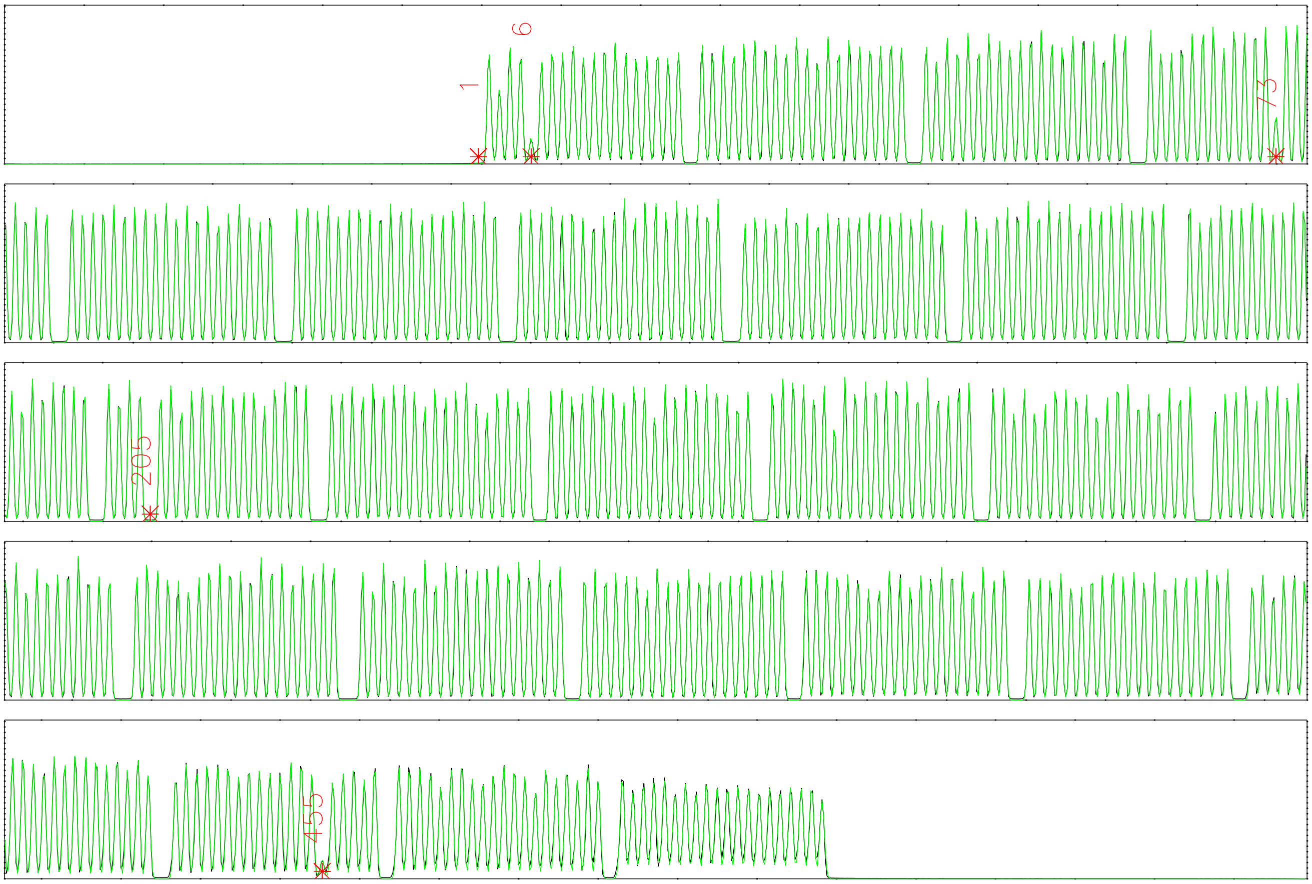
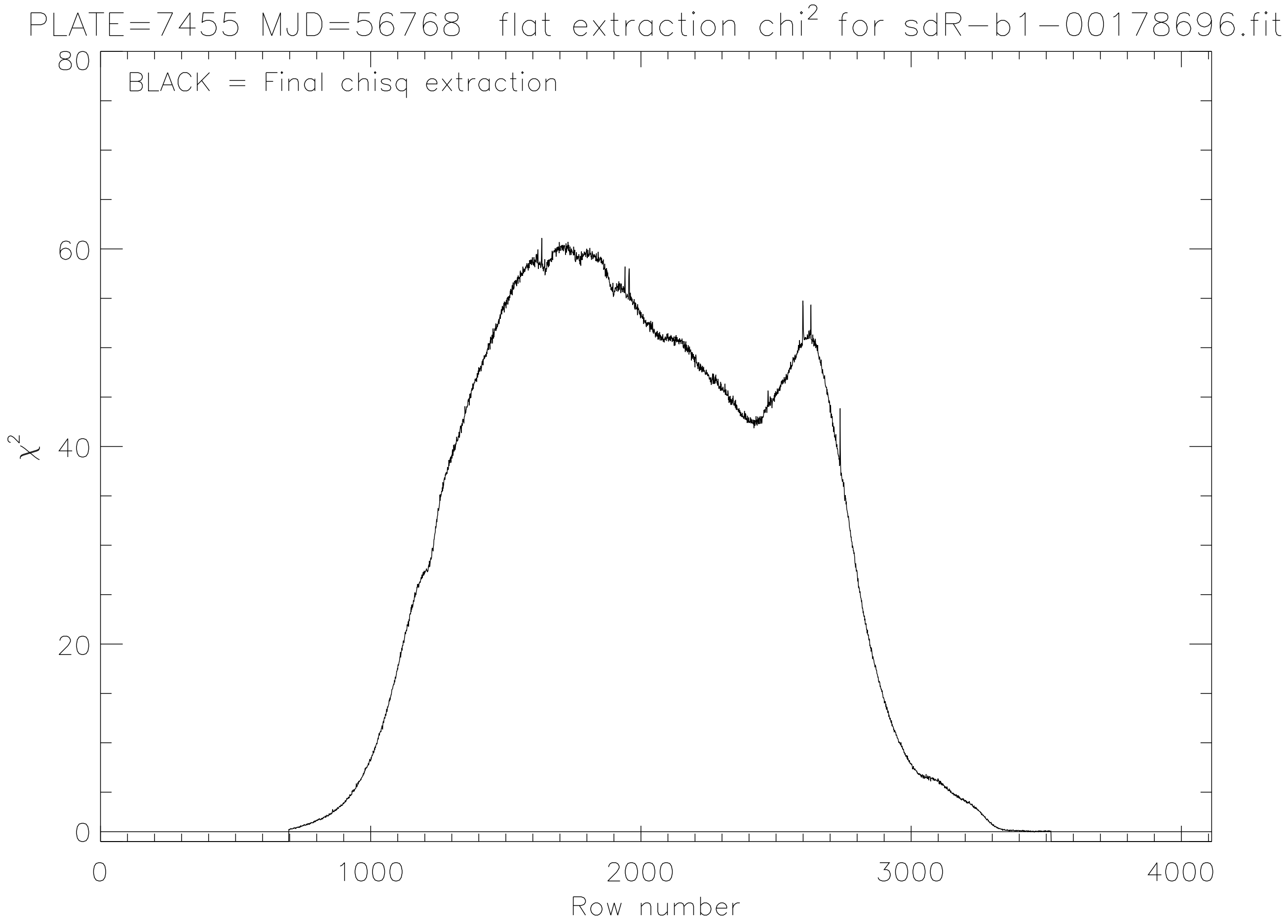
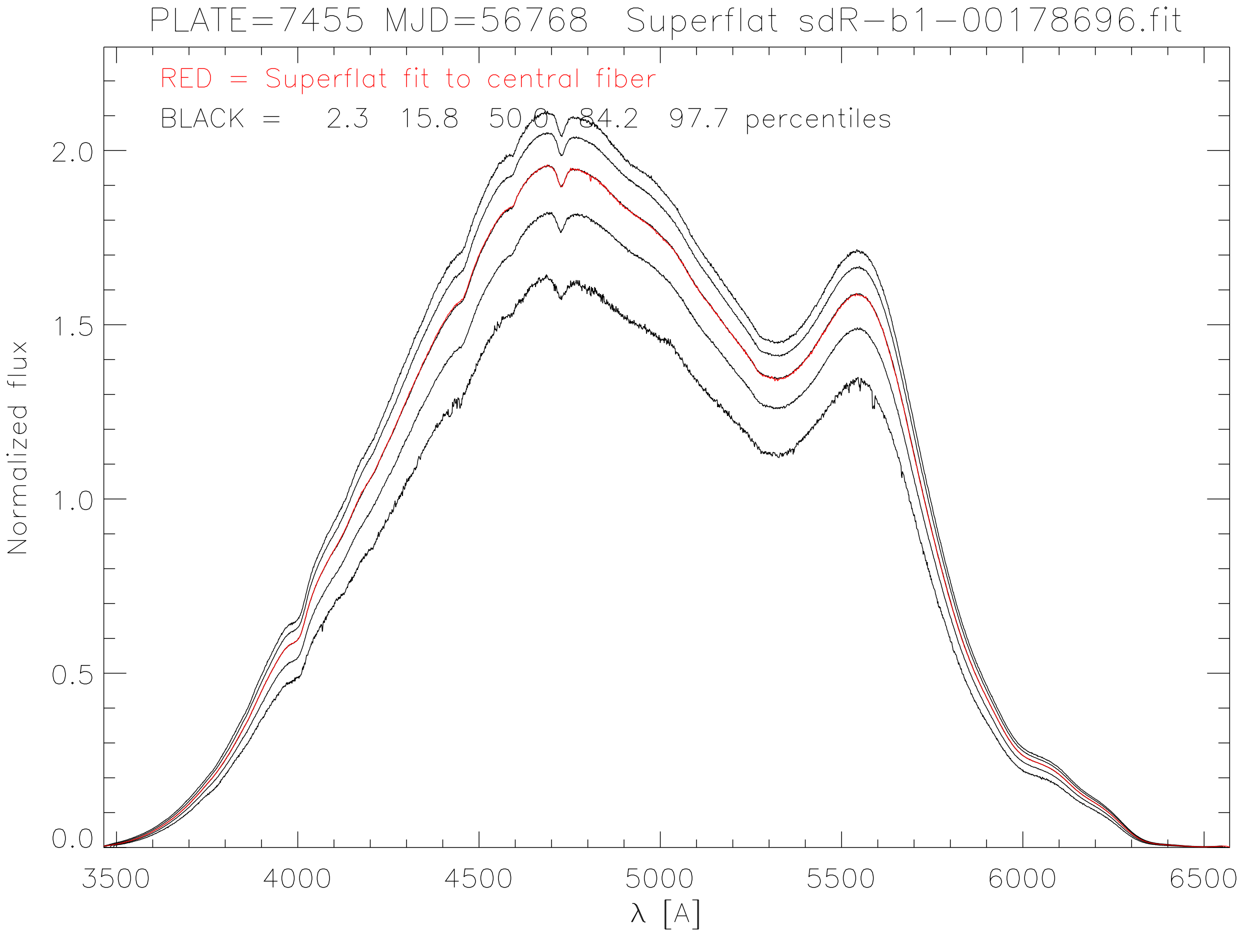
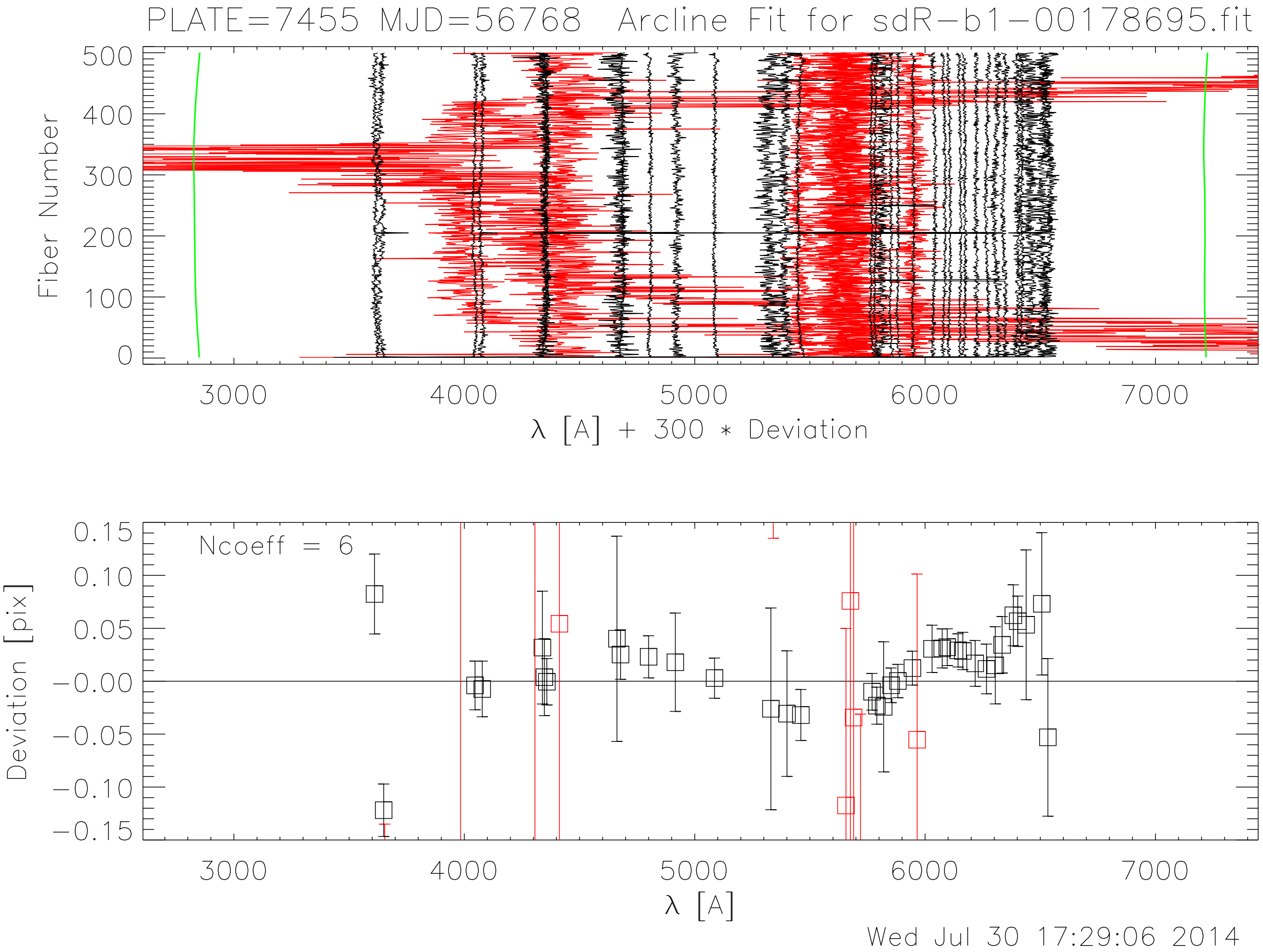
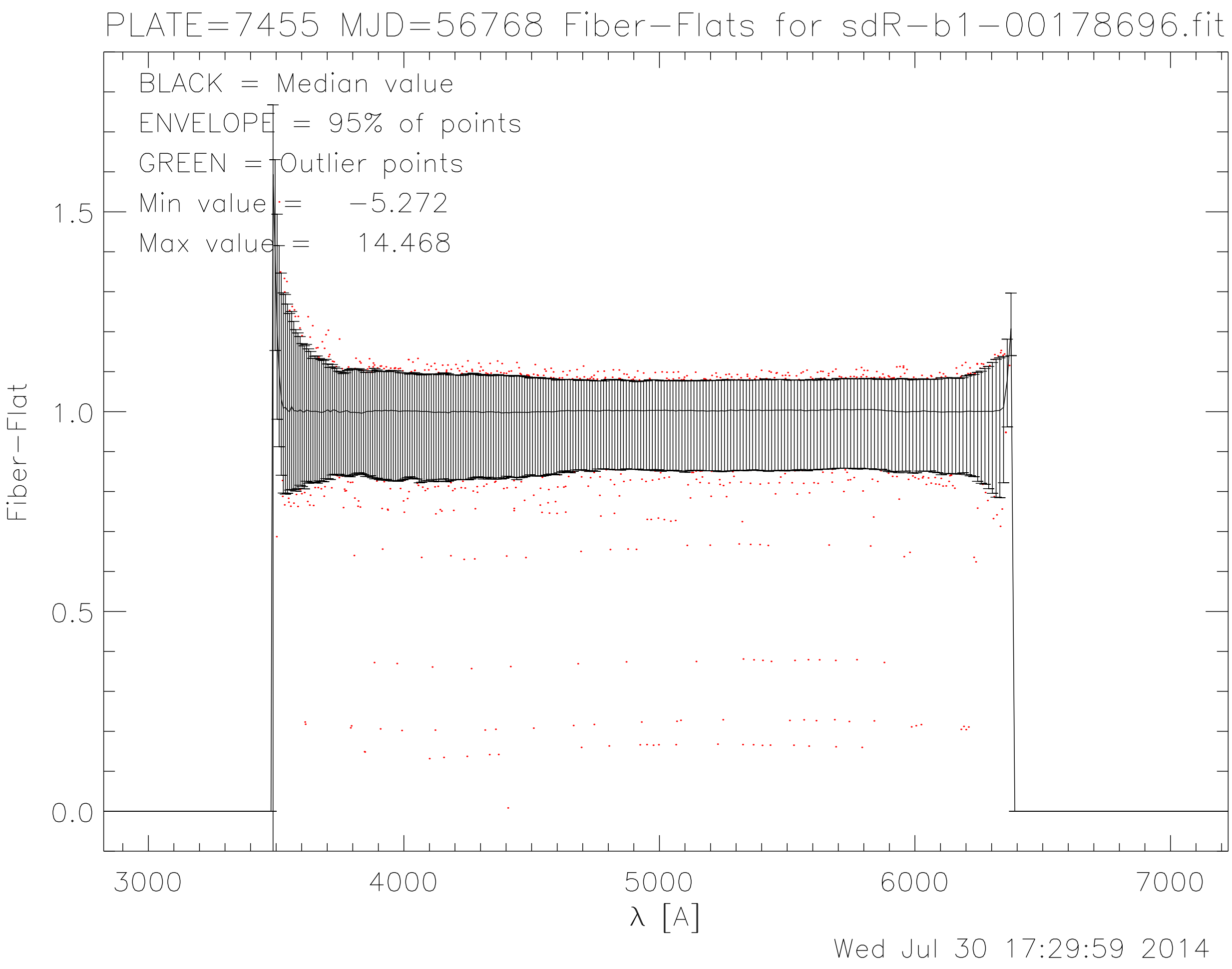
PLATE=7455 MJD=56768 Traces sdR-b1-00178696.fit

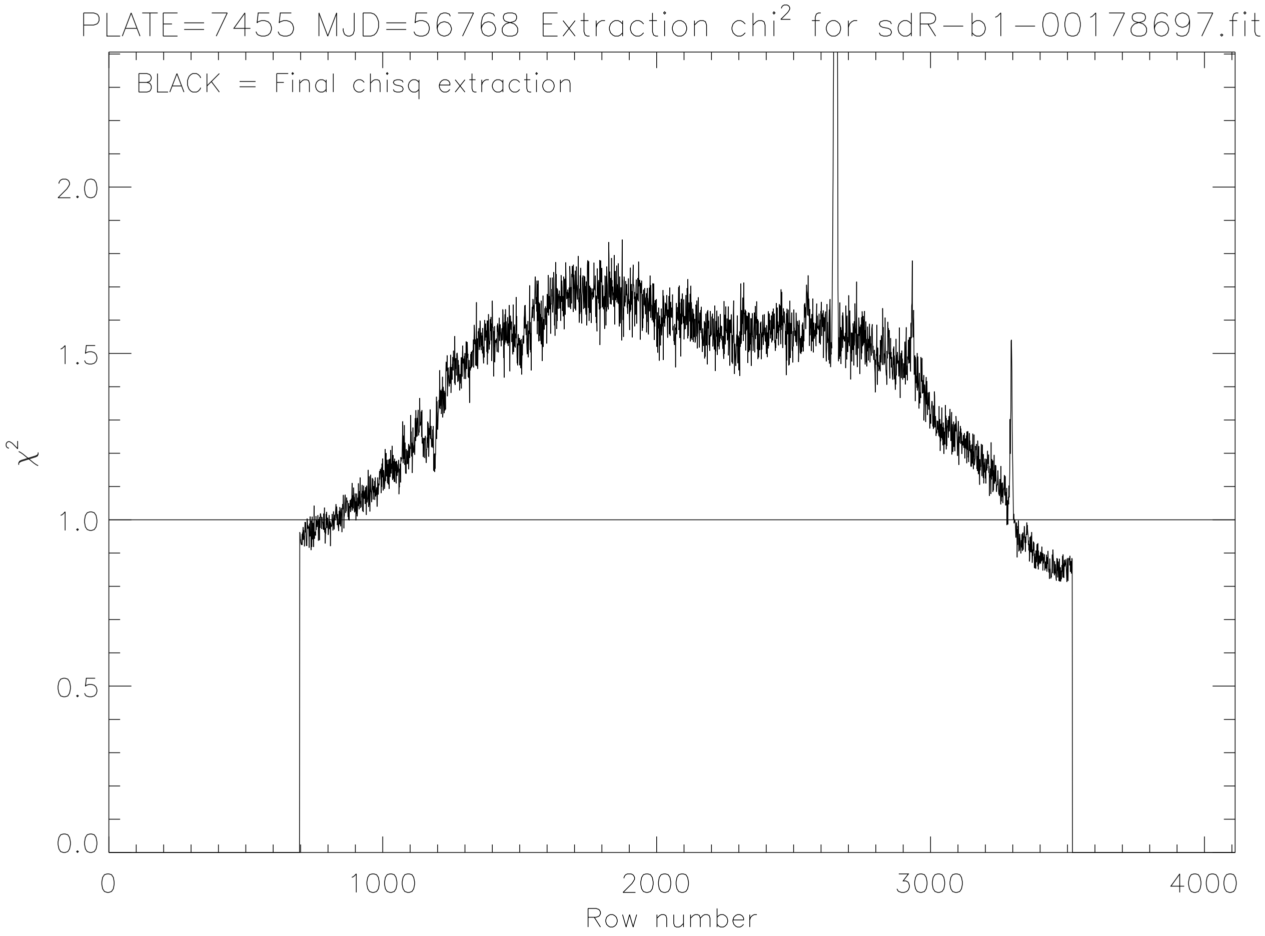


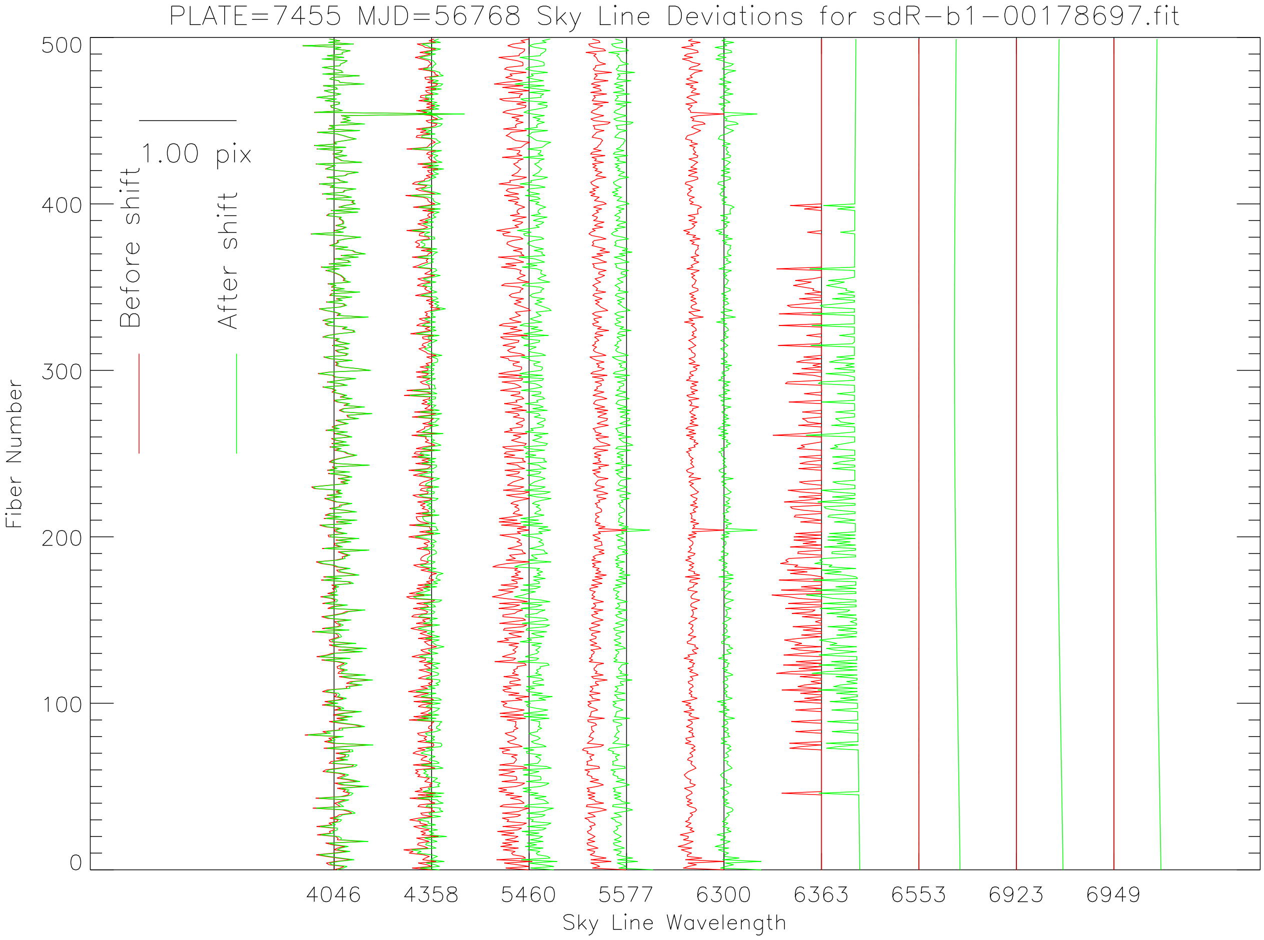

PLATE=7455 MJD=56768 flat extraction chi^2 for sdR-b1-00178696.fit
BLACK = Final chisq extraction
χ^2
80
60
40
20
0
0
1000
2000
3000
4000
Row number

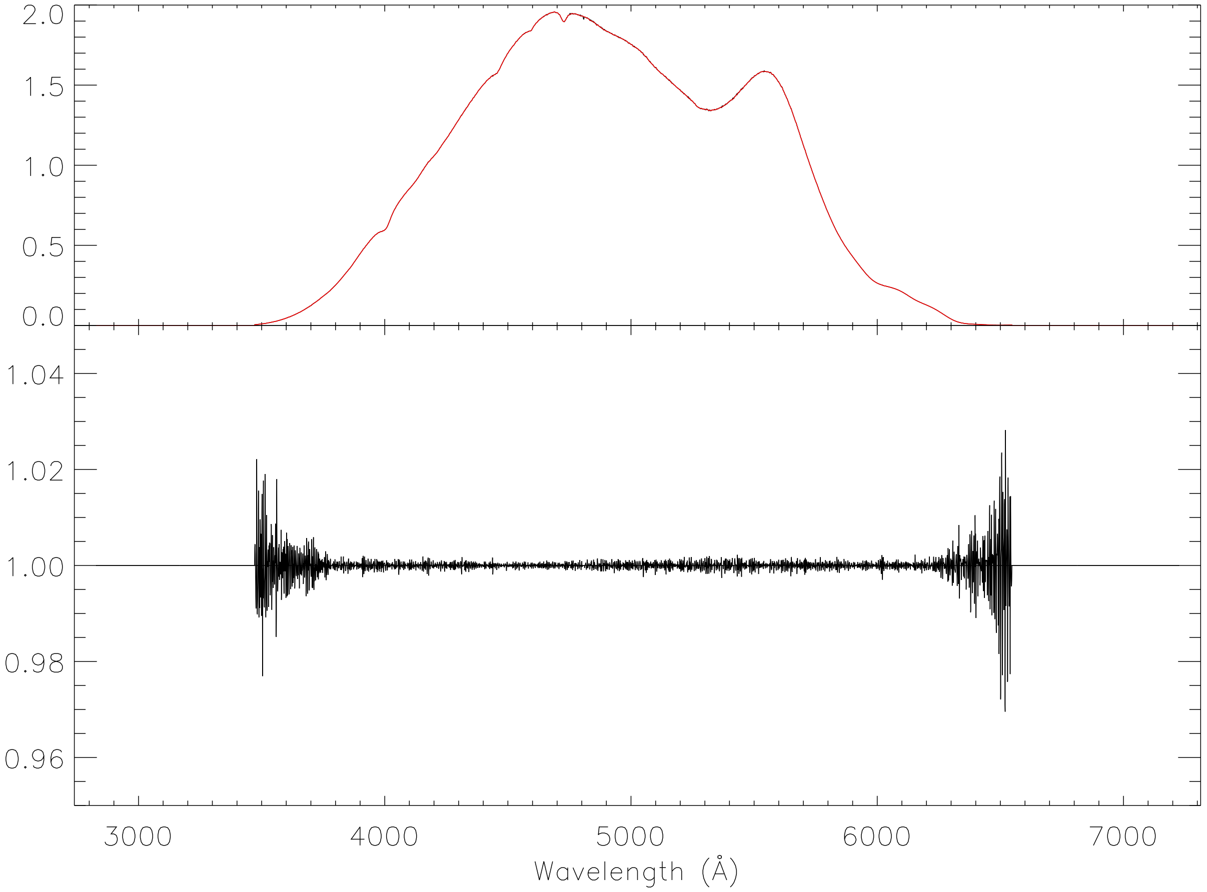

PLATE=7455 MJD=56768 Superflat sdR-b1-00178696.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
2.0
3500
4000
4500
5000
5500
6000
6500
λ [A]


PLATE=7455 MJD=56768 Arcline Fit for sdR-b1-00178695.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 17:29:06 2014

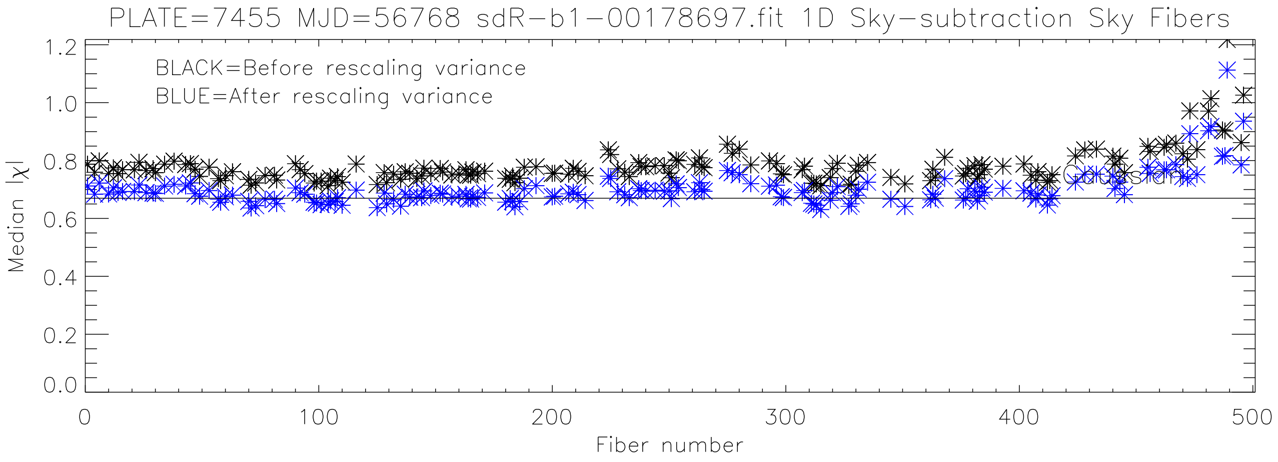

PLATE=7455 MJD=56768 Fiber−Flats for sdR−b1−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.272
Max value = 14.468
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 17:29:59 2014

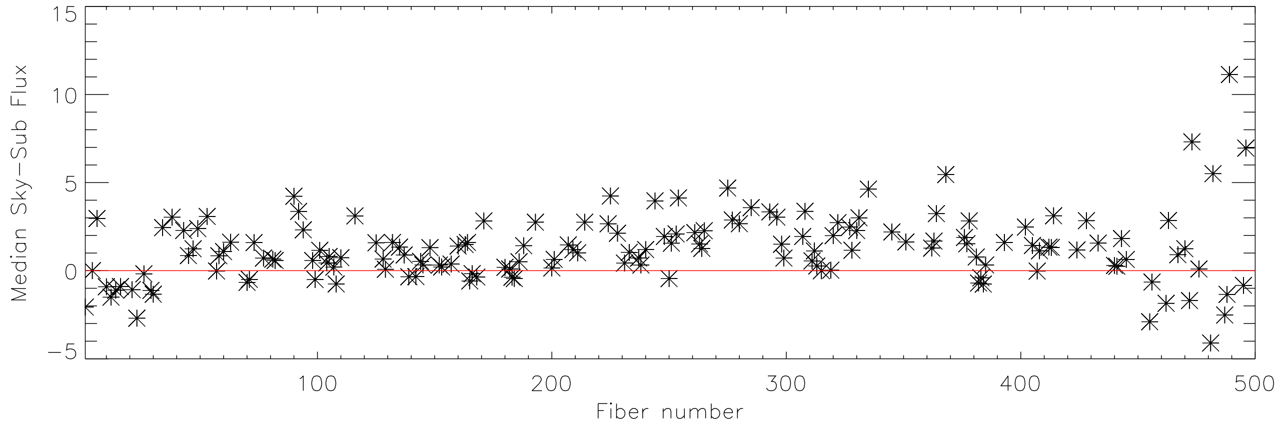

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b1-00178697.fit
BLACK = Final chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
1000
2000
3000
4000
Row number

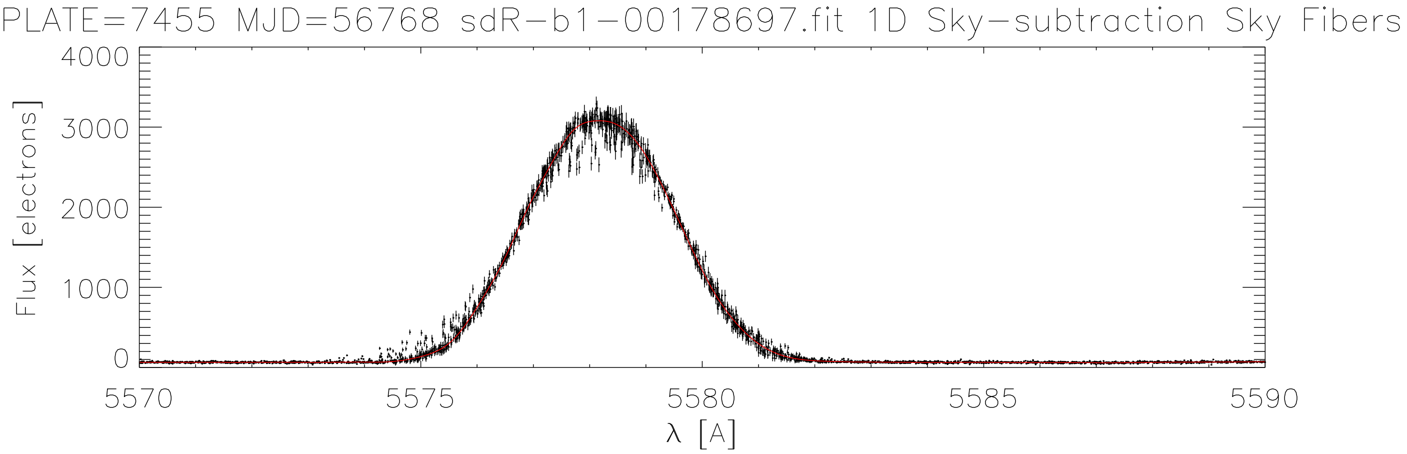

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b1-00178697.fit
1.00 pix
Before shift
After shift
Fiber Number
0
100
200
300
400
500
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

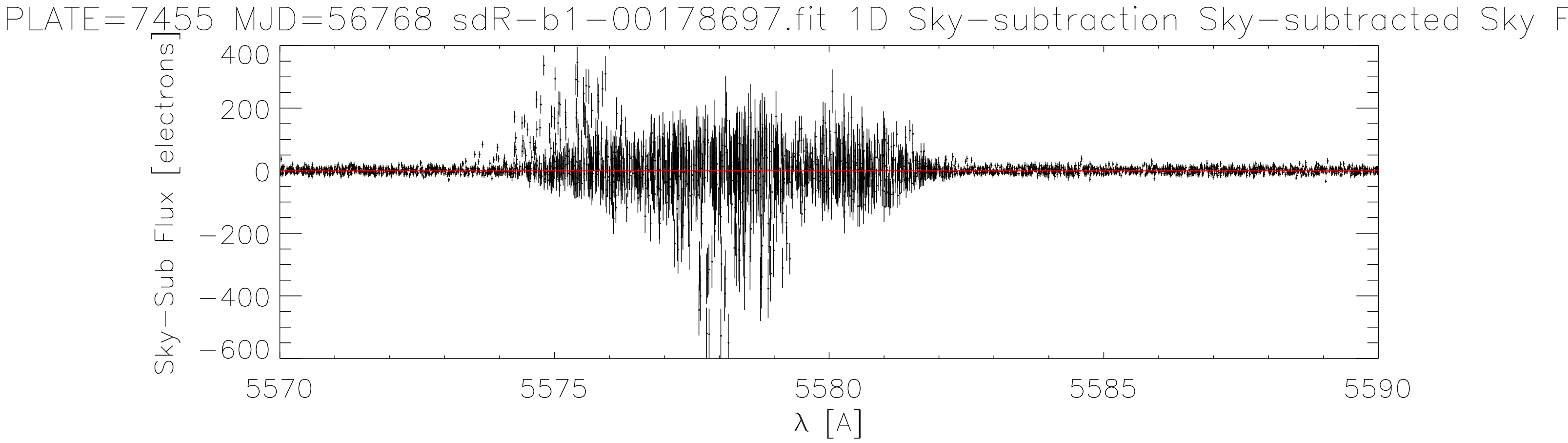


PLATE=7455 MJD=56768 Smooth superflat for sdR-b1-00178697.fit

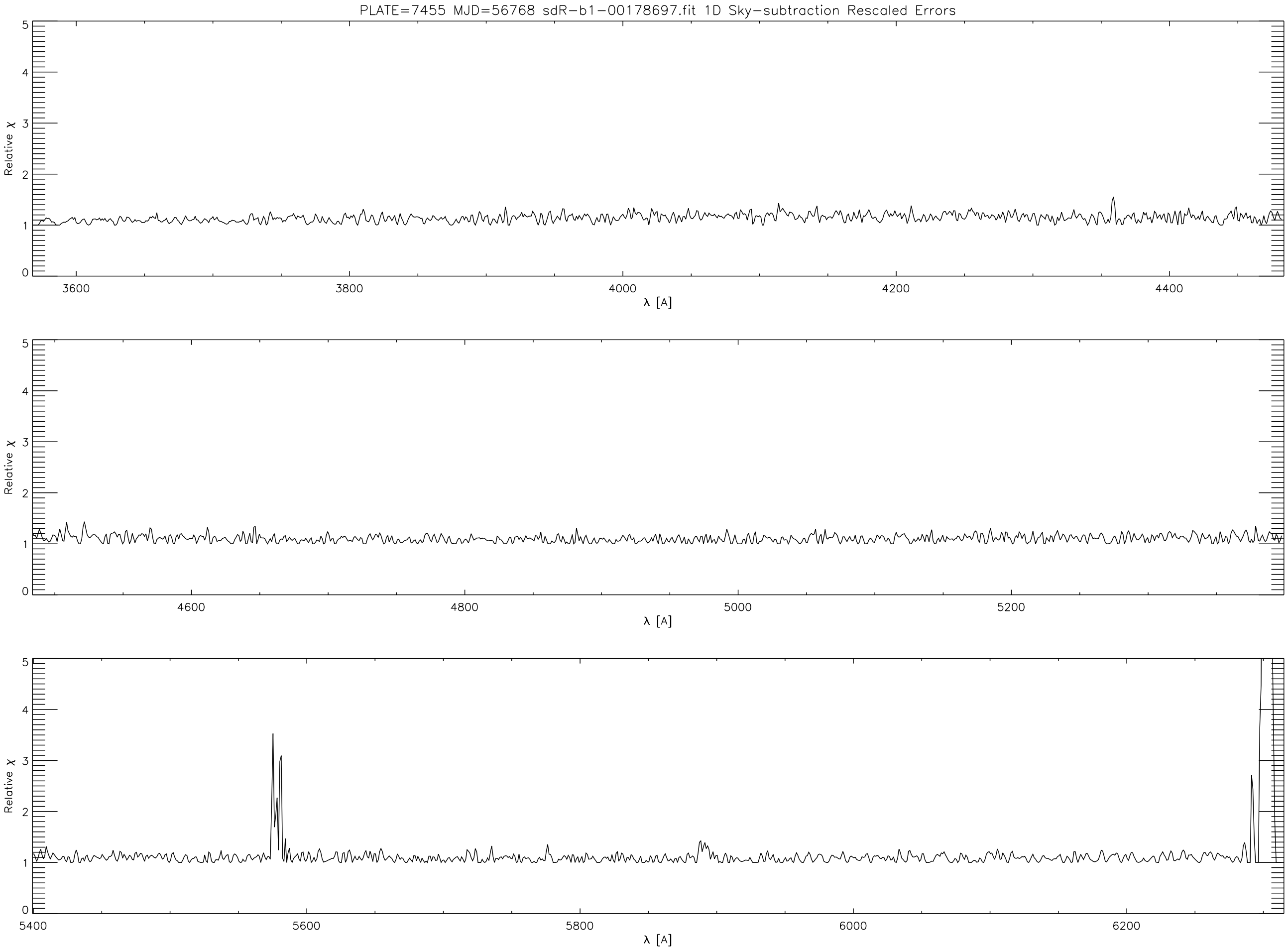

PLATE=7455 MJD=56768 sdR-b1-00178697.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
100
200
300
400
500
Fiber number

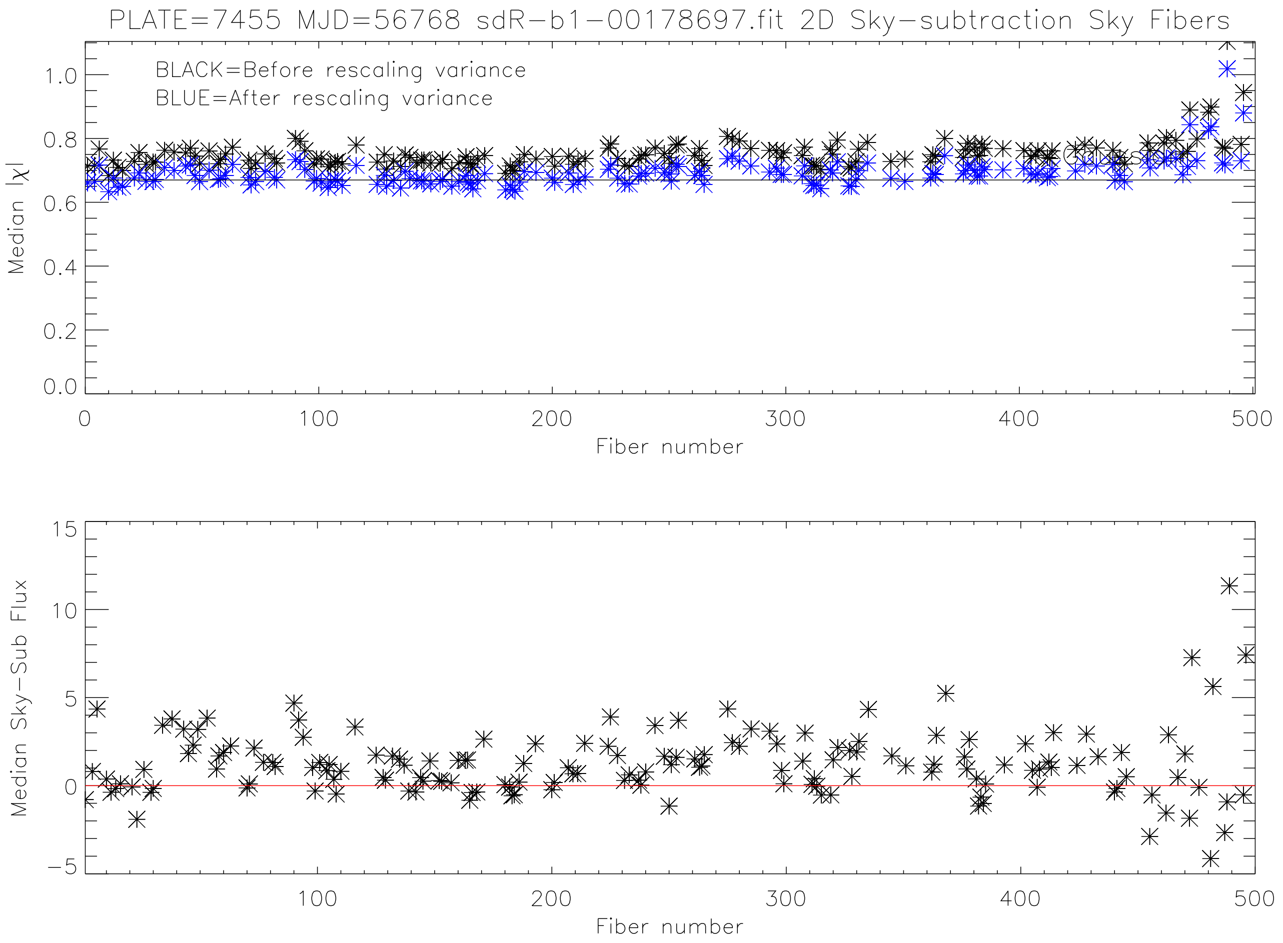

Median Sky-Sub Flux
−5
0
5
10
15
100
200
300
400
500
Fiber number

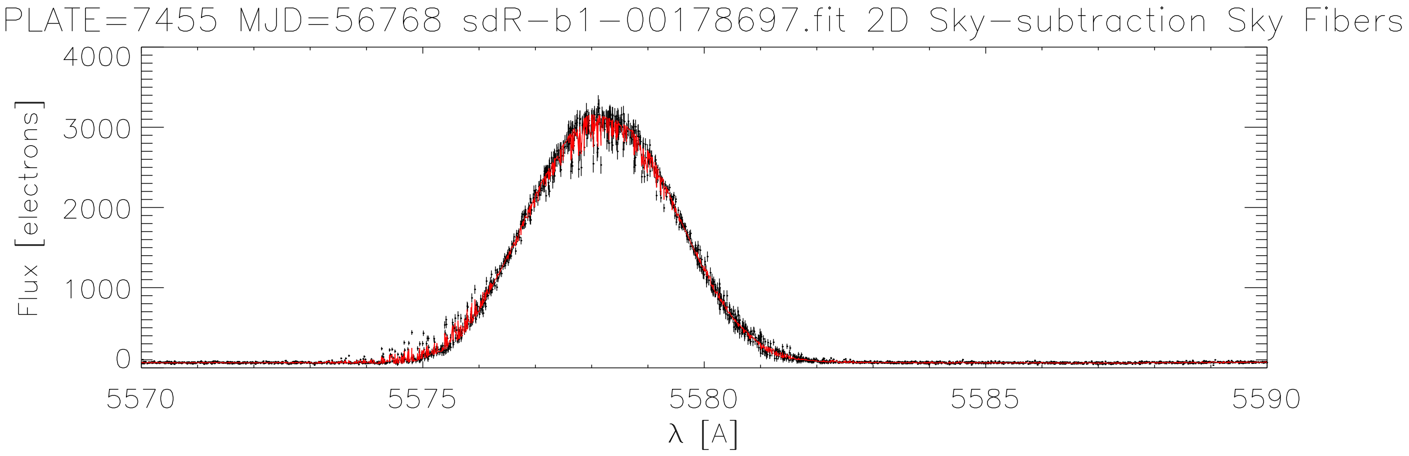

PLATE=7455 MJD=56768 sdR-b1-00178697.fit 1D Sky-subtraction Sky Fibers

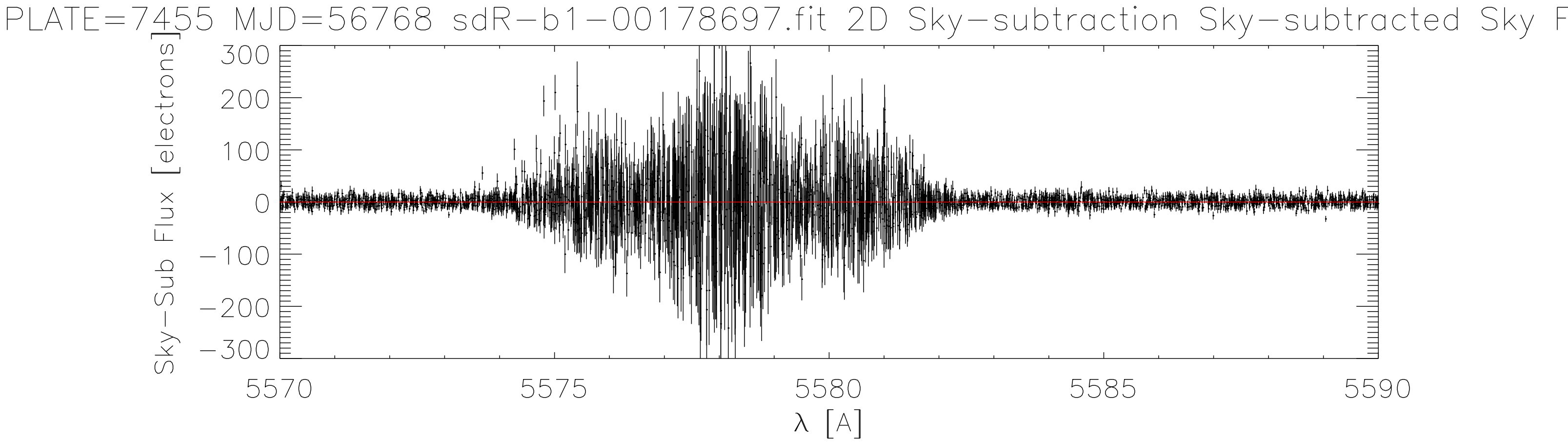

PLATE=7455 MJD=56768 sdR-b1-00178697.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 160

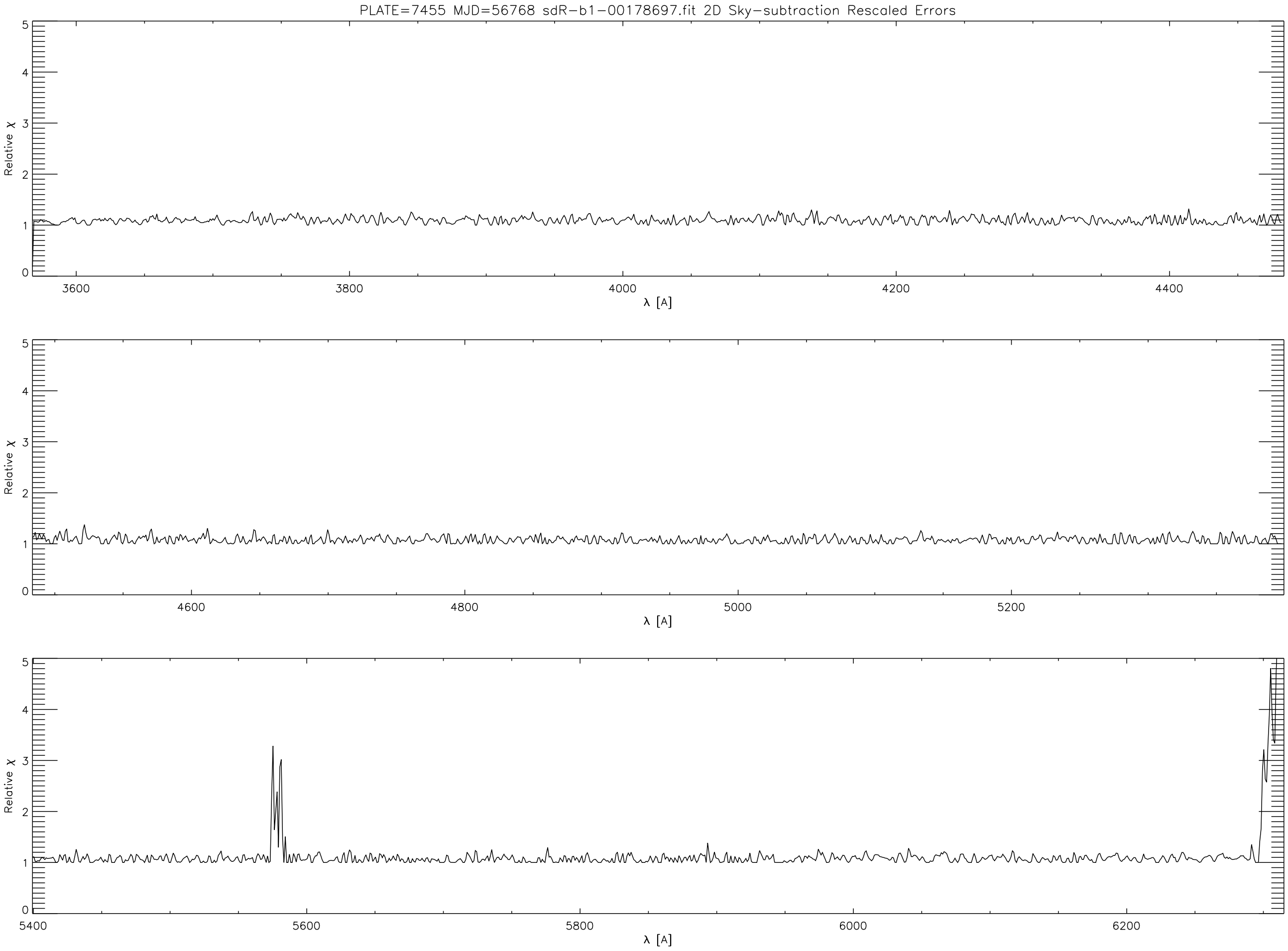



PLATE=7455 MJD=56768 sdR-b1-00178697.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
-5
0
5
10
15
100
200
300
400
500
Fiber number

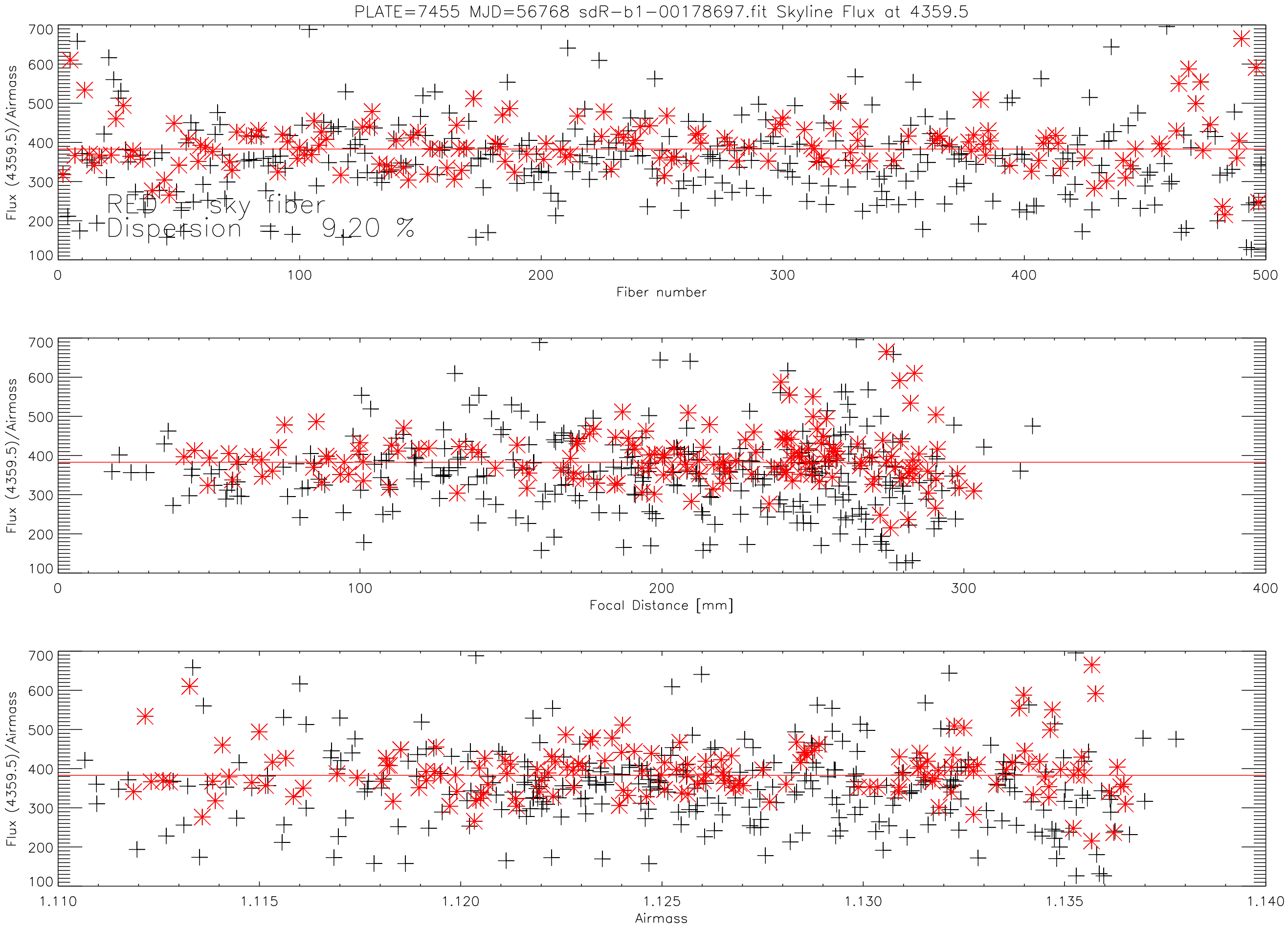

PLATE=7455 MJD=56768 sdR-b1-00178697.fit 2D Sky-subtraction Sky Fibers

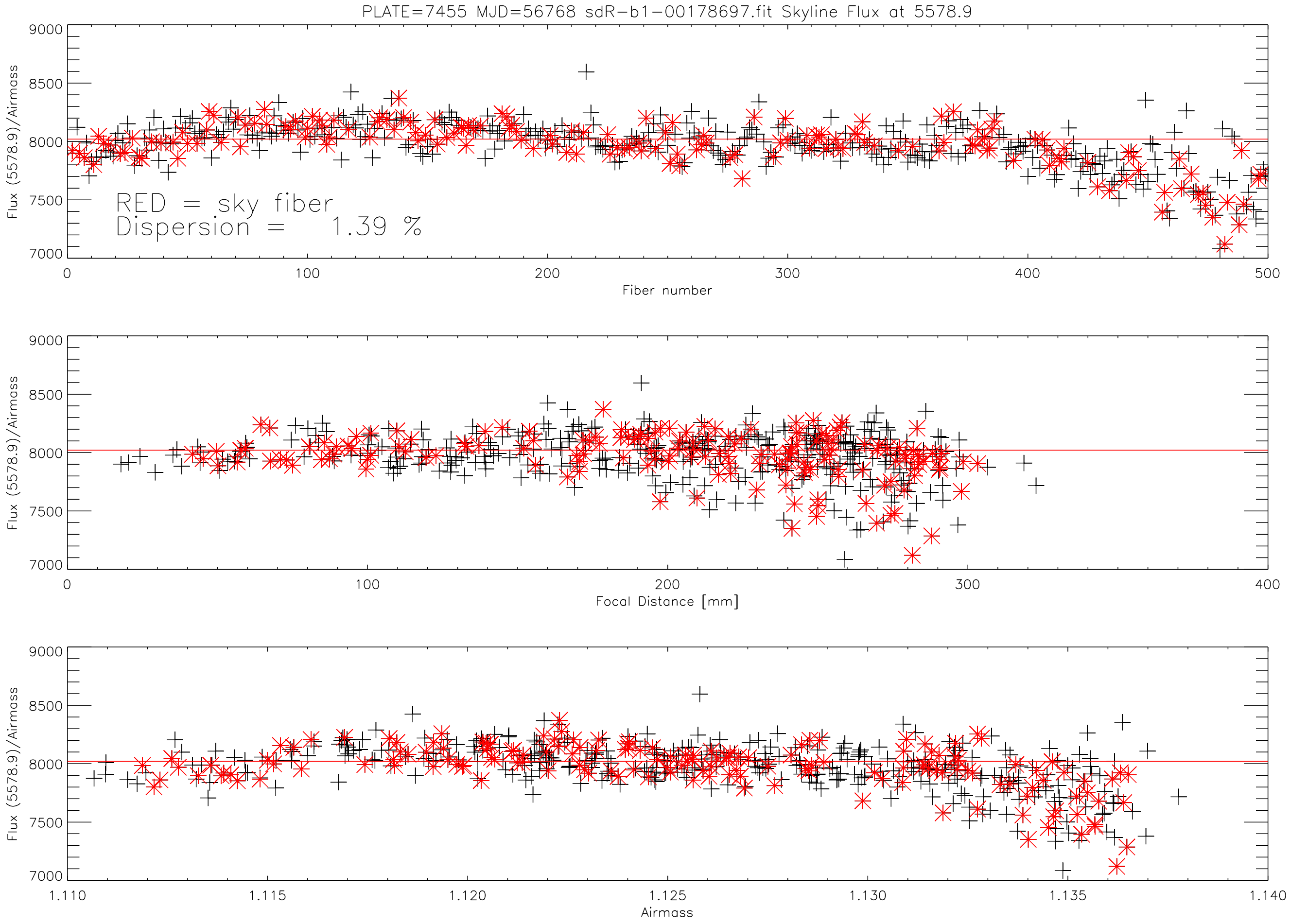

PLATE=7455 MJD=56768 sdR-b1-00178697.fit 2D Sky-subtraction Sky-subtracted Sky F

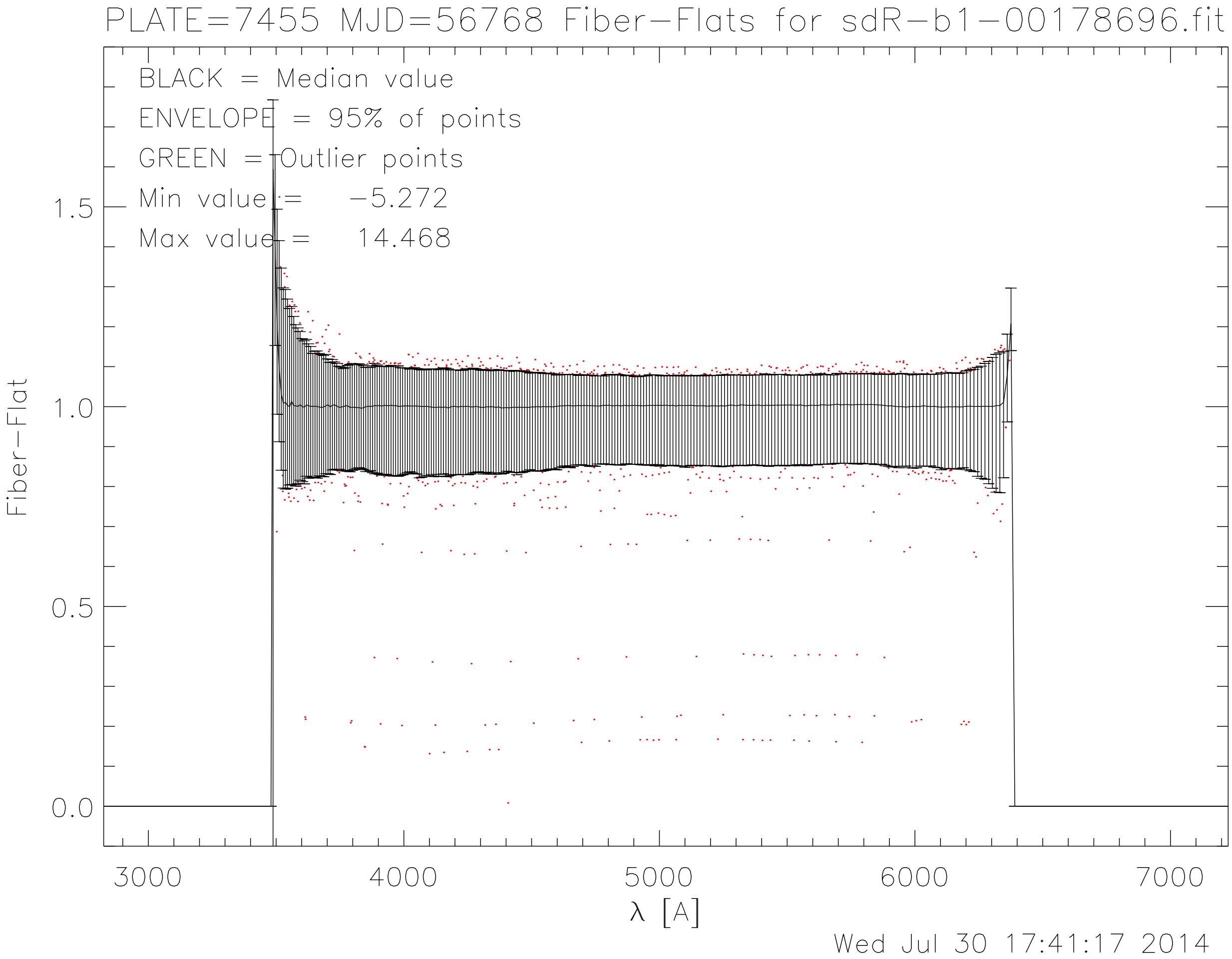
Number of sky fibers = 160

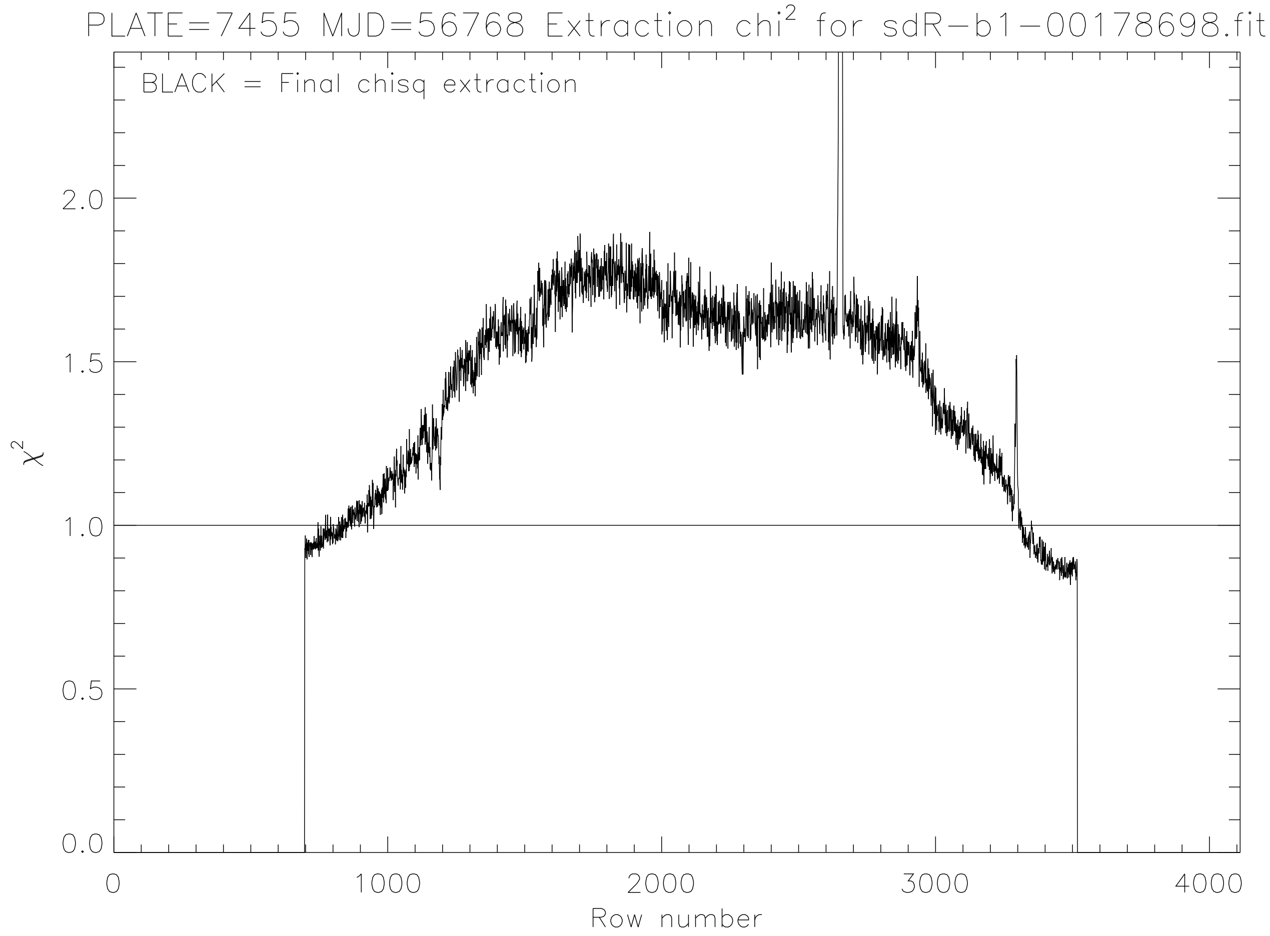


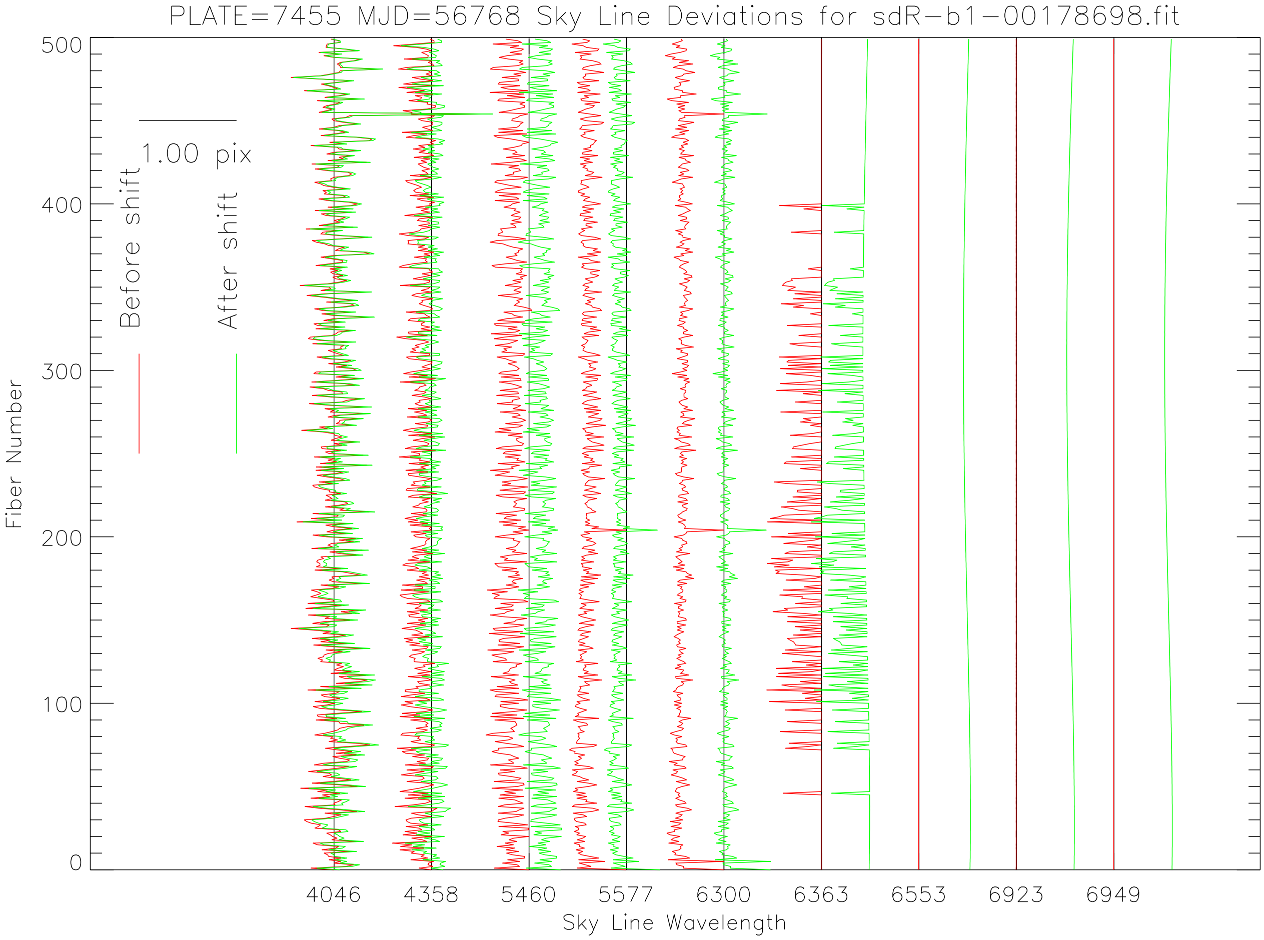
PLATE=7455 MJD=56768 sdR-b1-00178697.fit 2D Sky-subtraction Rescaled Errors

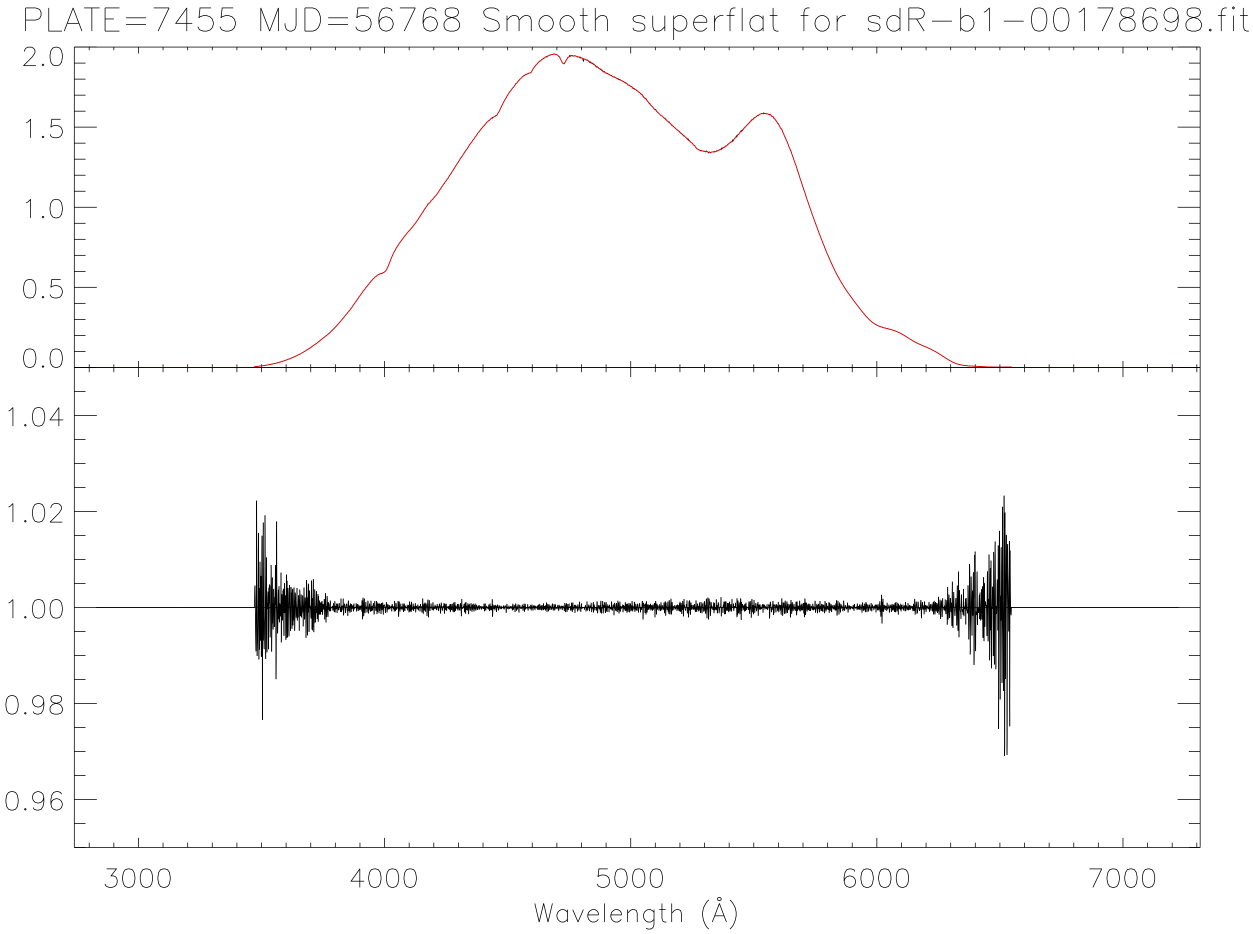

PLATE=7455 MJD=56768 sdR-b1-00178697.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.20 %
Fiber number
0
100
200
300
400
500
100
200
300
400
500
600
700
Focal Distance [mm]
Airmass
1.110
1.115
1.120
1.125
1.130
1.135
1.140

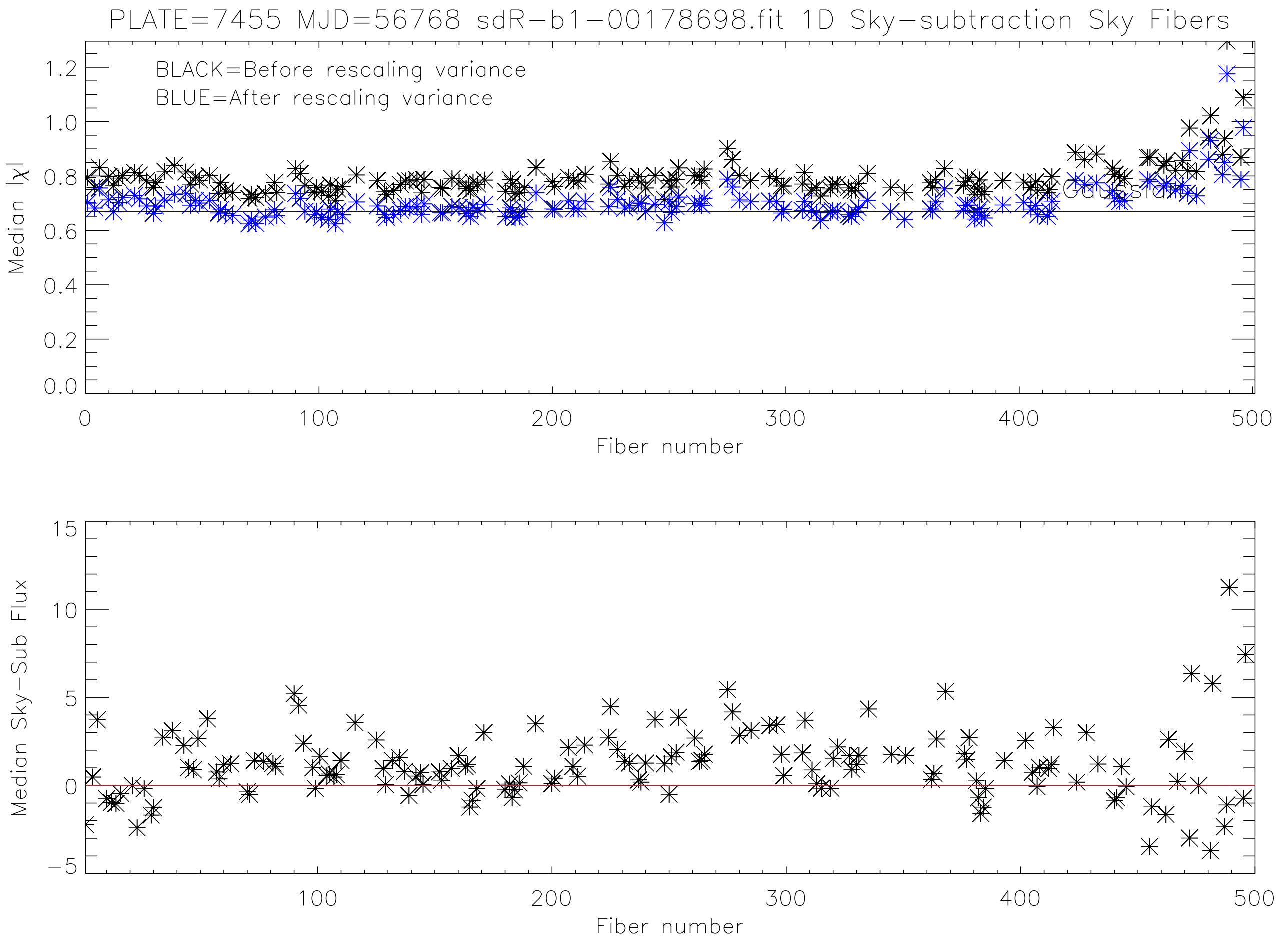

PLATE=7455 MJD=56768 sdR-b1-00178697.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
9000
8500
8000
7500
7000
RED = sky fiber
Dispersion = 1.39 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
9000
8500
8000
7500
7000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
9000
8500
8000
7500
7000
1.110
1.115
1.120
1.125
1.130
1.135
1.140
Airmass

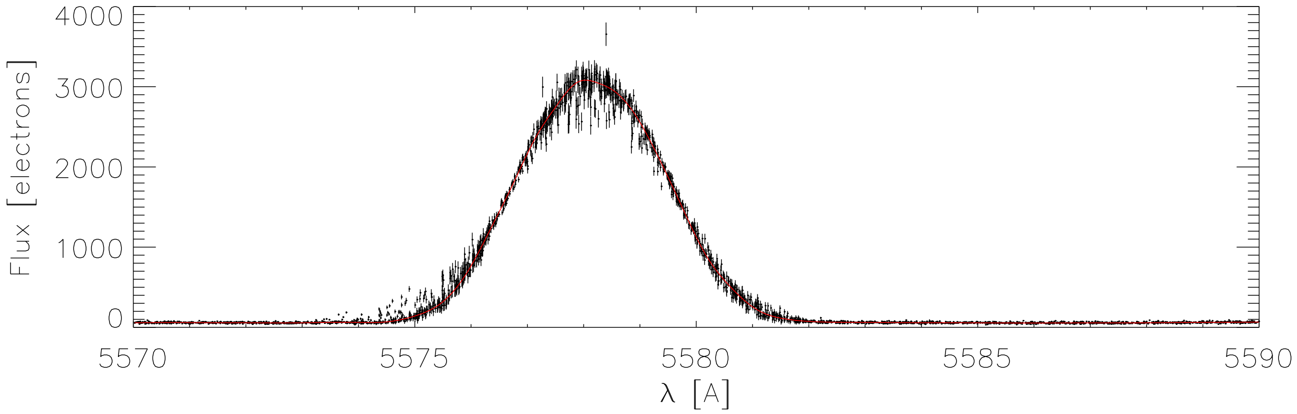

PLATE=7455 MJD=56768 Fiber−Flats for sdR−b1−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.272
Max value = 14.468
Fiber−Flat
0.0
0.5
1.0
1.5
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 17:41:17 2014


PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b1-00178698.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
0
1000
2000
3000
4000
Row number

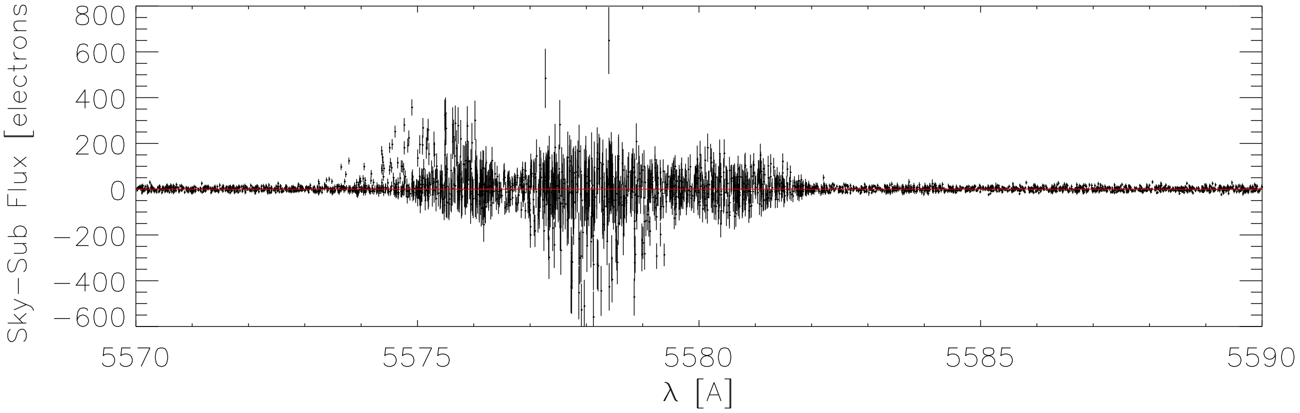

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b1-00178698.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength


PLATE=7455 MJD=56768 Smooth superflat for sdR-b1-00178698.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)


PLATE=7455 MJD=56768 sdR-b1-00178698.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
-5
0
5
10
15
100
200
300
400
500
Fiber number

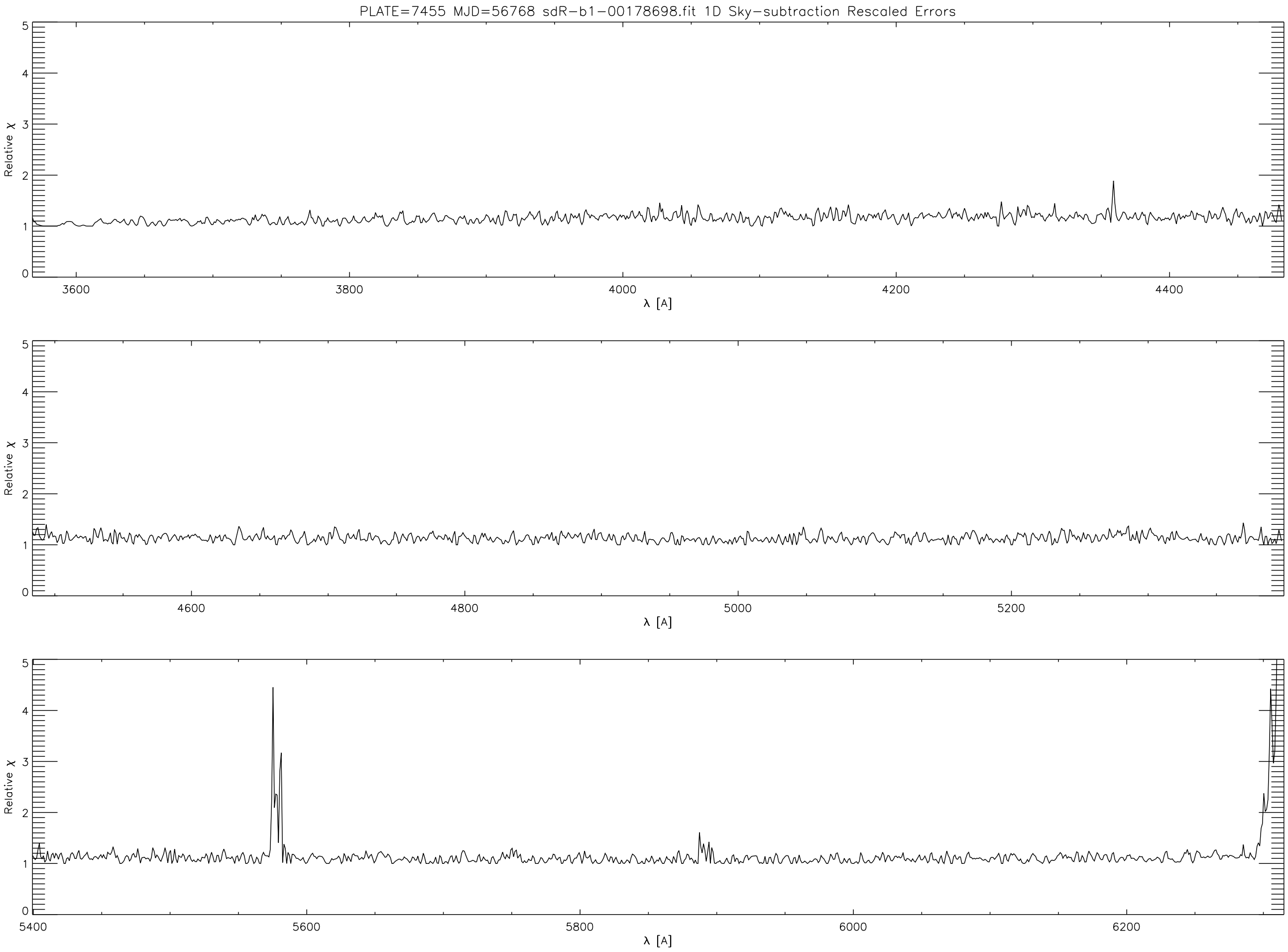


PLATE=7455 MJD=56768 sdR-b1-00178698.fit 1D Sky-subtraction Sky Fibers

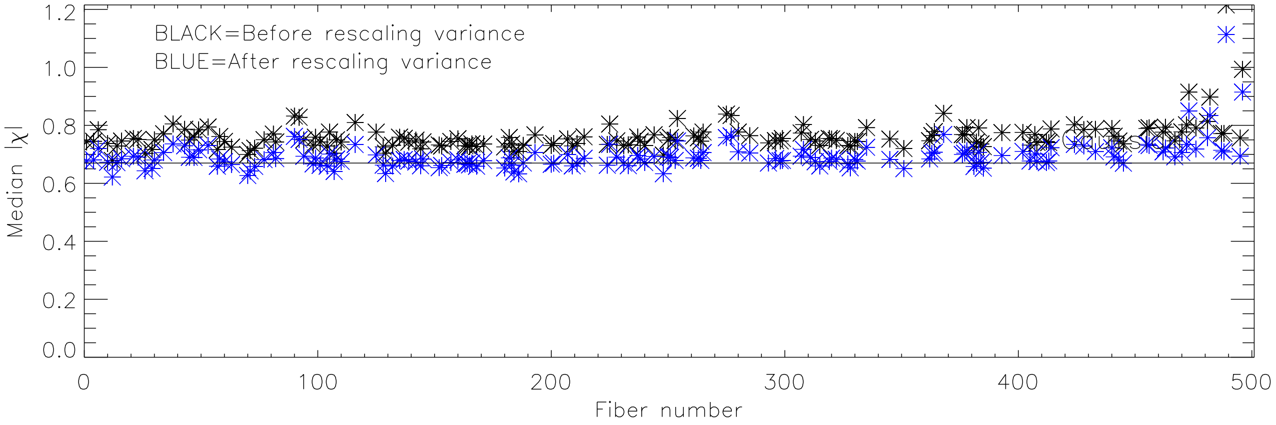


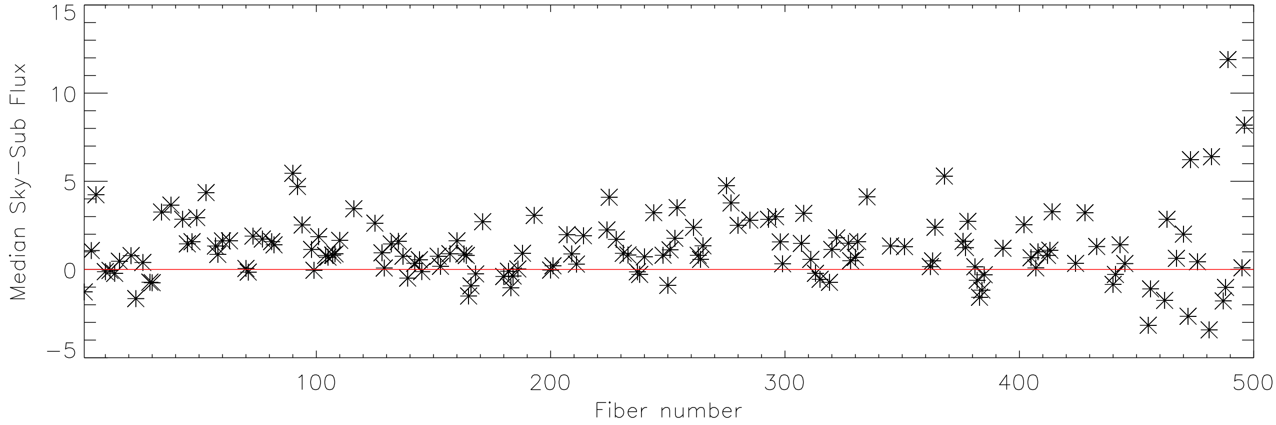
PLATE=7455 MJD=56768 sdR-b1-00178698.fit 1D Sky-subtraction Sky-subtracted Sky F

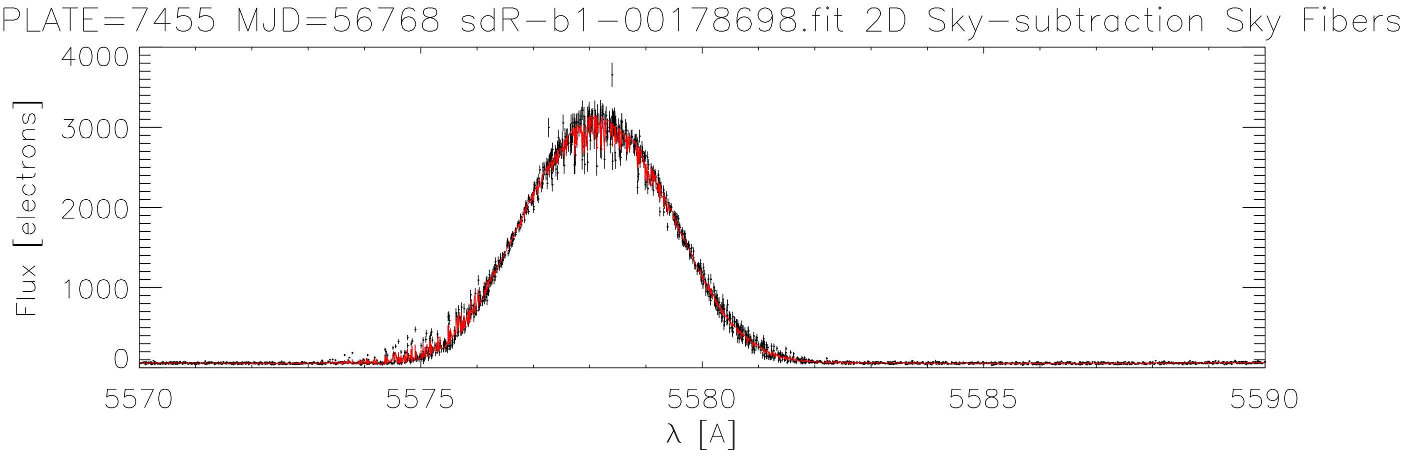
Number of sky fibers = 158

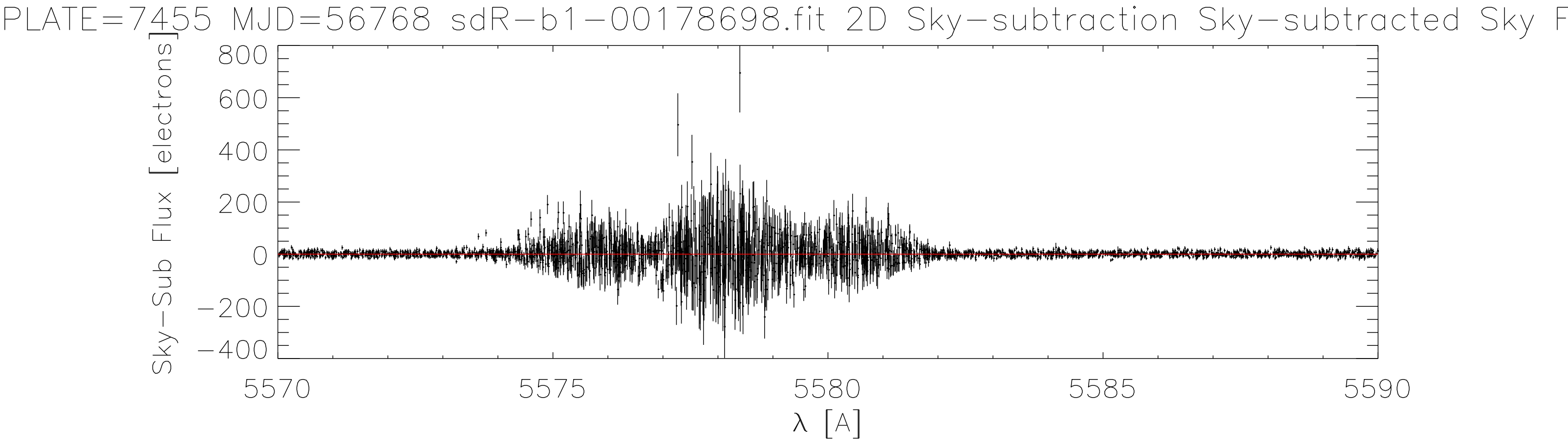


PLATE=7455 MJD=56768 sdR-b1-00178698.fit 2D Sky-subtraction Sky Fibers



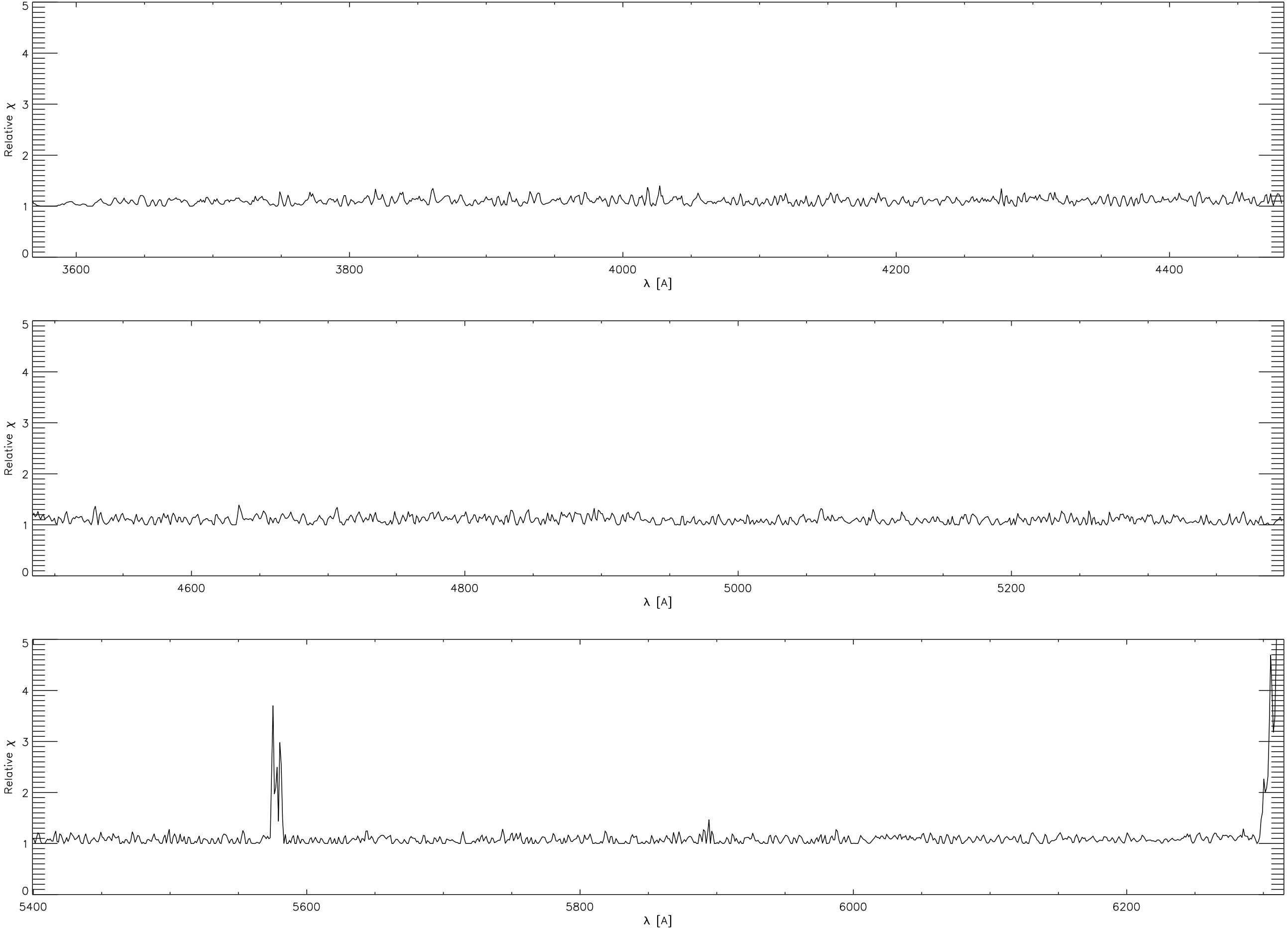


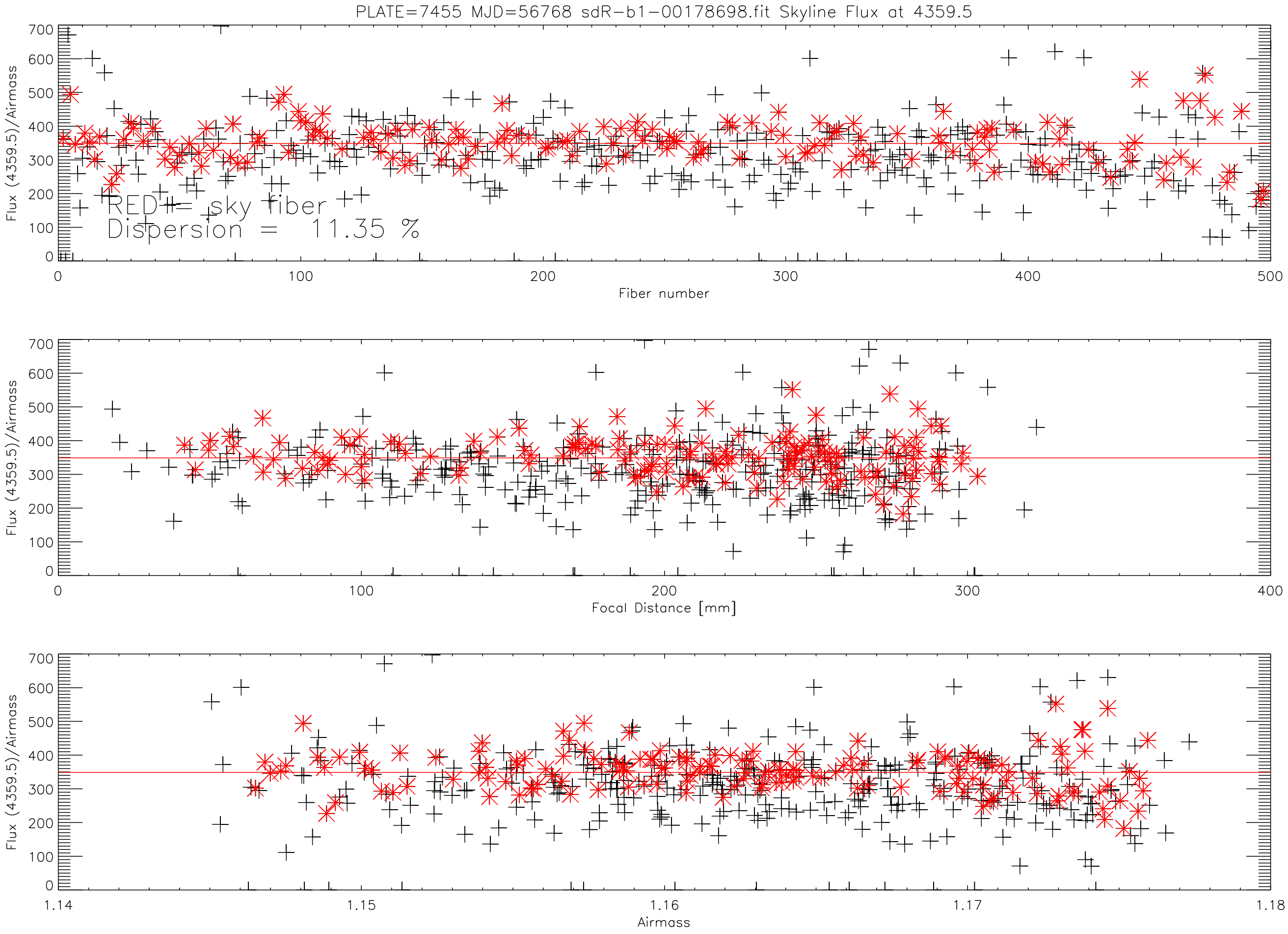

PLATE=7455 MJD=56768 sdR-b1-00178698.fit 2D Sky-subtraction Sky Fibers


PLATE=7455 MJD=56768 sdR-b1-00178698.fit 2D Sky-subtraction Sky-subtracted Sky F

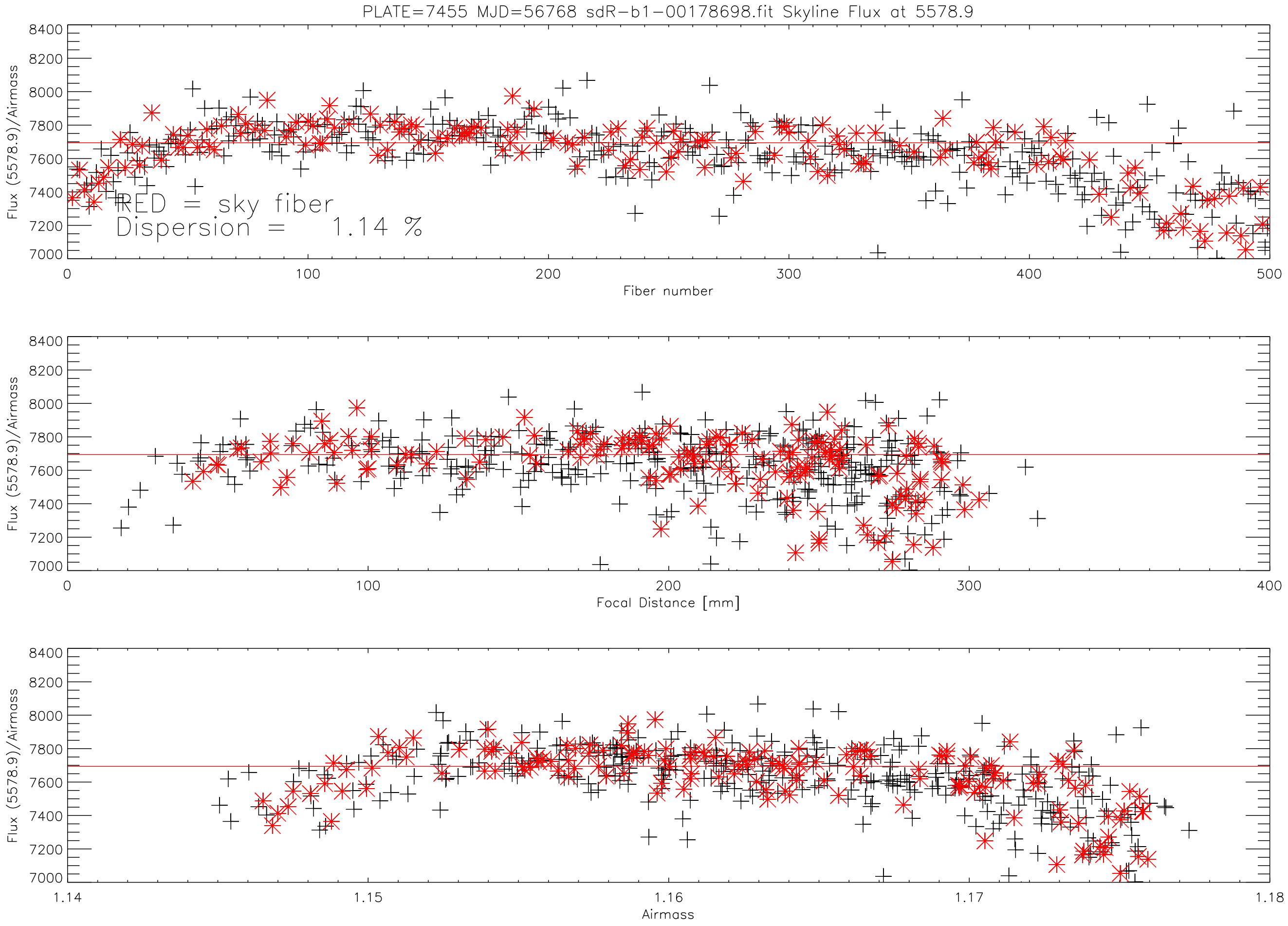
Number of sky fibers = 158

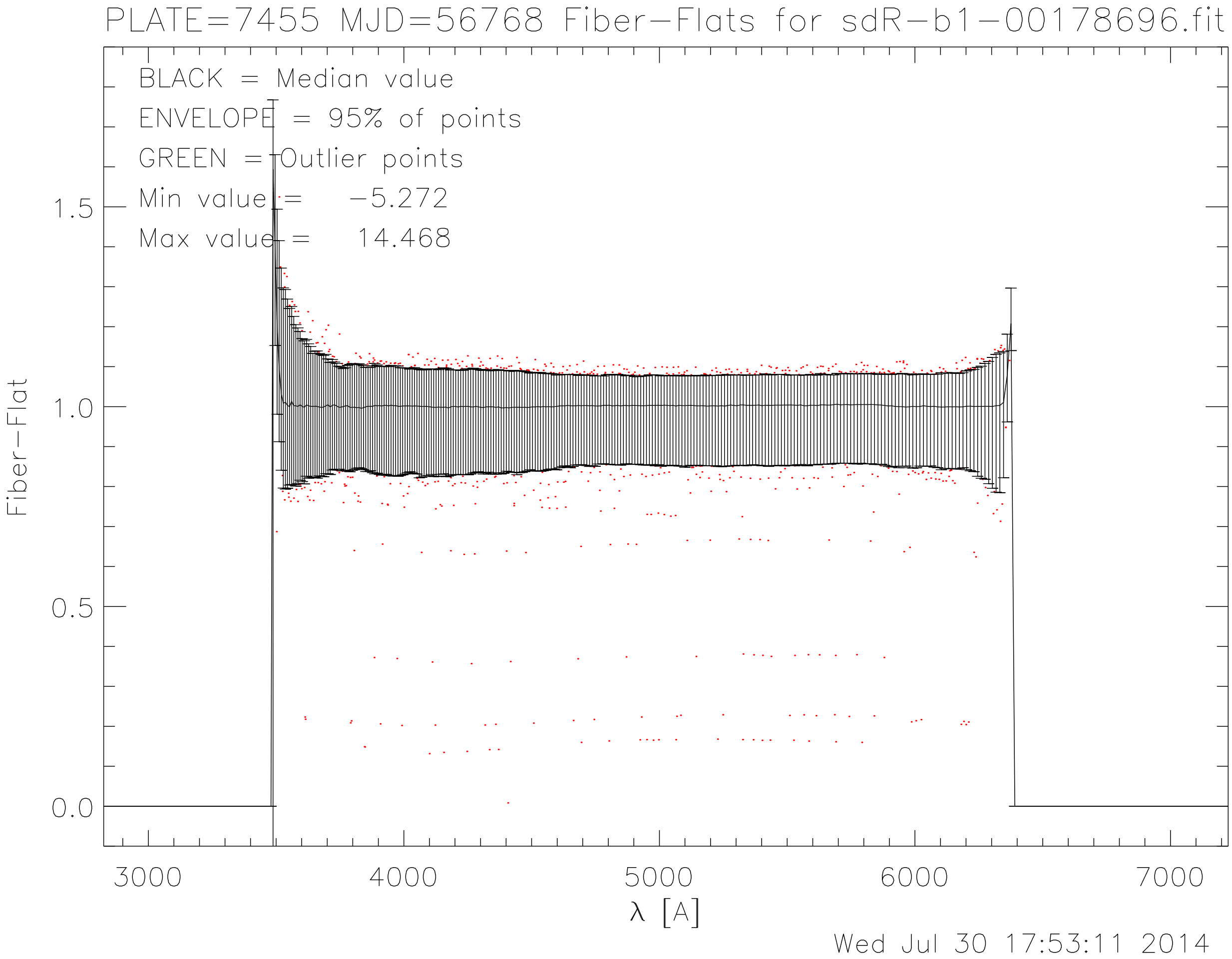
PLATE=7455 MJD=56768 sdR-b1-00178698.fit 2D Sky-subtraction Rescaled Errors

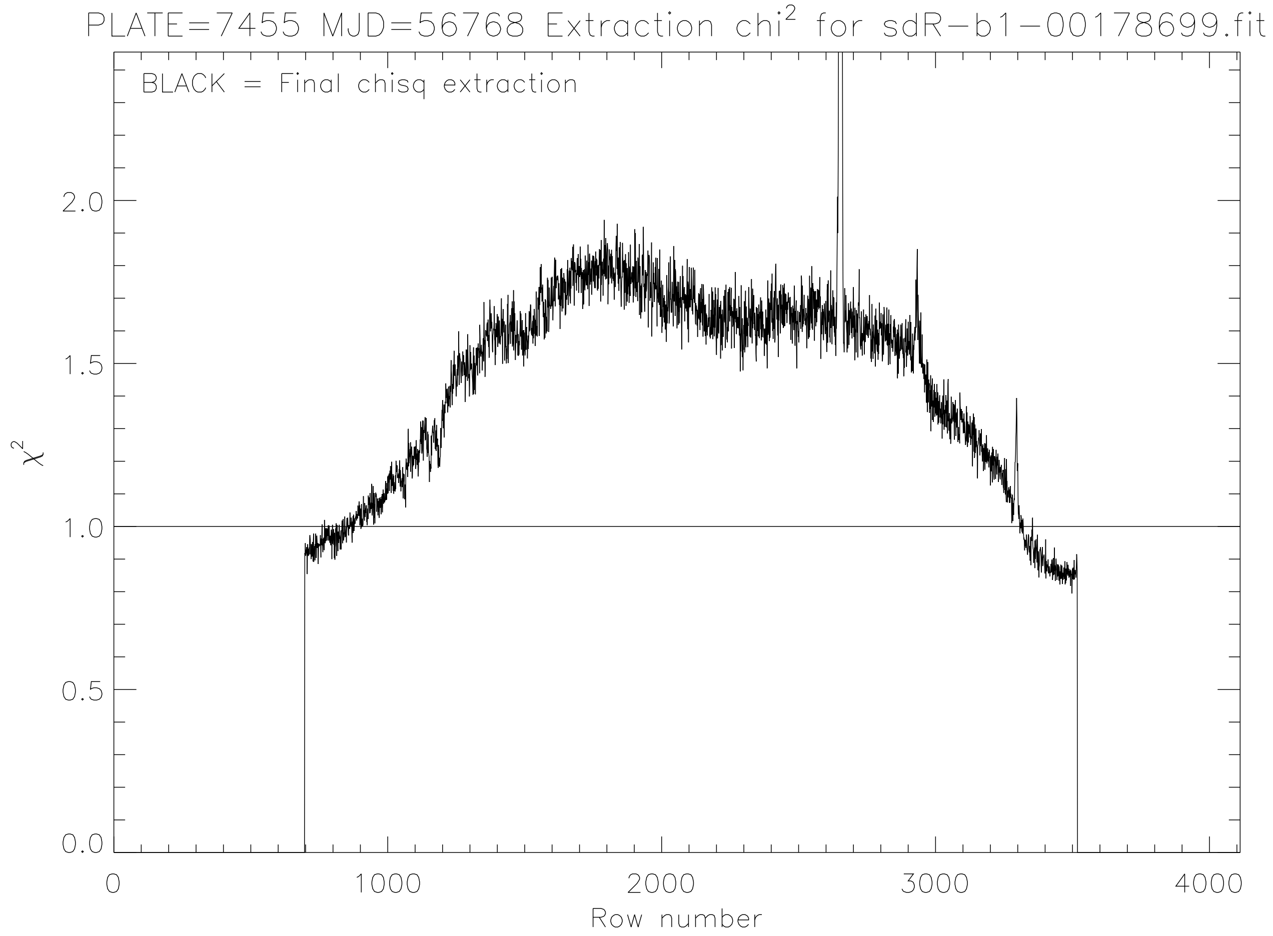


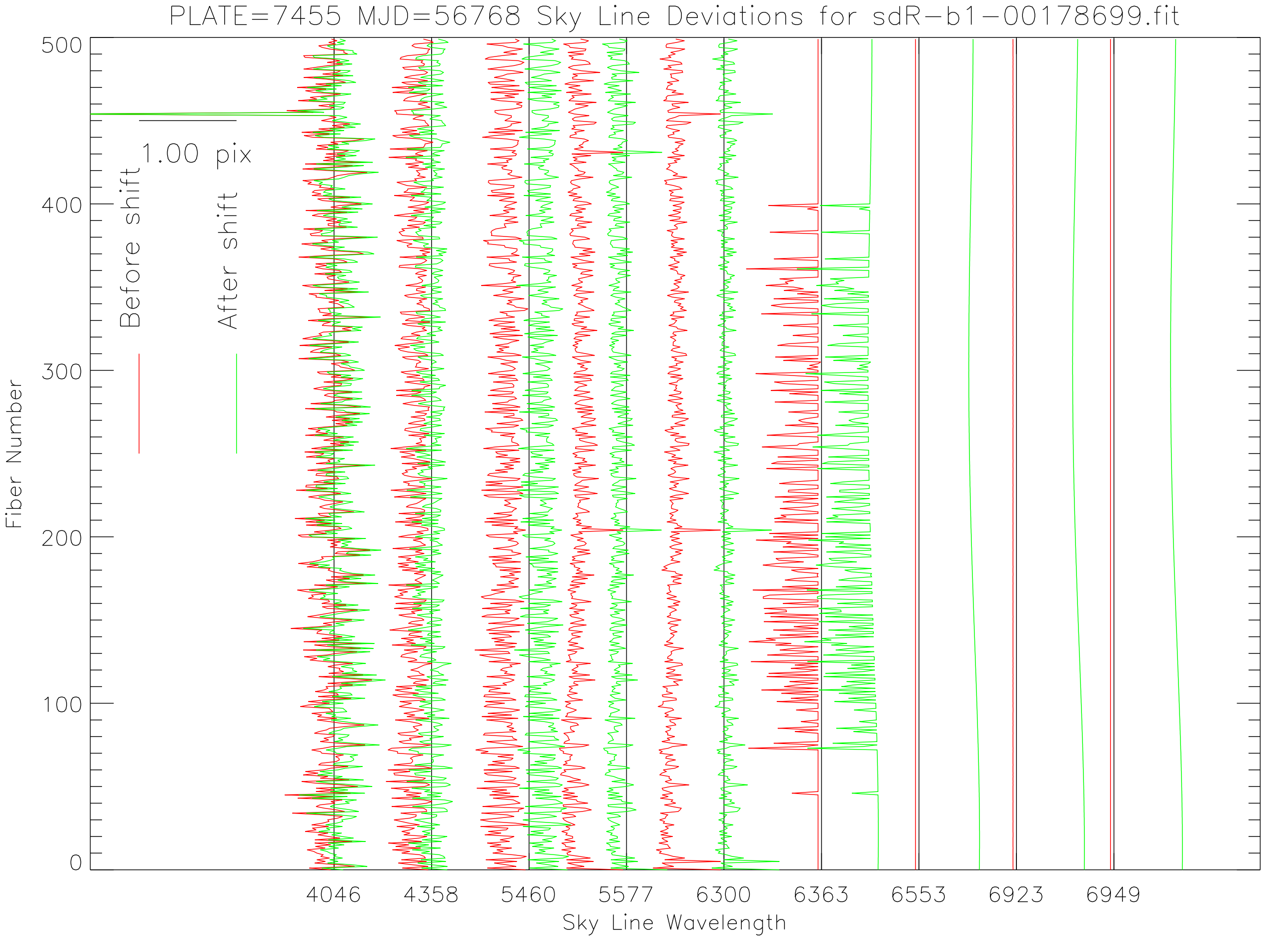


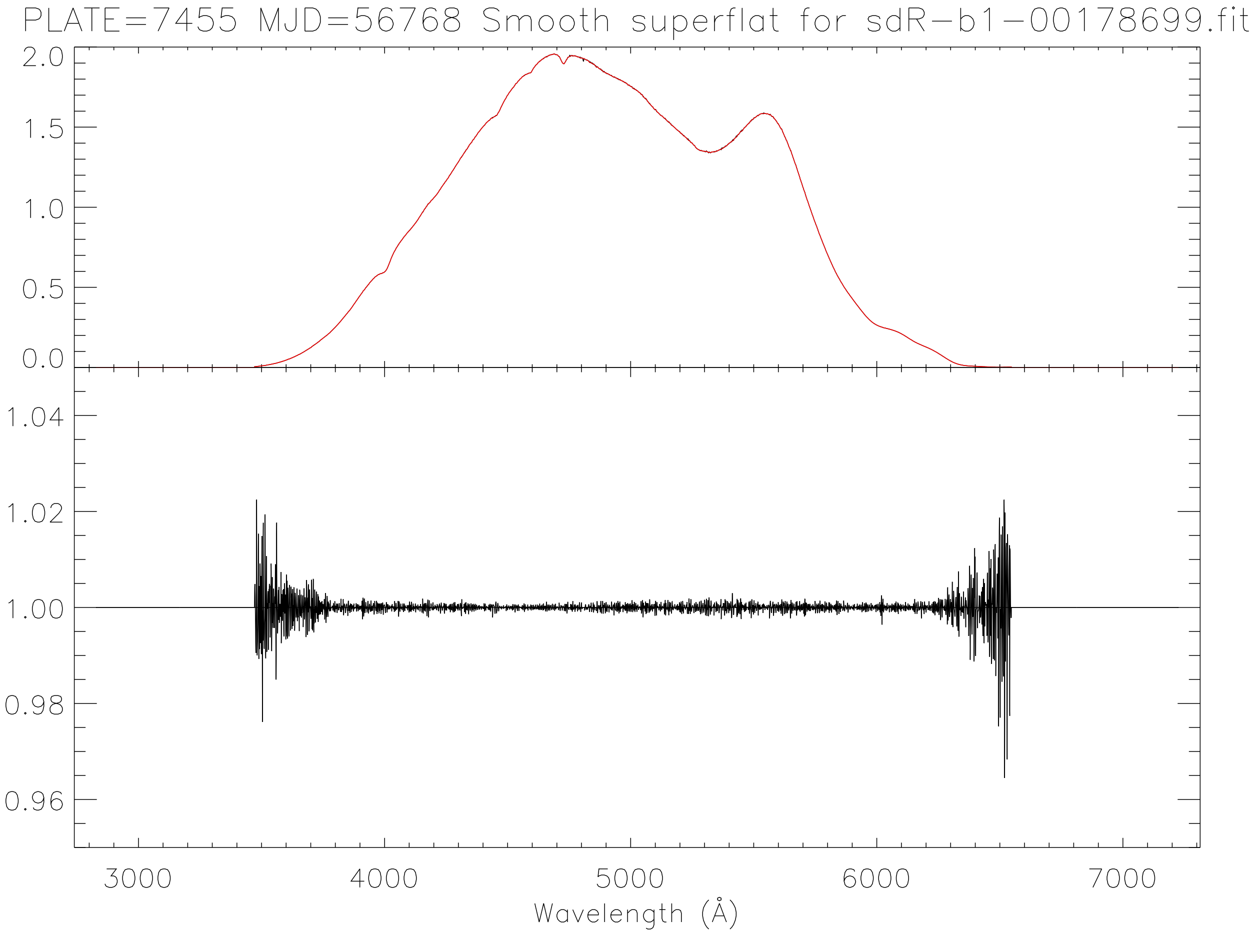
PLATE=7455 MJD=56768 sdR-b1-00178698.fit Skyline Flux at 4359.5


PLATE=7455 MJD=56768 sdR-b1-00178698.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
8400
8200
8000
7800
7600
7400
7200
7000
RED = sky fiber
Dispersion = 1.14 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.14
1.15
1.16
1.17
1.18
Airmass

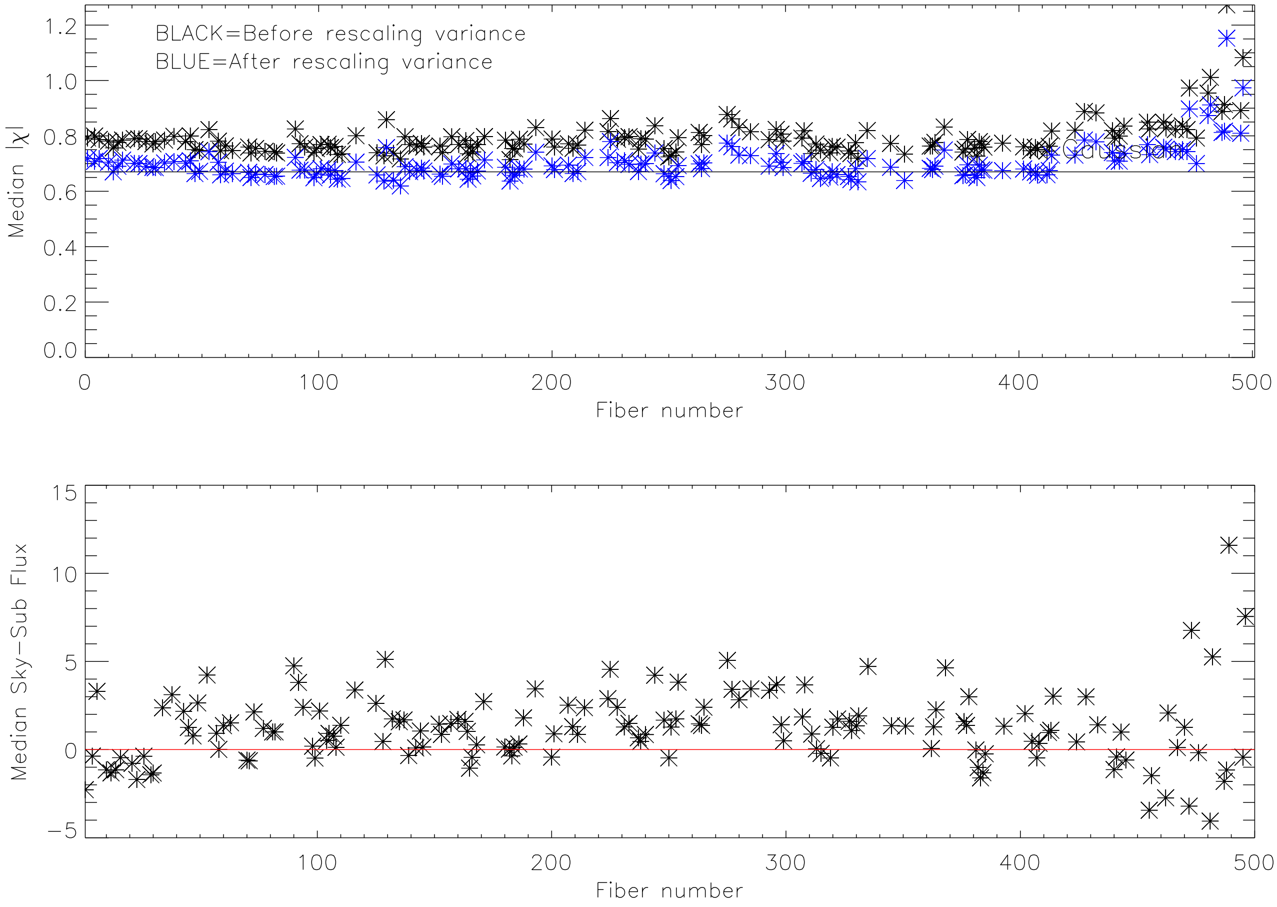

PLATE=7455 MJD=56768 Fiber−Flats for sdR−b1−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.272
Max value = 14.468
Fiber−Flat
0.0
0.5
1.0
1.5
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 17:53:11 2014

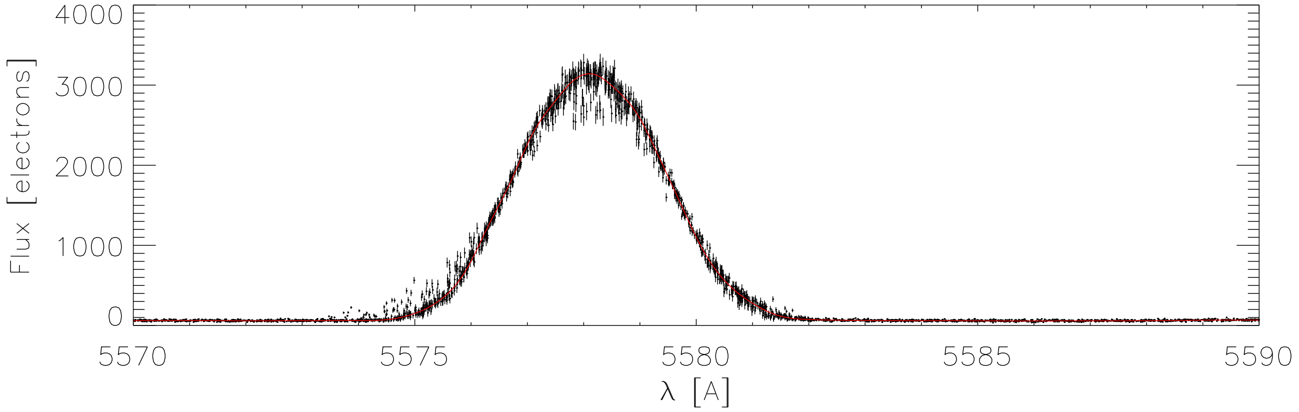

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b1-00178699.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
0
1000
2000
3000
4000
Row number


PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b1-00178699.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

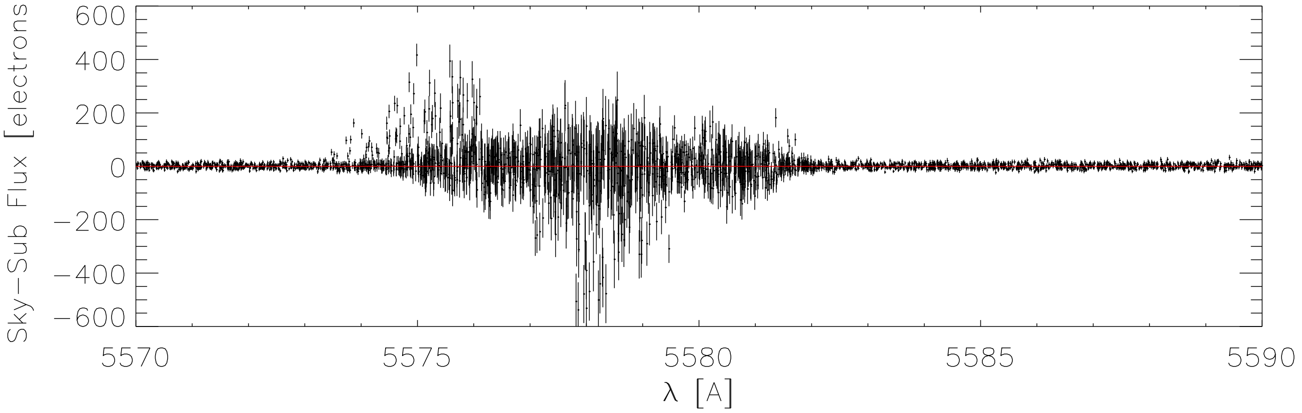

PLATE=7455 MJD=56768 Smooth superflat for sdR-b1-00178699.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

PLATE=7455 MJD=56768 sdR-b1-00178699.fit 1D Sky-subtraction Sky Fibers



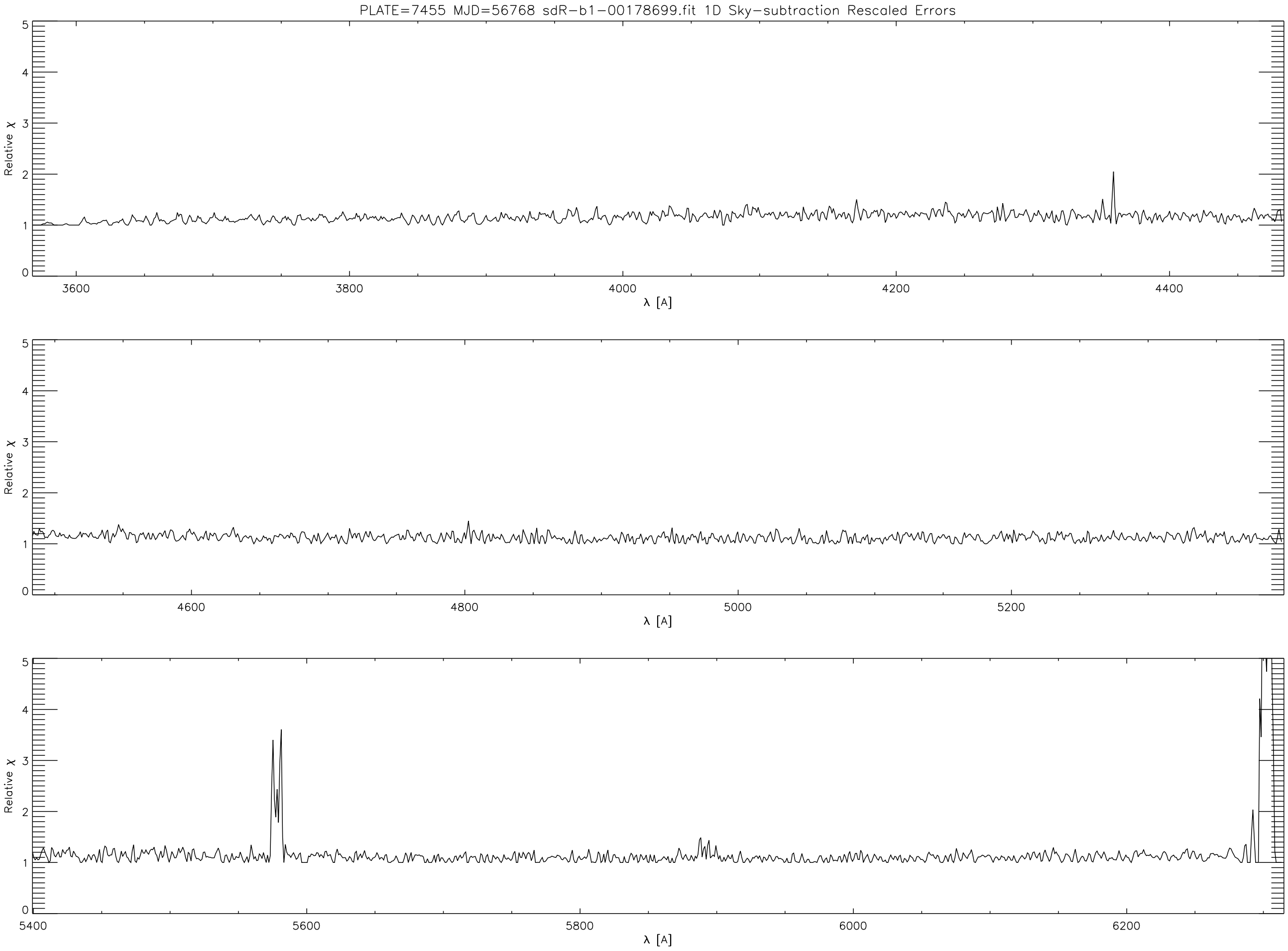


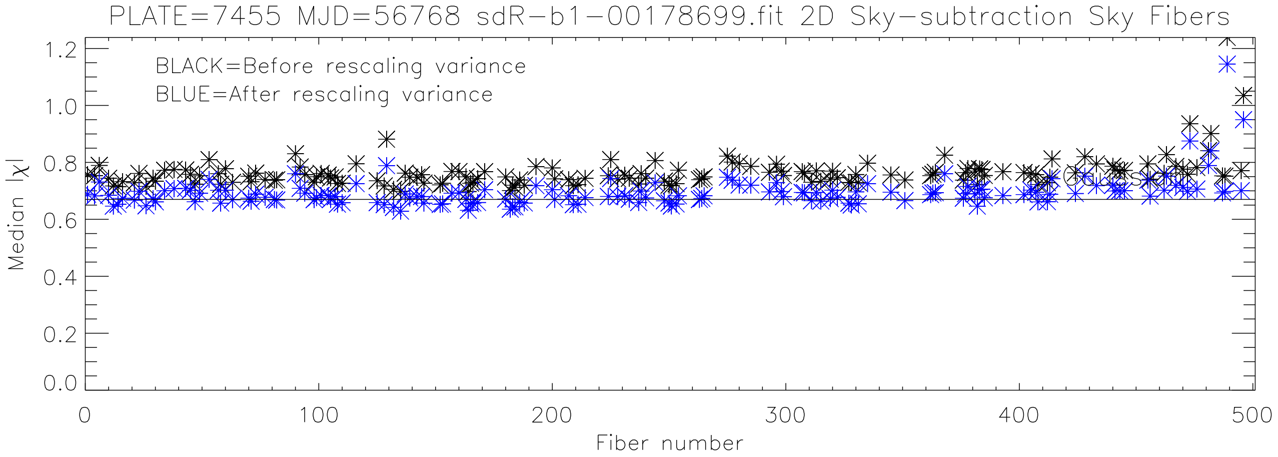
PLATE=7455 MJD=56768 sdR-b1-00178699.fit 1D Sky-subtraction Sky Fibers

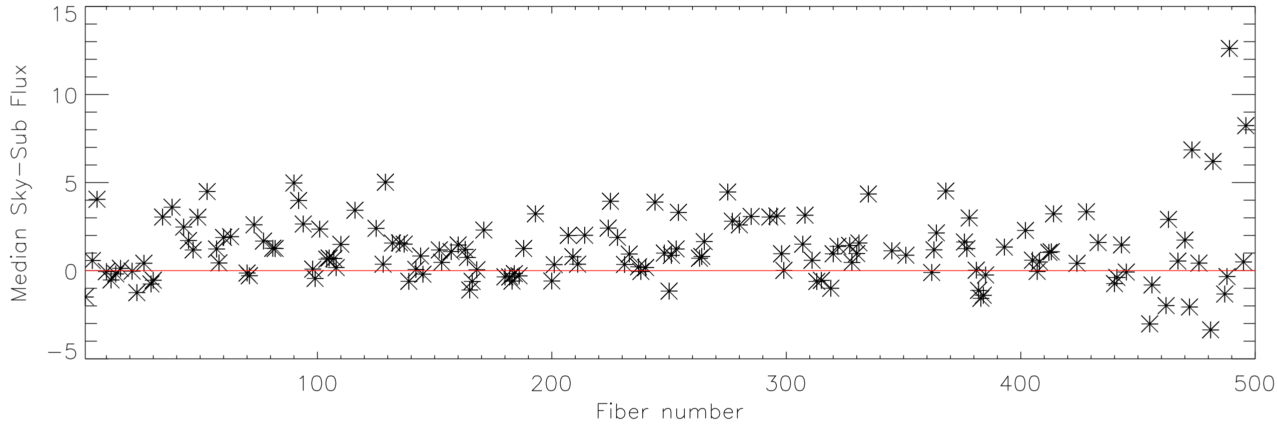


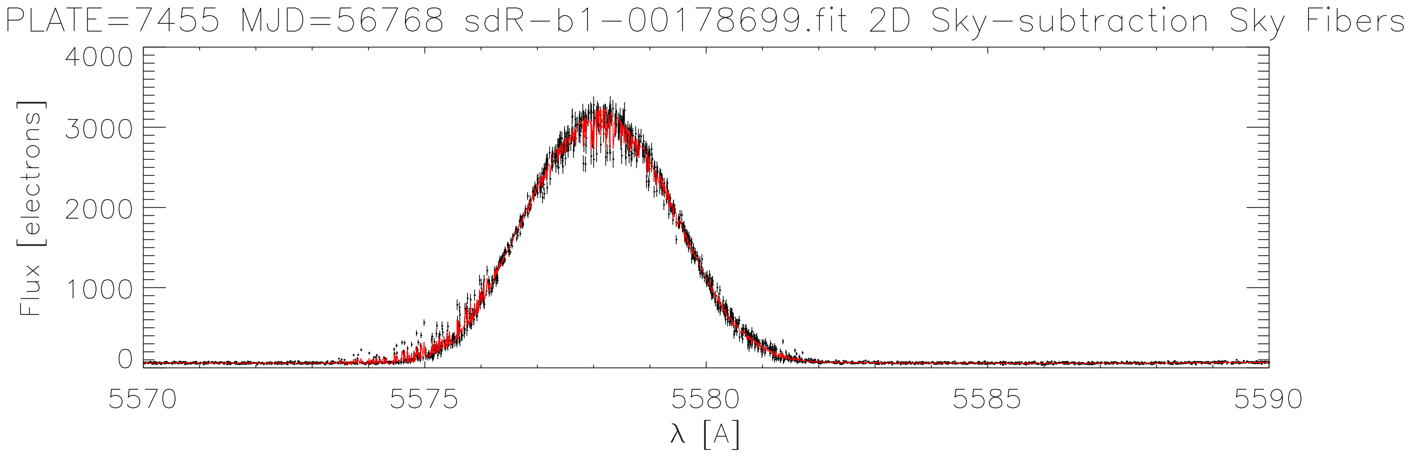
PLATE=7455 MJD=56768 sdR-b1-00178699.fit 1D Sky-subtraction Sky-subtracted Sky F

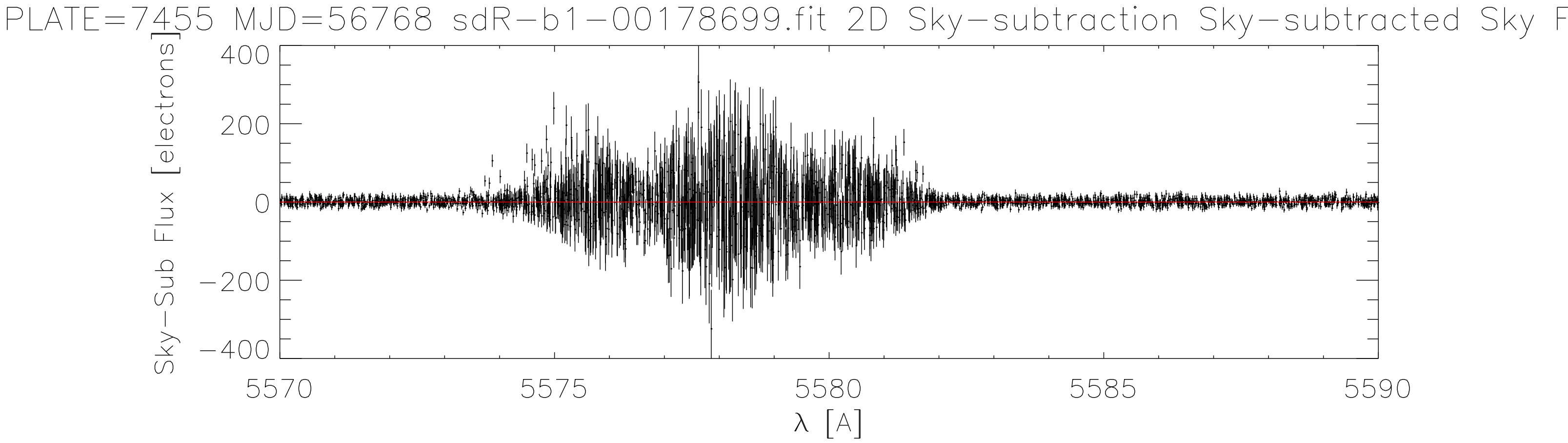
Number of sky fibers = 157



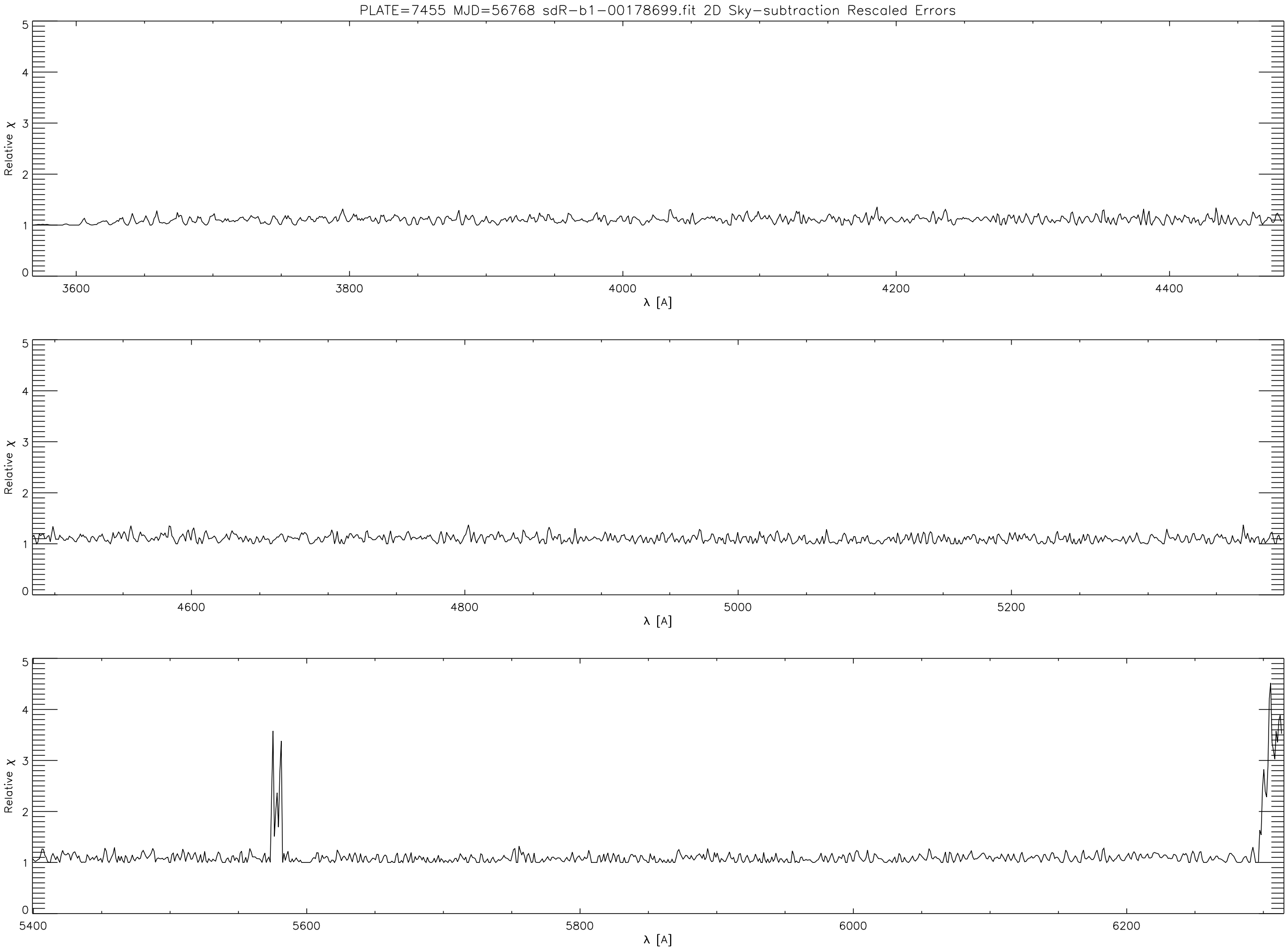

PLATE=7455 MJD=56768 sdR-b1-00178699.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
100
200
300
400
500
Fiber number

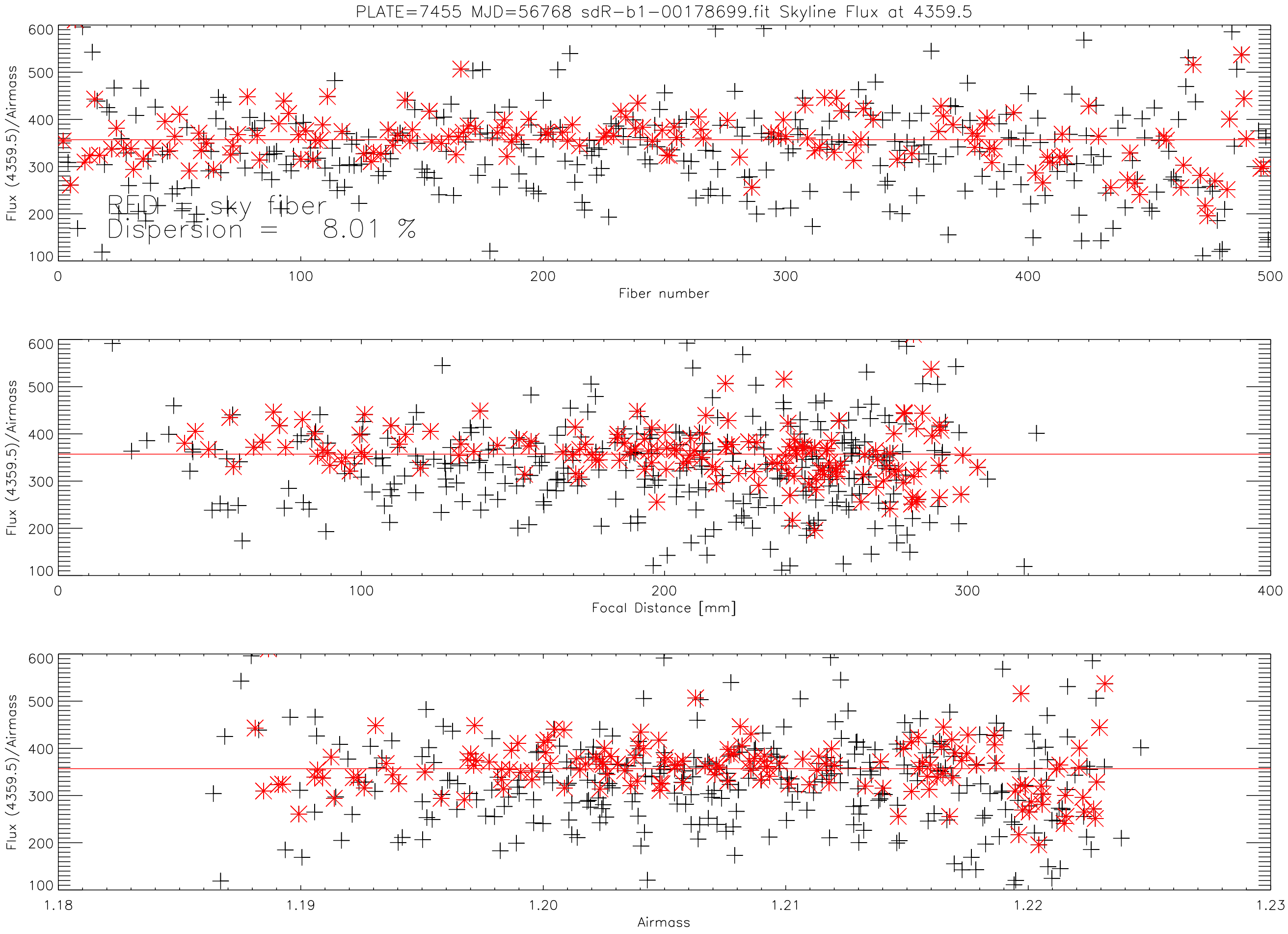

Median Sky-Sub Flux
−5
0
5
10
15
100
200
300
400
500
Fiber number

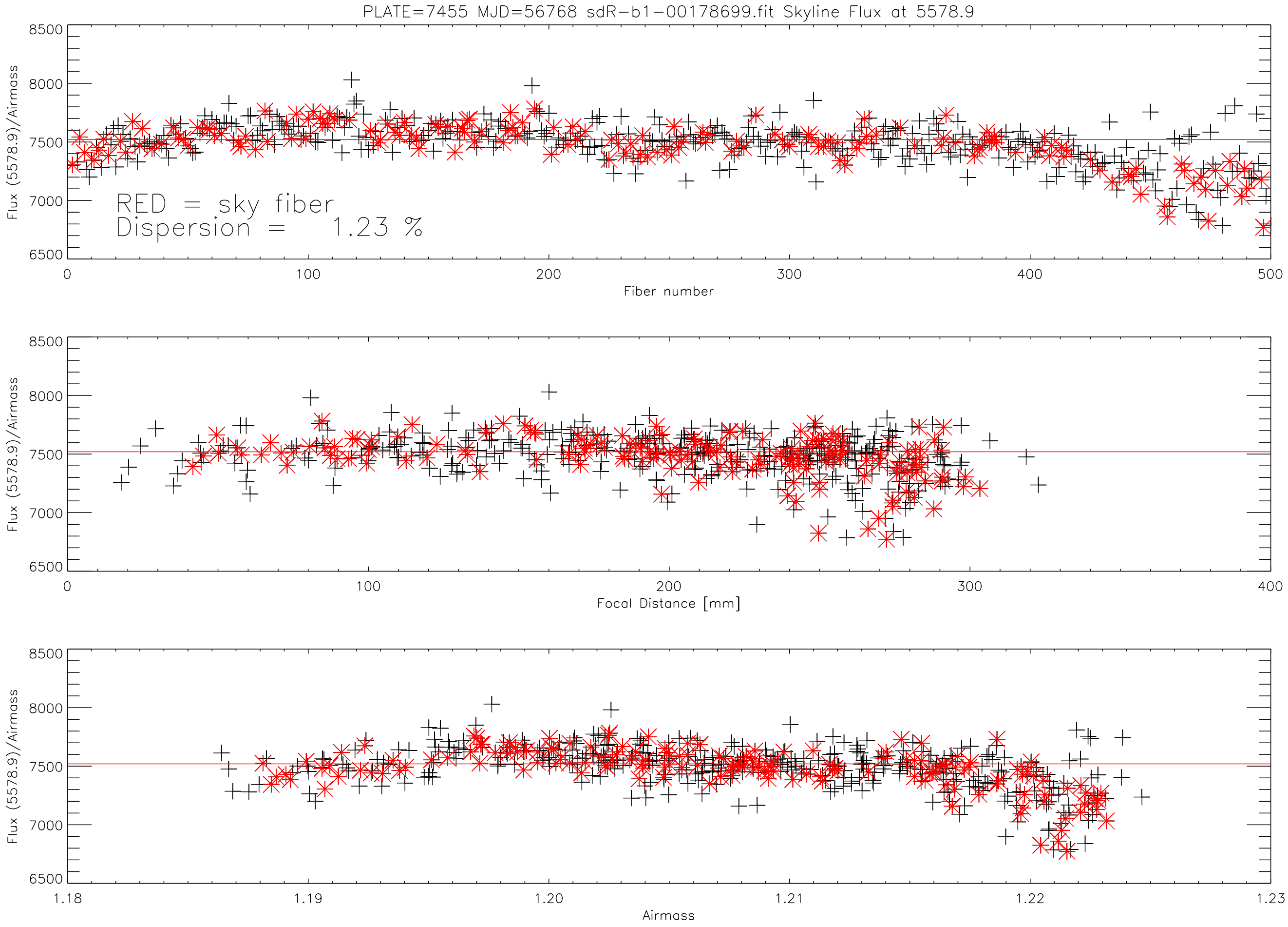

PLATE=7455 MJD=56768 sdR-b1-00178699.fit 2D Sky-subtraction Sky Fibers

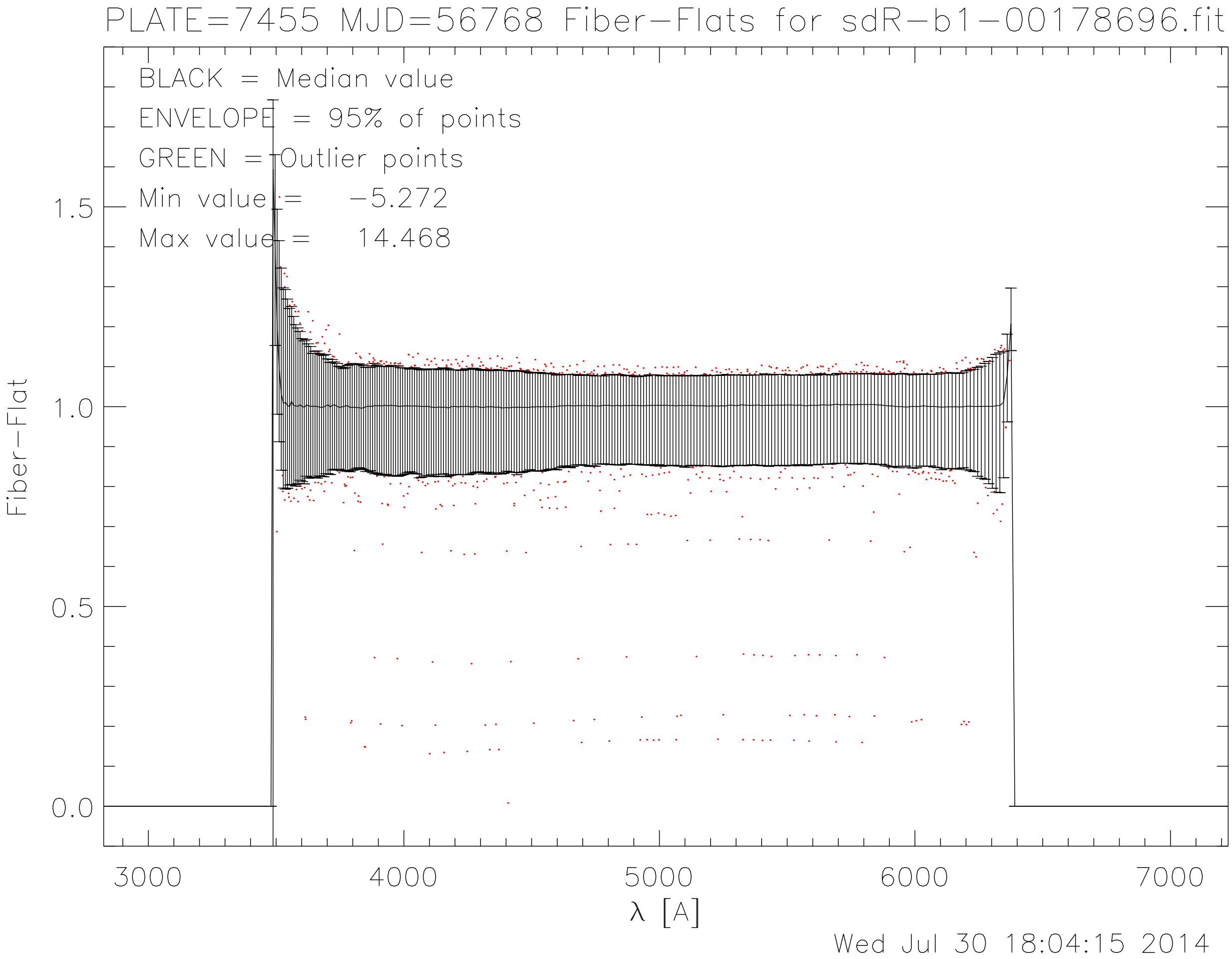

PLATE=7455 MJD=56768 sdR-b1-00178699.fit 2D Sky-subtraction Sky-subtracted Sky F

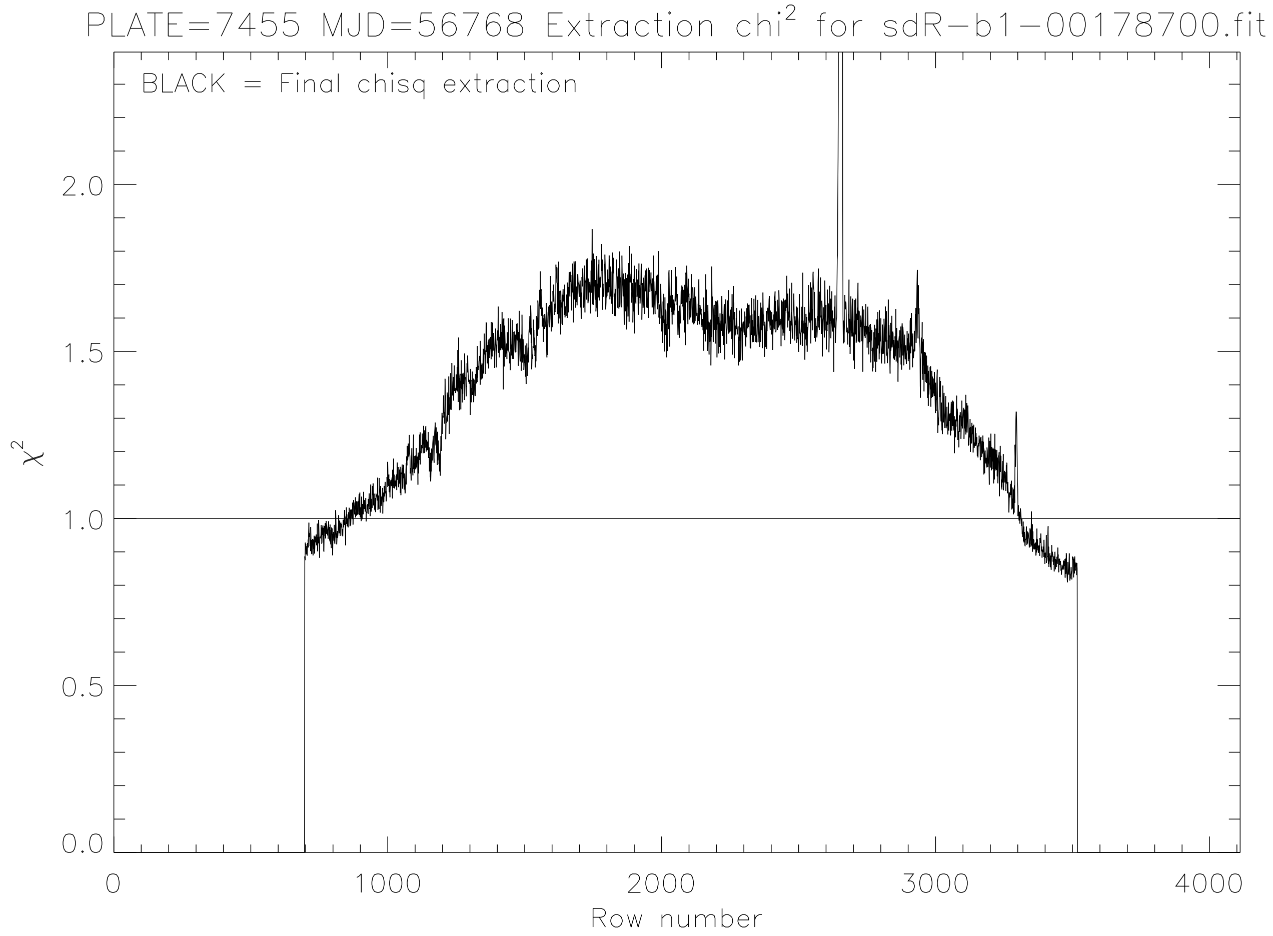
Number of sky fibers = 157

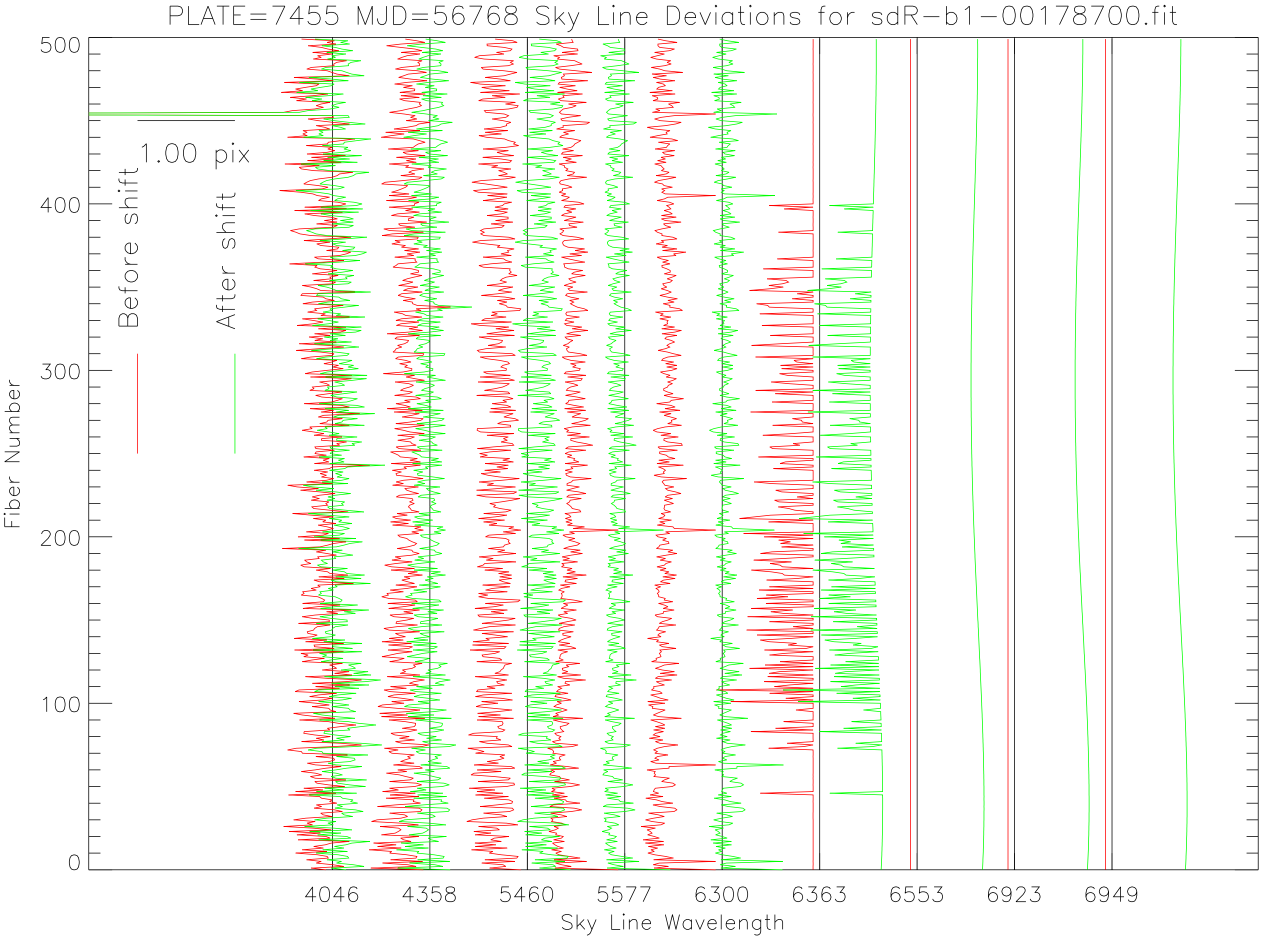

PLATE=7455 MJD=56768 sdR-b1-00178699.fit 2D Sky-subtraction Rescaled Errors


PLATE=7455 MJD=56768 sdR-b1-00178699.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
600
500
400
300
200
100
RED = sky fiber
Dispersion = 8.01 %
0
100
200
300
400
500
Fiber number
Flux (4359.5)/Airmass
600
500
400
300
200
100
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
600
500
400
300
200
100
1.18
1.19
1.20
1.21
1.22
1.23
Airmass

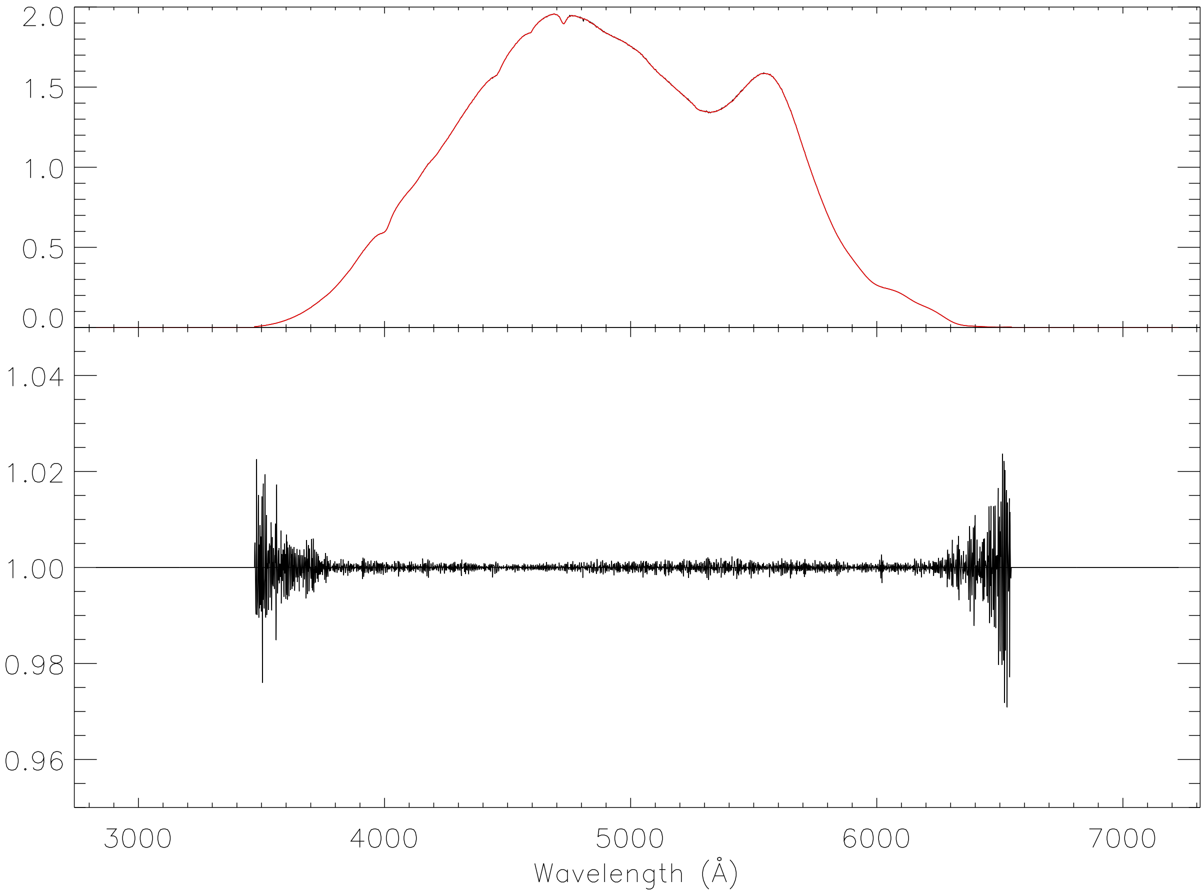

PLATE=7455 MJD=56768 sdR-b1-00178699.fit Skyline Flux at 5578.9

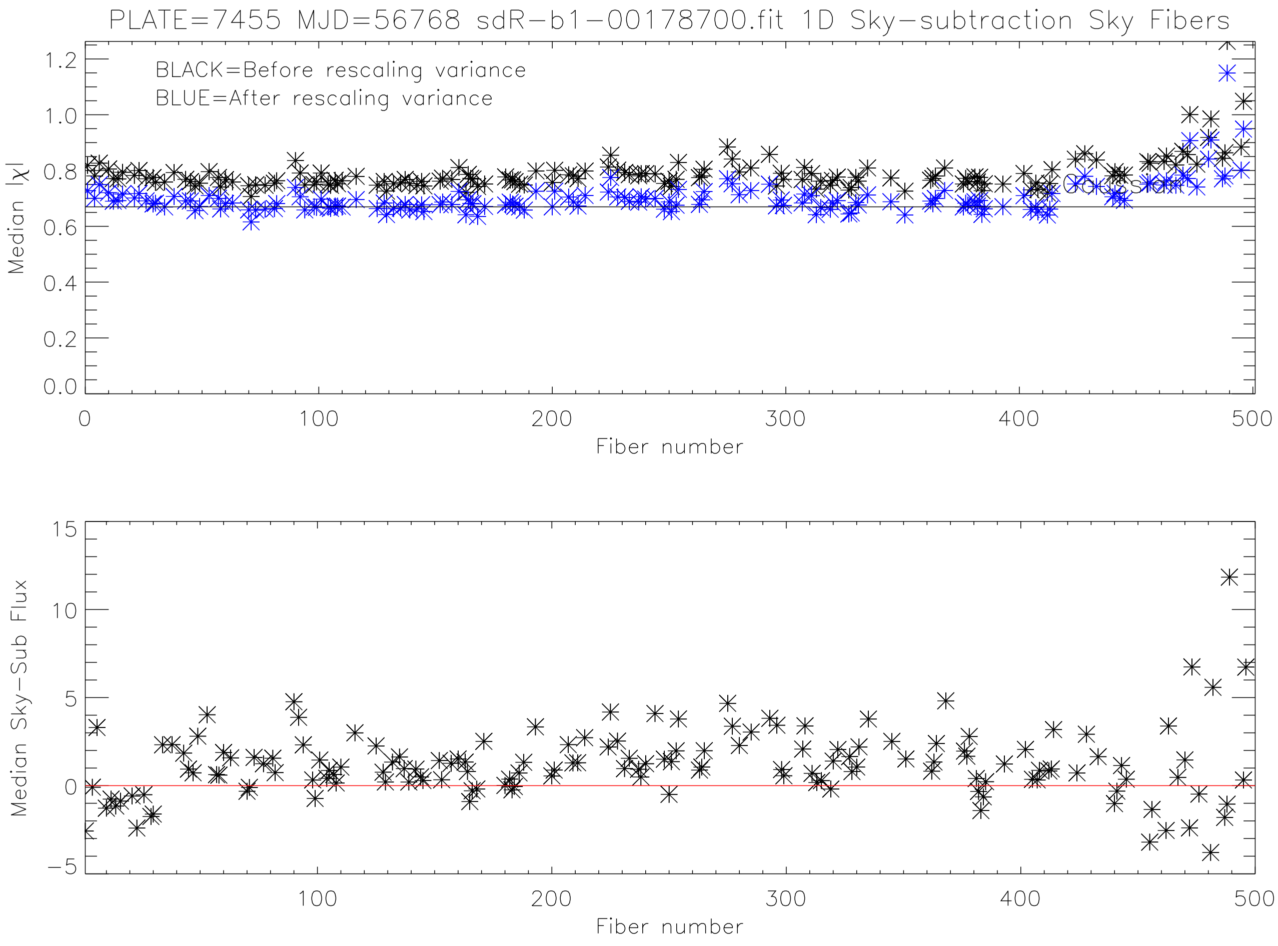

PLATE=7455 MJD=56768 Fiber−Flats for sdR−b1−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.272
Max value = 14.468
Fiber−Flat
0.0
0.5
1.0
1.5
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 18:04:15 2014

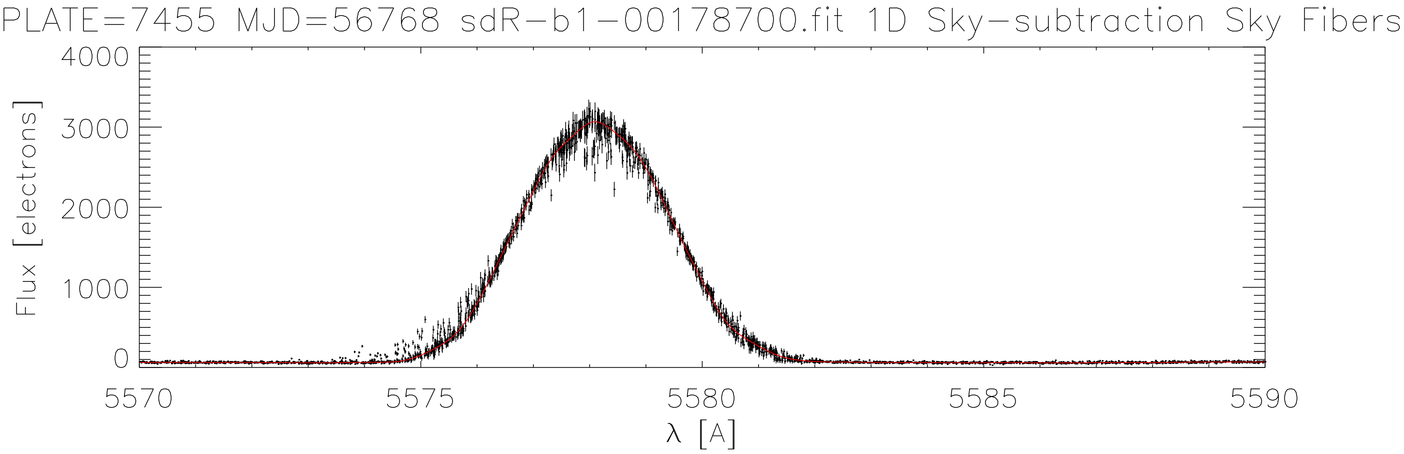

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b1-00178700.fit
BLACK = Final chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
1000
2000
3000
4000
Row number

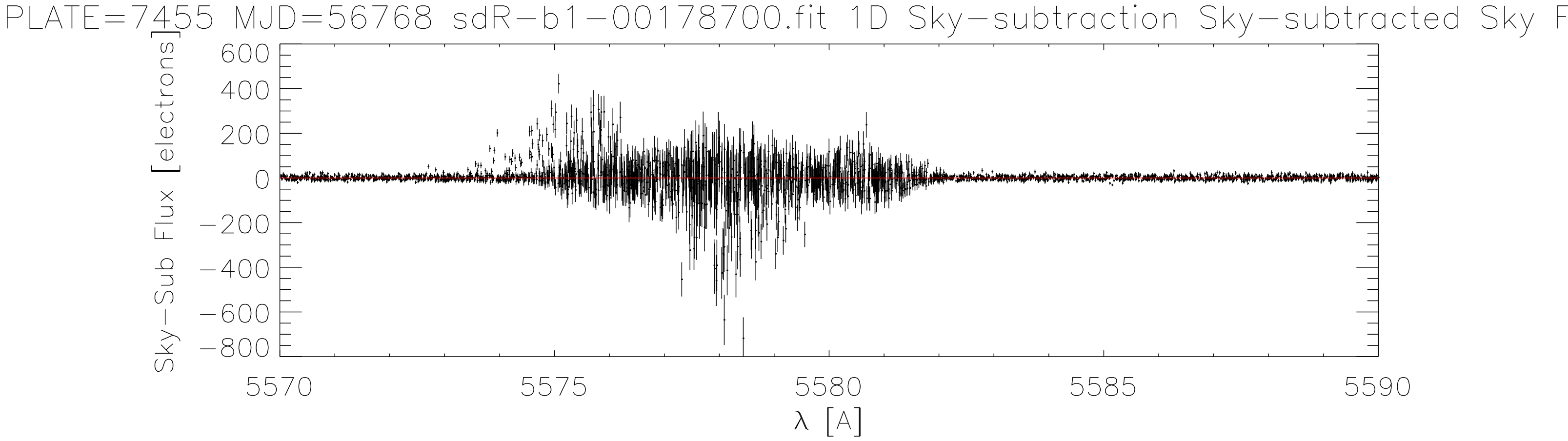

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b1-00178700.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

PLATE=7455 MJD=56768 Smooth superflat for sdR-b1-00178700.fit

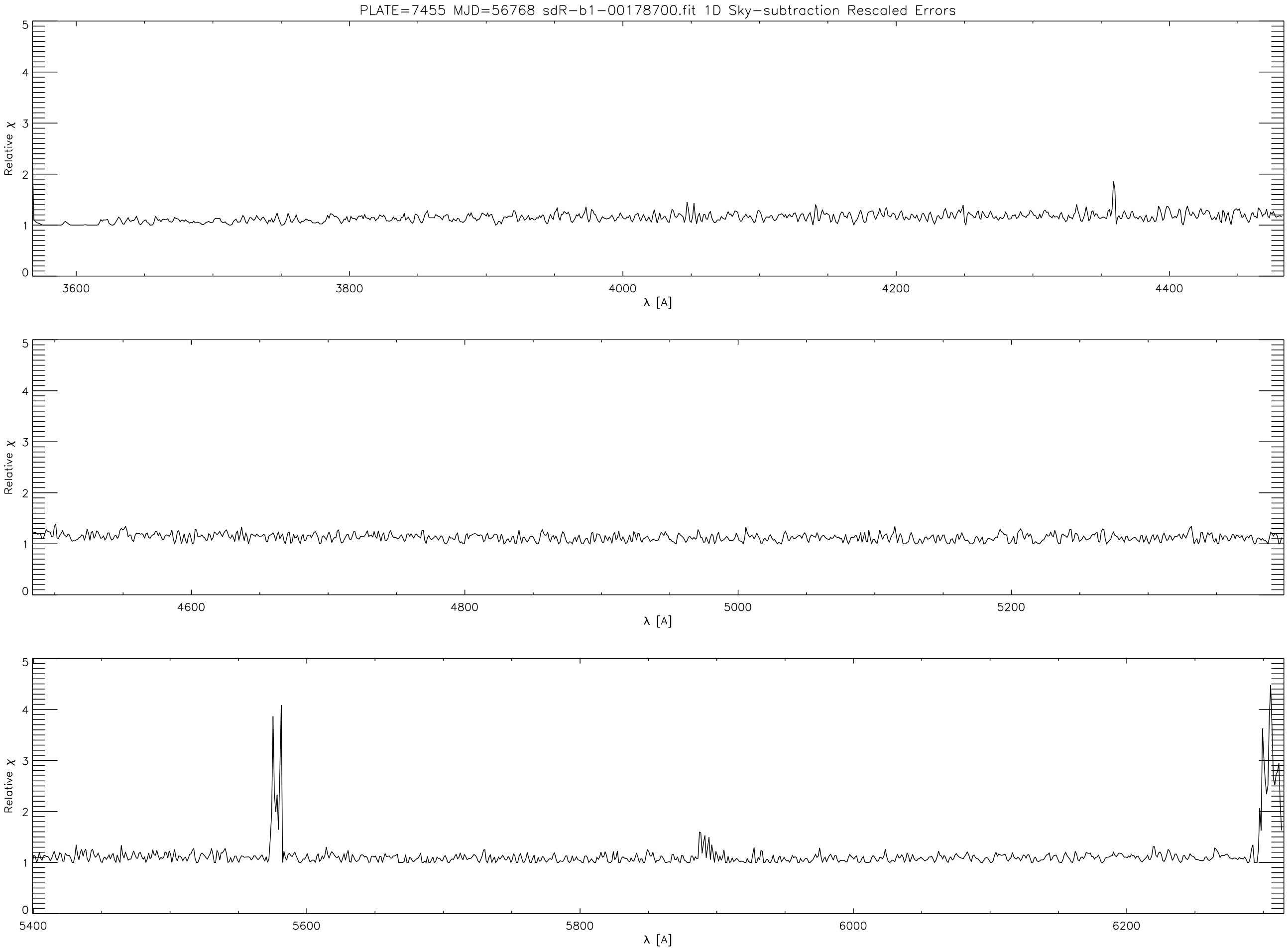



PLATE=7455 MJD=56768 sdR-b1-00178700.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−5
0
5
10
15
100
200
300
400
500
Fiber number

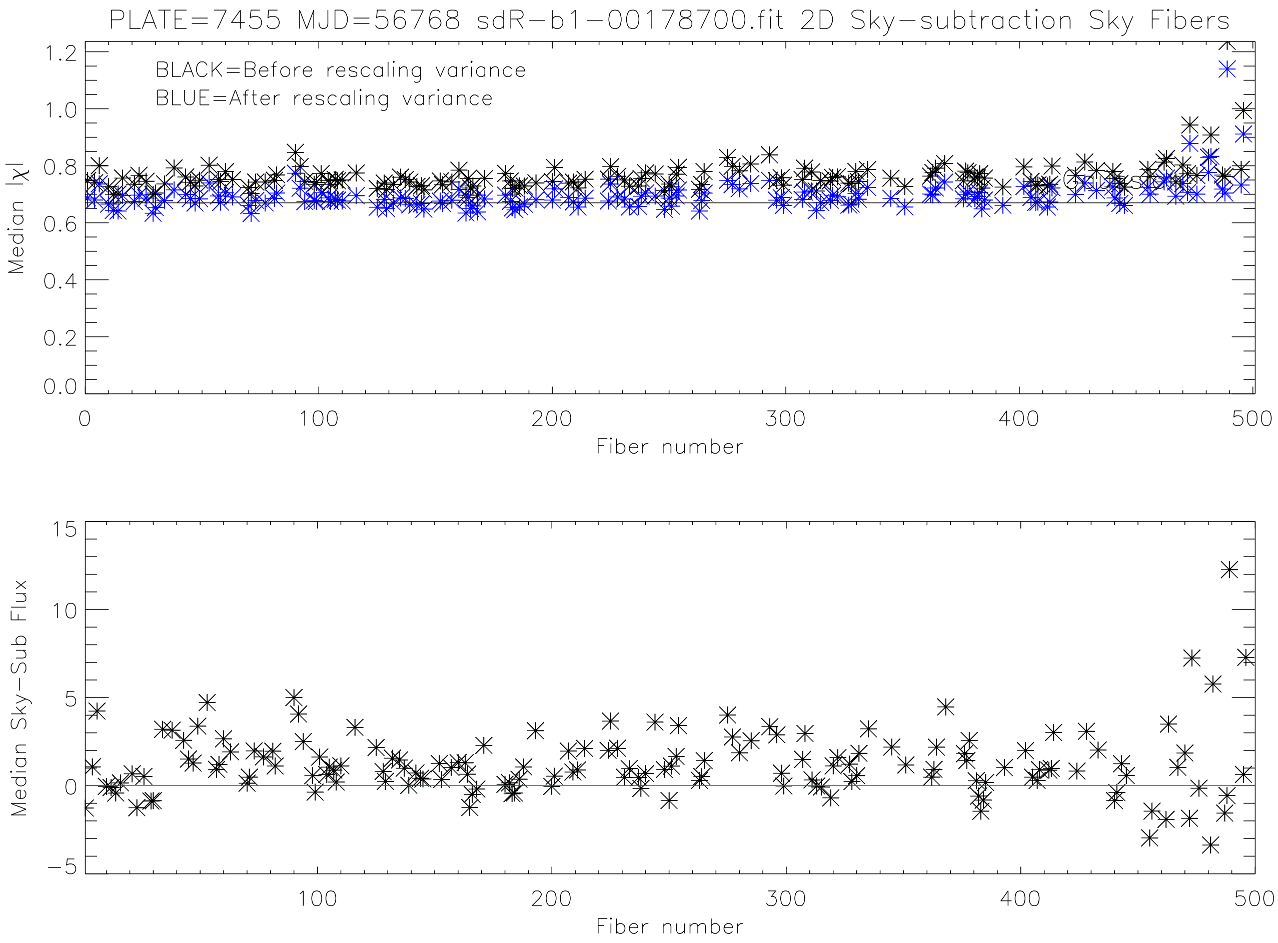

PLATE=7455 MJD=56768 sdR-b1-00178700.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

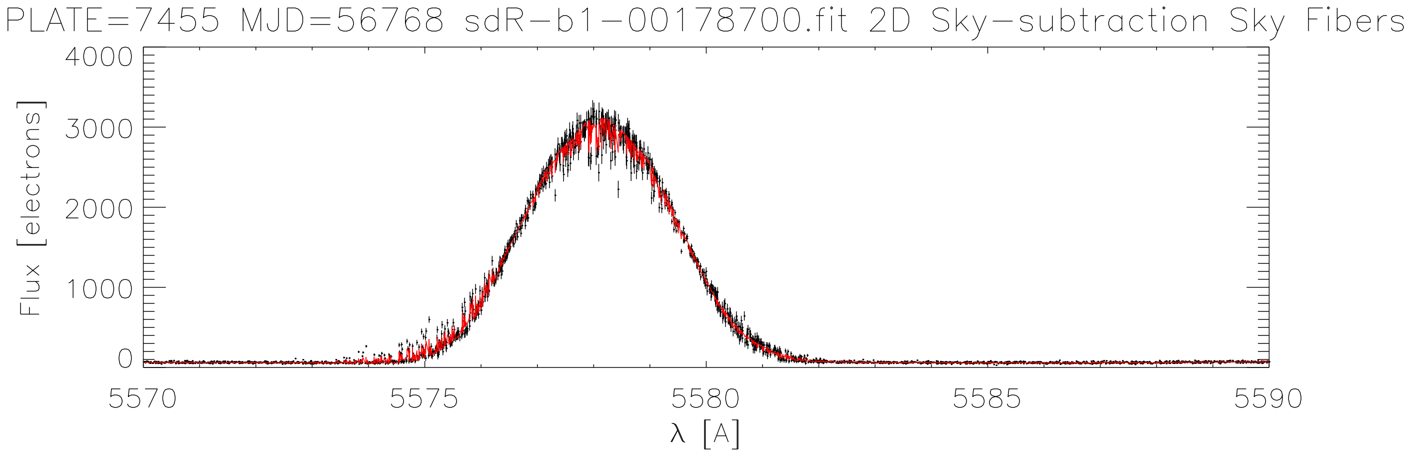

PLATE=7455 MJD=56768 sdR-b1-00178700.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
−600
−800
5570
5575
5580
5585
5590
λ [A]

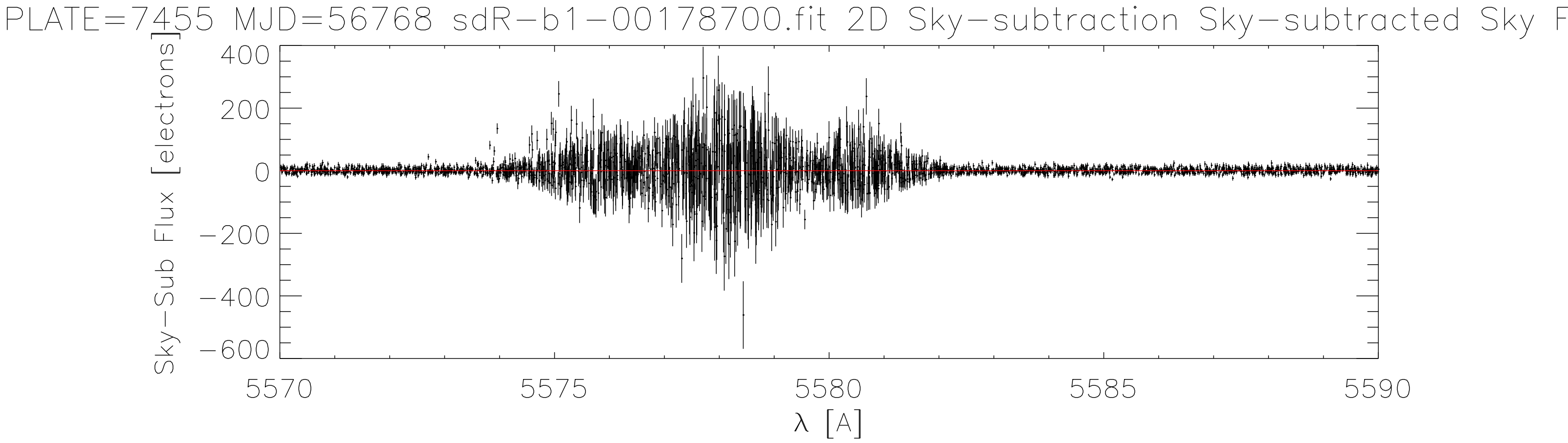
Number of sky fibers = 157



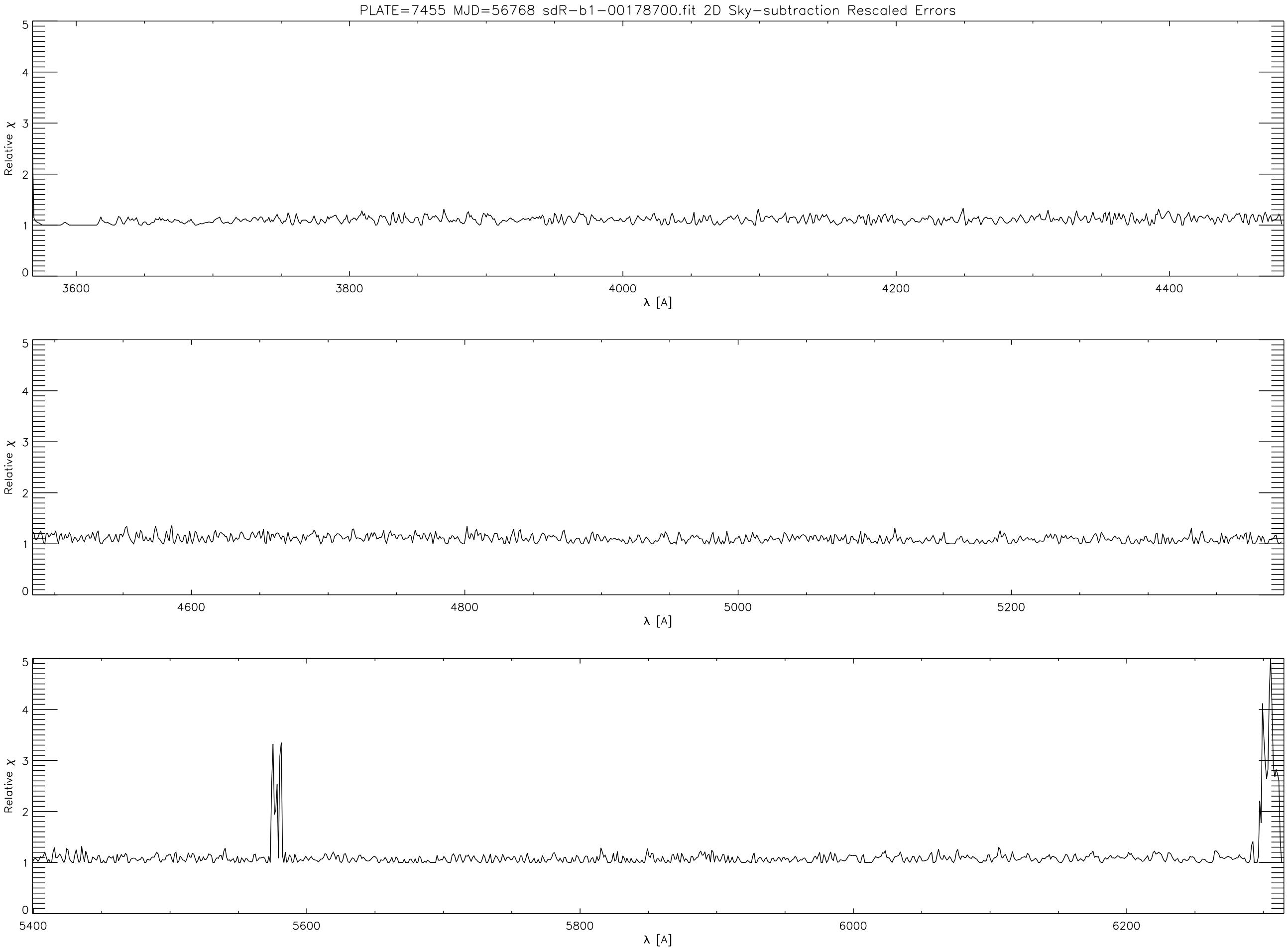
PLATE=7455 MJD=56768 sdR-b1-00178700.fit 1D Sky-subtraction Rescaled Errors

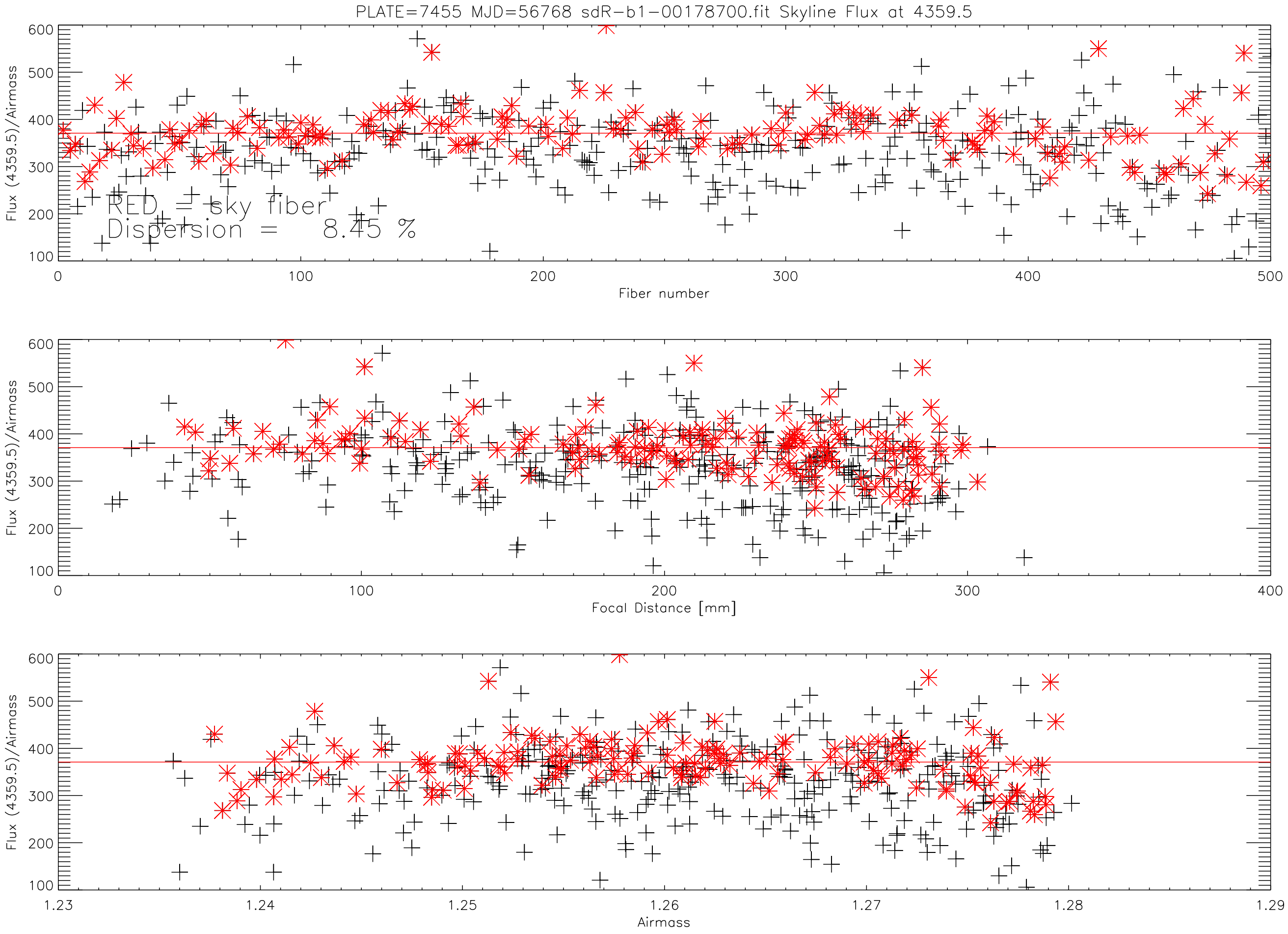

PLATE=7455 MJD=56768 sdR-b1-00178700.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−5
0
5
10
15
100
200
300
400
500
Fiber number

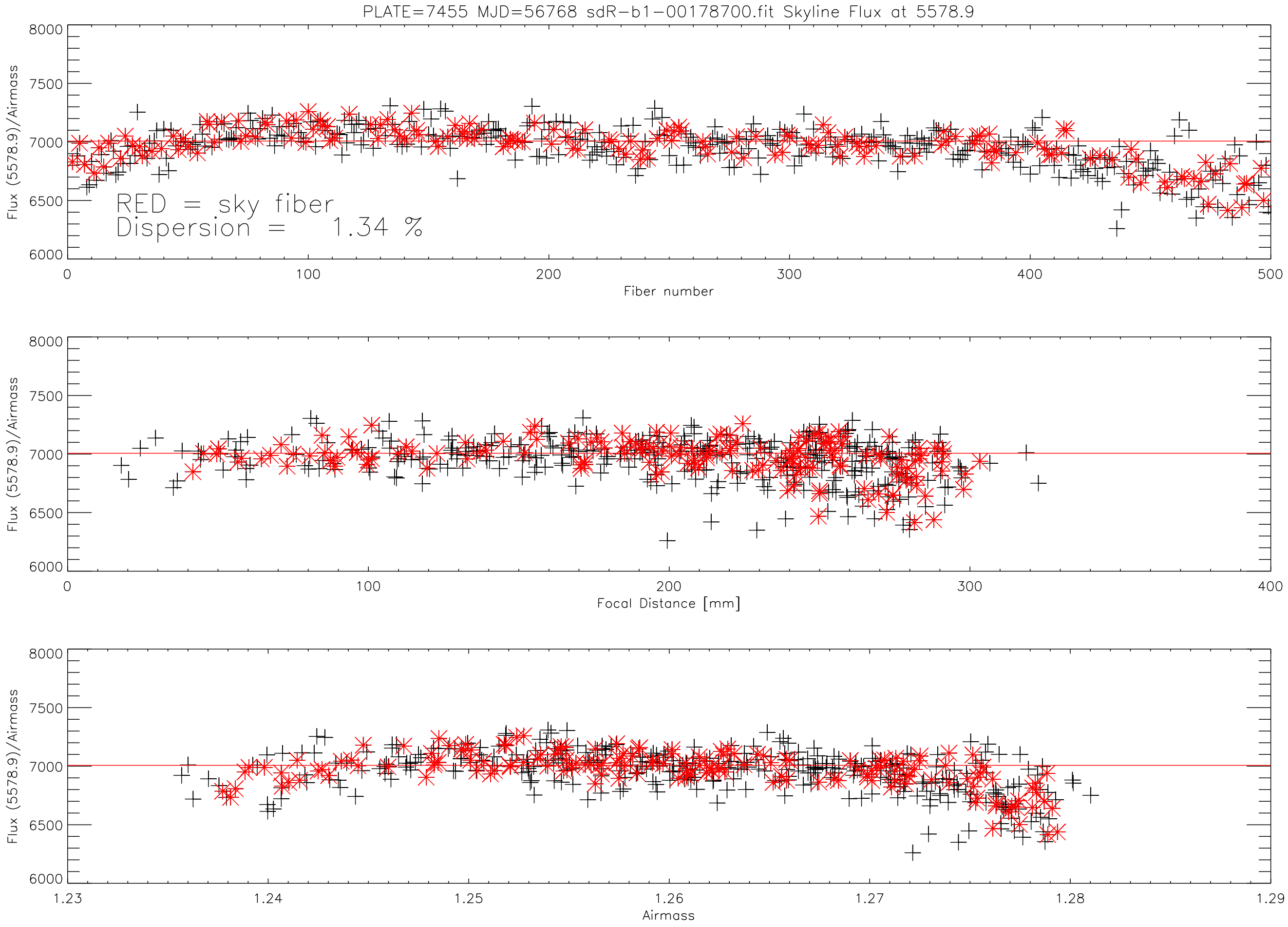

PLATE=7455 MJD=56768 sdR-b1-00178700.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

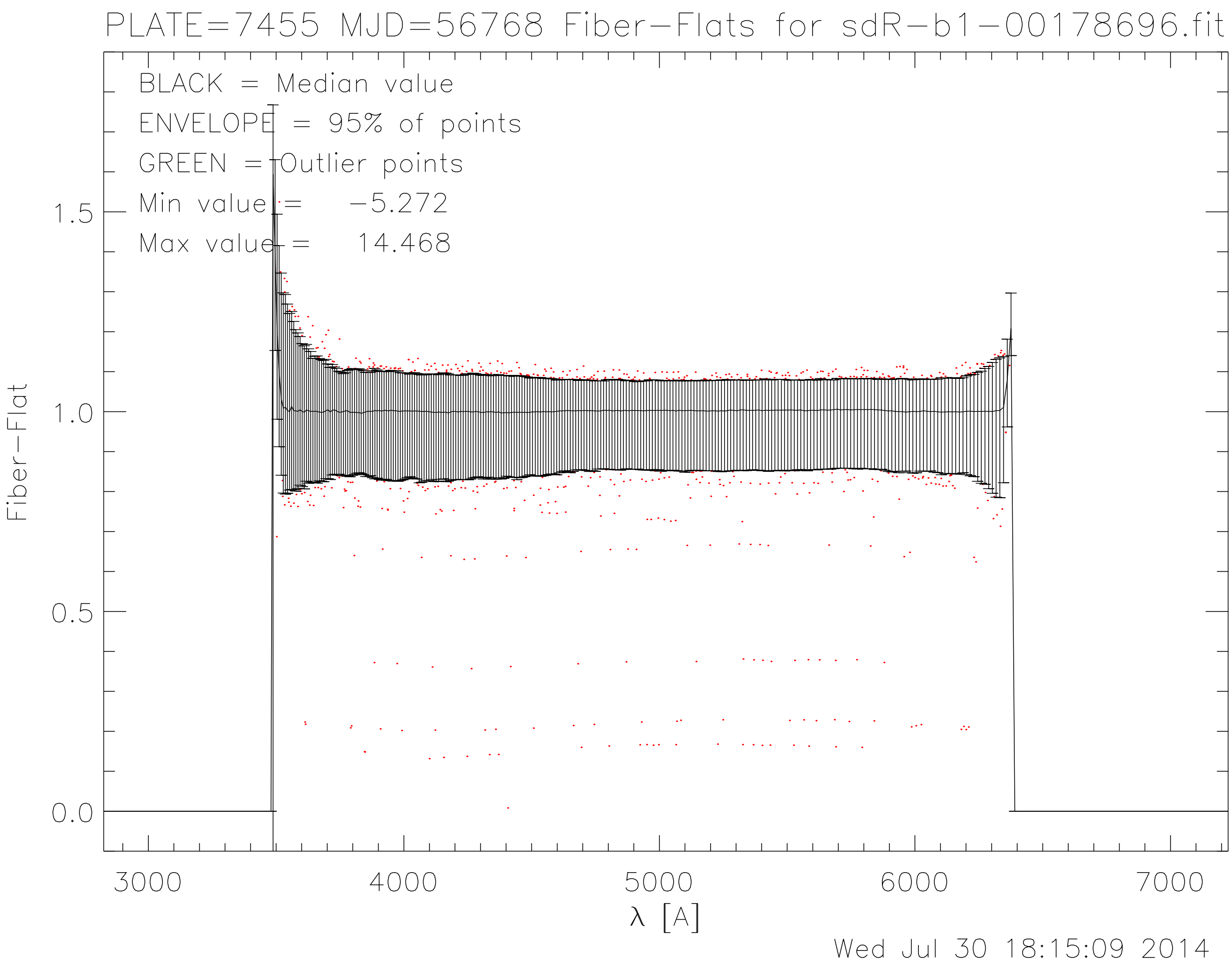

PLATE=7455 MJD=56768 sdR-b1-00178700.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
−600
5570
5575
5580
5585
5590
λ [A]

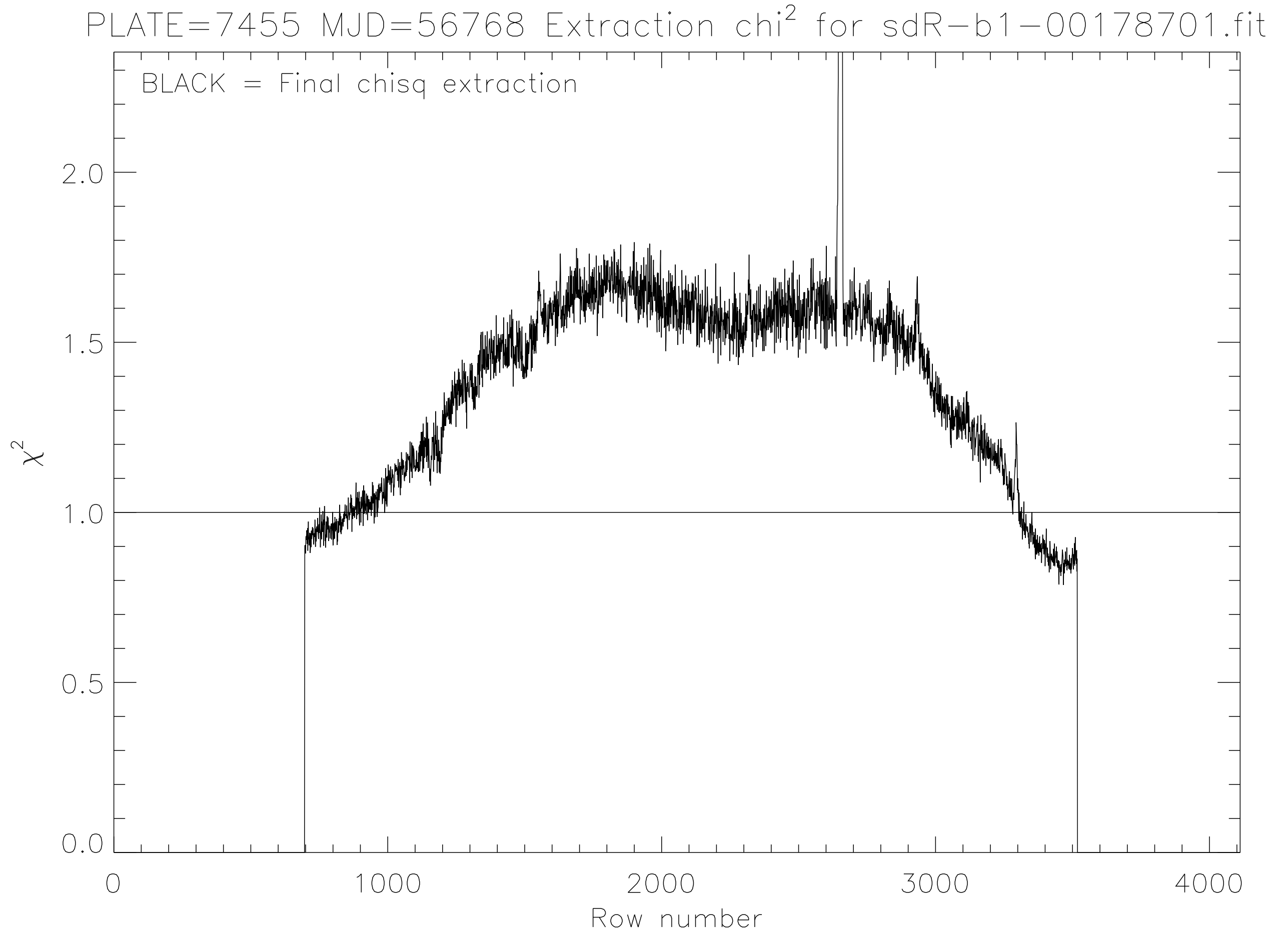
Number of sky fibers = 157

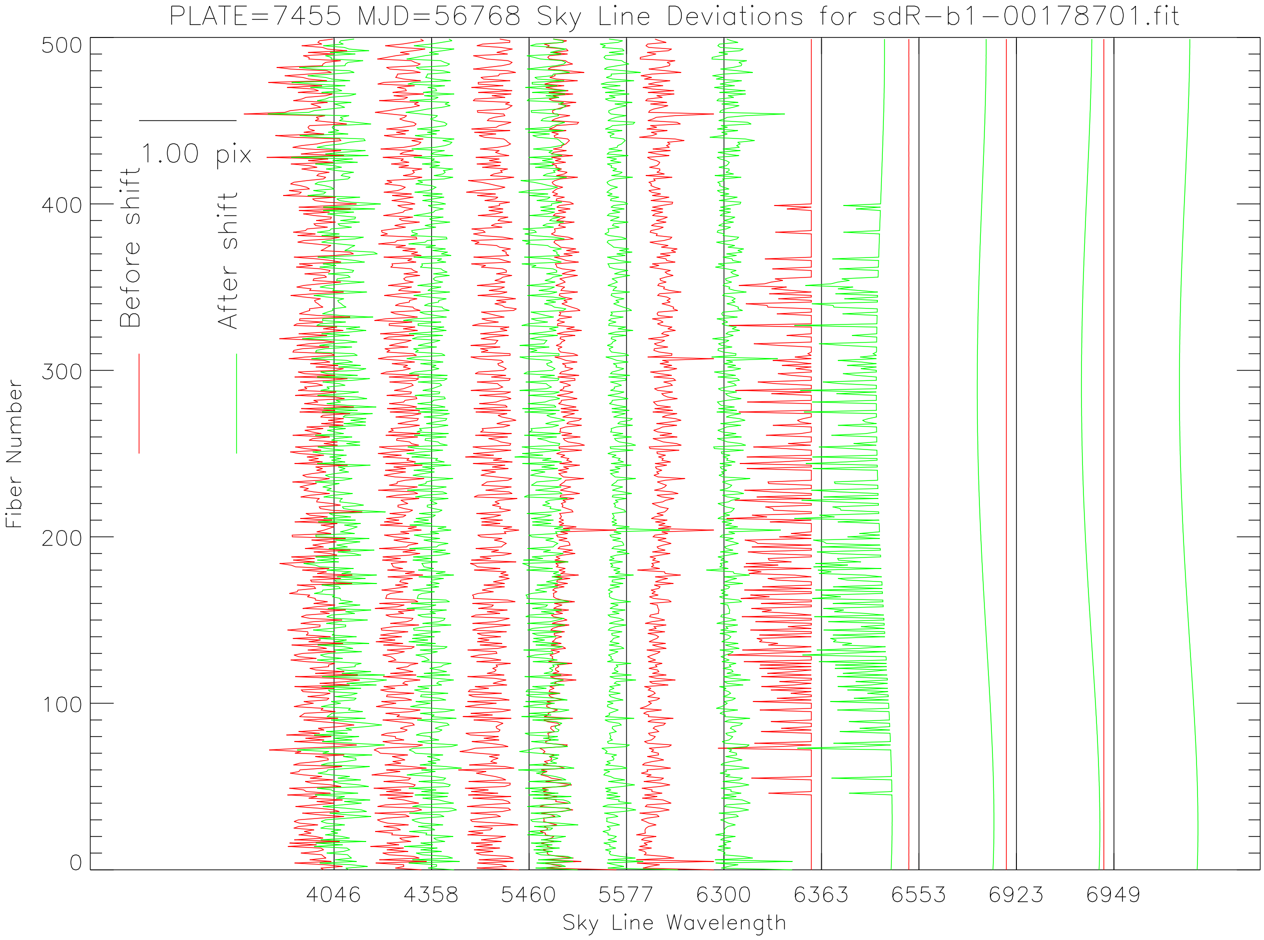


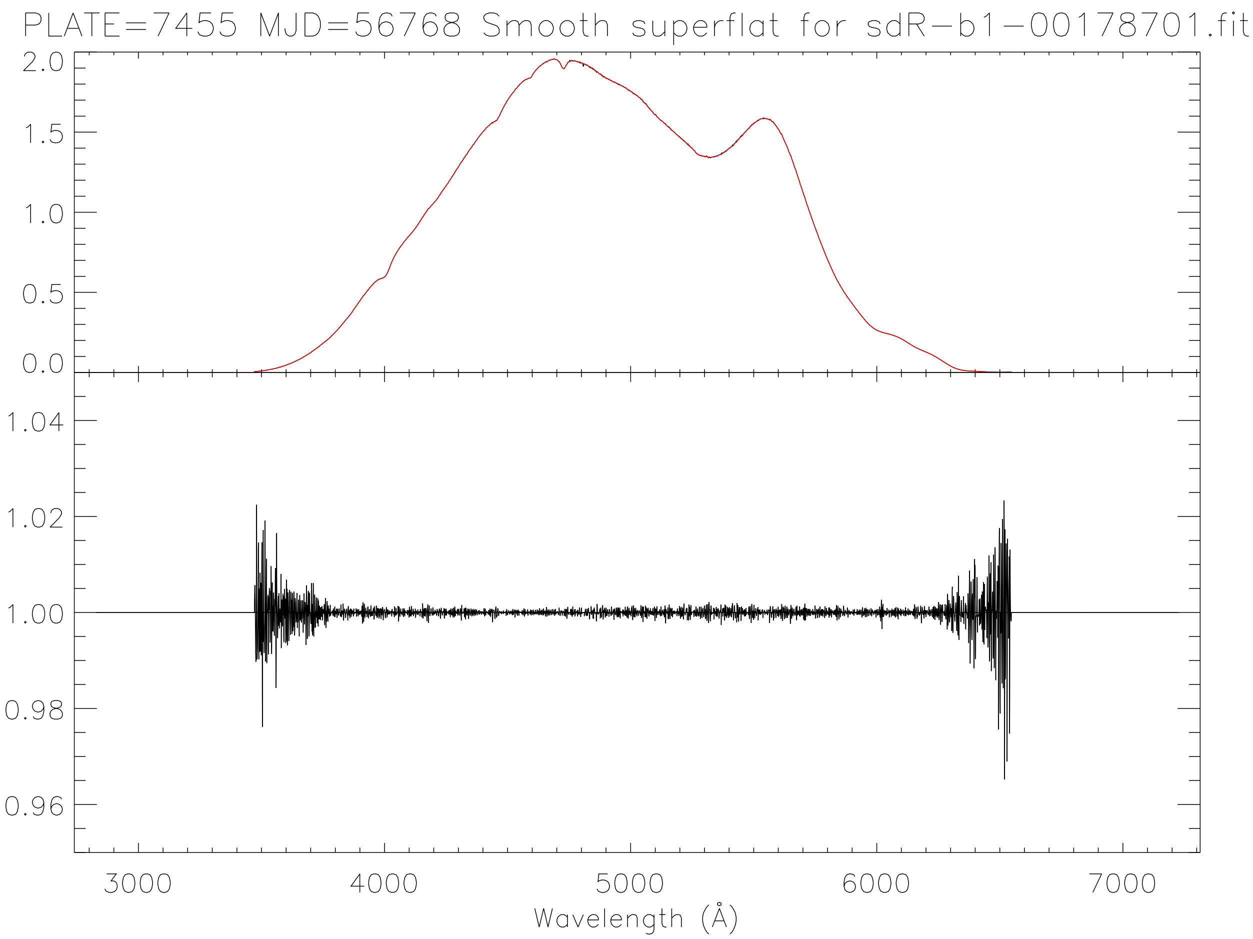

PLATE=7455 MJD=56768 sdR-b1-00178700.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
600
500
400
300
200
100
RED = sky fiber
Dispersion = 8.45 %
0
100
200
300
400
500
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.23
1.24
1.25
1.26
1.27
1.28
1.29
Airmass


PLATE=7455 MJD=56768 sdR-b1-00178700.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
8000
7500
7000
6500
6000
RED = sky fiber
Dispersion = 1.34 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
8000
7500
7000
6500
6000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
8000
7500
7000
6500
6000
1.23
1.24
1.25
1.26
1.27
1.28
1.29
Airmass

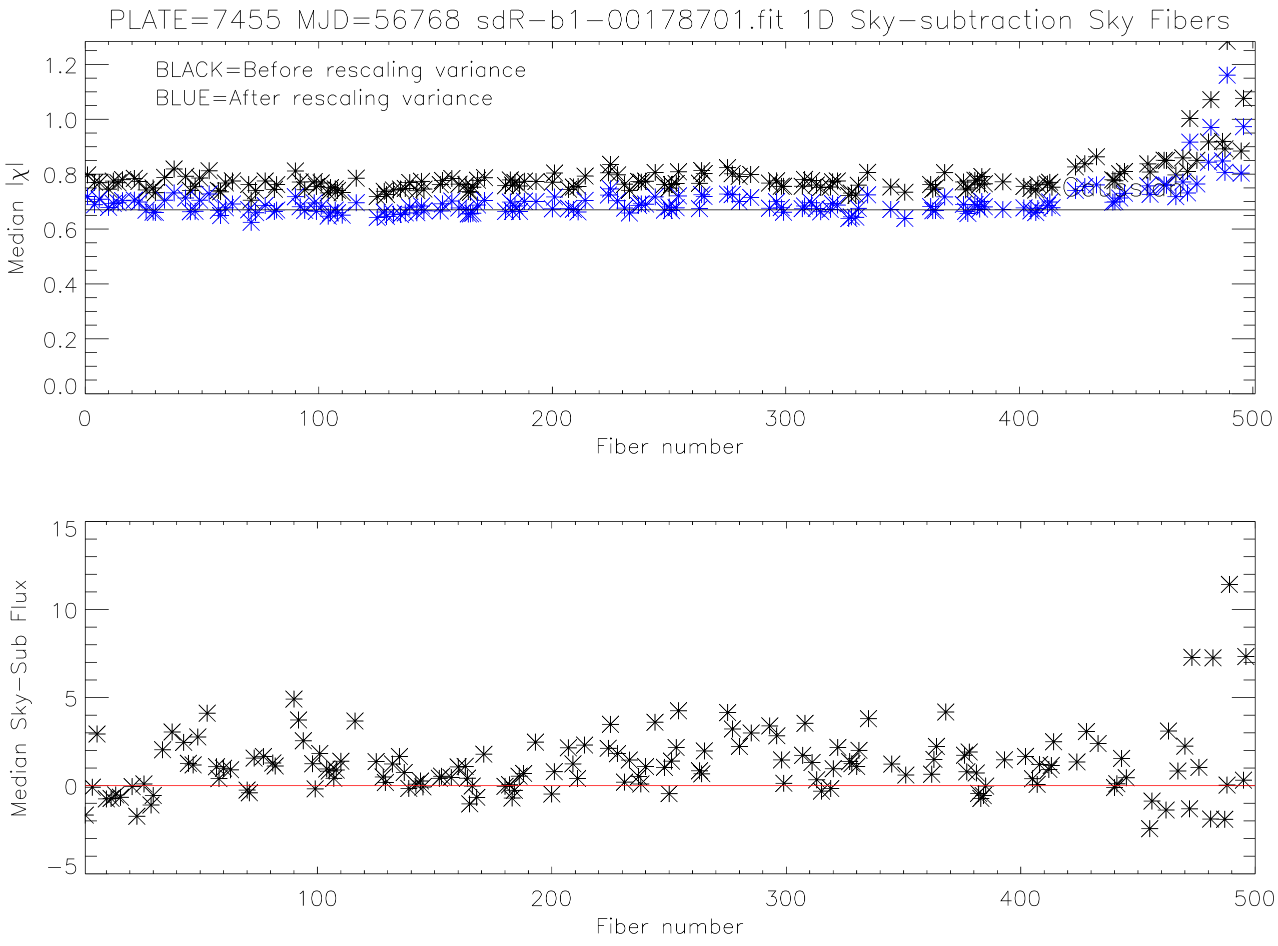

PLATE=7455 MJD=56768 Fiber−Flats for sdR−b1−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.272
Max value = 14.468
Fiber−Flat
0.0
0.5
1.0
1.5
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 18:15:09 2014


PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b1-00178701.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
0
1000
2000
3000
4000
Row number

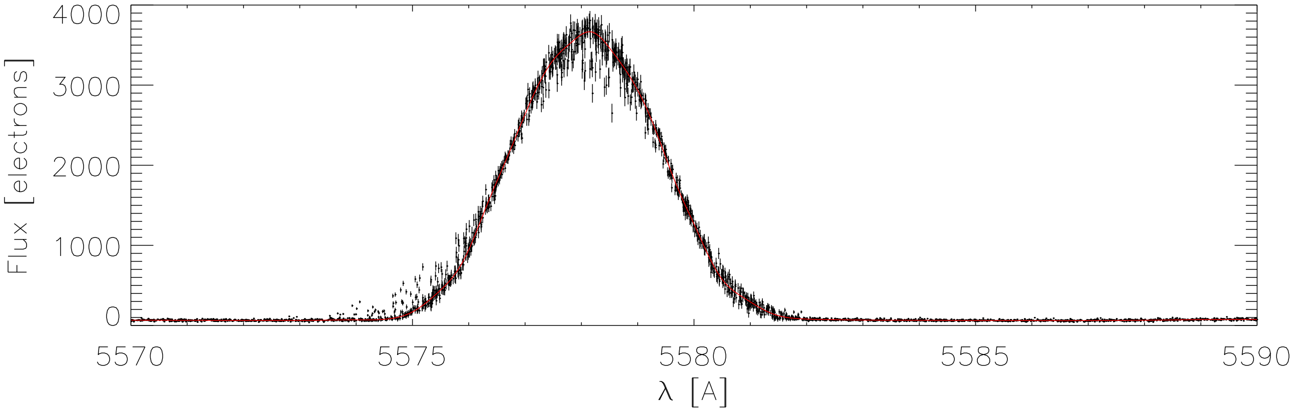

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b1-00178701.fit
1.00 pix
Before shift
After shift
Fiber Number
0
100
200
300
400
500
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength



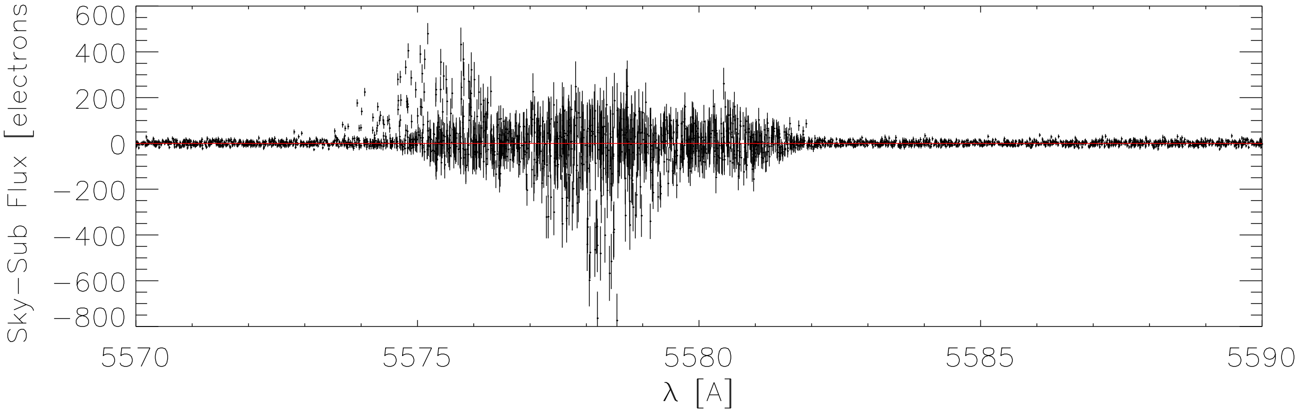
PLATE=7455 MJD=56768 Smooth superflat for sdR-b1-00178701.fit


PLATE=7455 MJD=56768 sdR-b1-00178701.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
-5
0
5
10
15
100
200
300
400
500
Fiber number

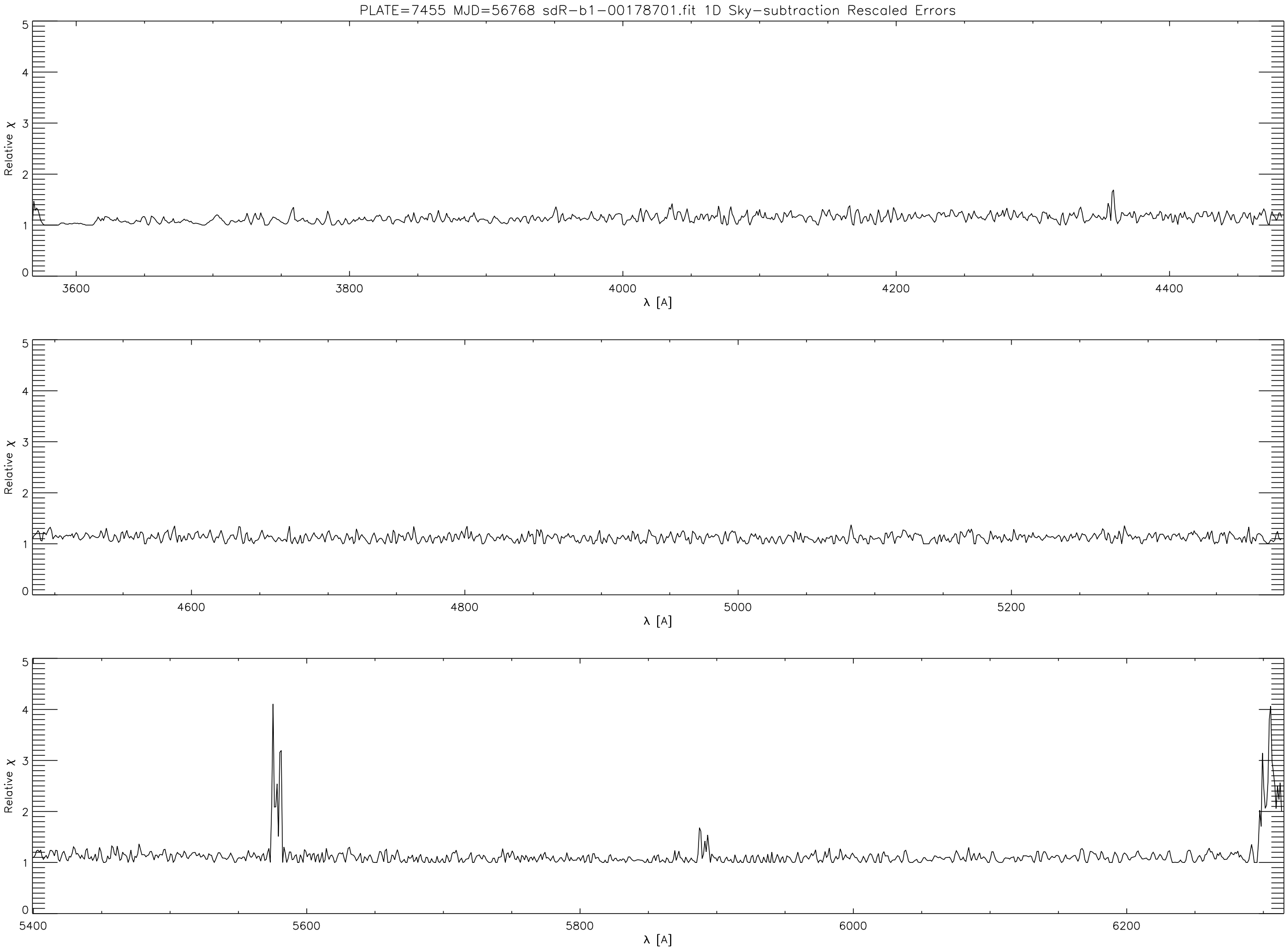
PLATE=7455 MJD=56768 sdR-b1-00178701.fit 1D Sky-subtraction Sky Fibers

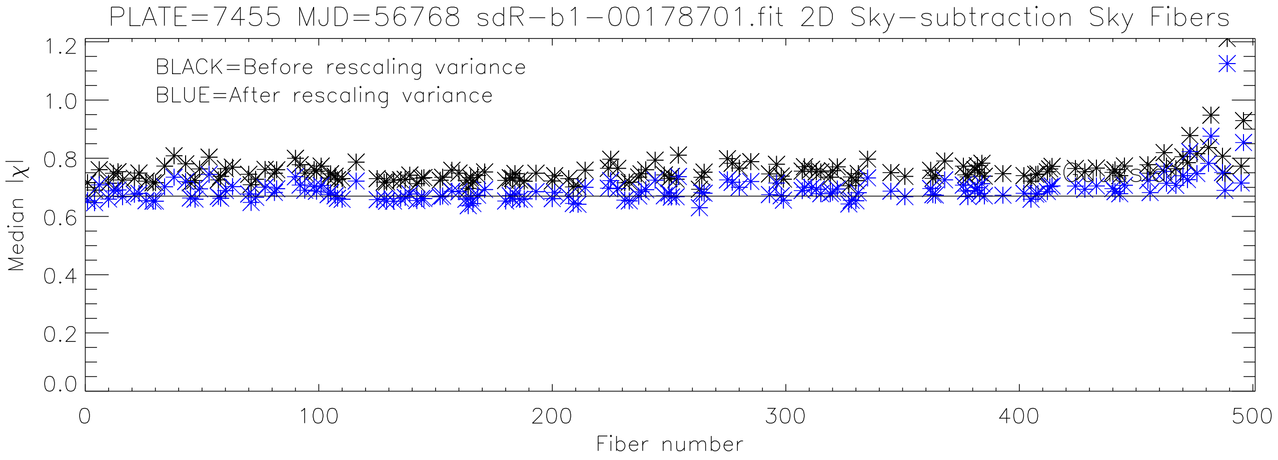


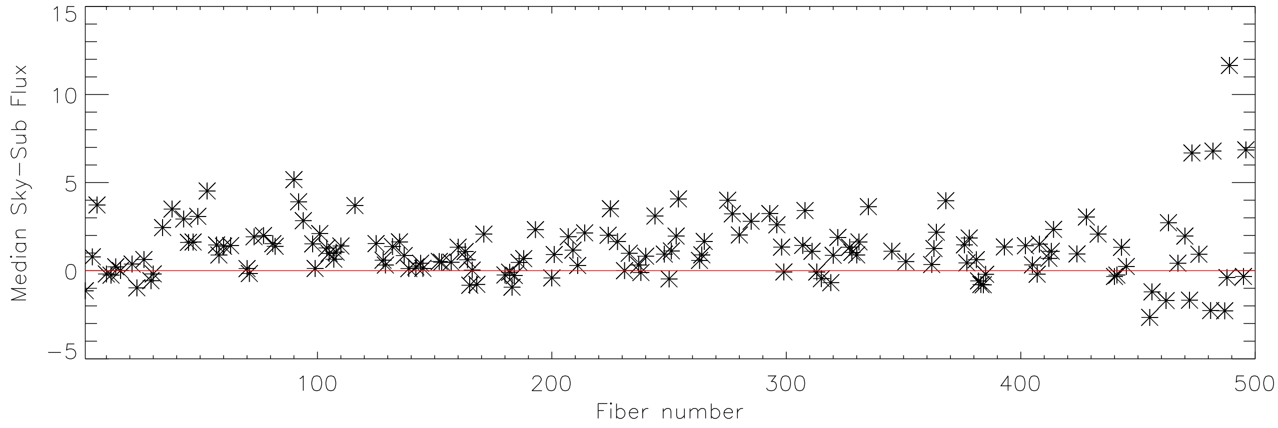
PLATE=7455 MJD=56768 sdR-b1-00178701.fit 1D Sky-subtraction Sky-subtracted Sky F

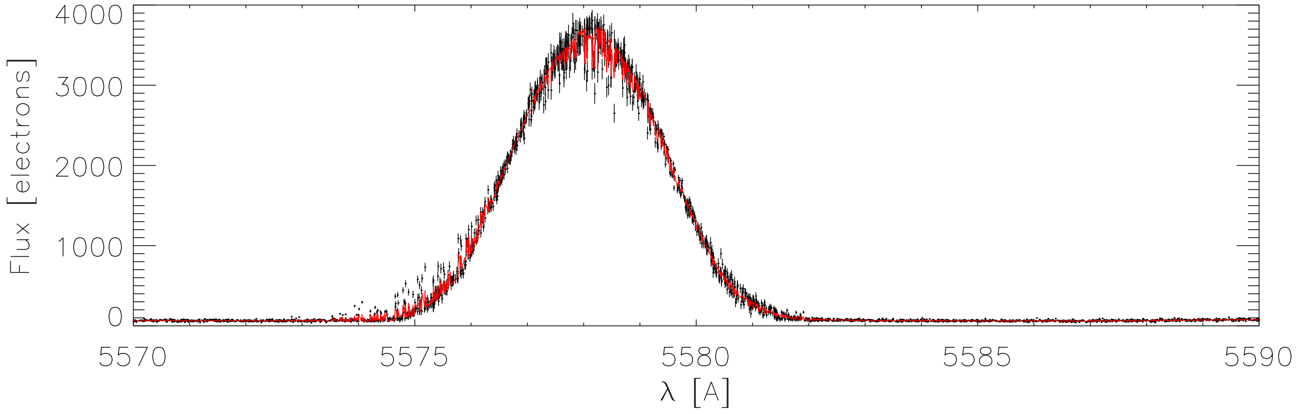


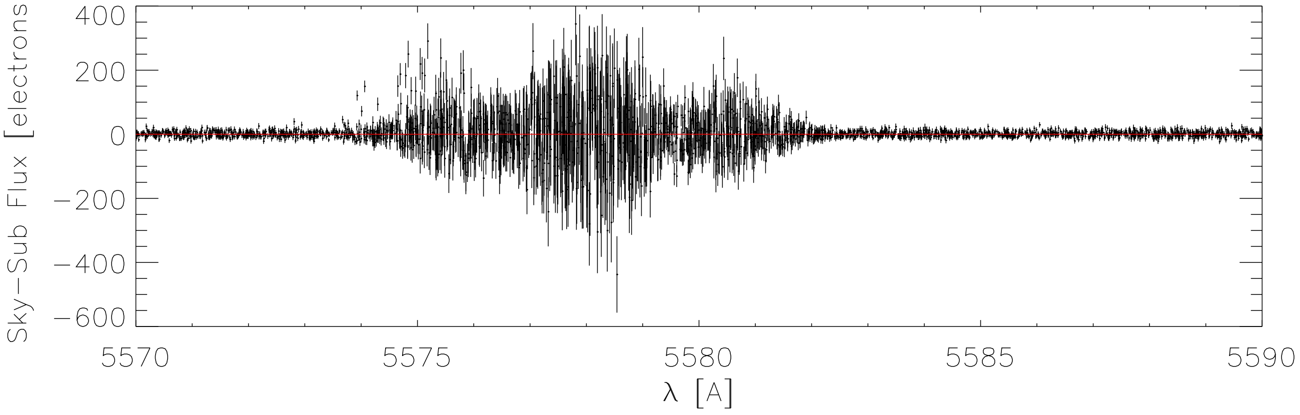
Number of sky fibers = 157



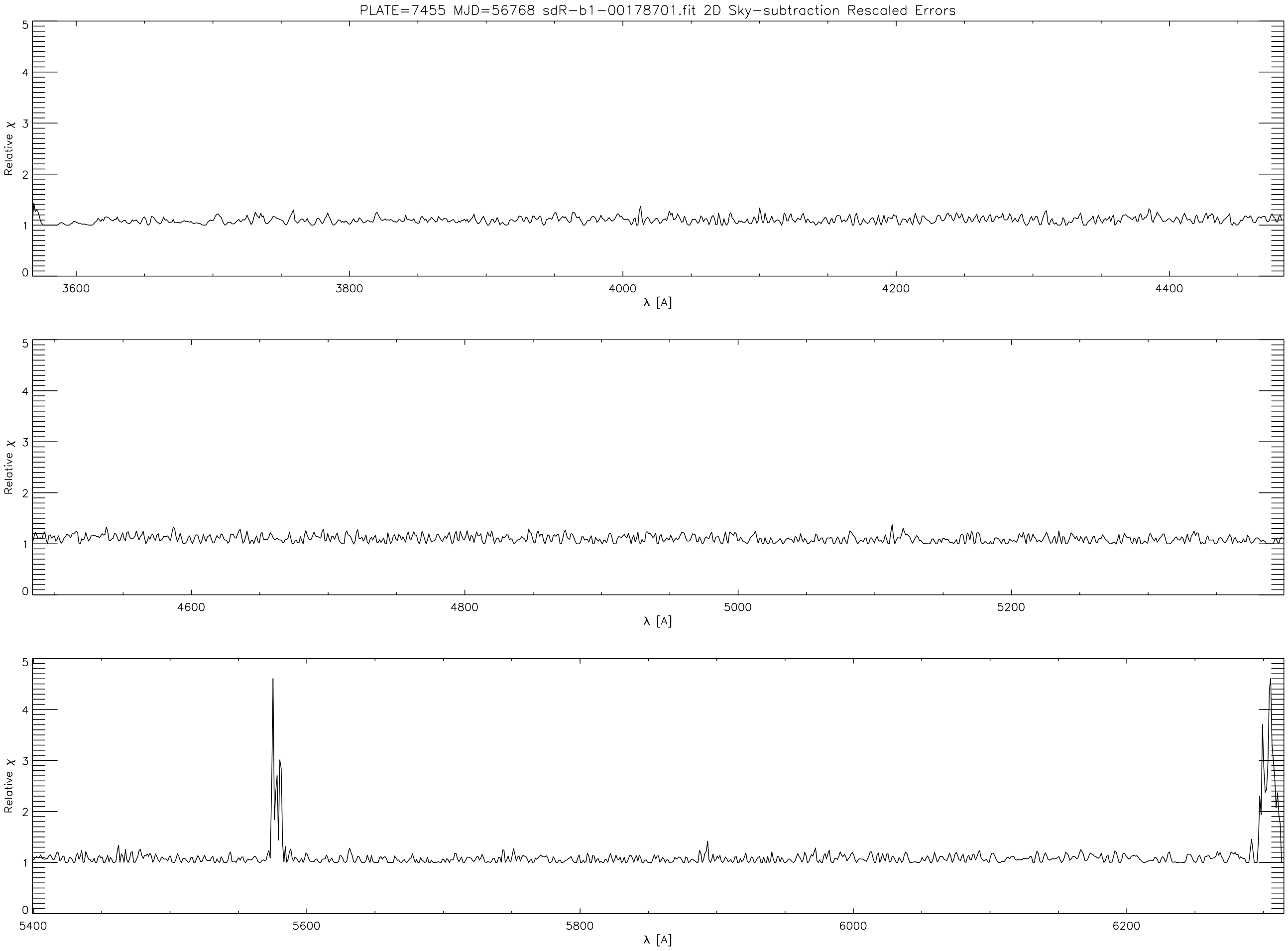

PLATE=7455 MJD=56768 sdR-b1-00178701.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number


Median Sky-Sub Flux
15
10
5
0
−5
100
200
300
400
500
Fiber number

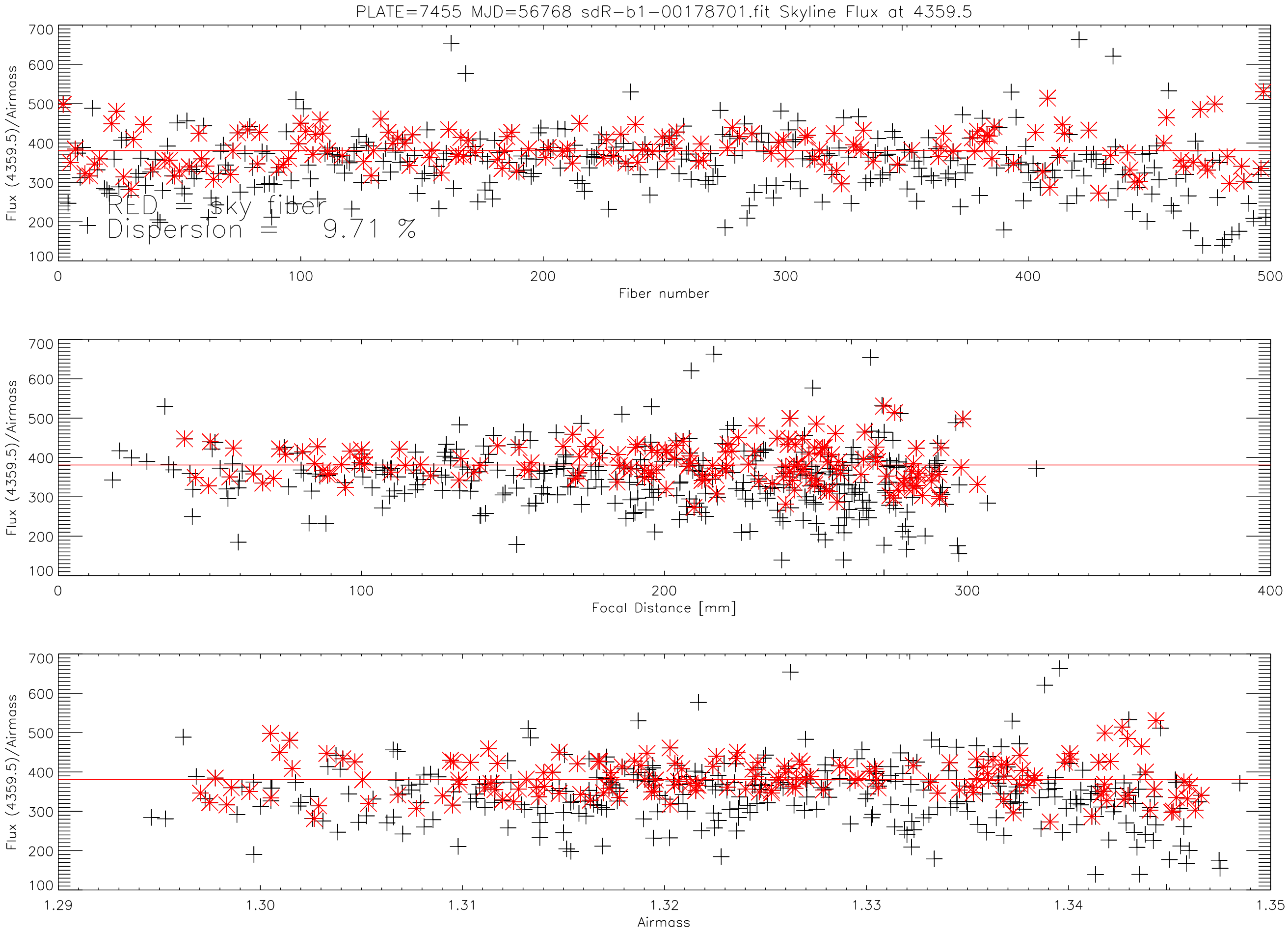

PLATE=7455 MJD=56768 sdR-b1-00178701.fit 2D Sky-subtraction Sky Fibers

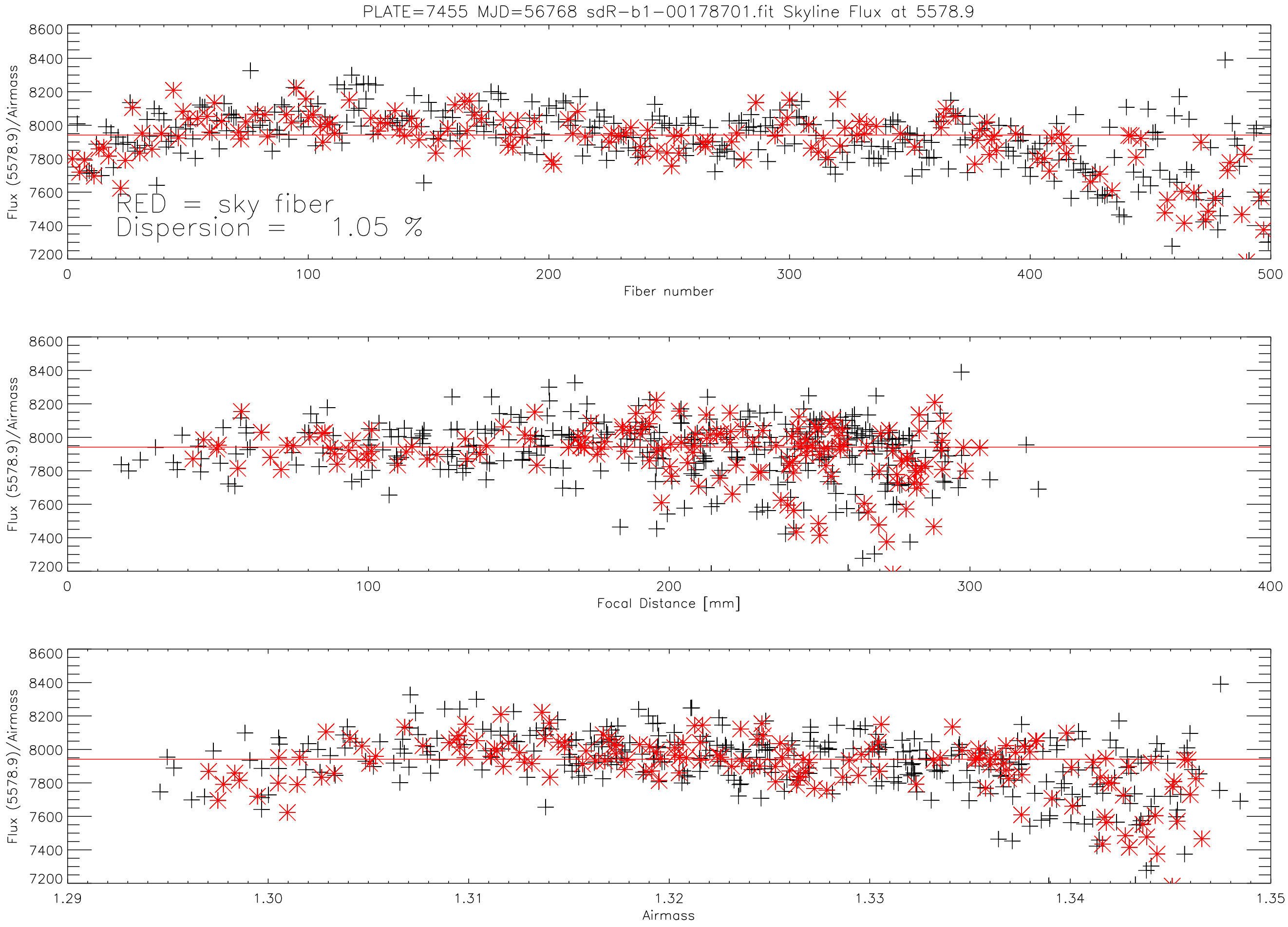

PLATE=7455 MJD=56768 sdR-b1-00178701.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 157

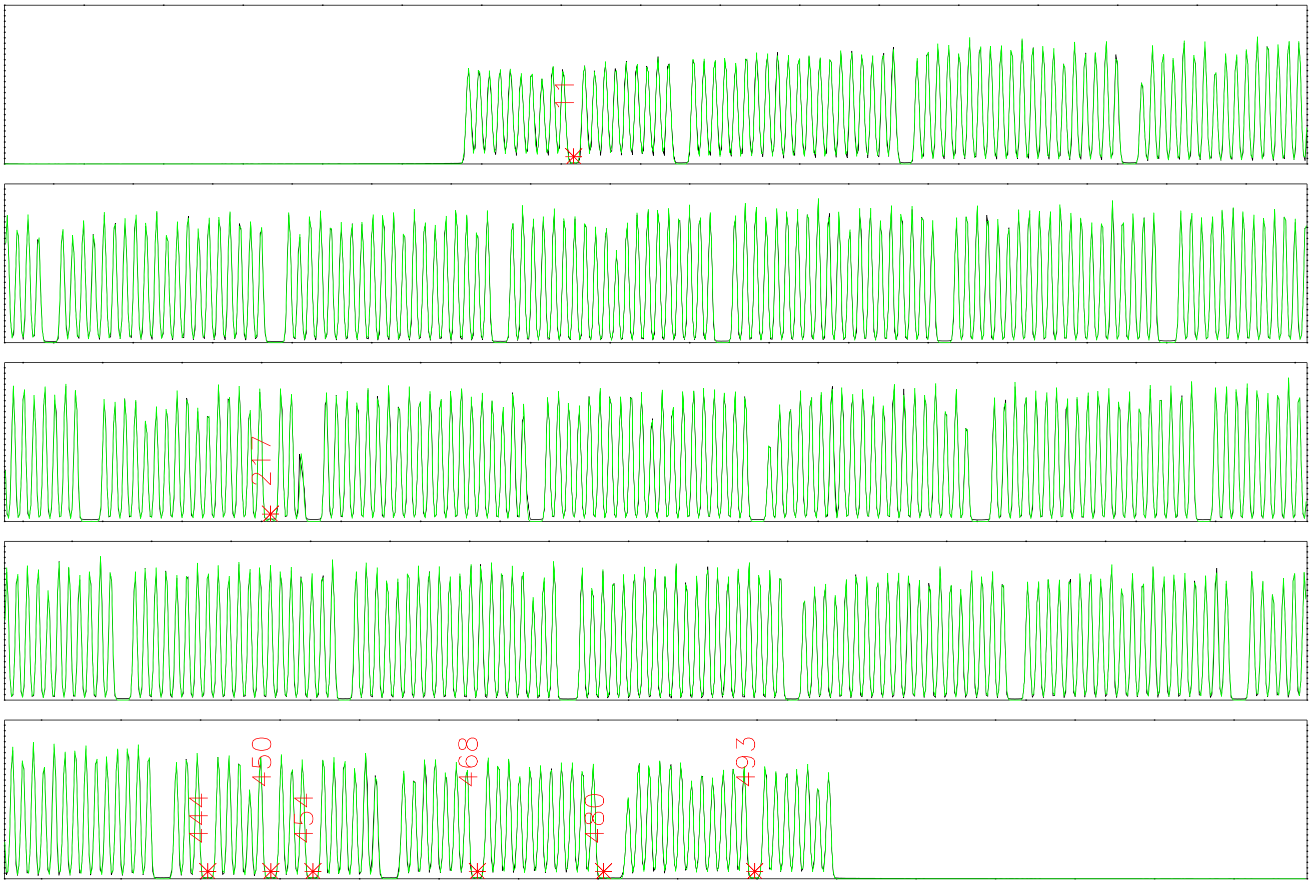


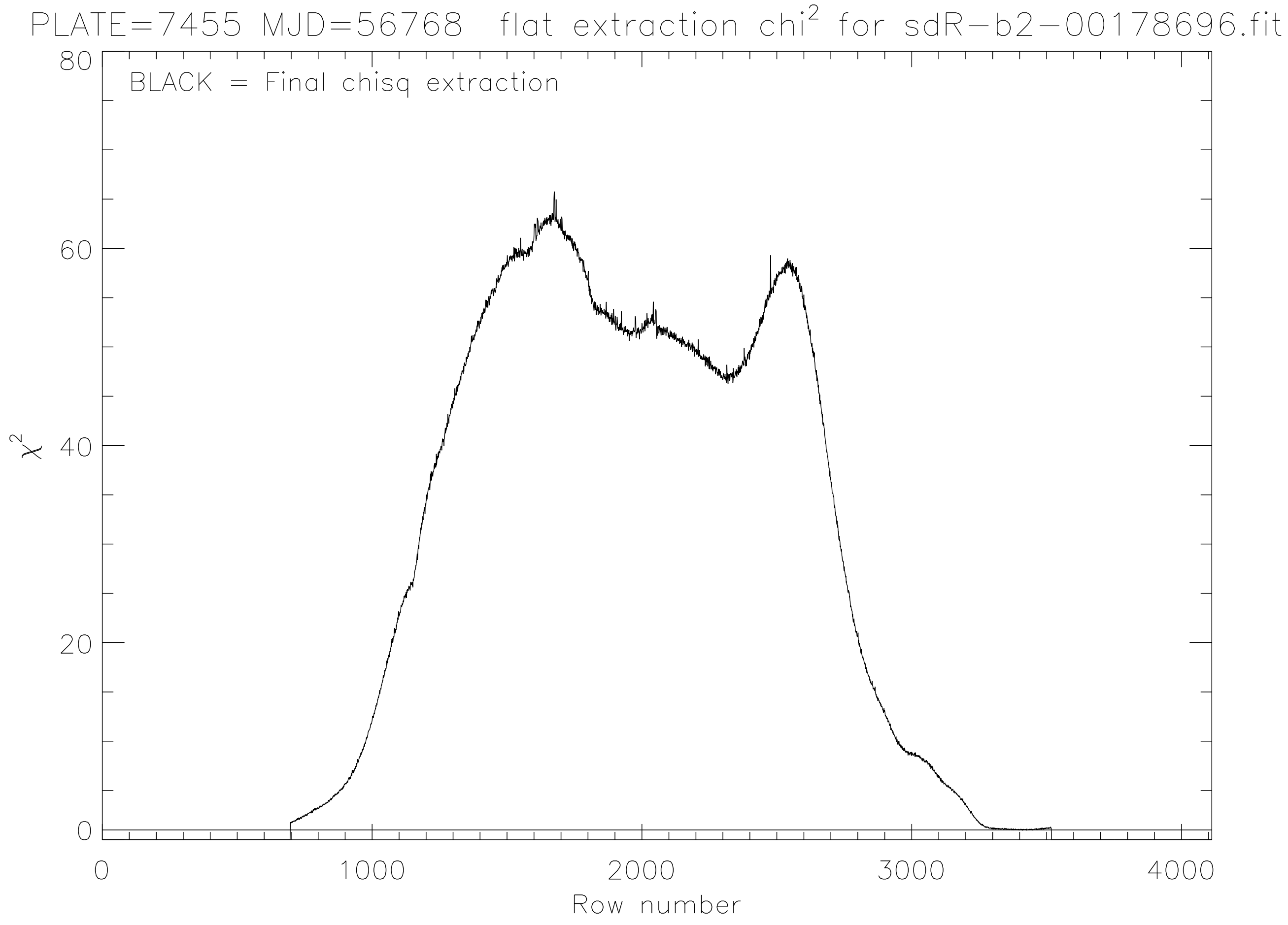
PLATE=7455 MJD=56768 sdR-b1-00178701.fit 2D Sky-subtraction Rescaled Errors

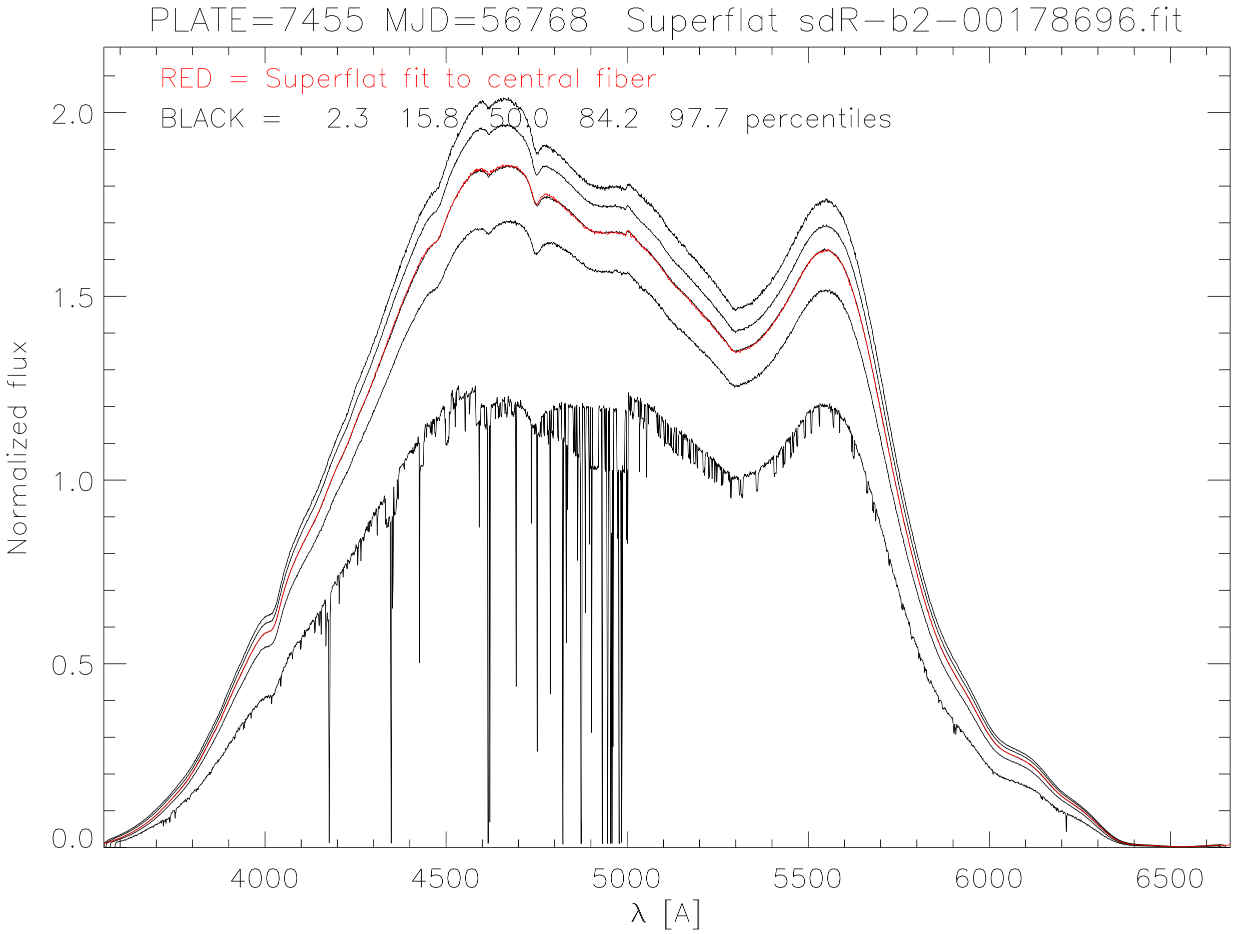

PLATE=7455 MJD=56768 sdR-b1-00178701.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
100
200
300
400
500
600
700
RED = Sky fiber
+ Dispersion = 9.71 %
0
100
200
300
400
500
Fiber number
Flux (4359.5)/Airmass
100
200
300
400
500
600
700
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
100
200
300
400
500
600
700
1.29
1.30
1.31
1.32
1.33
1.34
1.35
Airmass

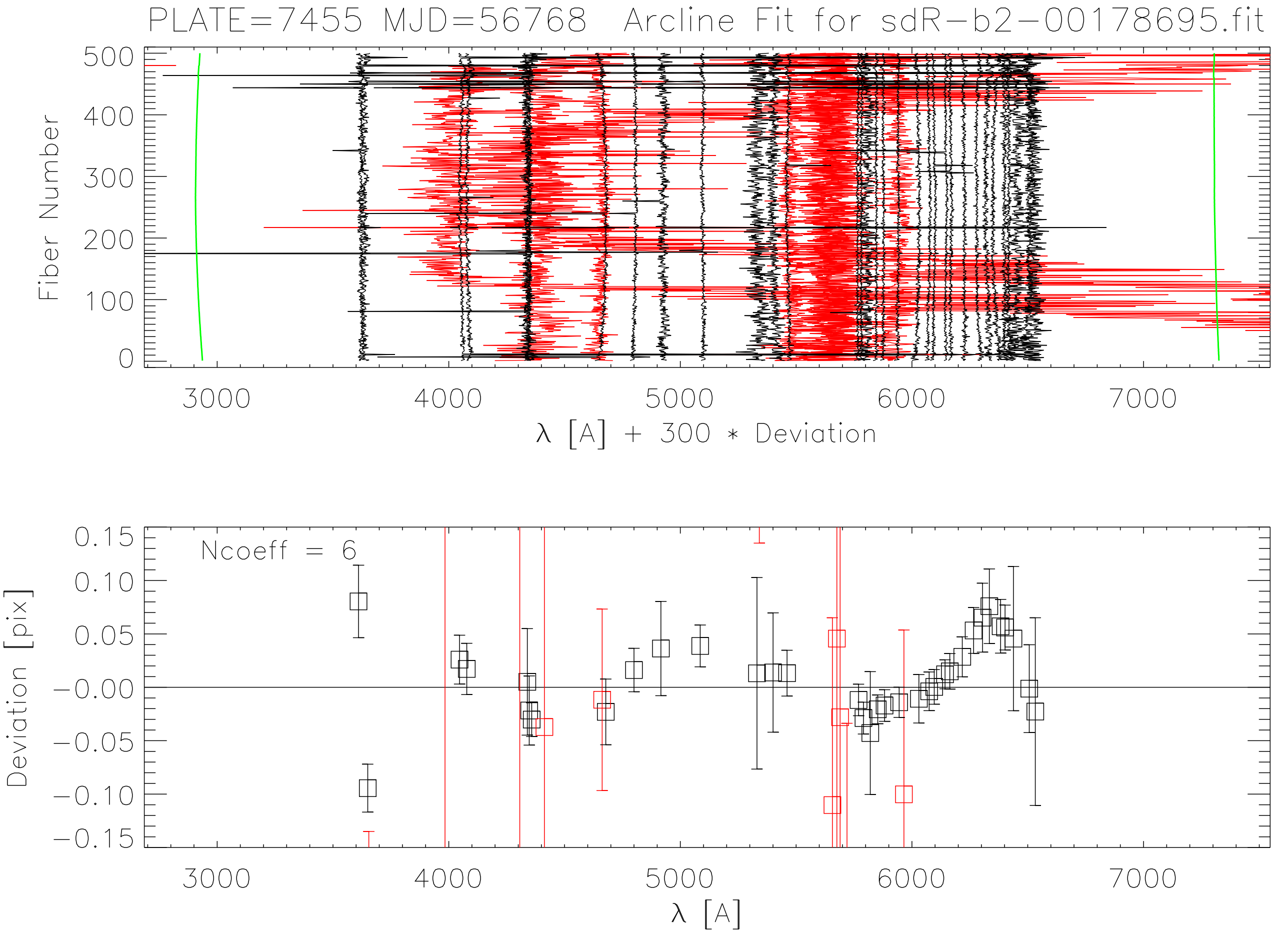

PLATE=7455 MJD=56768 sdR-b1-00178701.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
8600
8400
8200
8000
7800
7600
7400
7200
RED = sky fiber
Dispersion = 1.05 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.29
1.30
1.31
1.32
1.33
1.34
1.35
Airmass

PLATE=7455 MJD=56768 Traces sdR-b2-00178696.fit

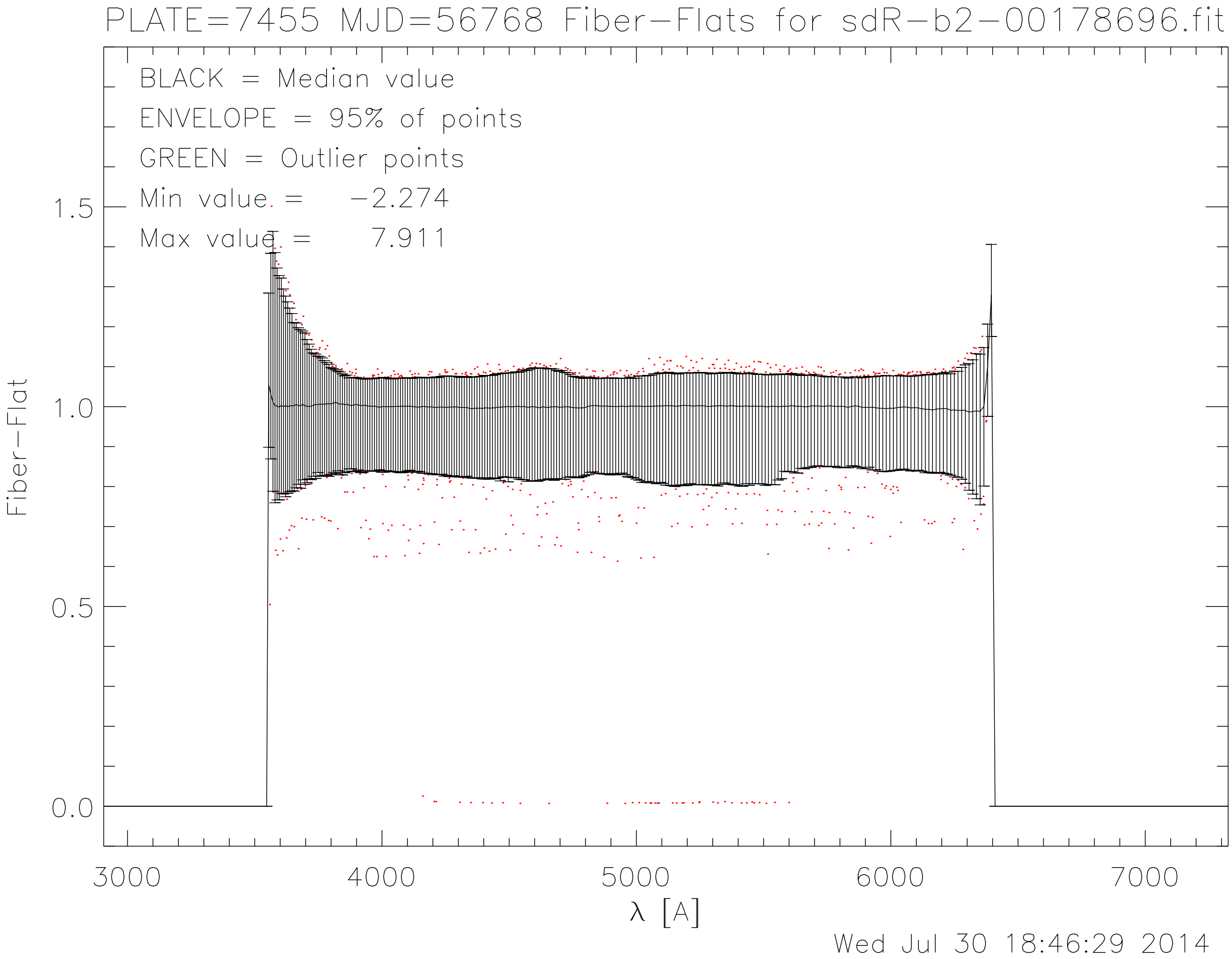



PLATE=7455 MJD=56768 flat extraction chi^2 for sdR-b2-00178696.fit
BLACK = Final chisq extraction
χ^2
0
20
40
60
80
0
1000
2000
3000
4000
Row number


PLATE=7455 MJD=56768 Superflat sdR-b2-00178696.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
2.0
4000
4500
5000
5500
6000
6500
λ [A]

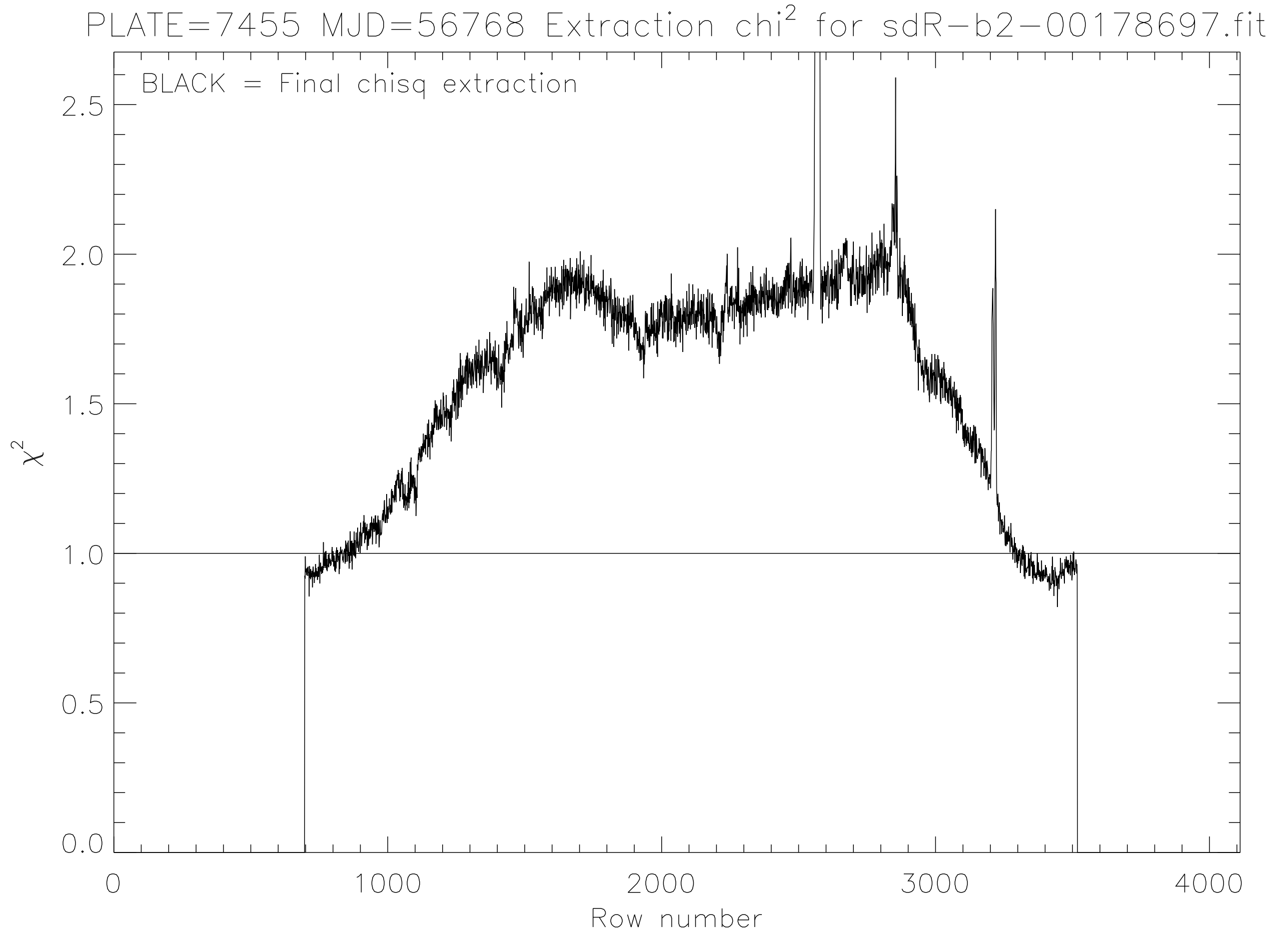


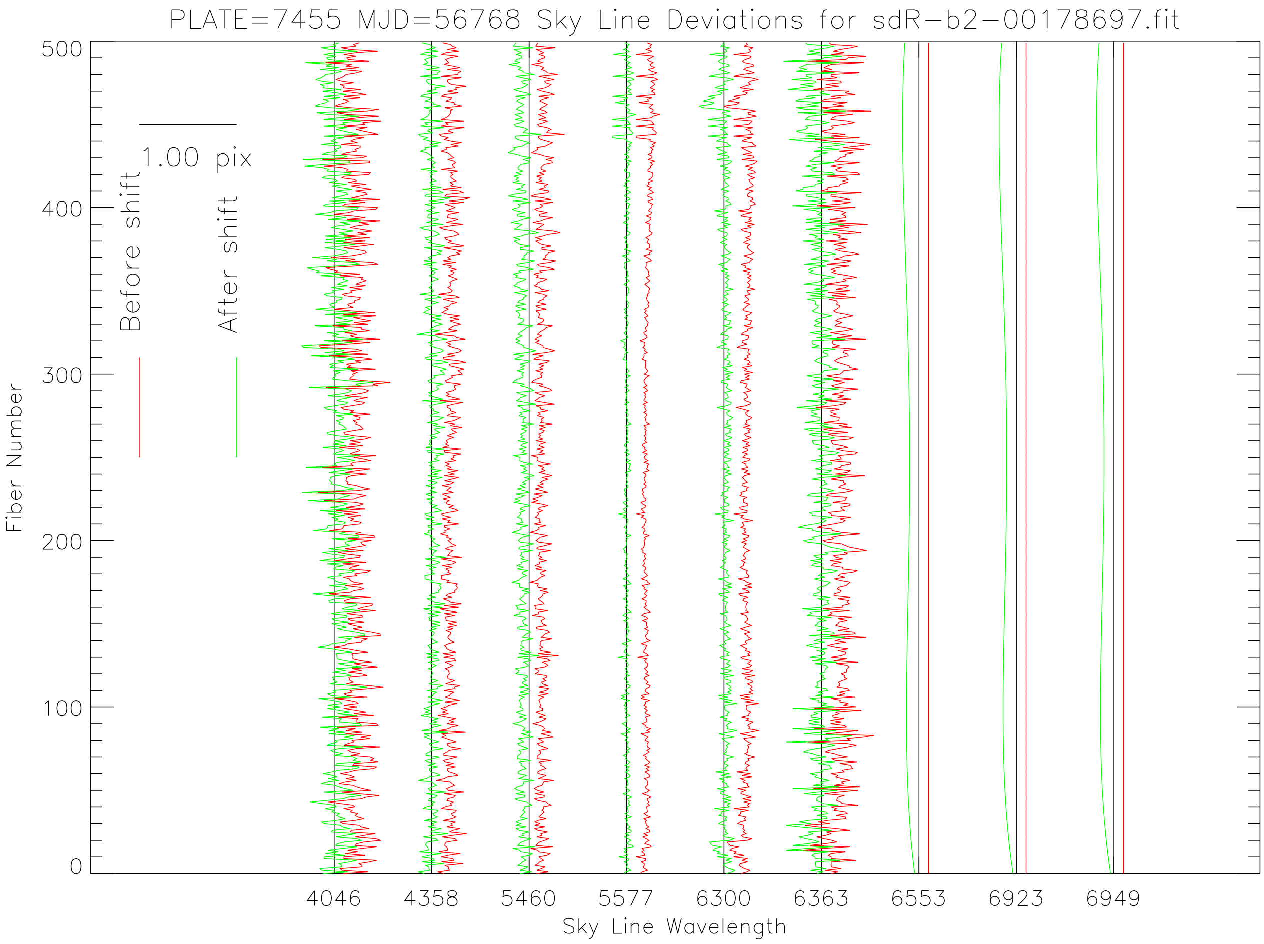
Wed Jul 30 18:46:01 2014



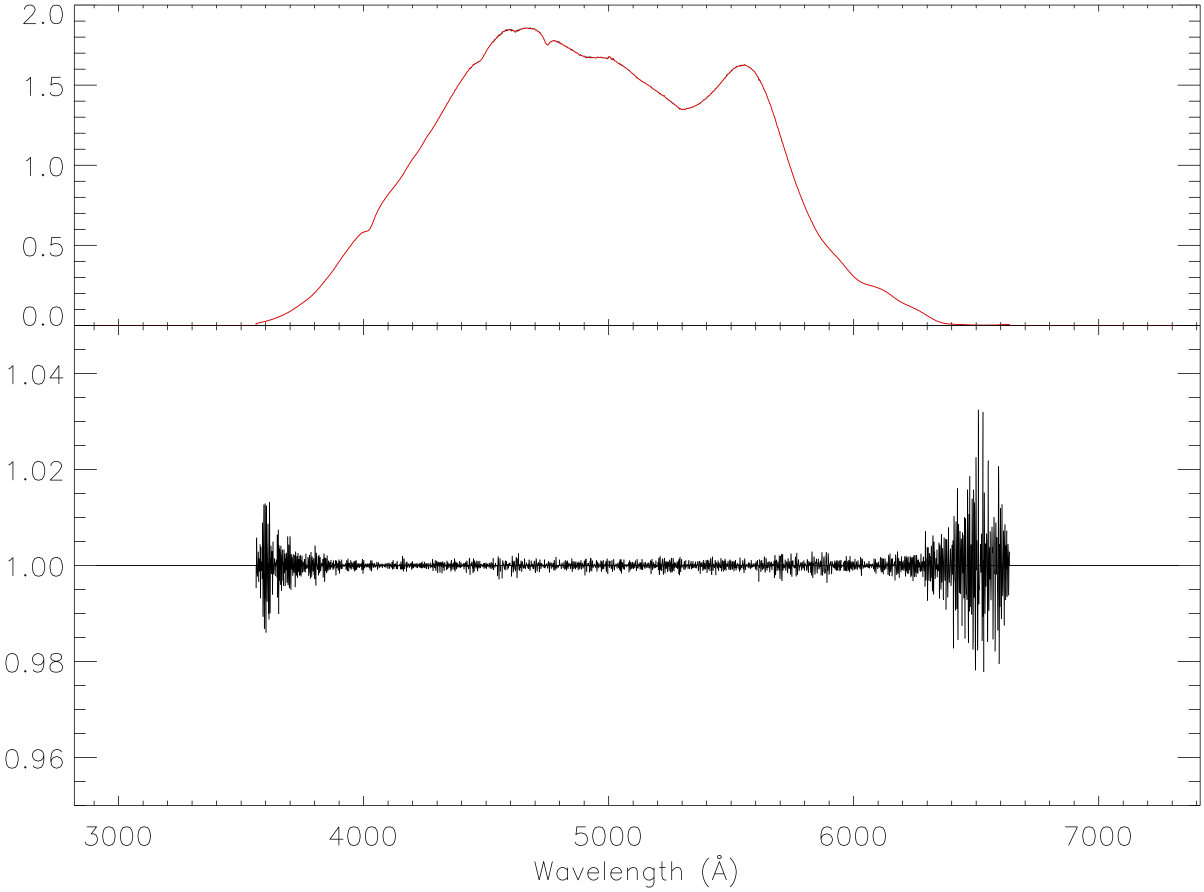
PLATE=7455 MJD=56768 Fiber−Flats for sdR−b2−00178696.fit

Wed Jul 30 18:46:29 2014

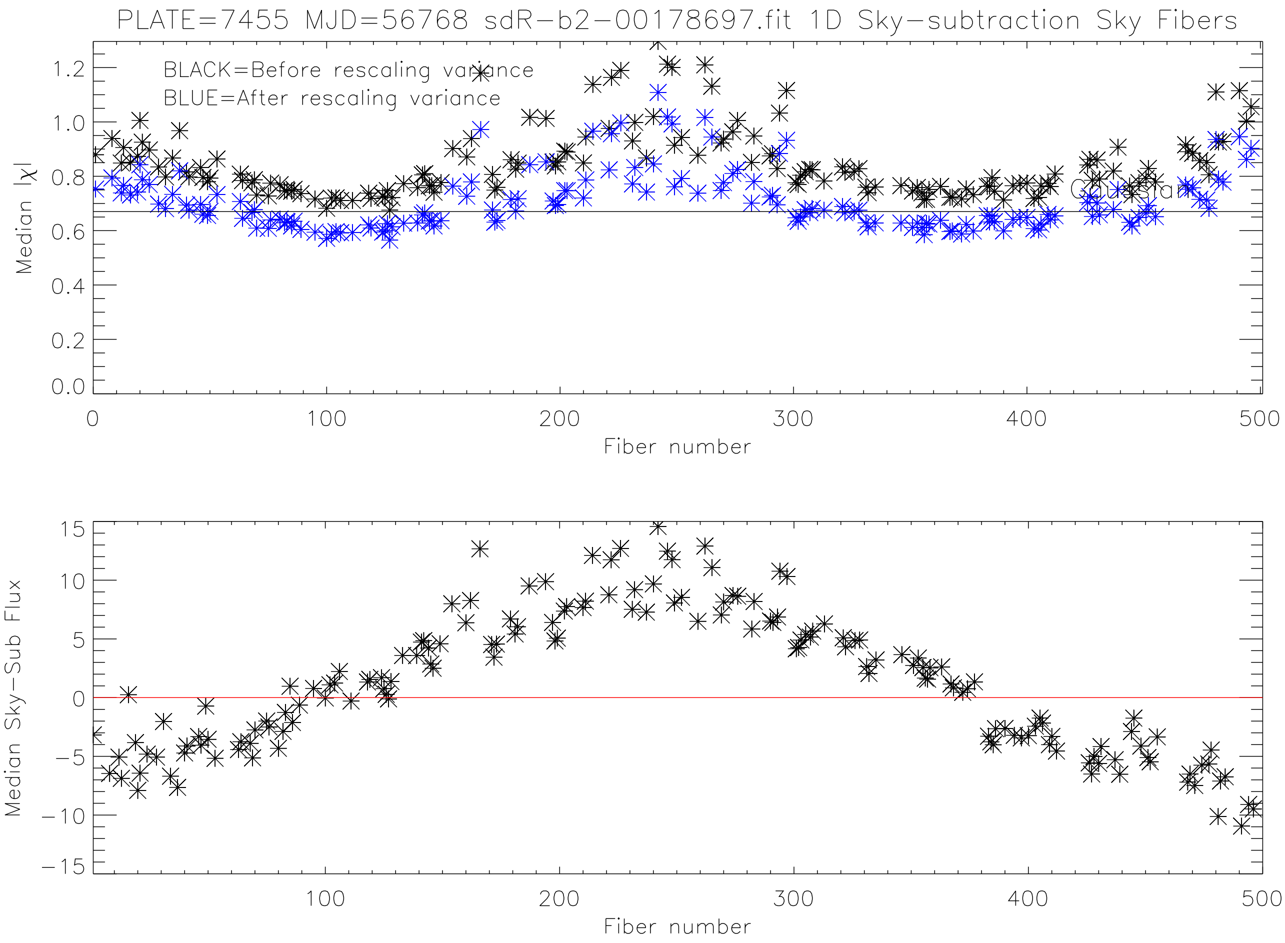

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b2-00178697.fit
BLACK = Final chisq extraction
χ^2
Row number
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000

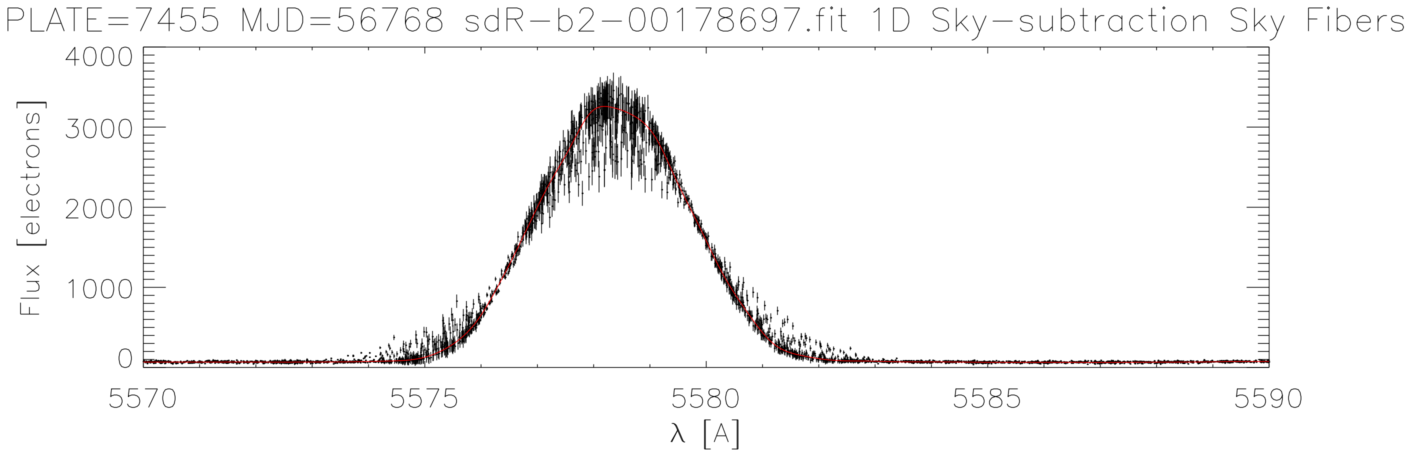


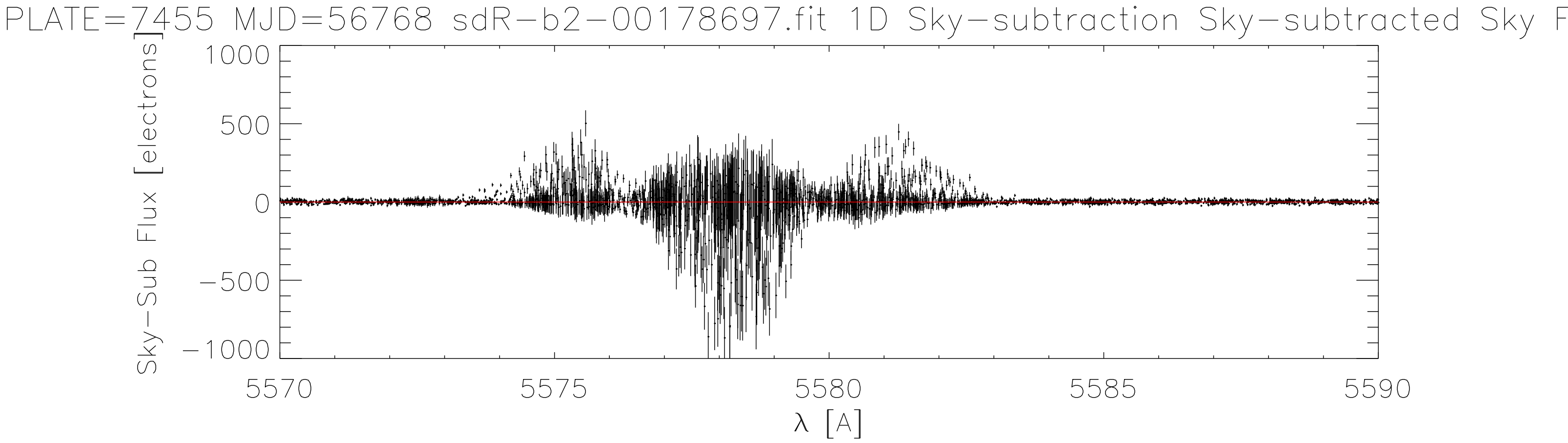
PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b2-00178697.fit
1.00 pix
Before shift
After shift
Fiber Number
0
100
200
300
400
500
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength



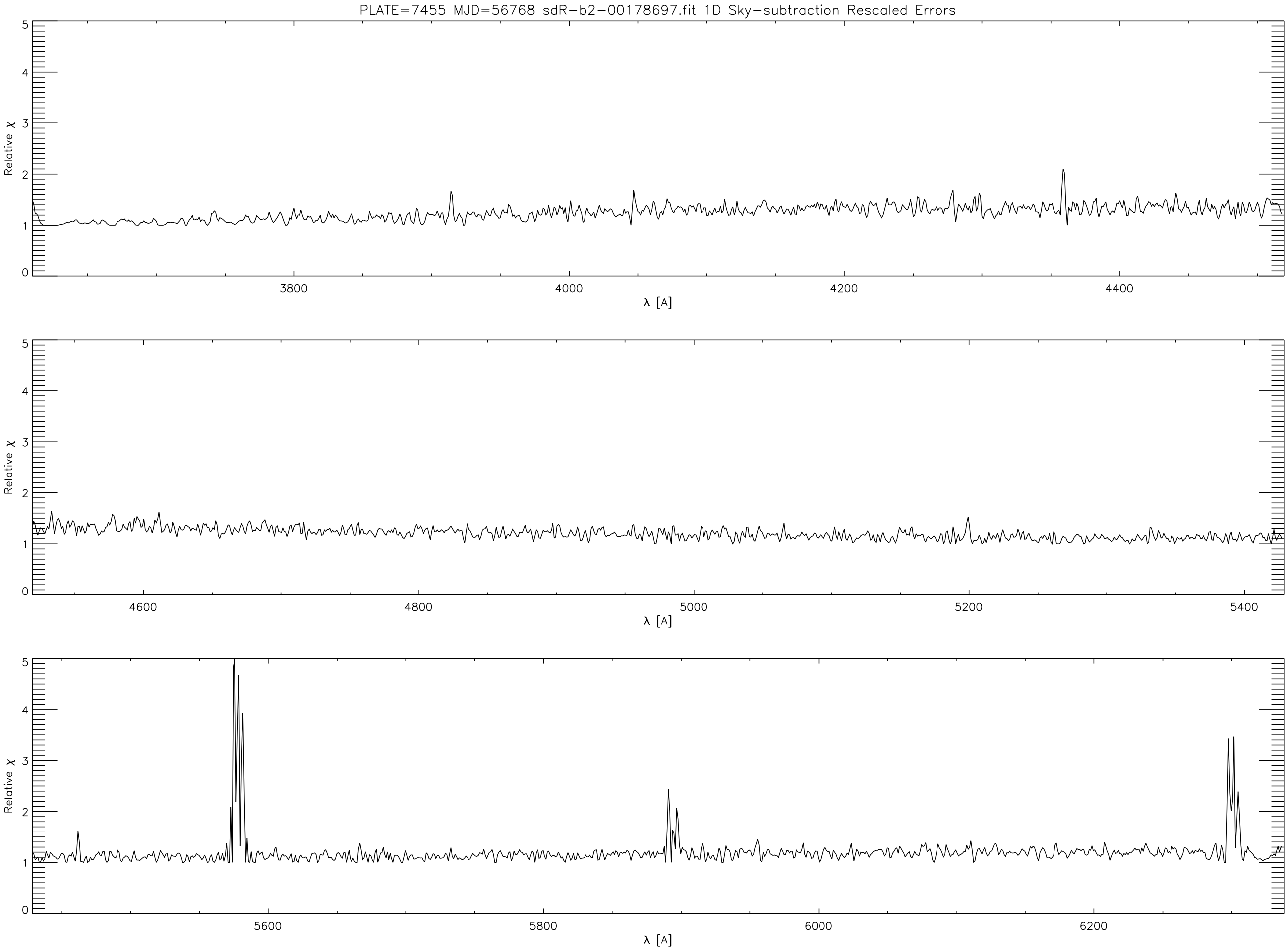
PLATE=7455 MJD=56768 Smooth superflat for sdR-b2-00178697.fit


PLATE=7455 MJD=56768 sdR-b2-00178697.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−15
−10
−5
0
5
10
15
100
200
300
400
500
Fiber number

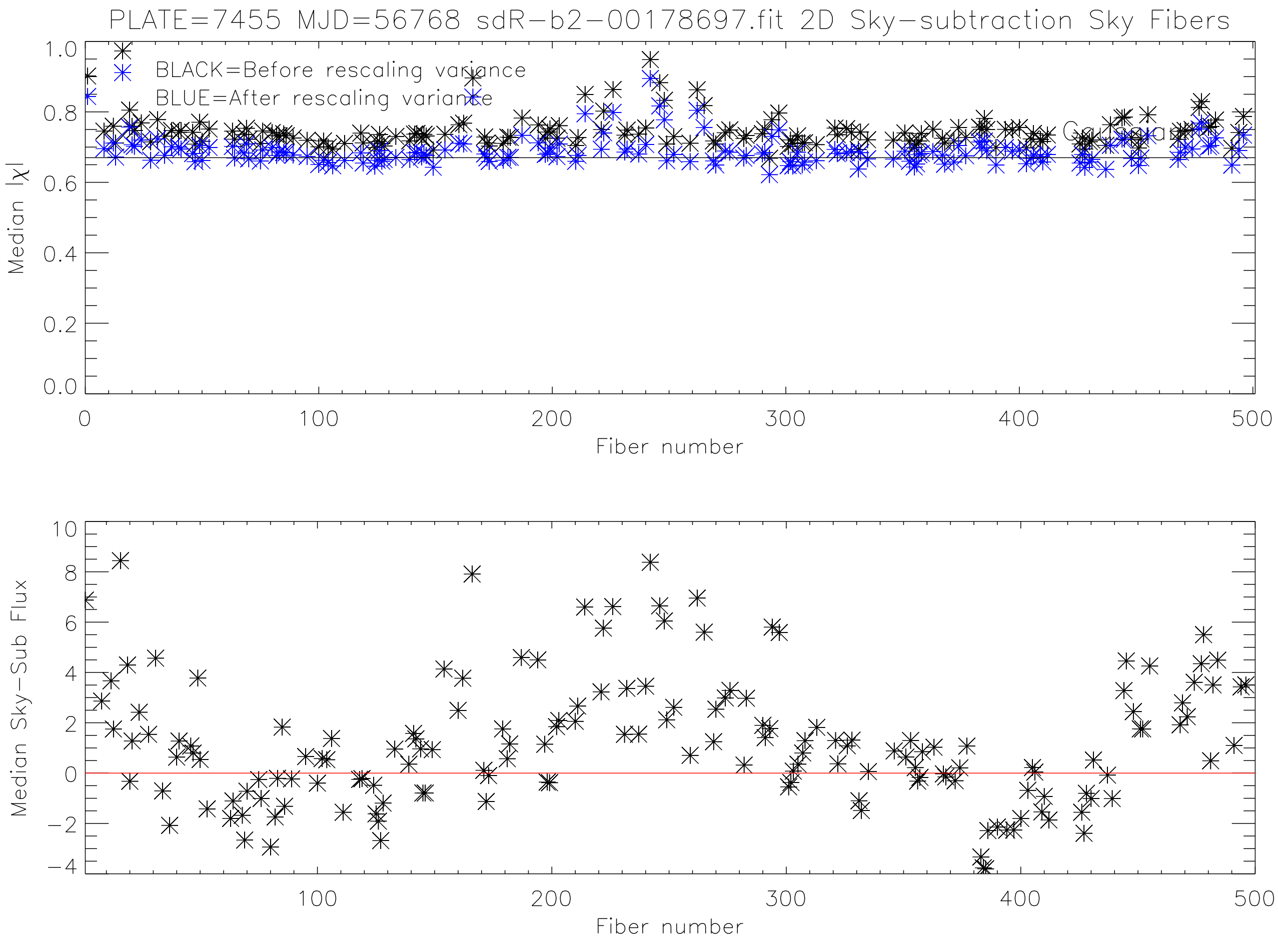

PLATE=7455 MJD=56768 sdR-b2-00178697.fit 1D Sky-subtraction Sky Fibers


PLATE=7455 MJD=56768 sdR-b2-00178697.fit 1D Sky-subtraction Sky-subtracted Sky F

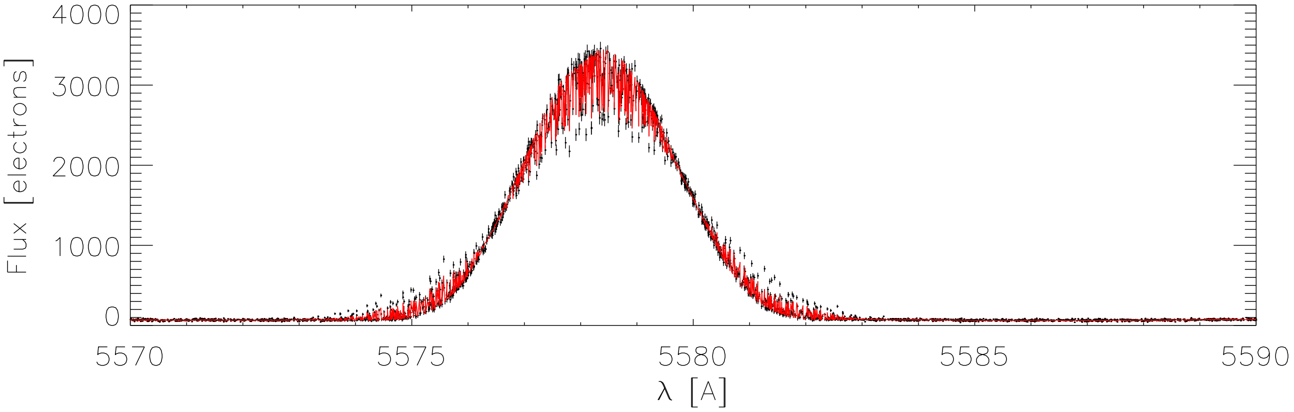
Number of sky fibers = 166



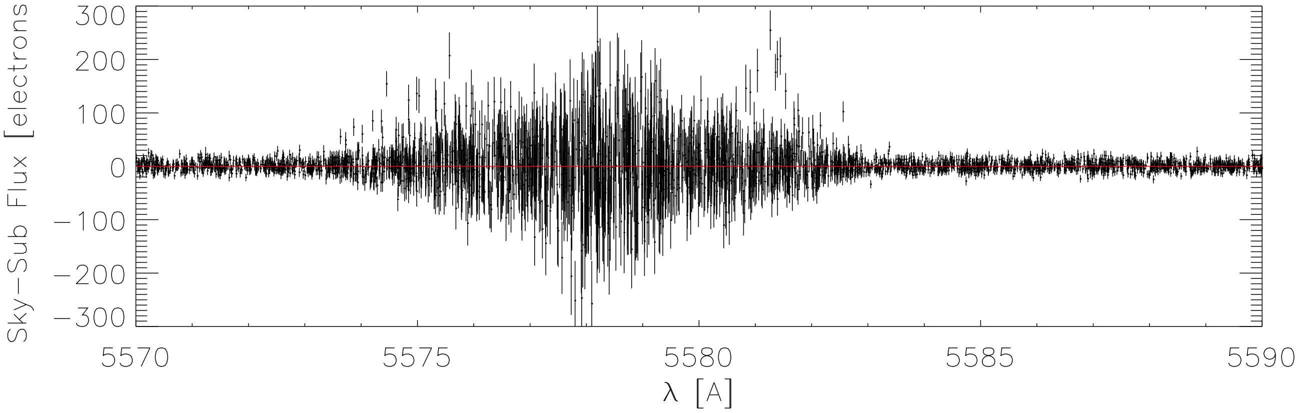
PLATE=7455 MJD=56768 sdR-b2-00178697.fit 1D Sky-subtraction Rescaled Errors


PLATE=7455 MJD=56768 sdR-b2-00178697.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
10
8
6
4
2
0
−2
−4
100
200
300
400
500
Fiber number

PLATE=7455 MJD=56768 sdR-b2-00178697.fit 2D Sky-subtraction Sky Fibers

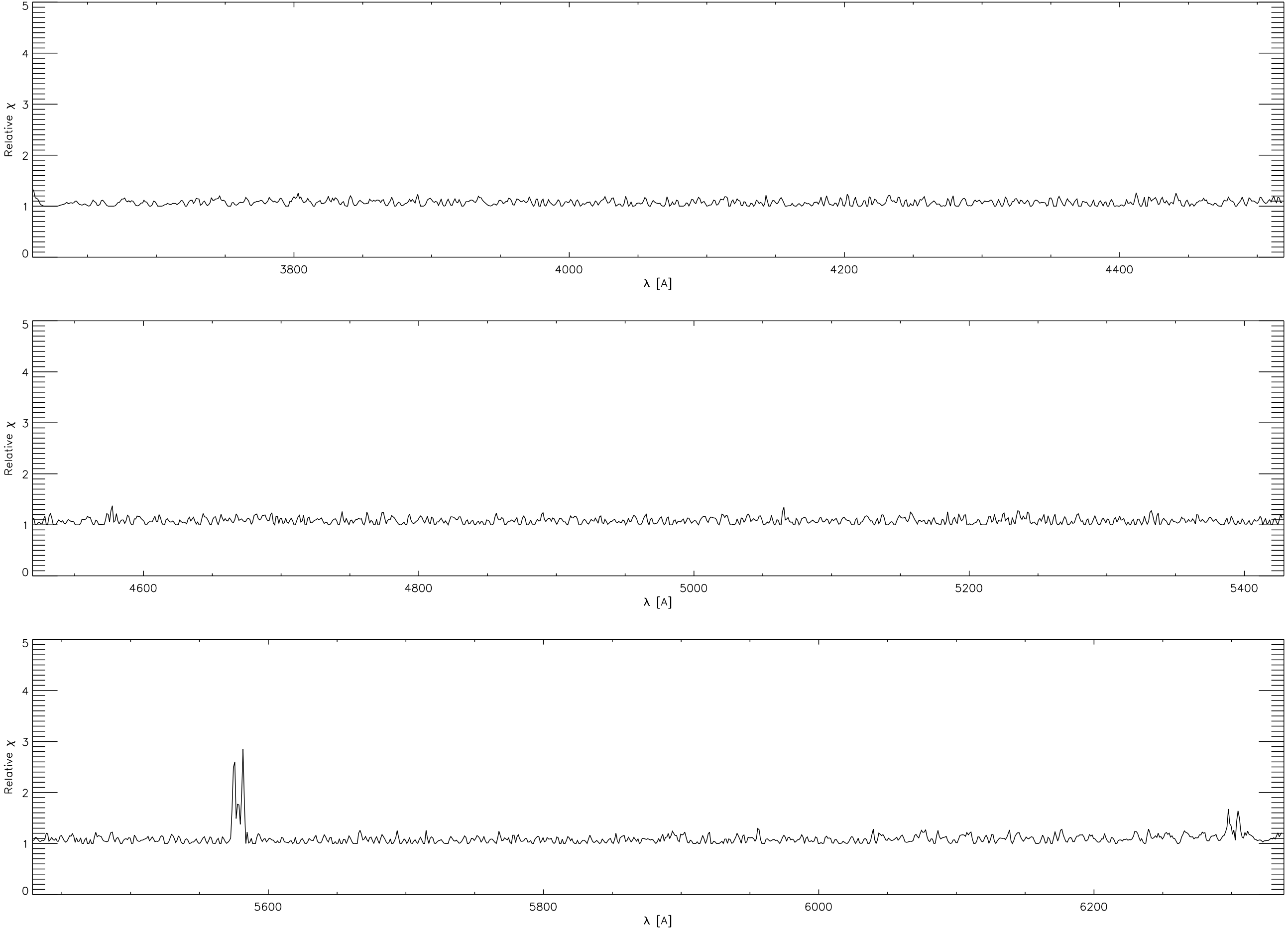


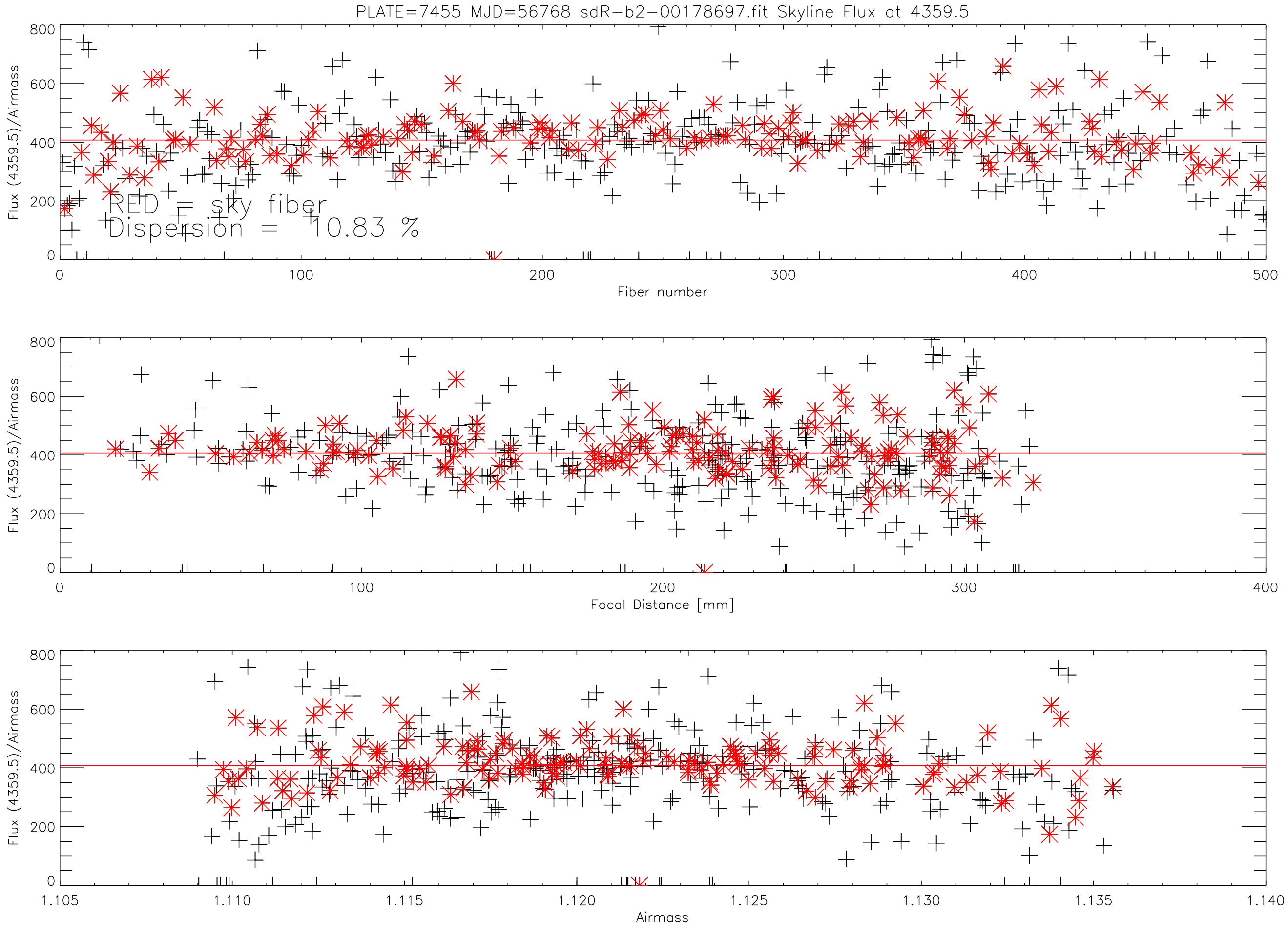
PLATE=7455 MJD=56768 sdR-b2-00178697.fit 2D Sky-subtraction Sky-subtracted Sky F

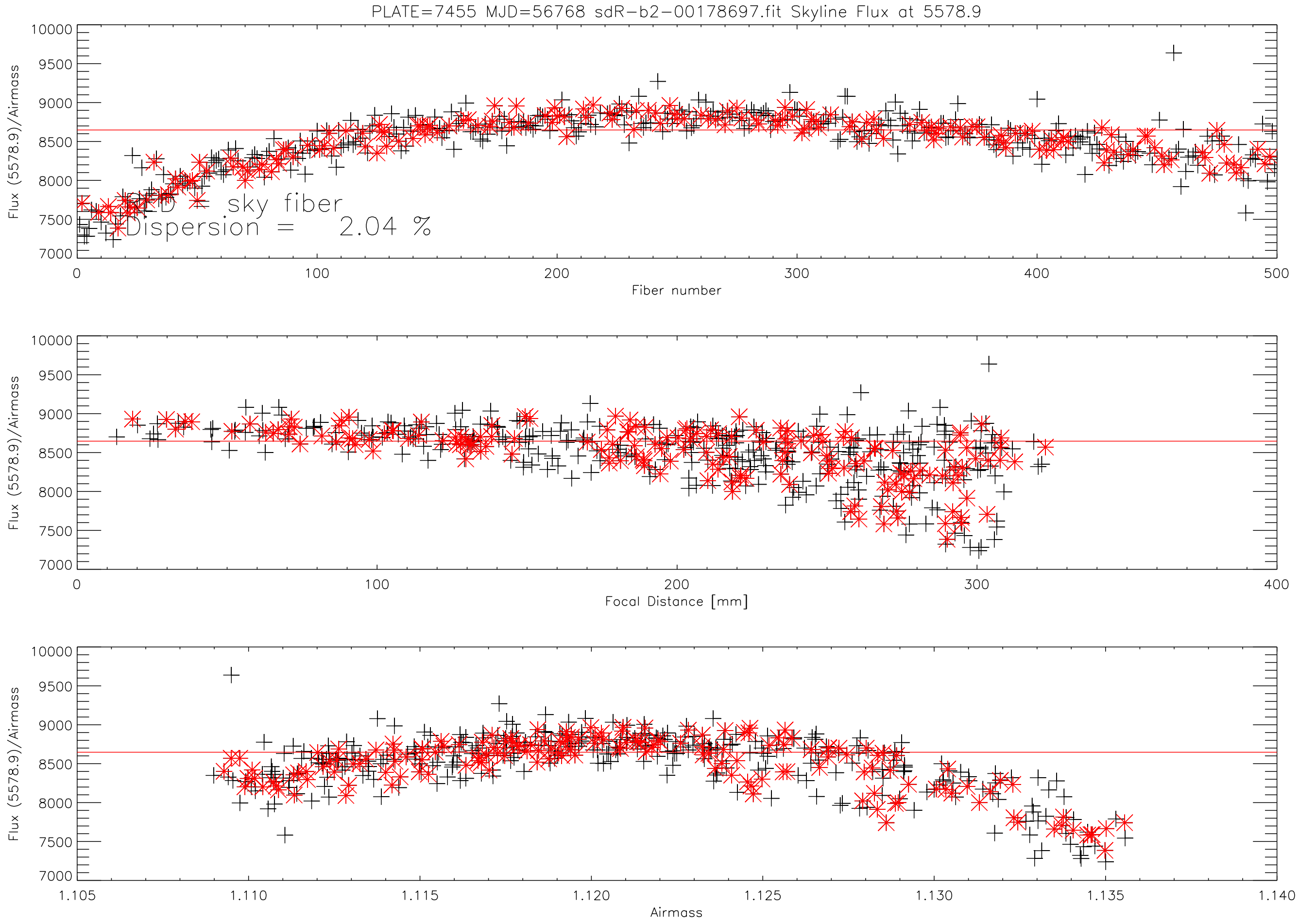


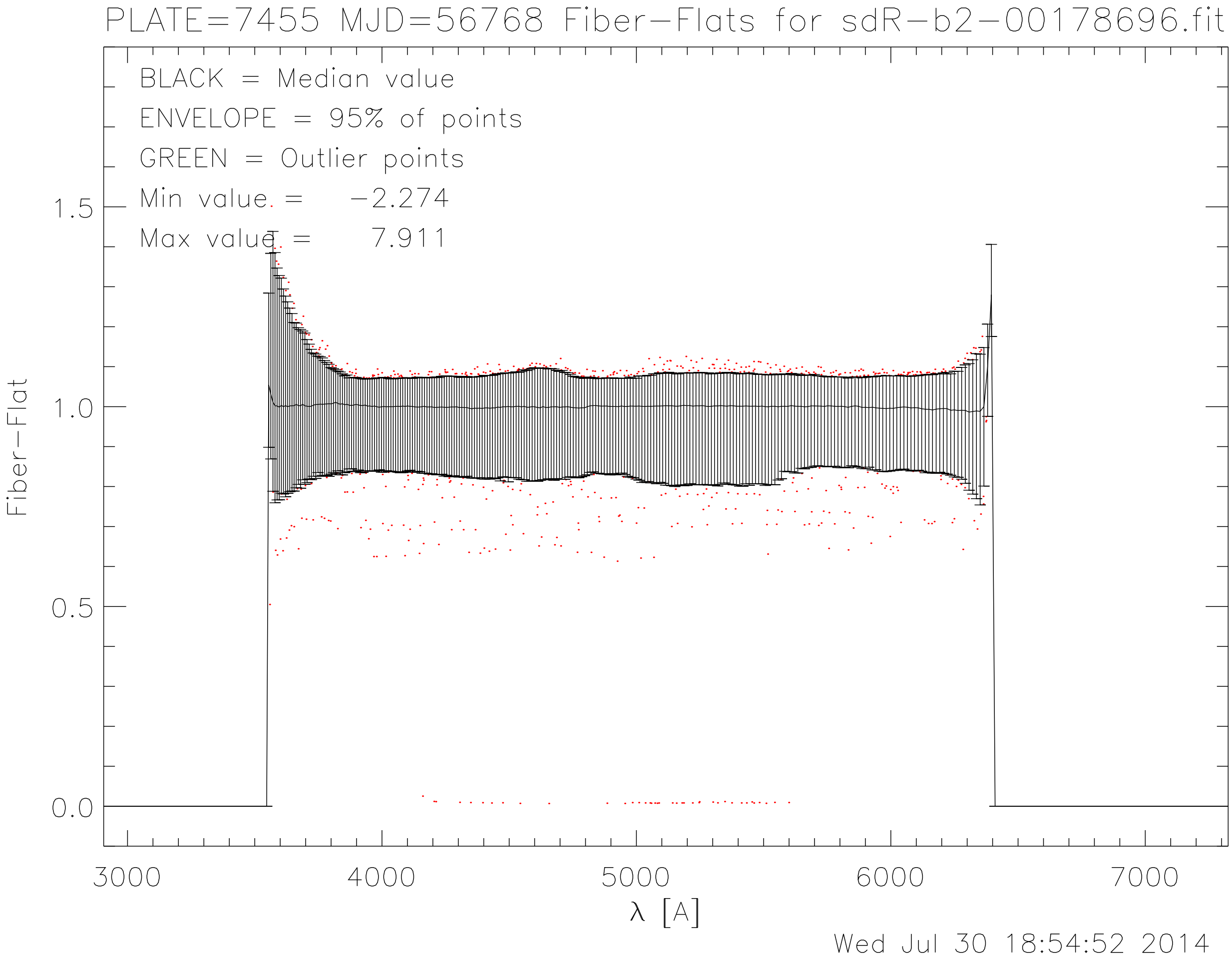
Number of sky fibers = 166

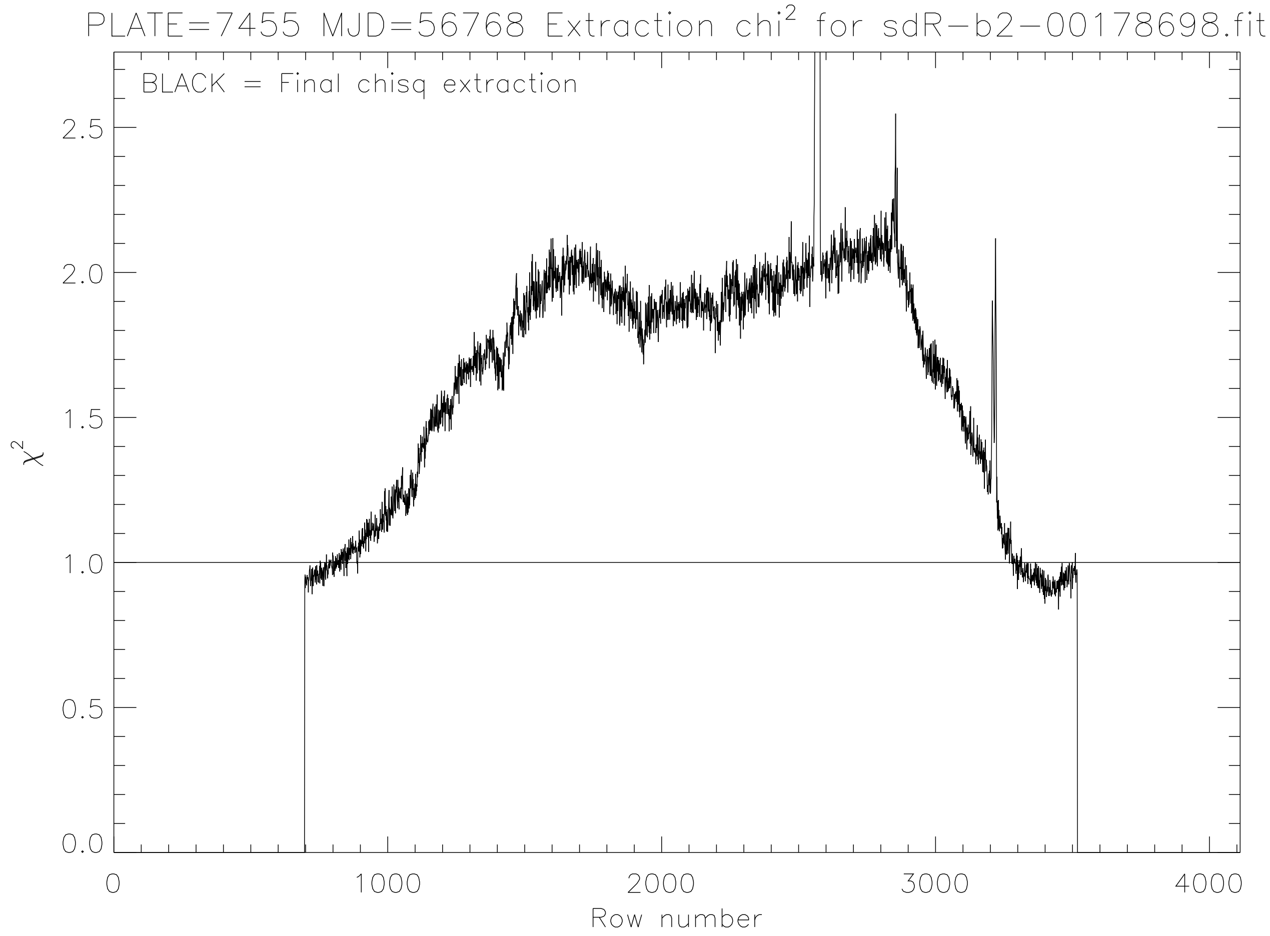
PLATE=7455 MJD=56768 sdR-b2-00178697.fit 2D Sky-subtraction Rescaled Errors



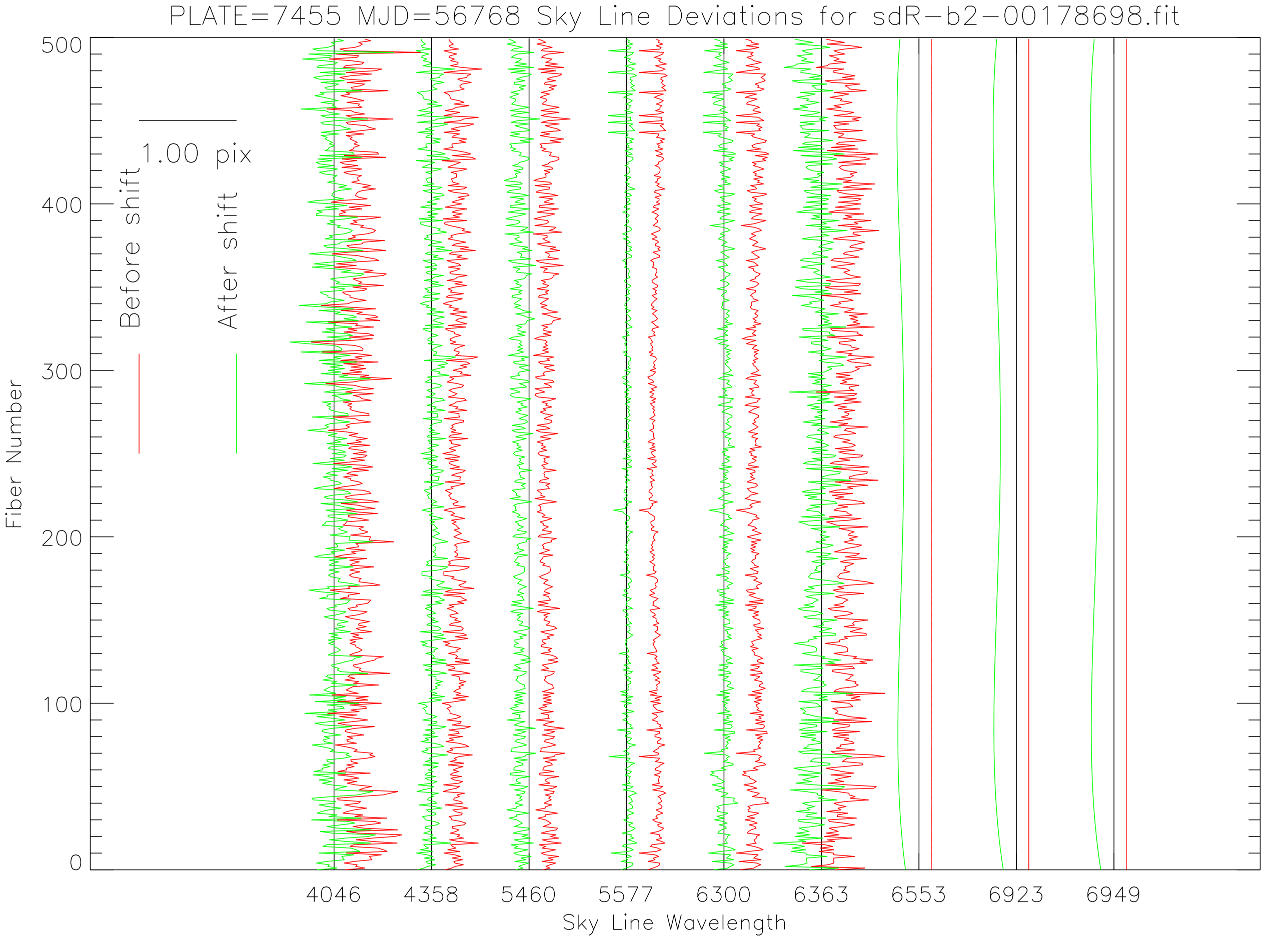

PLATE=7455 MJD=56768 sdR-b2-00178697.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
800
600
400
200
0
RED = sky fiber
Dispersion = 10.83 %
0
100
200
300
400
500
Fiber number
Flux (4359.5)/Airmass
800
600
400
200
0
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
800
600
400
200
0
1.105
1.110
1.115
1.120
1.125
1.130
1.135
1.140
Airmass

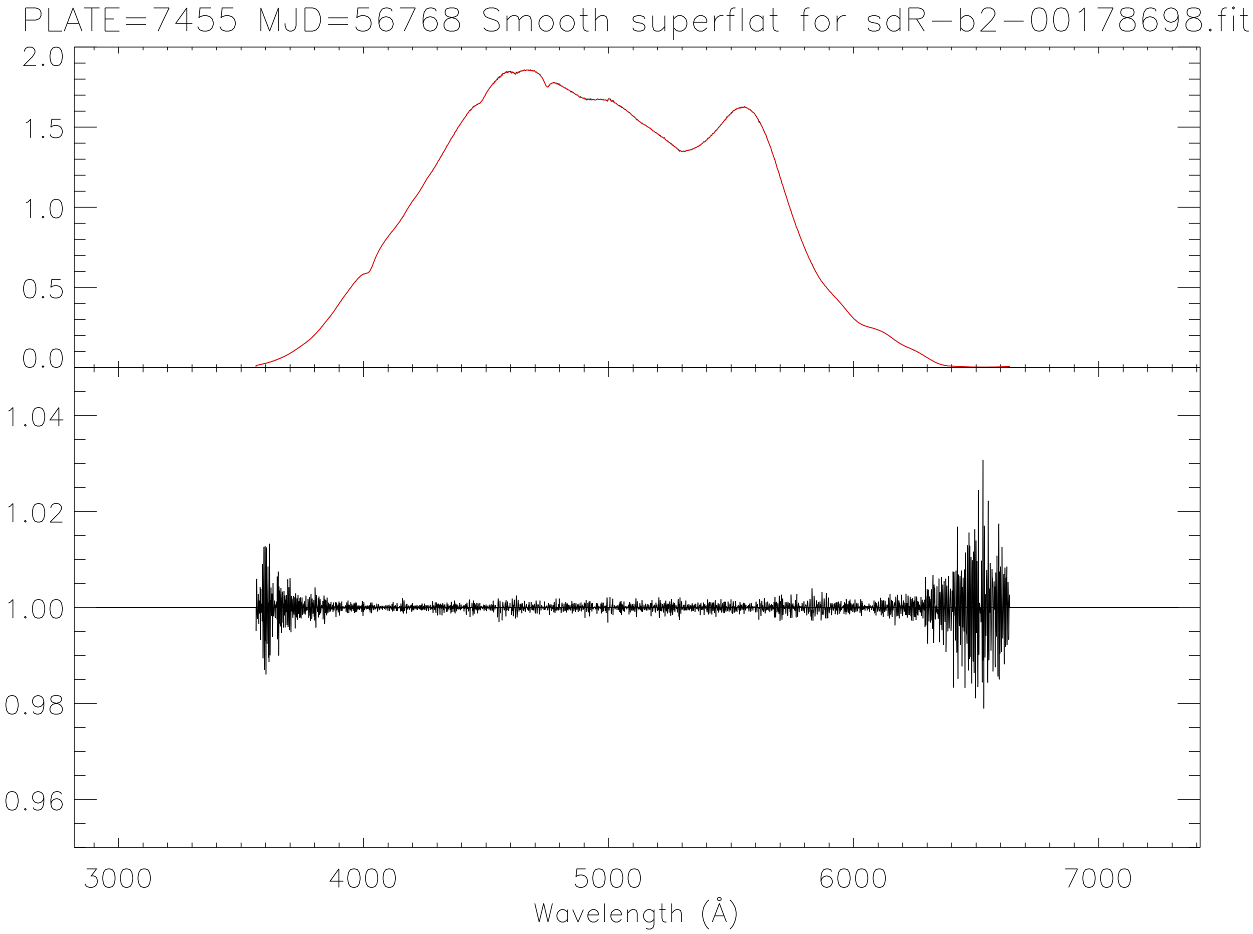

PLATE=7455 MJD=56768 sdR-b2-00178697.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 2.04 %
Flux (5578.9)/Airmass
10000
9500
9000
8500
8000
7500
7000
0
100
200
300
400
500
Fiber number
Focal Distance [mm]
1.105
1.110
1.115
1.120
1.125
1.130
1.135
1.140
Airmass

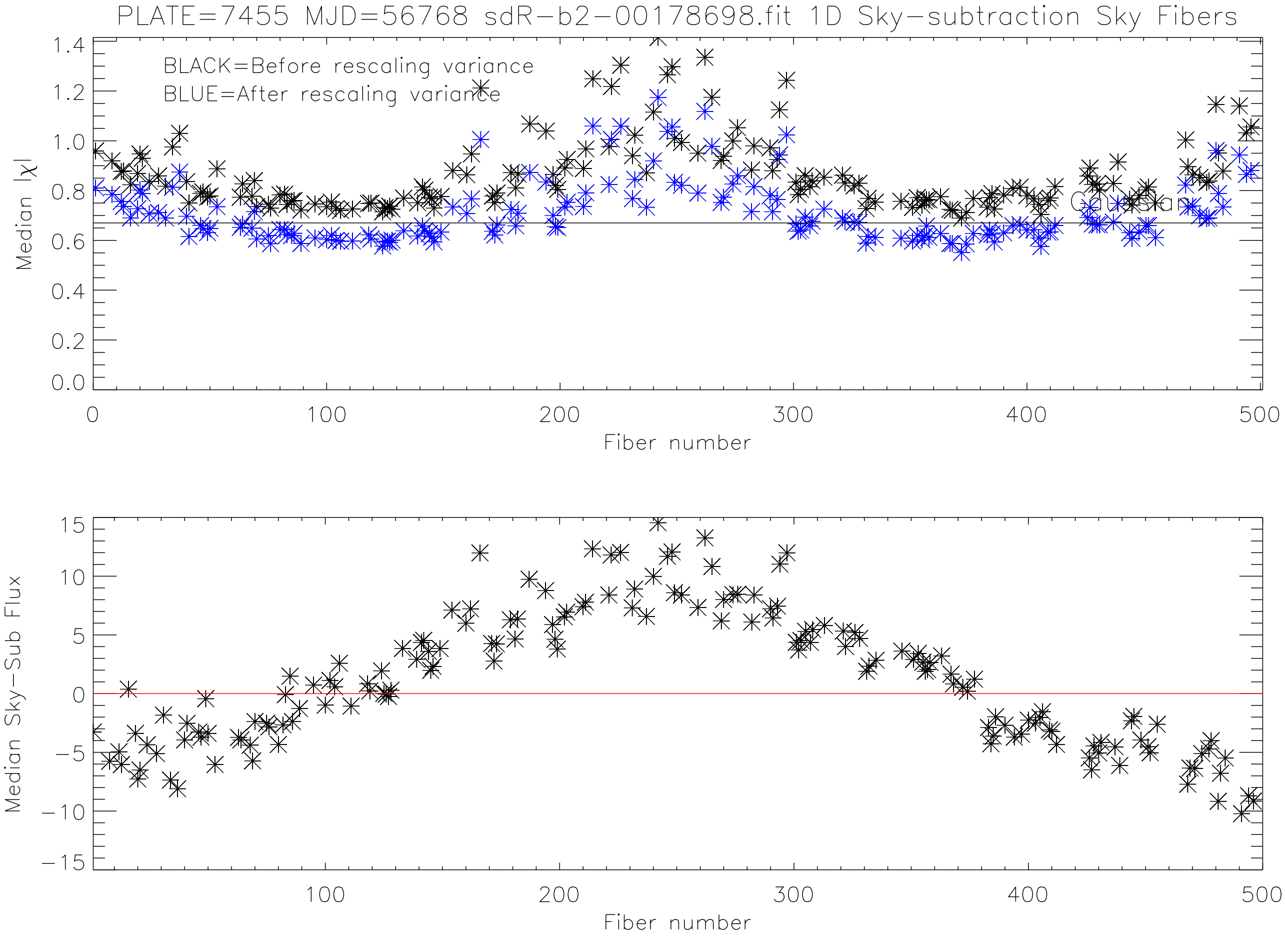

PLATE=7455 MJD=56768 Fiber−Flats for sdR−b2−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value. = −2.274
Max value = 7.911
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 18:54:52 2014



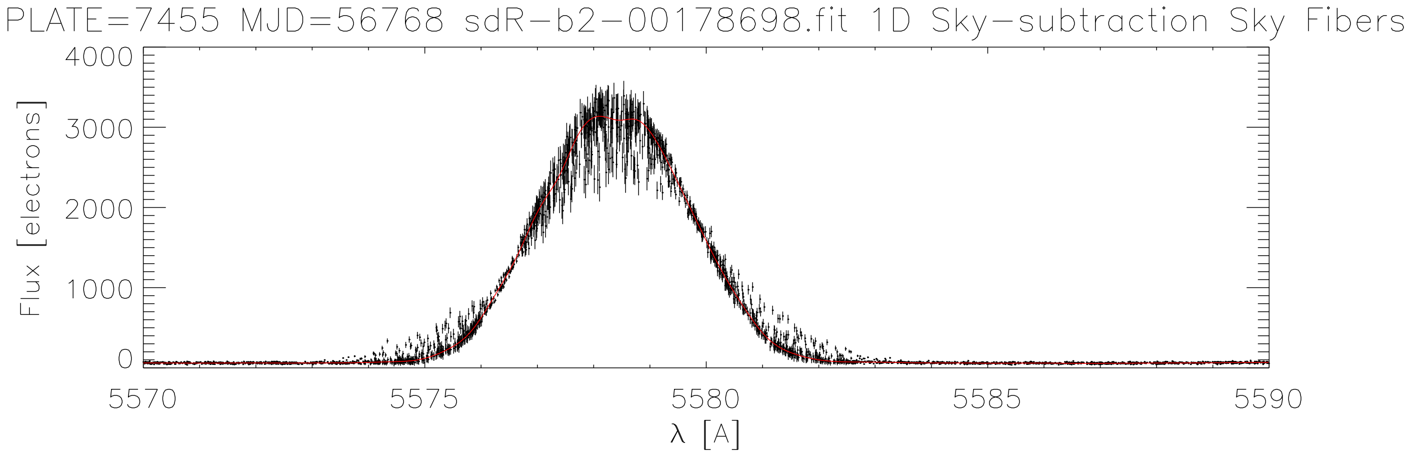
PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b2-00178698.fit

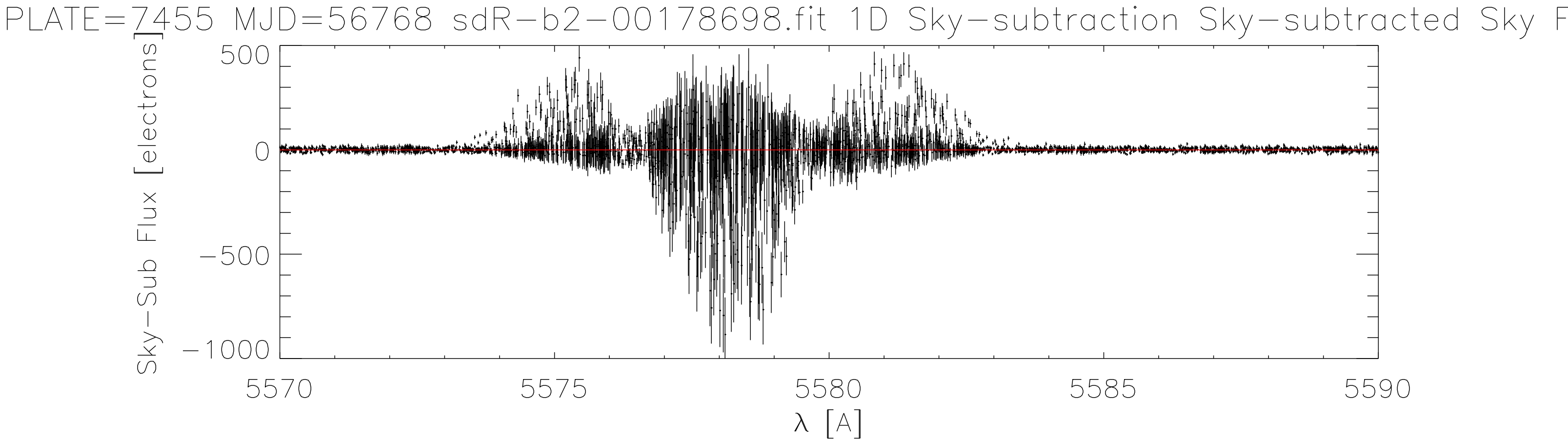

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b2-00178698.fit
Fiber Number
500
400
300
200
100
0
1.00 pix
Before shift
After shift
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength


PLATE=7455 MJD=56768 Smooth superflat for sdR-b2-00178698.fit

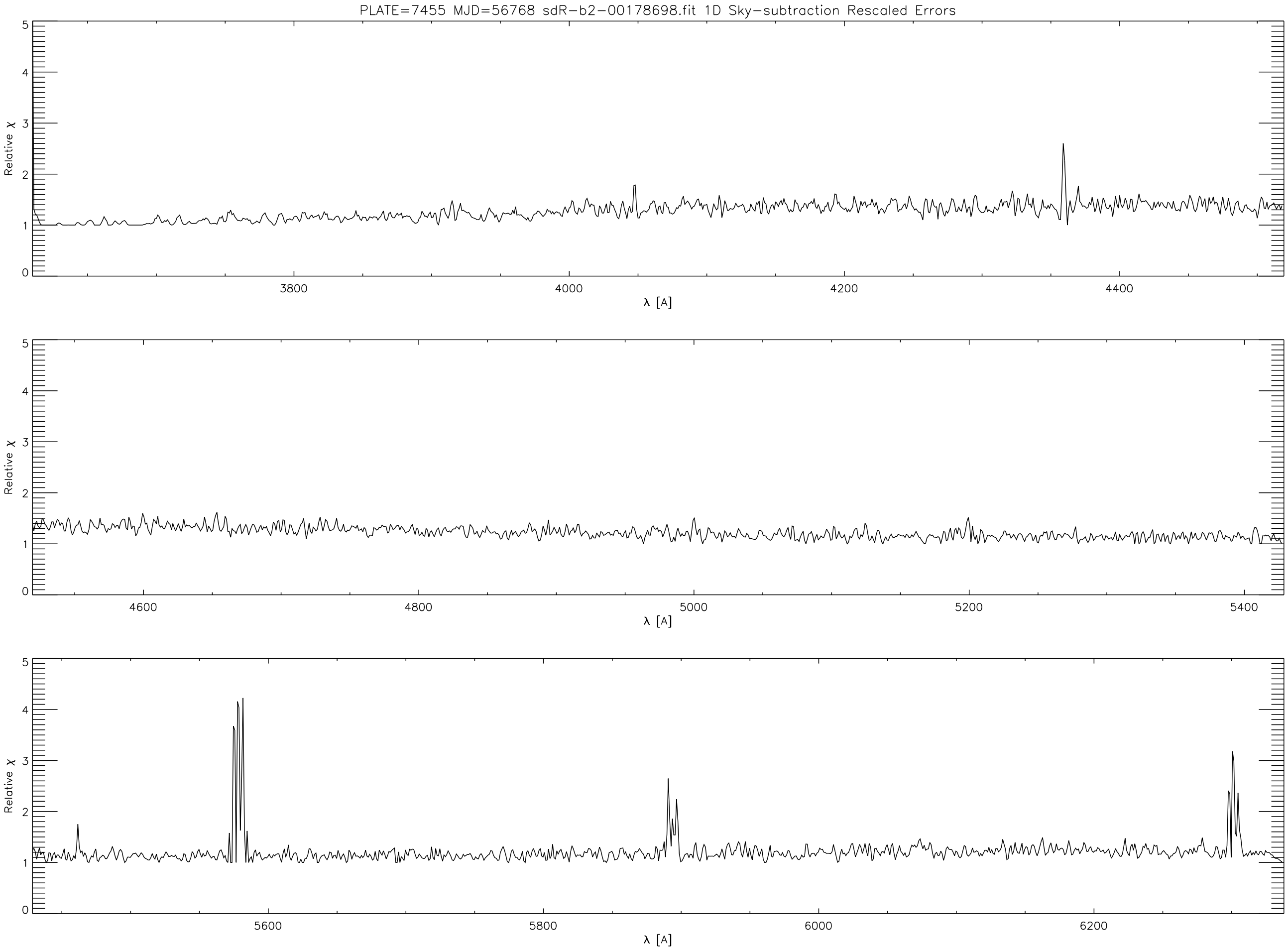


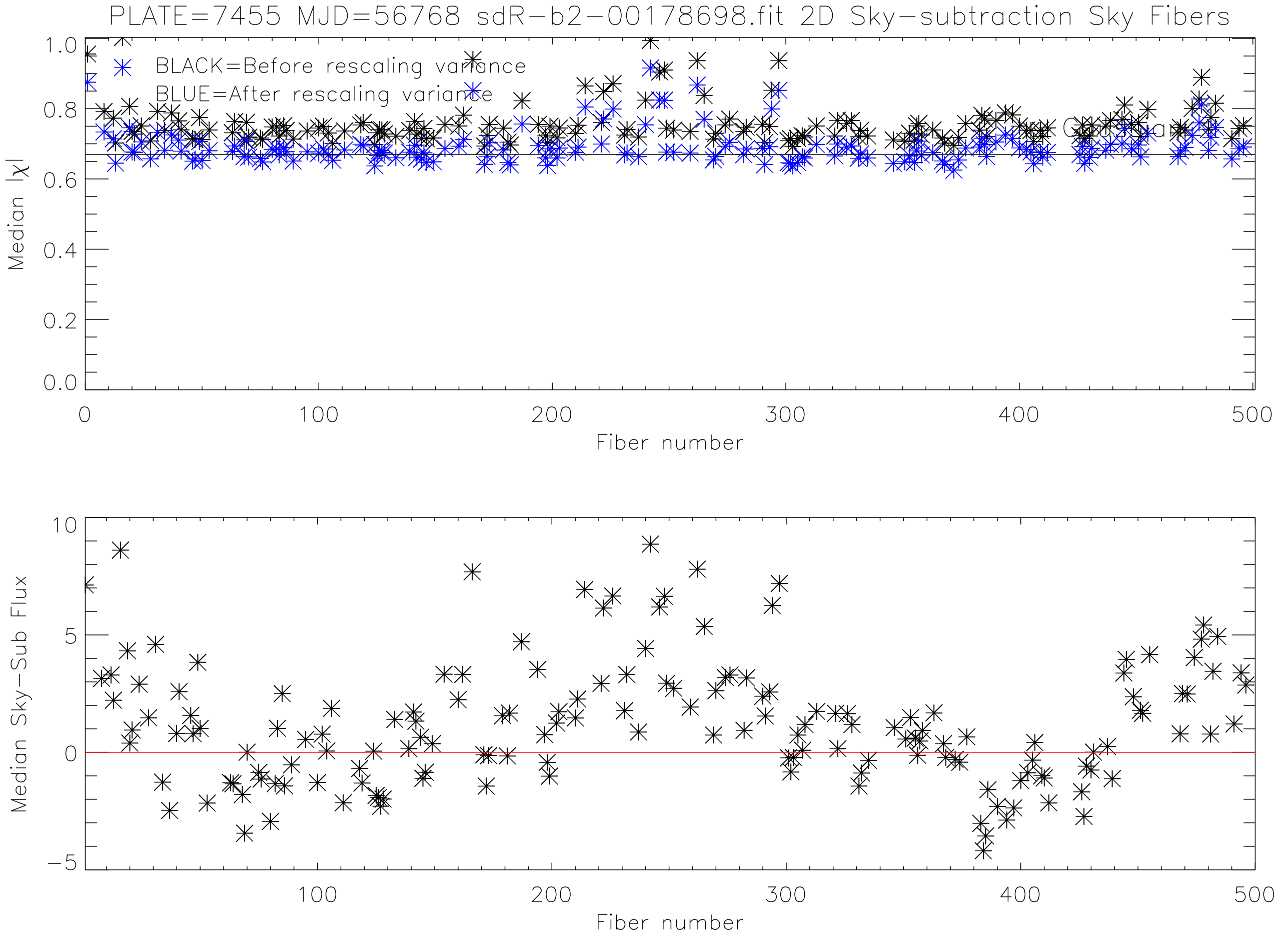
PLATE=7455 MJD=56768 sdR-b2-00178698.fit 1D Sky-subtraction Sky Fibers


PLATE=7455 MJD=56768 sdR-b2-00178698.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

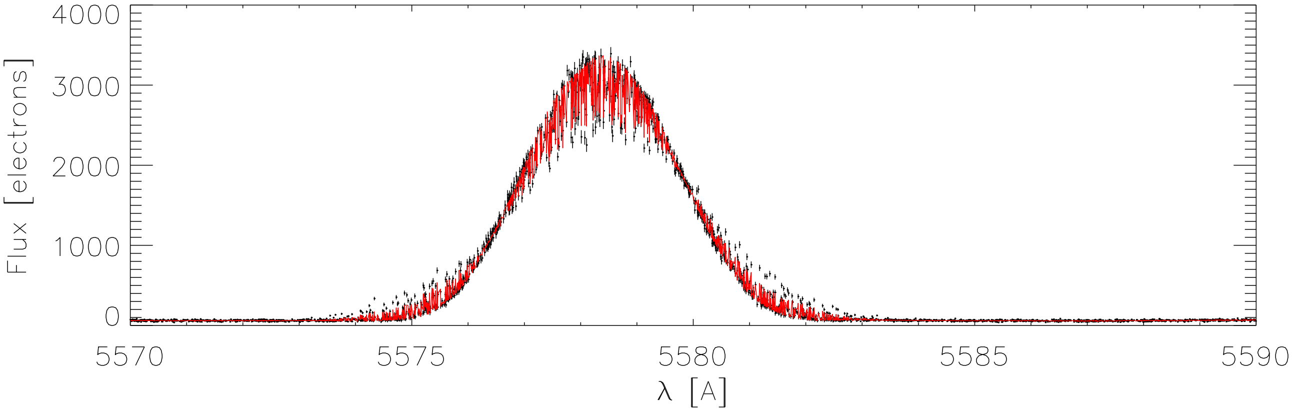

PLATE=7455 MJD=56768 sdR-b2-00178698.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 166

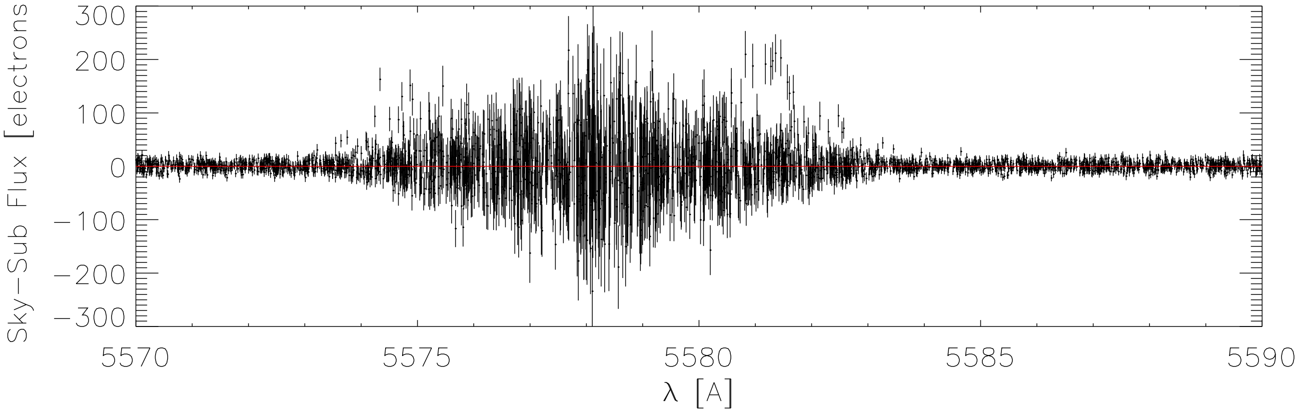



PLATE=7455 MJD=56768 sdR-b2-00178698.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−5
0
5
10
100
200
300
400
500
Fiber number

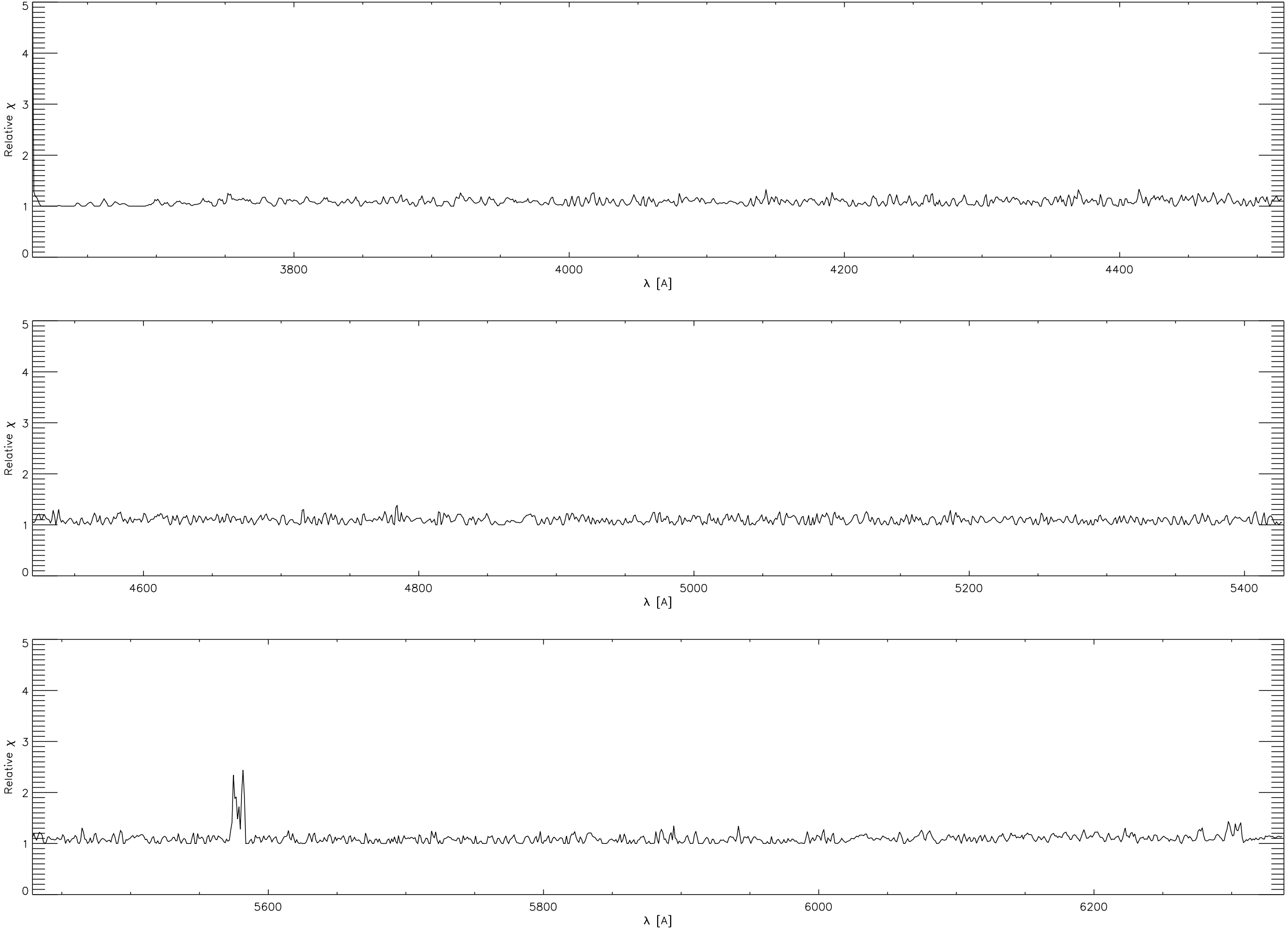
PLATE=7455 MJD=56768 sdR-b2-00178698.fit 2D Sky-subtraction Sky Fibers



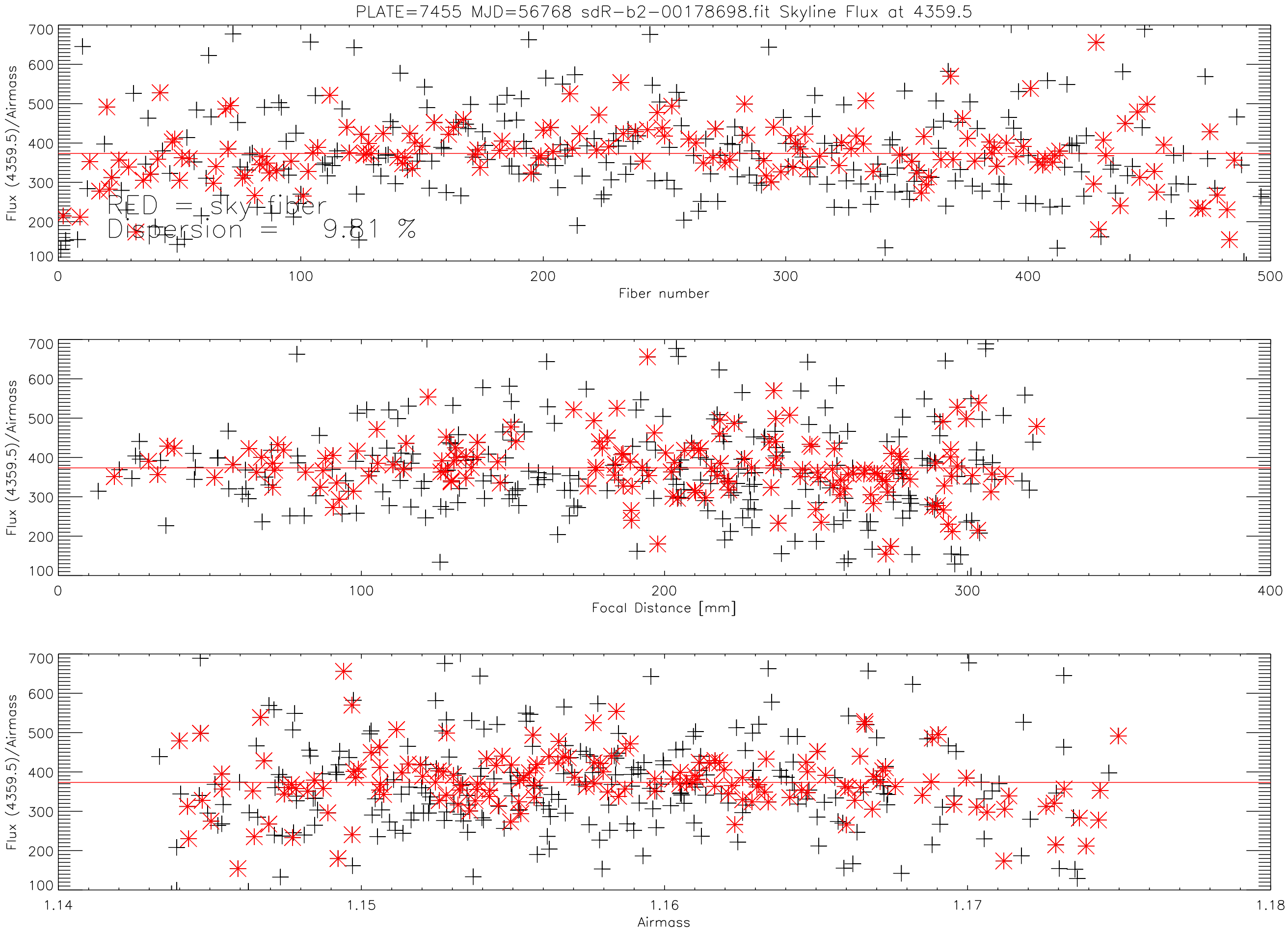
PLATE=7455 MJD=56768 sdR-b2-00178698.fit 2D Sky-subtraction Sky-subtracted Sky F



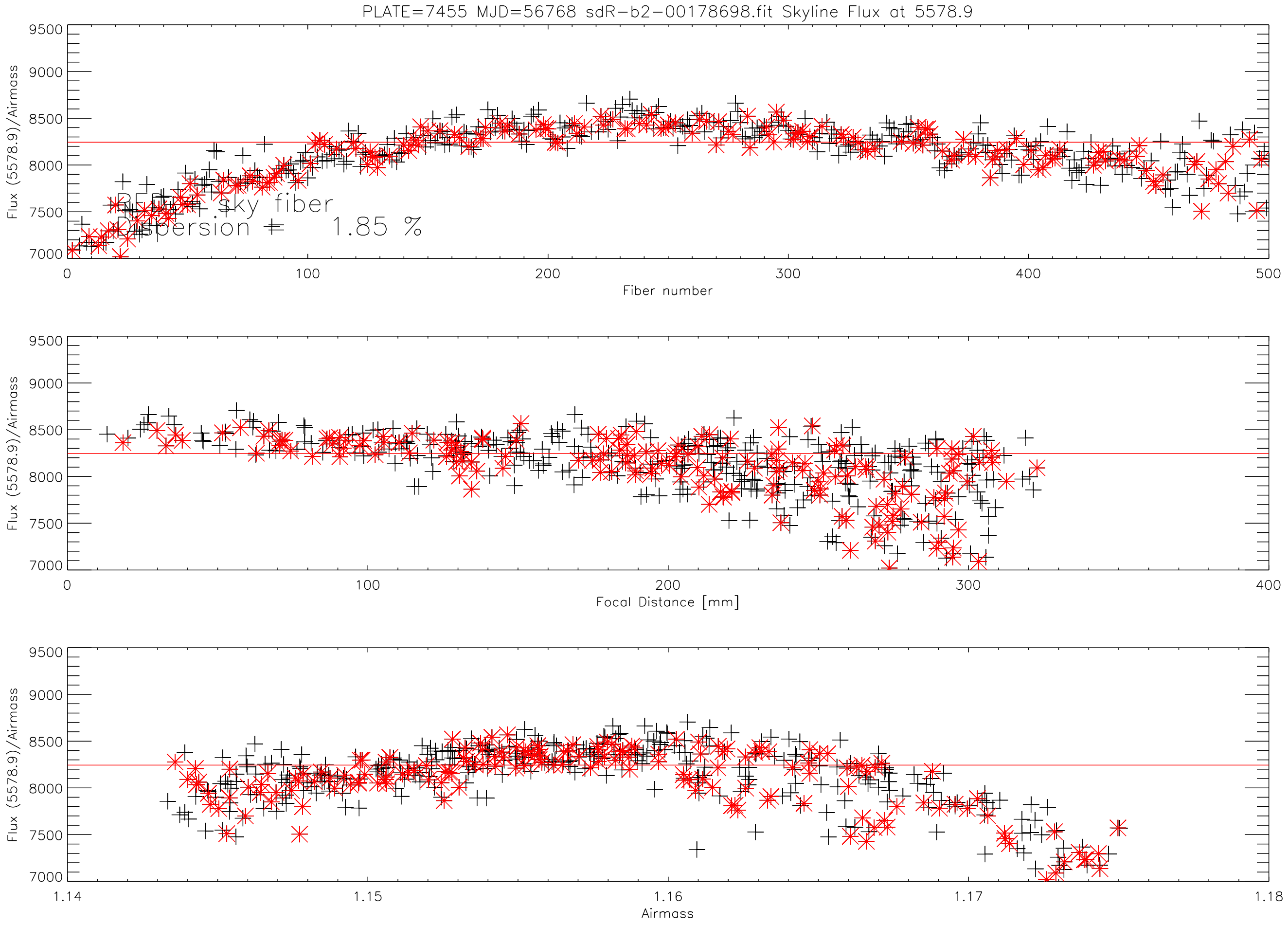
Number of sky fibers = 166

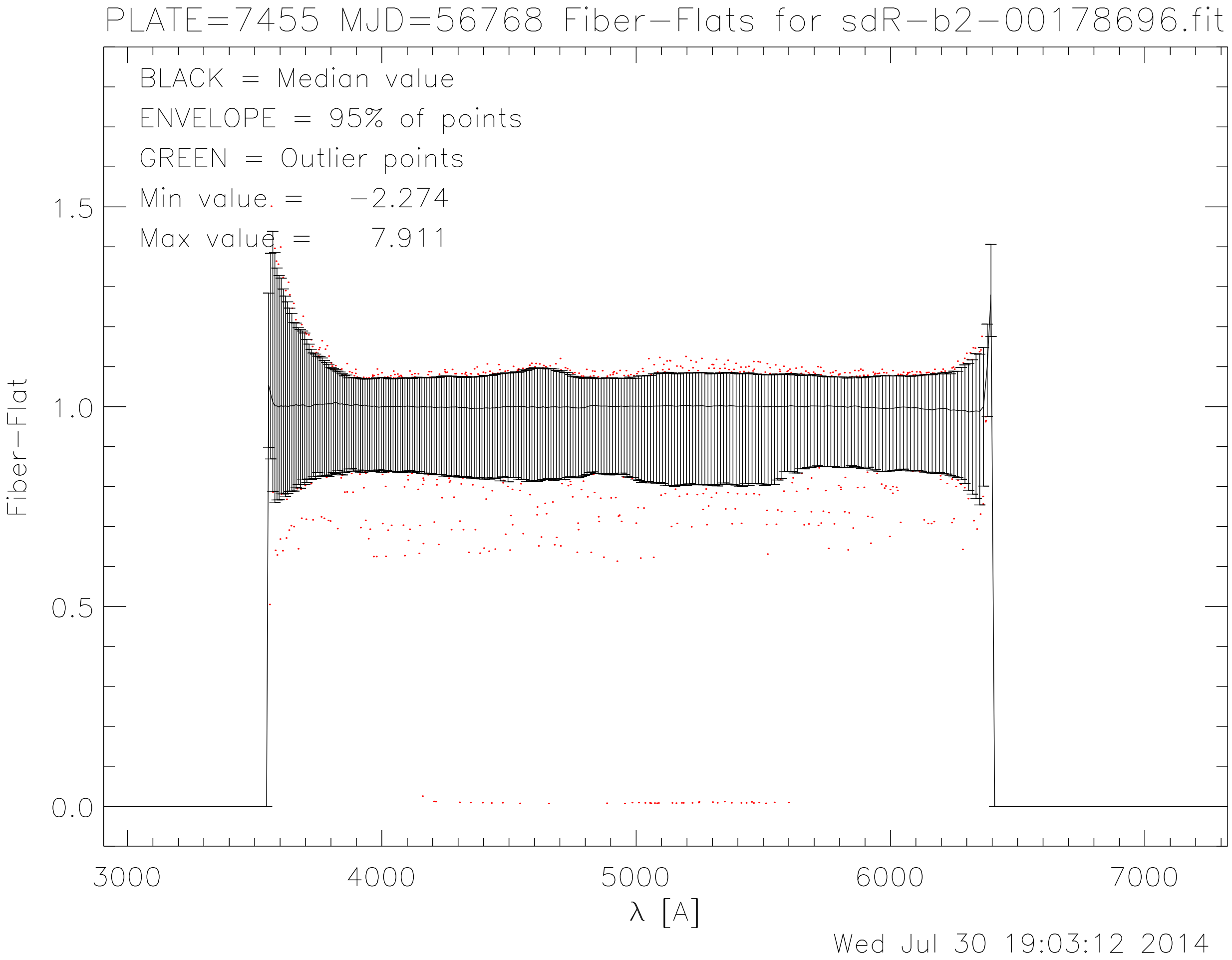


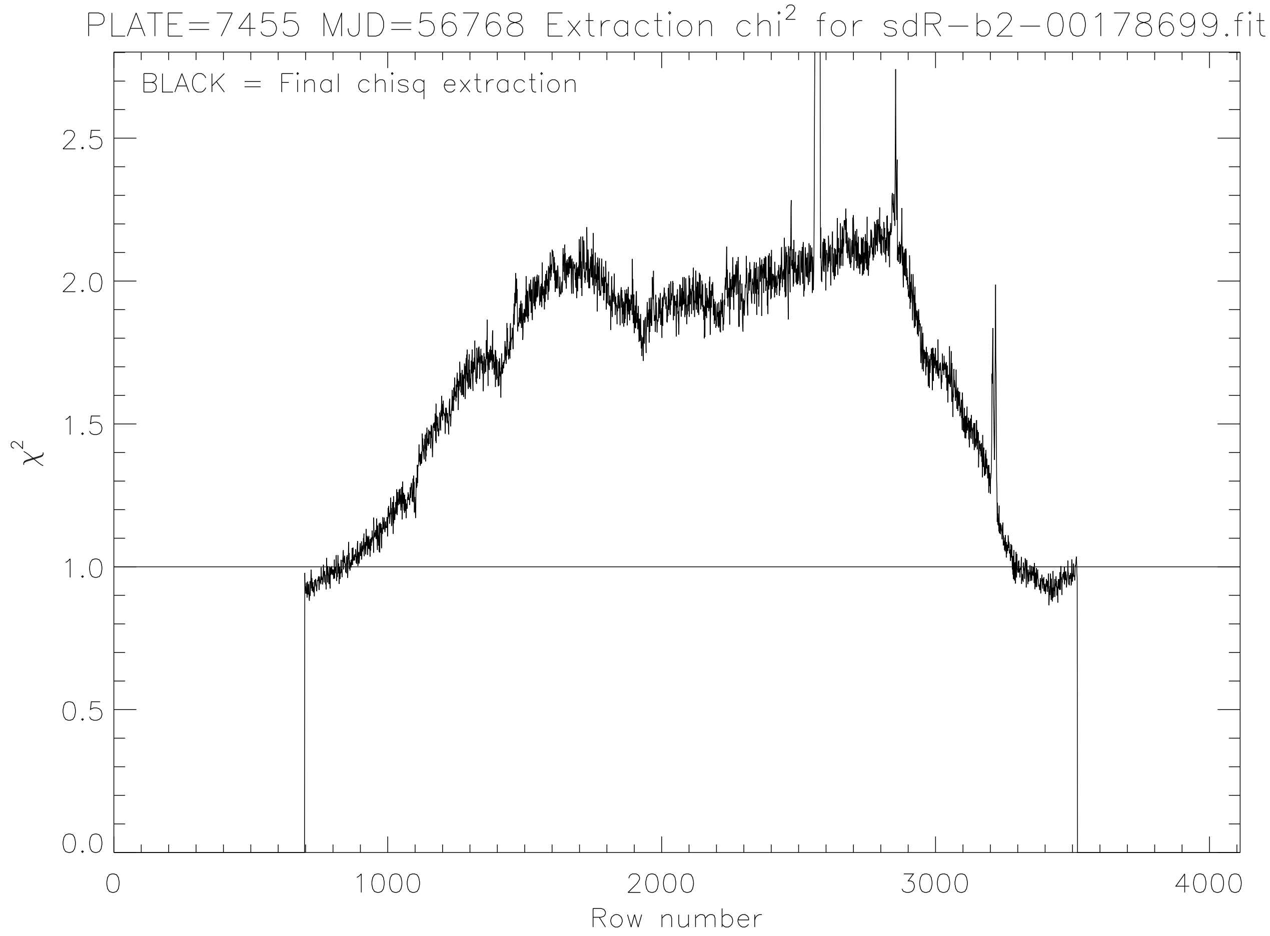
PLATE=7455 MJD=56768 sdR-b2-00178698.fit 2D Sky-subtraction Rescaled Errors

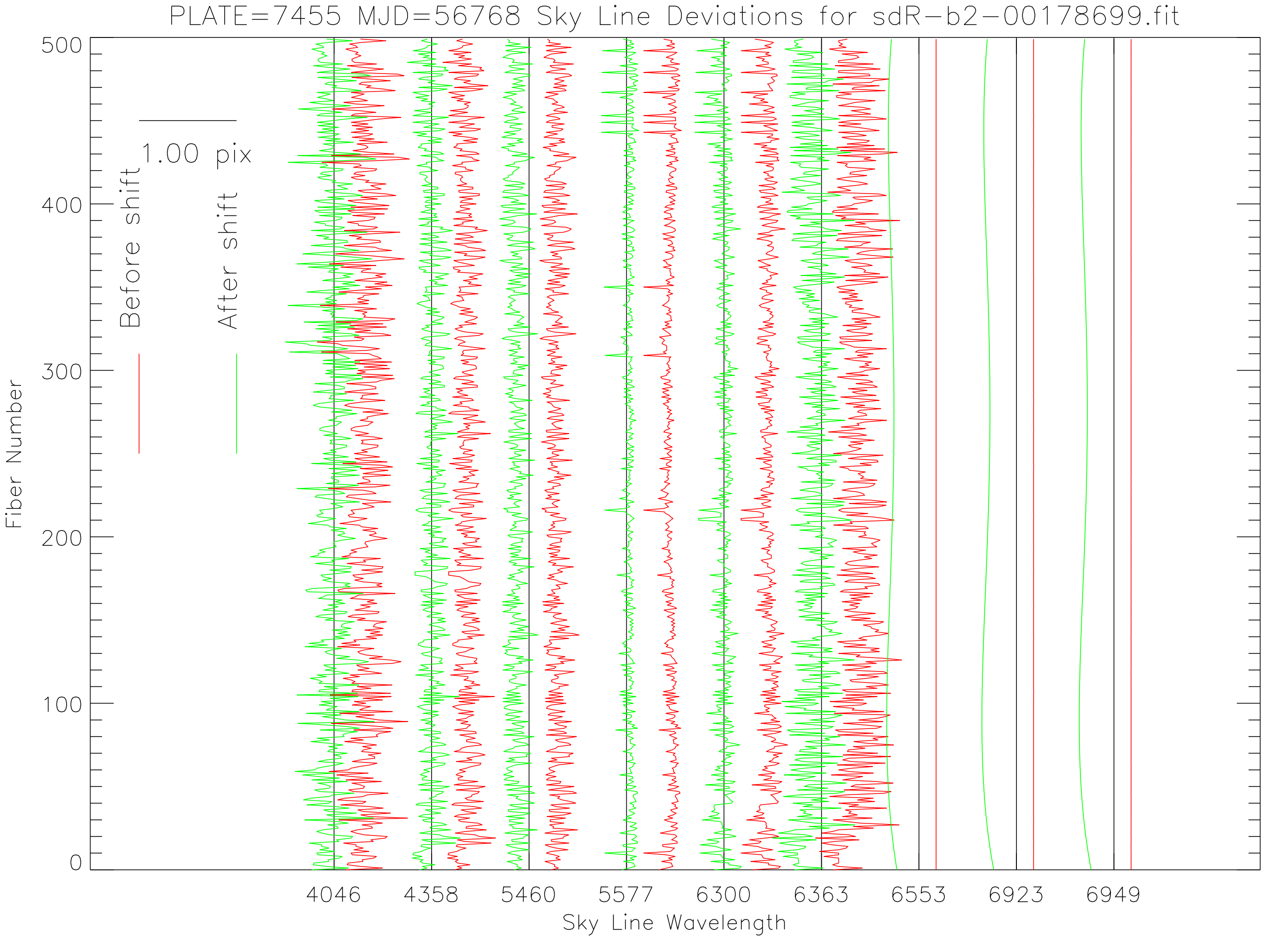


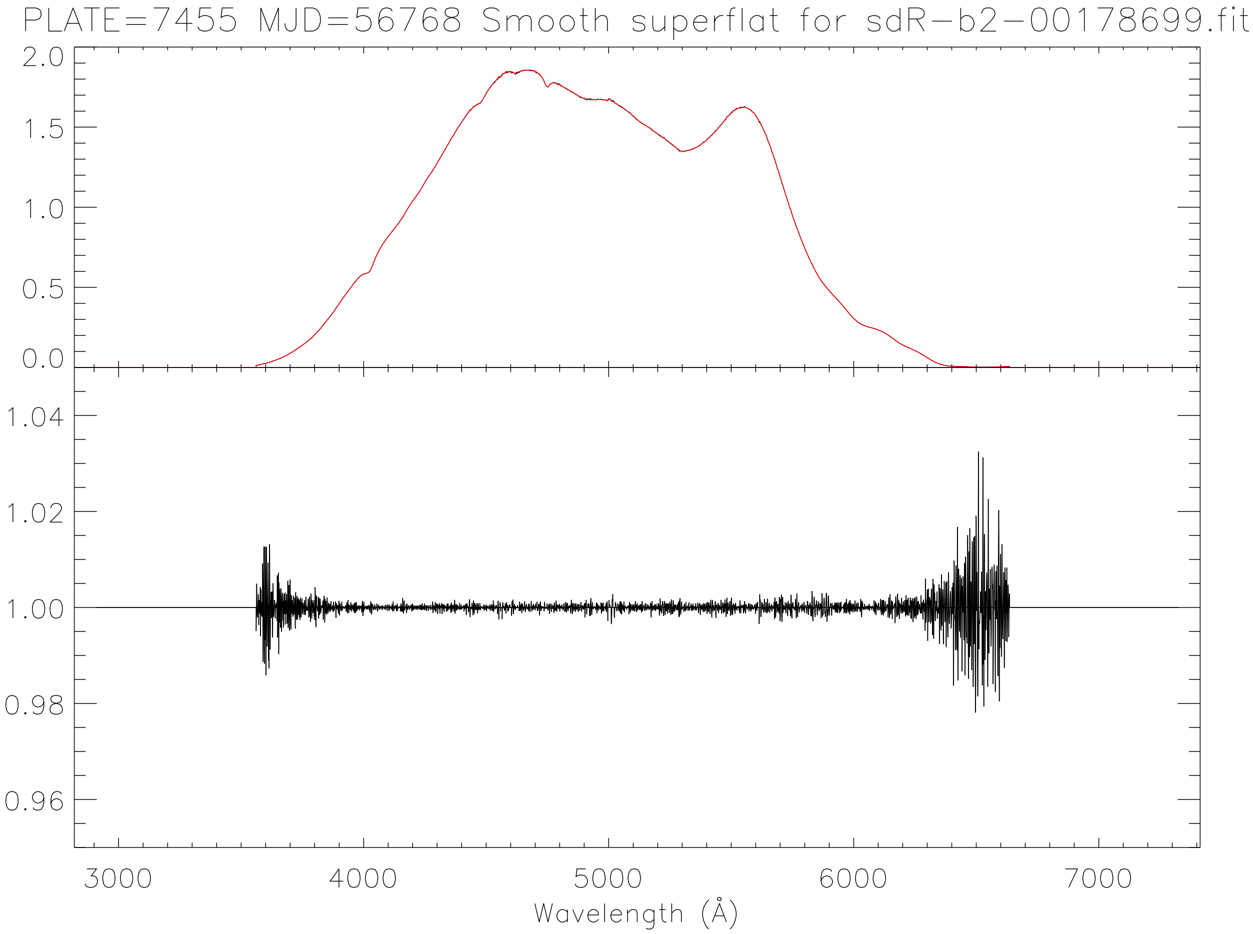
PLATE=7455 MJD=56768 sdR-b2-00178698.fit Skyline Flux at 4359.5

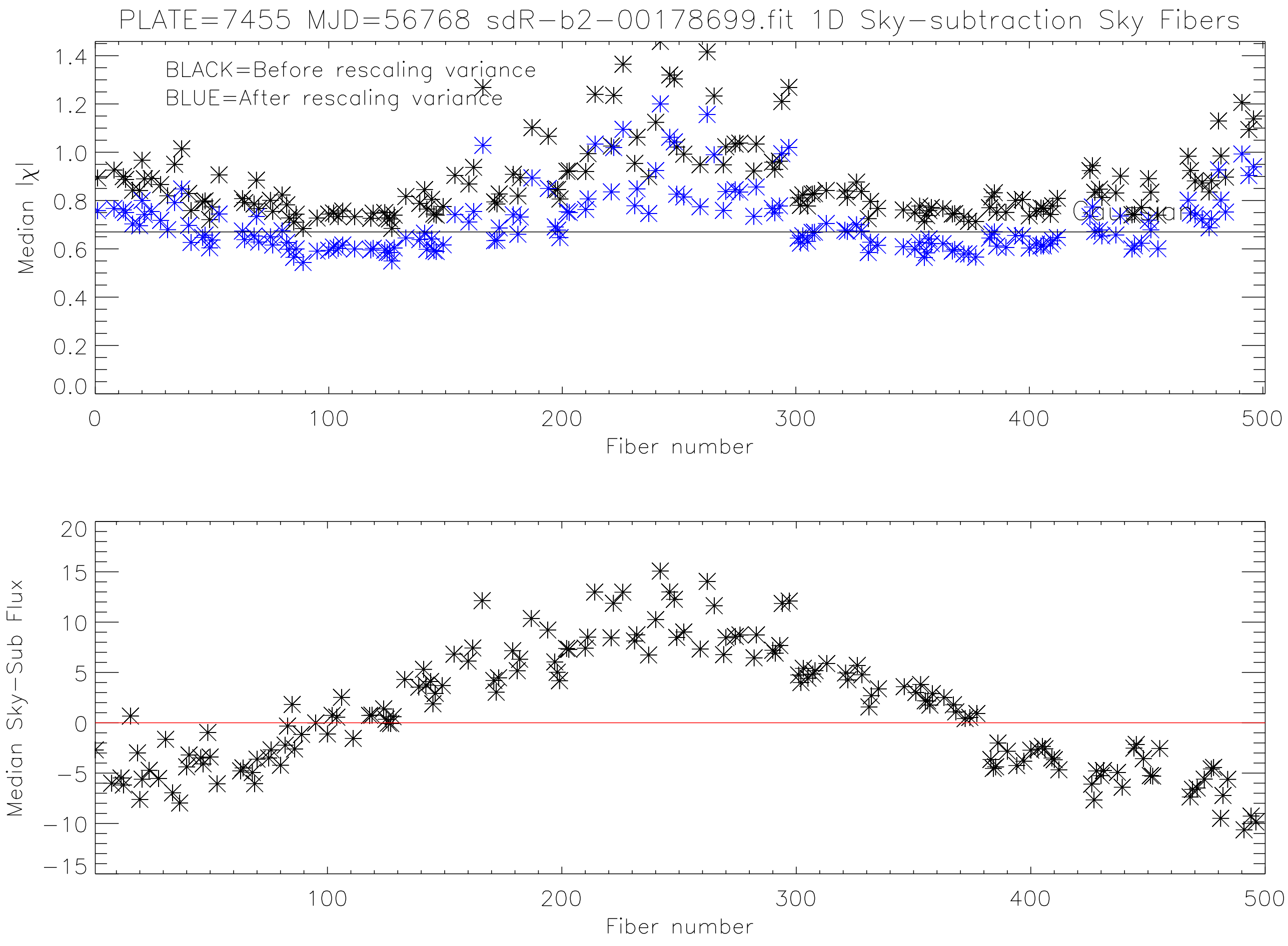

PLATE=7455 MJD=56768 sdR-b2-00178698.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 1.85 %
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
1.14
1.15
1.16
1.17
1.18
Airmass


PLATE=7455 MJD=56768 Fiber−Flats for sdR−b2−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value. = −2.274
Max value = 7.911
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 19:03:12 2014

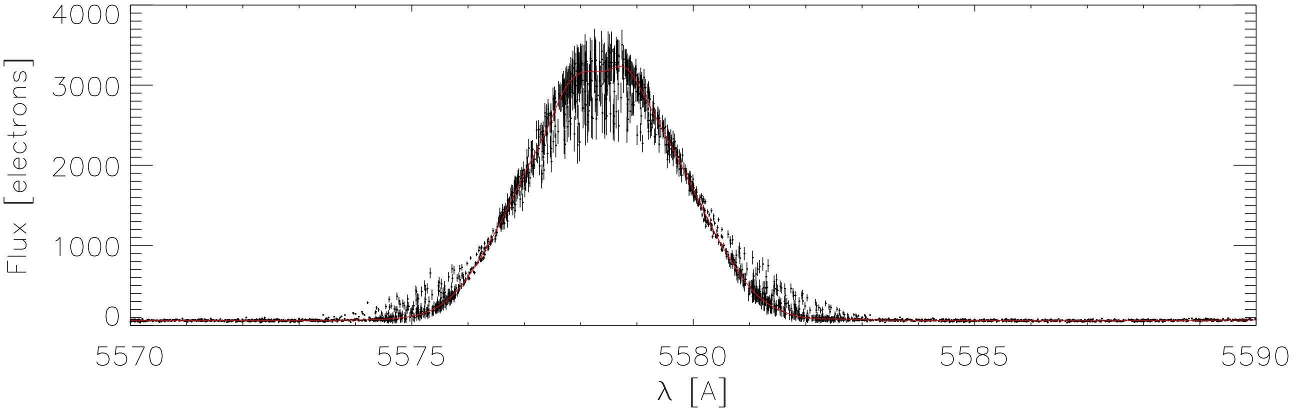

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b2-00178699.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number


PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b2-00178699.fit
Fiber Number
Sky Line Wavelength
0
100
200
300
400
500
4046
4358
5460
5577
6300
6363
6553
6923
6949
1.00 pix
Before shift
After shift

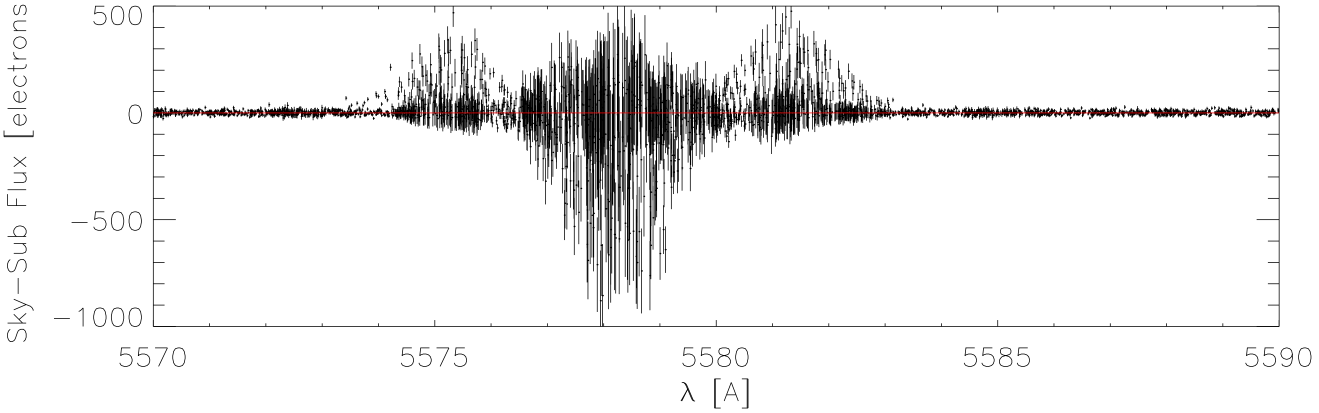

PLATE=7455 MJD=56768 Smooth superflat for sdR-b2-00178699.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)


PLATE=7455 MJD=56768 sdR-b2-00178699.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
Gaussian
Fiber number
0
100
200
300
400
500
Median Sky-Sub Flux
-15
-10
-5
0
5
10
15
20
Fiber number
100
200
300
400
500

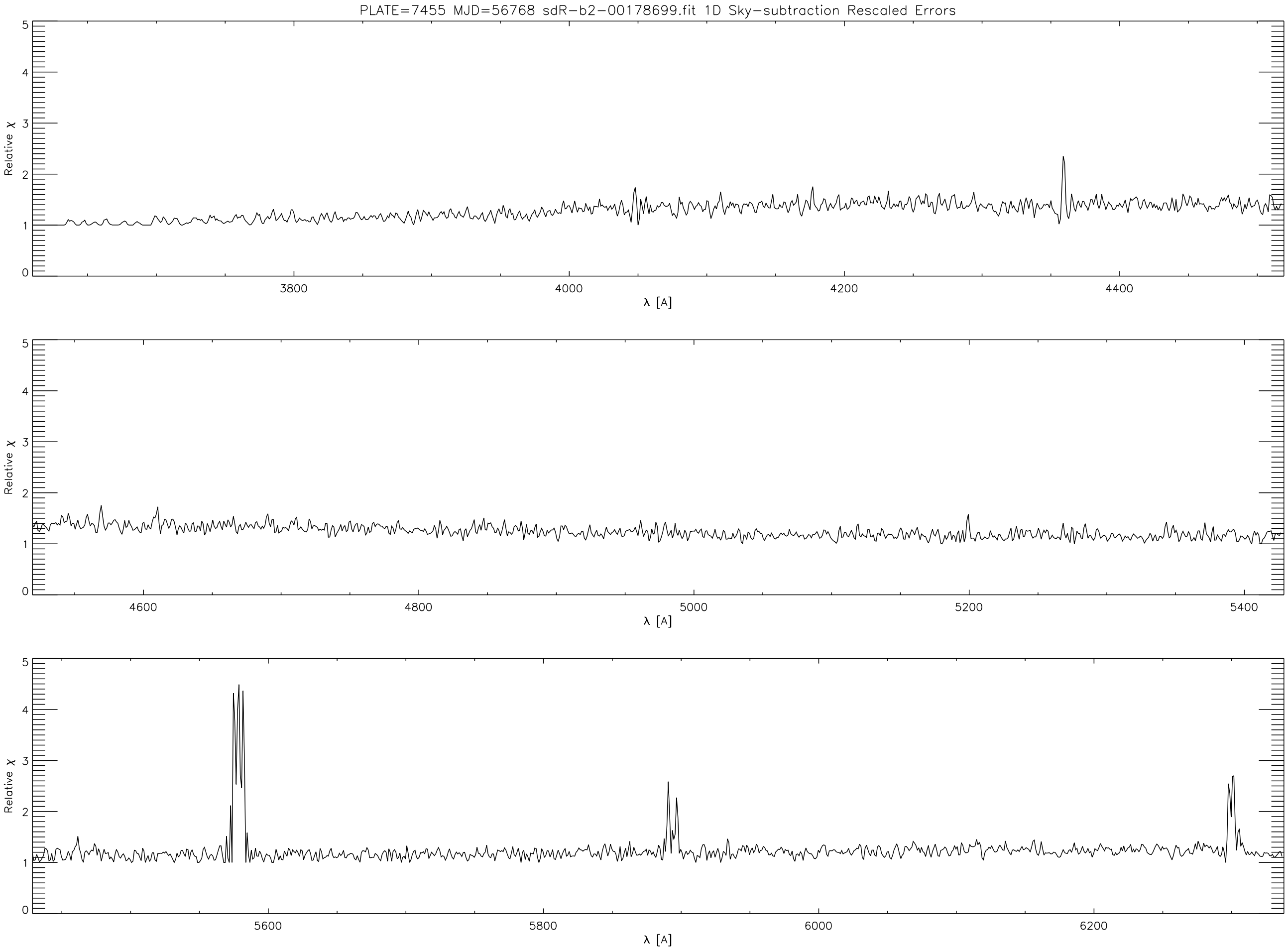
PLATE=7455 MJD=56768 sdR-b2-00178699.fit 1D Sky-subtraction Sky Fibers



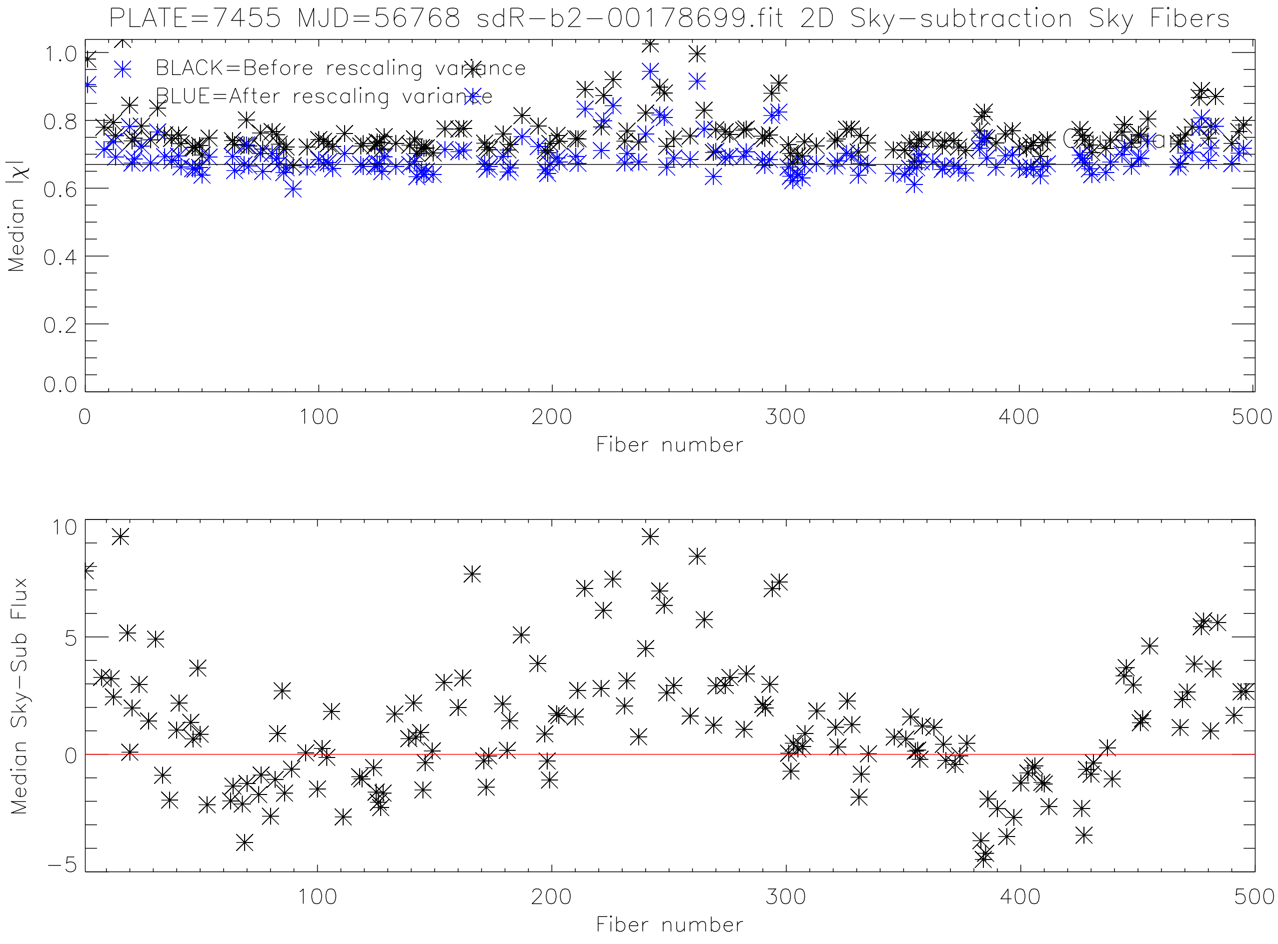
PLATE=7455 MJD=56768 sdR-b2-00178699.fit 1D Sky-subtraction Sky-subtracted Sky F

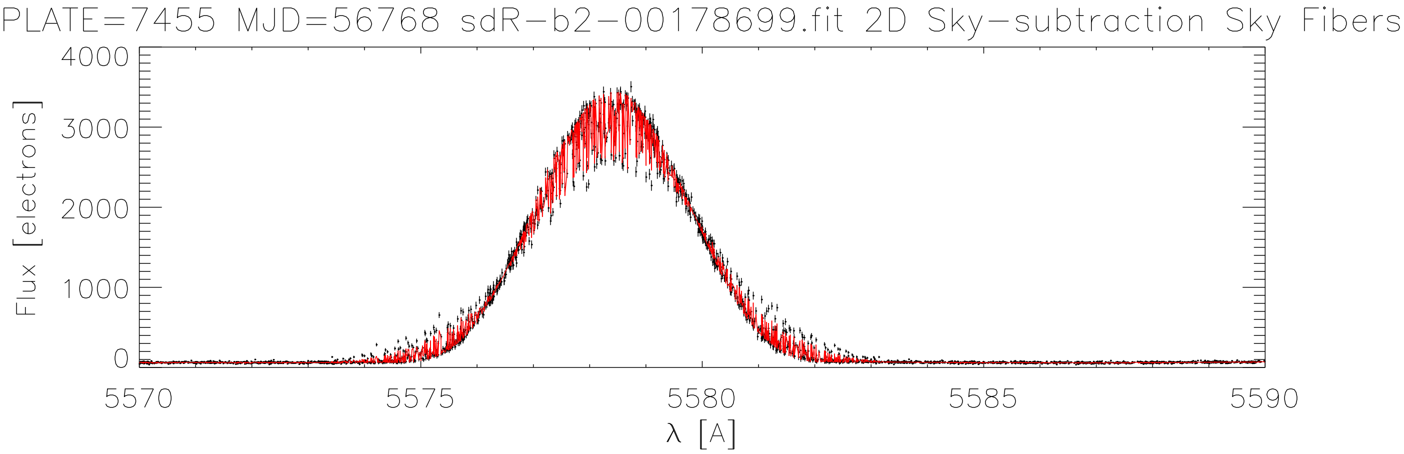


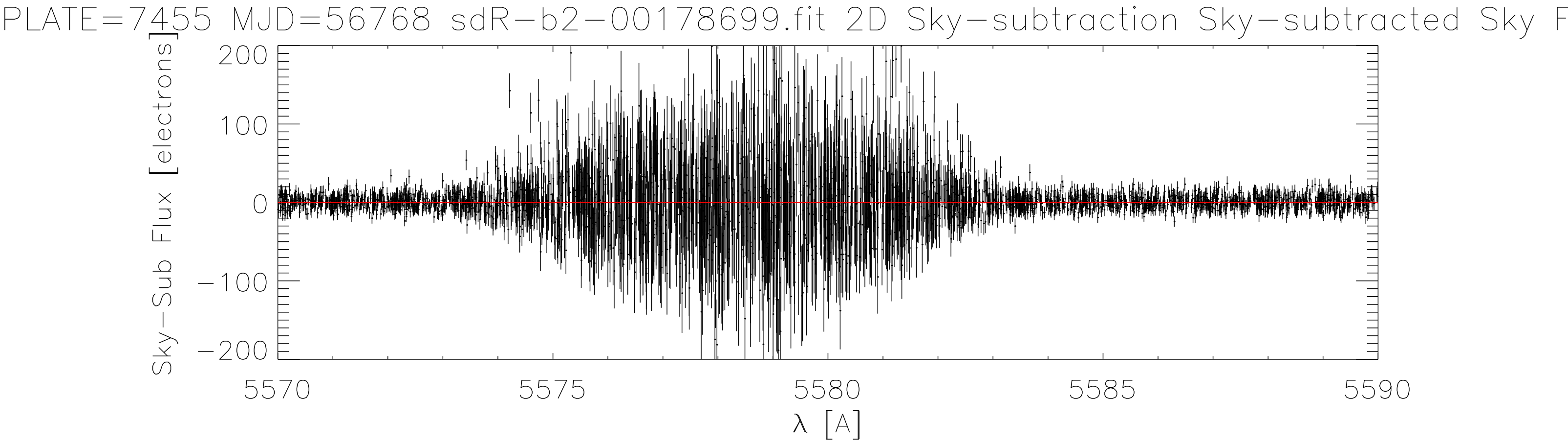
Number of sky fibers = 166



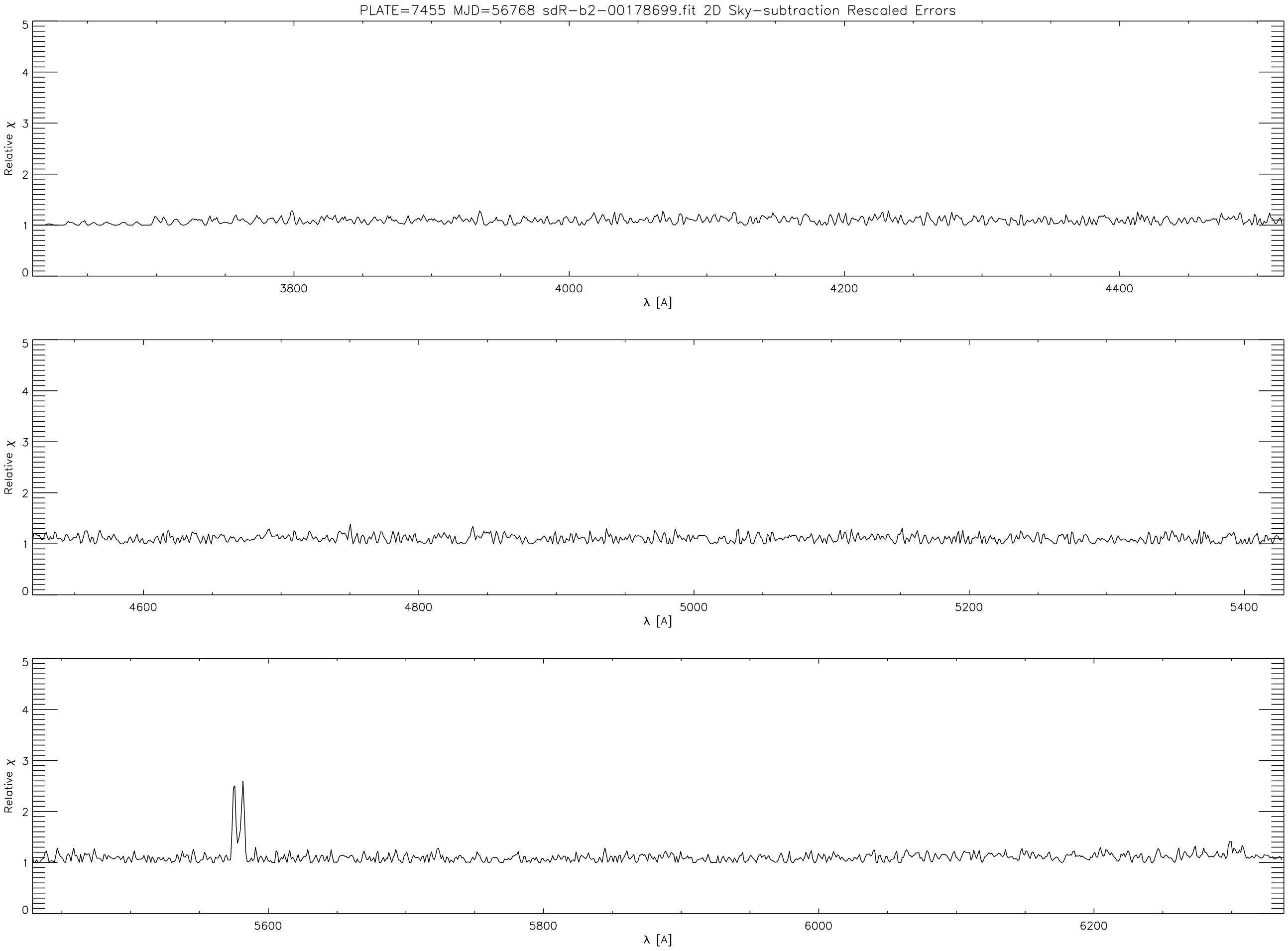
PLATE=7455 MJD=56768 sdR-b2-00178699.fit 1D Sky-subtraction Rescaled Errors

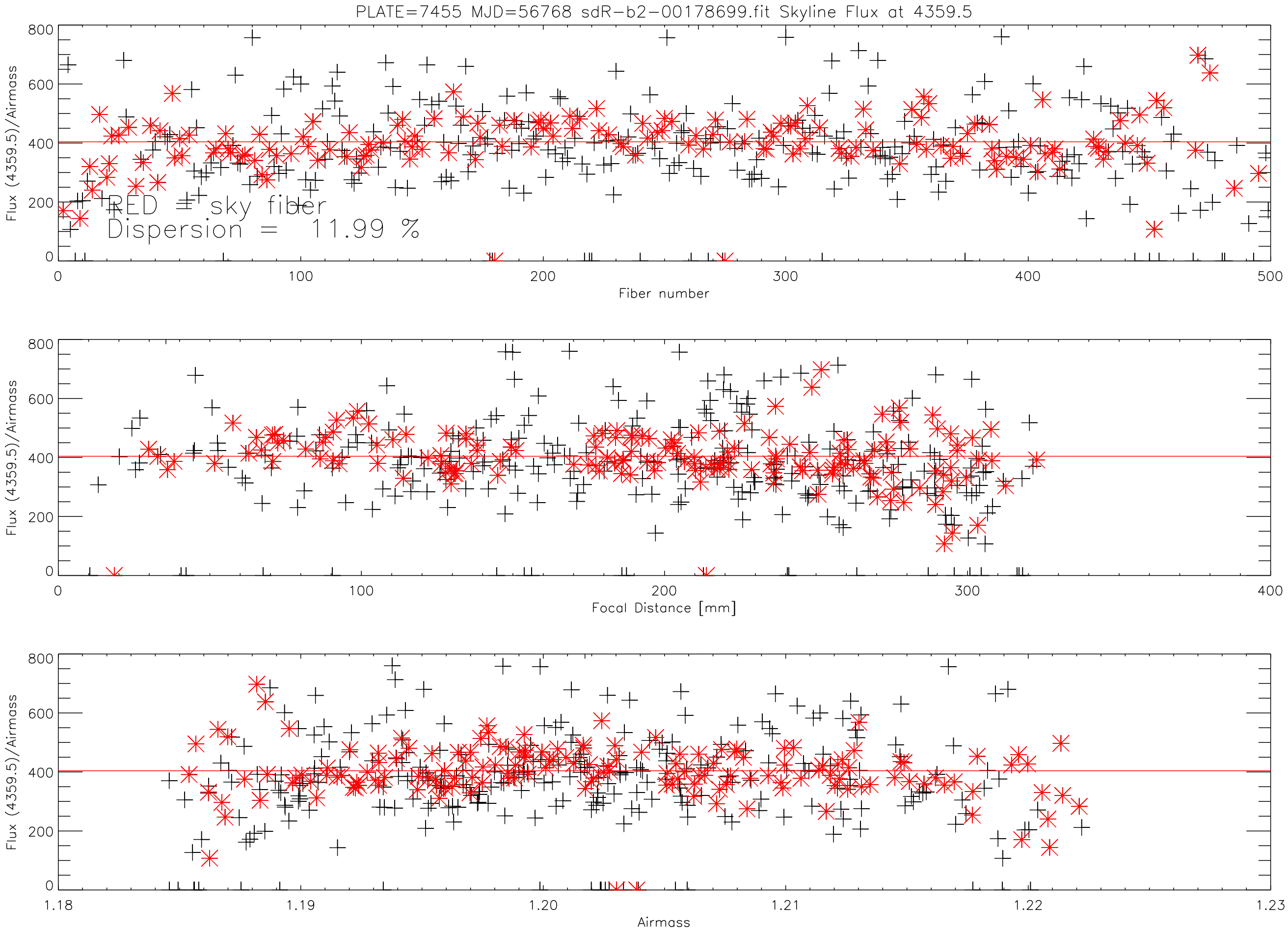

PLATE=7455 MJD=56768 sdR-b2-00178699.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
10
5
0
−5
100
200
300
400
500
Fiber number


PLATE=7455 MJD=56768 sdR-b2-00178699.fit 2D Sky-subtraction Sky Fibers

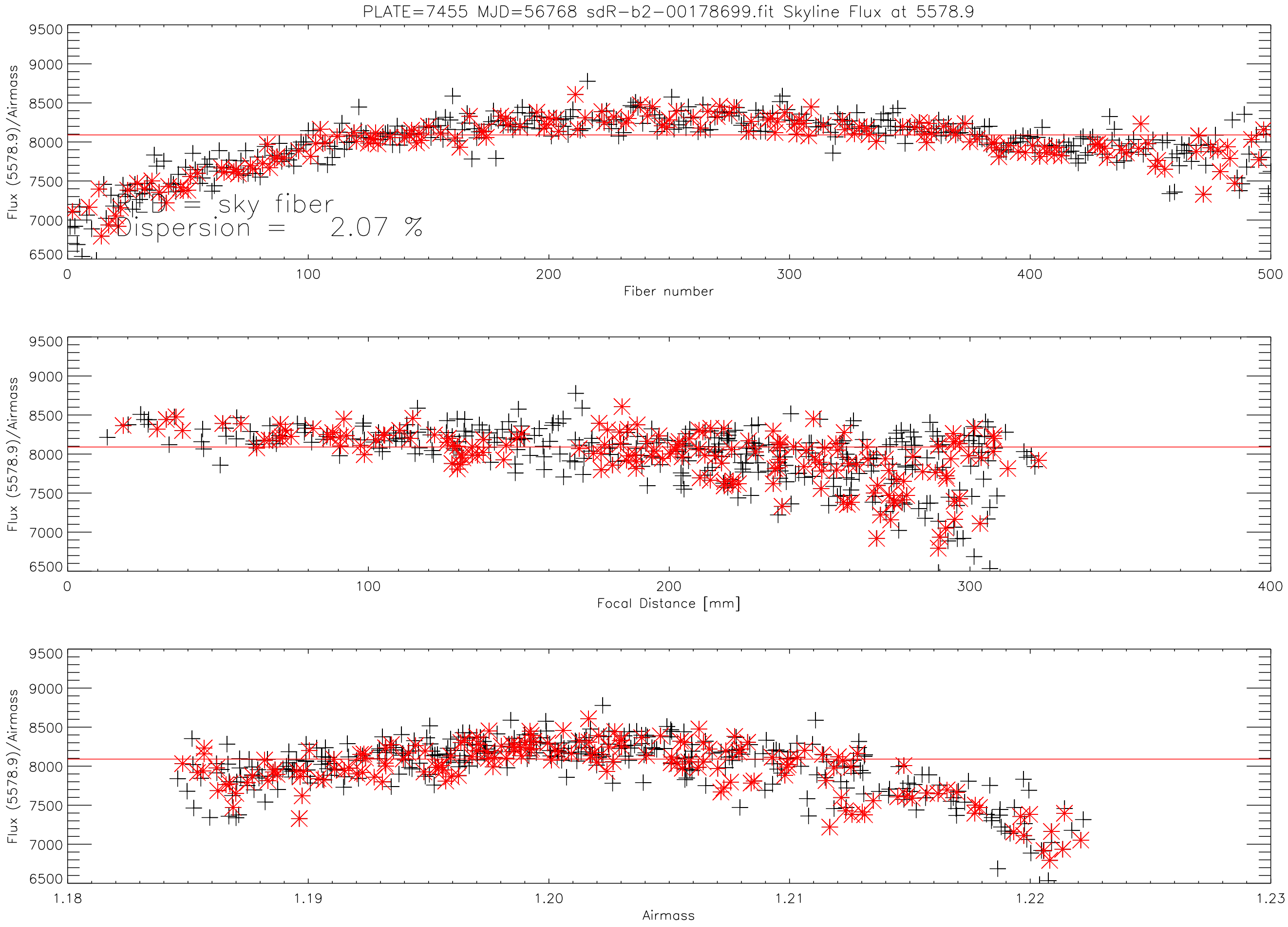

PLATE=7455 MJD=56768 sdR-b2-00178699.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 166

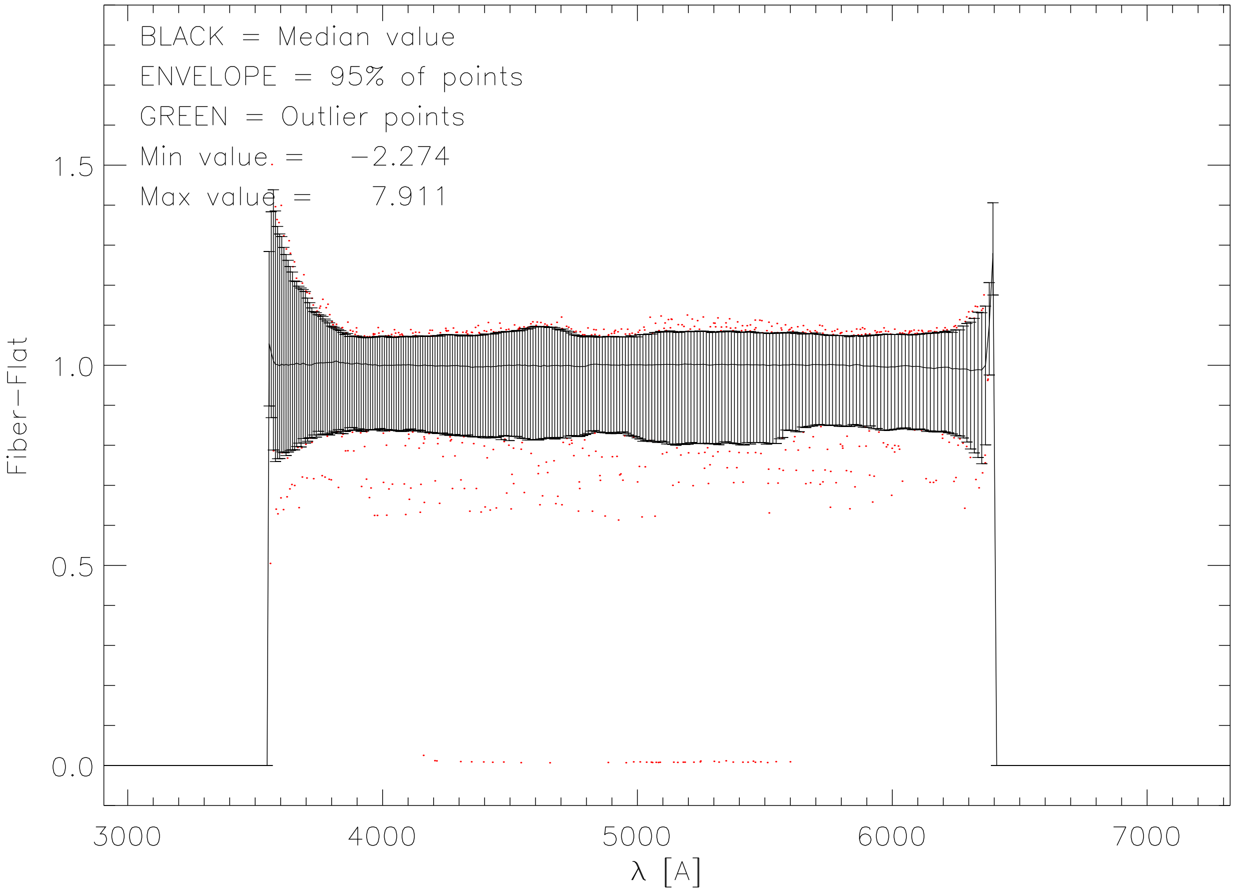




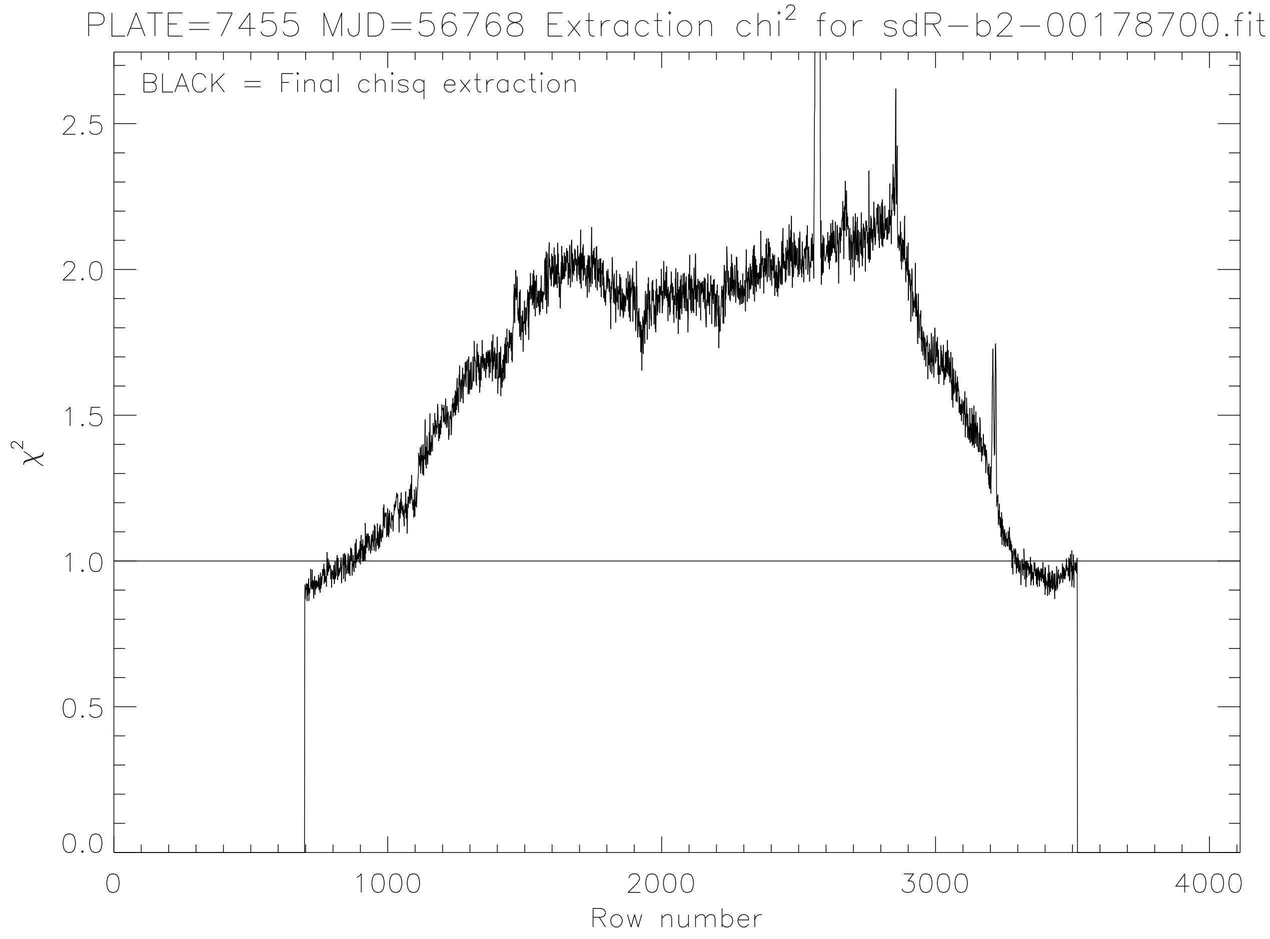
PLATE=7455 MJD=56768 sdR-b2-00178699.fit Skyline Flux at 4359.5


PLATE=7455 MJD=56768 sdR-b2-00178699.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
9500
9000
8500
8000
7500
7000
6500
RED = sky fiber
Dispersion = 2.07 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.18
1.19
1.20
1.21
1.22
1.23
Airmass

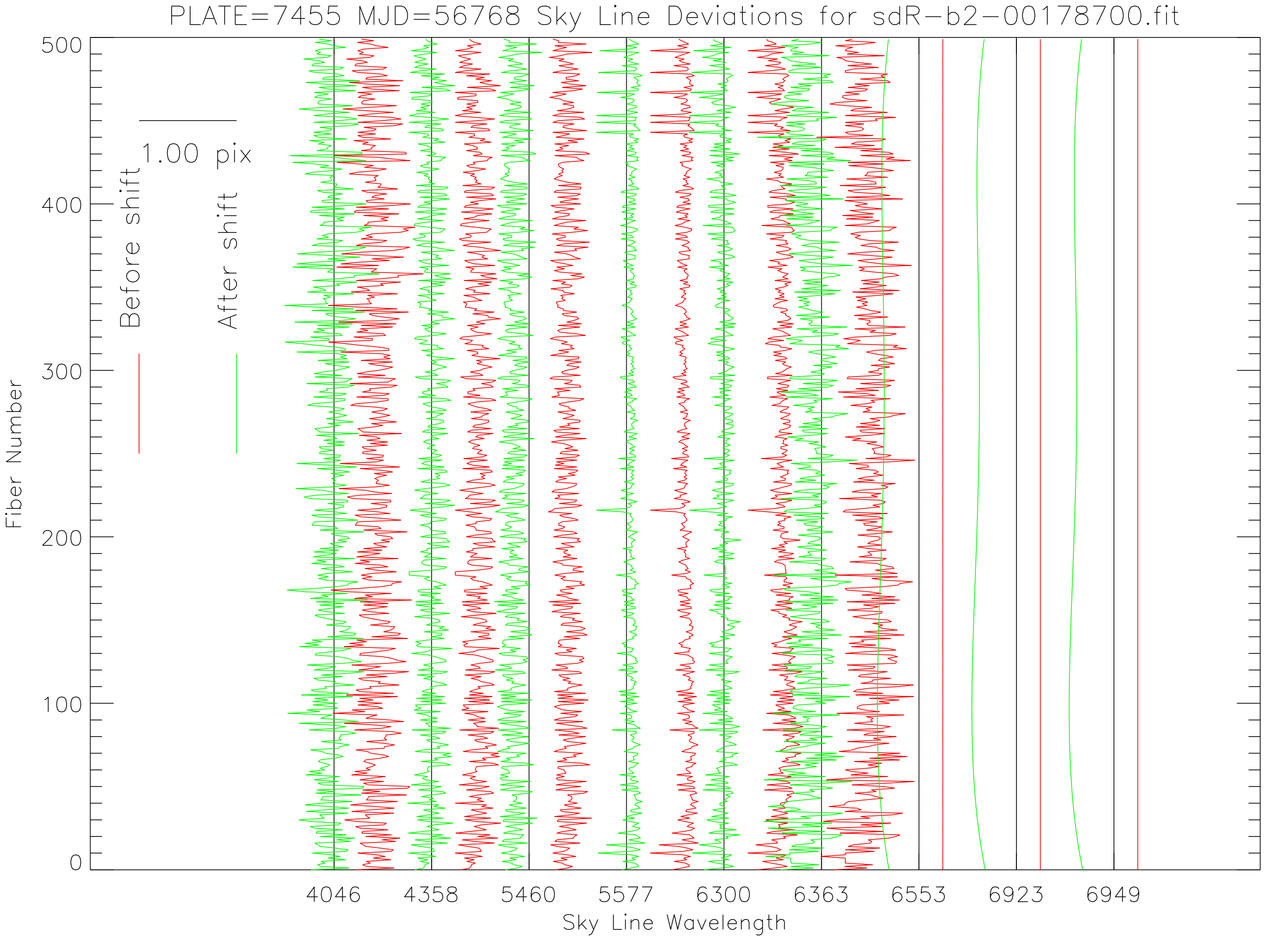
PLATE=7455 MJD=56768 Fiber−Flats for sdR−b2−00178696.fit

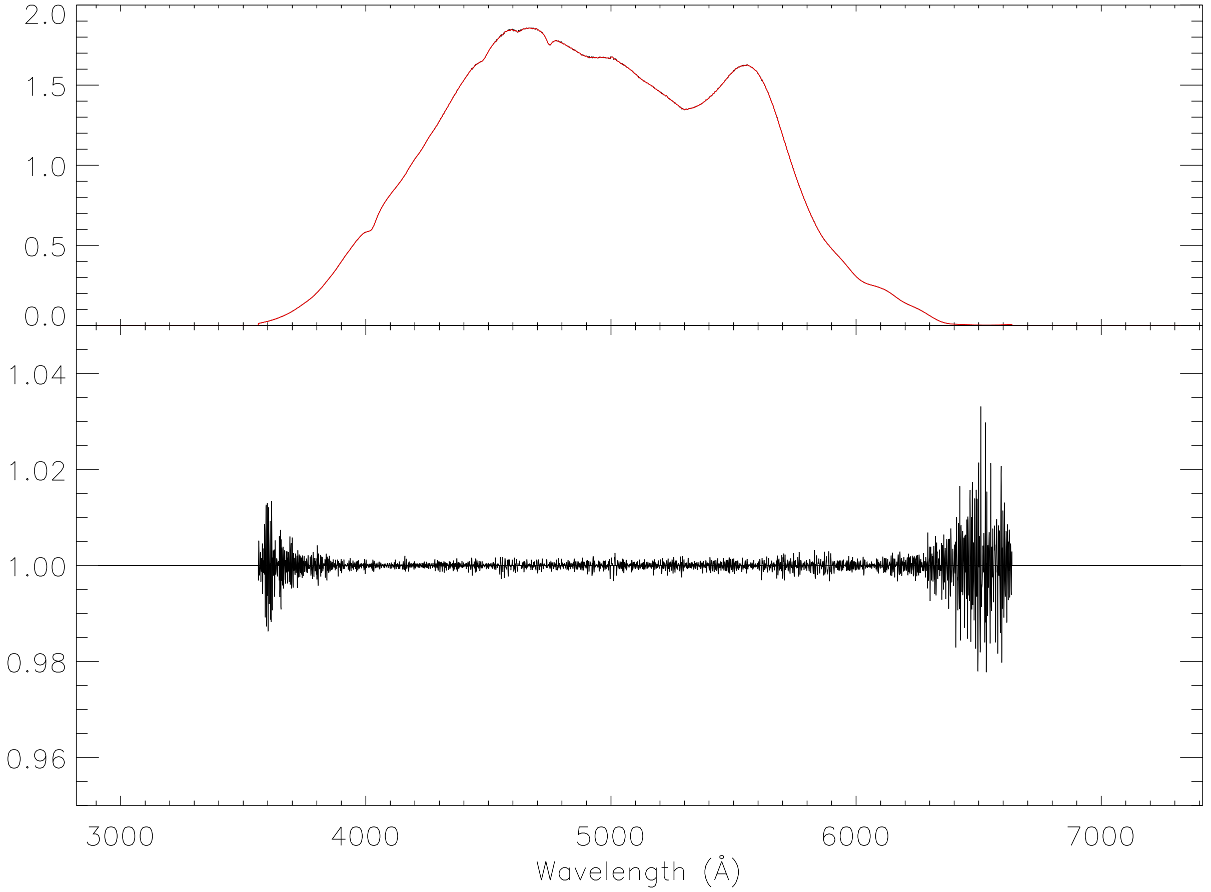


Wed Jul 30 19:11:32 2014

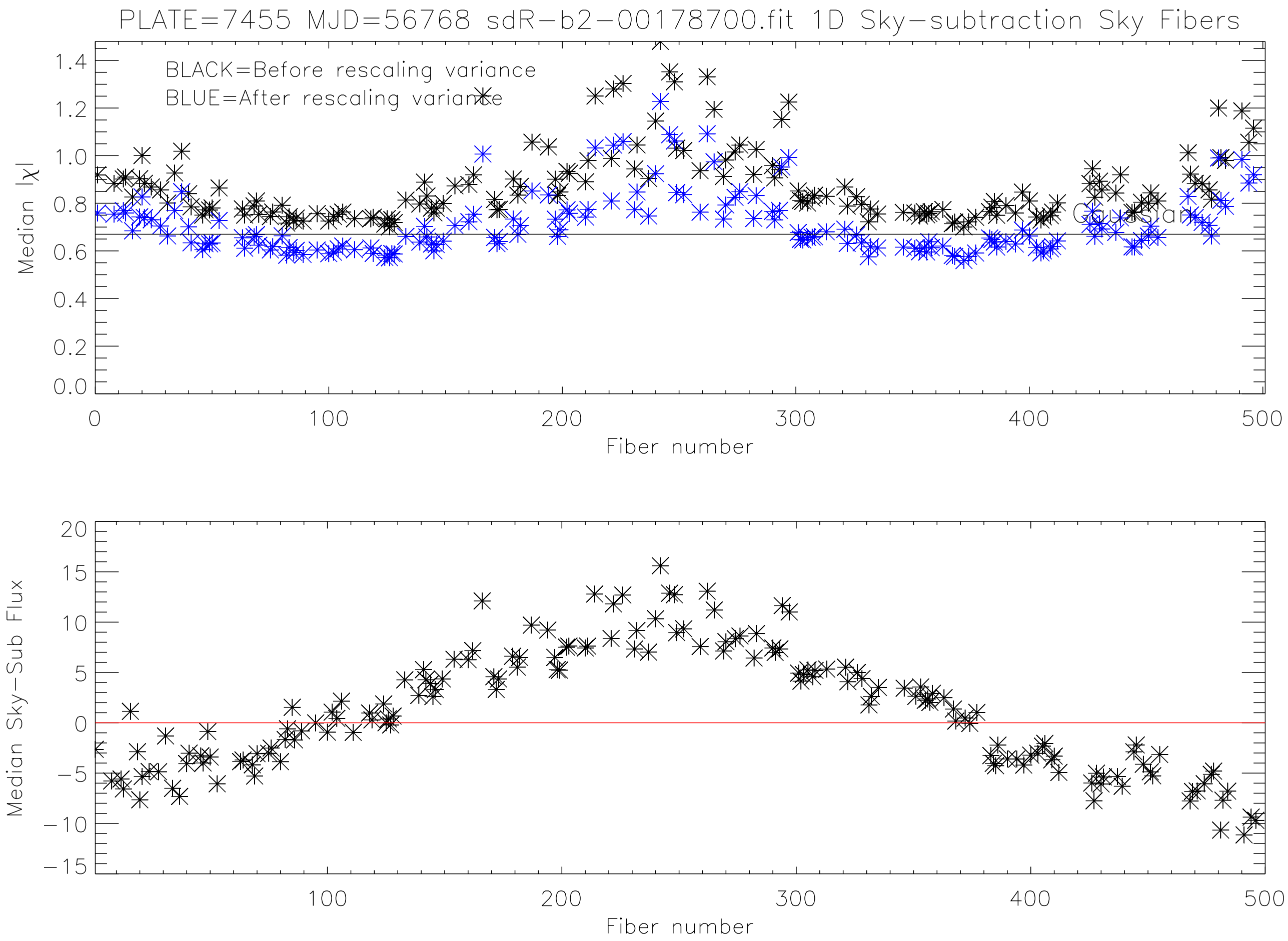


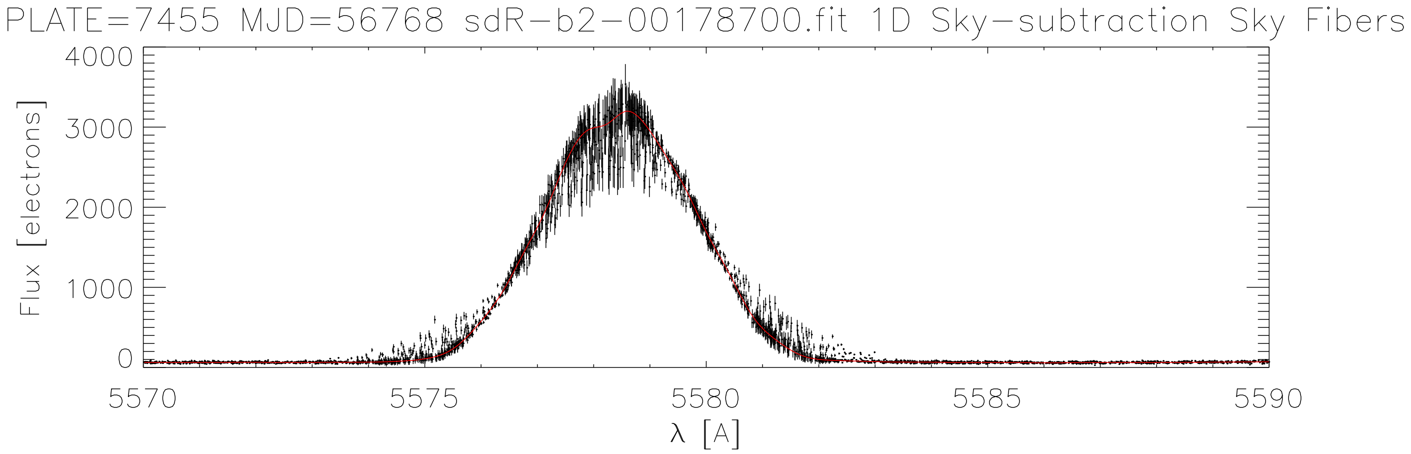
PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b2-00178700.fit

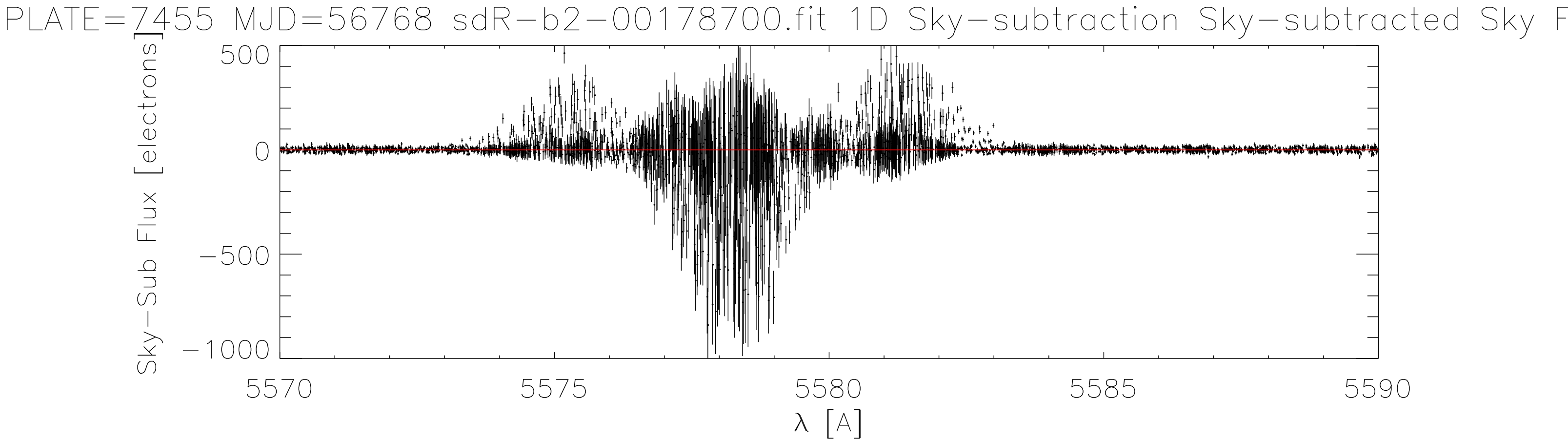

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b2-00178700.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength



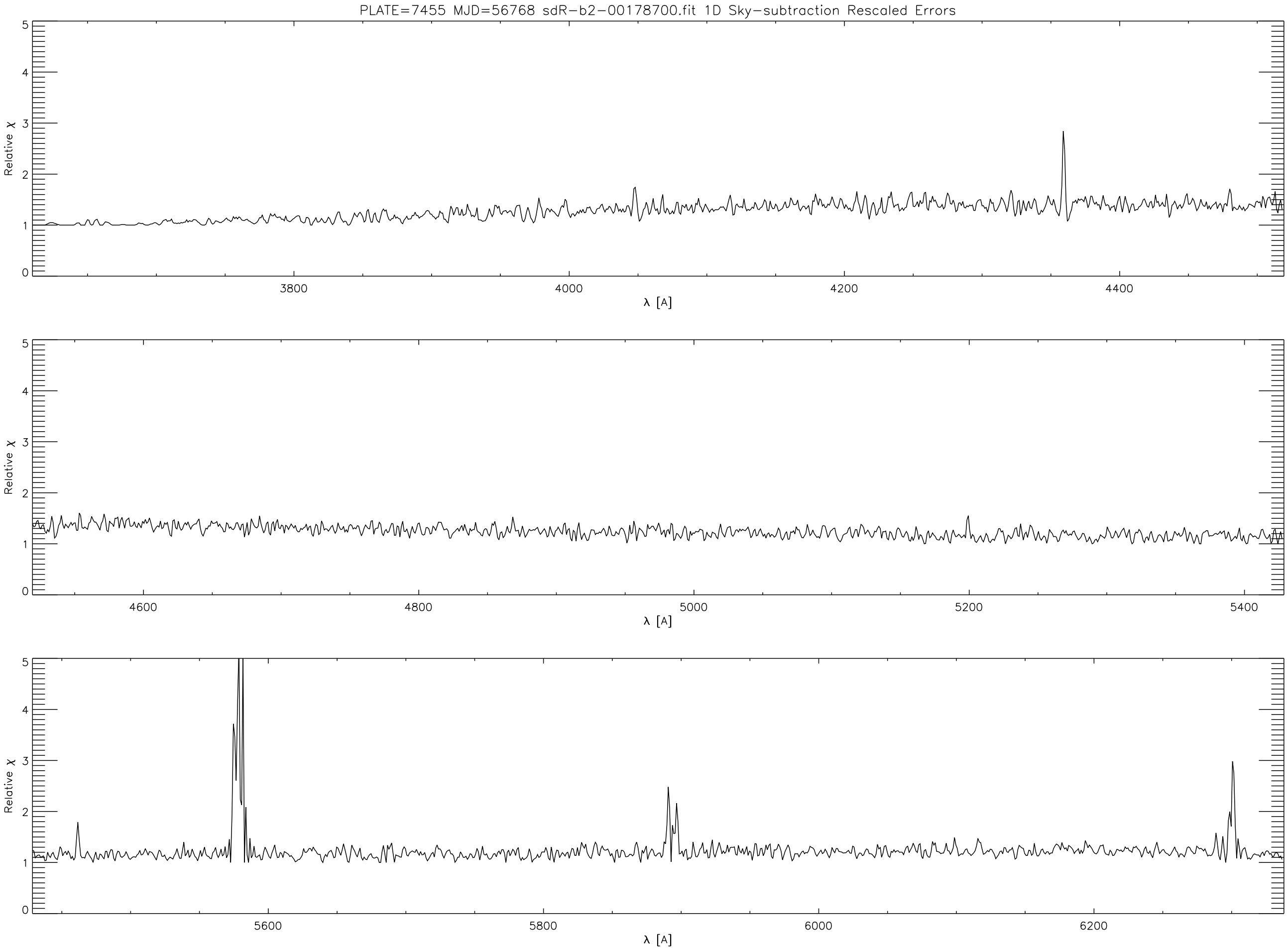
PLATE=7455 MJD=56768 Smooth superflat for sdR-b2-00178700.fit

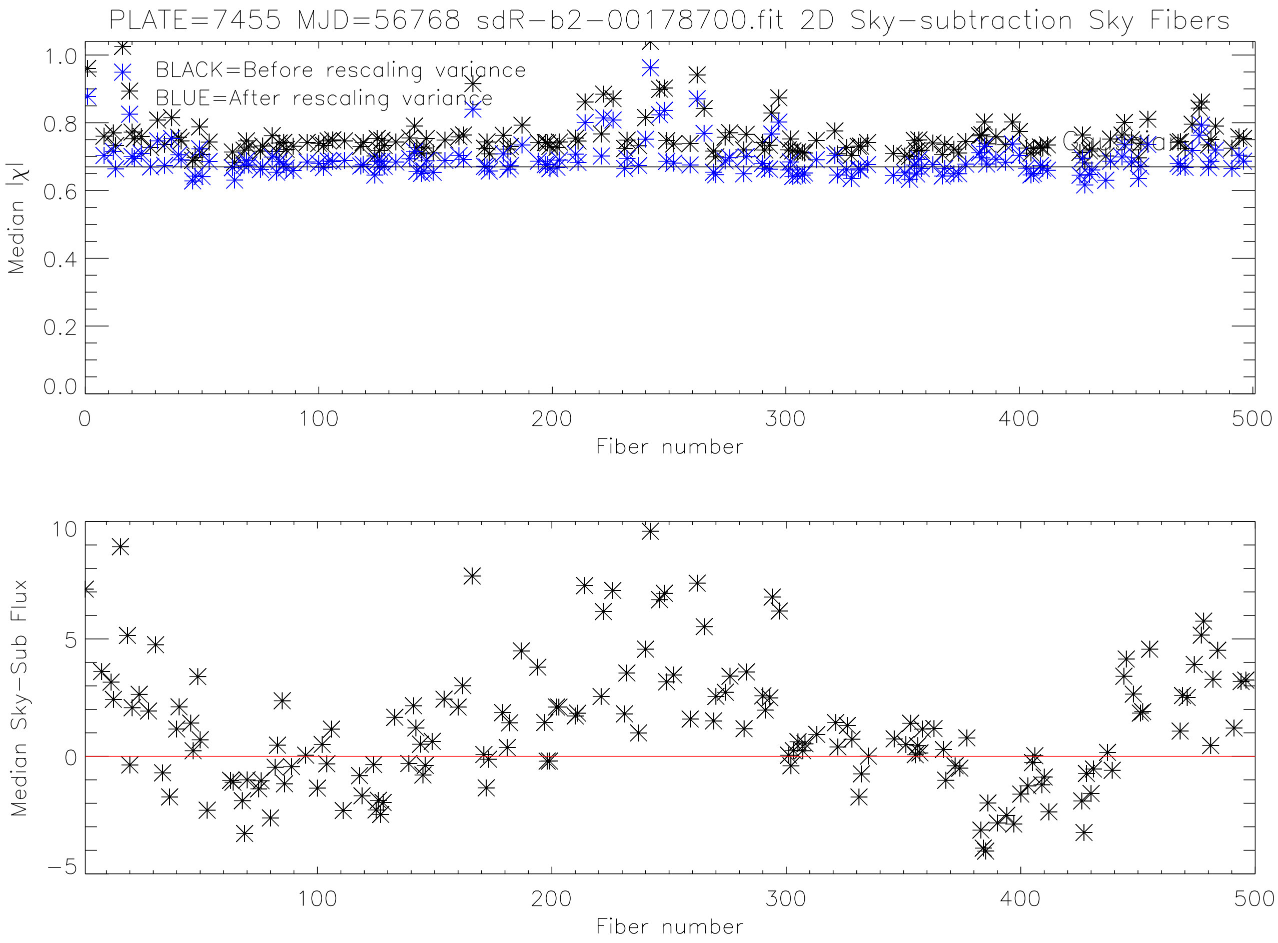

PLATE=7455 MJD=56768 sdR-b2-00178700.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−15
−10
−5
0
5
10
15
20
100
200
300
400
500
Fiber number

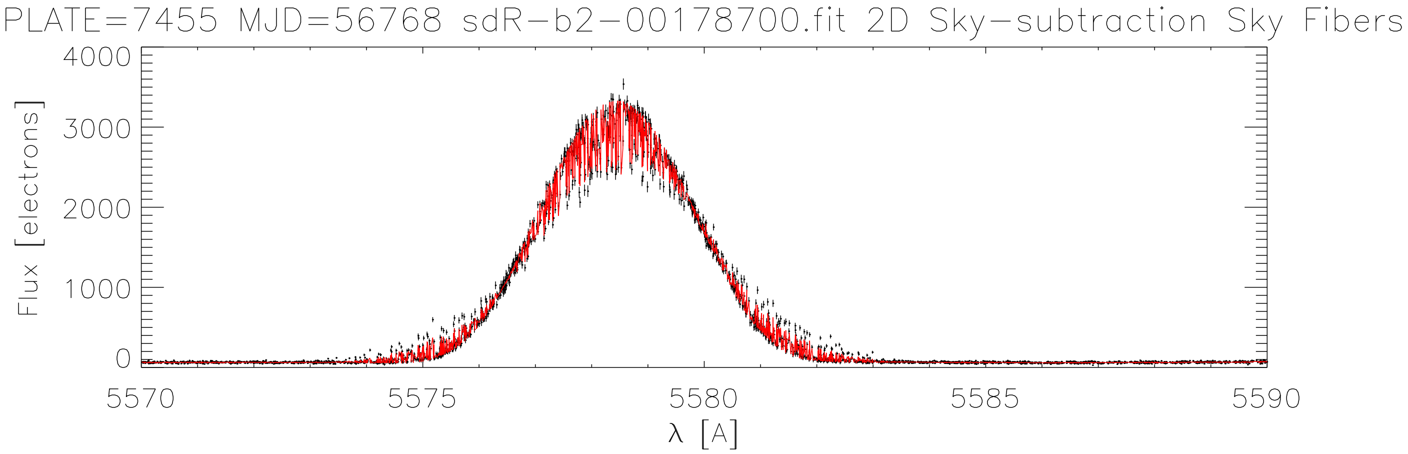

PLATE=7455 MJD=56768 sdR-b2-00178700.fit 1D Sky-subtraction Sky Fibers

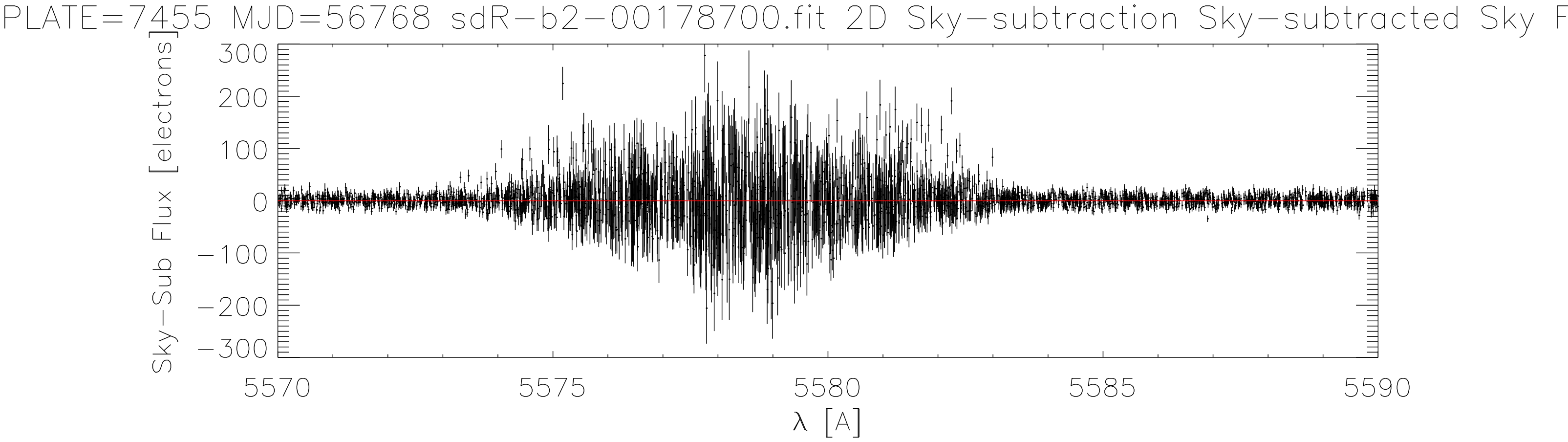

PLATE=7455 MJD=56768 sdR-b2-00178700.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 166

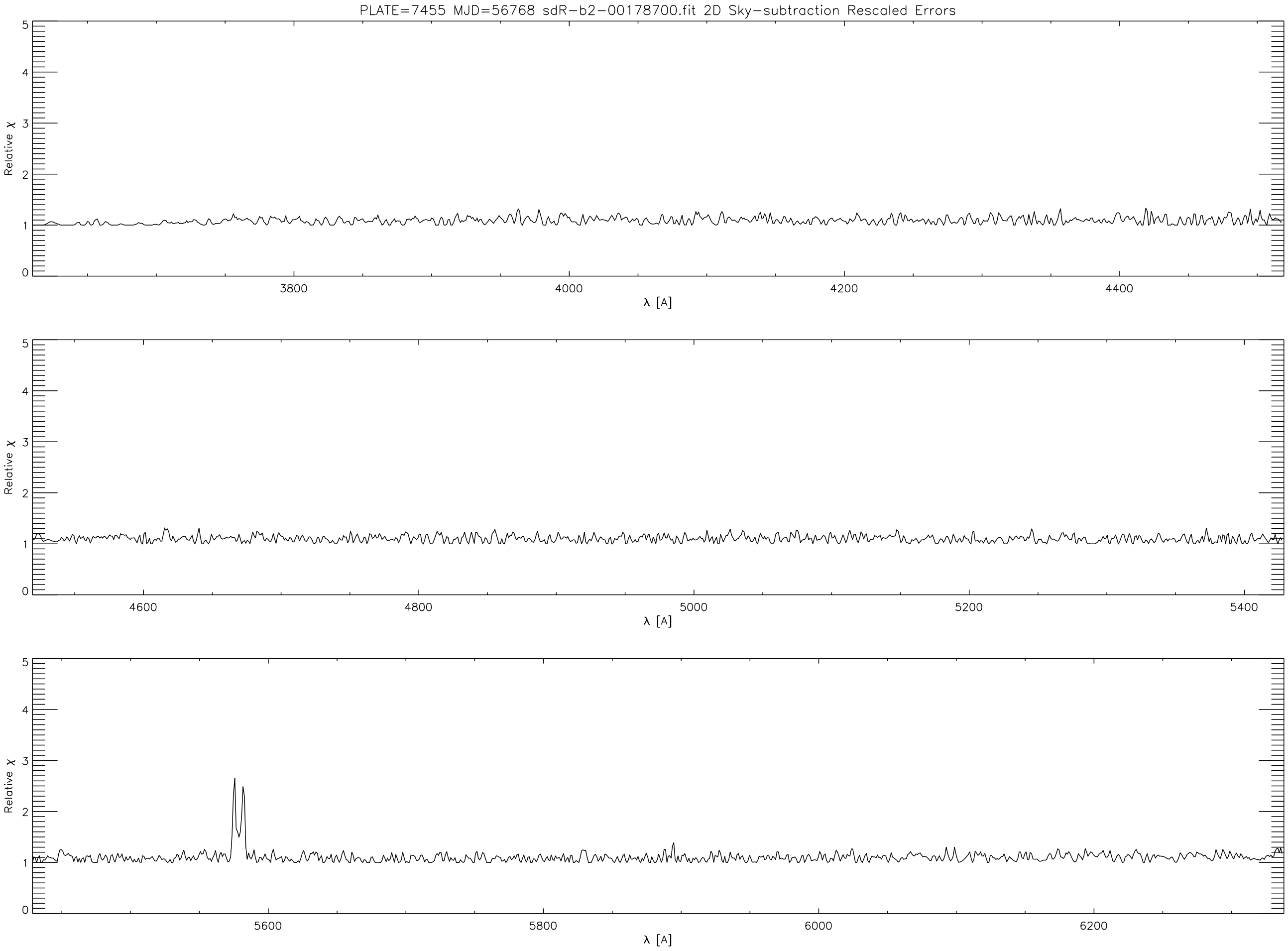

PLATE=7455 MJD=56768 sdR-b2-00178700.fit 1D Sky-subtraction Rescaled Errors

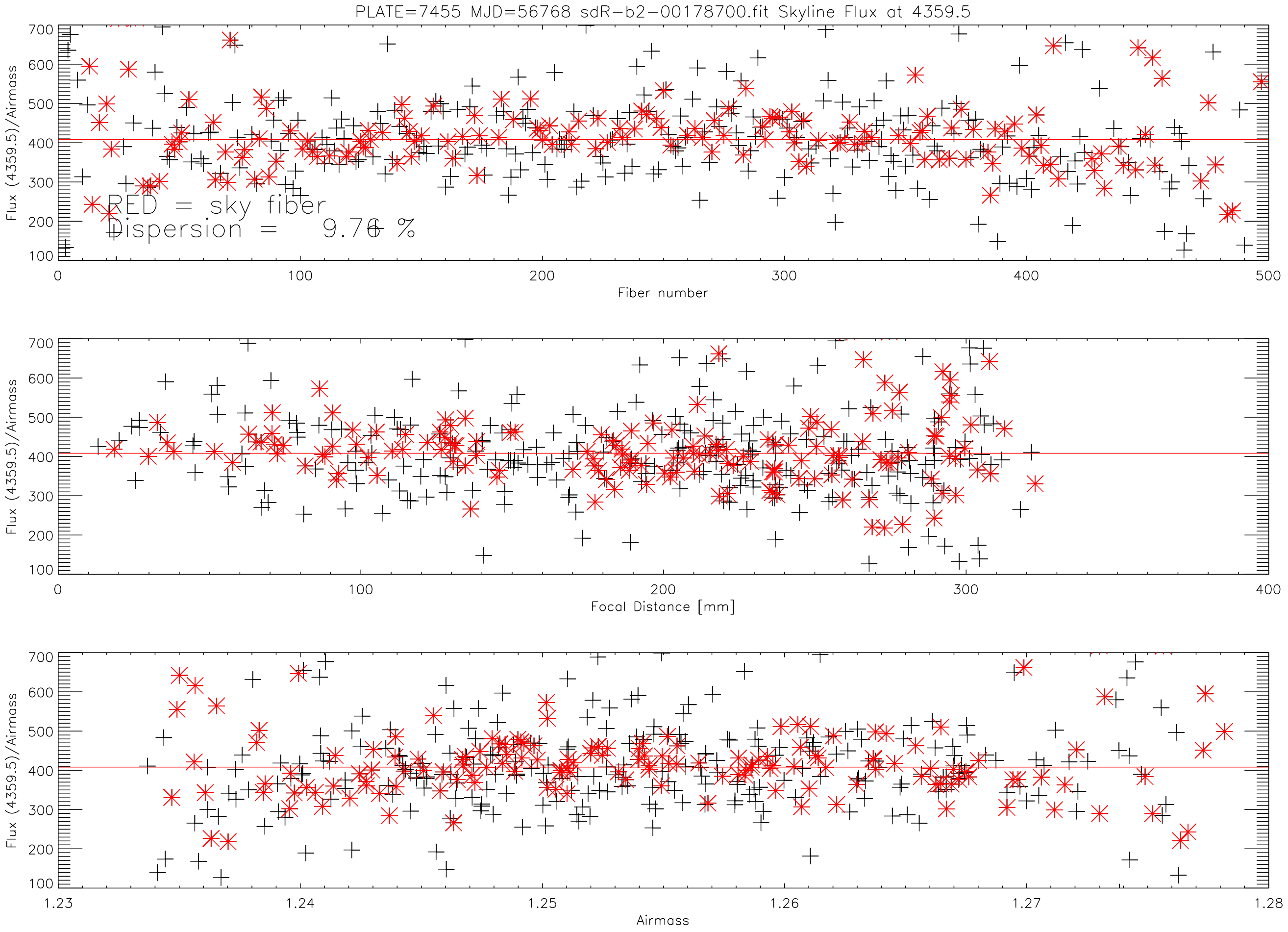

PLATE=7455 MJD=56768 sdR-b2-00178700.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−5
0
5
10
100
200
300
400
500
Fiber number

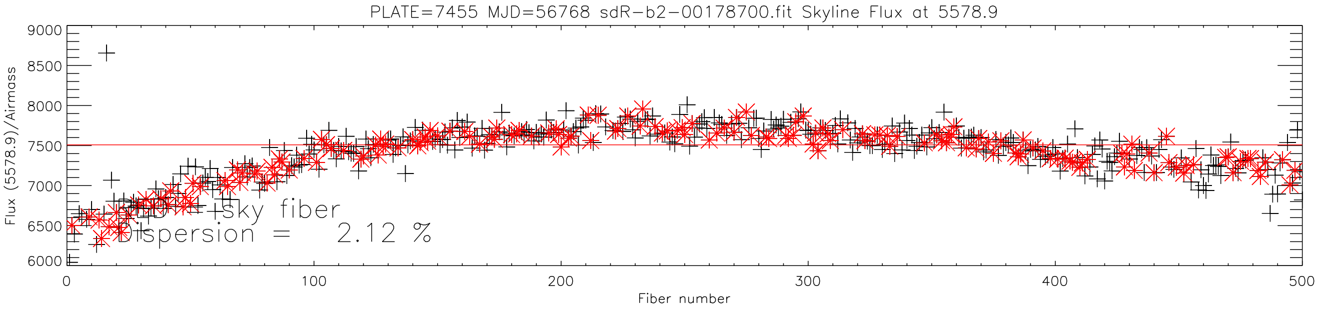

PLATE=7455 MJD=56768 sdR-b2-00178700.fit 2D Sky-subtraction Sky Fibers

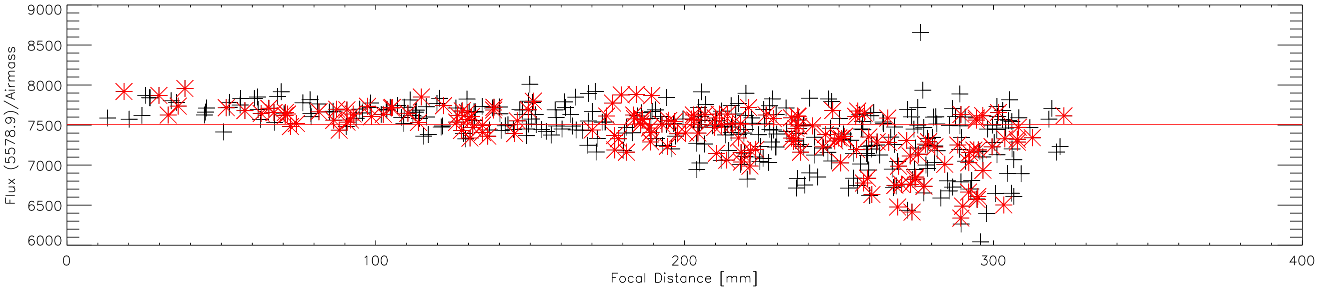

PLATE=7455 MJD=56768 sdR-b2-00178700.fit 2D Sky-subtraction Sky-subtracted Sky F

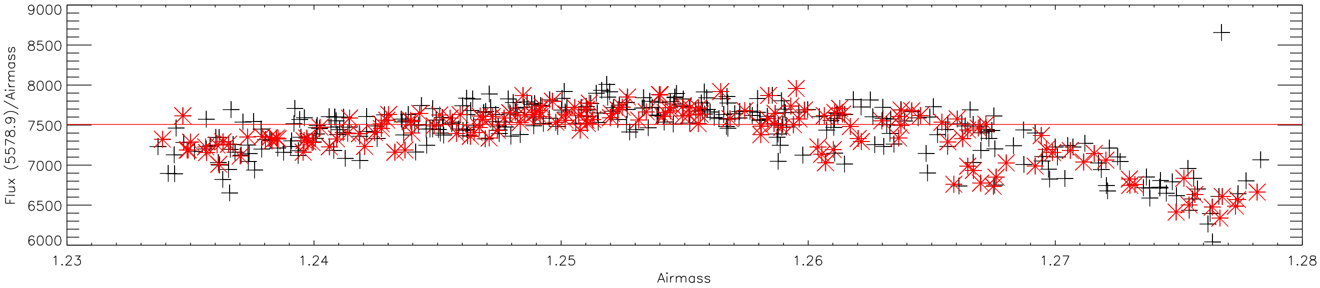
Number of sky fibers = 166

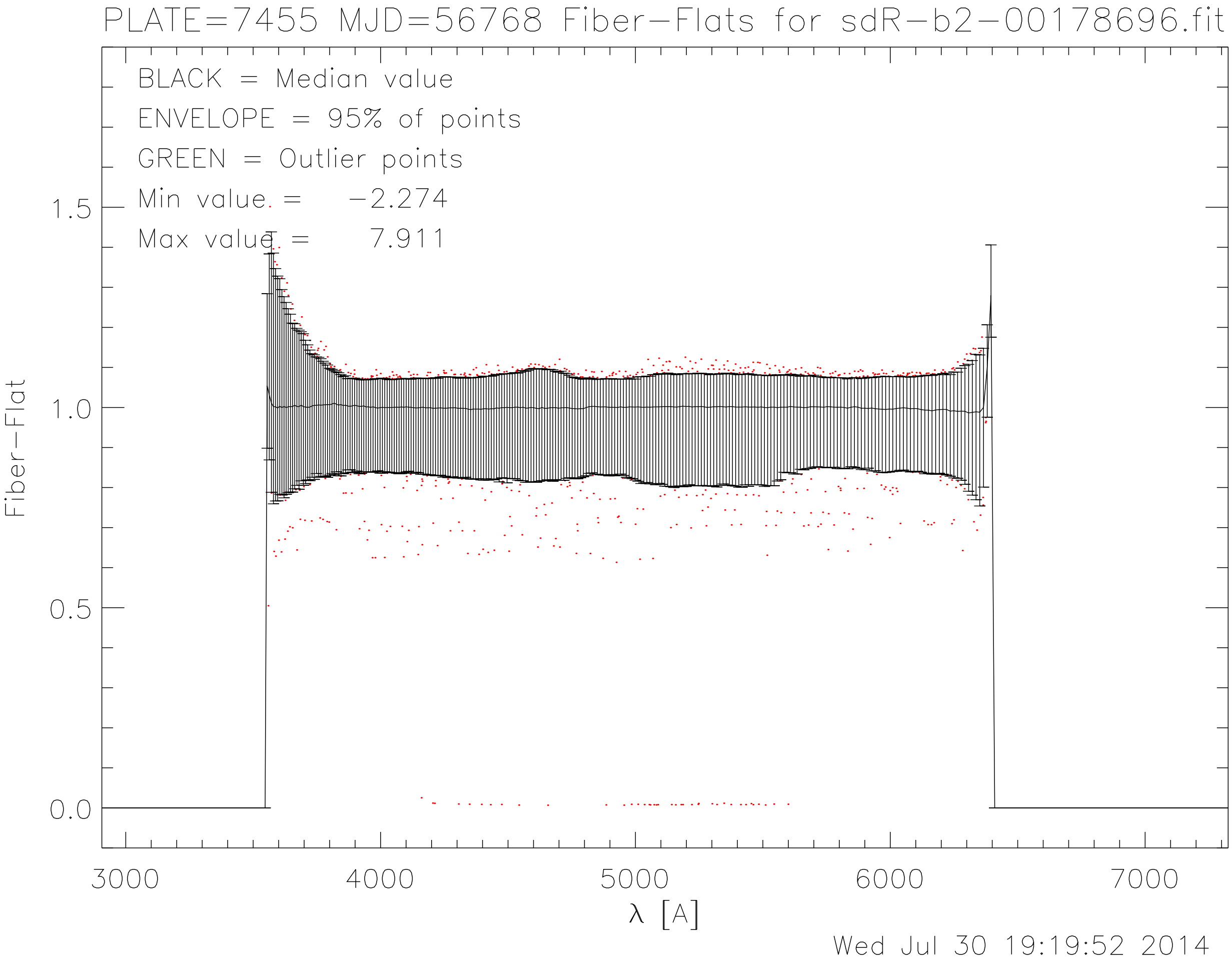


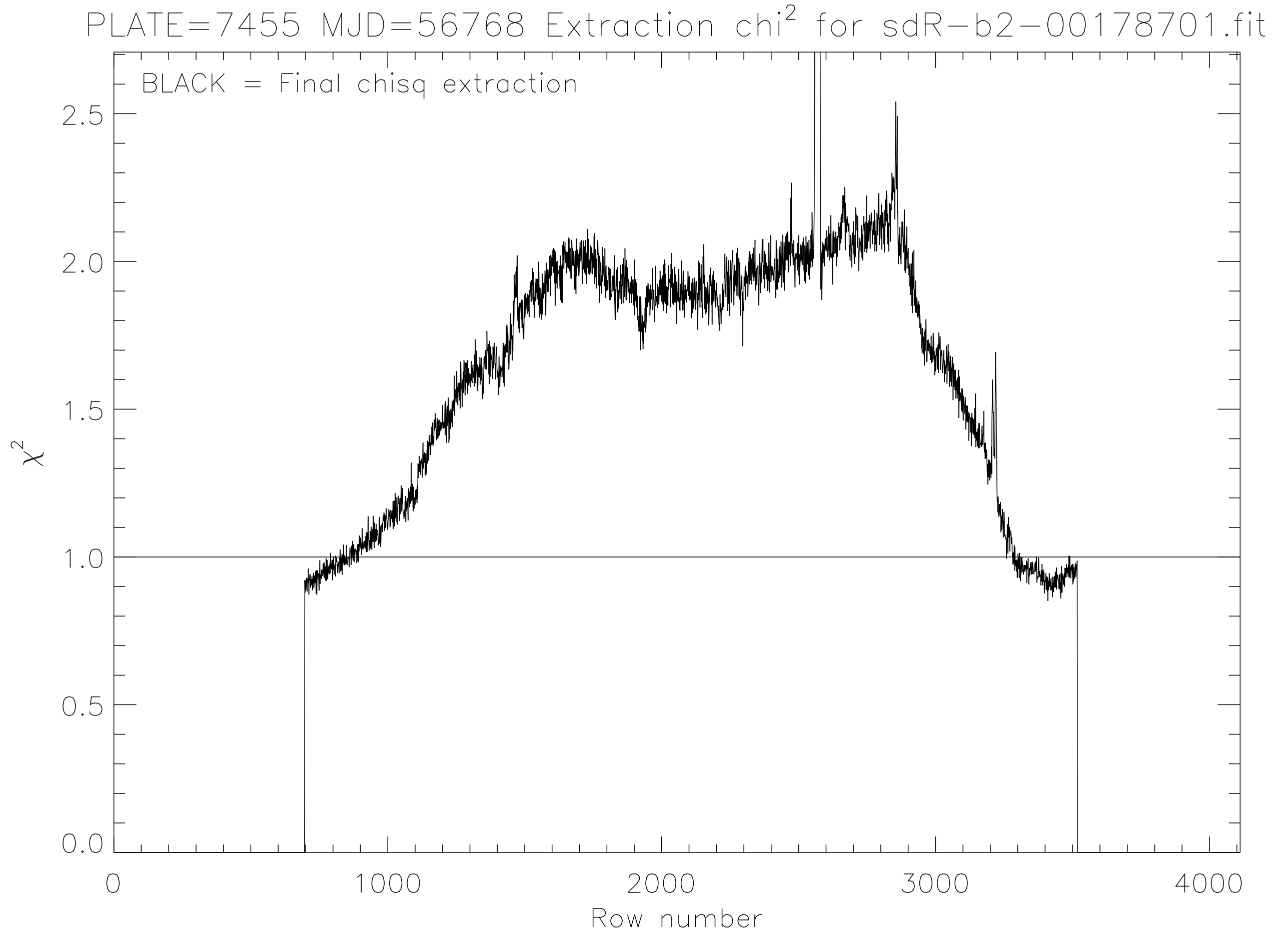

PLATE=7455 MJD=56768 sdR-b2-00178700.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 9.76 %
Flux (4359.5)/Airmass
100
200
300
400
500
600
700
Fiber number
0
100
200
300
400
500
Focal Distance [mm]
0
100
200
300
400
Airmass
1.23
1.24
1.25
1.26
1.27
1.28

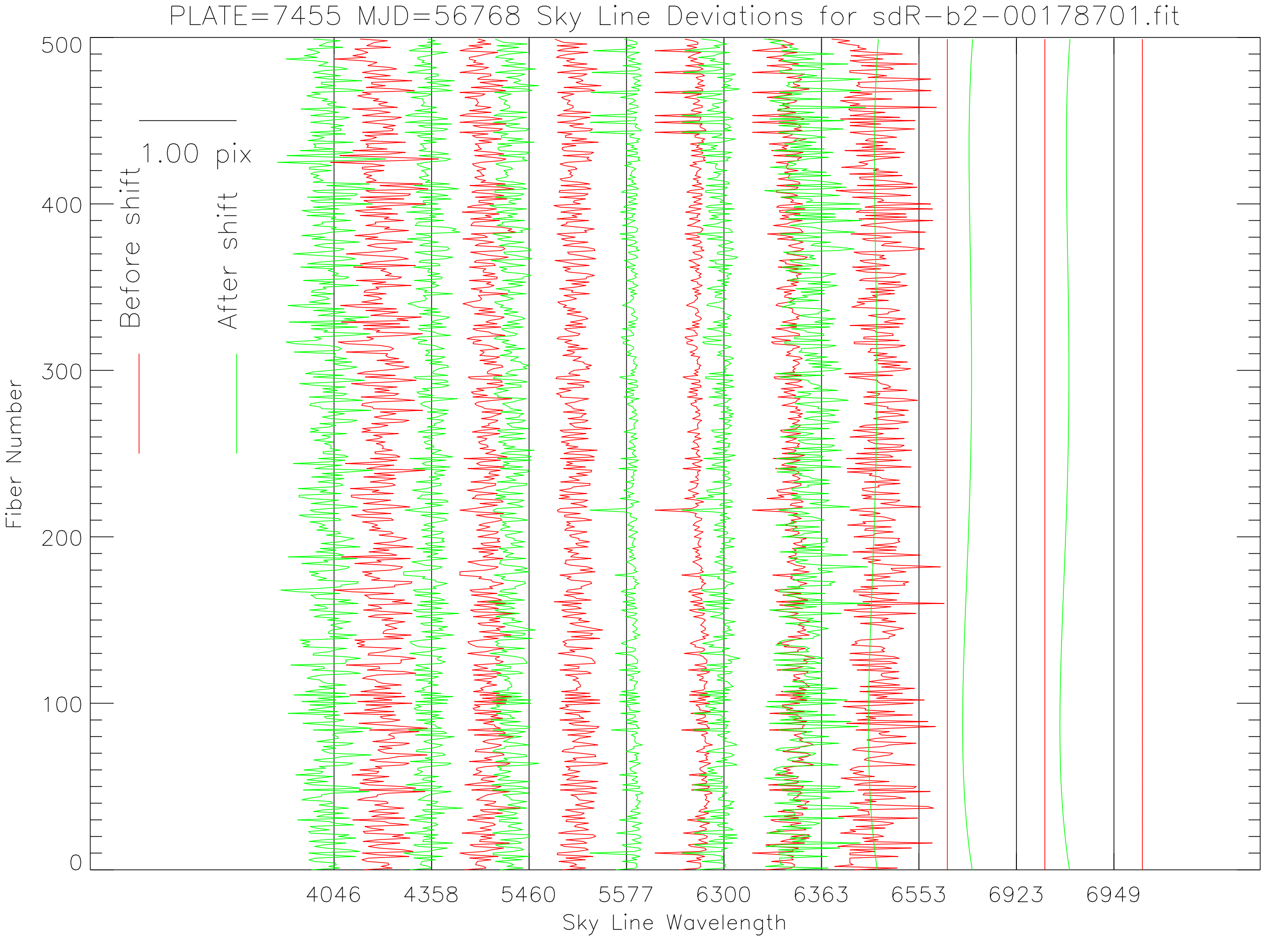

PLATE=7455 MJD=56768 sdR-b2-00178700.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
9000
8500
8000
7500
7000
6500
6000
0
100
200
300
400
500
Fiber number
+ Sky fiber
Dispersion = 2.12 %

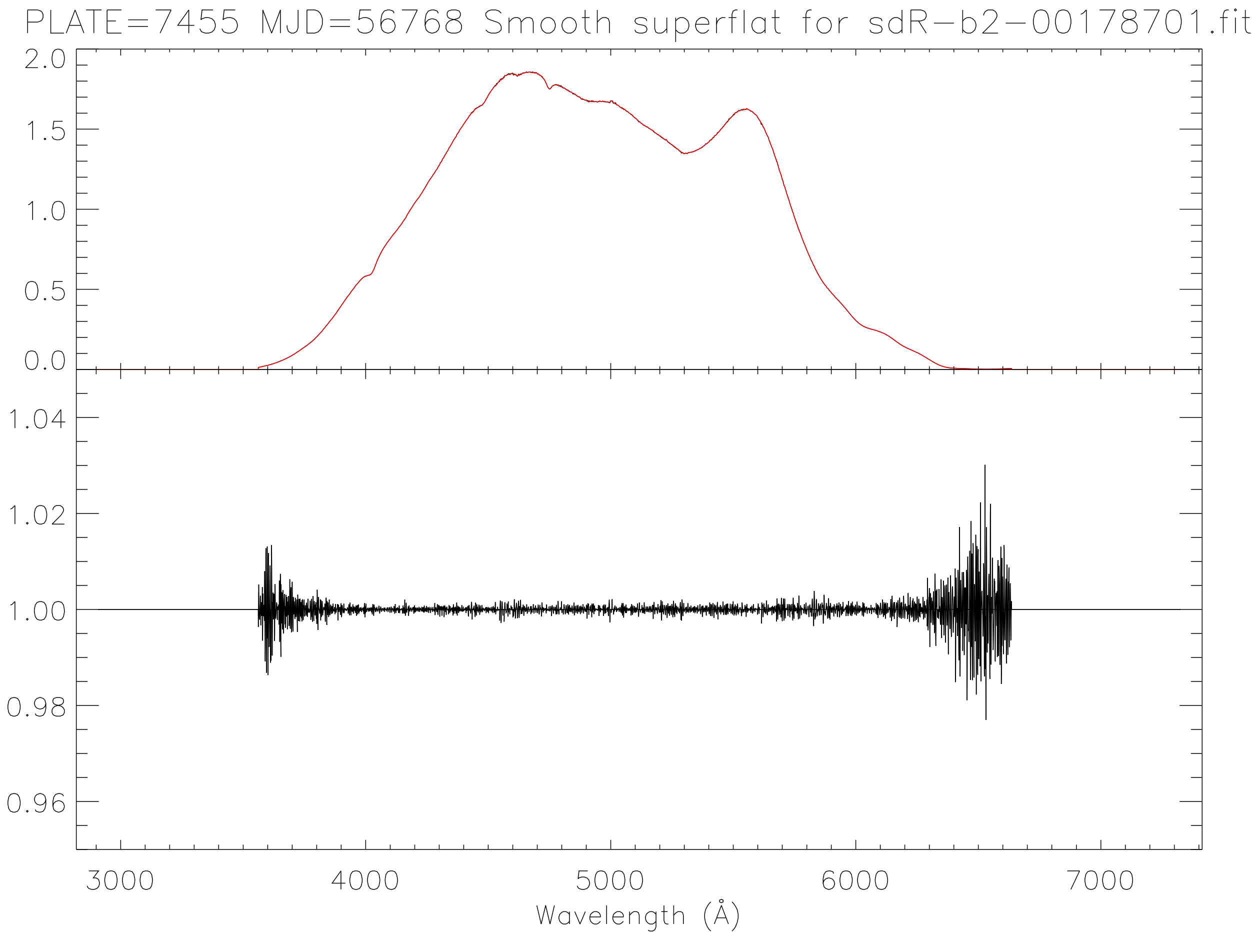

Flux (5578.9)/Airmass
9000
8500
8000
7500
7000
6500
6000
0
100
200
300
400
Focal Distance [mm]


Flux (5578.9)/Airmass
9000
8500
8000
7500
7000
6500
6000
1.23
1.24
1.25
1.26
1.27
1.28
Airmass

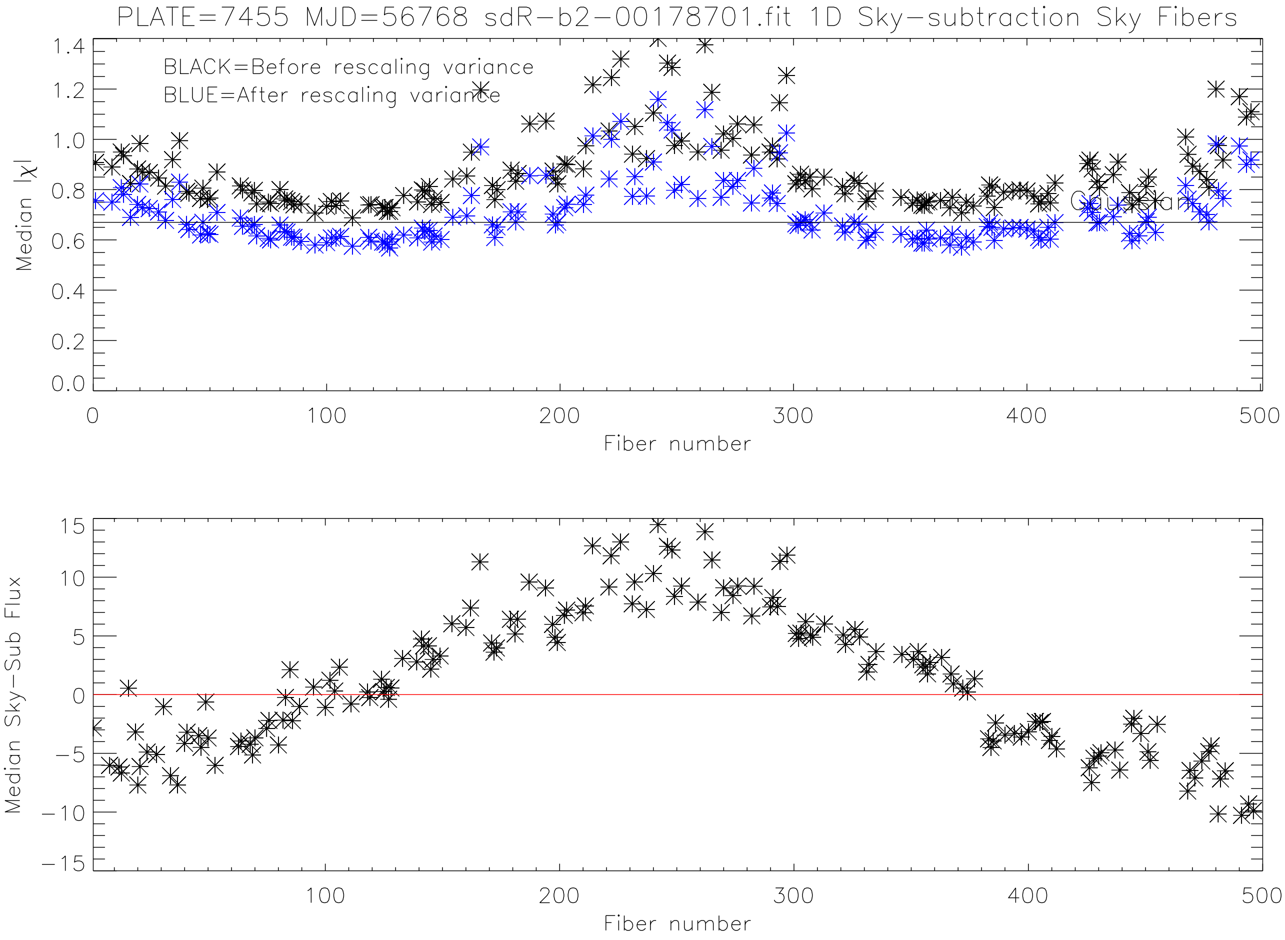

PLATE=7455 MJD=56768 Fiber−Flats for sdR−b2−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value. = −2.274
Max value = 7.911
Fiber−Flat
0.0
0.5
1.0
1.5
3000
4000
5000
6000
7000
λ [A]
Wed Jul 30 19:19:52 2014

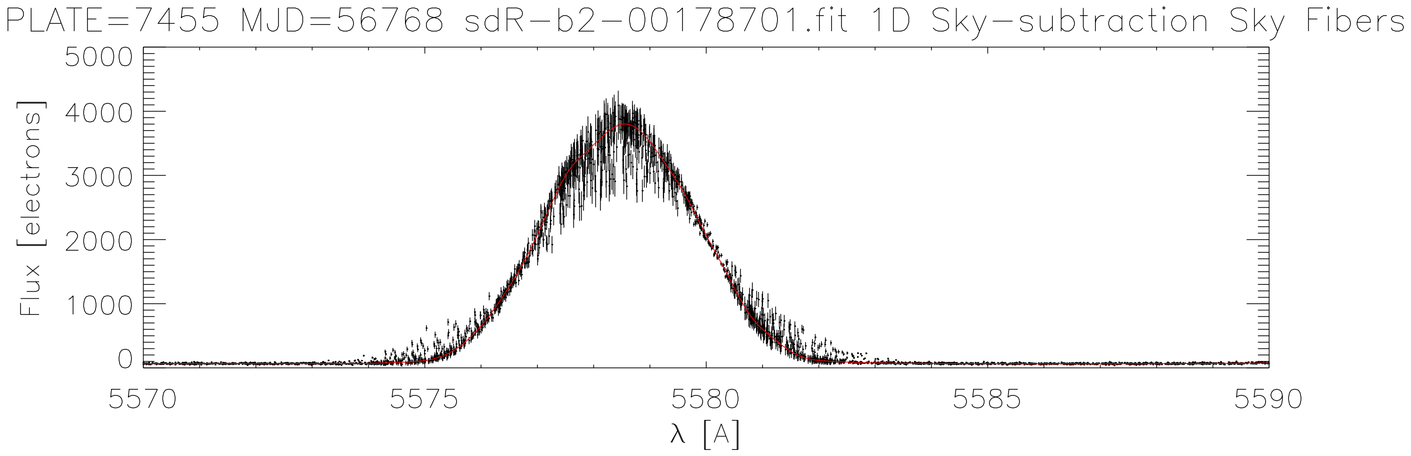

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-b2-00178701.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number

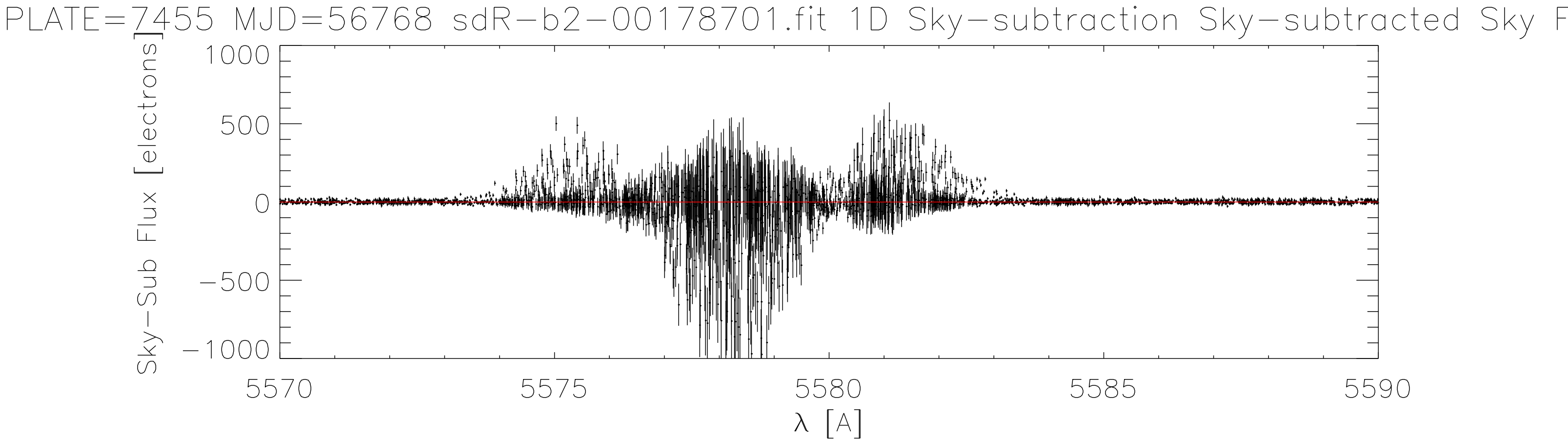

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-b2-00178701.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength



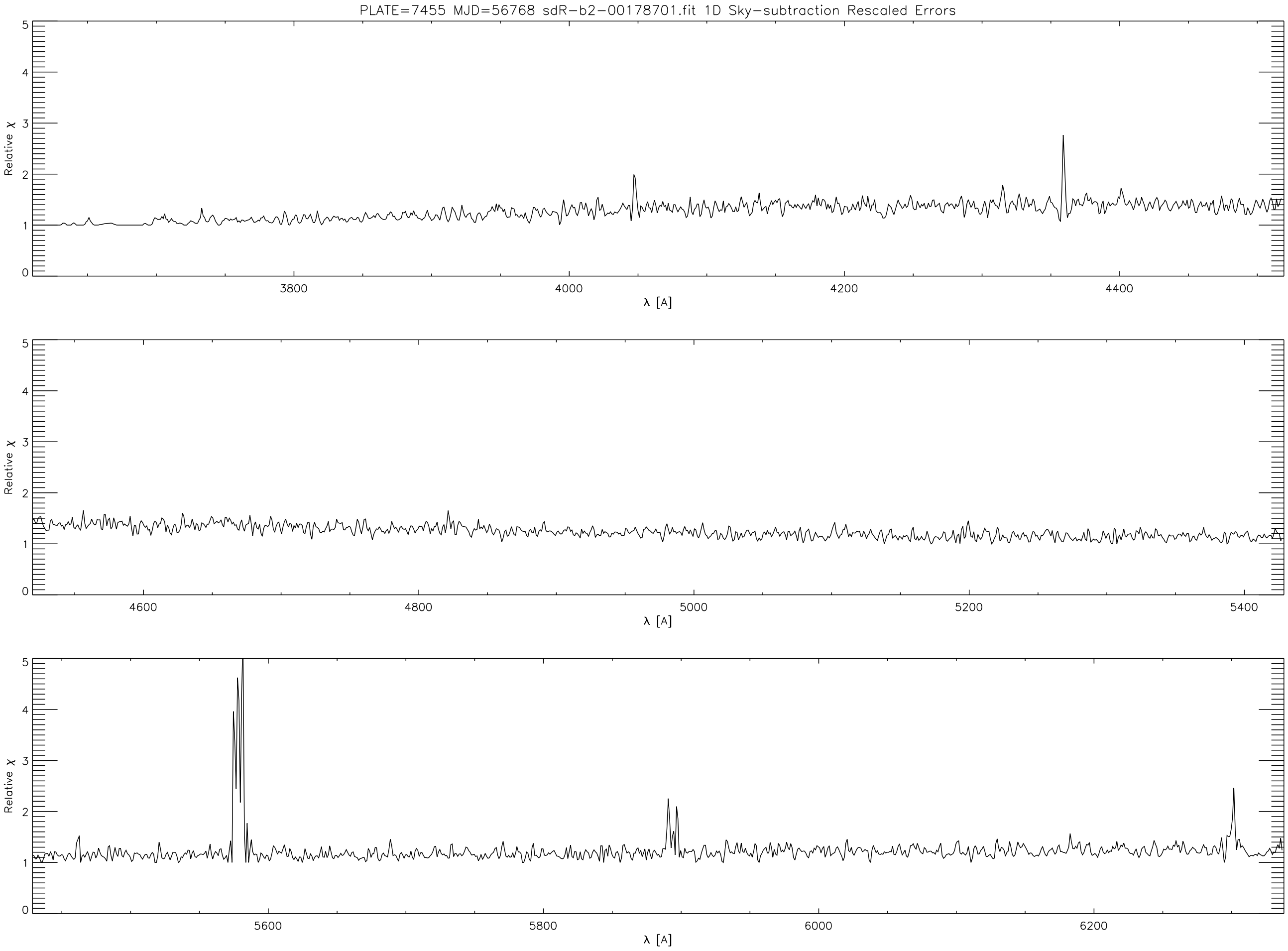
PLATE=7455 MJD=56768 Smooth superflat for sdR-b2-00178701.fit

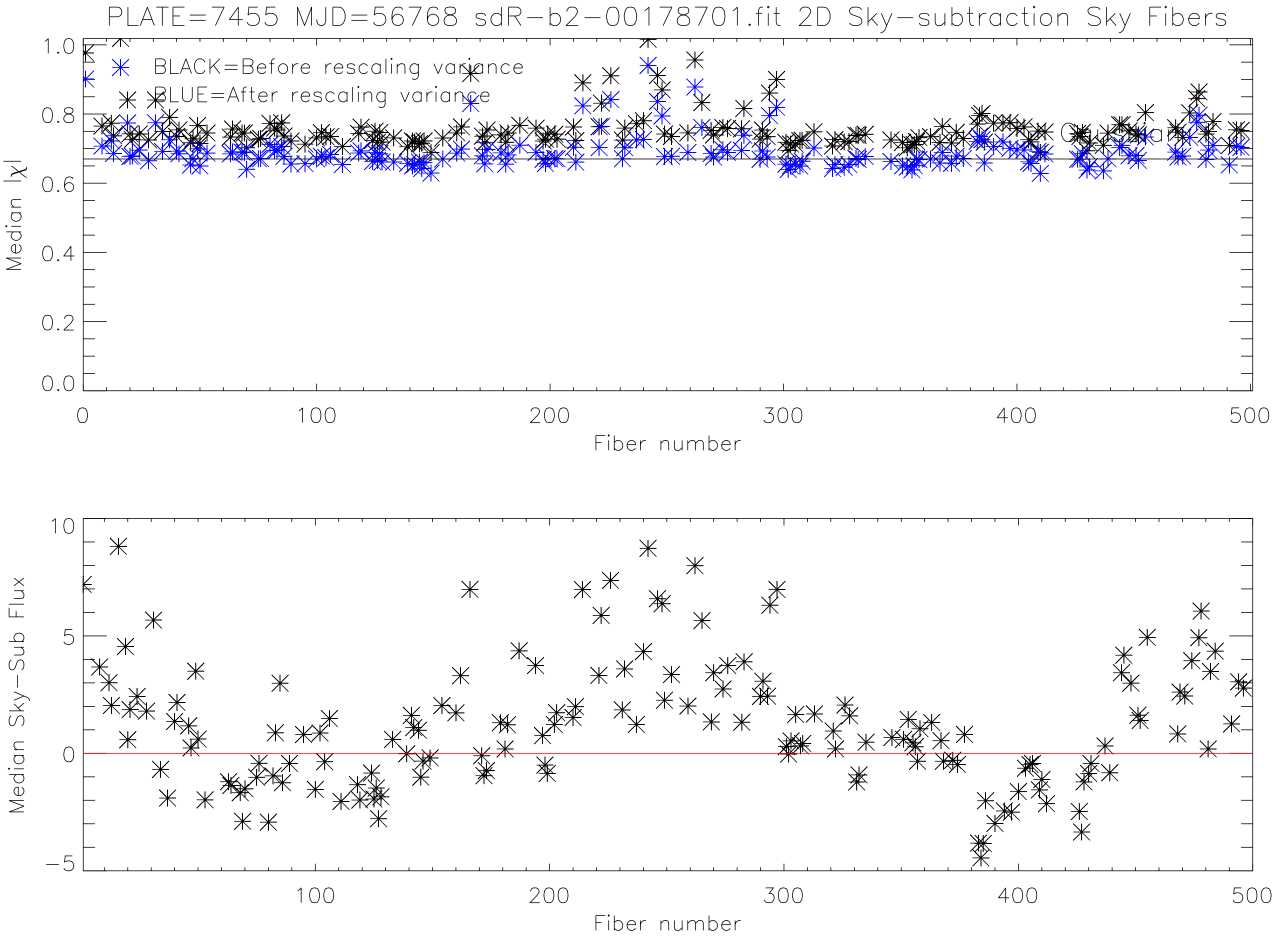

PLATE=7455 MJD=56768 sdR-b2-00178701.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
−15
100
200
300
400
500
Fiber number

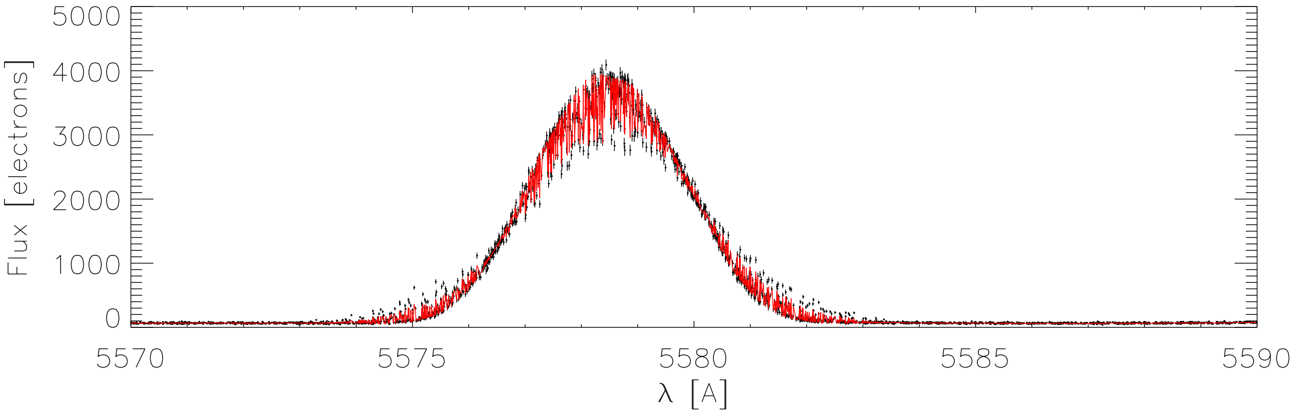

PLATE=7455 MJD=56768 sdR-b2-00178701.fit 1D Sky−subtraction Sky Fibers


PLATE=7455 MJD=56768 sdR-b2-00178701.fit 1D Sky−subtraction Sky−subtracted Sky F

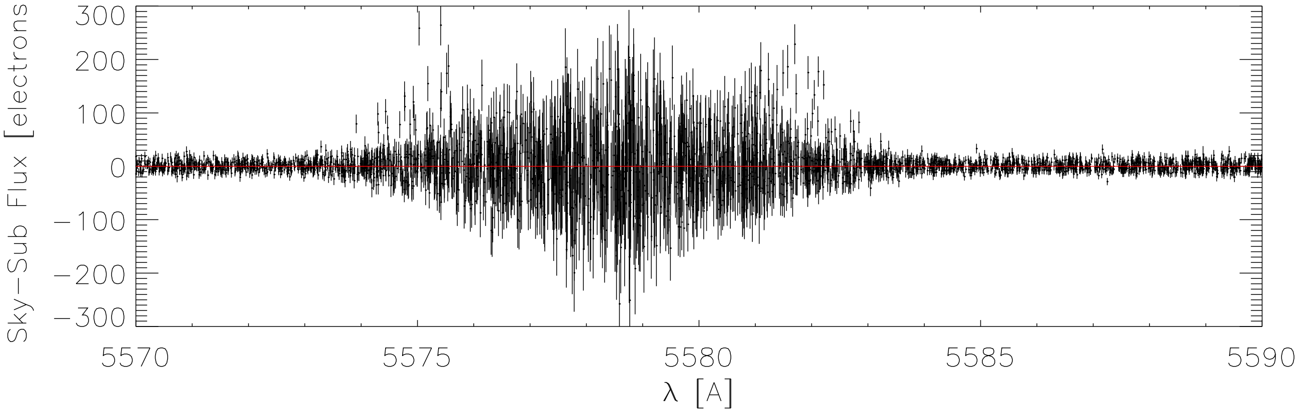
Number of sky fibers = 166


PLATE=7455 MJD=56768 sdR-b2-00178701.fit 1D Sky-subtraction Rescaled Errors


PLATE=7455 MJD=56768 sdR-b2-00178701.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−5
0
5
10
100
200
300
400
500
Fiber number

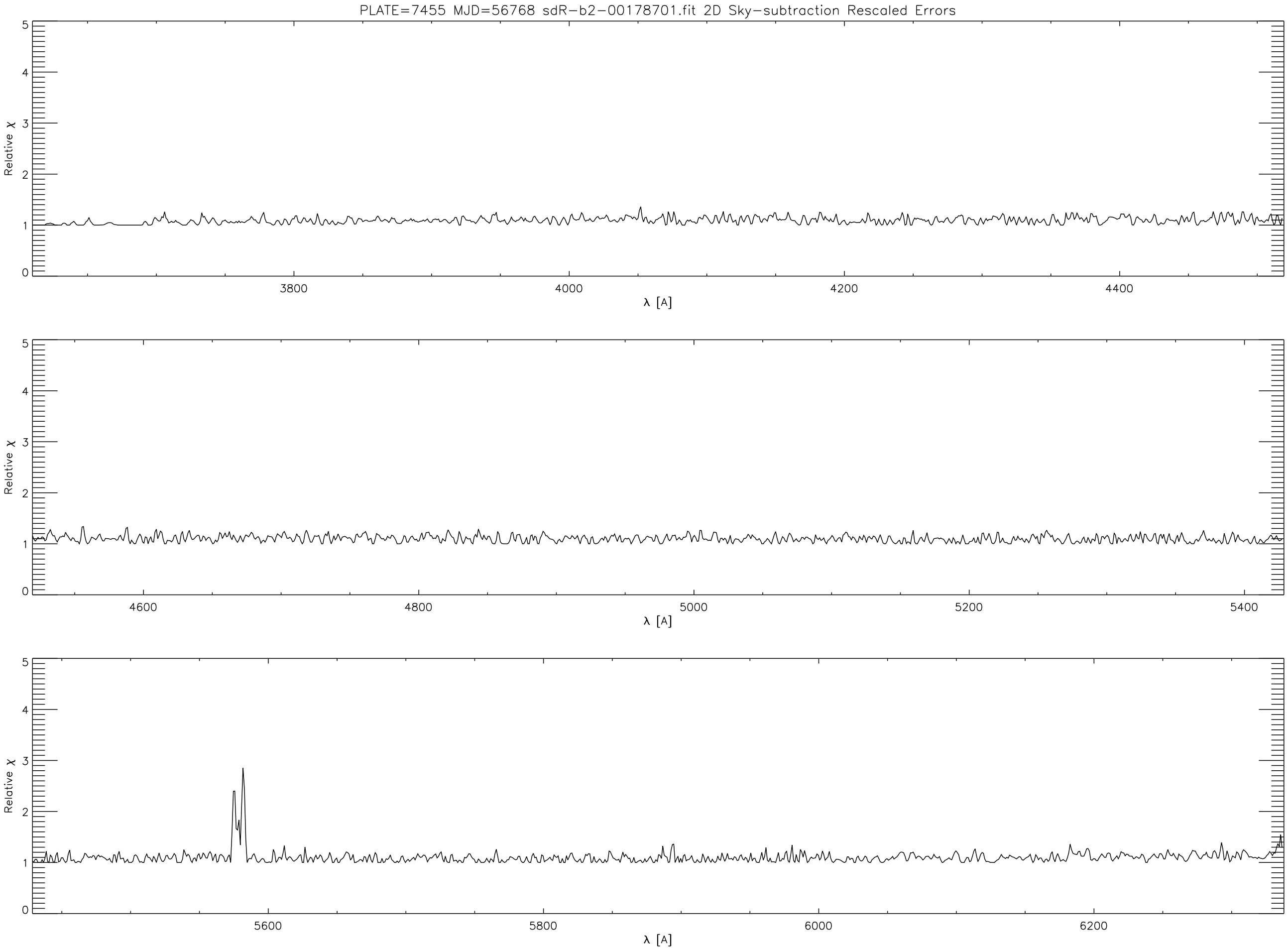


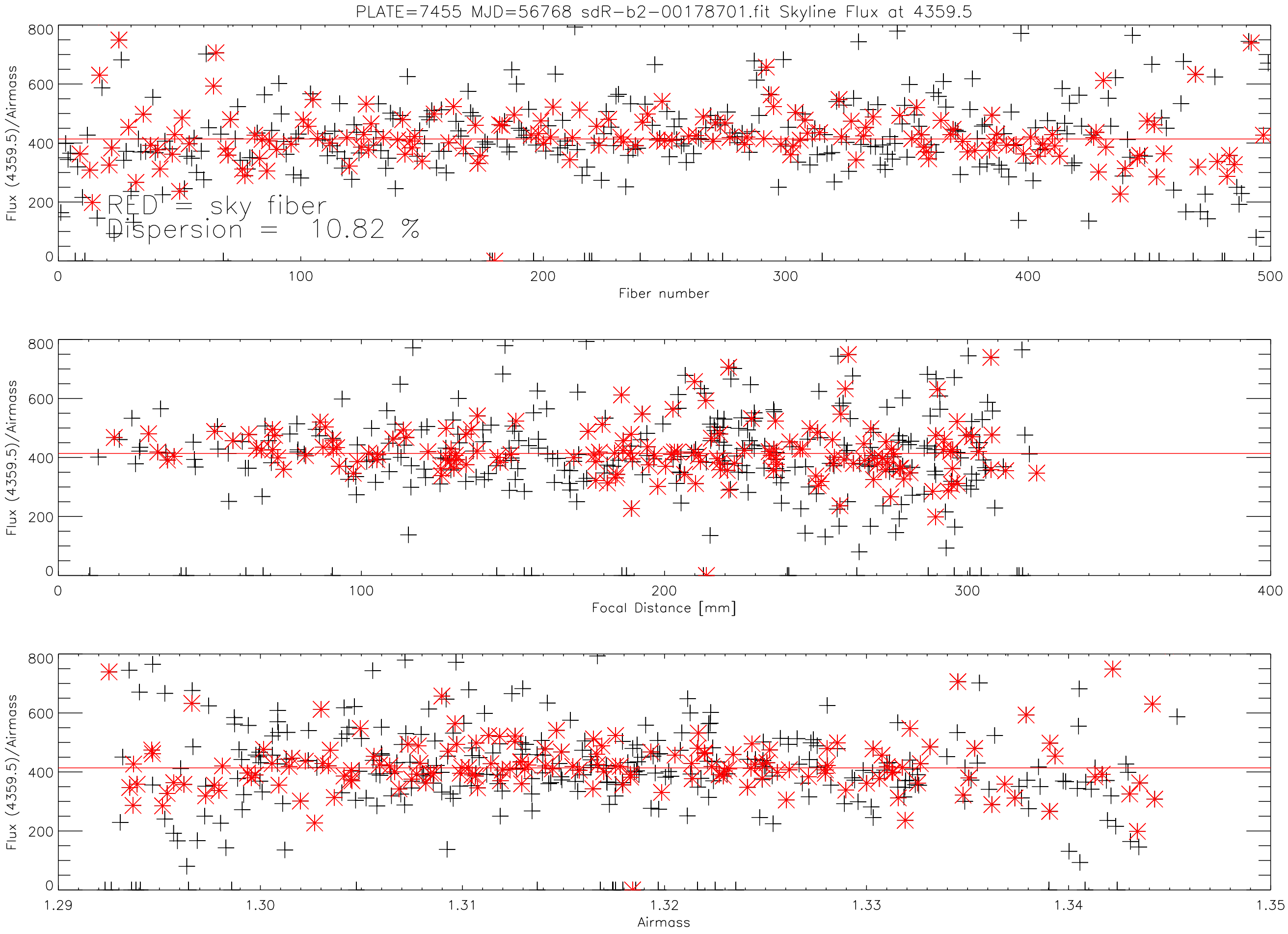
PLATE=7455 MJD=56768 sdR-b2-00178701.fit 2D Sky-subtraction Sky Fibers

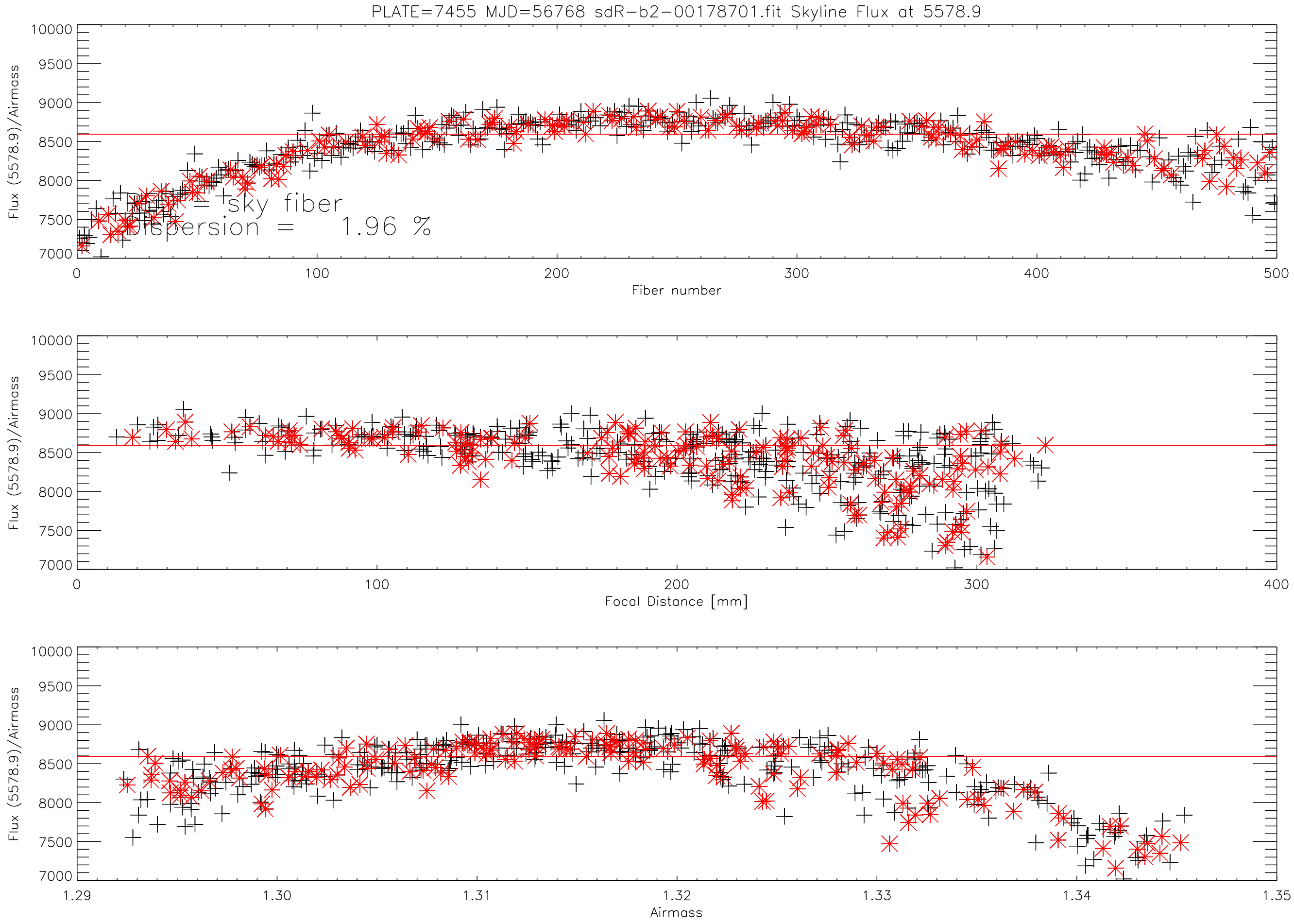


PLATE=7455 MJD=56768 sdR-b2-00178701.fit 2D Sky-subtraction Sky-subtracted Sky F

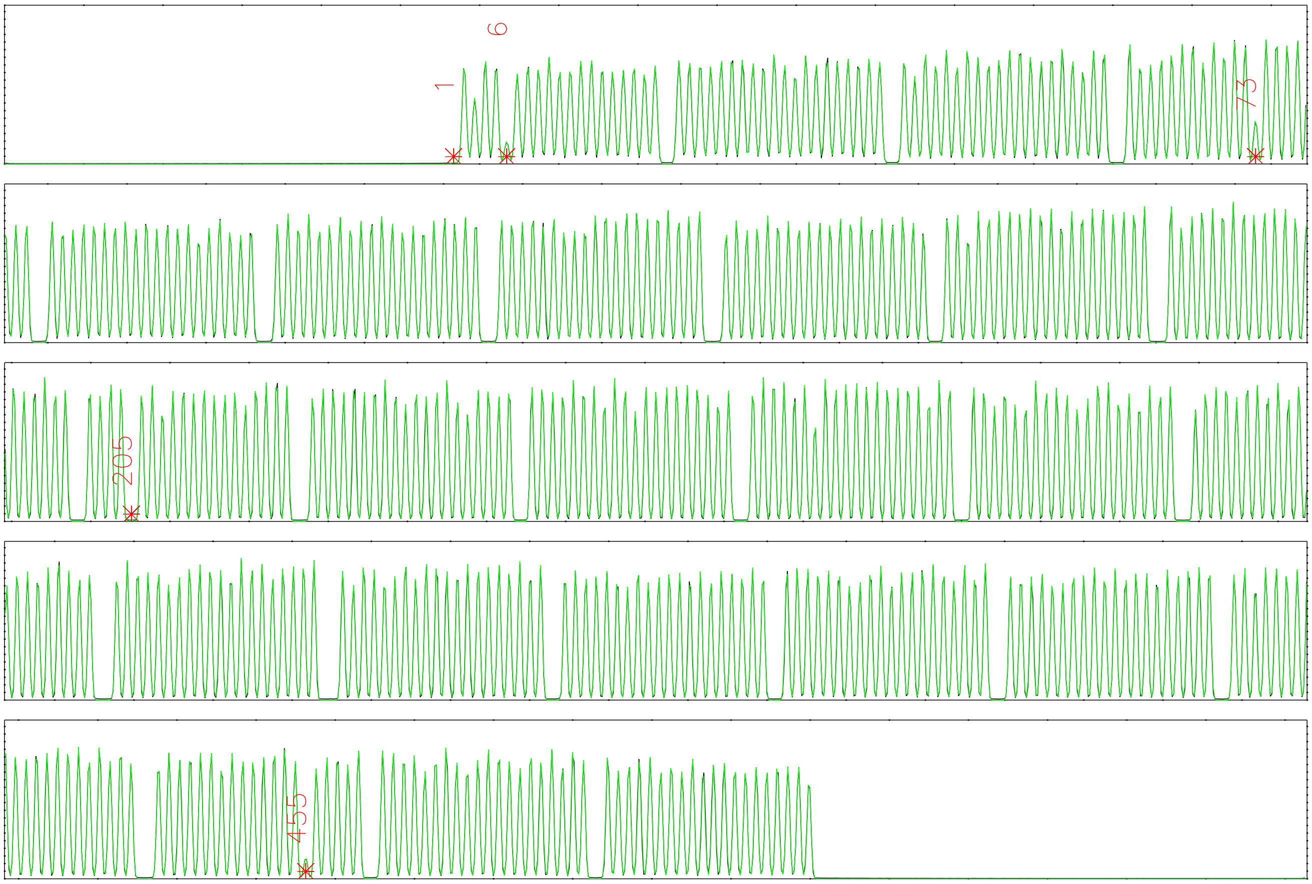
Number of sky fibers = 166

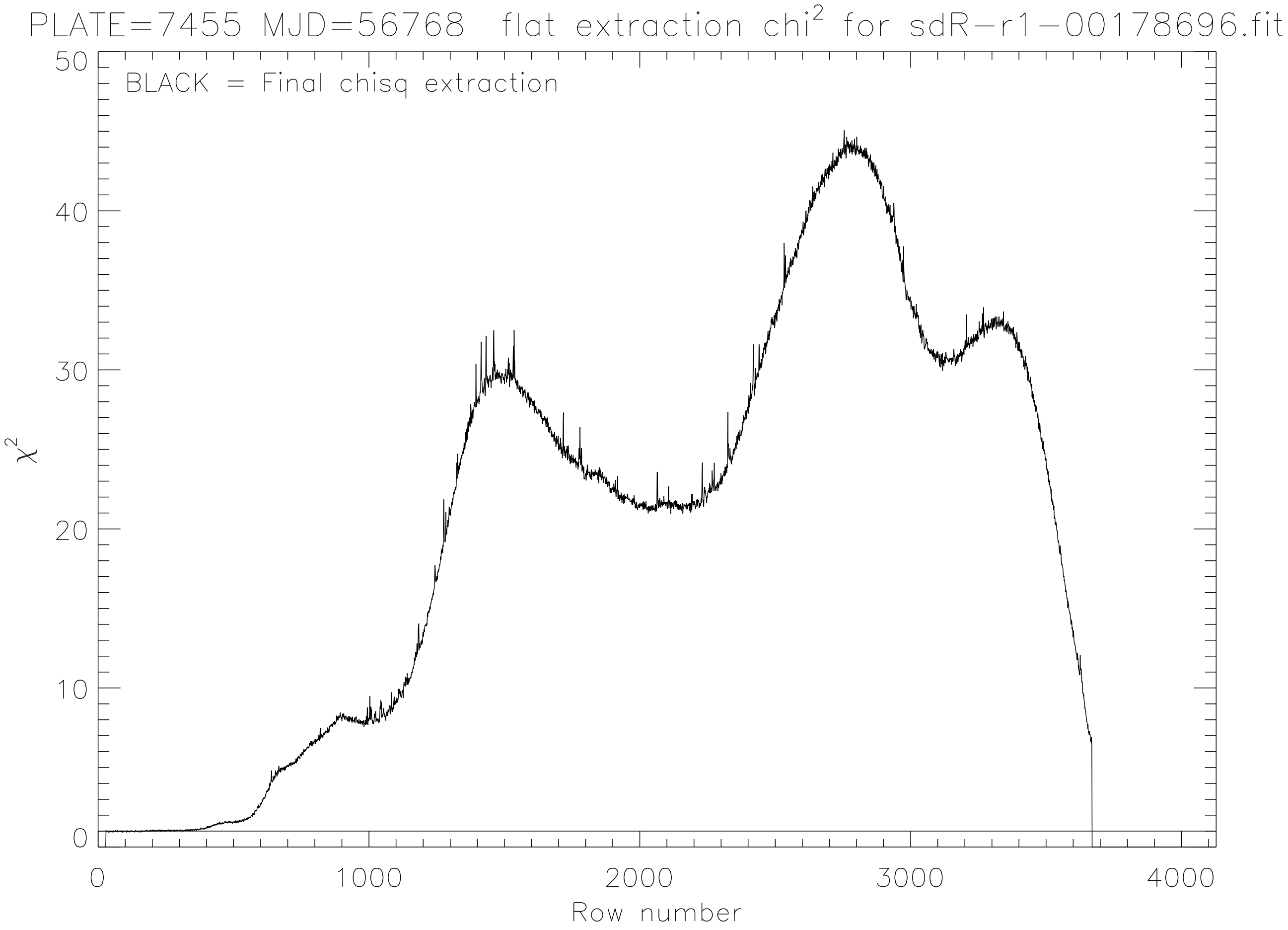


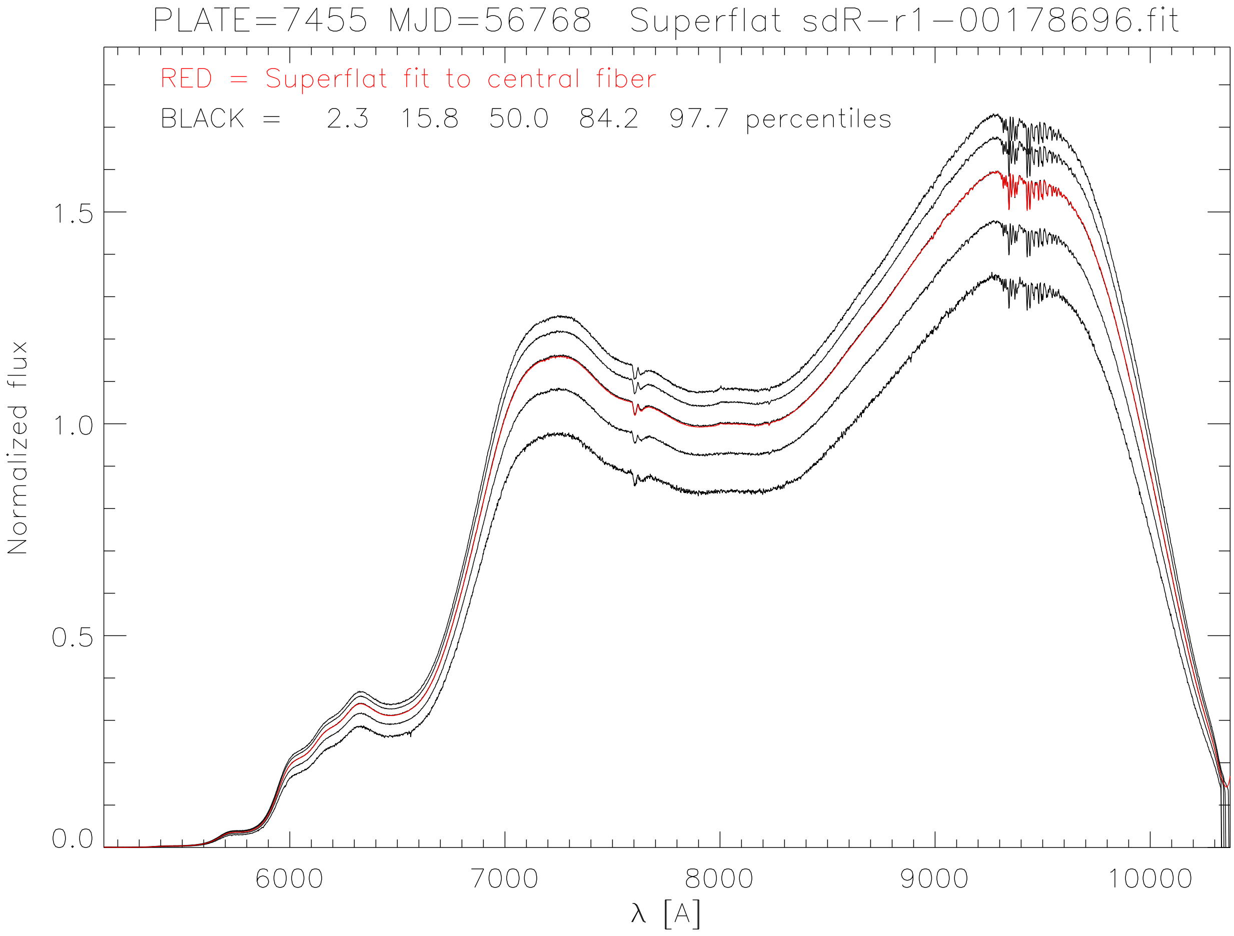

PLATE=7455 MJD=56768 sdR-b2-00178701.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 10.82 %
Flux (4359.5)/Airmass
0
200
400
600
800
Fiber number
0
100
200
300
400
500
Focal Distance [mm]
0
100
200
300
400
Airmass
1.29
1.30
1.31
1.32
1.33
1.34
1.35

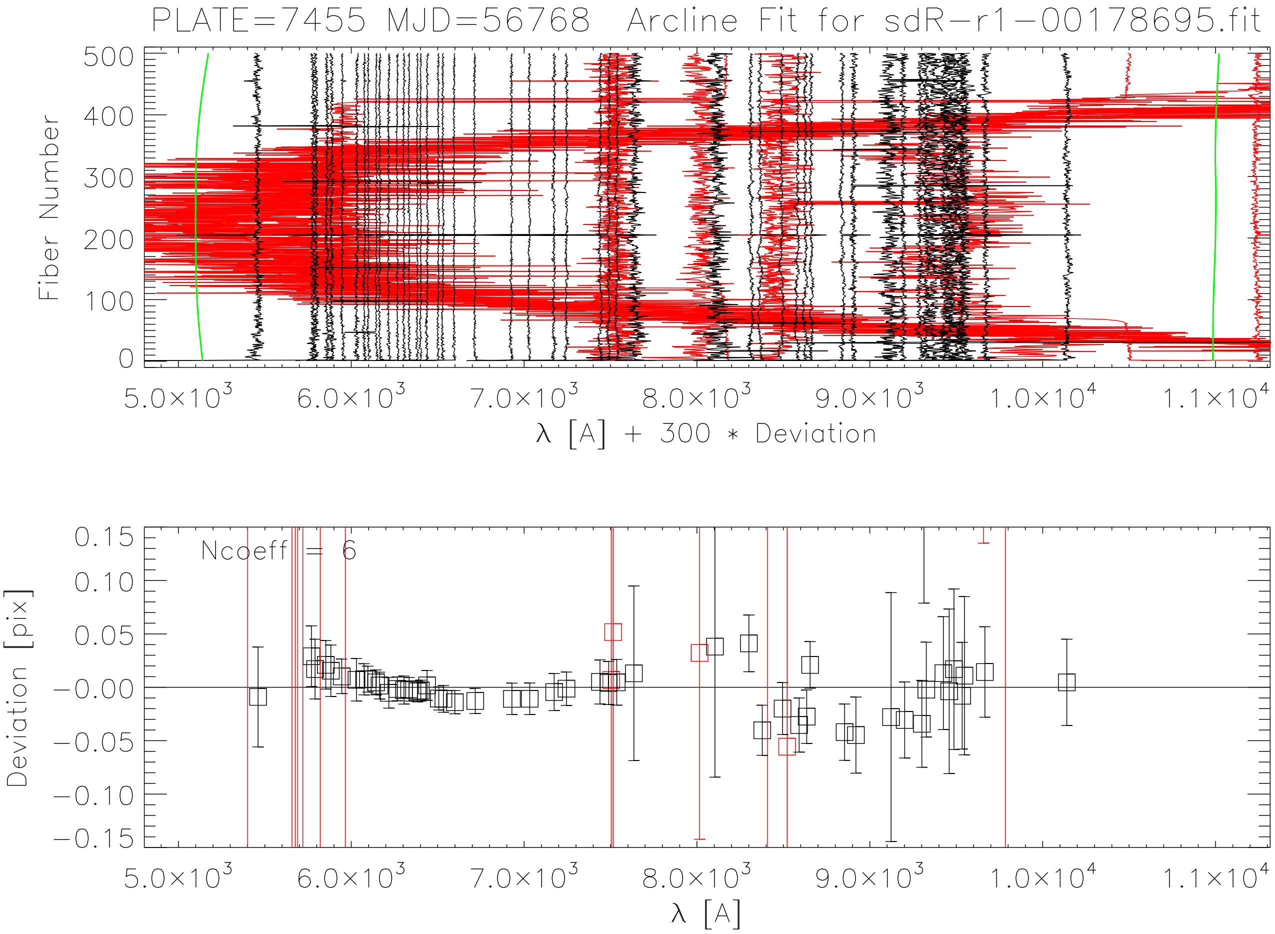

PLATE=7455 MJD=56768 sdR-b2-00178701.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
10000
9500
9000
8500
8000
7500
7000
+ = sky fiber
Dispersion = 1.96 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
10000
9500
9000
8500
8000
7500
7000
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
10000
9500
9000
8500
8000
7500
7000
1.29
1.30
1.31
1.32
1.33
1.34
1.35
Airmass

PLATE=7455 MJD=56768 Traces sdR-r1-00178696.fit

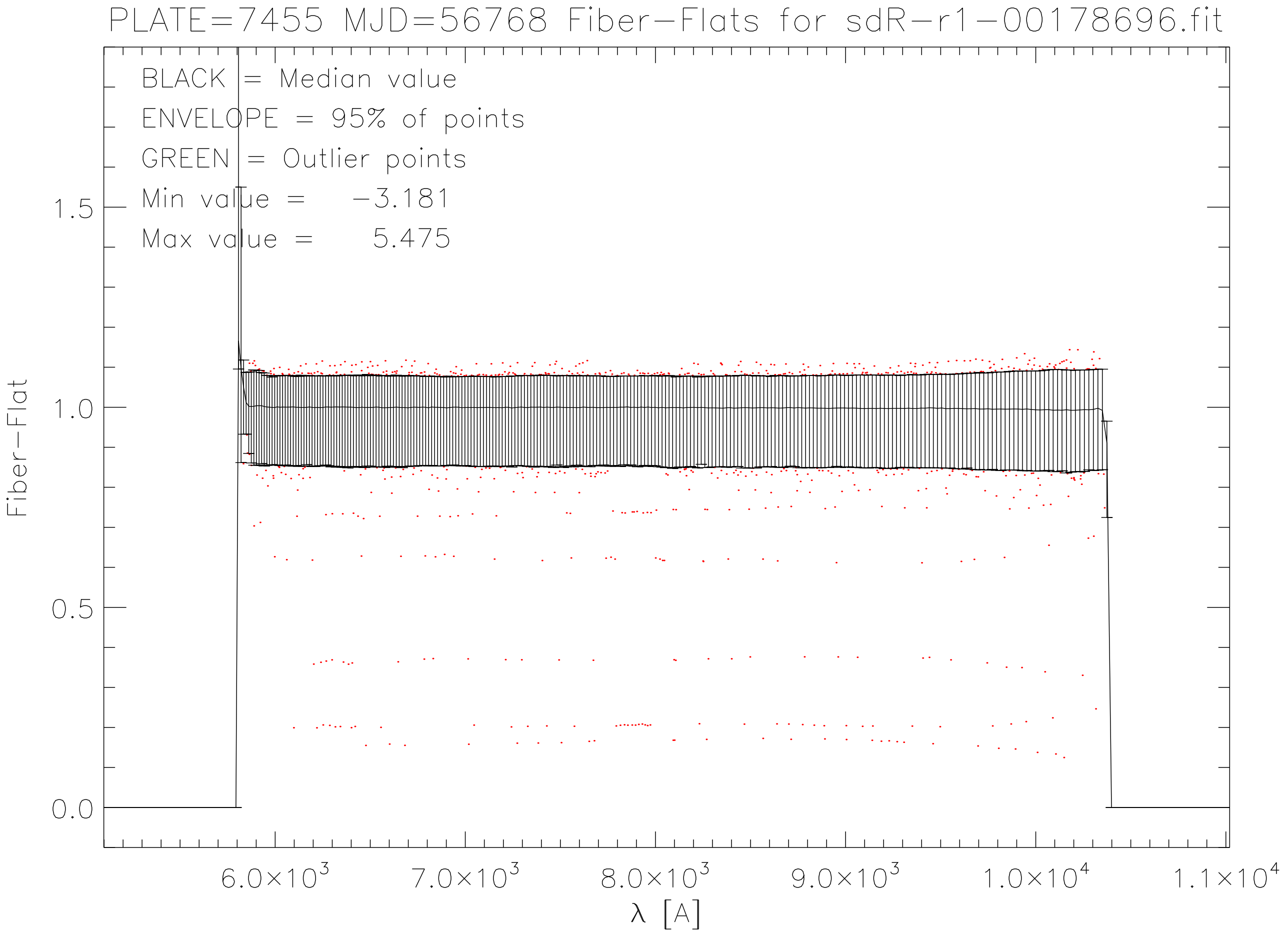



PLATE=7455 MJD=56768 flat extraction chi^2 for sdR-r1-00178696.fit
BLACK = Final chisq extraction
χ^2
0
10
20
30
40
50
0
1000
2000
3000
4000
Row number

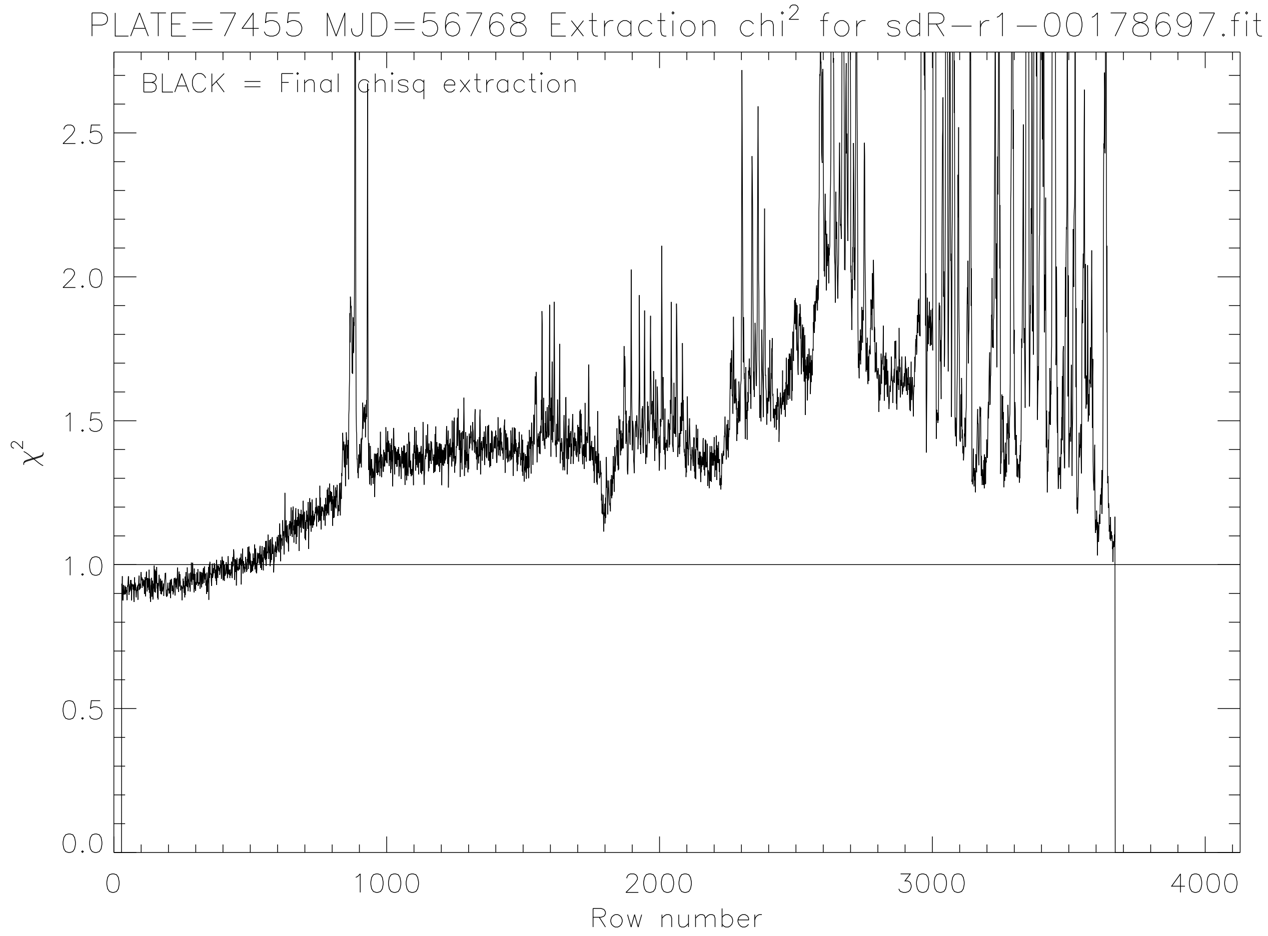

PLATE=7455 MJD=56768 Superflat sdR-r1-00178696.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000

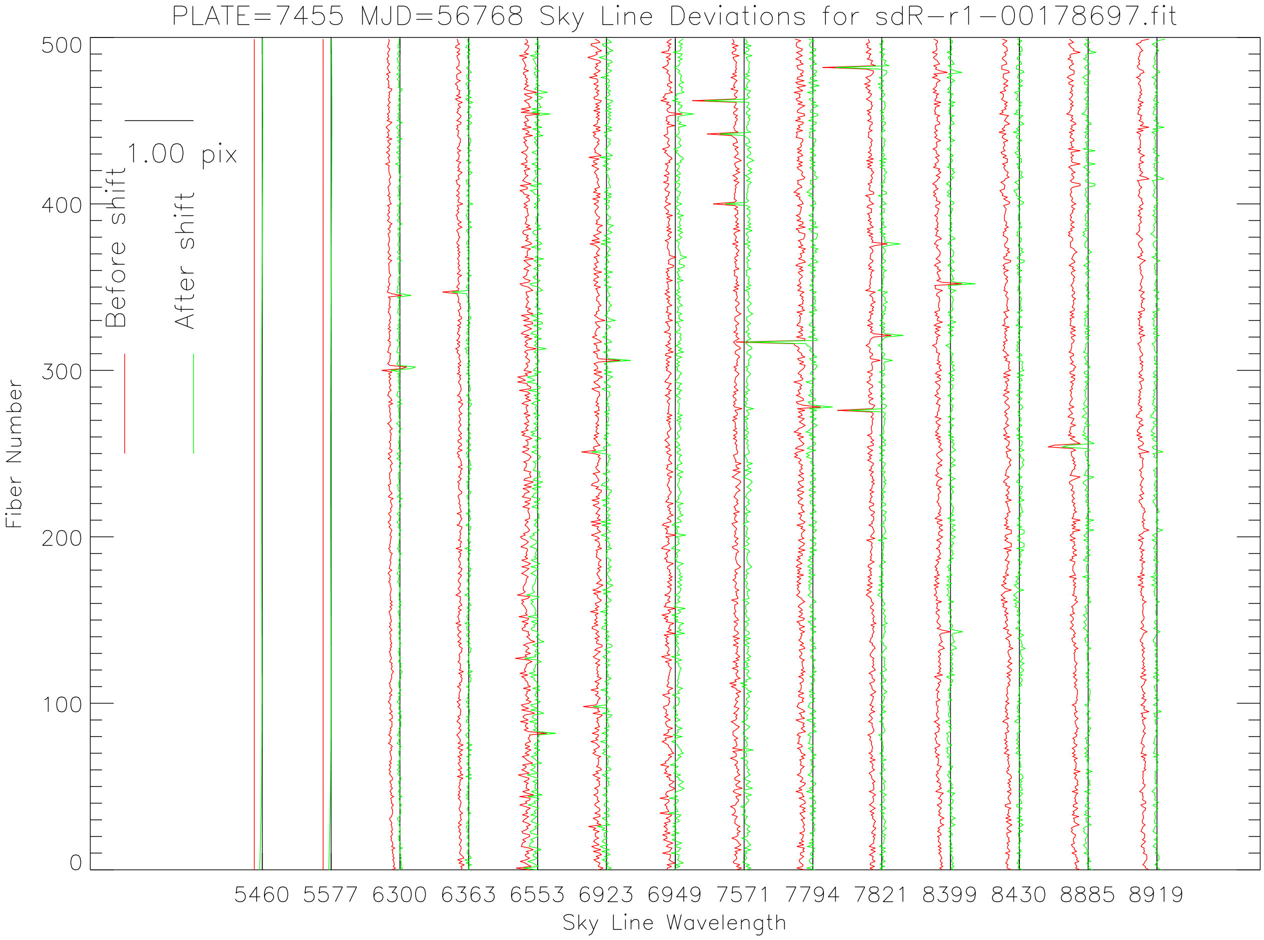


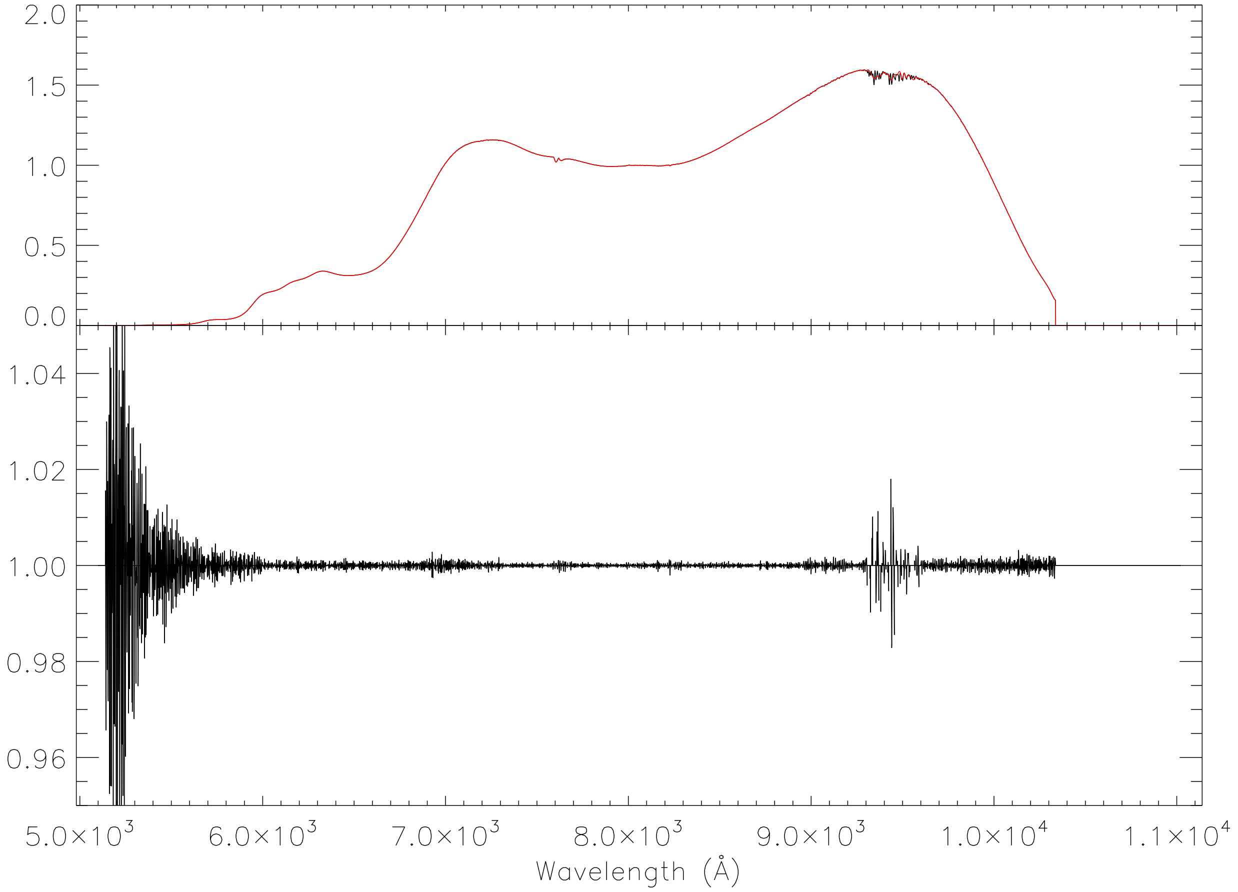
Wed Jul 30 19:51:15 2014



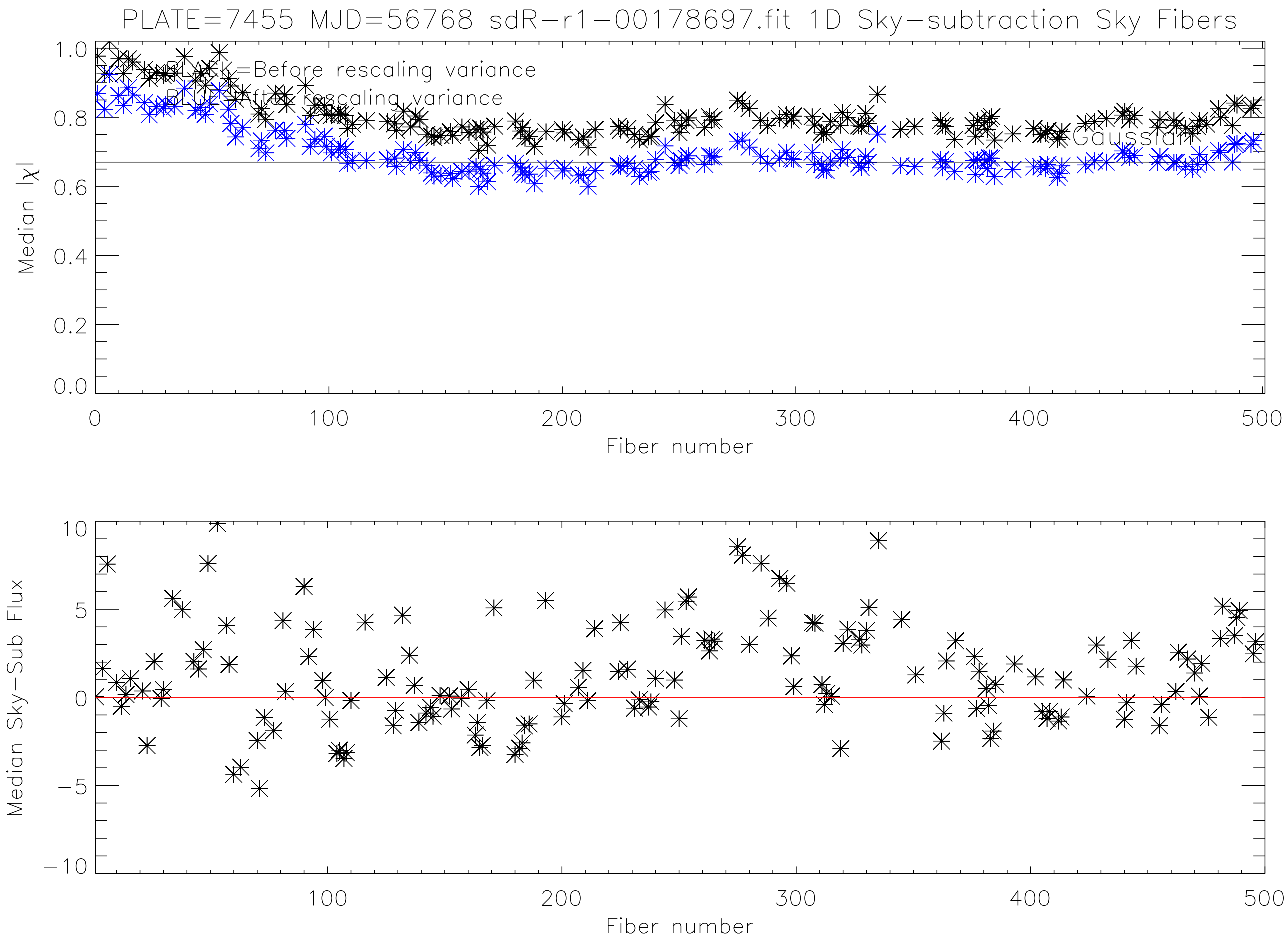
Wed Jul 30 19:51:39 2014

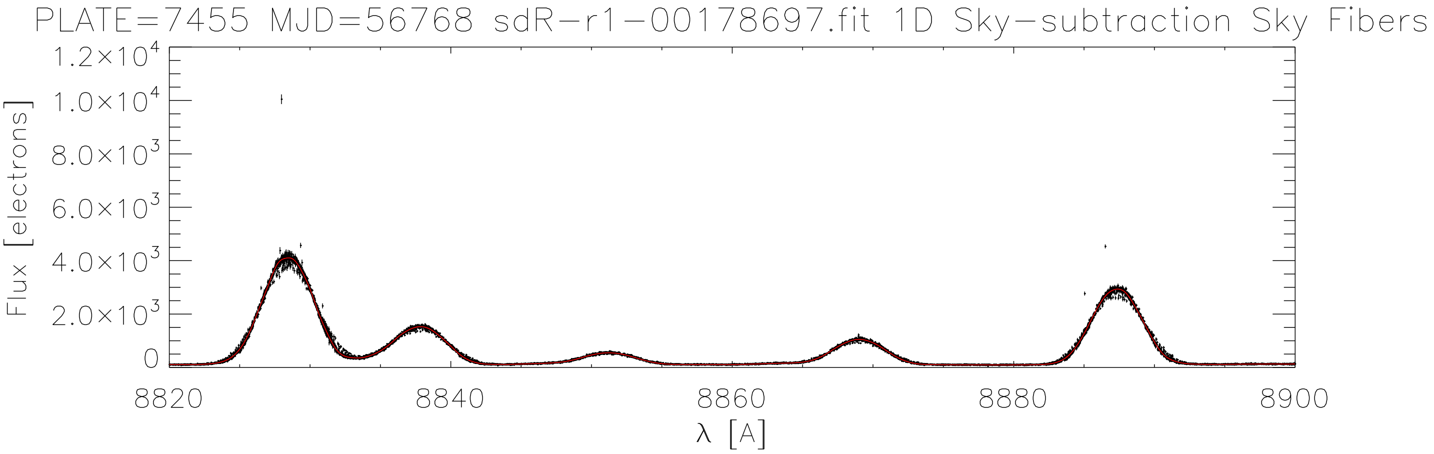

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r1-00178697.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number

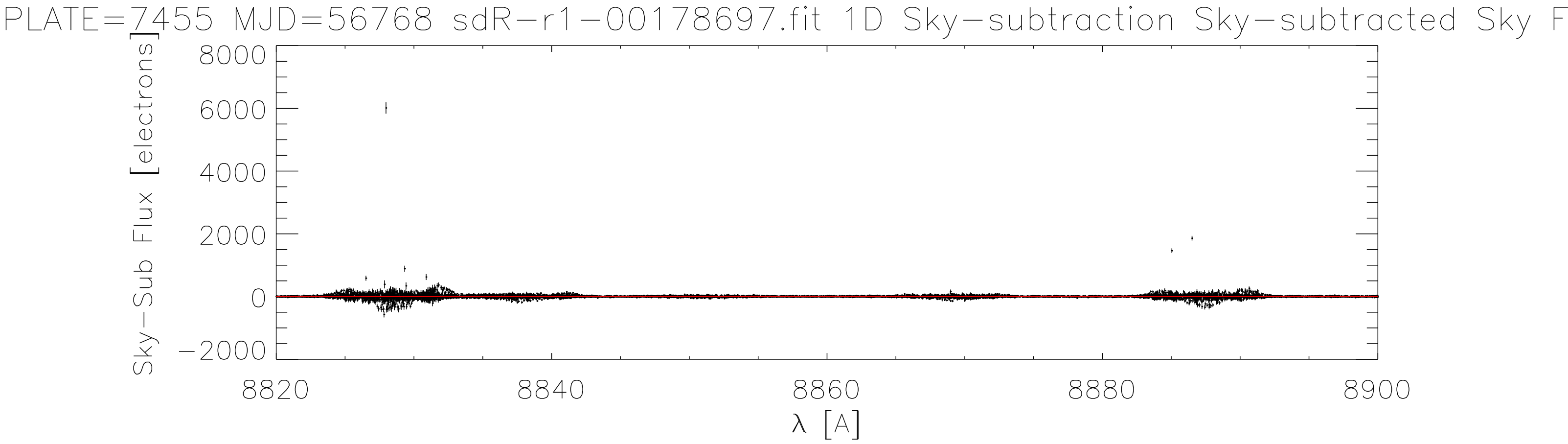

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r1-00178697.fit
Fiber Number
Sky Line Wavelength
1.00 pix
Before shift
After shift
0
100
200
300
400
500
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919



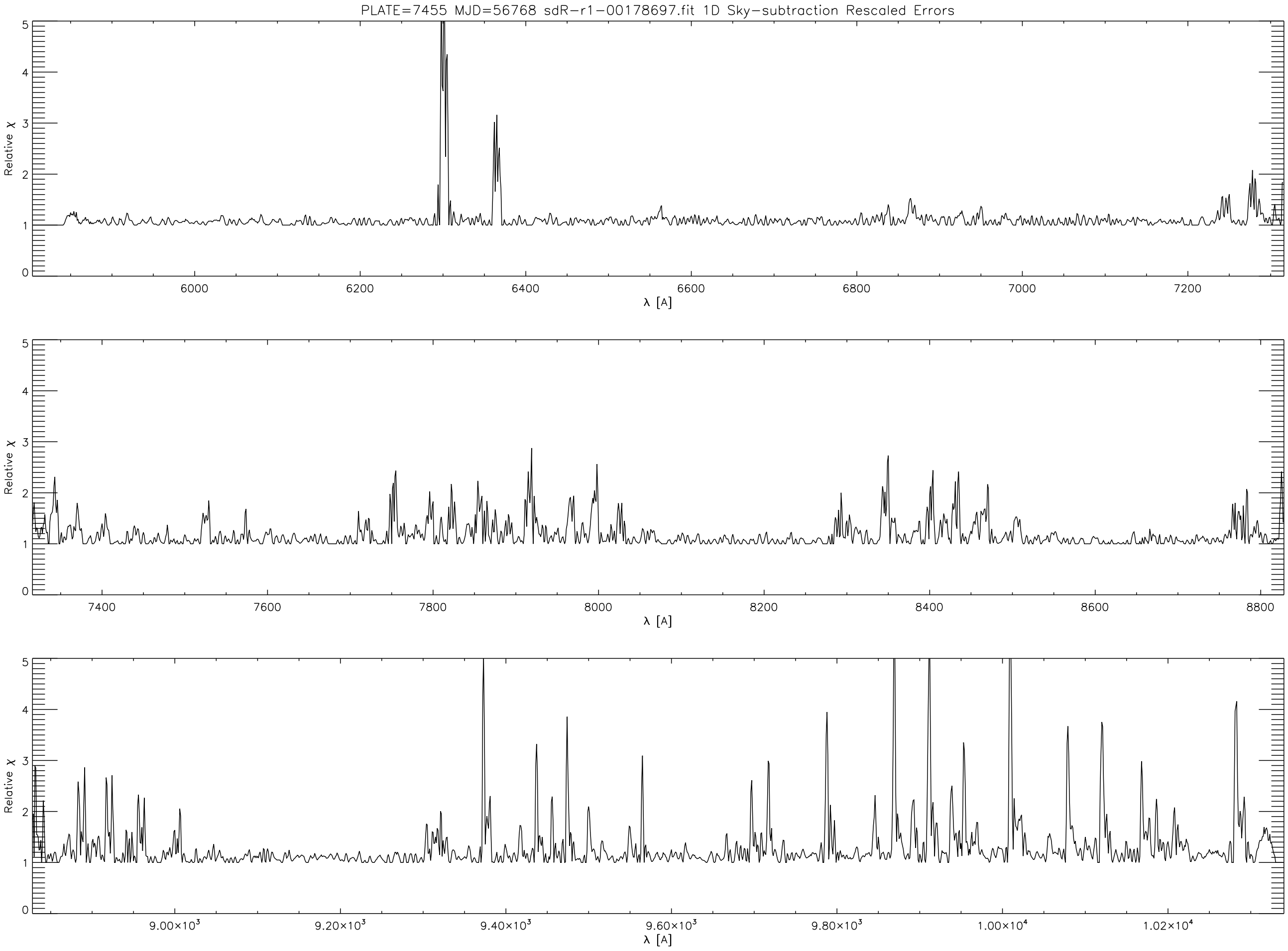
PLATE=7455 MJD=56768 Smooth superflat for sdR-r1-00178697.fit

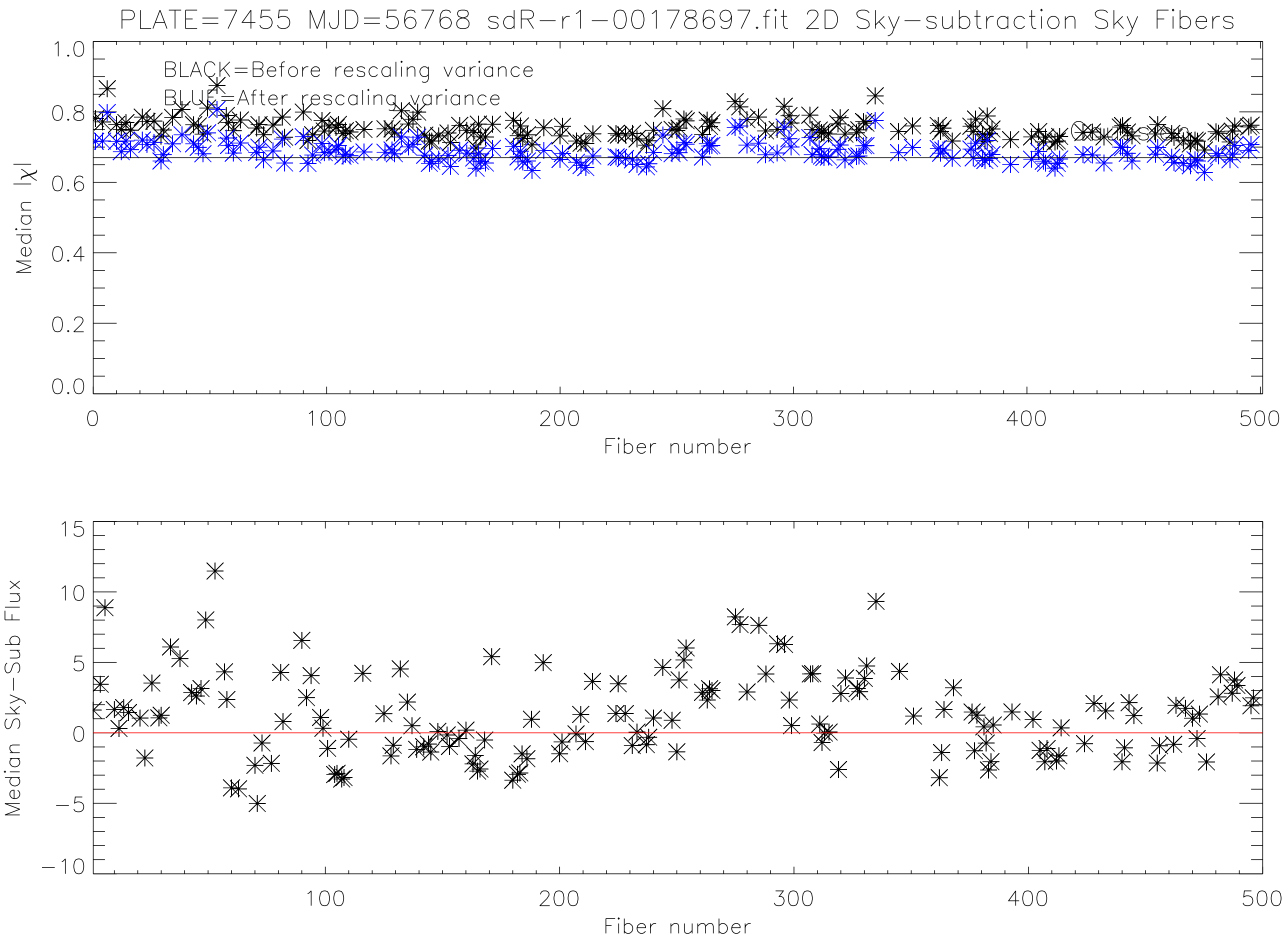

PLATE=7455 MJD=56768 sdR-r1-00178697.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
-10
-5
0
5
10
100
200
300
400
500
Fiber number

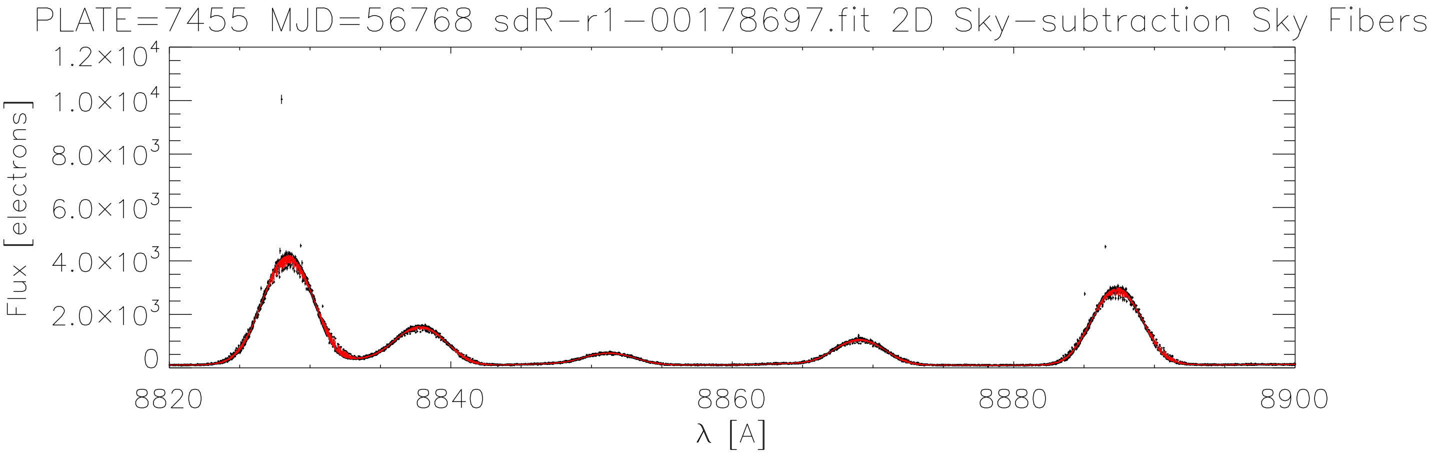

PLATE=7455 MJD=56768 sdR-r1-00178697.fit 1D Sky−subtraction Sky Fibers

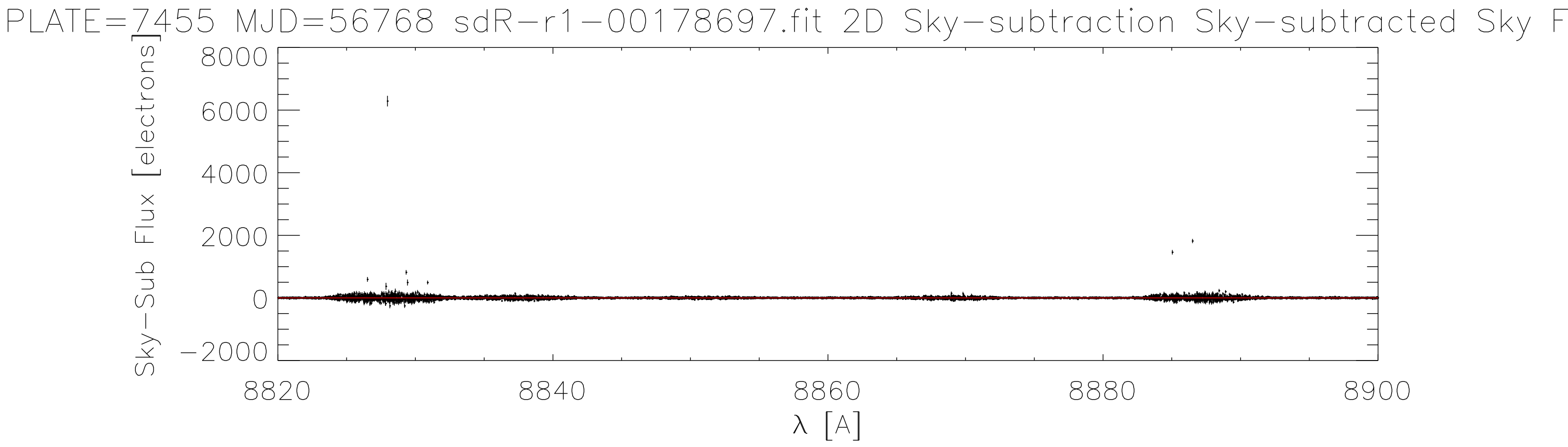

PLATE=7455 MJD=56768 sdR-r1-00178697.fit 1D Sky−subtraction Sky−subtracted Sky F

Number of sky fibers = 161

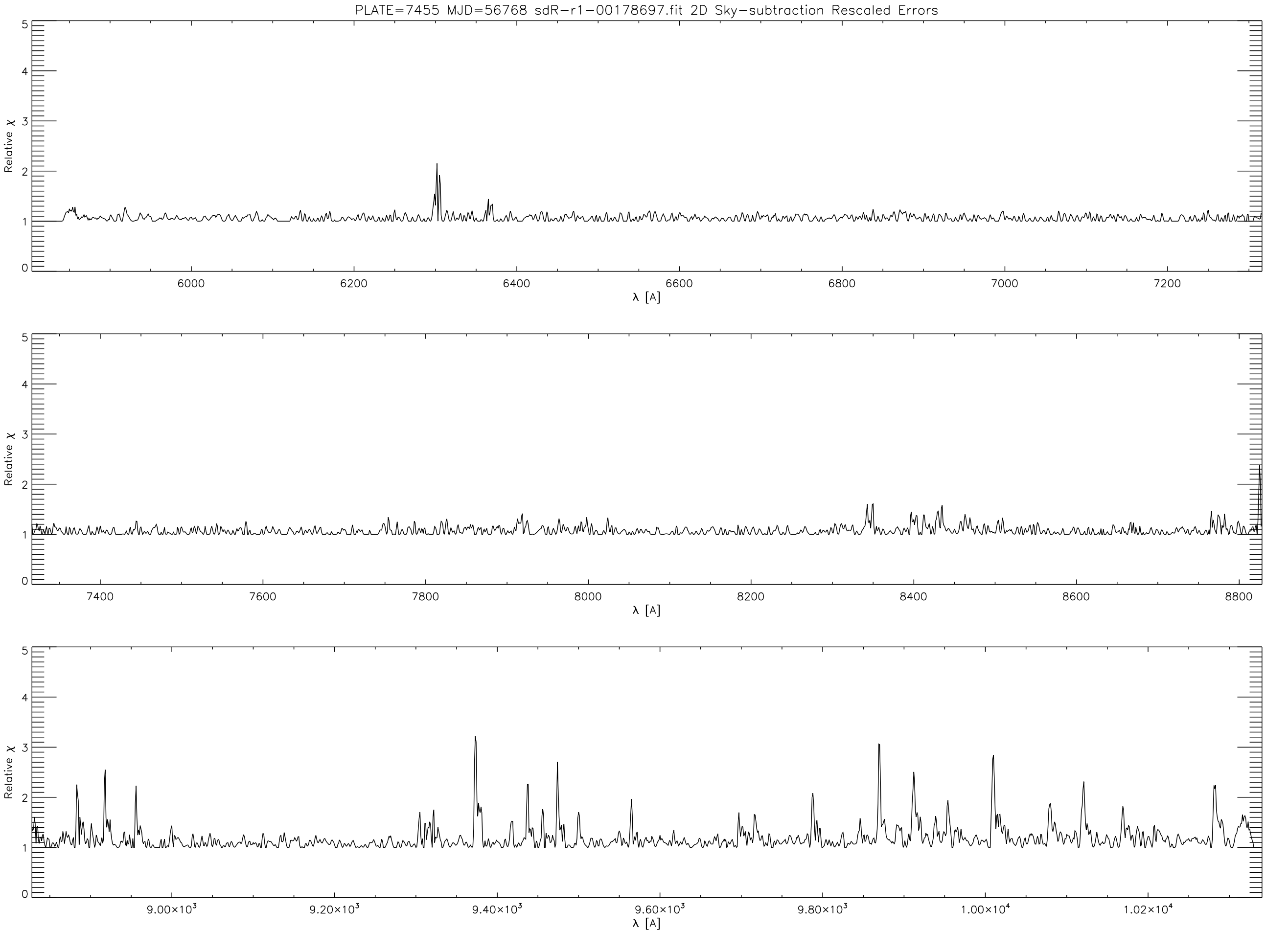


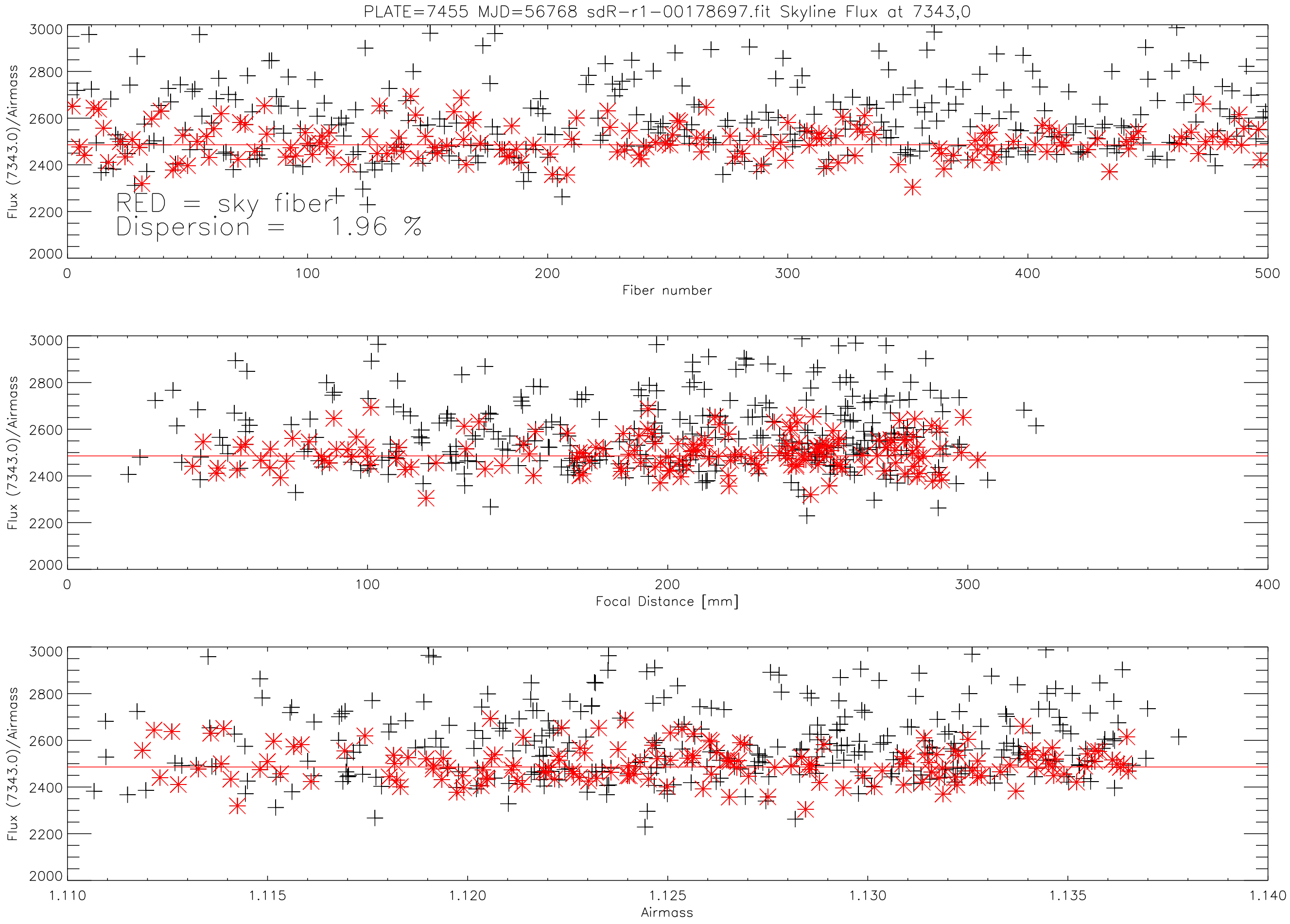

PLATE=7455 MJD=56768 sdR-r1-00178697.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
15
100
200
300
400
500
Fiber number


PLATE=7455 MJD=56768 sdR-r1-00178697.fit 2D Sky-subtraction Sky Fibers

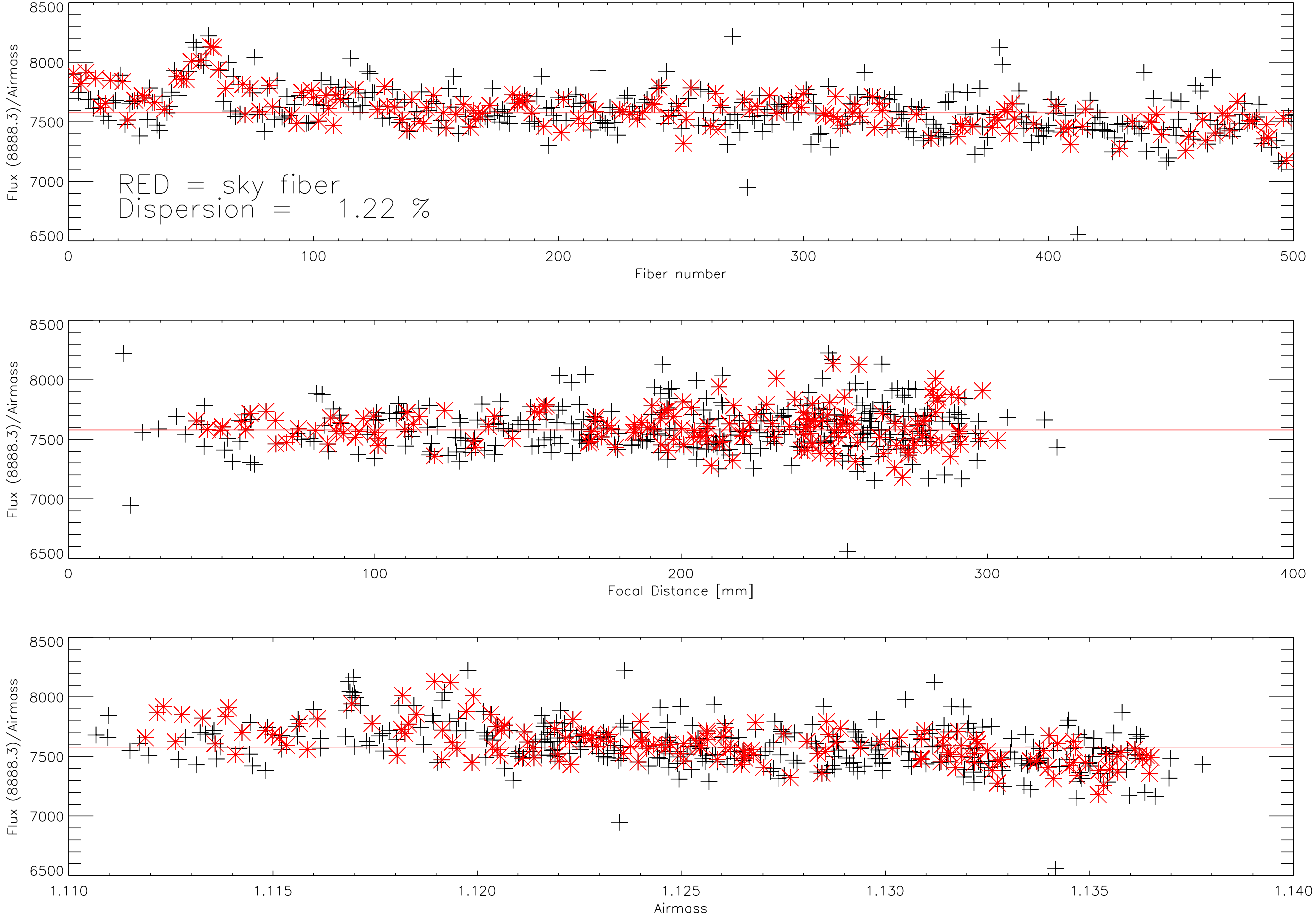

PLATE=7455 MJD=56768 sdR-r1-00178697.fit 2D Sky-subtraction Sky-subtracted Sky F

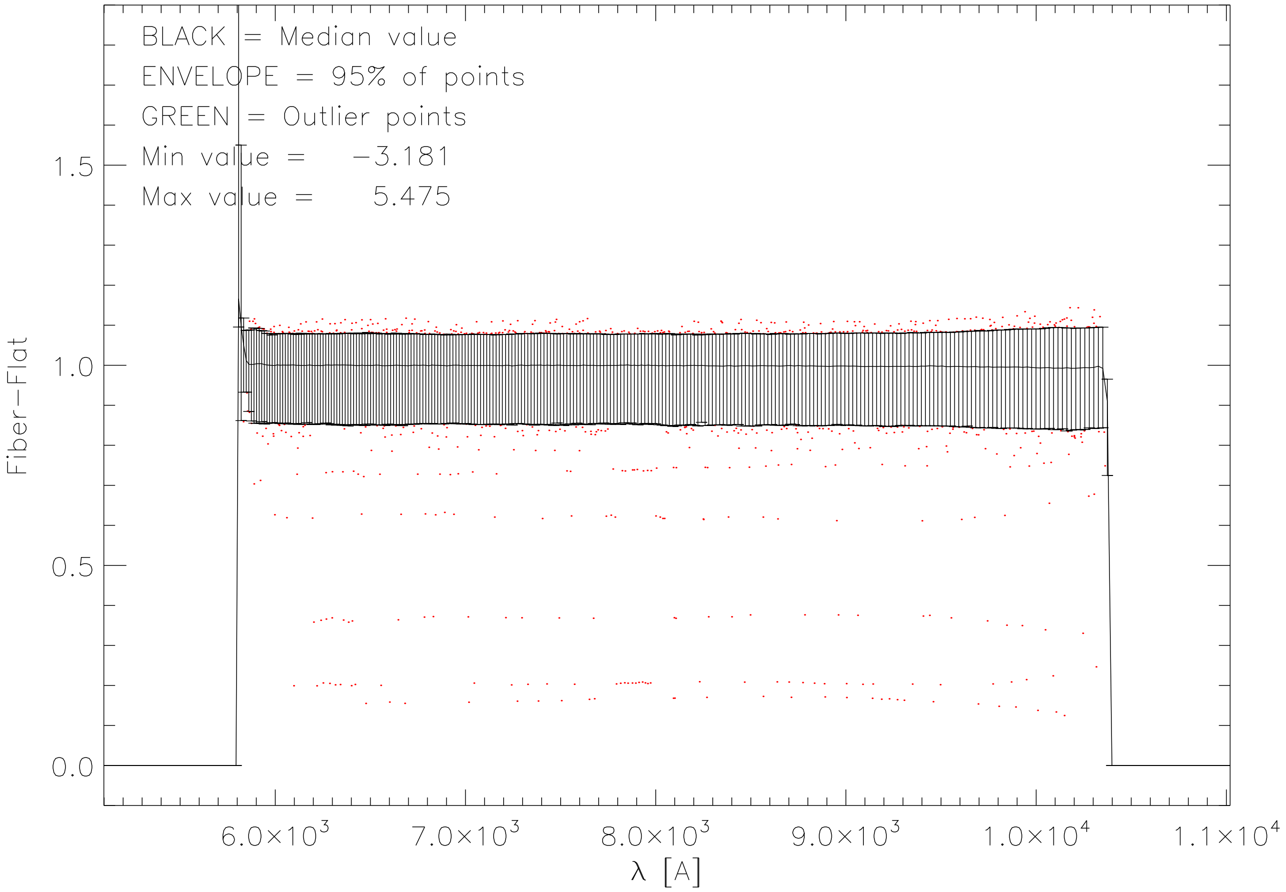
Number of sky fibers = 161



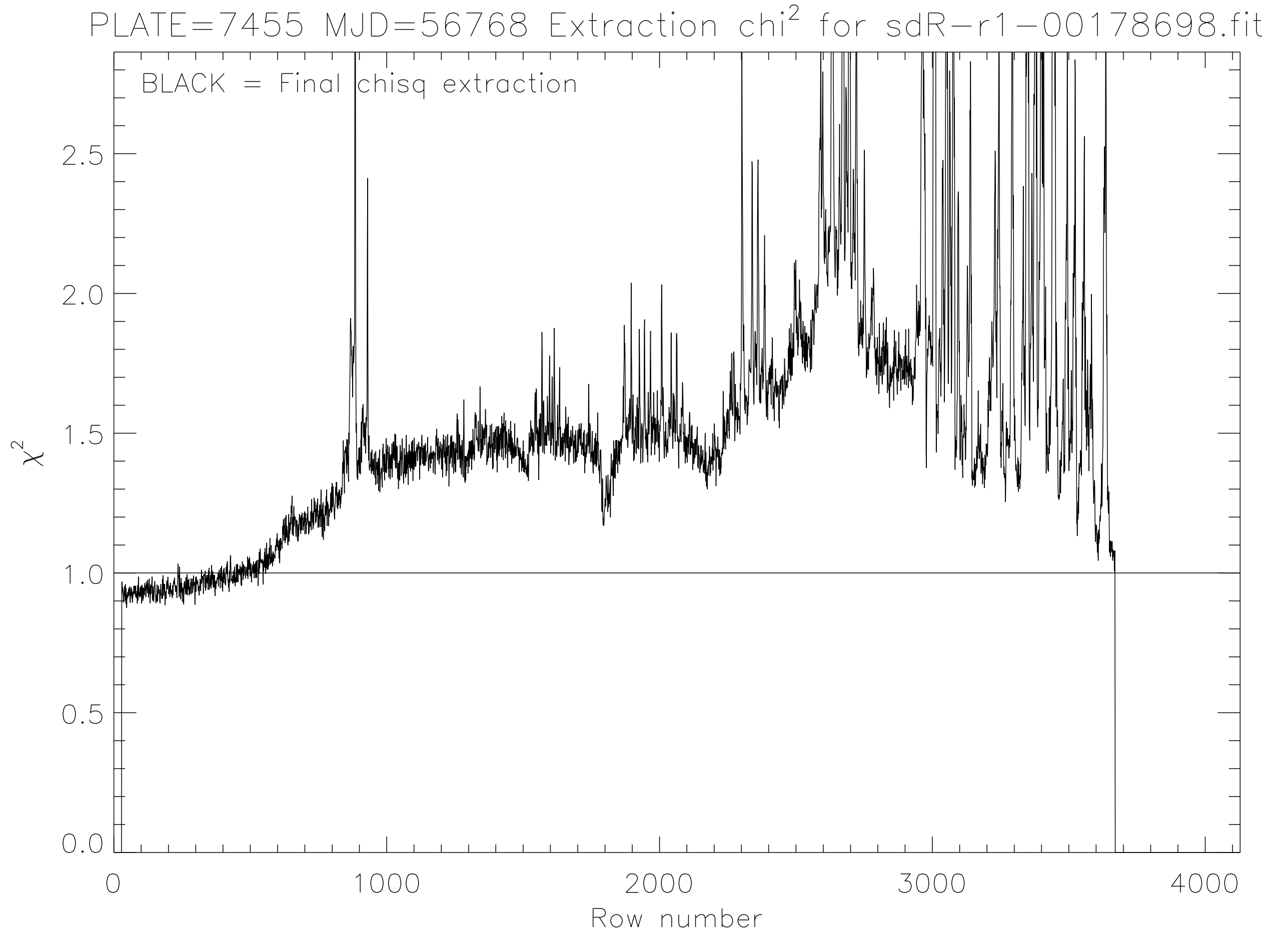

PLATE=7455 MJD=56768 sdR-r1-00178697.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
2000
RED = sky fiber
Dispersion = 1.96 %
0
100
200
300
400
500
Fiber number
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
2000
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
2000
1.110
1.115
1.120
1.125
1.130
1.135
1.140
Airmass

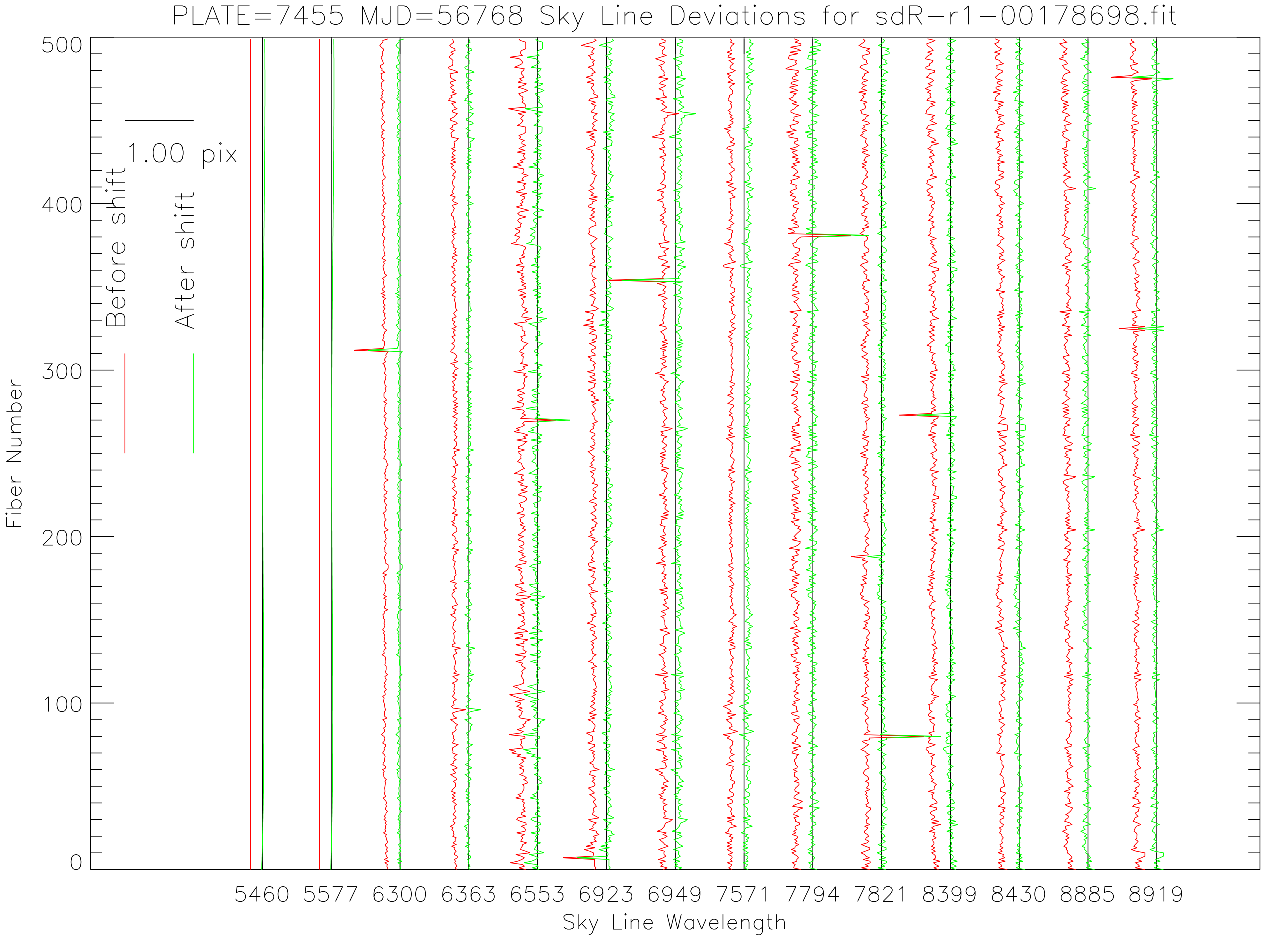
PLATE=7455 MJD=56768 sdR-r1-00178697.fit Skyline Flux at 8888.3

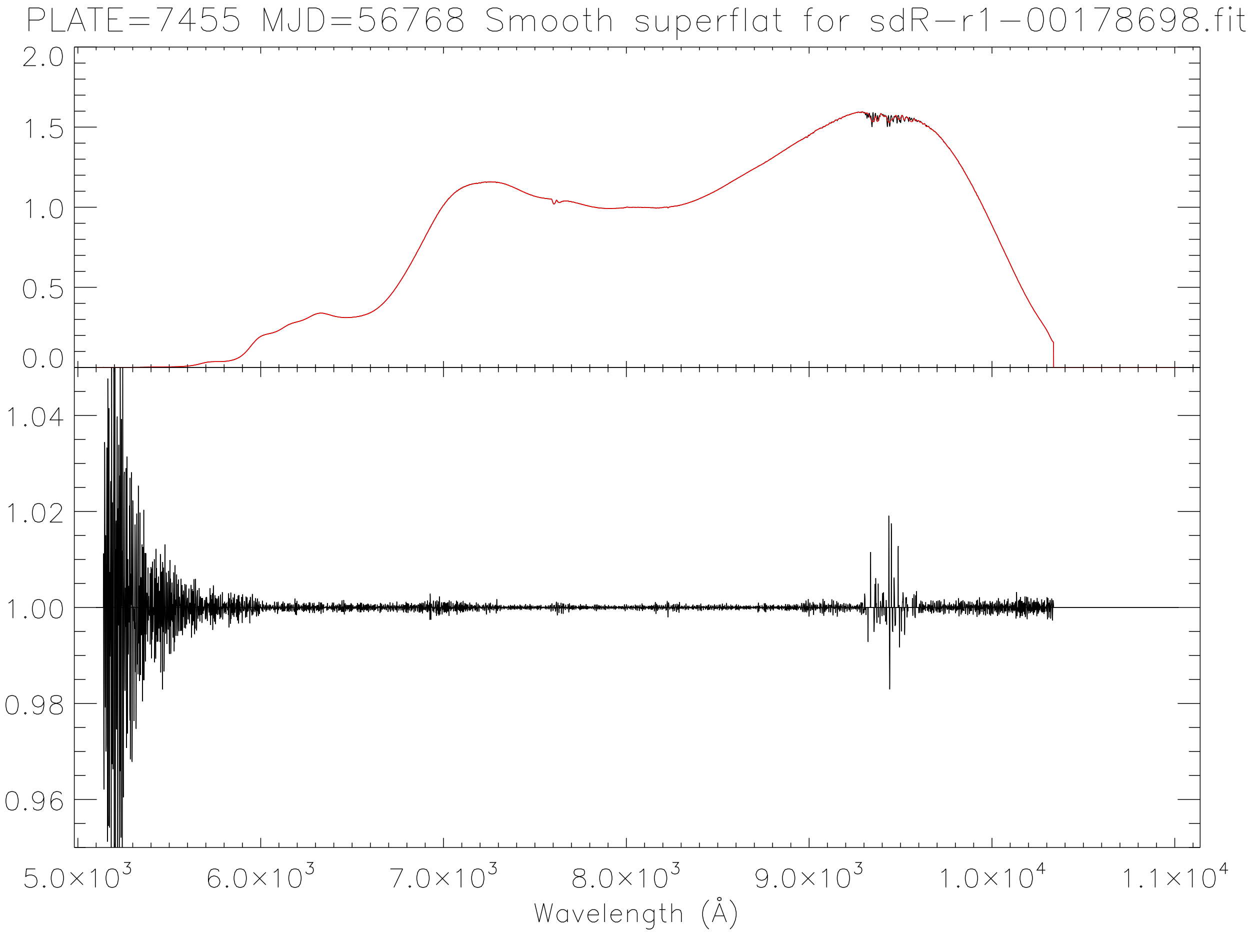


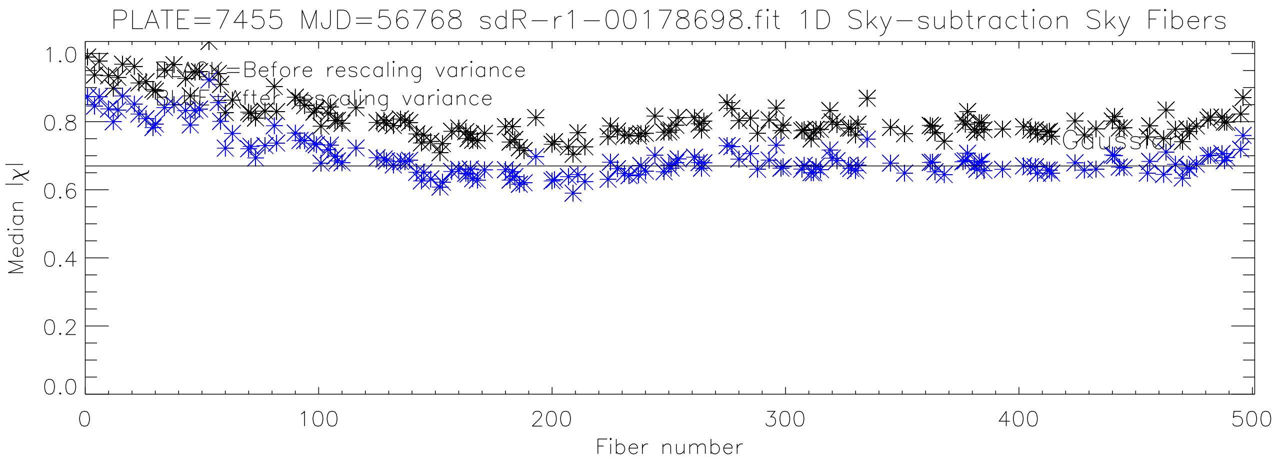

PLATE=7455 MJD=56768 Fiber−Flats for sdR−r1−00178696.fit

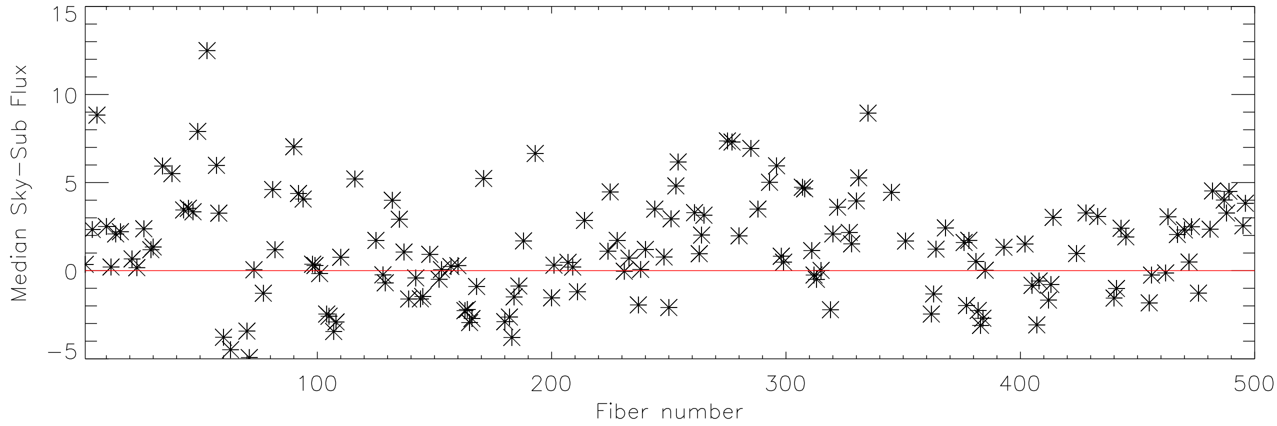
Wed Jul 30 20:05:24 2014

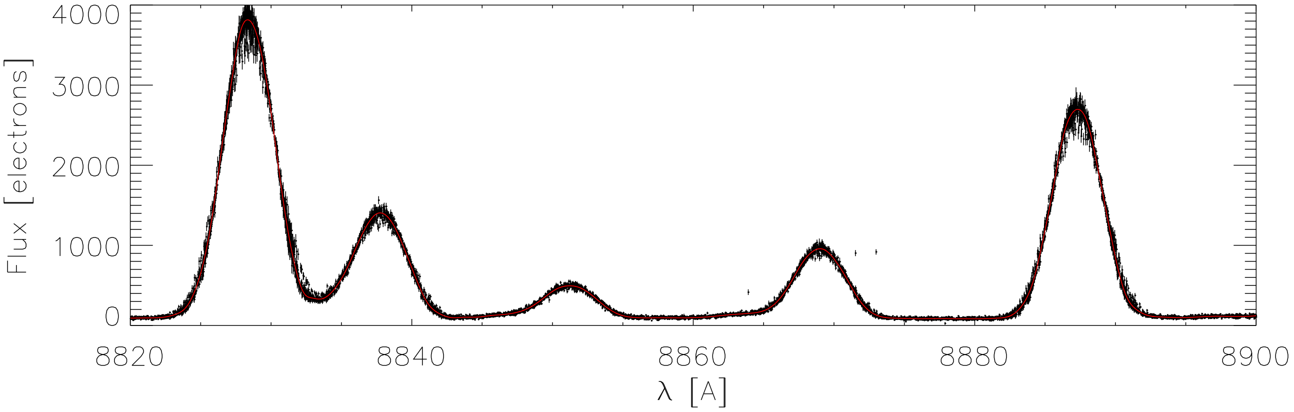

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r1-00178698.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number


PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r1-00178698.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919
Sky Line Wavelength

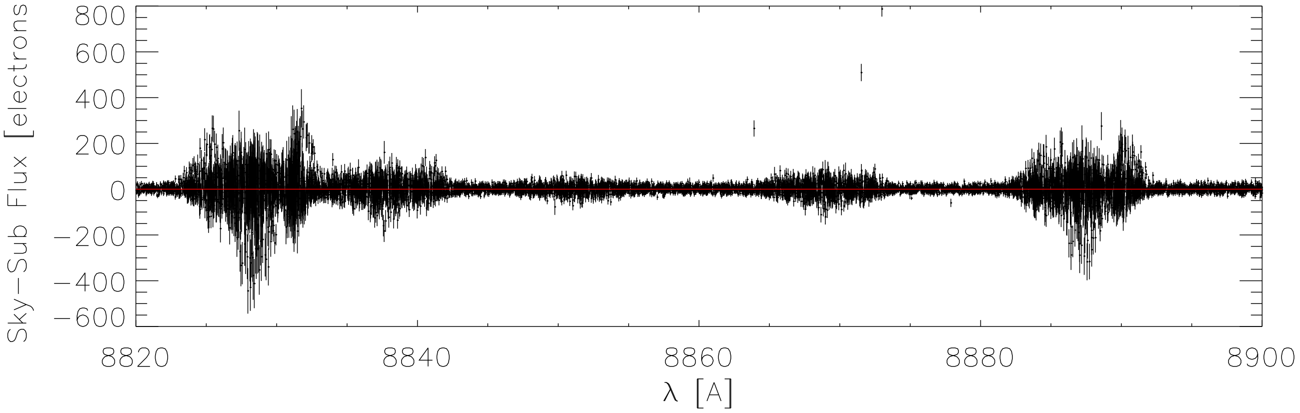

PLATE=7455 MJD=56768 Smooth superflat for sdR-r1-00178698.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)


PLATE=7455 MJD=56768 sdR-r1-00178698.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number


Median Sky-Sub Flux
15
10
5
0
−5
100
200
300
400
500
Fiber number

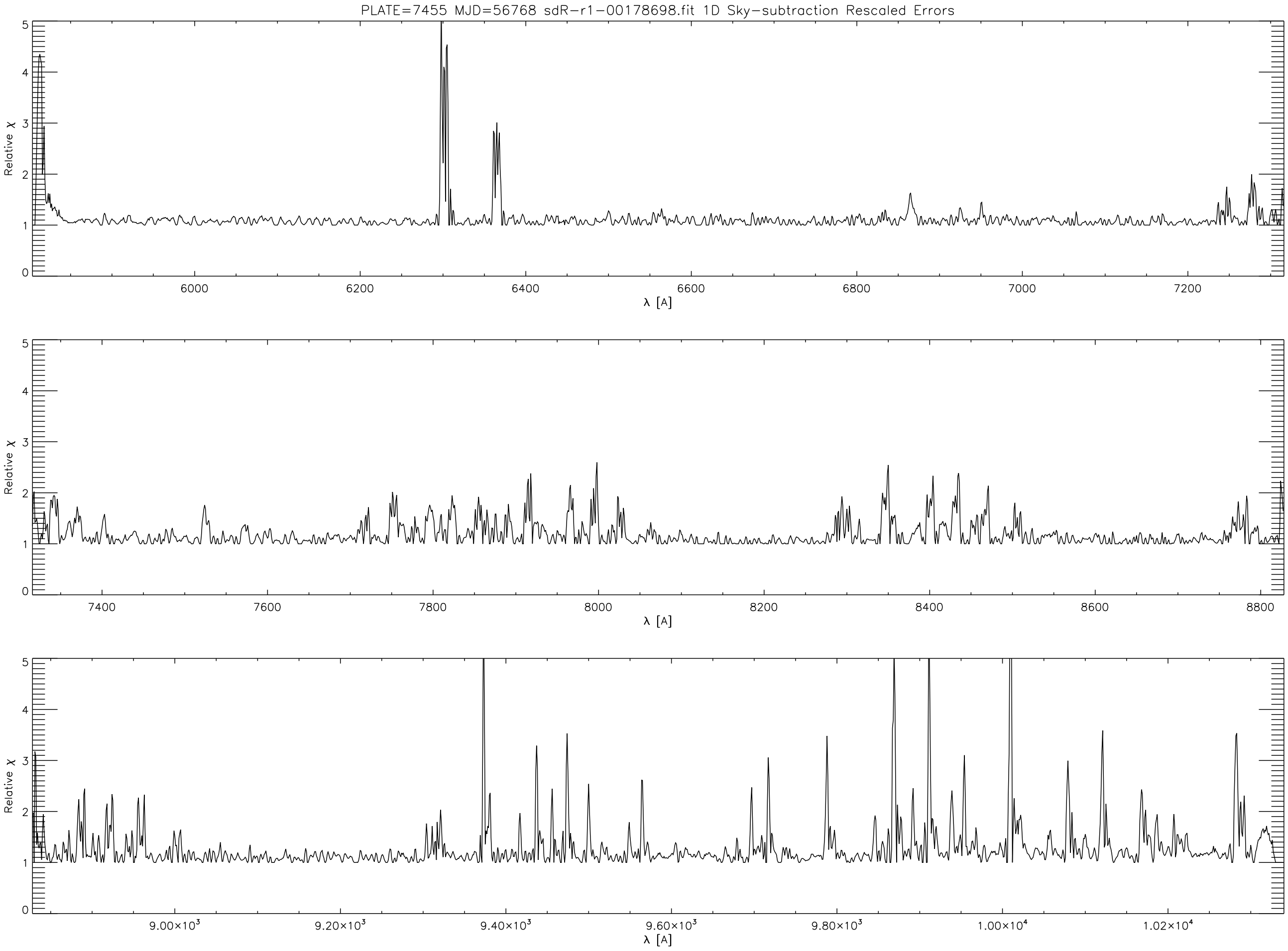


PLATE=7455 MJD=56768 sdR-r1-00178698.fit 1D Sky-subtraction Sky Fibers

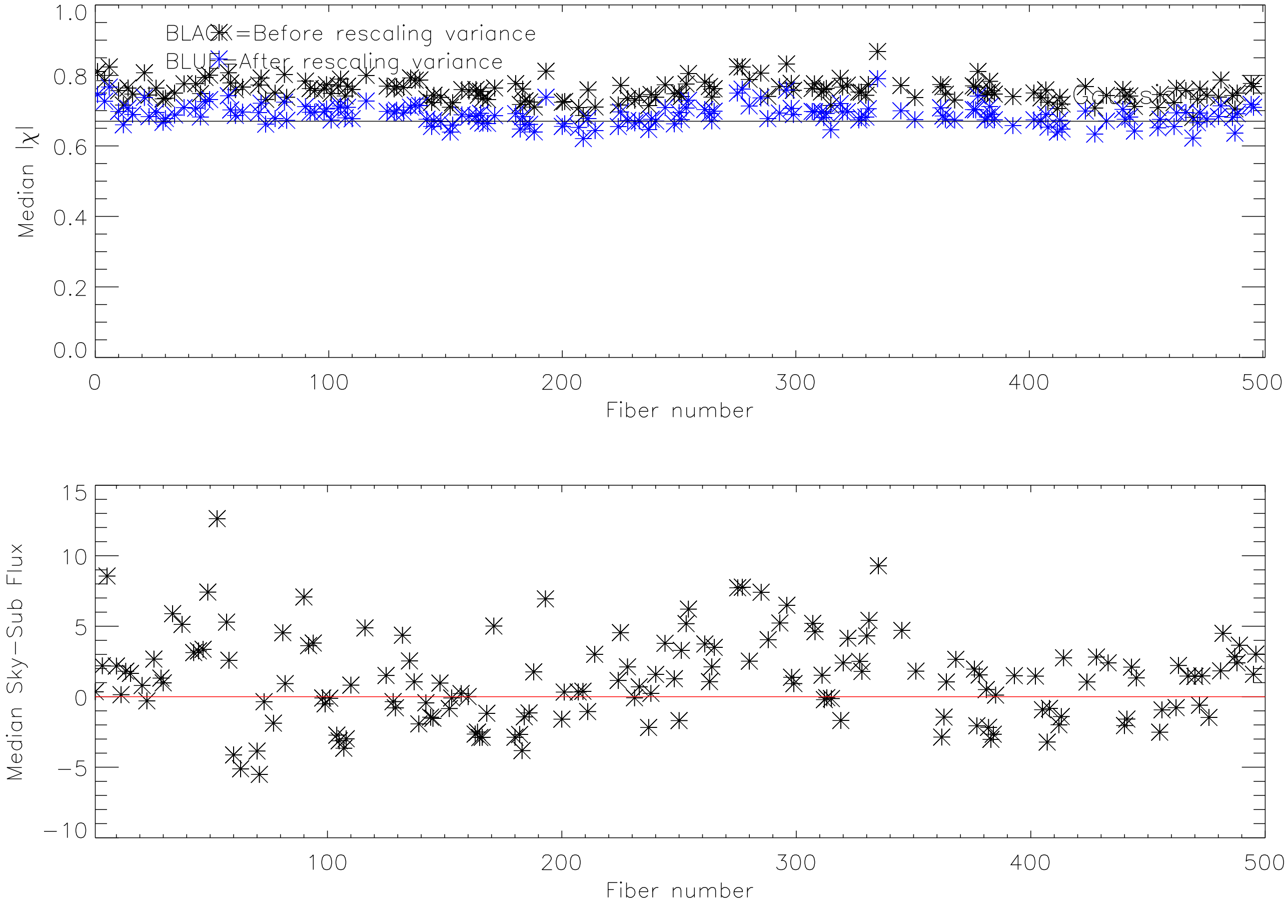


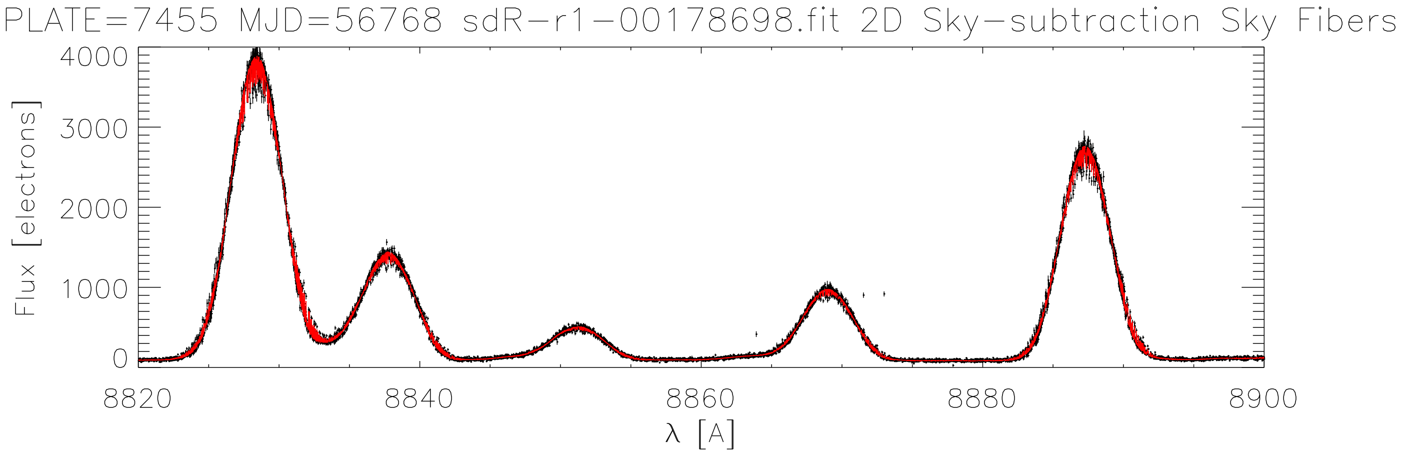
PLATE=7455 MJD=56768 sdR-r1-00178698.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 161

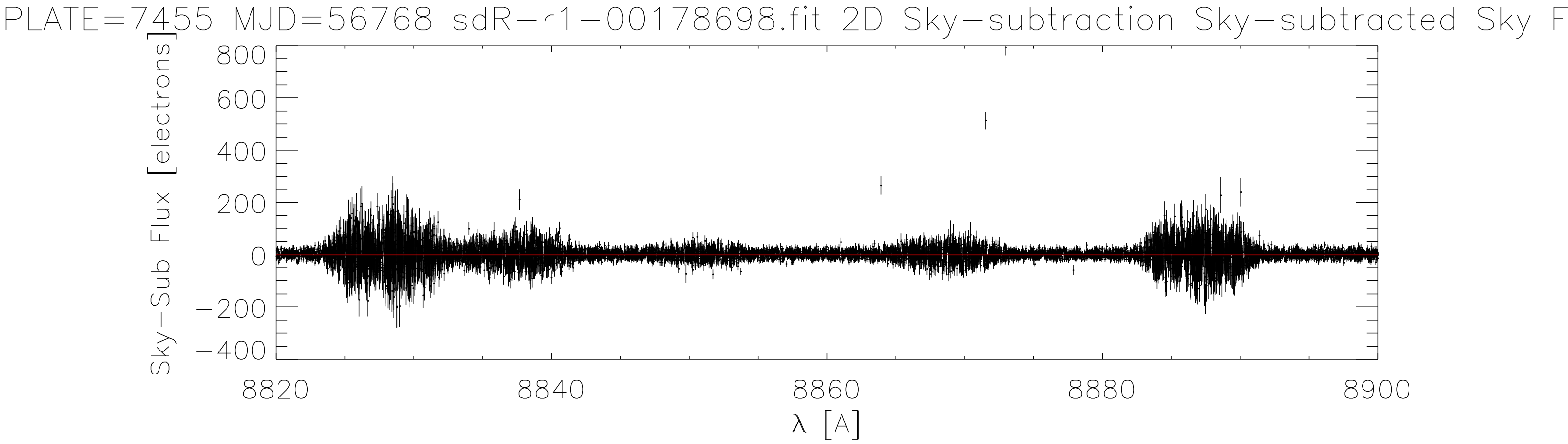


PLATE=7455 MJD=56768 sdR-r1-00178698.fit 2D Sky-subtraction Sky Fibers



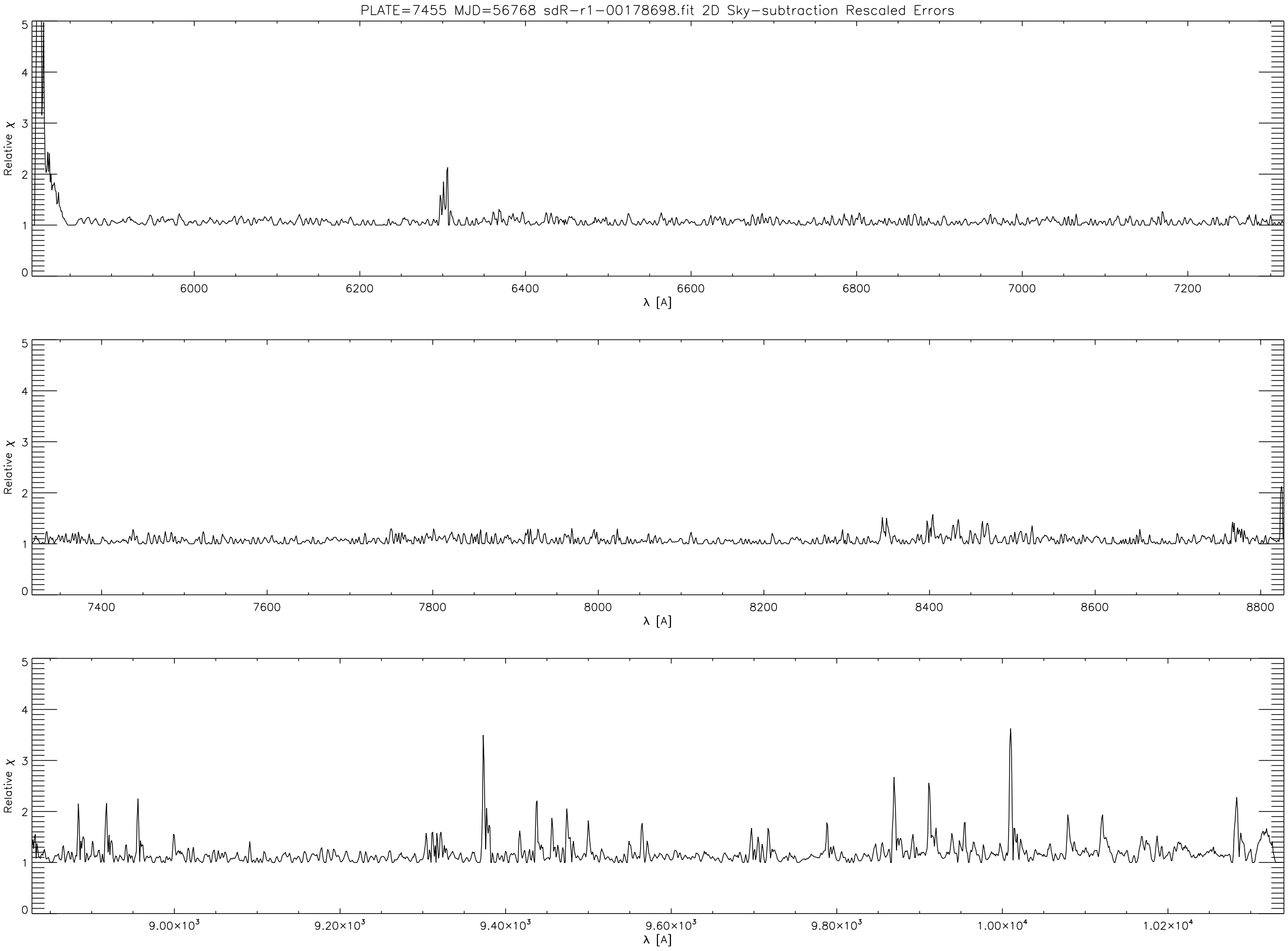


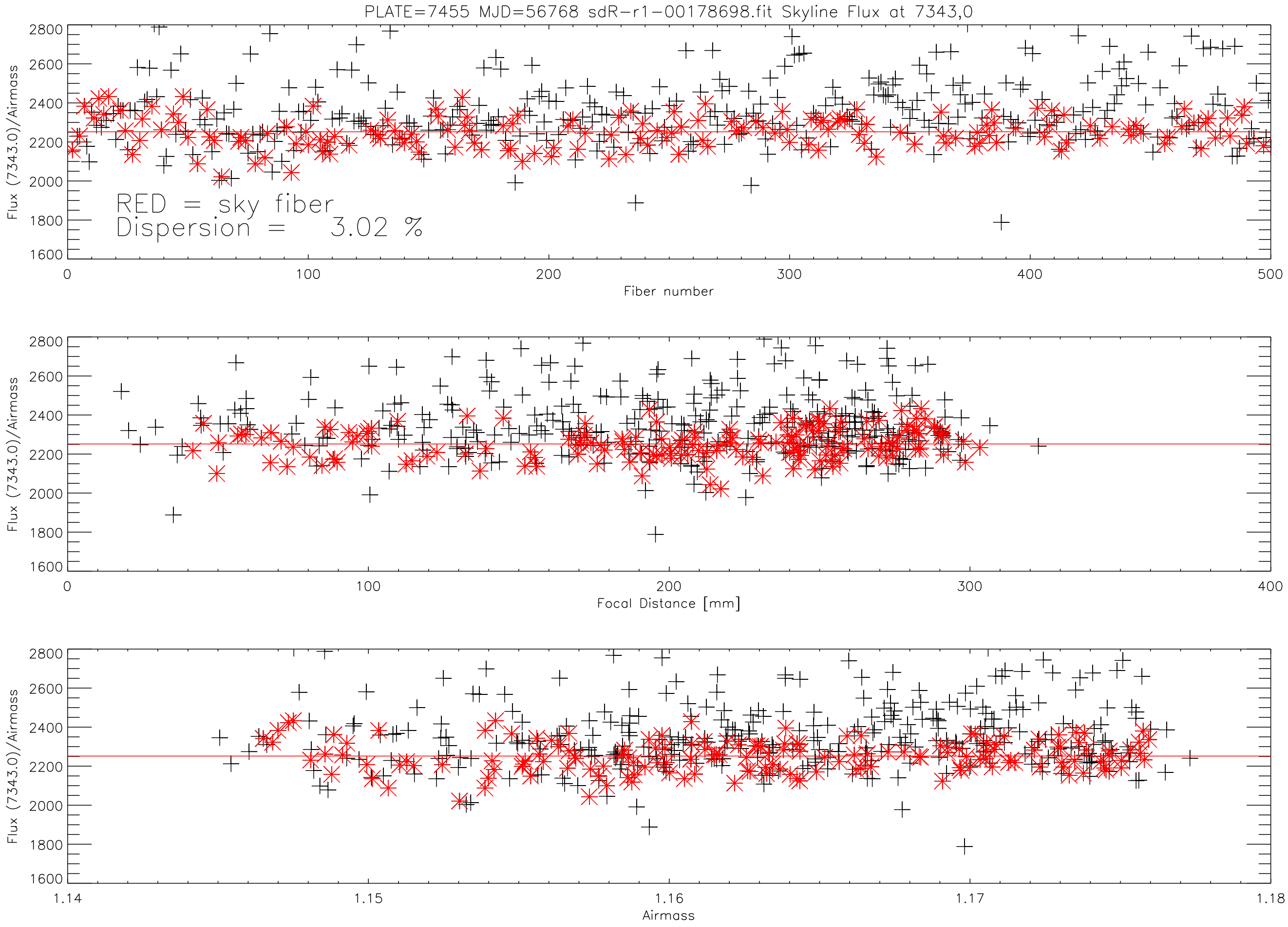
PLATE=7455 MJD=56768 sdR-r1-00178698.fit 2D Sky-subtraction Sky Fibers

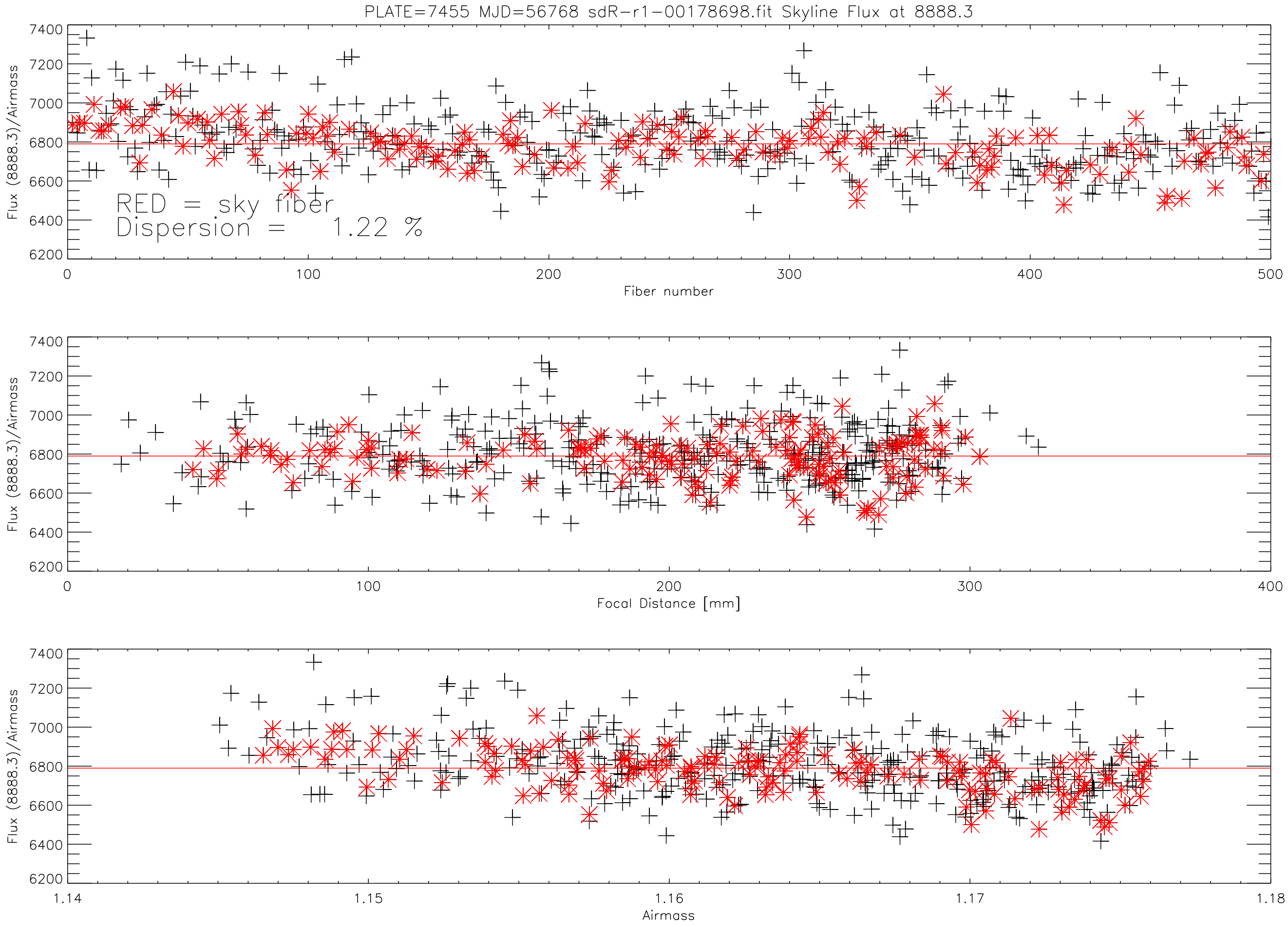


PLATE=7455 MJD=56768 sdR-r1-00178698.fit 2D Sky-subtraction Sky-subtracted Sky F

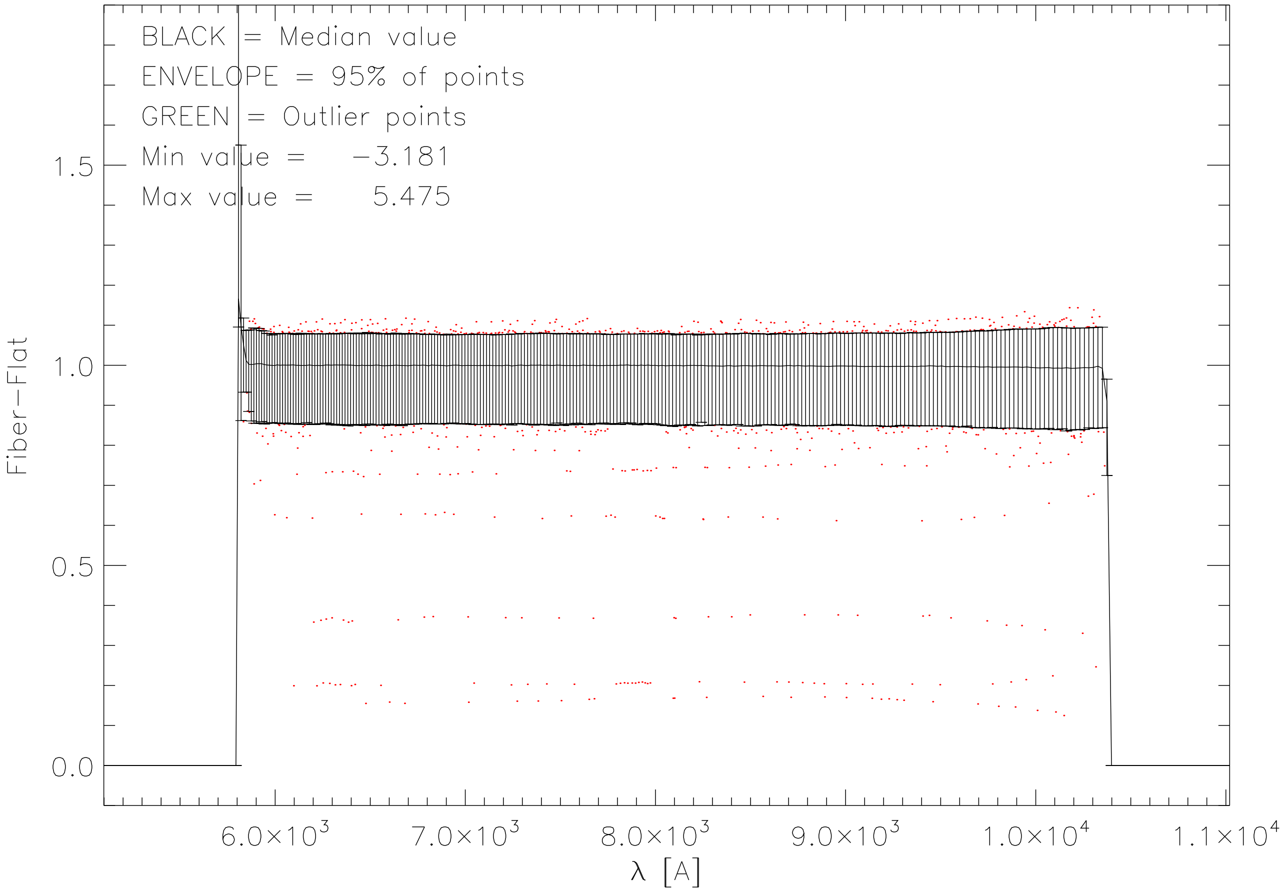
Number of sky fibers = 161



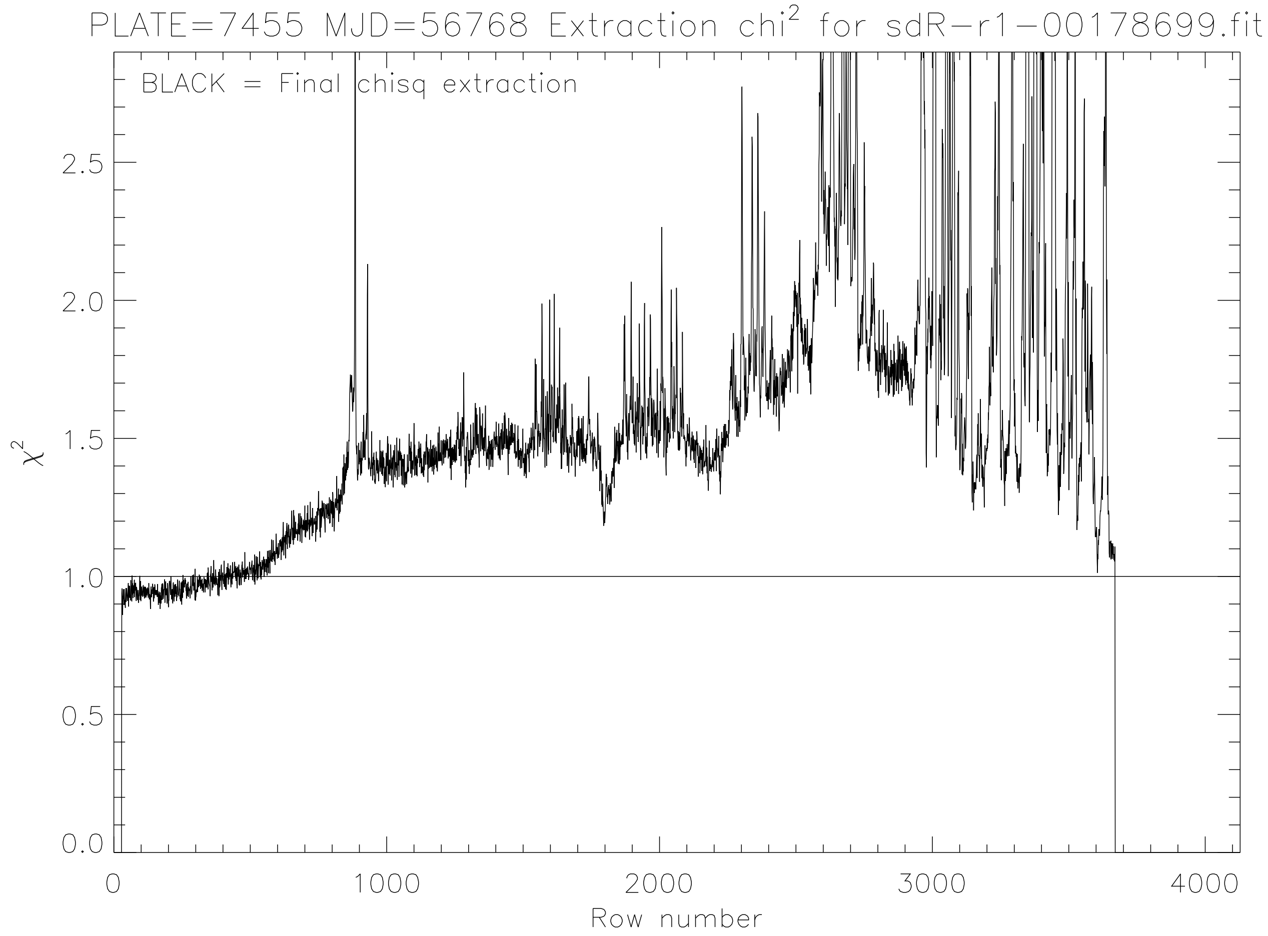

PLATE=7455 MJD=56768 sdR-r1-00178698.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2800
2600
2400
2200
2000
1800
1600
RED = sky fiber
Dispersion = 3.02 %
0
100
200
300
400
500
Fiber number
Flux (7343.0)/Airmass
2800
2600
2400
2200
2000
1800
1600
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2800
2600
2400
2200
2000
1800
1600
1.14
1.15
1.16
1.17
1.18
Airmass

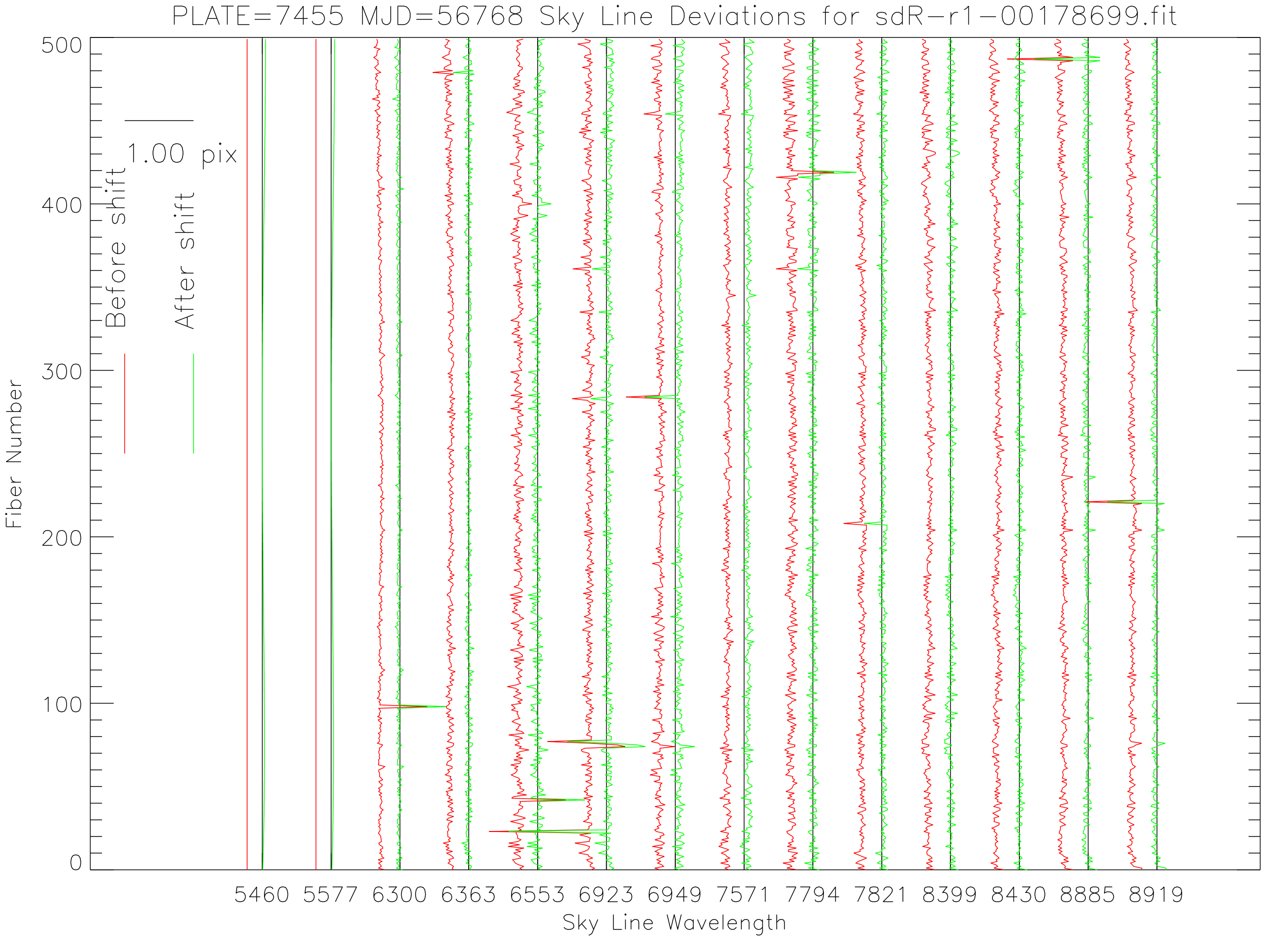

PLATE=7455 MJD=56768 sdR-r1-00178698.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
7400
7200
7000
6800
6600
6400
6200
RED = sky fiber
Dispersion = 1.22 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.14
1.15
1.16
1.17
1.18
Airmass

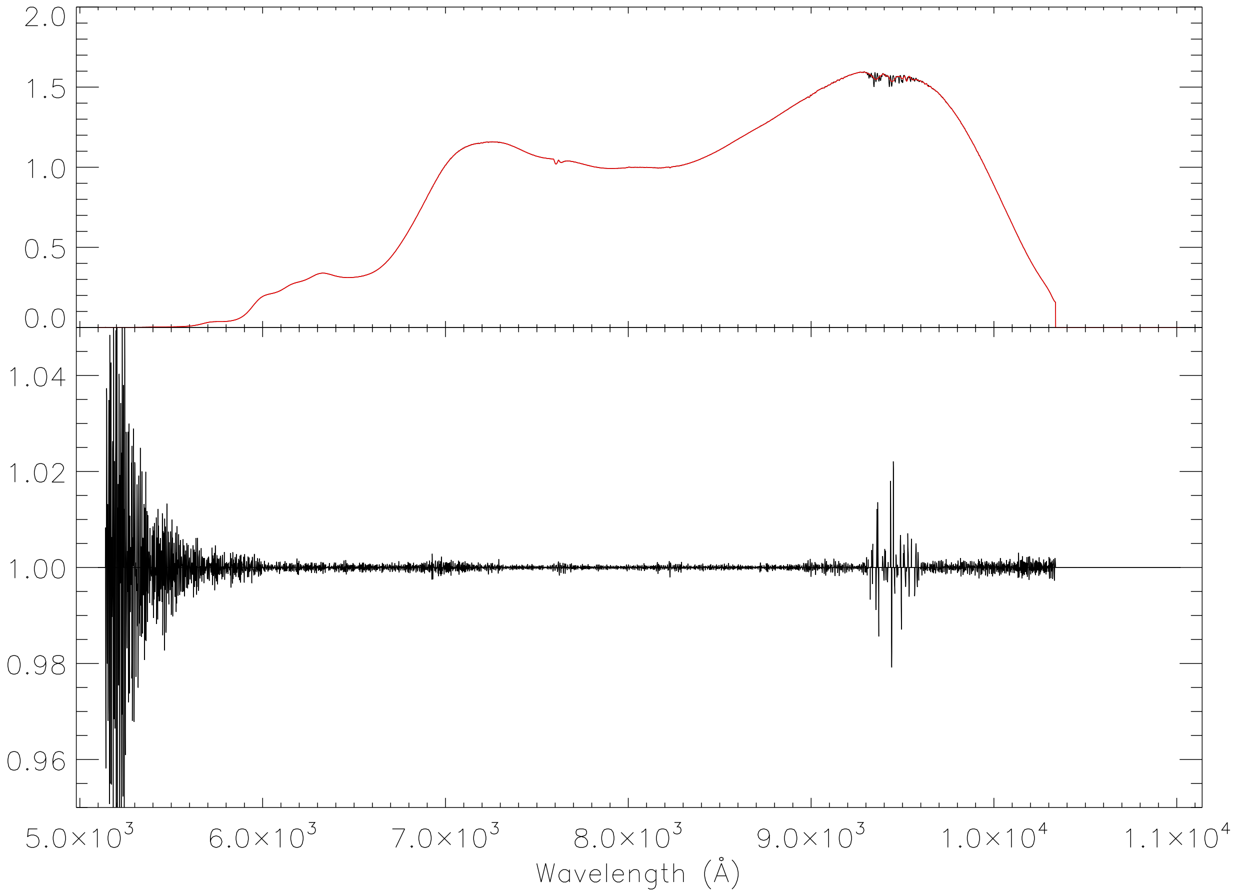
PLATE=7455 MJD=56768 Fiber−Flats for sdR−r1−00178696.fit



Wed Jul 30 20:19:13 2014

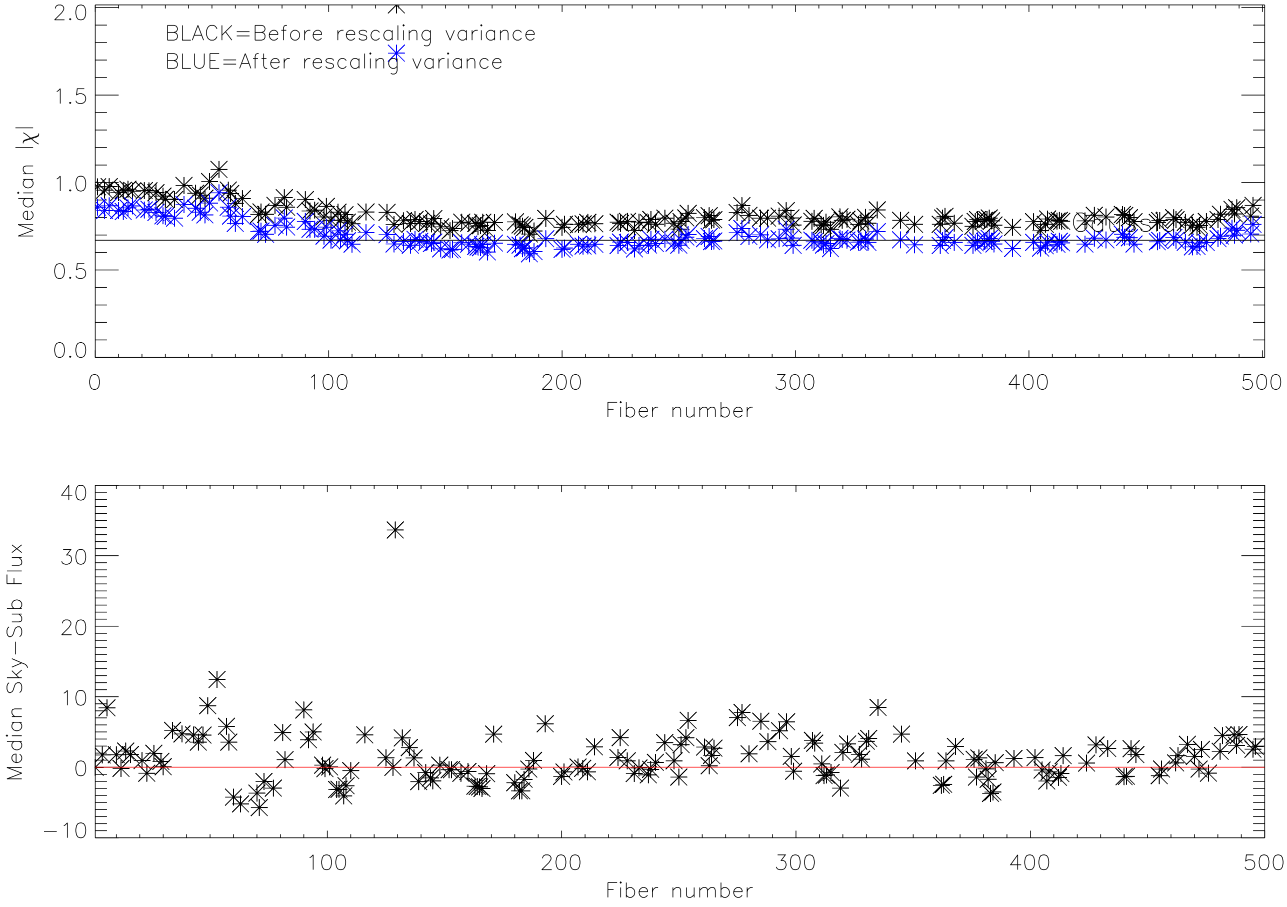

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r1-00178699.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number

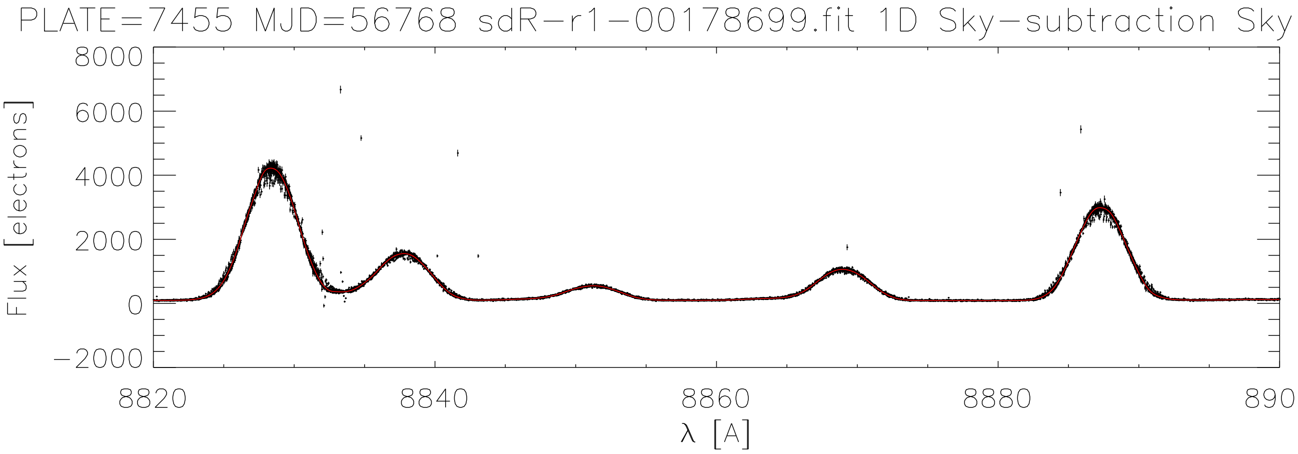

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r1-00178699.fit

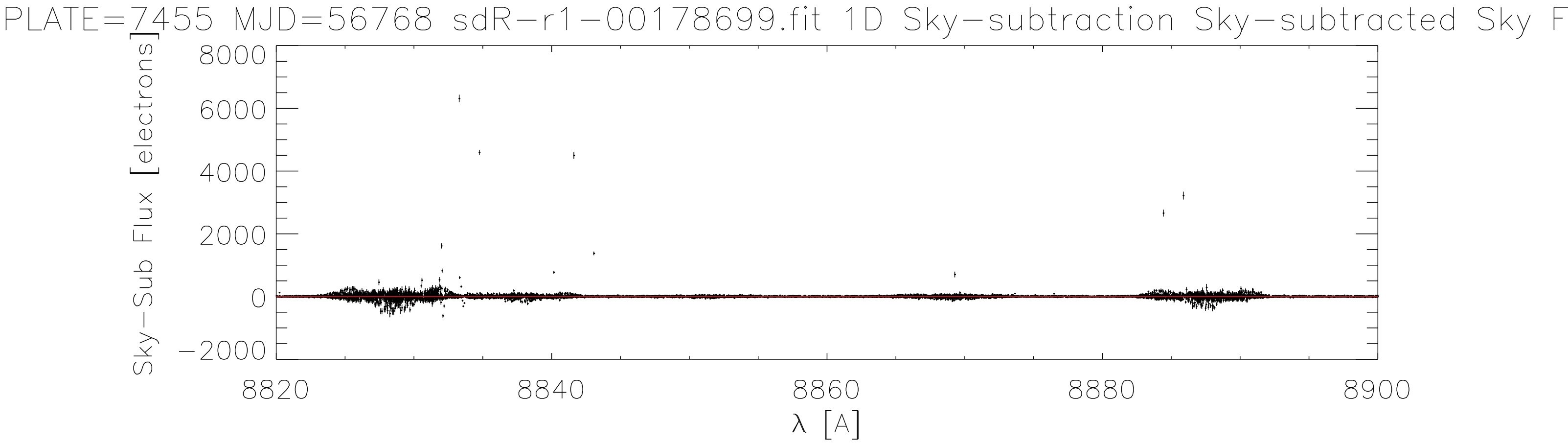


PLATE=7455 MJD=56768 Smooth superflat for sdR-r1-00178699.fit

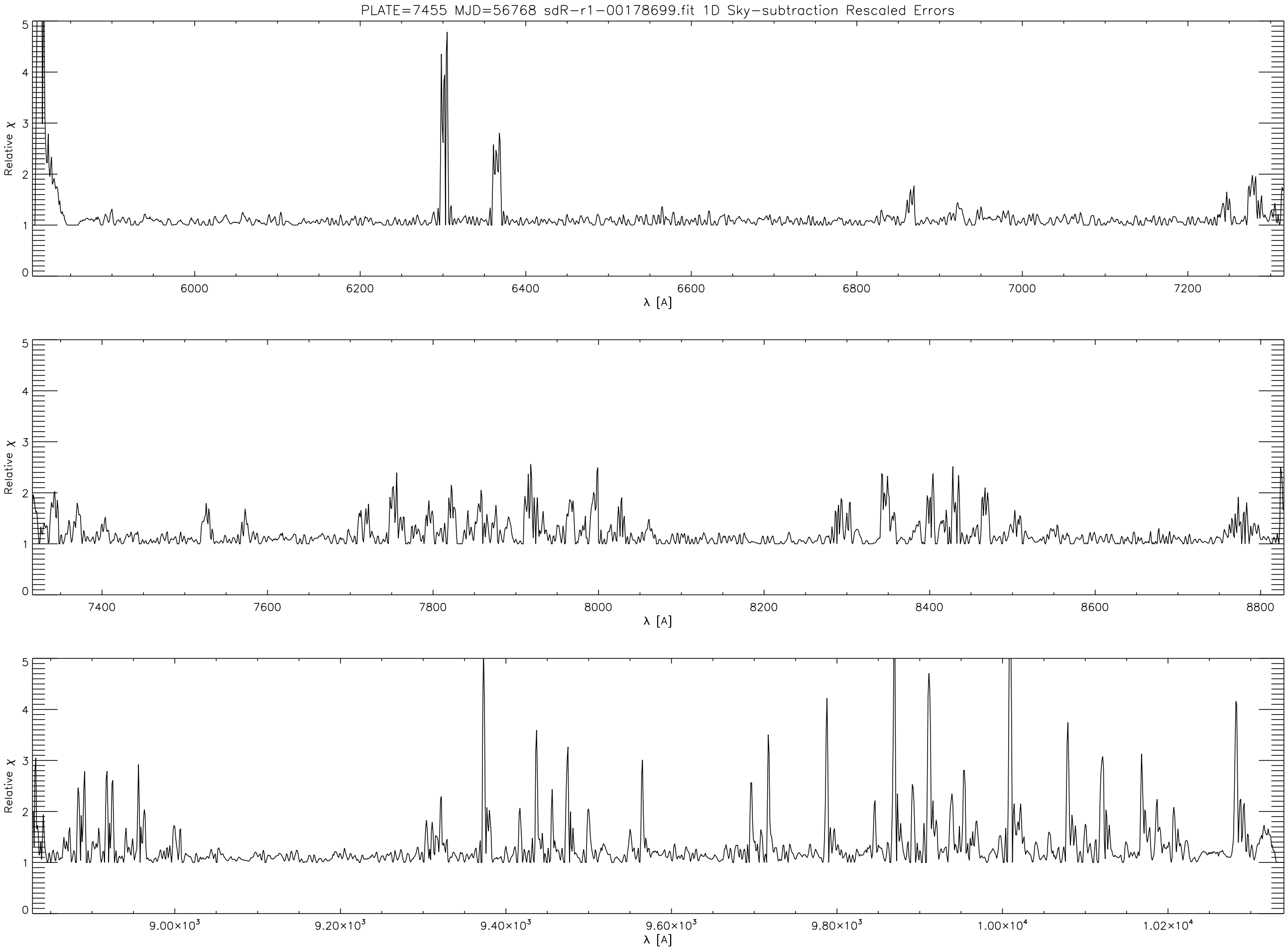
PLATE=7455 MJD=56768 sdR-r1-00178699.fit 1D Sky-subtraction Sky Fibers



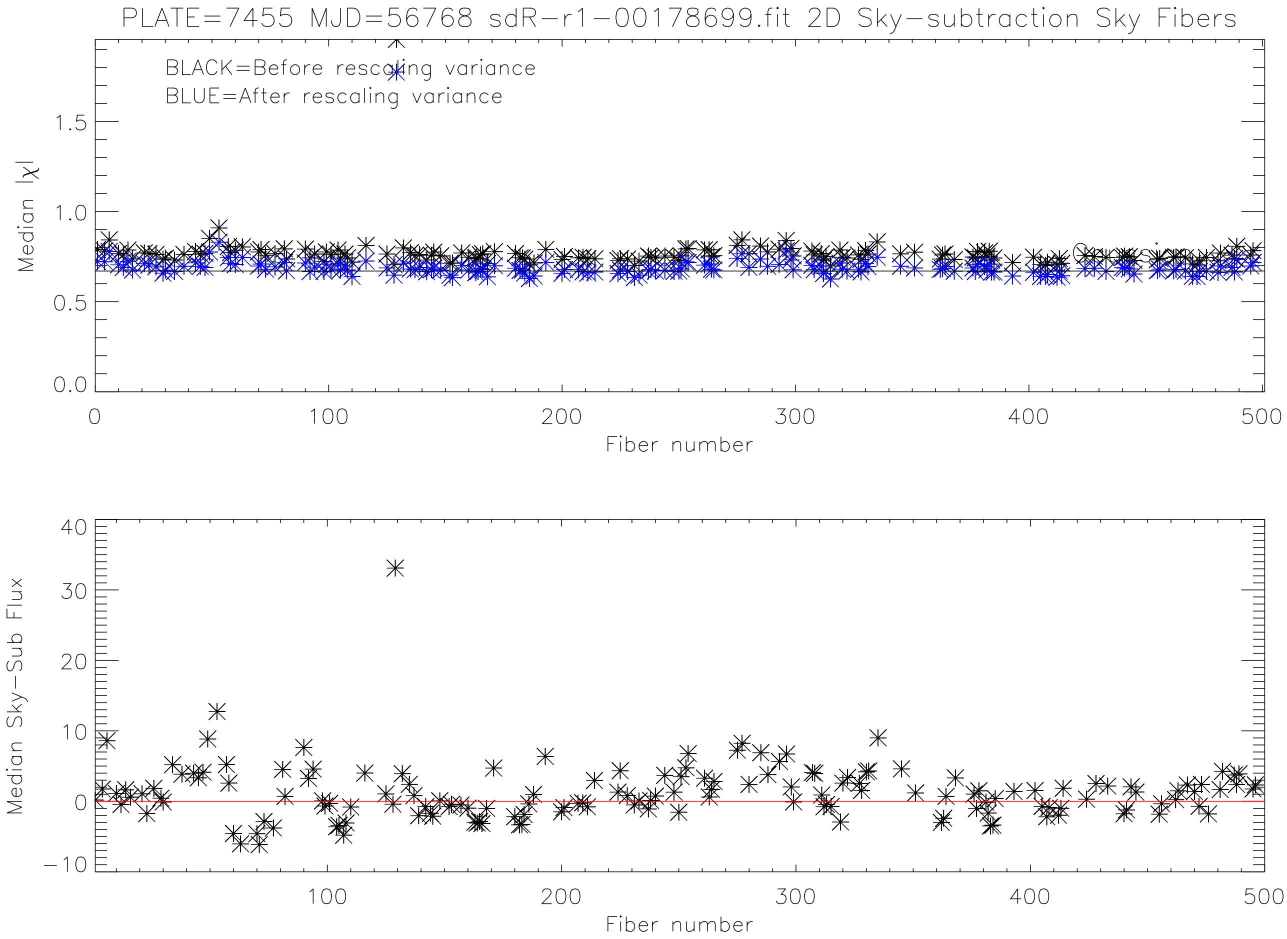

PLATE=7455 MJD=56768 sdR-r1-00178699.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

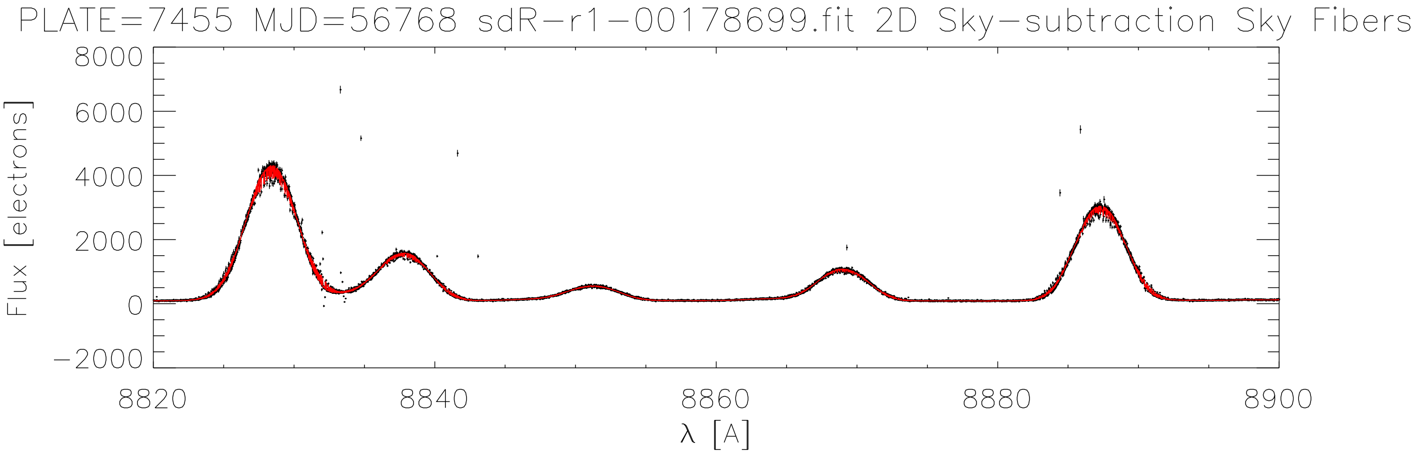

PLATE=7455 MJD=56768 sdR-r1-00178699.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

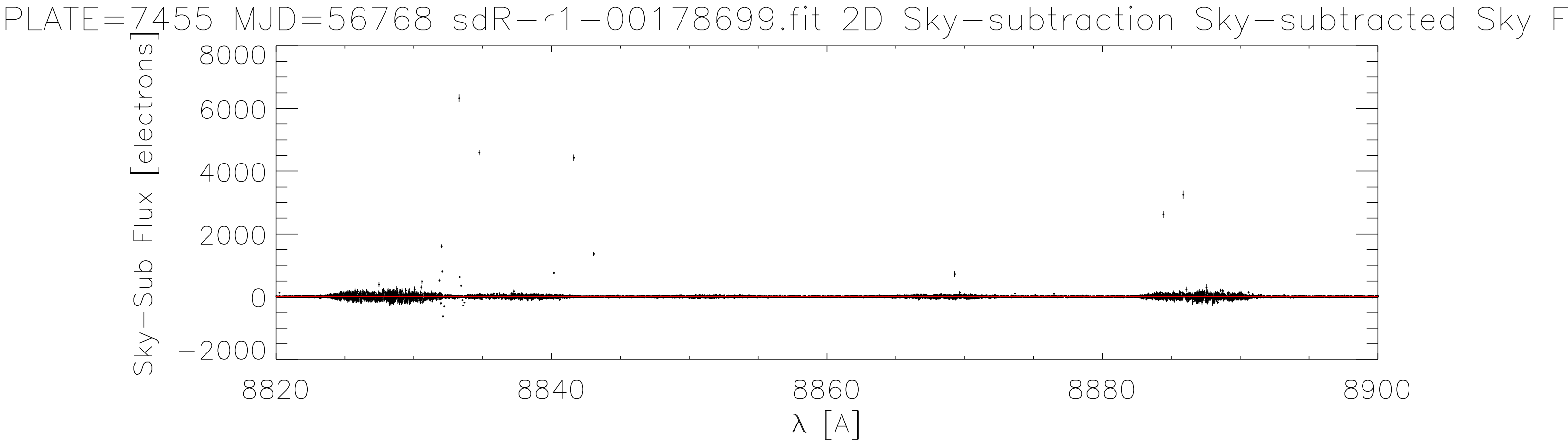
Number of sky fibers = 161



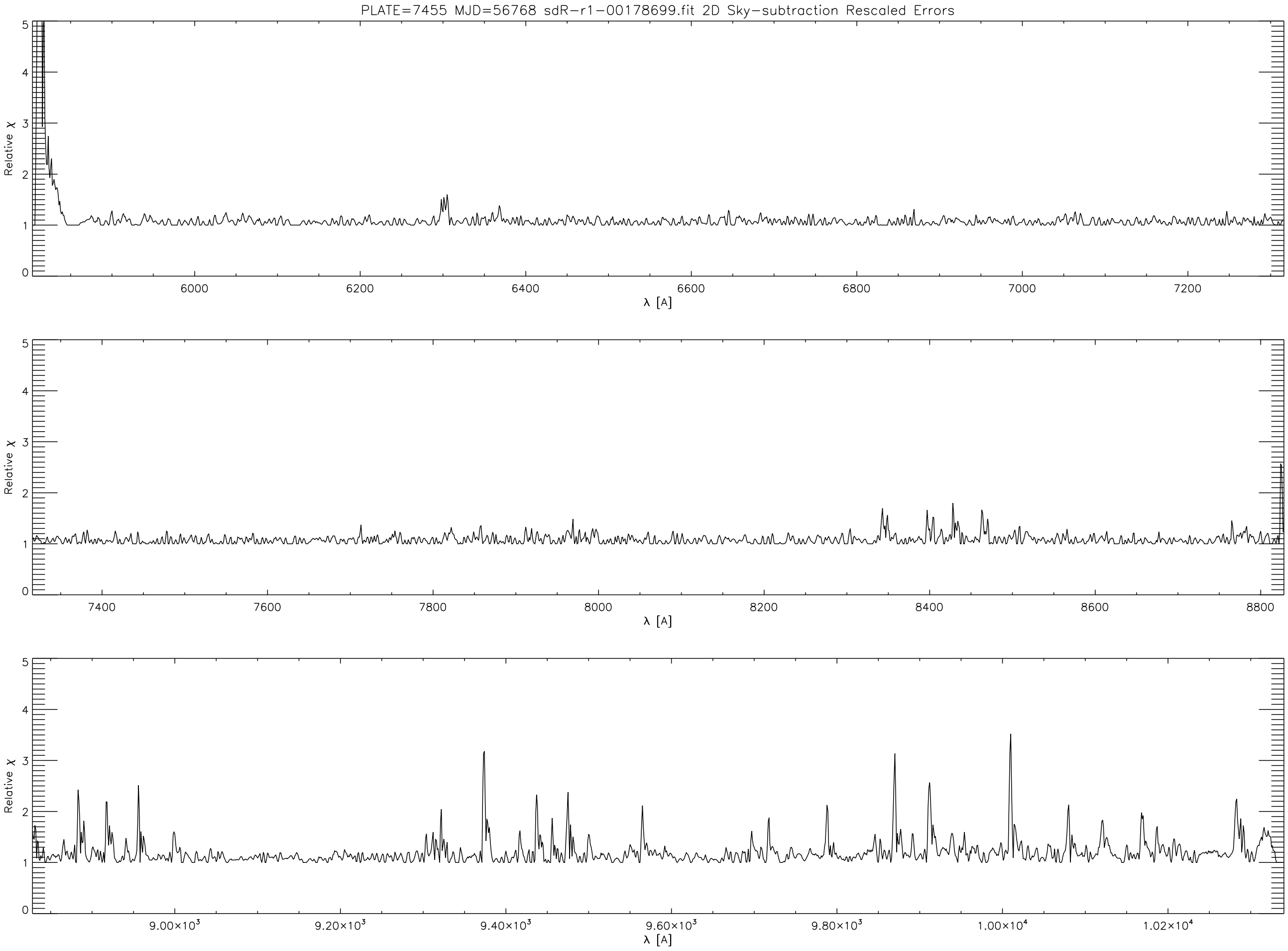
PLATE=7455 MJD=56768 sdR-r1-00178699.fit 1D Sky-subtraction Rescaled Errors


PLATE=7455 MJD=56768 sdR-r1-00178699.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.5
1.0
1.5
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−10
0
10
20
30
40
100
200
300
400
500
Fiber number

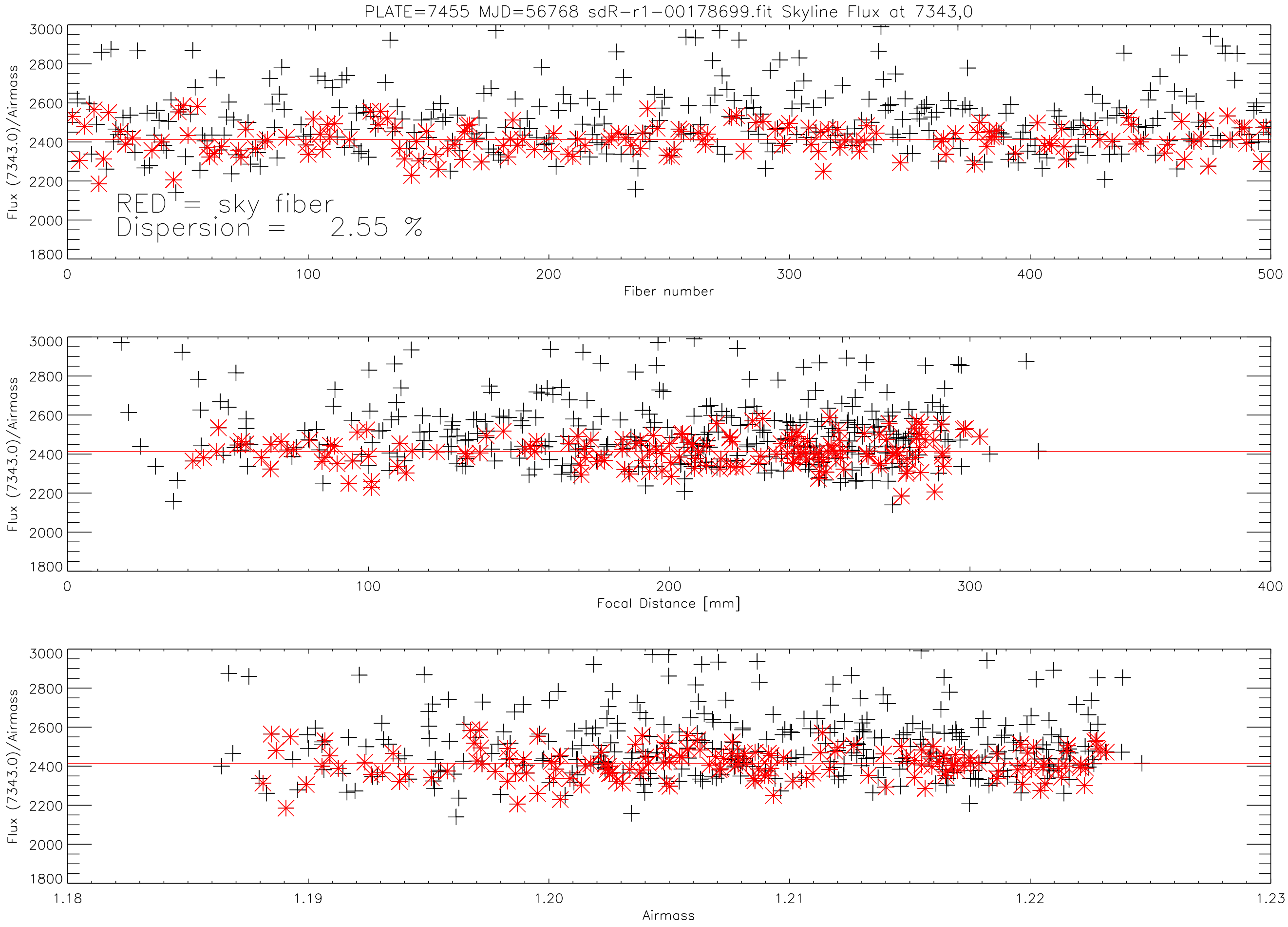

PLATE=7455 MJD=56768 sdR-r1-00178699.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

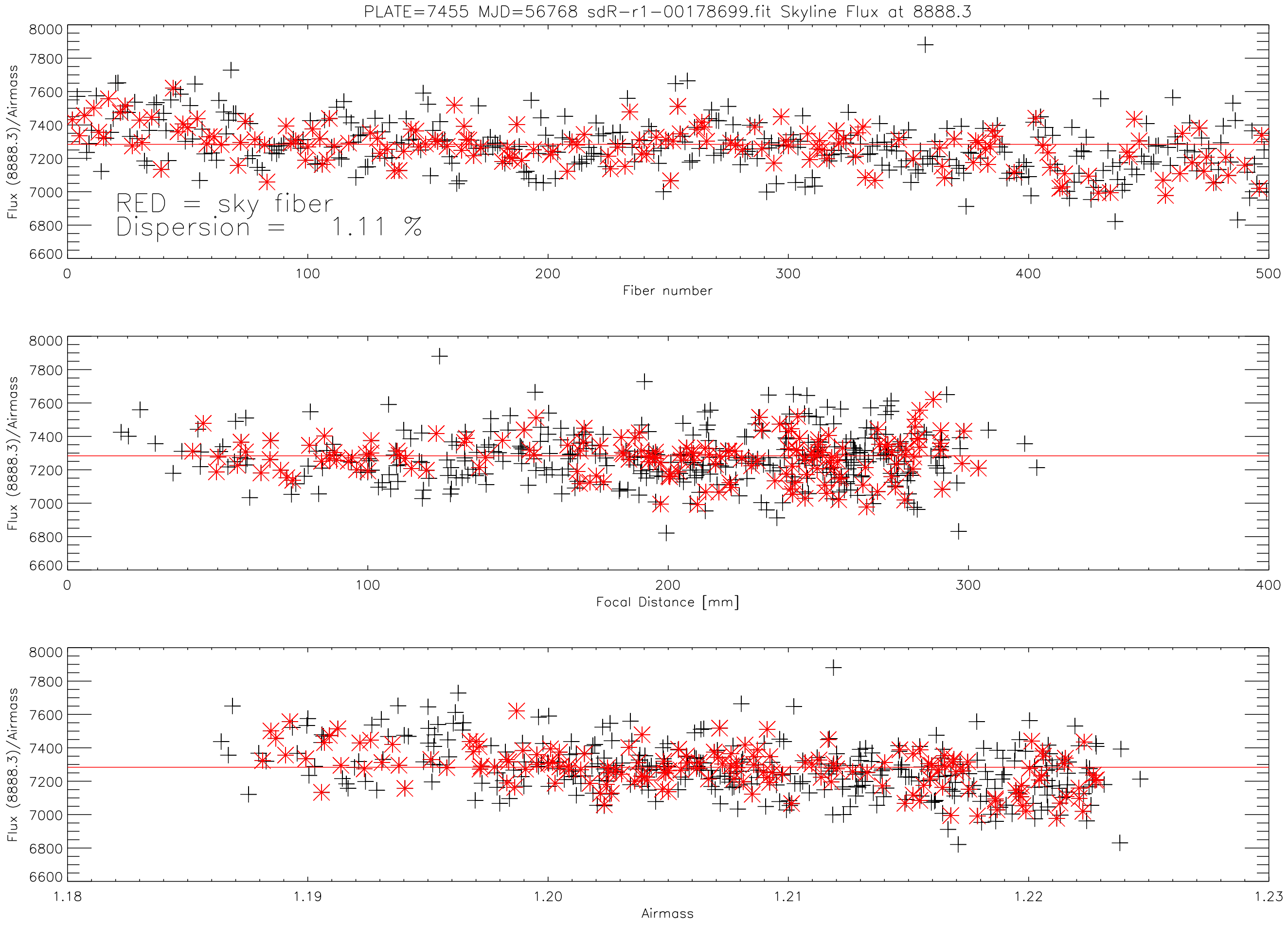

PLATE=7455 MJD=56768 sdR-r1-00178699.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
−2000
8820
8840
8860
8880
8900
λ [A]

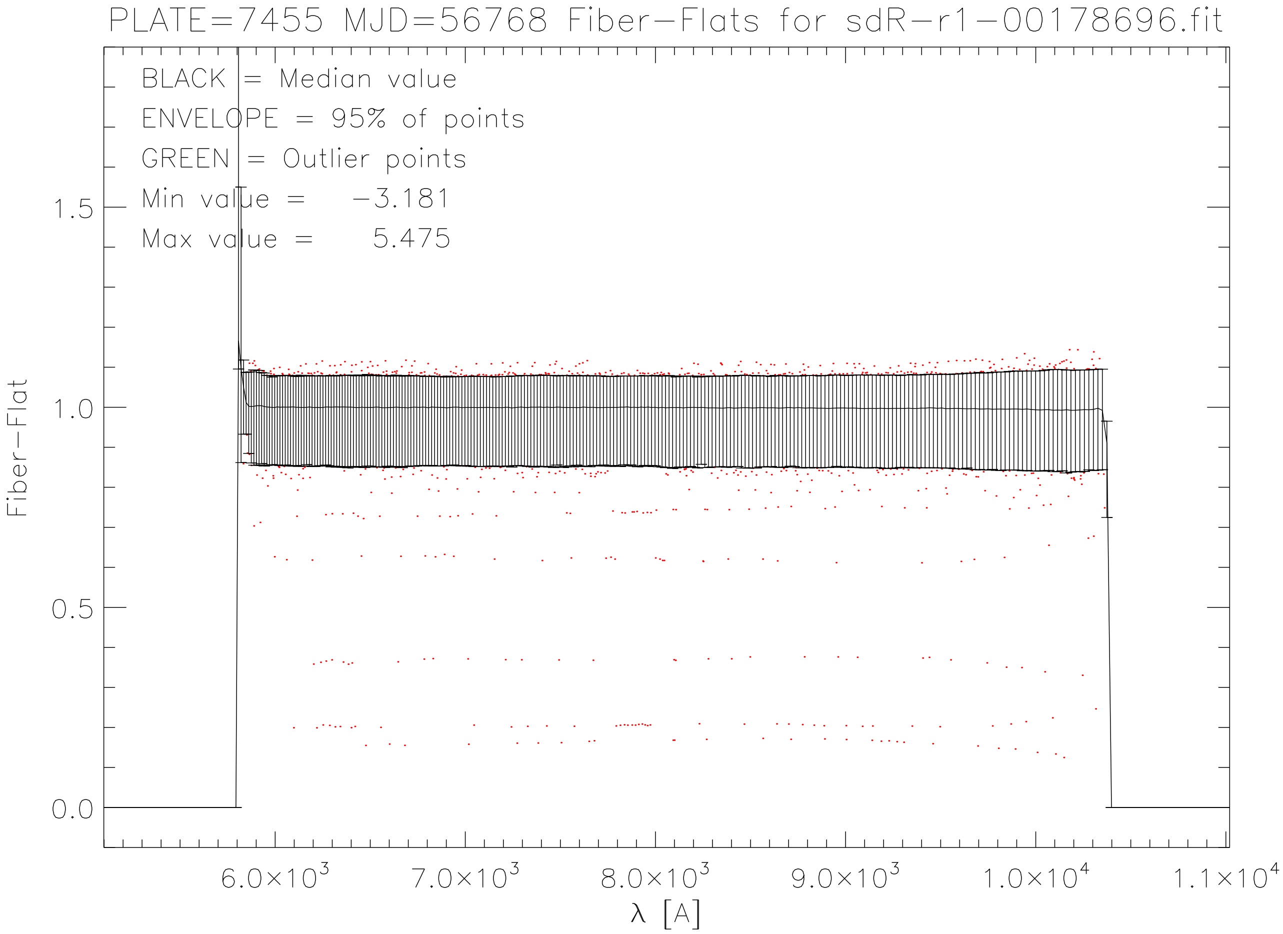
Number of sky fibers = 161



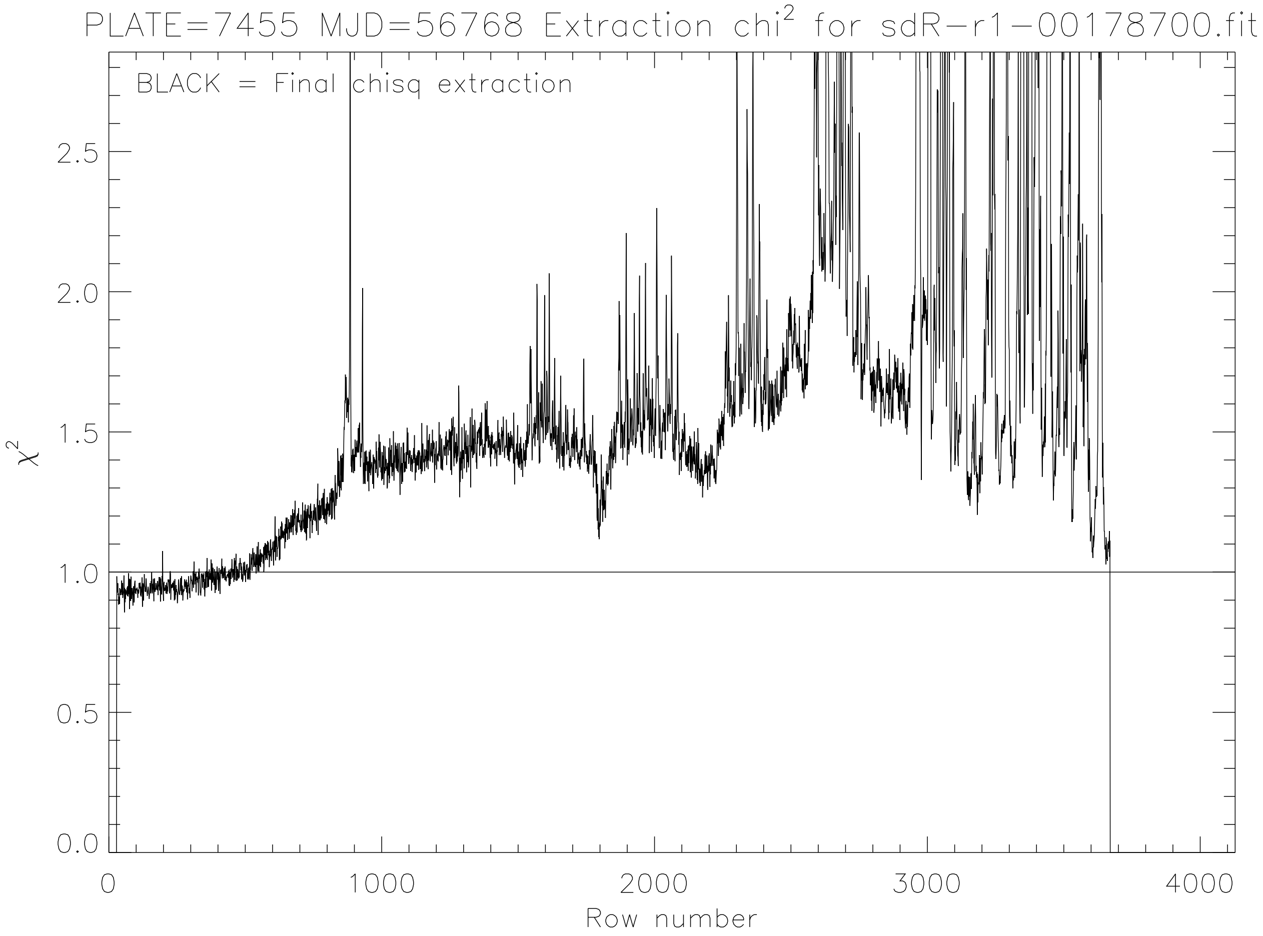
PLATE=7455 MJD=56768 sdR-r1-00178699.fit 2D Sky-subtraction Rescaled Errors

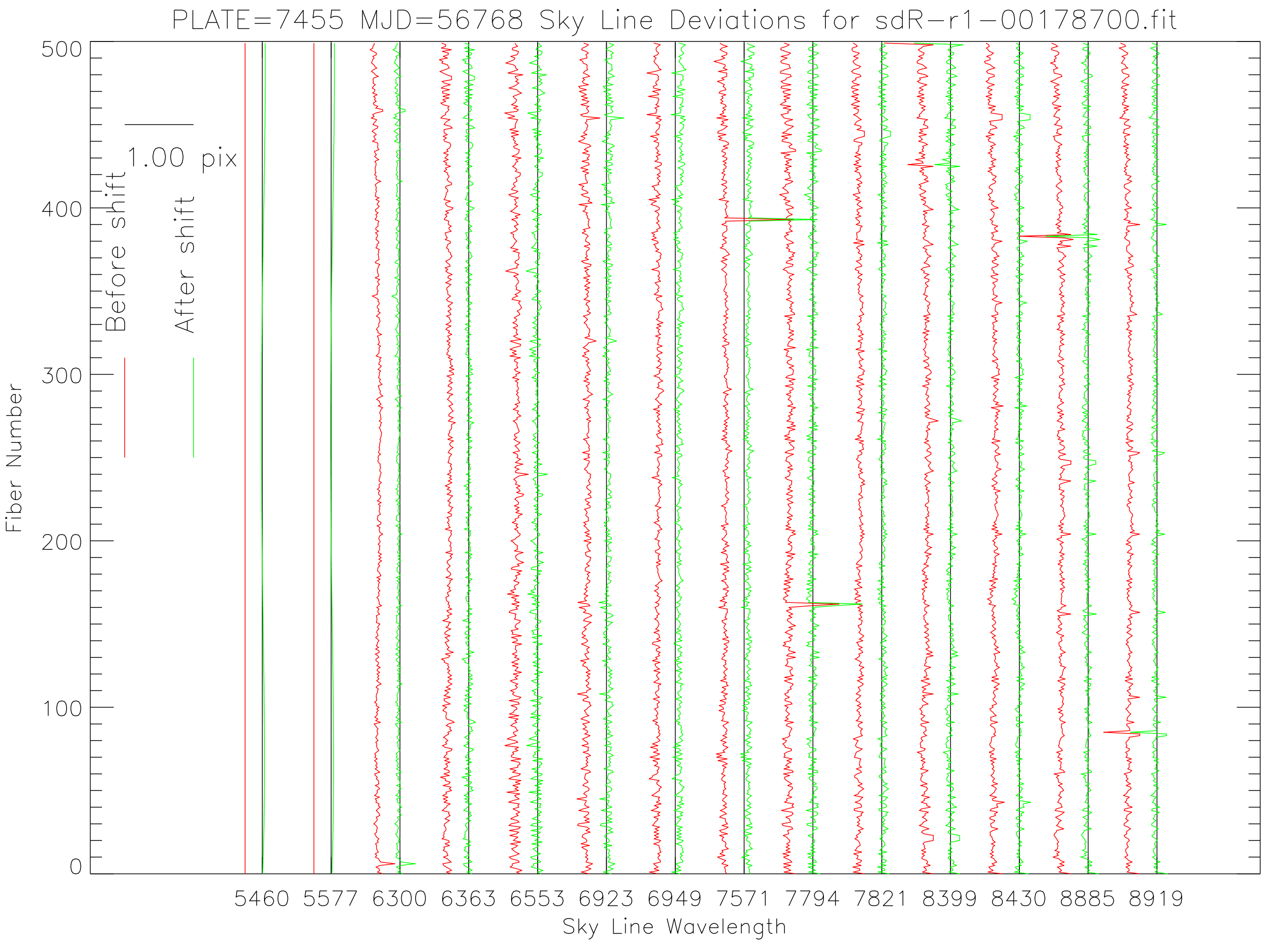

PLATE=7455 MJD=56768 sdR-r1-00178699.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.55 %
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
2000
1800
0
100
200
300
400
500
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.18
1.19
1.20
1.21
1.22
1.23
Airmass


PLATE=7455 MJD=56768 sdR-r1-00178699.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
8000
7800
7600
7400
7200
7000
6800
6600
RED = sky fiber
Dispersion = 1.11 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.18
1.19
1.20
1.21
1.22
1.23
Airmass

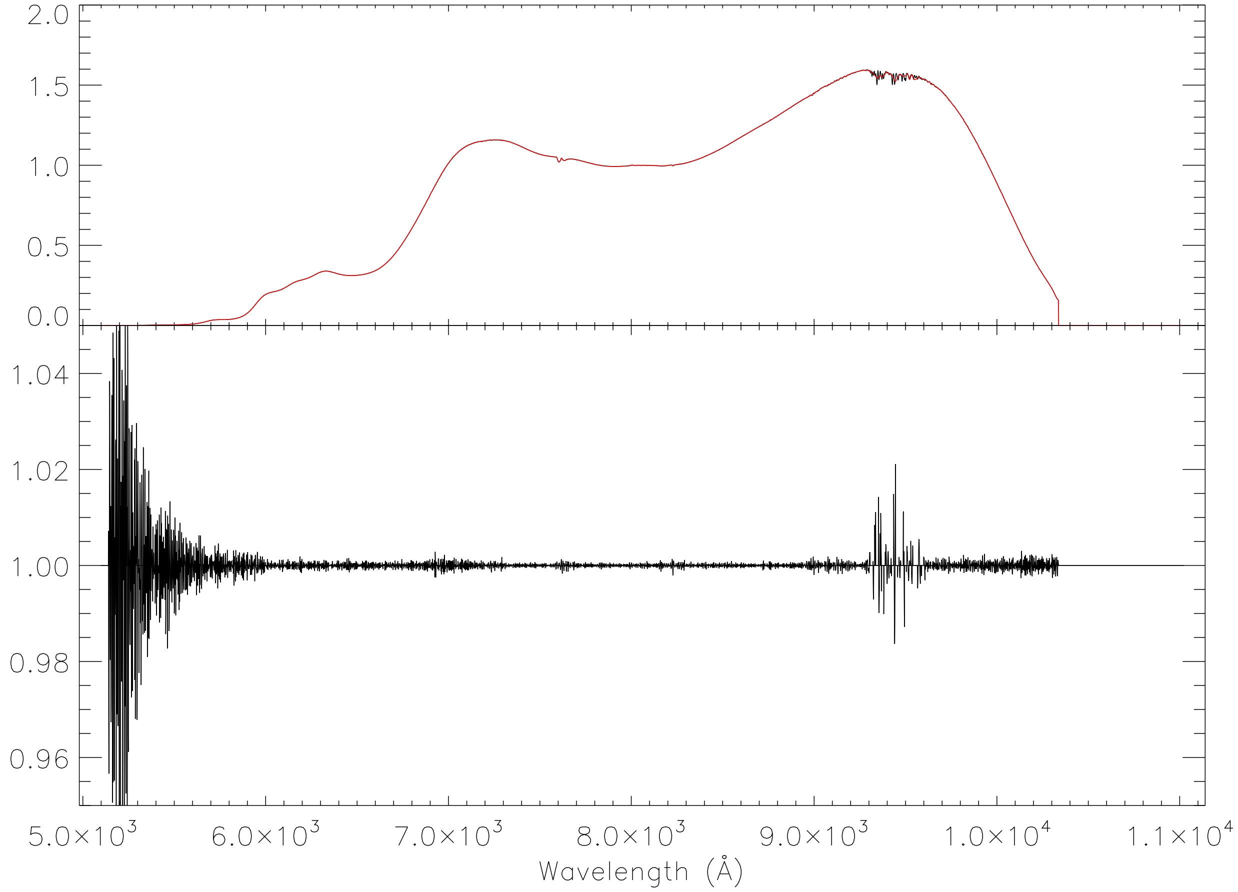


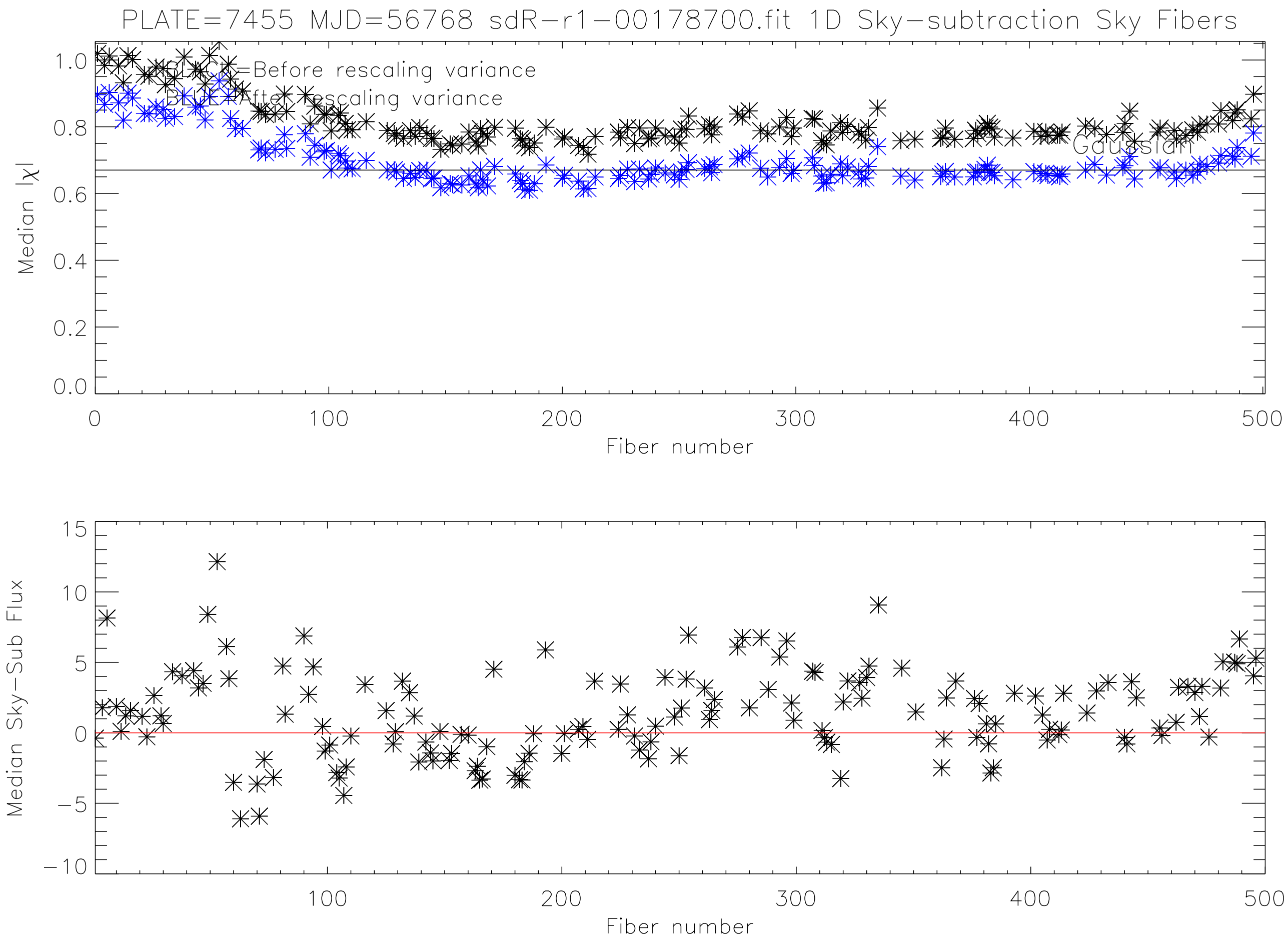
Wed Jul 30 20:33:57 2014

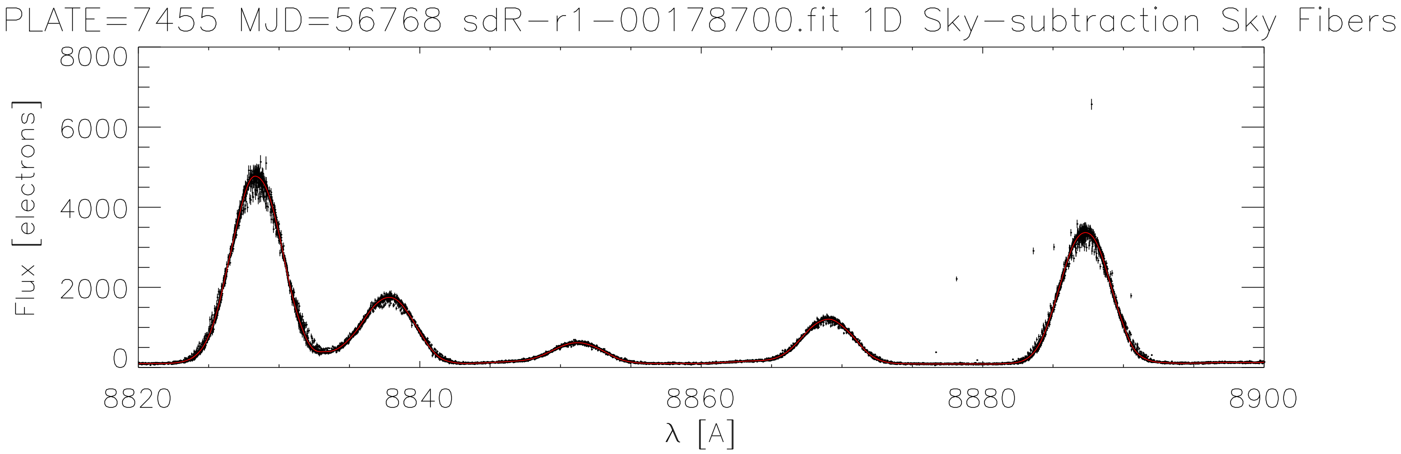

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r1-00178700.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number

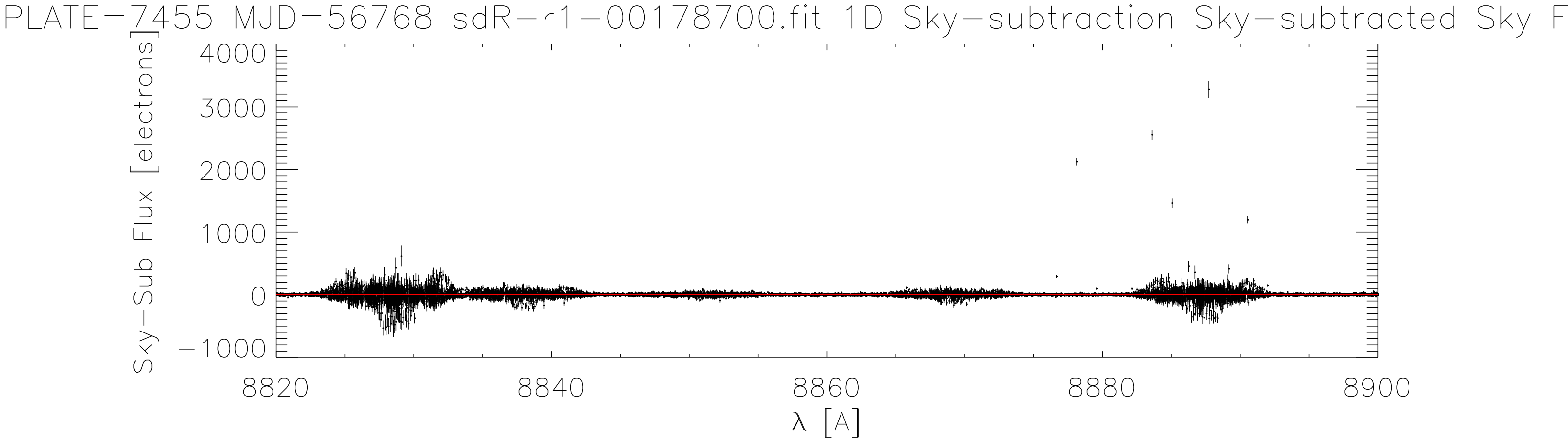

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r1-00178700.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919
Sky Line Wavelength

PLATE=7455 MJD=56768 Smooth superflat for sdR-r1-00178700.fit

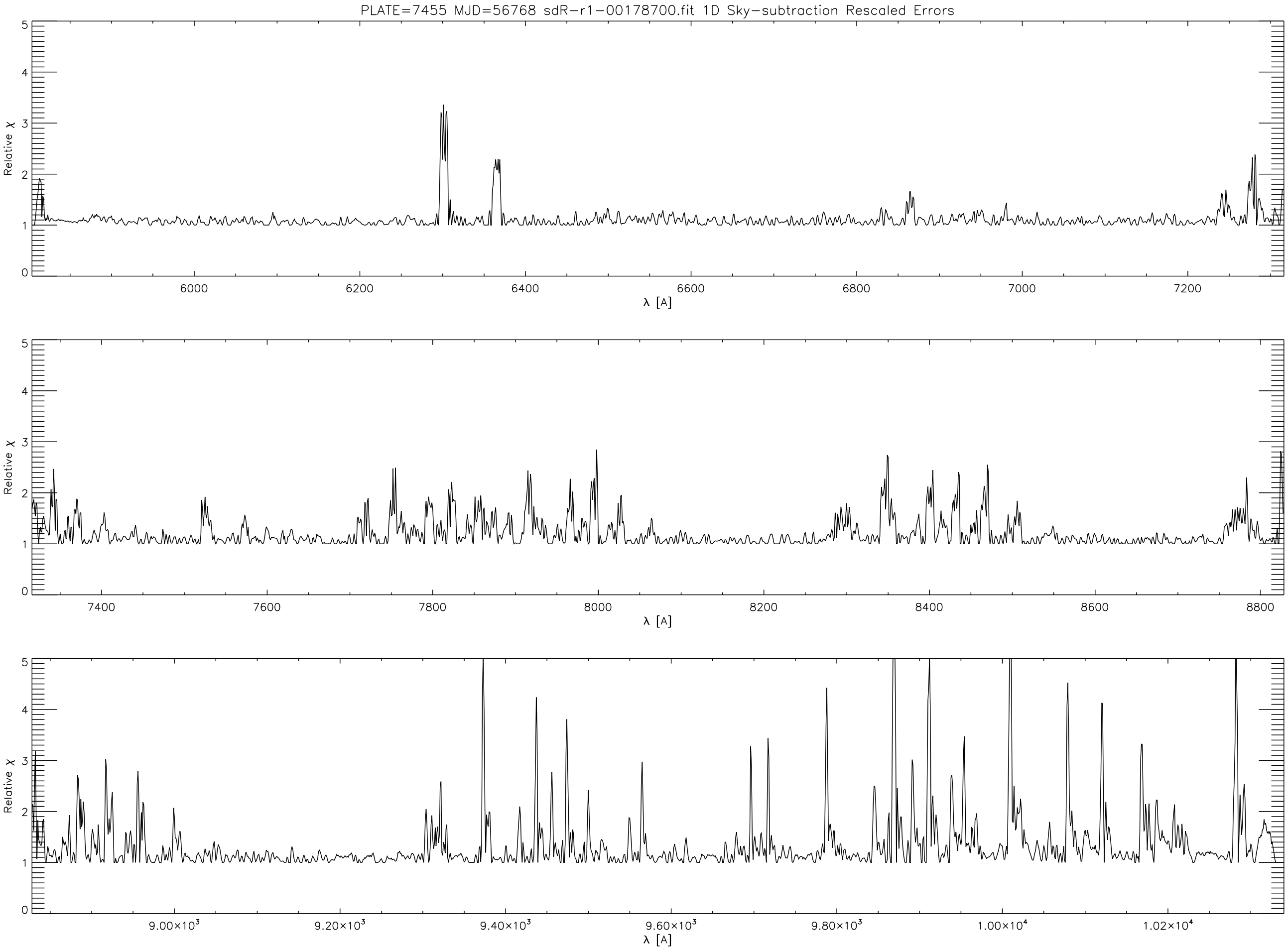


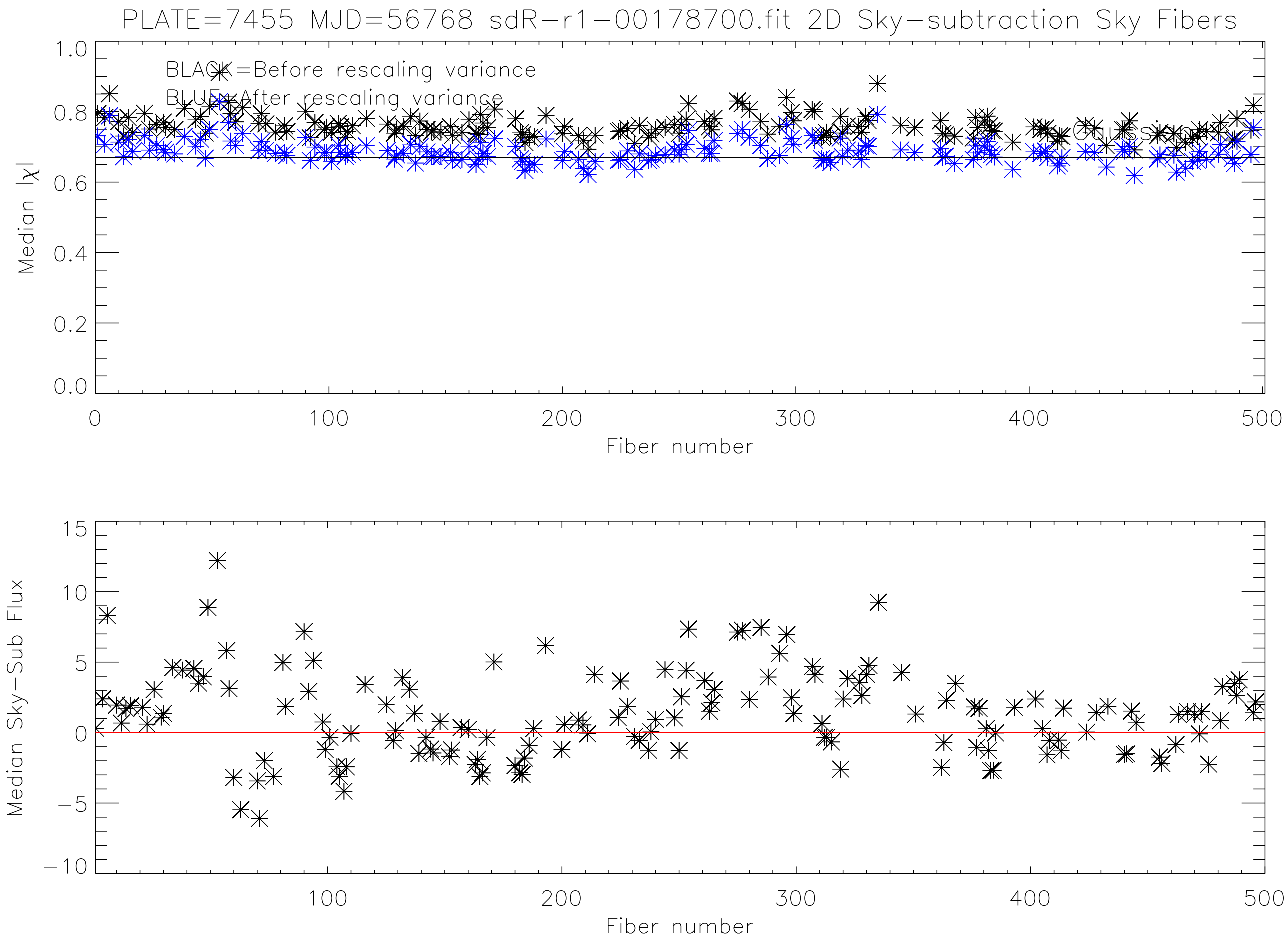

PLATE=7455 MJD=56768 sdR-r1-00178700.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
100
200
300
400
500
Fiber number

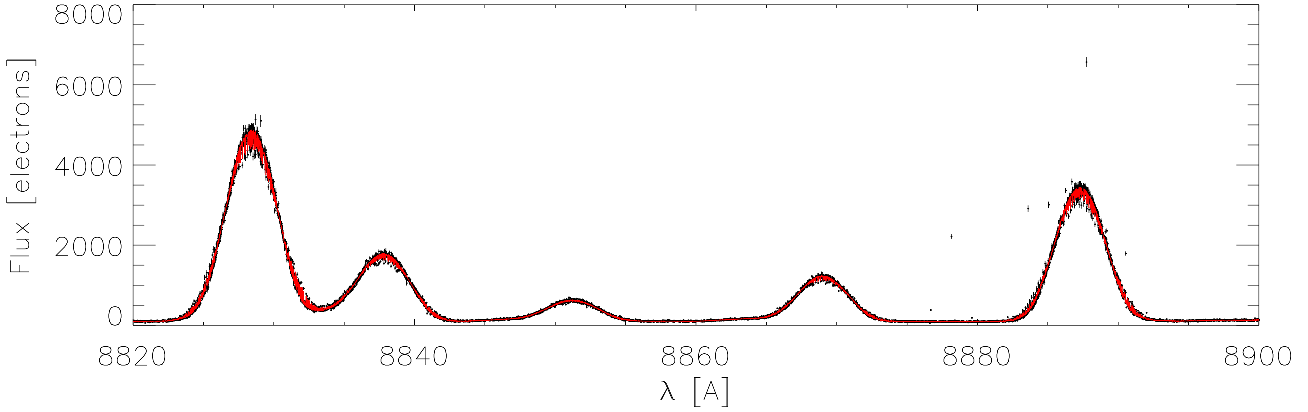

PLATE=7455 MJD=56768 sdR-r1-00178700.fit 1D Sky-subtraction Sky Fibers


PLATE=7455 MJD=56768 sdR-r1-00178700.fit 1D Sky-subtraction Sky-subtracted Sky F

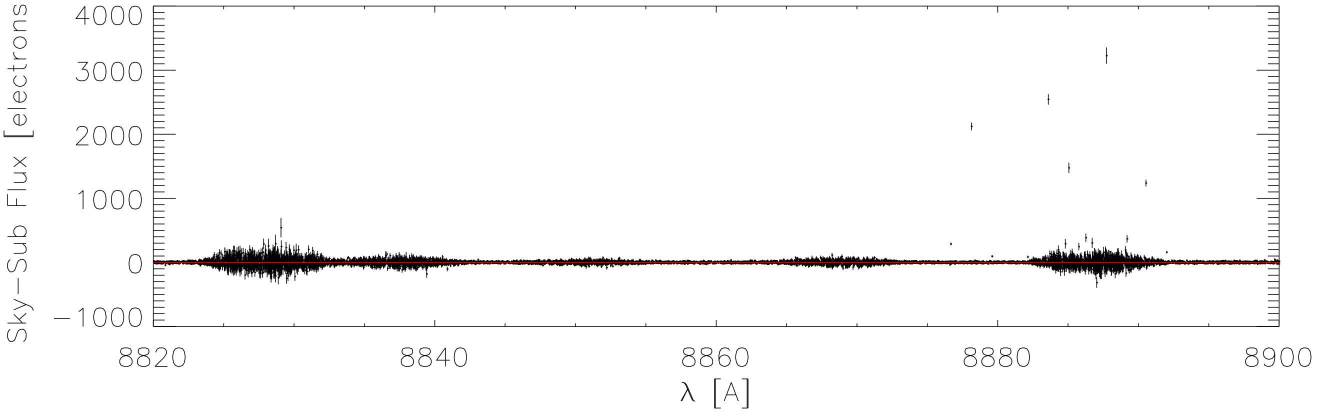
Number of sky fibers = 161




PLATE=7455 MJD=56768 sdR-r1-00178700.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
15
100
200
300
400
500
Fiber number



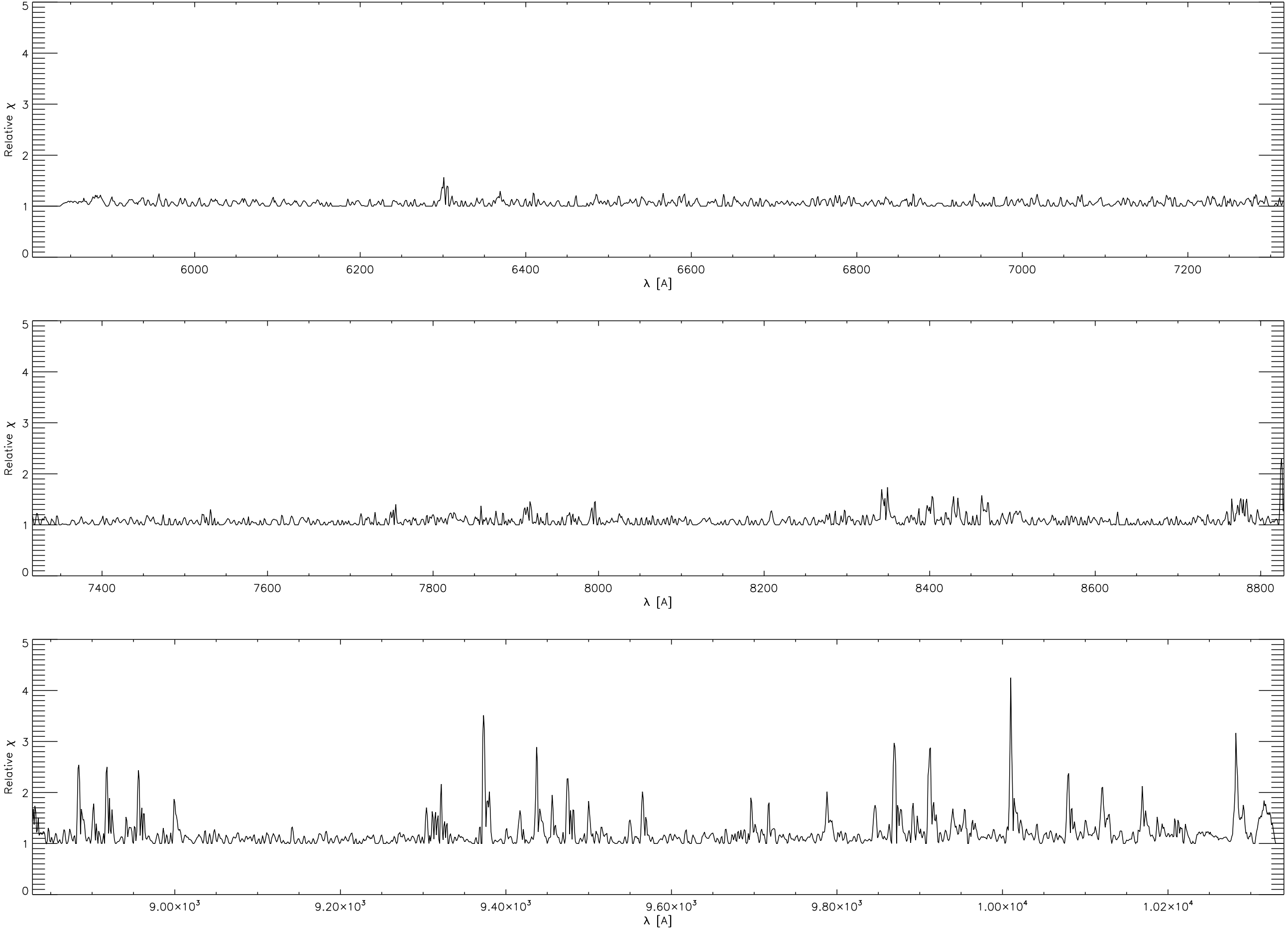
PLATE=7455 MJD=56768 sdR-r1-00178700.fit 2D Sky-subtraction Sky Fibers

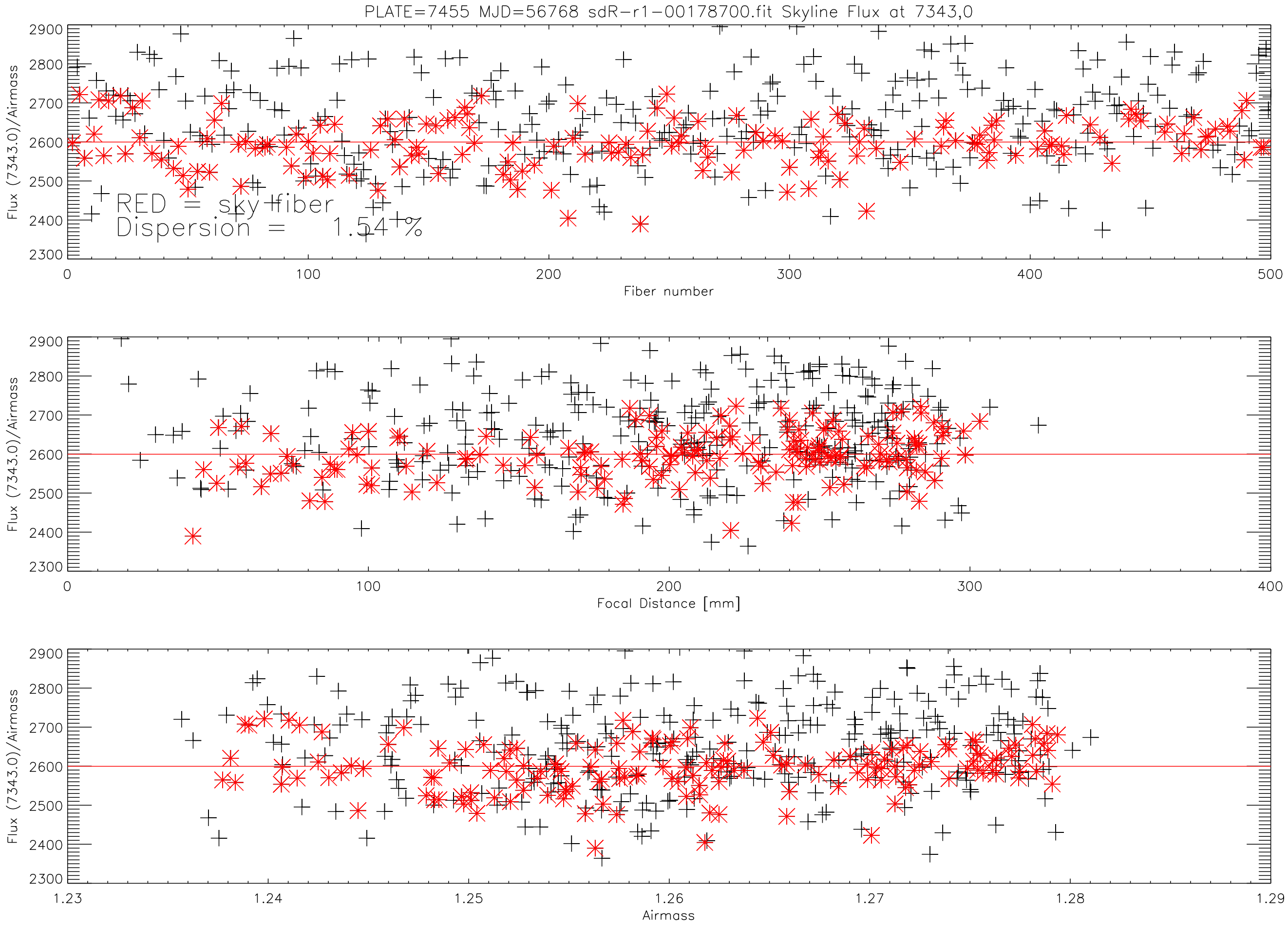


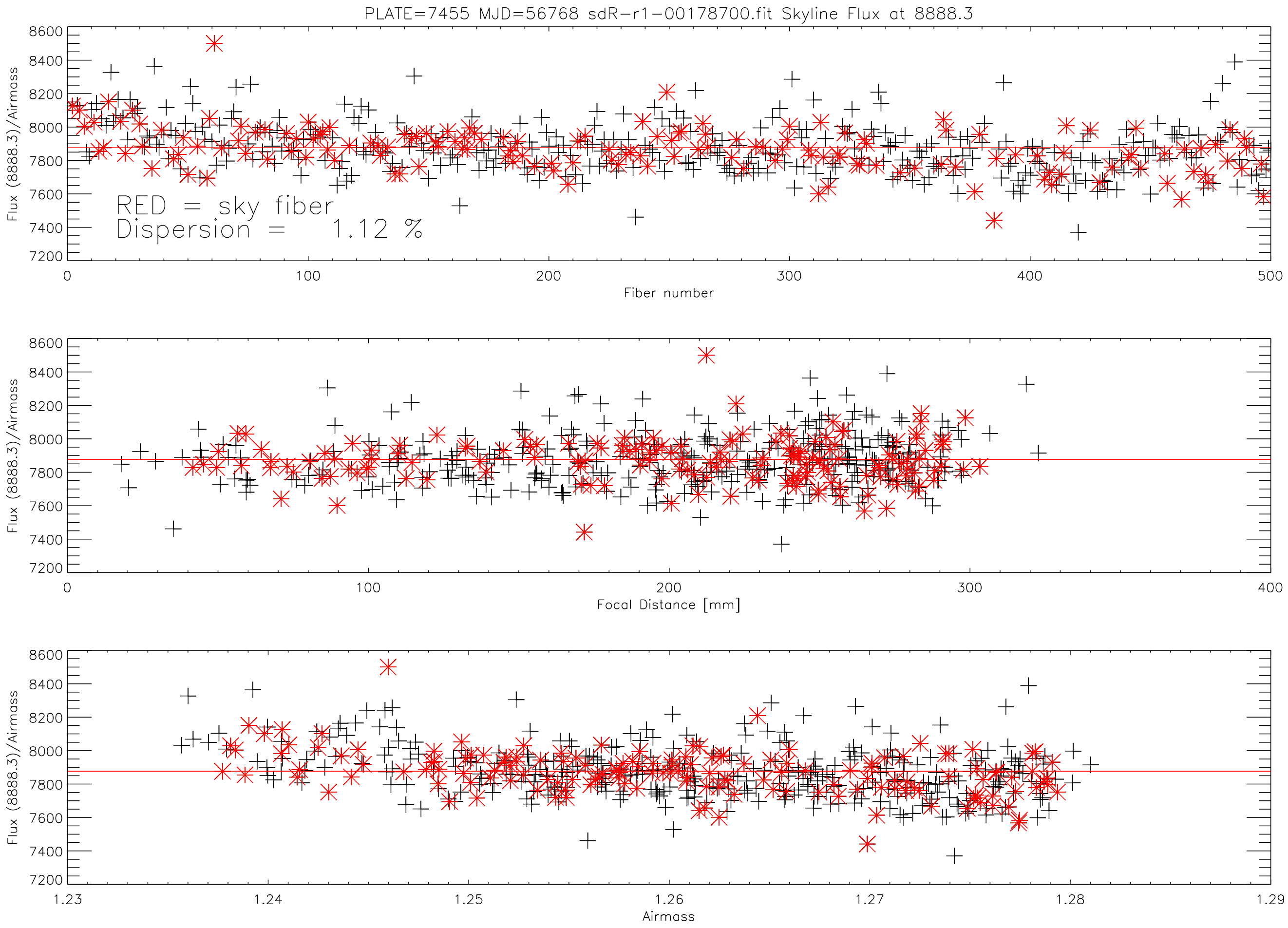
PLATE=7455 MJD=56768 sdR-r1-00178700.fit 2D Sky-subtraction Sky-subtracted Sky F

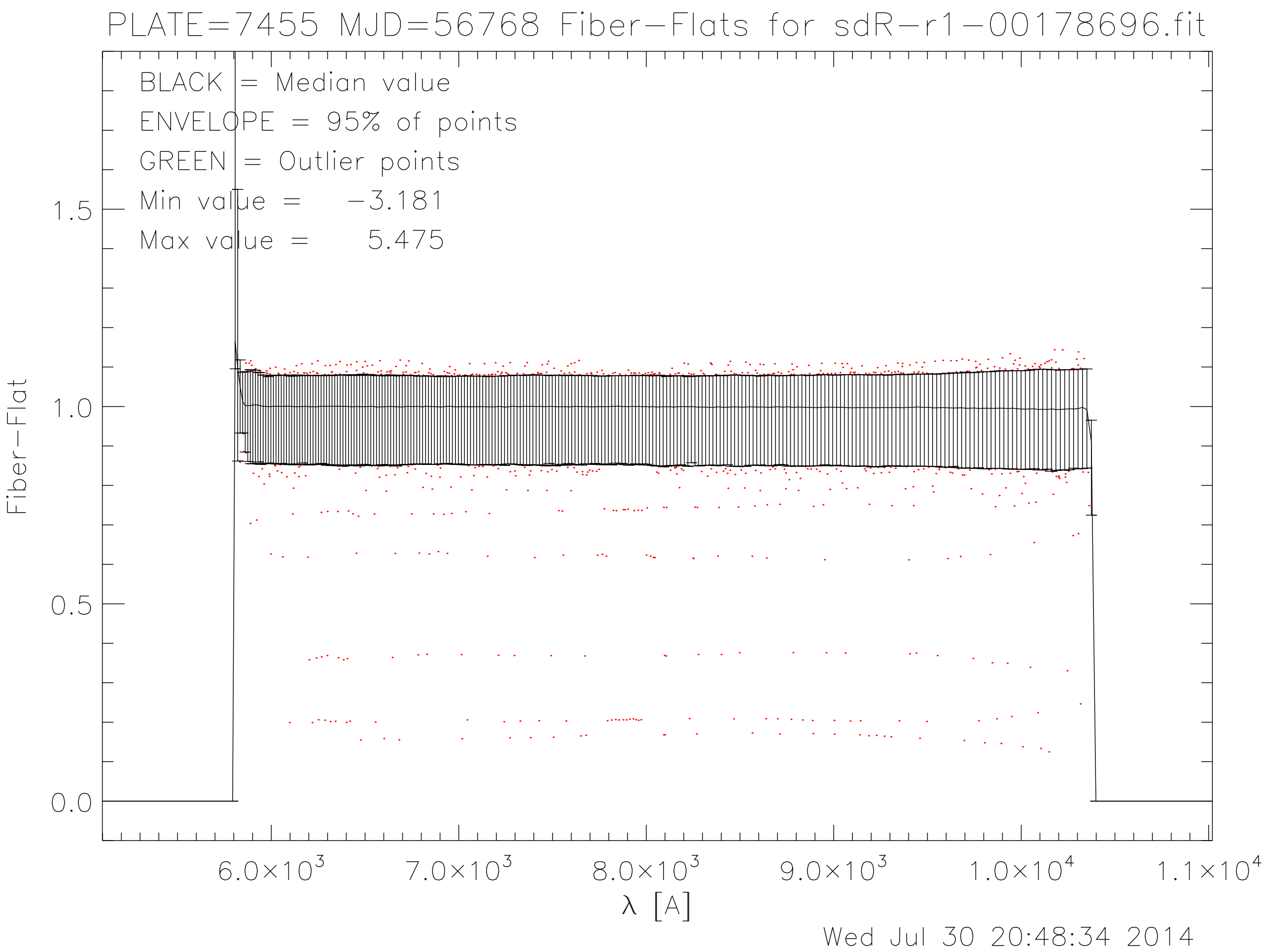
Number of sky fibers = 161

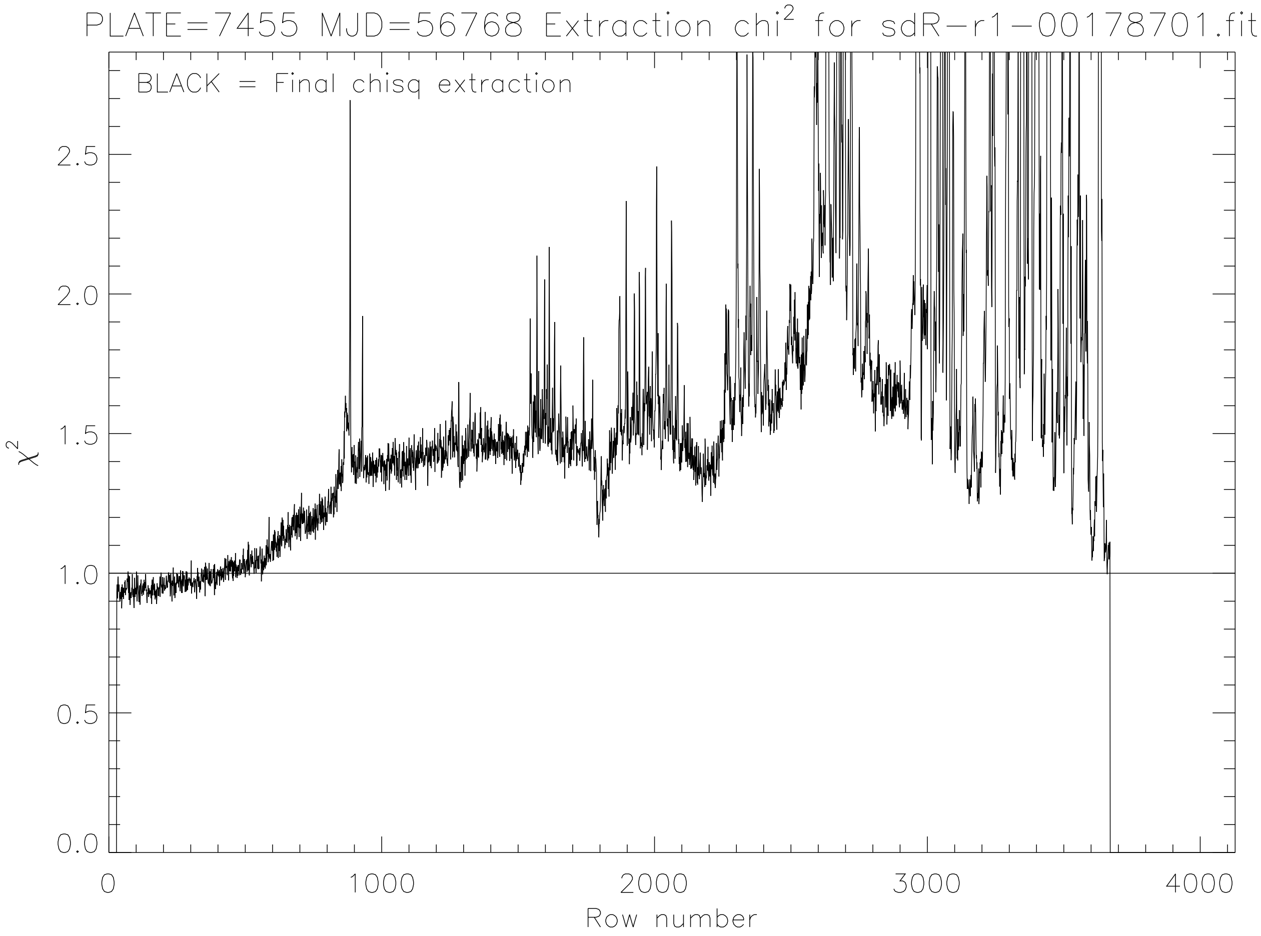
PLATE=7455 MJD=56768 sdR-r1-00178700.fit 2D Sky-subtraction Rescaled Errors

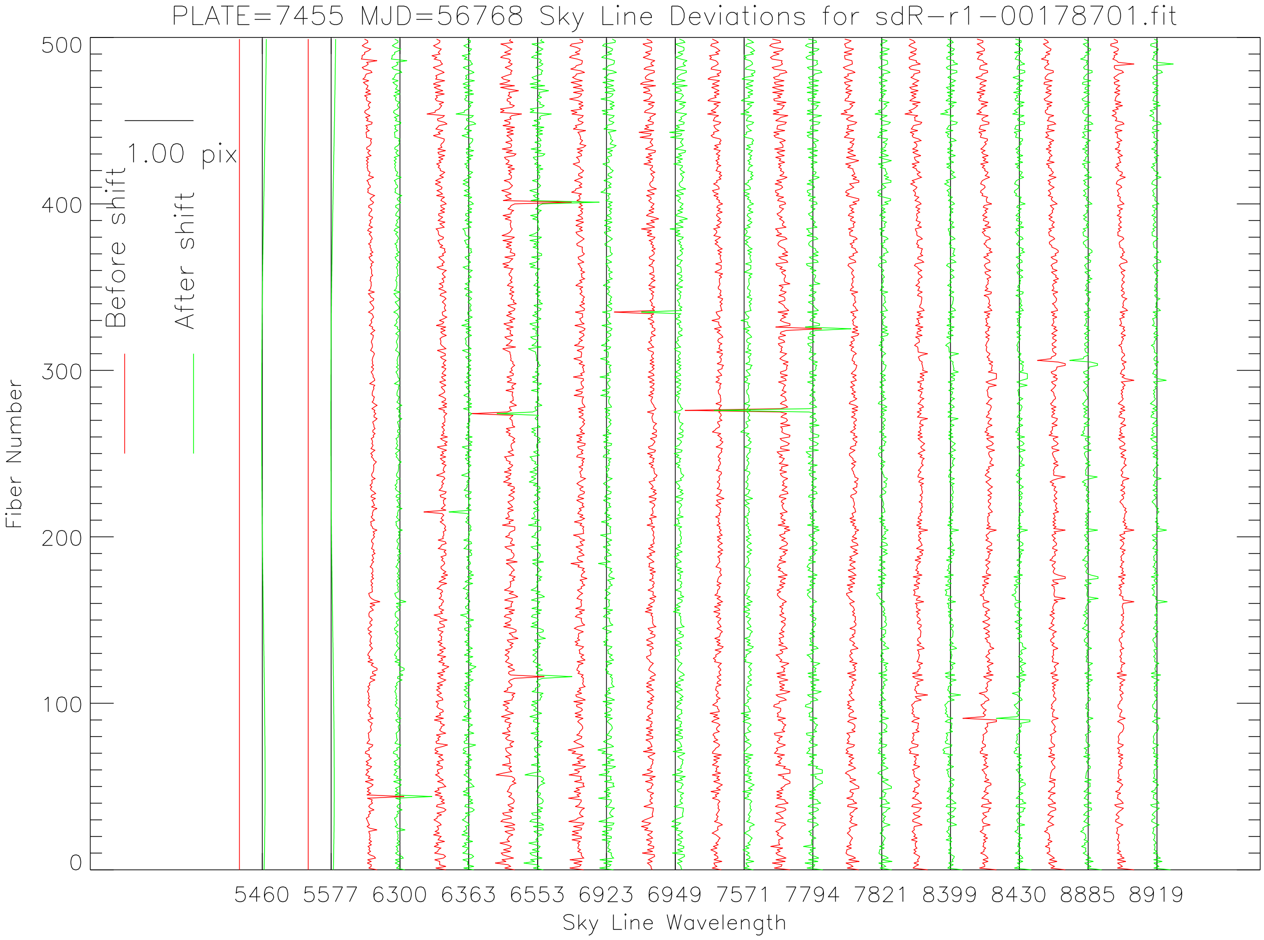


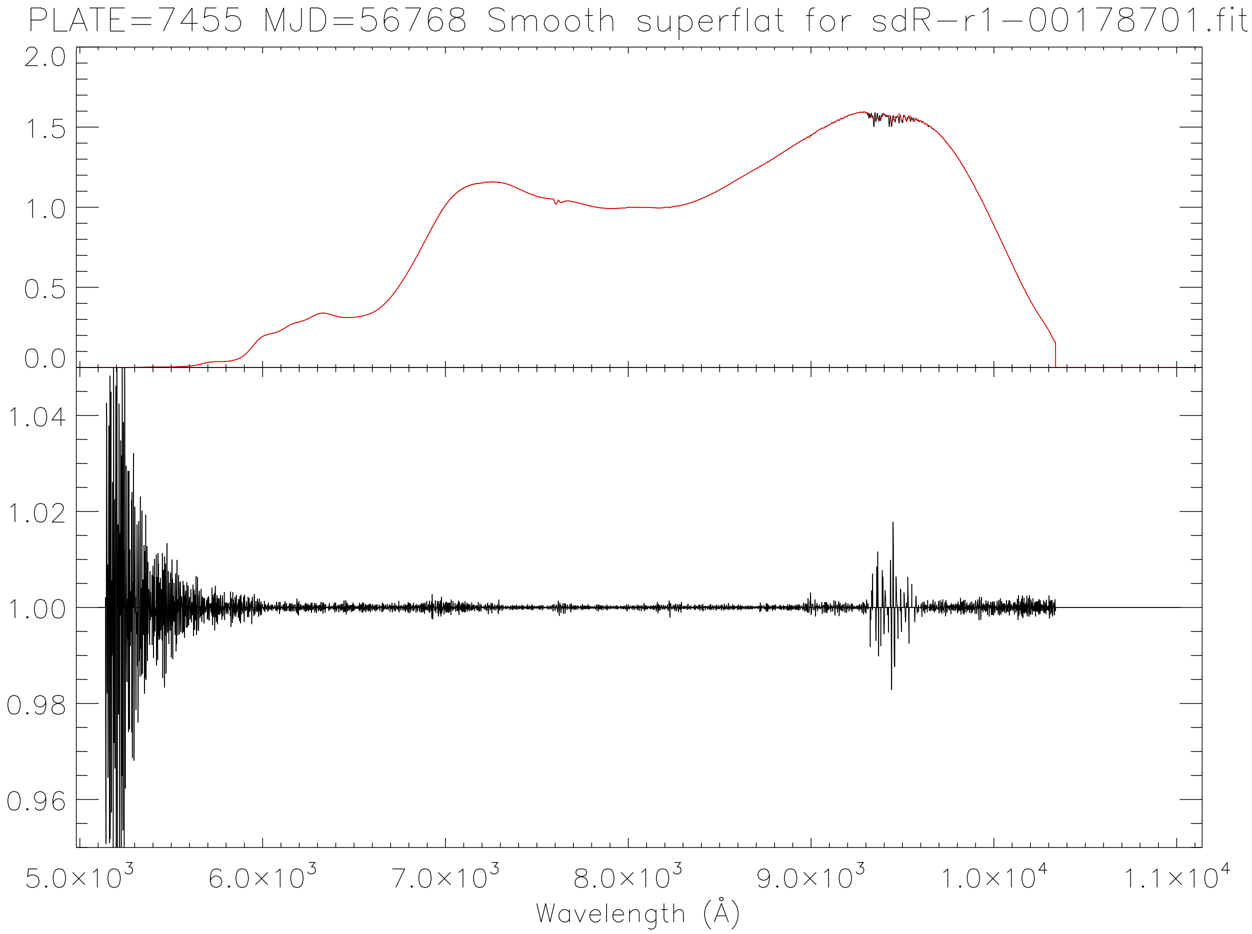

PLATE=7455 MJD=56768 sdR-r1-00178700.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2300
2400
2500
2600
2700
2800
2900
RED = sky fiber
Dispersion = 1.54 %
0
100
200
300
400
500
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.23
1.24
1.25
1.26
1.27
1.28
1.29
Airmass

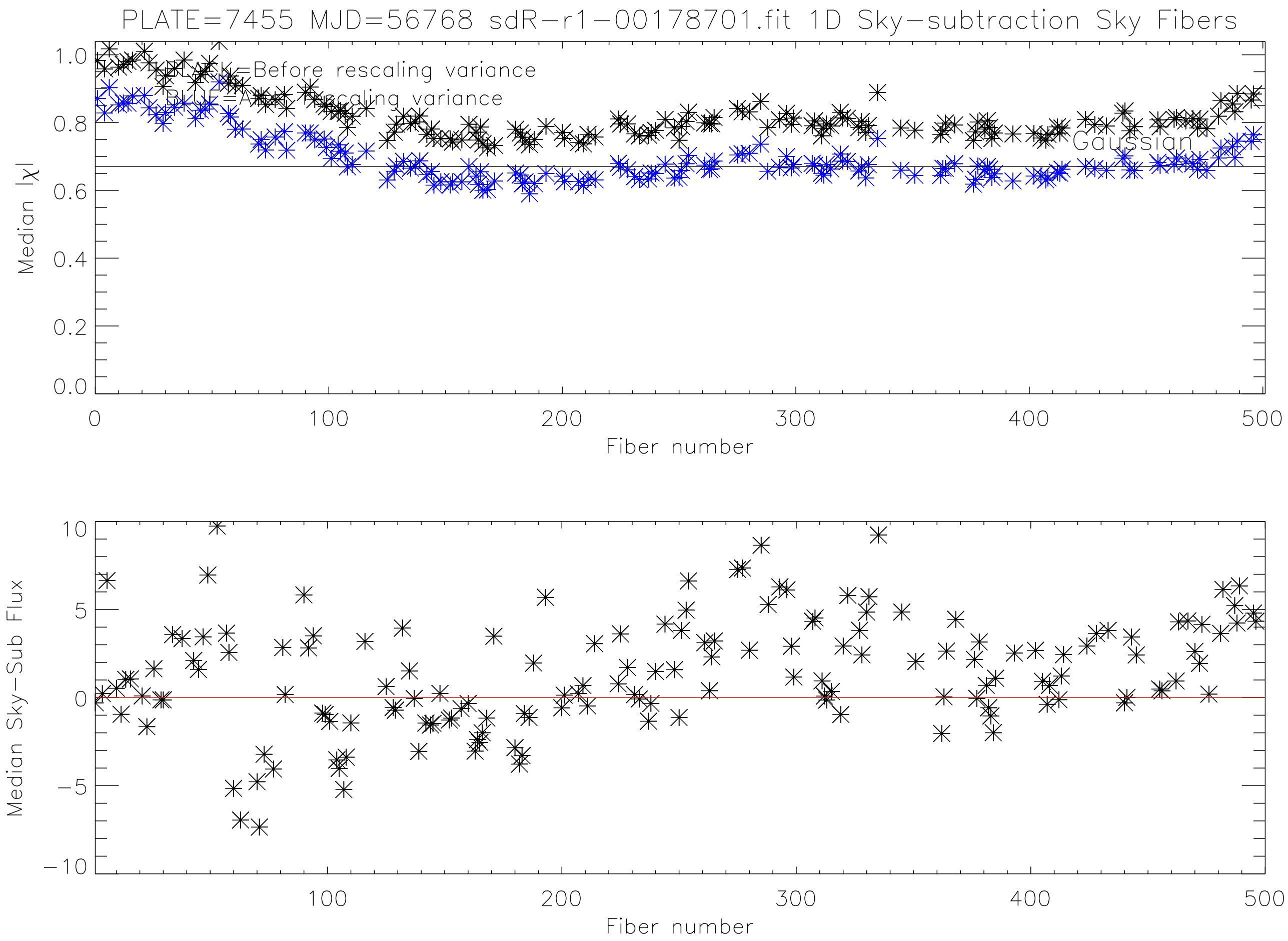

PLATE=7455 MJD=56768 sdR-r1-00178700.fit Skyline Flux at 8888.3


PLATE=7455 MJD=56768 Fiber−Flats for sdR−r1−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.181
Max value = 5.475
Fiber−Flat
0.0
0.5
1.0
1.5
6.0×10³
7.0×10³
8.0×10³
9.0×10³
1.0×10⁴
1.1×10⁴
λ [A]
Wed Jul 30 20:48:34 2014

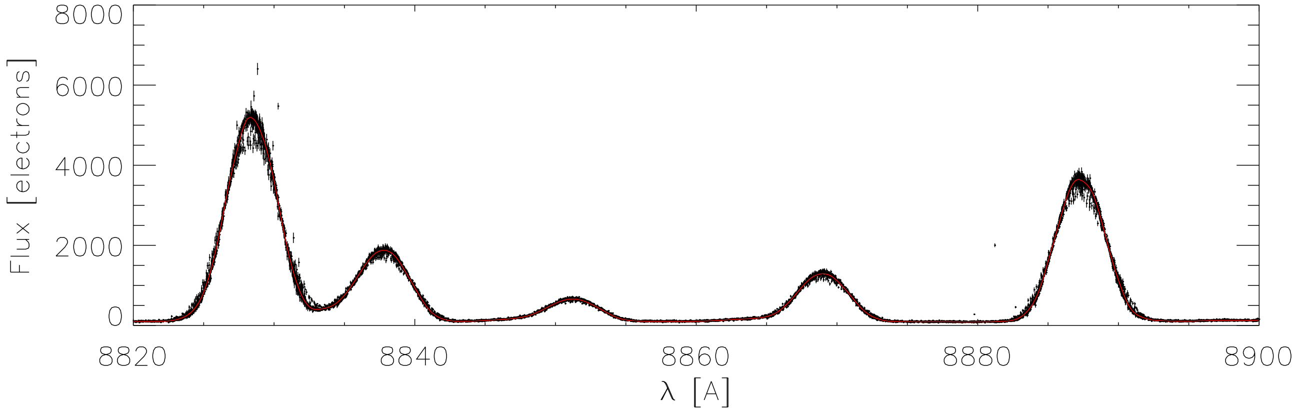

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r1-00178701.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number


PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r1-00178701.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919
Sky Line Wavelength

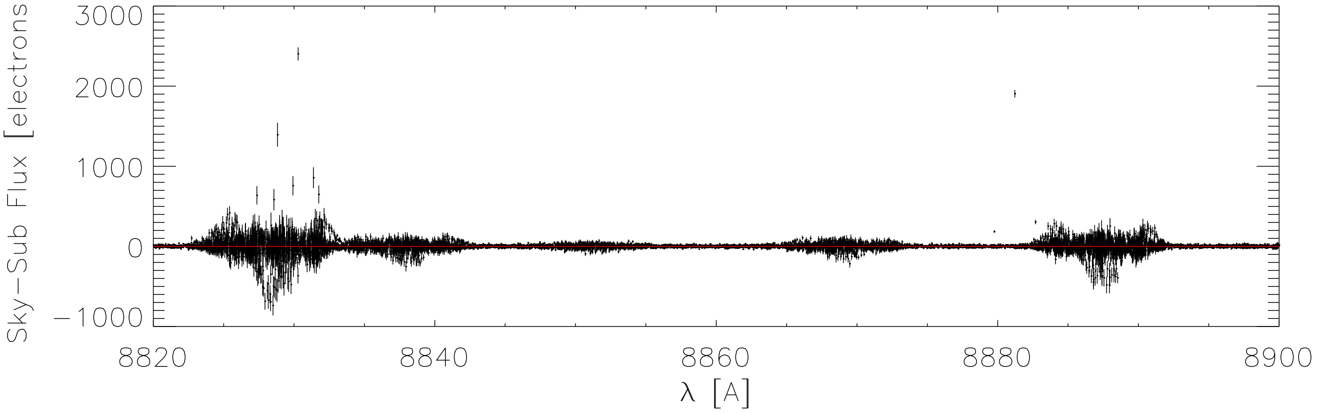

PLATE=7455 MJD=56768 Smooth superflat for sdR-r1-00178701.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10³
6.0×10³
7.0×10³
8.0×10³
9.0×10³
1.0×10⁴
1.1×10⁴
Wavelength (Å)


PLATE=7455 MJD=56768 sdR-r1-00178701.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
−10
−5
0
5
10
100
200
300
400
500
Fiber number

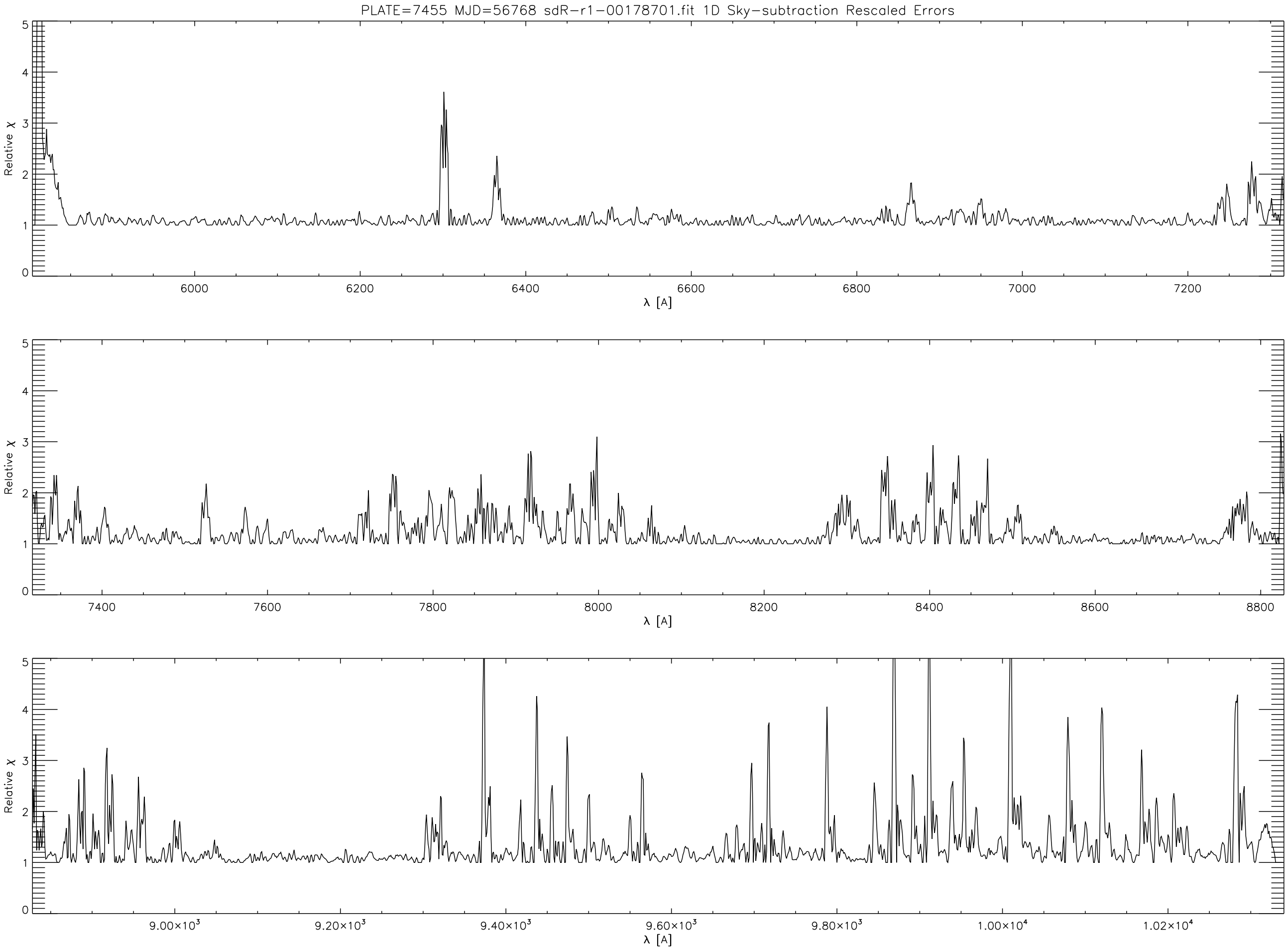
PLATE=7455 MJD=56768 sdR-r1-00178701.fit 1D Sky-subtraction Sky Fibers

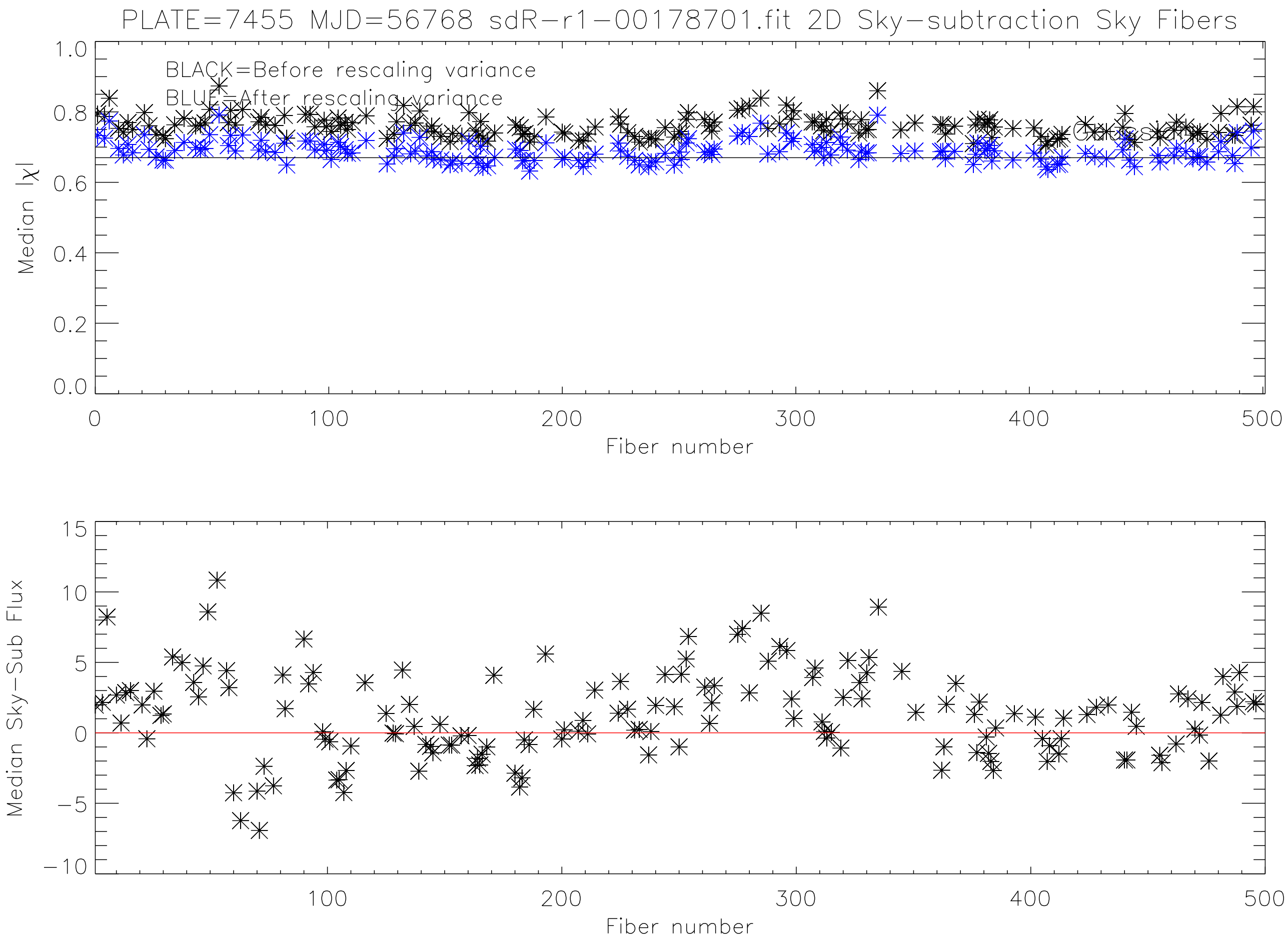


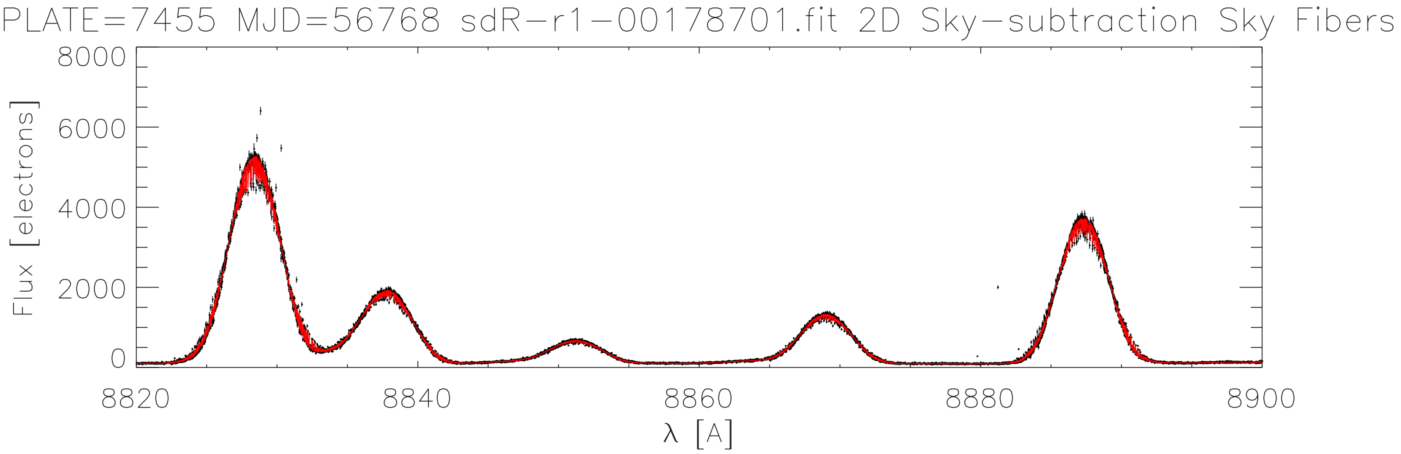
PLATE=7455 MJD=56768 sdR-r1-00178701.fit 1D Sky-subtraction Sky-subtracted Sky F

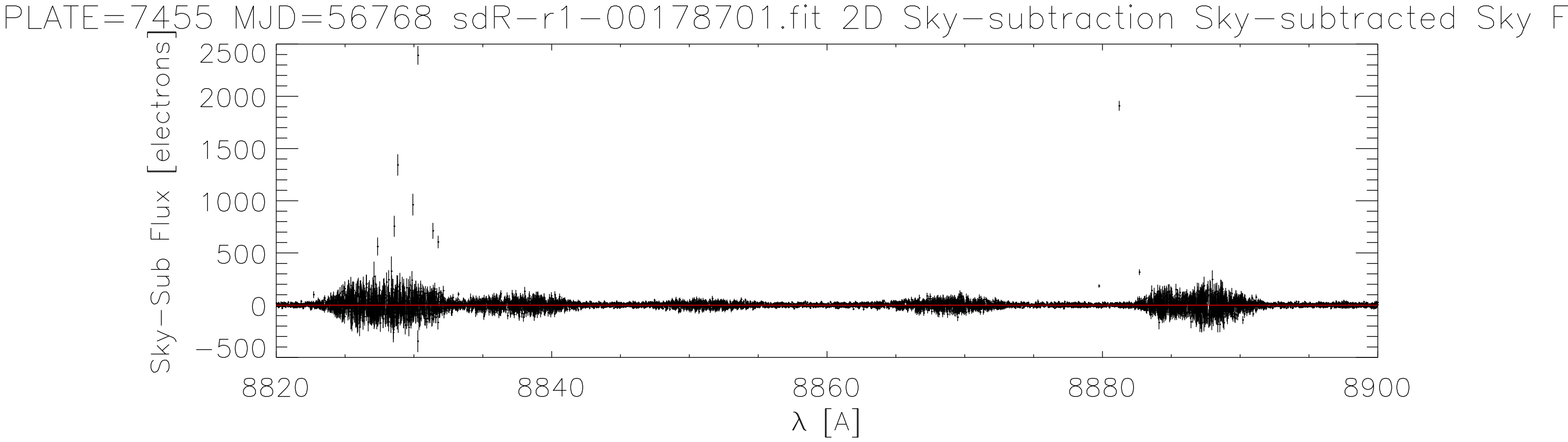


Number of sky fibers = 161


PLATE=7455 MJD=56768 sdR-r1-00178701.fit 1D Sky-subtraction Rescaled Errors

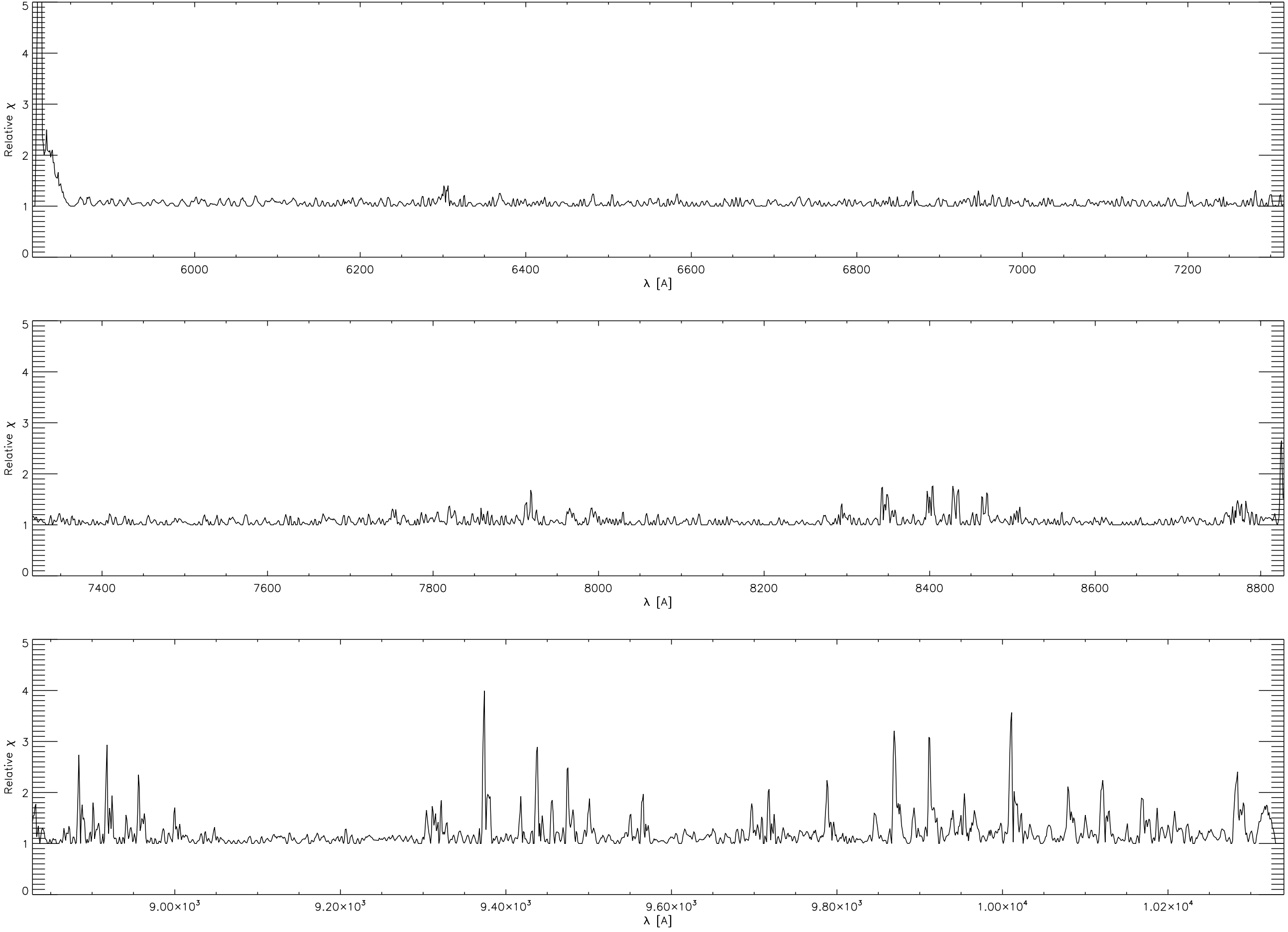

PLATE=7455 MJD=56768 sdR-r1-00178701.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
100
200
300
400
500
Fiber number

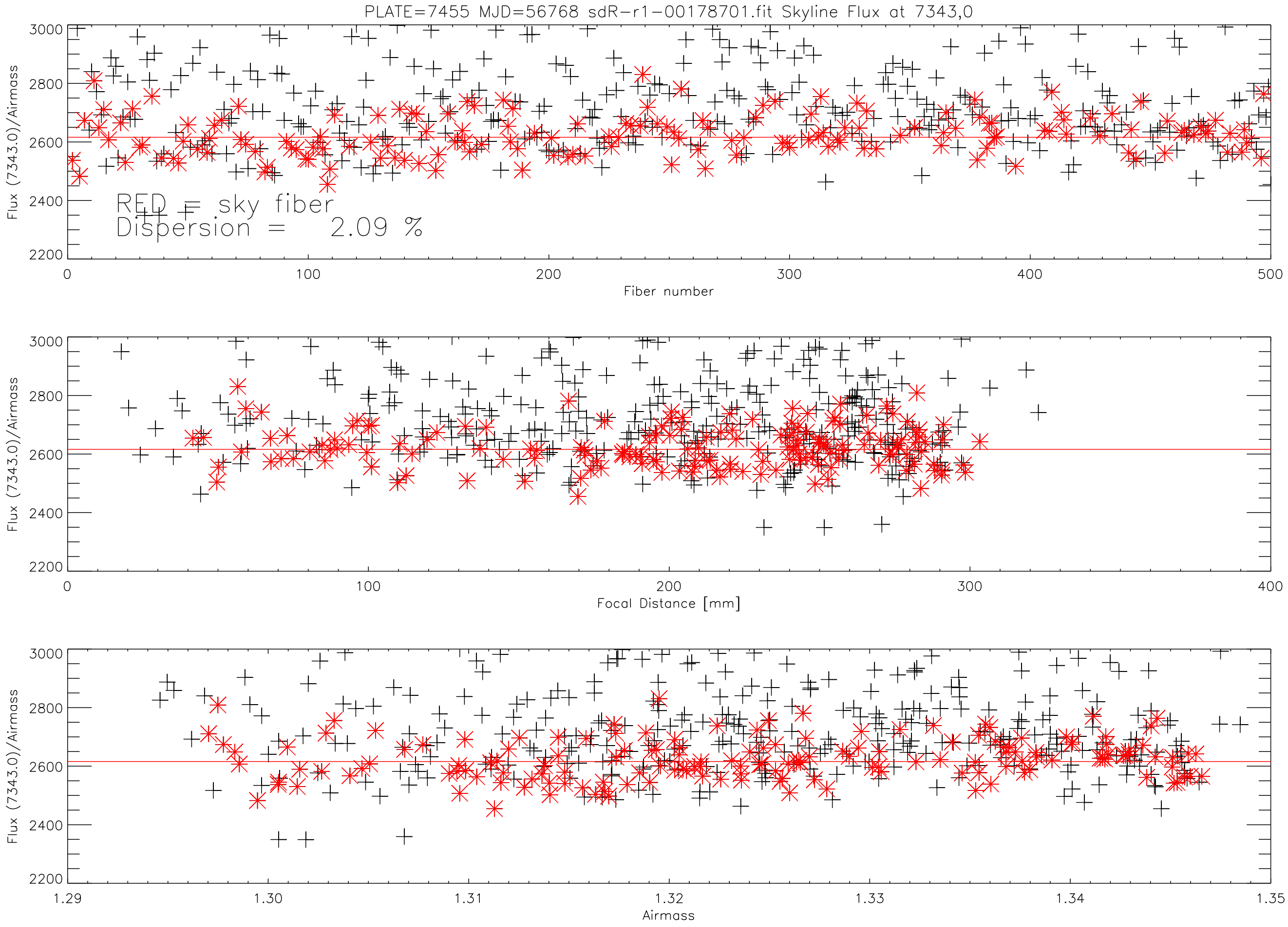

PLATE=7455 MJD=56768 sdR-r1-00178701.fit 2D Sky-subtraction Sky Fibers


PLATE=7455 MJD=56768 sdR-r1-00178701.fit 2D Sky-subtraction Sky-subtracted Sky F

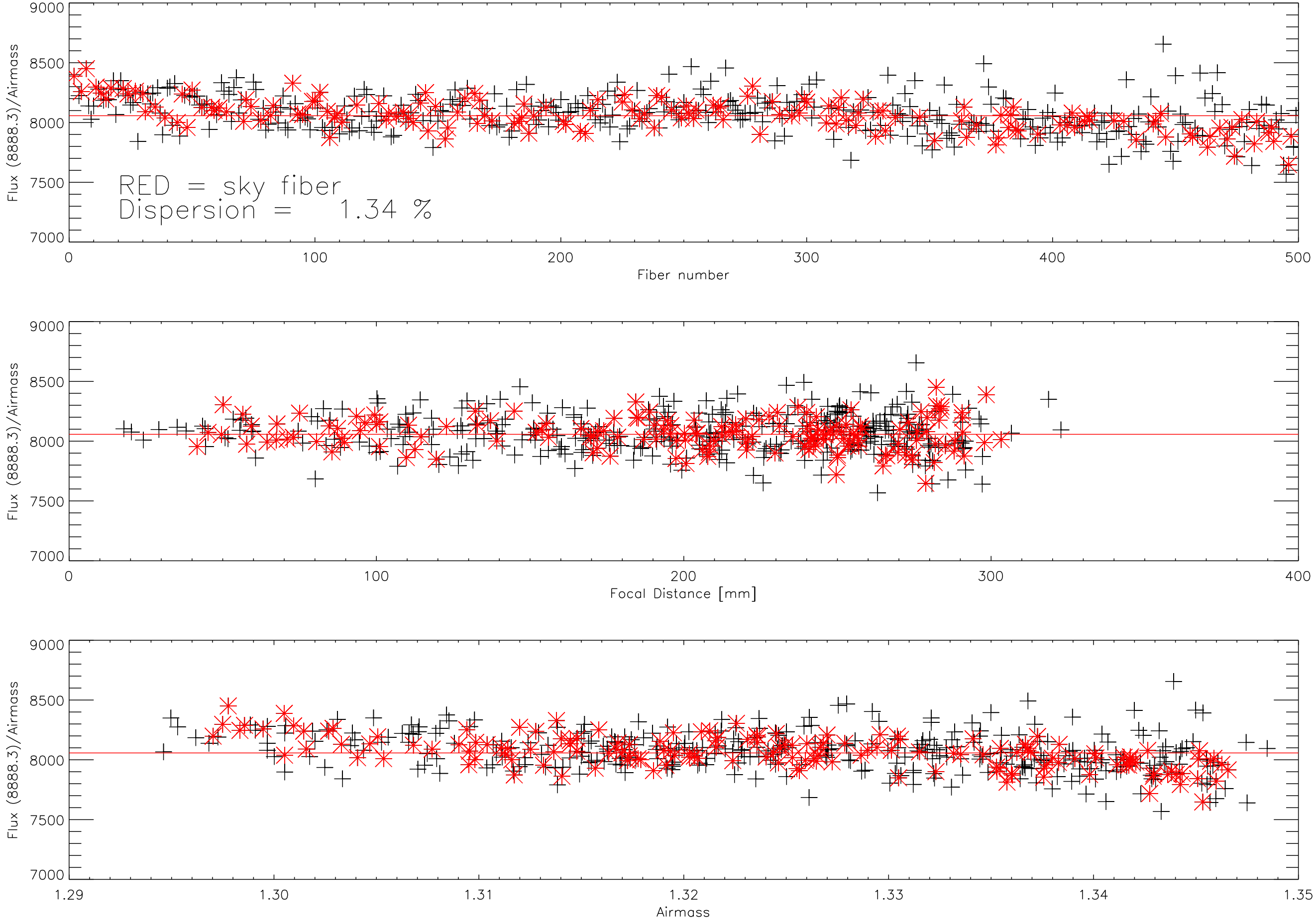
Number of sky fibers = 161

PLATE=7455 MJD=56768 sdR-r1-00178701.fit 2D Sky-subtraction Rescaled Errors

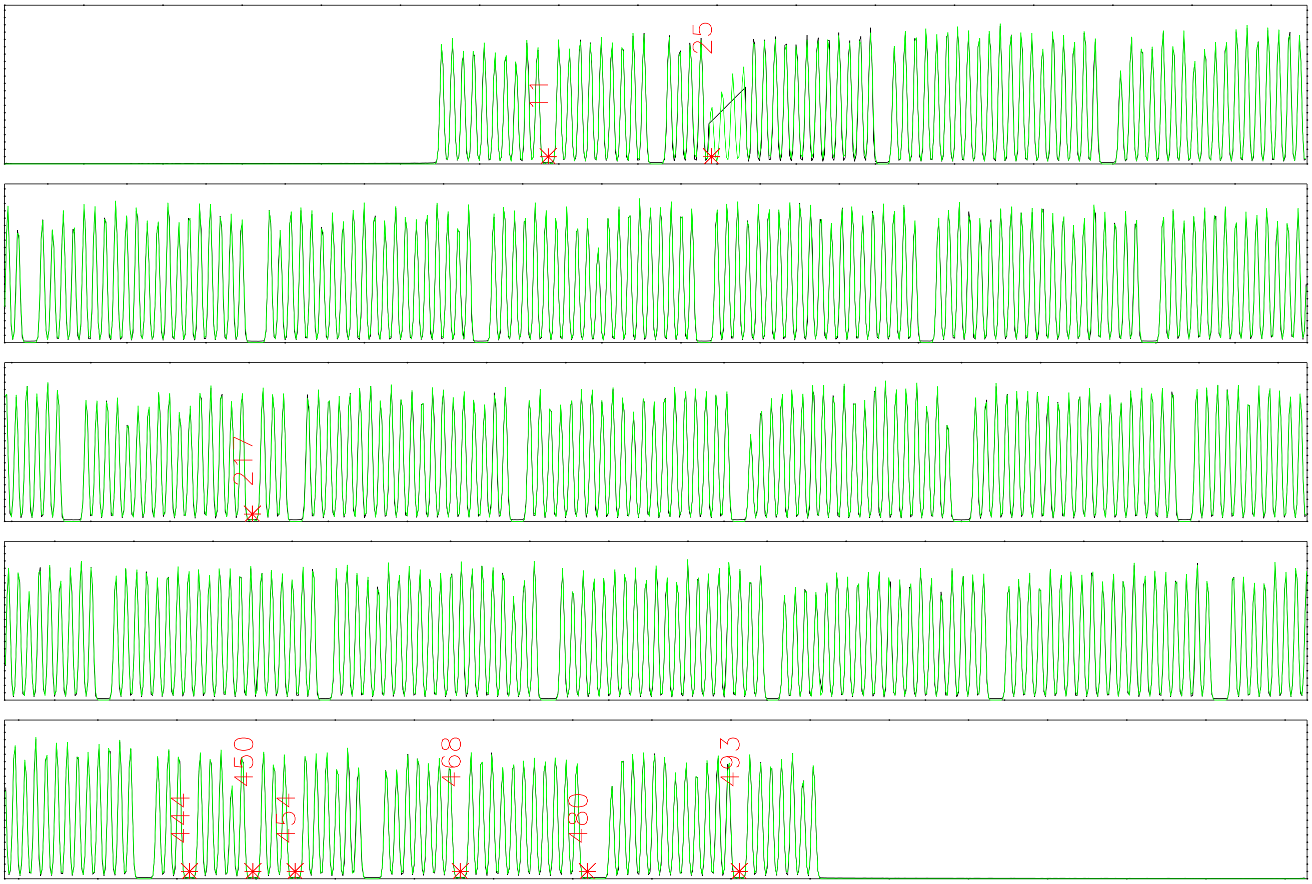


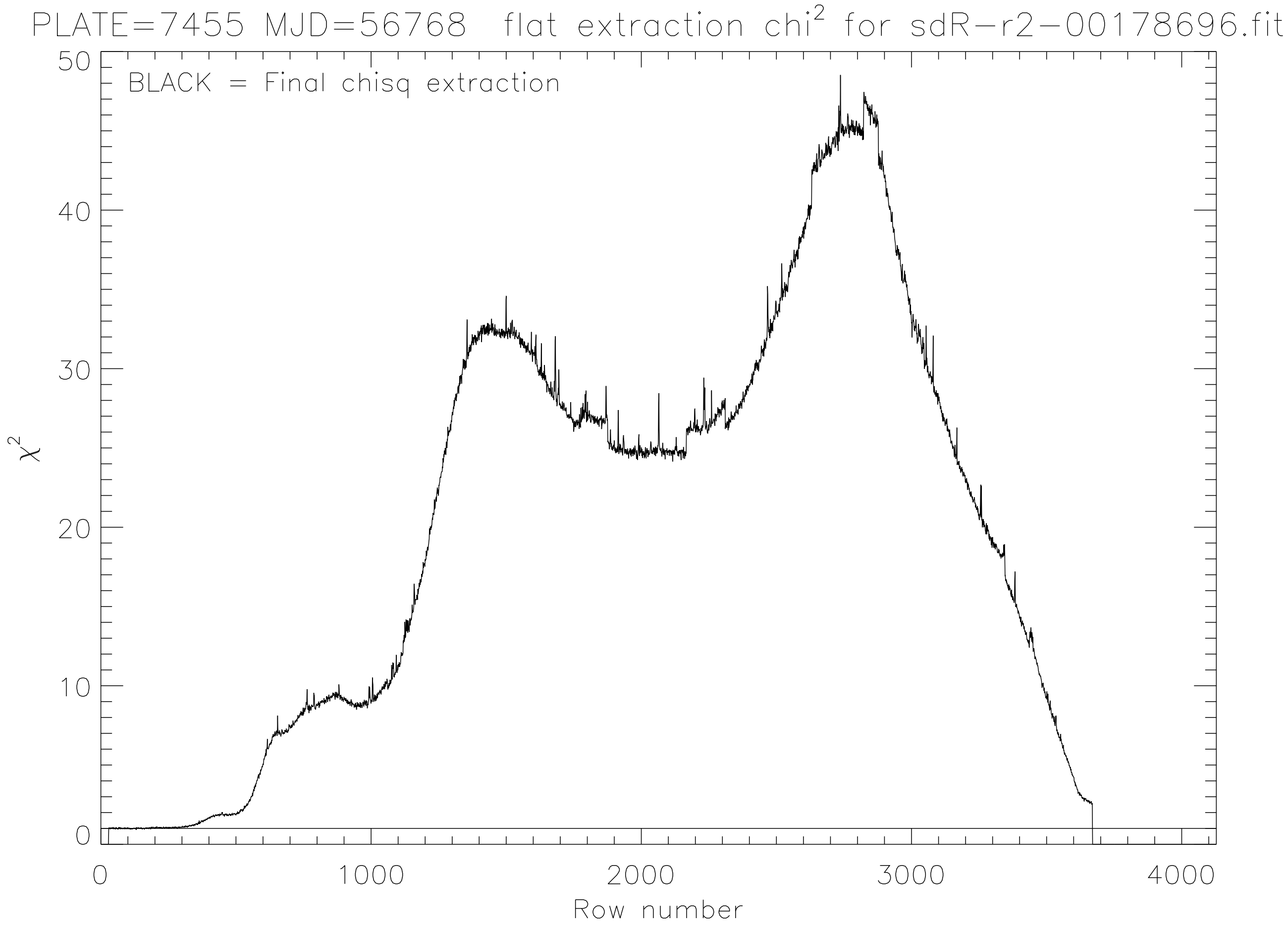

PLATE=7455 MJD=56768 sdR-r1-00178701.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
RED = sky fiber
Dispersion = 2.09 %
0
100
200
300
400
500
Fiber number
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3000
2800
2600
2400
2200
1.29
1.30
1.31
1.32
1.33
1.34
1.35
Airmass

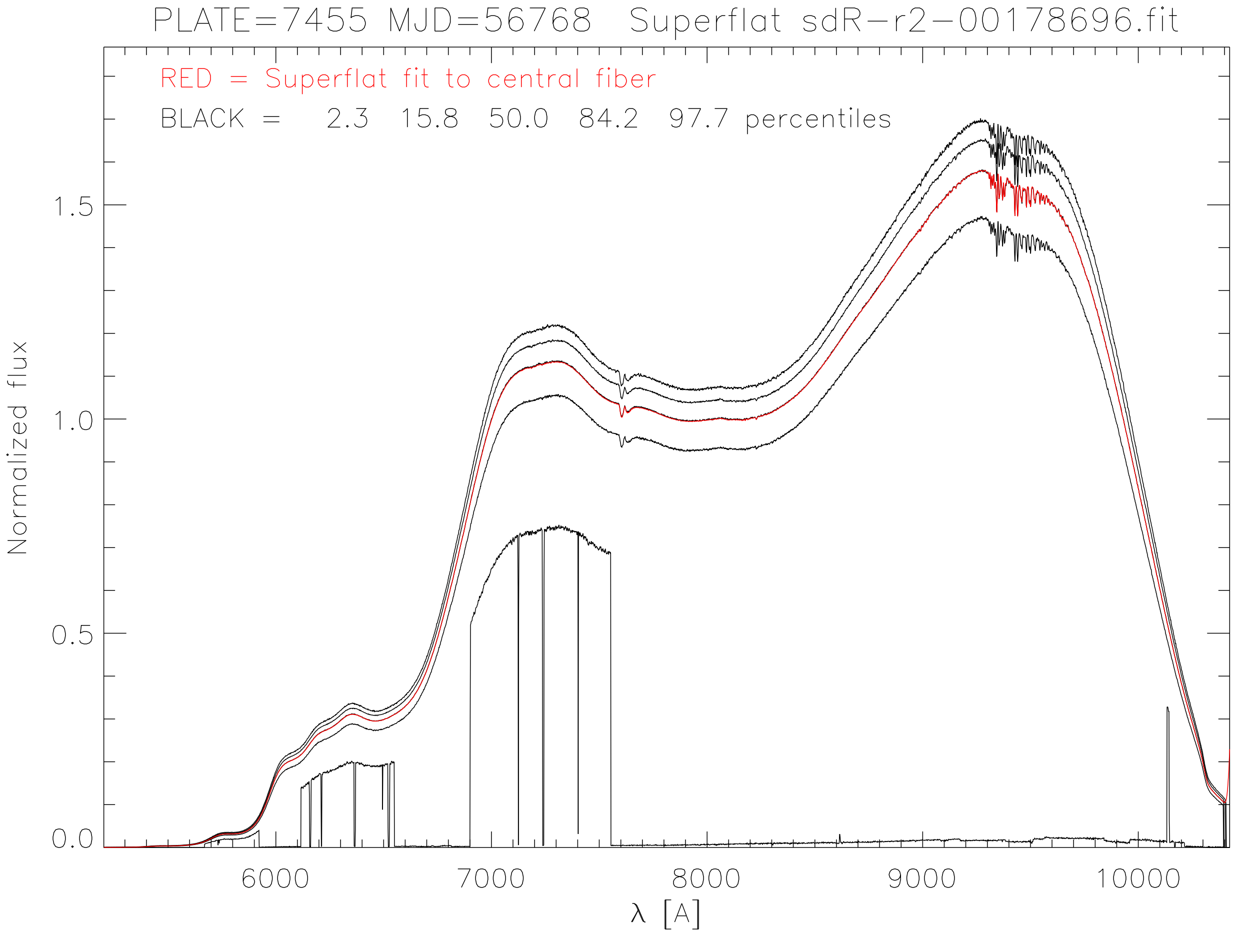
PLATE=7455 MJD=56768 sdR-r1-00178701.fit Skyline Flux at 8888.3

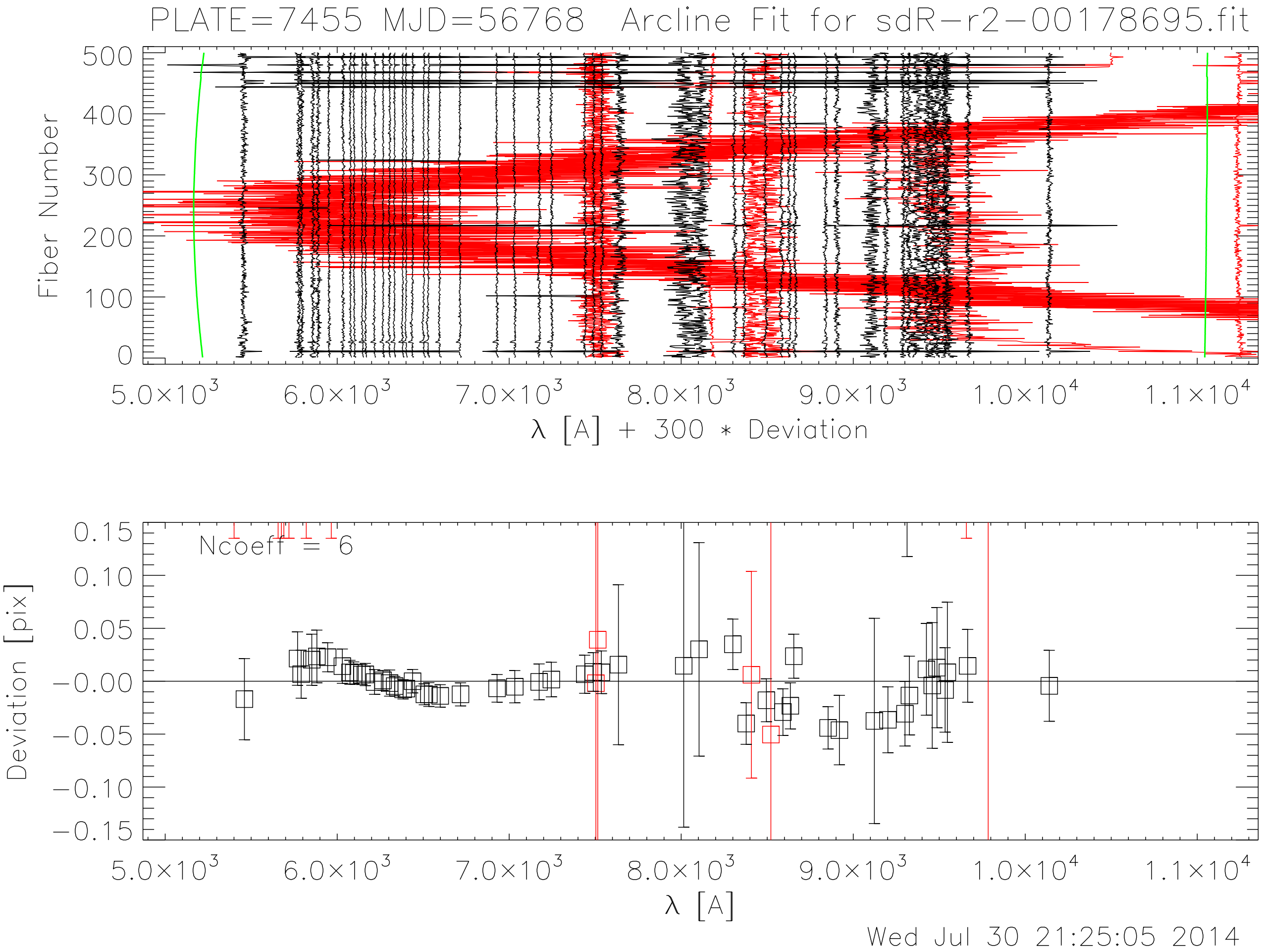


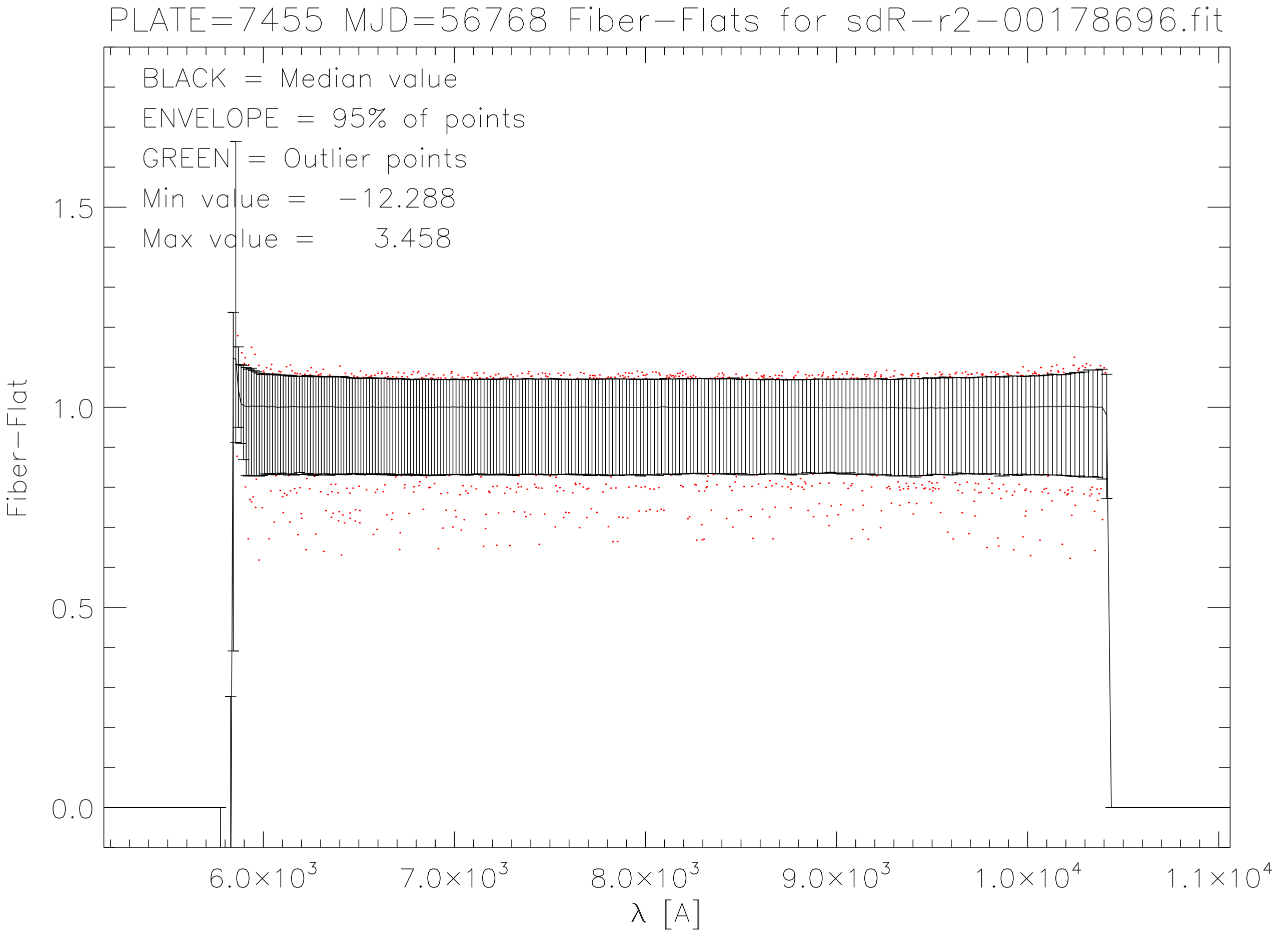
PLATE=7455 MJD=56768 Traces sdR-r2-00178696.fit



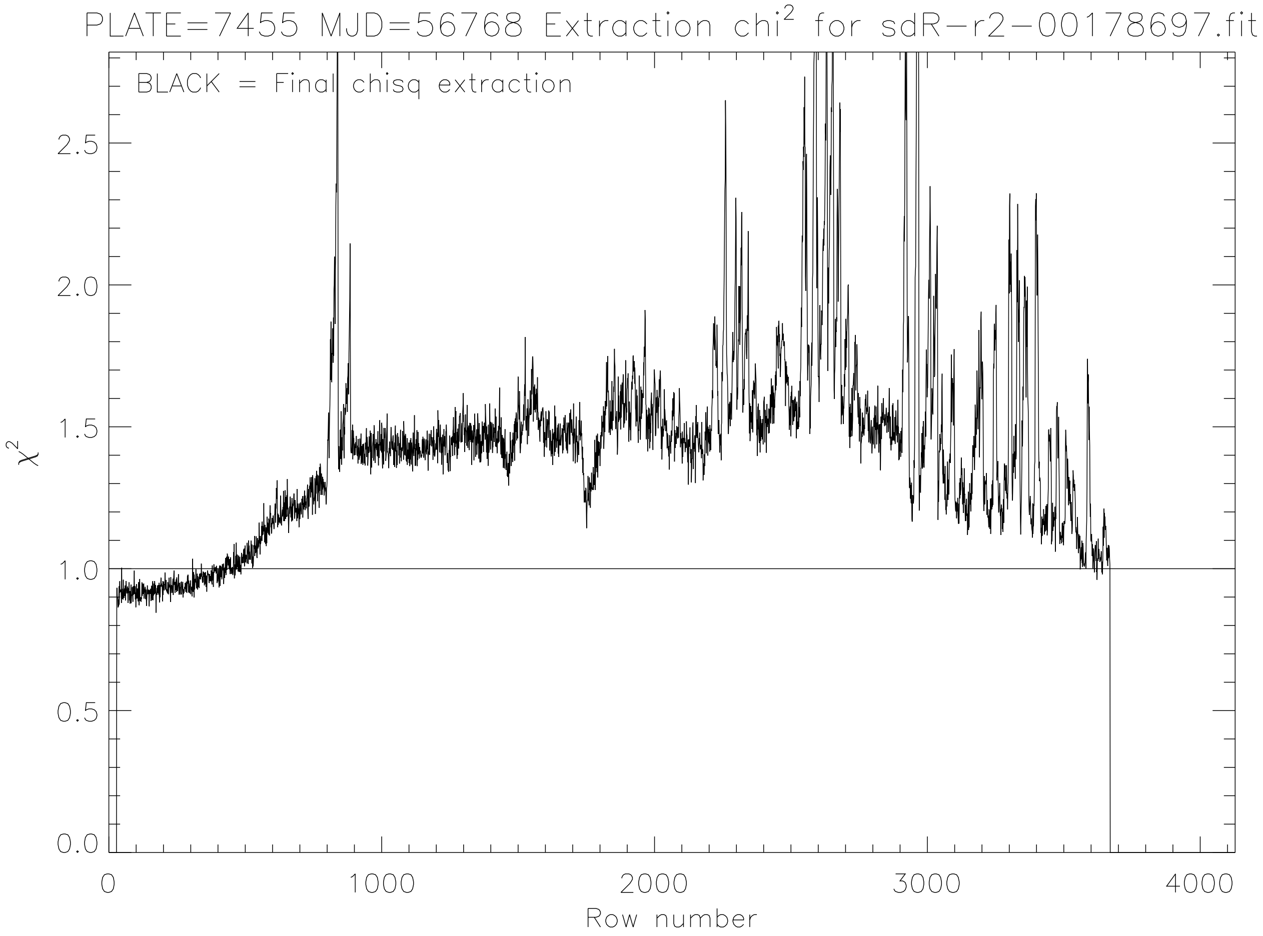
PLATE=7455 MJD=56768 flat extraction chi^2 for sdR-r2-00178696.fit
BLACK = Final chisq extraction
χ^2
0
10
20
30
40
50
0
1000
2000
3000
4000
Row number


PLATE=7455 MJD=56768 Superflat sdR-r2-00178696.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
1.5
1.0
0.5
0.0
6000
7000
8000
9000
10000
λ [A]

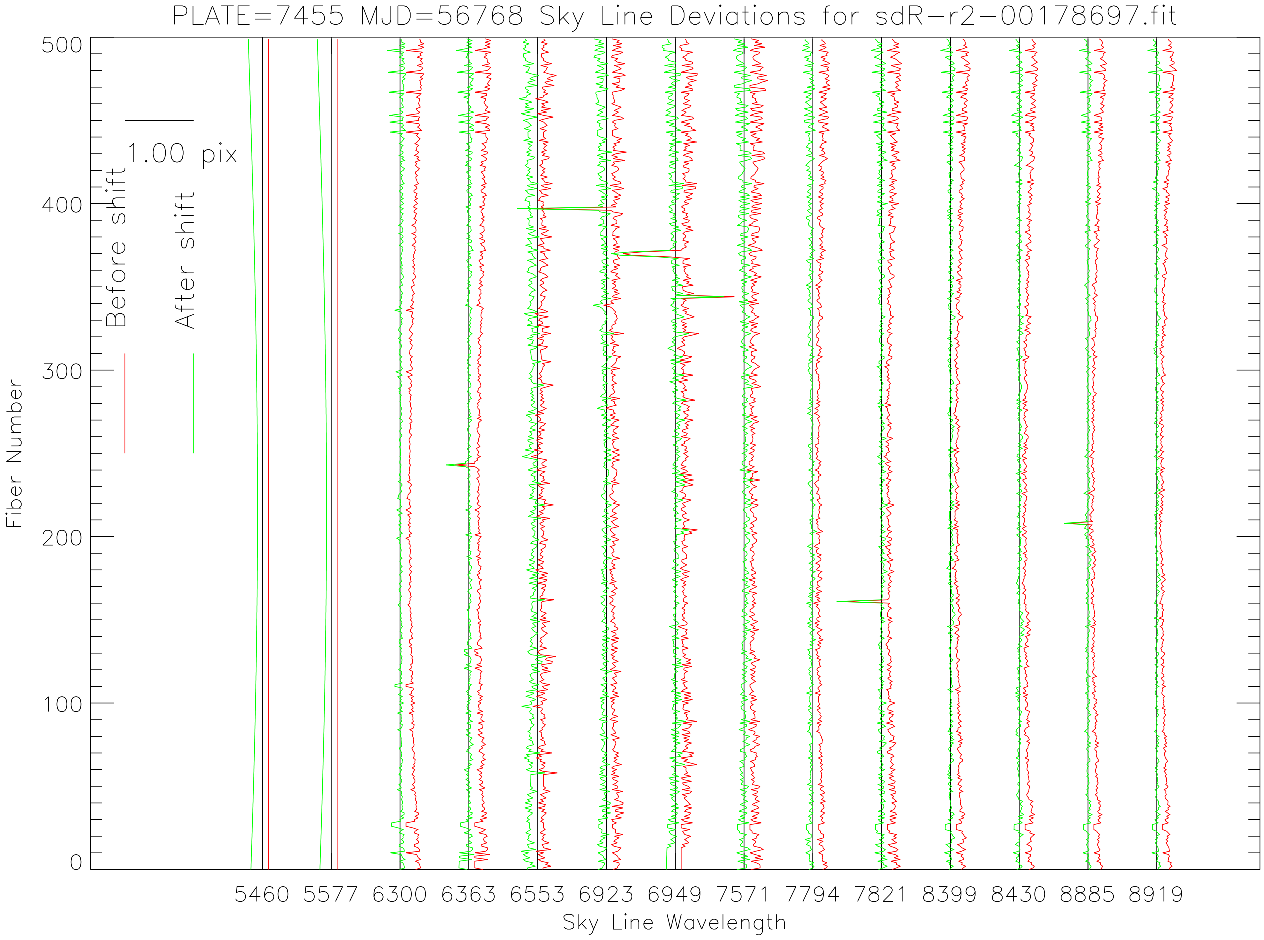

PLATE=7455 MJD=56768 Arcline Fit for sdR-r2-00178695.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Wed Jul 30 21:25:05 2014

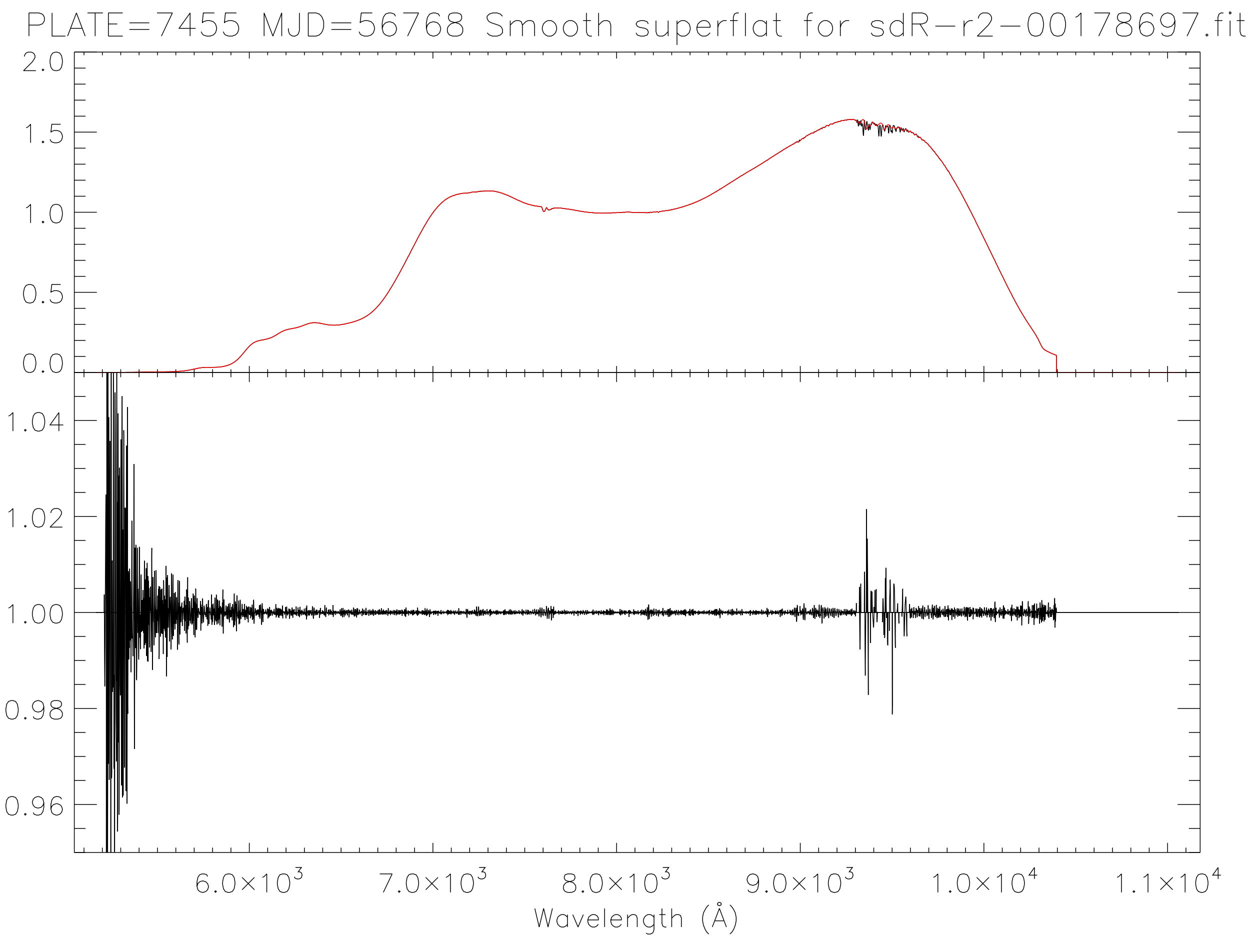


Wed Jul 30 21:25:36 2014

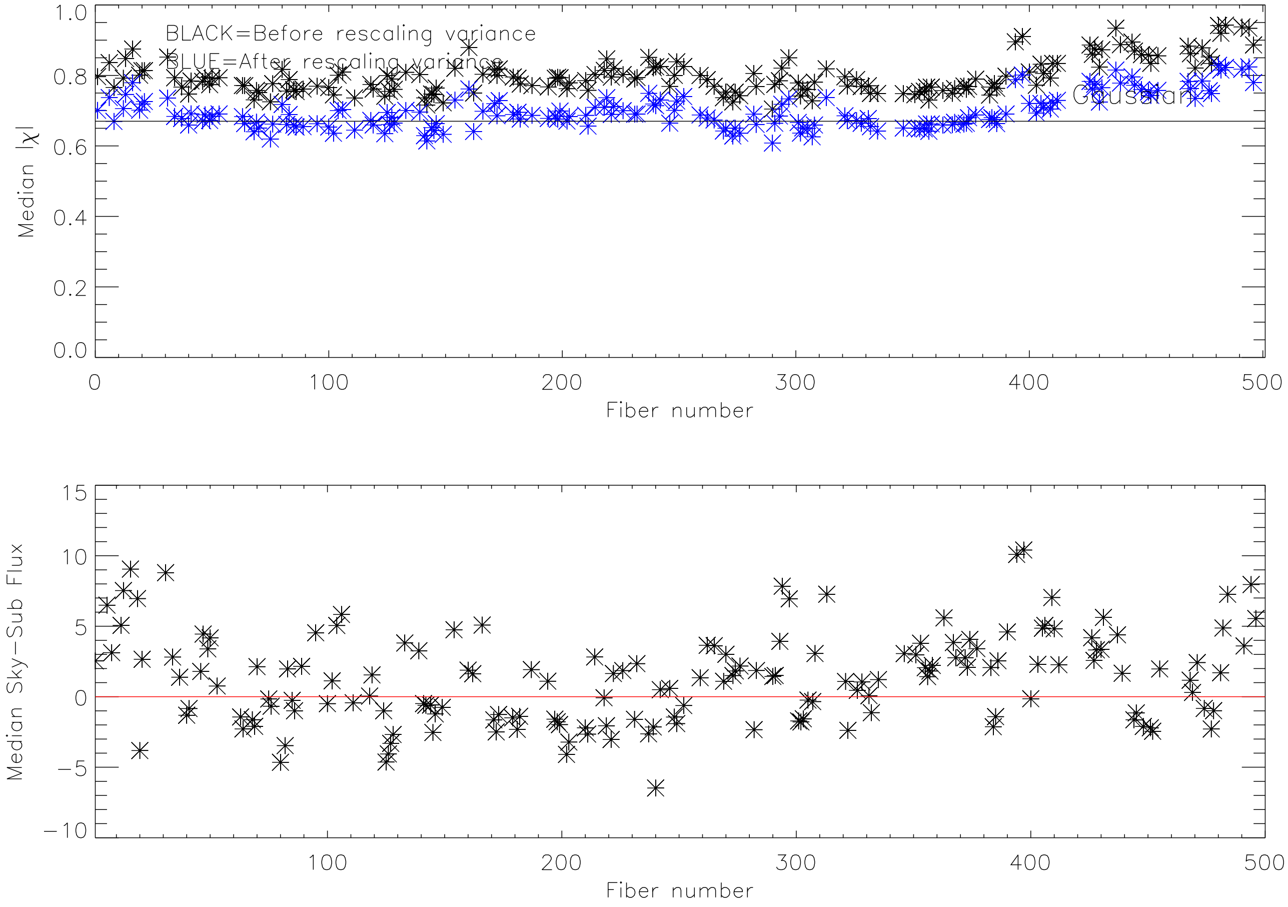


PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r2-00178697.fit

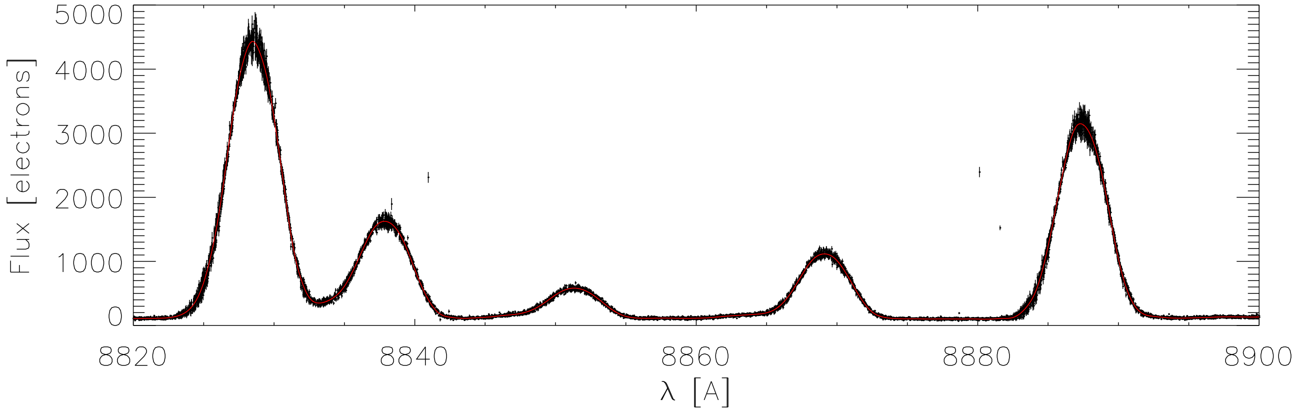

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r2-00178697.fit


PLATE=7455 MJD=56768 Smooth superflat for sdR-r2-00178697.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

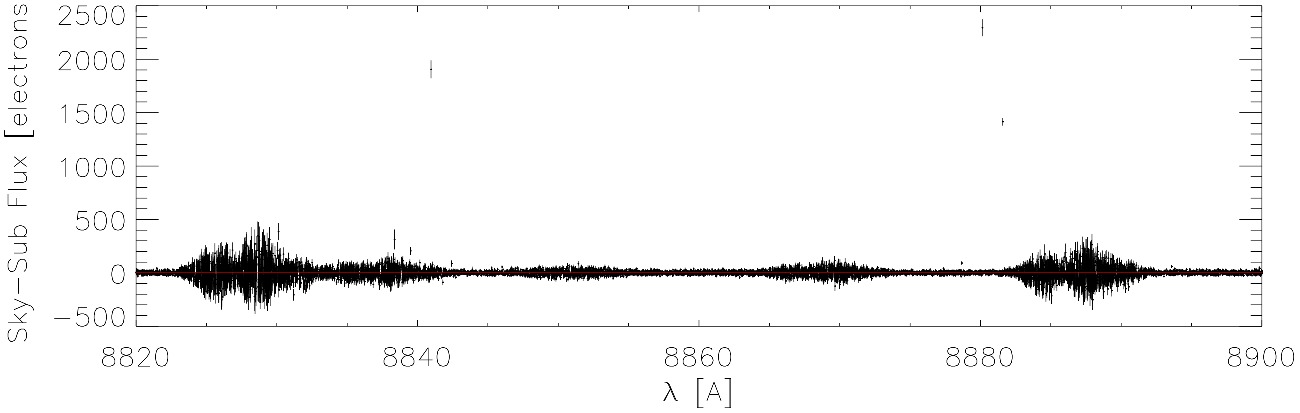
PLATE=7455 MJD=56768 sdR-r2-00178697.fit 1D Sky-subtraction Sky Fibers



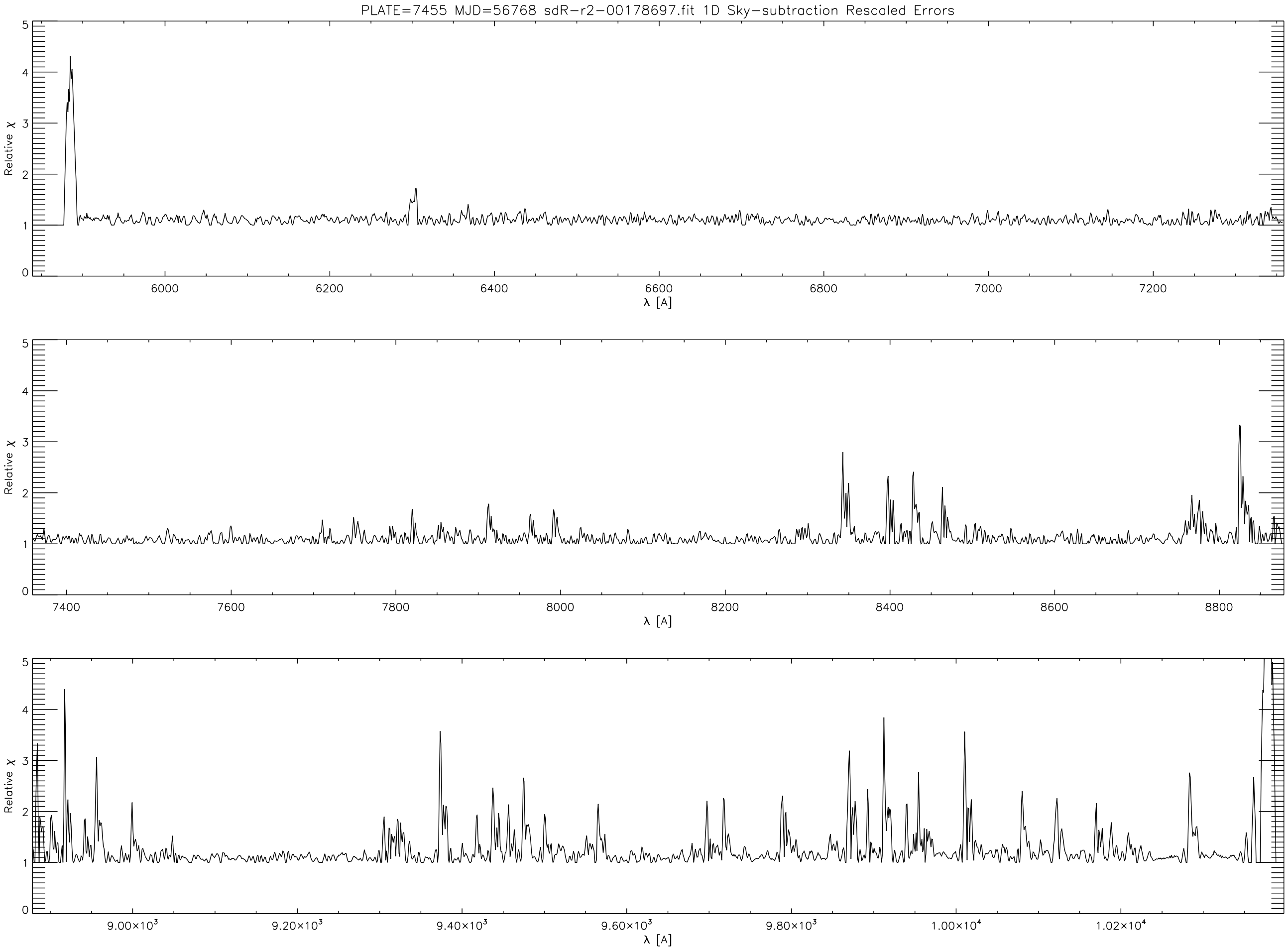
PLATE=7455 MJD=56768 sdR-r2-00178697.fit 1D Sky-subtraction Sky Fibers

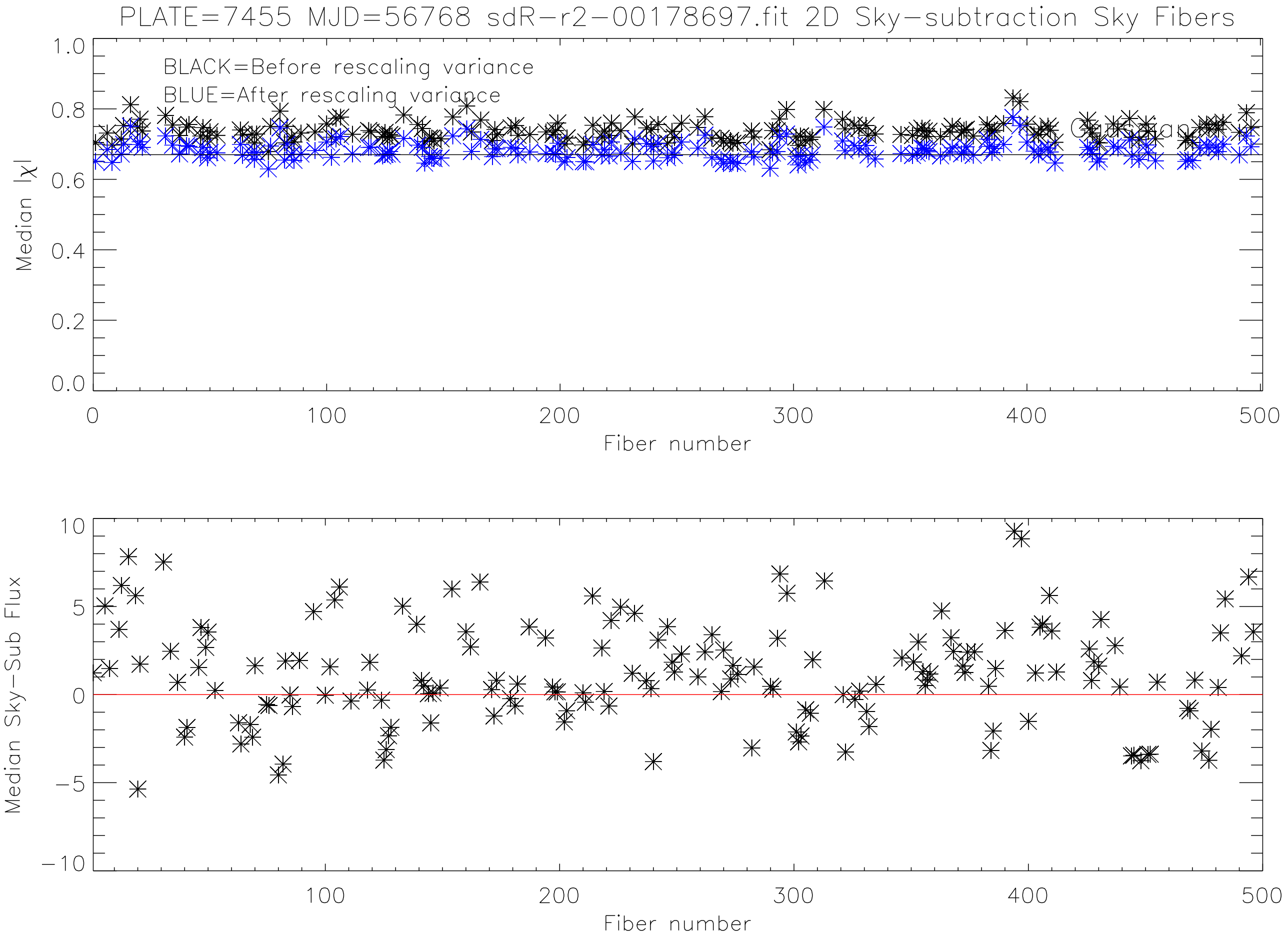


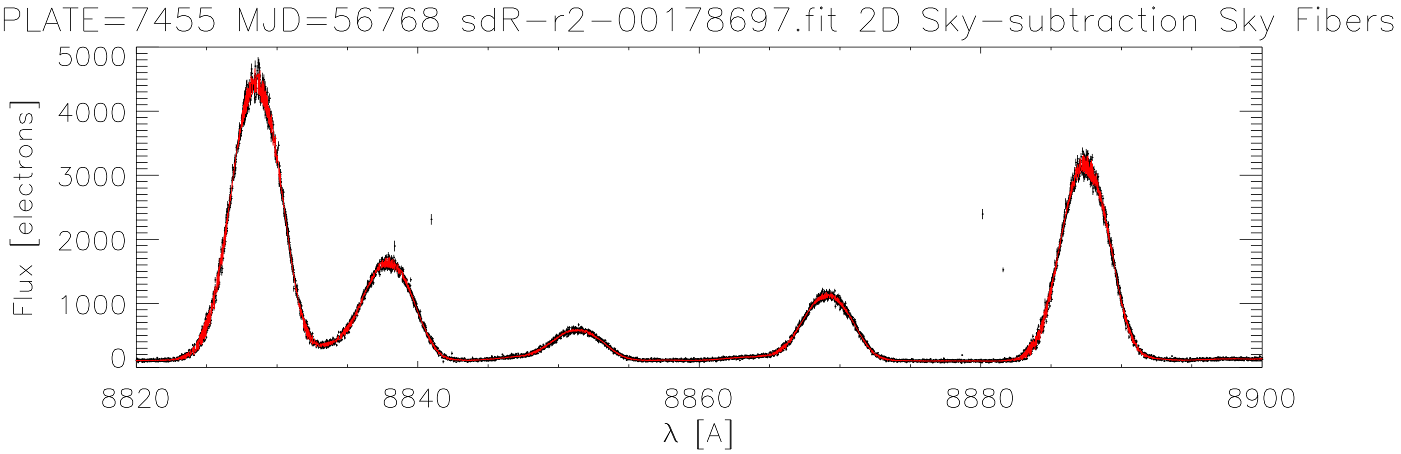
PLATE=7455 MJD=56768 sdR-r2-00178697.fit 1D Sky-subtraction Sky-subtracted Sky F

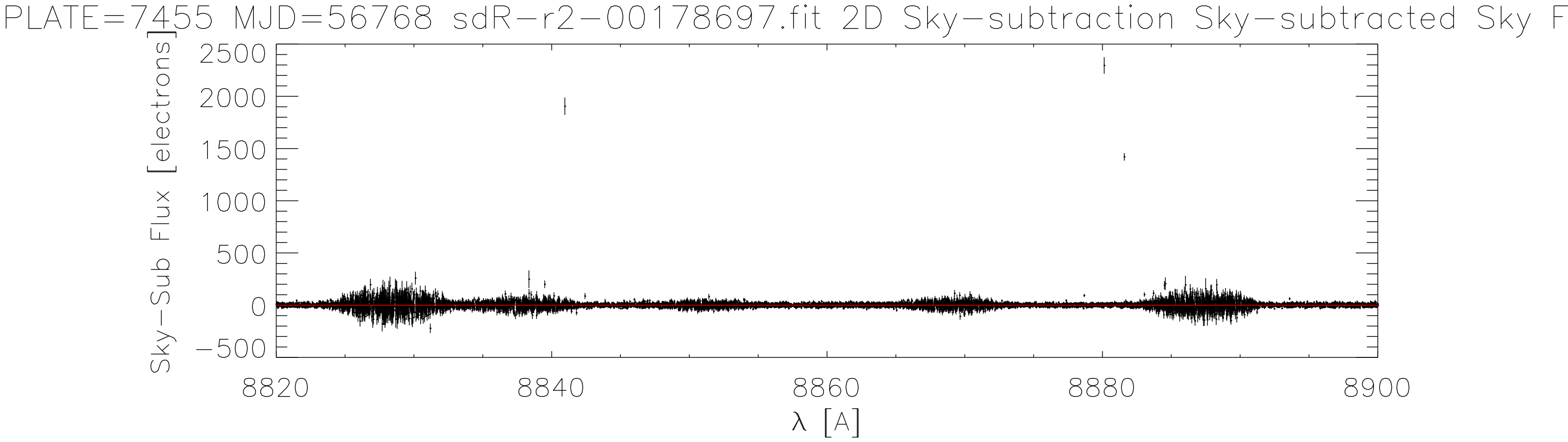


Number of sky fibers = 170

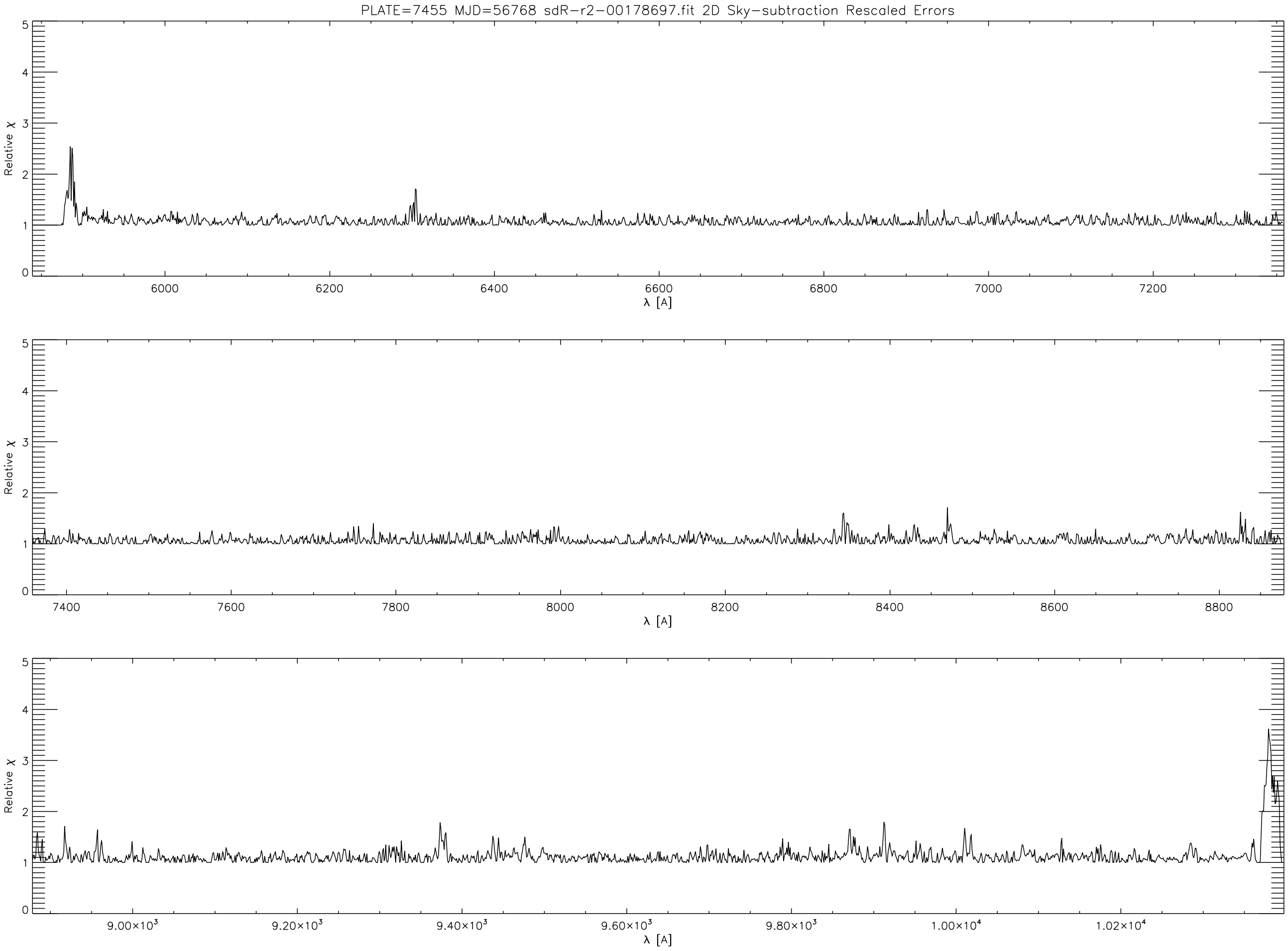


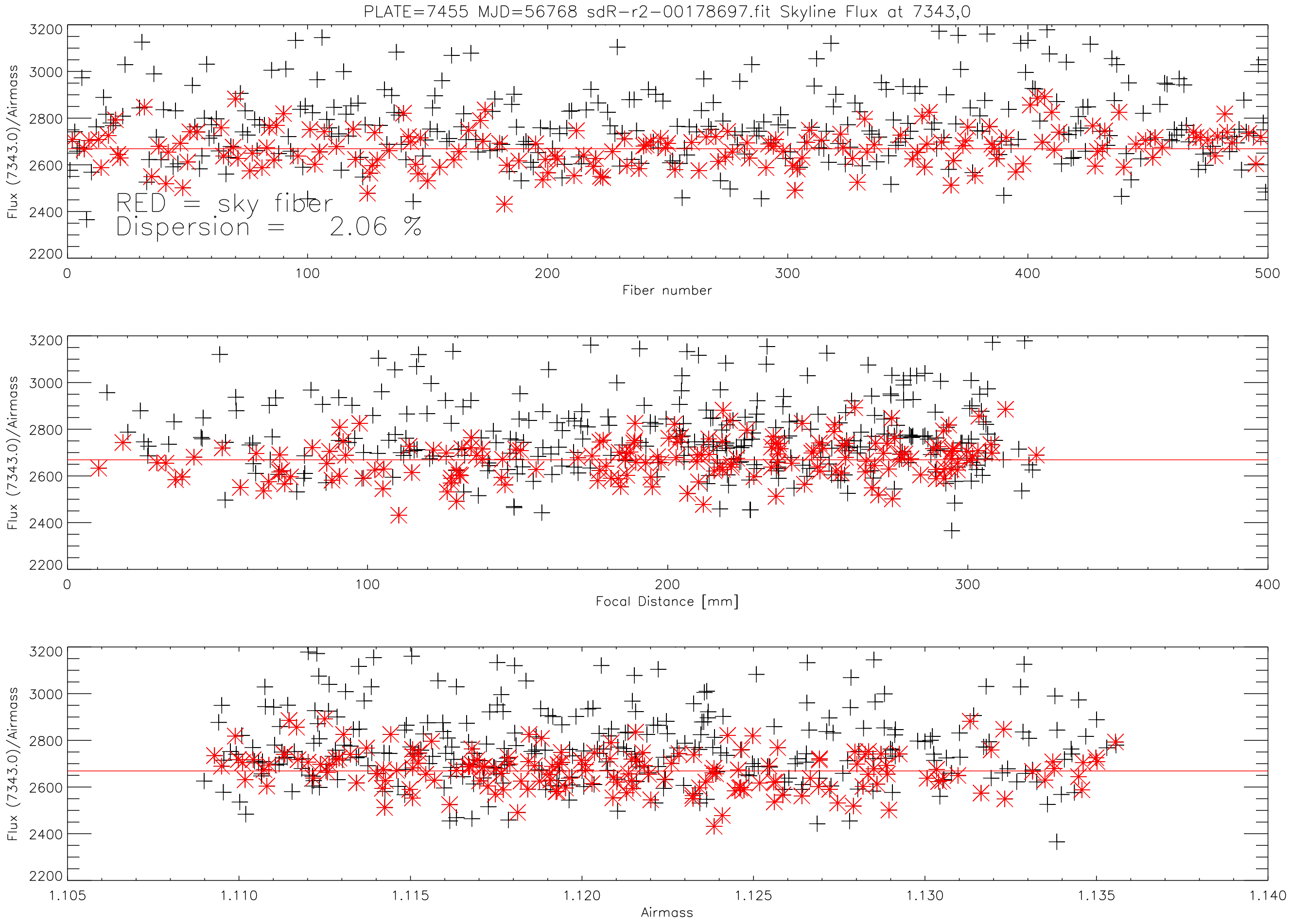

PLATE=7455 MJD=56768 sdR-r2-00178697.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
-10
-5
0
5
10
100
200
300
400
500
Fiber number

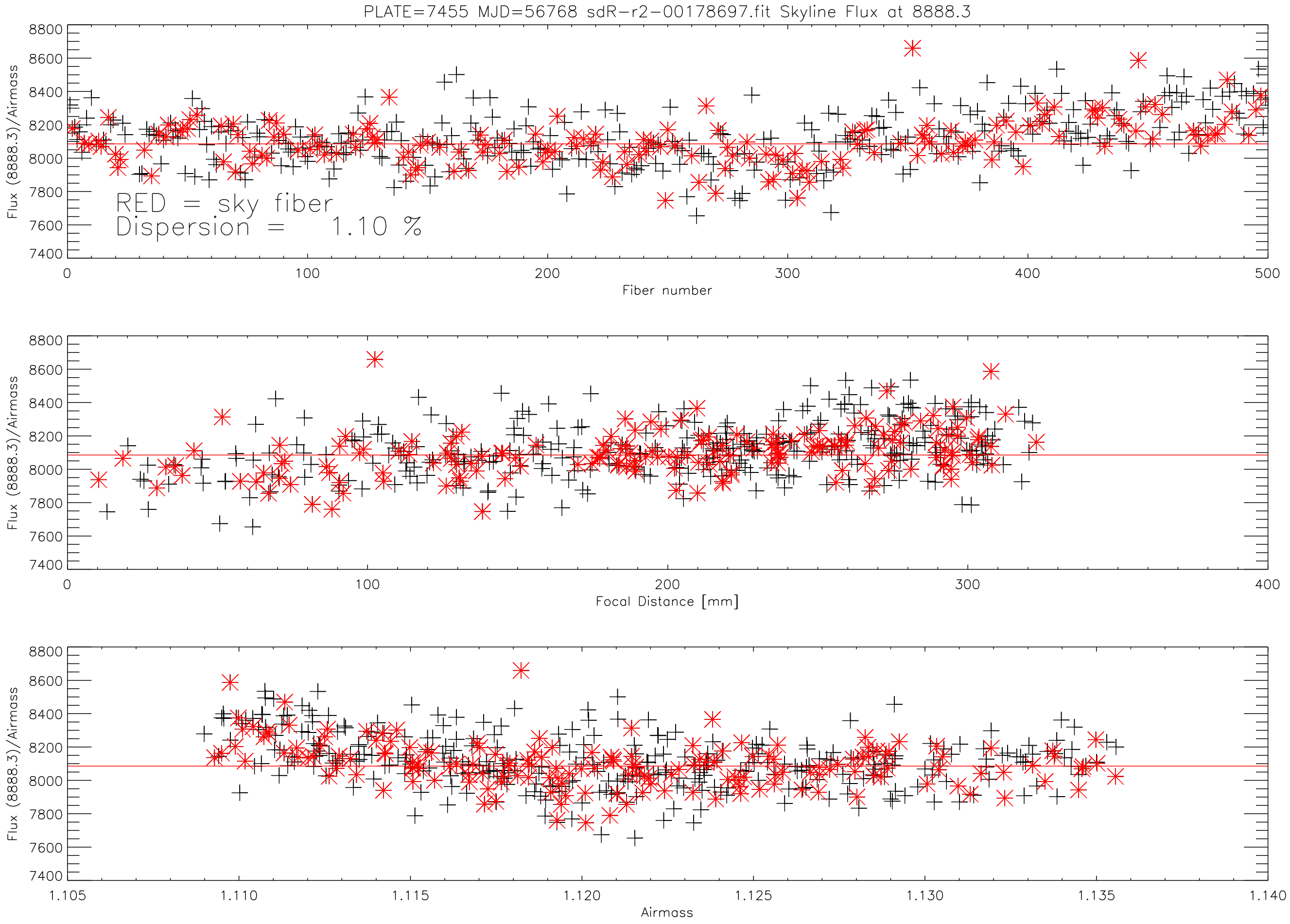

PLATE=7455 MJD=56768 sdR-r2-00178697.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

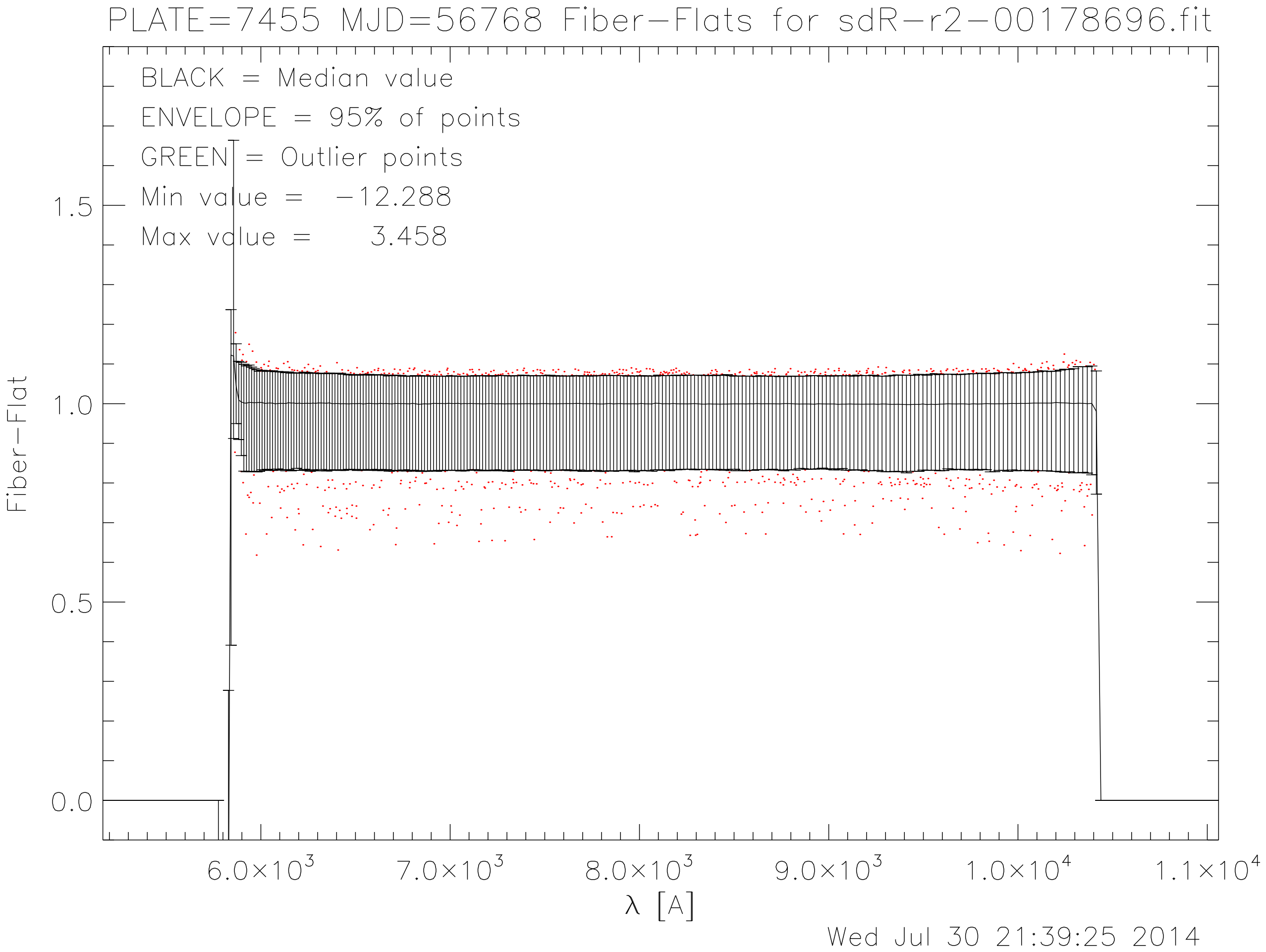

PLATE=7455 MJD=56768 sdR-r2-00178697.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

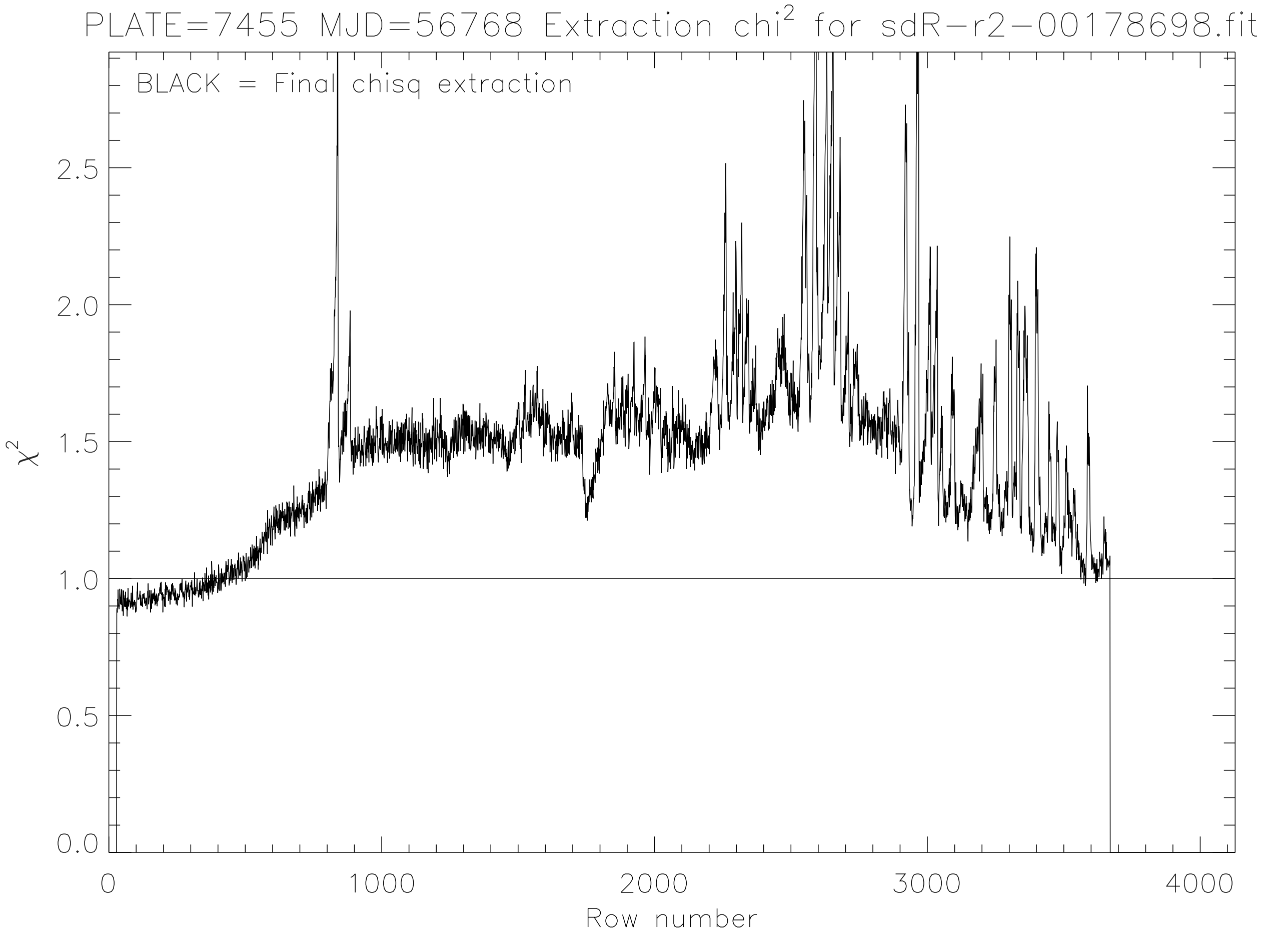
Number of sky fibers = 170

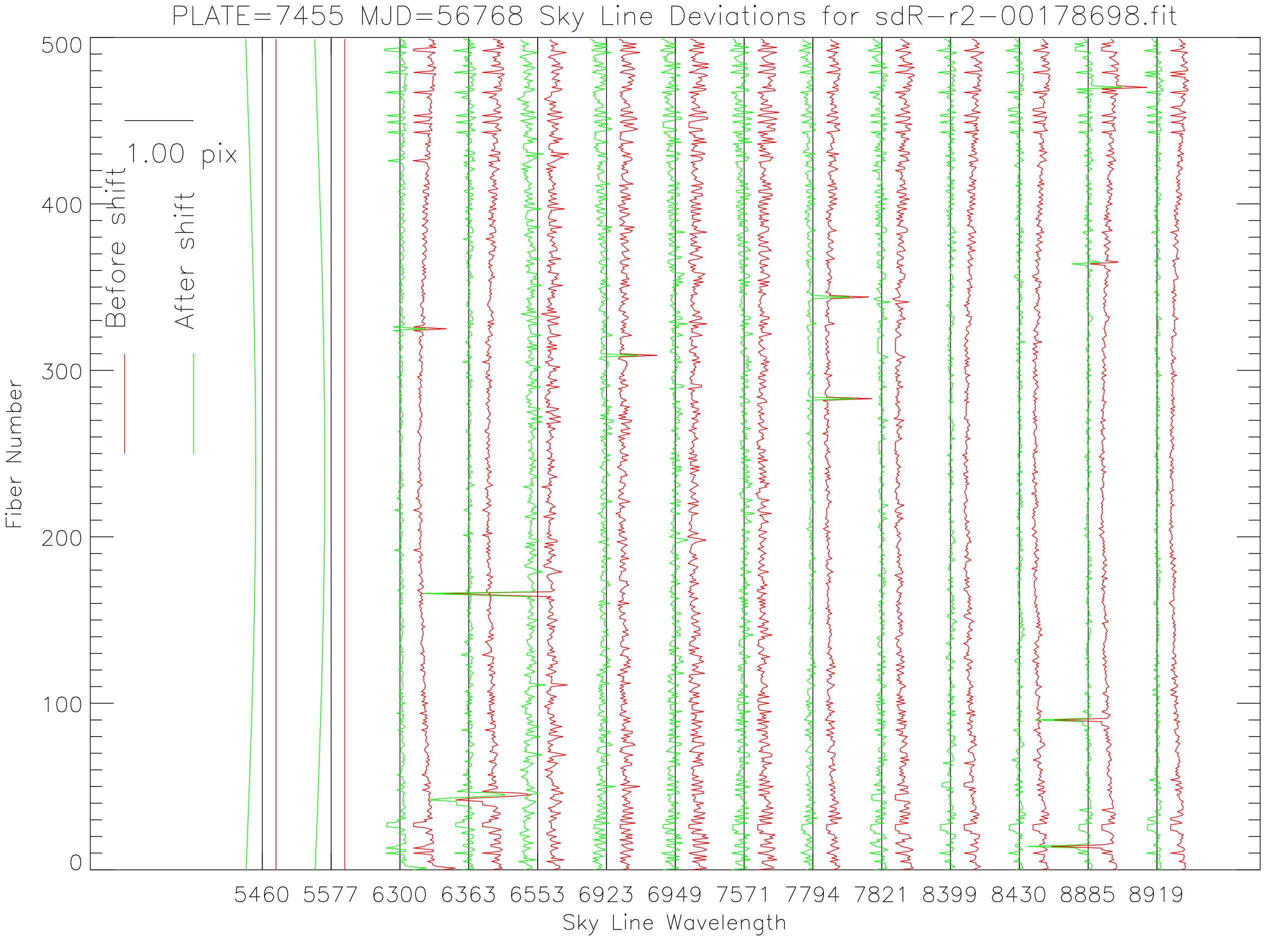


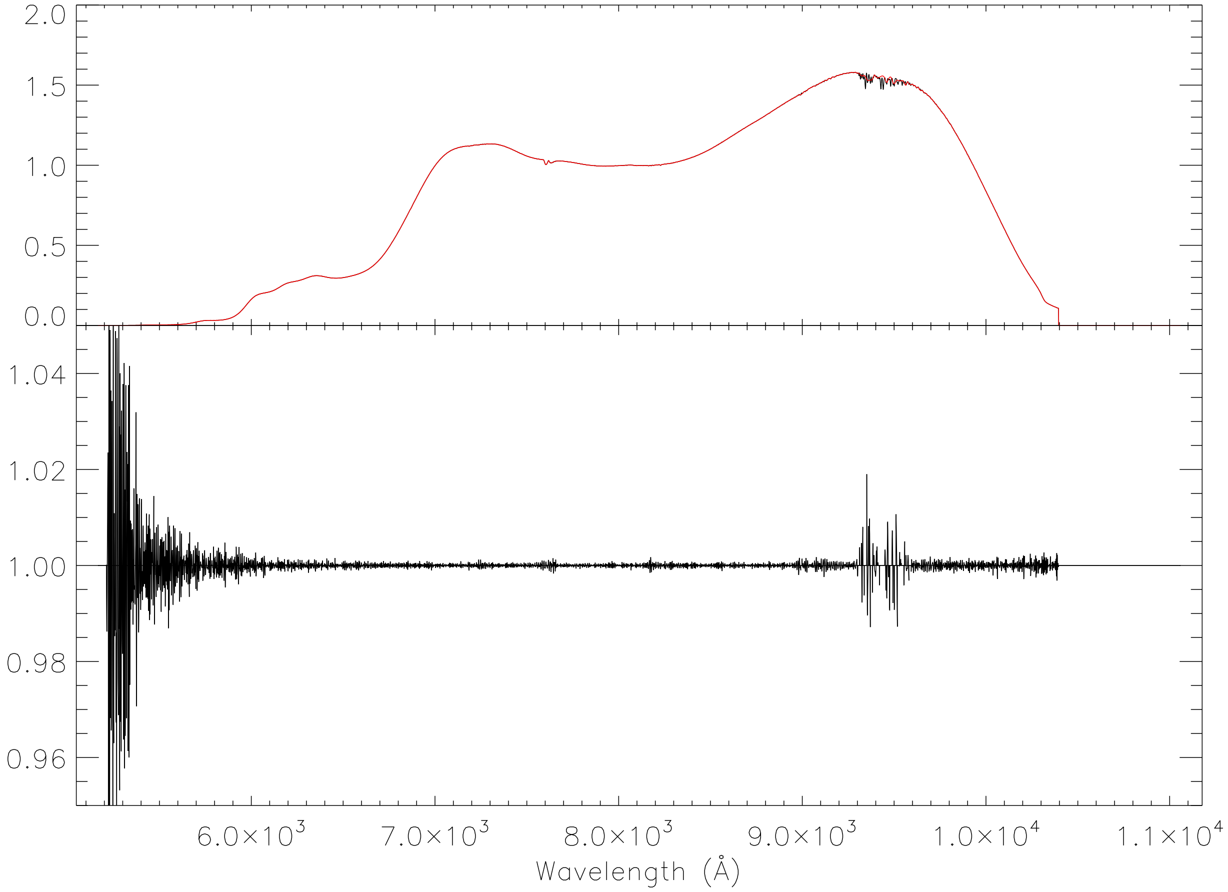

PLATE=7455 MJD=56768 sdR-r2-00178697.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
RED = sky fiber
Dispersion = 2.06 %
0
100
200
300
400
500
Fiber number
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
1.105
1.110
1.115
1.120
1.125
1.130
1.135
1.140
Airmass


PLATE=7455 MJD=56768 sdR-r2-00178697.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
8800
8600
8400
8200
8000
7800
7600
7400
RED = sky fiber
Dispersion = 1.10 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.105
1.110
1.115
1.120
1.125
1.130
1.135
1.140
Airmass

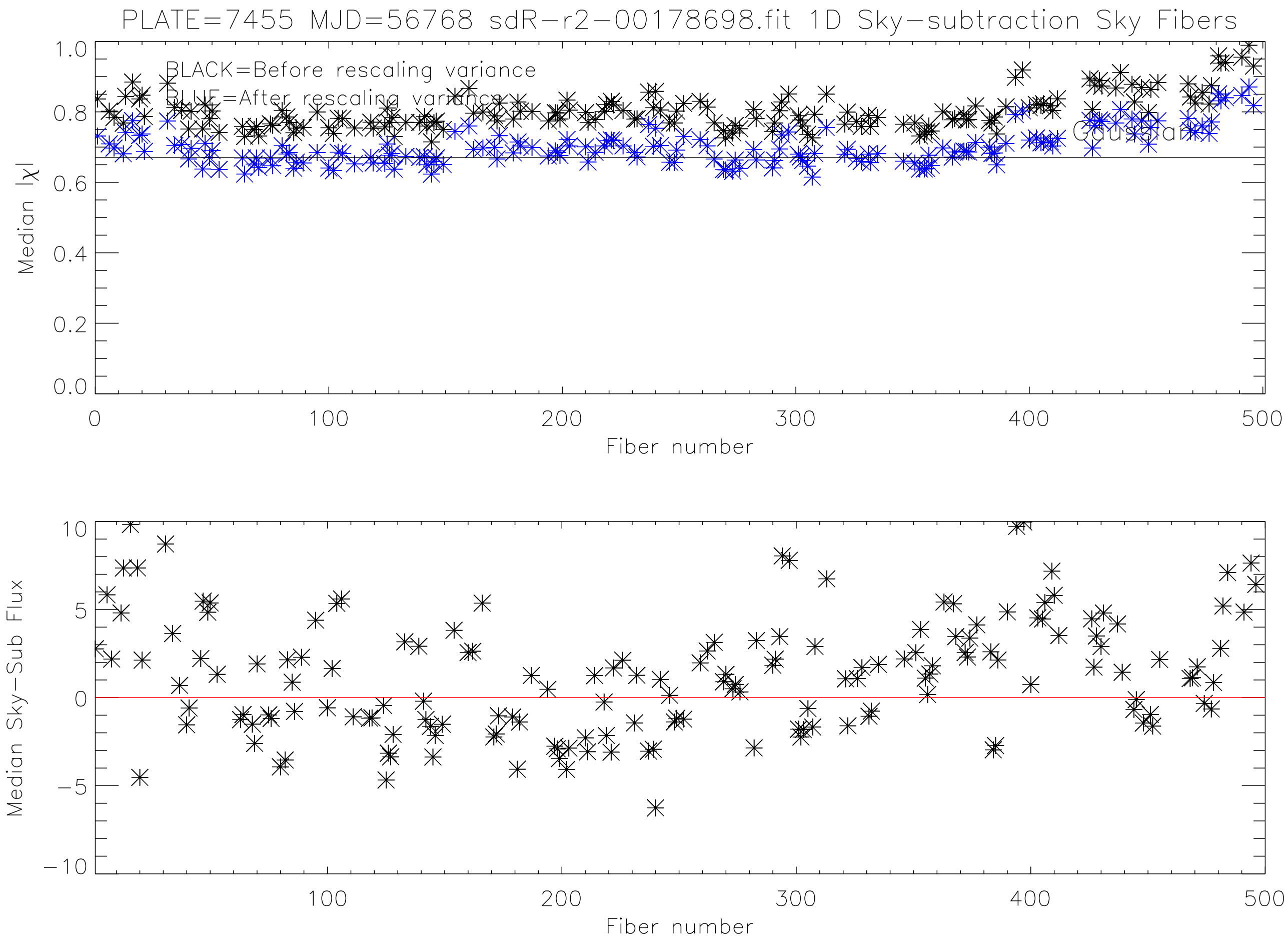

PLATE=7455 MJD=56768 Fiber−Flats for sdR−r2−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −12.288
Max value = 3.458
Fiber−Flat
0.0
0.5
1.0
1.5
6.0×10³
7.0×10³
8.0×10³
9.0×10³
1.0×10⁴
1.1×10⁴
λ [A]
Wed Jul 30 21:39:25 2014

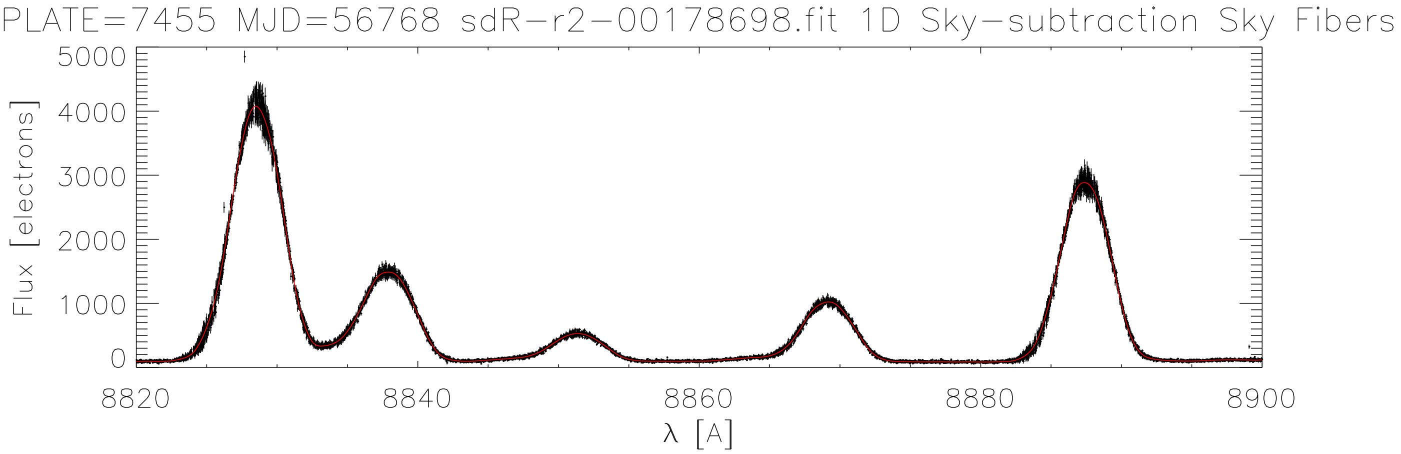

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r2-00178698.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number

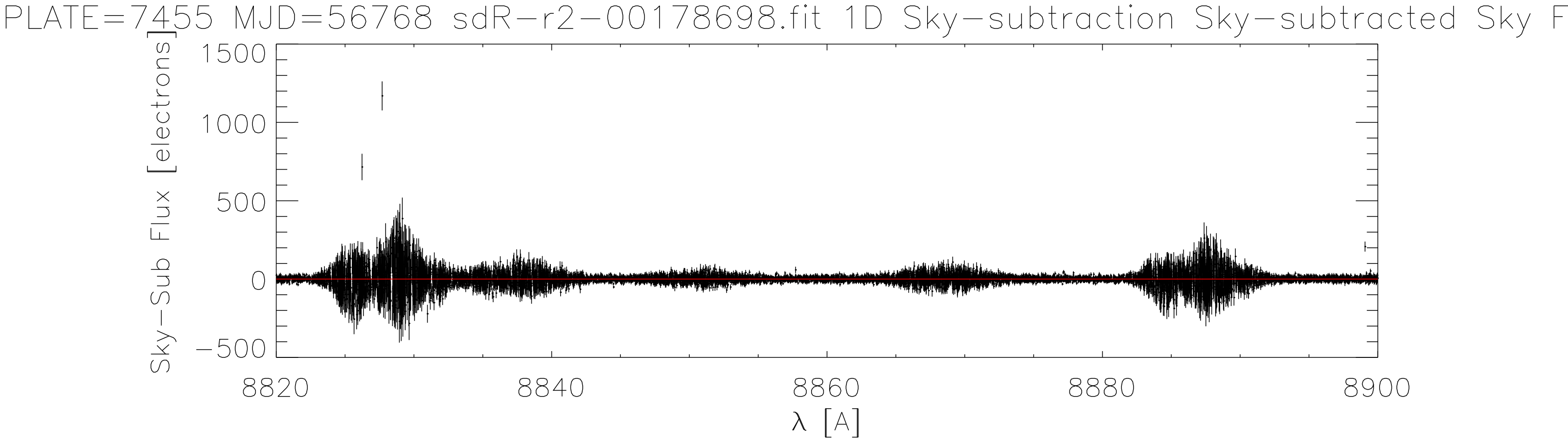

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r2-00178698.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919
Sky Line Wavelength



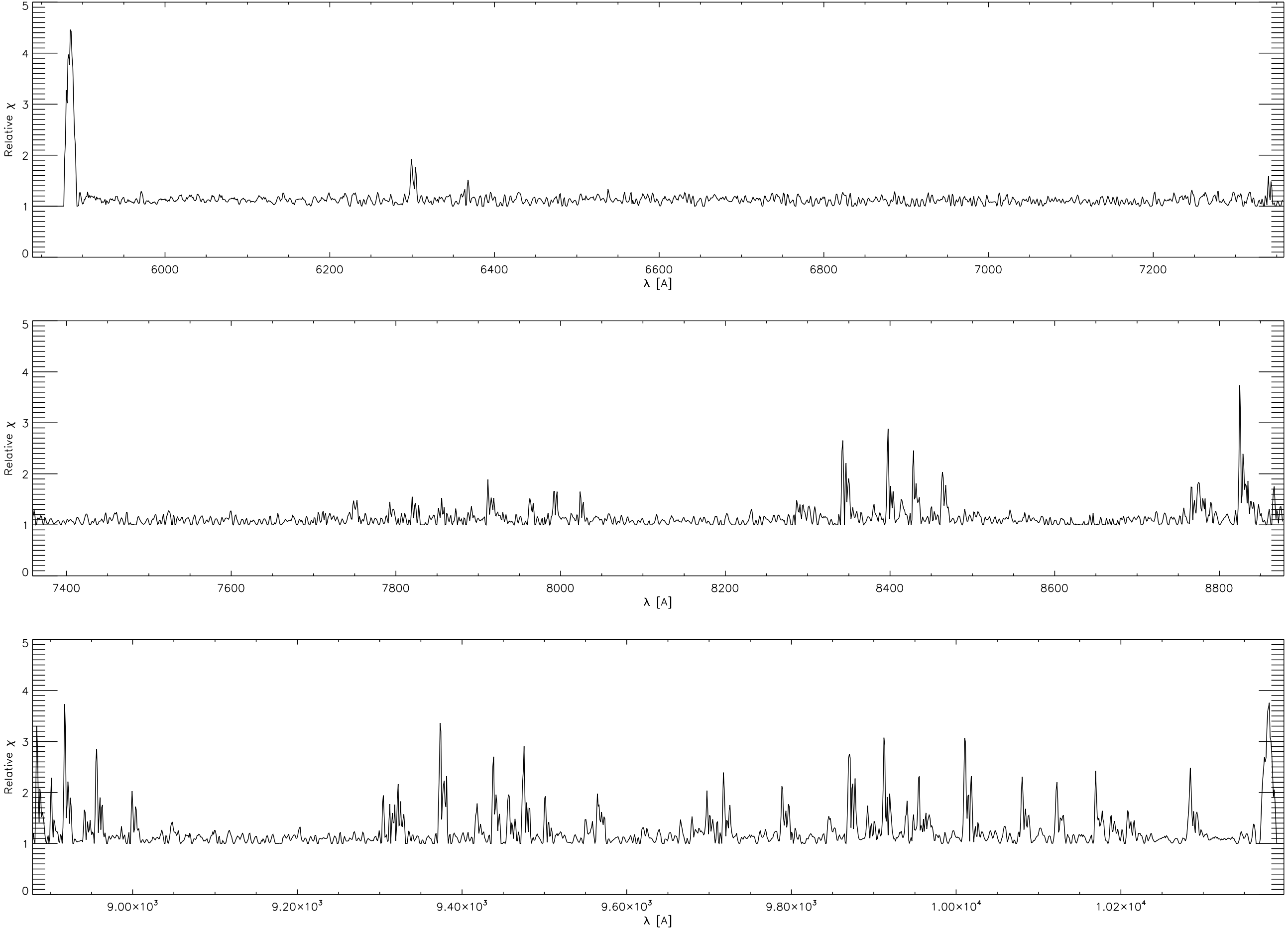
PLATE=7455 MJD=56768 Smooth superflat for sdR-r2-00178698.fit


PLATE=7455 MJD=56768 sdR-r2-00178698.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
-10
-5
0
5
10
100
200
300
400
500
Fiber number

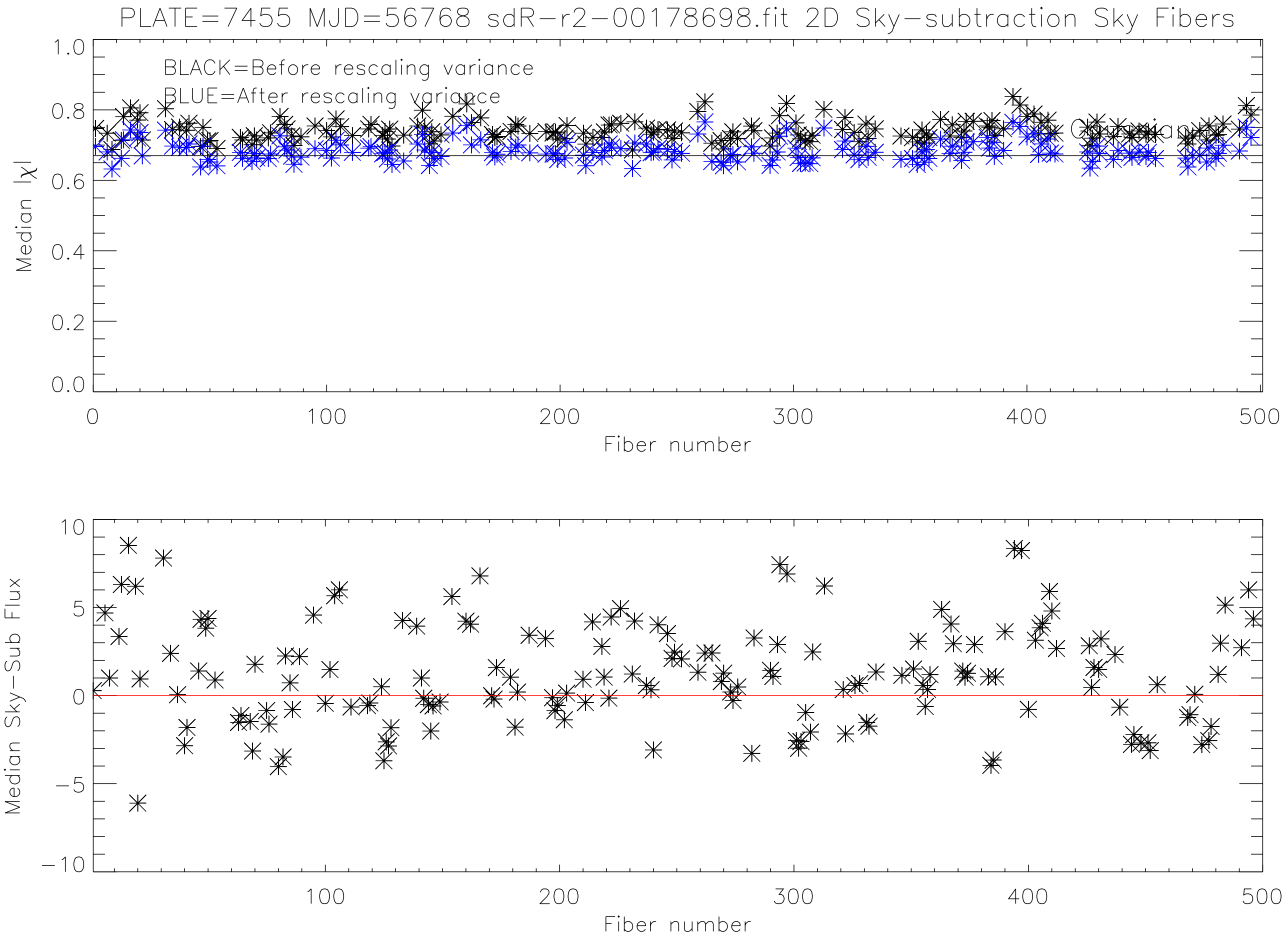

PLATE=7455 MJD=56768 sdR-r2-00178698.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=7455 MJD=56768 sdR-r2-00178698.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

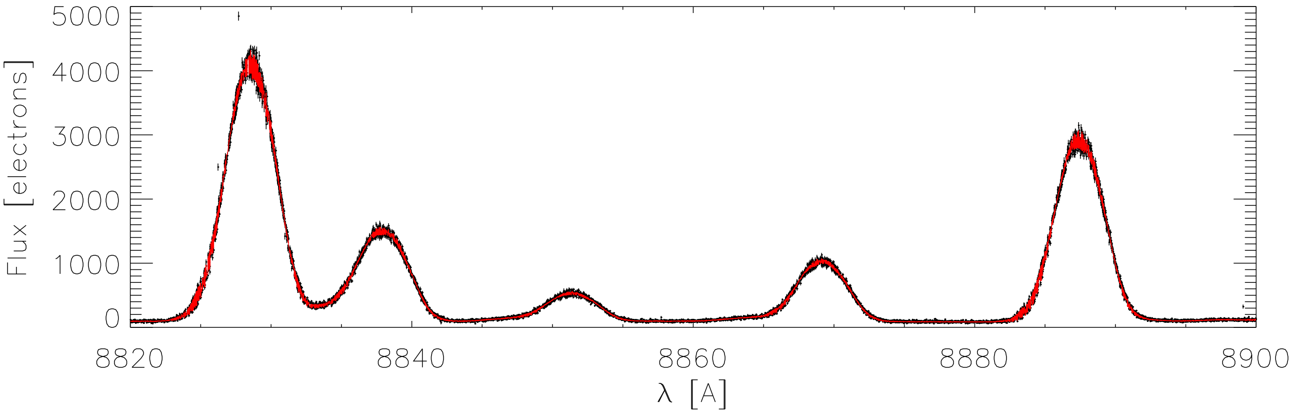
Number of sky fibers = 170



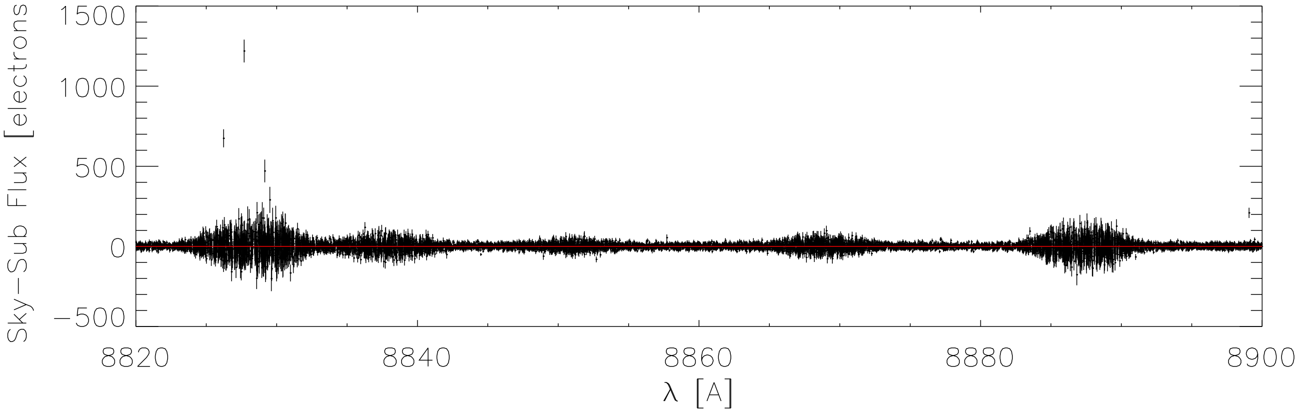
PLATE=7455 MJD=56768 sdR-r2-00178698.fit 1D Sky-subtraction Rescaled Errors


PLATE=7455 MJD=56768 sdR-r2-00178698.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
100
200
300
400
500
Fiber number

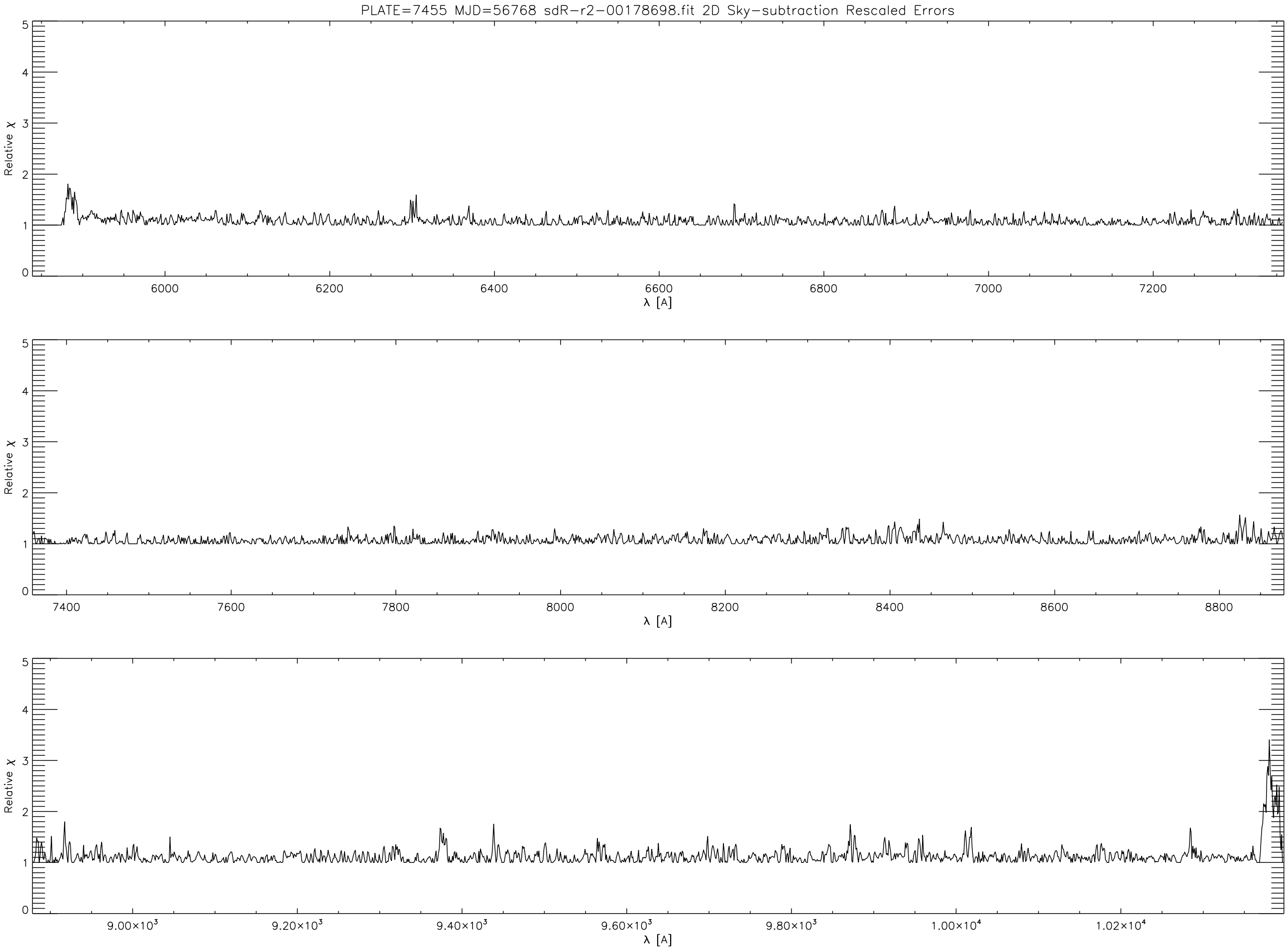
PLATE=7455 MJD=56768 sdR-r2-00178698.fit 2D Sky-subtraction Sky Fibers

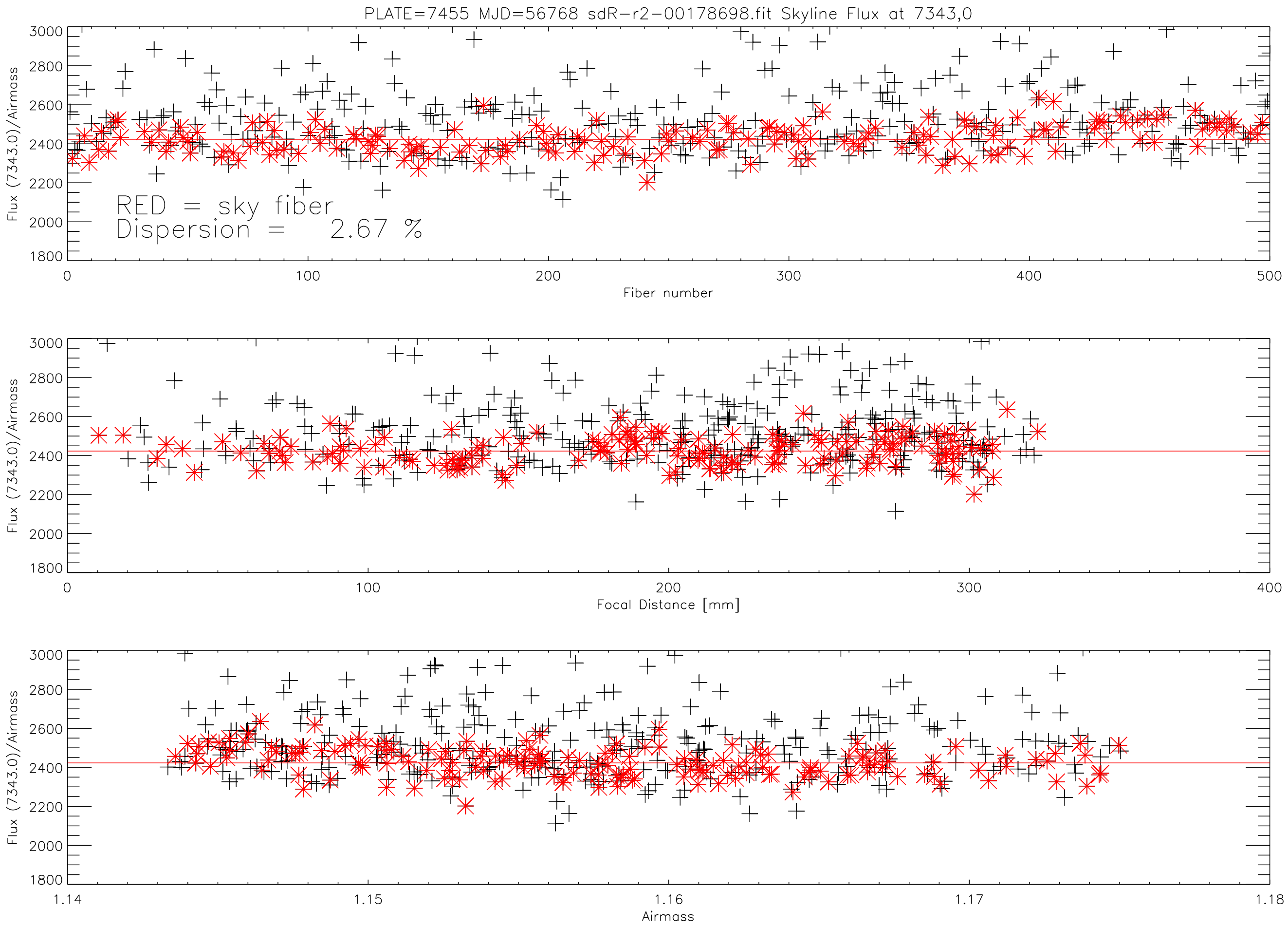


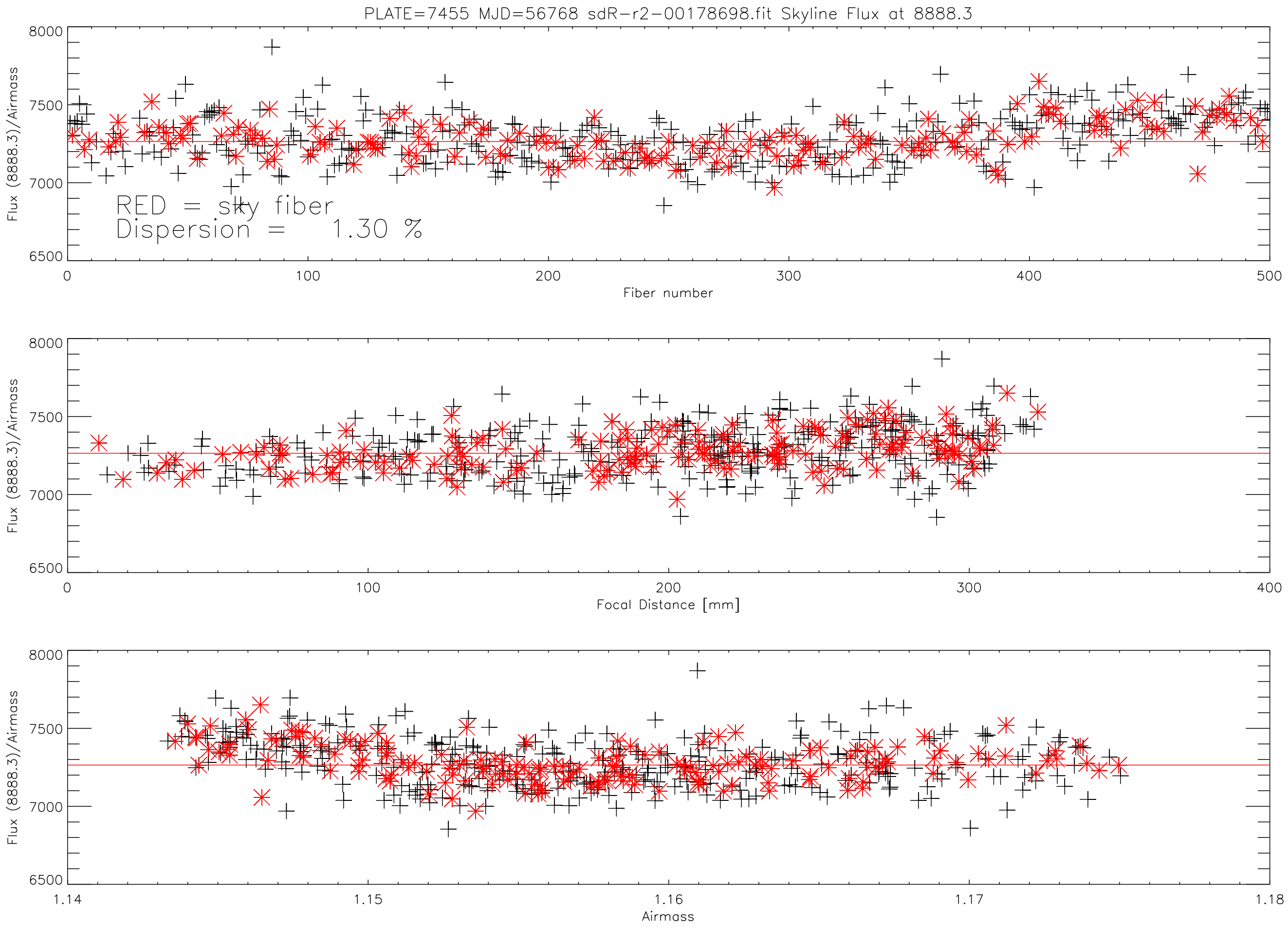
PLATE=7455 MJD=56768 sdR-r2-00178698.fit 2D Sky-subtraction Sky-subtracted Sky F

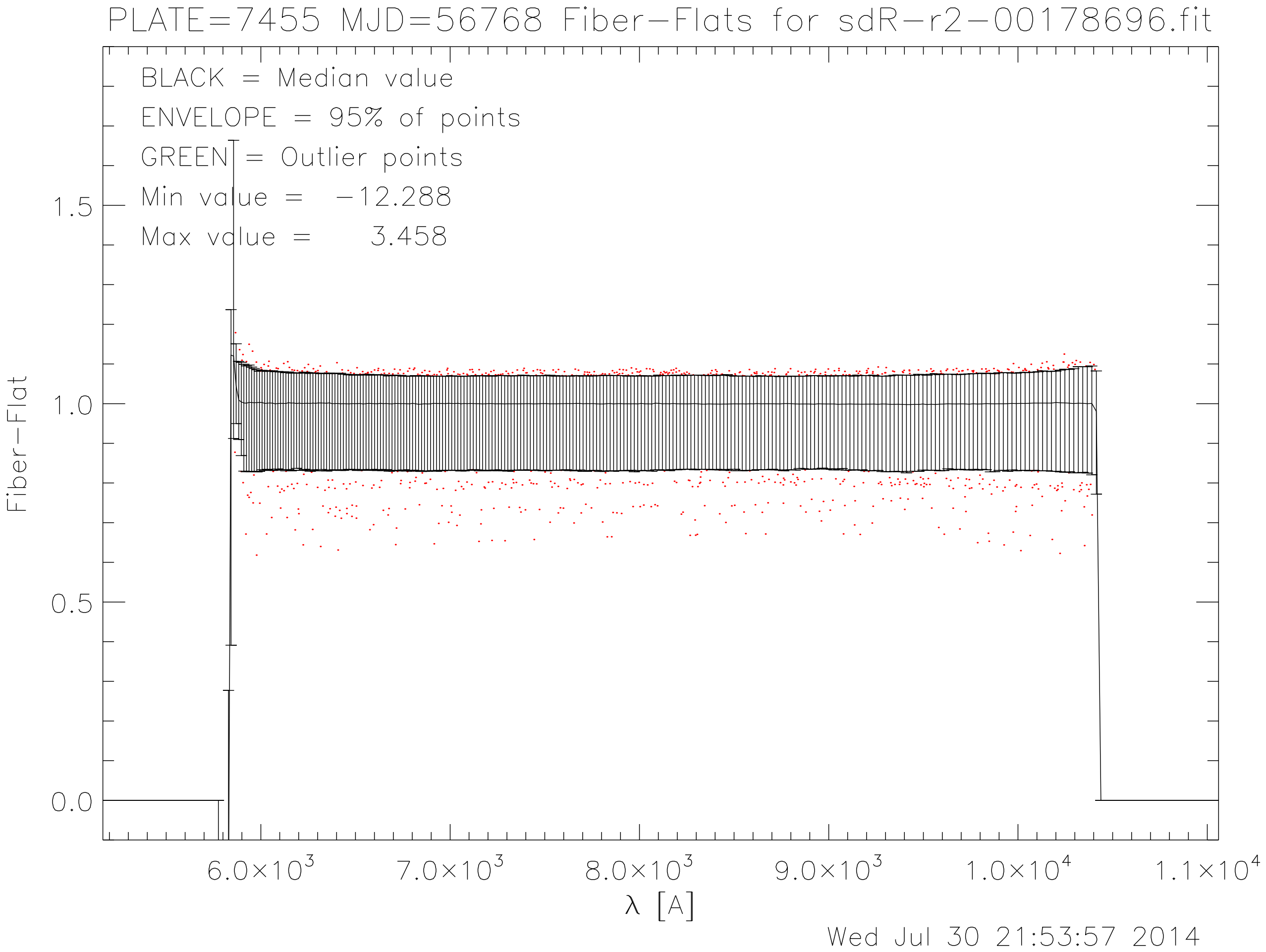


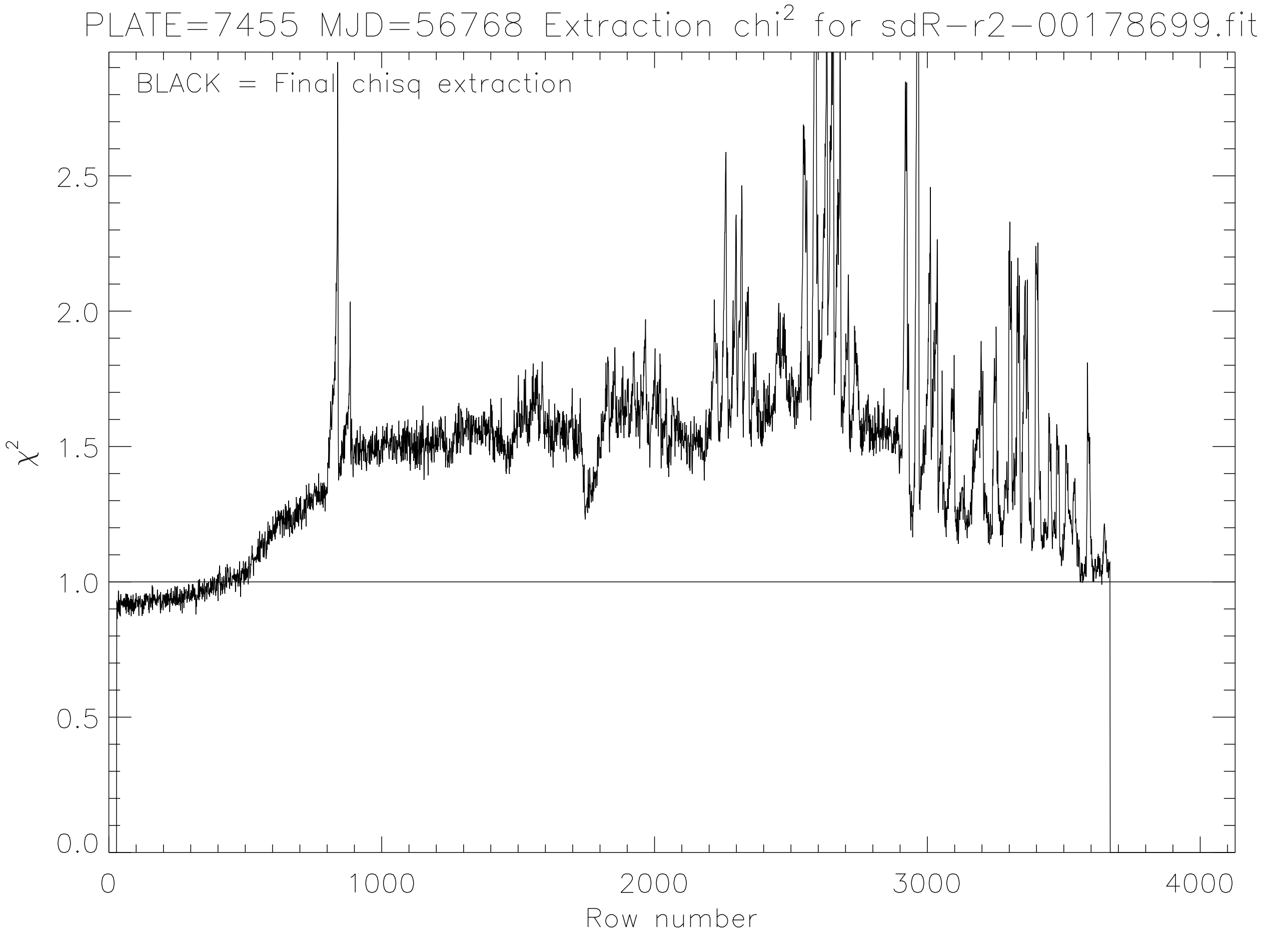
Number of sky fibers = 170

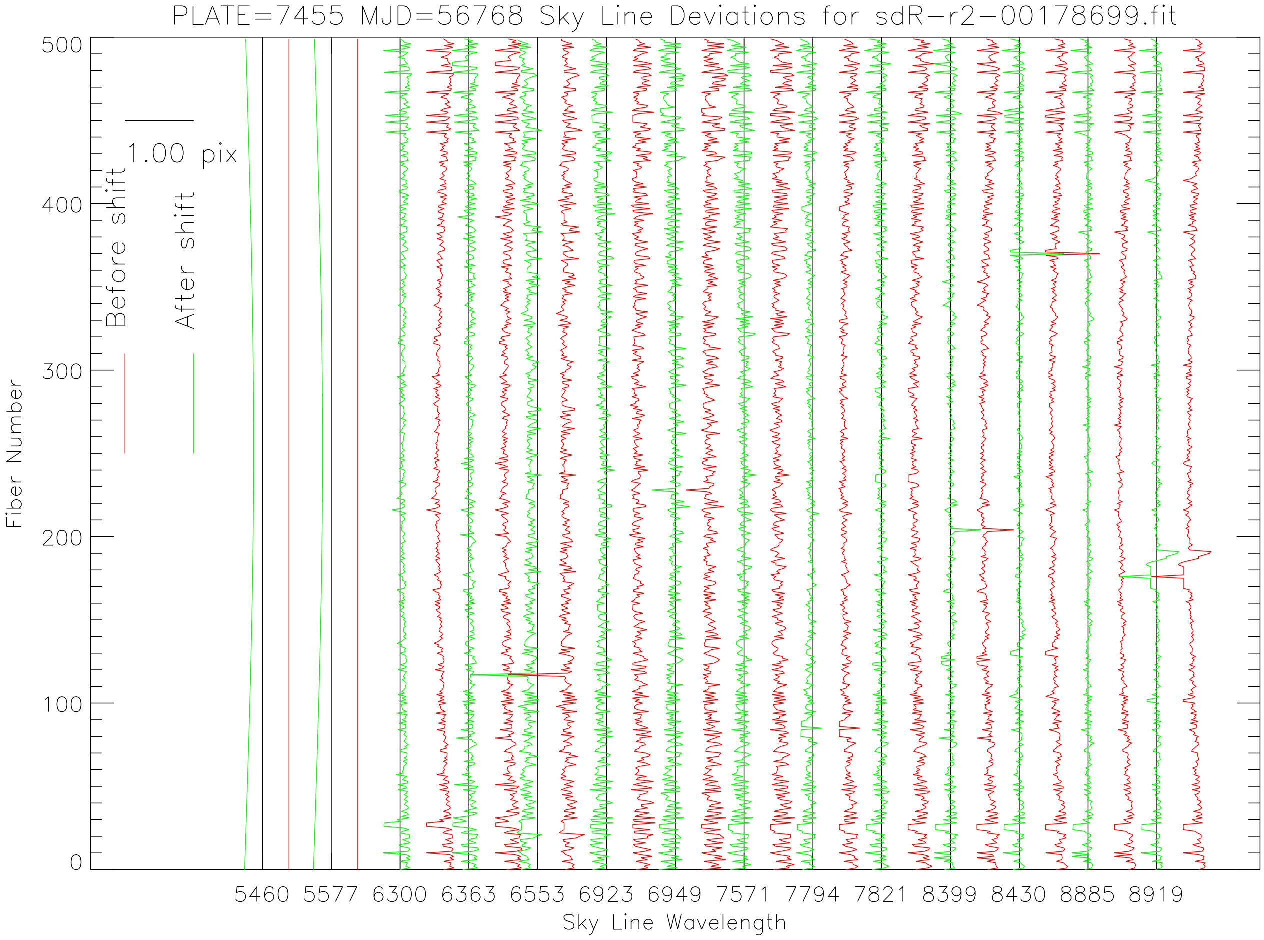

PLATE=7455 MJD=56768 sdR-r2-00178698.fit 2D Sky-subtraction Rescaled Errors

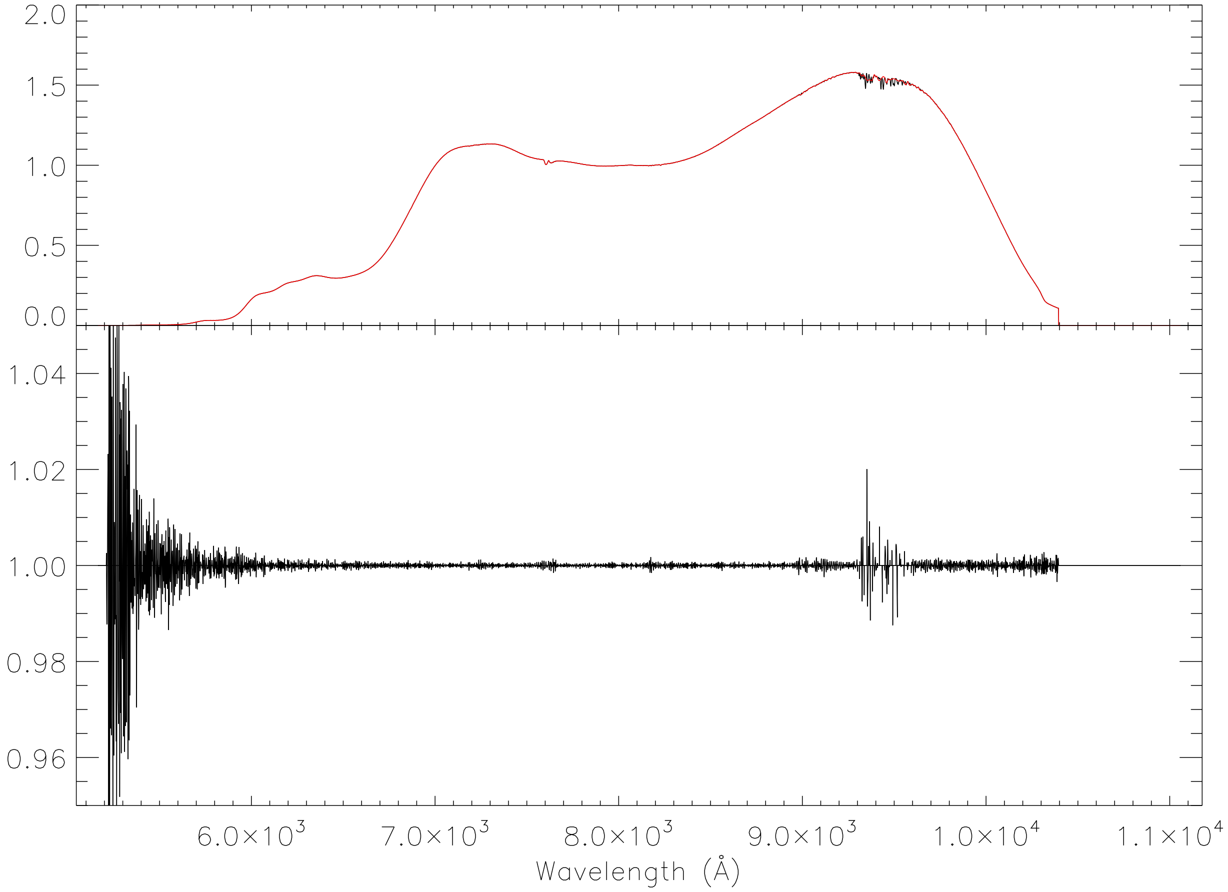

PLATE=7455 MJD=56768 sdR-r2-00178698.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.67 %
Flux (7343.0)/Airmass
1800
2000
2200
2400
2600
2800
3000
0
100
200
300
400
500
Fiber number
Focal Distance [mm]
1.14
1.15
1.16
1.17
1.18
Airmass


PLATE=7455 MJD=56768 sdR-r2-00178698.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
8000
7500
7000
6500
RED = sky fiber
Dispersion = 1.30 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
8000
7500
7000
6500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
8000
7500
7000
6500
1.14
1.15
1.16
1.17
1.18
Airmass

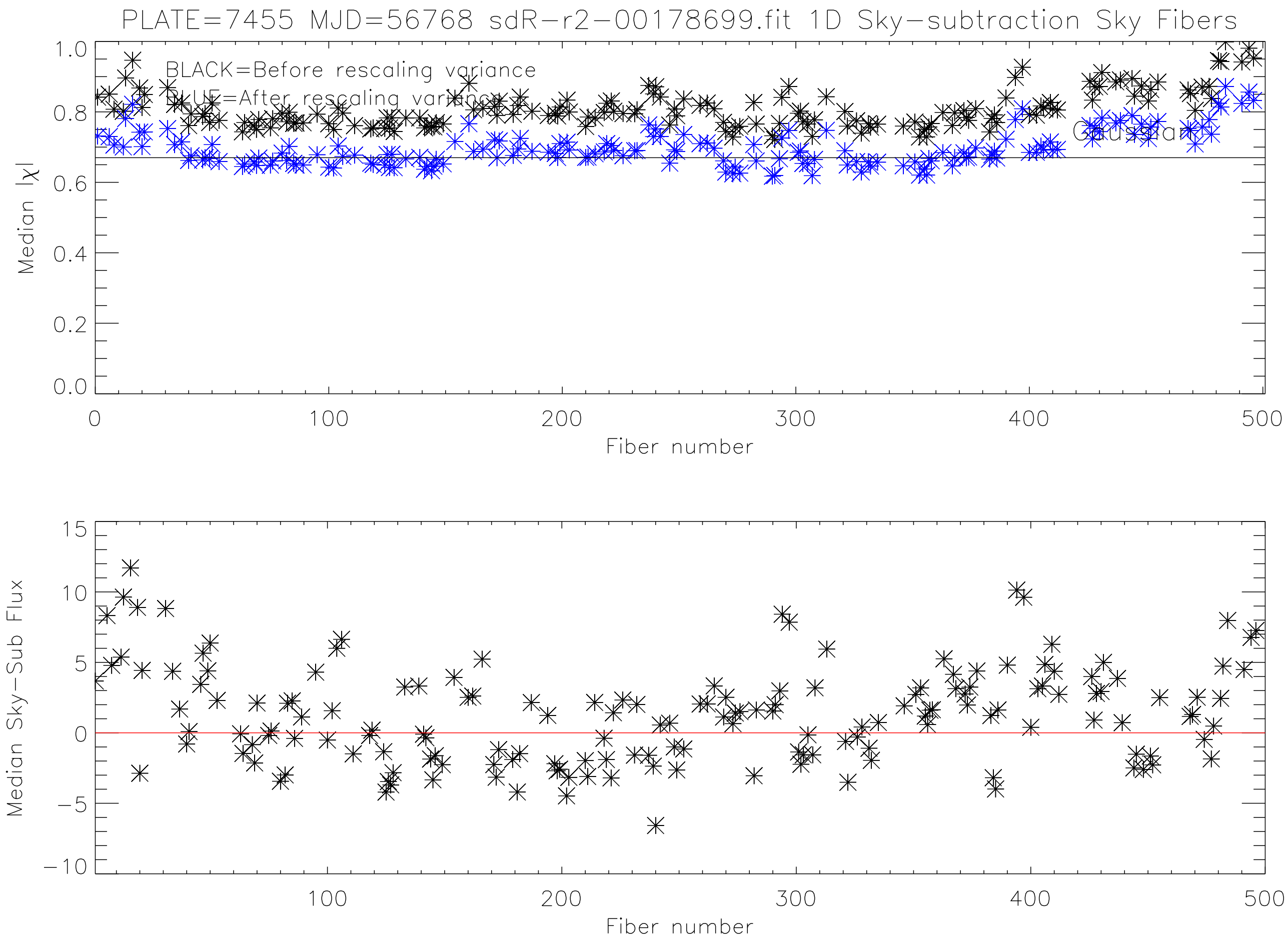

PLATE=7455 MJD=56768 Fiber−Flats for sdR−r2−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −12.288
Max value = 3.458
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10³
7.0×10³
8.0×10³
9.0×10³
1.0×10⁴
1.1×10⁴
λ [A]
Wed Jul 30 21:53:57 2014

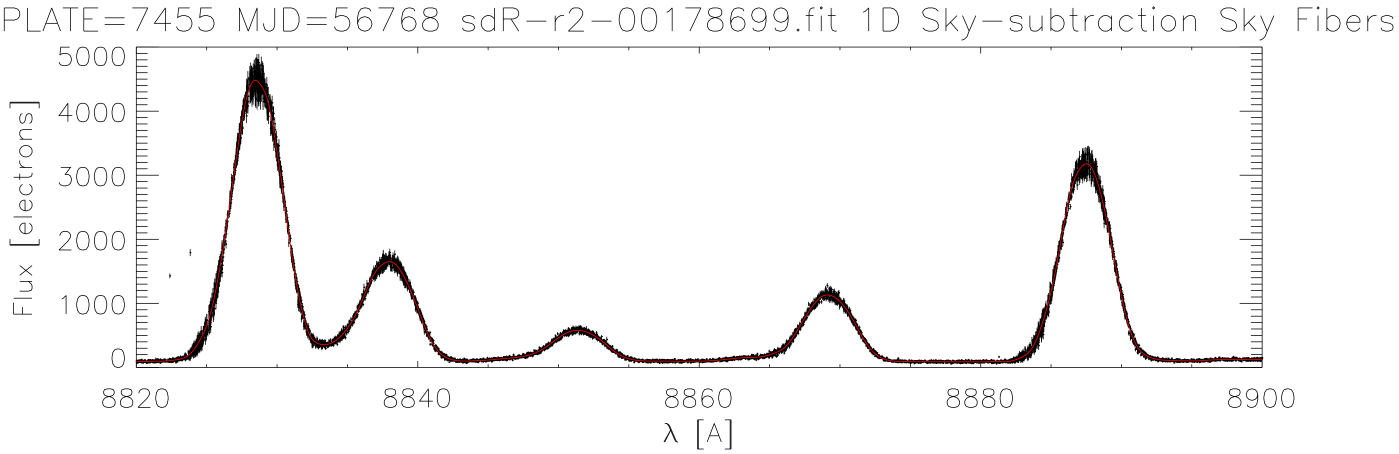

PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r2-00178699.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number


PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r2-00178699.fit
Fiber Number
0
100
200
300
400
500
1.00 pix
Before shift
After shift
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919
Sky Line Wavelength

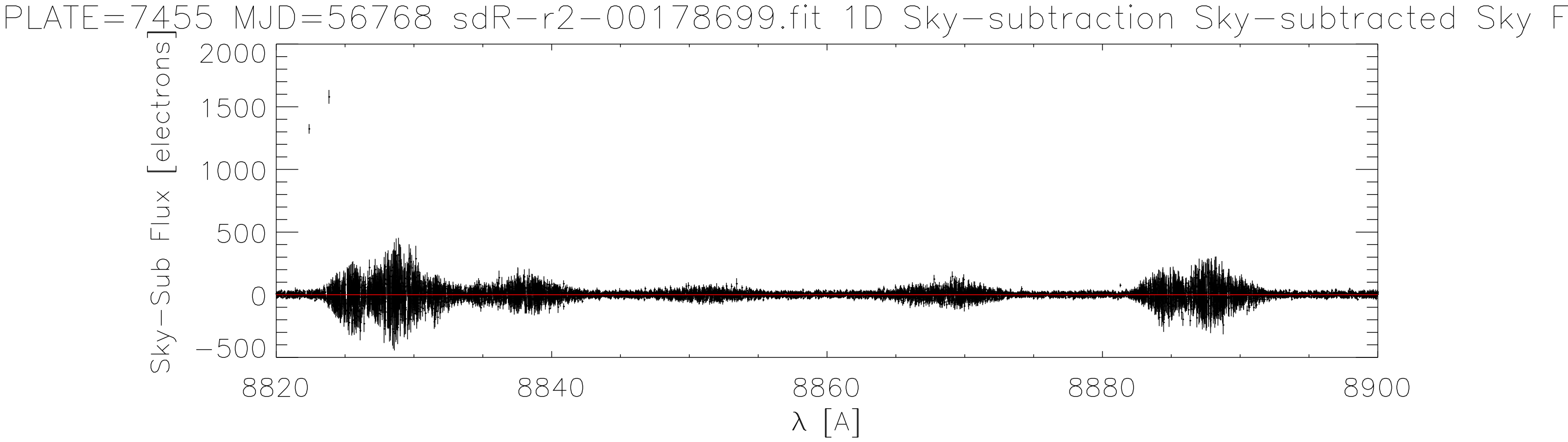


PLATE=7455 MJD=56768 Smooth superflat for sdR-r2-00178699.fit


PLATE=7455 MJD=56768 sdR-r2-00178699.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
0.0
0.2
0.4
0.6
0.8
1.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
-10
-5
0
5
10
15
100
200
300
400
500
Fiber number

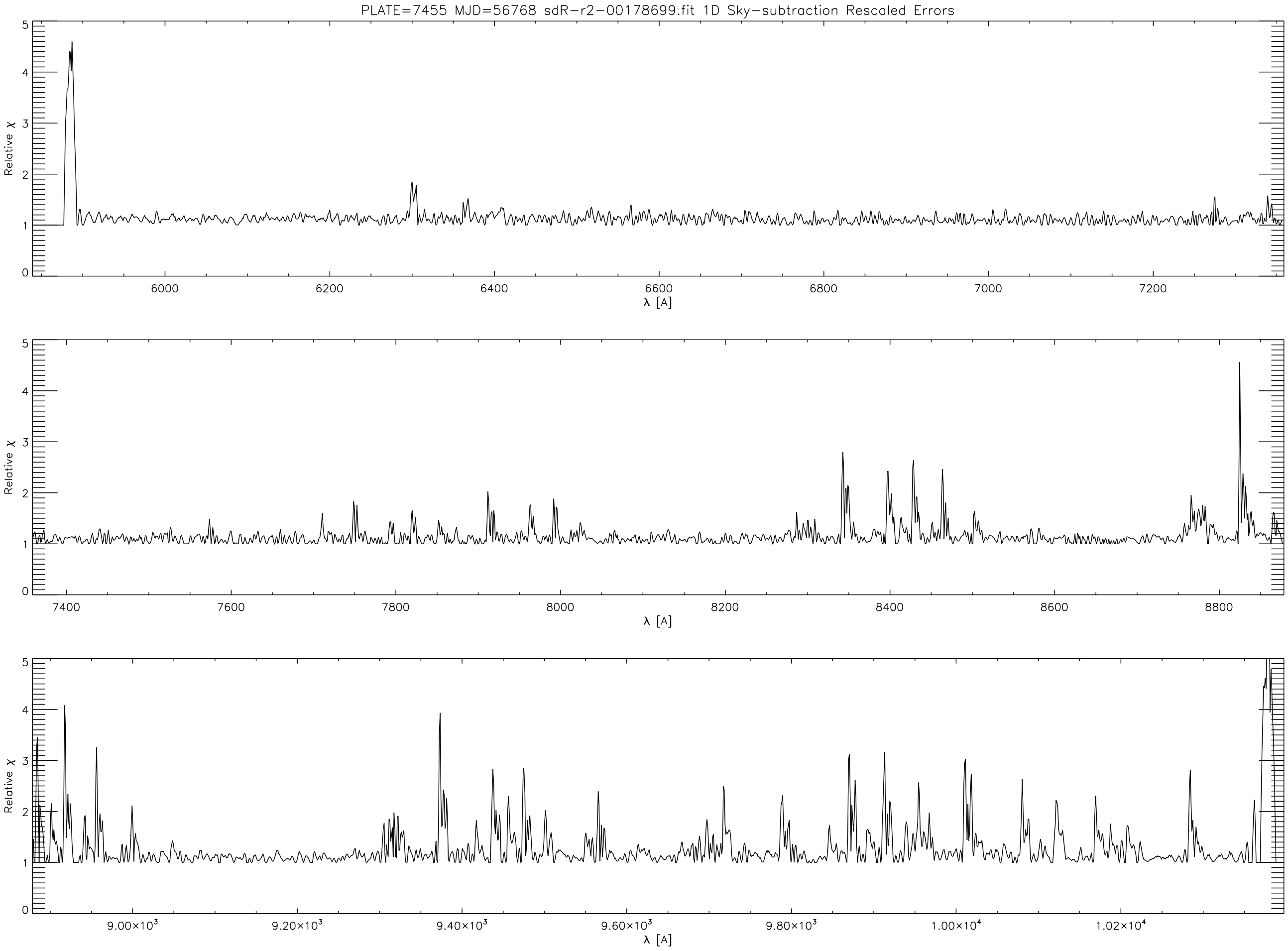


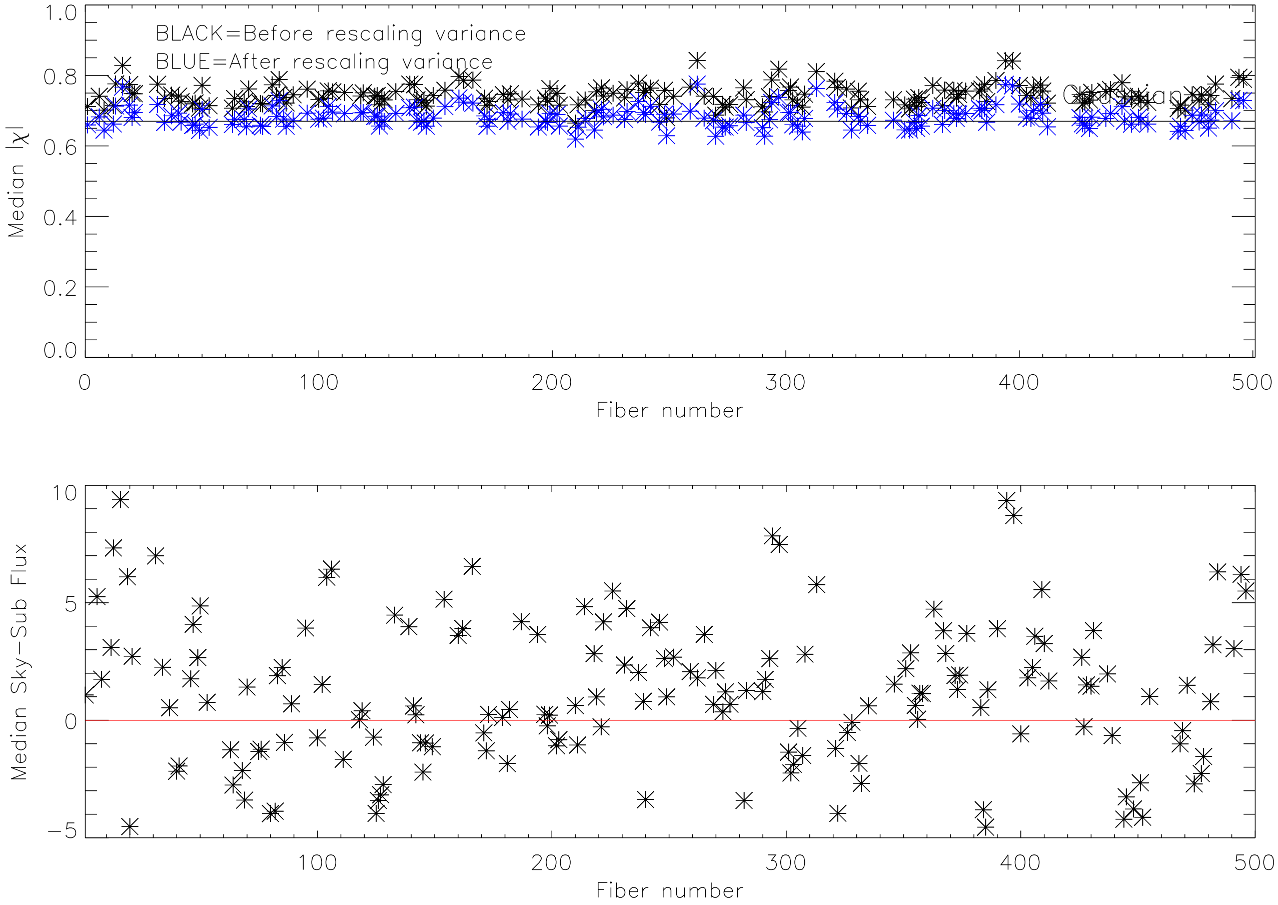
PLATE=7455 MJD=56768 sdR-r2-00178699.fit 1D Sky-subtraction Sky Fibers



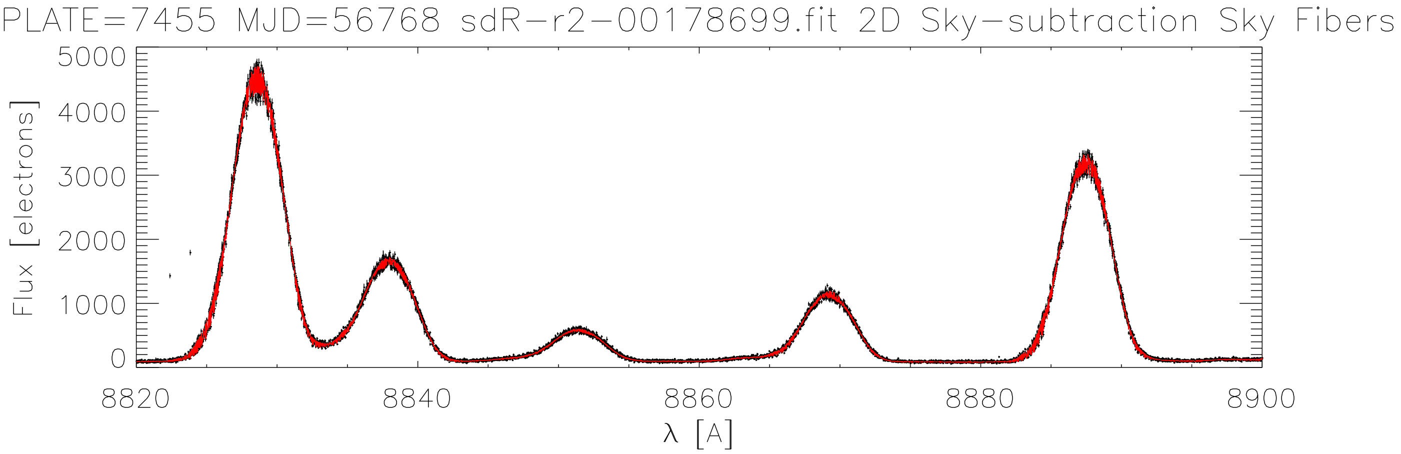
PLATE=7455 MJD=56768 sdR-r2-00178699.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 170

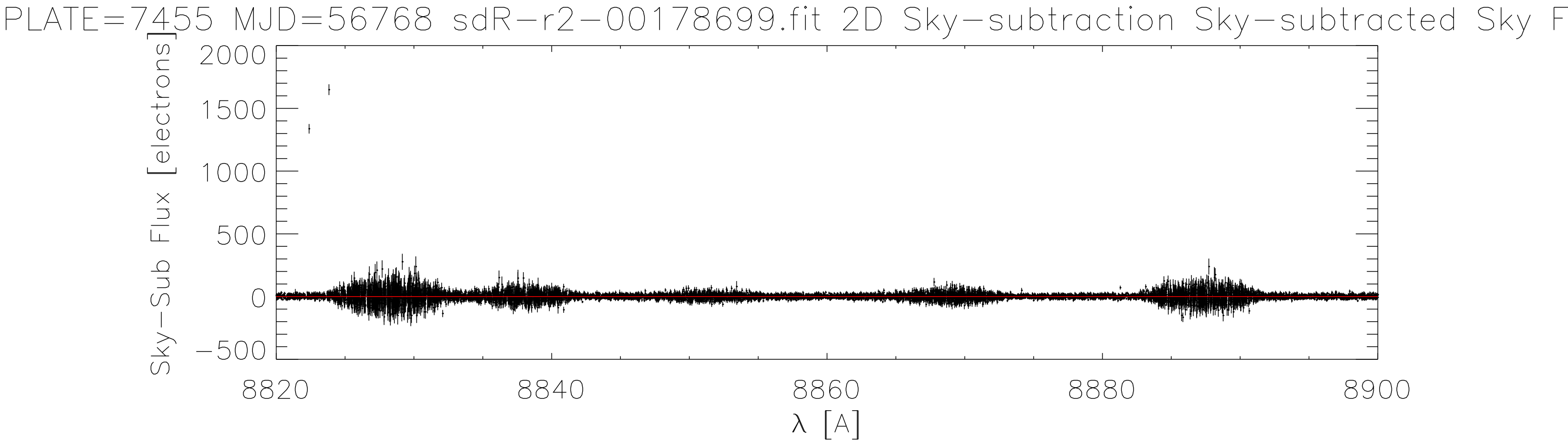




PLATE=7455 MJD=56768 sdR-r2-00178699.fit 2D Sky-subtraction Sky Fibers

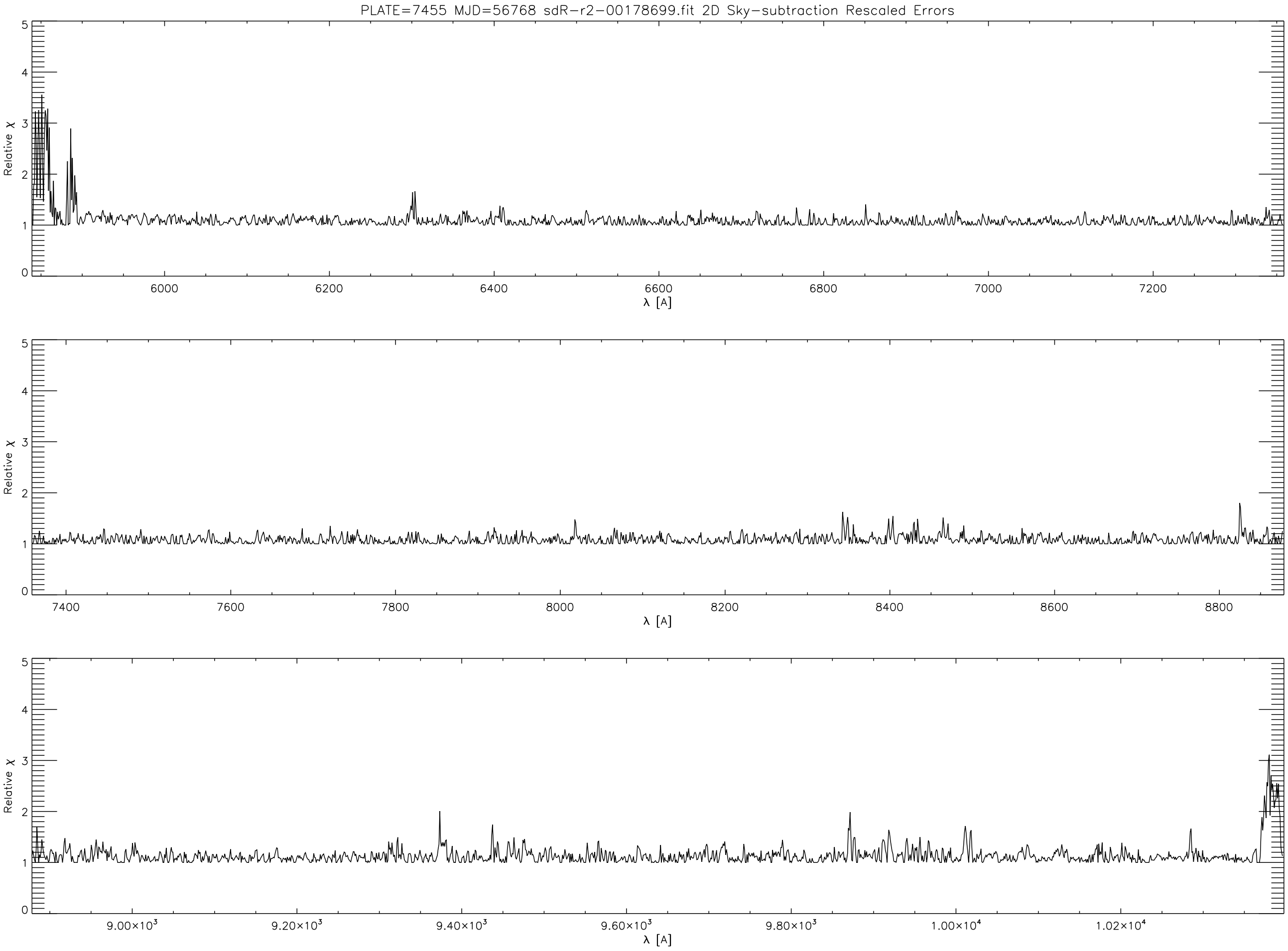


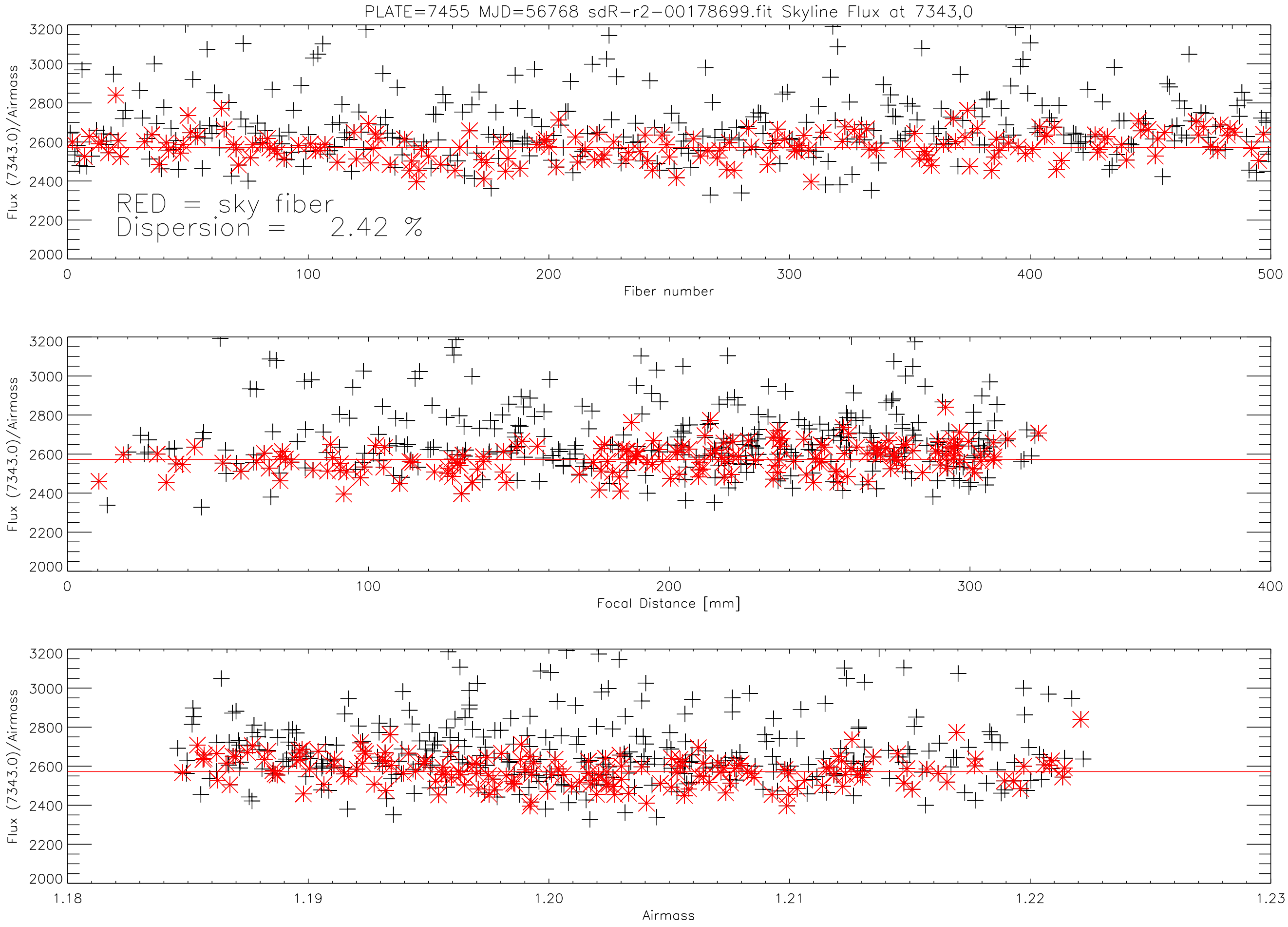
PLATE=7455 MJD=56768 sdR-r2-00178699.fit 2D Sky-subtraction Sky Fibers

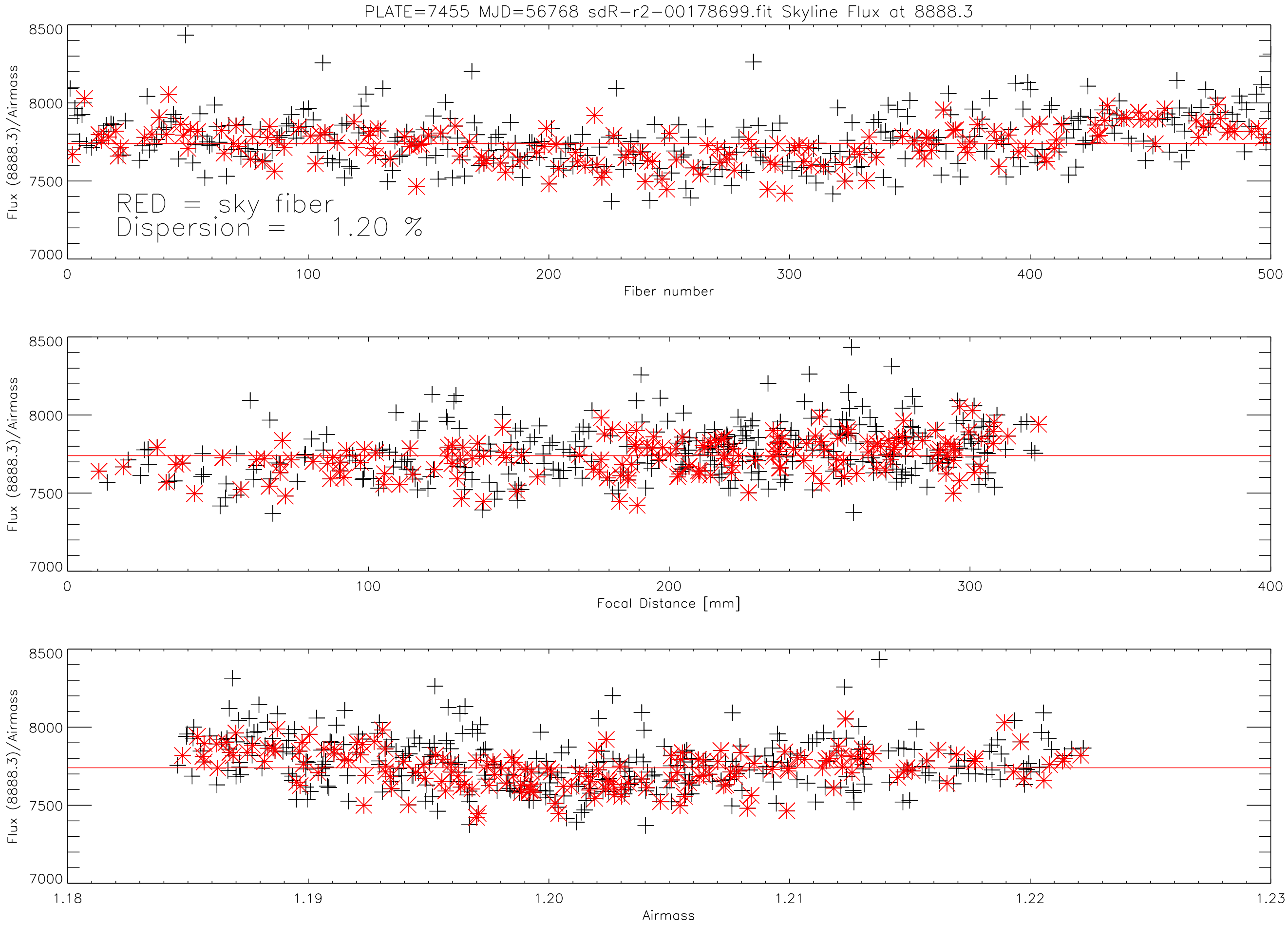


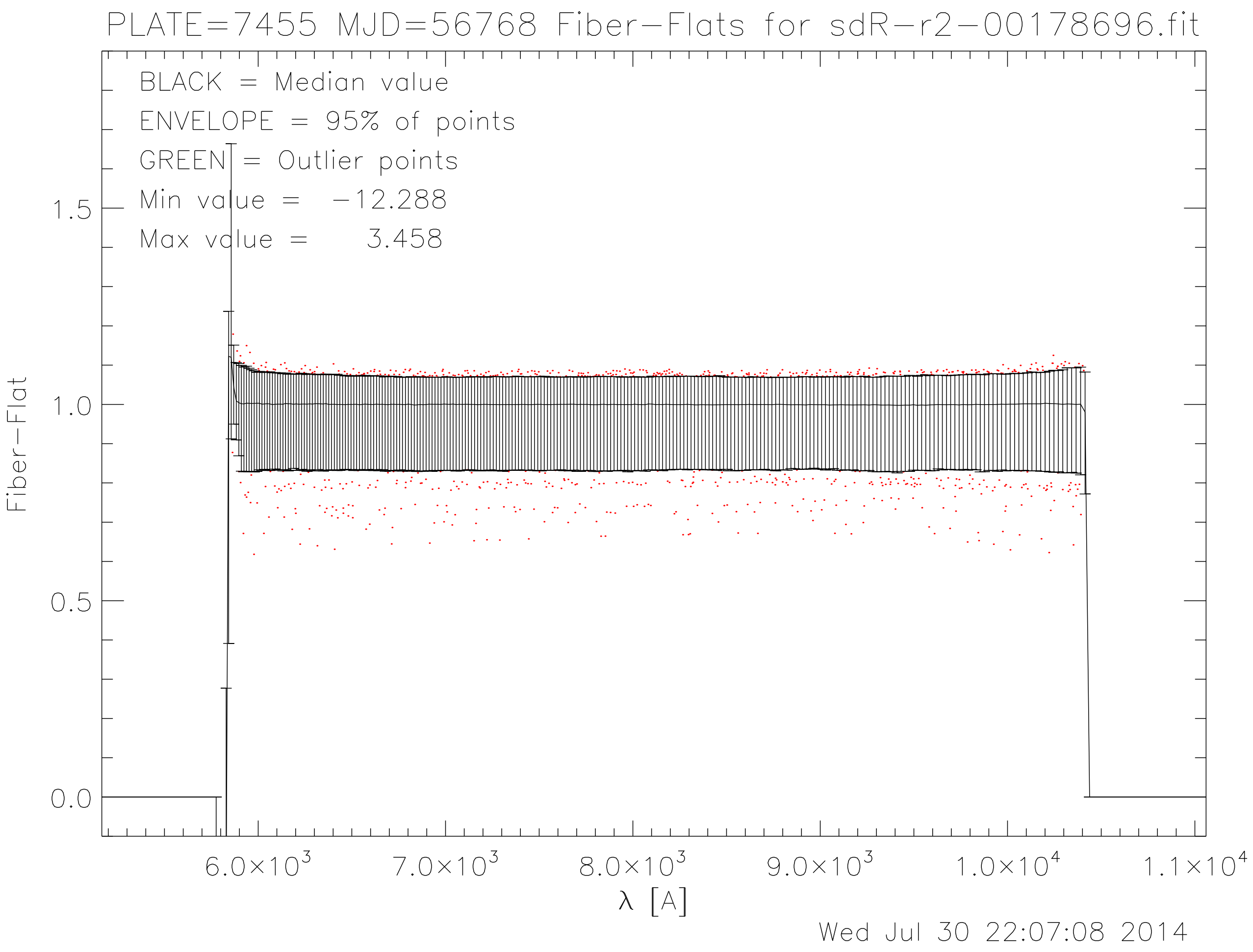
PLATE=7455 MJD=56768 sdR-r2-00178699.fit 2D Sky-subtraction Sky-subtracted Sky F

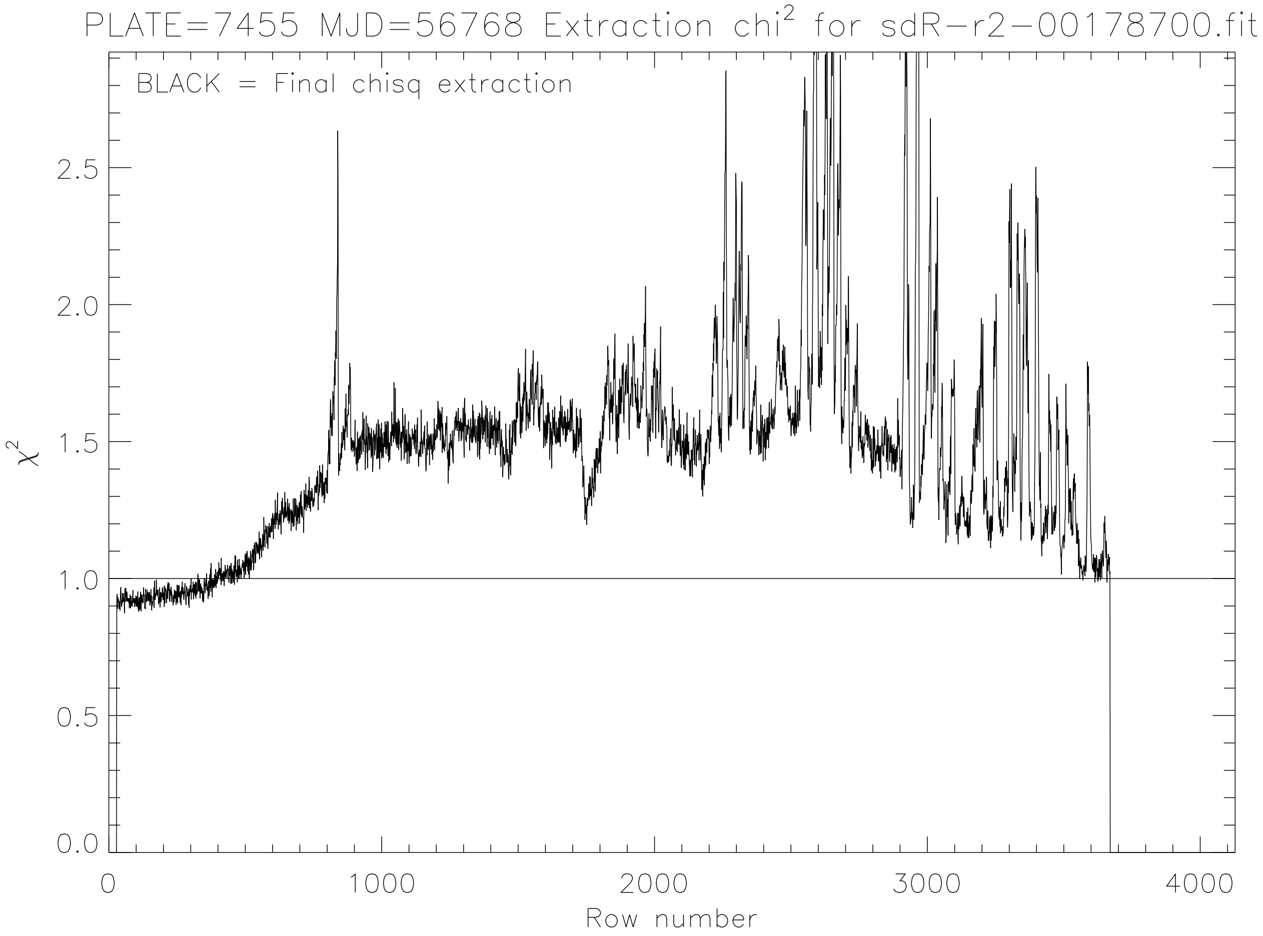
Number of sky fibers = 170



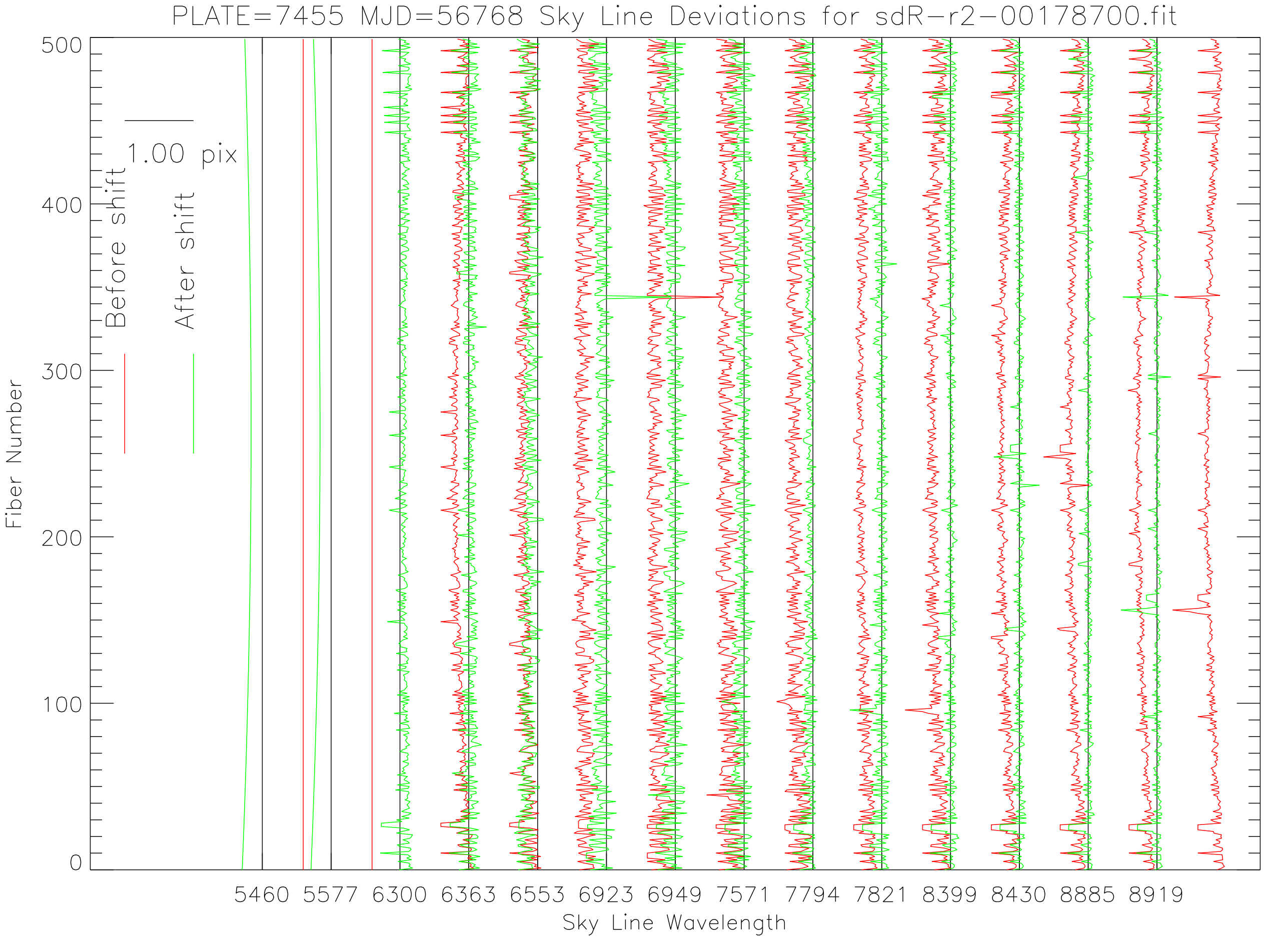

PLATE=7455 MJD=56768 sdR-r2-00178699.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.42 %
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
2000
0
100
200
300
400
500
Fiber number
Focal Distance [mm]
1.18
1.19
1.20
1.21
1.22
1.23
Airmass

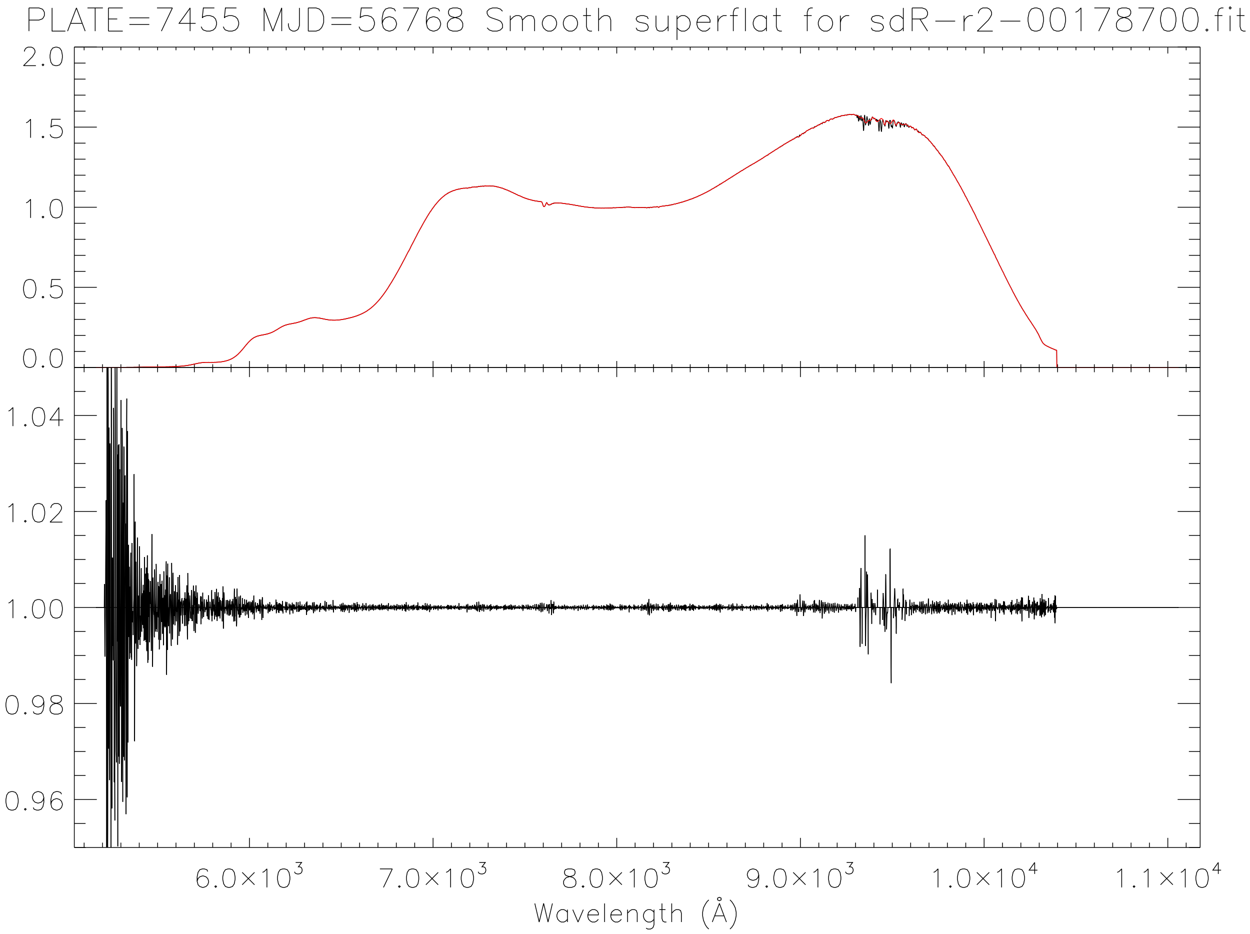

PLATE=7455 MJD=56768 sdR-r2-00178699.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
8500
8000
7500
7000
RED = sky fiber
Dispersion = 1.20 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
8500
8000
7500
7000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
8500
8000
7500
7000
1.18
1.19
1.20
1.21
1.22
1.23
Airmass


PLATE=7455 MJD=56768 Fiber−Flats for sdR−r2−00178696.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −12.288
Max value = 3.458
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Wed Jul 30 22:07:08 2014

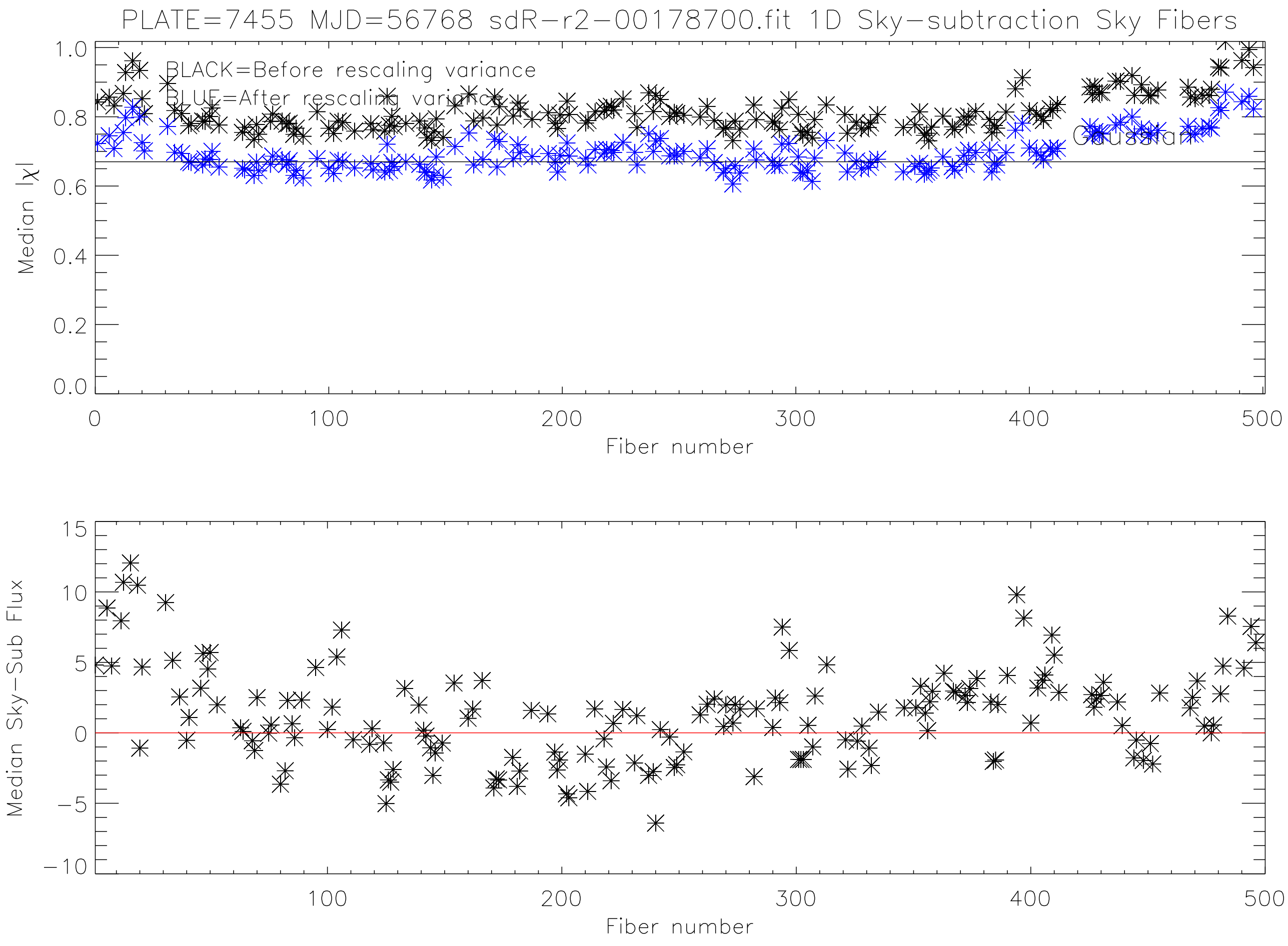


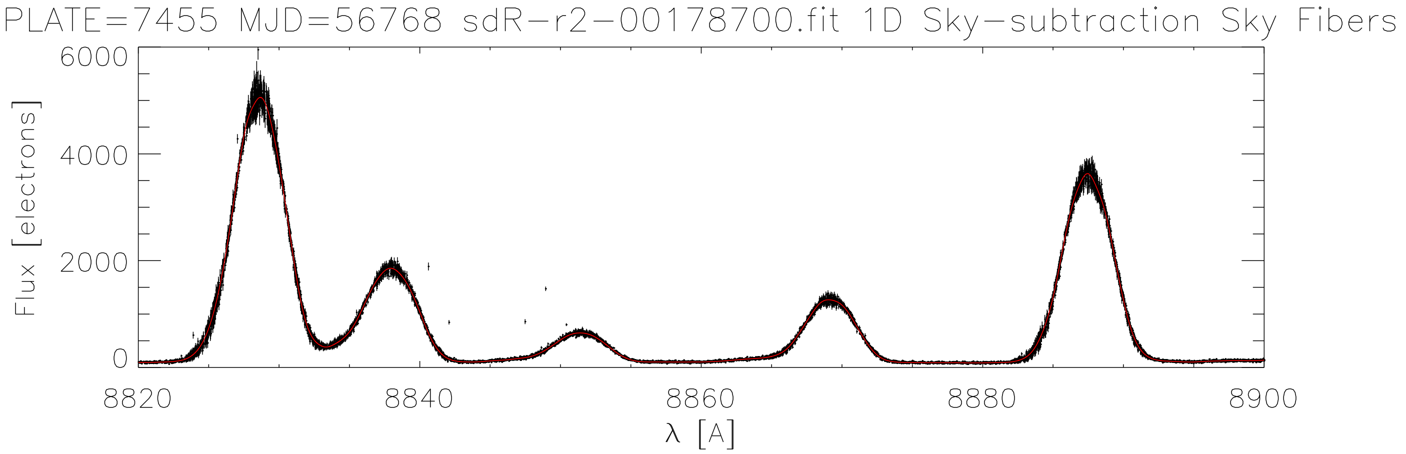
PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r2-00178700.fit

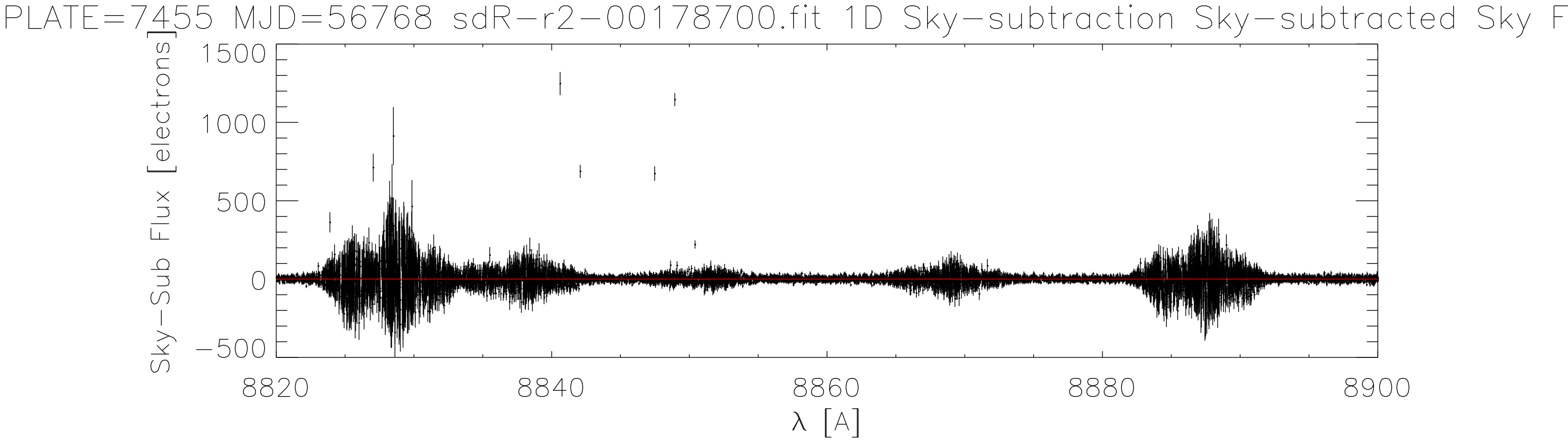

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r2-00178700.fit



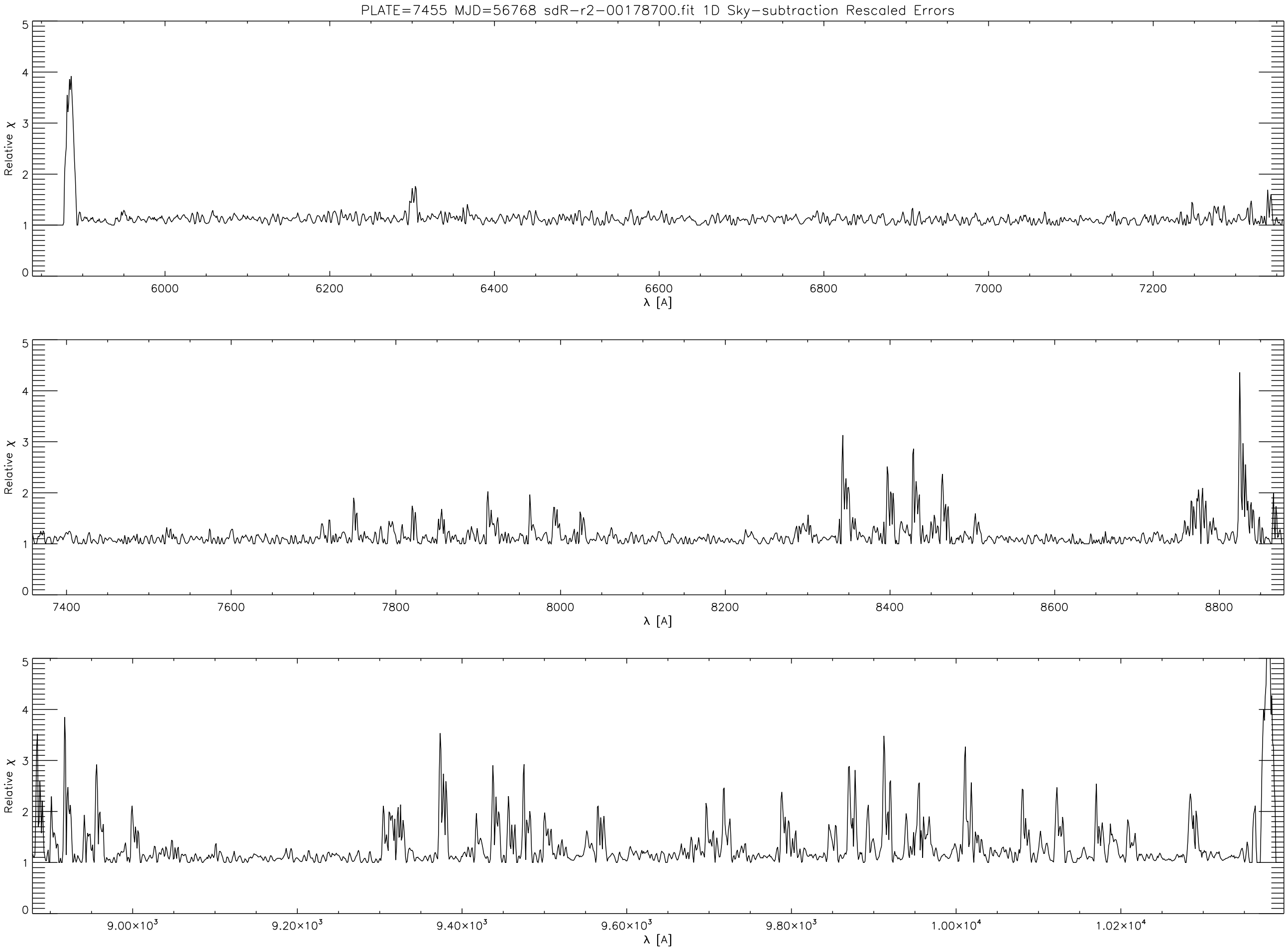
PLATE=7455 MJD=56768 Smooth superflat for sdR-r2-00178700.fit

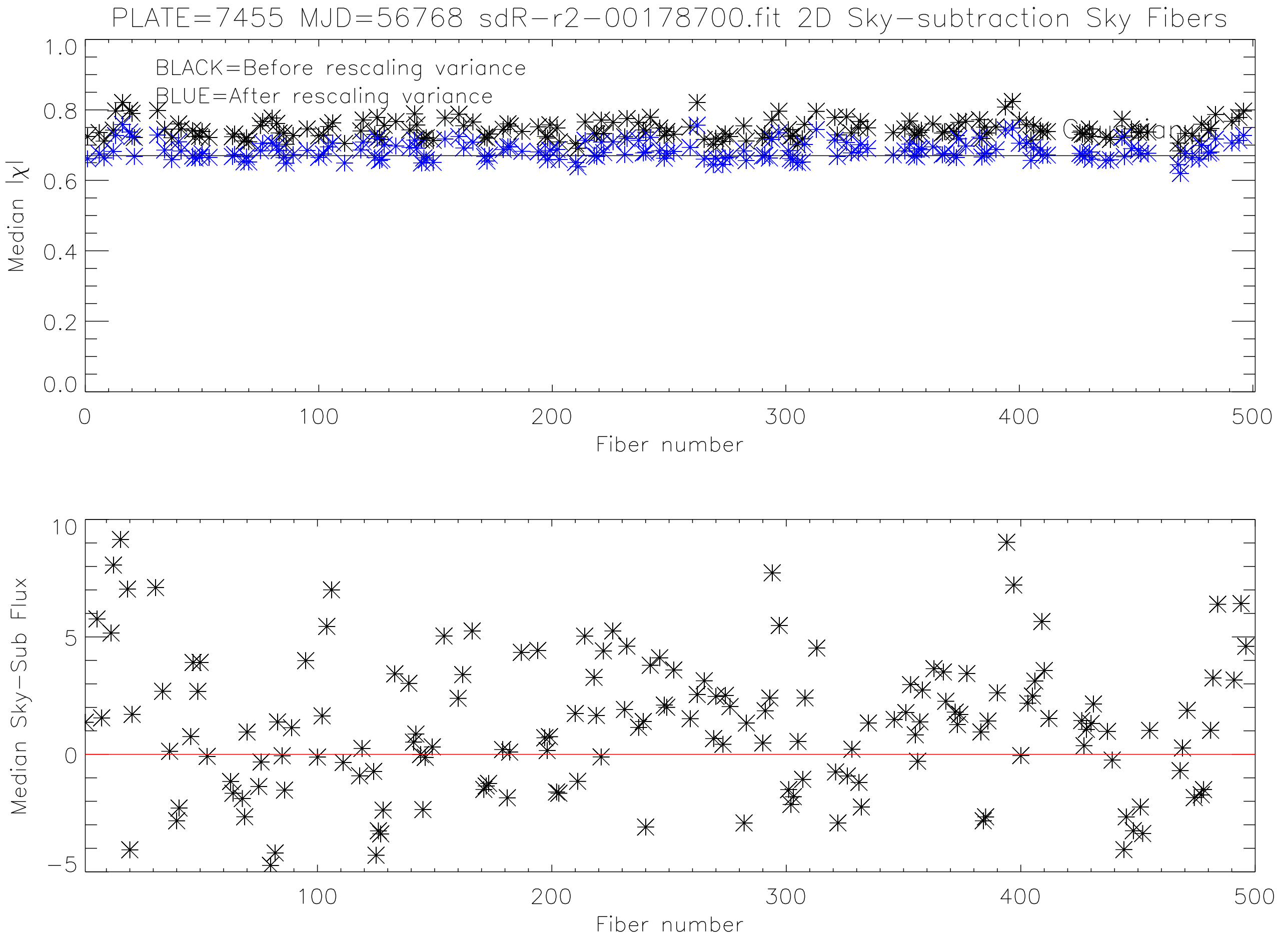

PLATE=7455 MJD=56768 sdR-r2-00178700.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
100
200
300
400
500
Fiber number

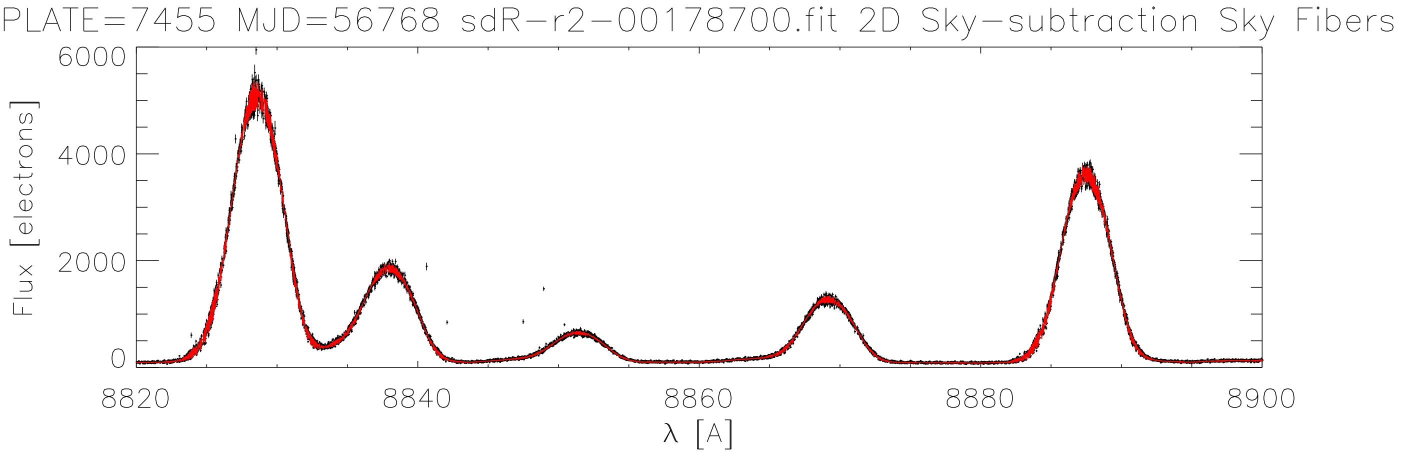

PLATE=7455 MJD=56768 sdR-r2-00178700.fit 1D Sky-subtraction Sky Fibers


PLATE=7455 MJD=56768 sdR-r2-00178700.fit 1D Sky-subtraction Sky-subtracted Sky F

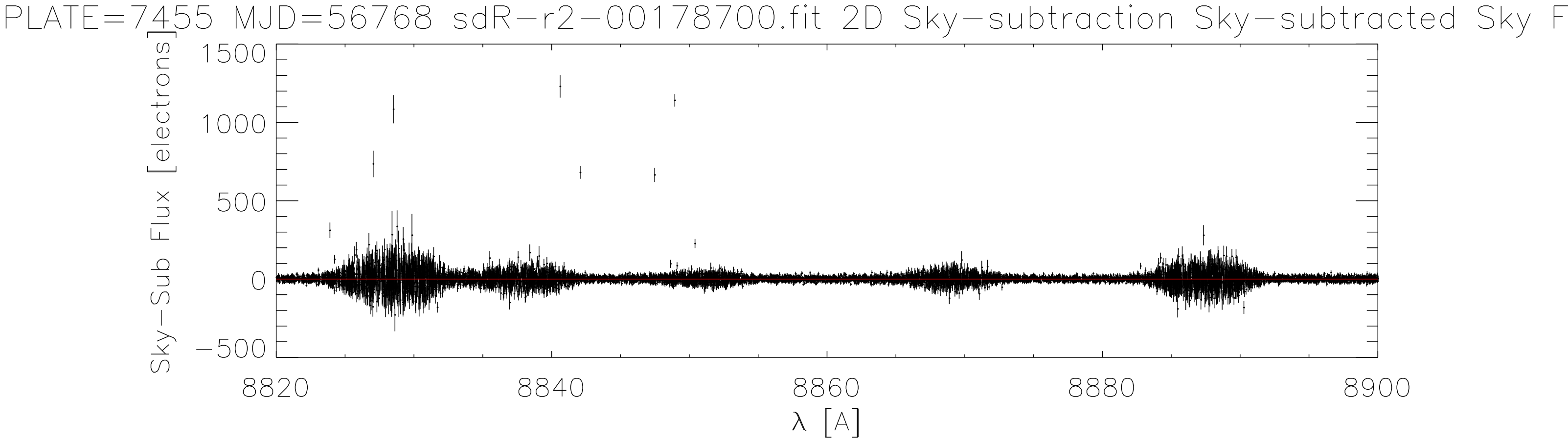
Number of sky fibers = 170




PLATE=7455 MJD=56768 sdR-r2-00178700.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
10
5
0
−5
100
200
300
400
500
Fiber number

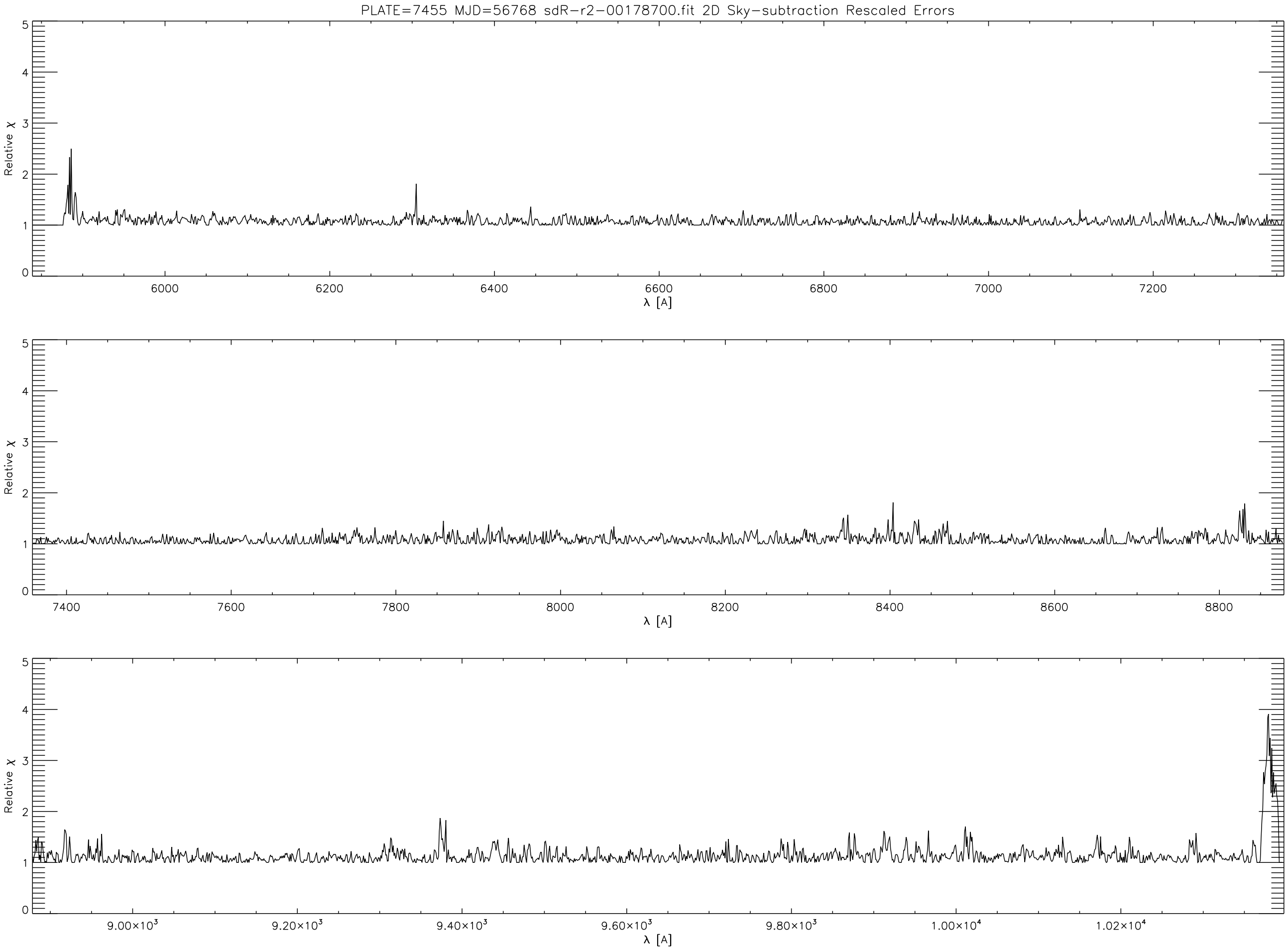


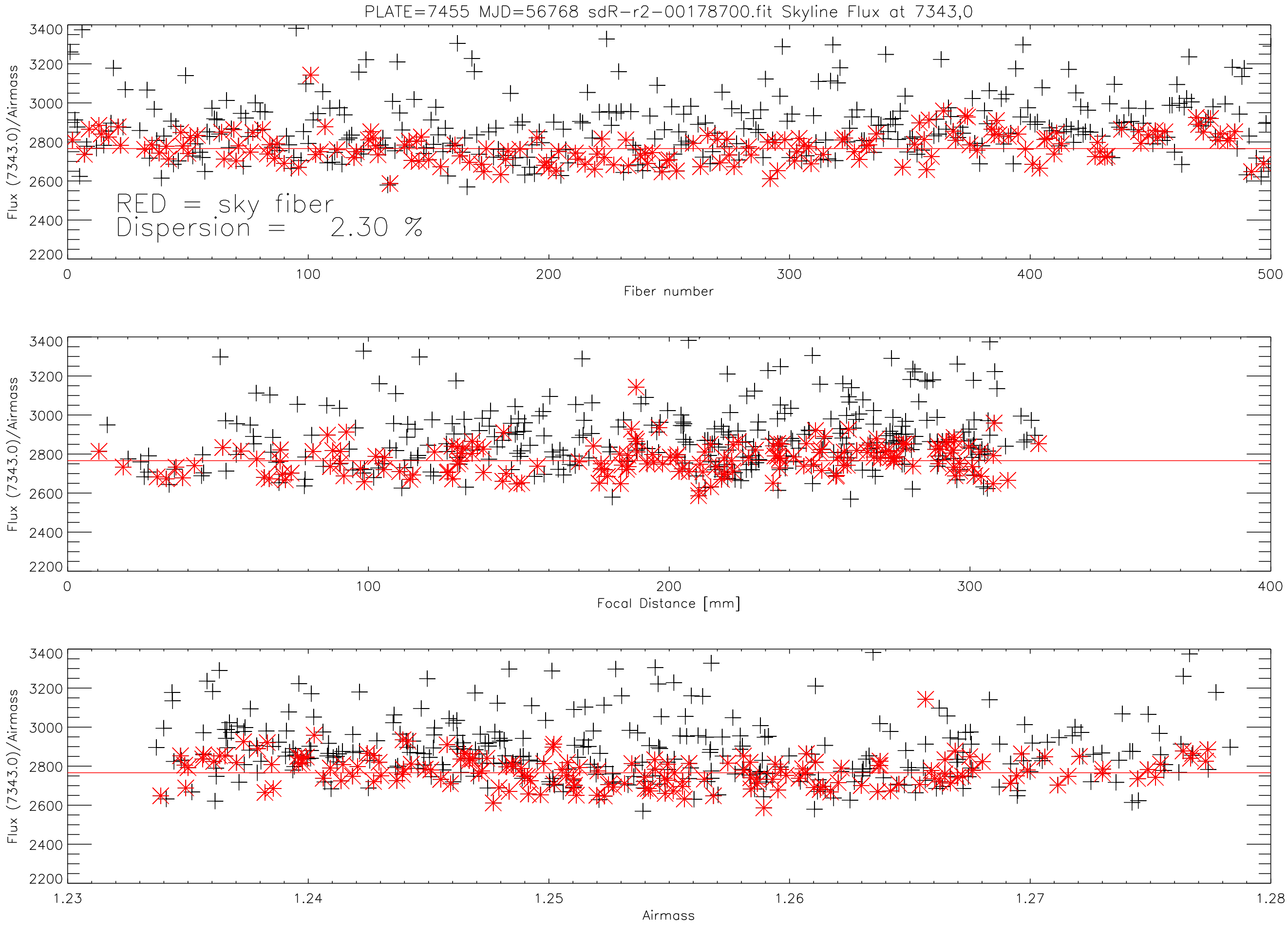
PLATE=7455 MJD=56768 sdR-r2-00178700.fit 2D Sky-subtraction Sky Fibers



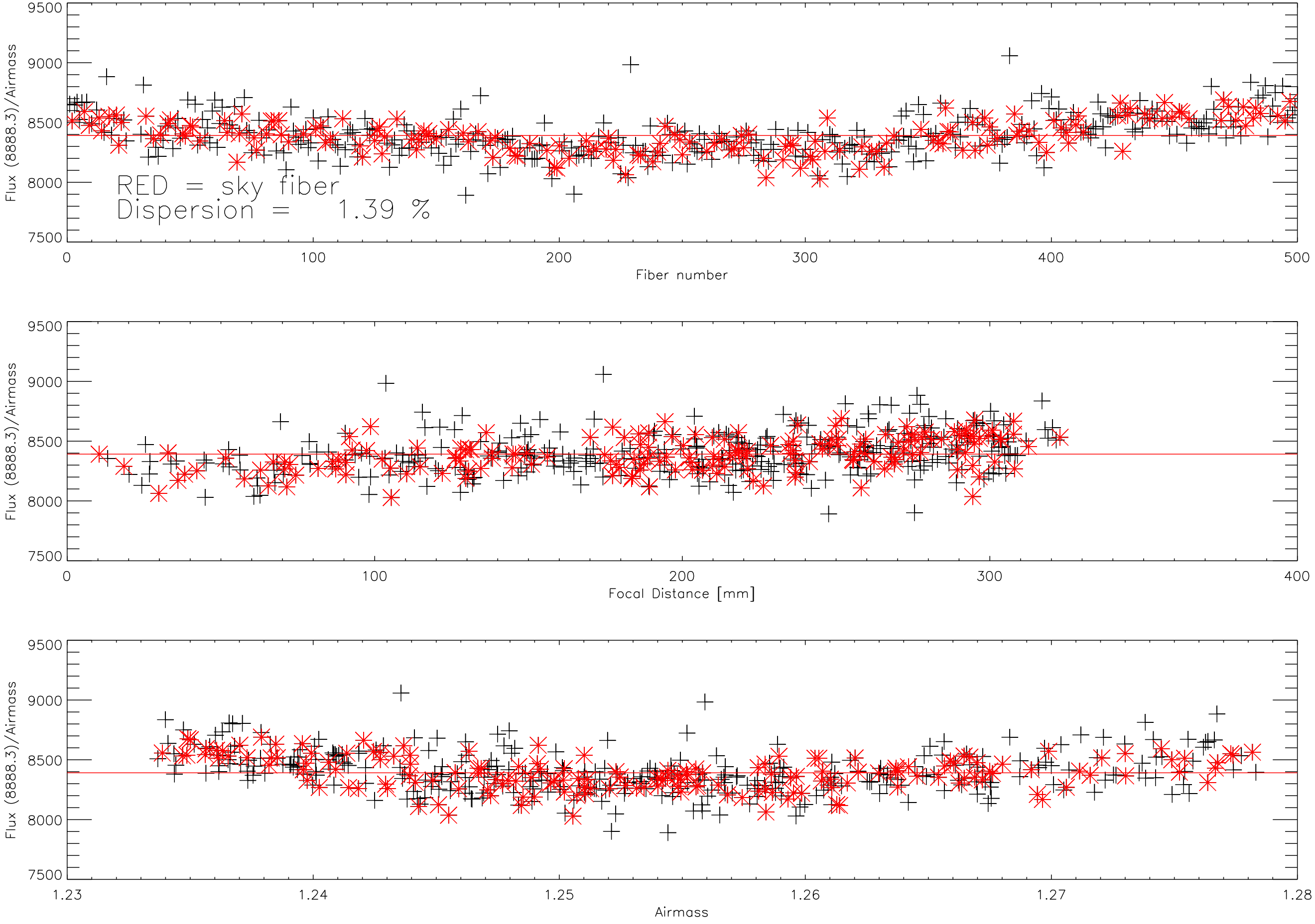
PLATE=7455 MJD=56768 sdR-r2-00178700.fit 2D Sky-subtraction Sky-subtracted Sky F

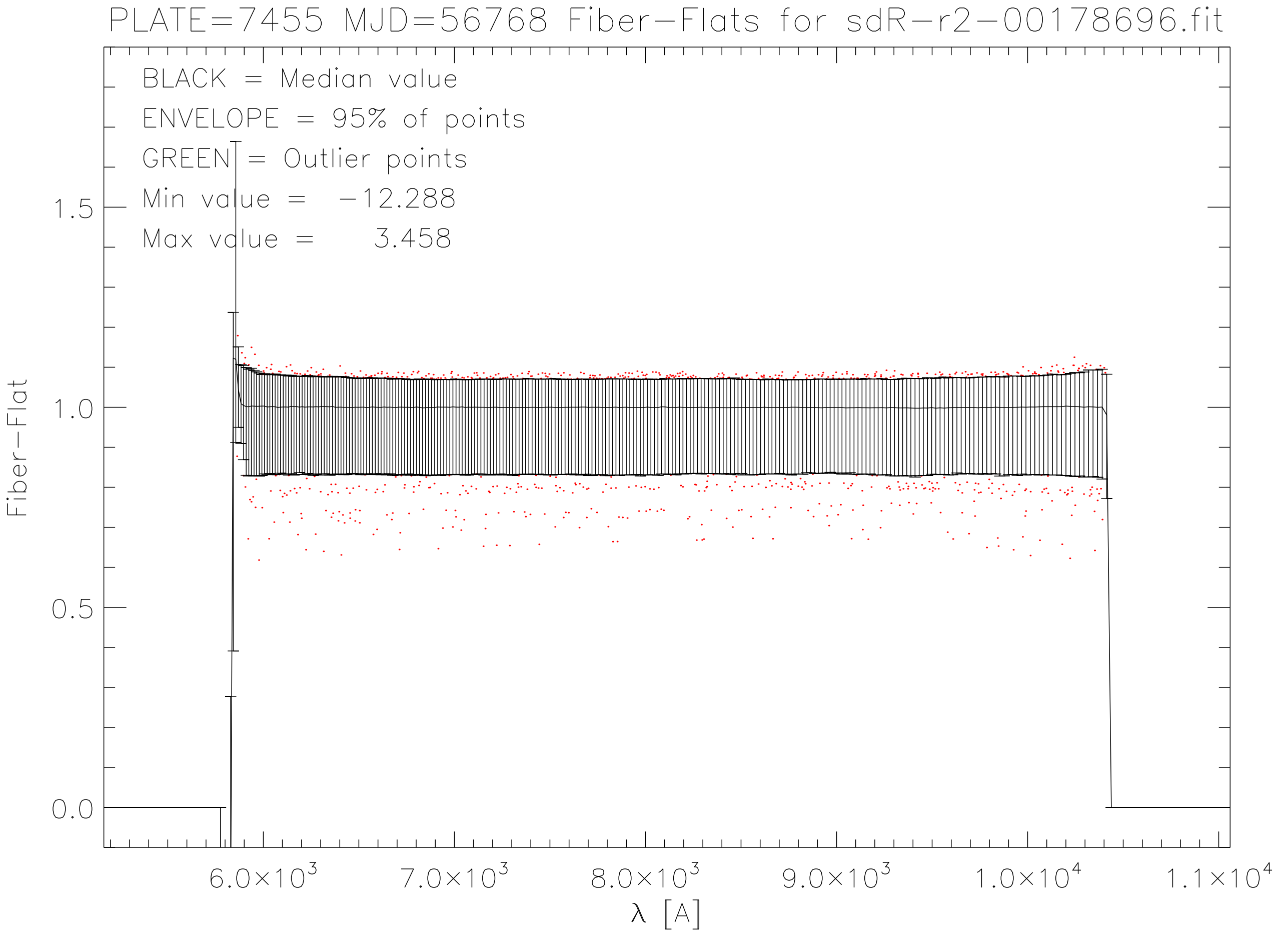
Number of sky fibers = 170



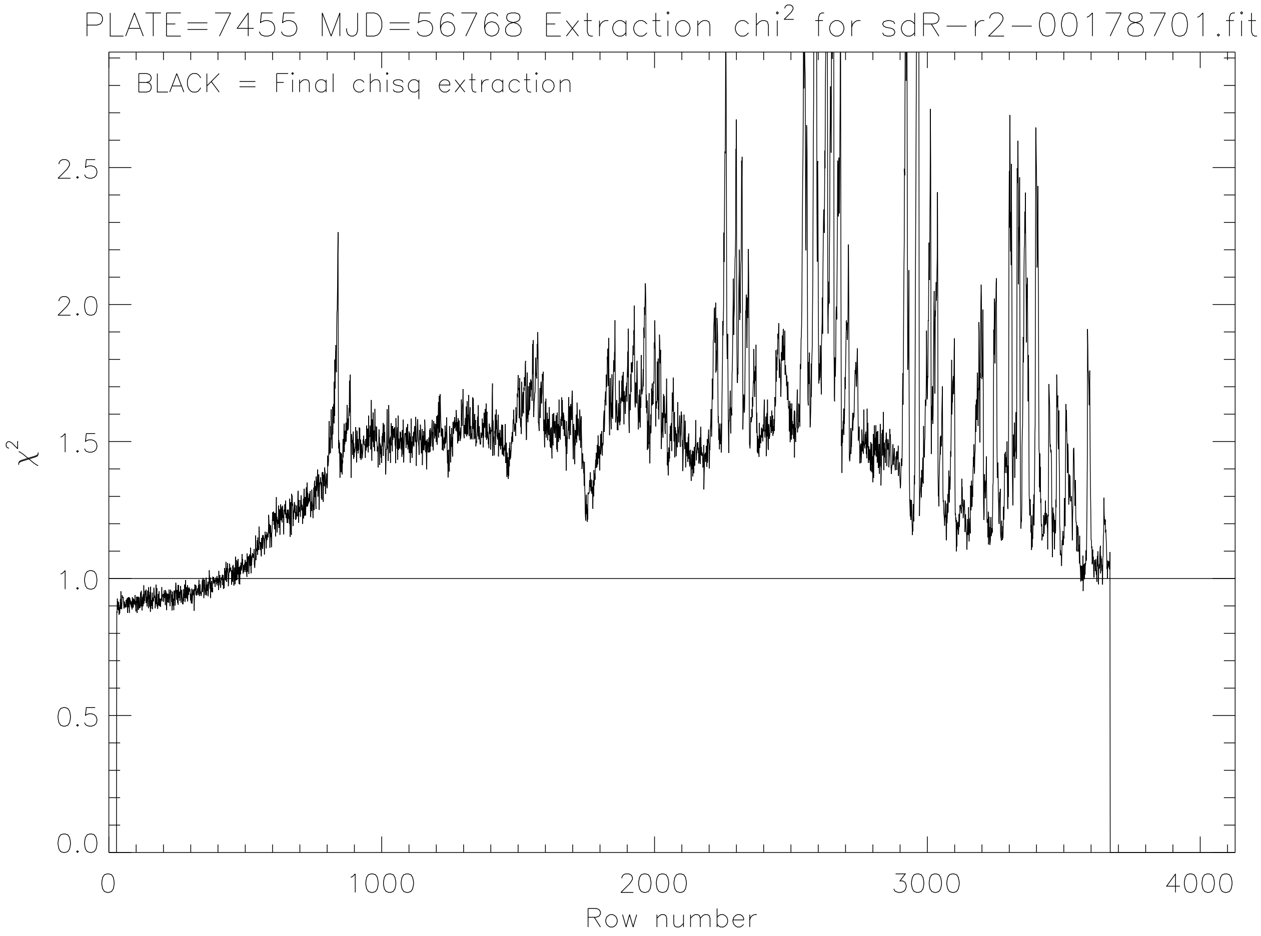

PLATE=7455 MJD=56768 sdR-r2-00178700.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 2.30 %
Flux (7343.0)/Airmass
3400
3200
3000
2800
2600
2400
2200
0
100
200
300
400
500
Fiber number
Flux (7343.0)/Airmass
3400
3200
3000
2800
2600
2400
2200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3400
3200
3000
2800
2600
2400
2200
1.23
1.24
1.25
1.26
1.27
1.28
Airmass

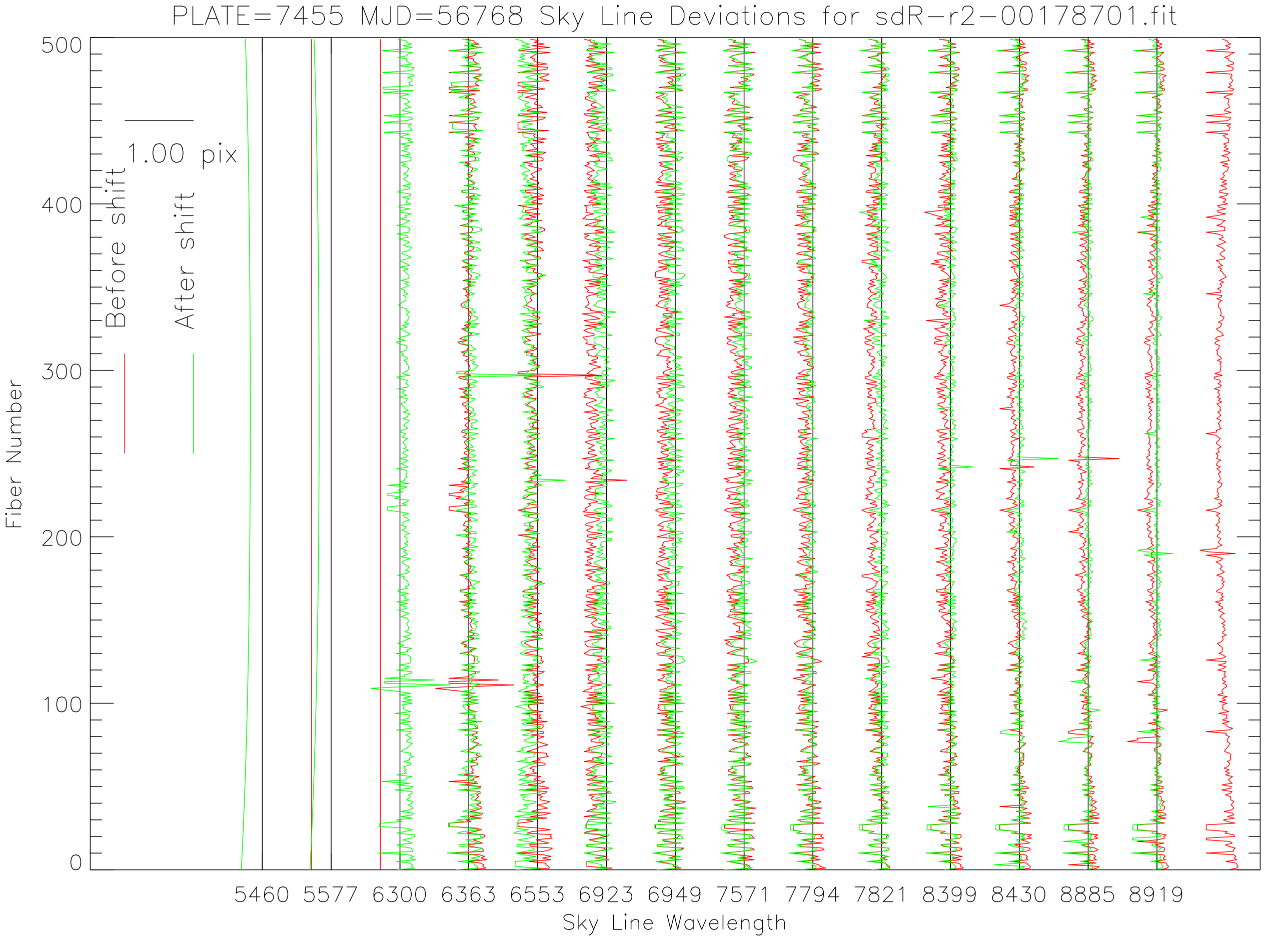
PLATE=7455 MJD=56768 sdR-r2-00178700.fit Skyline Flux at 8888.3

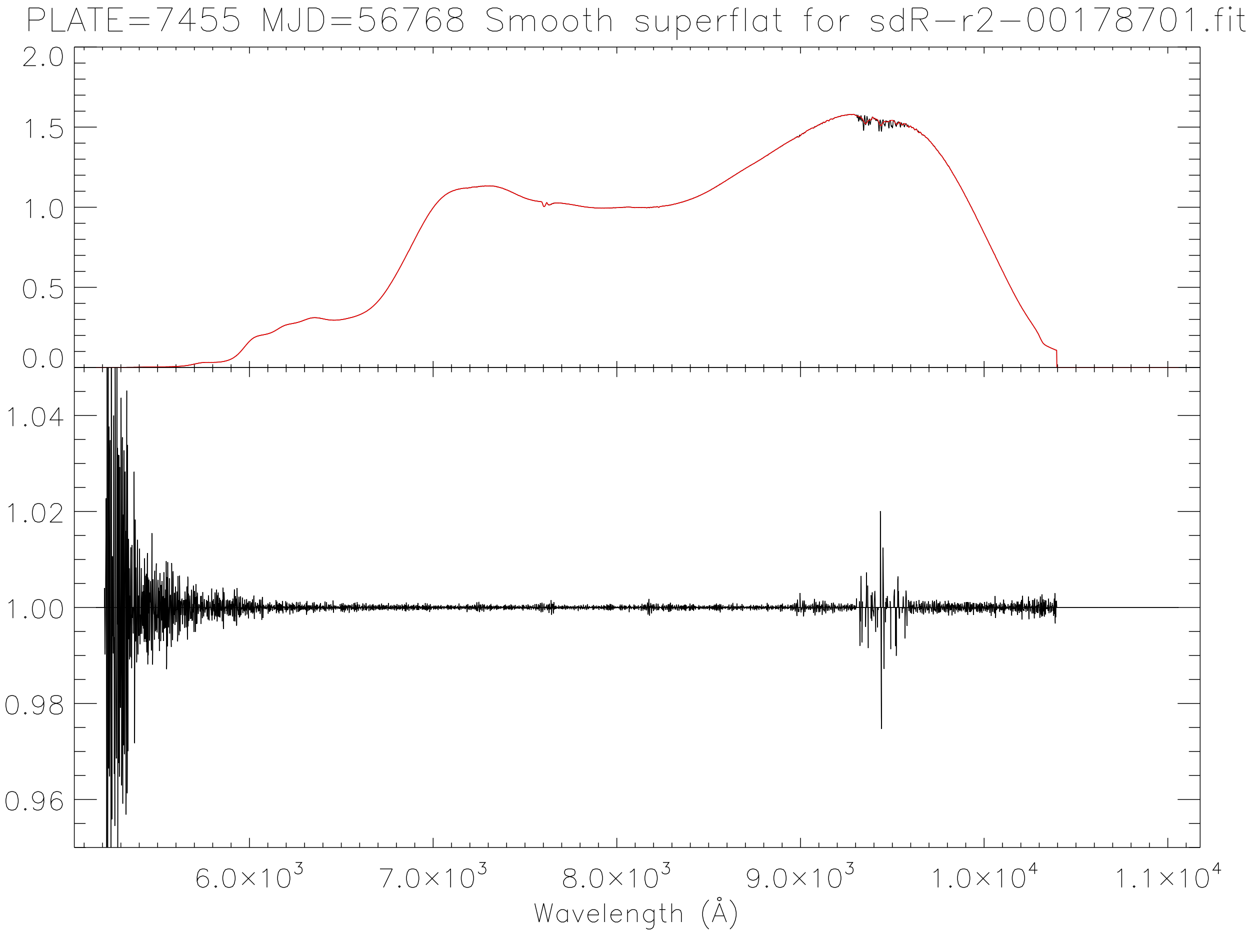




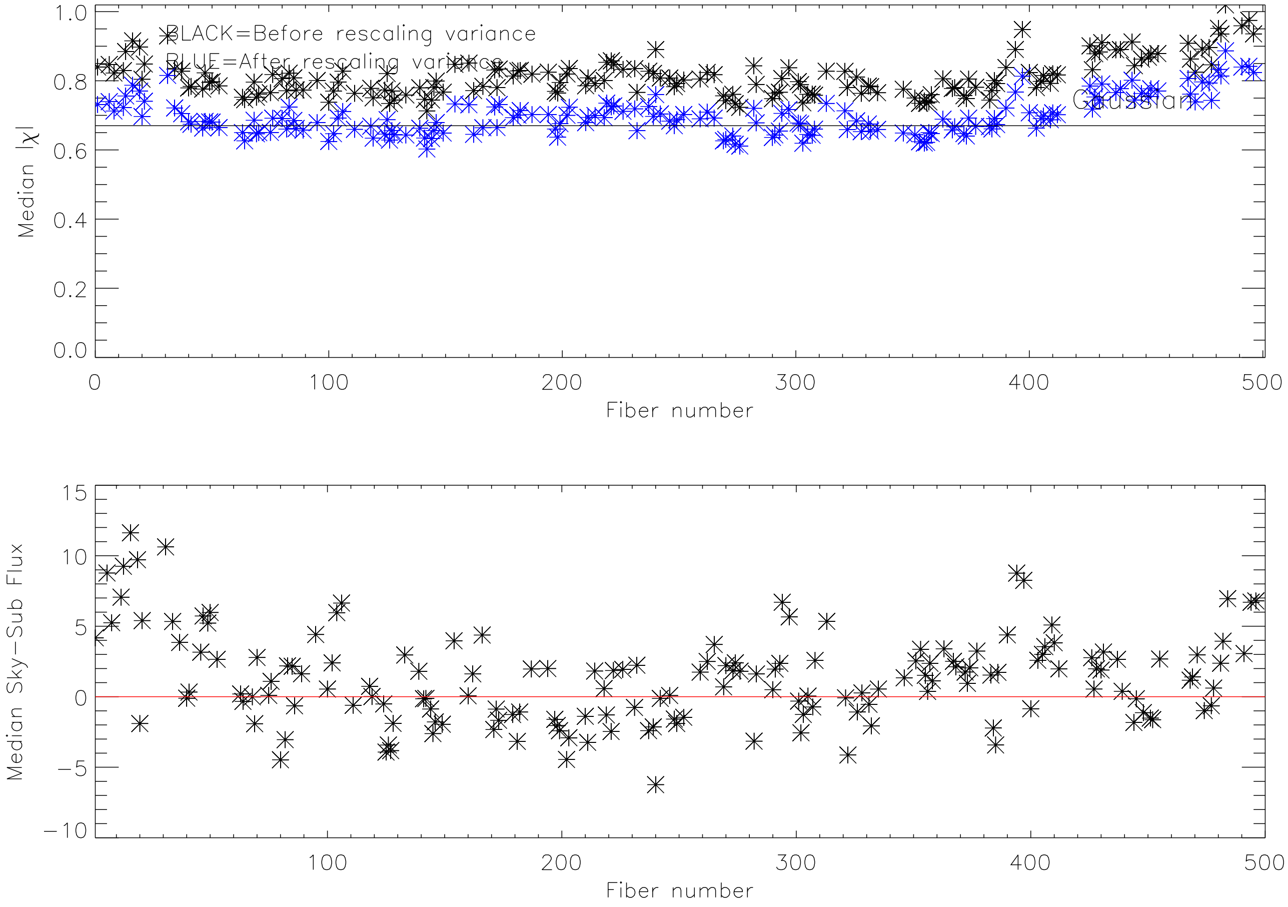
Wed Jul 30 22:20:07 2014


PLATE=7455 MJD=56768 Extraction chi^2 for sdR-r2-00178701.fit
BLACK = Final chisq extraction
χ^2
0.0
0.5
1.0
1.5
2.0
2.5
0
1000
2000
3000
4000
Row number

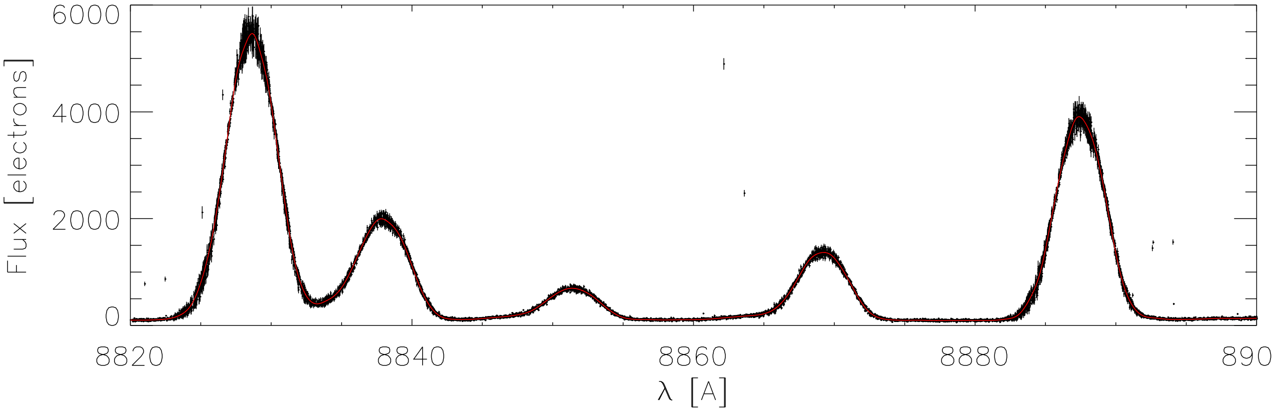

PLATE=7455 MJD=56768 Sky Line Deviations for sdR-r2-00178701.fit
1.00 pix
Before shift
After shift
Fiber Number
0
100
200
300
400
500
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919
Sky Line Wavelength


PLATE=7455 MJD=56768 Smooth superflat for sdR-r2-00178701.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

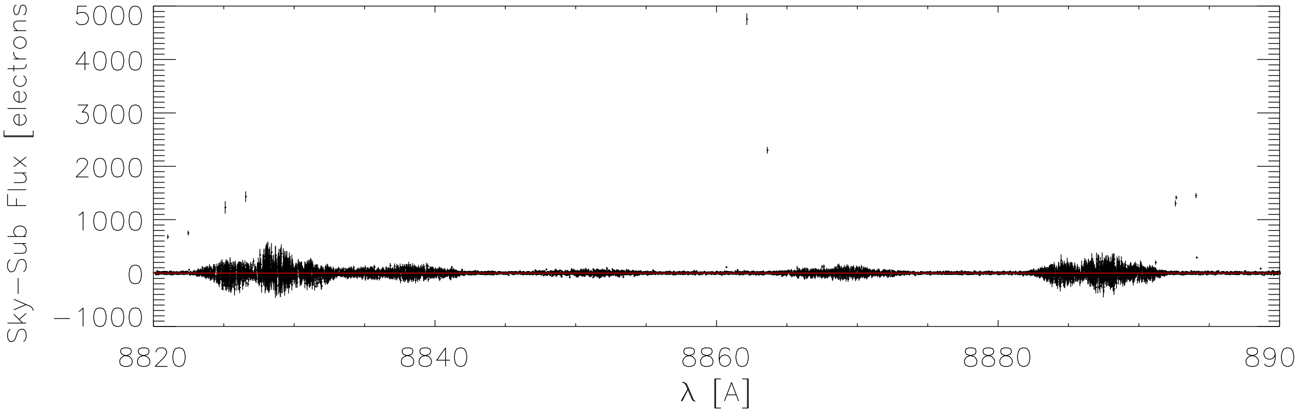
PLATE=7455 MJD=56768 sdR-r2-00178701.fit 1D Sky-subtraction Sky Fibers



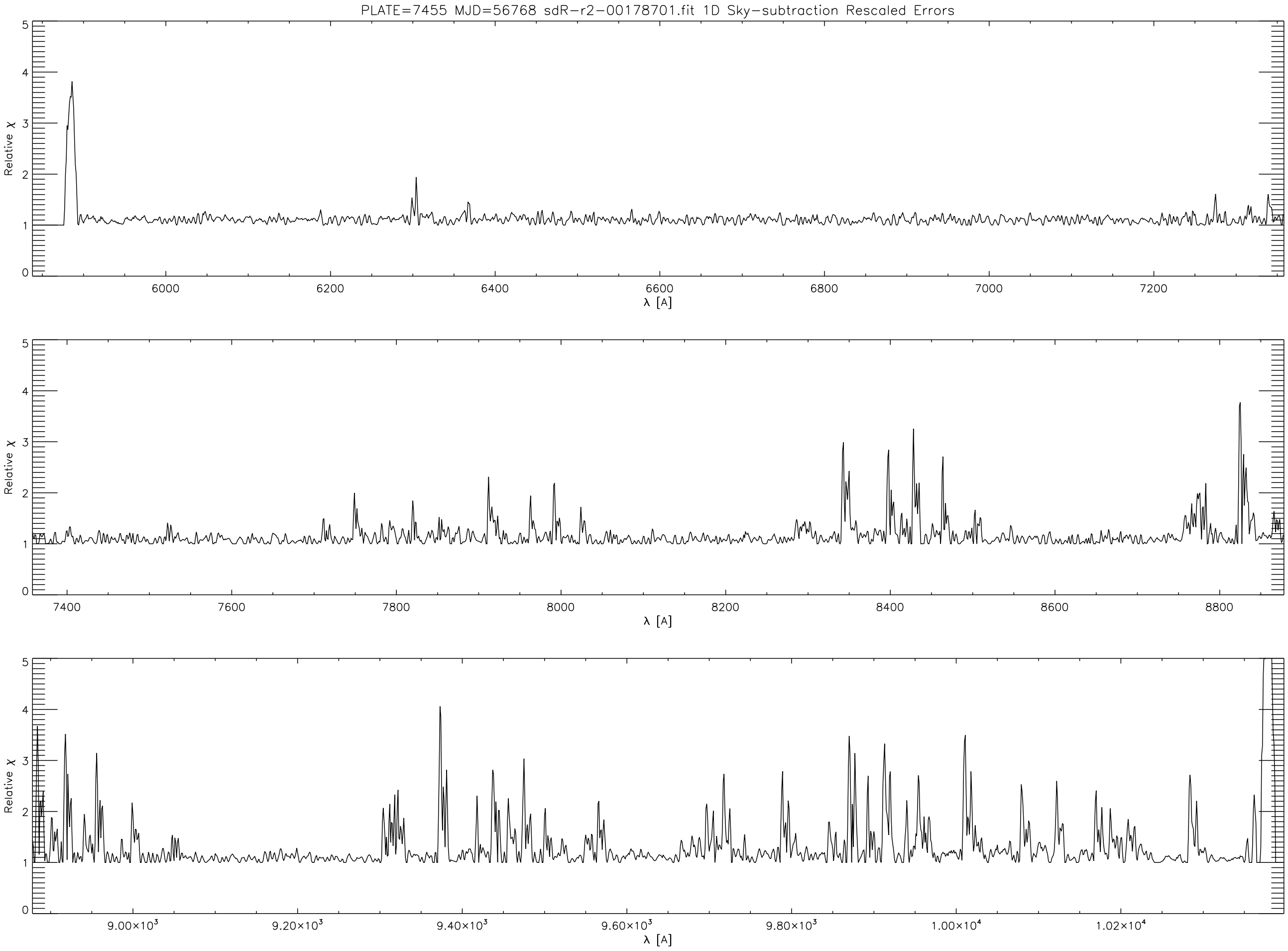
PLATE=7455 MJD=56768 sdR-r2-00178701.fit 1D Sky-subtraction Sky Fibers

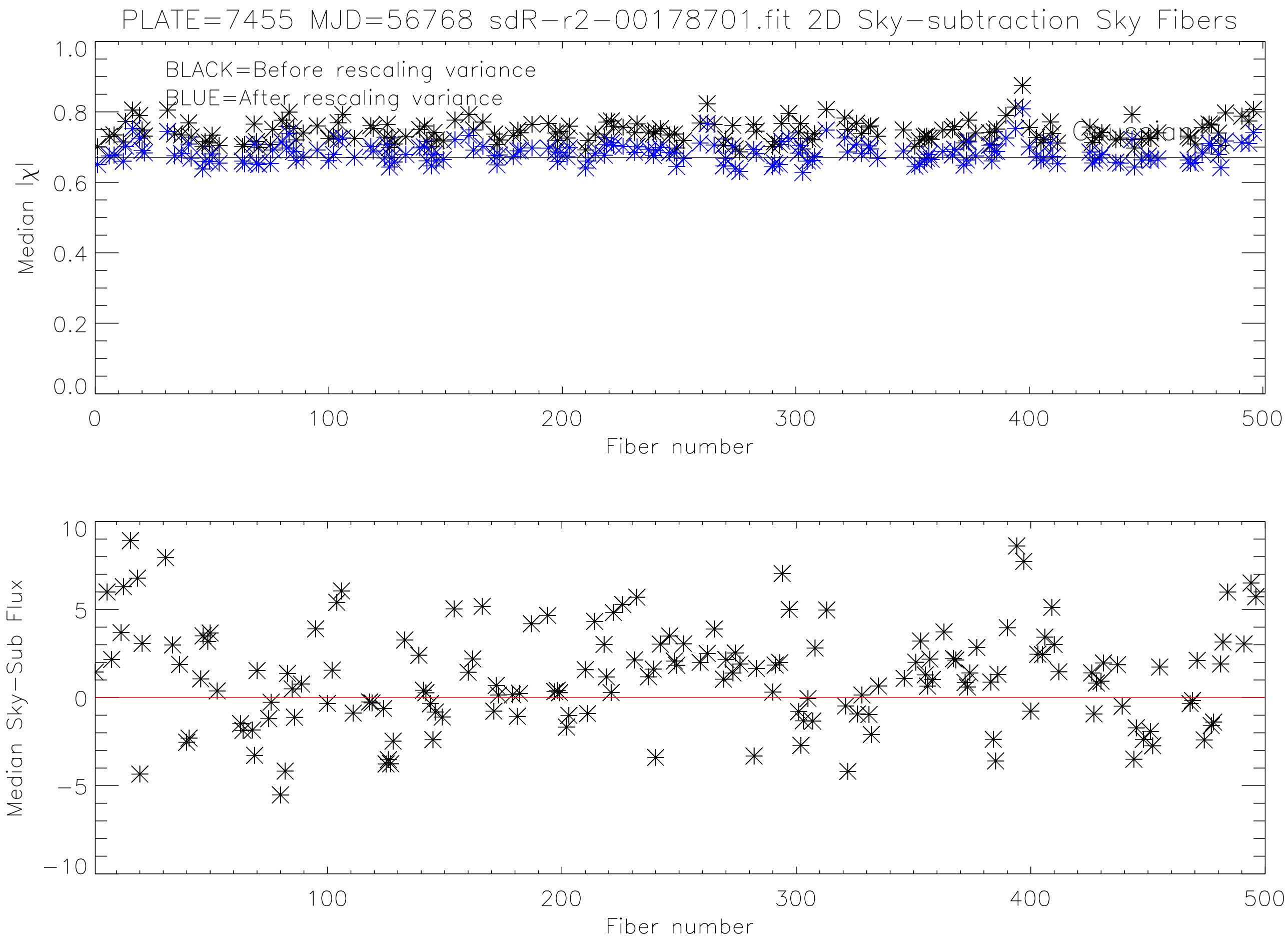


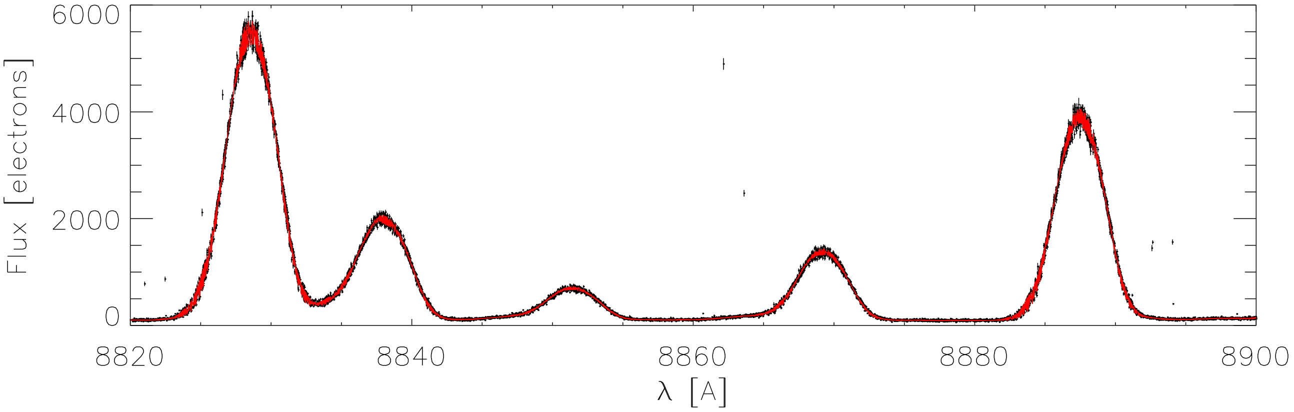
PLATE=7455 MJD=56768 sdR-r2-00178701.fit 1D Sky-subtraction Sky-subtracted Sky F



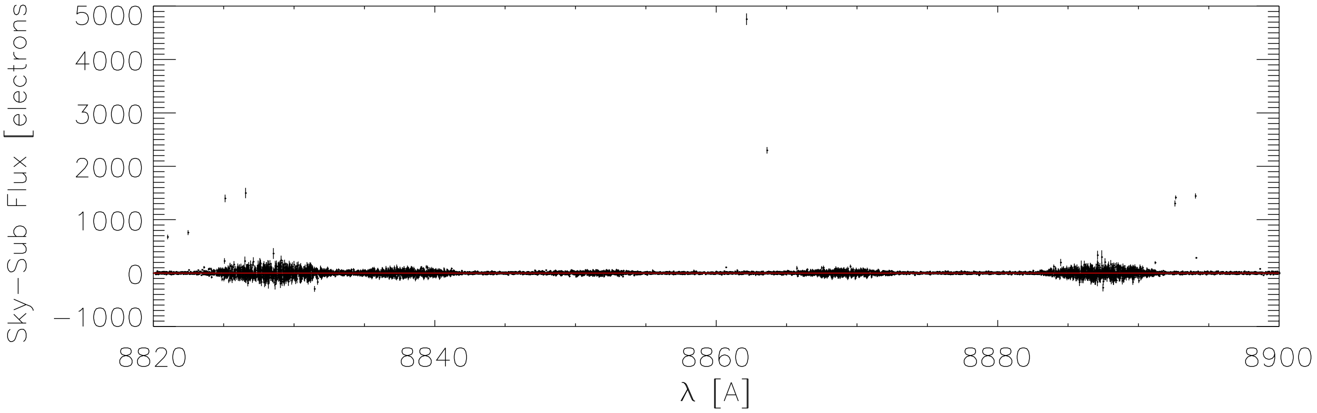
Number of sky fibers = 170


PLATE=7455 MJD=56768 sdR-r2-00178701.fit 1D Sky-subtraction Rescaled Errors


PLATE=7455 MJD=56768 sdR-r2-00178701.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
1.0
0.8
0.6
0.4
0.2
0.0
0
100
200
300
400
500
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
100
200
300
400
500
Fiber number

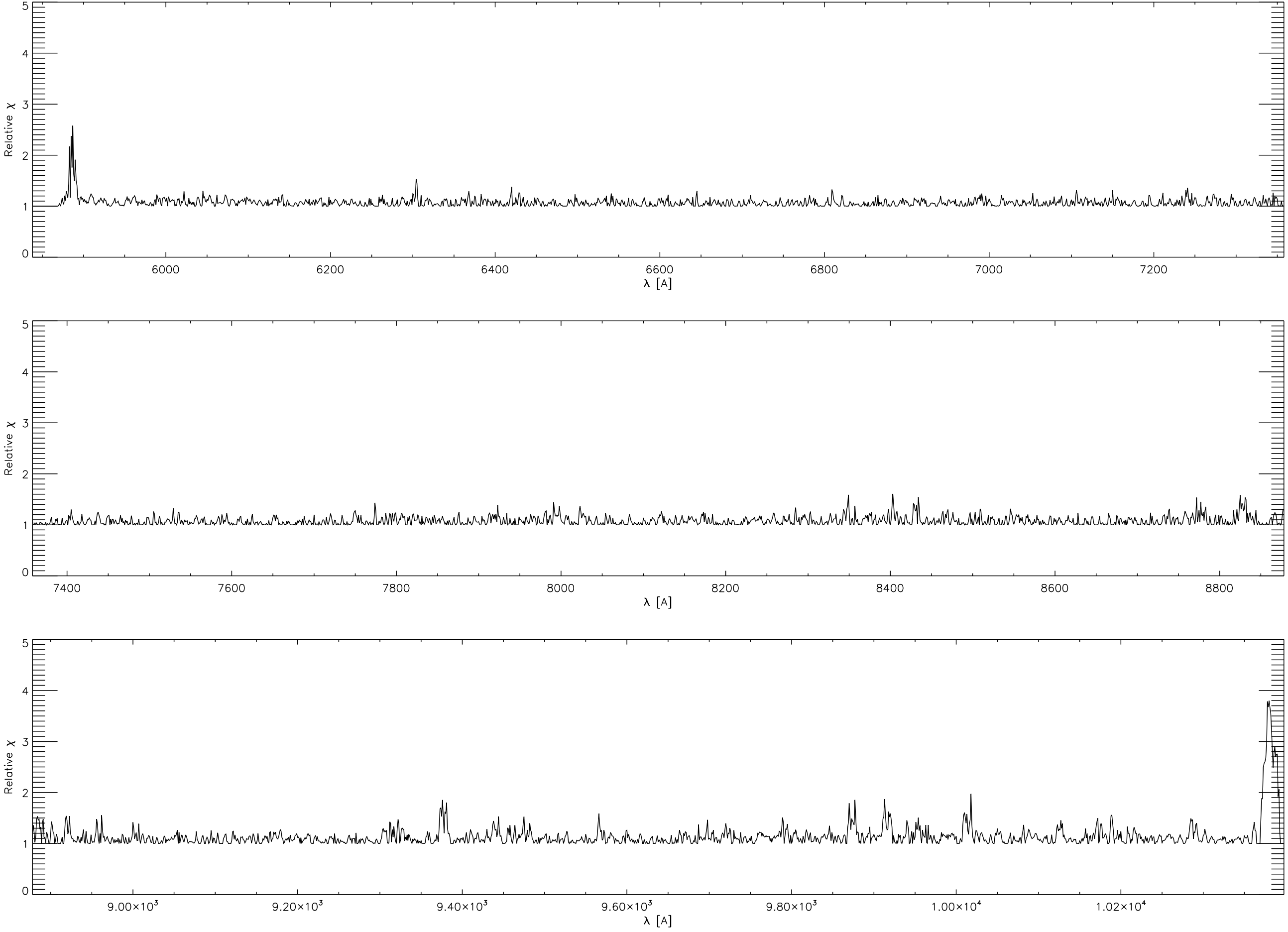


PLATE=7455 MJD=56768 sdR-r2-00178701.fit 2D Sky-subtraction Sky Fibers

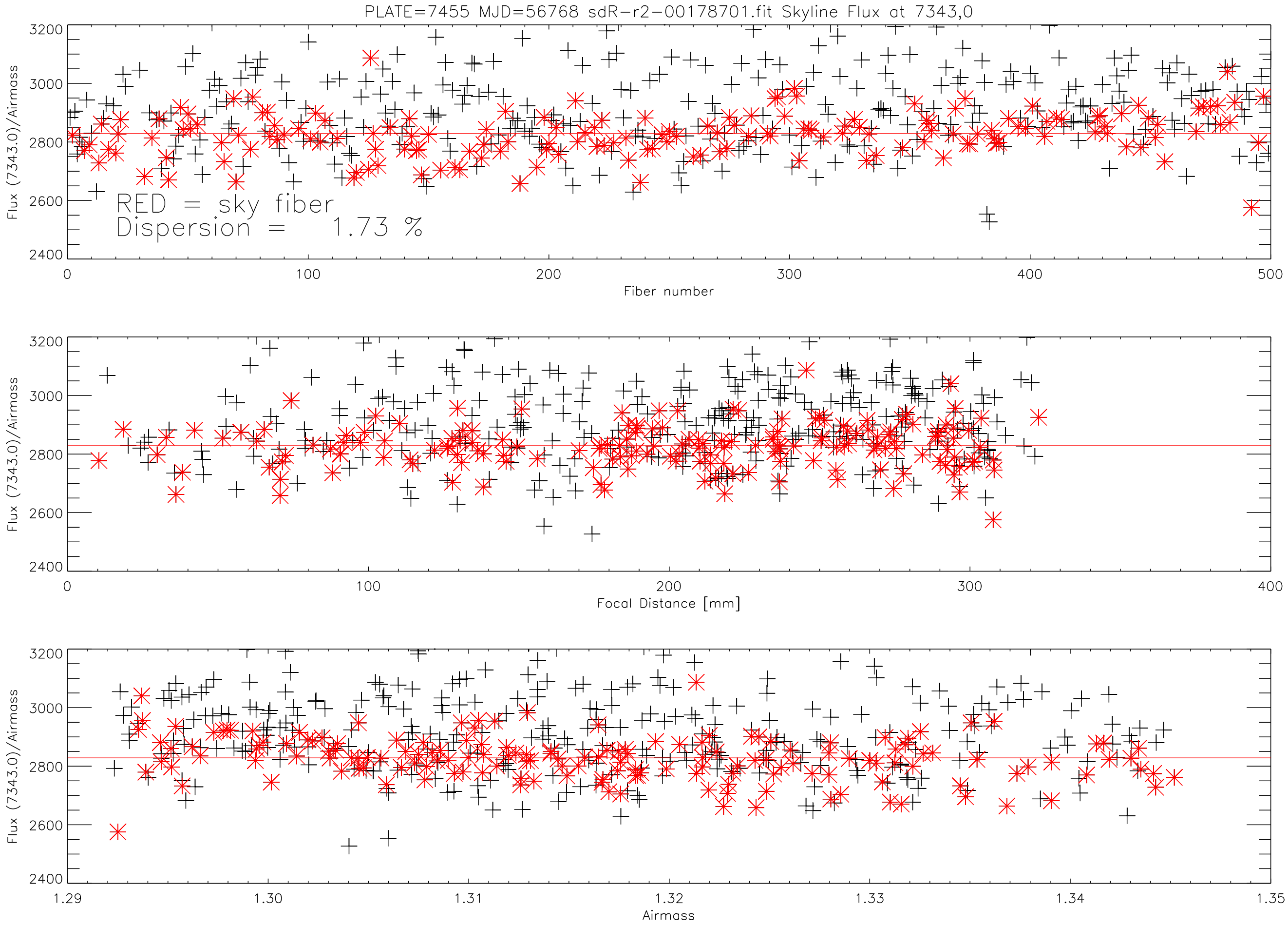


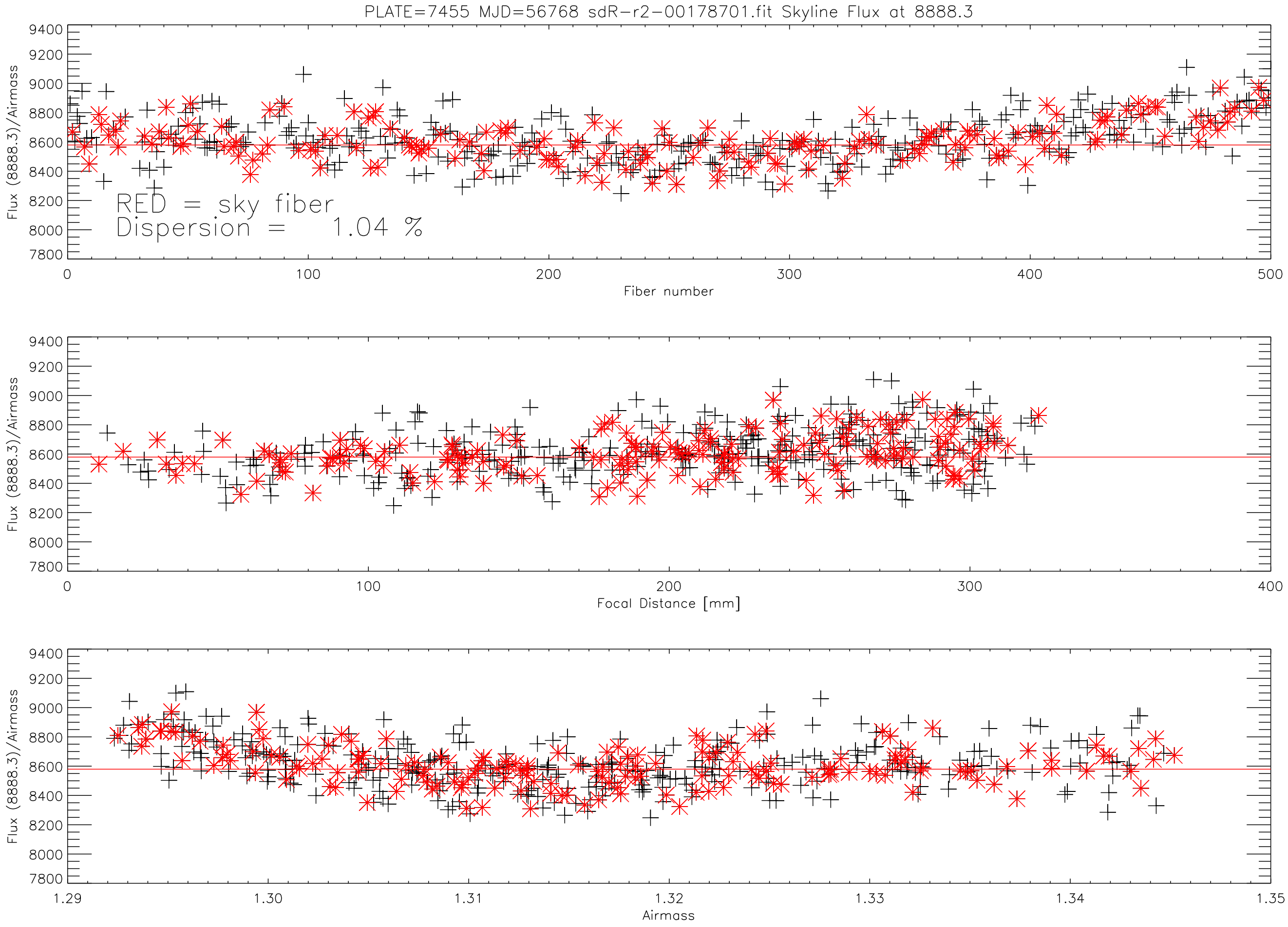
PLATE=7455 MJD=56768 sdR-r2-00178701.fit 2D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 170



PLATE=7455 MJD=56768 sdR-r2-00178701.fit 2D Sky-subtraction Rescaled Errors


PLATE=7455 MJD=56768 sdR-r2-00178701.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 1.73 %
Flux (7343.0)/Airmass
2400
2600
2800
3000
3200
0
100
200
300
400
500
Fiber number
Flux (7343.0)/Airmass
2400
2600
2800
3000
3200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2400
2600
2800
3000
3200
1.29
1.30
1.31
1.32
1.33
1.34
1.35
Airmass


PLATE=7455 MJD=56768 sdR-r2-00178701.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
9400
9200
9000
8800
8600
8400
8200
8000
7800
RED = sky fiber
Dispersion = 1.04 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.29
1.30
1.31
1.32
1.33
1.34
1.35
Airmass