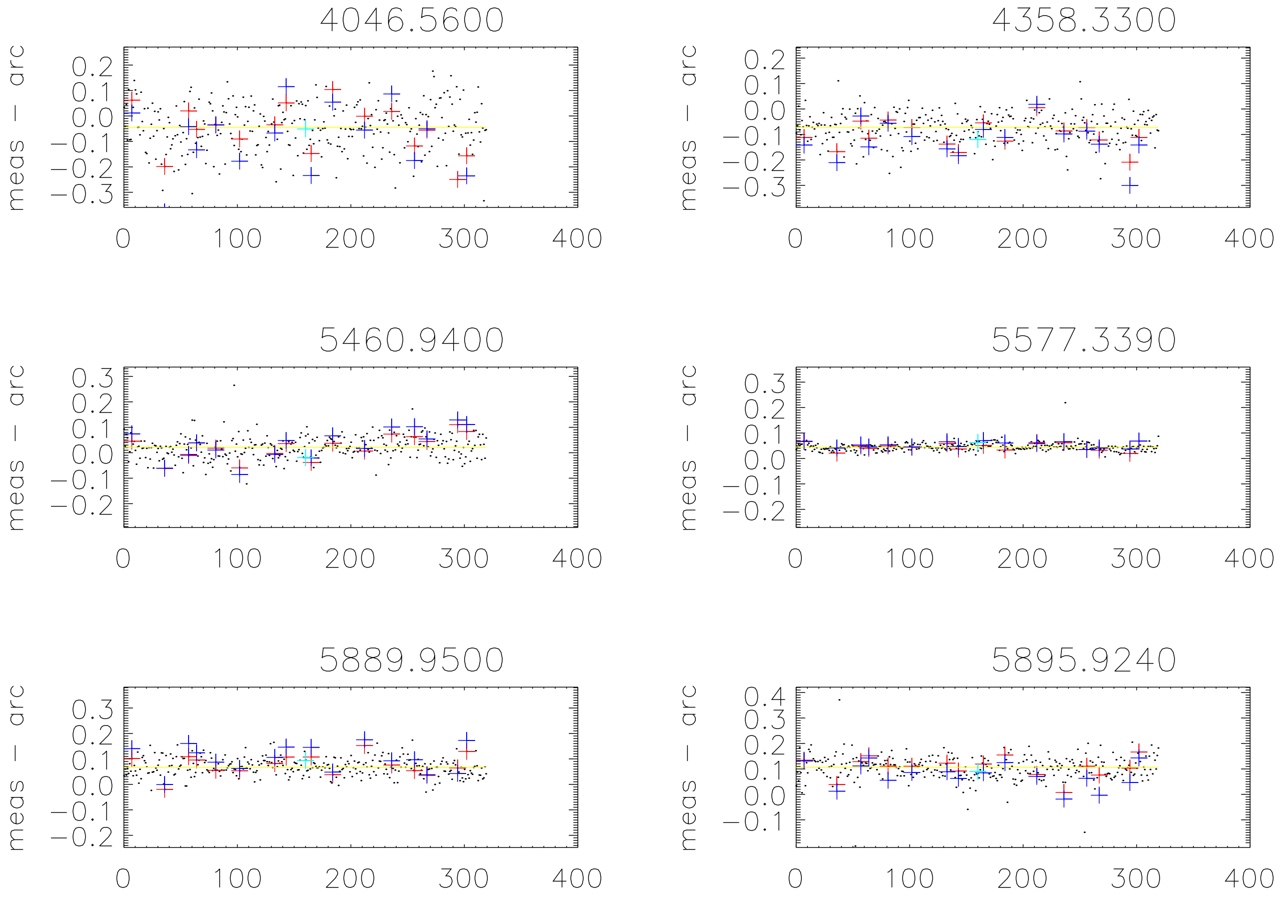

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-b2-00008821.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

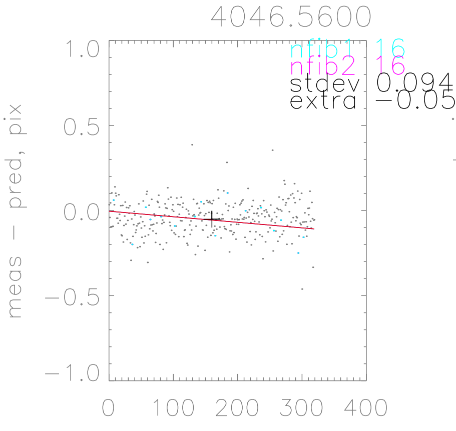

4046.5600
off: −0.11
sig: 0.037
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: −0.11
sig: 0.016
500
400
300
200
100
0
−100
5460.9400
off: 0.04
sig: 0.013
5577.3390
off: 0.06
sig: 0.003
8000
6000
4000
2000
0
−2000
5889.9500
off: 0.10
sig: 0.009
800
600
400
200
0
−200
5895.9240
off: 0.09
sig: 0.010
600
400
200
0
−200

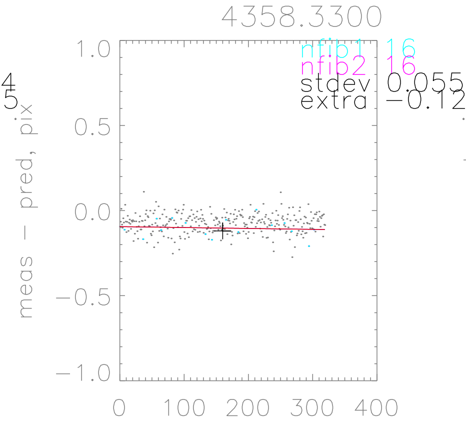

shift(pix)=−0.051
err(pix)= 0.048
oldshift(pix)=−0.114
0
20
40
60
80
100
120
4020
4030
4040
4050
4060
4070
4080

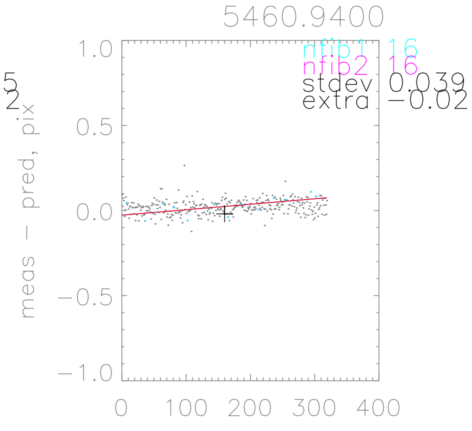

shift(pix)=−0.120
err(pix)= 0.019
oldshift(pix)=−0.112
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

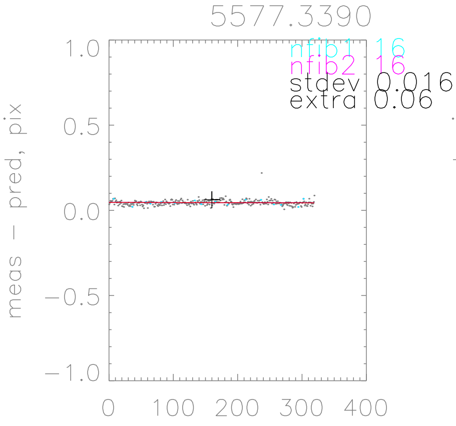

shift(pix)=−0.019
err(pix)= 0.016
oldshift(pix)= 0.035
0
20
40
60
80
100
120
5430
5440
5450
5460
5470
5480
5490

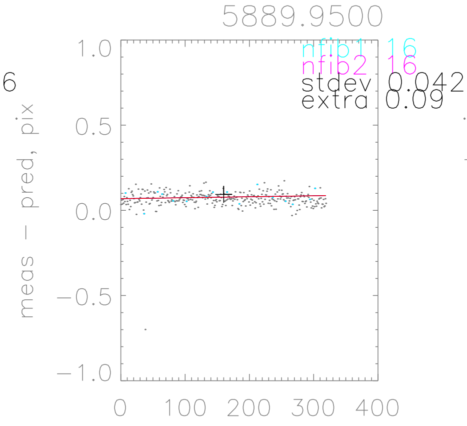

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

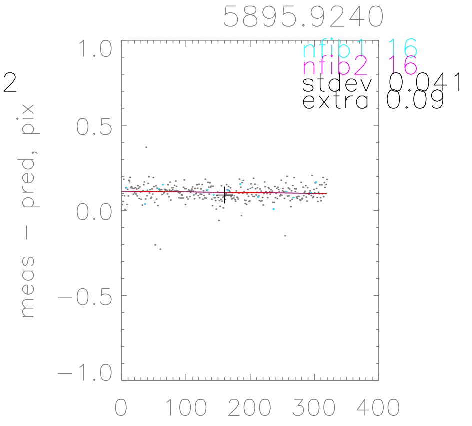

4046.5600
nfib1 16
nfib2 16
stdev 0.094
extra −0.05
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

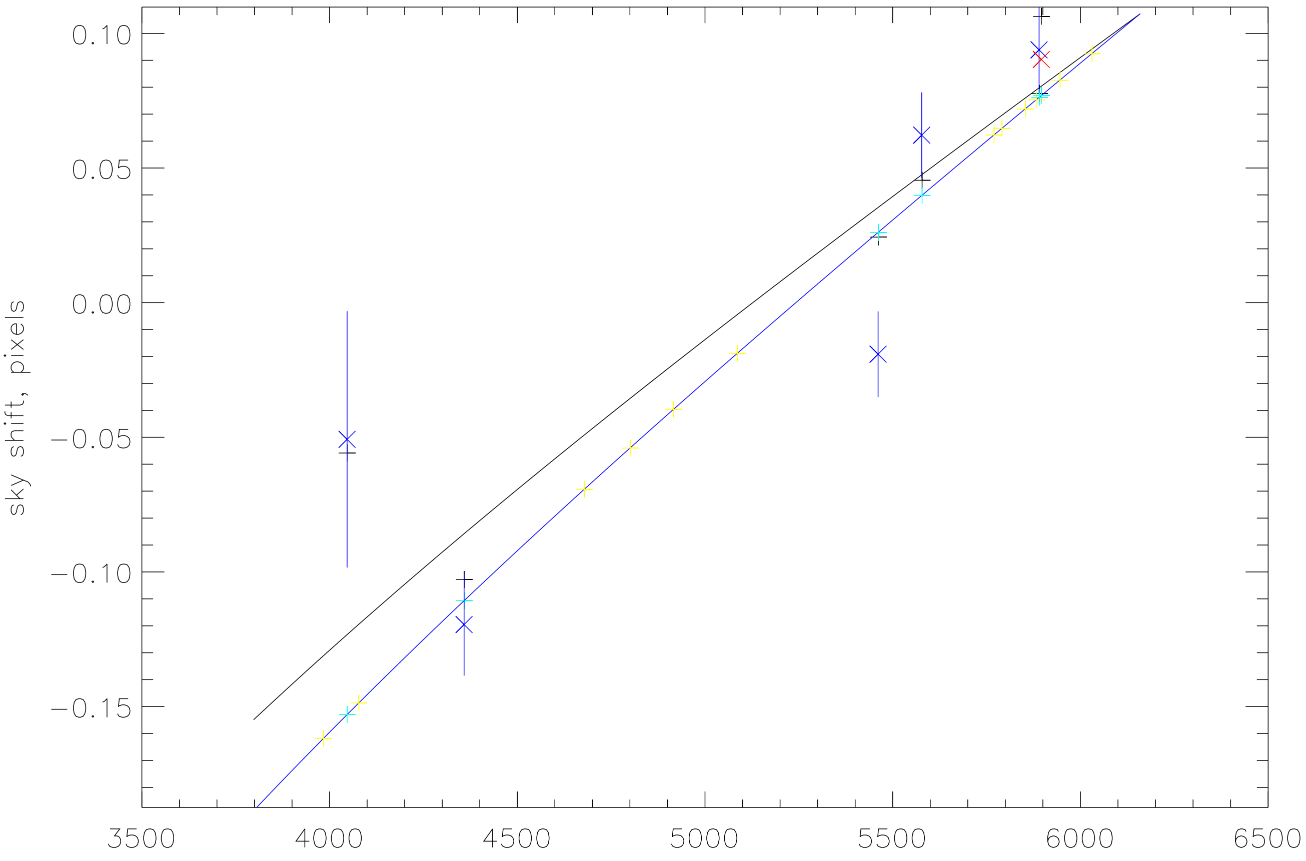

4358.3300
nfib1 16
nfib2 16
stdev 0.055
extra −0.12
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

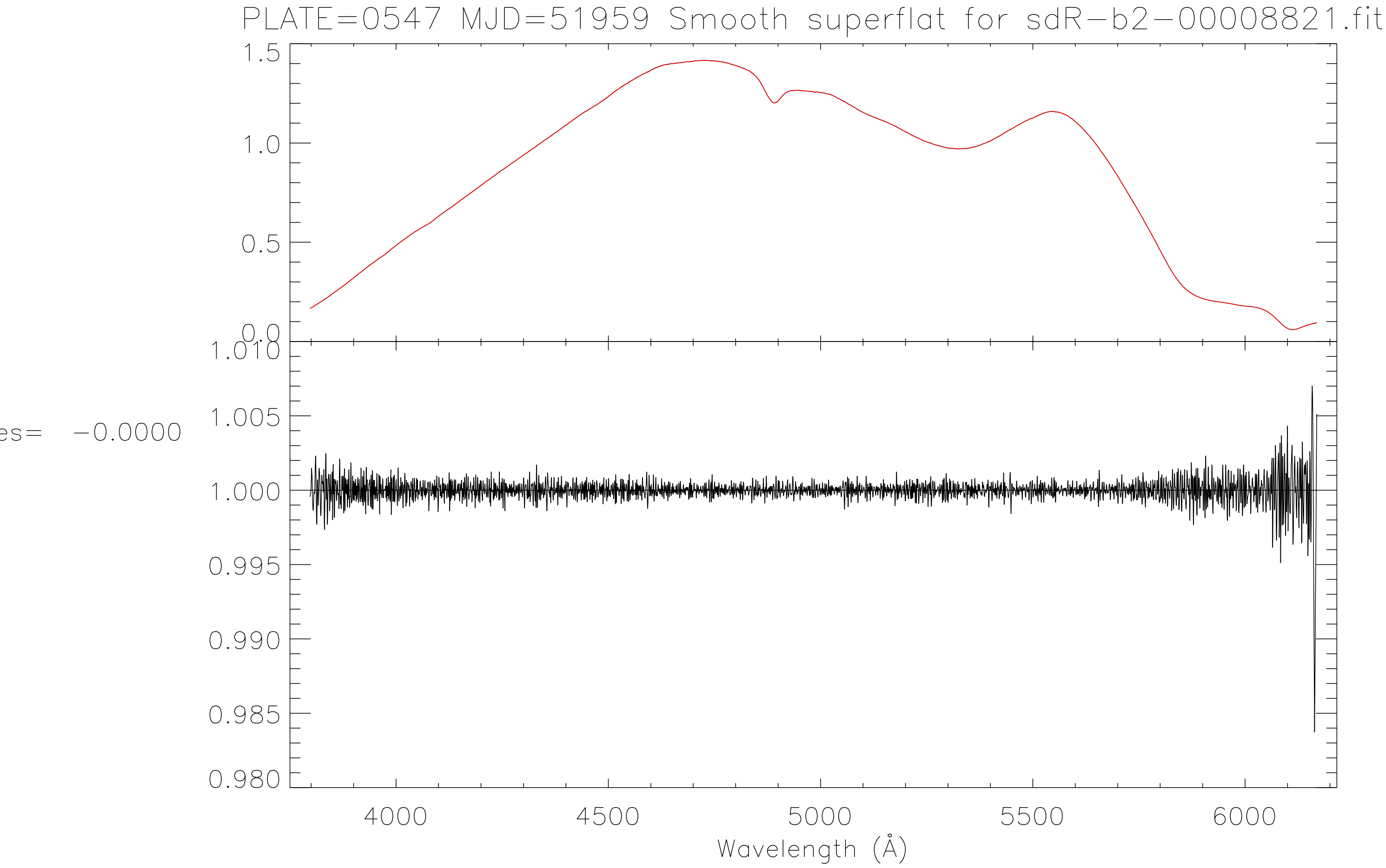

5460.9400
nfib1 16
nfib2 16
stdev 0.039
extra −0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

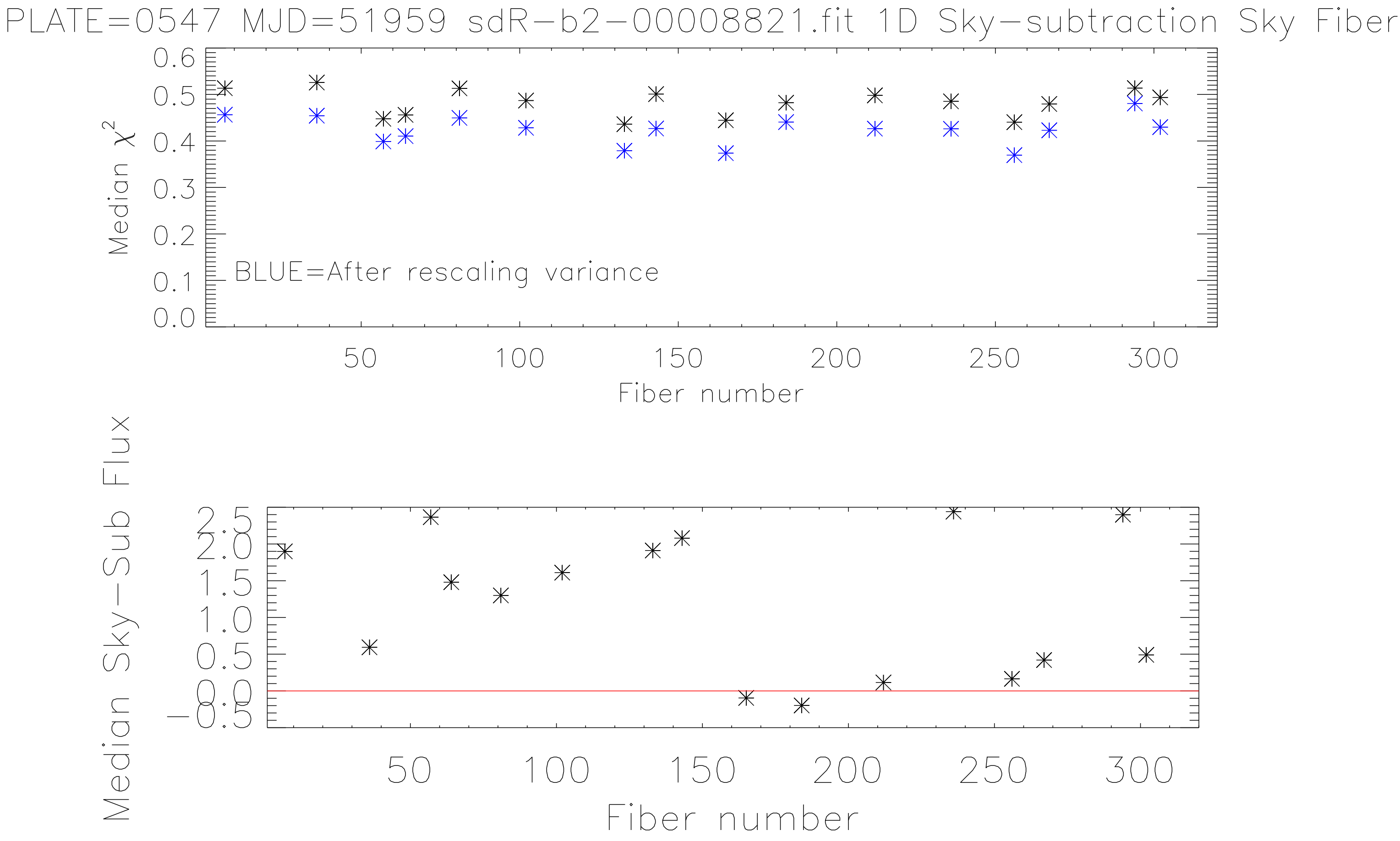

5577.3390
nfib1 16
nfib2 16
stdev 0.016
extra 0.06
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


5889.9500
nfib1 16
nfib2 16
stdev 0.042
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

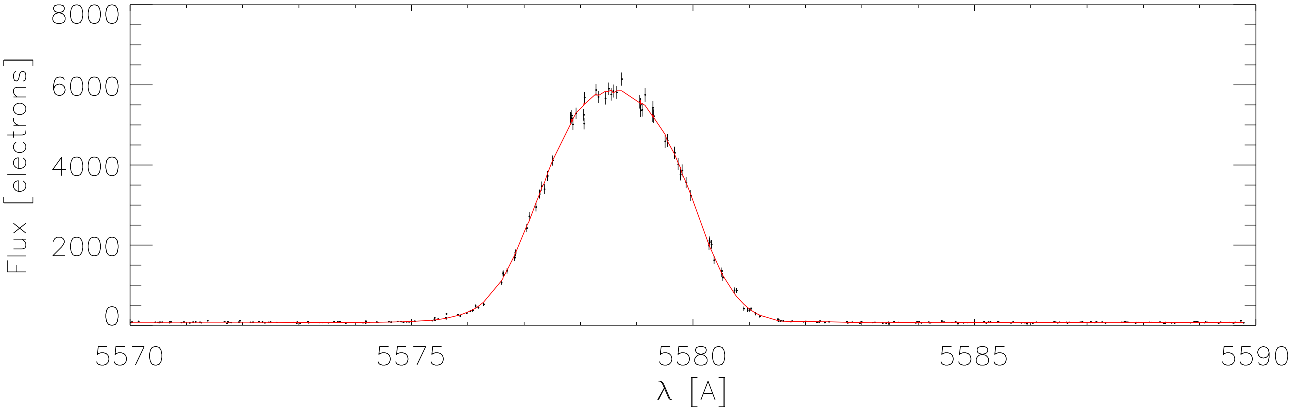

5895.9240
nfib1 16
nfib2 16
stdev 0.041
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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

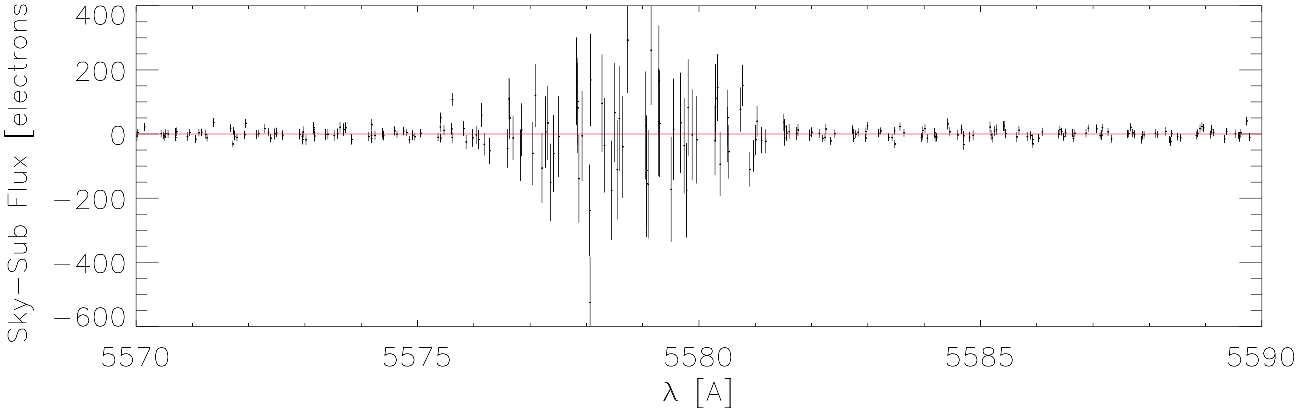

PLATE=0547 MJD=51959 Smooth superflat for sdR-b2-00008821.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

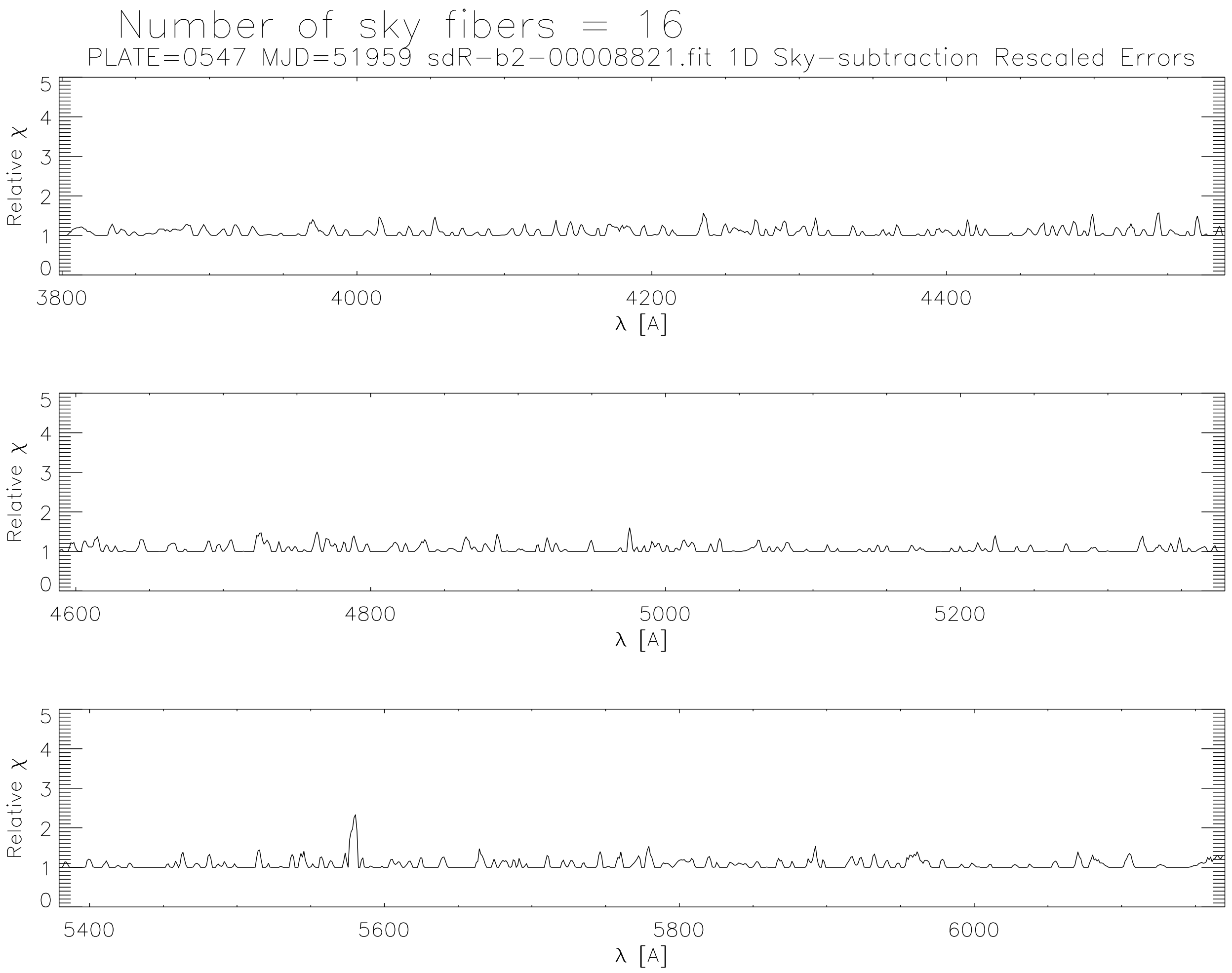

PLATE=0547 MJD=51959 sdR-b2-00008821.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2.5
2.0
1.5
1.0
0.5
0.0
−0.5
50
100
150
200
250
300
Fiber number

PLATE=0547 MJD=51959 sdR-b2-00008821.fit 1D Sky-subtraction Sky Fibers



PLATE=0547 MJD=51959 sdR-b2-00008821.fit 1D Sky-subtraction Sky-subtracted Sky F

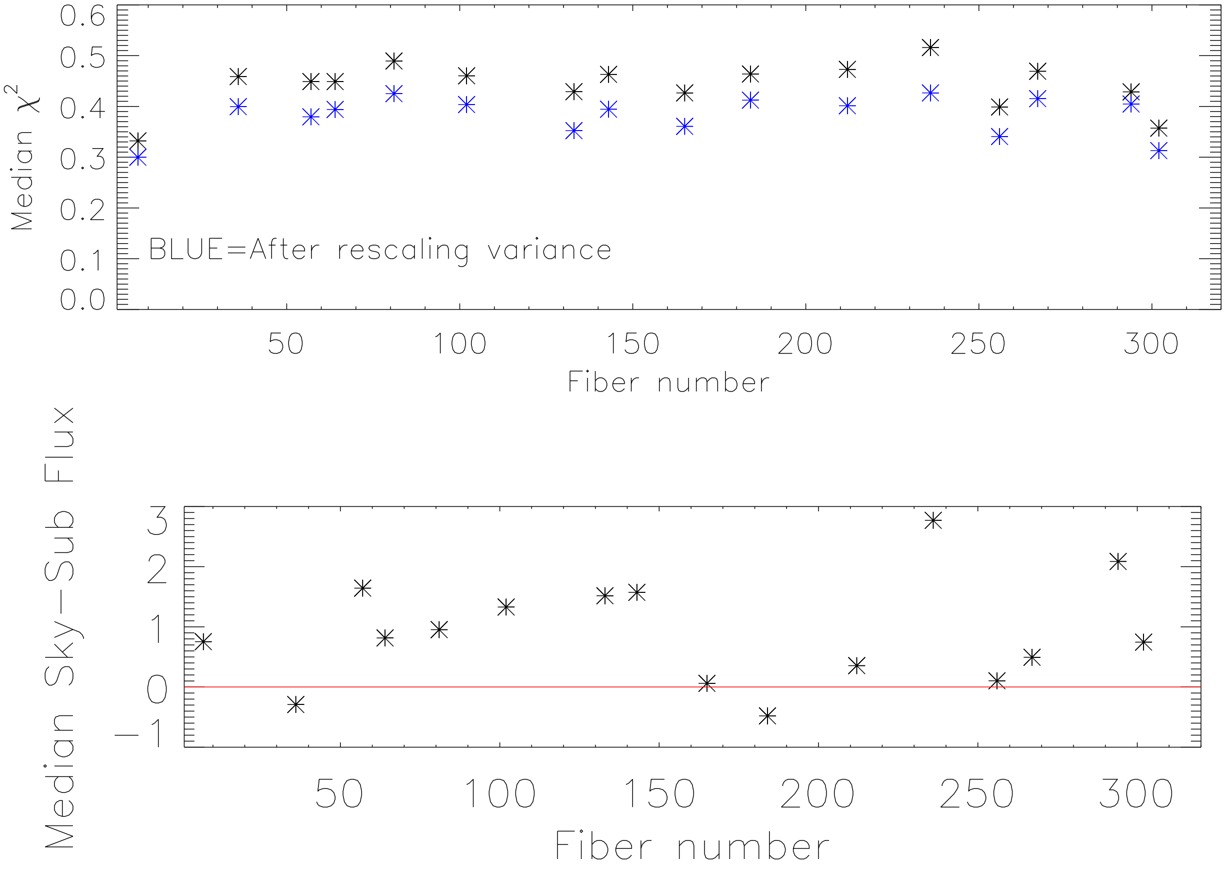


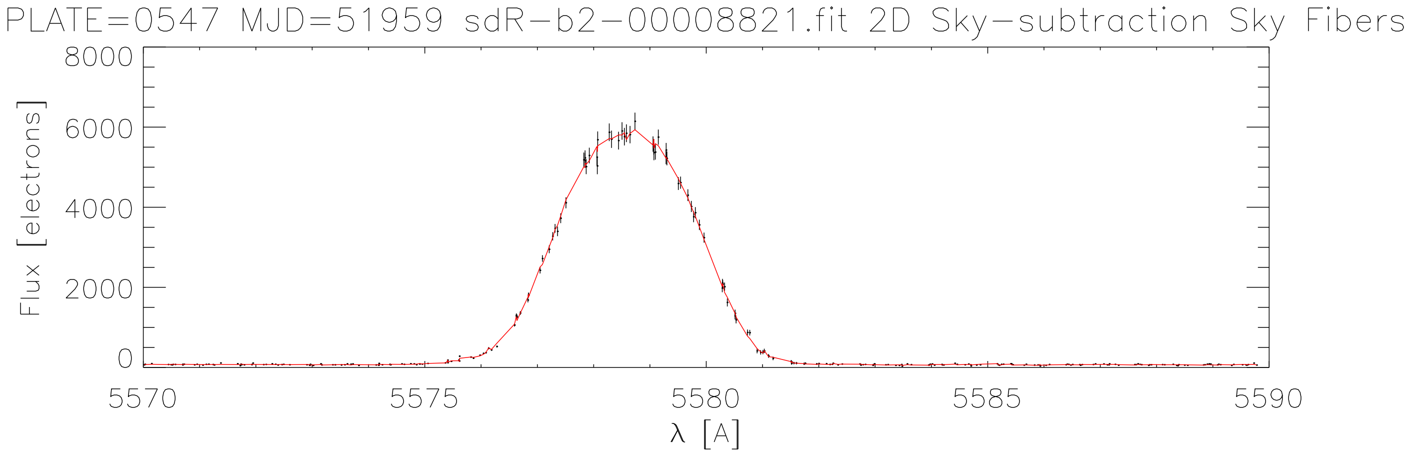


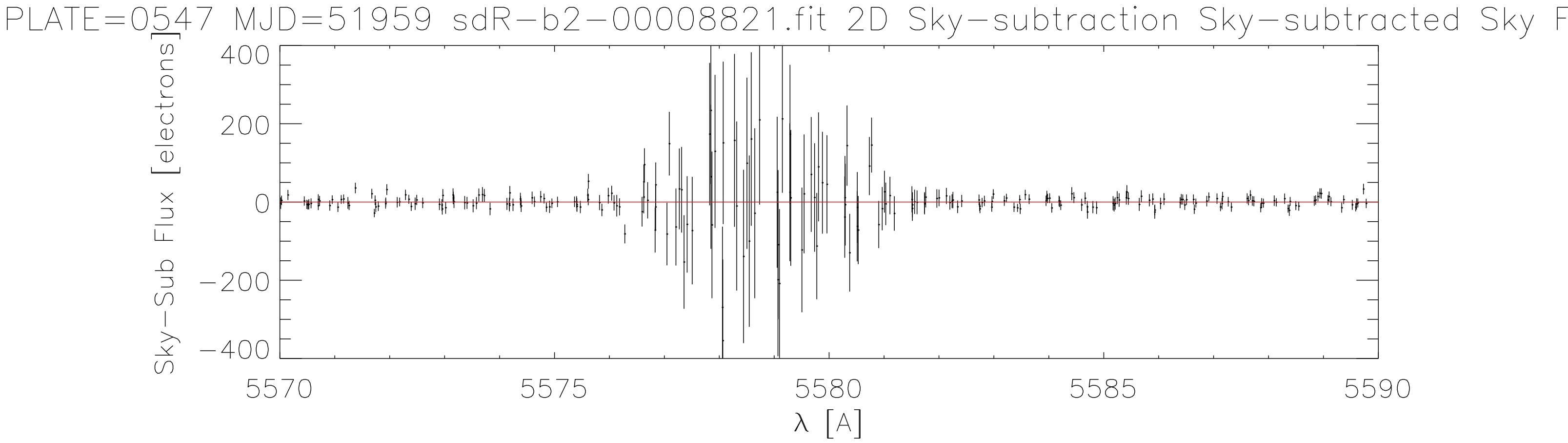
Number of sky fibers = 16

PLATE=0547 MJD=51959 sdR-b2-00008821.fit 1D Sky-subtraction Rescaled Errors

PLATE=0547 MJD=51959 sdR-b2-00008821.fit 2D Sky-subtraction Sky Fiber

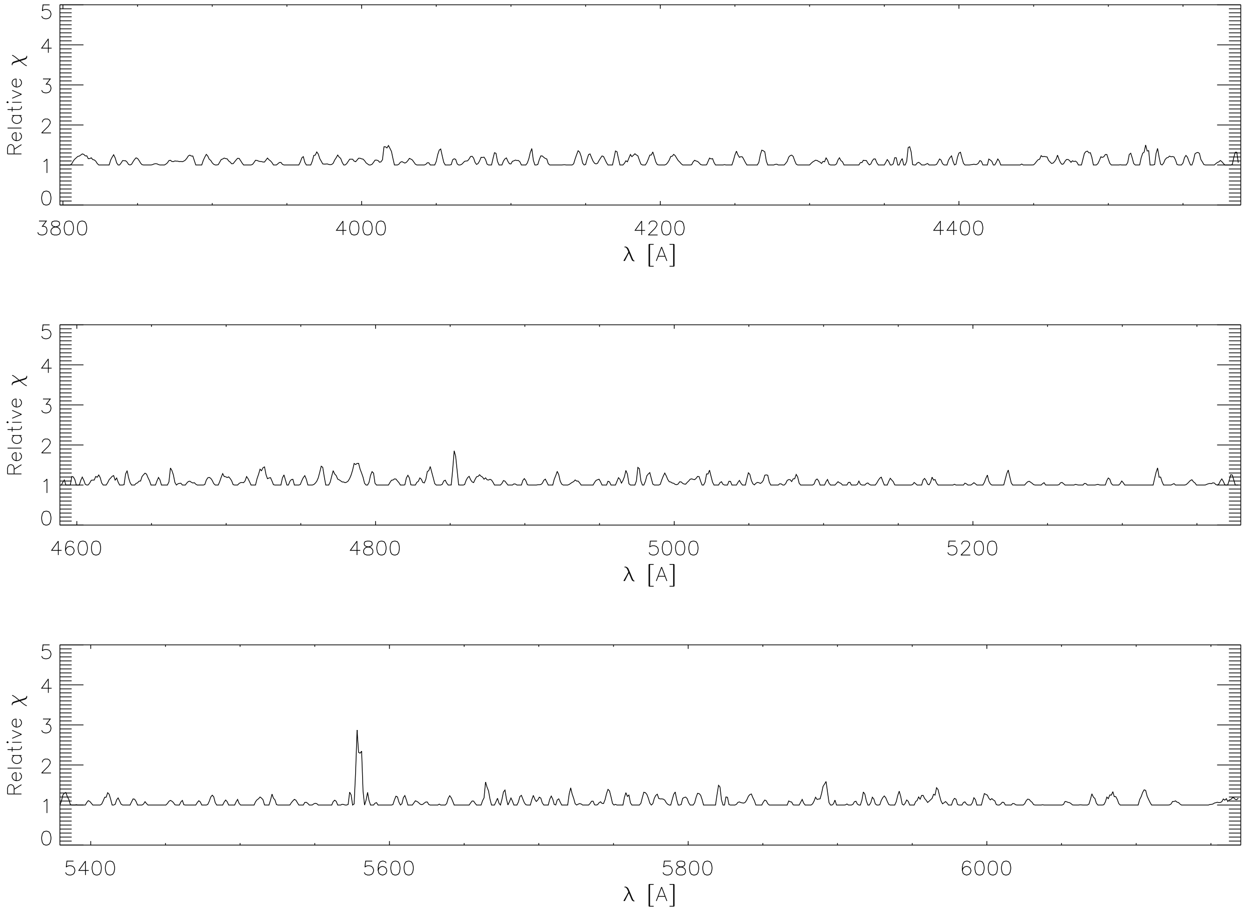


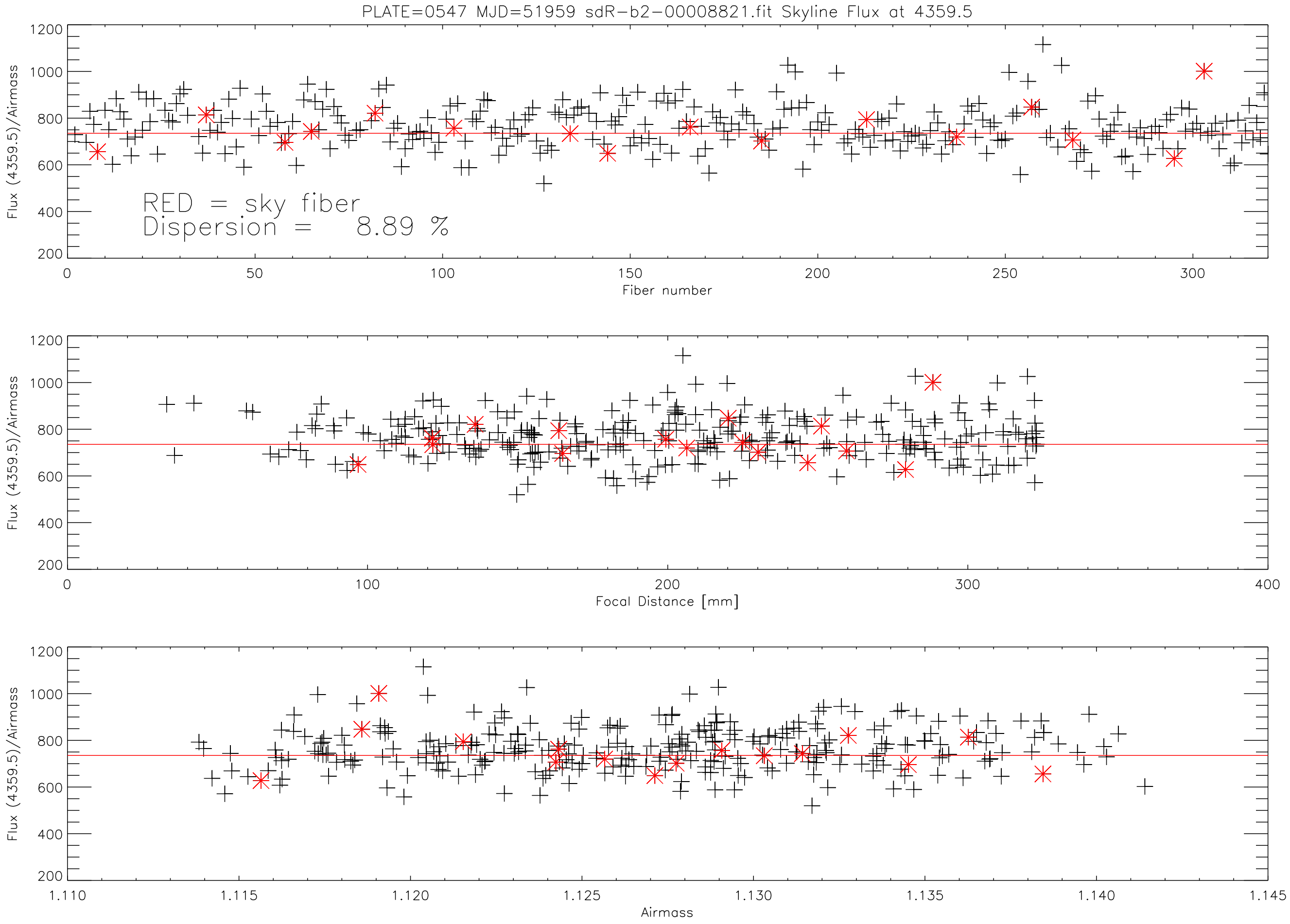

PLATE=0547 MJD=51959 sdR-b2-00008821.fit 2D Sky-subtraction Sky Fibers

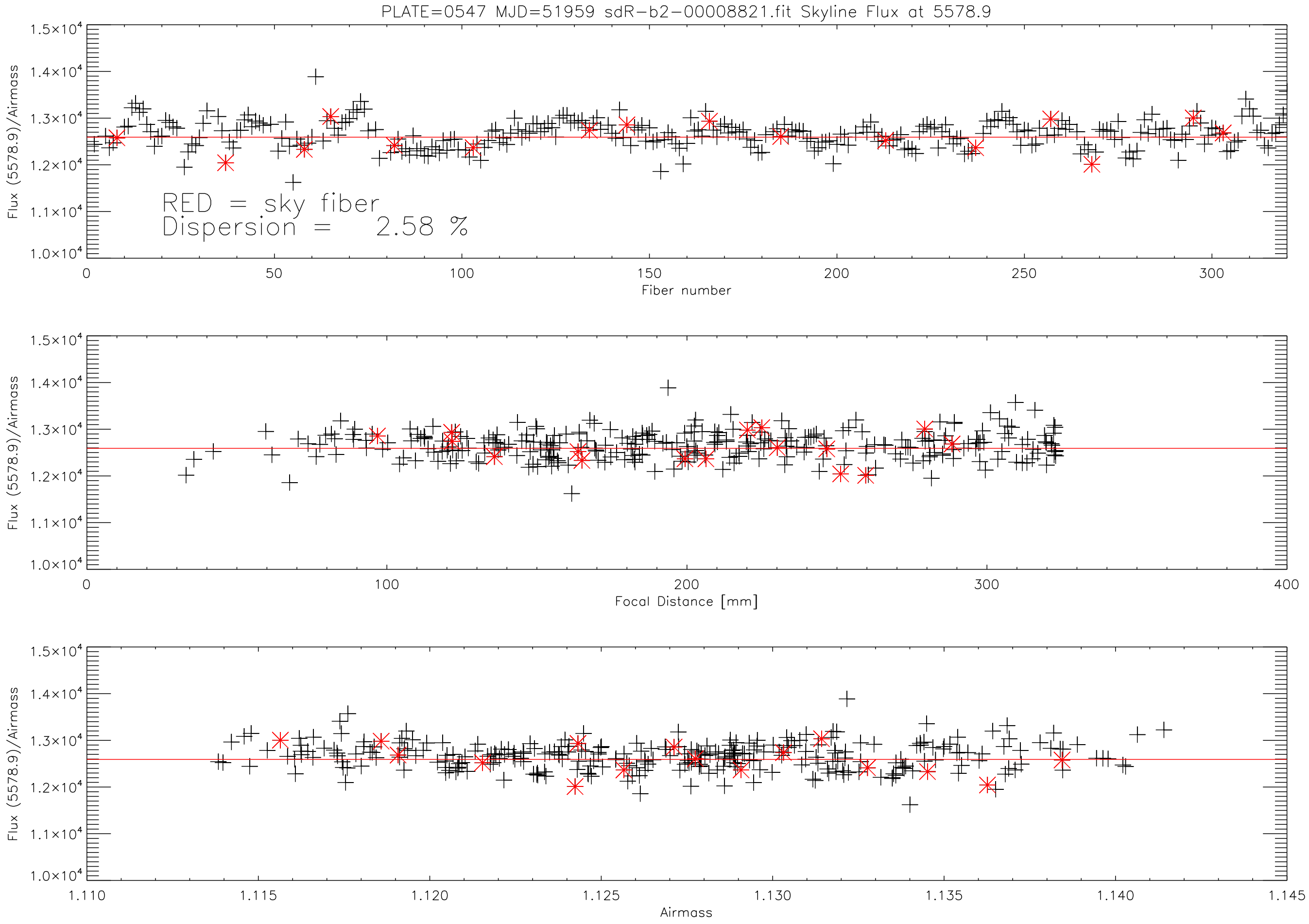

PLATE=0547 MJD=51959 sdR-b2-00008821.fit 2D Sky-subtraction Sky-subtracted Sky F

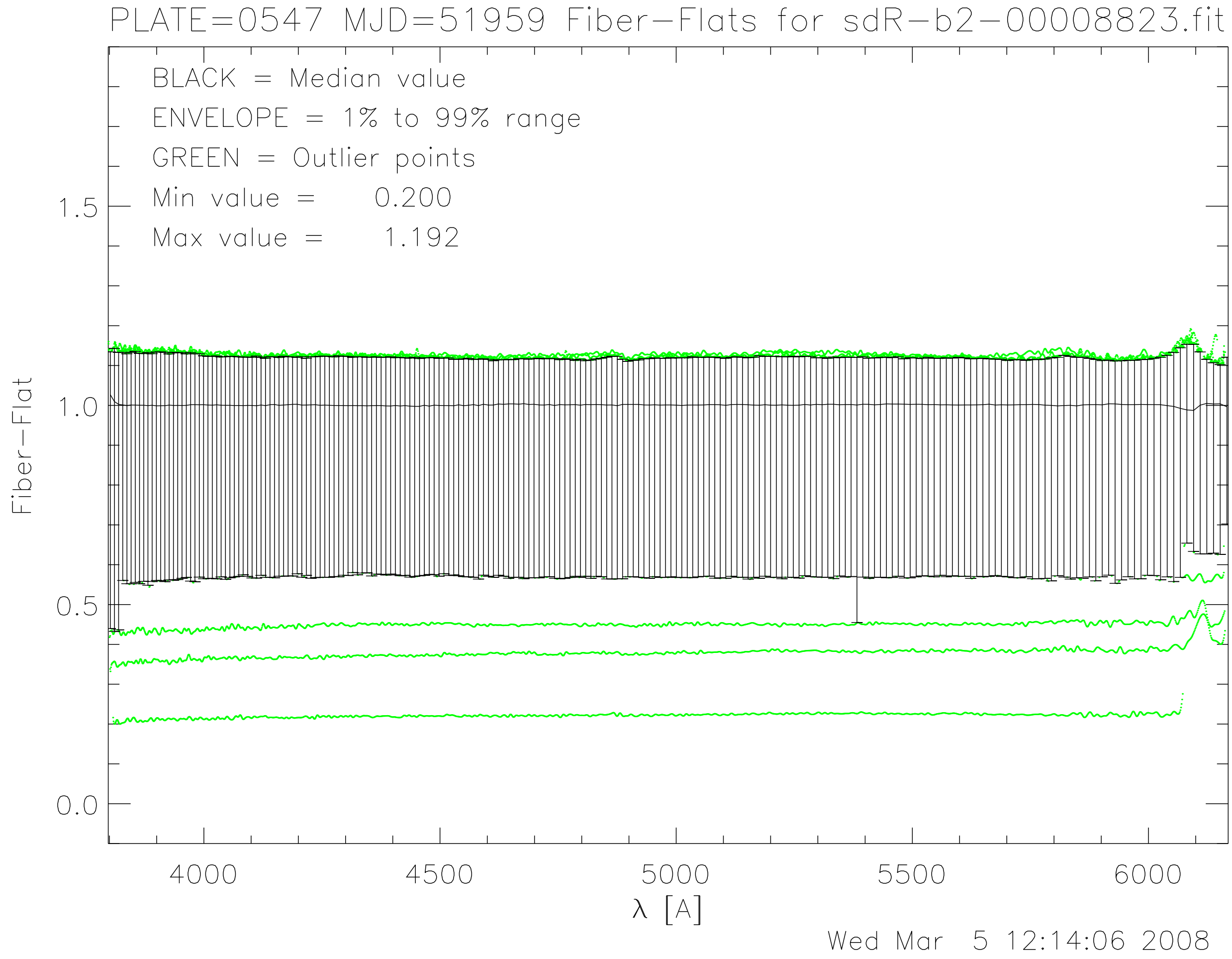
Number of sky fibers = 16

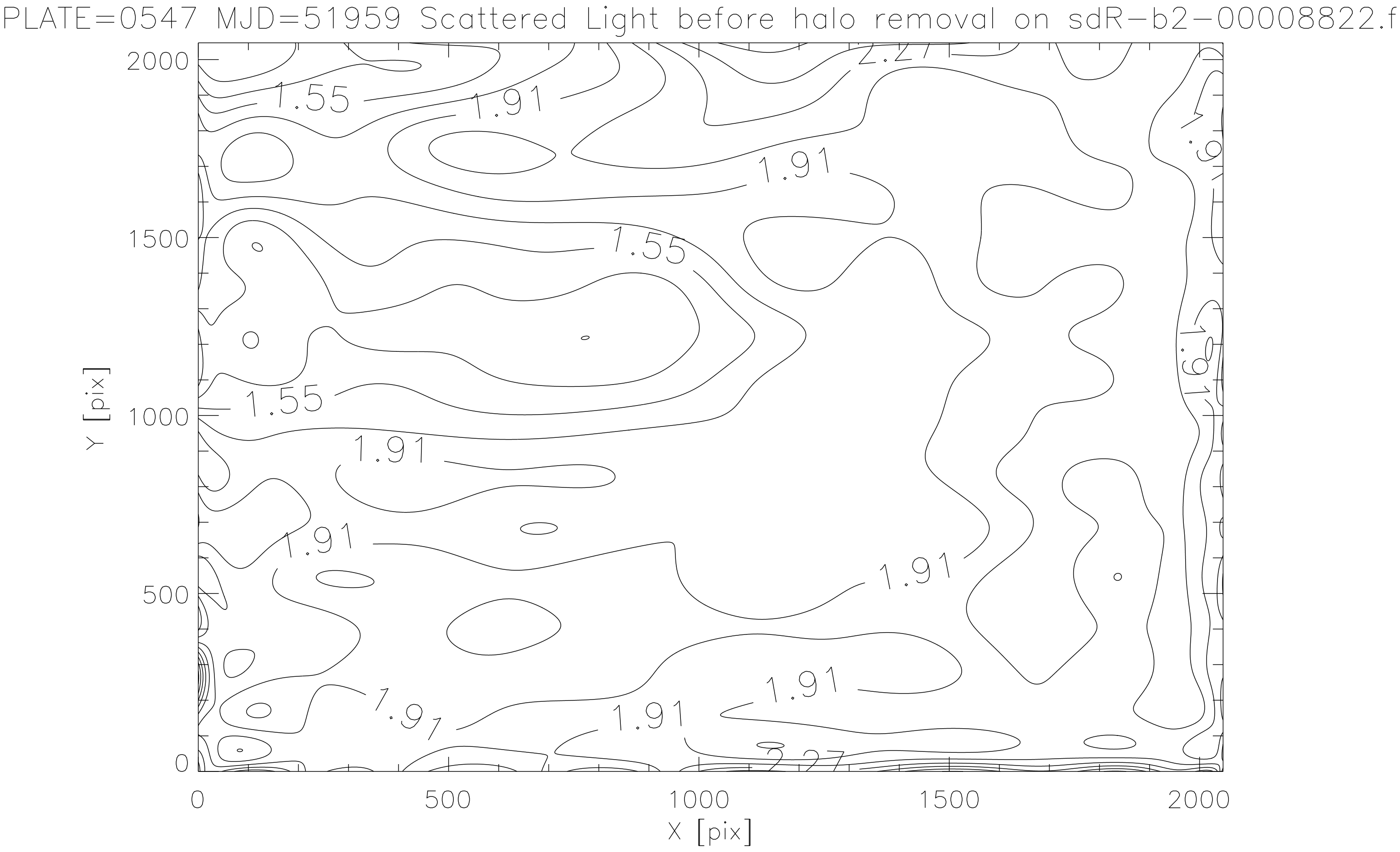
PLATE=0547 MJD=51959 sdR-b2-00008821.fit 2D Sky-subtraction Rescaled Errors




PLATE=0547 MJD=51959 sdR-b2-00008821.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1200
1000
800
600
400
200
RED = sky fiber
Dispersion = 8.89 %
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
1.110
1.115
1.120
1.125
1.130
1.135
1.140
1.145
Airmass

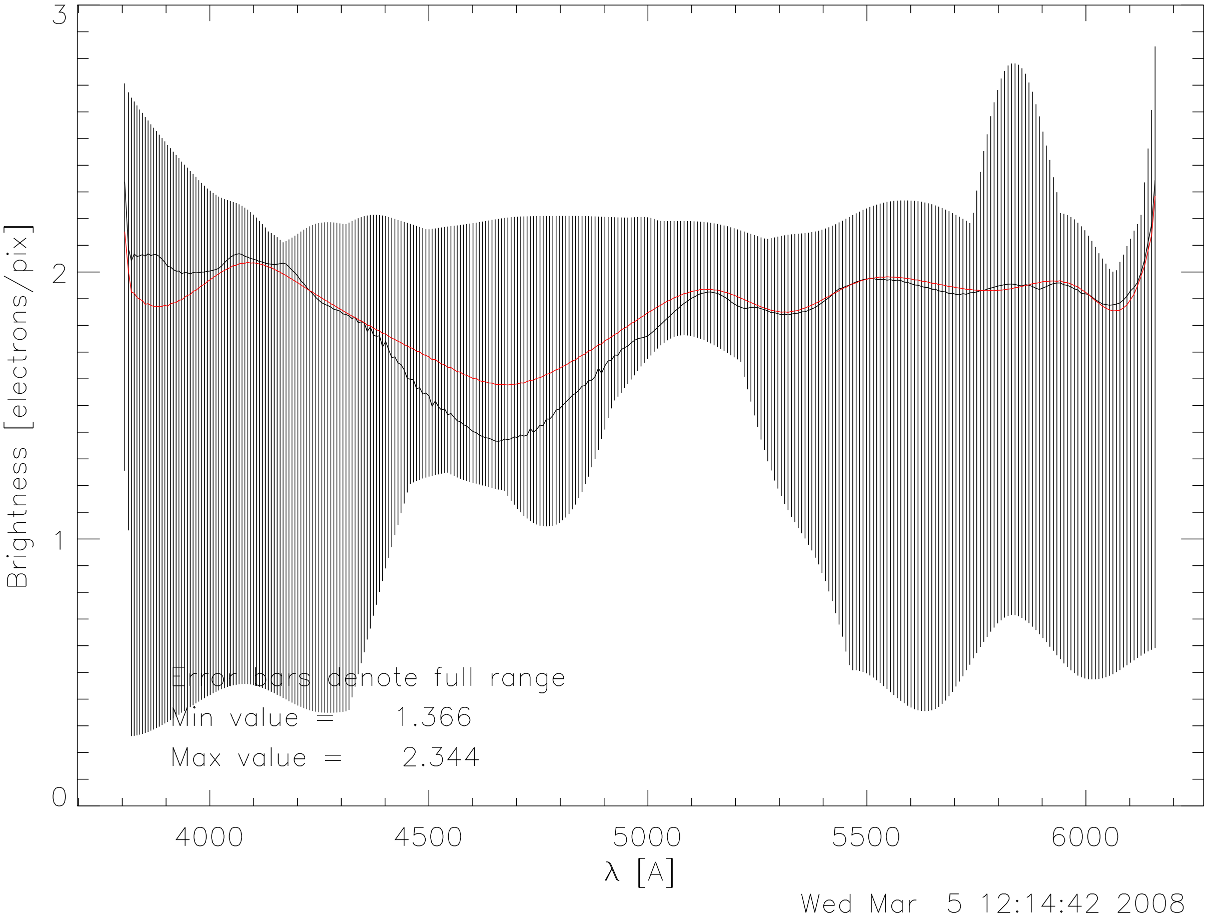

PLATE=0547 MJD=51959 sdR-b2-00008821.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.0×10⁴
1.1×10⁴
1.2×10⁴
1.3×10⁴
1.4×10⁴
1.5×10⁴
RED = sky fiber
Dispersion = 2.58 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.0×10⁴
1.1×10⁴
1.2×10⁴
1.3×10⁴
1.4×10⁴
1.5×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.0×10⁴
1.1×10⁴
1.2×10⁴
1.3×10⁴
1.4×10⁴
1.5×10⁴
1.110
1.115
1.120
1.125
1.130
1.135
1.140
1.145
Airmass

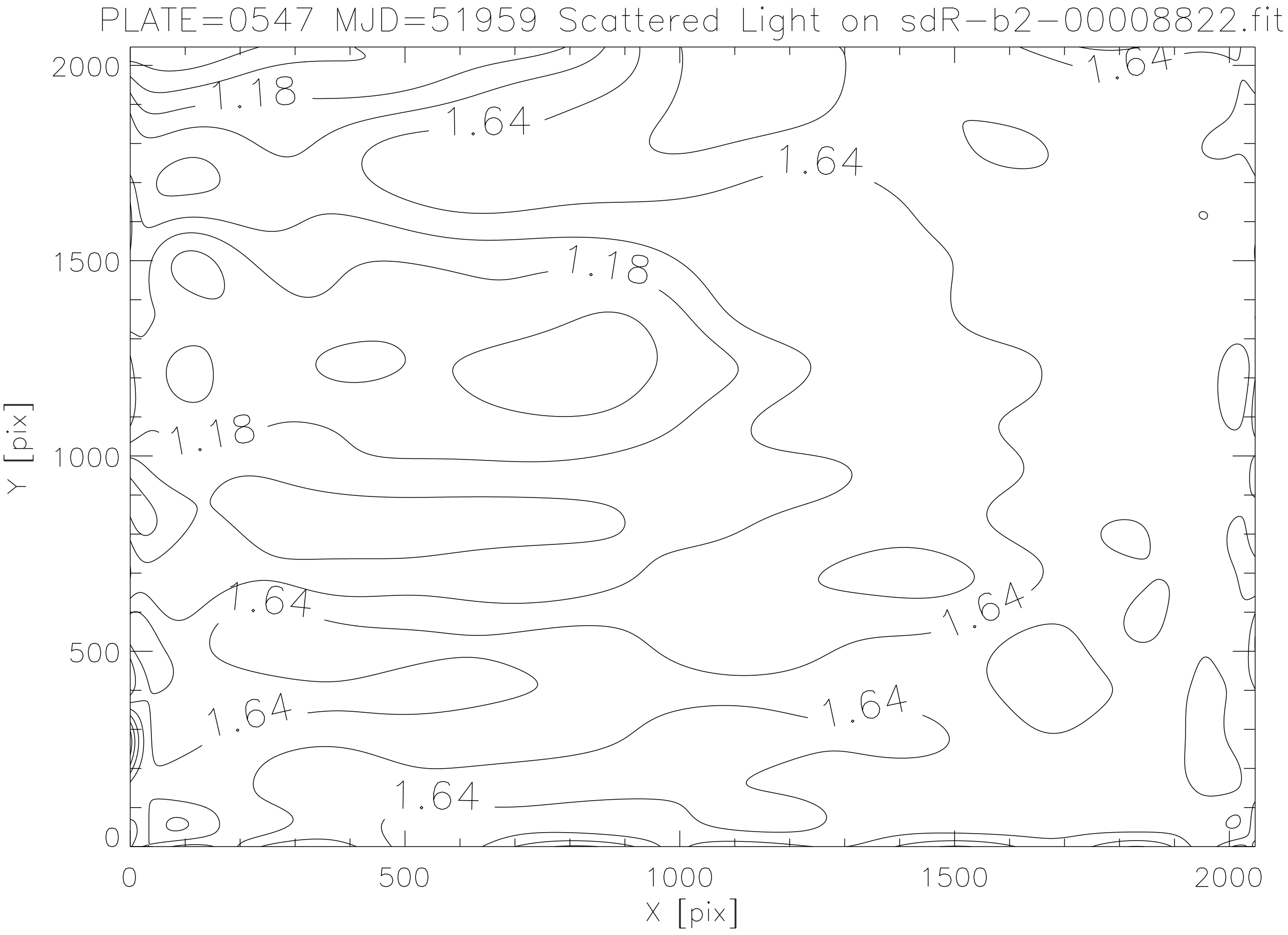

PLATE=0547 MJD=51959 Fiber−Flats for sdR−b2−00008823.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.200
Max value = 1.192
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Wed Mar 5 12:14:06 2008



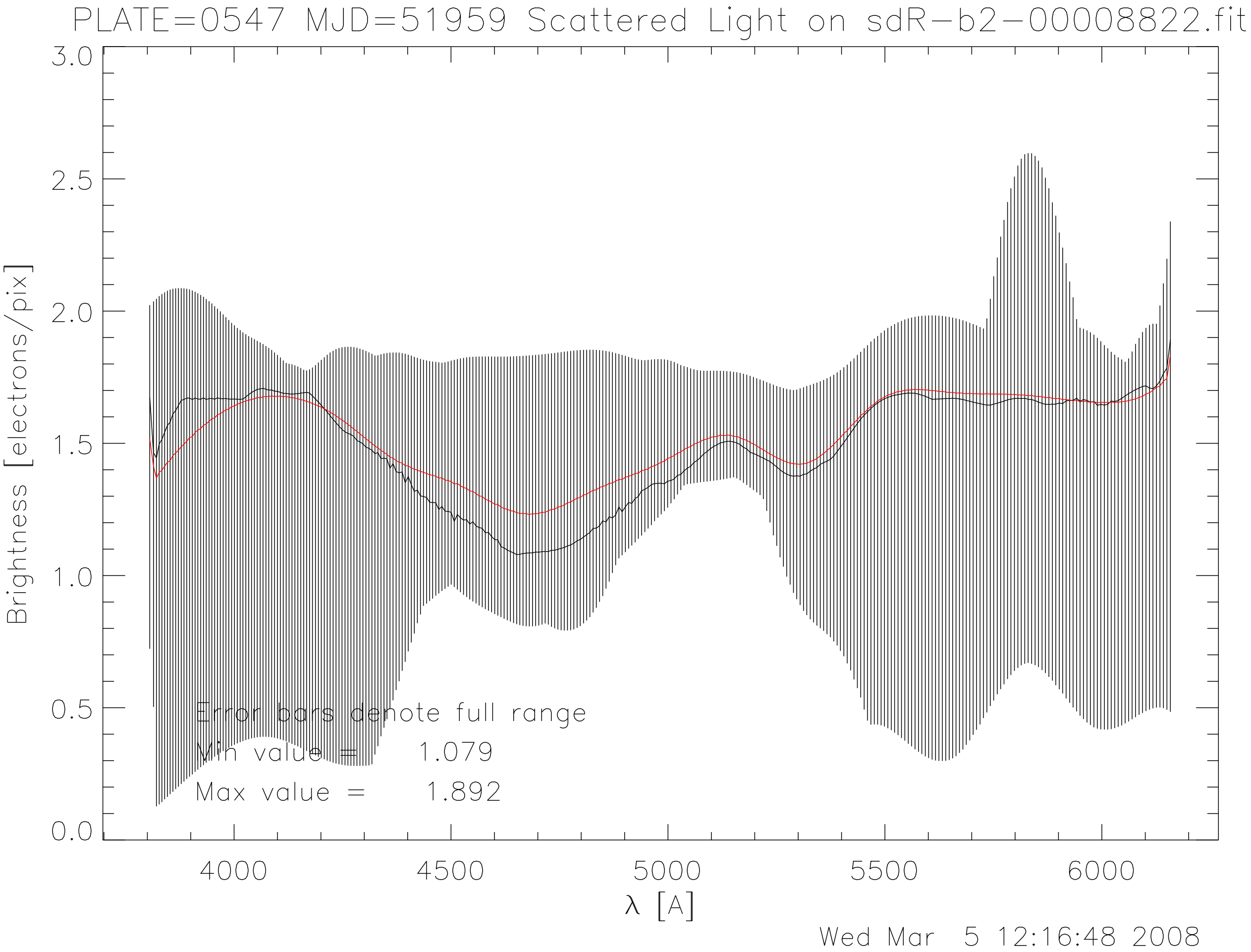
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008822.f

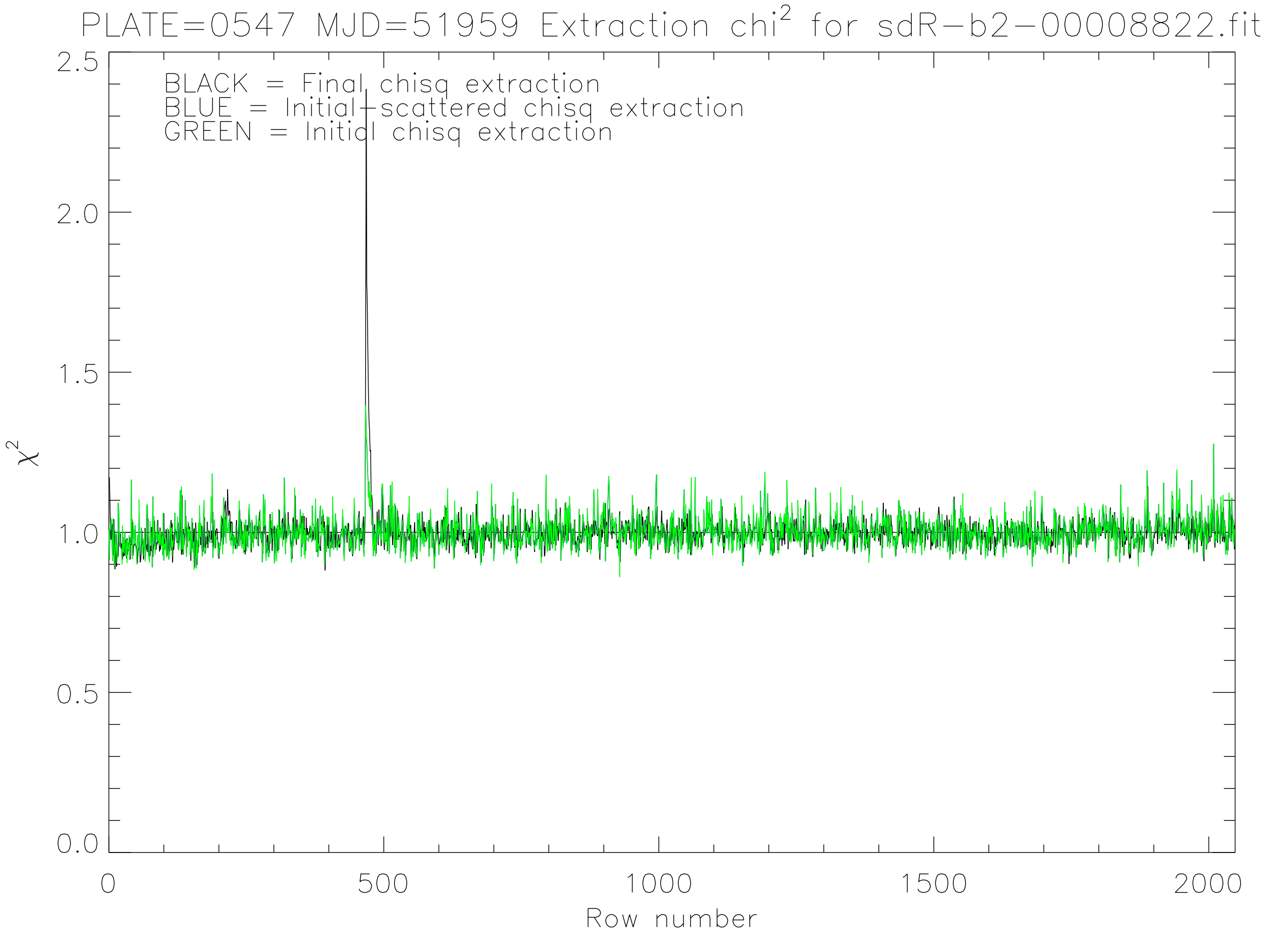
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-b2-00008822.f

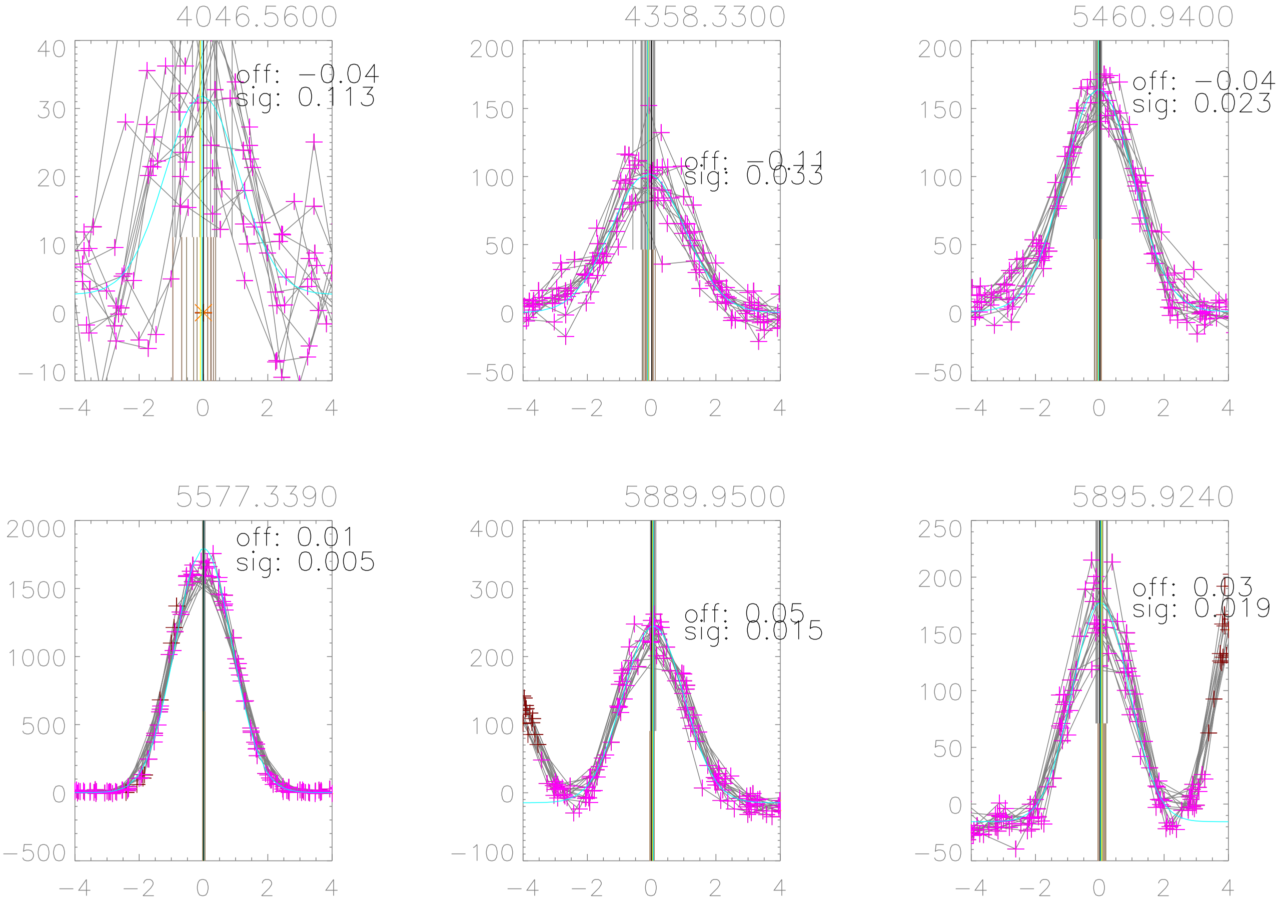


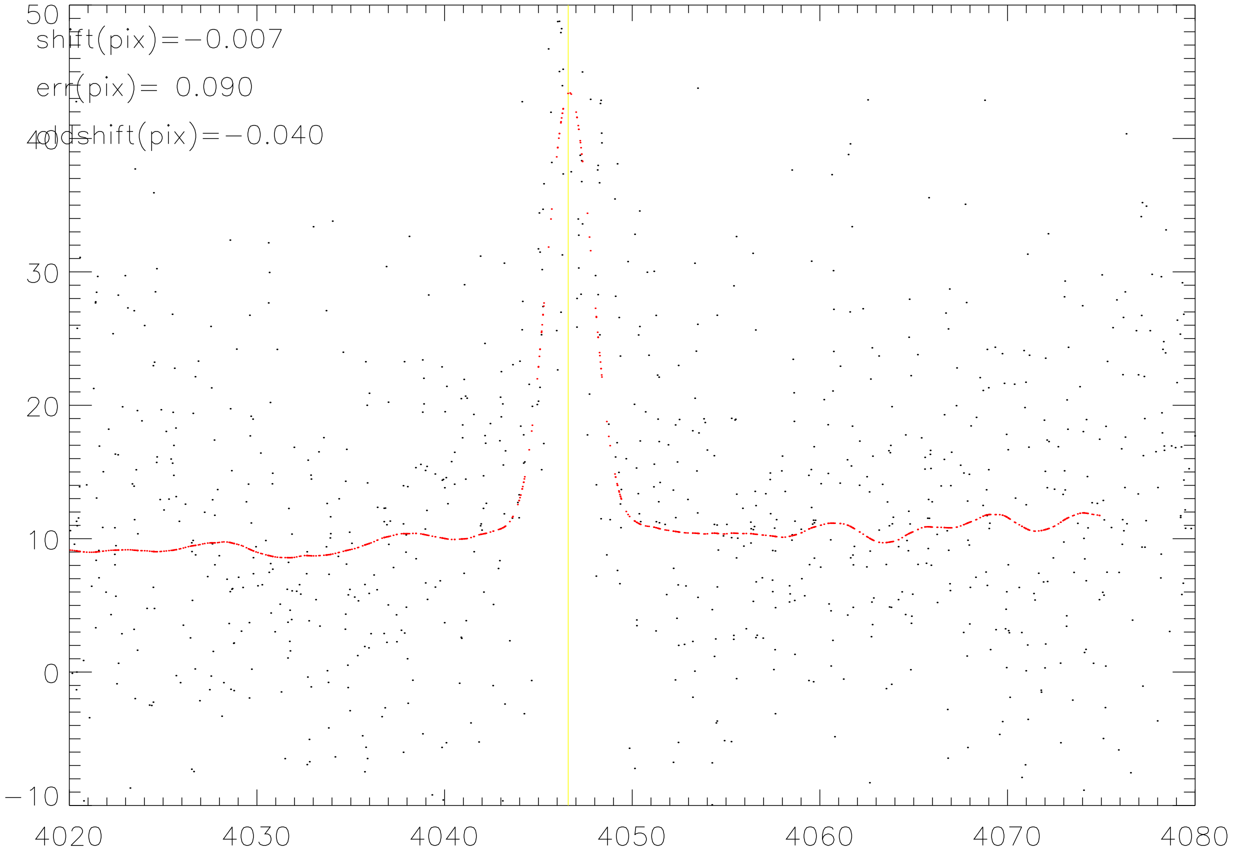


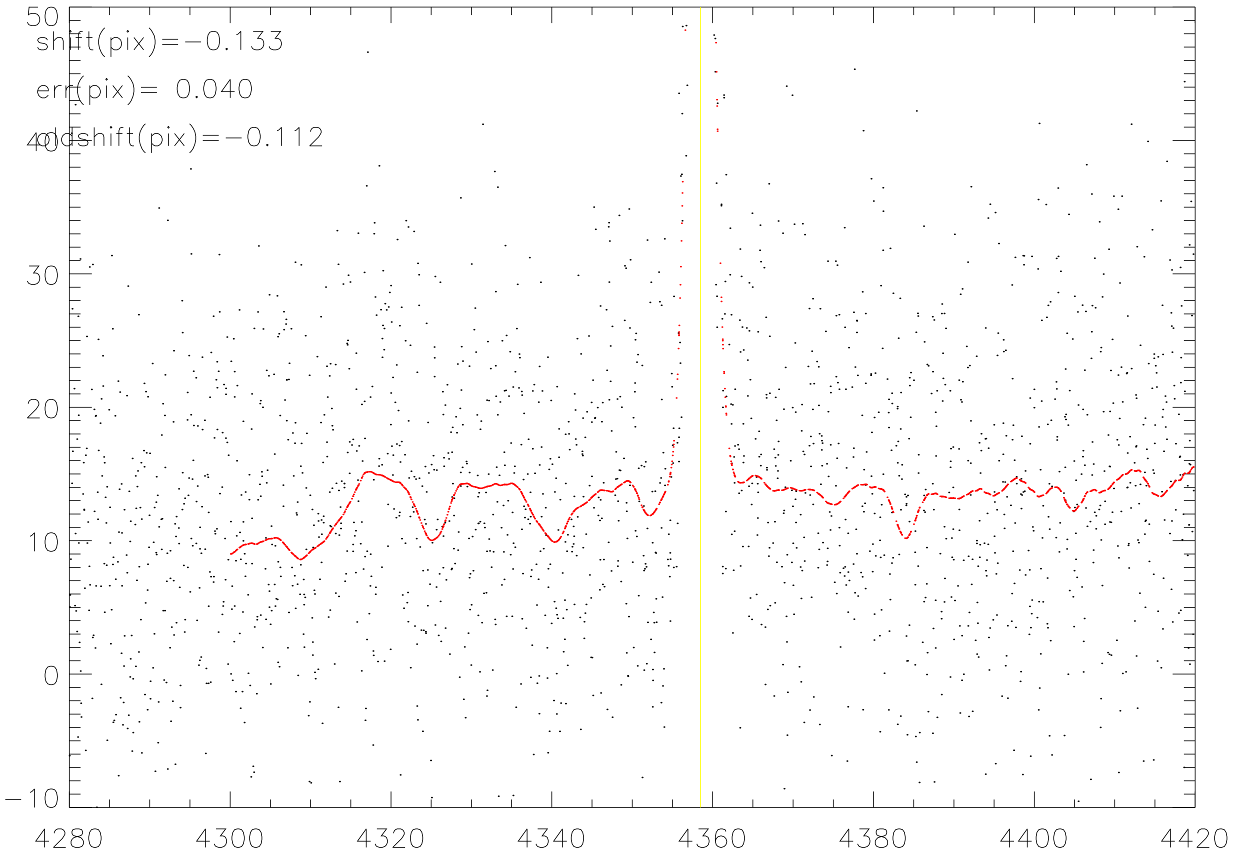
PLATE=0547 MJD=51959 Scattered Light on sdR-b2-00008822.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
1.18
1.64
1.64
1.64
1.18
1.18
1.64
1.64
1.64
1.64
1.64

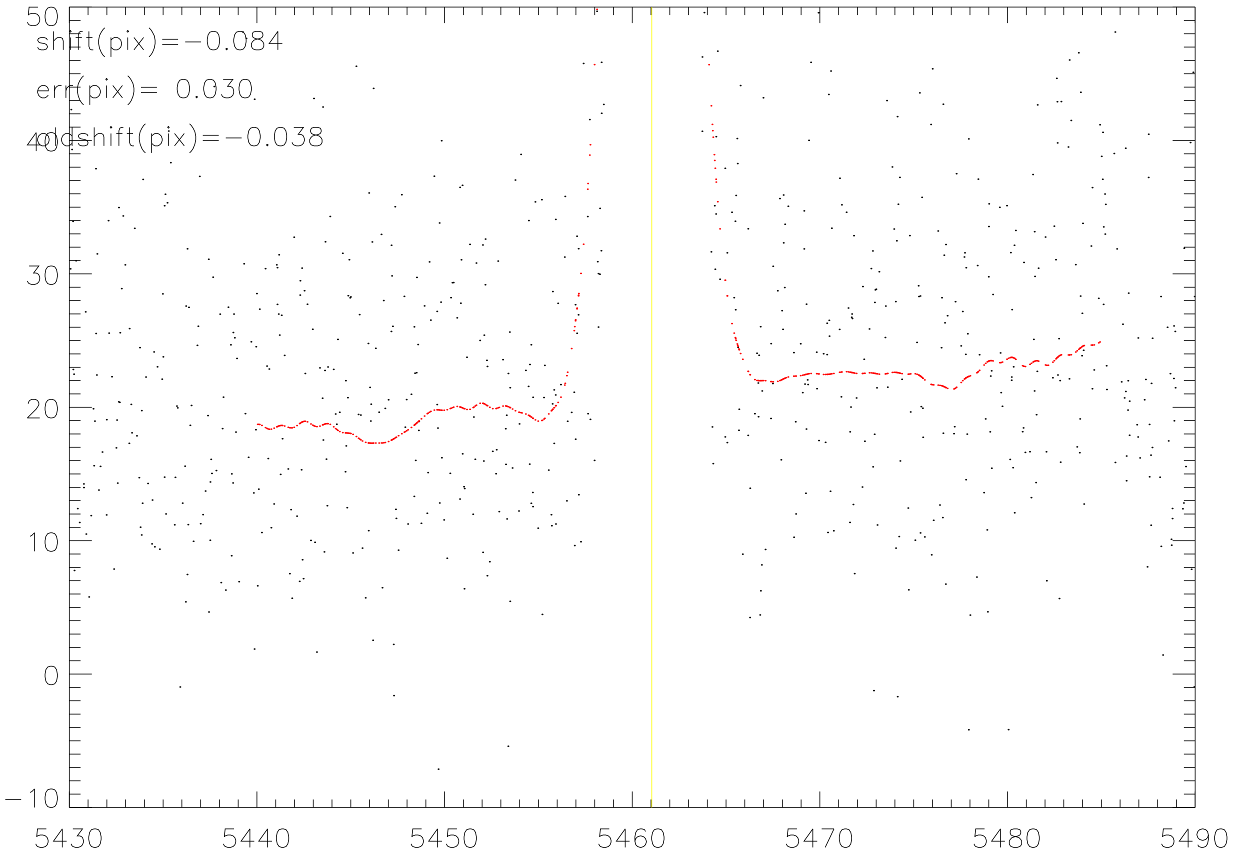

PLATE=0547 MJD=51959 Scattered Light on sdR-b2-00008822.fit
Brightness [electrons/pix]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 1.079
Max value = 1.892
Wed Mar 5 12:16:48 2008

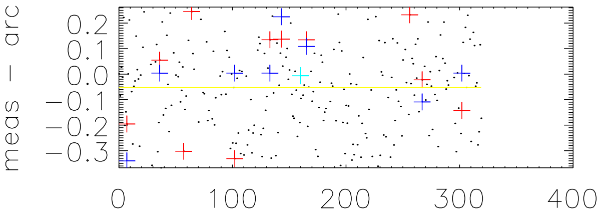

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-b2-00008822.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

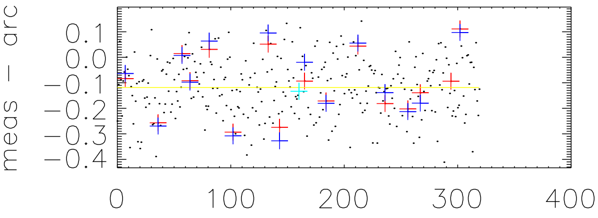

4046.5600
off: −0.04
sig: 0.113
4358.3300
off: −0.11
sig: 0.033
5460.9400
off: −0.04
sig: 0.023
5577.3390
off: 0.01
sig: 0.005
5889.9500
off: 0.05
sig: 0.015
5895.9240
off: 0.03
sig: 0.019
−4
−2
0
2
4

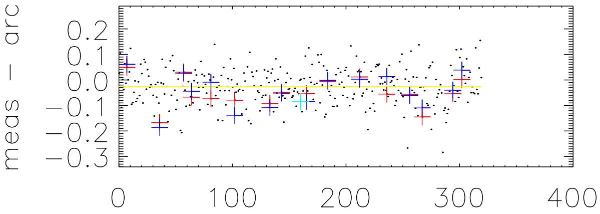

shift(pix)=−0.007
err(pix)= 0.090
oldshift(pix)=−0.040
50
40
30
20
10
0
−10
4020
4030
4040
4050
4060
4070
4080

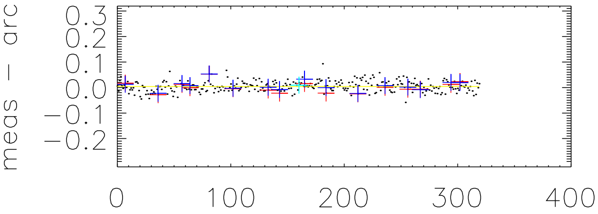

shift(pix)=−0.133
err(pix)= 0.040
oldshift(pix)=−0.112
50
40
30
20
10
0
−10
4280
4300
4320
4340
4360
4380
4400
4420

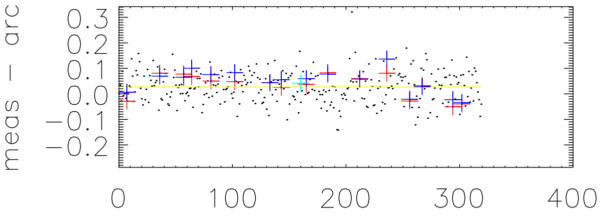

shift(pix)=−0.084
err(pix)= 0.030
oldshift(pix)=−0.038
50
40
30
20
10
0
−10
5430
5440
5450
5460
5470
5480
5490

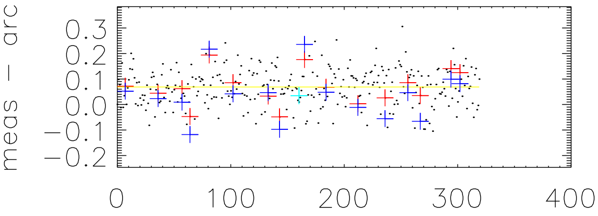

4046.5600

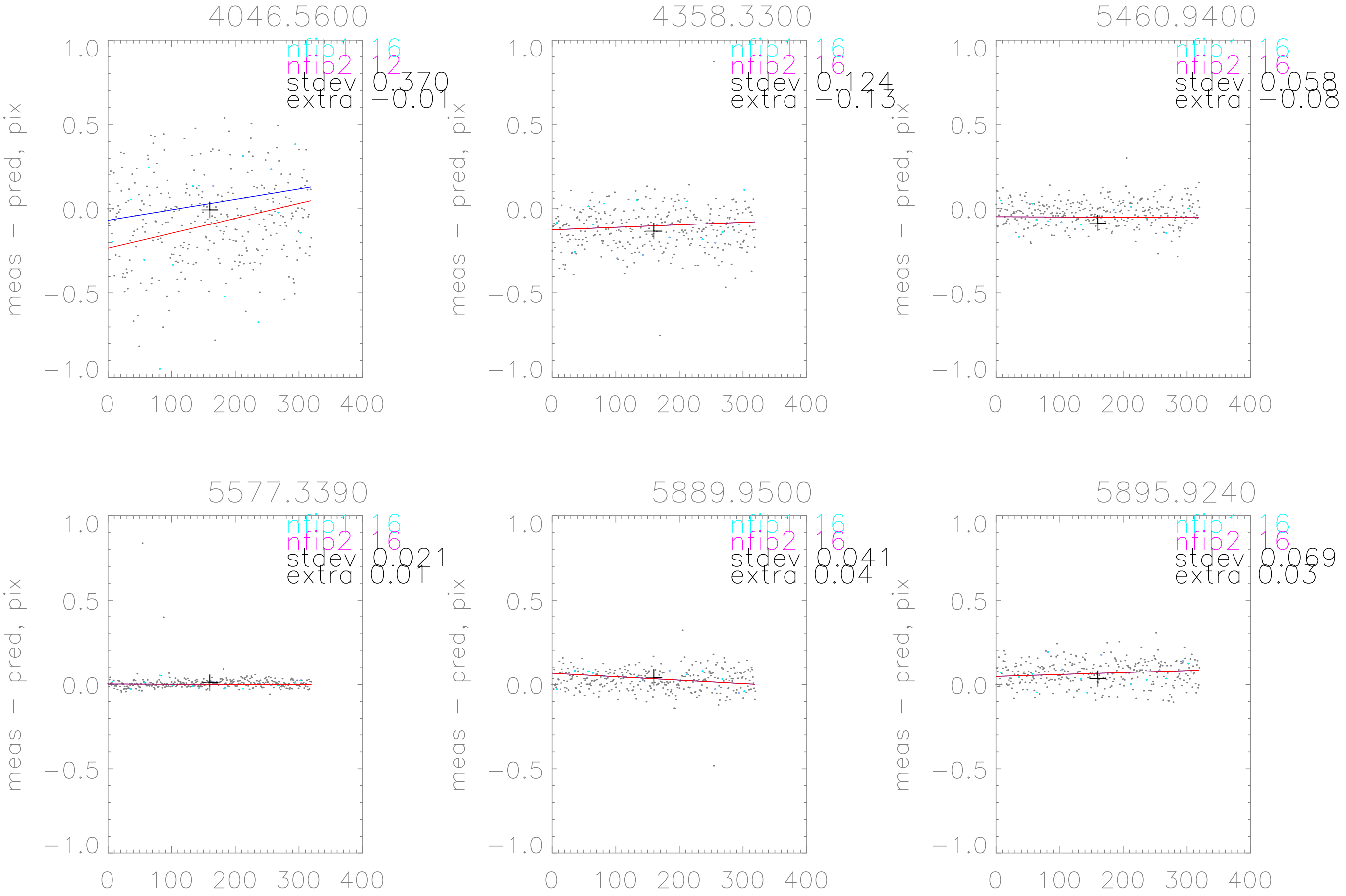

4358.3300

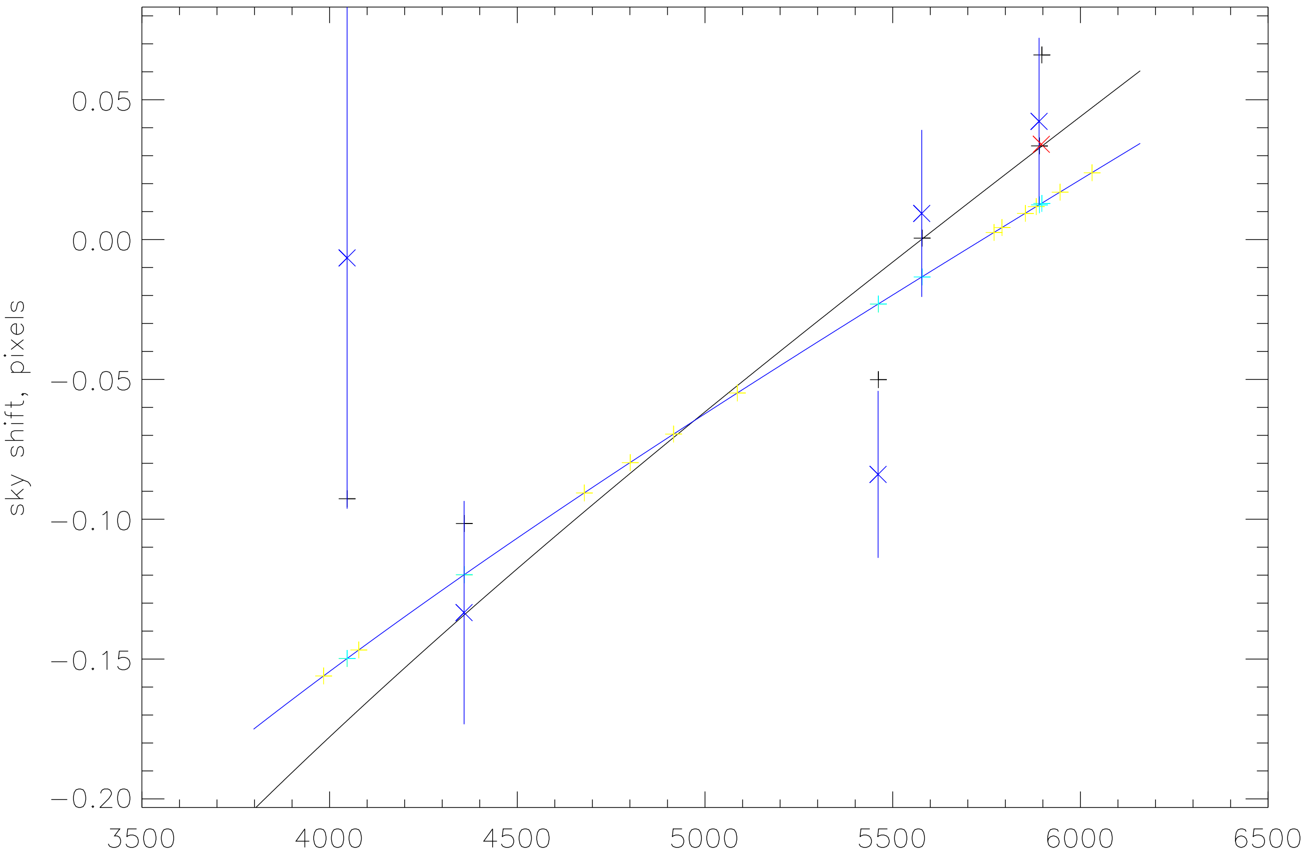

5460.9400

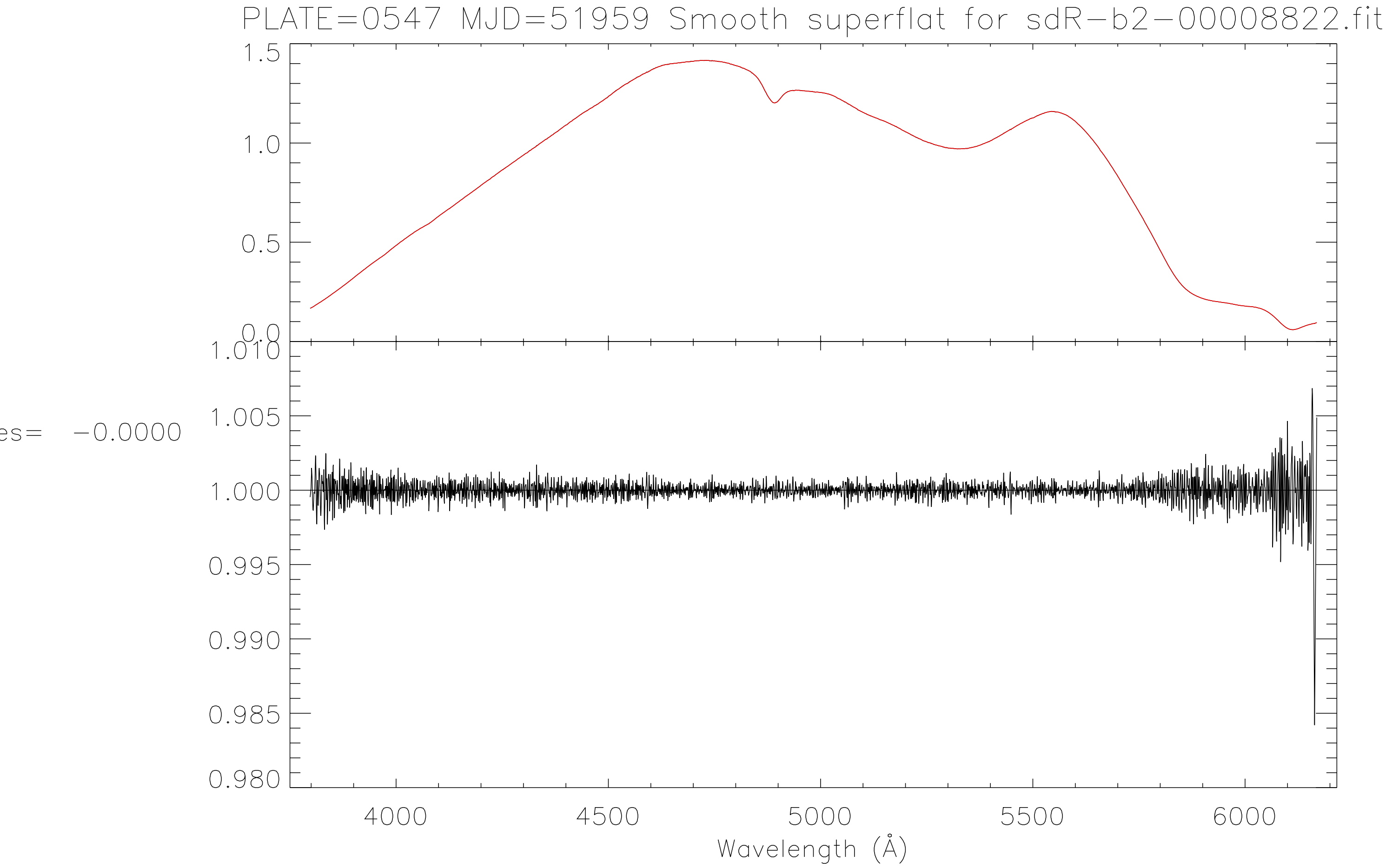

5577.3390

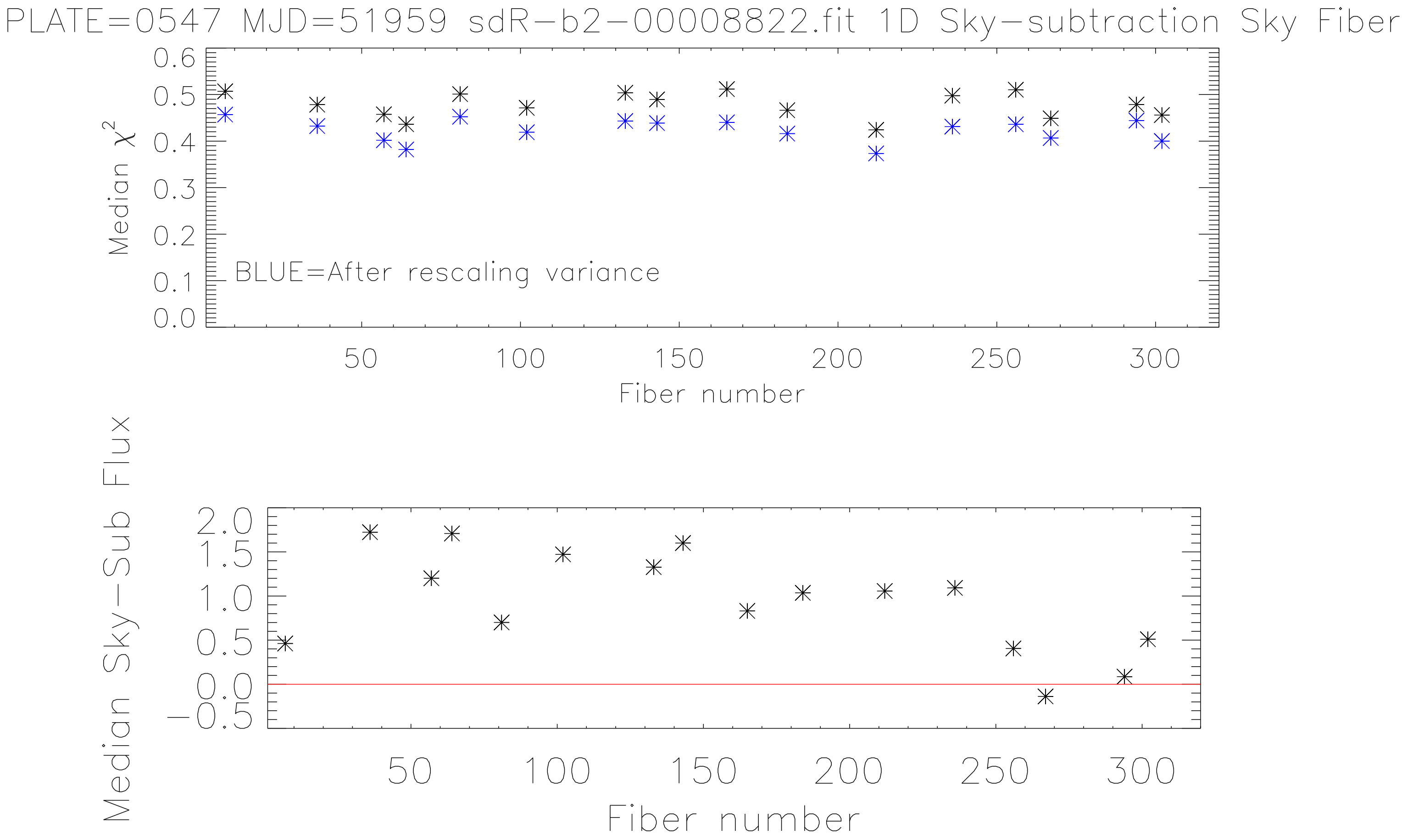

5889.9500

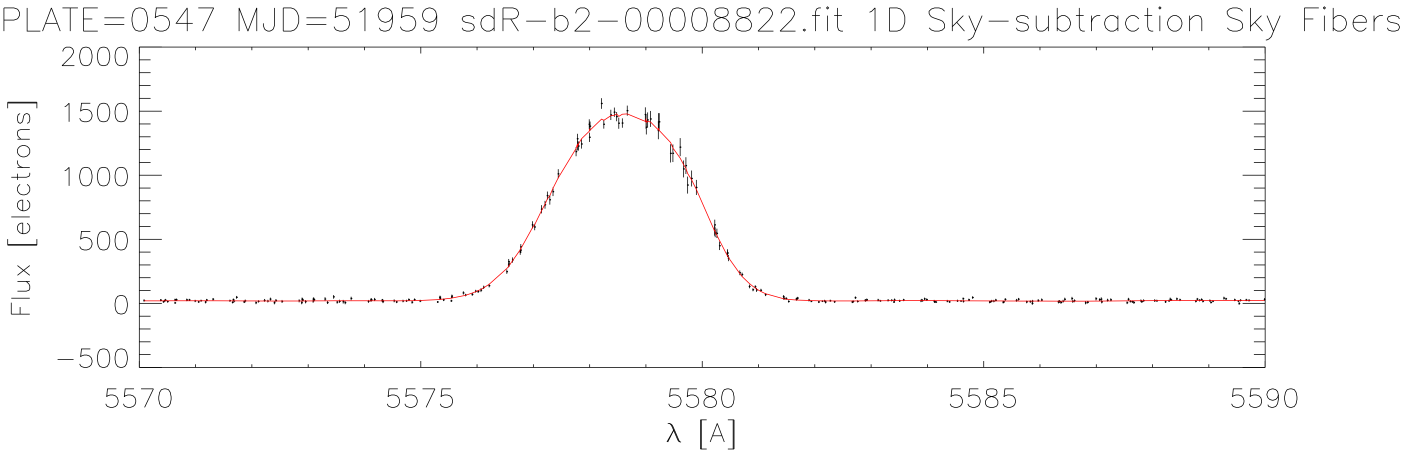

5895.9240

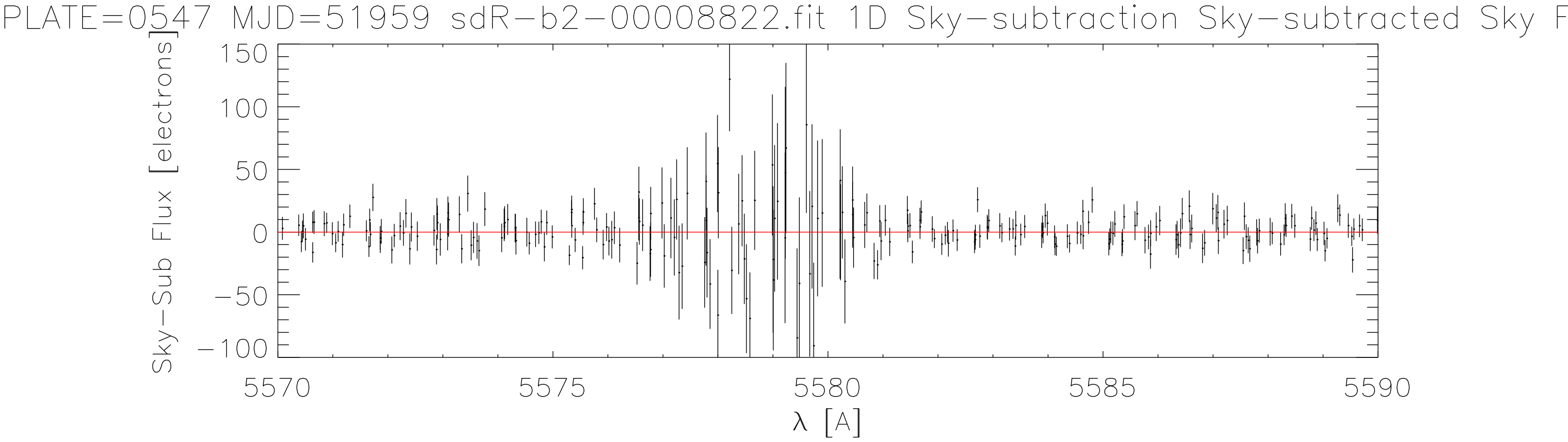

4046.5600
nfib1 16
nfib2 12
stdev 0.370
extra −0.01
4358.3300
nfib1 16
nfib2 16
stdev 0.124
extra −0.13
5460.9400
nfib1 16
nfib2 16
stdev 0.058
extra −0.08
5577.3390
nfib1 16
nfib2 16
stdev 0.021
extra 0.01
5889.9500
nfib1 16
nfib2 16
stdev 0.041
extra 0.04
5895.9240
nfib1 16
nfib2 16
stdev 0.069
extra 0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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


PLATE=0547 MJD=51959 Smooth superflat for sdR-b2-00008822.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)

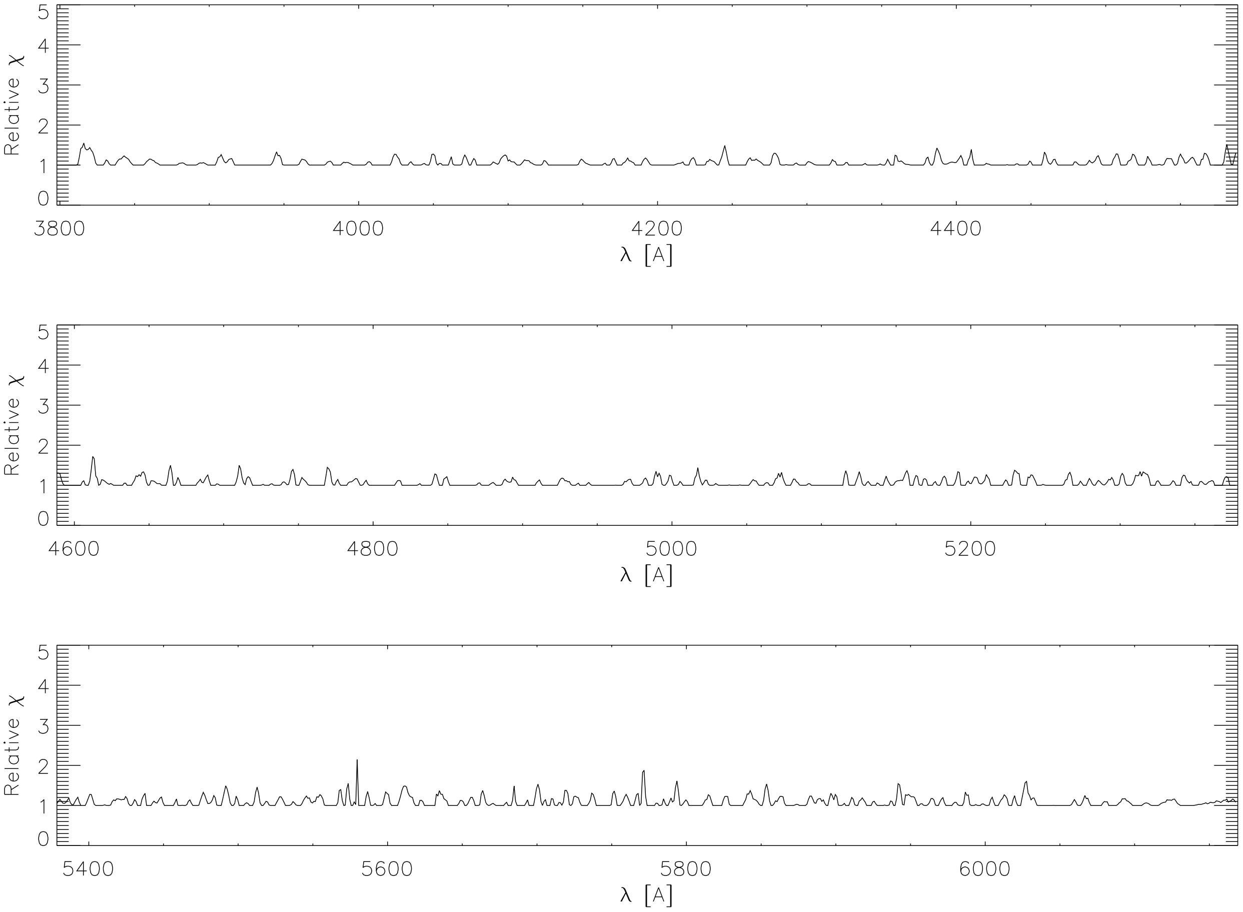

PLATE=0547 MJD=51959 sdR-b2-00008822.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
2.0
1.5
1.0
0.5
0.0
−0.5
50
100
150
200
250
300
Fiber number

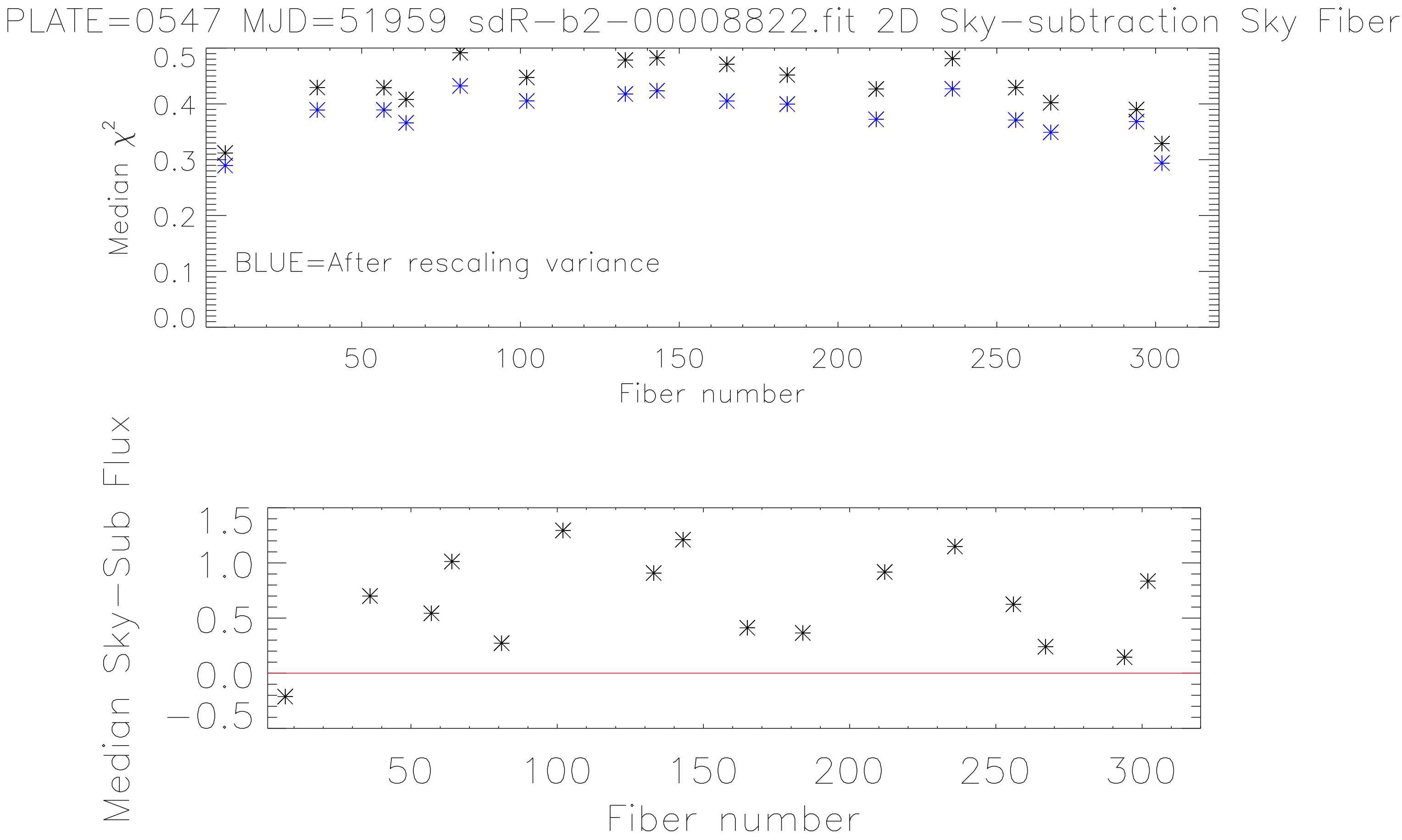

PLATE=0547 MJD=51959 sdR-b2-00008822.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

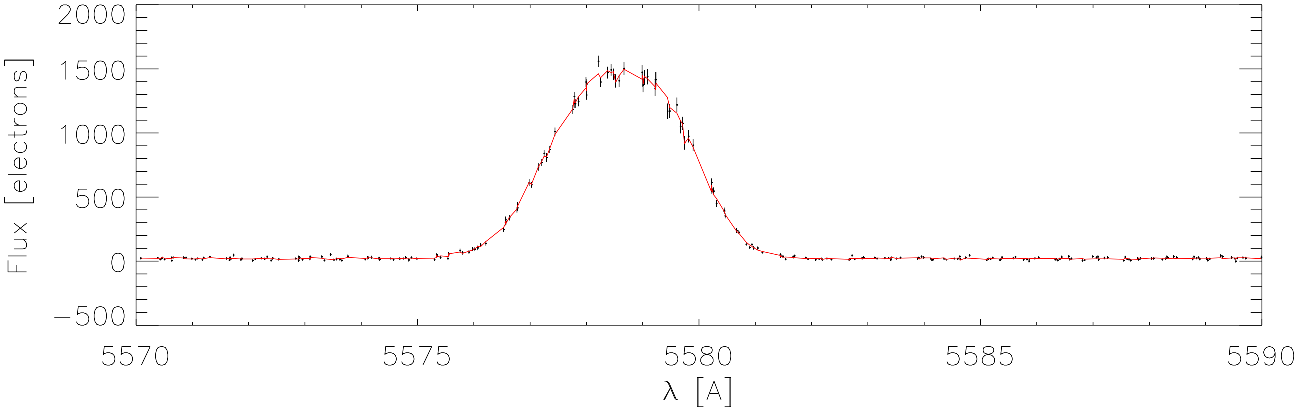

PLATE=0547 MJD=51959 sdR-b2-00008822.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

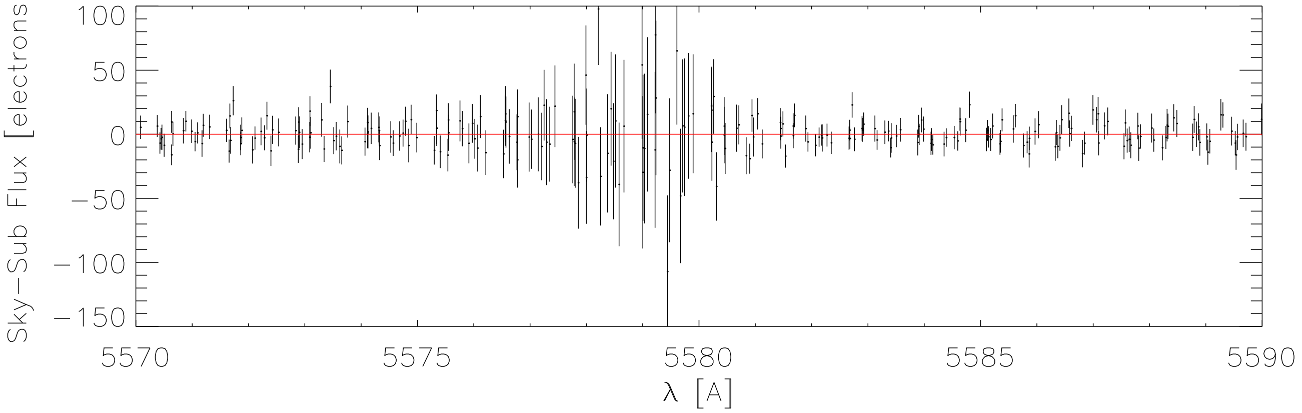
Number of sky fibers = 16

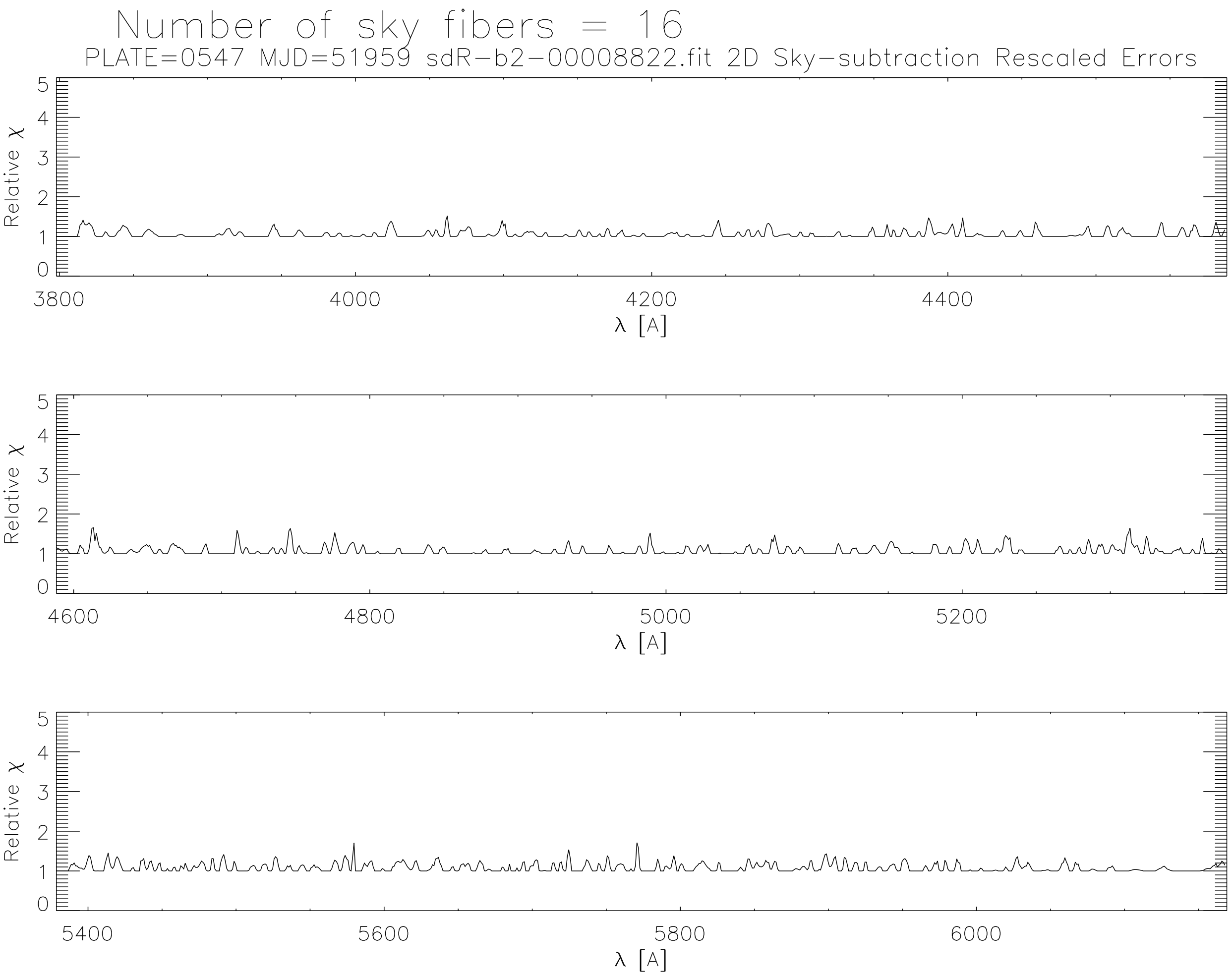
PLATE=0547 MJD=51959 sdR-b2-00008822.fit 1D Sky-subtraction Rescaled Errors




PLATE=0547 MJD=51959 sdR-b2-00008822.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−0.5
0.0
0.5
1.0
1.5
50
100
150
200
250
300
Fiber number

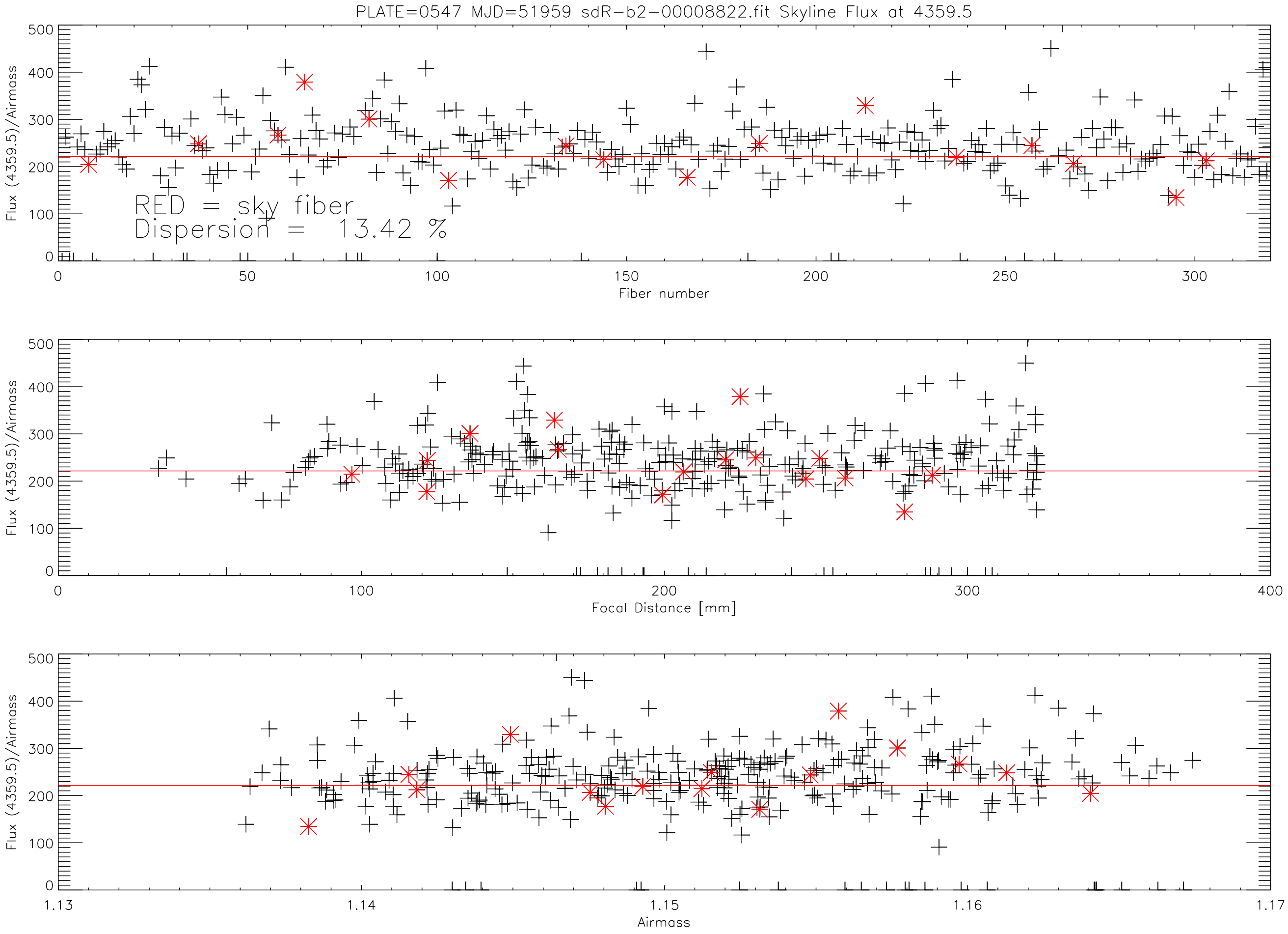

PLATE=0547 MJD=51959 sdR-b2-00008822.fit 2D Sky-subtraction Sky Fibers

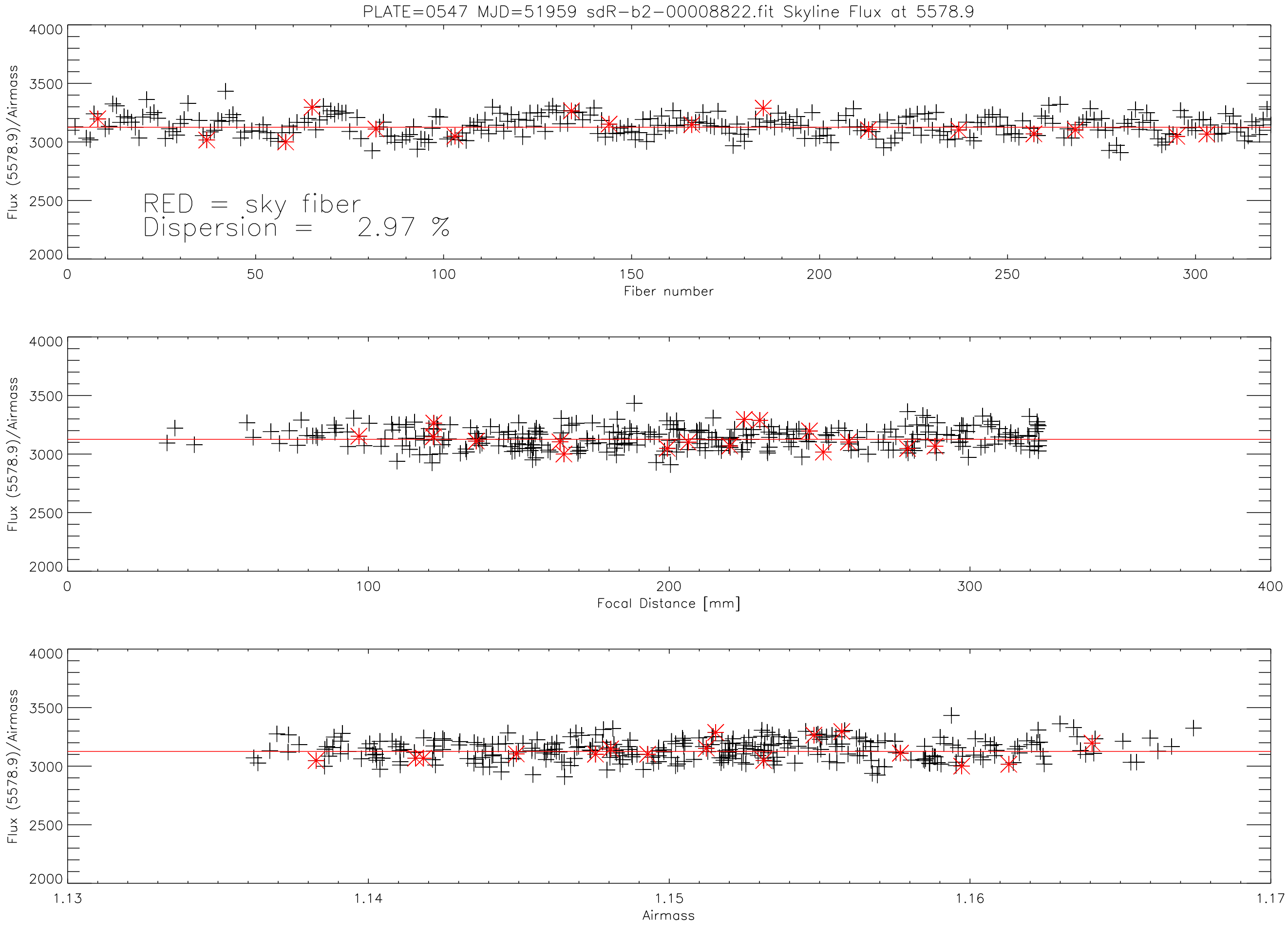

PLATE=0547 MJD=51959 sdR-b2-00008822.fit 2D Sky-subtraction Sky-subtracted Sky F

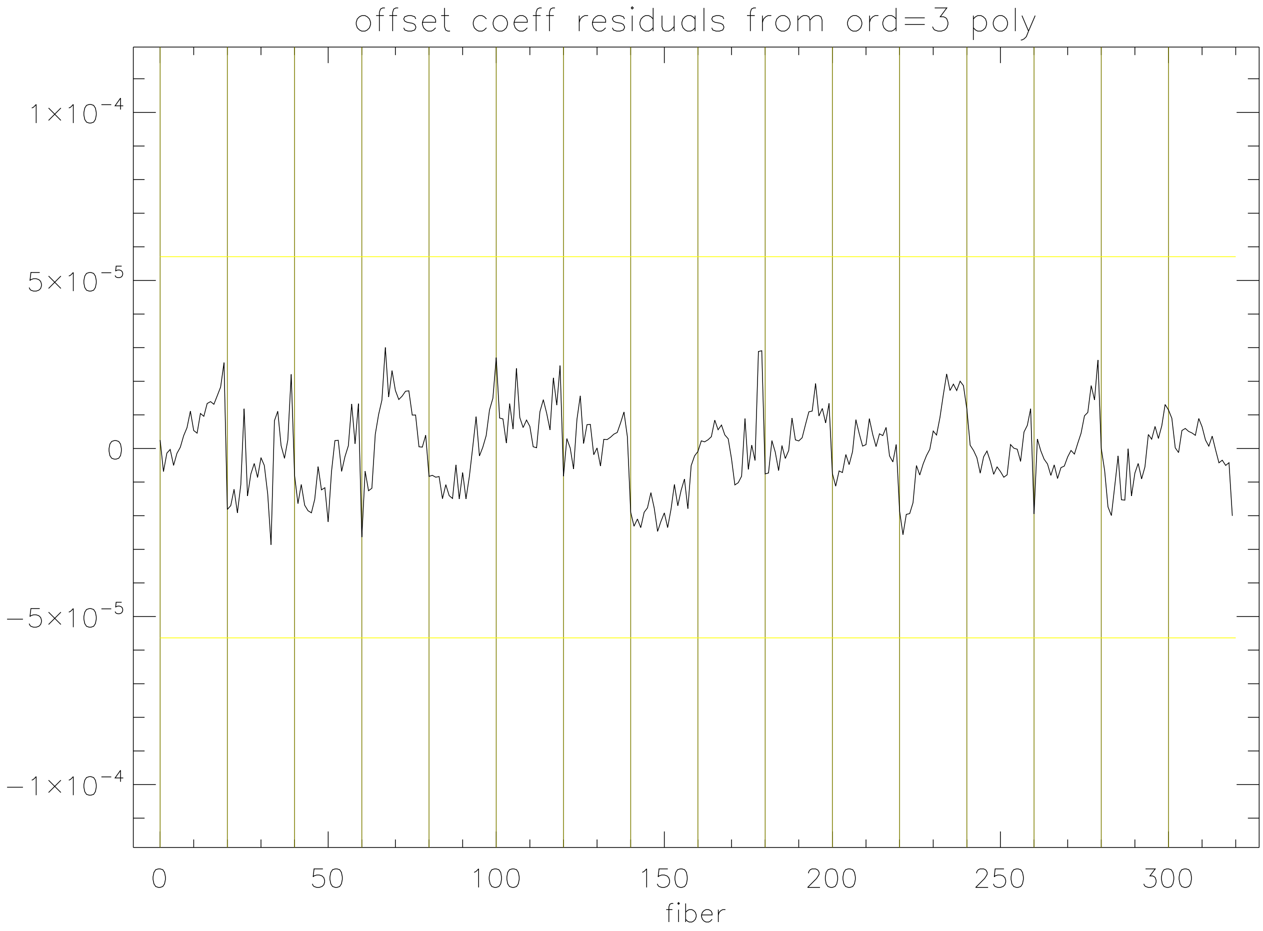


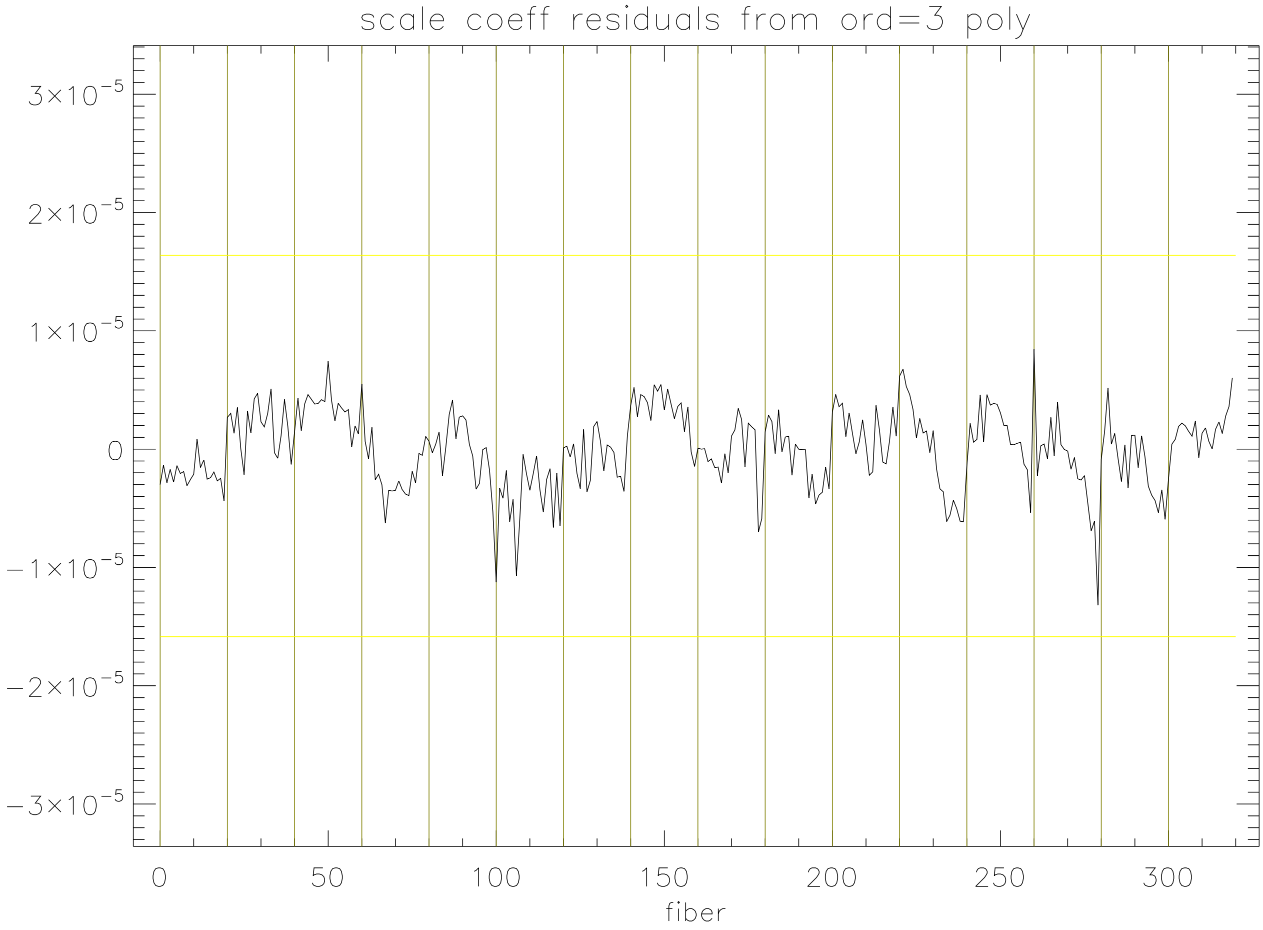
Number of sky fibers = 16

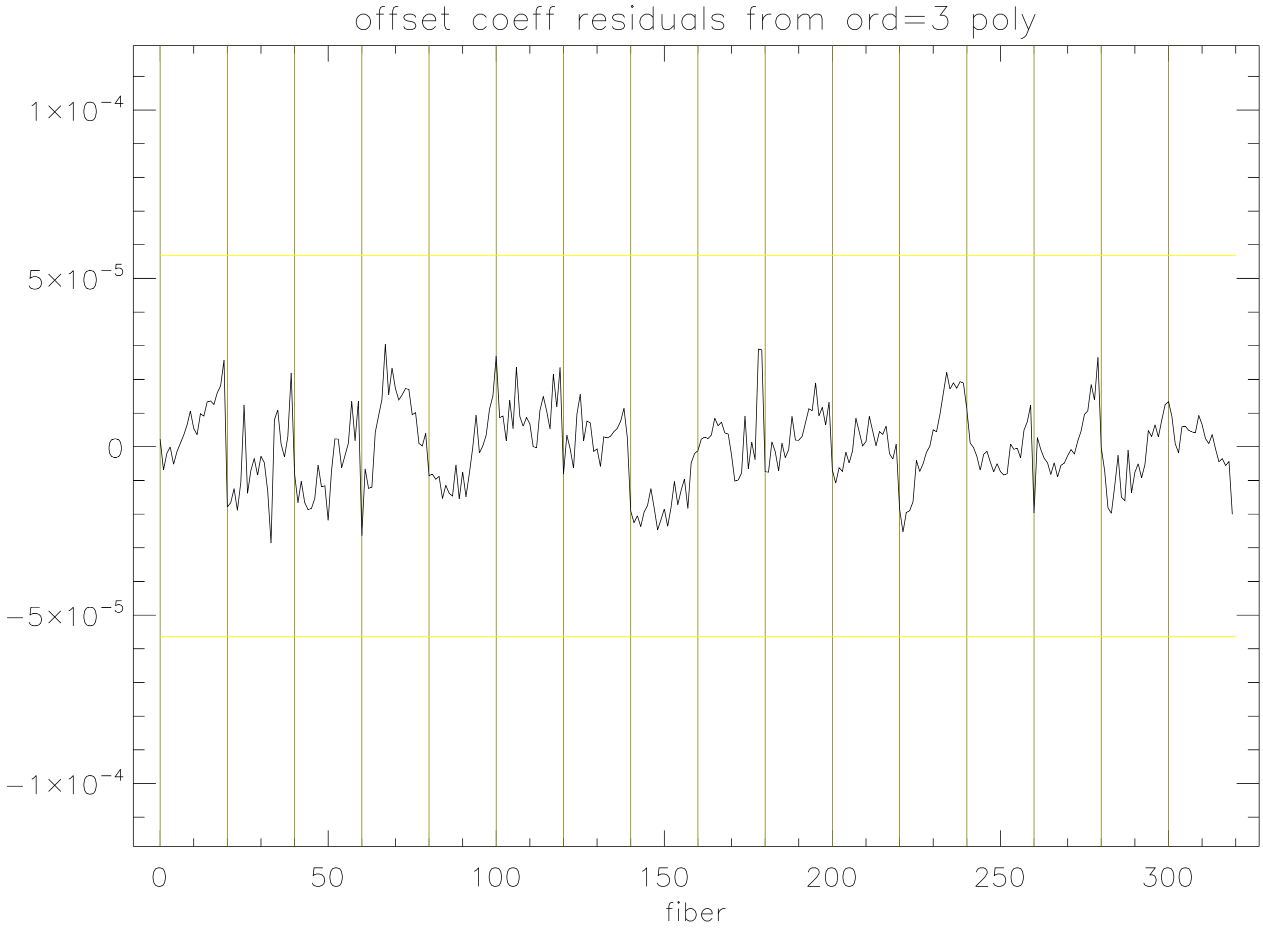
PLATE=0547 MJD=51959 sdR-b2-00008822.fit 2D Sky-subtraction Rescaled Errors

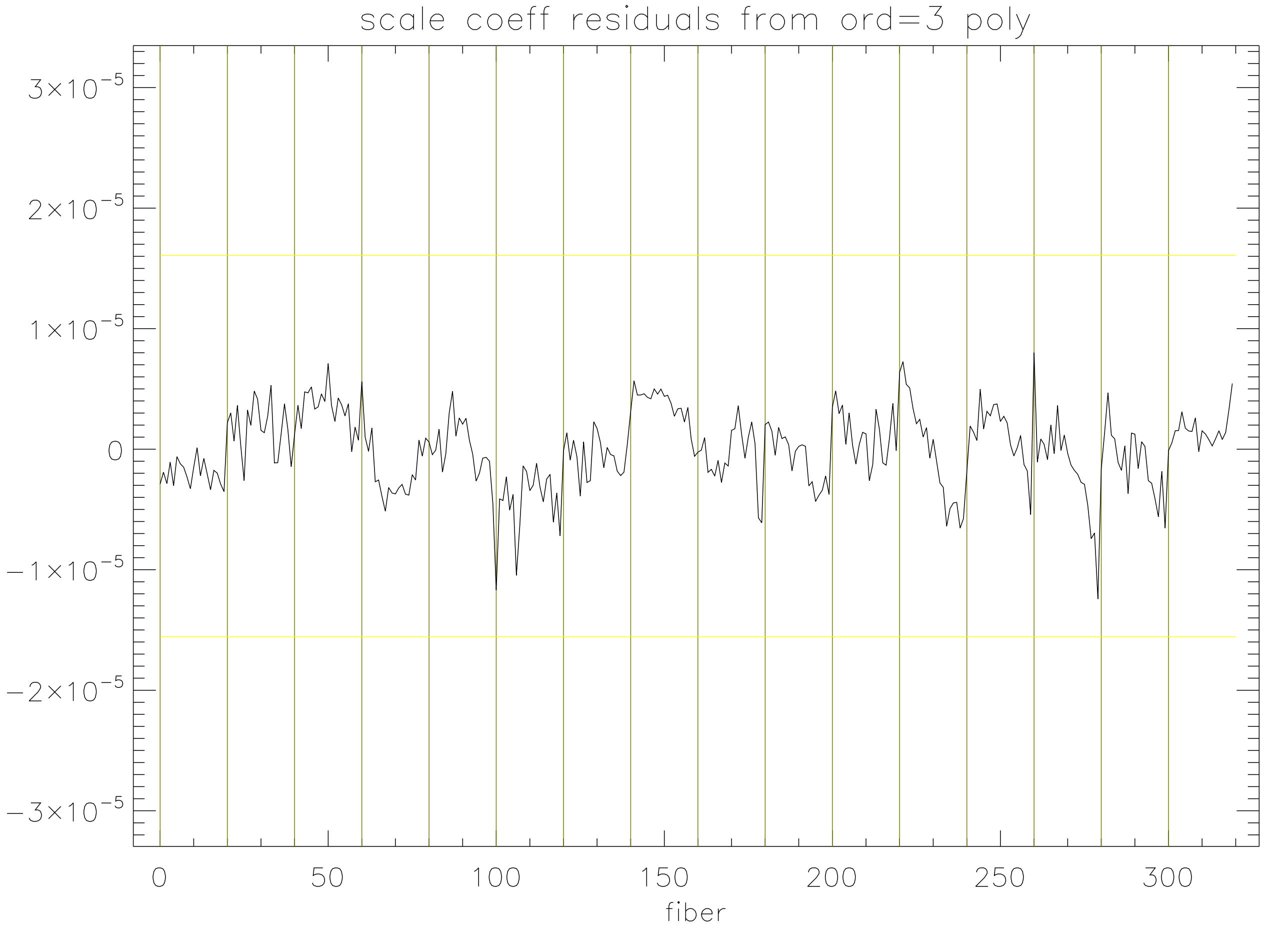

PLATE=0547 MJD=51959 sdR-b2-00008822.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.42 %
0
100
200
300
400
500
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
500
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
0
100
200
300
400
500
1.13
1.14
1.15
1.16
1.17
Airmass


PLATE=0547 MJD=51959 sdR-b2-00008822.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
4000
3500
3000
2500
2000
RED = sky fiber
Dispersion = 2.97 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
4000
3500
3000
2500
2000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
4000
3500
3000
2500
2000
1.13
1.14
1.15
1.16
1.17
Airmass

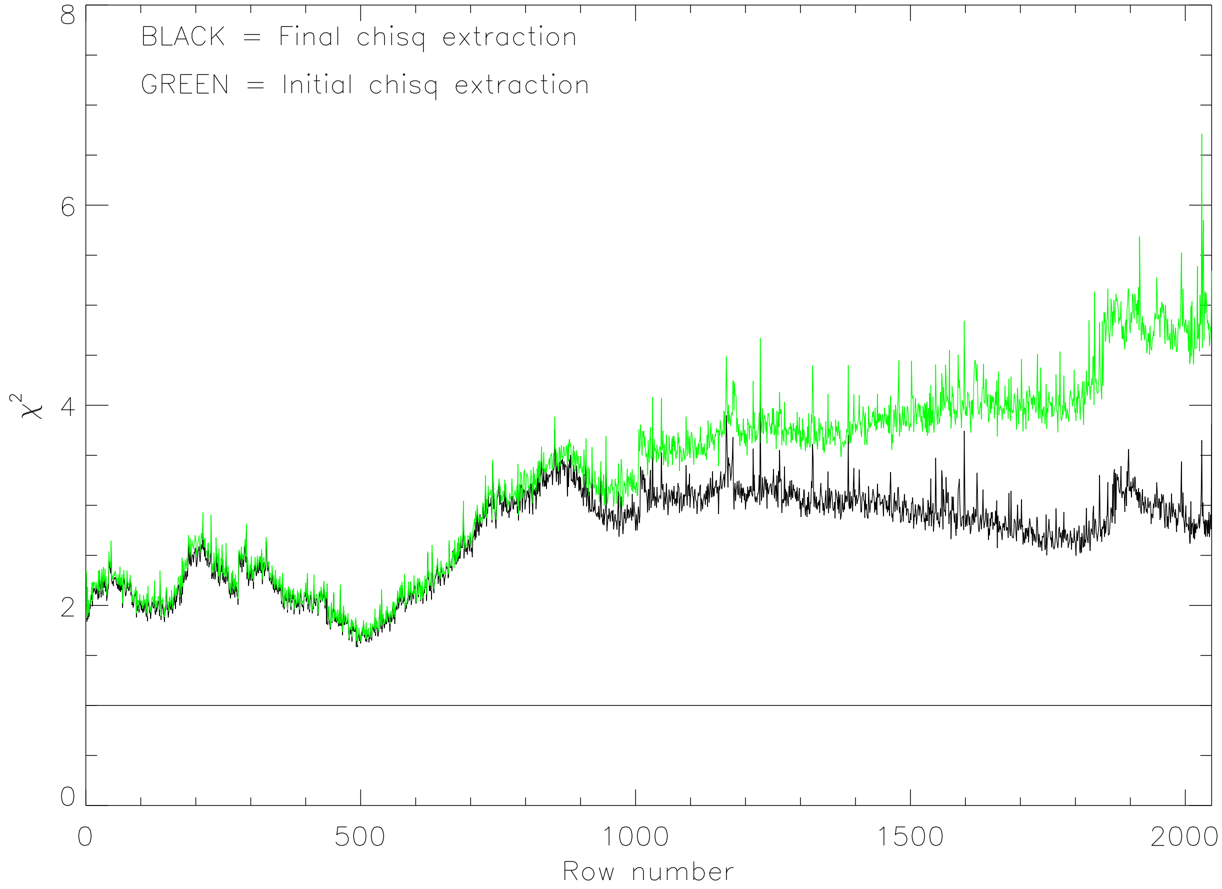

offset coeff residuals from ord=3 poly
1×10^{-4}
5×10^{-5}
0
−5×10^{-5}
−1×10^{-4}
0
50
100
150
200
250
300
fiber

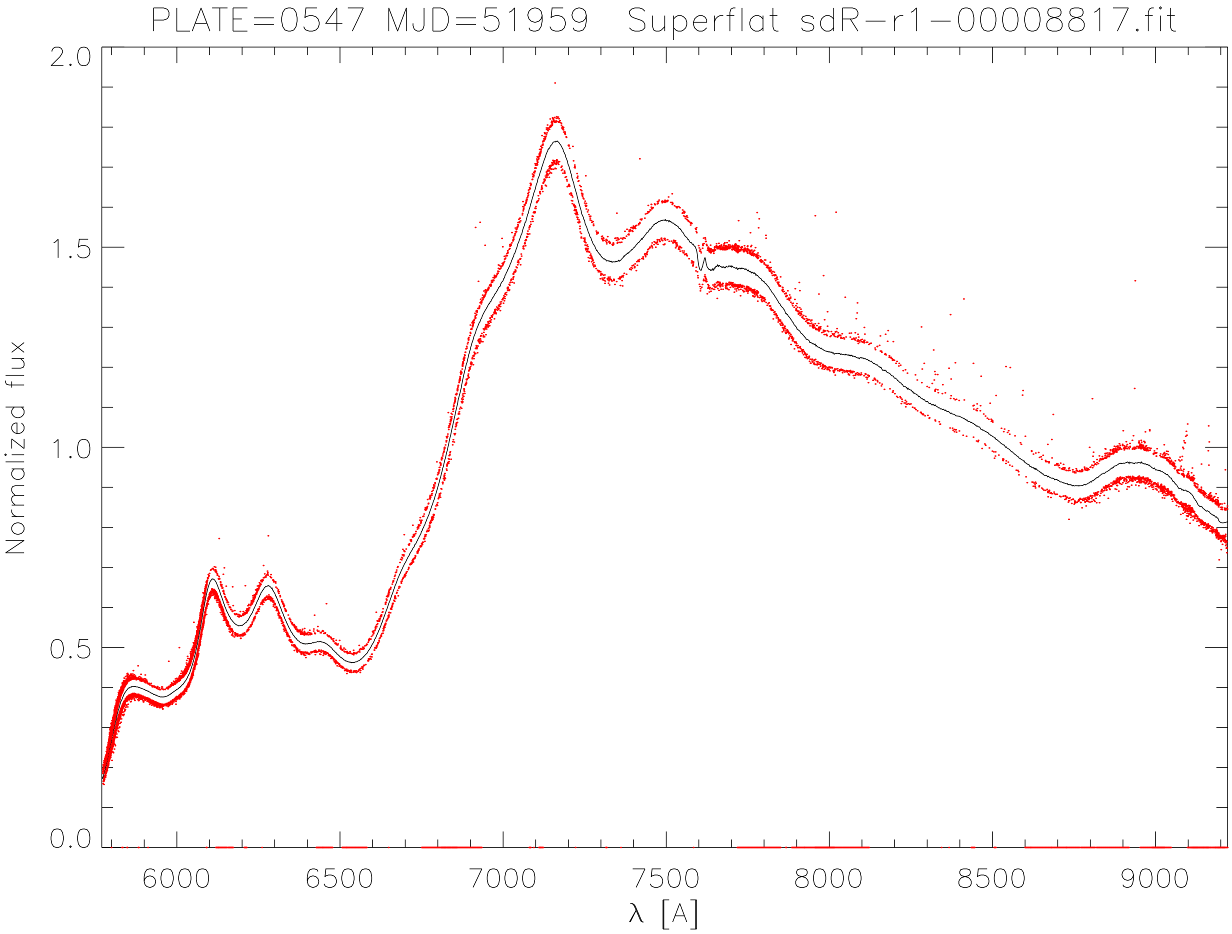

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

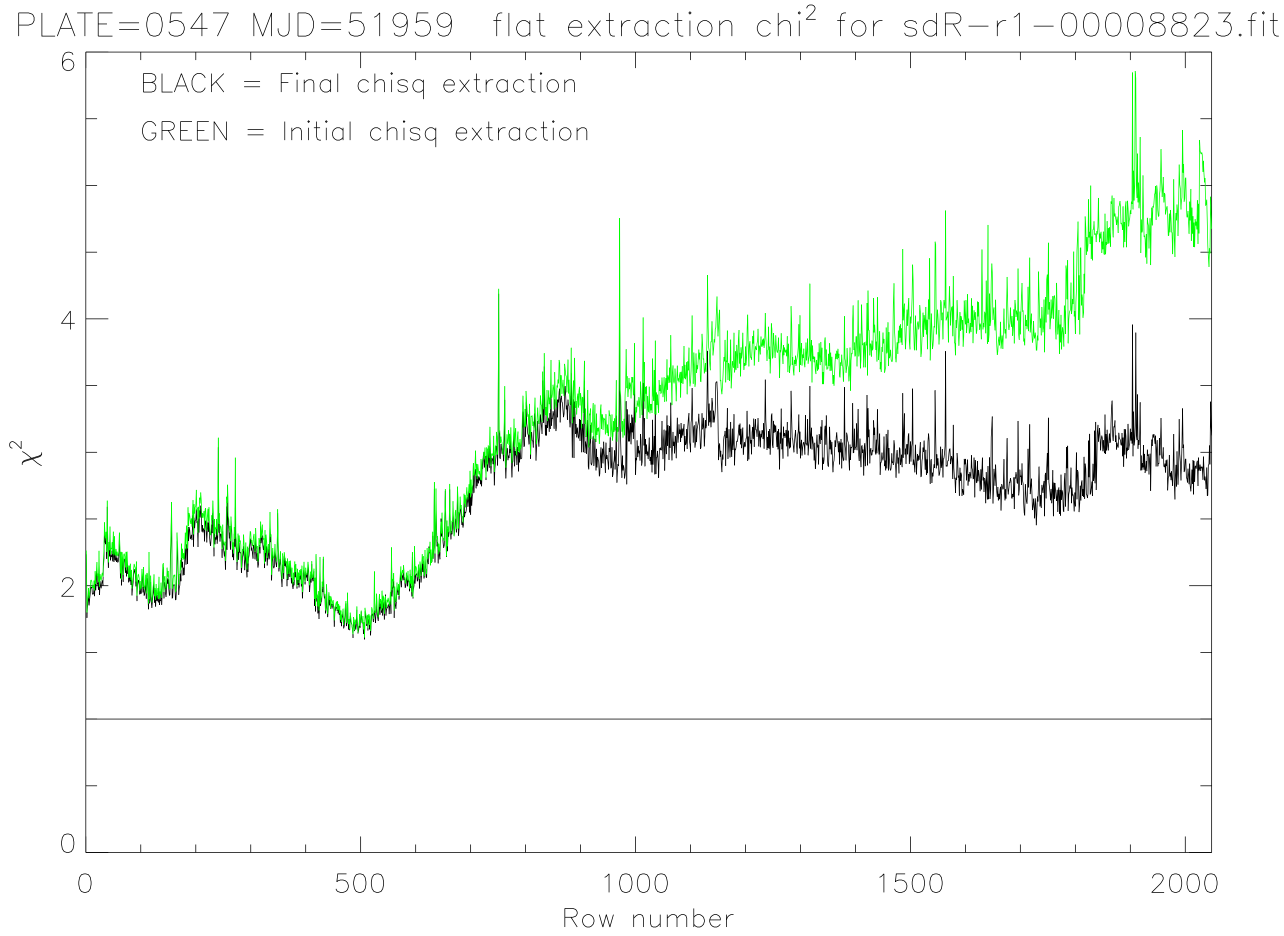

offset coeff residuals from ord=3 poly
1×10^-4
5×10^-5
0
−5×10^-5
−1×10^-4
0
50
100
150
200
250
300
fiber

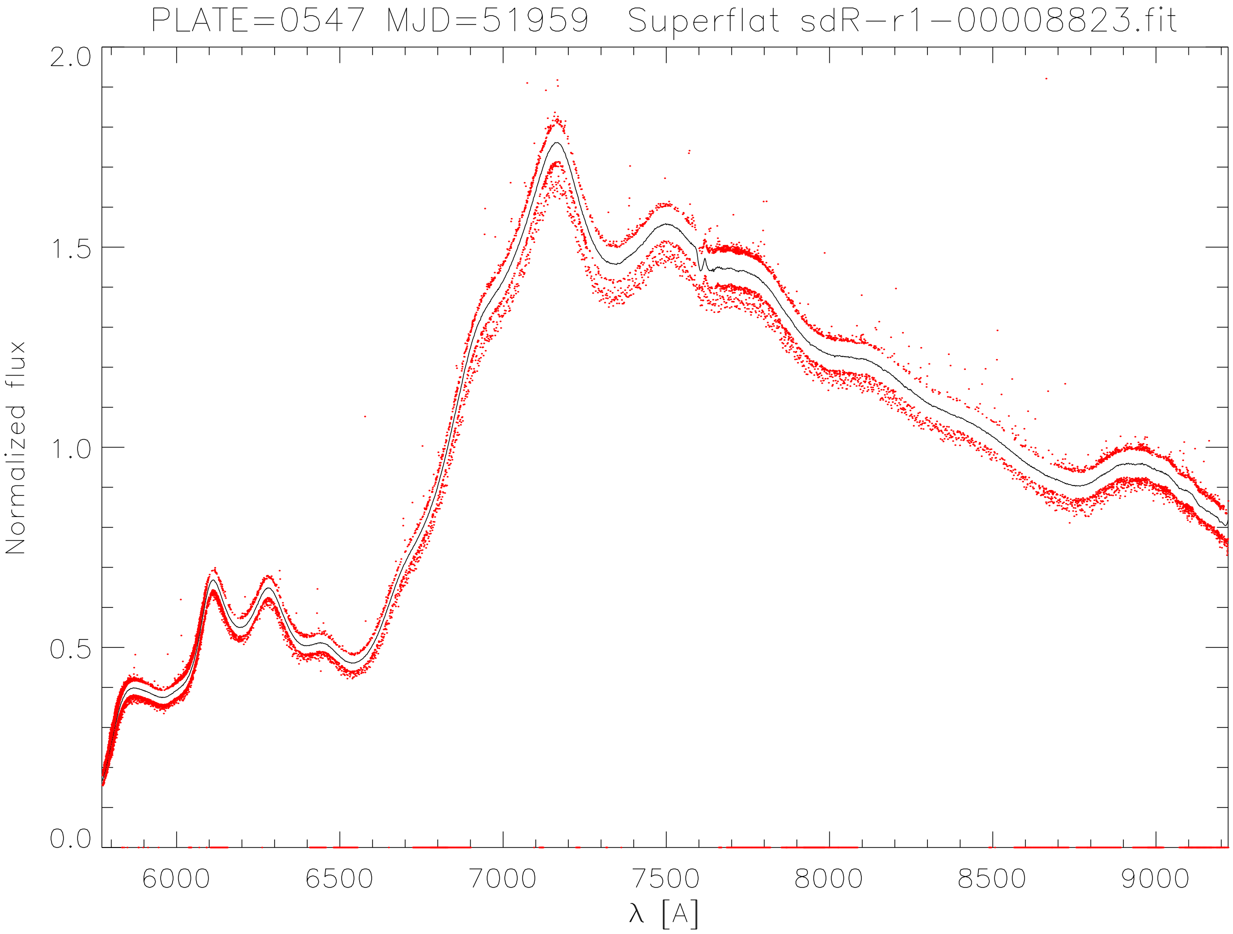

scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber

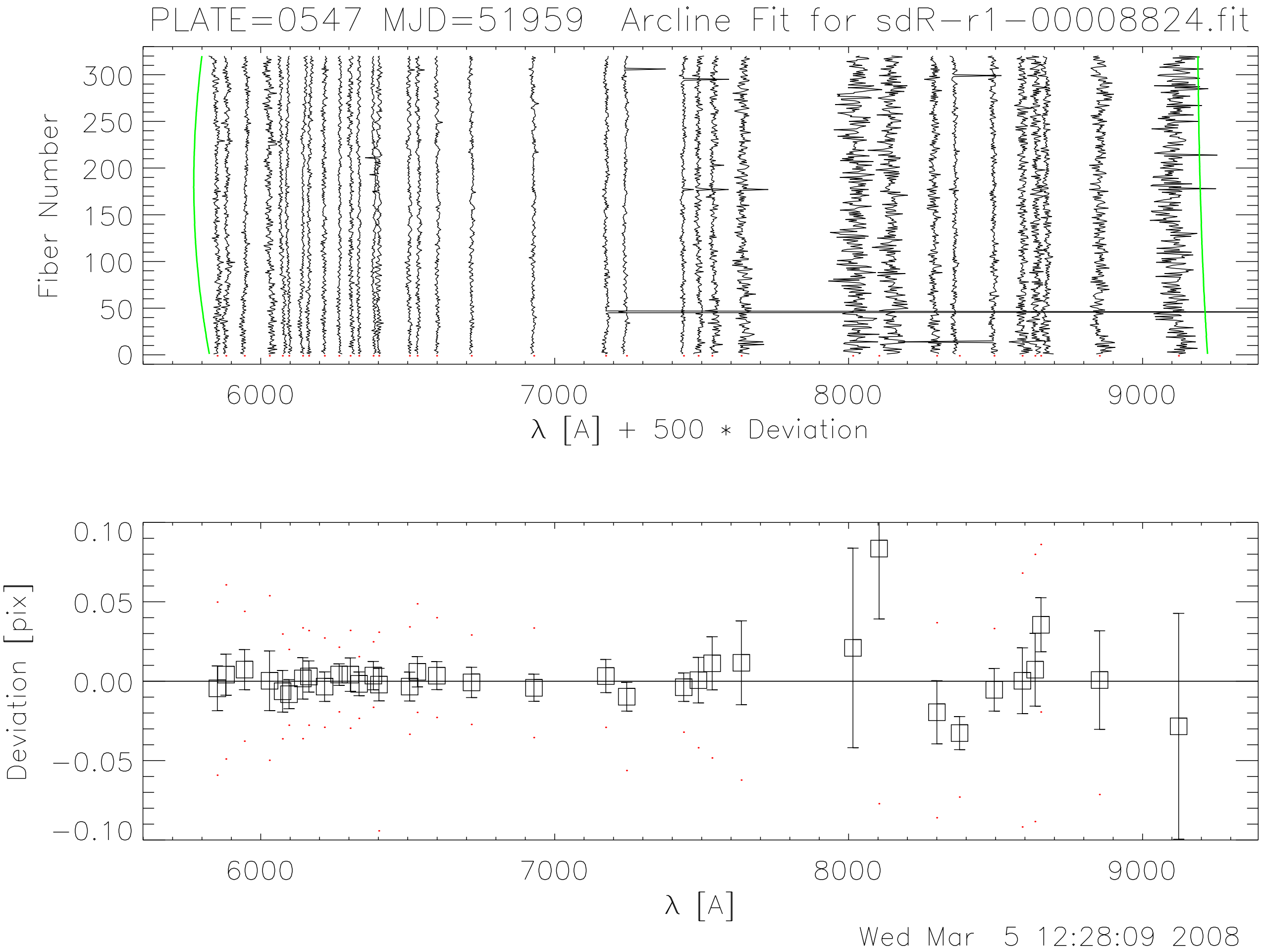
PLATE=0547 MJD=51959 flat extraction chi^2 for sdR-r1-00008817.fit

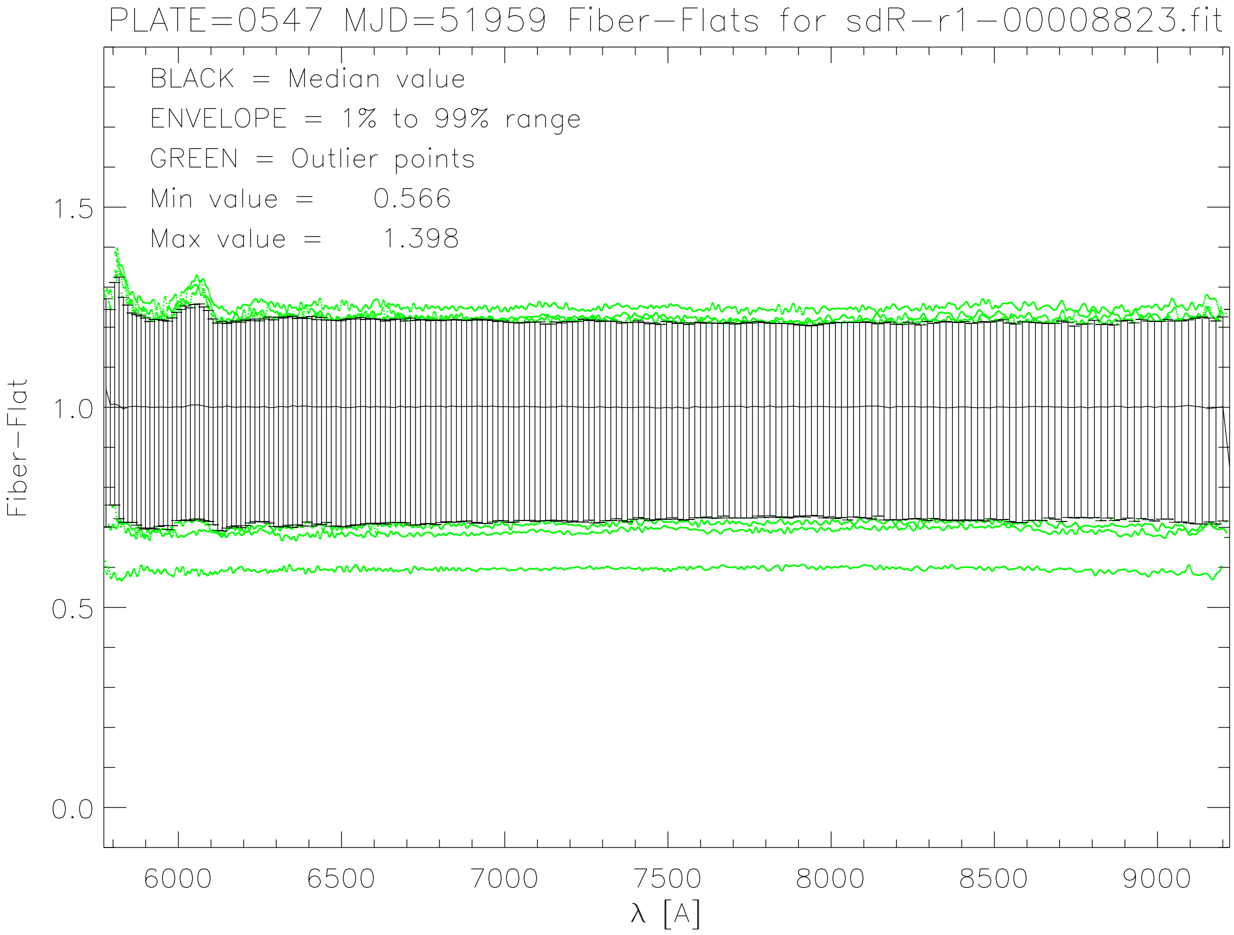



PLATE=0547 MJD=51959 Superflat sdR-r1-00008817.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

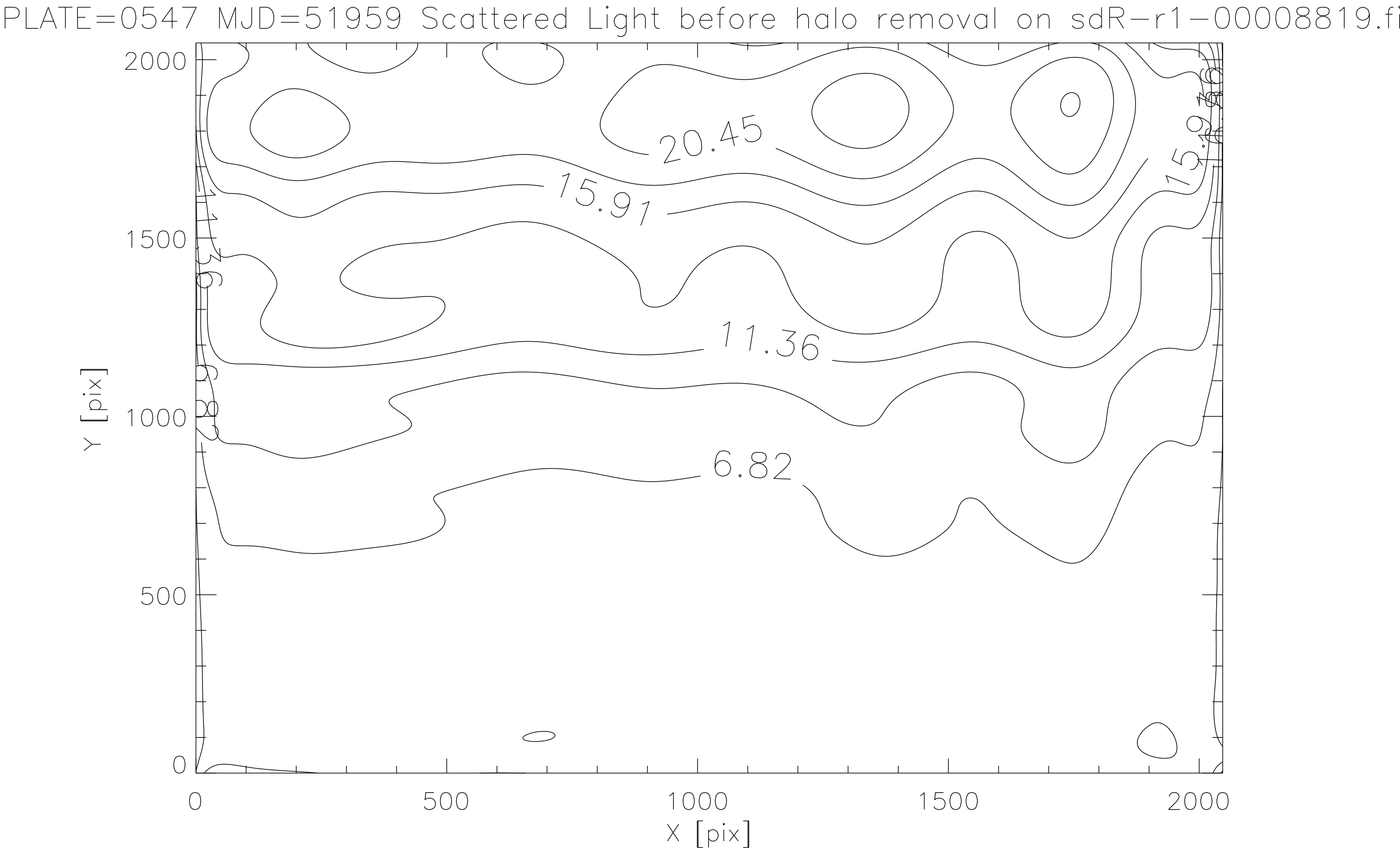

PLATE=0547 MJD=51959 flat extraction chi^2 for sdR-r1-00008823.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number

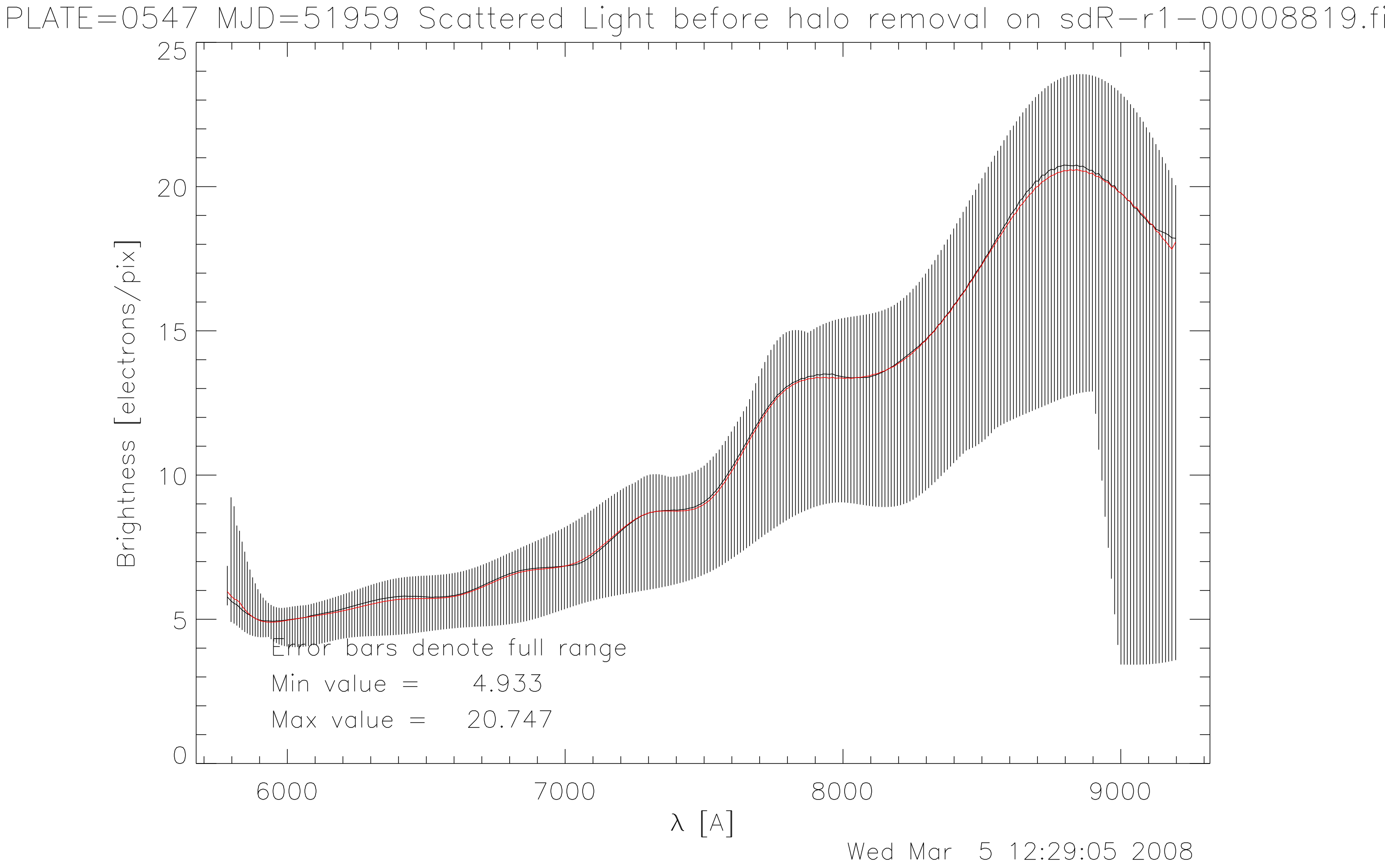

PLATE=0547 MJD=51959 Superflat sdR-r1-00008823.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]


PLATE=0547 MJD=51959 Arcline Fit for sdR-r1-00008824.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]
Wed Mar 5 12:28:09 2008

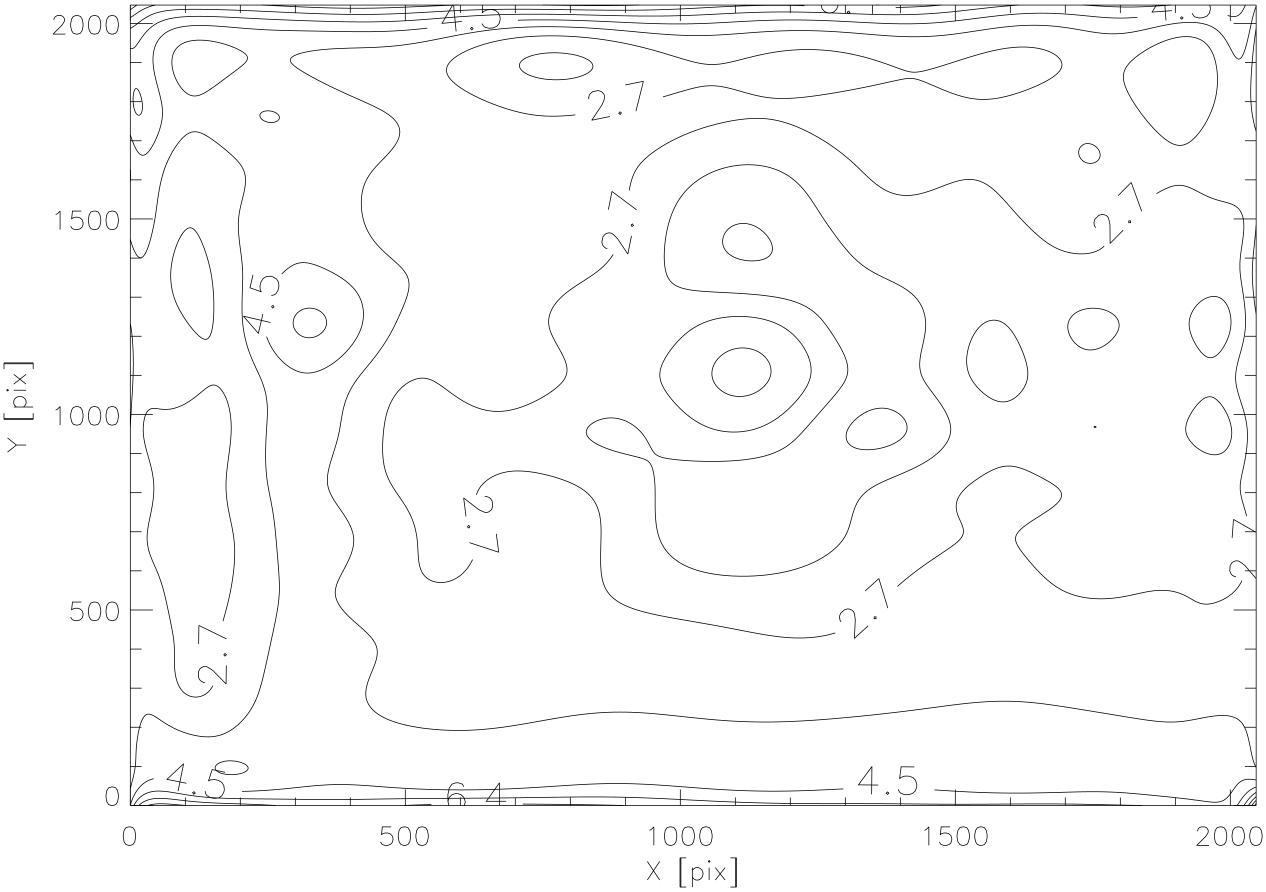


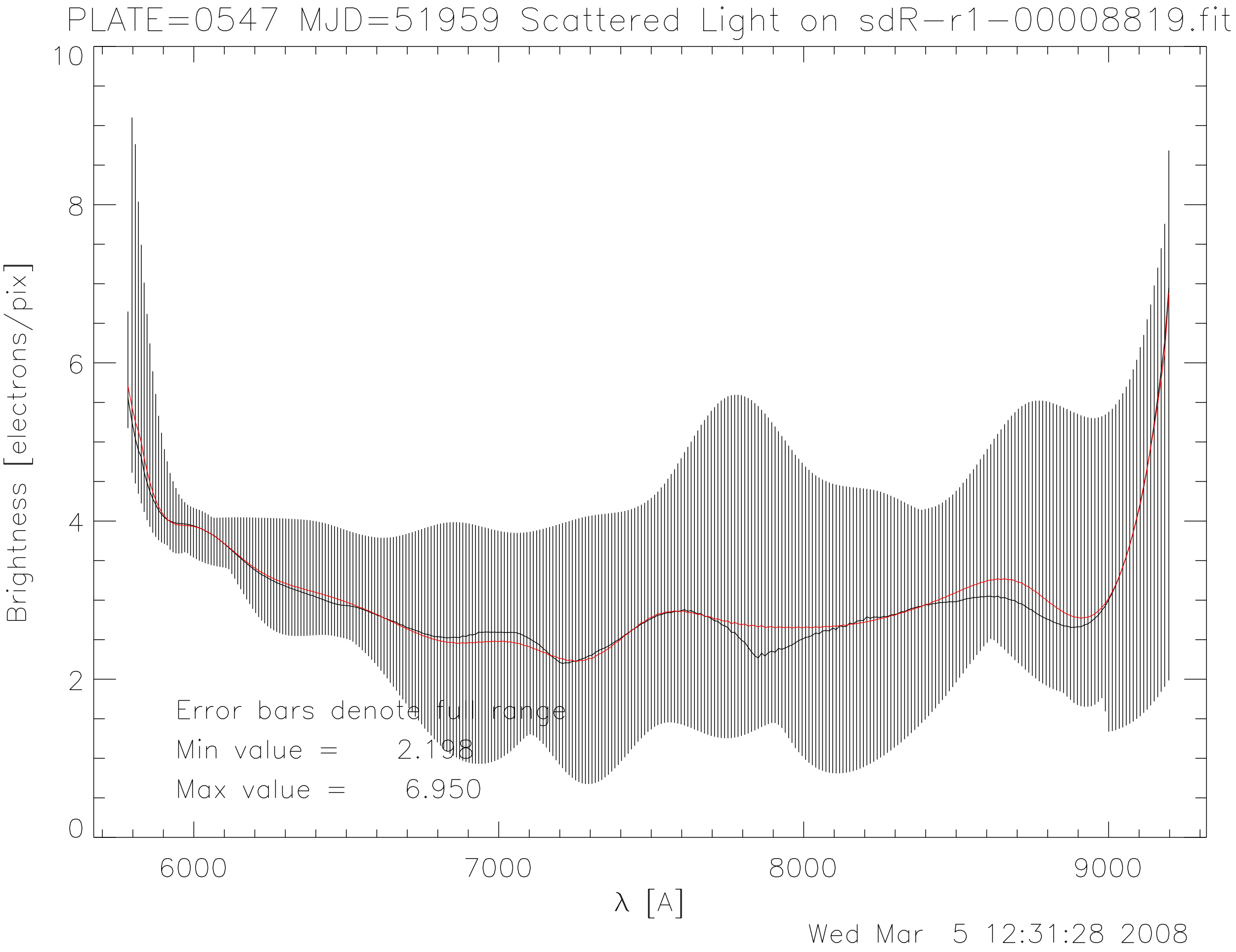
Wed Mar 5 12:28:15 2008

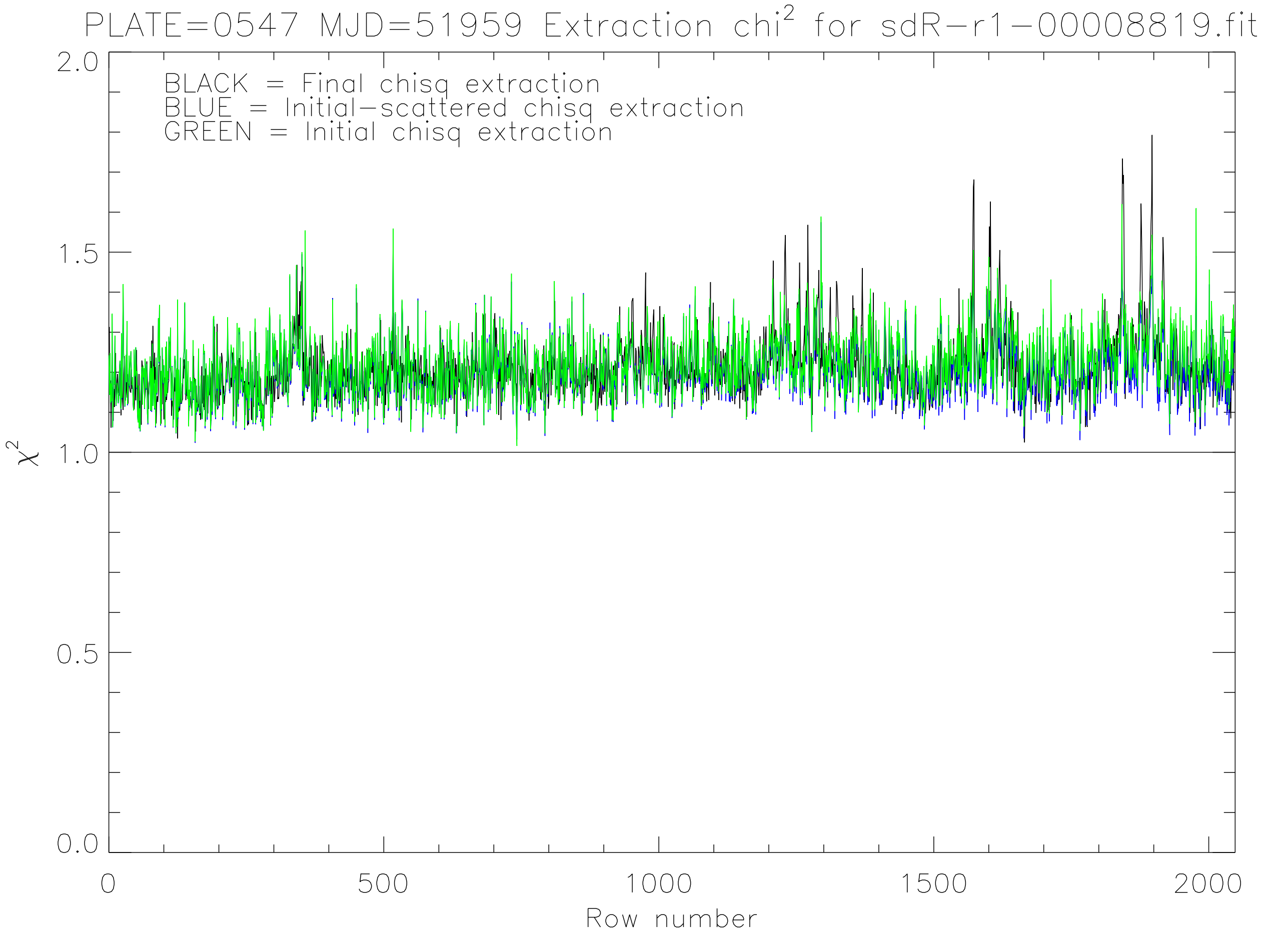

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008819.fi
20.45
15.91
11.36
6.82
15.91
11.36
6.82
2000
1500
1000
500
0
Y [pix]
0
500
1000
1500
2000
X [pix]

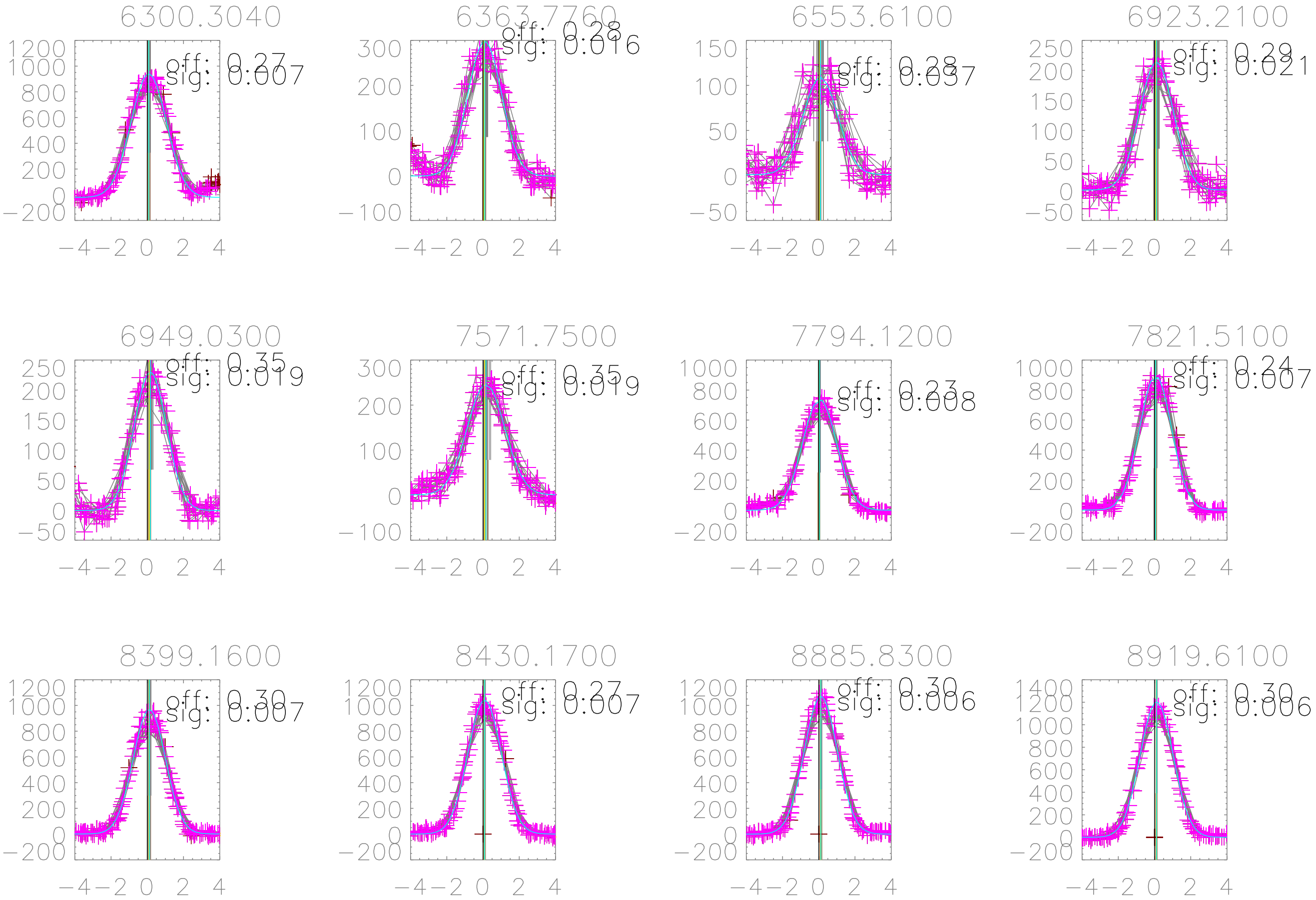

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008819.fi
Brightness [electrons/pix]
0
5
10
15
20
25
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.933
Max value = 20.747
Wed Mar 5 12:29:05 2008

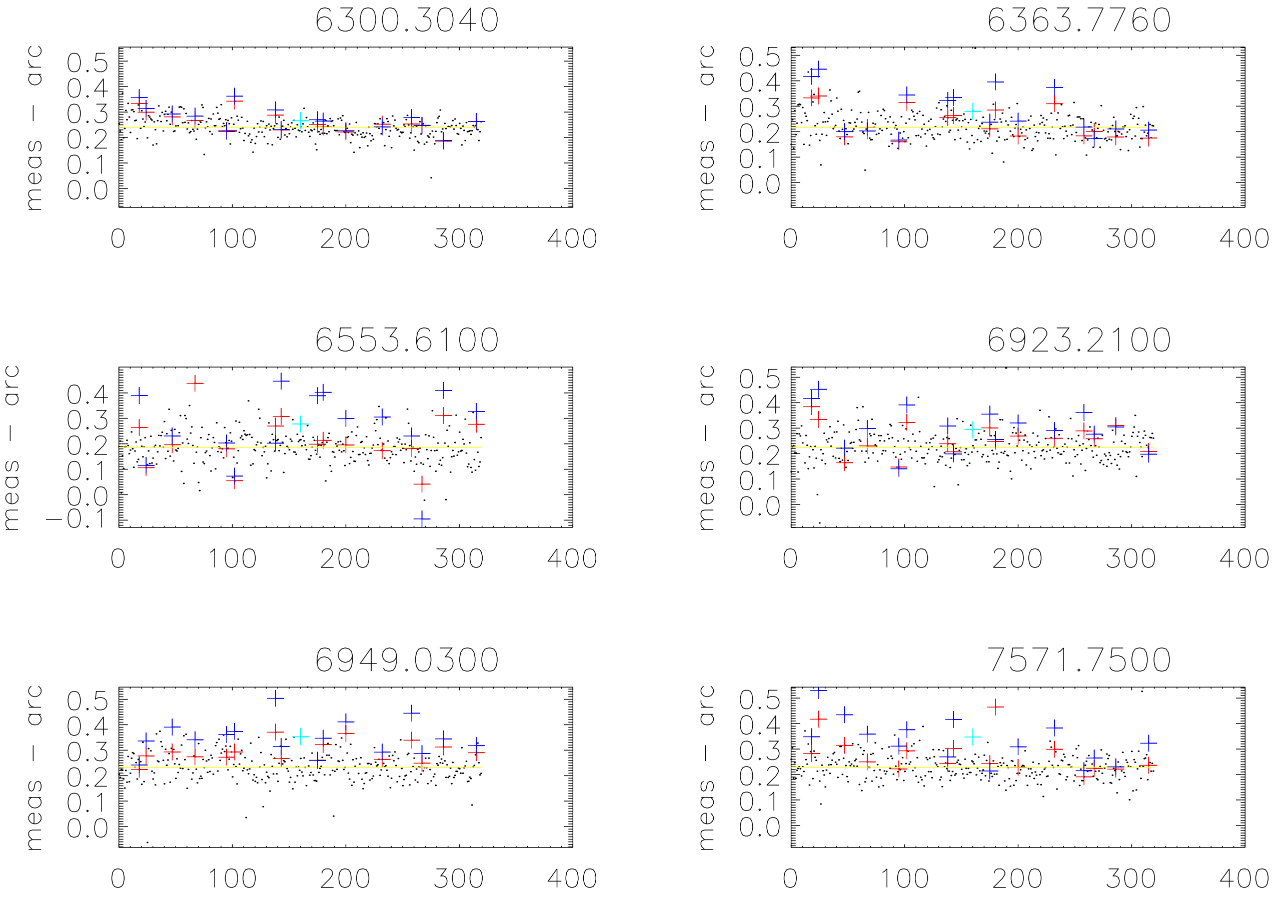
PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008819.fit




PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008819.fit
Brightness [electrons/pix]
0
2
4
6
8
10
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.198
Max value = 6.950
Wed Mar 5 12:31:28 2008

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-r1-00008819.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number


6300.3040
off: 0.27
sig: 0.007
6363.7760
off: 0.28
sig: 0.016
6553.6100
off: 0.28
sig: 0.037
6923.2100
off: 0.29
sig: 0.021
6949.0300
off: 0.35
sig: 0.019
7571.7500
off: 0.35
sig: 0.019
7794.1200
off: 0.23
sig: 0.008
7821.5100
off: 0.24
sig: 0.007
8399.1600
off: 0.30
sig: 0.007
8430.1700
off: 0.27
sig: 0.007
8885.8300
off: 0.30
sig: 0.006
8919.6100
off: 0.30
sig: 0.006
−4 −2 0 2 4



6300.3040

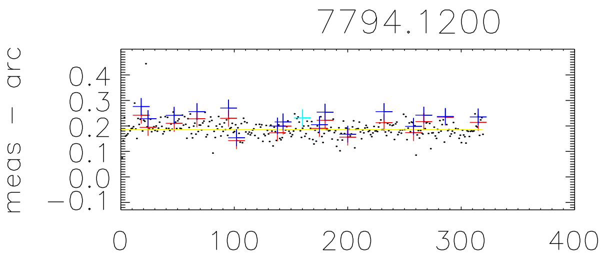
6363.7760

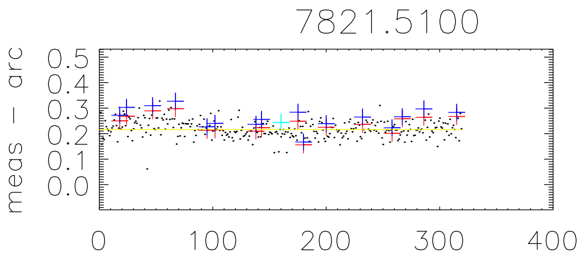
6553.6100

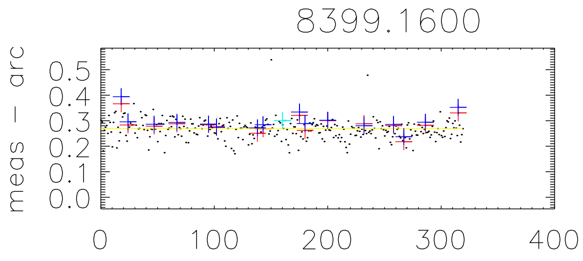
6923.2100

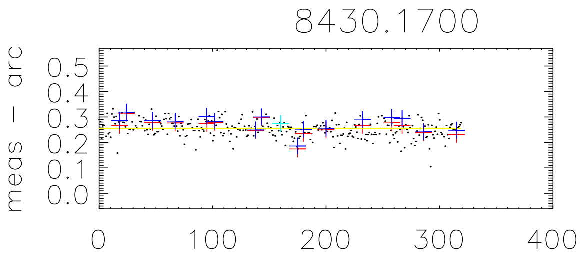
6949.0300

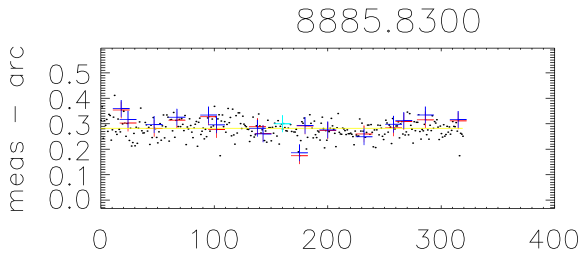
7571.7500

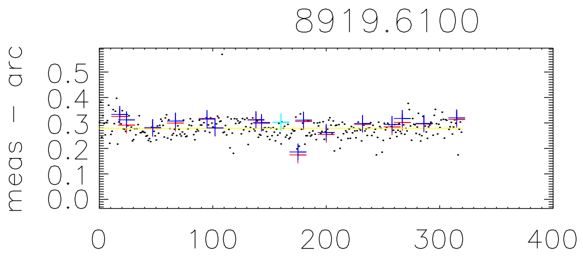

7794.1200
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

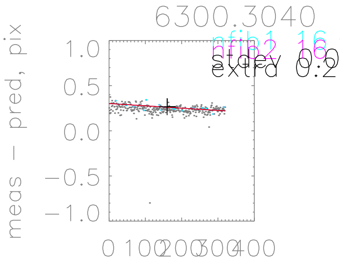

7821.5100
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

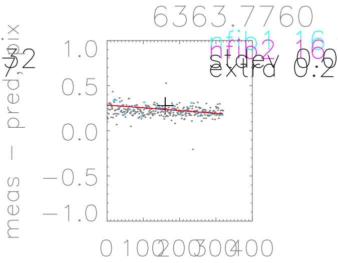

8399.1600
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

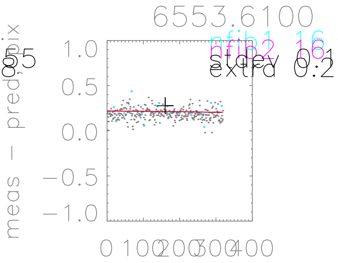

8430.1700
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

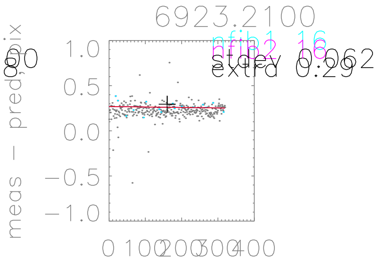

8885.8300
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

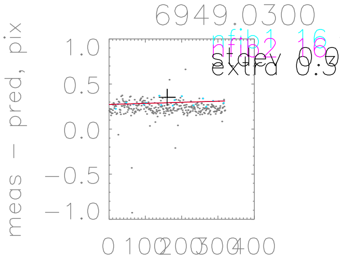

8919.6100
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

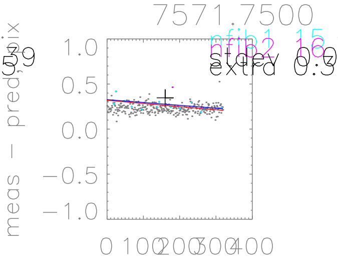

6300.3040
nfib1 16
nfib2 16
stdev 0.032
extrd 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

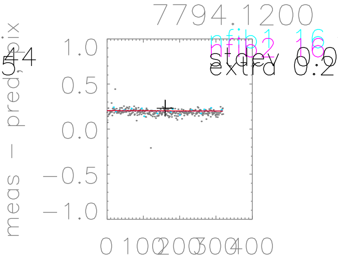

6363.7760
nfib1 16
nfib2 16
stdev 0.055
extrd 0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

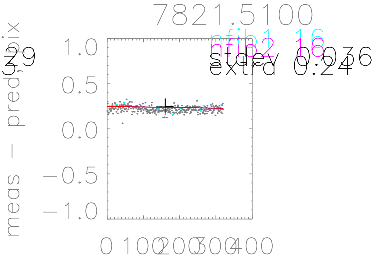

6553.6100
nfib1 16
nfib2 16
stdev 0.100
extrd 0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

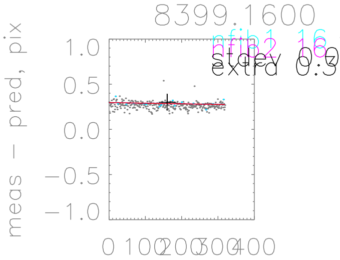

6923.2100
nfib1 16
nfib2 16
stdev 0.062
extrd 0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

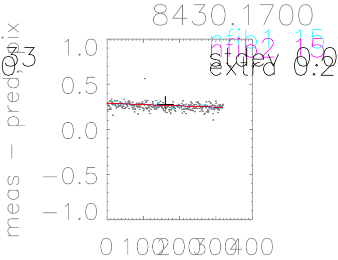

6949.0300
nfib1 16
nfib2 16
stdev 0.039
extrd 0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

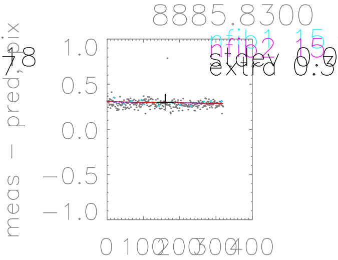

7571.7500
nfib1 15
nfib2 15
stdev 0.044
extrd 0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

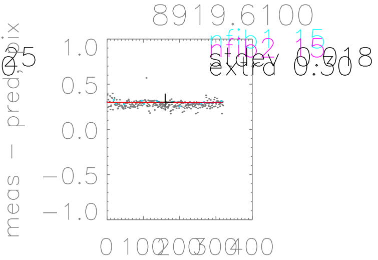

7794.1200
nfib1 16
nfib2 16
stdev 0.029
extrd 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

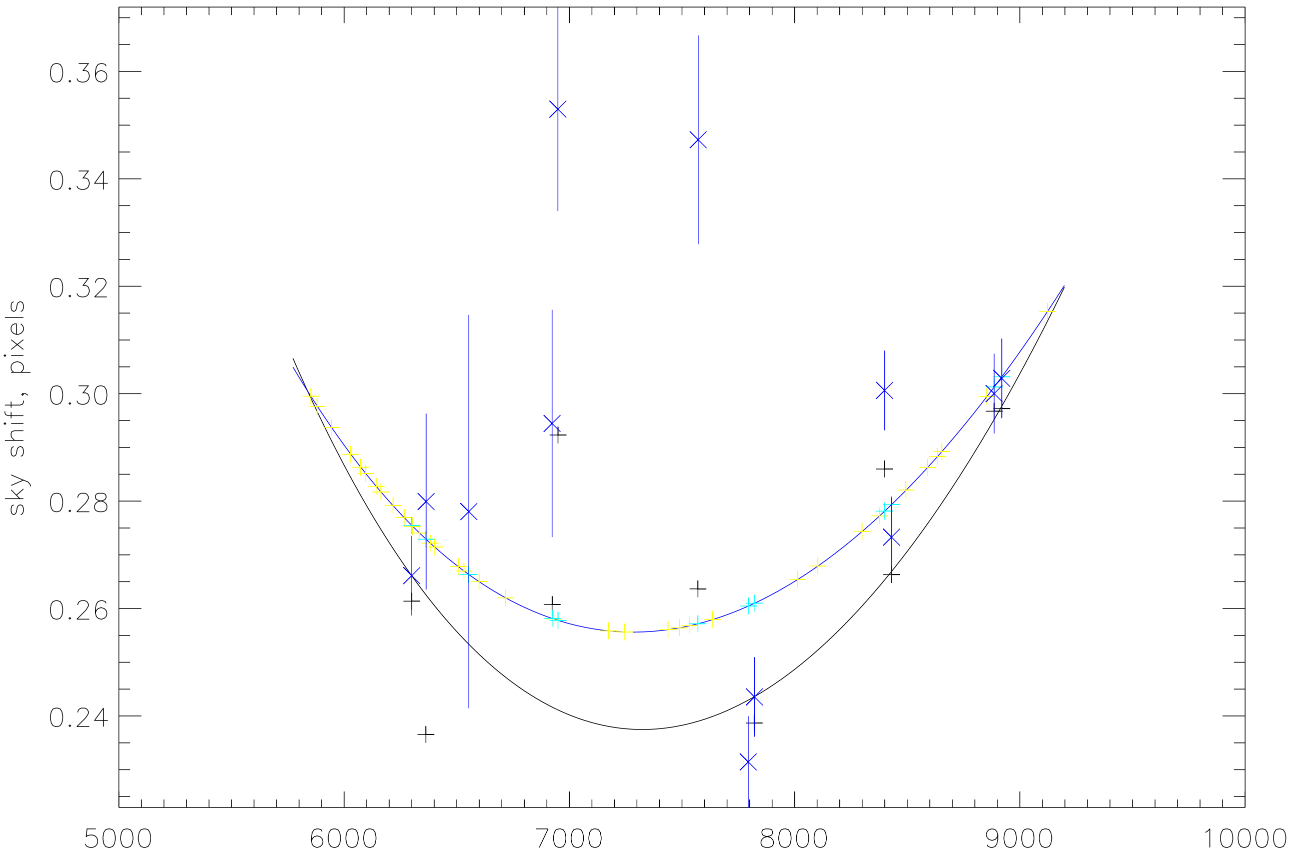

7821.5100
nfib1 16
nfib2 16
stdev 0.036
extrd 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

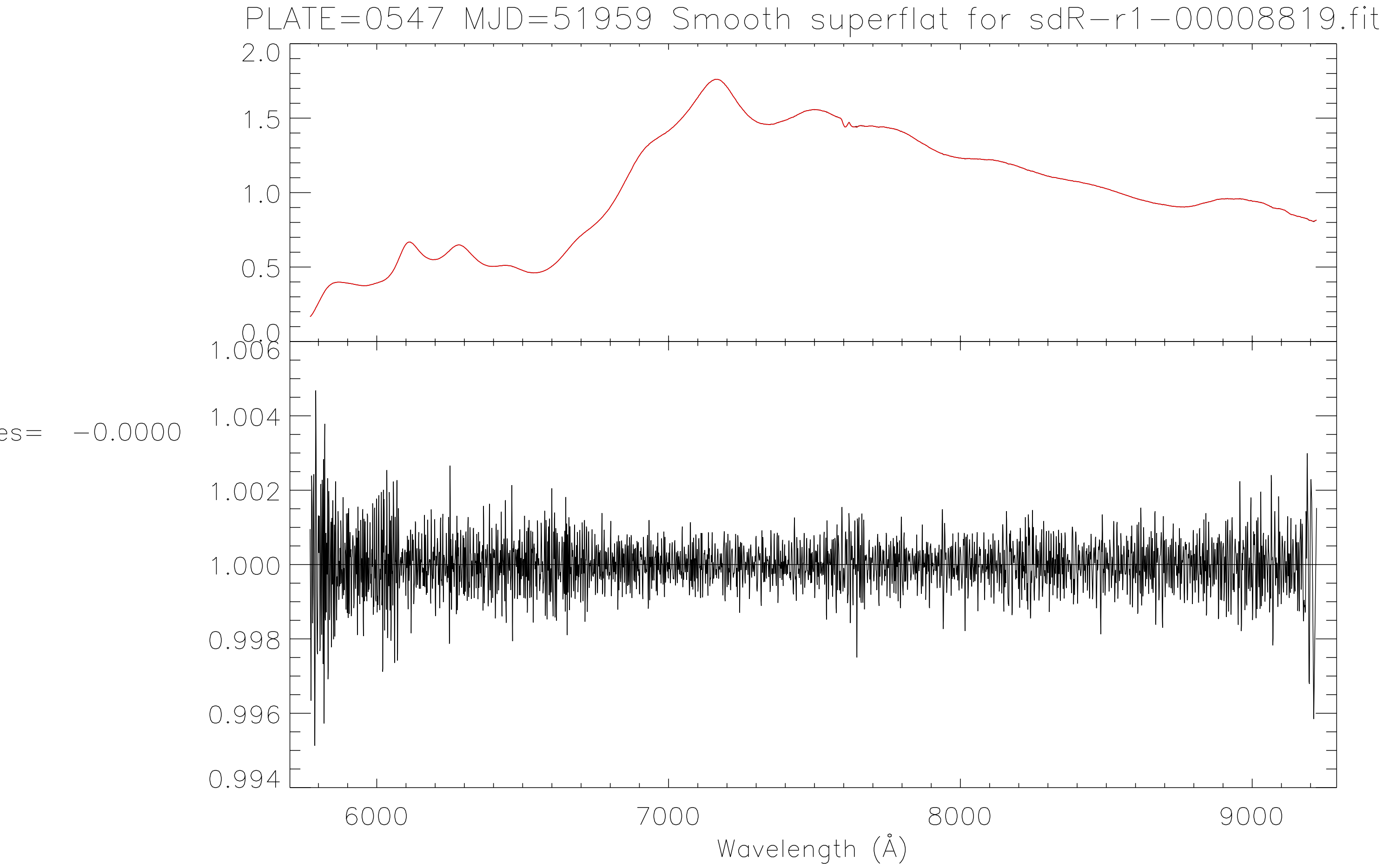

8399.1600
nfib1 16
nfib2 16
stdev 0.033
extrd 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

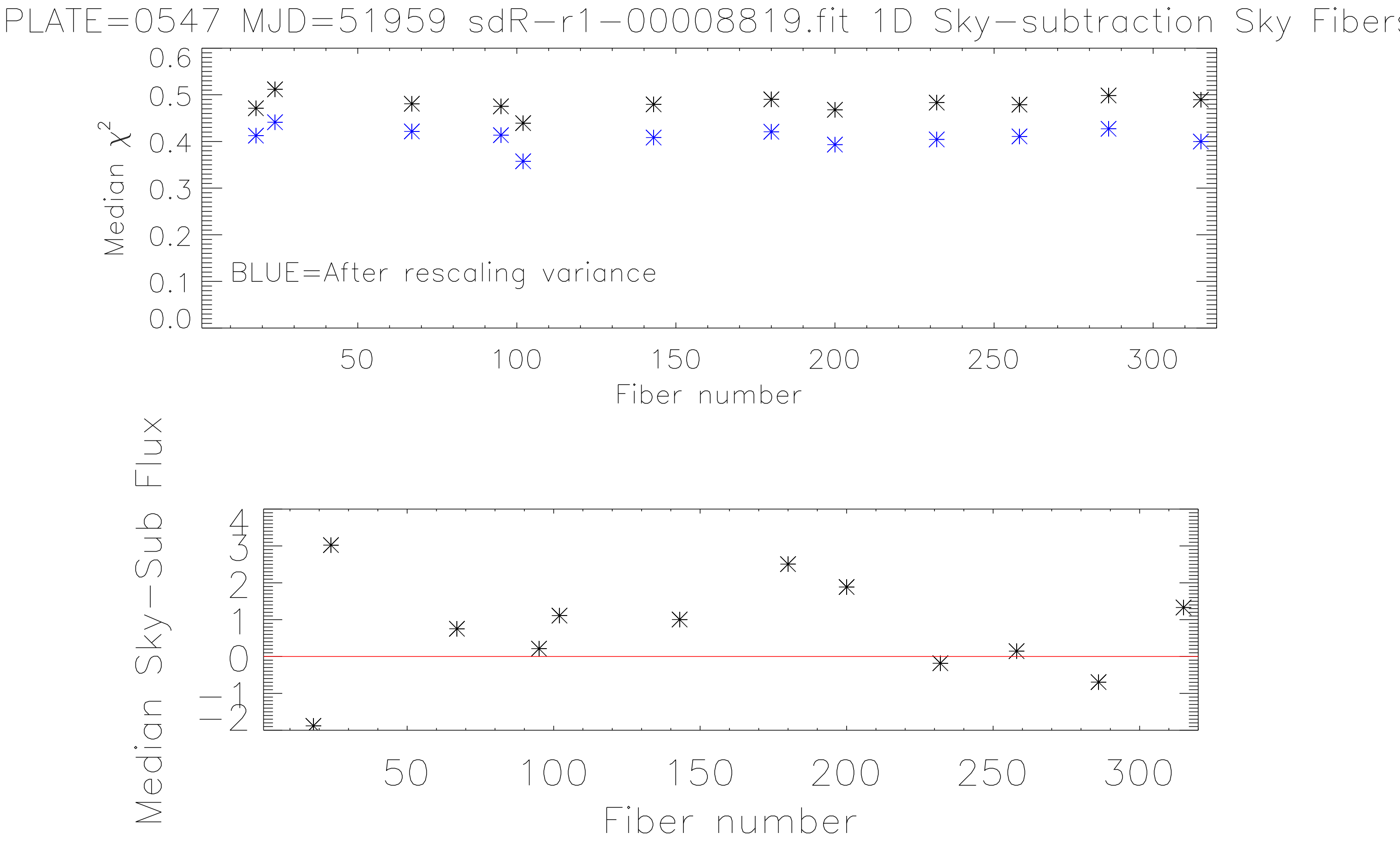

8430.1700
nfib1 15
nfib2 15
stdev 0.078
extrd 0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

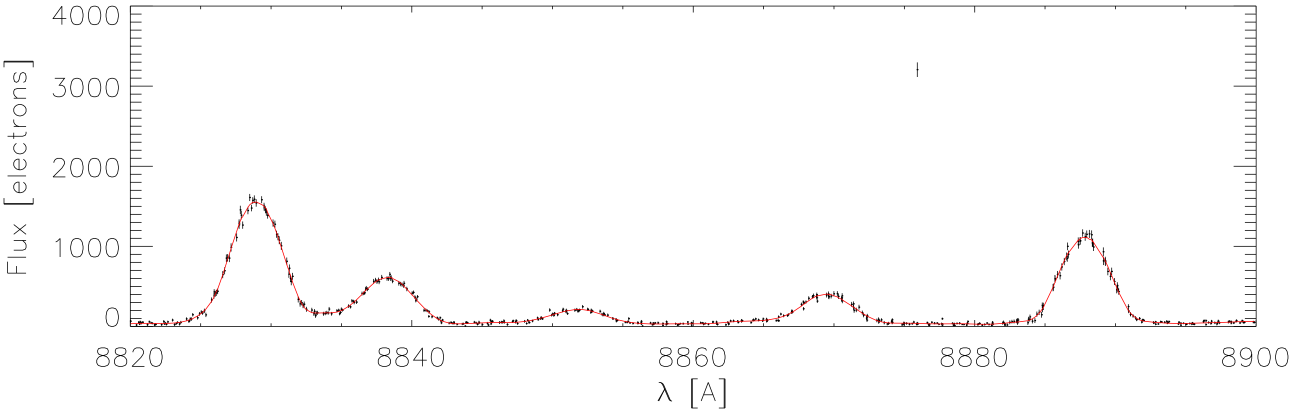

8885.8300
nfib1 15
nfib2 15
stdev 0.025
extrd 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

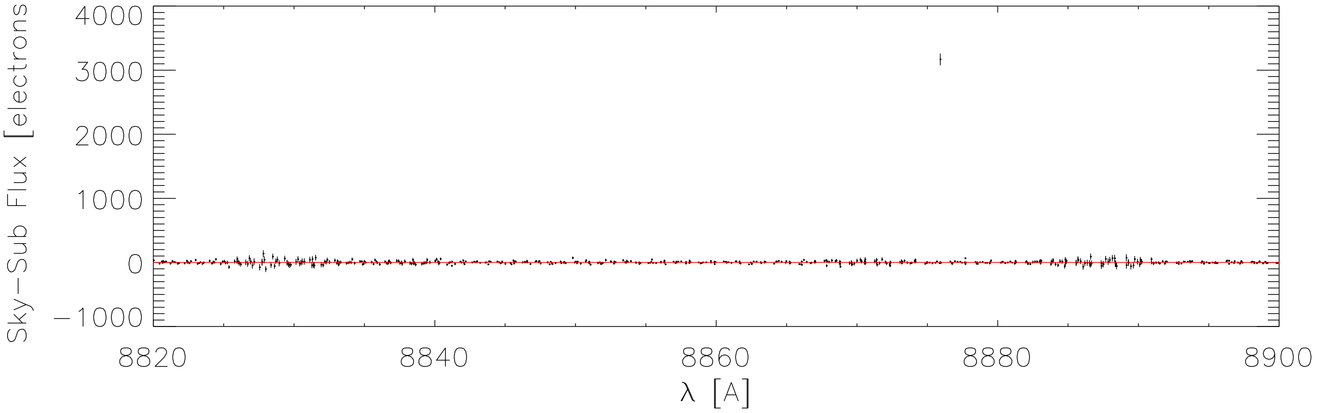

8919.6100
nfib1 15
nfib2 15
stdev 0.018
extrd 0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

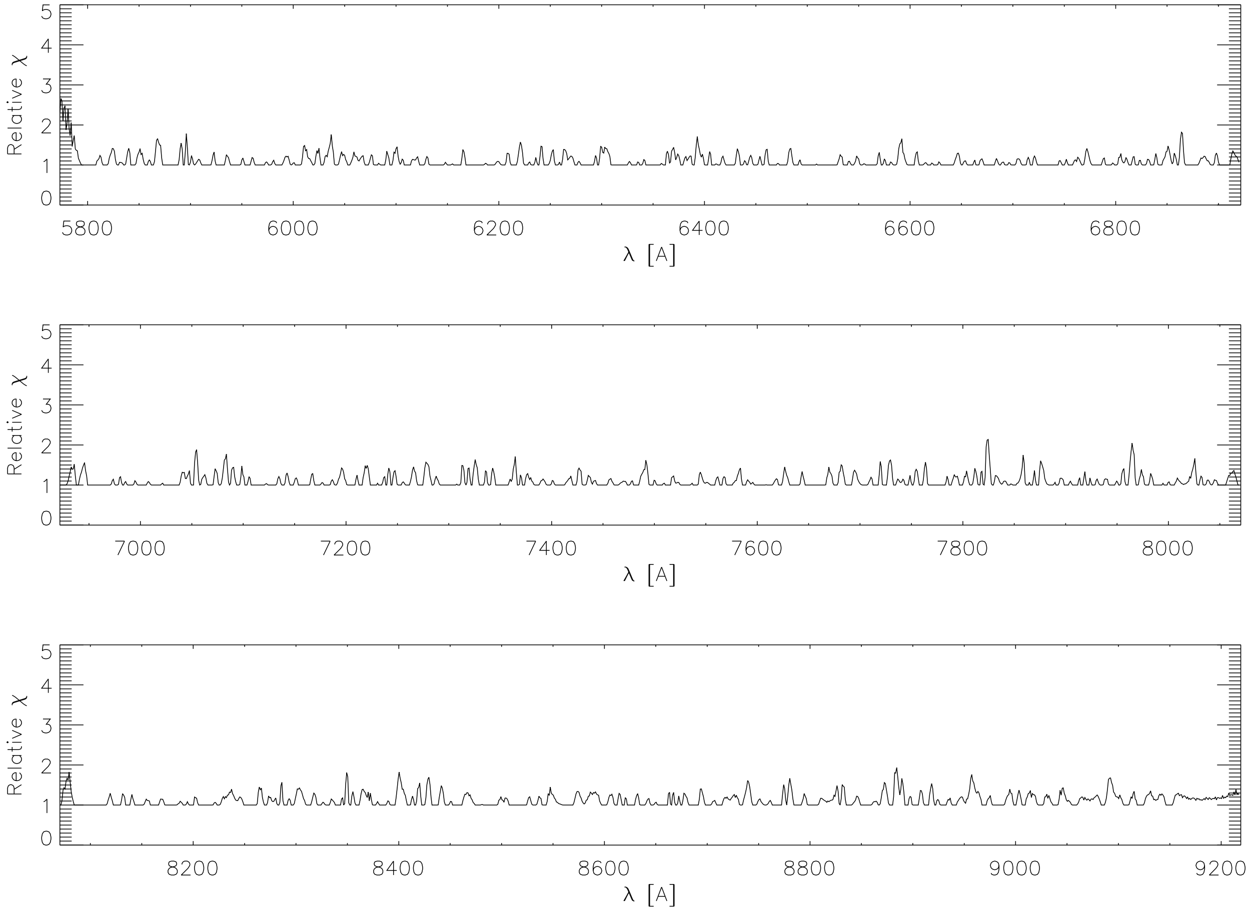

sky shift, pixels
0.36
0.34
0.32
0.30
0.28
0.26
0.24
5000
6000
7000
8000
9000
10000


PLATE=0547 MJD=51959 Smooth superflat for sdR-r1-00008819.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=0547 MJD=51959 sdR-r1-00008819.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
4
50
100
150
200
250
300
Fiber number

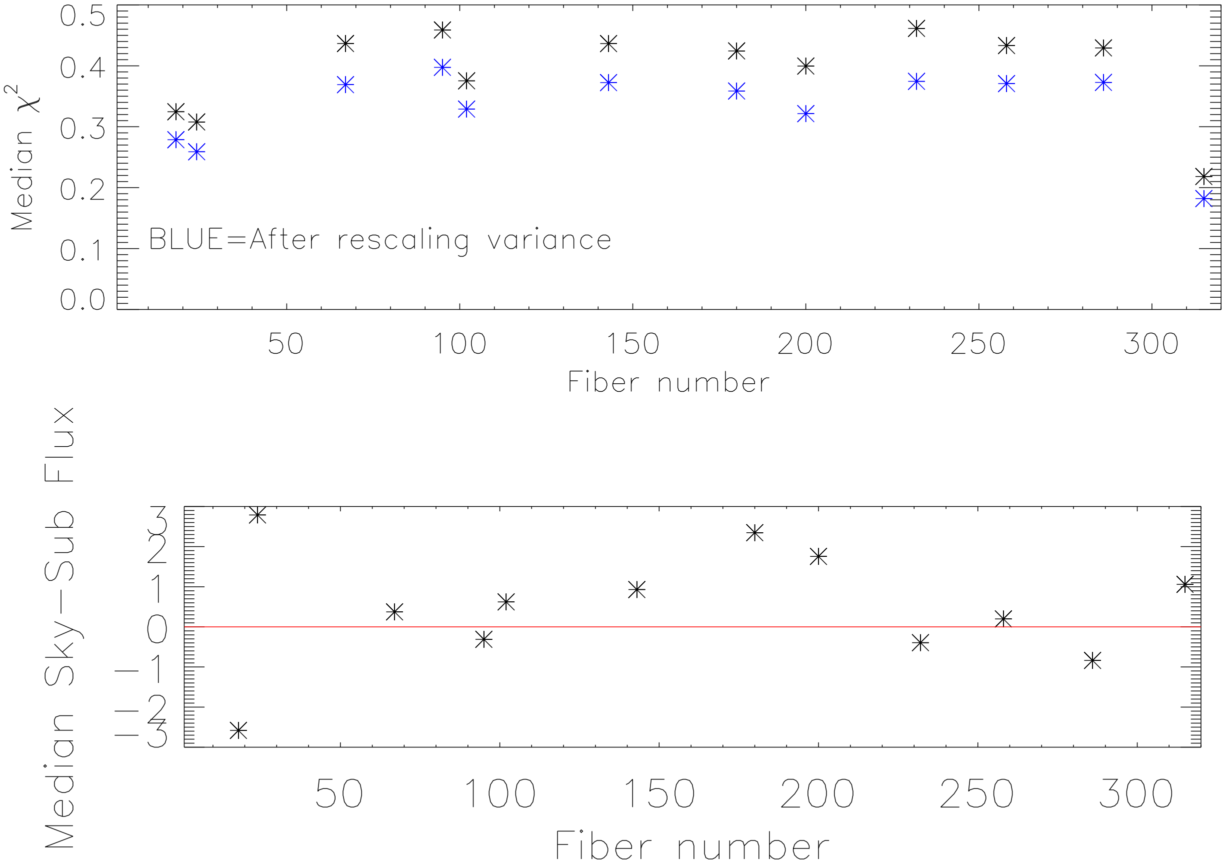

PLATE=0547 MJD=51959 sdR−r1−00008819.fit 1D Sky−subtraction Sky Fibers

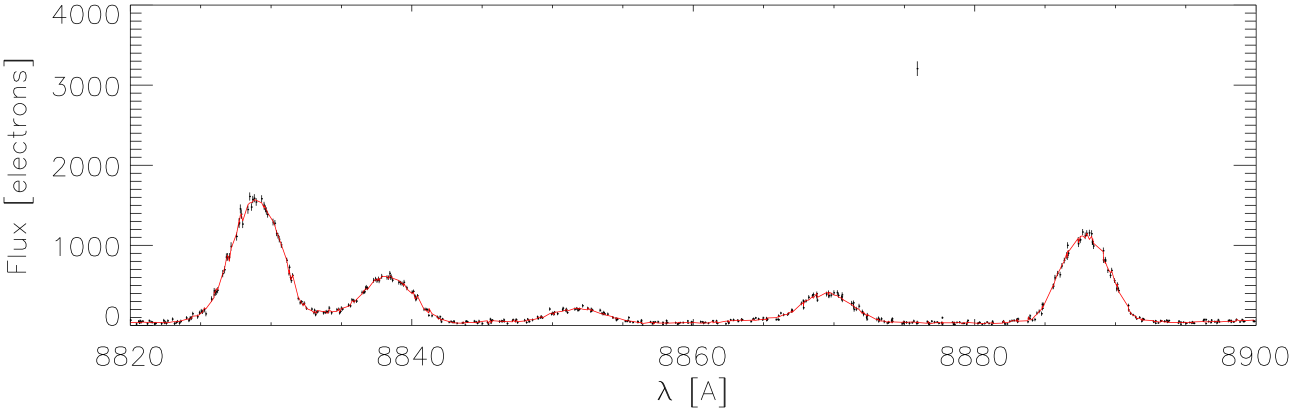

PLATE=0547 MJD=51959 sdR−r1−00008819.fit 1D Sky−subtraction Sky−subtracted Sky F

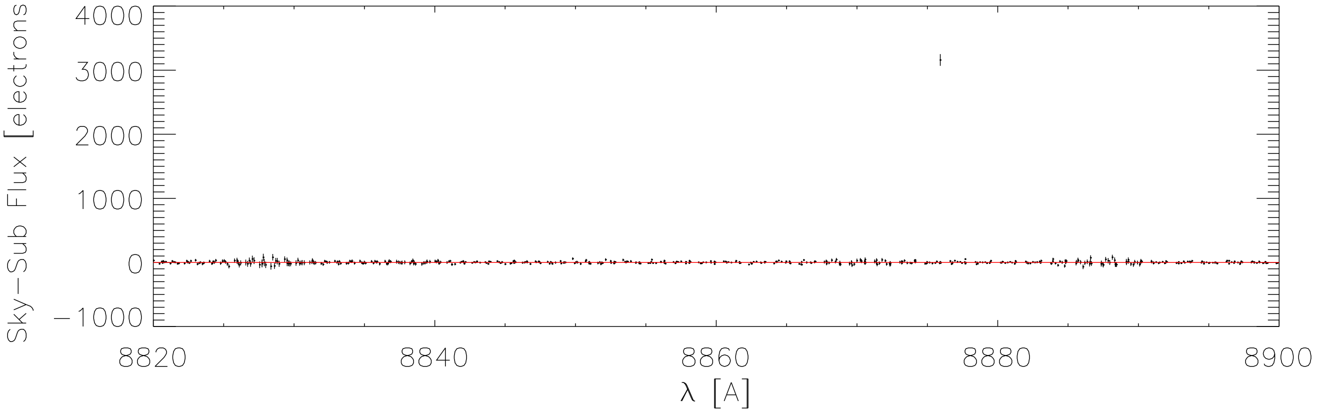

Number of sky fibers = 12

PLATE=0547 MJD=51959 sdR-r1-00008819.fit 1D Sky-subtraction Rescaled Errors

PLATE=0547 MJD=51959 sdR-r1-00008819.fit 2D Sky-subtraction Sky Fiber

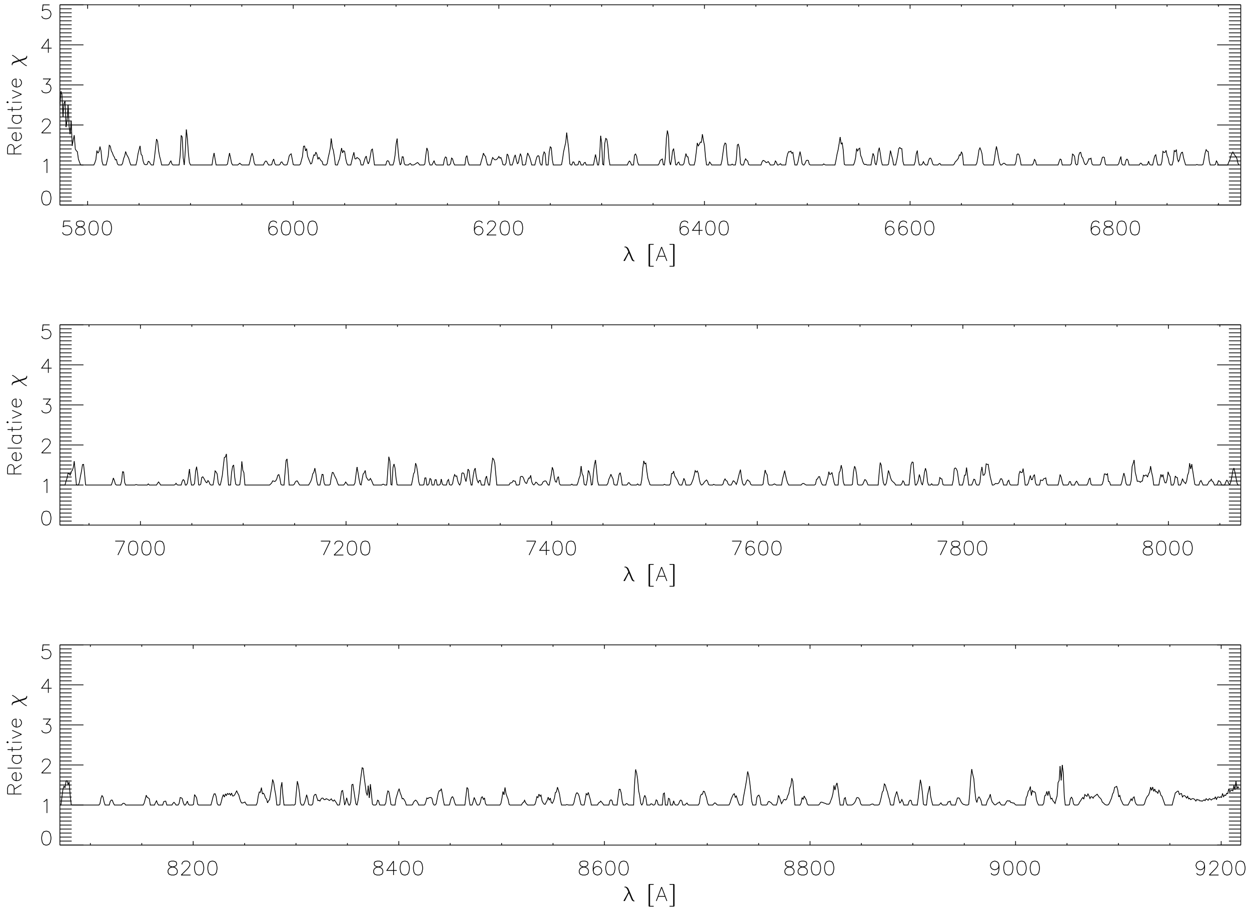


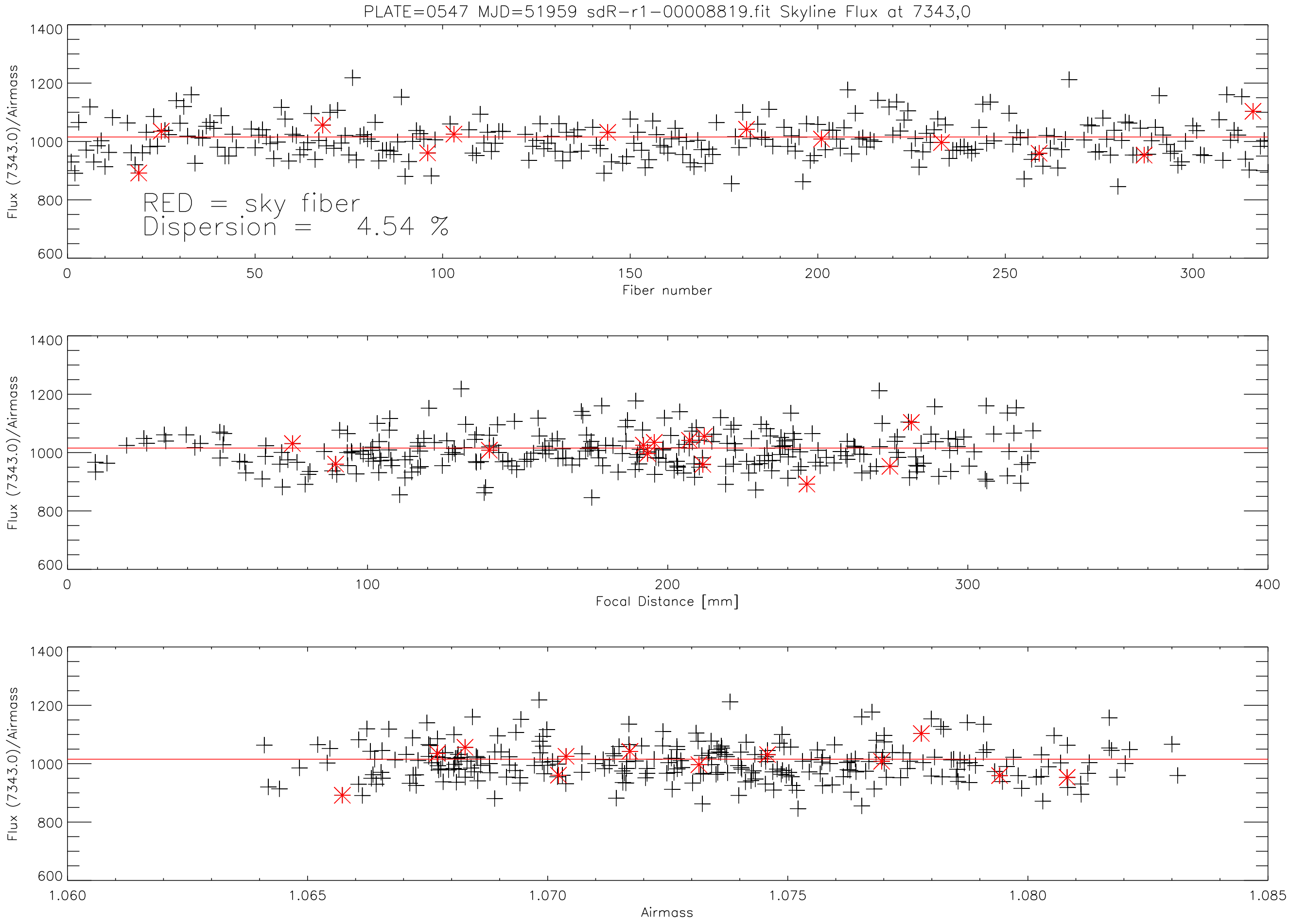

PLATE=0547 MJD=51959 sdR-r1-00008819.fit 2D Sky-subtraction Sky Fibers

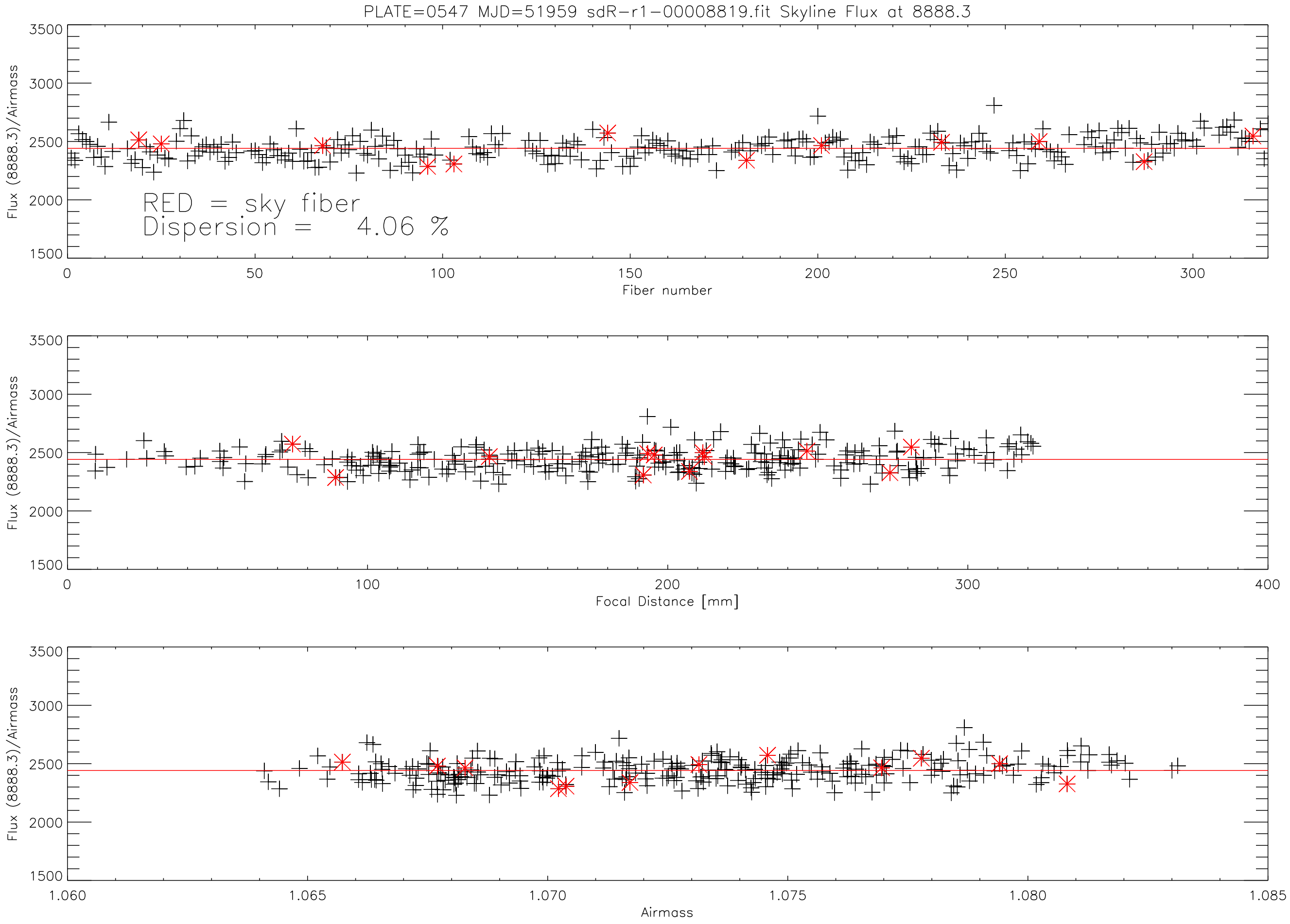

PLATE=0547 MJD=51959 sdR-r1-00008819.fit 2D Sky-subtraction Sky-subtracted Sky F

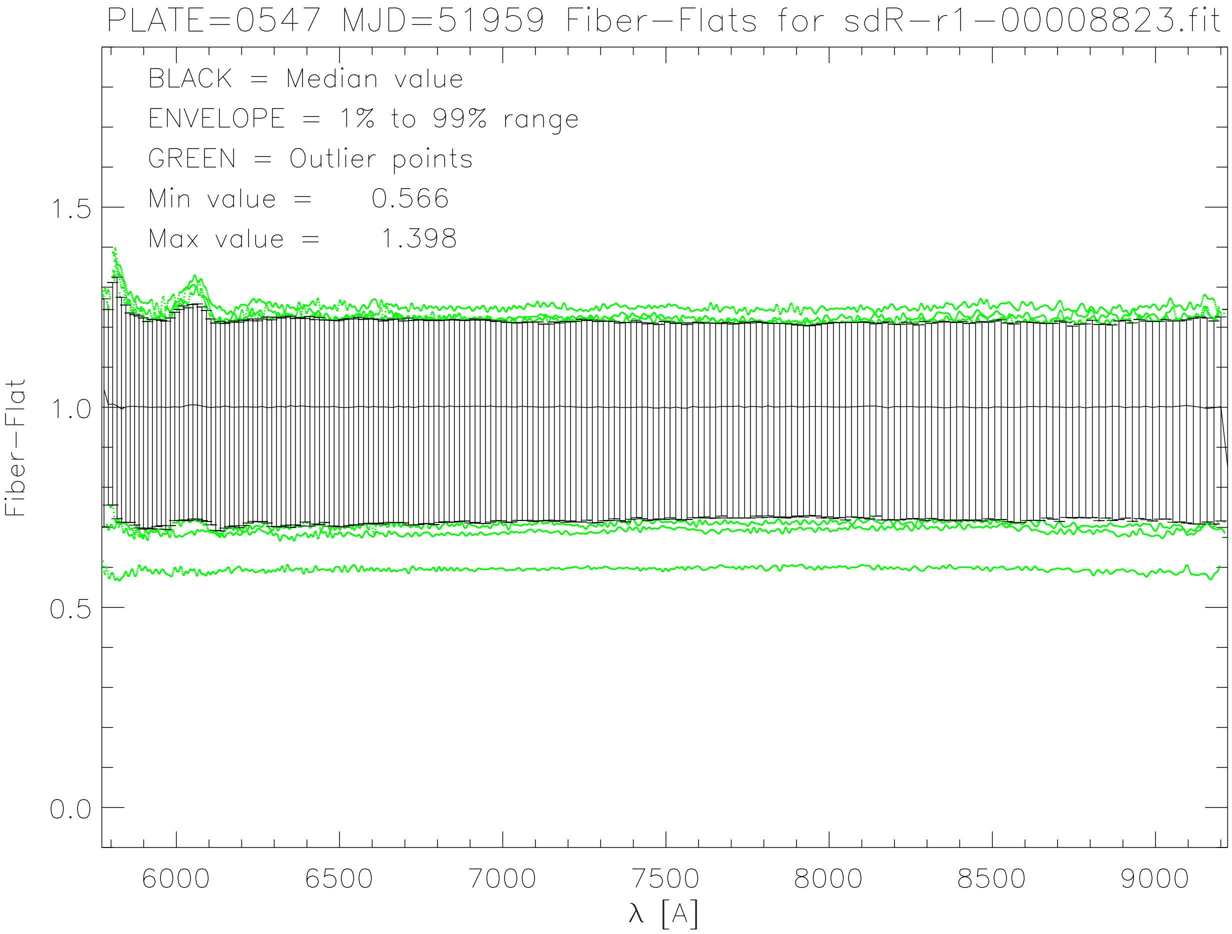
Number of sky fibers = 12

PLATE=0547 MJD=51959 sdR-r1-00008819.fit 2D Sky-subtraction Rescaled Errors

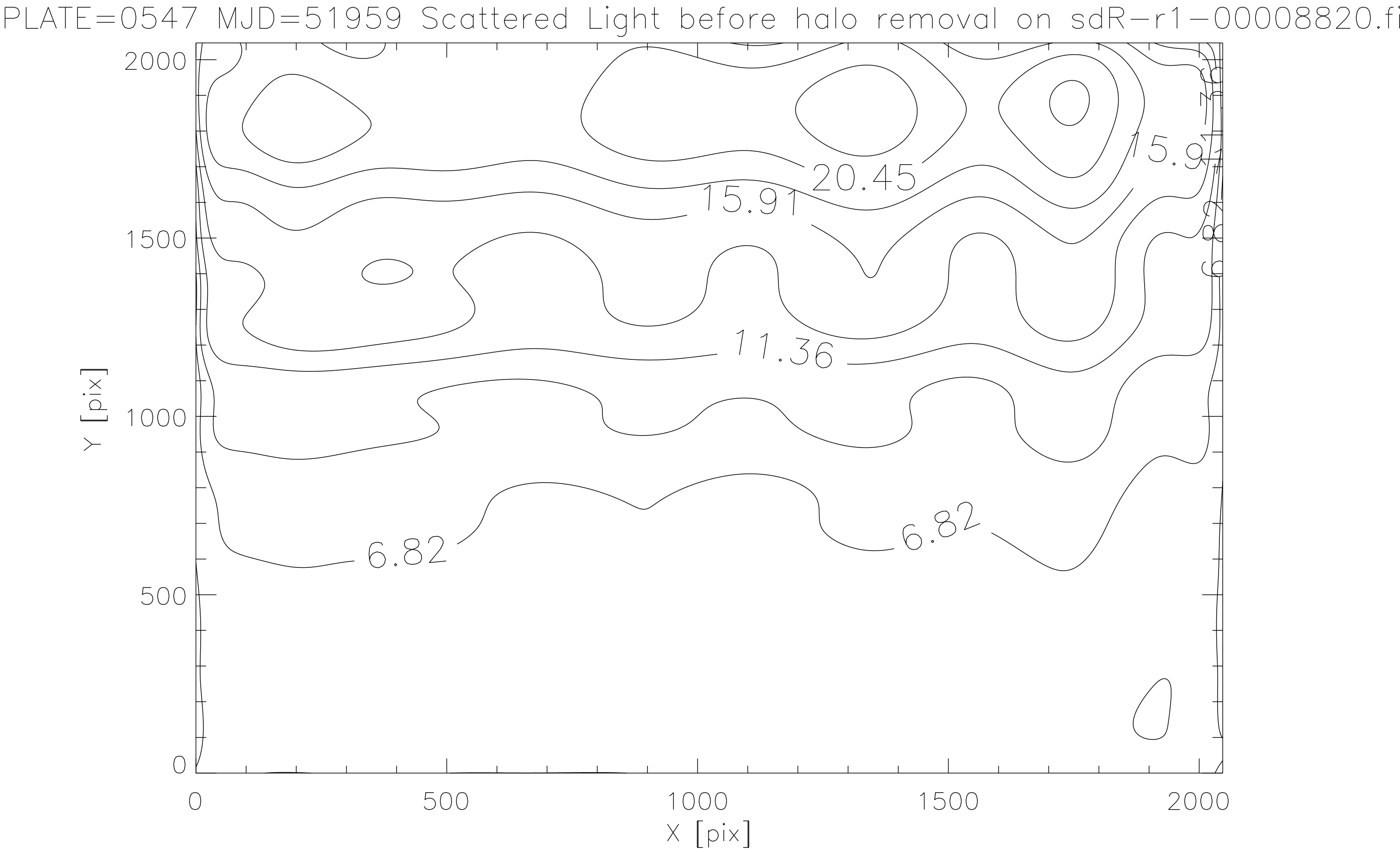


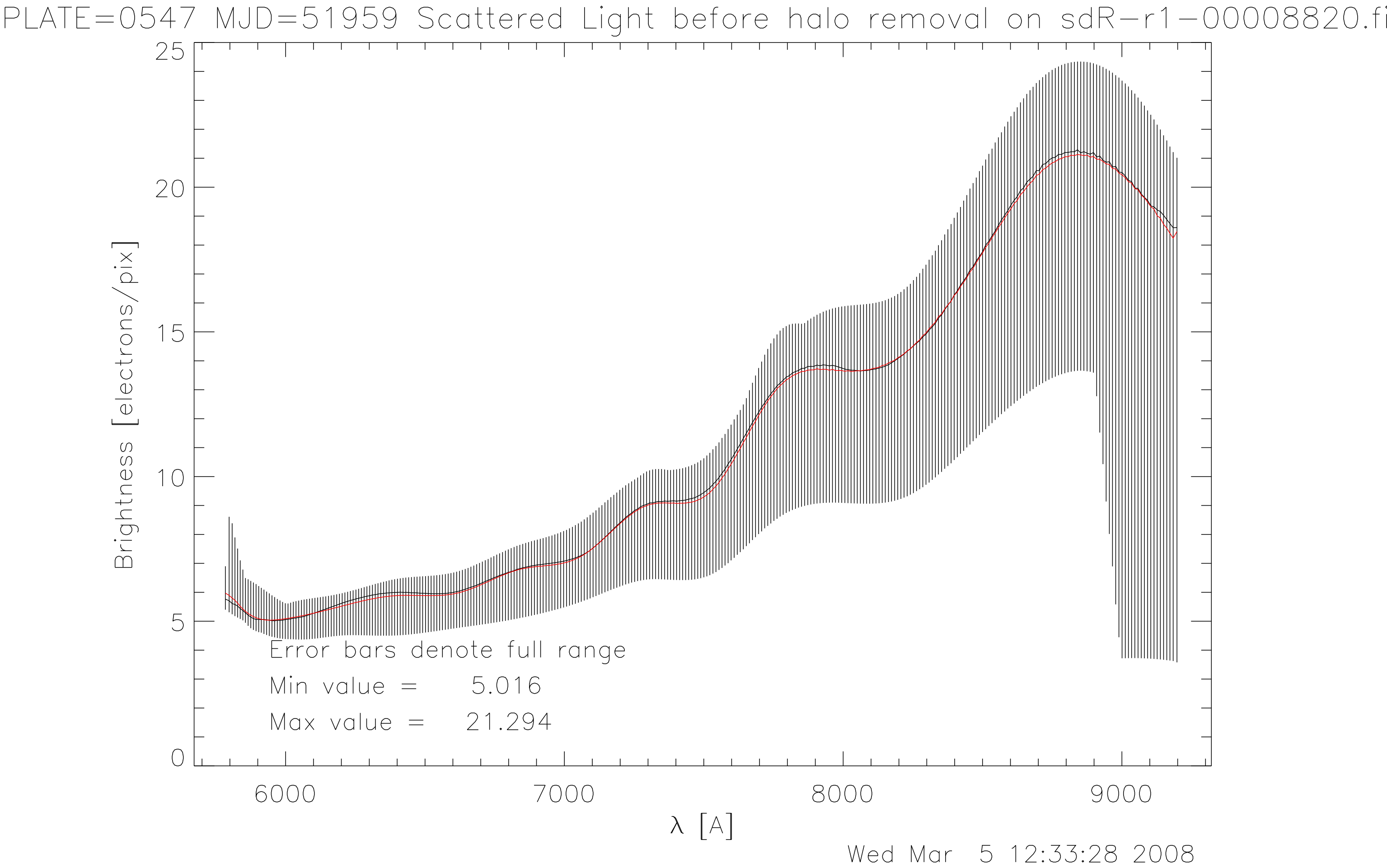

PLATE=0547 MJD=51959 sdR-r1-00008819.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 4.54 %
Flux (7343.0)/Airmass
1400
1200
1000
800
600
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
1400
1200
1000
800
600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1400
1200
1000
800
600
1.060
1.065
1.070
1.075
1.080
1.085
Airmass


PLATE=0547 MJD=51959 sdR-r1-00008819.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
3500
3000
2500
2000
1500
RED = sky fiber
Dispersion = 4.06 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
3500
3000
2500
2000
1500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
3500
3000
2500
2000
1500
1.060
1.065
1.070
1.075
1.080
1.085
Airmass

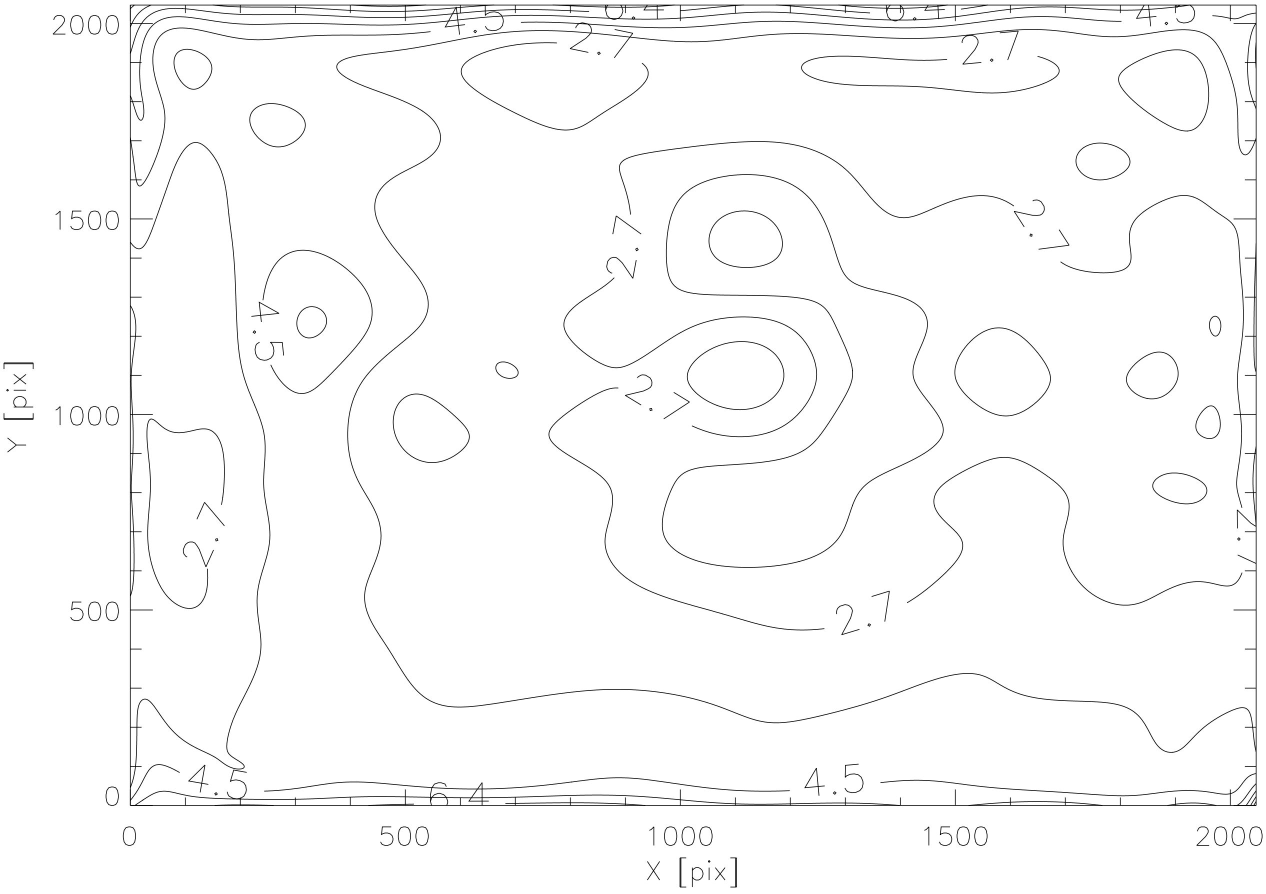


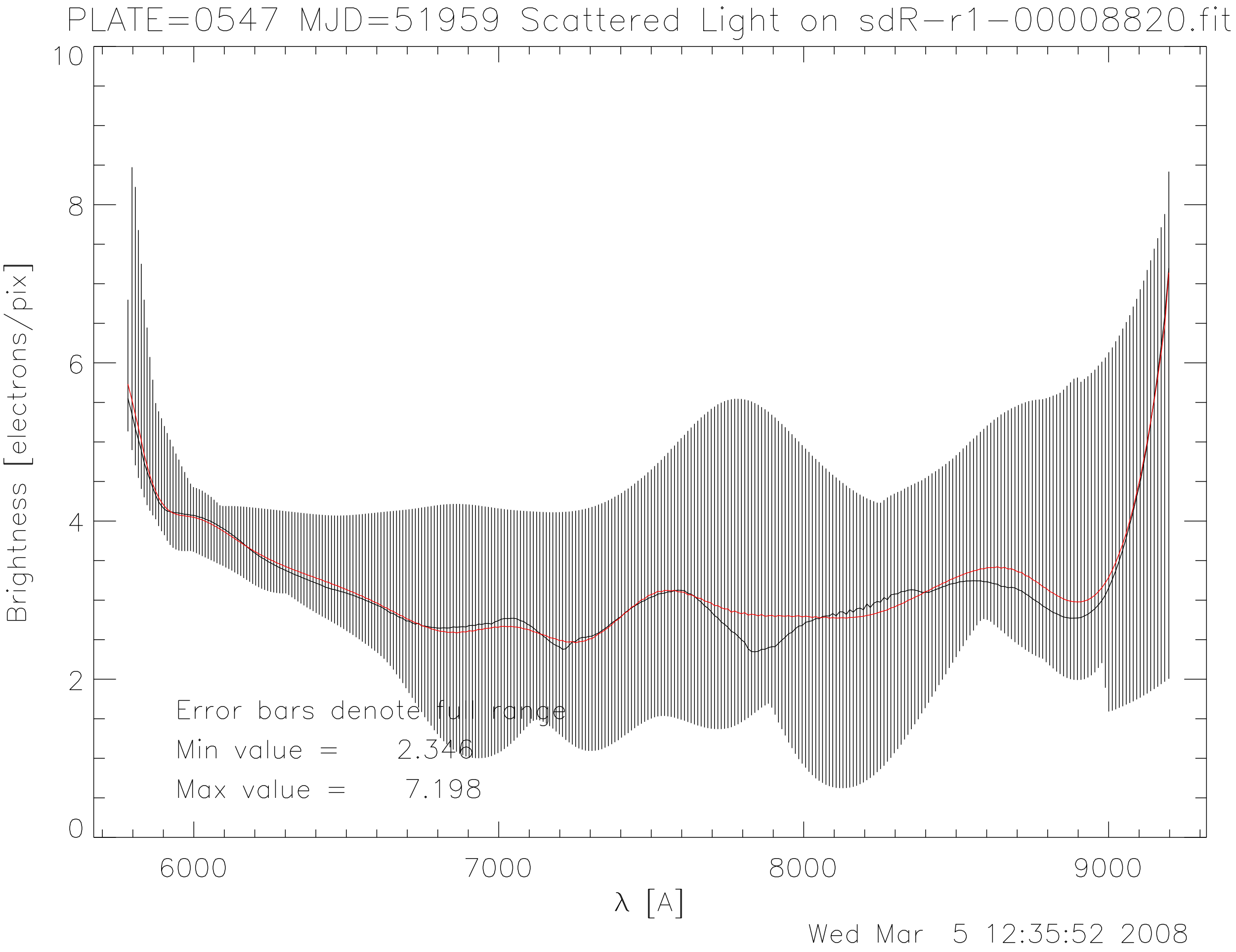
Wed Mar 5 12:32:38 2008


PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008820.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
20.45
15.91
15.91
11.36
6.82
6.82
6.82
11.36

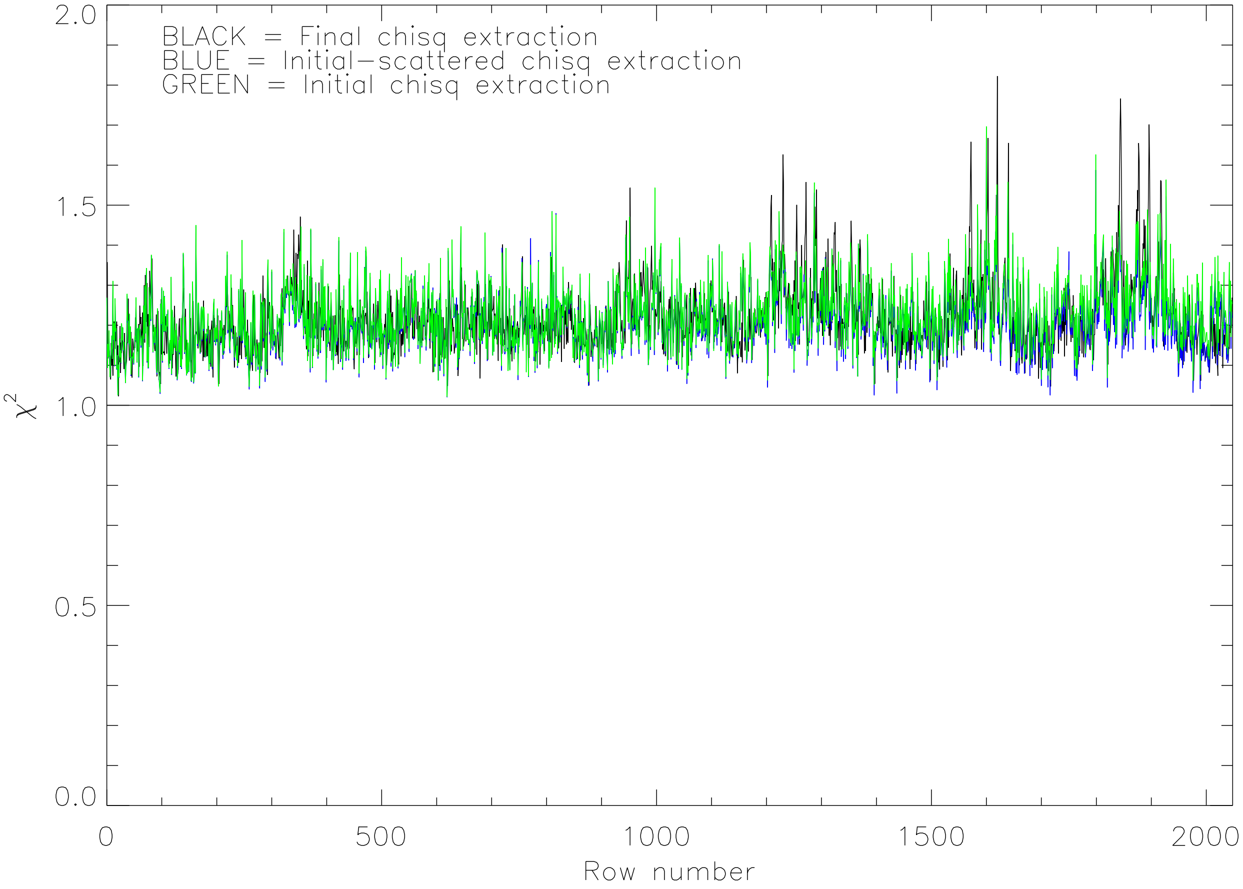

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008820.fi
Brightness [electrons/pix]
0
5
10
15
20
25
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.016
Max value = 21.294
Wed Mar 5 12:33:28 2008

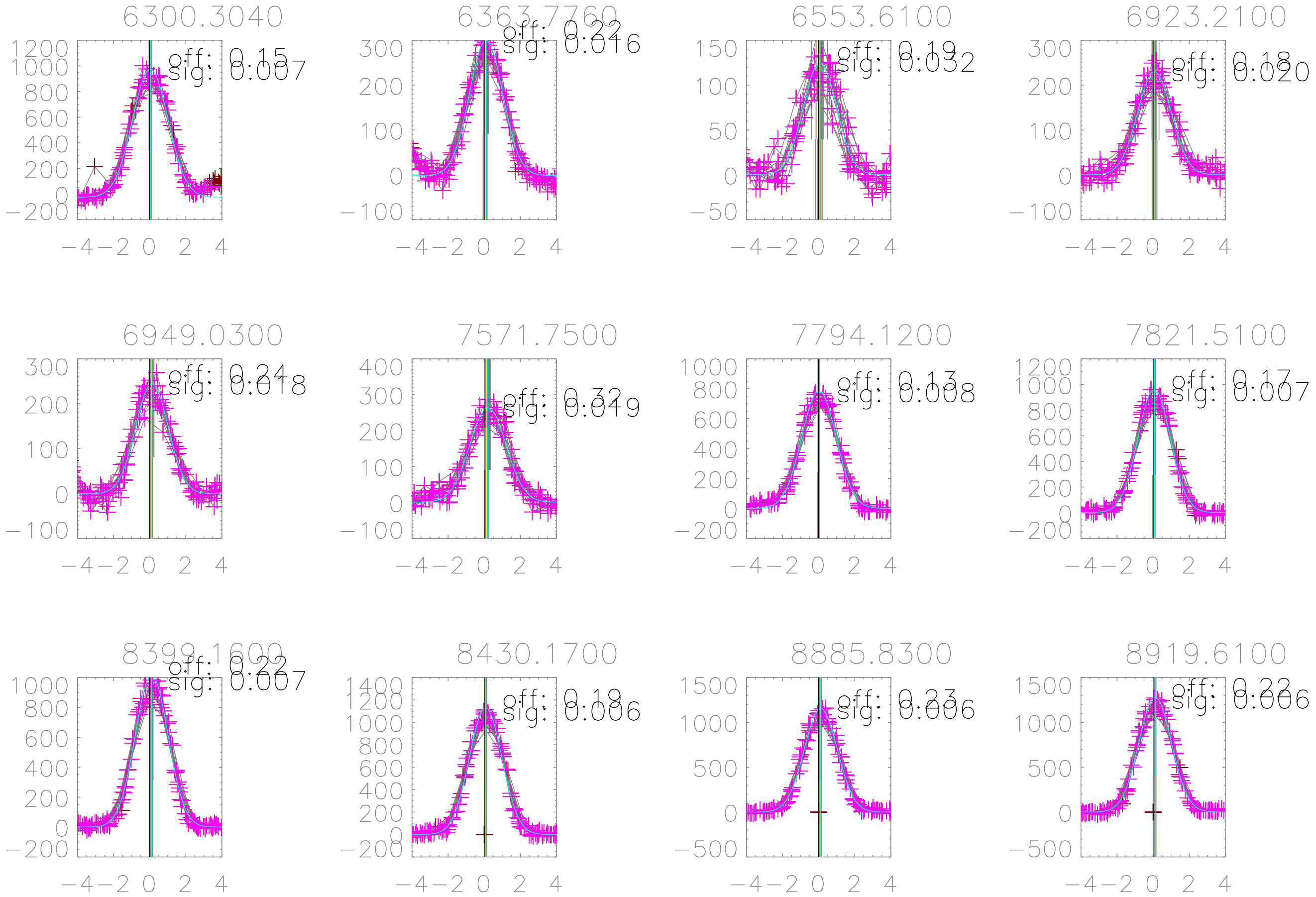
PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008820.fit

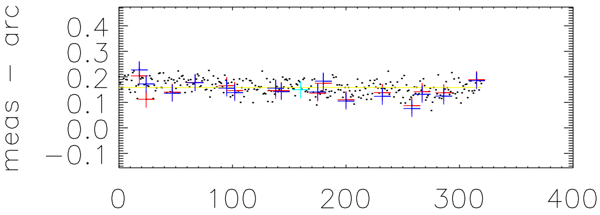


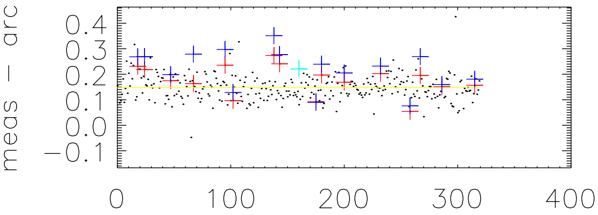

PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008820.fit
Brightness [electrons/pix]
0
2
4
6
8
10
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.346
Max value = 7.198
Wed Mar 5 12:35:52 2008

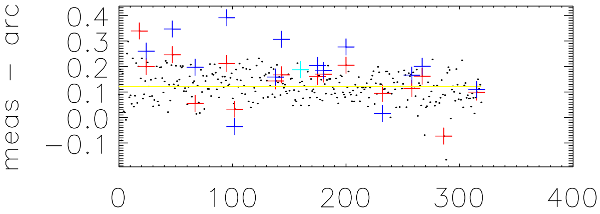
PLATE=0547 MJD=51959 Extraction χ^2 for sdR-r1-00008820.fit

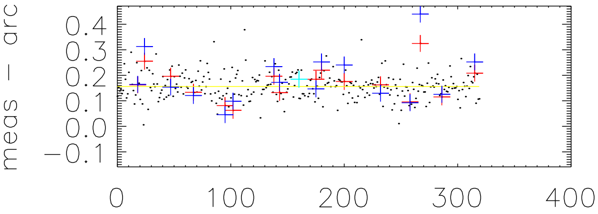


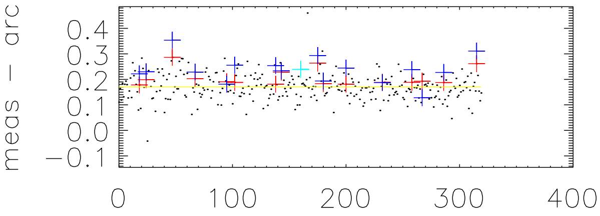

6300.3040
off: 0.15
sig: 0.007
6363.7760
off: 0.22
sig: 0.016
6553.6100
off: 0.19
sig: 0.032
6923.2100
off: 0.18
sig: 0.020
6949.0300
off: 0.24
sig: 0.018
7571.7500
off: 0.32
sig: 0.049
7794.1200
off: 0.13
sig: 0.008
7821.5100
off: 0.17
sig: 0.007
8399.1600
off: 0.22
sig: 0.007
8430.1700
off: 0.19
sig: 0.006
8885.8300
off: 0.23
sig: 0.006
8919.6100
off: 0.22
sig: 0.006
−4 −2 0 2 4

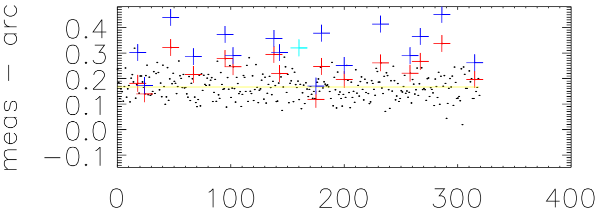

6300.3040

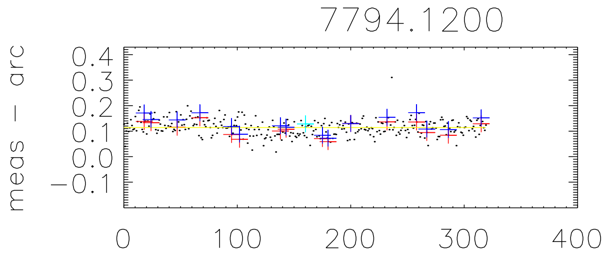

6363.7760

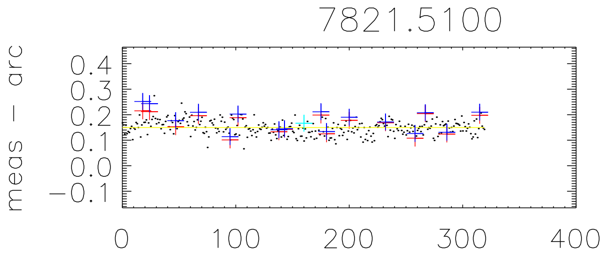

6553.6100

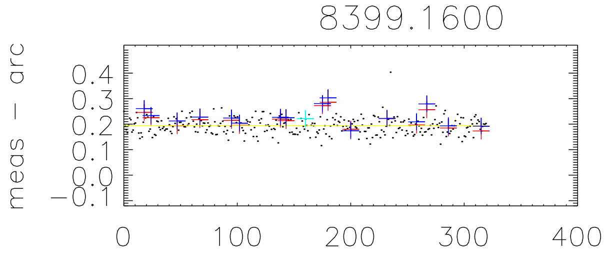

6923.2100

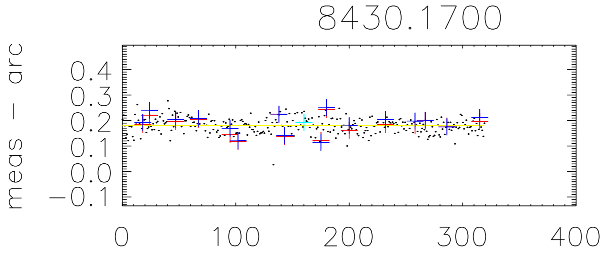

6949.0300

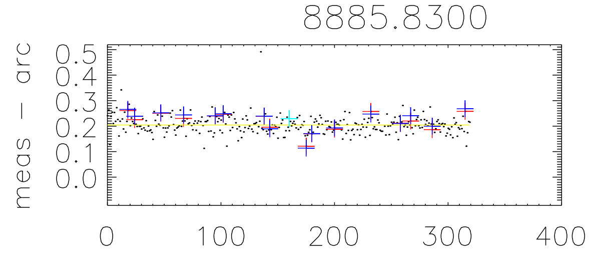

7571.7500

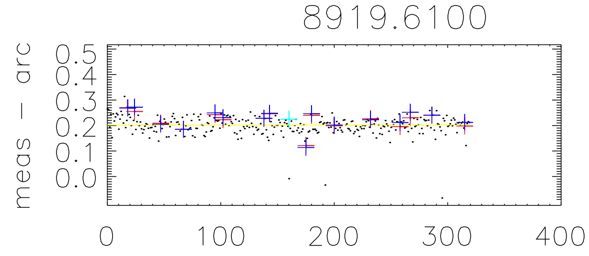

7794.1200
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

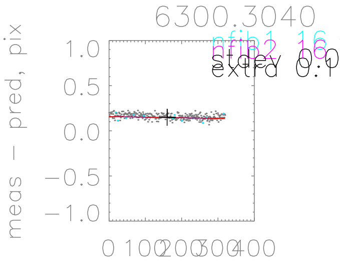

7821.5100
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

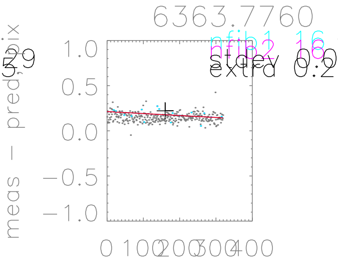

8399.1600
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

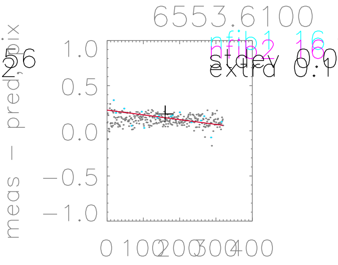

8430.1700
meas - arc
0.4
0.3
0.2
0.1
0.0
−0.1
0
100
200
300
400

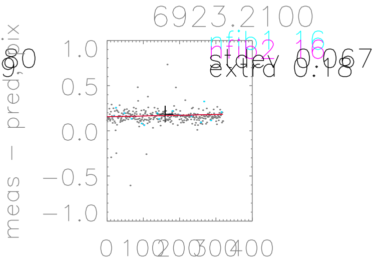

8885.8300
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

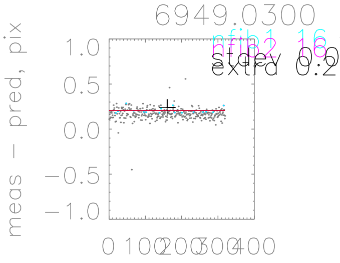

8919.6100
meas - arc
0.5
0.4
0.3
0.2
0.1
0.0
0
100
200
300
400

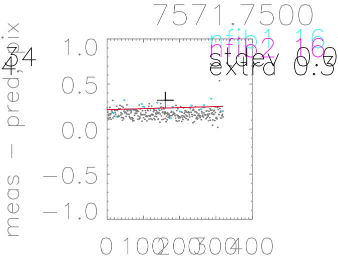

6300.3040
nfib1 16
nfib2 16
stdev 0.029
extrd 0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

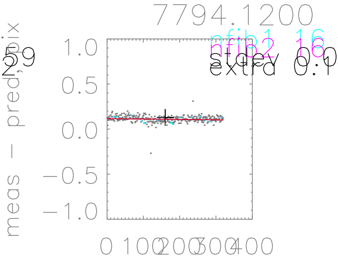

6363.7760
nfib1 16
nfib2 16
stdev 0.056
extrd 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

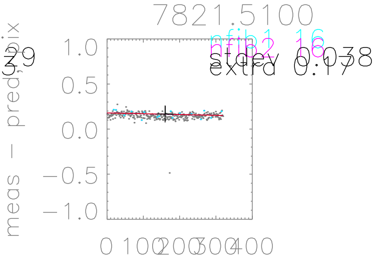

6553.6100
nfib1 16
nfib2 16
stdev 0.080
extrd 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

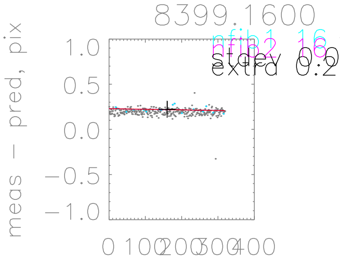

6923.2100
nfib1 16
nfib2 16
stdev 0.067
extrd 0.18
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

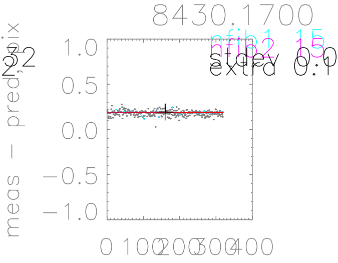

6949.0300
nfib1 16
nfib2 16
stdev 0.034
extrd 0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

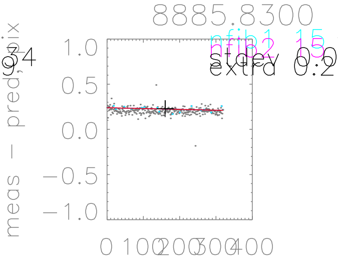

7571.7500
nfib1 16
nfib2 16
stdev 0.059
extrd 0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

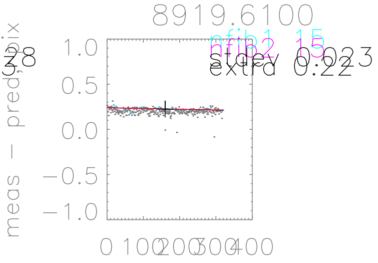

7794.1200
nfib1 16
nfib2 16
stdev 0.029
extrd 0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

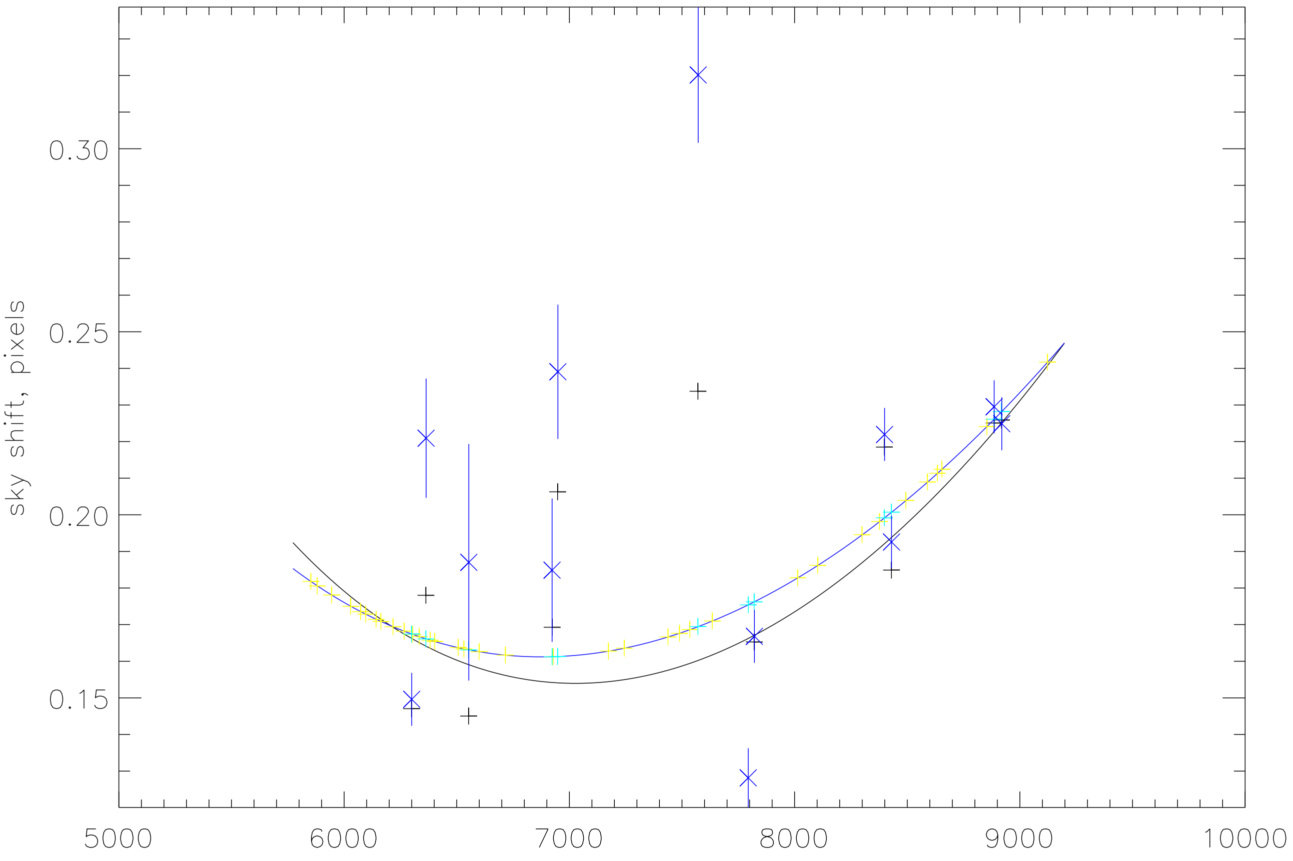

7821.5100
nfib1 16
nfib2 16
stdev 0.038
extrd 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

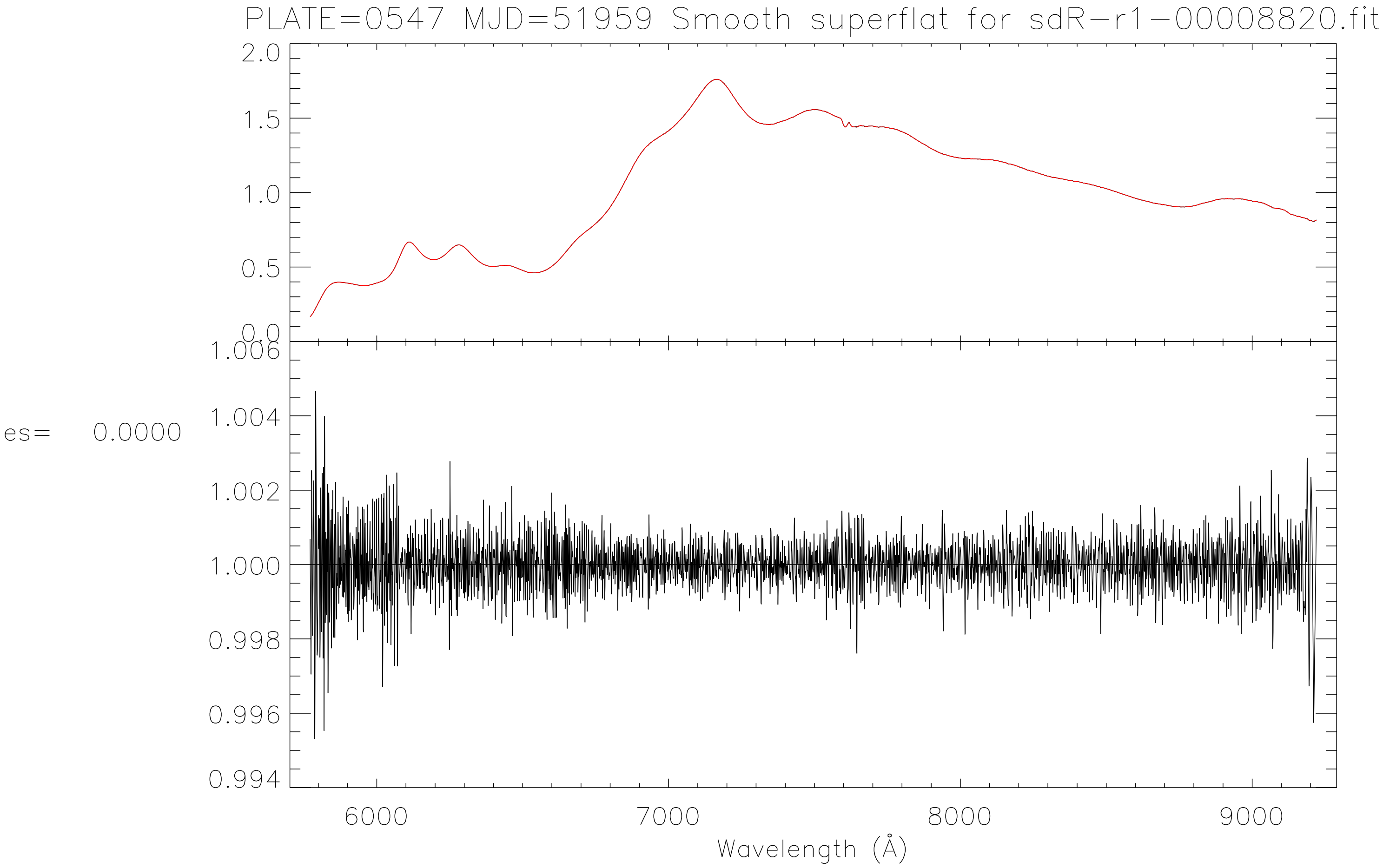

8399.1600
nfib1 16
nfib2 16
stdev 0.032
extrd 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

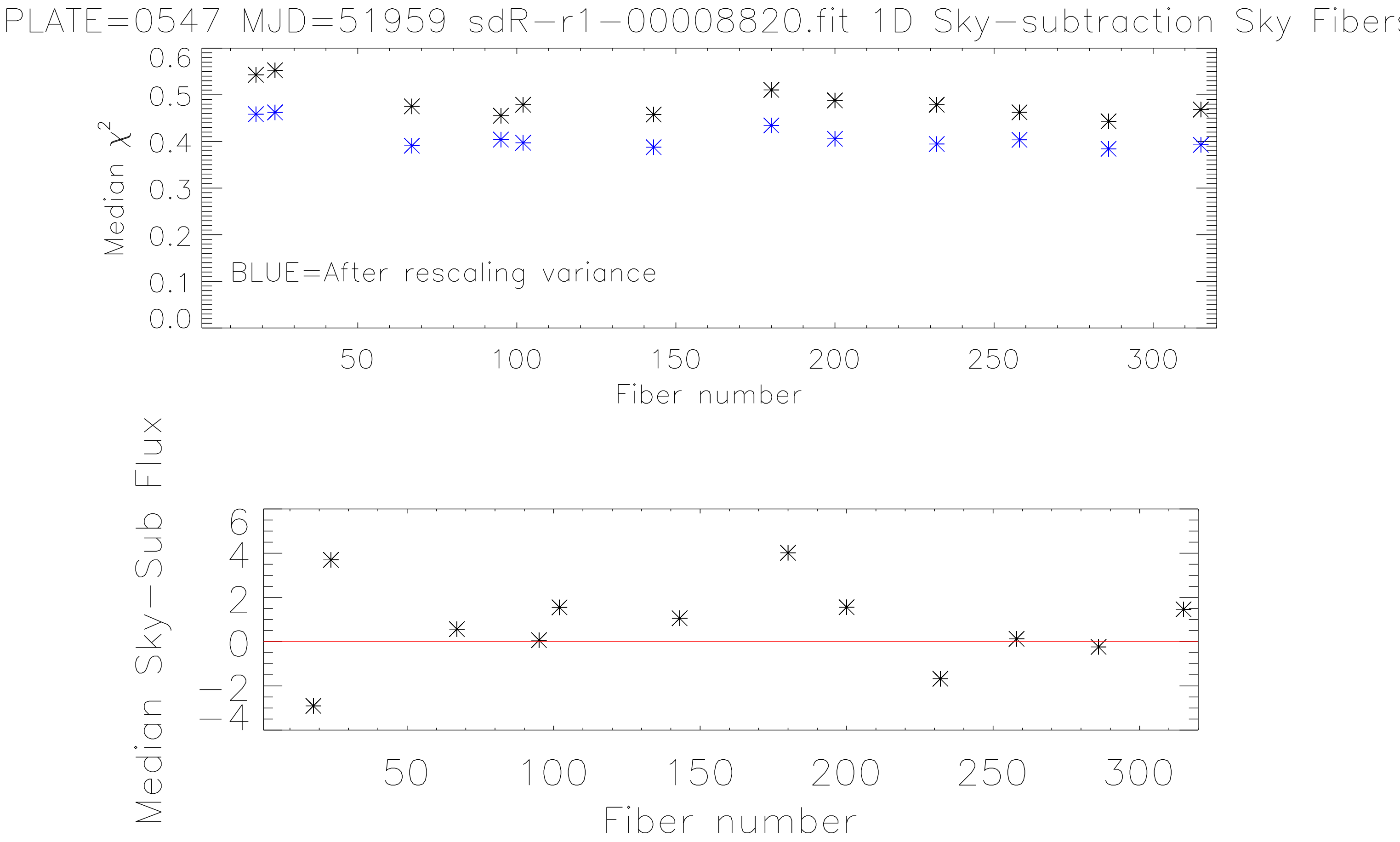

8430.1700
nfib1 15
nfib2 15
stdev 0.034
extrd 0.19
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

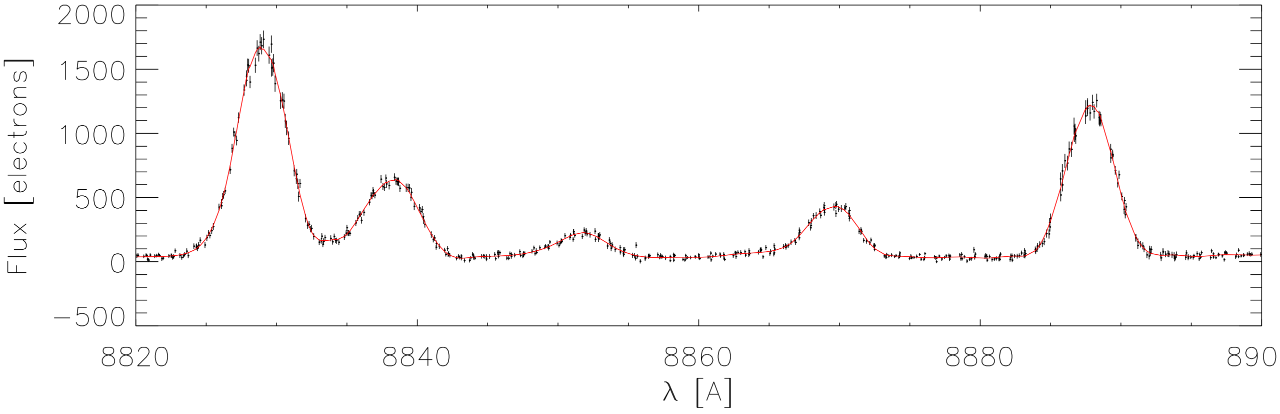

8885.8300
nfib1 15
nfib2 15
stdev 0.028
extrd 0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

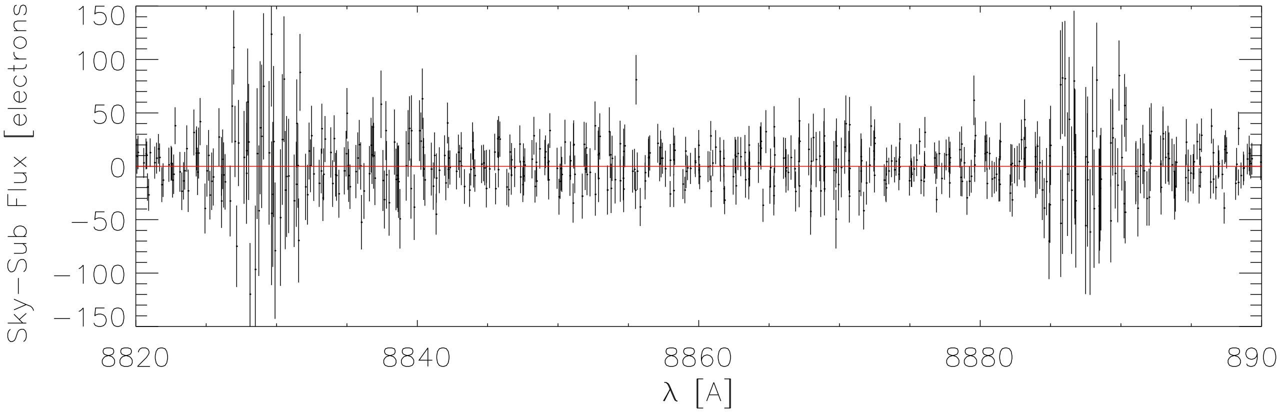

8919.6100
nfib1 15
nfib2 15
stdev 0.023
extrd 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


sky shift, pixels
0.15
0.20
0.25
0.30
5000
6000
7000
8000
9000
10000


PLATE=0547 MJD=51959 Smooth superflat for sdR-r1-00008820.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)

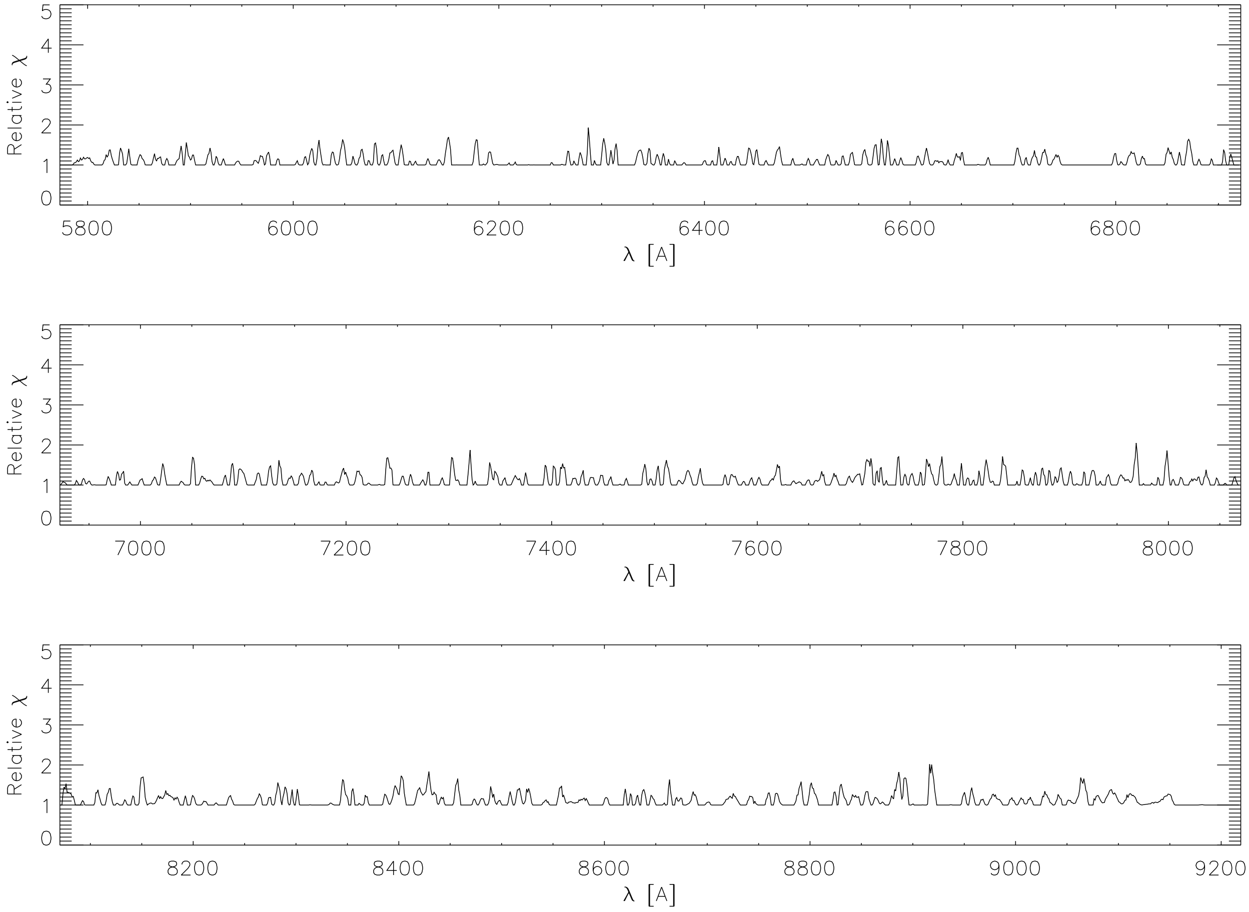

PLATE=0547 MJD=51959 sdR-r1-00008820.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

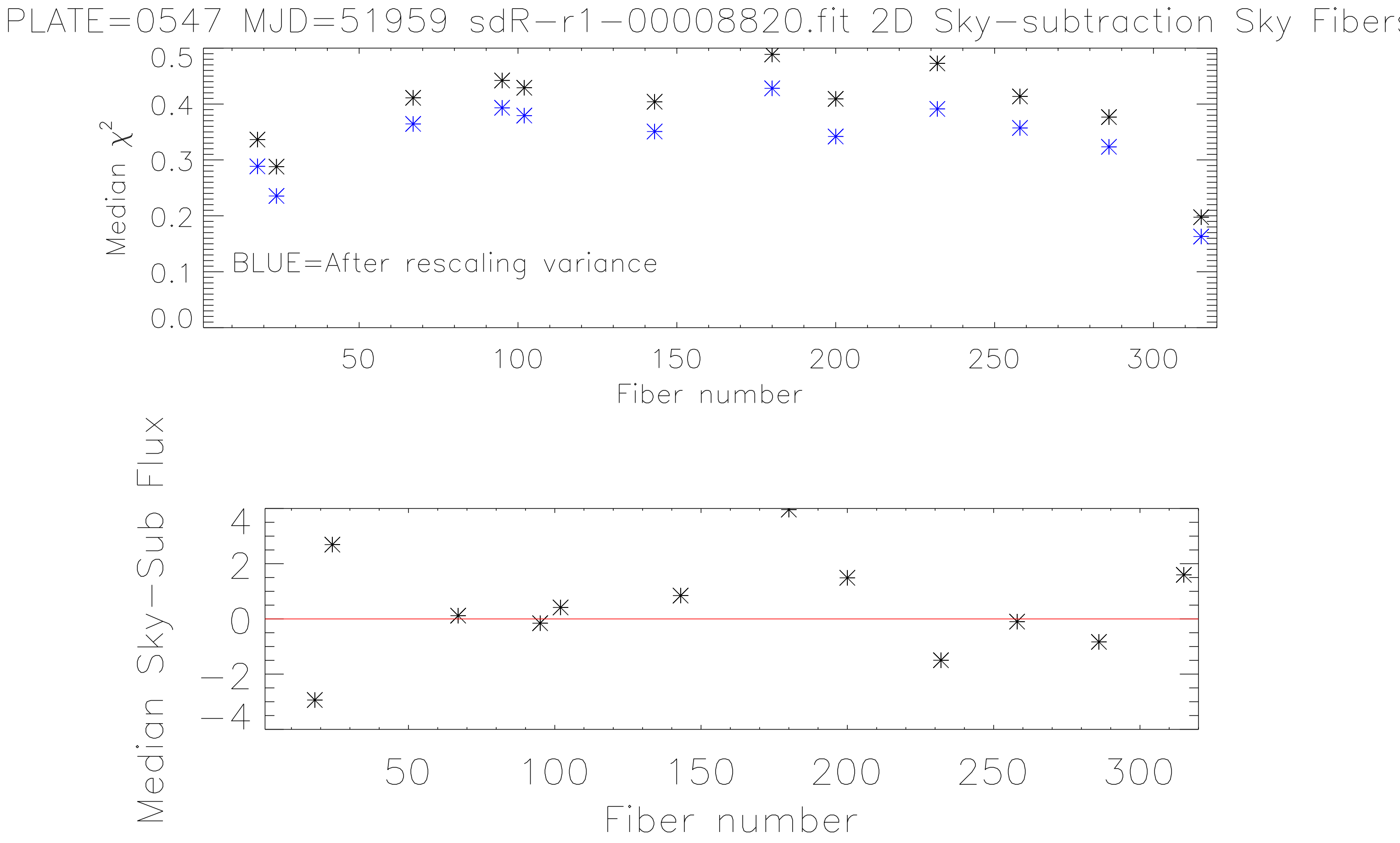

PLATE=0547 MJD=51959 sdR-r1-00008820.fit 1D Sky-subtraction Sky Fibers

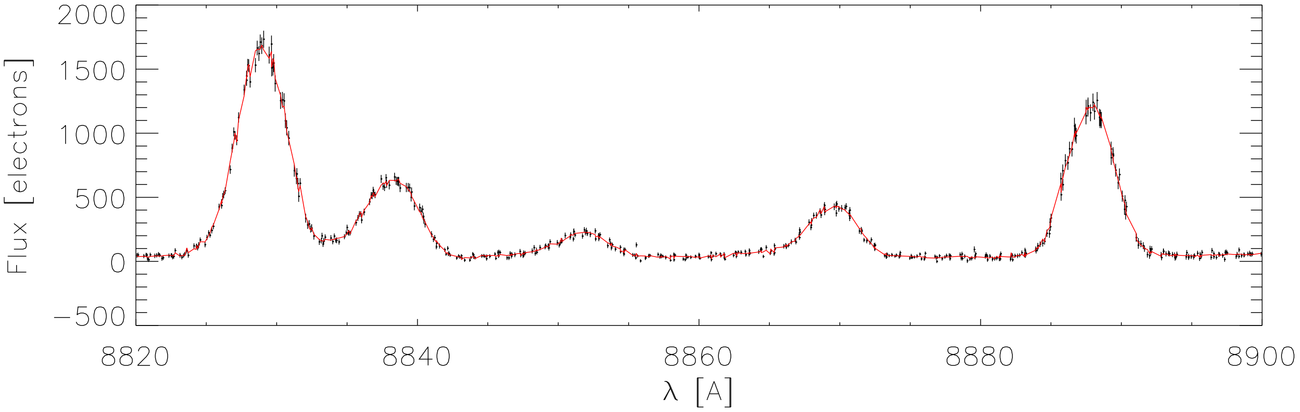

PLATE=0547 MJD=51959 sdR-r1-00008820.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 12

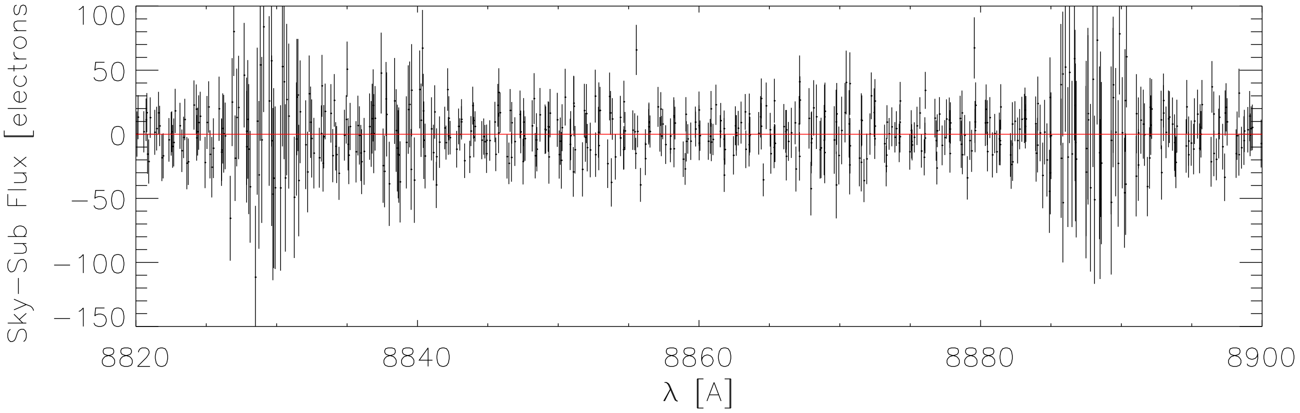
PLATE=0547 MJD=51959 sdR-r1-00008820.fit 1D Sky-subtraction Rescaled Errors




PLATE=0547 MJD=51959 sdR-r1-00008820.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number



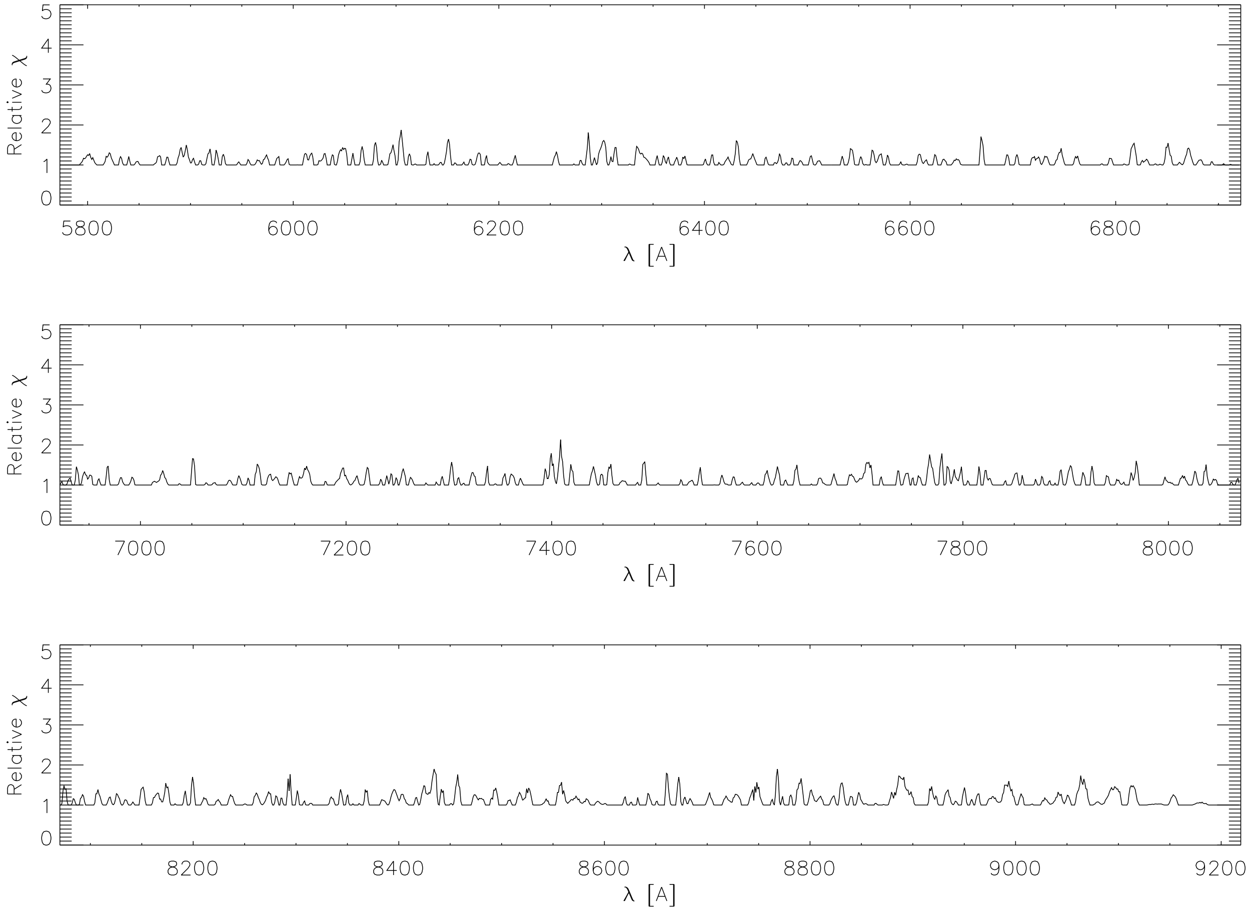
PLATE=0547 MJD=51959 sdR-r1-00008820.fit 2D Sky-subtraction Sky Fibers

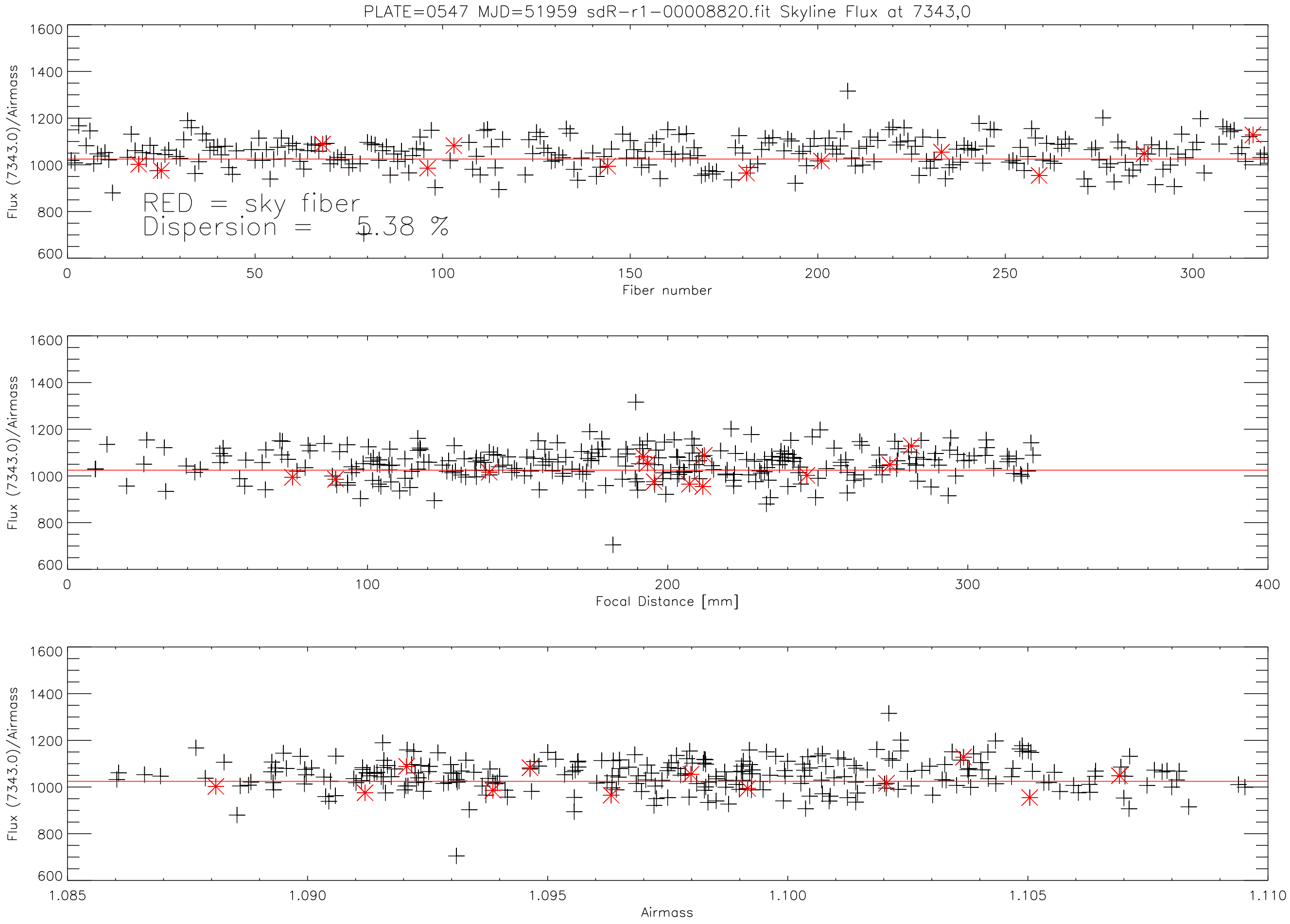


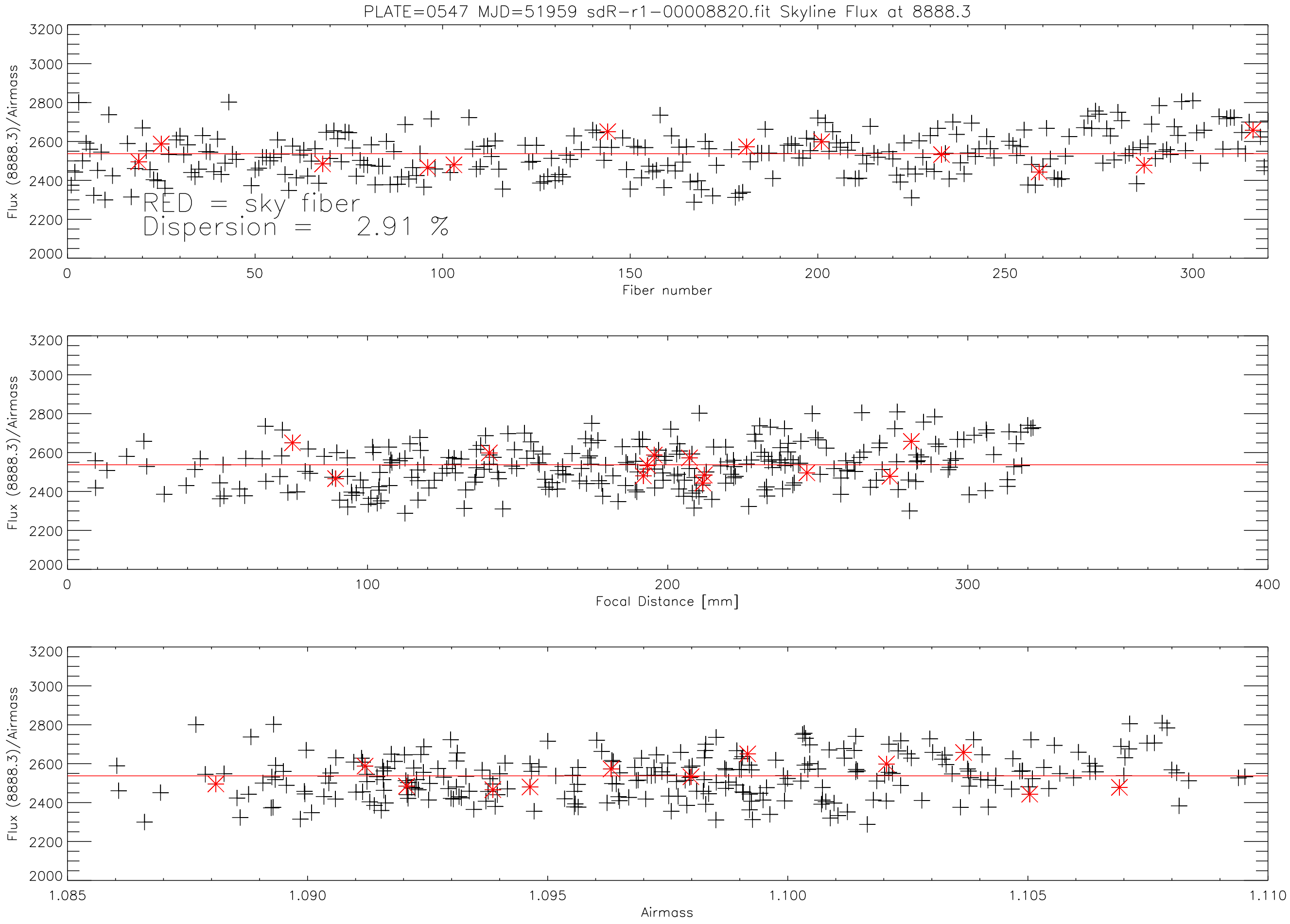
PLATE=0547 MJD=51959 sdR-r1-00008820.fit 2D Sky-subtraction Sky-subtracted Sky F

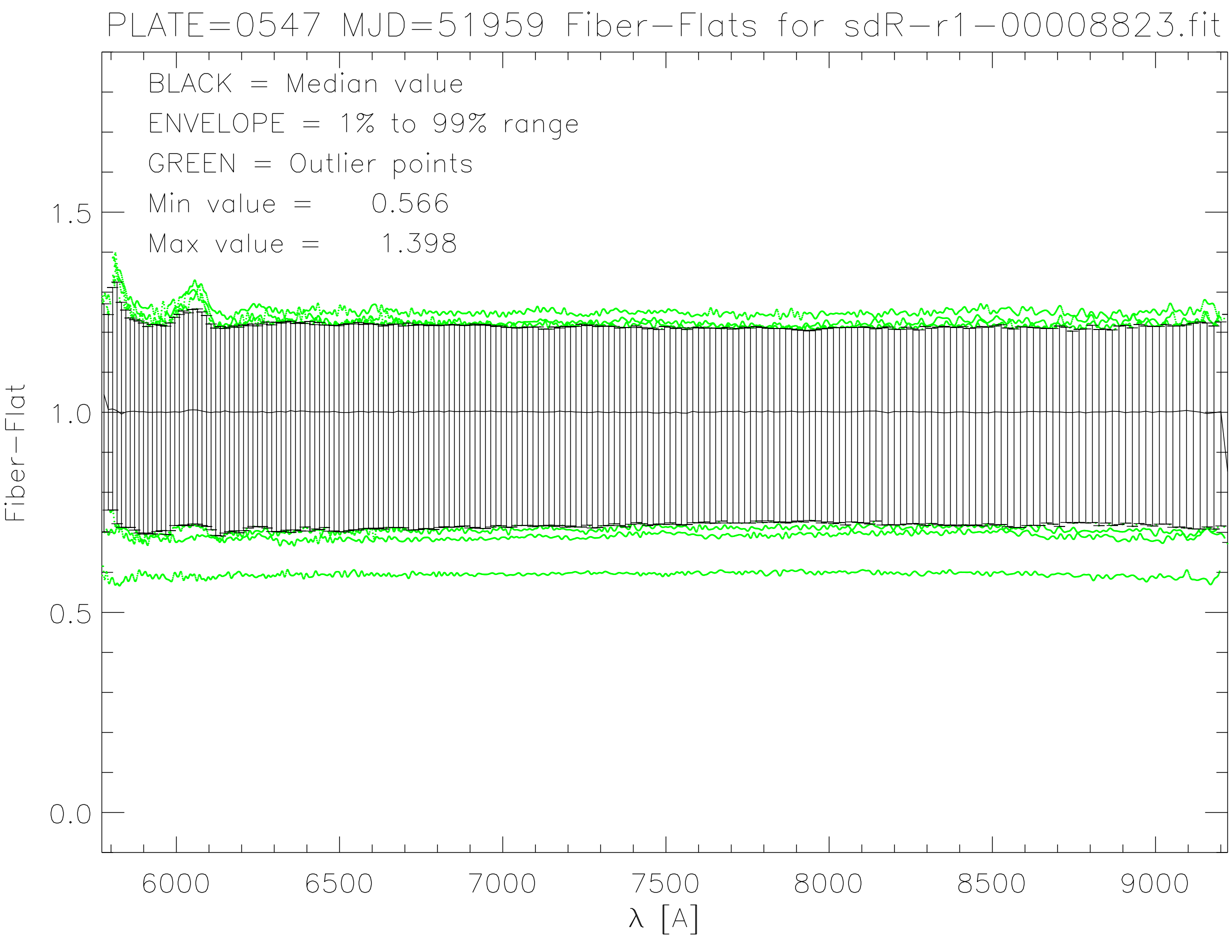
Number of sky fibers = 12

PLATE=0547 MJD=51959 sdR-r1-00008820.fit 2D Sky-subtraction Rescaled Errors

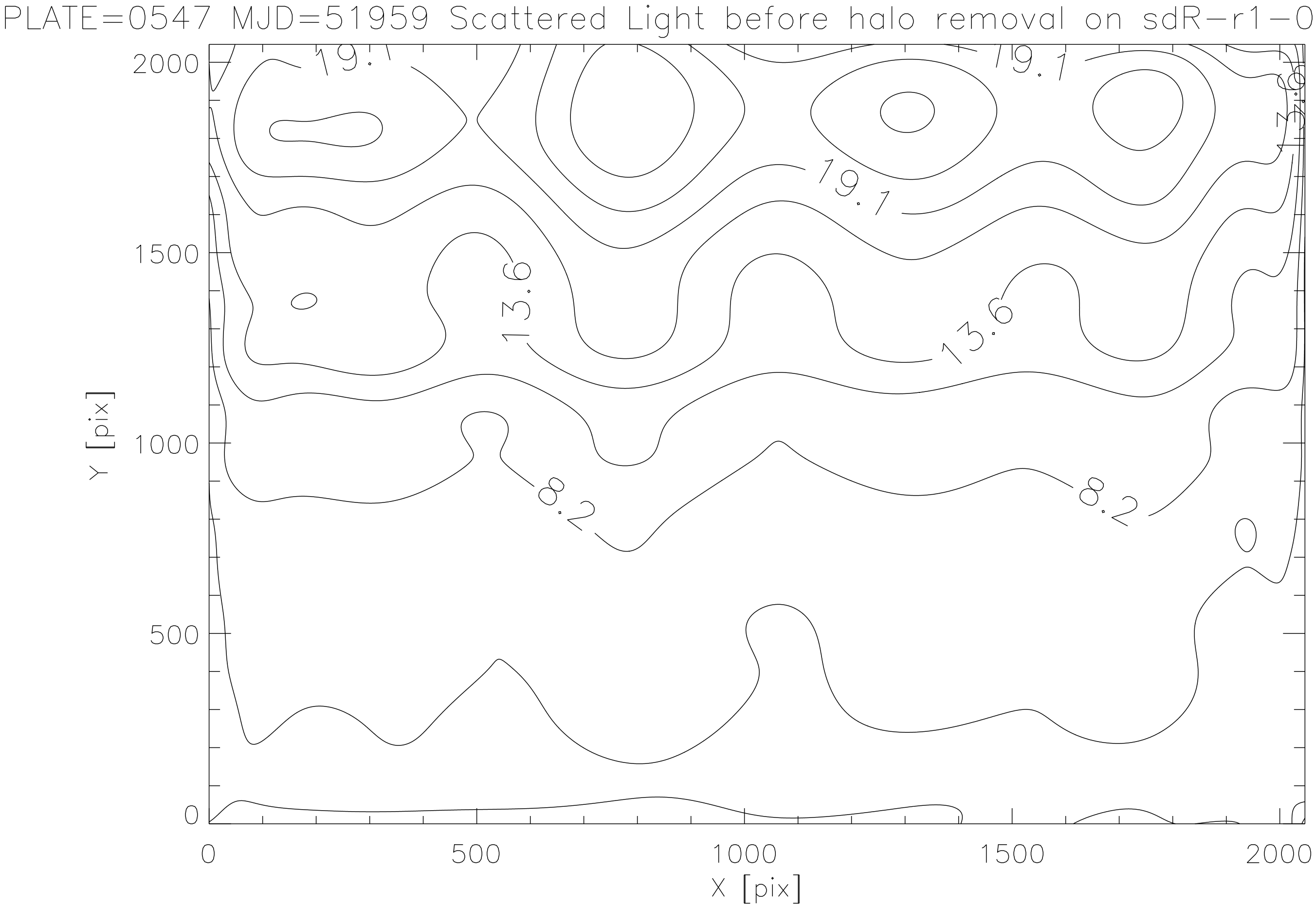


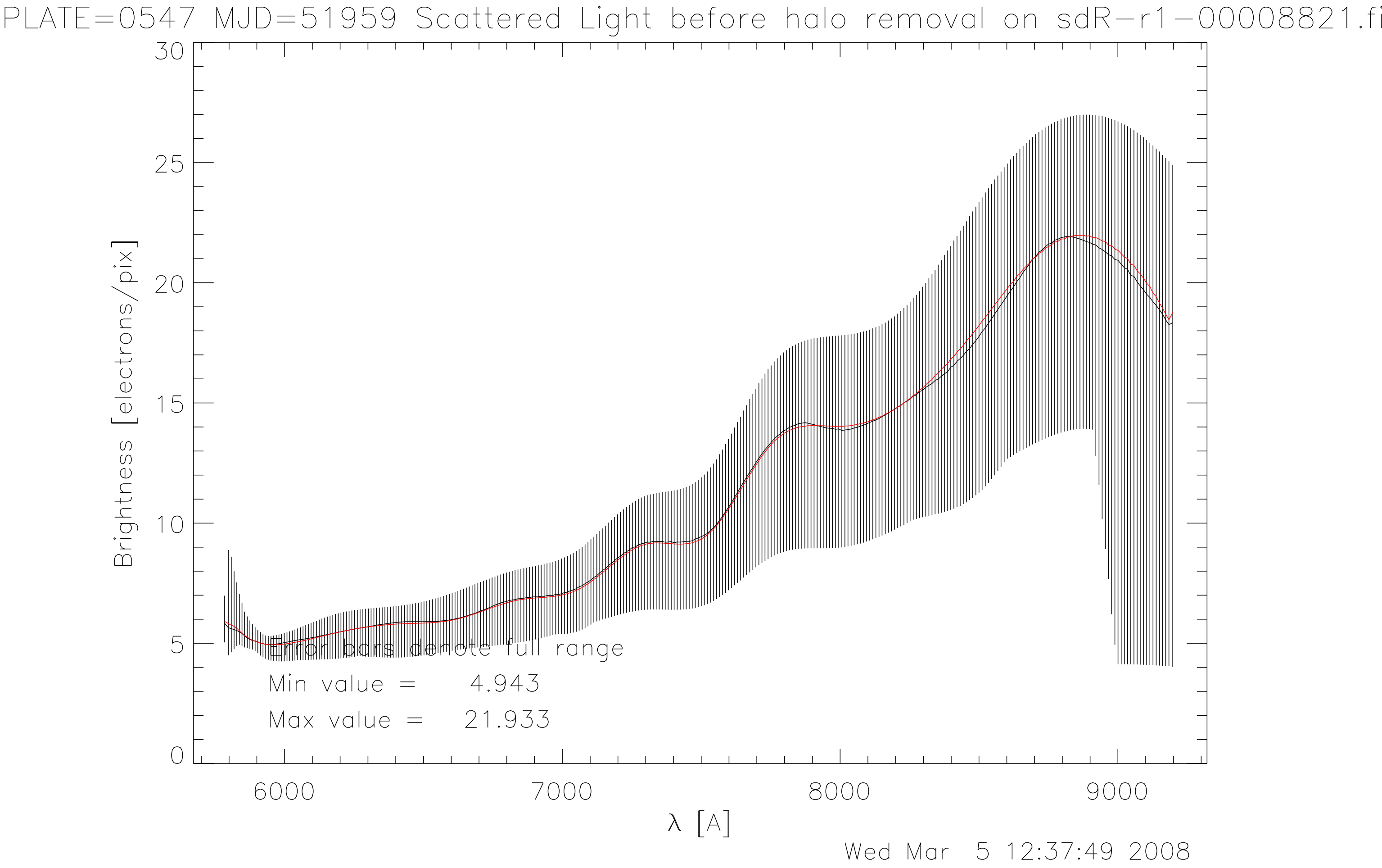

PLATE=0547 MJD=51959 sdR-r1-00008820.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1600
1400
1200
1000
800
600
RED = sky fiber
Dispersion = 5.38 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.085
1.090
1.095
1.100
1.105
1.110
Airmass


PLATE=0547 MJD=51959 sdR-r1-00008820.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
3200
3000
2800
2600
2400
2200
2000
RED = sky fiber
Dispersion = 2.91 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
3200
3000
2800
2600
2400
2200
2000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
3200
3000
2800
2600
2400
2200
2000
1.085
1.090
1.095
1.100
1.105
1.110
Airmass



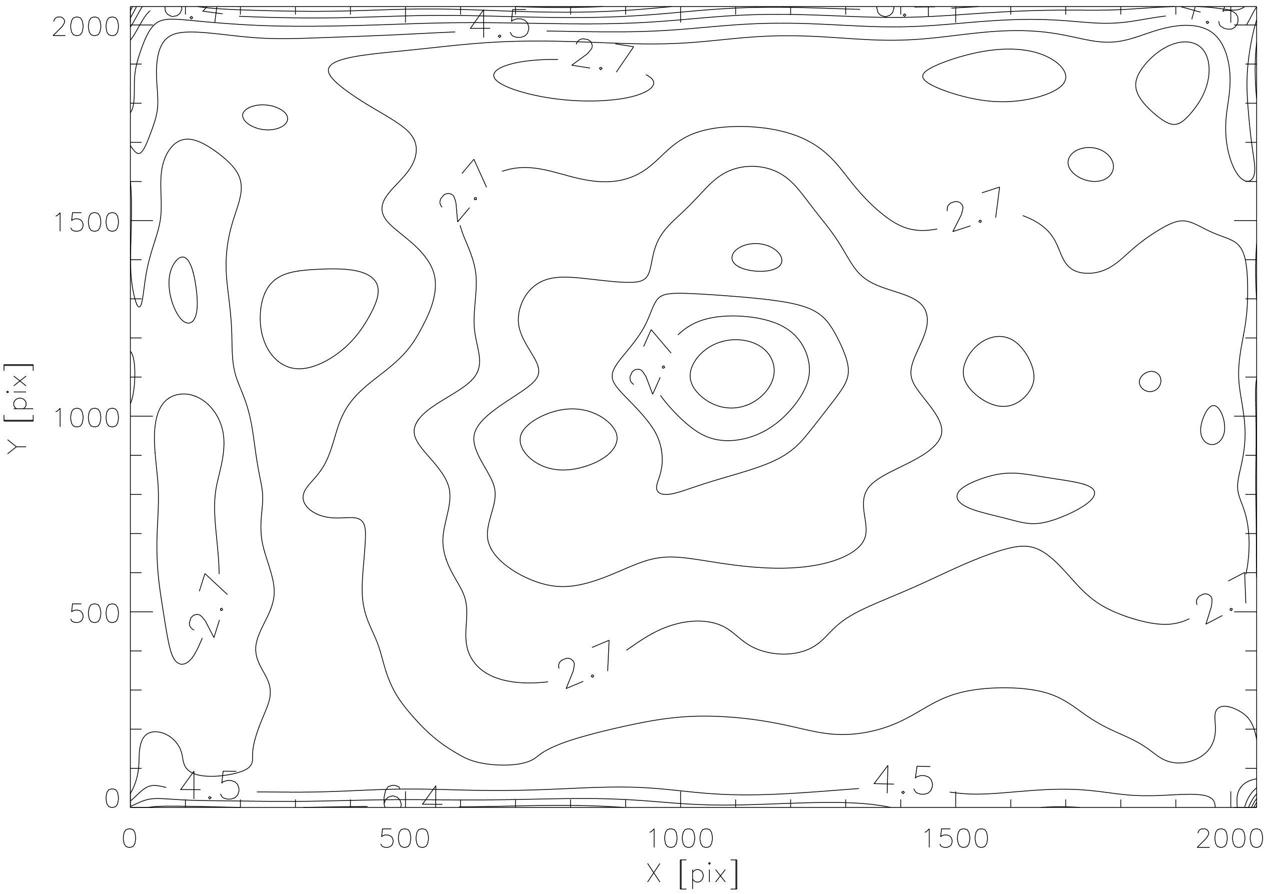
Wed Mar 5 12:37:01 2008


PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008821.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
19.1
19.1
19.1
13.6
13.6
13.6
8.2
8.2

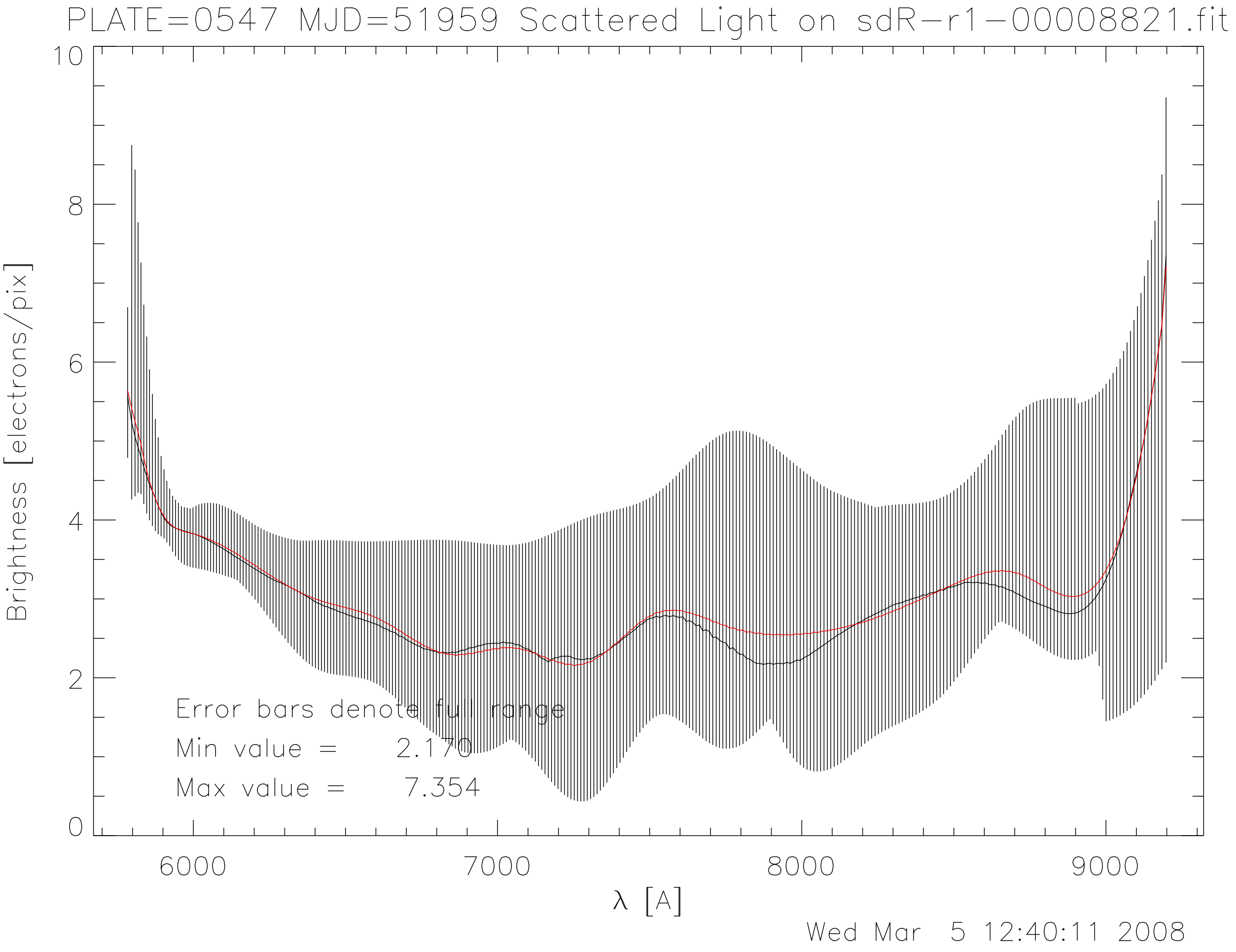


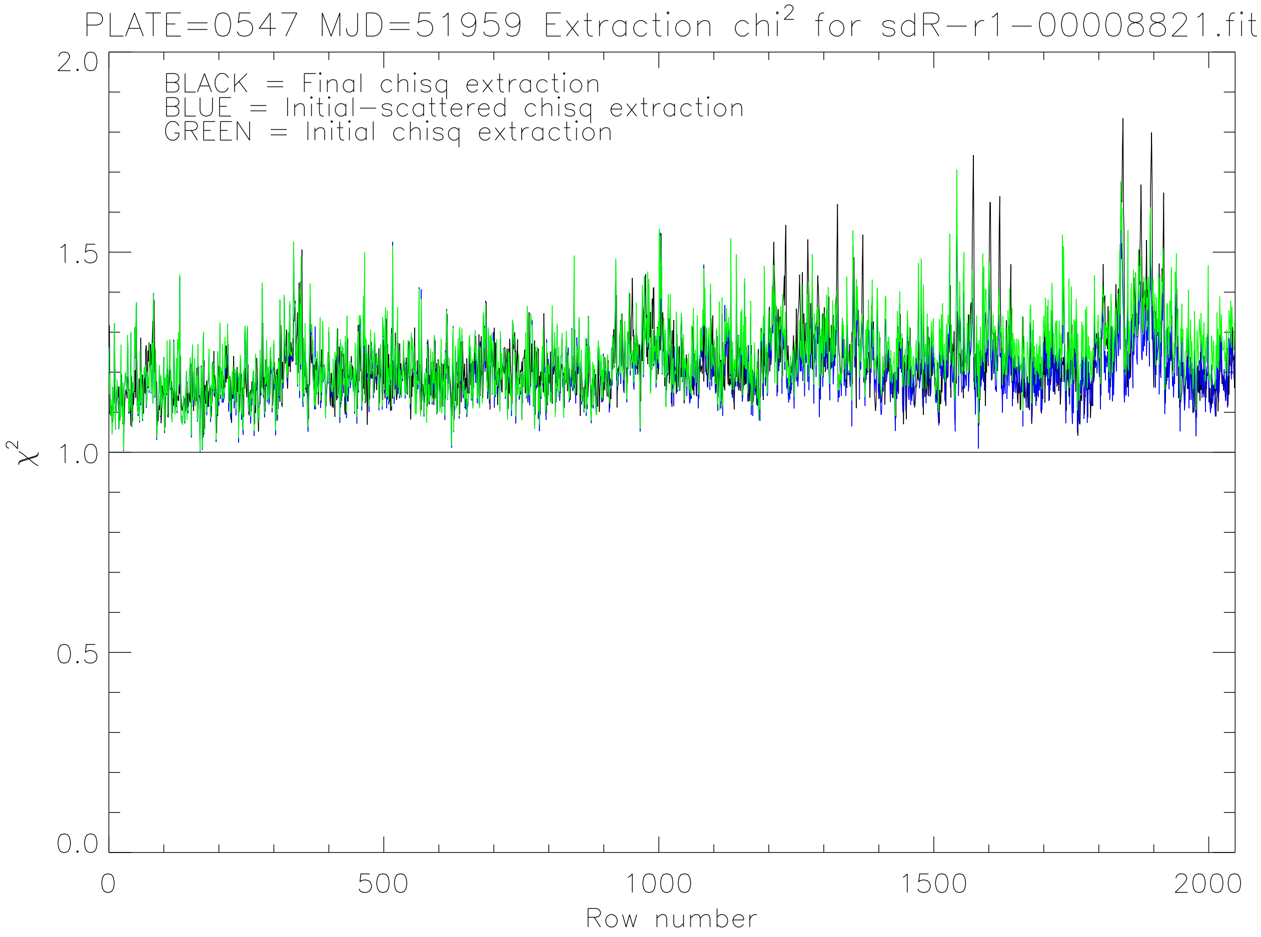
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008821.fi

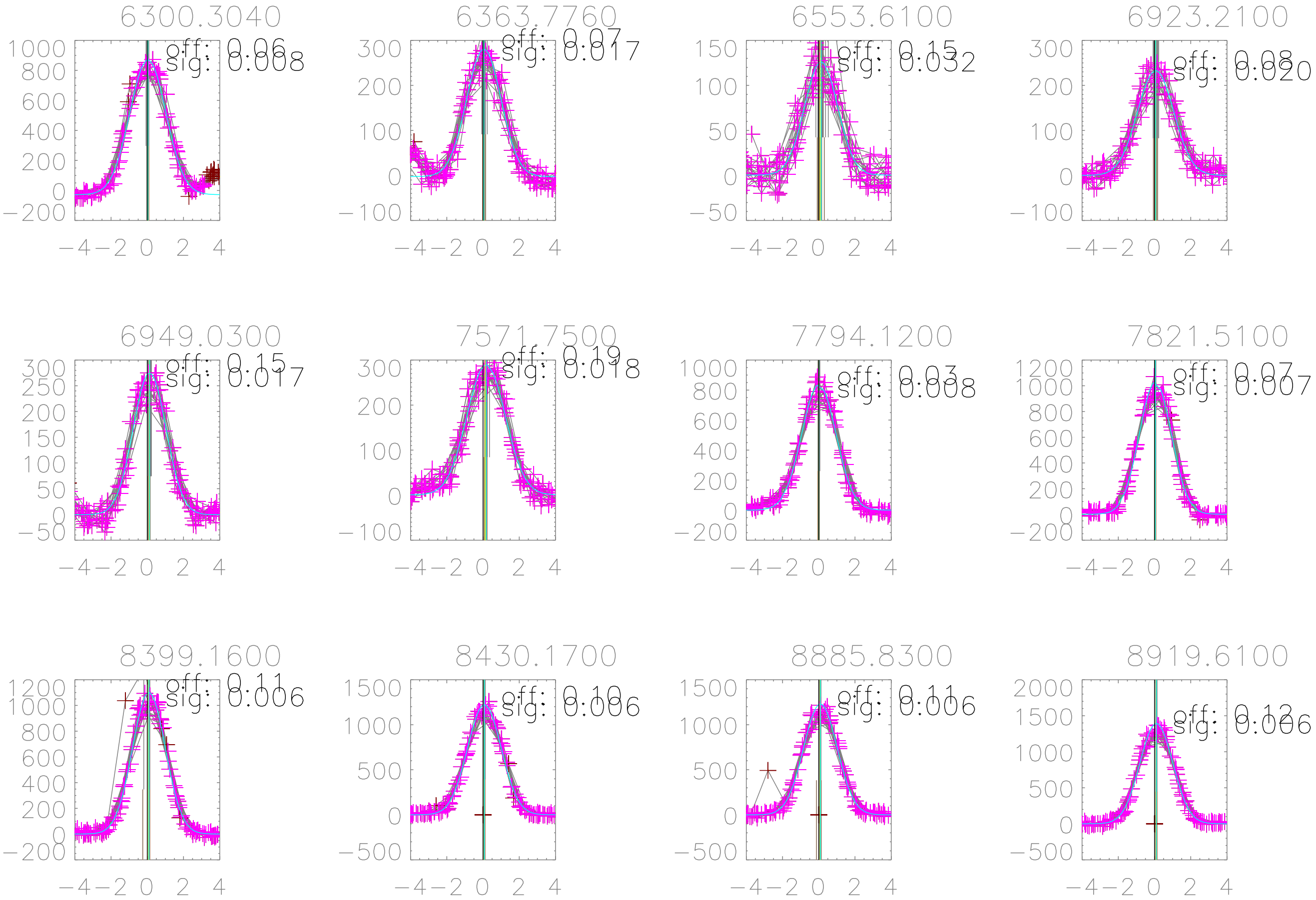
Wed Mar 5 12:37:49 2008

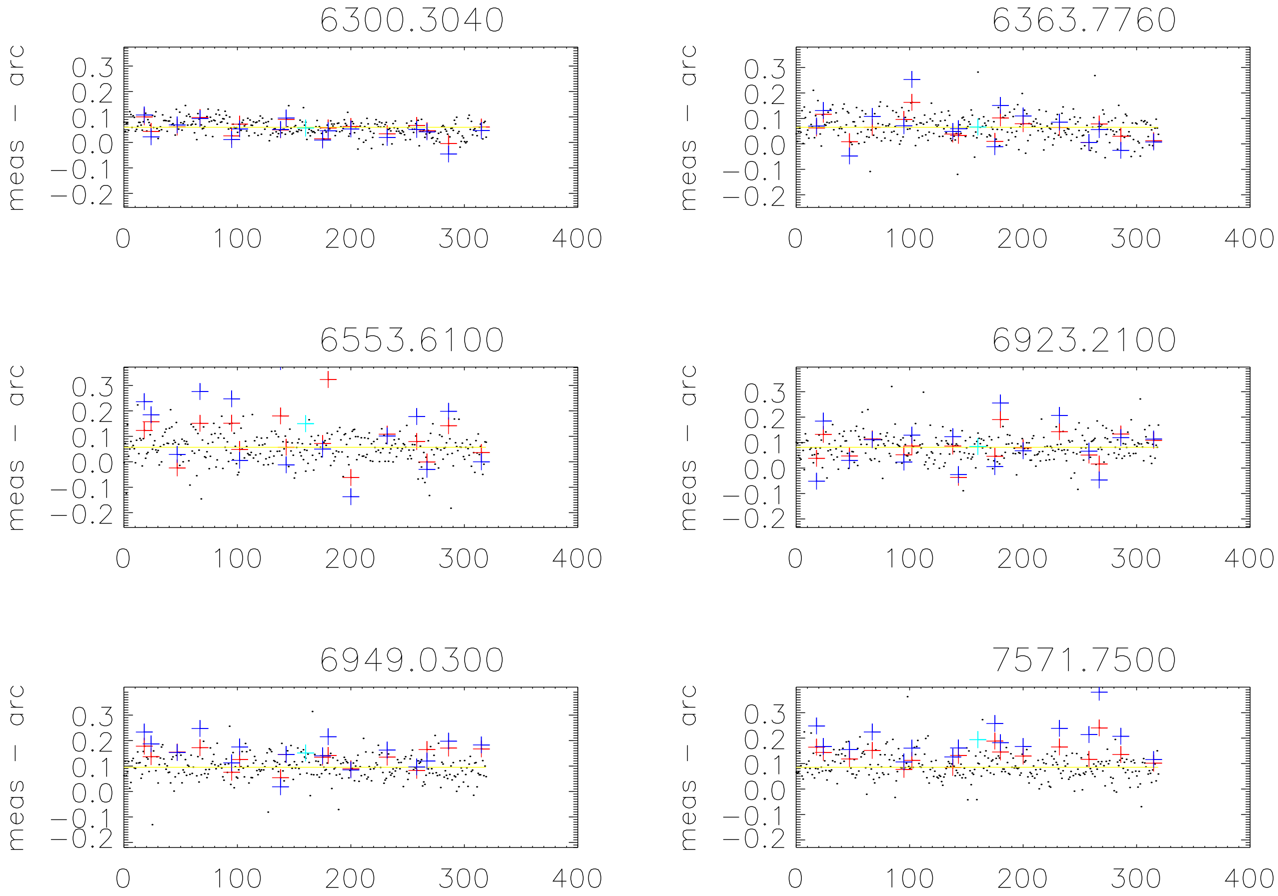


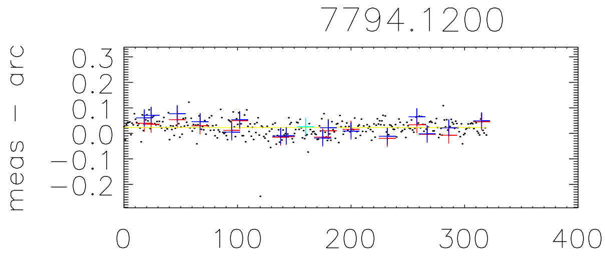
PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008821.fit

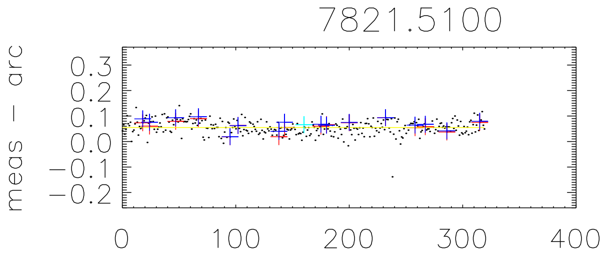

PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008821.fit
Brightness [electrons/pix]
0
2
4
6
8
10
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 2.170
Max value = 7.354
Wed Mar 5 12:40:11 2008

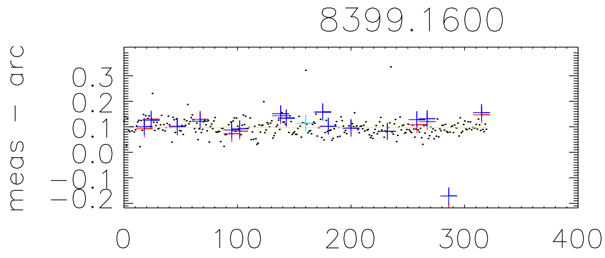

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-r1-00008821.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

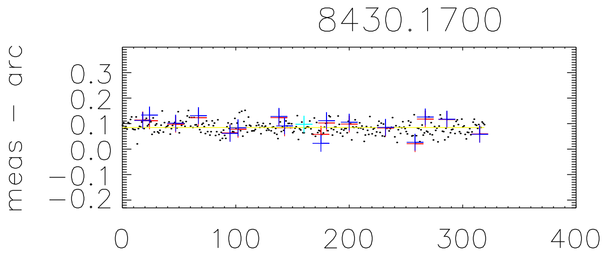

6300.3040
off: 0.06
sig: 0.008
6363.7760
off: 0.07
sig: 0.017
6553.6100
off: 0.15
sig: 0.032
6923.2100
off: 0.08
sig: 0.020
6949.0300
off: 0.15
sig: 0.017
7571.7500
off: 0.19
sig: 0.018
7794.1200
off: 0.03
sig: 0.008
7821.5100
off: 0.07
sig: 0.007
8399.1600
off: 0.11
sig: 0.006
8430.1700
off: 0.10
sig: 0.006
8885.8300
off: 0.11
sig: 0.006
8919.6100
off: 0.12
sig: 0.006
−4 −2 0 2 4

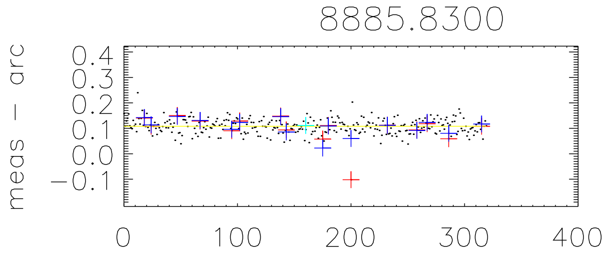

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas – arc
0.3
0.2
0.1
0.0
–0.1
–0.2
0
100
200
300
400

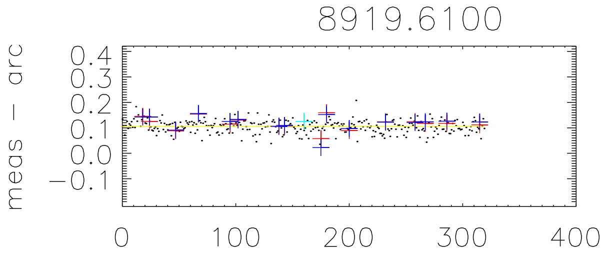

7794.1200

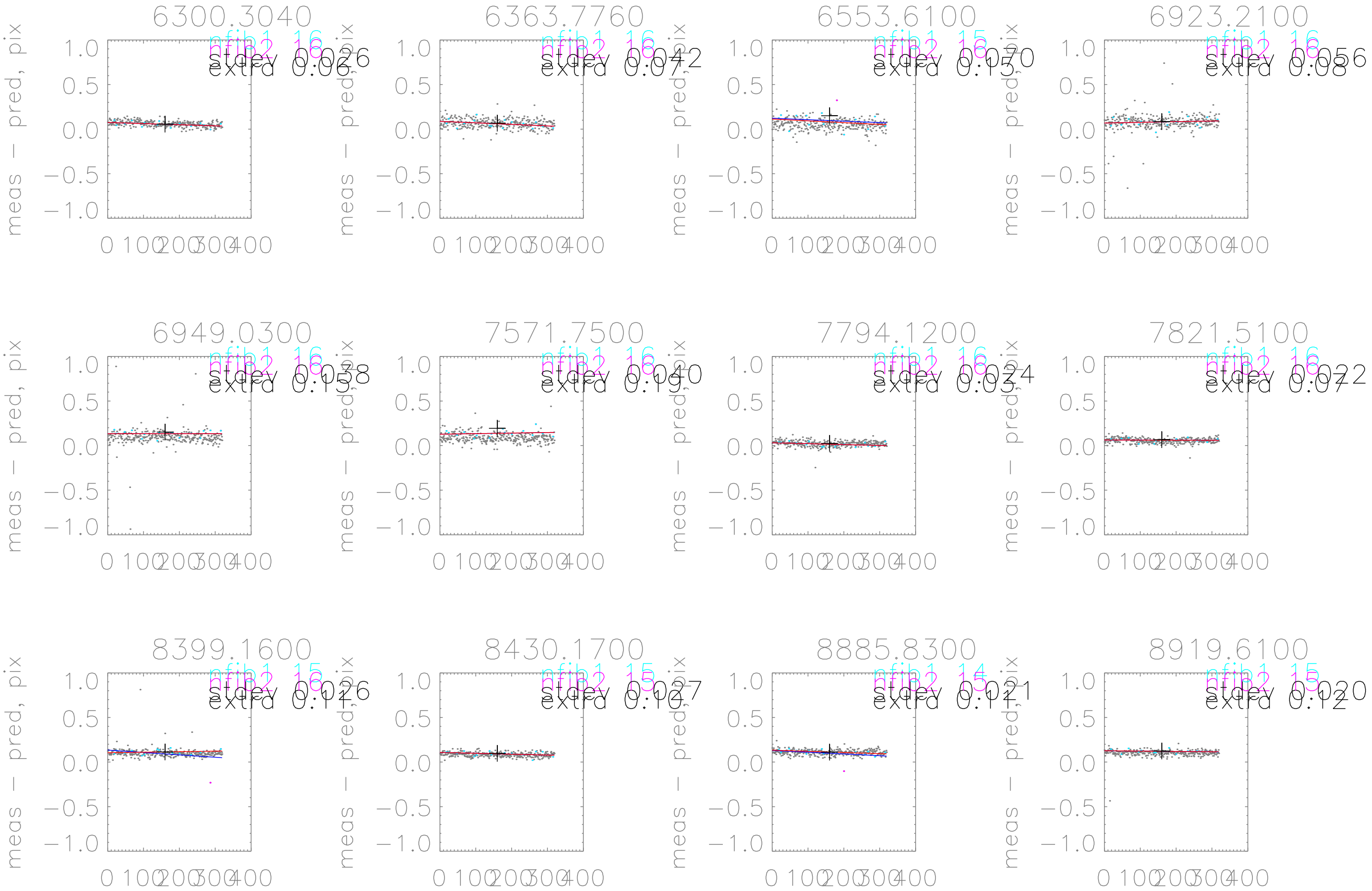

7821.5100

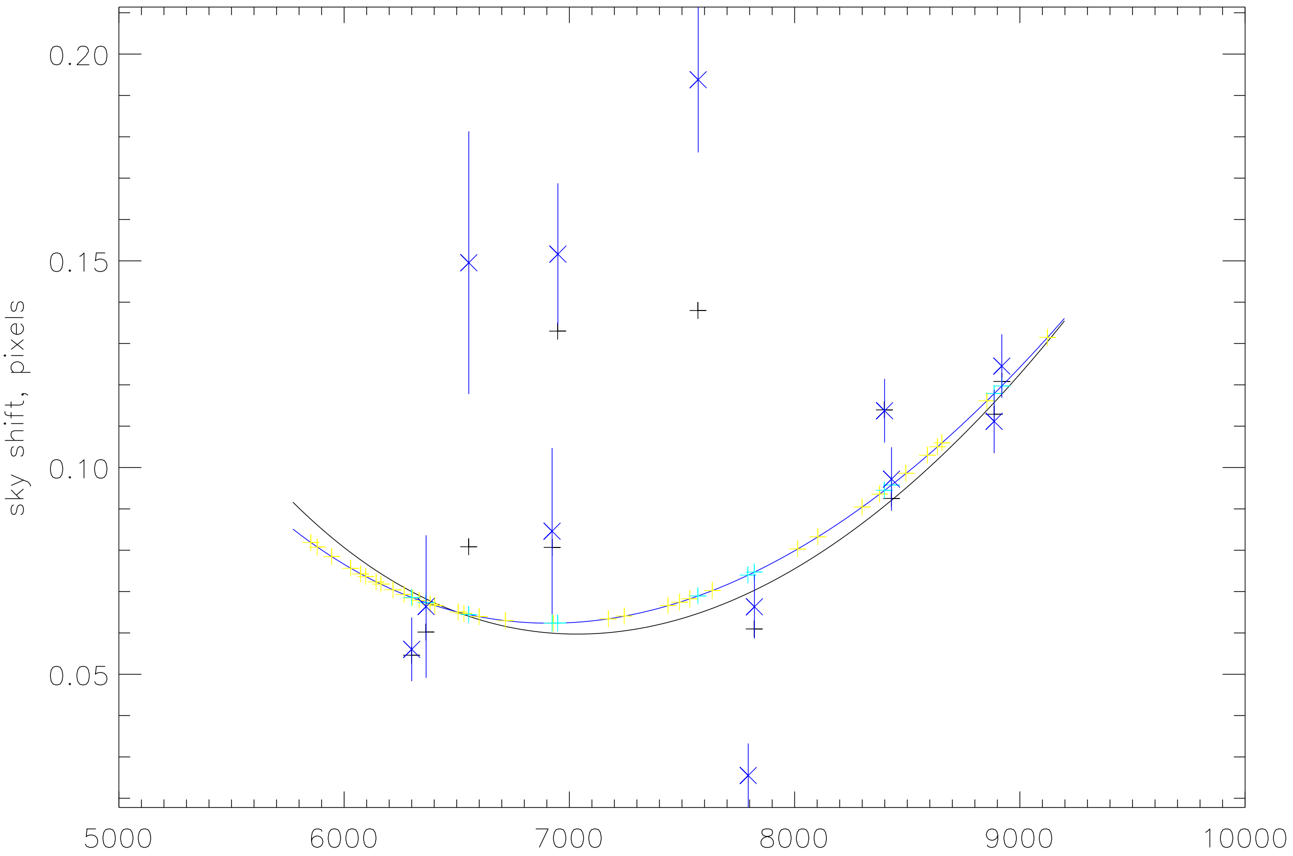

8399.1600


8430.1700

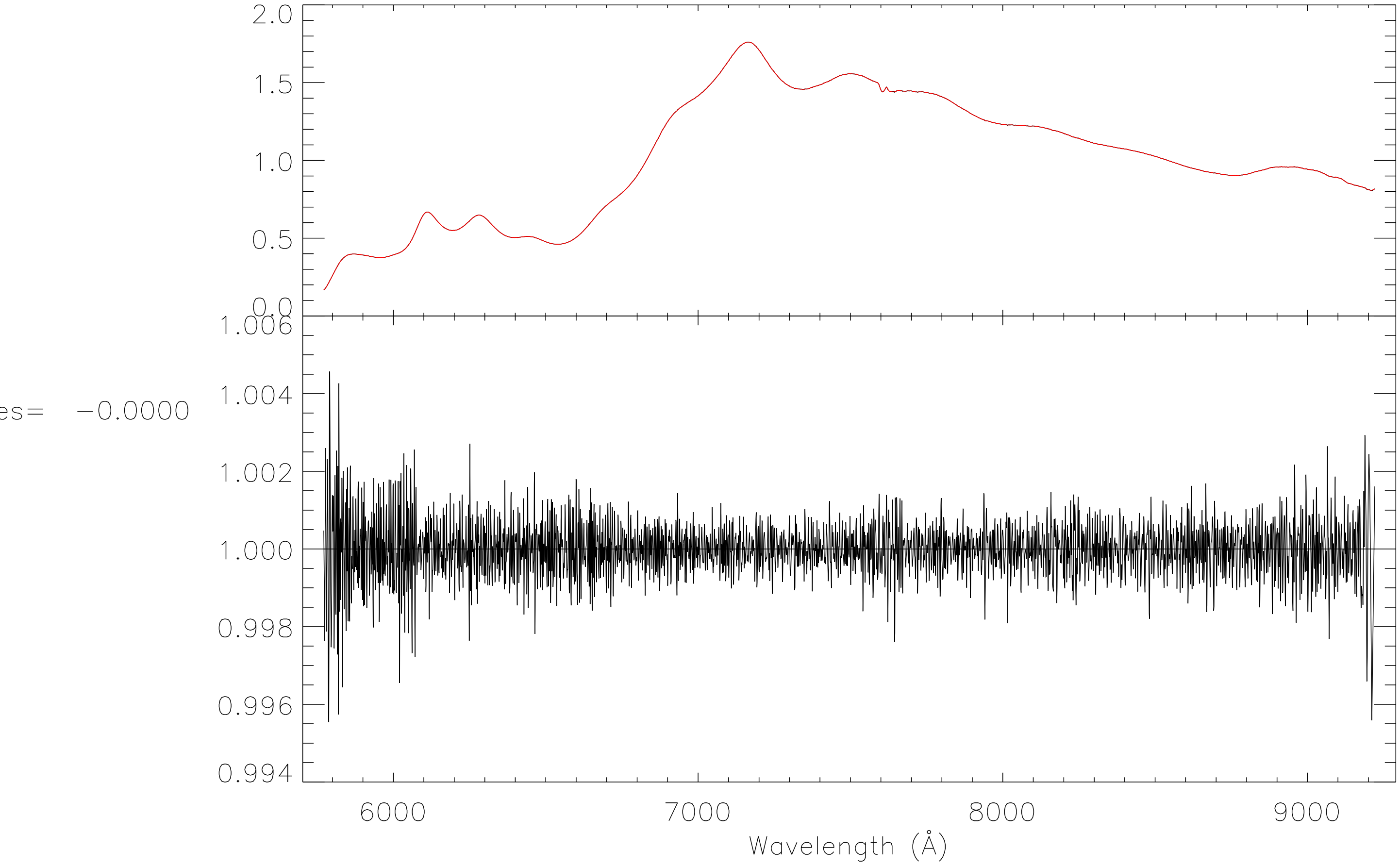

8885.8300

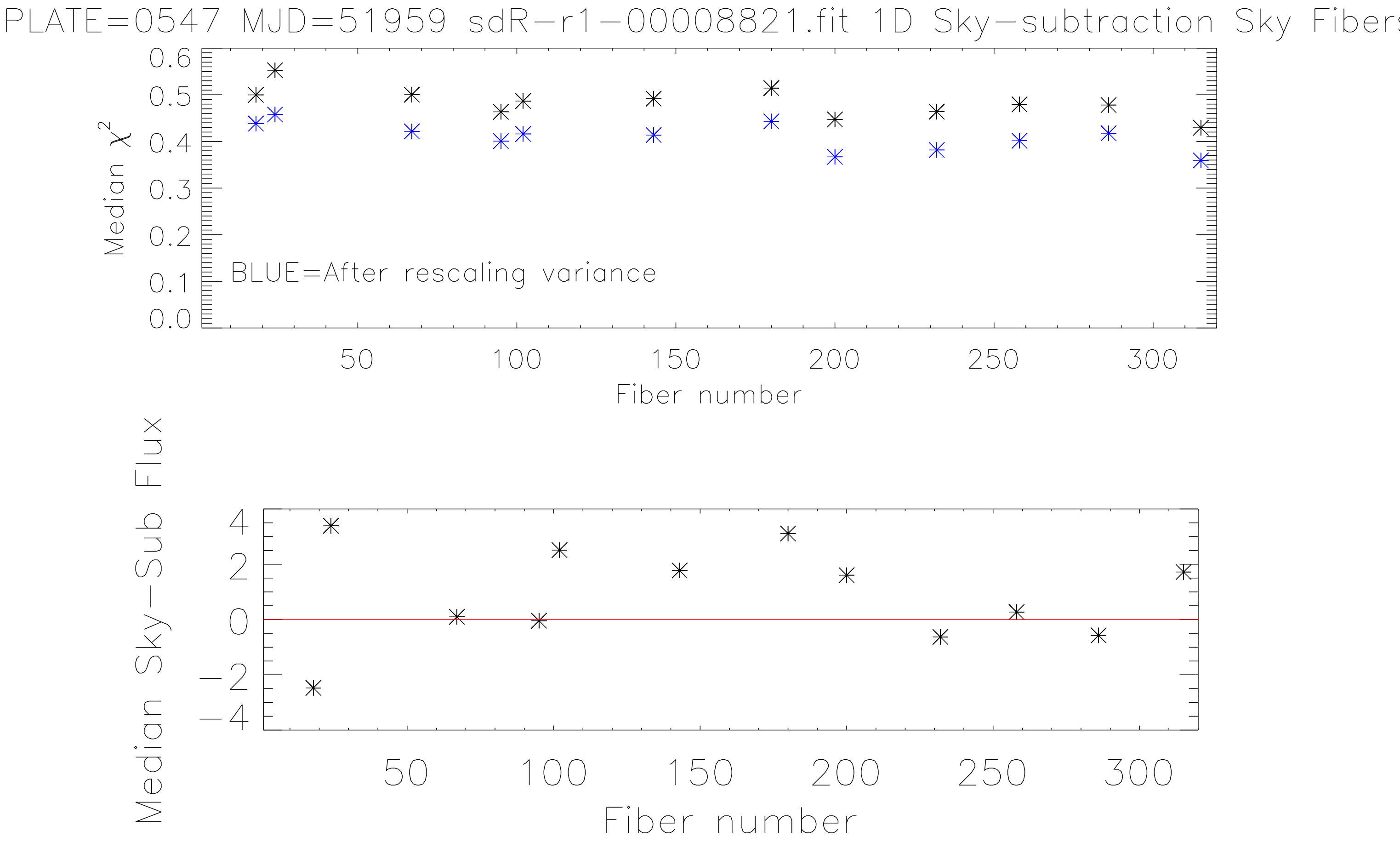

8919.6100

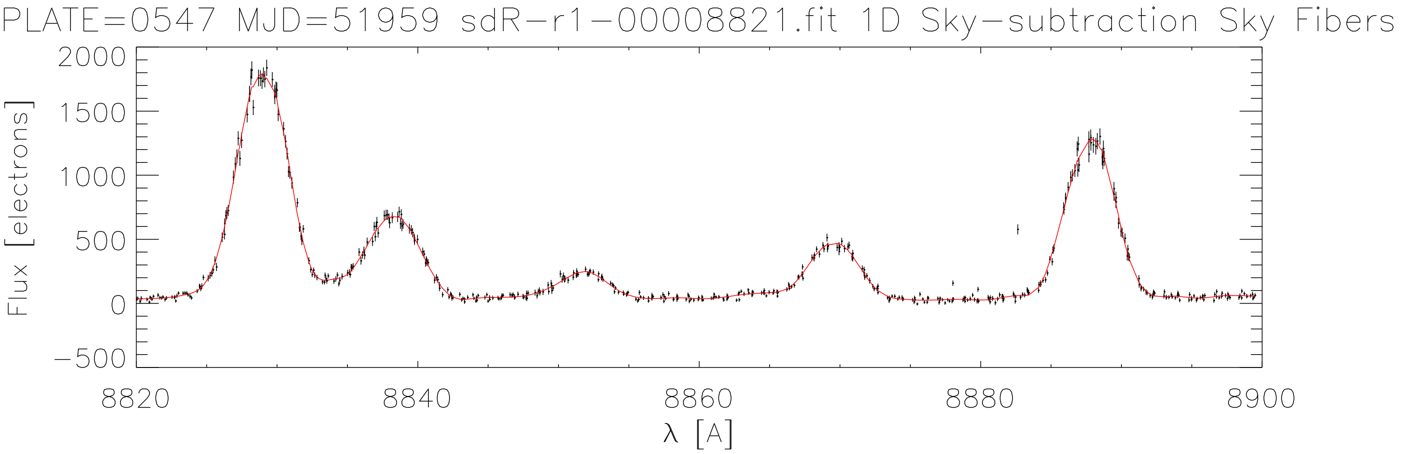

6300.3040
nfib1 16
nfib2 16
stdev 0.026
extrd 0.06
6363.7760
nfib1 16
nfib2 16
stdev 0.042
extrd 0.07
6553.6100
nfib1 15
nfib2 16
stdev 0.070
extrd 0.15
6923.2100
nfib1 16
nfib2 16
stdev 0.056
extrd 0.08
6949.0300
nfib1 16
nfib2 16
stdev 0.038
extrd 0.15
7571.7500
nfib1 16
nfib2 16
stdev 0.040
extrd 0.19
7794.1200
nfib1 16
nfib2 16
stdev 0.024
extrd 0.03
7821.5100
nfib1 16
nfib2 16
stdev 0.022
extrd 0.07
8399.1600
nfib1 15
nfib2 16
stdev 0.026
extrd 0.11
8430.1700
nfib1 15
nfib2 15
stdev 0.027
extrd 0.10
8885.8300
nfib1 14
nfib2 15
stdev 0.021
extrd 0.11
8919.6100
nfib1 15
nfib2 15
stdev 0.020
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

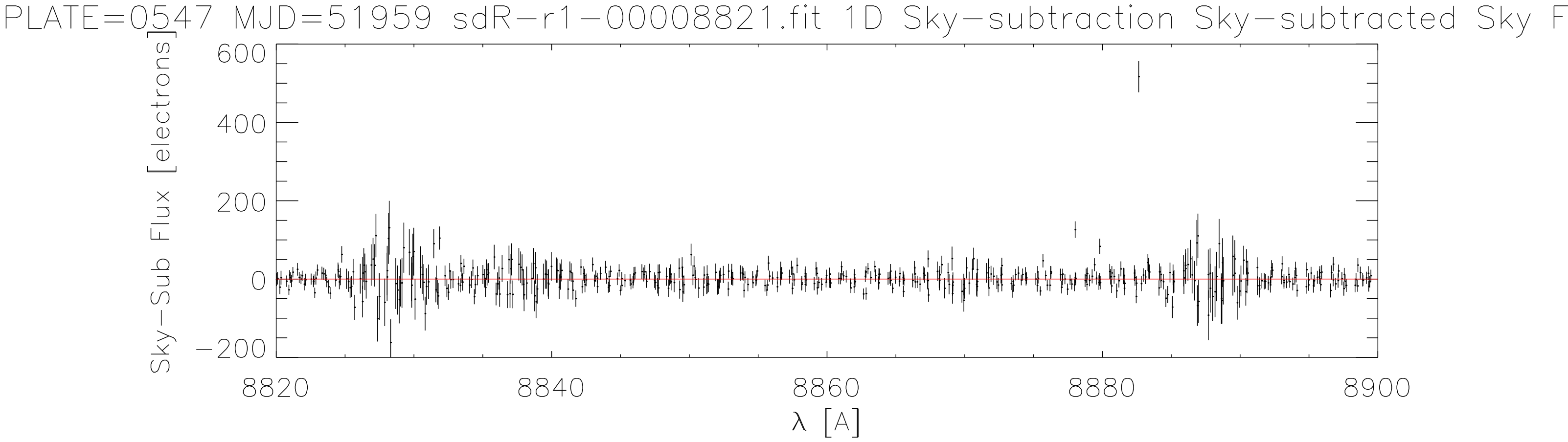
PLATE=0547 MJD=51959 Smooth superflat for sdR-r1-00008821.fit




PLATE=0547 MJD=51959 sdR-r1-00008821.fit 1D 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
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number



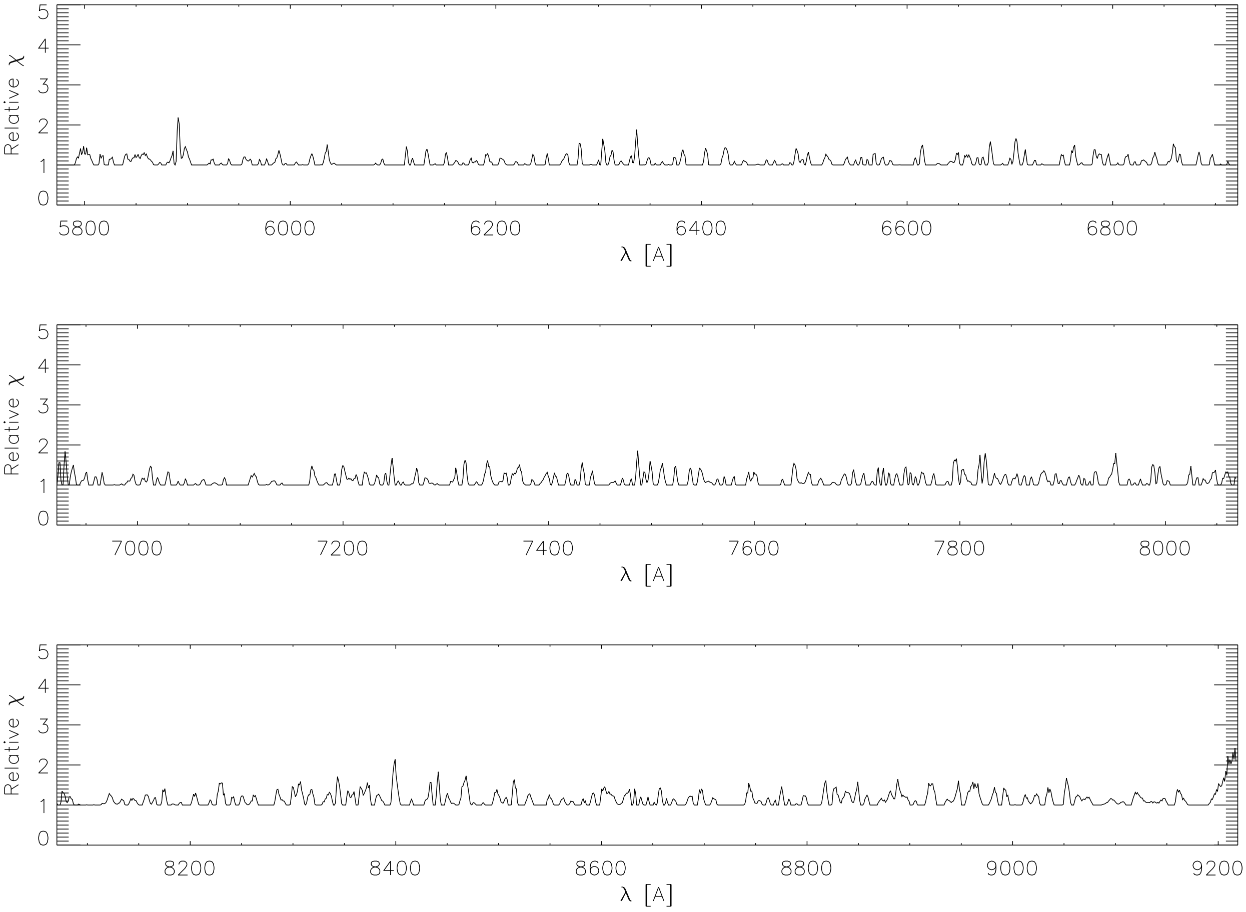
PLATE=0547 MJD=51959 sdR-r1-00008821.fit 1D Sky-subtraction Sky Fibers

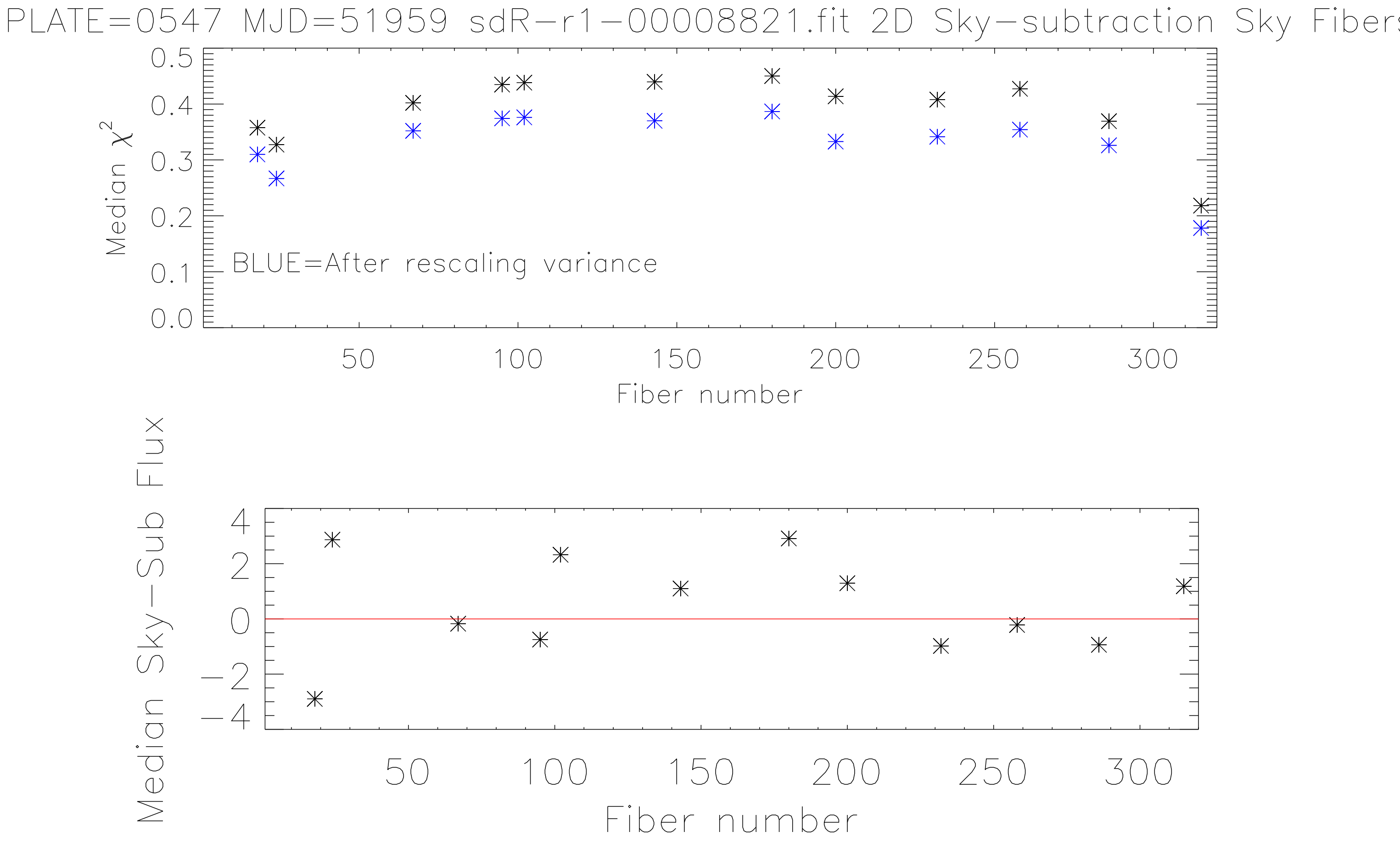


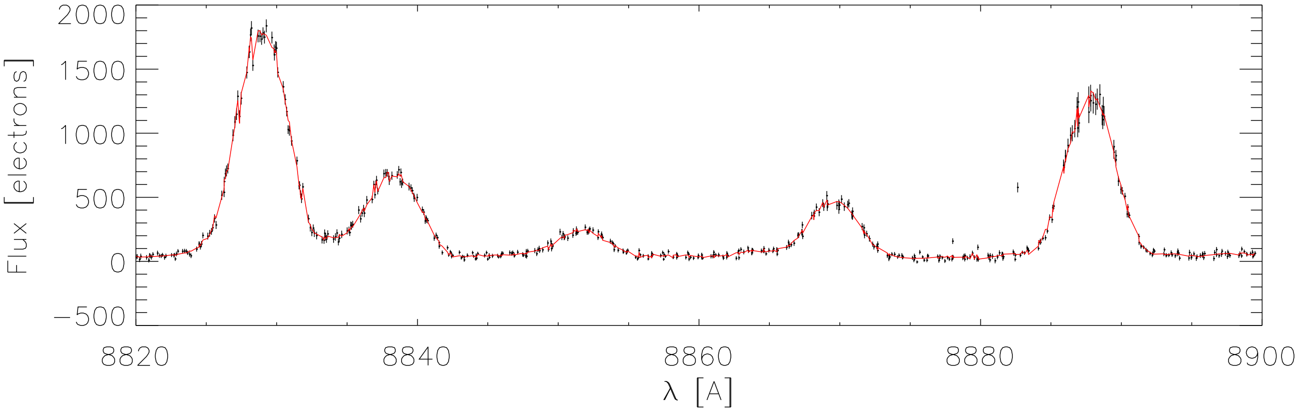
PLATE=0547 MJD=51959 sdR-r1-00008821.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 12

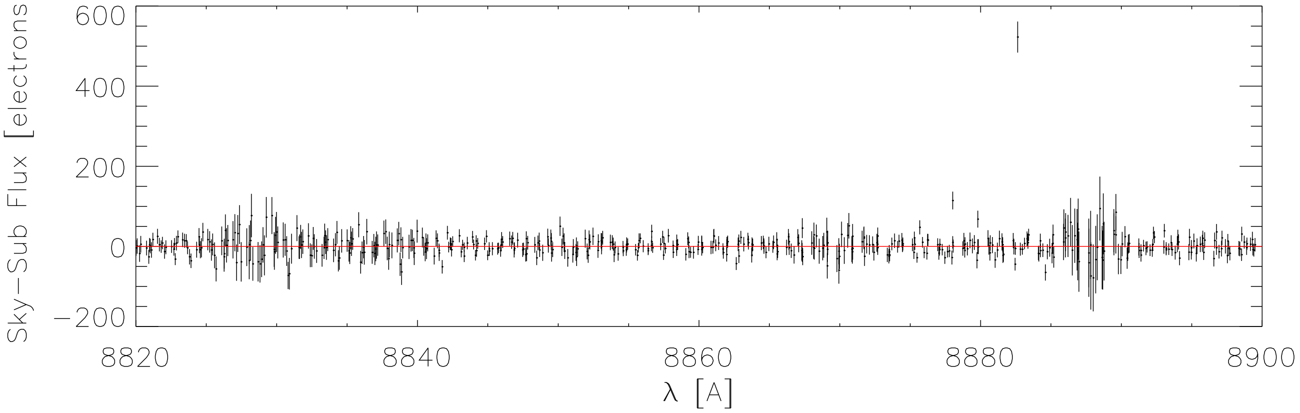
PLATE=0547 MJD=51959 sdR-r1-00008821.fit 1D Sky-subtraction Rescaled Errors




PLATE=0547 MJD=51959 sdR-r1-00008821.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number



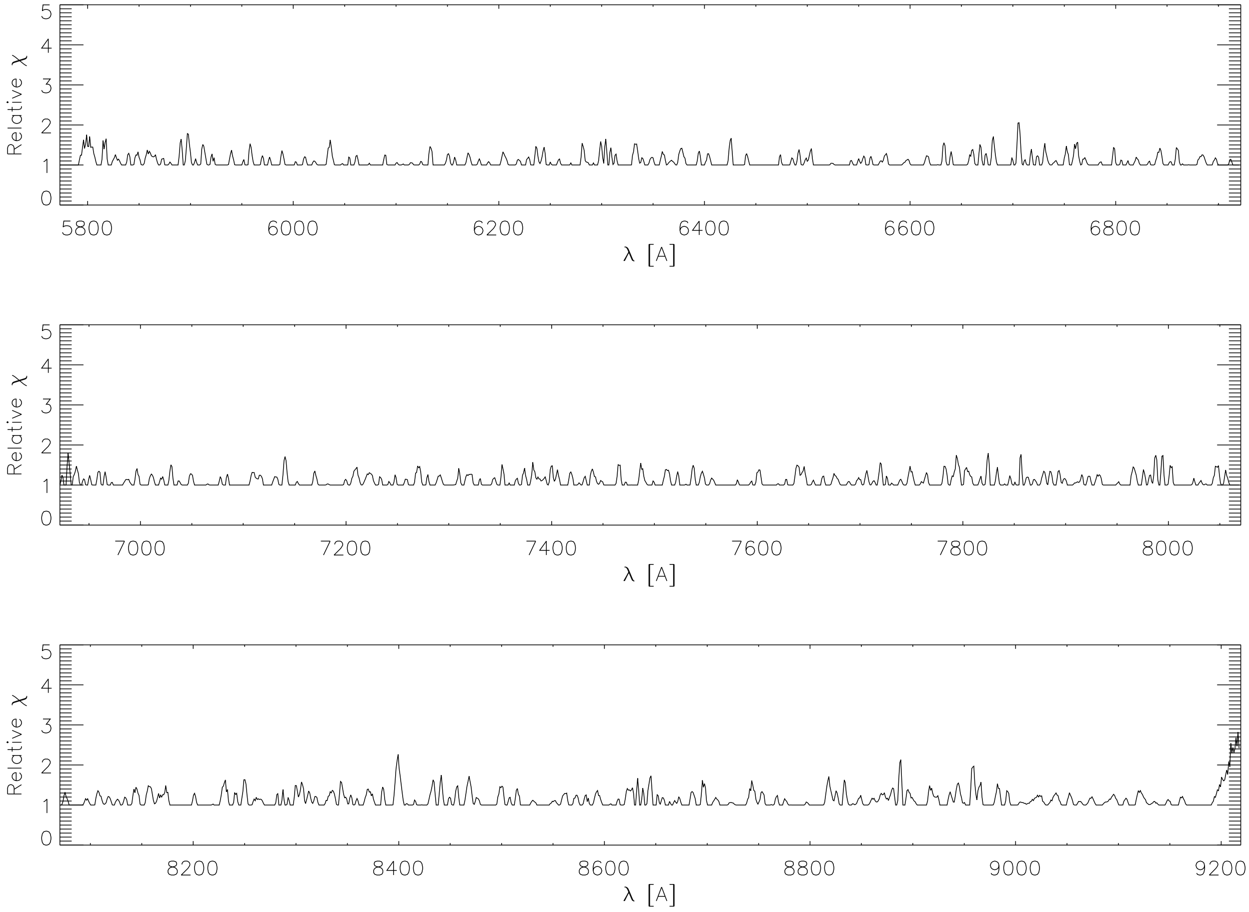
PLATE=0547 MJD=51959 sdR-r1-00008821.fit 2D Sky-subtraction Sky Fibers

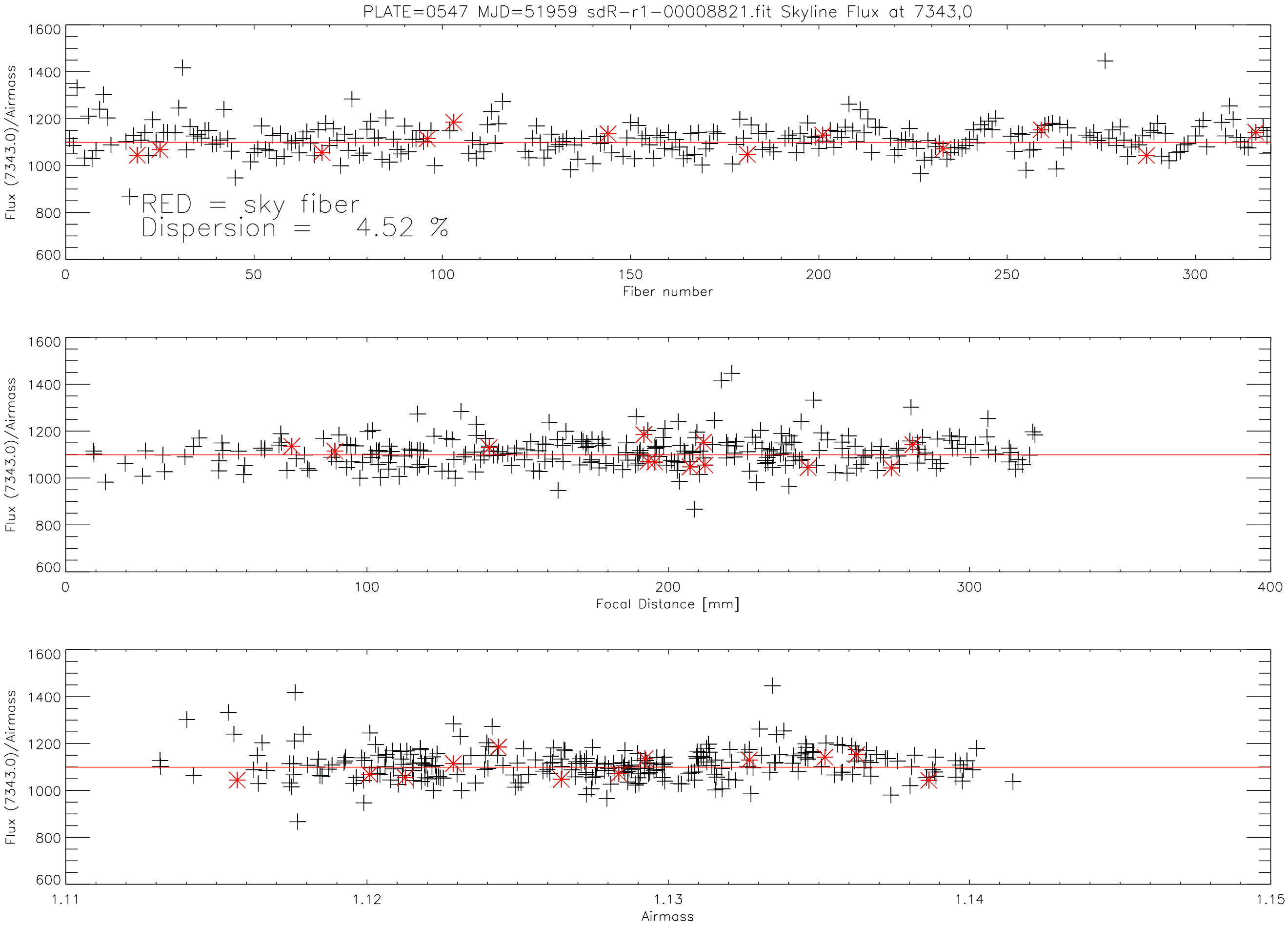


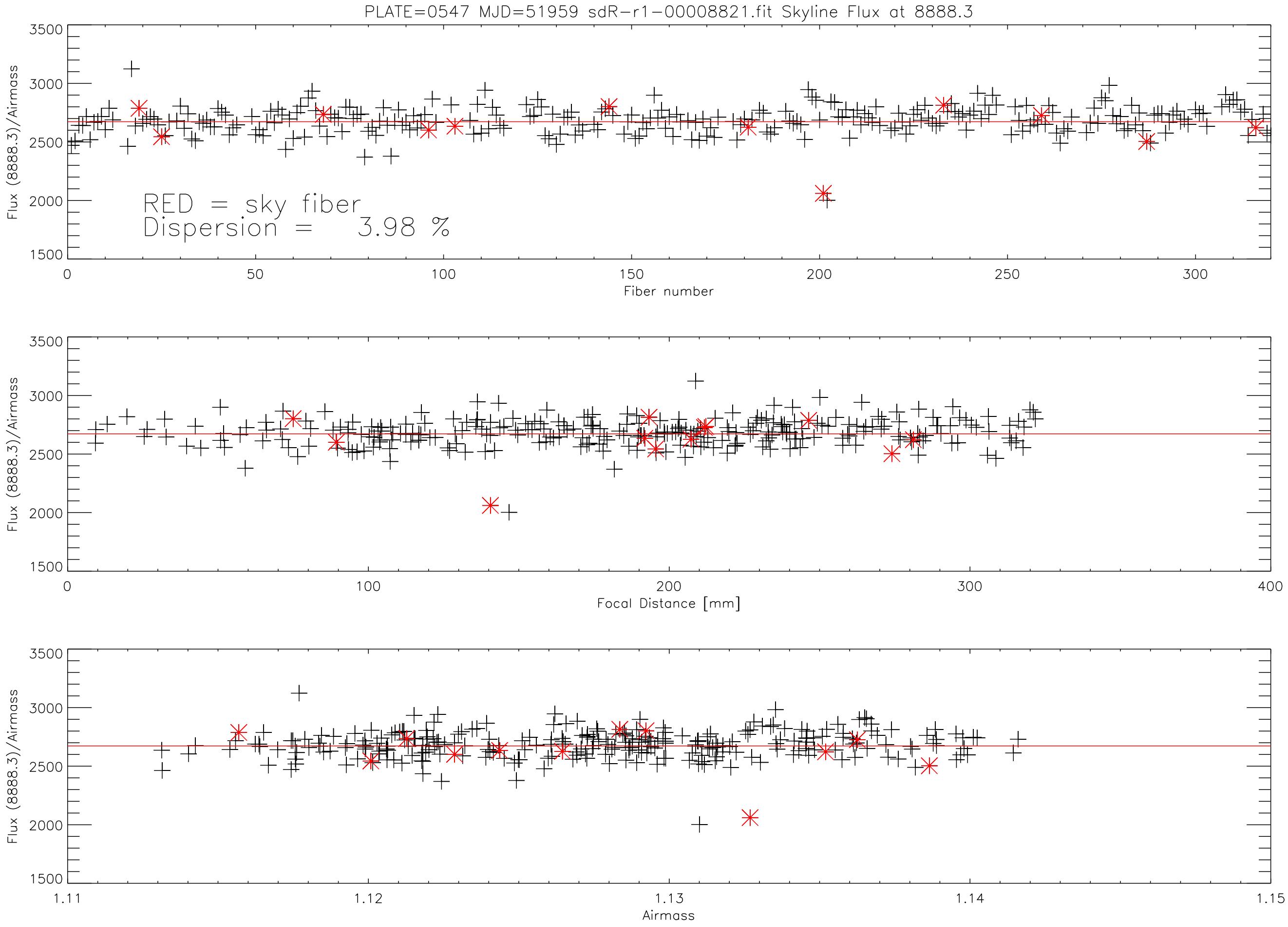
PLATE=0547 MJD=51959 sdR-r1-00008821.fit 2D Sky-subtraction Sky-subtracted Sky F

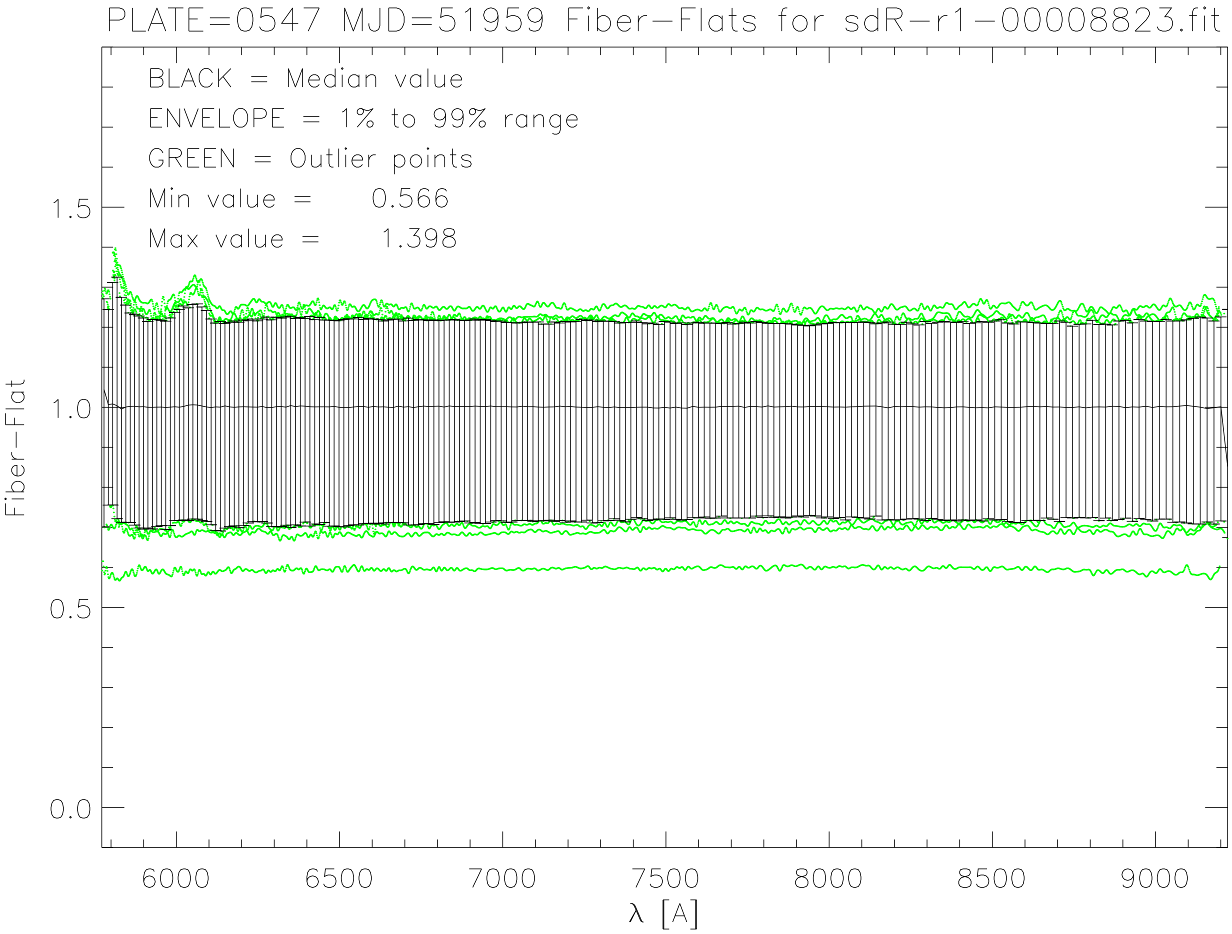
Number of sky fibers = 12

PLATE=0547 MJD=51959 sdR-r1-00008821.fit 2D Sky-subtraction Rescaled Errors

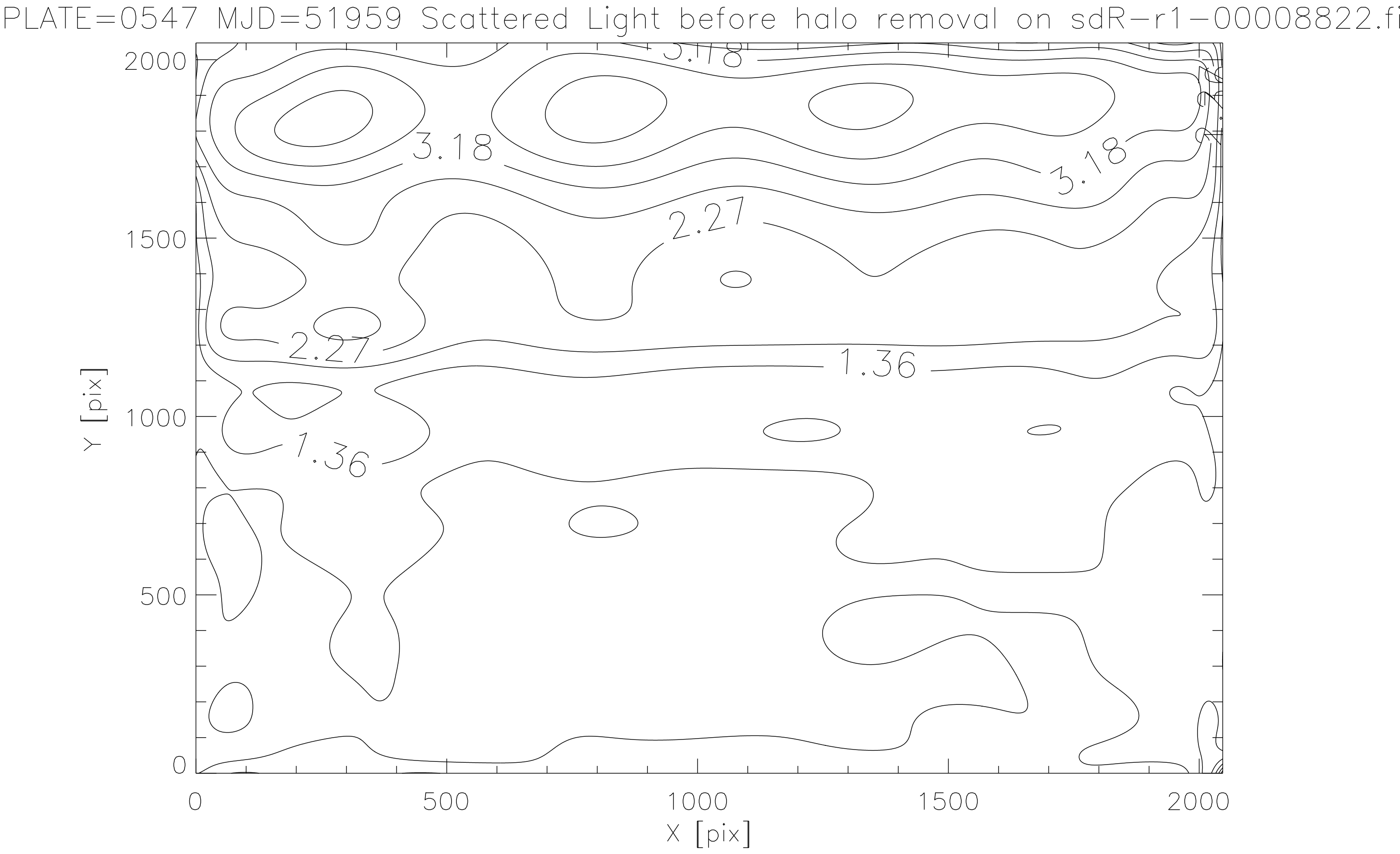



PLATE=0547 MJD=51959 sdR−r1−00008821.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1600
1400
1200
1000
800
600
RED = sky fiber
Dispersion = 4.52 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
1600
1400
1200
1000
800
600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1600
1400
1200
1000
800
600
1.11
1.12
1.13
1.14
1.15
Airmass

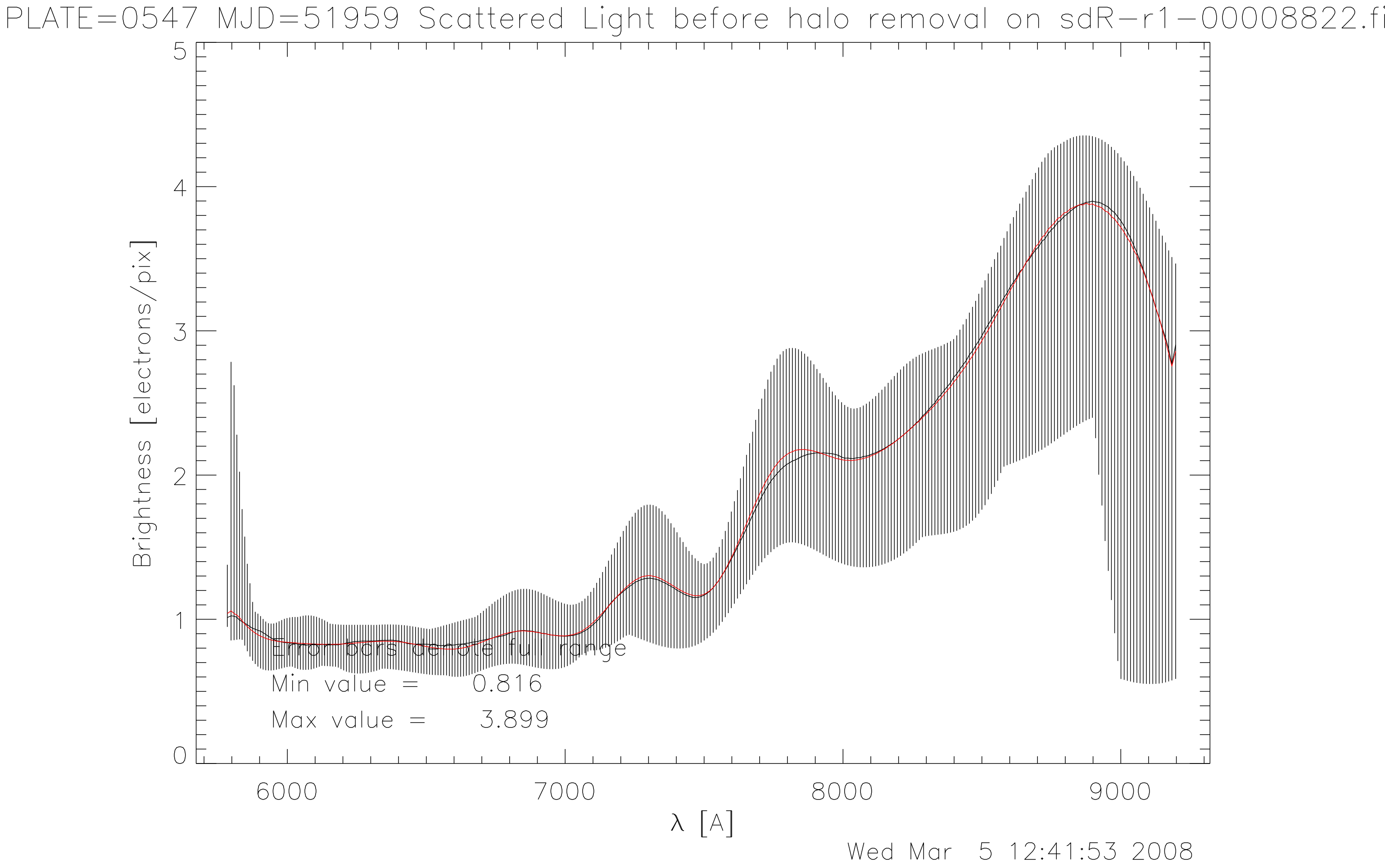

PLATE=0547 MJD=51959 sdR-r1-00008821.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
3500
3000
2500
2000
1500
RED = sky fiber
Dispersion = 3.98 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
3500
3000
2500
2000
1500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
3500
3000
2500
2000
1500
1.11
1.12
1.13
1.14
1.15
Airmass

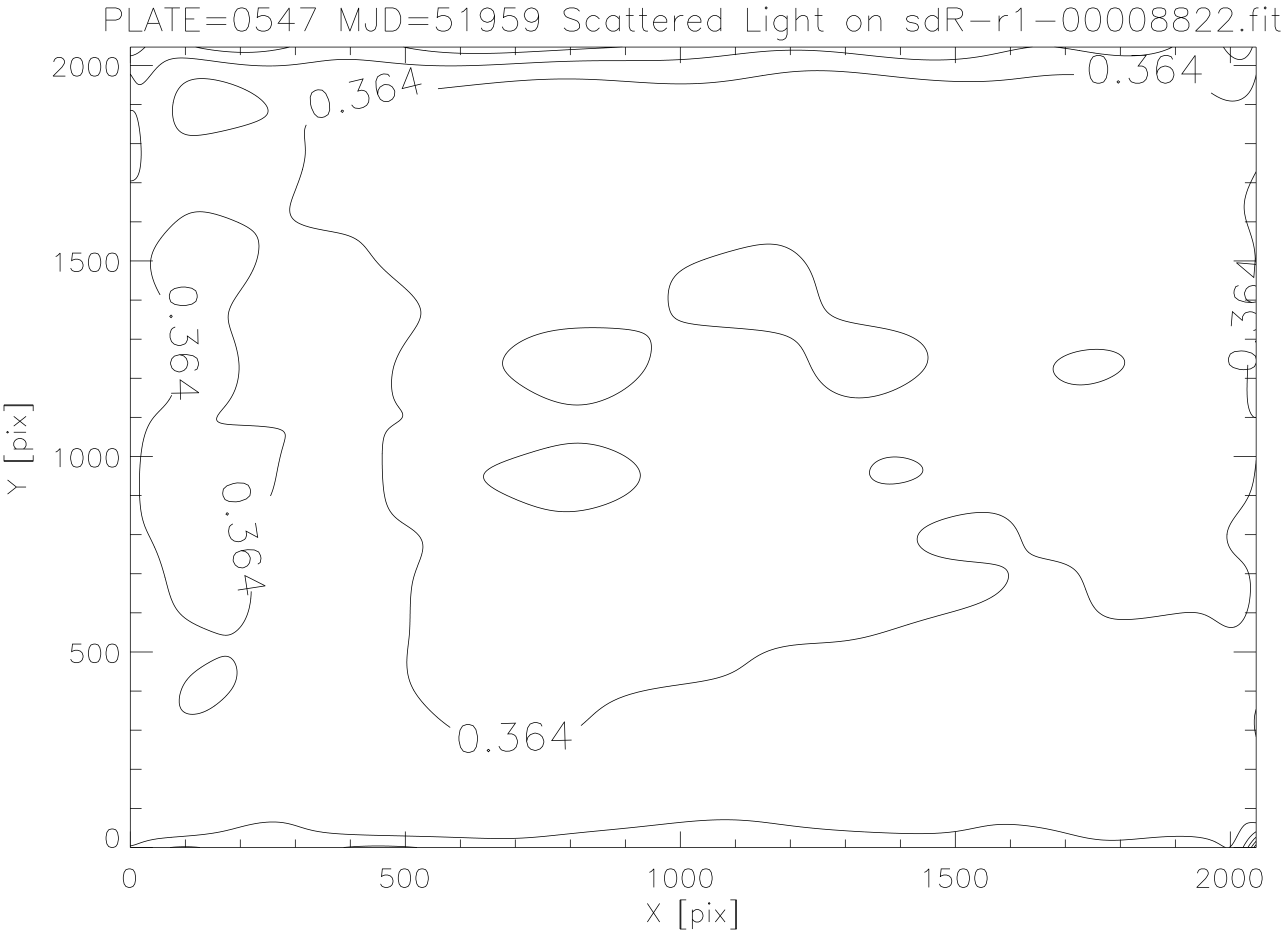


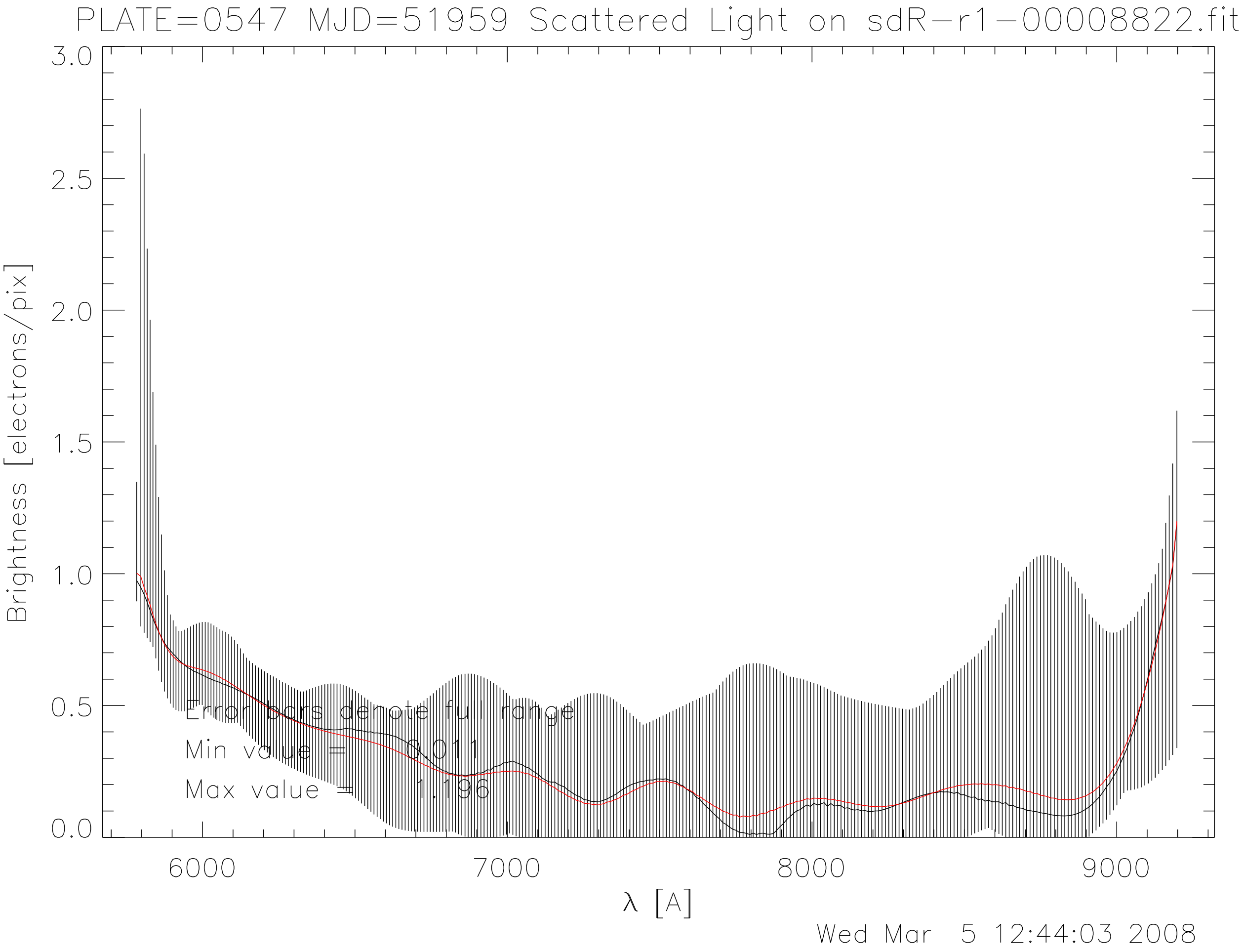
Wed Mar 5 12:41:18 2008

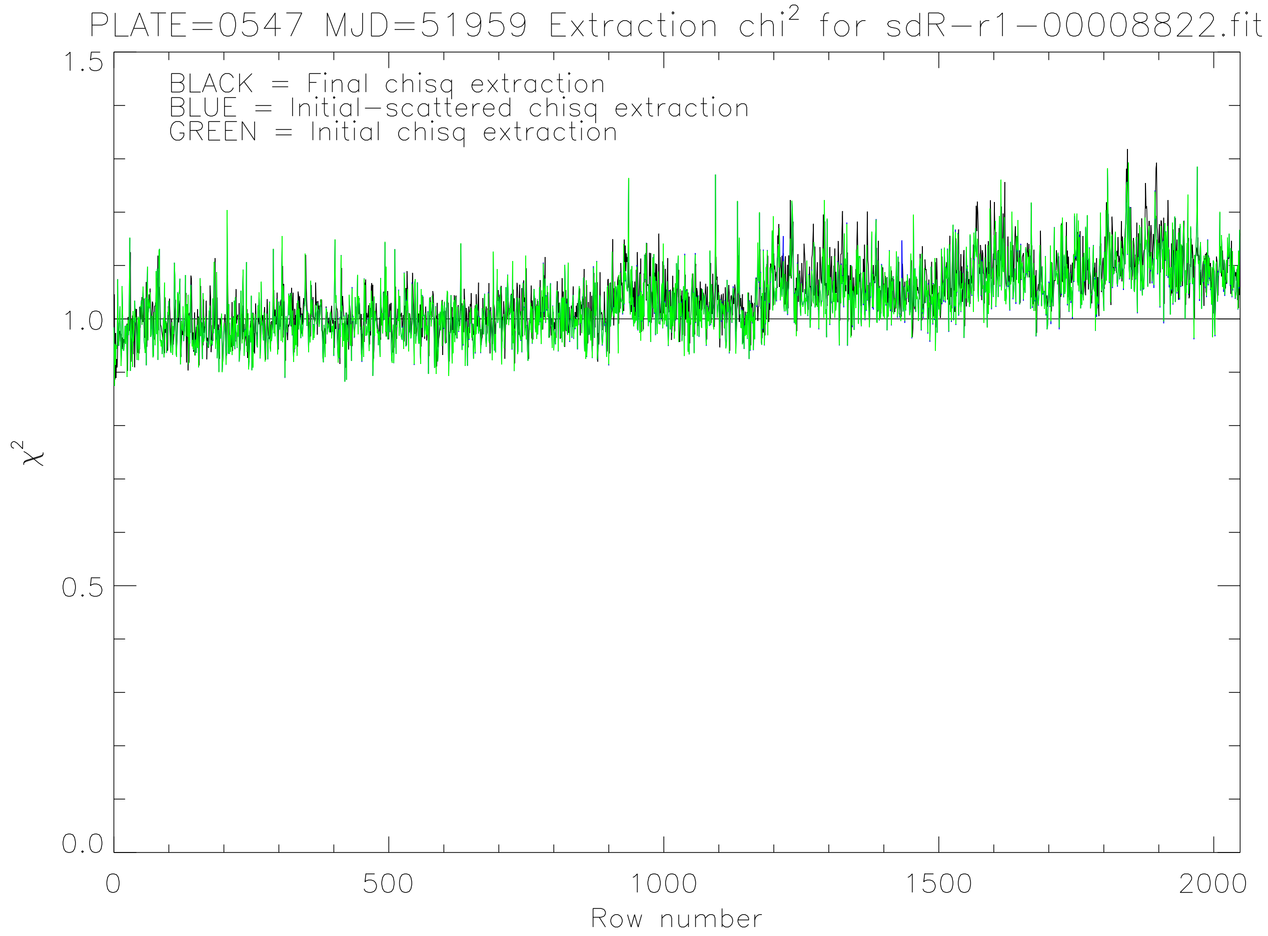


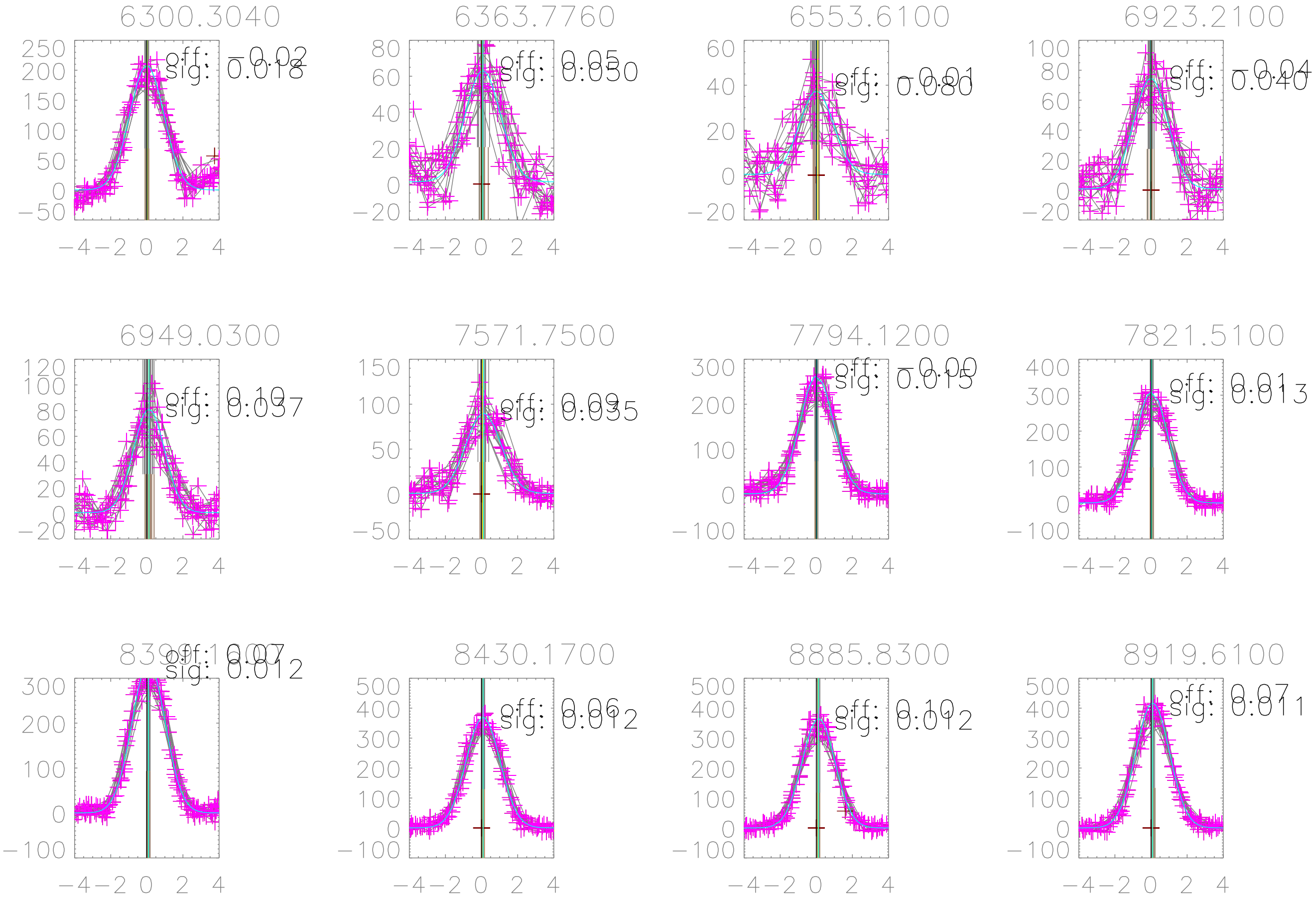
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008822.fi

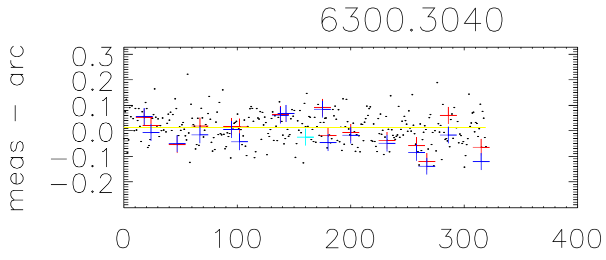

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r1-00008822.fi
Brightness [electrons/pix]
0
1
2
3
4
5
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.816
Max value = 3.899
Wed Mar 5 12:41:53 2008

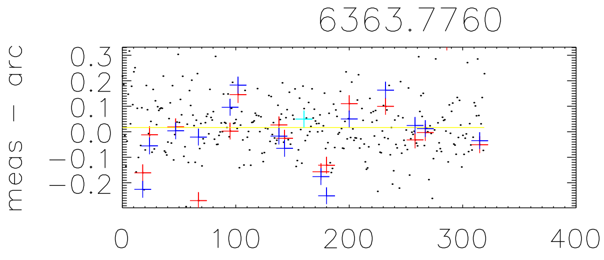

PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008822.fit
0.364
0.364
0.364
0.364
0.364
0.364
2000
1500
1000
500
0
0
500
1000
1500
2000
X [pix]
Y [pix]

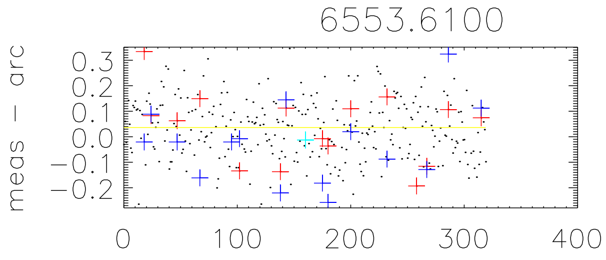

PLATE=0547 MJD=51959 Scattered Light on sdR-r1-00008822.fit
Brightness [electrons/pix]
3.0
2.5
2.0
1.5
1.0
0.5
0.0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.011
Max value = 1.196
Wed Mar 5 12:44:03 2008

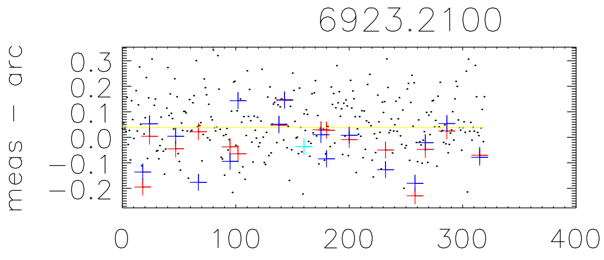

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-r1-00008822.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

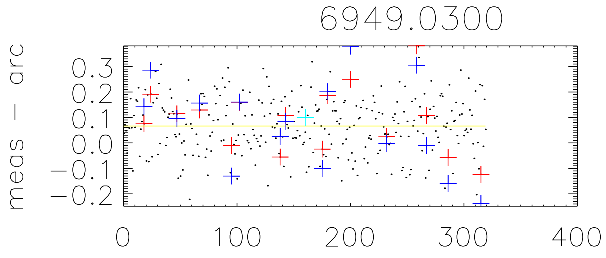

6300.3040
off: −0.02
sig: 0.018
6363.7760
off: 0.05
sig: 0.050
6553.6100
off: −0.01
sig: 0.080
6923.2100
off: −0.04
sig: 0.040
6949.0300
off: 0.10
sig: 0.037
7571.7500
off: 0.09
sig: 0.035
7794.1200
off: −0.00
sig: 0.015
7821.5100
off: 0.01
sig: 0.013
off: 0.07
sig: 0.012
8430.1700
off: 0.06
sig: 0.012
8885.8300
off: 0.10
sig: 0.012
8919.6100
off: 0.07
sig: 0.011
−4 −2 0 2 4

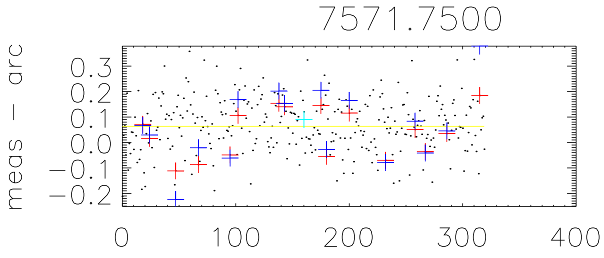

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

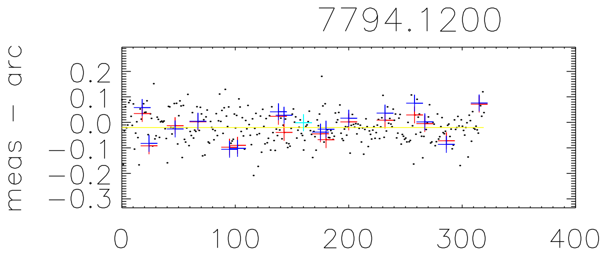

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

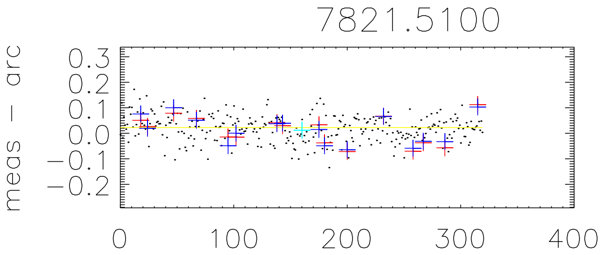

6553.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

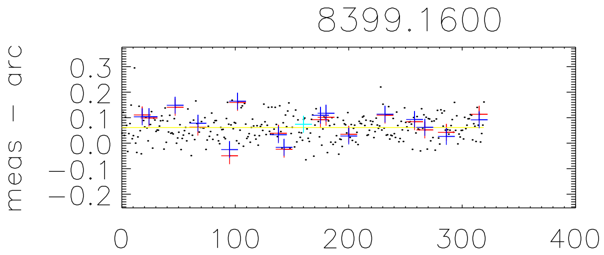

6923.2100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

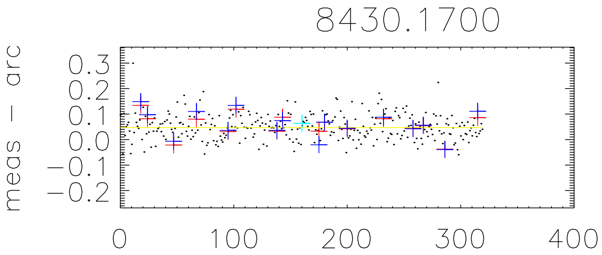

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

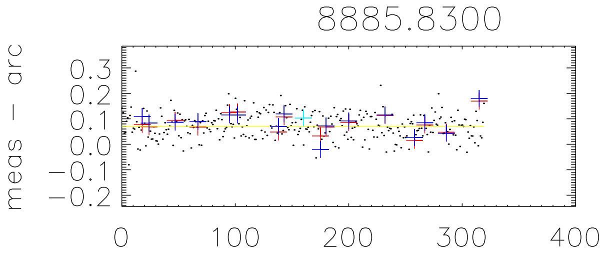

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

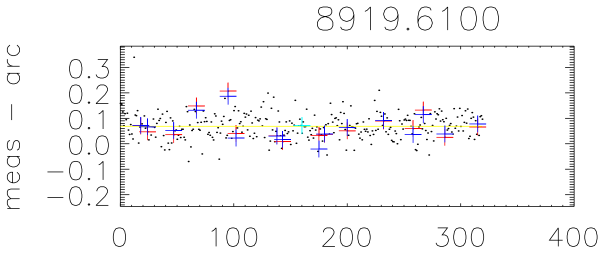

7794.1200
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

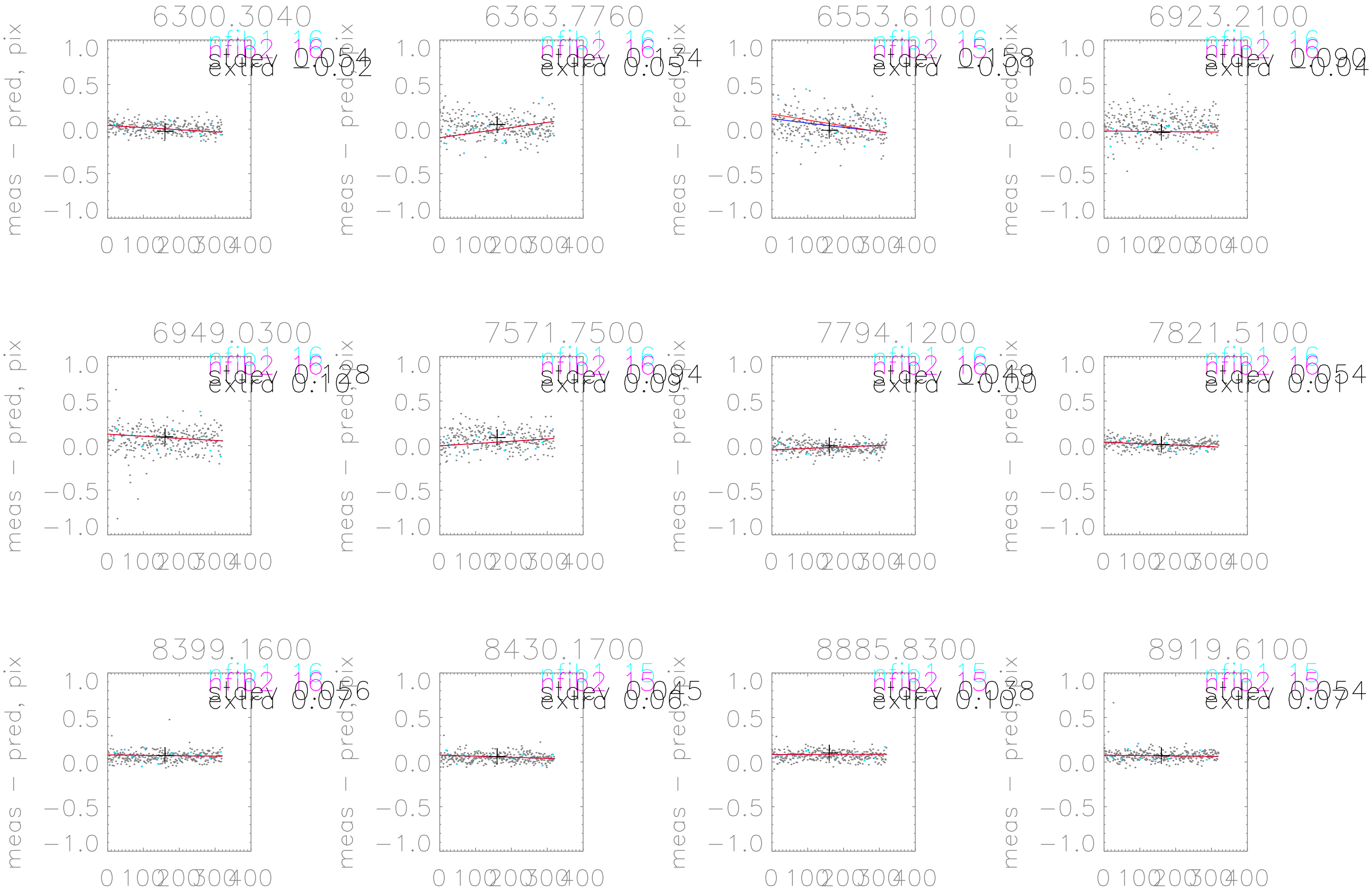

7821.5100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

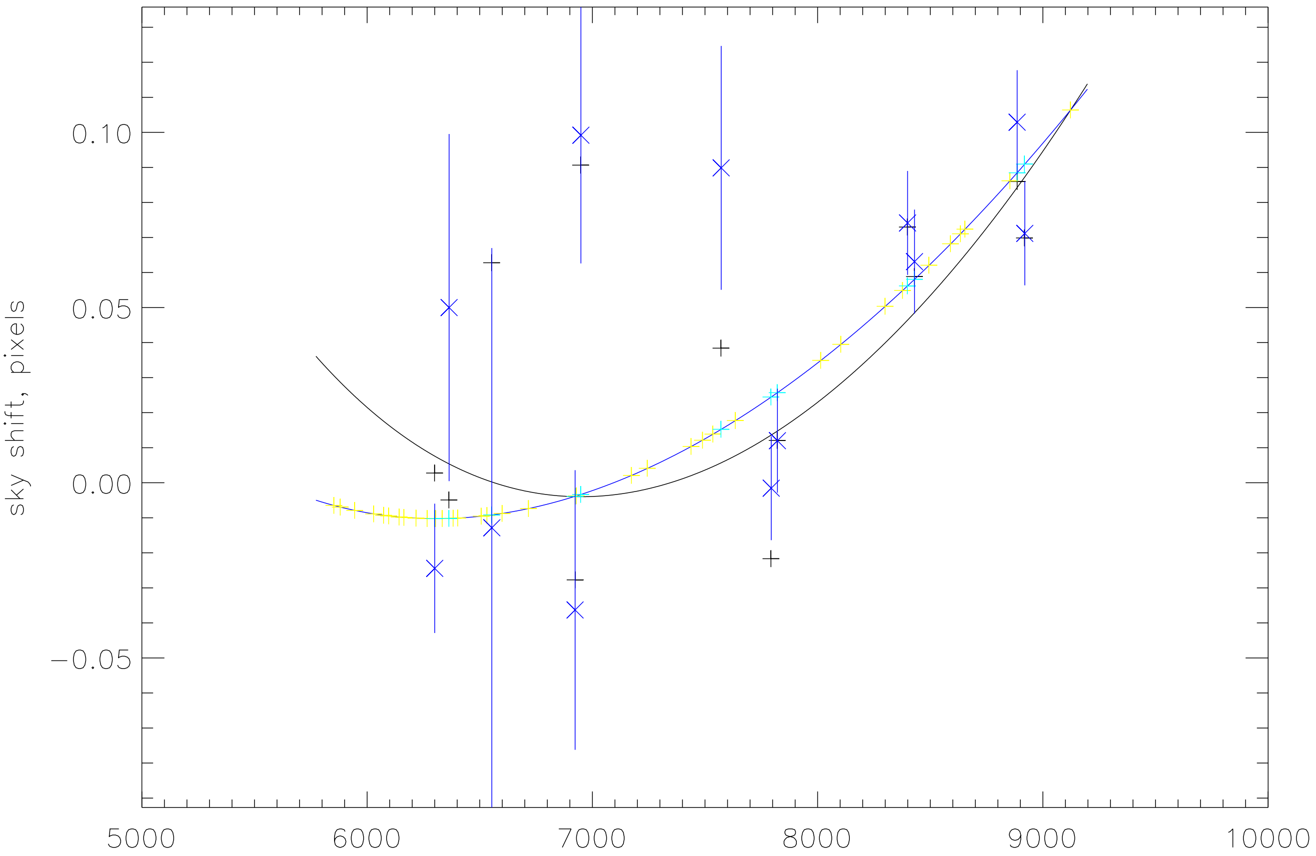

8399.1600
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

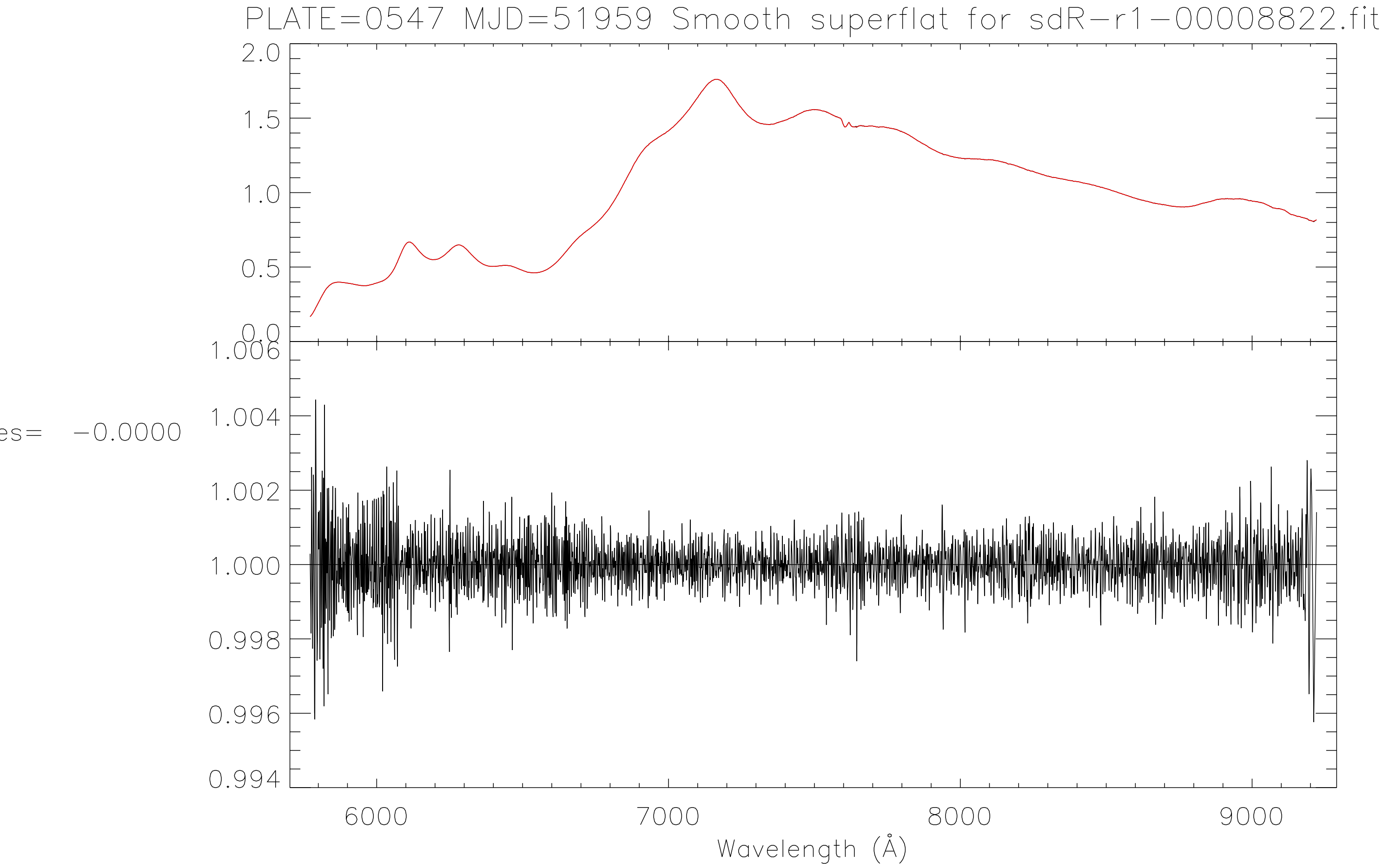

8430.1700
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

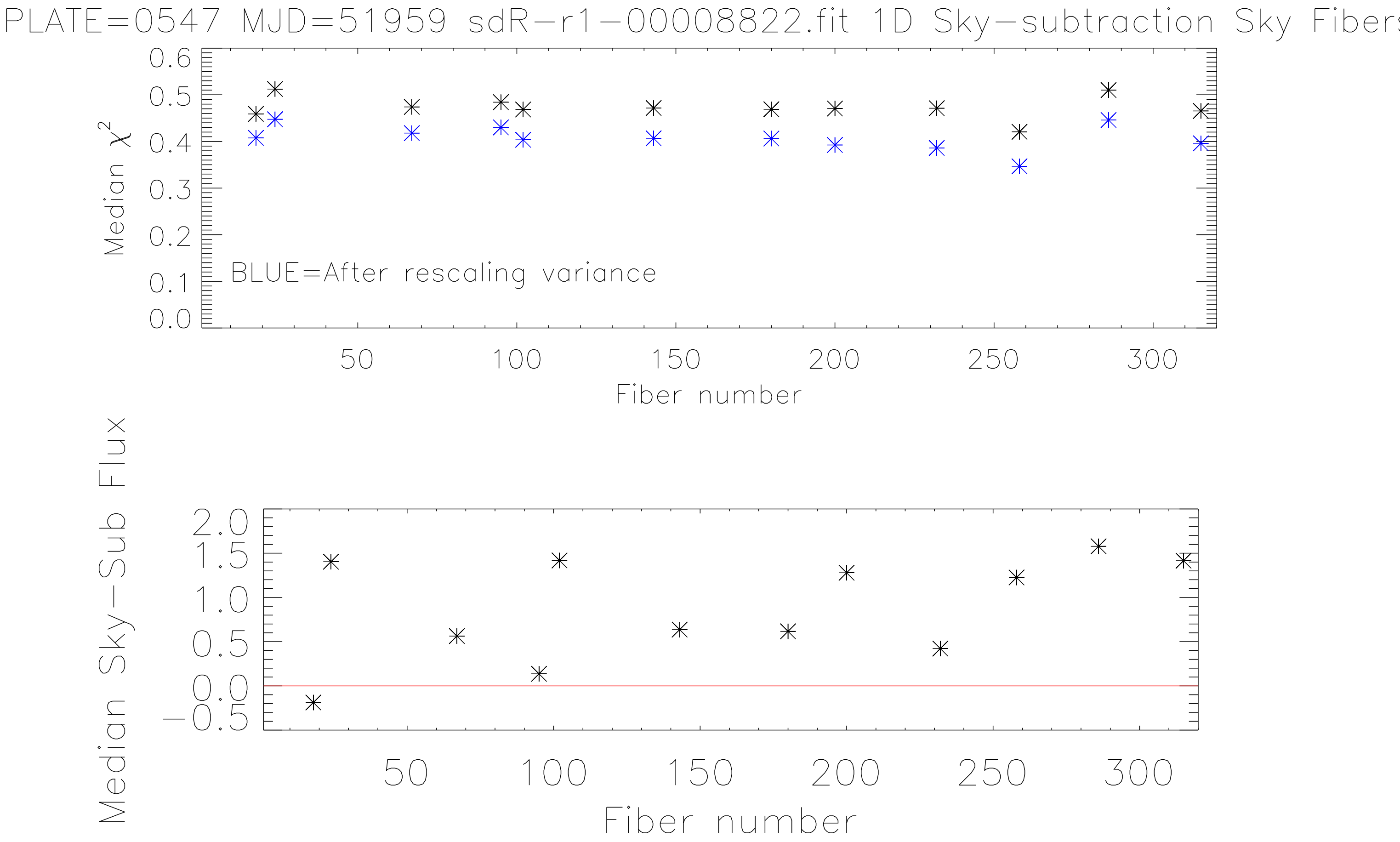

8885.8300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

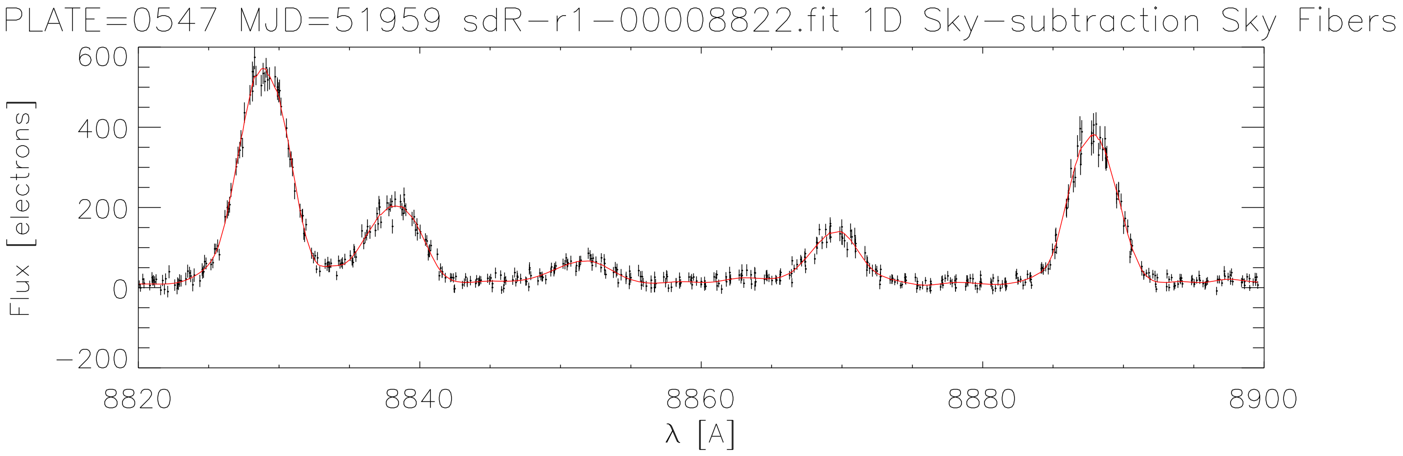

8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

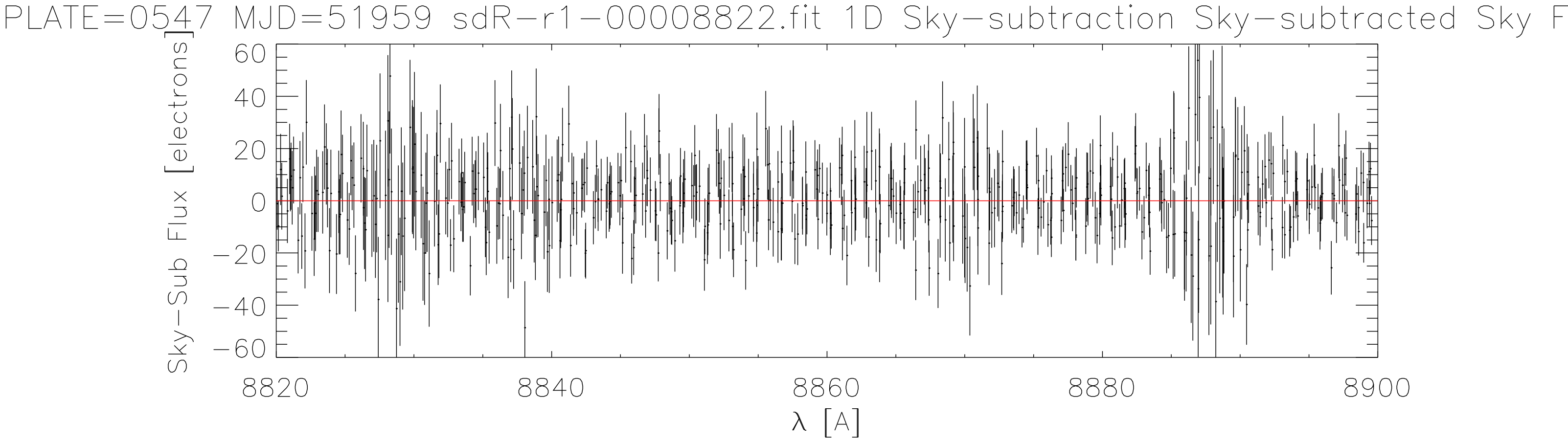

6300.3040
nfib1 16
nfib2 16
stdev 0.054
extrd −0.02
6363.7760
nfib1 16
nfib2 16
stdev 0.134
extrd 0.05
6553.6100
nfib1 16
nfib2 15
stdev 0.158
extrd −0.01
6923.2100
nfib1 16
nfib2 16
stdev 0.090
extrd −0.04
6949.0300
nfib1 16
nfib2 16
stdev 0.128
extrd 0.10
7571.7500
nfib1 16
nfib2 16
stdev 0.094
extrd 0.09
7794.1200
nfib1 16
nfib2 16
stdev 0.049
extrd −0.00
7821.5100
nfib1 16
nfib2 16
stdev 0.054
extrd 0.01
8399.1600
nfib1 16
nfib2 16
stdev 0.056
extrd 0.07
8430.1700
nfib1 15
nfib2 15
stdev 0.045
extrd 0.06
8885.8300
nfib1 15
nfib2 15
stdev 0.038
extrd 0.10
8919.6100
nfib1 15
nfib2 15
stdev 0.054
extrd 0.07
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


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


PLATE=0547 MJD=51959 Smooth superflat for sdR-r1-00008822.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)

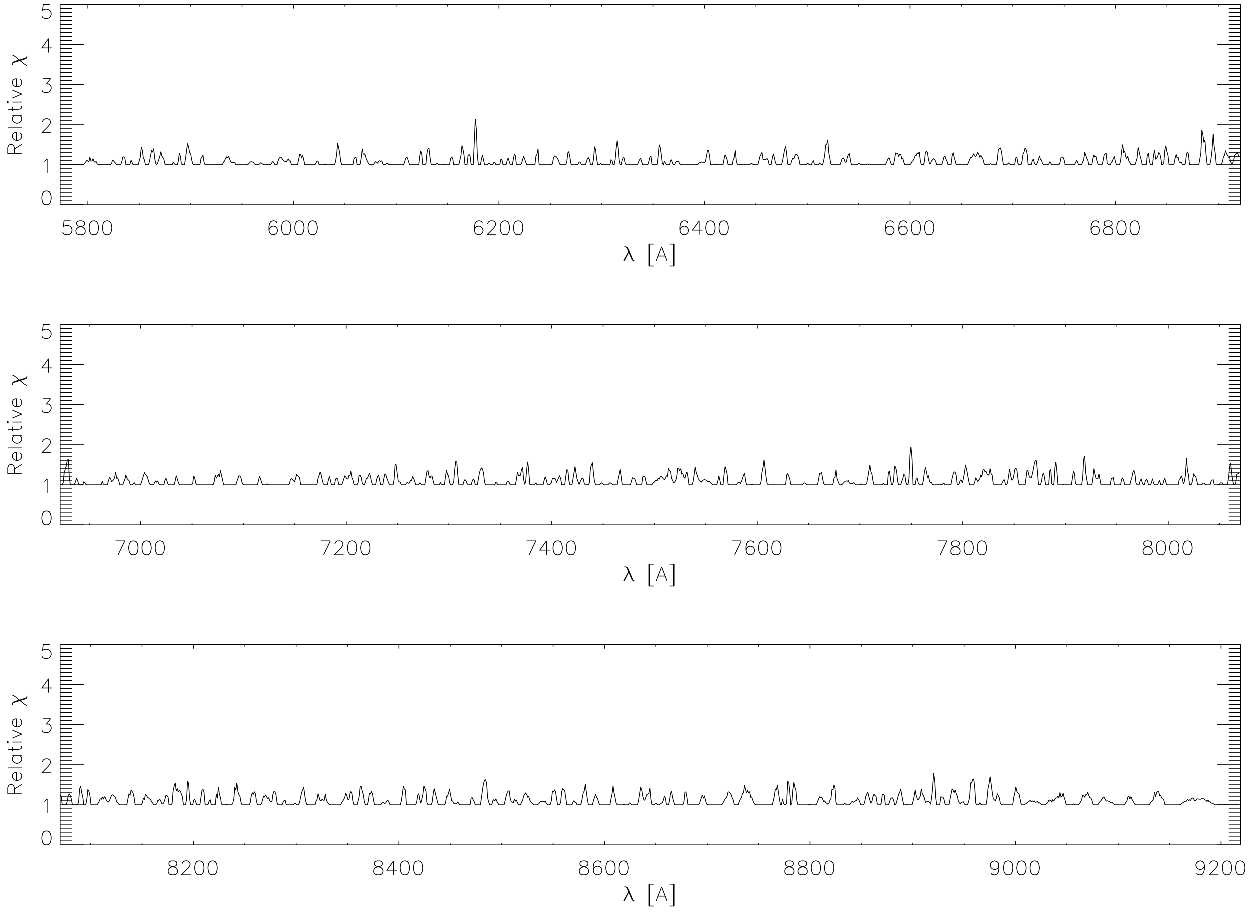

PLATE=0547 MJD=51959 sdR-r1-00008822.fit 1D Sky-subtraction Sky Fibers

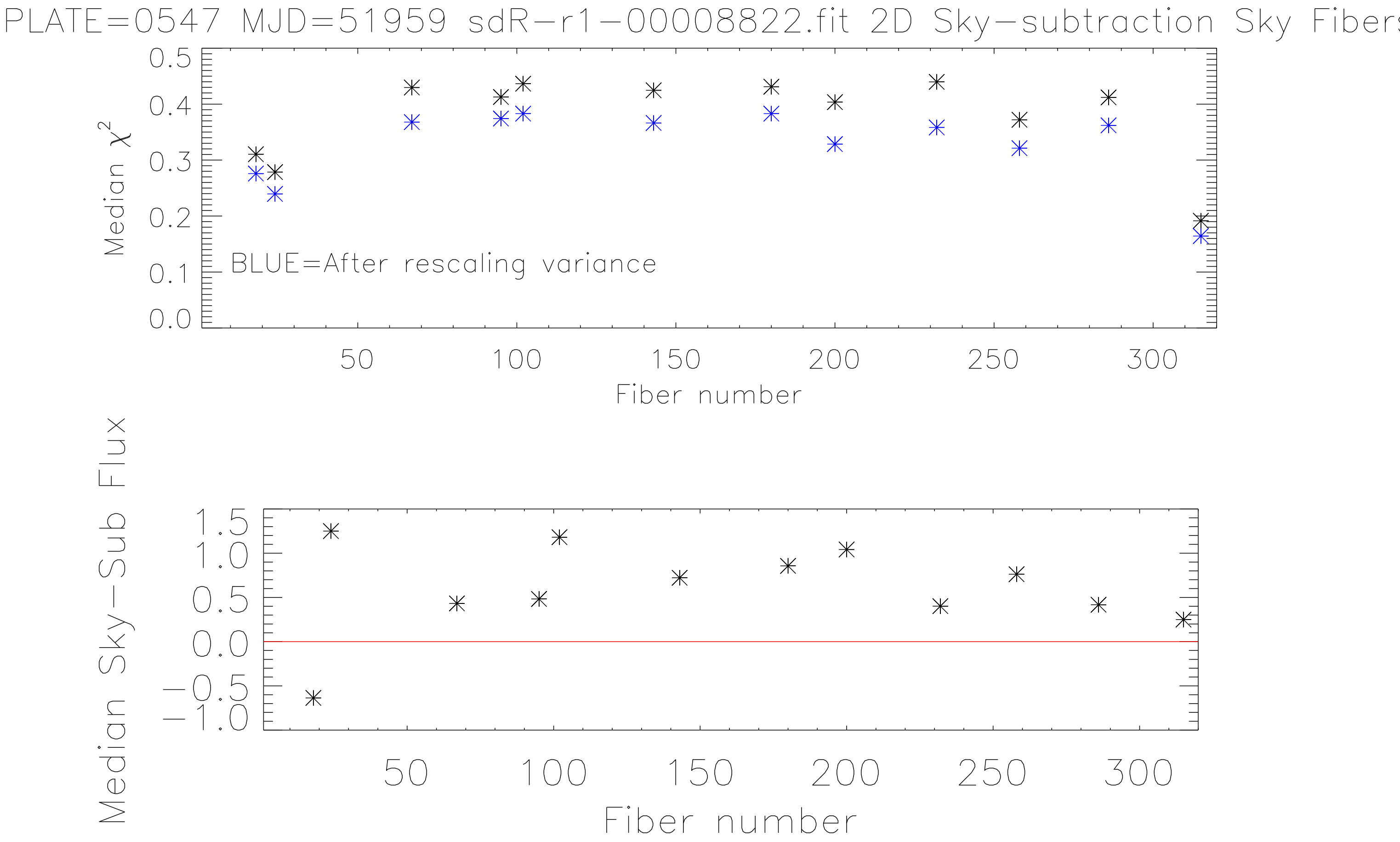

PLATE=0547 MJD=51959 sdR-r1-00008822.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

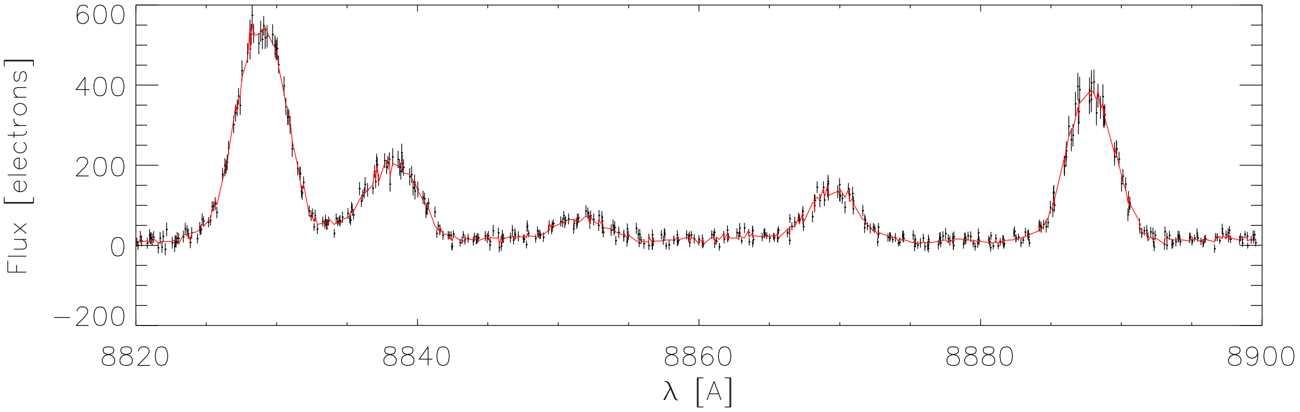

PLATE=0547 MJD=51959 sdR-r1-00008822.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky−Sub Flux [electrons]
60
40
20
0
−20
−40
−60
8820
8840
8860
8880
8900
λ [A]

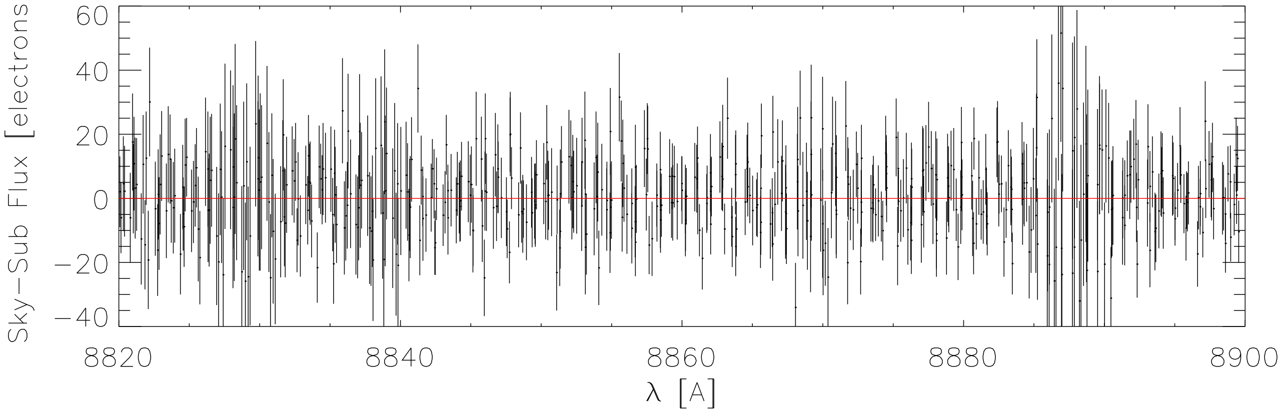
Number of sky fibers = 12

PLATE=0547 MJD=51959 sdR-r1-00008822.fit 1D Sky-subtraction Rescaled Errors



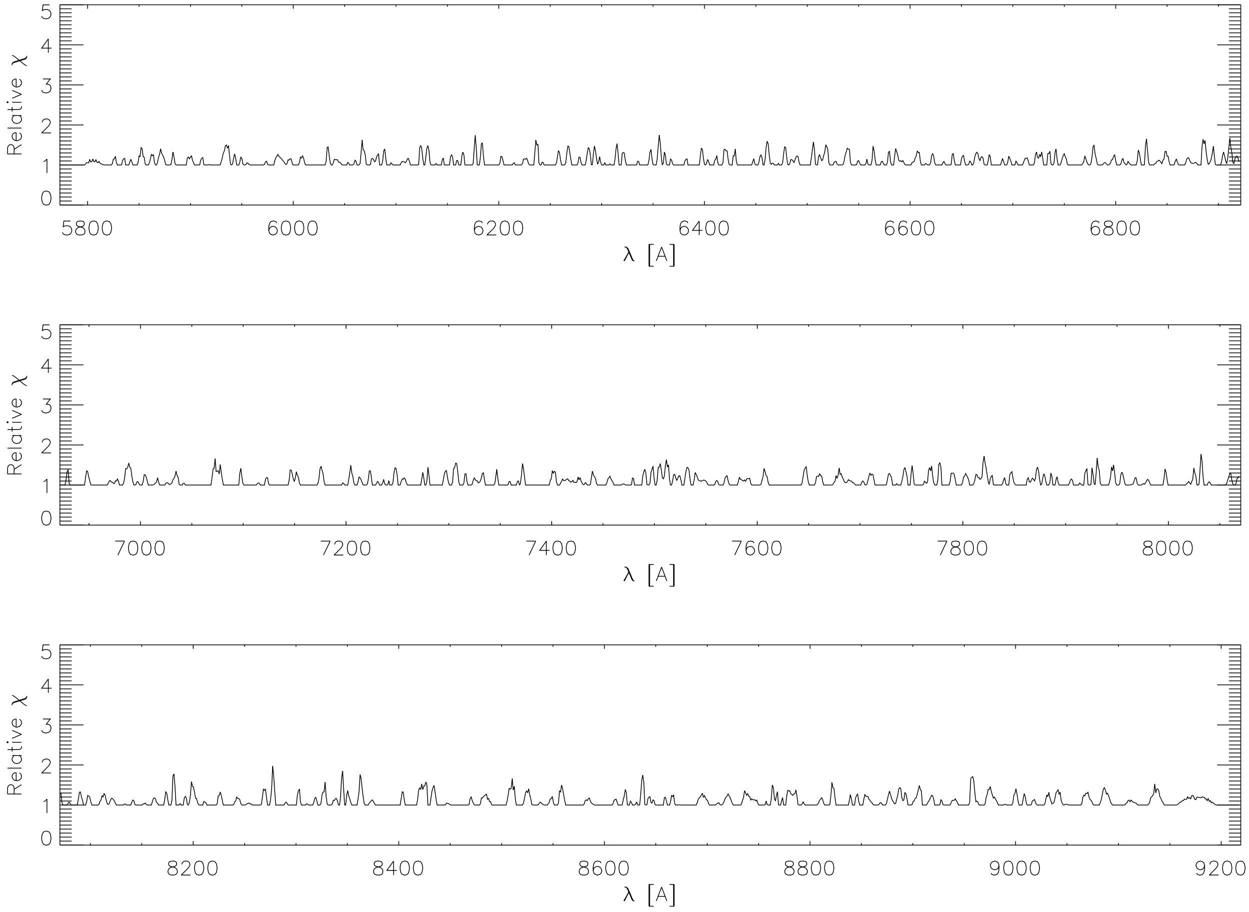

PLATE=0547 MJD=51959 sdR-r1-00008822.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
1.5
1.0
0.5
0.0
-0.5
-1.0
50
100
150
200
250
300
Fiber number

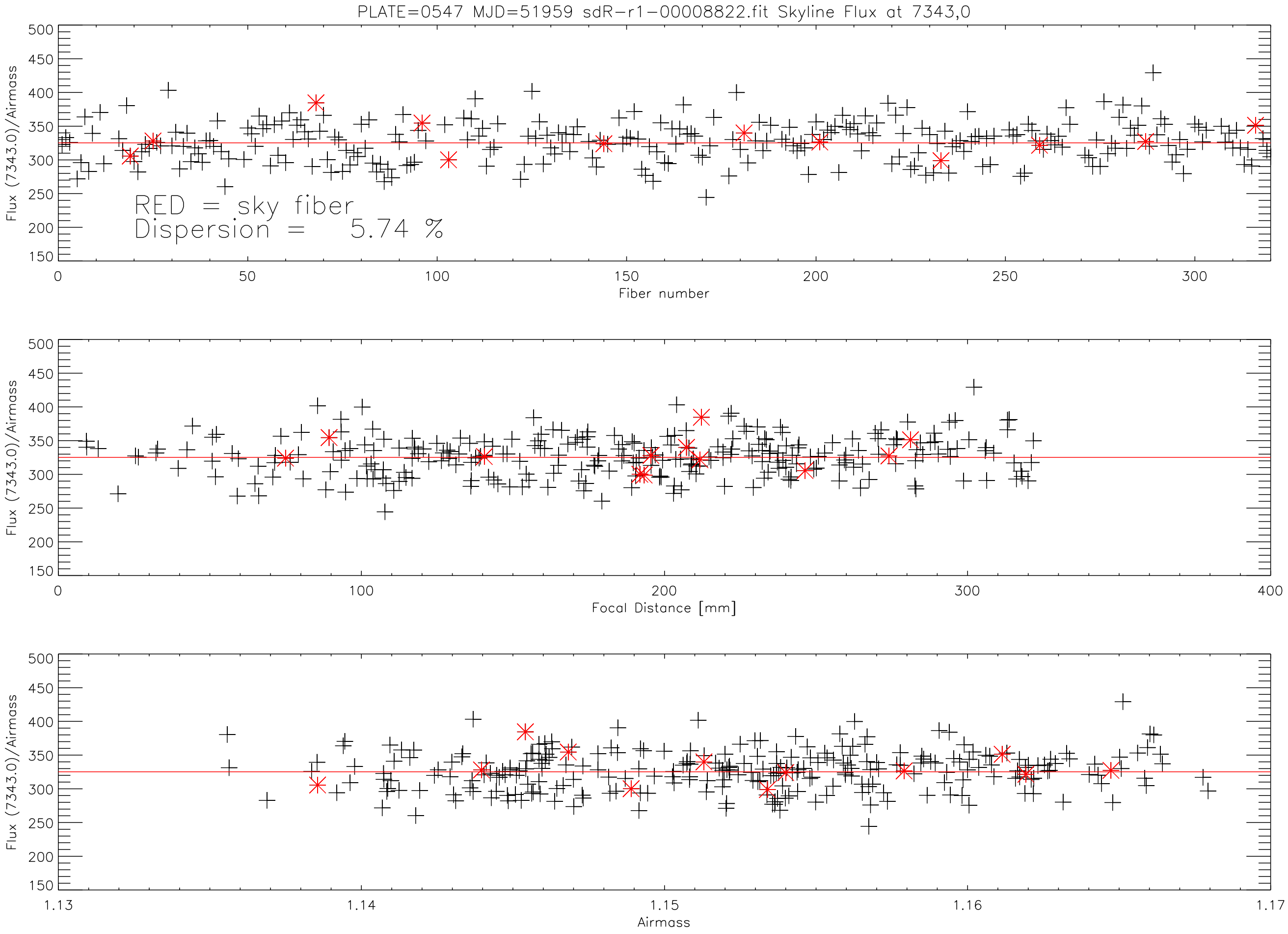

PLATE=0547 MJD=51959 sdR-r1-00008822.fit 2D Sky-subtraction Sky Fibers

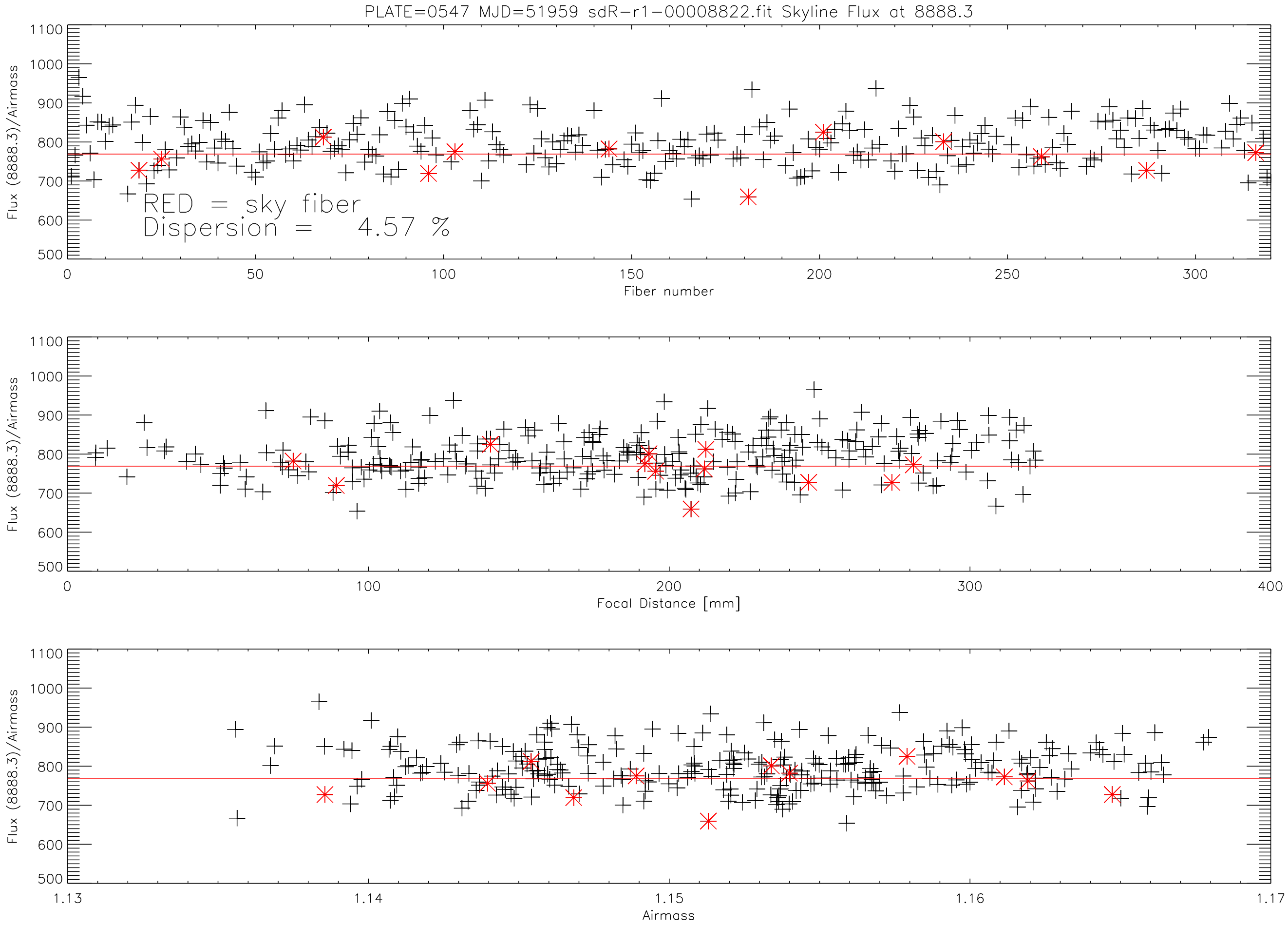

PLATE=0547 MJD=51959 sdR-r1-00008822.fit 2D Sky-subtraction Sky-subtracted Sky F

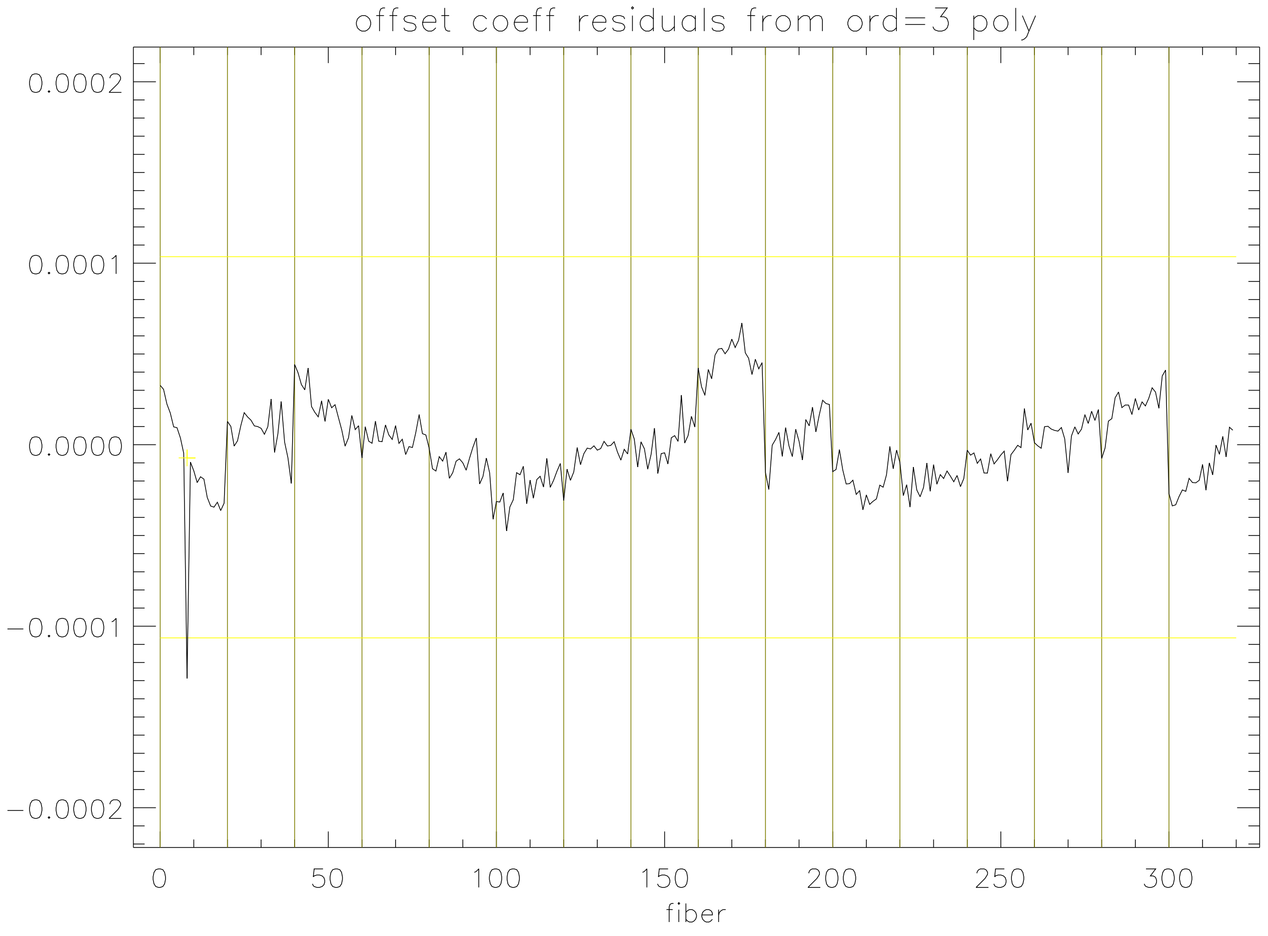
Number of sky fibers = 12

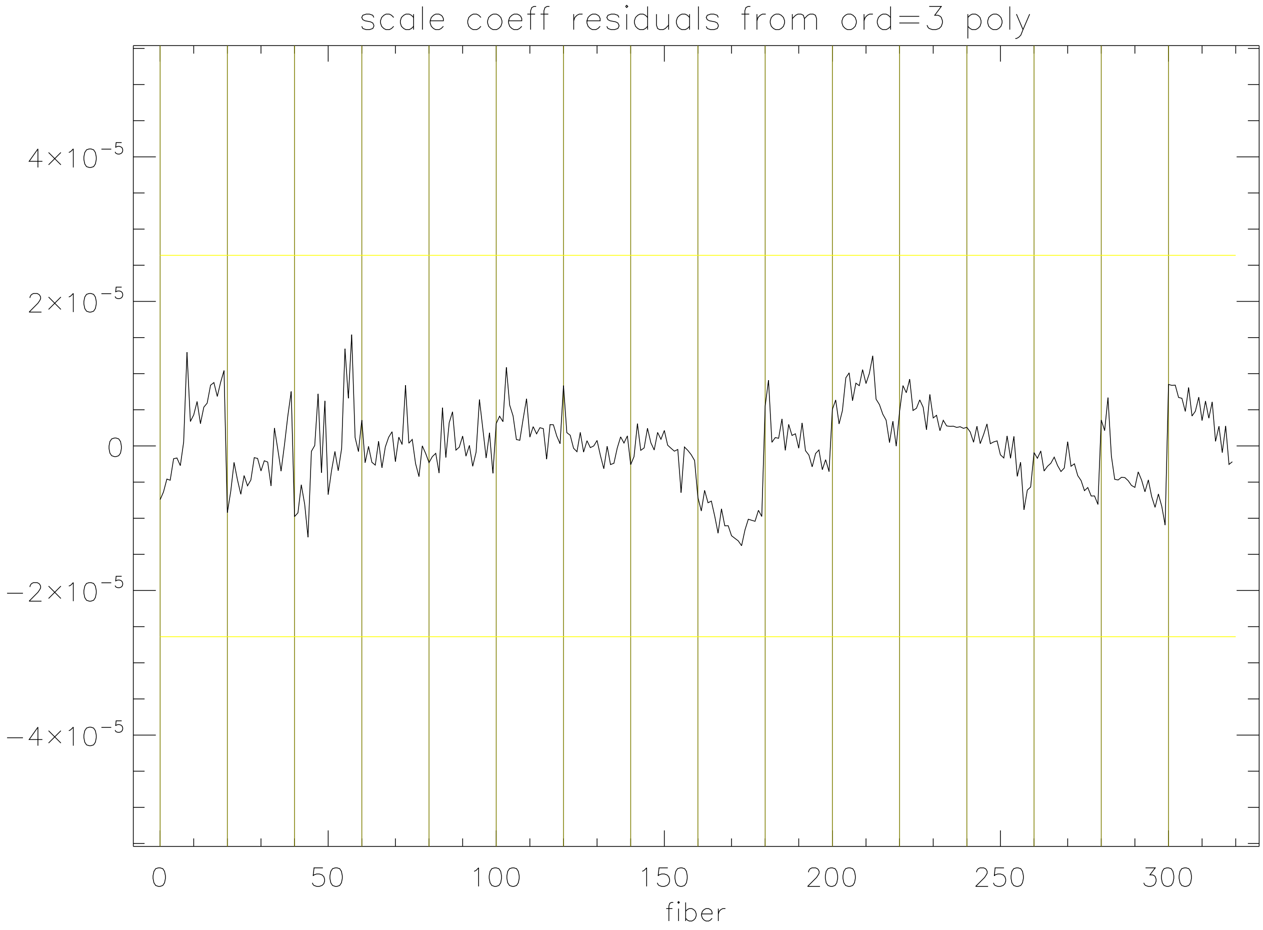
PLATE=0547 MJD=51959 sdR-r1-00008822.fit 2D Sky-subtraction Rescaled Errors

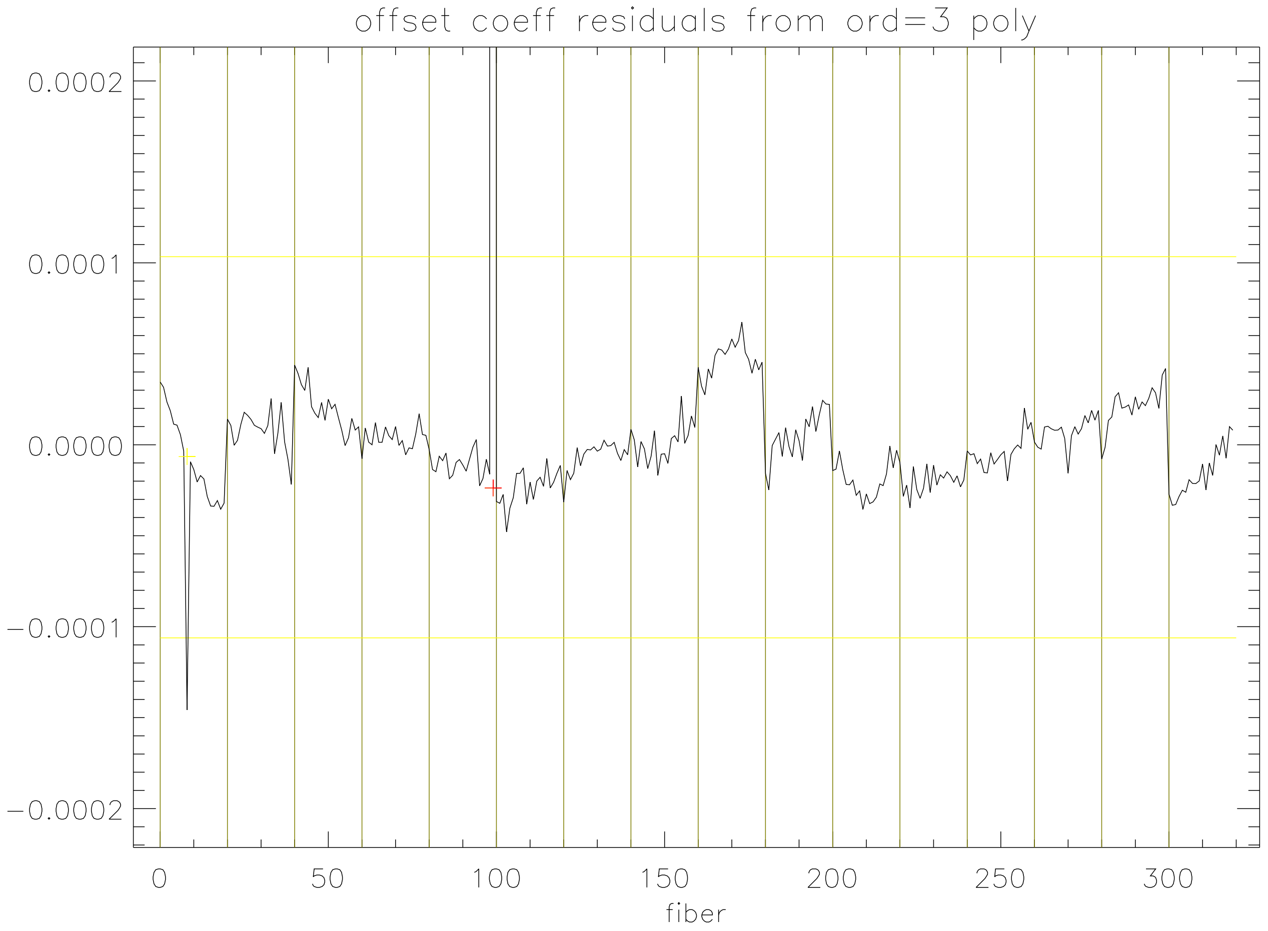


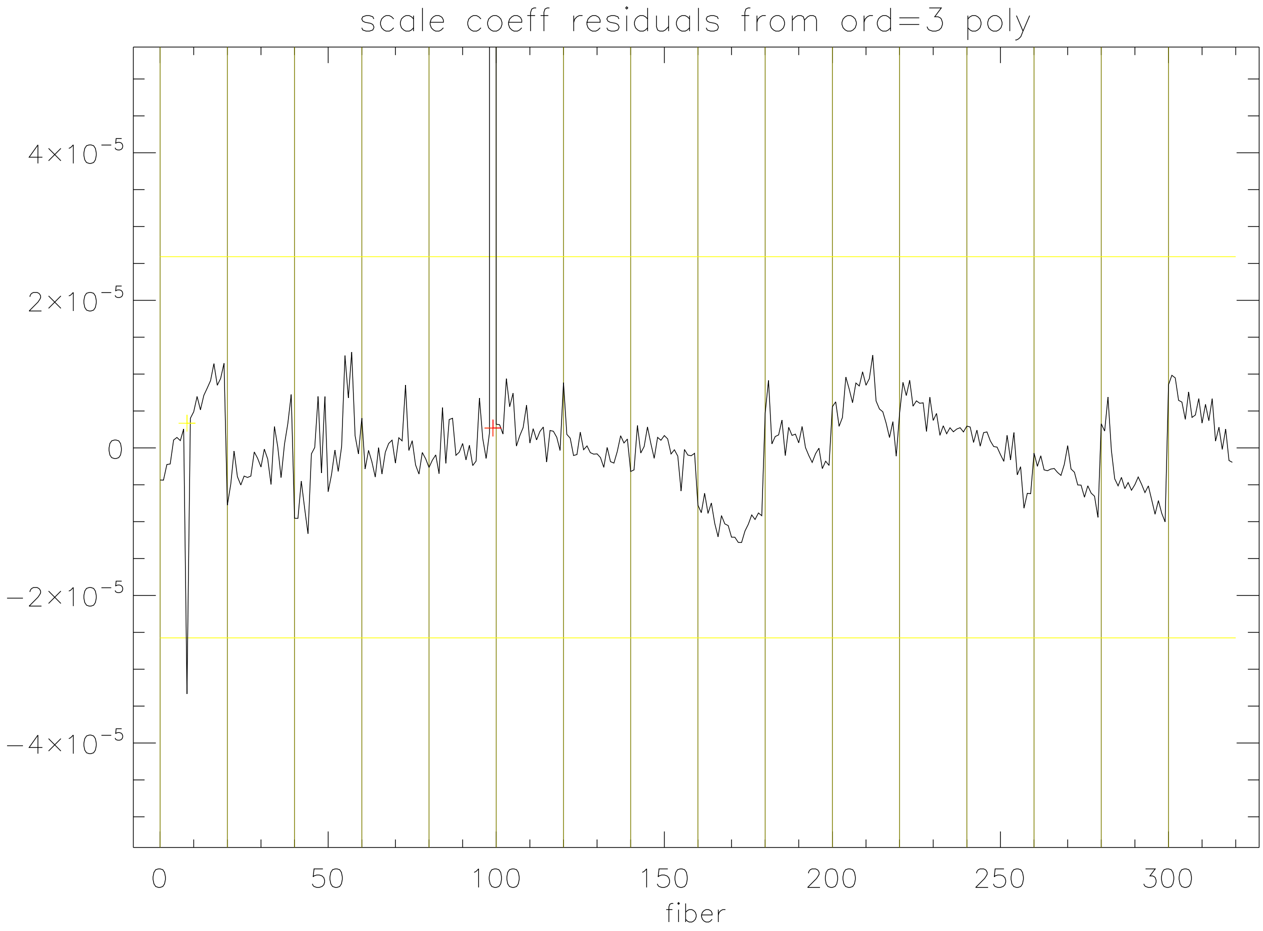

PLATE=0547 MJD=51959 sdR-r1-00008822.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
500
450
400
350
300
250
200
150
RED = sky fiber
Dispersion = 5.74 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
500
450
400
350
300
250
200
150
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
500
450
400
350
300
250
200
150
1.13
1.14
1.15
1.16
1.17
Airmass

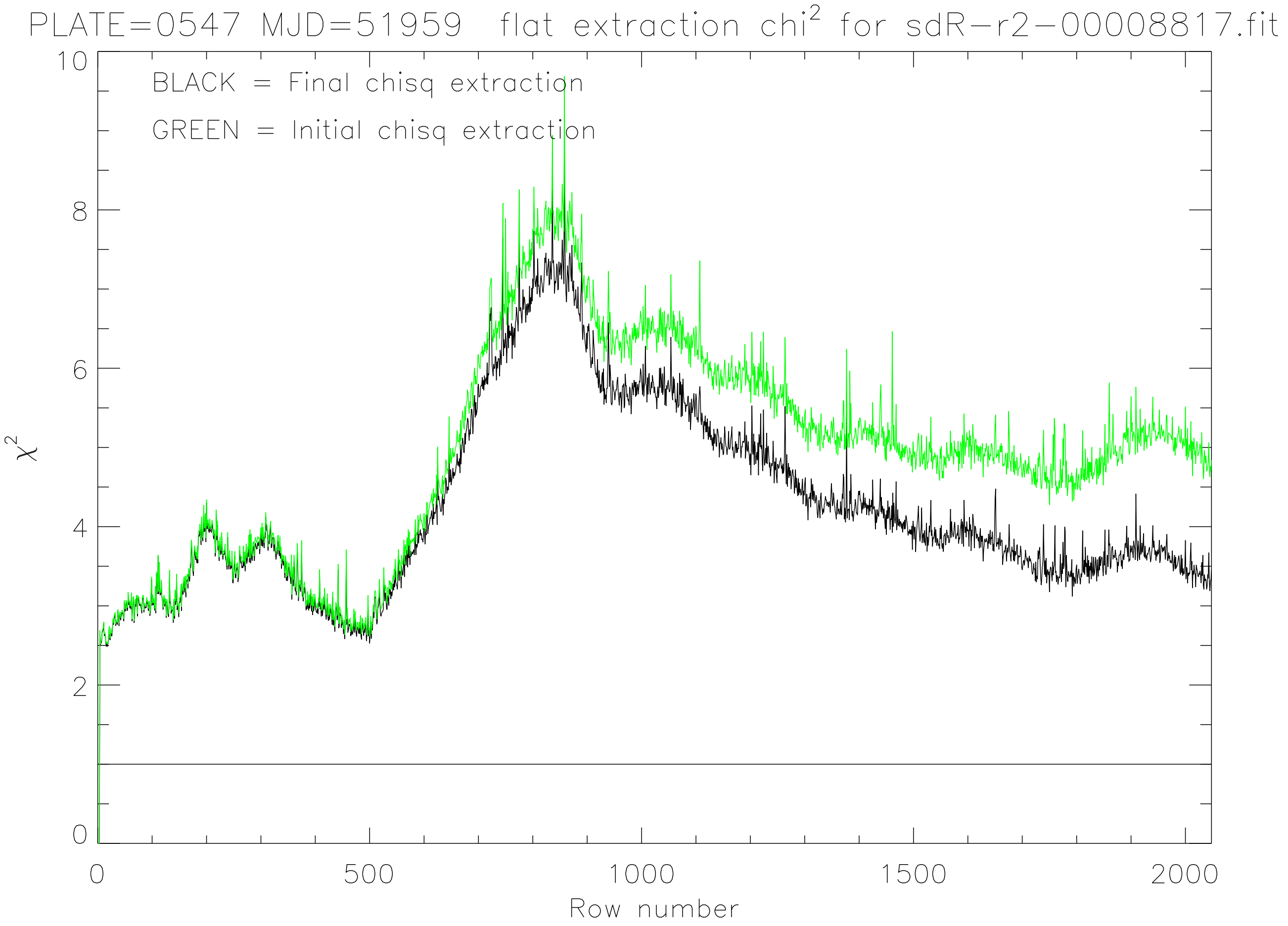

PLATE=0547 MJD=51959 sdR-r1-00008822.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1100
1000
900
800
700
600
500
RED = sky fiber
Dispersion = 4.57 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
1100
1000
900
800
700
600
500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1100
1000
900
800
700
600
500
1.13
1.14
1.15
1.16
1.17
Airmass

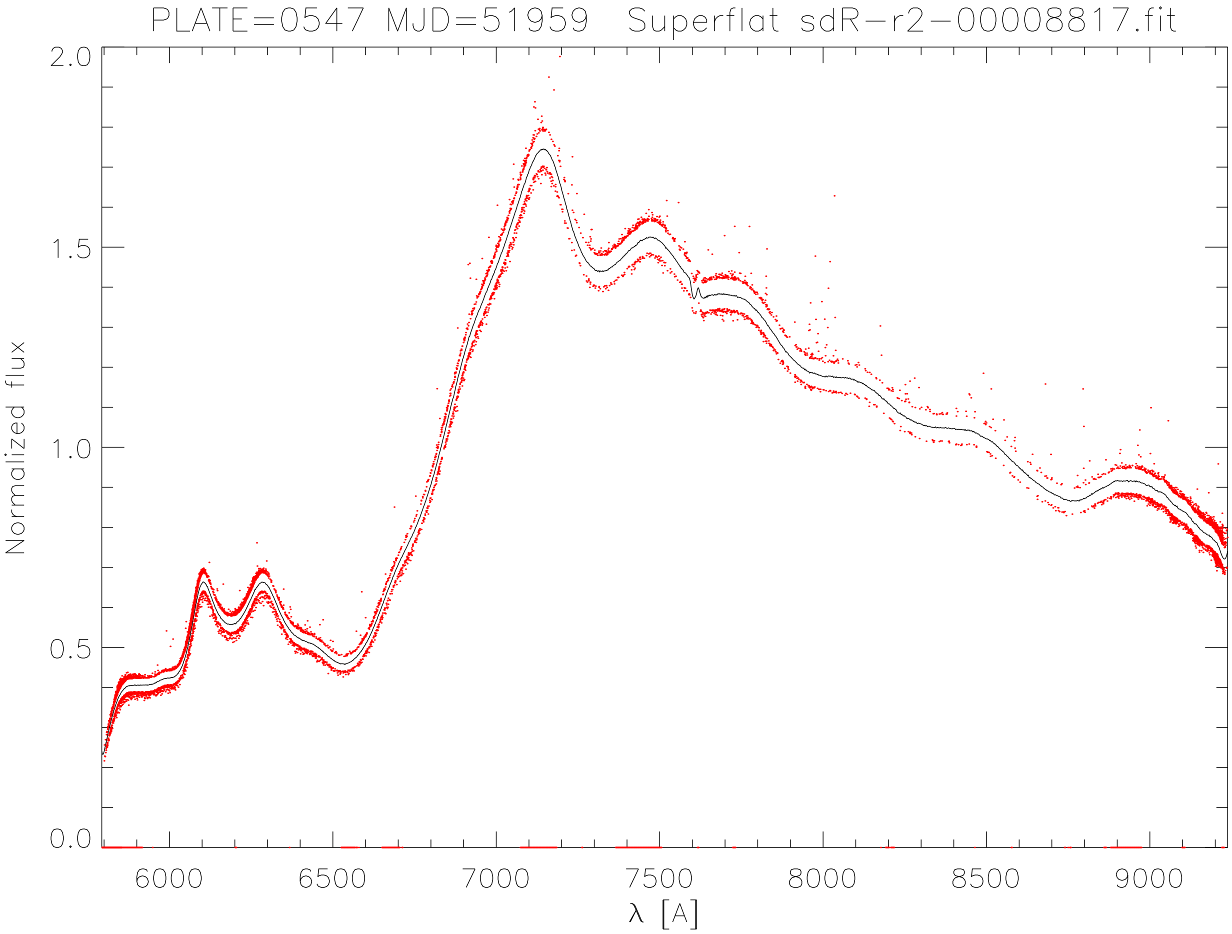

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

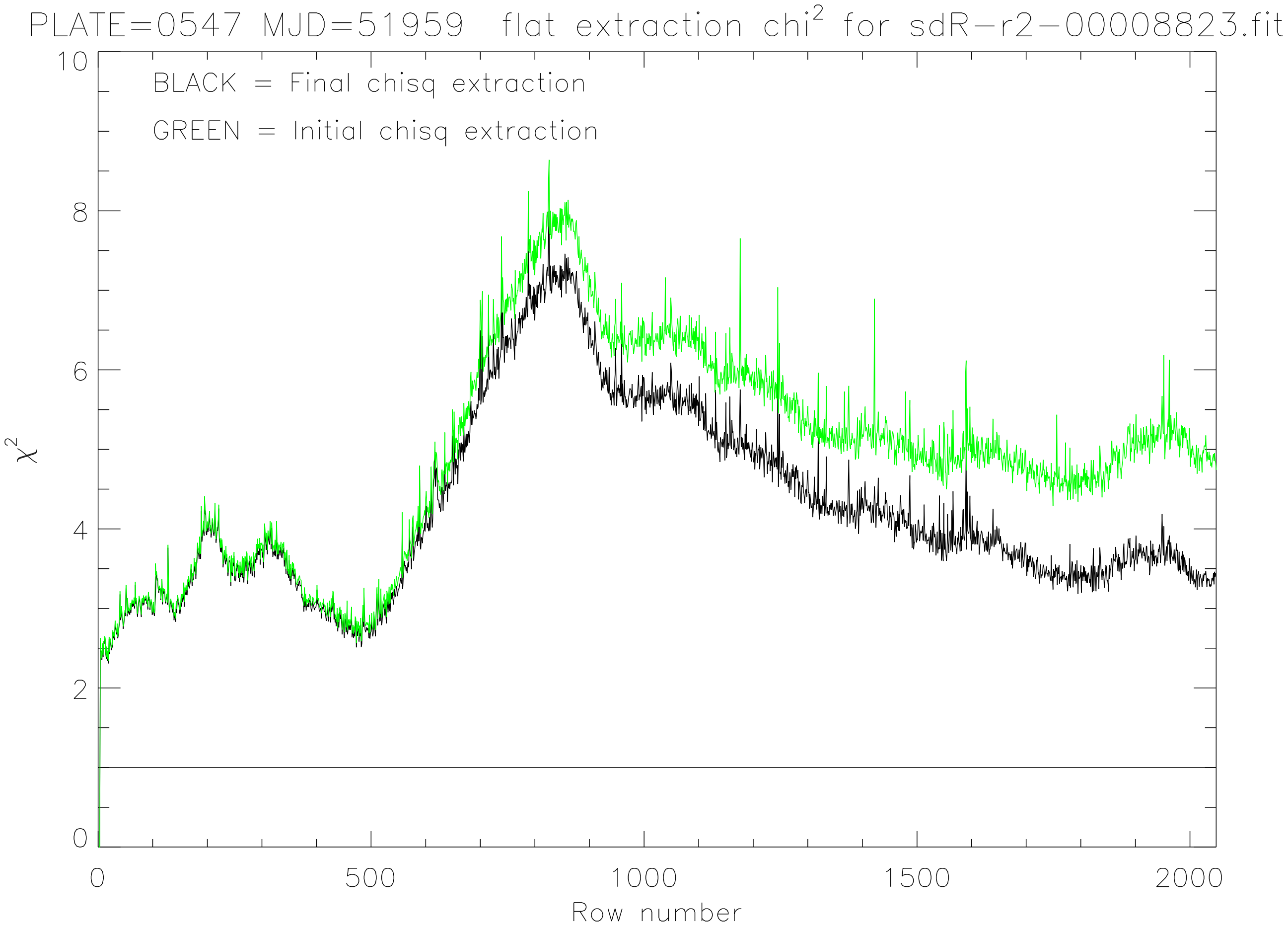

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

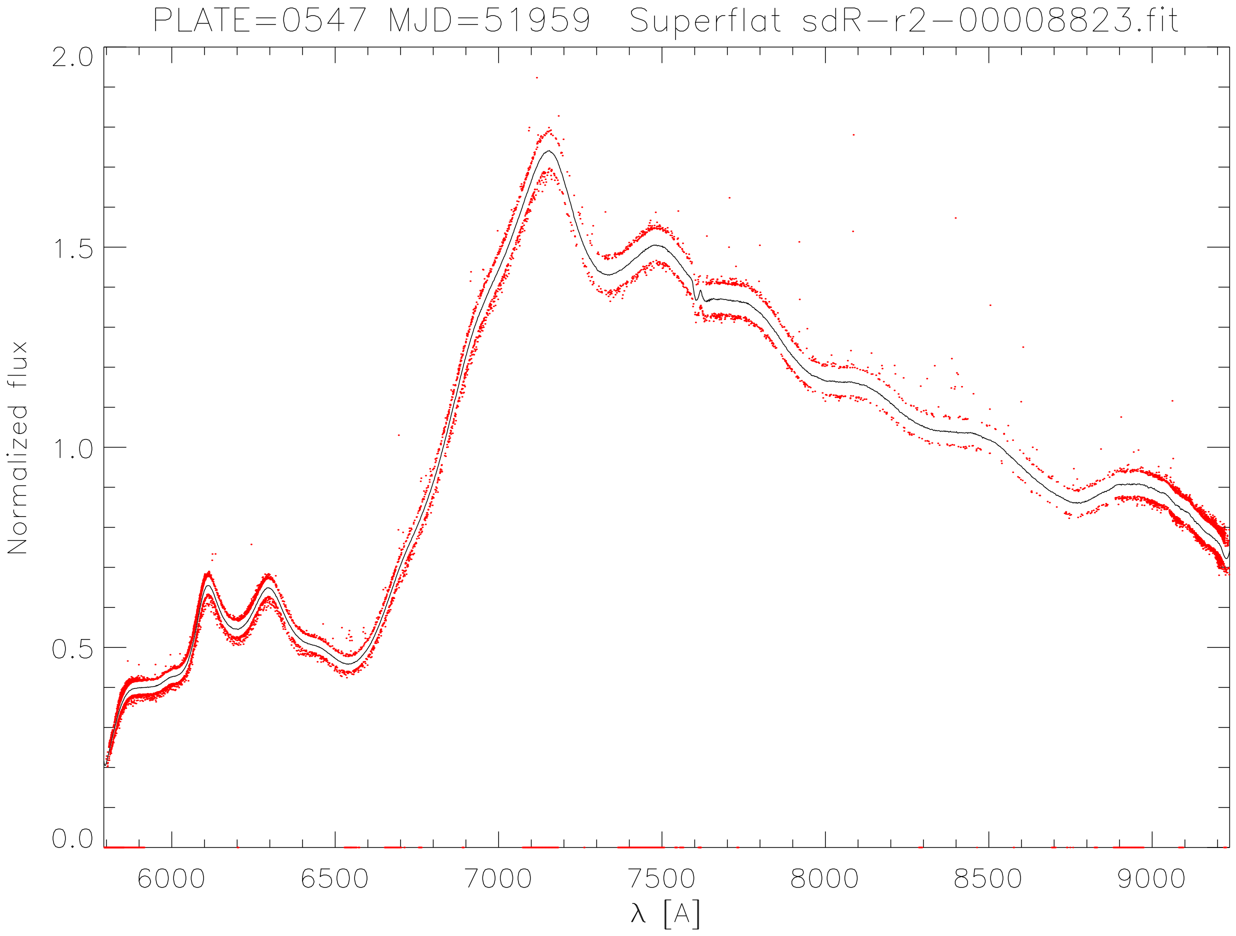

offset coeff residuals from ord=3 poly
0.0002
0.0001
0.0000
−0.0001
−0.0002
0
50
100
150
200
250
300
fiber

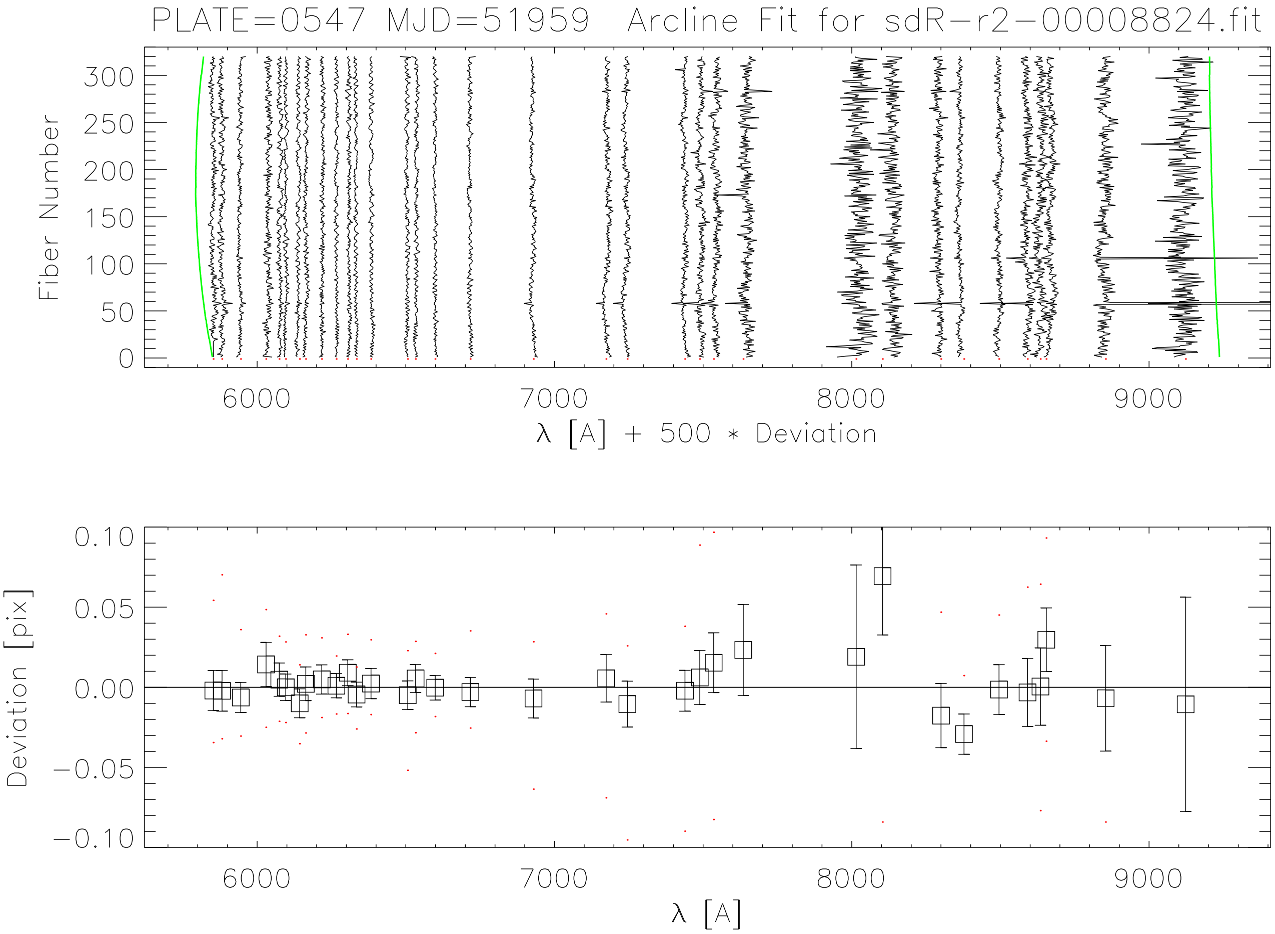

scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=0547 MJD=51959 flat extraction chi^2 for sdR-r2-00008817.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=0547 MJD=51959 Superflat sdR-r2-00008817.fit
Normalized flux
2.0
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

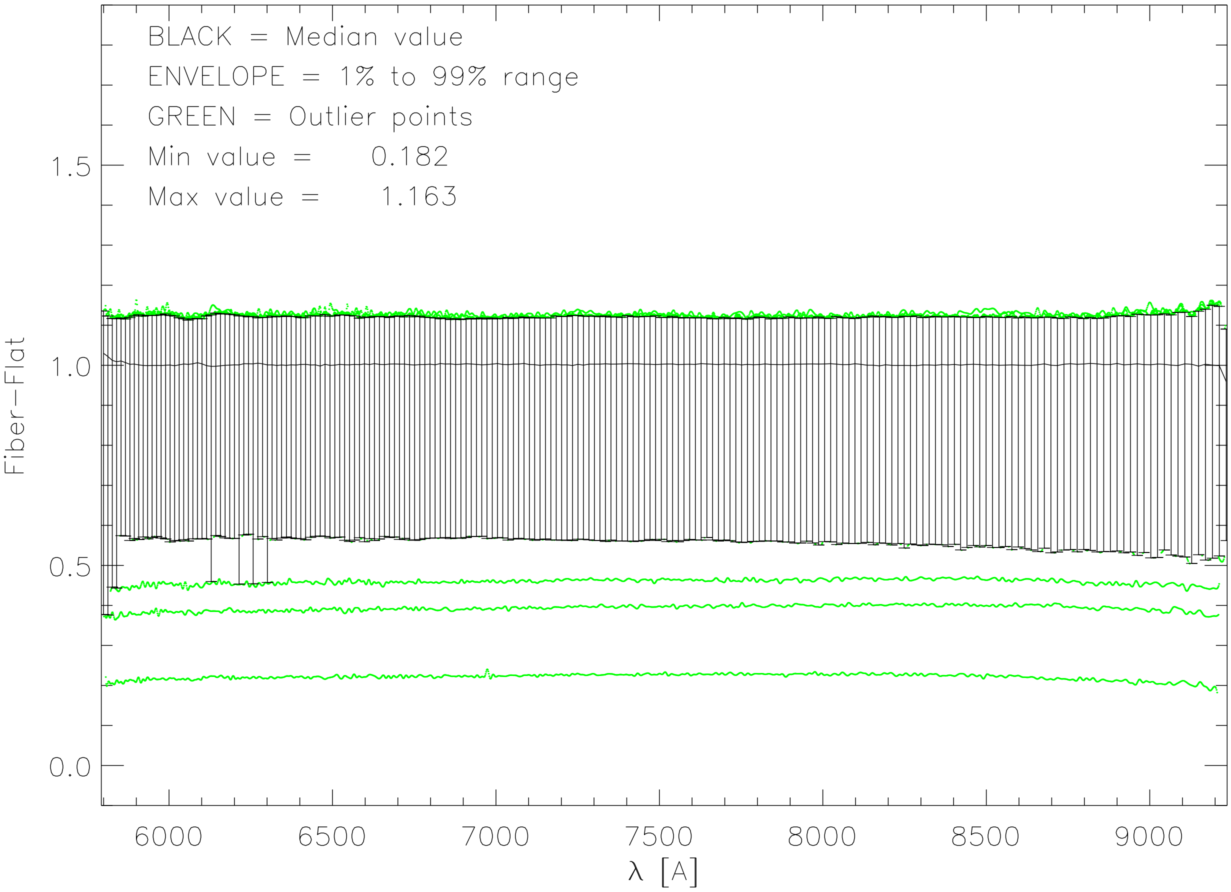

PLATE=0547 MJD=51959 flat extraction chi^2 for sdR-r2-00008823.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number


PLATE=0547 MJD=51959 Superflat sdR-r2-00008823.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

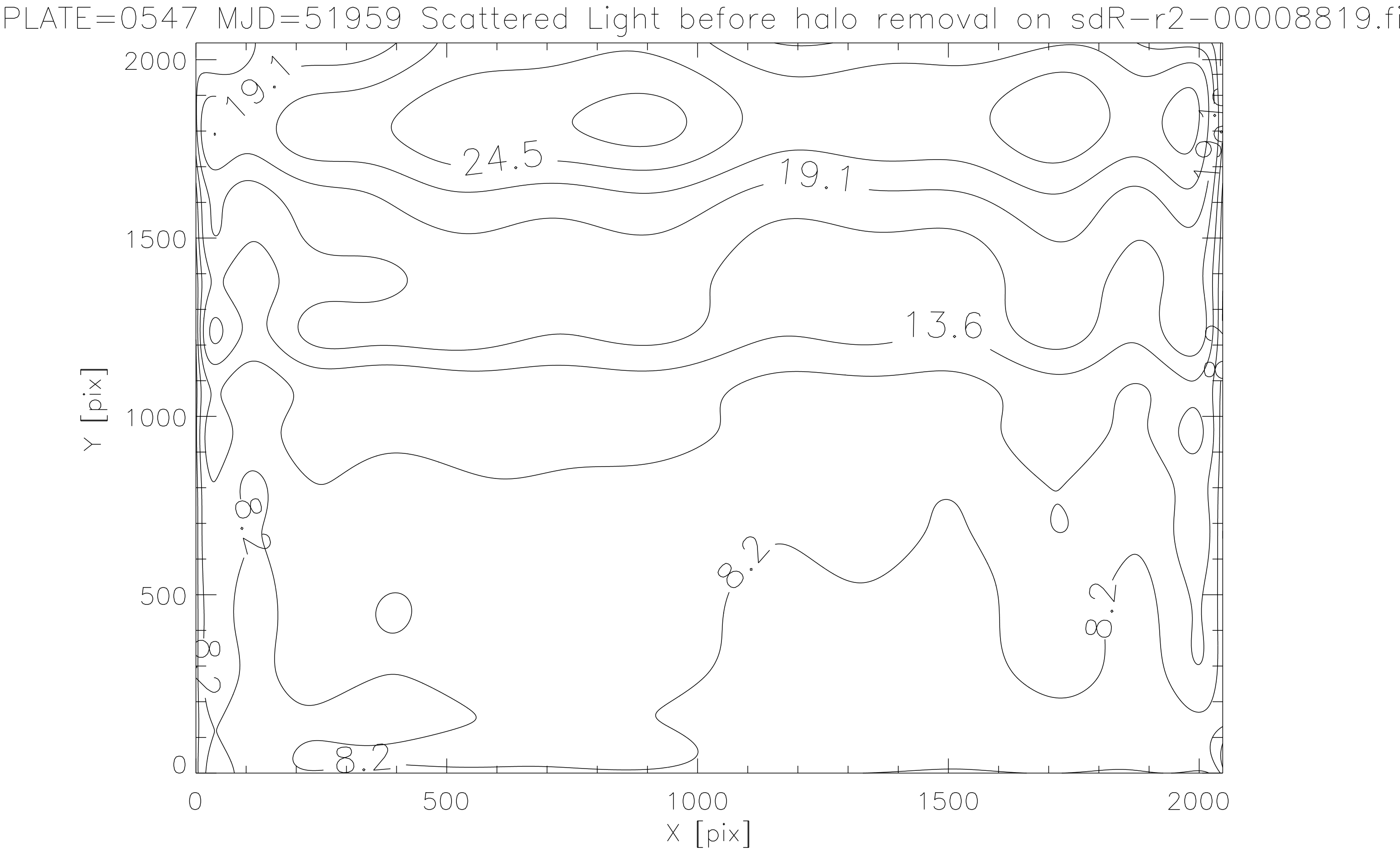


Wed Mar 5 12:54:41 2008

PLATE=0547 MJD=51959 Fiber-Flats for sdR-r2-00008823.fit

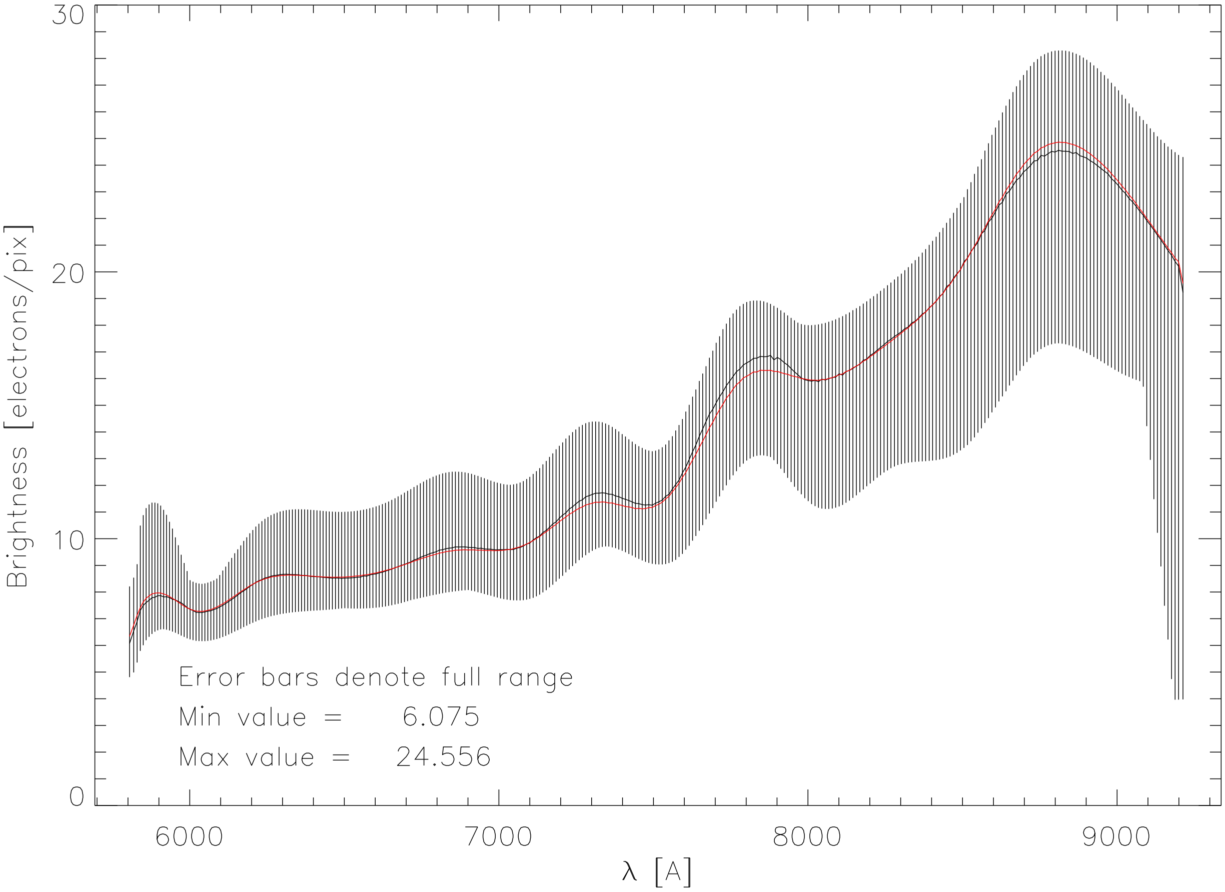


Wed Mar 5 12:54:48 2008

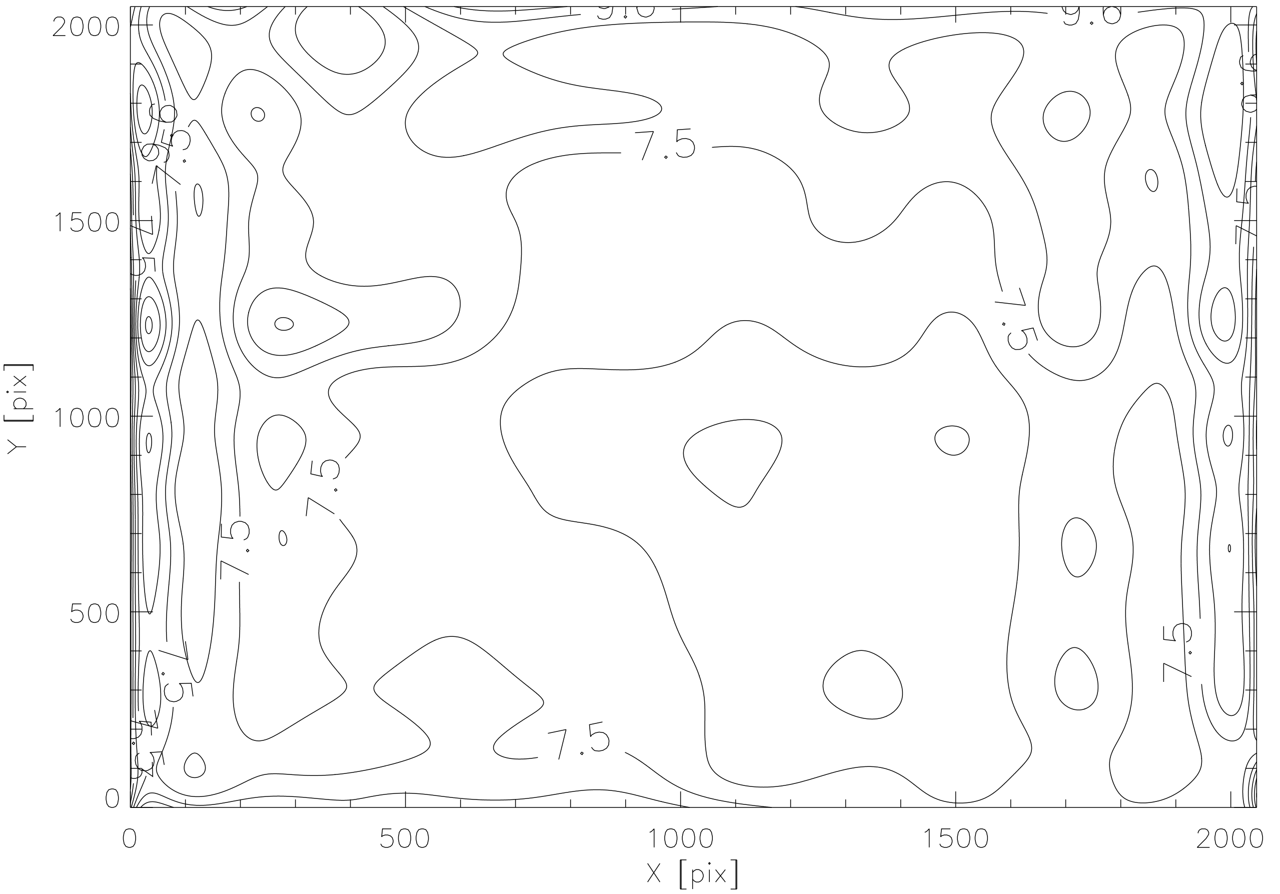


PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008819.fi

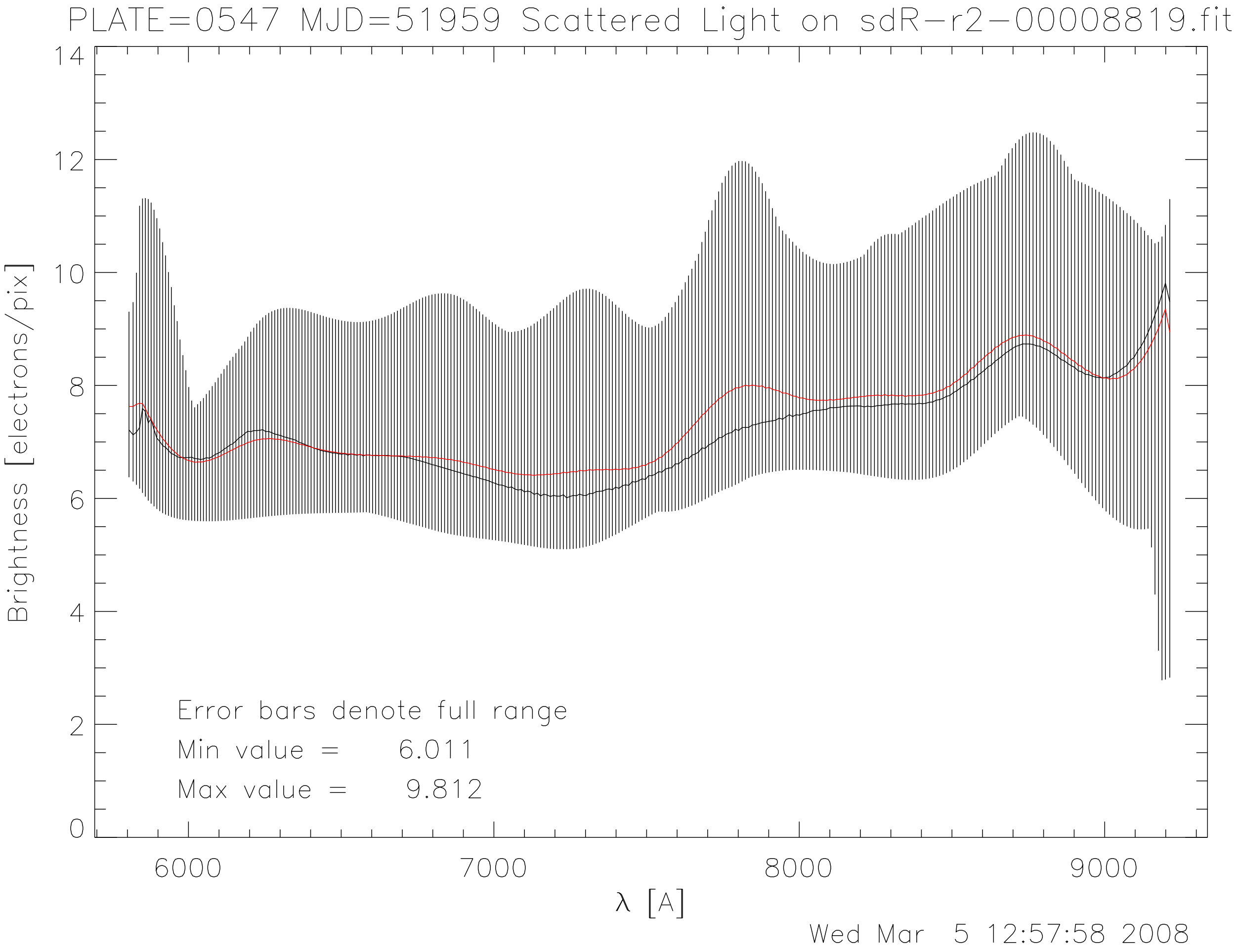
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008819.fi

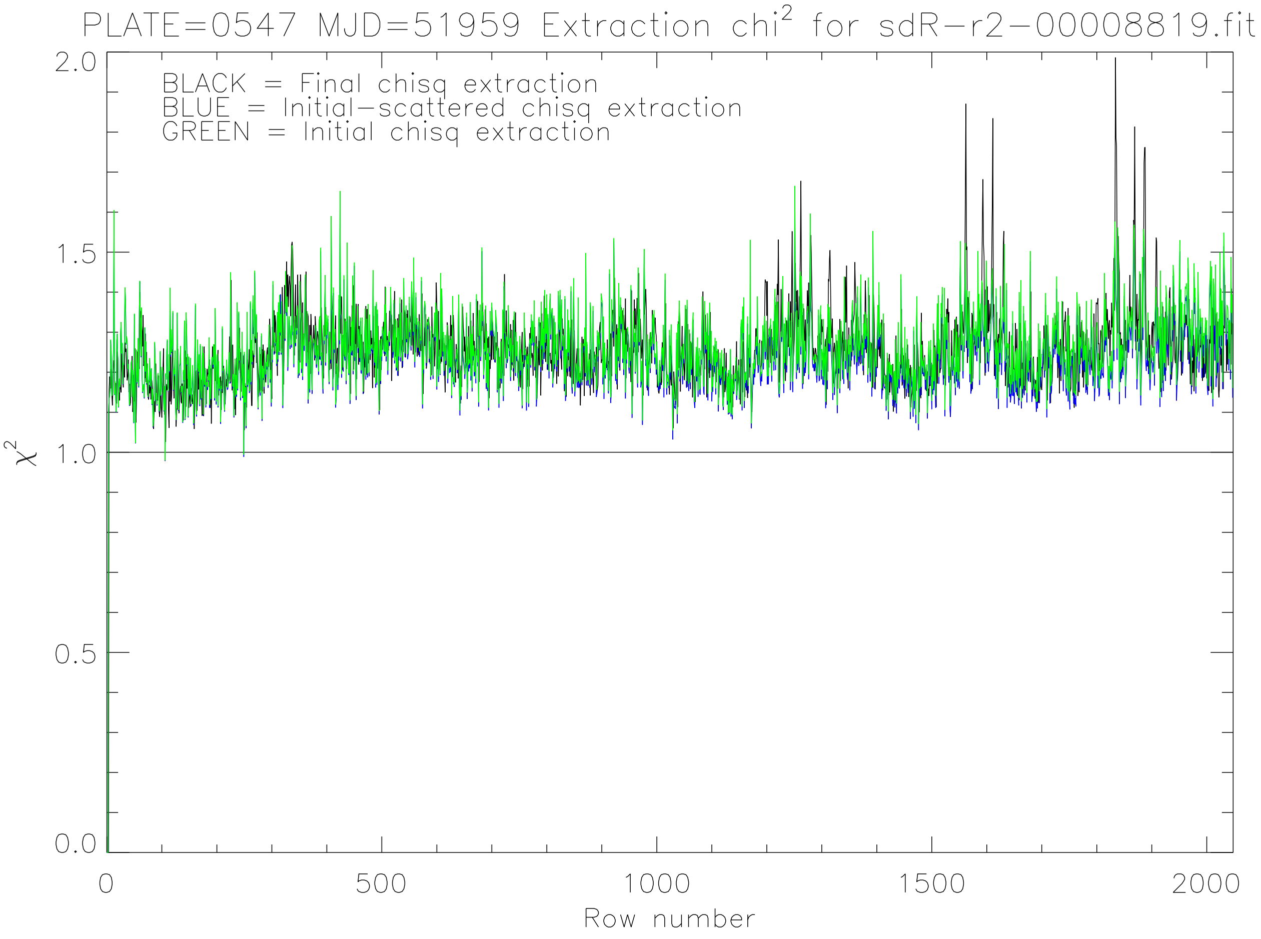


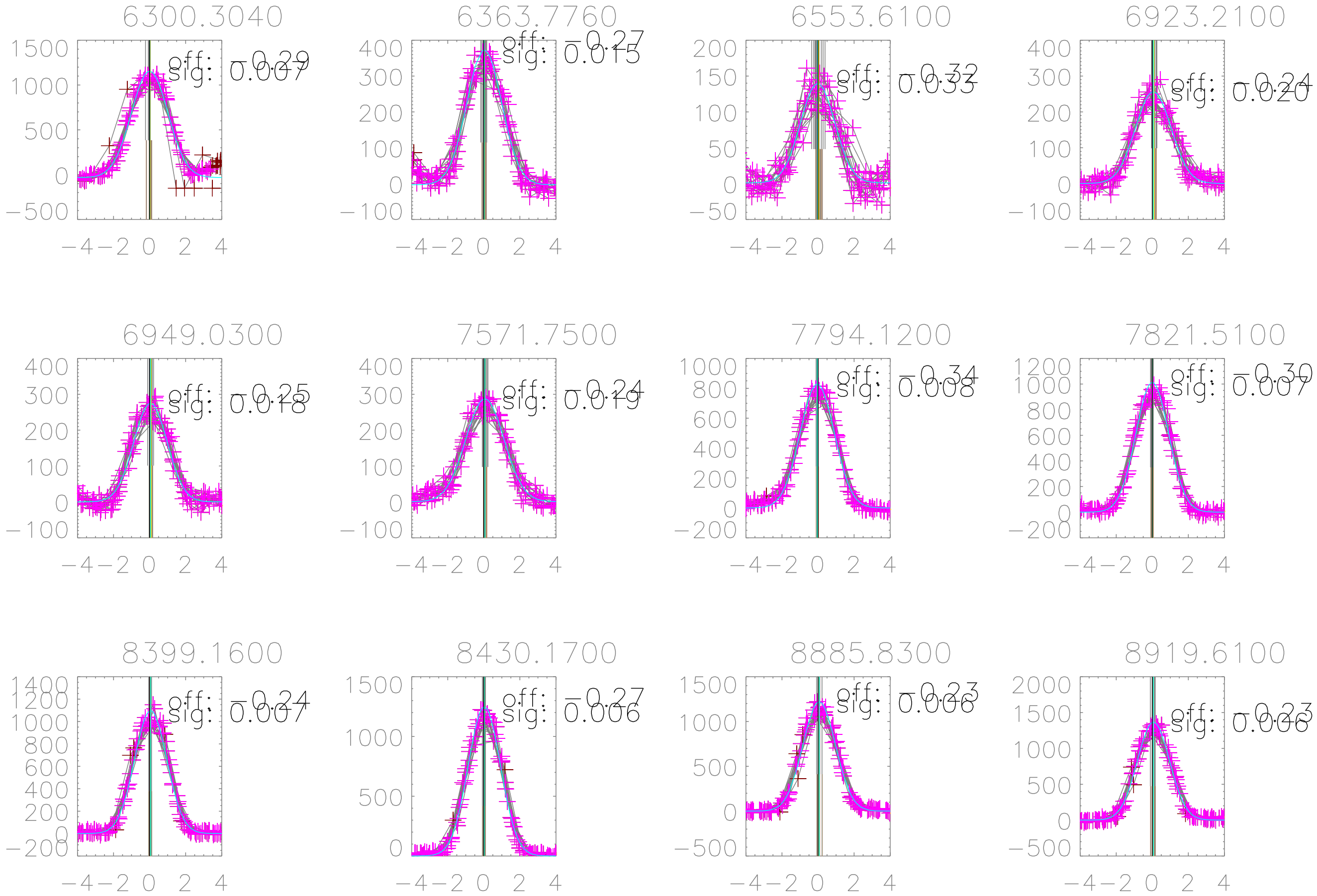
Wed Mar 5 12:55:39 2008

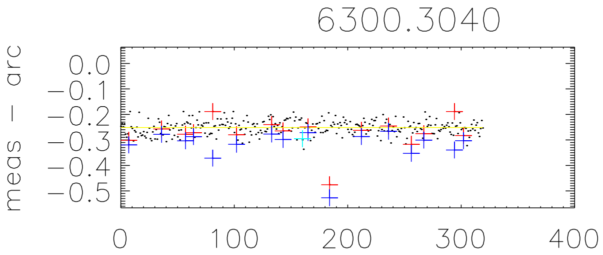


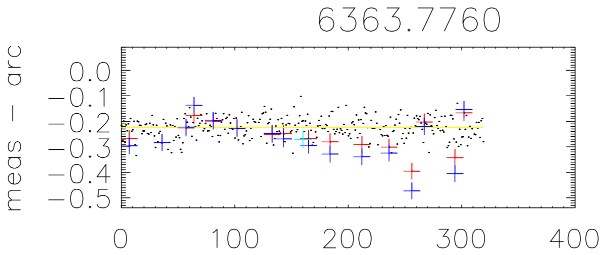
PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008819.fit

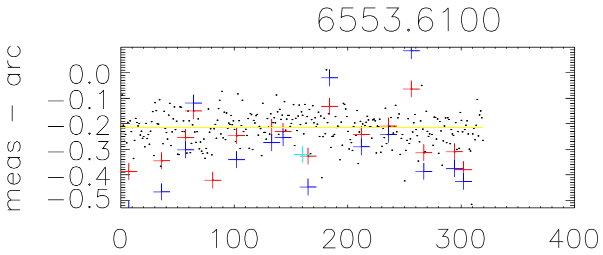

PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008819.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
14
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   6.011
Max value =   9.812
Wed Mar 5 12:57:58 2008

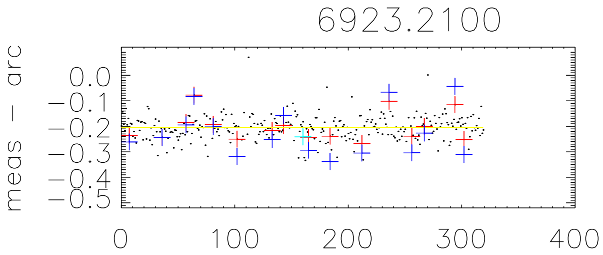

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-r2-00008819.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

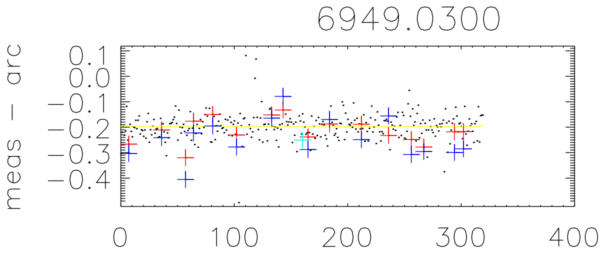

6300.3040
off: −0.29
sig: 0.007
6363.7760
off: −0.27
sig: 0.015
6553.6100
off: −0.32
sig: 0.033
6923.2100
off: −0.24
sig: 0.020
6949.0300
off: −0.25
sig: 0.018
7571.7500
off: −0.24
sig: 0.019
7794.1200
off: −0.34
sig: 0.008
7821.5100
off: −0.30
sig: 0.007
8399.1600
off: −0.24
sig: 0.007
8430.1700
off: −0.27
sig: 0.006
8885.8300
off: −0.23
sig: 0.006
8919.6100
off: −0.23
sig: 0.006
−4 −2 0 2 4

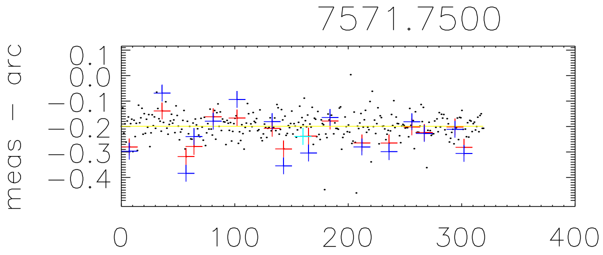

6300.3040
meas – arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

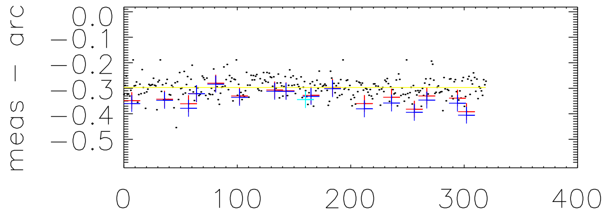

6363.7760
meas – arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

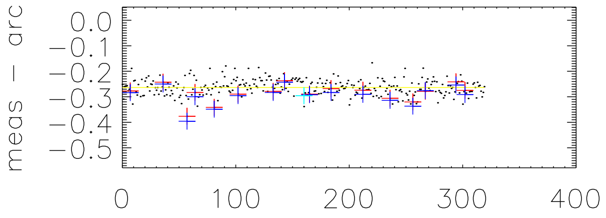

6553.6100
meas – arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

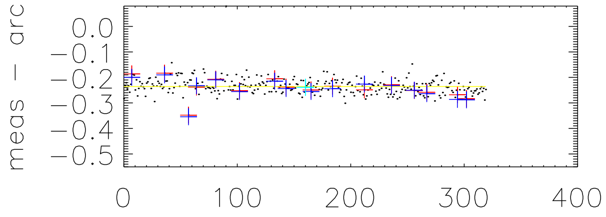

6923.2100
meas – arc
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
0
100
200
300
400

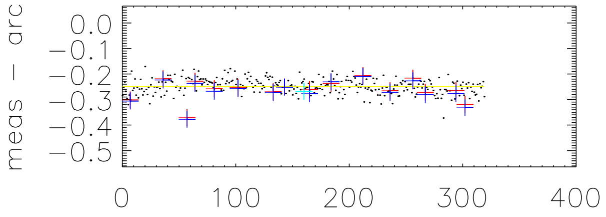

6949.0300
meas – arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

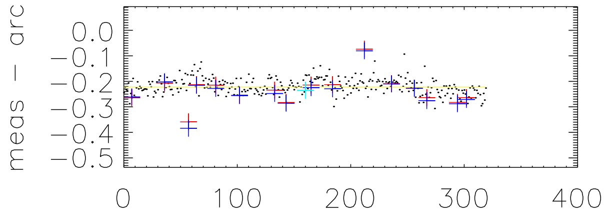

7571.7500
meas – arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

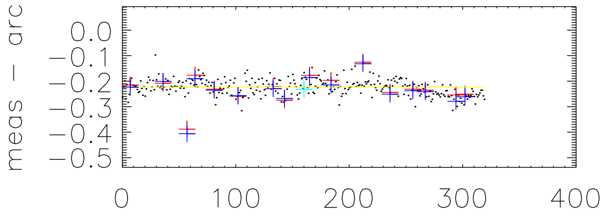

7794.1200

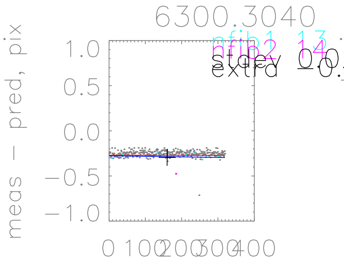

7821.5100

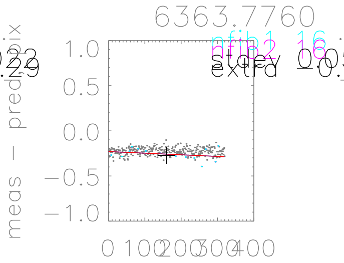

8399.1600

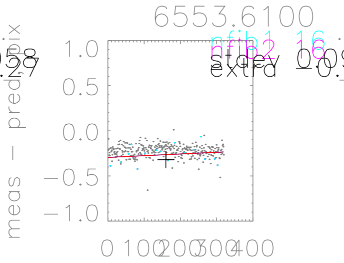

8430.1700

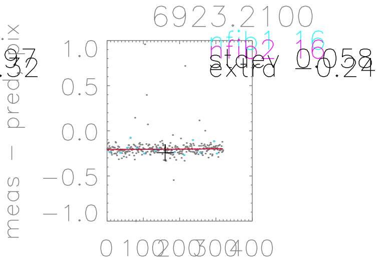

8885.8300

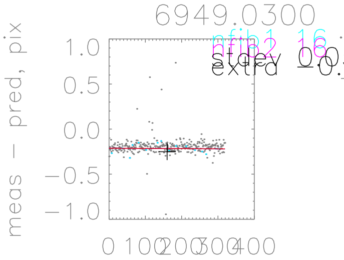

8919.6100

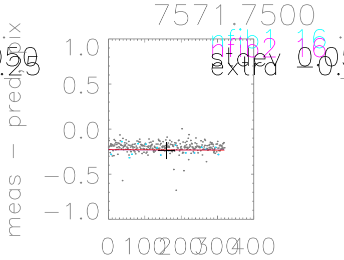

6300.3040
nfib1 13
nfib2 14
stdev 0.022
extrd −0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

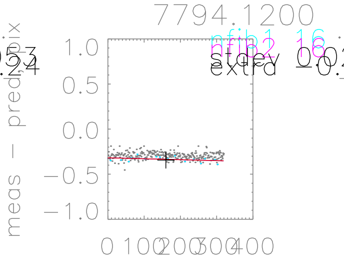

6363.7760
nfib1 16
nfib2 16
stdev 0.058
extrd −0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

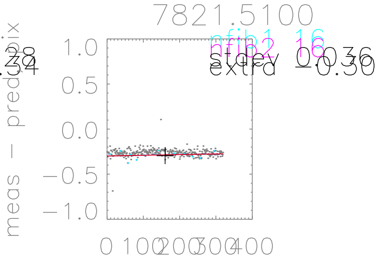

6553.6100
nfib1 16
nfib2 16
stdev 0.097
extrd −0.32
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

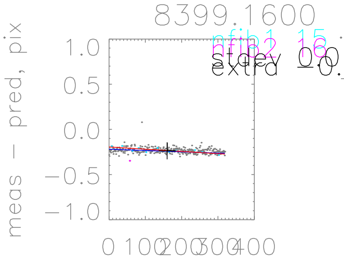

6923.2100
nfib1 16
nfib2 16
stdev 0.058
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

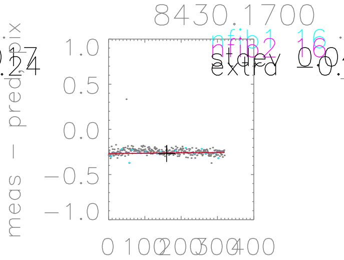

6949.0300
nfib1 16
nfib2 16
stdev 0.050
extrd −0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

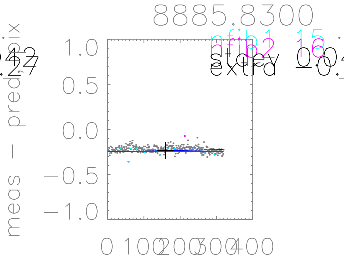

7571.7500
nfib1 16
nfib2 16
stdev 0.053
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

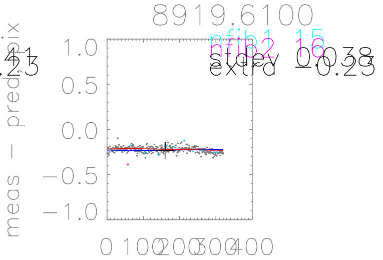

7794.1200
nfib1 16
nfib2 16
stdev 0.038
extrd −0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

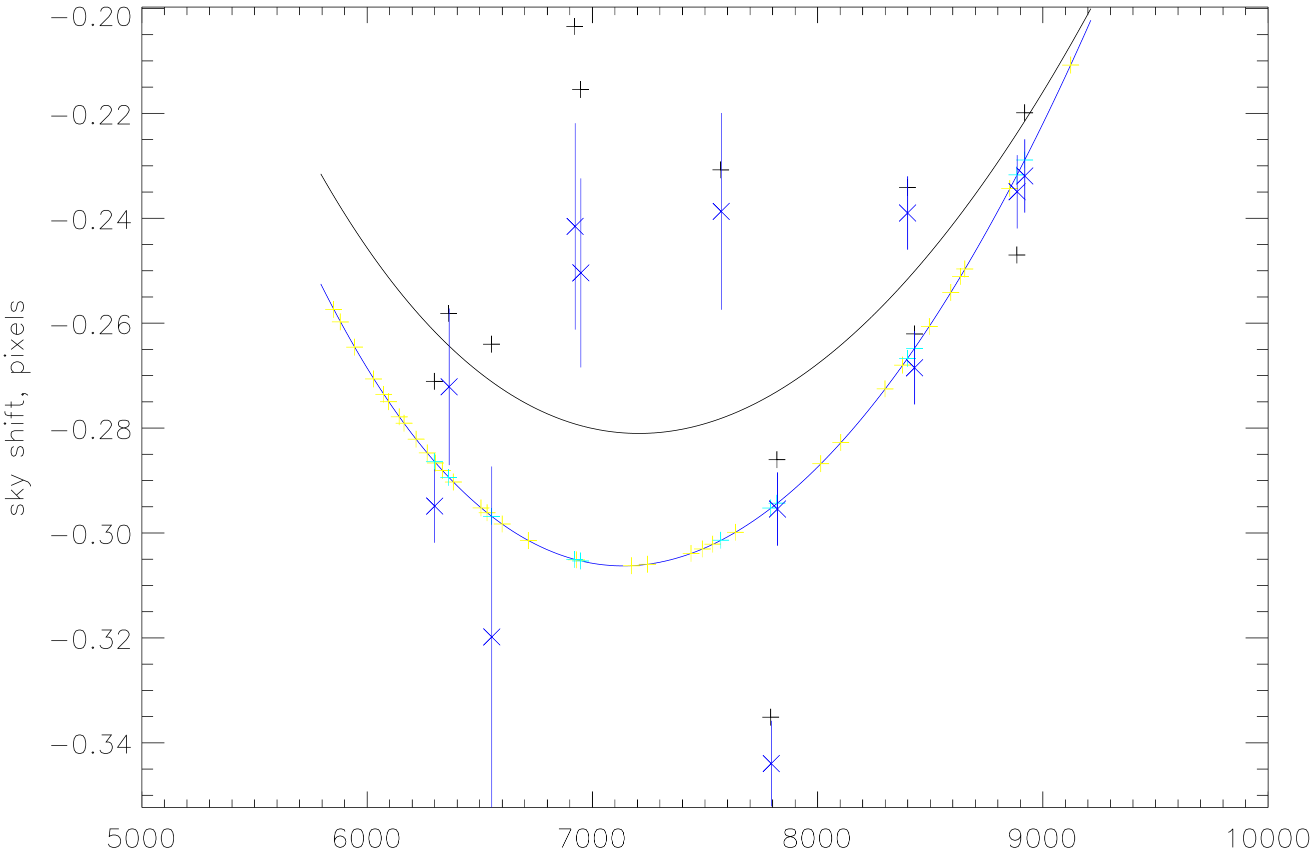

7821.5100
nfib1 16
nfib2 16
stdev 0.036
extrd −0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

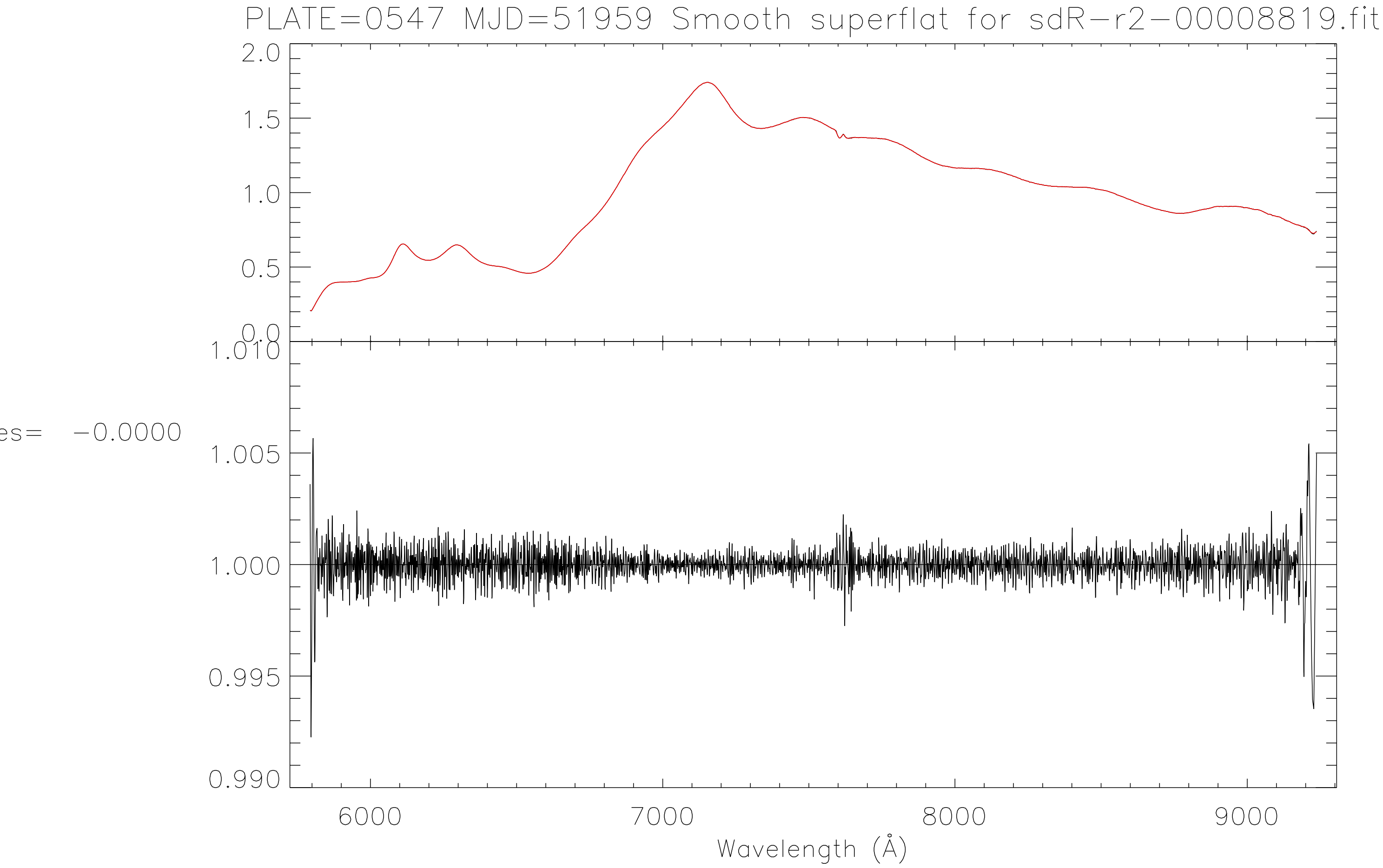

8399.1600
nfib1 15
nfib2 16
stdev 0.017
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

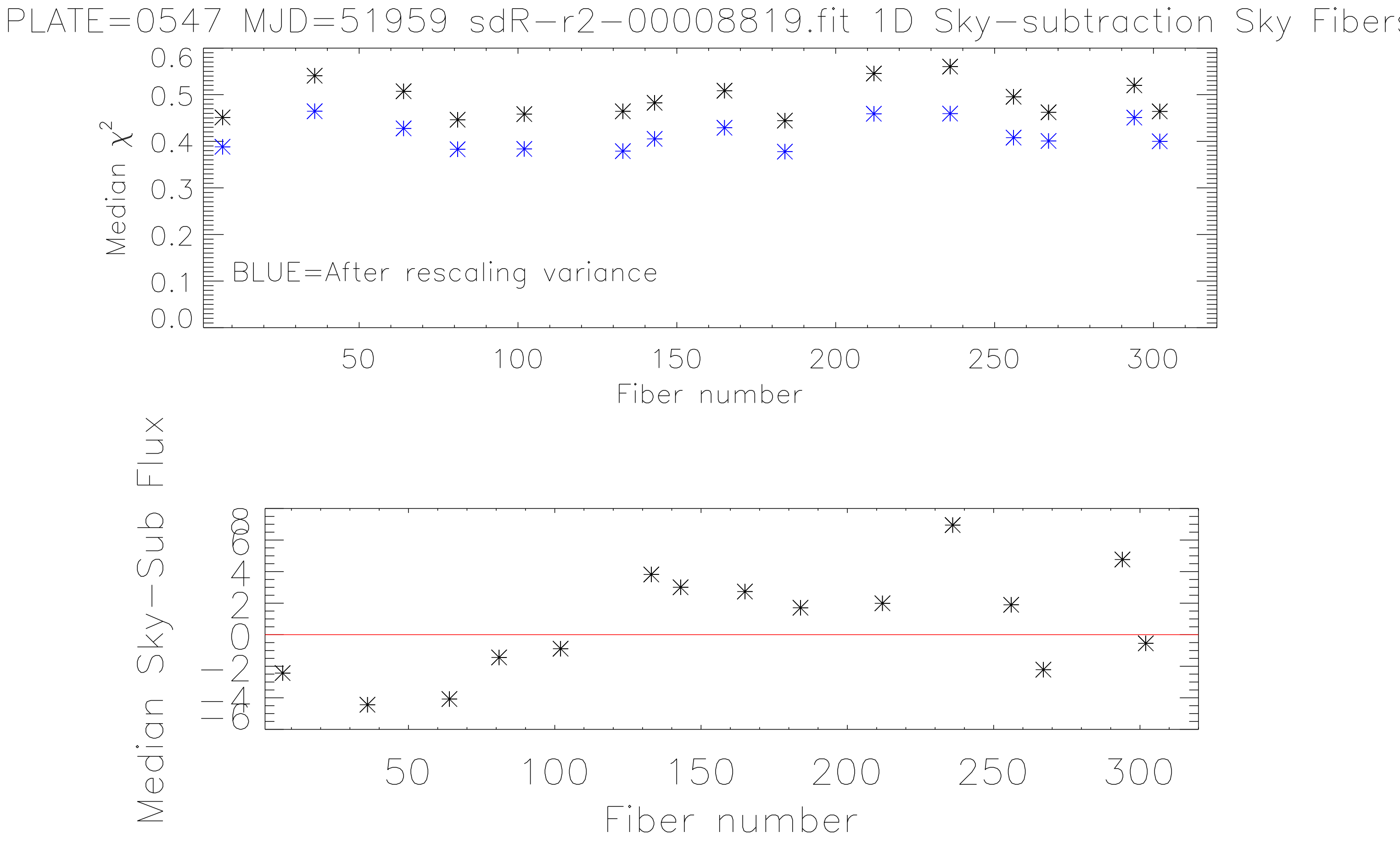

8430.1700
nfib1 16
nfib2 16
stdev 0.042
extrd −0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

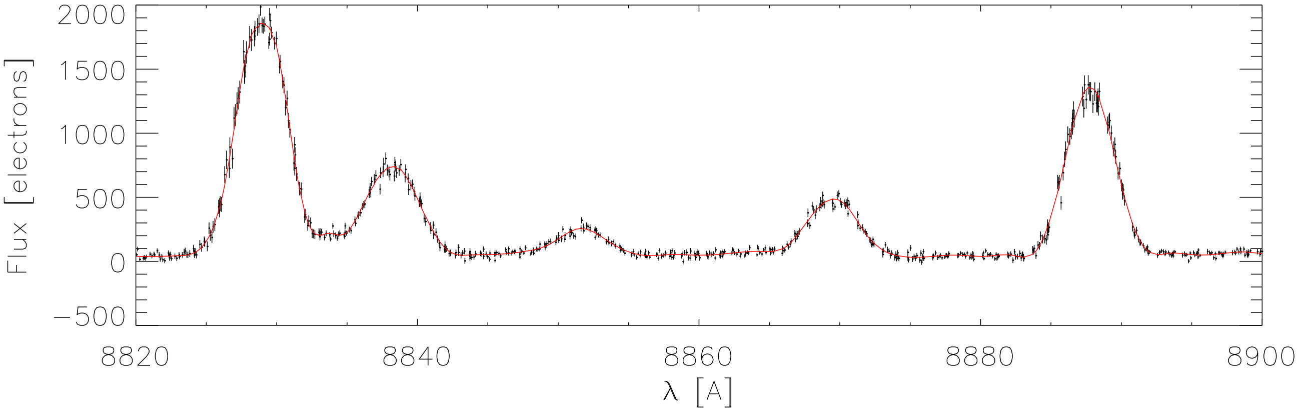

8885.8300
nfib1 15
nfib2 16
stdev 0.041
extrd −0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


8919.6100
nfib1 15
nfib2 16
stdev 0.038
extrd −0.23
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

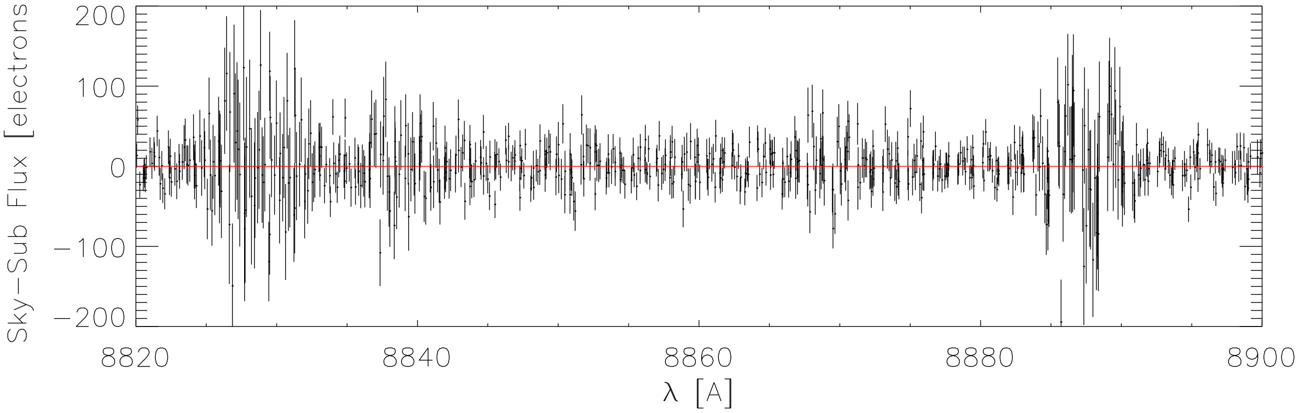

sky shift, pixels
−0.20
−0.22
−0.24
−0.26
−0.28
−0.30
−0.32
−0.34
5000
6000
7000
8000
9000
10000


PLATE=0547 MJD=51959 Smooth superflat for sdR-r2-00008819.fit

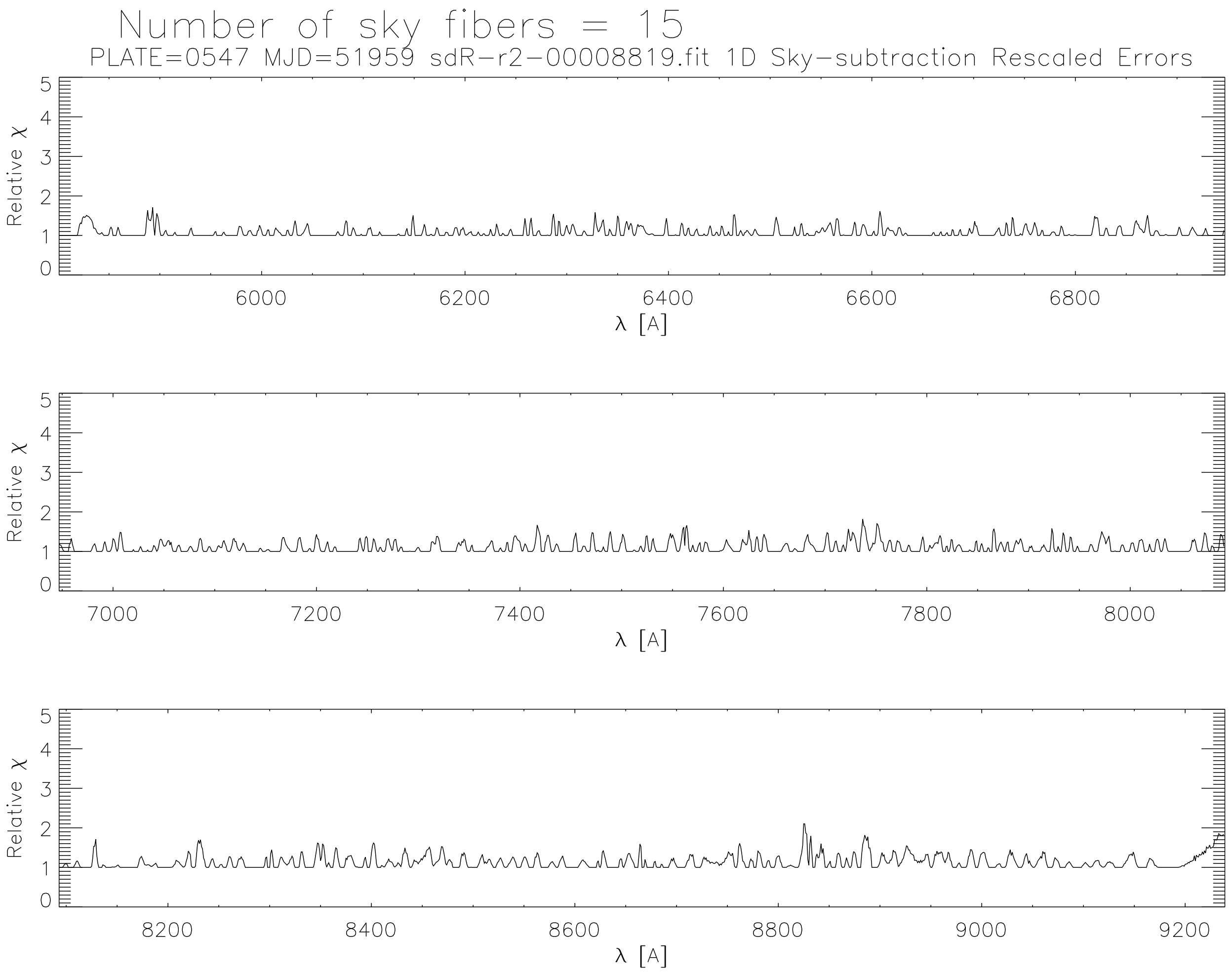

PLATE=0547 MJD=51959 sdR-r2-00008819.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
8
6
4
2
0
−2
−4
−6
50
100
150
200
250
300
Fiber number

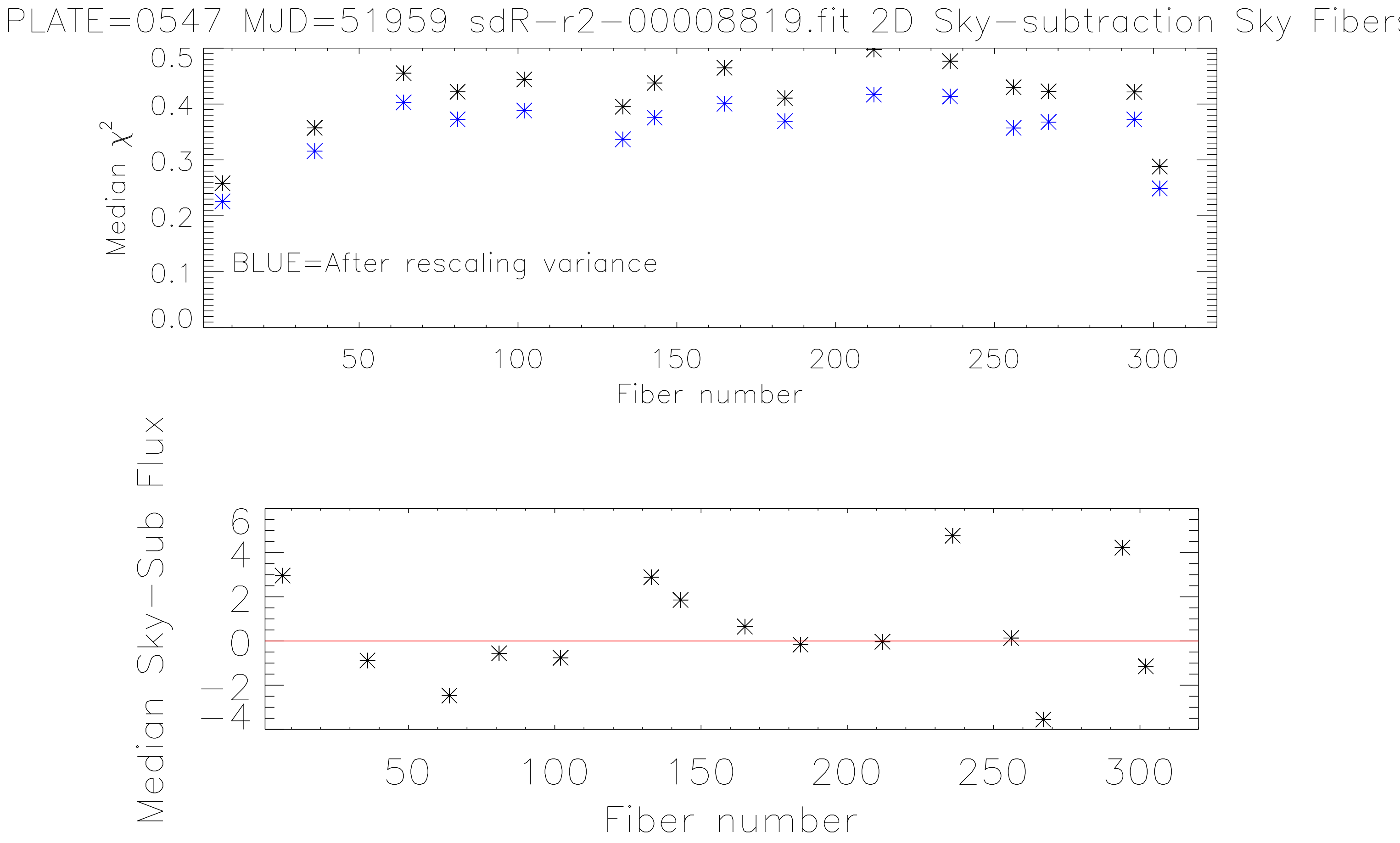


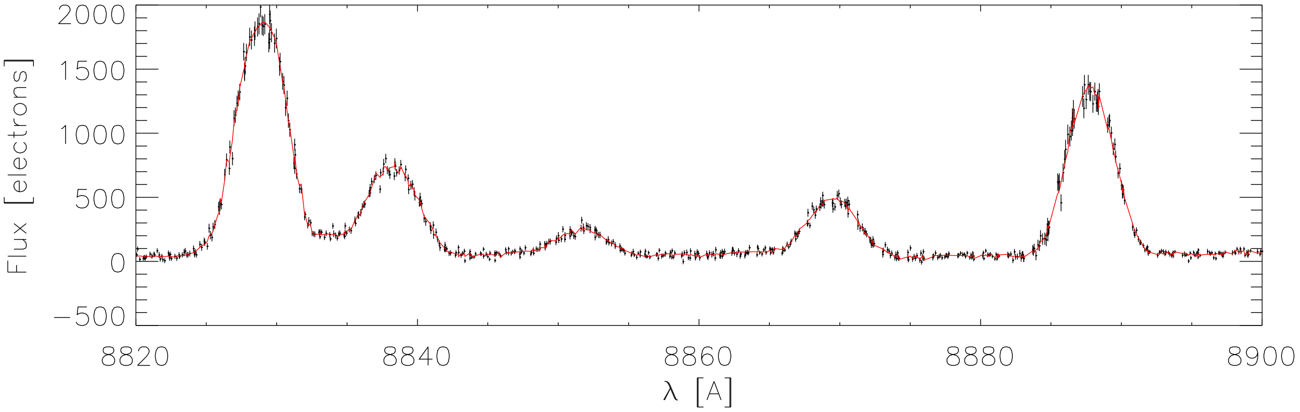
PLATE=0547 MJD=51959 sdR-r2-00008819.fit 1D Sky-subtraction Sky Fibers



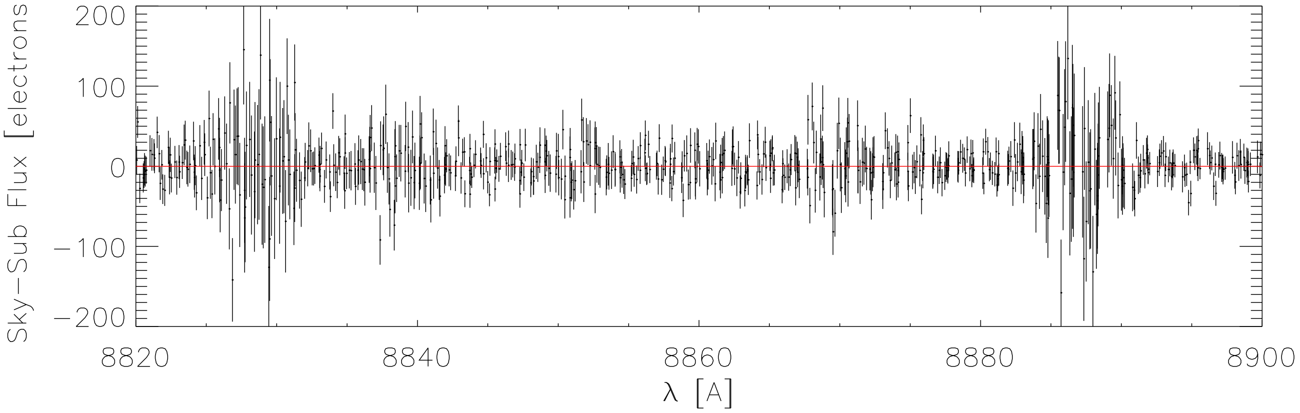
PLATE=0547 MJD=51959 sdR-r2-00008819.fit 1D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 15
PLATE=0547 MJD=51959 sdR-r2-00008819.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]


PLATE=0547 MJD=51959 sdR-r2-00008819.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
6
4
2
0
-2
-4
50
100
150
200
250
300
Fiber number



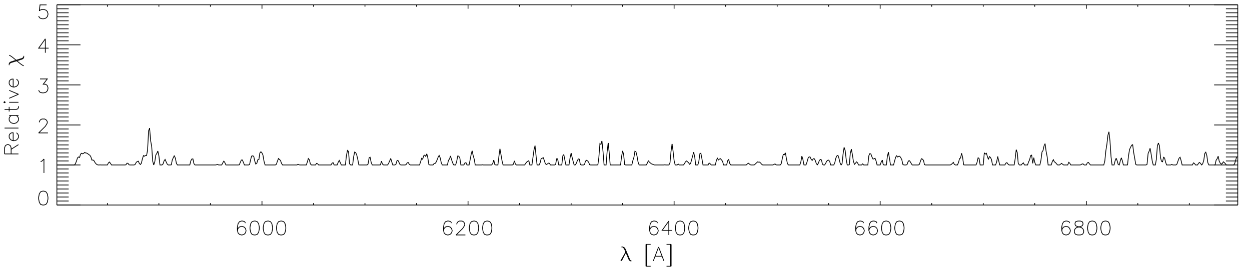
PLATE=0547 MJD=51959 sdR-r2-00008819.fit 2D Sky-subtraction Sky Fibers

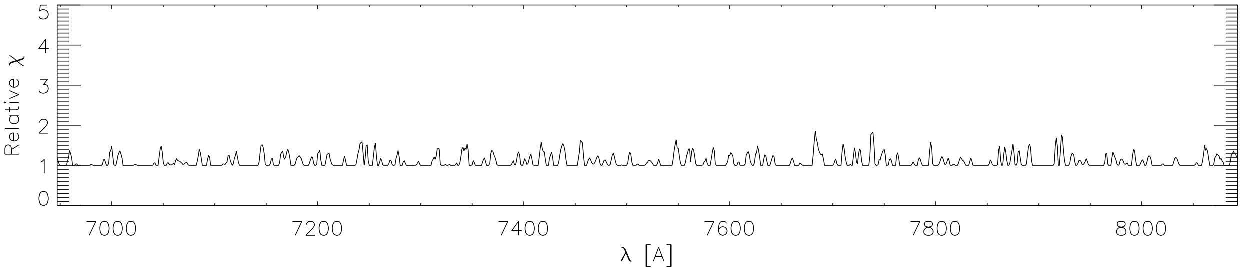


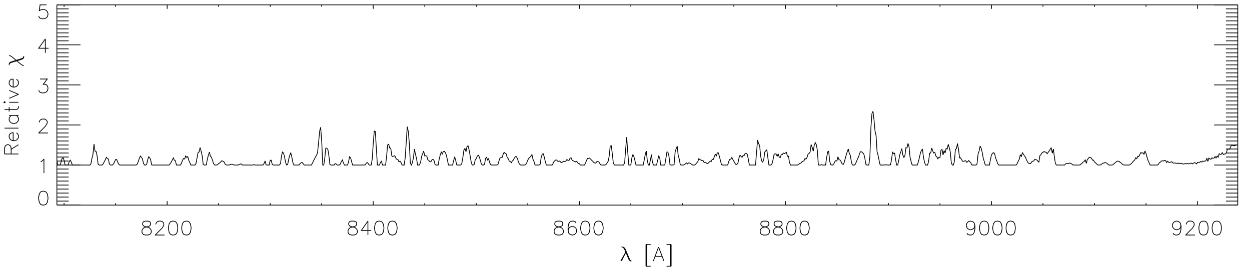
PLATE=0547 MJD=51959 sdR-r2-00008819.fit 2D Sky-subtraction Sky-subtracted Sky F

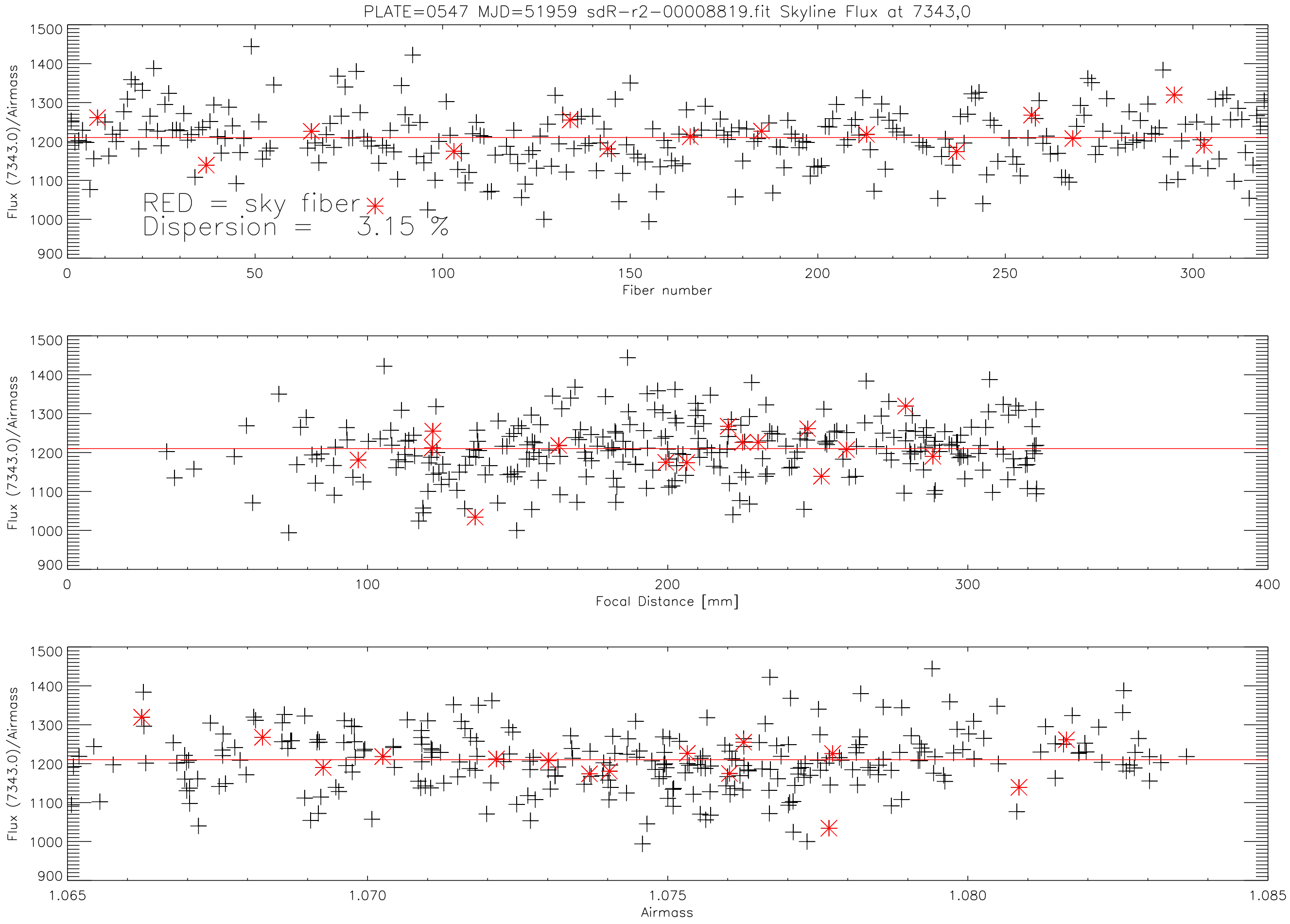
Number of sky fibers = 15

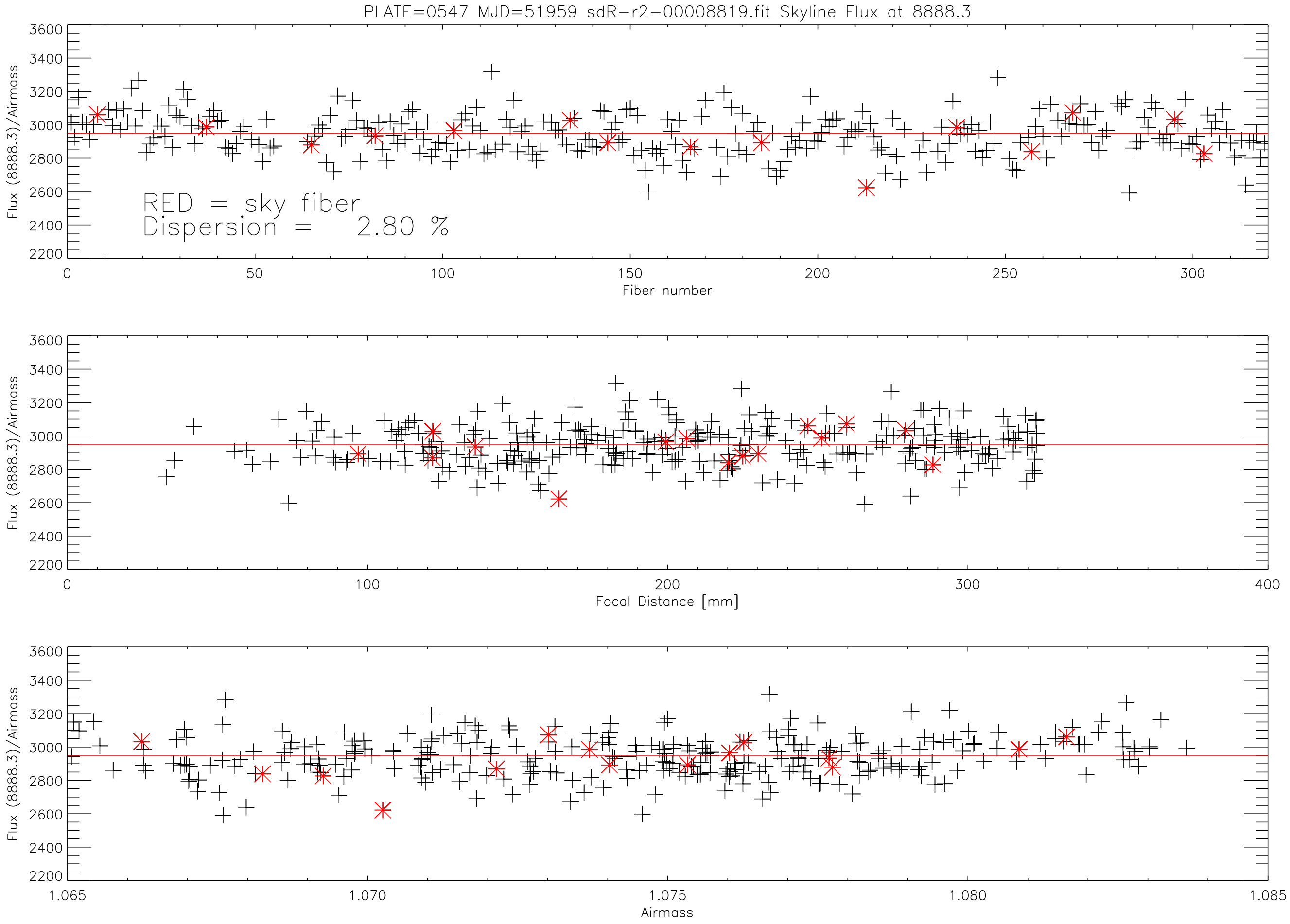
PLATE=0547 MJD=51959 sdR-r2-00008819.fit 2D Sky-subtraction Rescaled Errors

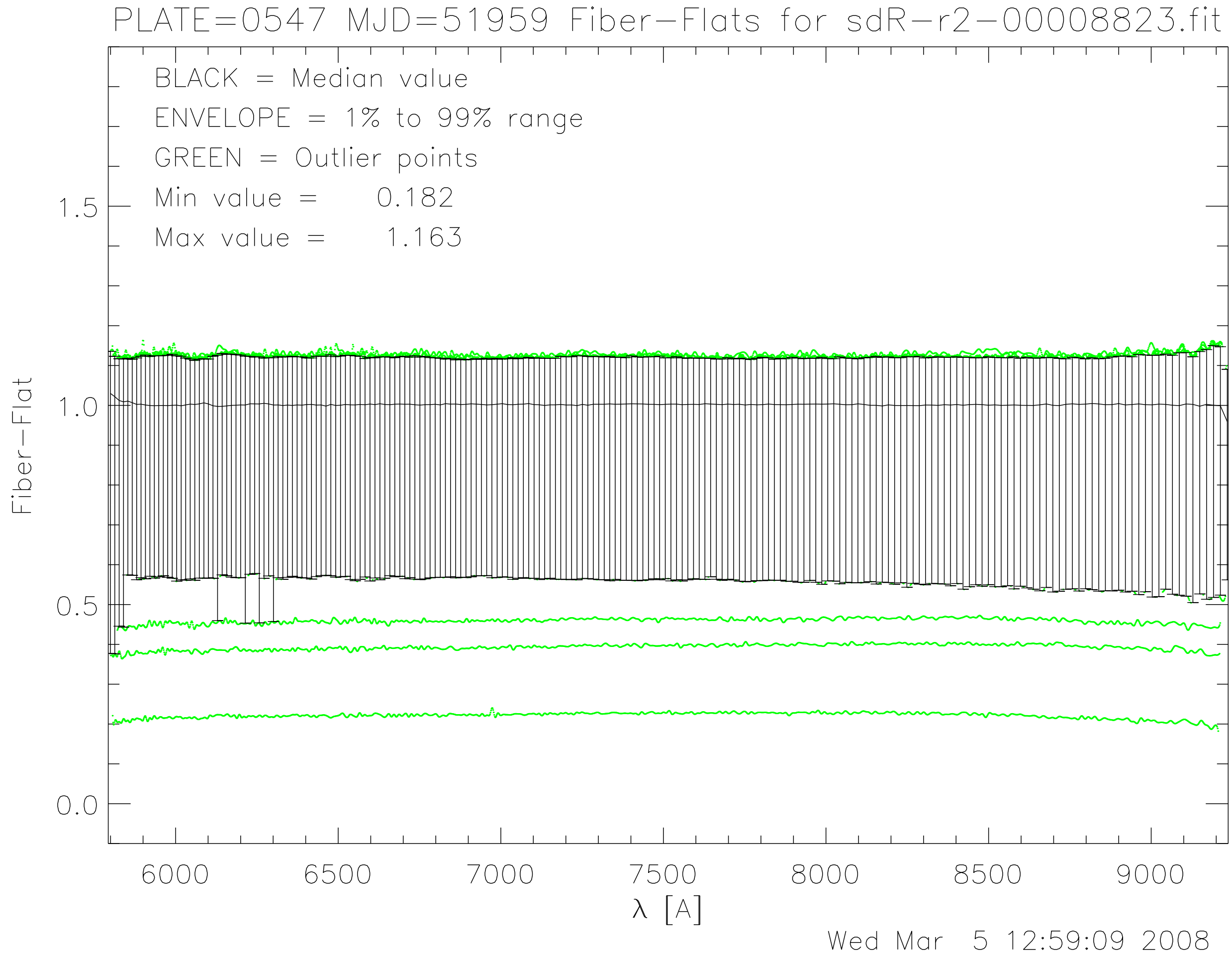




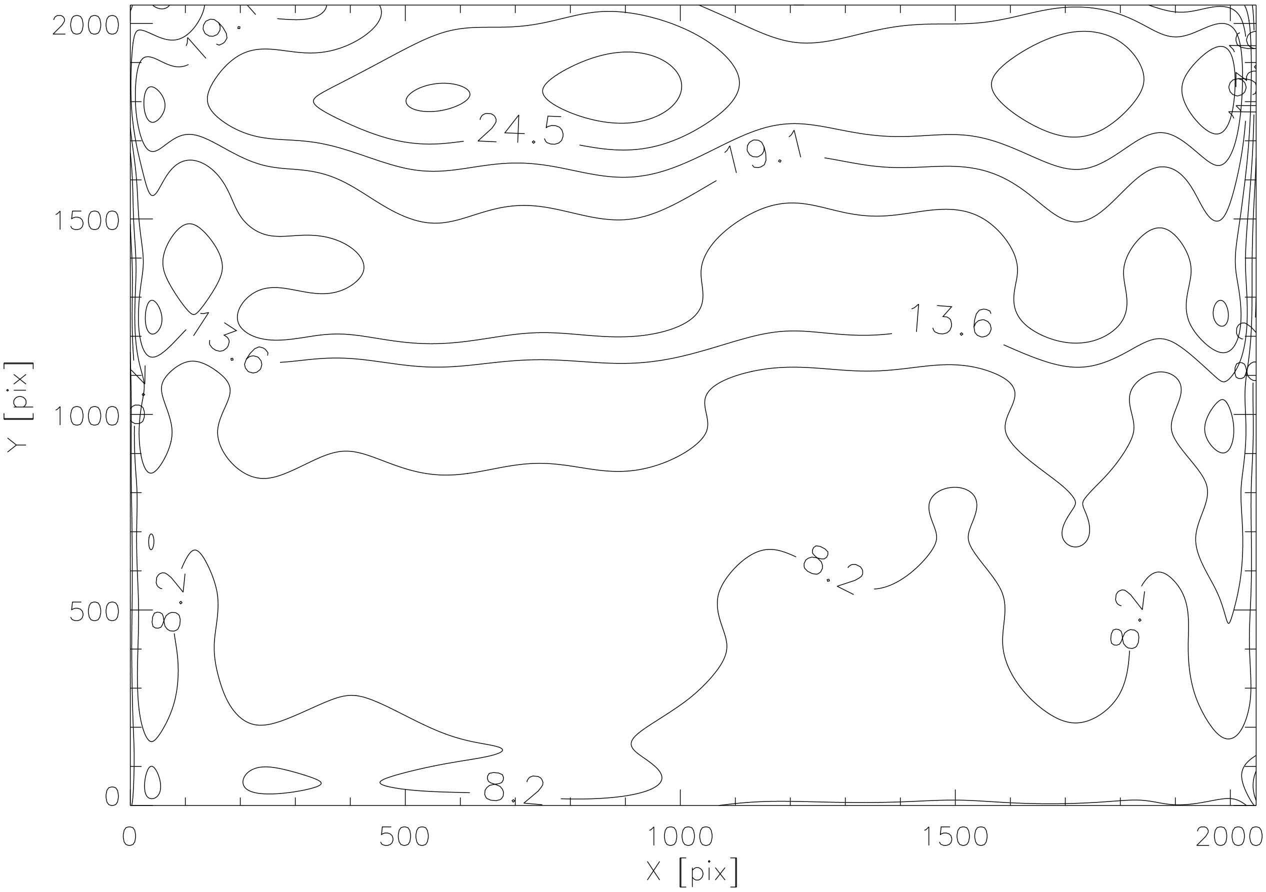


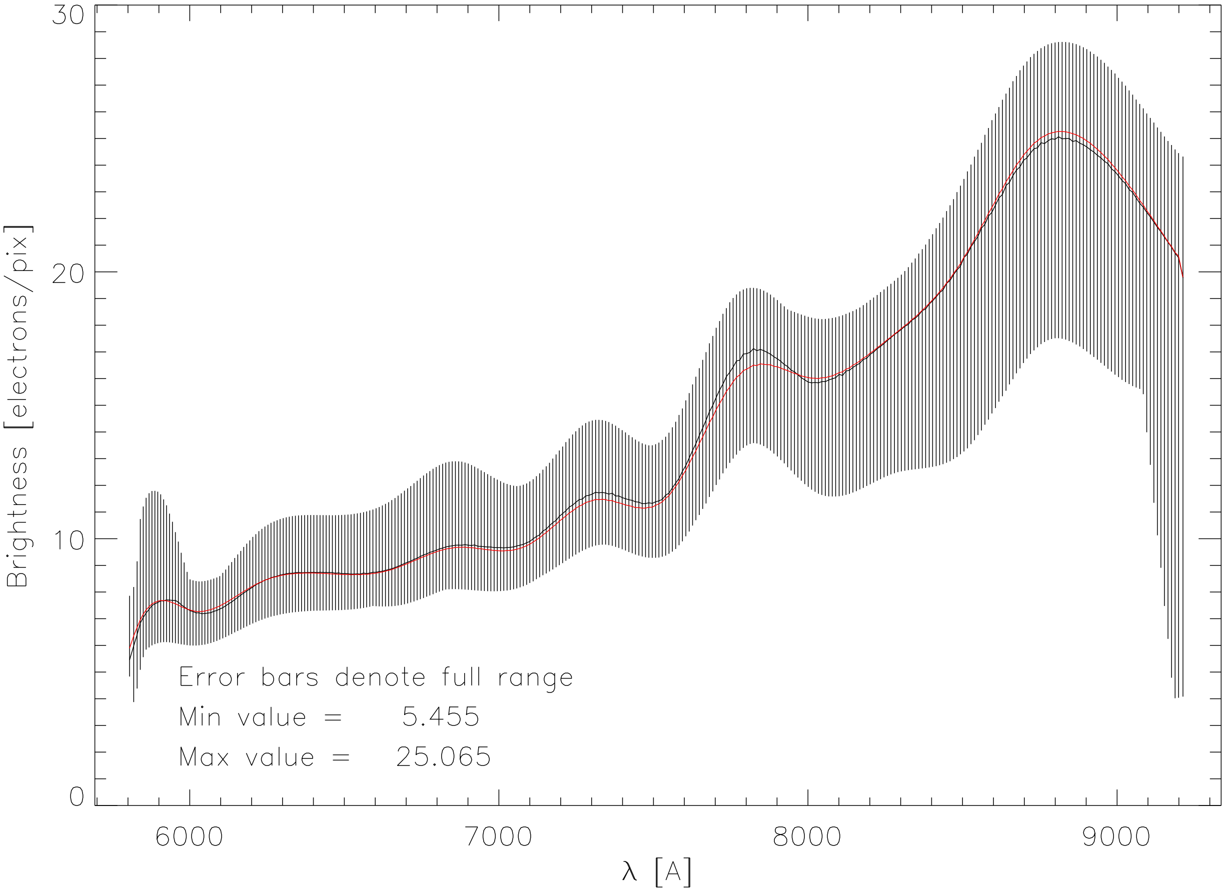

PLATE=0547 MJD=51959 sdR-r2-00008819.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1500
1400
1300
1200
1100
1000
900
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 3.15 %
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.065
1.070
1.075
1.080
1.085
Airmass


PLATE=0547 MJD=51959 sdR-r2-00008819.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
3600
3400
3200
3000
2800
2600
2400
2200
RED = sky fiber
Dispersion = 2.80 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
3600
3400
3200
3000
2800
2600
2400
2200
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
3600
3400
3200
3000
2800
2600
2400
2200
1.065
1.070
1.075
1.080
1.085
Airmass


PLATE=0547 MJD=51959 Fiber–Flats for sdR–r2–00008823.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.182
Max value = 1.163
Fiber–Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 5 12:59:09 2008

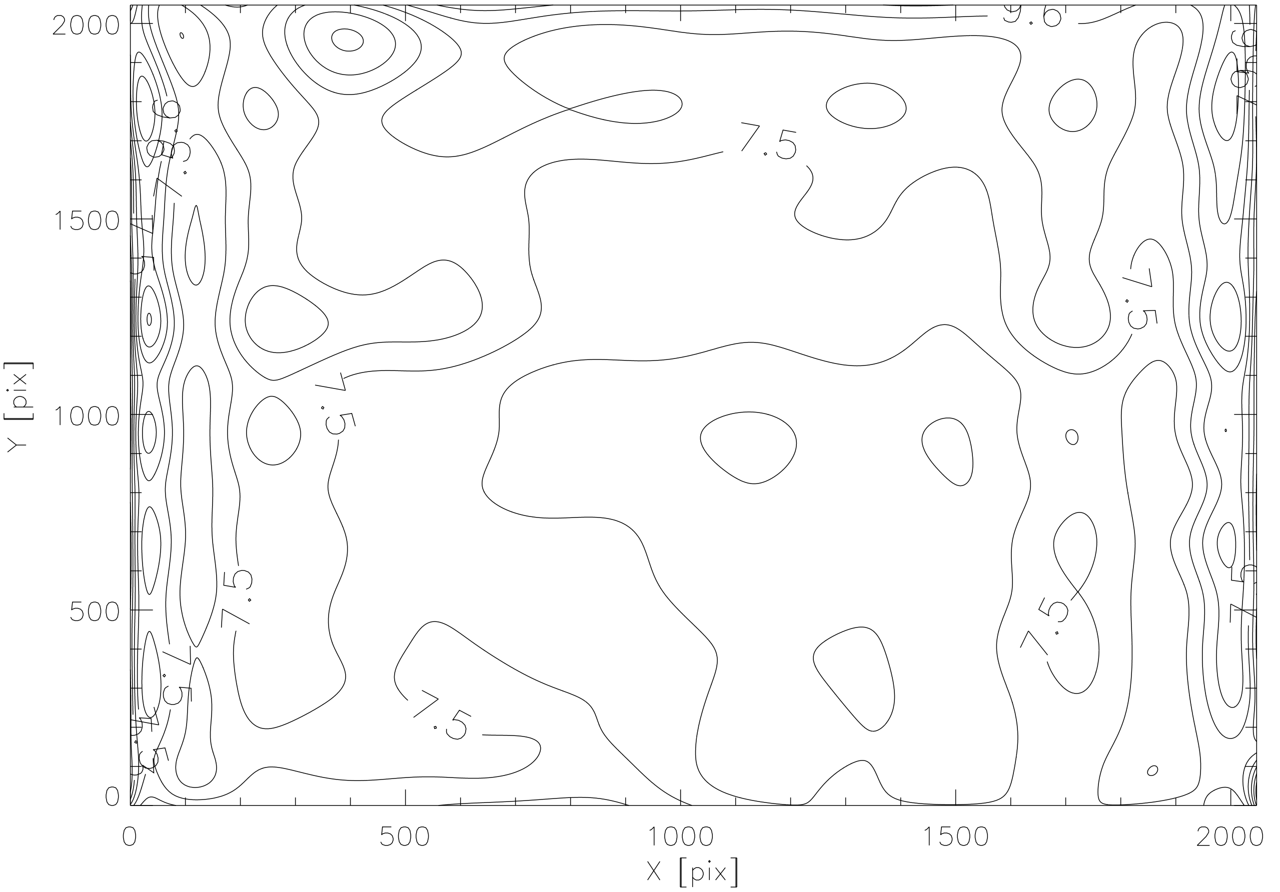
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008820.fi



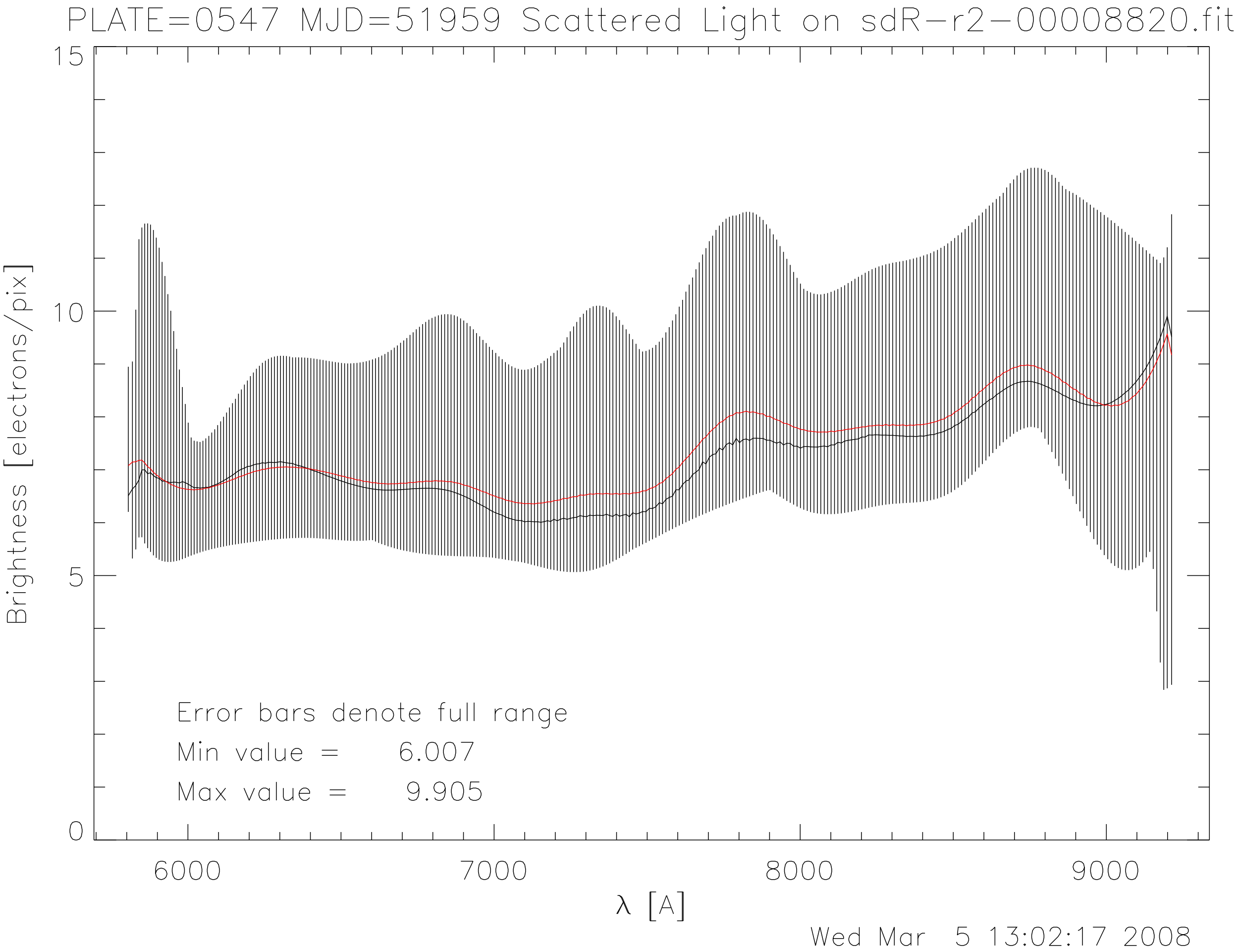


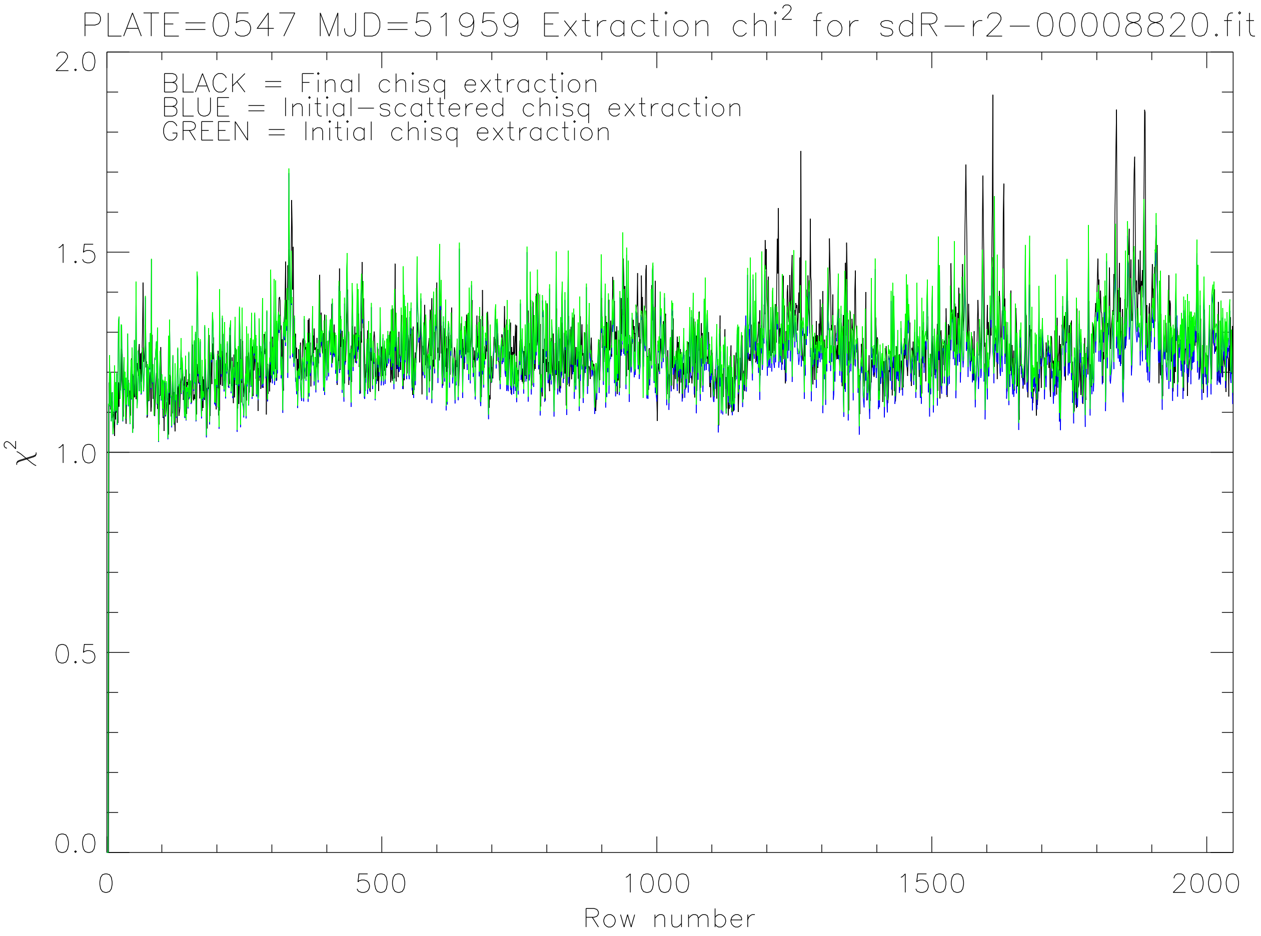
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008820.fi

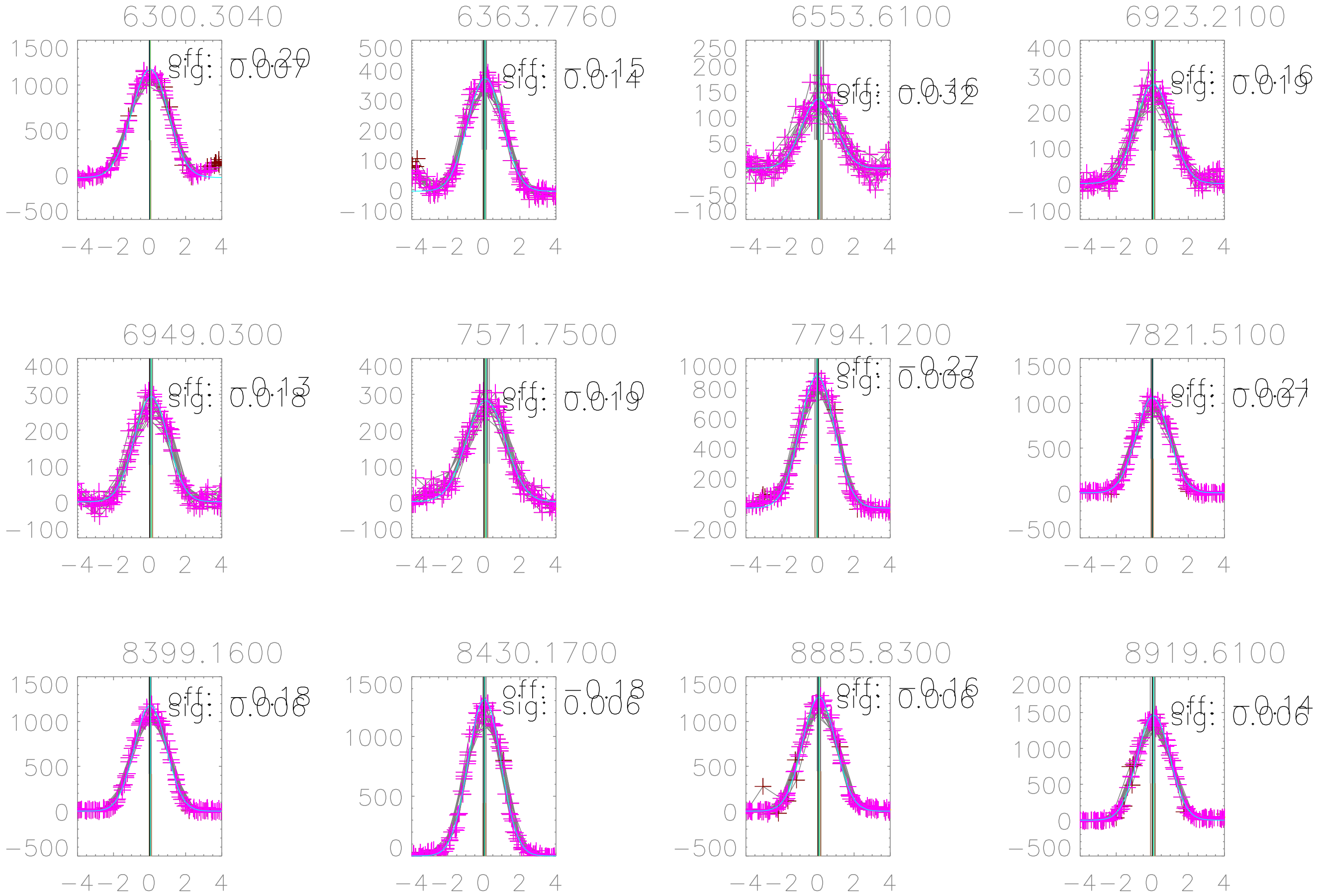
Wed Mar 5 12:59:59 2008

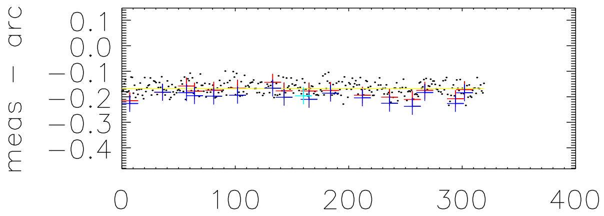


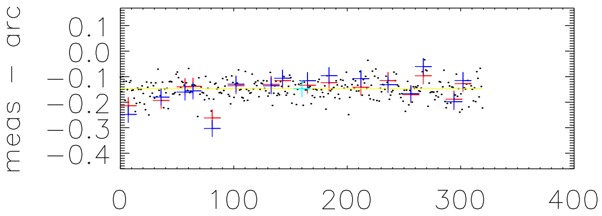
PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008820.fit

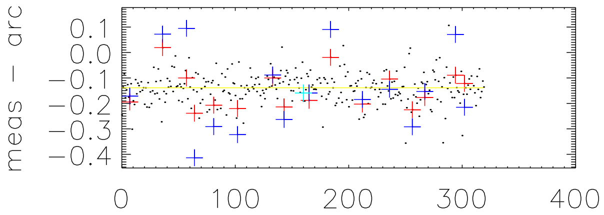

PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008820.fit
15
10
5
0
Brightness [electrons/pix]
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.007
Max value = 9.905
Wed Mar 5 13:02:17 2008

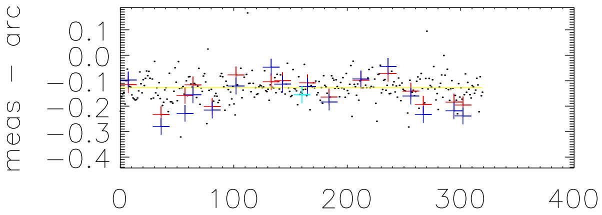

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-r2-00008820.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
0
500
1000
1500
2000
Row number

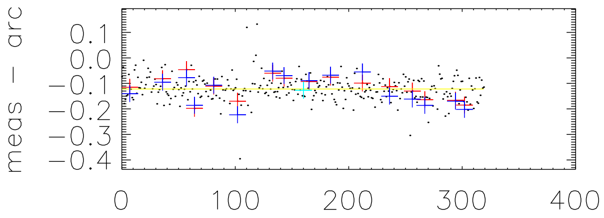

6300.3040
off: −0.20
sig: 0.007
6363.7760
off: −0.15
sig: 0.014
6553.6100
off: −0.16
sig: 0.032
6923.2100
off: −0.16
sig: 0.019
6949.0300
off: −0.13
sig: 0.018
7571.7500
off: −0.10
sig: 0.019
7794.1200
off: −0.27
sig: 0.008
7821.5100
off: −0.21
sig: 0.007
8399.1600
off: −0.18
sig: 0.006
8430.1700
off: −0.18
sig: 0.006
8885.8300
off: −0.16
sig: 0.006
8919.6100
off: −0.14
sig: 0.006
−4 −2 0 2 4

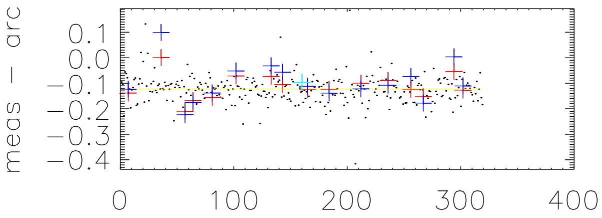

6300.3040

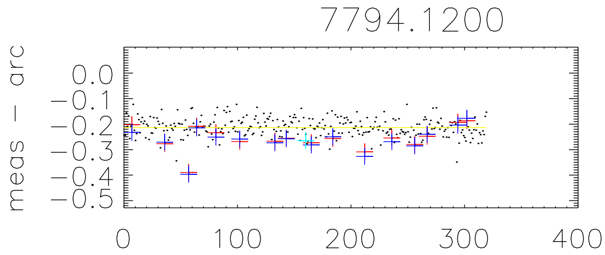

6363.7760

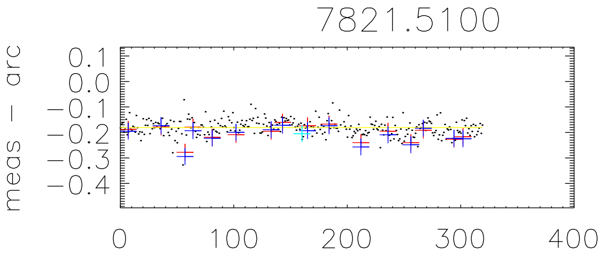

6553.6100

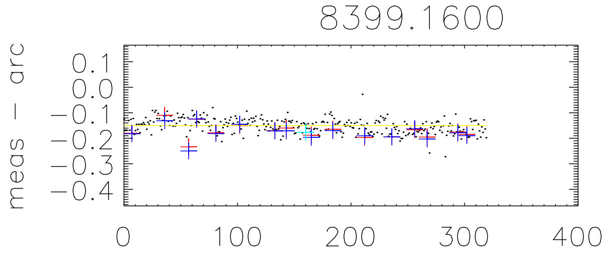

6923.2100

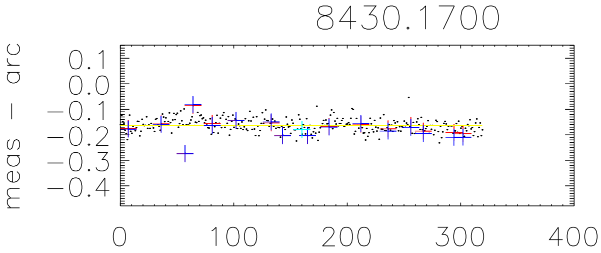

6949.0300

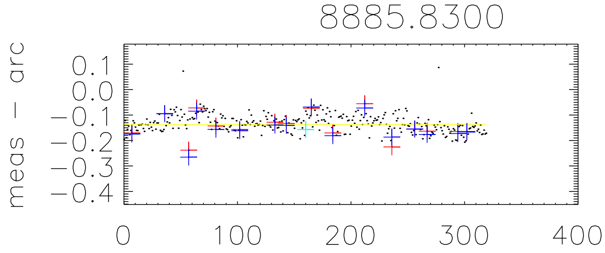

7571.7500

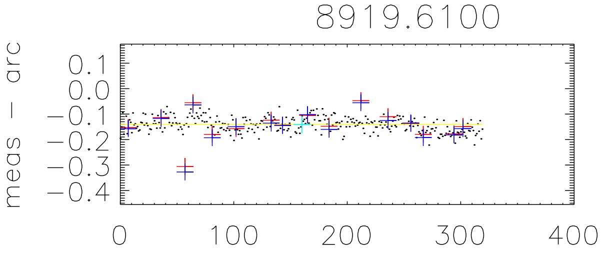

7794.1200
meas – arc
0.0
–0.1
–0.2
–0.3
–0.4
–0.5
0
100
200
300
400

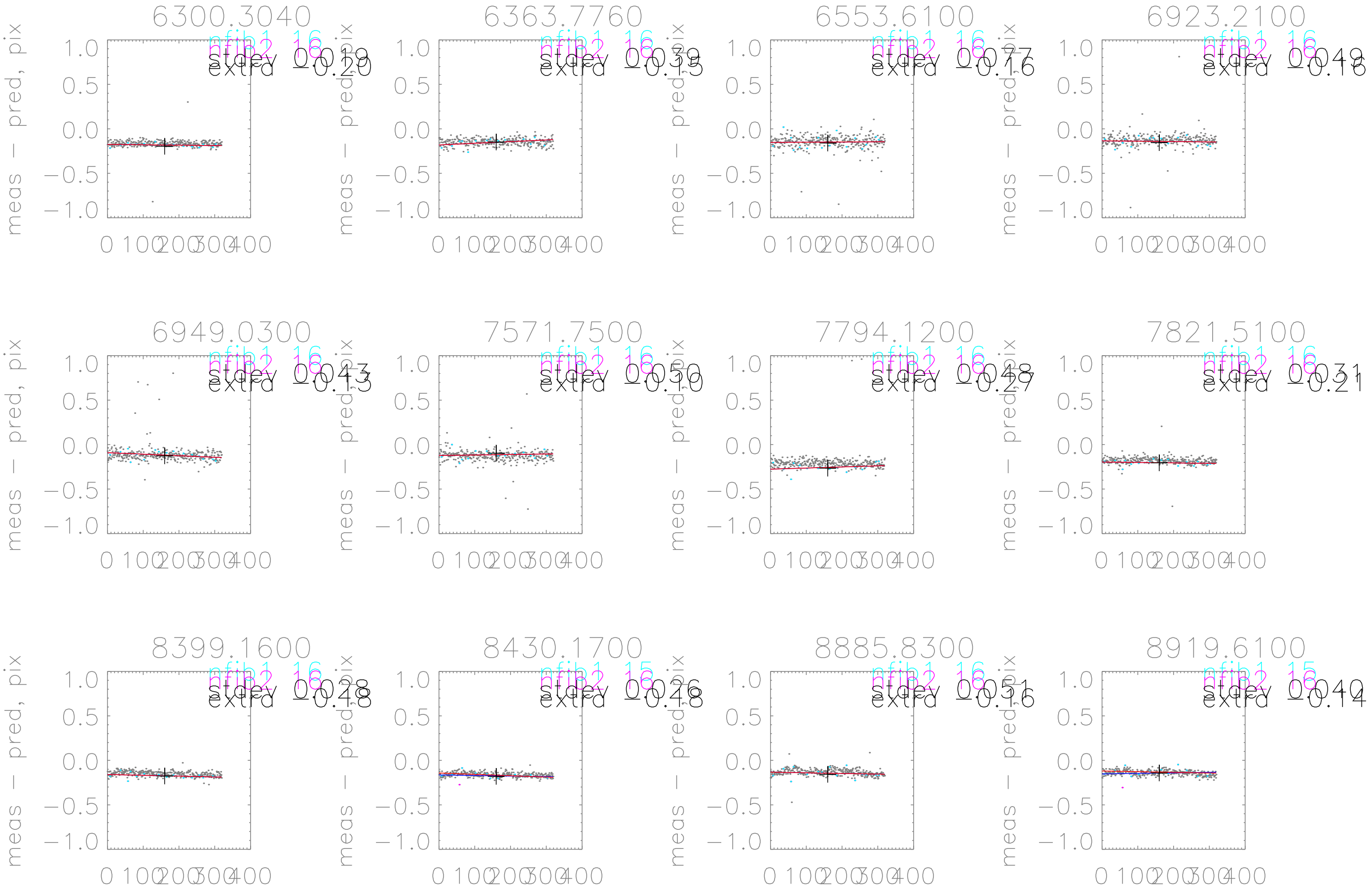

7821.5100
meas – arc
0.1
0.0
–0.1
–0.2
–0.3
–0.4
0
100
200
300
400

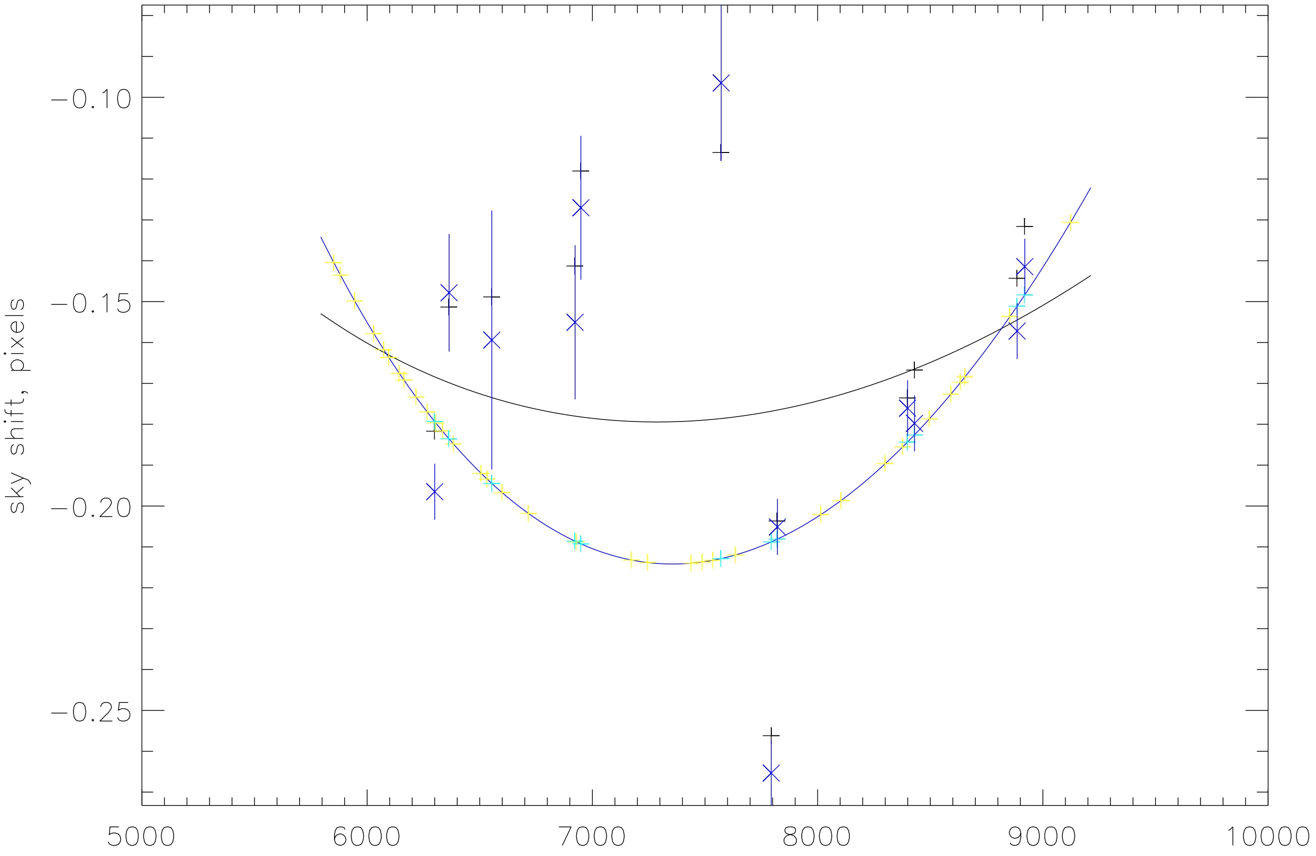

8399.1600
meas – arc
0.1
0.0
–0.1
–0.2
–0.3
–0.4
0
100
200
300
400

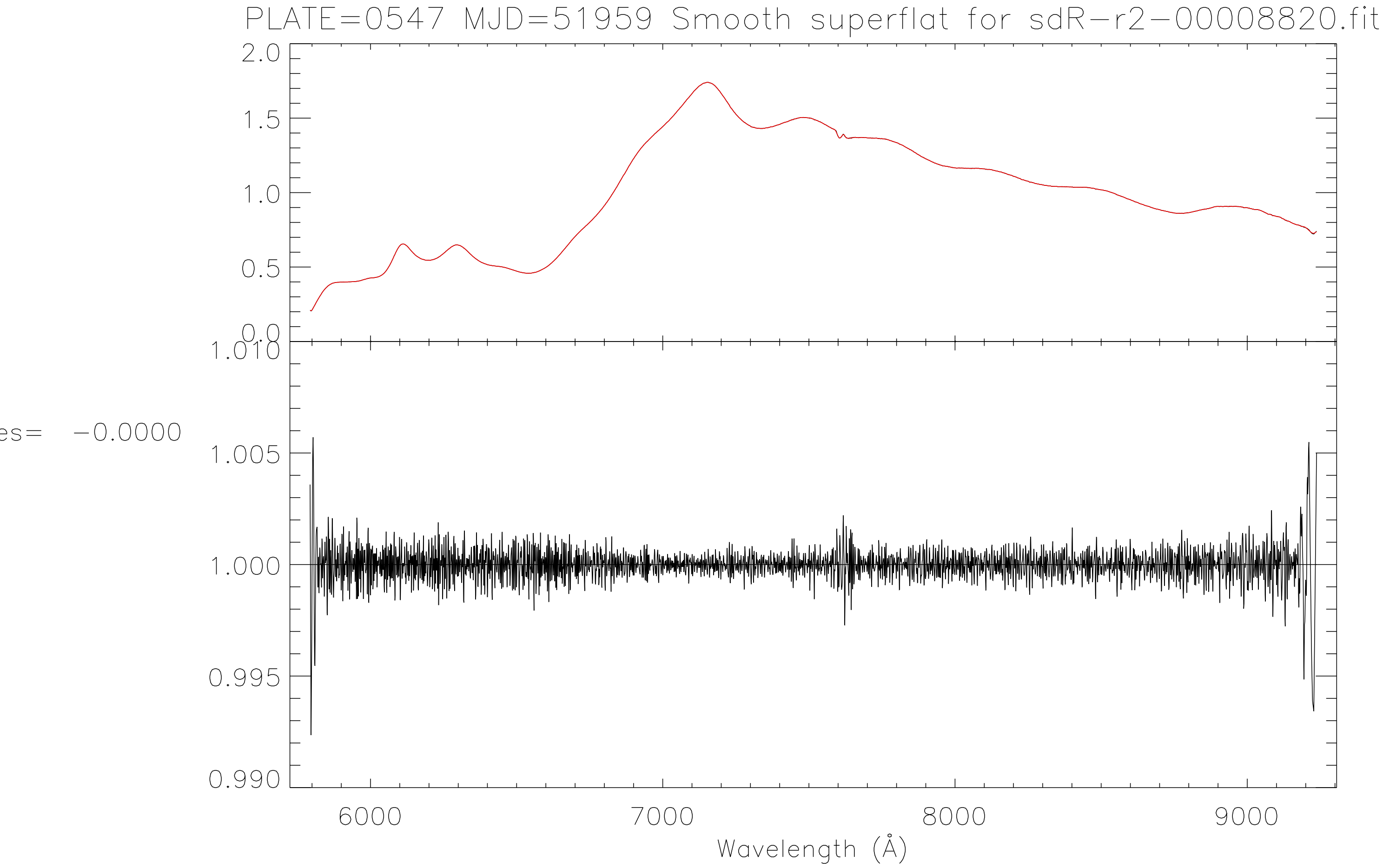

8430.1700
meas – arc
0.1
0.0
–0.1
–0.2
–0.3
–0.4
0
100
200
300
400

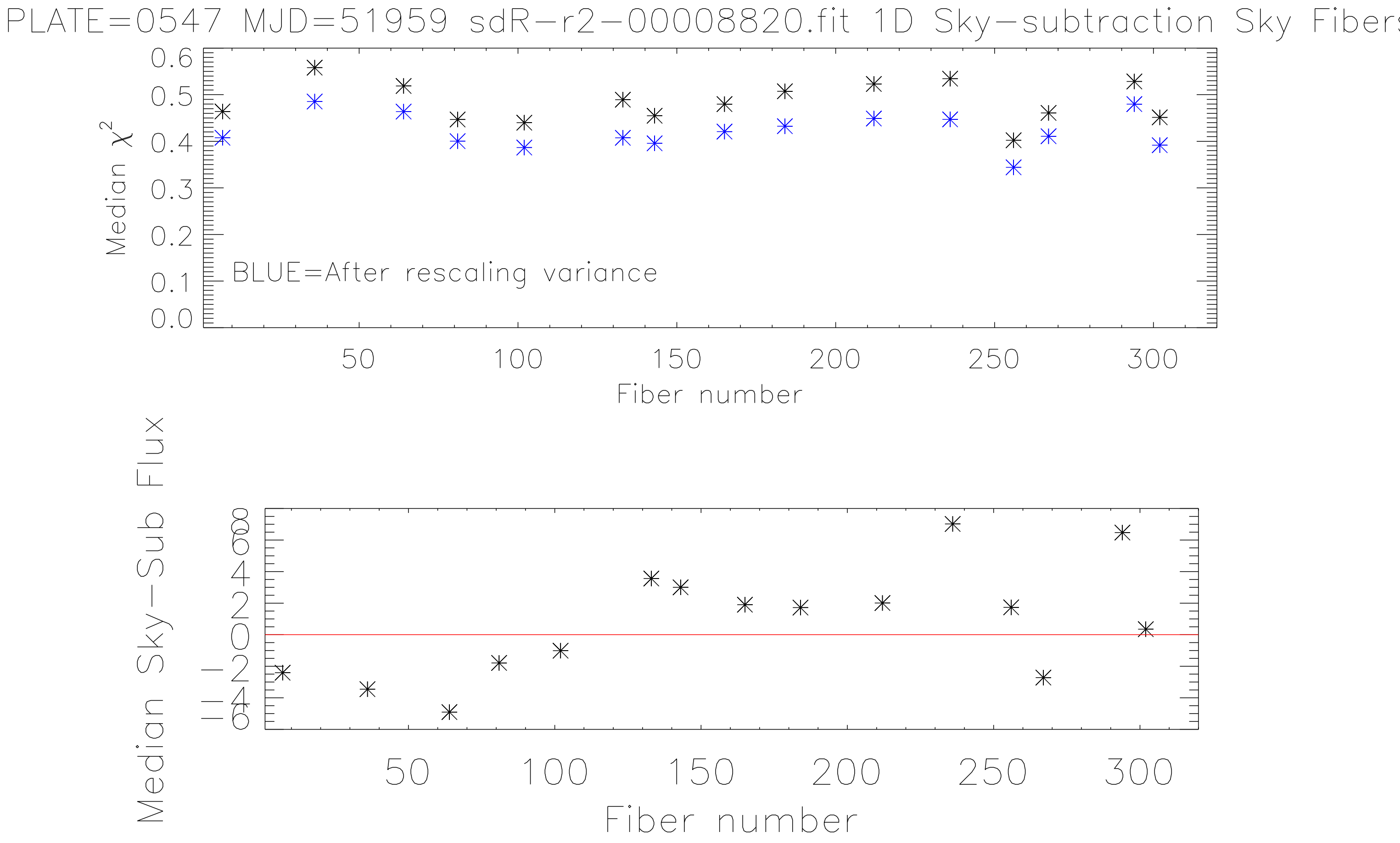

8885.8300
meas – arc
0.1
0.0
–0.1
–0.2
–0.3
–0.4
0
100
200
300
400

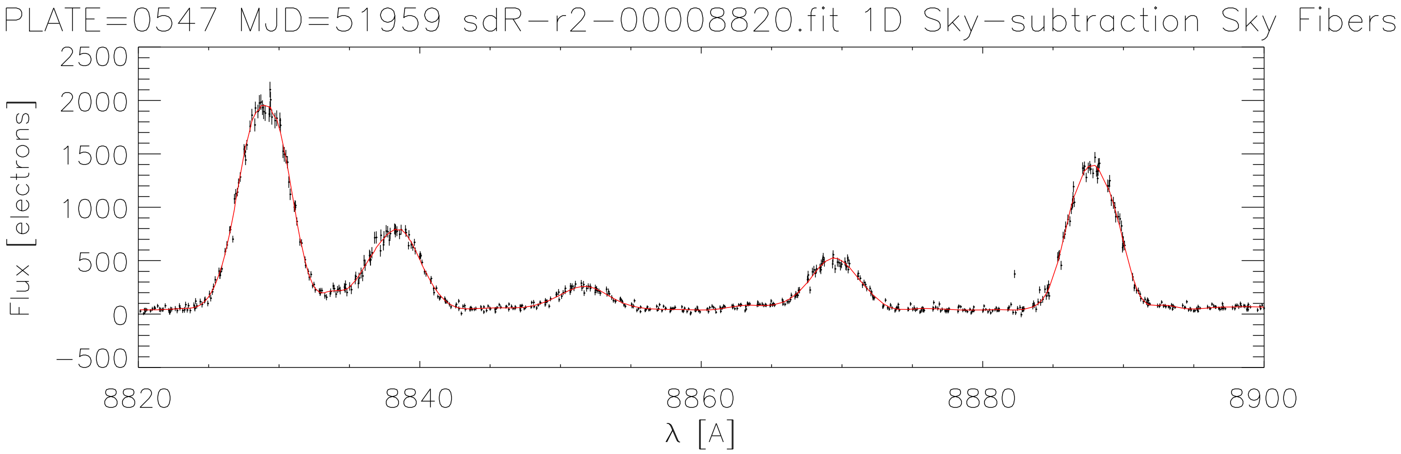

8919.6100
meas – arc
0.1
0.0
–0.1
–0.2
–0.3
–0.4
0
100
200
300
400

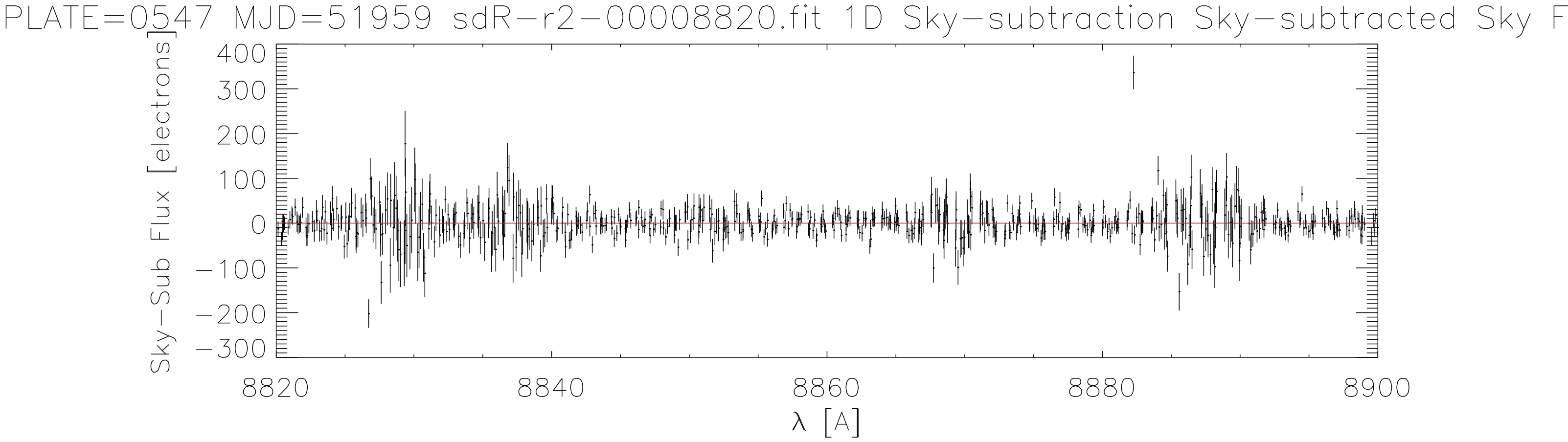

6300.3040
nfib1 16
nfib2 16
stdev 0.019
extrd −0.20
6363.7760
nfib1 16
nfib2 16
stdev 0.039
extrd −0.15
6553.6100
nfib1 16
nfib2 16
stdev 0.077
extrd −0.16
6923.2100
nfib1 16
nfib2 16
stdev 0.049
extrd −0.16
6949.0300
nfib1 16
nfib2 16
stdev 0.043
extrd −0.13
7571.7500
nfib1 16
nfib2 16
stdev 0.050
extrd −0.10
7794.1200
nfib1 16
nfib2 16
stdev 0.048
extrd −0.27
7821.5100
nfib1 16
nfib2 16
stdev 0.031
extrd −0.21
8399.1600
nfib1 16
nfib2 16
stdev 0.028
extrd −0.18
8430.1700
nfib1 15
nfib2 16
stdev 0.026
extrd −0.18
8885.8300
nfib1 16
nfib2 16
stdev 0.051
extrd −0.16
8919.6100
nfib1 15
nfib2 16
stdev 0.040
extrd −0.14
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

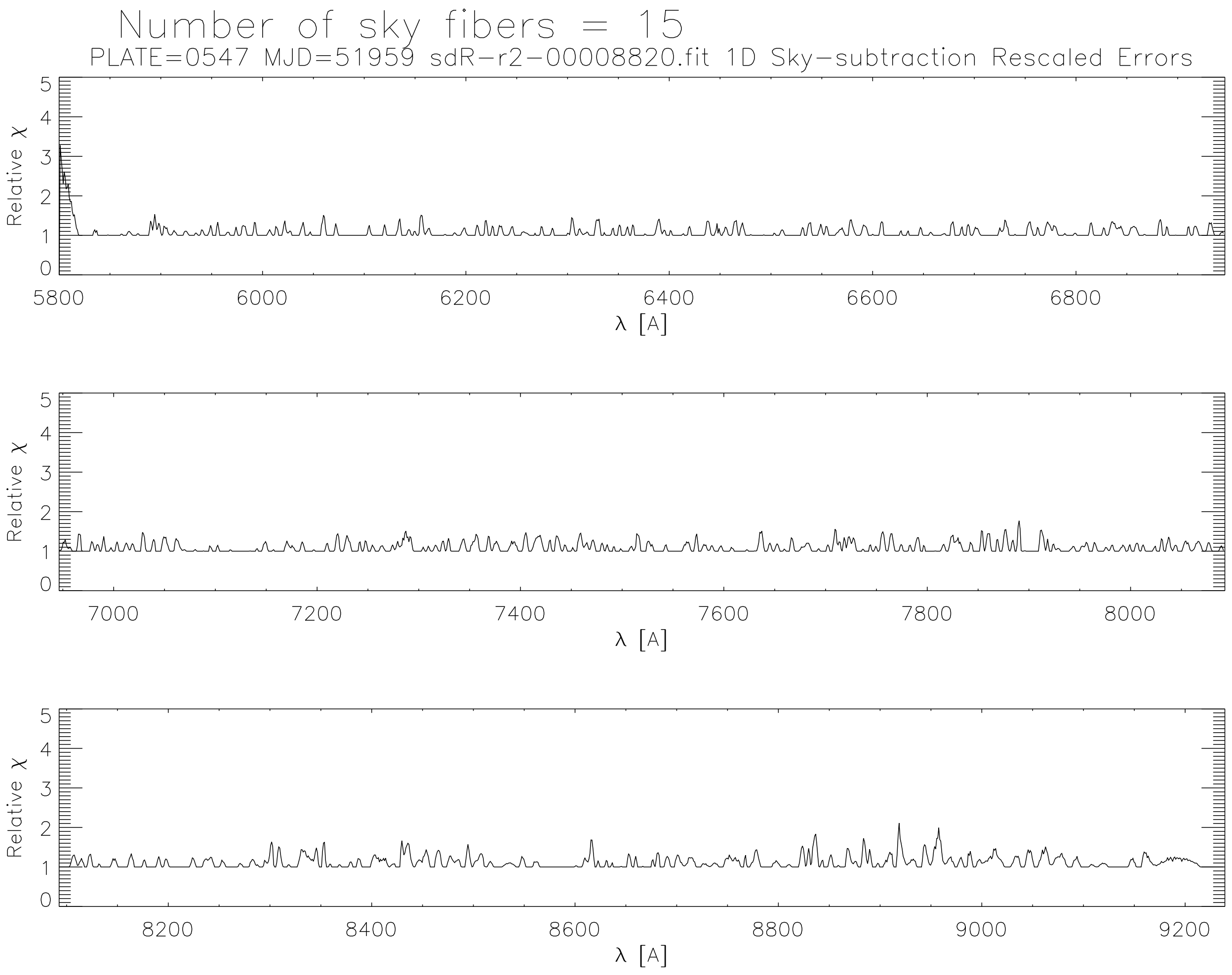

sky shift, pixels
−0.10
−0.15
−0.20
−0.25
5000
6000
7000
8000
9000
10000

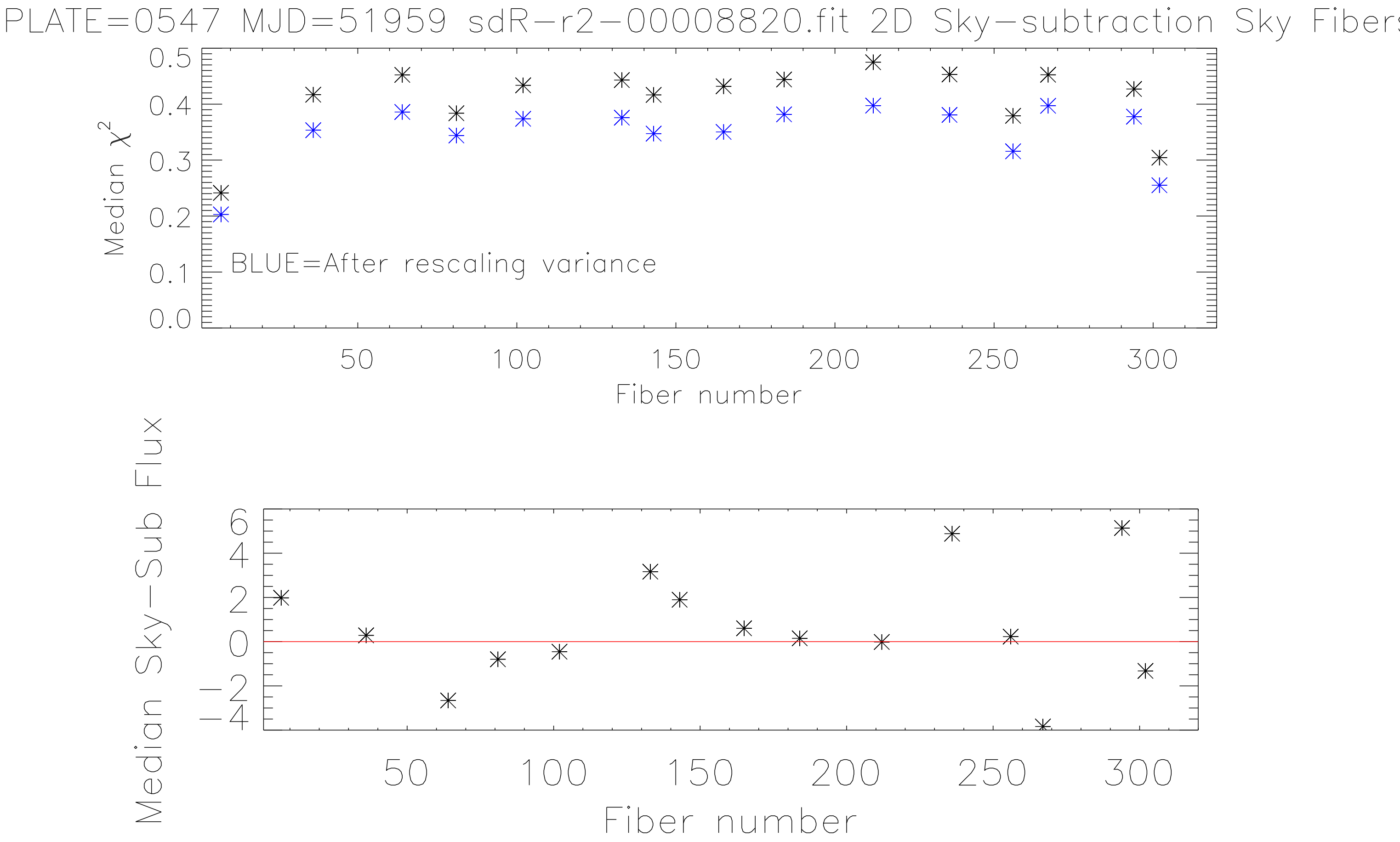

PLATE=0547 MJD=51959 Smooth superflat for sdR-r2-00008820.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

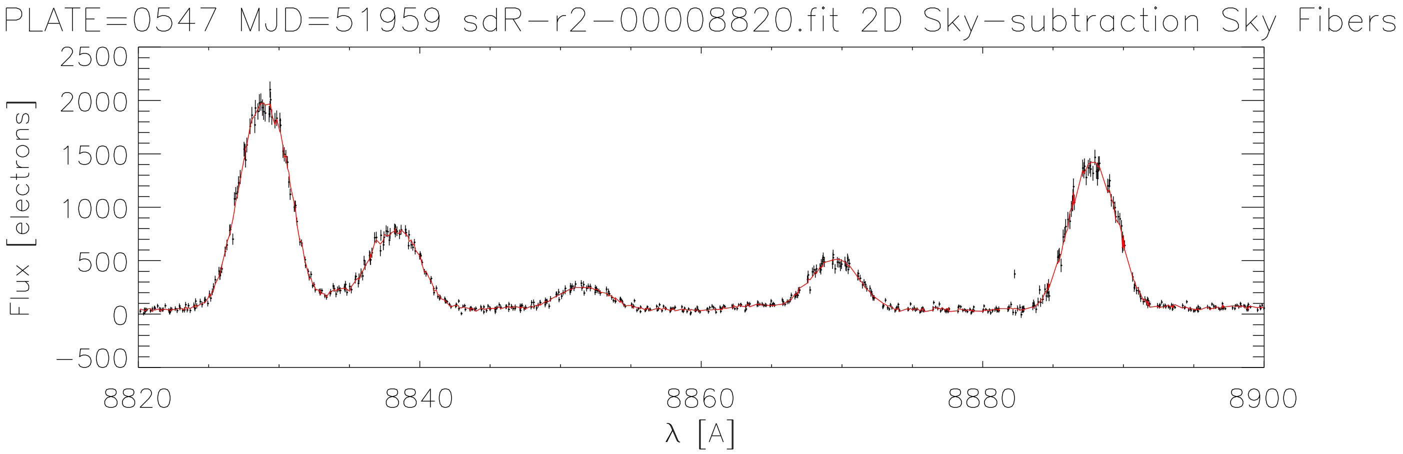

PLATE=0547 MJD=51959 sdR-r2-00008820.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
8
6
4
2
0
−2
−4
−6
50
100
150
200
250
300
Fiber number


PLATE=0547 MJD=51959 sdR-r2-00008820.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]

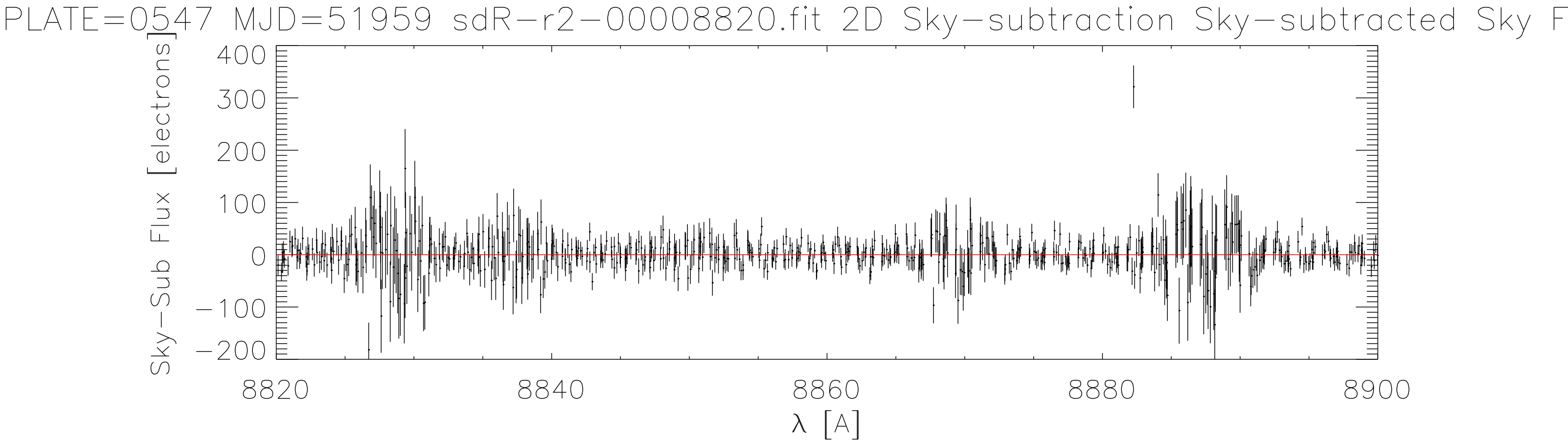

PLATE=0547 MJD=51959 sdR-r2-00008820.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
−100
−200
−300
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 15
PLATE=0547 MJD=51959 sdR-r2-00008820.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]

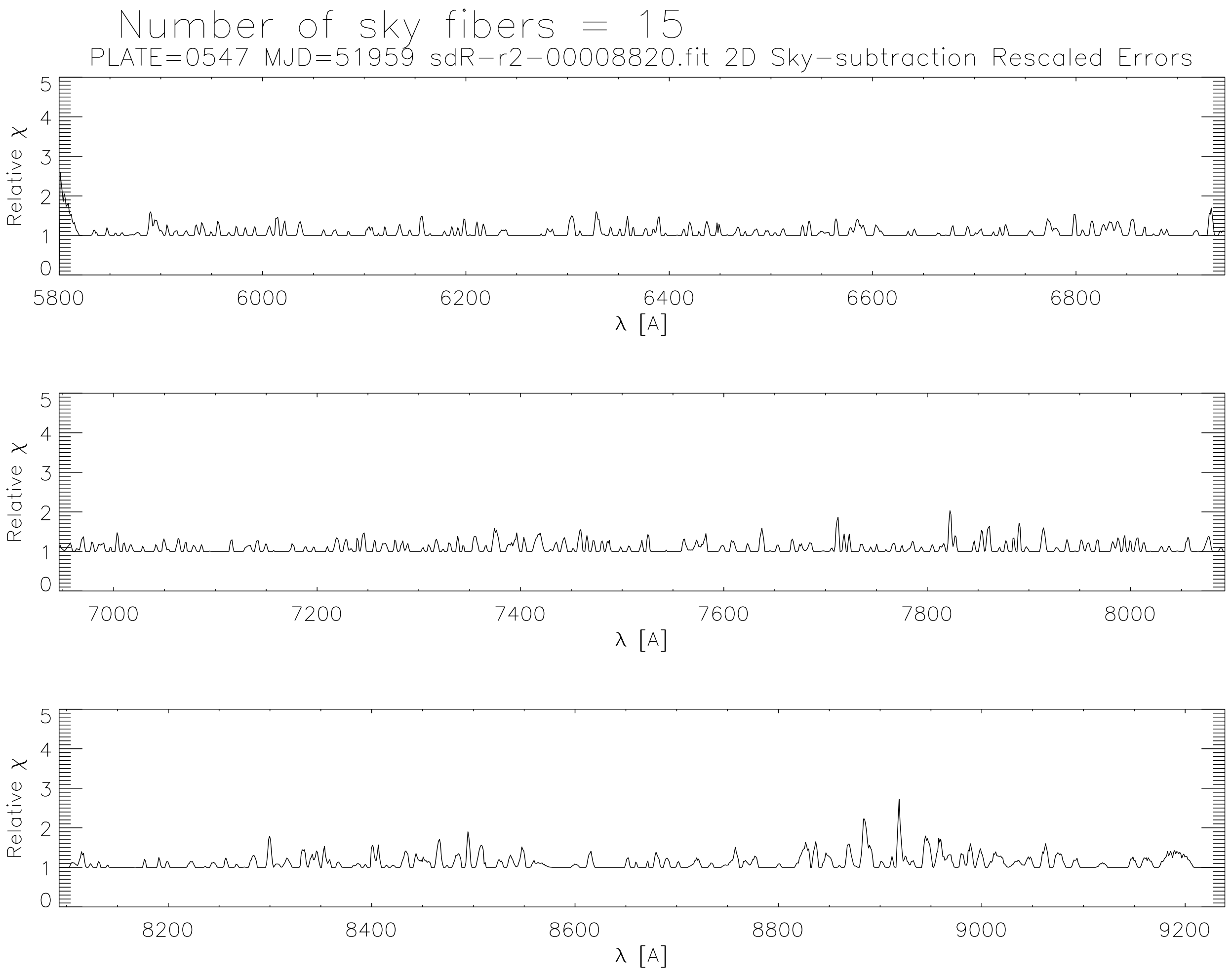

PLATE=0547 MJD=51959 sdR-r2-00008820.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

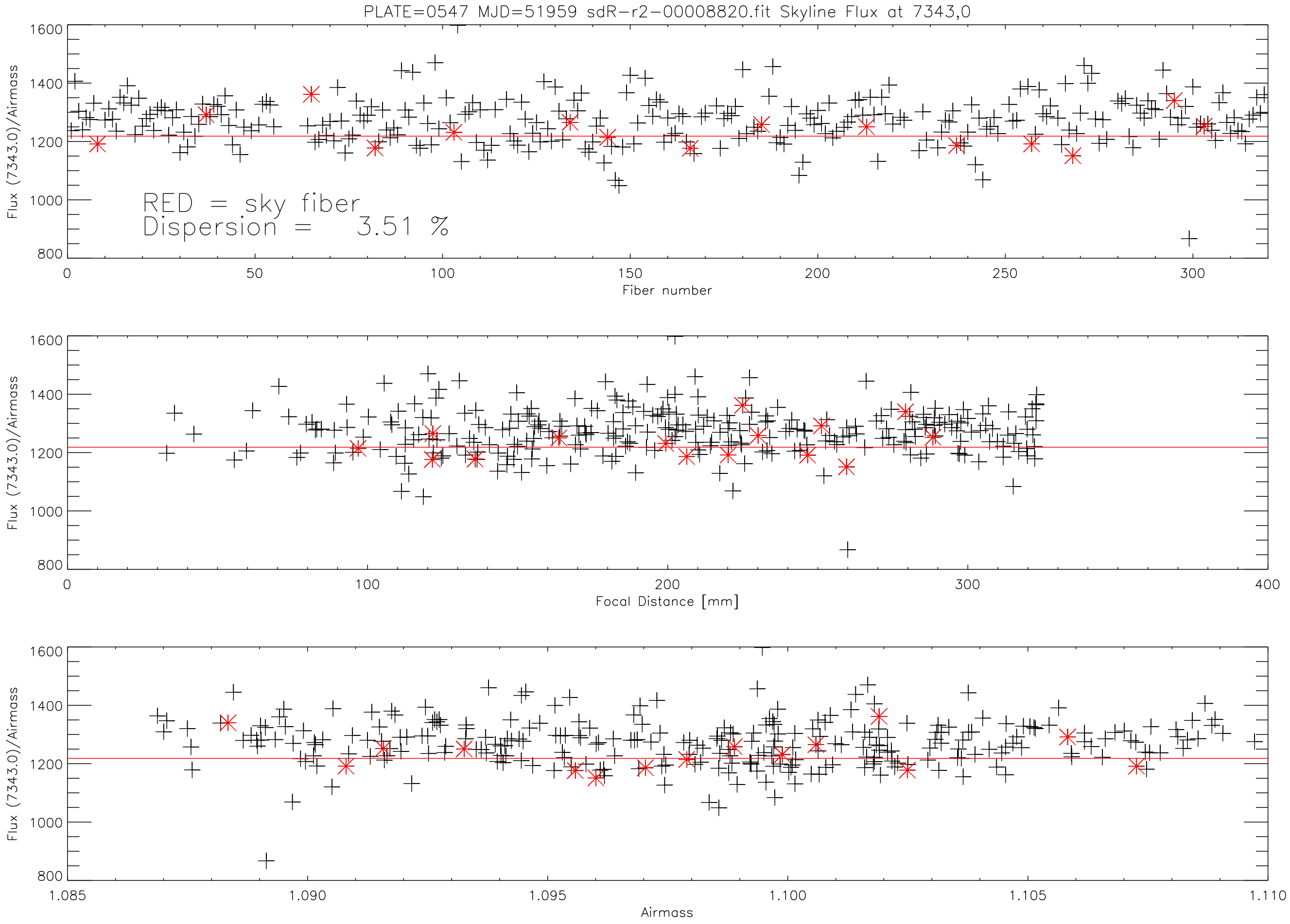


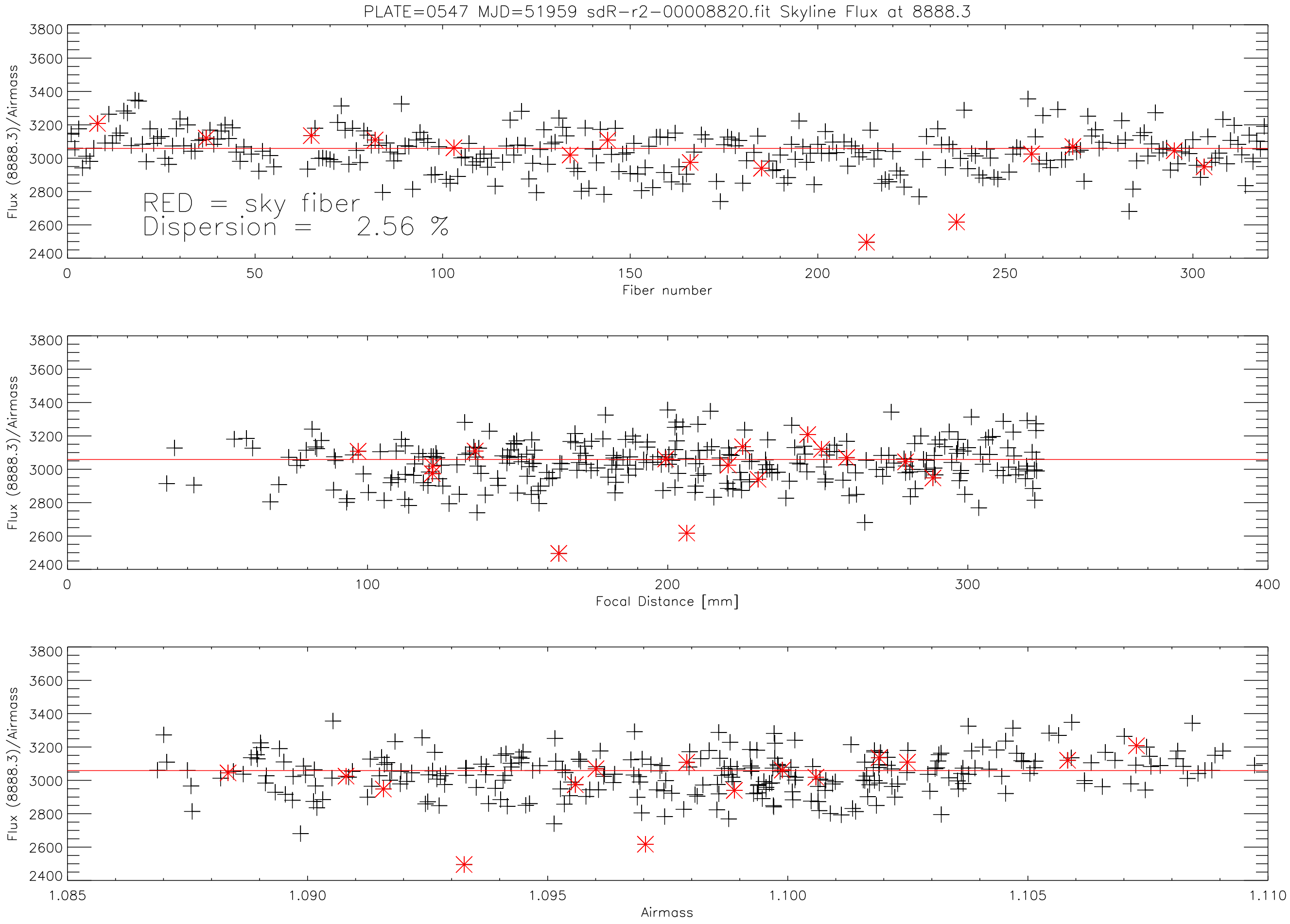
PLATE=0547 MJD=51959 sdR-r2-00008820.fit 2D Sky-subtraction Sky Fibers

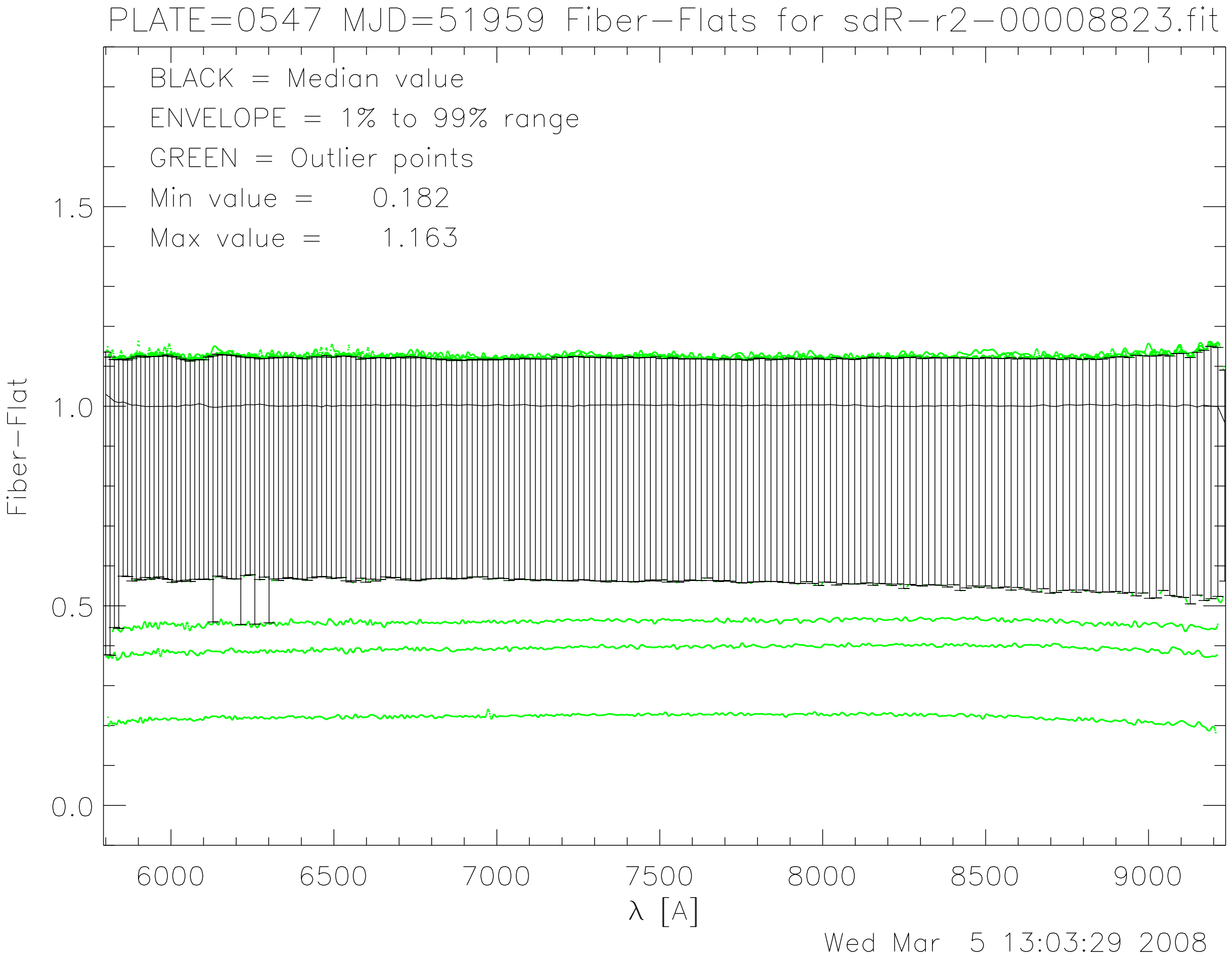


PLATE=0547 MJD=51959 sdR-r2-00008820.fit 2D Sky-subtraction Sky-subtracted Sky F

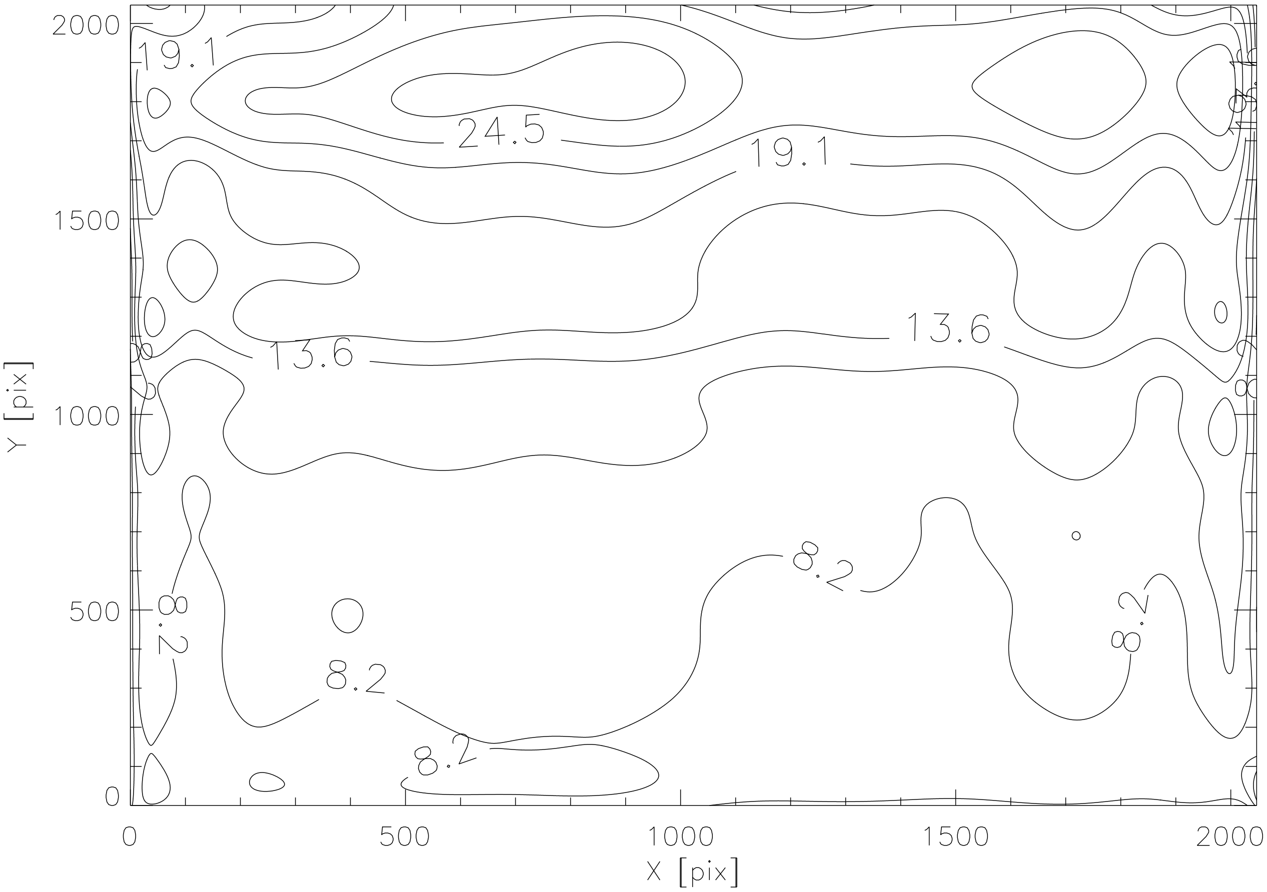

Number of sky fibers = 15
PLATE=0547 MJD=51959 sdR-r2-00008820.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
λ [A]
Relative χ
0
1
2
3
4
5
7000
7200
7400
7600
7800
8000
λ [A]
Relative χ
0
1
2
3
4
5
8200
8400
8600
8800
9000
9200
λ [A]


PLATE=0547 MJD=51959 sdR−r2−00008820.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1600
1400
1200
1000
800
RED = sky fiber
Dispersion = 3.51 %
0
50
100
150
200
250
300
Fiber number
Focal Distance [mm]
400
1.085
1.090
1.095
1.100
1.105
1.110
Airmass

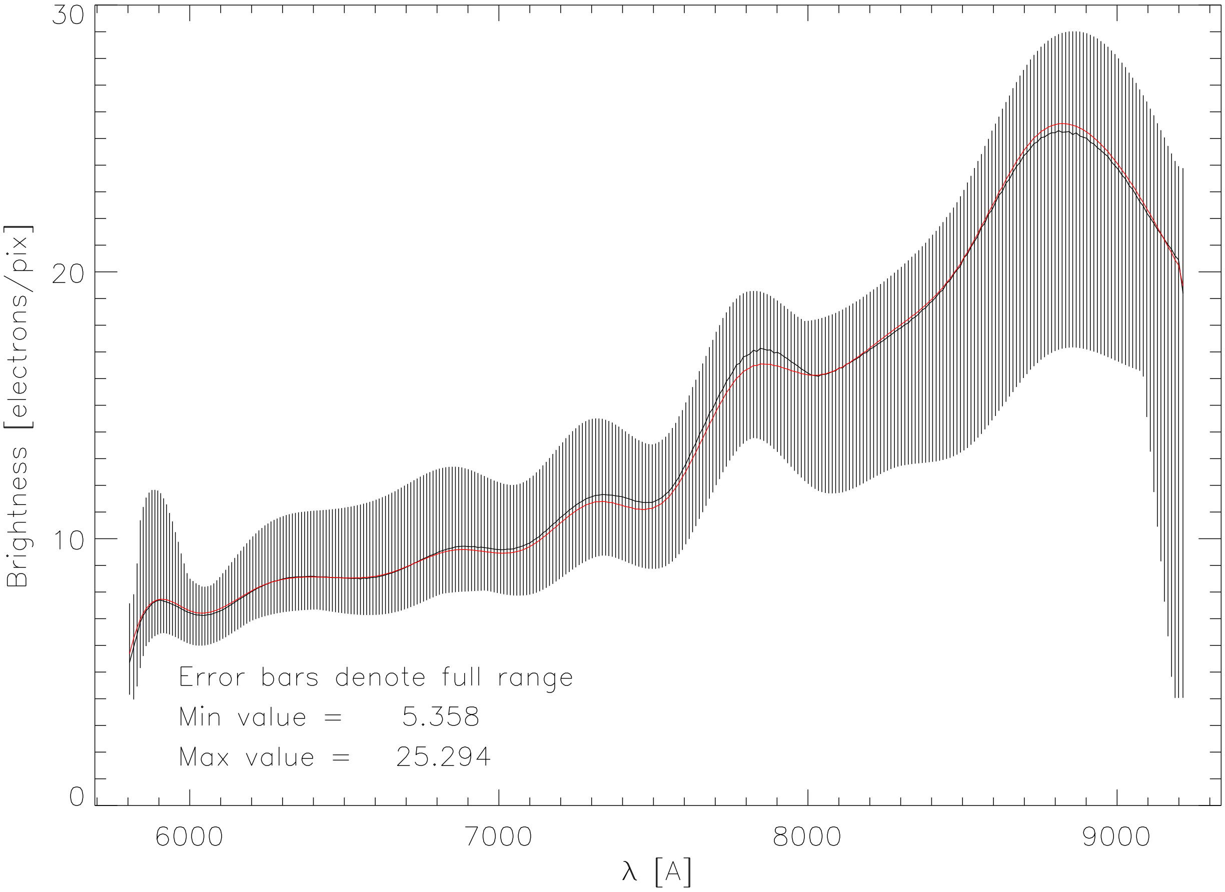

PLATE=0547 MJD=51959 sdR-r2-00008820.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
3800
3600
3400
3200
3000
2800
2600
2400
RED = sky fiber
Dispersion = 2.56 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.085
1.090
1.095
1.100
1.105
1.110
Airmass


PLATE=0547 MJD=51959 Fiber-Flats for sdR-r2-00008823.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.182
Max value = 1.163
Fiber-Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Wed Mar 5 13:03:29 2008

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008821.fi

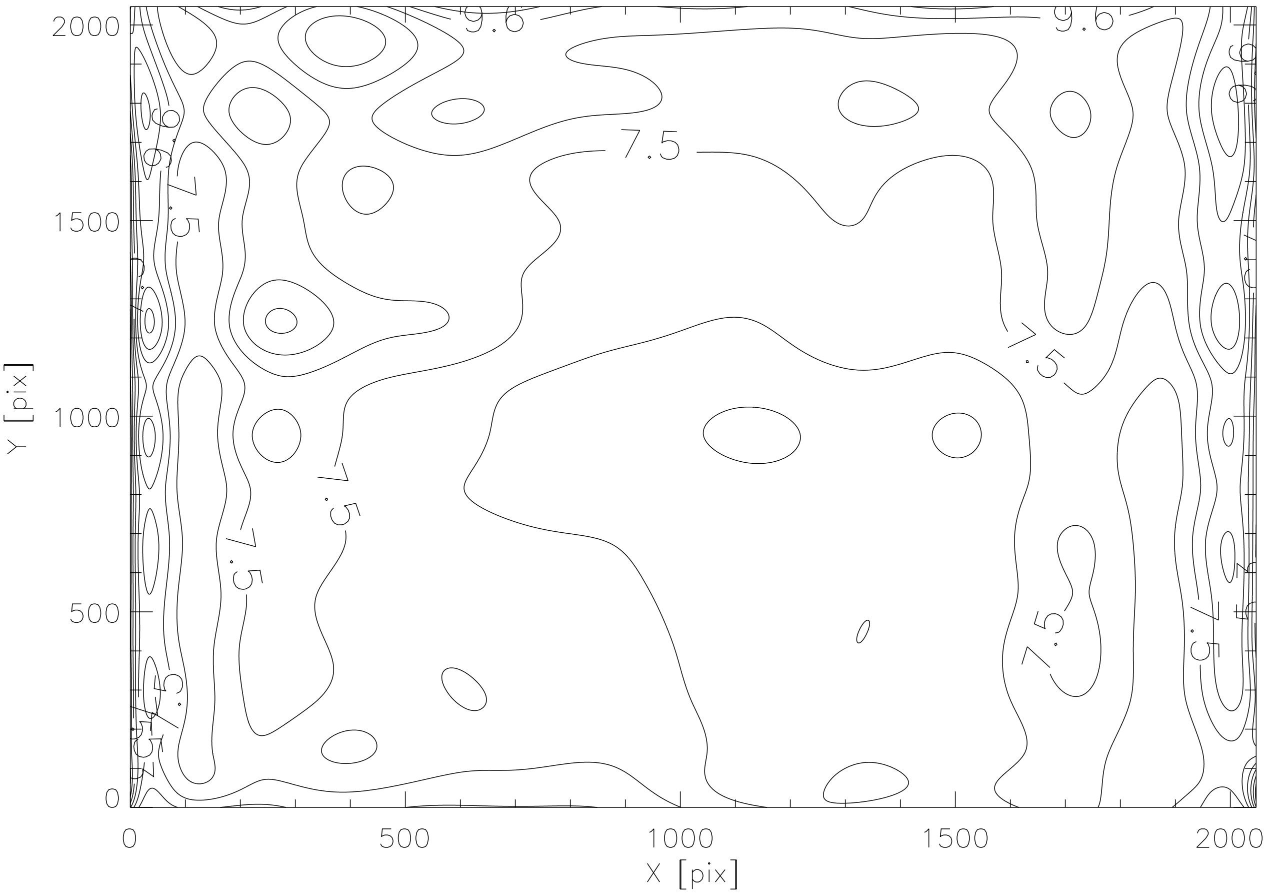


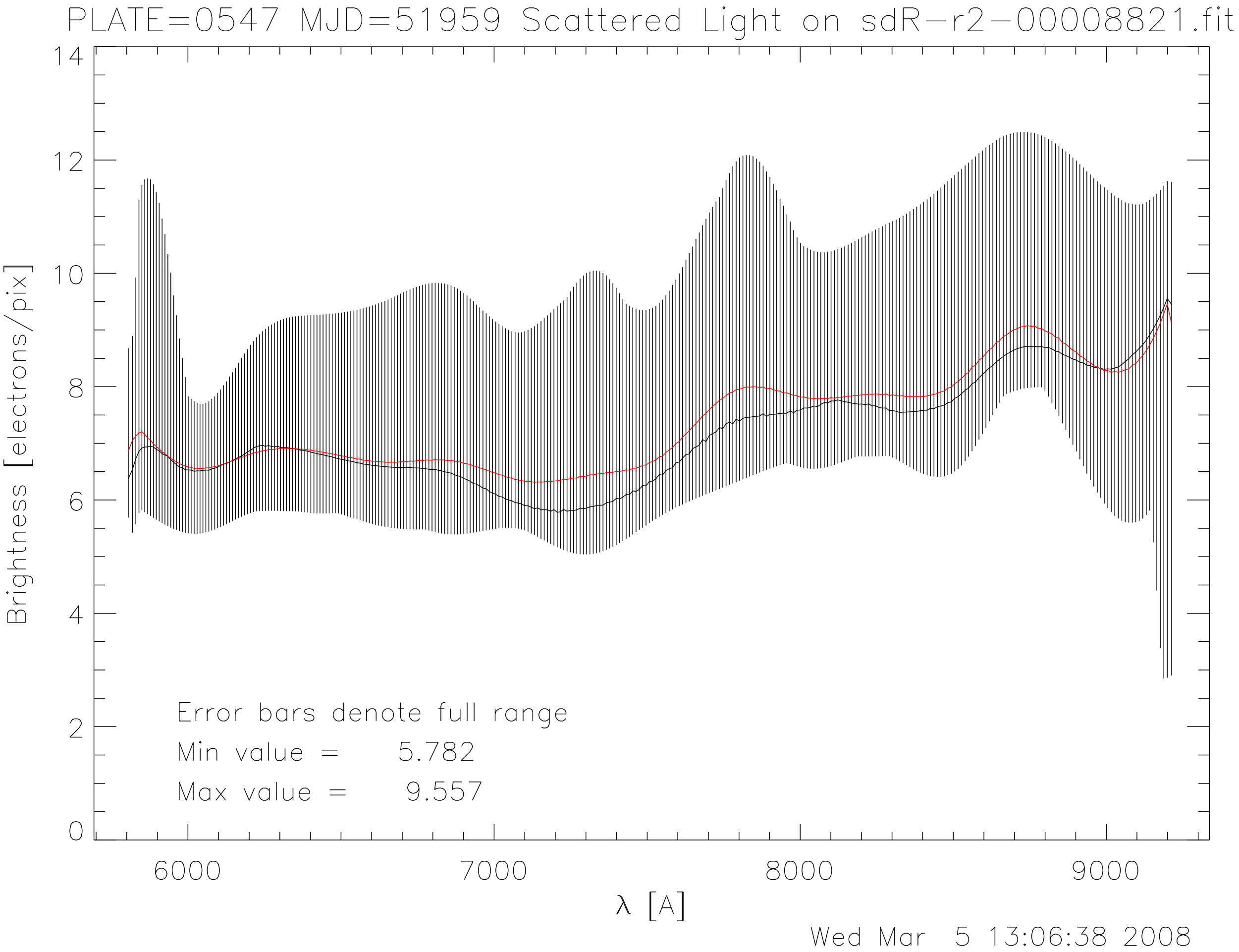
PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008821.fi

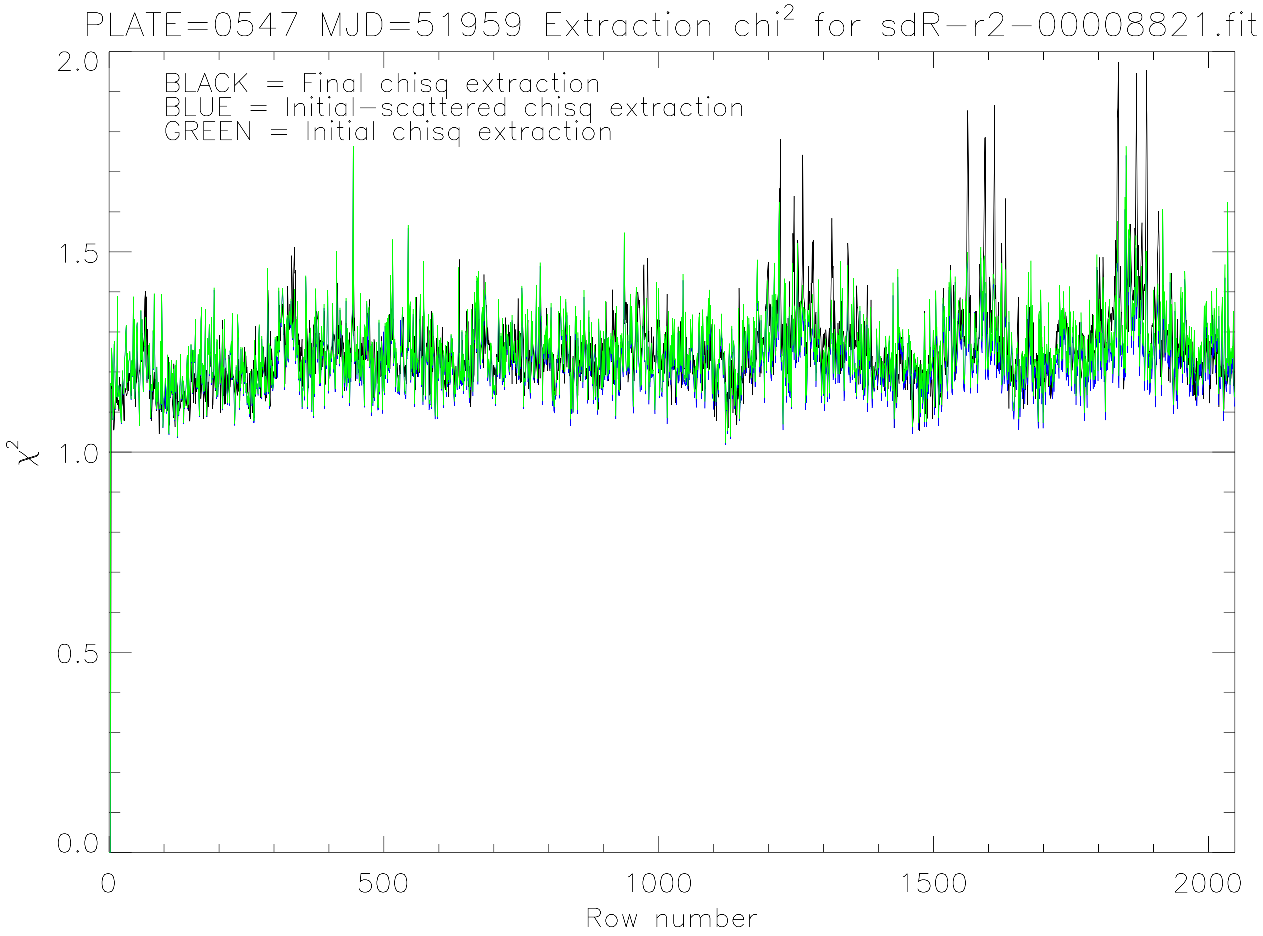


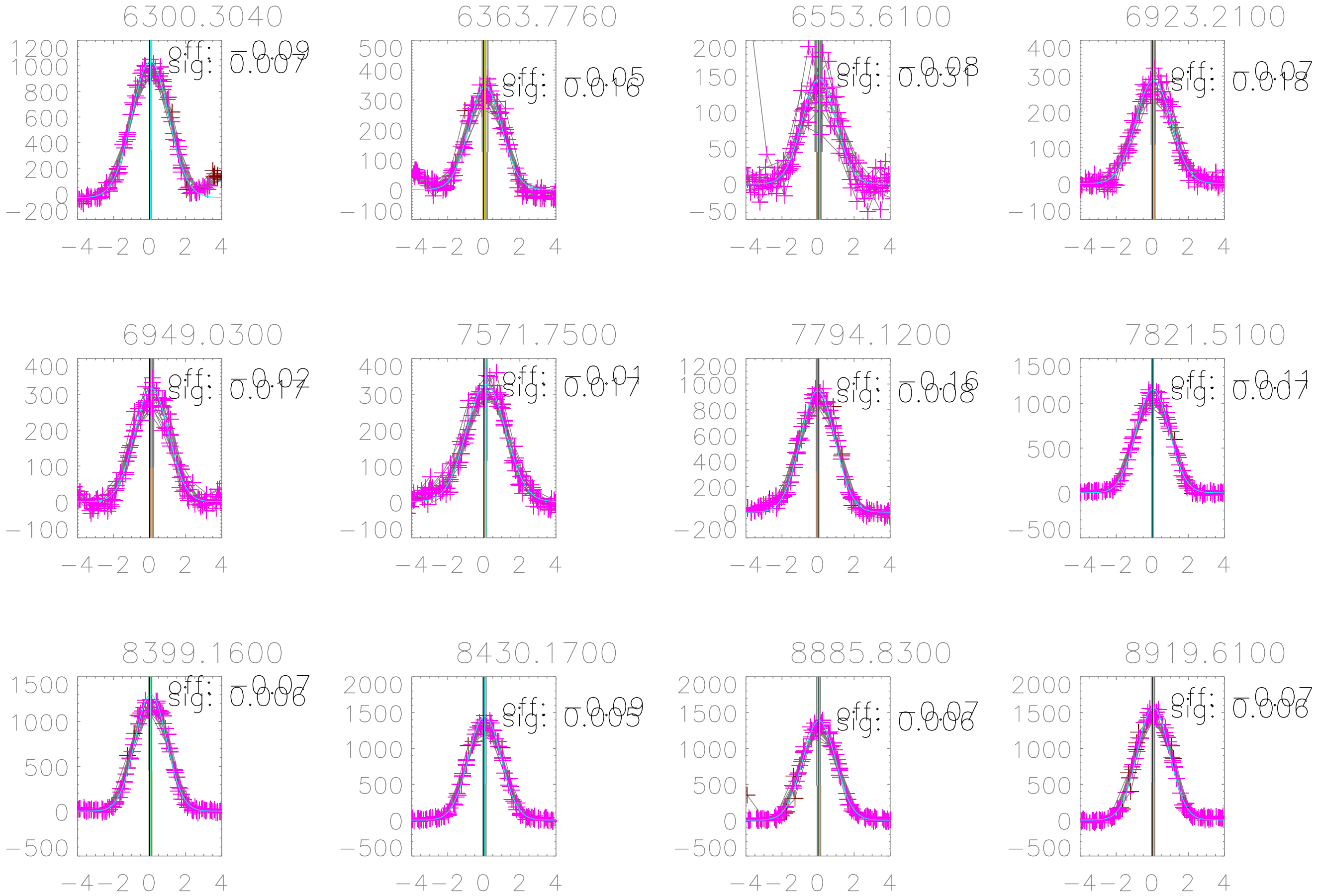
Wed Mar 5 13:04:20 2008

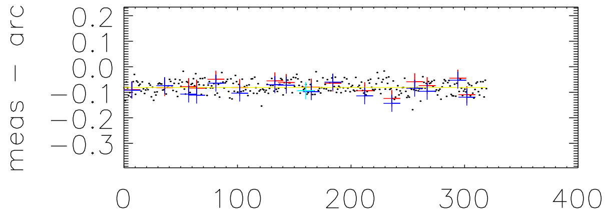
PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008821.fit

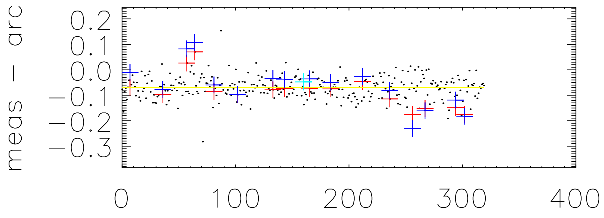


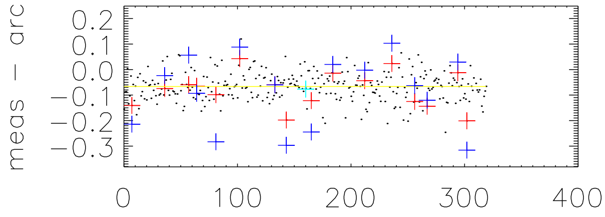

PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008821.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
14
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 5.782
Max value = 9.557
Wed Mar 5 13:06:38 2008

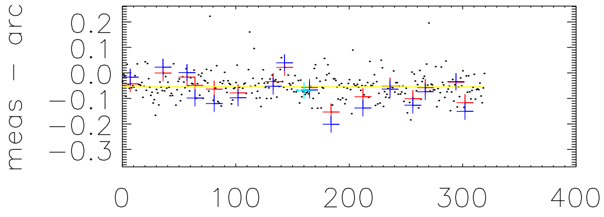

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-r2-00008821.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
0
500
1000
1500
2000
Row number

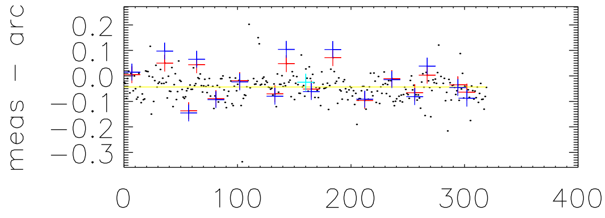

6300.3040
off: −0.09
sig: 0.007
6363.7760
off: −0.05
sig: 0.016
6553.6100
off: −0.08
sig: 0.031
6923.2100
off: −0.07
sig: 0.018
6949.0300
off: −0.02
sig: 0.017
7571.7500
off: −0.01
sig: 0.017
7794.1200
off: −0.16
sig: 0.008
7821.5100
off: −0.11
sig: 0.007
8399.1600
off: −0.07
sig: 0.006
8430.1700
off: −0.09
sig: 0.005
8885.8300
off: −0.07
sig: 0.006
8919.6100
off: −0.07
sig: 0.006
−4 −2 0 2 4

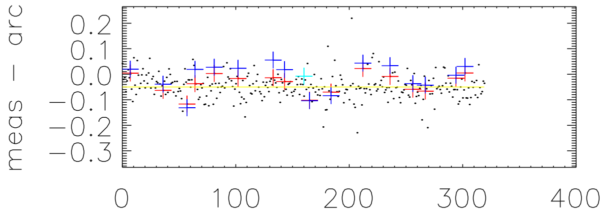

6300.3040

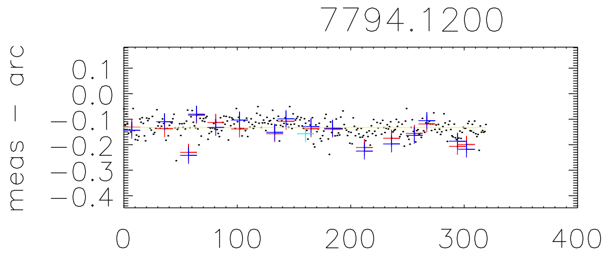

6363.7760

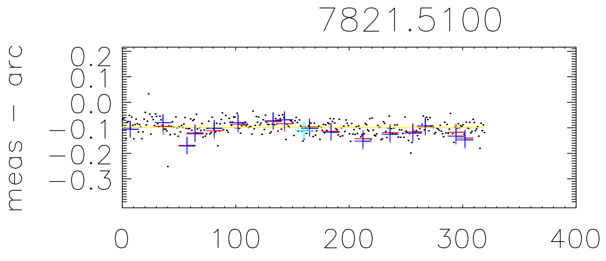

6553.6100

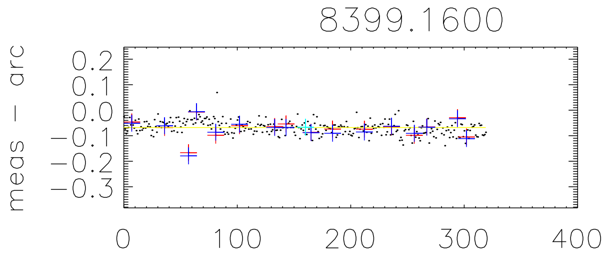

6923.2100

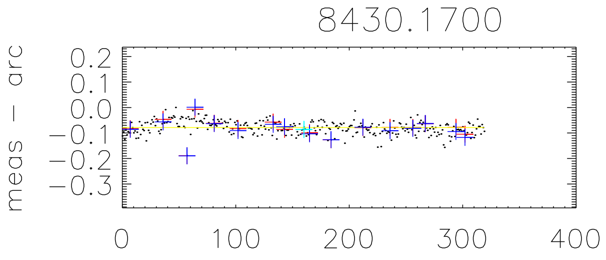

6949.0300

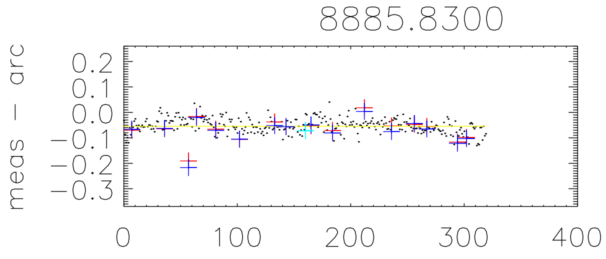

7571.7500

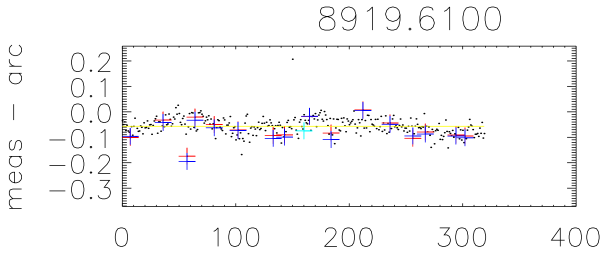

7794.1200
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

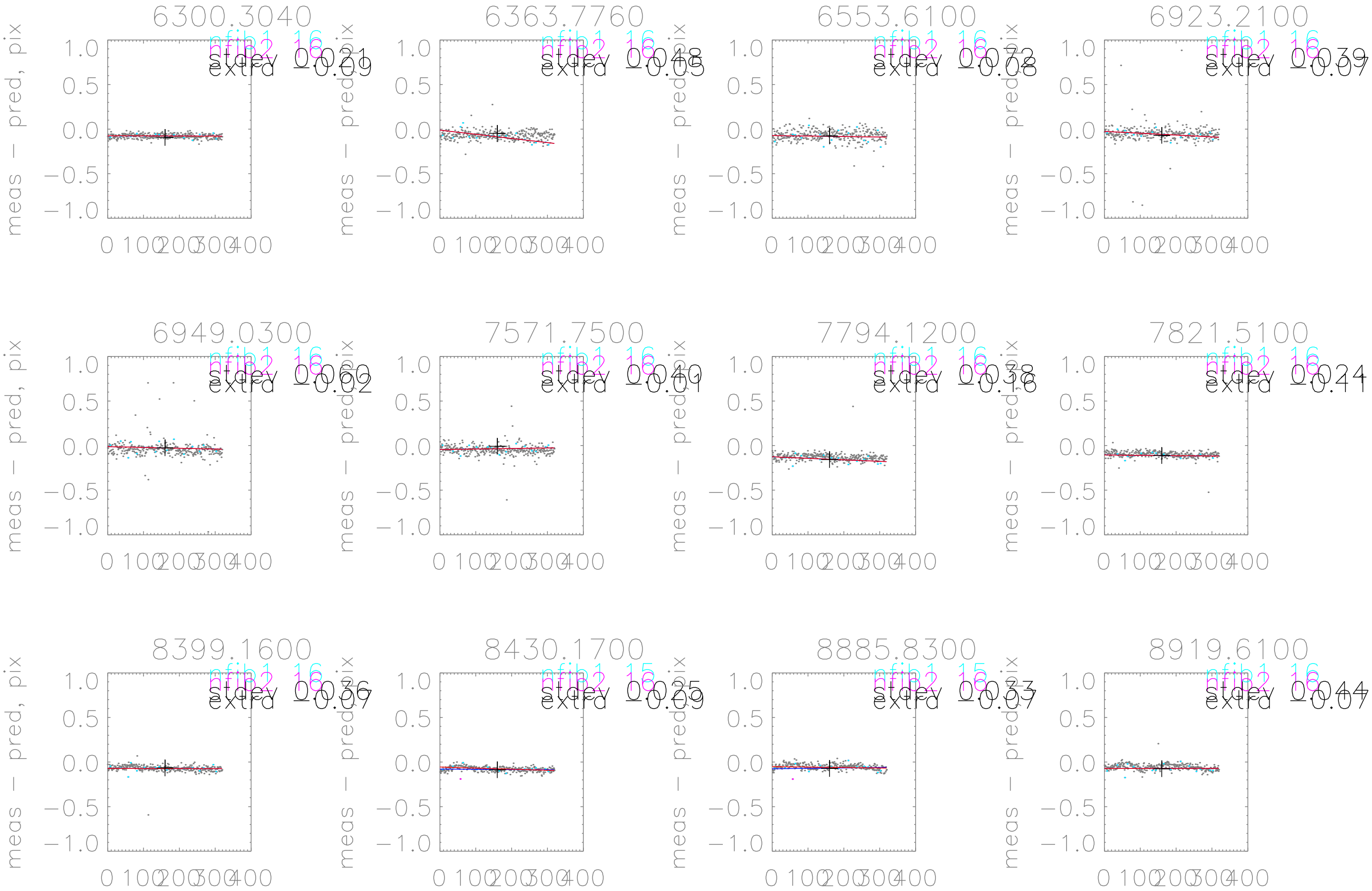

7821.5100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

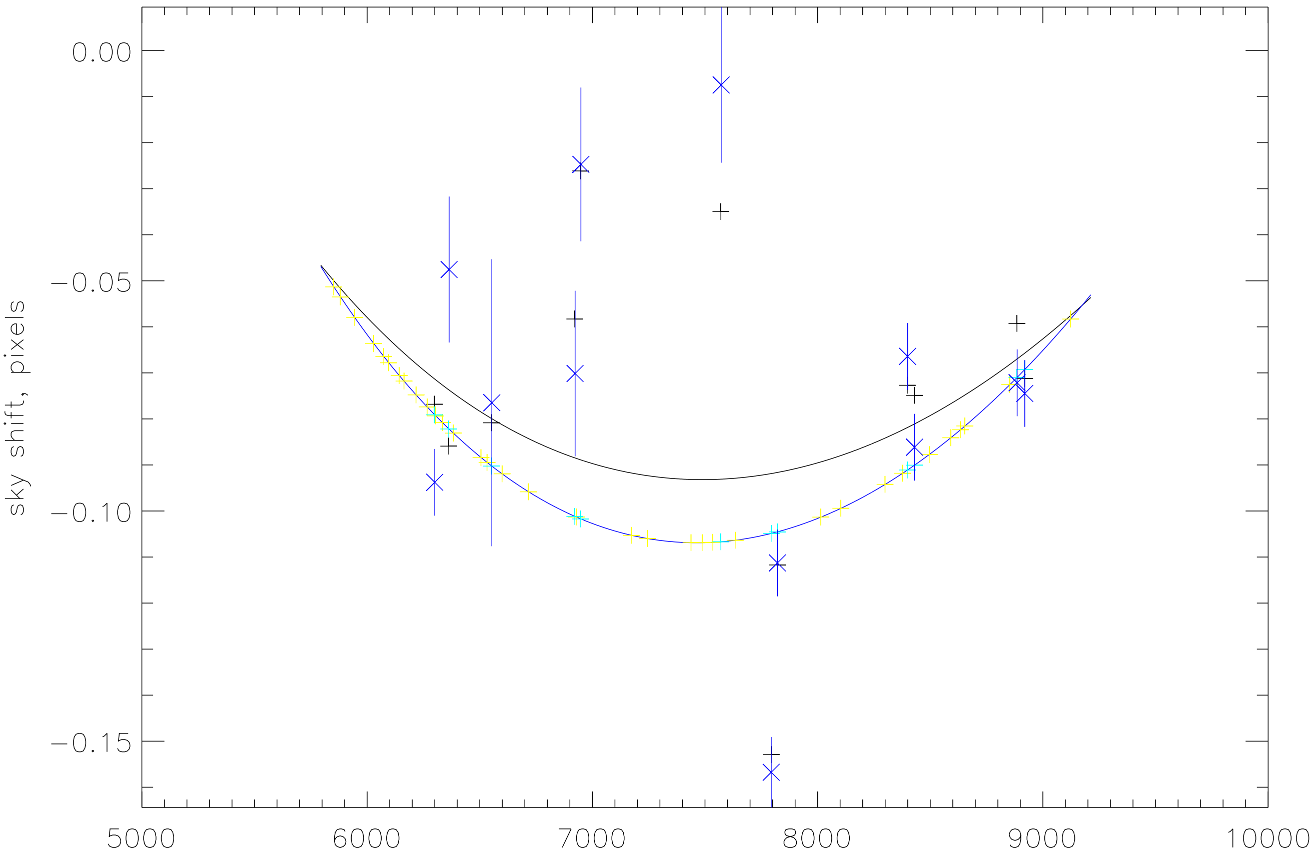

8399.1600
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

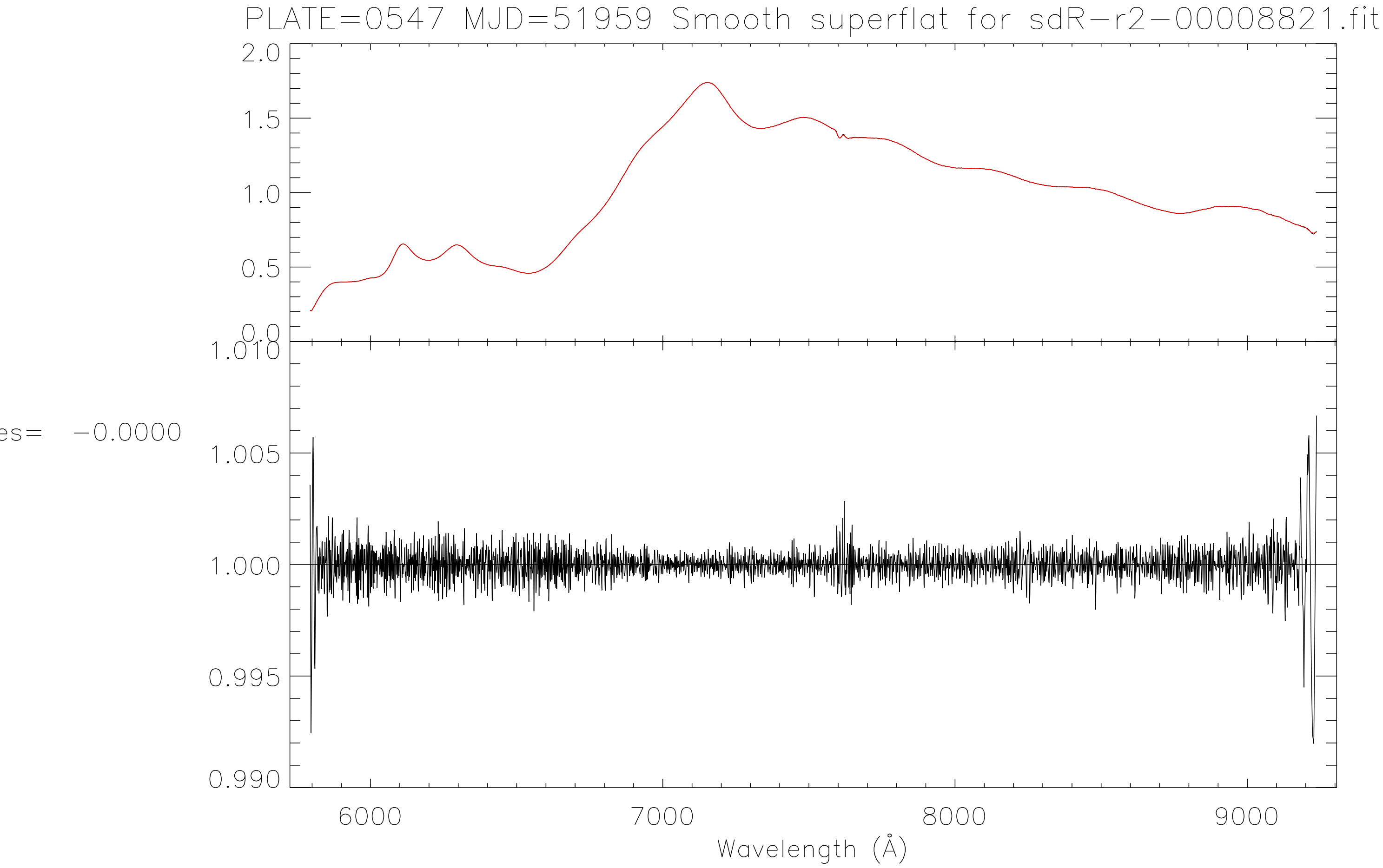

8430.1700
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

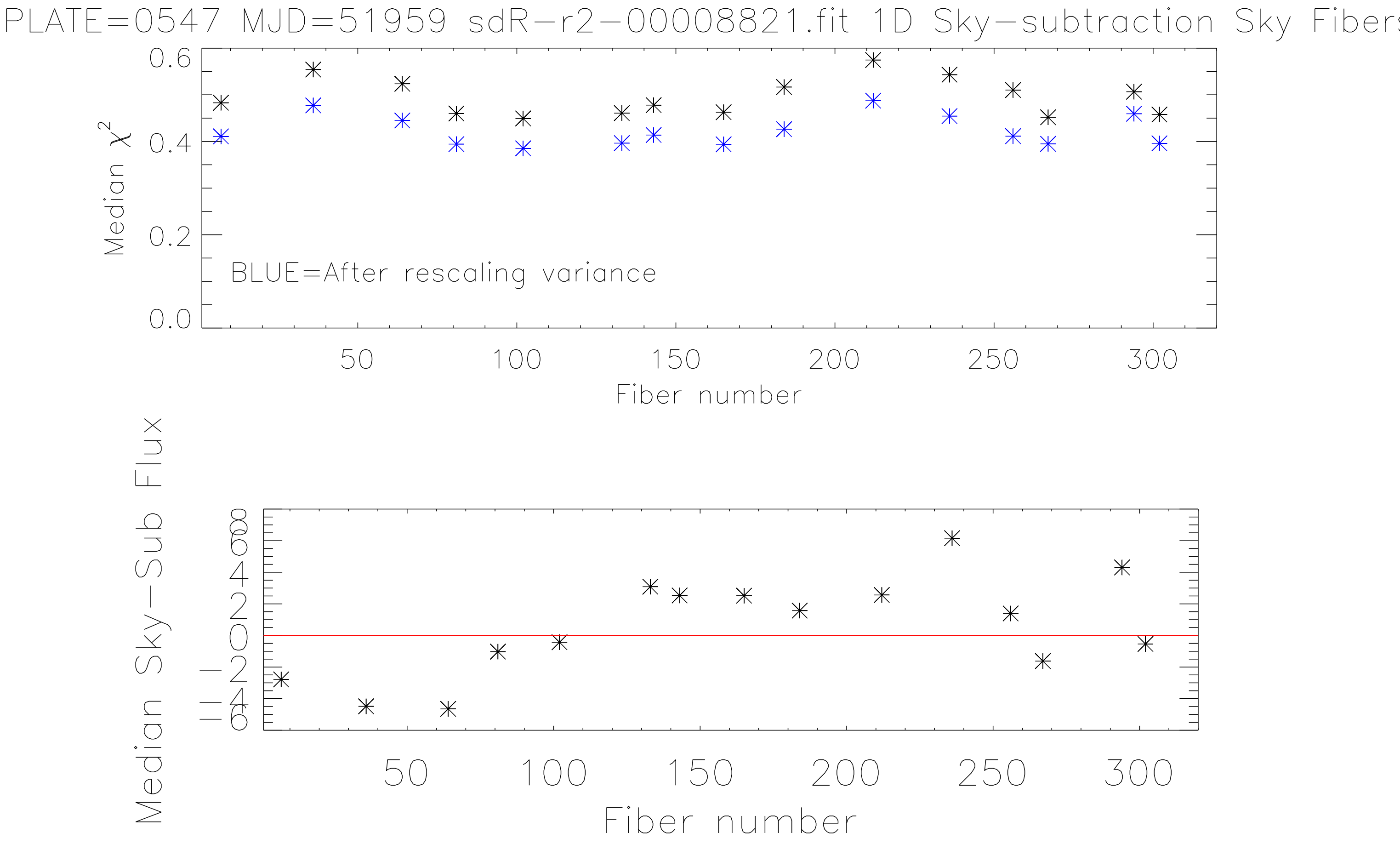

8885.8300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

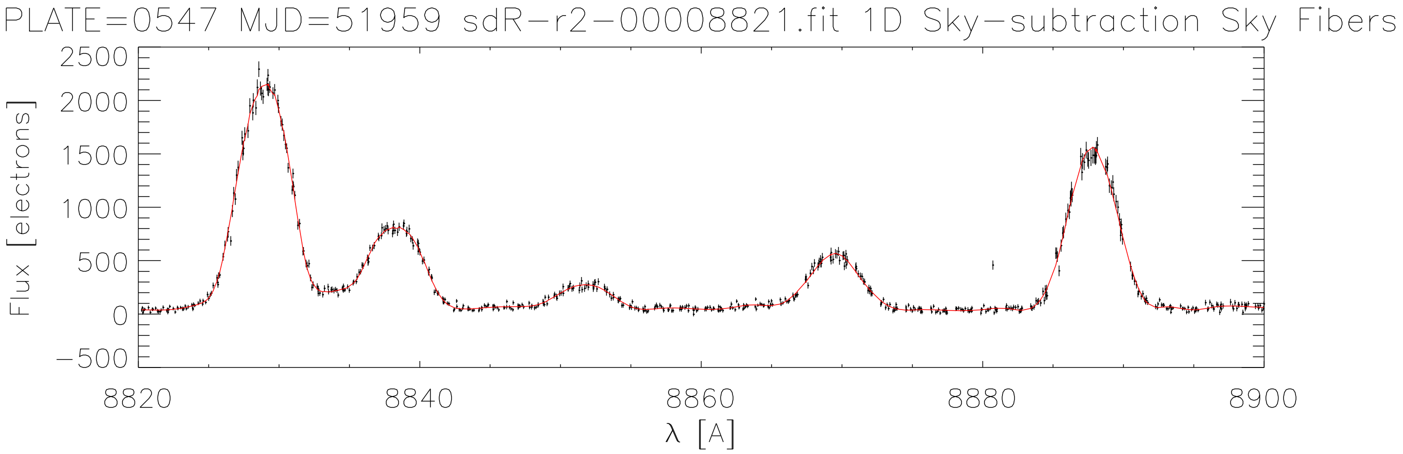

8919.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

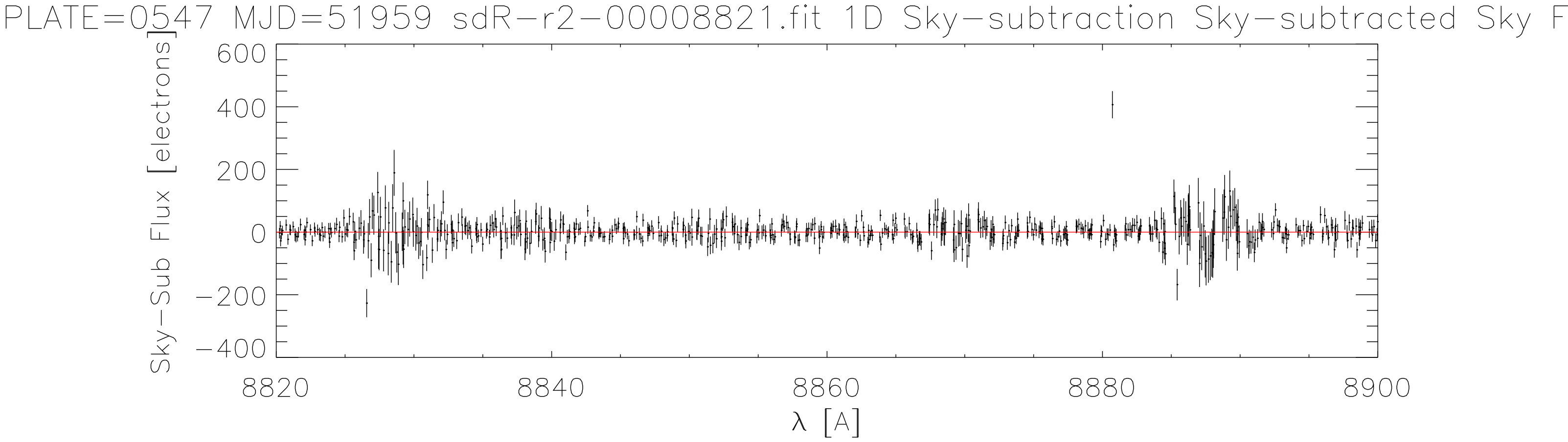

6300.3040
nfib1 16
nfib2 16
stdev 0.021
extrd −0.09
6363.7760
nfib1 16
nfib2 16
stdev 0.048
extrd −0.05
6553.6100
nfib1 16
nfib2 16
stdev 0.072
extrd −0.08
6923.2100
nfib1 16
nfib2 16
stdev 0.039
extrd −0.07
6949.0300
nfib1 16
nfib2 16
stdev 0.060
extrd −0.02
7571.7500
nfib1 16
nfib2 16
stdev 0.040
extrd −0.01
7794.1200
nfib1 16
nfib2 16
stdev 0.038
extrd −0.16
7821.5100
nfib1 16
nfib2 16
stdev 0.024
extrd −0.11
8399.1600
nfib1 16
nfib2 16
stdev 0.036
extrd −0.07
8430.1700
nfib1 15
nfib2 16
stdev 0.025
extrd −0.09
8885.8300
nfib1 15
nfib2 16
stdev 0.033
extrd −0.07
8919.6100
nfib1 16
nfib2 16
stdev 0.044
extrd −0.07
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=0547 MJD=51959 Smooth superflat for sdR-r2-00008821.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

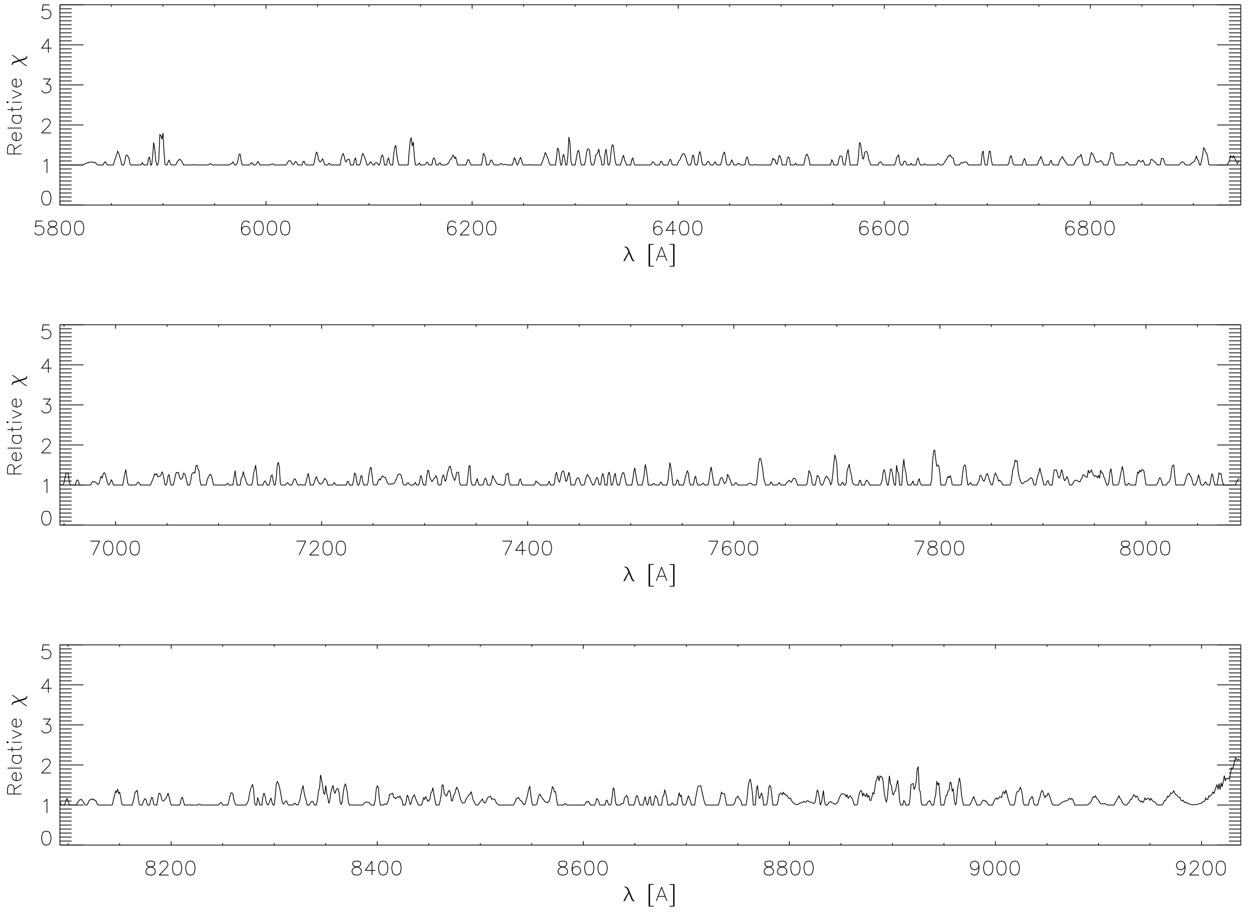

PLATE=0547 MJD=51959 sdR-r2-00008821.fit 1D Sky-subtraction Sky Fiber

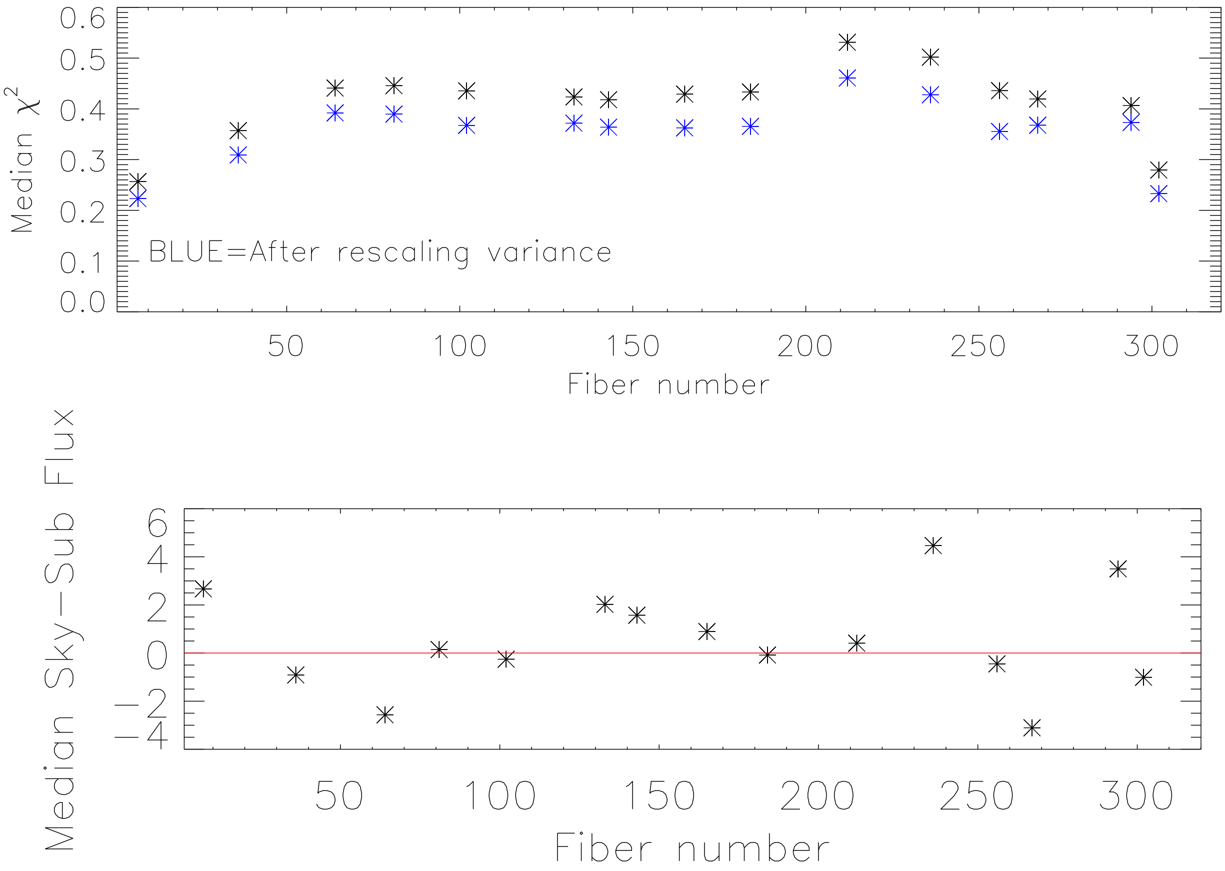

PLATE=0547 MJD=51959 sdR-r2-00008821.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]


PLATE=0547 MJD=51959 sdR-r2-00008821.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
8820
8840
8860
8880
8900
λ [A]

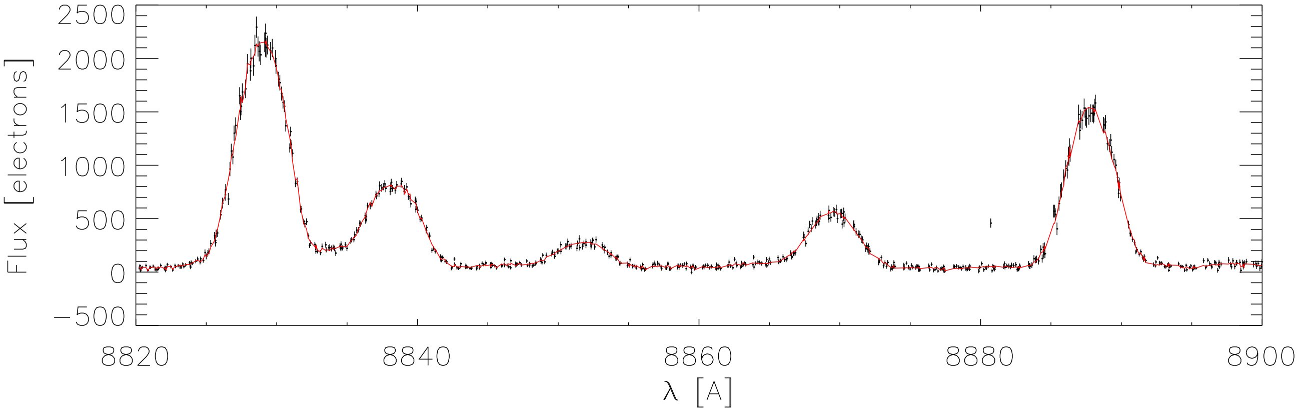
Number of sky fibers = 15

PLATE=0547 MJD=51959 sdR-r2-00008821.fit 1D Sky-subtraction Rescaled Errors

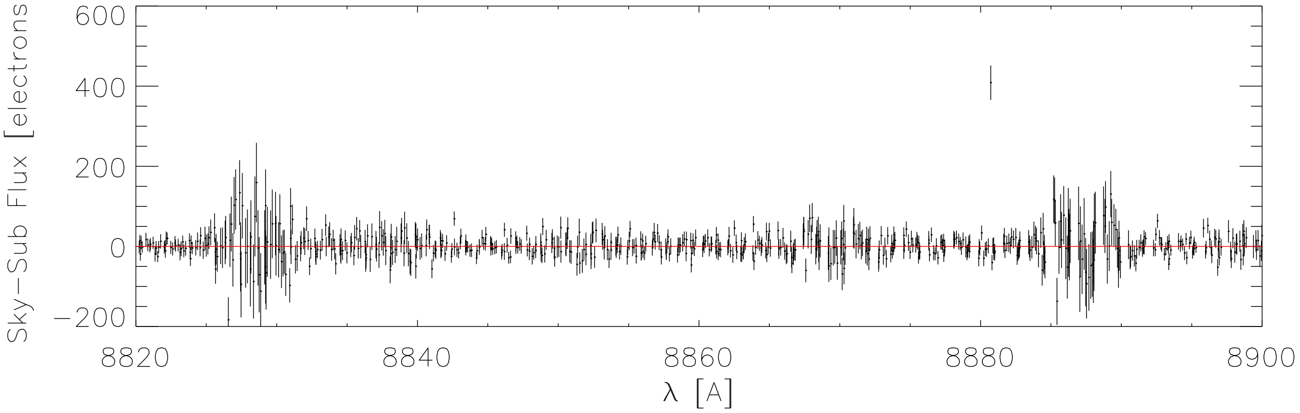


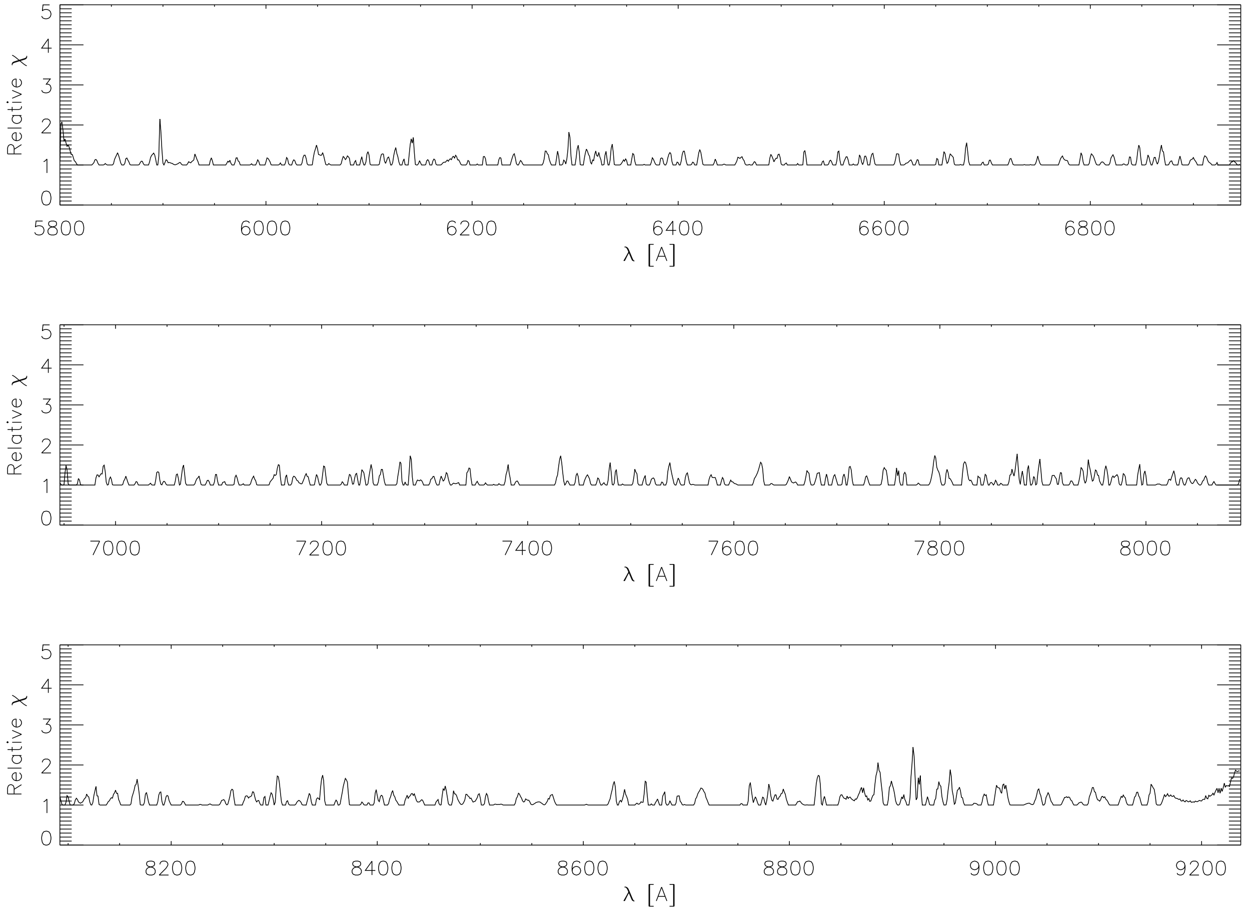
 PLATE=0547 MJD=51959 sdR-r2-00008821.fit 2D Sky-subtraction Sky Fiber

PLATE=0547 MJD=51959 sdR-r2-00008821.fit 2D Sky-subtraction Sky Fibers



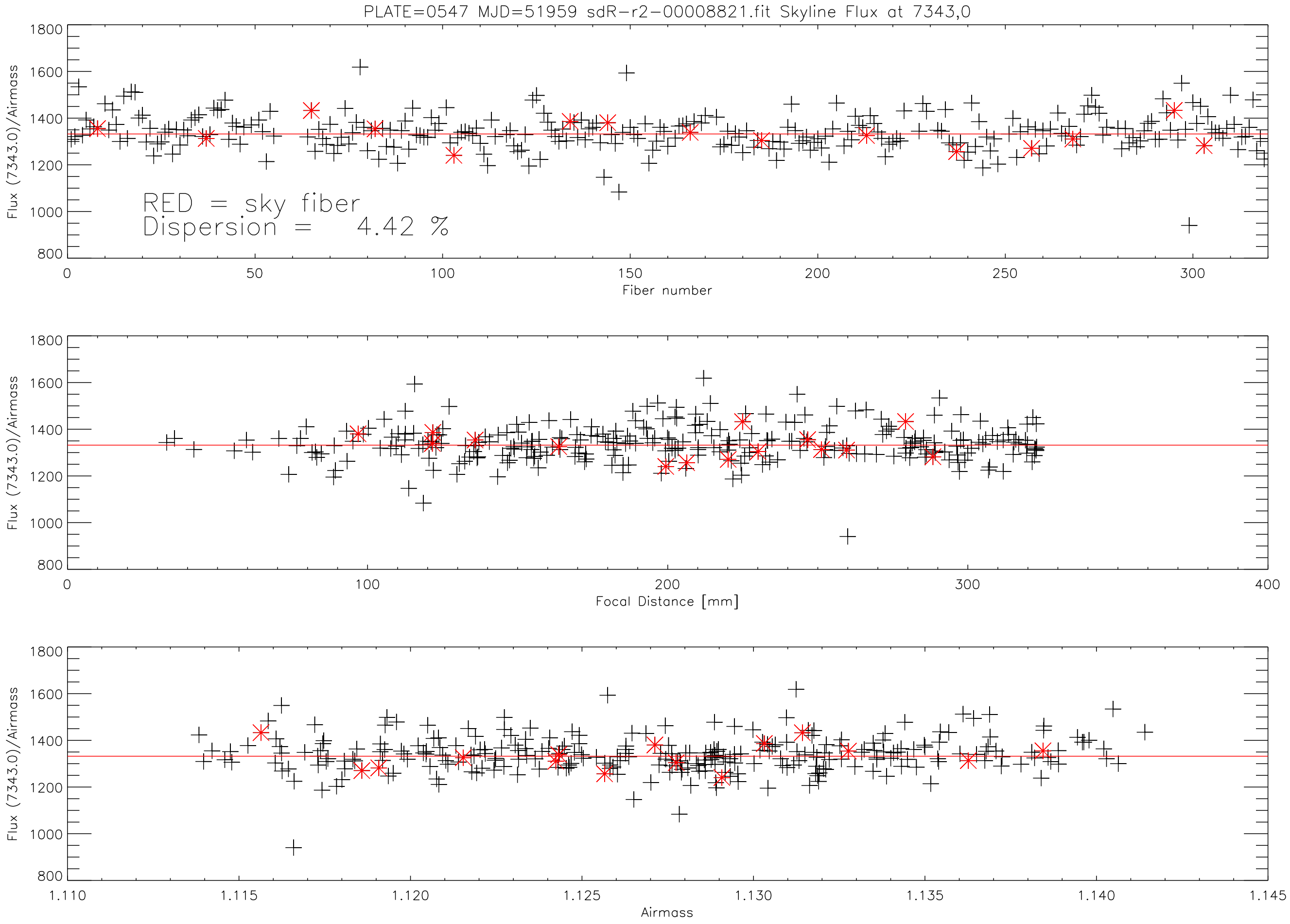
PLATE=0547 MJD=51959 sdR-r2-00008821.fit 2D Sky-subtraction Sky-subtracted Sky F

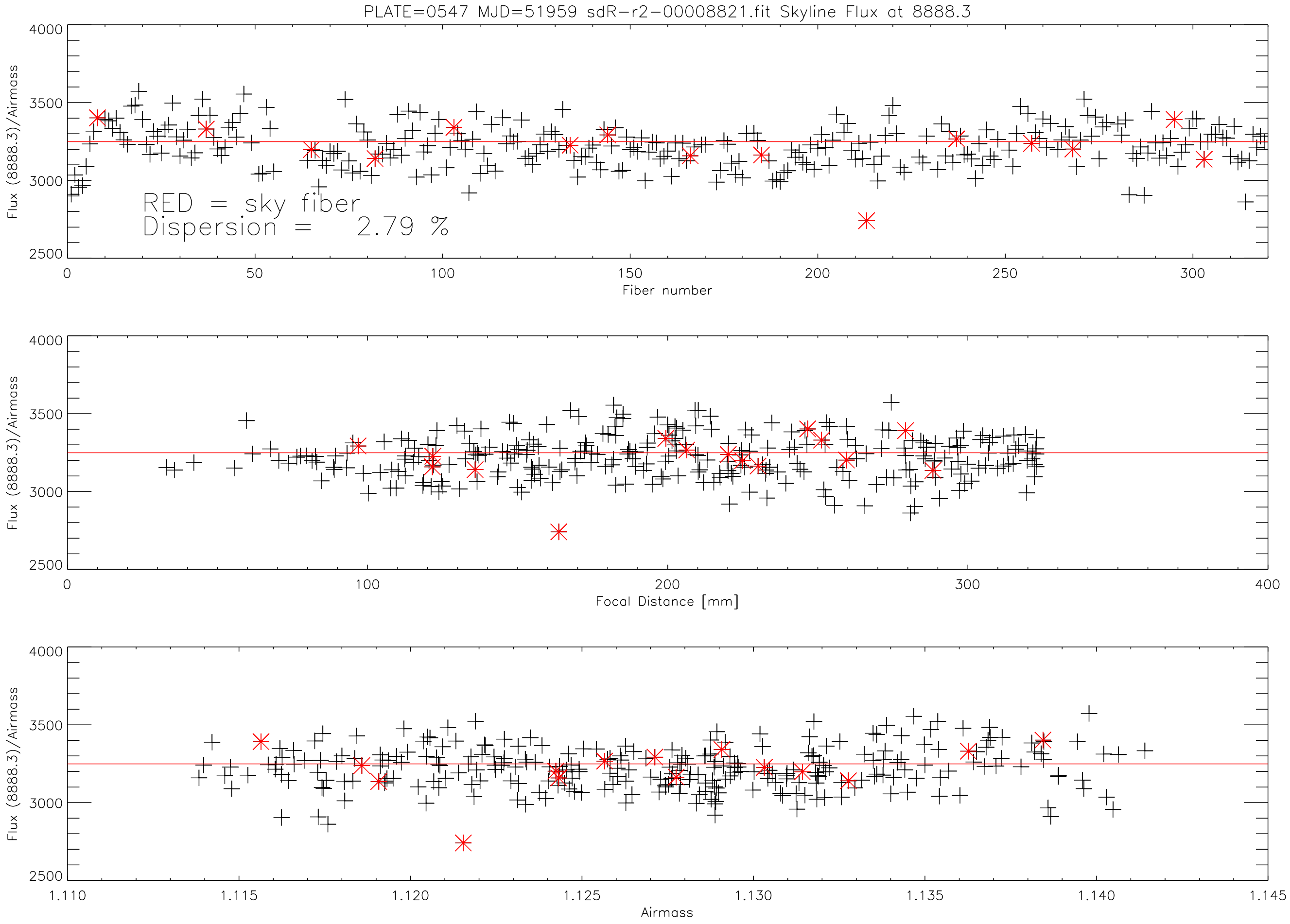


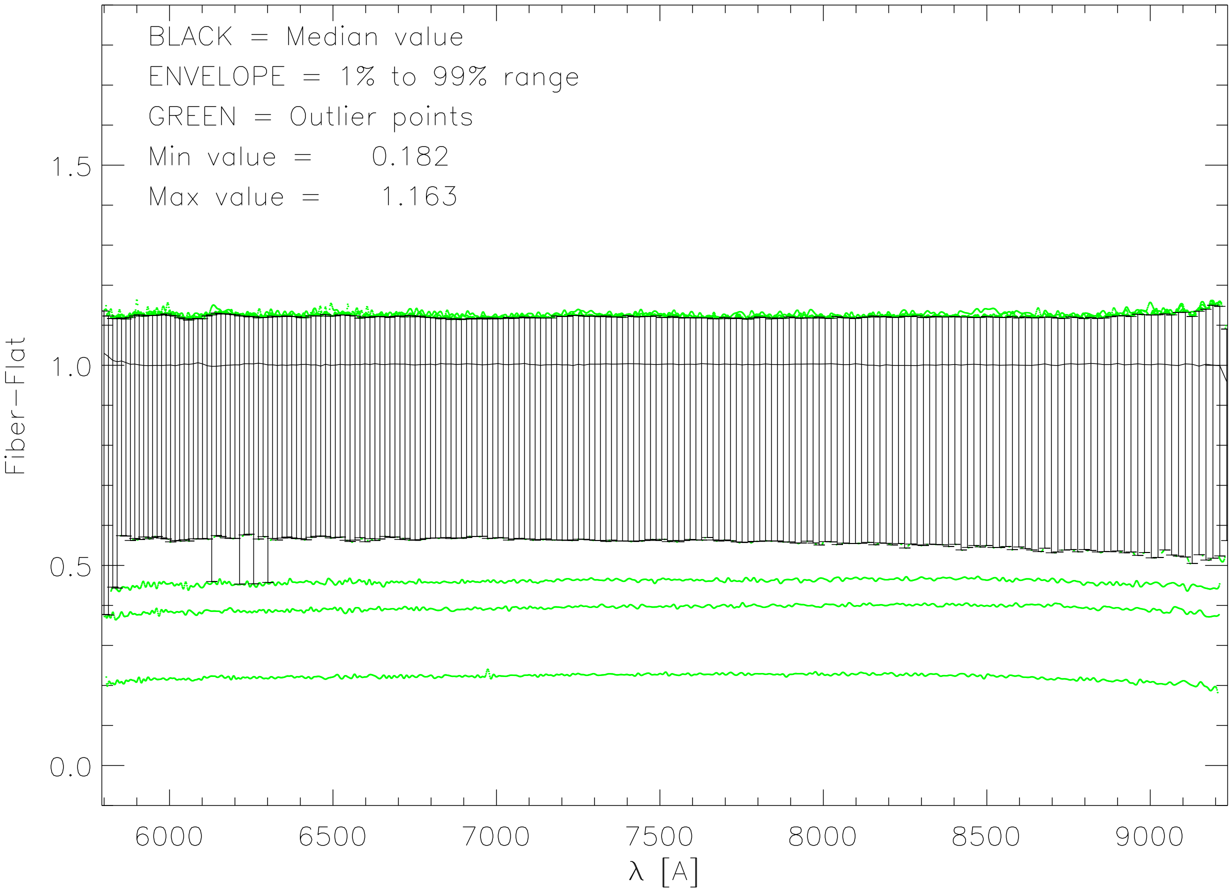


Number of sky fibers = 15

PLATE=0547 MJD=51959 sdR-r2-00008821.fit 2D Sky-subtraction Rescaled Errors

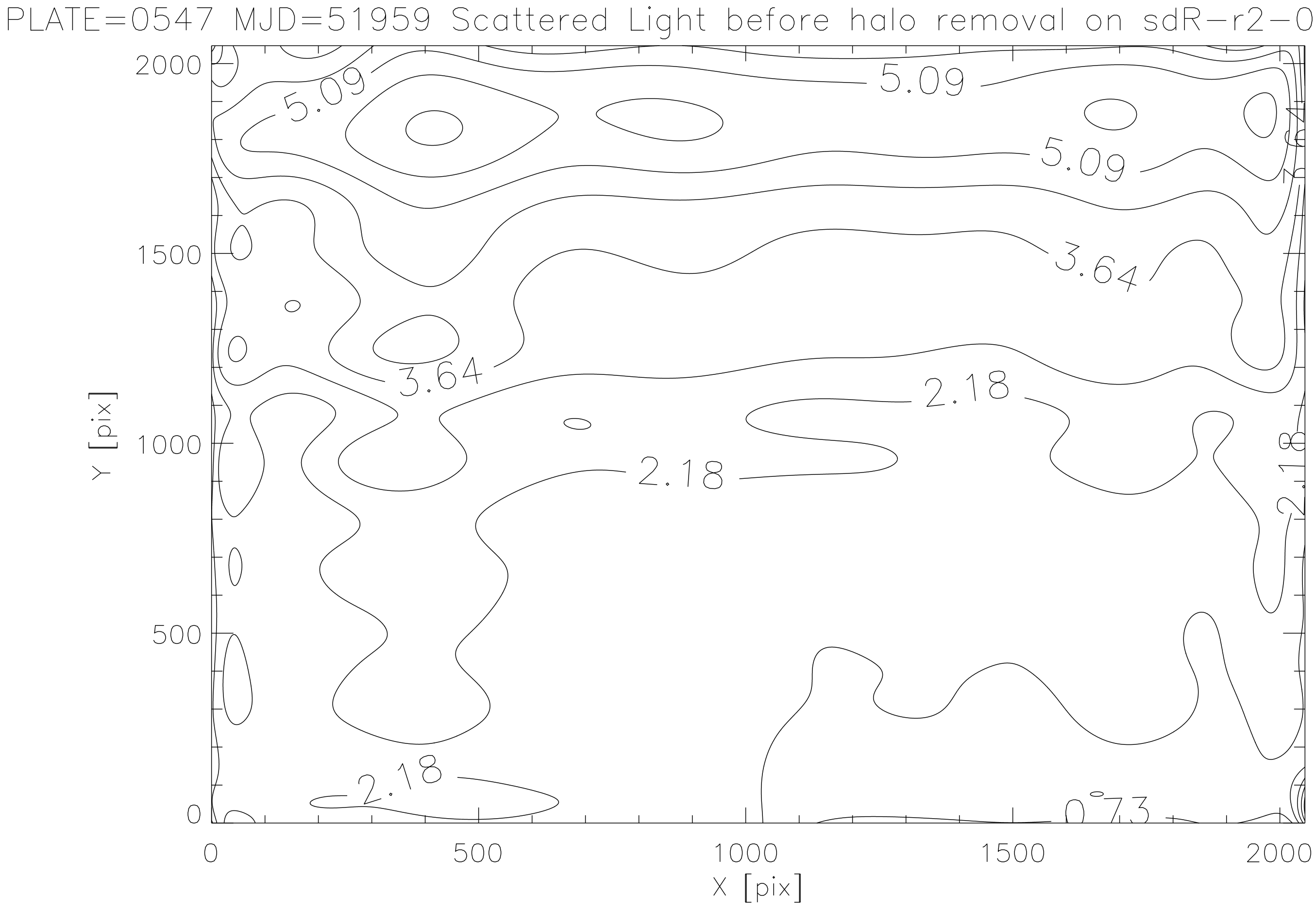

PLATE=0547 MJD=51959 sdR-r2-00008821.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
800
1000
1200
1400
1600
1800
RED = sky fiber
Dispersion = 4.42 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
800
1000
1200
1400
1600
1800
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
800
1000
1200
1400
1600
1800
1.110
1.115
1.120
1.125
1.130
1.135
1.140
1.145
Airmass

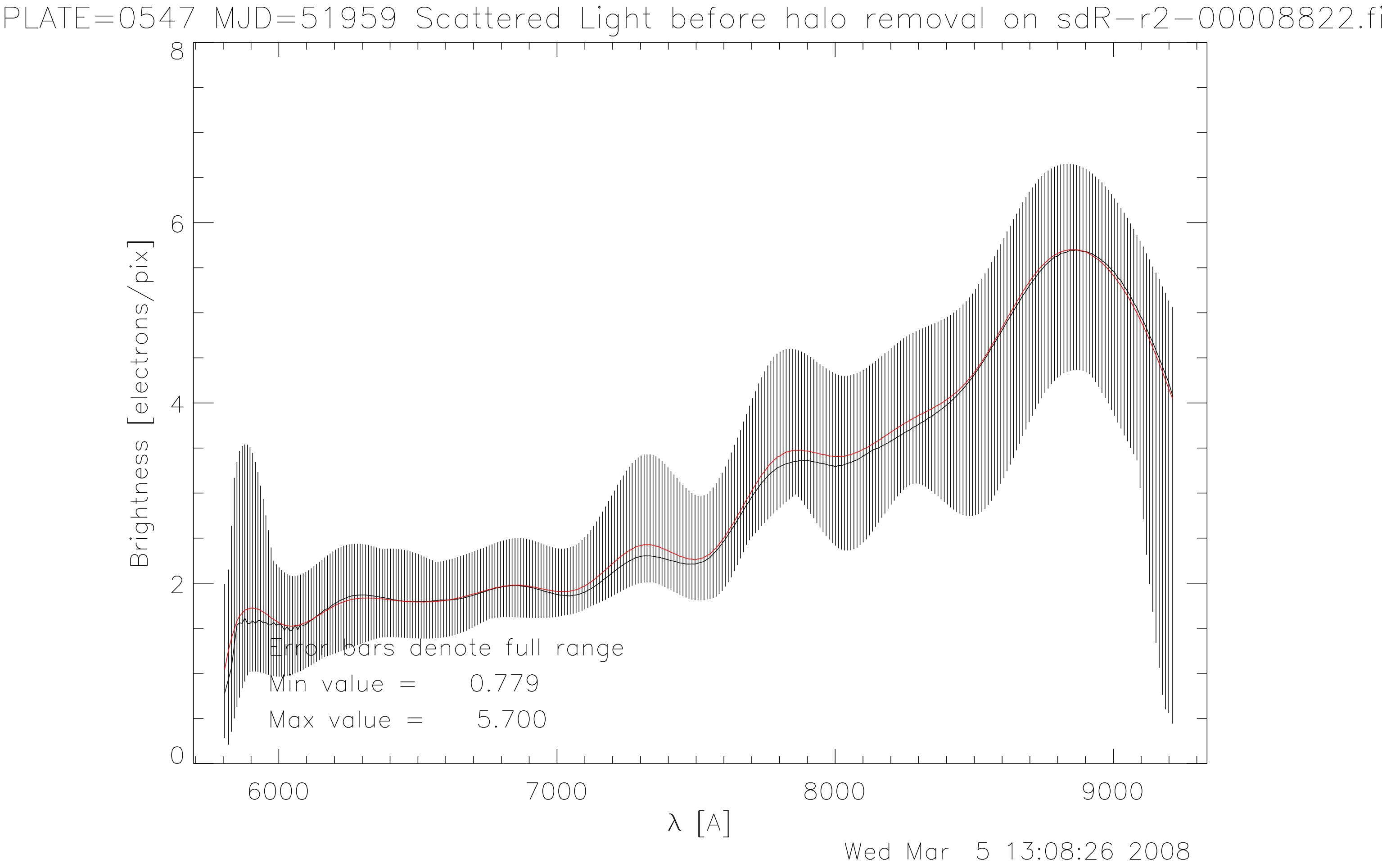

PLATE=0547 MJD=51959 sdR-r2-00008821.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
4000
3500
3000
2500
RED = sky fiber
Dispersion = 2.79 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
4000
3500
3000
2500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
4000
3500
3000
2500
1.110
1.115
1.120
1.125
1.130
1.135
1.140
1.145
Airmass

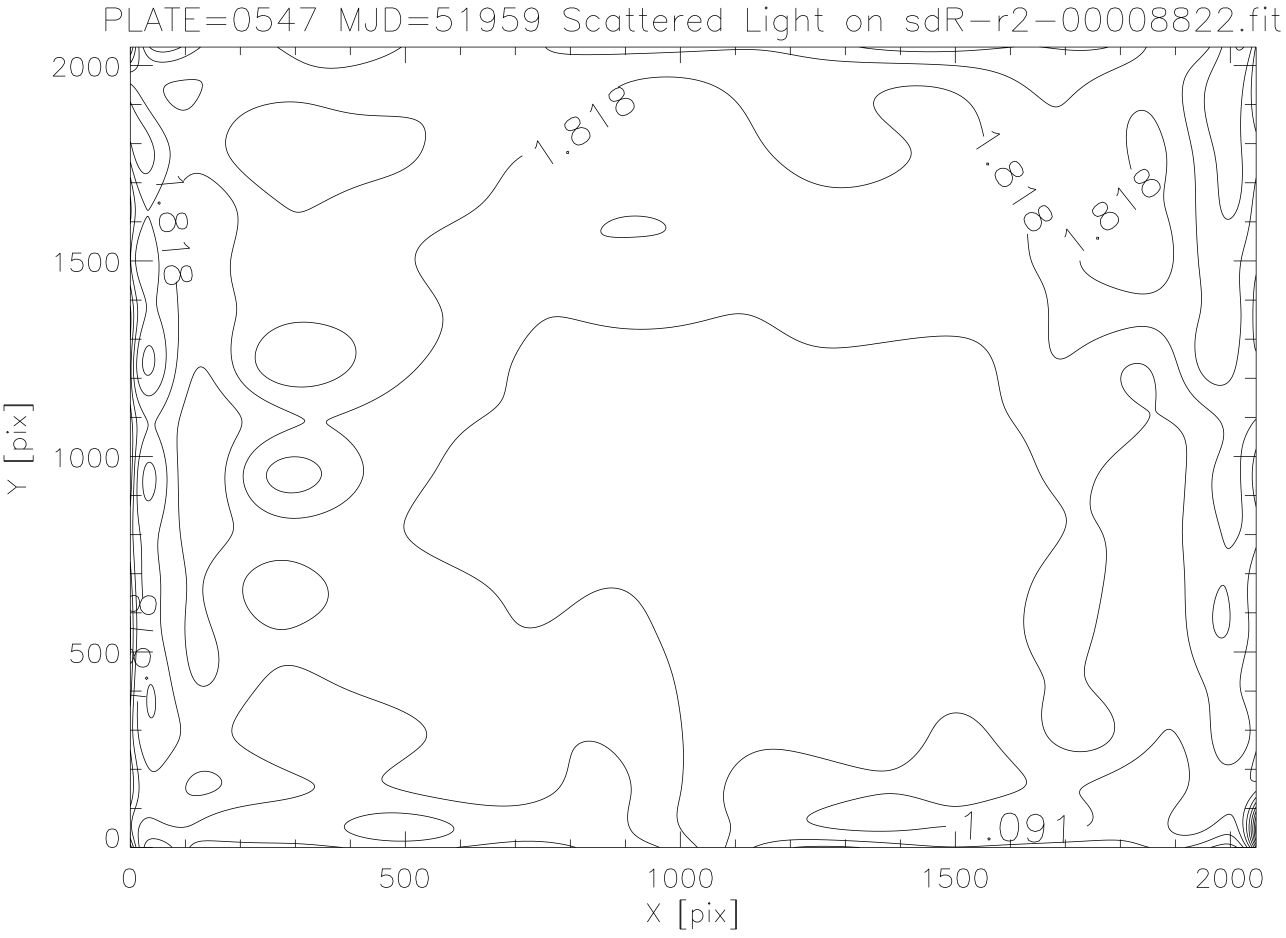


PLATE=0547 MJD=51959 Fiber-Flats for sdR-r2-00008823.fit

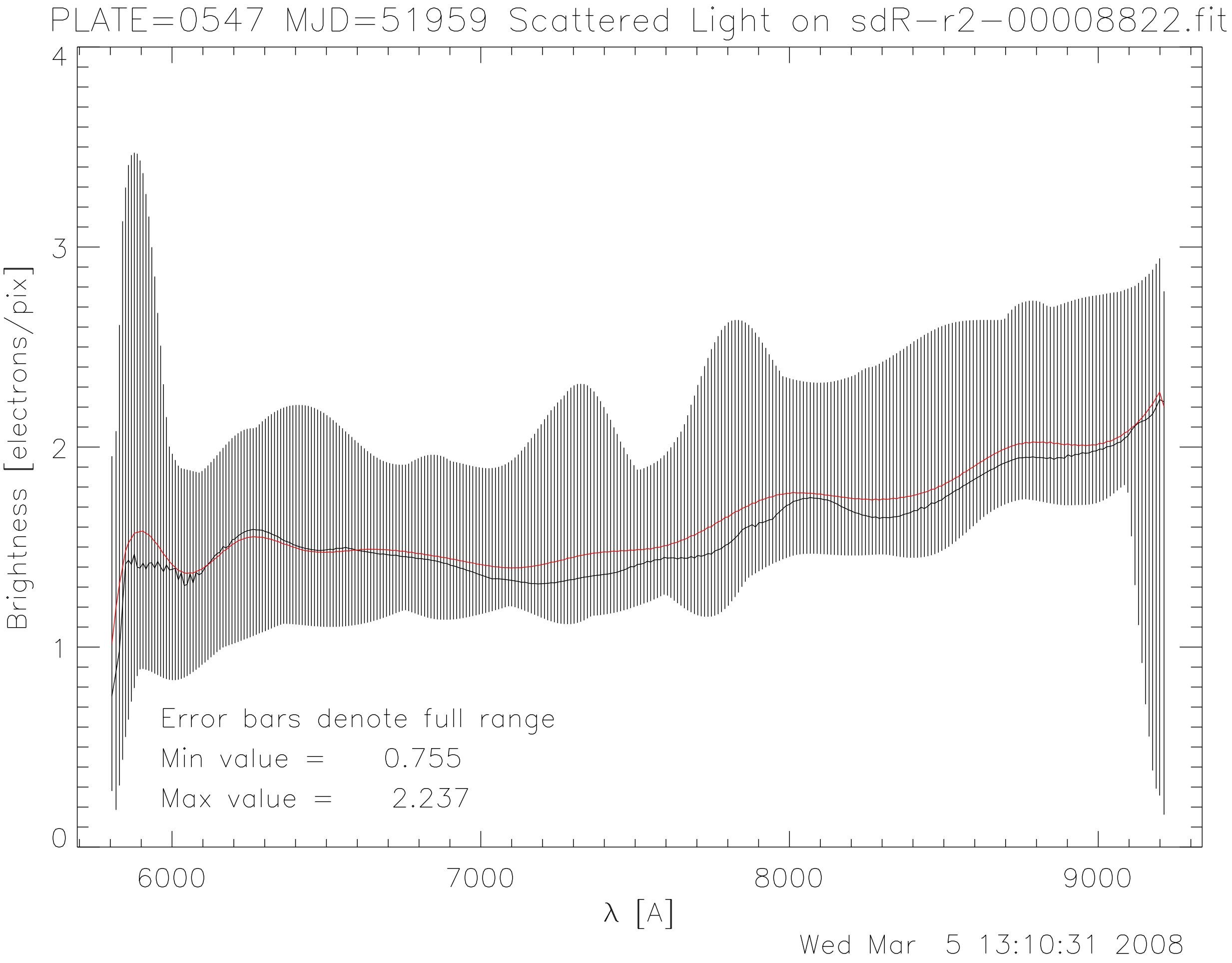
Wed Mar 5 13:07:50 2008

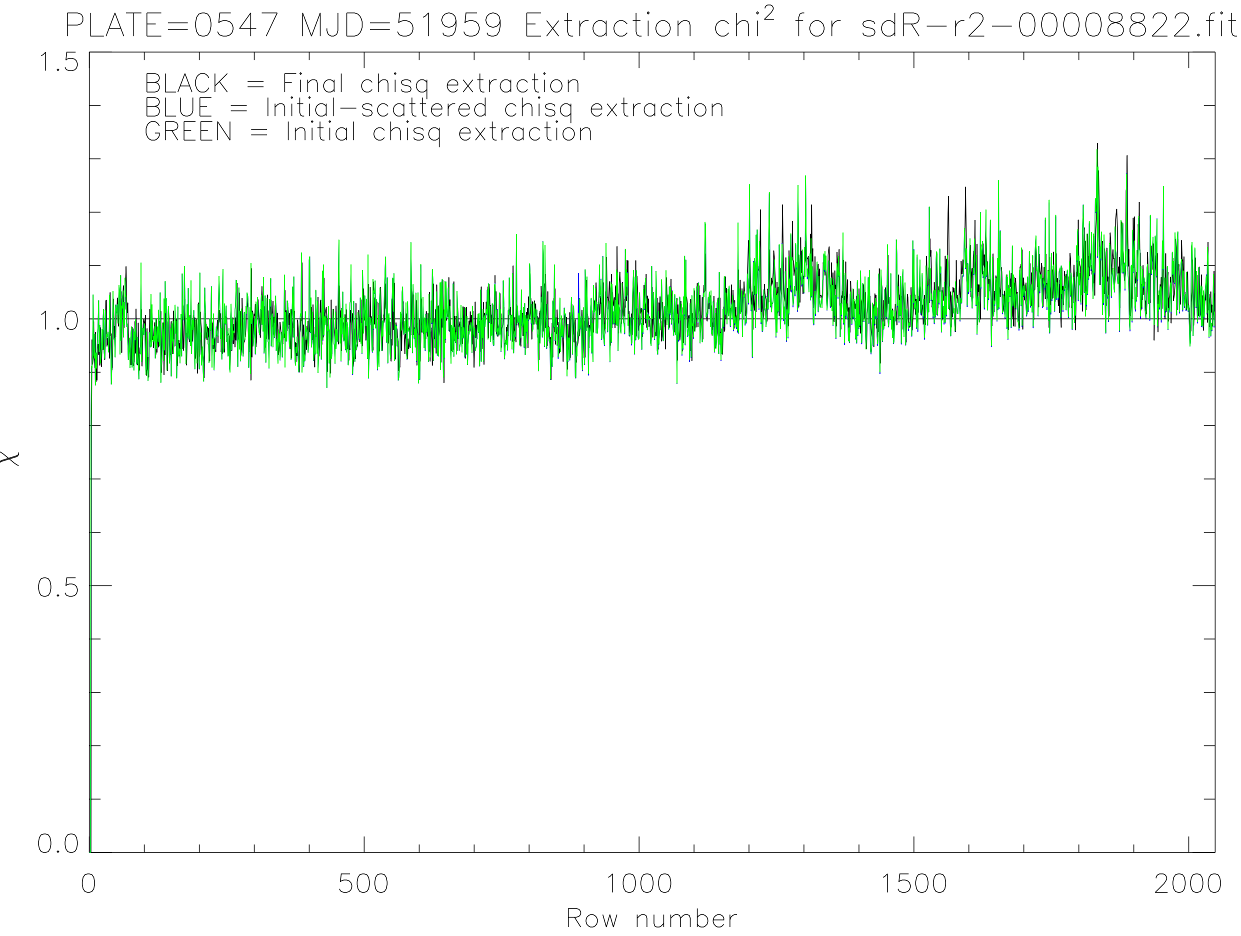

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008822.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
5.09
5.09
5.09
3.64
3.64
3.64
2.18
2.18
2.18
2.18
0.73

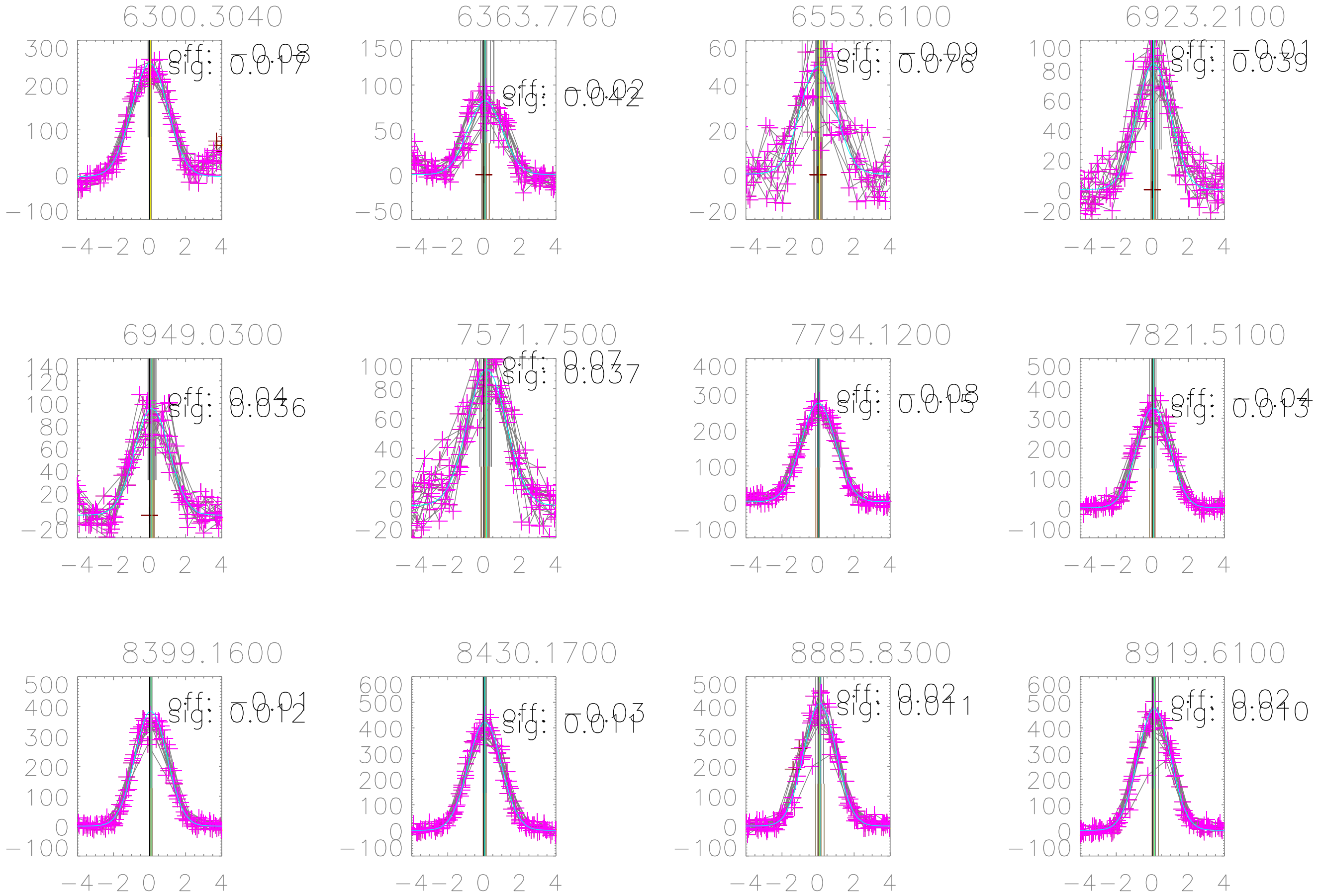

PLATE=0547 MJD=51959 Scattered Light before halo removal on sdR-r2-00008822.fi
Brightness [electrons/pix]
0
2
4
6
8
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   0.779
Max value =   5.700
Wed Mar 5 13:08:26 2008

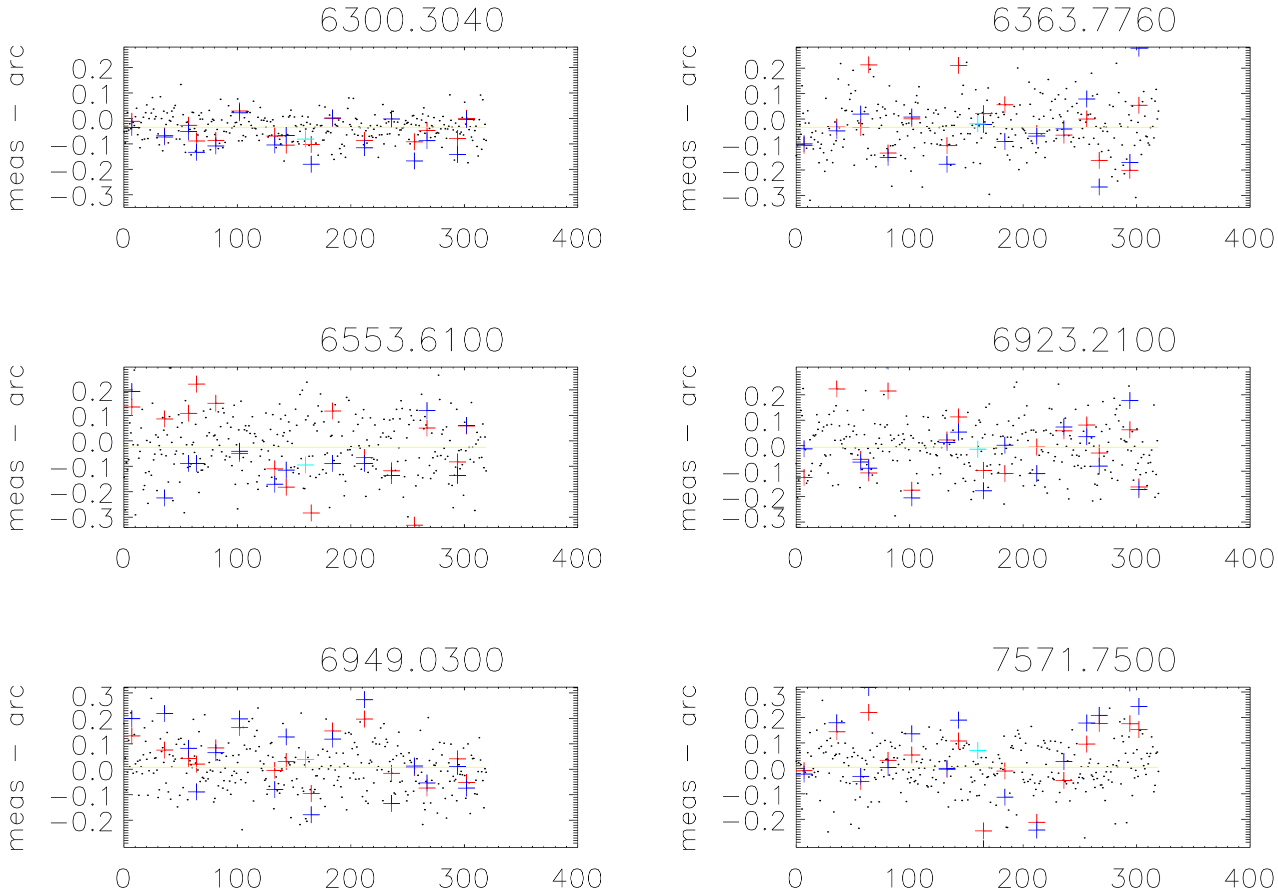


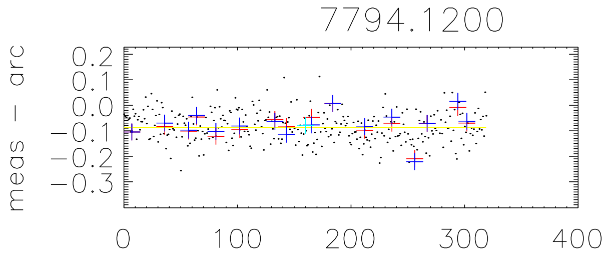
PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008822.fit

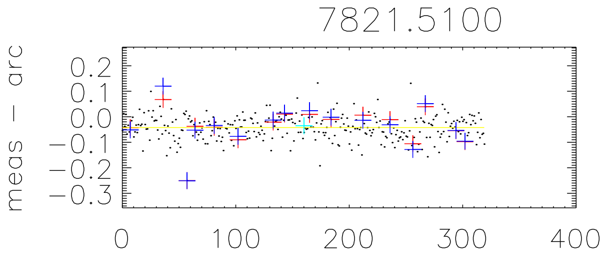

PLATE=0547 MJD=51959 Scattered Light on sdR-r2-00008822.fit
Brightness [electrons/pix]
0
1
2
3
4
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 0.755
Max value = 2.237
Wed Mar 5 13:10:31 2008

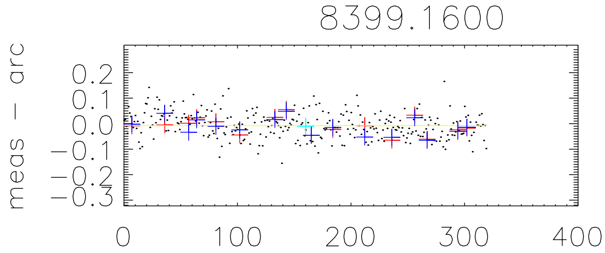

PLATE=0547 MJD=51959 Extraction chi^2 for sdR-r2-00008822.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0.0
0.5
1.0
1.5
0
500
1000
1500
2000
Row number

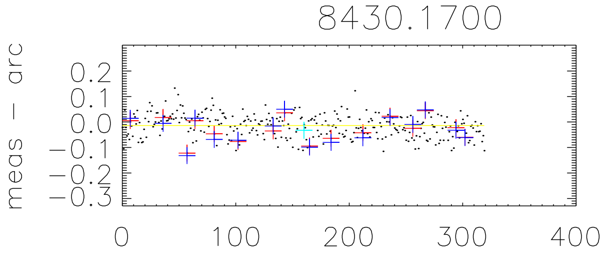

6300.3040
off: −0.08
sig: 0.017
6363.7760
off: −0.02
sig: 0.042
6553.6100
off: −0.09
sig: 0.076
6923.2100
off: −0.01
sig: 0.039
6949.0300
off: 0.04
sig: 0.036
7571.7500
off: 0.07
sig: 0.037
7794.1200
off: −0.08
sig: 0.015
7821.5100
off: −0.04
sig: 0.013
8399.1600
off: −0.01
sig: 0.012
8430.1700
off: −0.03
sig: 0.011
8885.8300
off: 0.02
sig: 0.011
8919.6100
off: 0.02
sig: 0.010
−4 −2 0 2 4

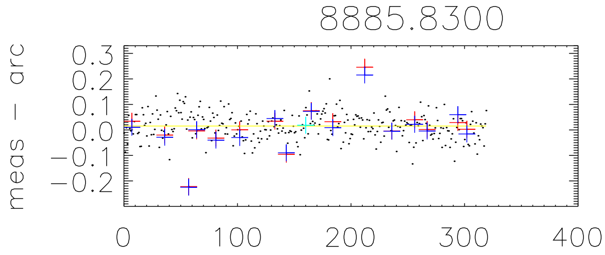

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas − arc
−0.3
−0.2
−0.1
0.0
0.1
0.2
0.3
0
100
200
300
400

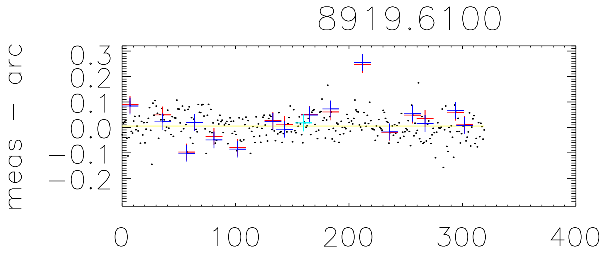

7794.1200

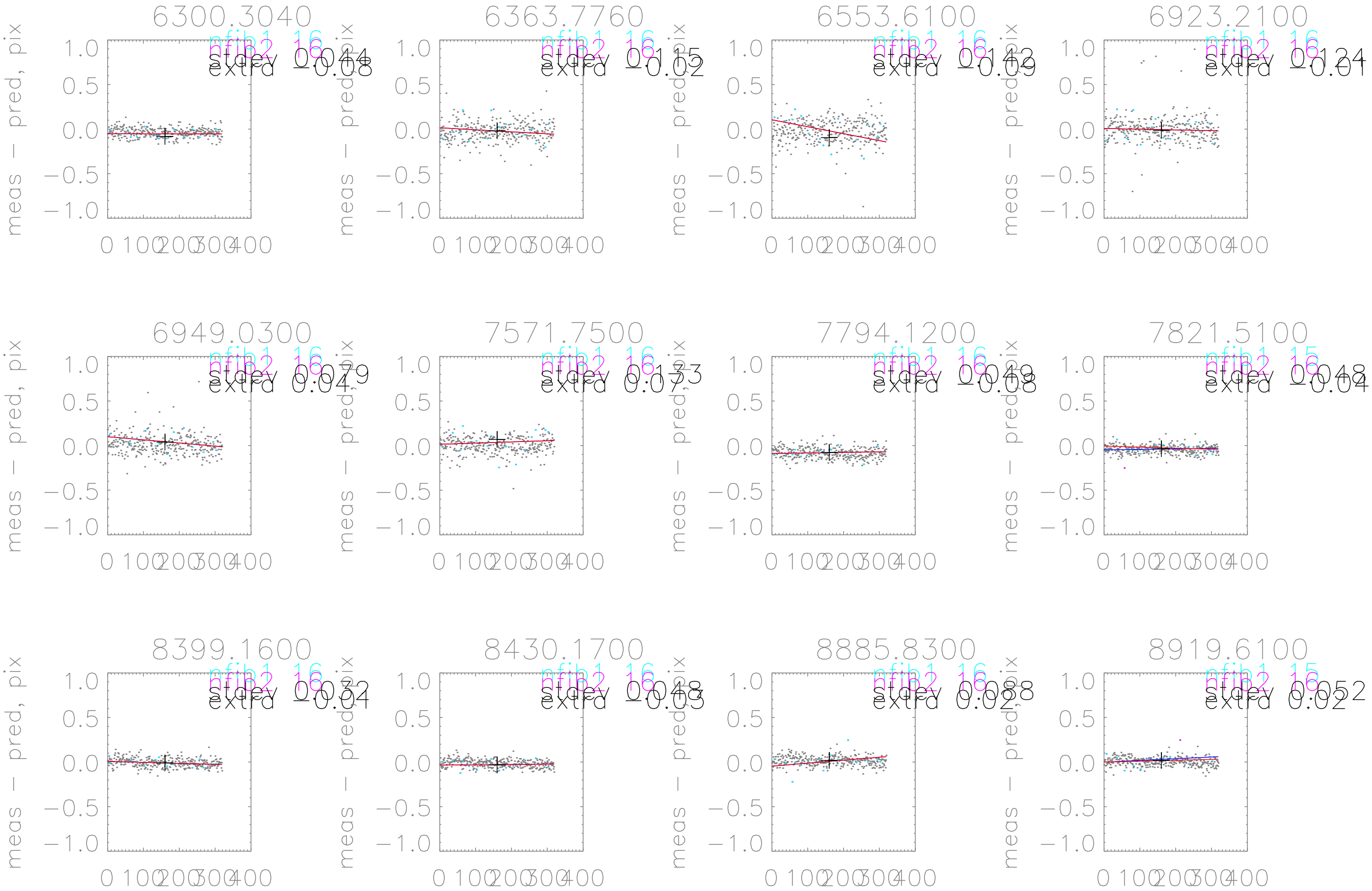

7821.5100

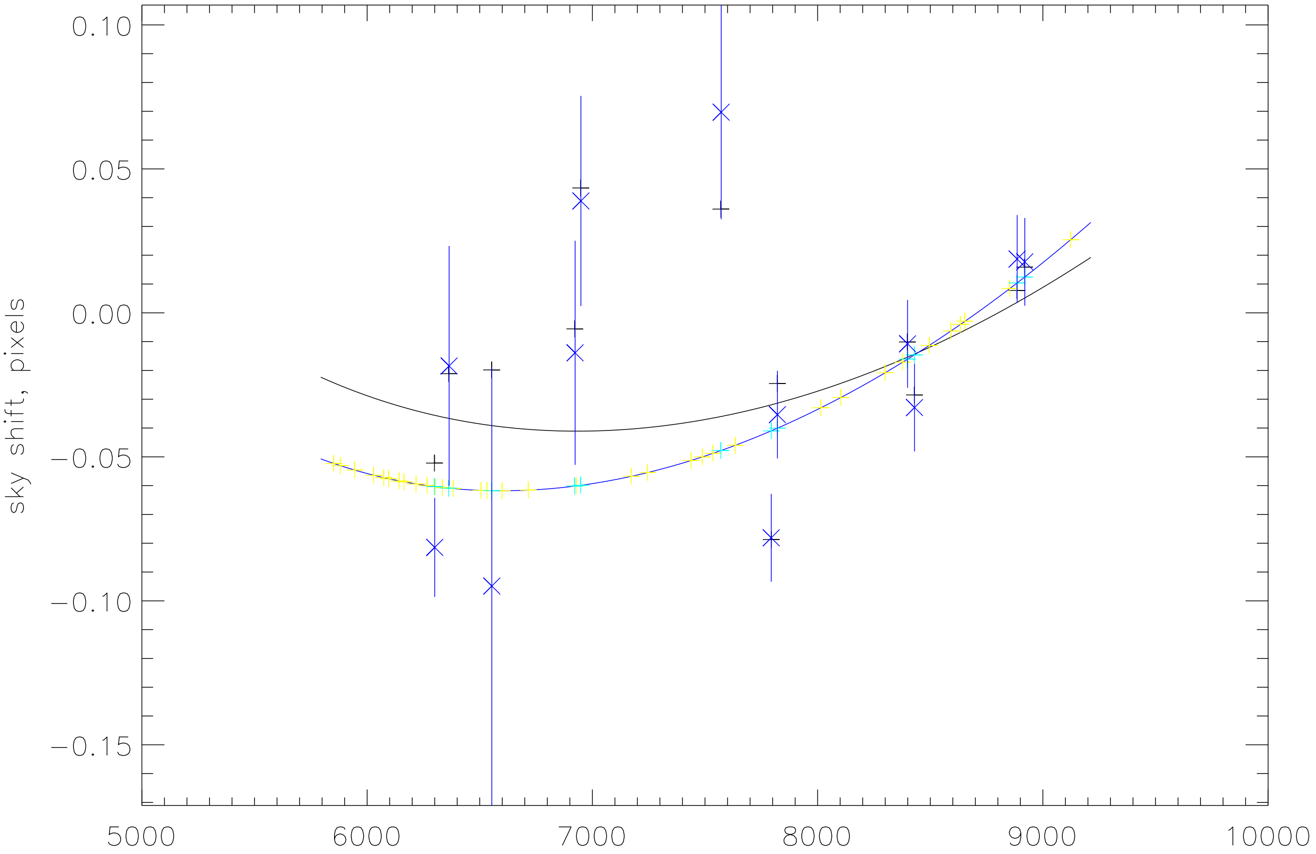

8399.1600

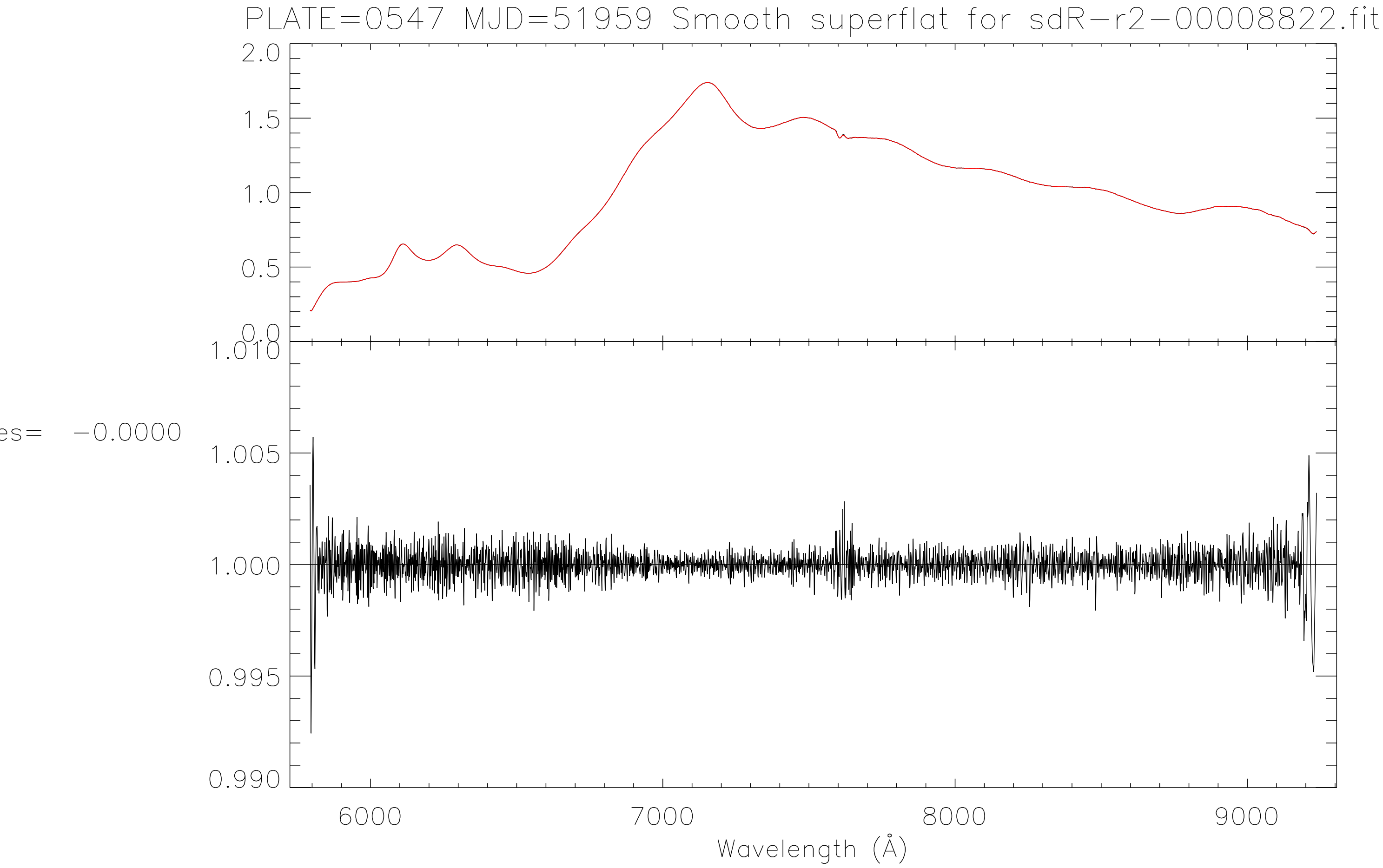

8430.1700


8885.8300

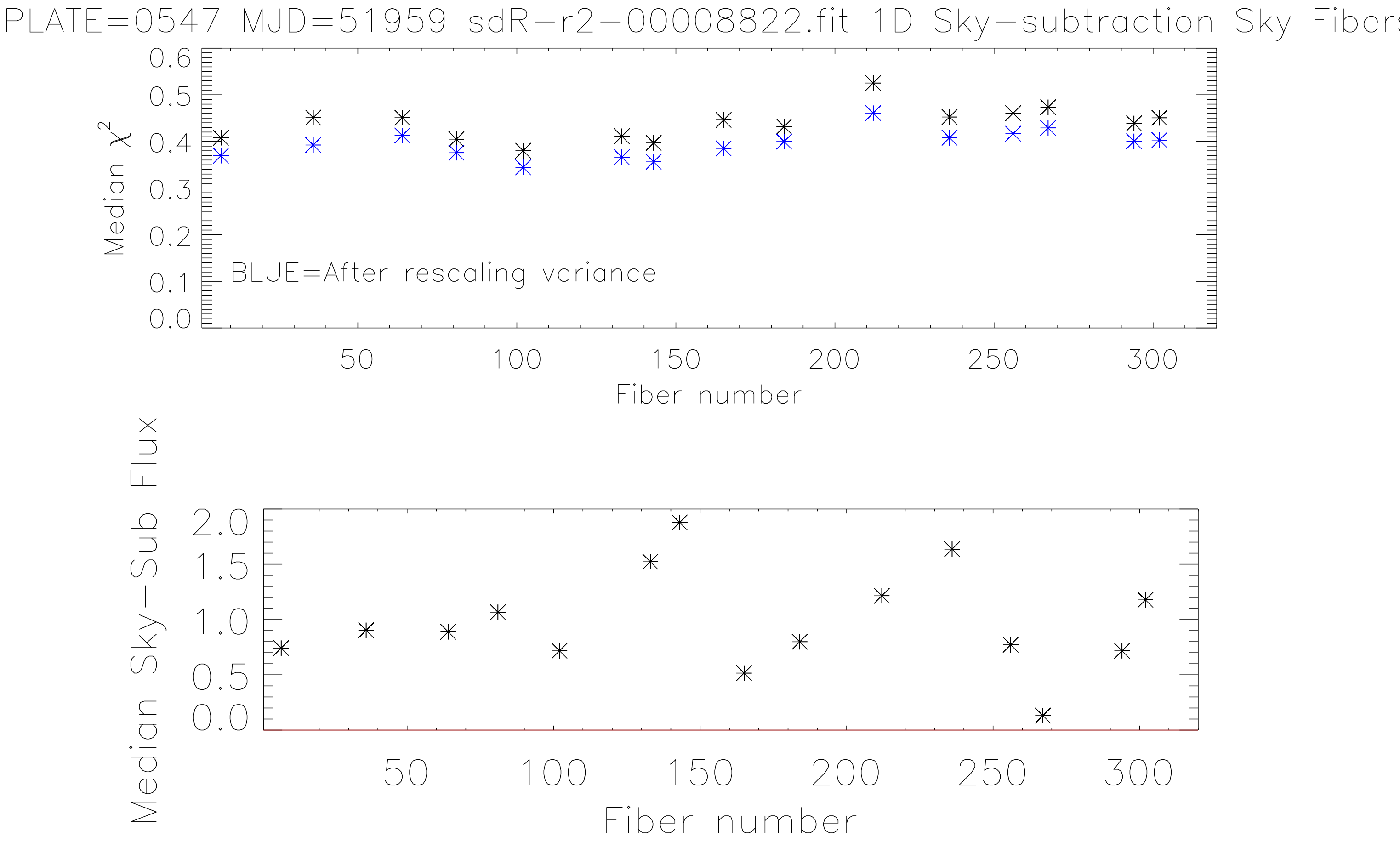

8919.6100


6300.3040
nfib1 16
nfib2 16
stdev 0.044
extrd −0.08
6363.7760
nfib1 16
nfib2 16
stdev 0.115
extrd −0.02
6553.6100
nfib1 16
nfib2 16
stdev 0.142
extrd −0.09
6923.2100
nfib1 16
nfib2 16
stdev 0.124
extrd −0.01
6949.0300
nfib1 16
nfib2 16
stdev 0.079
extrd 0.04
7571.7500
nfib1 16
nfib2 16
stdev 0.133
extrd 0.07
7794.1200
nfib1 16
nfib2 16
stdev 0.049
extrd −0.08
7821.5100
nfib1 15
nfib2 16
stdev 0.048
extrd −0.04
8399.1600
nfib1 16
nfib2 16
stdev 0.032
extrd −0.04
8430.1700
nfib1 16
nfib2 16
stdev 0.048
extrd −0.03
8885.8300
nfib1 16
nfib2 16
stdev 0.088
extrd 0.02
8919.6100
nfib1 15
nfib2 16
stdev 0.052
extrd 0.02
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

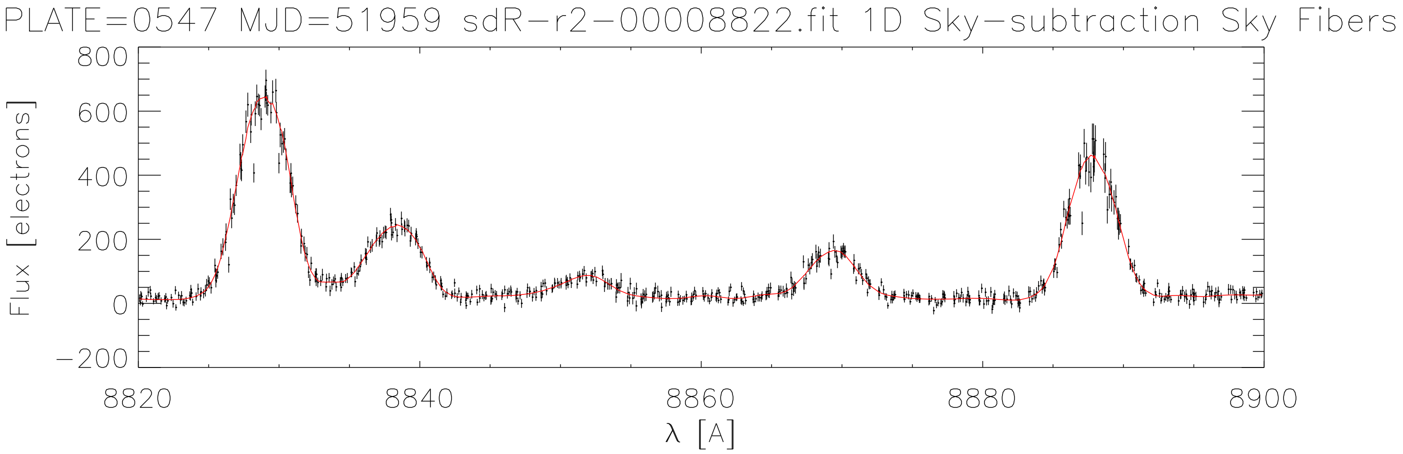

sky shift, pixels
0.10
0.05
0.00
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000

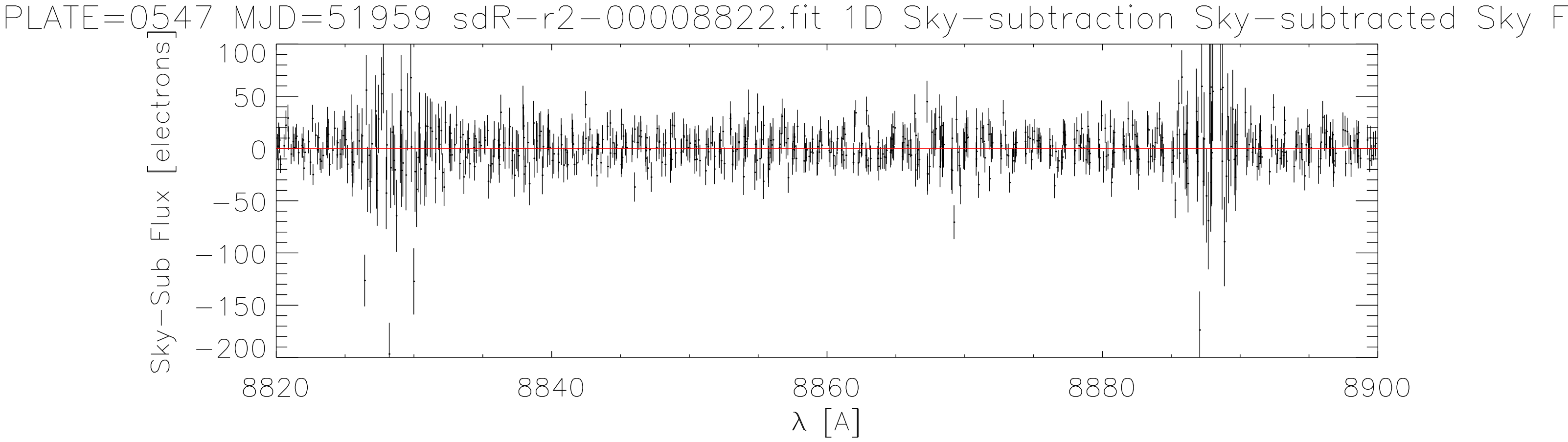


PLATE=0547 MJD=51959 Smooth superflat for sdR-r2-00008822.fit



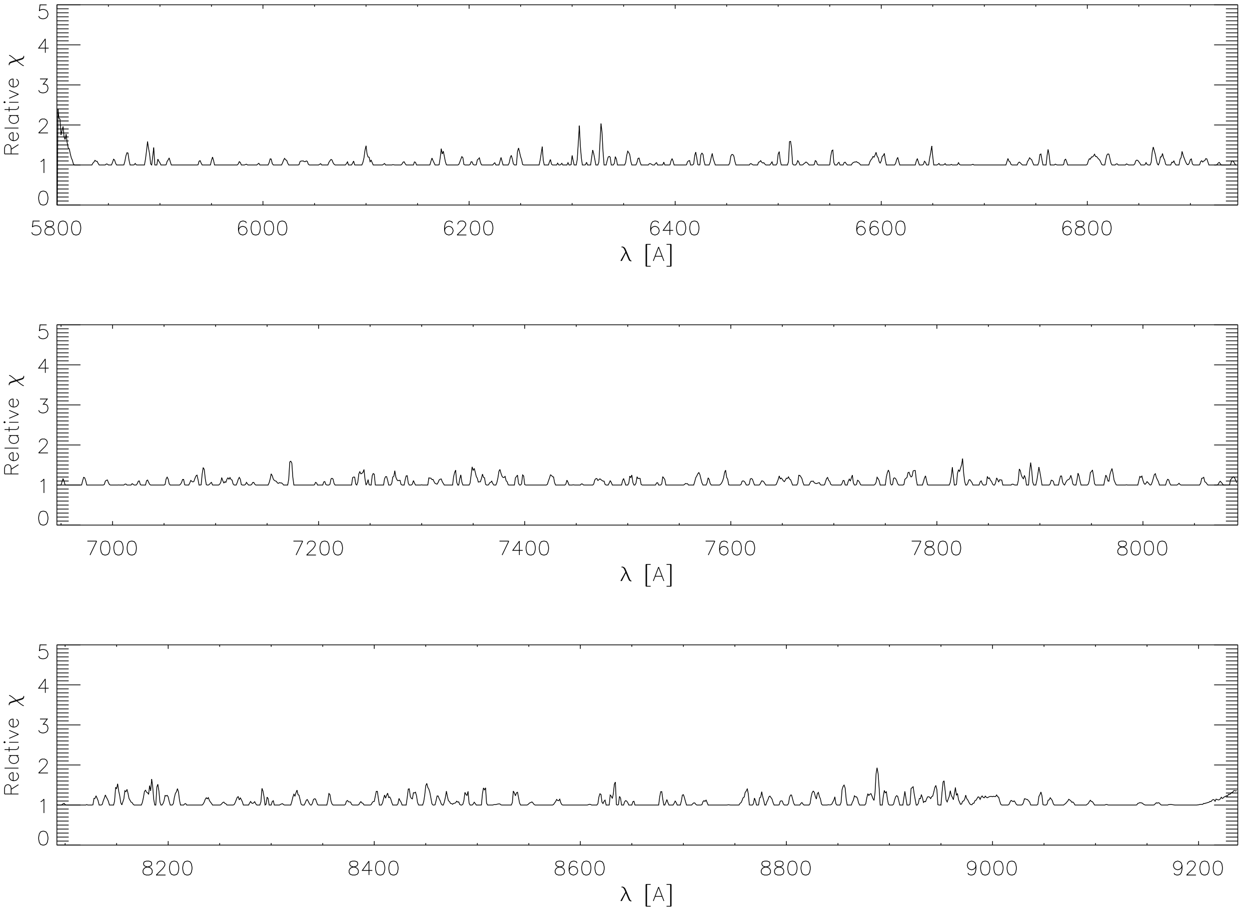
PLATE=0547 MJD=51959 sdR-r2-00008822.fit 1D Sky-subtraction Sky Fibers


PLATE=0547 MJD=51959 sdR-r2-00008822.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
800
600
400
200
0
−200
8820
8840
8860
8880
8900
λ [A]

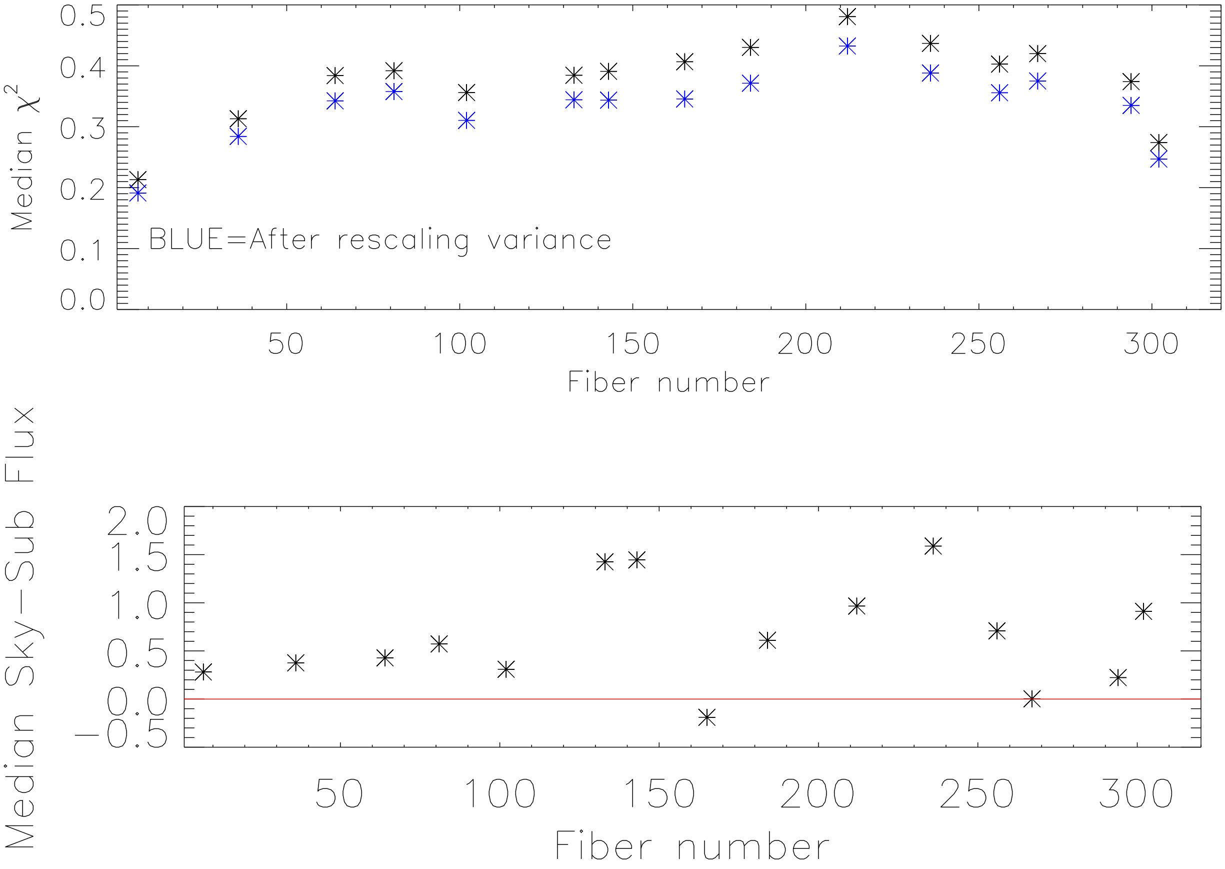

PLATE=0547 MJD=51959 sdR-r2-00008822.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
100
50
0
−50
−100
−150
−200
8820
8840
8860
8880
8900
λ [A]

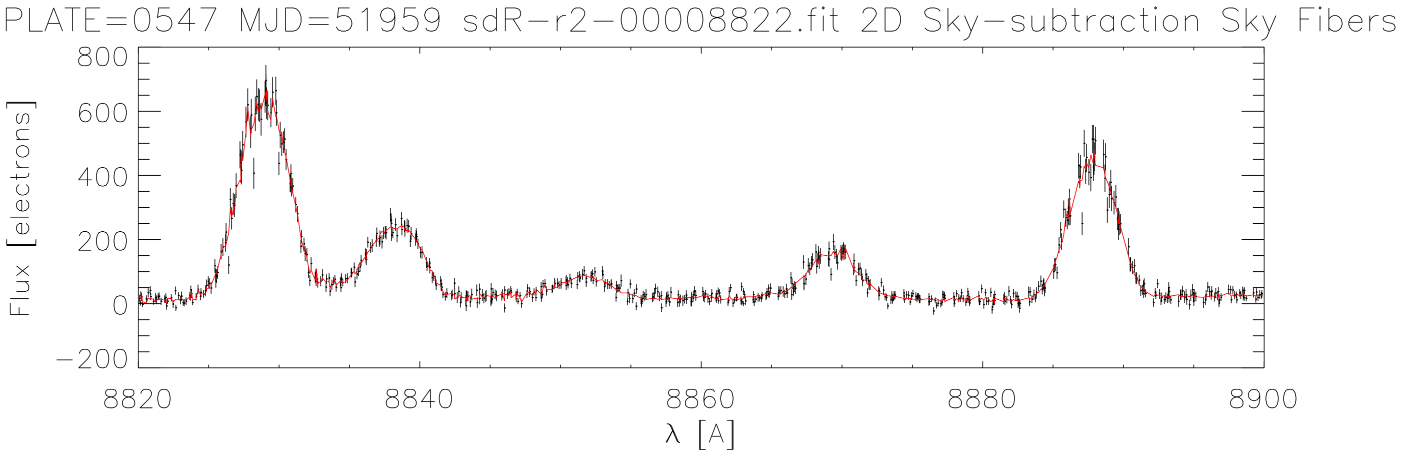
Number of sky fibers = 15

PLATE=0547 MJD=51959 sdR-r2-00008822.fit 1D Sky-subtraction Rescaled Errors

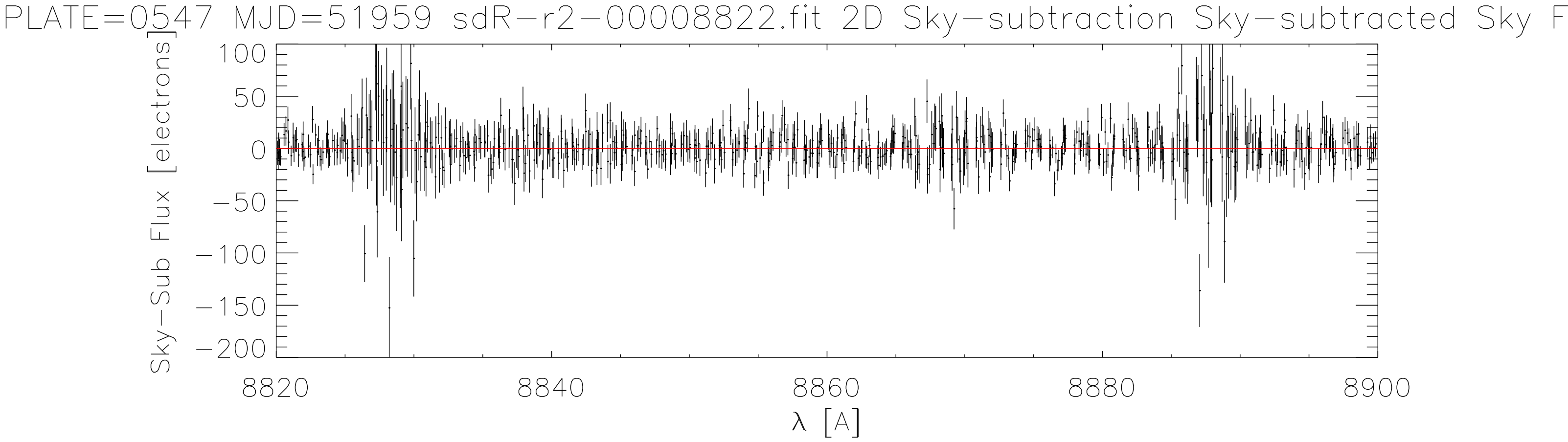


PLATE=0547 MJD=51959 sdR-r2-00008822.fit 2D Sky-subtraction Sky Fiber





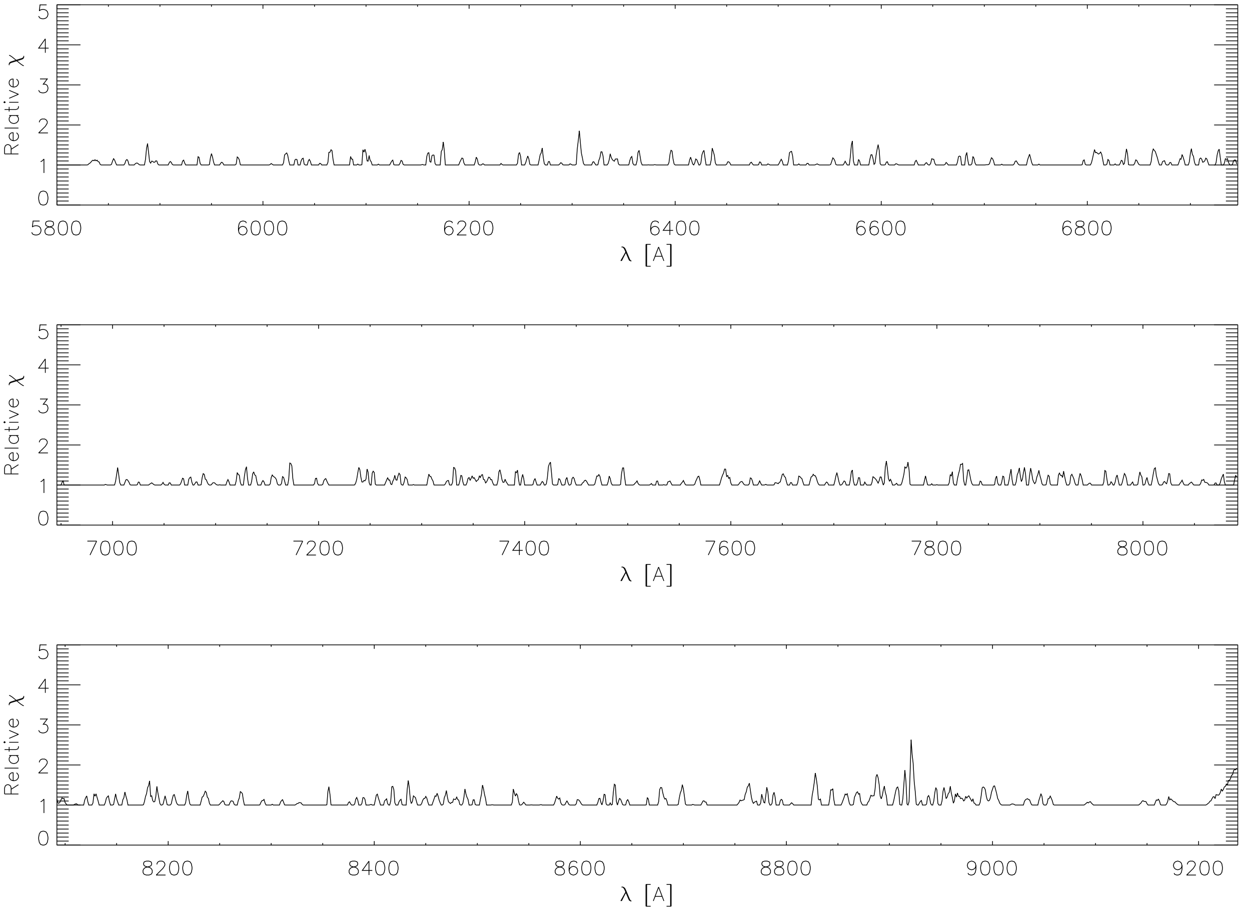
PLATE=0547 MJD=51959 sdR-r2-00008822.fit 2D Sky-subtraction Sky Fibers

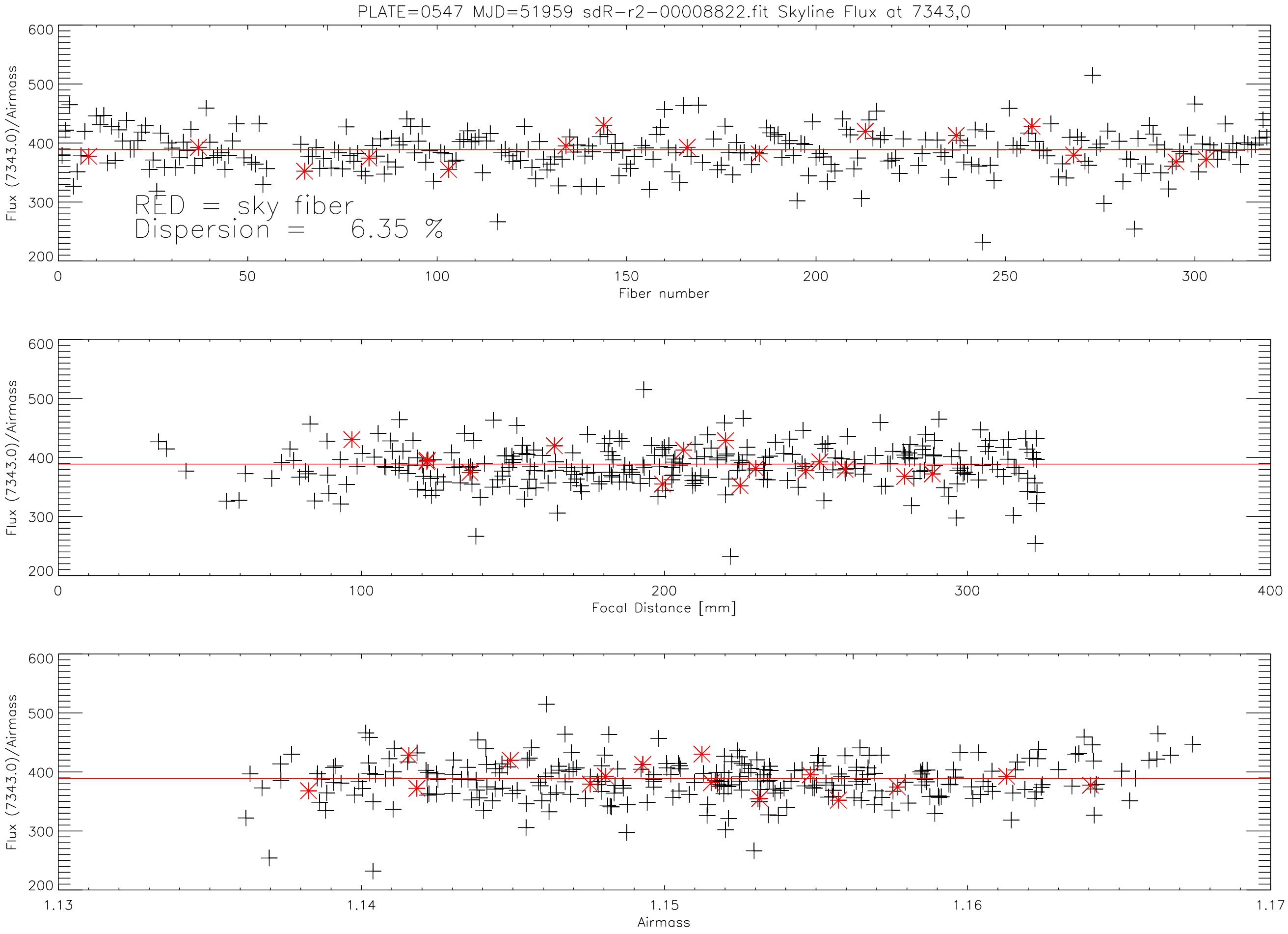


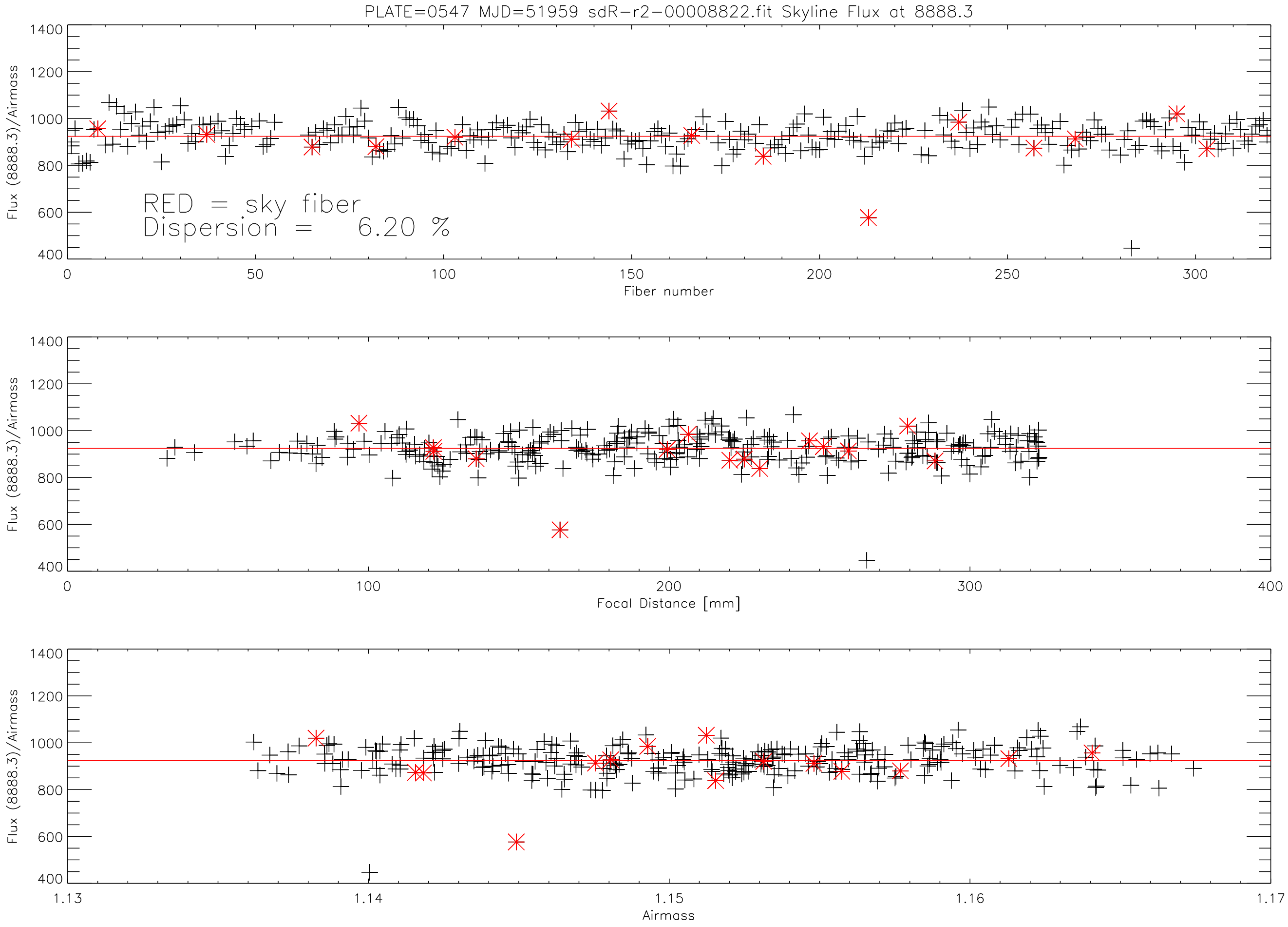
PLATE=0547 MJD=51959 sdR-r2-00008822.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 15

PLATE=0547 MJD=51959 sdR-r2-00008822.fit 2D Sky-subtraction Rescaled Errors




PLATE=0547 MJD=51959 sdR-r2-00008822.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
600
500
400
300
200
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 6.35 %
Flux (7343.0)/Airmass
600
500
400
300
200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
600
500
400
300
200
1.13
1.14
1.15
1.16
1.17
Airmass


PLATE=0547 MJD=51959 sdR-r2-00008822.fit Skyline Flux at 8888.3