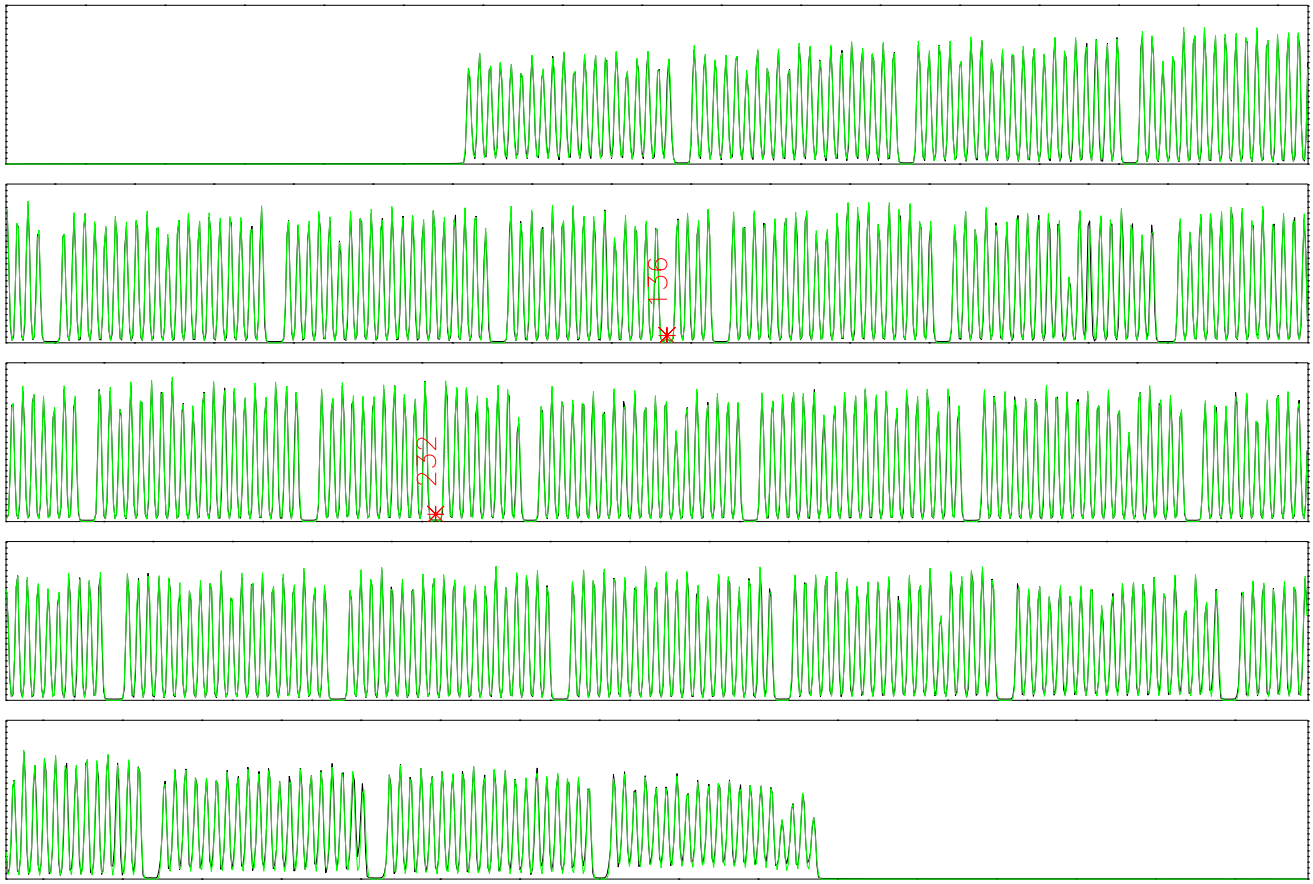
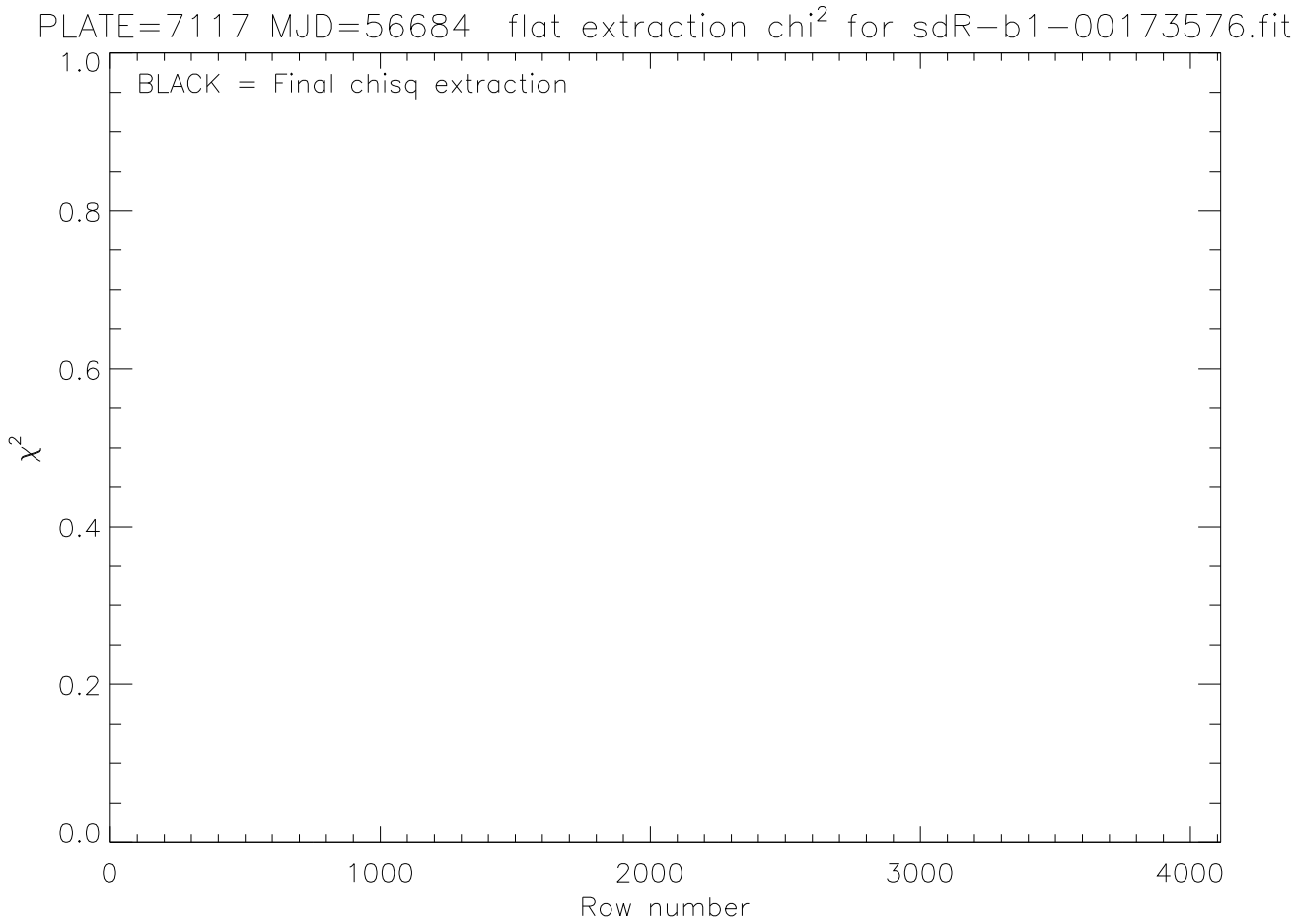
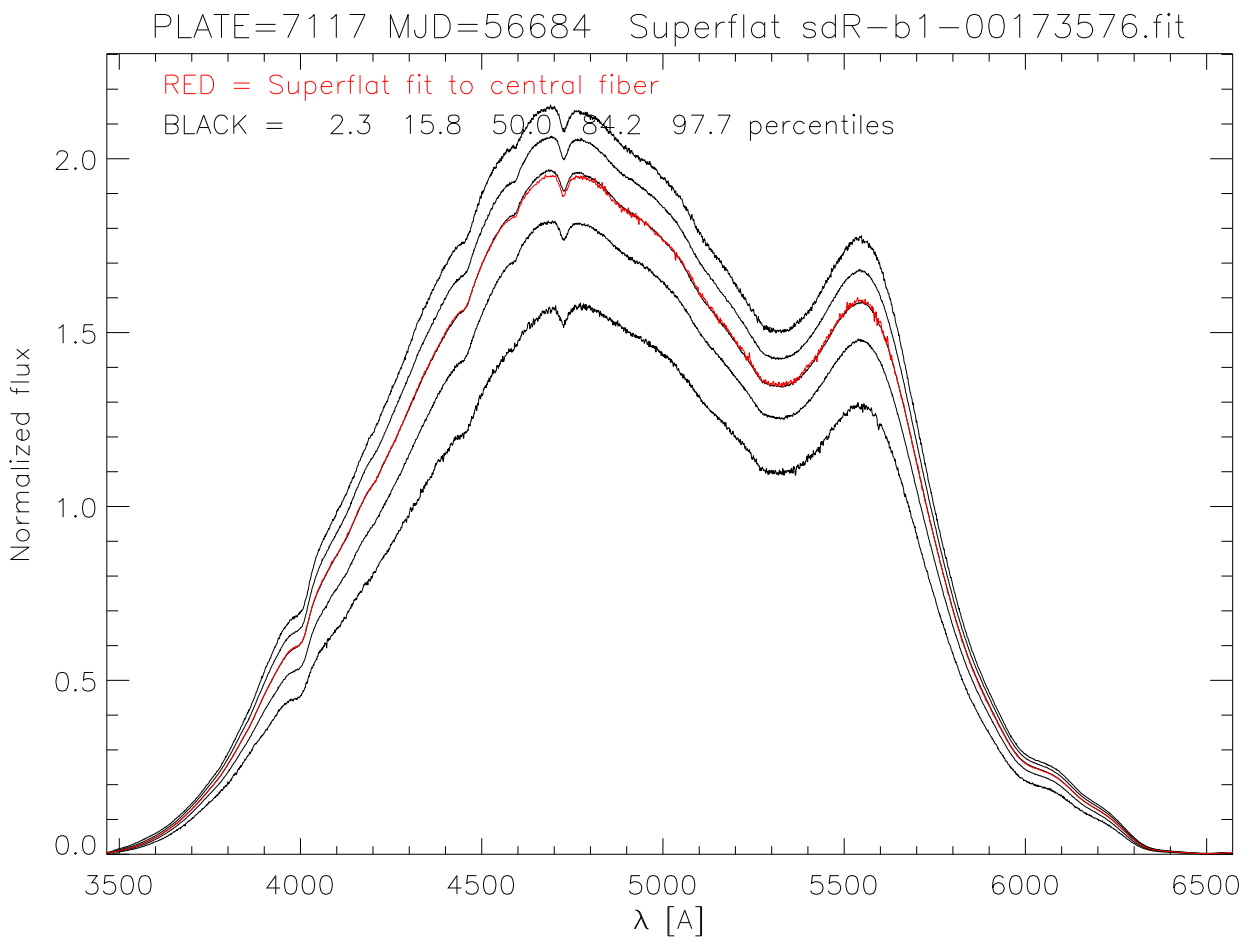
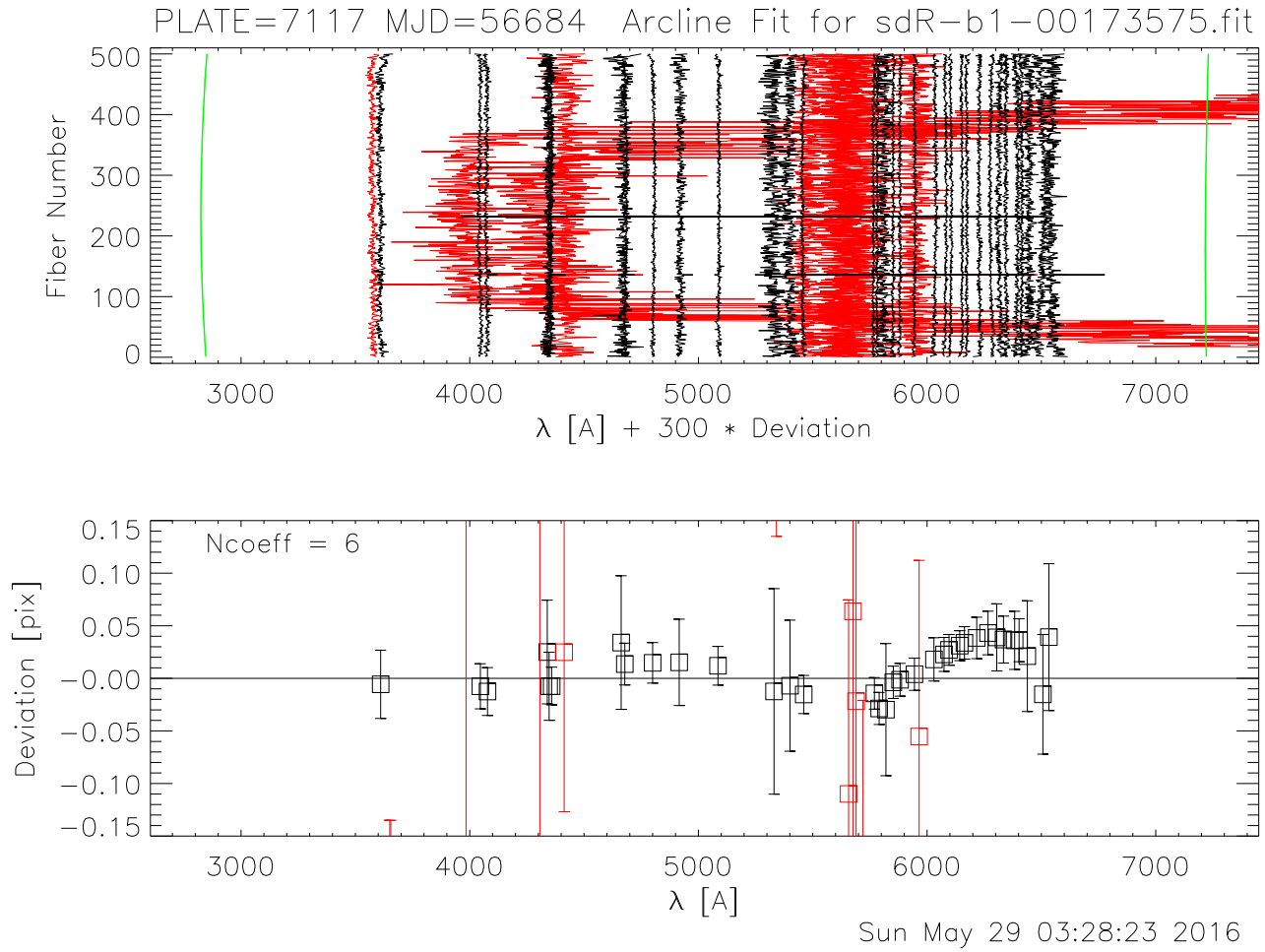
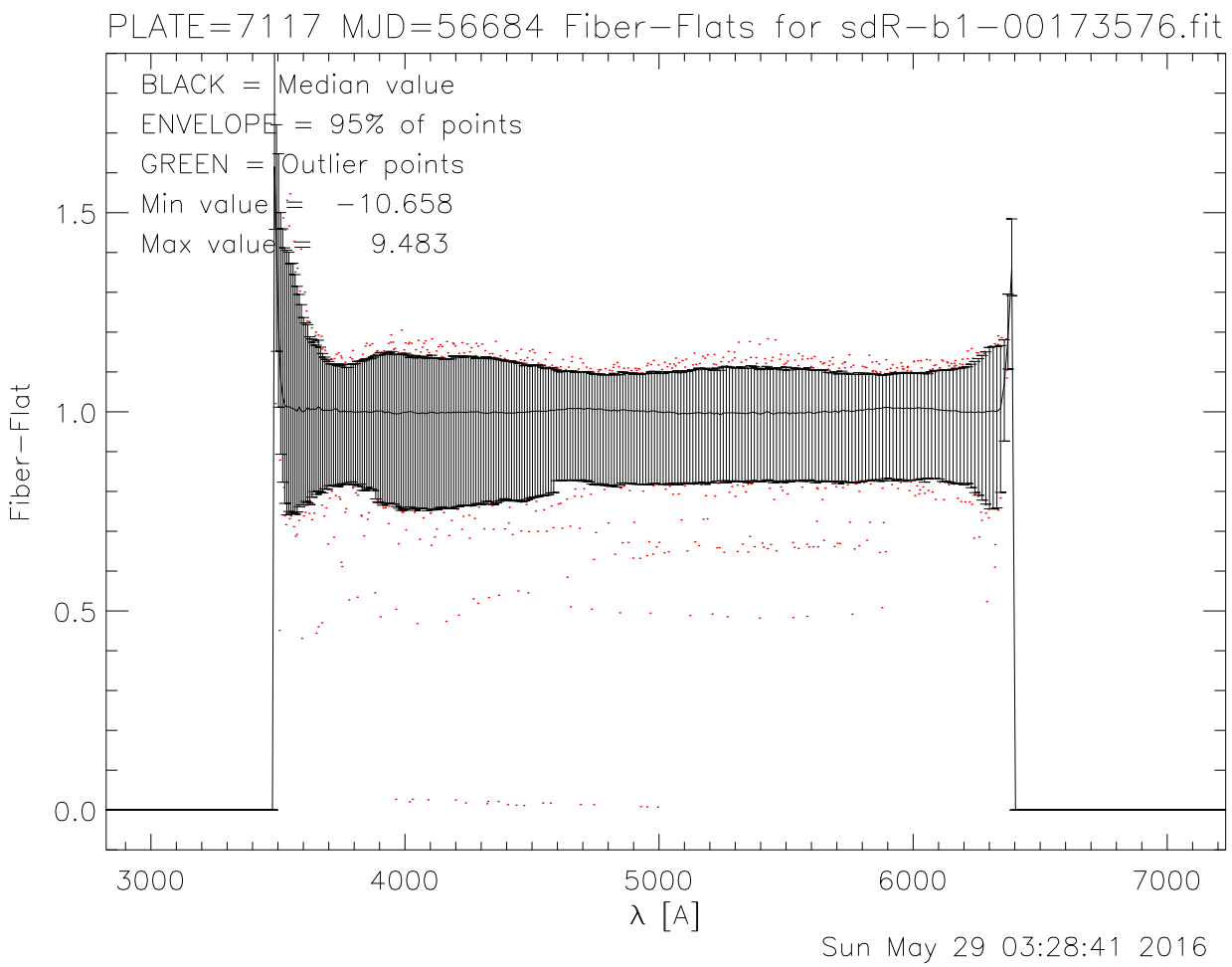
PLATE=7117 MJD=56684 Traces sdR-b1-00173576.fit

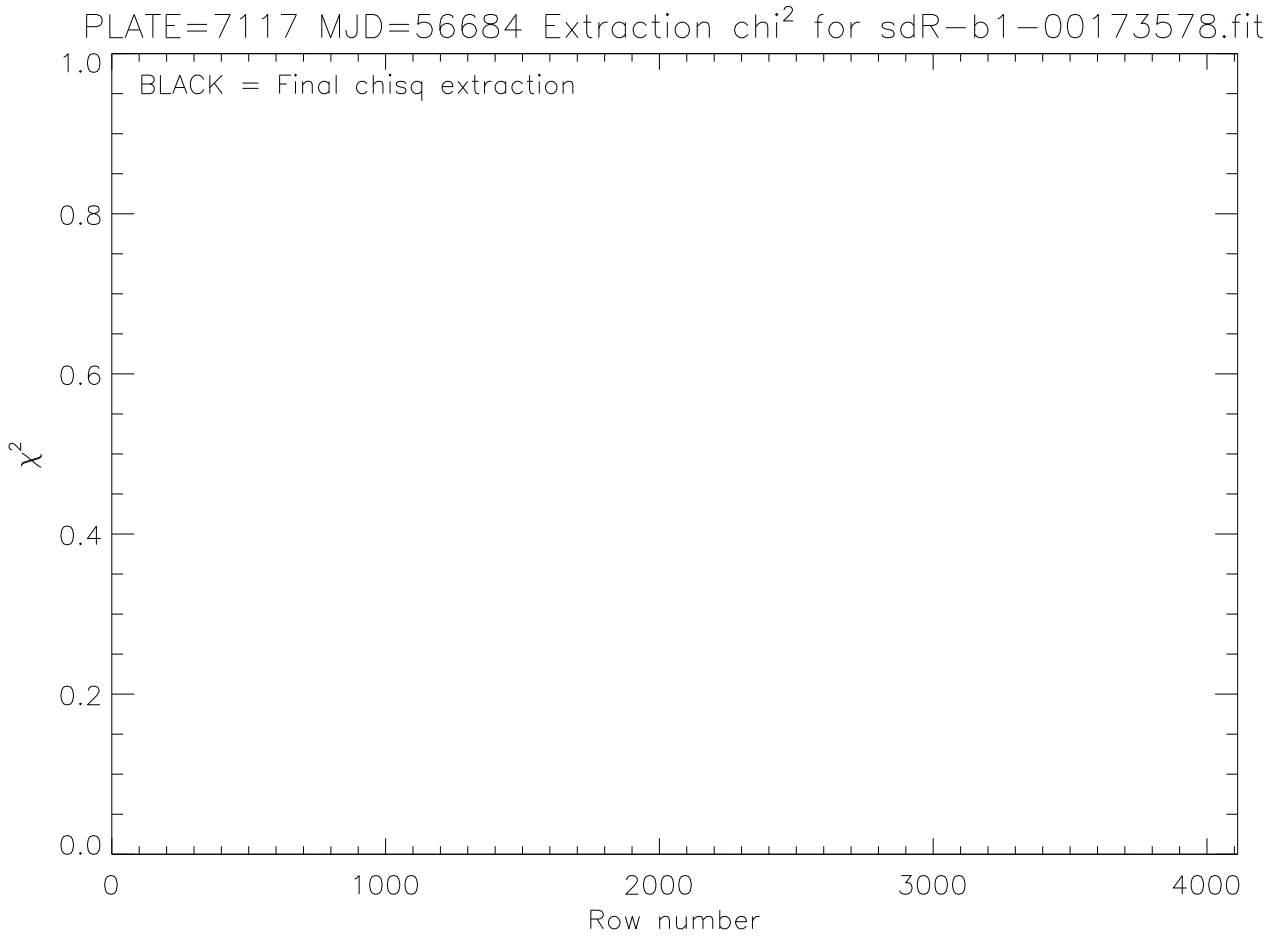


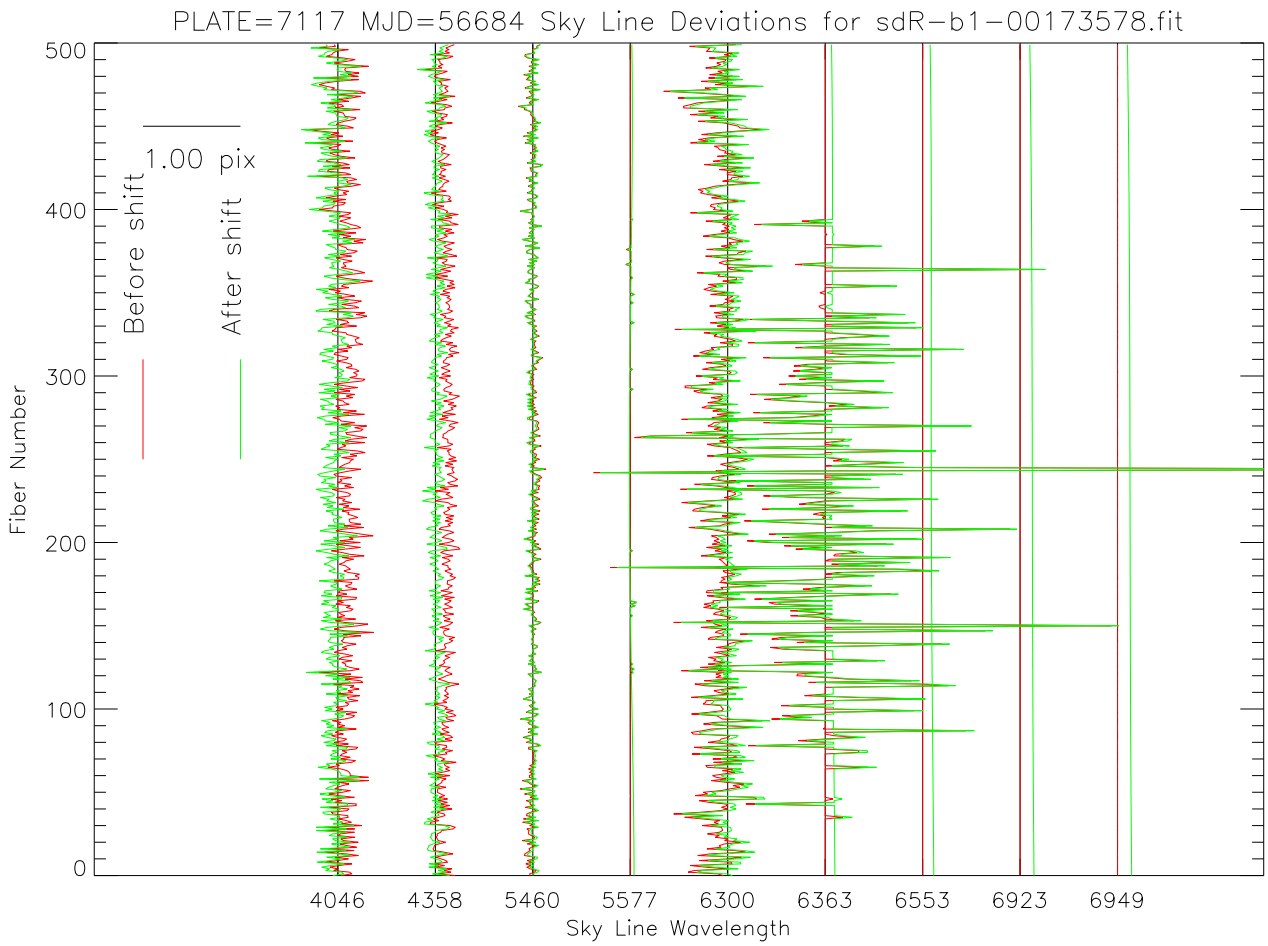

PLATE=7117 MJD=56684 flat extraction chi^2 for sdR−b1−00173576.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

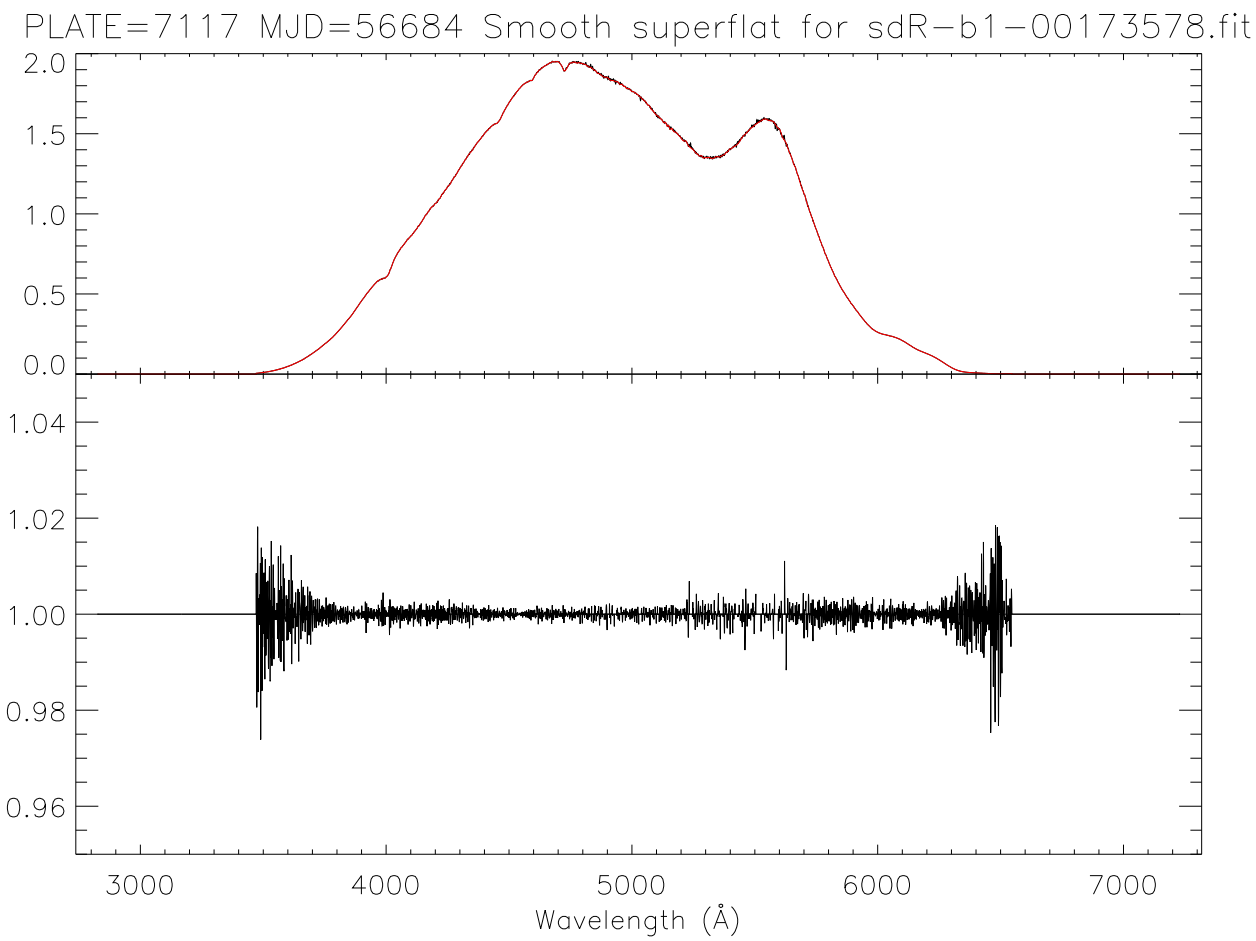

PLATE=7117 MJD=56684 Superflat sdR-b1-00173576.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
3500
4000
4500
5000
5500
6000
6500

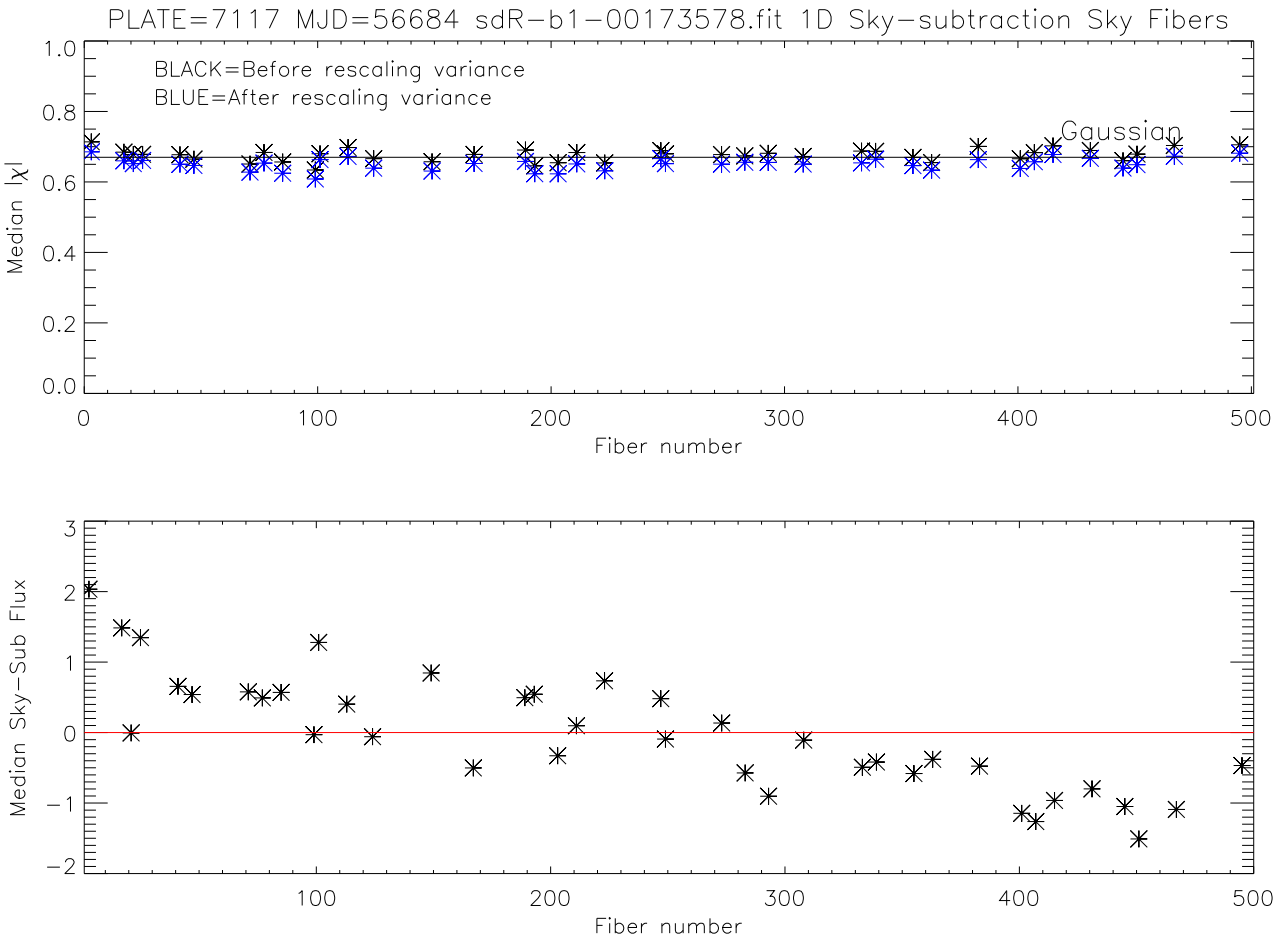

PLATE=7117 MJD=56684 Arcline Fit for sdR-b1-00173575.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:28:23 2016

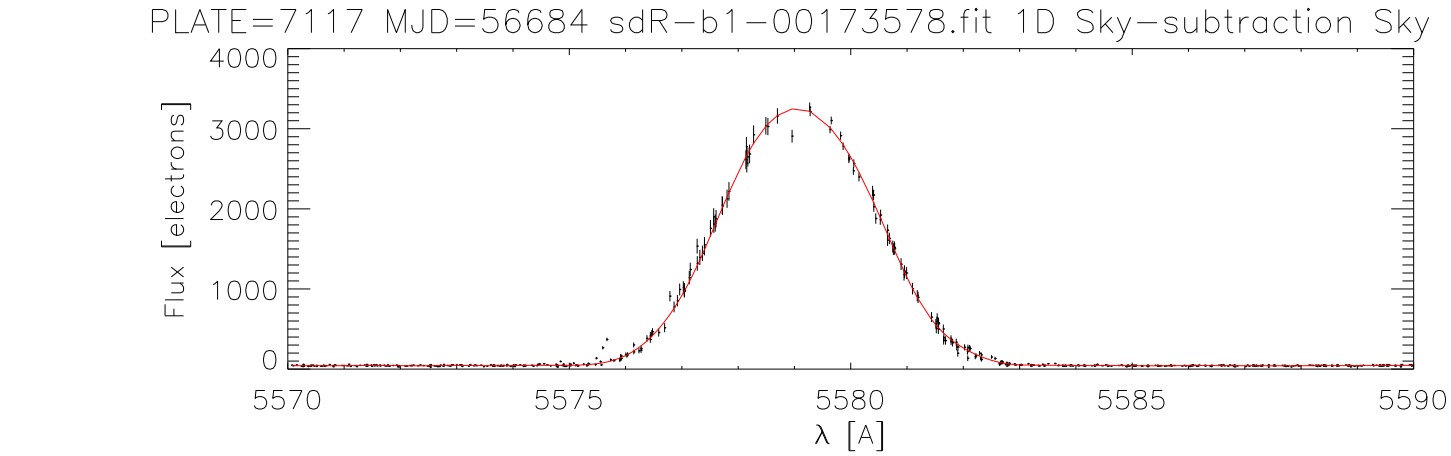

PLATE=7117 MJD=56684 Fiber−Flats for sdR−b1−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −10.658
Max value = 9.483
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:28:41 2016

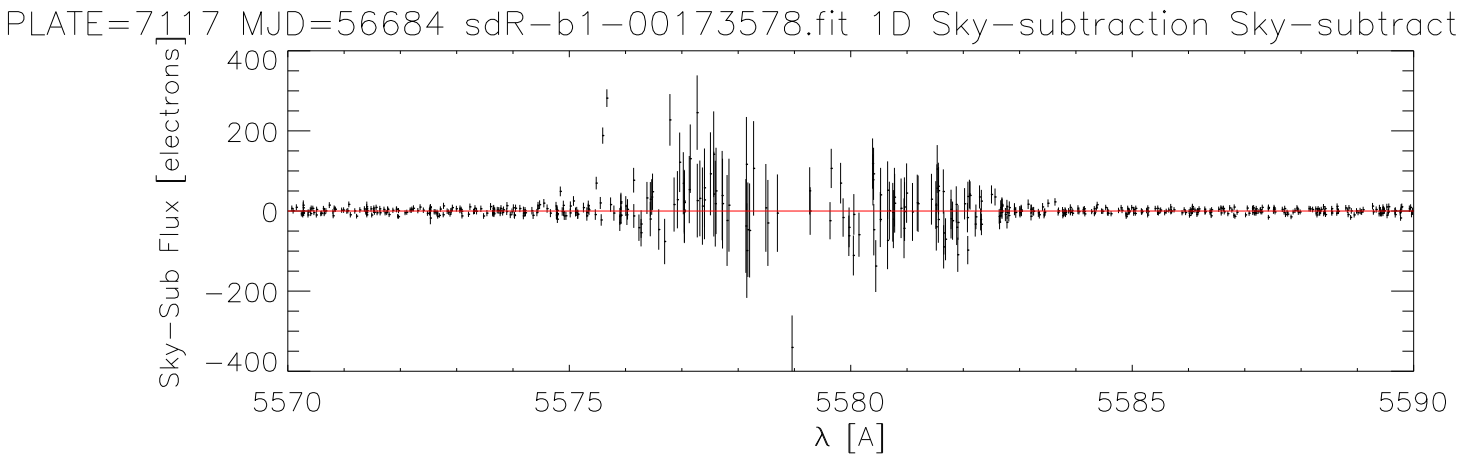

PLATE=7117 MJD=56684 Extraction chi^2 for sdR-b1-00173578.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-b1-00173578.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

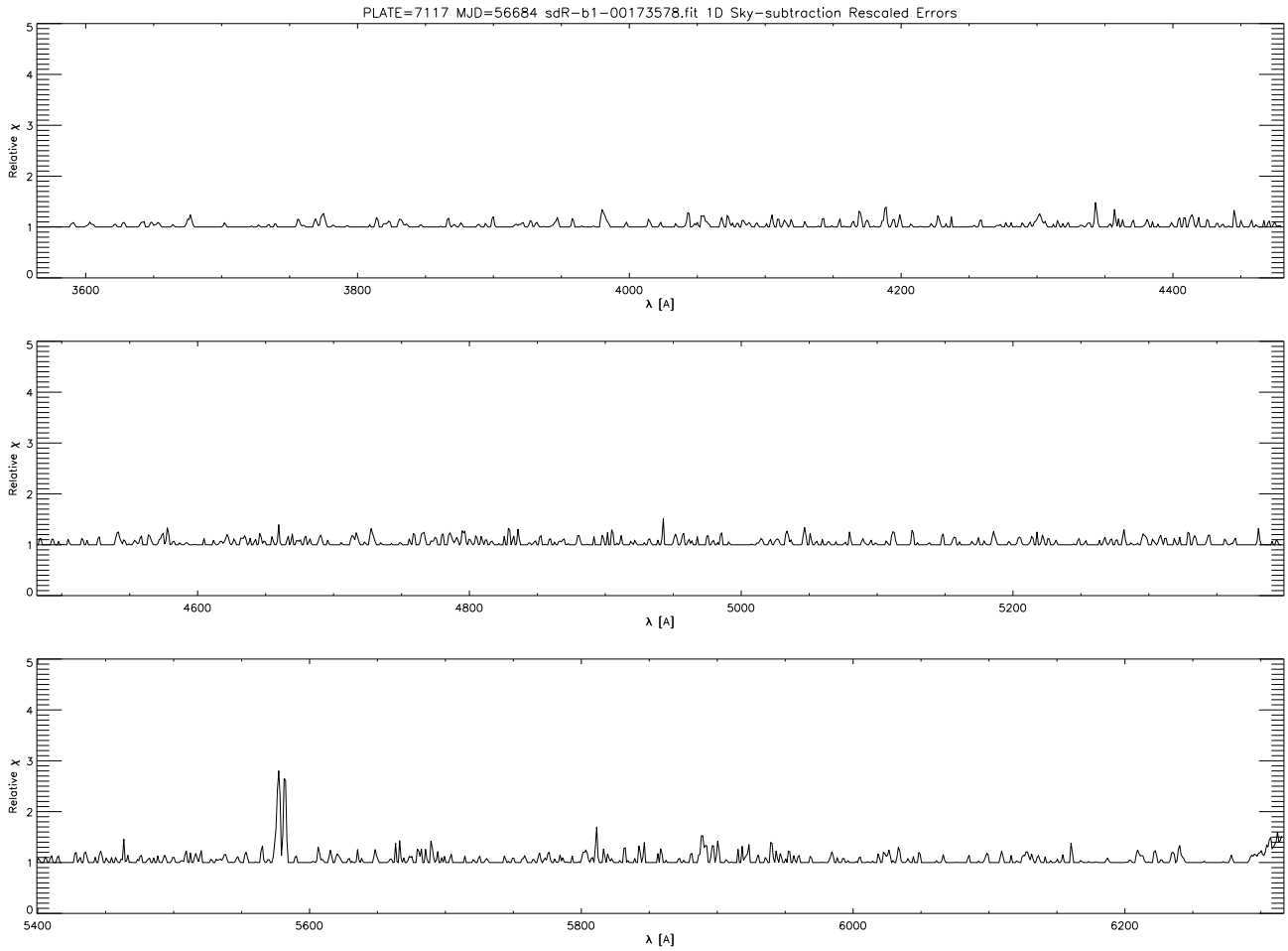

PLATE=7117 MJD=56684 Smooth superflat for sdR-b1-00173578.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

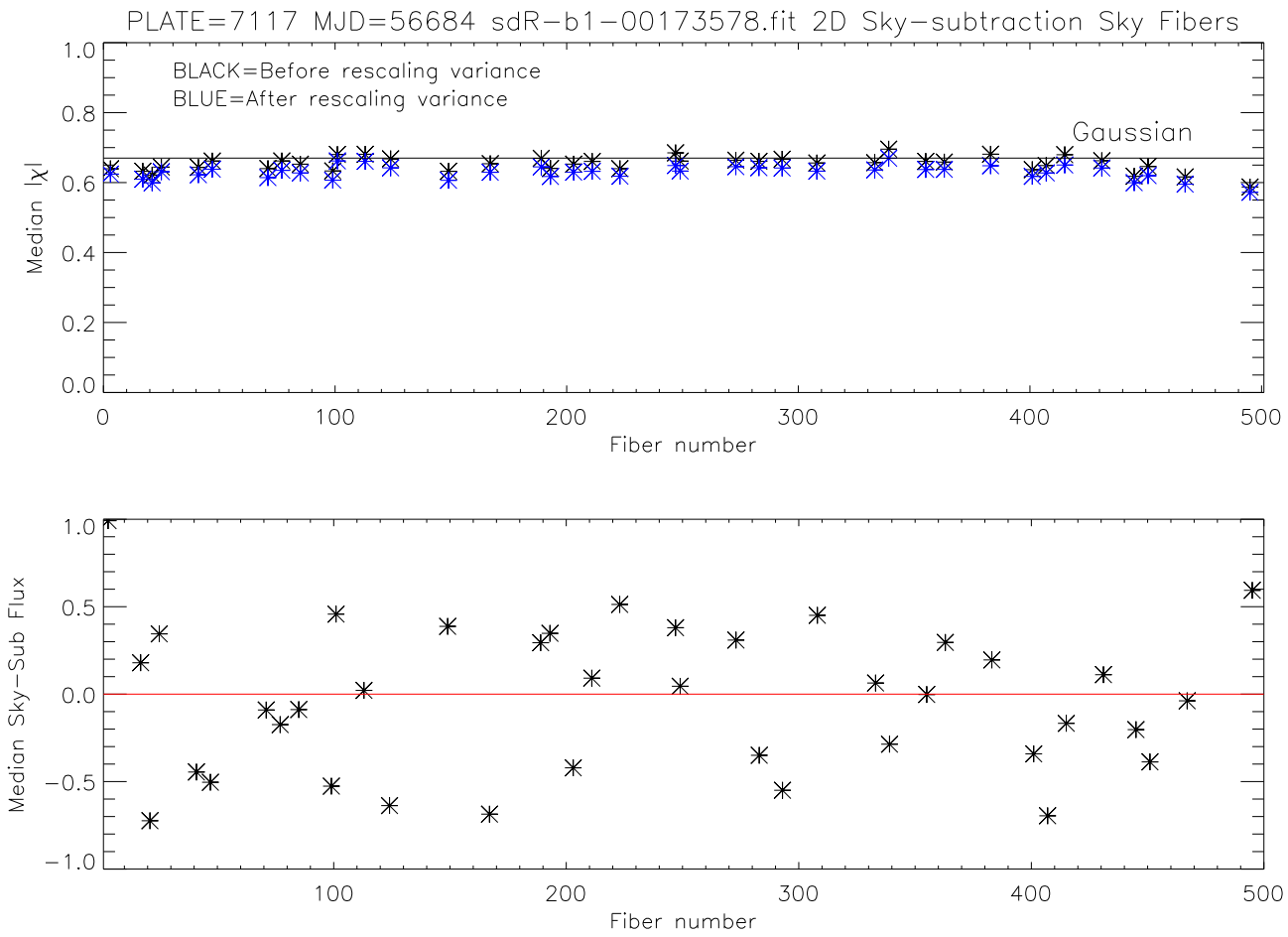

PLATE=7117 MJD=56684 sdR-b1-00173578.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

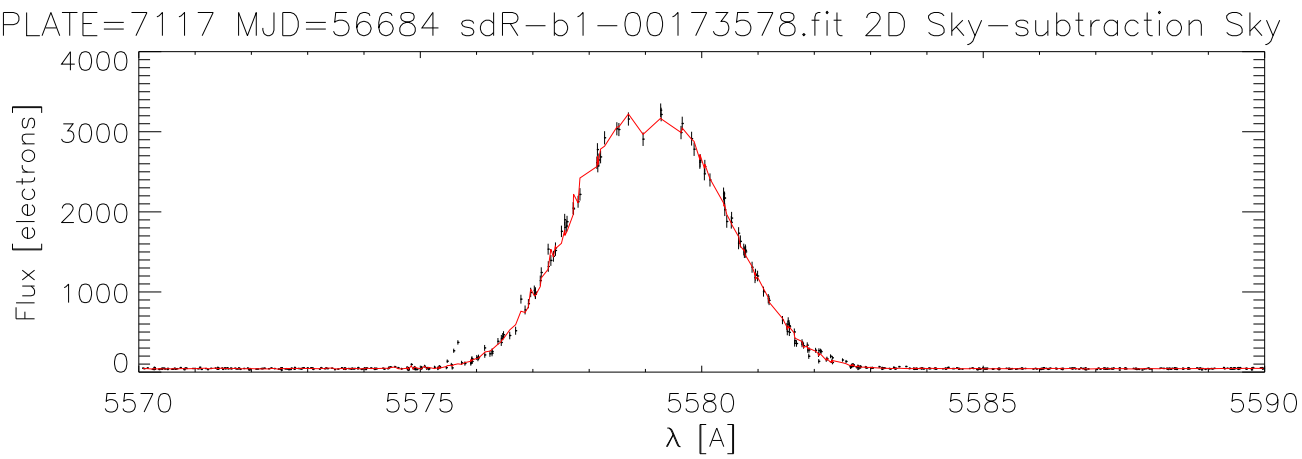

PLATE=7117 MJD=56684 sdR-b1-00173578.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

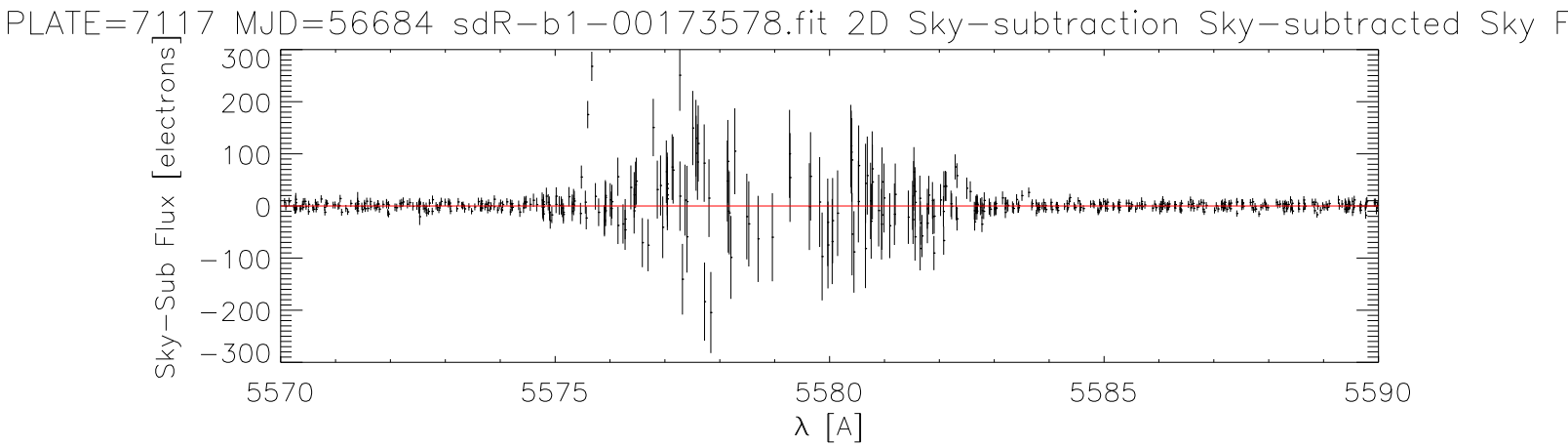

PLATE=7117 MJD=56684 sdR-b1-00173578.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

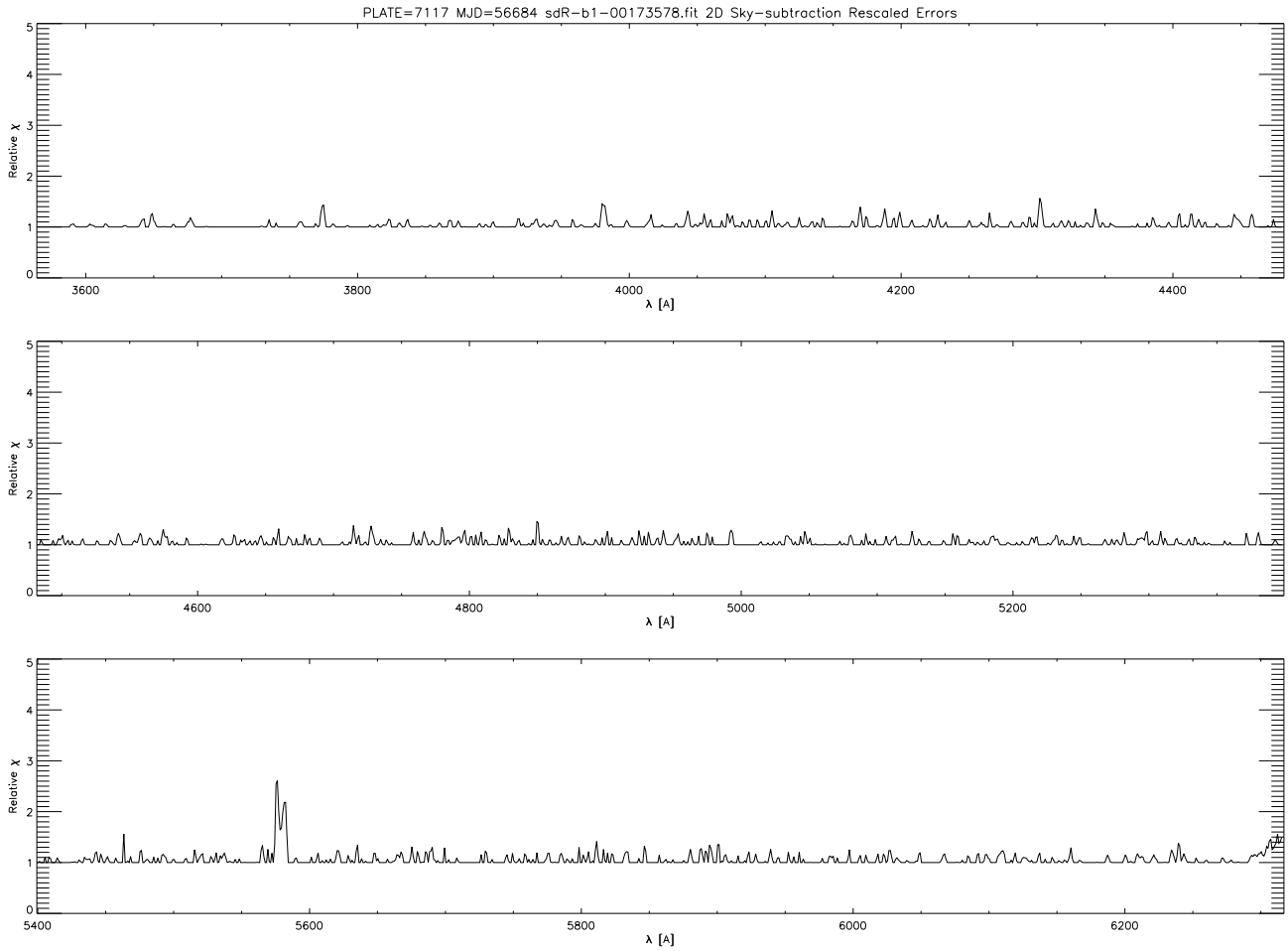


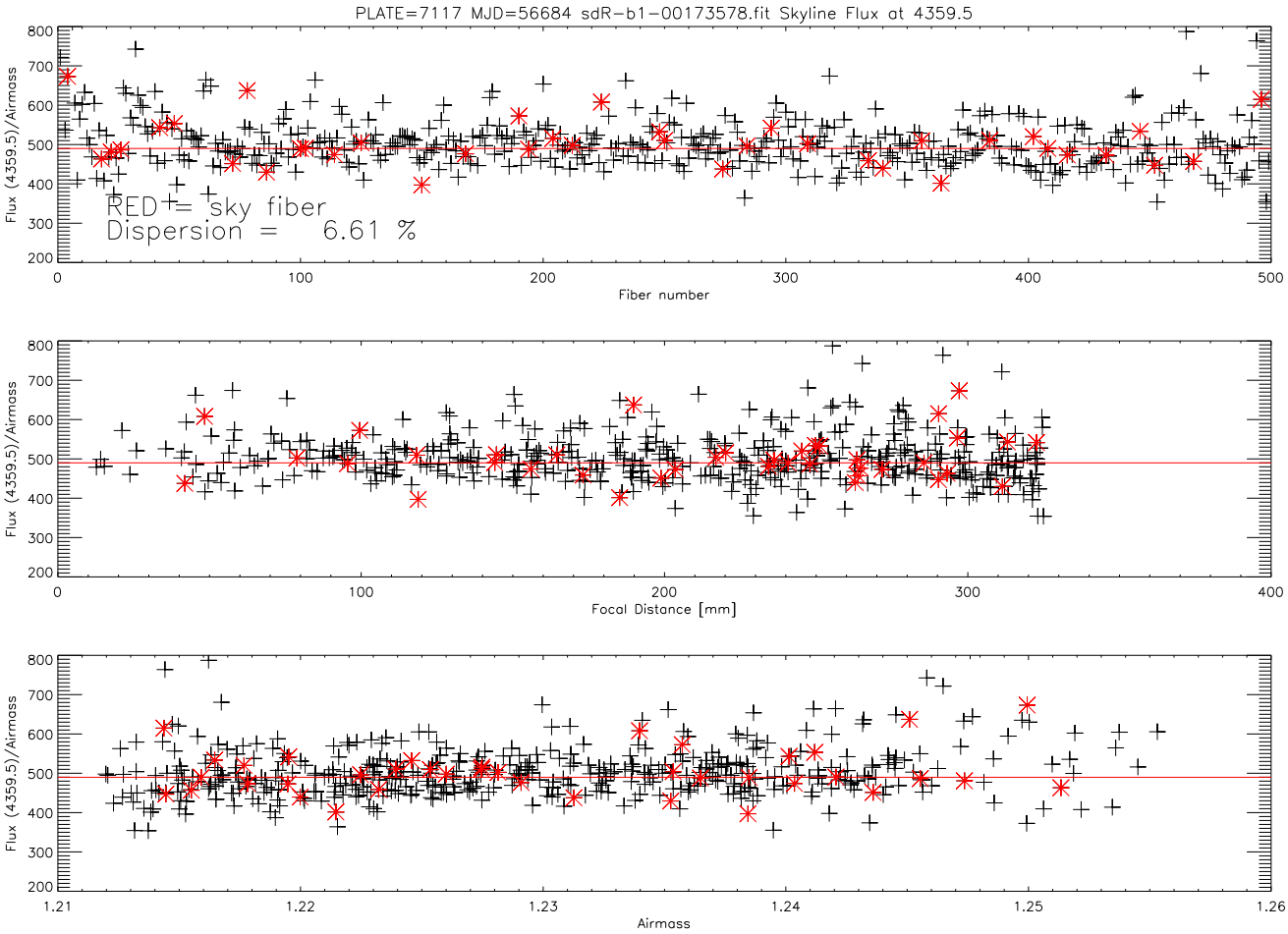

PLATE=7117 MJD=56684 sdR-b1-00173578.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

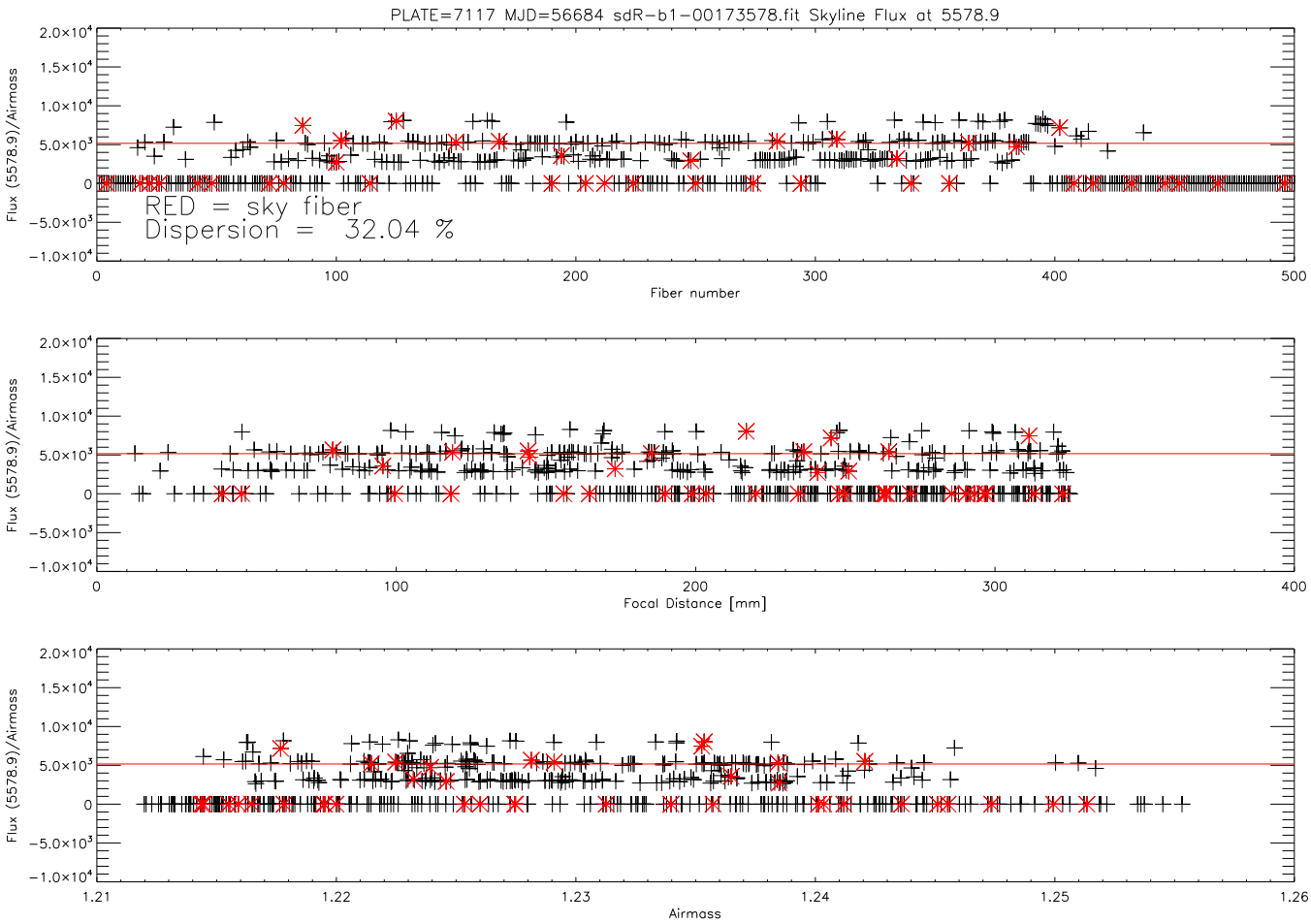

PLATE=7117 MJD=56684 sdR-b1-00173578.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

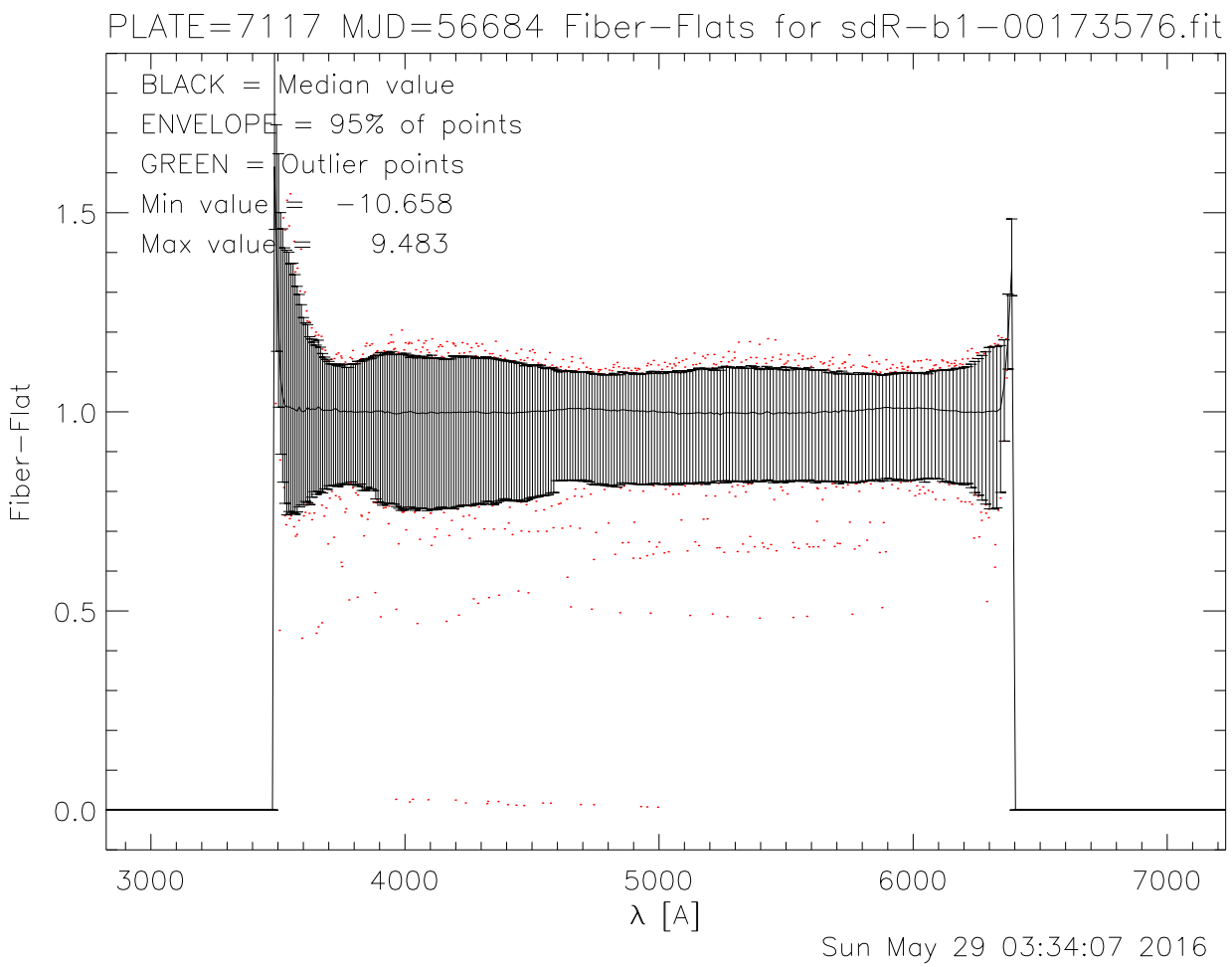

PLATE=7117 MJD=56684 sdR-b1-00173578.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

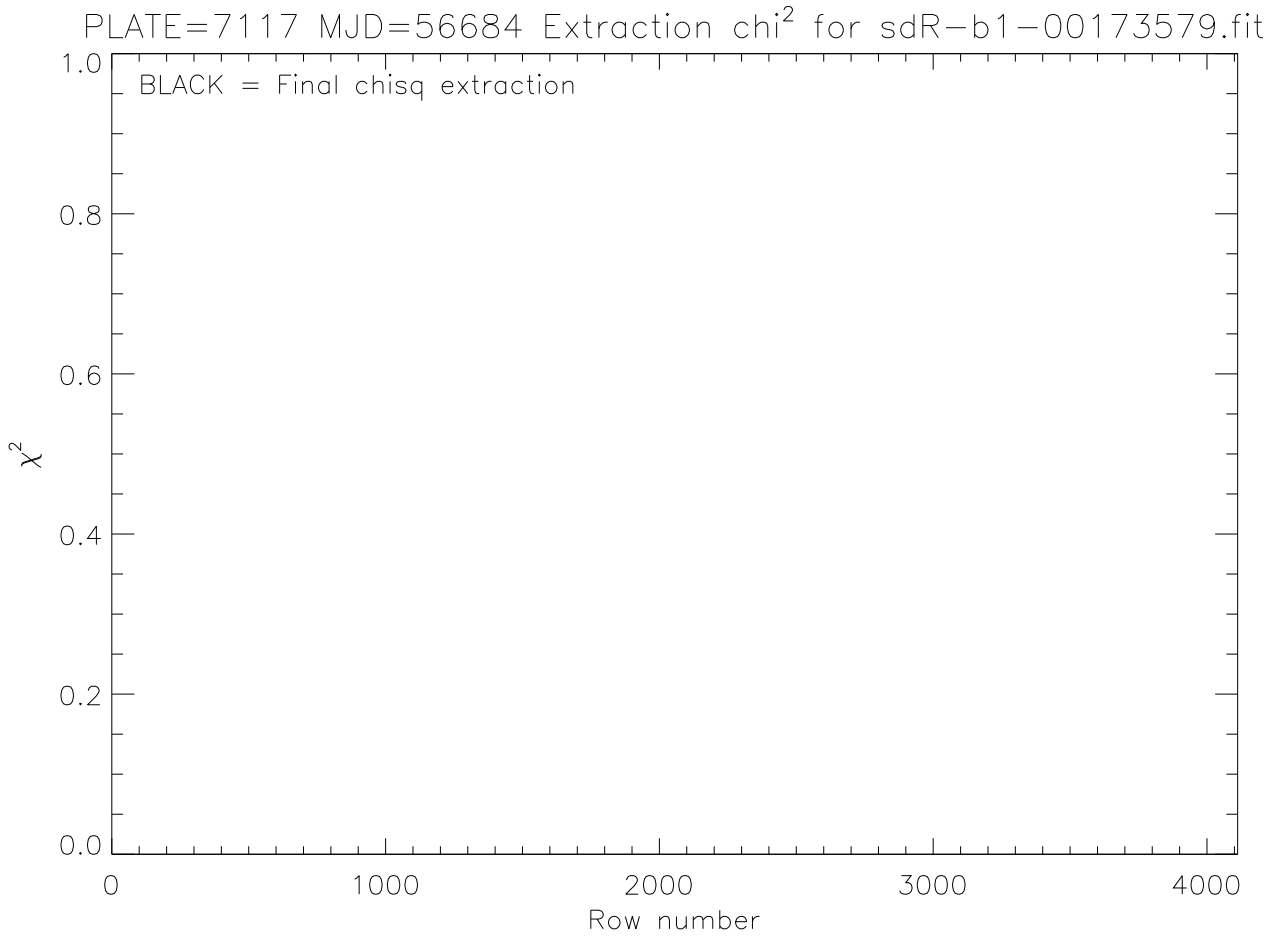
Number of sky fibers = 39

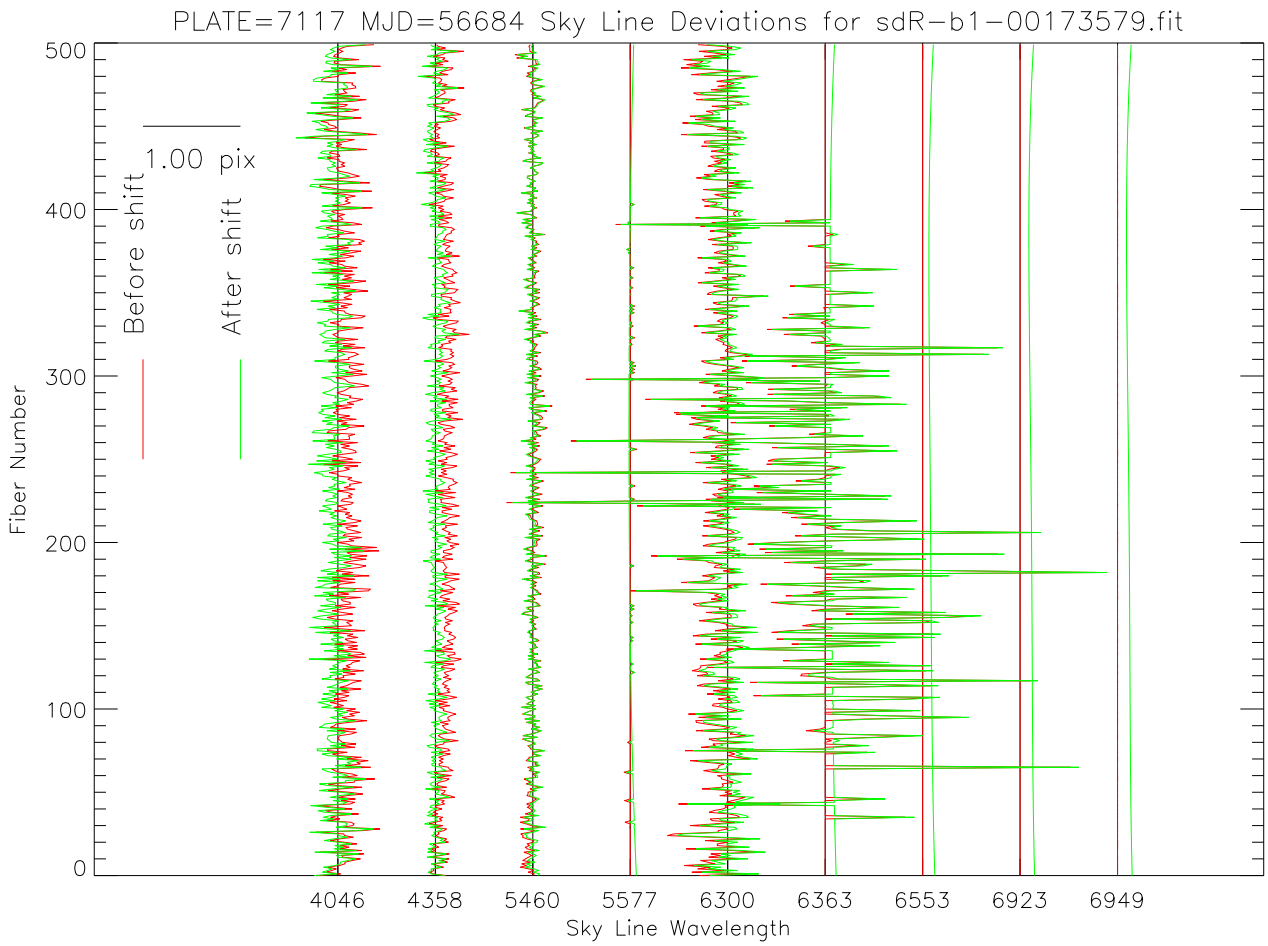


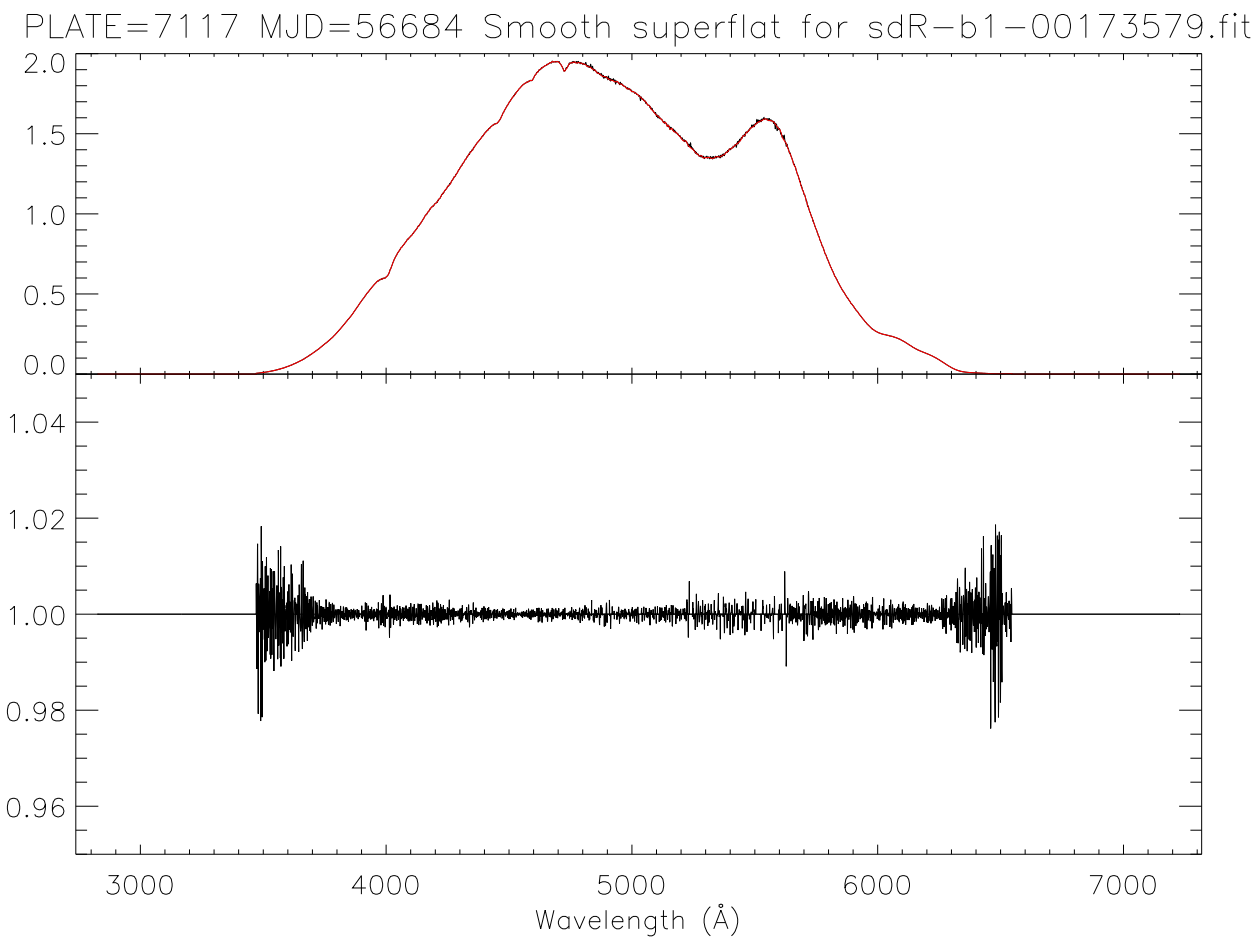

PLATE=7117 MJD=56684 sdR-b1-00173578.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED += sky fiber
Dispersion = 6.61 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

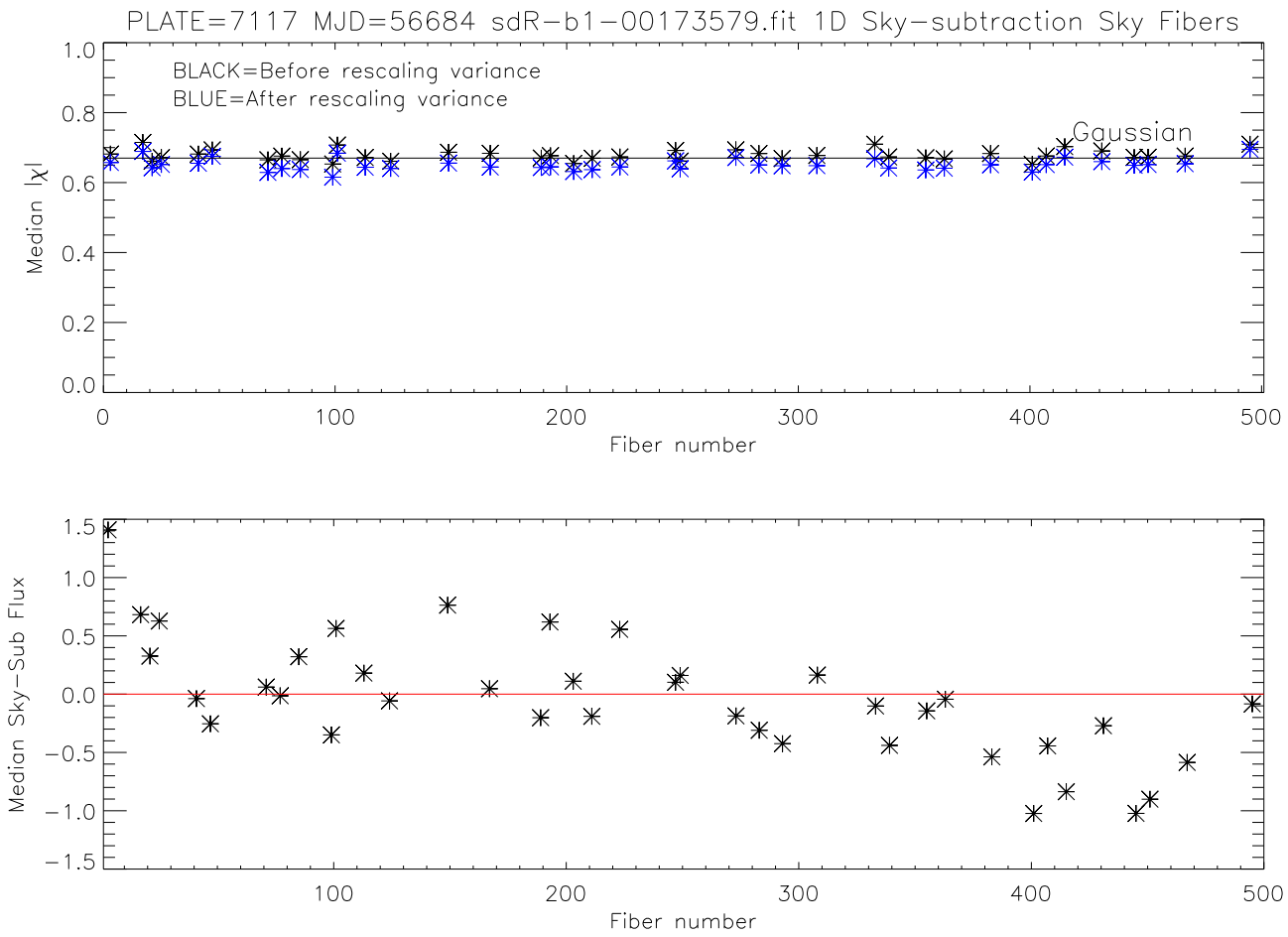

PLATE=7117 MJD=56684 sdR-b1-00173578.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 32.04 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

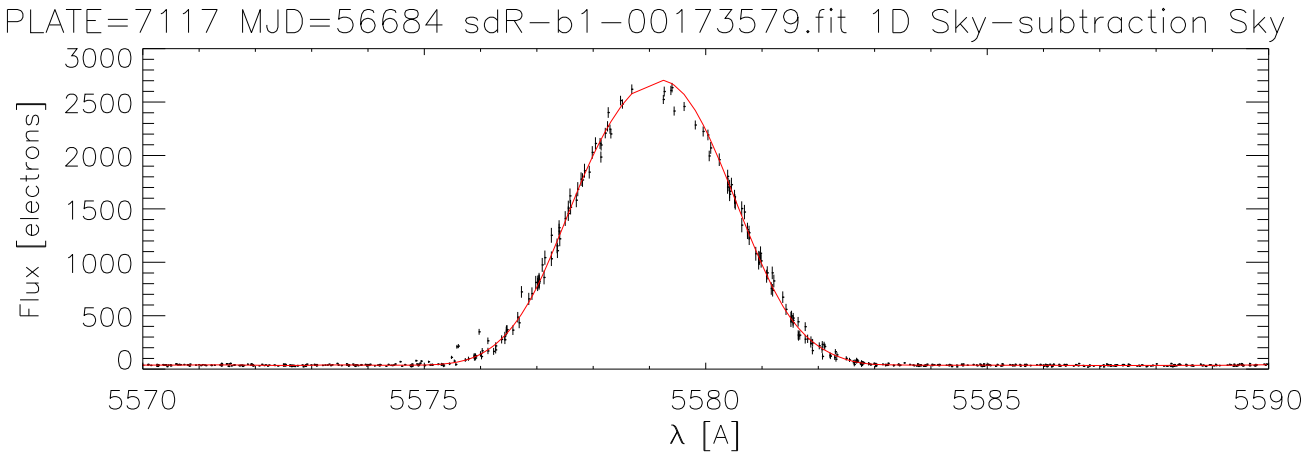

PLATE=7117 MJD=56684 Fiber−Flats for sdR−b1−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −10.658
Max value = 9.483
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:34:07 2016

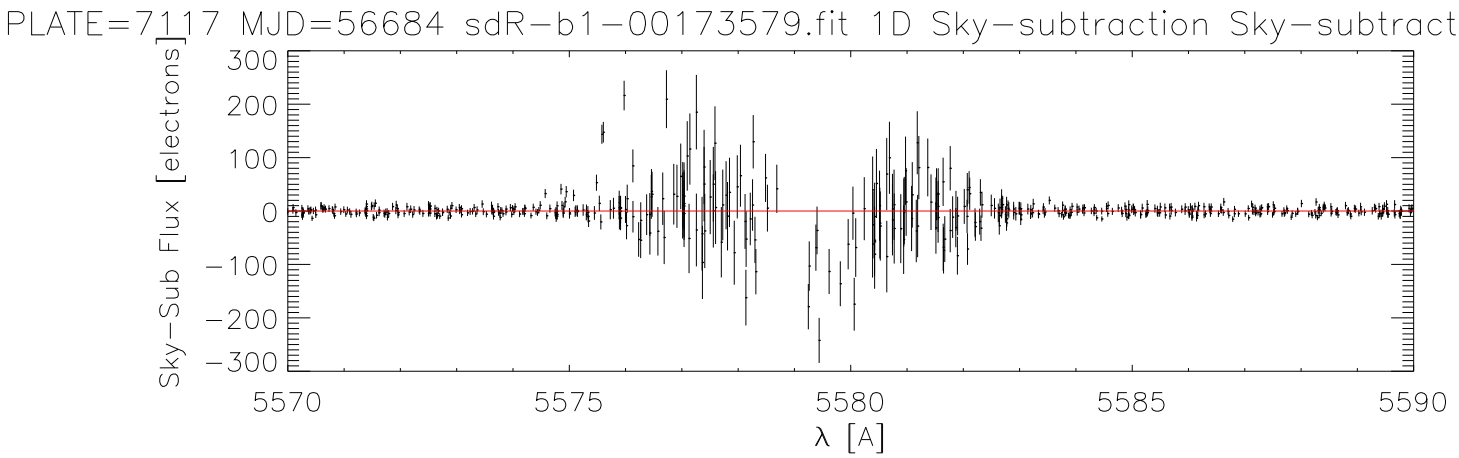

PLATE=7117 MJD=56684 Extraction chi^2 for sdR-b1-00173579.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-b1-00173579.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

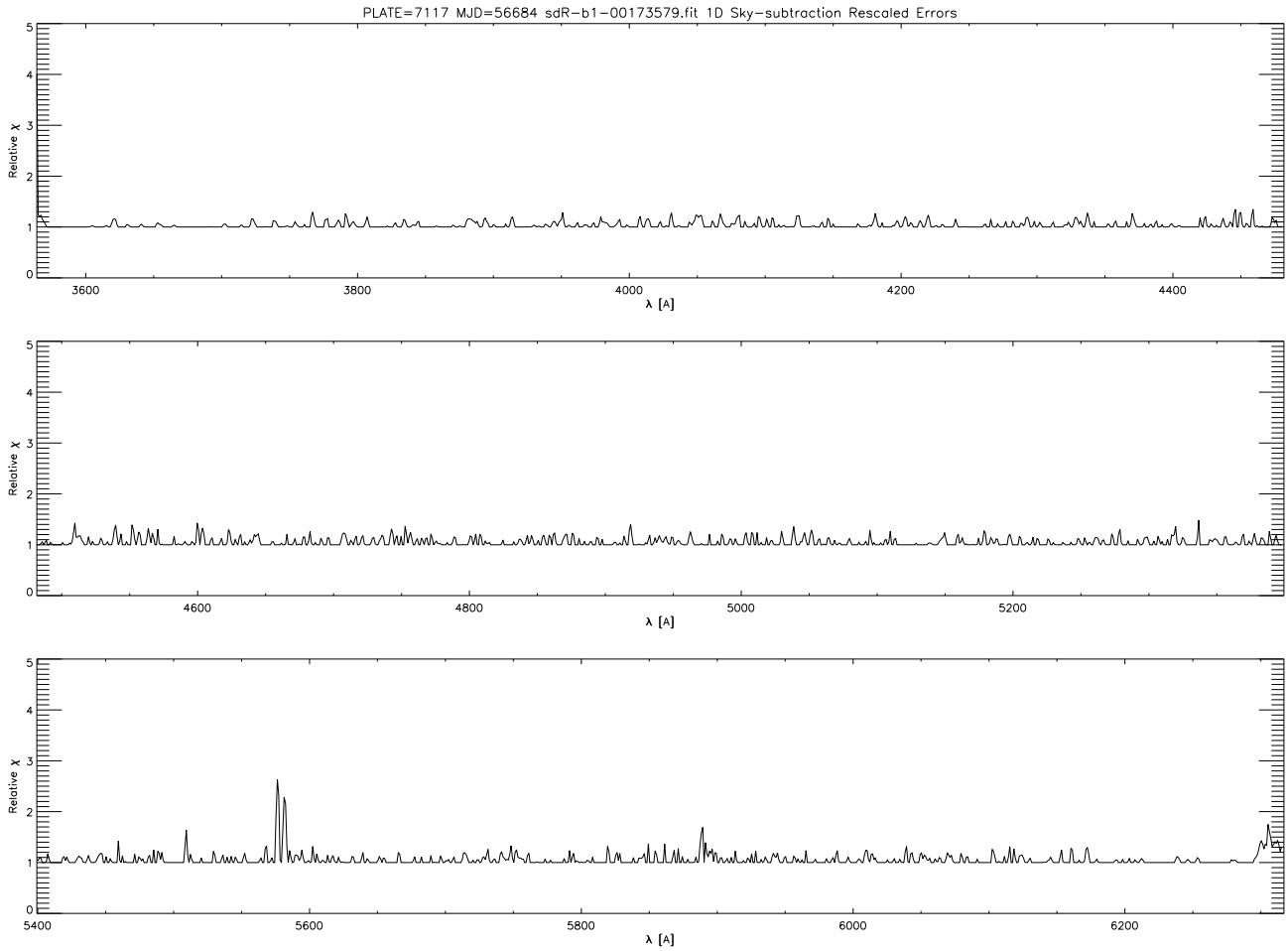

PLATE=7117 MJD=56684 Smooth superflat for sdR-b1-00173579.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

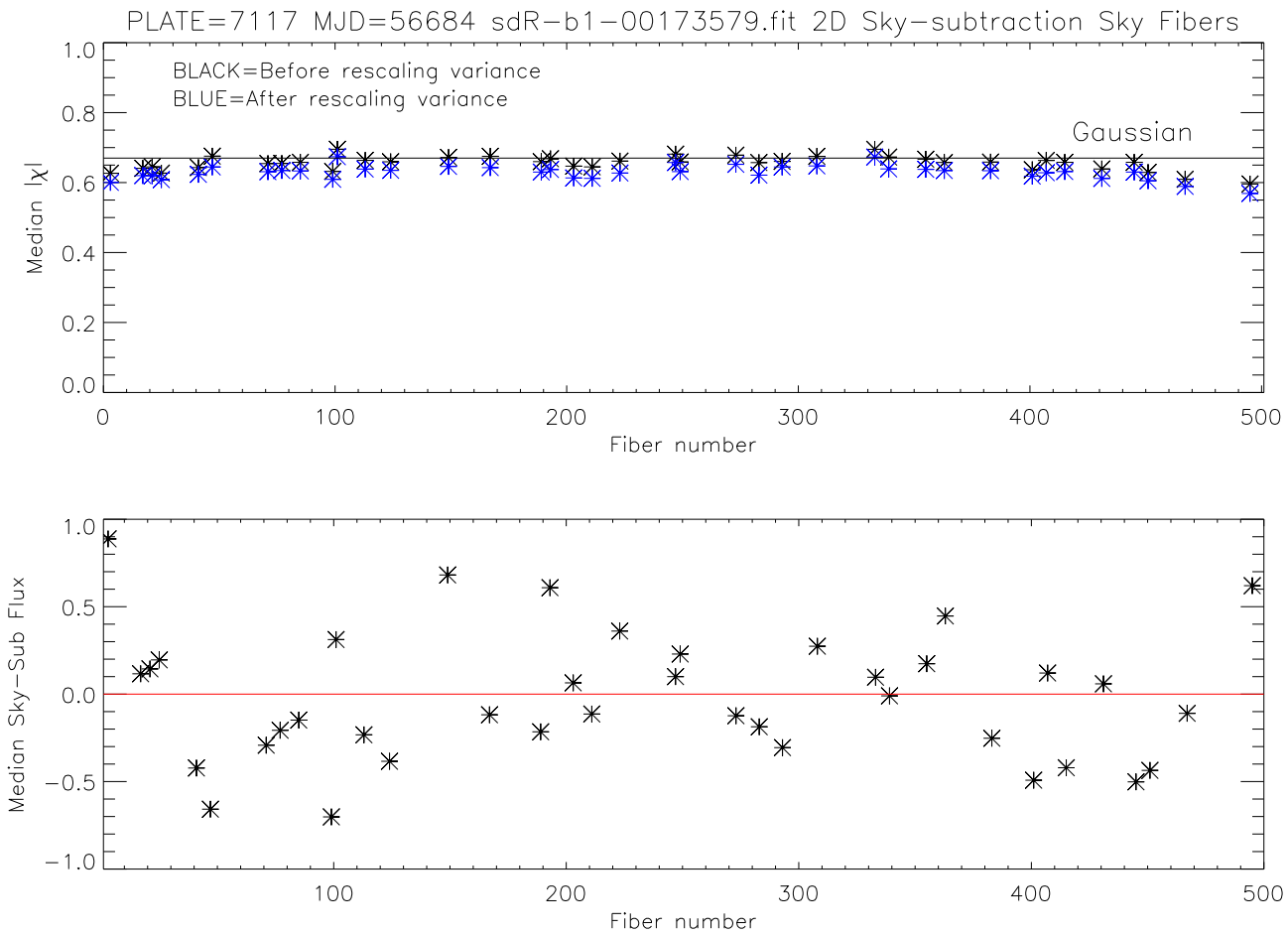

PLATE=7117 MJD=56684 sdR-b1-00173579.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

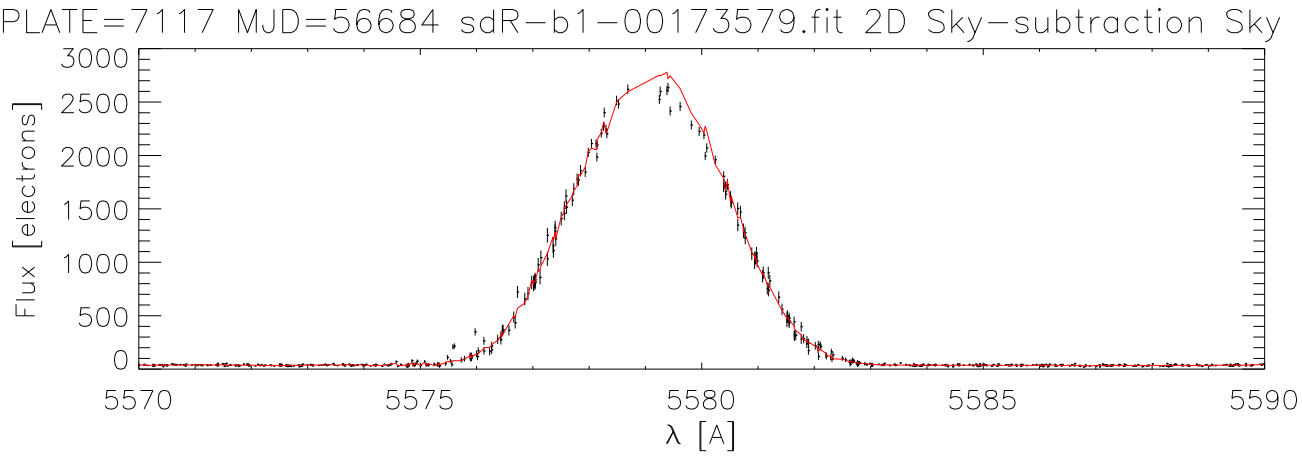

PLATE=7117 MJD=56684 sdR-b1-00173579.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

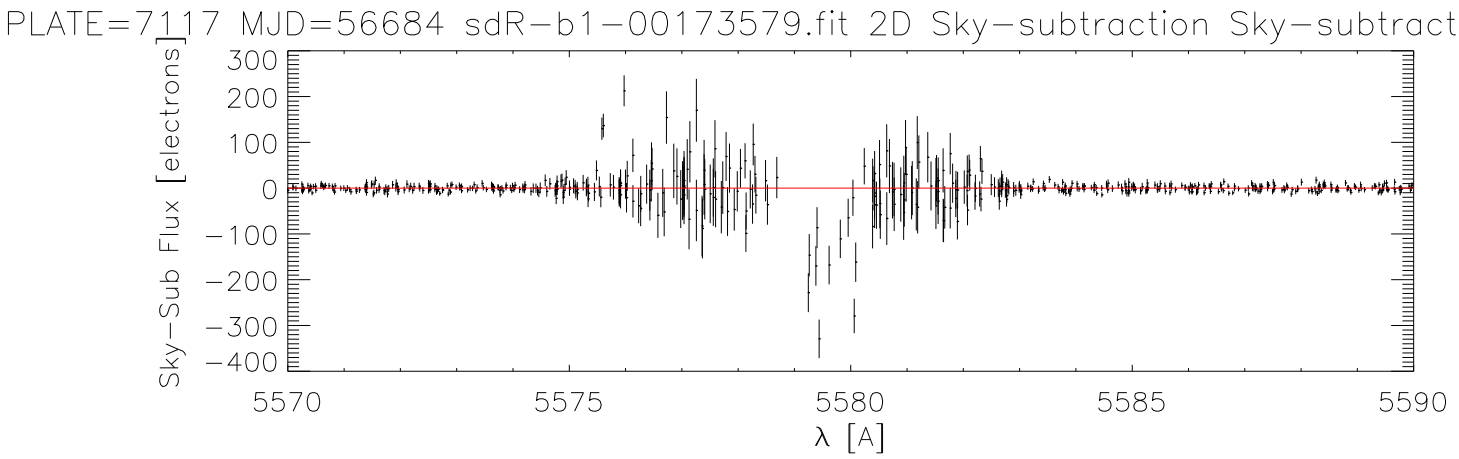

PLATE=7117 MJD=56684 sdR-b1-00173579.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

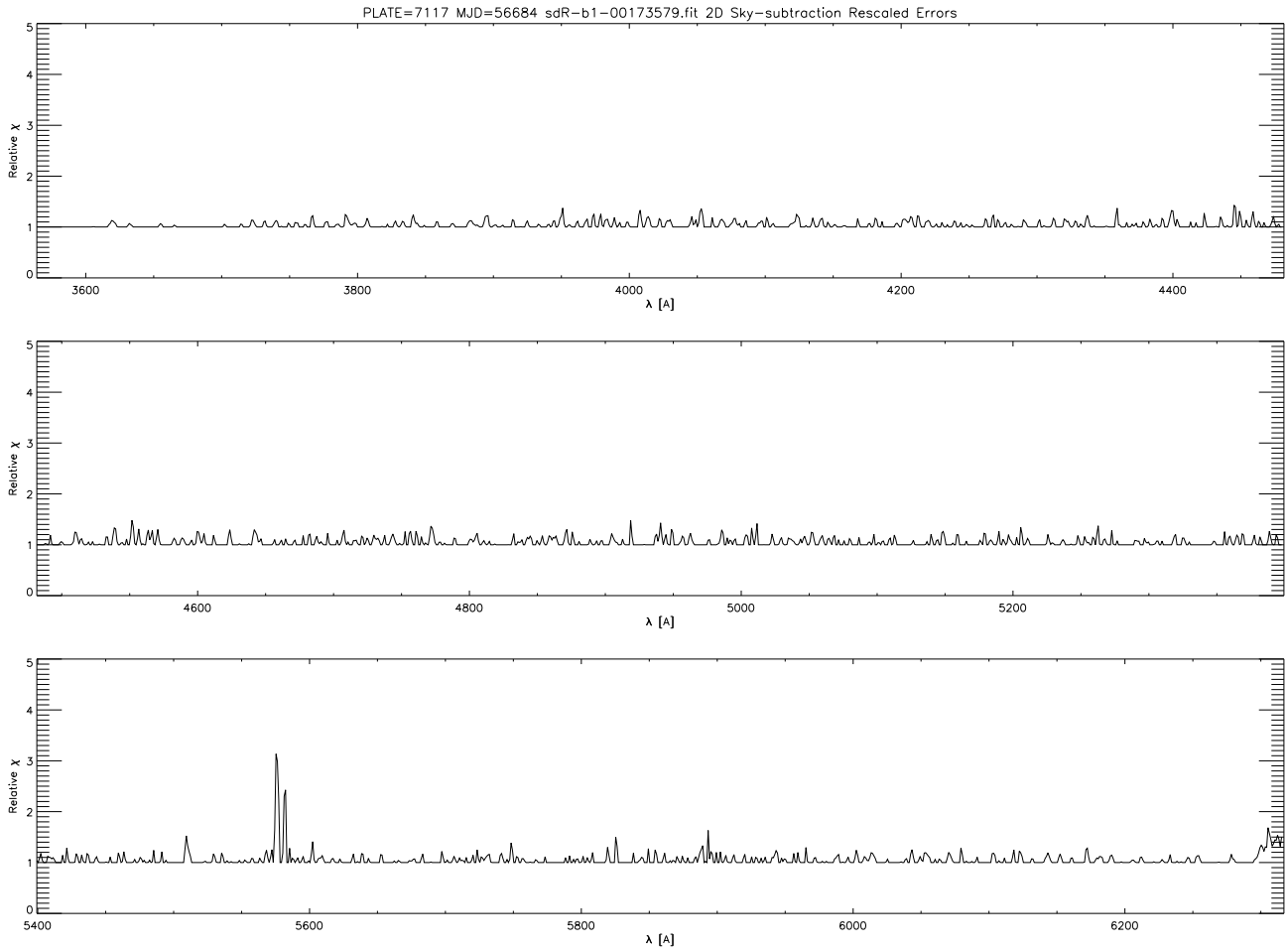


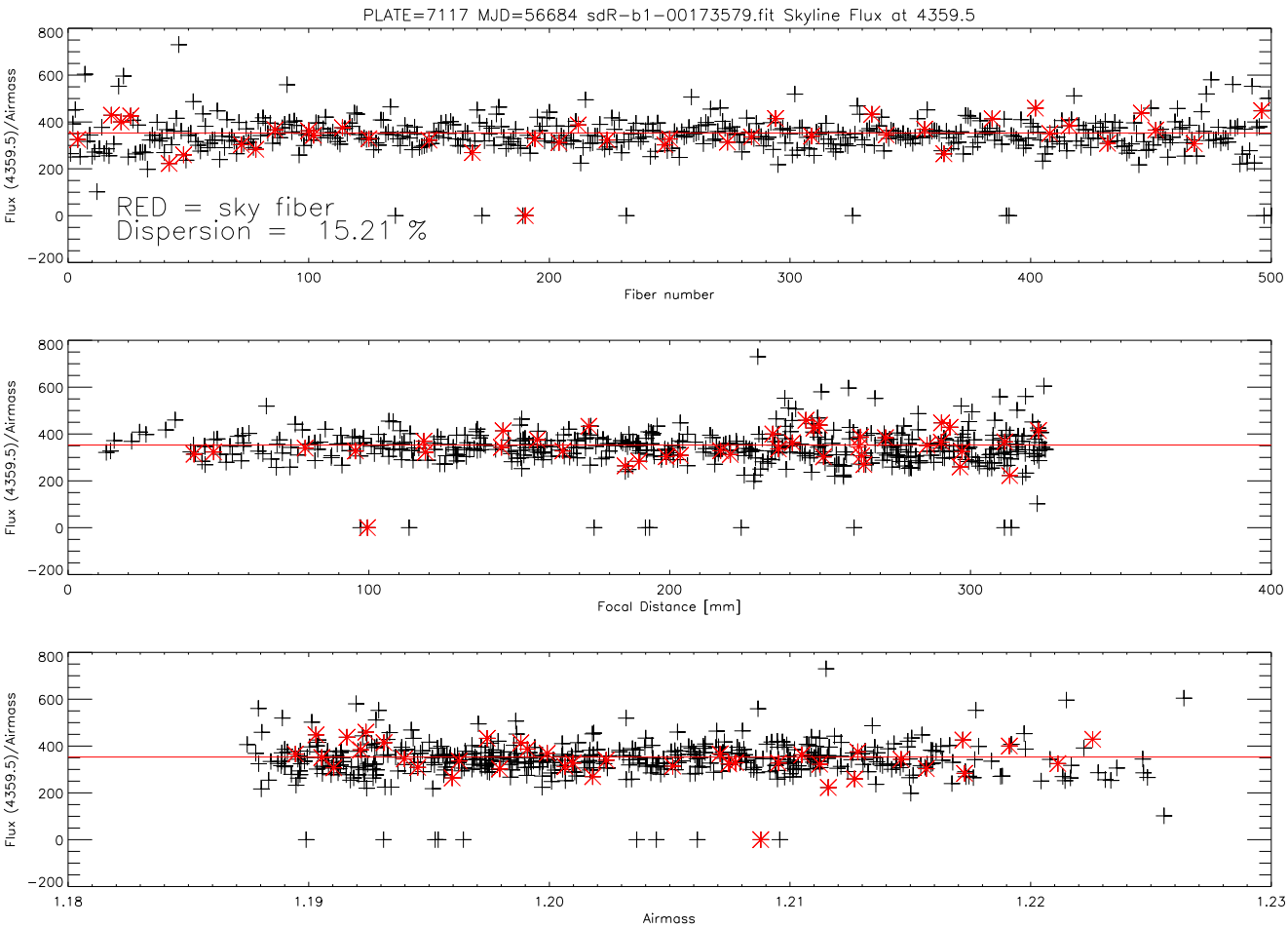

PLATE=7117 MJD=56684 sdR-b1-00173579.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

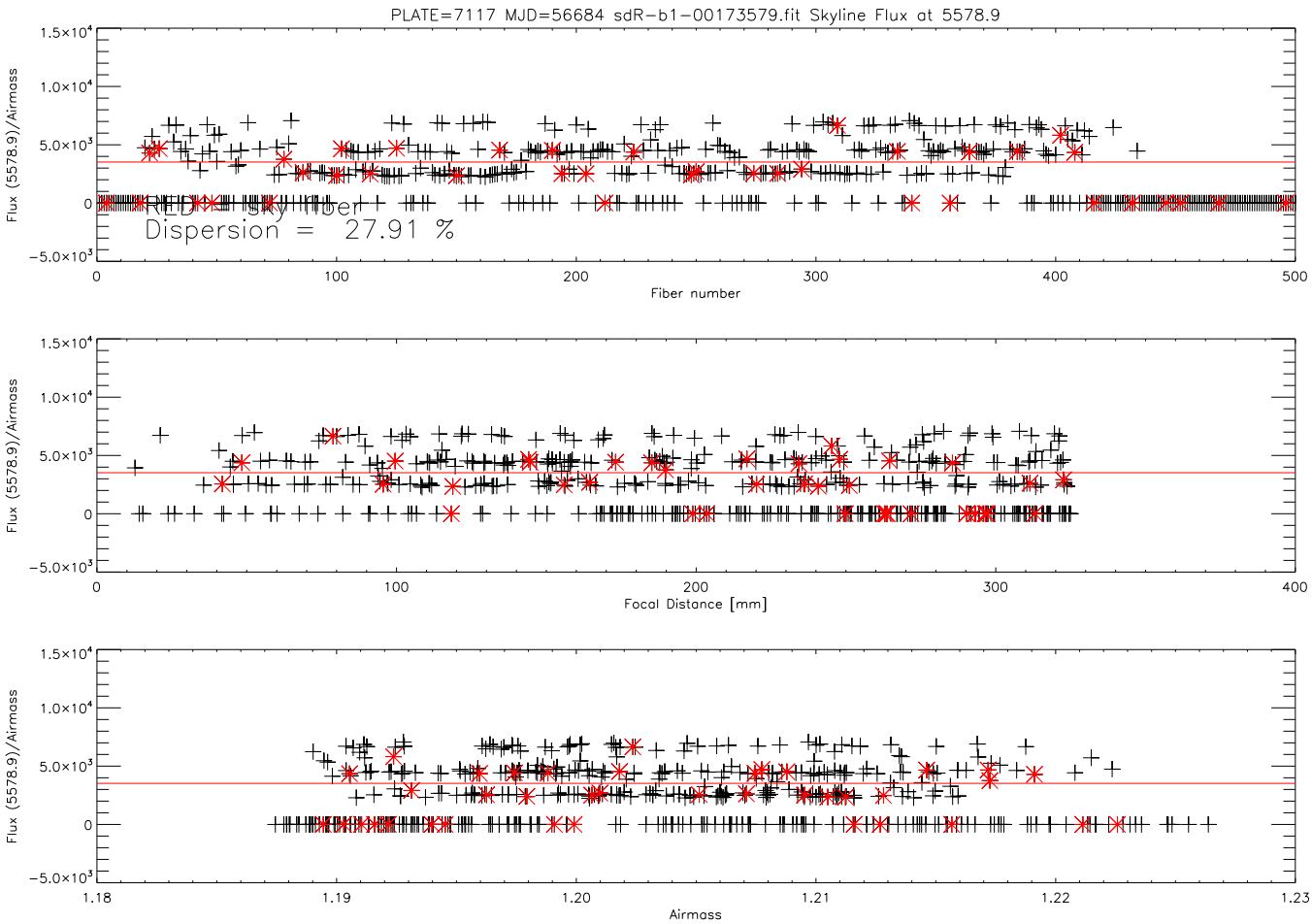

PLATE=7117 MJD=56684 sdR-b1-00173579.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

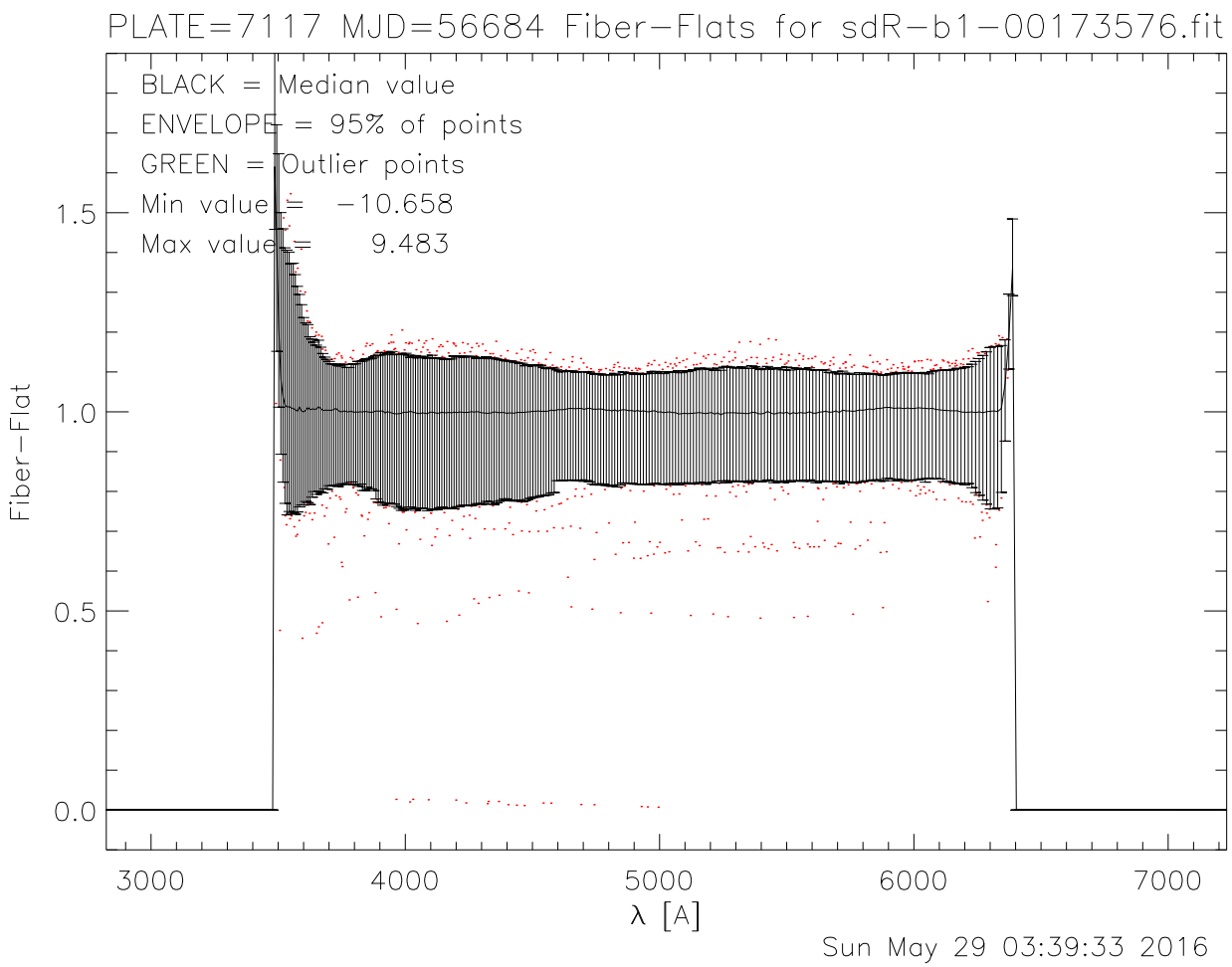

PLATE=7117 MJD=56684 sdR-b1-00173579.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
5570
5575
5580
5585
5590
λ [A]

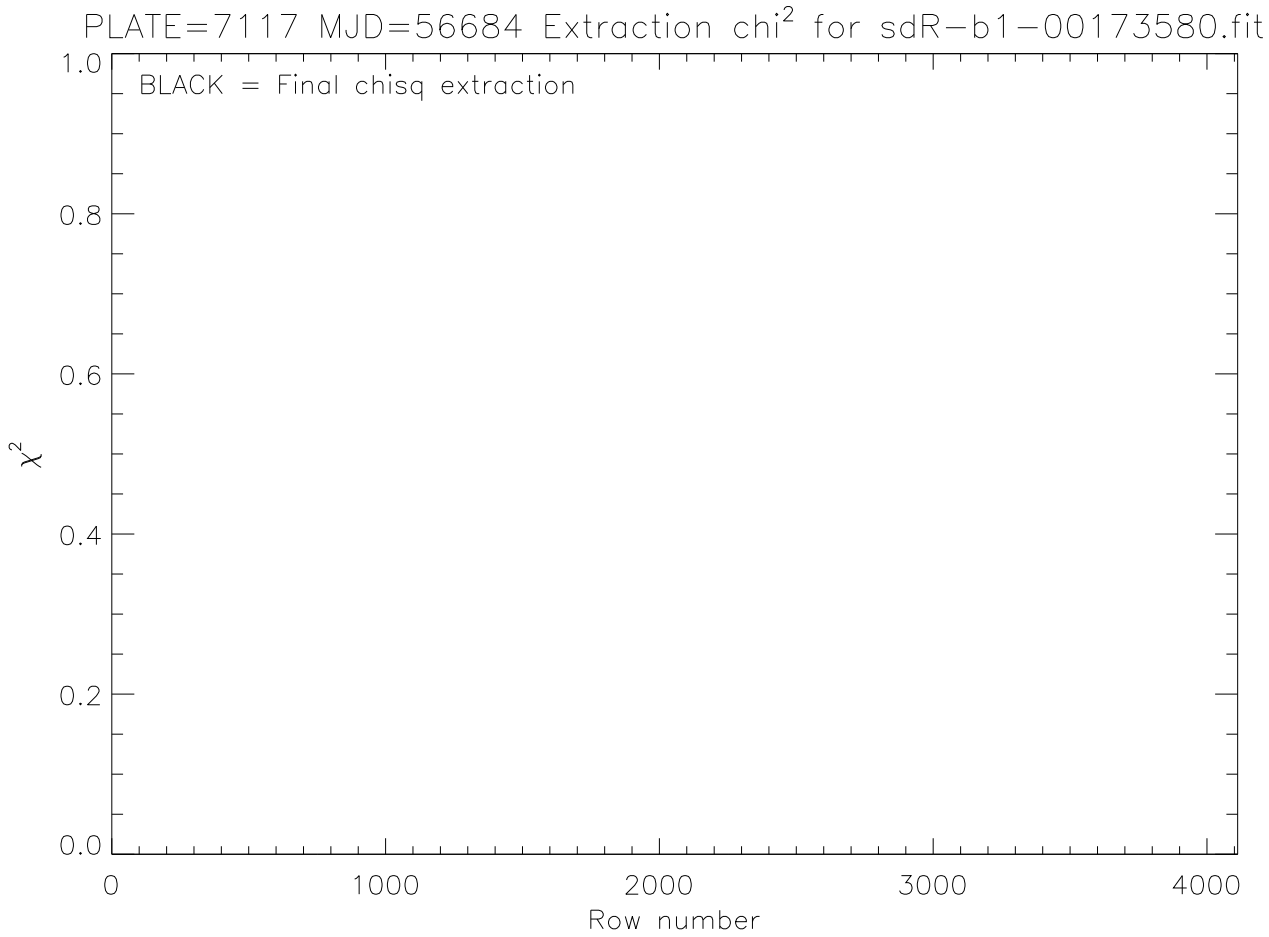
Number of sky fibers = 39

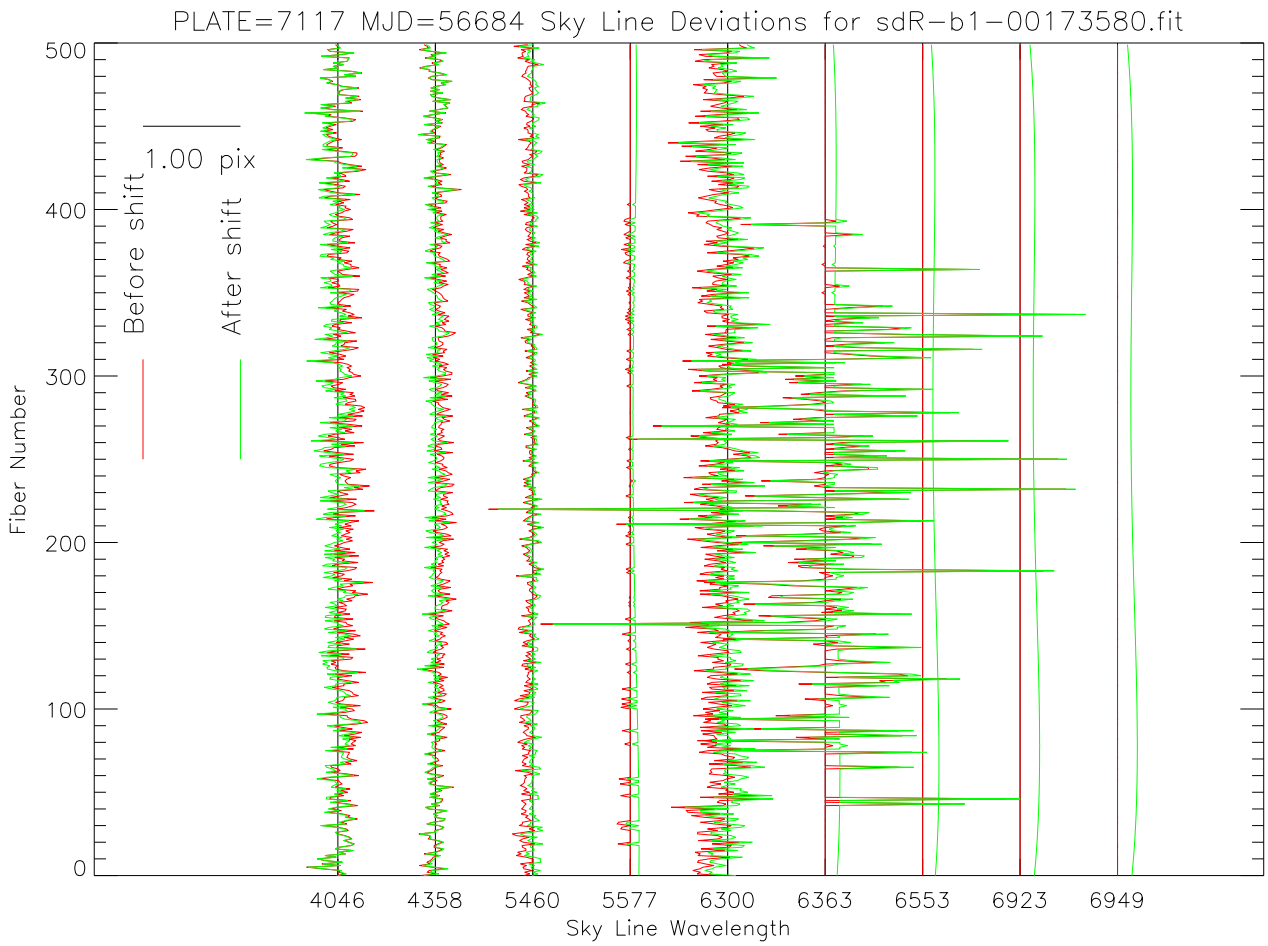


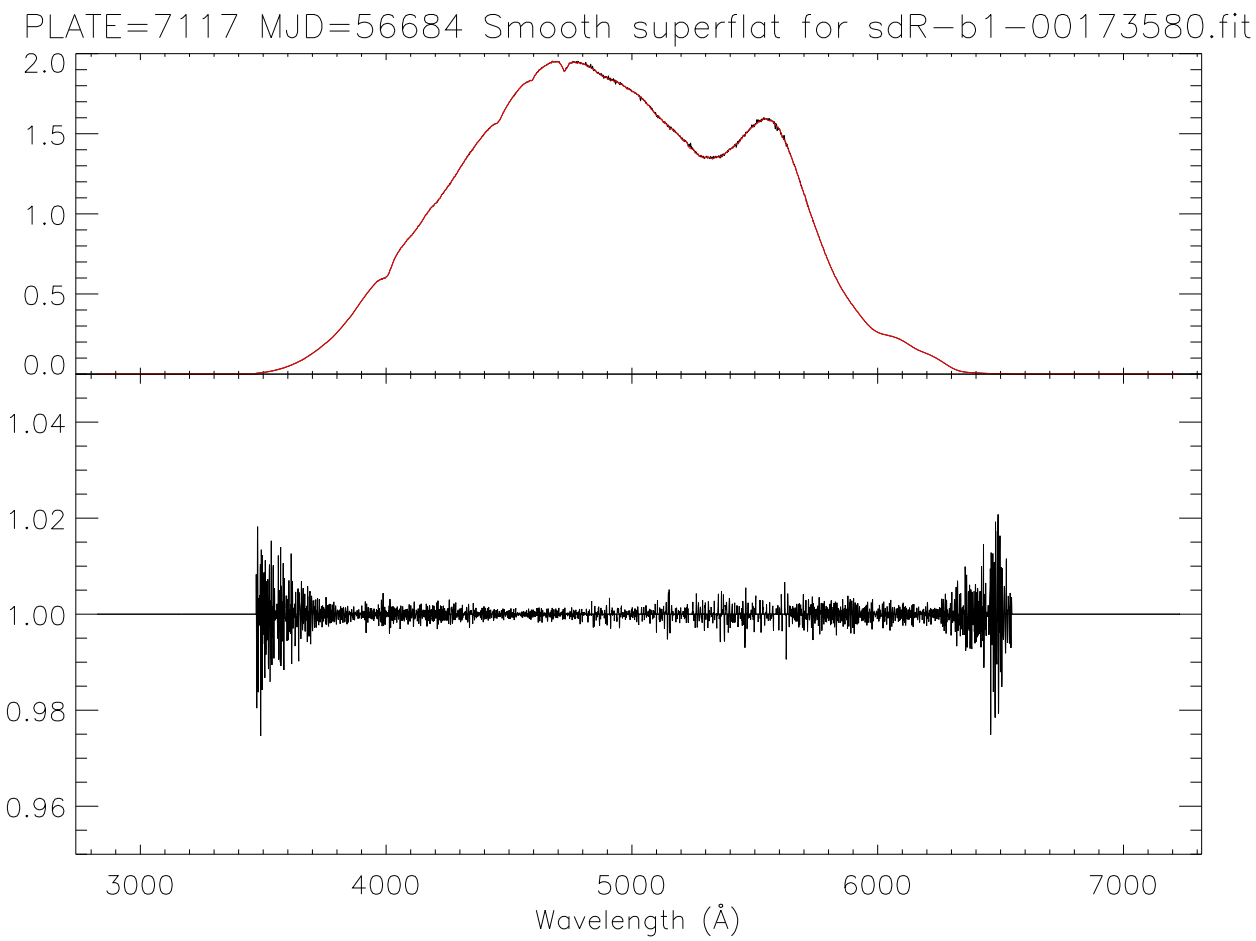

PLATE=7117 MJD=56684 sdR-b1-00173579.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 15.21 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

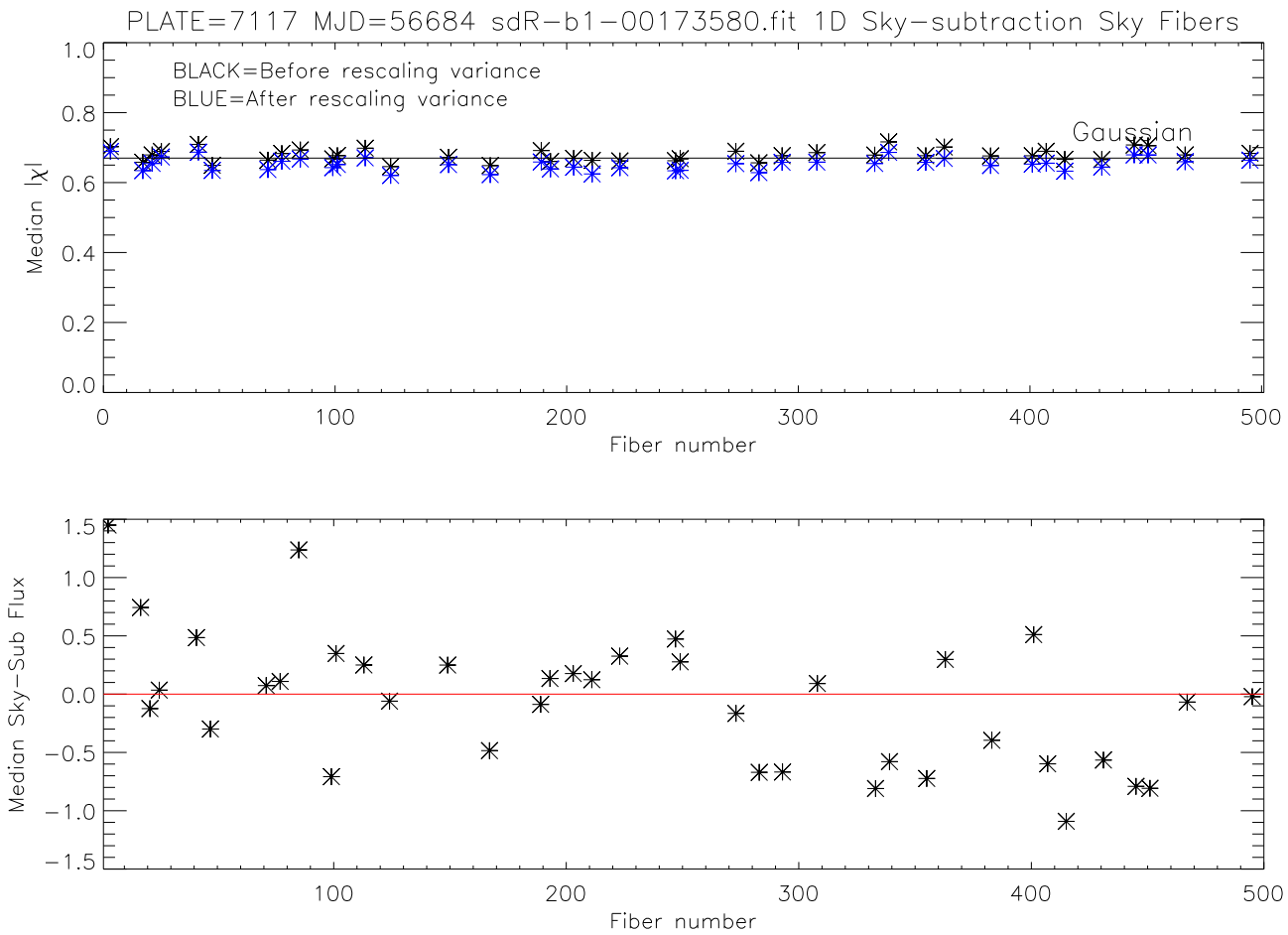

PLATE=7117 MJD=56684 sdR-b1-00173579.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
0
100
200
300
400
500
Fiber number
Red Sky Fiber
Dispersion = 27.91 %
Flux (5578.9)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
1.18
1.19
1.20
1.21
1.22
1.23
Airmass

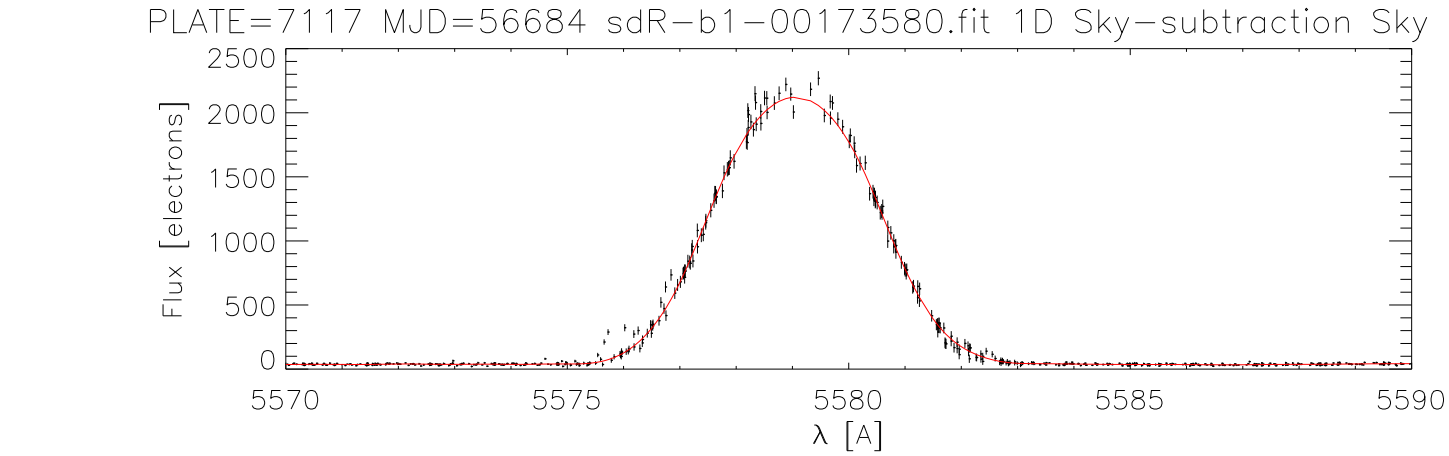

PLATE=7117 MJD=56684 Fiber−Flats for sdR−b1−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −10.658
Max value = 9.483
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:39:33 2016

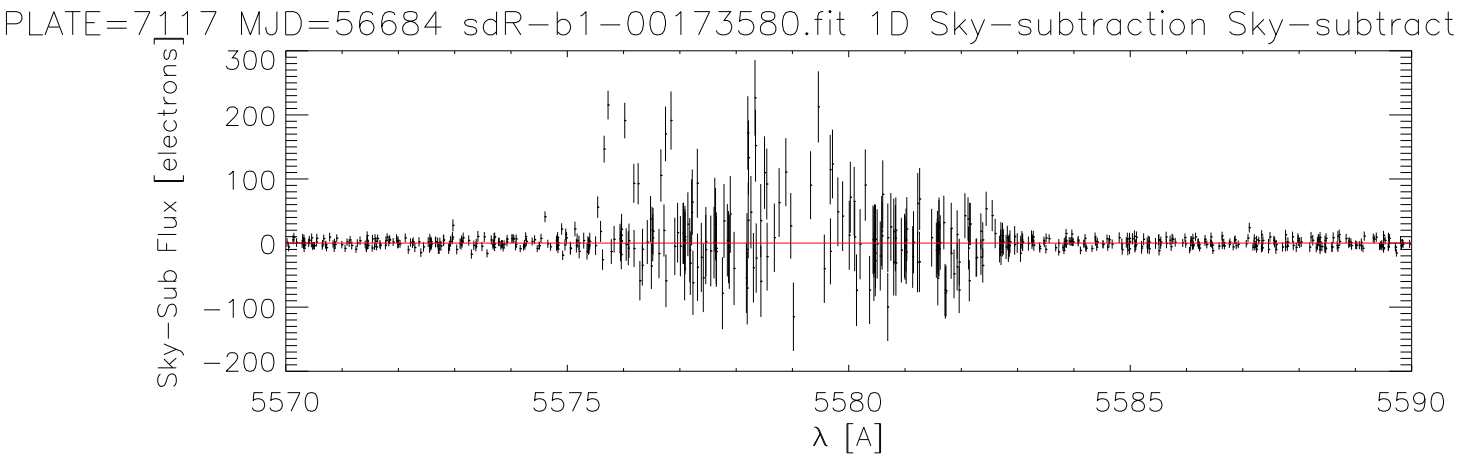

PLATE=7117 MJD=56684 Extraction chi^2 for sdR-b1-00173580.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-b1-00173580.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

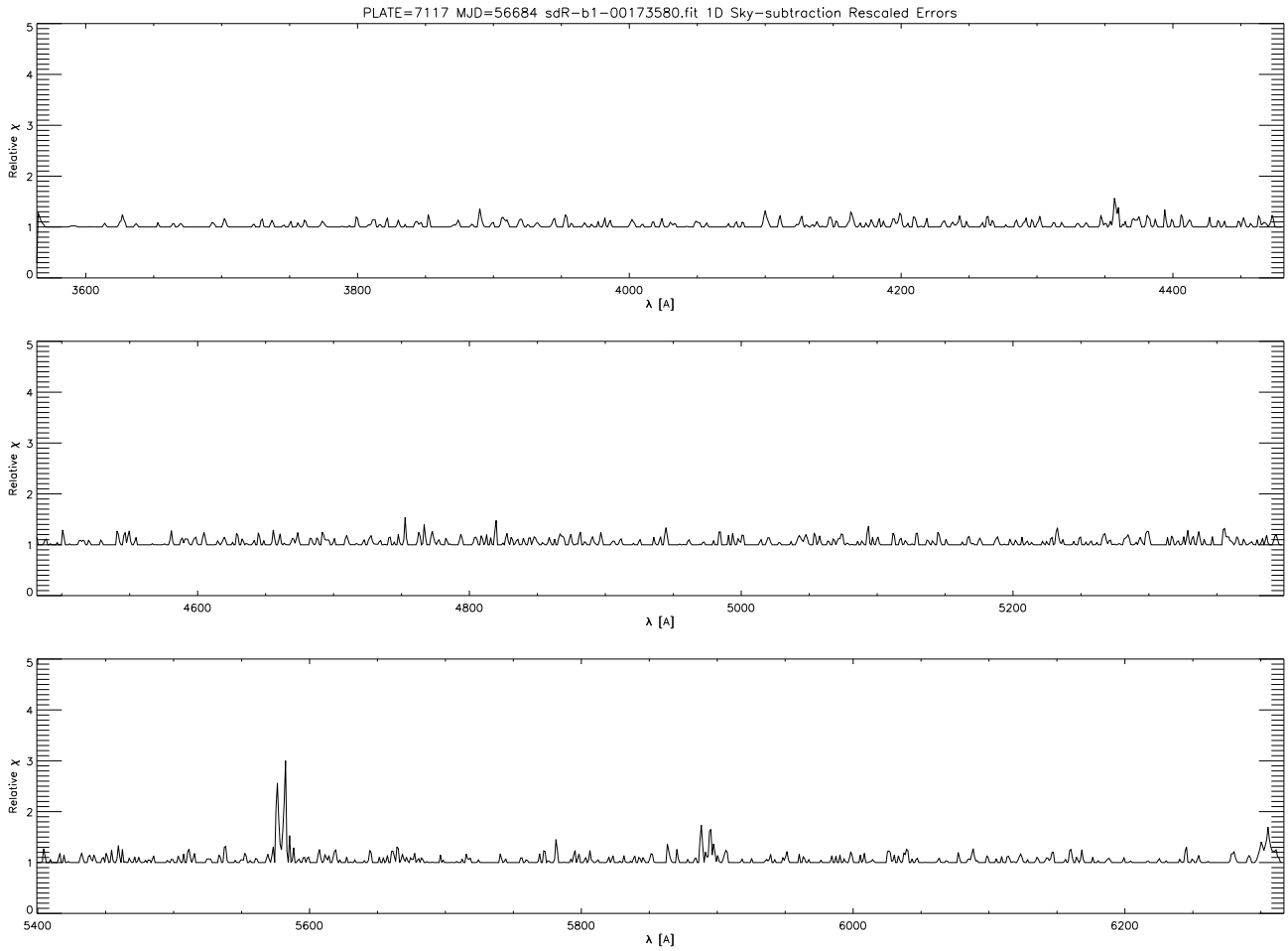

PLATE=7117 MJD=56684 Smooth superflat for sdR-b1-00173580.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

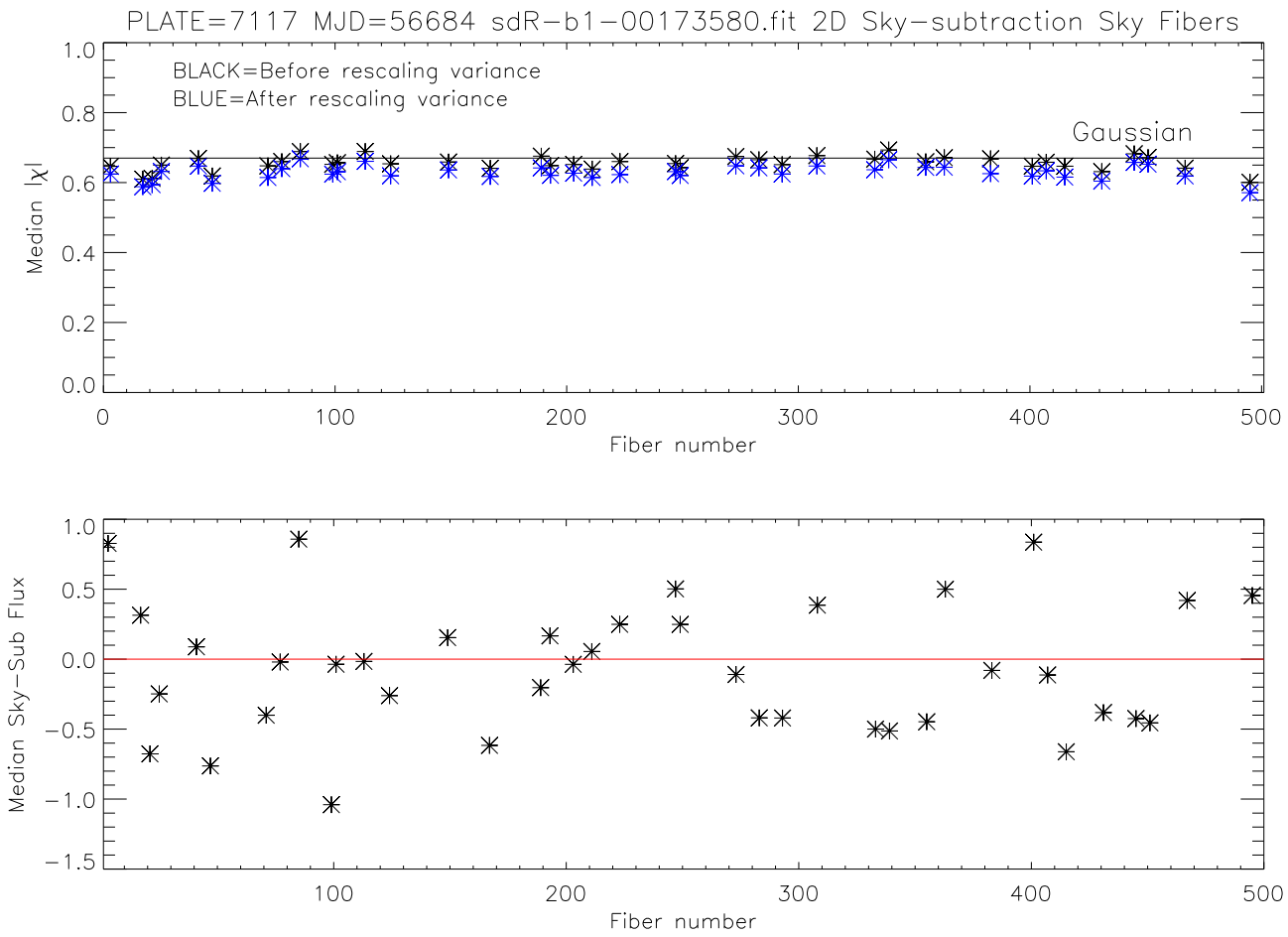

PLATE=7117 MJD=56684 sdR-b1-00173580.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

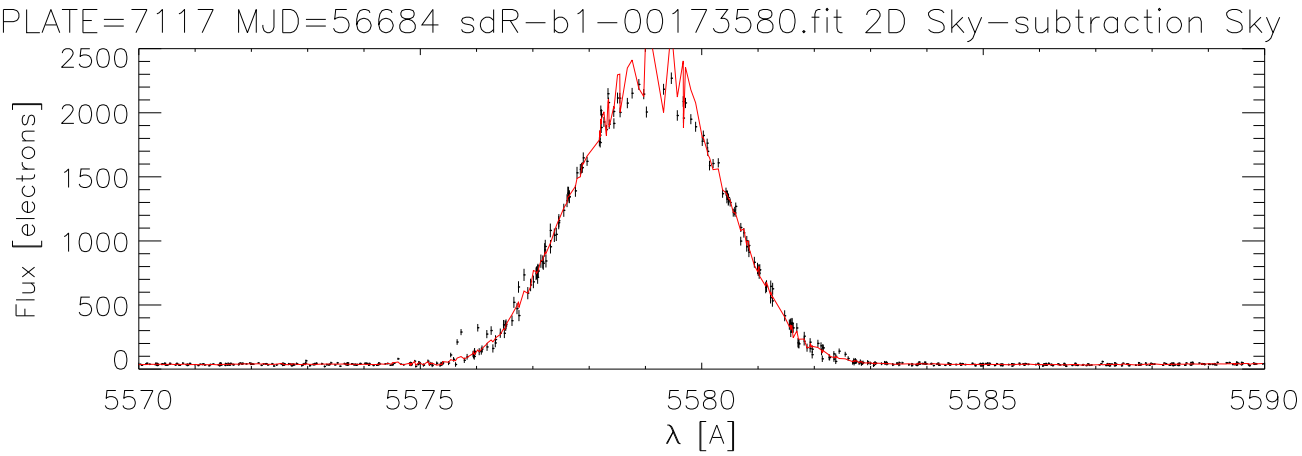

PLATE=7117 MJD=56684 sdR-b1-00173580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

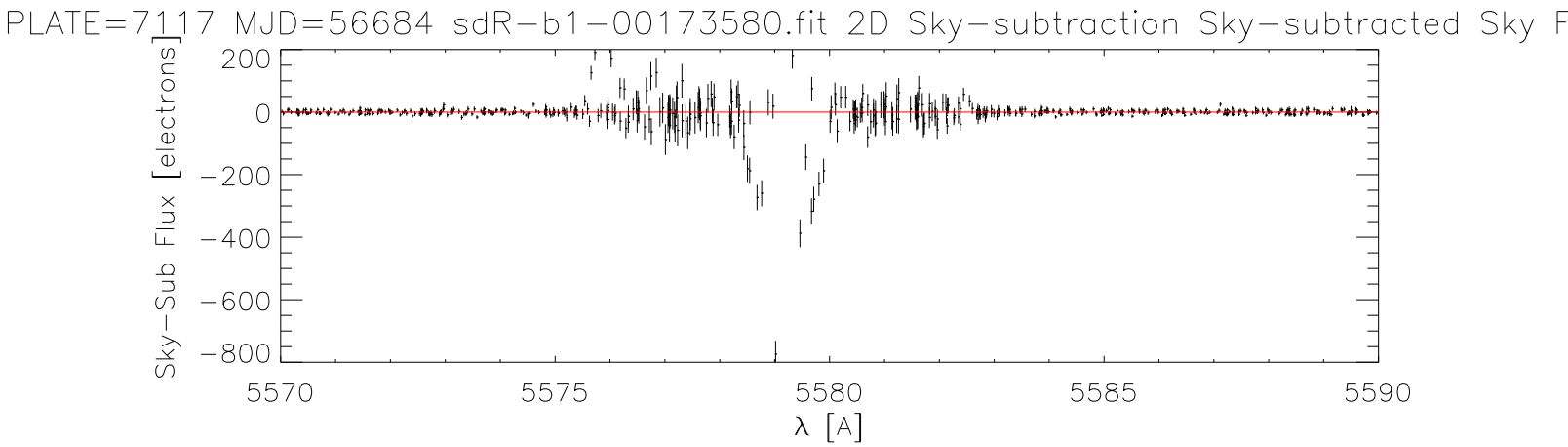

PLATE=7117 MJD=56684 sdR-b1-00173580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

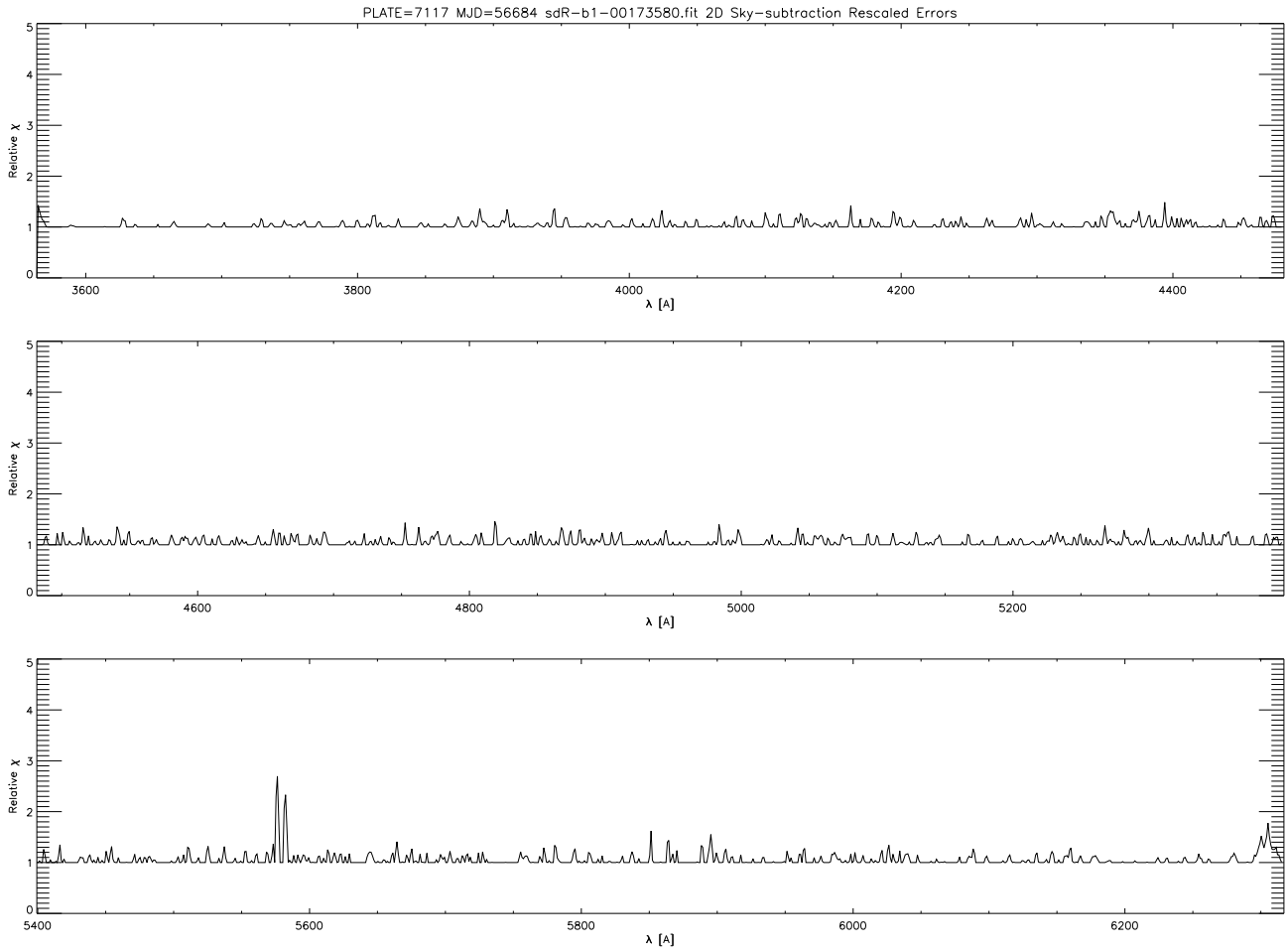


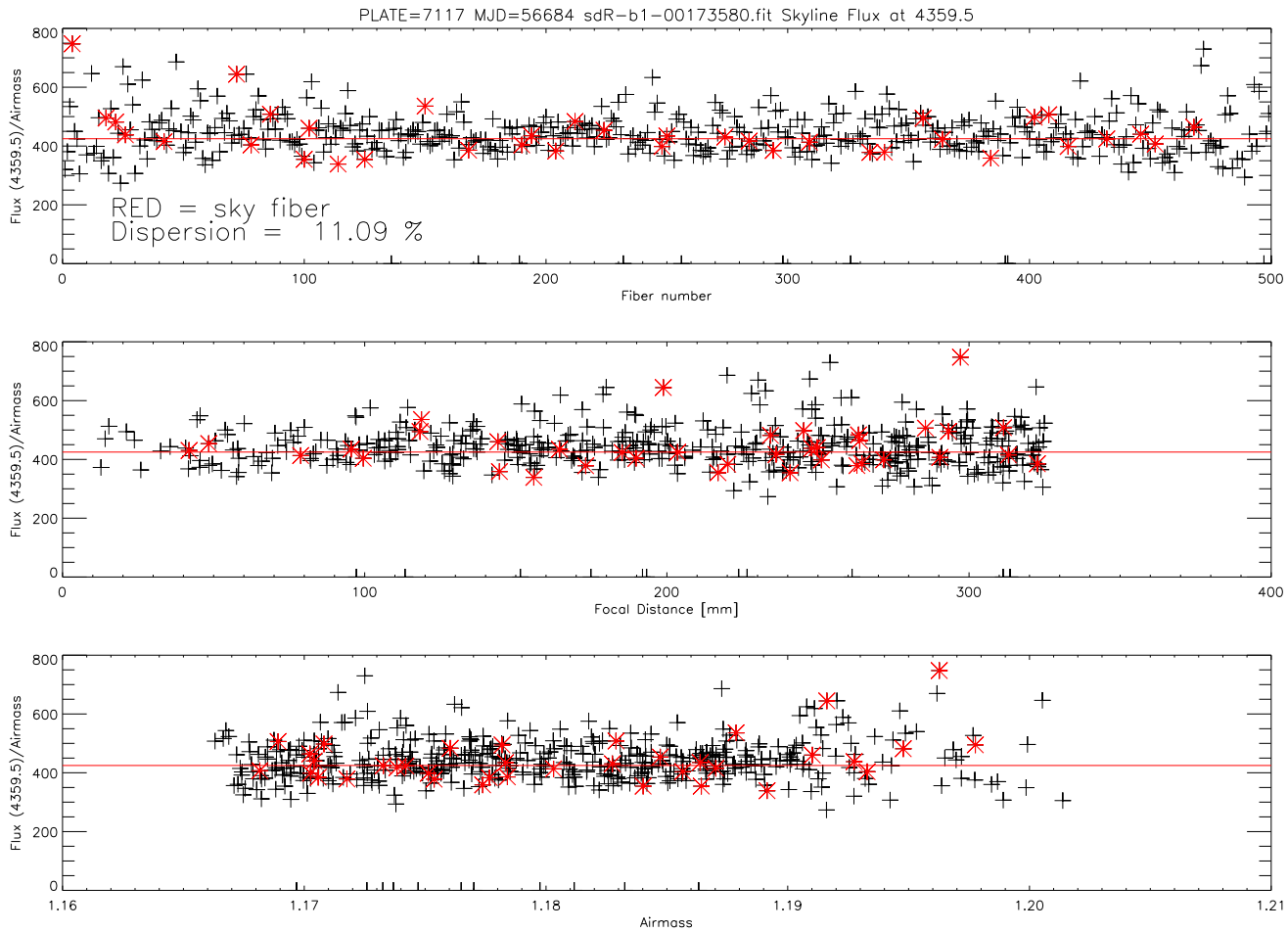

PLATE=7117 MJD=56684 sdR-b1-00173580.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

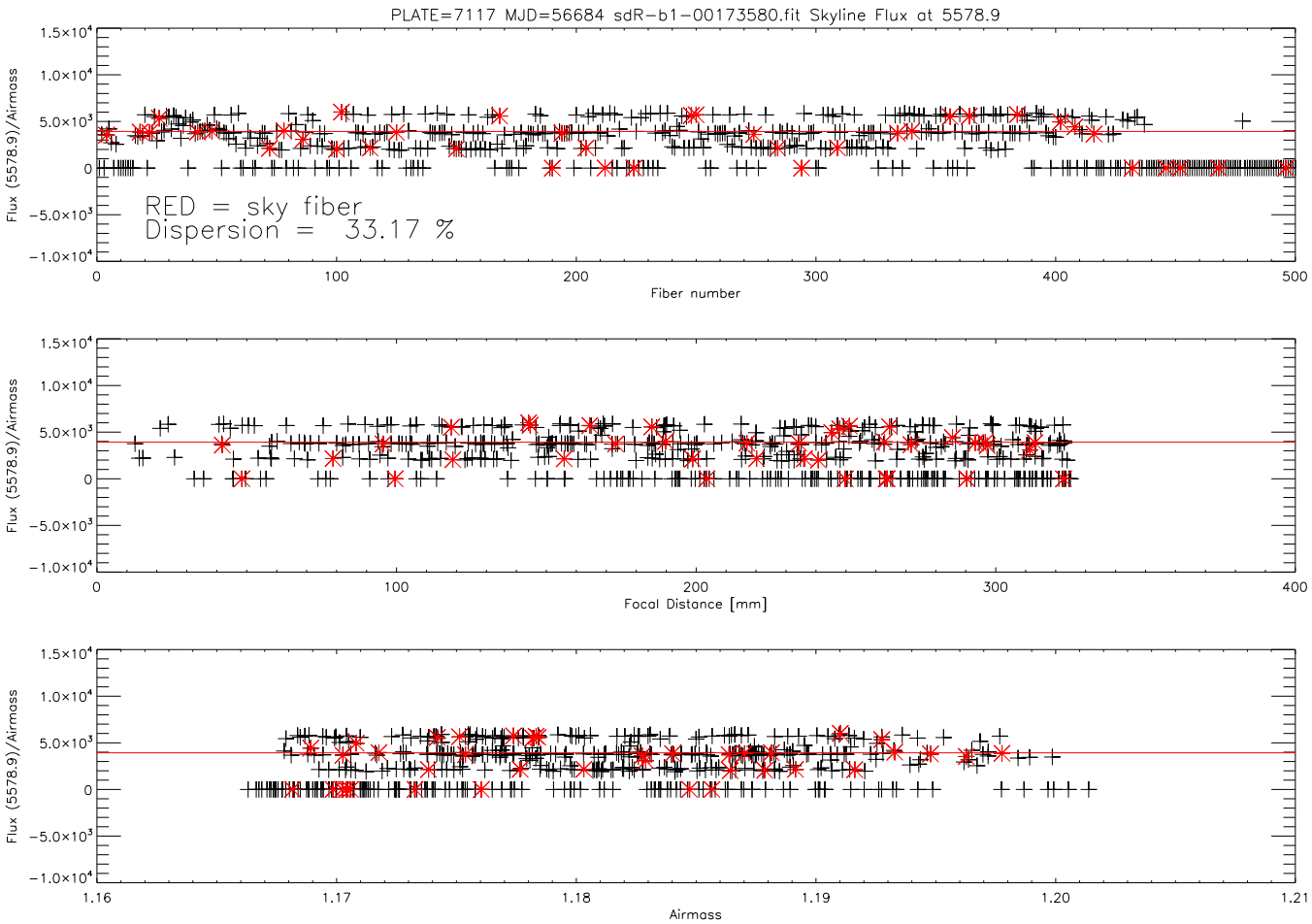

PLATE=7117 MJD=56684 sdR-b1-00173580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]


PLATE=7117 MJD=56684 sdR-b1-00173580.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
0
-200
-400
-600
-800
5570
5575
5580
5585
5590
λ [A]

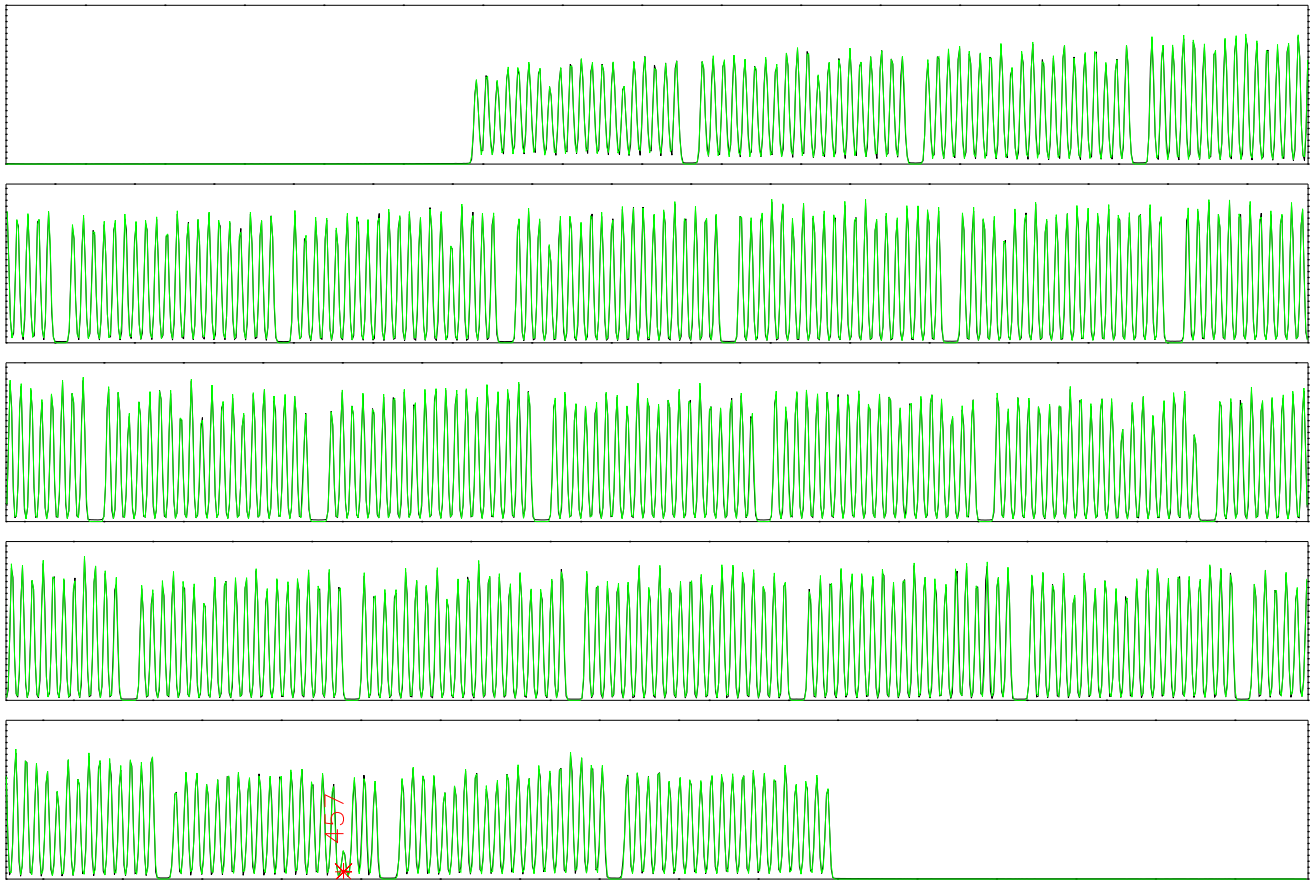
Number of sky fibers = 39

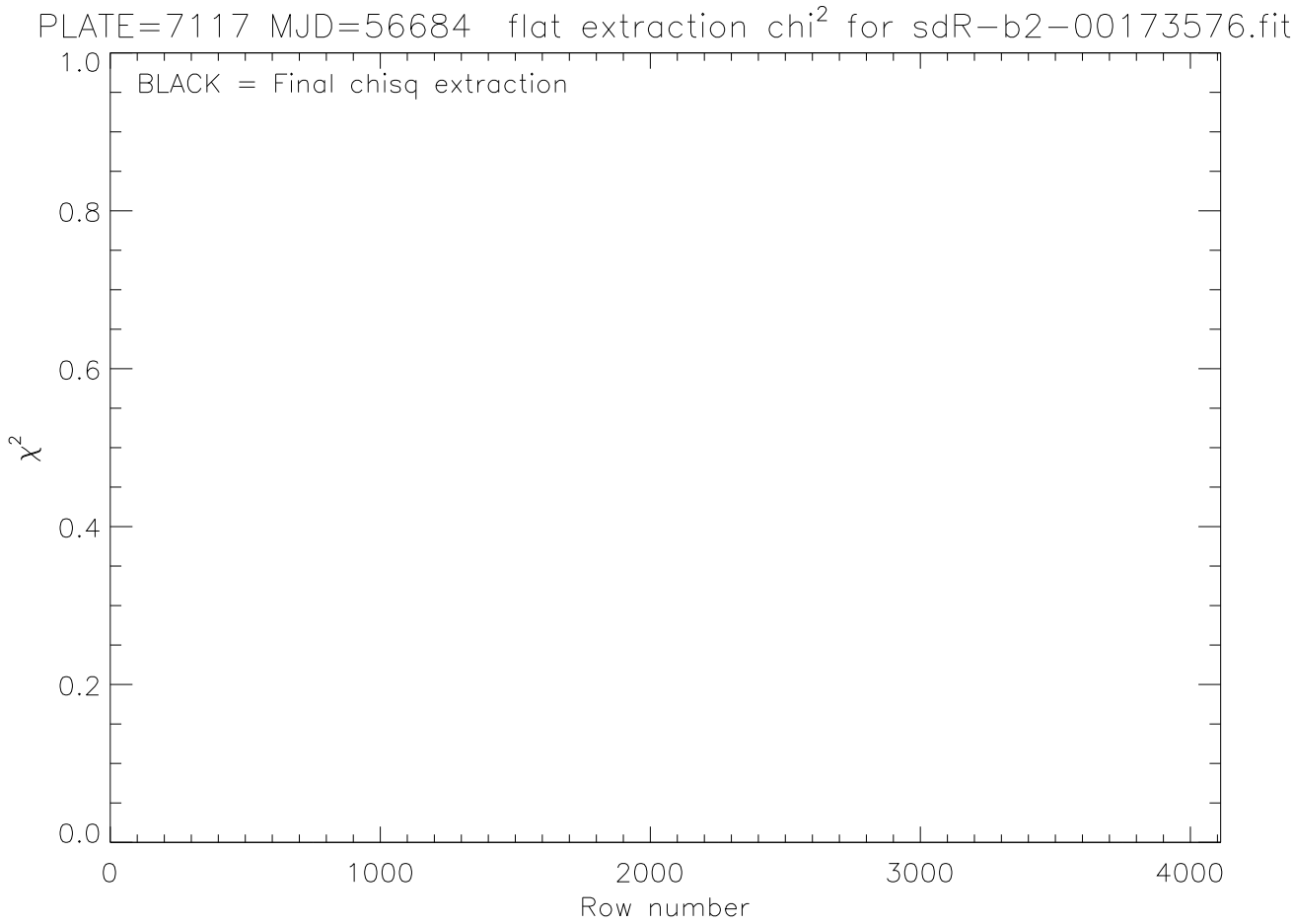


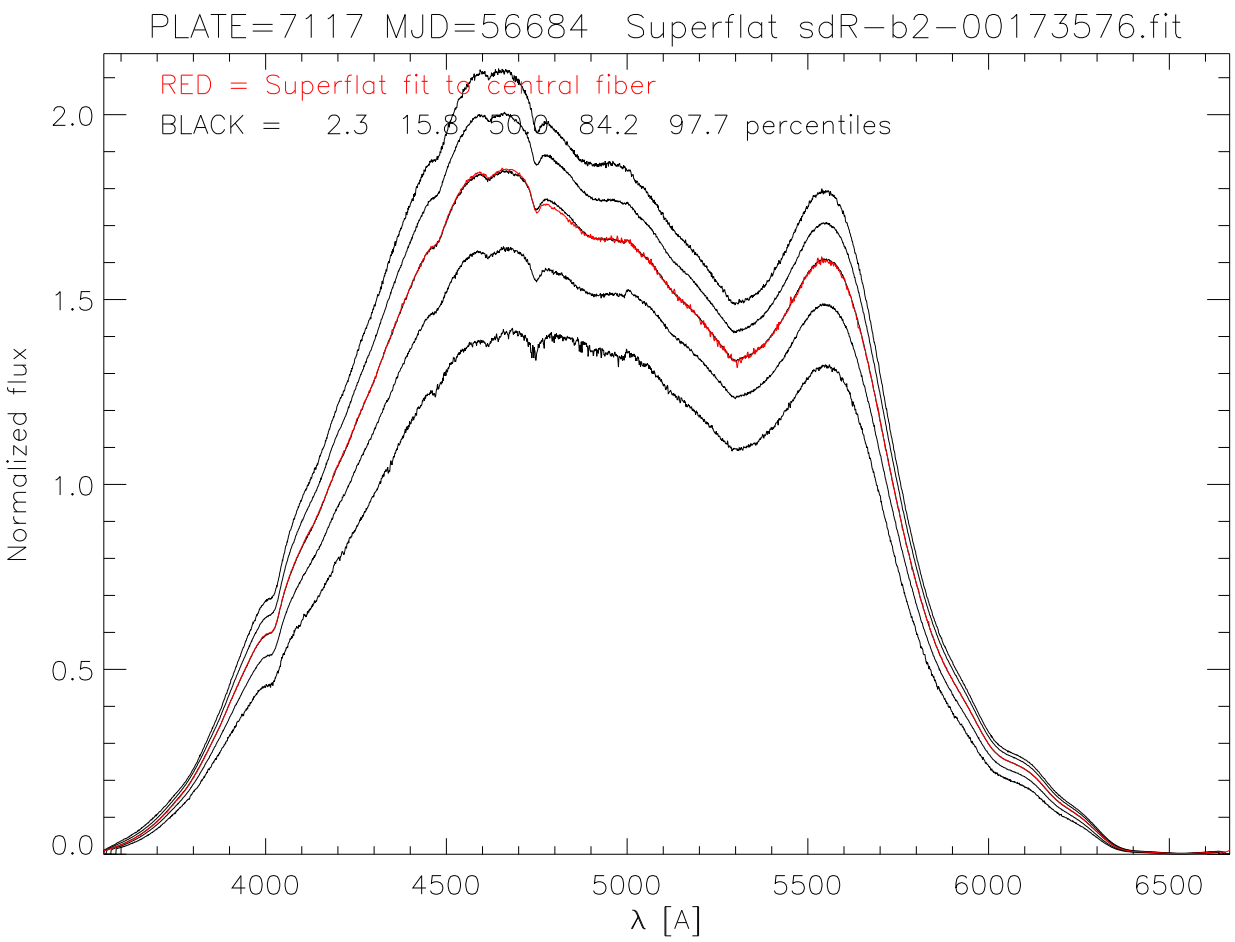

PLATE=7117 MJD=56684 sdR-b1-00173580.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.09 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

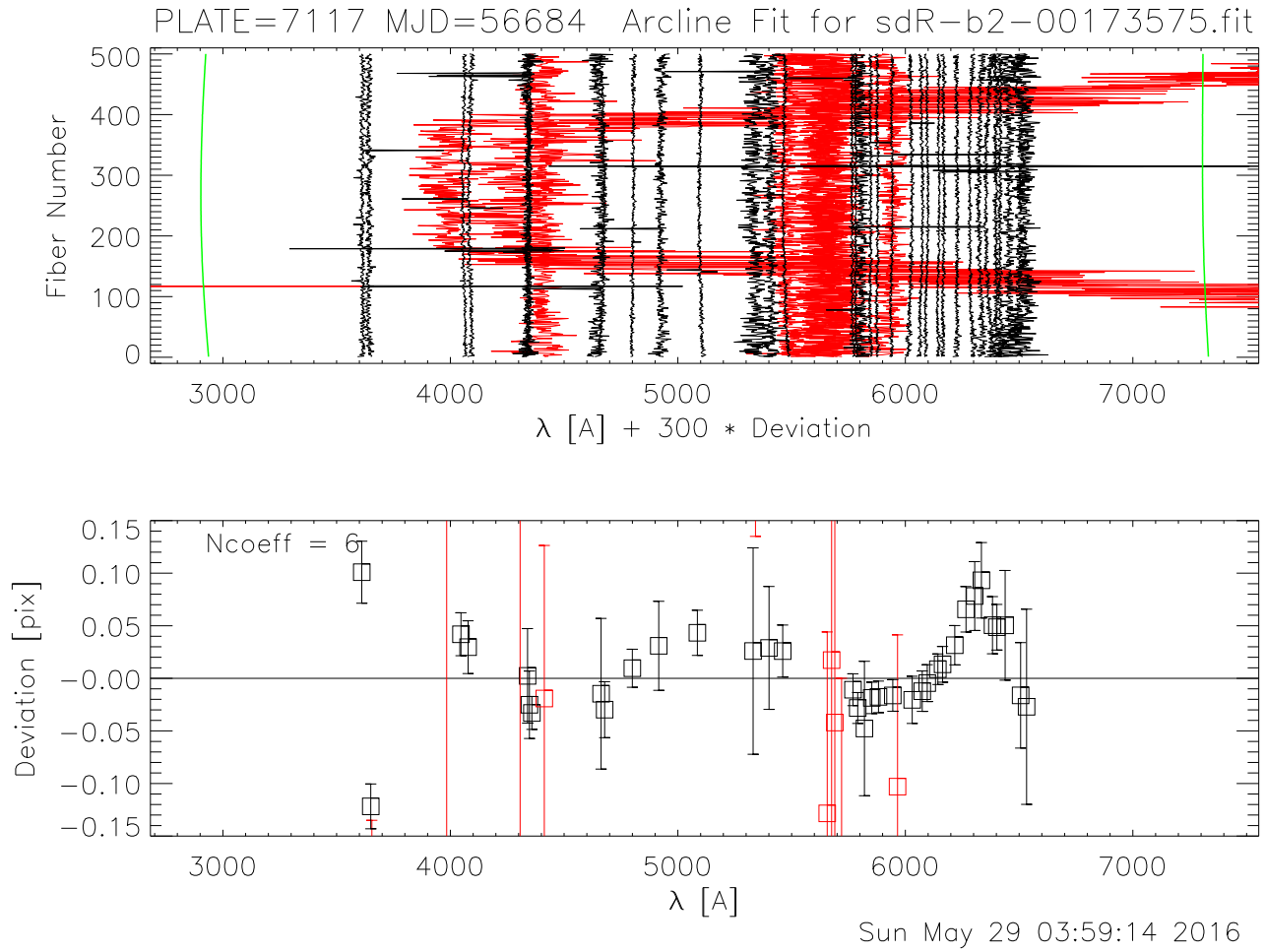

PLATE=7117 MJD=56684 sdR-b1-00173580.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 33.17 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

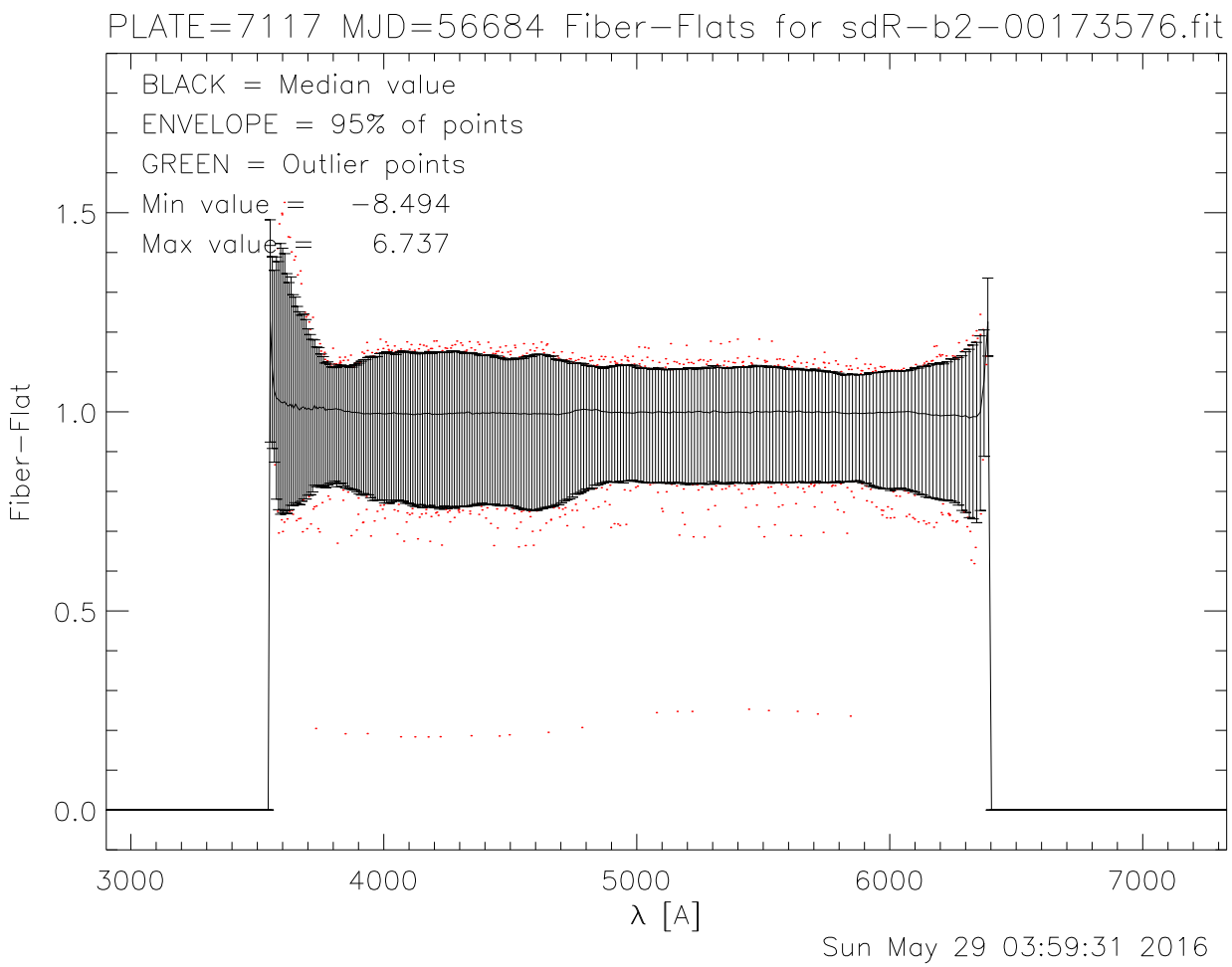
PLATE=7117 MJD=56684 Traces sdR-b2-00173576.fit

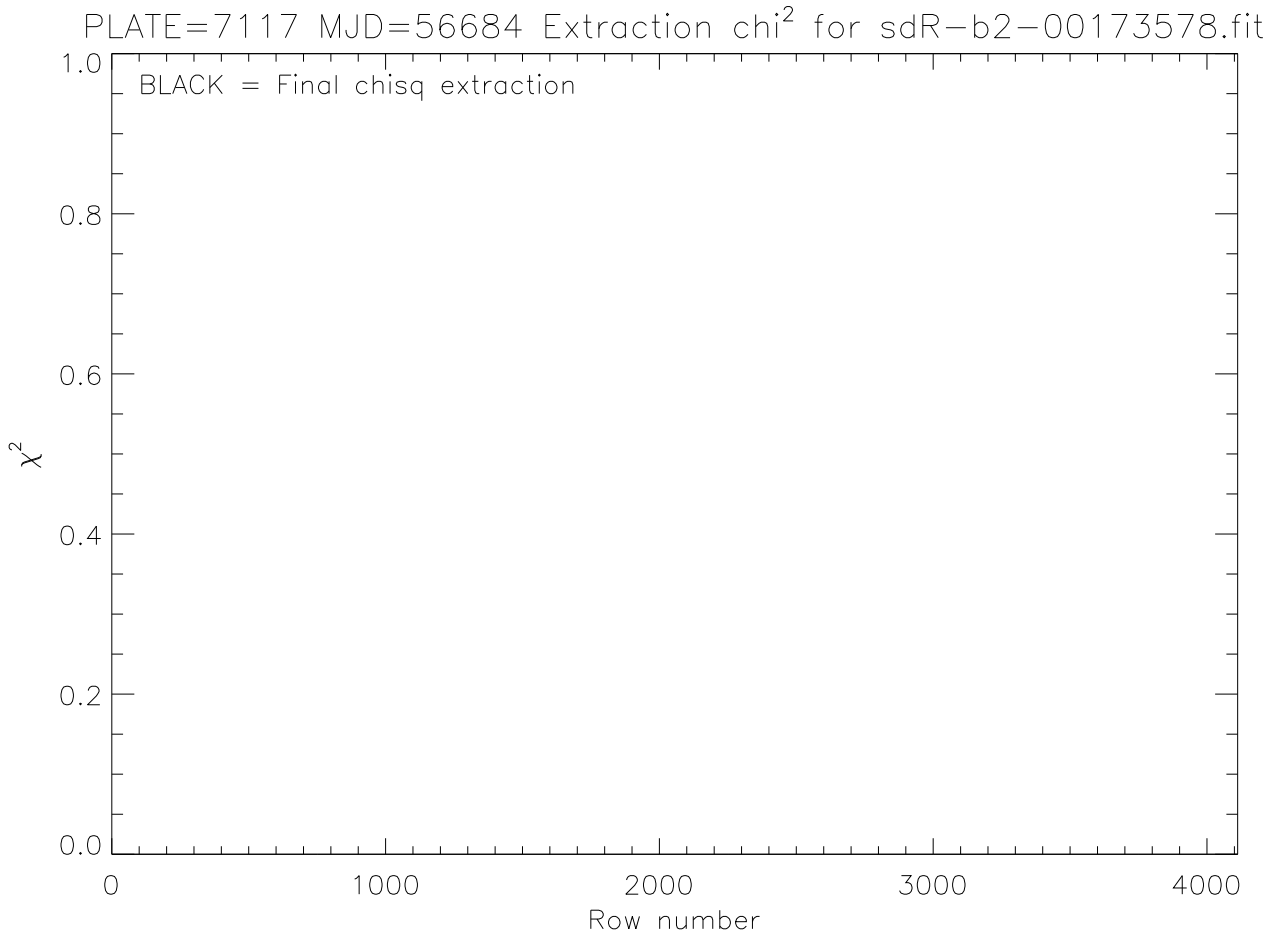


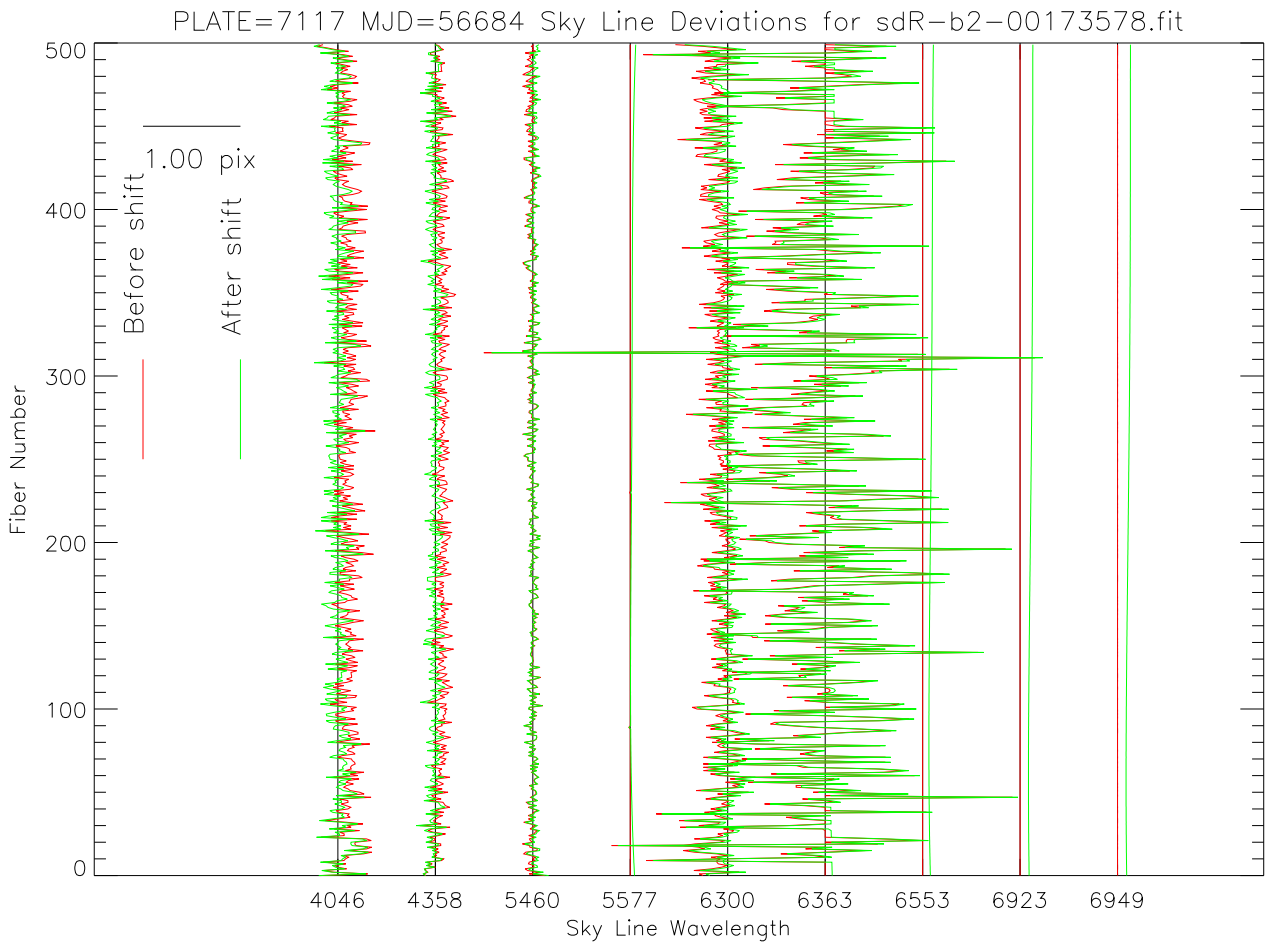

PLATE=7117 MJD=56684 flat extraction chi^2 for sdR−b2−00173576.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

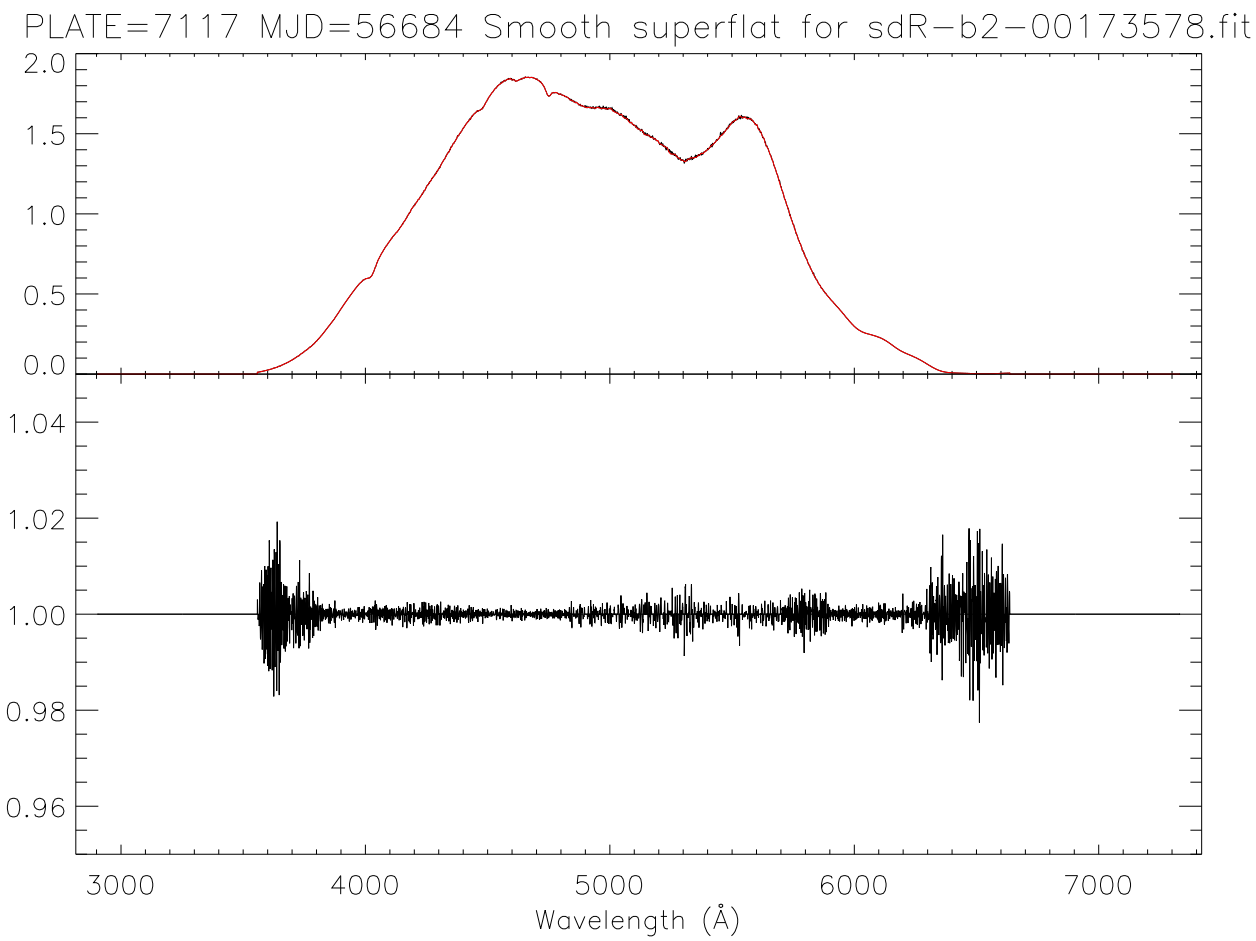

PLATE=7117 MJD=56684 Superflat sdR-b2-00173576.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
4000
4500
5000
5500
6000
6500

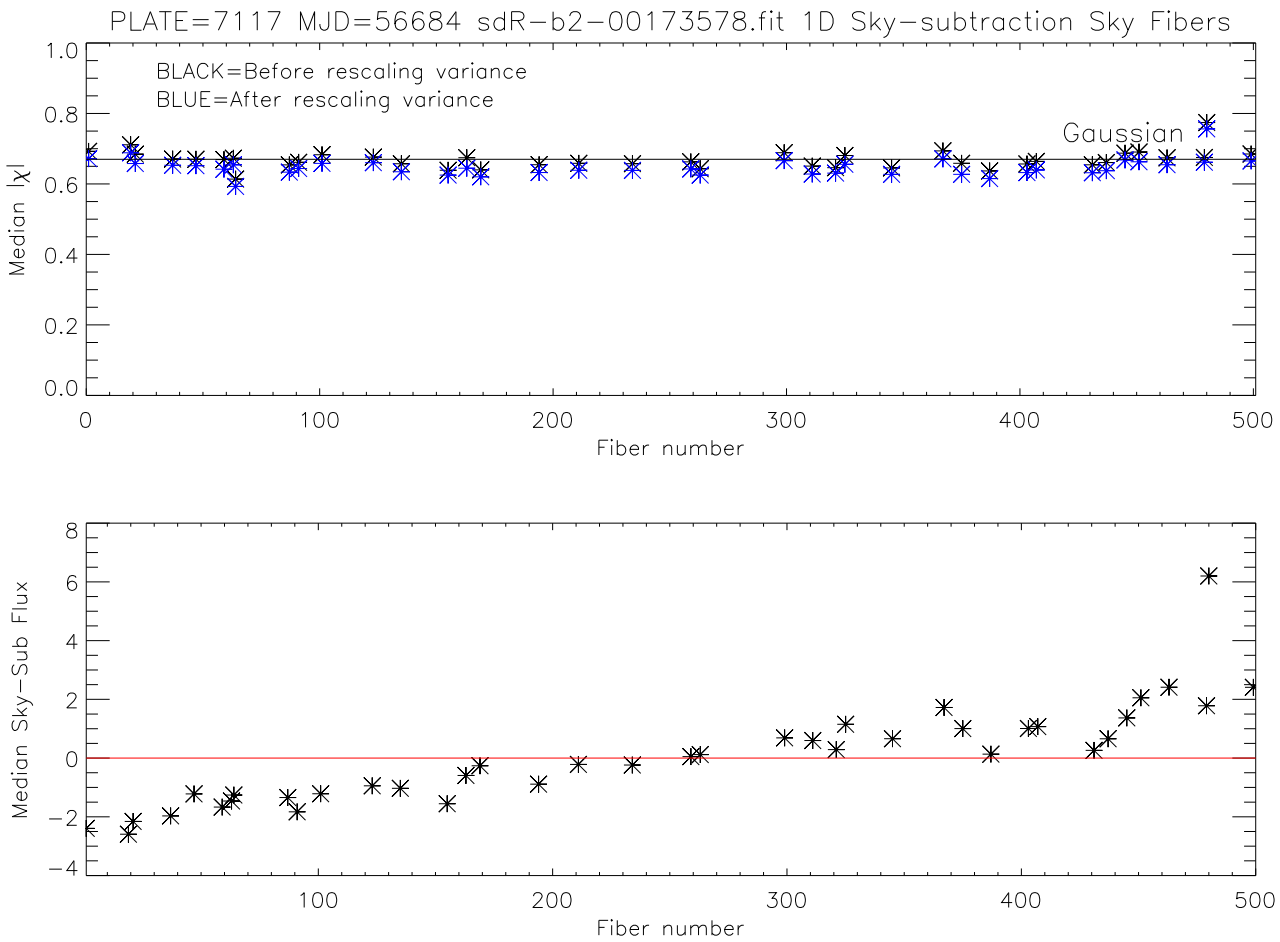

PLATE=7117 MJD=56684 Arcline Fit for sdR-b2-00173575.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:59:14 2016

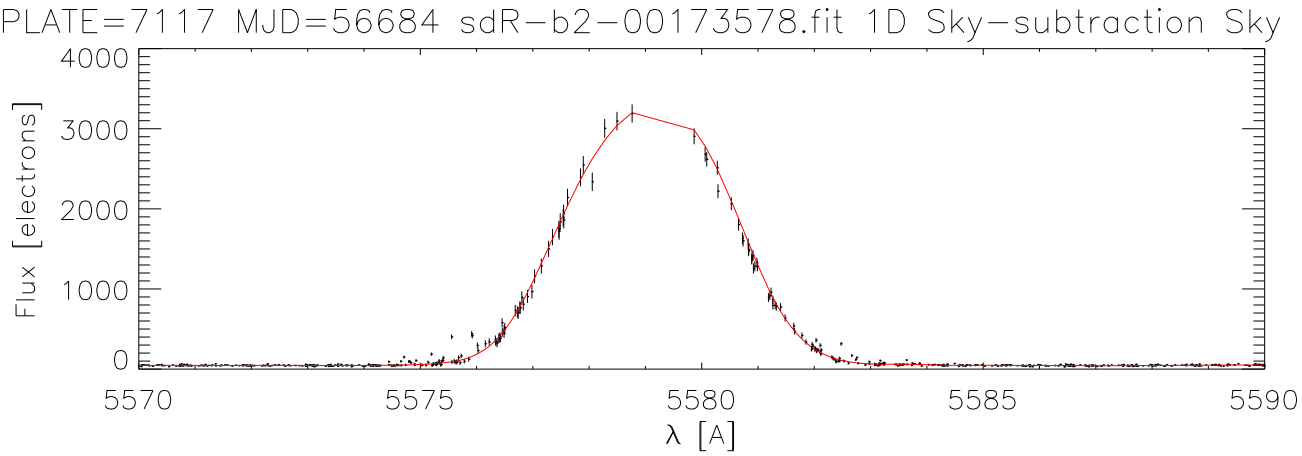

PLATE=7117 MJD=56684 Fiber−Flats for sdR−b2−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −8.494
Max value = 6.737
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:59:31 2016

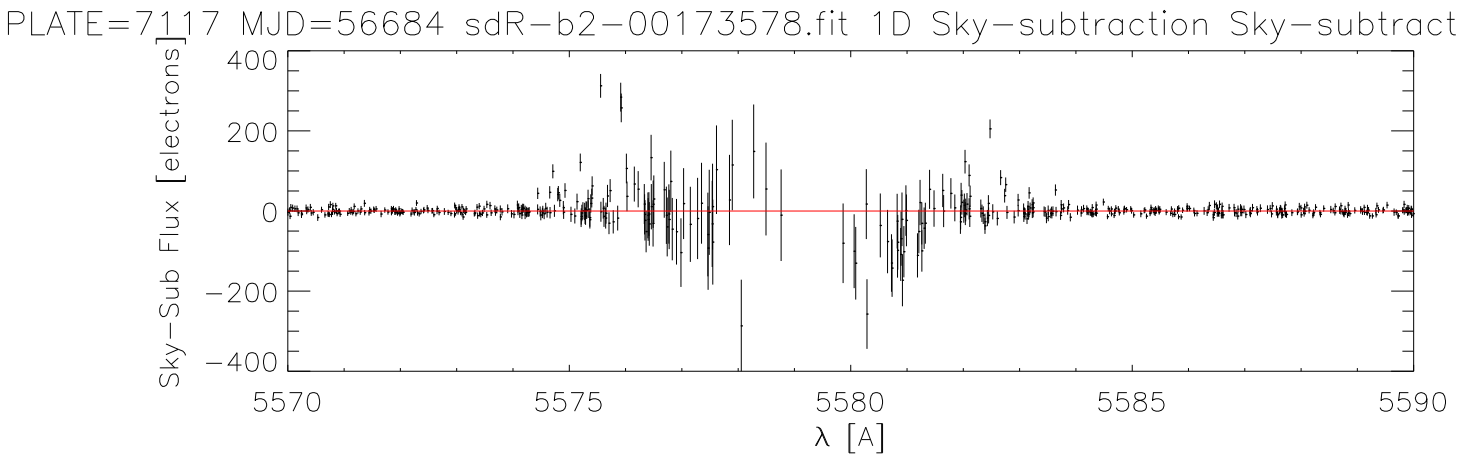

PLATE=7117 MJD=56684 Extraction chi^2 for sdR-b2-00173578.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-b2-00173578.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

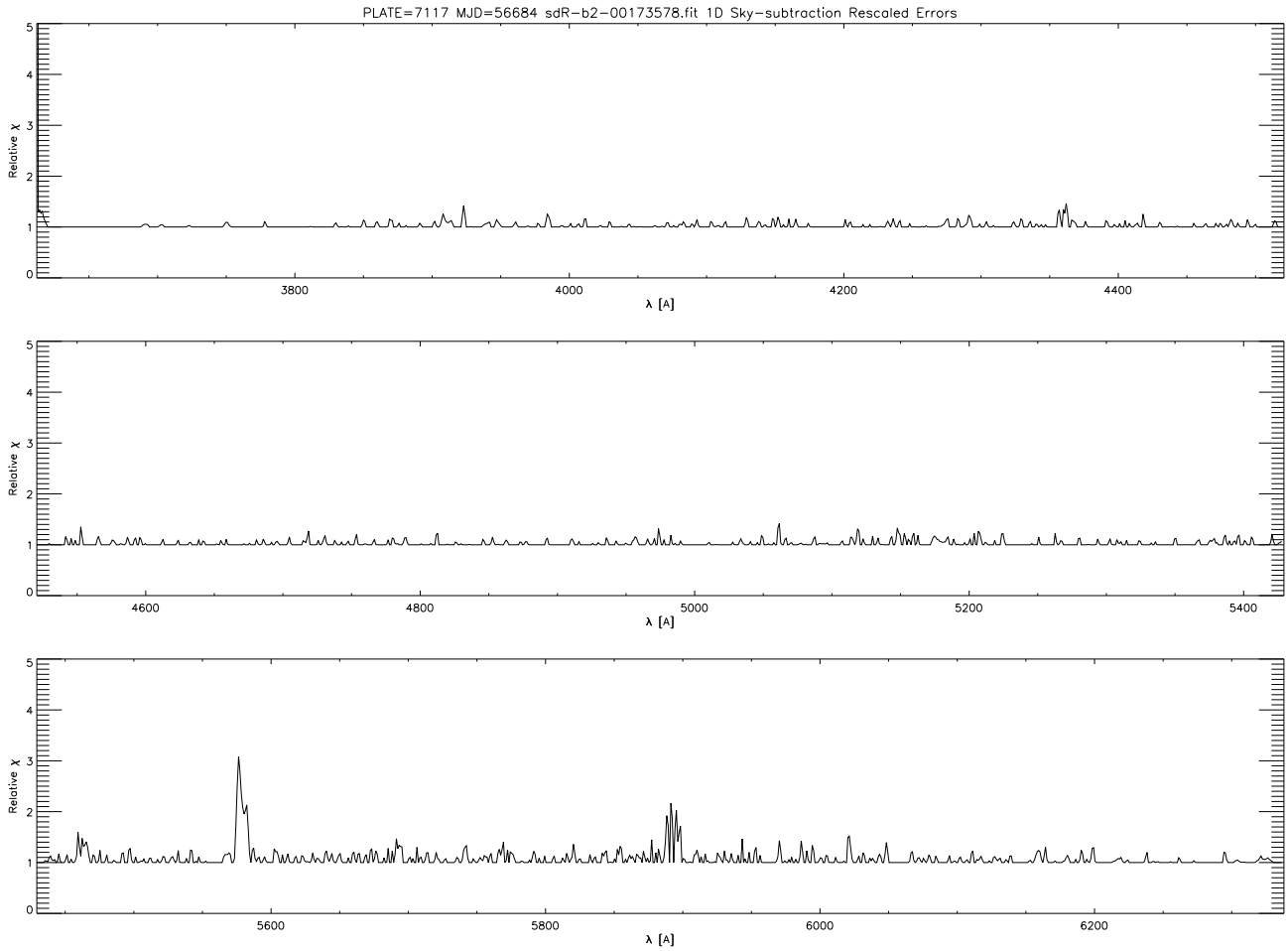

PLATE=7117 MJD=56684 Smooth superflat for sdR-b2-00173578.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

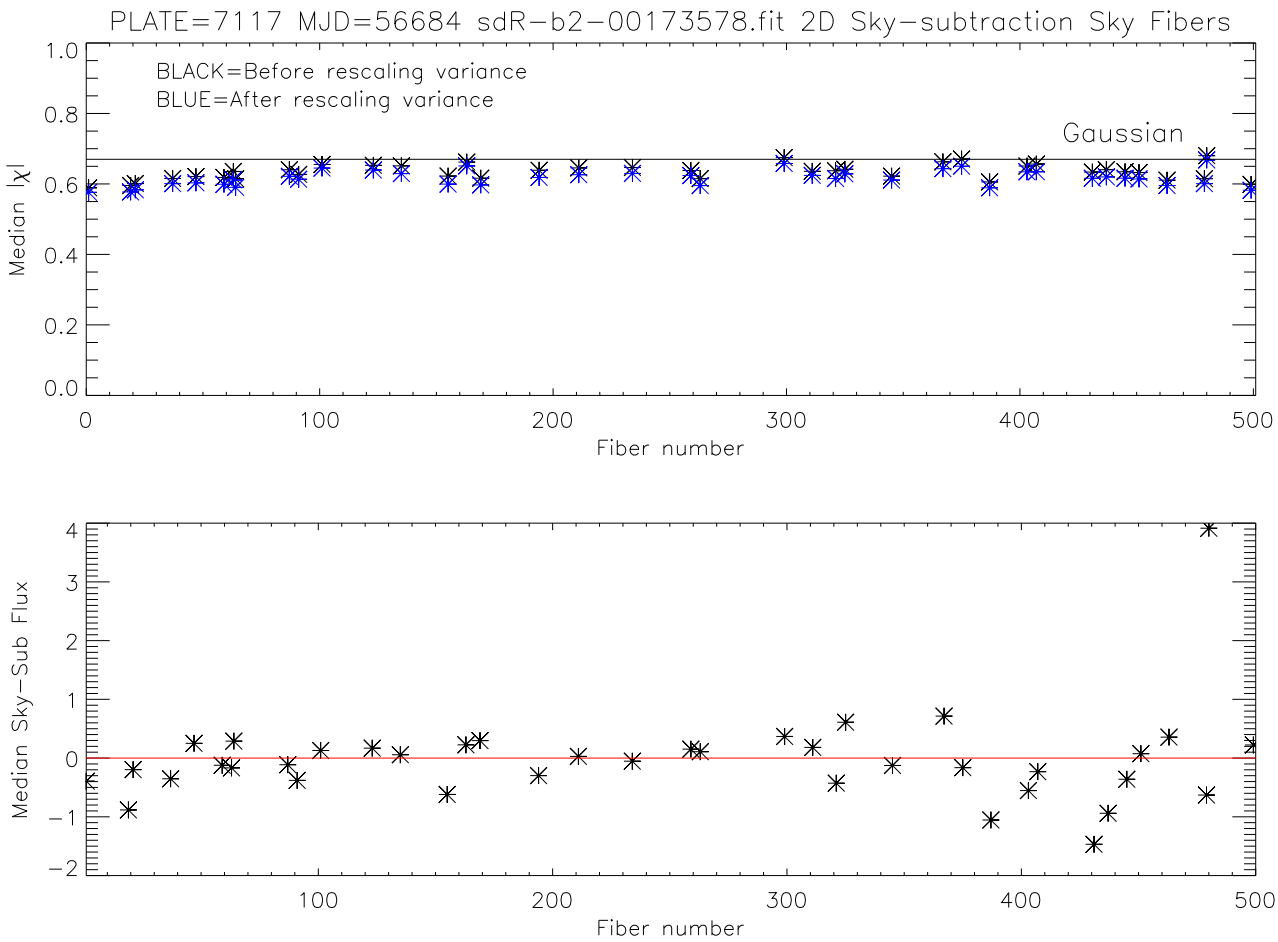

PLATE=7117 MJD=56684 sdR-b2-00173578.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

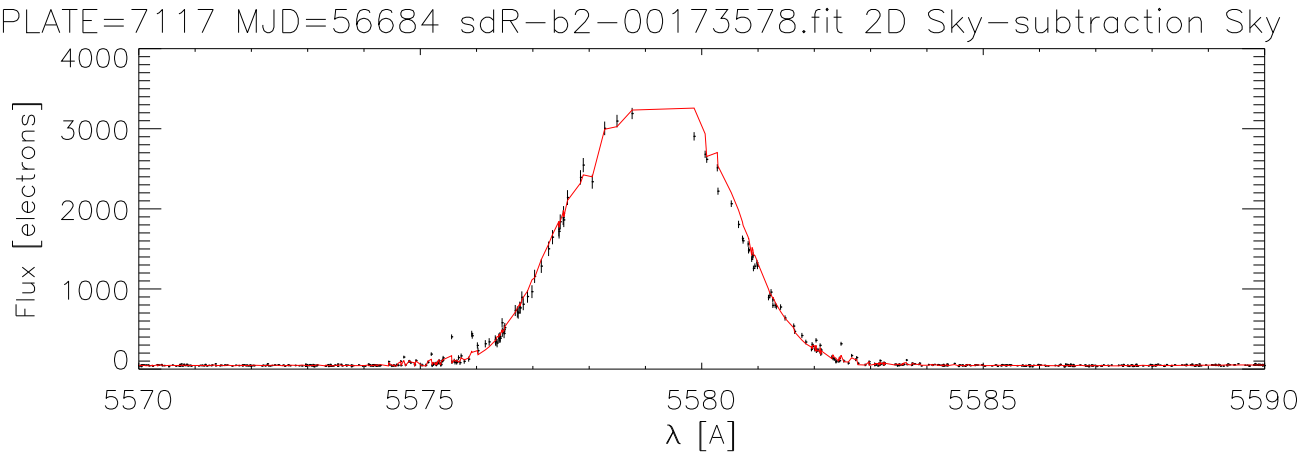

PLATE=7117 MJD=56684 sdR-b2-00173578.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

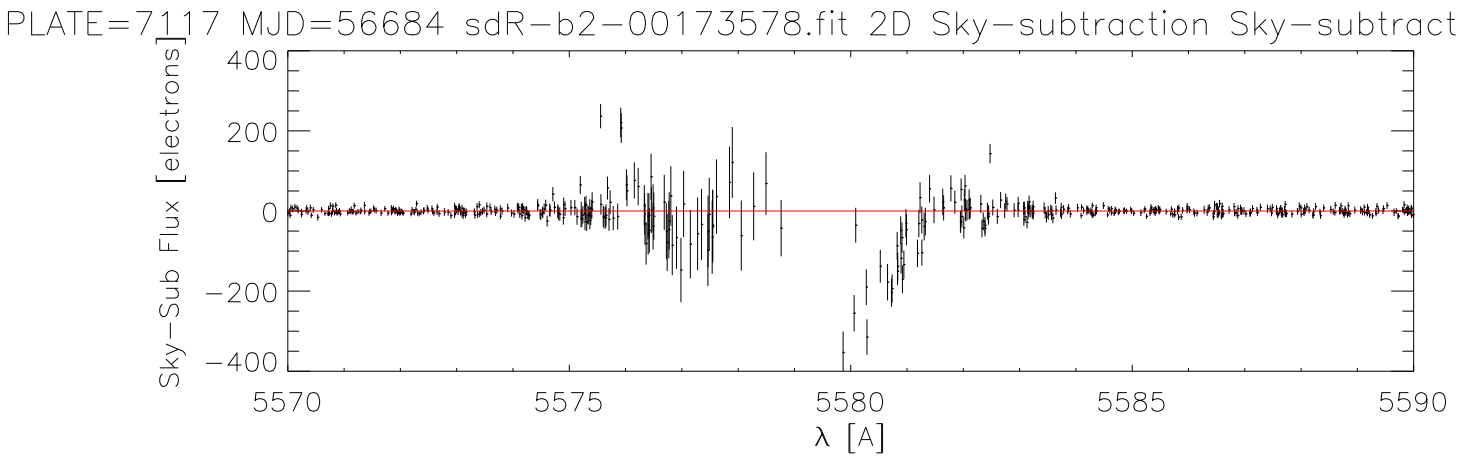

PLATE=7117 MJD=56684 sdR-b2-00173578.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

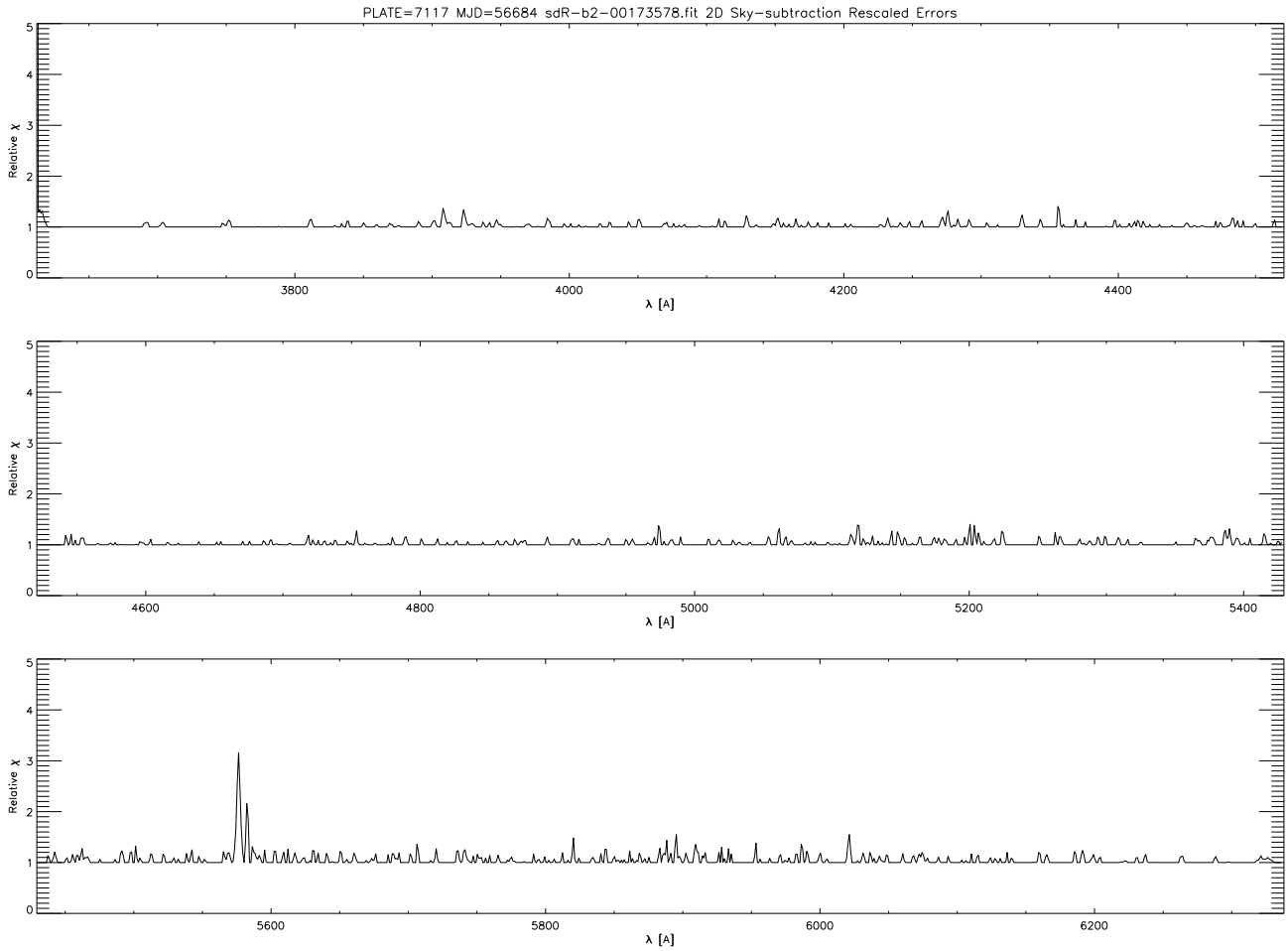


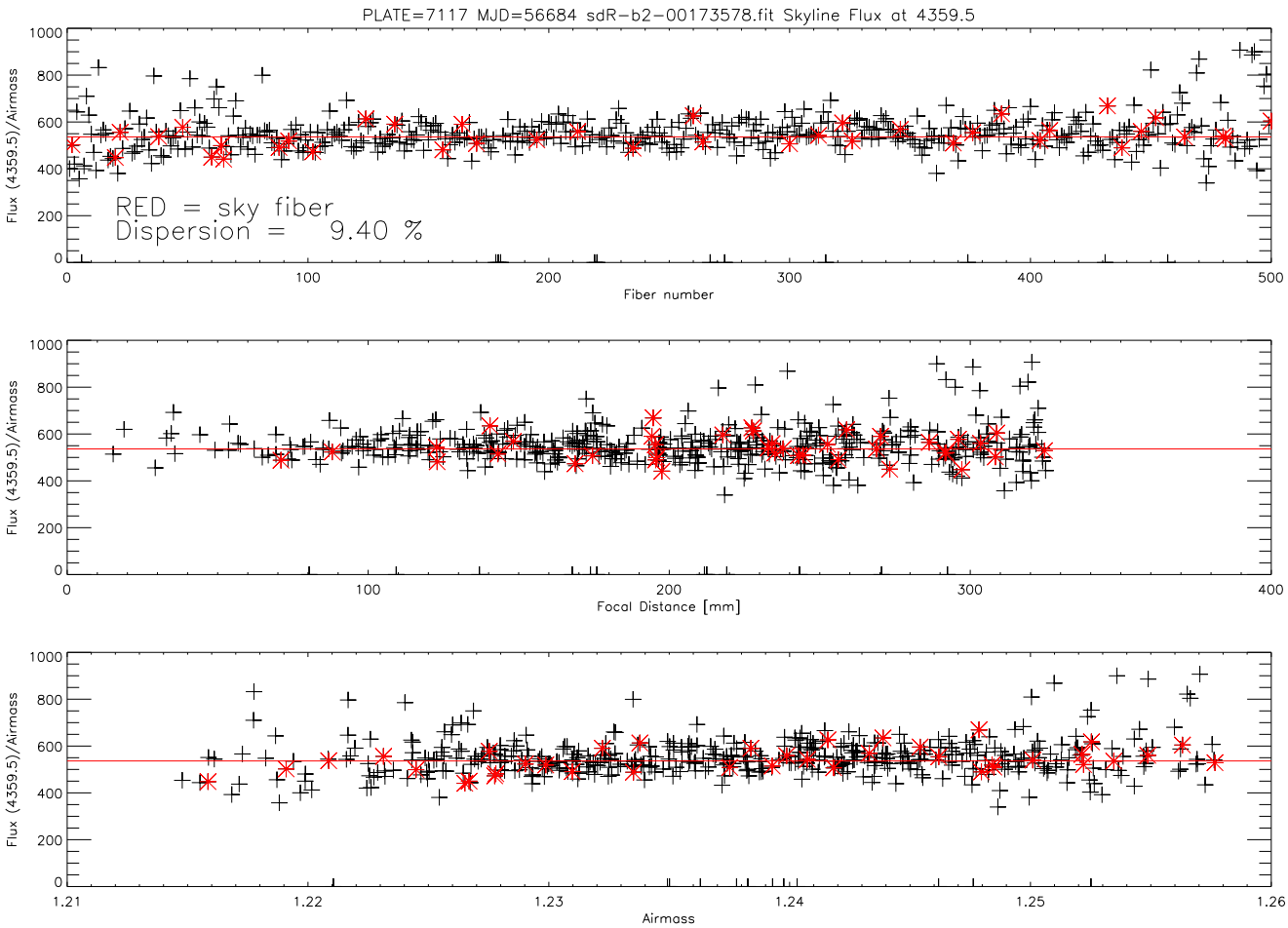

PLATE=7117 MJD=56684 sdR-b2-00173578.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

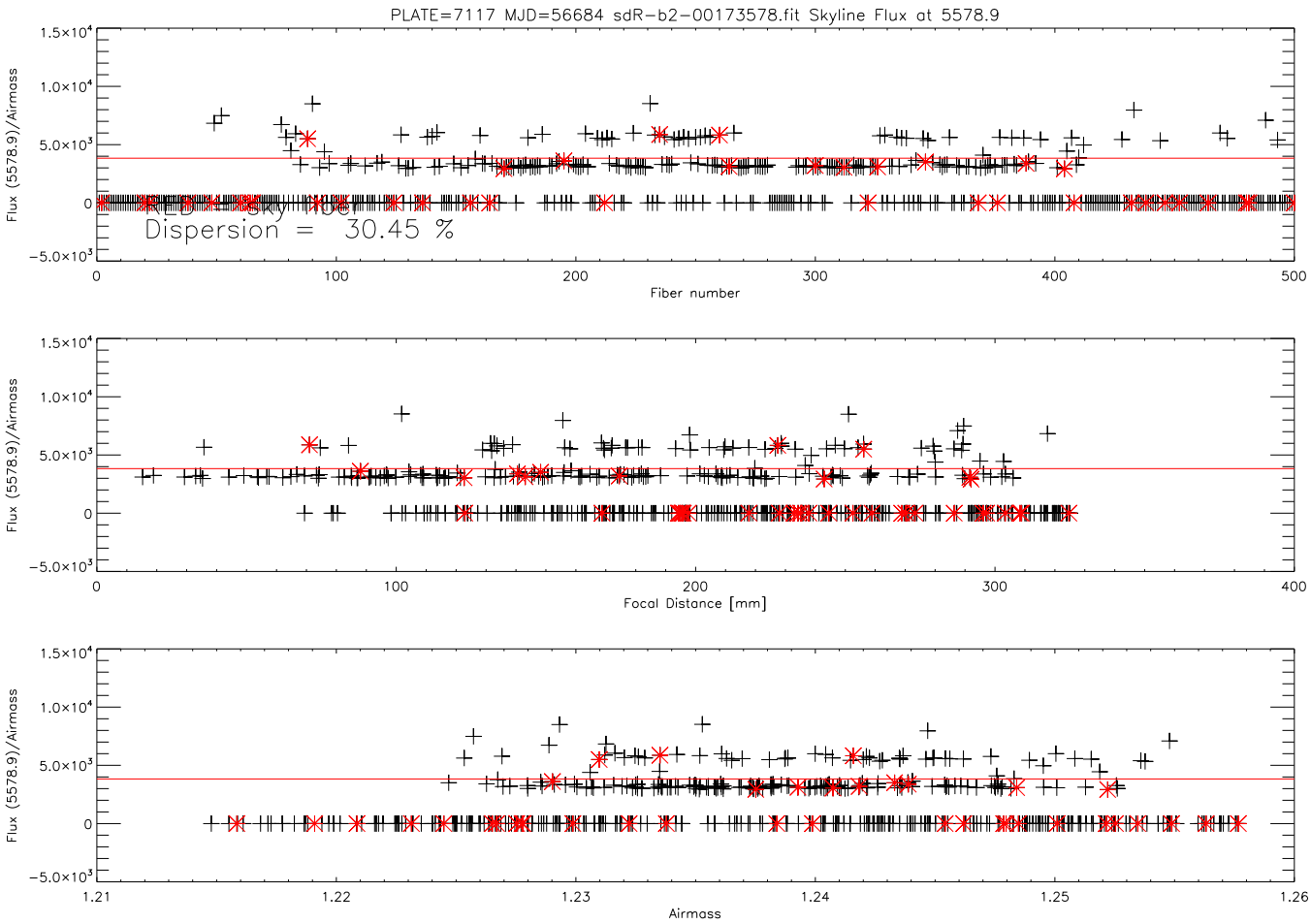

PLATE=7117 MJD=56684 sdR-b2-00173578.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

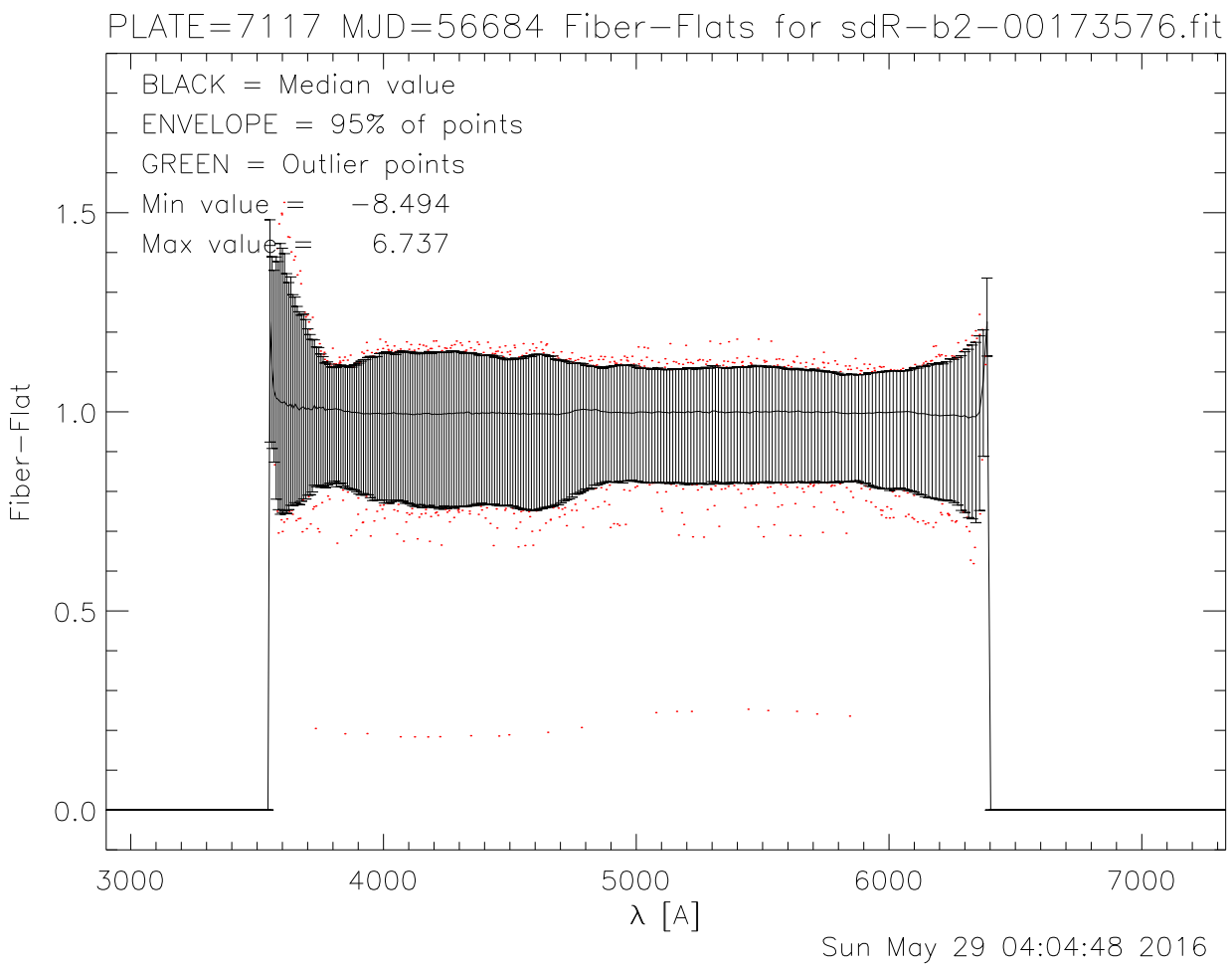

PLATE=7117 MJD=56684 sdR-b2-00173578.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

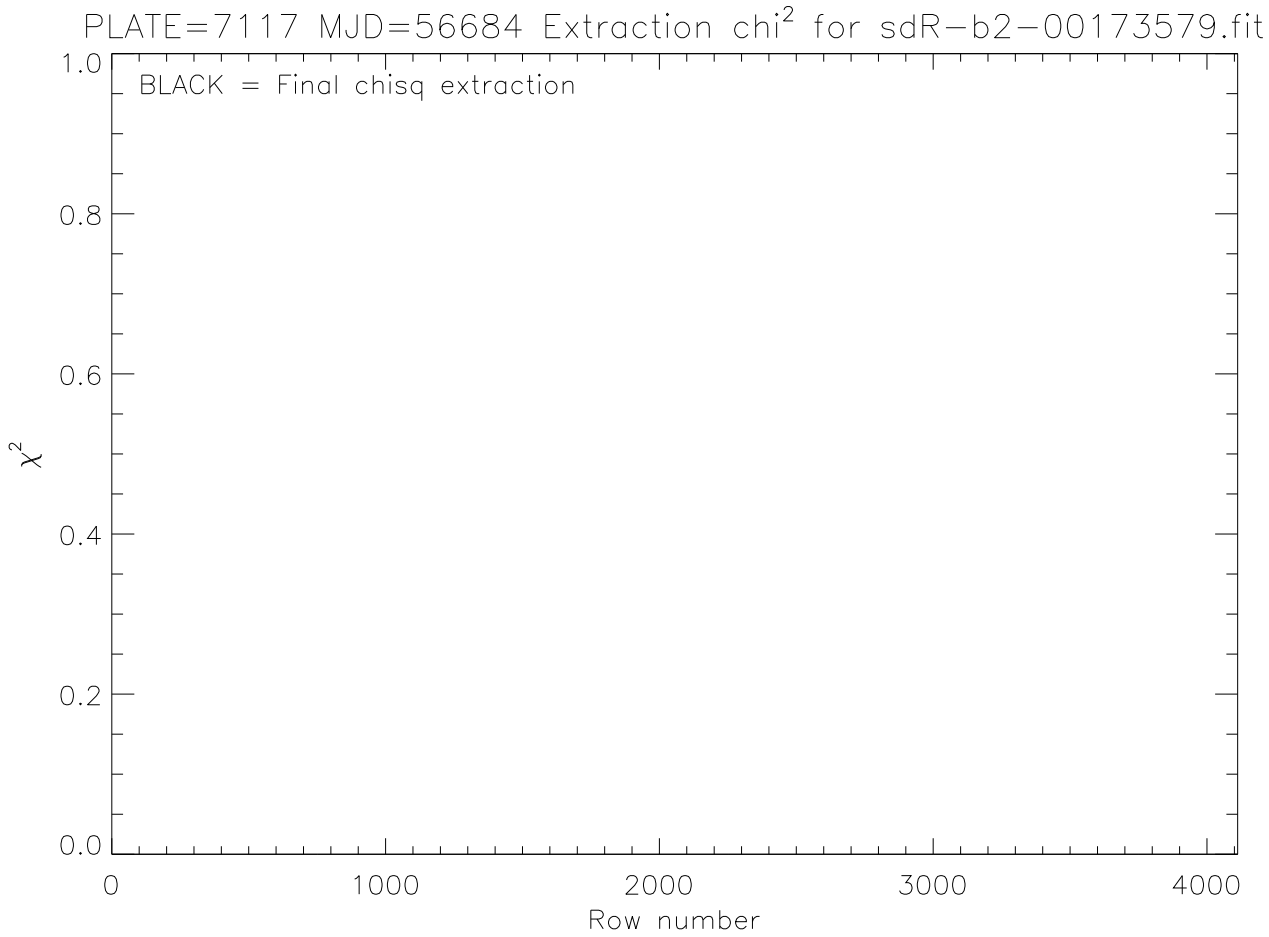
Number of sky fibers = 39

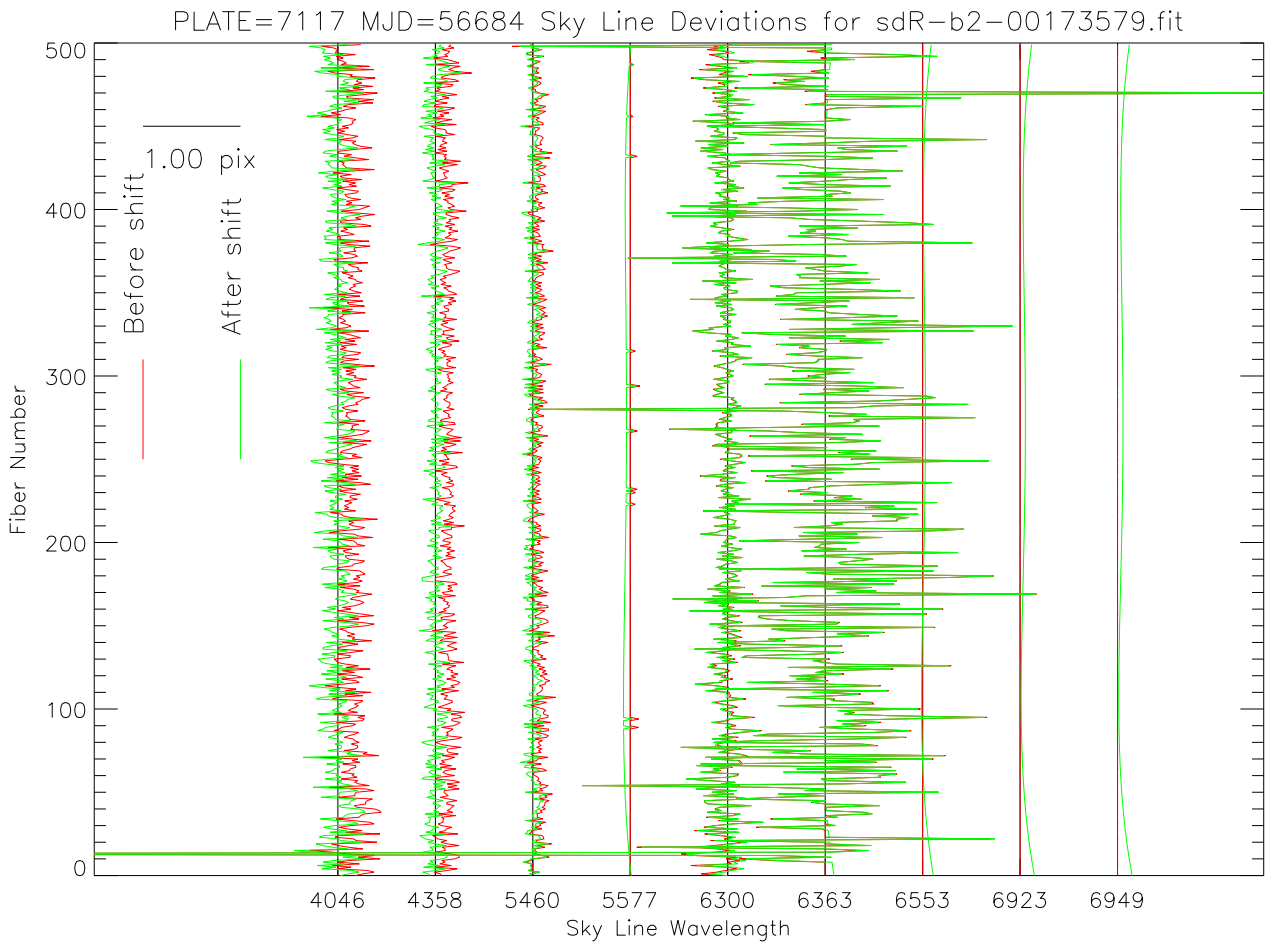


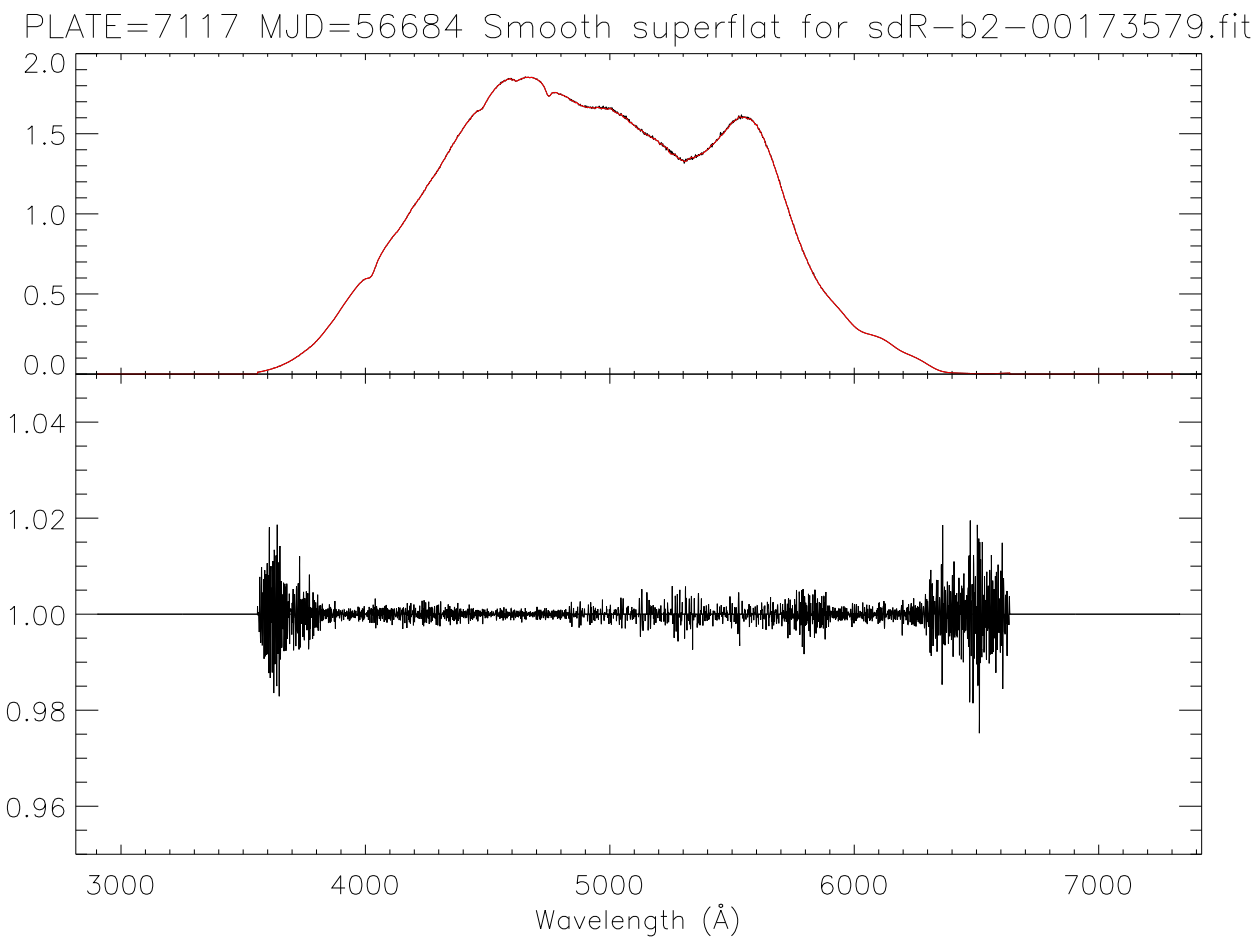

PLATE=7117 MJD=56684 sdR-b2-00173578.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.40 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

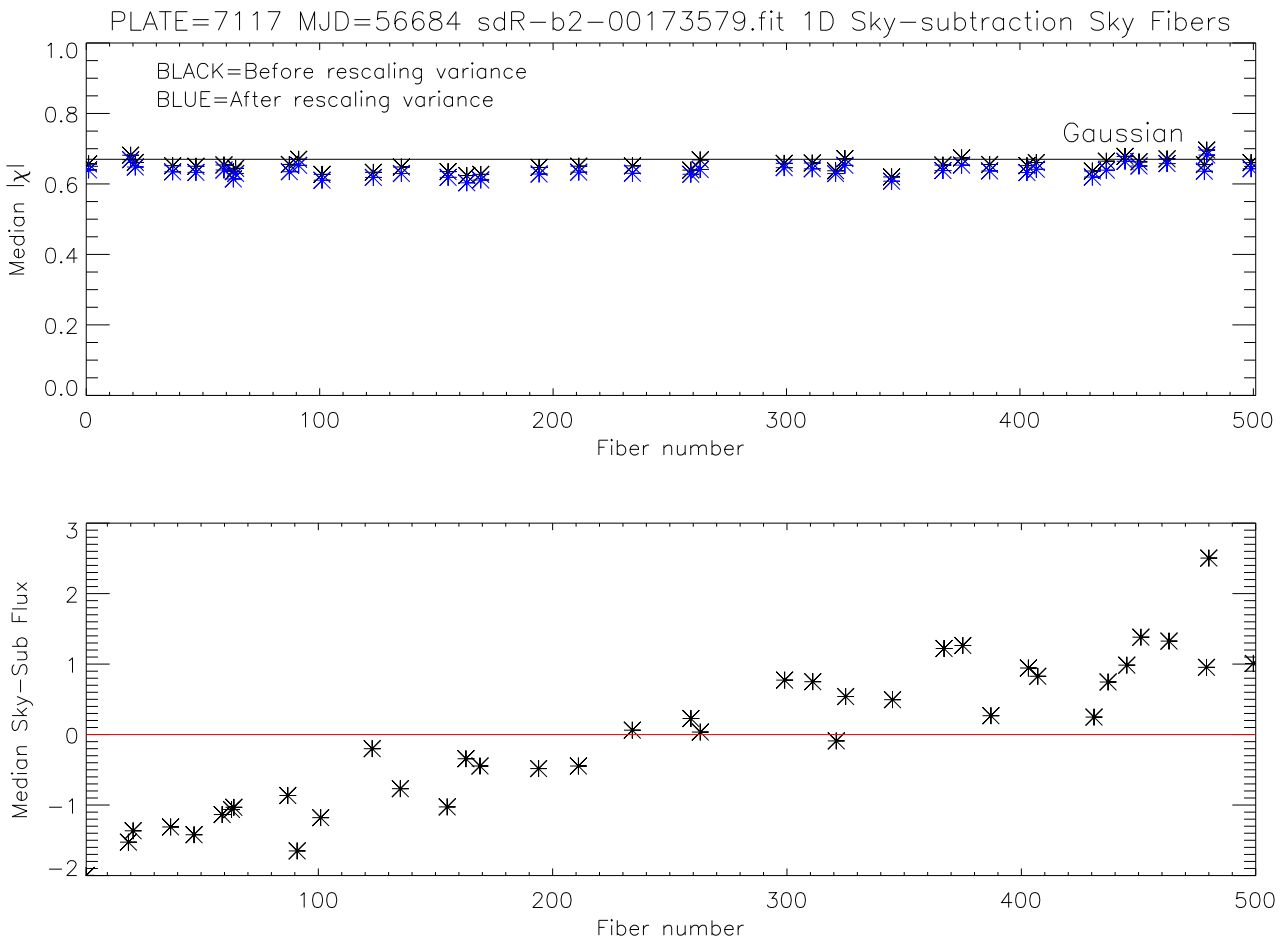

PLATE=7117 MJD=56684 sdR-b2-00173578.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.5×10^4
1.0×10^4
5.0×10^3
0
−5.0×10^3
Dispersion = 30.45 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
1.21
1.22
1.23
1.24
1.25
1.26
Airmass

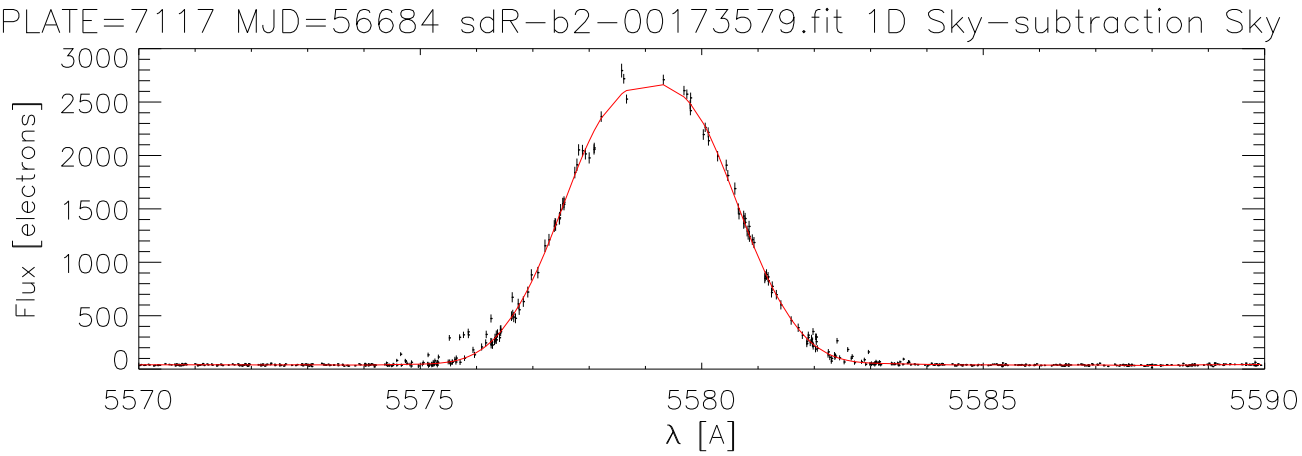

PLATE=7117 MJD=56684 Fiber−Flats for sdR−b2−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −8.494
Max value = 6.737
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 04:04:48 2016

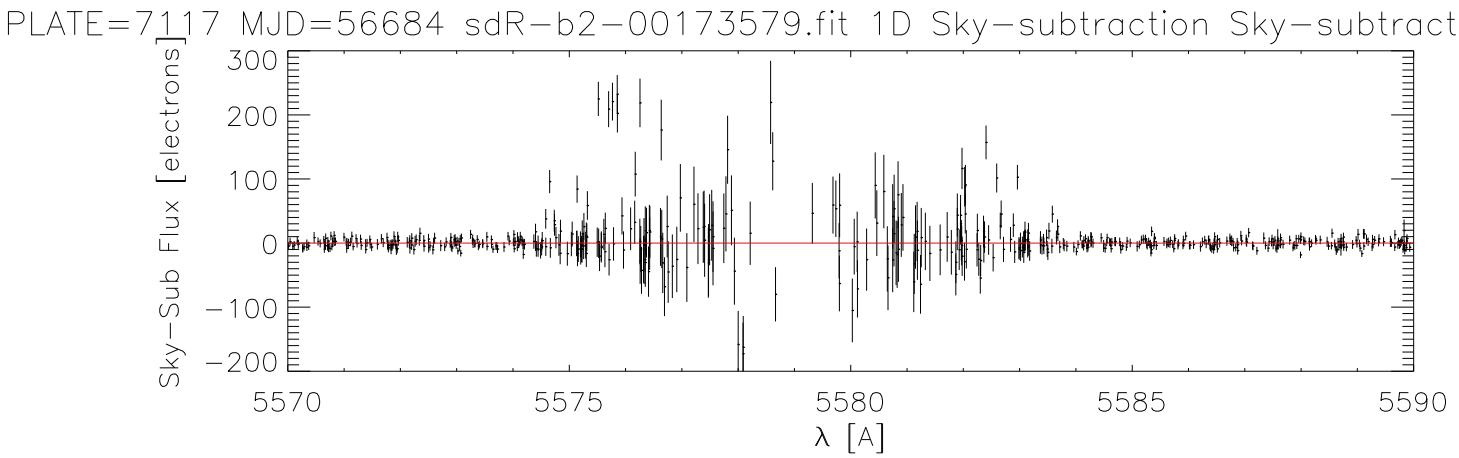

PLATE=7117 MJD=56684 Extraction chi^2 for sdR-b2-00173579.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-b2-00173579.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

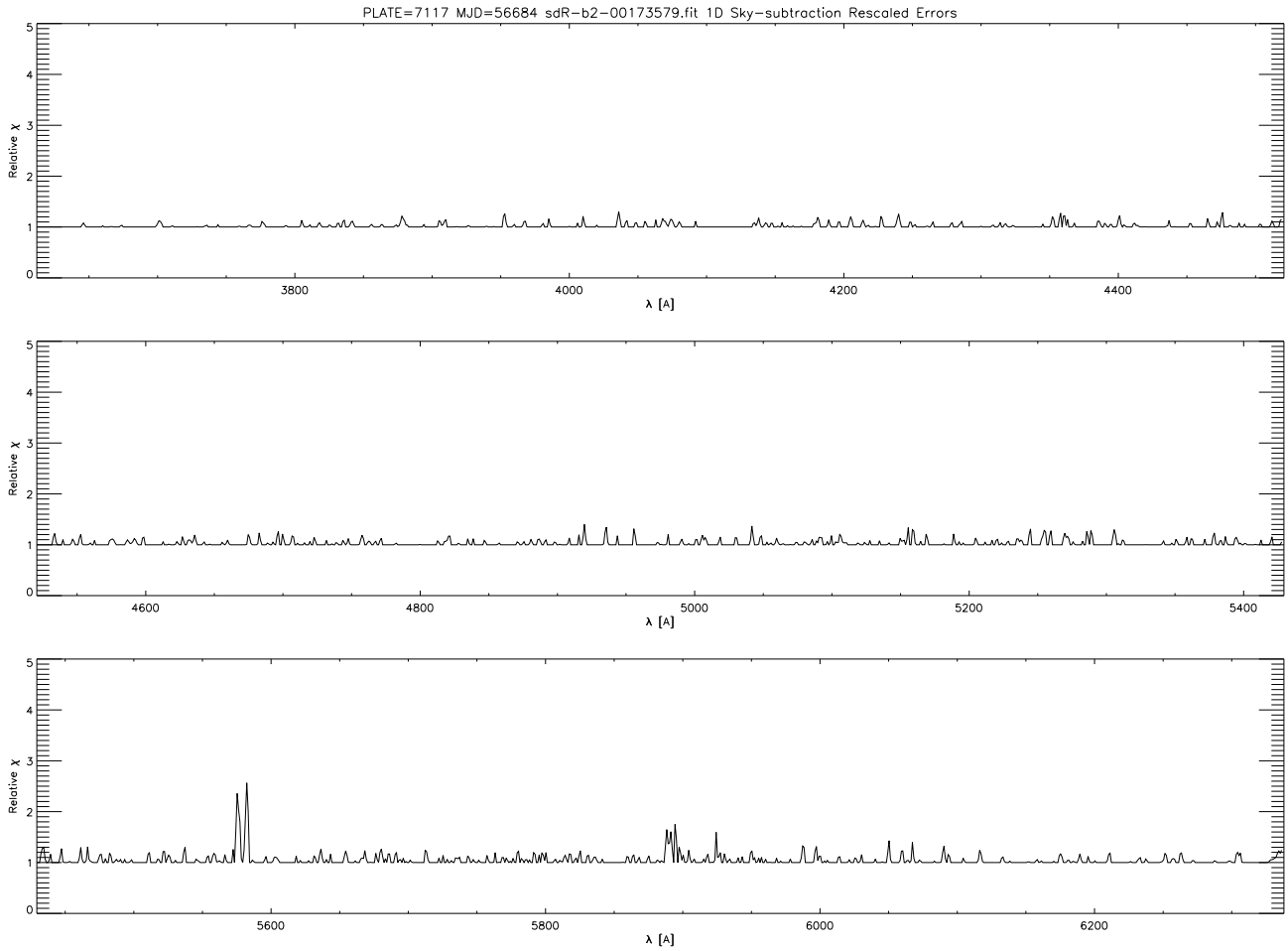

PLATE=7117 MJD=56684 Smooth superflat for sdR-b2-00173579.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

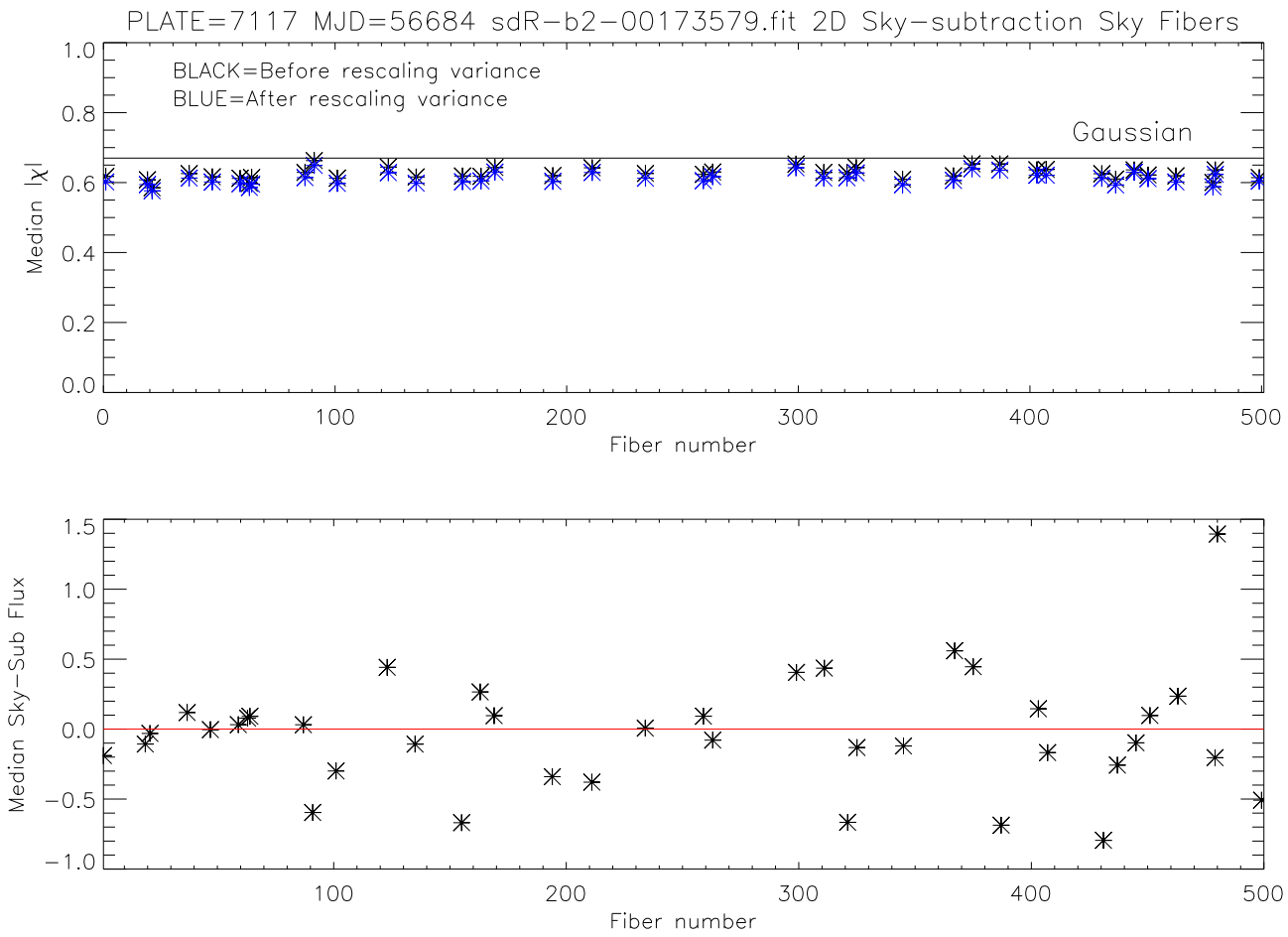

PLATE=7117 MJD=56684 sdR-b2-00173579.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

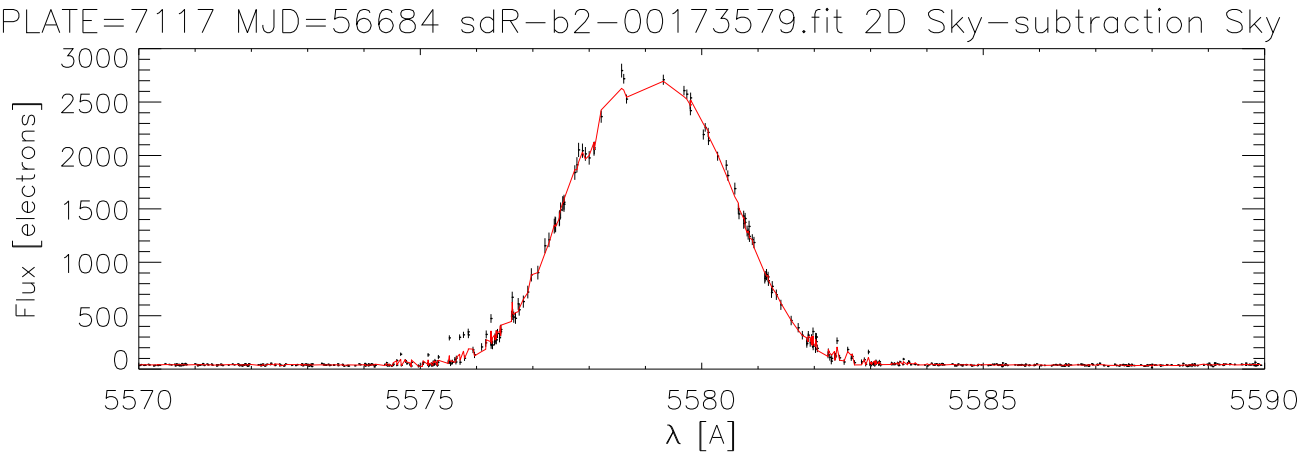

PLATE=7117 MJD=56684 sdR-b2-00173579.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

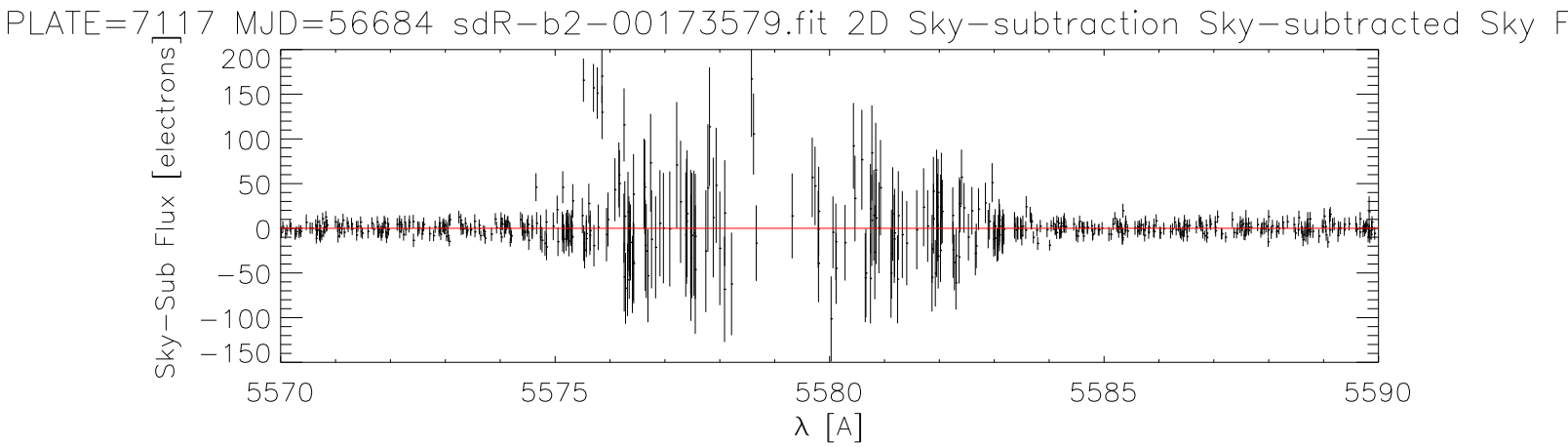

PLATE=7117 MJD=56684 sdR-b2-00173579.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

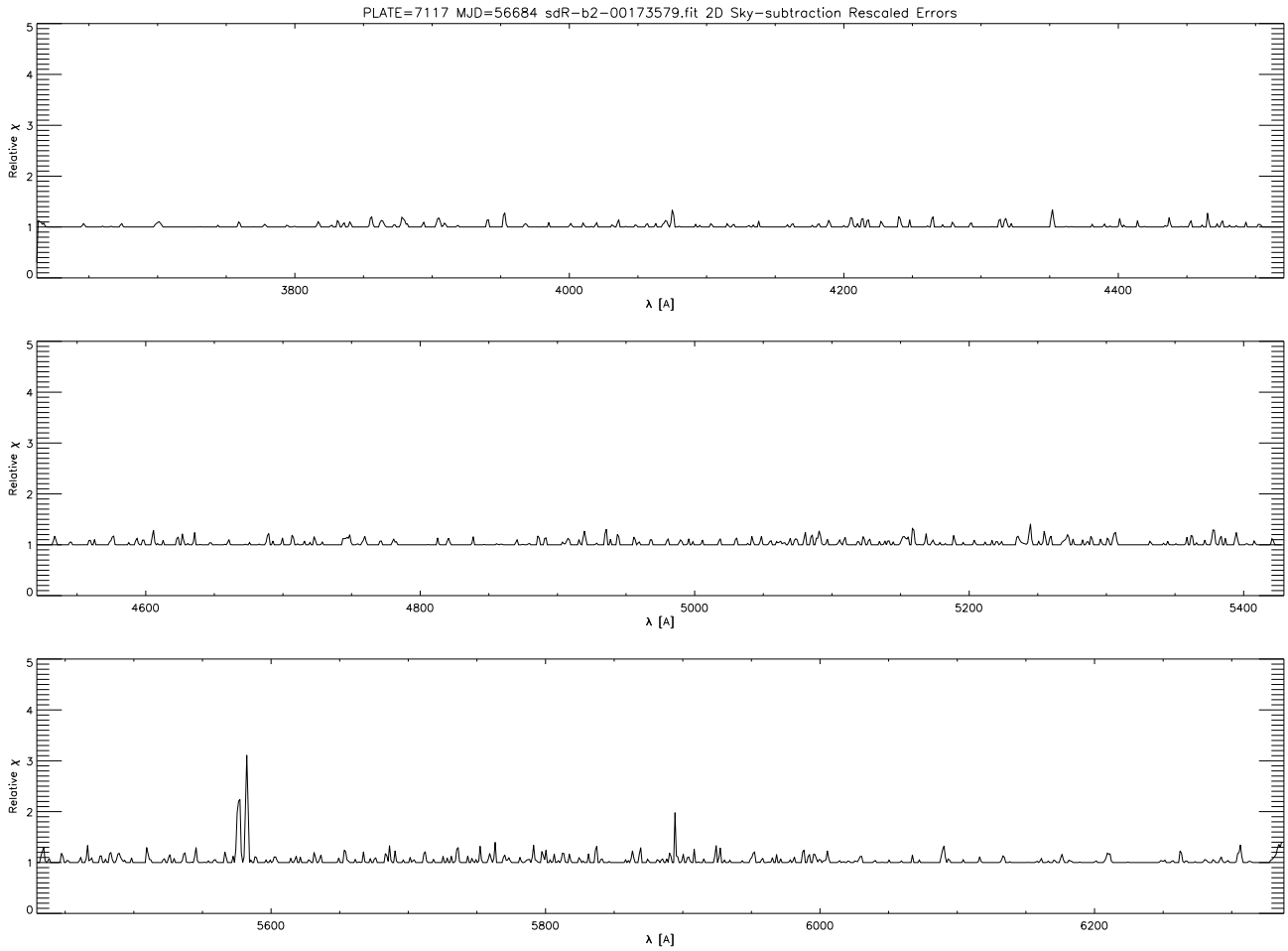


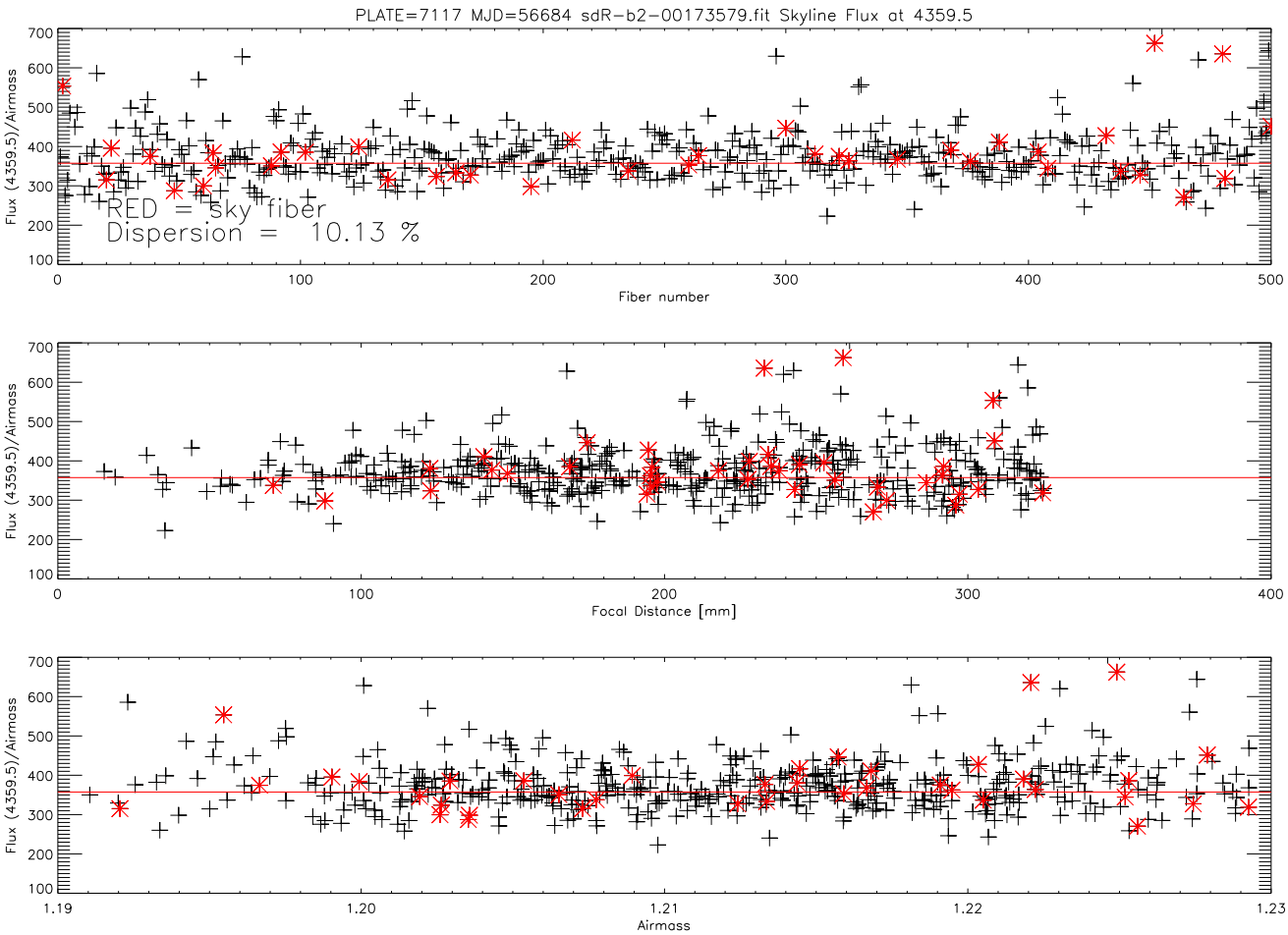

PLATE=7117 MJD=56684 sdR-b2-00173579.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

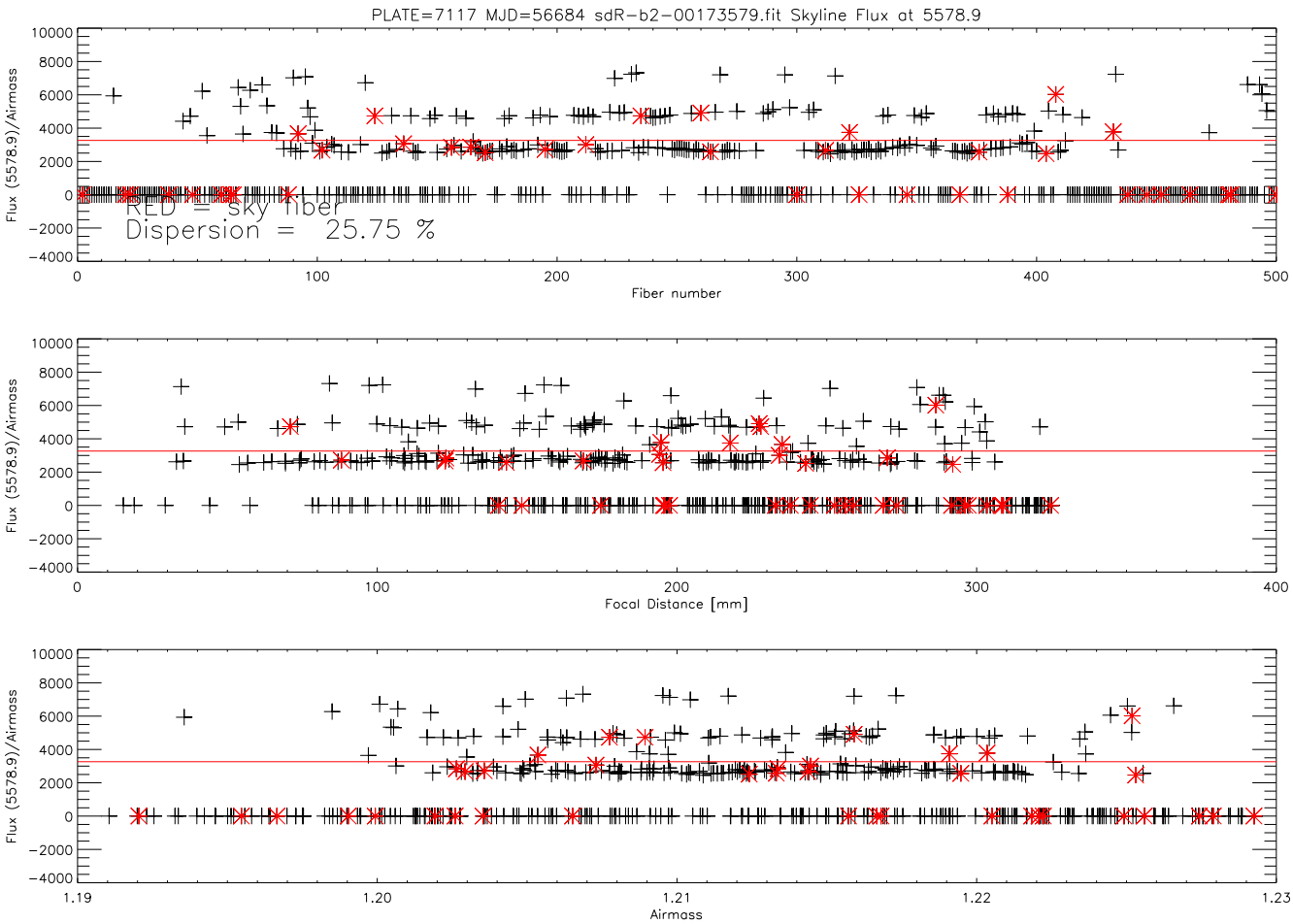

PLATE=7117 MJD=56684 sdR-b2-00173579.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

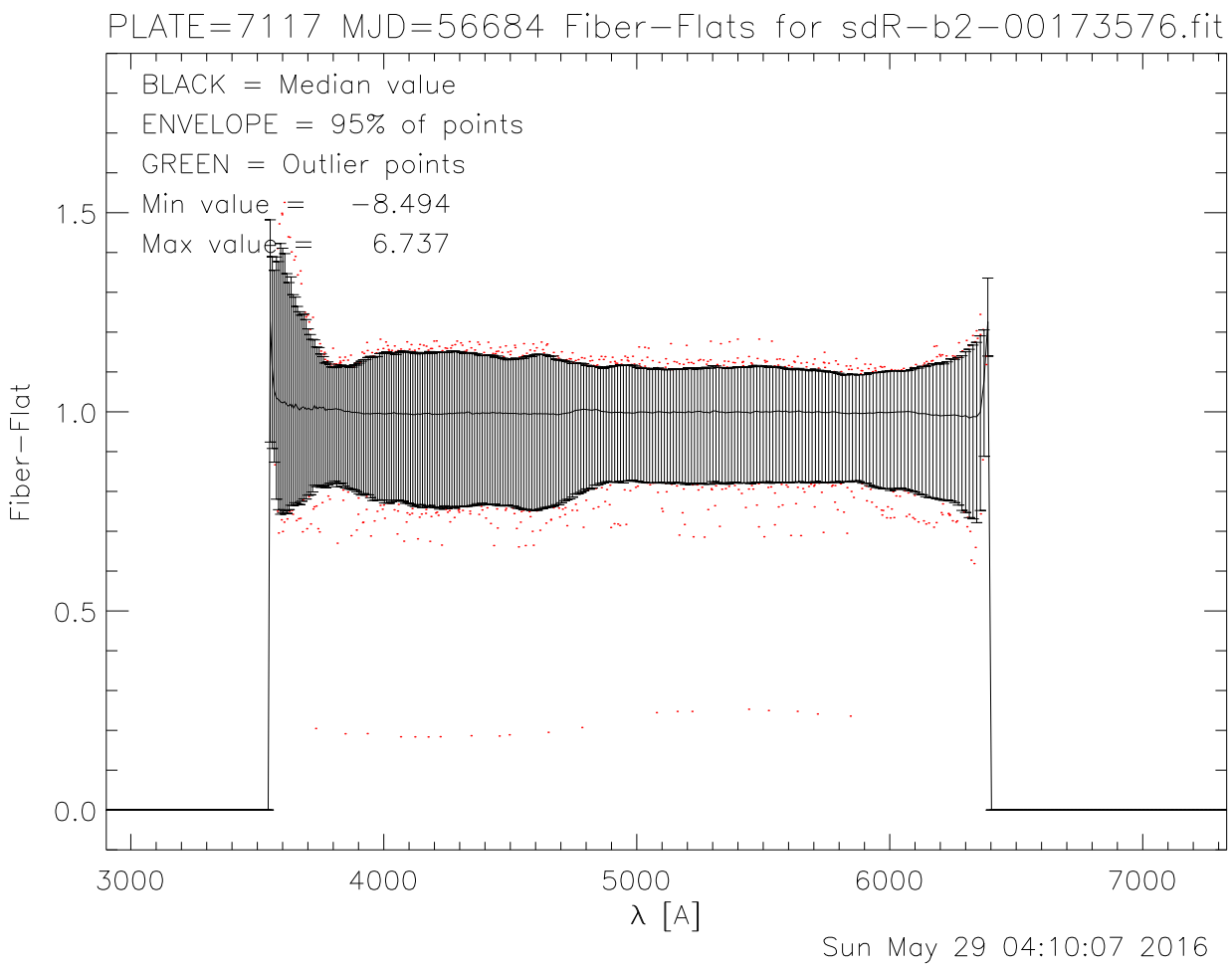

PLATE=7117 MJD=56684 sdR-b2-00173579.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

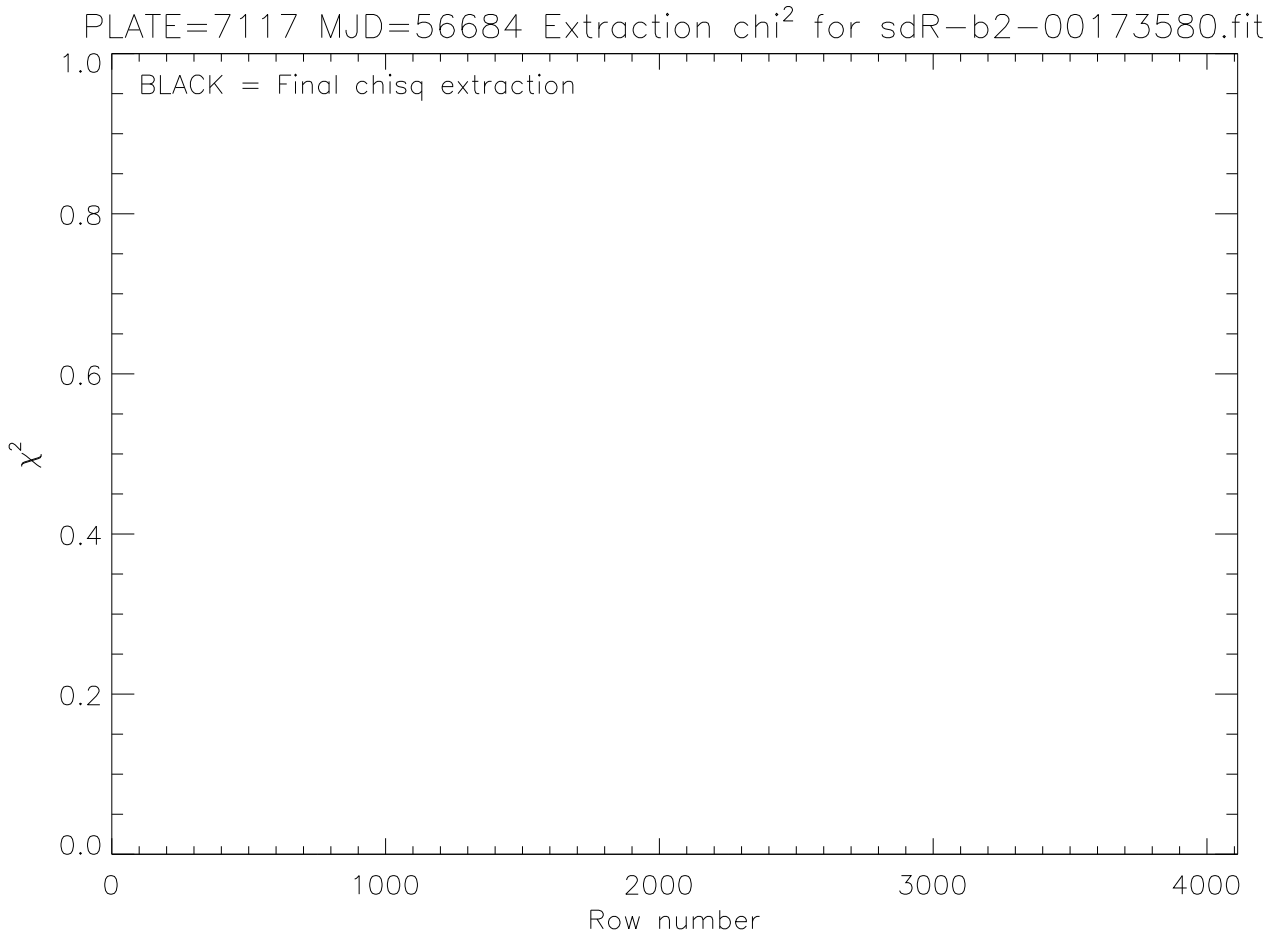
Number of sky fibers = 39

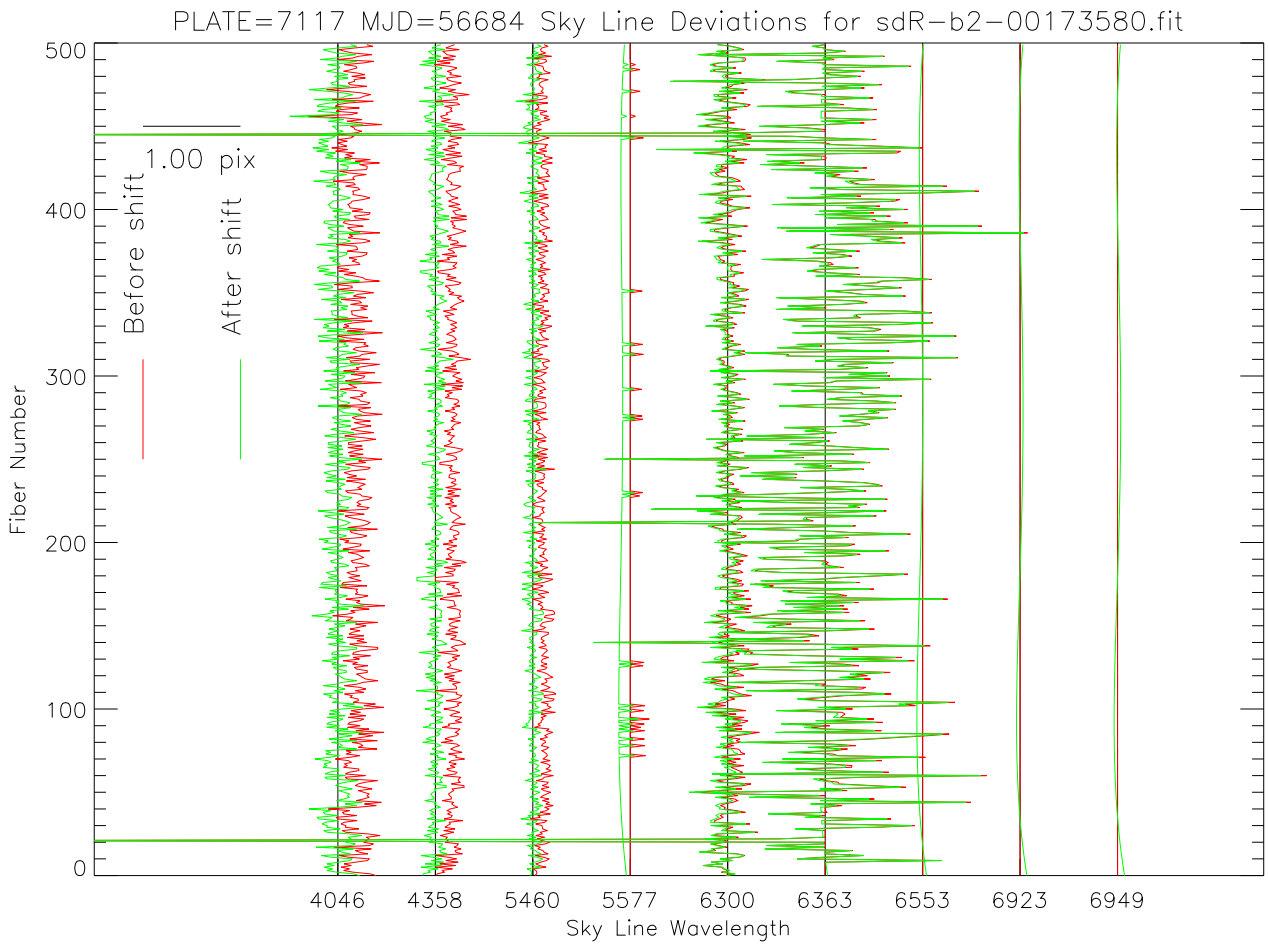


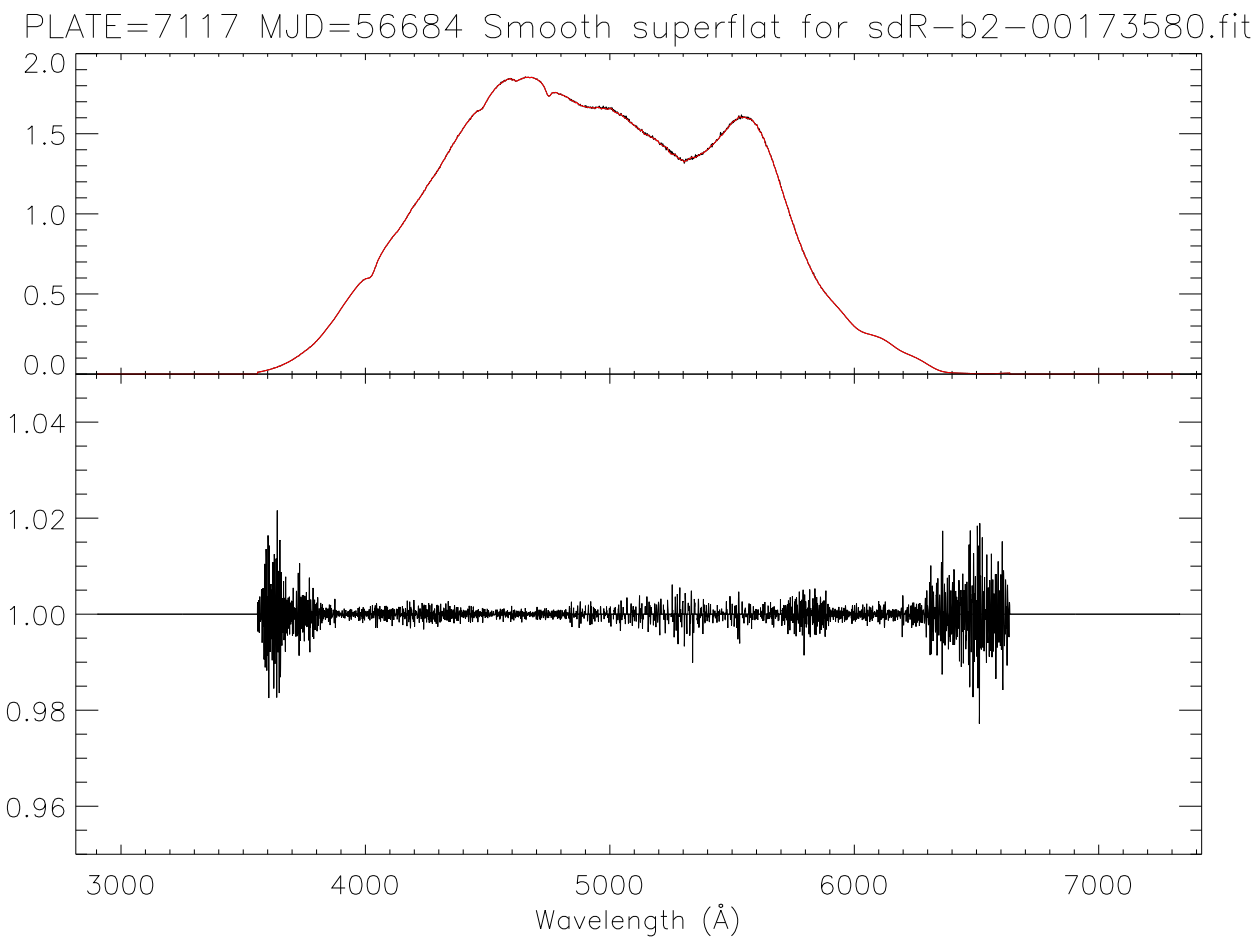

PLATE=7117 MJD=56684 sdR-b2-00173579.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.13 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

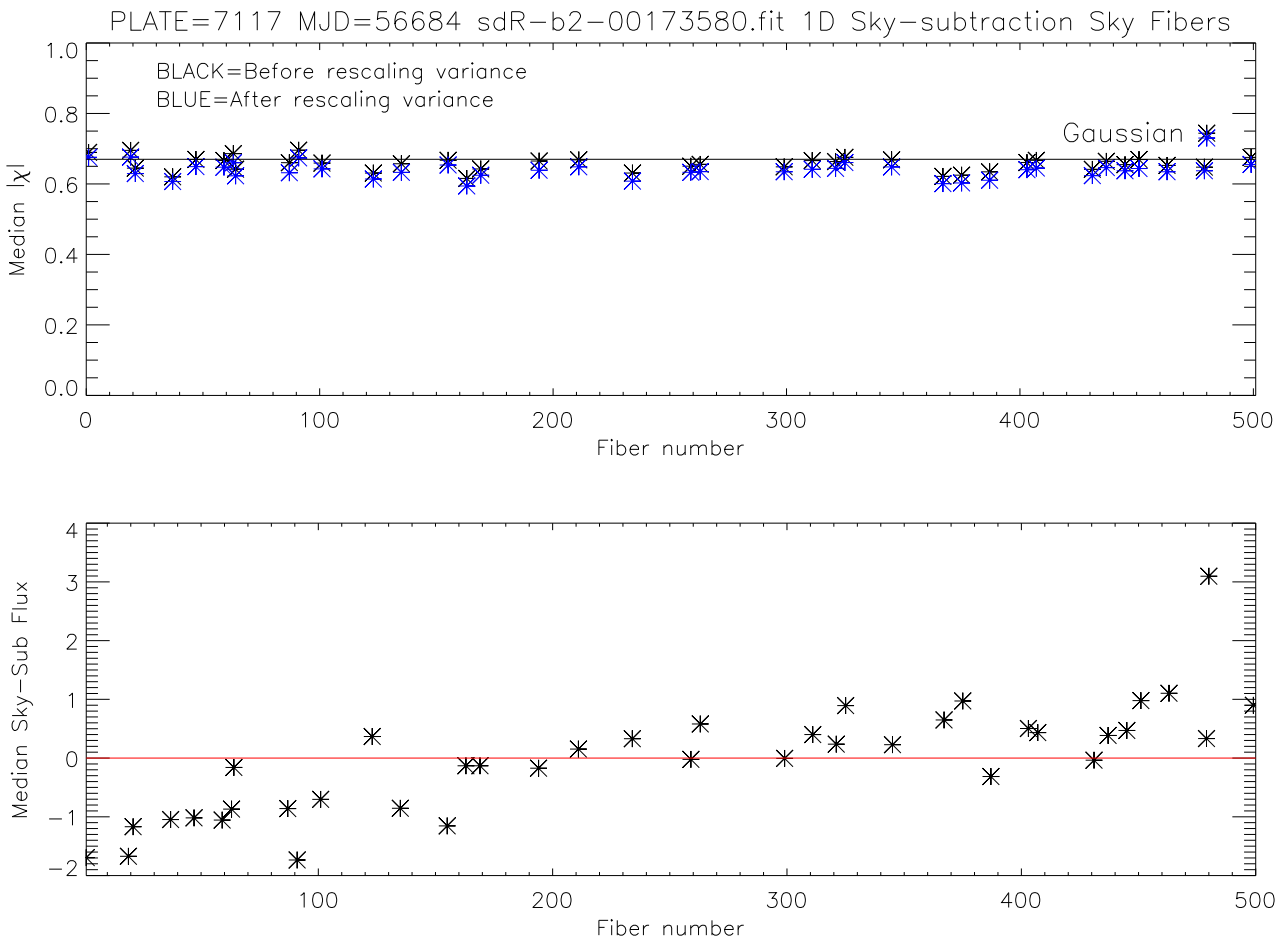

PLATE=7117 MJD=56684 sdR-b2-00173579.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 25.75 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

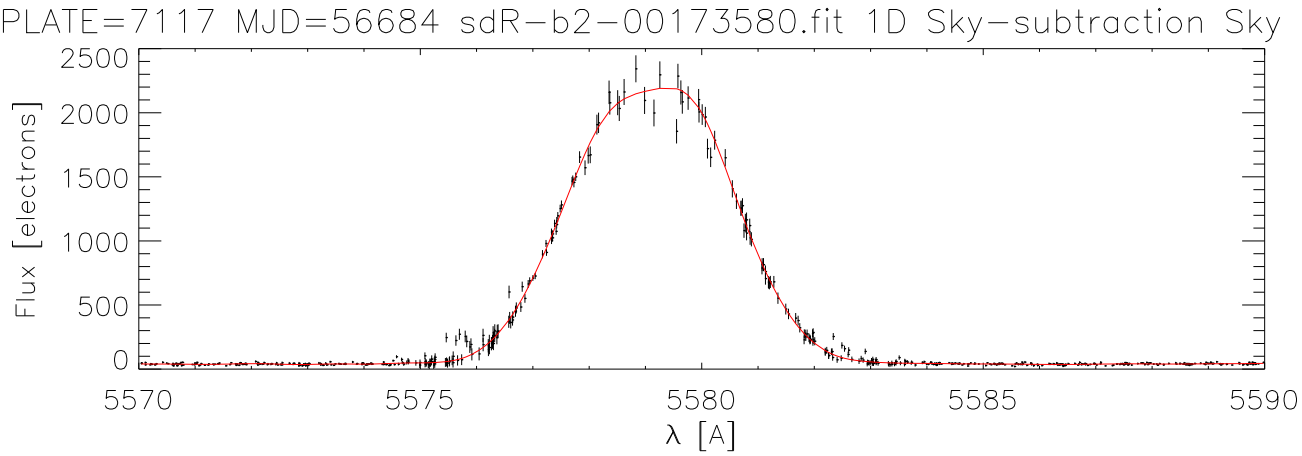

PLATE=7117 MJD=56684 Fiber−Flats for sdR−b2−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −8.494
Max value = 6.737
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 04:10:07 2016

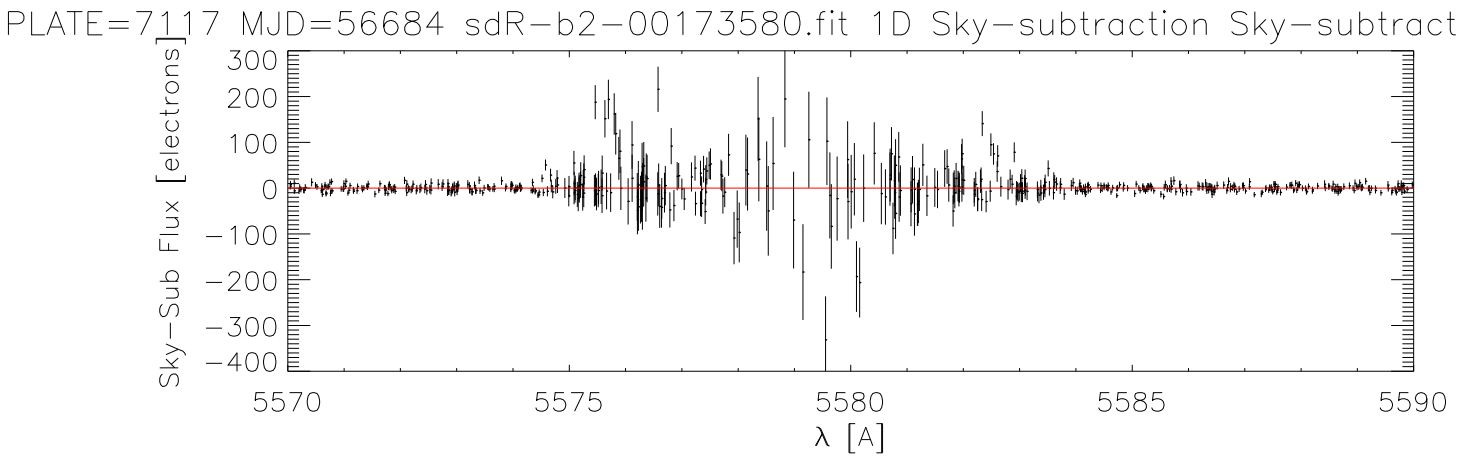

PLATE=7117 MJD=56684 Extraction chi^2 for sdR−b2−00173580.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-b2-00173580.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

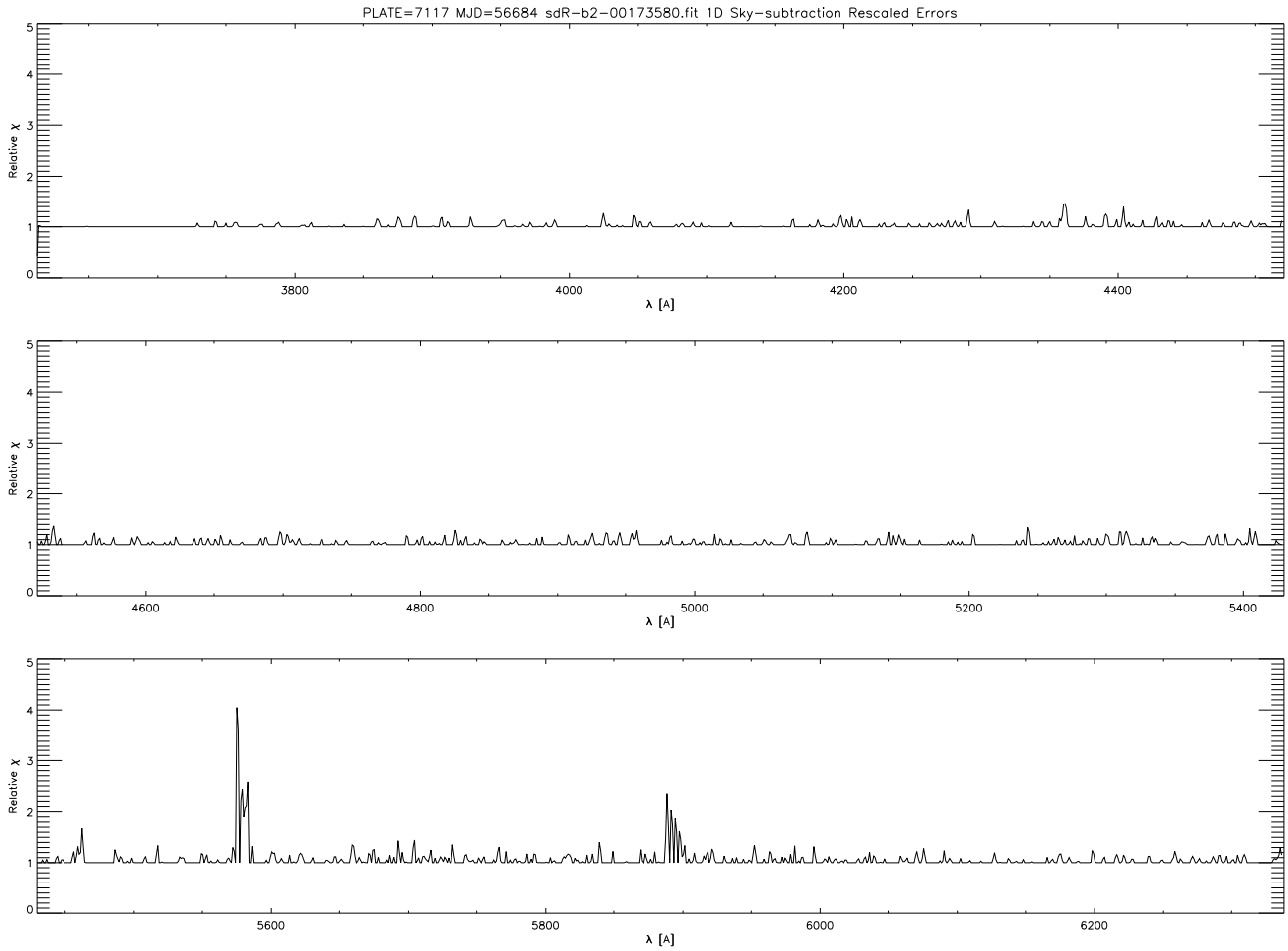

PLATE=7117 MJD=56684 Smooth superflat for sdR-b2-00173580.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

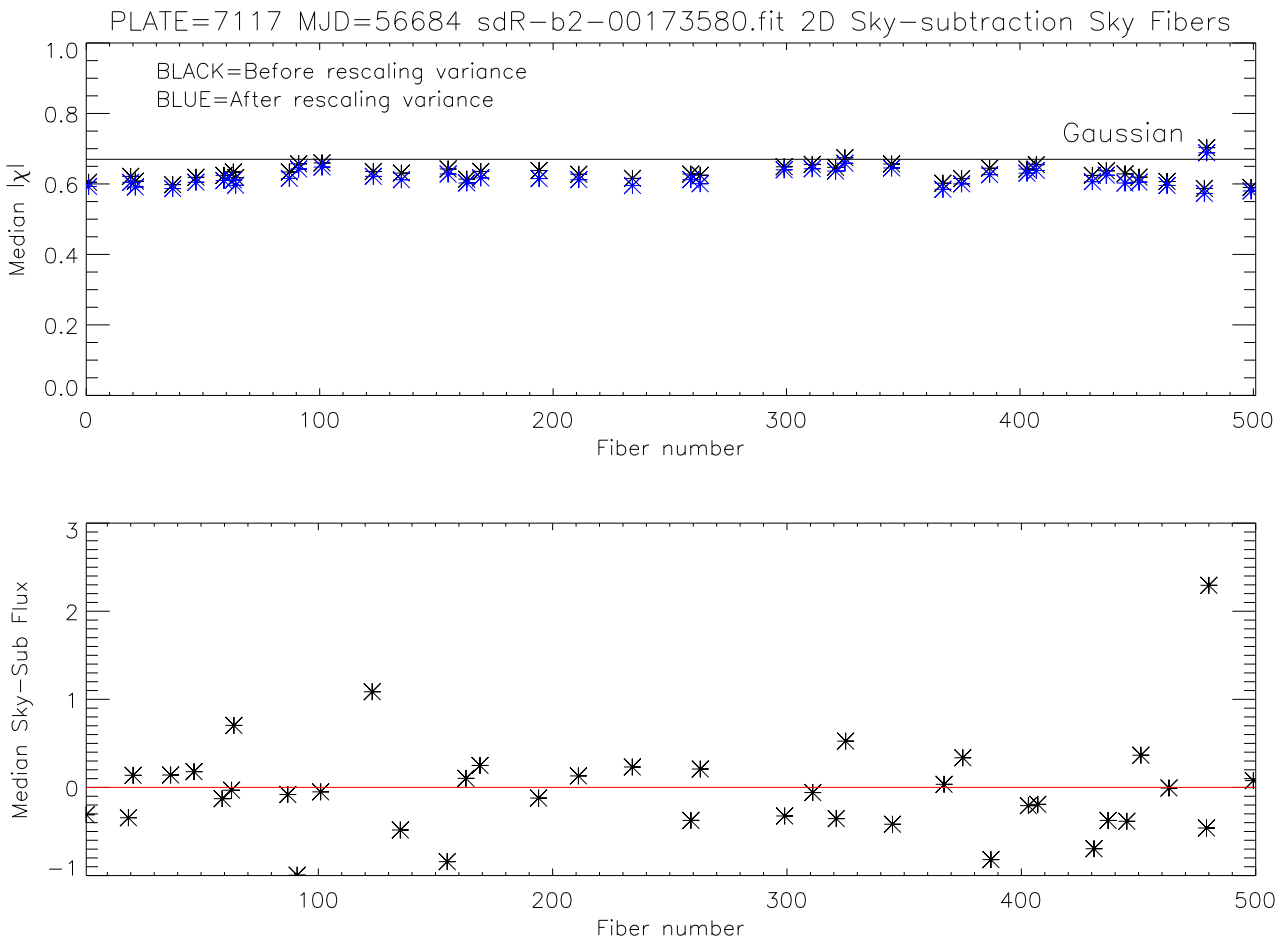

PLATE=7117 MJD=56684 sdR-b2-00173580.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

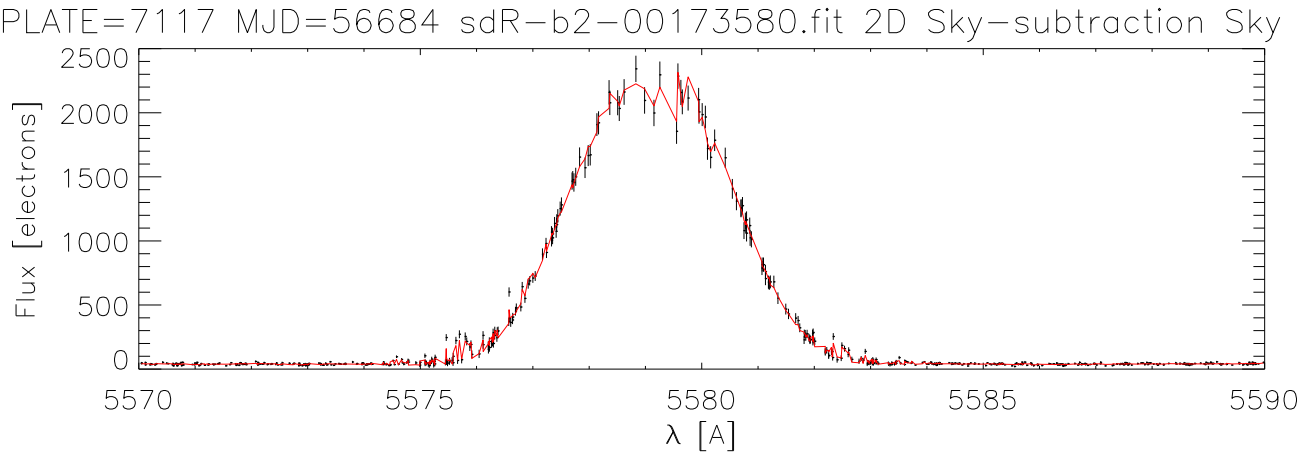

PLATE=7117 MJD=56684 sdR-b2-00173580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

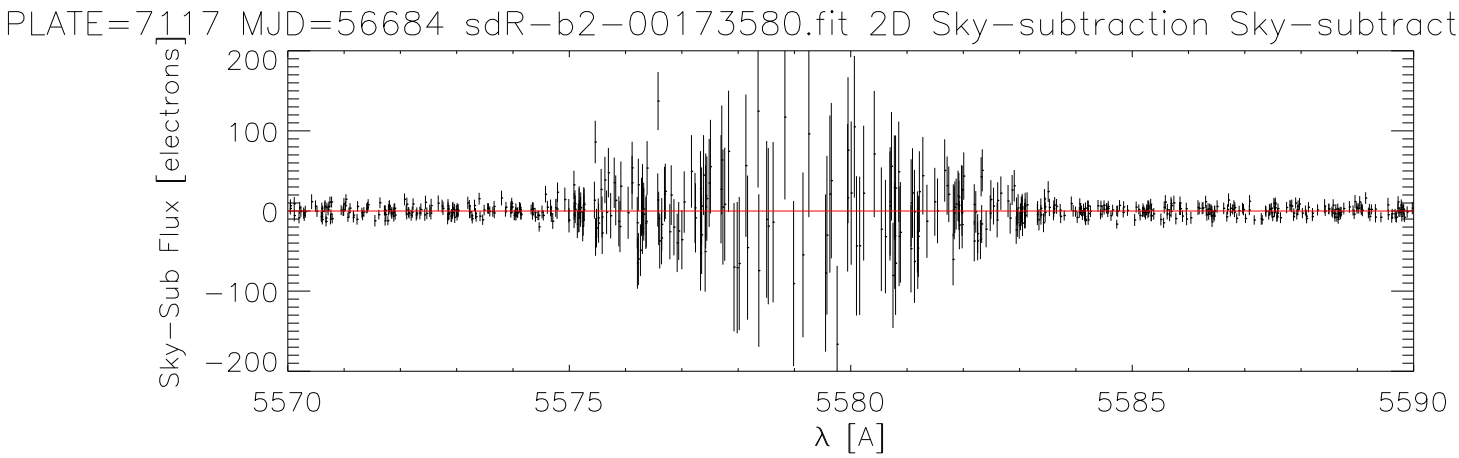

PLATE=7117 MJD=56684 sdR-b2-00173580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 39

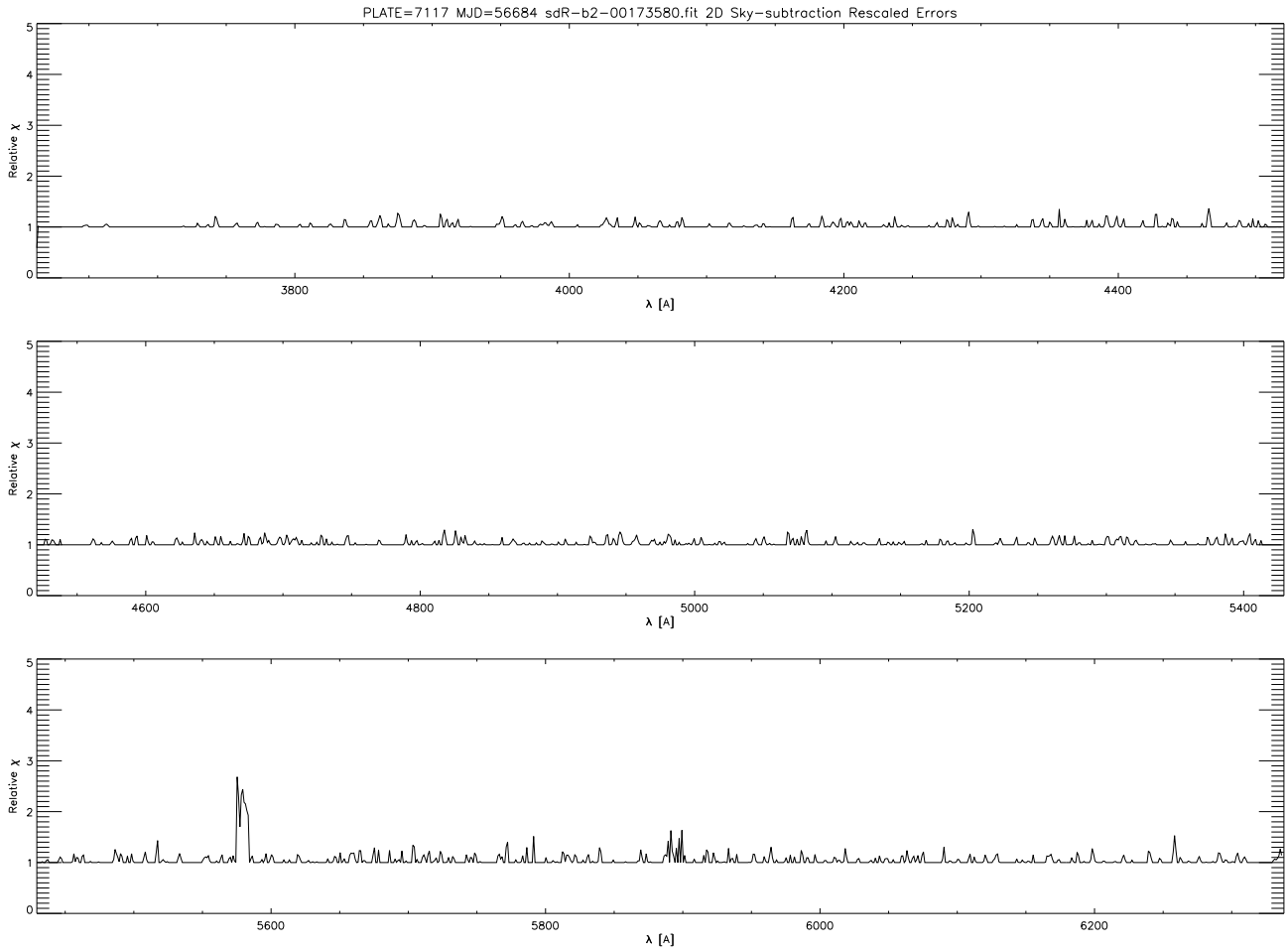


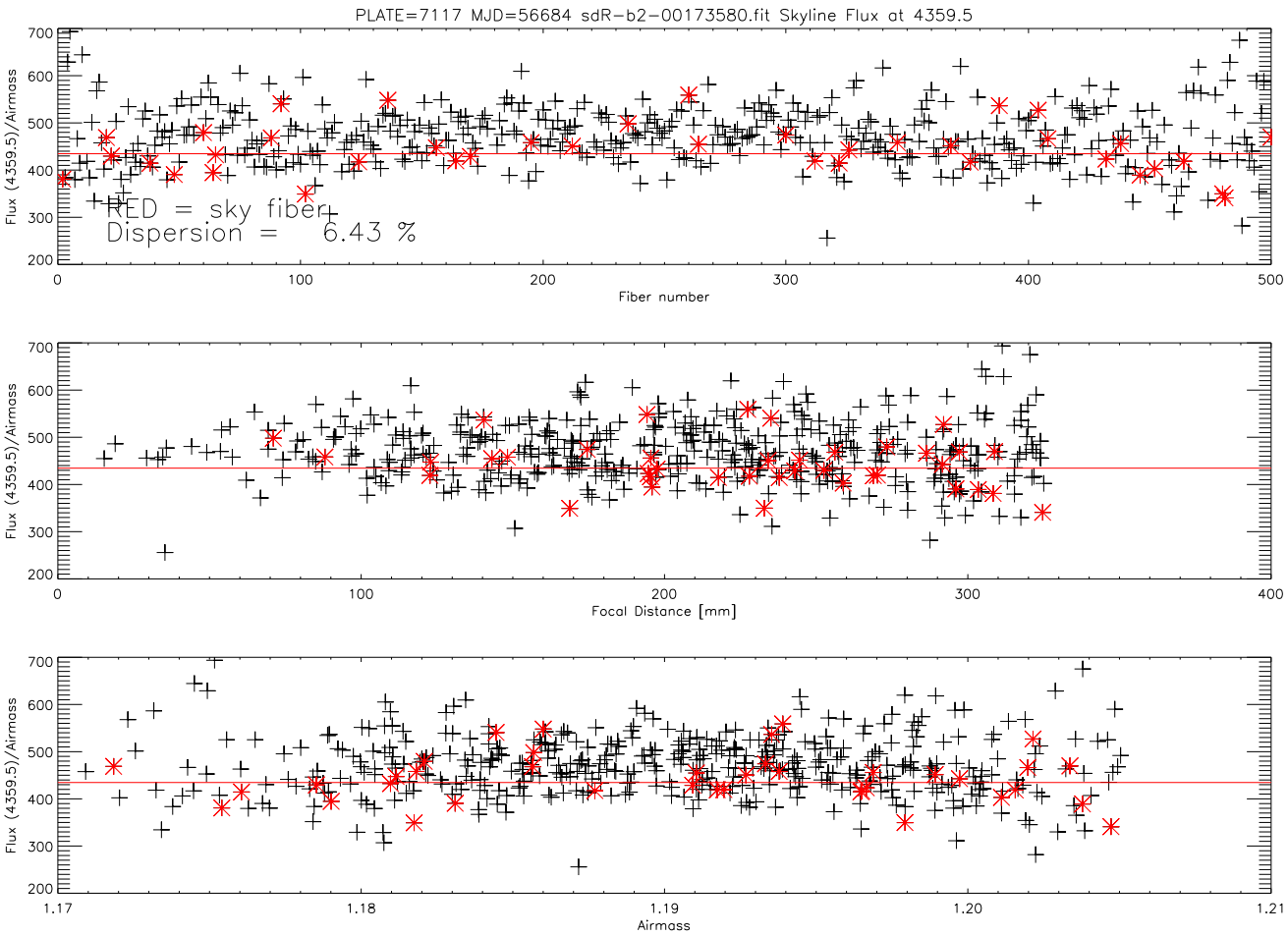

PLATE=7117 MJD=56684 sdR-b2-00173580.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

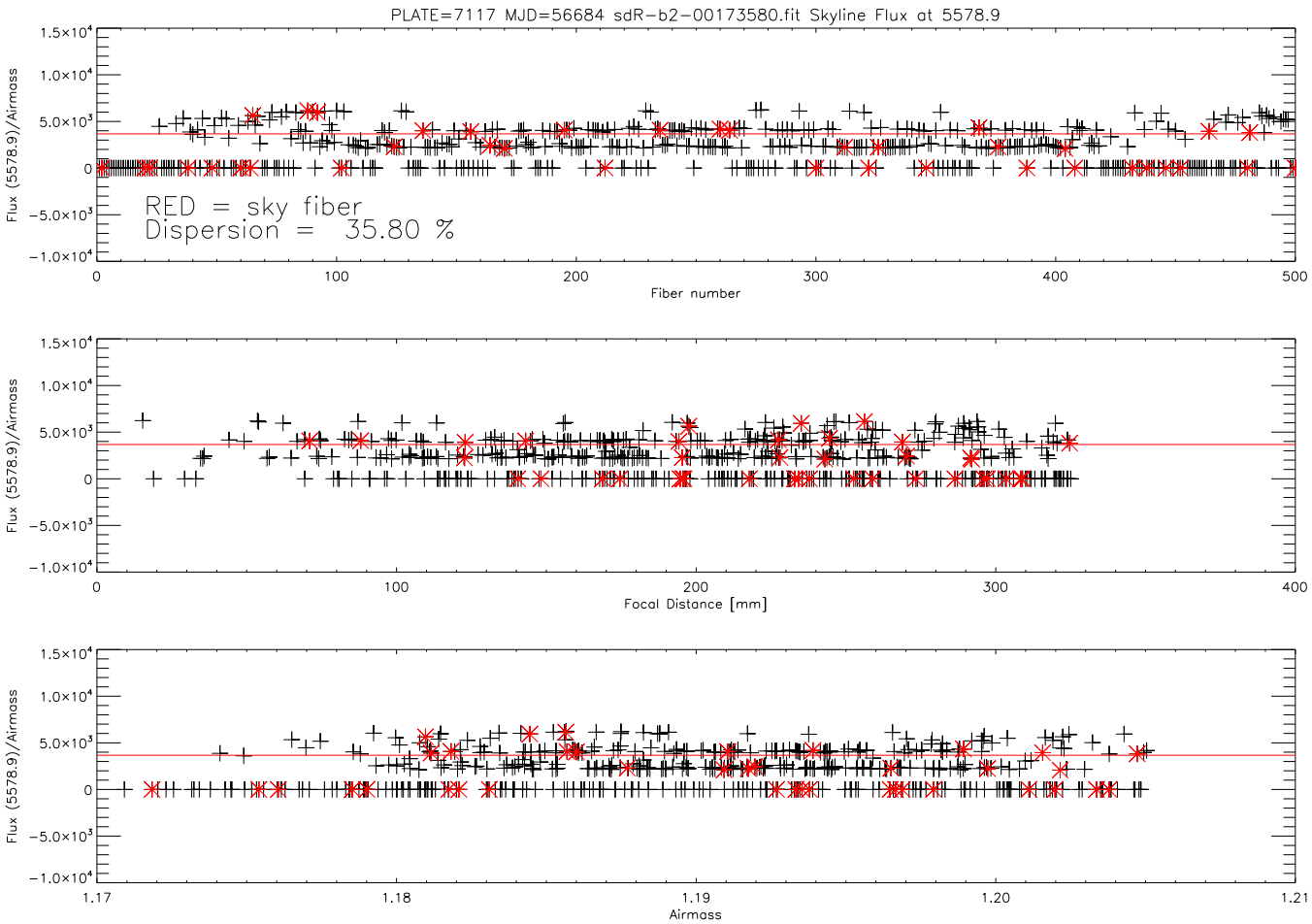

PLATE=7117 MJD=56684 sdR-b2-00173580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]


PLATE=7117 MJD=56684 sdR-b2-00173580.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

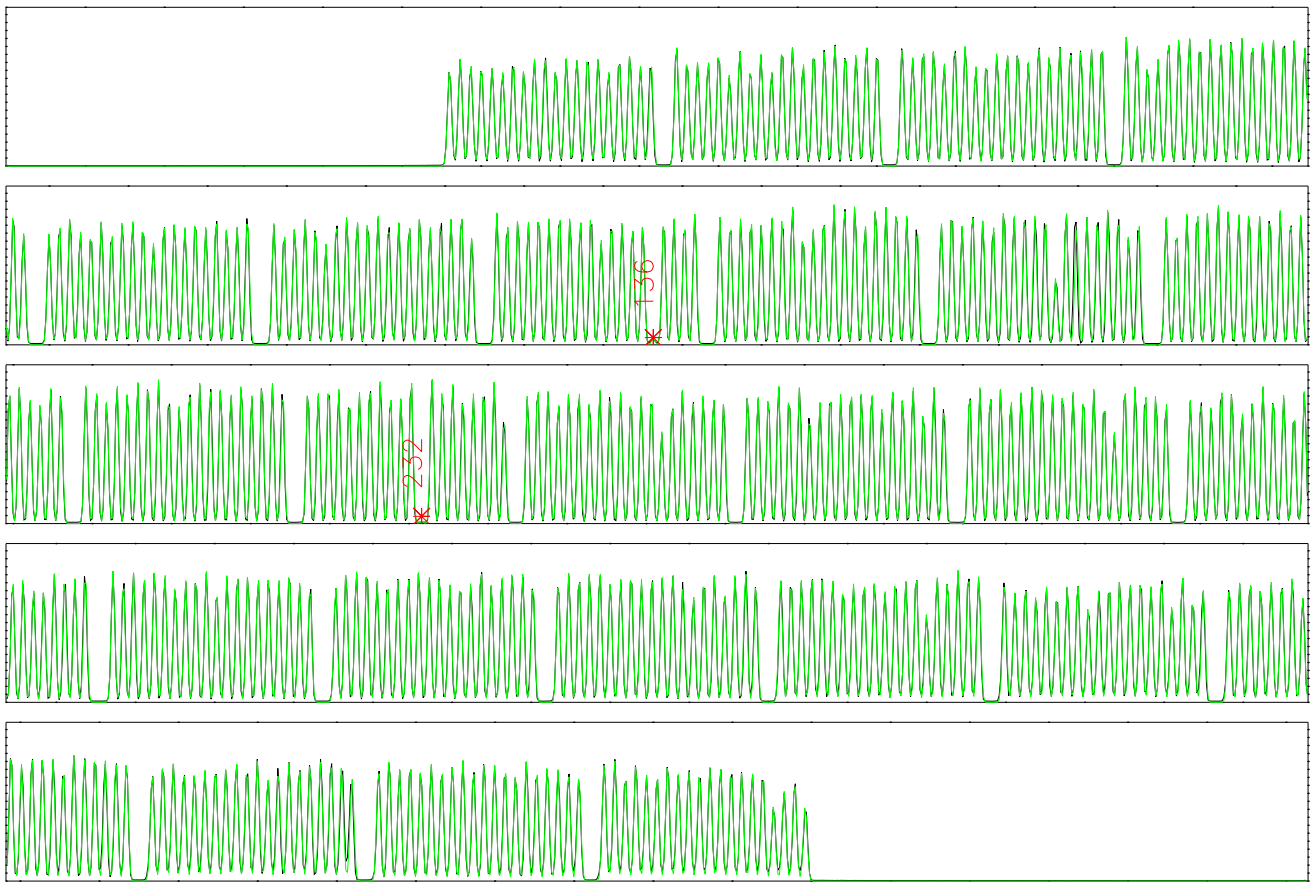
Number of sky fibers = 39

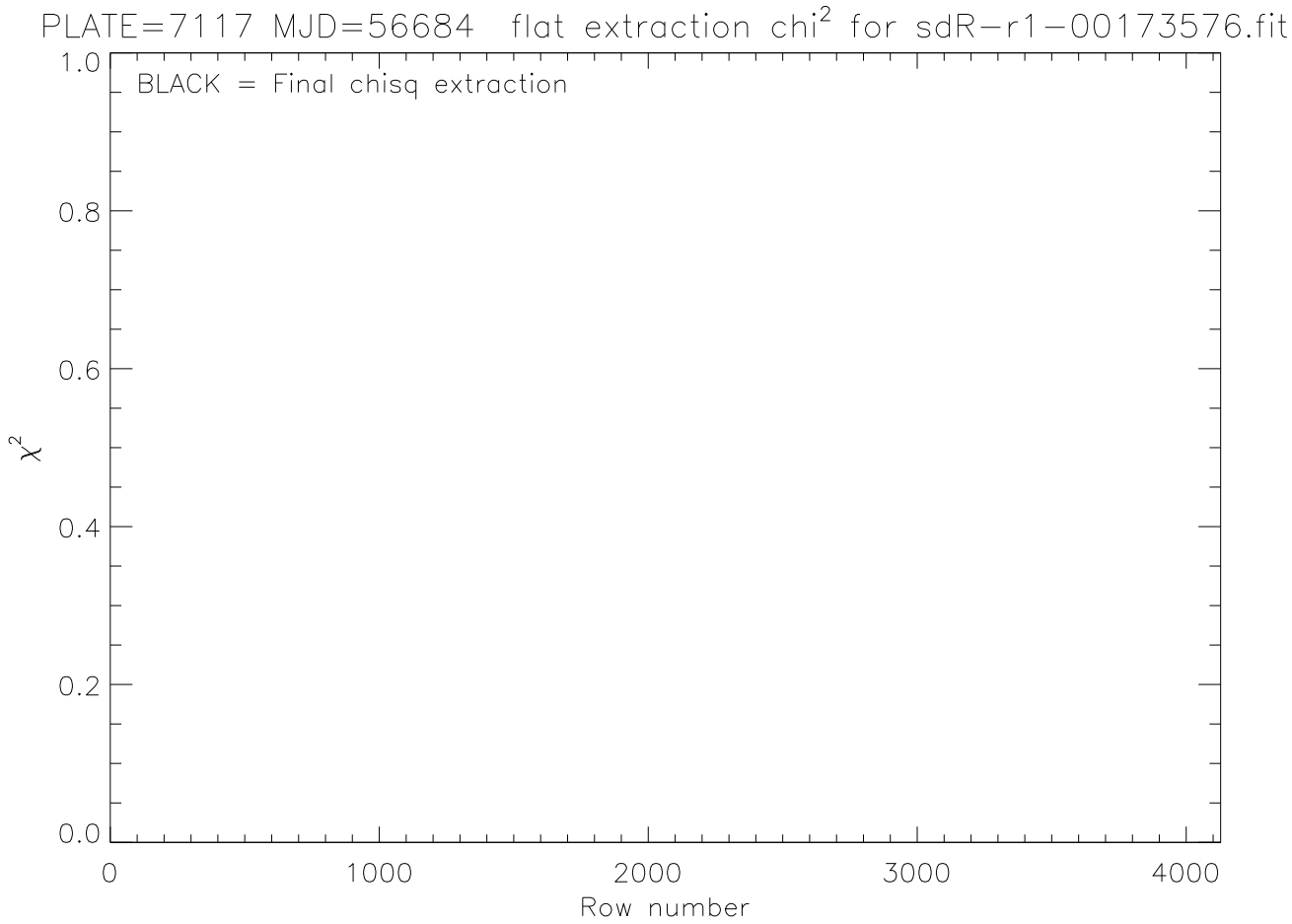


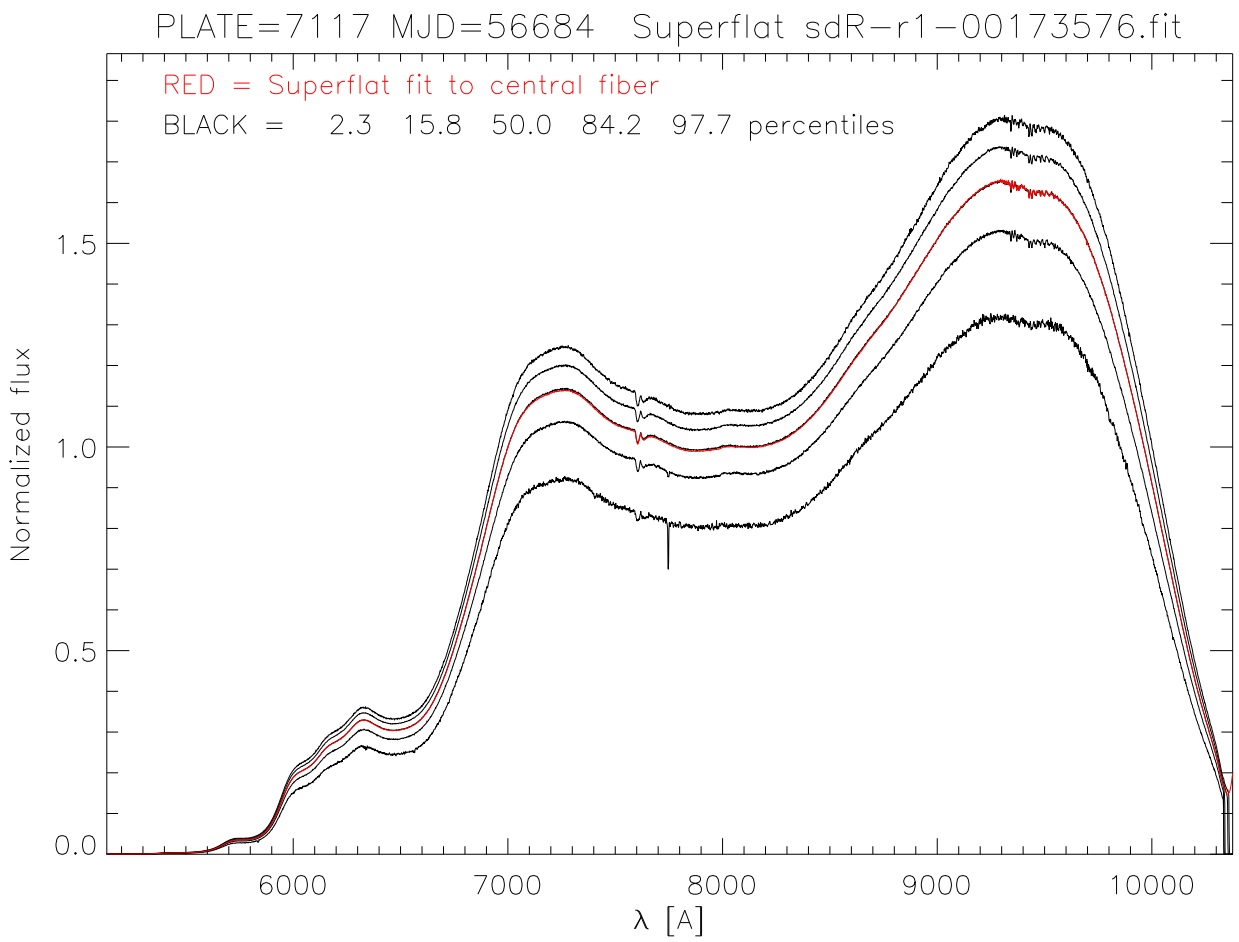

PLATE=7117 MJD=56684 sdR-b2-00173580.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 6.43 %
Flux (4359.5)/Airmass
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

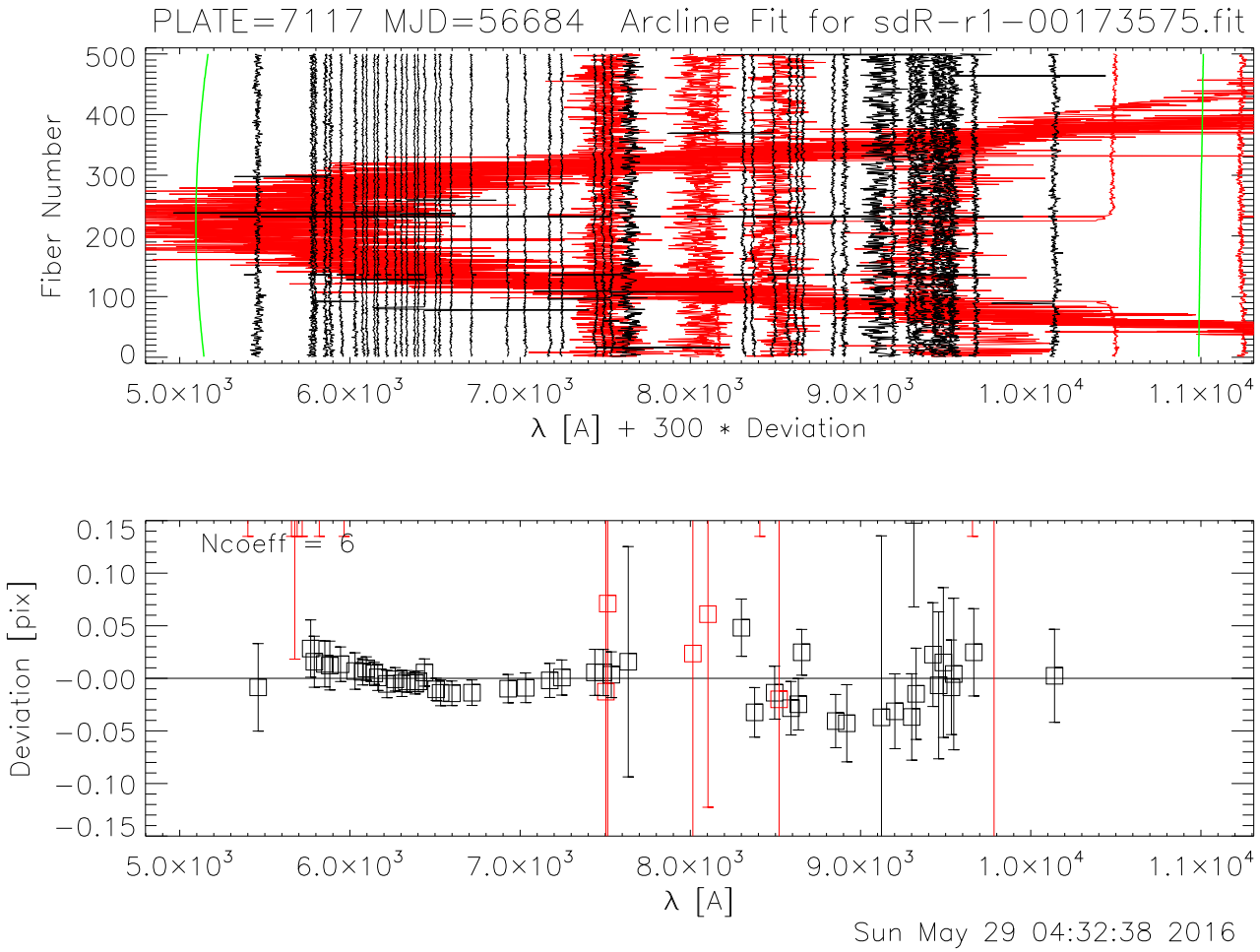

PLATE=7117 MJD=56684 sdR-b2-00173580.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 35.80 %
Fiber number
Focal Distance [mm]
Airmass

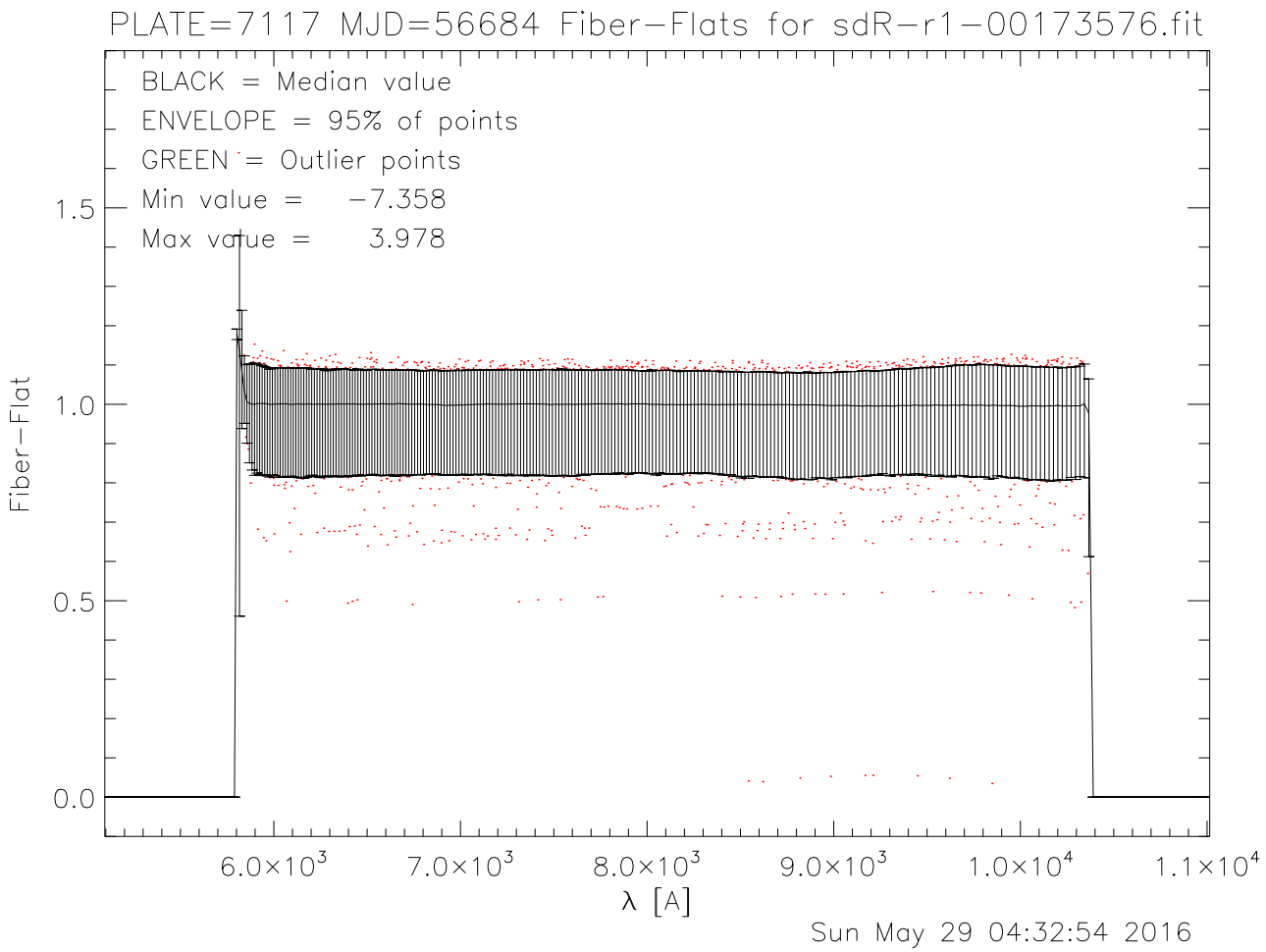
PLATE=7117 MJD=56684 Traces sdR-r1-00173576.fit

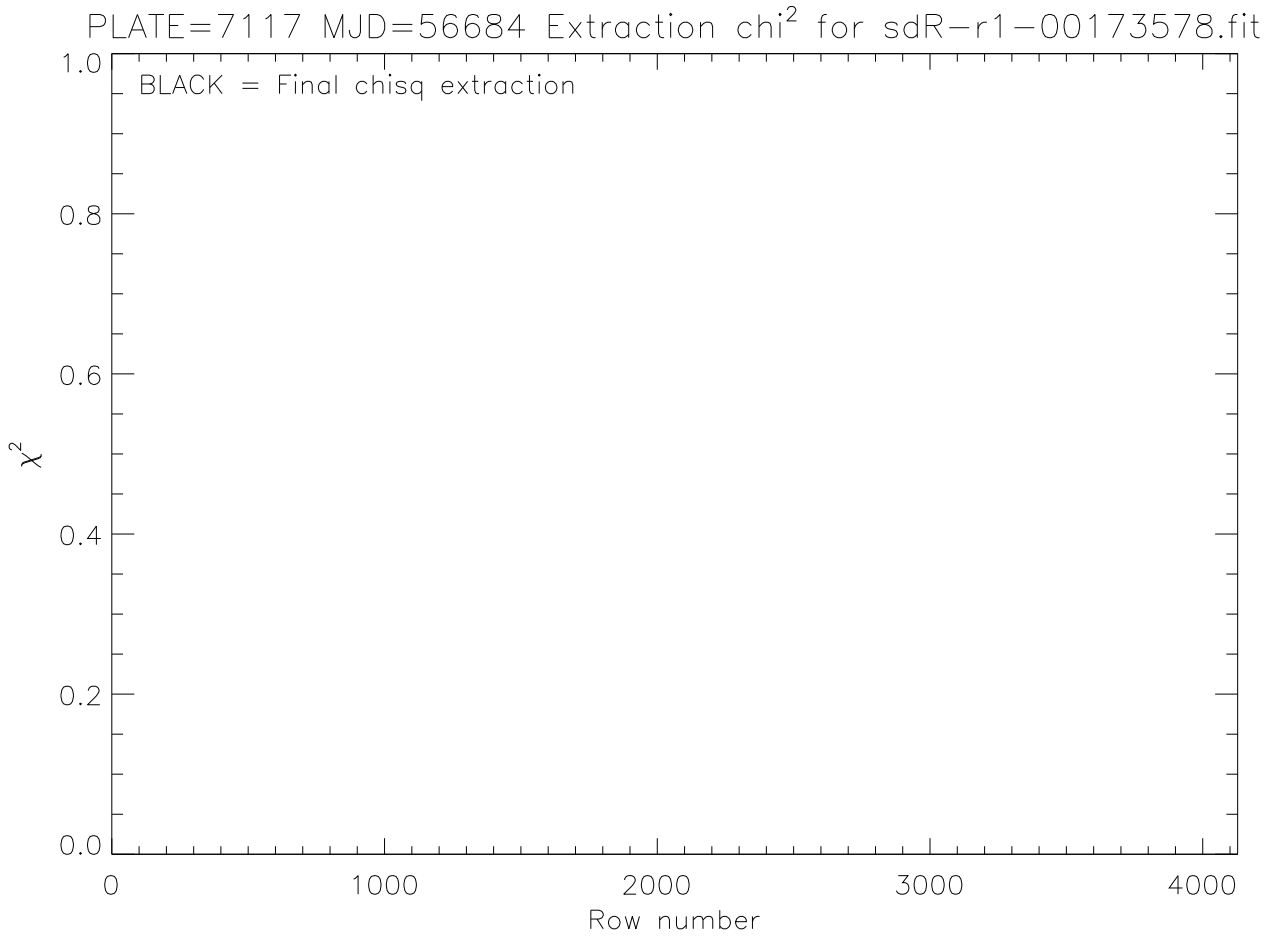


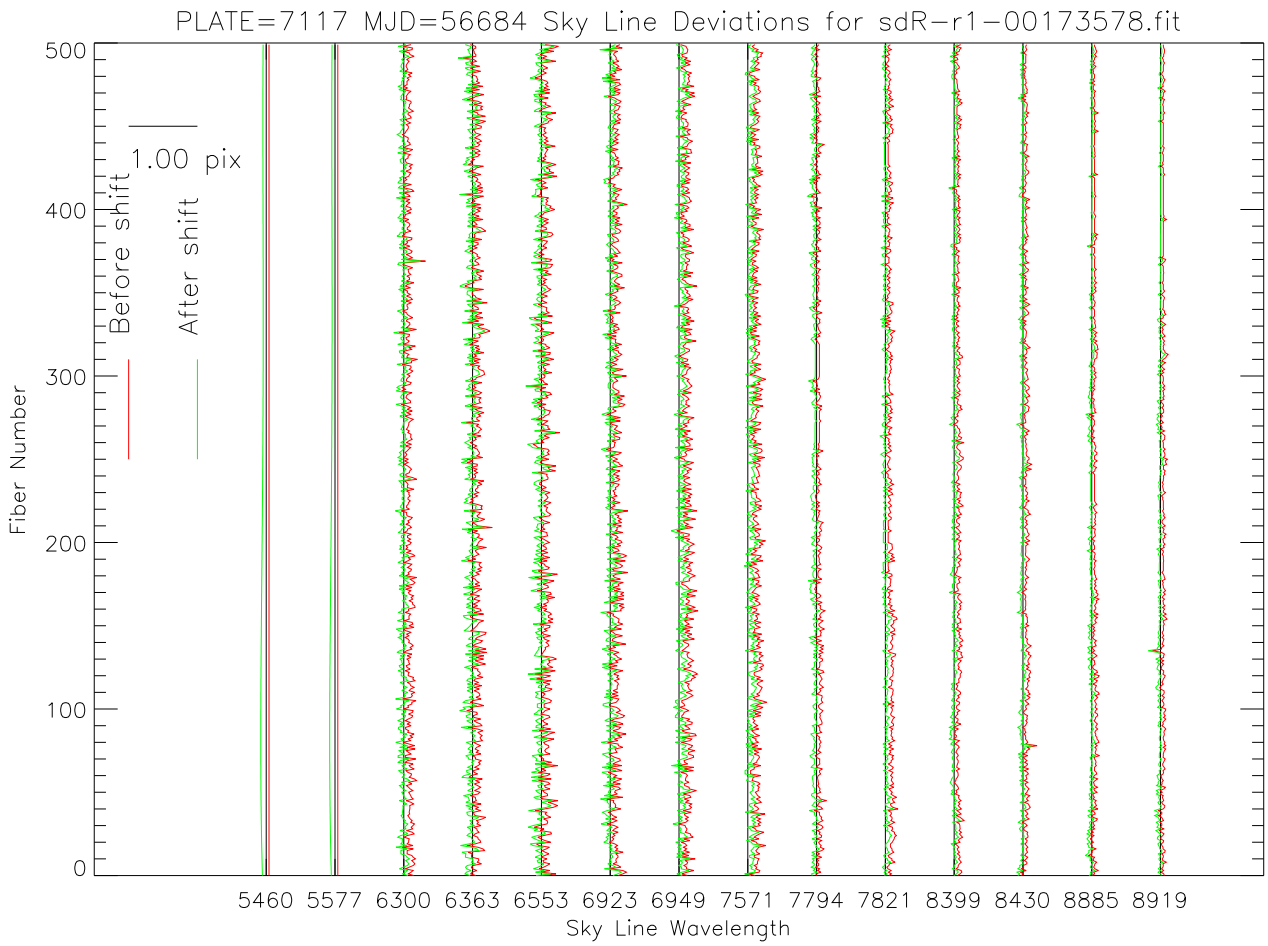

PLATE=7117 MJD=56684 flat extraction chi^2 for sdR−r1−00173576.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

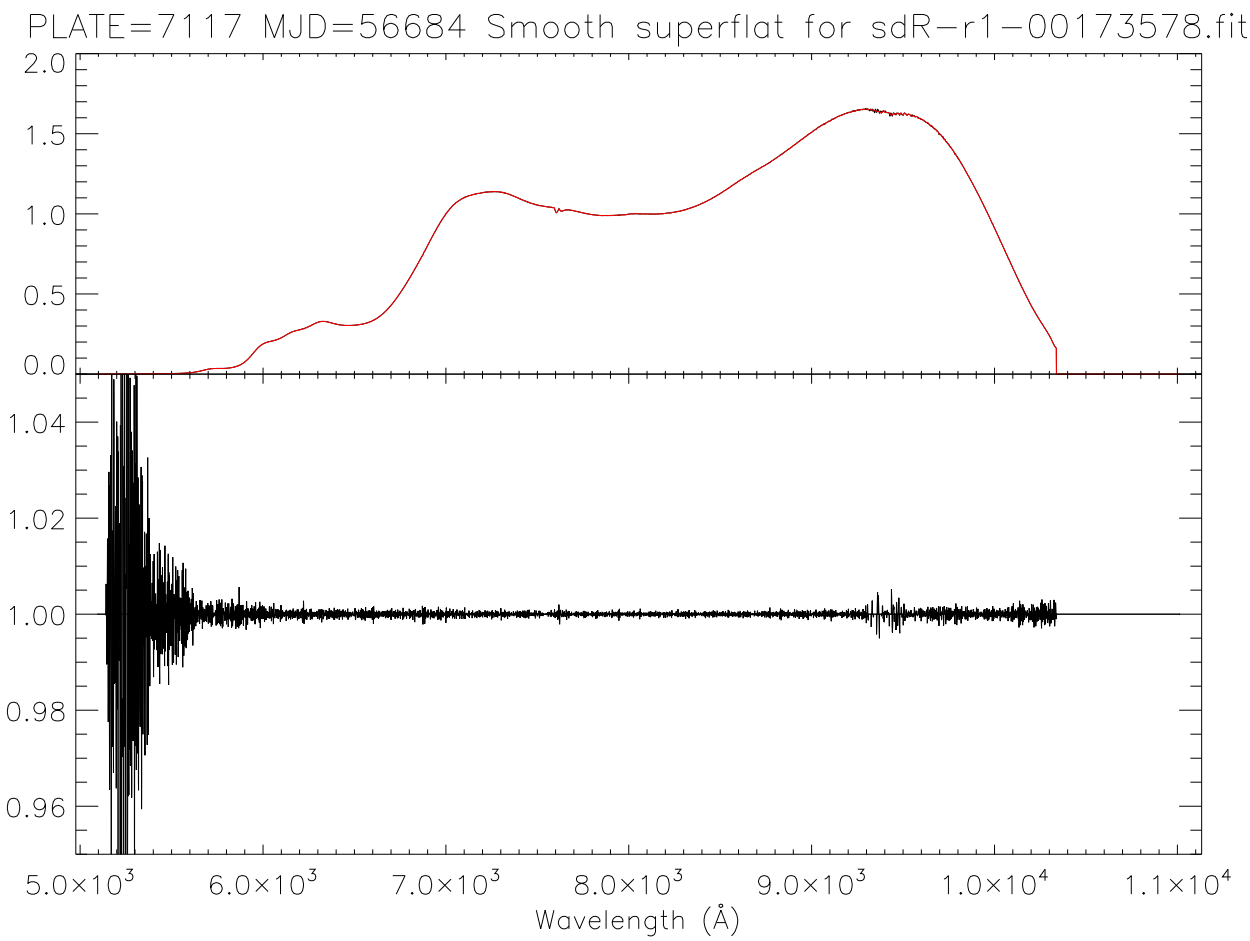

PLATE=7117 MJD=56684 Superflat sdR-r1-00173576.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

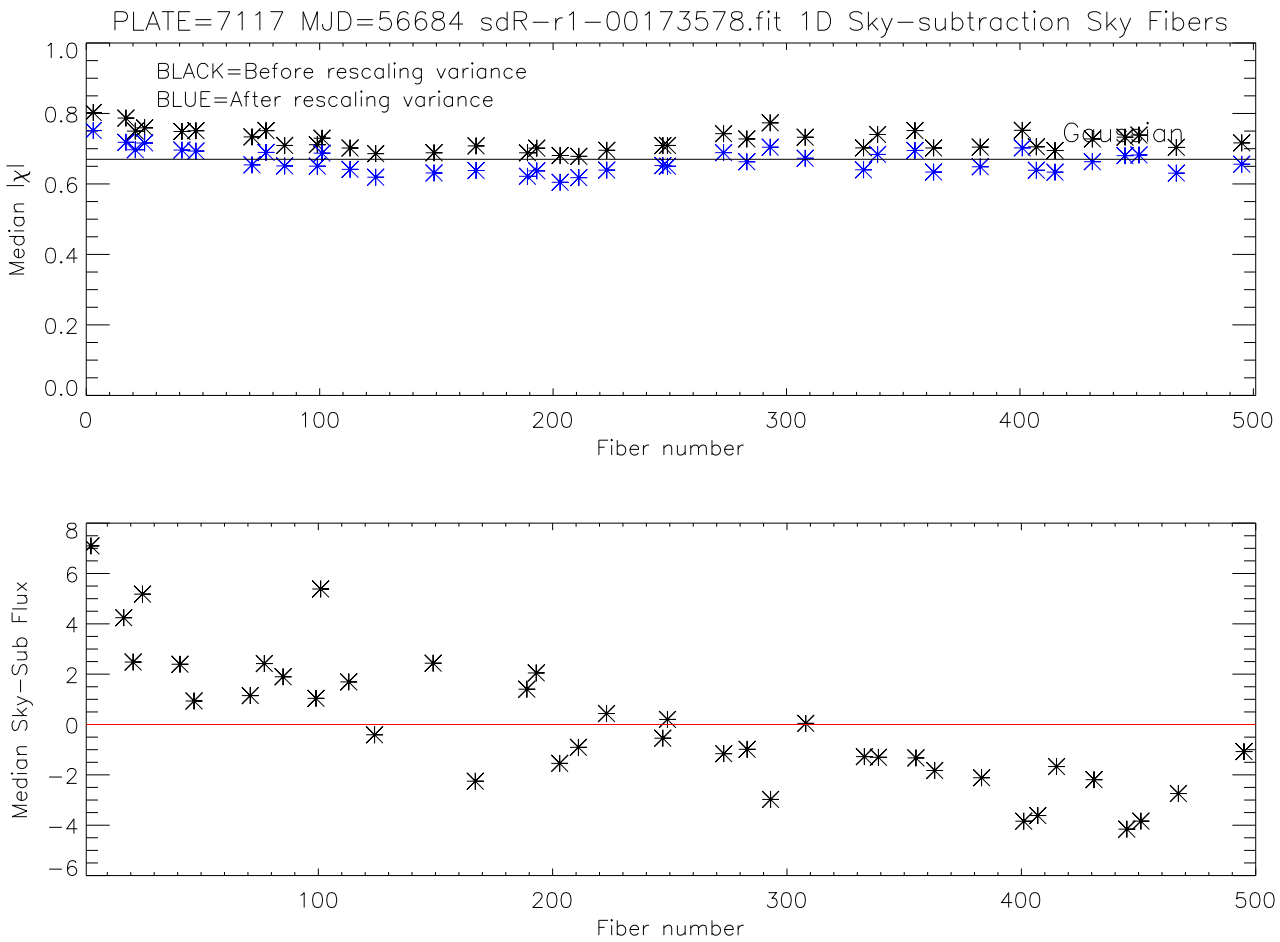

PLATE=7117 MJD=56684 Arcline Fit for sdR-r1-00173575.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sun May 29 04:32:38 2016

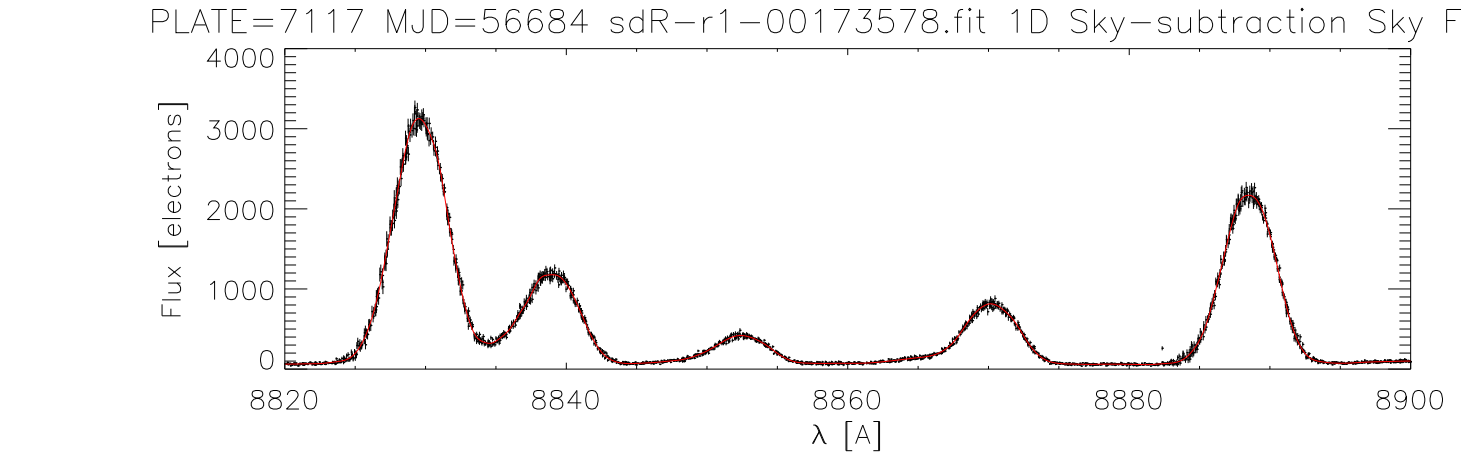

PLATE=7117 MJD=56684 Fiber−Flats for sdR−r1−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −7.358
Max value = 3.978
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:32:54 2016

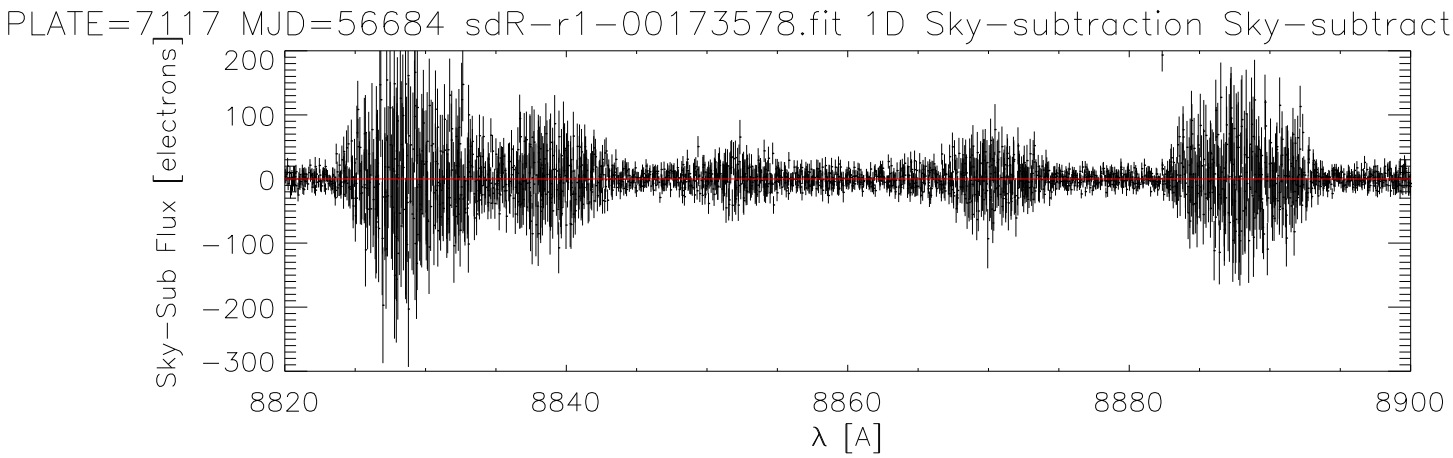

PLATE=7117 MJD=56684 Extraction chi^2 for sdR−r1−00173578.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-r1-00173578.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

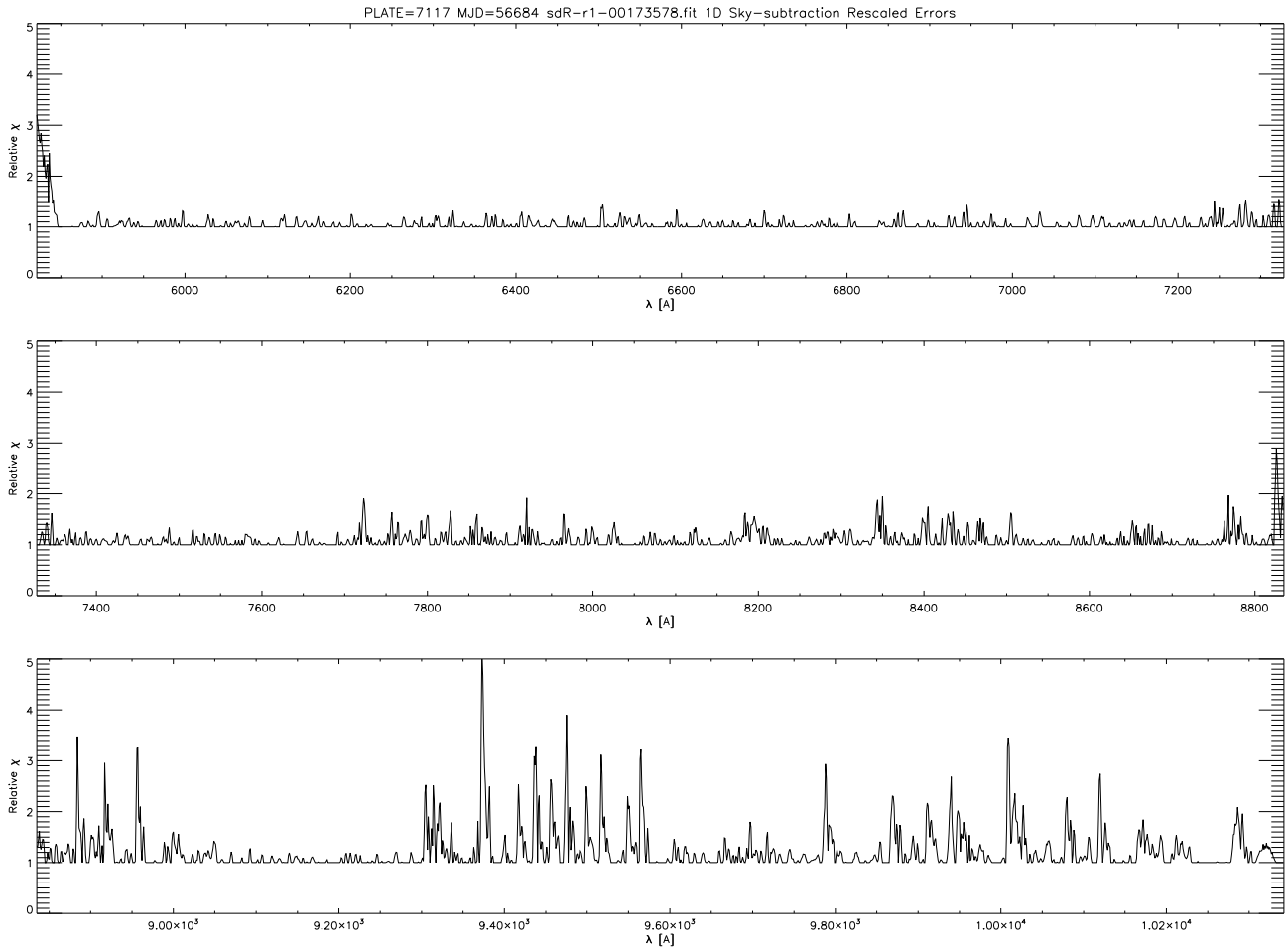

PLATE=7117 MJD=56684 Smooth superflat for sdR-r1-00173578.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

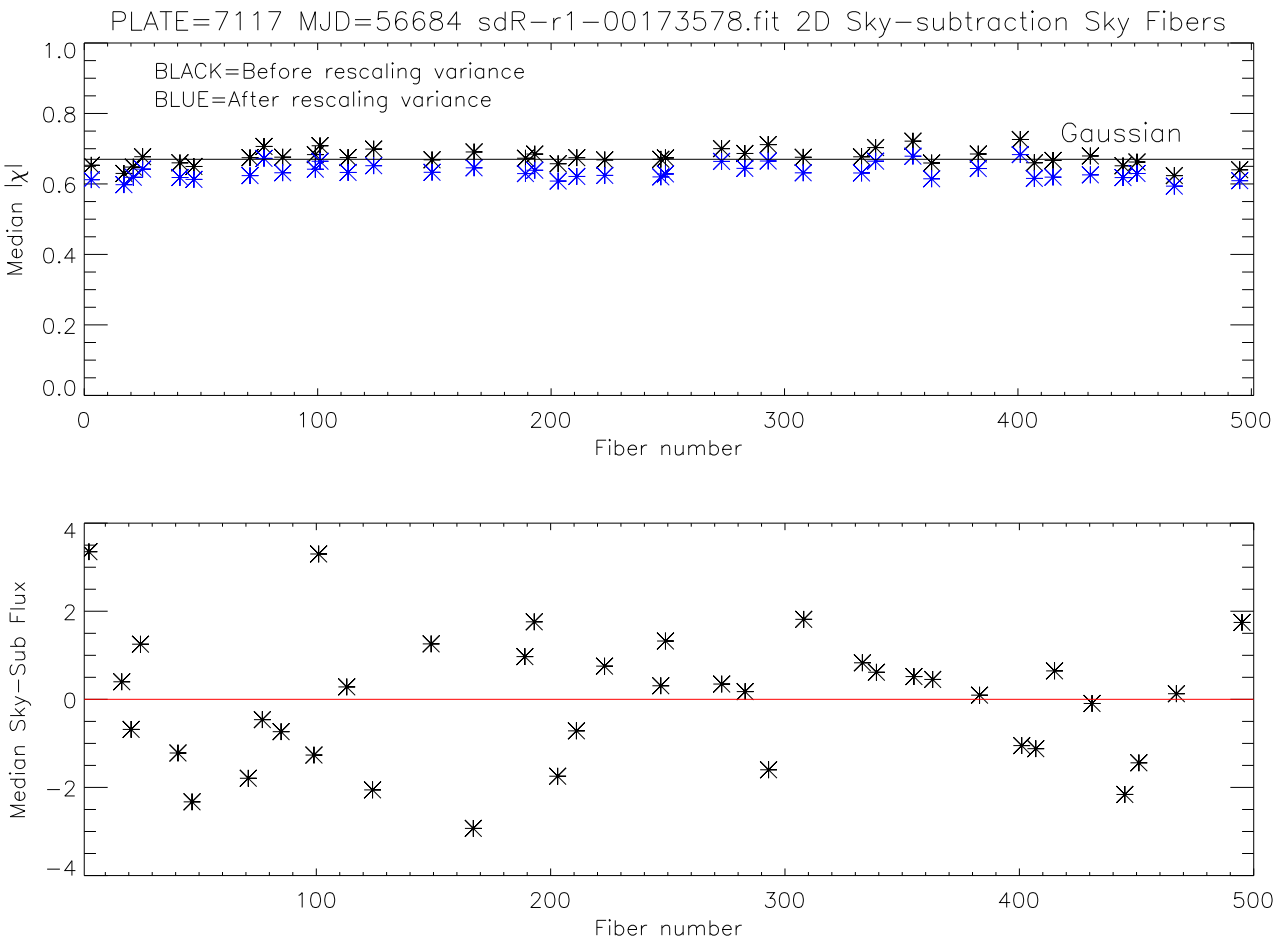

PLATE=7117 MJD=56684 sdR-r1-00173578.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

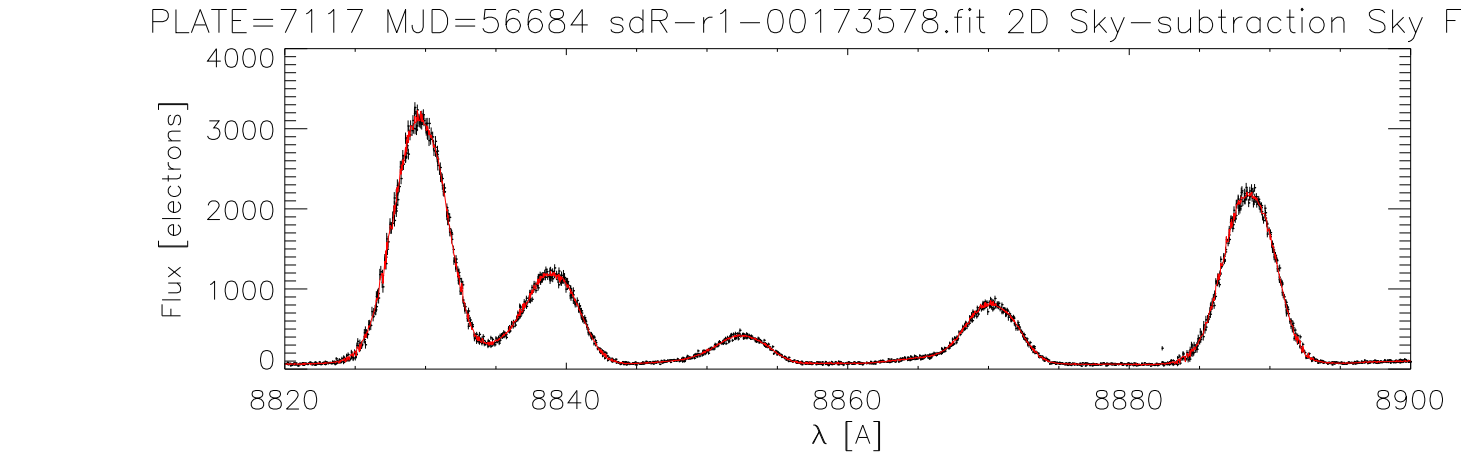

PLATE=7117 MJD=56684 sdR-r1-00173578.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

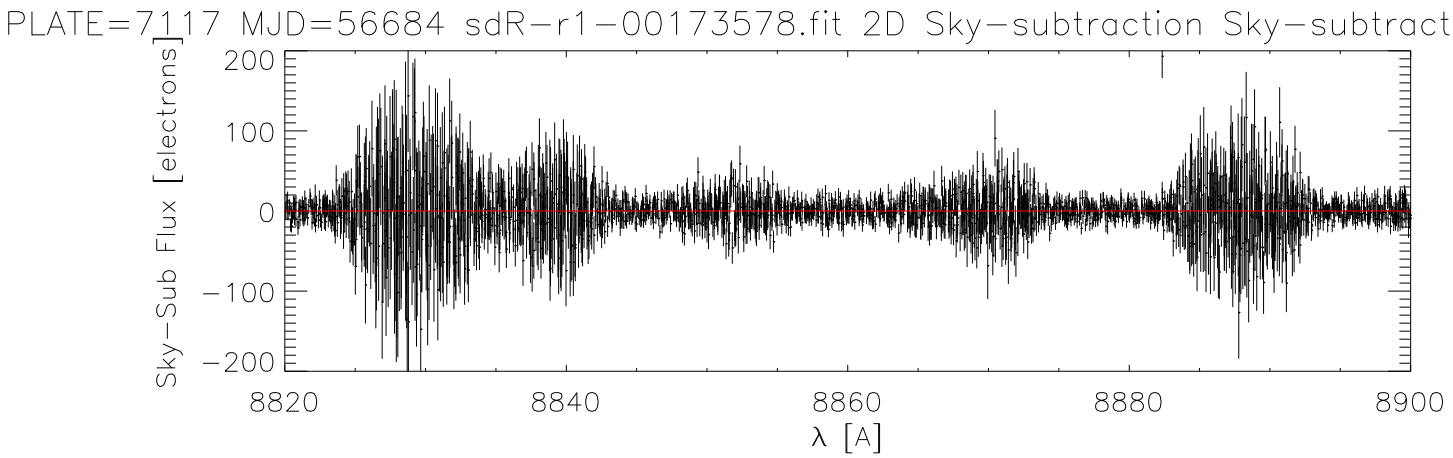

PLATE=7117 MJD=56684 sdR-r1-00173578.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 39

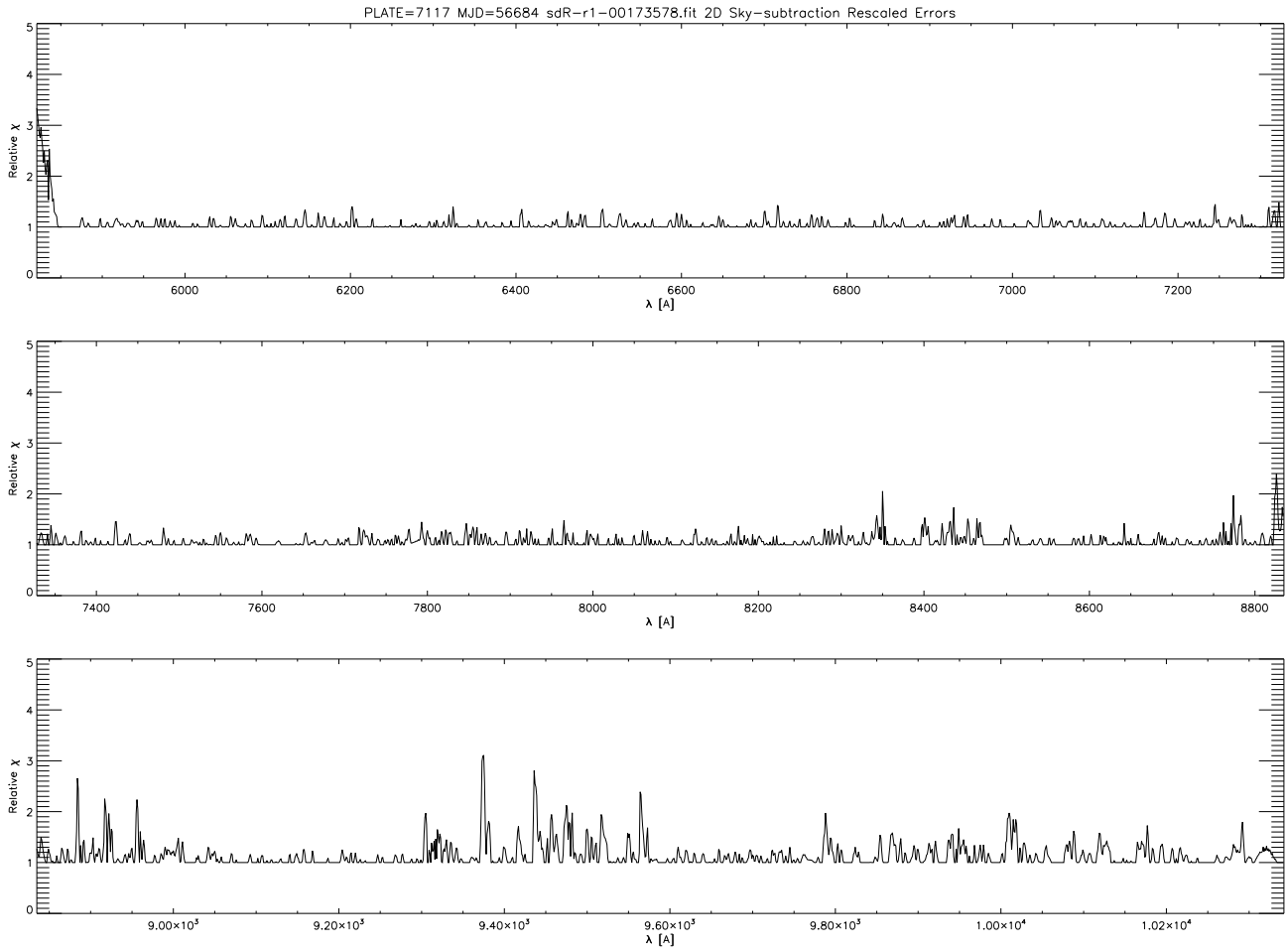


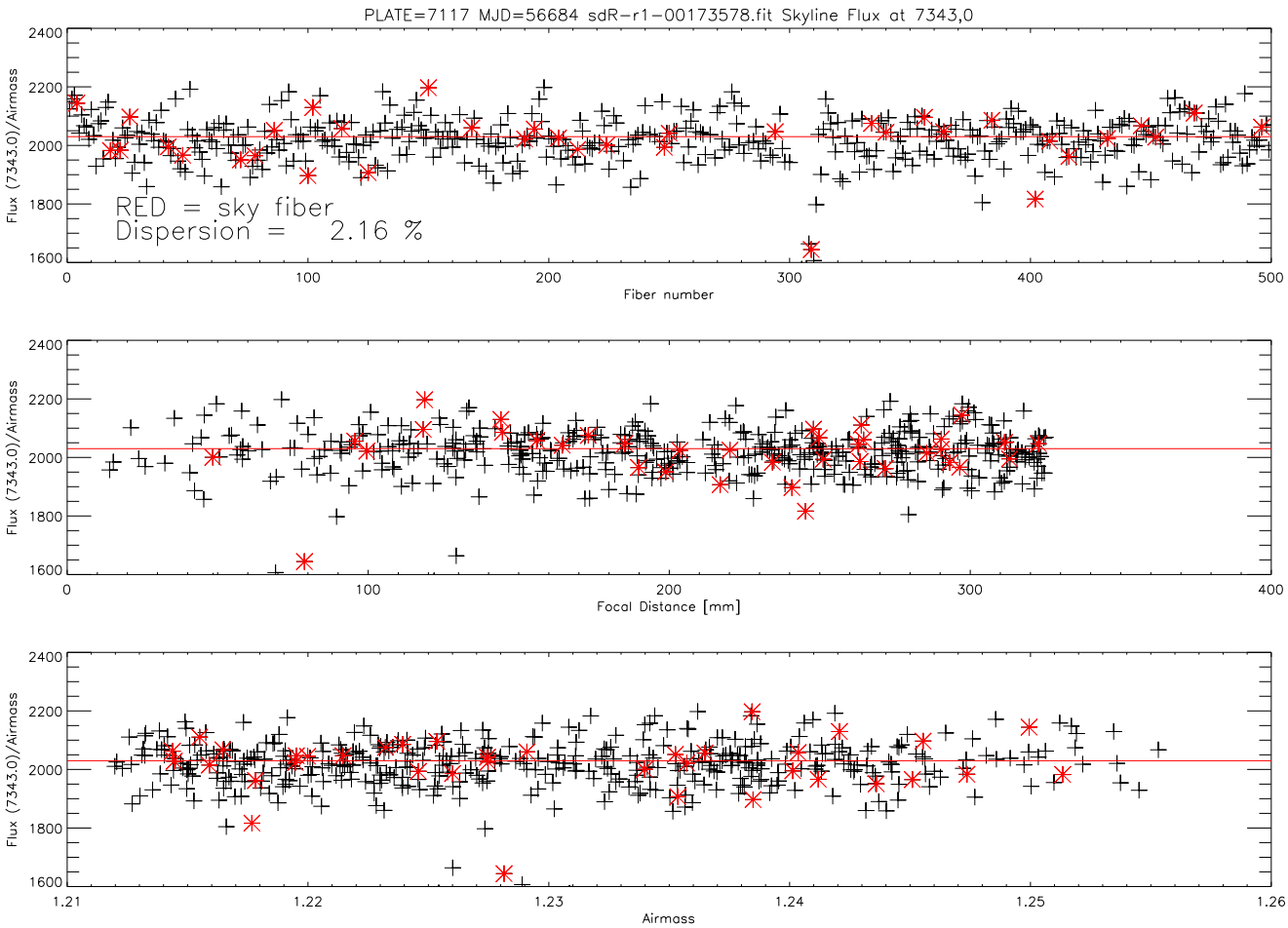

PLATE=7117 MJD=56684 sdR-r1-00173578.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

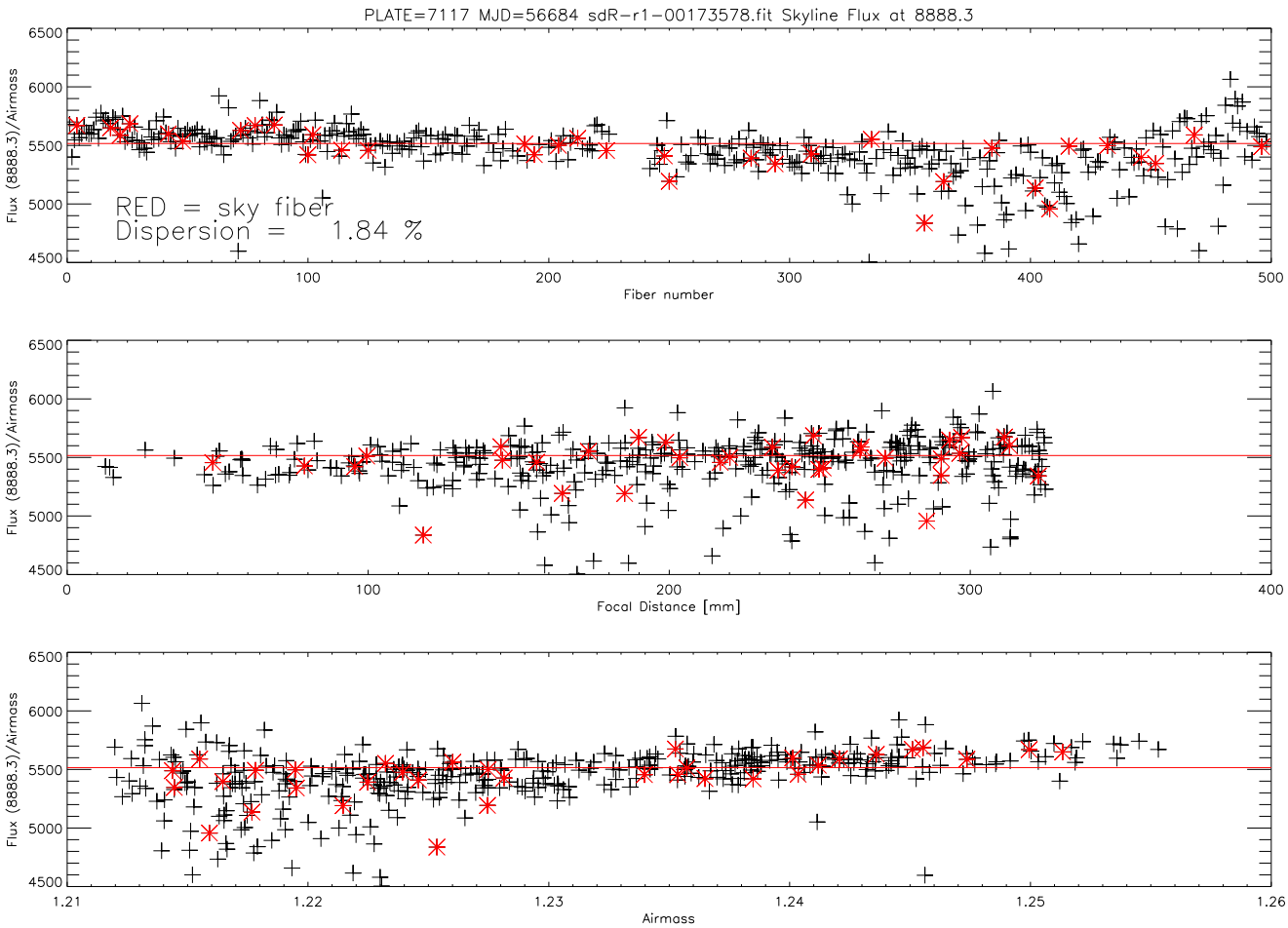

PLATE=7117 MJD=56684 sdR-r1-00173578.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

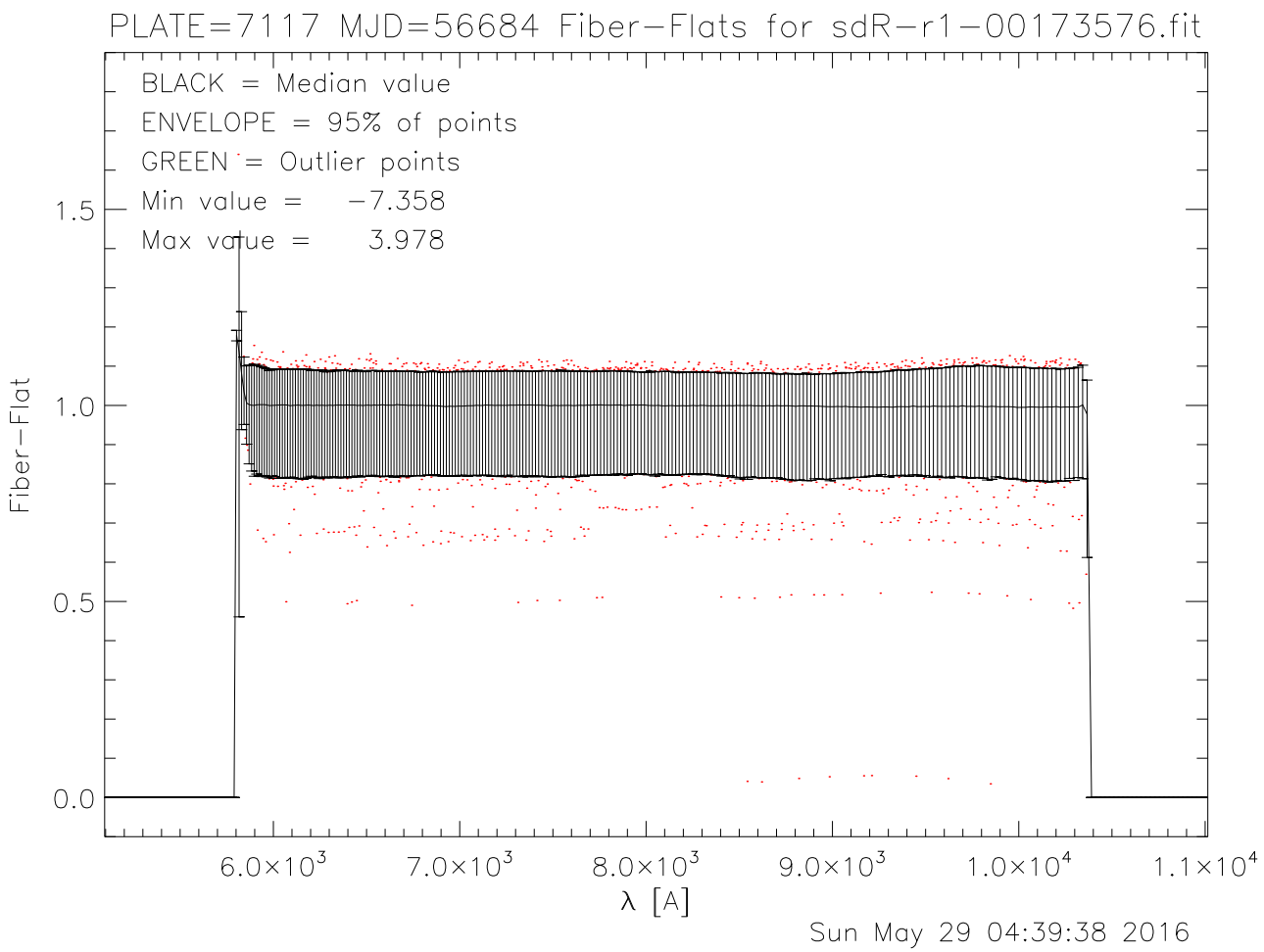

PLATE=7117 MJD=56684 sdR-r1-00173578.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

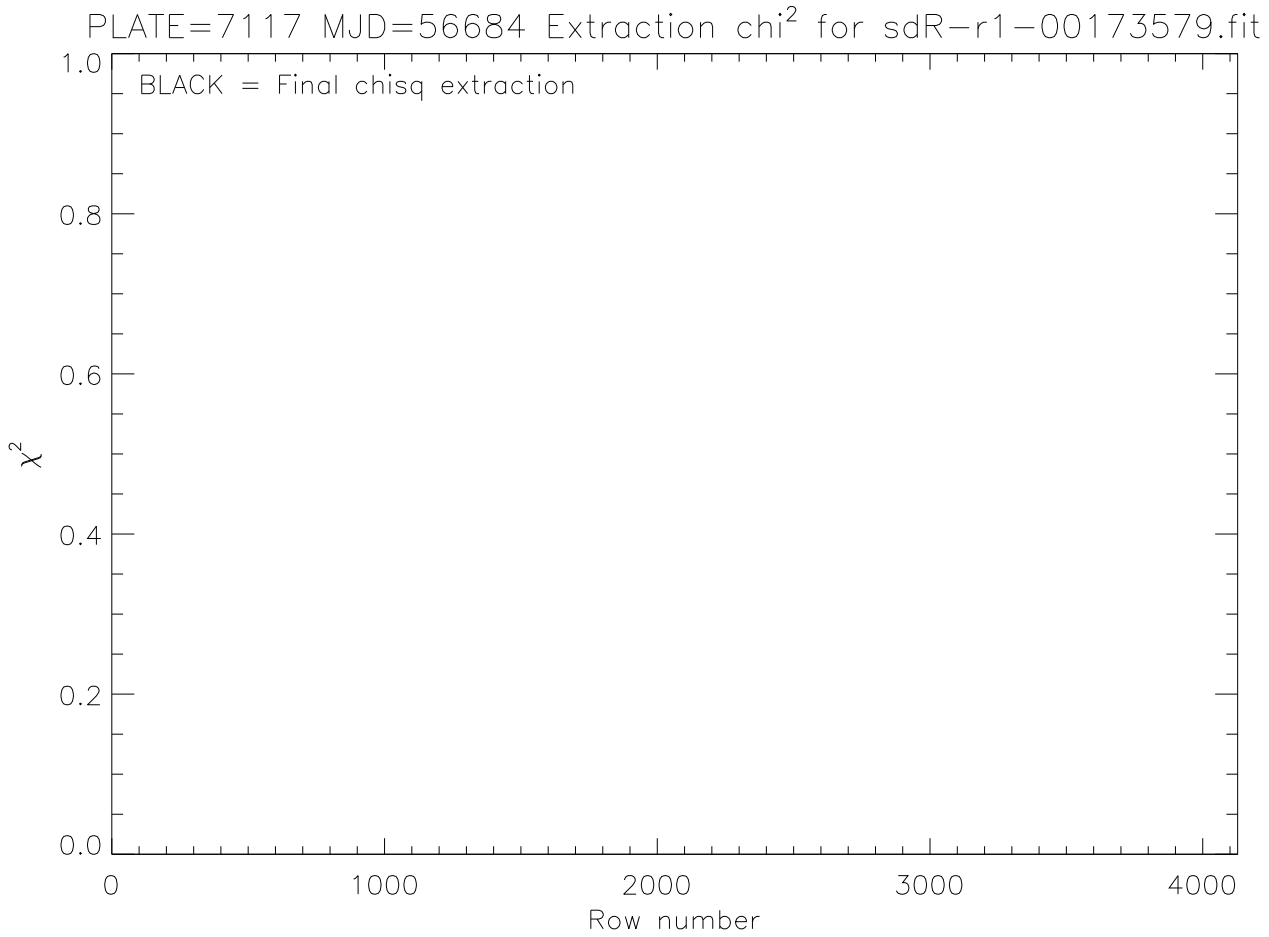
Number of sky fibers = 39

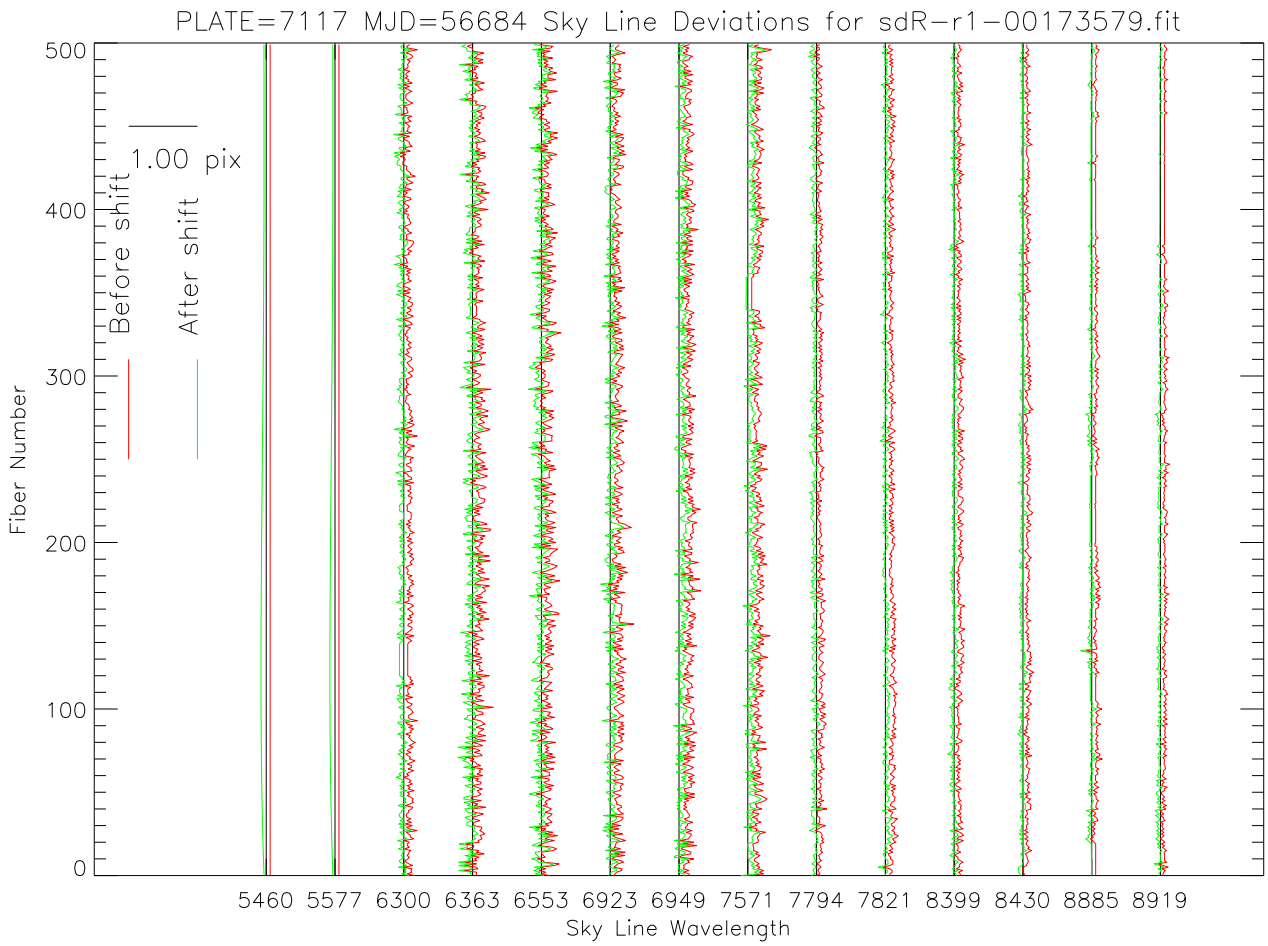


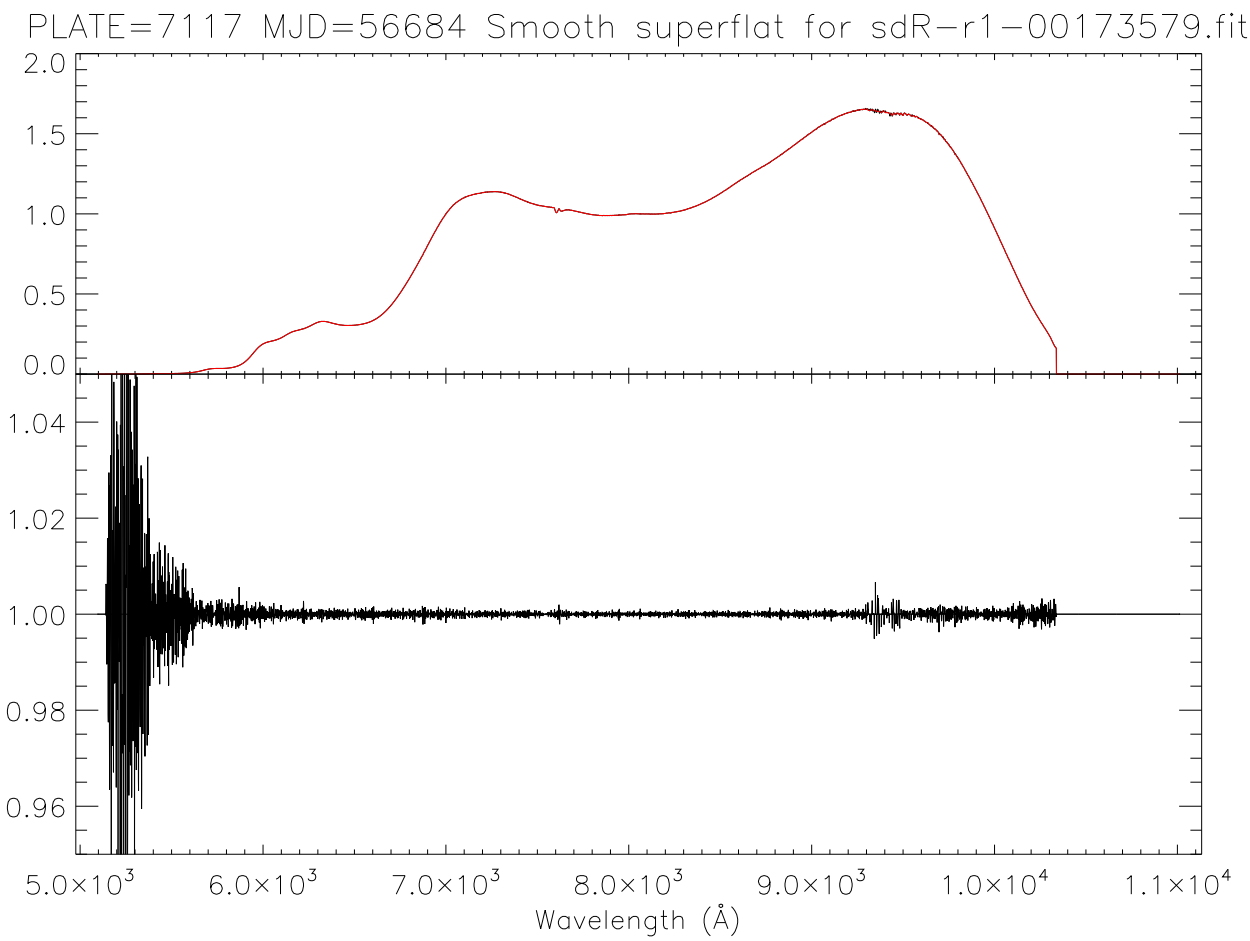

PLATE=7117 MJD=56684 sdR-r1-00173578.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.16 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

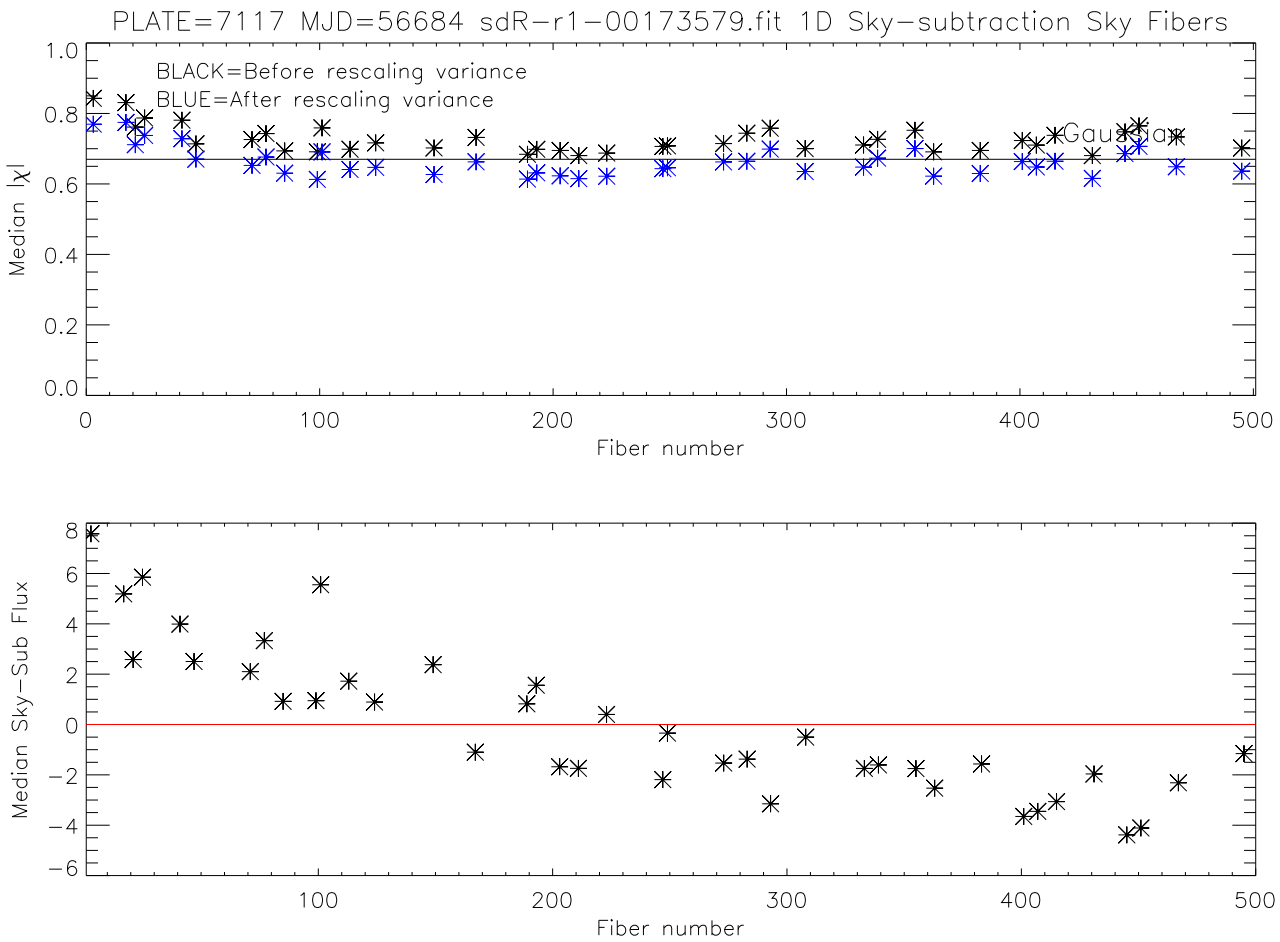

PLATE=7117 MJD=56684 sdR-r1-00173578.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.84 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

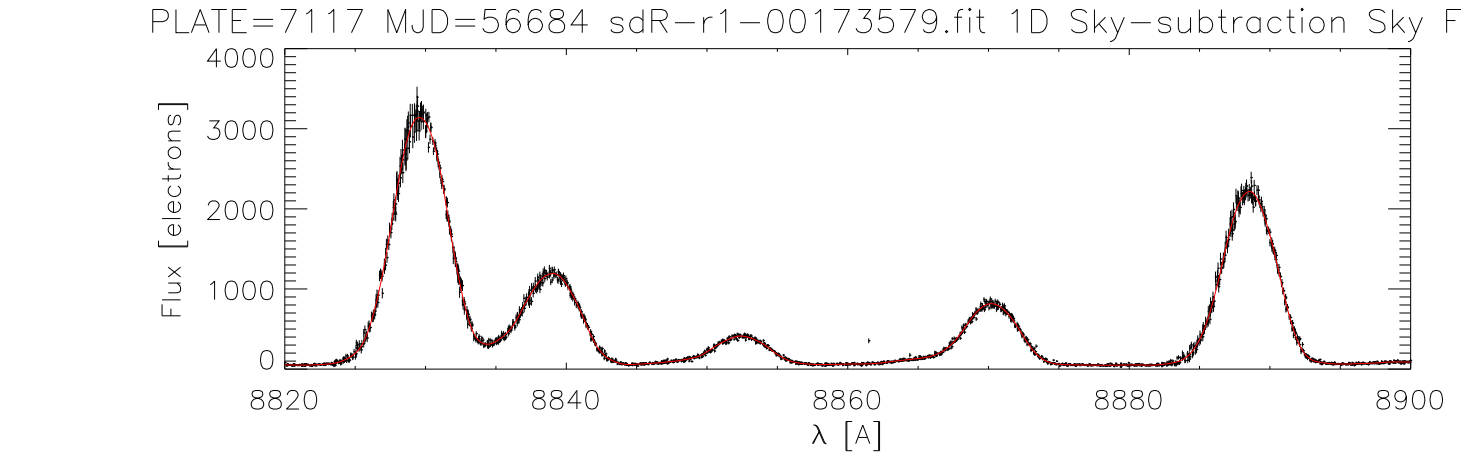

PLATE=7117 MJD=56684 Fiber−Flats for sdR−r1−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −7.358
Max value = 3.978
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:39:38 2016

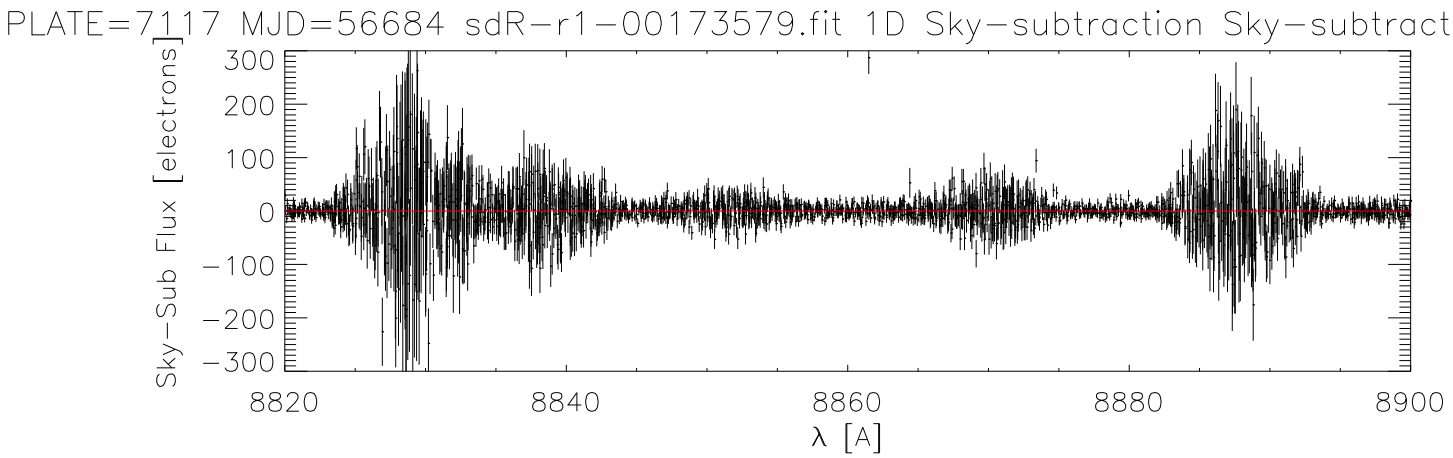

PLATE=7117 MJD=56684 Extraction chi^2 for sdR−r1−00173579.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-r1-00173579.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

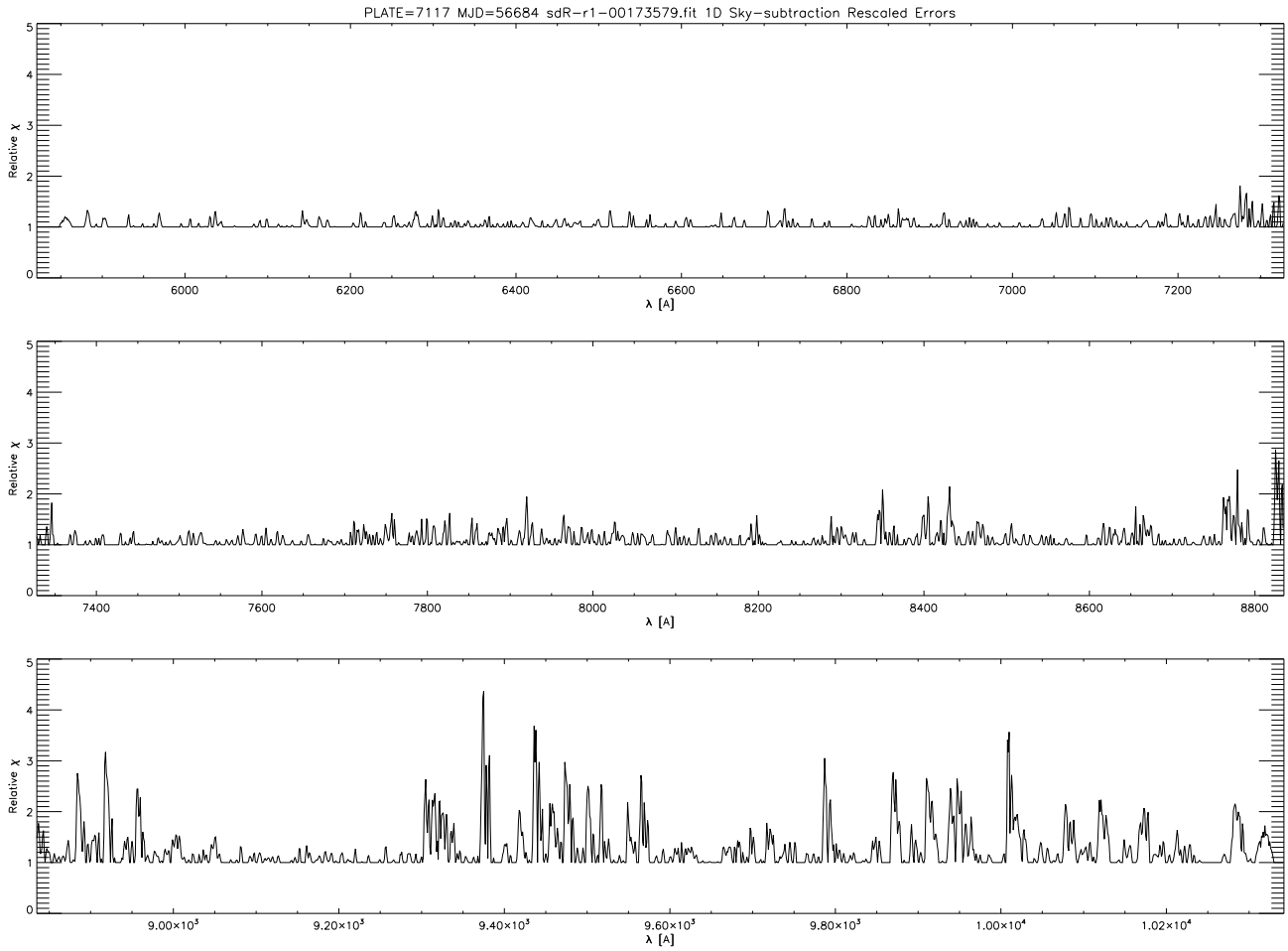

PLATE=7117 MJD=56684 Smooth superflat for sdR-r1-00173579.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

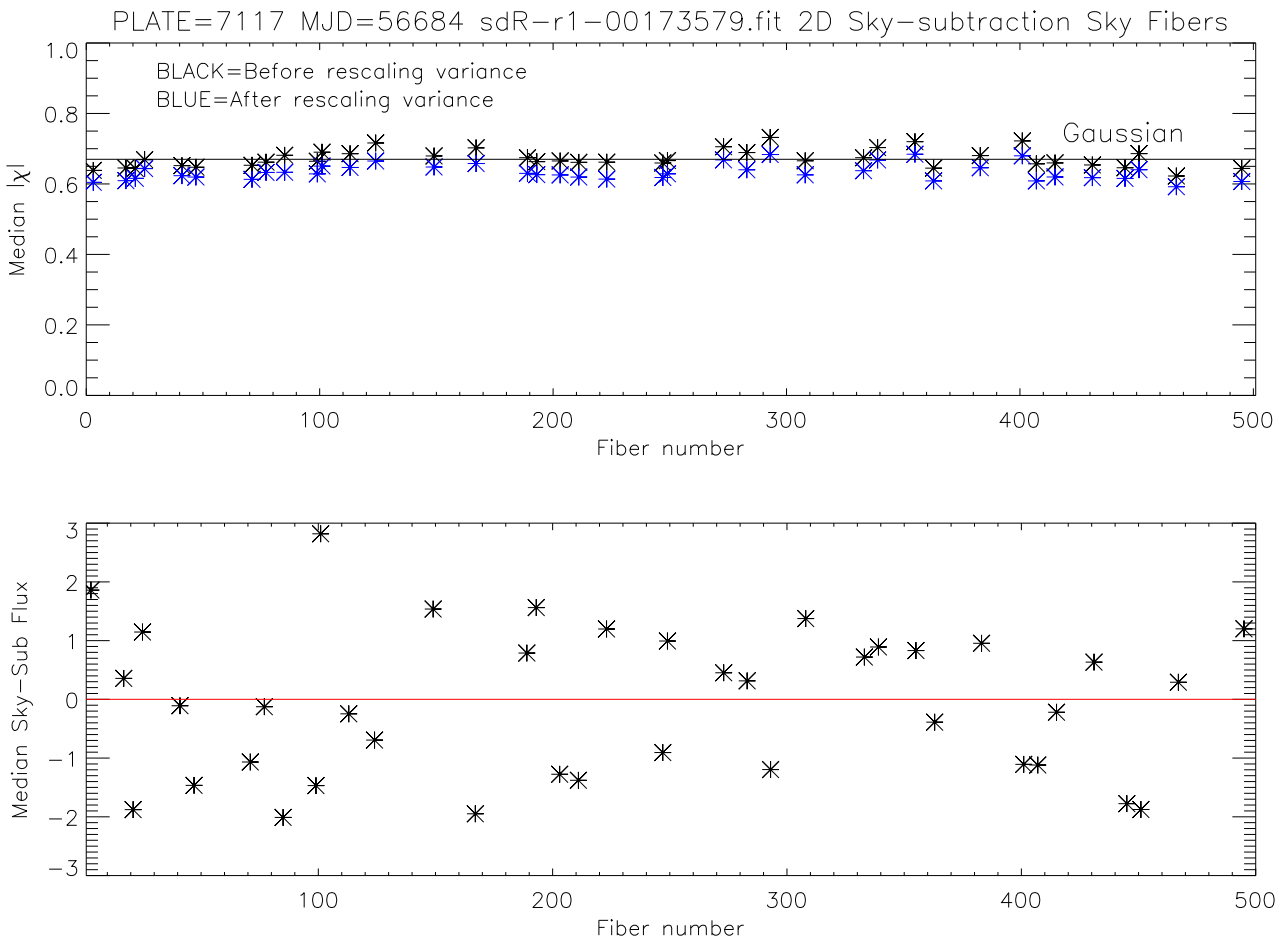

PLATE=7117 MJD=56684 sdR-r1-00173579.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

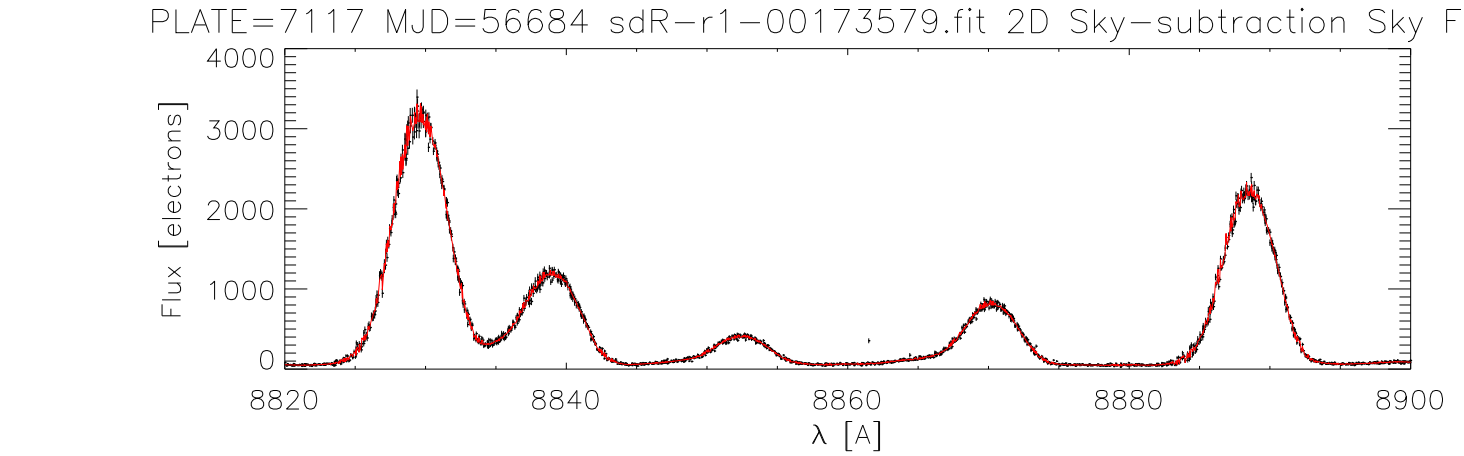

PLATE=7117 MJD=56684 sdR-r1-00173579.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

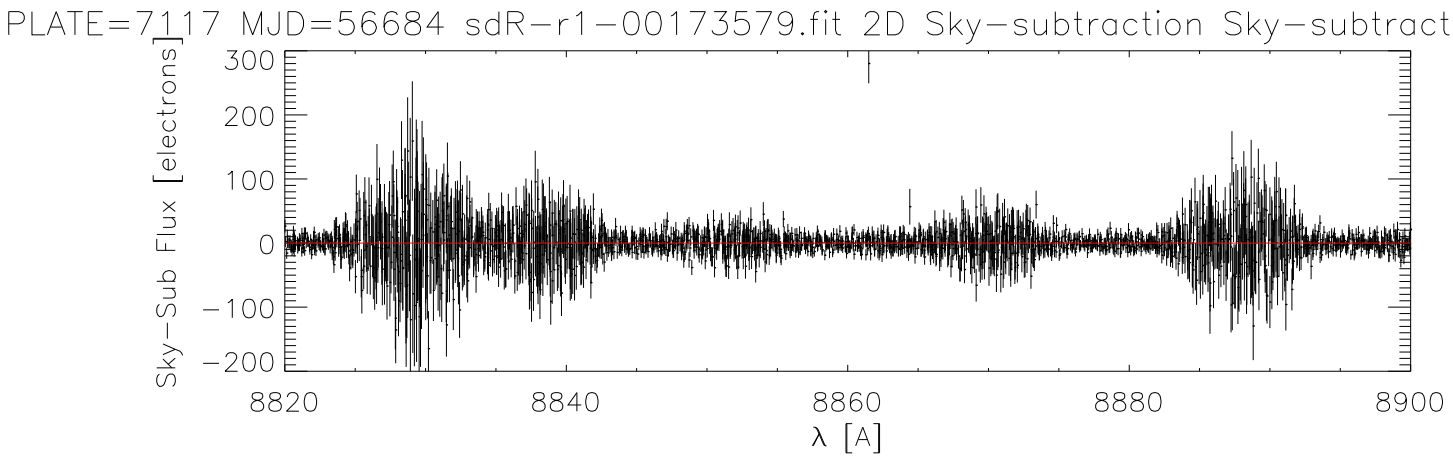

PLATE=7117 MJD=56684 sdR-r1-00173579.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 39

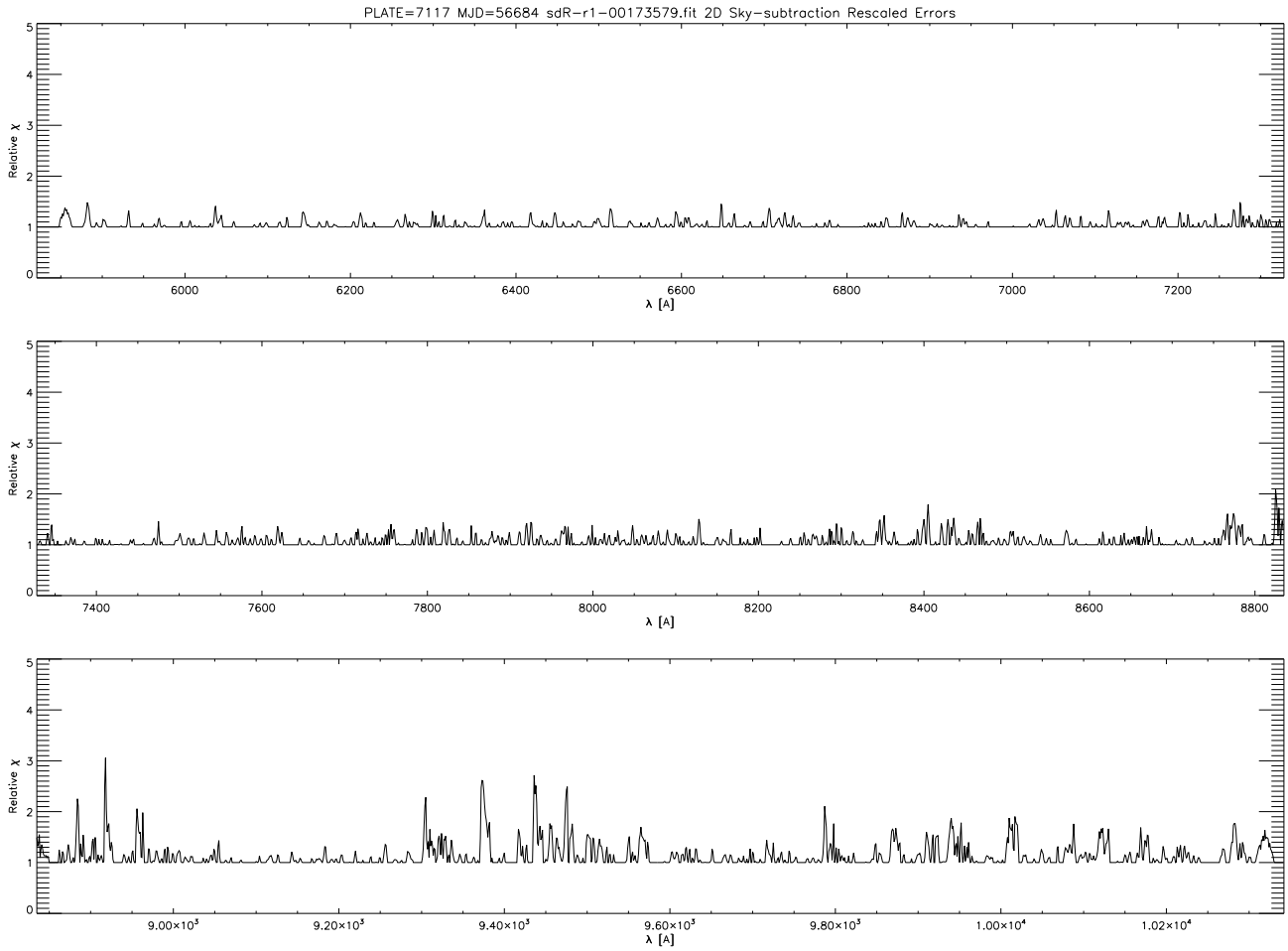


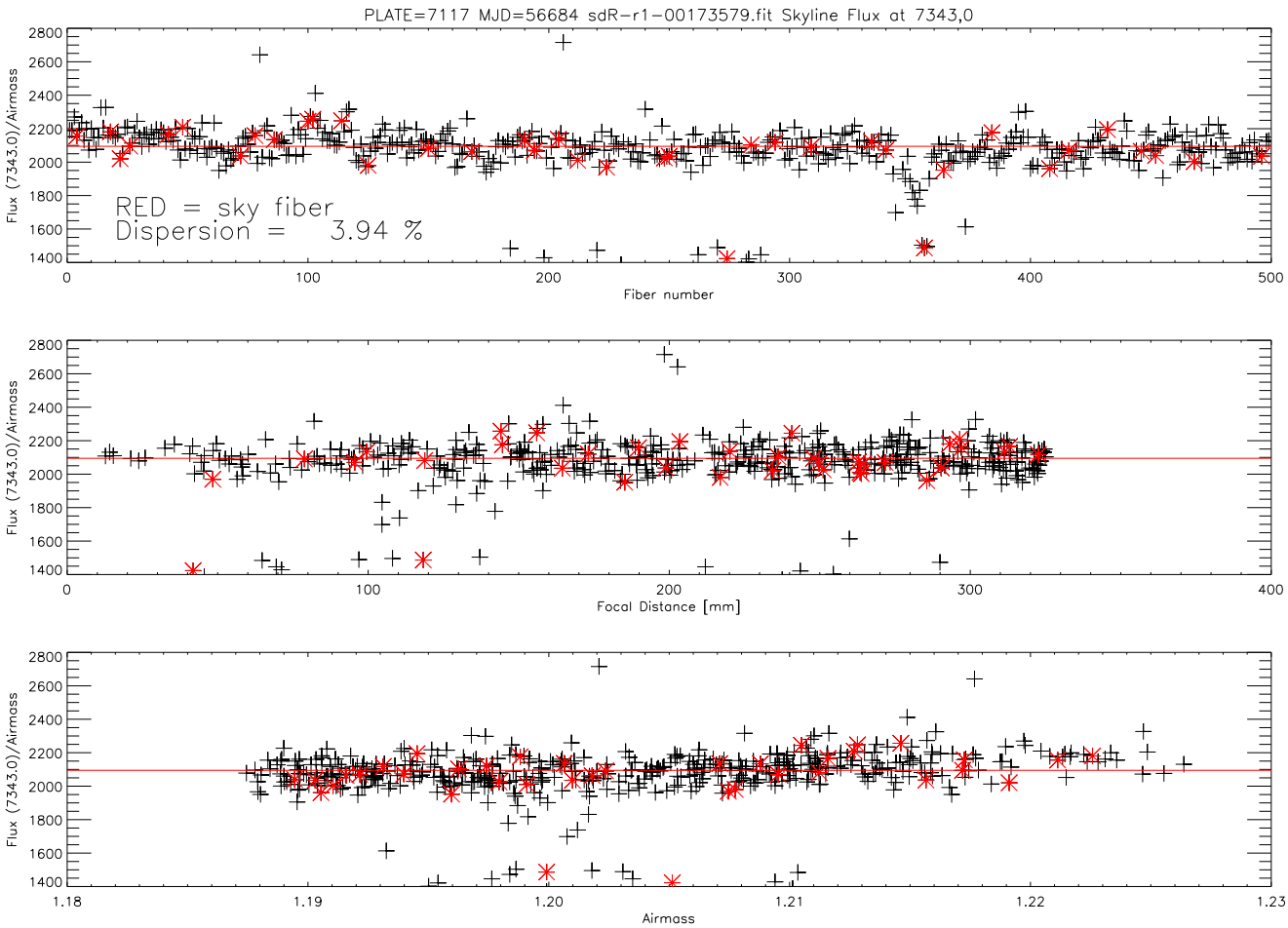

PLATE=7117 MJD=56684 sdR-r1-00173579.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

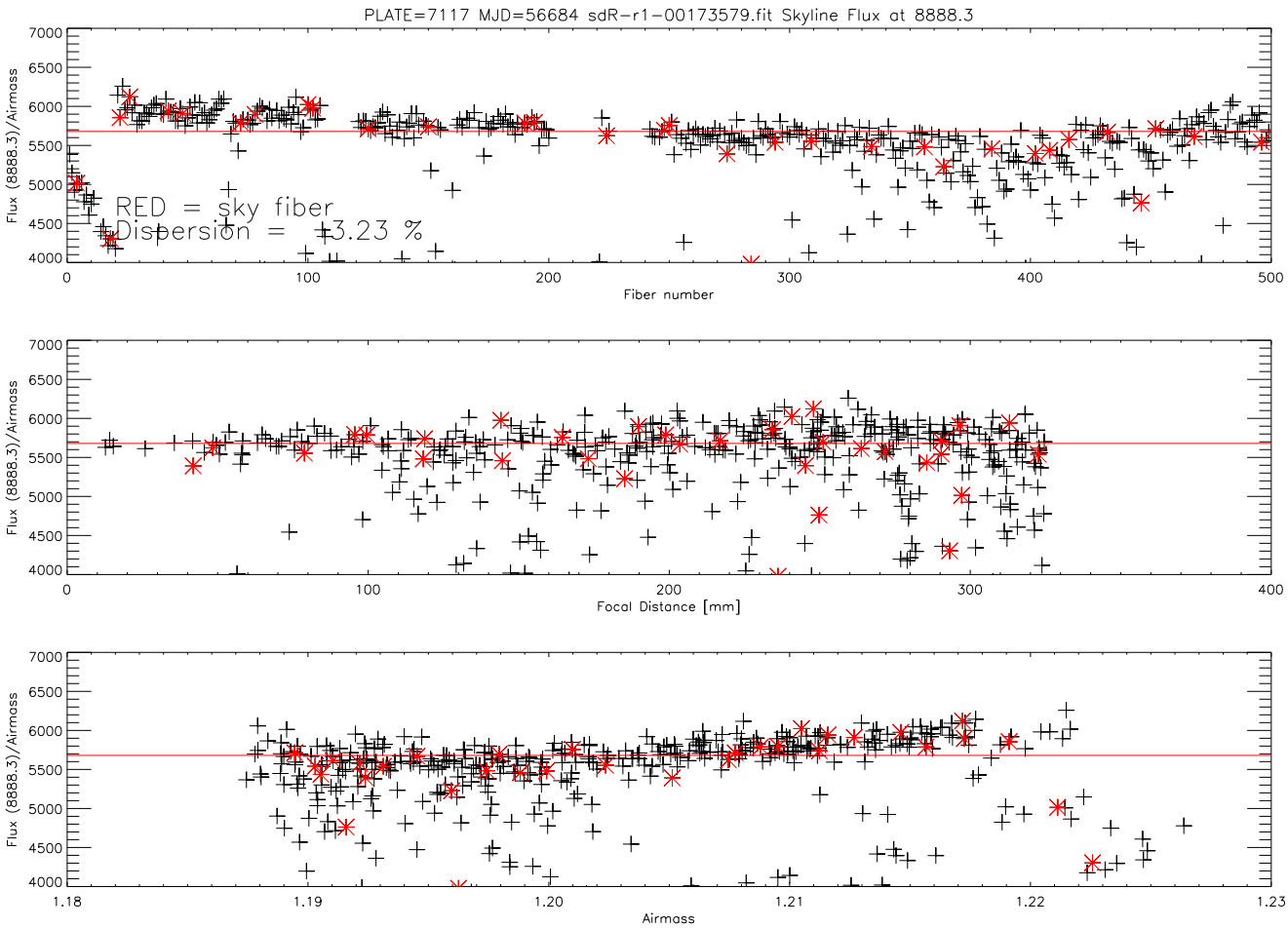

PLATE=7117 MJD=56684 sdR-r1-00173579.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

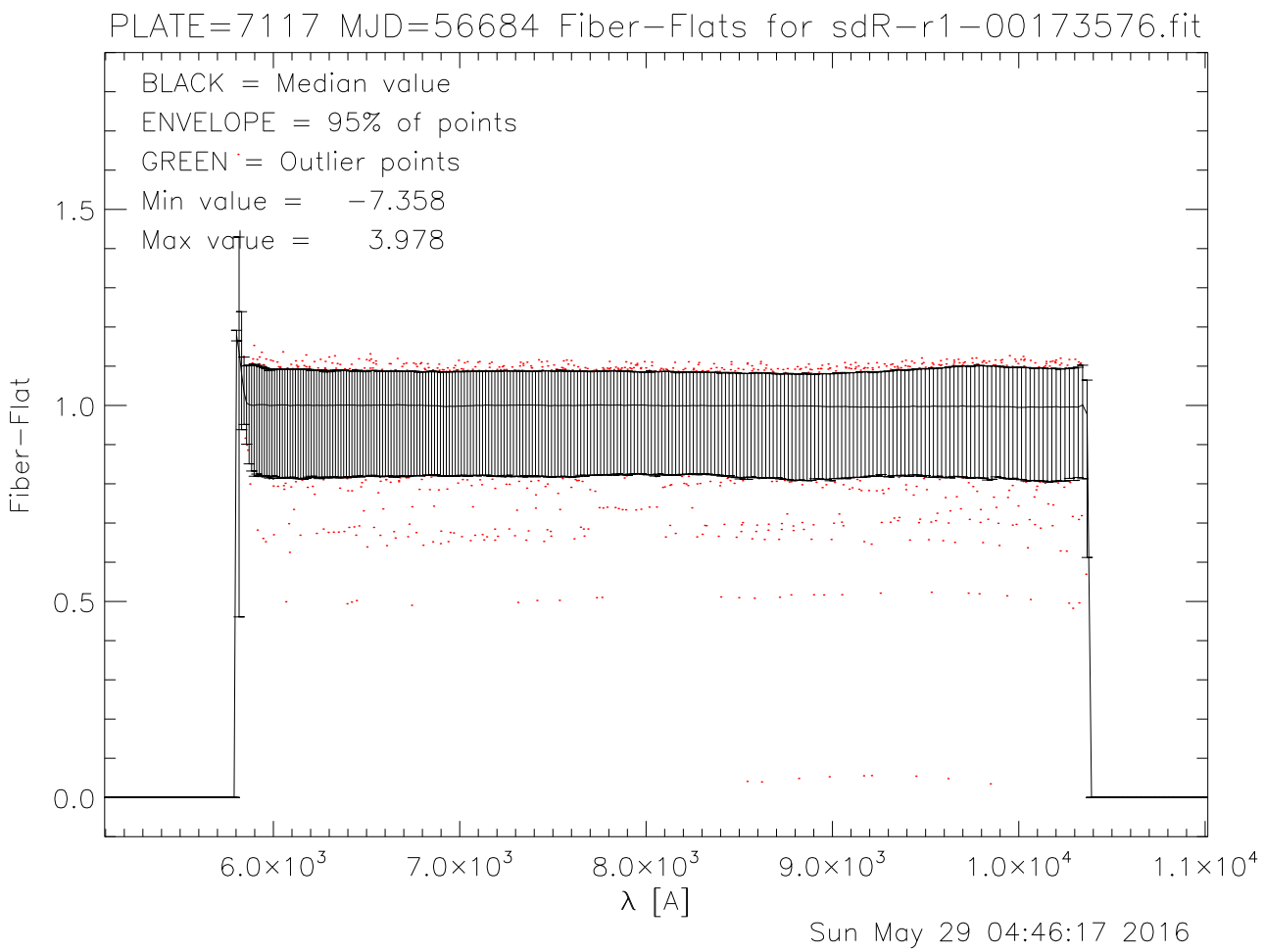

PLATE=7117 MJD=56684 sdR-r1-00173579.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

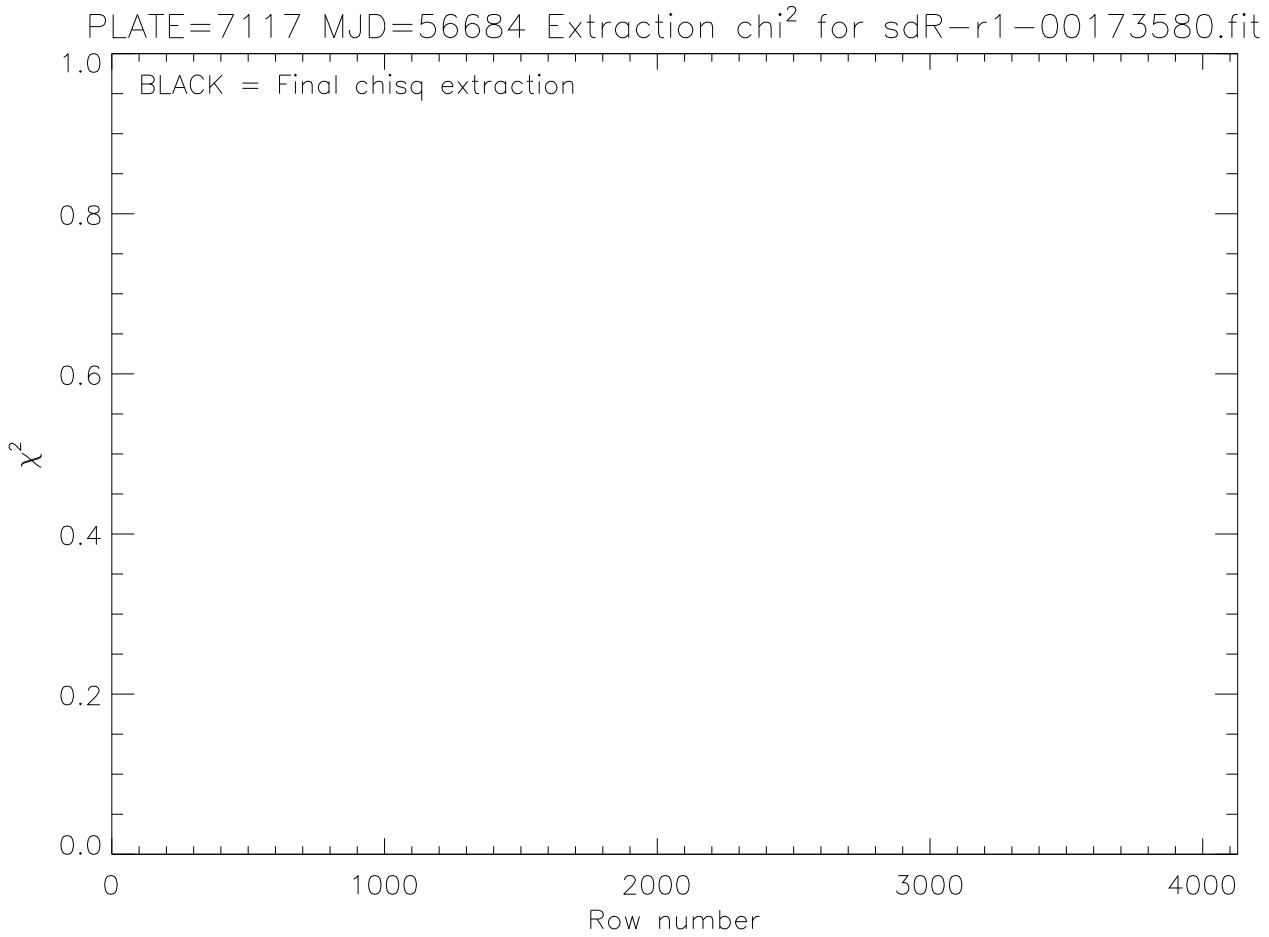
Number of sky fibers = 39

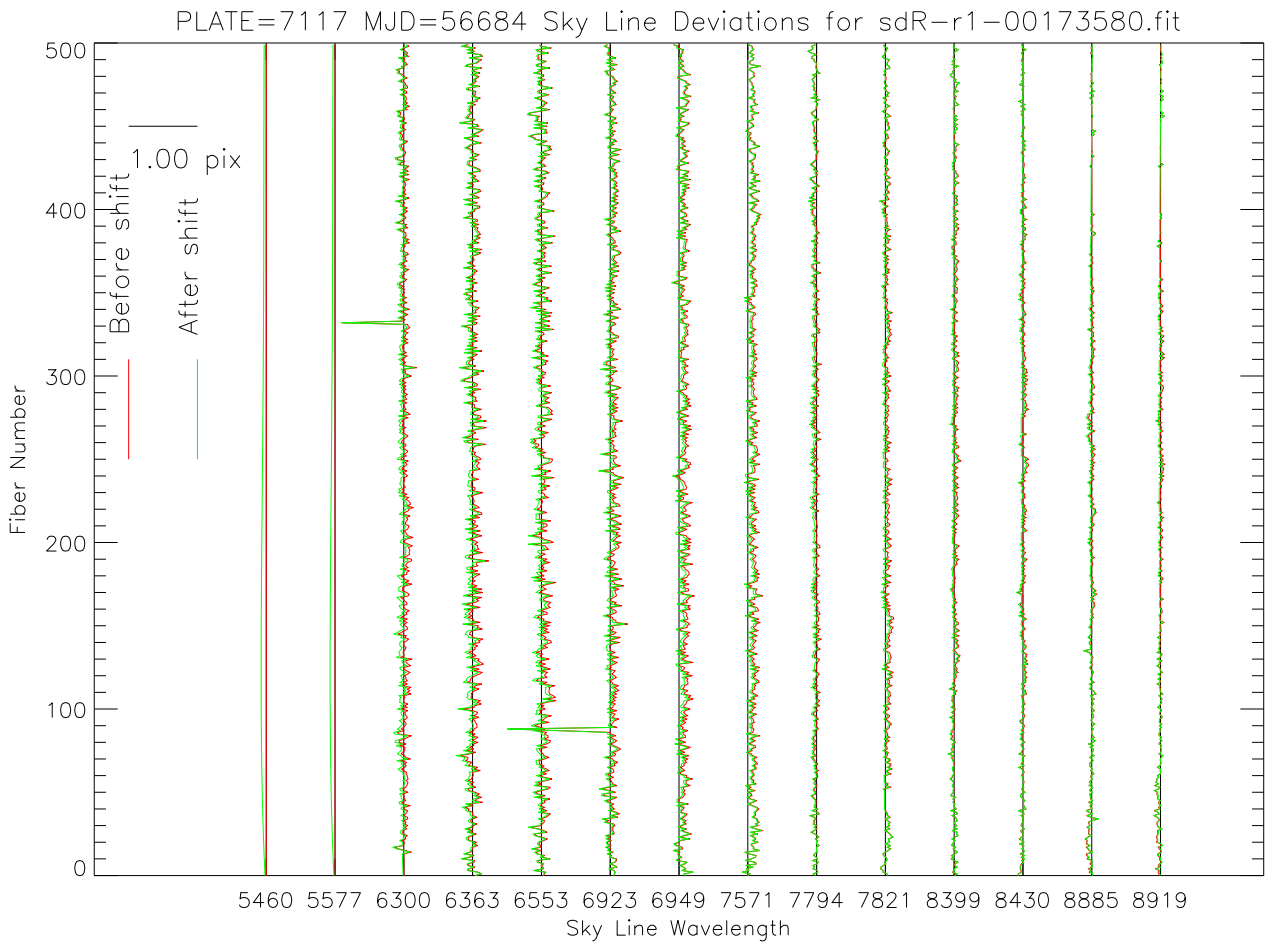


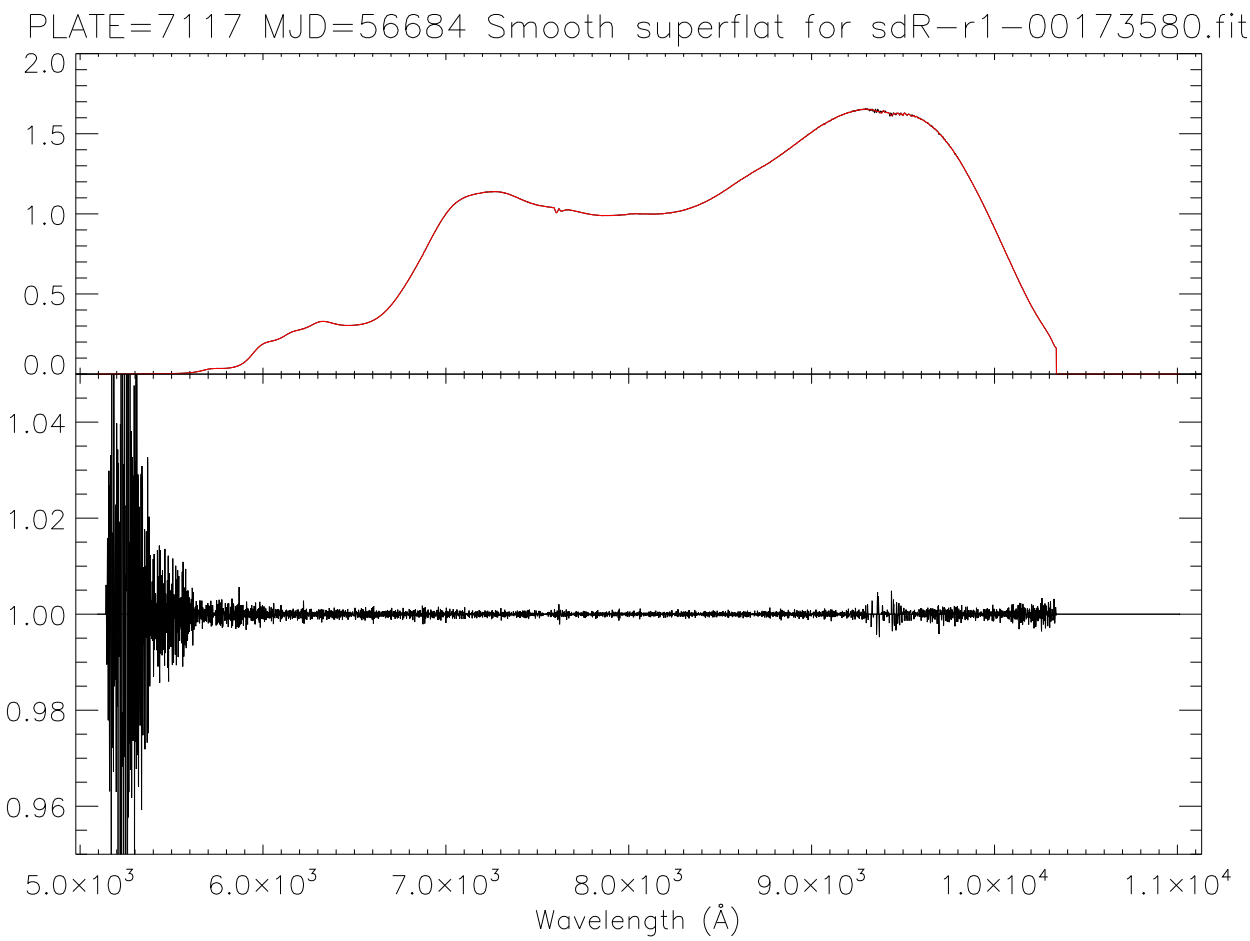

PLATE=7117 MJD=56684 sdR-r1-00173579.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.94 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

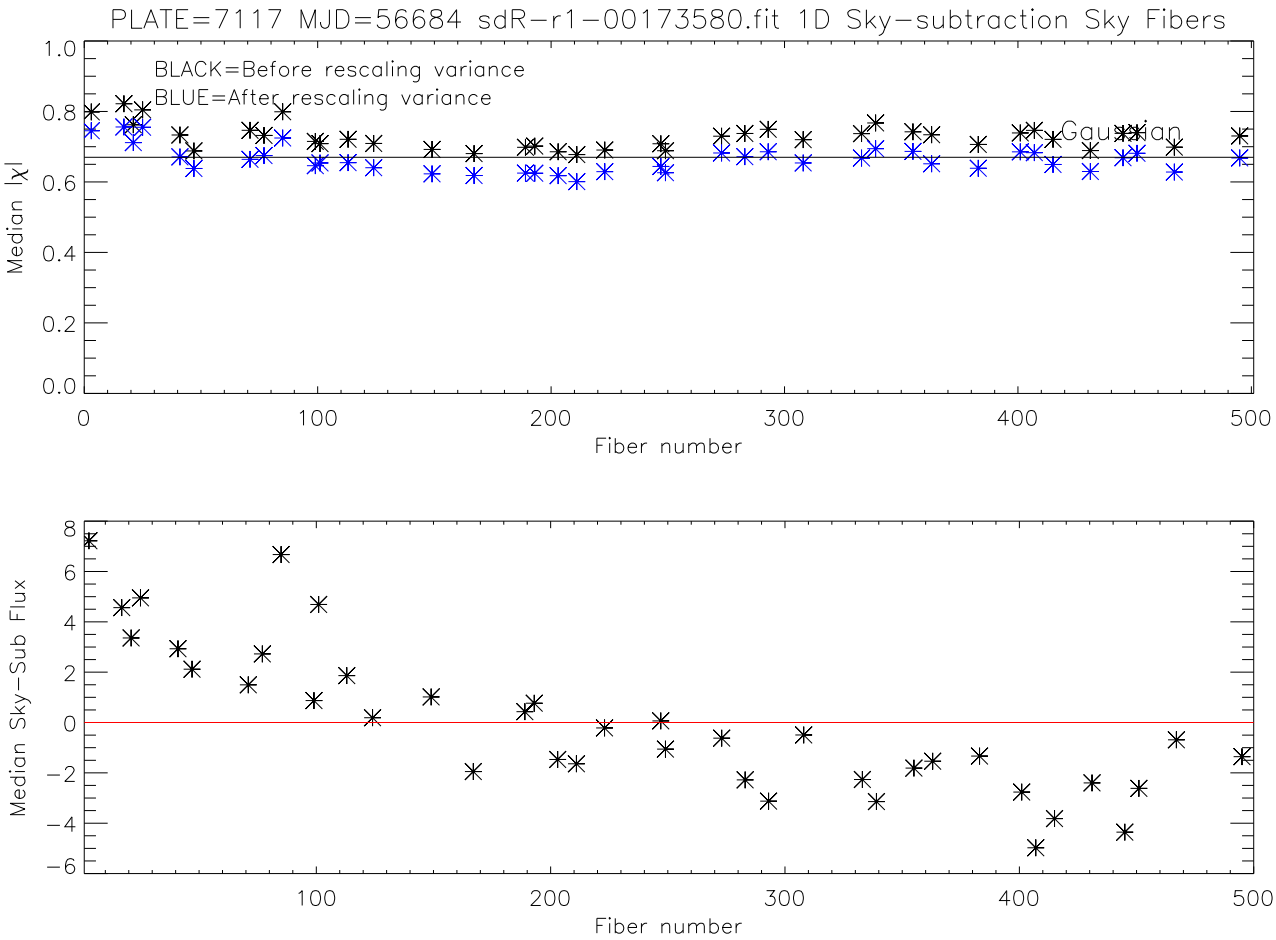

PLATE=7117 MJD=56684 sdR-r1-00173579.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.23 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

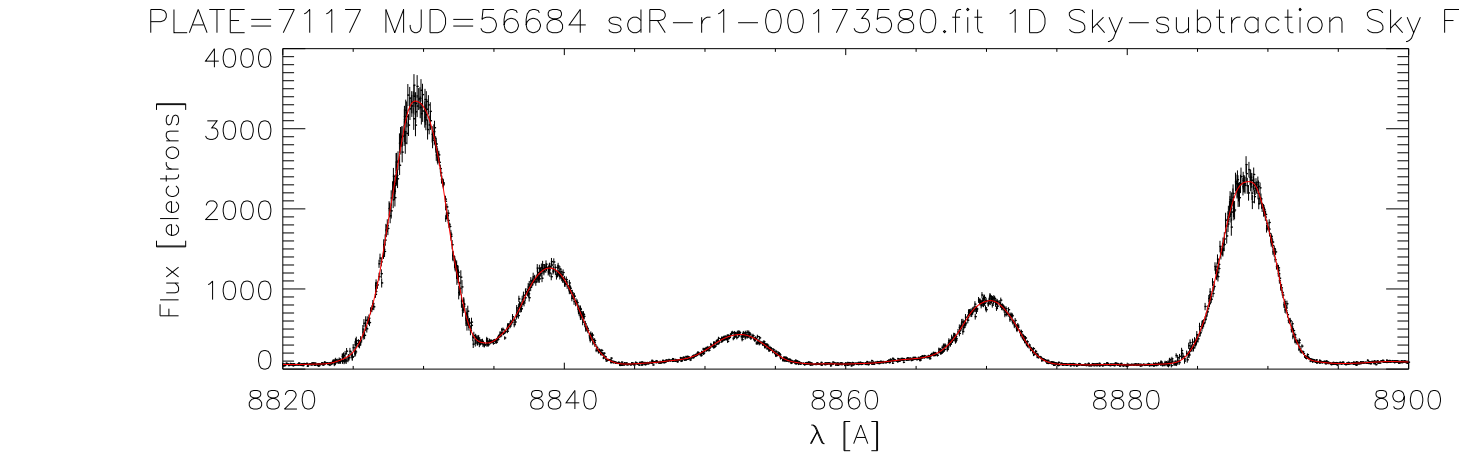

PLATE=7117 MJD=56684 Fiber−Flats for sdR−r1−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −7.358
Max value = 3.978
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:46:17 2016

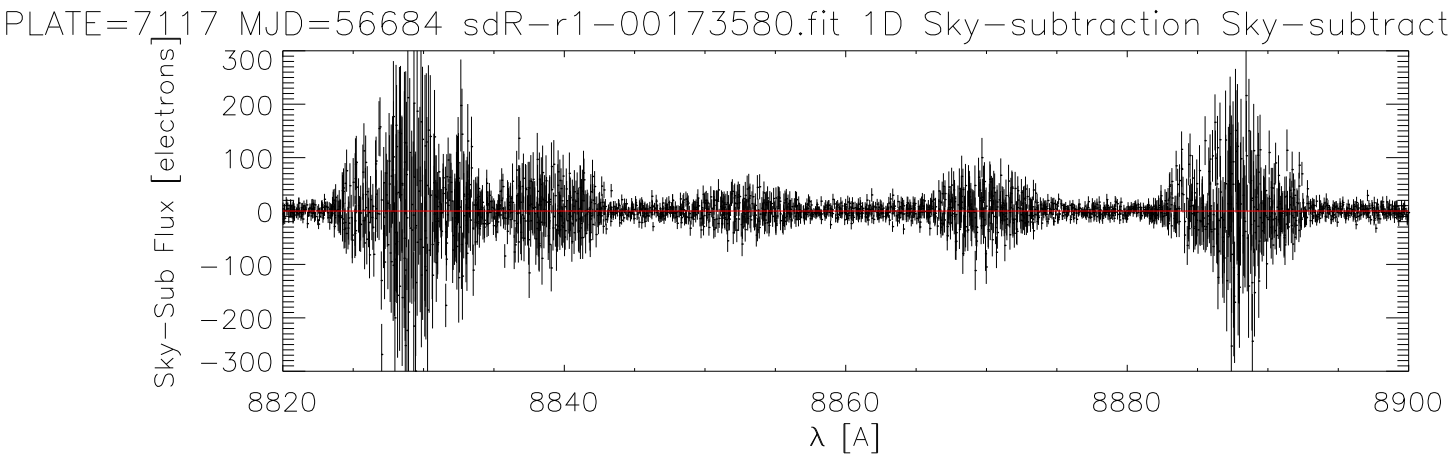

PLATE=7117 MJD=56684 Extraction chi^2 for sdR−r1−00173580.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-r1-00173580.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

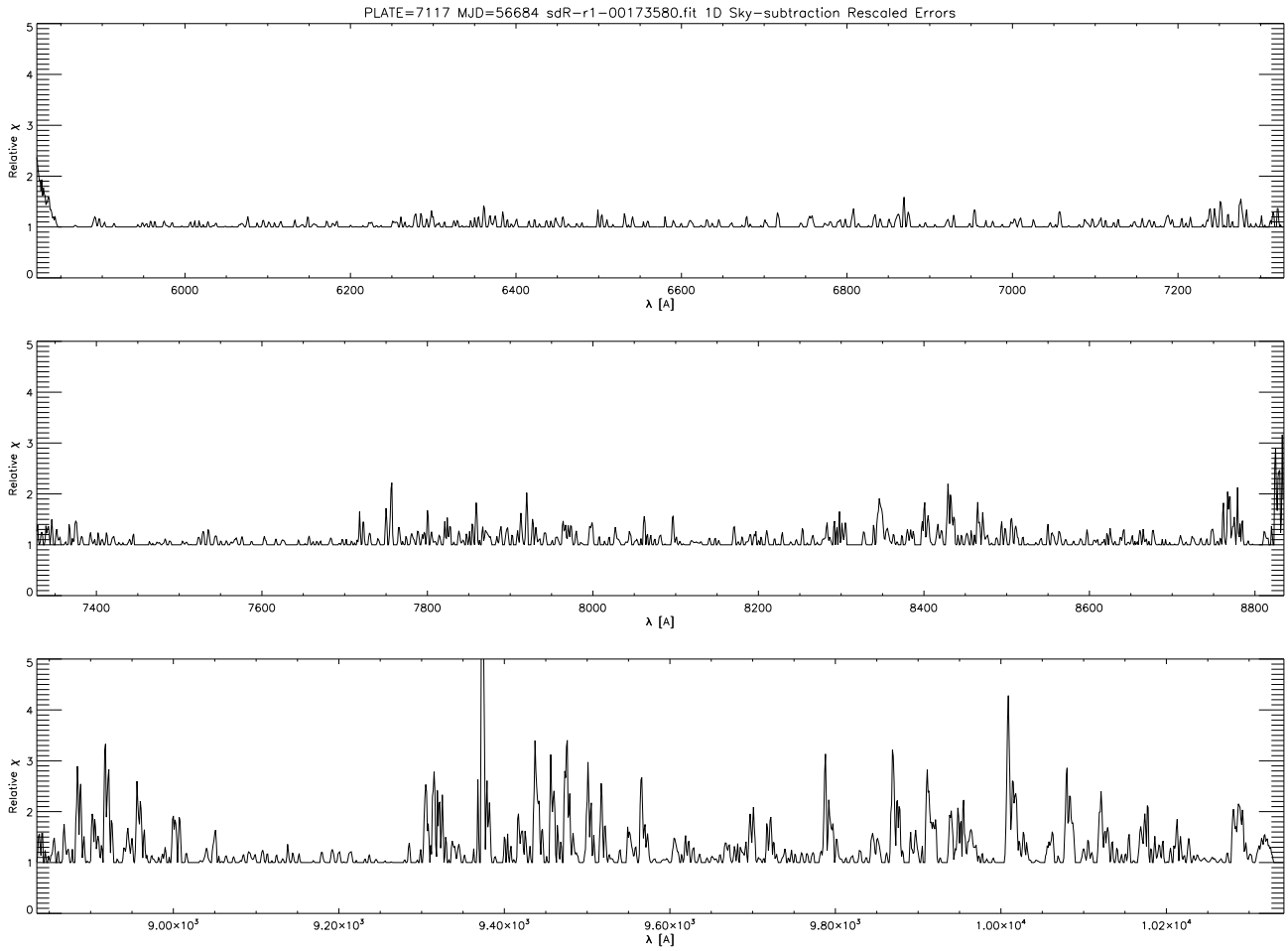

PLATE=7117 MJD=56684 Smooth superflat for sdR-r1-00173580.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

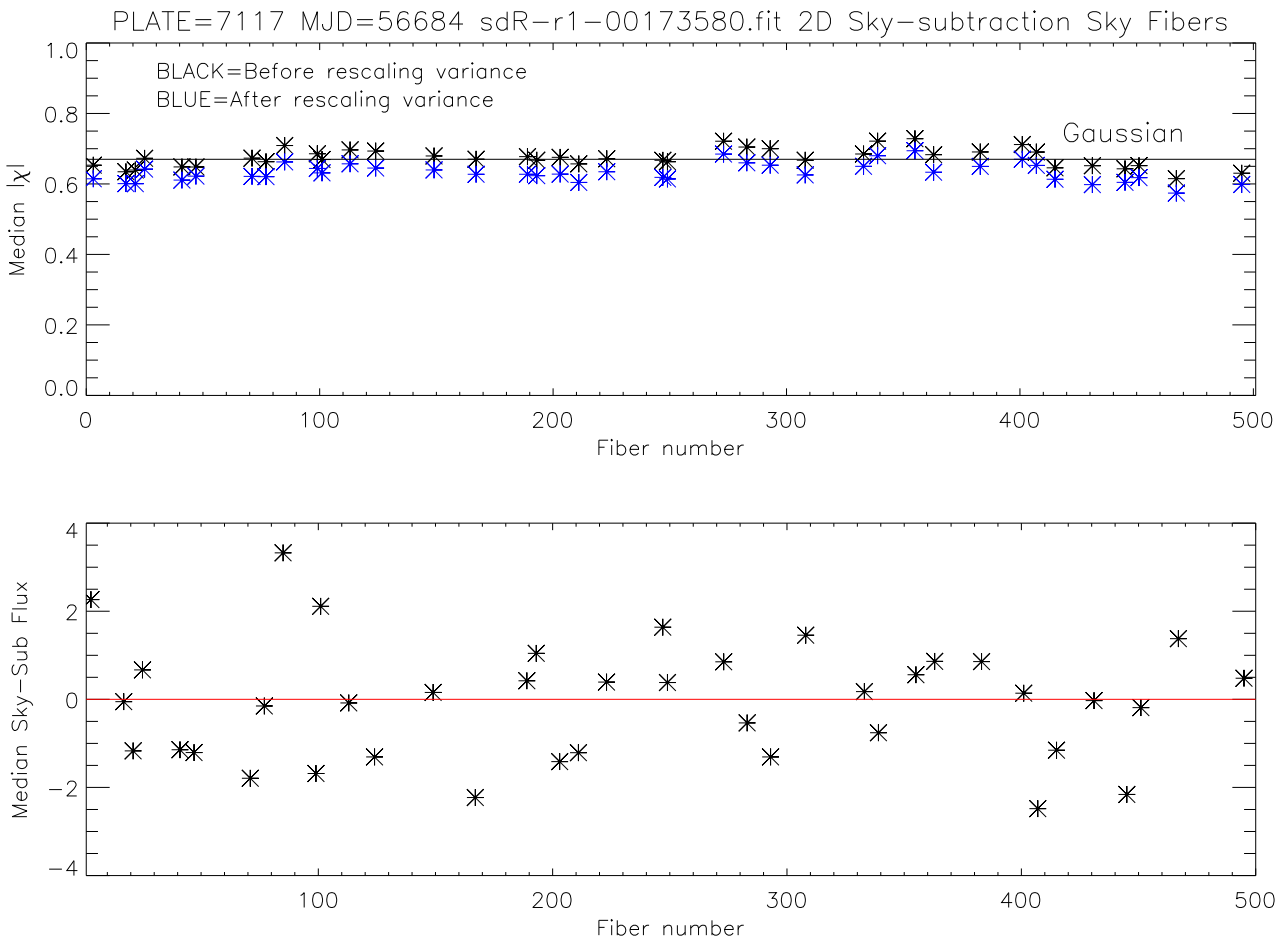

PLATE=7117 MJD=56684 sdR-r1-00173580.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

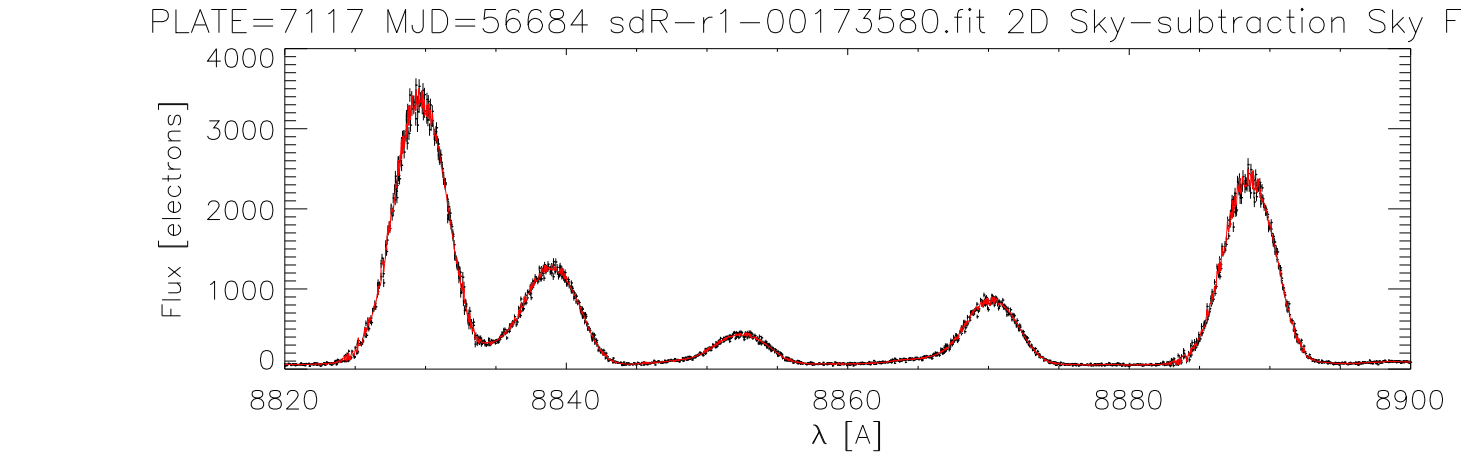

PLATE=7117 MJD=56684 sdR-r1-00173580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

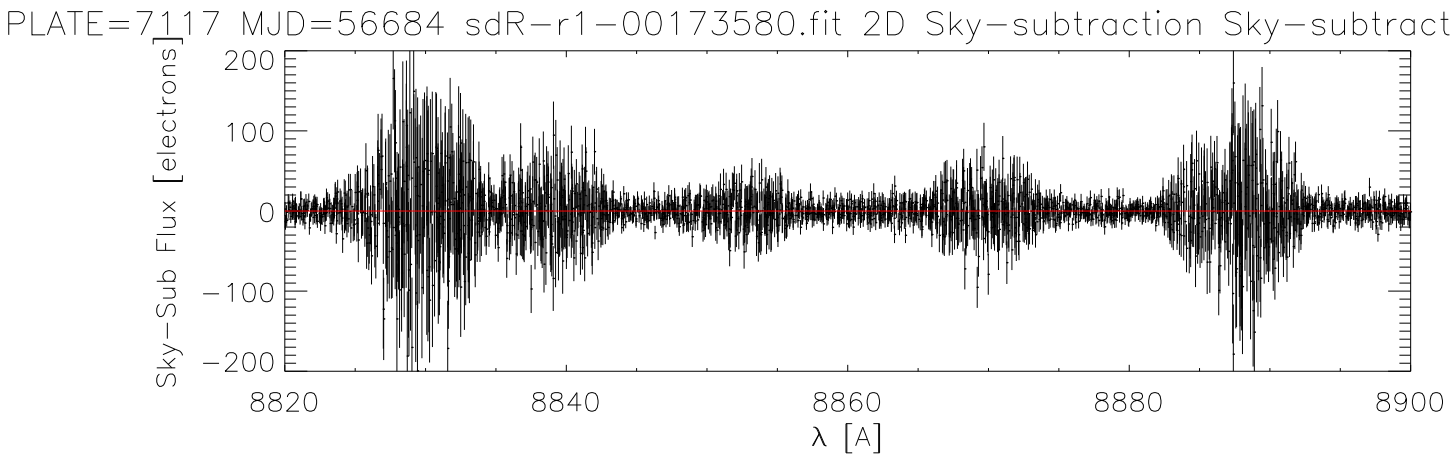

PLATE=7117 MJD=56684 sdR-r1-00173580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 39

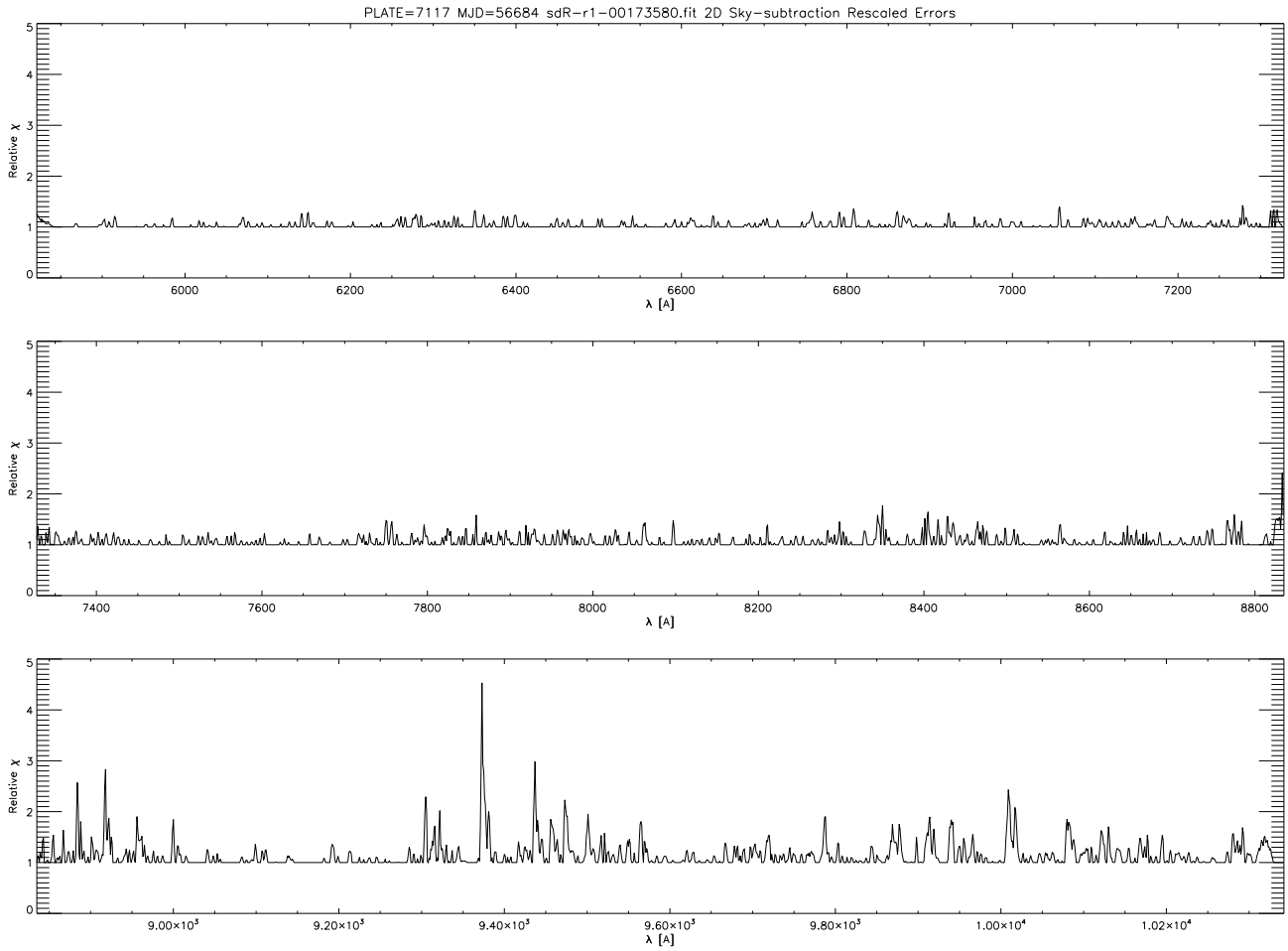


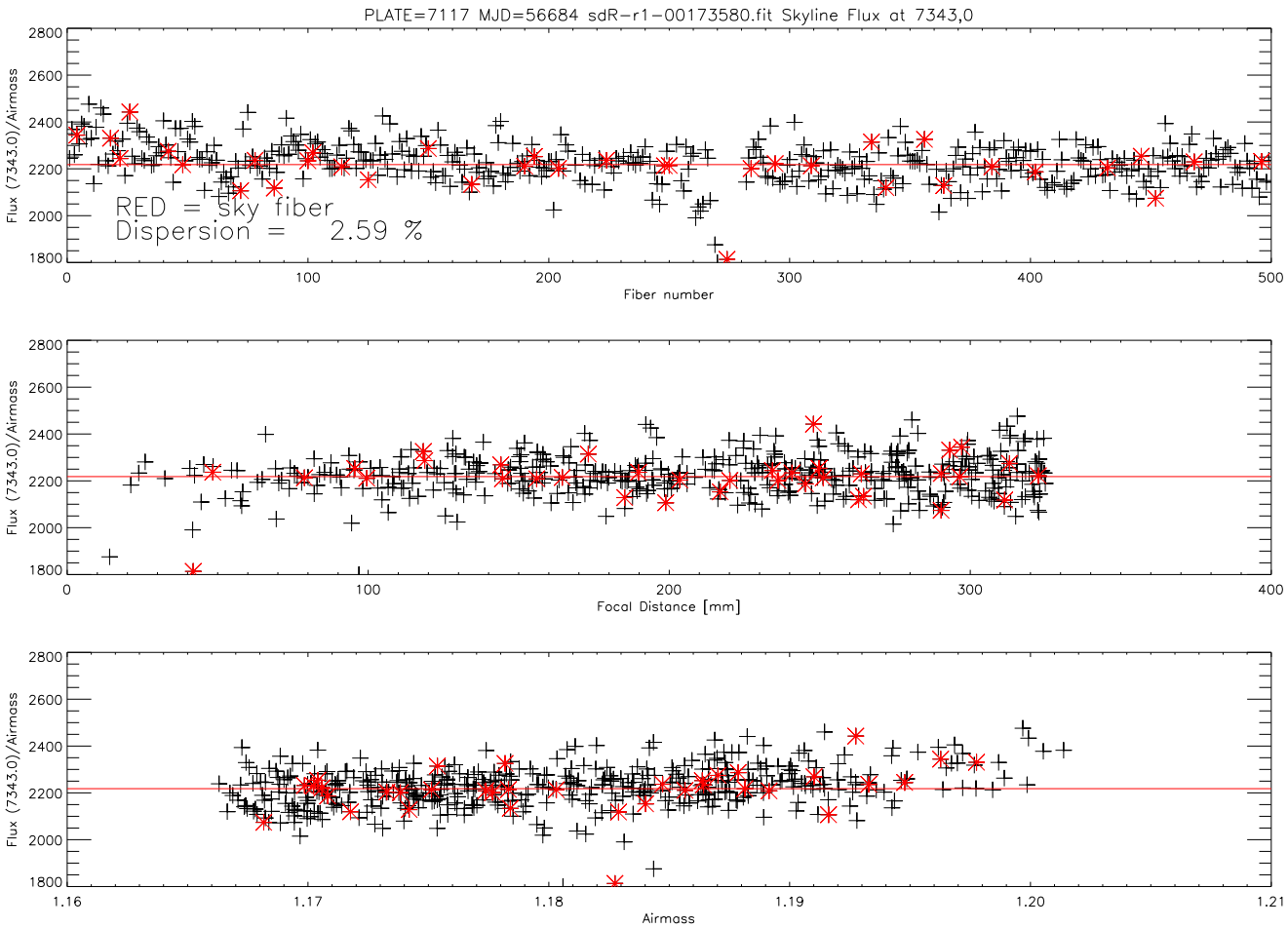

PLATE=7117 MJD=56684 sdR-r1-00173580.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

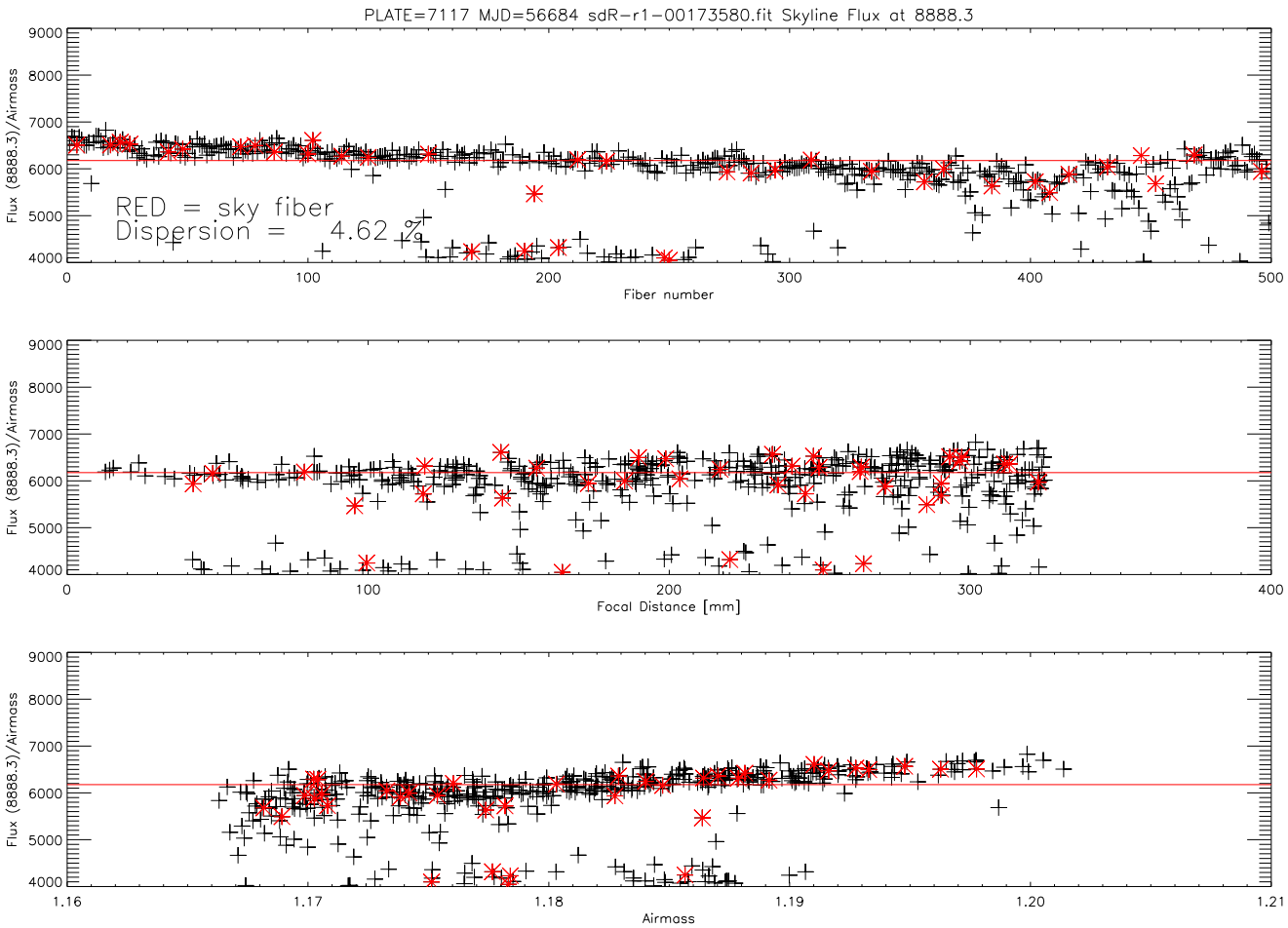

PLATE=7117 MJD=56684 sdR-r1-00173580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=7117 MJD=56684 sdR-r1-00173580.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

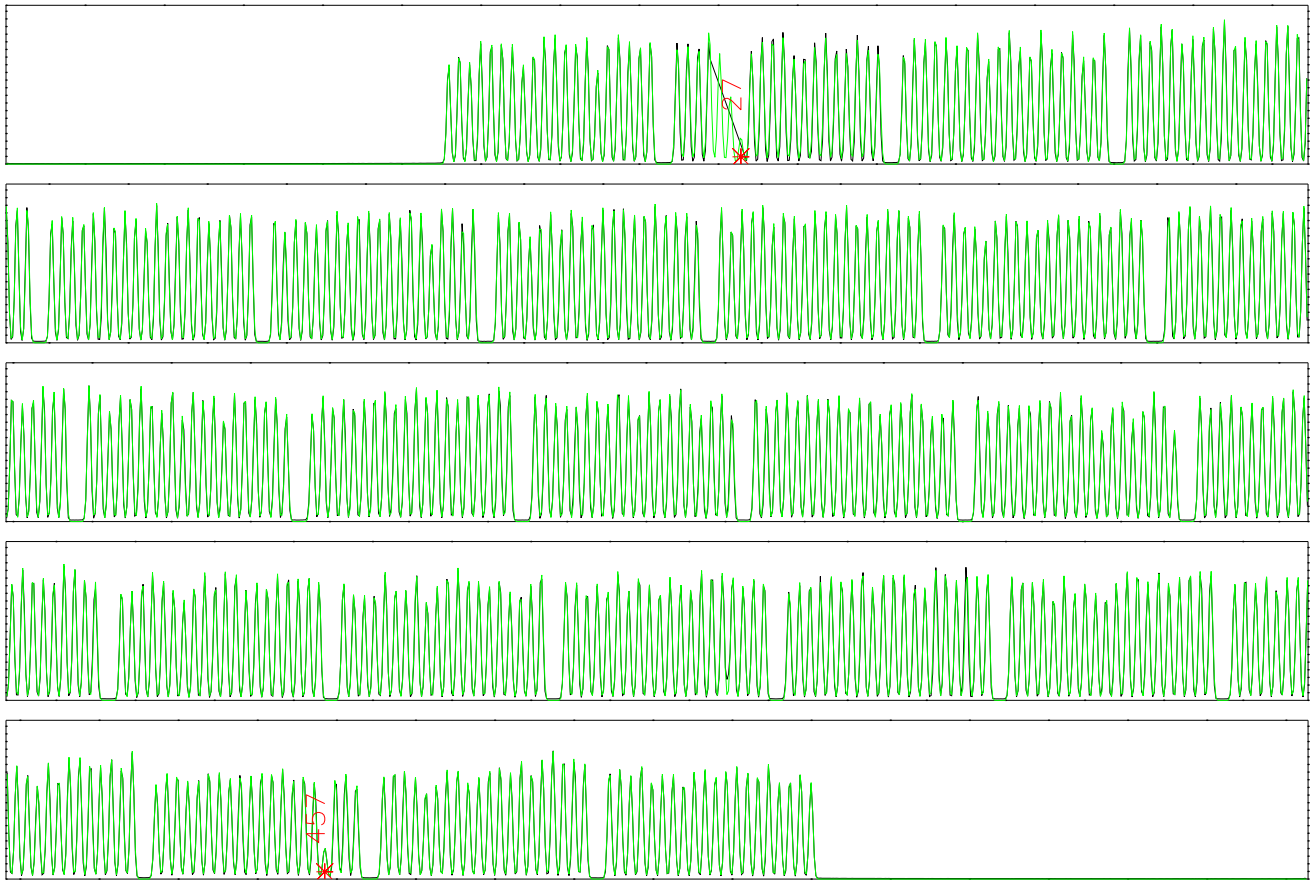
Number of sky fibers = 39

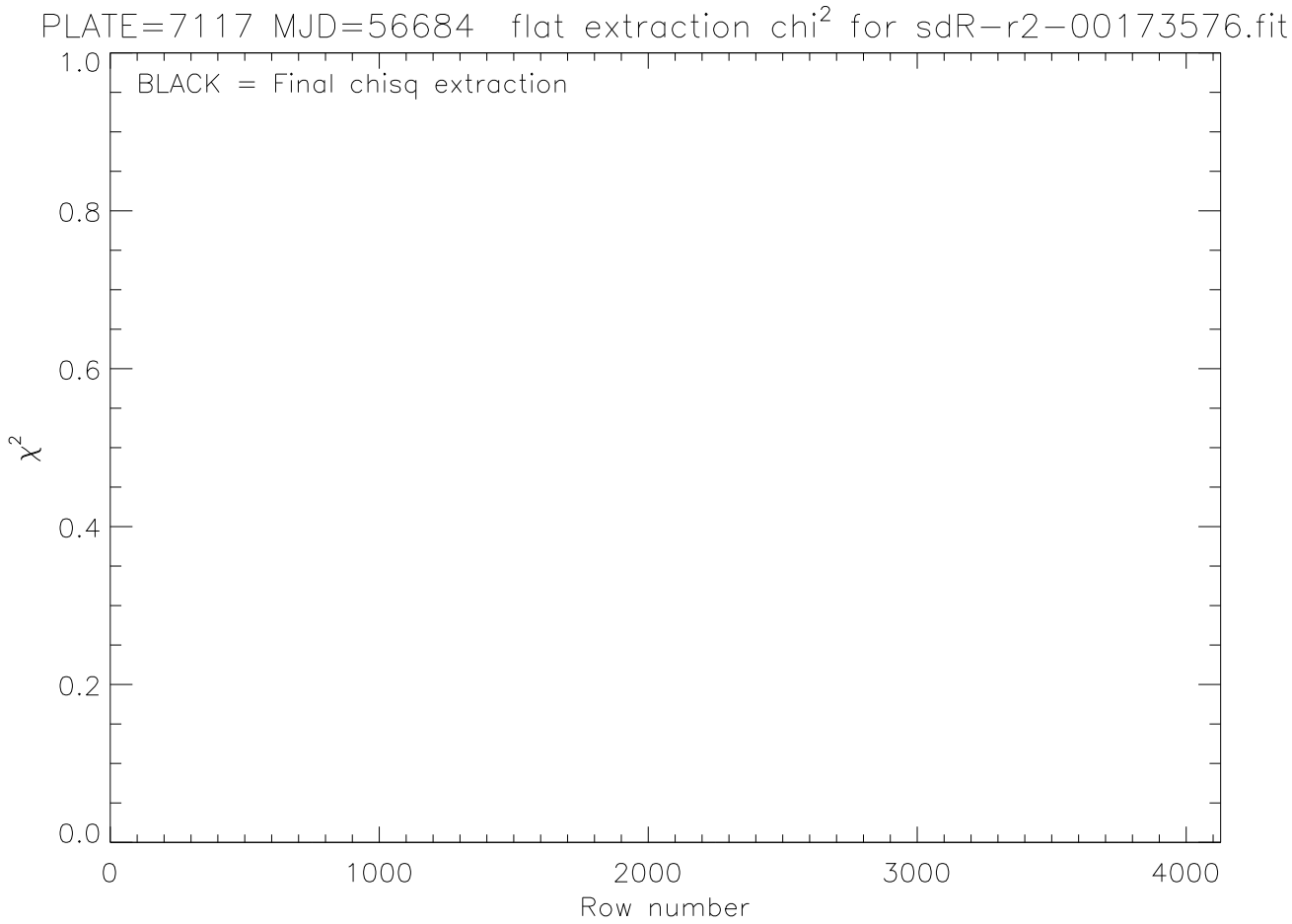


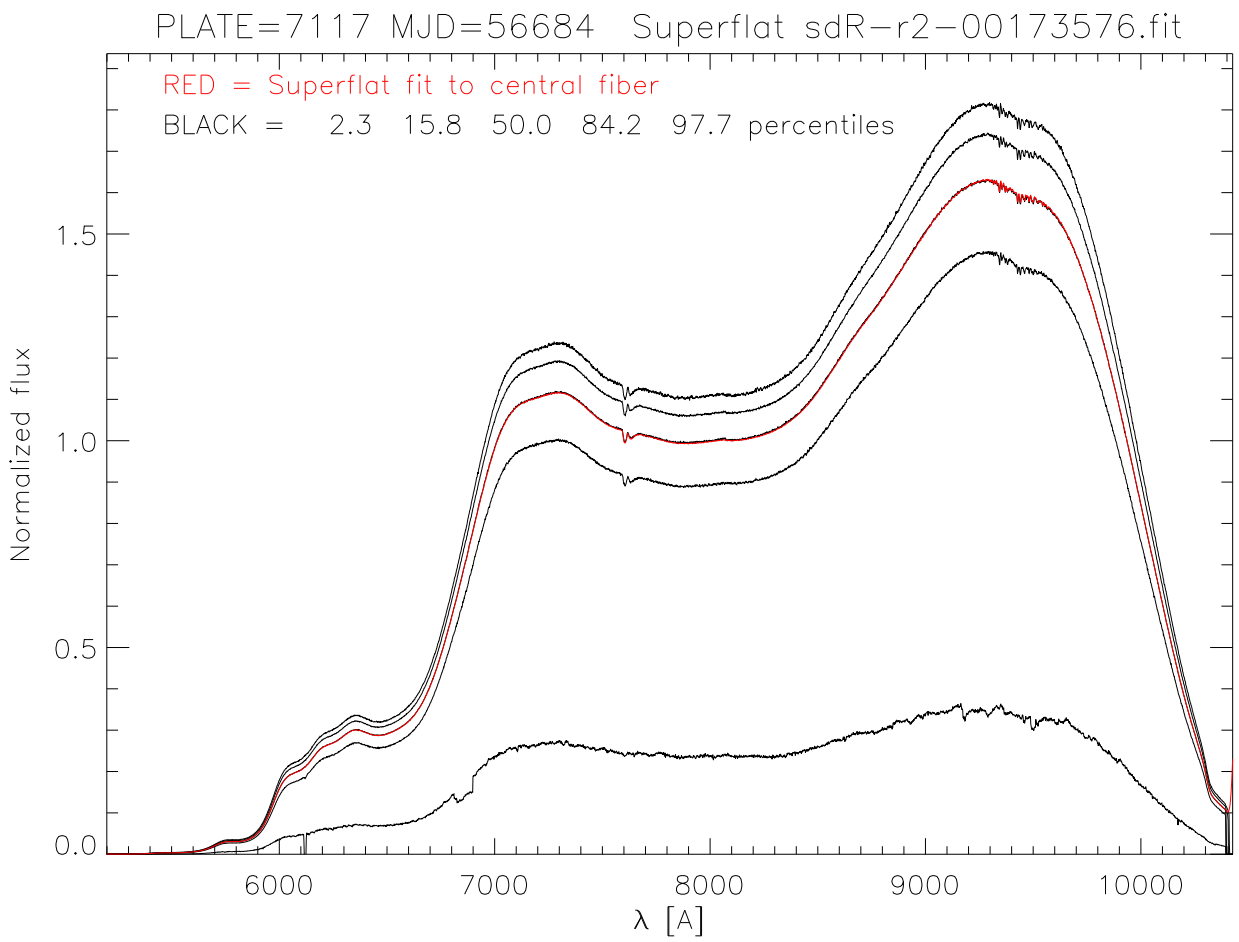

PLATE=7117 MJD=56684 sdR-r1-00173580.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.59 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

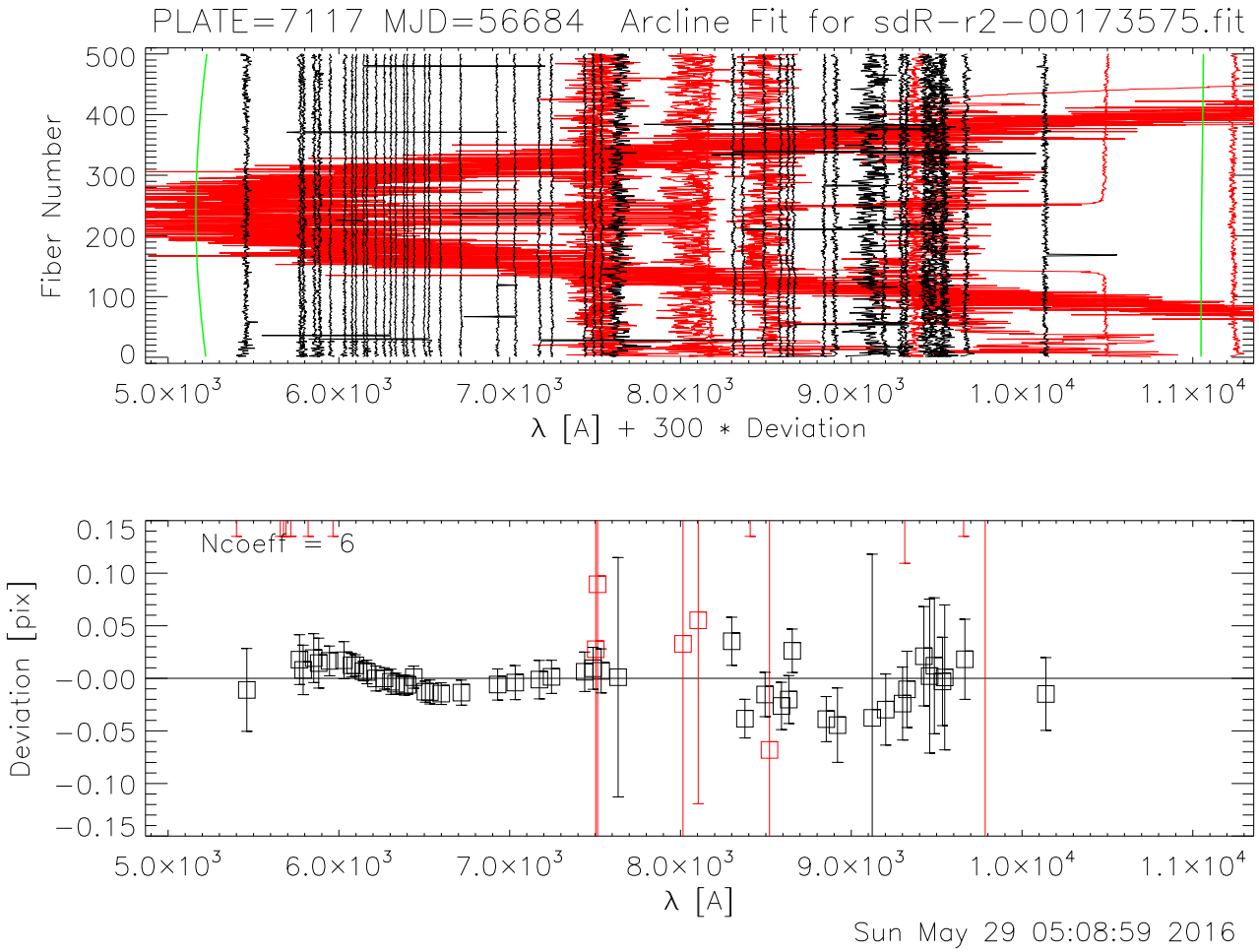

PLATE=7117 MJD=56684 sdR-r1-00173580.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 4.62 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

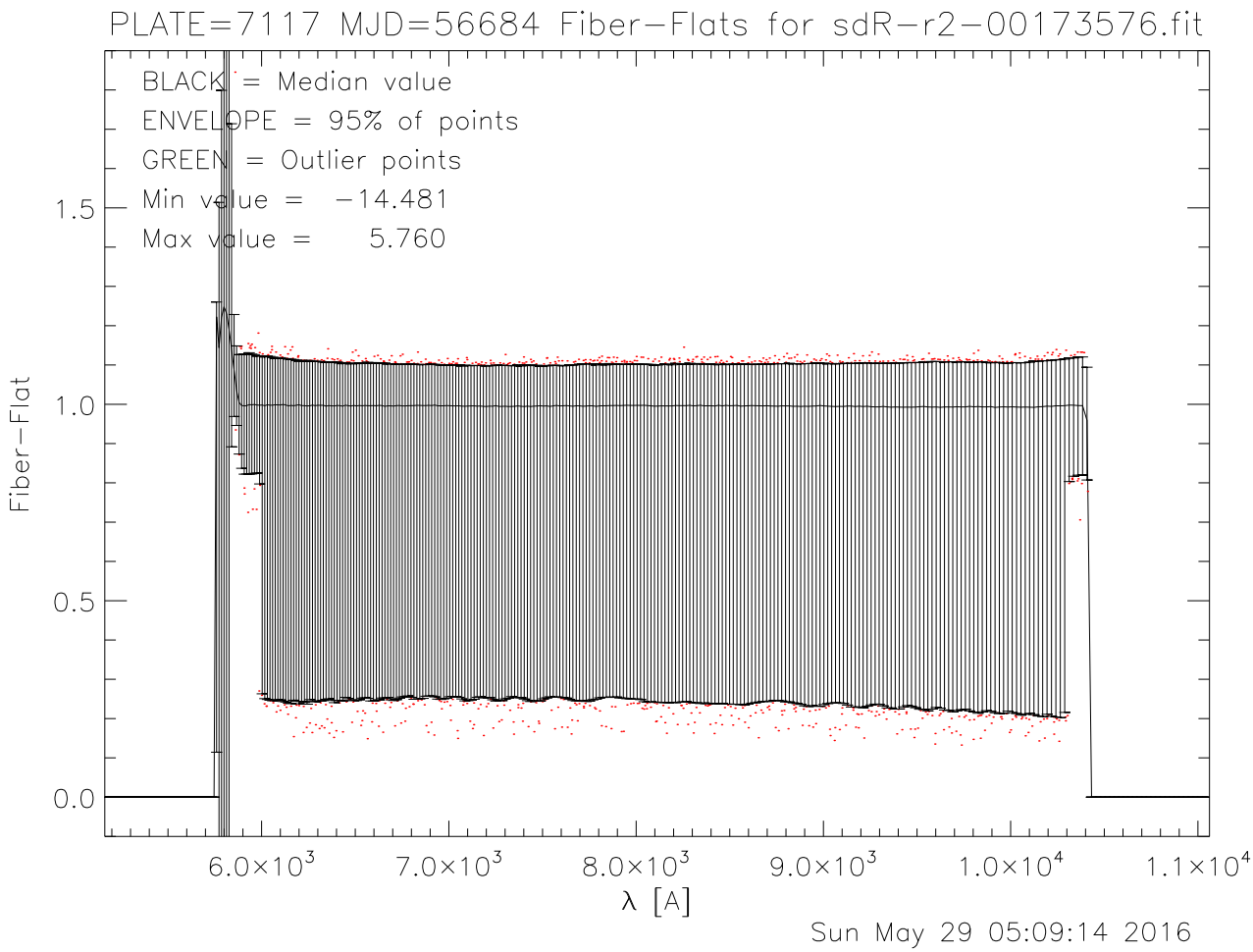
PLATE=7117 MJD=56684 Traces sdR-r2-00173576.fit

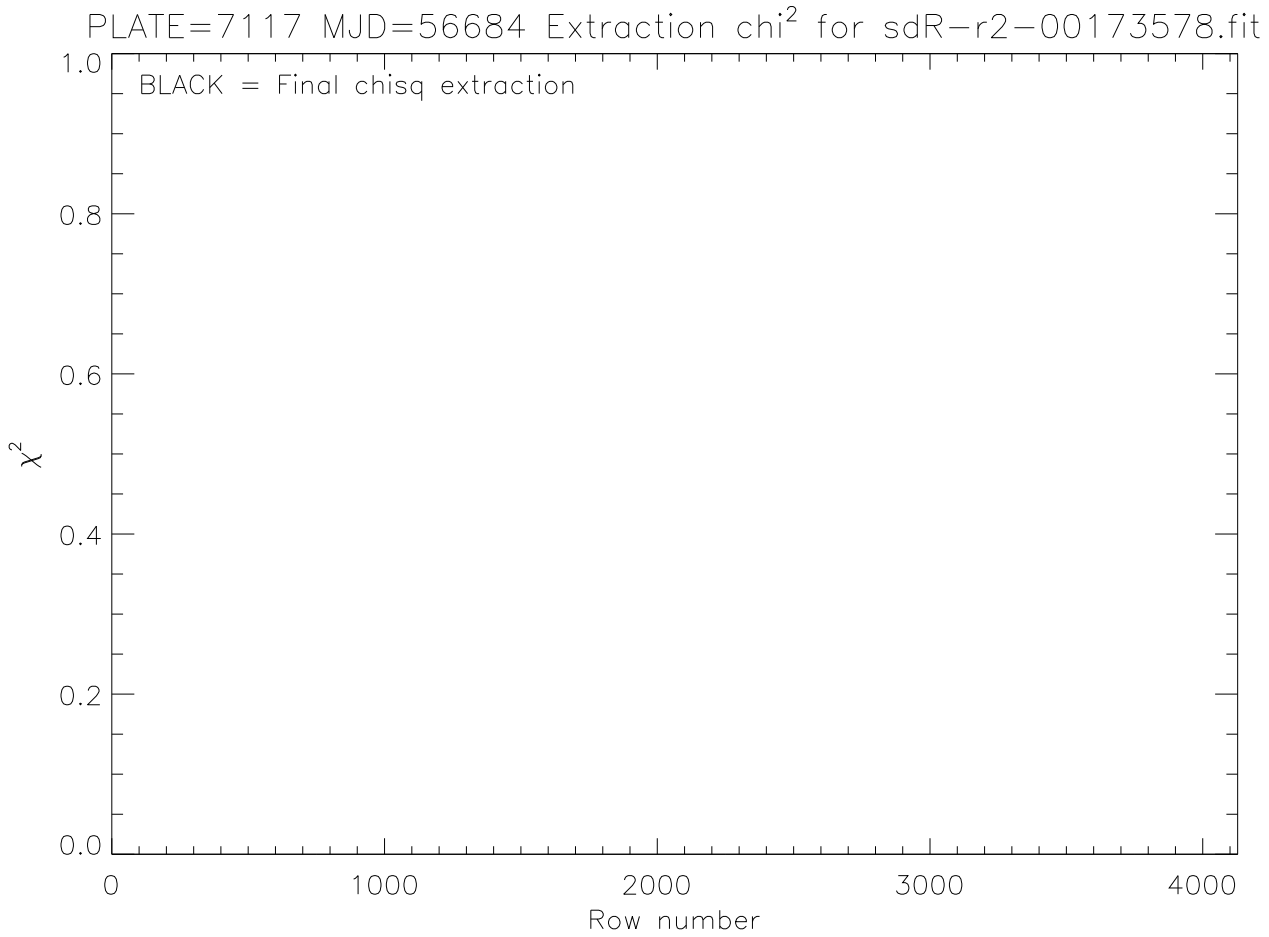


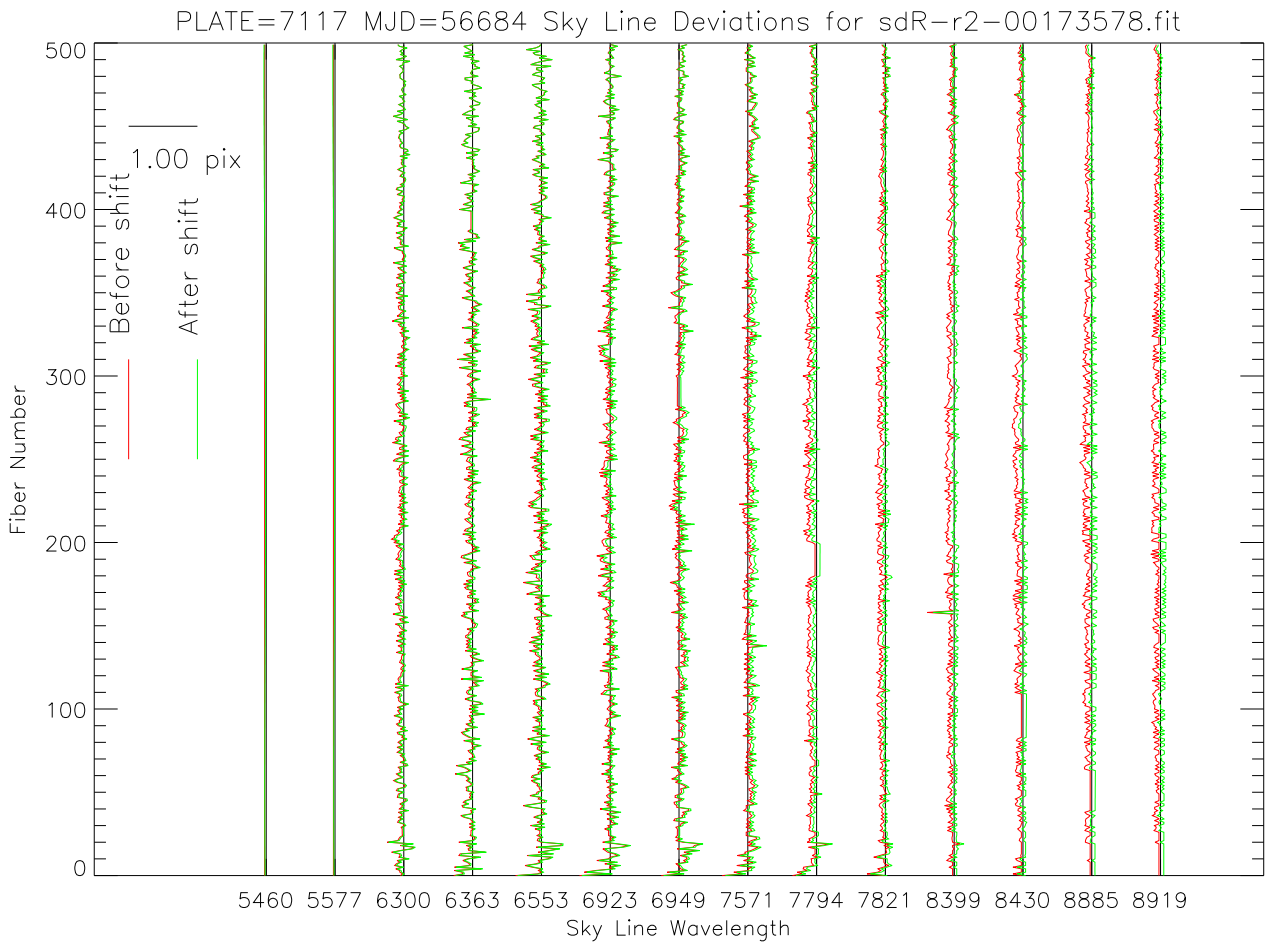

PLATE=7117 MJD=56684 flat extraction chi^2 for sdR-r2-00173576.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

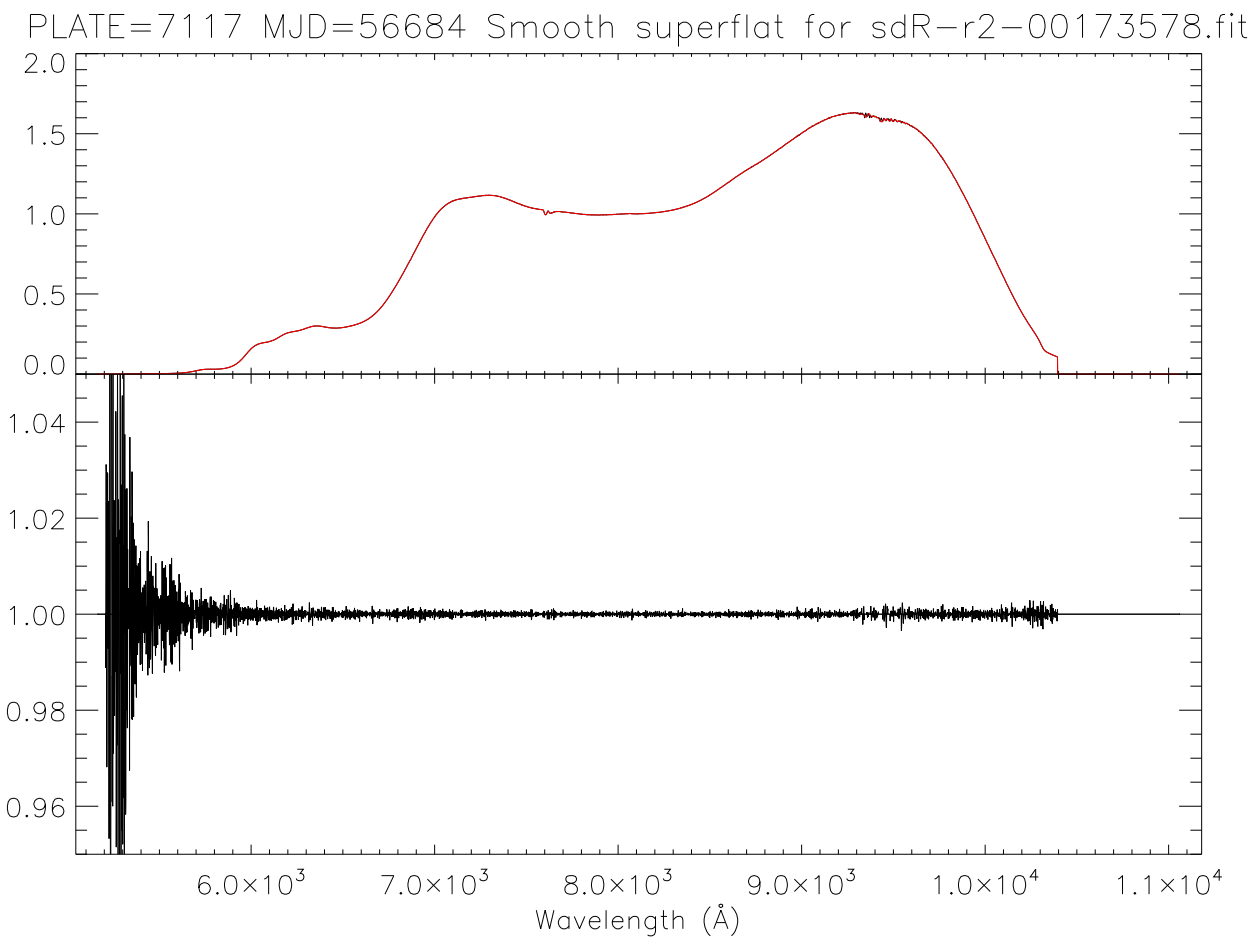

PLATE=7117 MJD=56684 Superflat sdR-r2-00173576.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

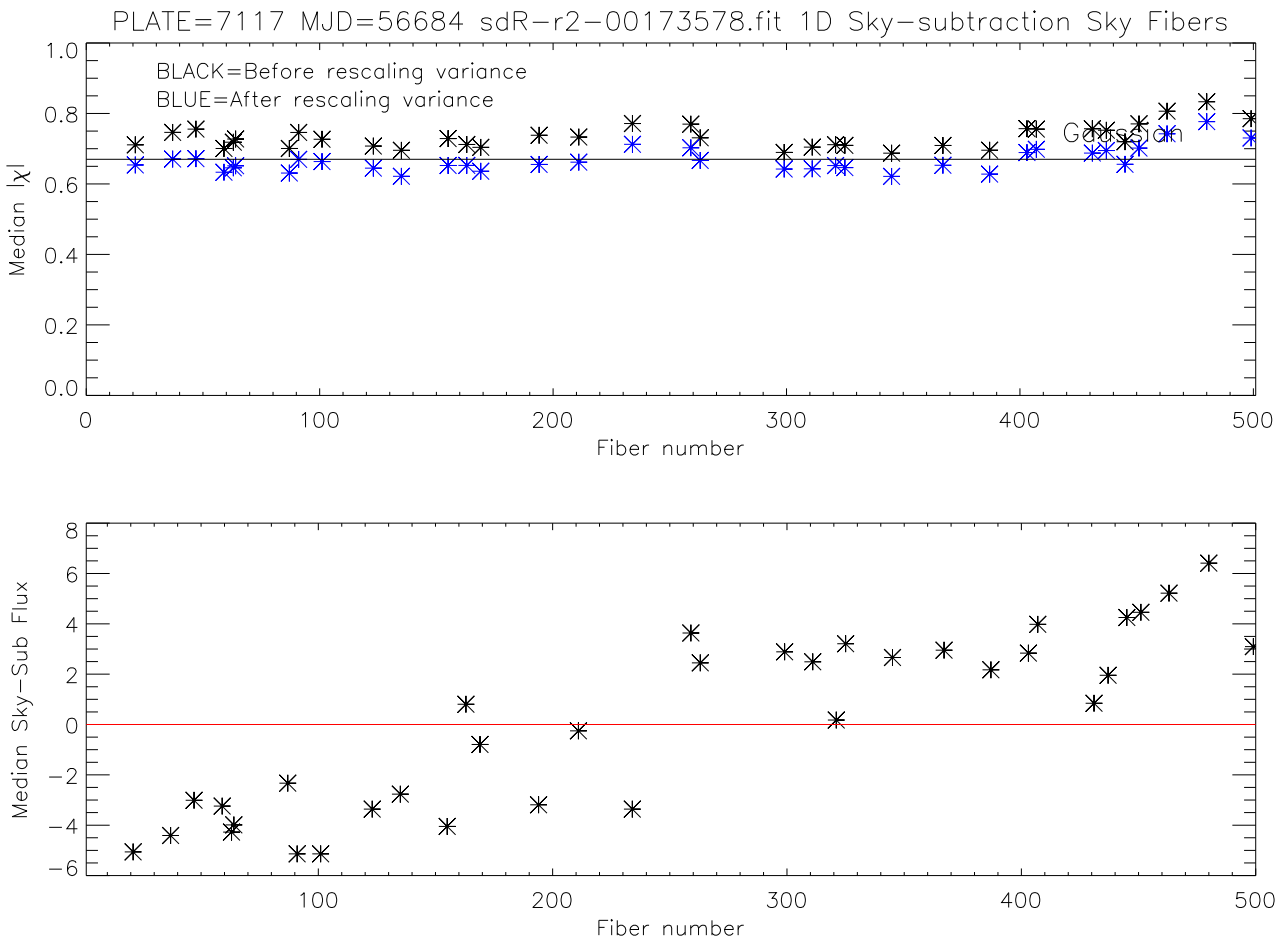

PLATE=7117 MJD=56684 Arcline Fit for sdR-r2-00173575.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sun May 29 05:08:59 2016

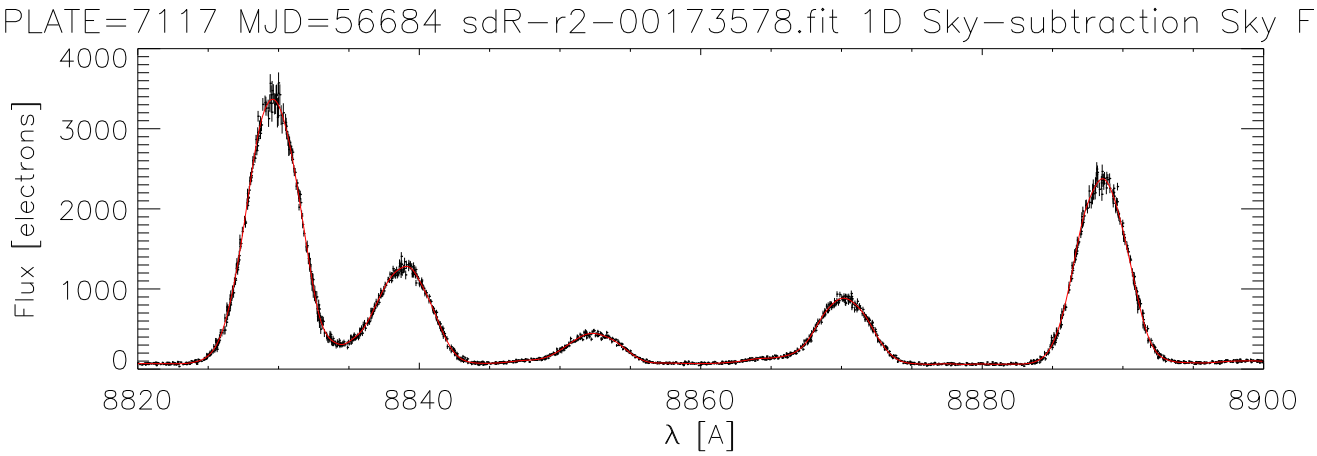

PLATE=7117 MJD=56684 Fiber−Flats for sdR−r2−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −14.481
Max value = 5.760
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:09:14 2016

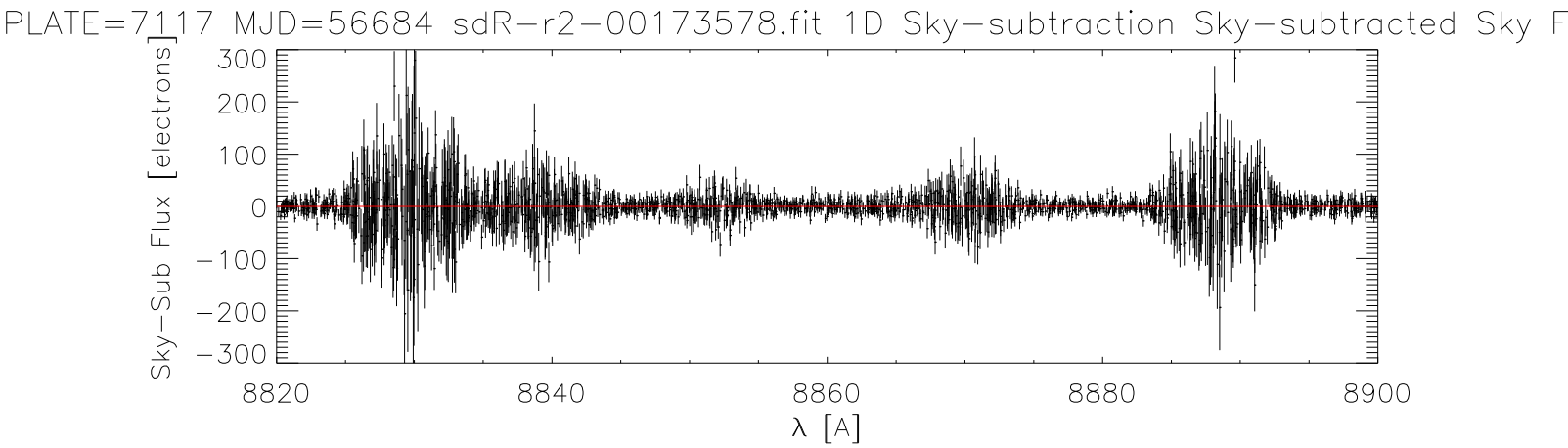

PLATE=7117 MJD=56684 Extraction chi^2 for sdR−r2−00173578.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-r2-00173578.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

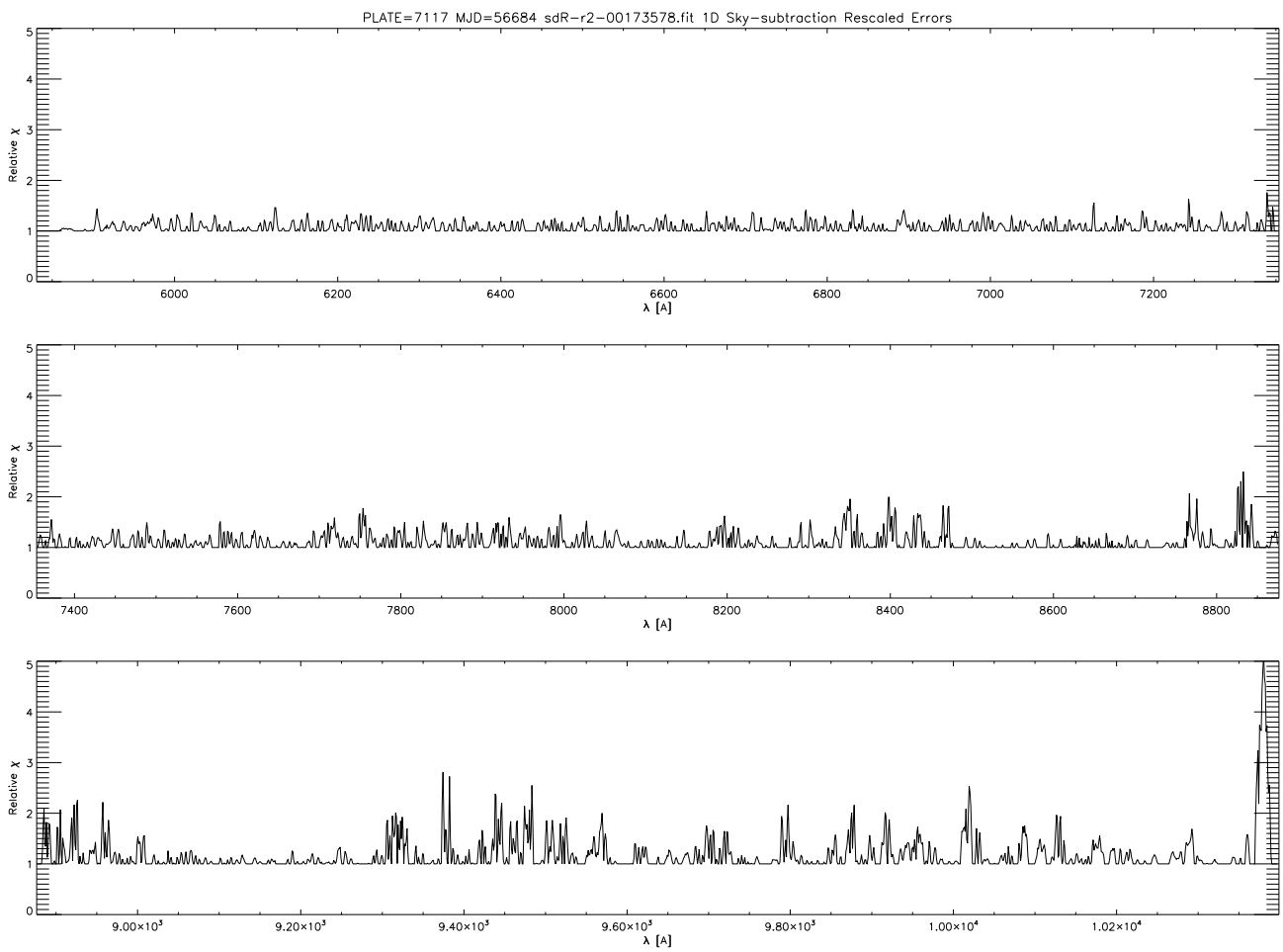

PLATE=7117 MJD=56684 Smooth superflat for sdR-r2-00173578.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

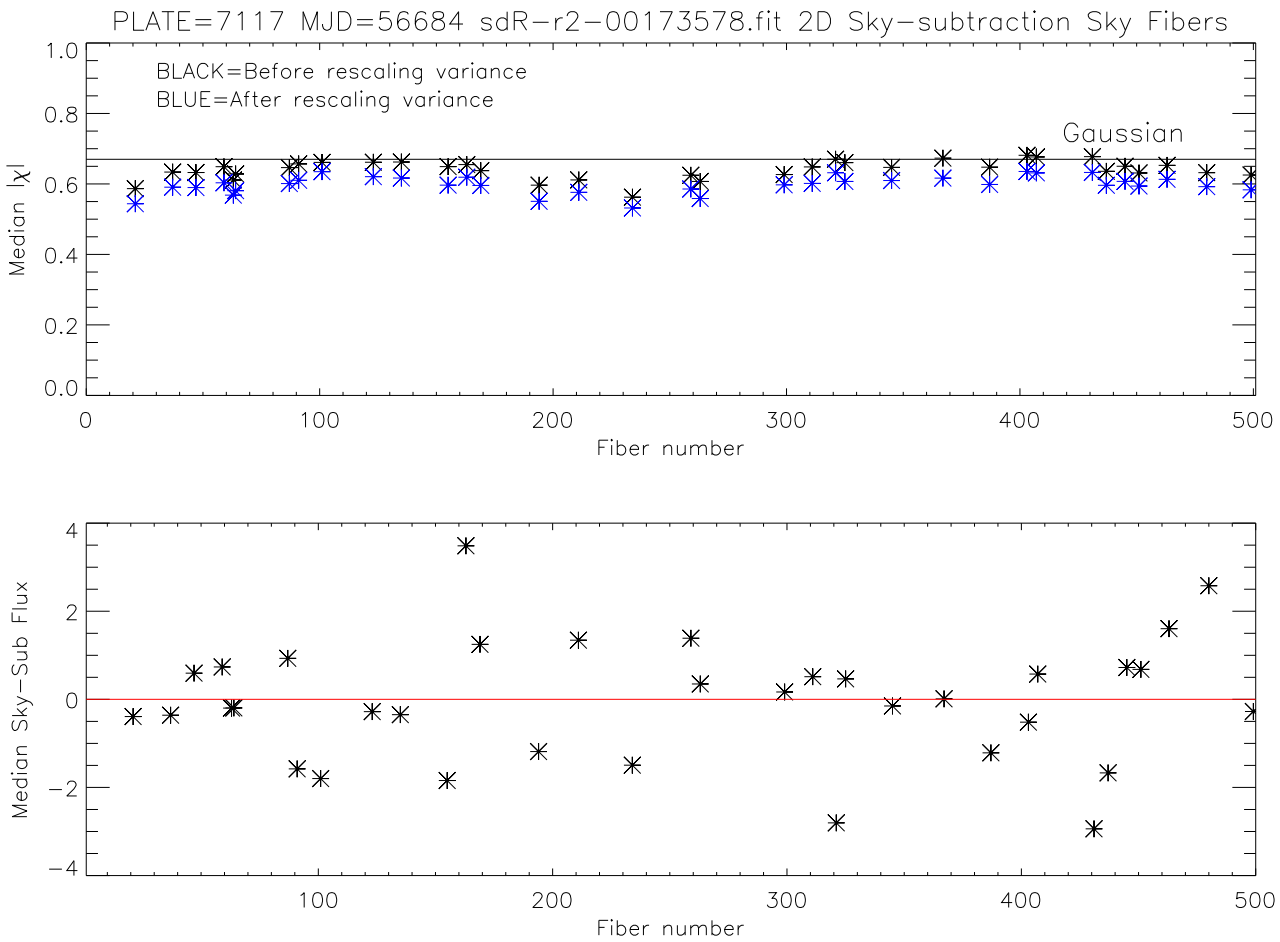

PLATE=7117 MJD=56684 sdR-r2-00173578.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

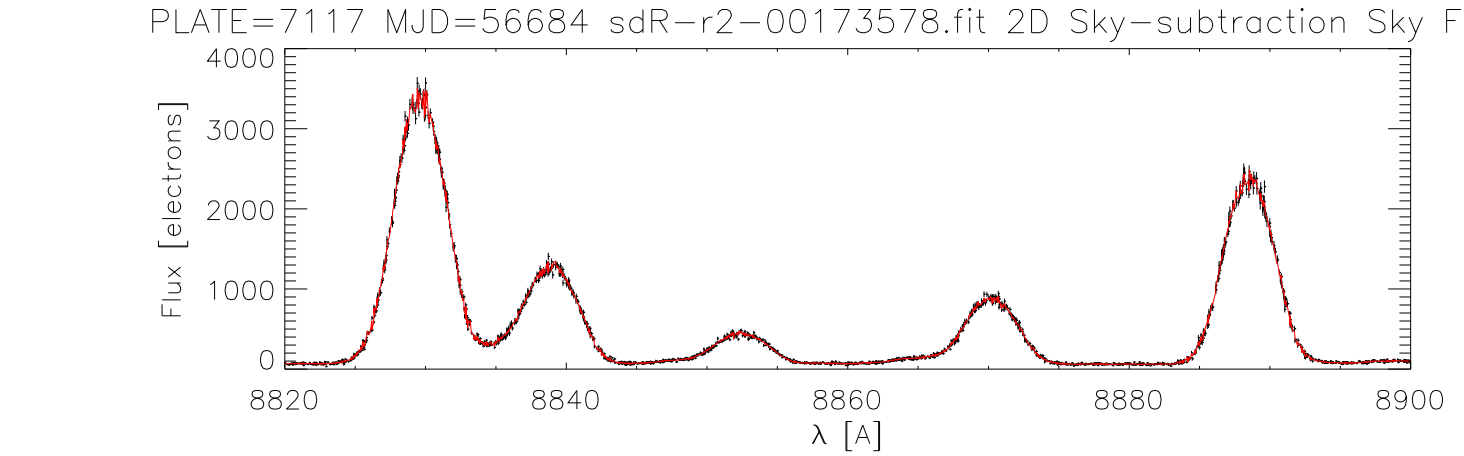

PLATE=7117 MJD=56684 sdR-r2-00173578.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

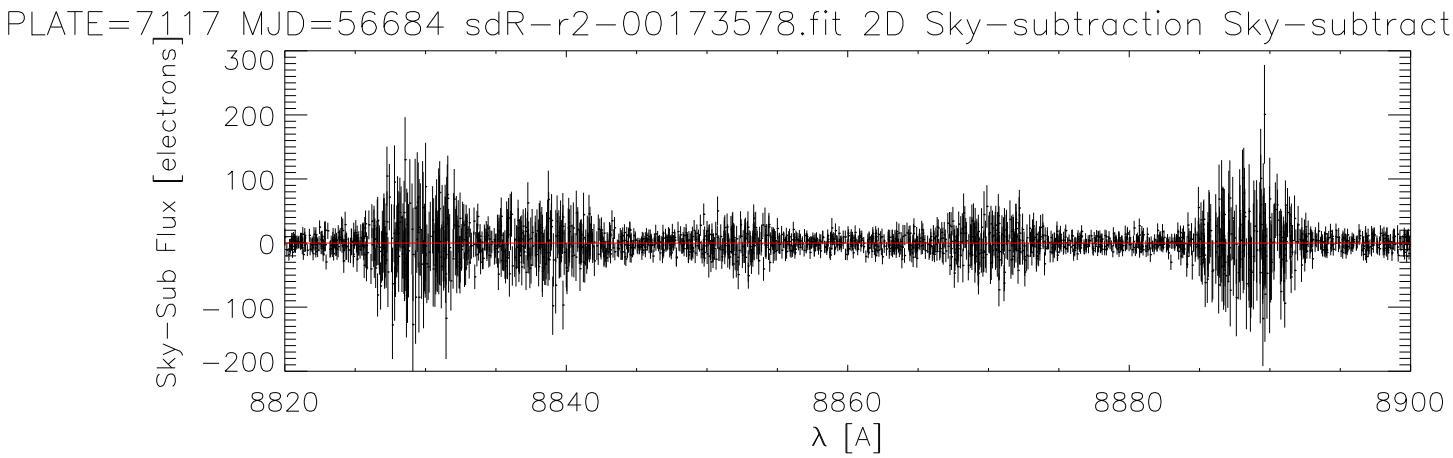

PLATE=7117 MJD=56684 sdR-r2-00173578.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 35

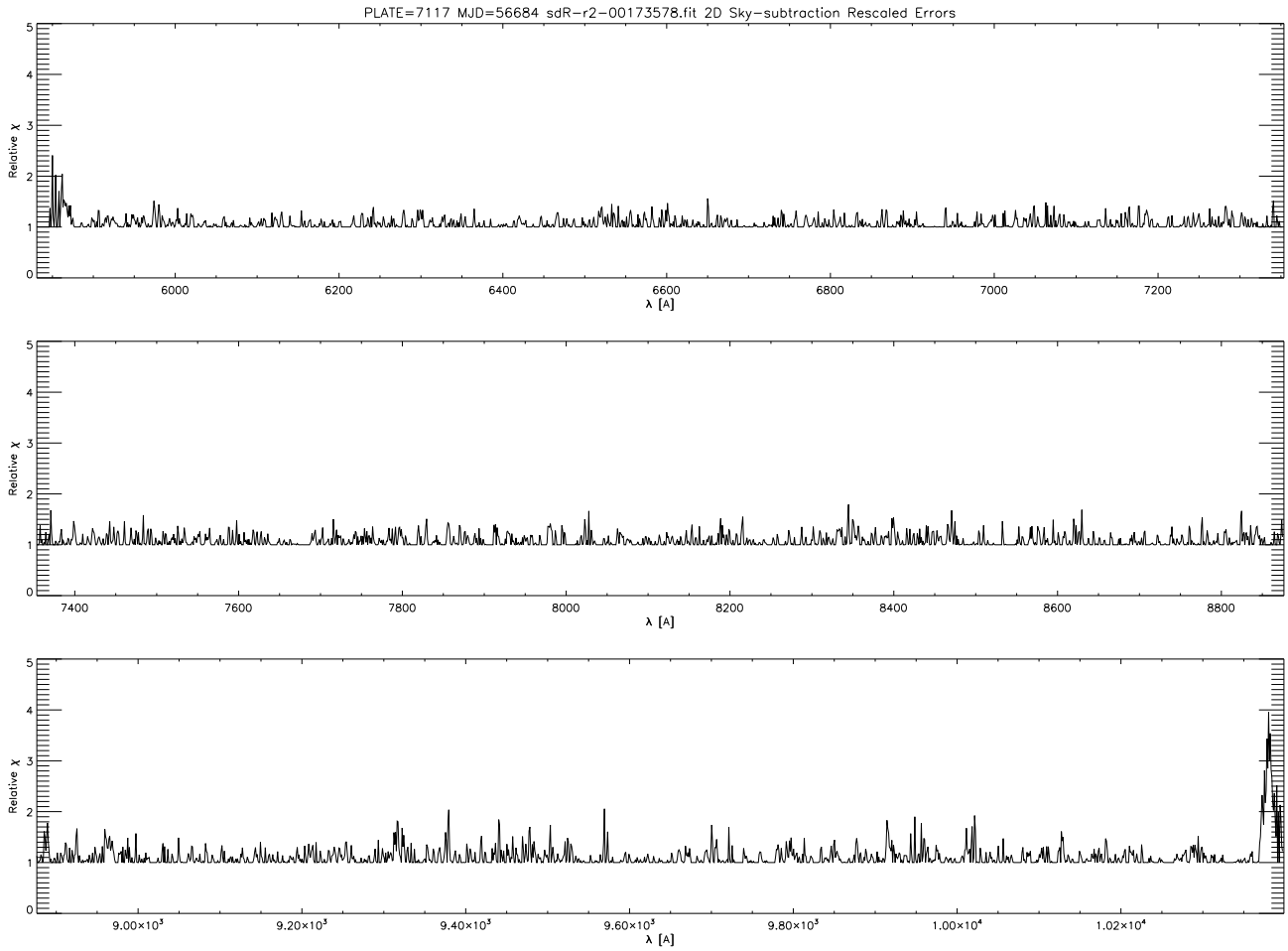


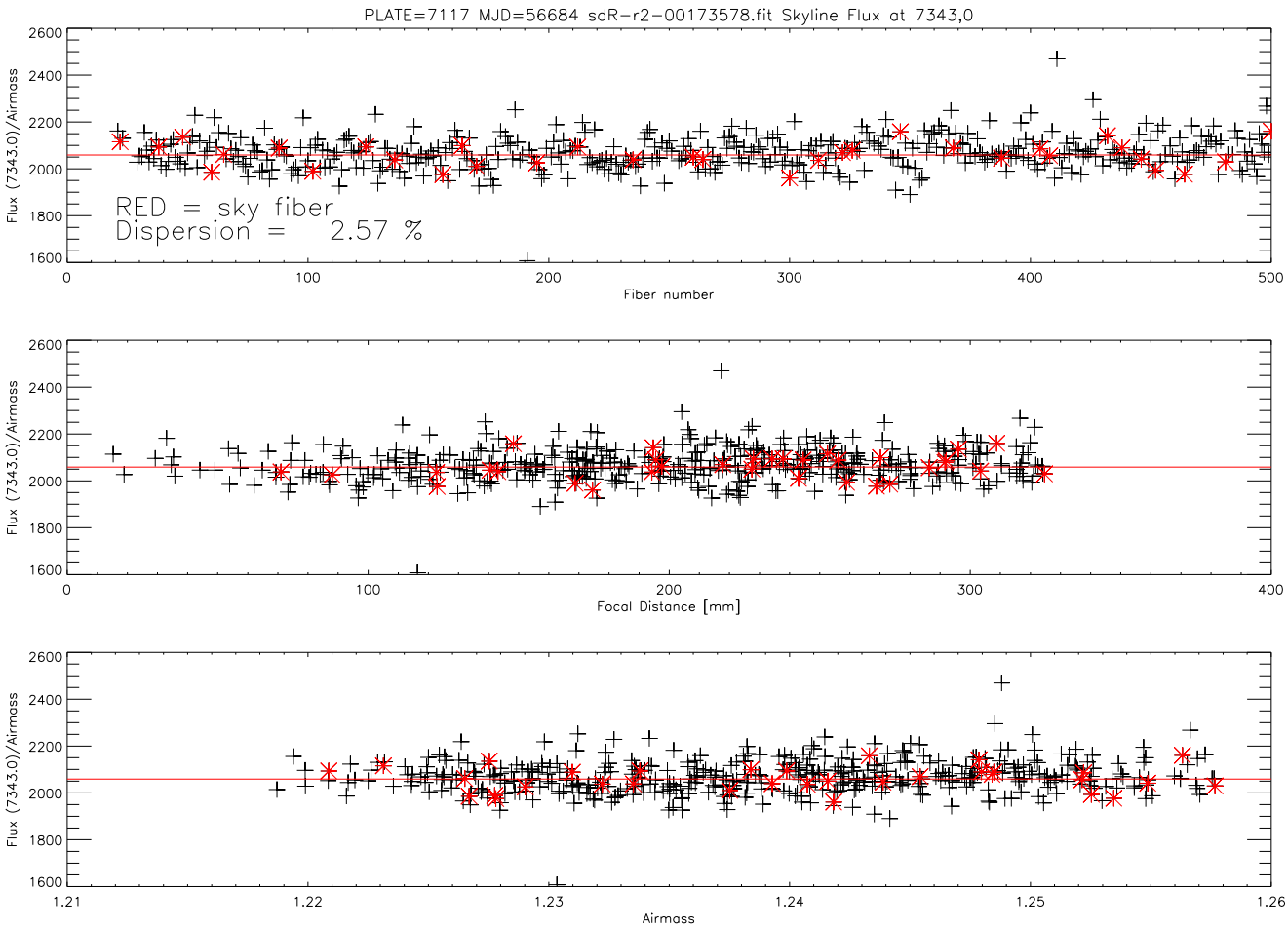

PLATE=7117 MJD=56684 sdR-r2-00173578.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

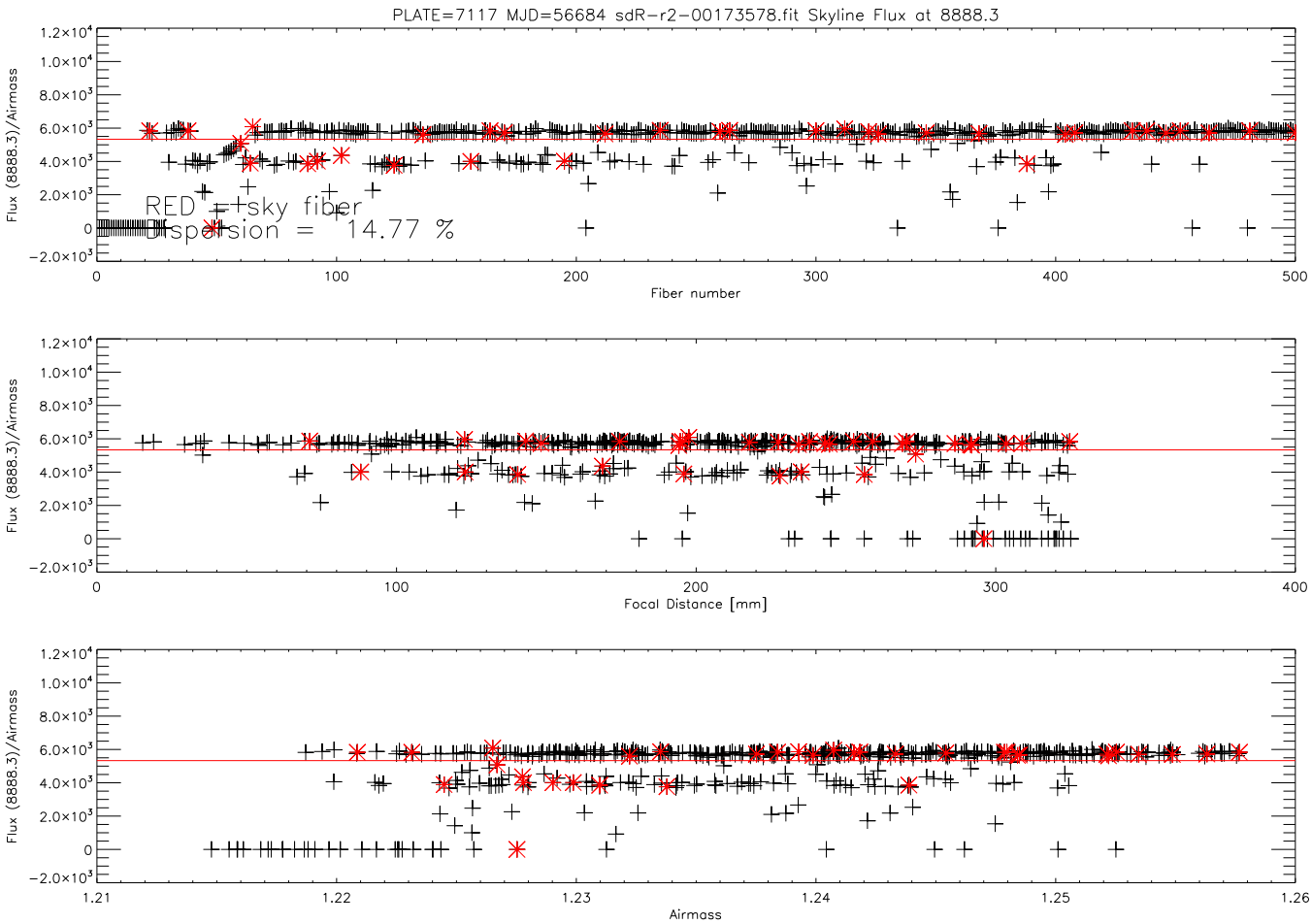

PLATE=7117 MJD=56684 sdR-r2-00173578.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

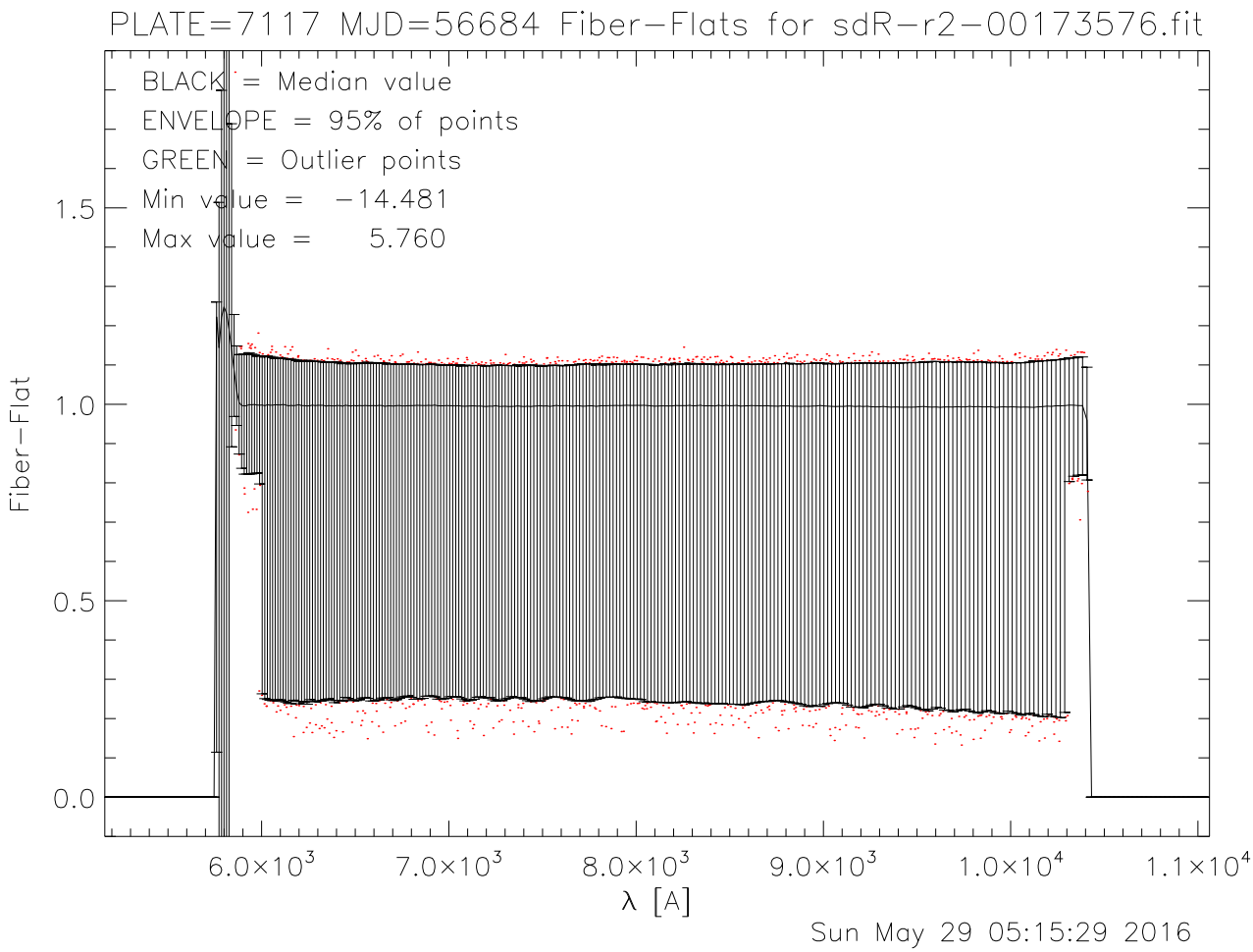

PLATE=7117 MJD=56684 sdR-r2-00173578.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

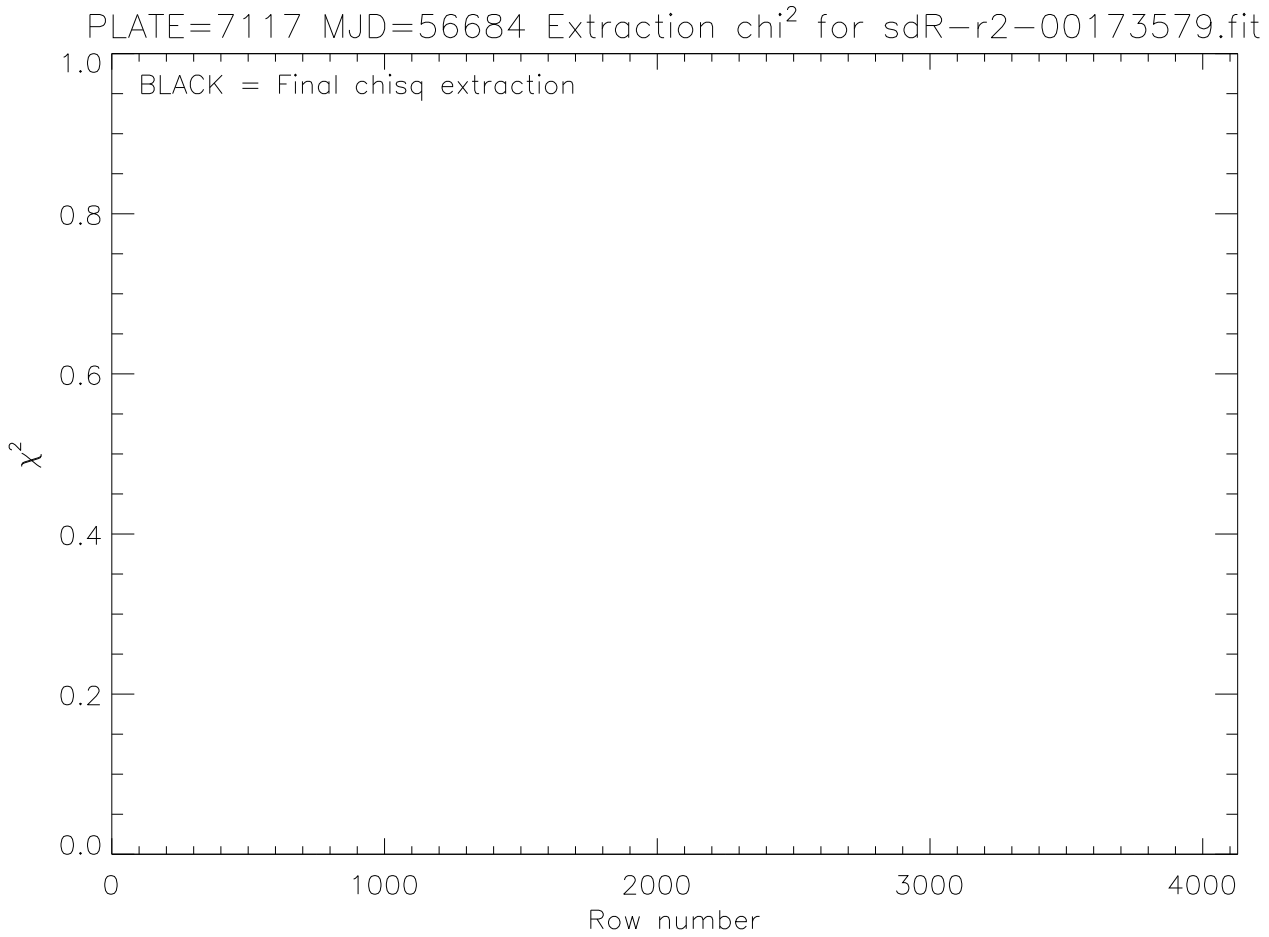
Number of sky fibers = 35

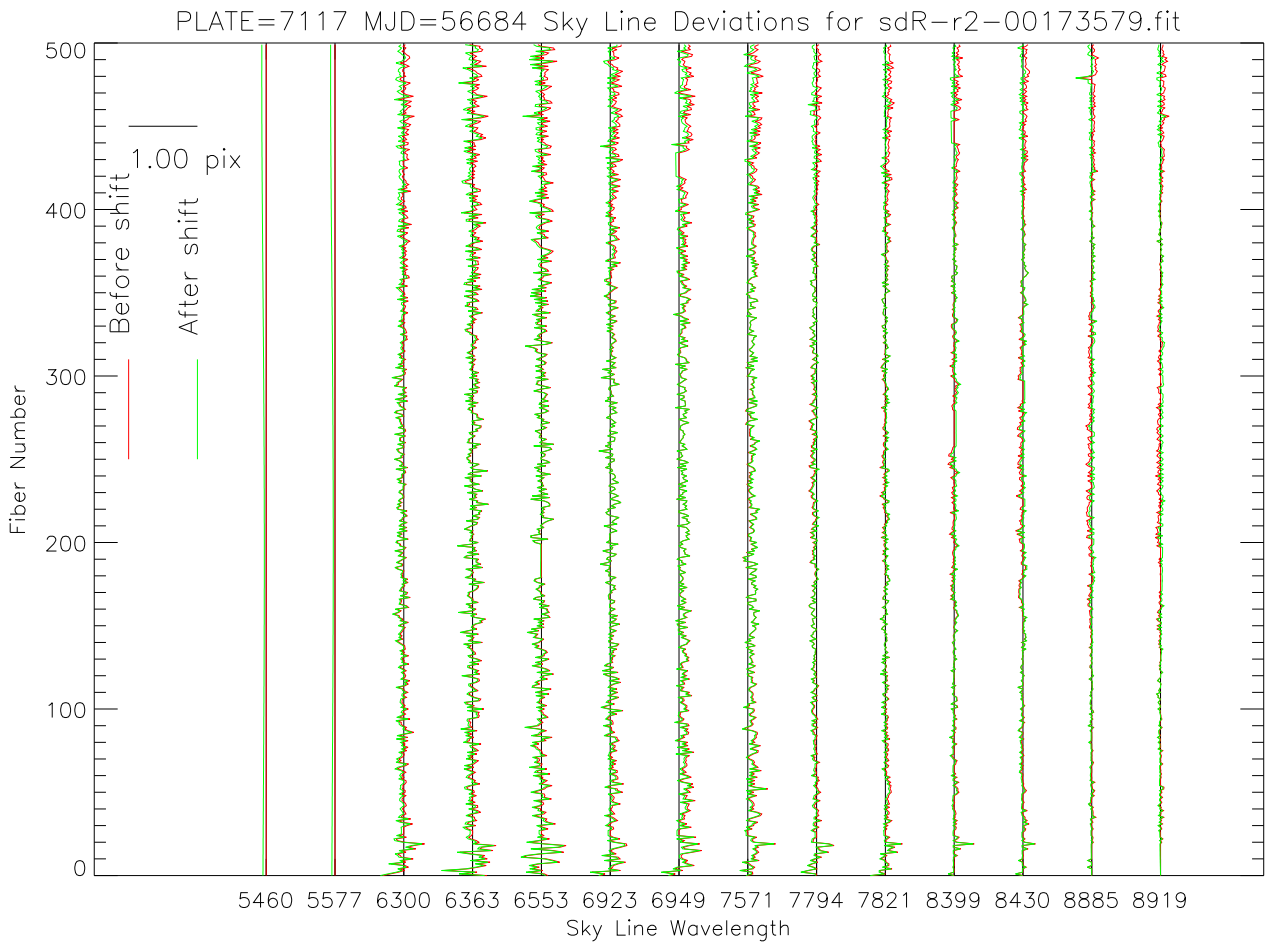


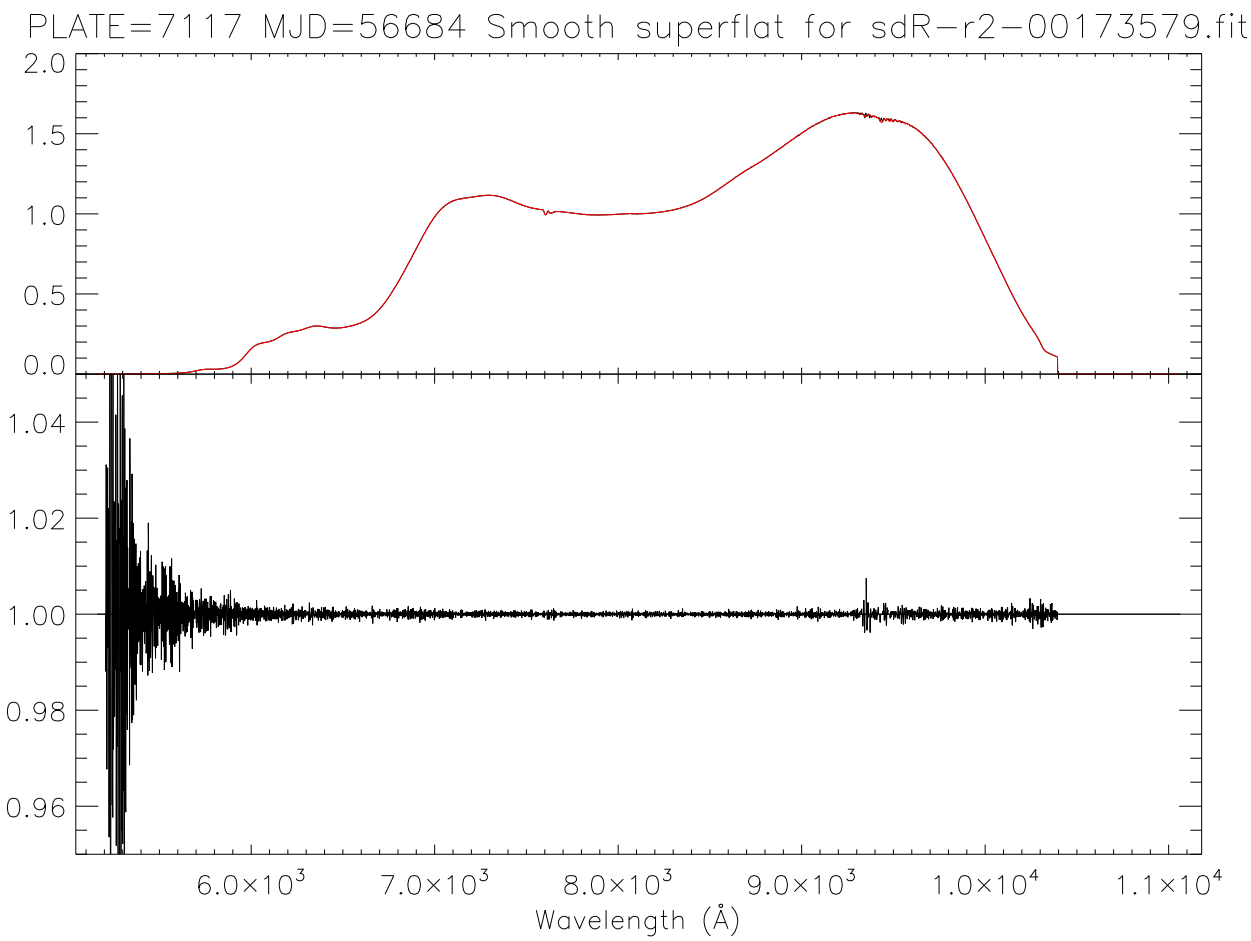

PLATE=7117 MJD=56684 sdR-r2-00173578.fit Skyline Flux at 7343.0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.57 %
Fiber number
Focal Distance [mm]
Airmass

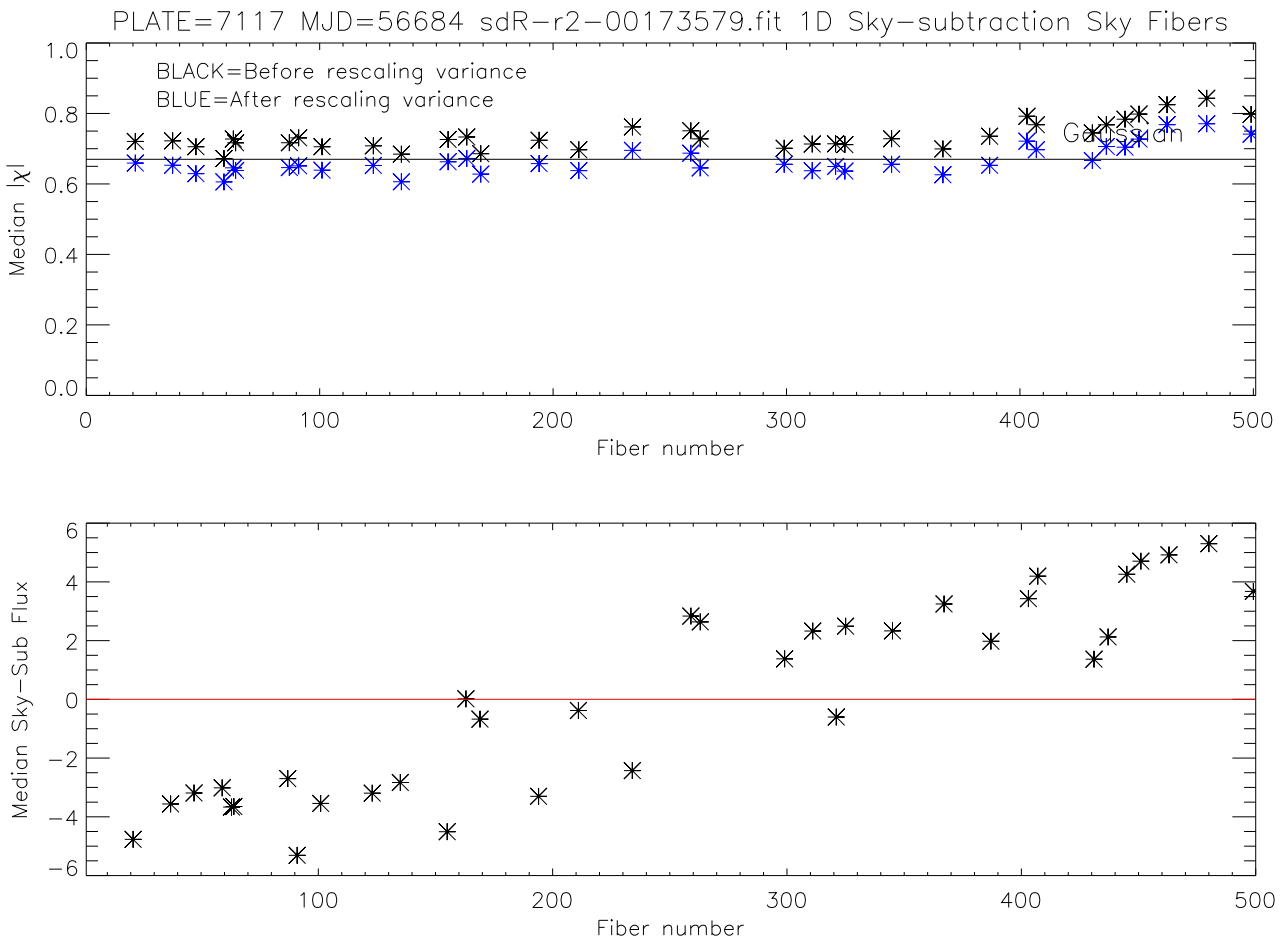

PLATE=7117 MJD=56684 sdR-r2-00173578.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 14.77 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

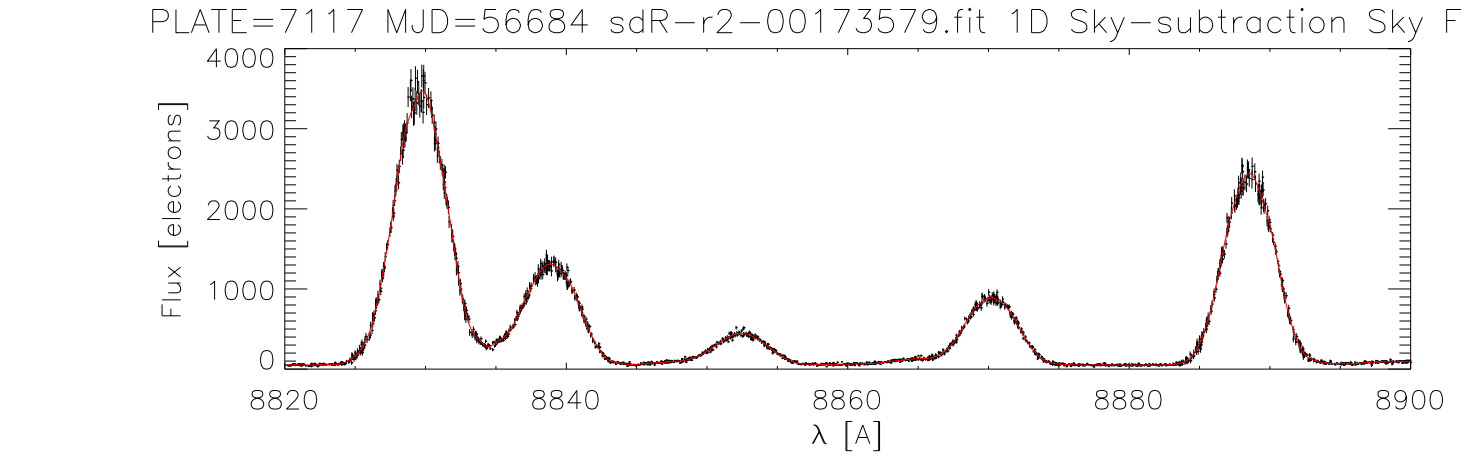

PLATE=7117 MJD=56684 Fiber−Flats for sdR−r2−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −14.481
Max value = 5.760
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:15:29 2016

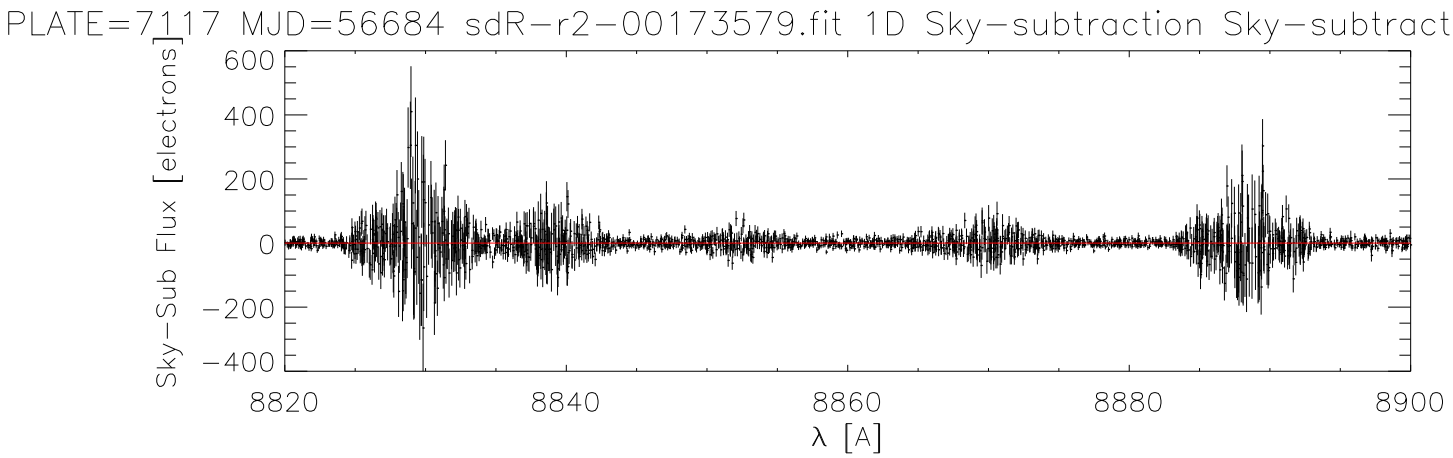

PLATE=7117 MJD=56684 Extraction chi^2 for sdR−r2−00173579.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-r2-00173579.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

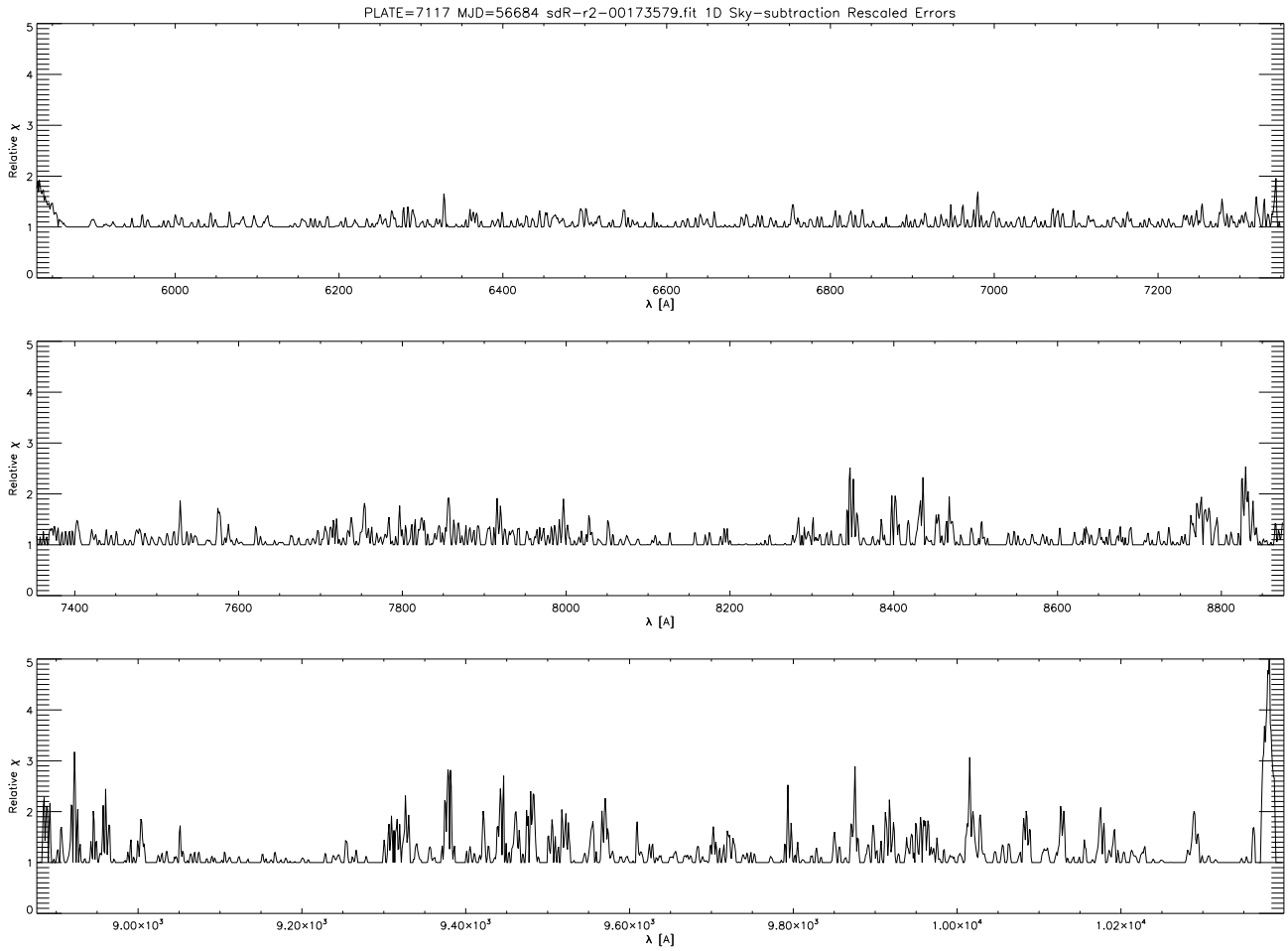

PLATE=7117 MJD=56684 Smooth superflat for sdR-r2-00173579.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

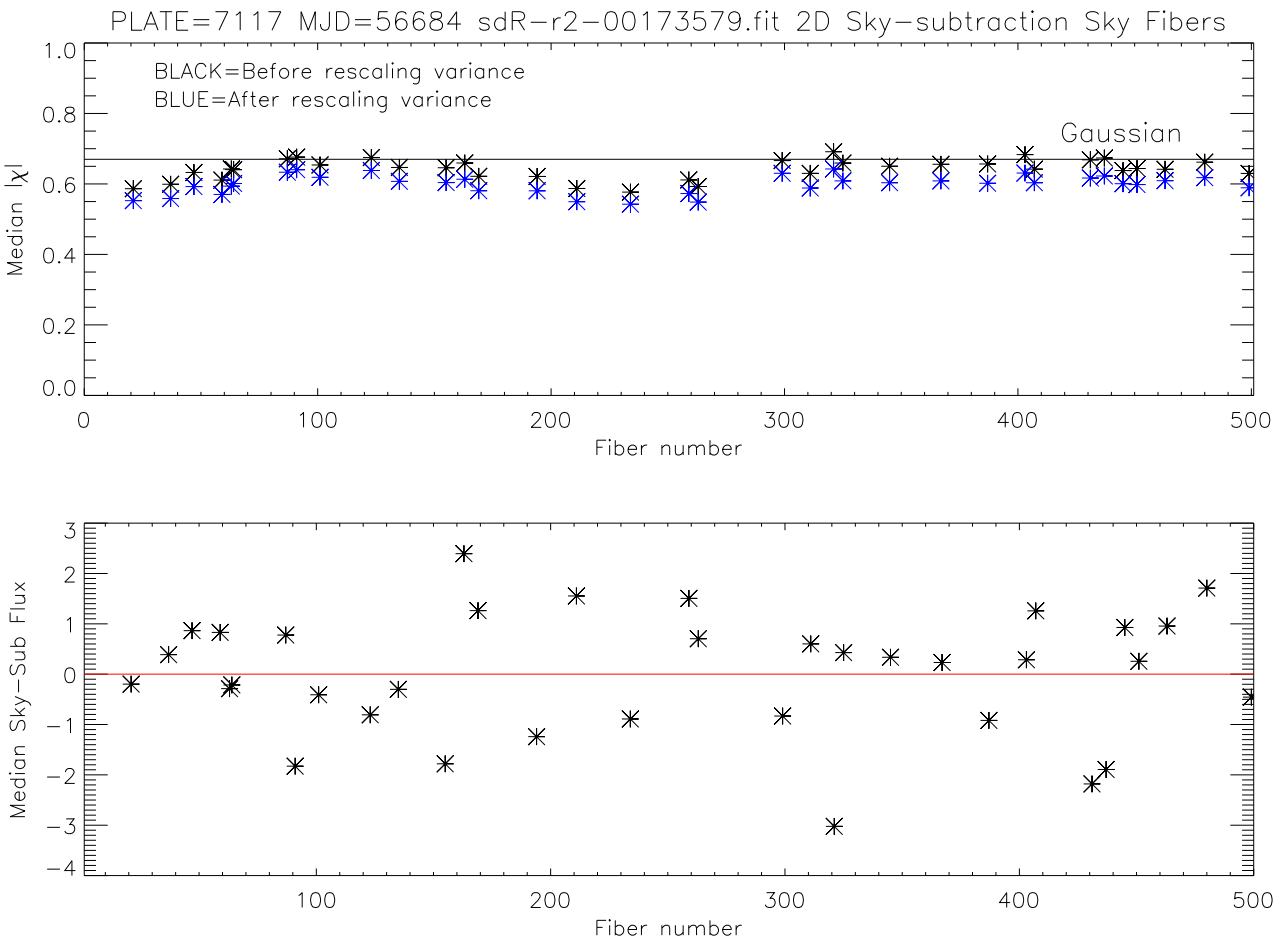

PLATE=7117 MJD=56684 sdR-r2-00173579.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

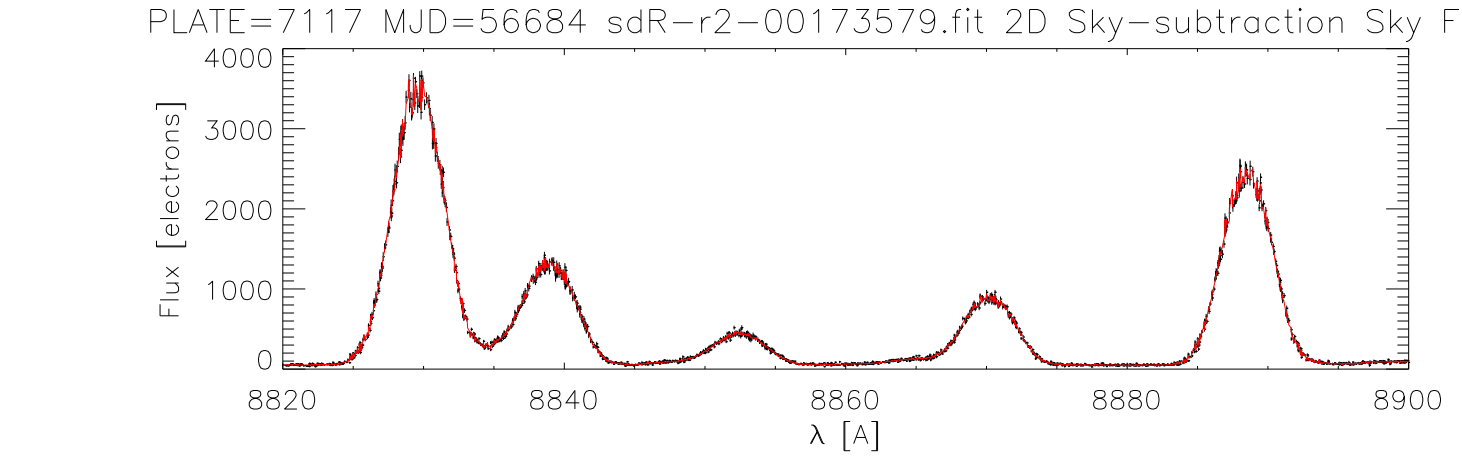

PLATE=7117 MJD=56684 sdR-r2-00173579.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

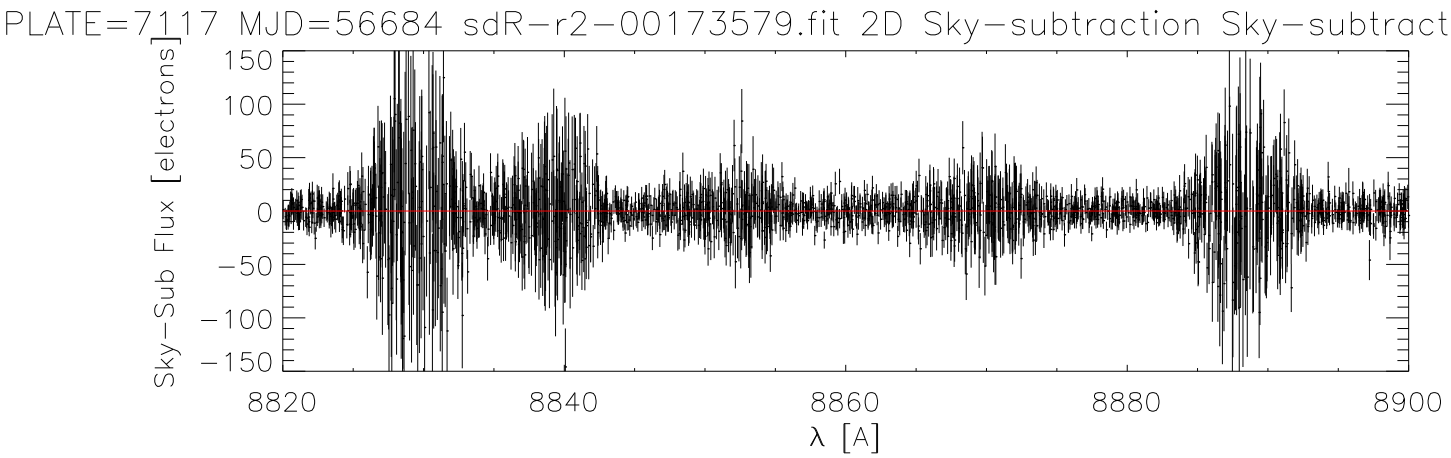

PLATE=7117 MJD=56684 sdR-r2-00173579.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 35

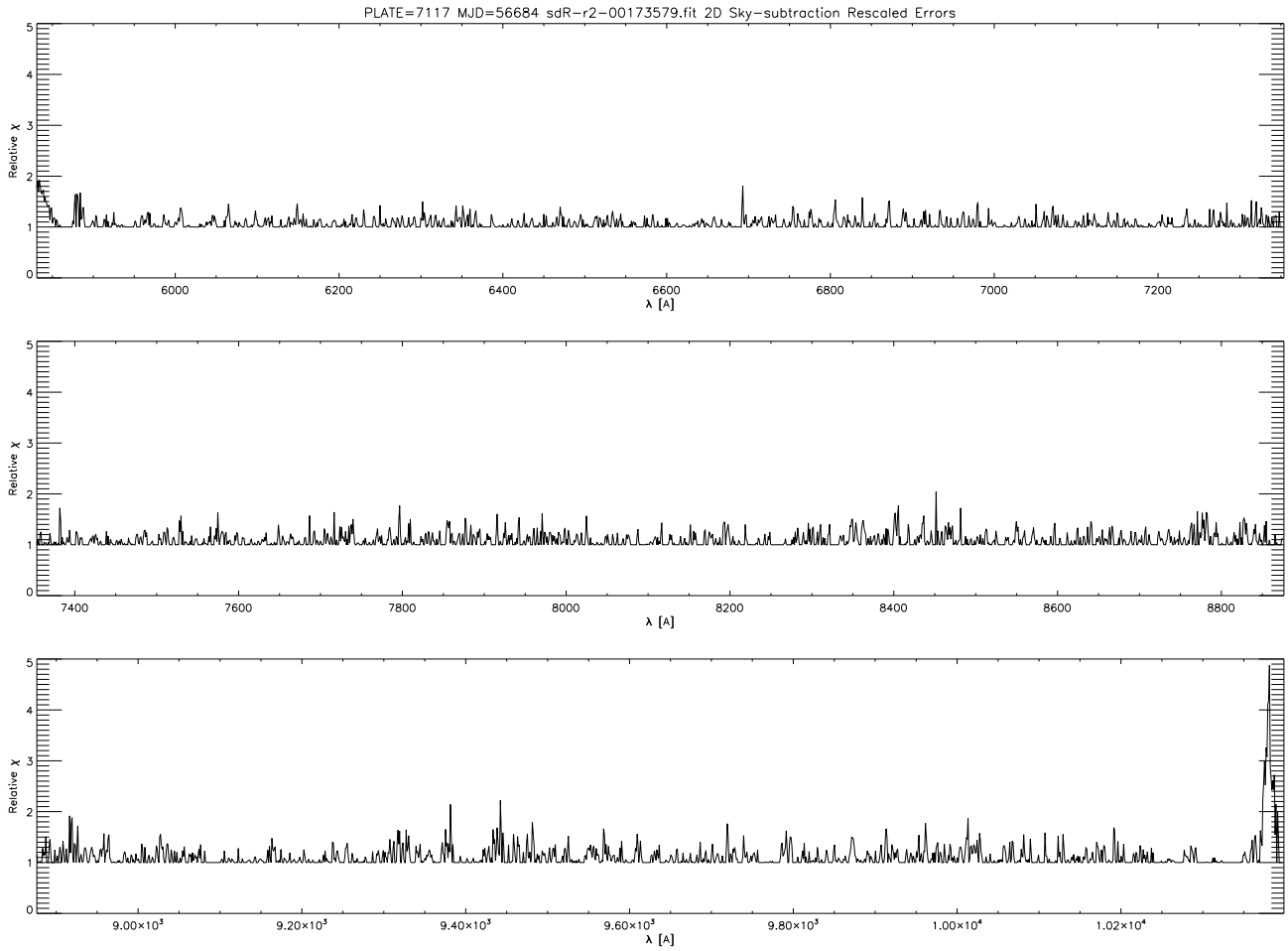


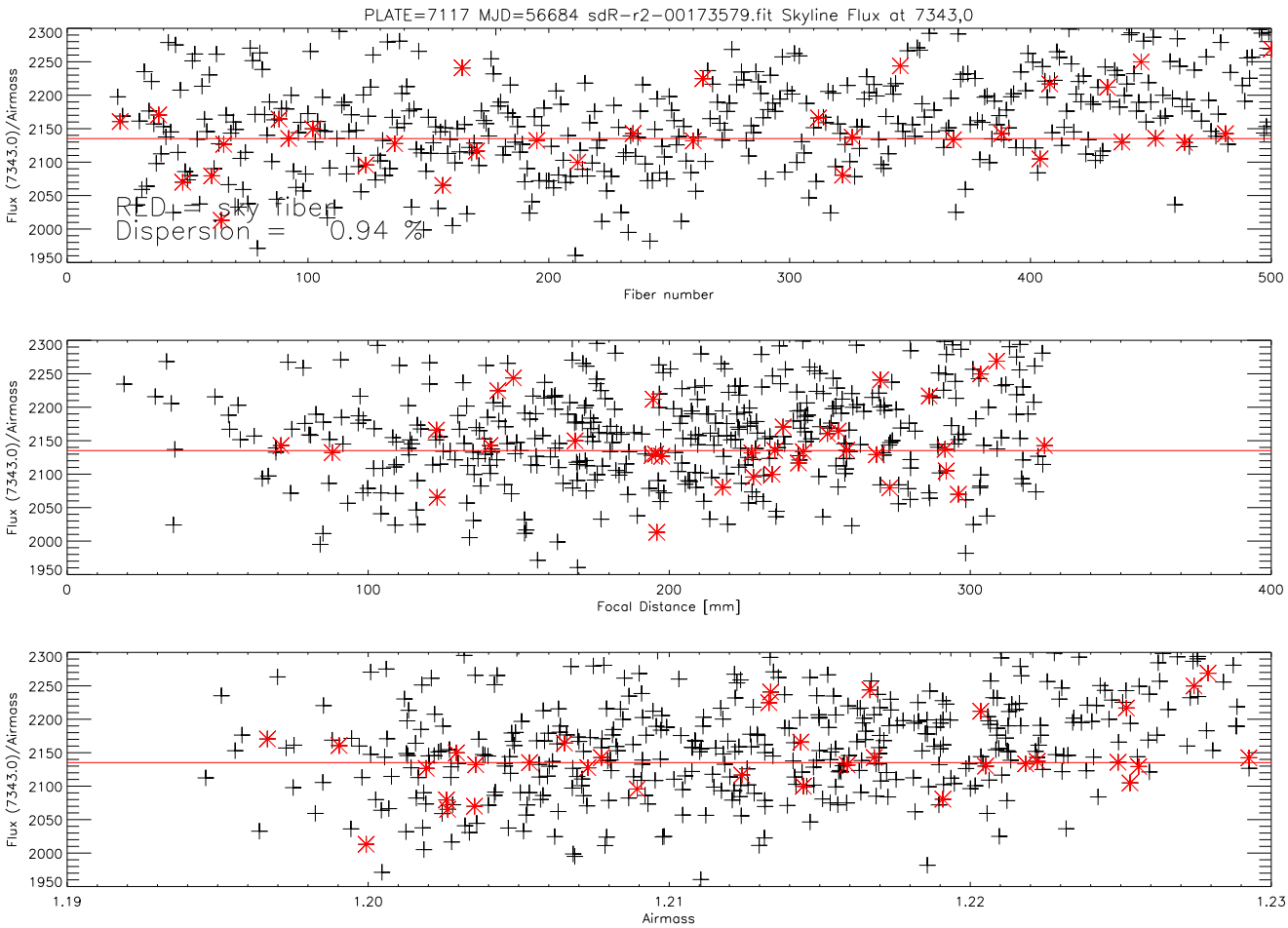

PLATE=7117 MJD=56684 sdR-r2-00173579.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

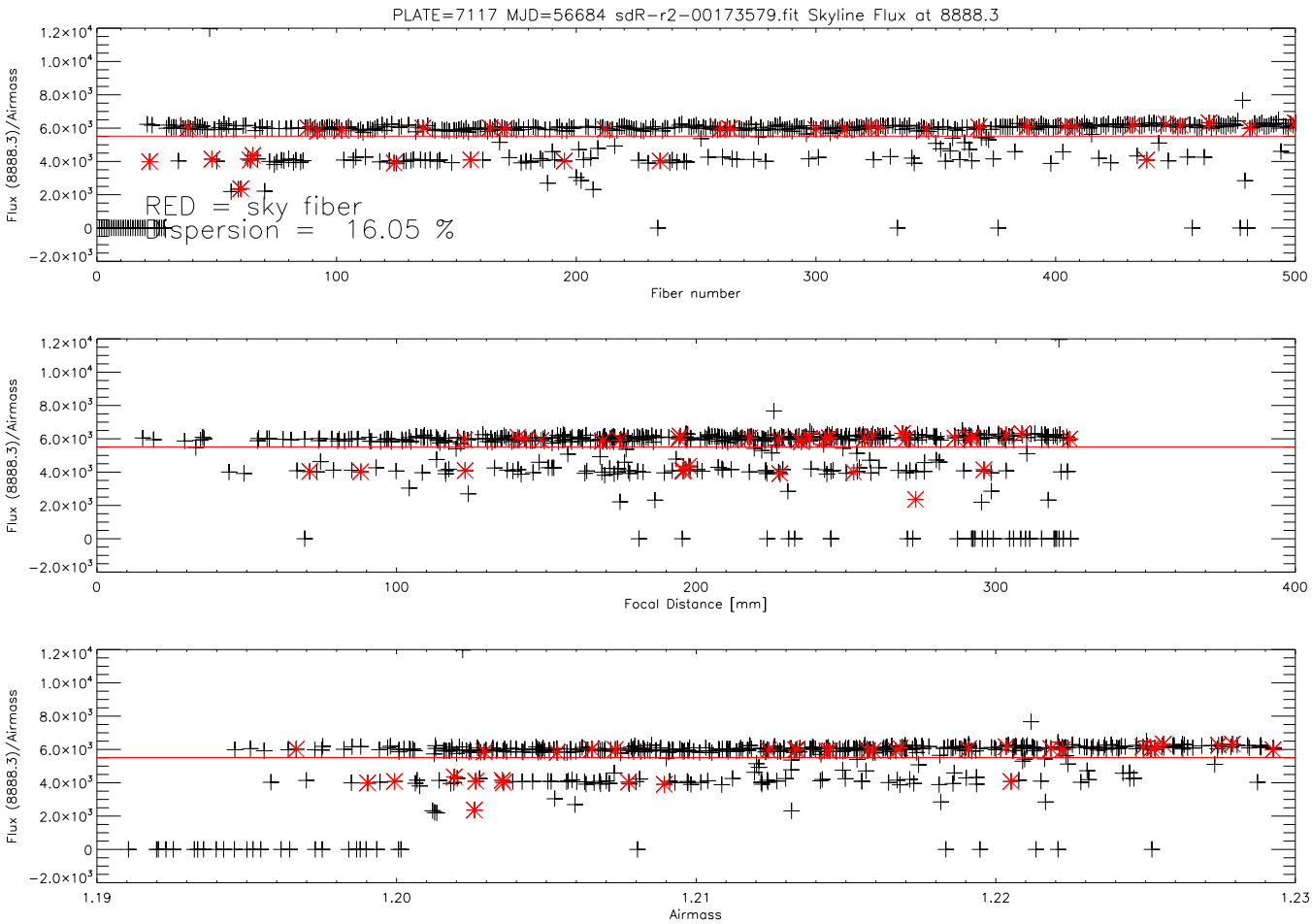

PLATE=7117 MJD=56684 sdR-r2-00173579.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

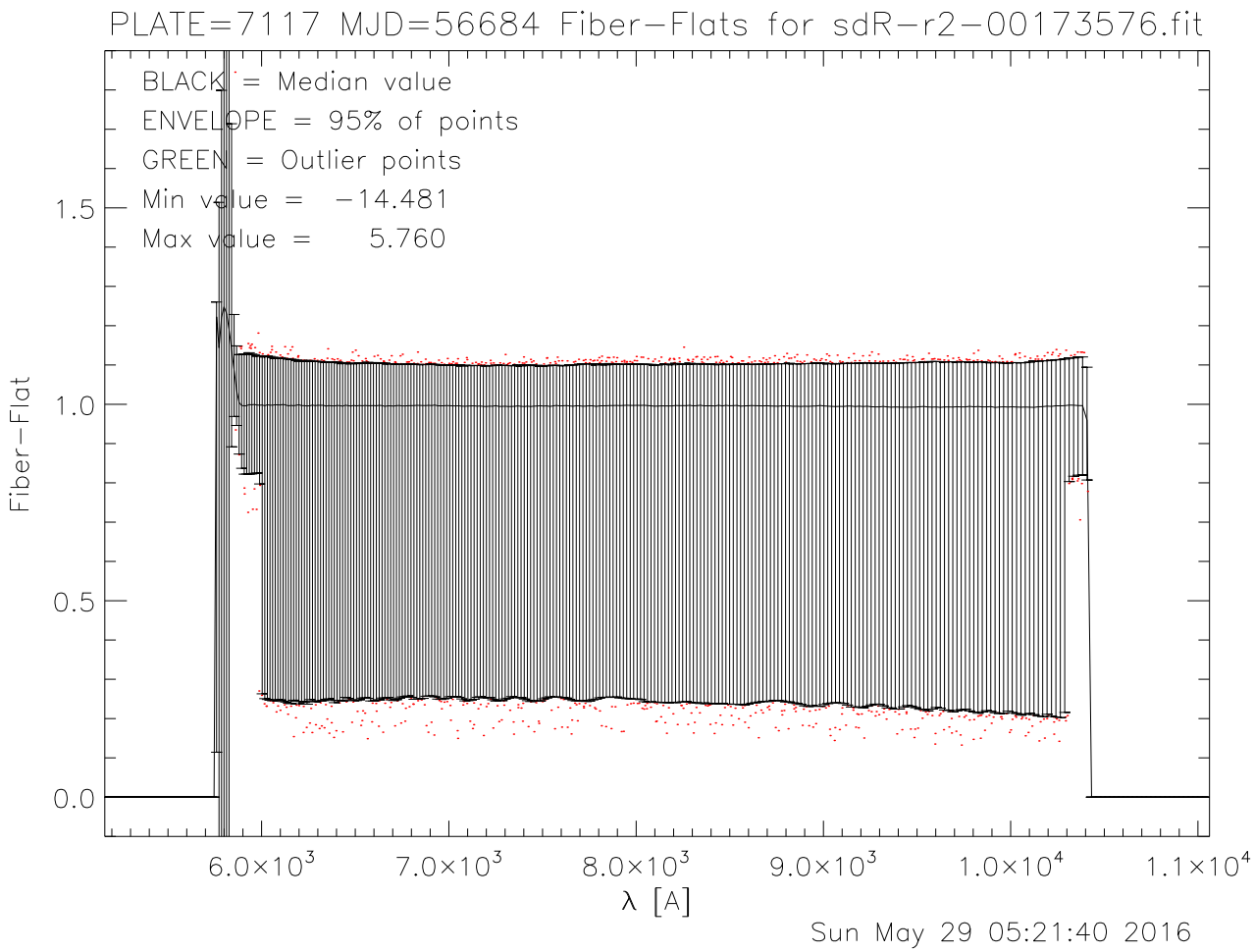

PLATE=7117 MJD=56684 sdR-r2-00173579.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

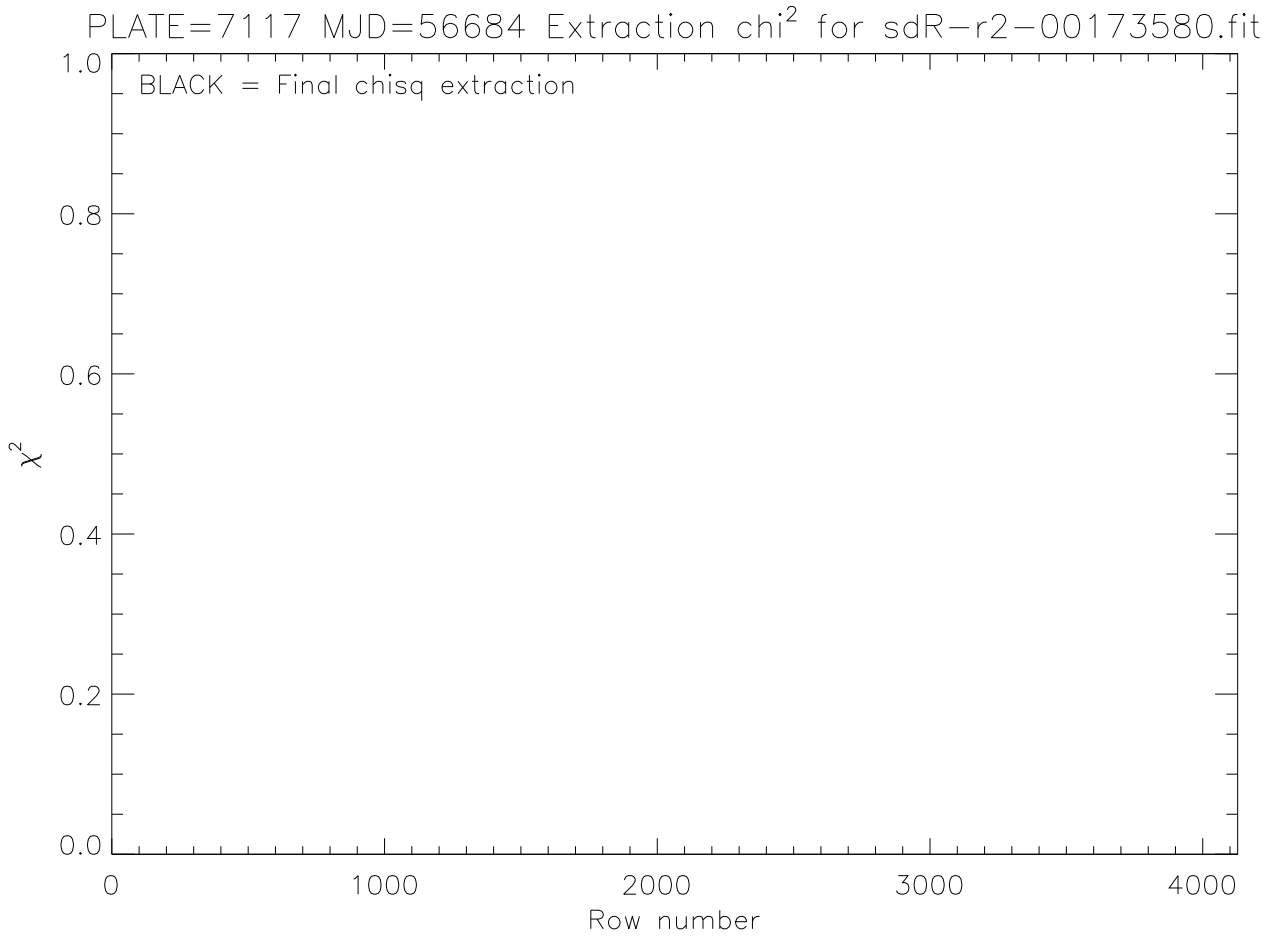
Number of sky fibers = 35

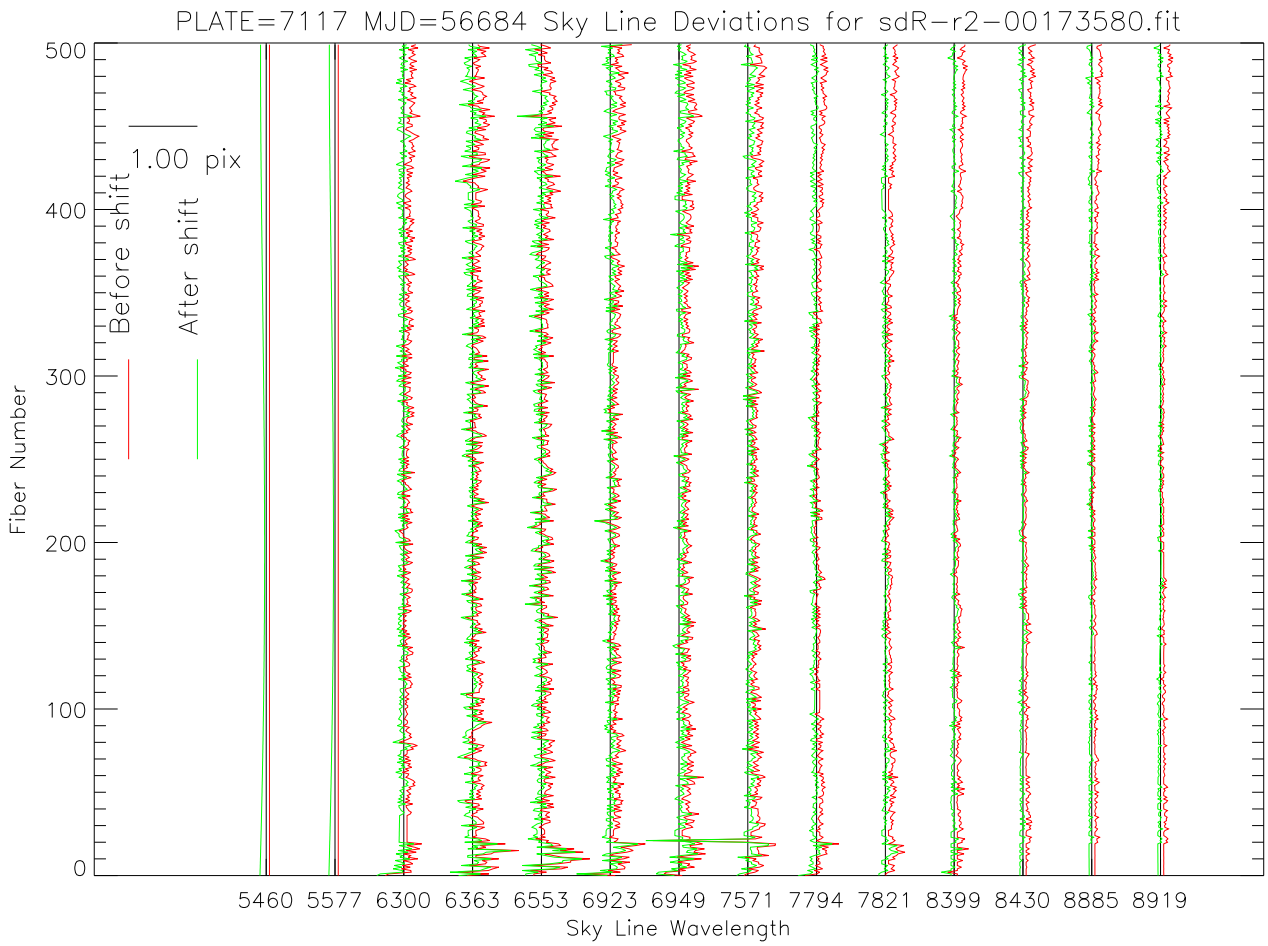


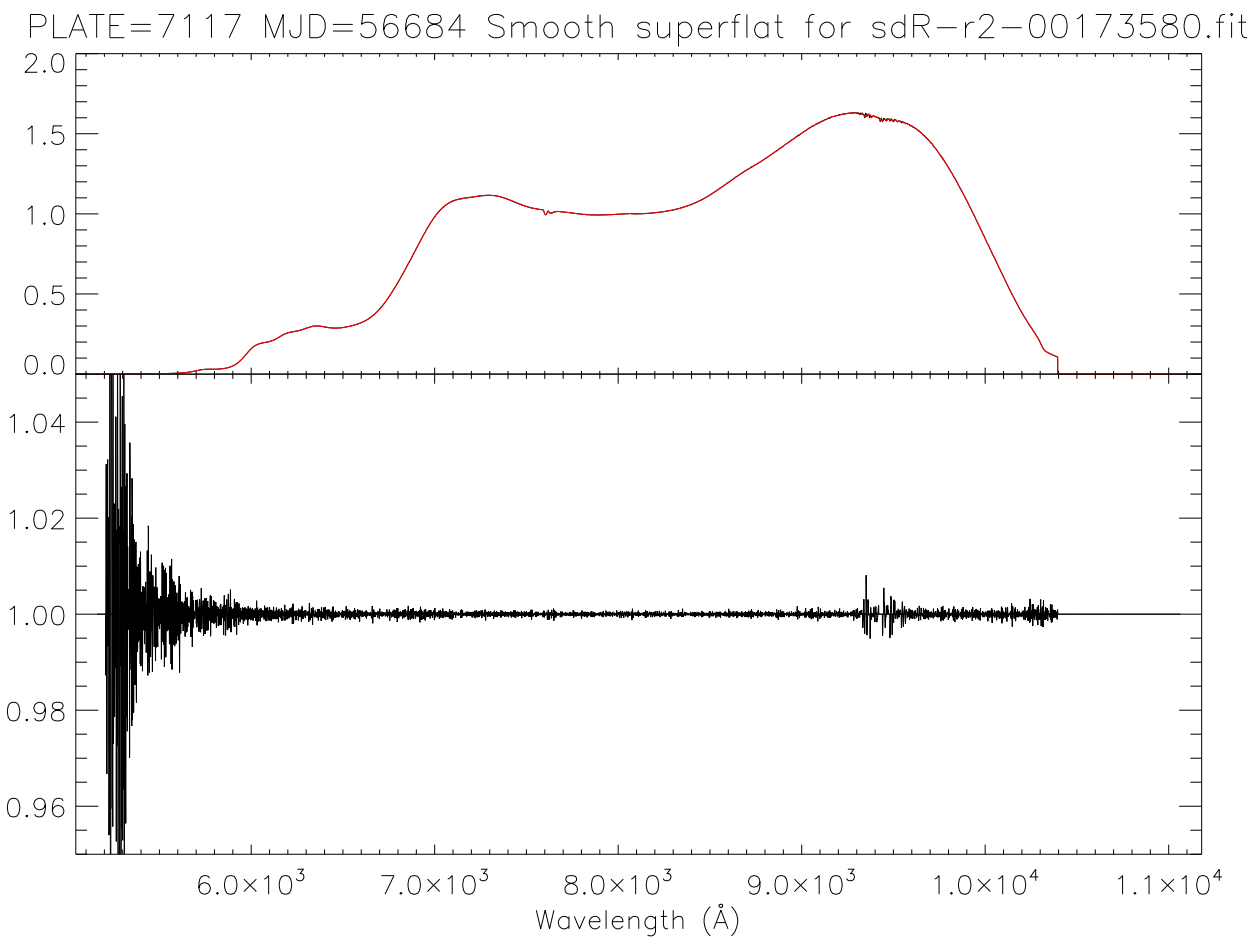

PLATE=7117 MJD=56684 sdR-r2-00173579.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 0.94 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

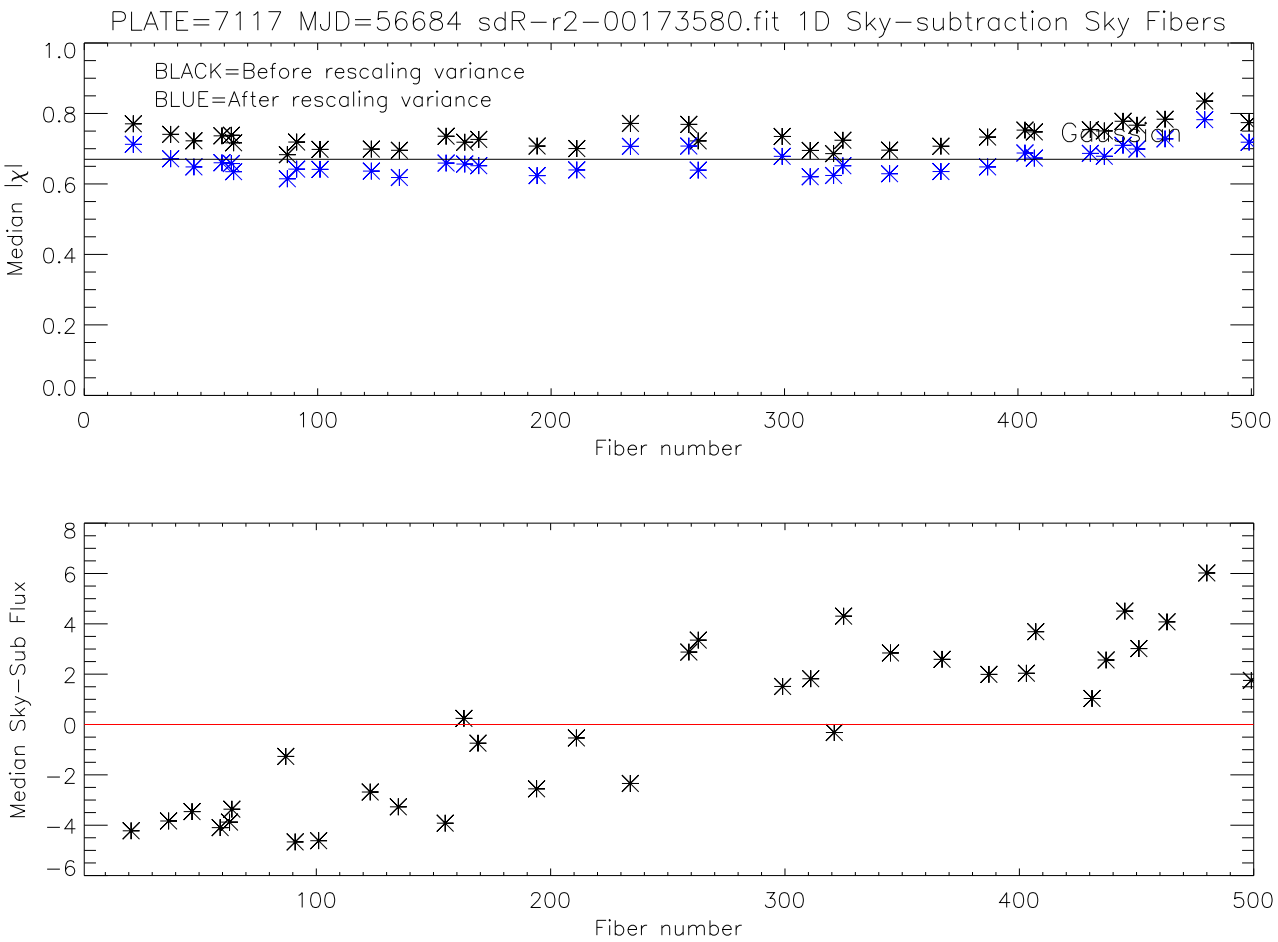

PLATE=7117 MJD=56684 sdR-r2-00173579.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 16.05 %
Fiber number
Focal Distance [mm]
Airmass

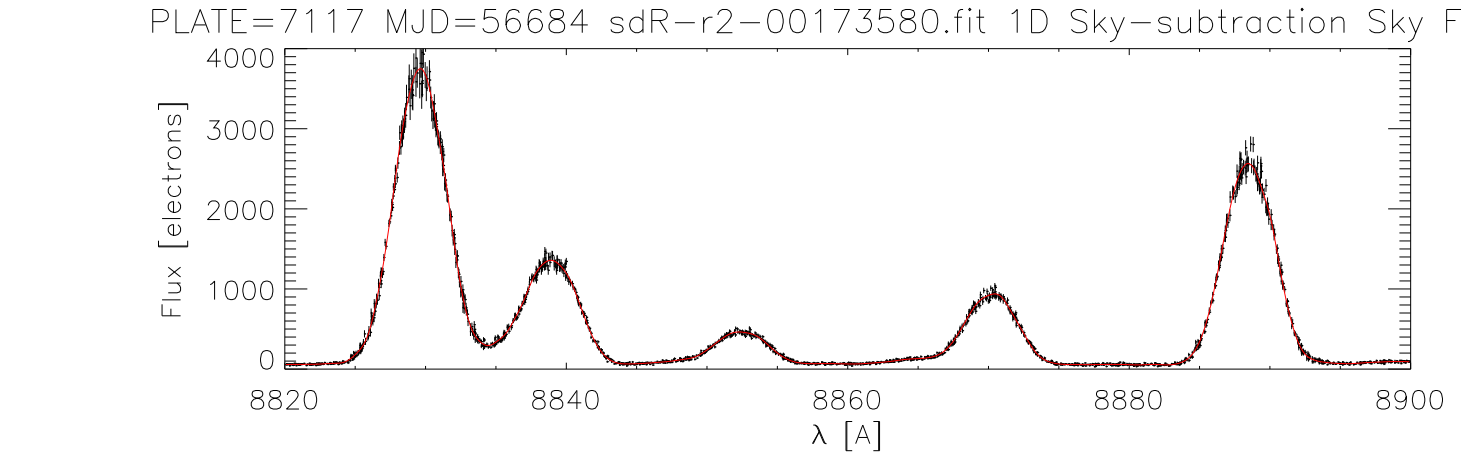

PLATE=7117 MJD=56684 Fiber−Flats for sdR−r2−00173576.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −14.481
Max value = 5.760
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:21:40 2016

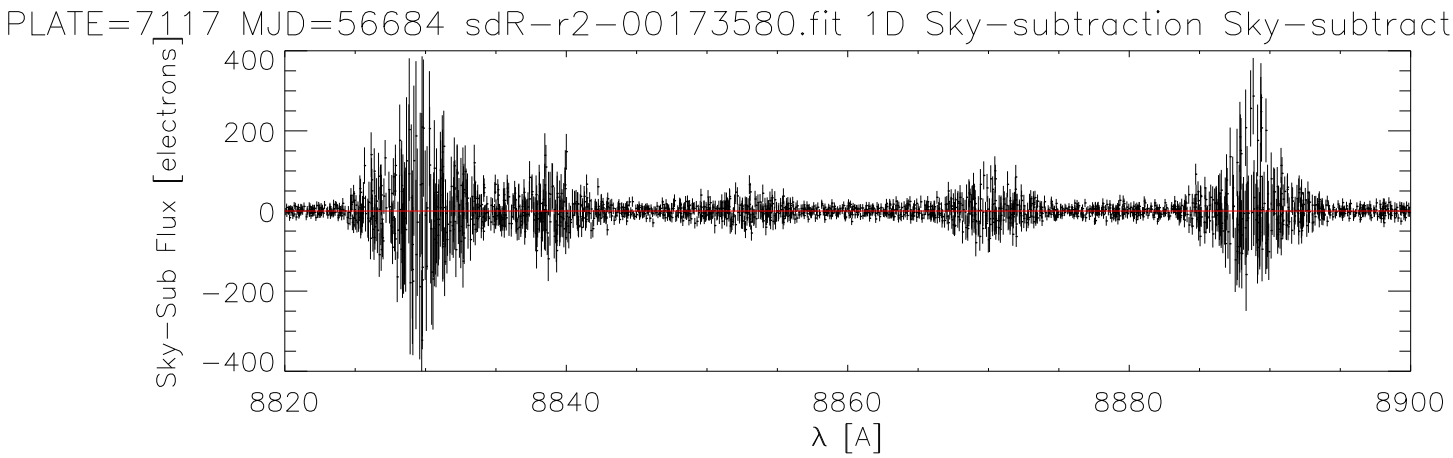

PLATE=7117 MJD=56684 Extraction chi^2 for sdR−r2−00173580.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7117 MJD=56684 Sky Line Deviations for sdR-r2-00173580.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

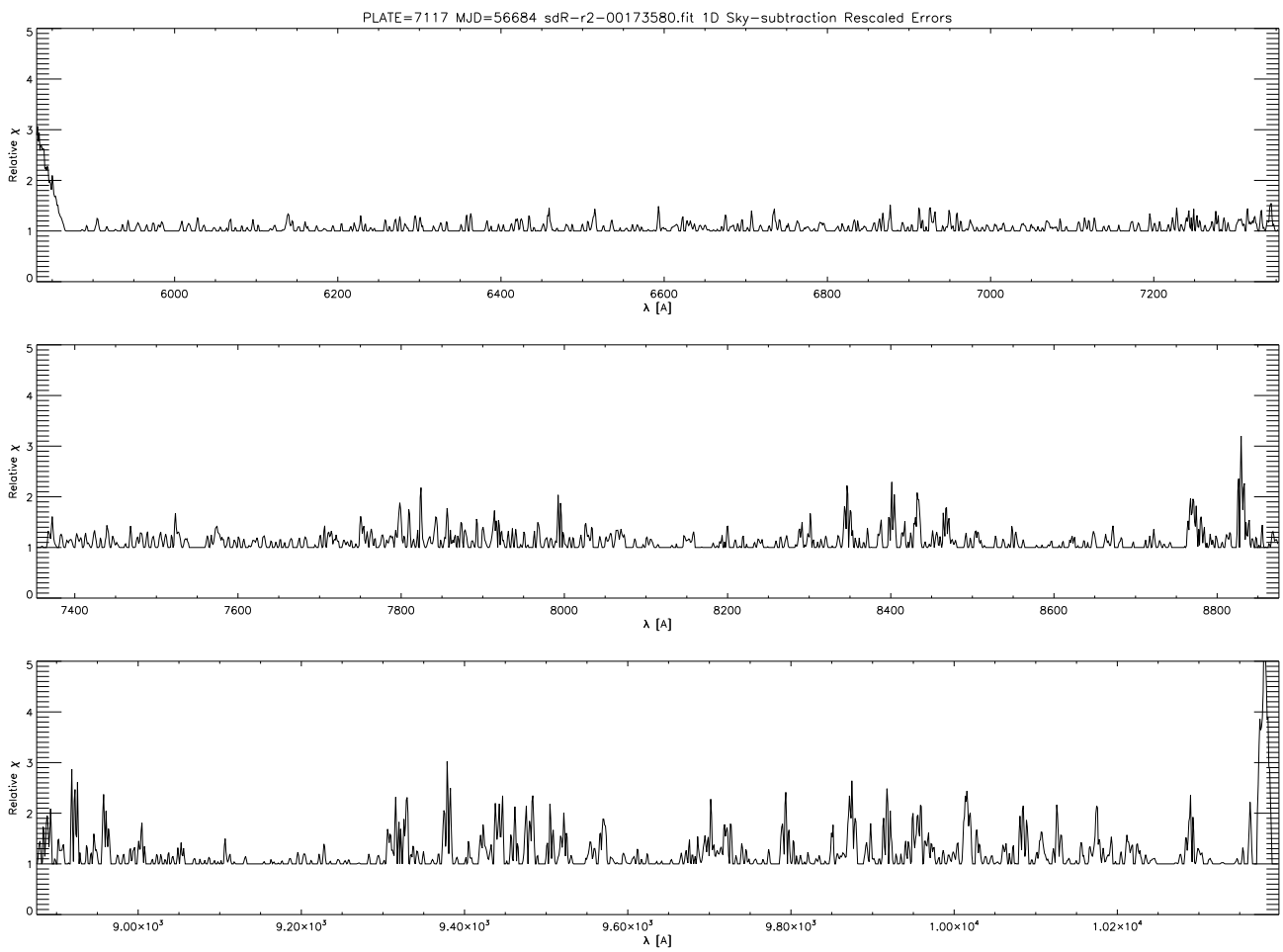

PLATE=7117 MJD=56684 Smooth superflat for sdR-r2-00173580.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

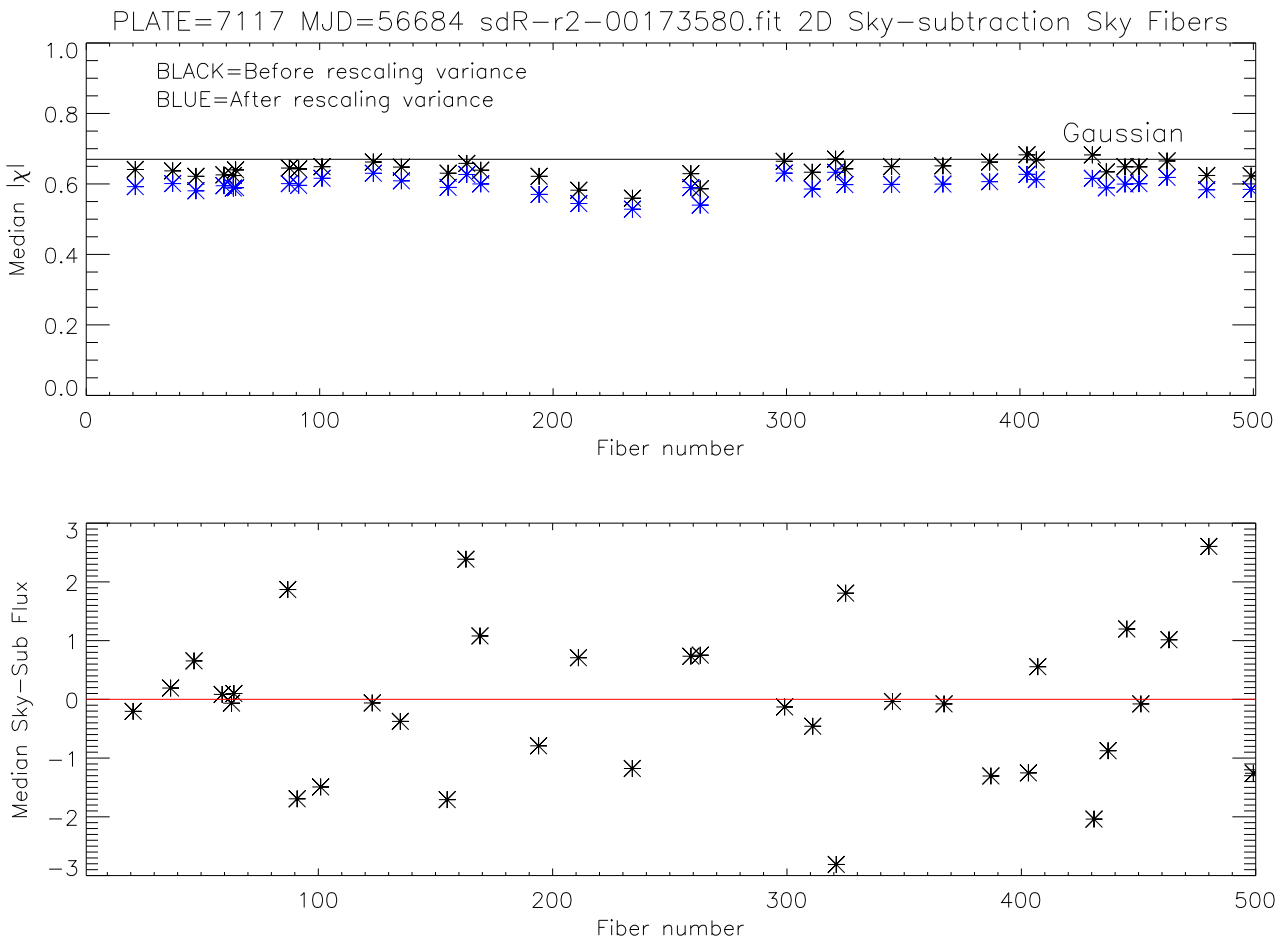

PLATE=7117 MJD=56684 sdR-r2-00173580.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

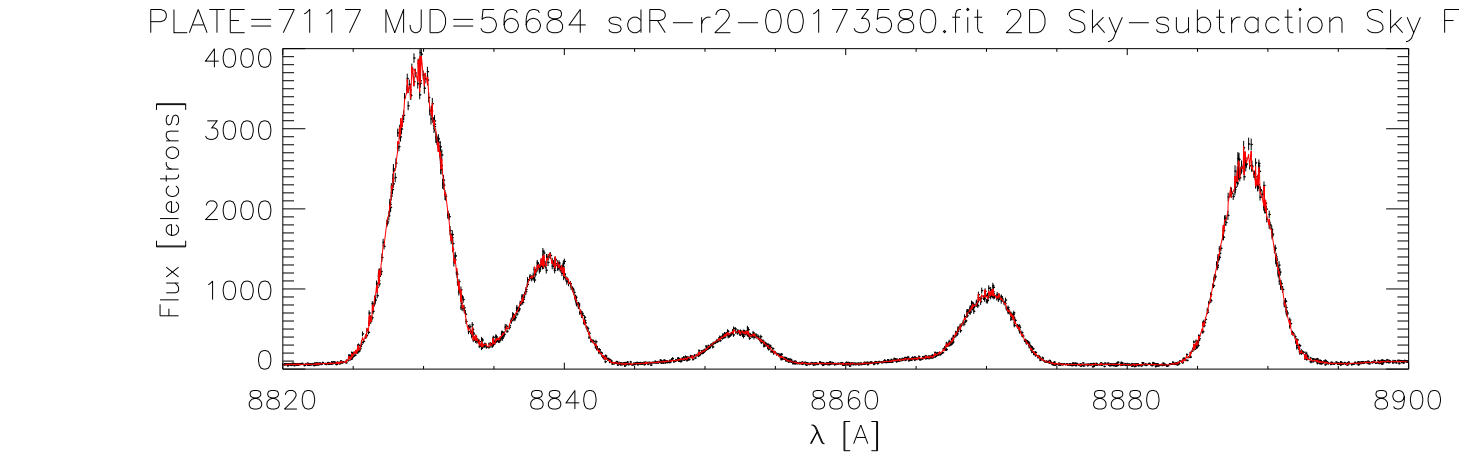

PLATE=7117 MJD=56684 sdR-r2-00173580.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

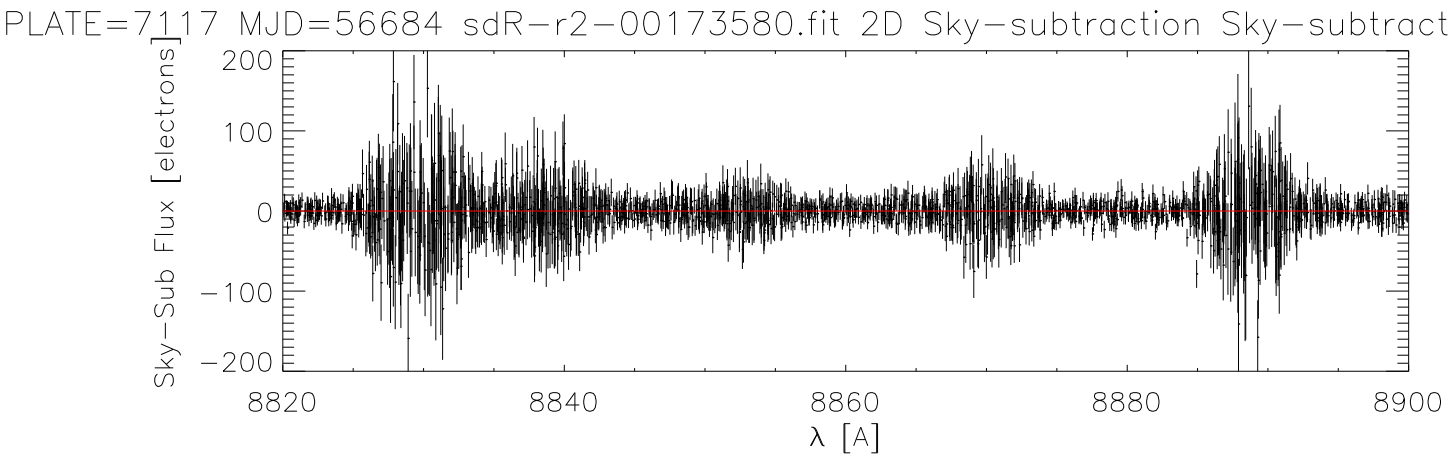

PLATE=7117 MJD=56684 sdR-r2-00173580.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 35

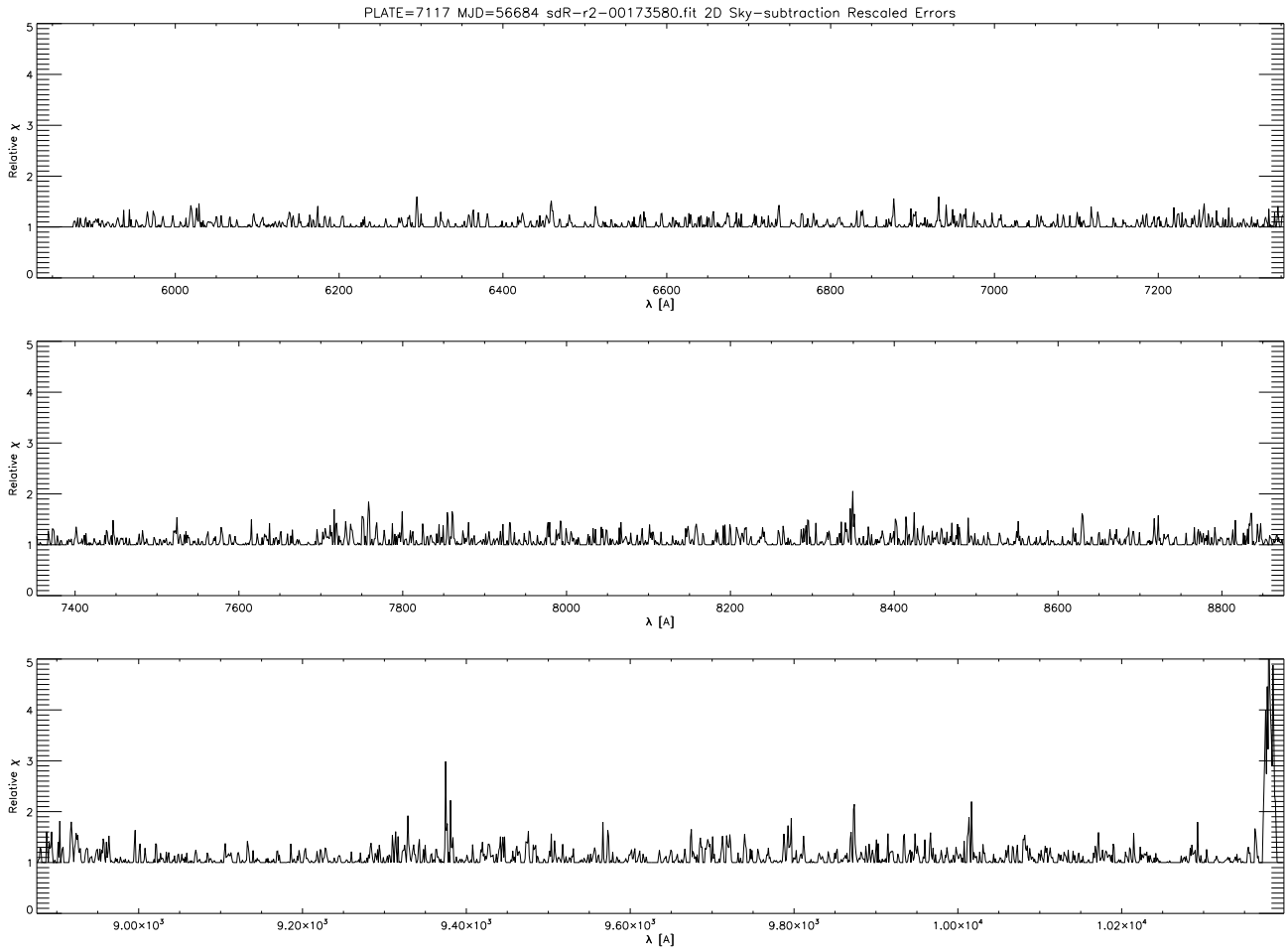


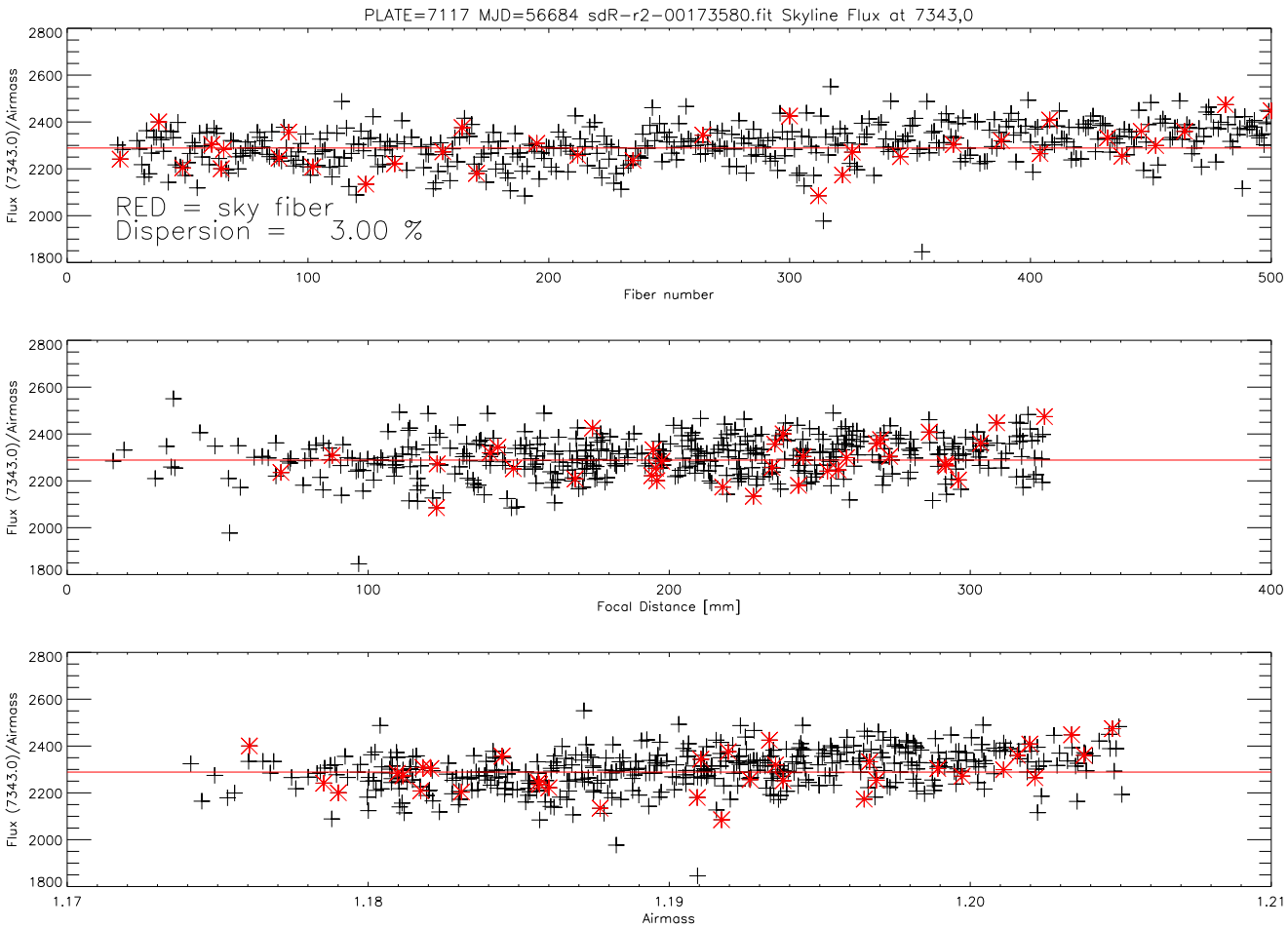

PLATE=7117 MJD=56684 sdR-r2-00173580.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

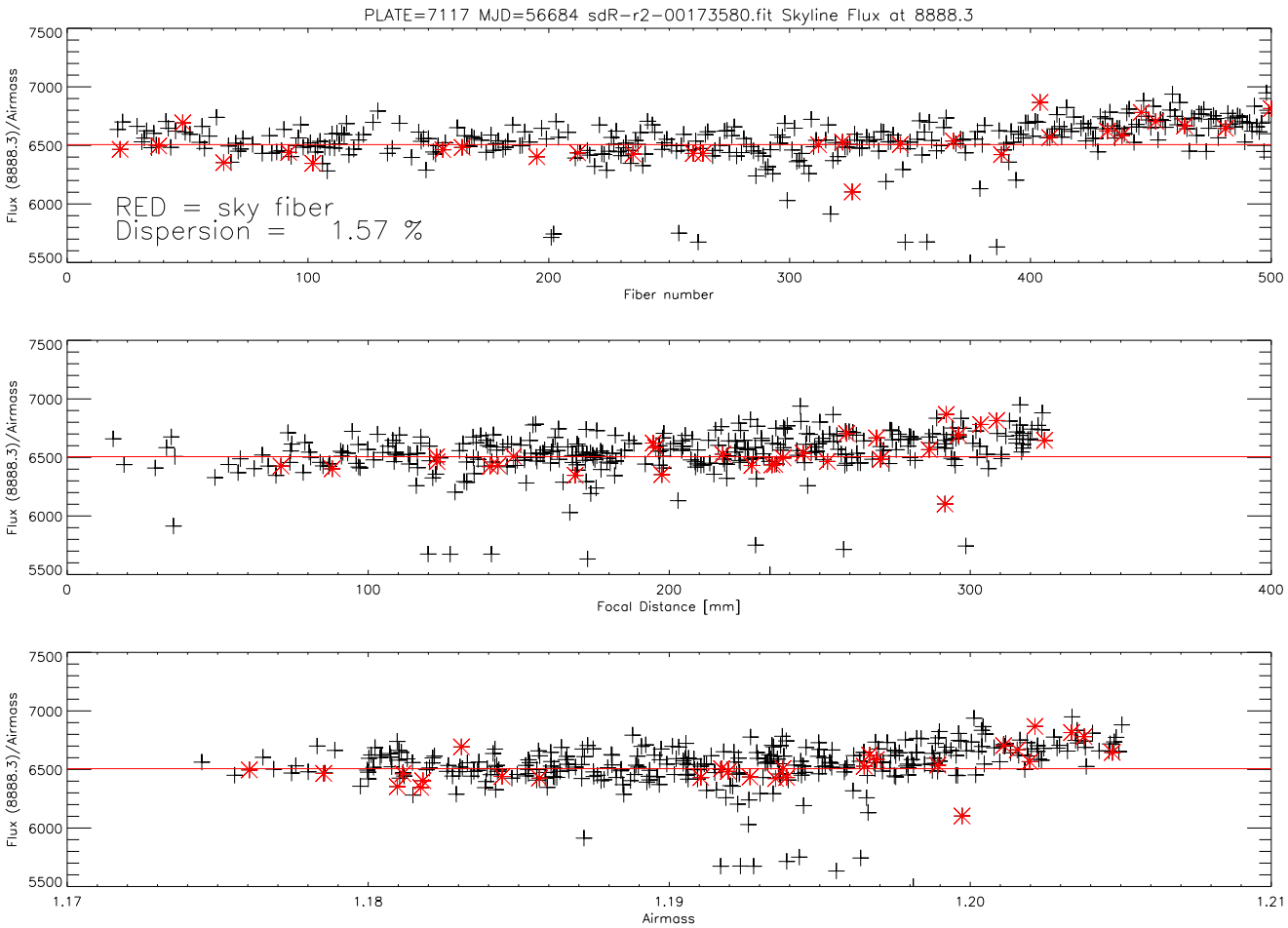

PLATE=7117 MJD=56684 sdR-r2-00173580.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=7117 MJD=56684 sdR-r2-00173580.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 = 35




PLATE=7117 MJD=56684 sdR-r2-00173580.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 3.00 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=7117 MJD=56684 sdR-r2-00173580.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.57 %
Fiber number
Focal Distance [mm]
Airmass