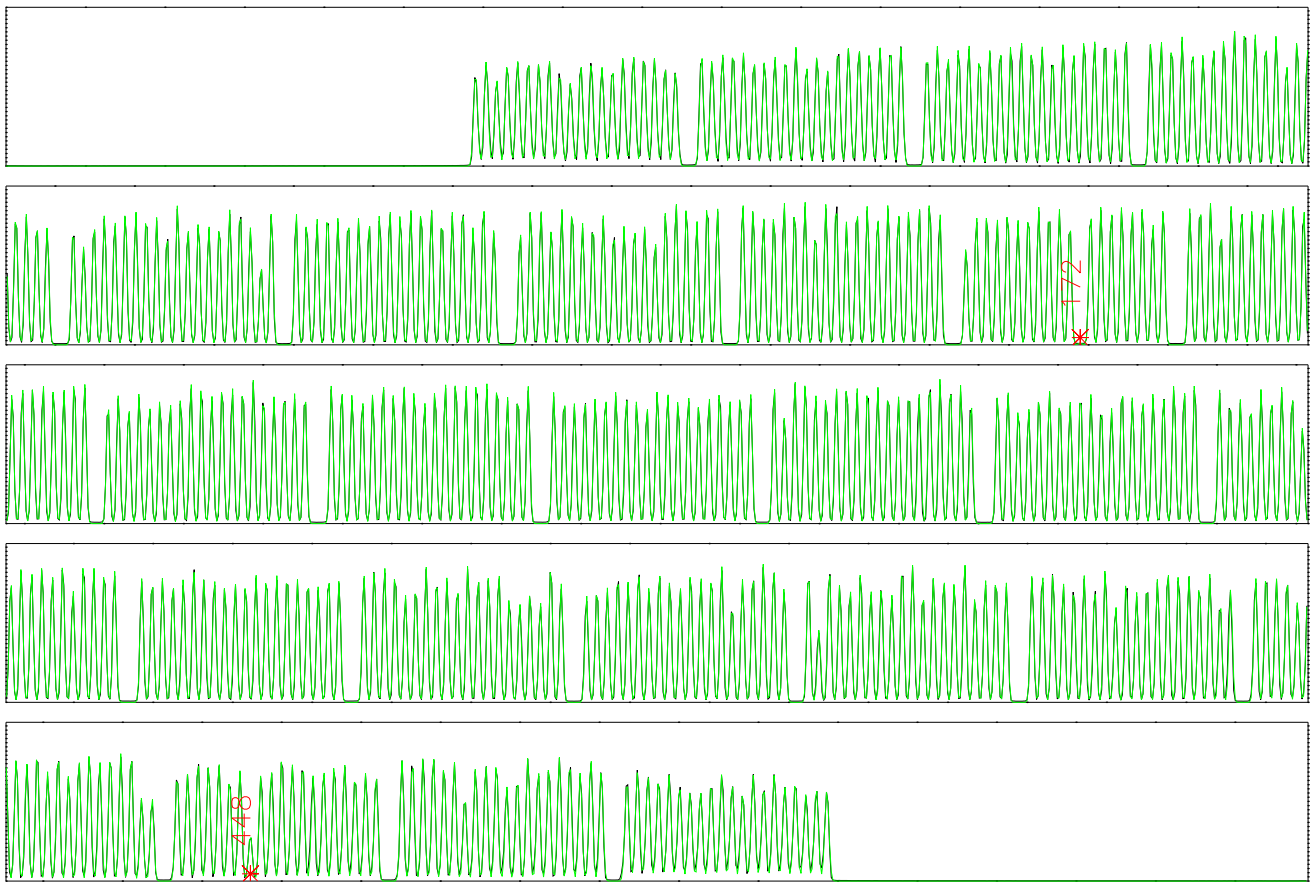
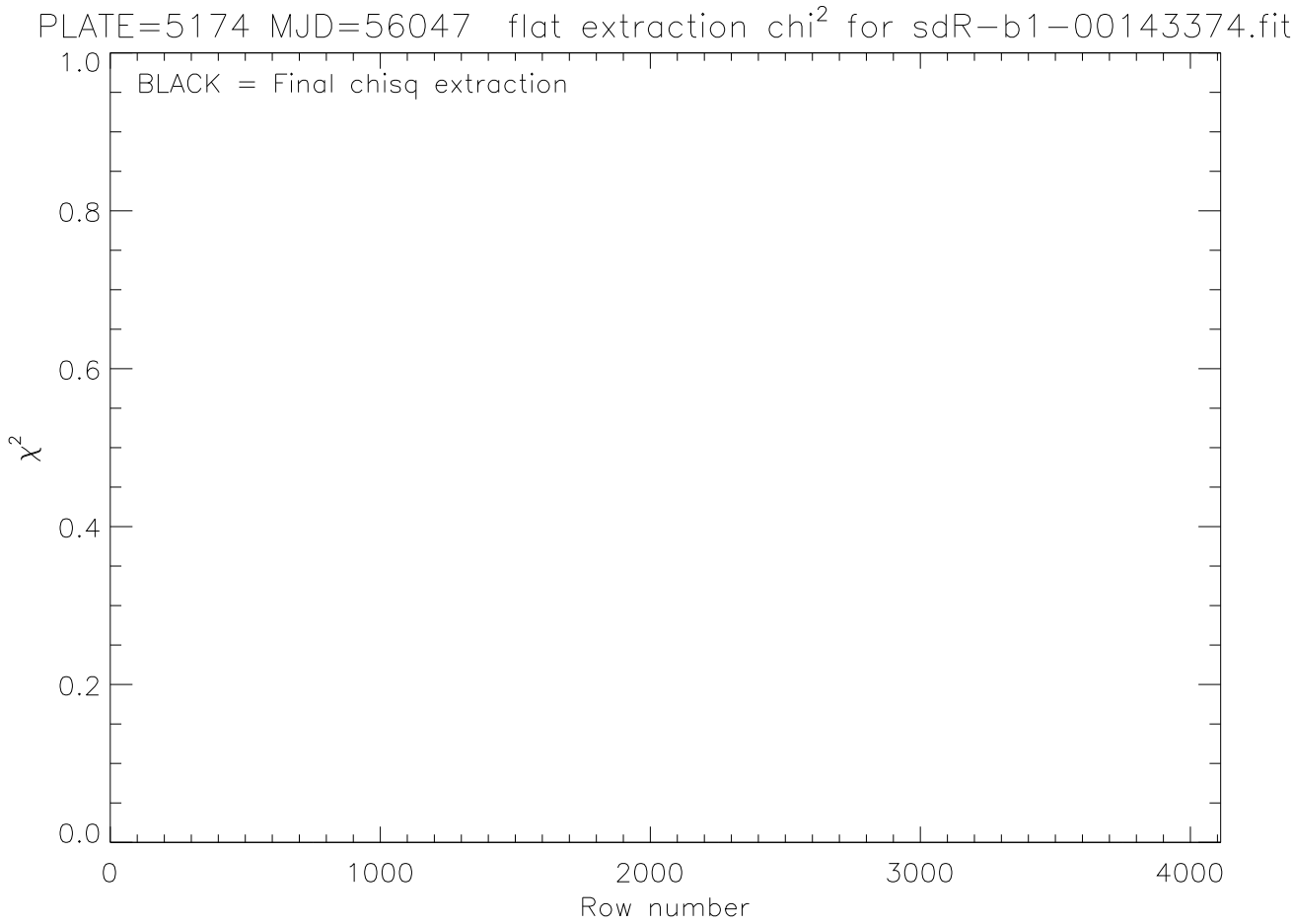
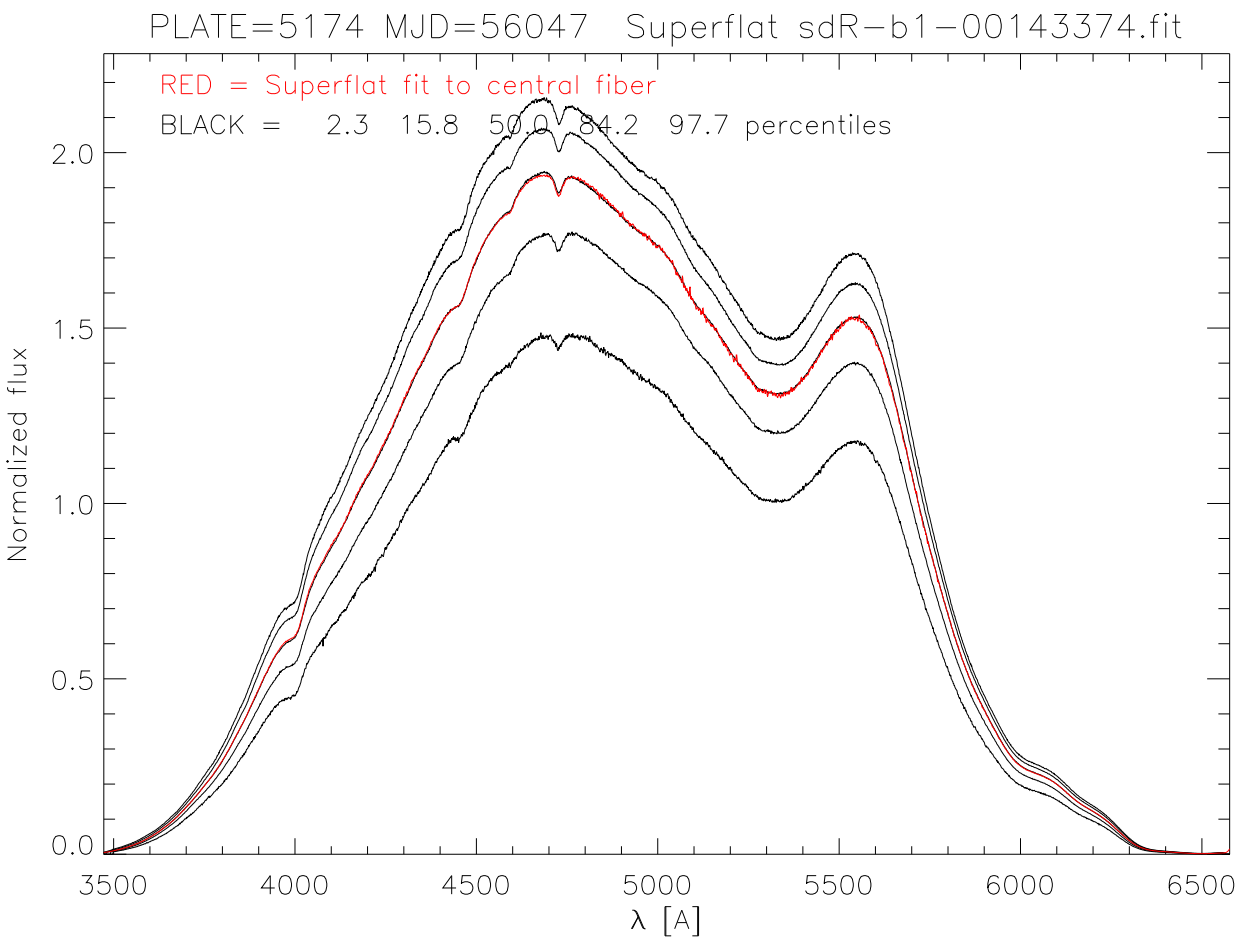
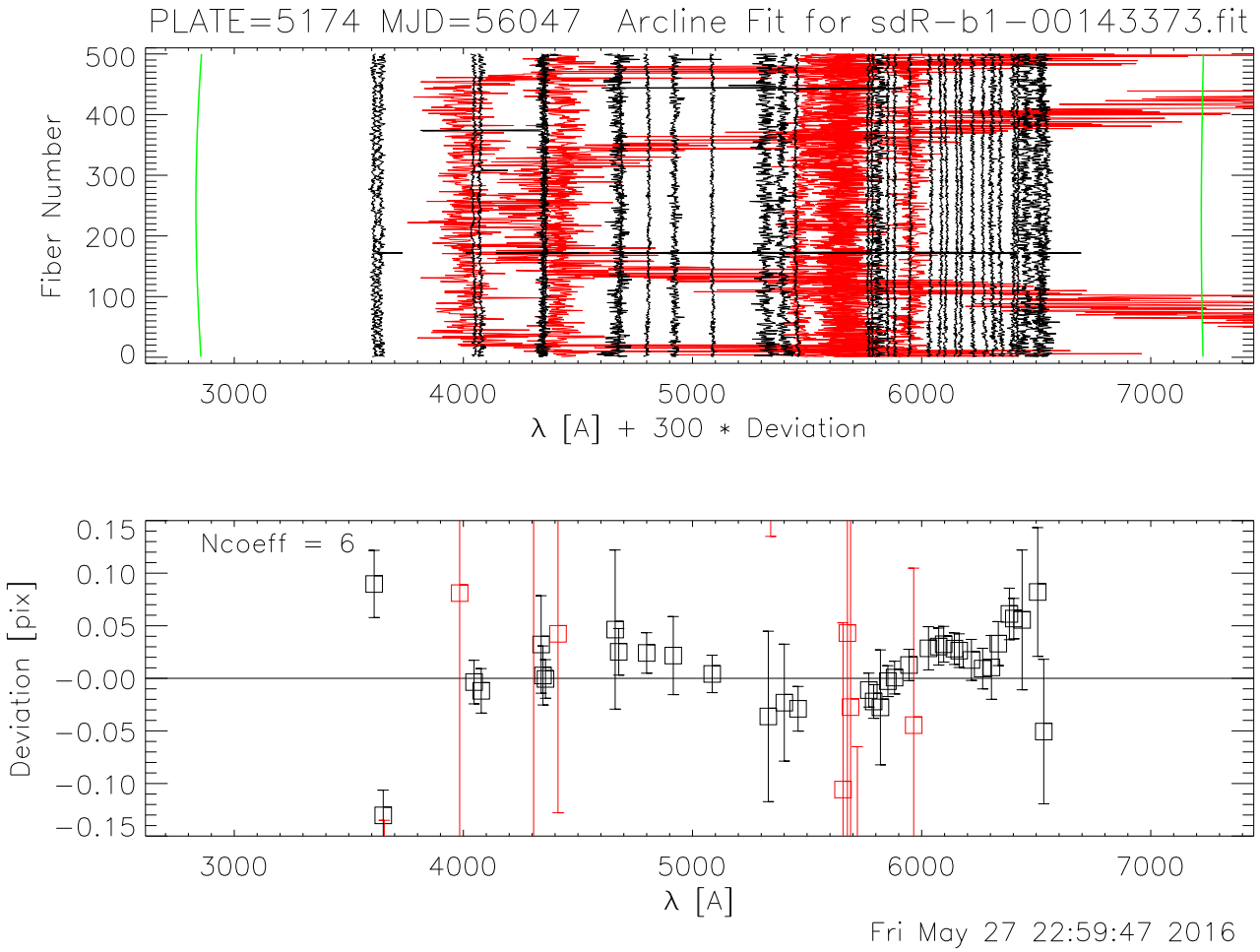
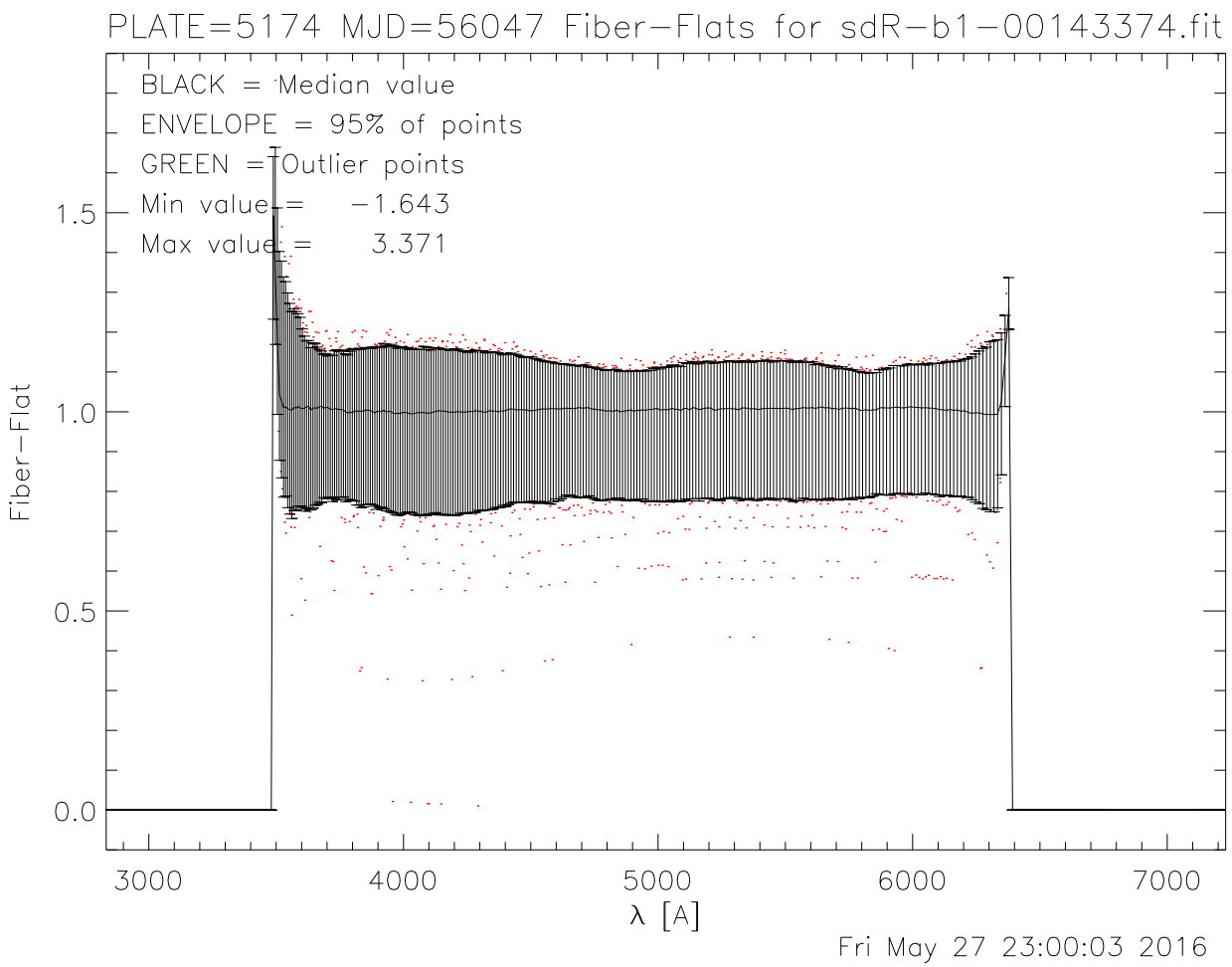
PLATE=5174 MJD=56047 Traces sdR-b1-00143374.fit

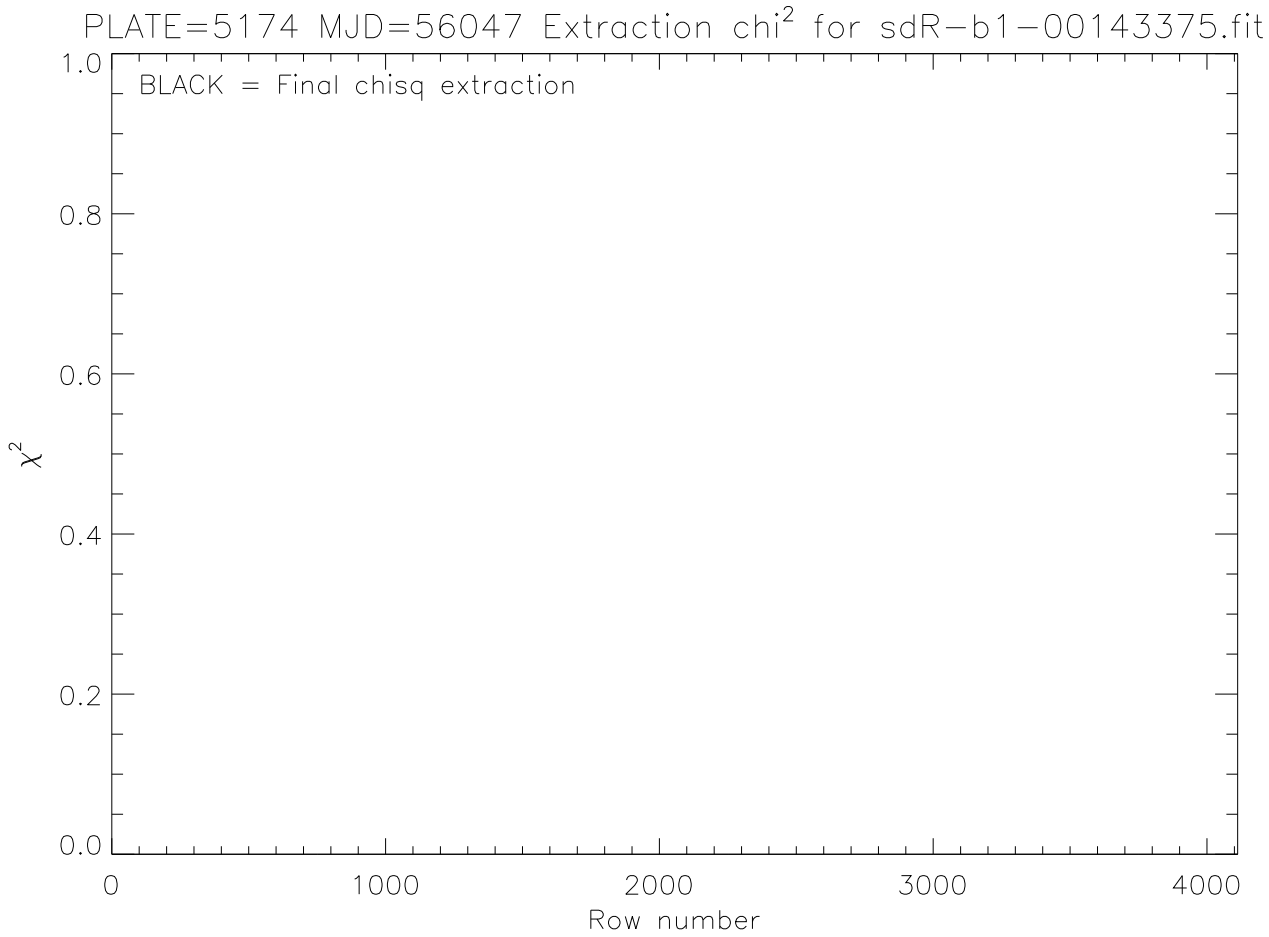


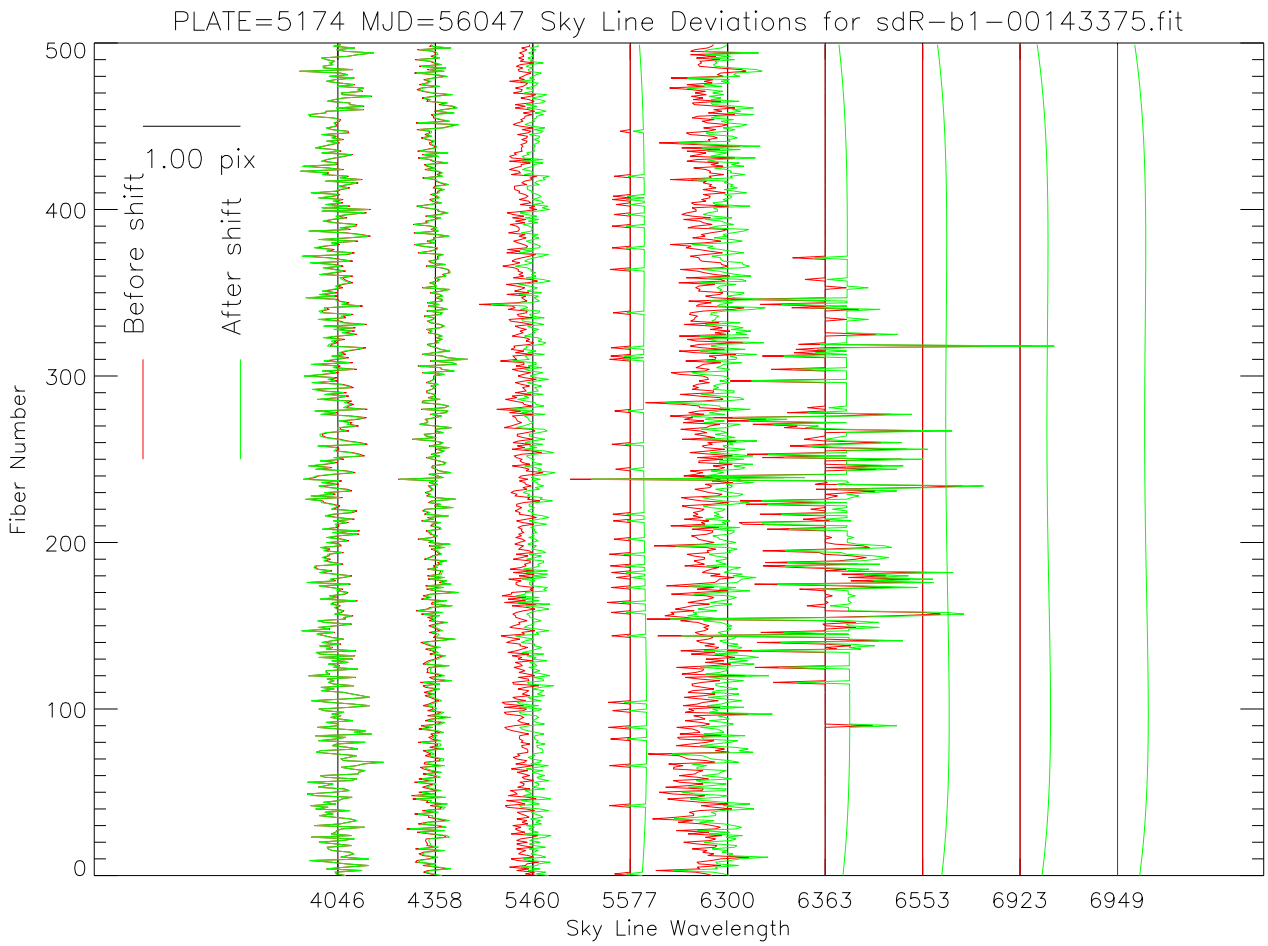

PLATE=5174 MJD=56047 flat extraction chi^2 for sdR−b1−00143374.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

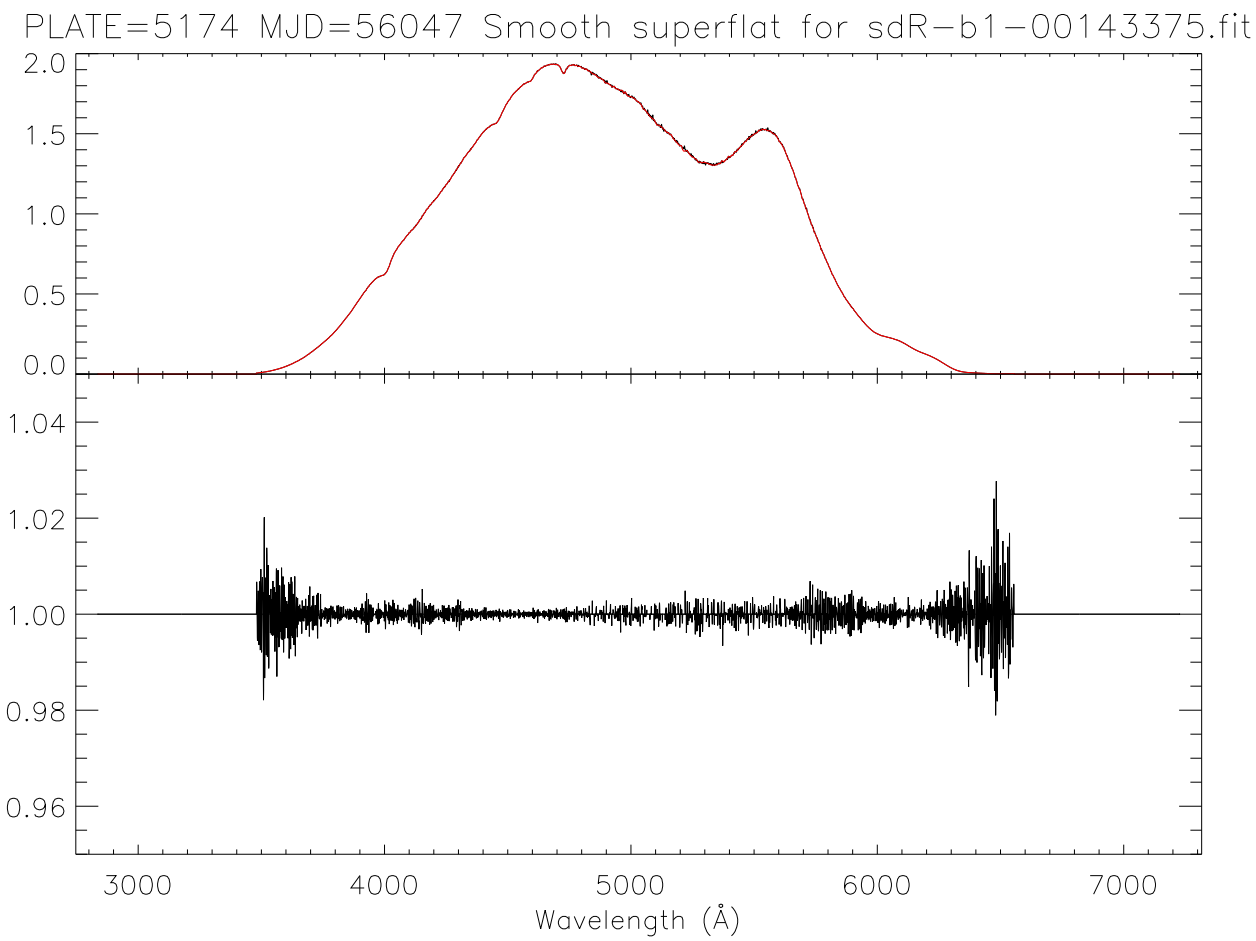

PLATE=5174 MJD=56047 Superflat sdR-b1-00143374.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
3500
4000
4500
5000
5500
6000
6500

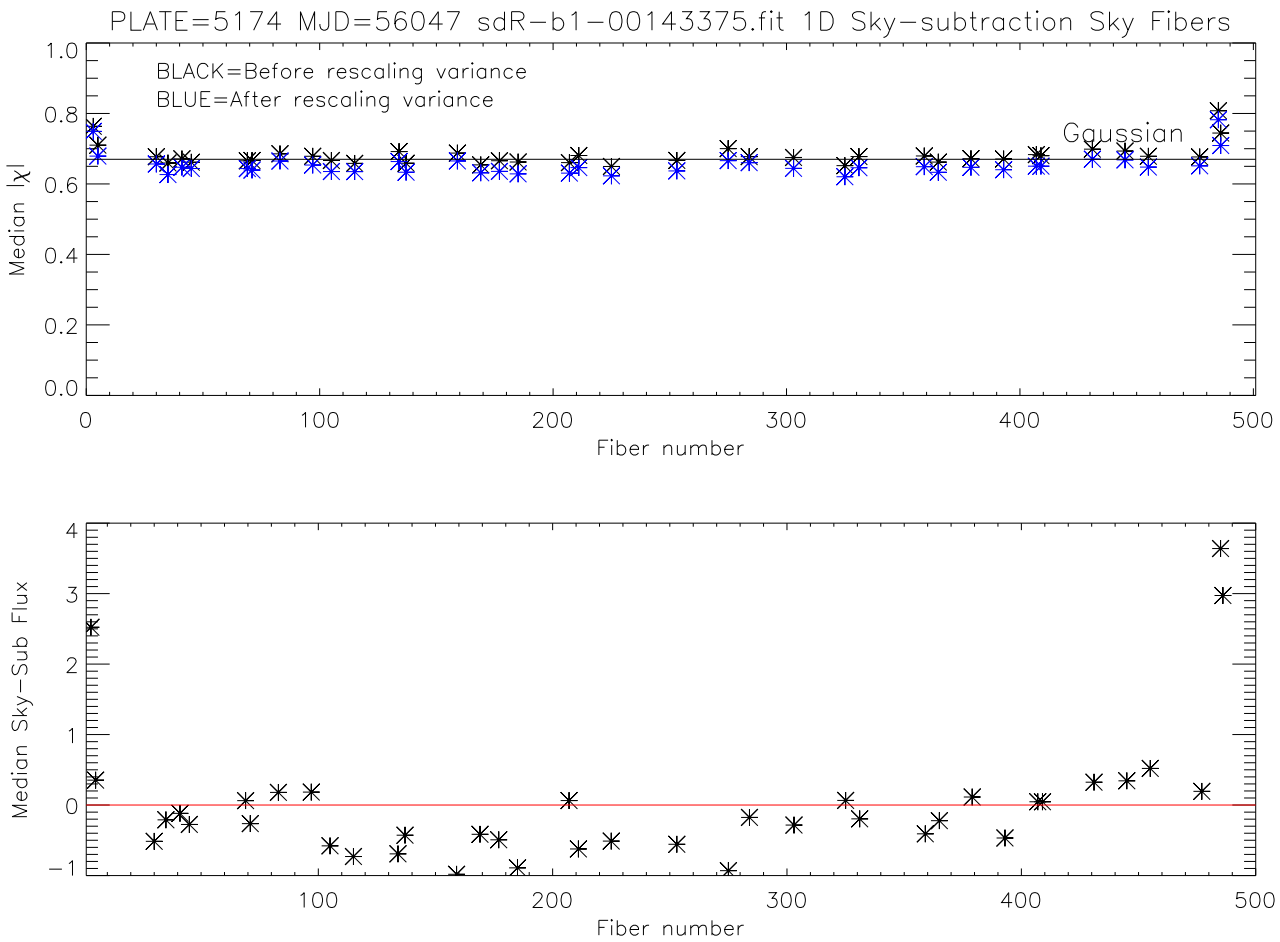

PLATE=5174 MJD=56047 Arcline Fit for sdR-b1-00143373.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Fri May 27 22:59:47 2016

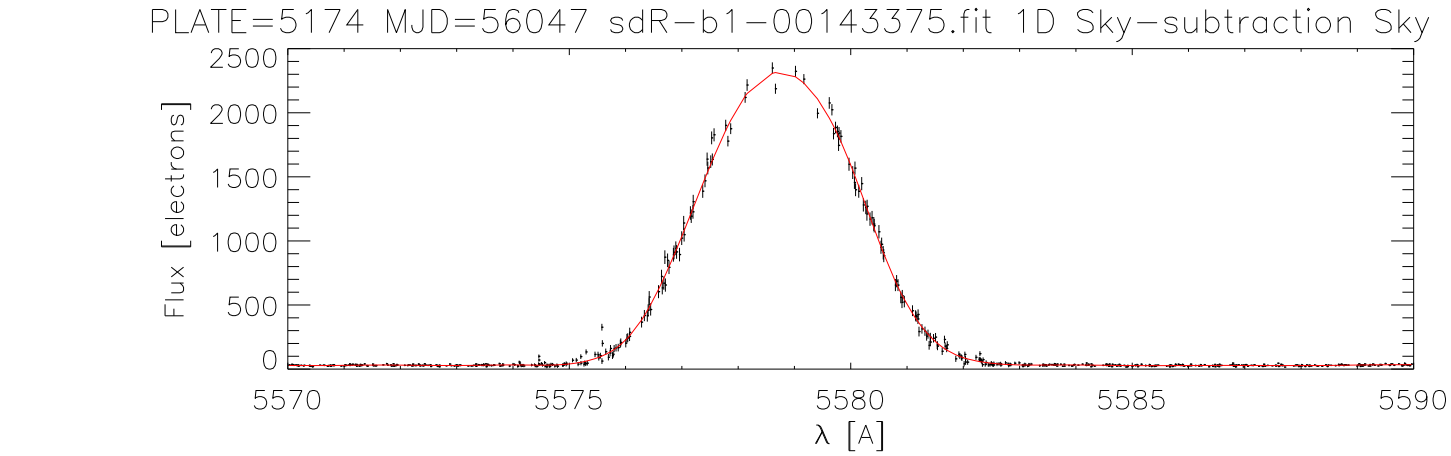

PLATE=5174 MJD=56047 Fiber-Flats for sdR-b1-00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -1.643
Max value = 3.371
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Fri May 27 23:00:03 2016

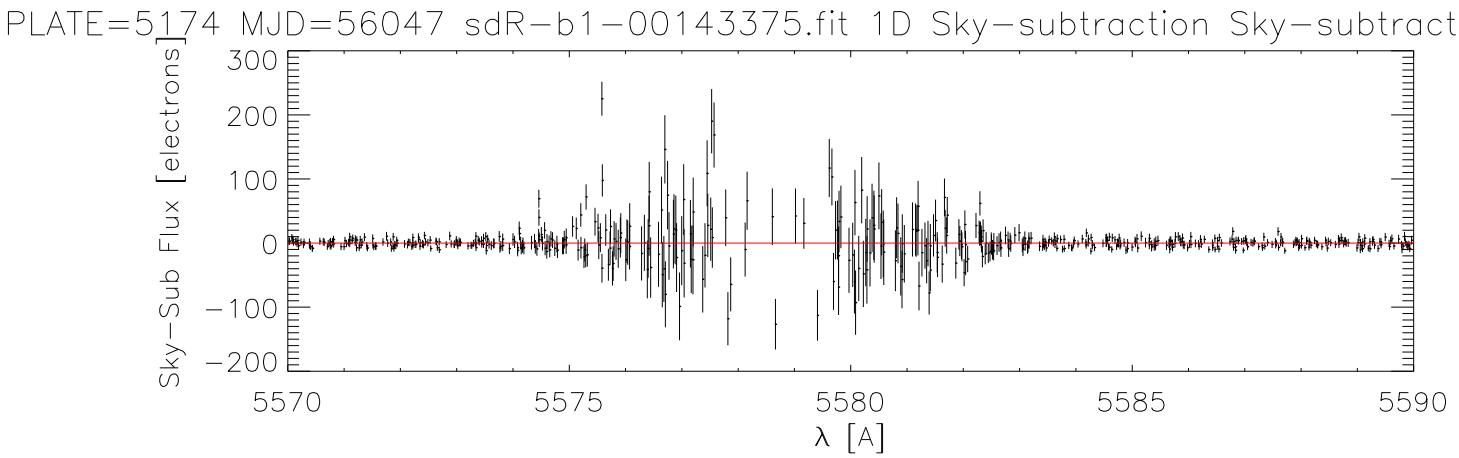

PLATE=5174 MJD=56047 Extraction chi^2 for sdR-b1-00143375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-b1-00143375.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

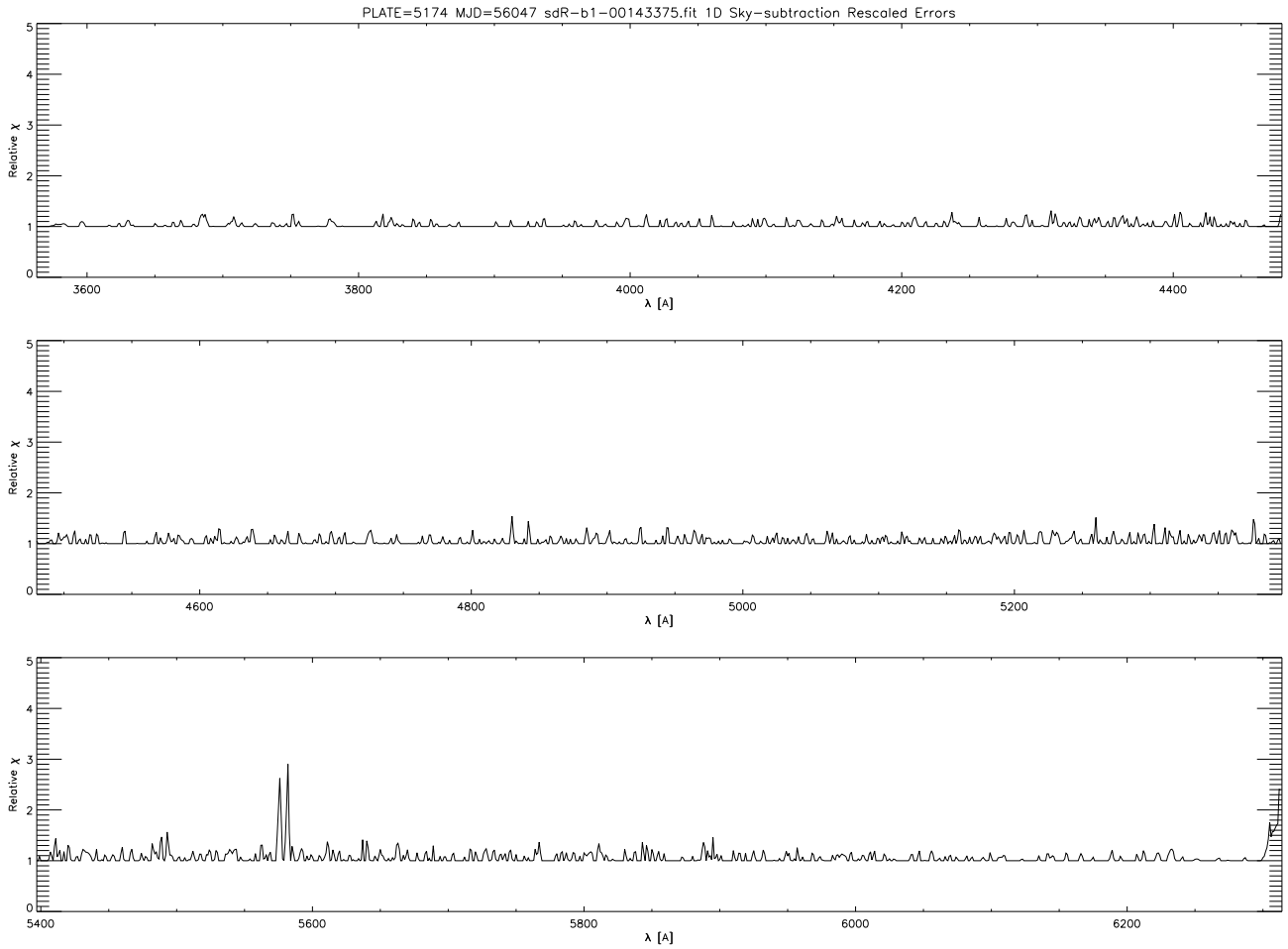

PLATE=5174 MJD=56047 Smooth superflat for sdR-b1-00143375.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

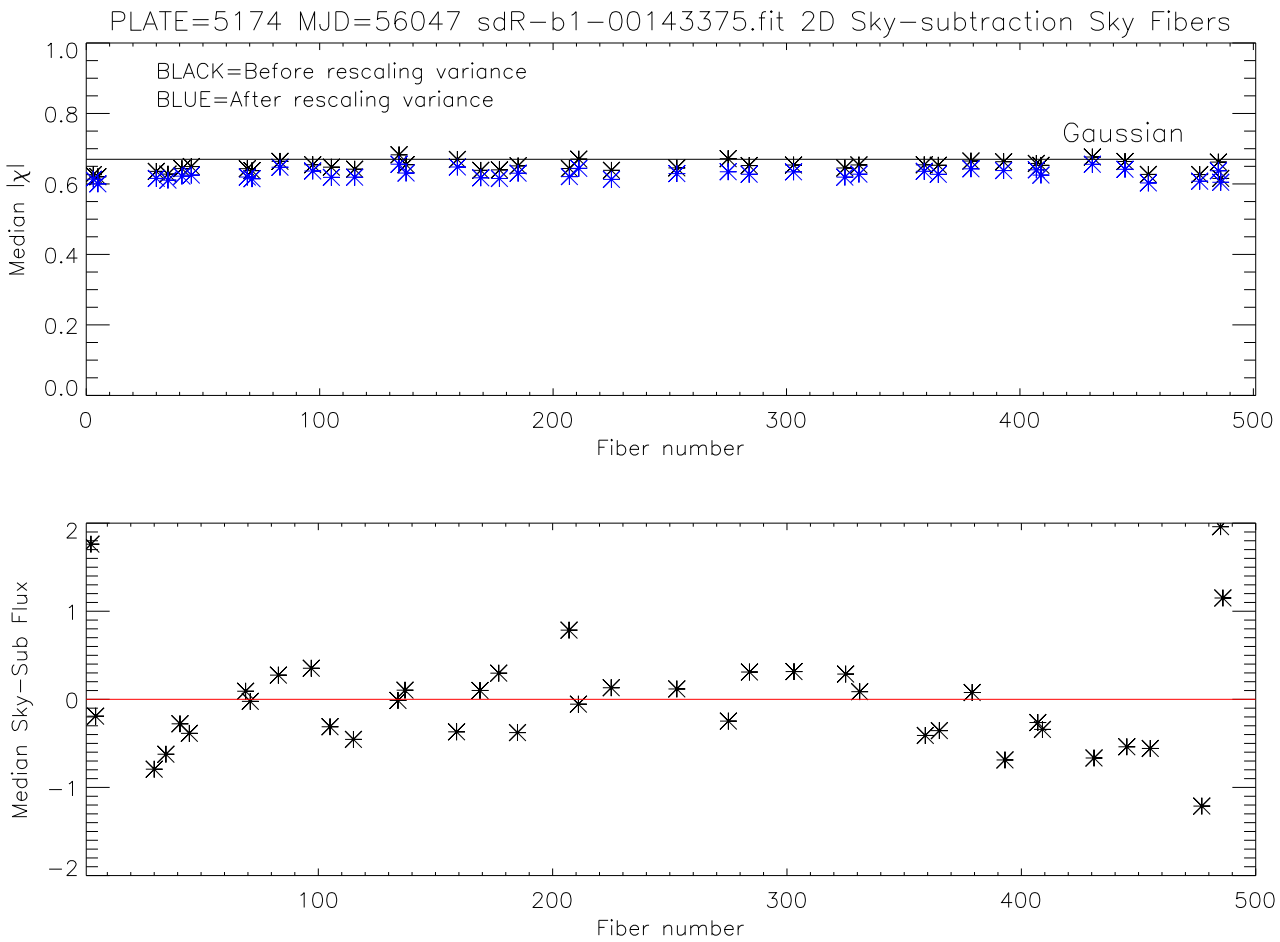

PLATE=5174 MJD=56047 sdR-b1-00143375.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

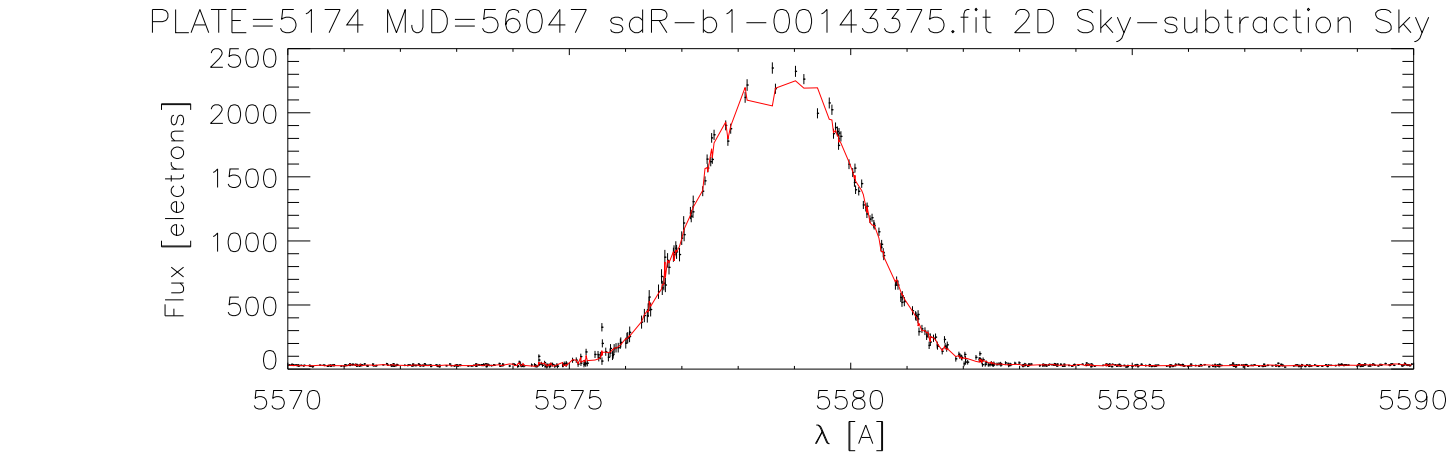

PLATE=5174 MJD=56047 sdR-b1-00143375.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

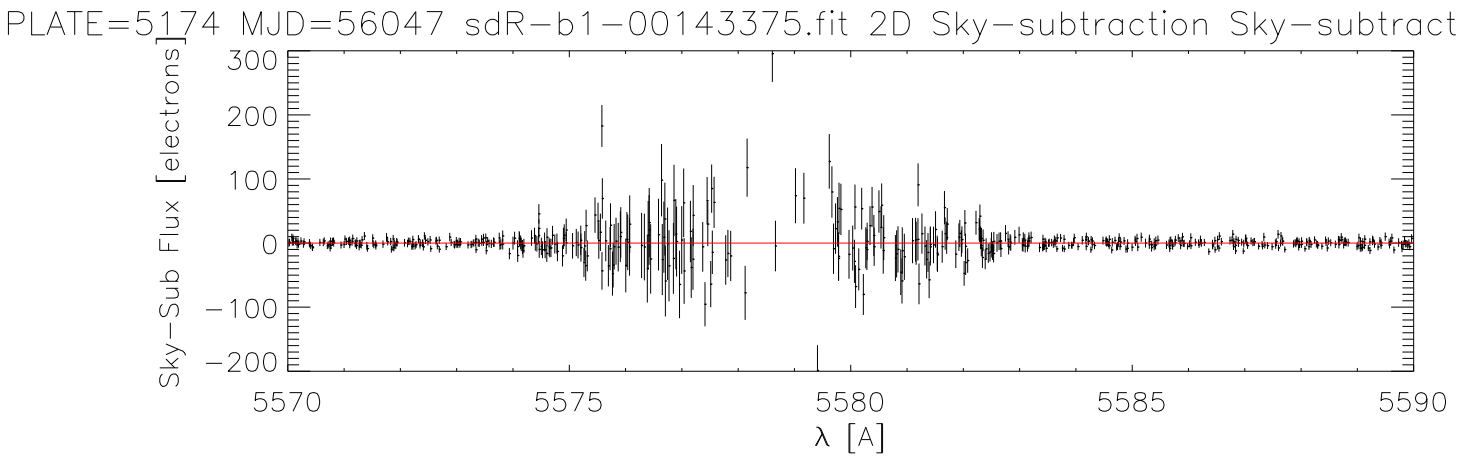

PLATE=5174 MJD=56047 sdR-b1-00143375.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

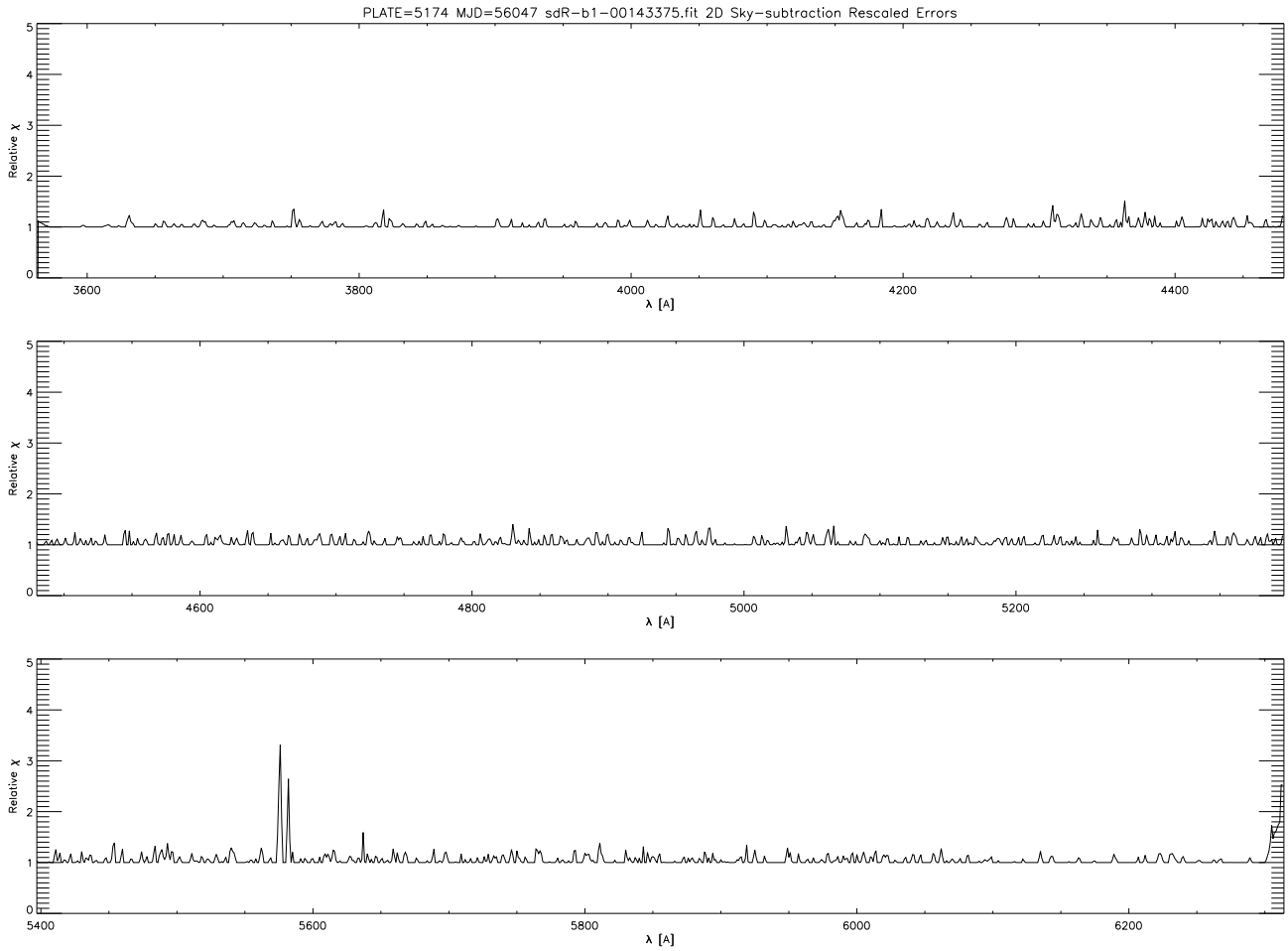


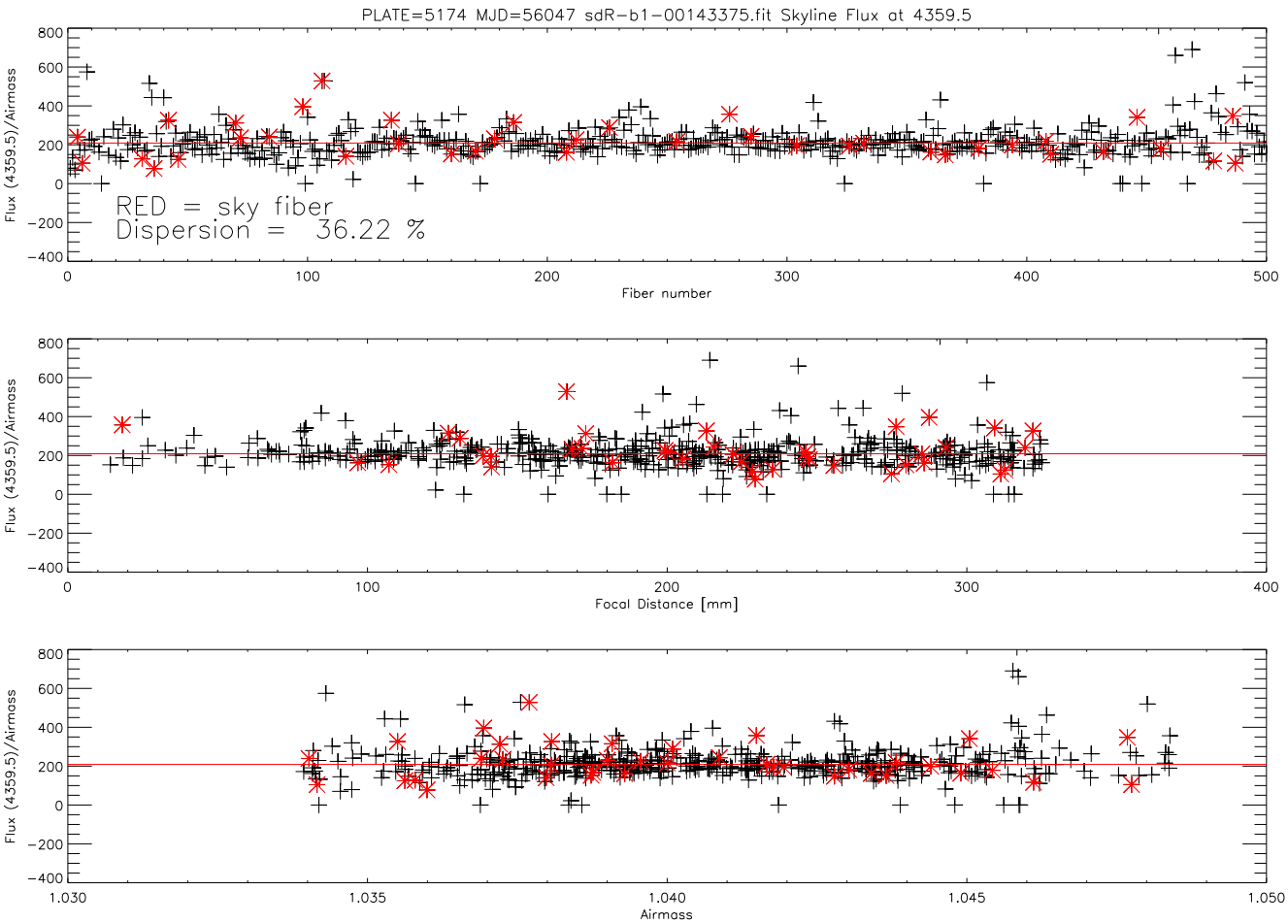

PLATE=5174 MJD=56047 sdR-b1-00143375.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

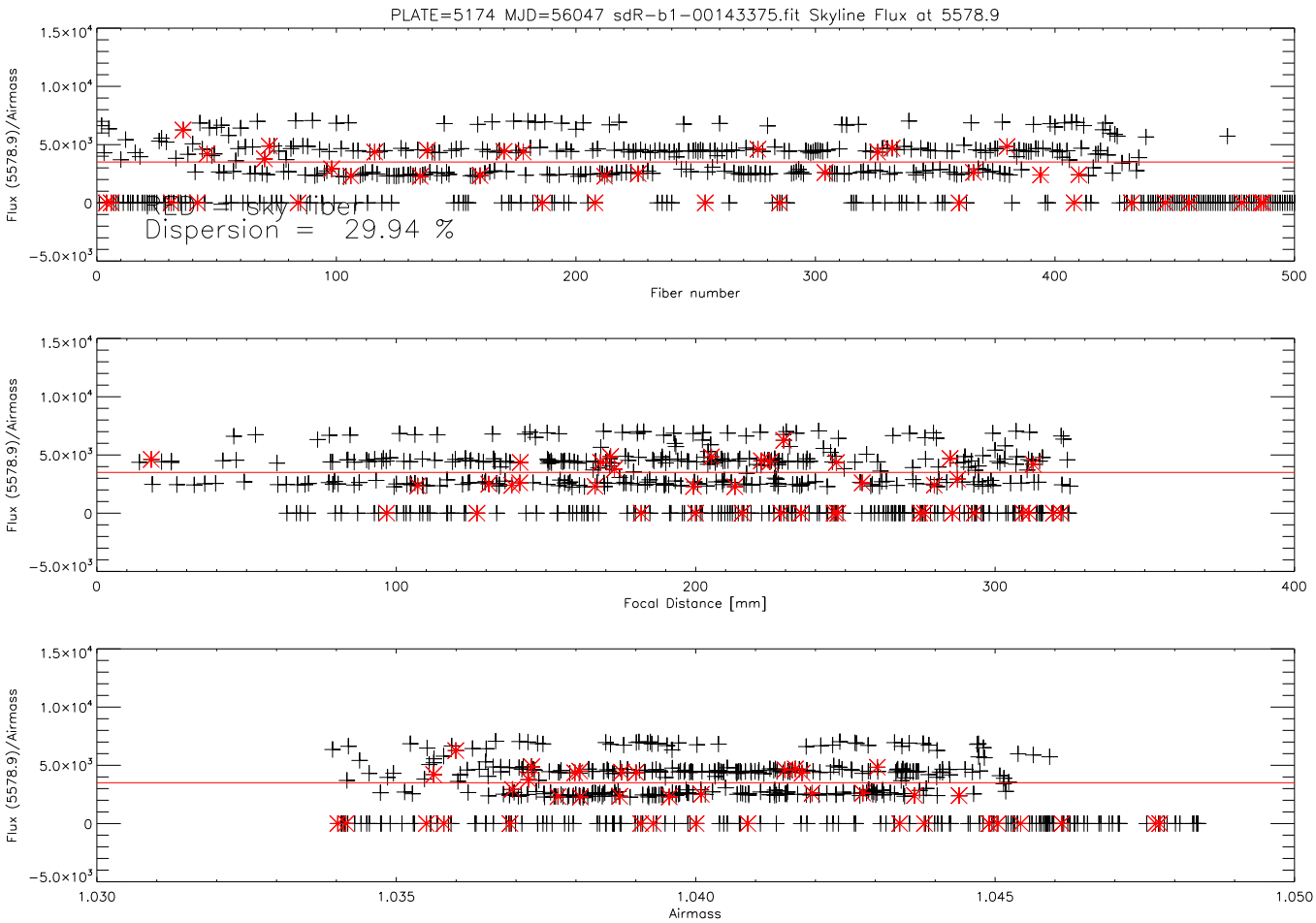

PLATE=5174 MJD=56047 sdR-b1-00143375.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

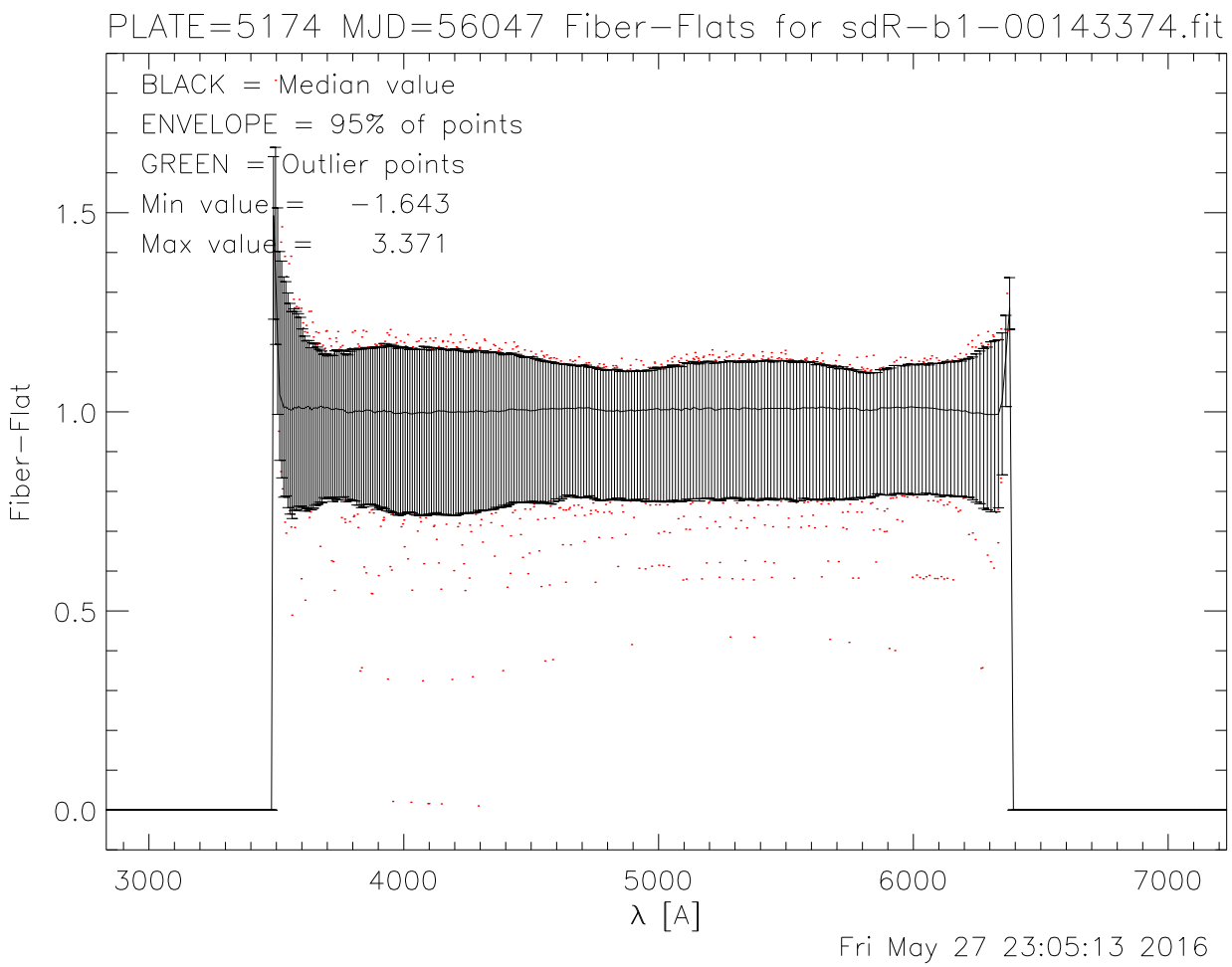

PLATE=5174 MJD=56047 sdR-b1-00143375.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

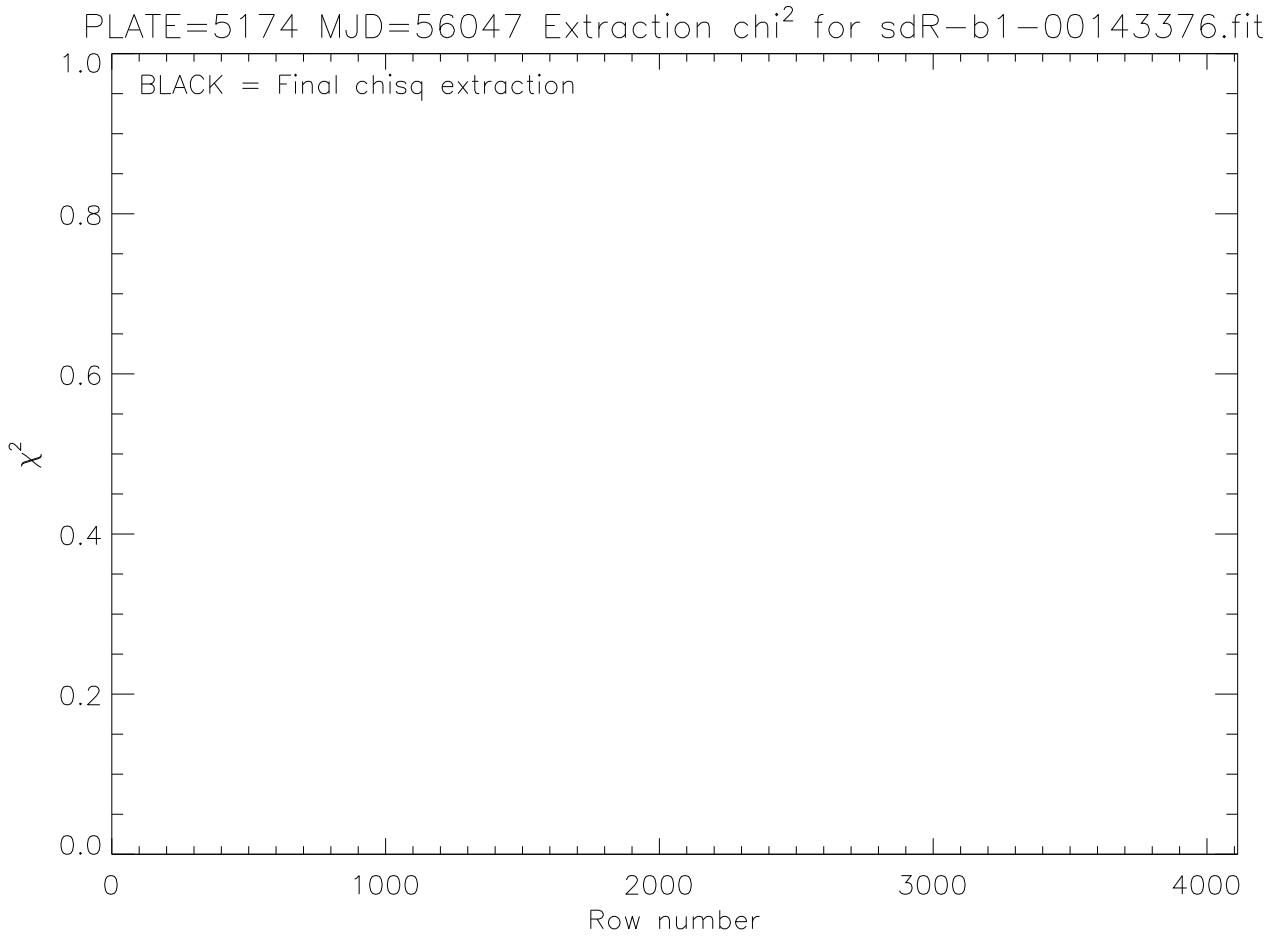
Number of sky fibers = 39

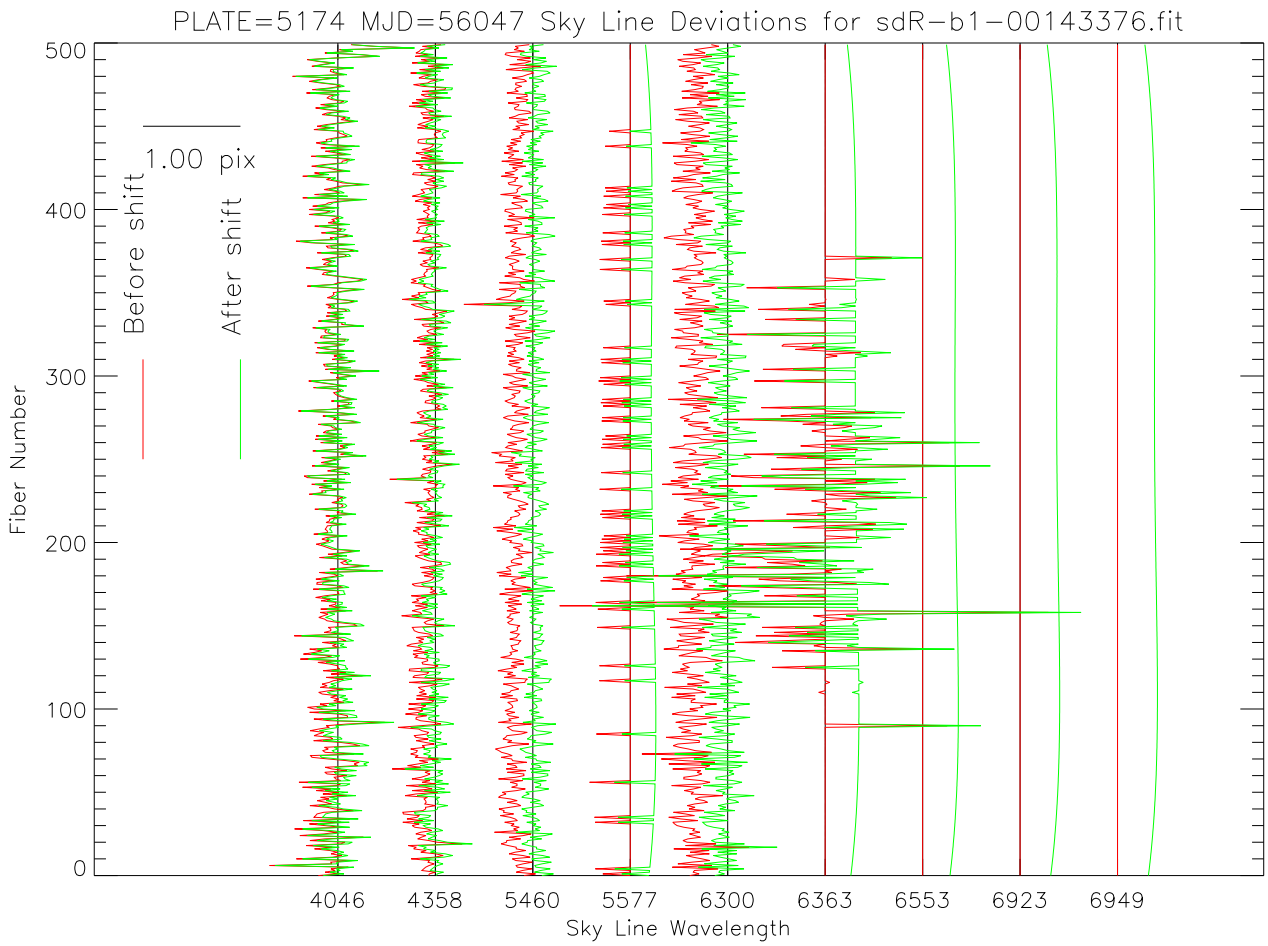


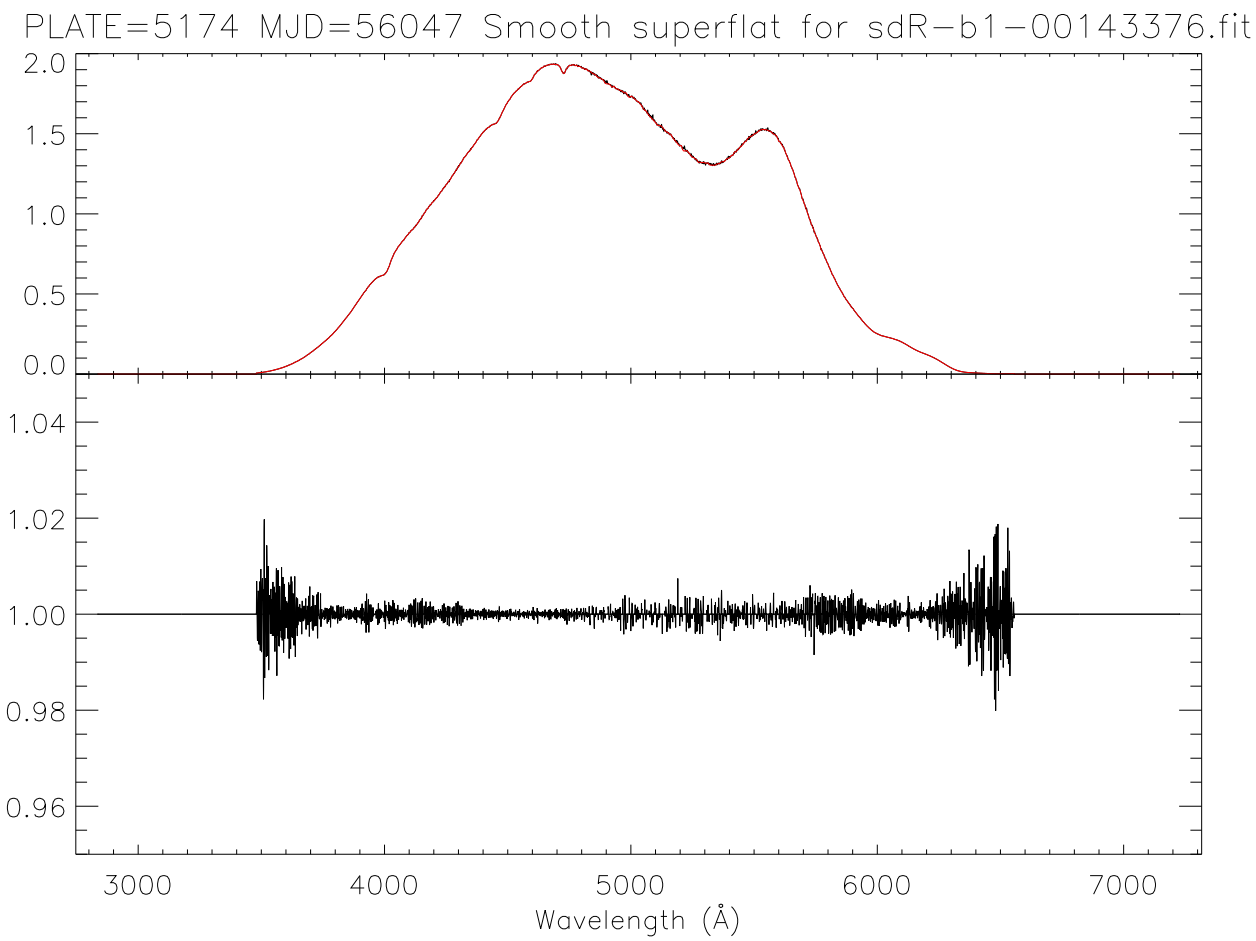

PLATE=5174 MJD=56047 sdR-b1-00143375.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 36.22 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

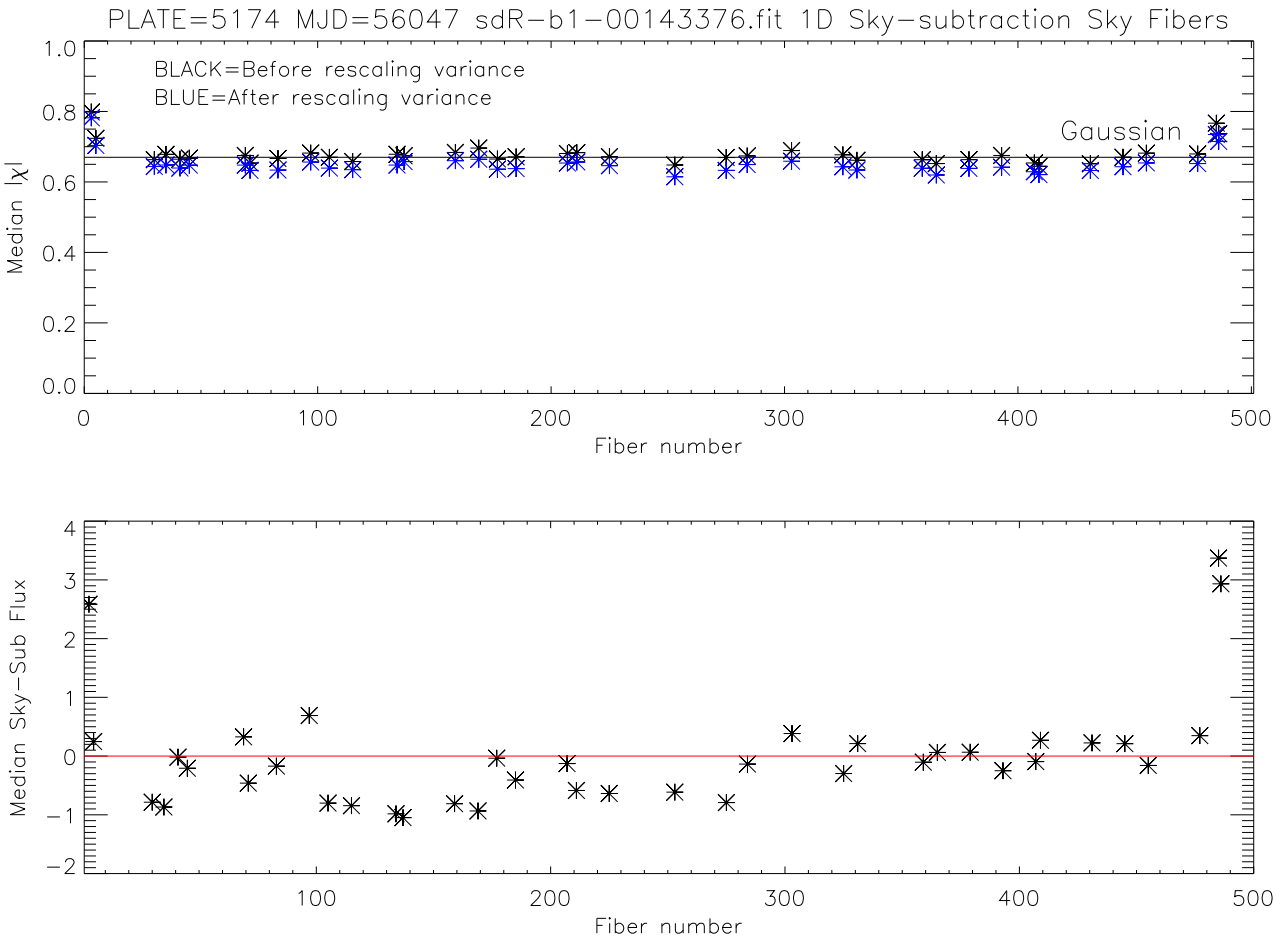

PLATE=5174 MJD=56047 sdR-b1-00143375.fit Skyline Flux at 5578.9
Red = Sky fiber
Dispersion = 29.94 %
Flux (5578.9)/Airmass
Fiber number
Focal Distance [mm]
Airmass

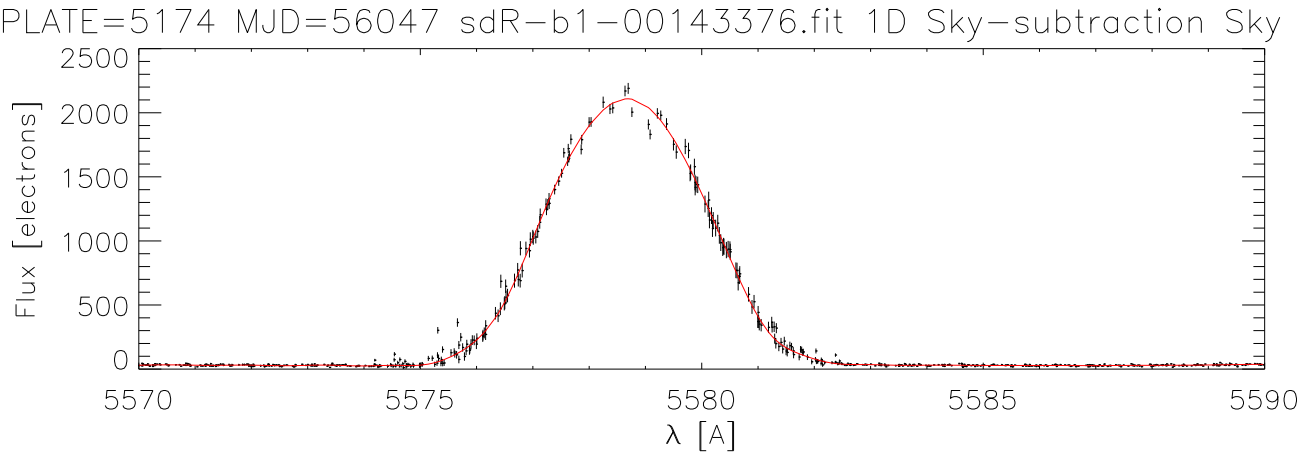

PLATE=5174 MJD=56047 Fiber-Flats for sdR-b1-00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -1.643
Max value = 3.371
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Fri May 27 23:05:13 2016

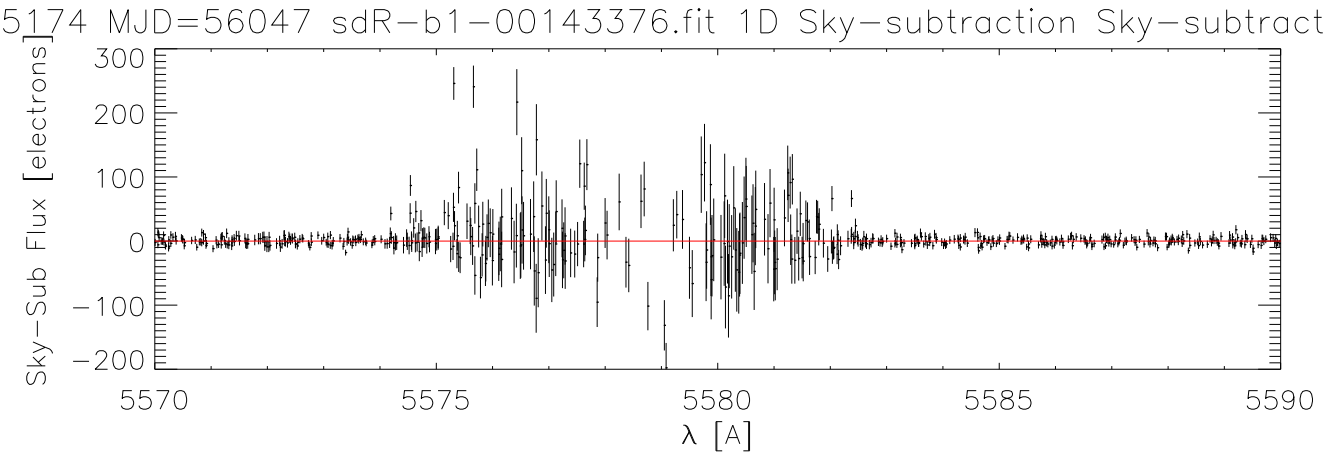

PLATE=5174 MJD=56047 Extraction chi^2 for sdR-b1-00143376.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-b1-00143376.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

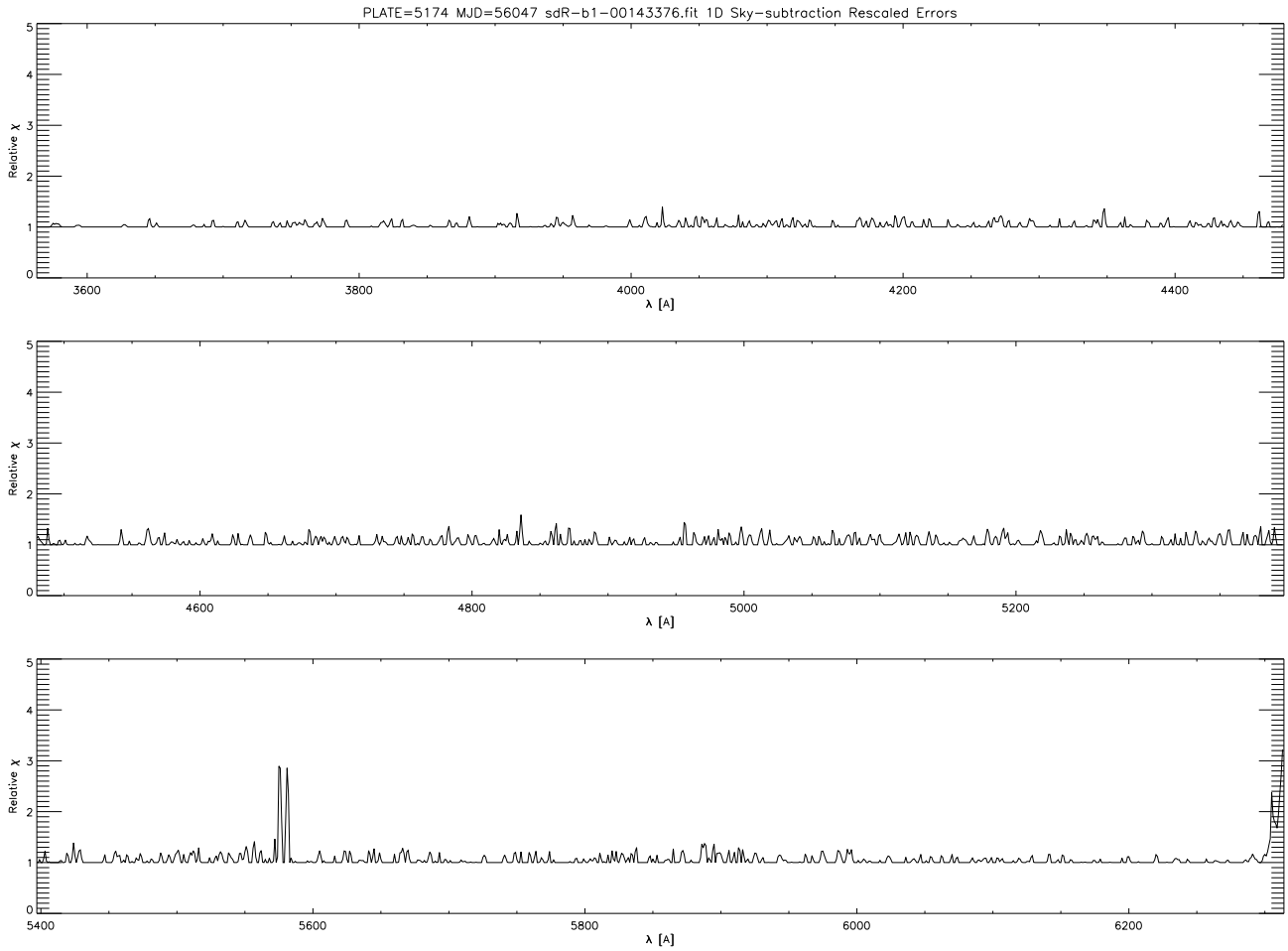

PLATE=5174 MJD=56047 Smooth superflat for sdR-b1-00143376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

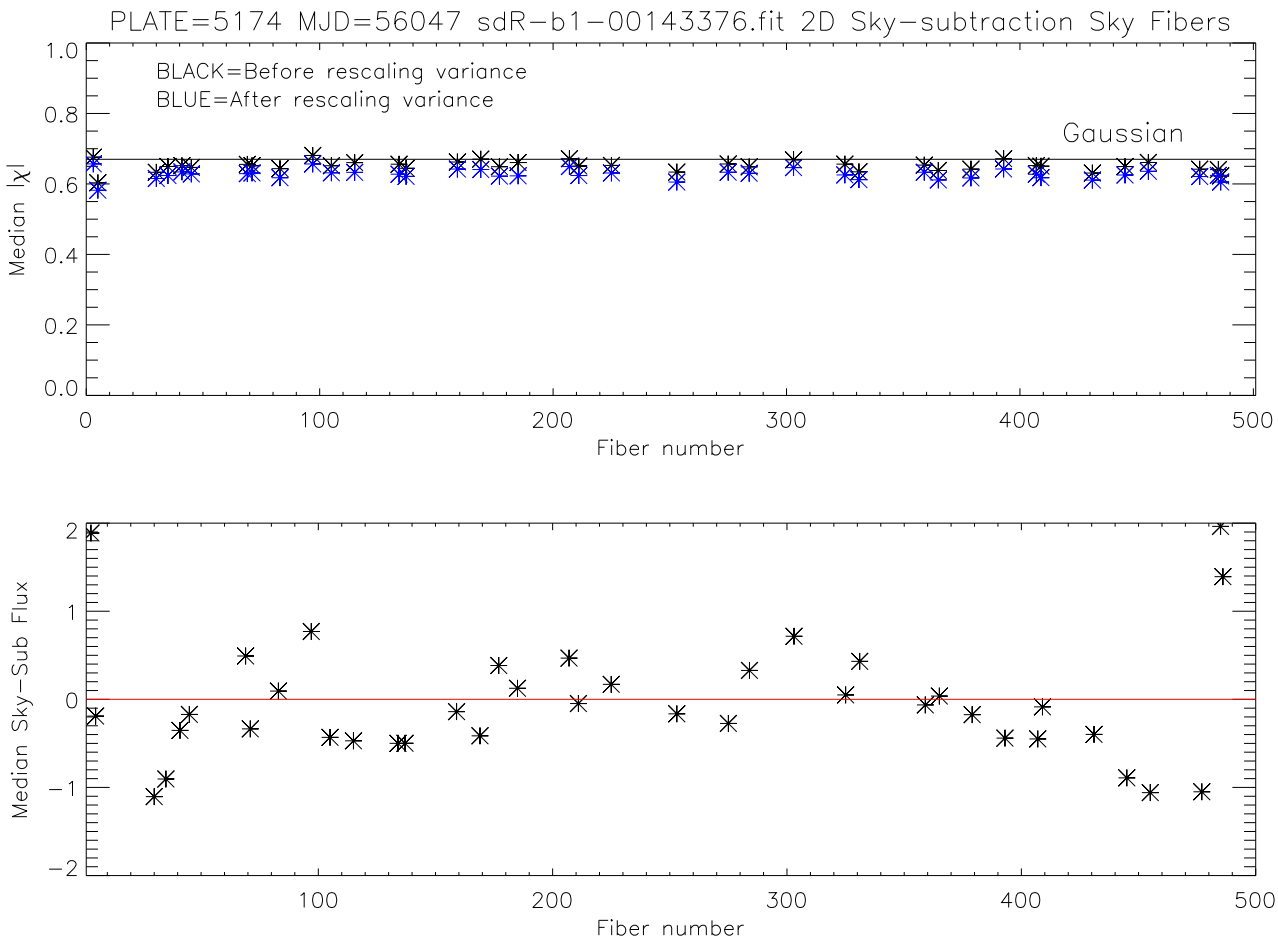

PLATE=5174 MJD=56047 sdR-b1-00143376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

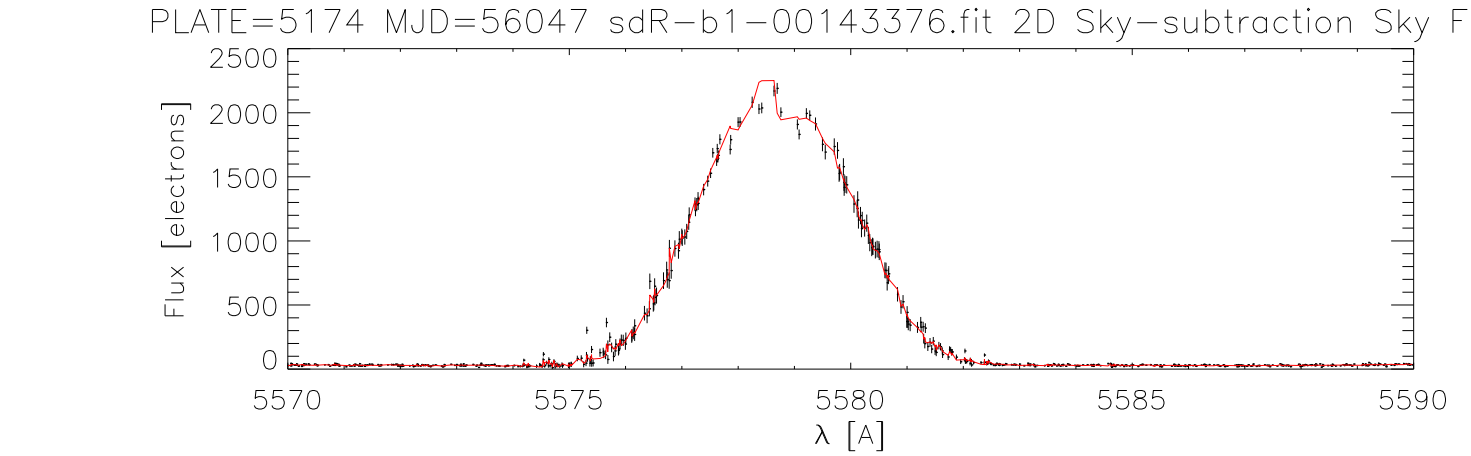

PLATE=5174 MJD=56047 sdR-b1-00143376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

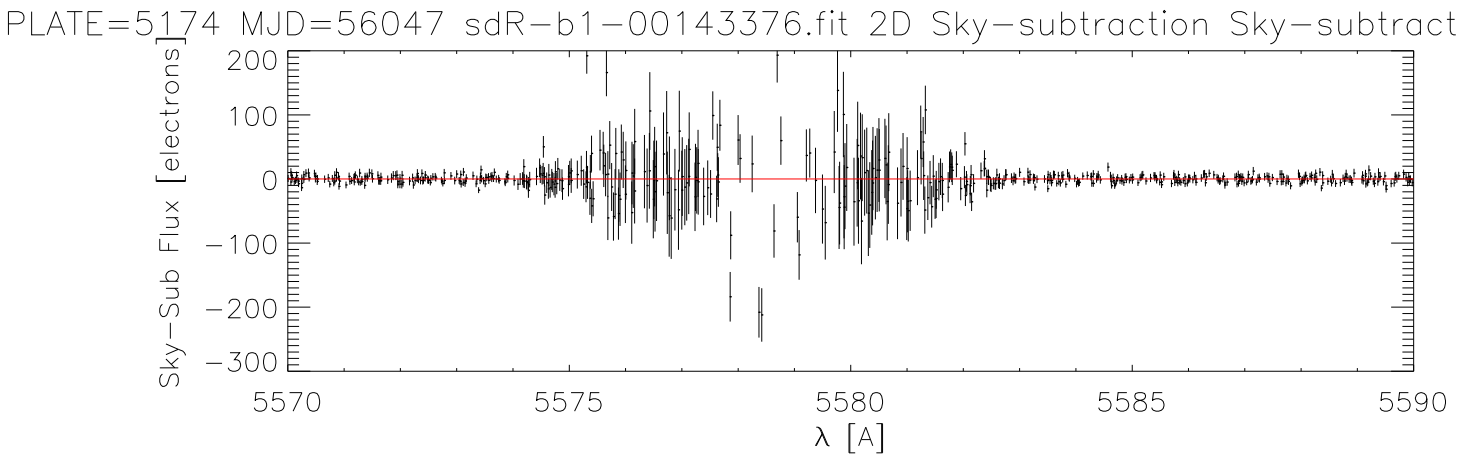

PLATE=5174 MJD=56047 sdR-b1-00143376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

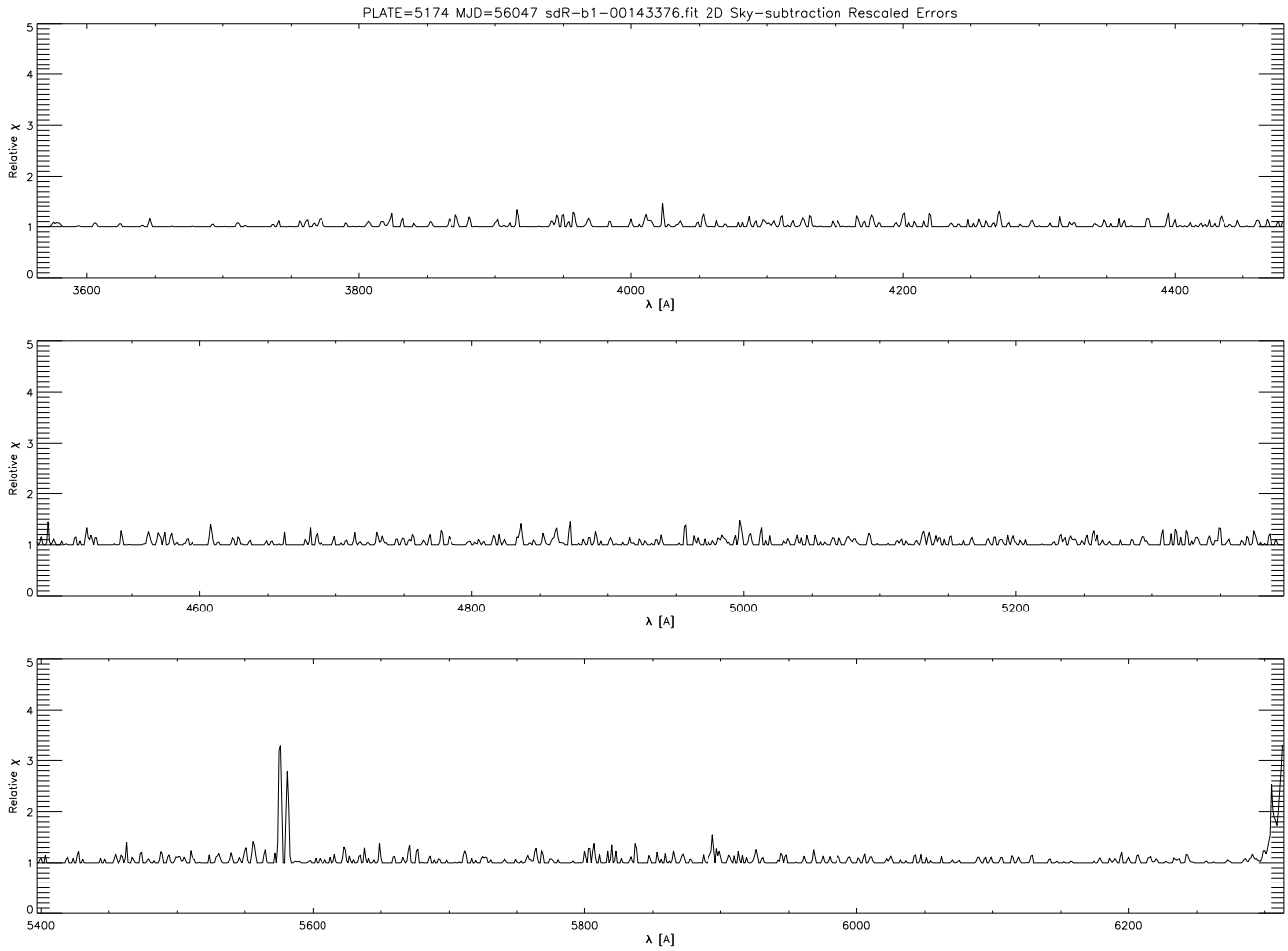


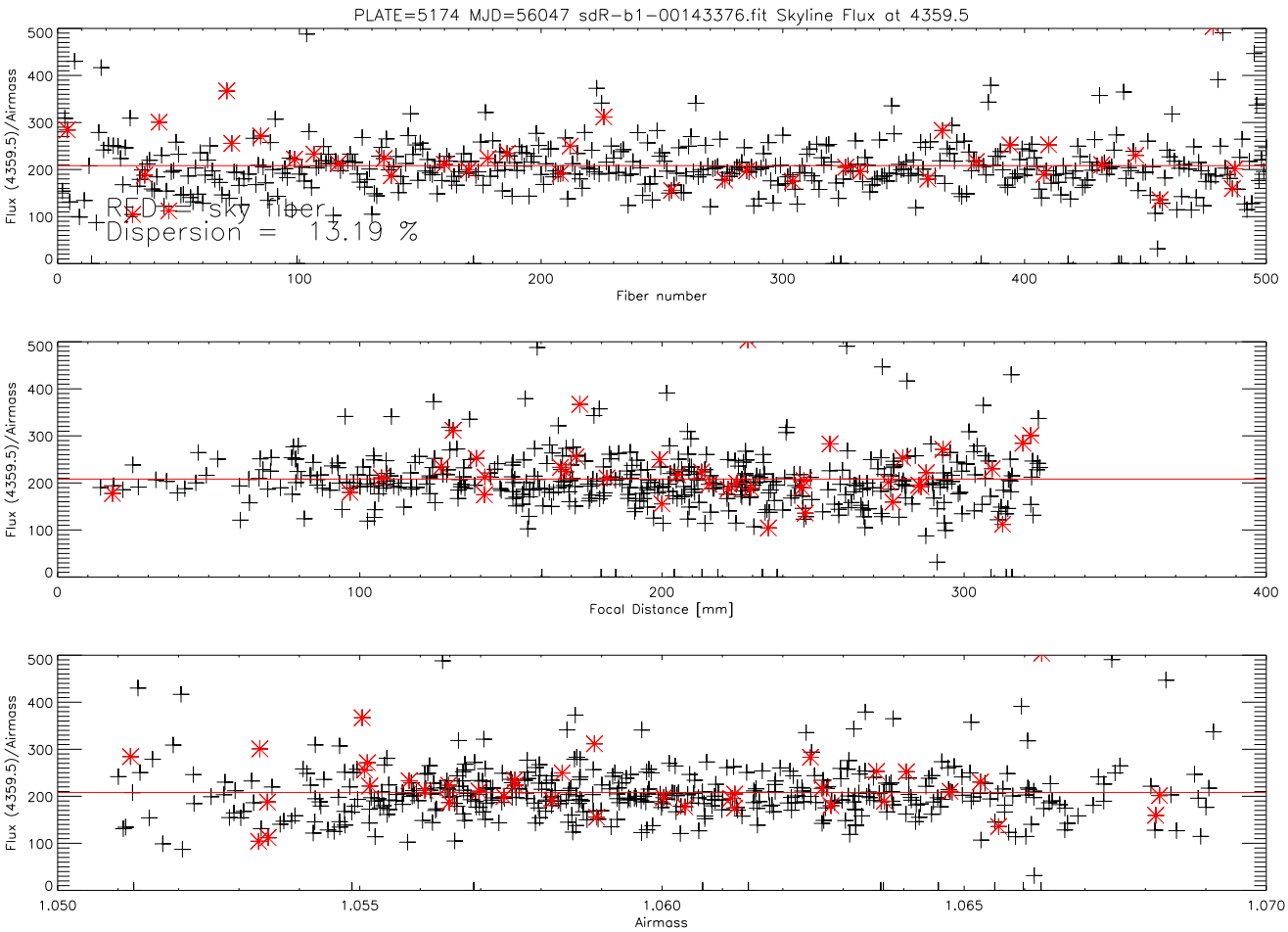

PLATE=5174 MJD=56047 sdR-b1-00143376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

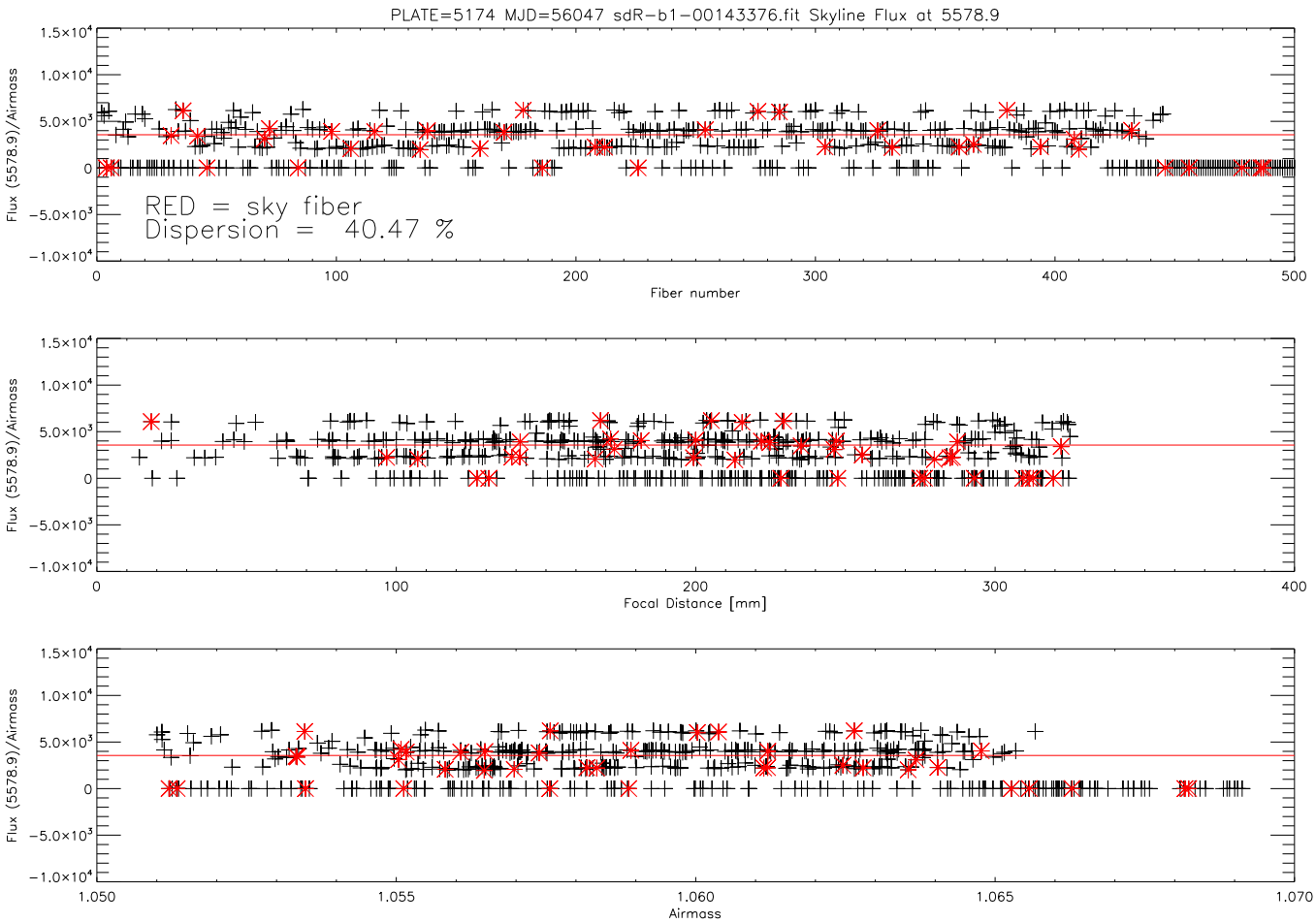

PLATE=5174 MJD=56047 sdR-b1-00143376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

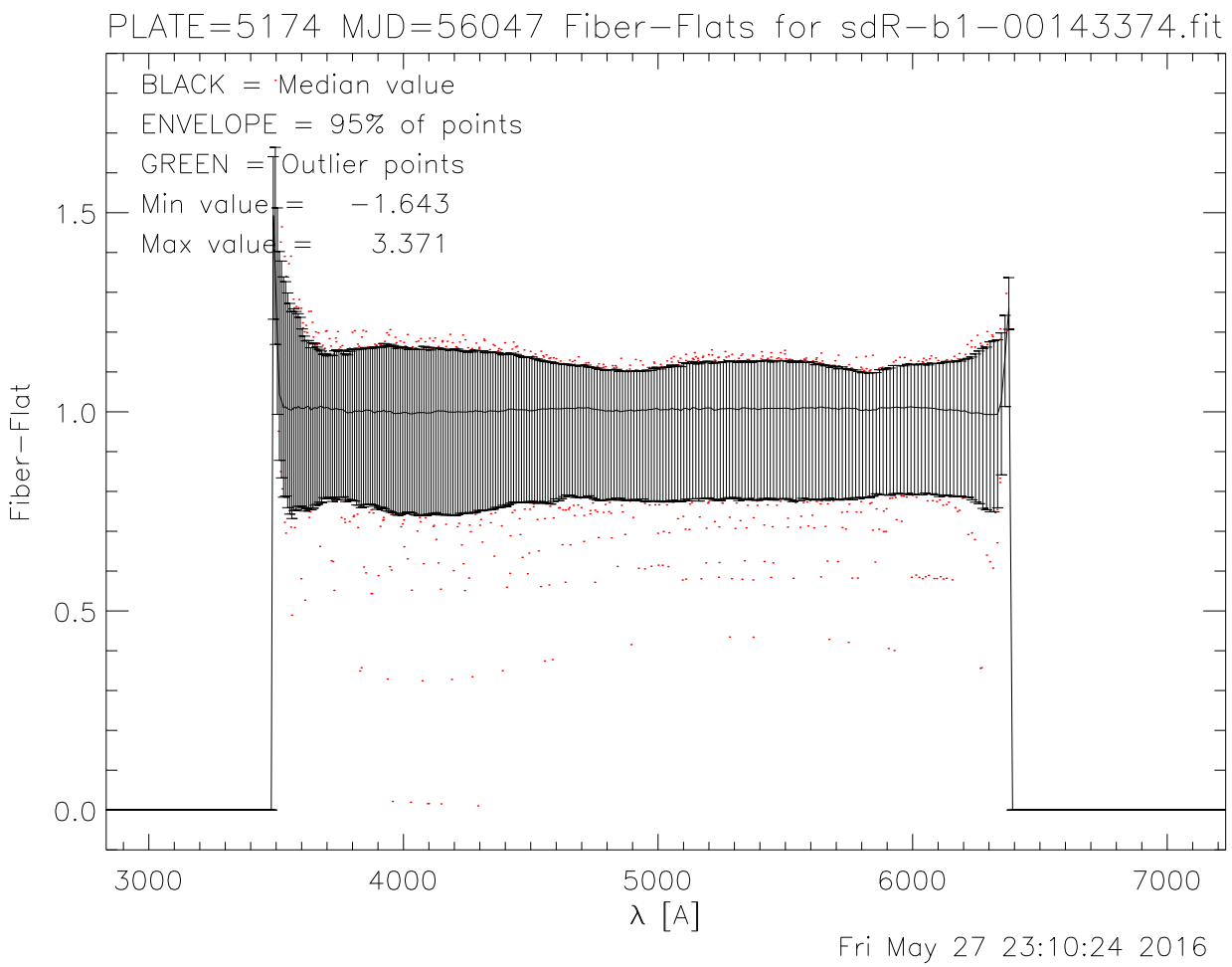

PLATE=5174 MJD=56047 sdR-b1-00143376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

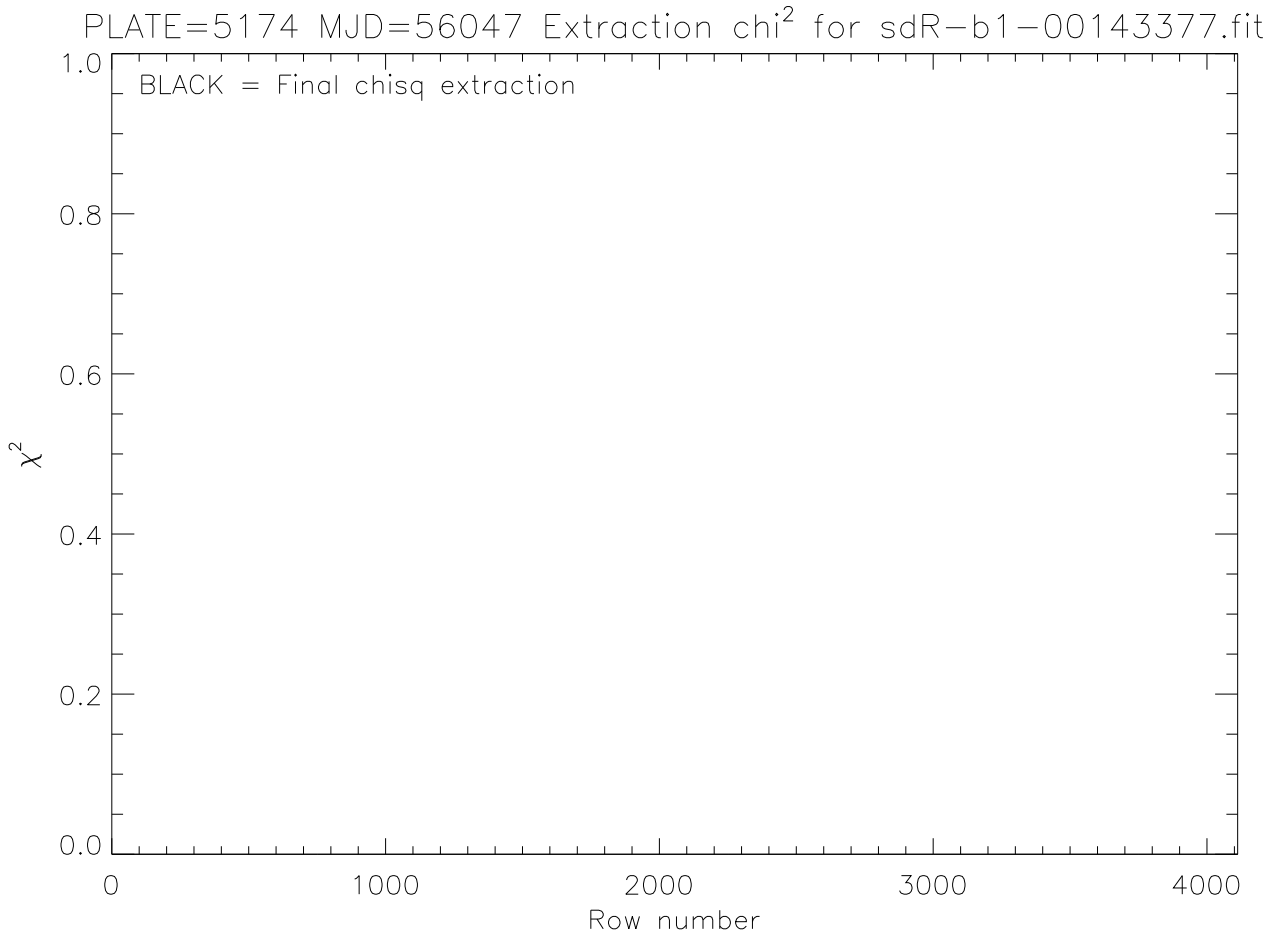
Number of sky fibers = 39

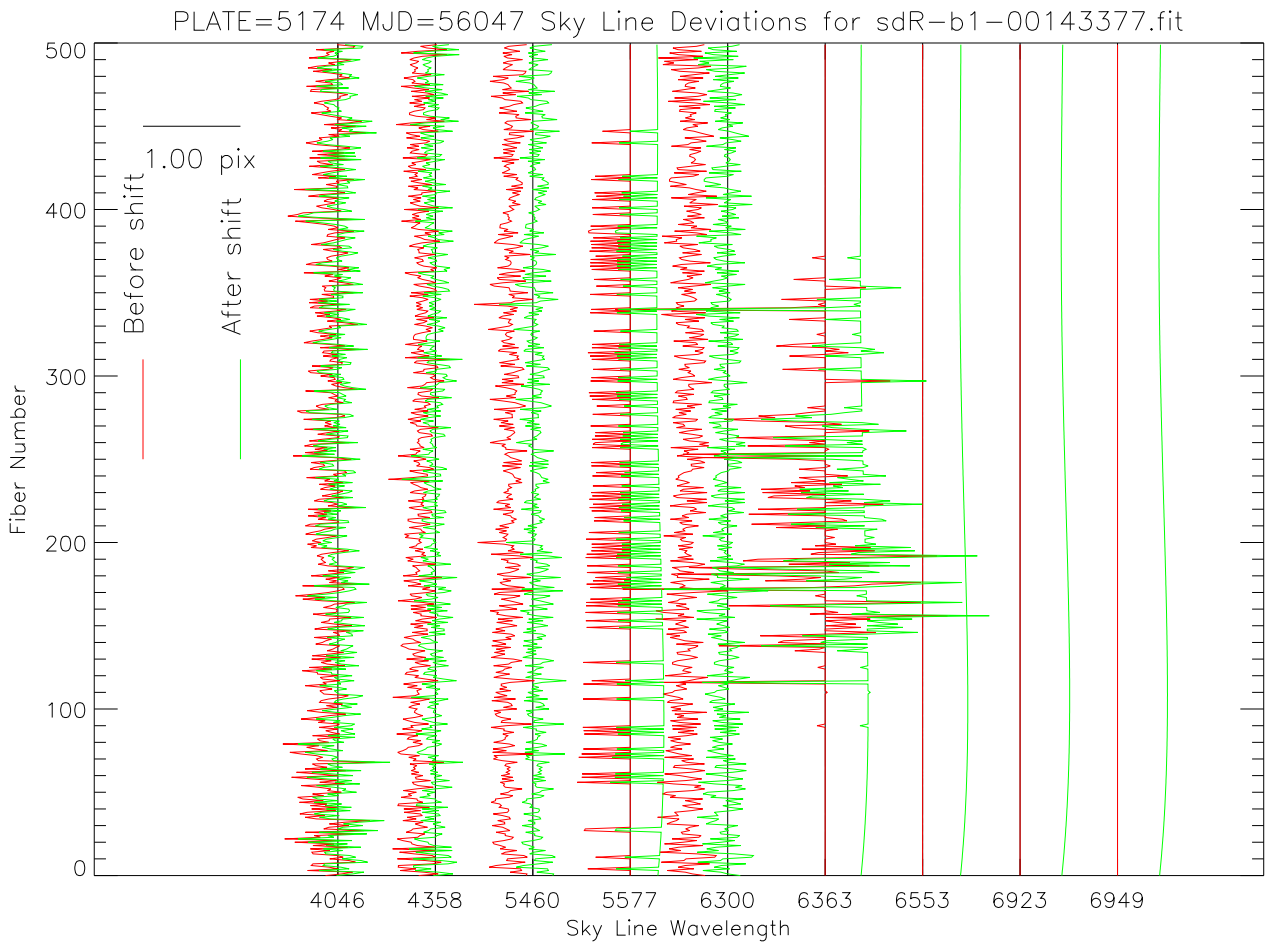


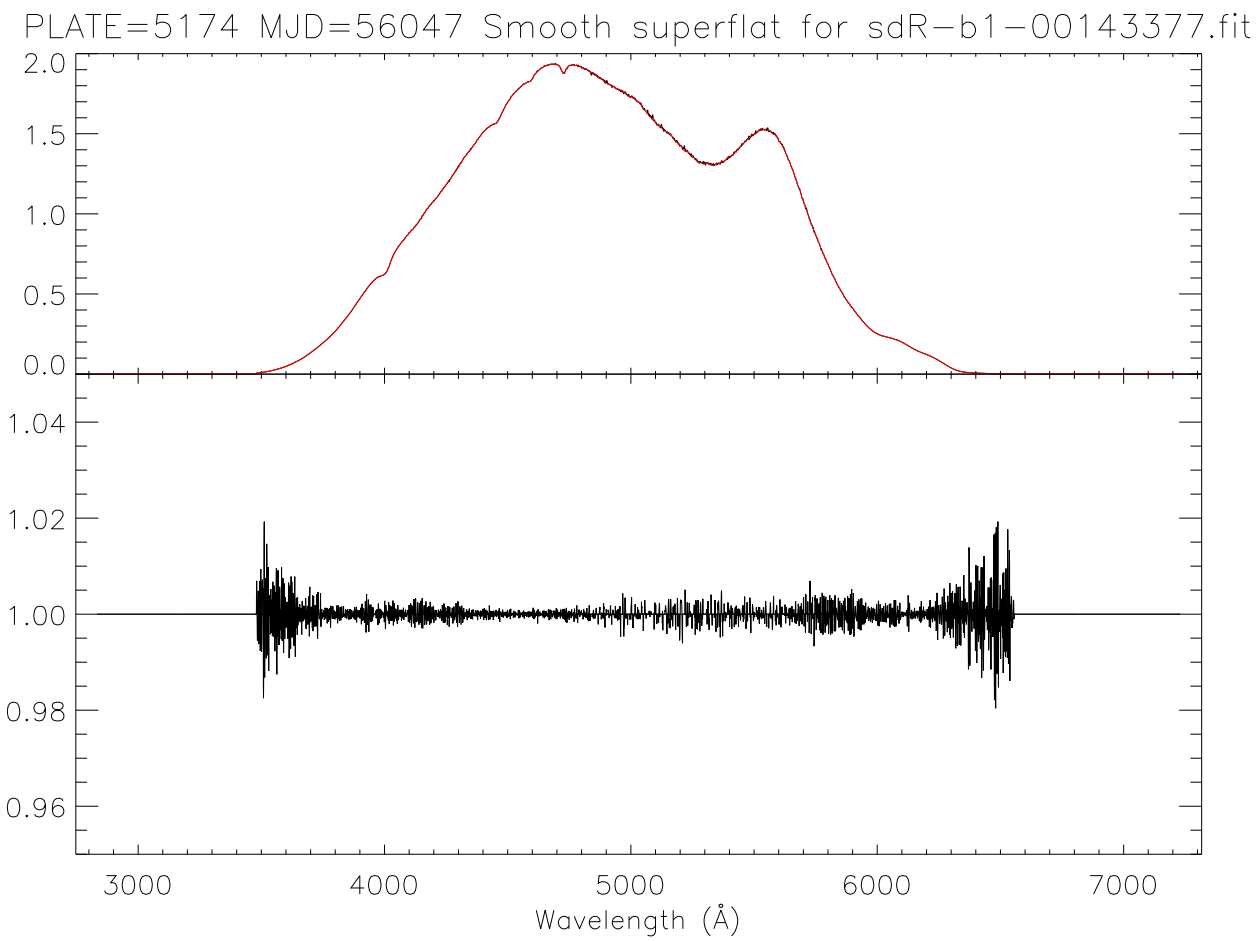

PLATE=5174 MJD=56047 sdR-b1-00143376.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED=sky fiber
Dispersion = 13.19 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

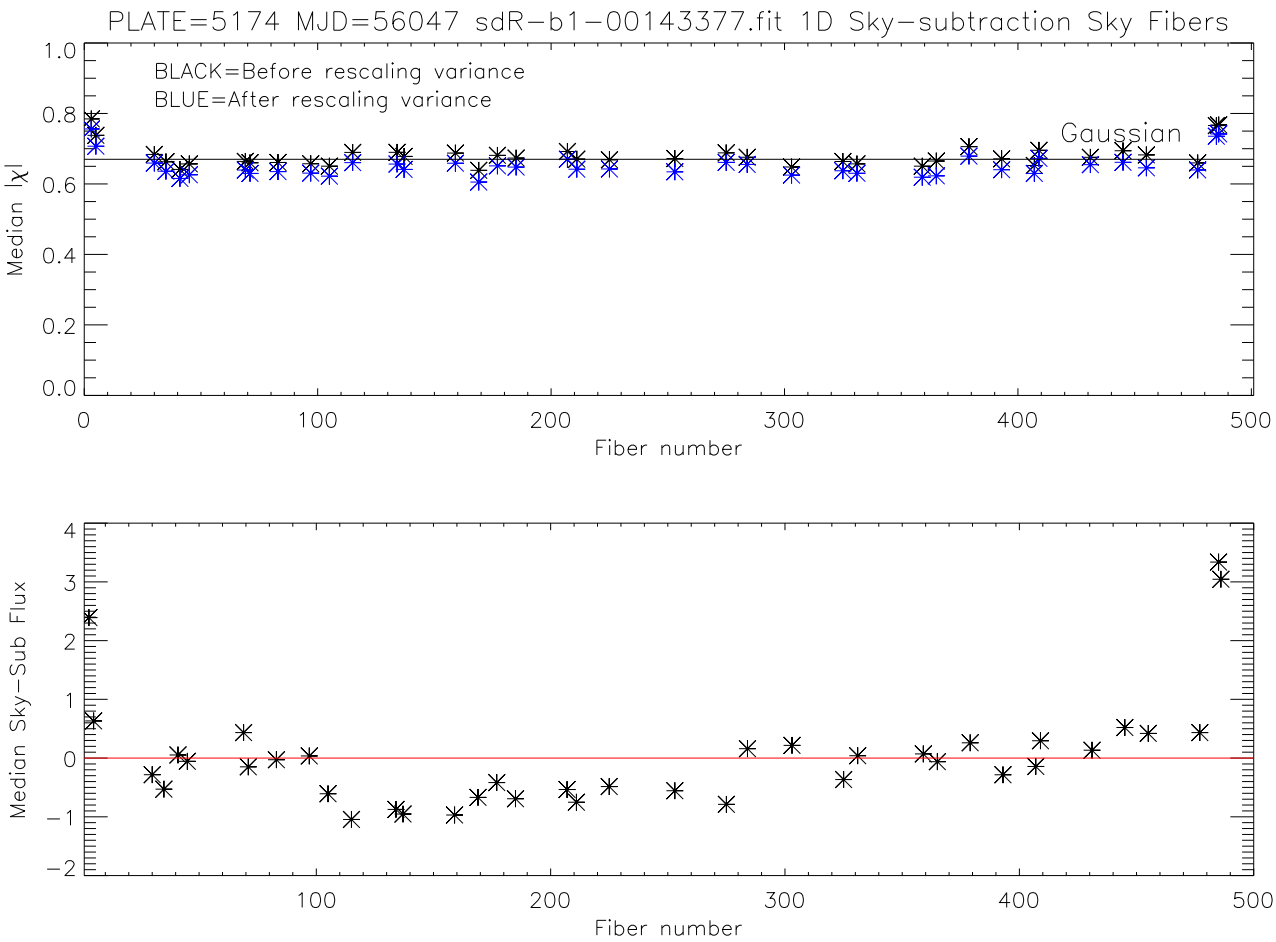

PLATE=5174 MJD=56047 sdR-b1-00143376.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 40.47 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

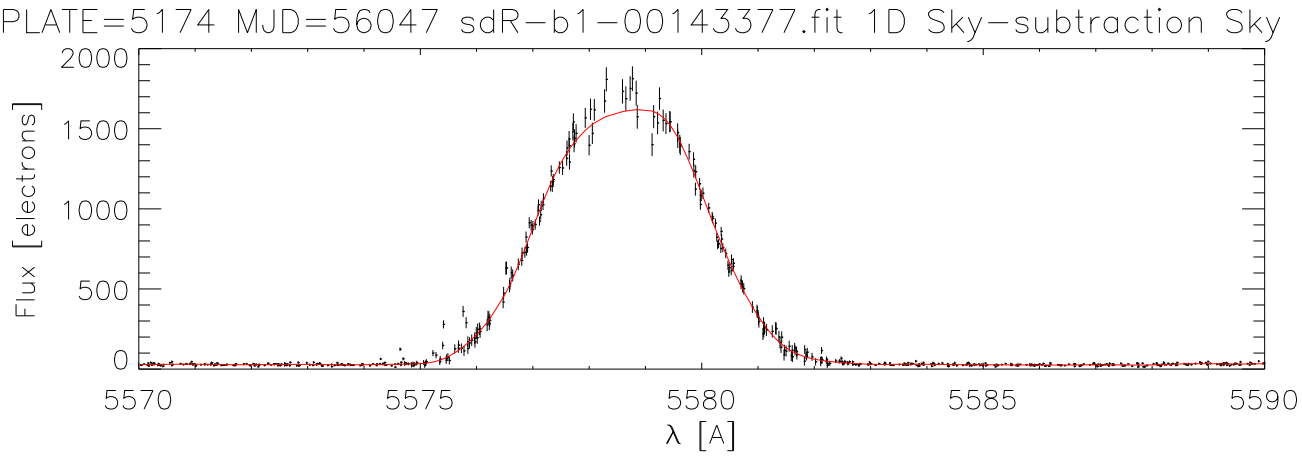

PLATE=5174 MJD=56047 Fiber−Flats for sdR−b1−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −1.643
Max value = 3.371
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Fri May 27 23:10:24 2016

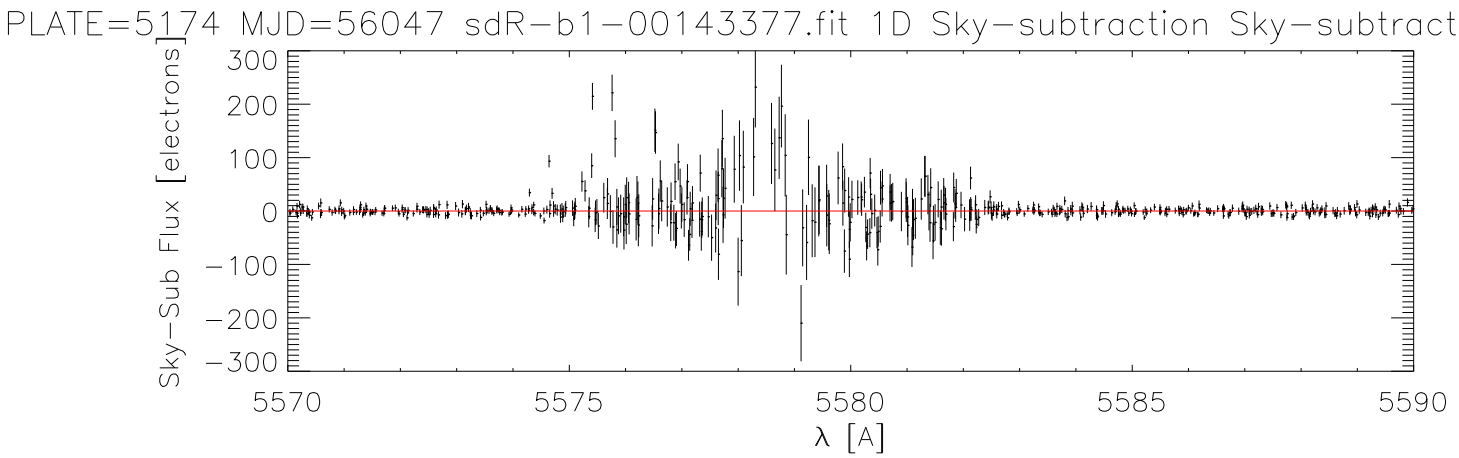

PLATE=5174 MJD=56047 Extraction chi^2 for sdR-b1-00143377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-b1-00143377.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

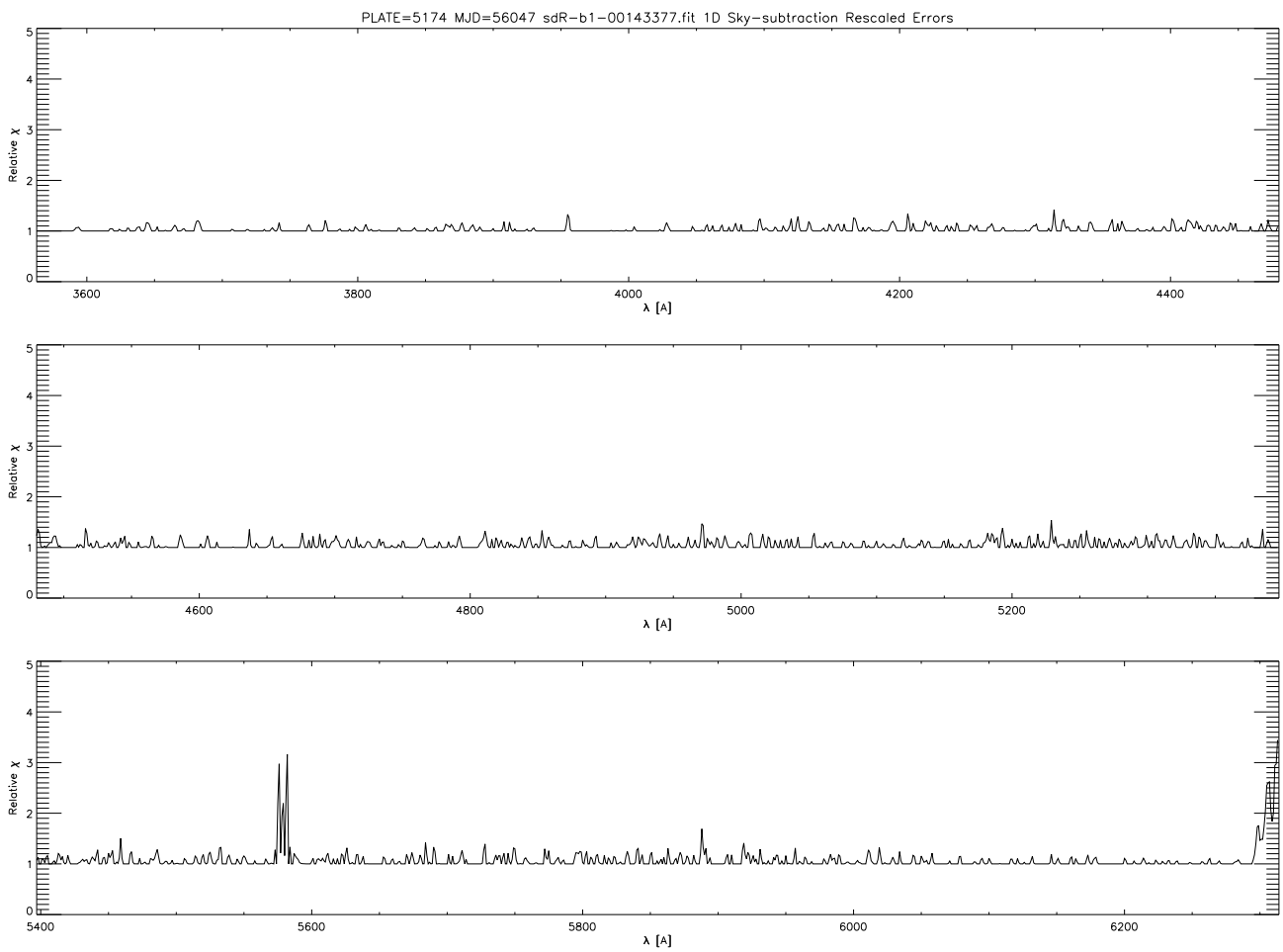

PLATE=5174 MJD=56047 Smooth superflat for sdR-b1-00143377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

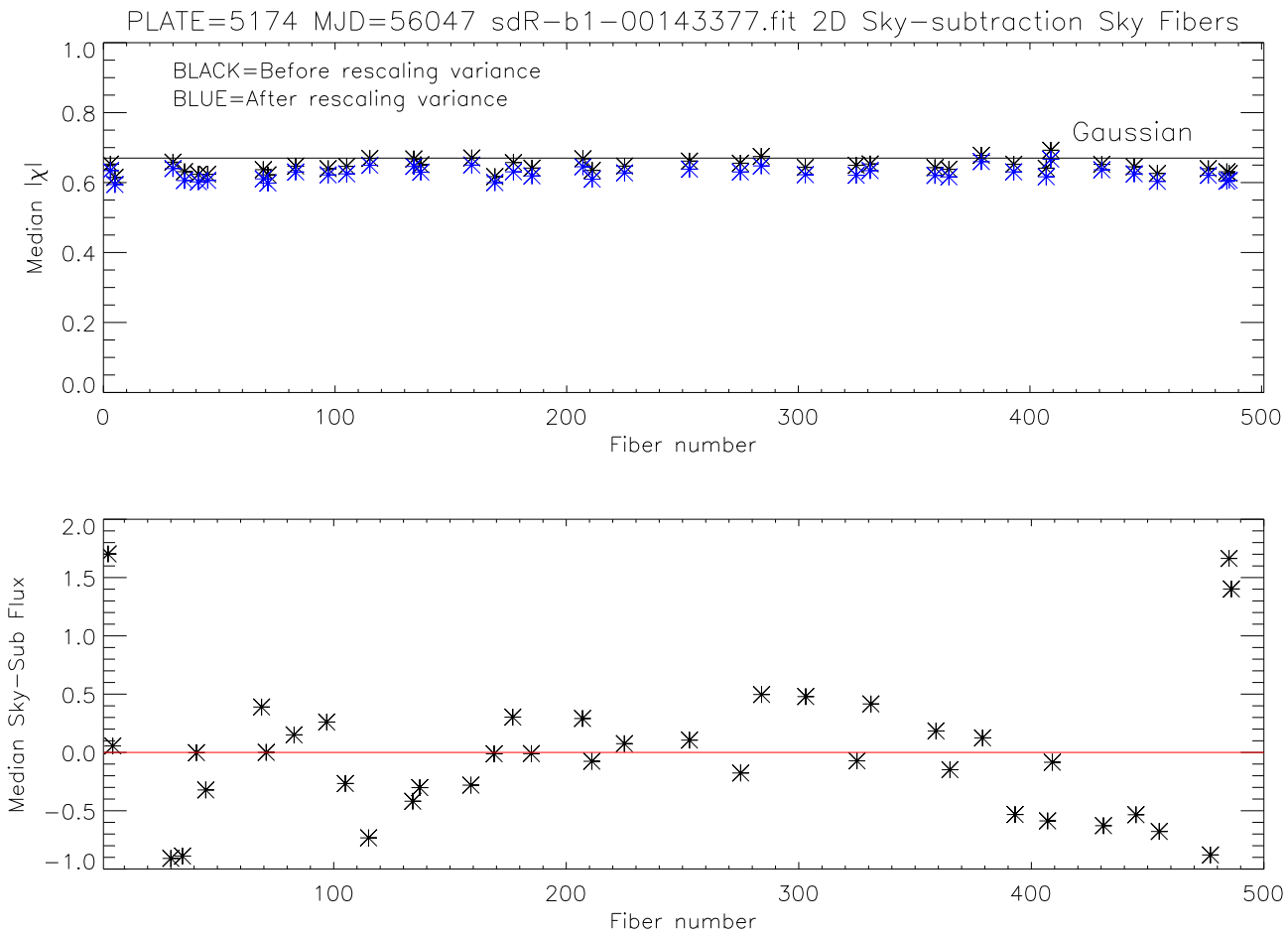

PLATE=5174 MJD=56047 sdR-b1-00143377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

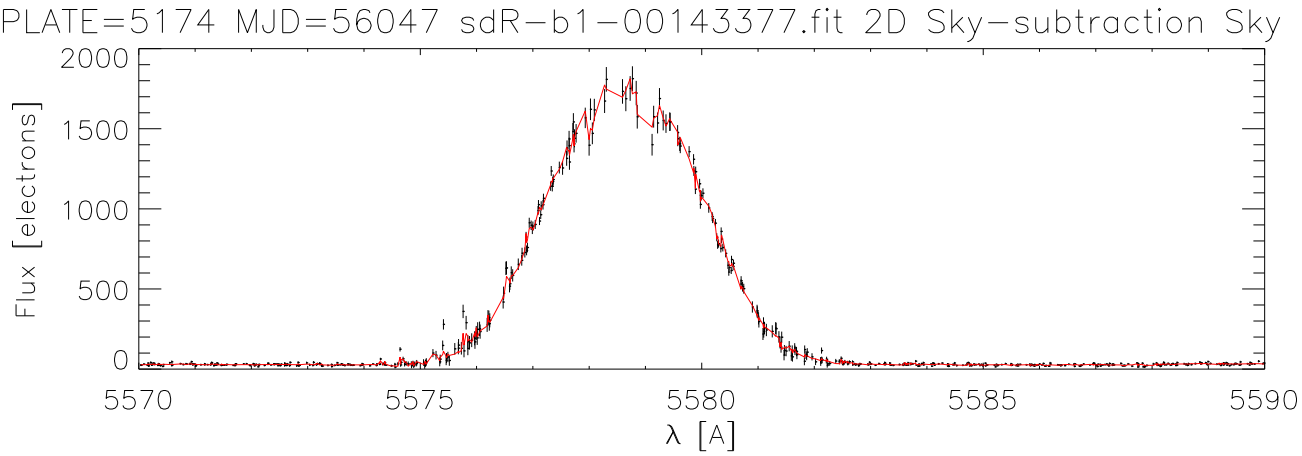

PLATE=5174 MJD=56047 sdR-b1-00143377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

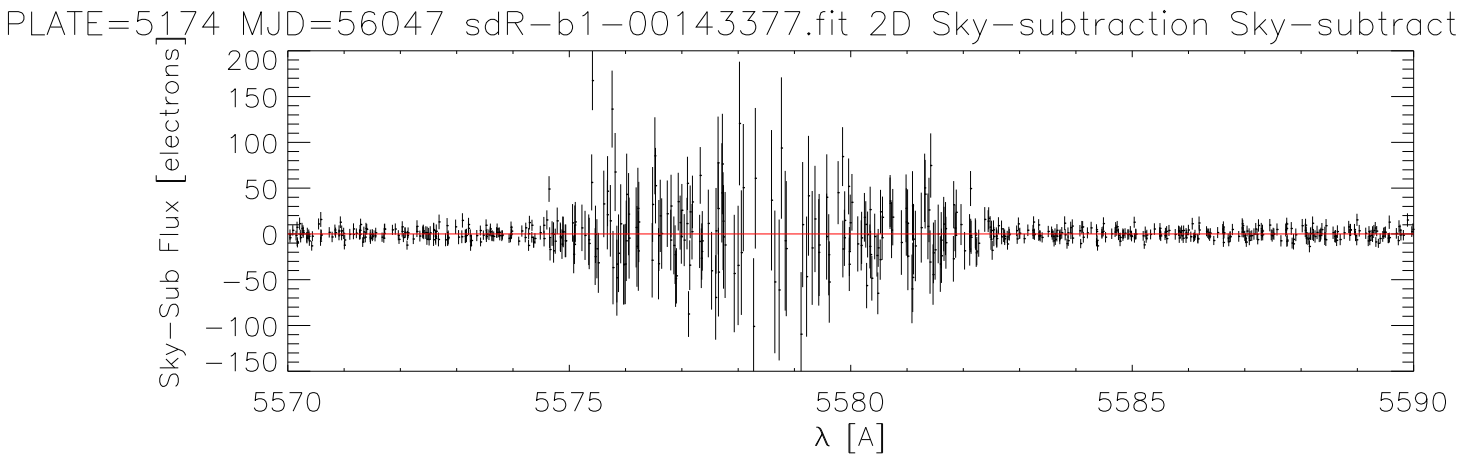

PLATE=5174 MJD=56047 sdR-b1-00143377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

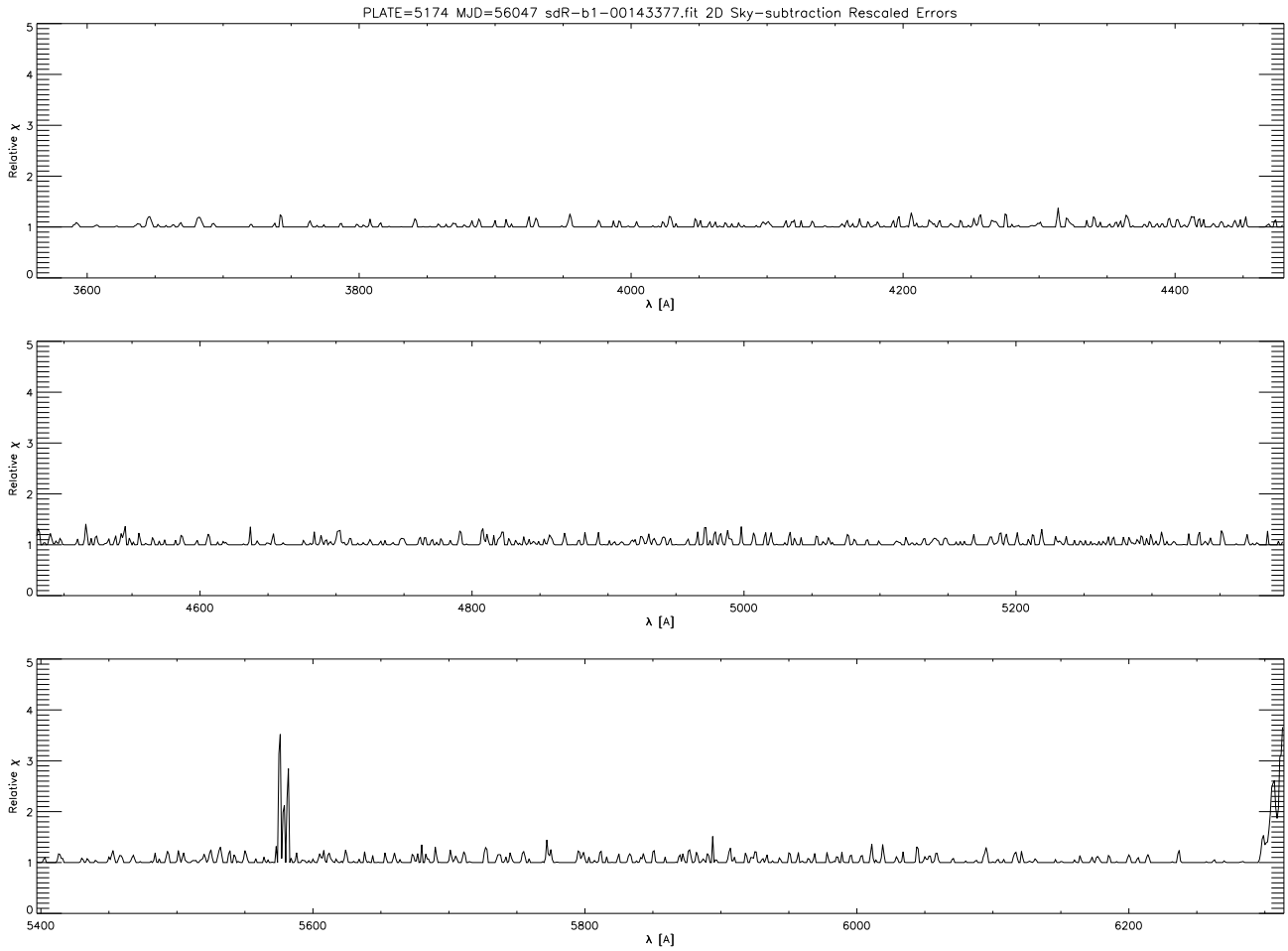


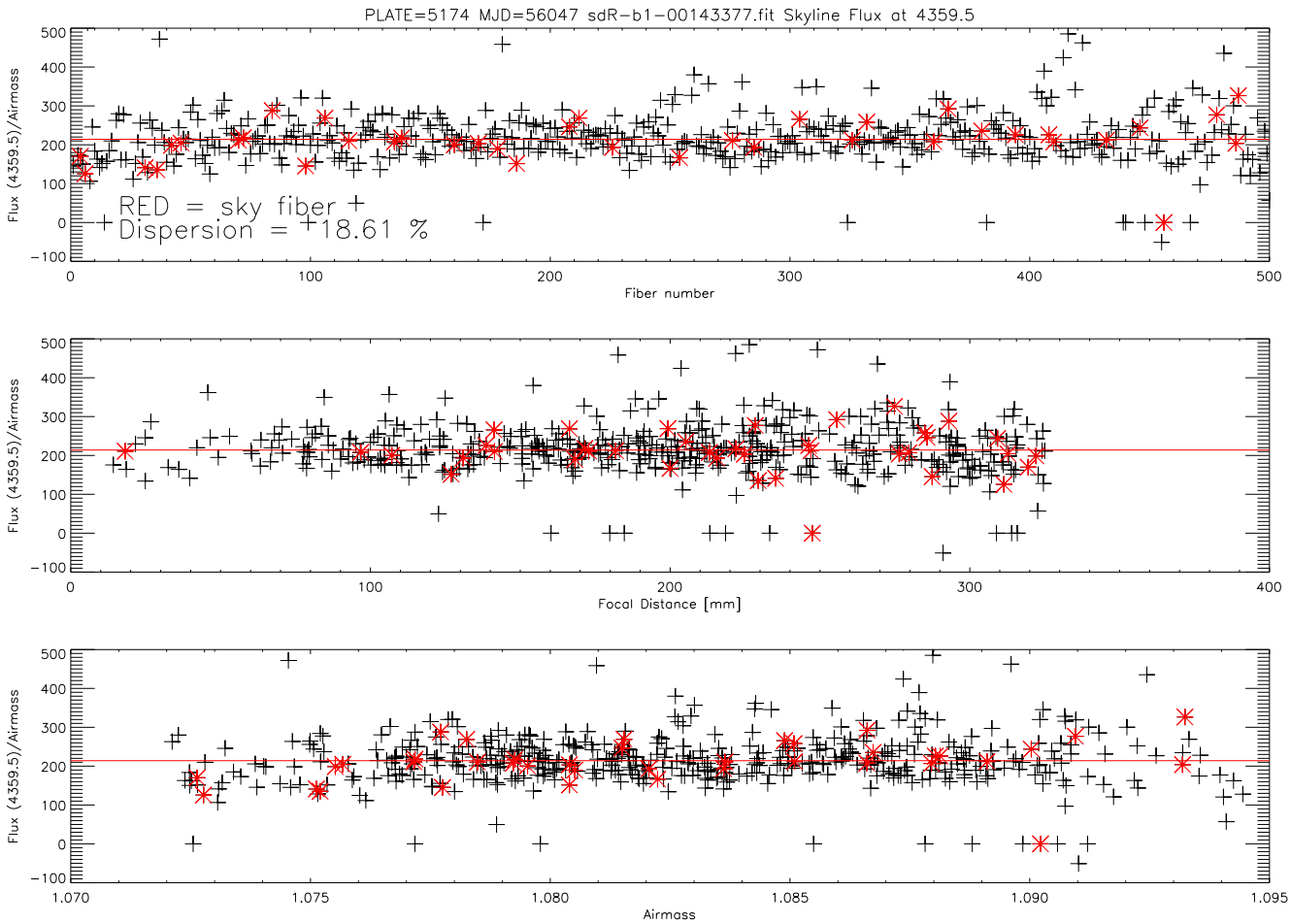

PLATE=5174 MJD=56047 sdR-b1-00143377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

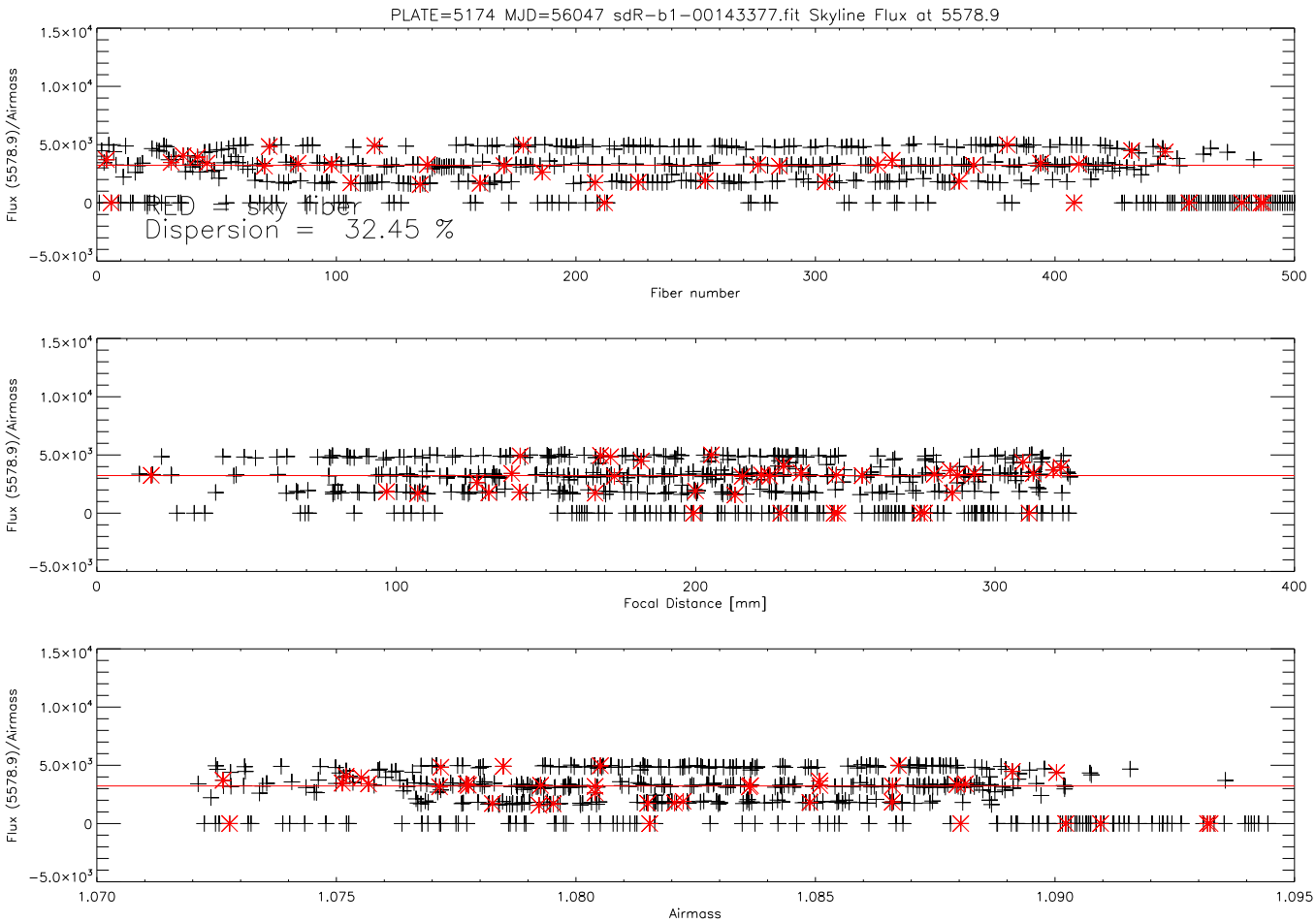

PLATE=5174 MJD=56047 sdR-b1-00143377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

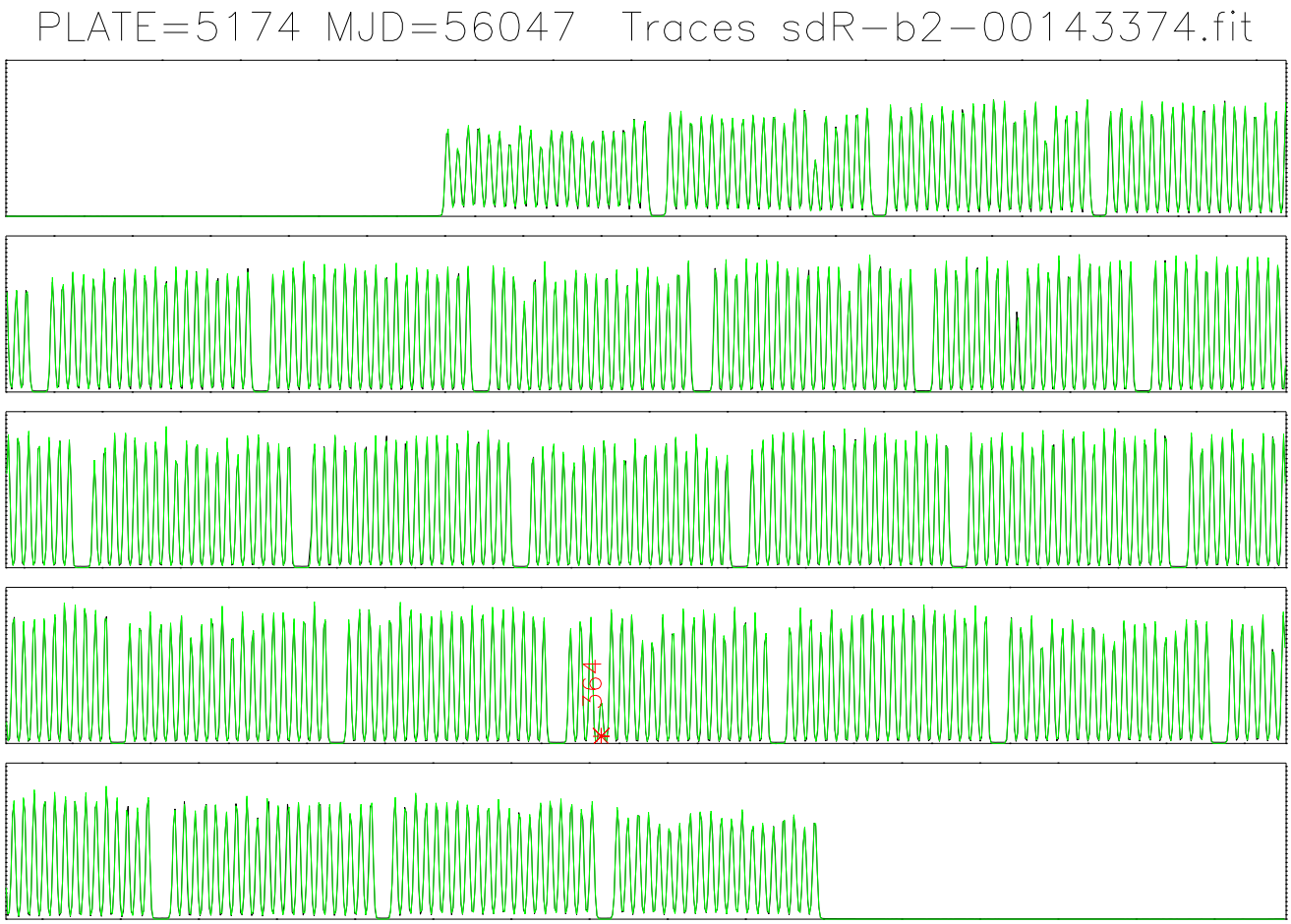

PLATE=5174 MJD=56047 sdR-b1-00143377.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

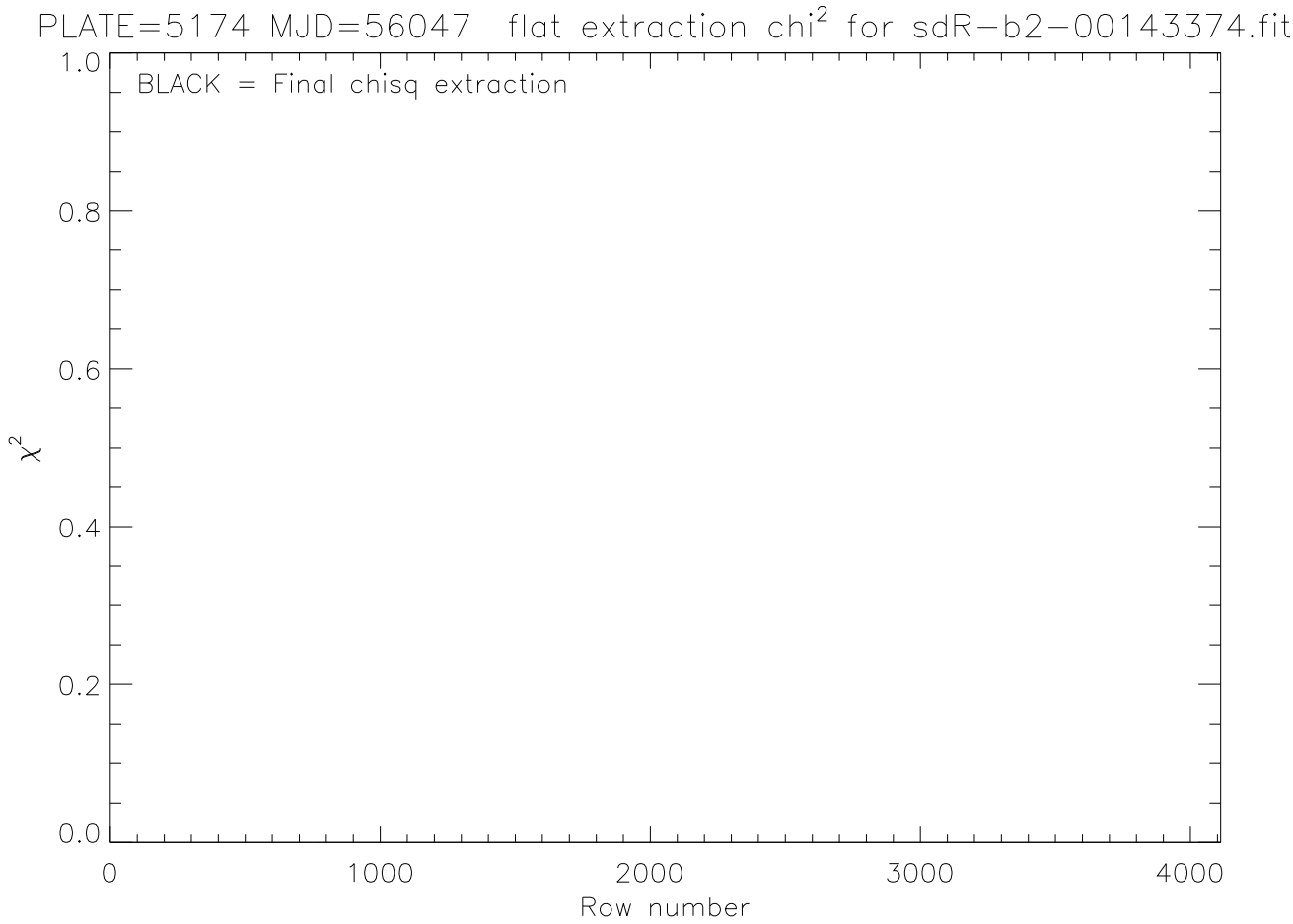
Number of sky fibers = 39

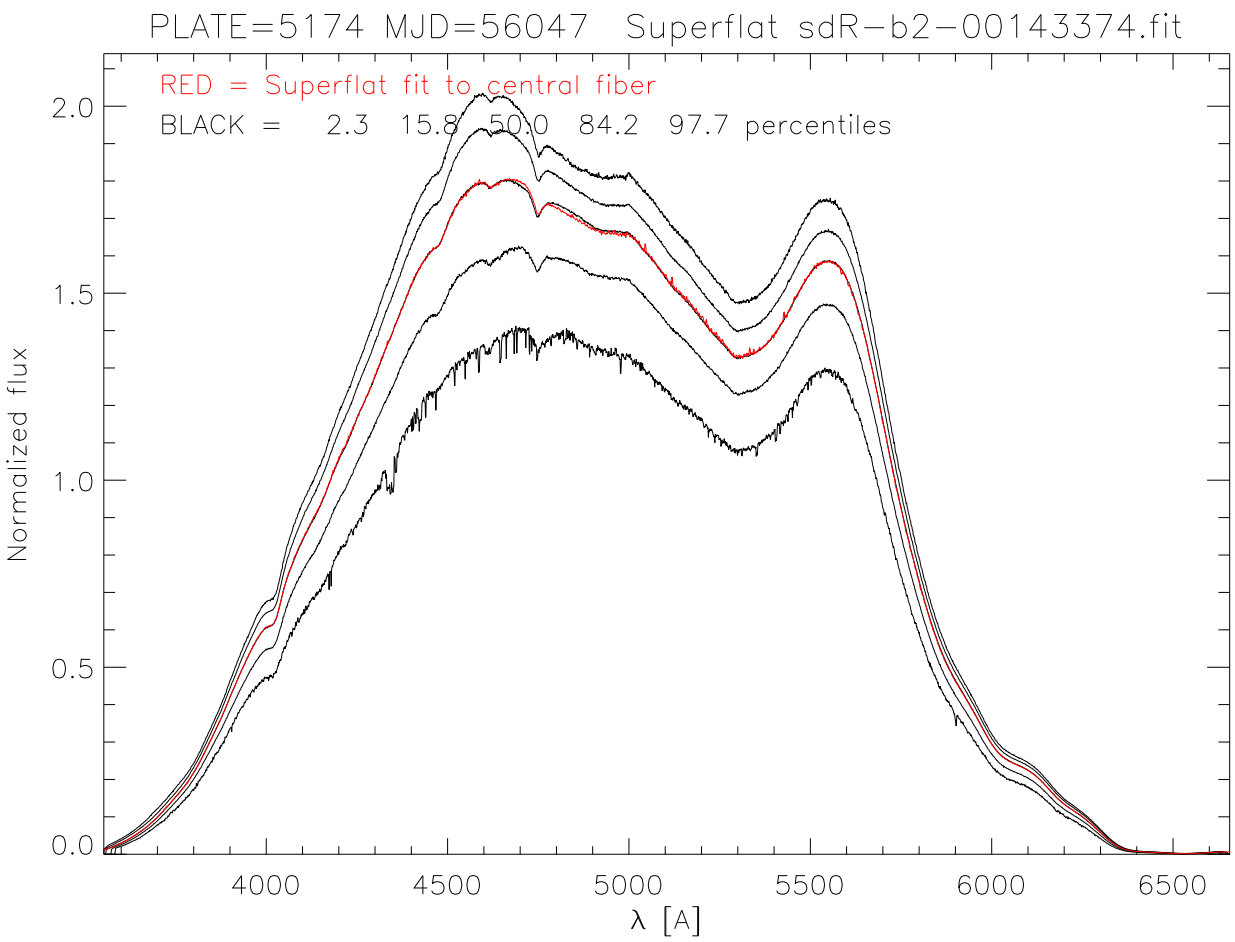


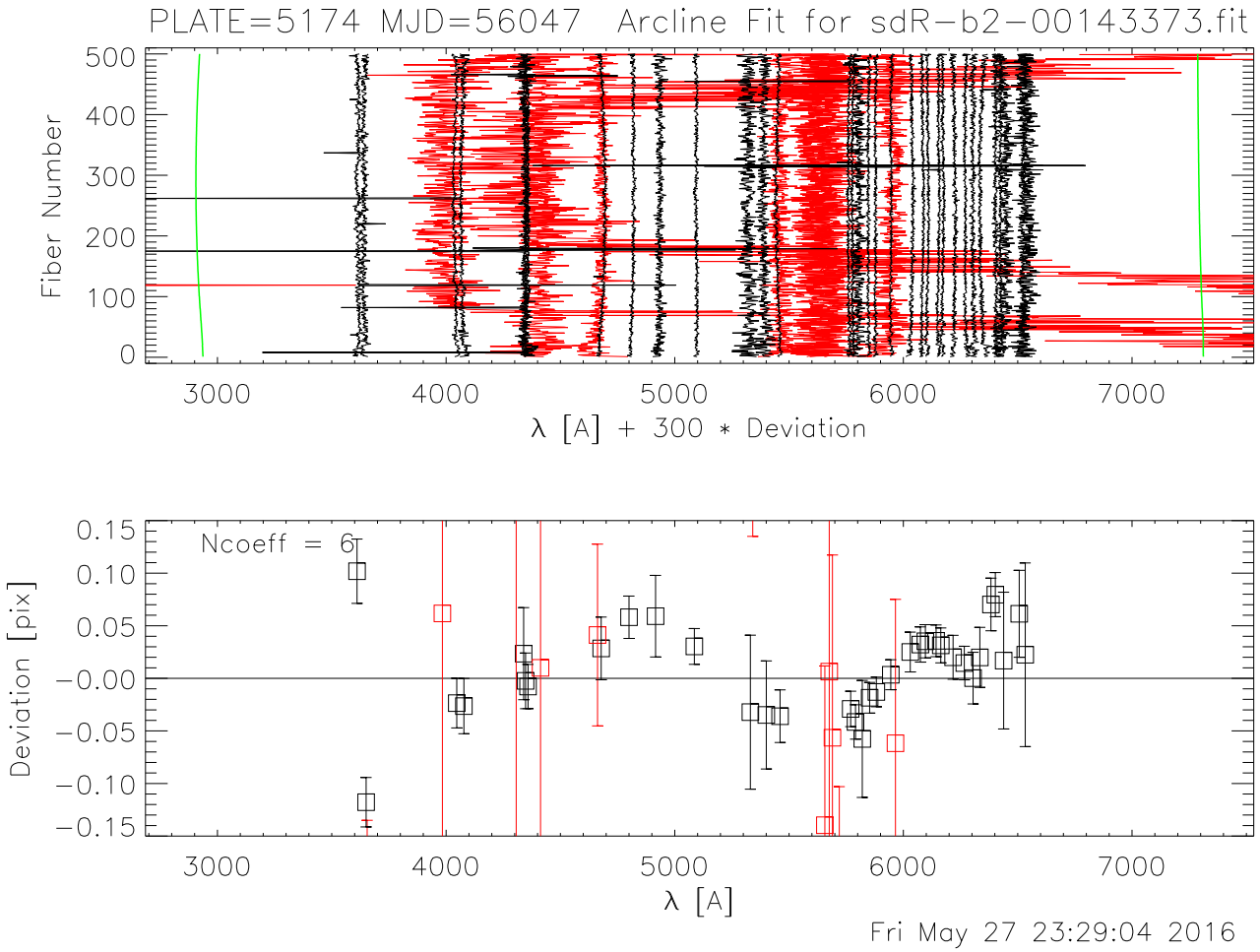

PLATE=5174 MJD=56047 sdR-b1-00143377.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 18.61 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

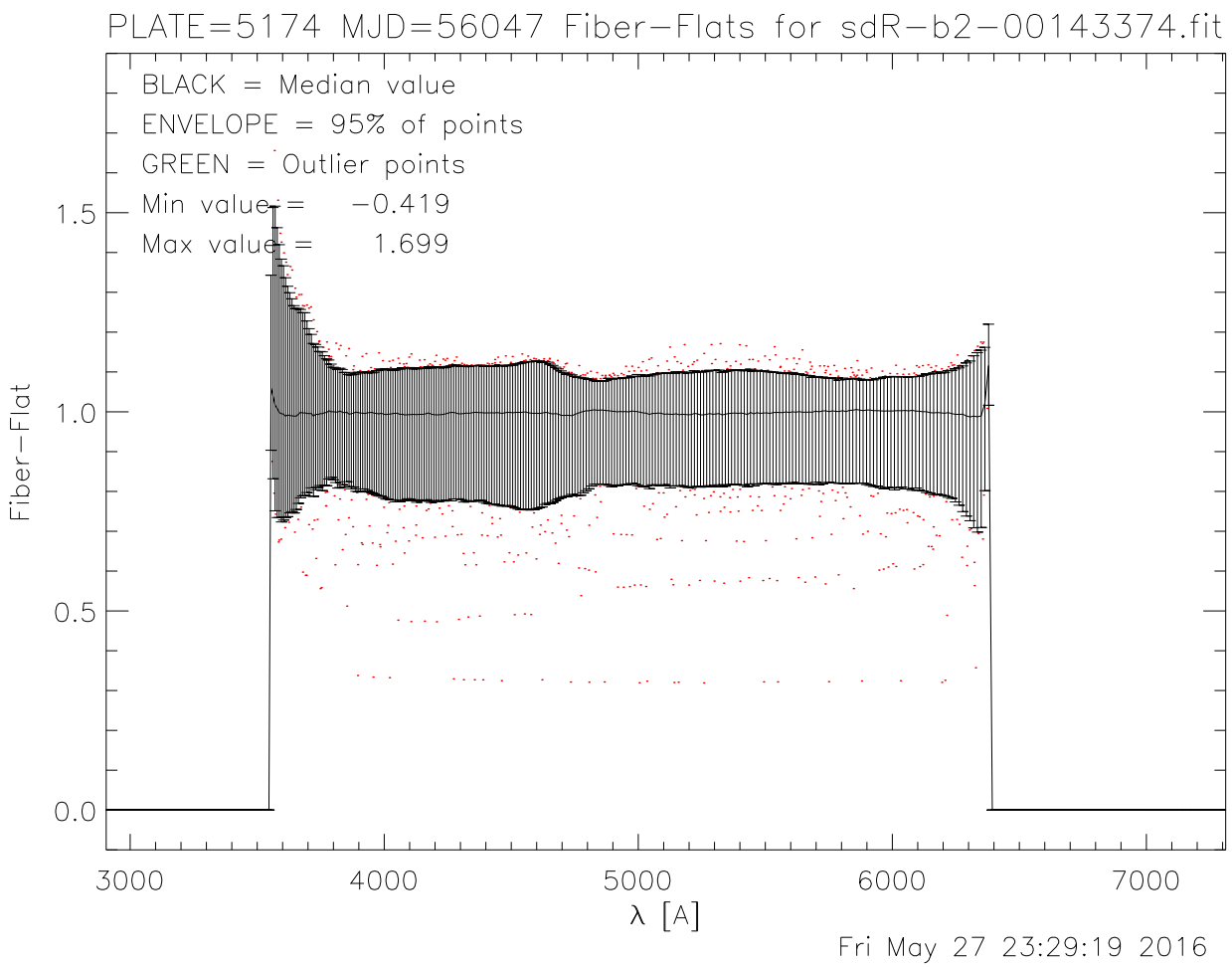

PLATE=5174 MJD=56047 sdR-b1-00143377.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 32.45 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

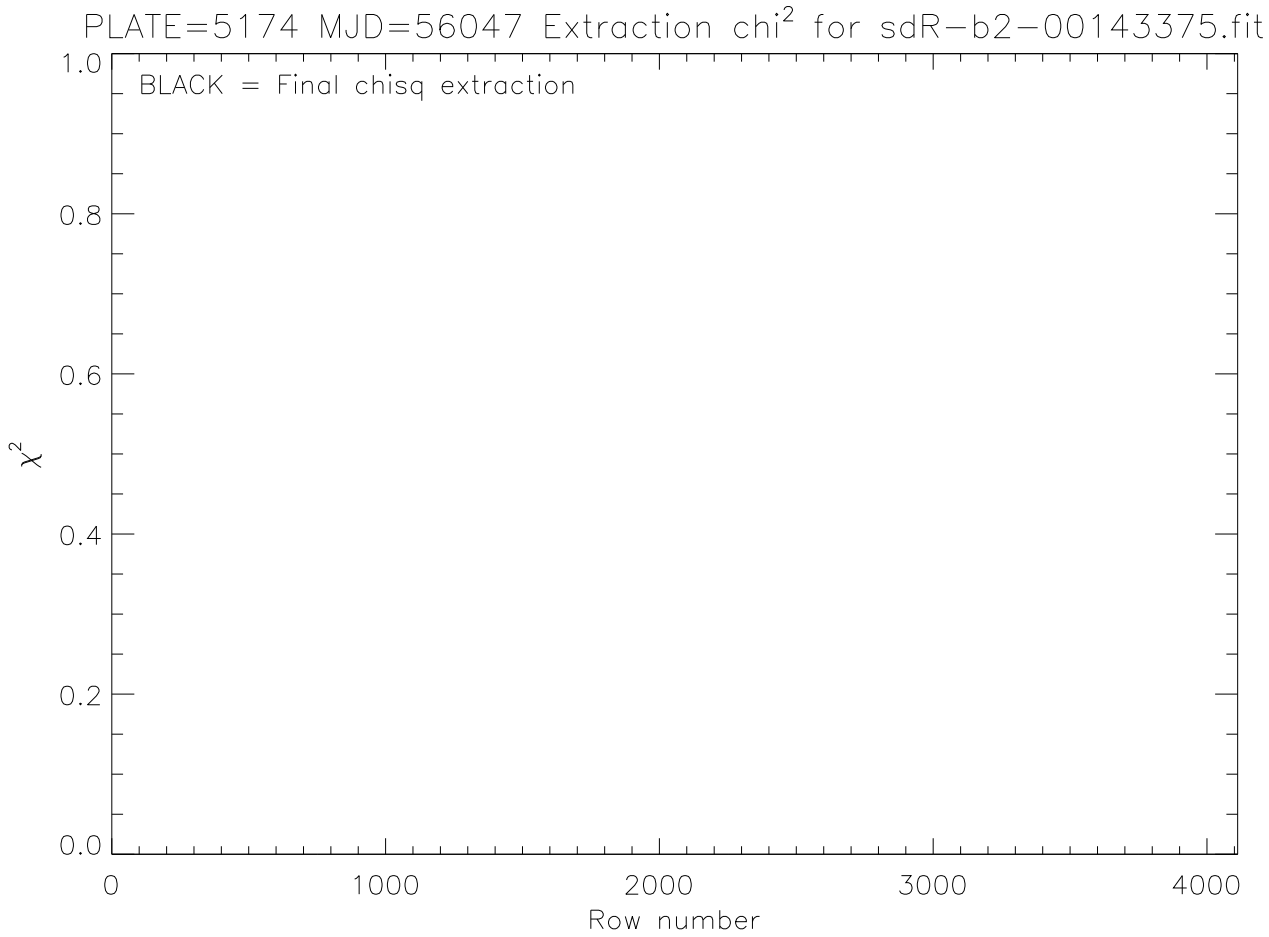

PLATE=5174 MJD=56047 Traces sdR-b2-00143374.fit
364

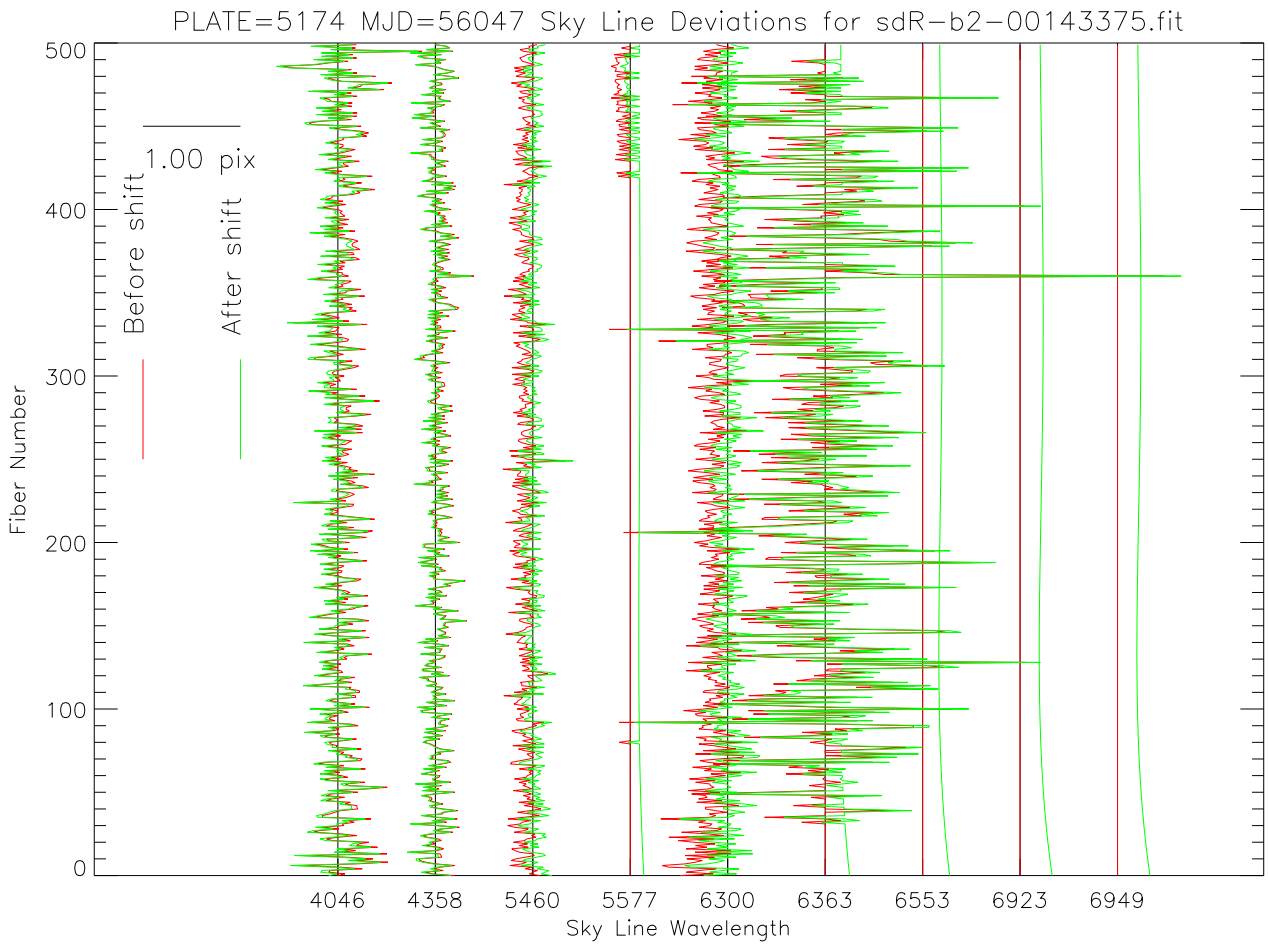

PLATE=5174 MJD=56047 flat extraction chi^2 for sdR−b2−00143374.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

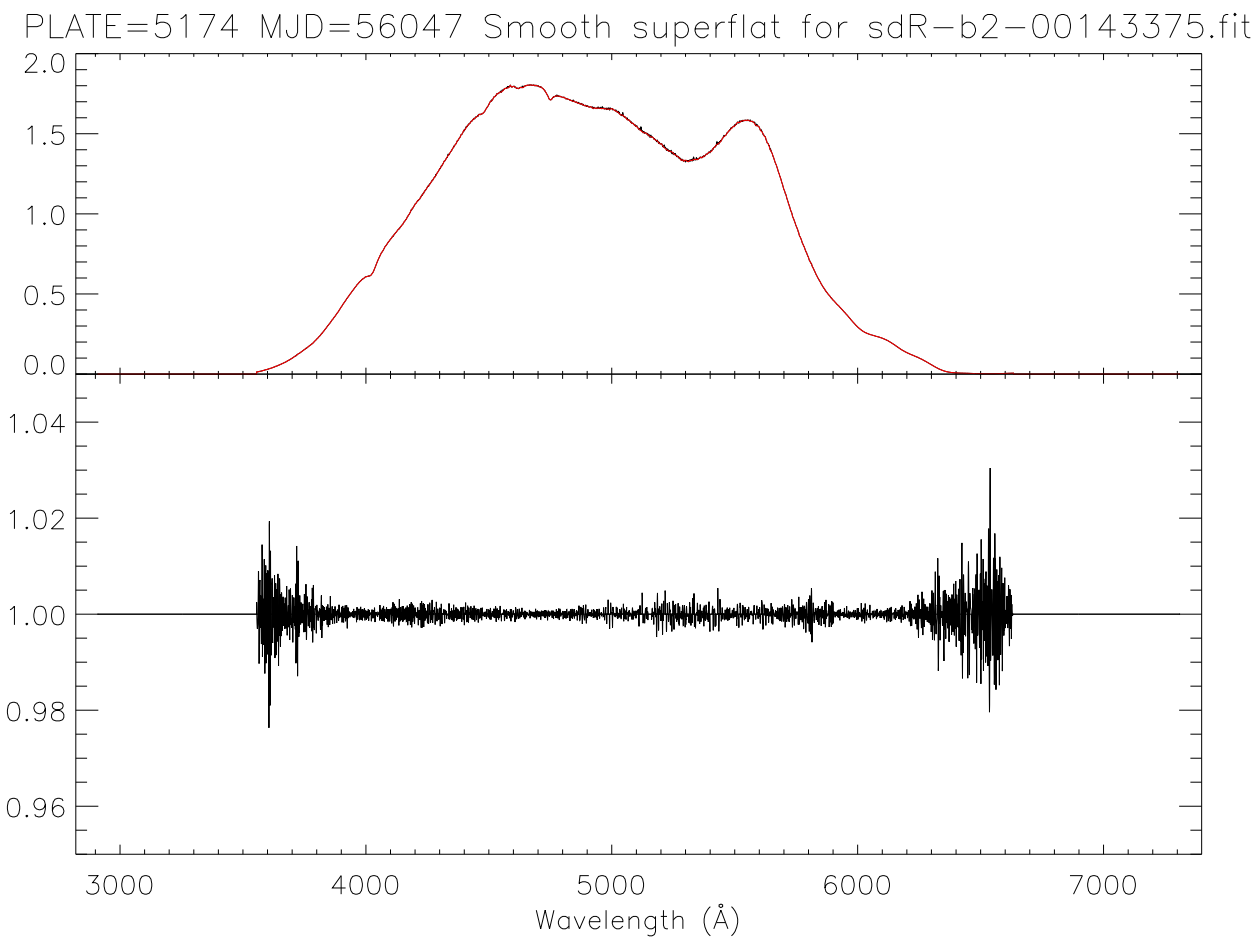

PLATE=5174 MJD=56047 Superflat sdR-b2-00143374.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
4000
4500
5000
5500
6000
6500

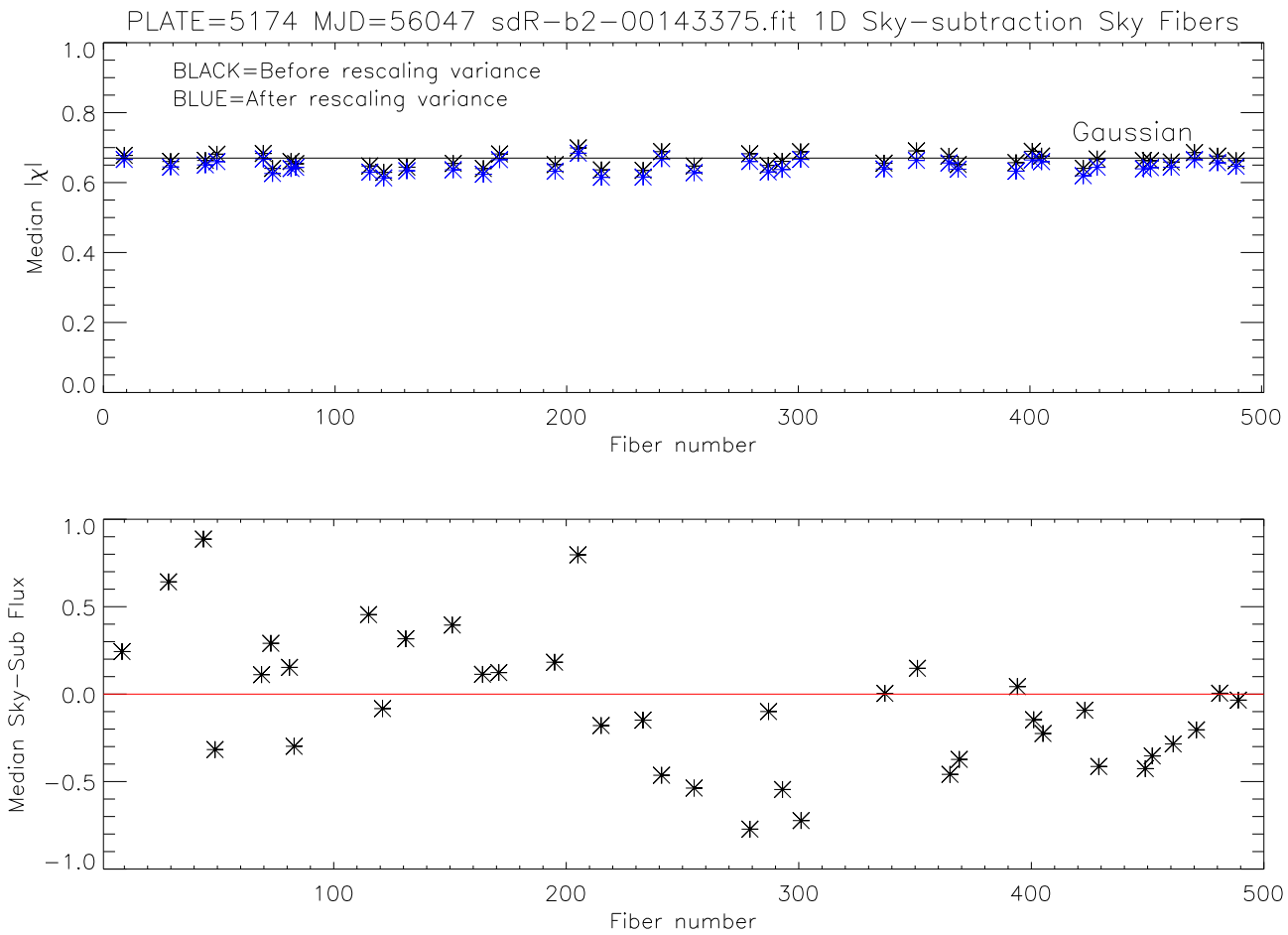

PLATE=5174 MJD=56047 Arcline Fit for sdR-b2-00143373.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Fri May 27 23:29:04 2016

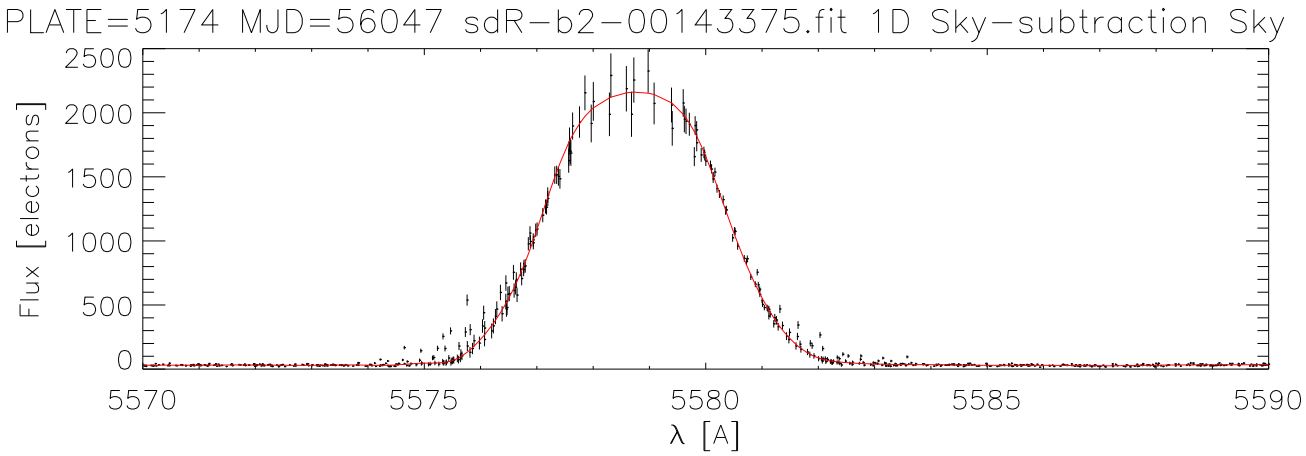

PLATE=5174 MJD=56047 Fiber−Flats for sdR−b2−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −0.419
Max value = 1.699
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Fri May 27 23:29:19 2016

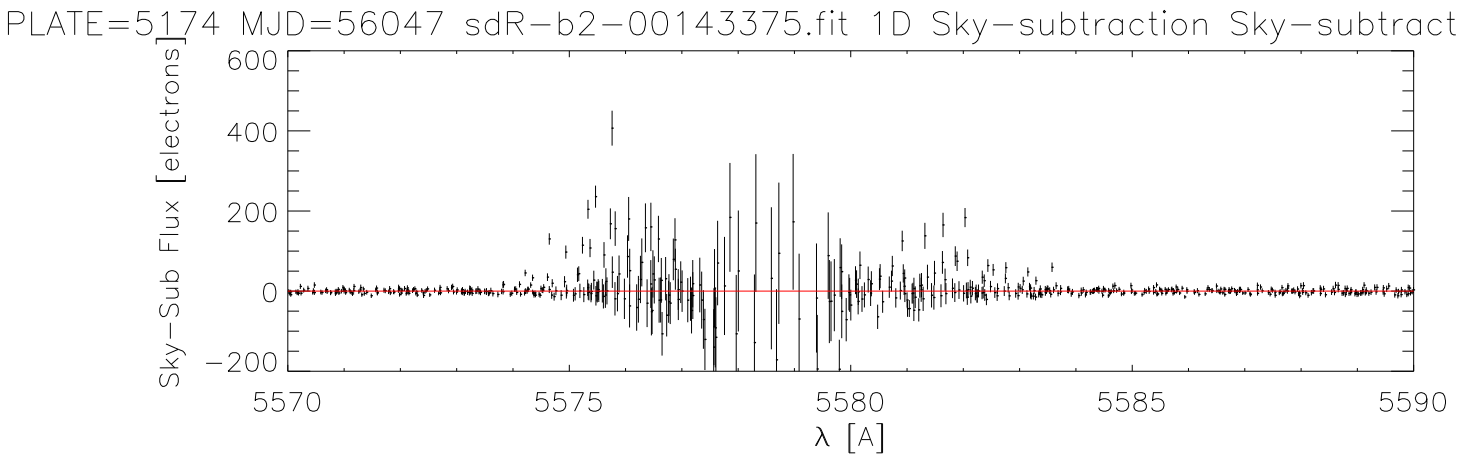

PLATE=5174 MJD=56047 Extraction chi^2 for sdR−b2−00143375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-b2-00143375.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

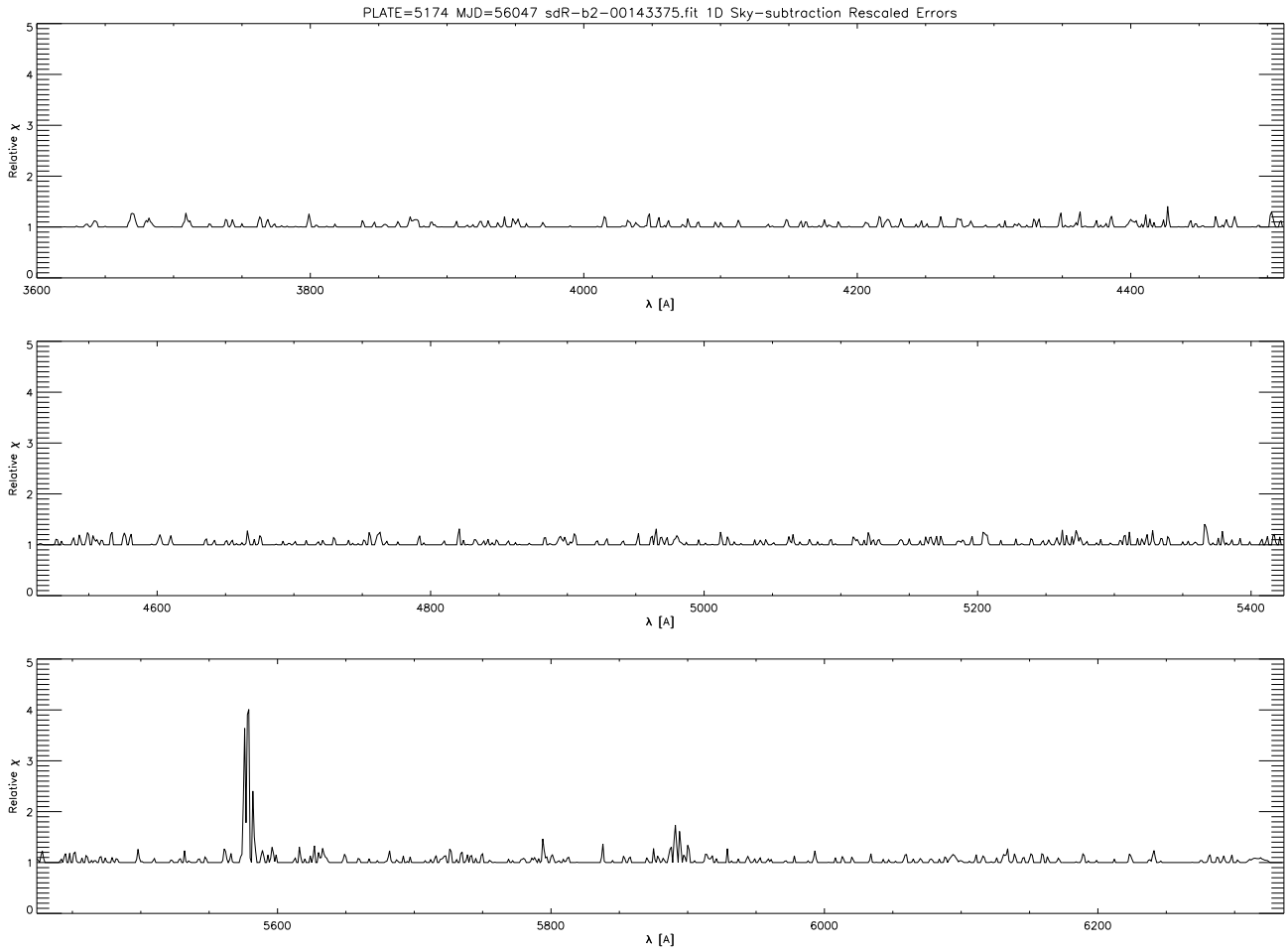

PLATE=5174 MJD=56047 Smooth superflat for sdR-b2-00143375.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

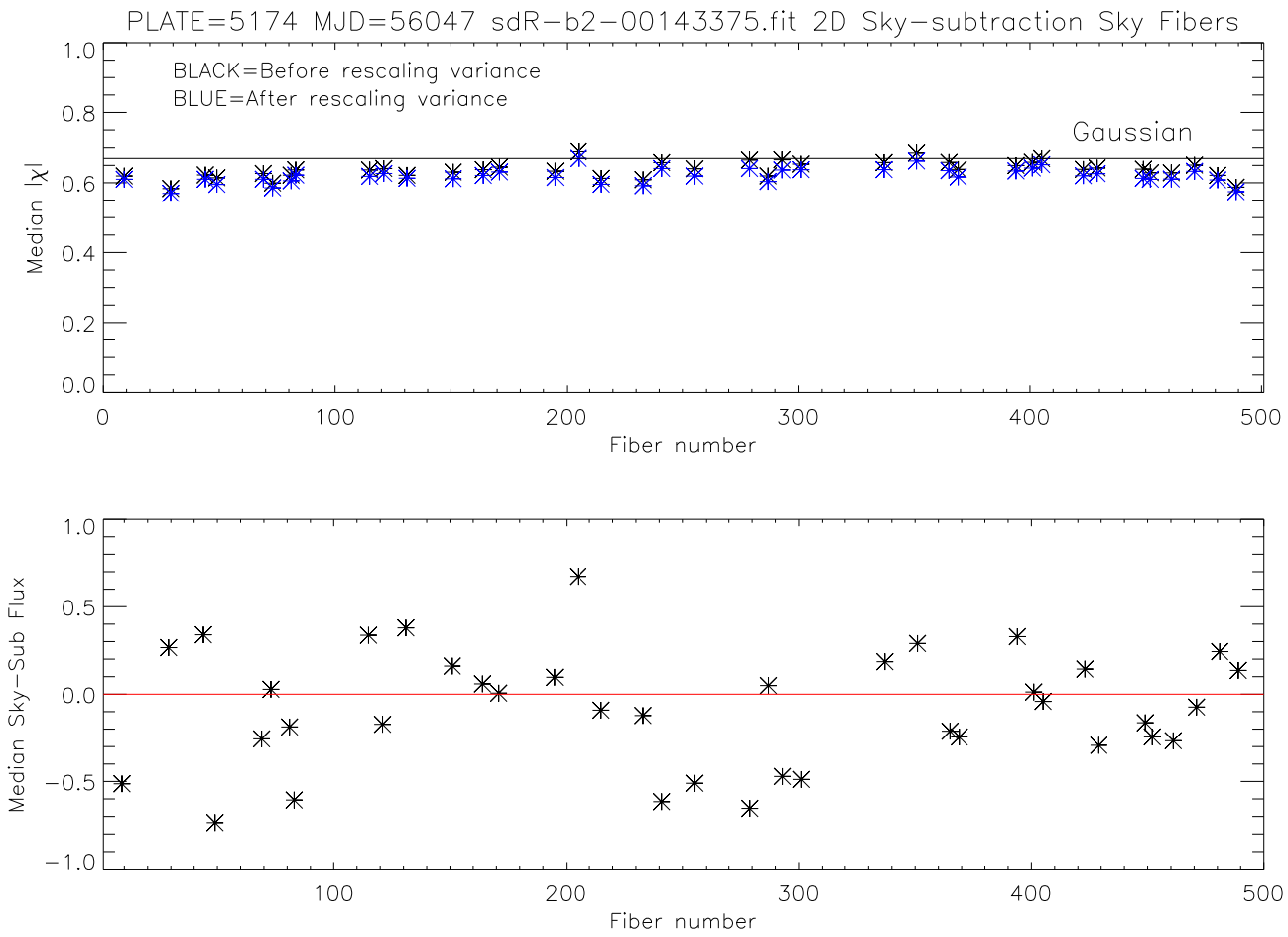

PLATE=5174 MJD=56047 sdR-b2-00143375.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

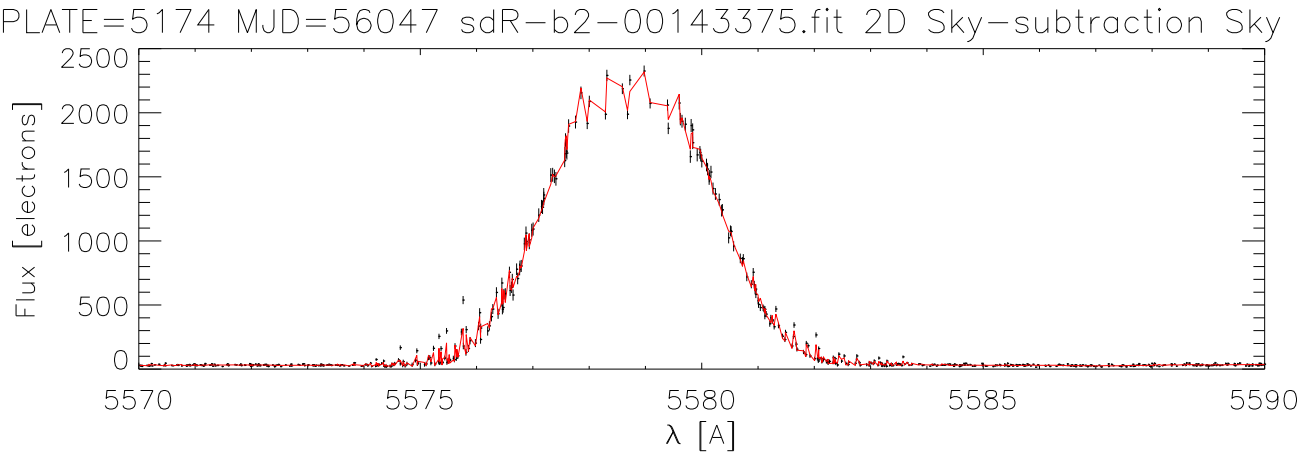

PLATE=5174 MJD=56047 sdR-b2-00143375.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

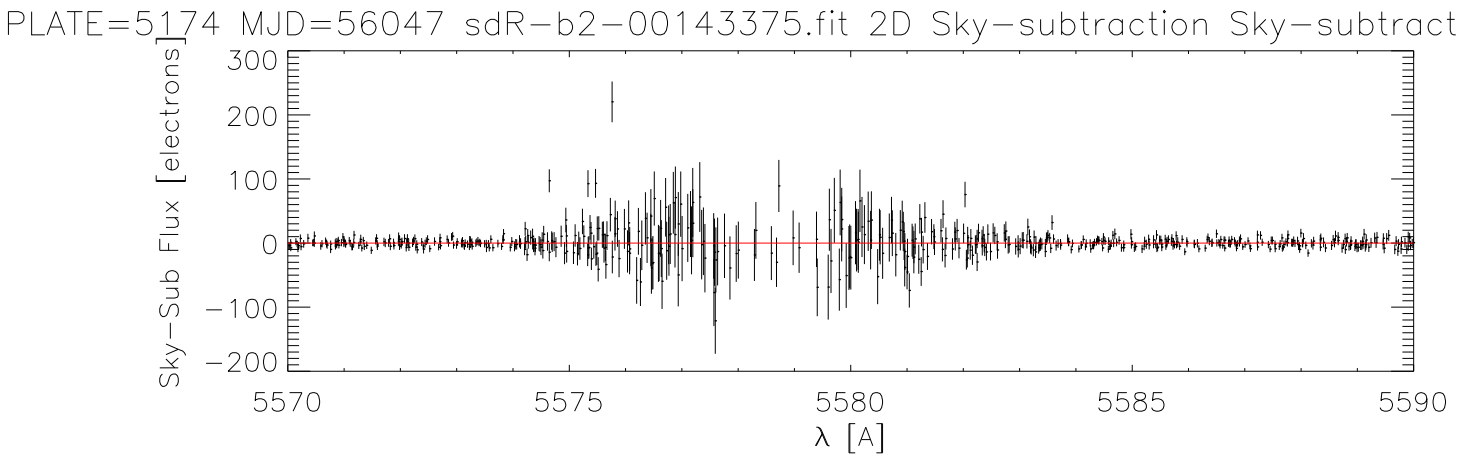

PLATE=5174 MJD=56047 sdR-b2-00143375.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

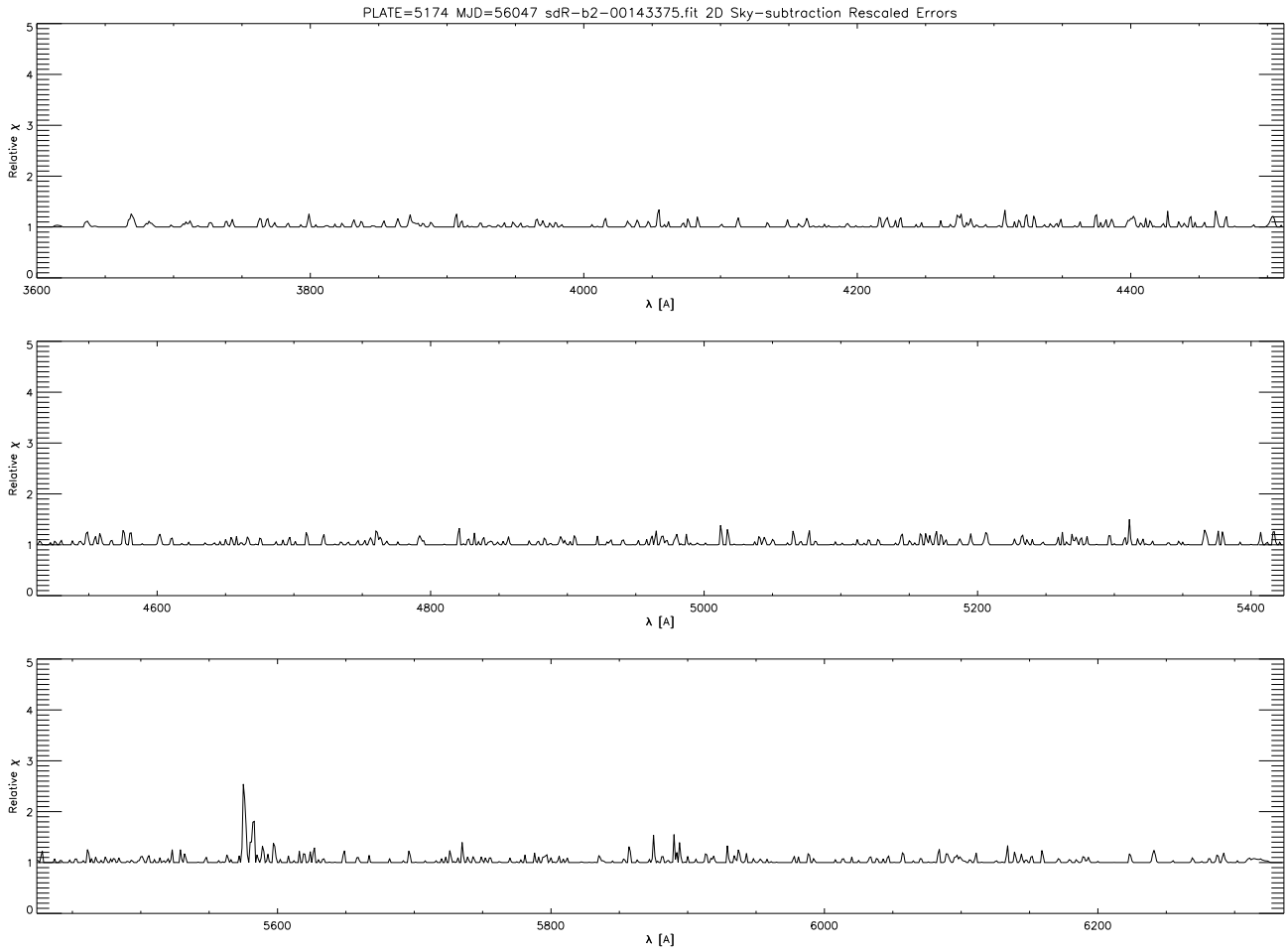


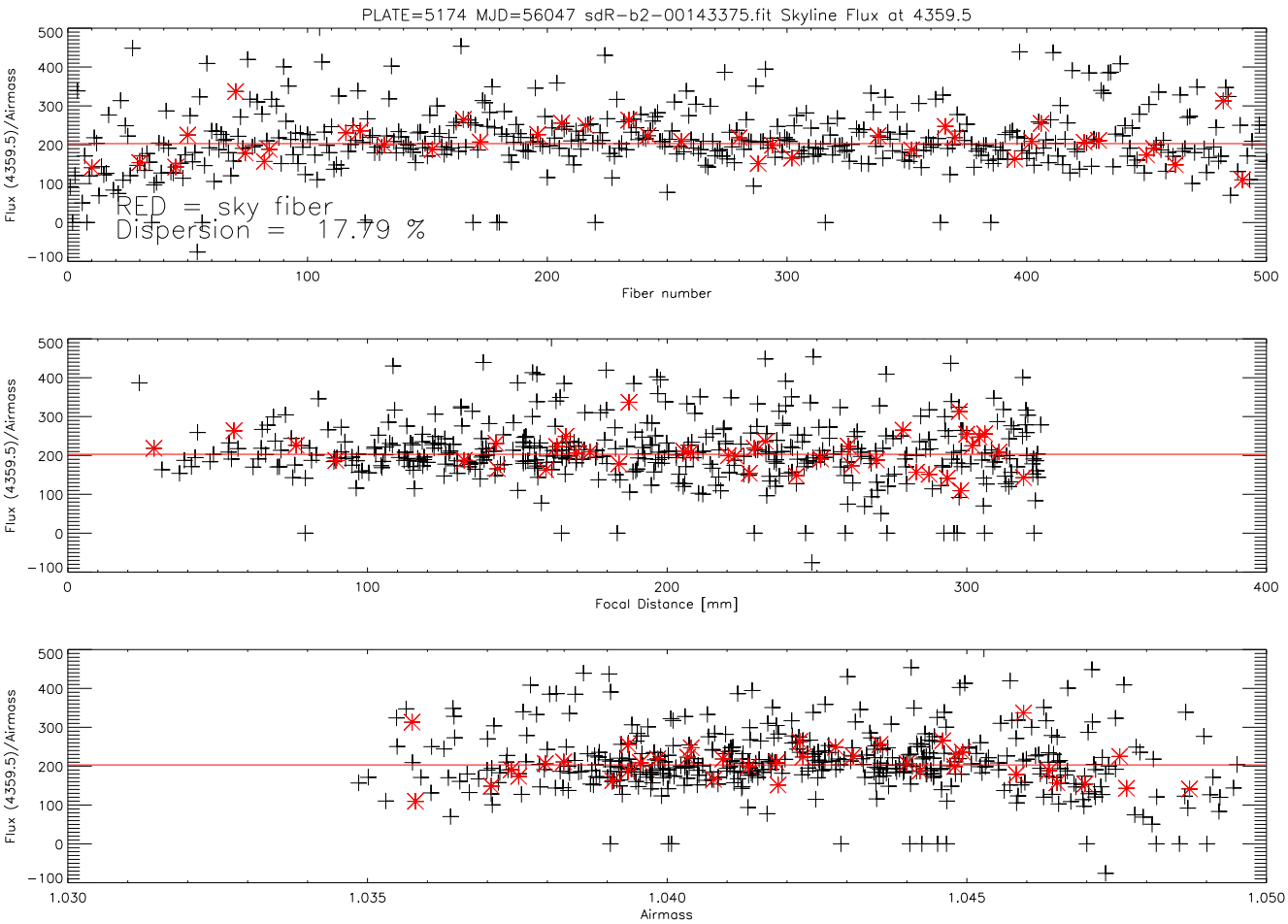

PLATE=5174 MJD=56047 sdR-b2-00143375.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

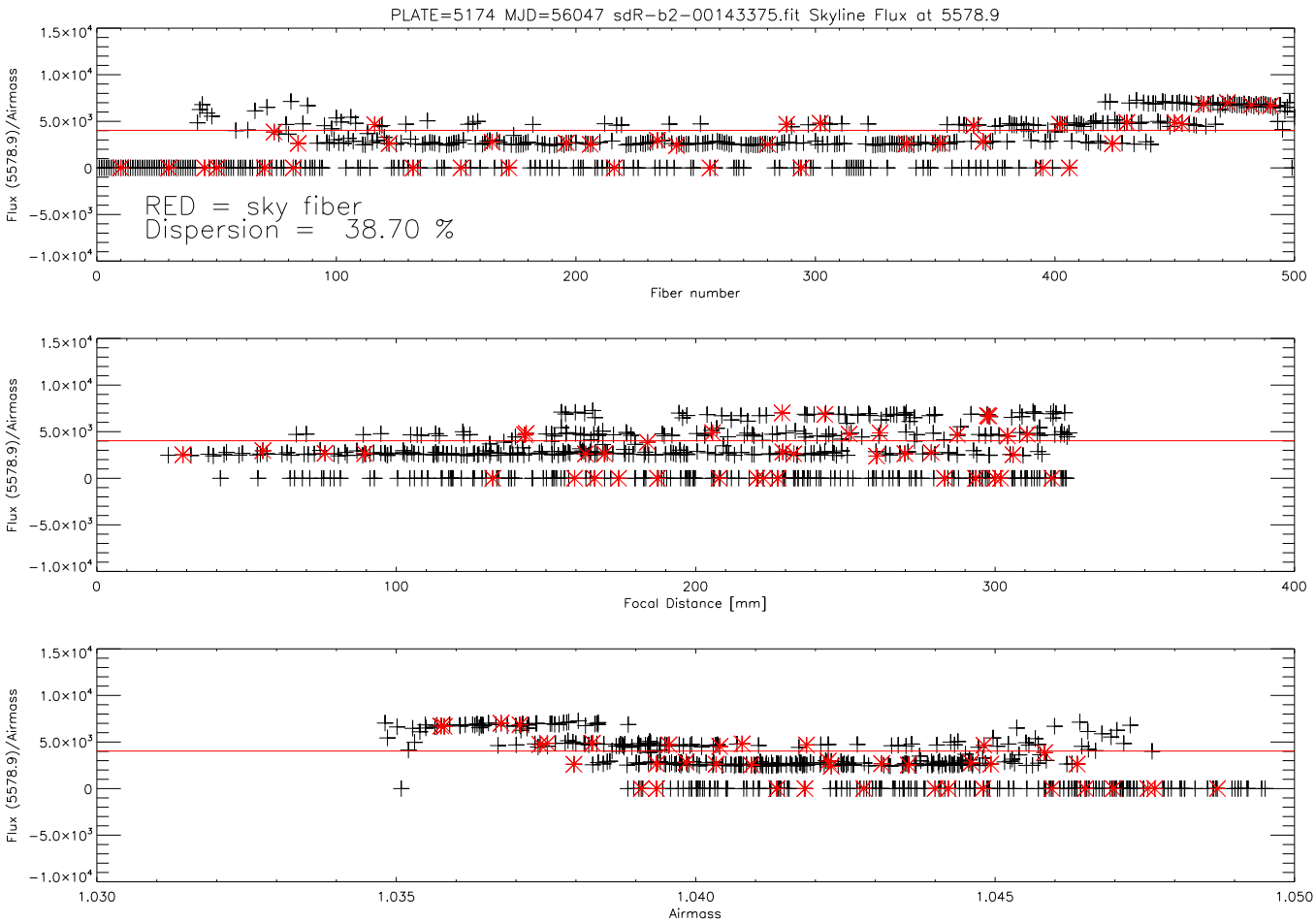

PLATE=5174 MJD=56047 sdR-b2-00143375.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

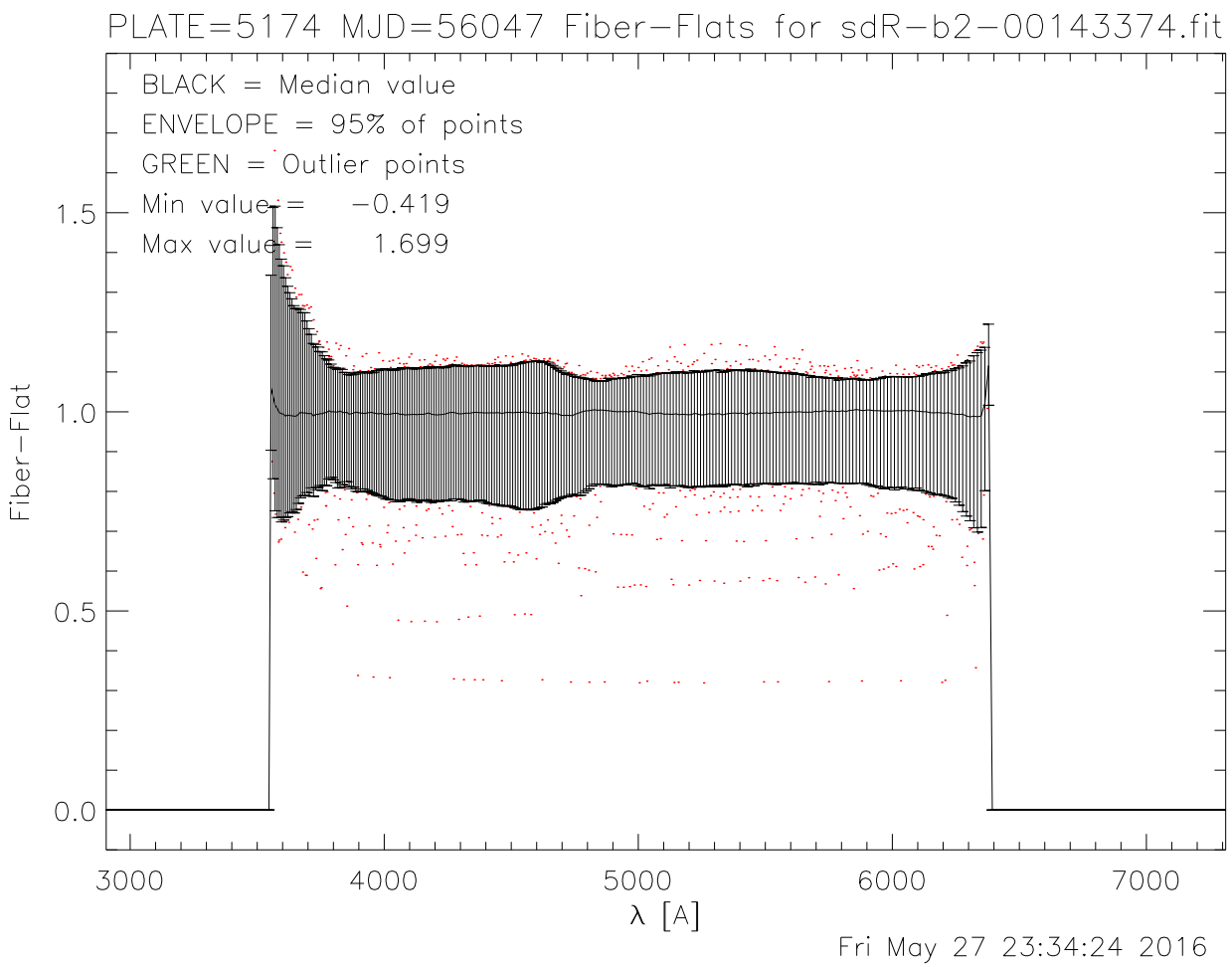

PLATE=5174 MJD=56047 sdR-b2-00143375.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

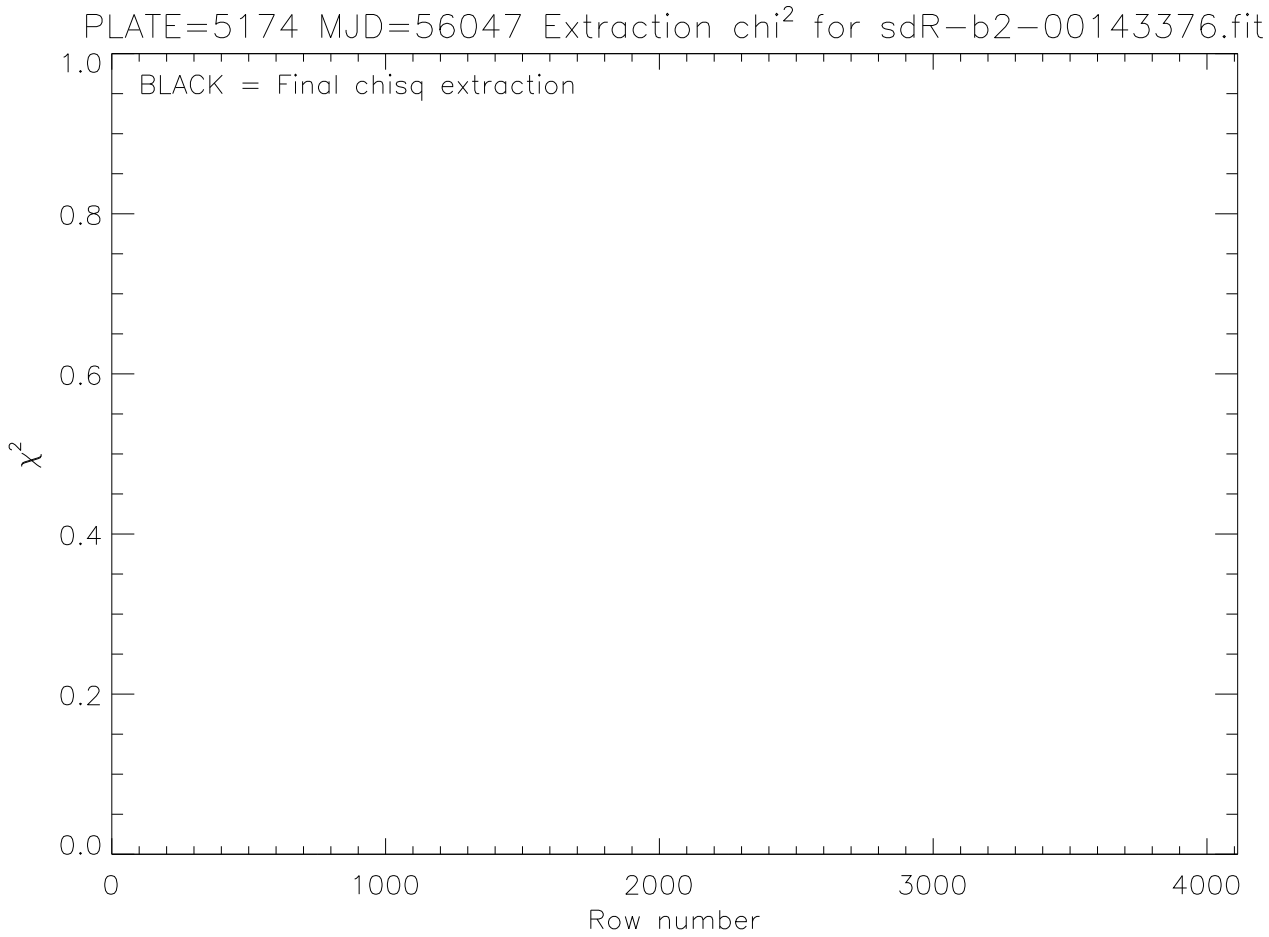
Number of sky fibers = 39

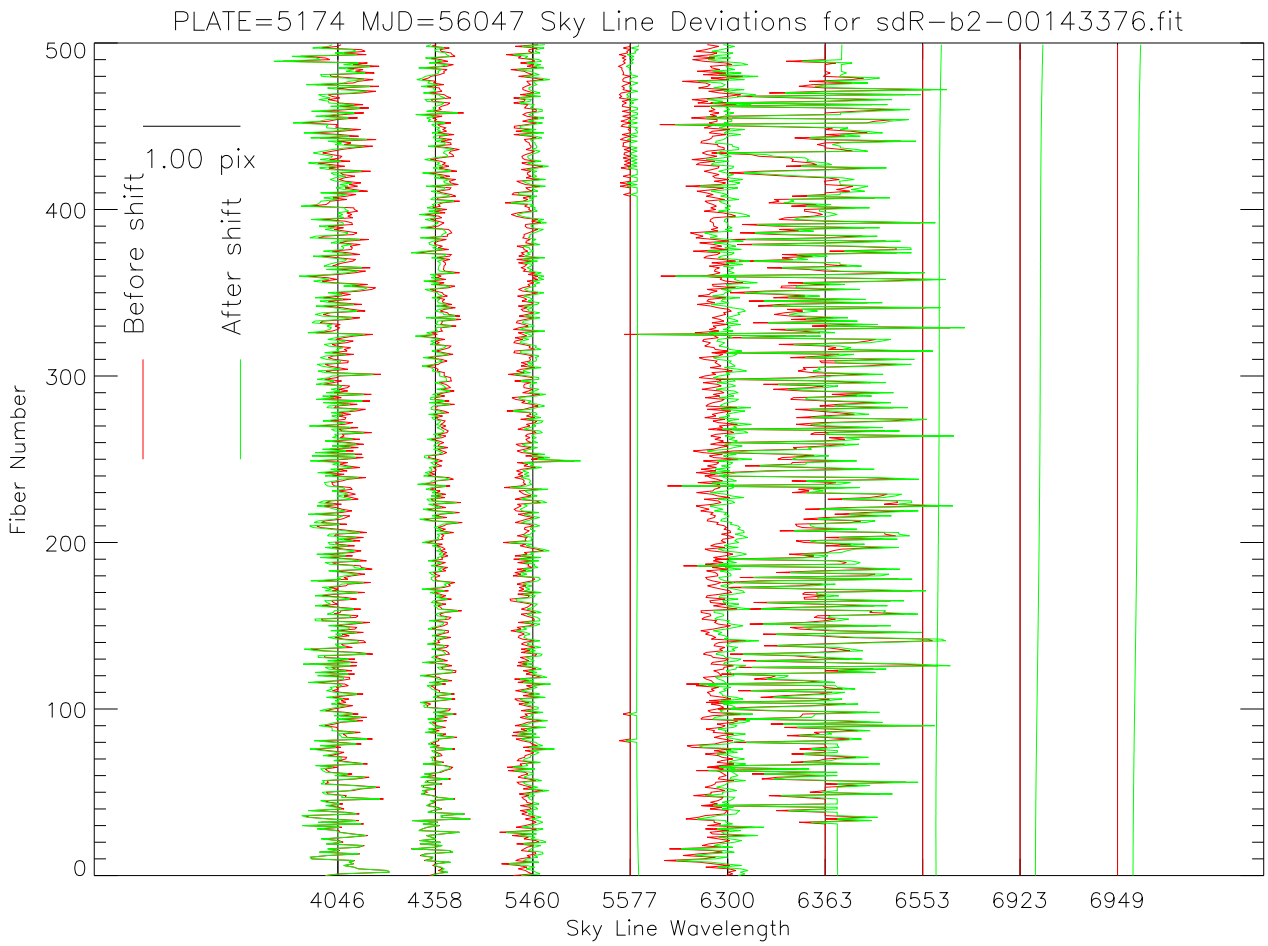


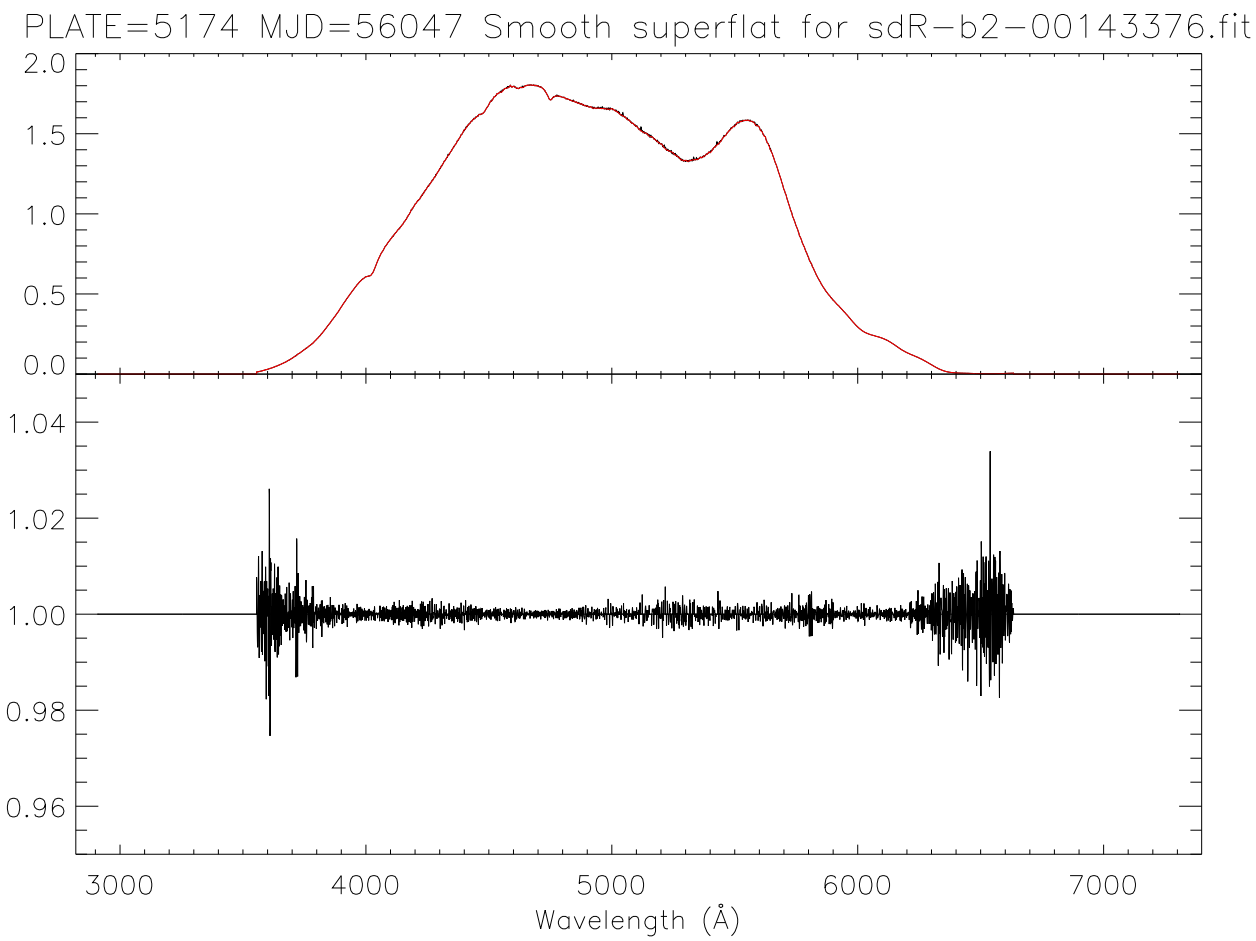

PLATE=5174 MJD=56047 sdR-b2-00143375.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 17.79 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

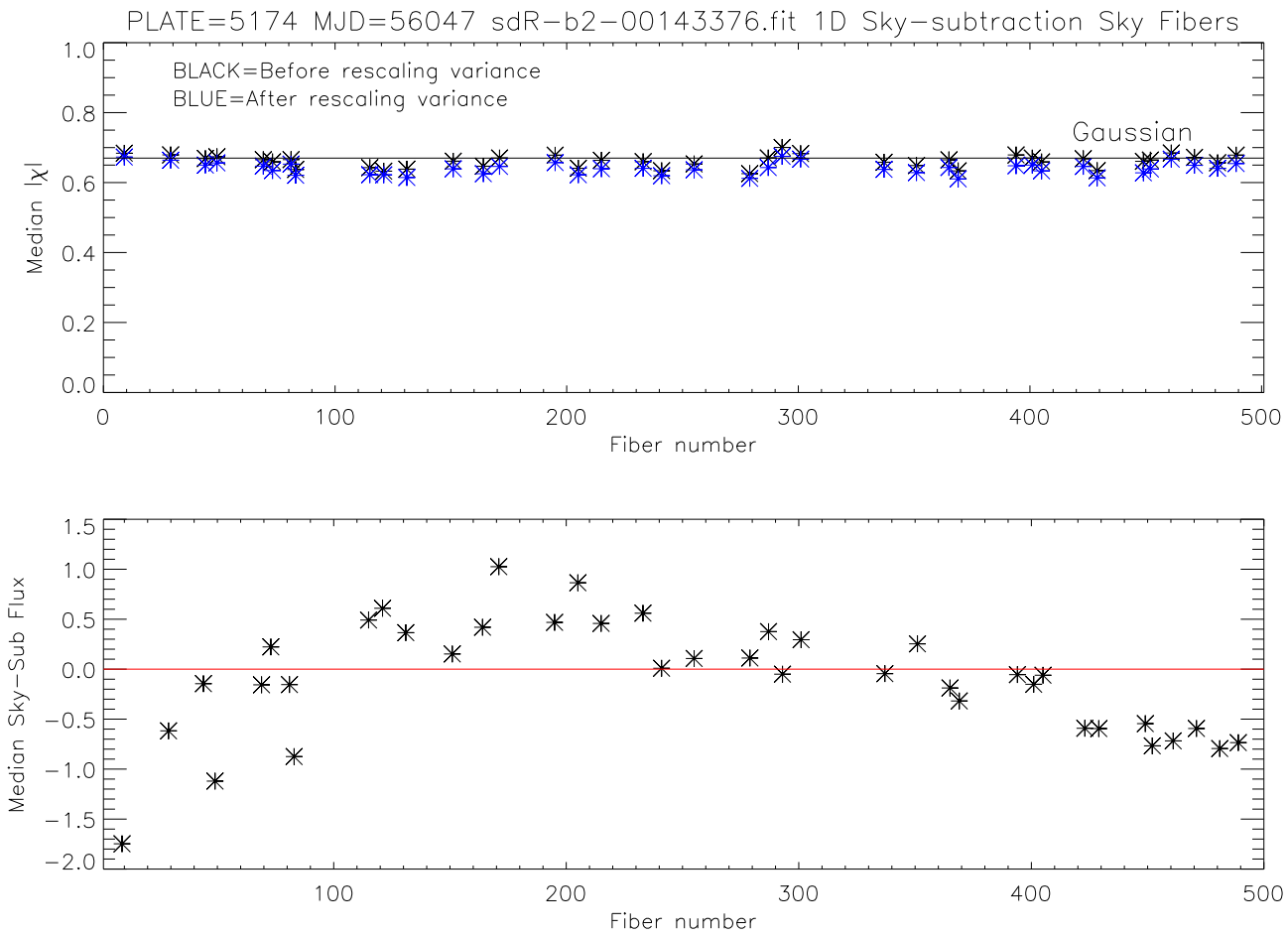

PLATE=5174 MJD=56047 sdR-b2-00143375.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.5×10^4
1.0×10^4
5.0×10^3
0
−5.0×10^3
−1.0×10^4
RED = sky fiber
Dispersion = 38.70 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
1.030
1.035
1.040
1.045
1.050
Airmass

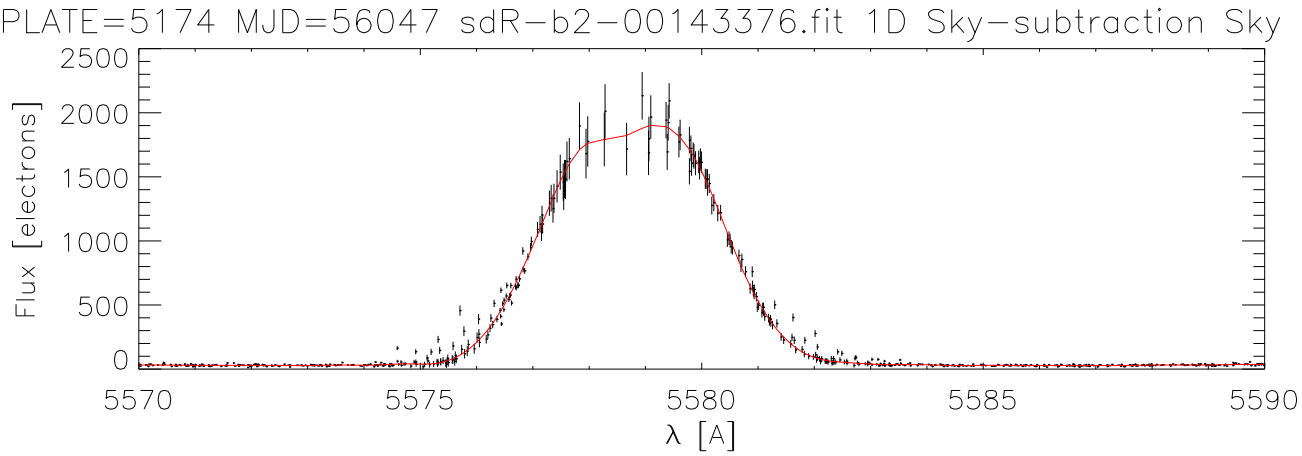

PLATE=5174 MJD=56047 Fiber−Flats for sdR−b2−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −0.419
Max value = 1.699
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Fri May 27 23:34:24 2016

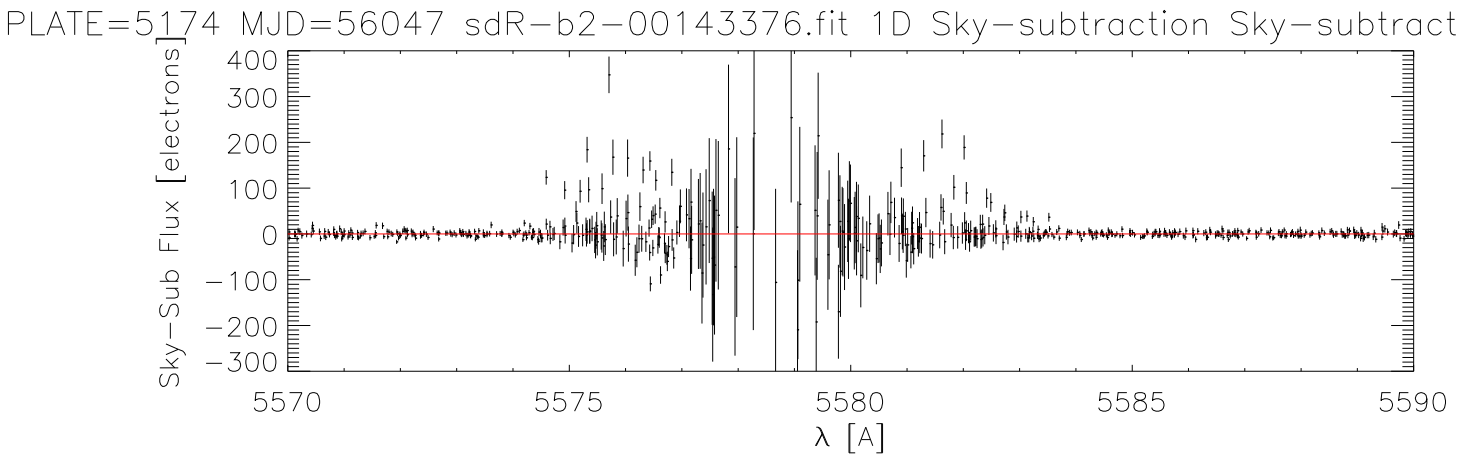

PLATE=5174 MJD=56047 Extraction chi^2 for sdR-b2-00143376.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-b2-00143376.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

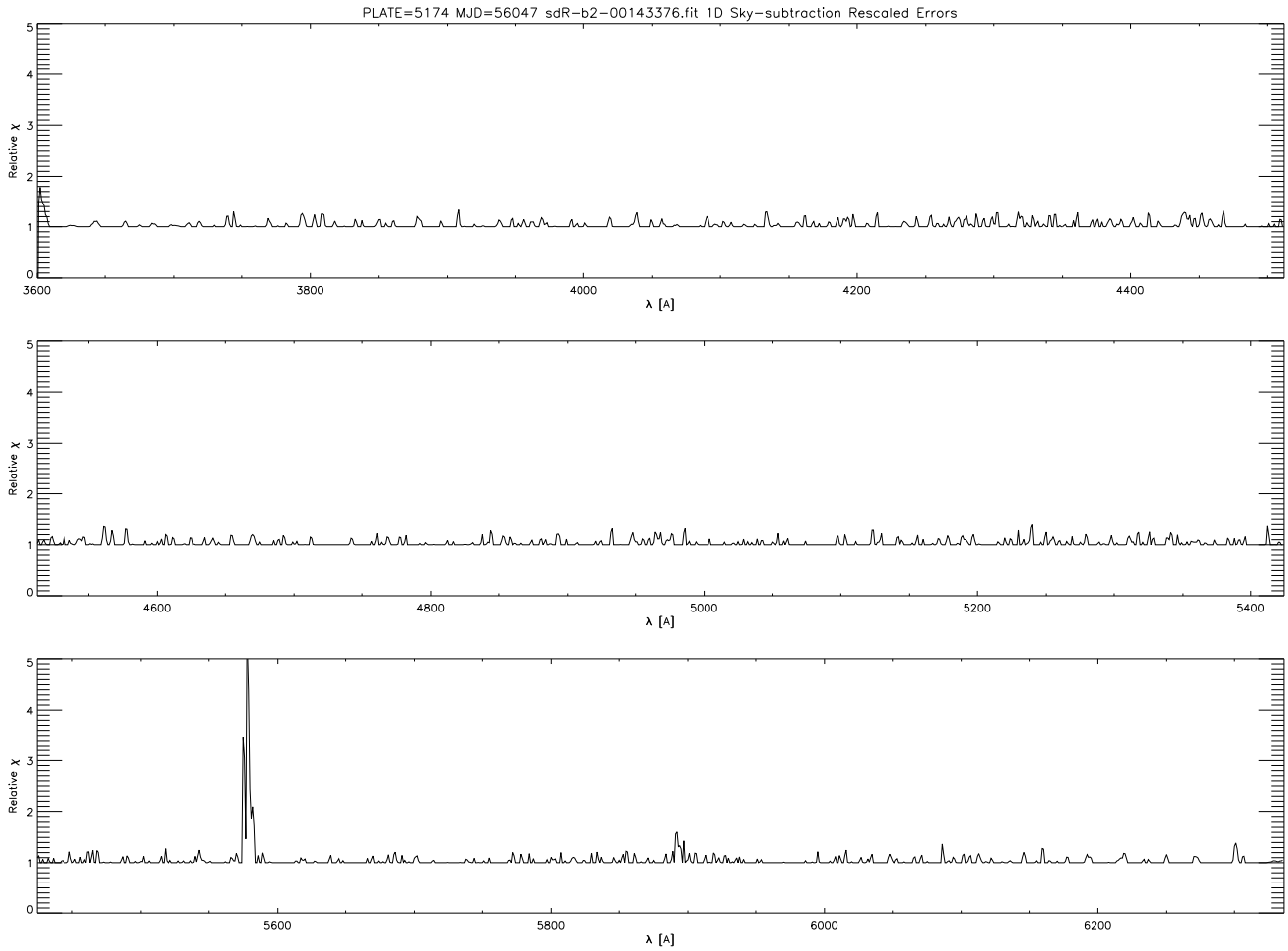

PLATE=5174 MJD=56047 Smooth superflat for sdR-b2-00143376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

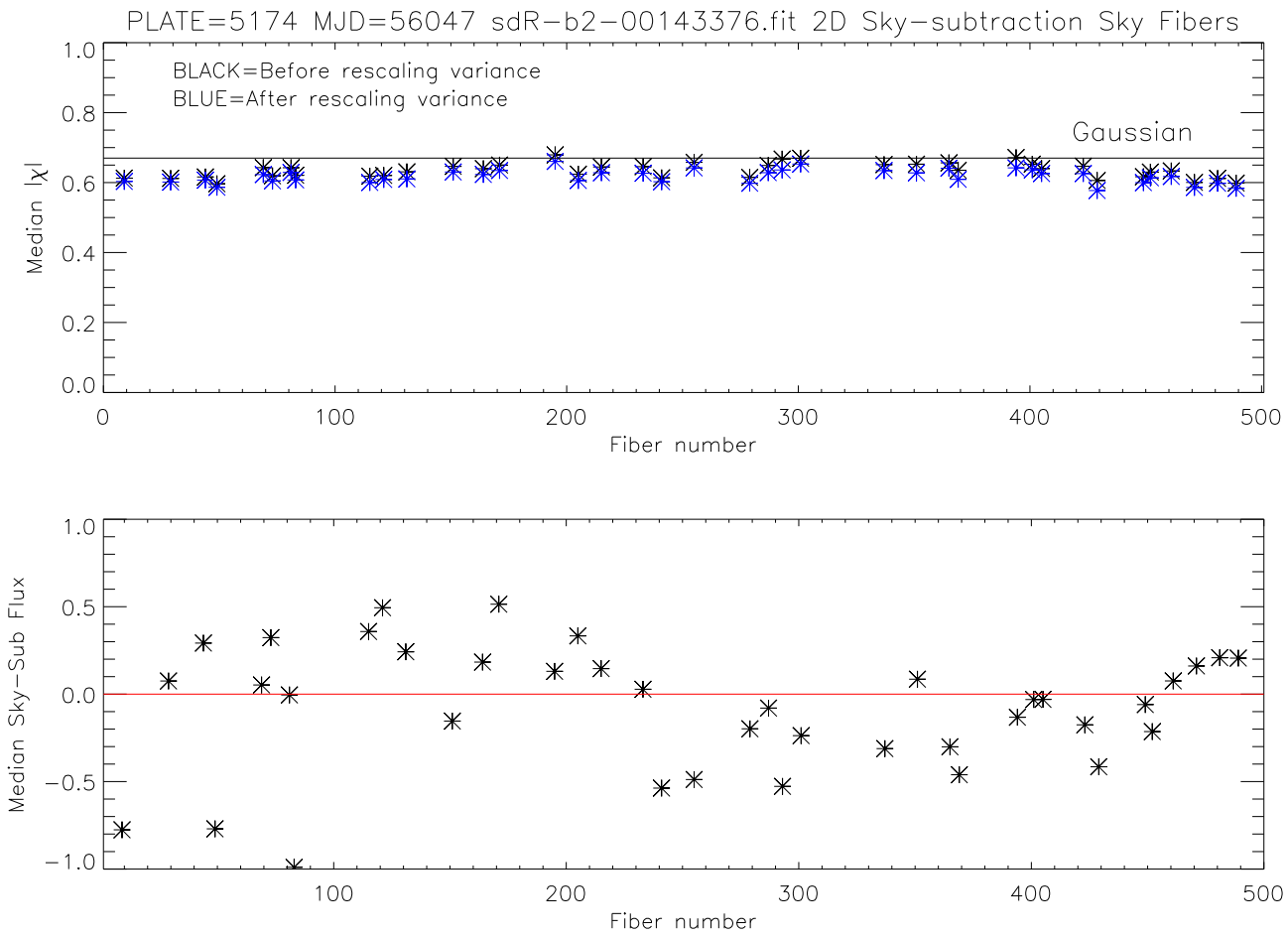

PLATE=5174 MJD=56047 sdR-b2-00143376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

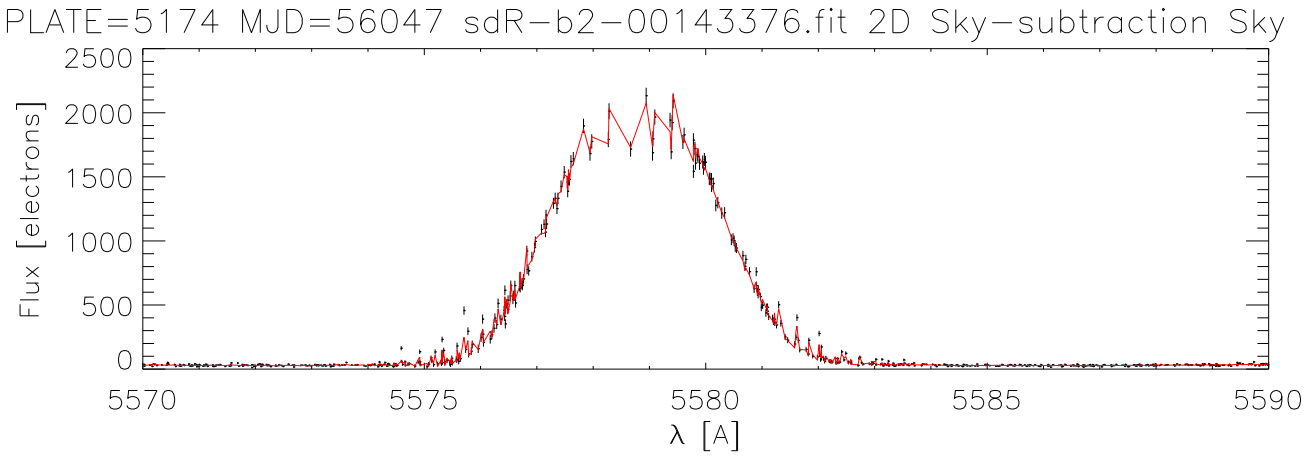

PLATE=5174 MJD=56047 sdR-b2-00143376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

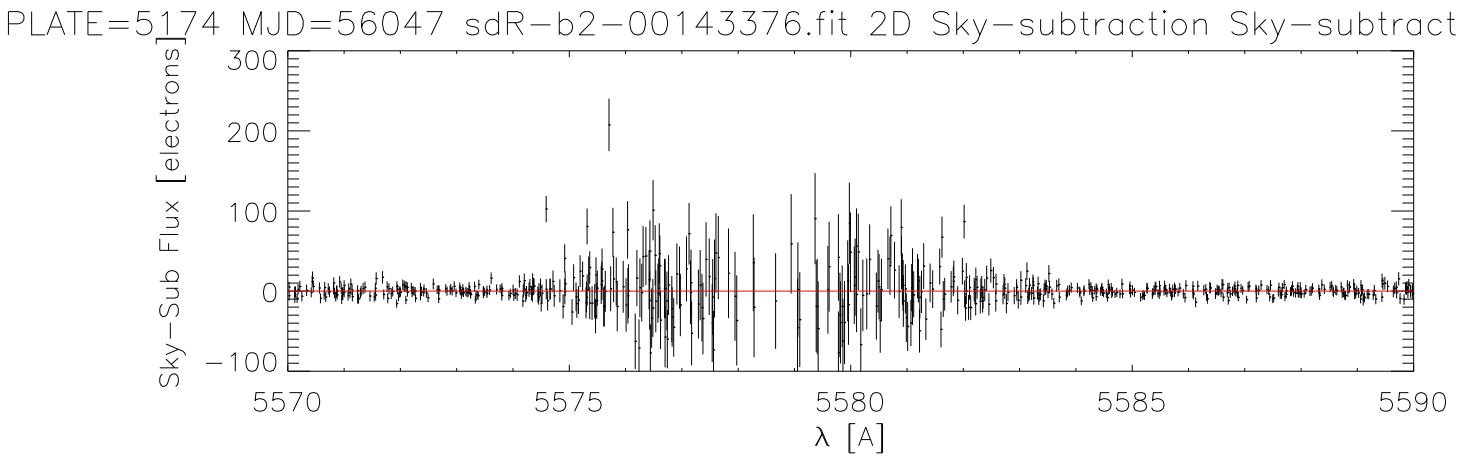

PLATE=5174 MJD=56047 sdR-b2-00143376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

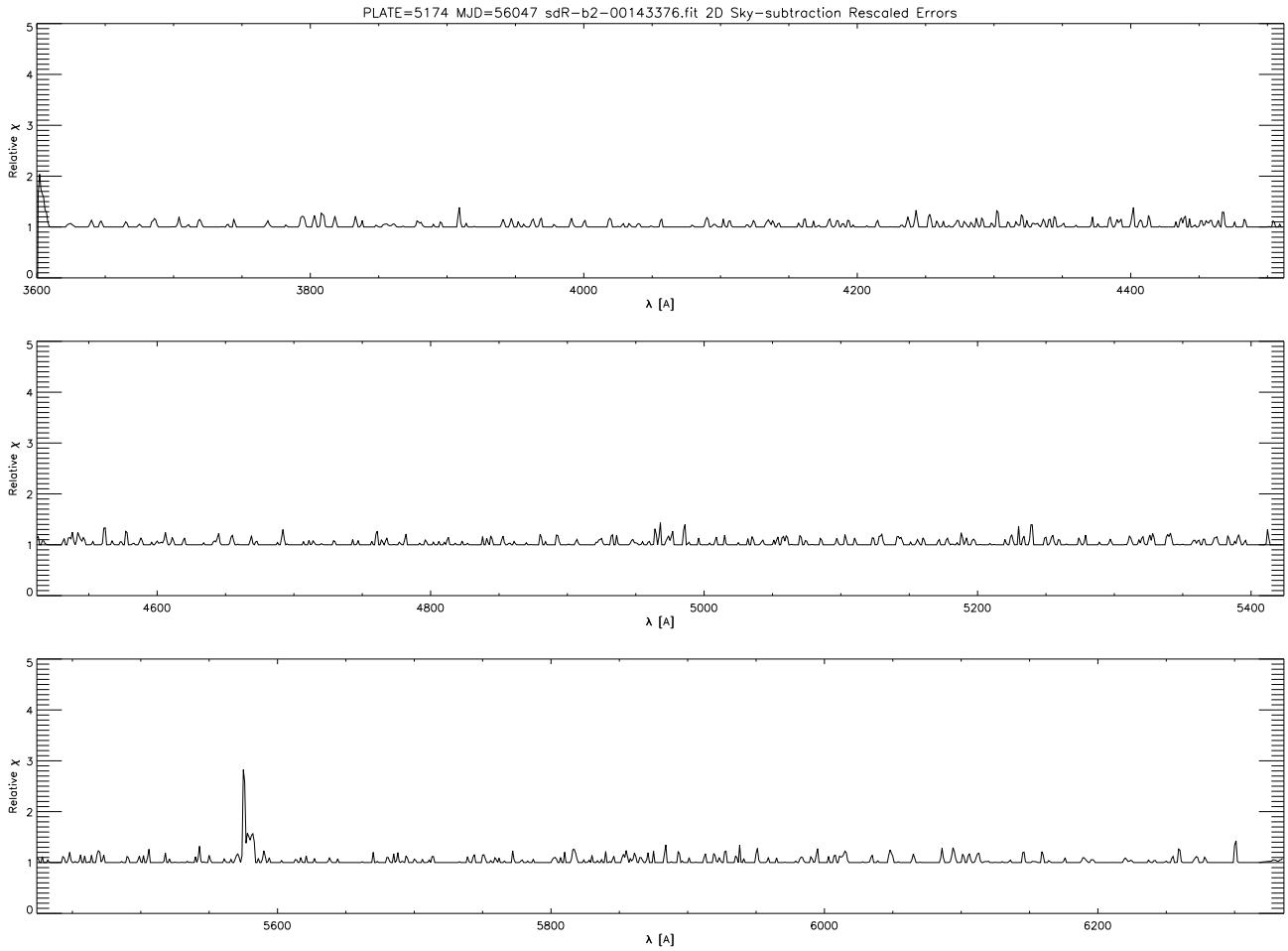


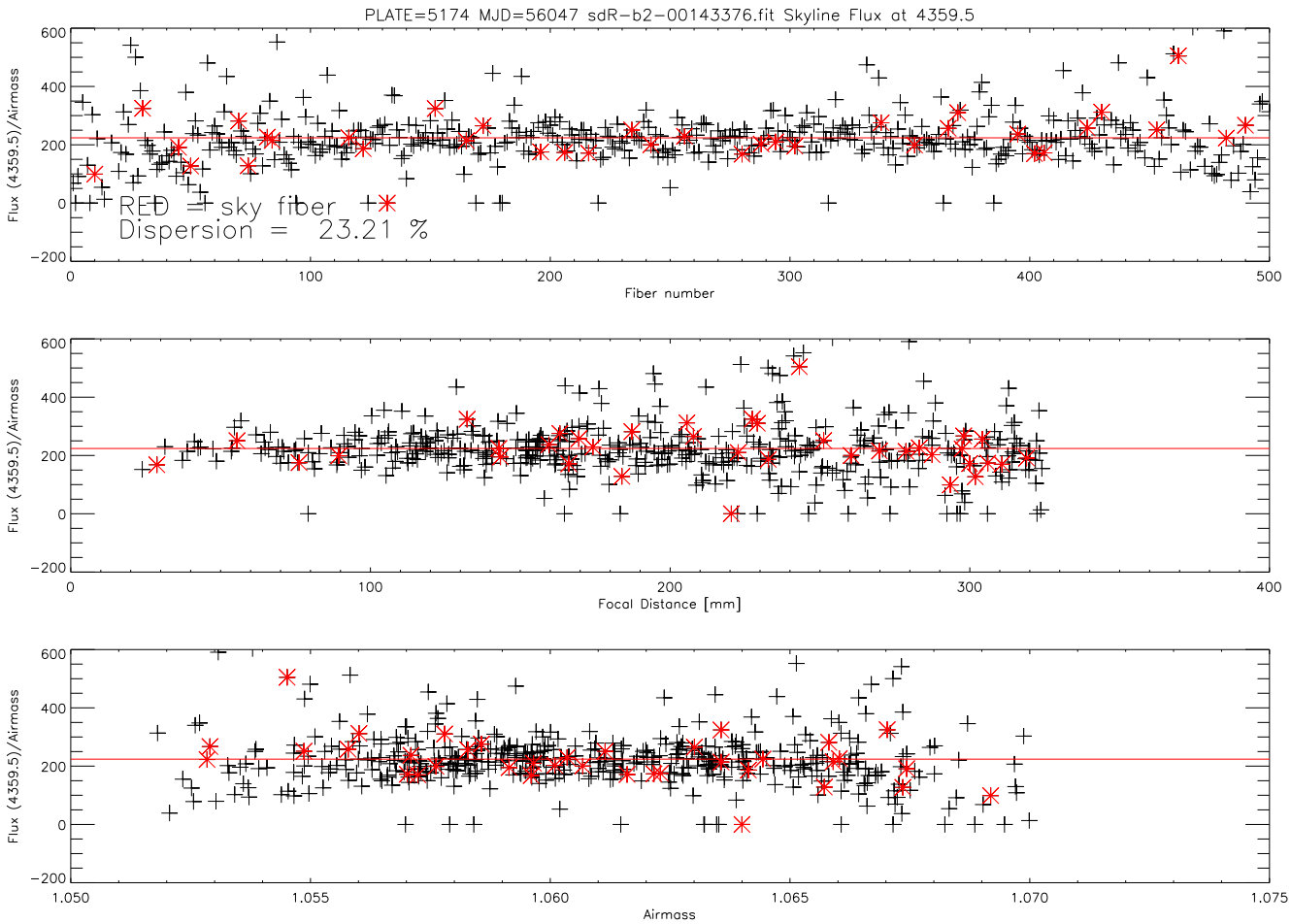

PLATE=5174 MJD=56047 sdR-b2-00143376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

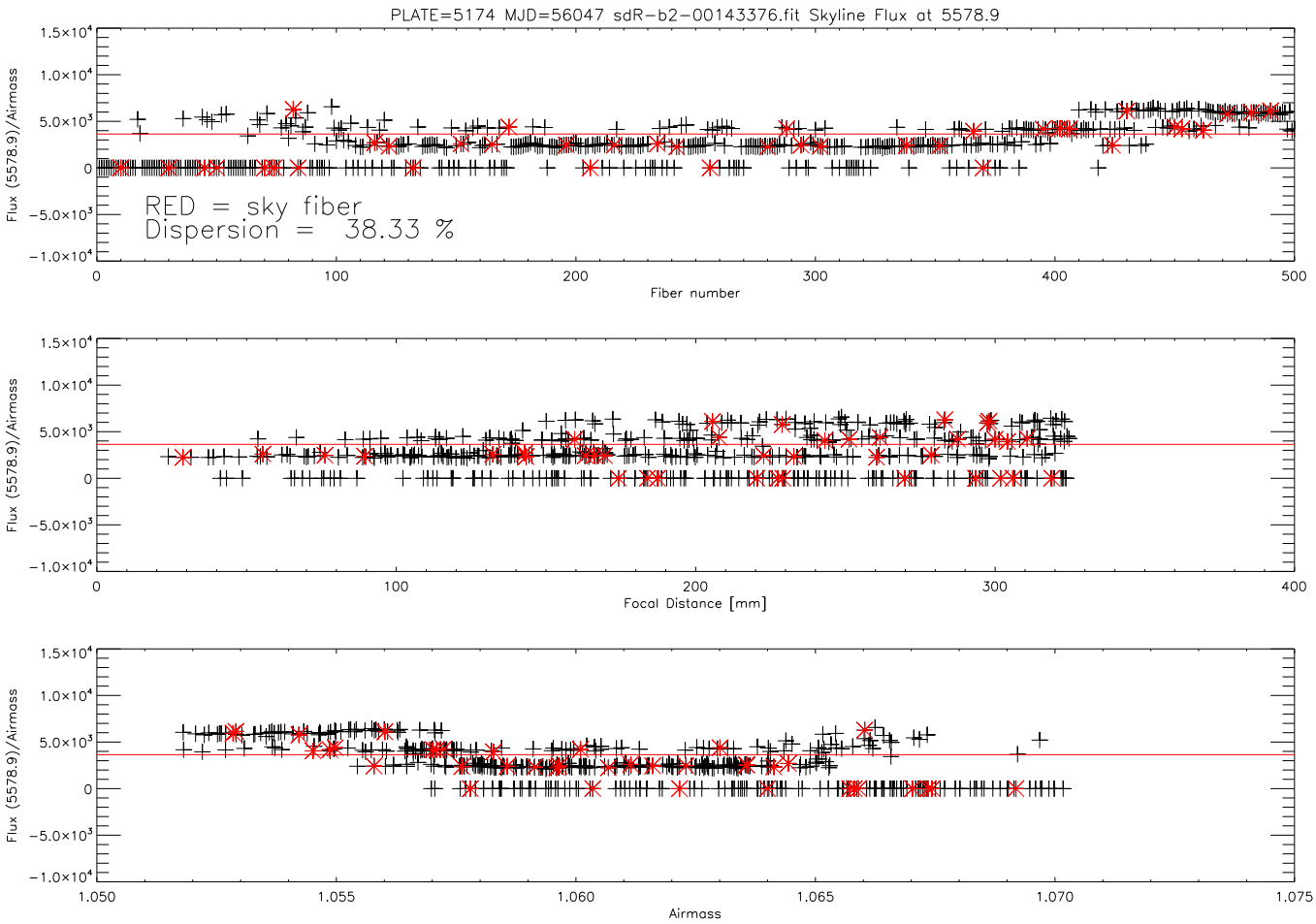

PLATE=5174 MJD=56047 sdR-b2-00143376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

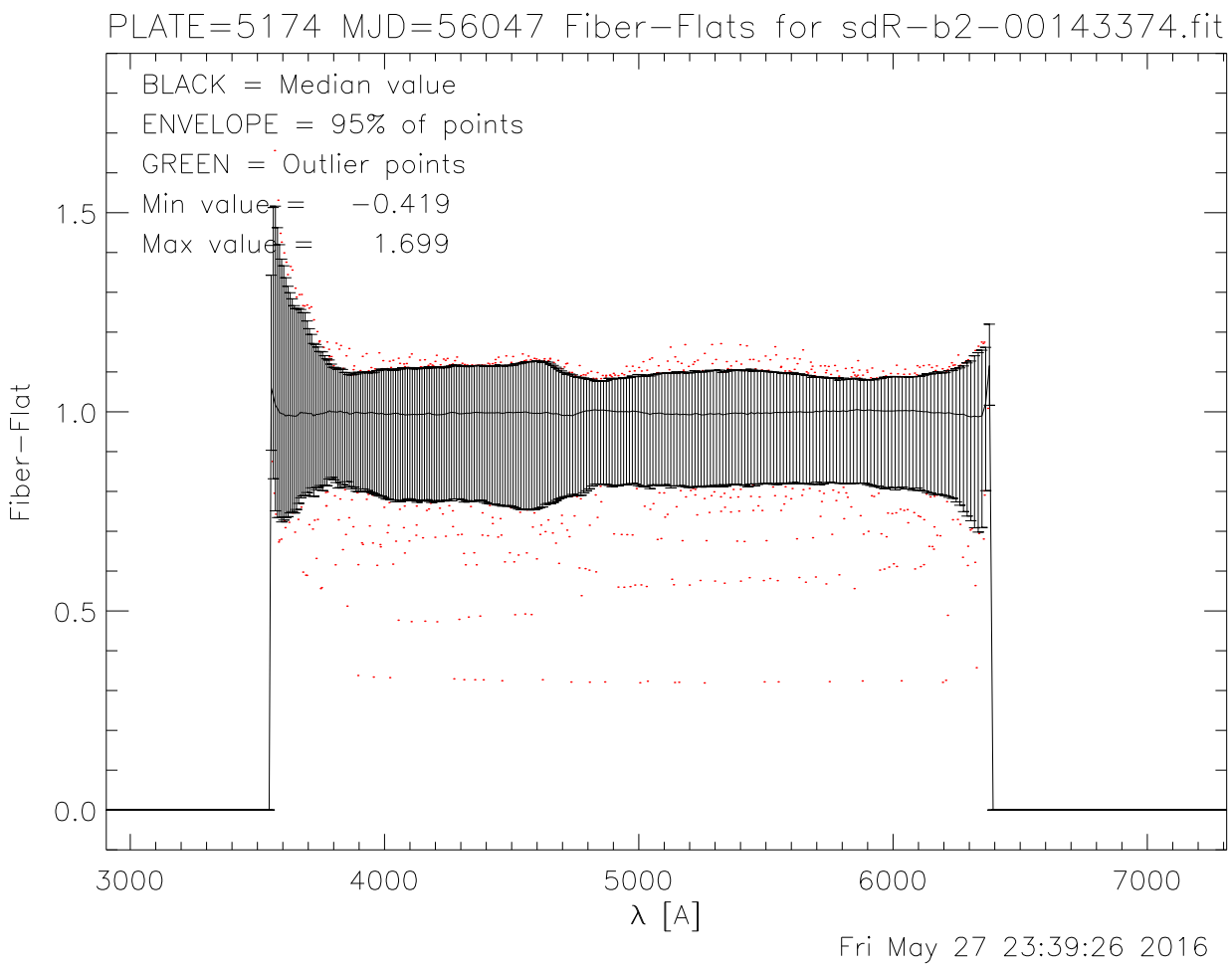

PLATE=5174 MJD=56047 sdR-b2-00143376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
5570
5575
5580
5585
5590
λ [A]

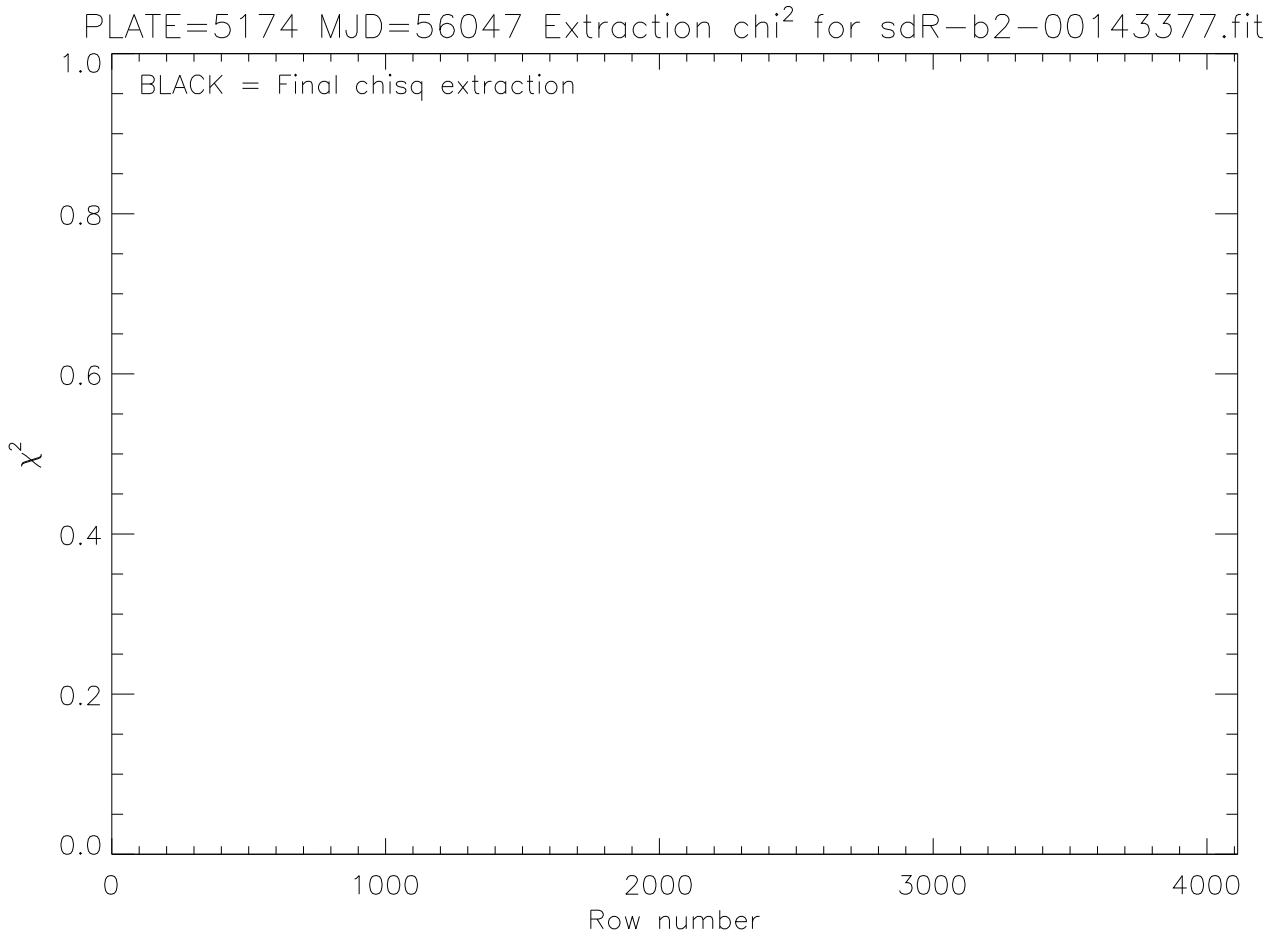
Number of sky fibers = 39

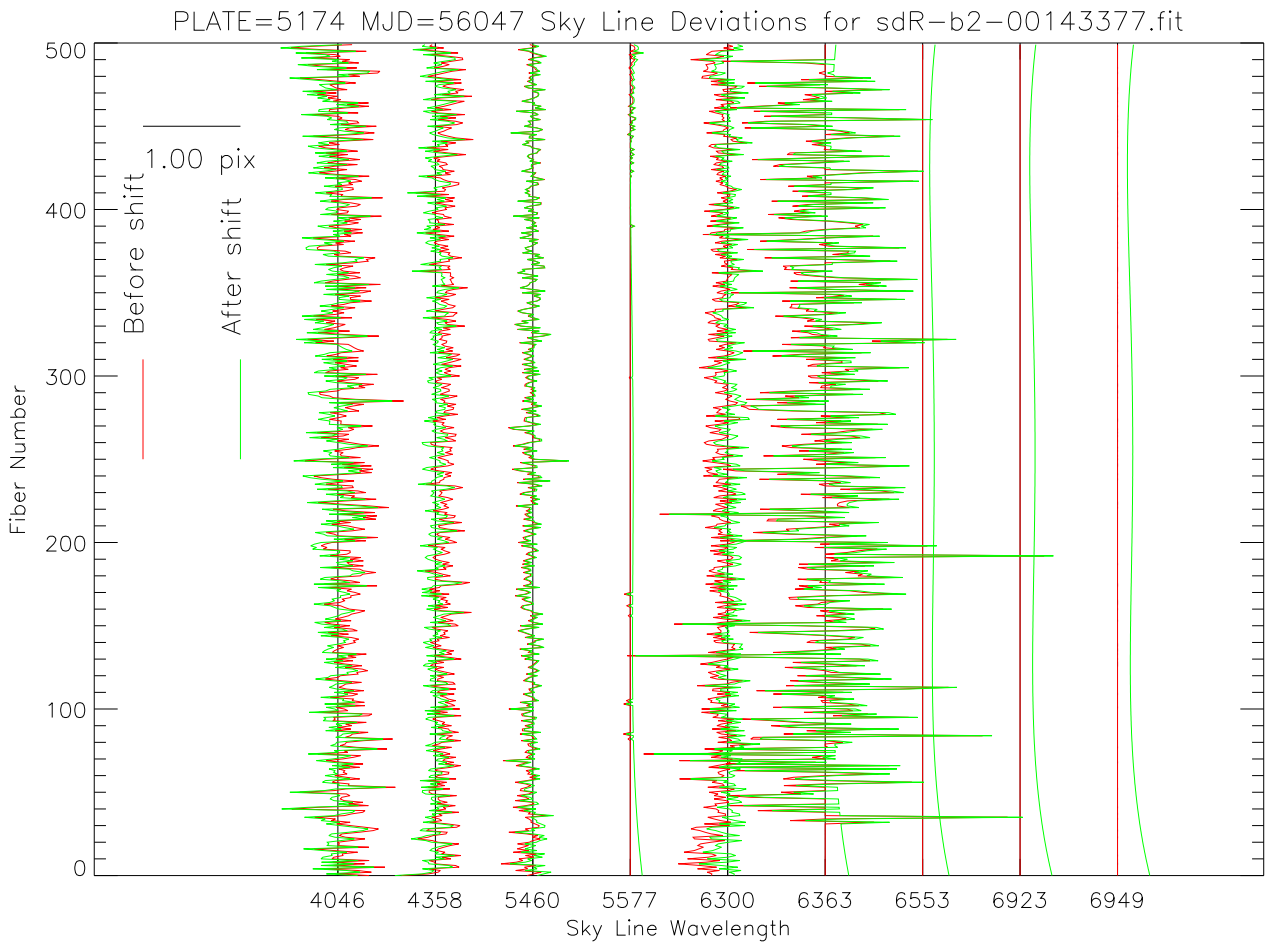


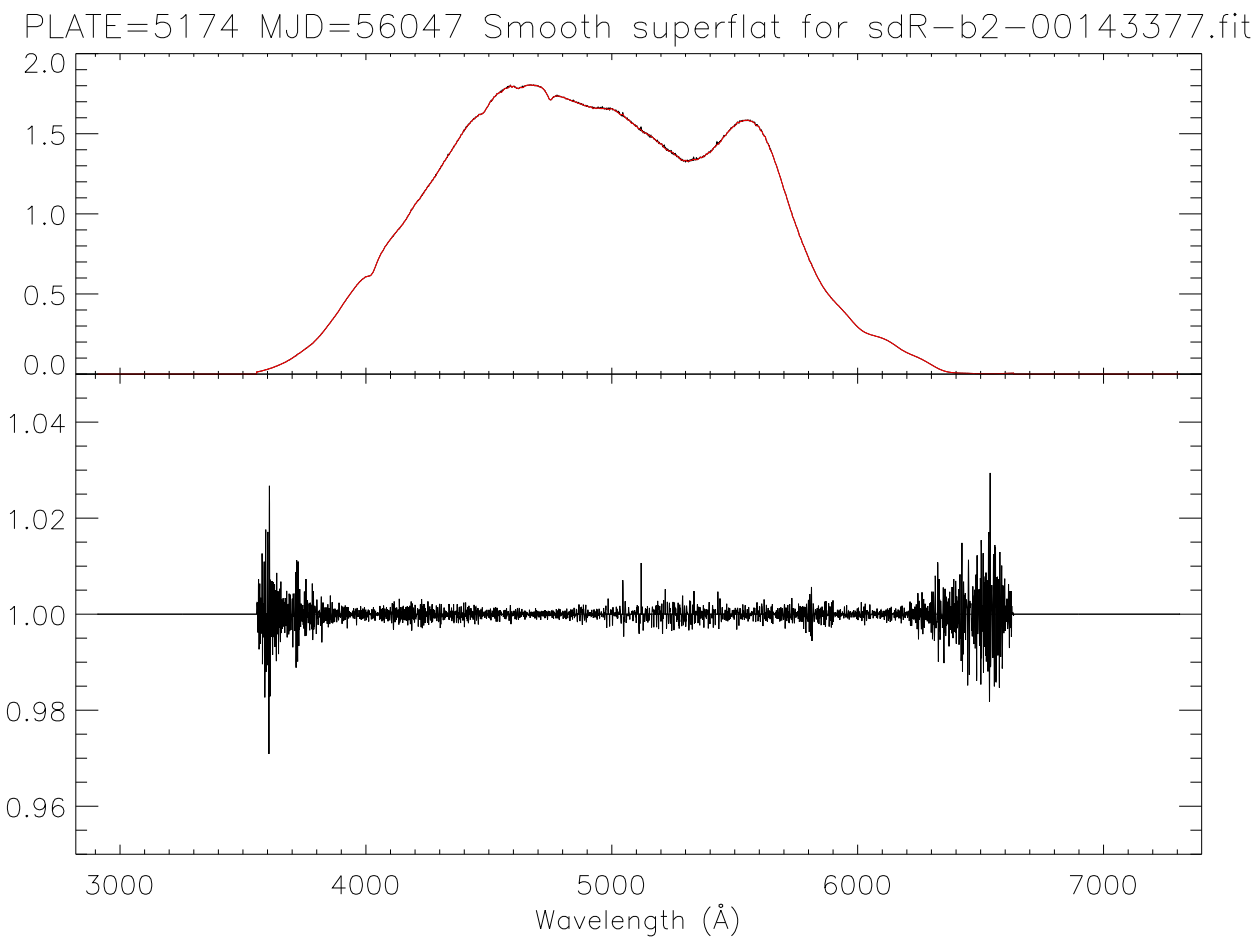

PLATE=5174 MJD=56047 sdR-b2-00143376.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 23.21 %
Flux (4359.5)/Airmass
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

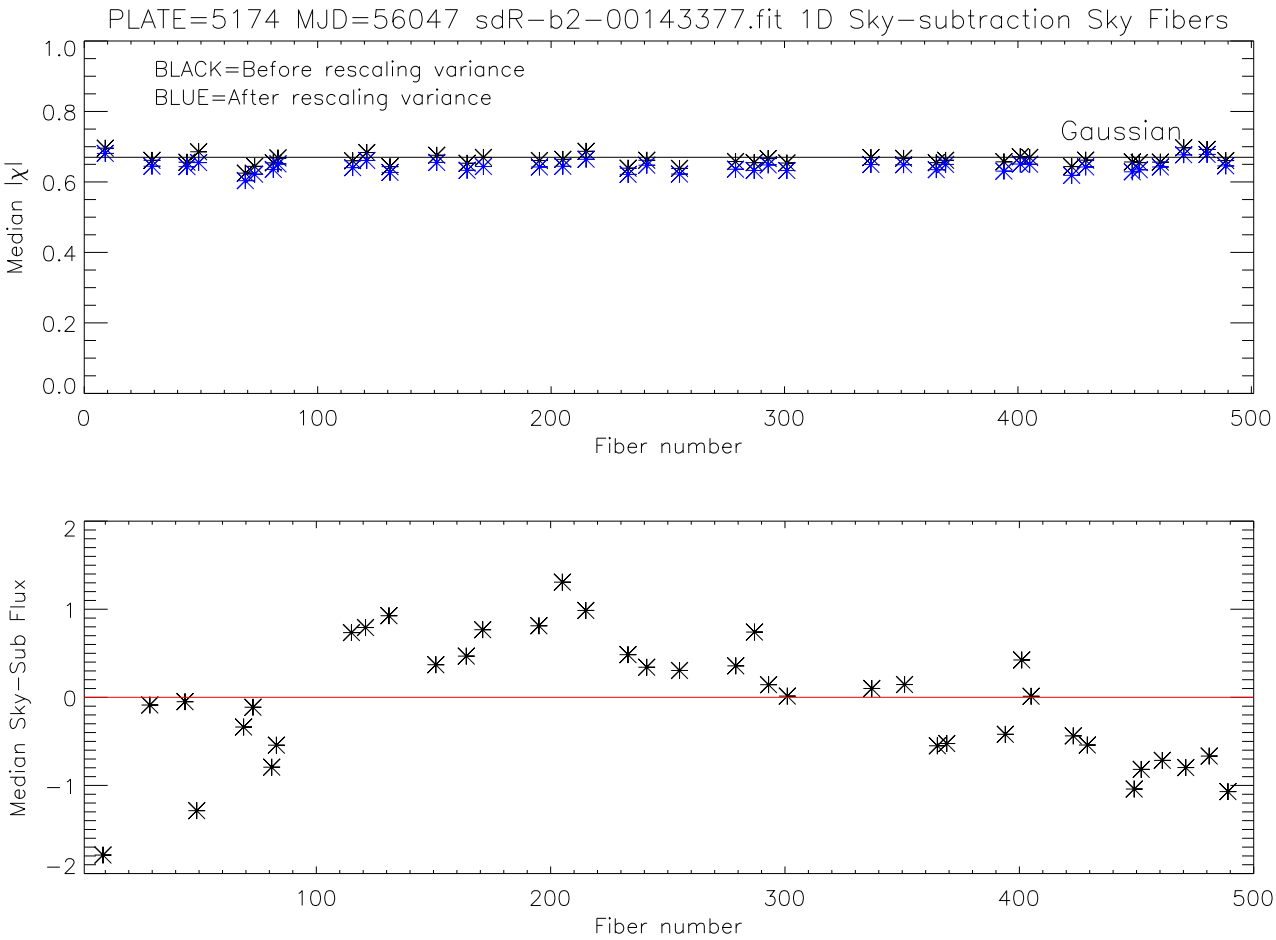

PLATE=5174 MJD=56047 sdR-b2-00143376.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 38.33 %
Fiber number
Focal Distance [mm]
Airmass

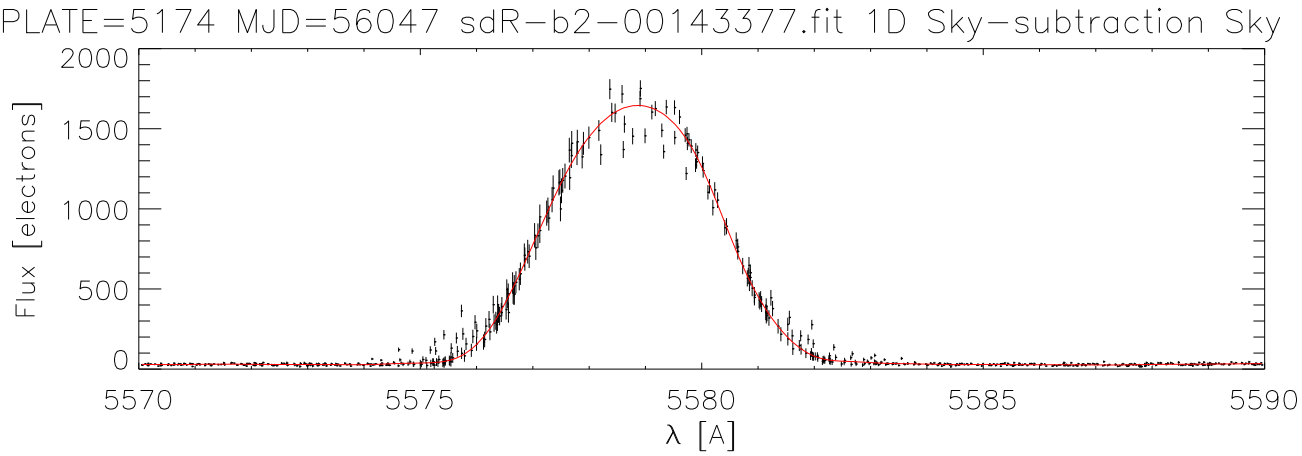

PLATE=5174 MJD=56047 Fiber−Flats for sdR−b2−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −0.419
Max value = 1.699
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Fri May 27 23:39:26 2016

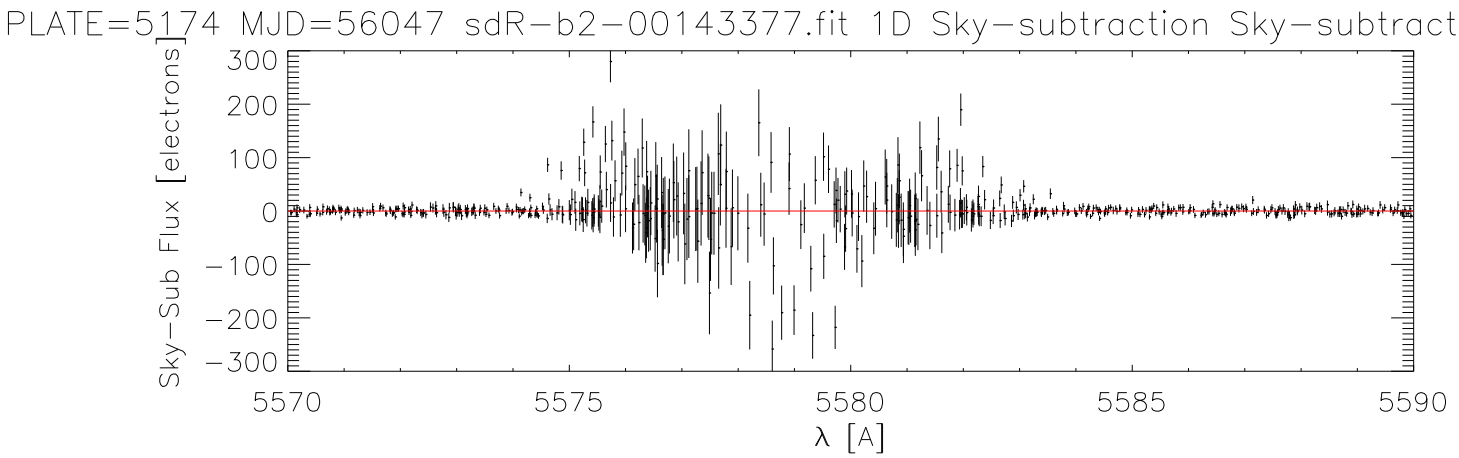

PLATE=5174 MJD=56047 Extraction chi^2 for sdR-b2-00143377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-b2-00143377.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

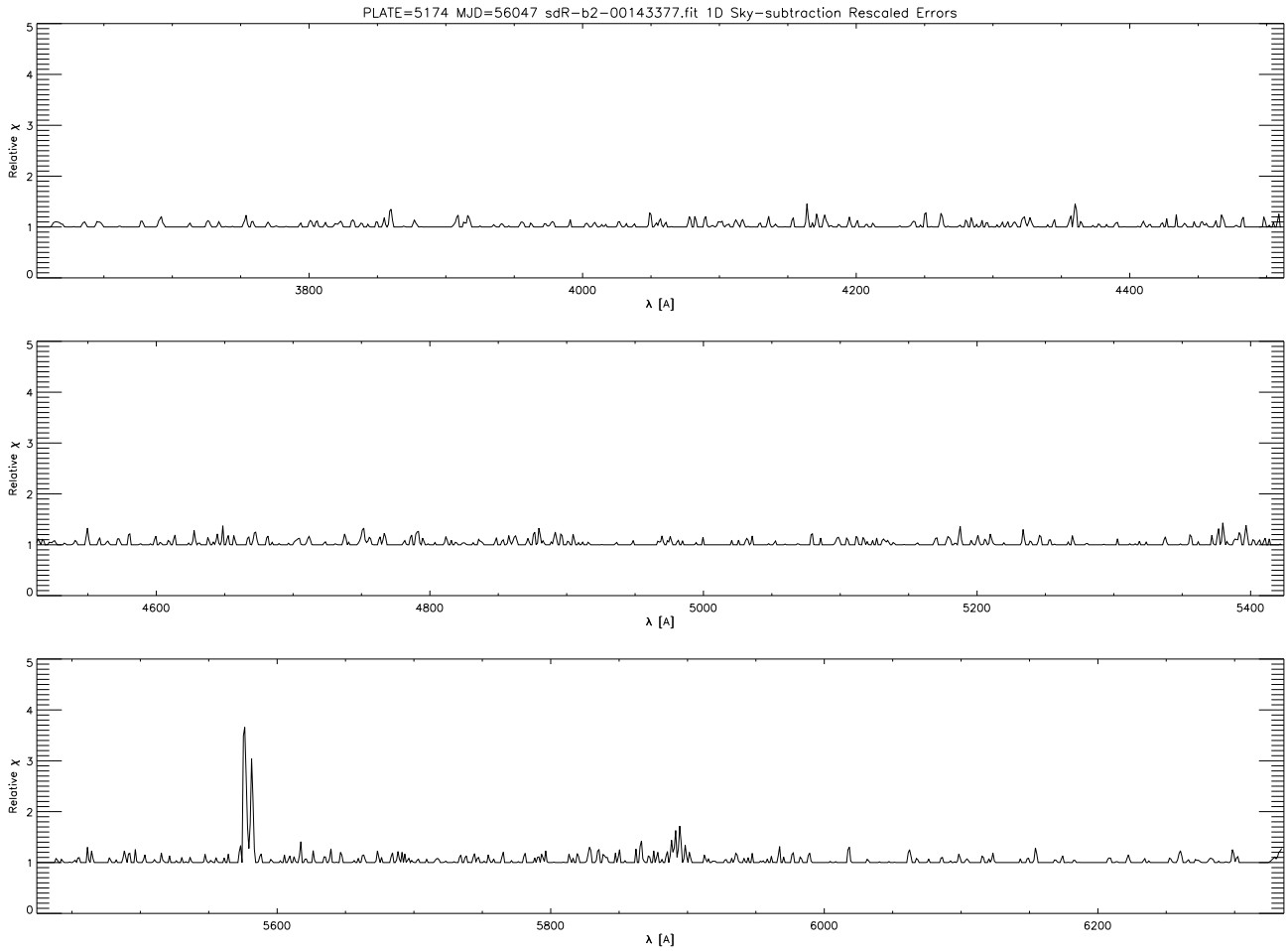

PLATE=5174 MJD=56047 Smooth superflat for sdR-b2-00143377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

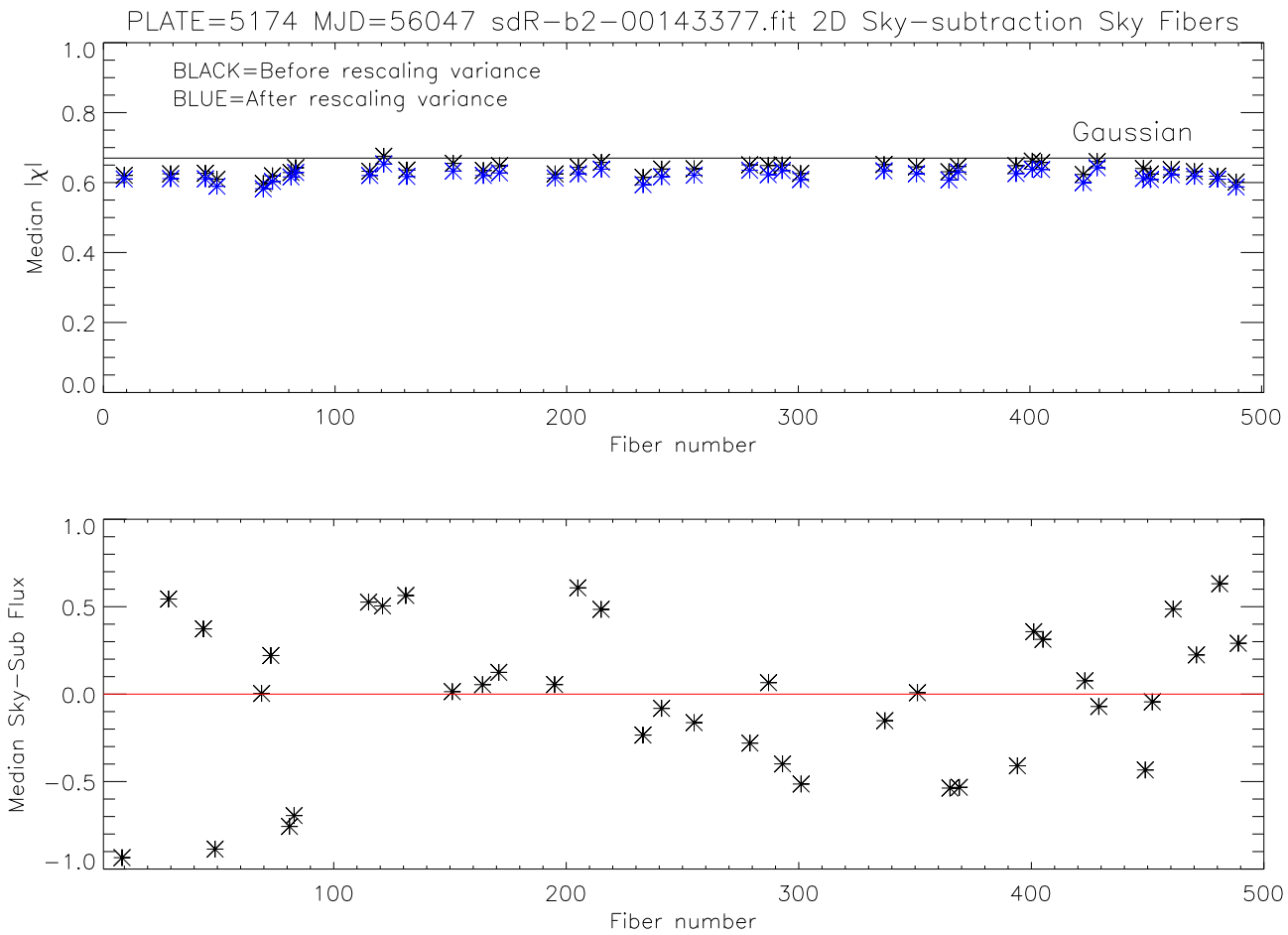

PLATE=5174 MJD=56047 sdR-b2-00143377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

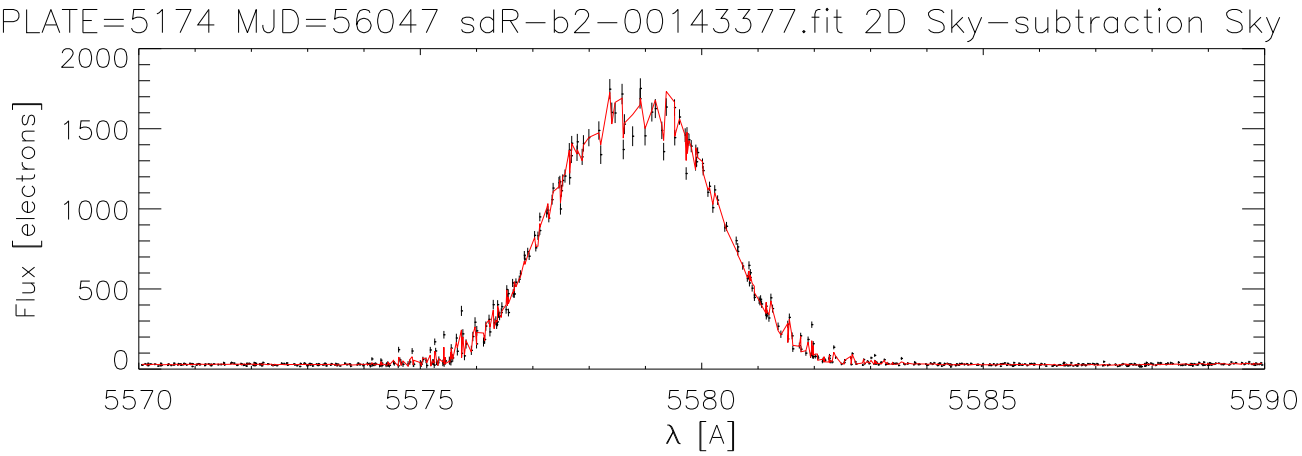

PLATE=5174 MJD=56047 sdR-b2-00143377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

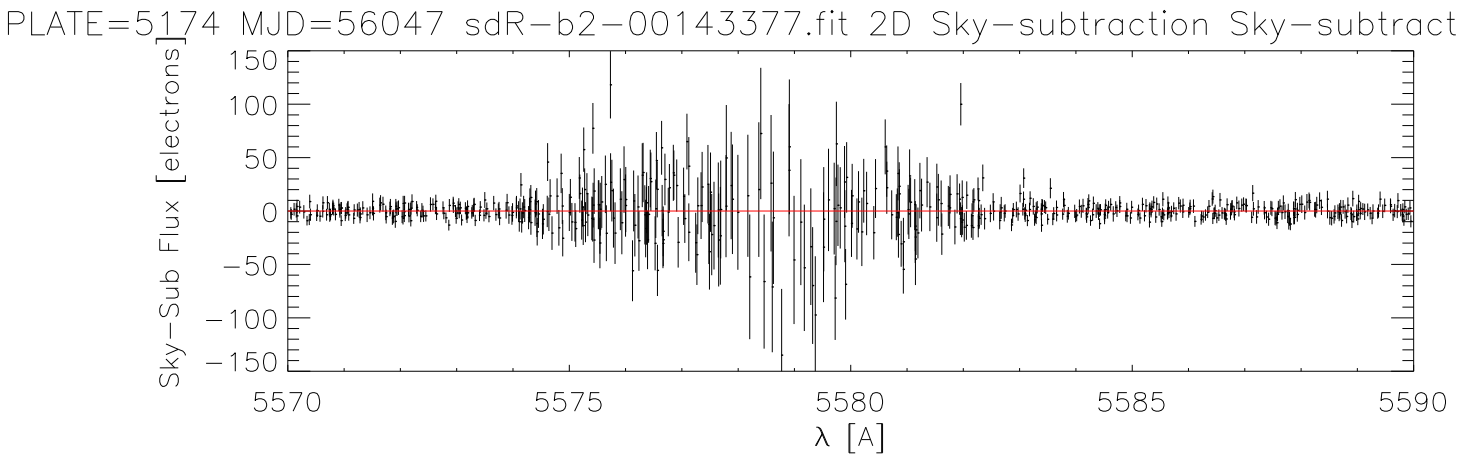

PLATE=5174 MJD=56047 sdR-b2-00143377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

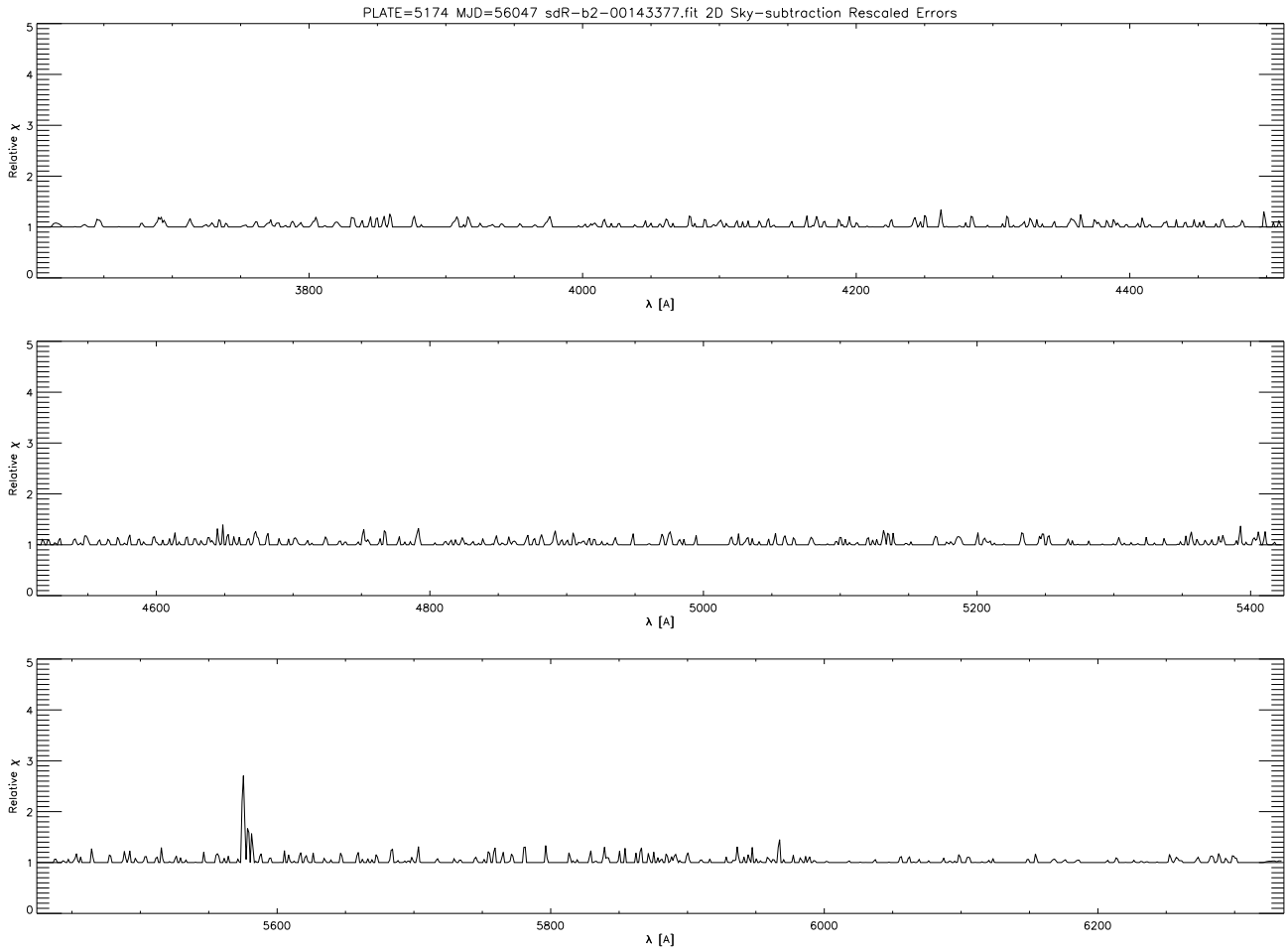


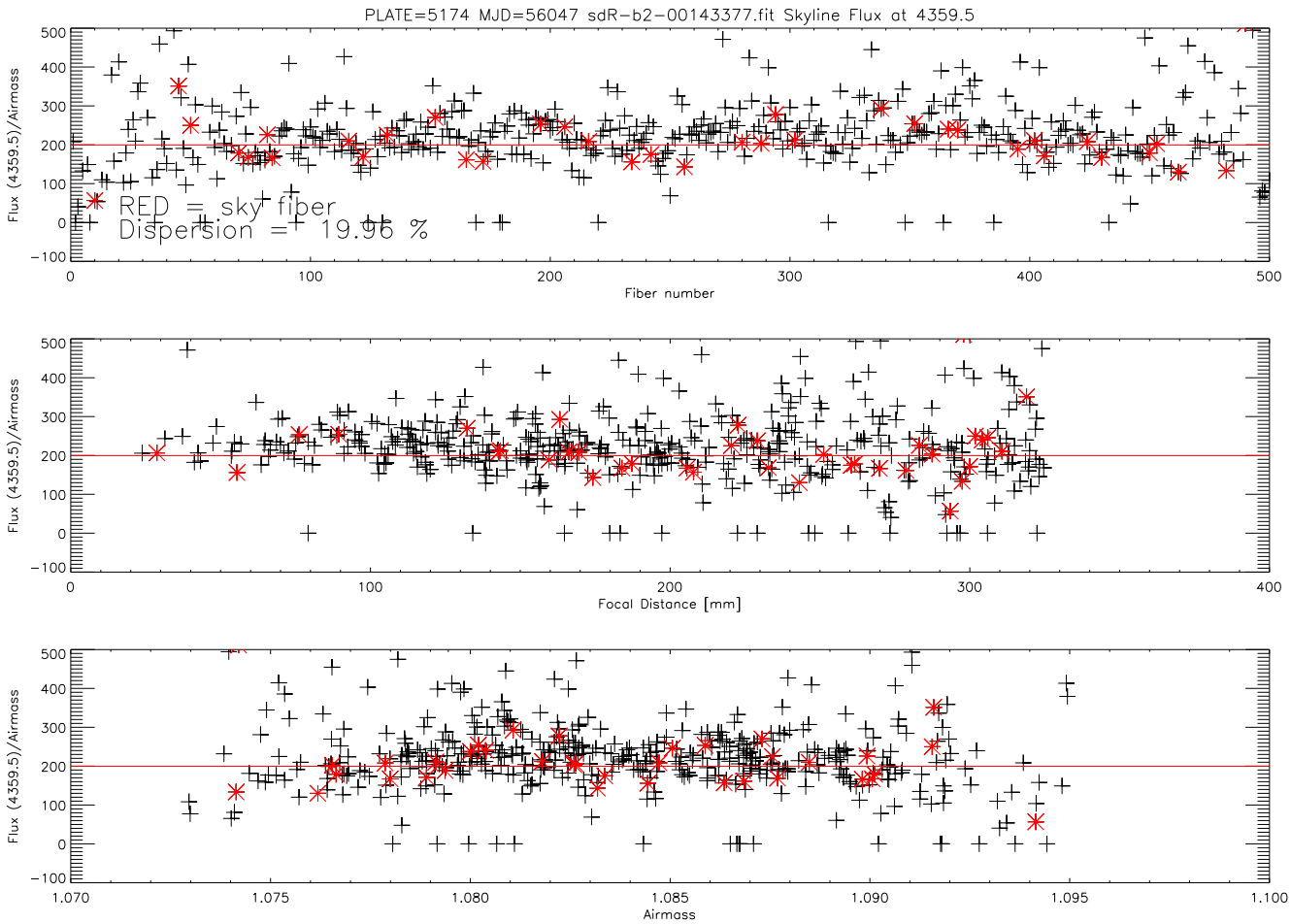

PLATE=5174 MJD=56047 sdR-b2-00143377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

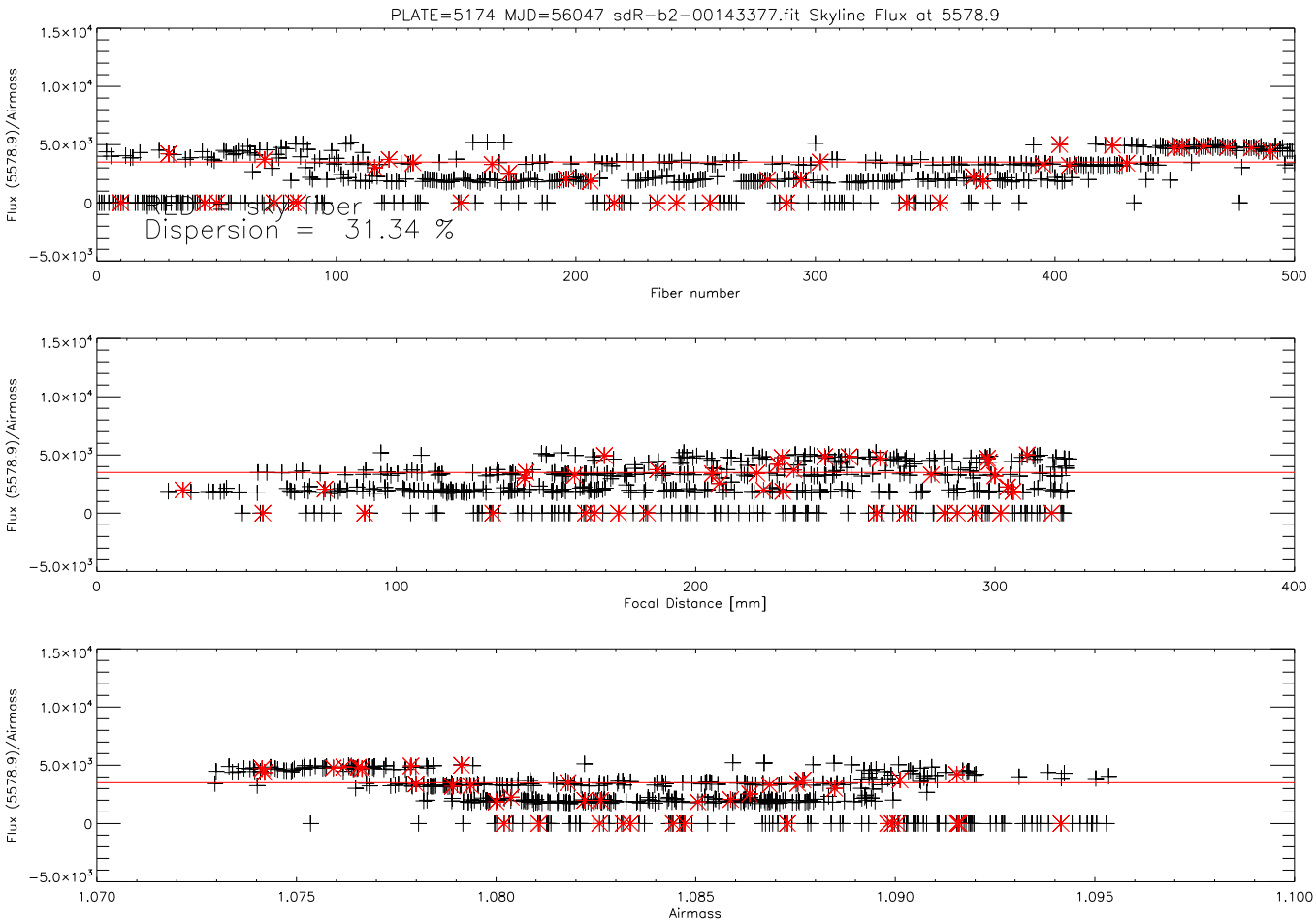

PLATE=5174 MJD=56047 sdR-b2-00143377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]


PLATE=5174 MJD=56047 sdR-b2-00143377.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

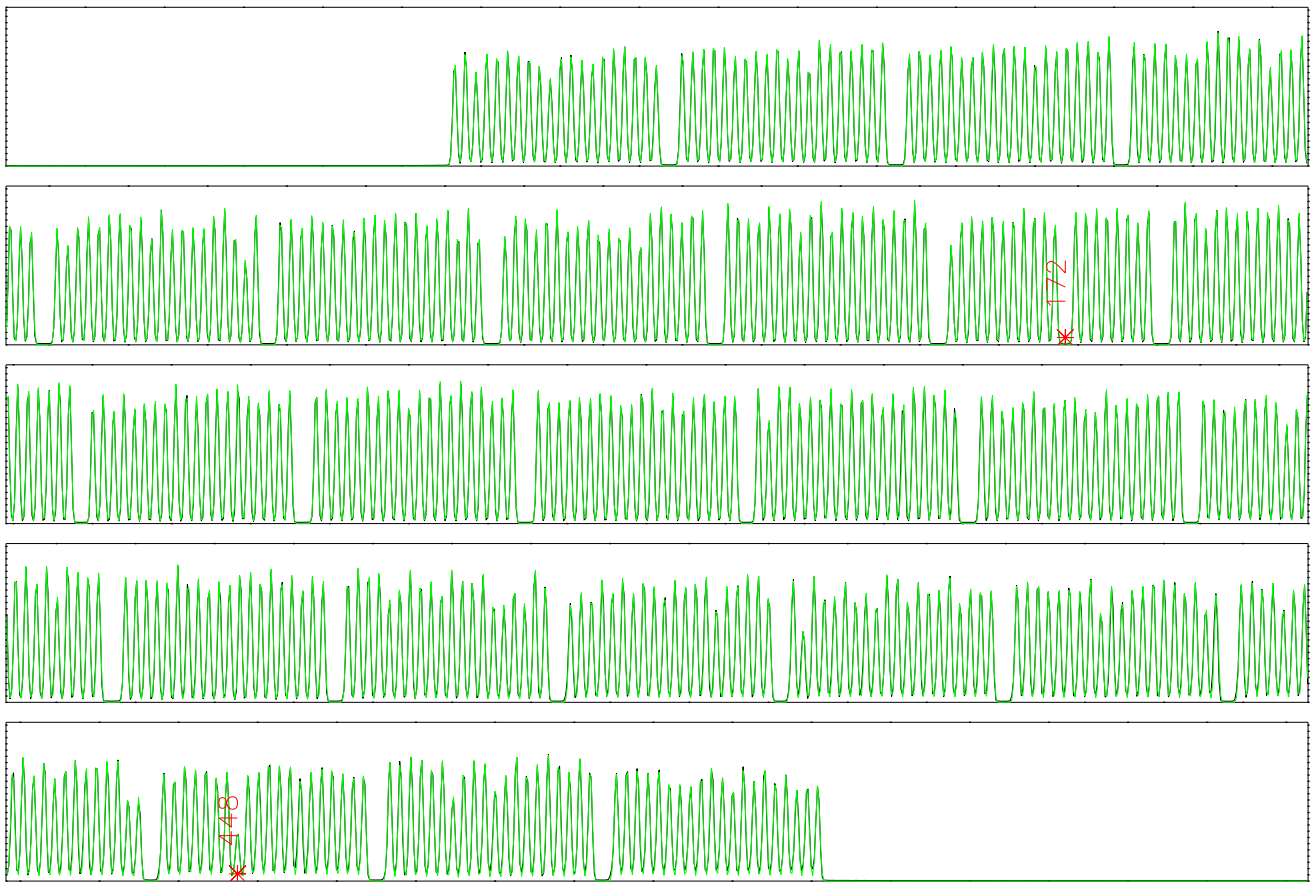
Number of sky fibers = 39

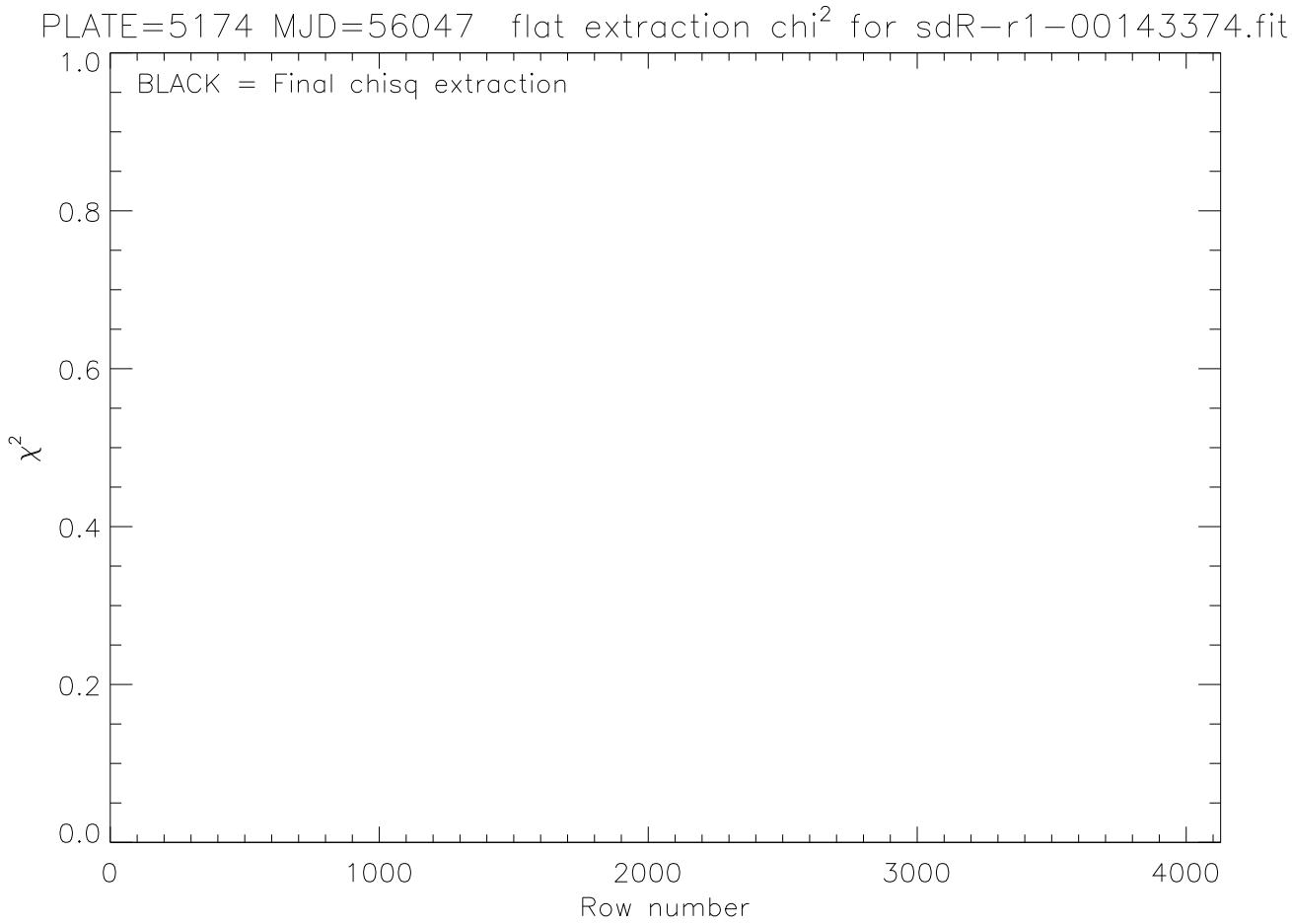


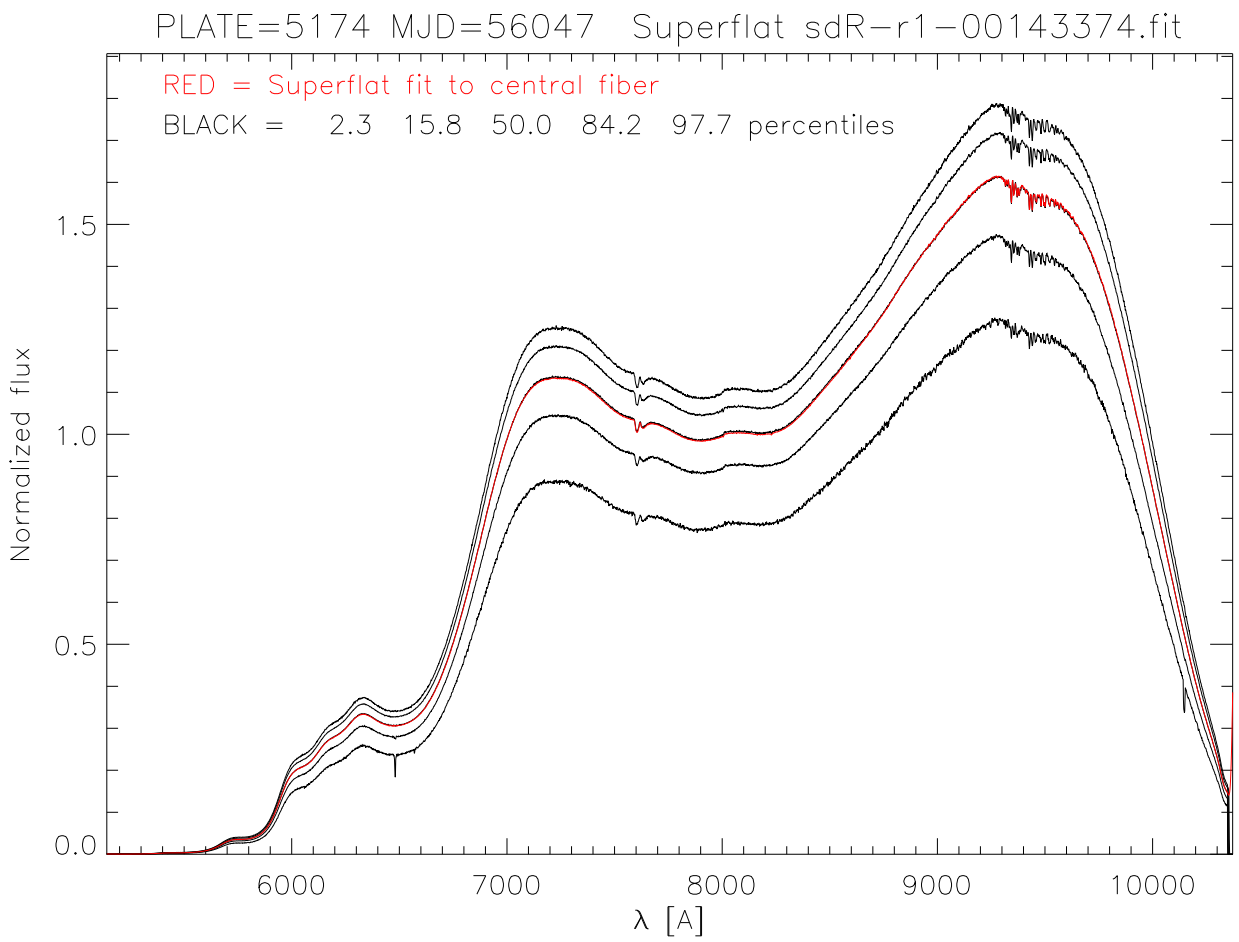

PLATE=5174 MJD=56047 sdR-b2-00143377.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 19.96 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

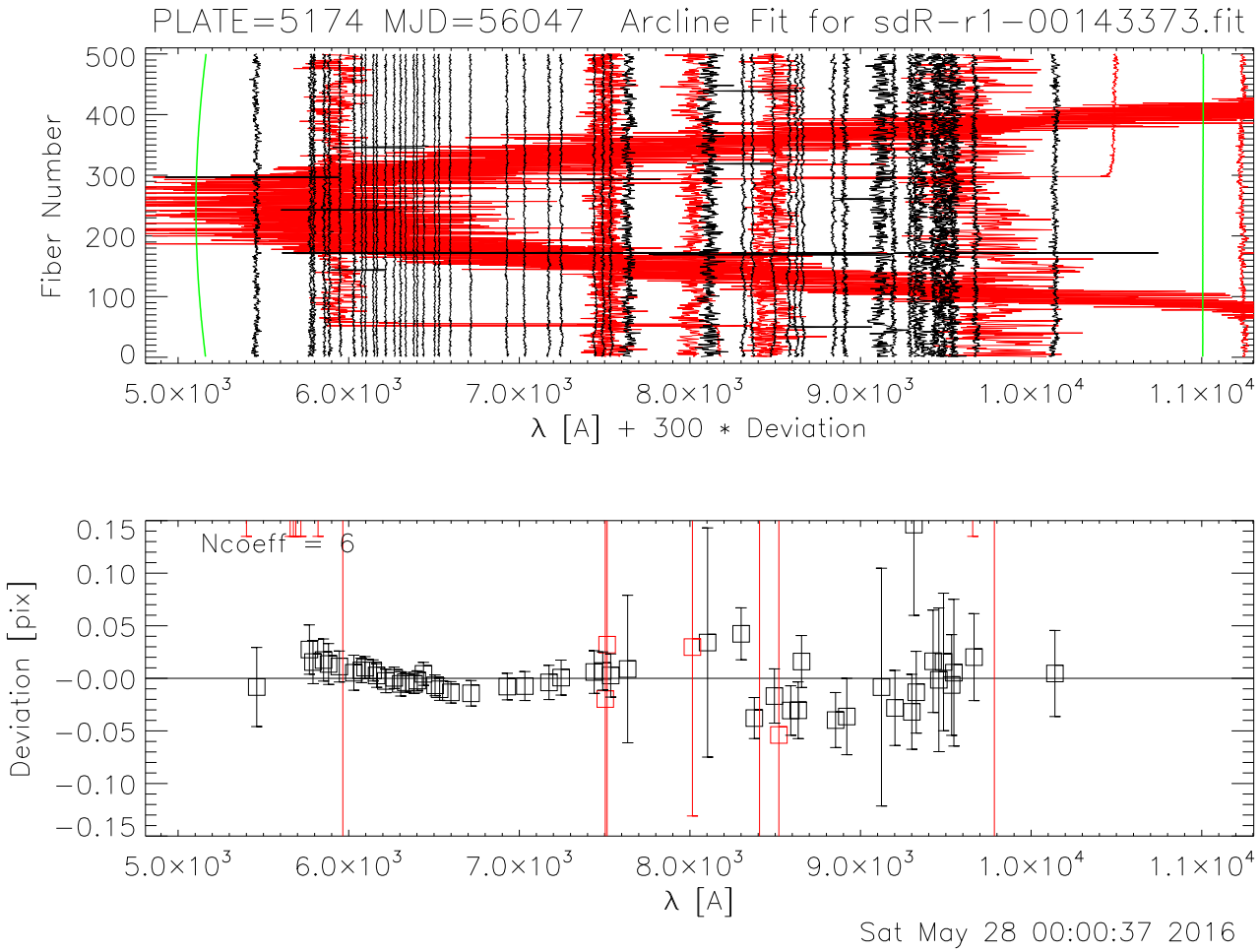

PLATE=5174 MJD=56047 sdR-b2-00143377.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
Non-sky fiber
Dispersion = 31.34 %
Focal Distance [mm]
Airmass

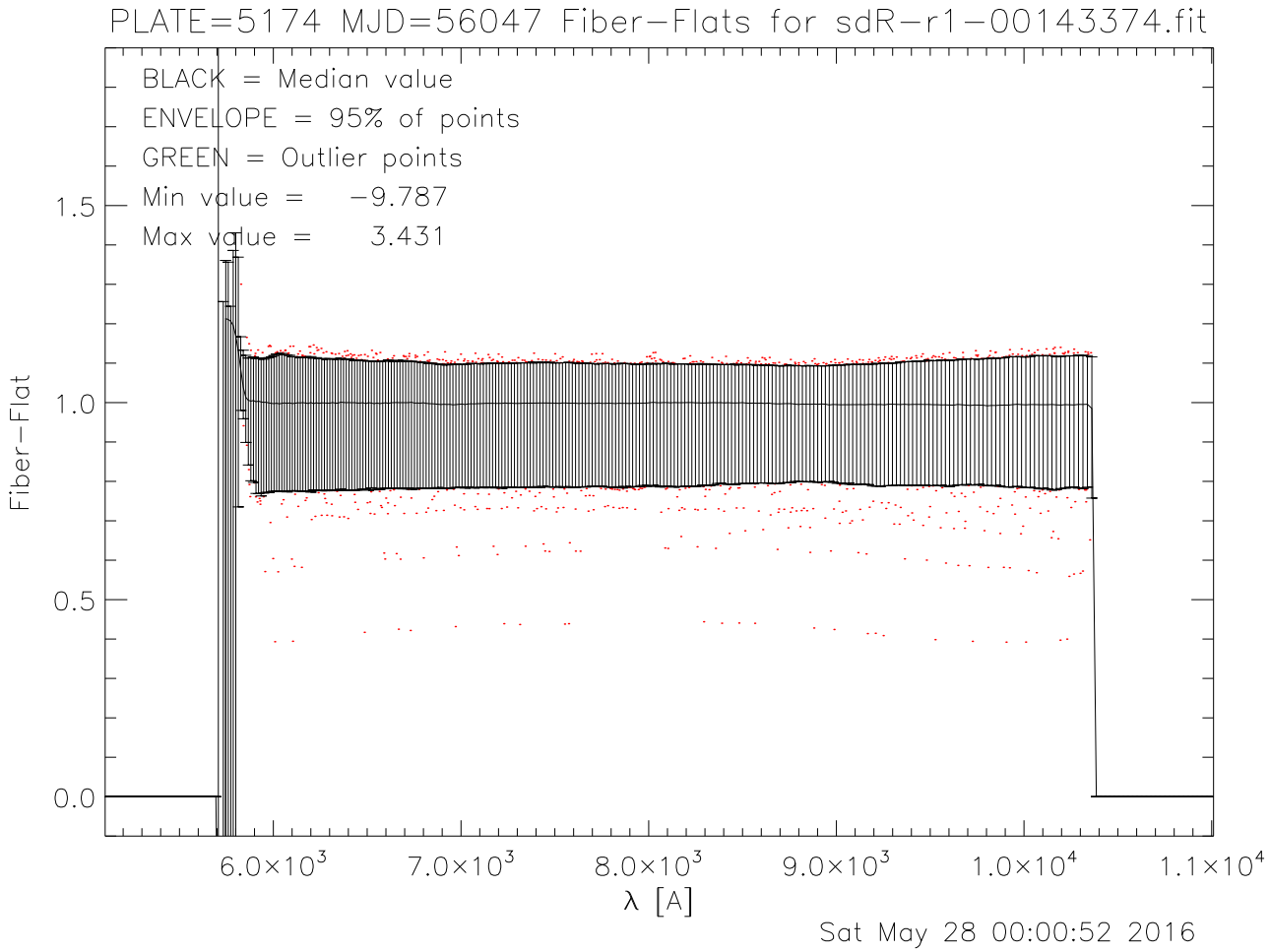
PLATE=5174 MJD=56047 Traces sdR-r1-00143374.fit

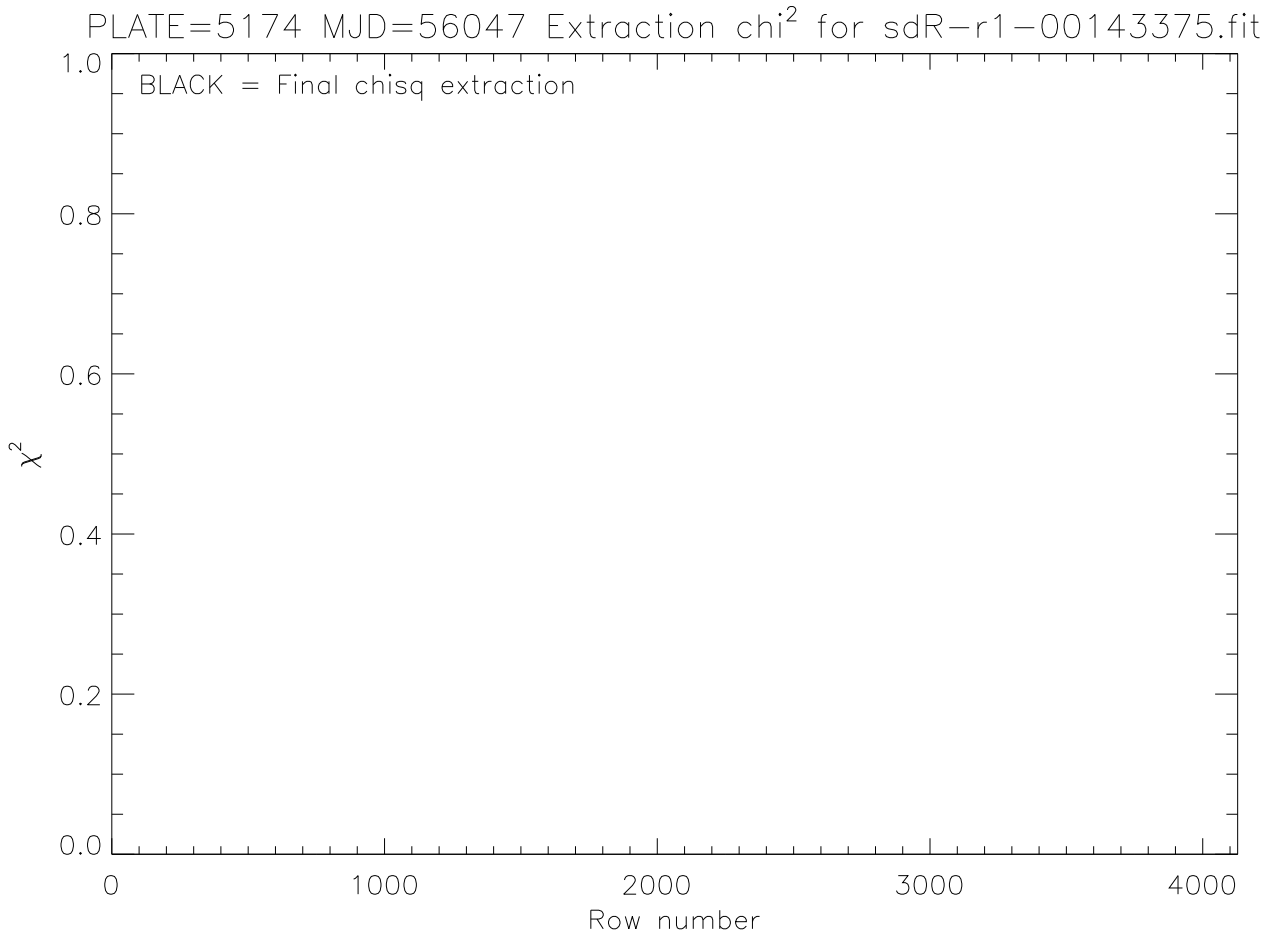


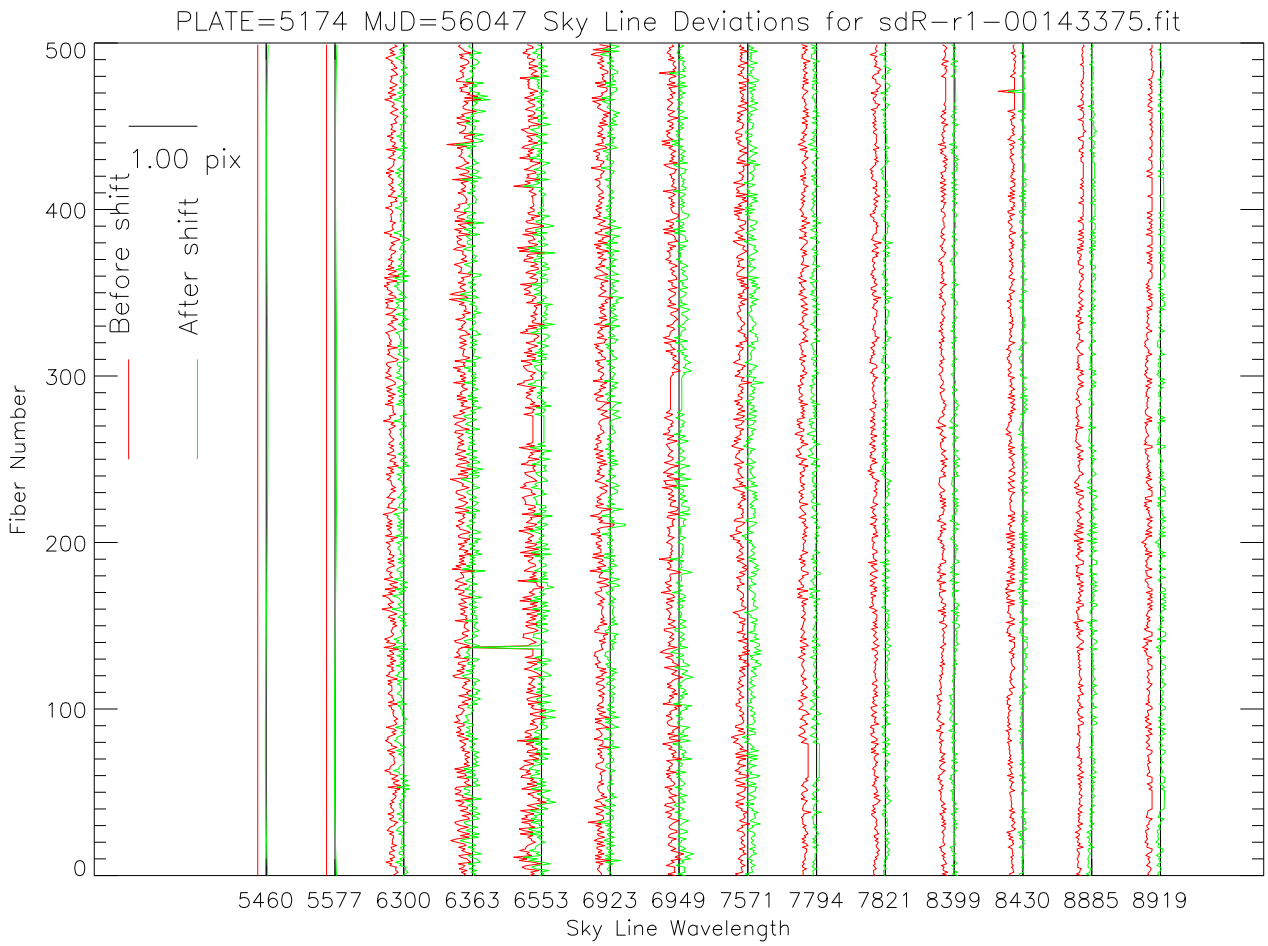

PLATE=5174 MJD=56047 flat extraction chi^2 for sdR−r1−00143374.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

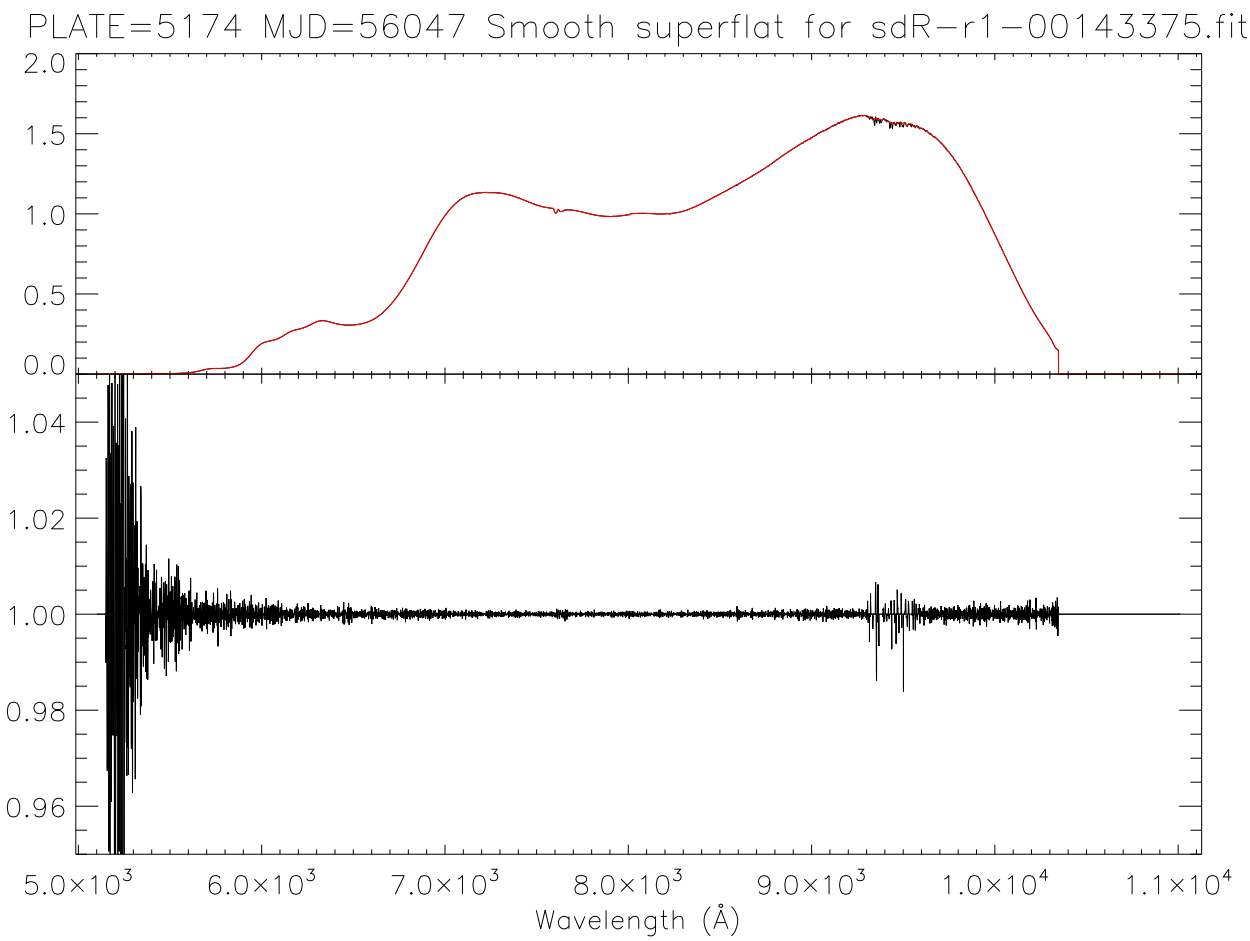

PLATE=5174 MJD=56047 Superflat sdR-r1-00143374.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

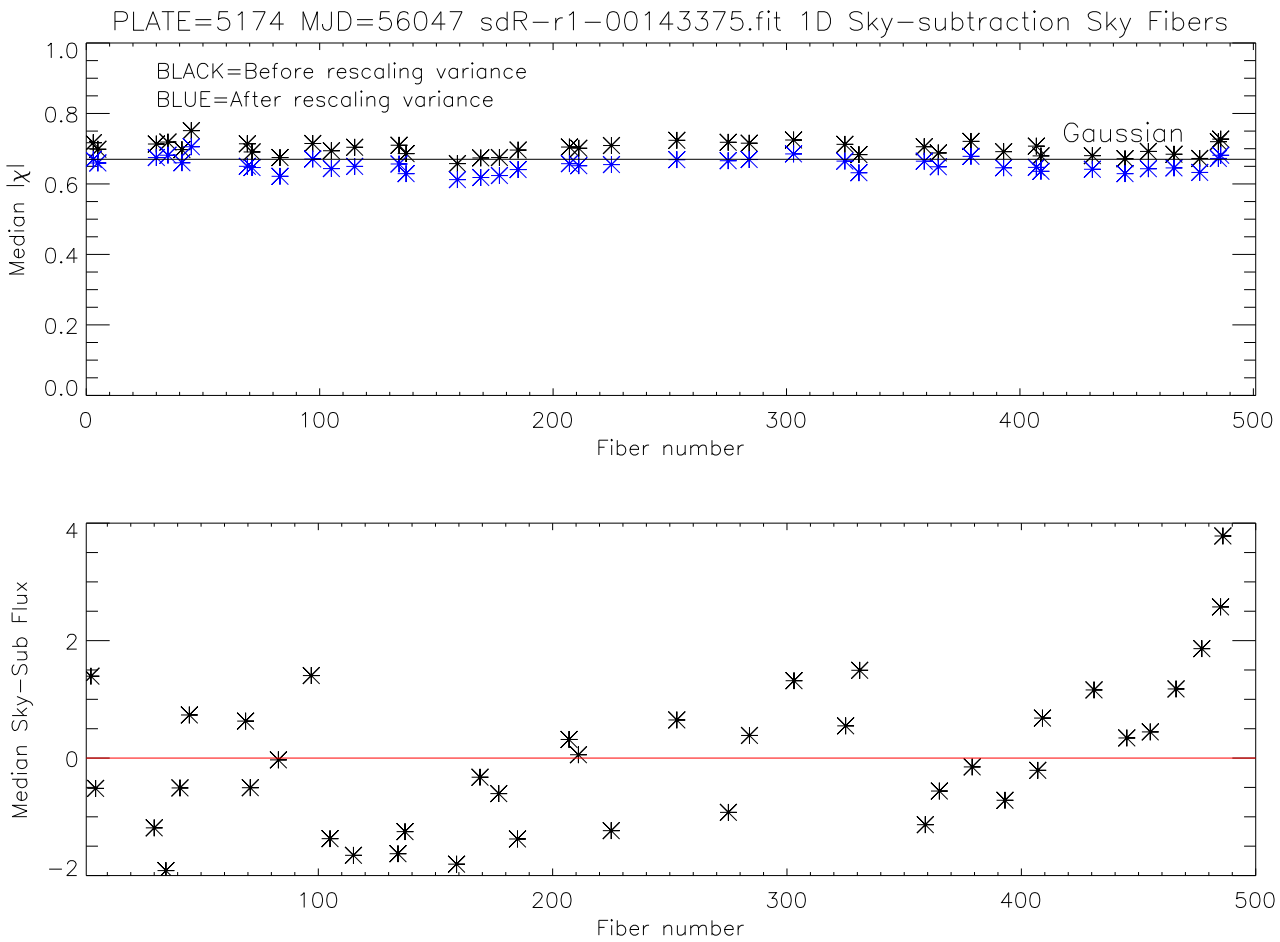

PLATE=5174 MJD=56047 Arcline Fit for sdR-r1-00143373.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sat May 28 00:00:37 2016

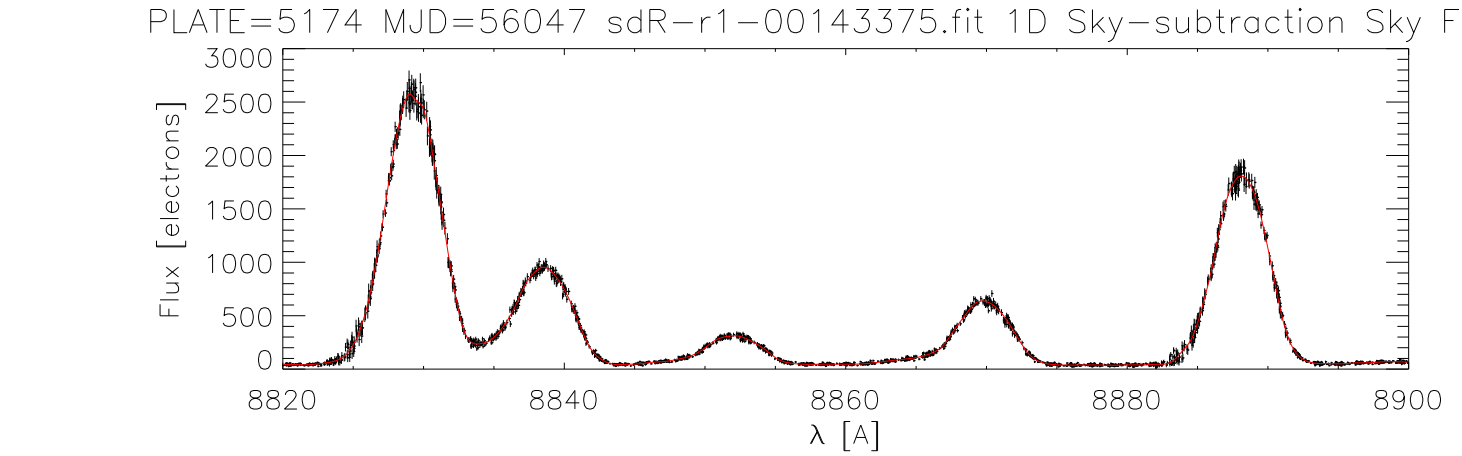

PLATE=5174 MJD=56047 Fiber−Flats for sdR−r1−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −9.787
Max value = 3.431
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 00:00:52 2016

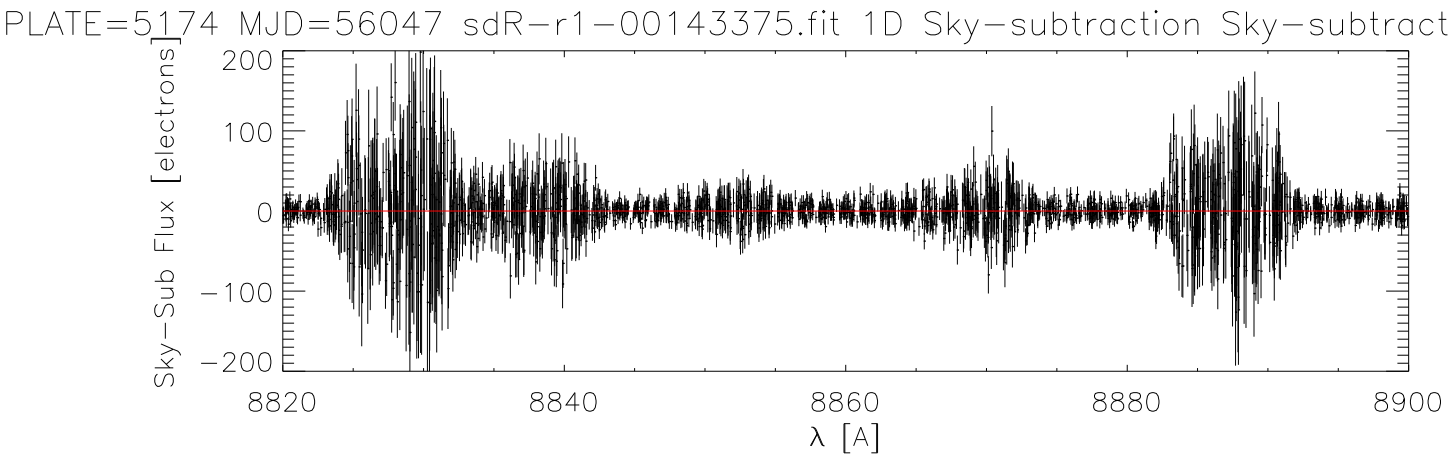

PLATE=5174 MJD=56047 Extraction chi^2 for sdR−r1−00143375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-r1-00143375.fit
Before shift
After shift
1.00 pix
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

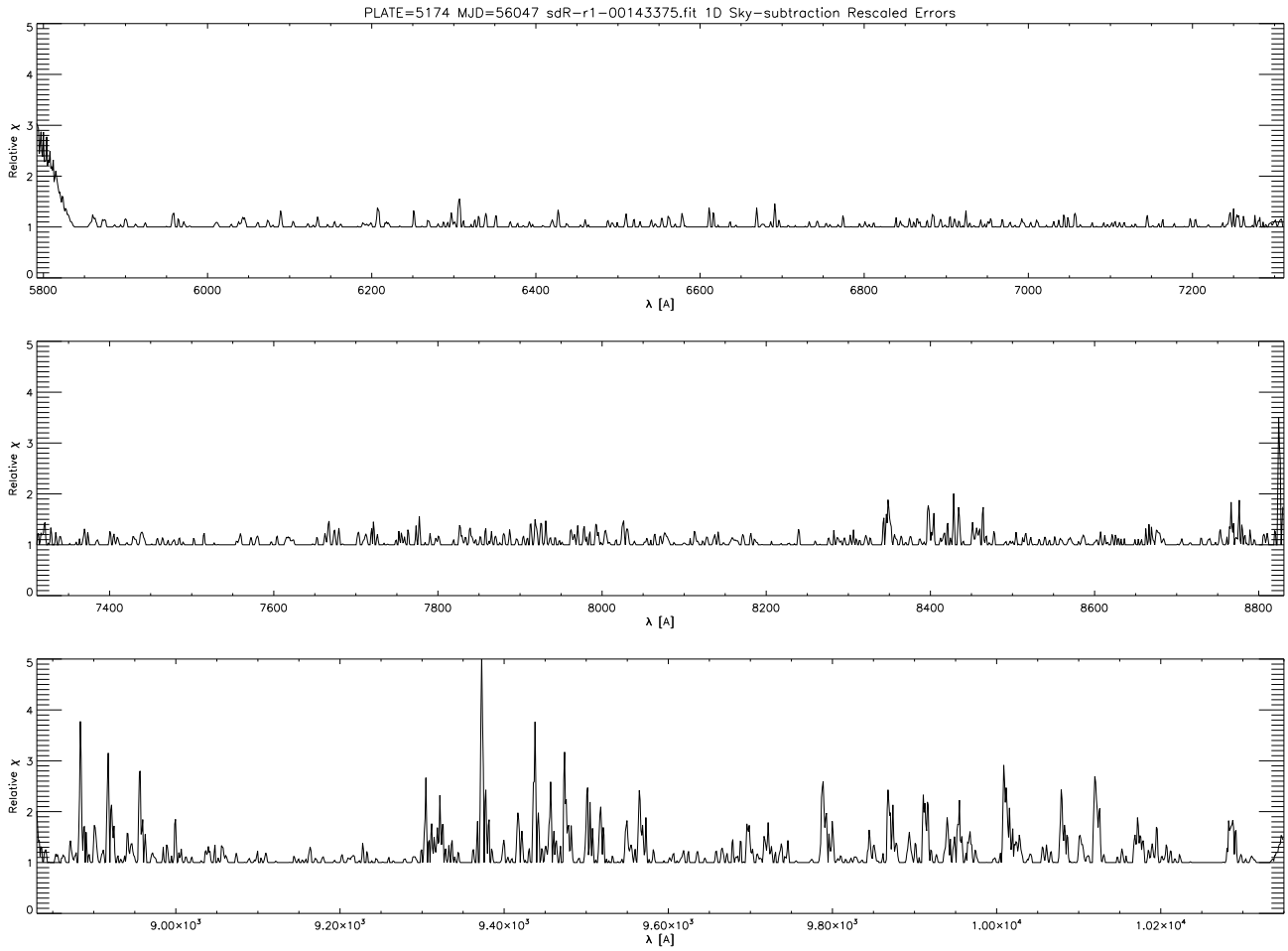

PLATE=5174 MJD=56047 Smooth superflat for sdR-r1-00143375.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

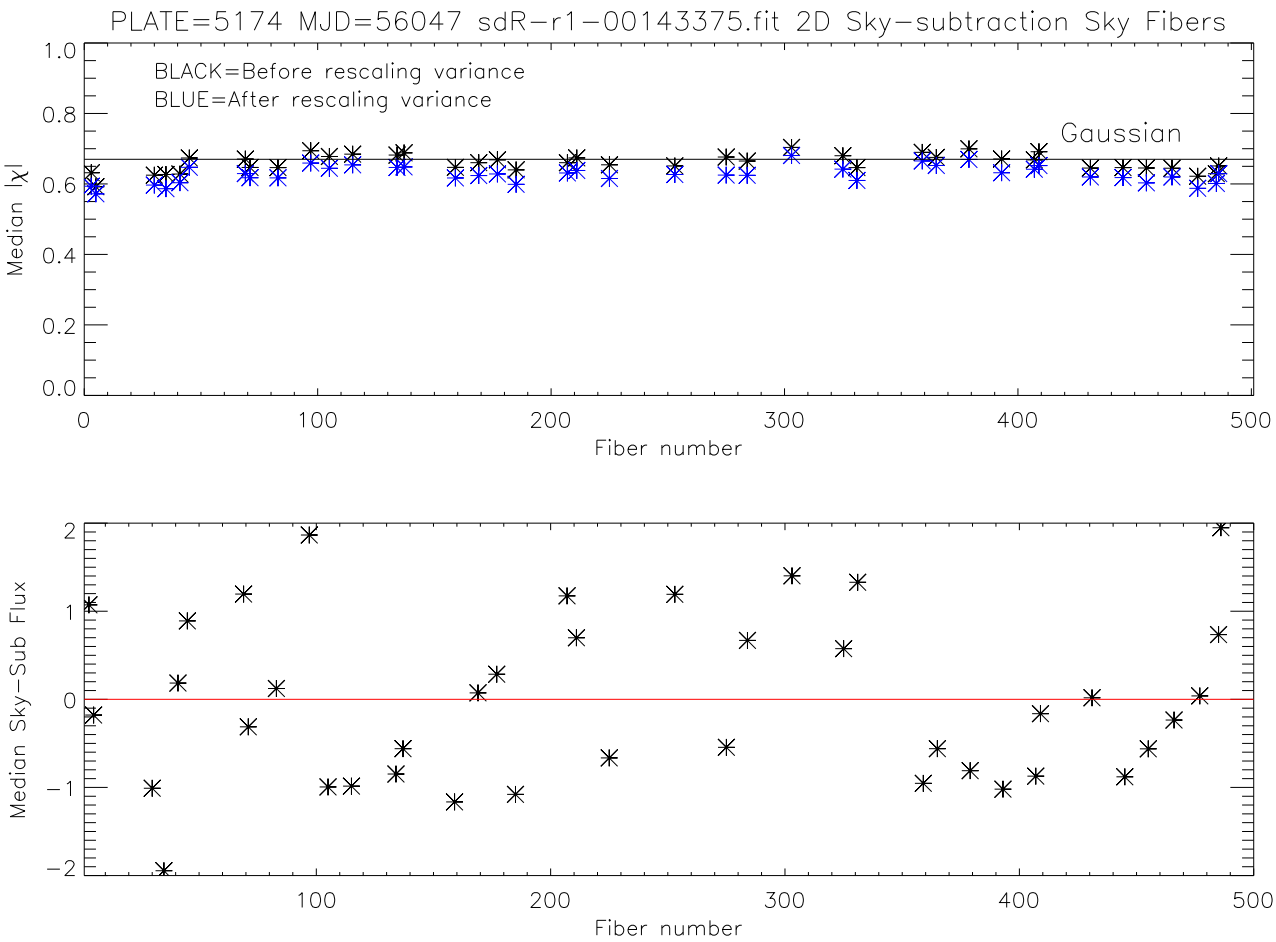

PLATE=5174 MJD=56047 sdR-r1-00143375.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

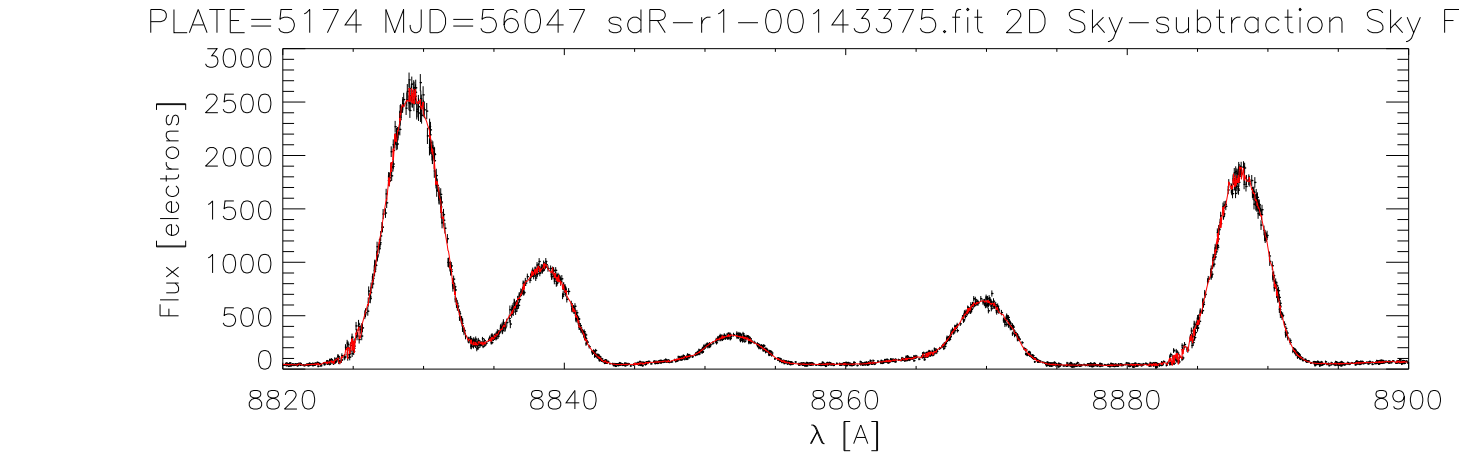

PLATE=5174 MJD=56047 sdR-r1-00143375.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

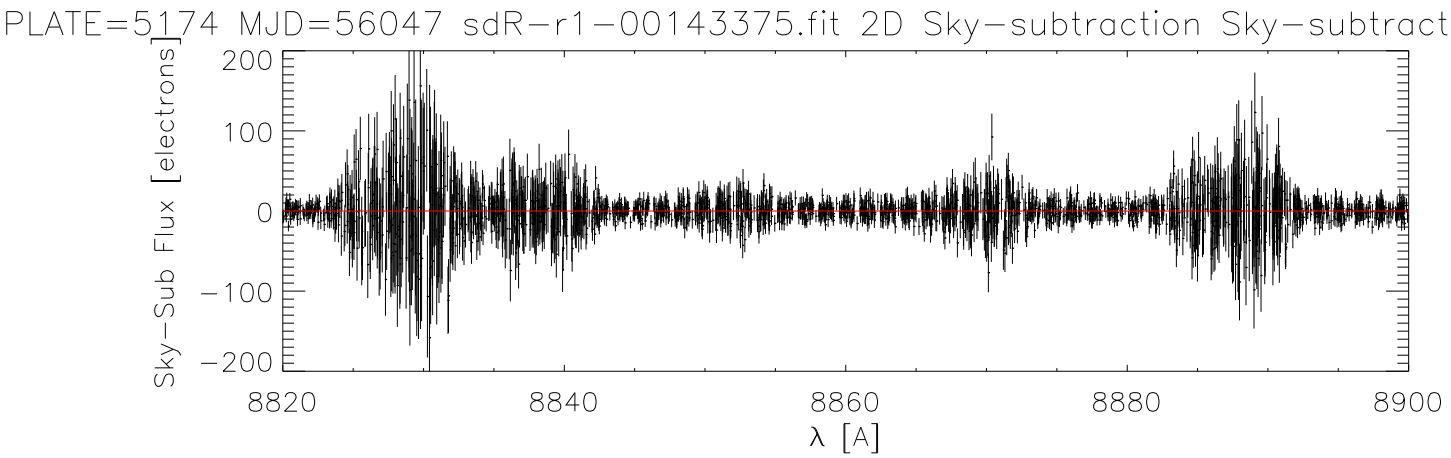

PLATE=5174 MJD=56047 sdR-r1-00143375.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 40

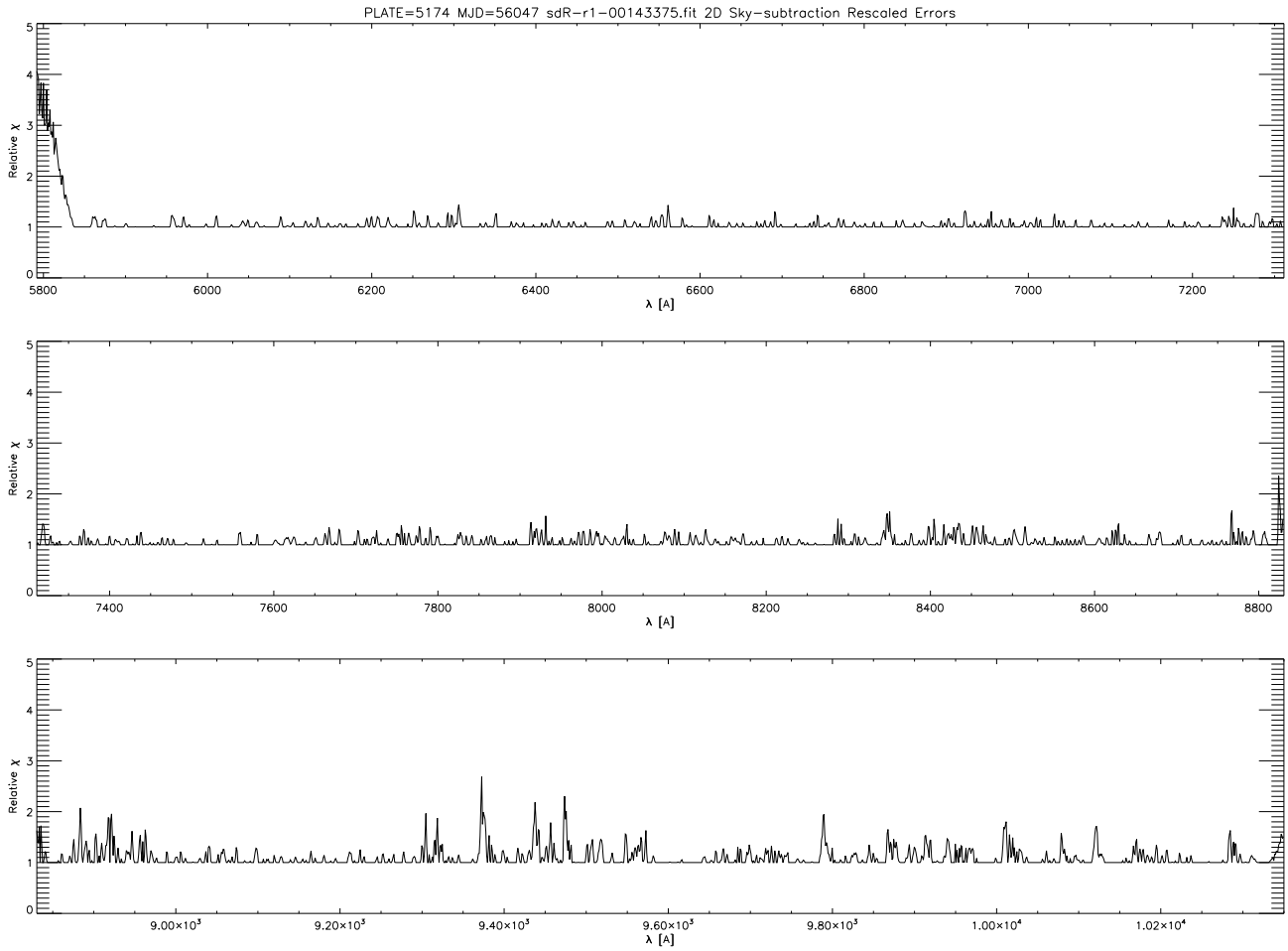


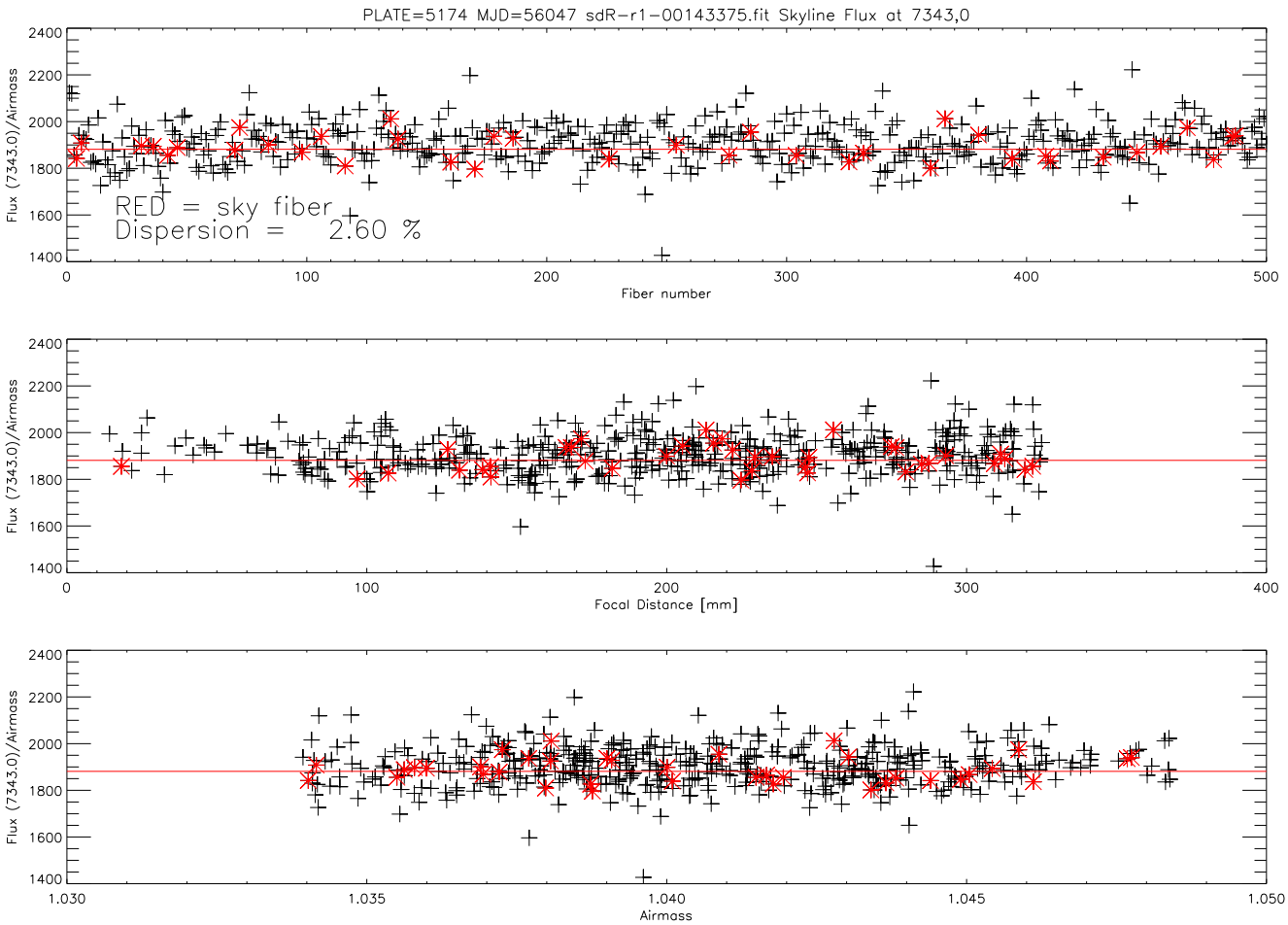

PLATE=5174 MJD=56047 sdR-r1-00143375.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

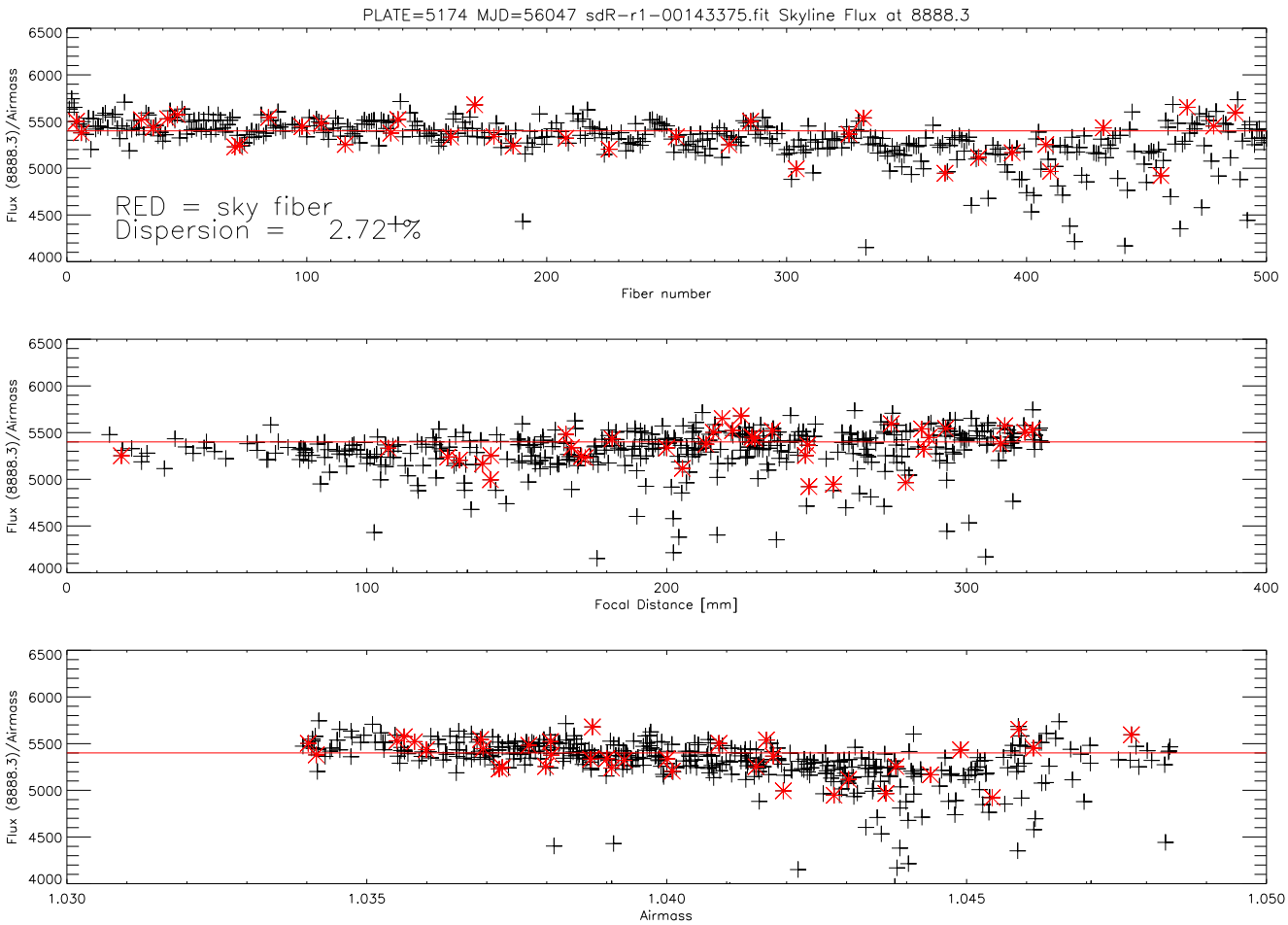

PLATE=5174 MJD=56047 sdR-r1-00143375.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
8820
8840
8860
8880
8900
λ [A]

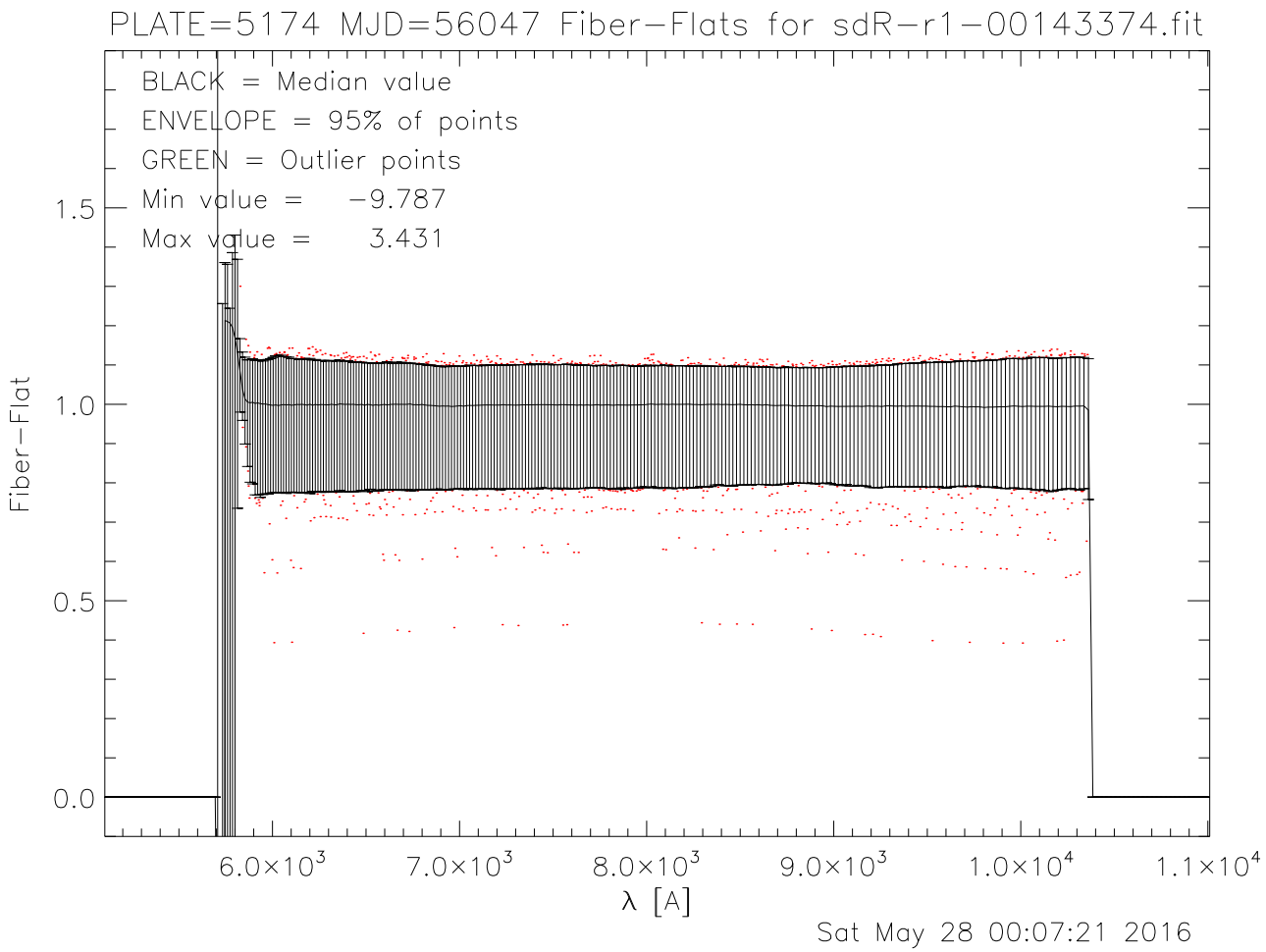

PLATE=5174 MJD=56047 sdR-r1-00143375.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

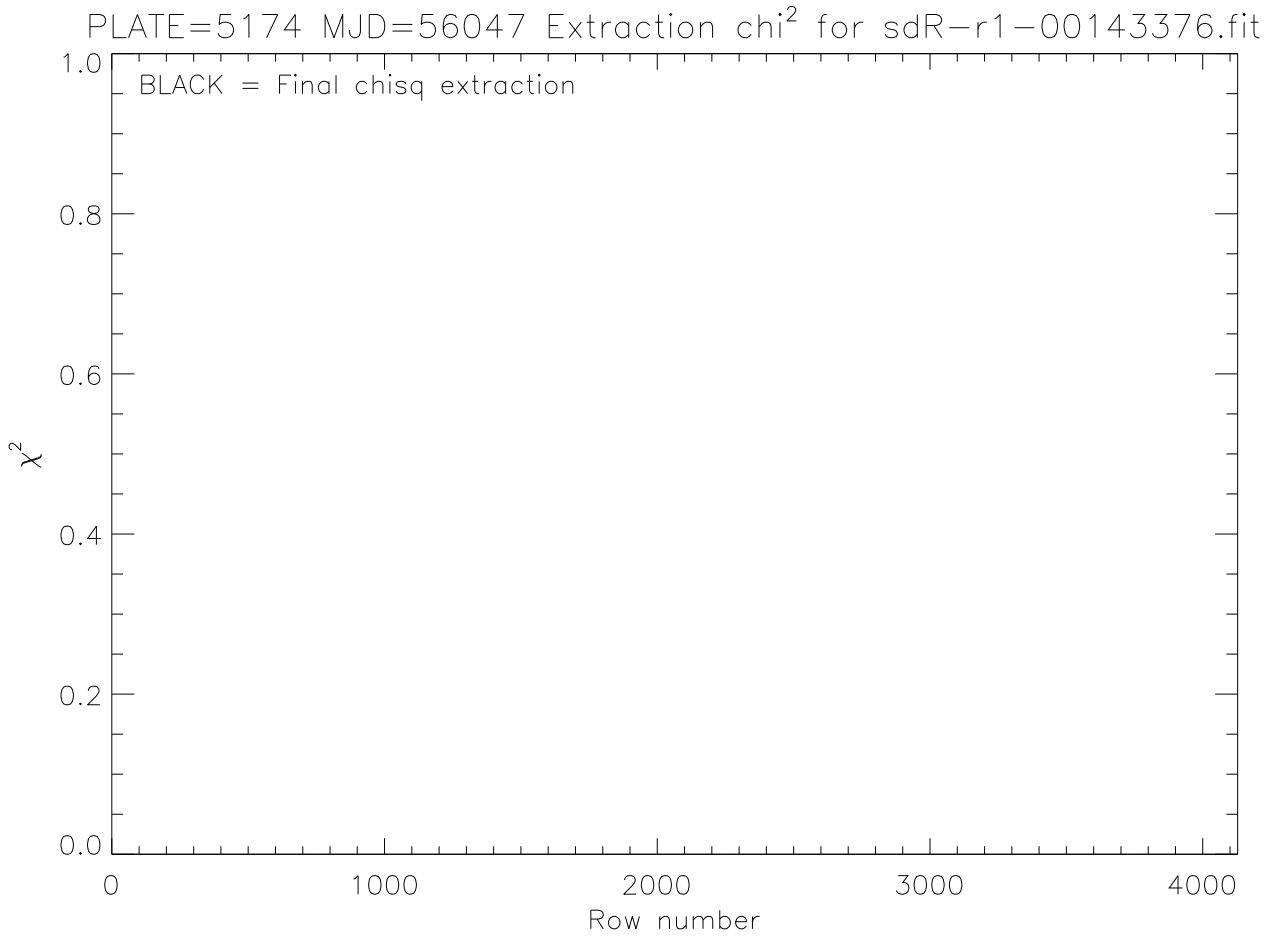
Number of sky fibers = 40

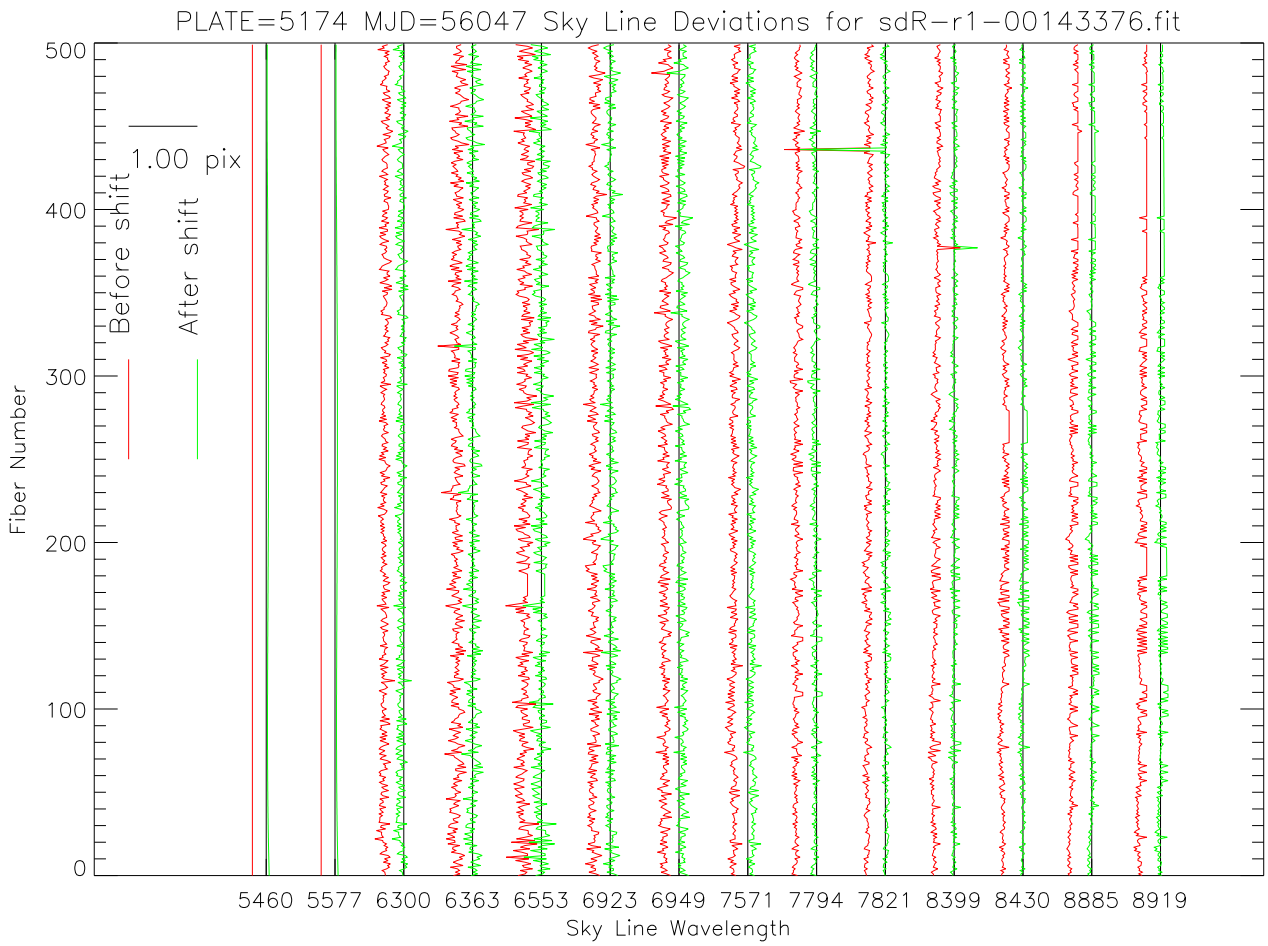


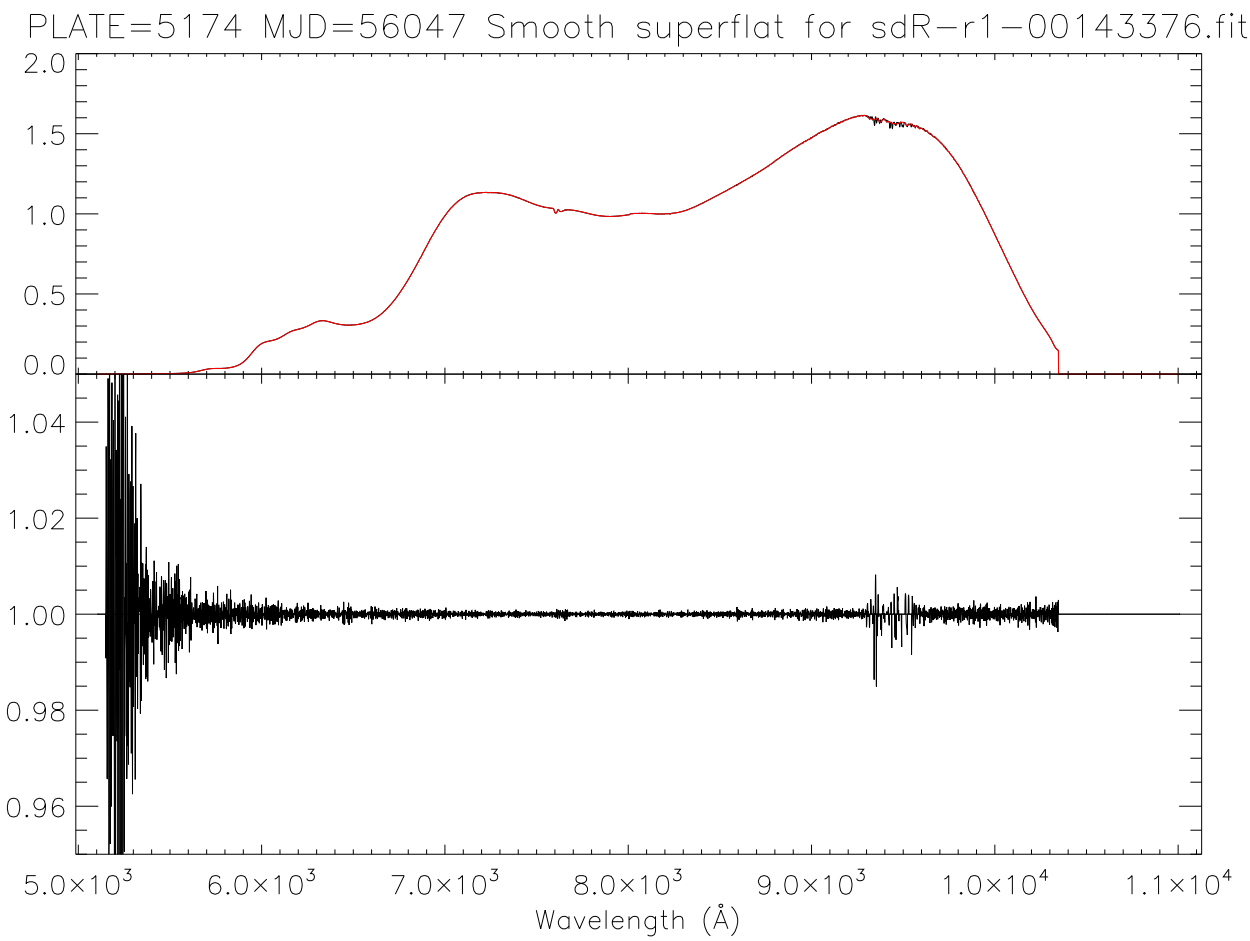

PLATE=5174 MJD=56047 sdR-r1-00143375.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.60 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

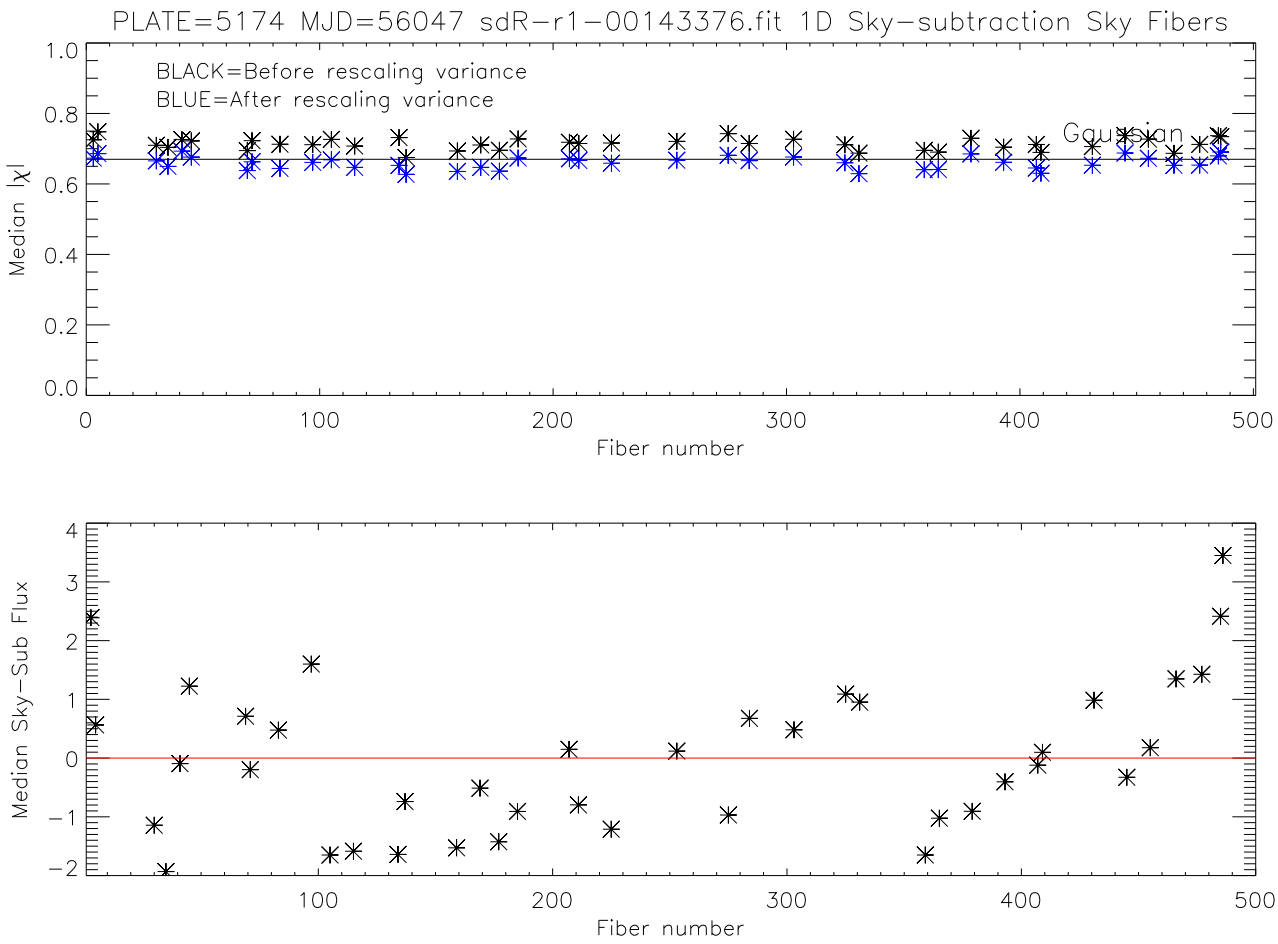

PLATE=5174 MJD=56047 sdR-r1-00143375.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.72+%
Fiber number
Focal Distance [mm]
Airmass

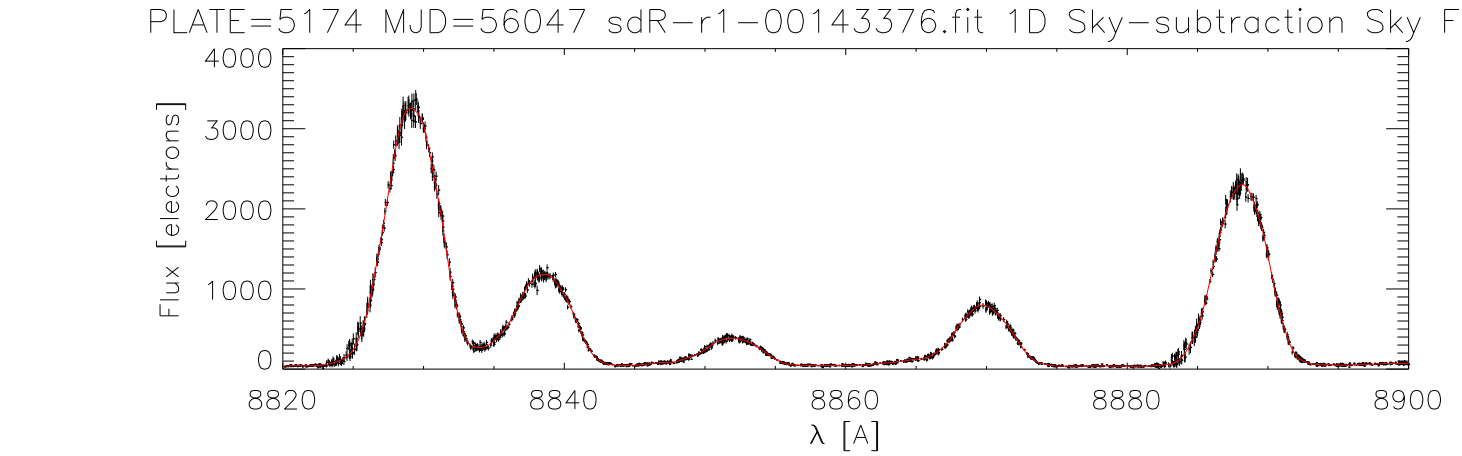

PLATE=5174 MJD=56047 Fiber−Flats for sdR−r1−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −9.787
Max value = 3.431
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 00:07:21 2016

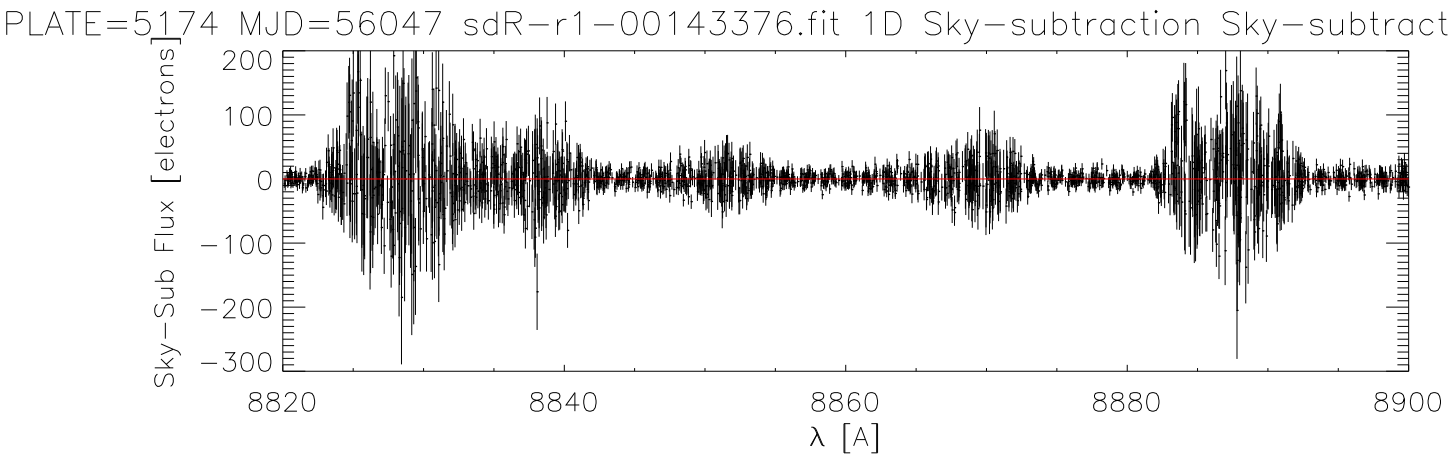

PLATE=5174 MJD=56047 Extraction chi^2 for sdR−r1−00143376.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-r1-00143376.fit
Before shift
After shift
1.00 pix
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

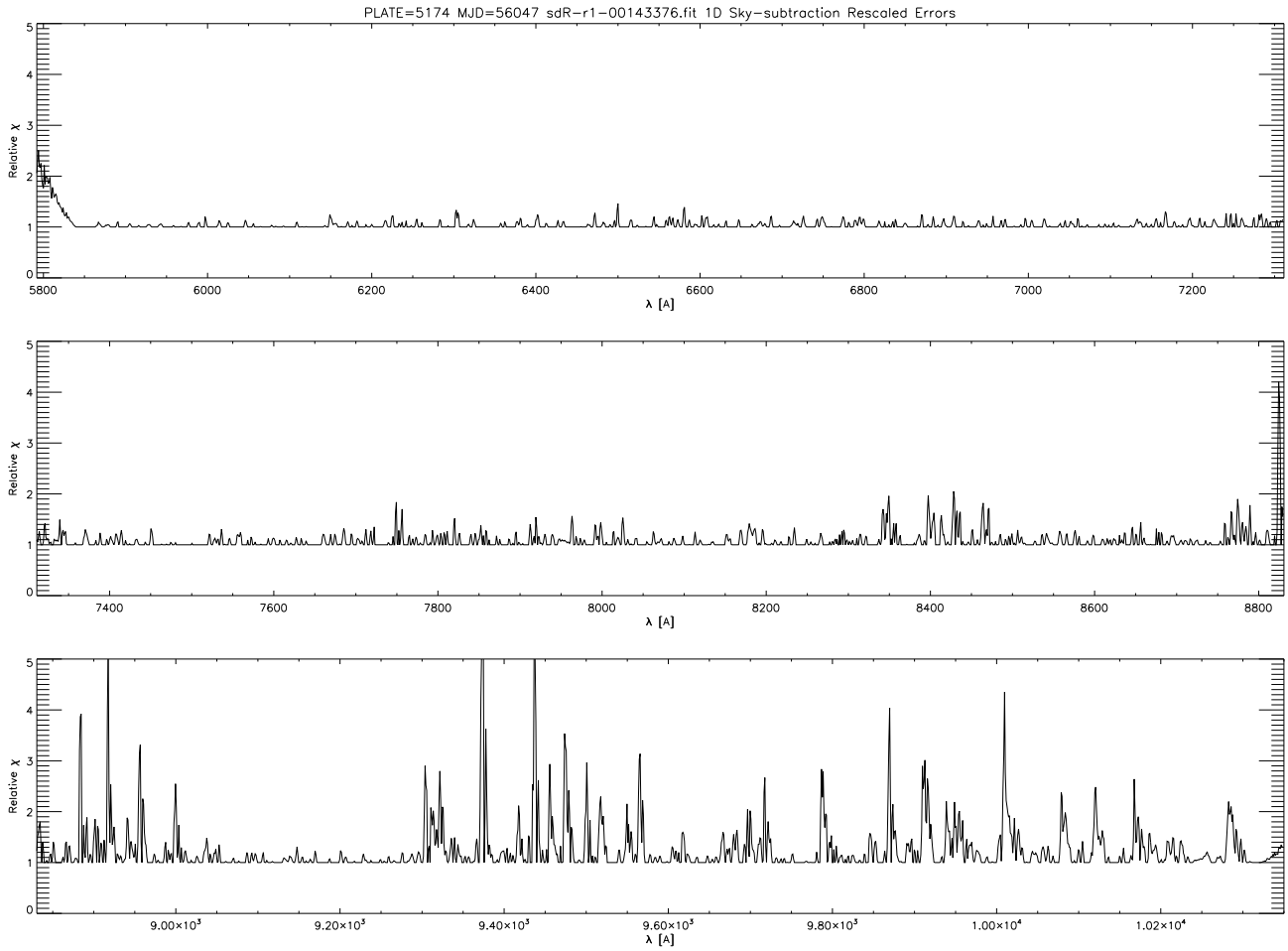

PLATE=5174 MJD=56047 Smooth superflat for sdR-r1-00143376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

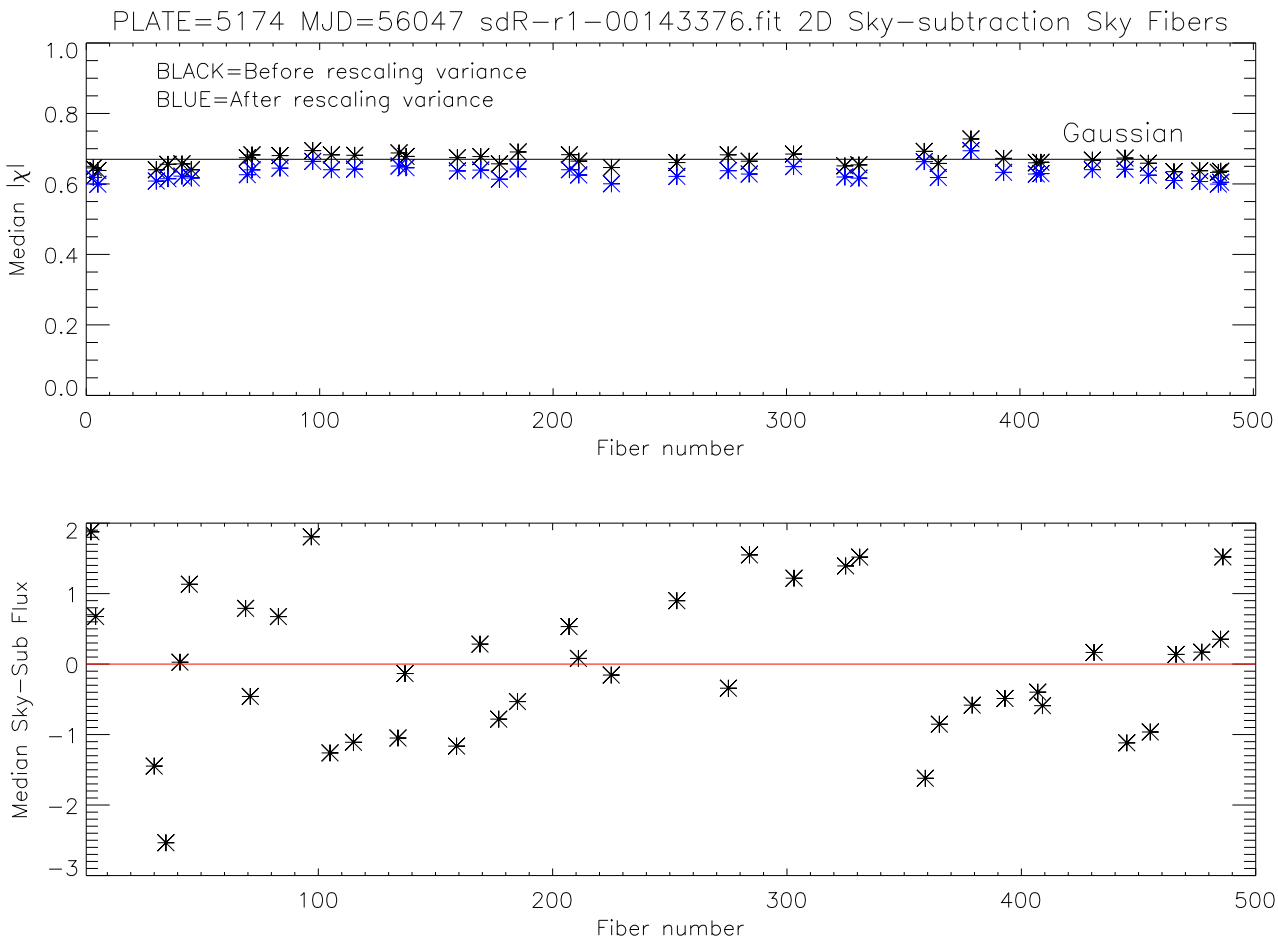

PLATE=5174 MJD=56047 sdR-r1-00143376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

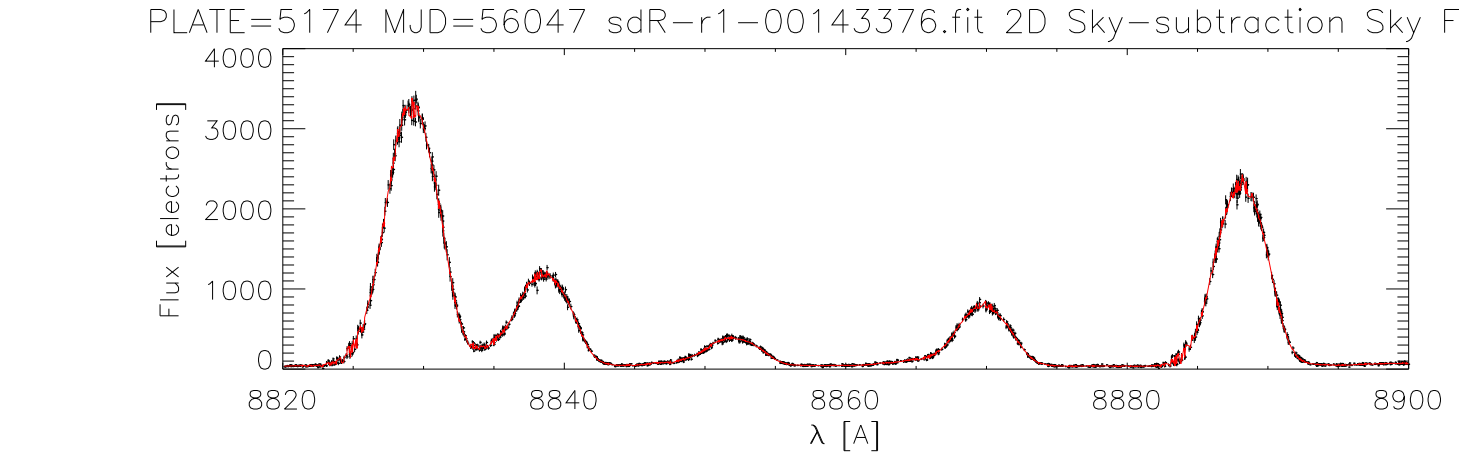

PLATE=5174 MJD=56047 sdR-r1-00143376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

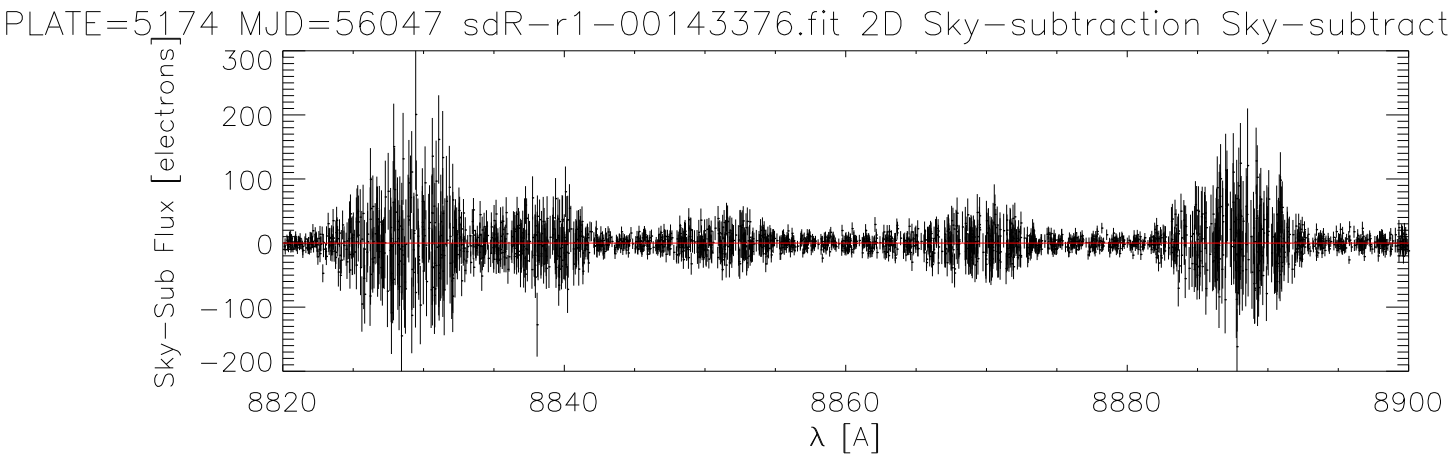

PLATE=5174 MJD=56047 sdR-r1-00143376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 40

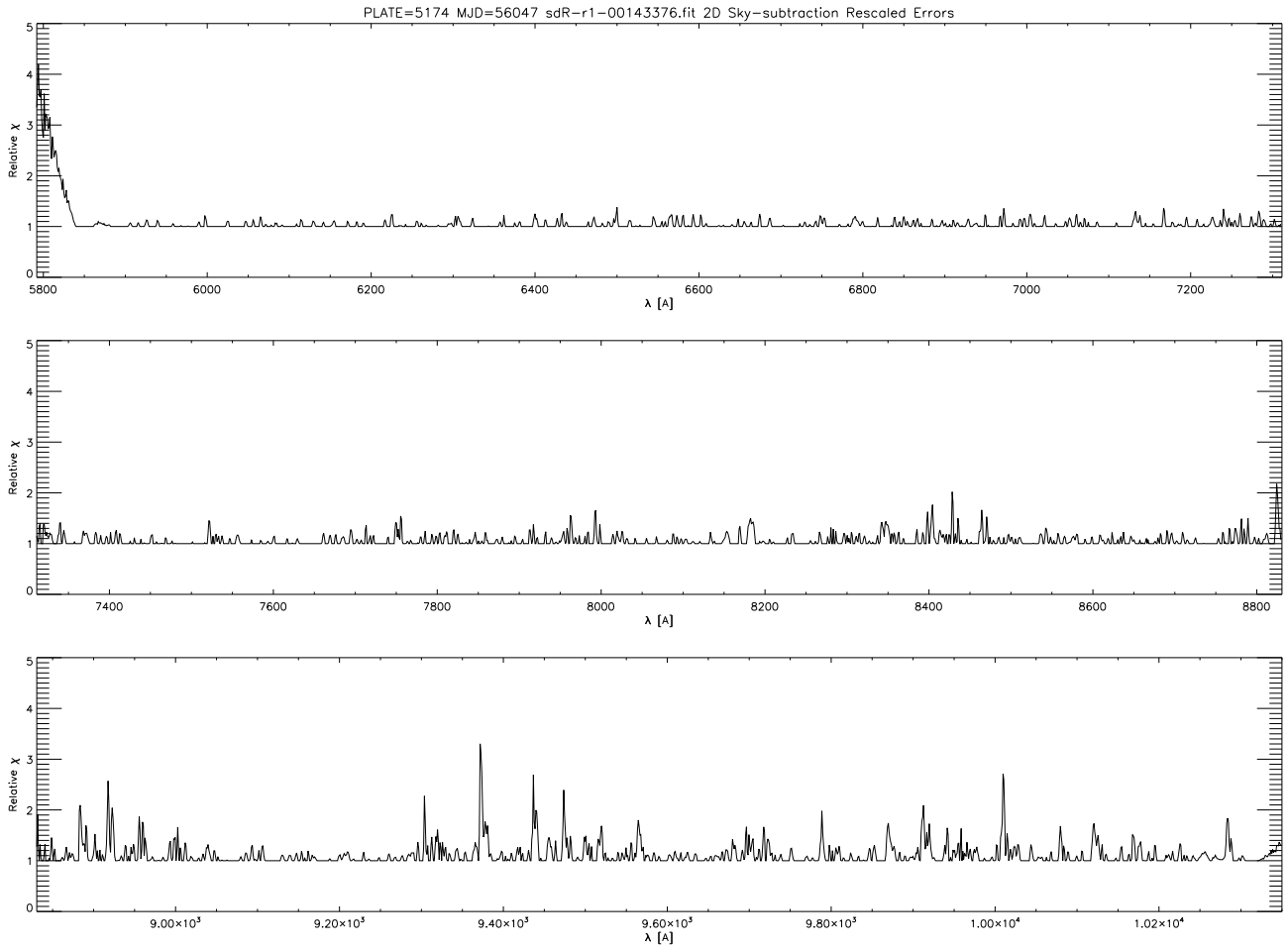


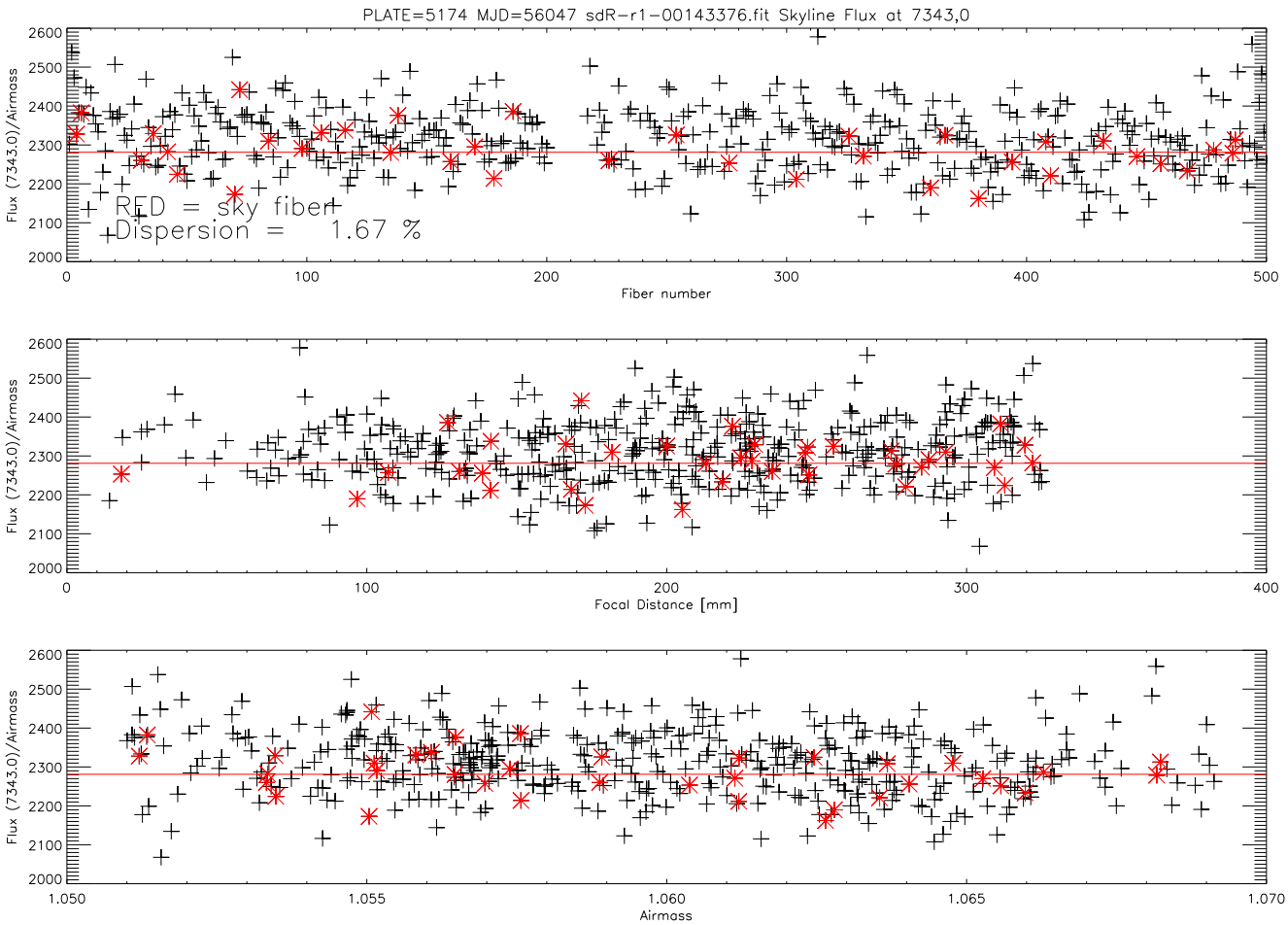

PLATE=5174 MJD=56047 sdR-r1-00143376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

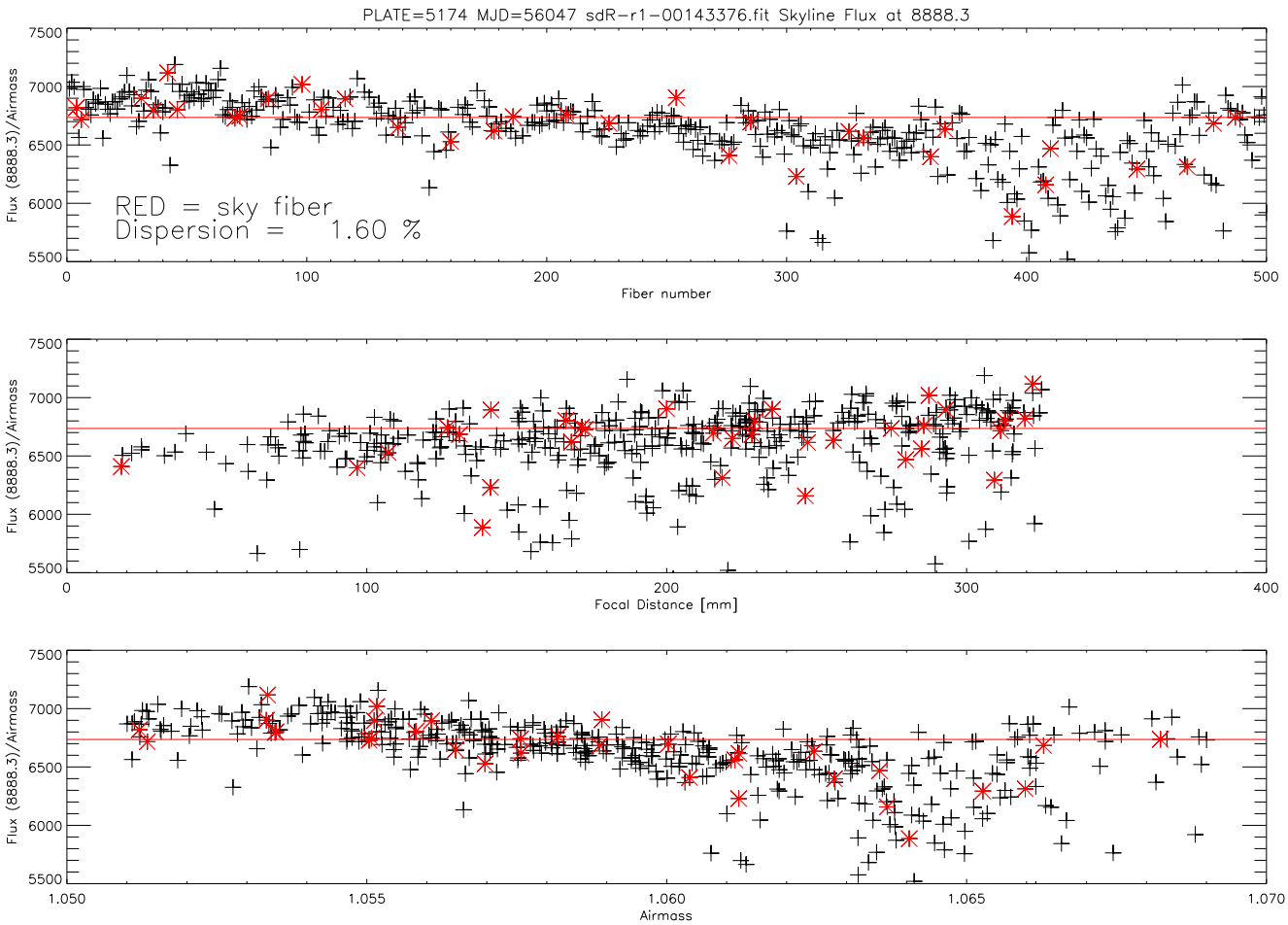

PLATE=5174 MJD=56047 sdR-r1-00143376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

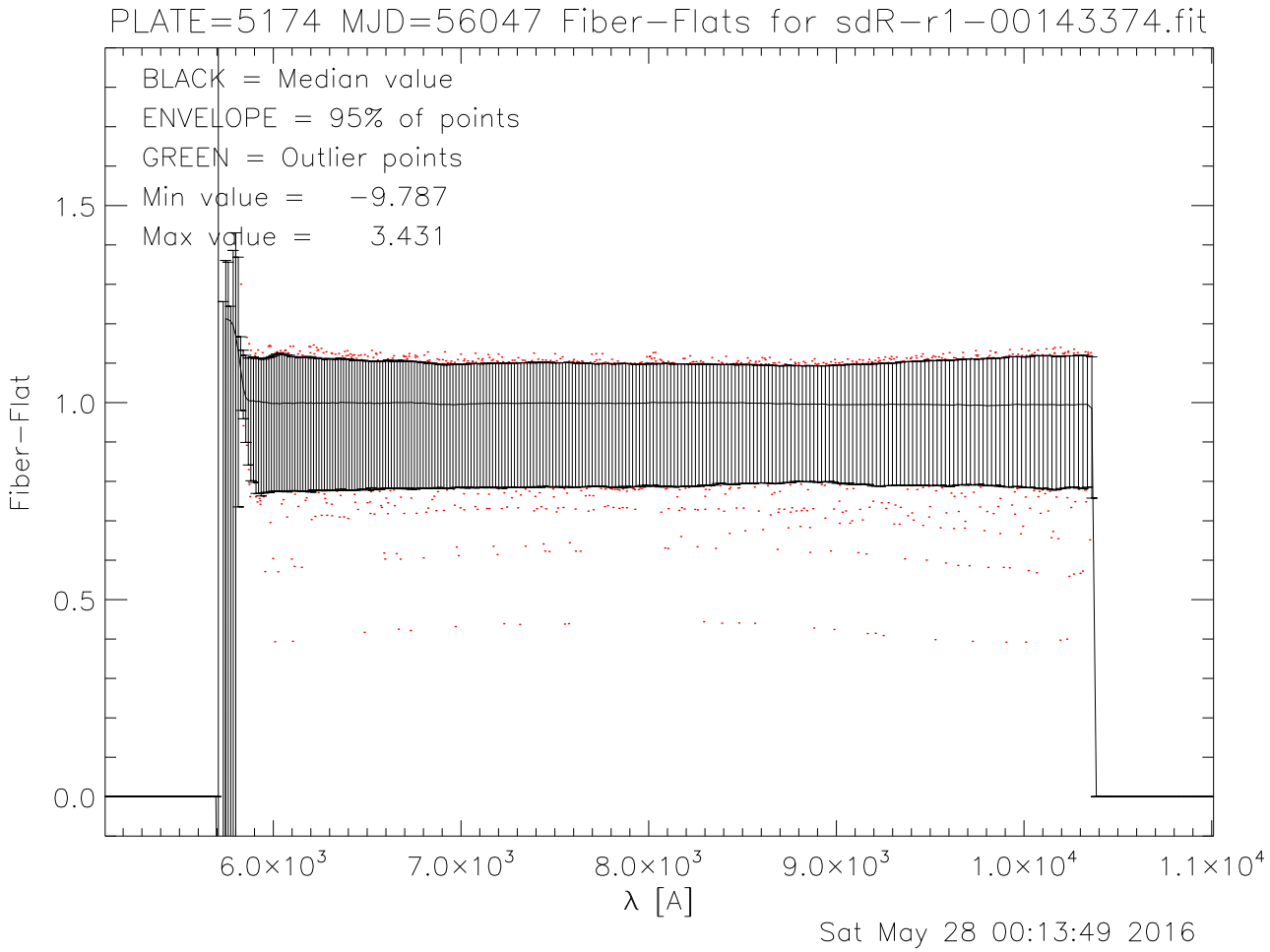

PLATE=5174 MJD=56047 sdR-r1-00143376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

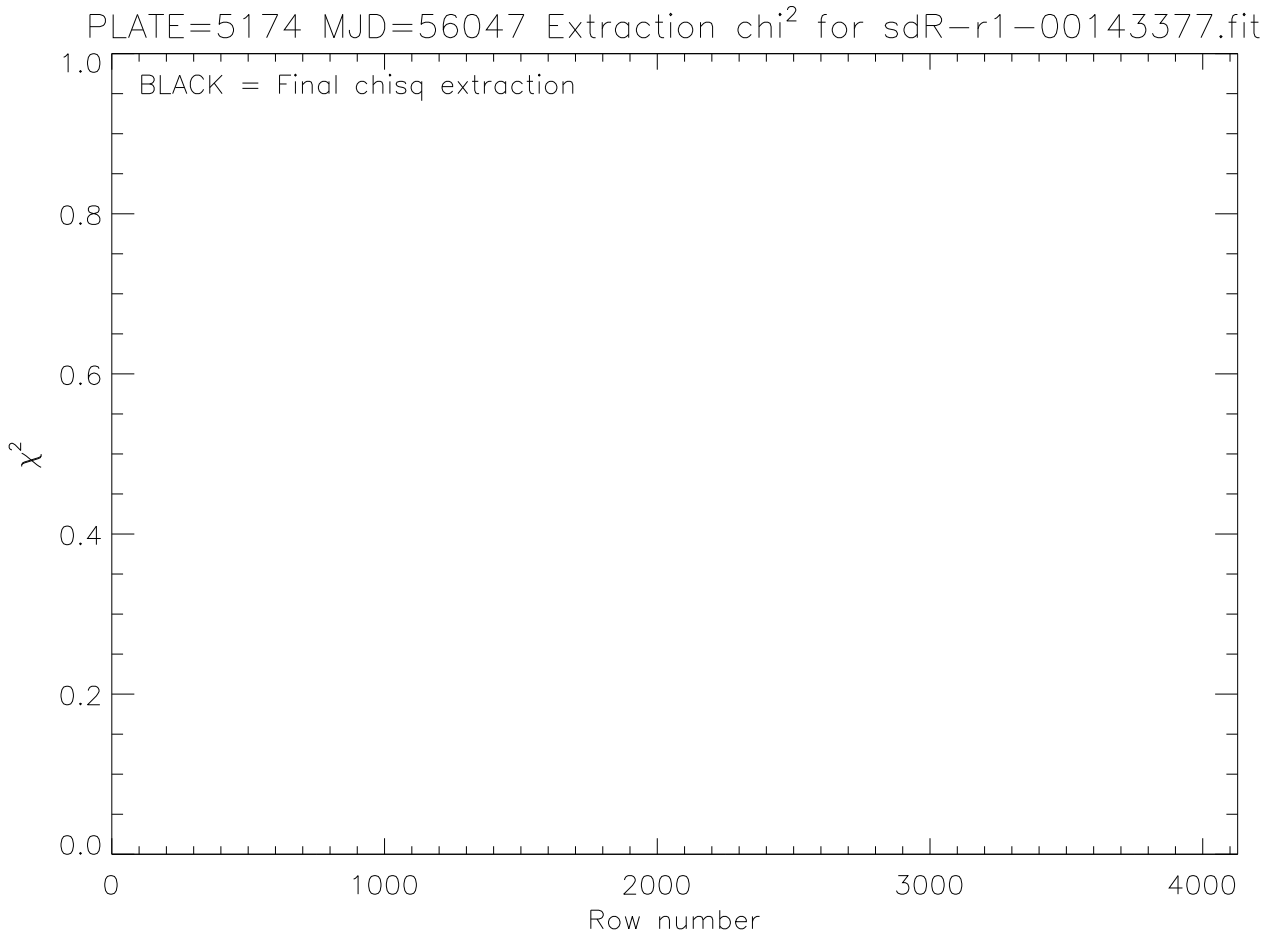
Number of sky fibers = 40

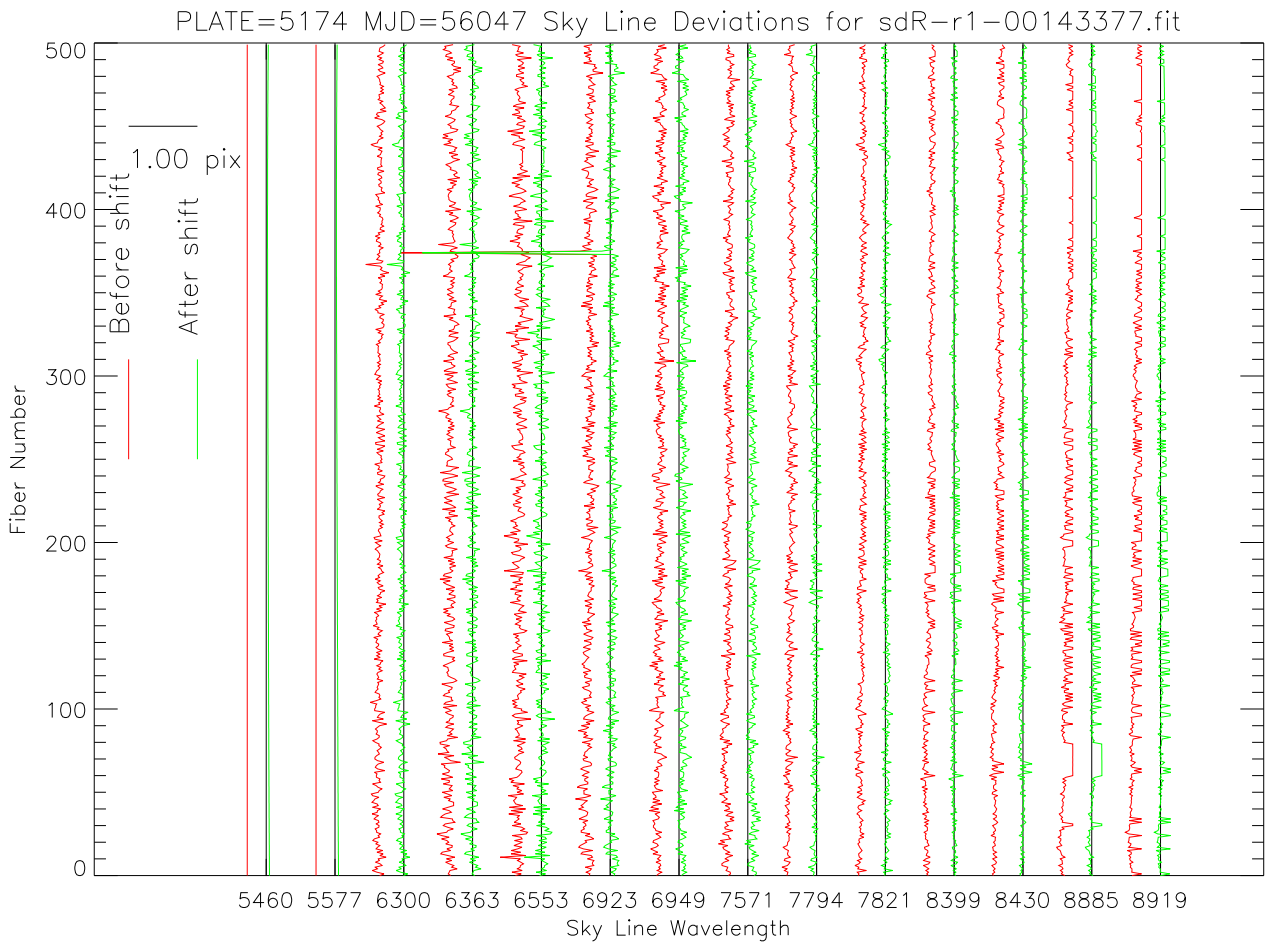


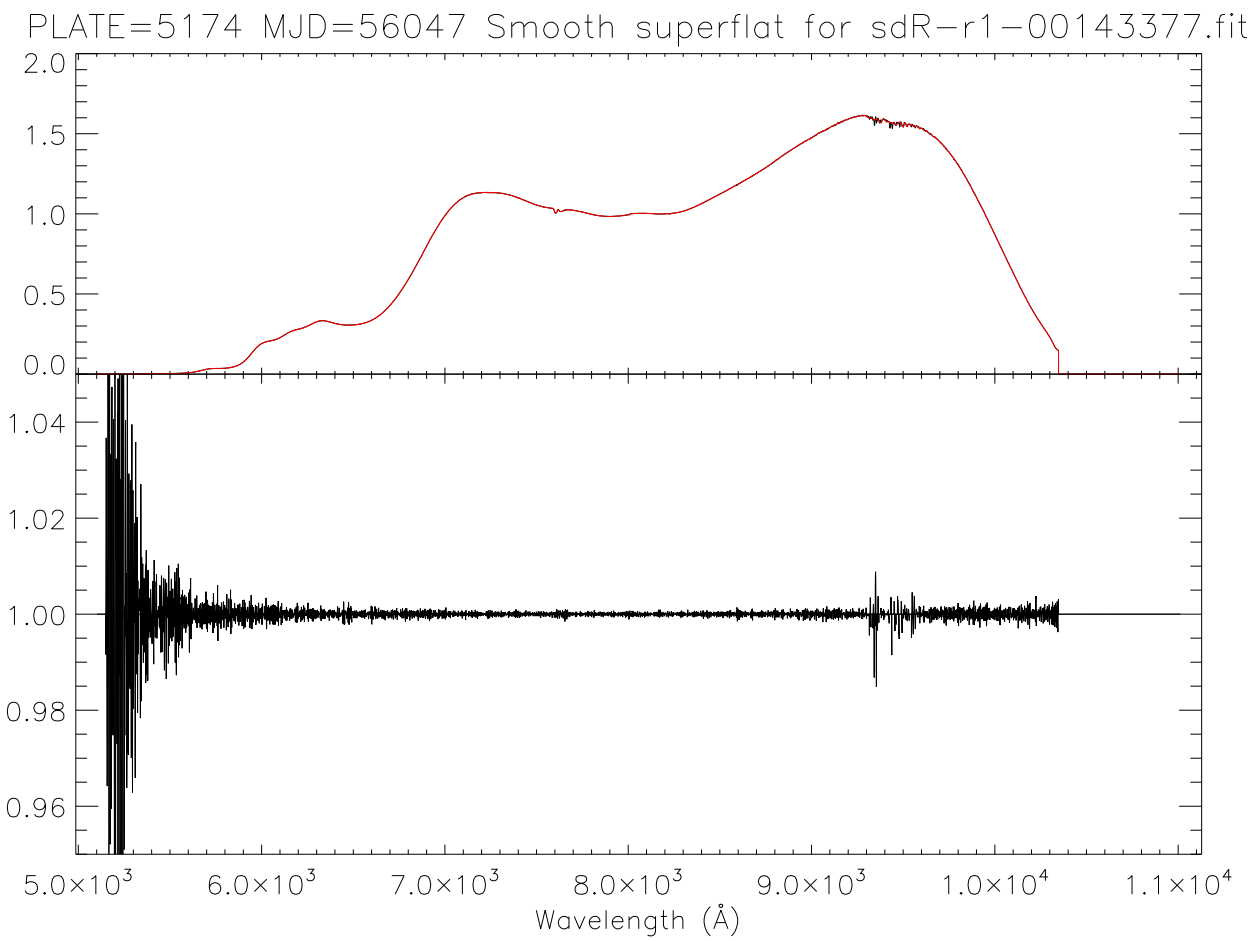

PLATE=5174 MJD=56047 sdR-r1-00143376.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.67 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

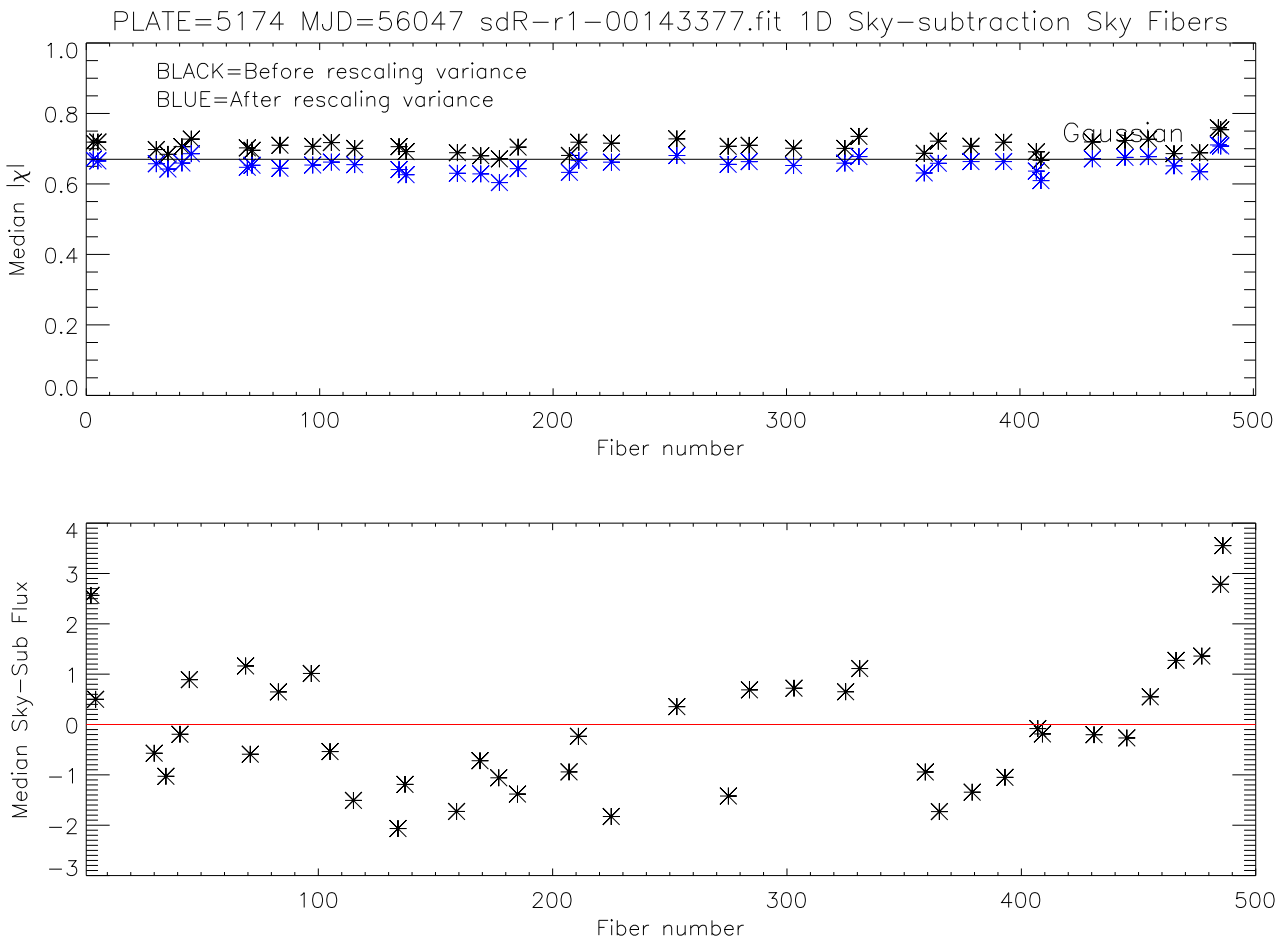

PLATE=5174 MJD=56047 sdR-r1-00143376.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.60 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

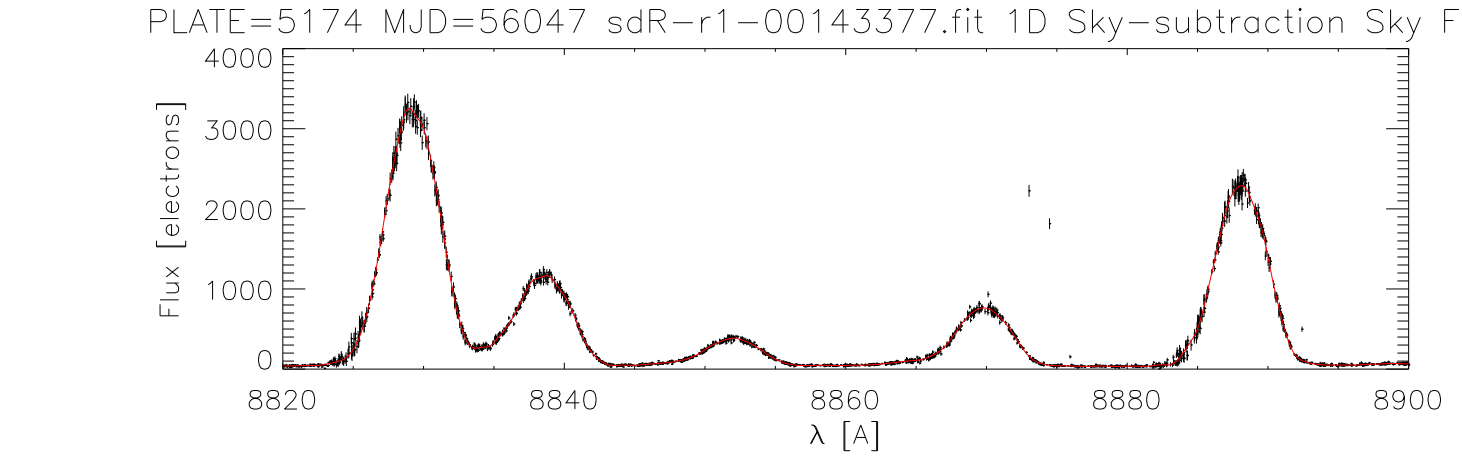

PLATE=5174 MJD=56047 Fiber−Flats for sdR−r1−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −9.787
Max value = 3.431
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 00:13:49 2016

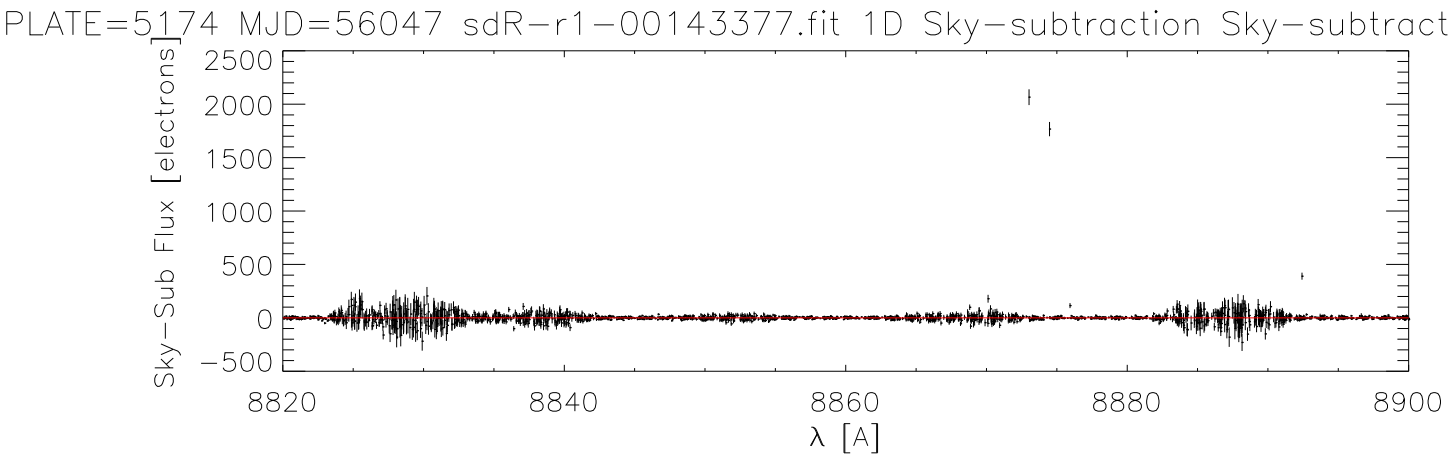

PLATE=5174 MJD=56047 Extraction chi^2 for sdR−r1−00143377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-r1-00143377.fit
Before shift
After shift
1.00 pix
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

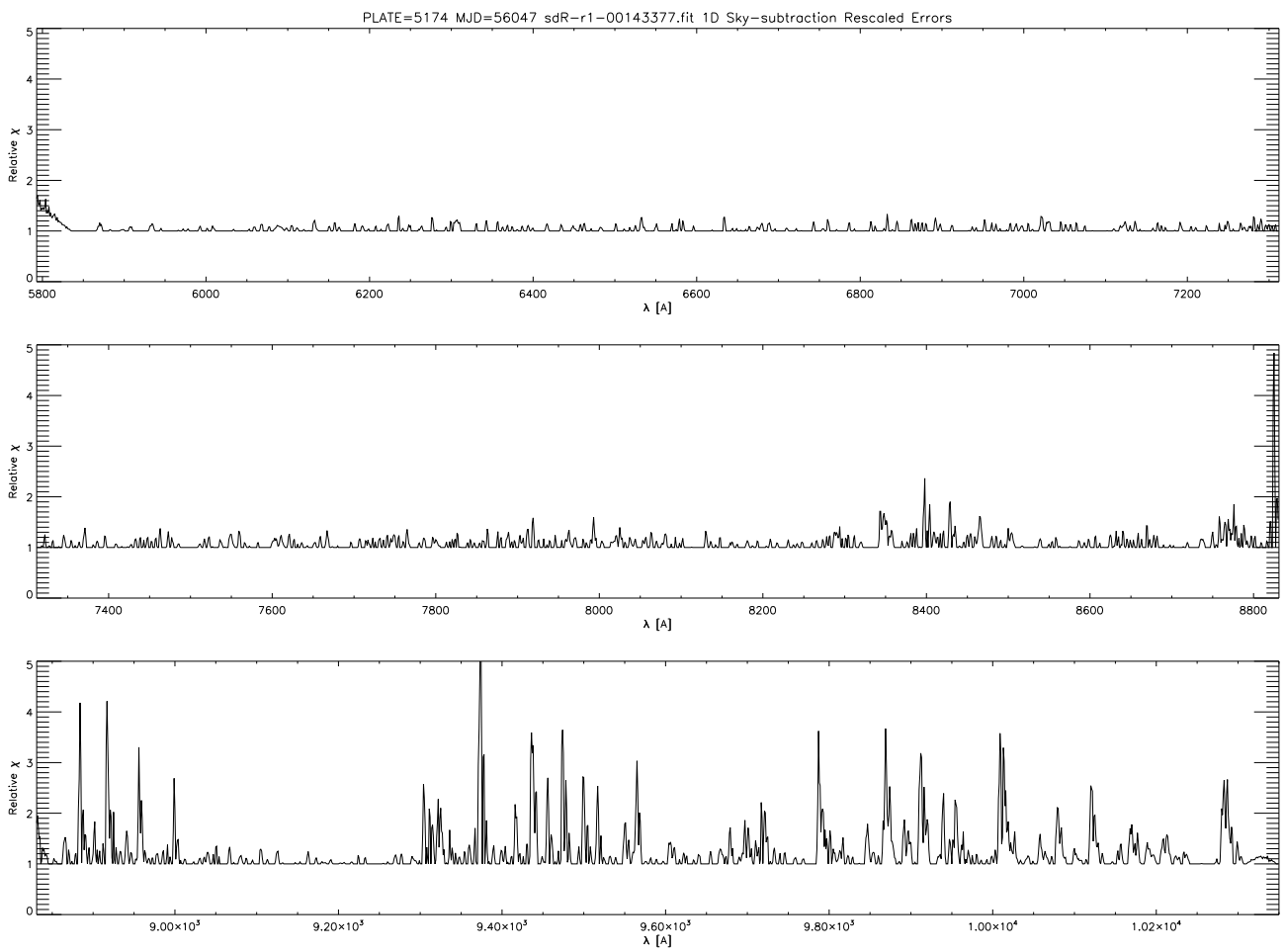

PLATE=5174 MJD=56047 Smooth superflat for sdR-r1-00143377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

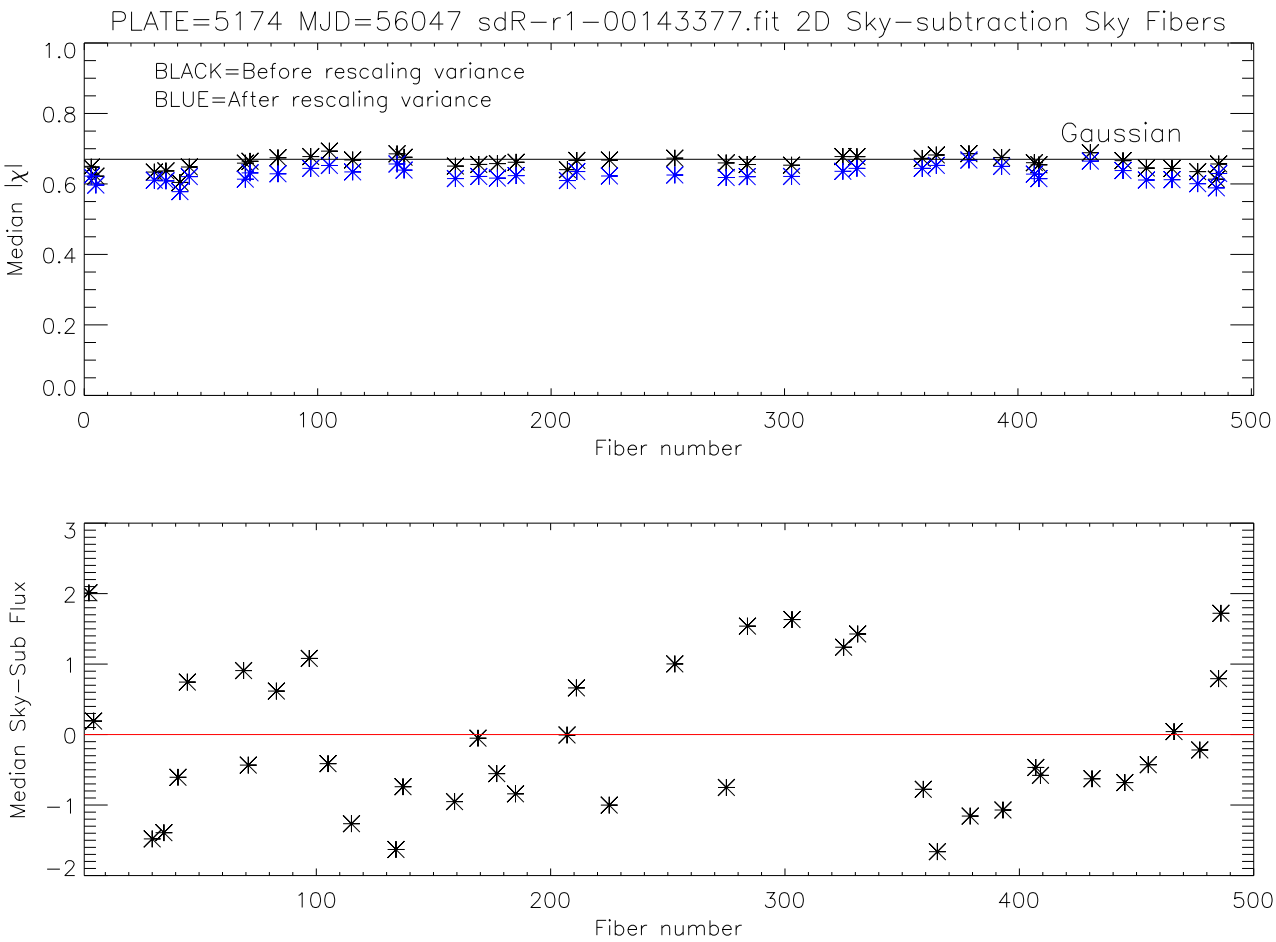

PLATE=5174 MJD=56047 sdR-r1-00143377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

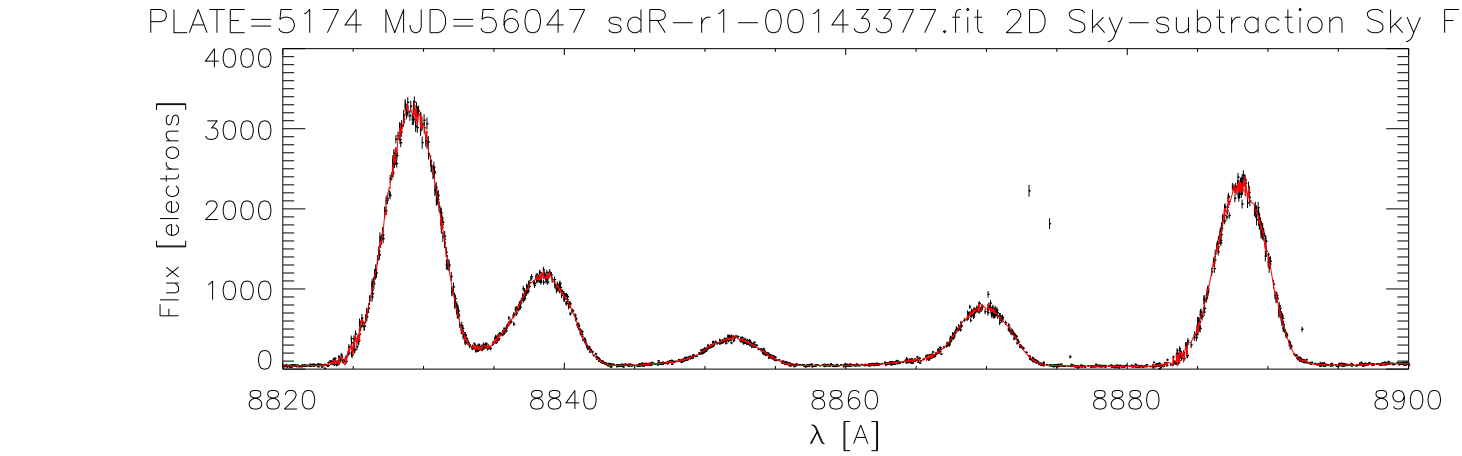

PLATE=5174 MJD=56047 sdR-r1-00143377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

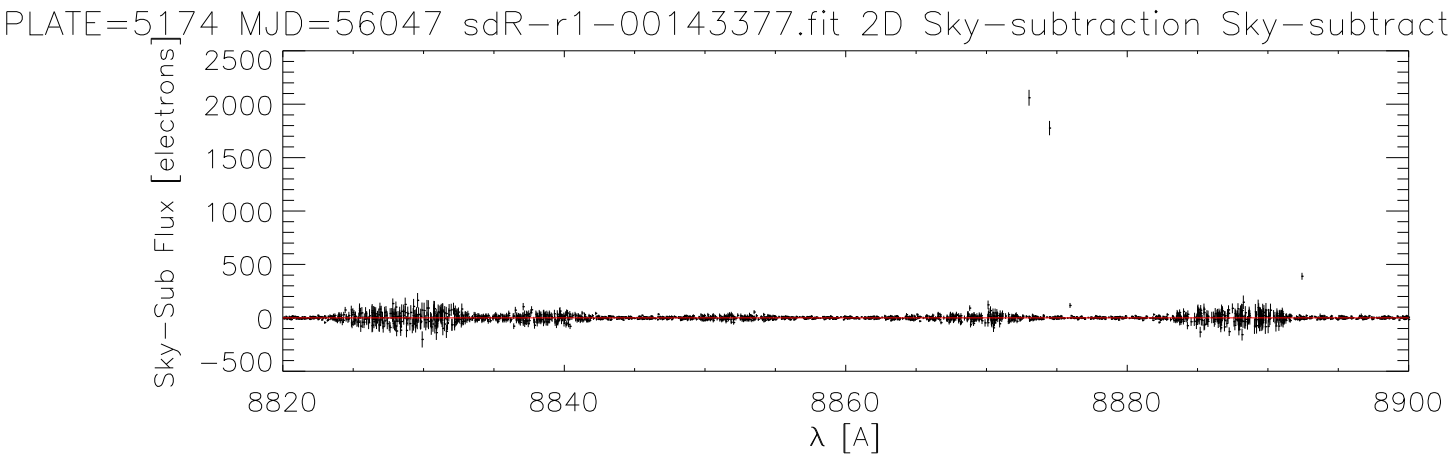

PLATE=5174 MJD=56047 sdR-r1-00143377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 40

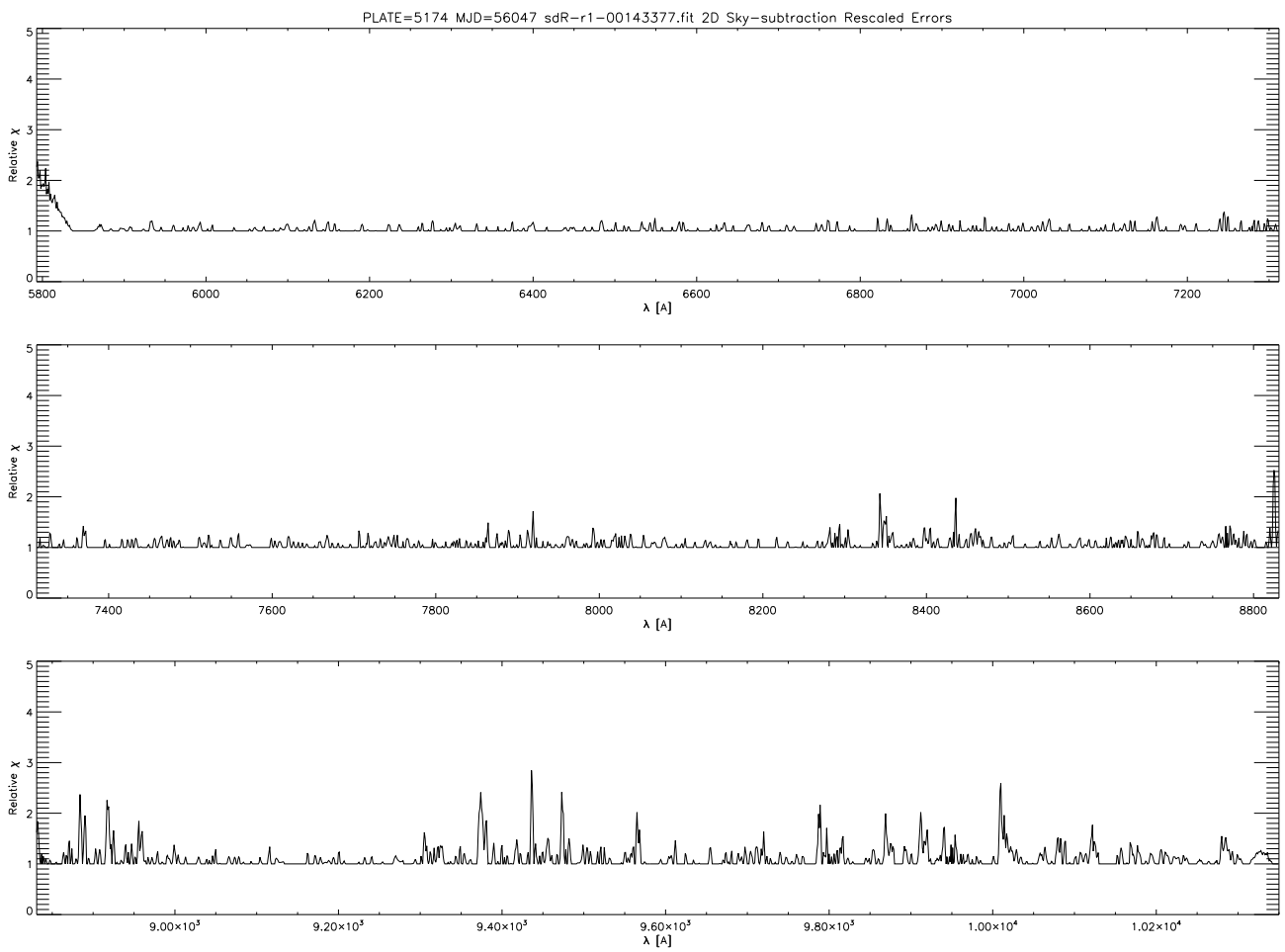


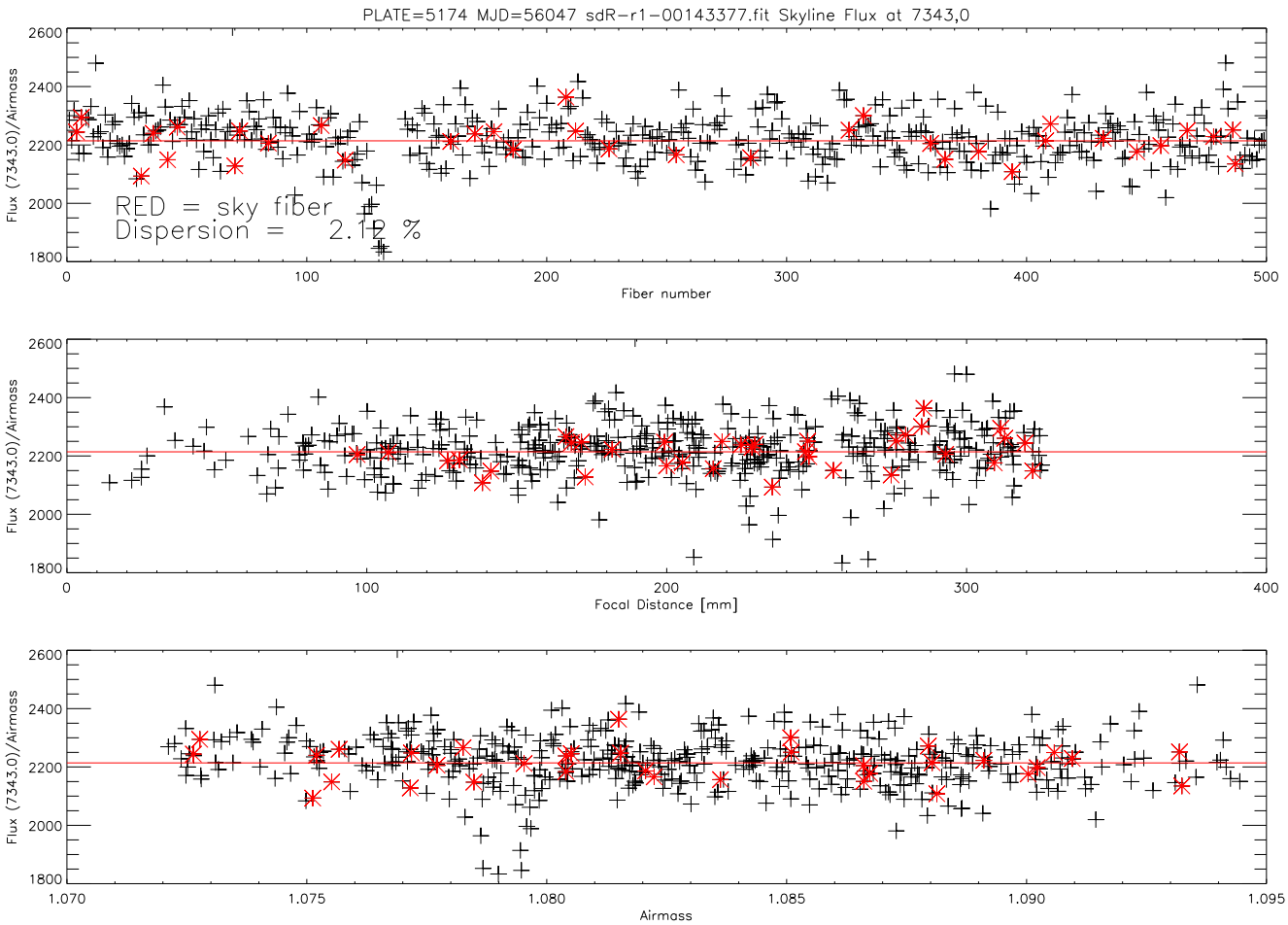

PLATE=5174 MJD=56047 sdR-r1-00143377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

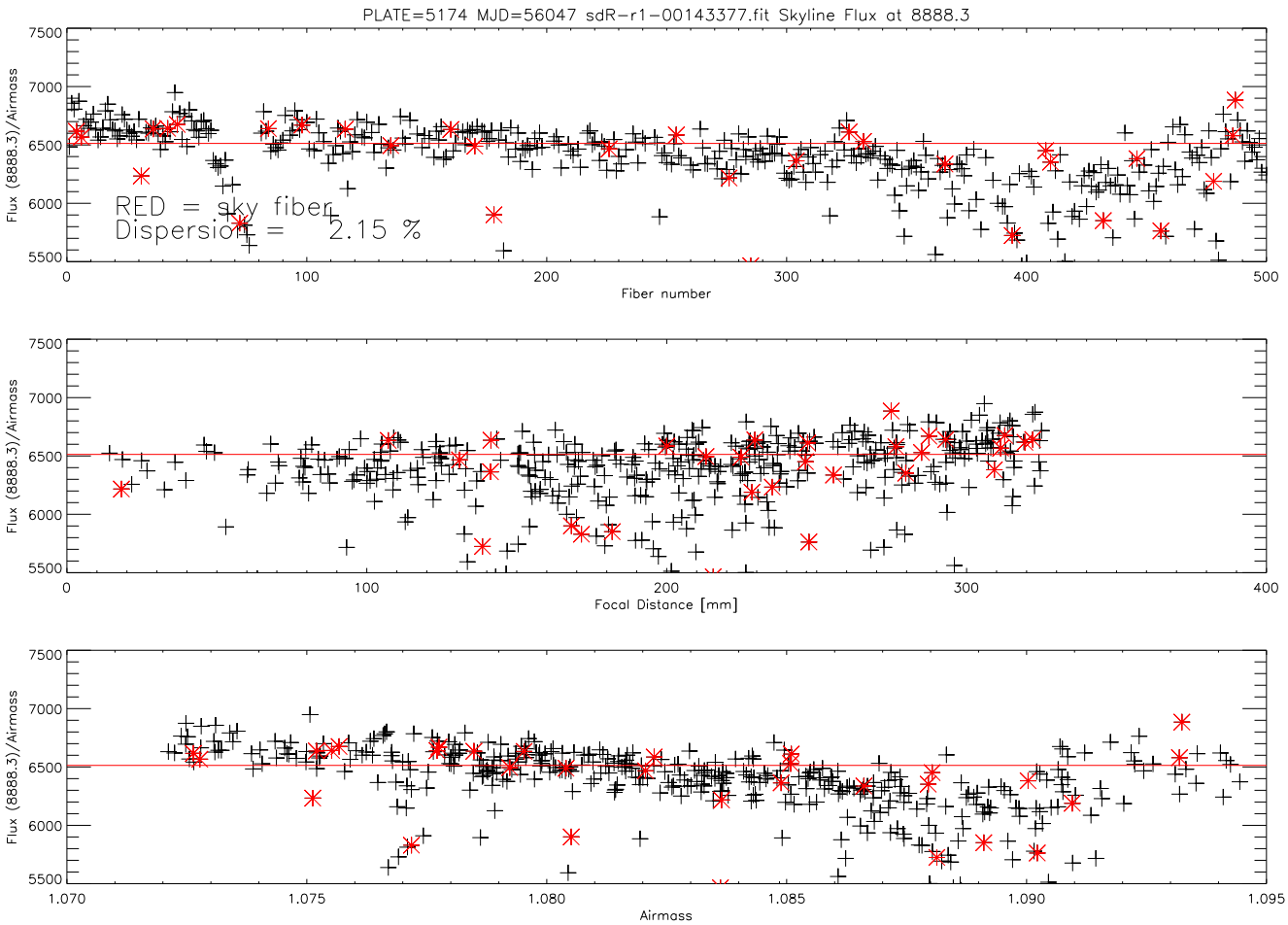

PLATE=5174 MJD=56047 sdR-r1-00143377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=5174 MJD=56047 sdR-r1-00143377.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]

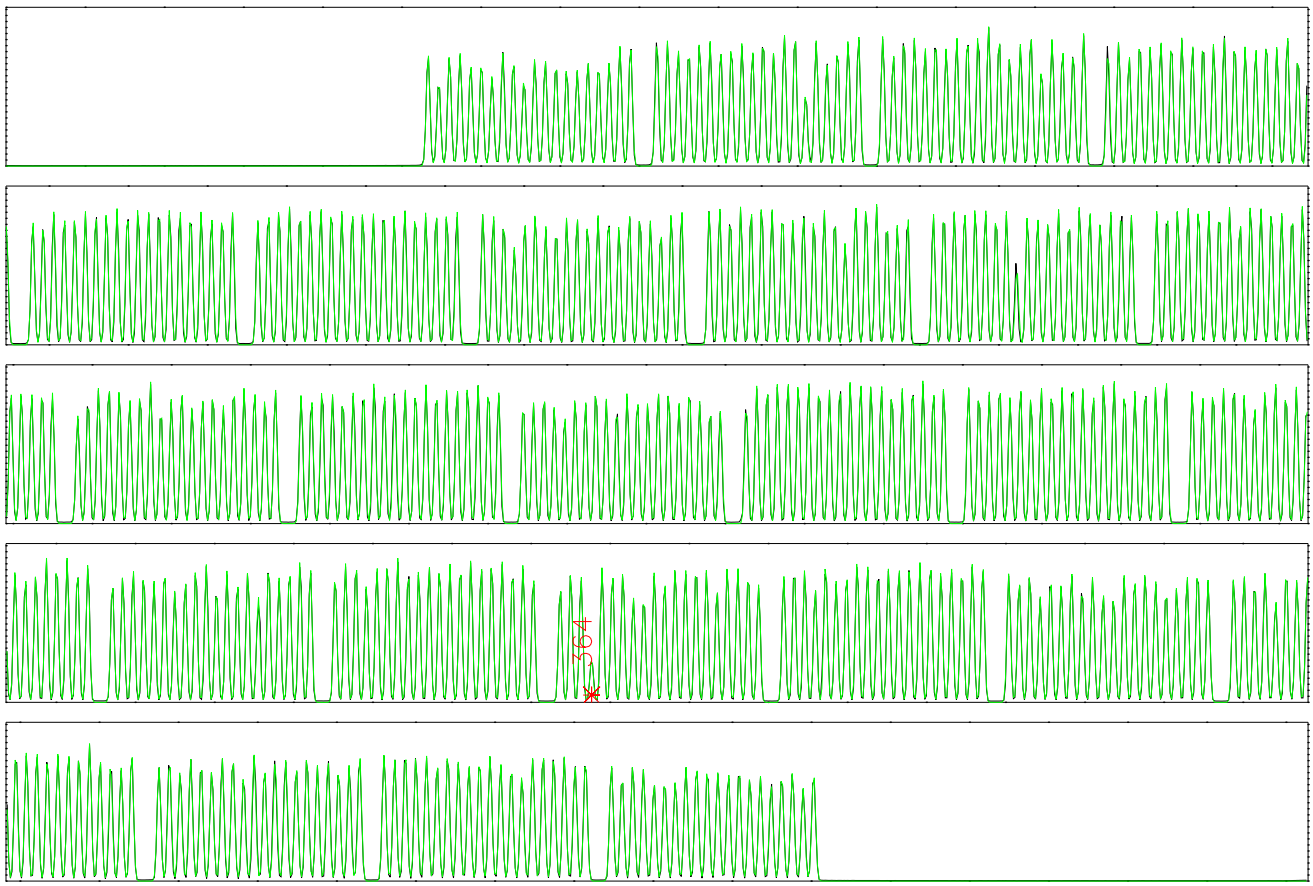
Number of sky fibers = 40

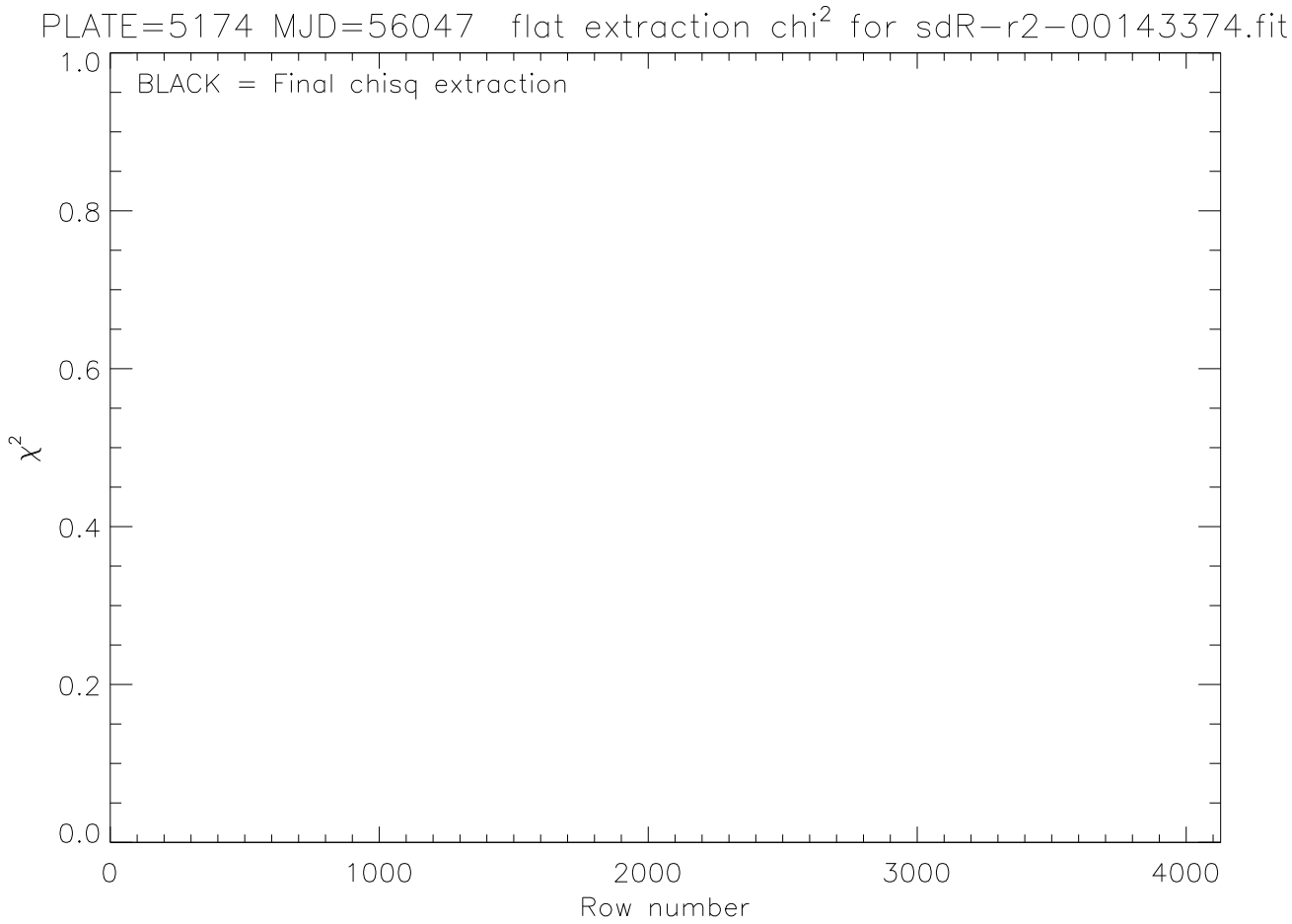


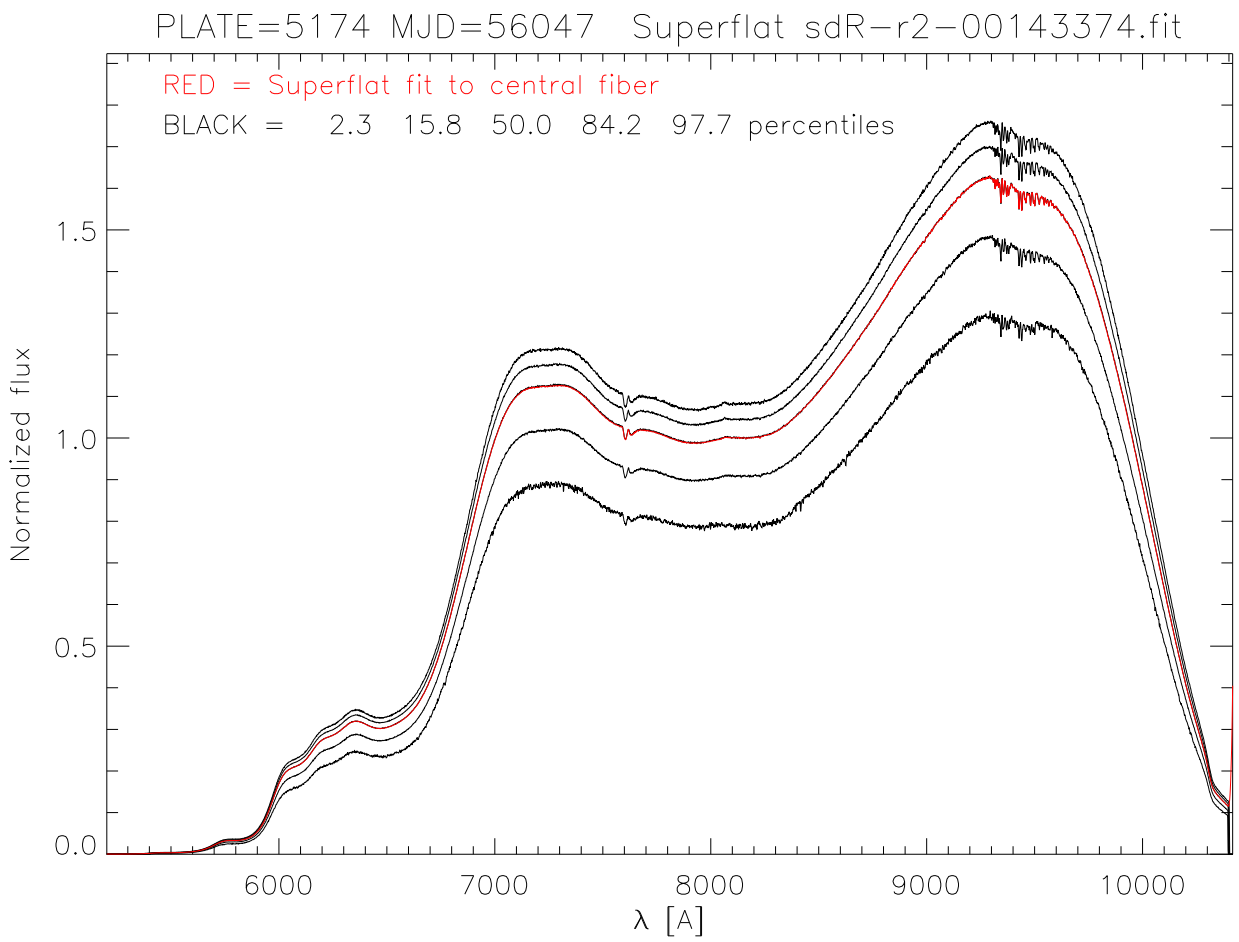

PLATE=5174 MJD=56047 sdR-r1-00143377.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.12 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

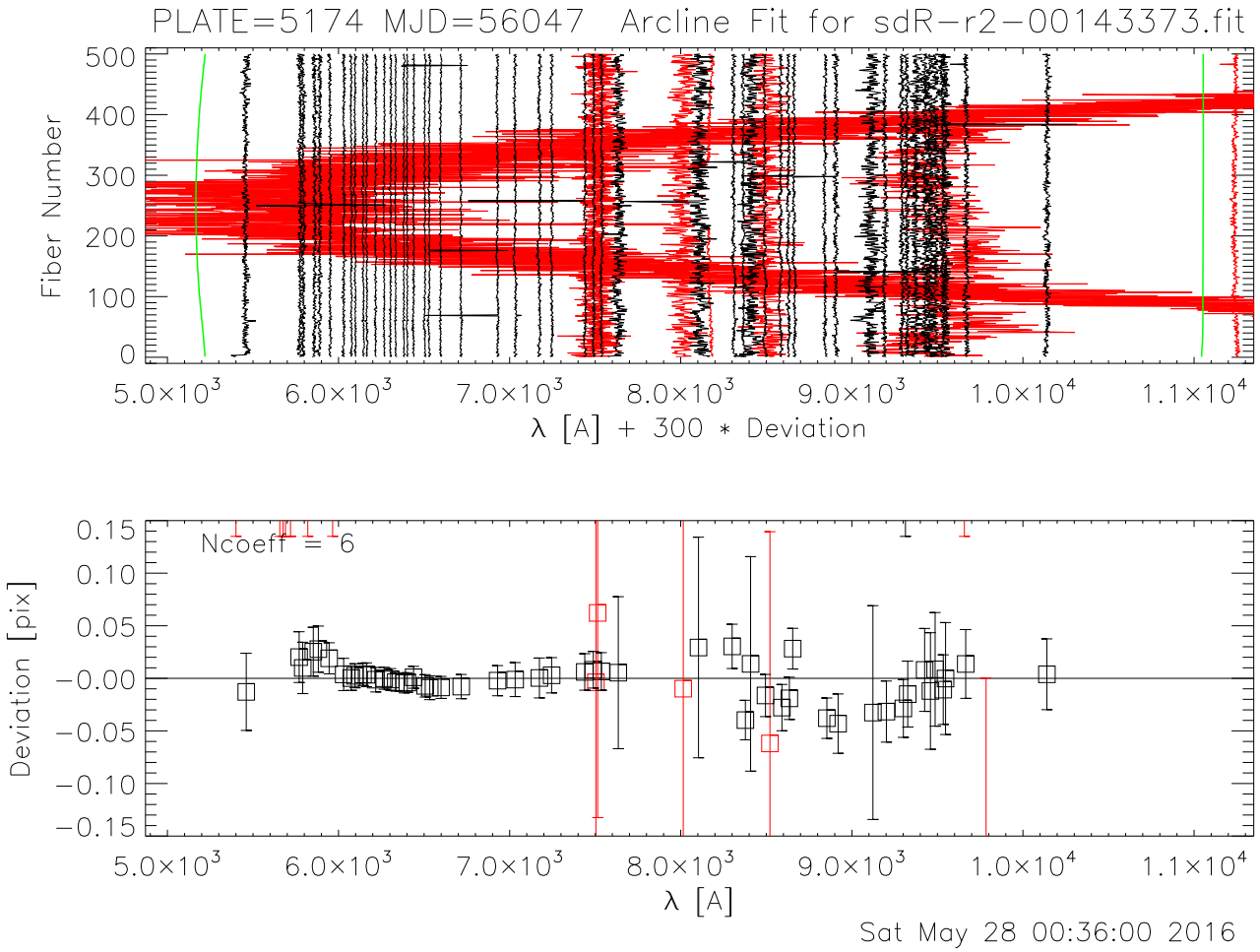

PLATE=5174 MJD=56047 sdR-r1-00143377.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.15 %
Fiber number
Focal Distance [mm]
Airmass

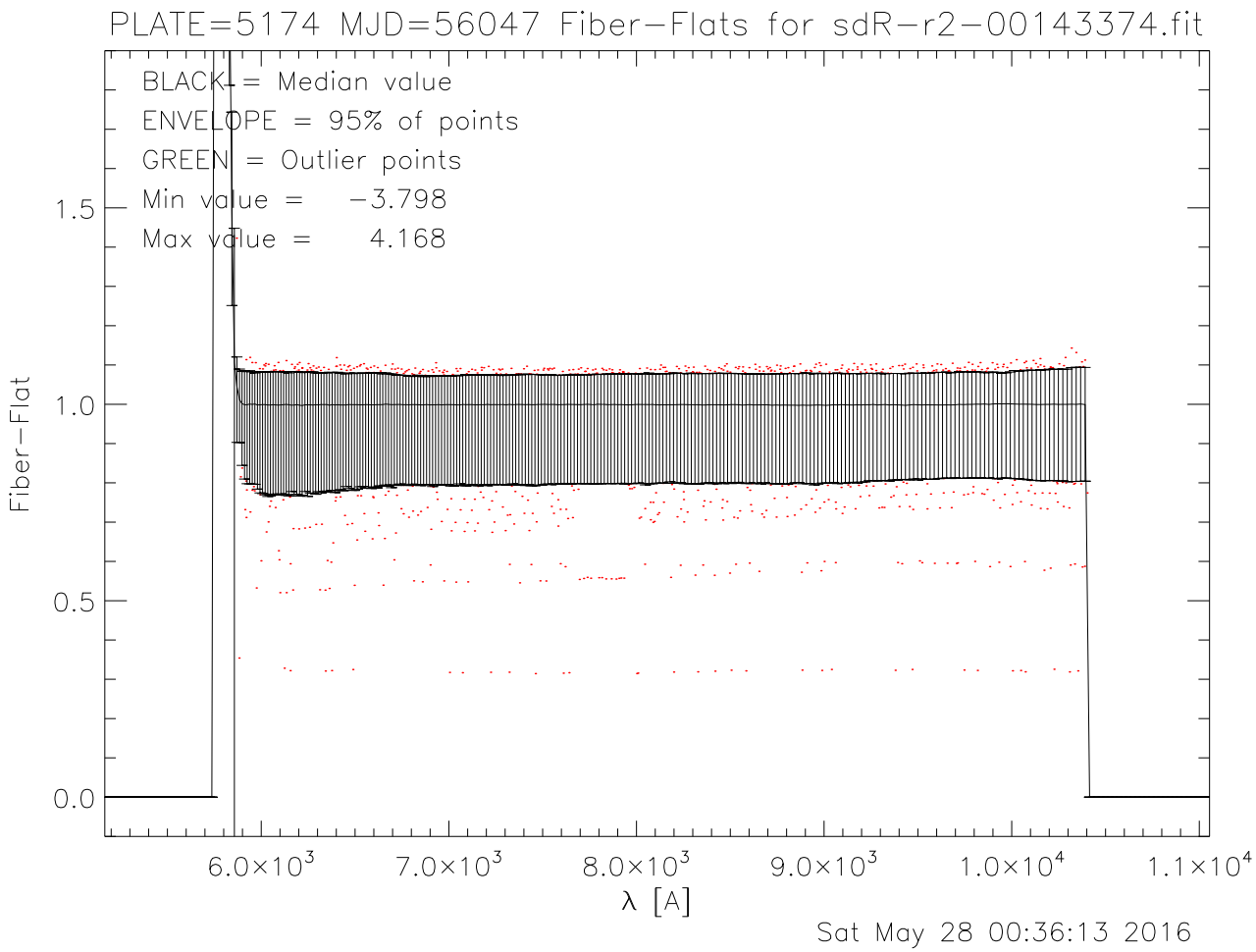
PLATE=5174 MJD=56047 Traces sdR-r2-00143374.fit

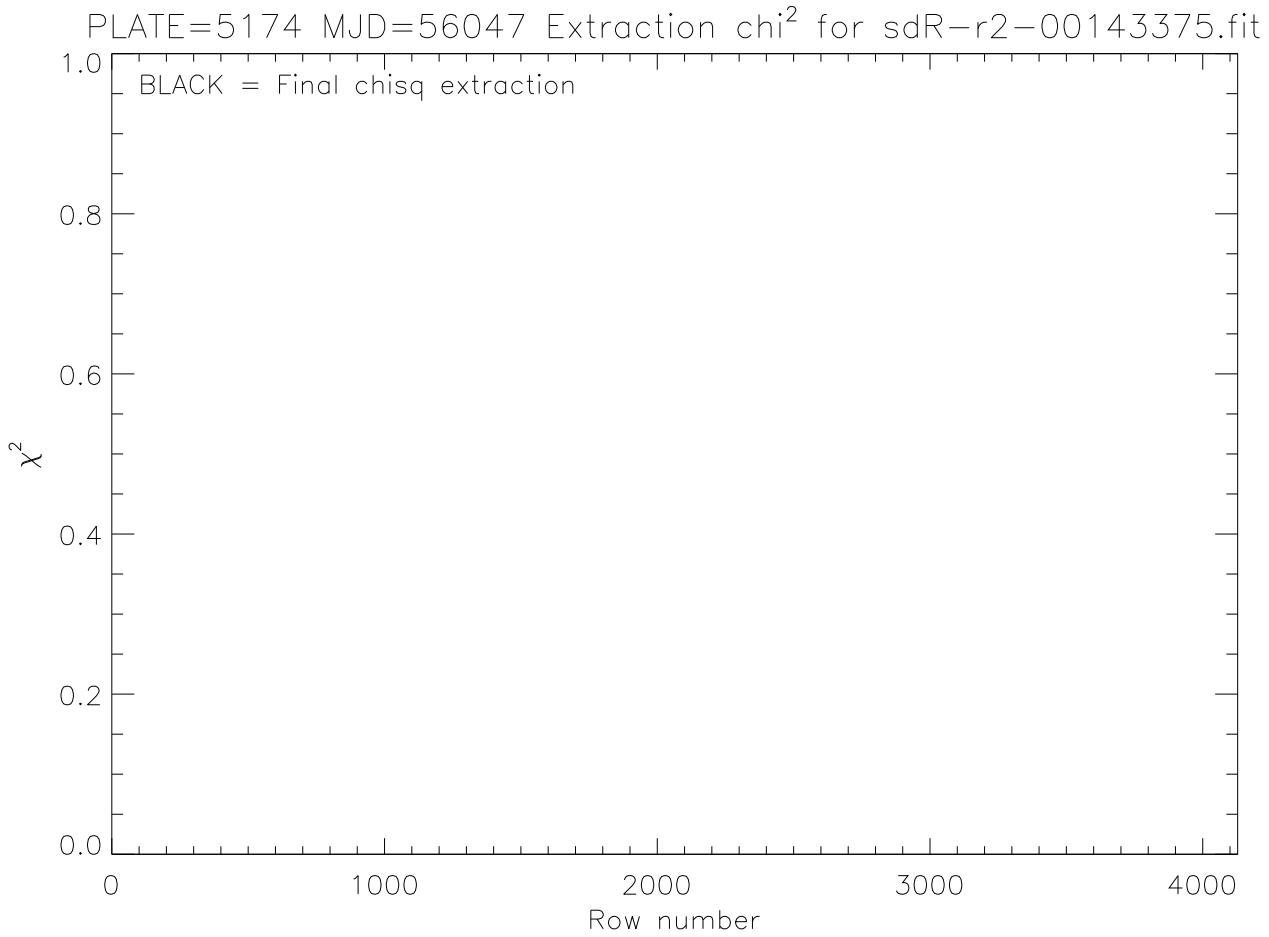


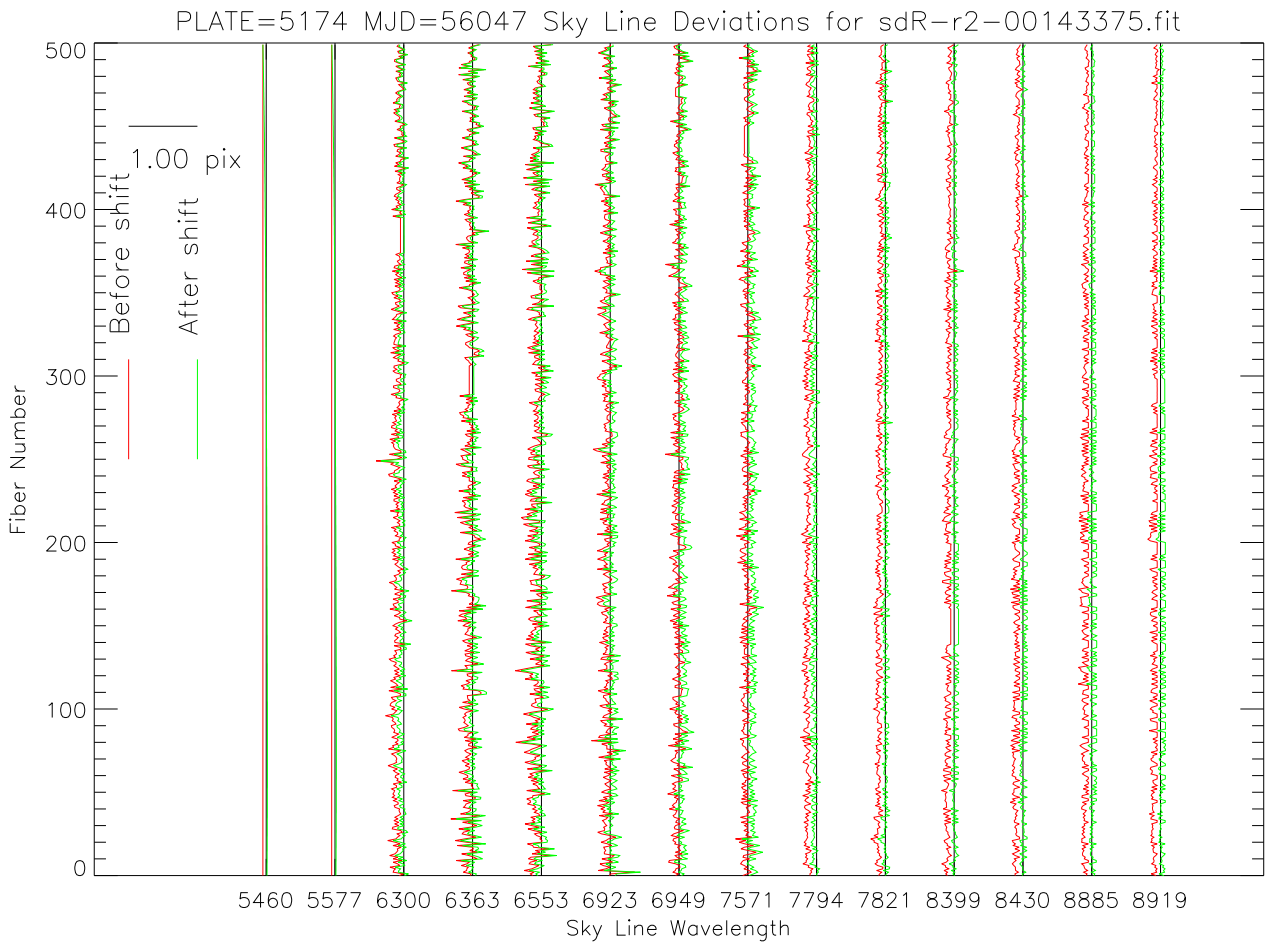

PLATE=5174 MJD=56047 flat extraction chi^2 for sdR-r2-00143374.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

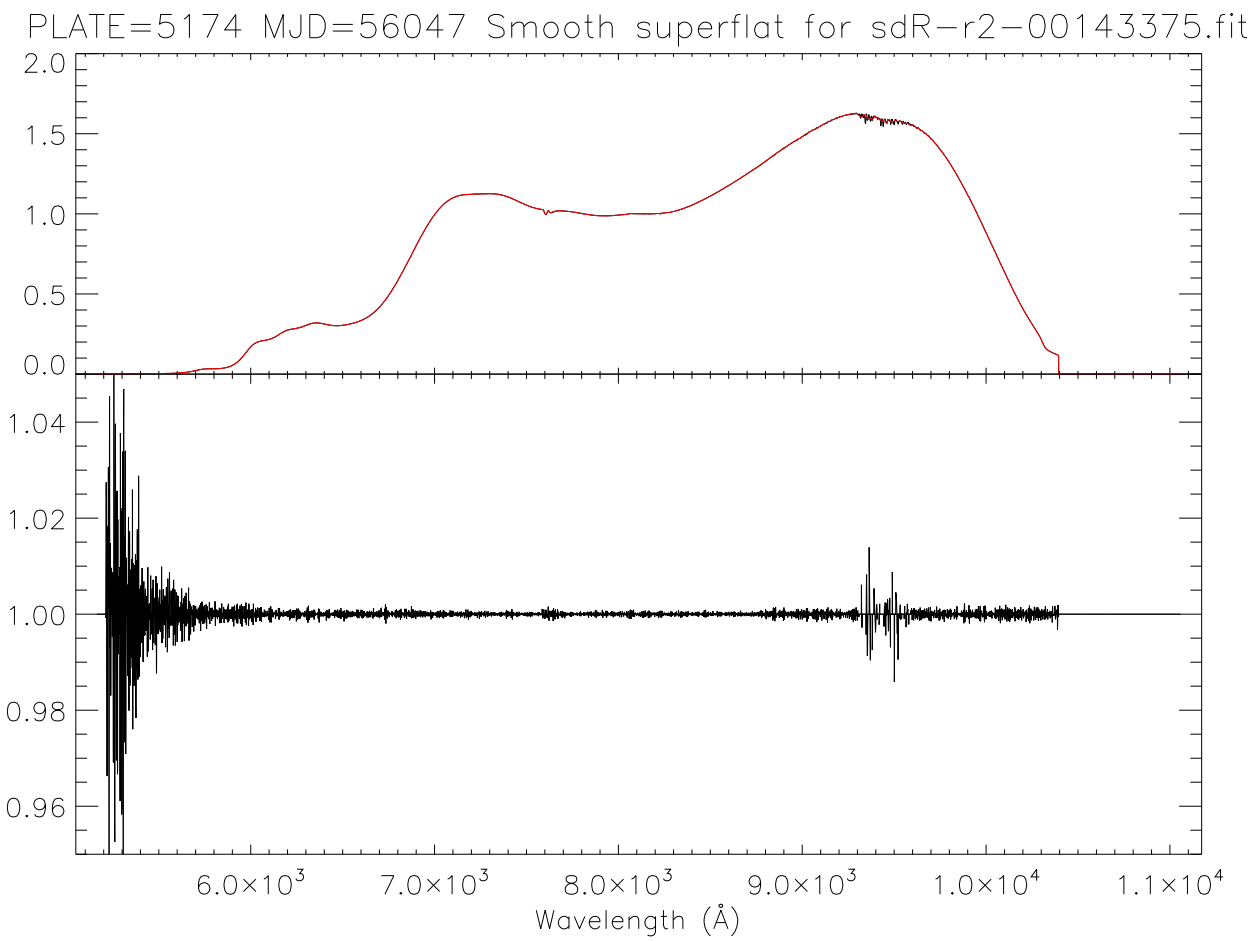

PLATE=5174 MJD=56047 Superflat sdR-r2-00143374.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

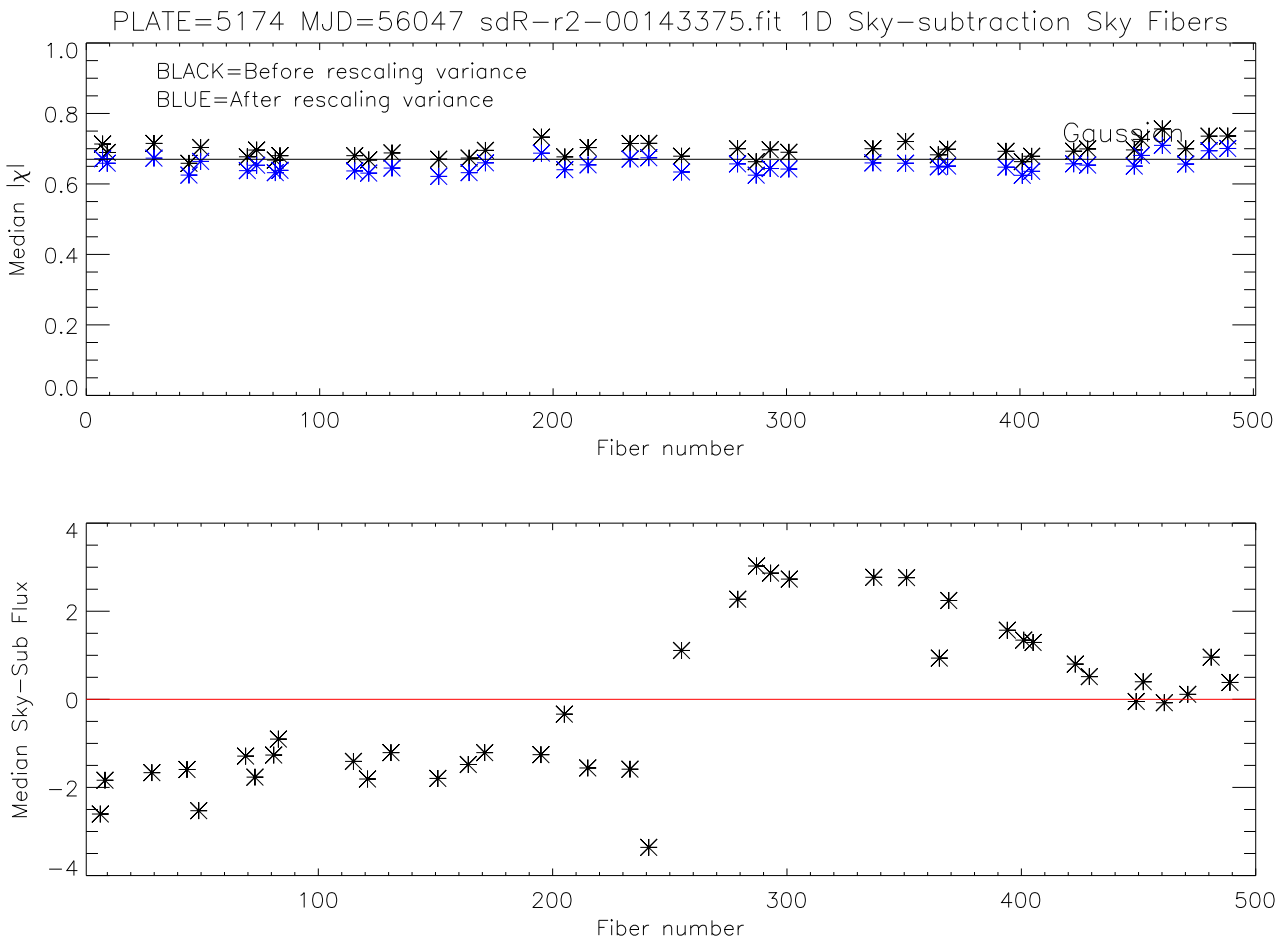

PLATE=5174 MJD=56047 Arcline Fit for sdR-r2-00143373.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sat May 28 00:36:00 2016

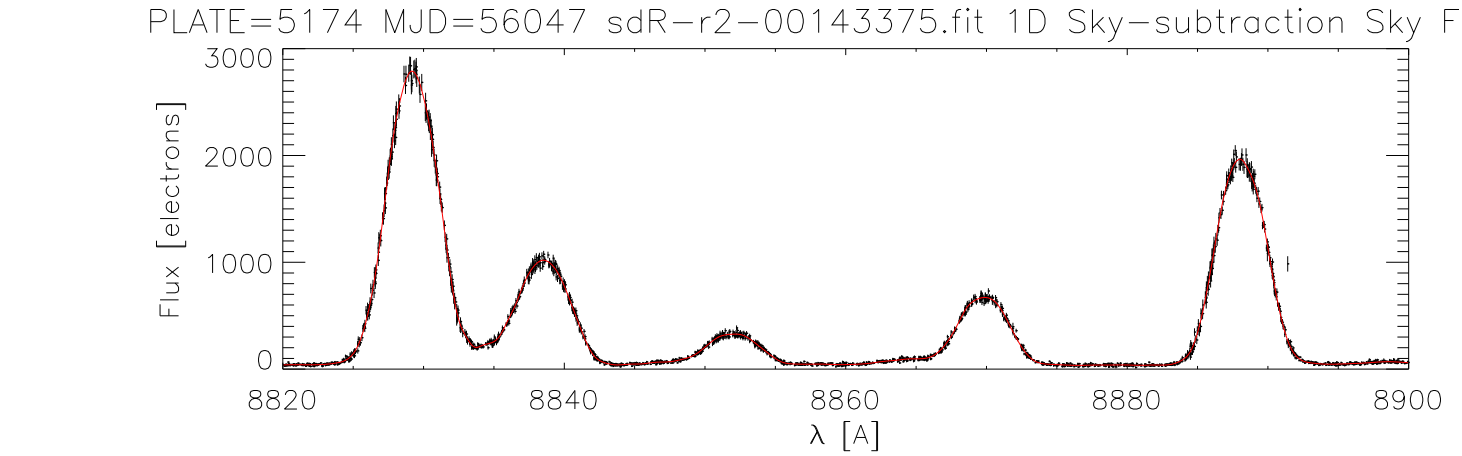

PLATE=5174 MJD=56047 Fiber−Flats for sdR−r2−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.798
Max value = 4.168
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 00:36:13 2016

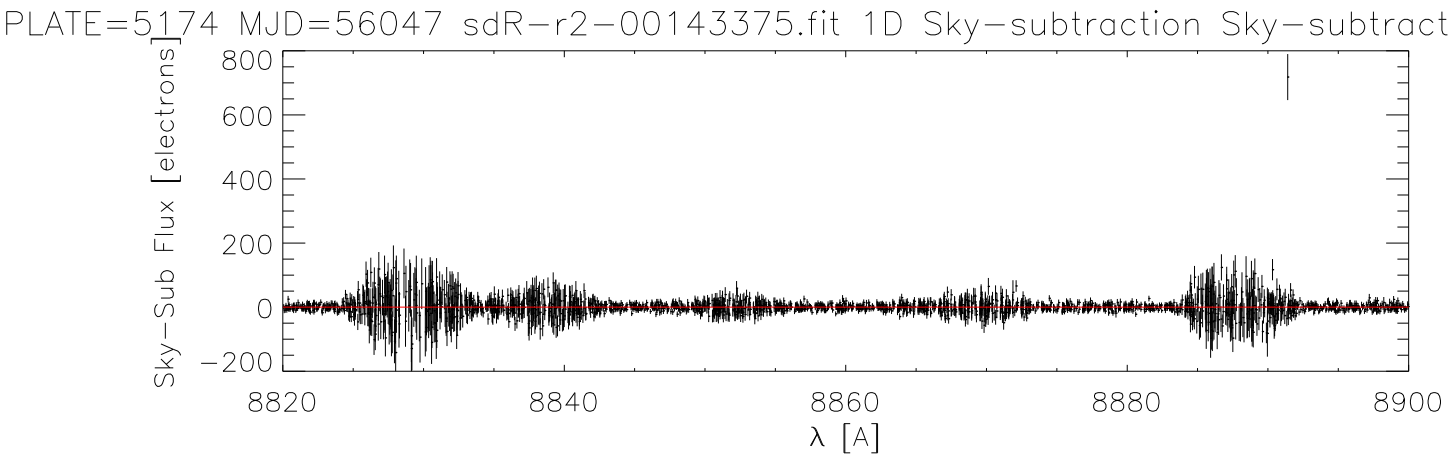

PLATE=5174 MJD=56047 Extraction chi^2 for sdR−r2−00143375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-r2-00143375.fit
Before shift
After shift
1.00 pix
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

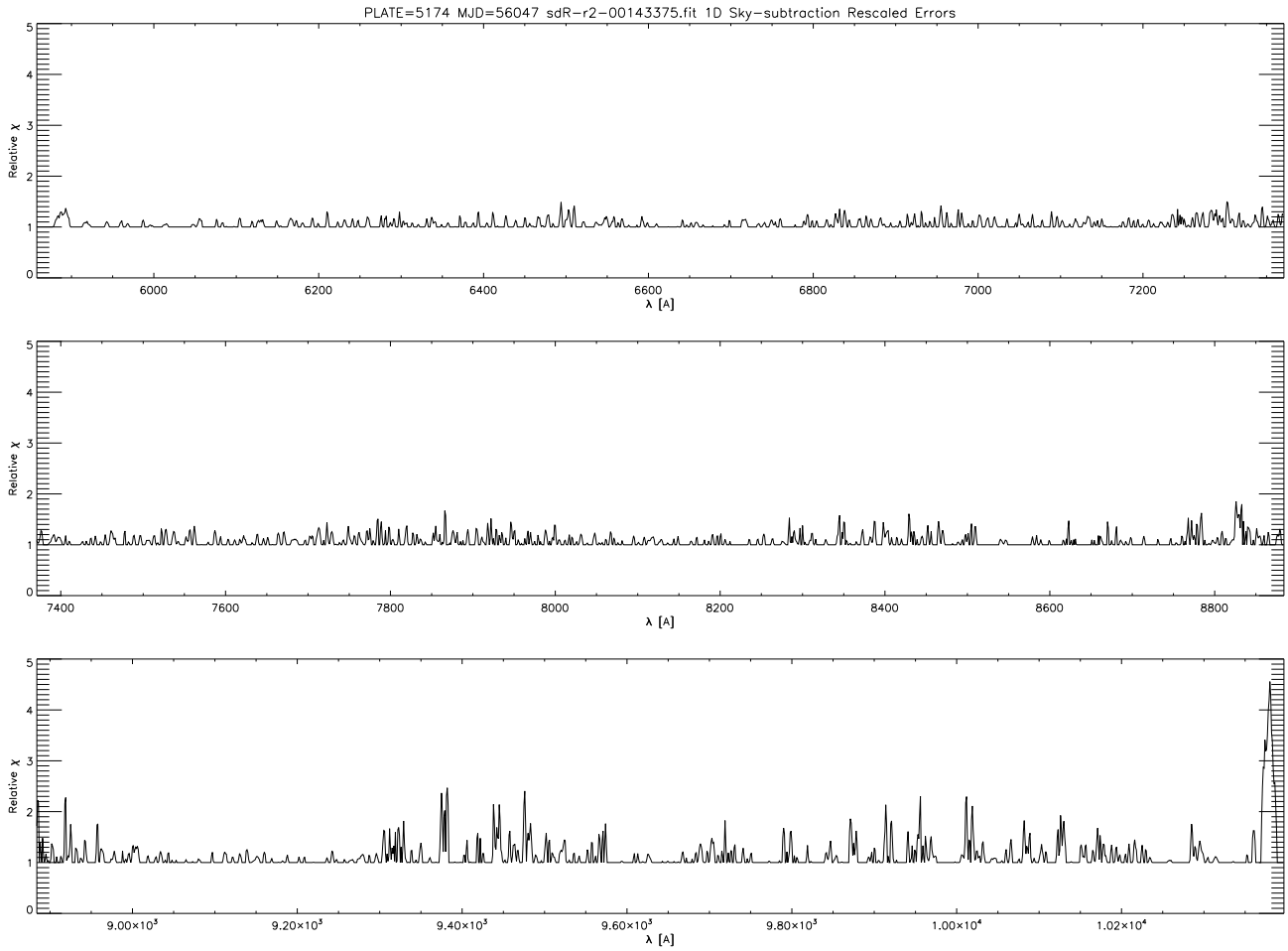

PLATE=5174 MJD=56047 Smooth superflat for sdR-r2-00143375.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

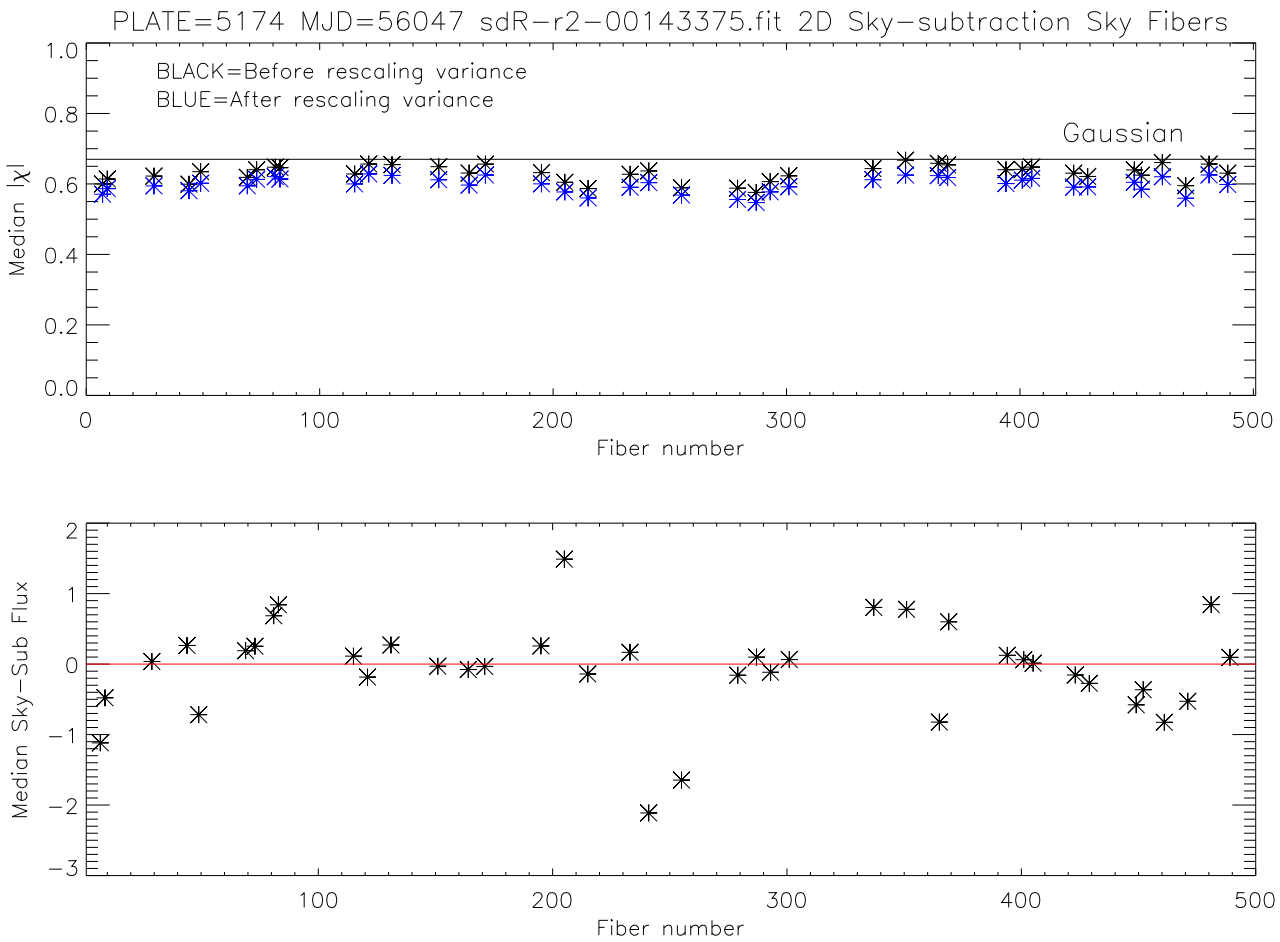

PLATE=5174 MJD=56047 sdR-r2-00143375.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

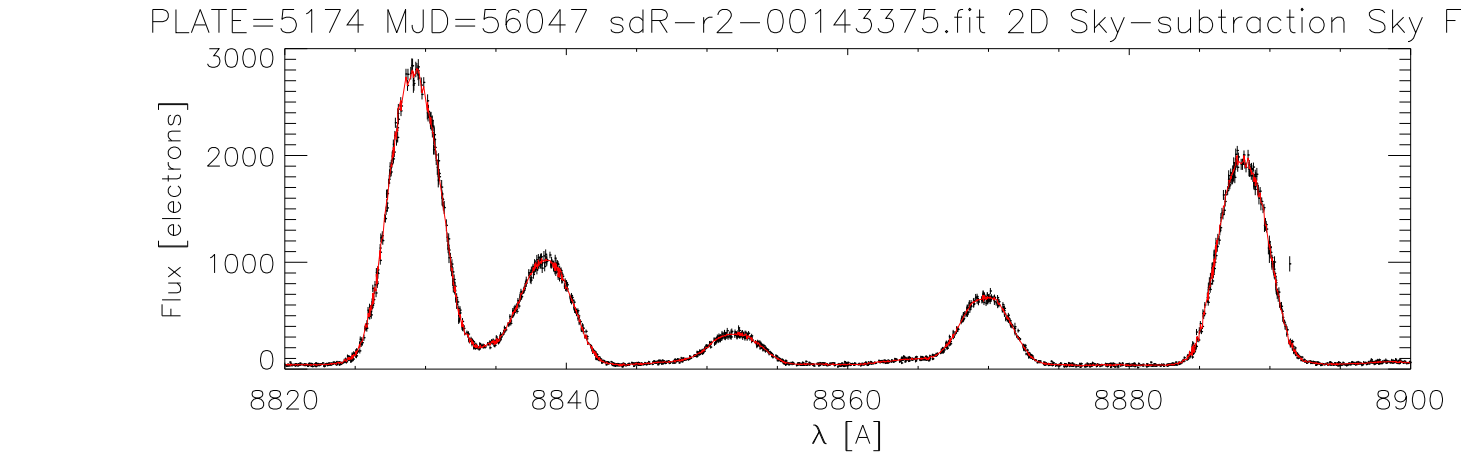

PLATE=5174 MJD=56047 sdR-r2-00143375.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

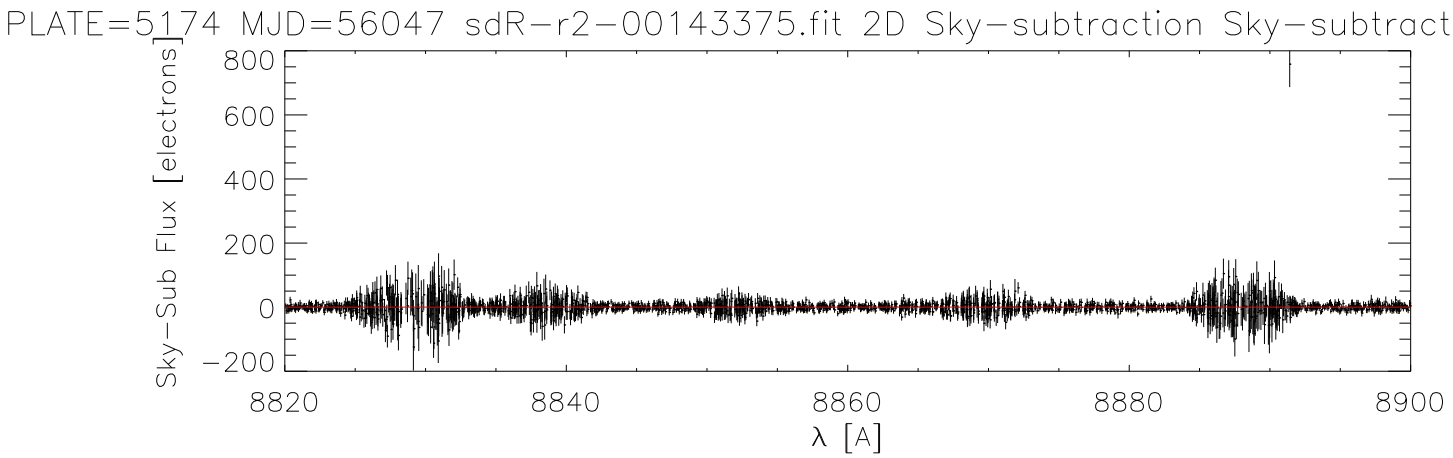

PLATE=5174 MJD=56047 sdR-r2-00143375.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 40

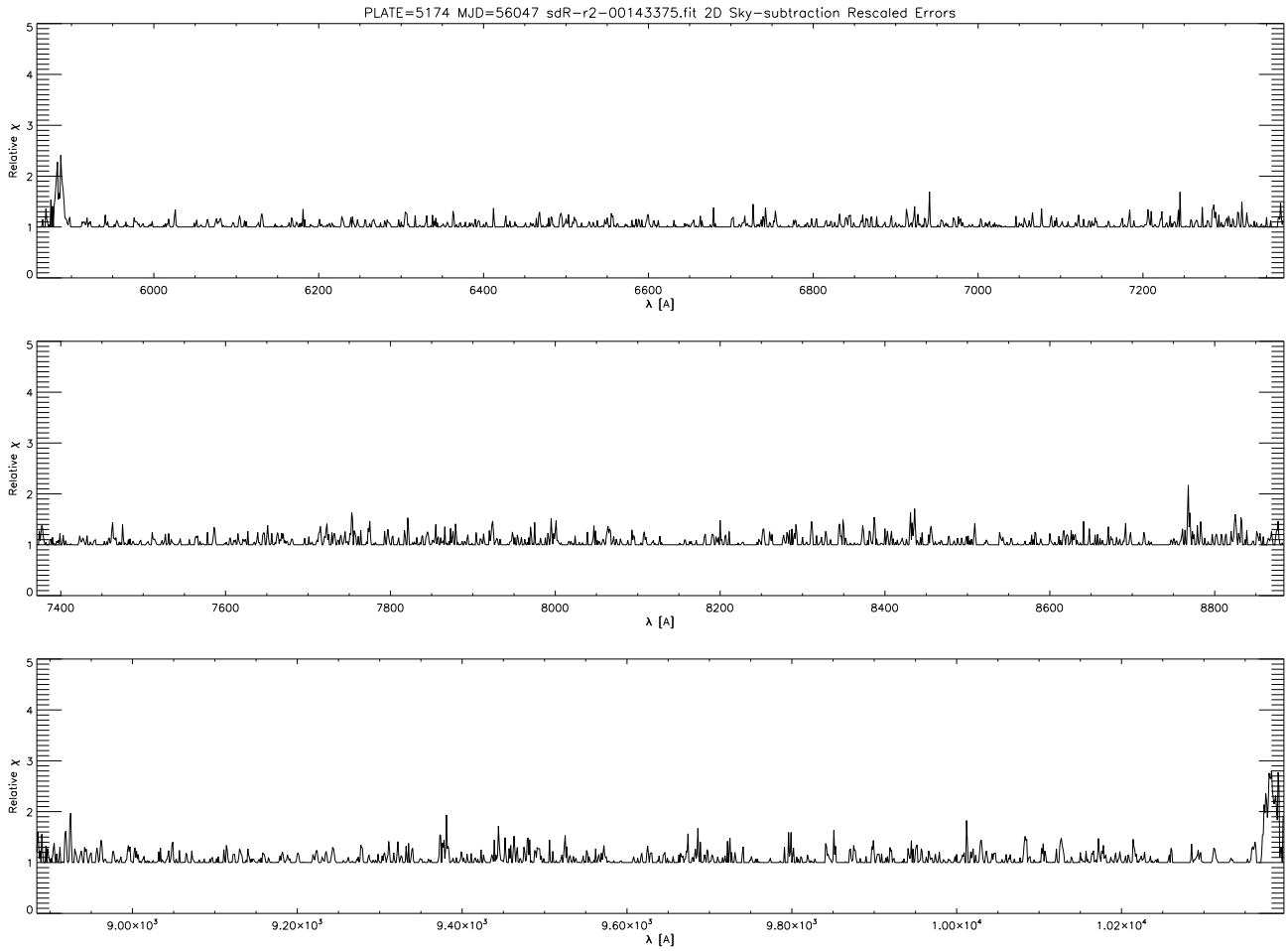


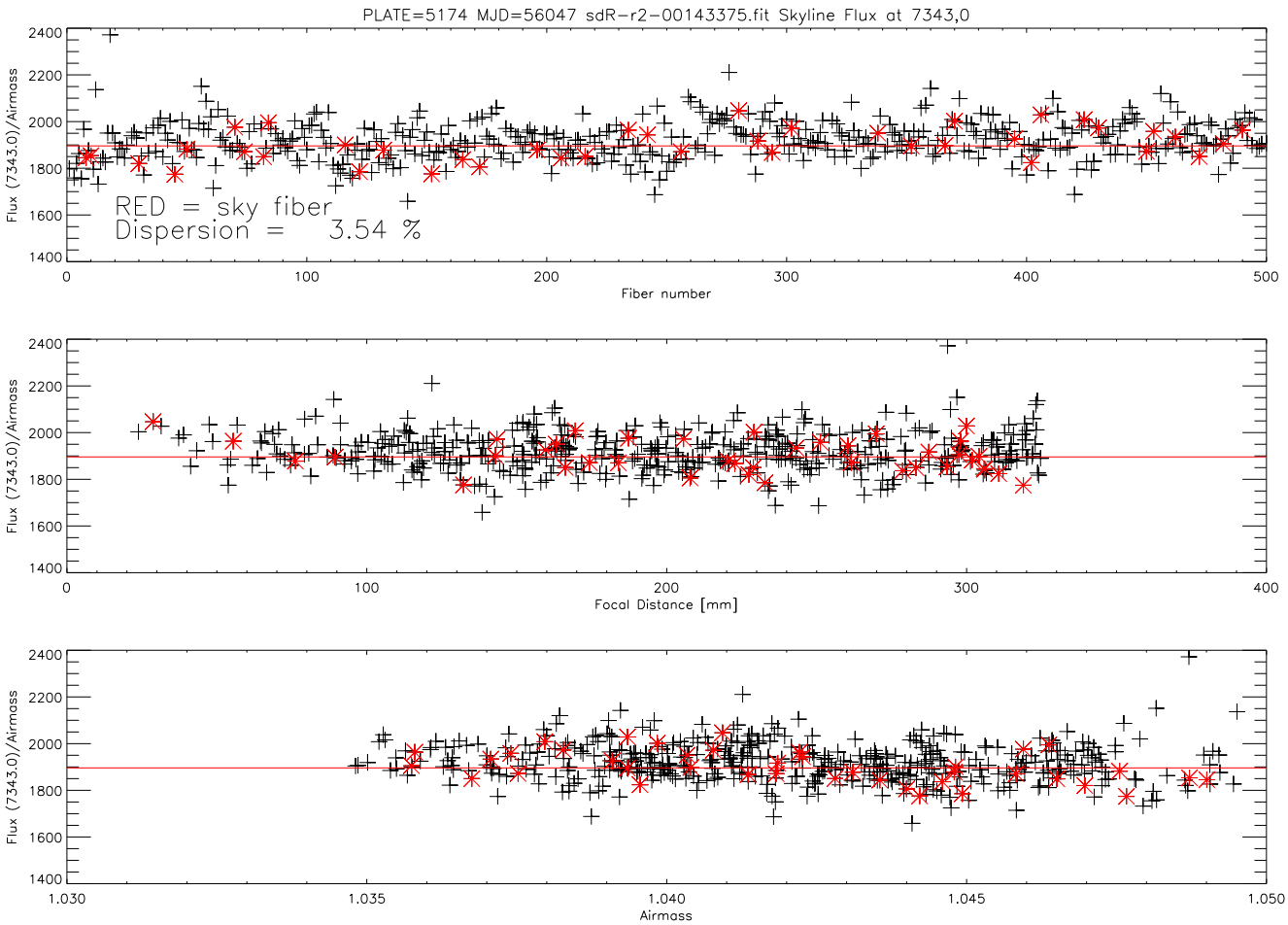

PLATE=5174 MJD=56047 sdR-r2-00143375.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

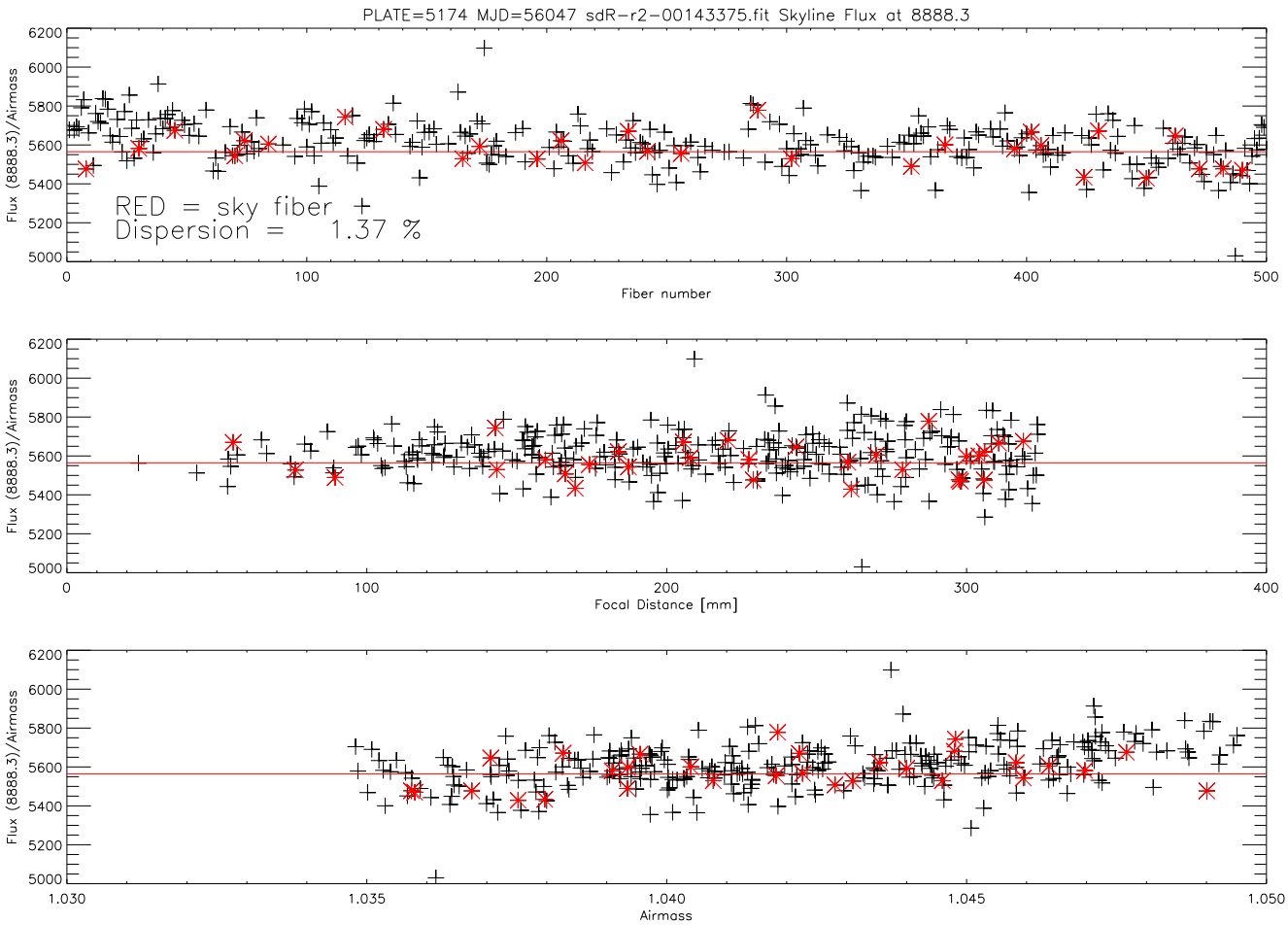

PLATE=5174 MJD=56047 sdR-r2-00143375.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

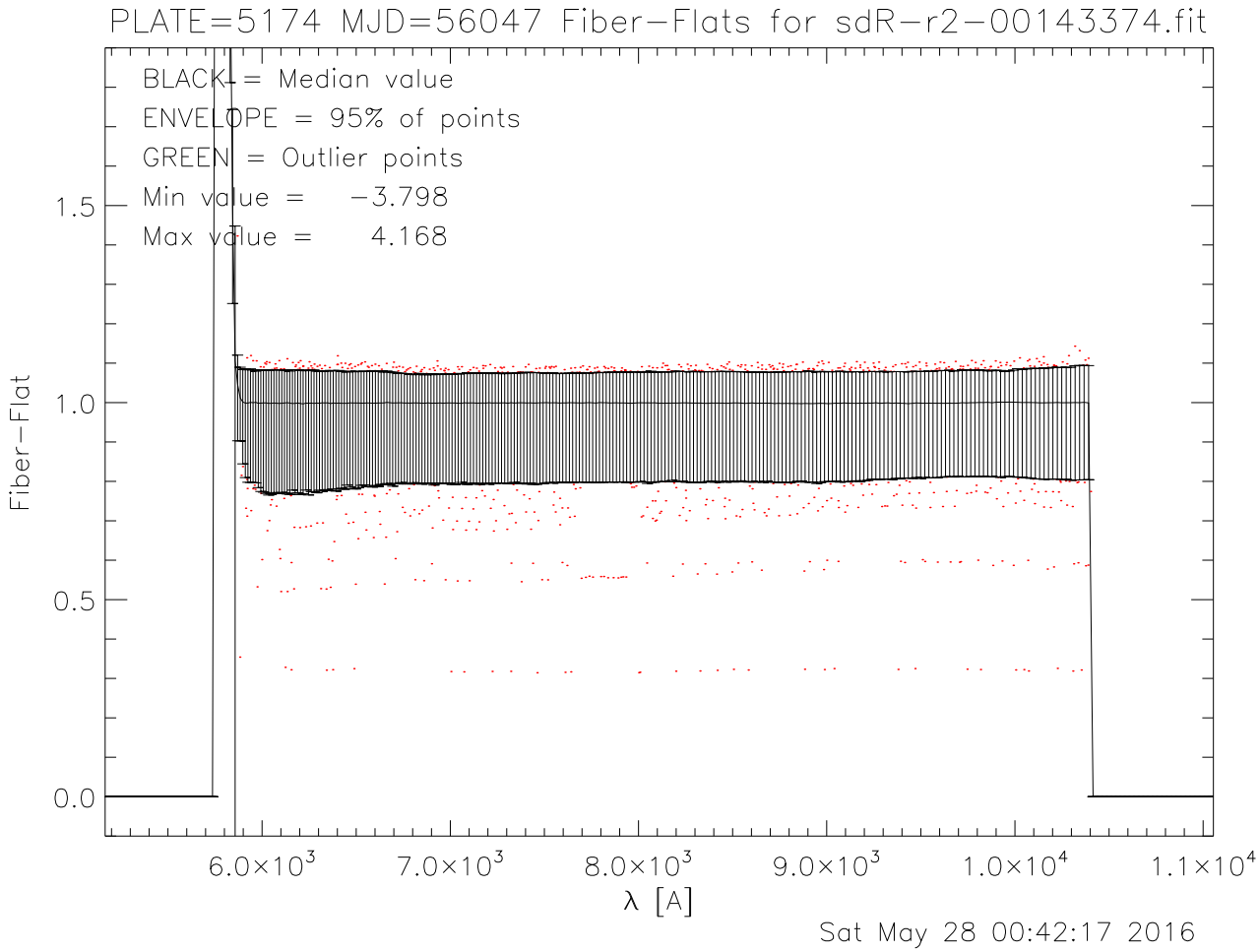

PLATE=5174 MJD=56047 sdR-r2-00143375.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
8820
8840
8860
8880
8900
λ [A]

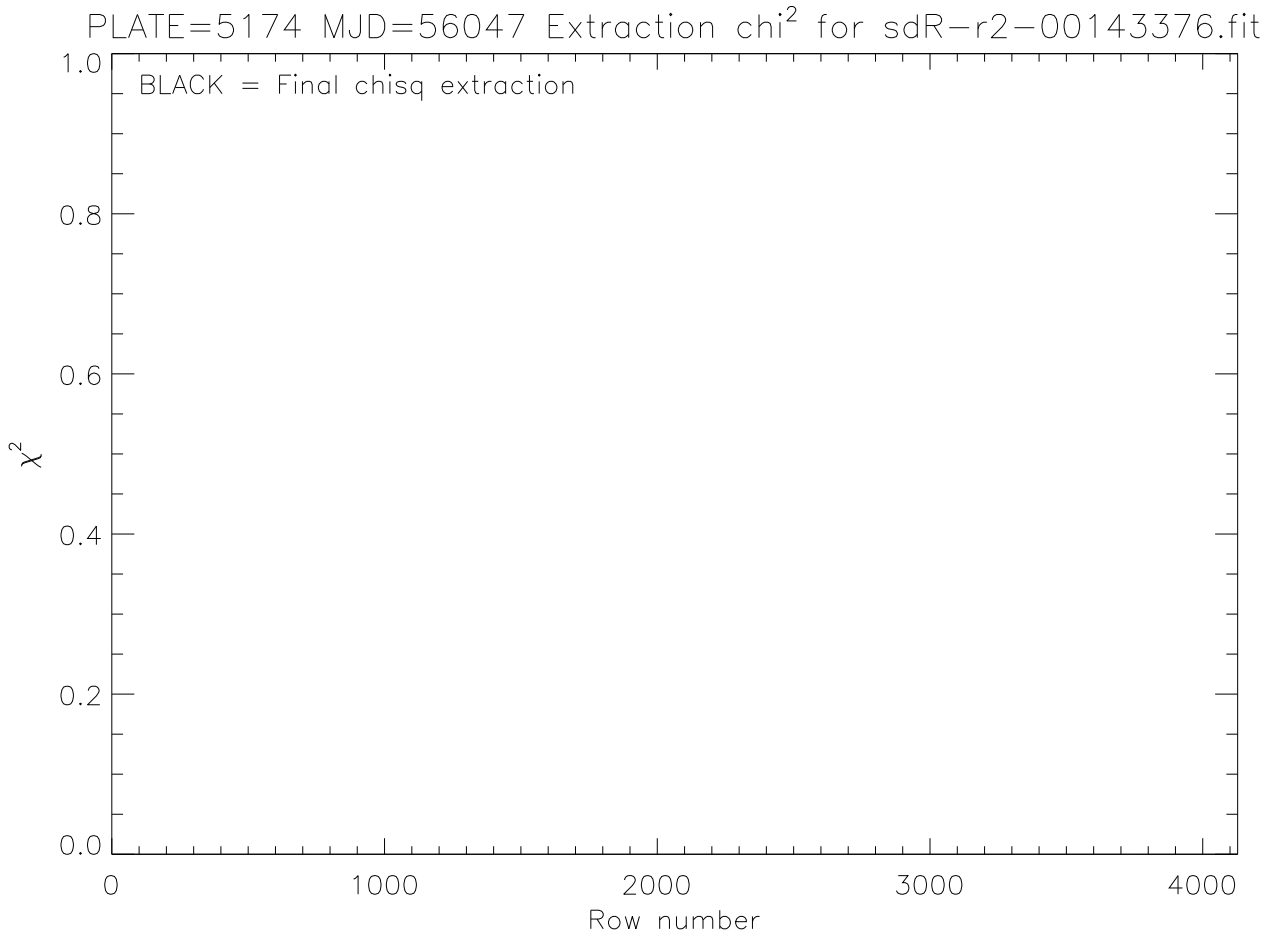
Number of sky fibers = 40

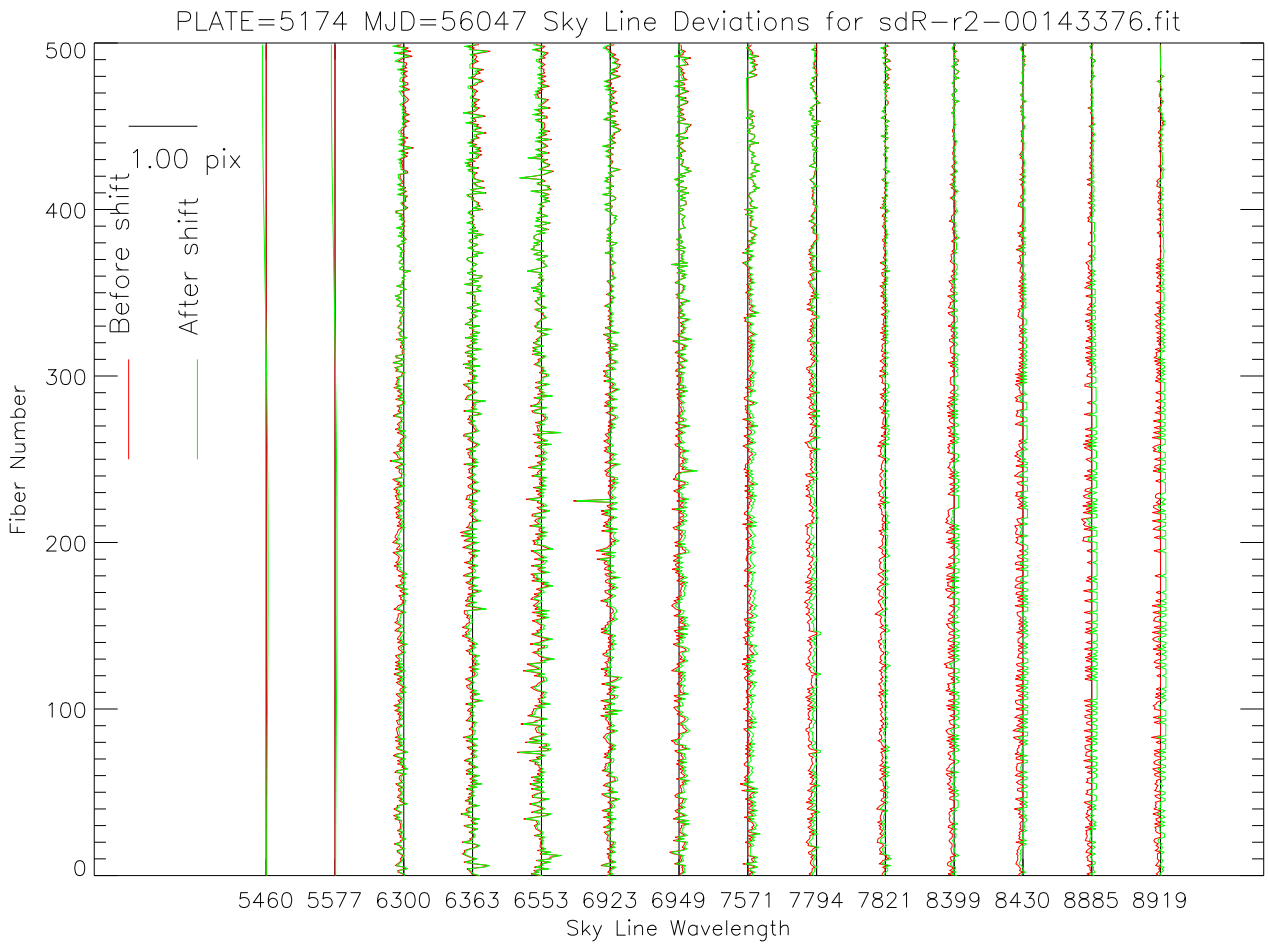


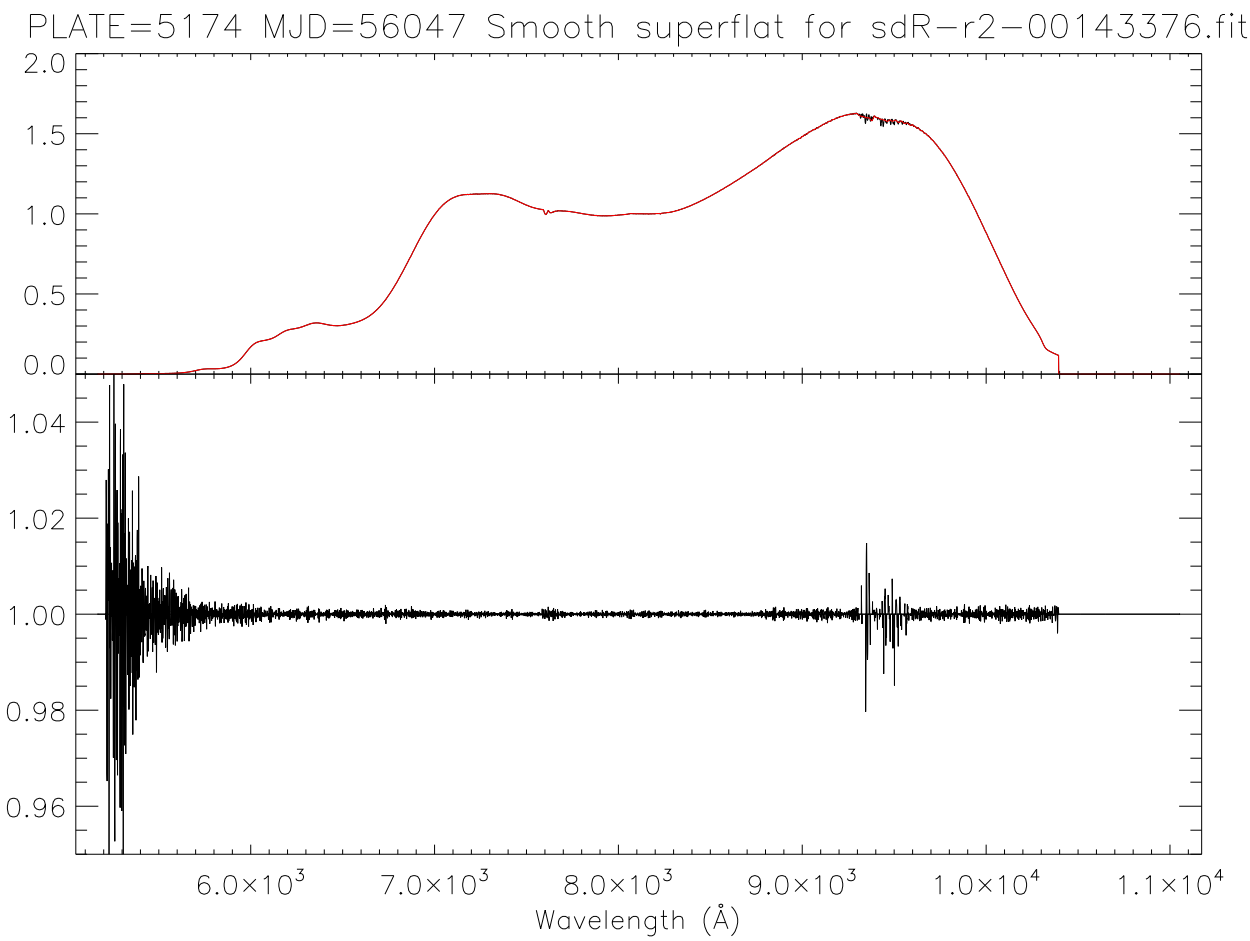

PLATE=5174 MJD=56047 sdR-r2-00143375.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.54 %
Fiber number
Focal Distance [mm]
Airmass

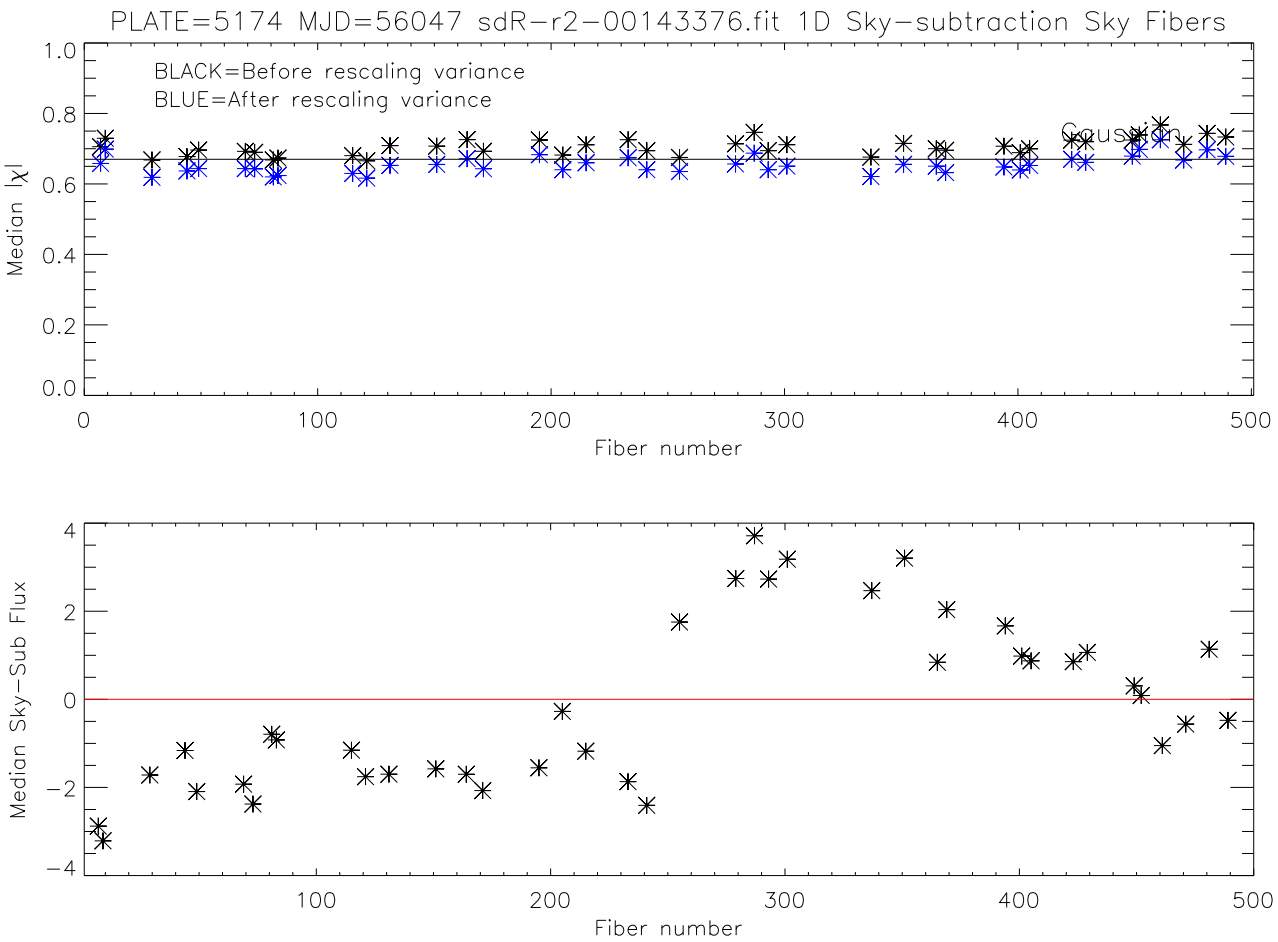

PLATE=5174 MJD=56047 sdR-r2-00143375.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber +
Dispersion = 1.37 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

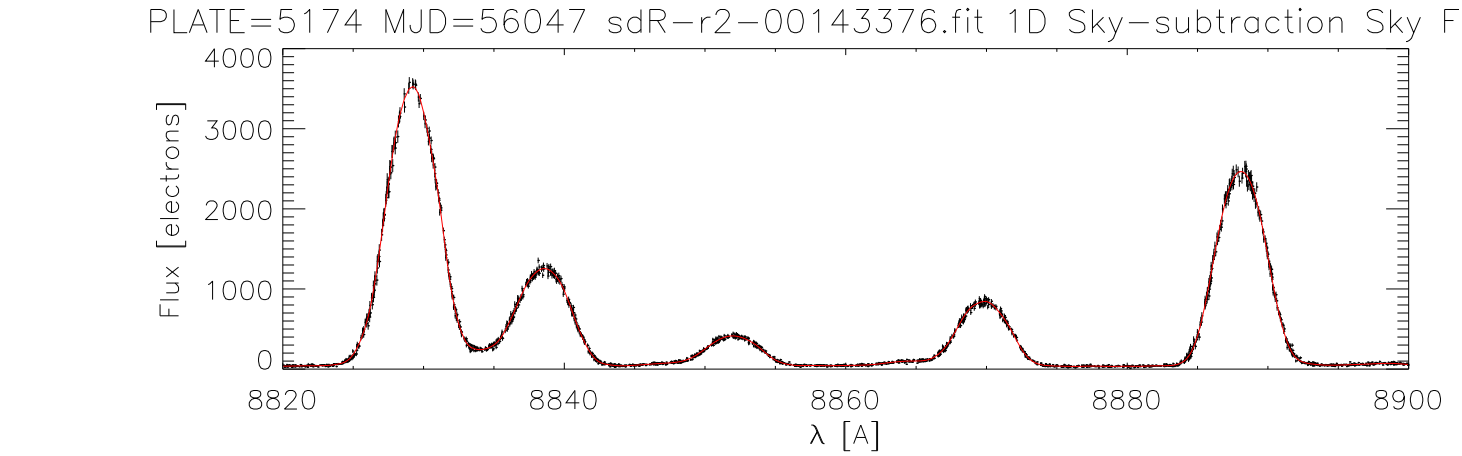

PLATE=5174 MJD=56047 Fiber−Flats for sdR−r2−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.798
Max value = 4.168
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 00:42:17 2016

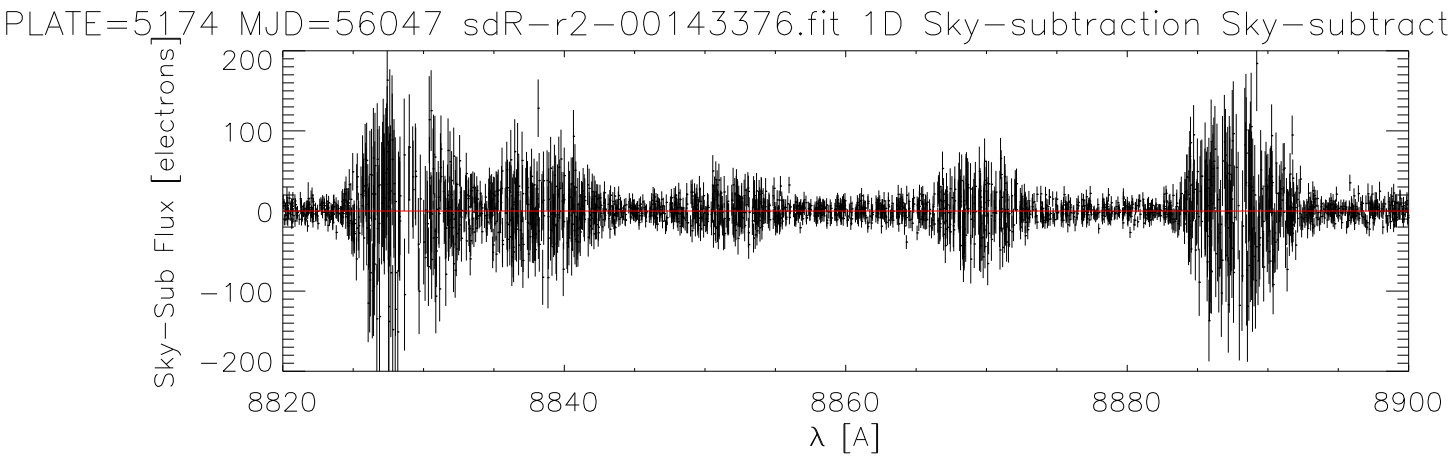

PLATE=5174 MJD=56047 Extraction chi^2 for sdR−r2−00143376.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-r2-00143376.fit
Before shift
After shift
1.00 pix
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

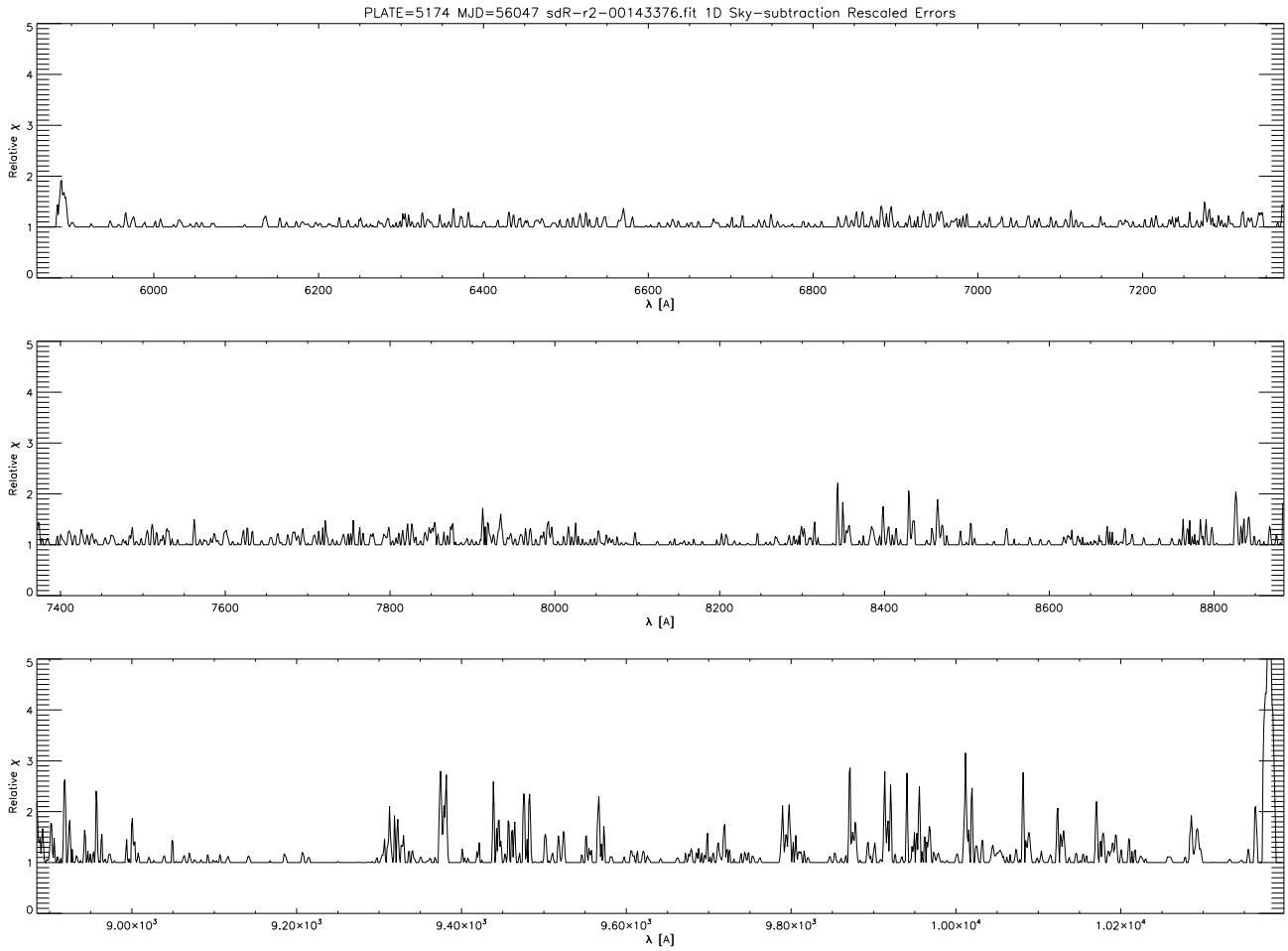

PLATE=5174 MJD=56047 Smooth superflat for sdR-r2-00143376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

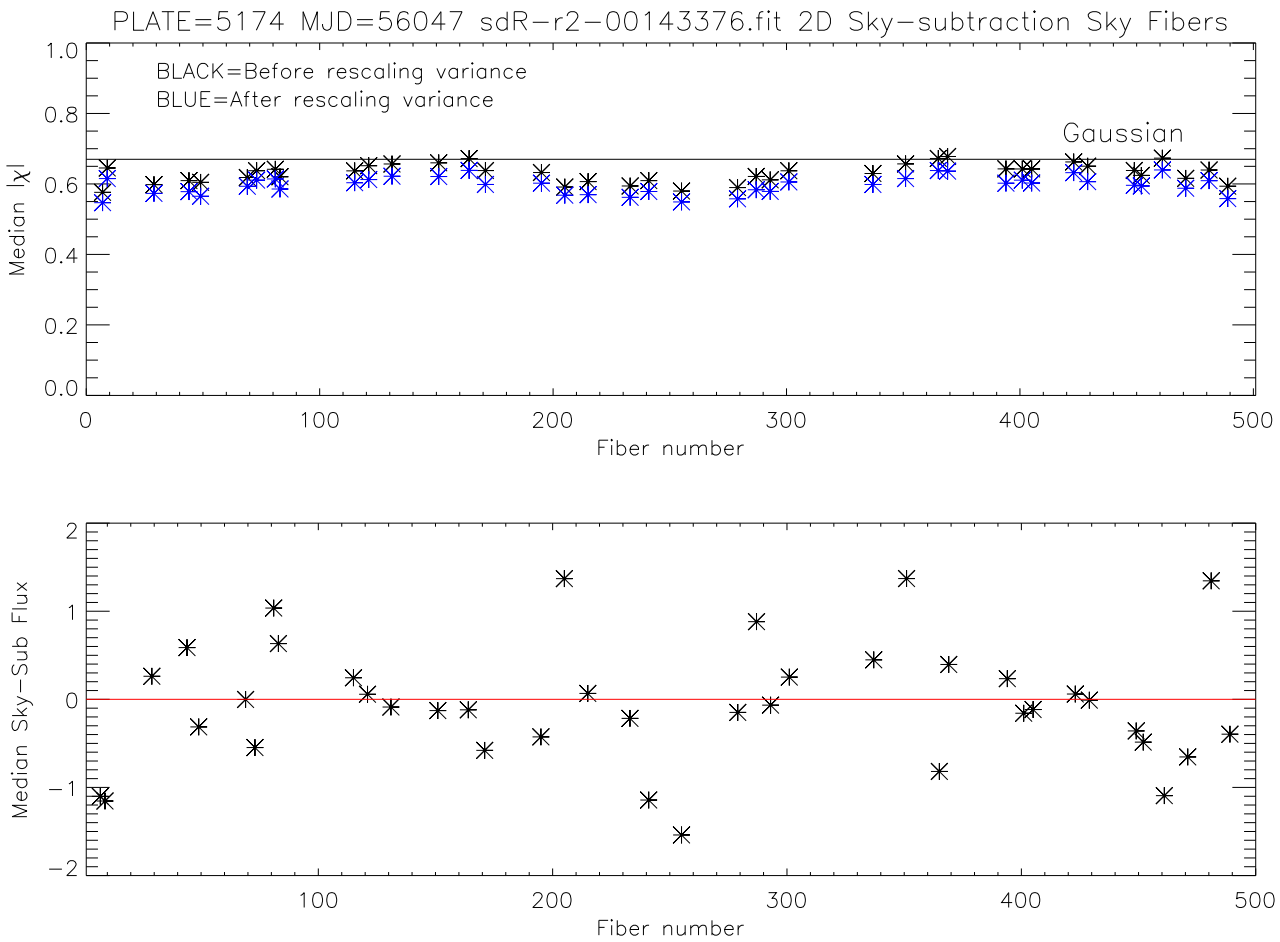

PLATE=5174 MJD=56047 sdR-r2-00143376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

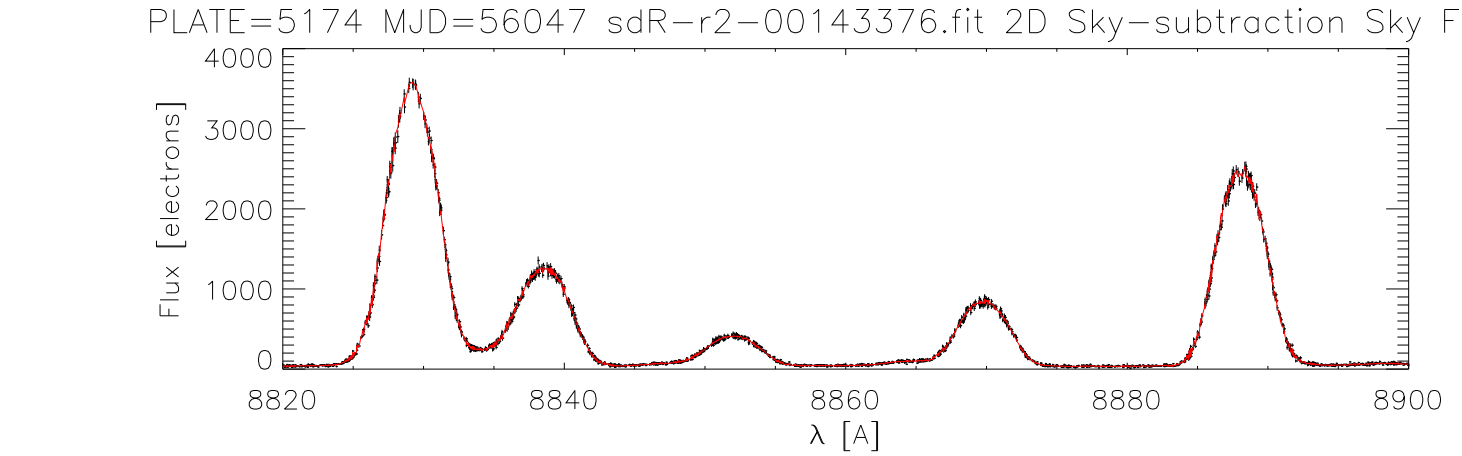

PLATE=5174 MJD=56047 sdR-r2-00143376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

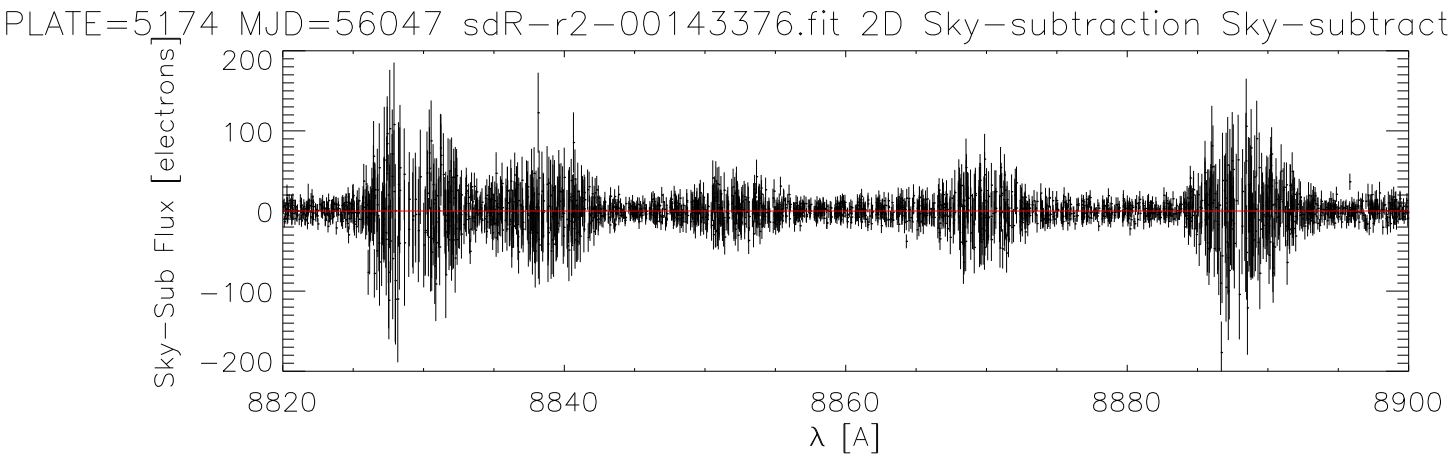

PLATE=5174 MJD=56047 sdR-r2-00143376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 40

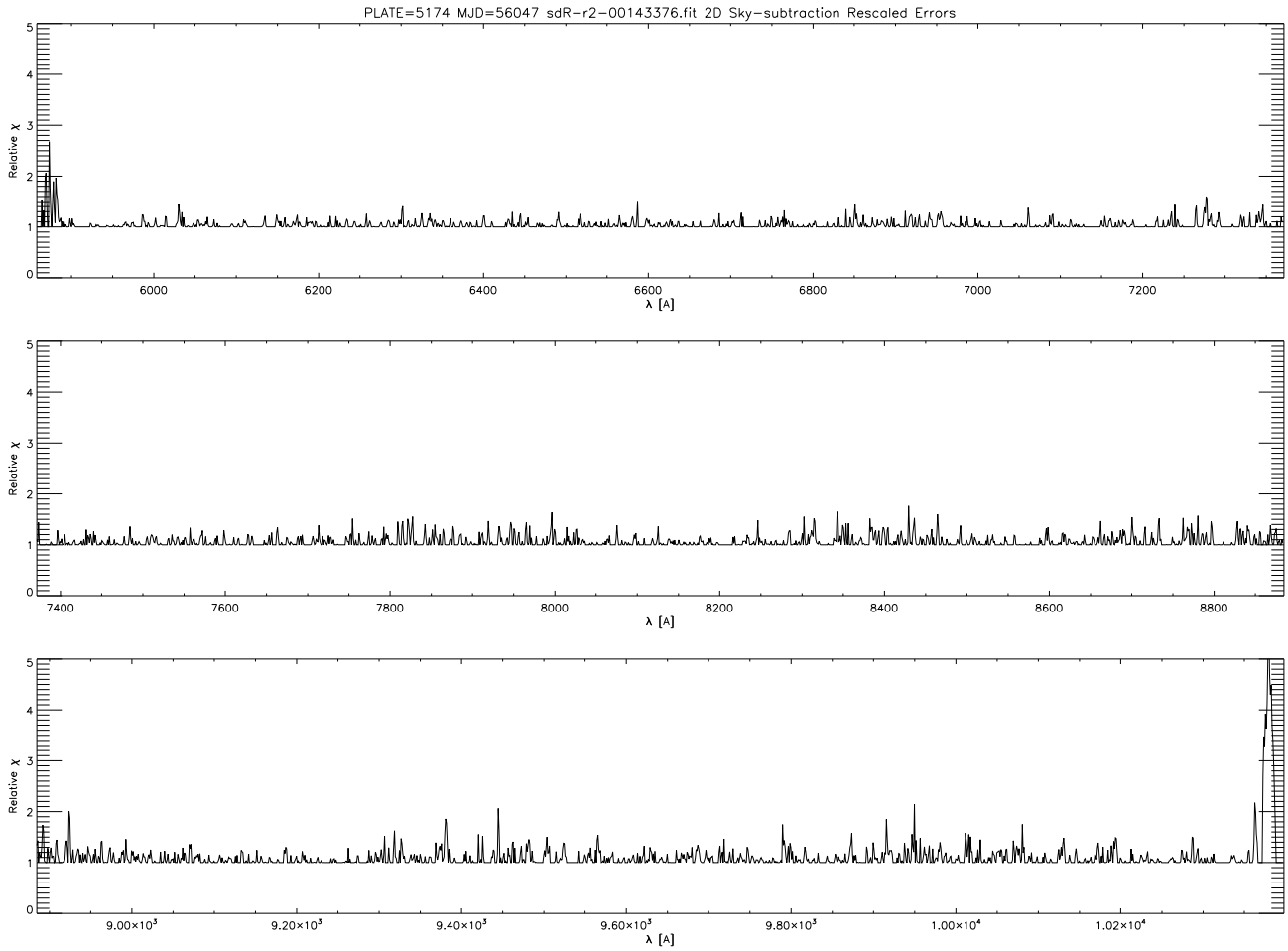


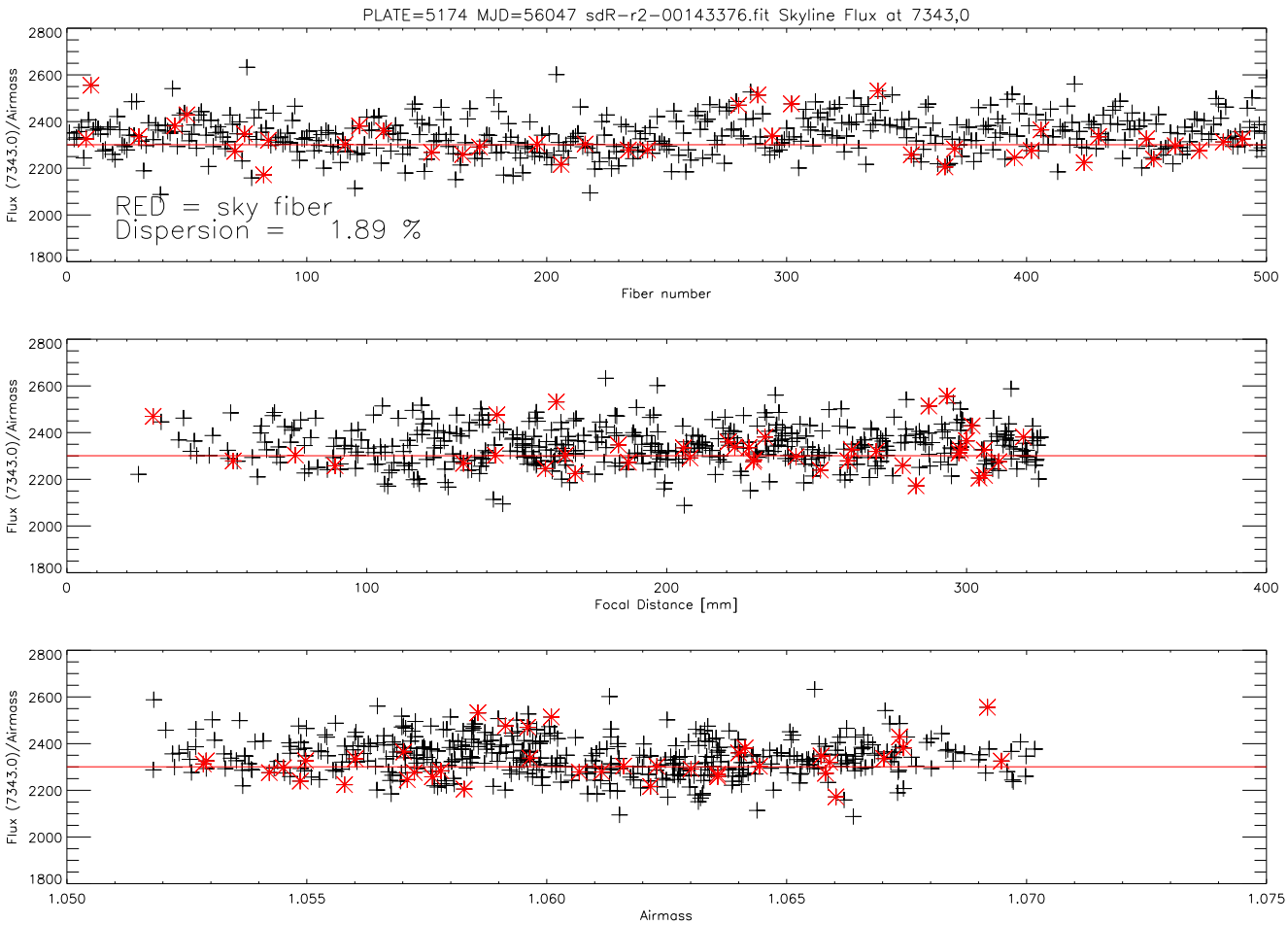

PLATE=5174 MJD=56047 sdR-r2-00143376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

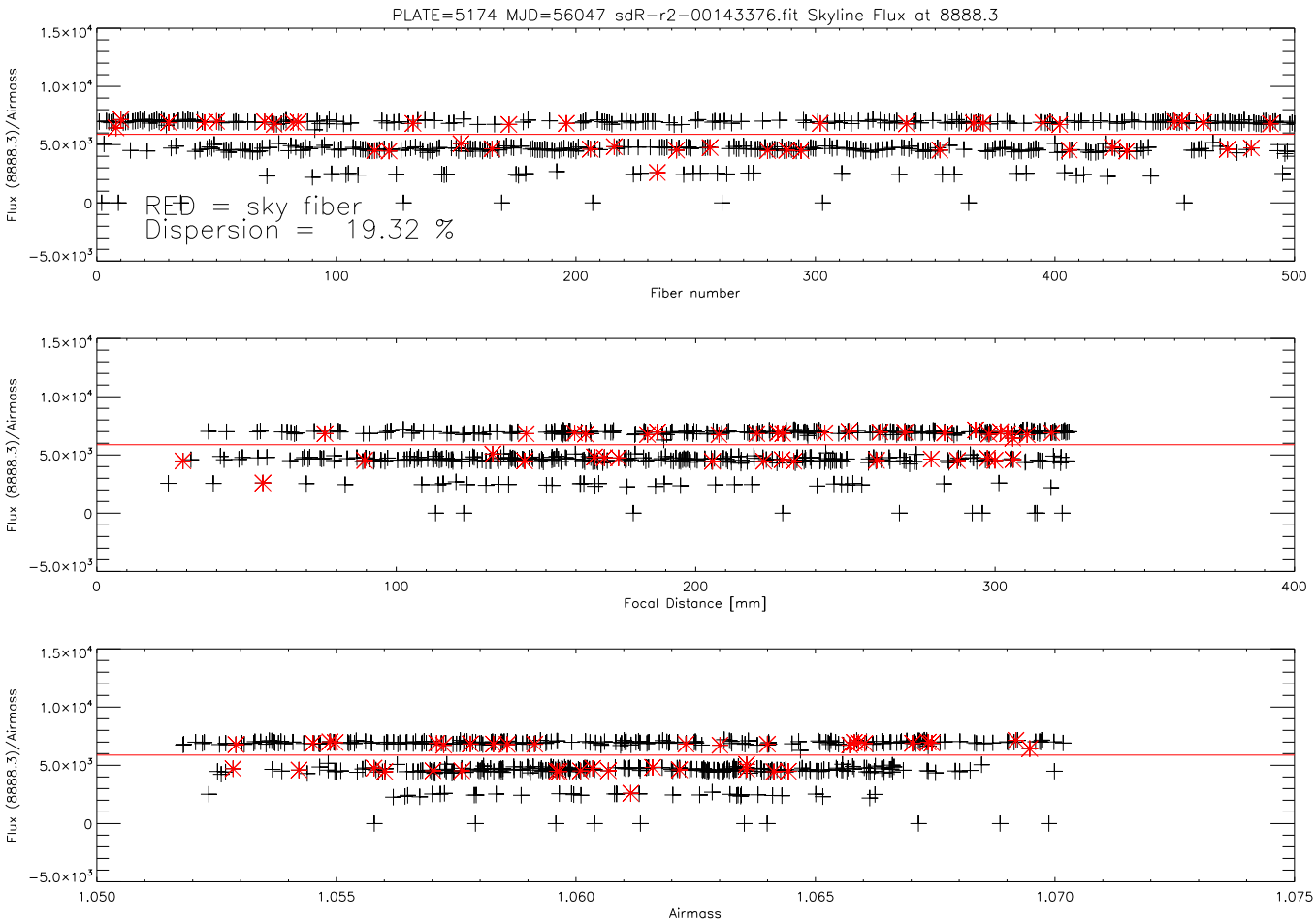

PLATE=5174 MJD=56047 sdR-r2-00143376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

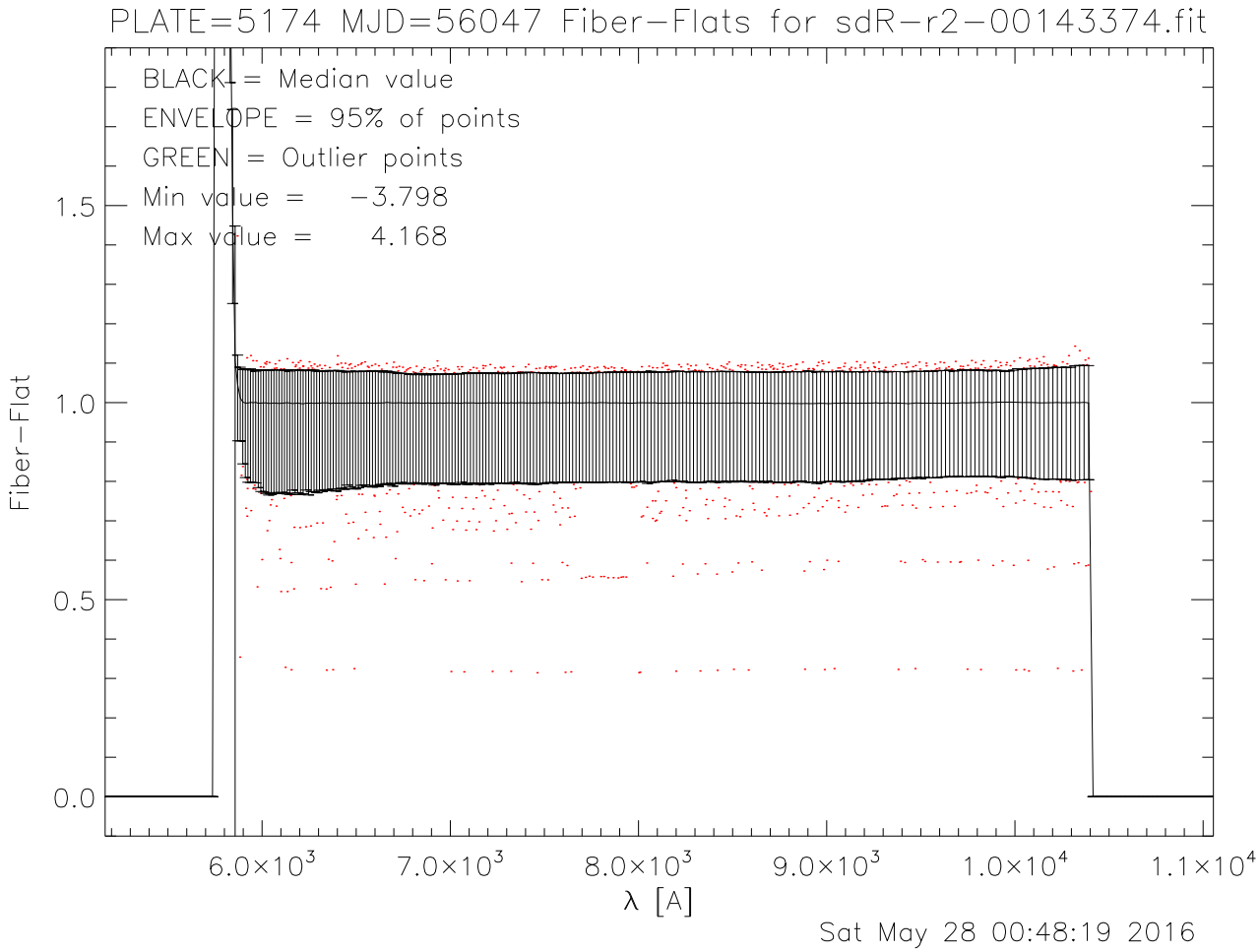

PLATE=5174 MJD=56047 sdR-r2-00143376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

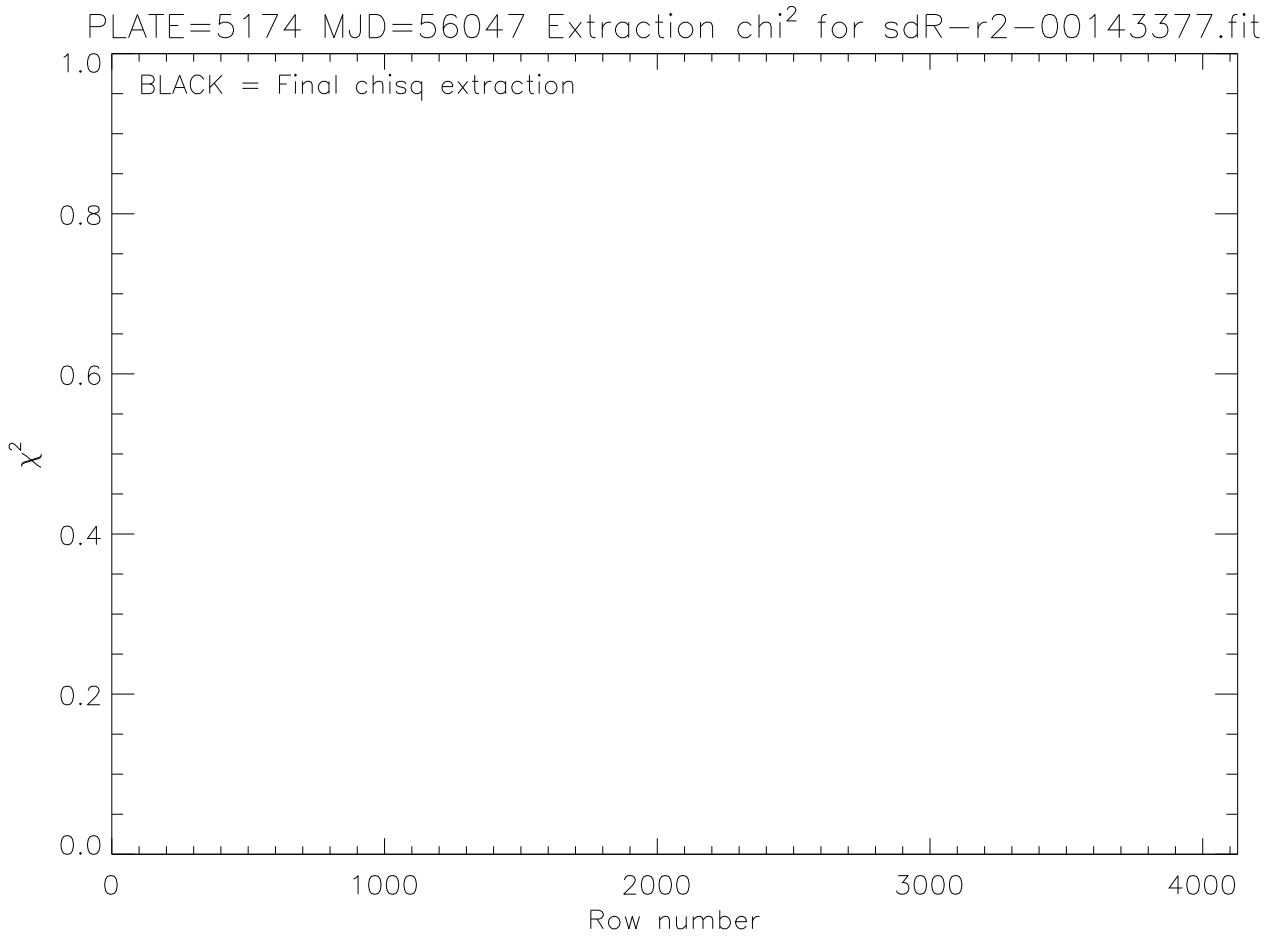
Number of sky fibers = 40

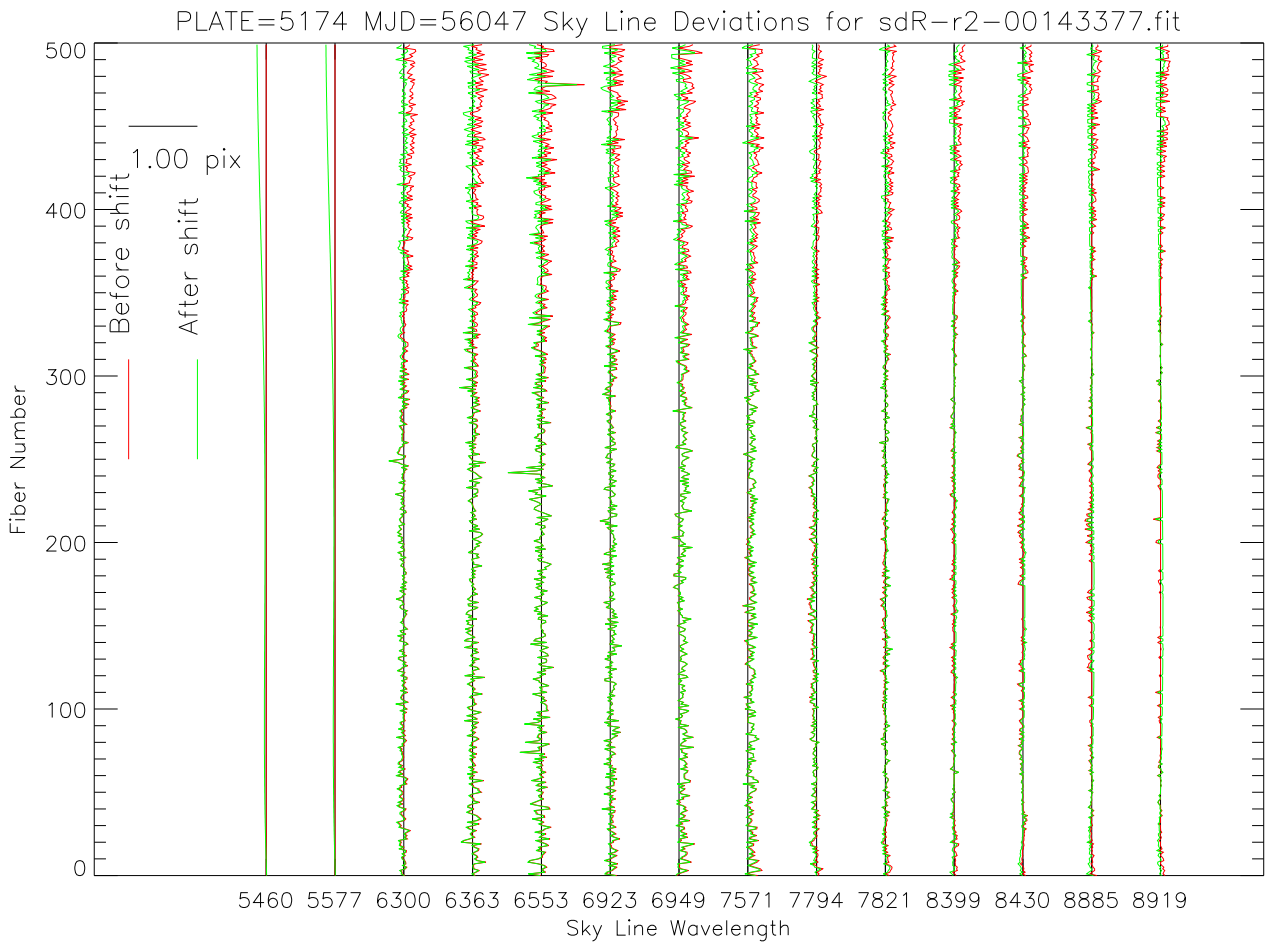


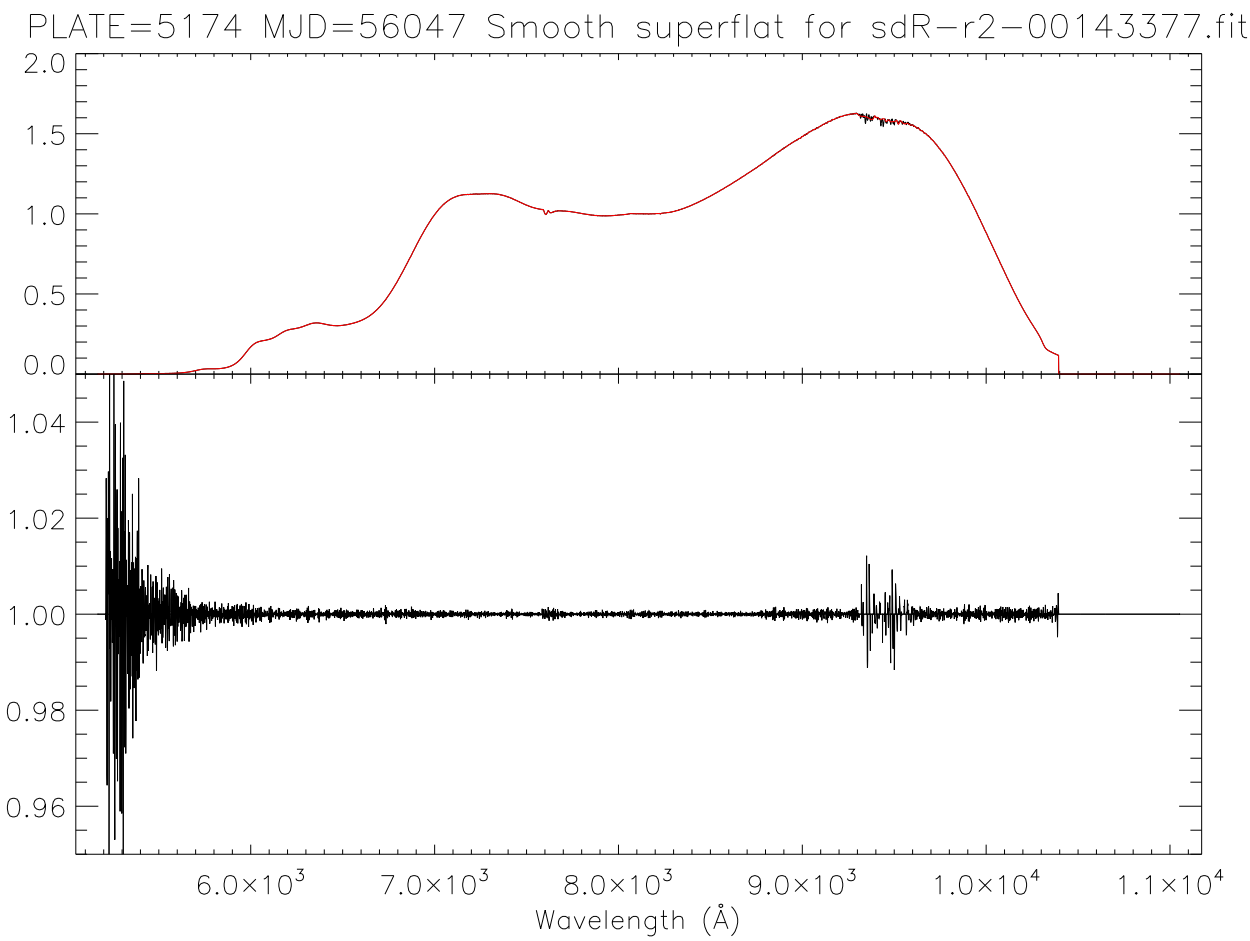

PLATE=5174 MJD=56047 sdR-r2-00143376.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.89 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

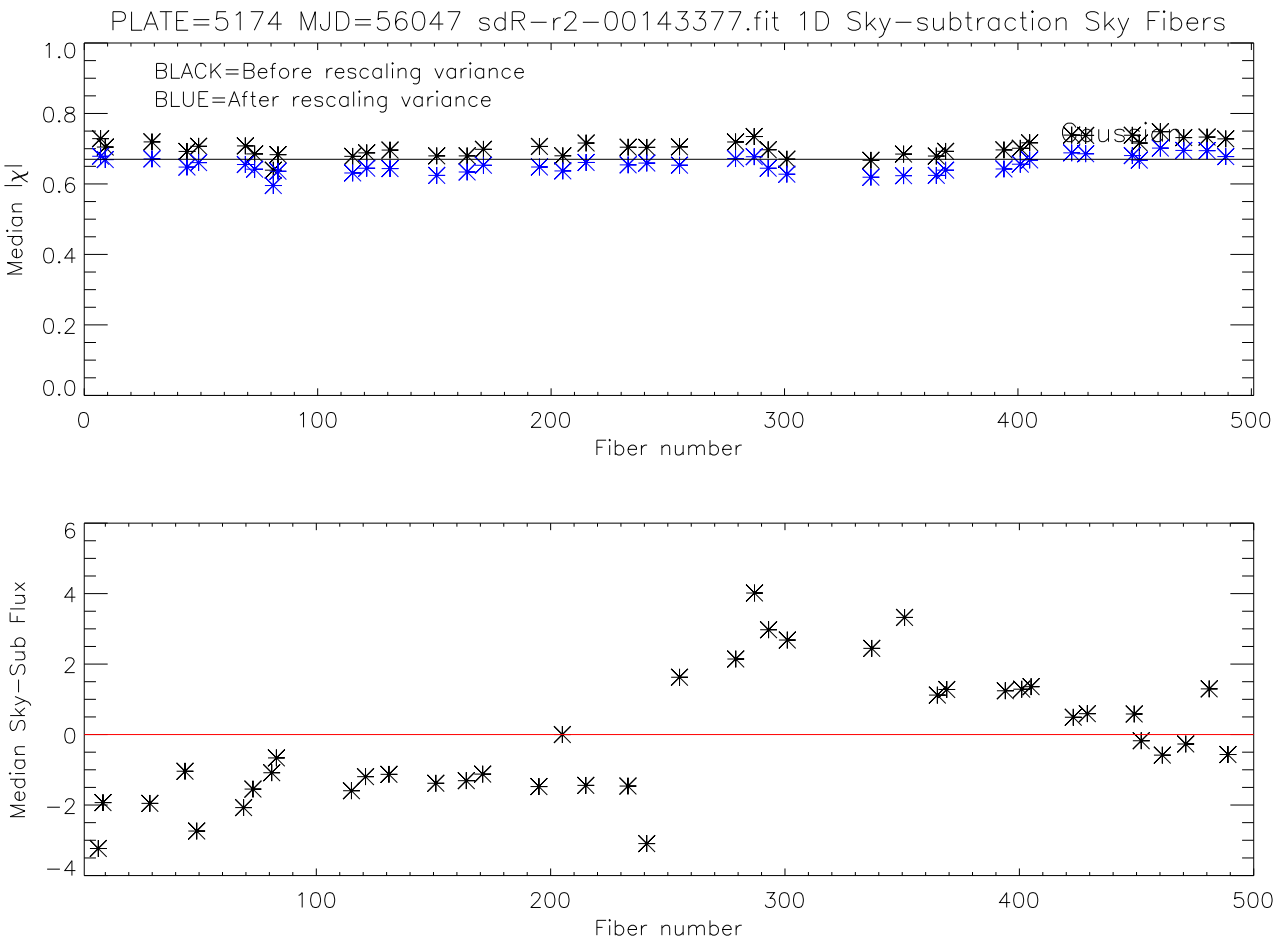

PLATE=5174 MJD=56047 sdR-r2-00143376.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
RED = sky fiber
Dispersion = 19.32 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
1.050
1.055
1.060
1.065
1.070
1.075
Airmass

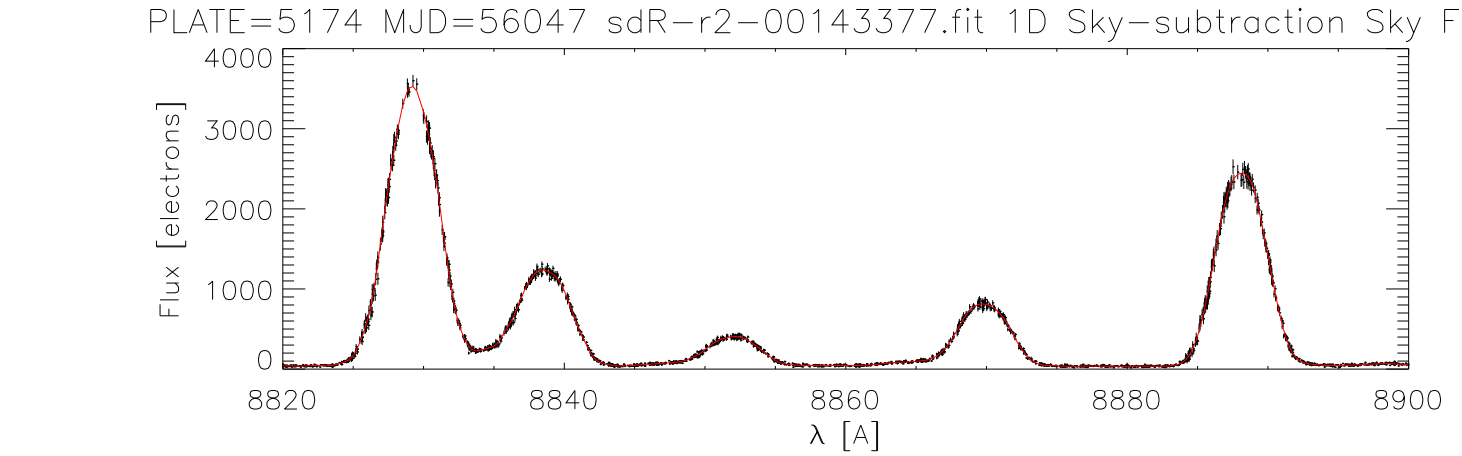

PLATE=5174 MJD=56047 Fiber−Flats for sdR−r2−00143374.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.798
Max value = 4.168
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 00:48:19 2016

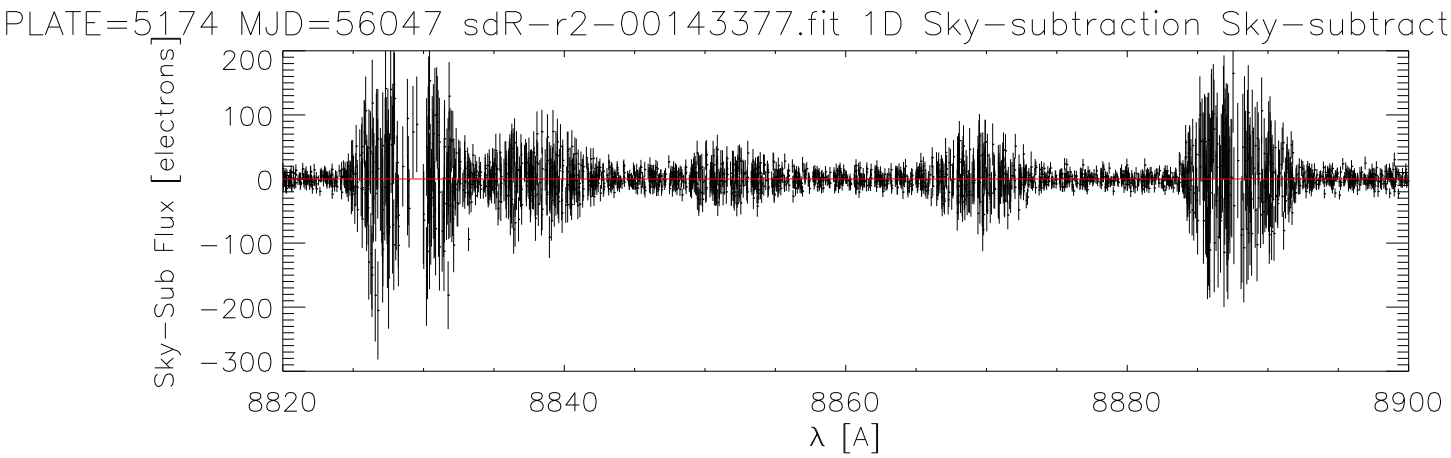

PLATE=5174 MJD=56047 Extraction chi^2 for sdR−r2−00143377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=5174 MJD=56047 Sky Line Deviations for sdR-r2-00143377.fit
Before shift
After shift
1.00 pix
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

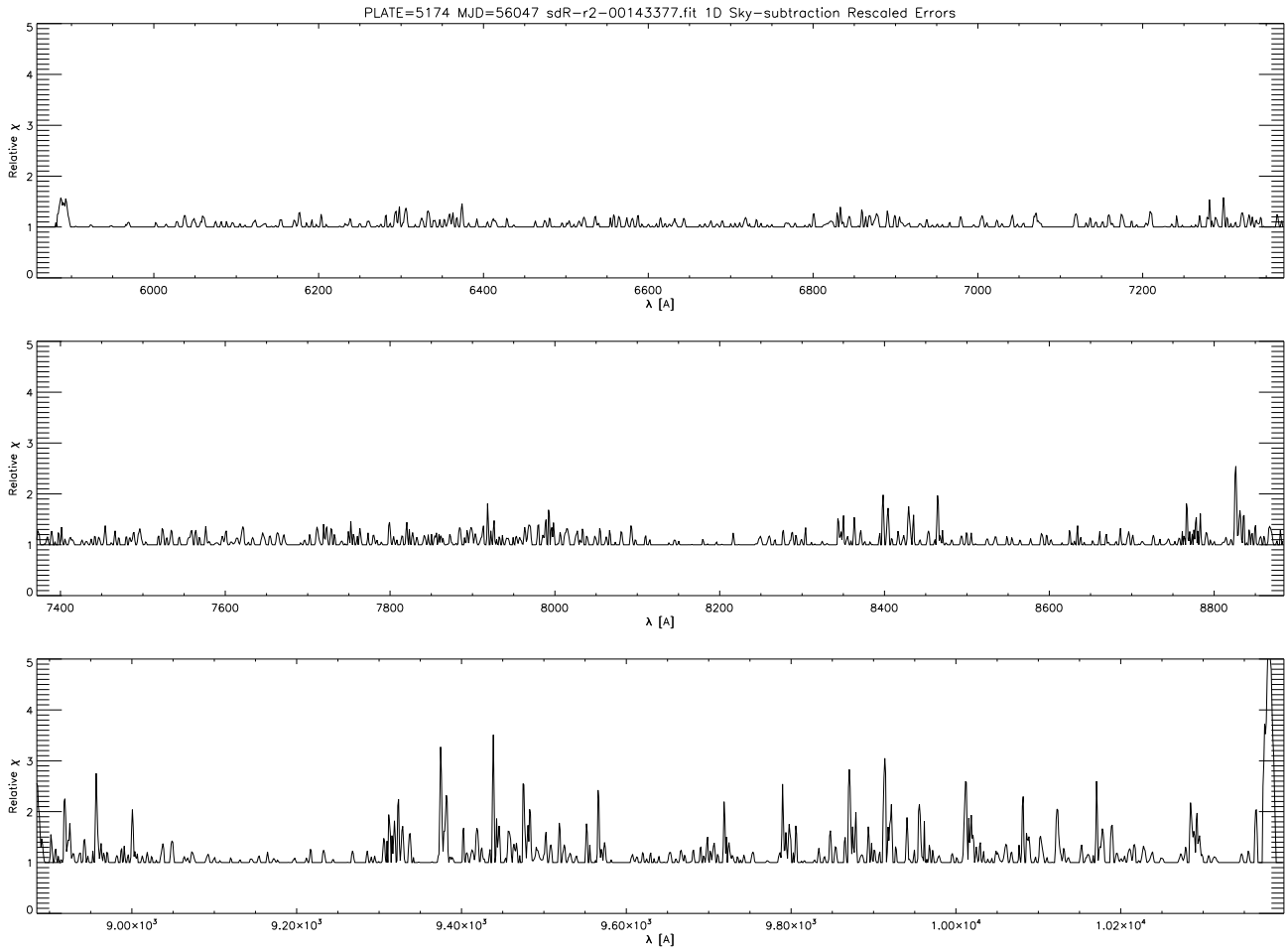

PLATE=5174 MJD=56047 Smooth superflat for sdR-r2-00143377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

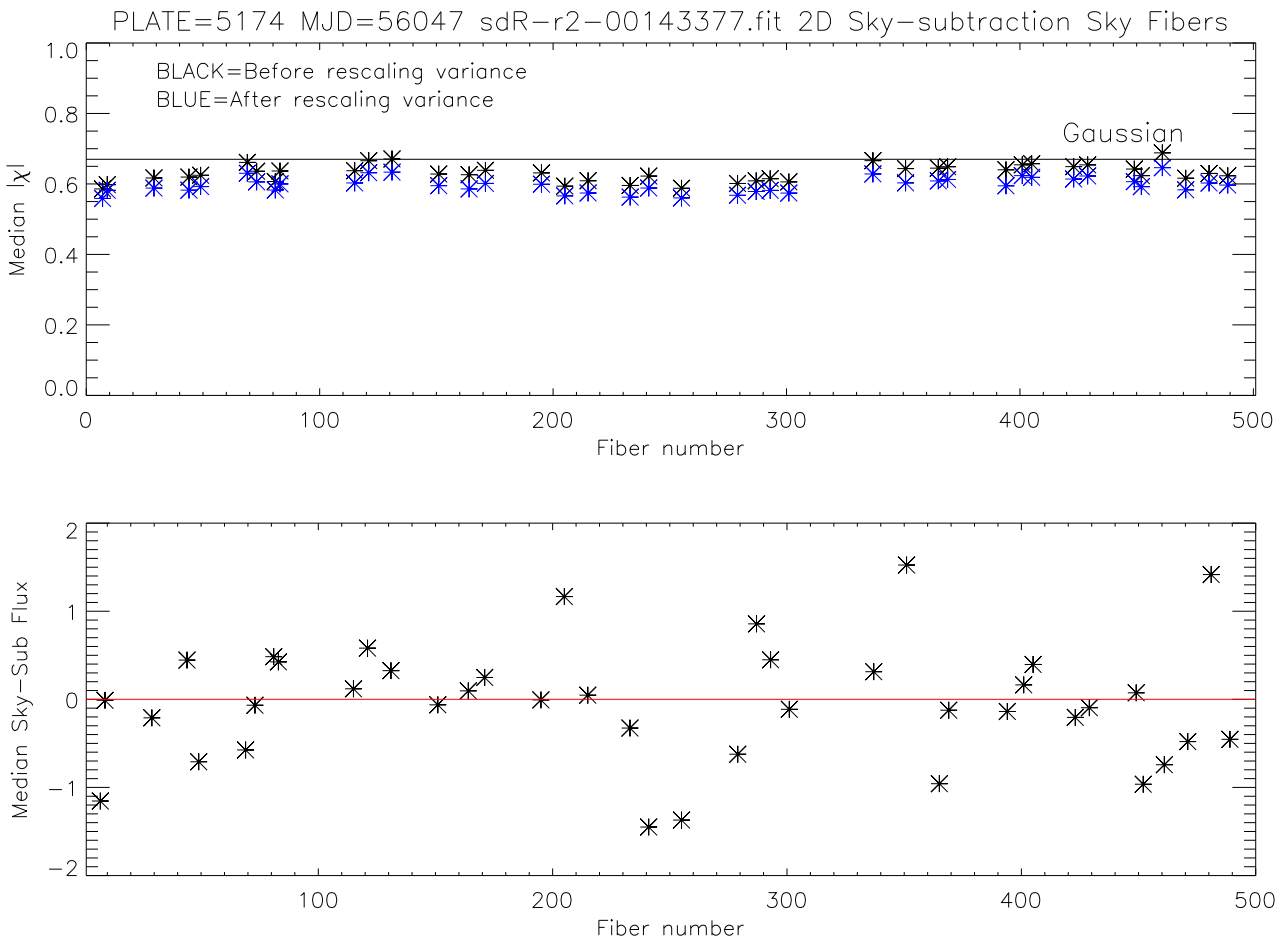

PLATE=5174 MJD=56047 sdR-r2-00143377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

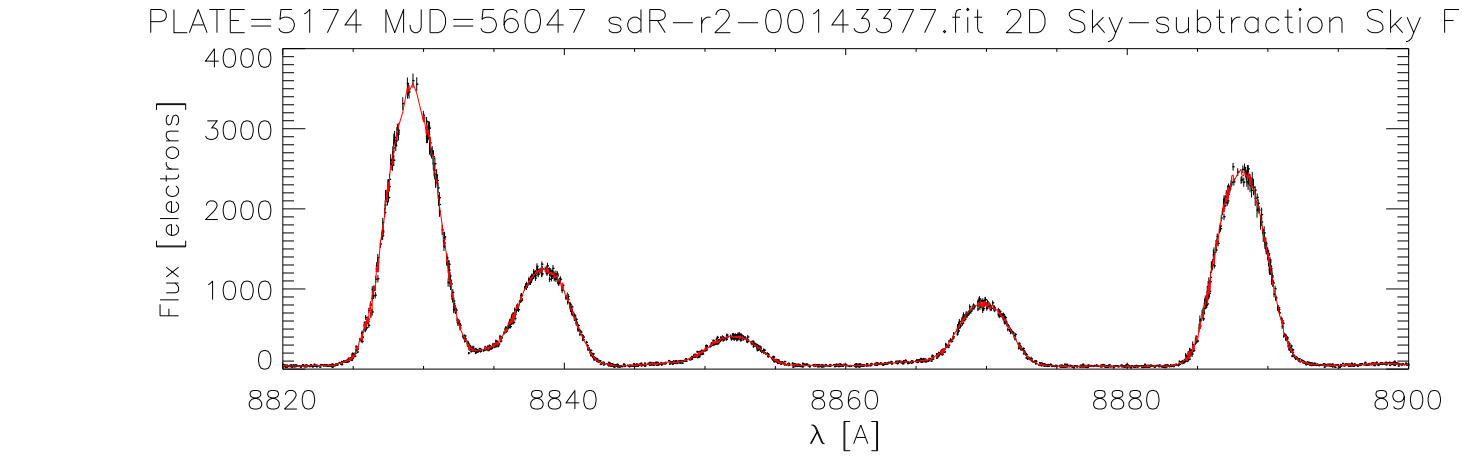

PLATE=5174 MJD=56047 sdR-r2-00143377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

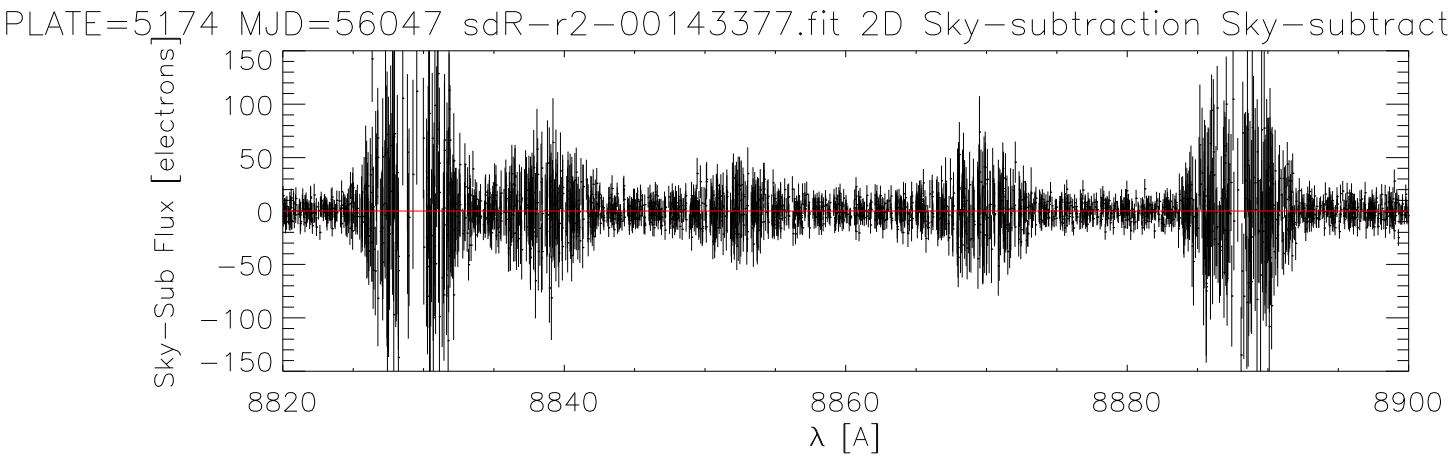

PLATE=5174 MJD=56047 sdR-r2-00143377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 40

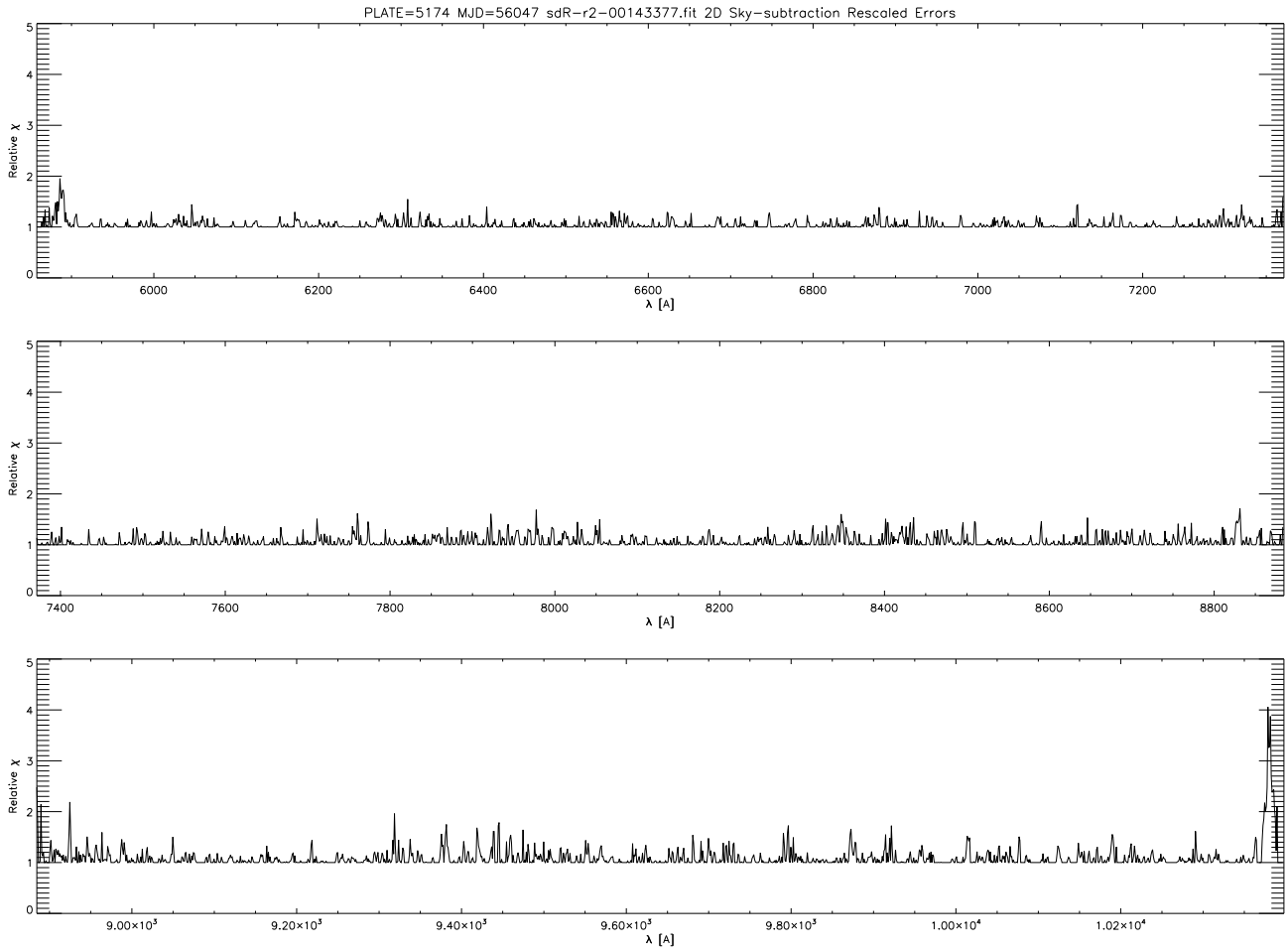


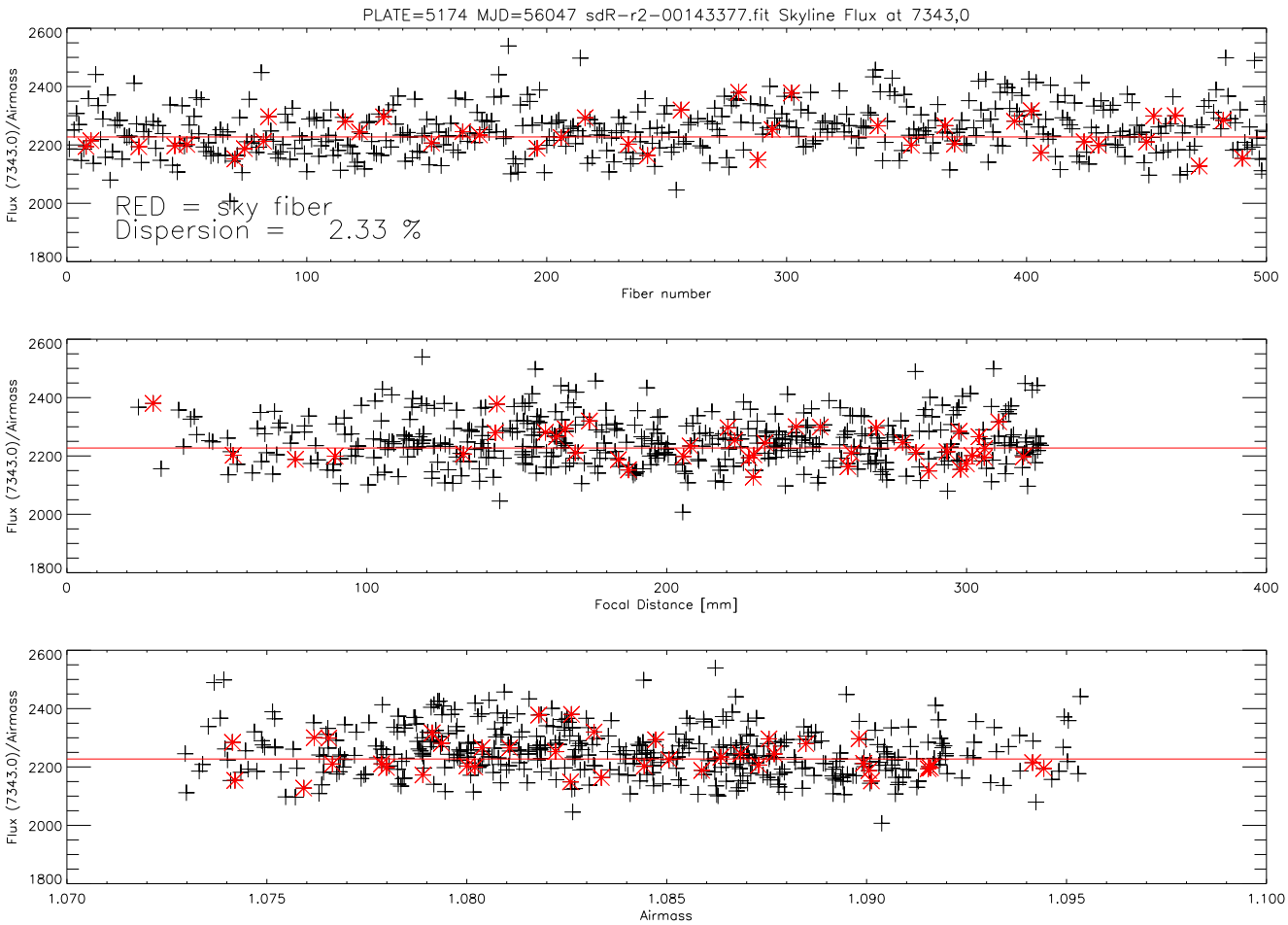

PLATE=5174 MJD=56047 sdR-r2-00143377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

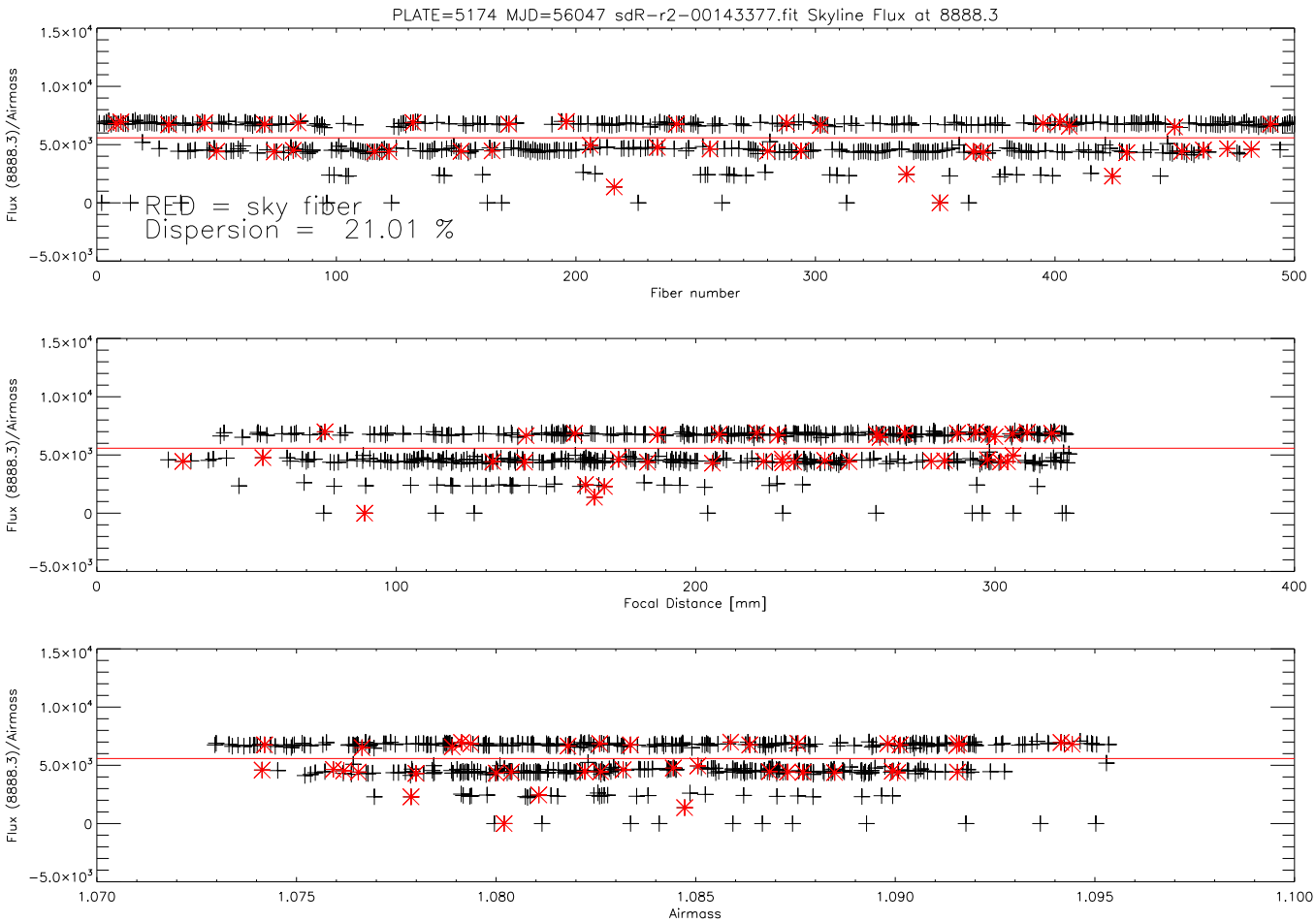

PLATE=5174 MJD=56047 sdR-r2-00143377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=5174 MJD=56047 sdR-r2-00143377.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 40




PLATE=5174 MJD=56047 sdR-r2-00143377.fit Skyline Flux at 7343.0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.33 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=5174 MJD=56047 sdR-r2-00143377.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
RED = sky fiber
Dispersion = 21.01 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
1.070
1.075
1.080
1.085
1.090
1.095
1.100
Airmass