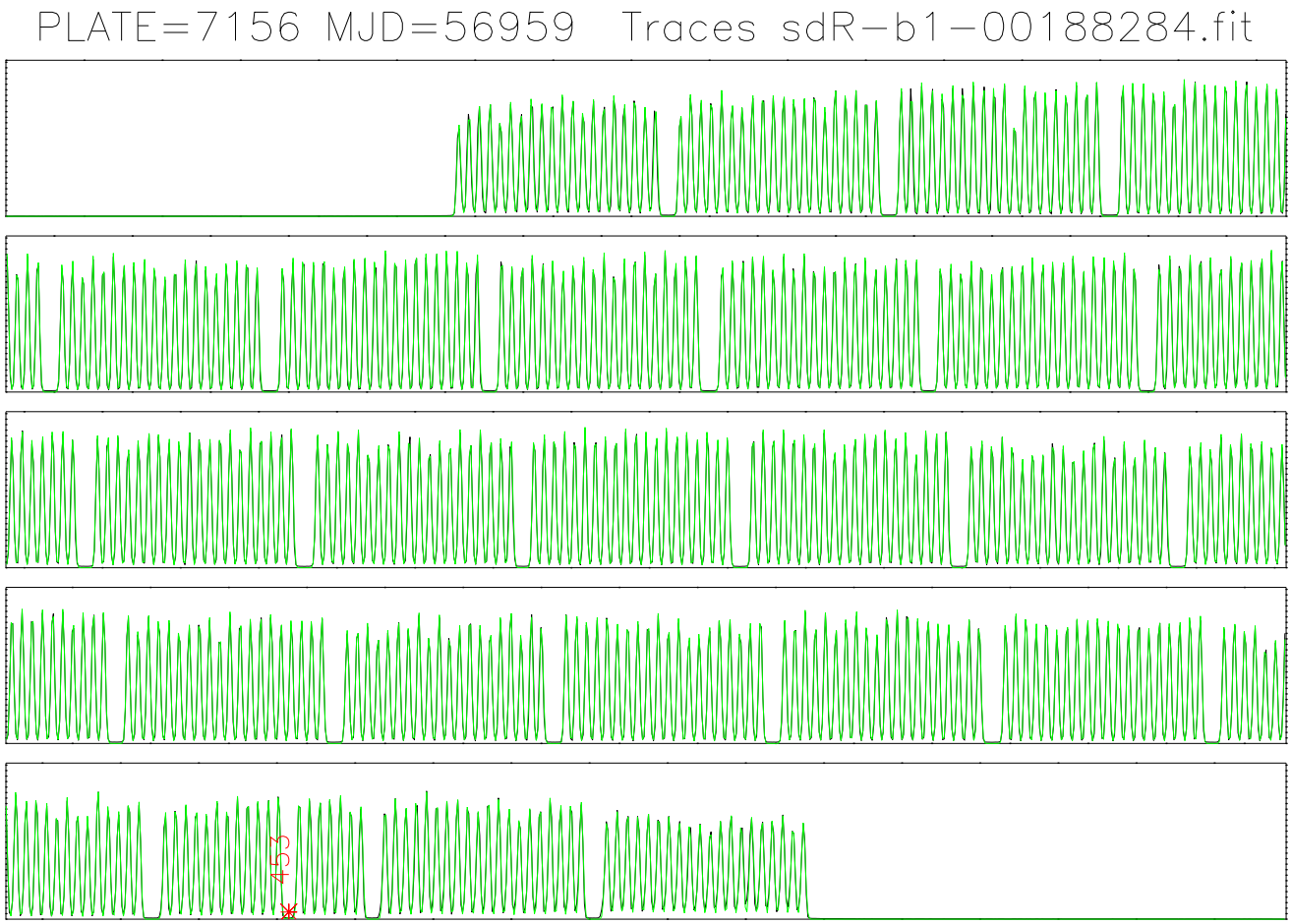
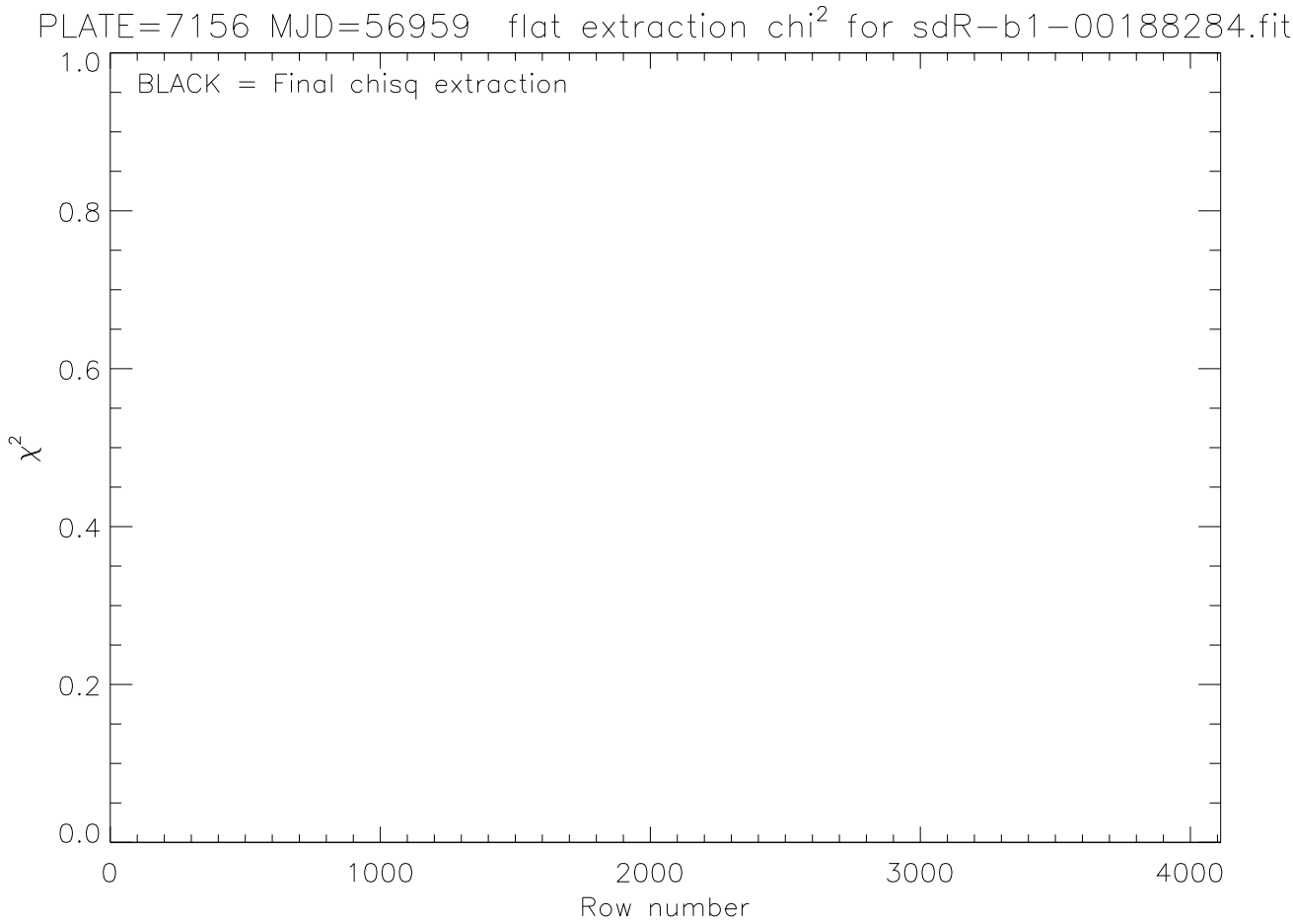
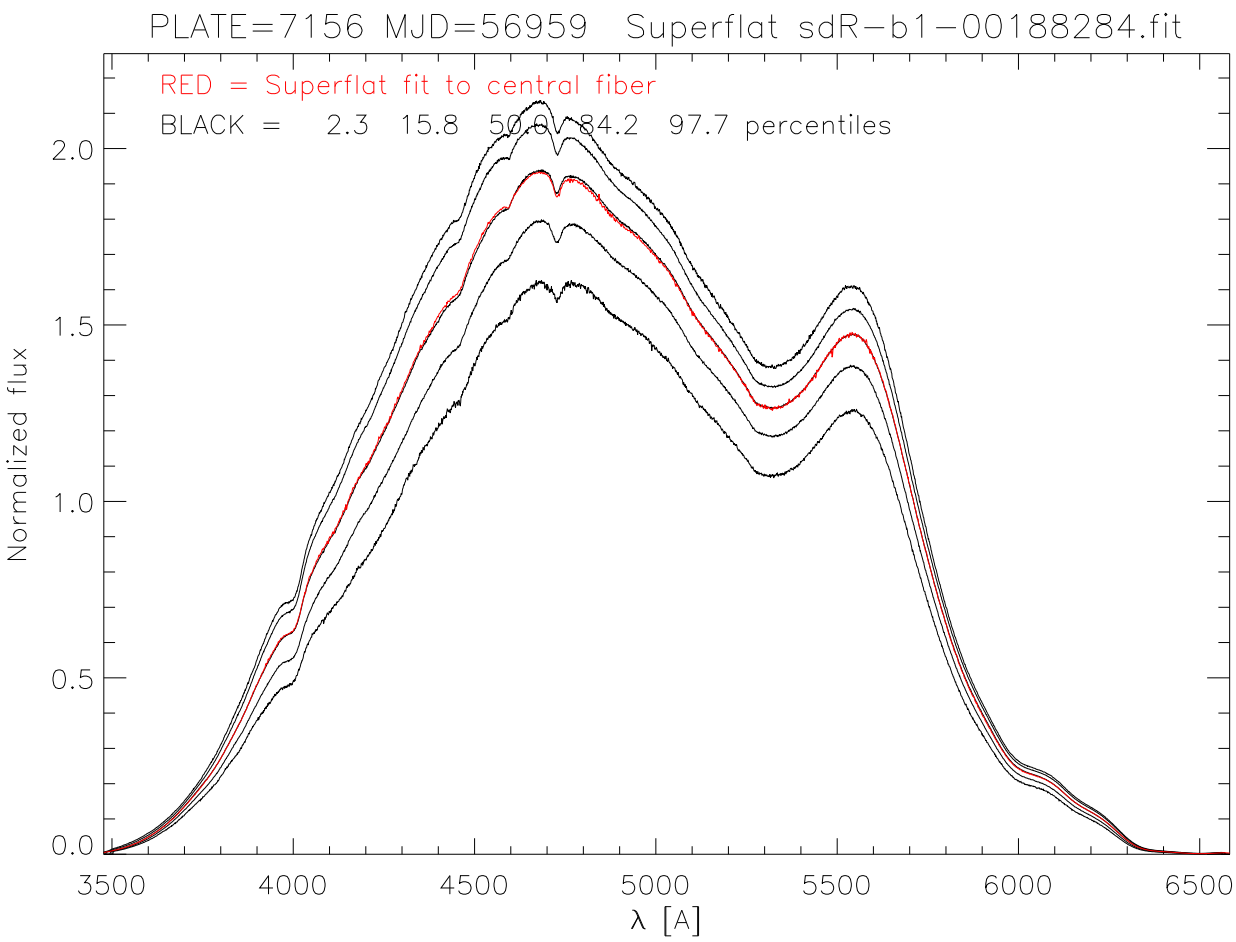
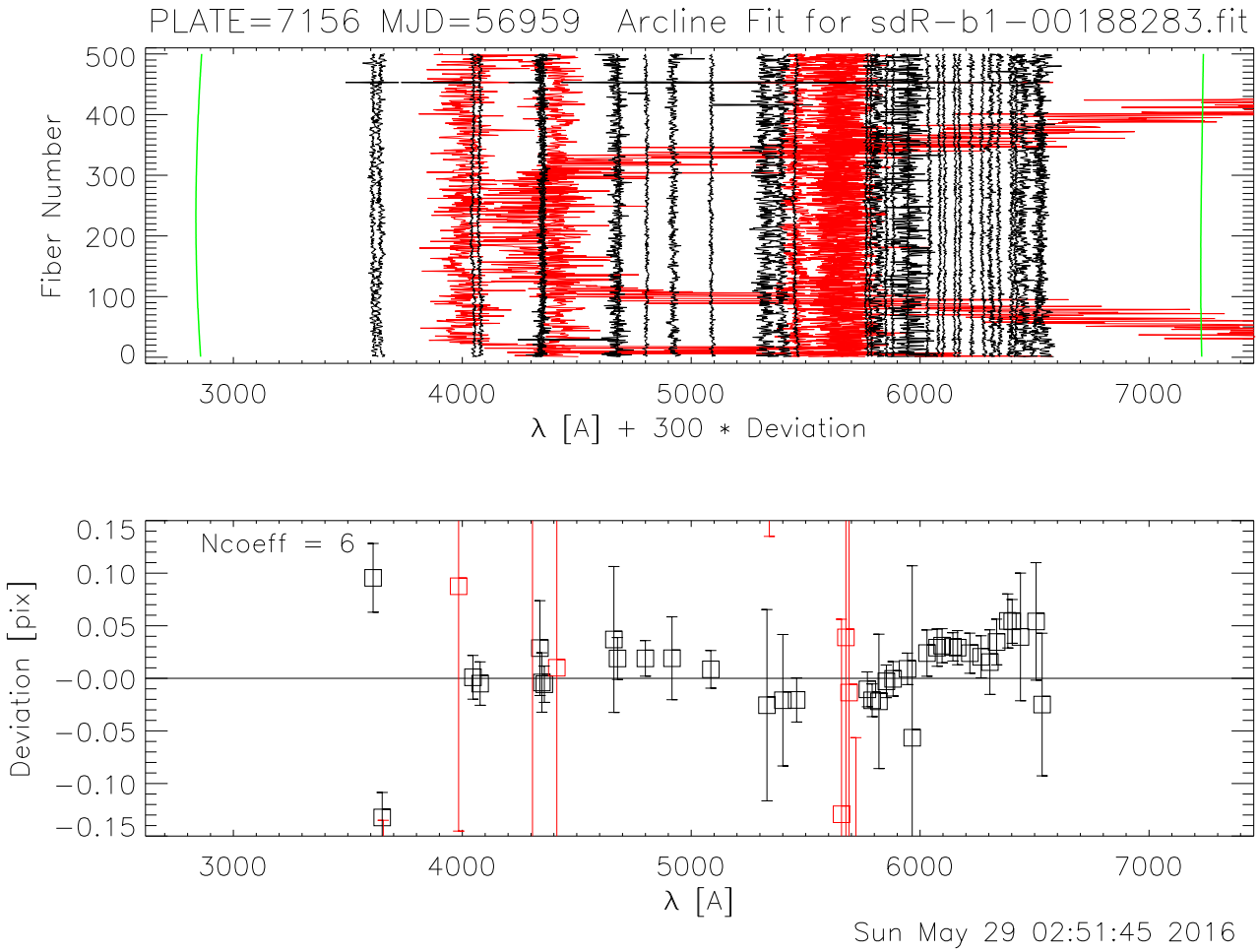
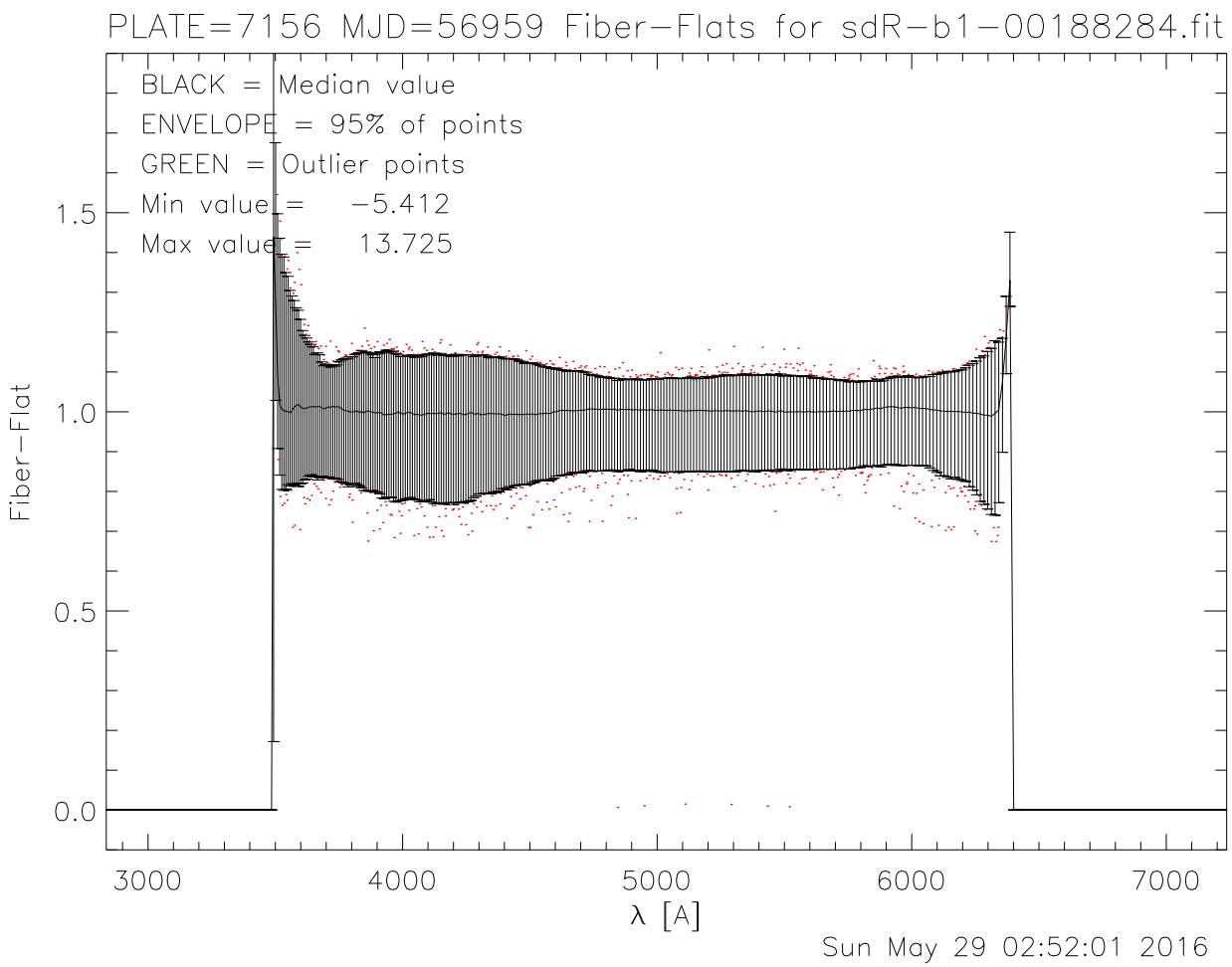

PLATE=7156 MJD=56959 Traces sdR-b1-00188284.fit
453

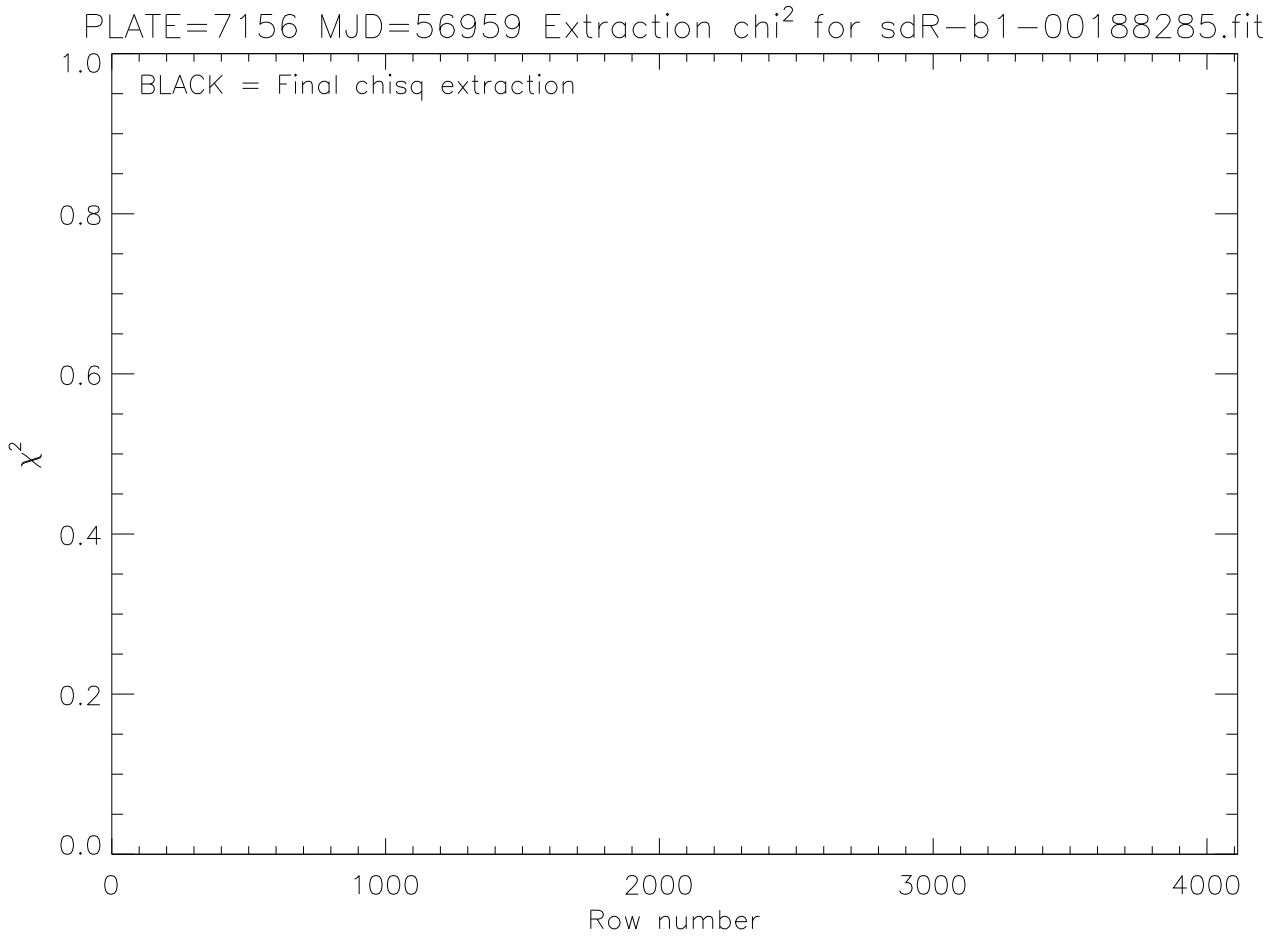

PLATE=7156 MJD=56959 flat extraction chi^2 for sdR−b1−00188284.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

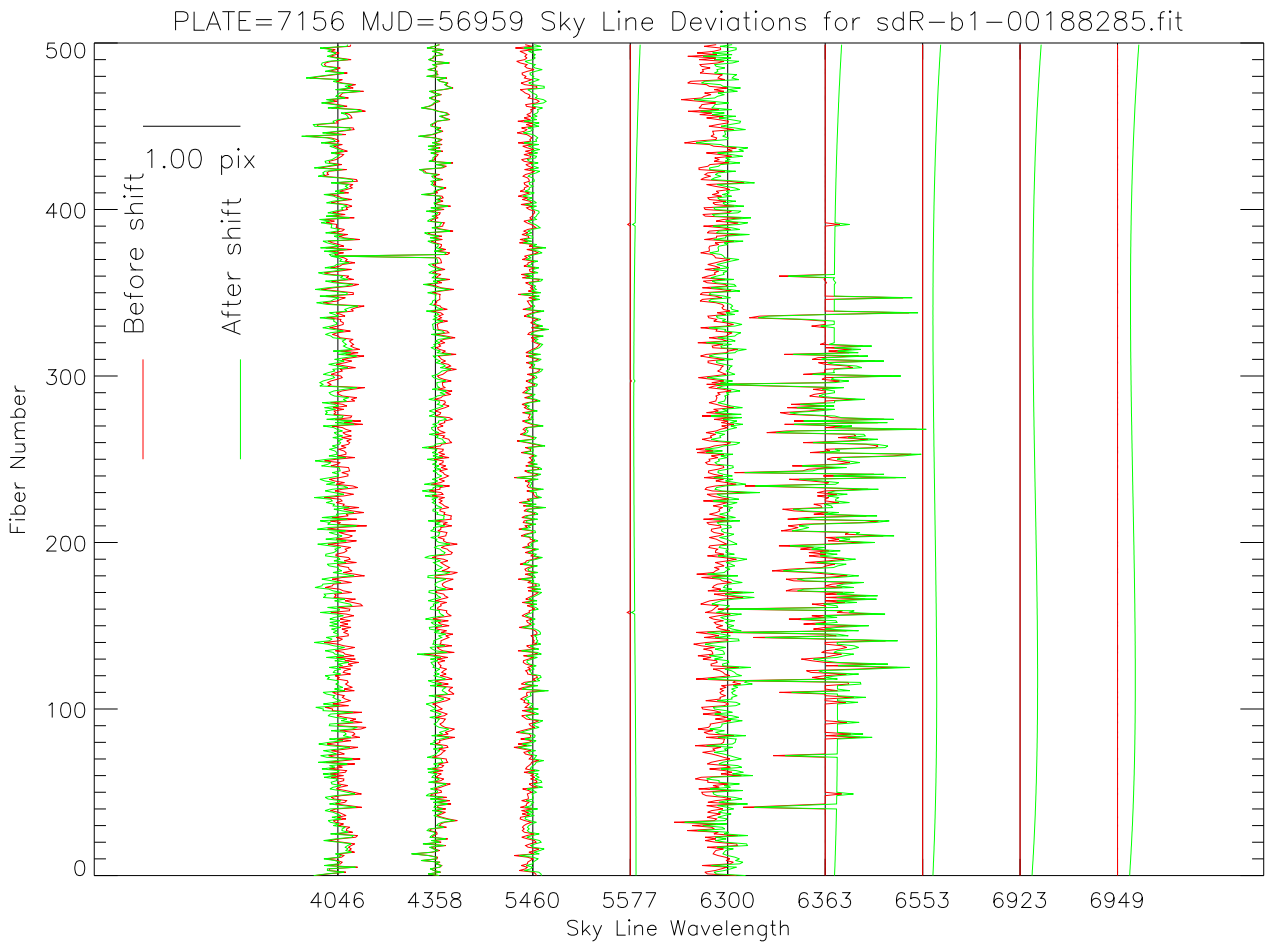

PLATE=7156 MJD=56959 Superflat sdR-b1-00188284.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
3500
4000
4500
5000
5500
6000
6500

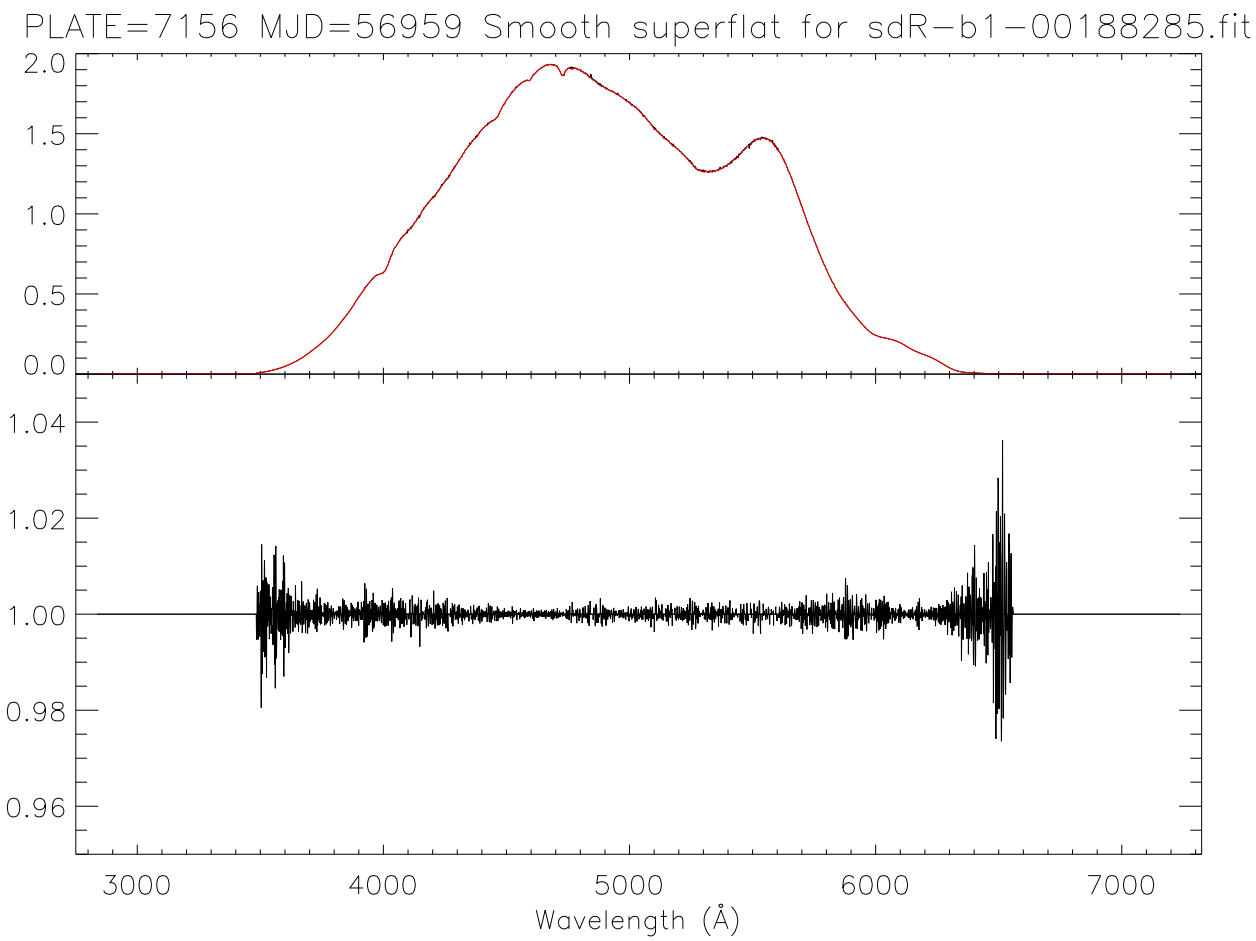

PLATE=7156 MJD=56959 Arcline Fit for sdR-b1-00188283.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation

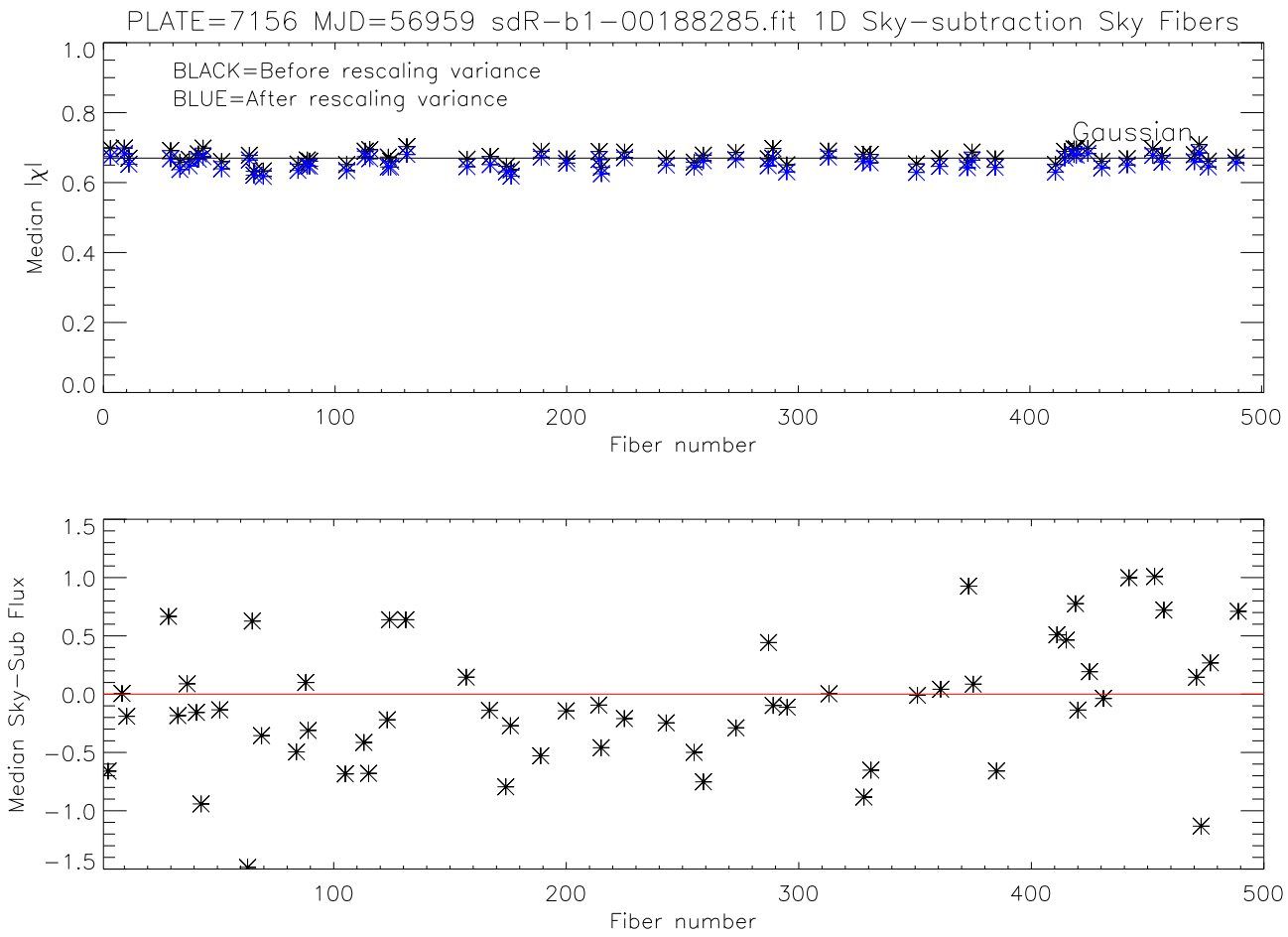
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Sun May 29 02:51:45 2016

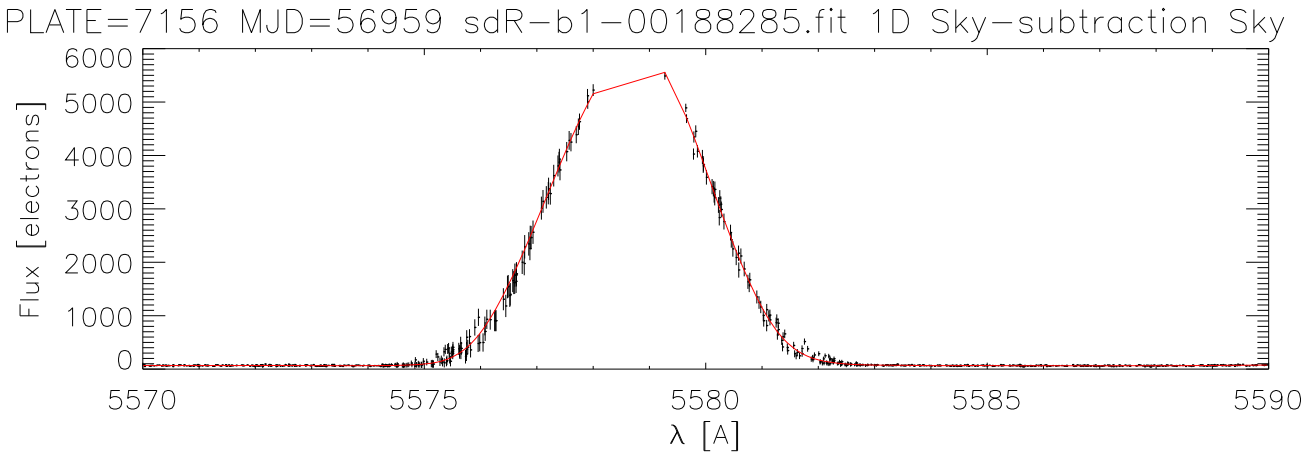

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.412
Max value = 13.725
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 02:52:01 2016

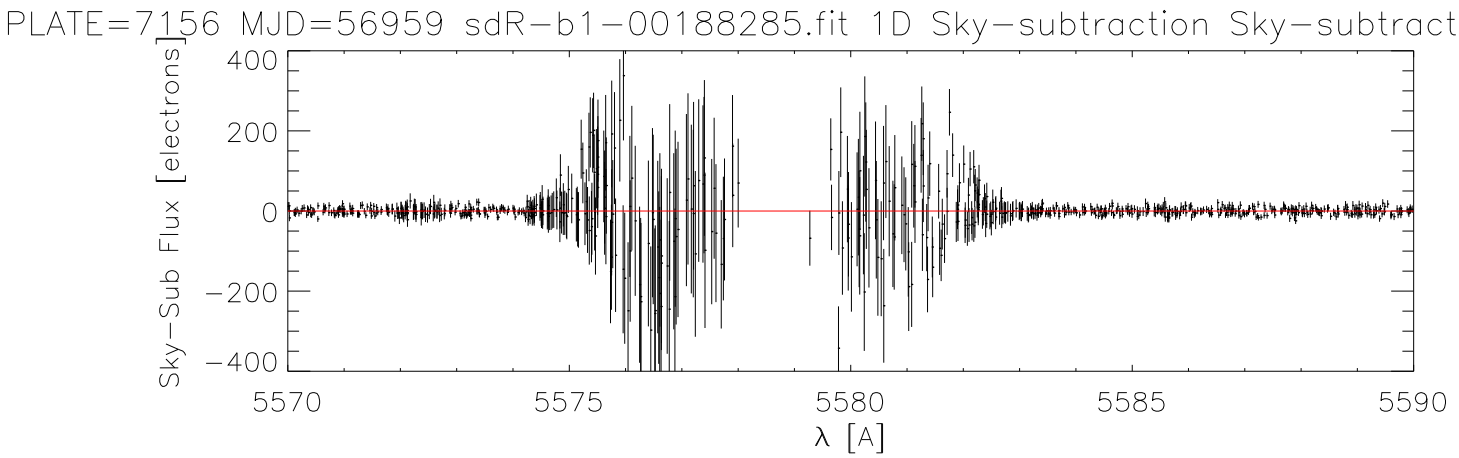

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−b1−00188285.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b1-00188285.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

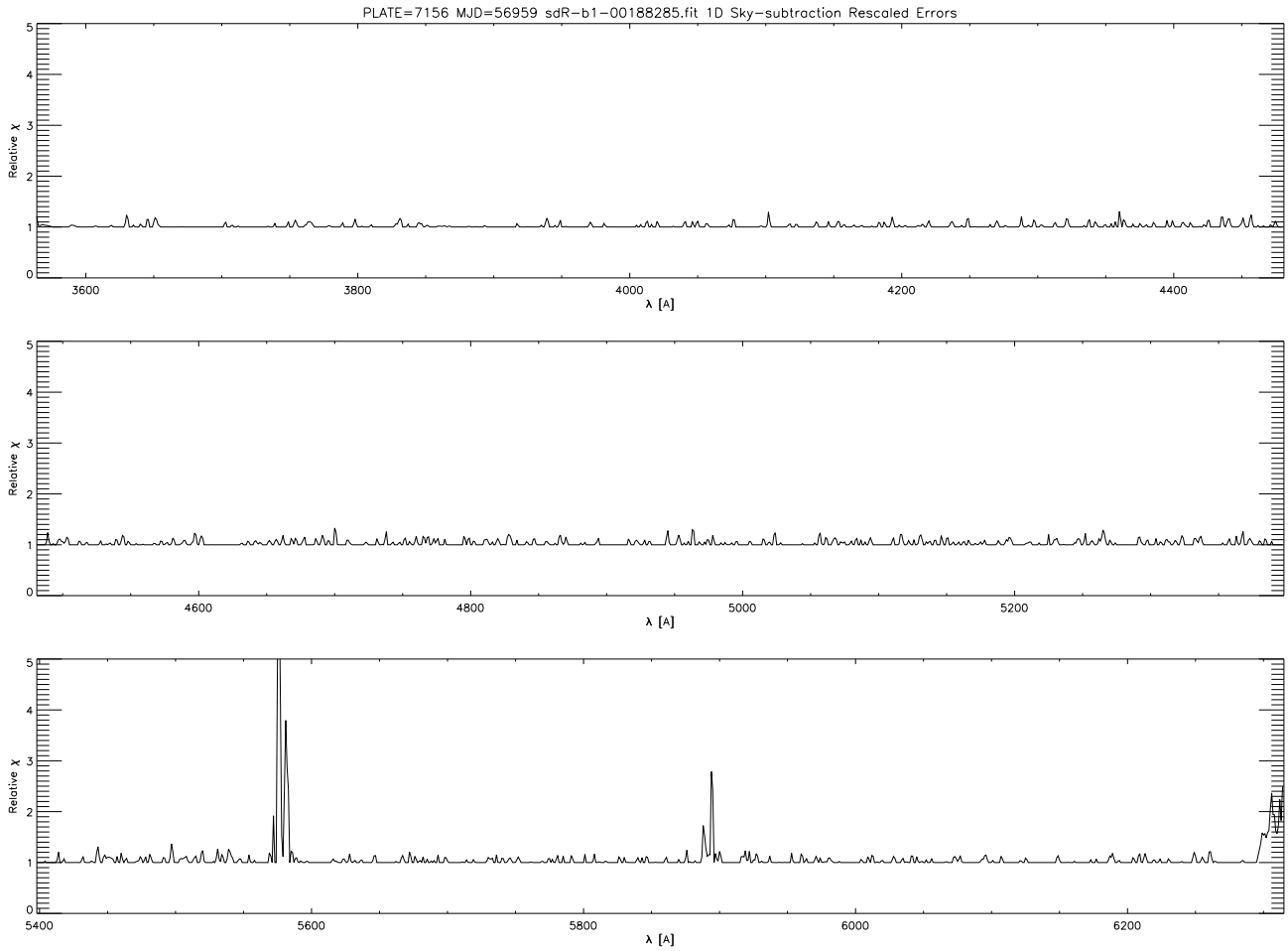

PLATE=7156 MJD=56959 Smooth superflat for sdR-b1-00188285.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

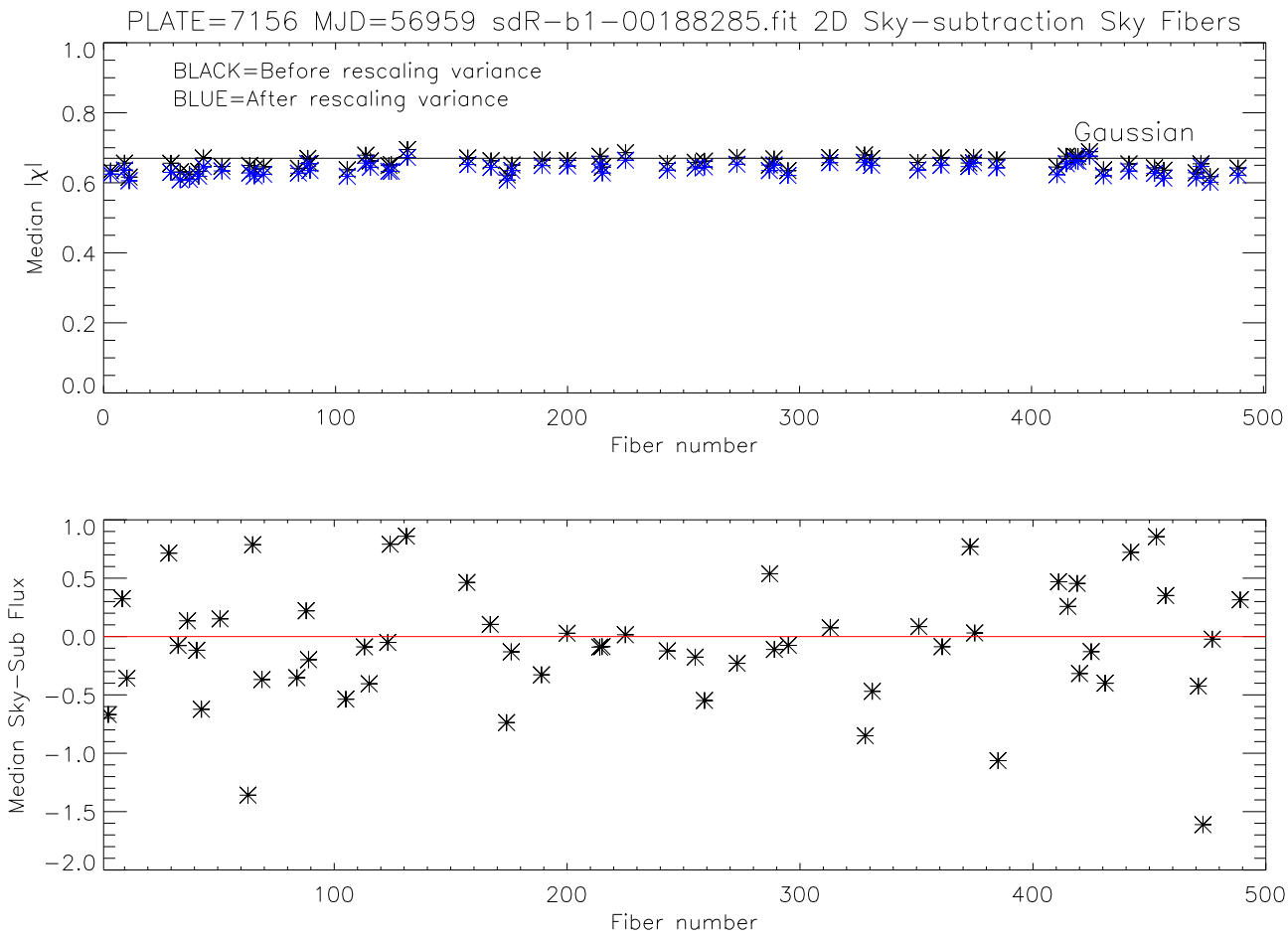

PLATE=7156 MJD=56959 sdR-b1-00188285.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

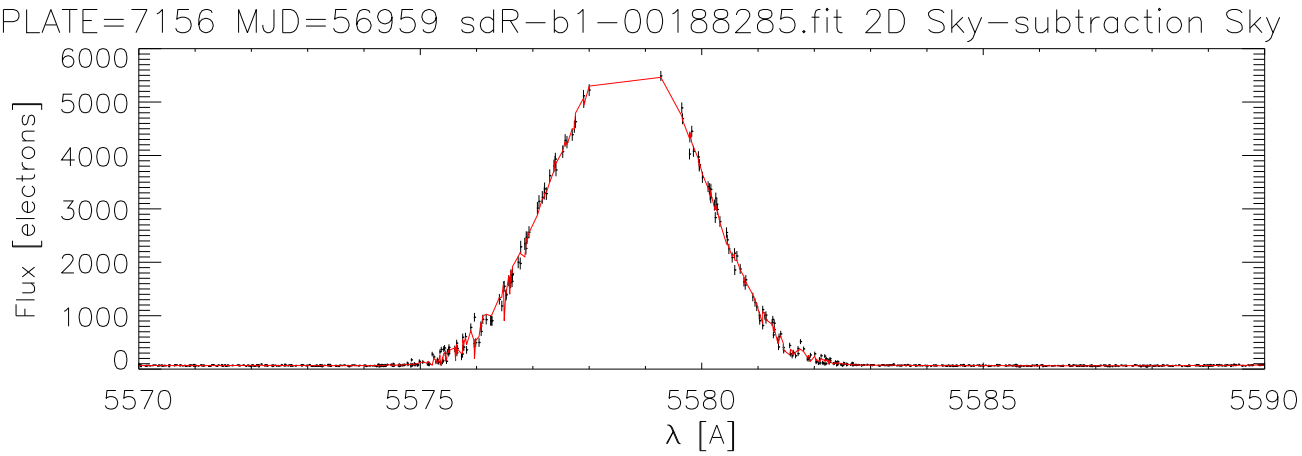

PLATE=7156 MJD=56959 sdR-b1-00188285.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

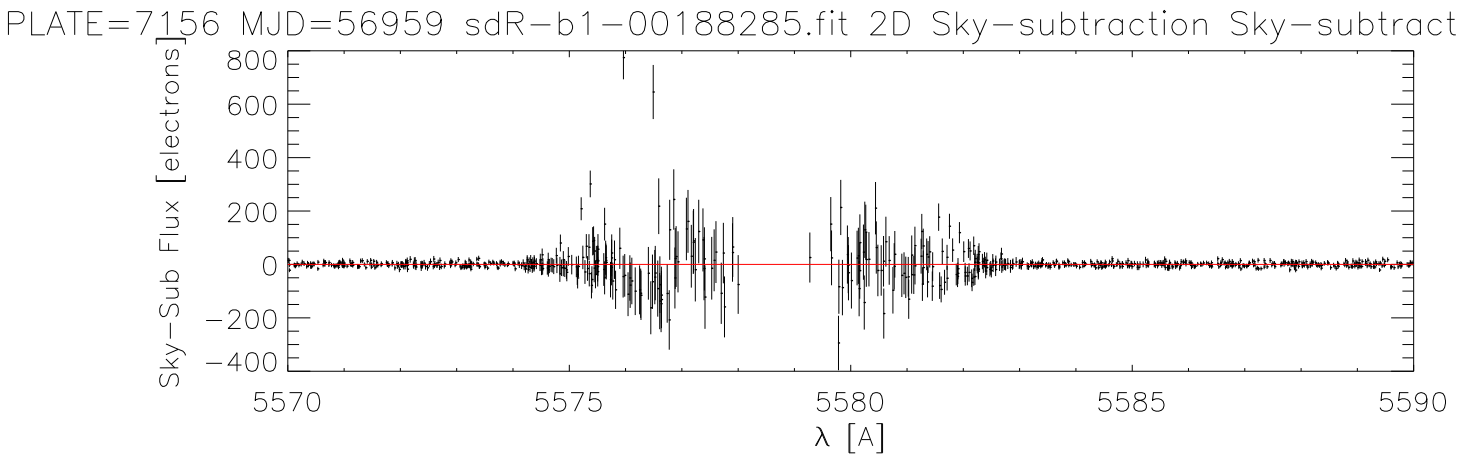

PLATE=7156 MJD=56959 sdR-b1-00188285.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 58

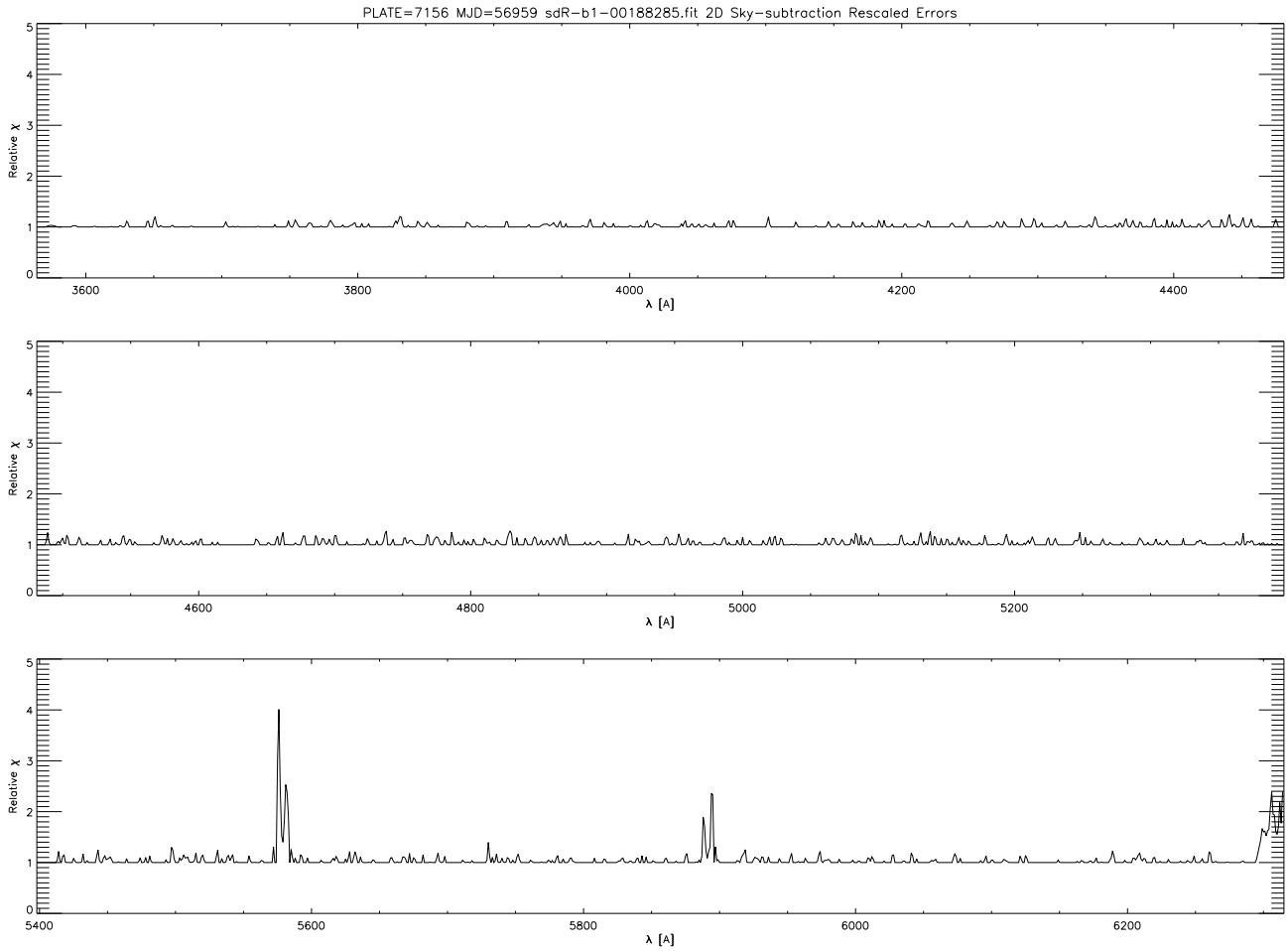


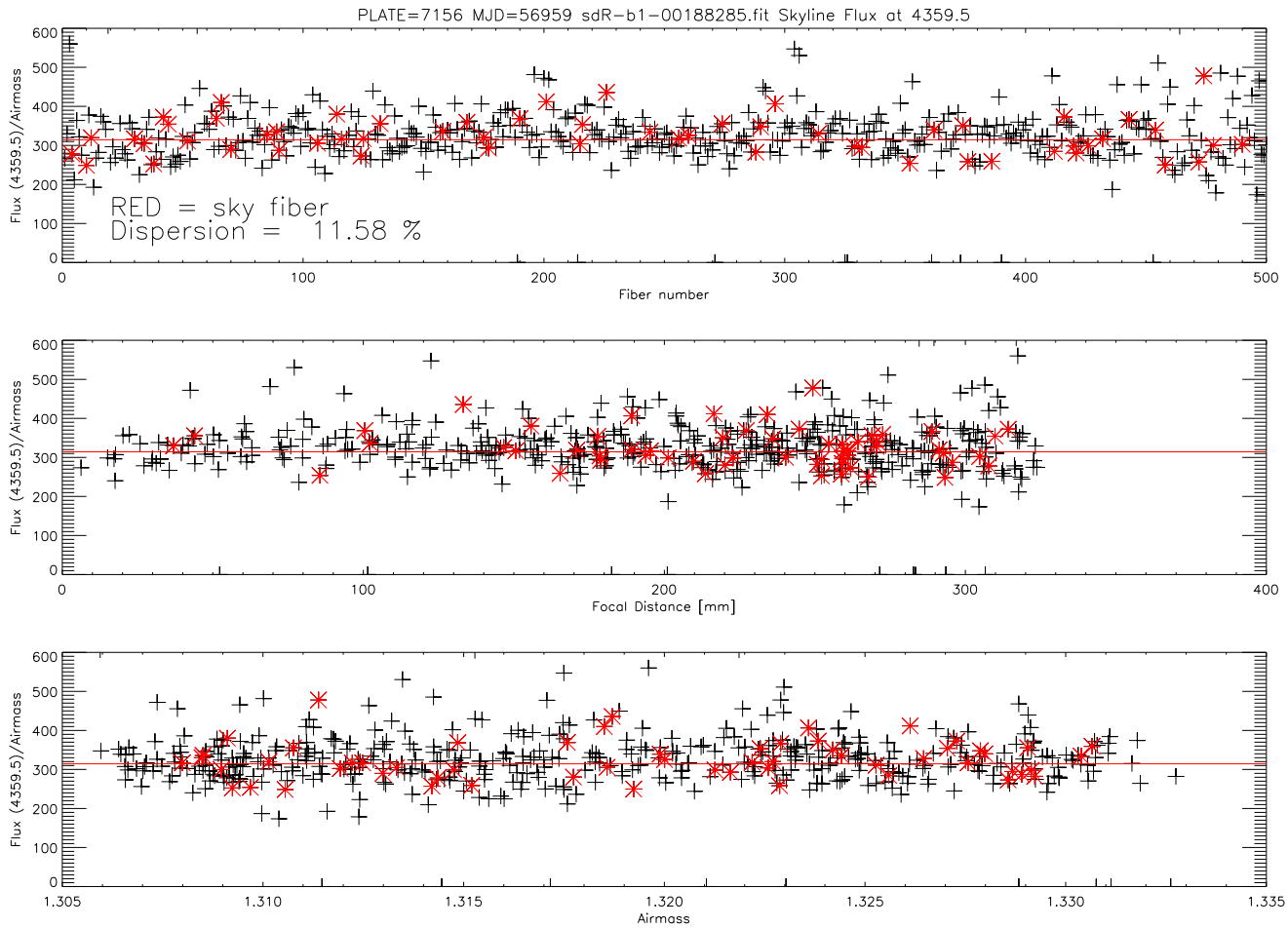

PLATE=7156 MJD=56959 sdR-b1-00188285.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

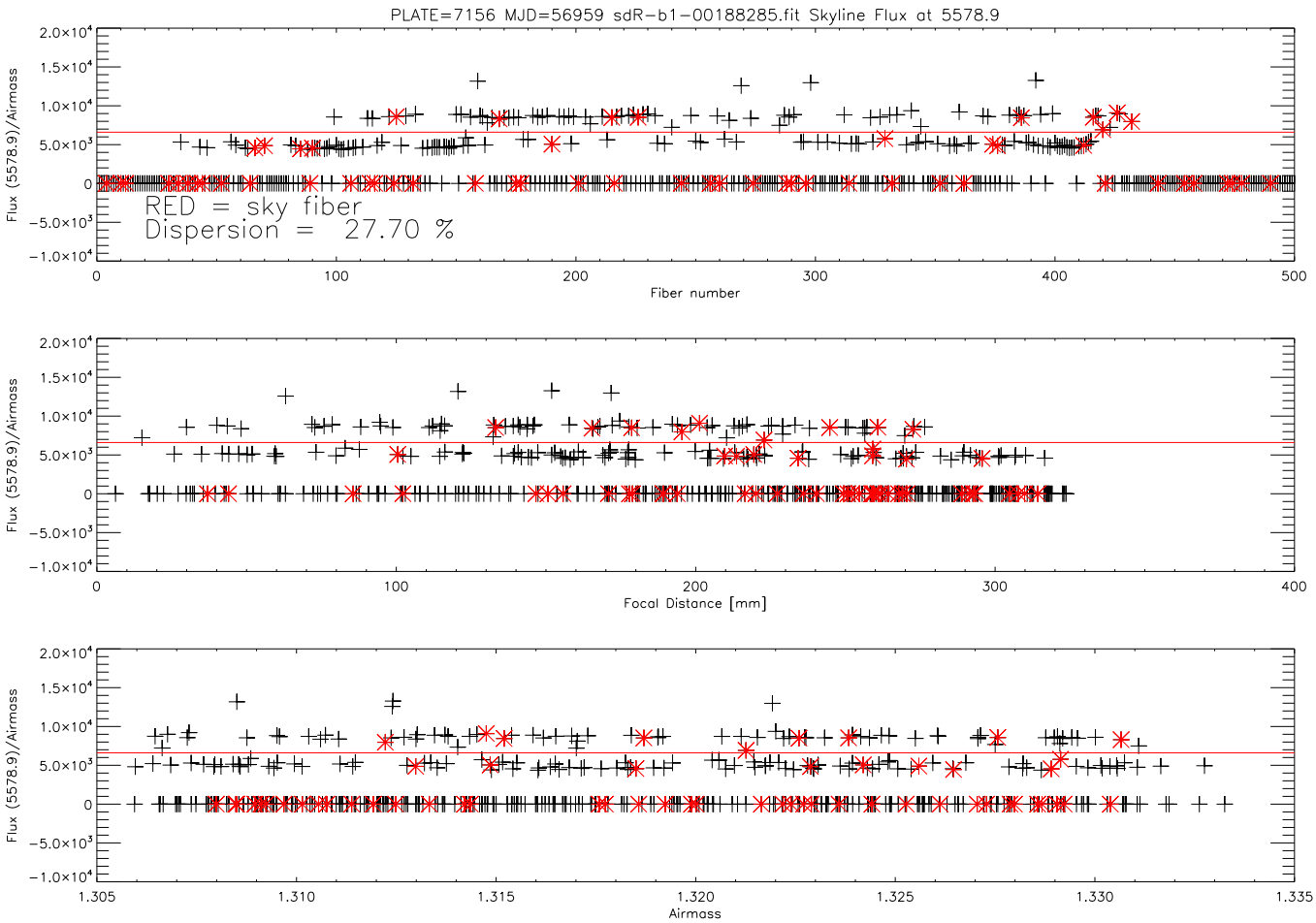

PLATE=7156 MJD=56959 sdR-b1-00188285.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

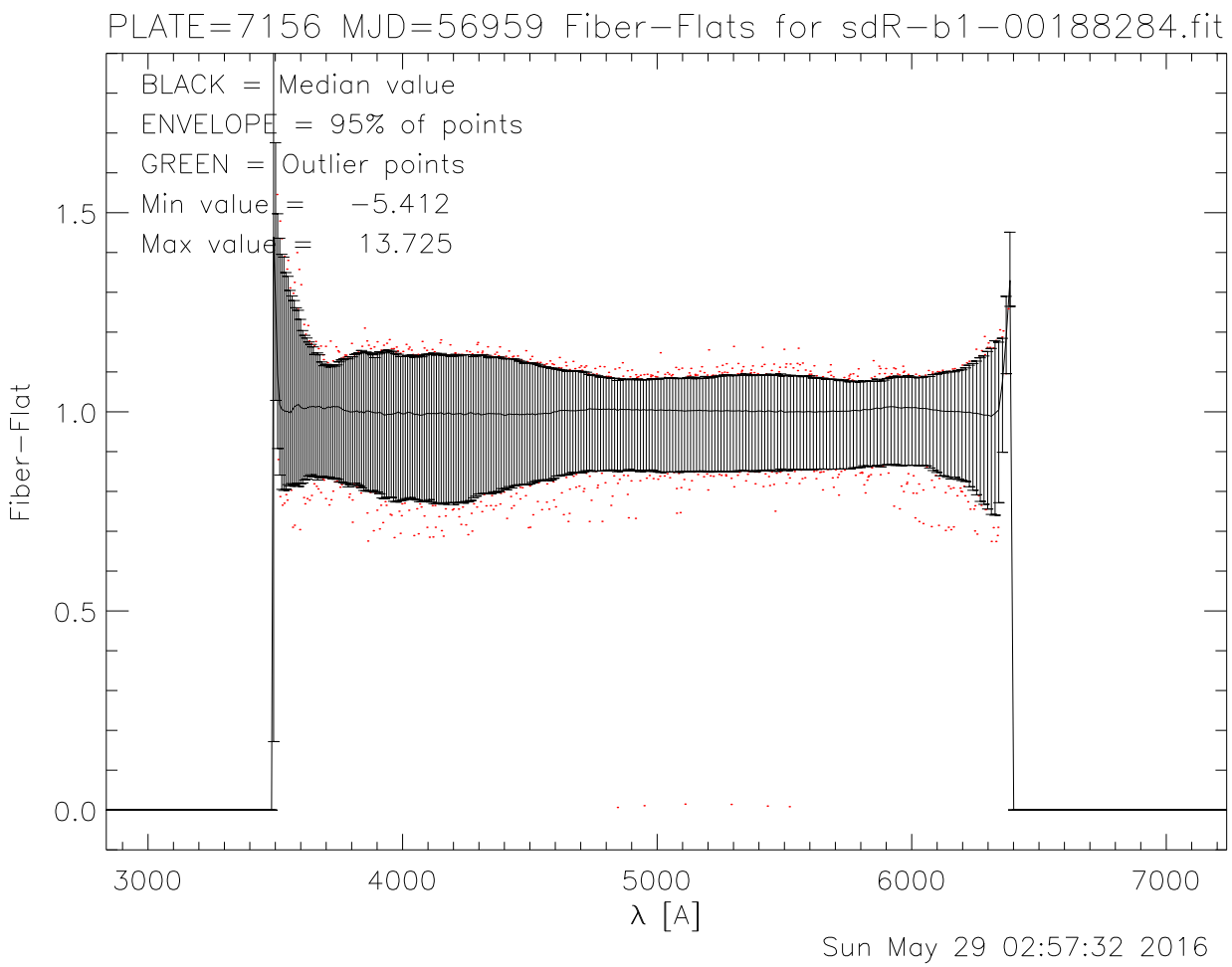

PLATE=7156 MJD=56959 sdR-b1-00188285.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

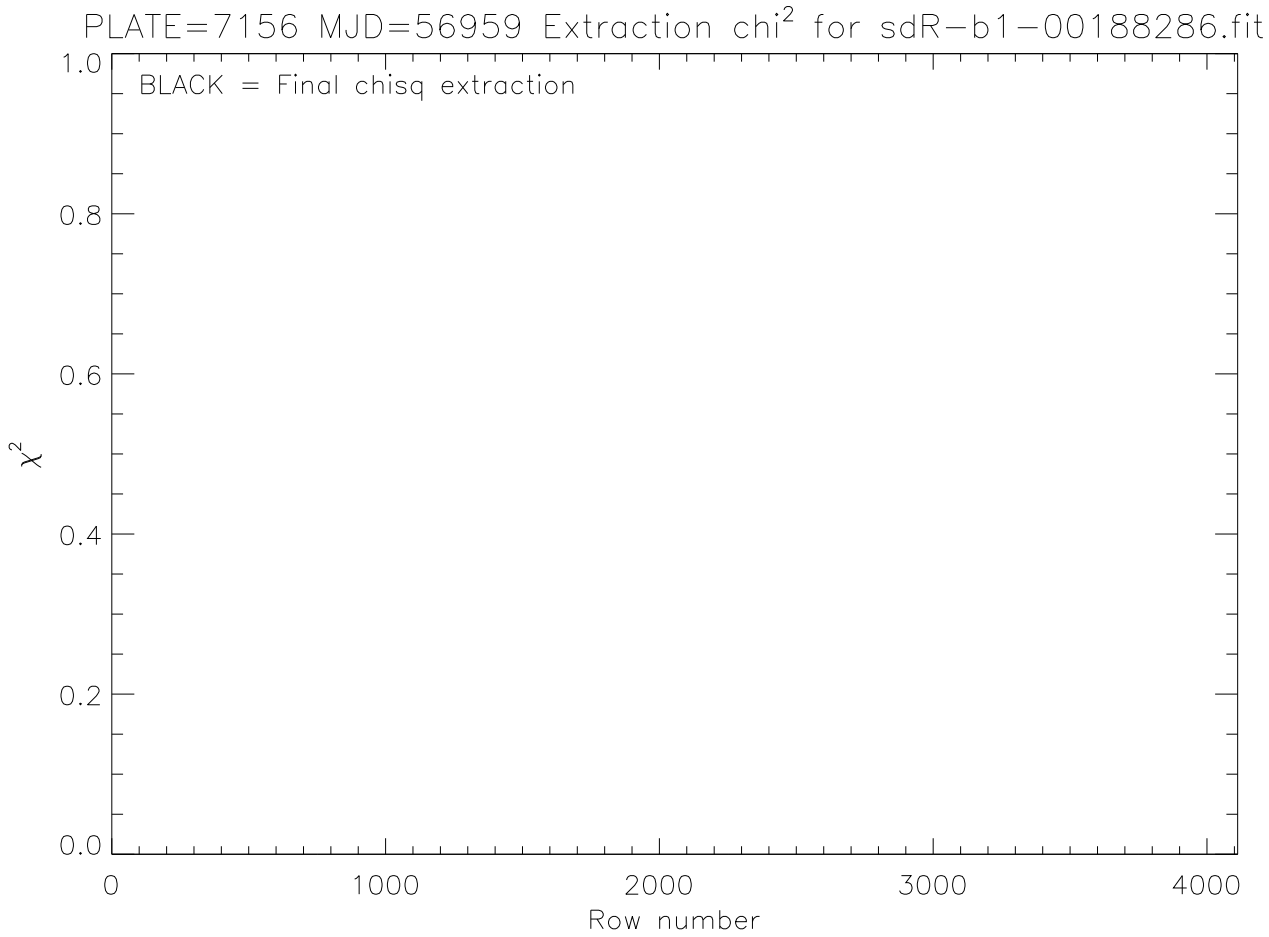
Number of sky fibers = 58

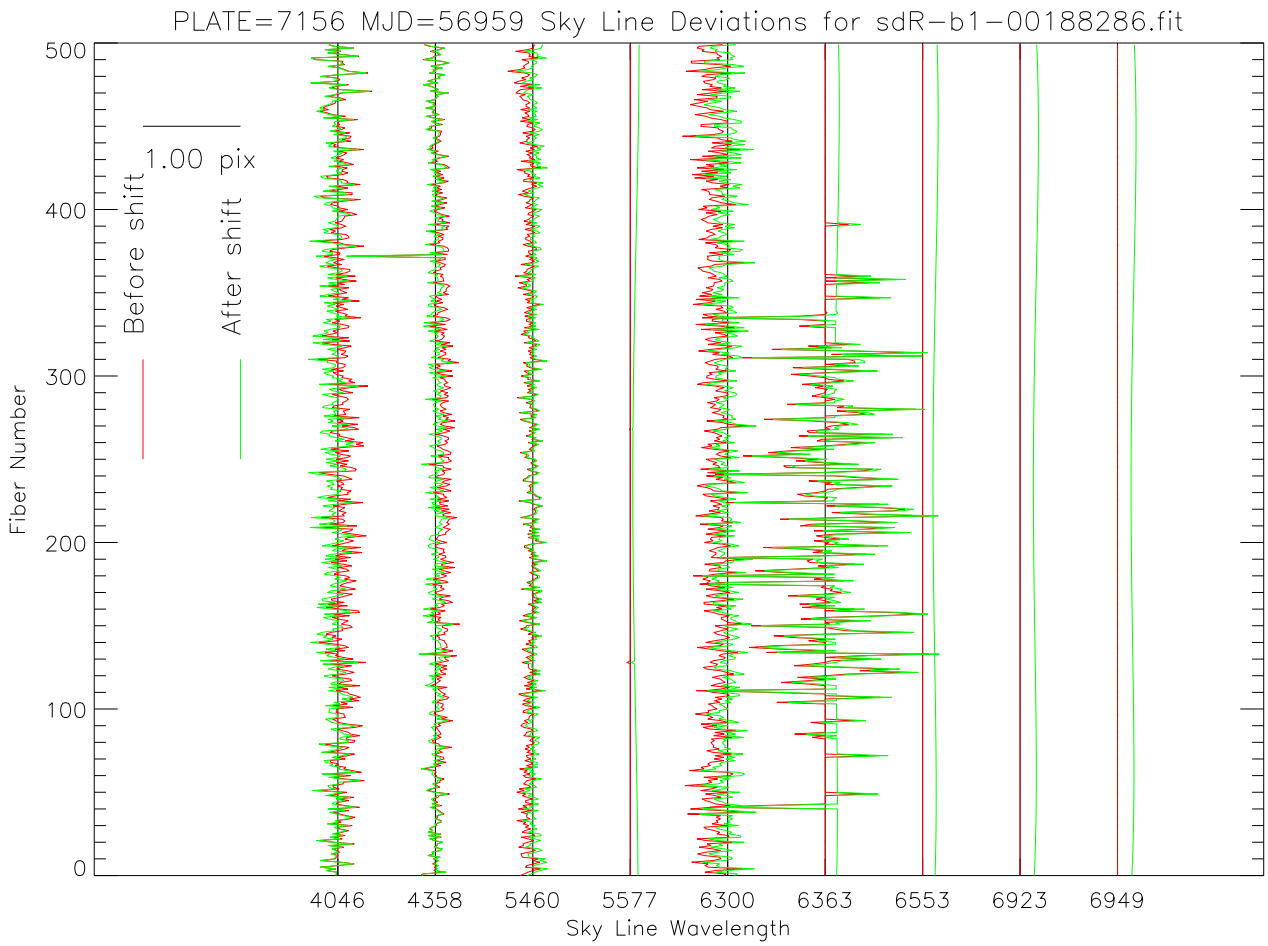


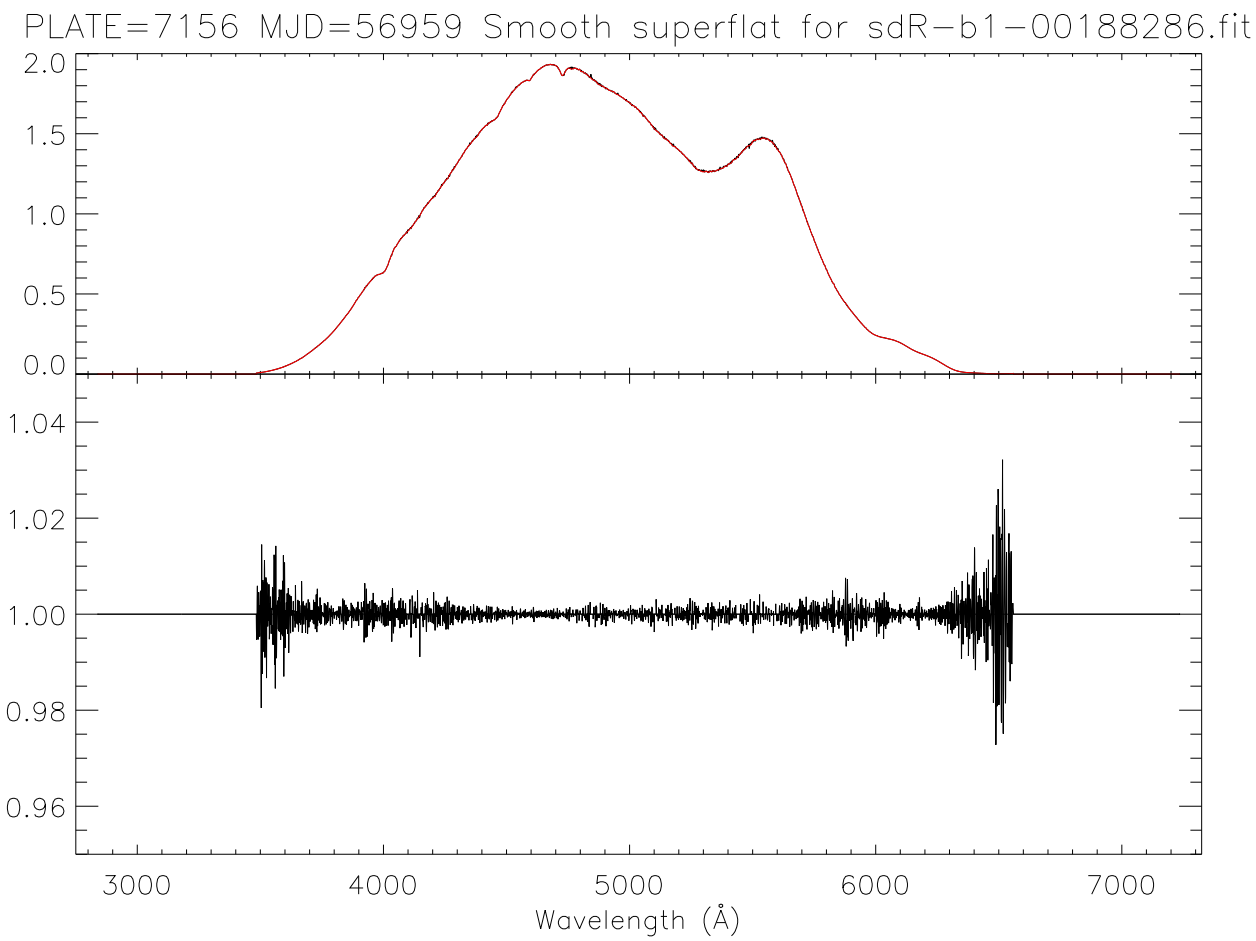

PLATE=7156 MJD=56959 sdR-b1-00188285.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.58 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

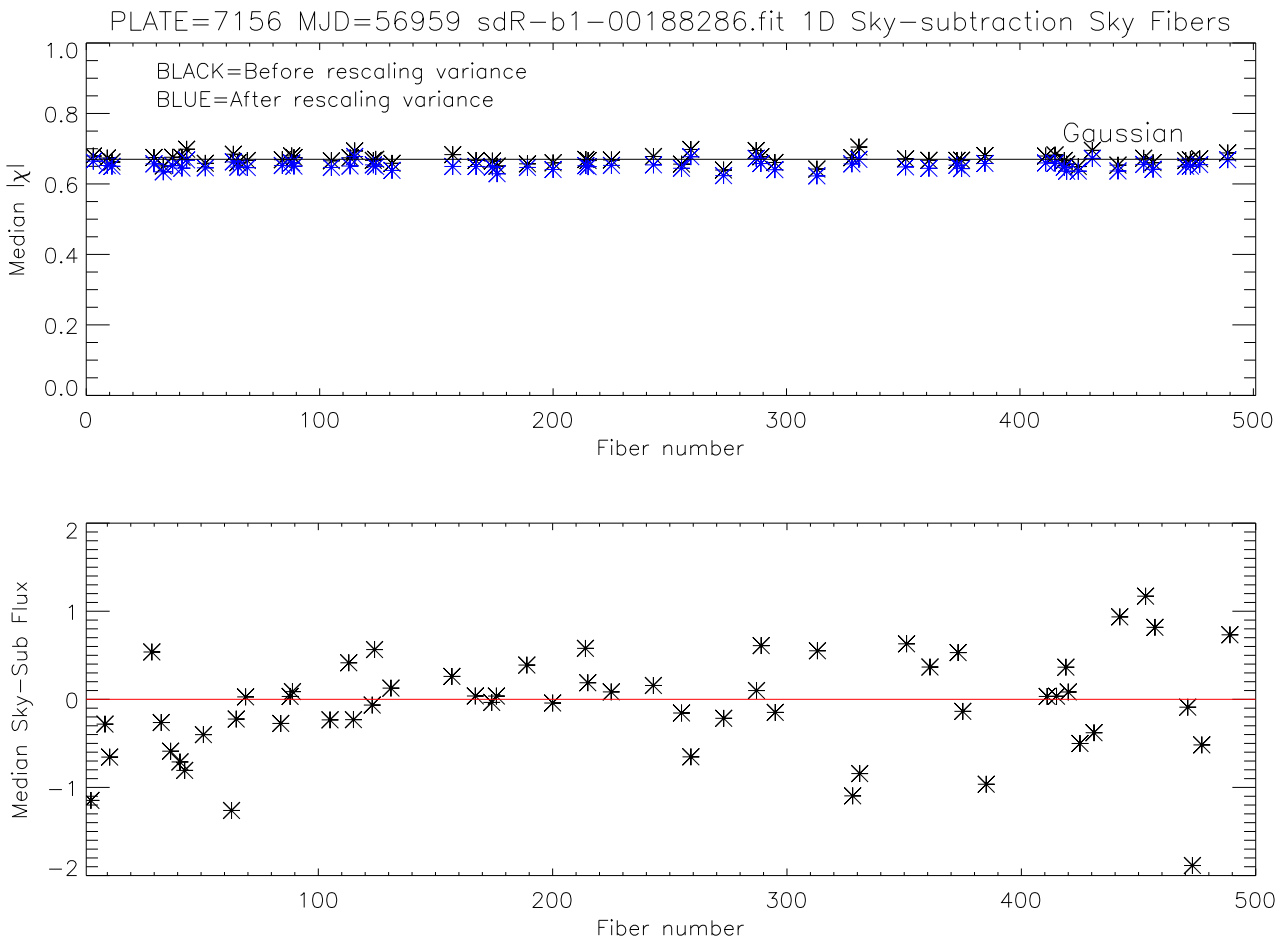

PLATE=7156 MJD=56959 sdR-b1-00188285.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 27.70 %
Fiber number
Focal Distance [mm]
Airmass

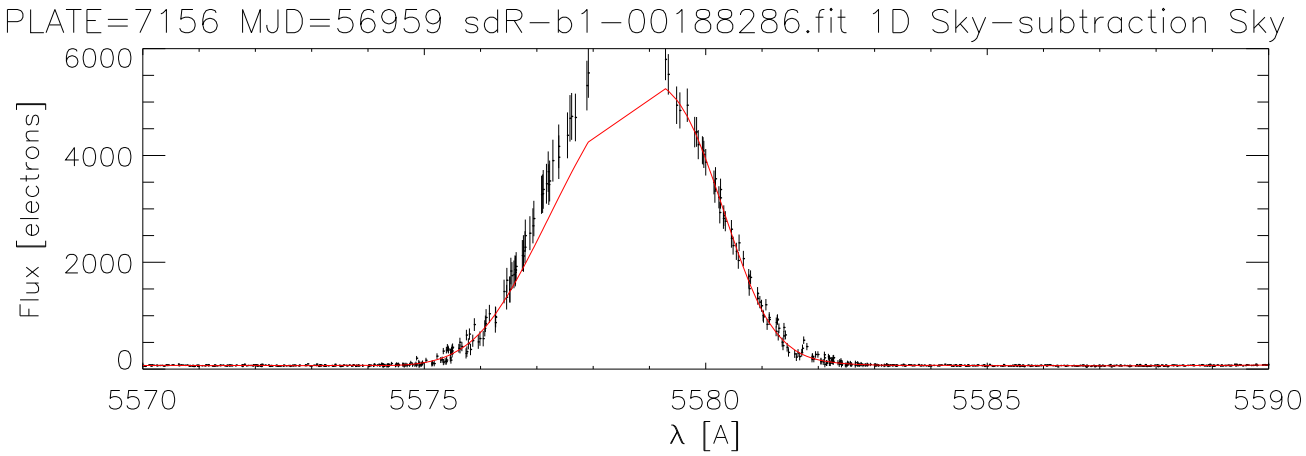

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.412
Max value = 13.725
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 02:57:32 2016

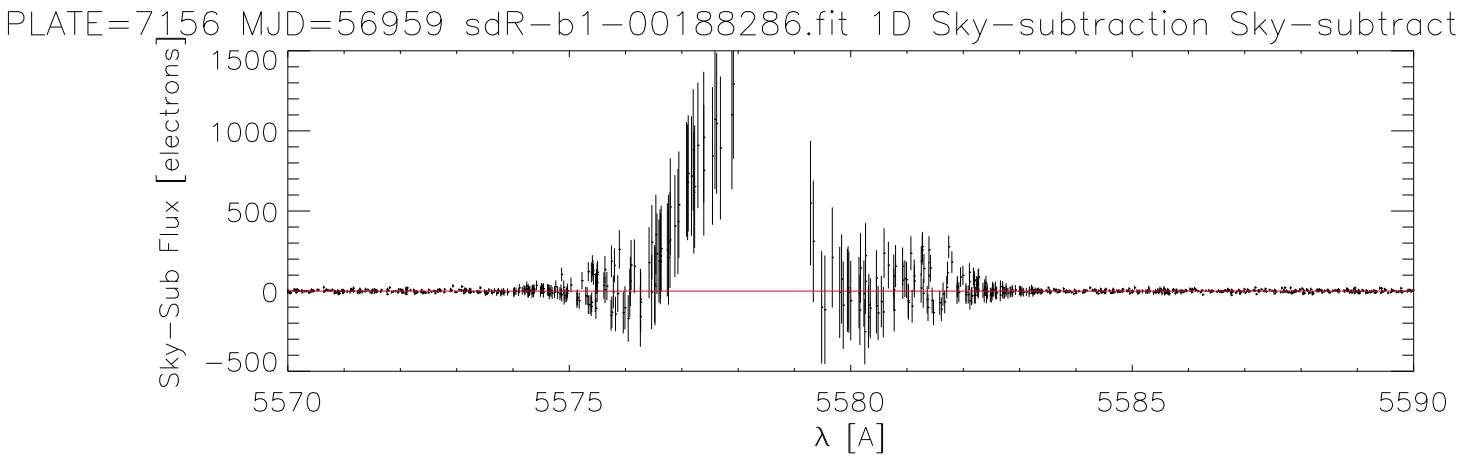

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−b1−00188286.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b1-00188286.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

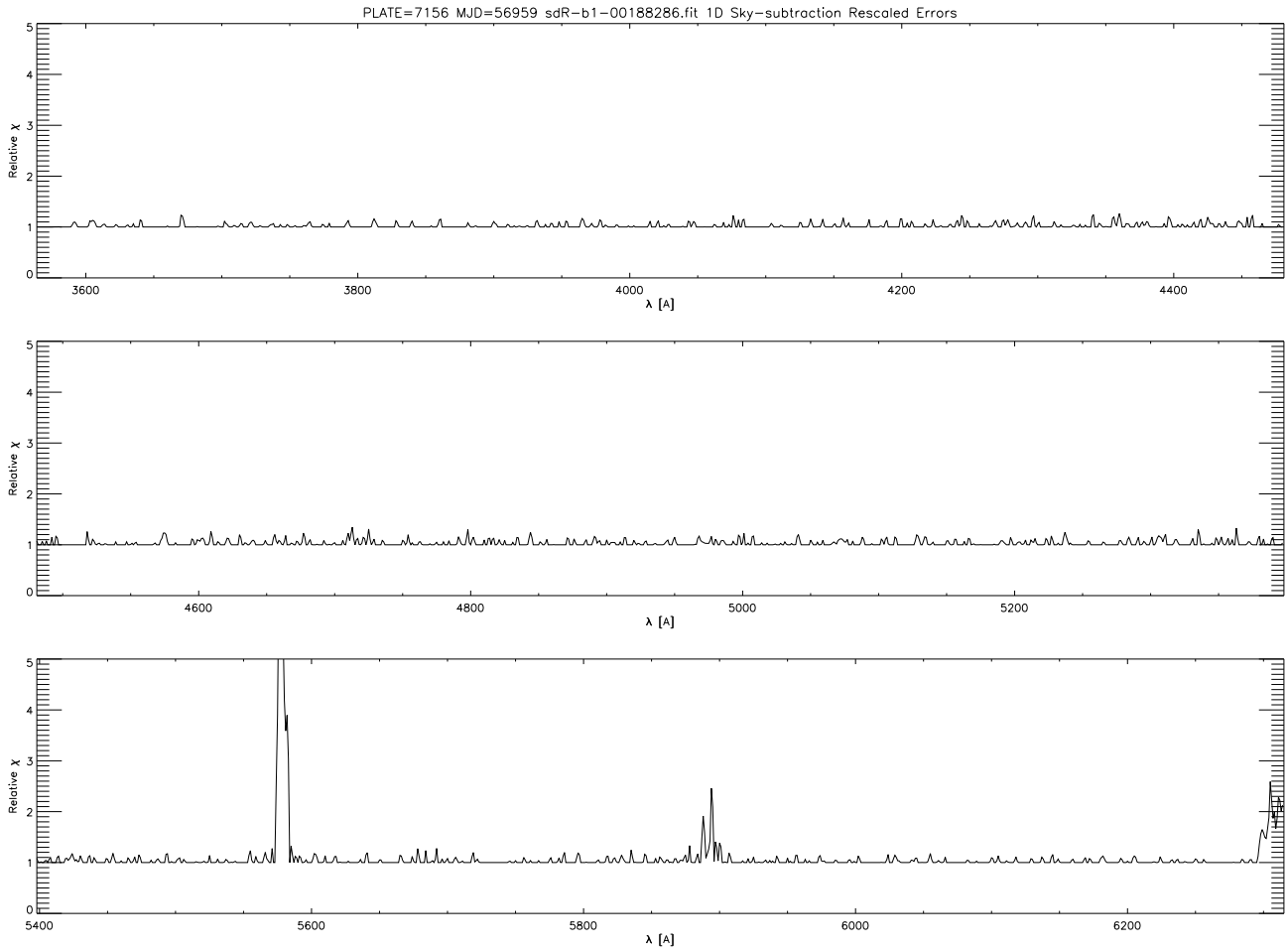

PLATE=7156 MJD=56959 Smooth superflat for sdR-b1-00188286.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

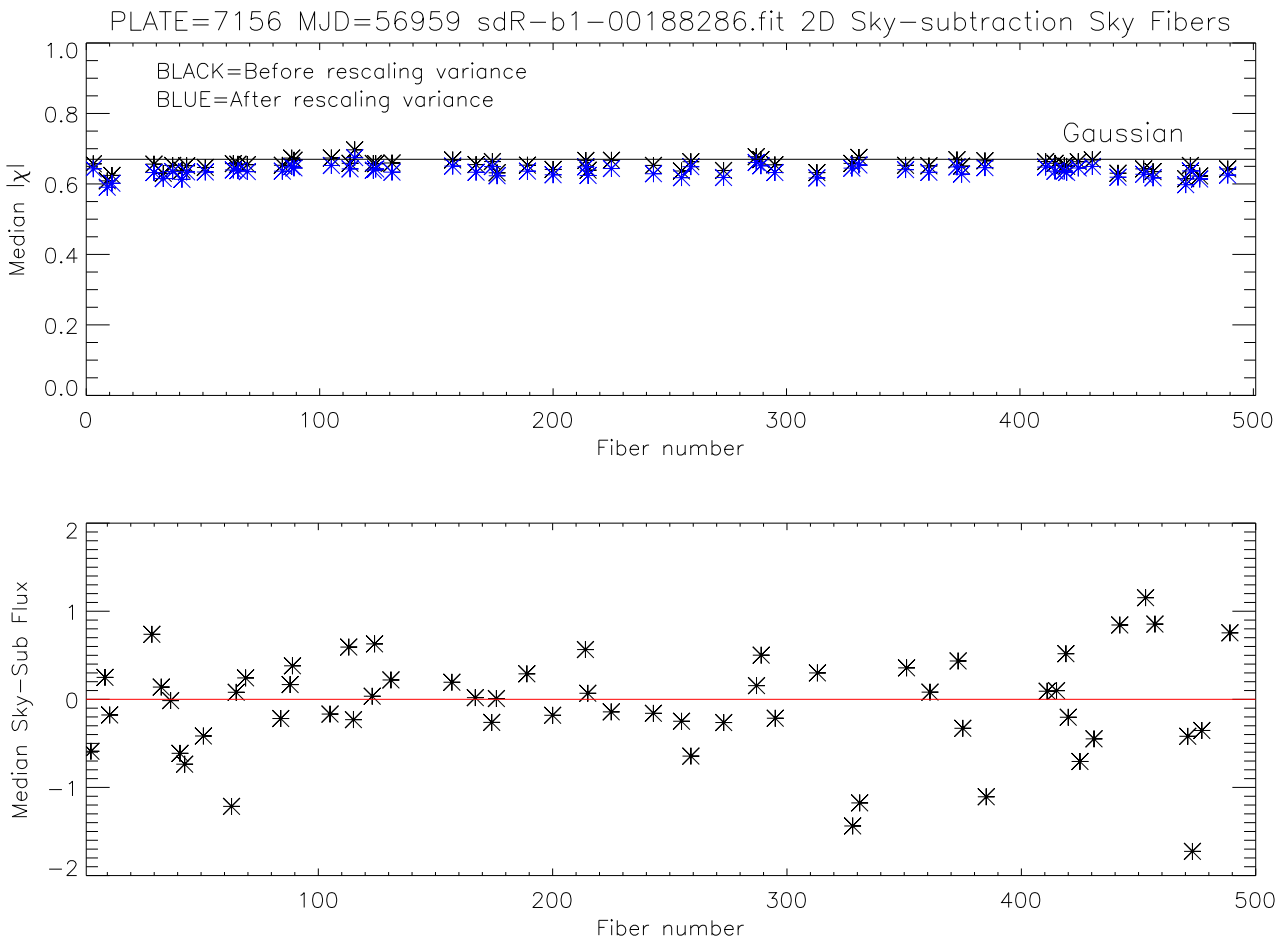

PLATE=7156 MJD=56959 sdR-b1-00188286.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

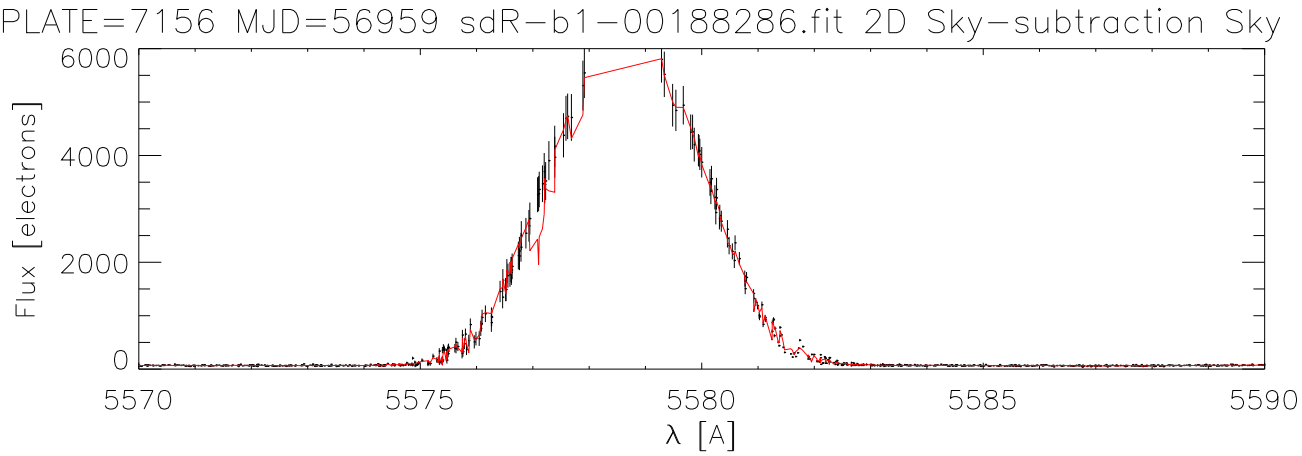

PLATE=7156 MJD=56959 sdR-b1-00188286.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

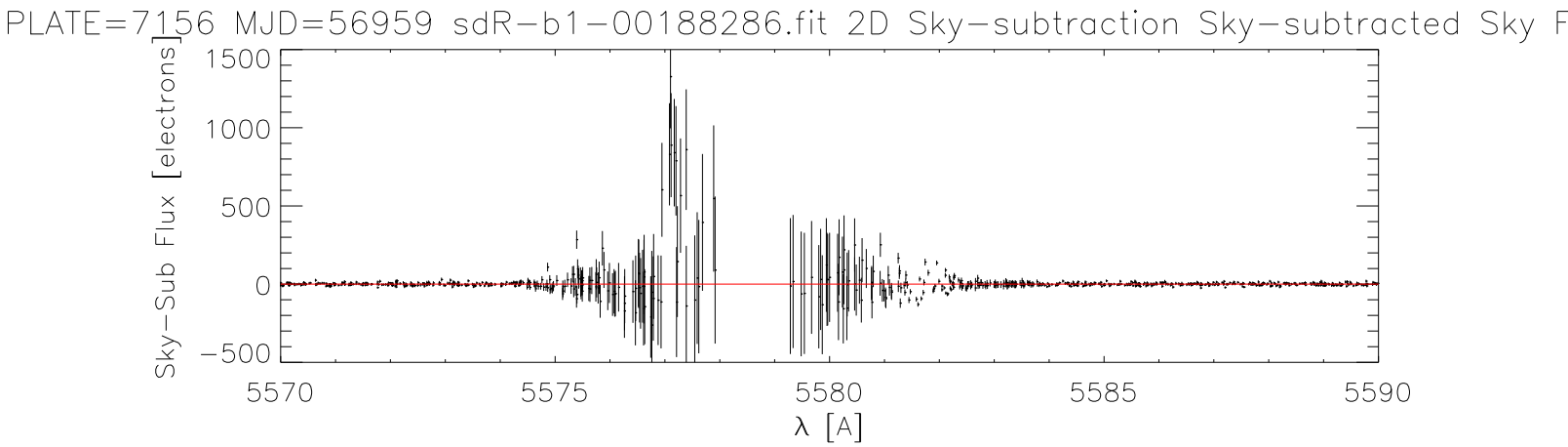

PLATE=7156 MJD=56959 sdR-b1-00188286.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 58

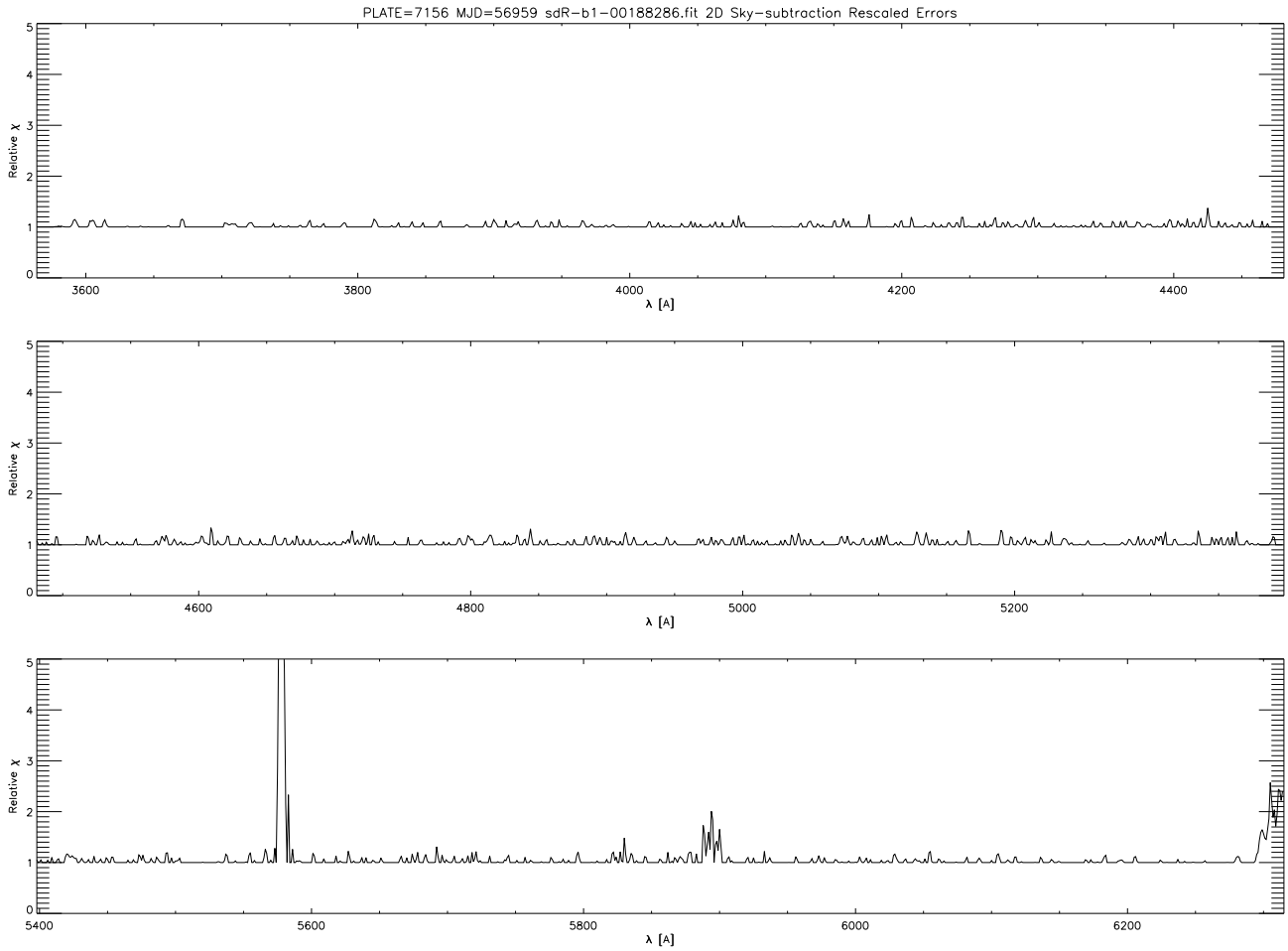


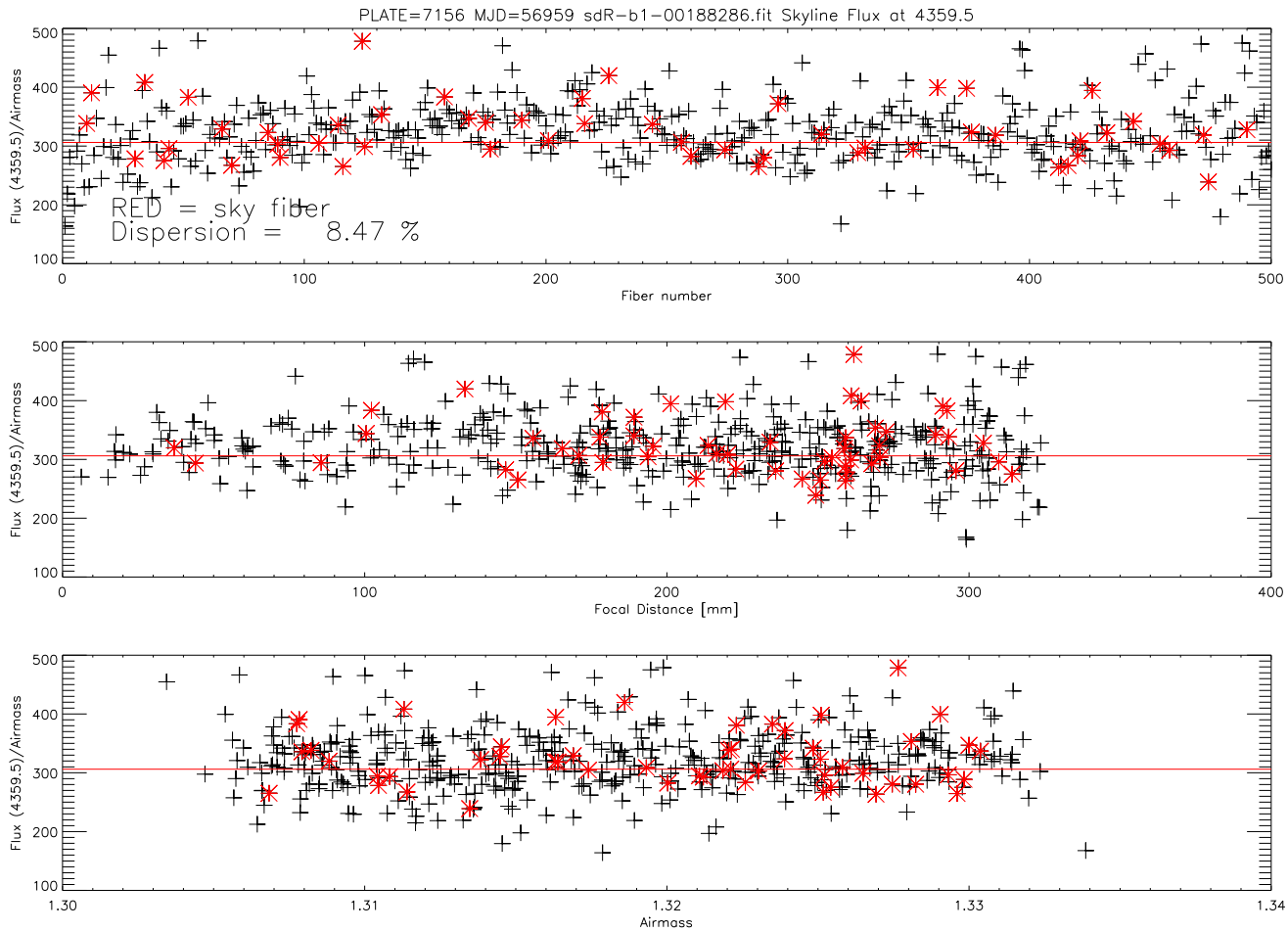

PLATE=7156 MJD=56959 sdR-b1-00188286.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

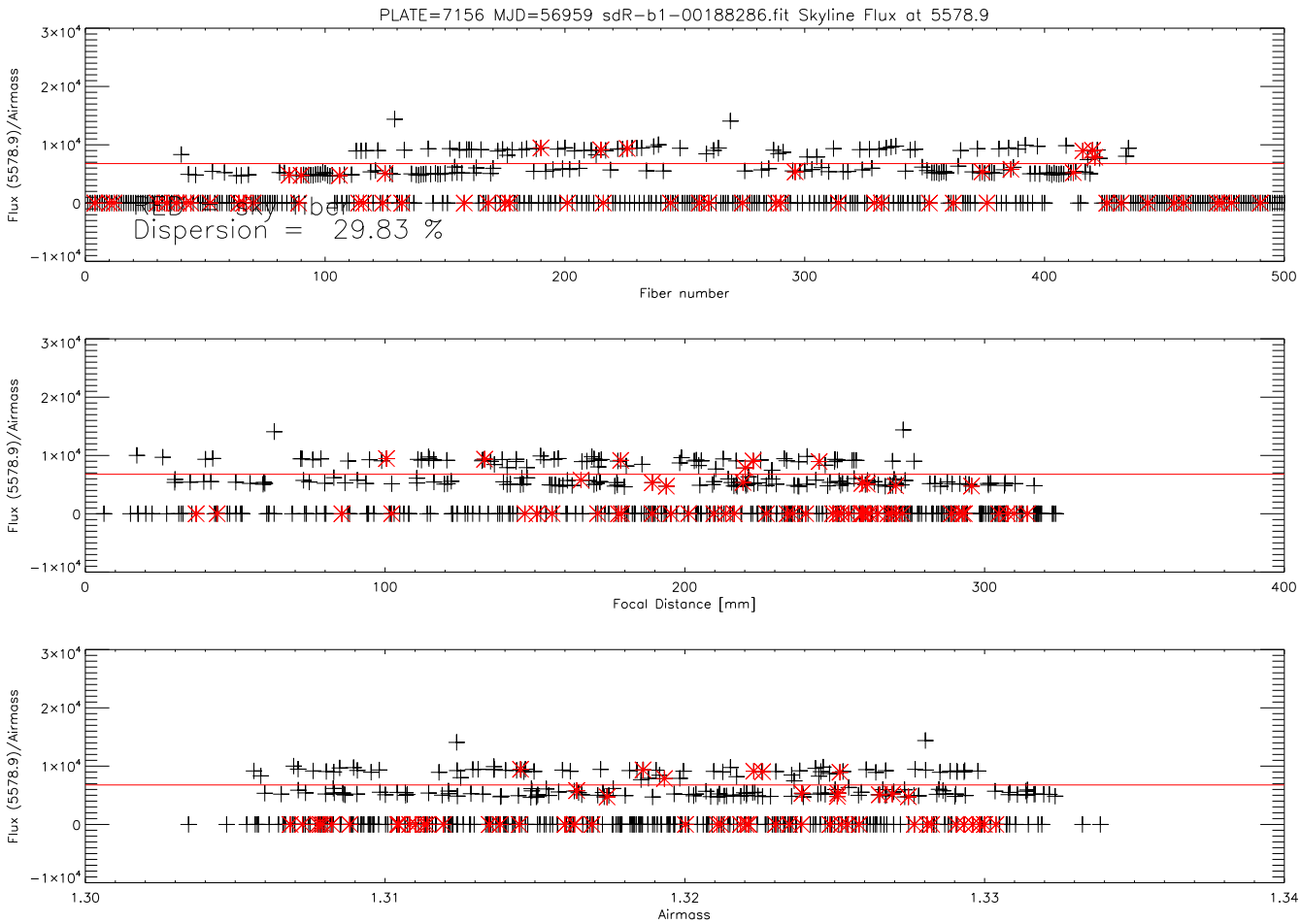

PLATE=7156 MJD=56959 sdR-b1-00188286.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

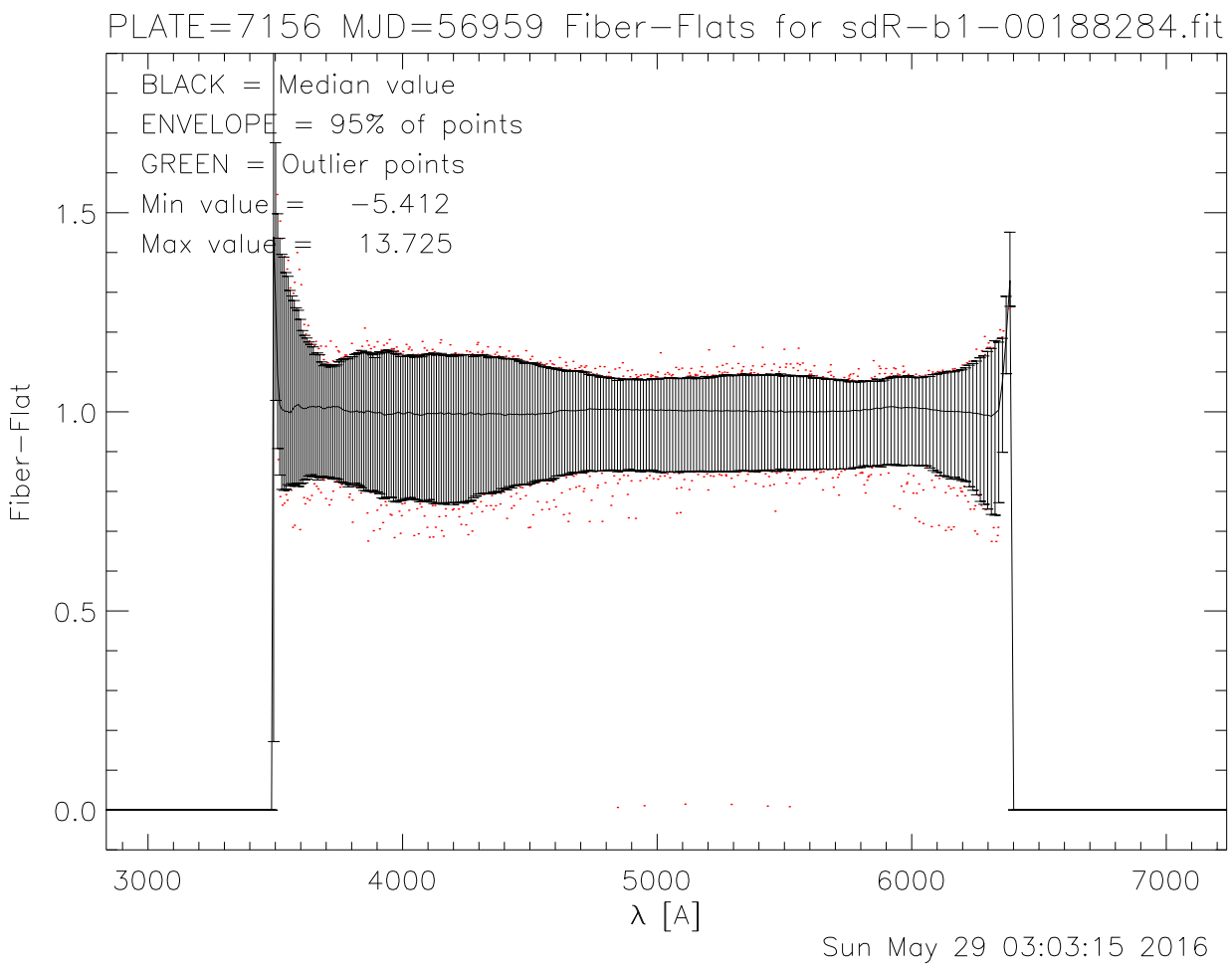

PLATE=7156 MJD=56959 sdR-b1-00188286.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
−500
5570
5575
5580
5585
5590
λ [A]

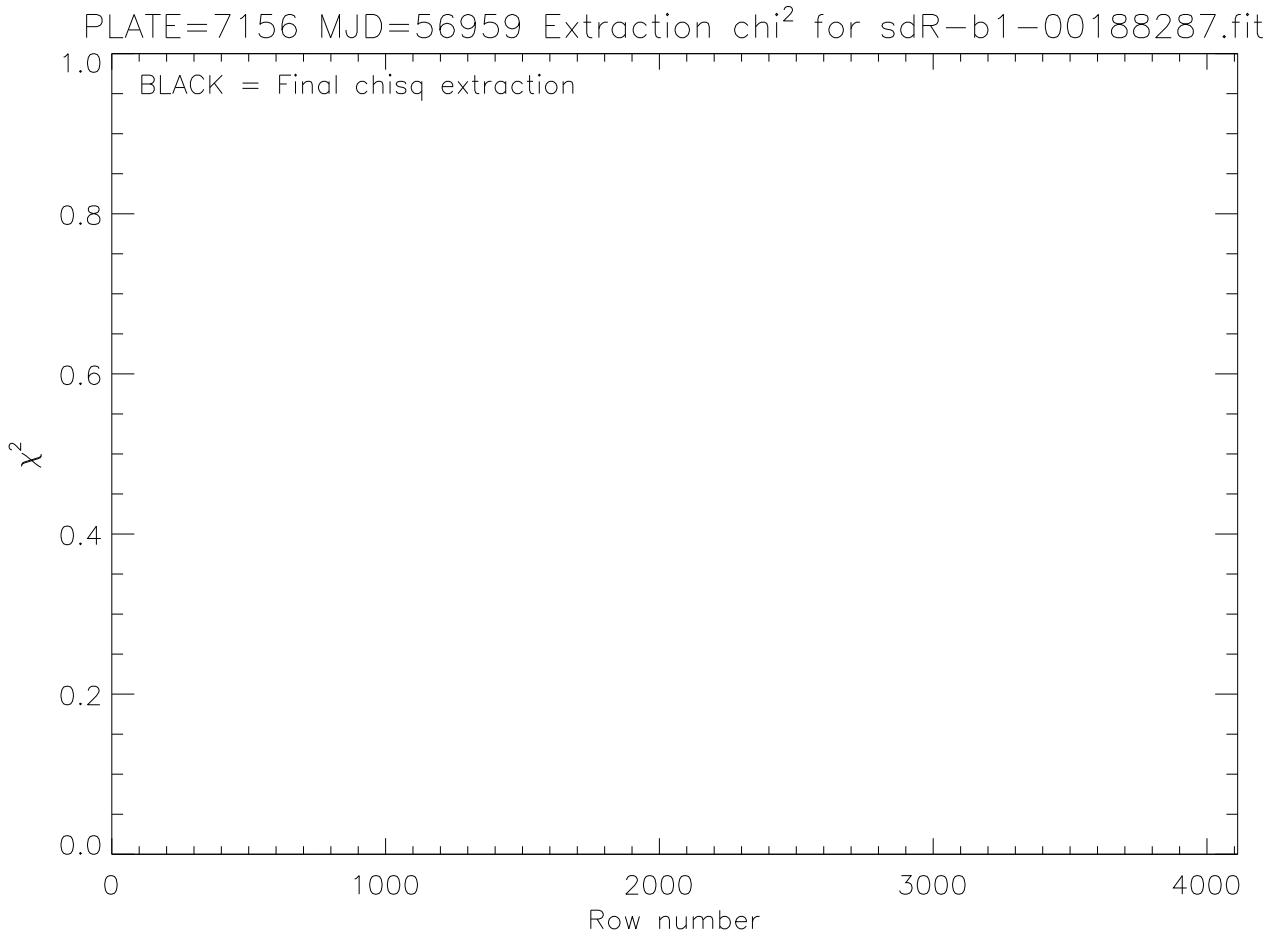
Number of sky fibers = 58

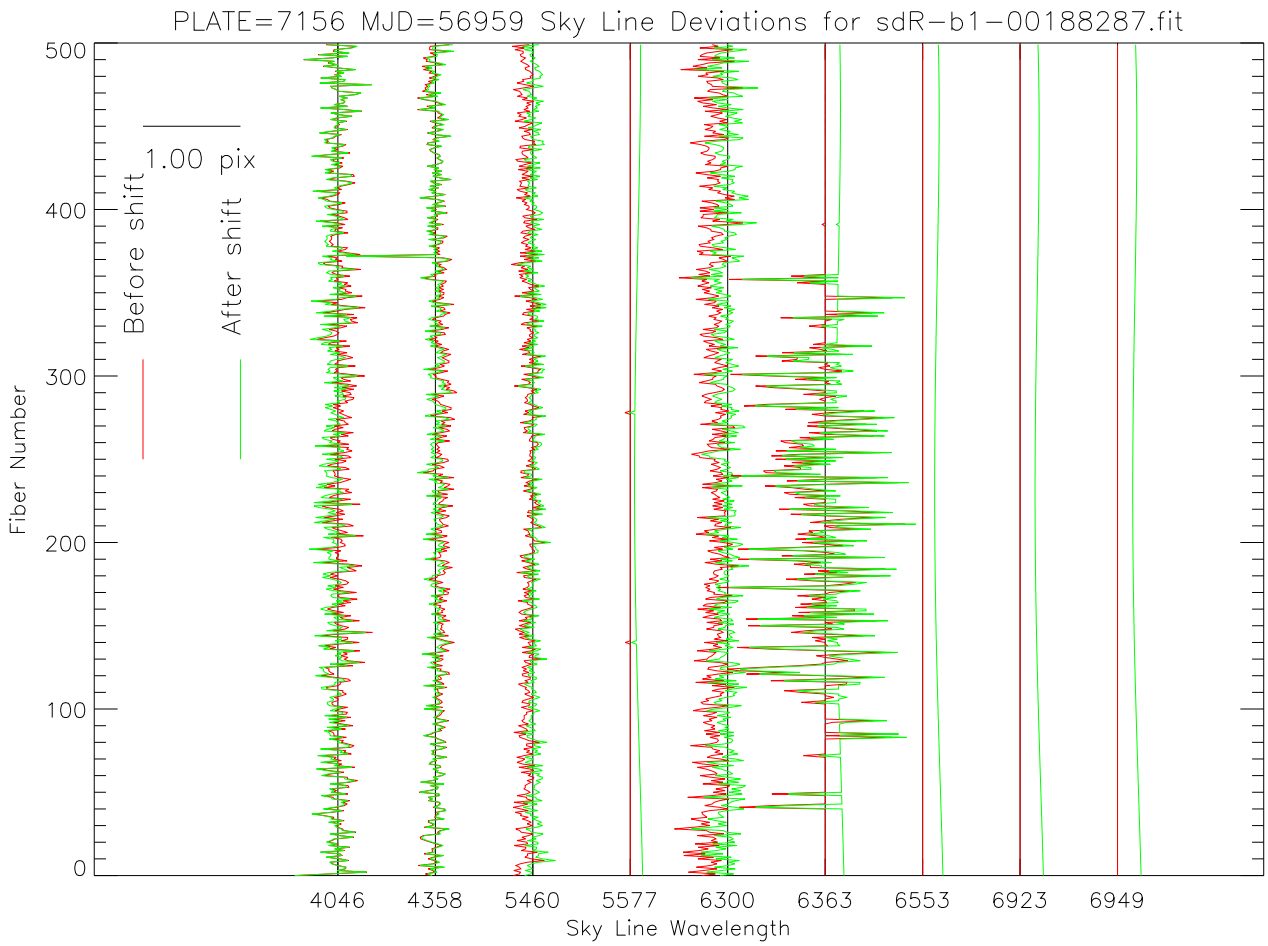


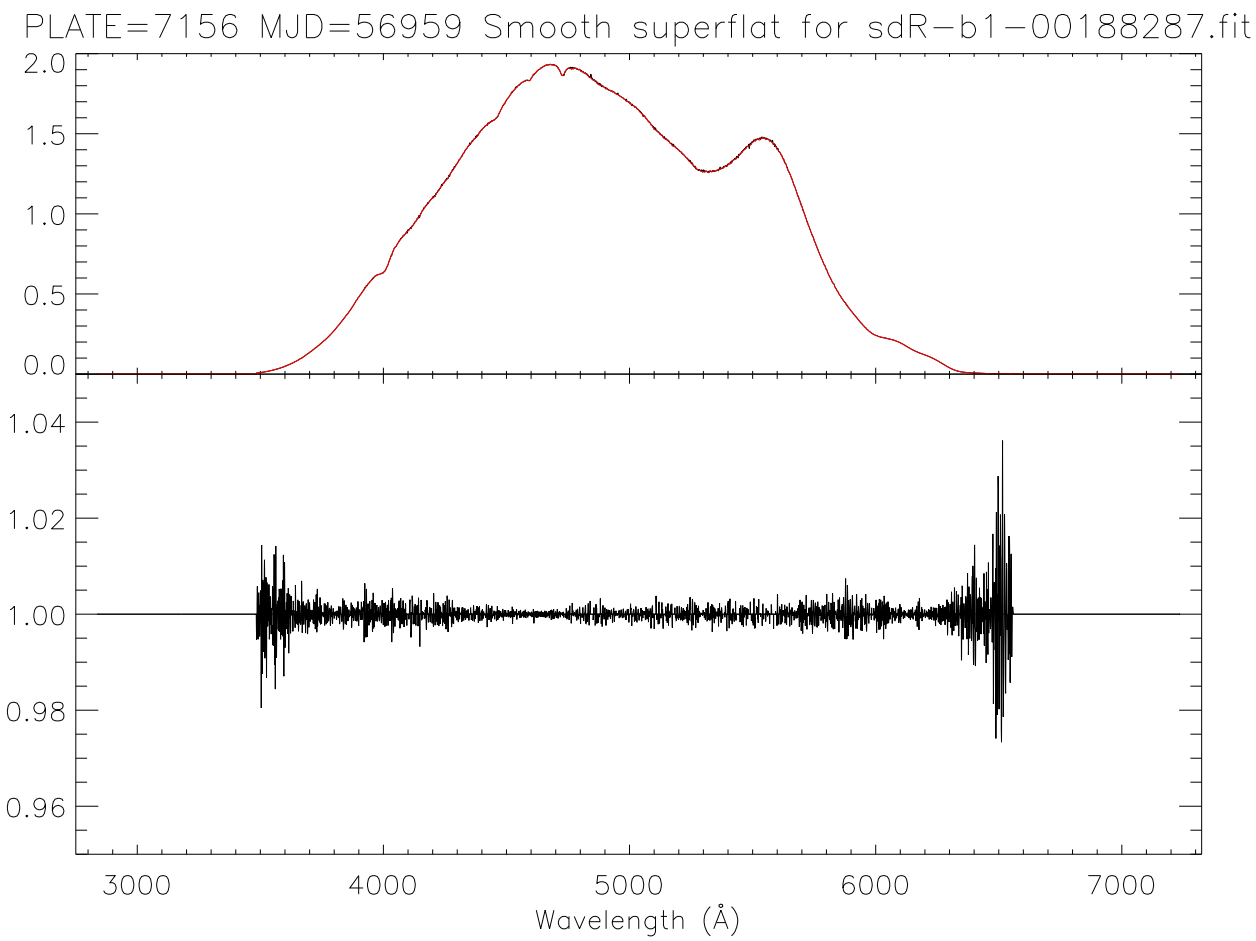

PLATE=7156 MJD=56959 sdR-b1-00188286.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.47 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

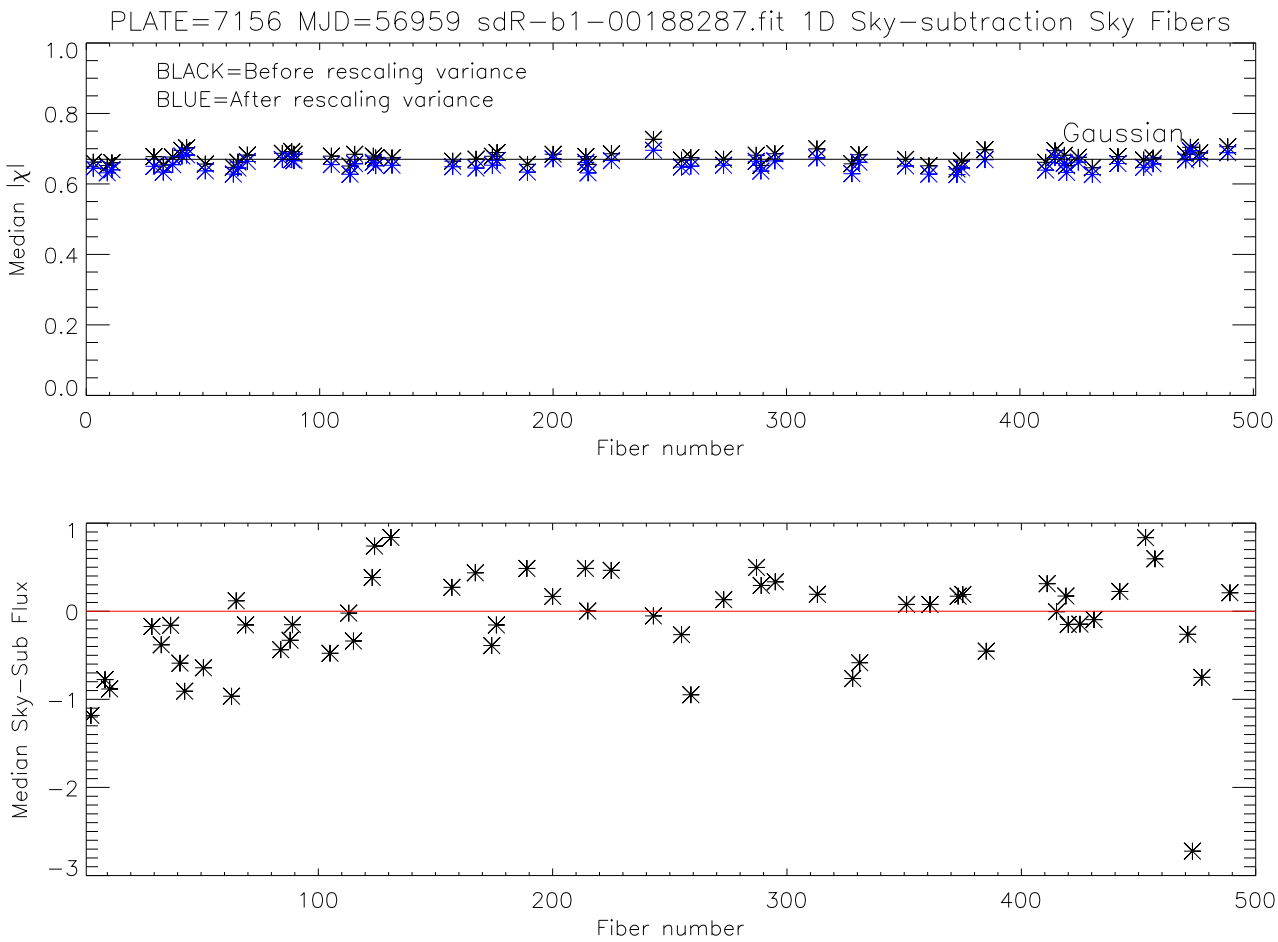

PLATE=7156 MJD=56959 sdR-b1-00188286.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
Dispersion = 29.83 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

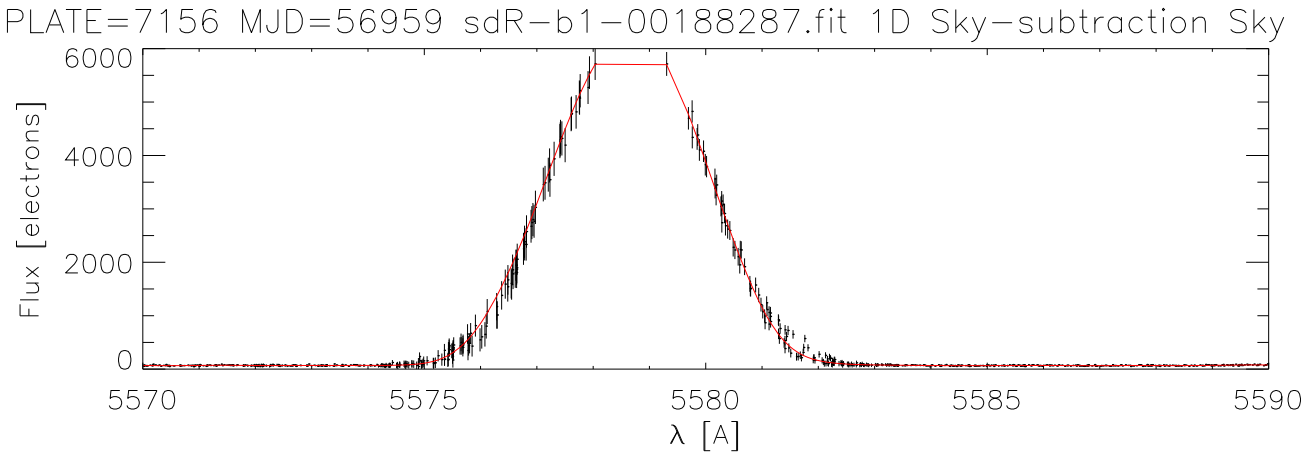

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.412
Max value = 13.725
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:03:15 2016

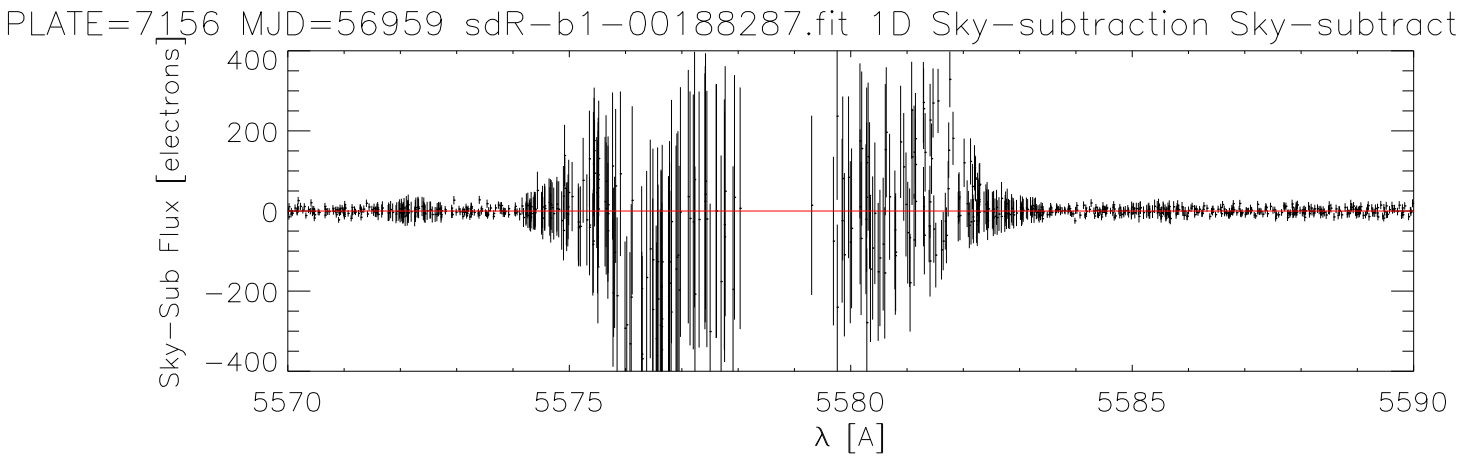

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−b1−00188287.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b1-00188287.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

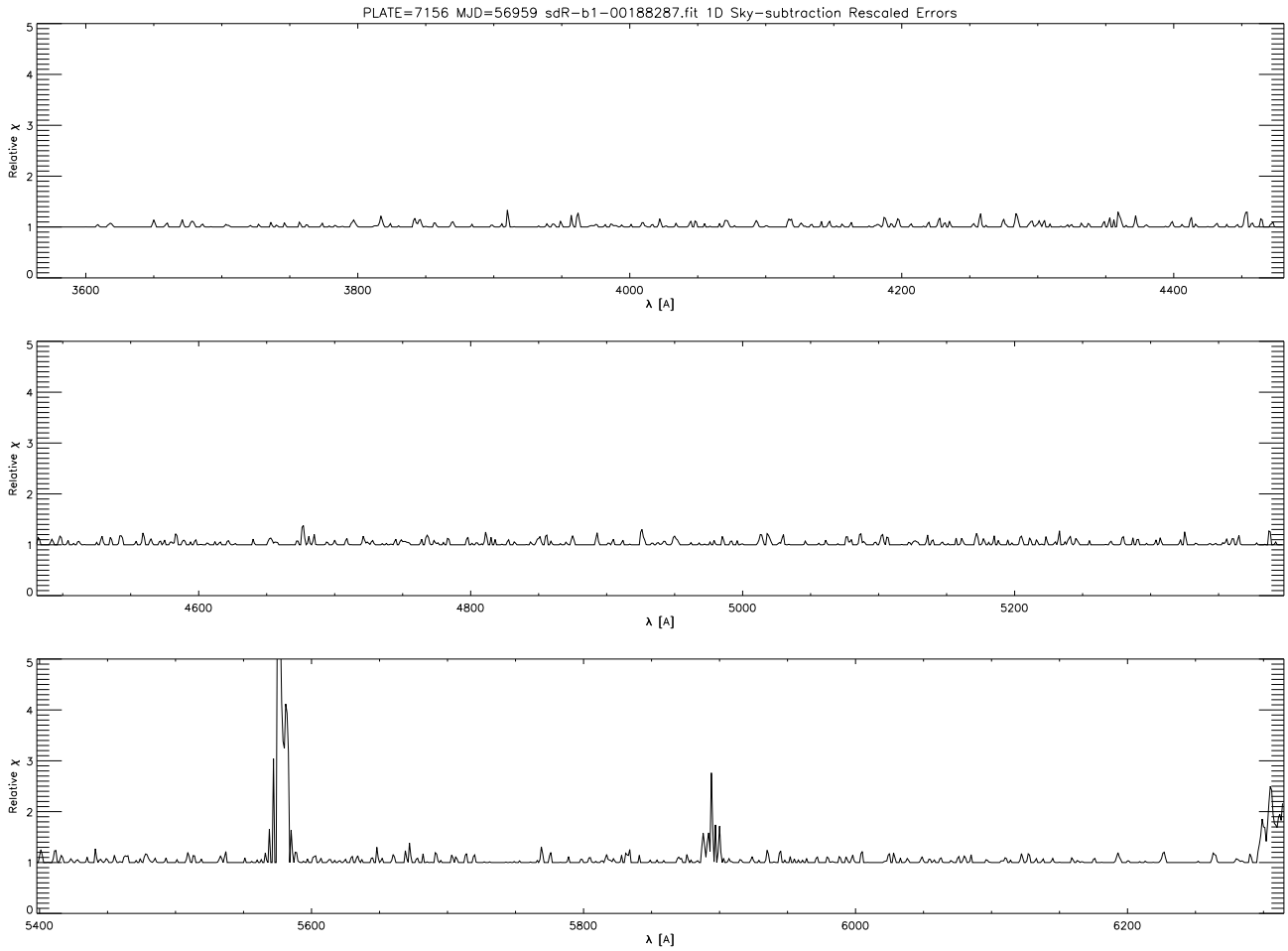

PLATE=7156 MJD=56959 Smooth superflat for sdR-b1-00188287.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

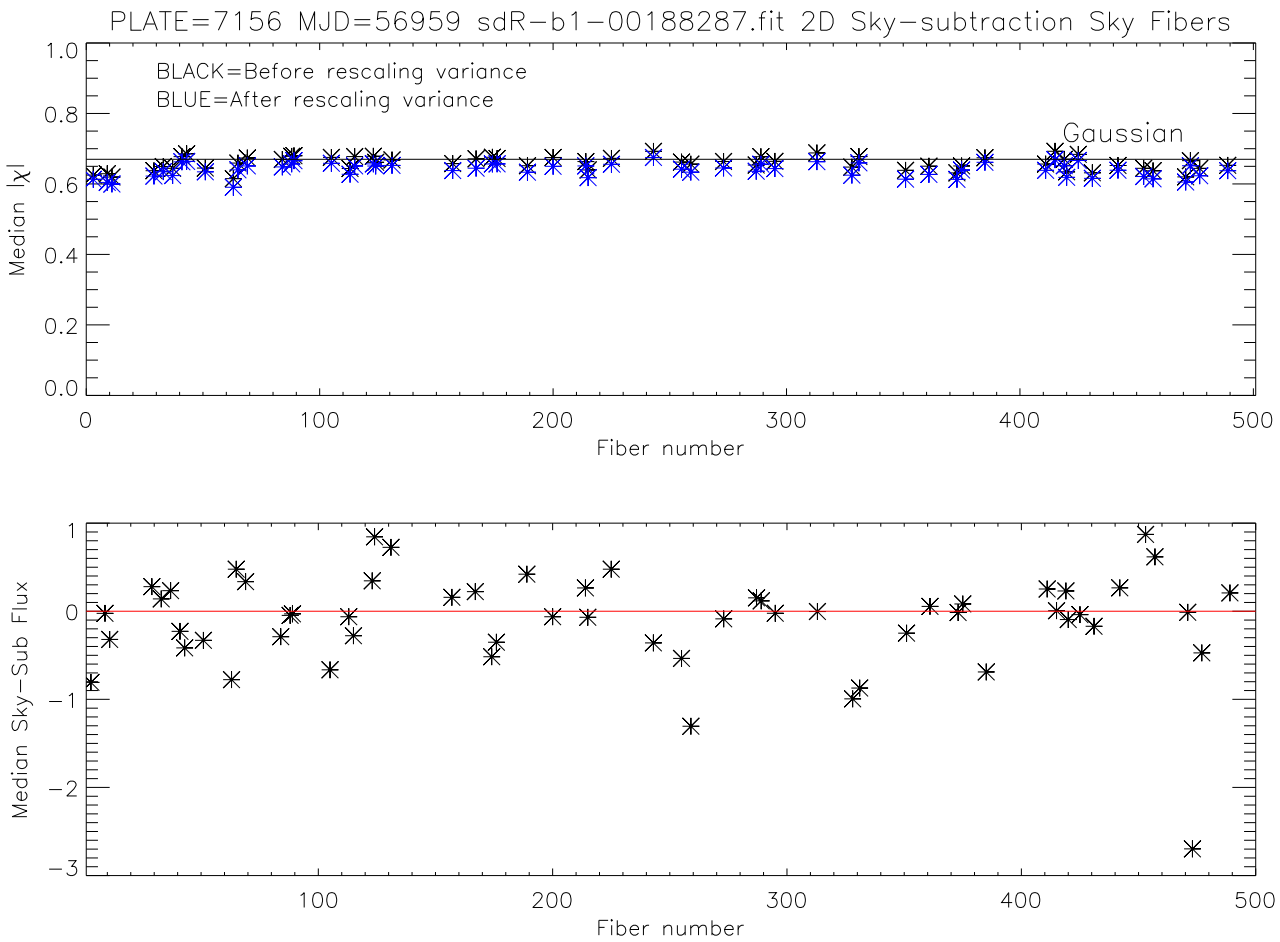

PLATE=7156 MJD=56959 sdR-b1-00188287.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

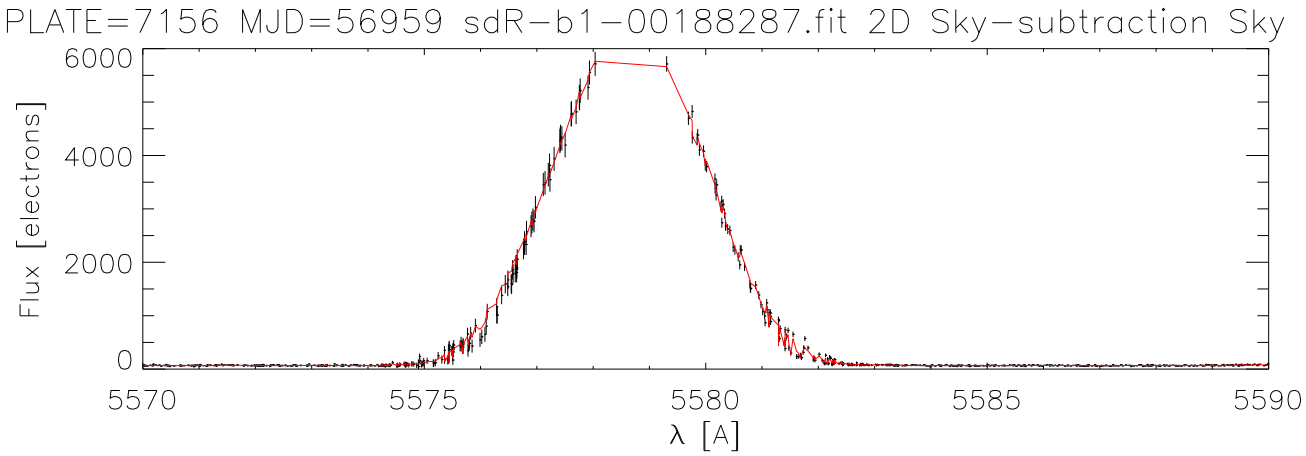

PLATE=7156 MJD=56959 sdR-b1-00188287.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

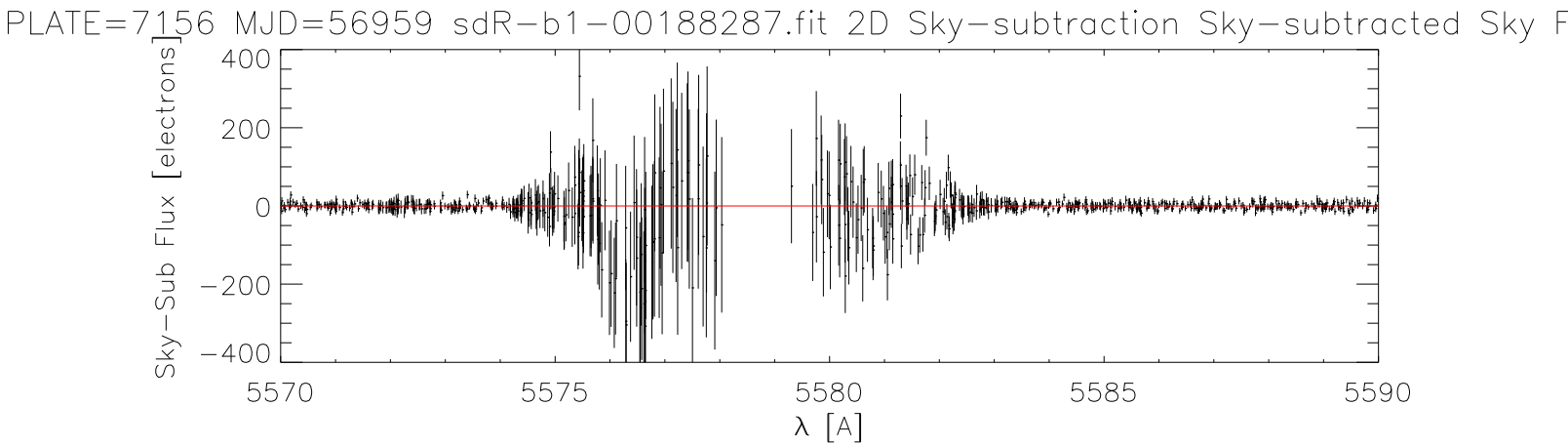

PLATE=7156 MJD=56959 sdR-b1-00188287.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 58

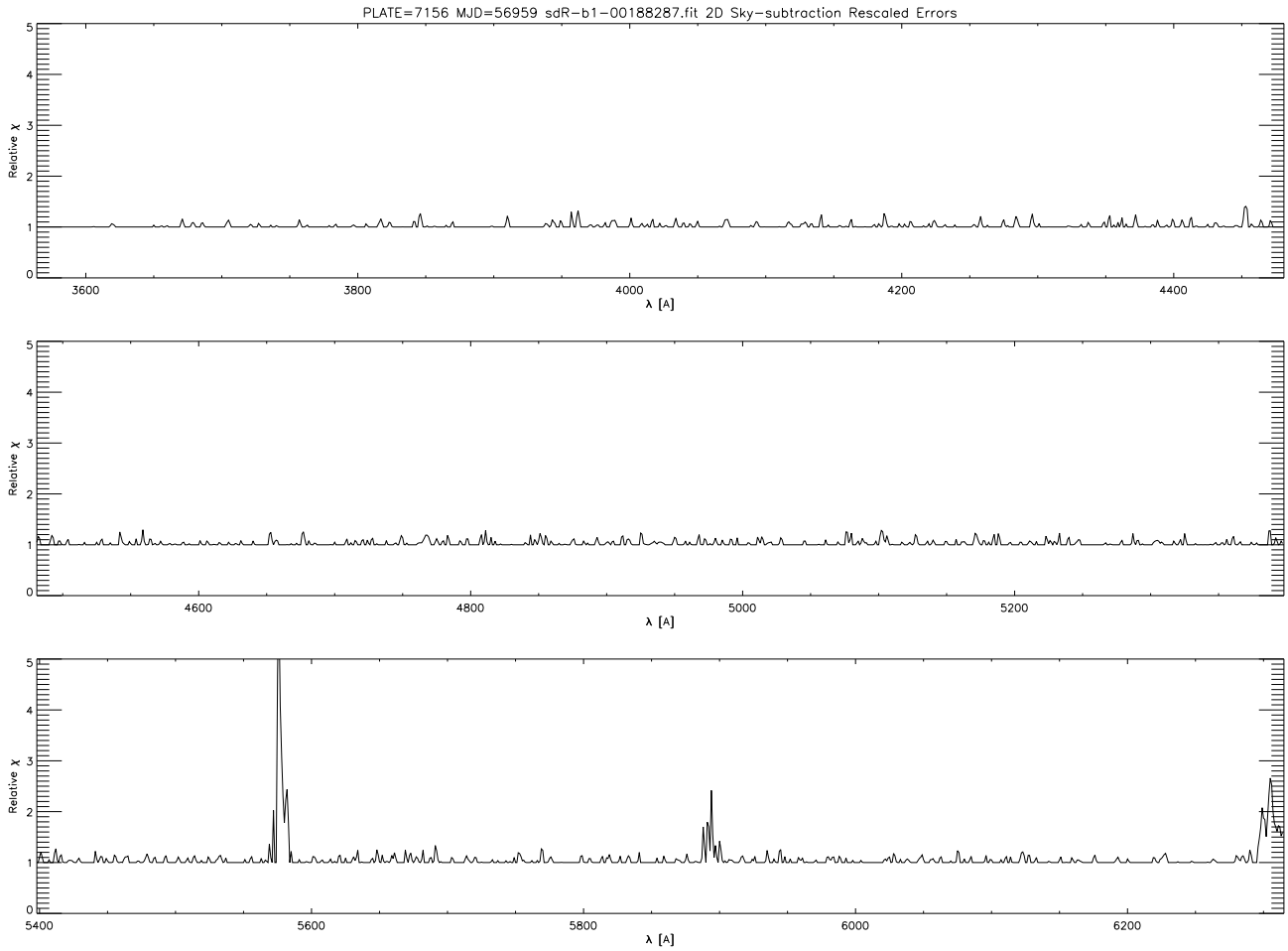


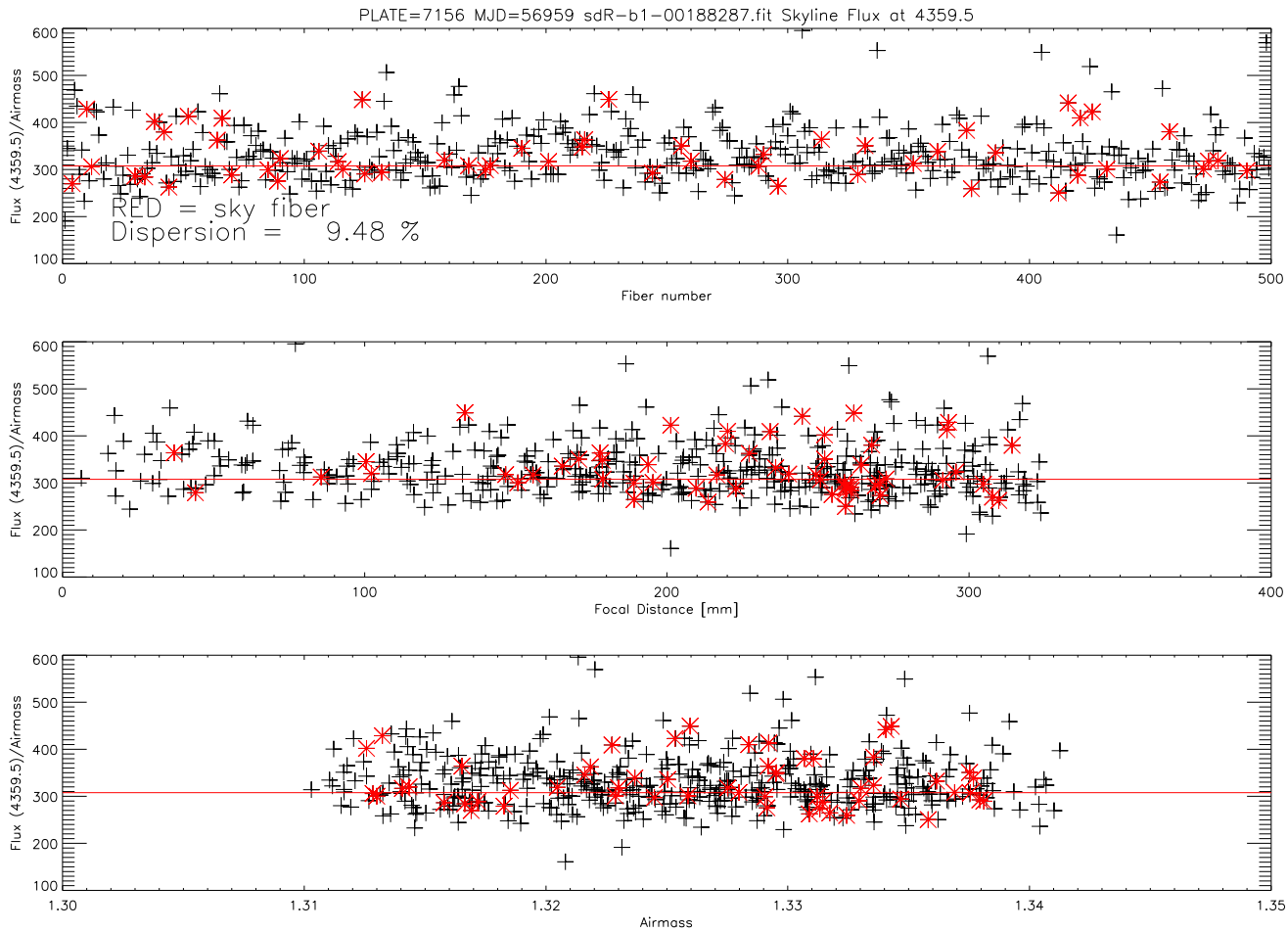

PLATE=7156 MJD=56959 sdR-b1-00188287.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

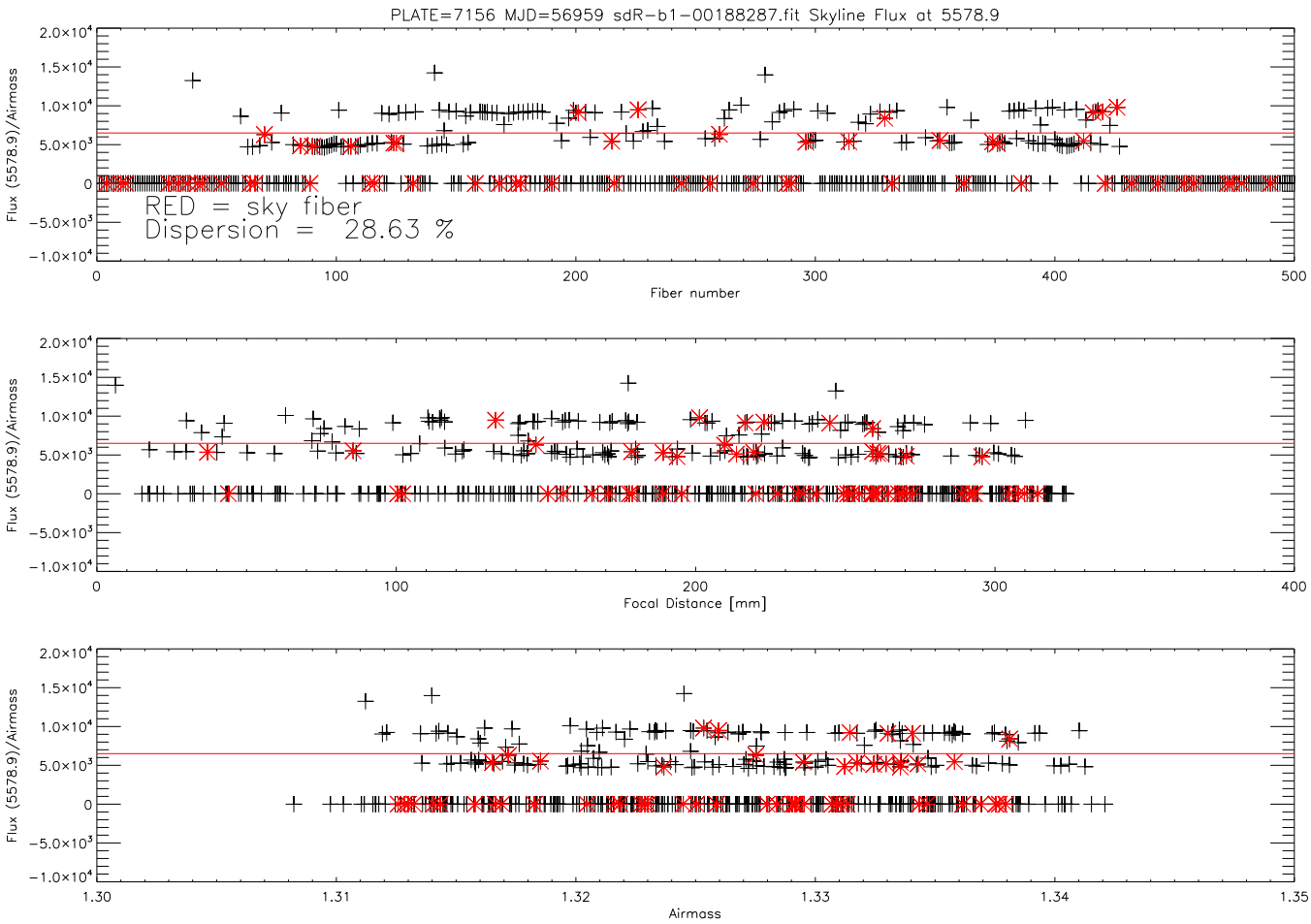

PLATE=7156 MJD=56959 sdR-b1-00188287.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

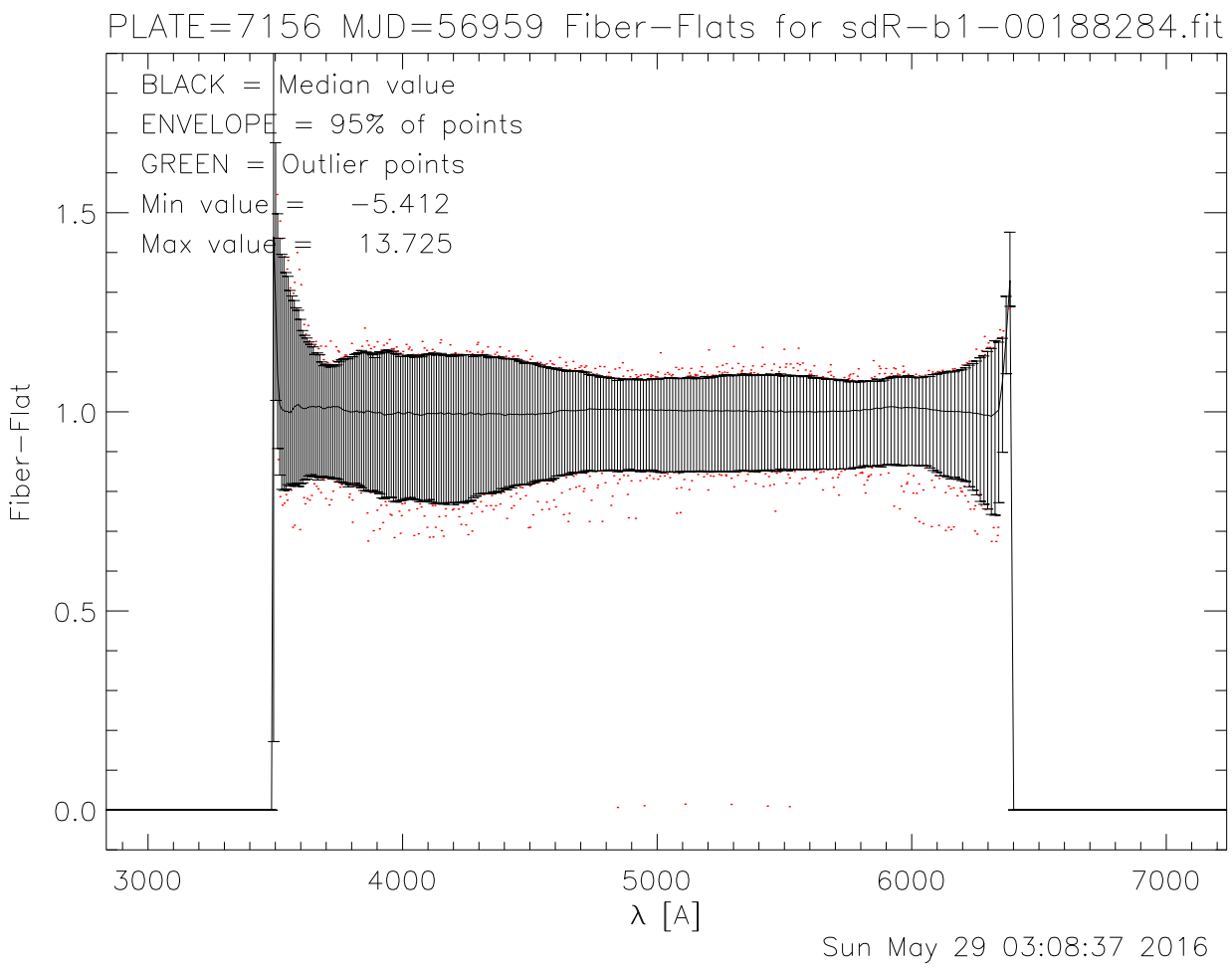

PLATE=7156 MJD=56959 sdR-b1-00188287.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

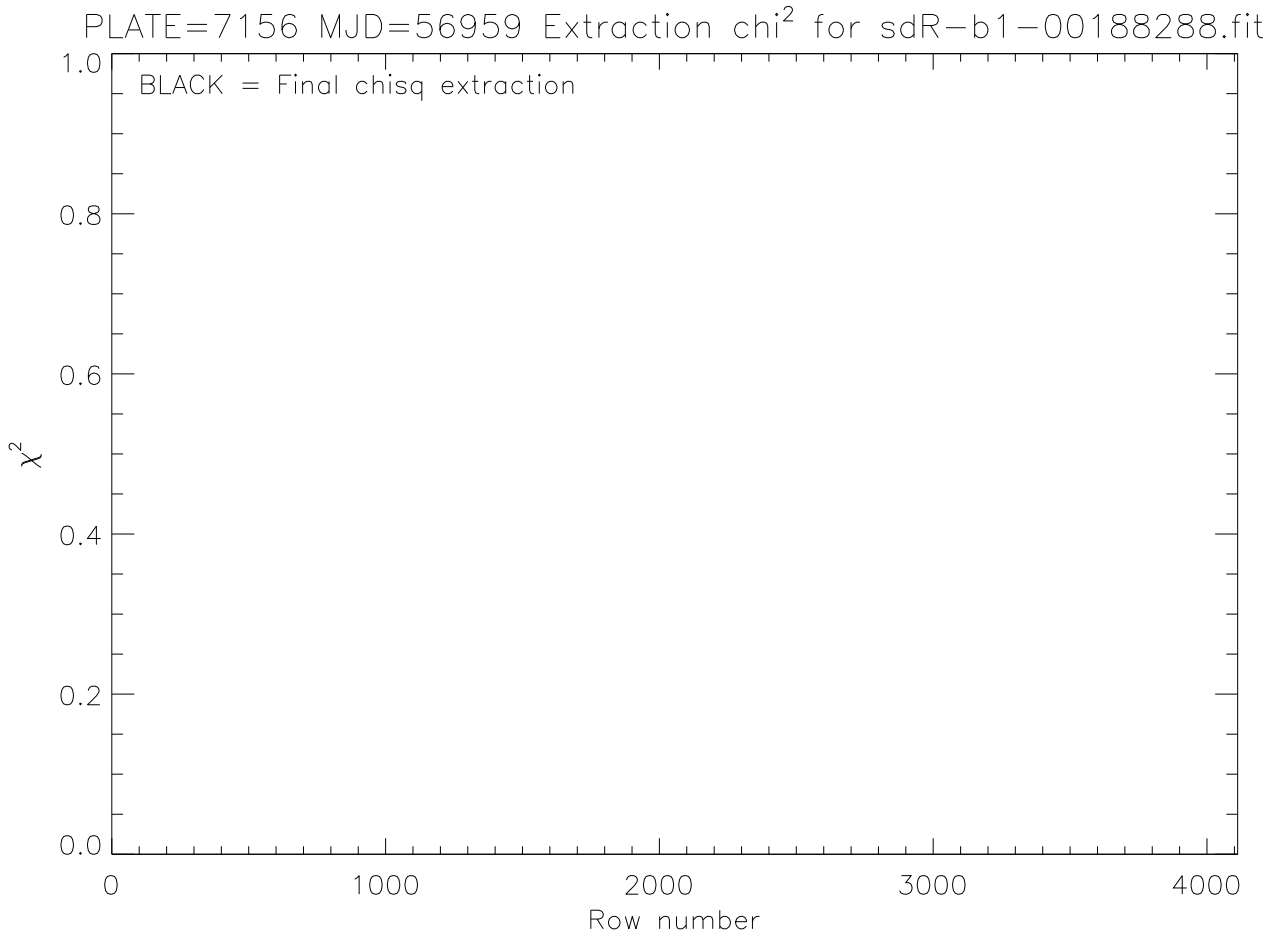
Number of sky fibers = 58

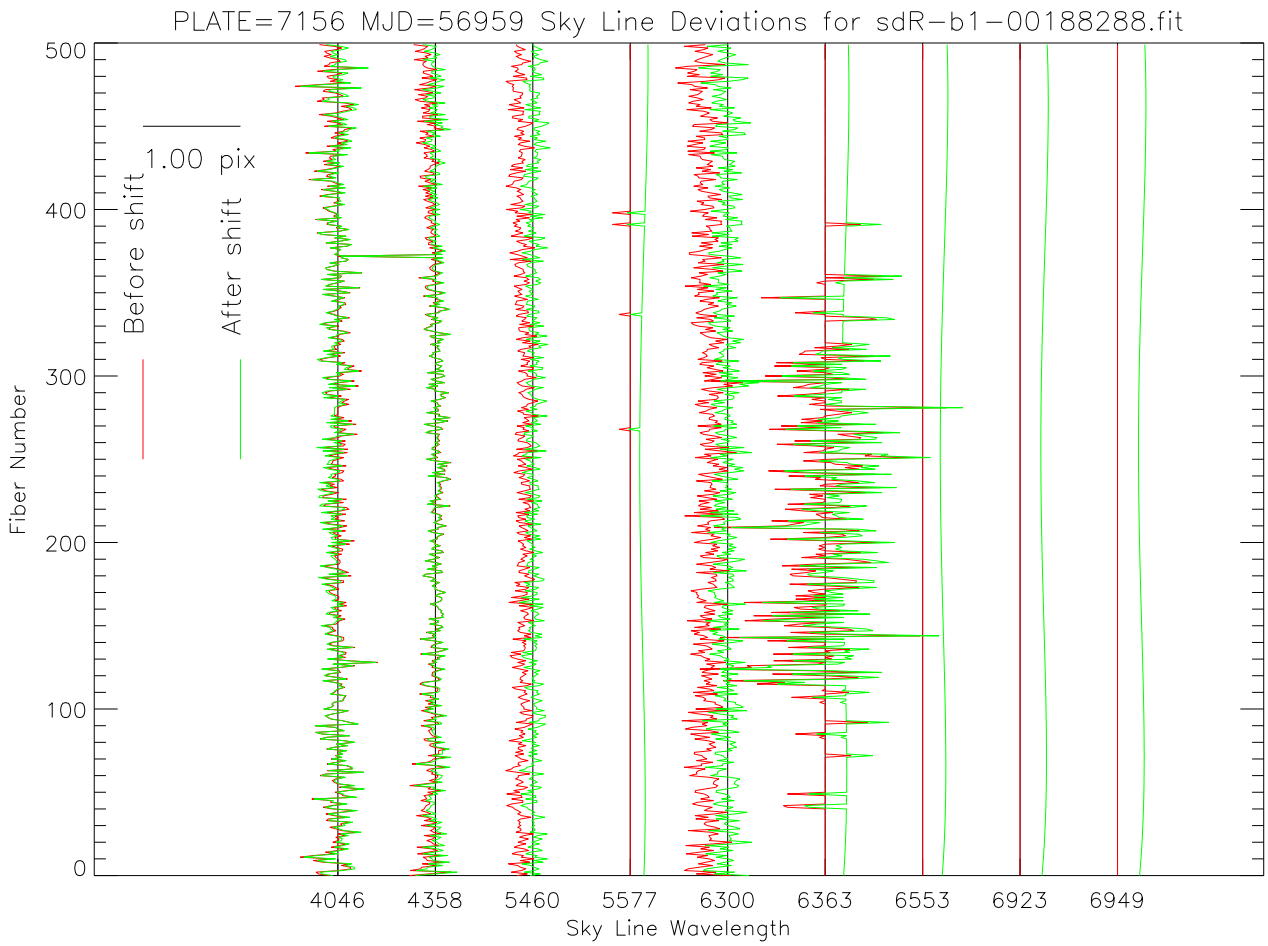


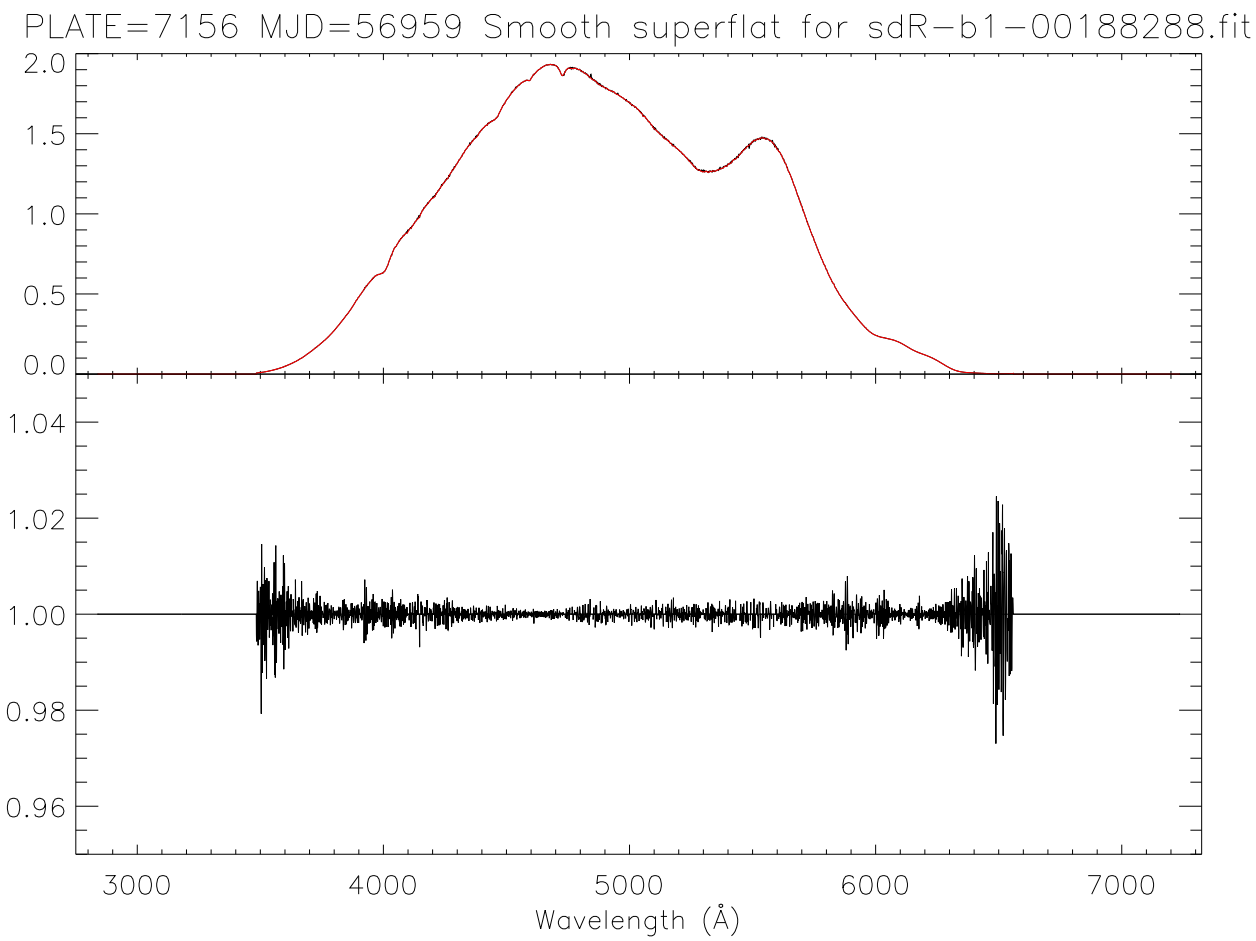

PLATE=7156 MJD=56959 sdR-b1-00188287.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 9.48 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

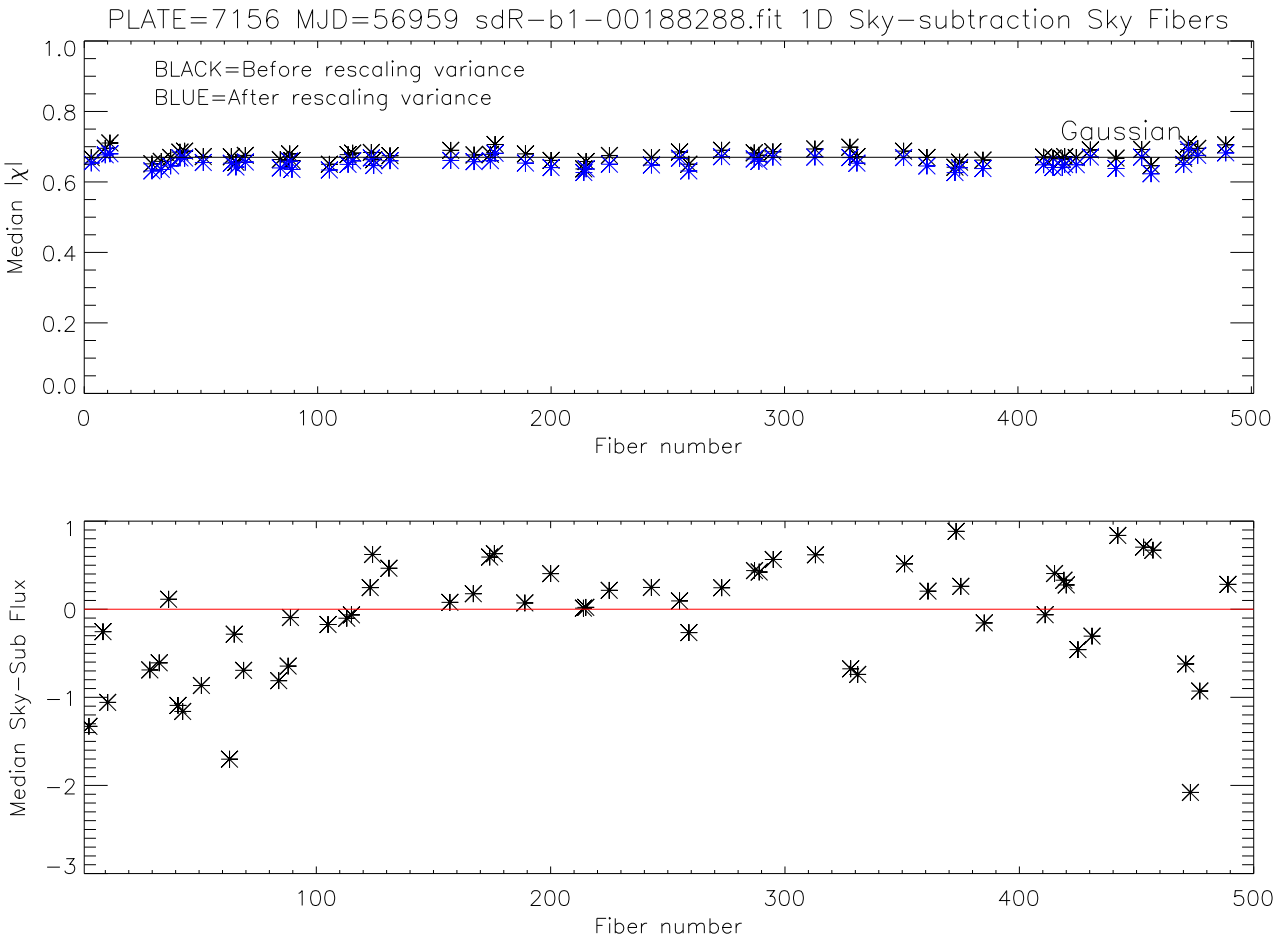

PLATE=7156 MJD=56959 sdR-b1-00188287.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 28.63 %
Fiber number
Focal Distance [mm]
Airmass

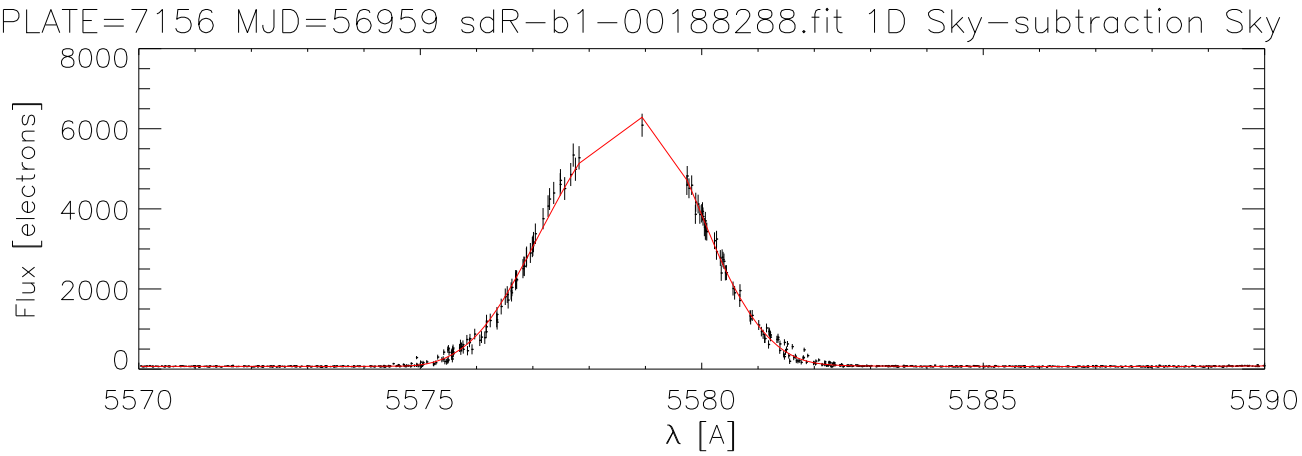

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.412
Max value = 13.725
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:08:37 2016

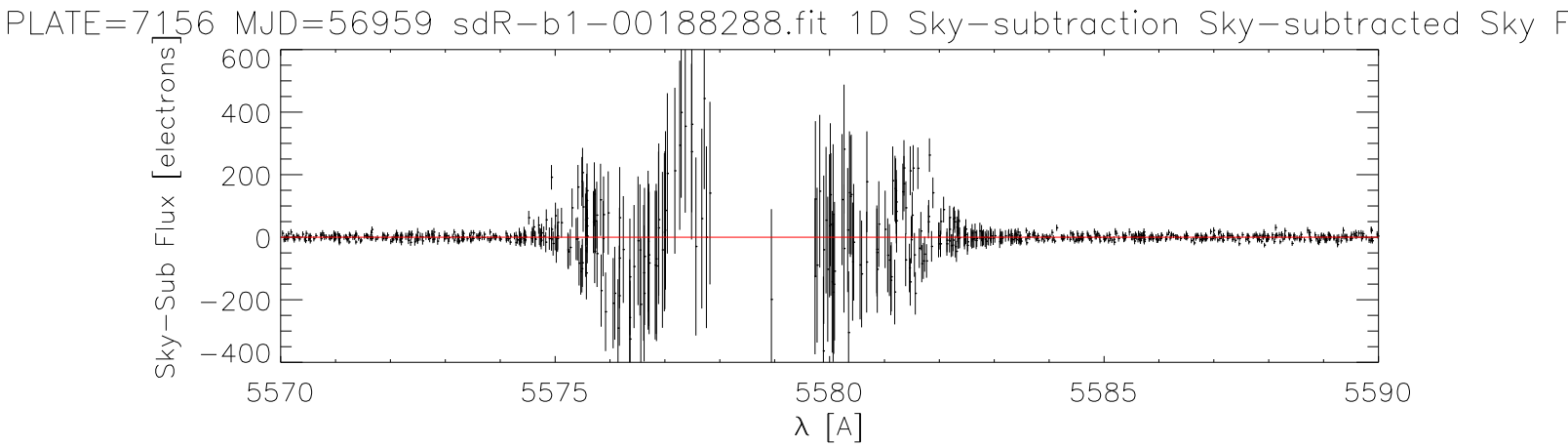

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−b1−00188288.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b1-00188288.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

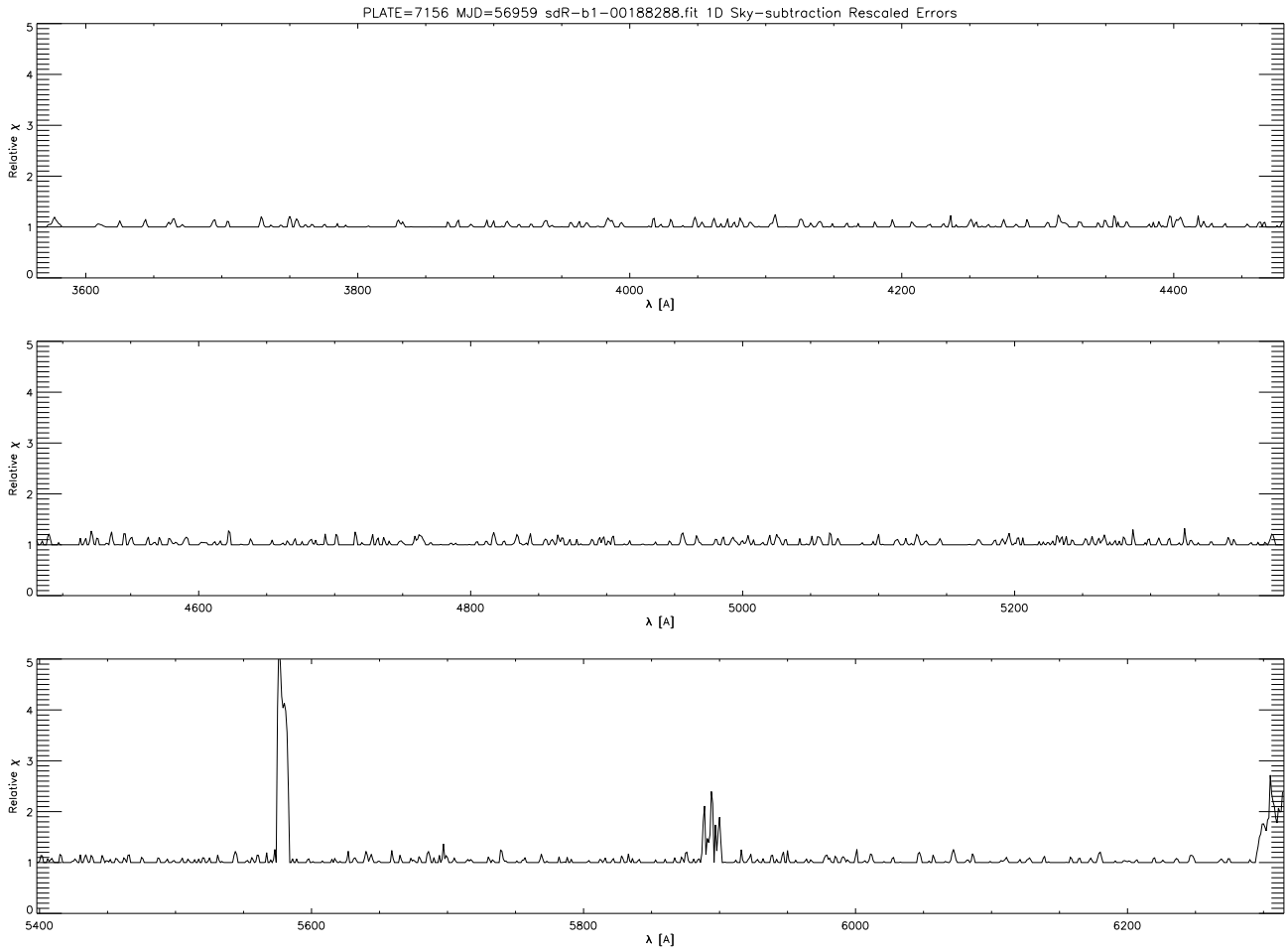

PLATE=7156 MJD=56959 Smooth superflat for sdR-b1-00188288.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

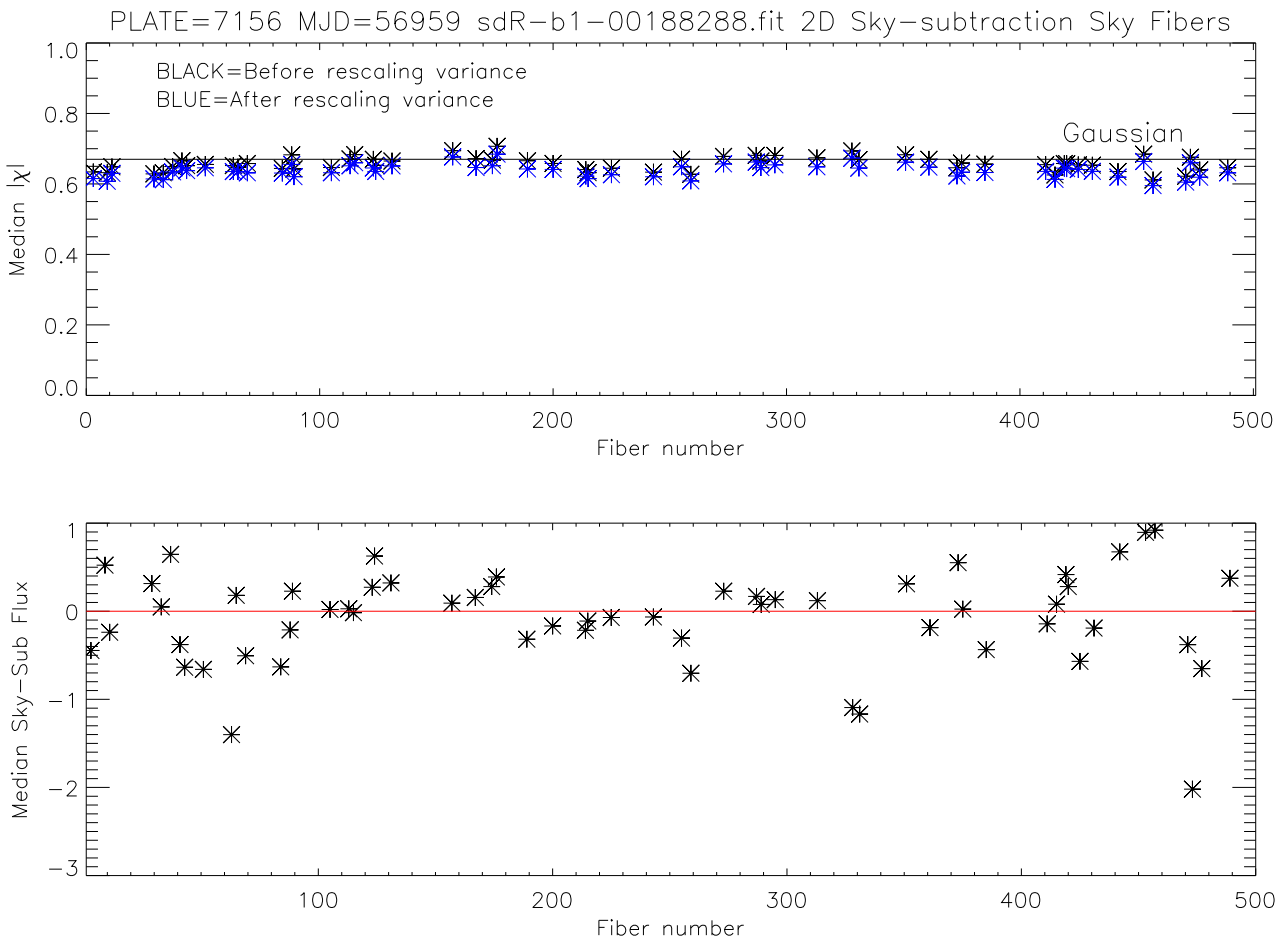

PLATE=7156 MJD=56959 sdR-b1-00188288.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

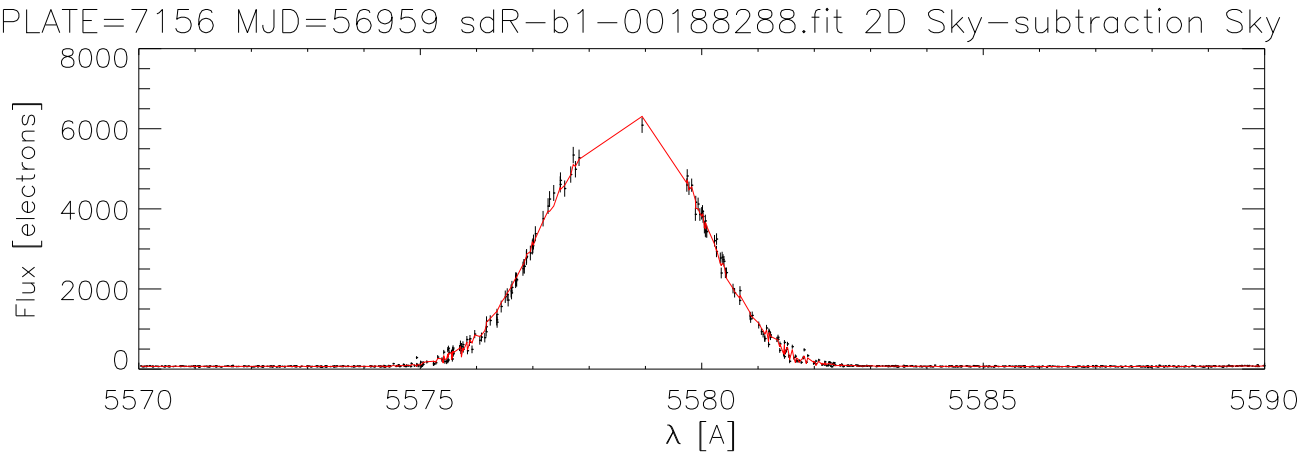

PLATE=7156 MJD=56959 sdR-b1-00188288.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

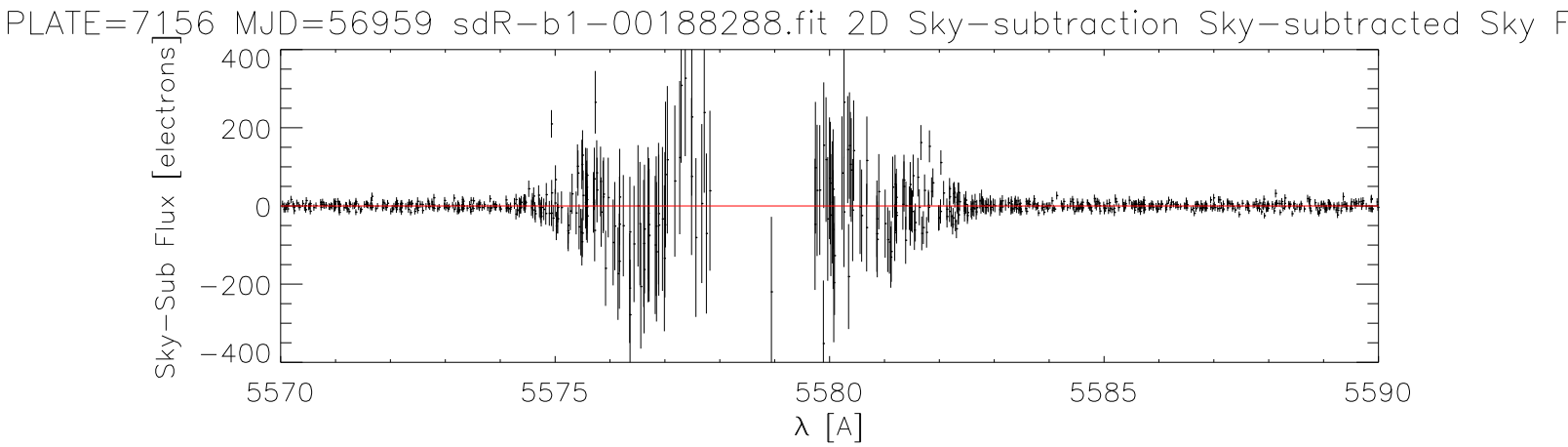

PLATE=7156 MJD=56959 sdR-b1-00188288.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 58

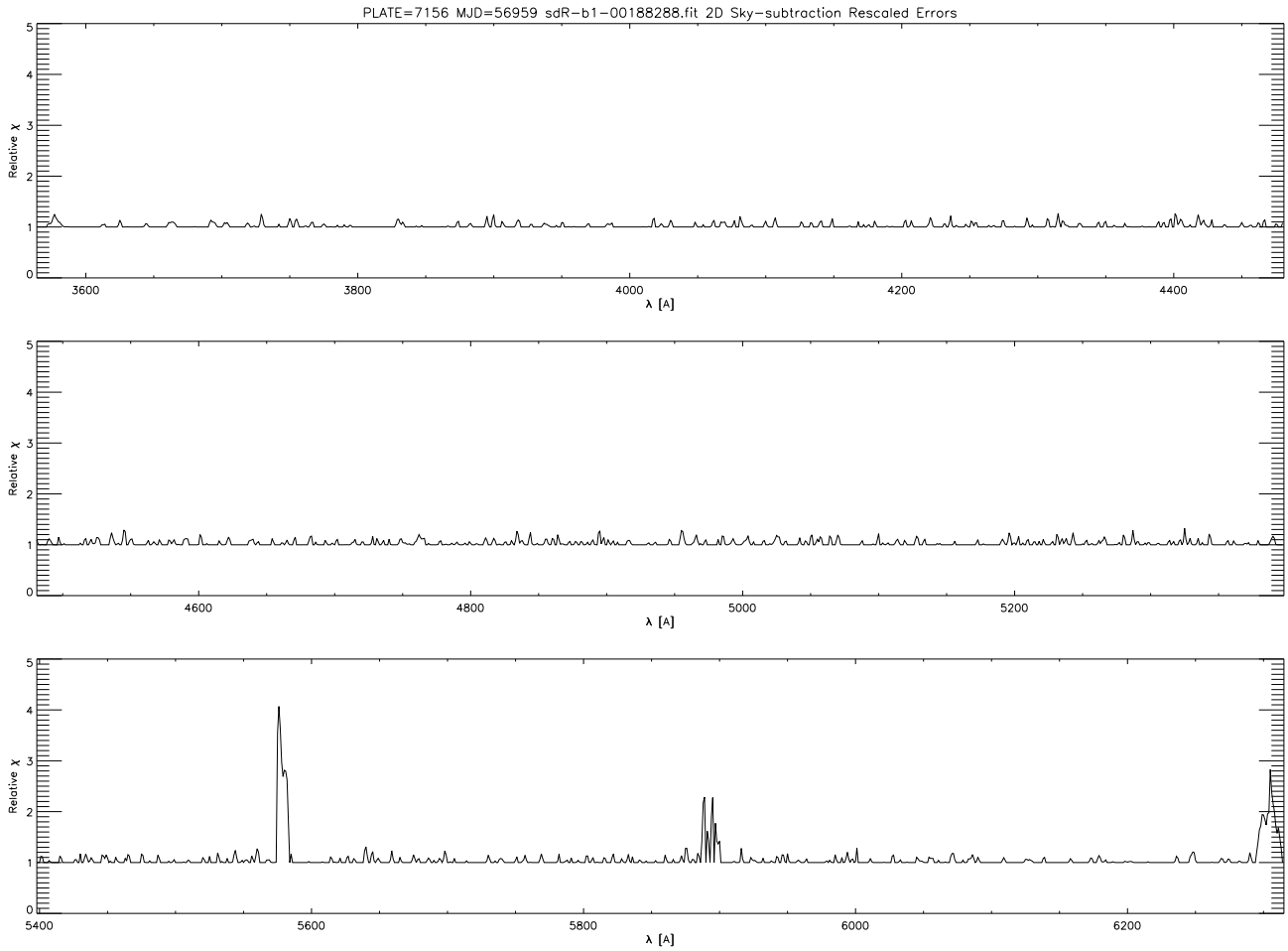


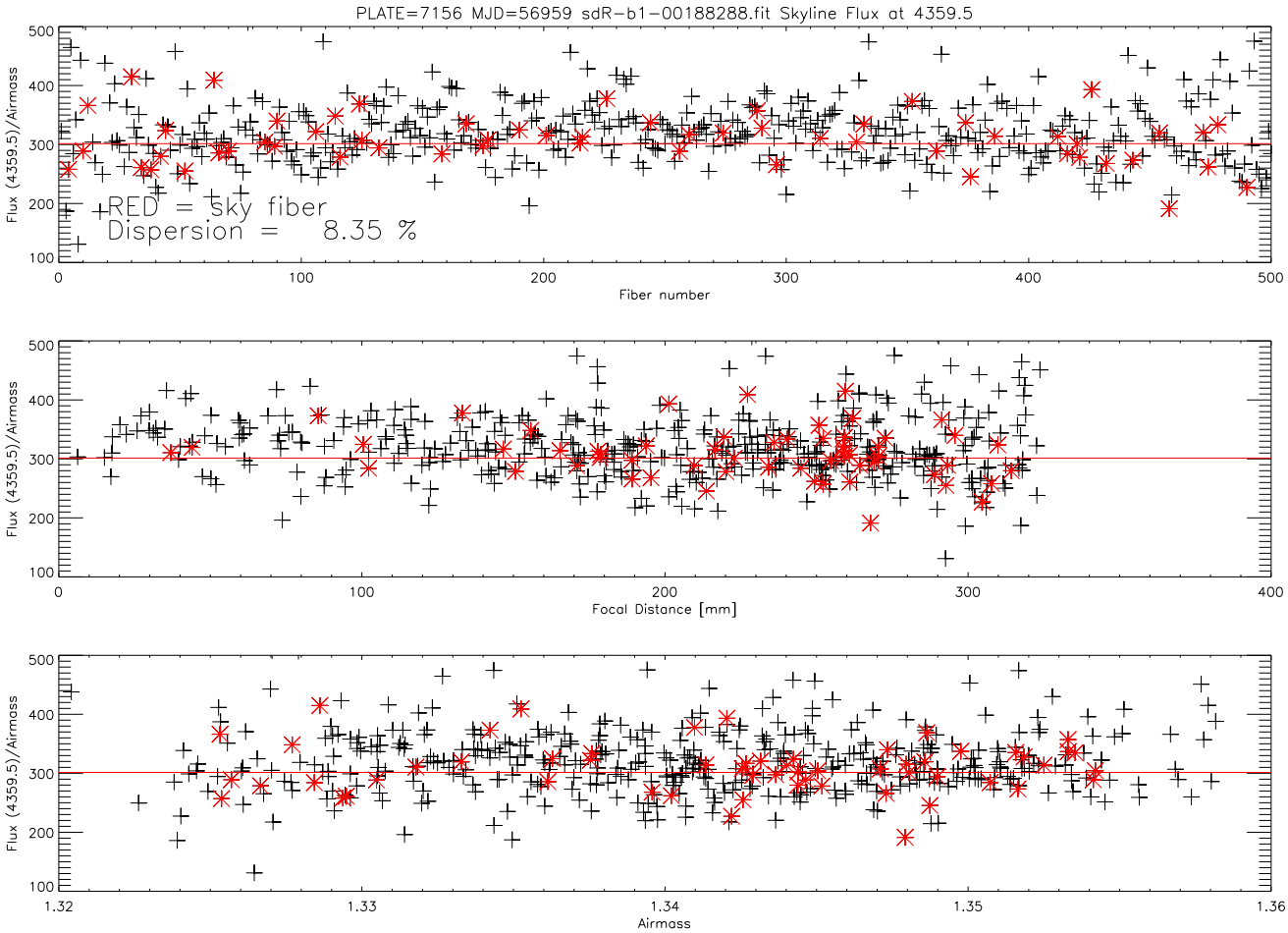

PLATE=7156 MJD=56959 sdR-b1-00188288.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

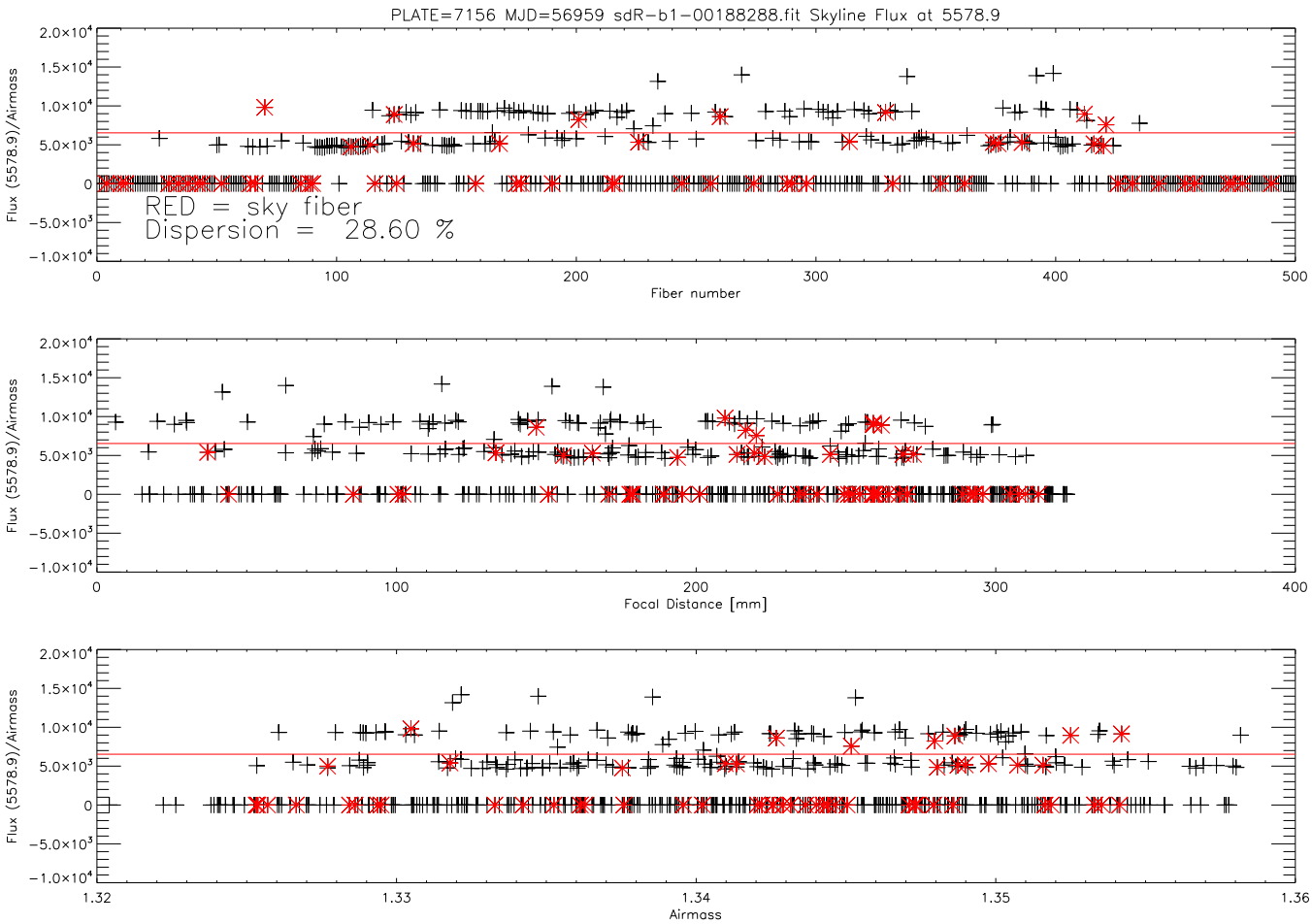

PLATE=7156 MJD=56959 sdR-b1-00188288.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

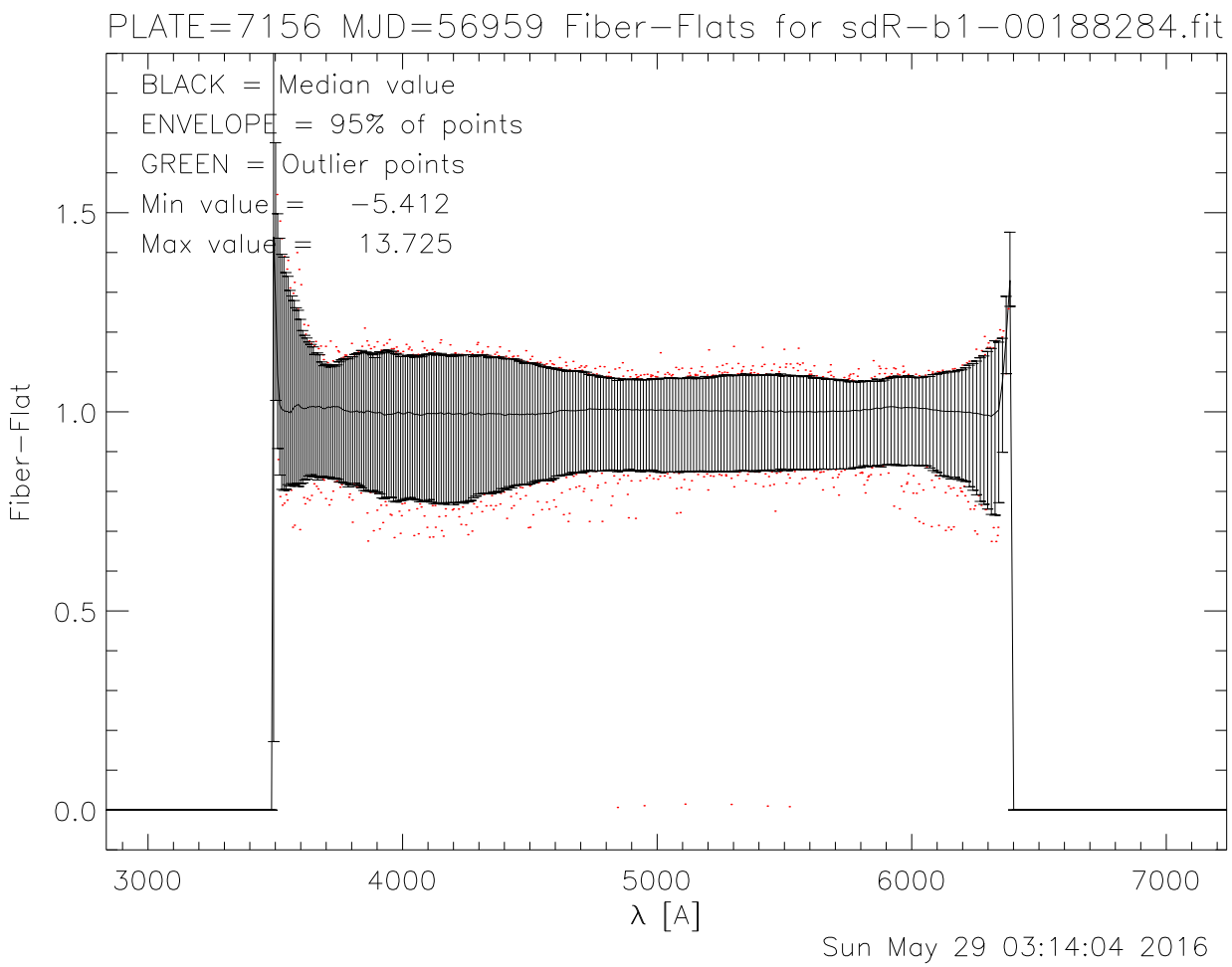

PLATE=7156 MJD=56959 sdR-b1-00188288.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

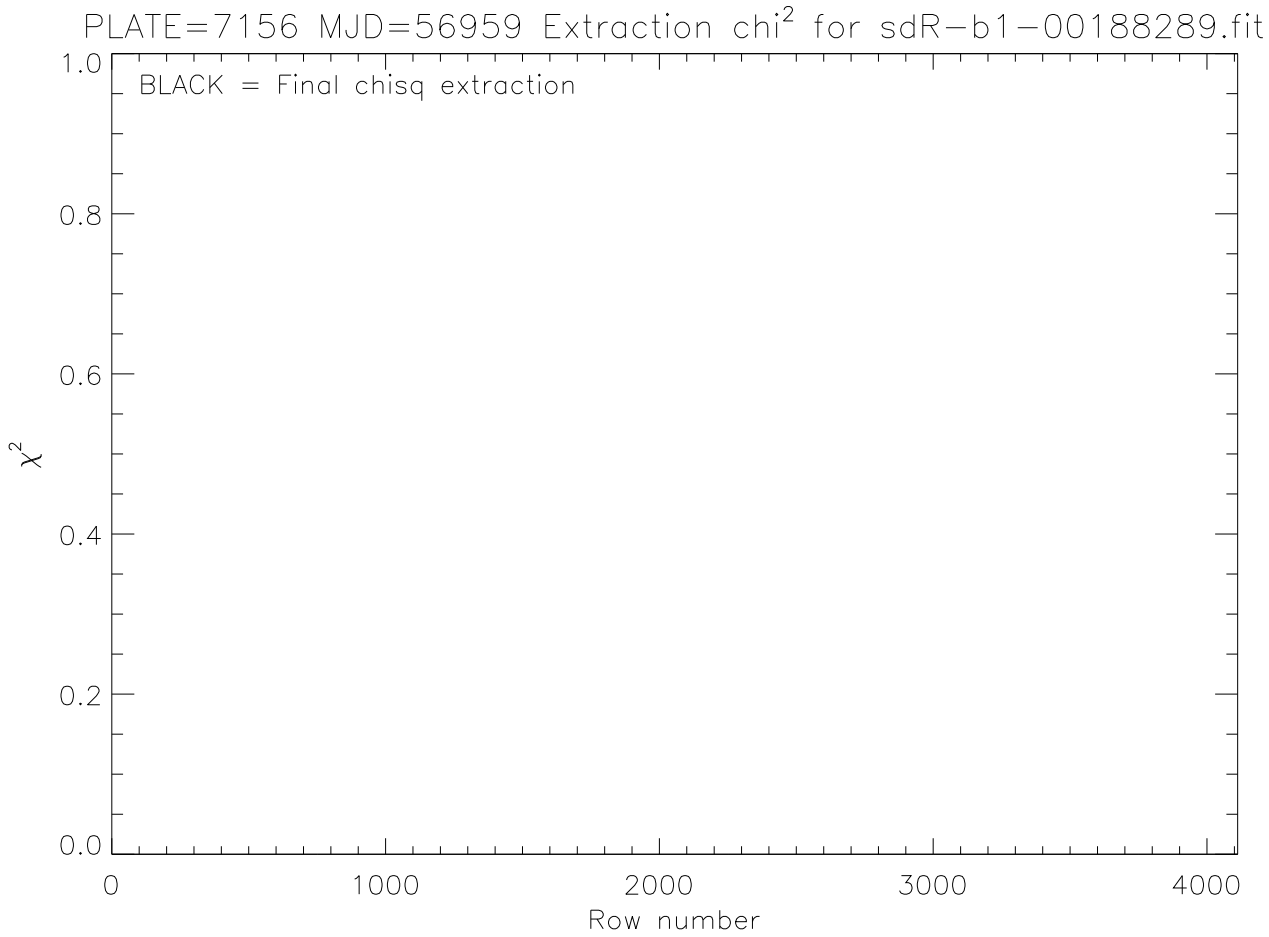
Number of sky fibers = 58

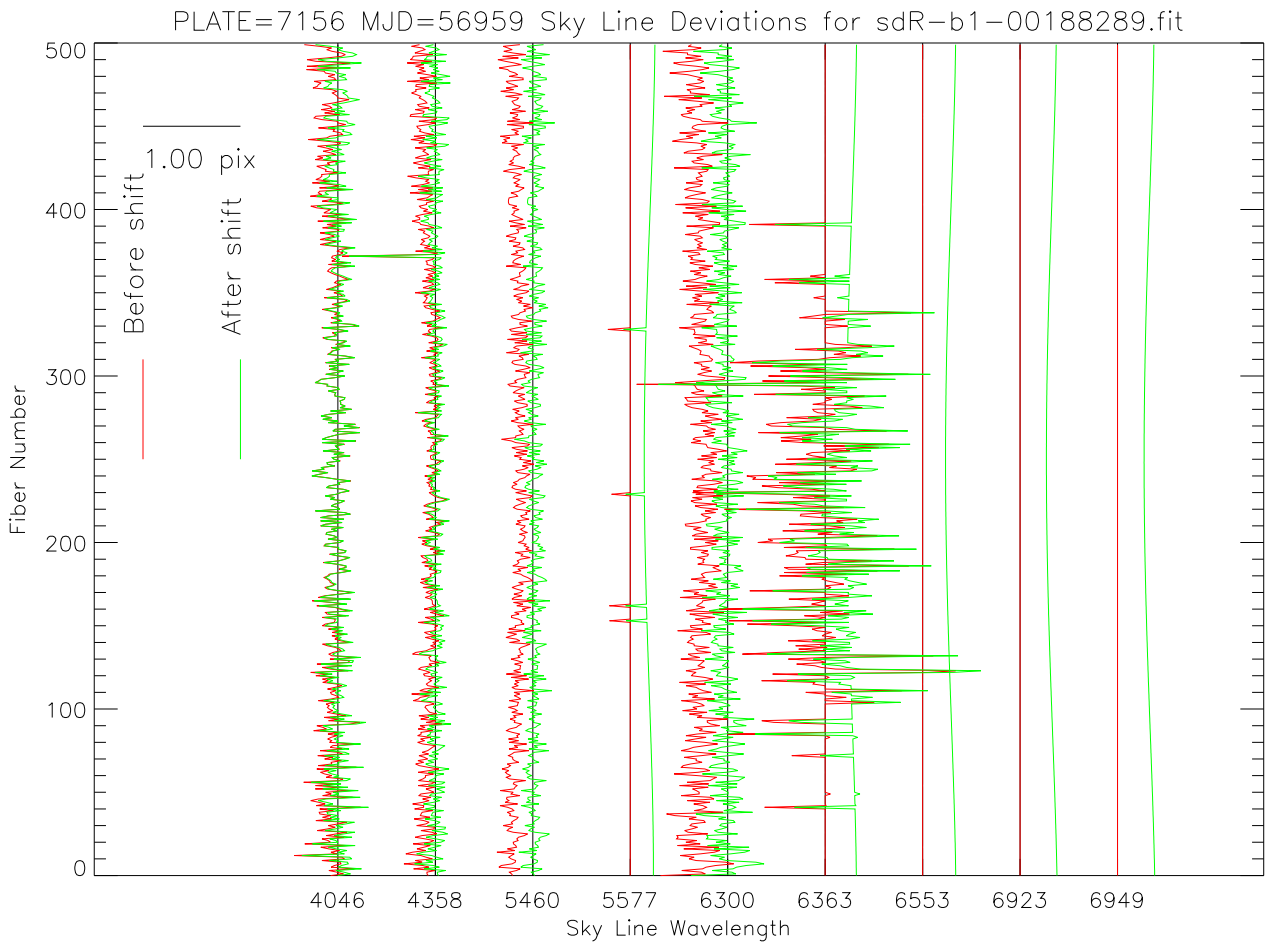


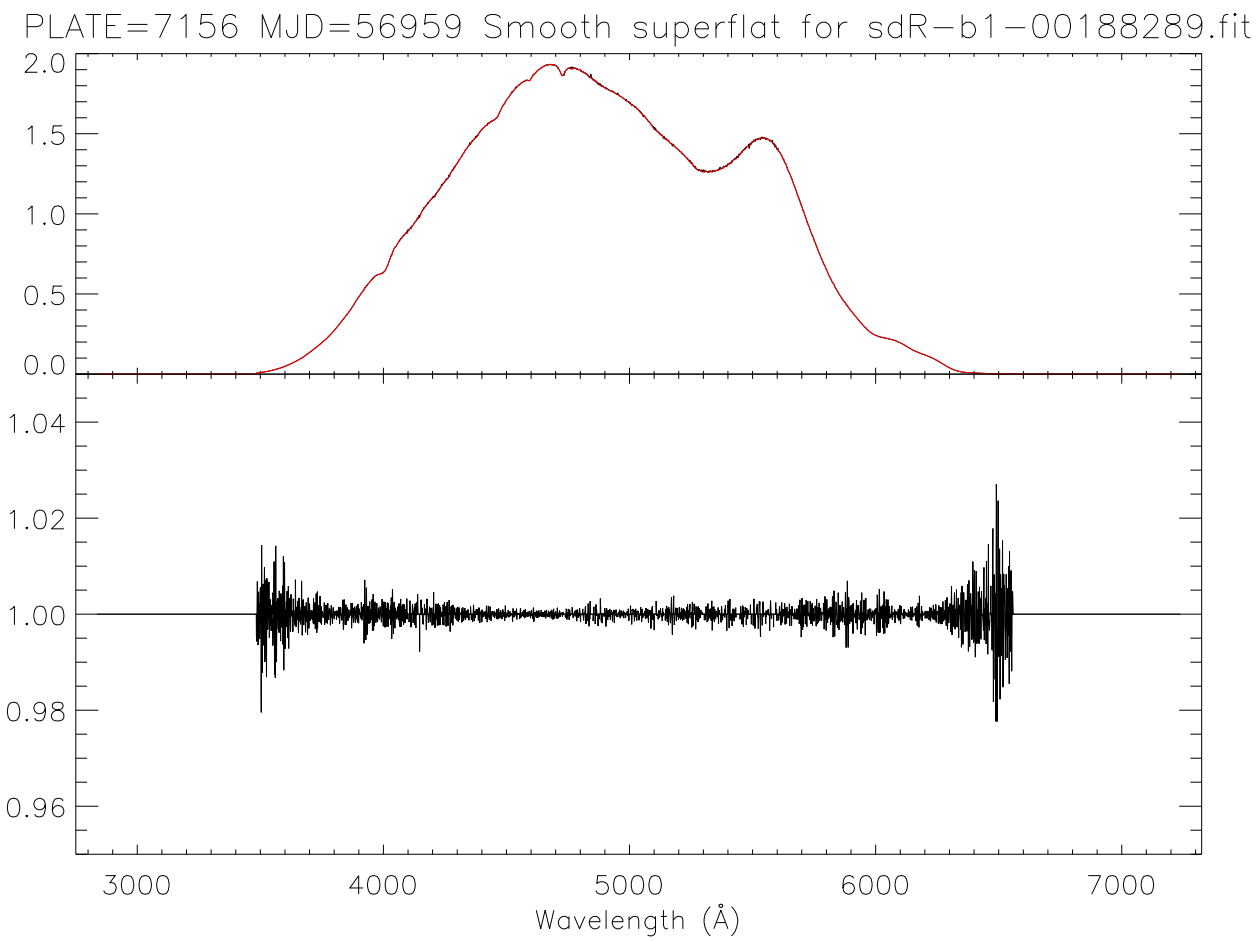

PLATE=7156 MJD=56959 sdR-b1-00188288.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.35 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

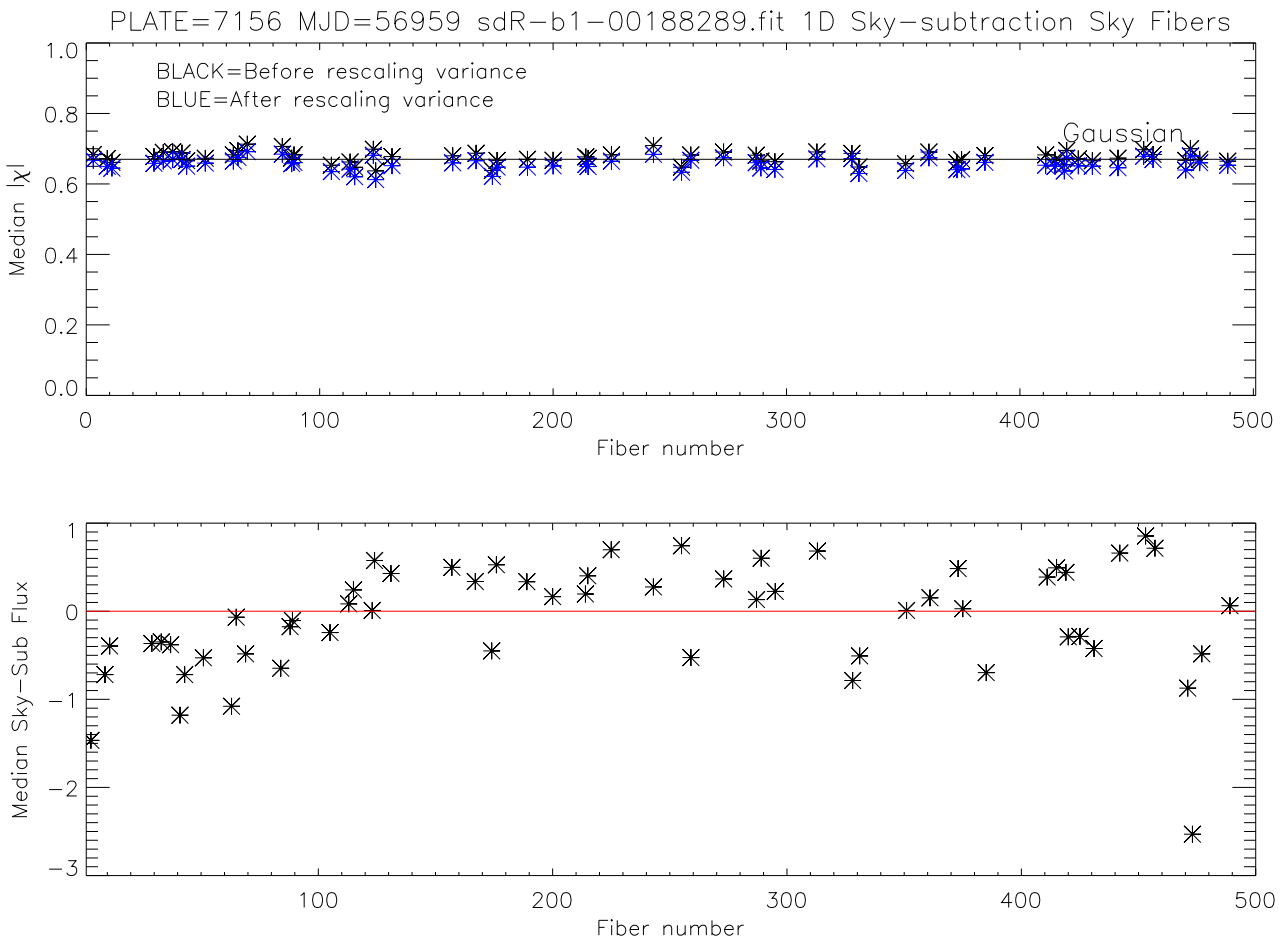

PLATE=7156 MJD=56959 sdR-b1-00188288.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 28.60 %
Fiber number
Focal Distance [mm]
Airmass

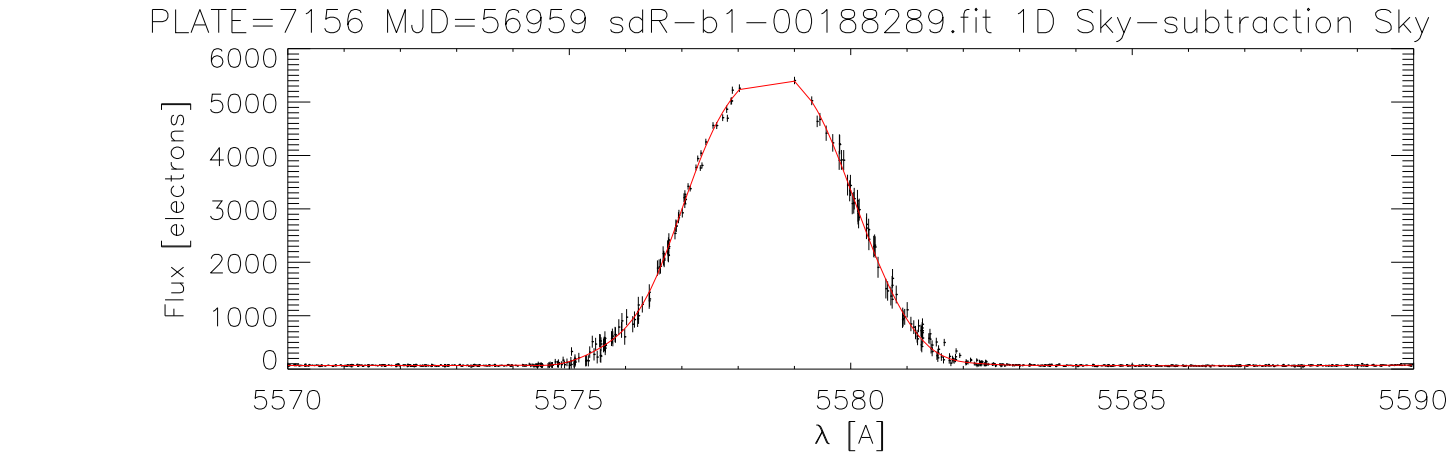

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −5.412
Max value = 13.725
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:14:04 2016

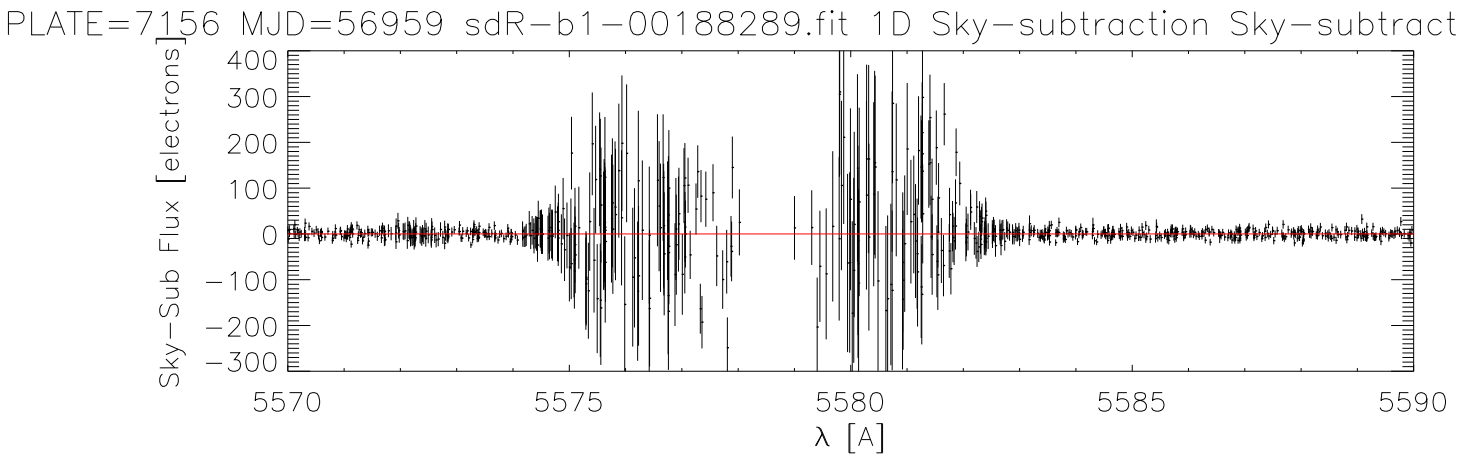

PLATE=7156 MJD=56959 Extraction chi^2 for sdR-b1-00188289.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b1-00188289.fit
Before shift
After shift
1.00 pix
Fiber Number
0
100
200
300
400
500
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

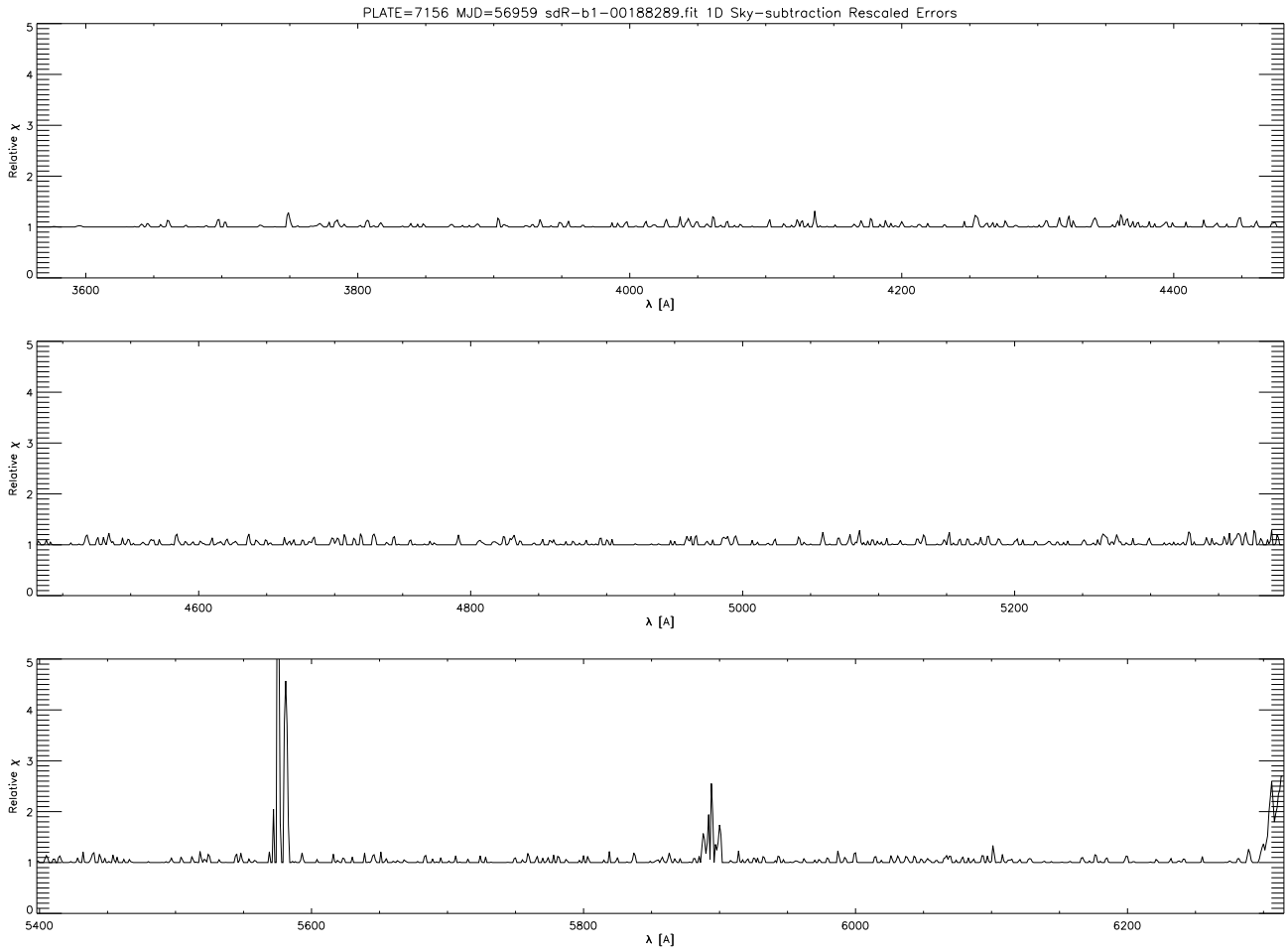

PLATE=7156 MJD=56959 Smooth superflat for sdR-b1-00188289.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

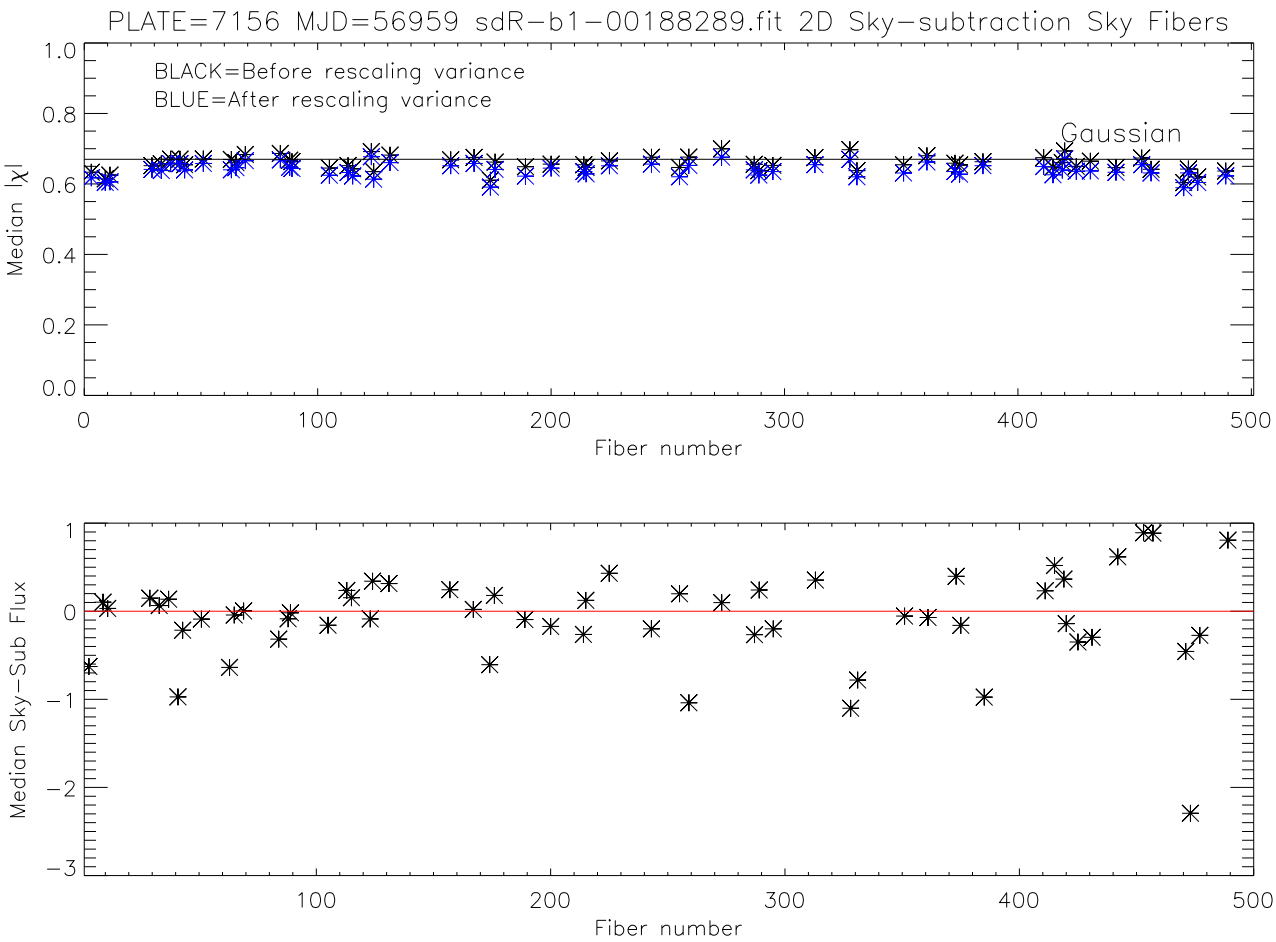

PLATE=7156 MJD=56959 sdR-b1-00188289.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

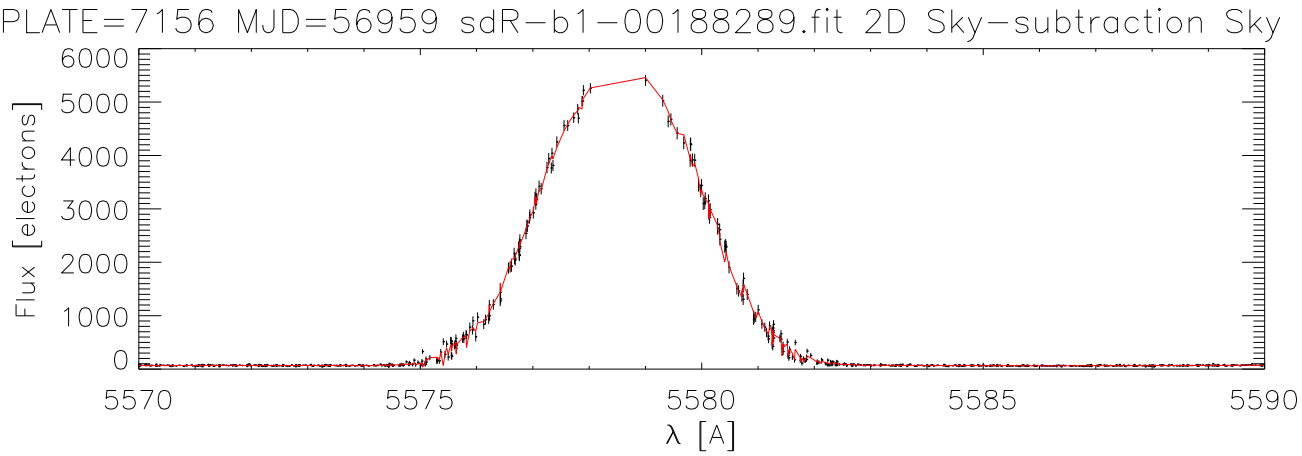

PLATE=7156 MJD=56959 sdR-b1-00188289.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

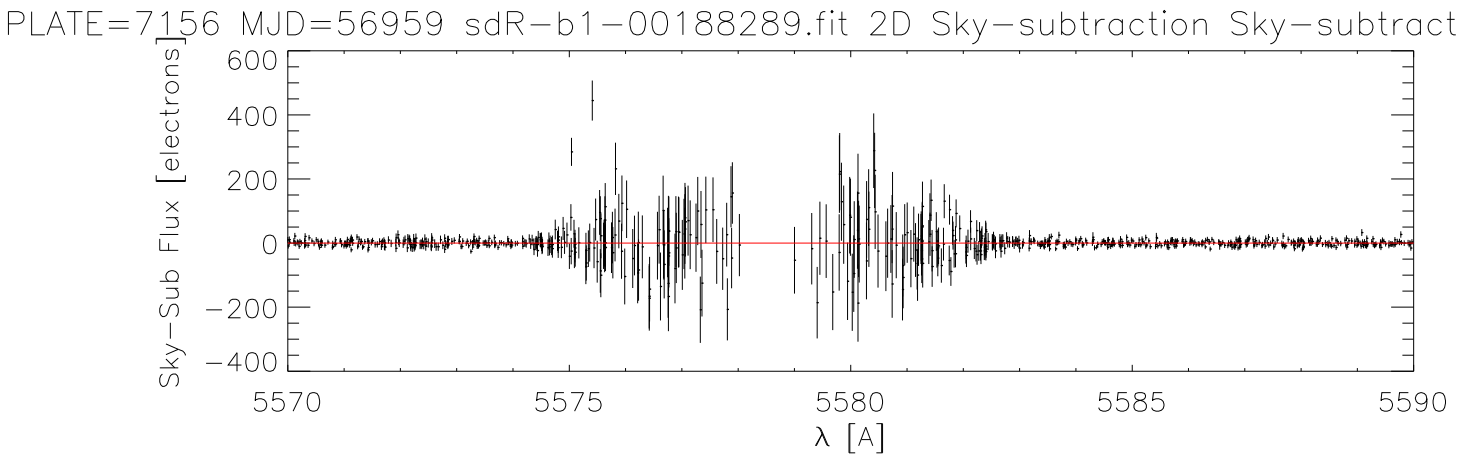

PLATE=7156 MJD=56959 sdR-b1-00188289.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 58

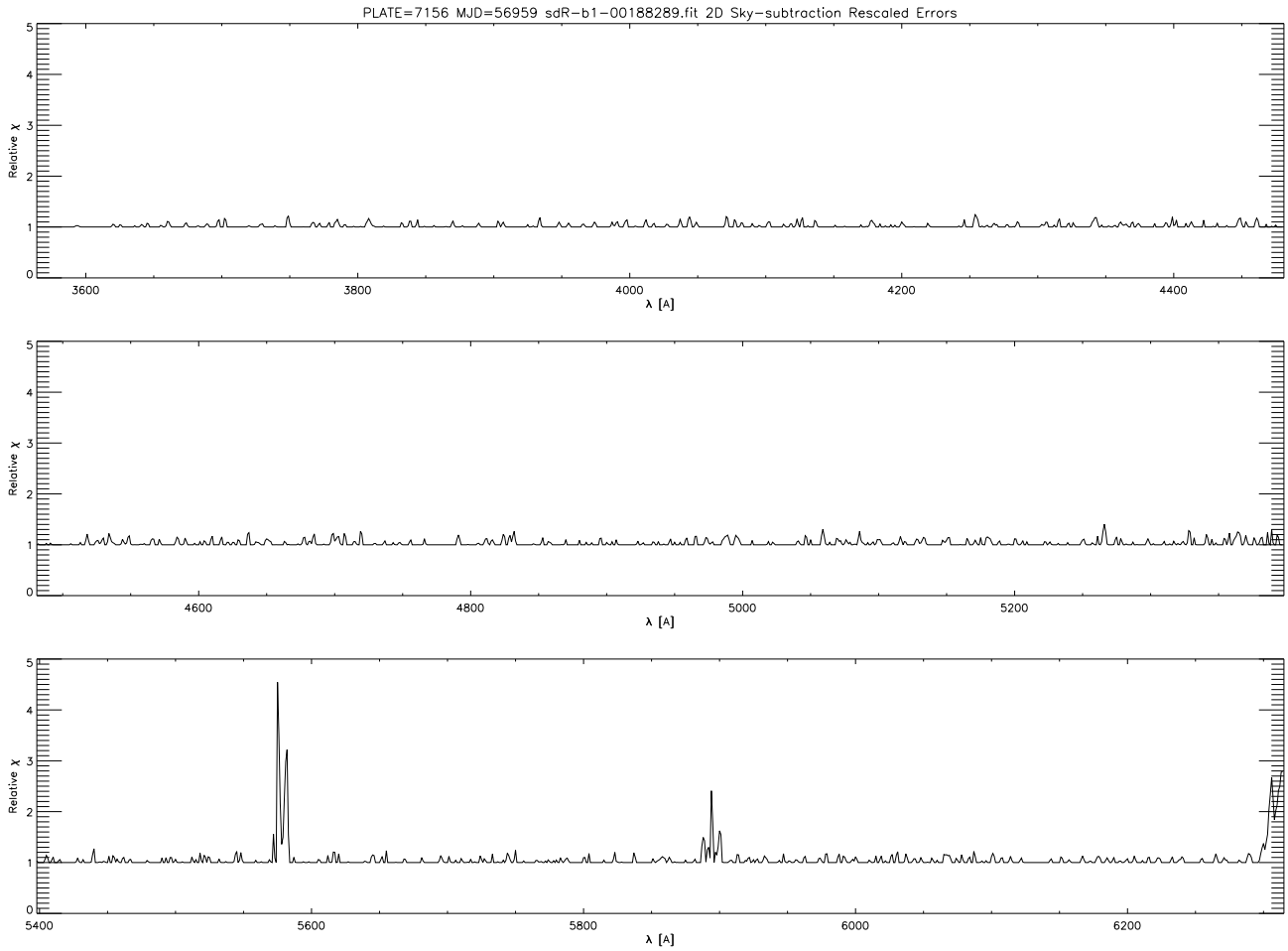


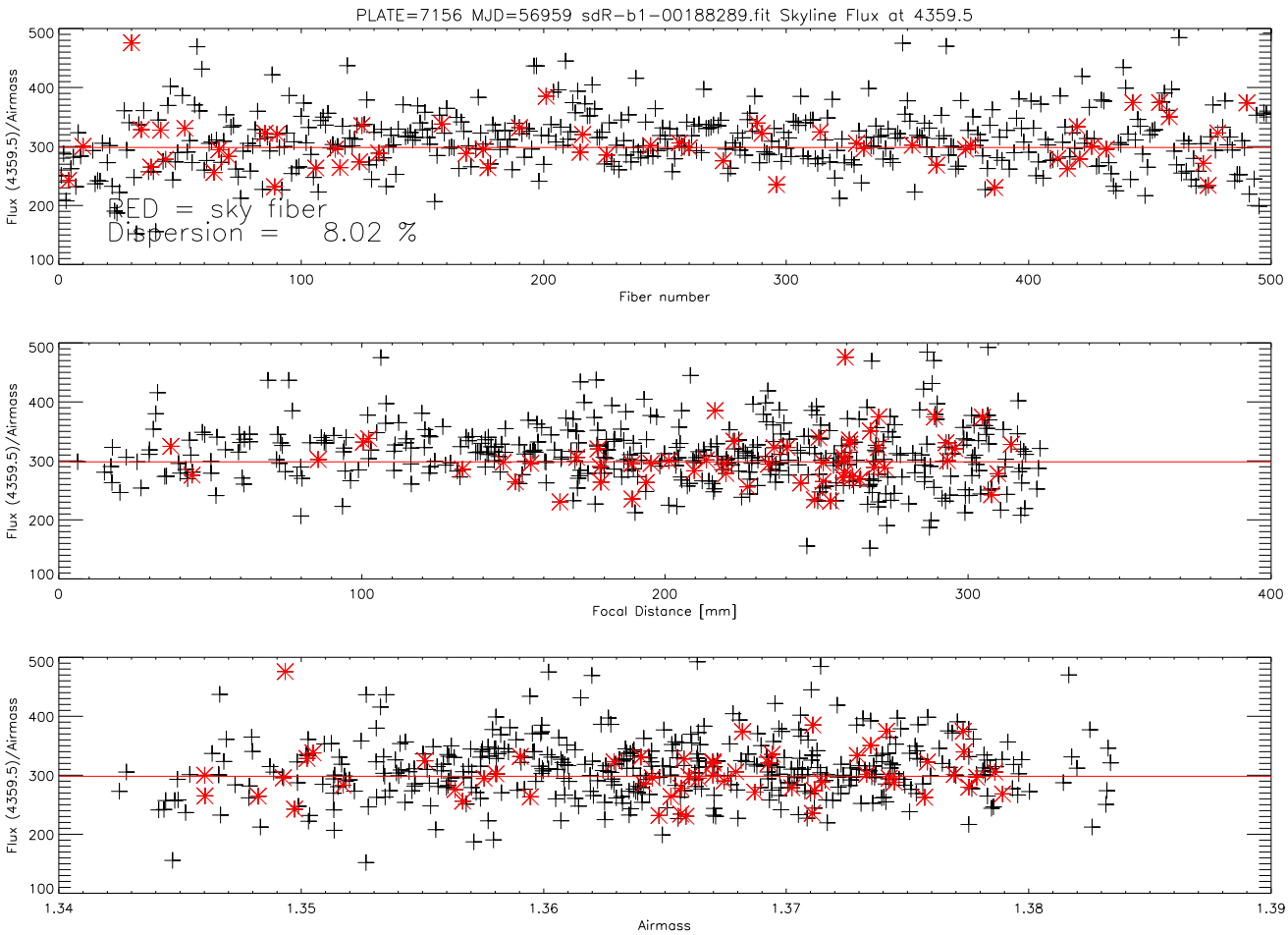

PLATE=7156 MJD=56959 sdR-b1-00188289.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

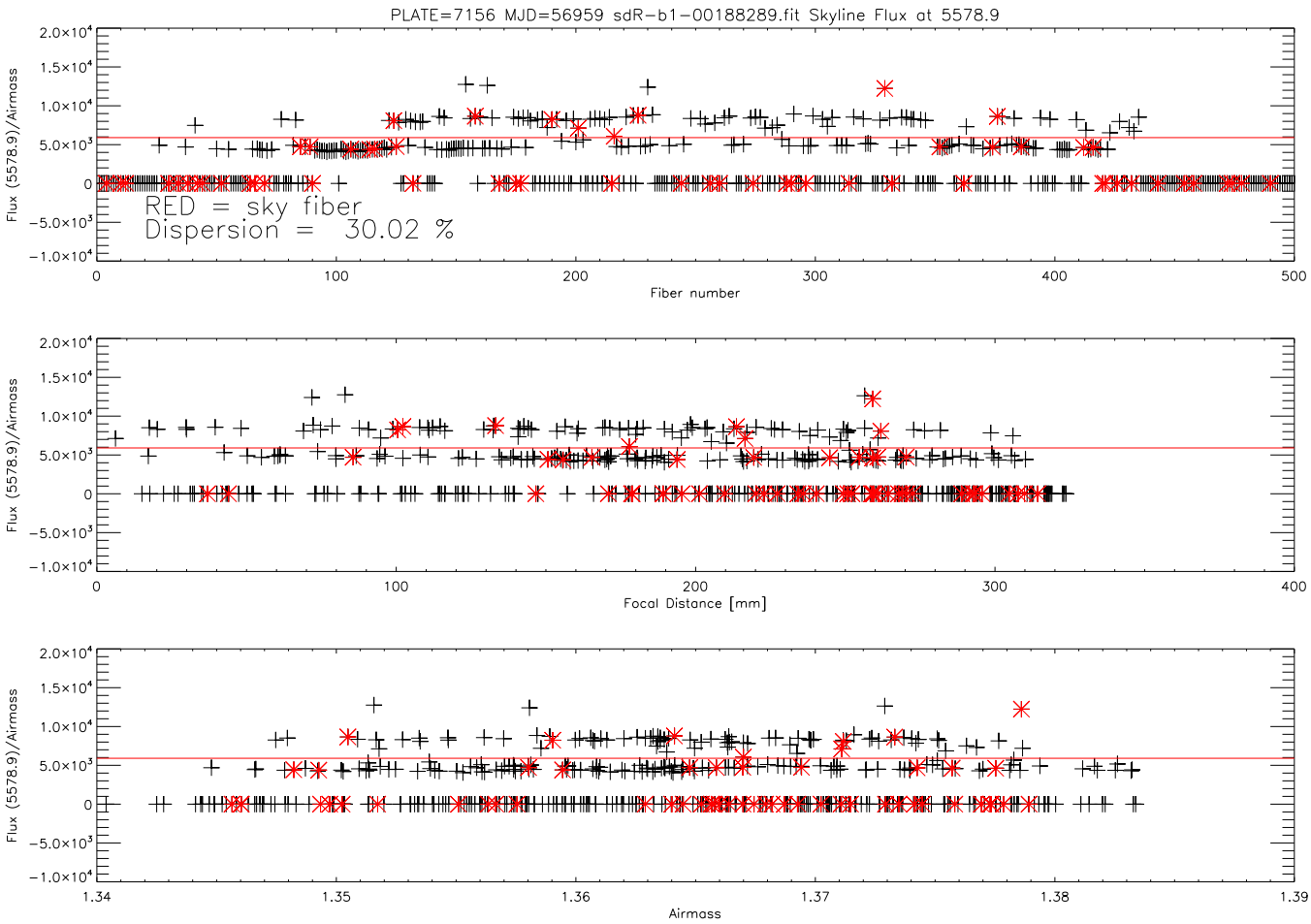

PLATE=7156 MJD=56959 sdR-b1-00188289.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

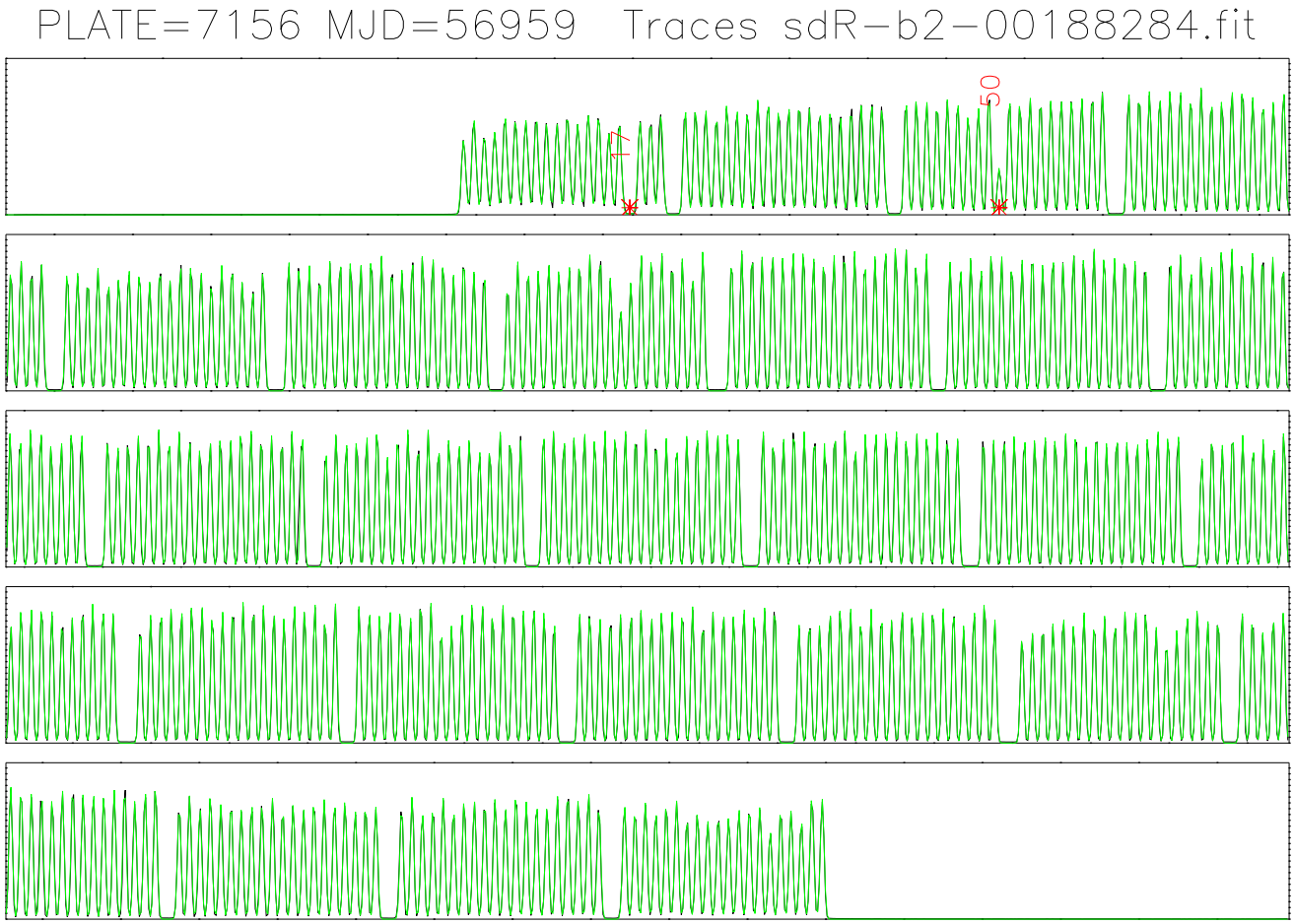

PLATE=7156 MJD=56959 sdR-b1-00188289.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

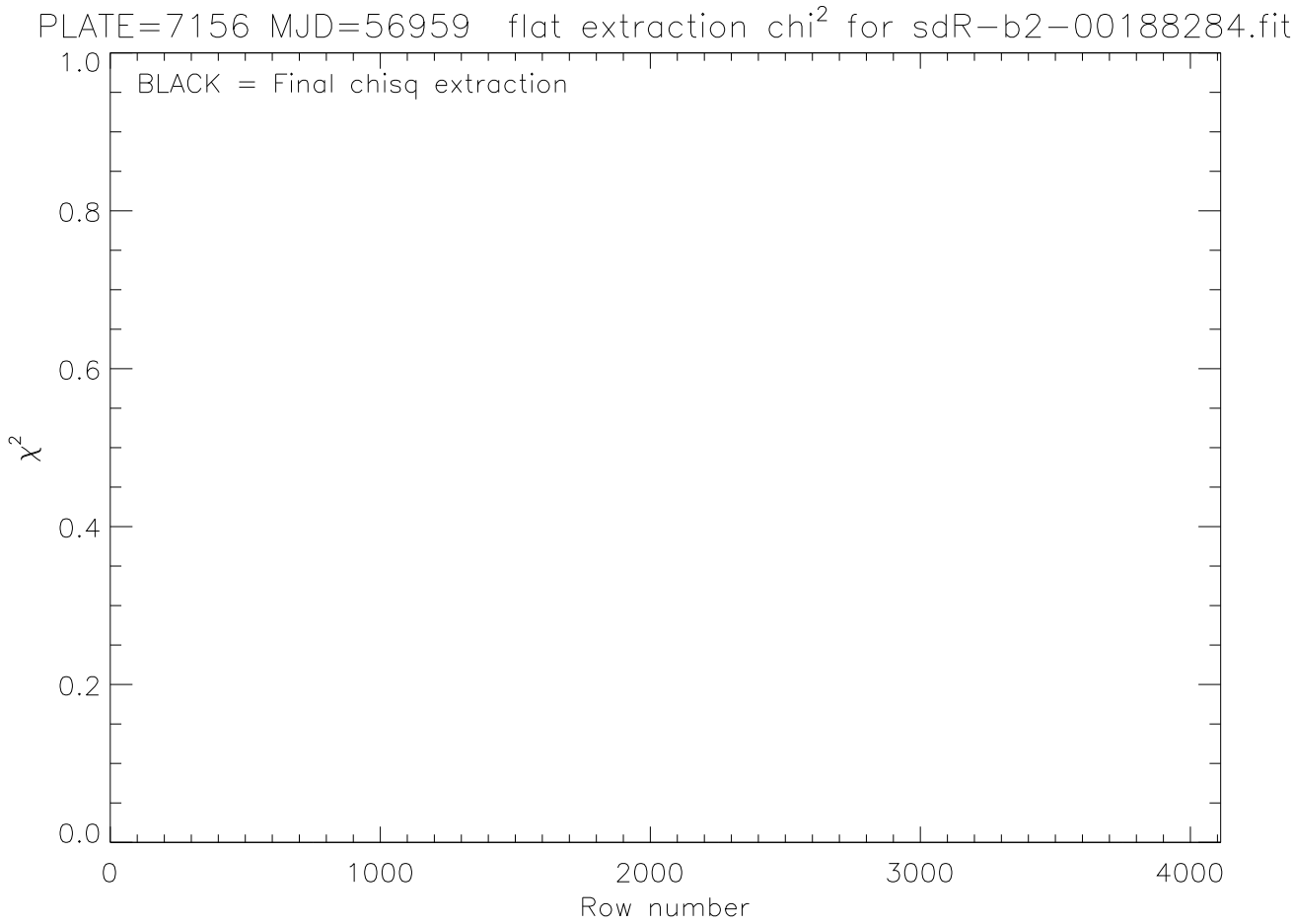
Number of sky fibers = 58

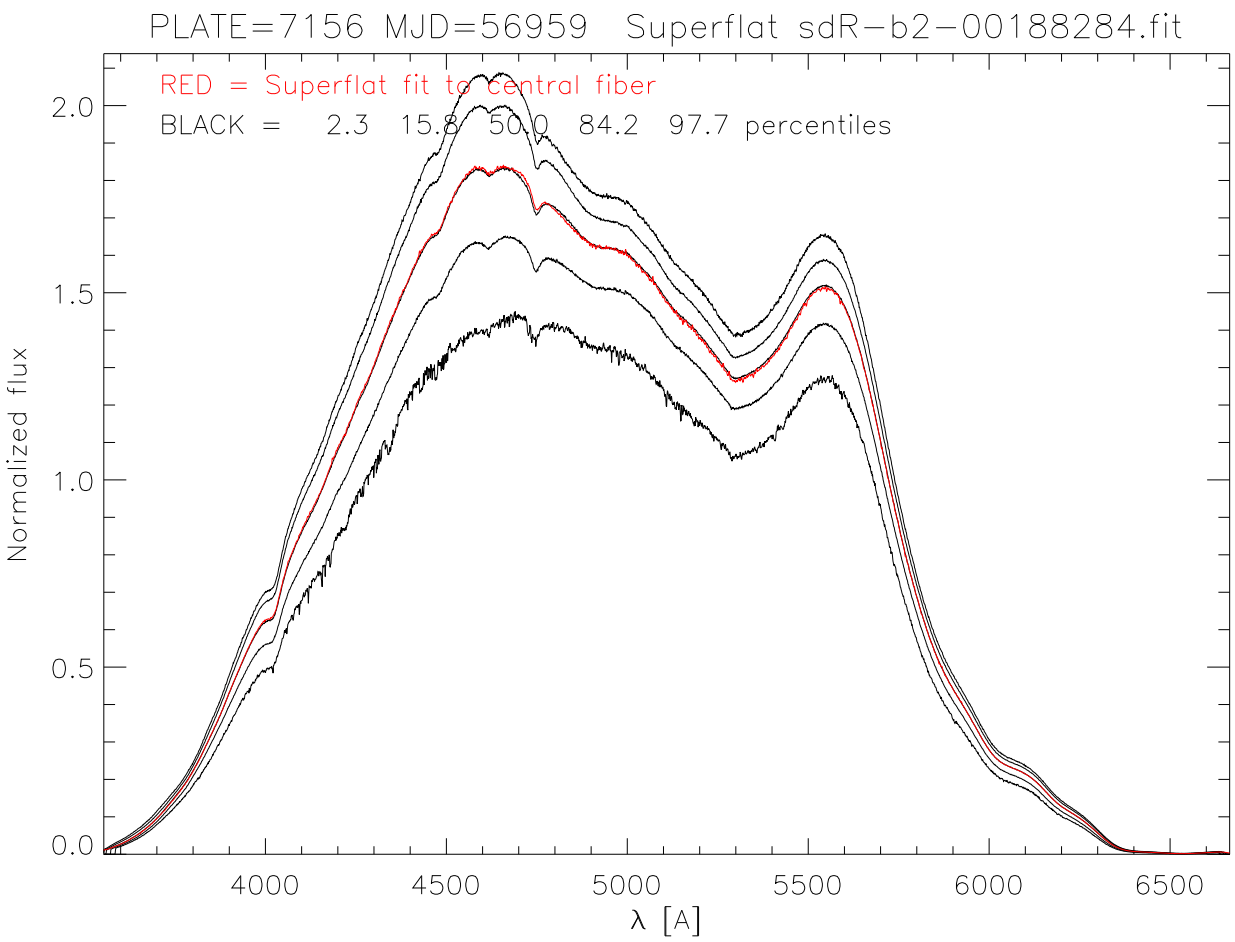


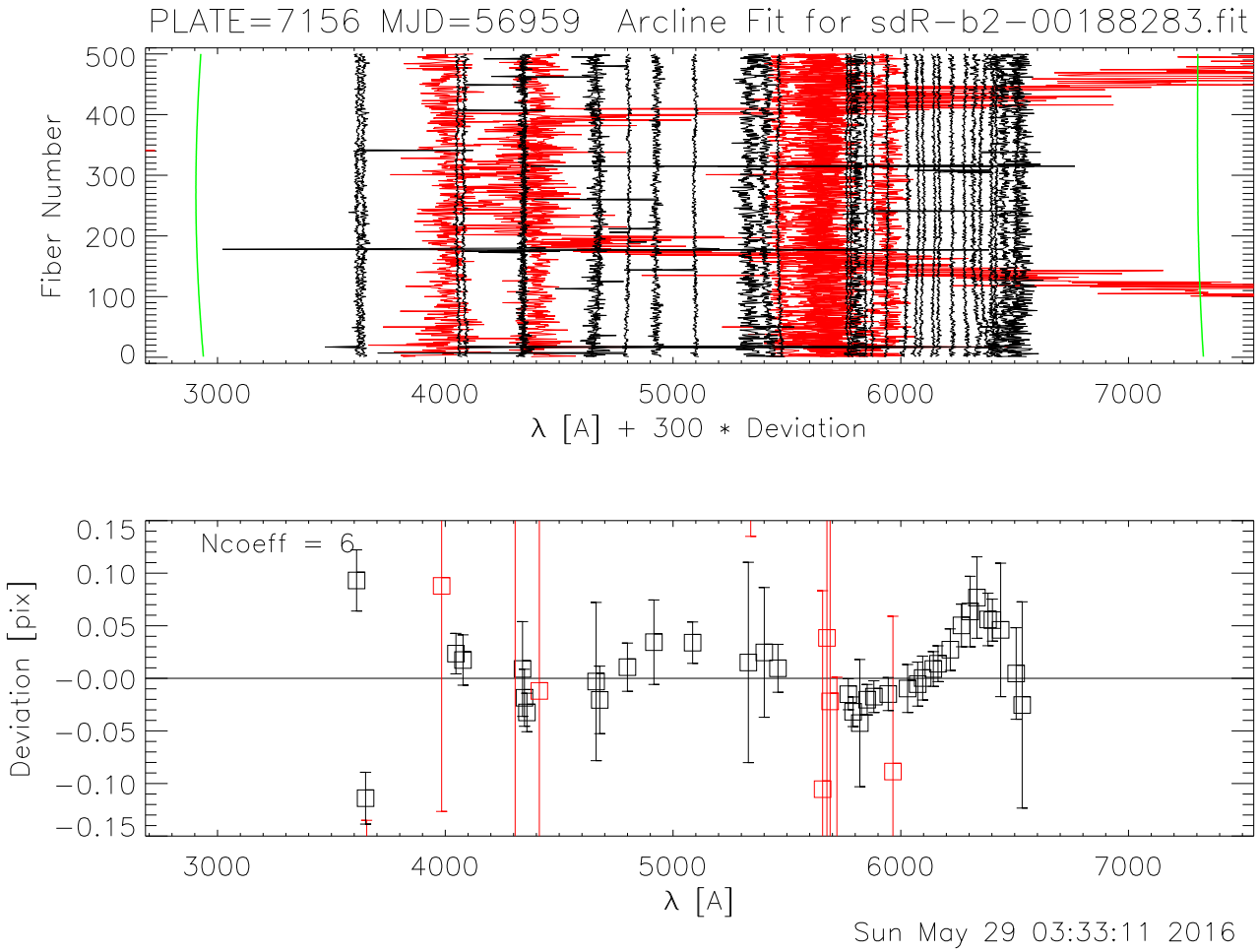

PLATE=7156 MJD=56959 sdR-b1-00188289.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.02 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

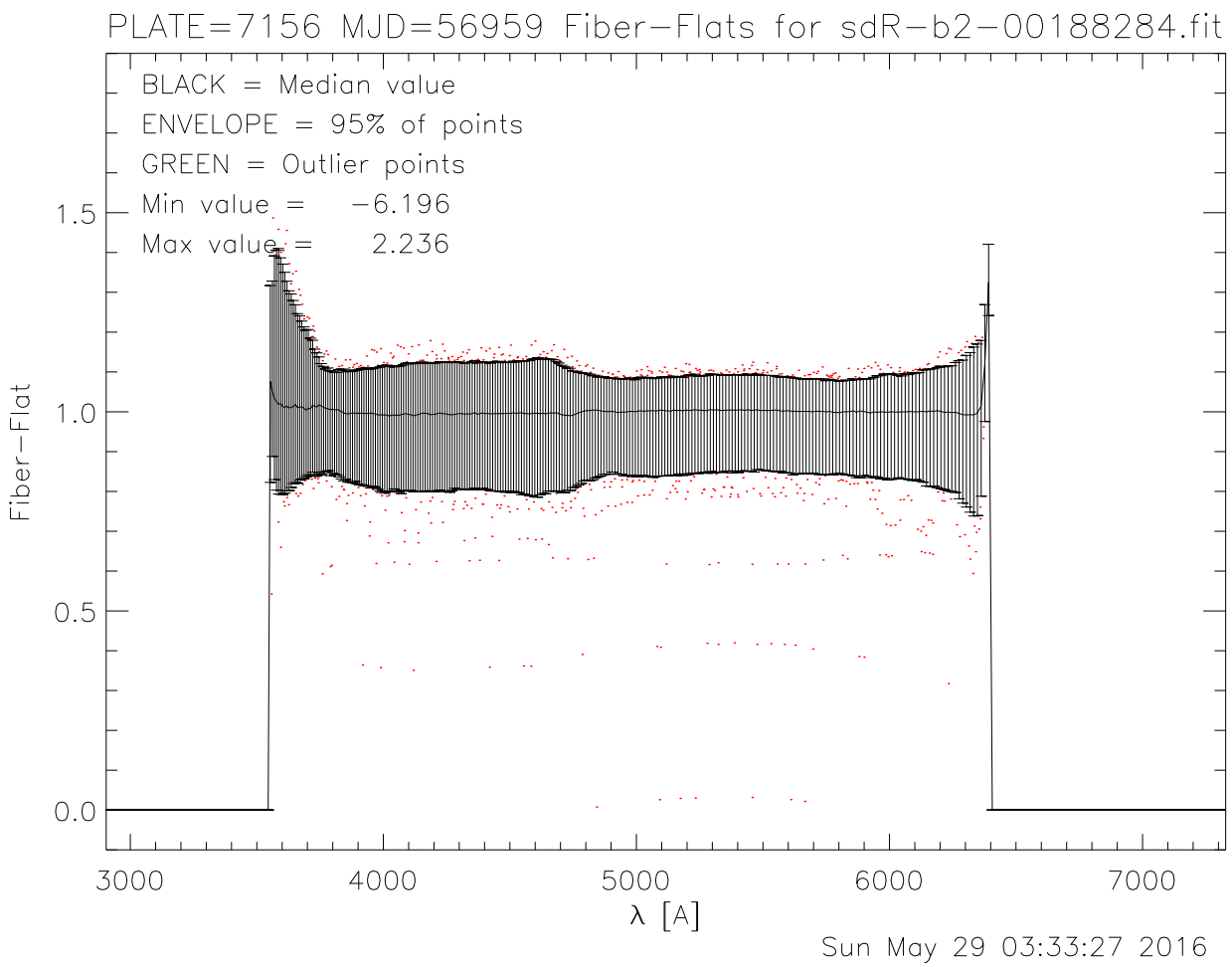

PLATE=7156 MJD=56959 sdR-b1-00188289.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 30.02 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

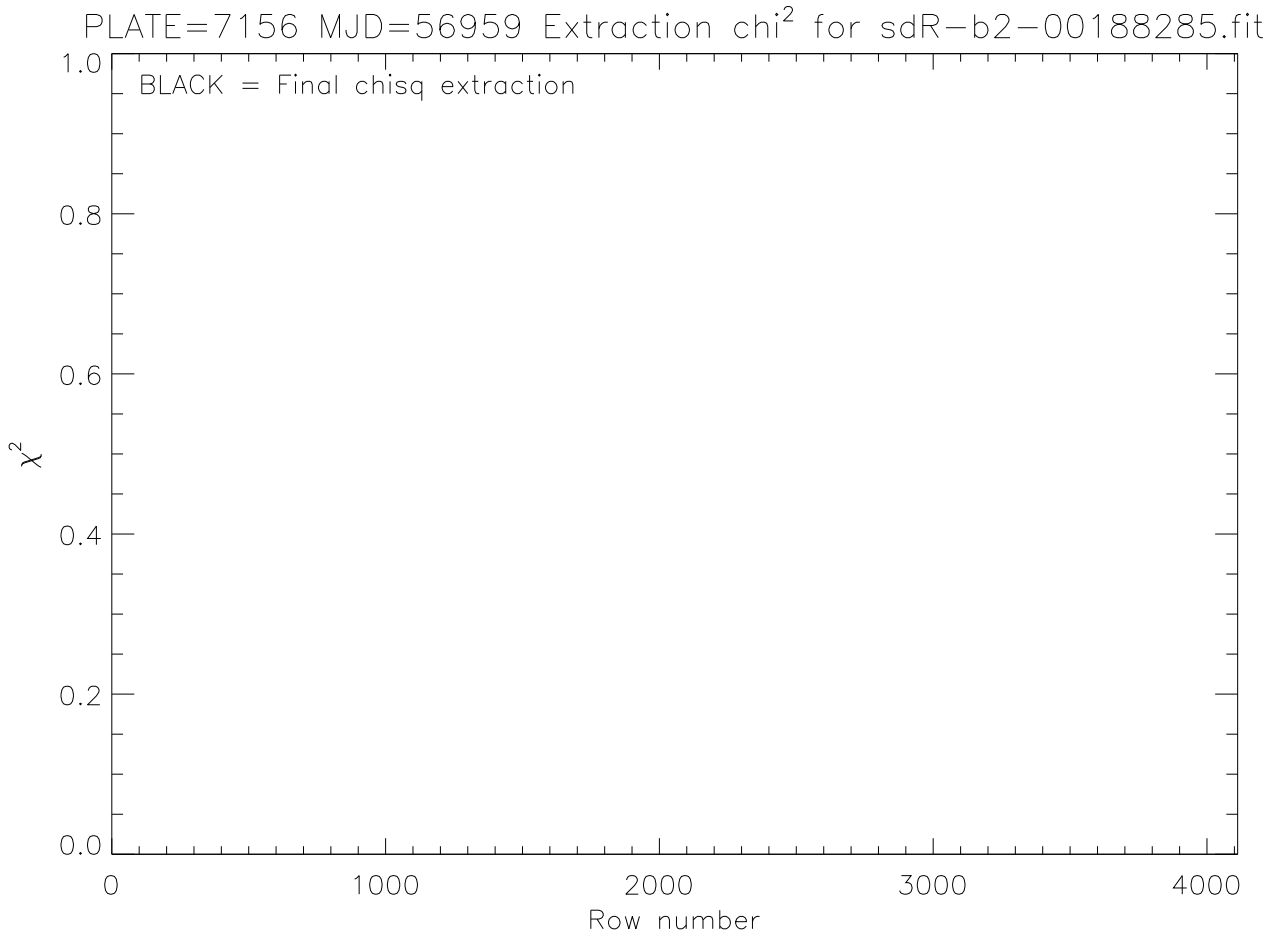

PLATE=7156 MJD=56959 Traces sdR-b2-00188284.fit
50

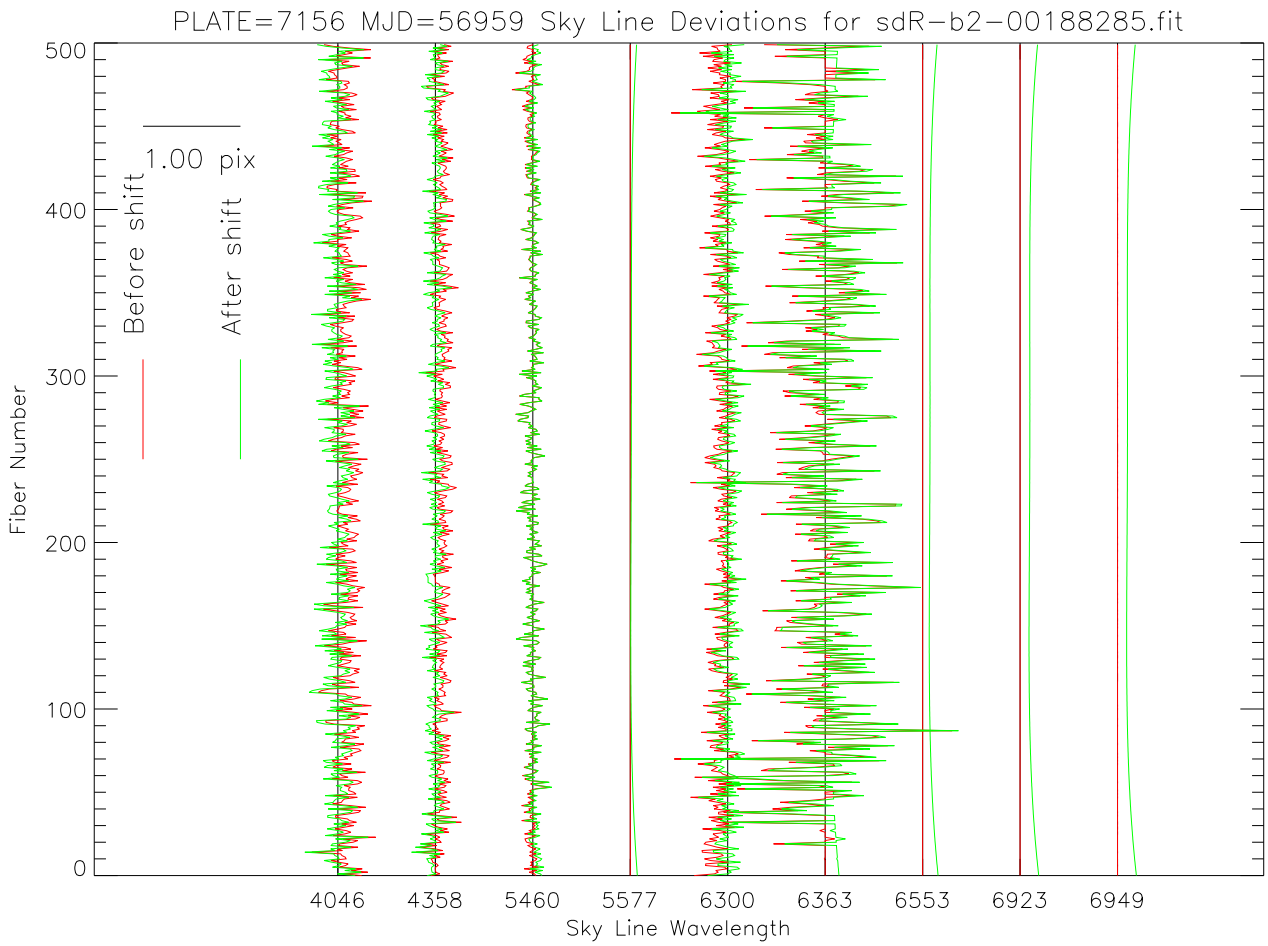

PLATE=7156 MJD=56959 flat extraction chi^2 for sdR−b2−00188284.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

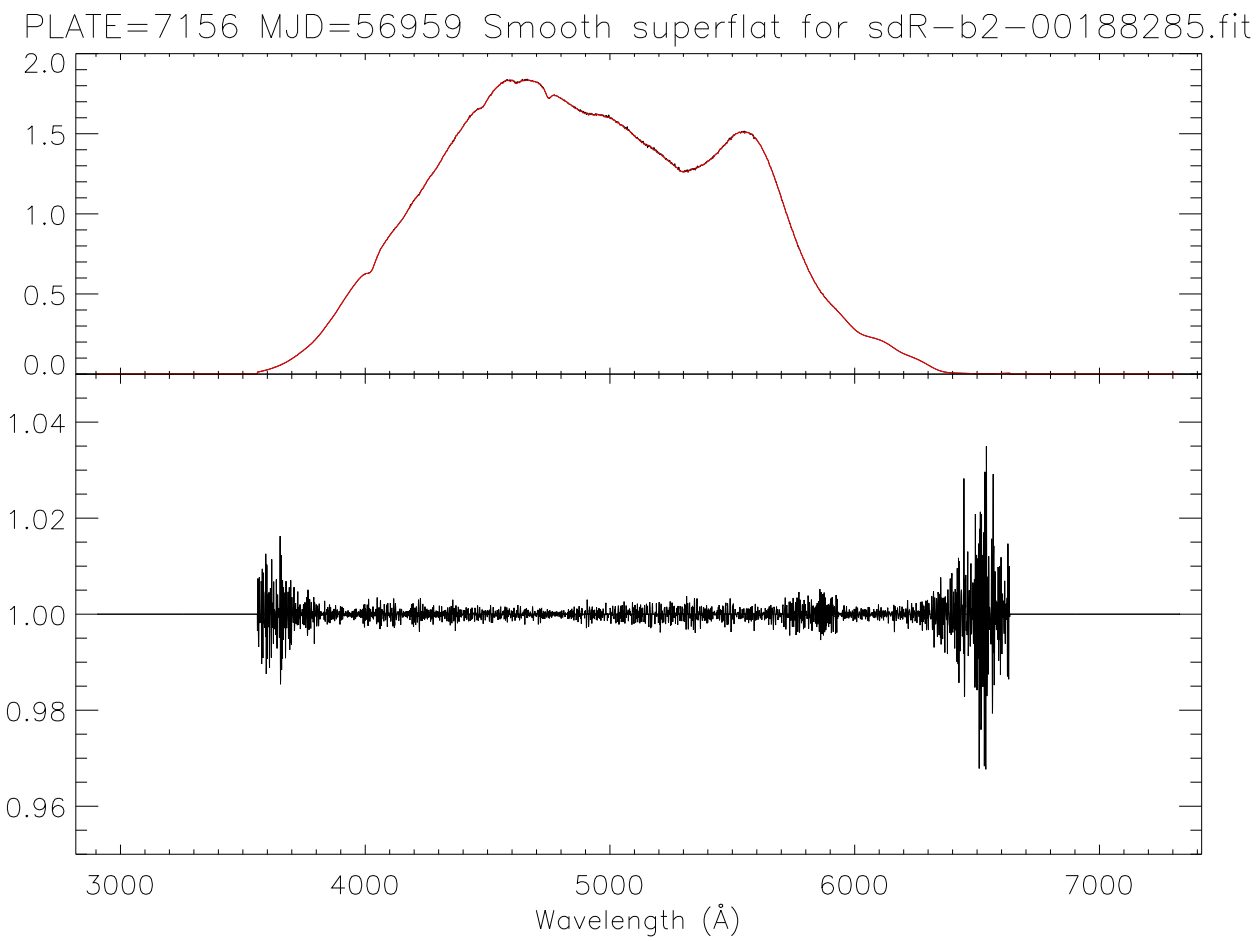

PLATE=7156 MJD=56959 Superflat sdR-b2-00188284.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
4000
4500
5000
5500
6000
6500

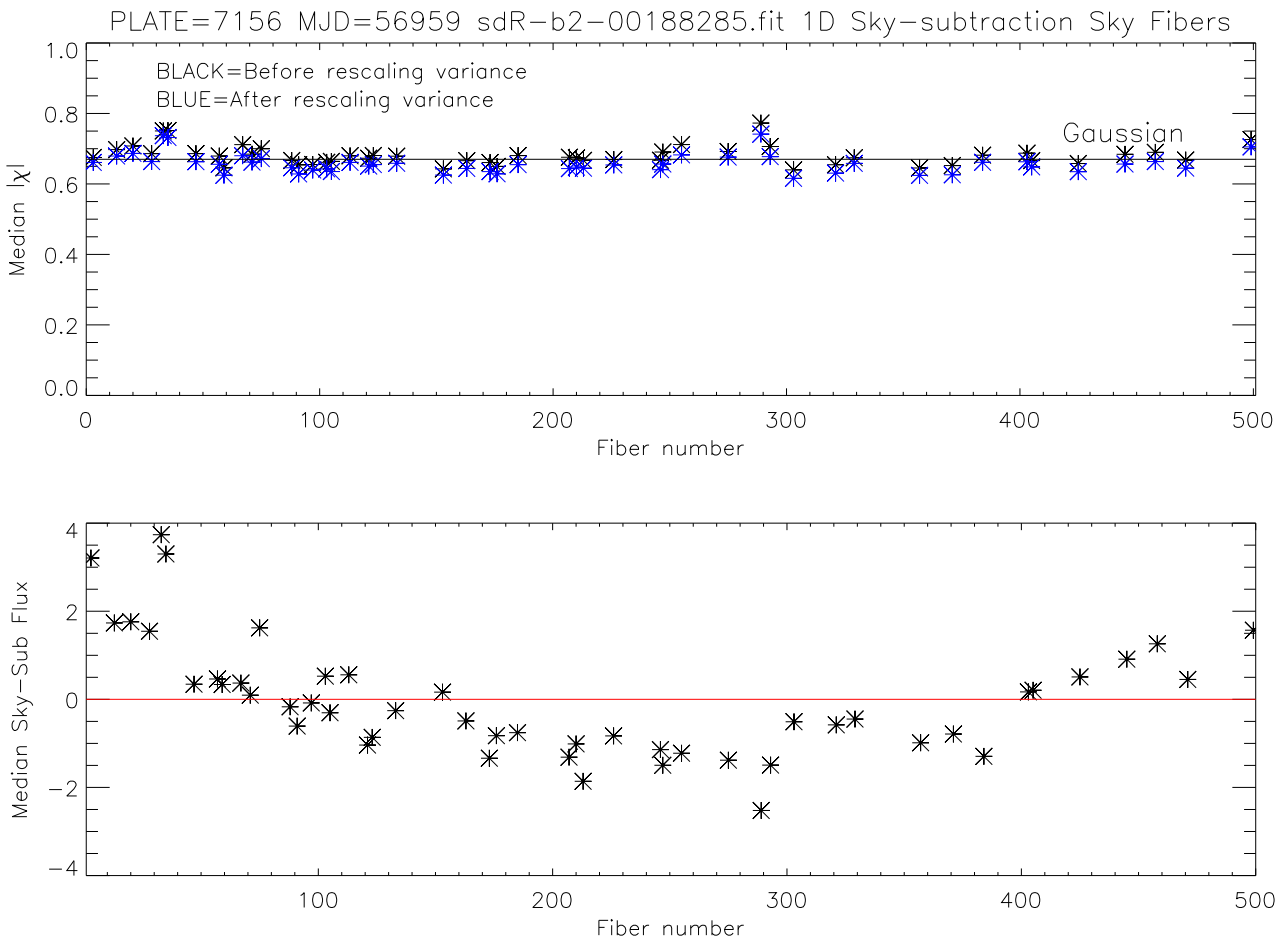

PLATE=7156 MJD=56959 Arcline Fit for sdR-b2-00188283.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:33:11 2016

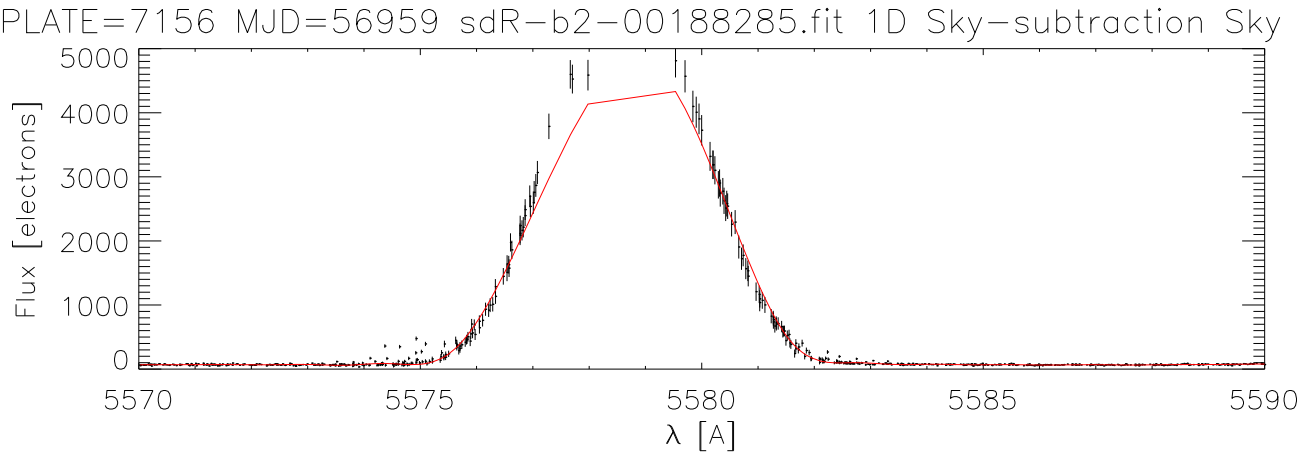

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −6.196
Max value = 2.236
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:33:27 2016

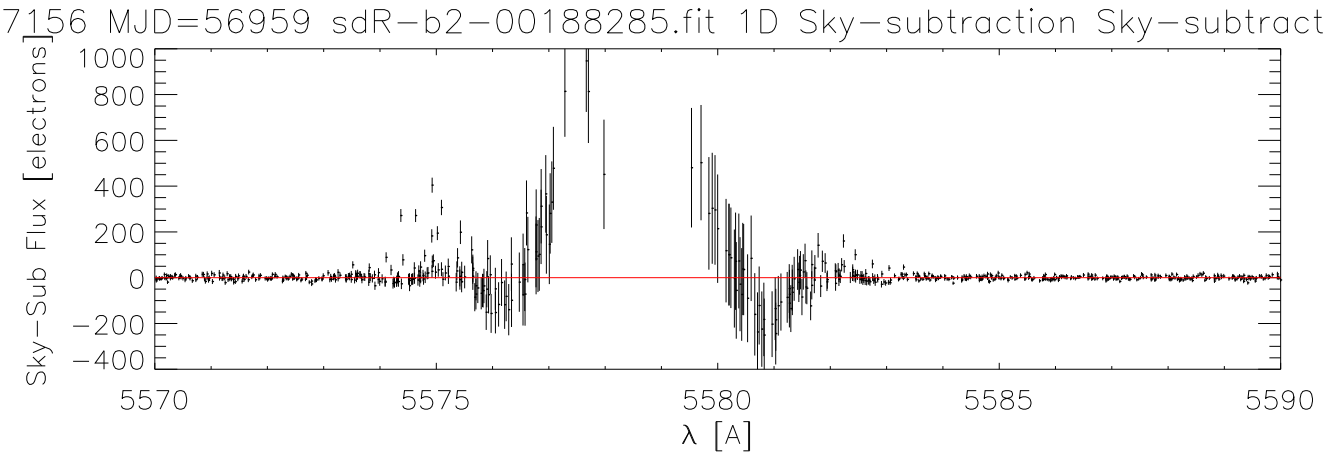

PLATE=7156 MJD=56959 Extraction chi^2 for sdR-b2-00188285.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b2-00188285.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

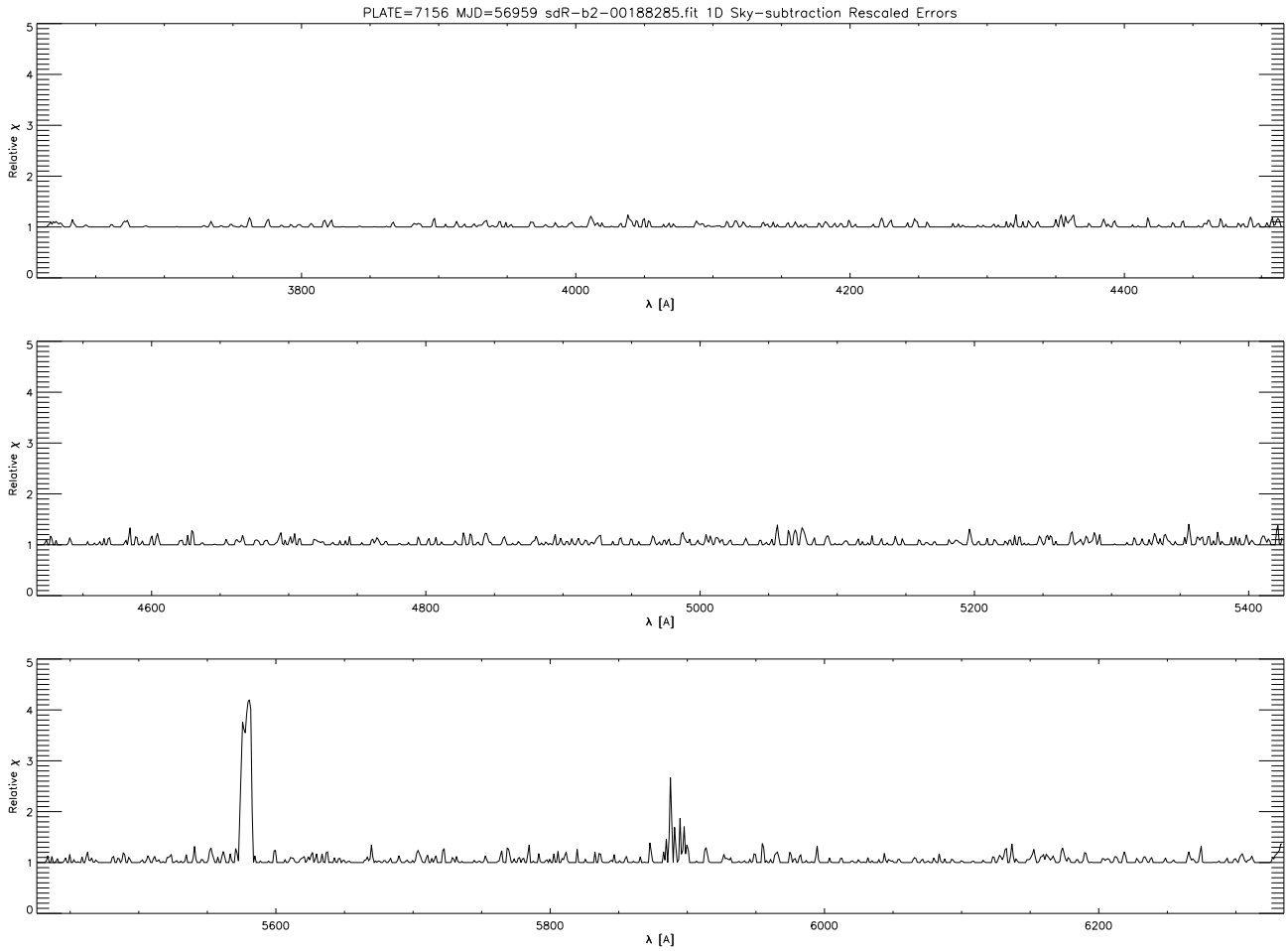

PLATE=7156 MJD=56959 Smooth superflat for sdR-b2-00188285.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

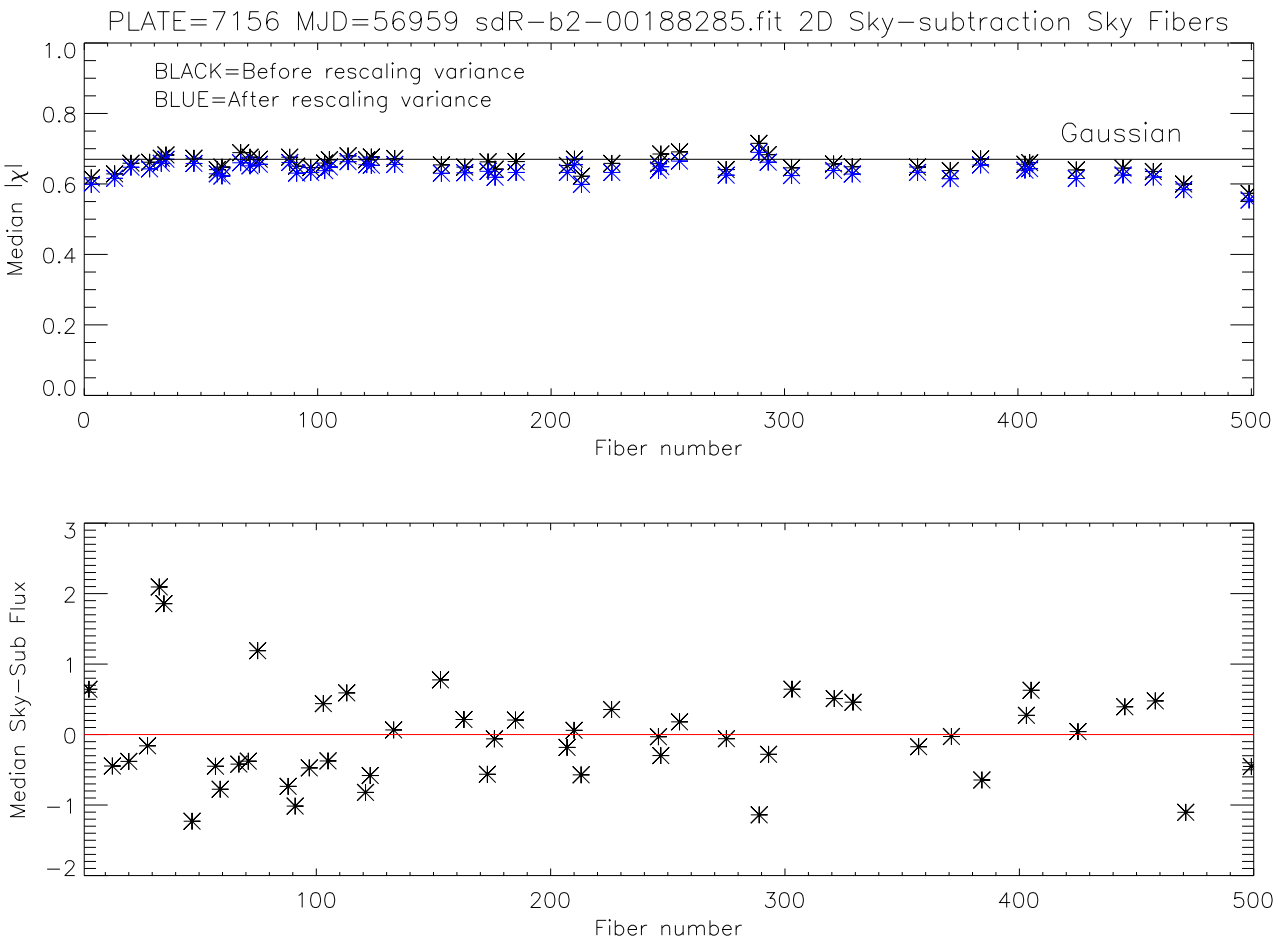

PLATE=7156 MJD=56959 sdR-b2-00188285.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussign
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

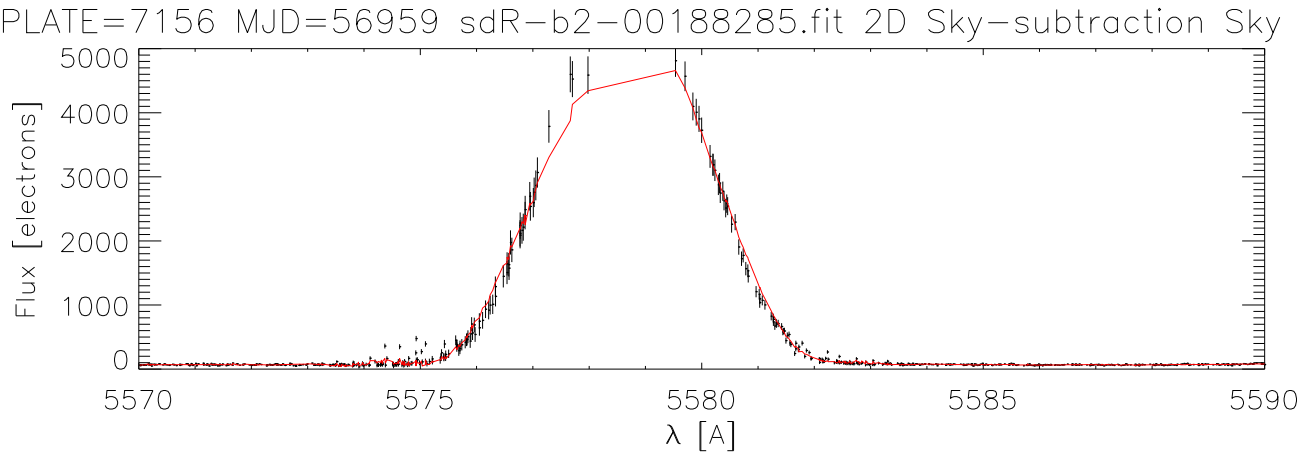

PLATE=7156 MJD=56959 sdR-b2-00188285.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

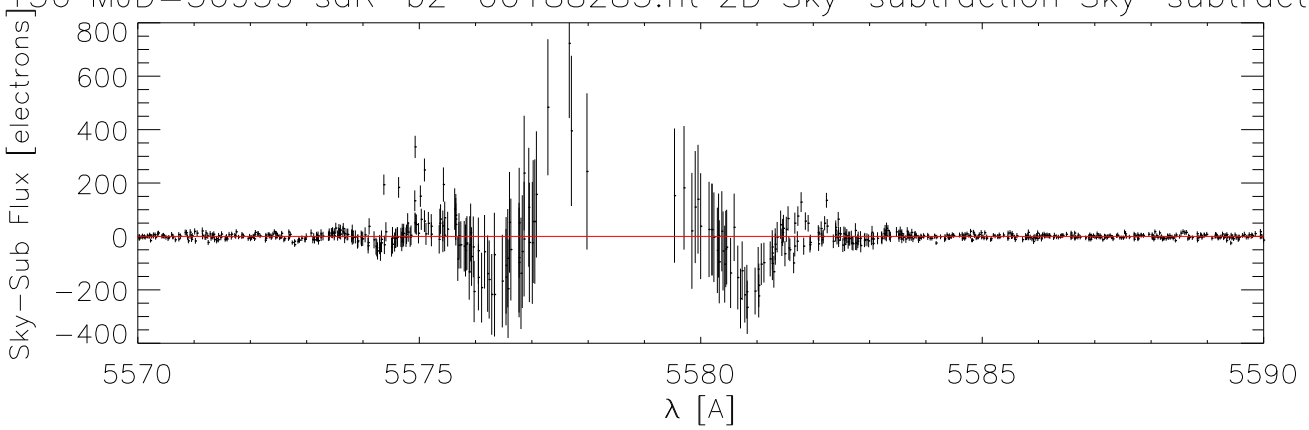

PLATE=7156 MJD=56959 sdR-b2-00188285.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 49

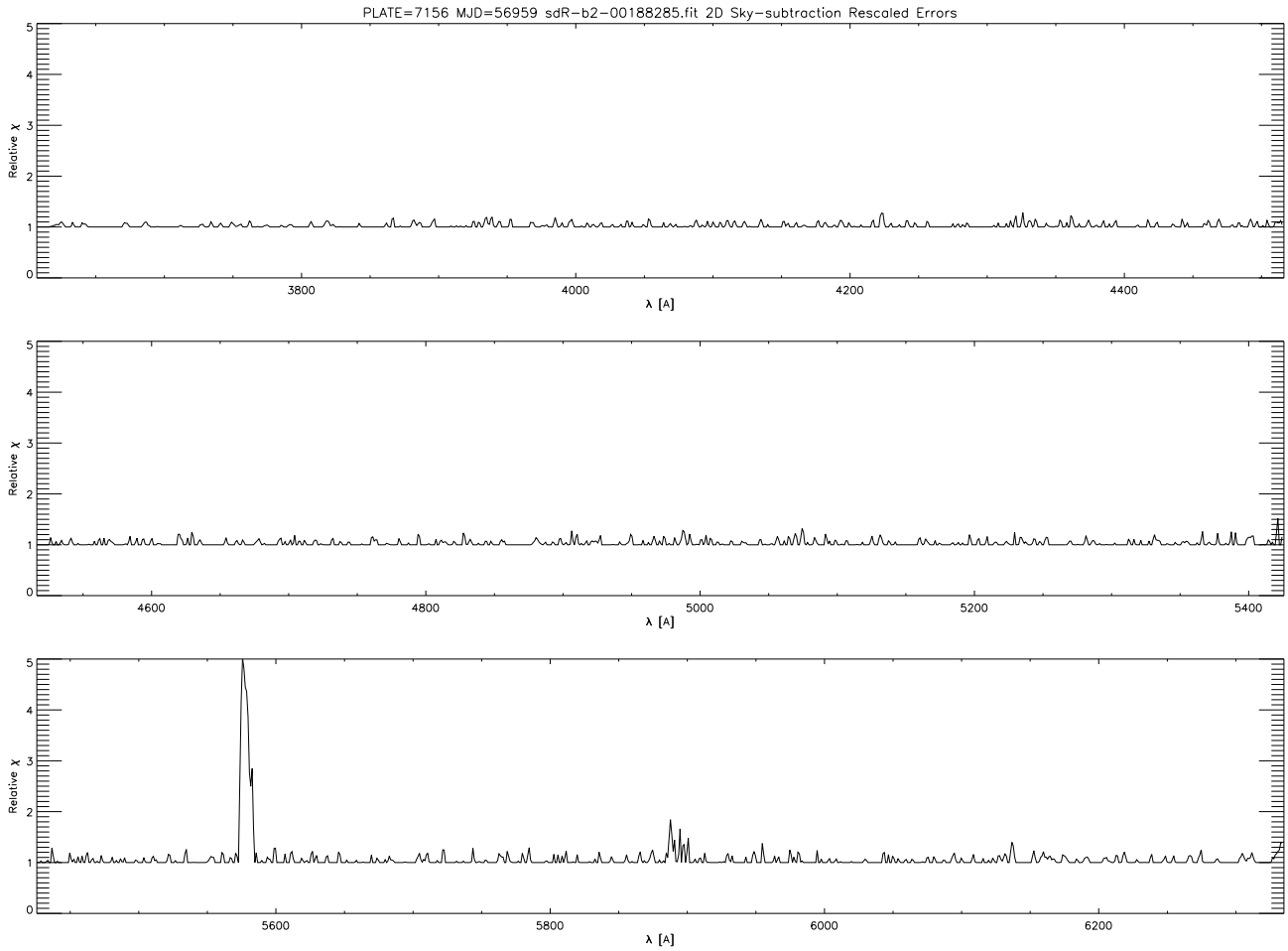


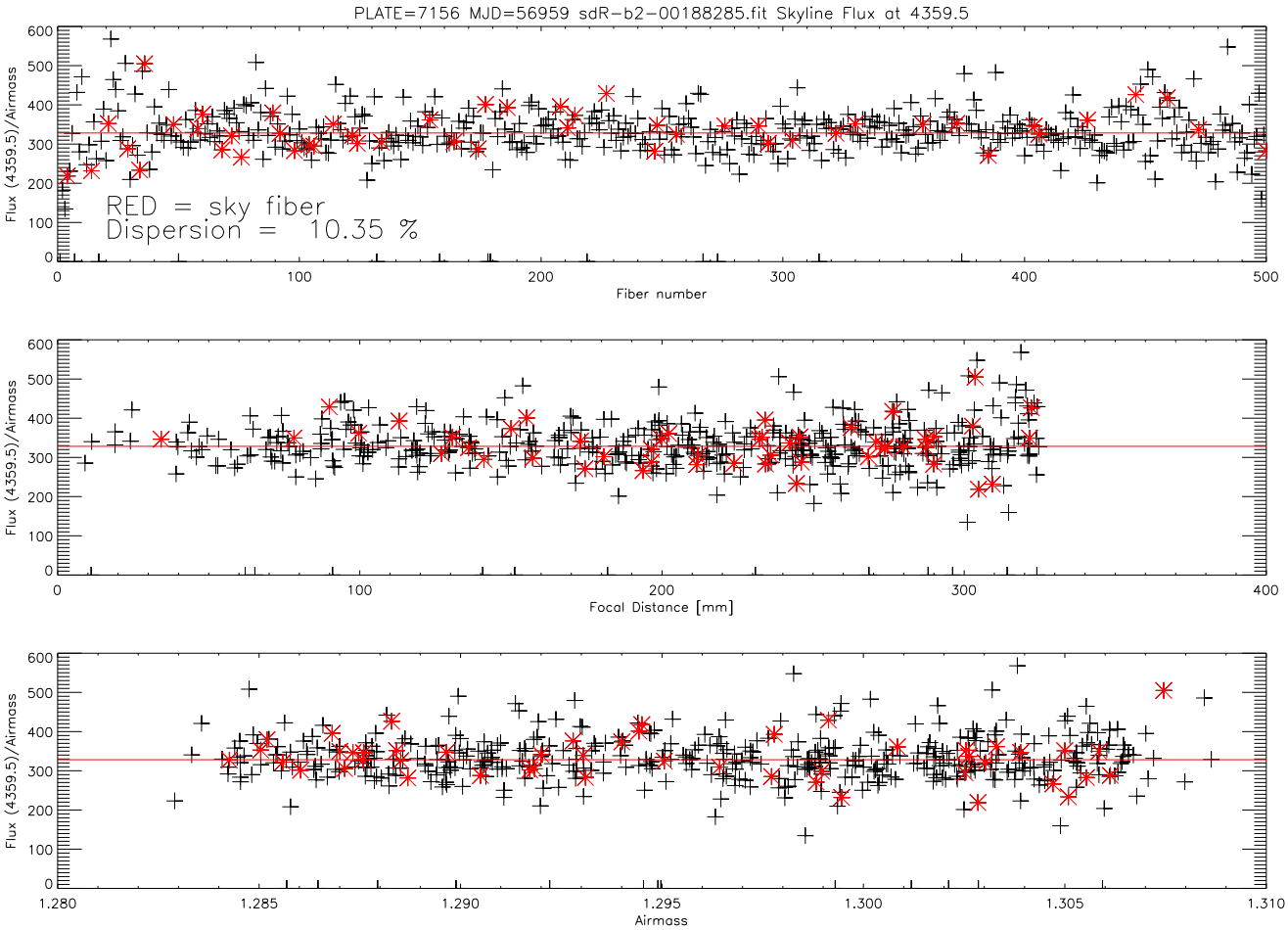

PLATE=7156 MJD=56959 sdR-b2-00188285.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

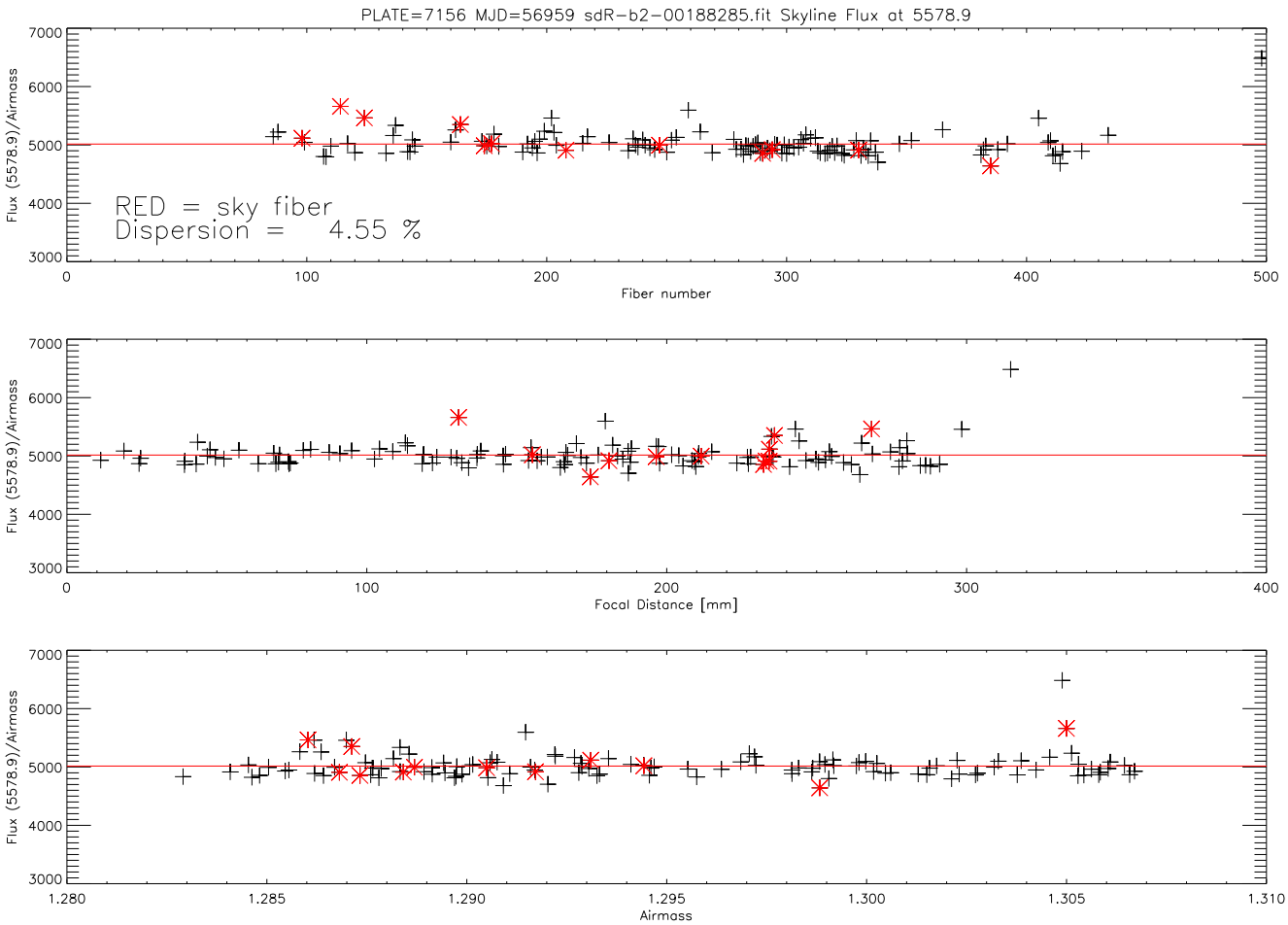

PLATE=7156 MJD=56959 sdR-b2-00188285.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

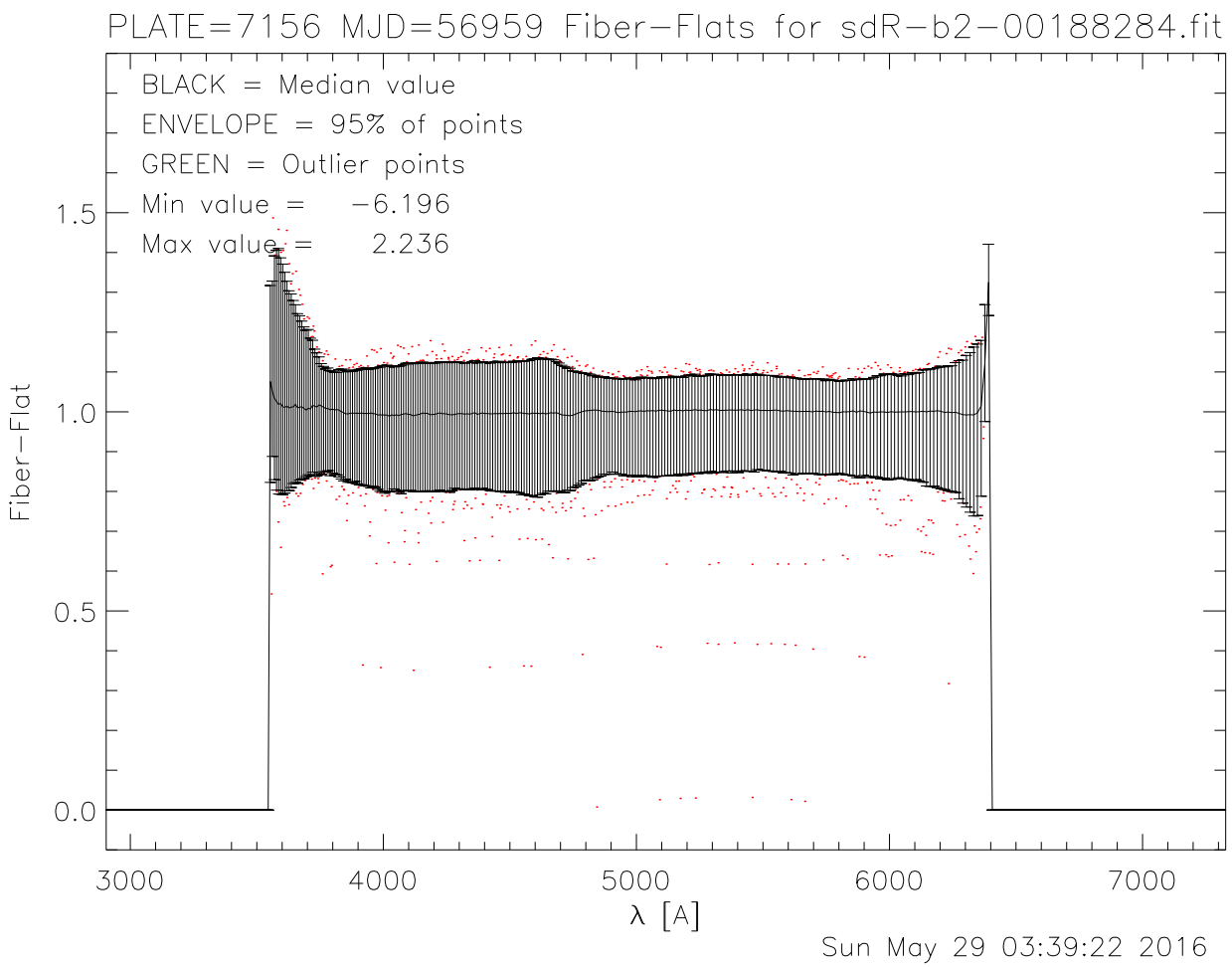

PLATE=7156 MJD=56959 sdR-b2-00188285.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

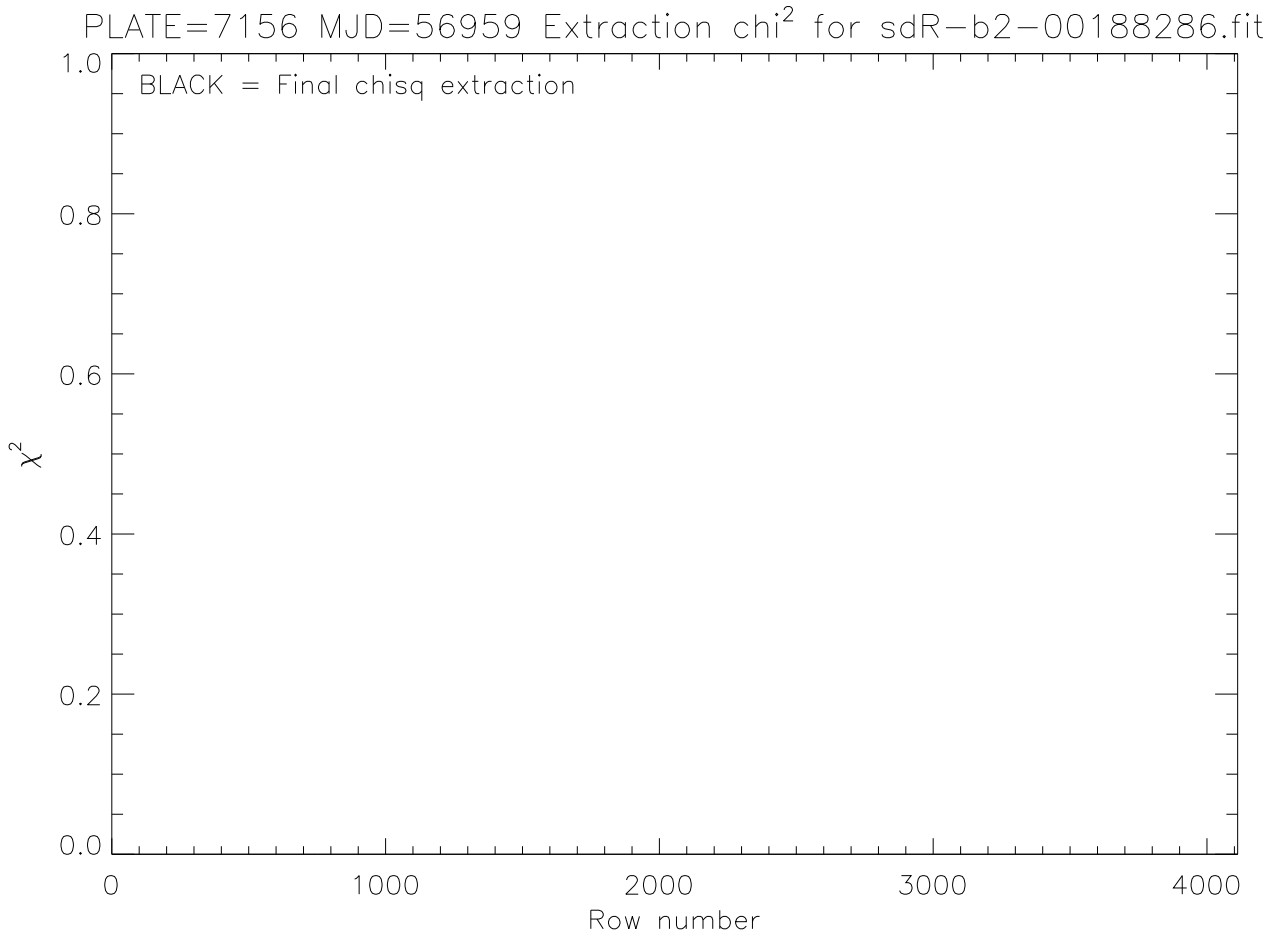
Number of sky fibers = 49

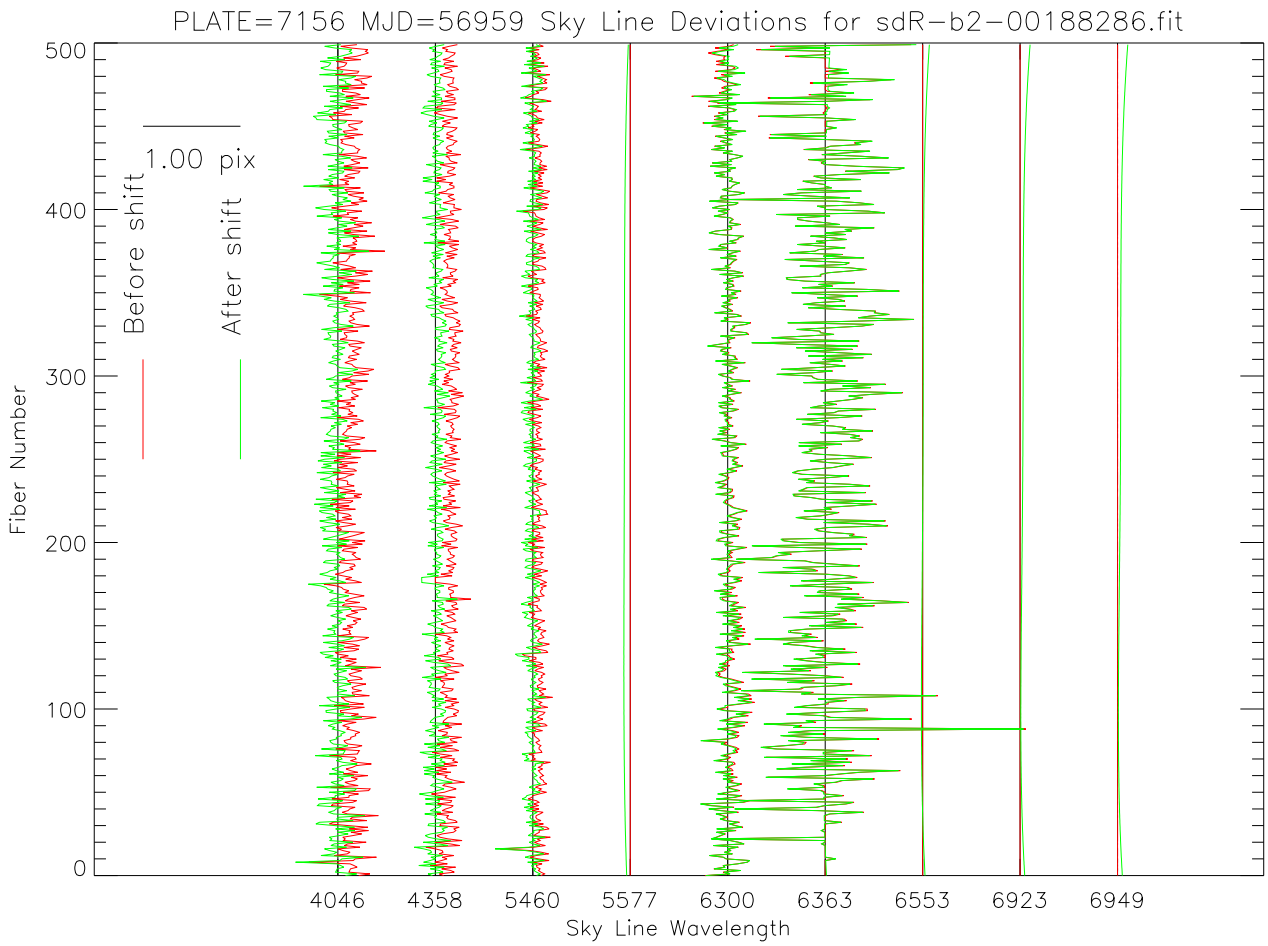


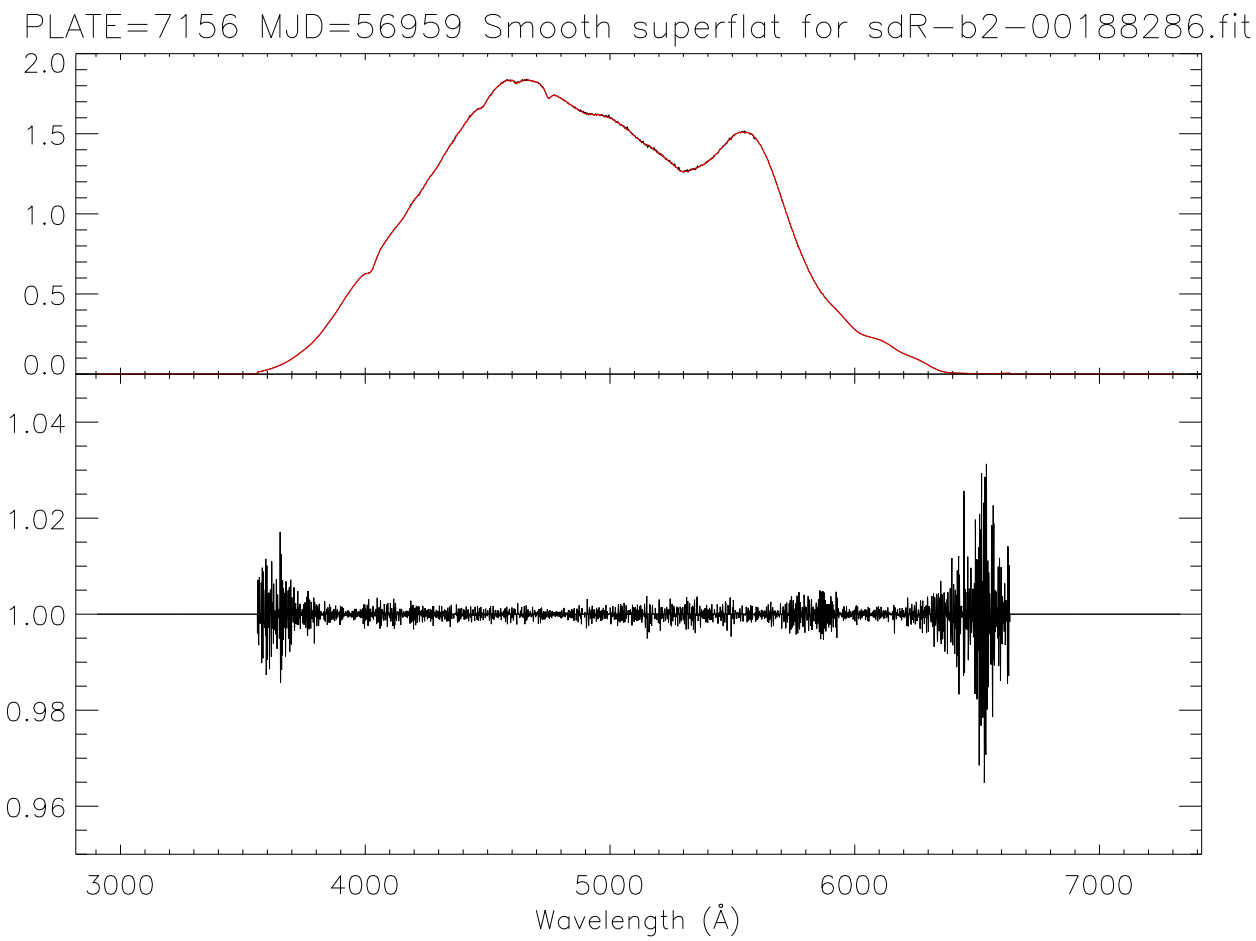

PLATE=7156 MJD=56959 sdR-b2-00188285.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.35 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

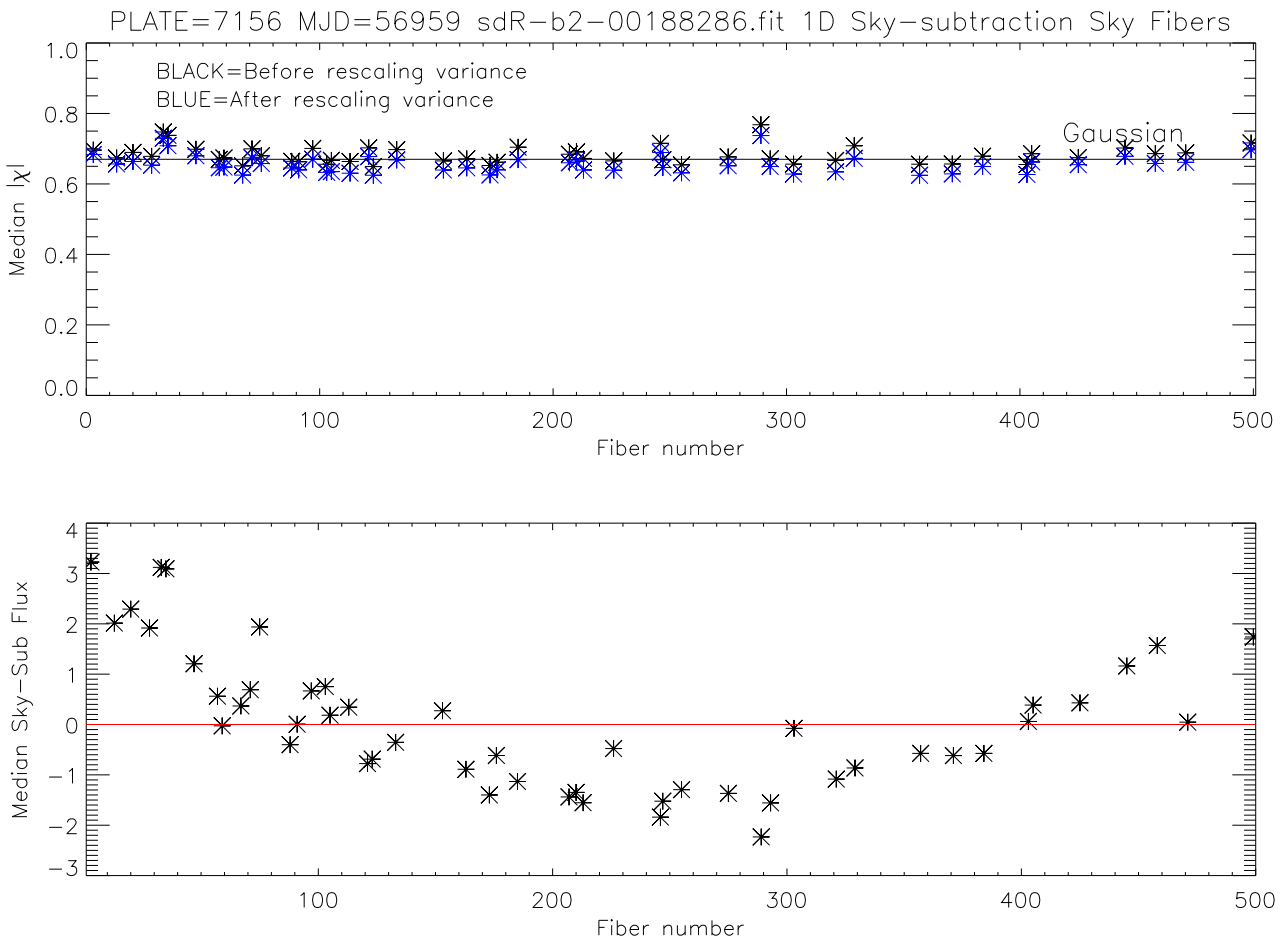

PLATE=7156 MJD=56959 sdR-b2-00188285.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 4.55 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

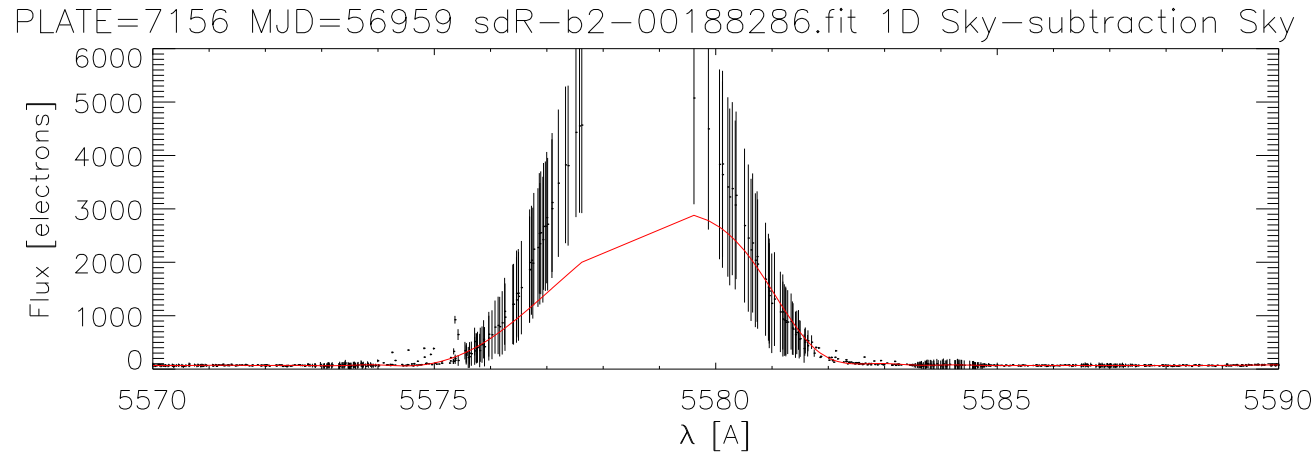

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −6.196
Max value = 2.236
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:39:22 2016

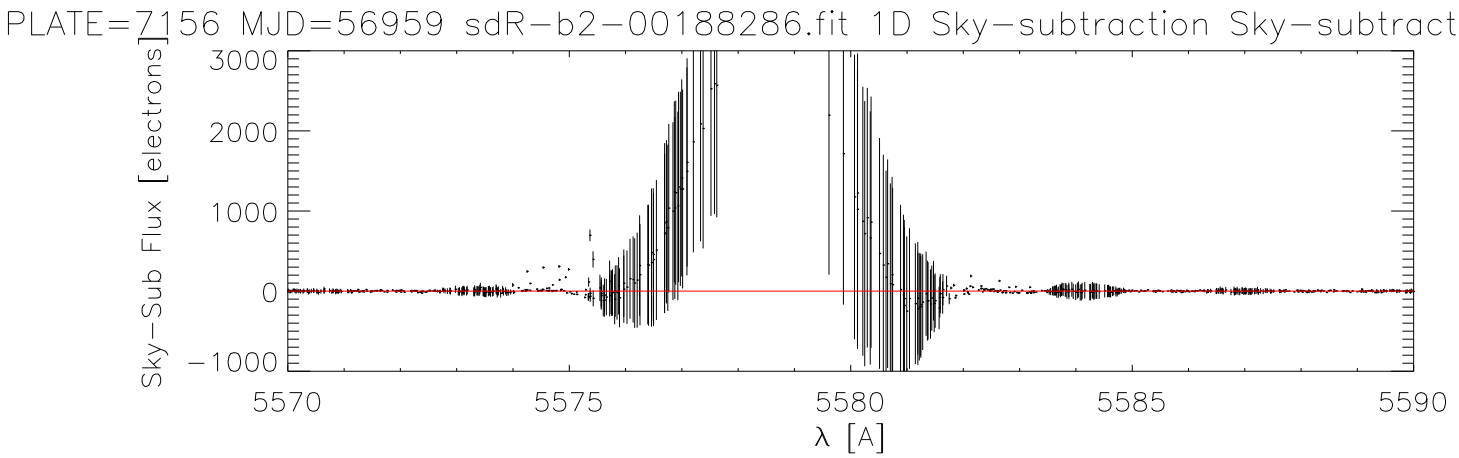

PLATE=7156 MJD=56959 Extraction chi^2 for sdR-b2-00188286.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b2-00188286.fit
Before shift
After shift
1.00 pix
Fiber Number
0
100
200
300
400
500
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

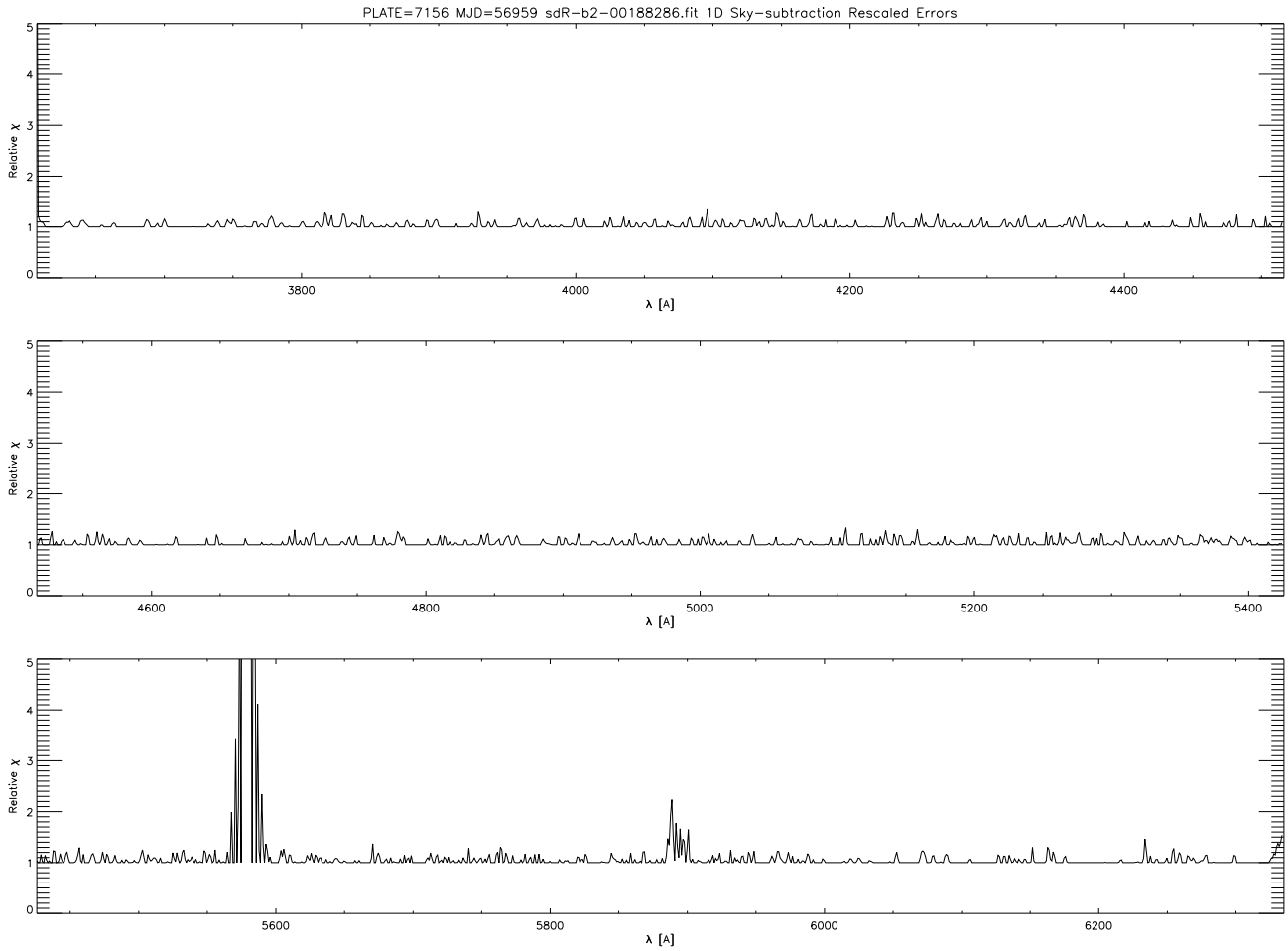

PLATE=7156 MJD=56959 Smooth superflat for sdR-b2-00188286.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

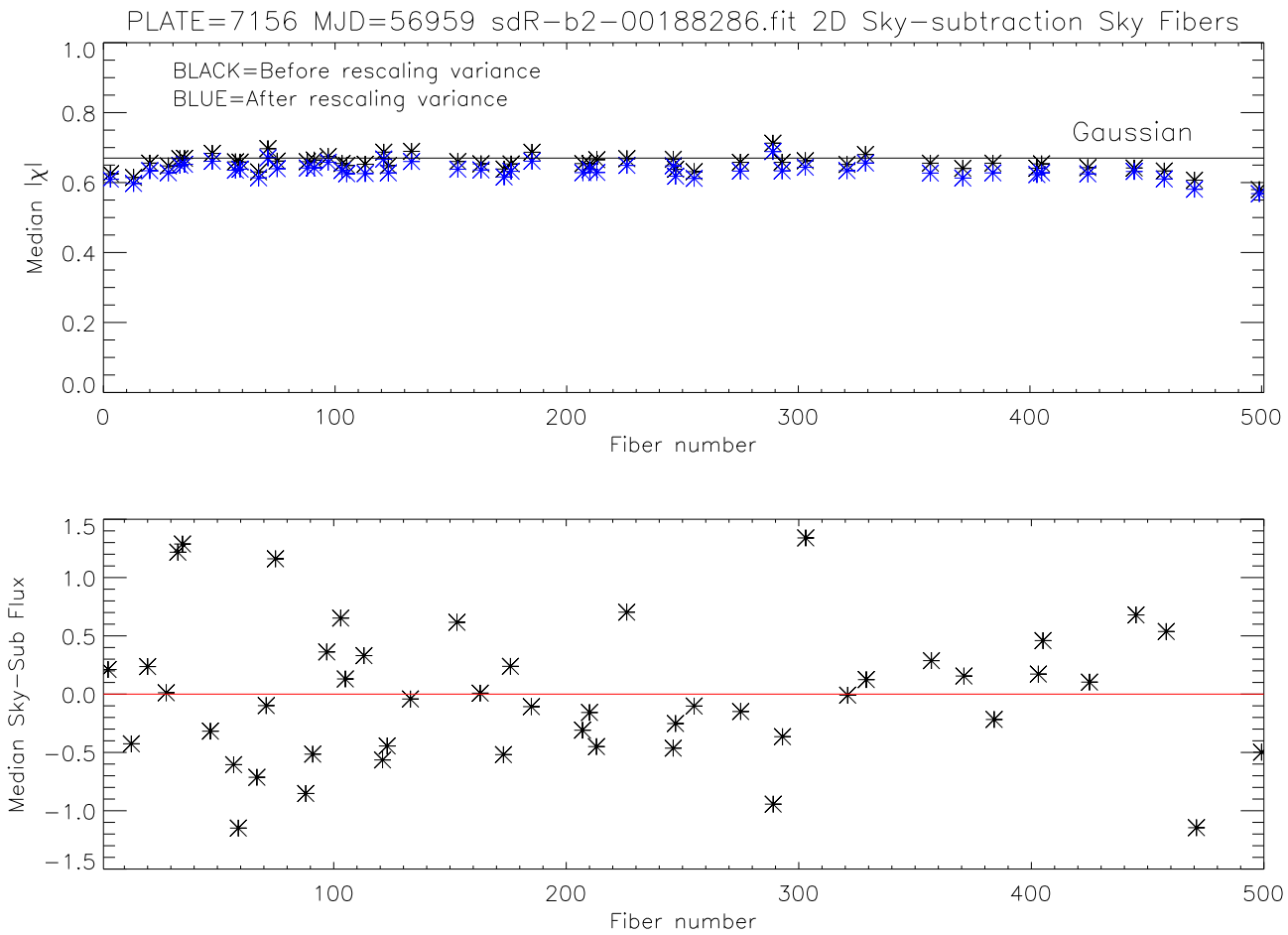

PLATE=7156 MJD=56959 sdR-b2-00188286.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

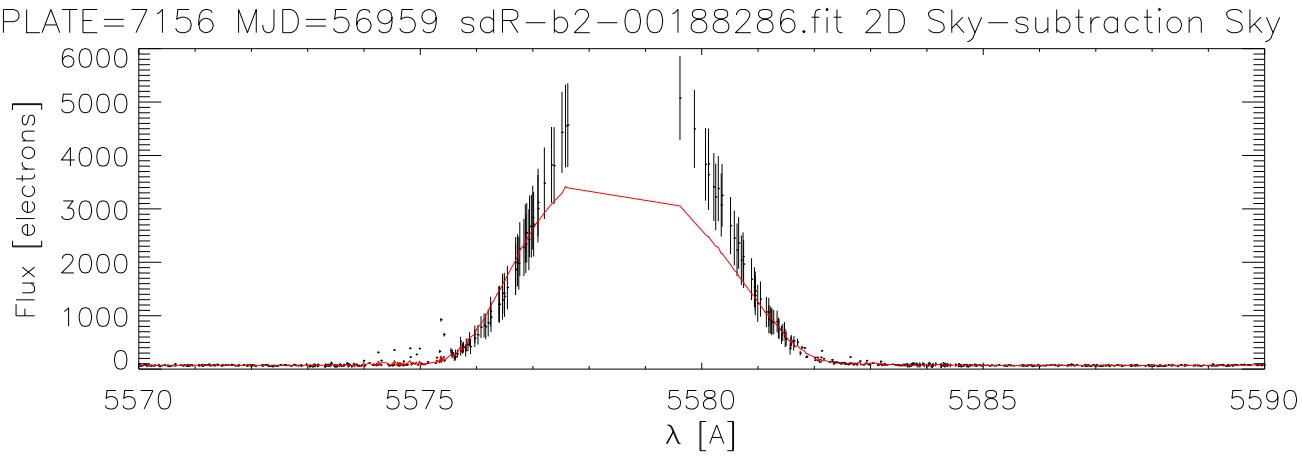

PLATE=7156 MJD=56959 sdR-b2-00188286.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

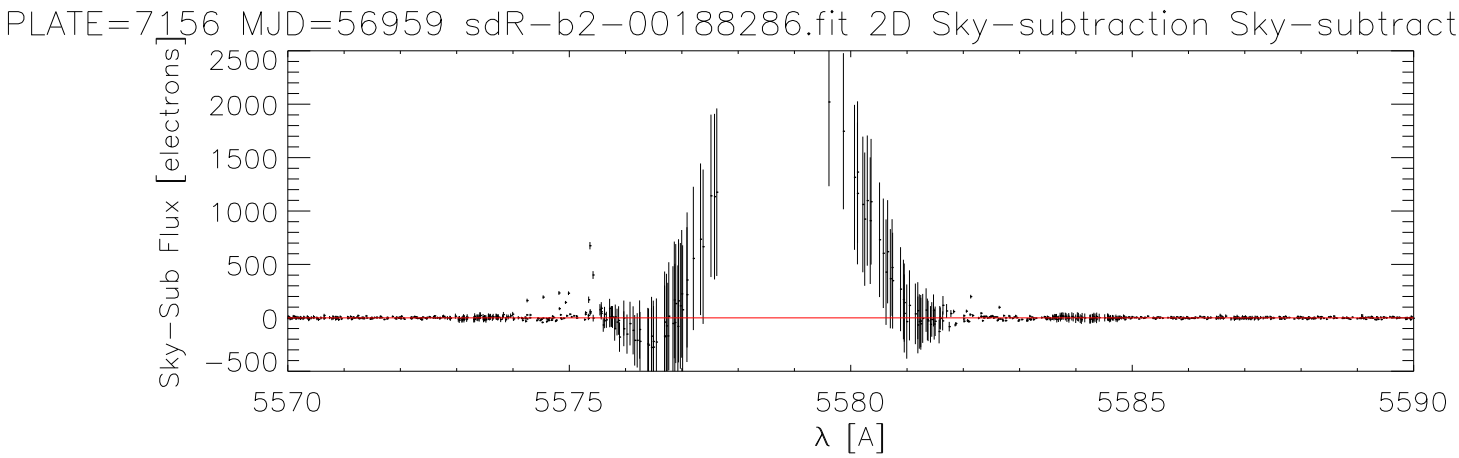

PLATE=7156 MJD=56959 sdR-b2-00188286.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 49

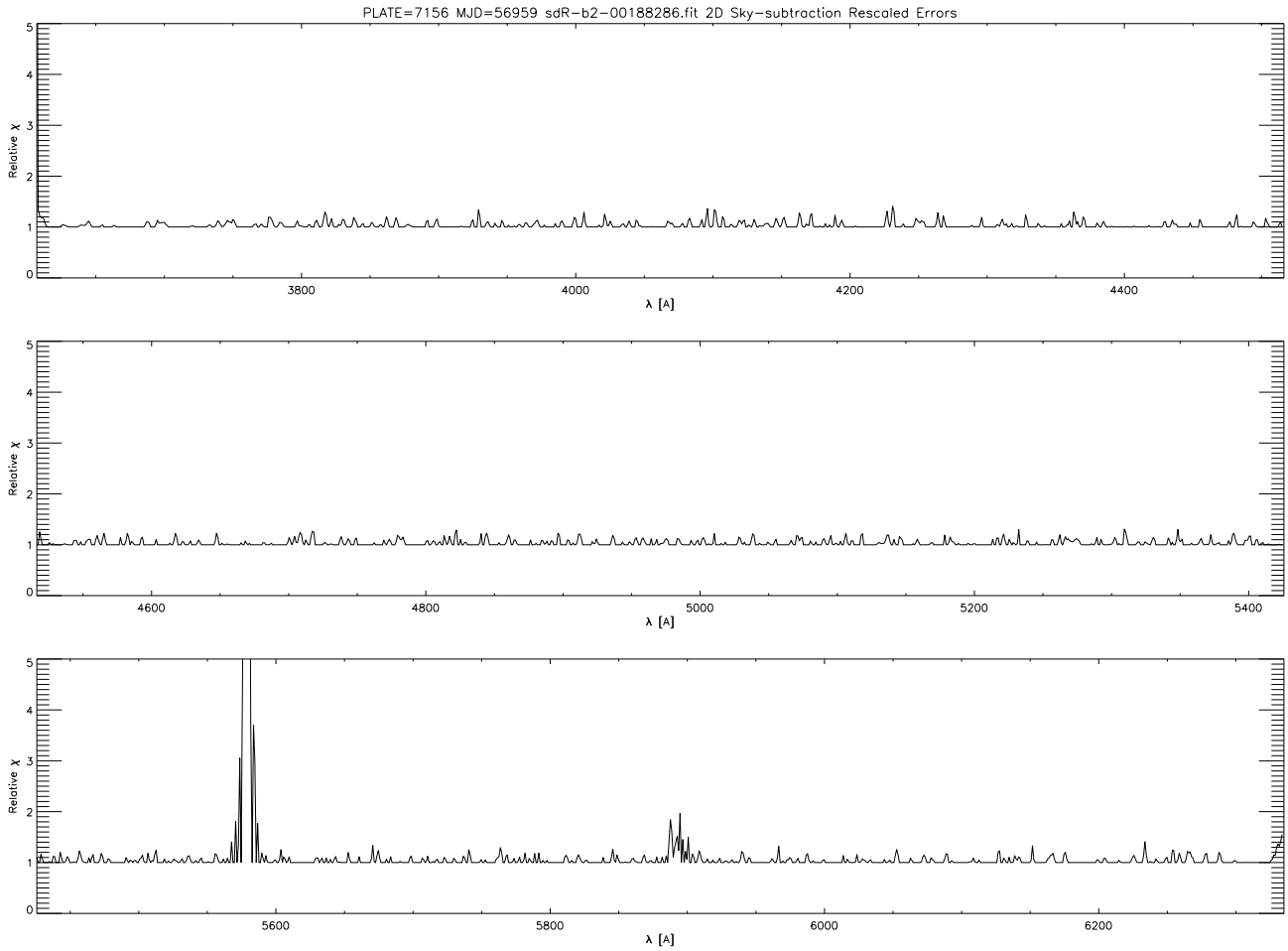


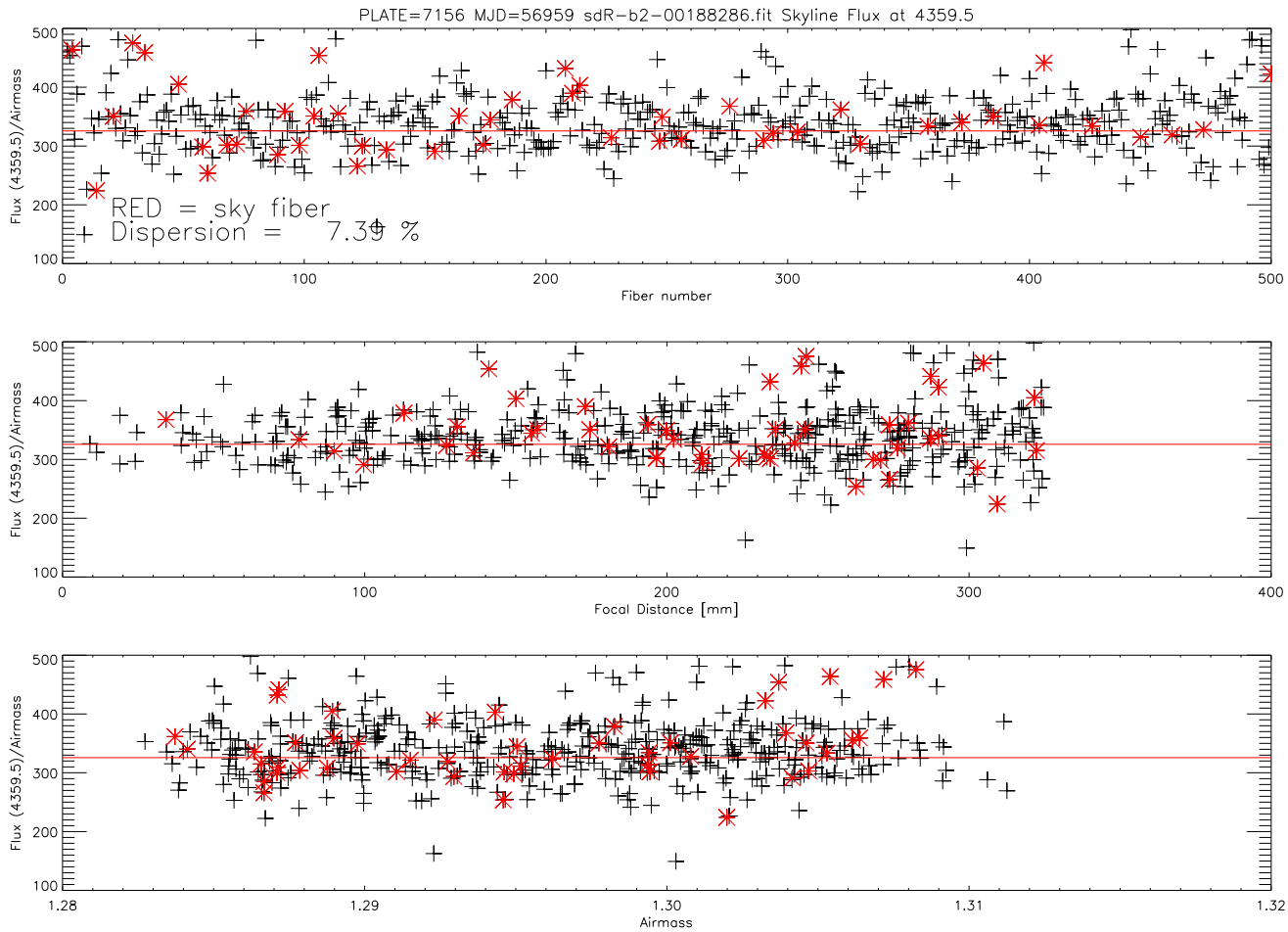

PLATE=7156 MJD=56959 sdR-b2-00188286.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

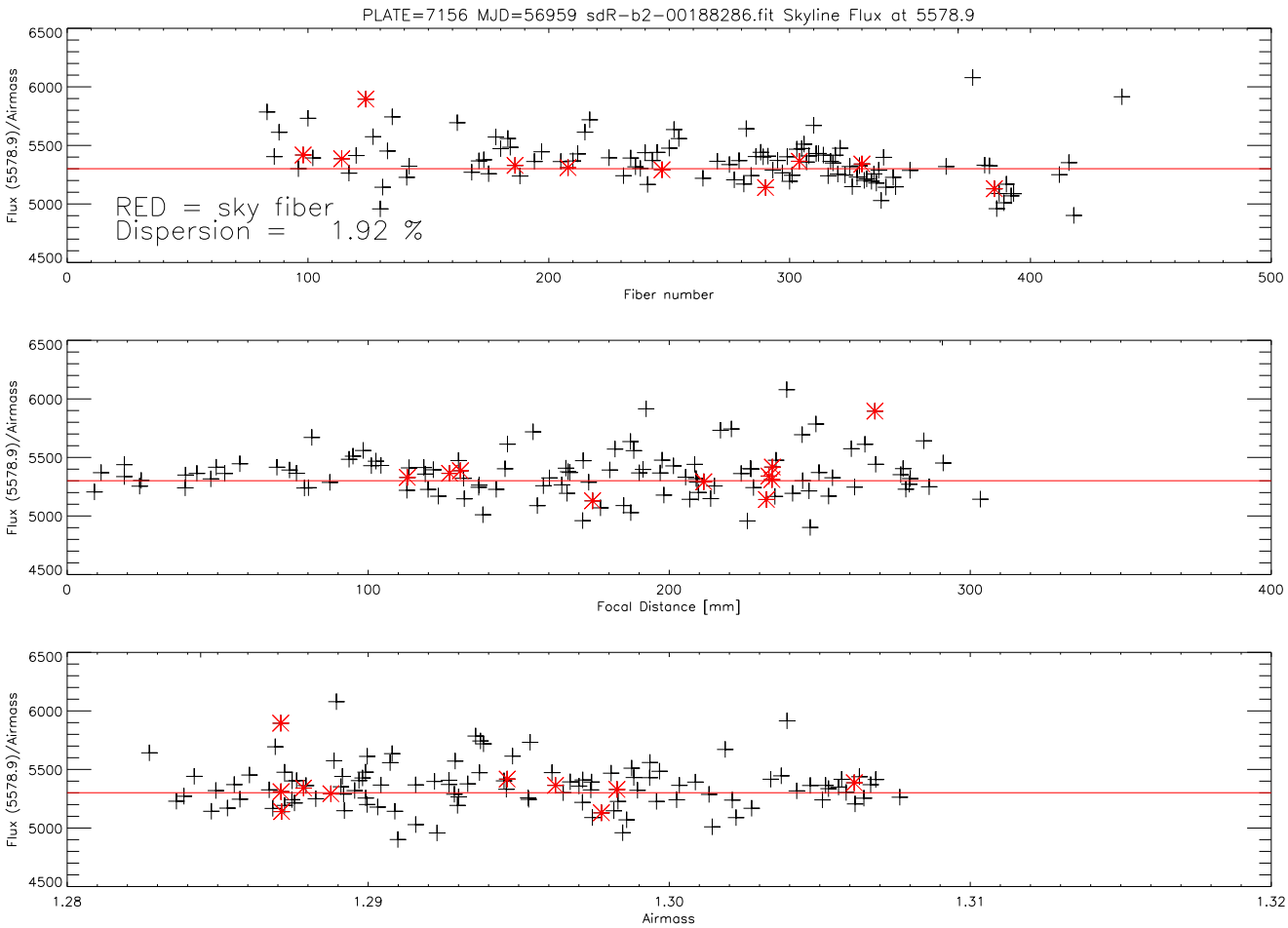

PLATE=7156 MJD=56959 sdR-b2-00188286.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

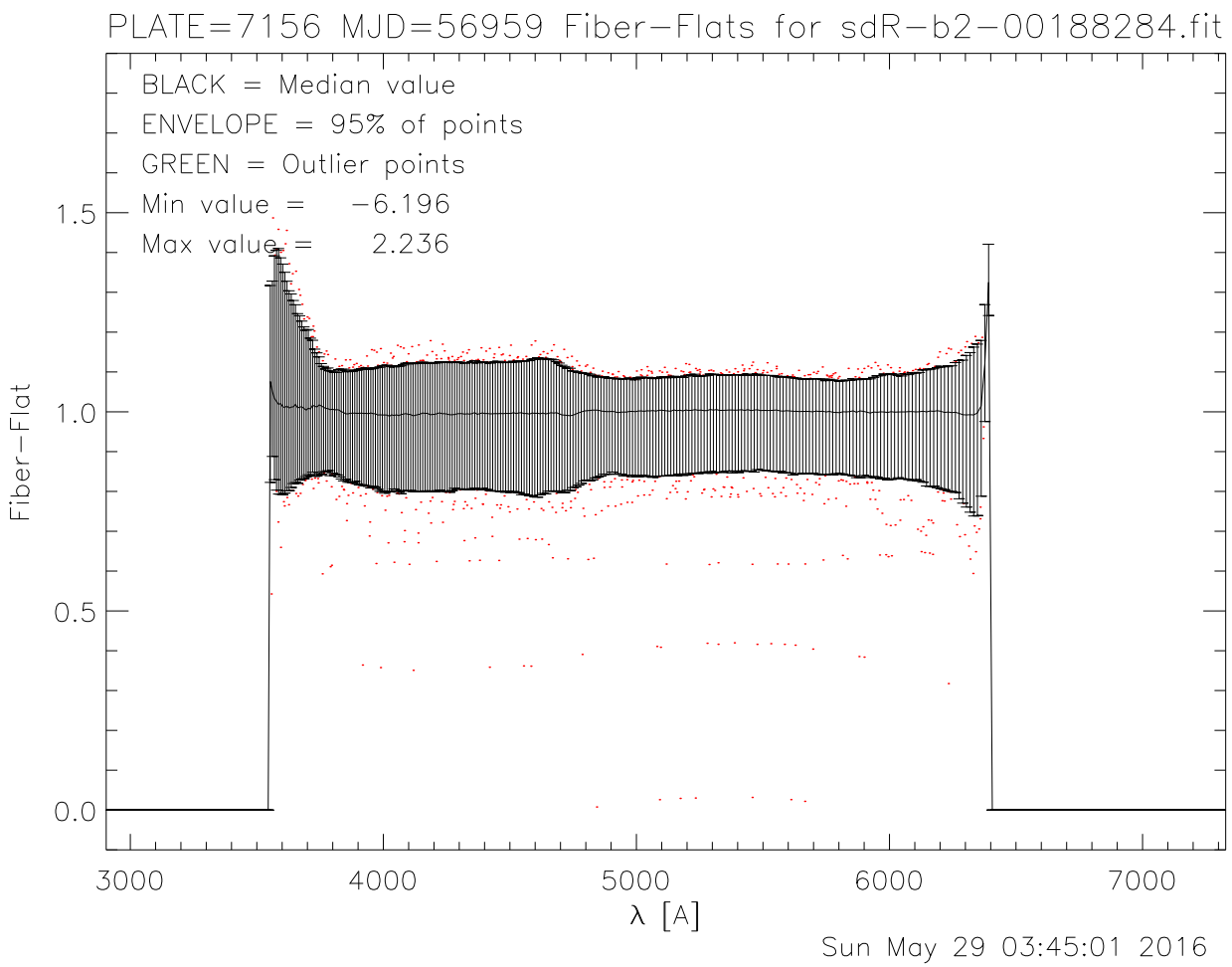

PLATE=7156 MJD=56959 sdR-b2-00188286.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

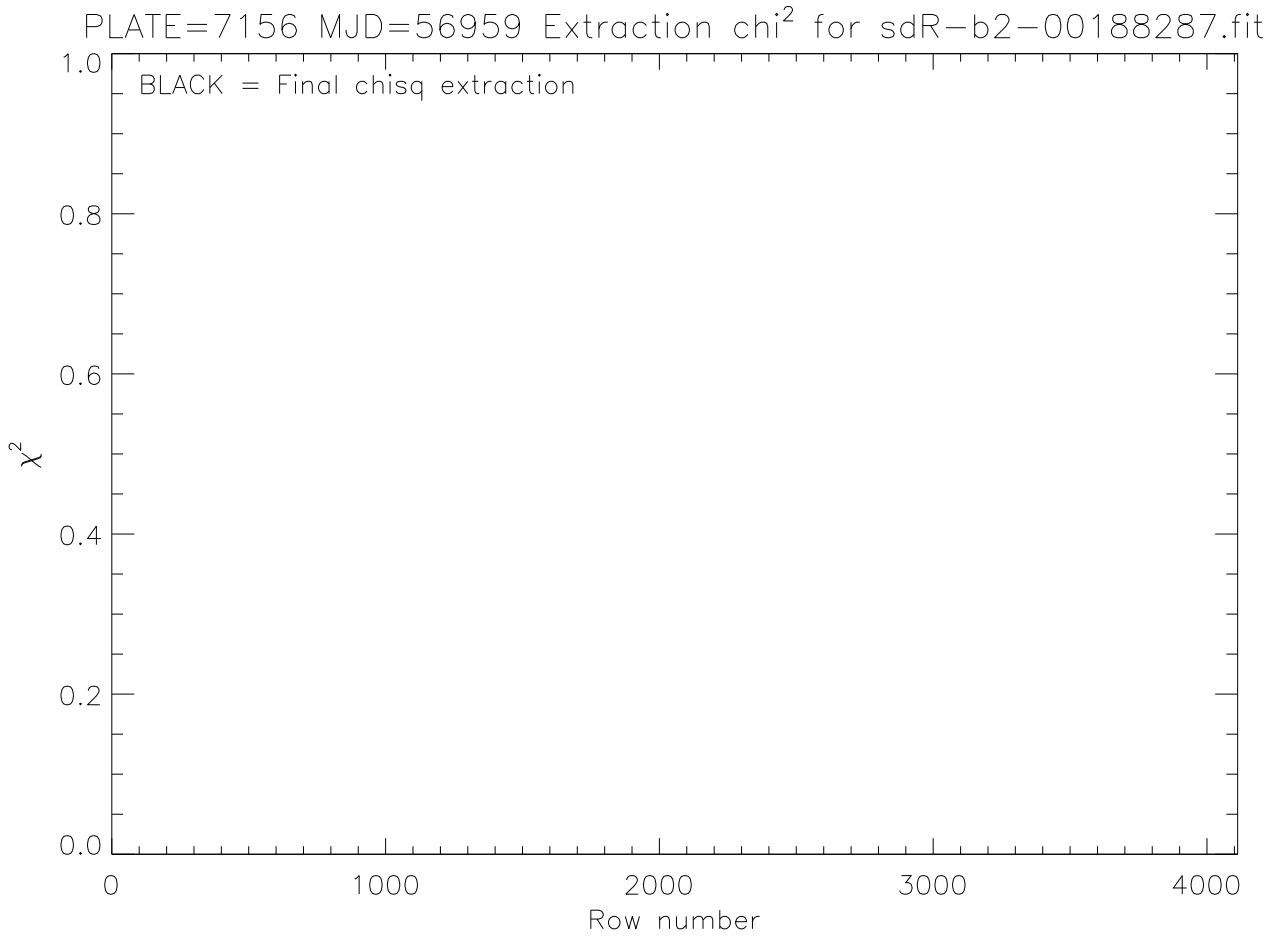
Number of sky fibers = 49

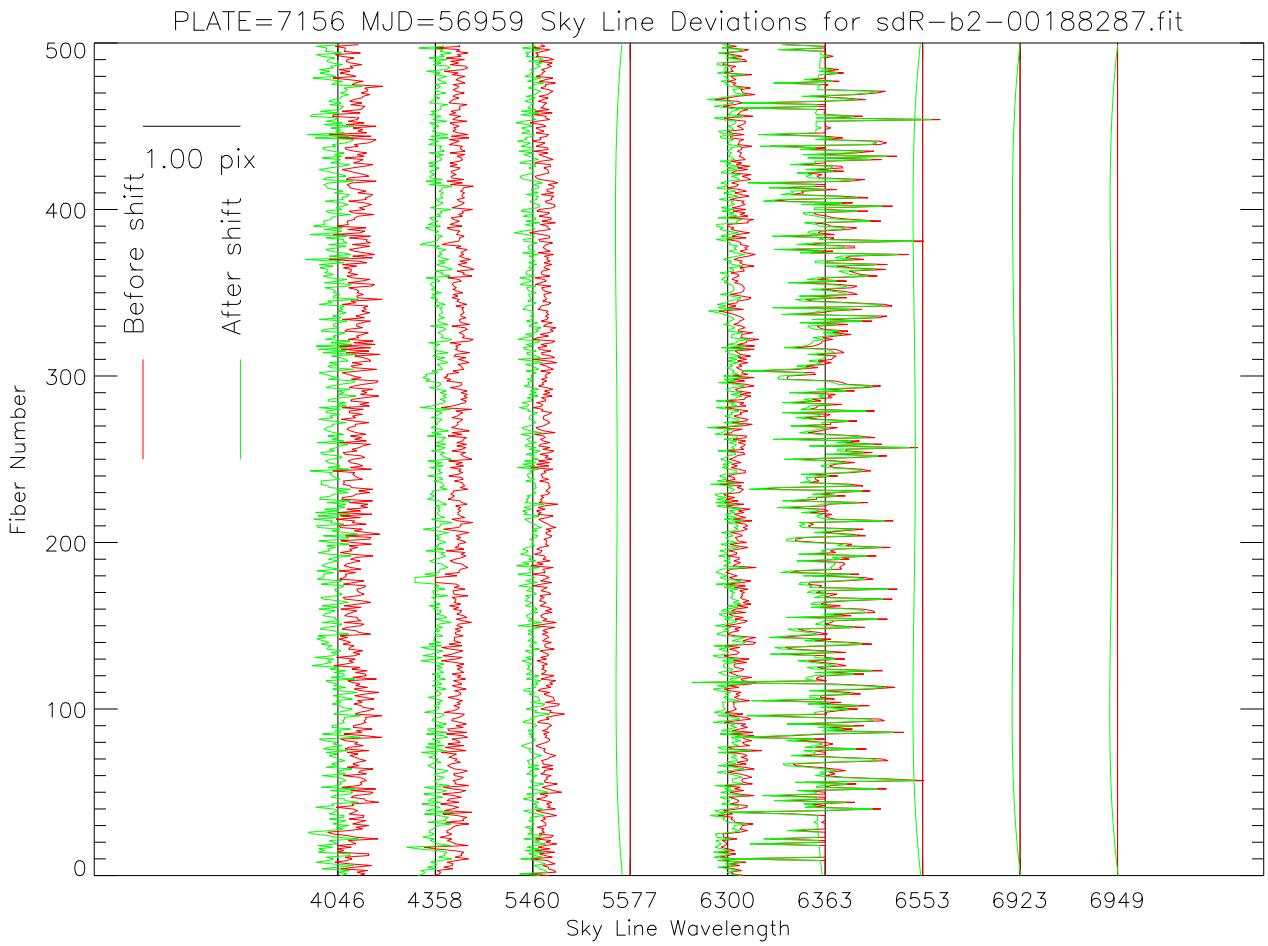


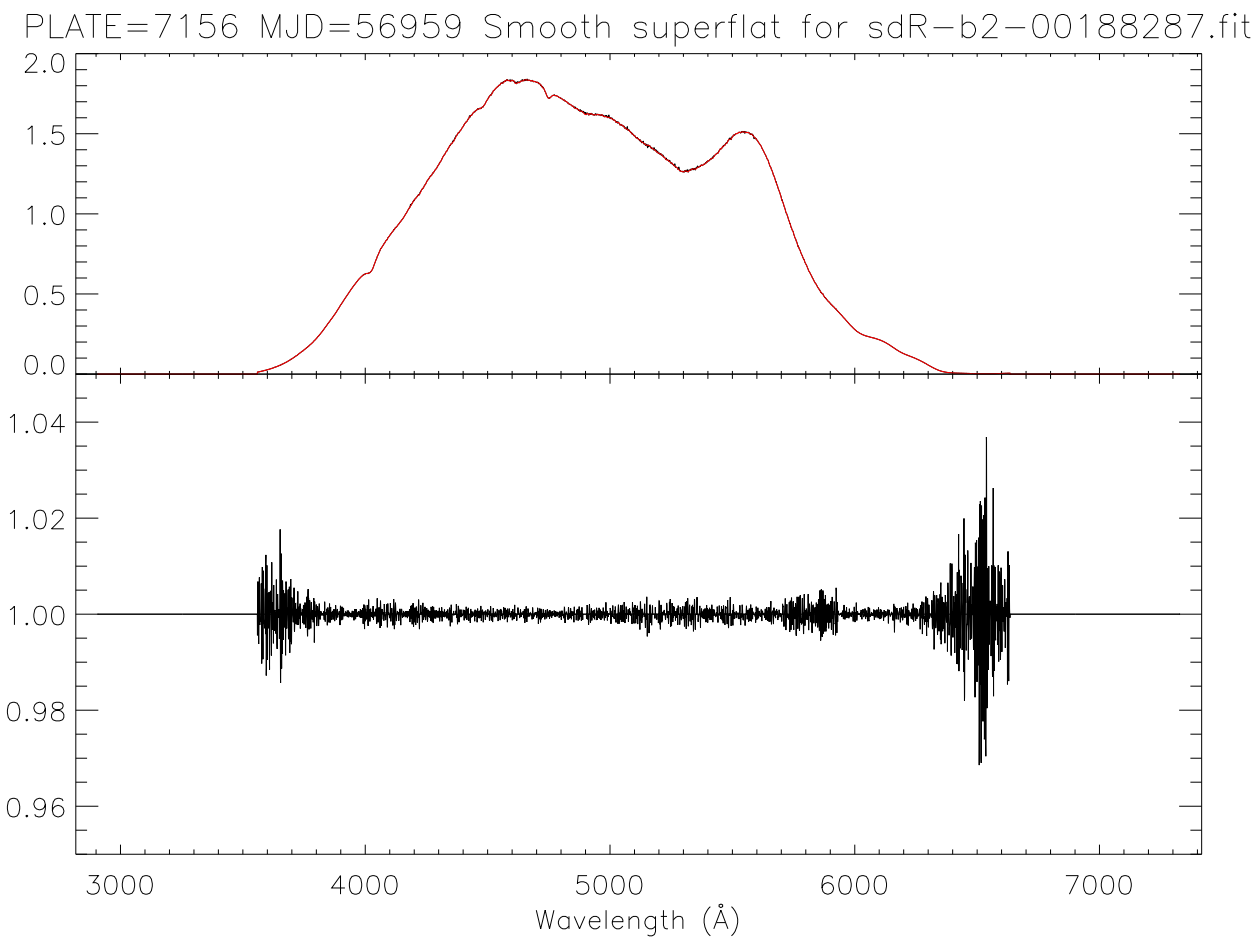

PLATE=7156 MJD=56959 sdR-b2-00188286.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 7.39 %
Fiber number
Focal Distance [mm]
Airmass

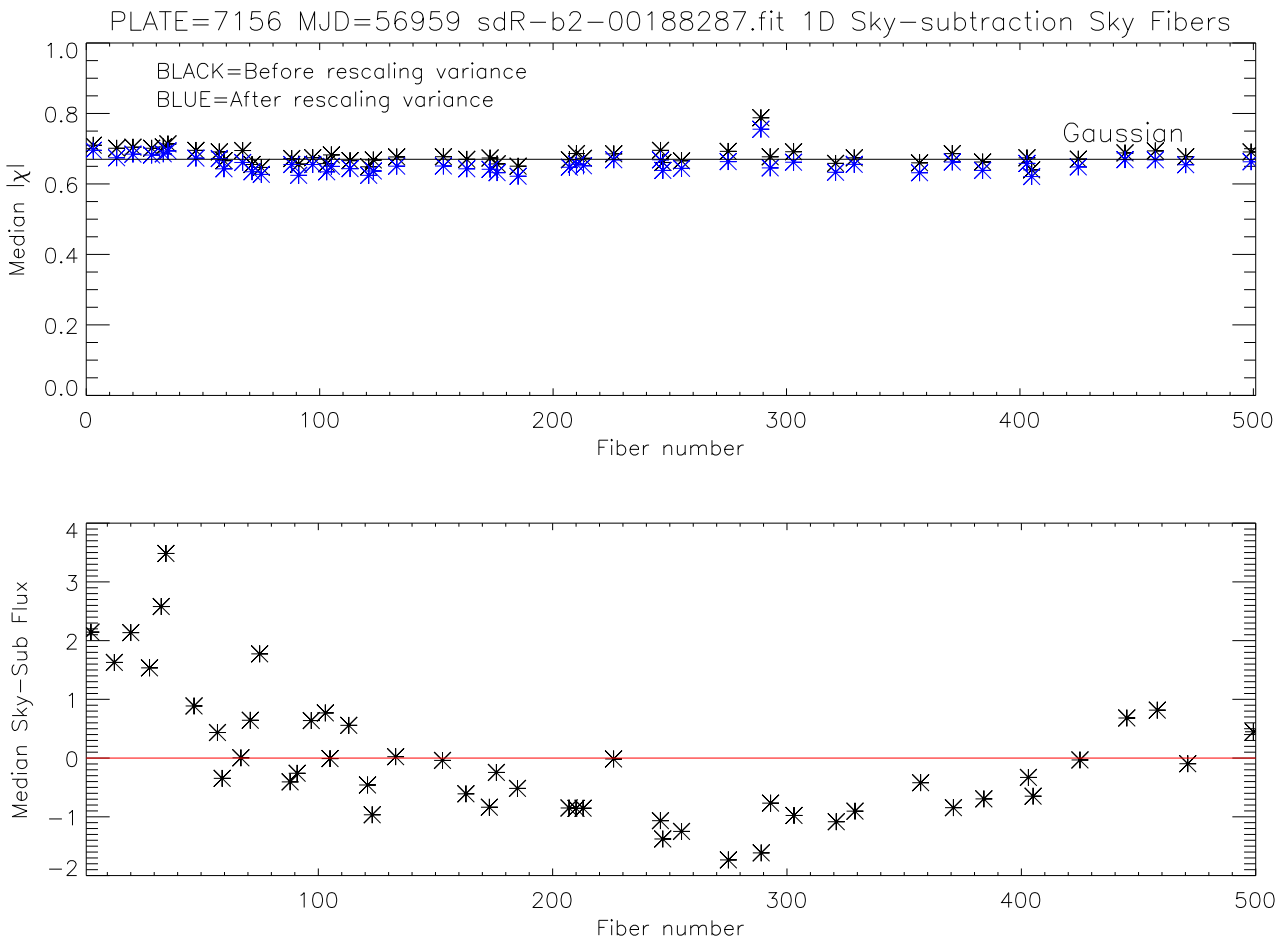

PLATE=7156 MJD=56959 sdR-b2-00188286.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 1.92 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

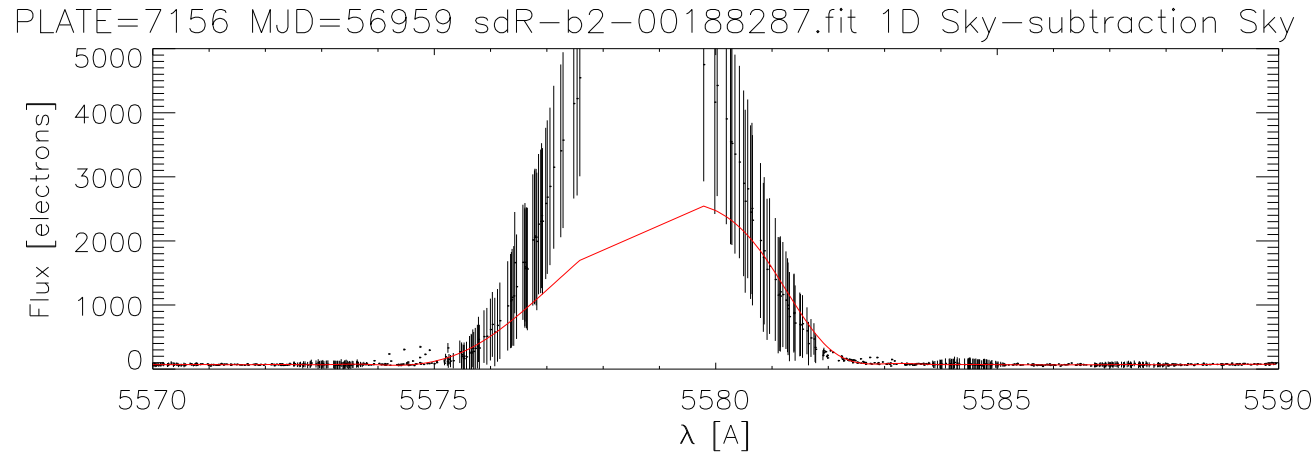

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −6.196
Max value = 2.236
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:45:01 2016

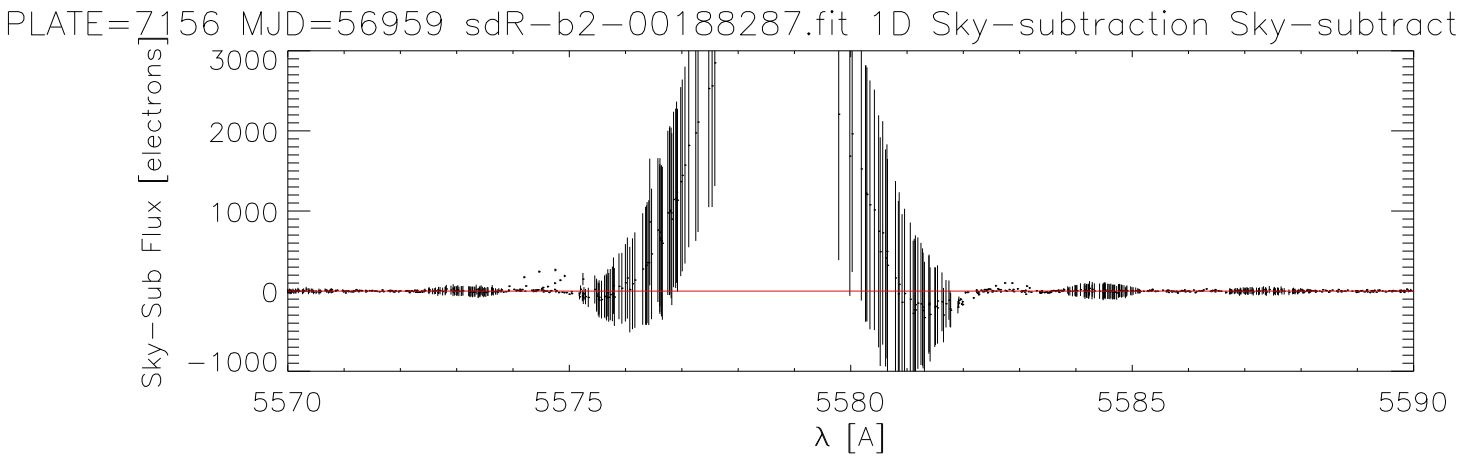

PLATE=7156 MJD=56959 Extraction chi^2 for sdR-b2-00188287.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b2-00188287.fit
Before shift
After shift
1.00 pix
Fiber Number
0
100
200
300
400
500
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

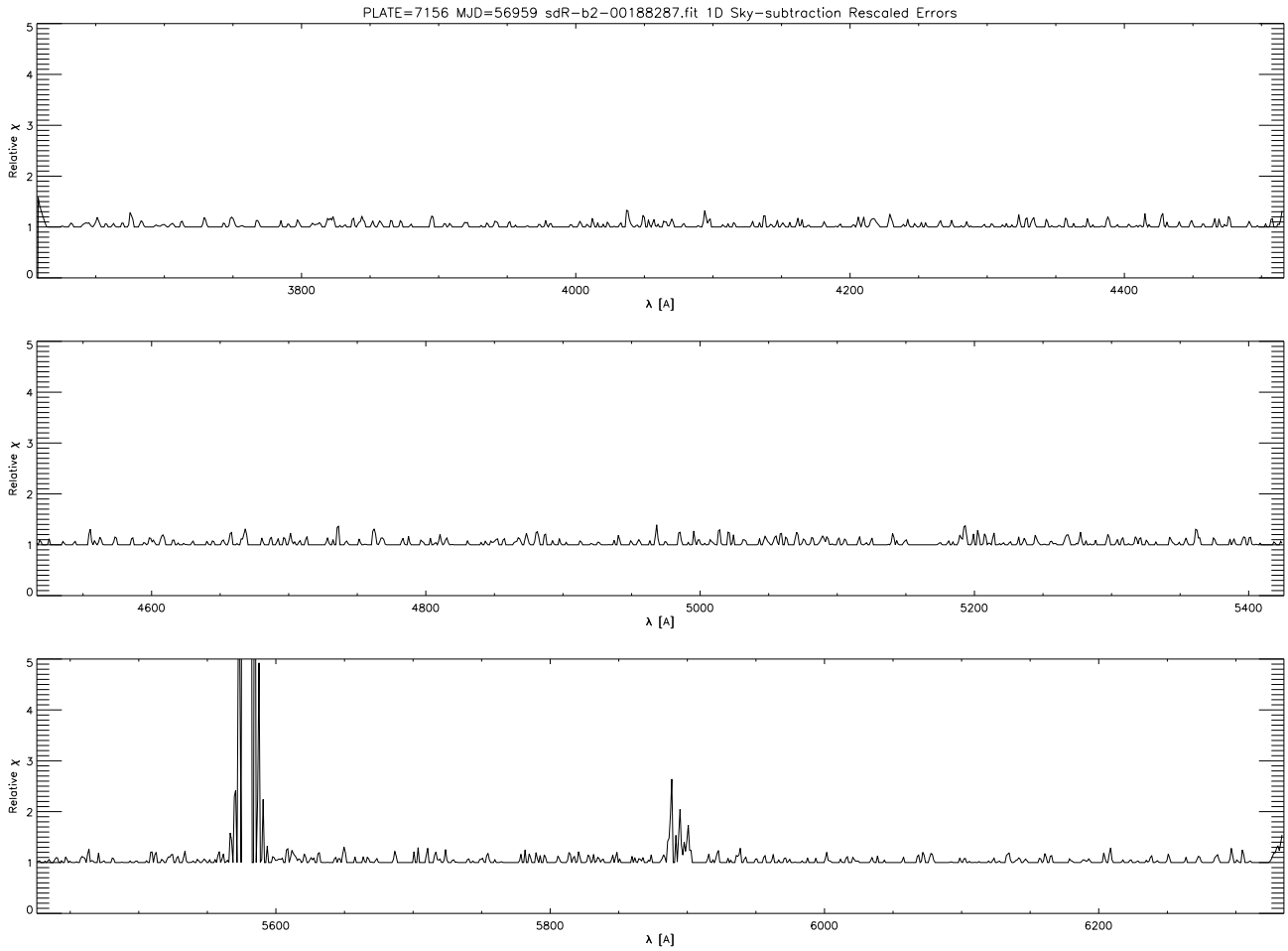

PLATE=7156 MJD=56959 Smooth superflat for sdR-b2-00188287.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

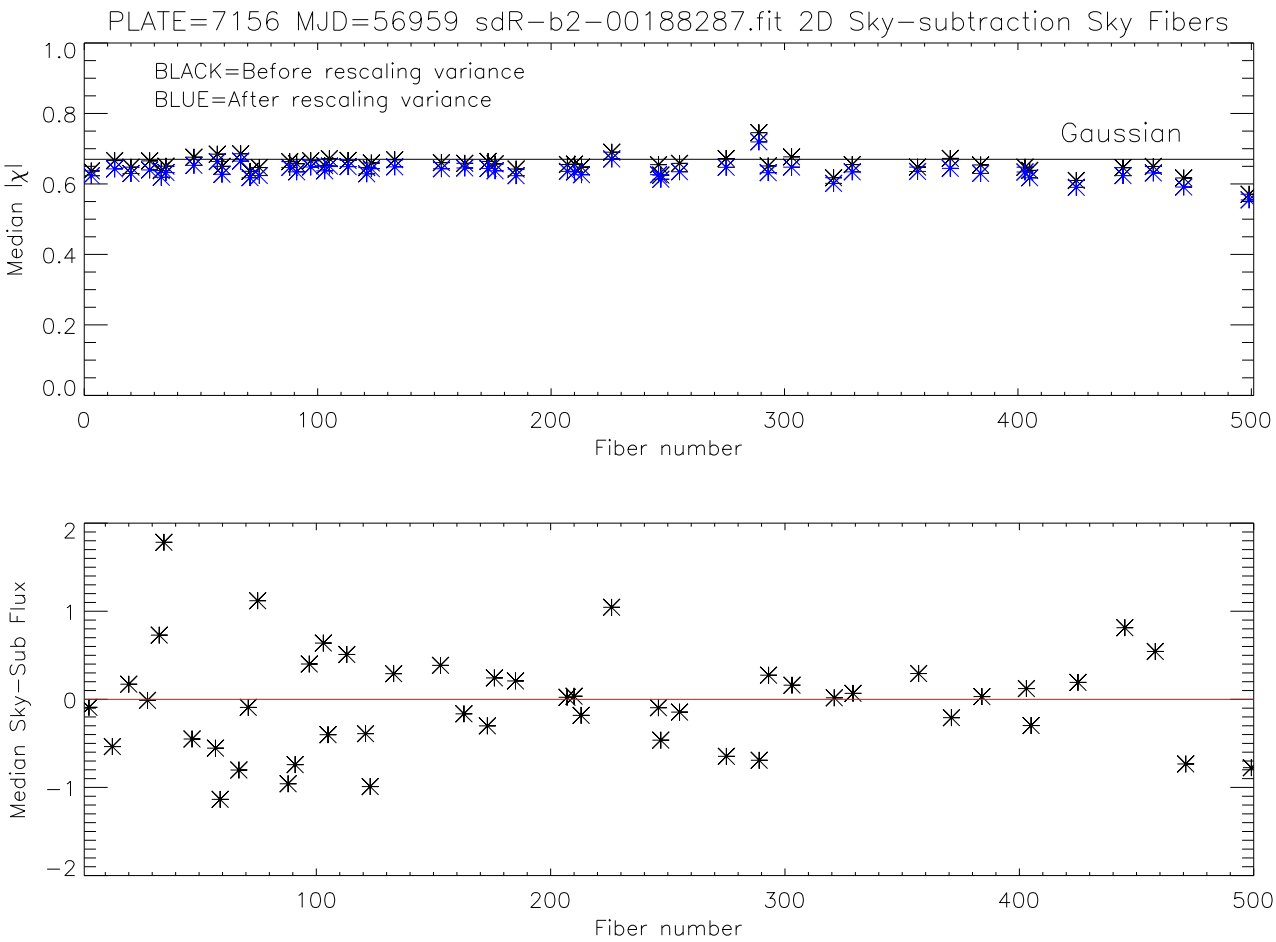

PLATE=7156 MJD=56959 sdR-b2-00188287.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussign
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

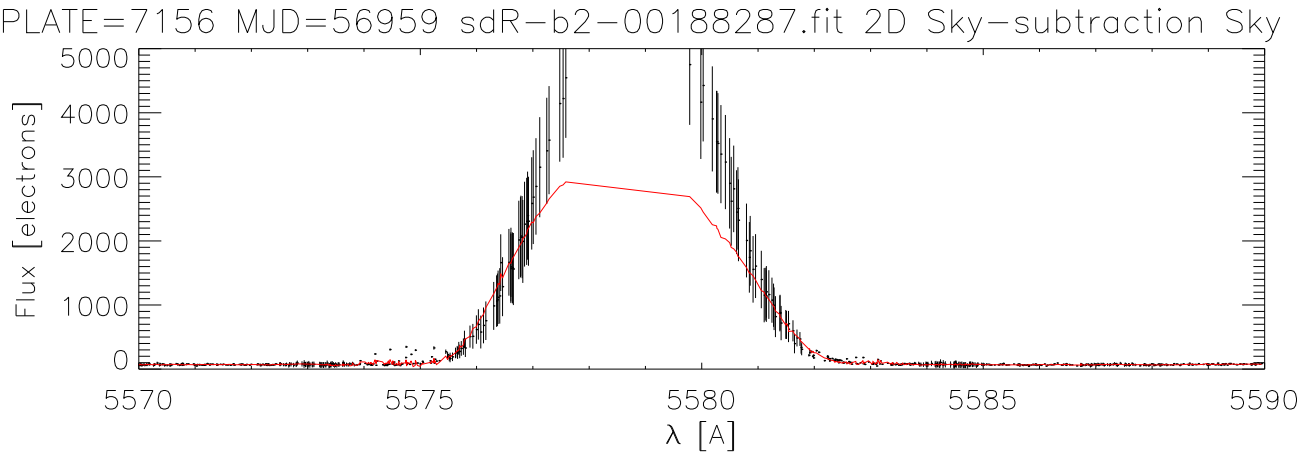

PLATE=7156 MJD=56959 sdR-b2-00188287.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

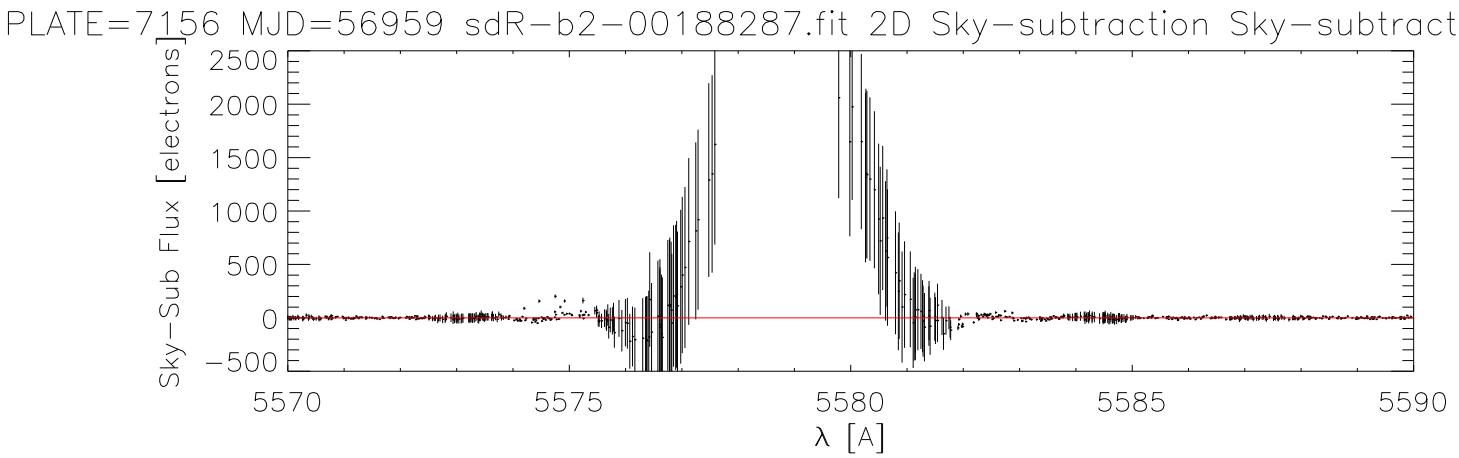

PLATE=7156 MJD=56959 sdR-b2-00188287.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 49

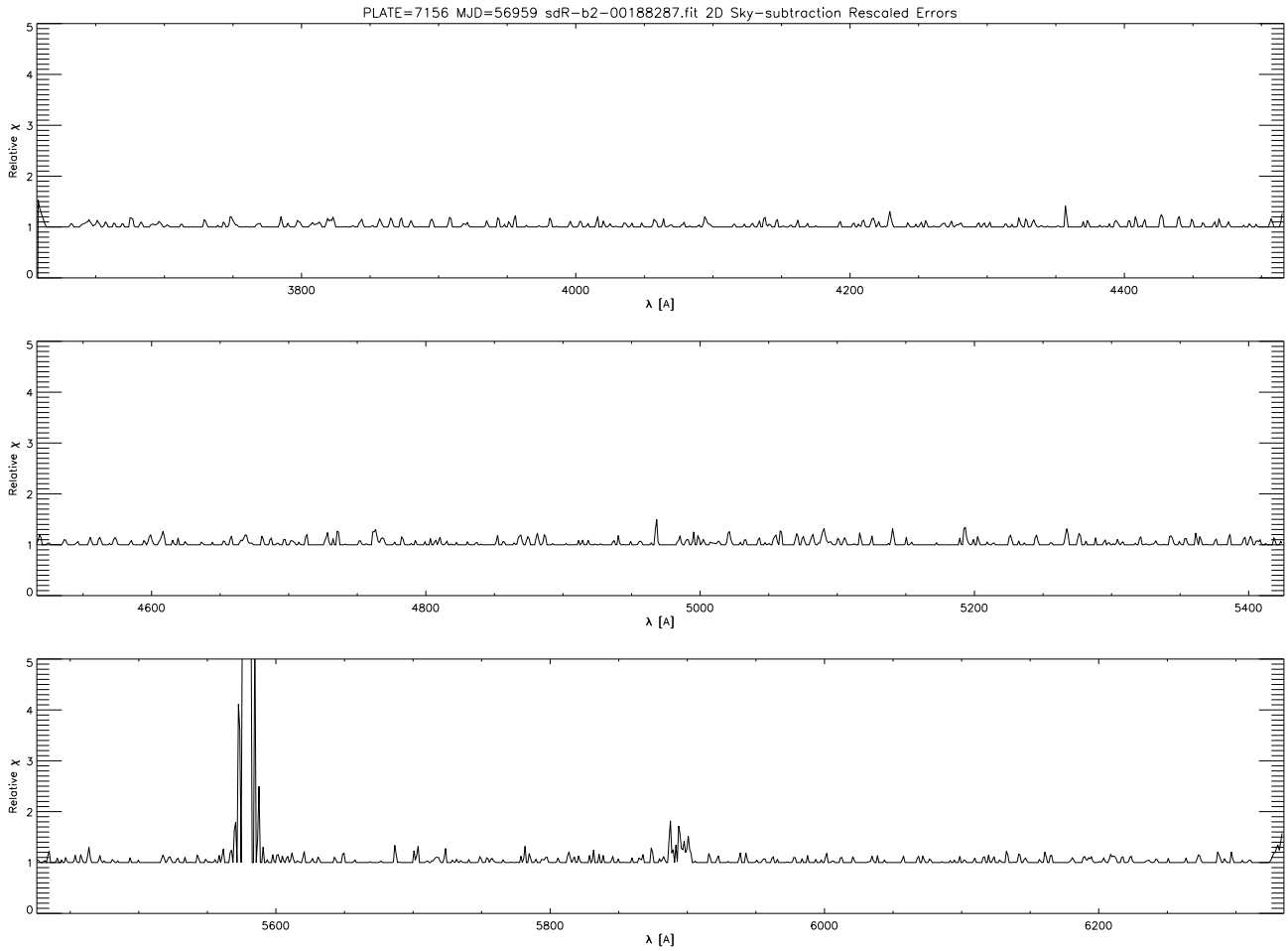


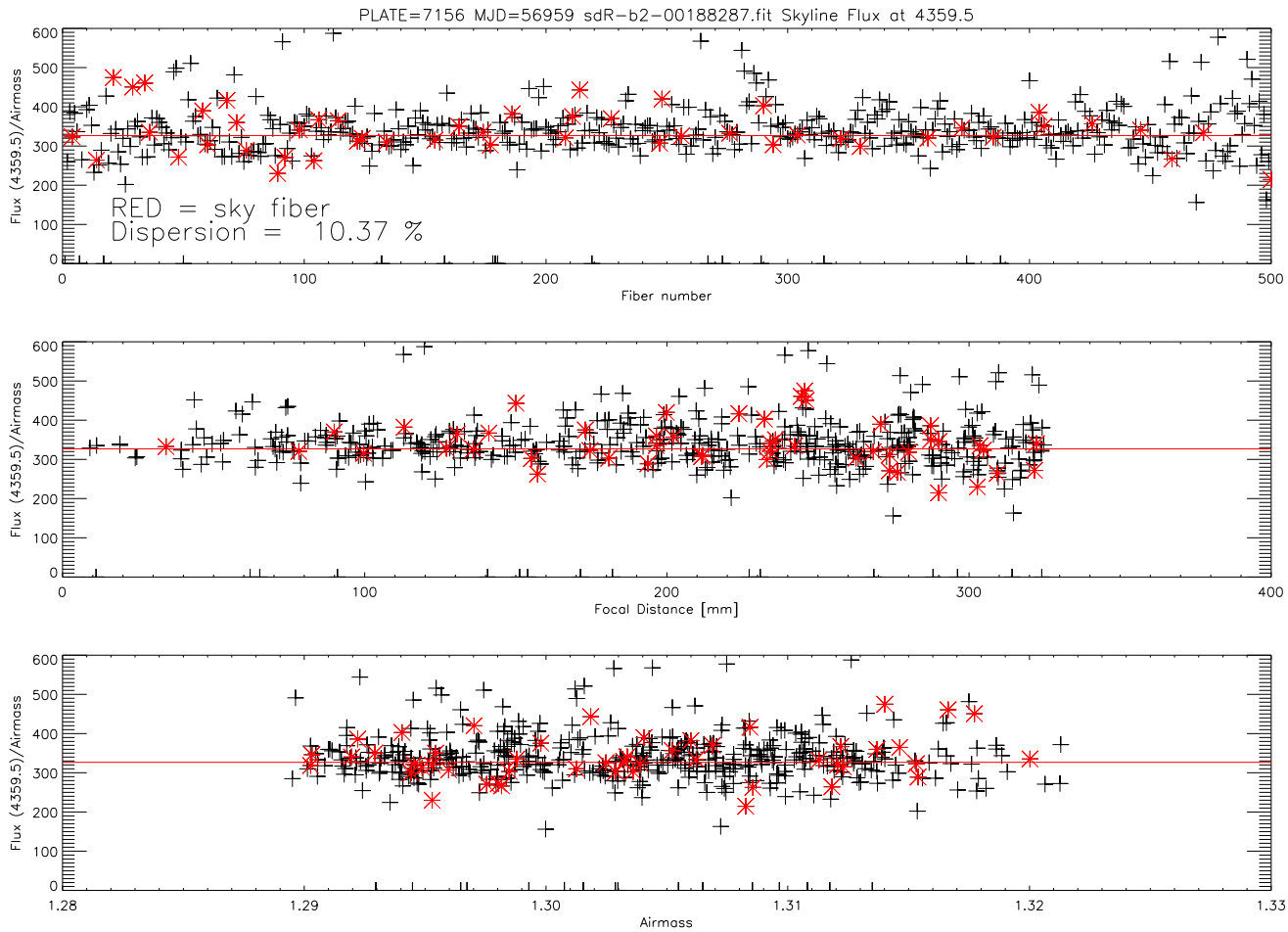

PLATE=7156 MJD=56959 sdR-b2-00188287.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

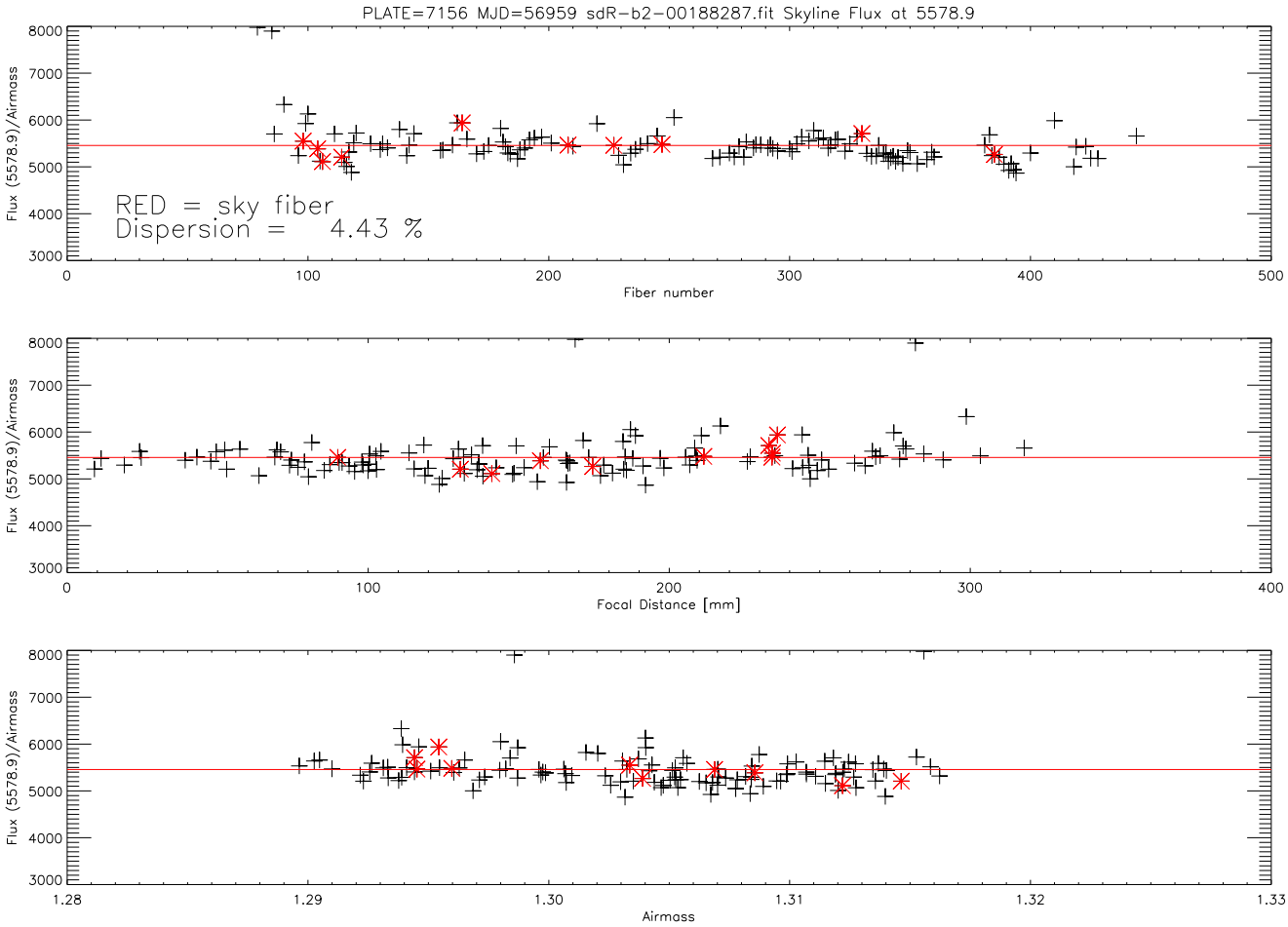

PLATE=7156 MJD=56959 sdR-b2-00188287.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

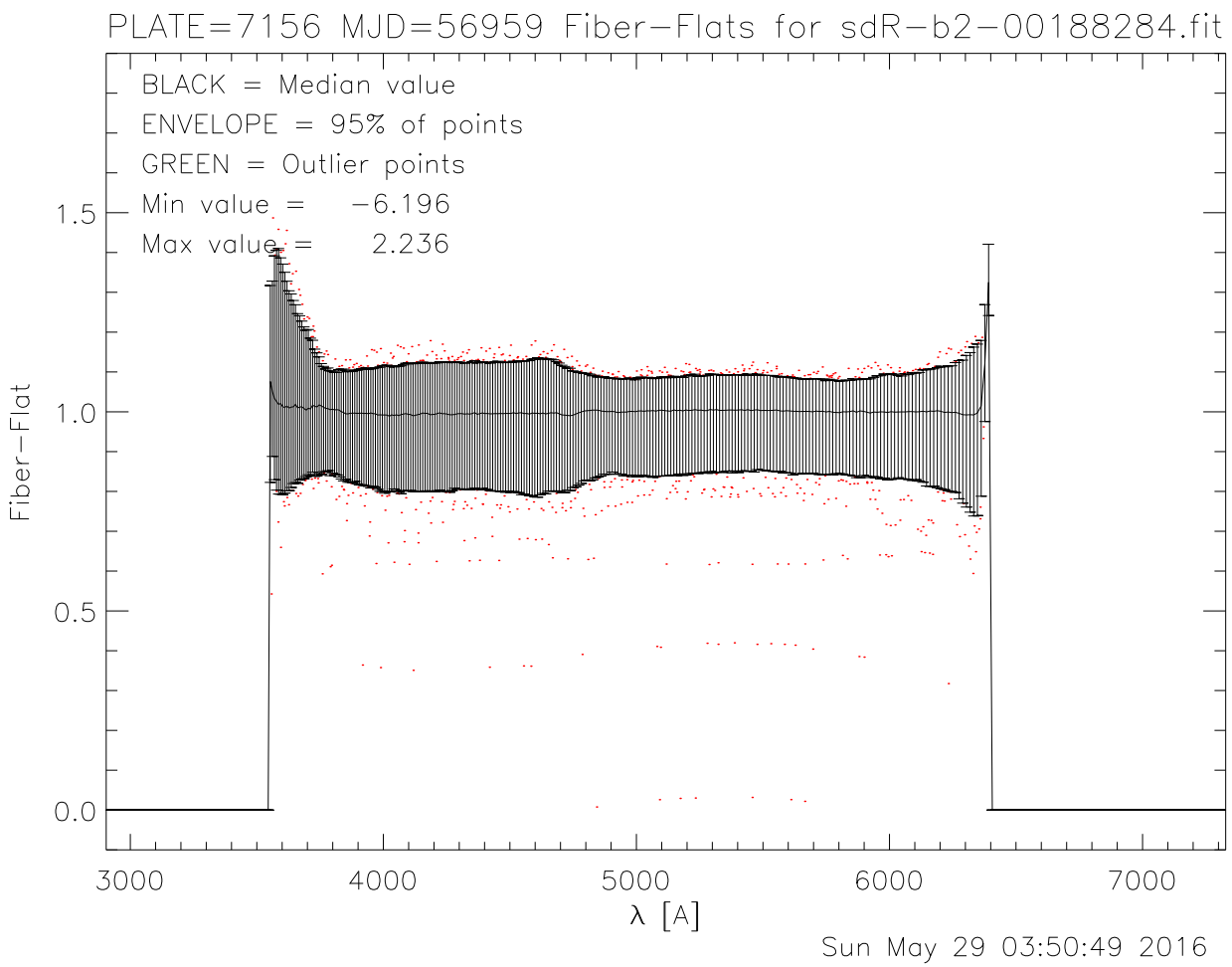

PLATE=7156 MJD=56959 sdR-b2-00188287.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

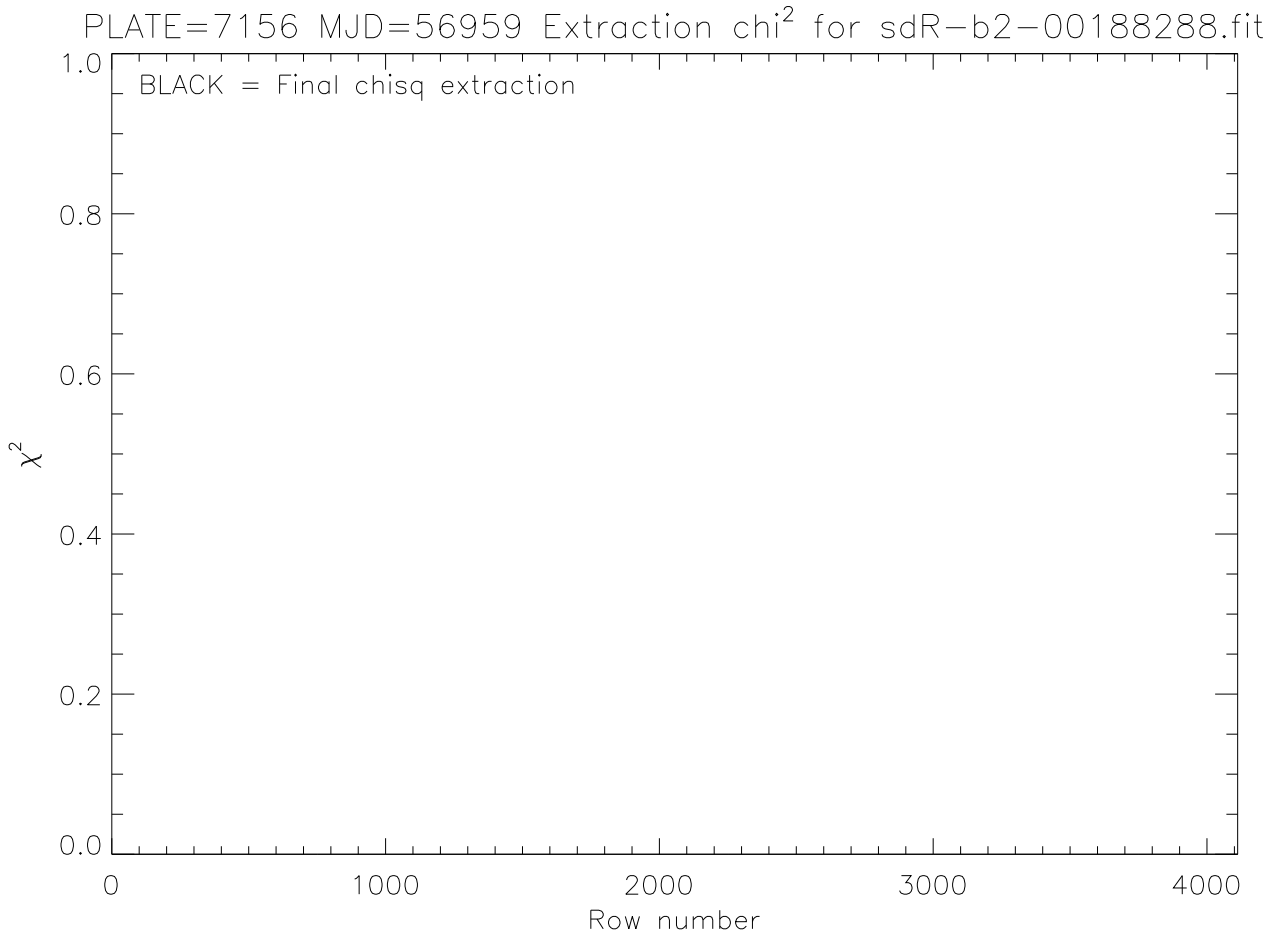
Number of sky fibers = 49

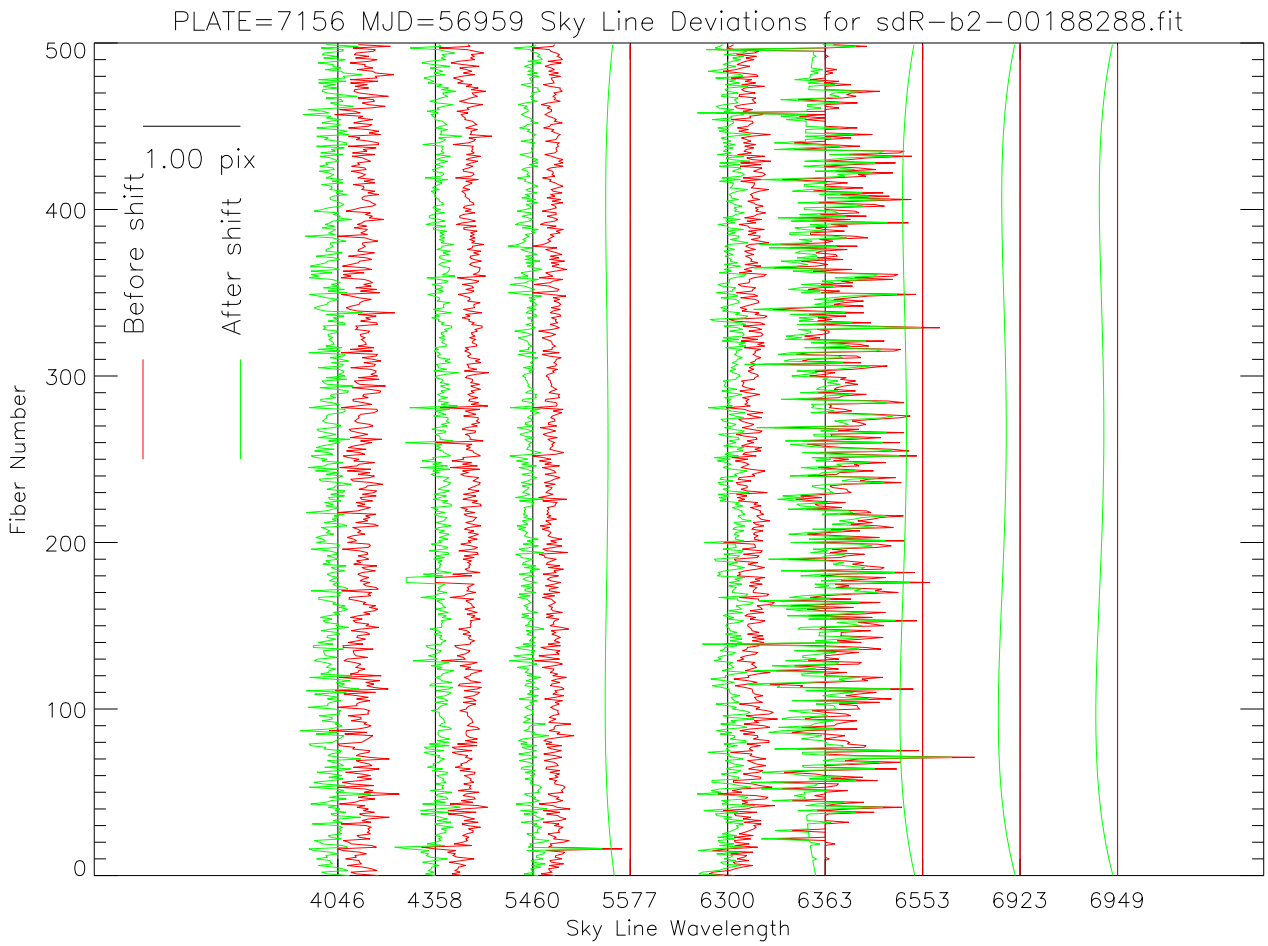


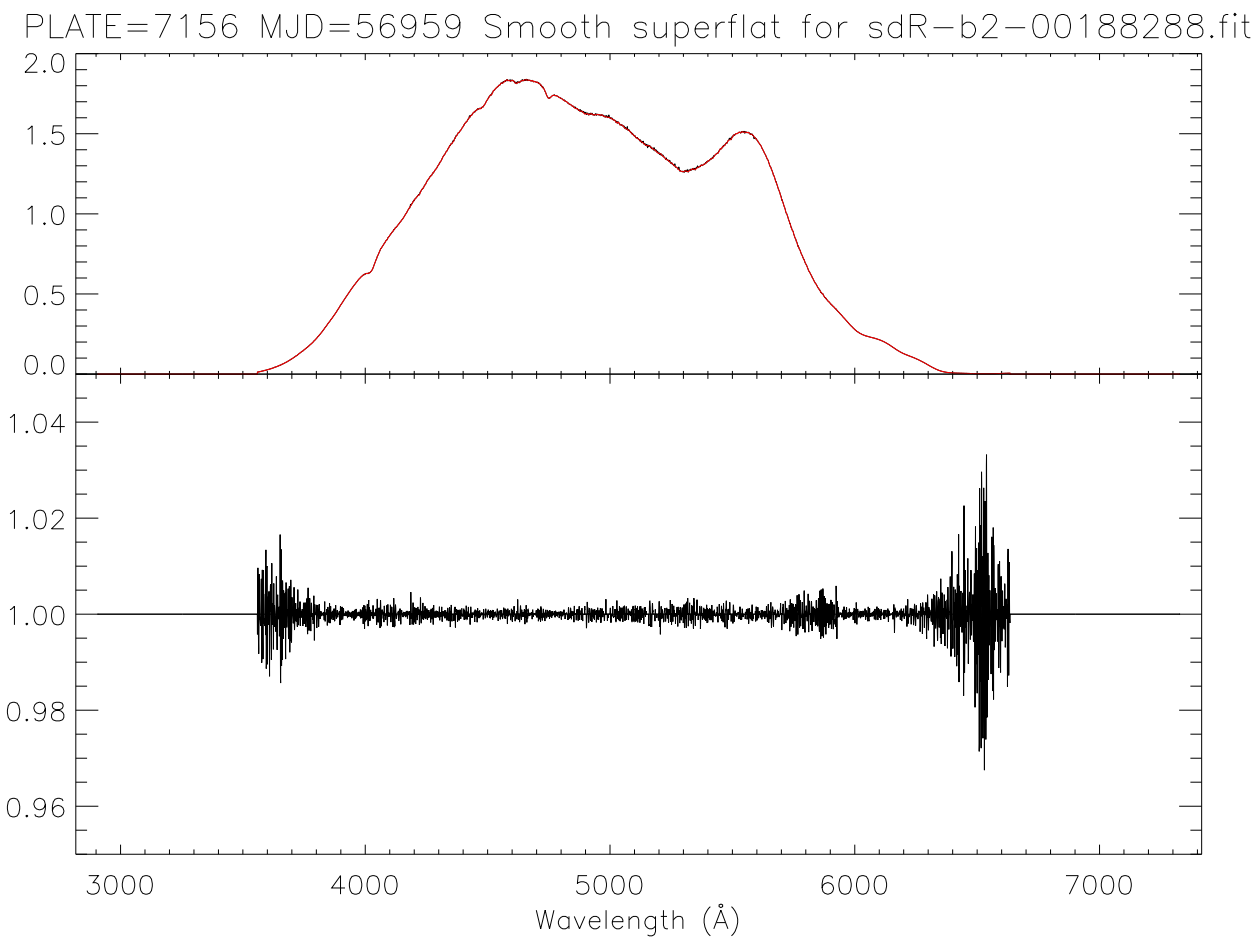

PLATE=7156 MJD=56959 sdR-b2-00188287.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.37 %
Fiber number
Focal Distance [mm]
Airmass

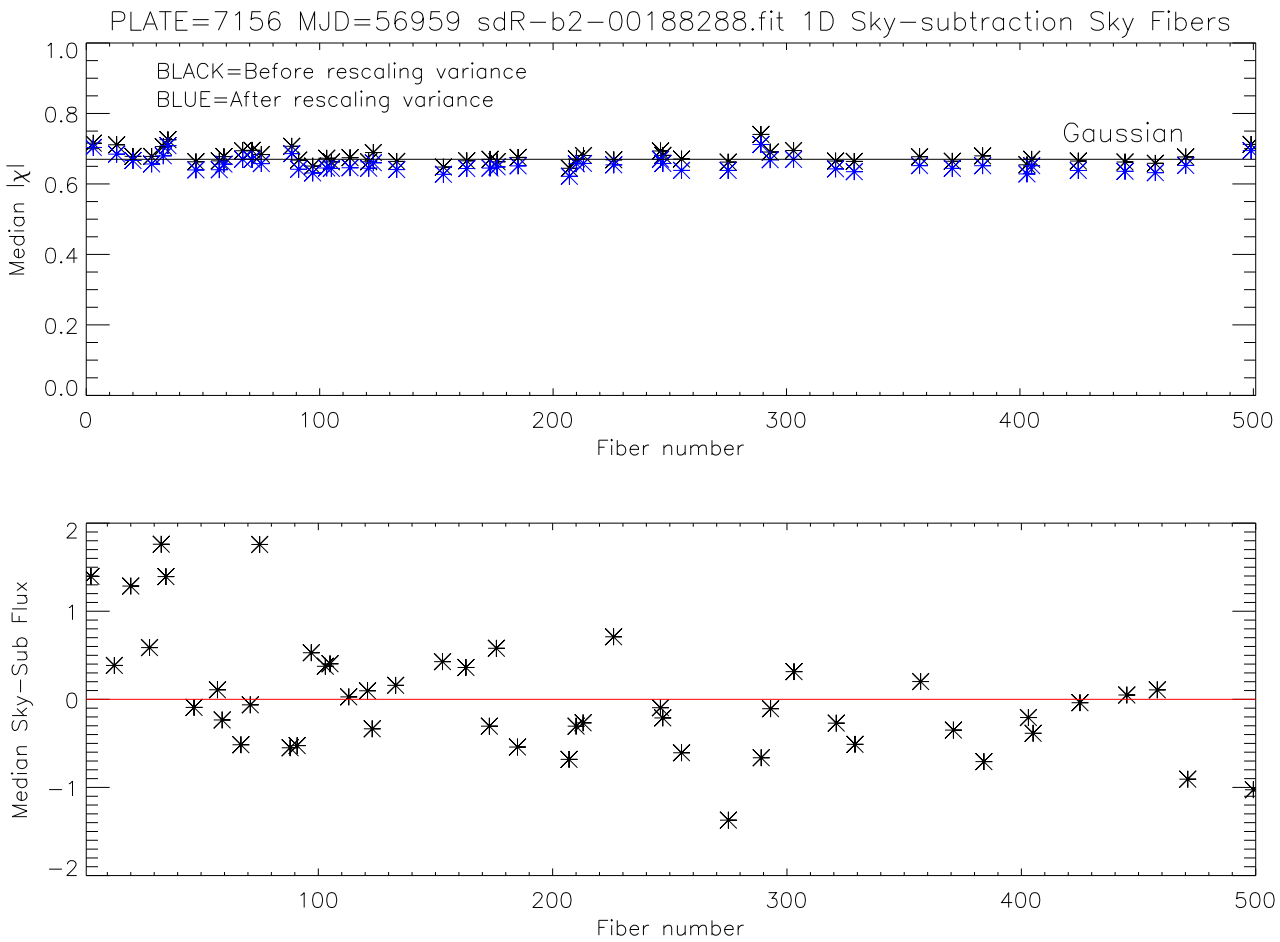

PLATE=7156 MJD=56959 sdR-b2-00188287.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 4.43 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

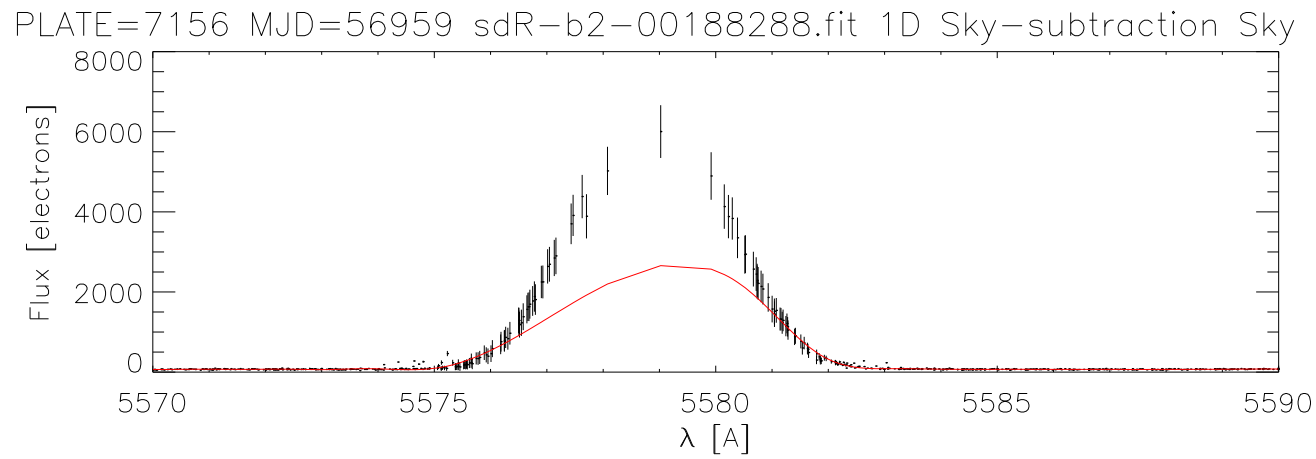

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −6.196
Max value = 2.236
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:50:49 2016

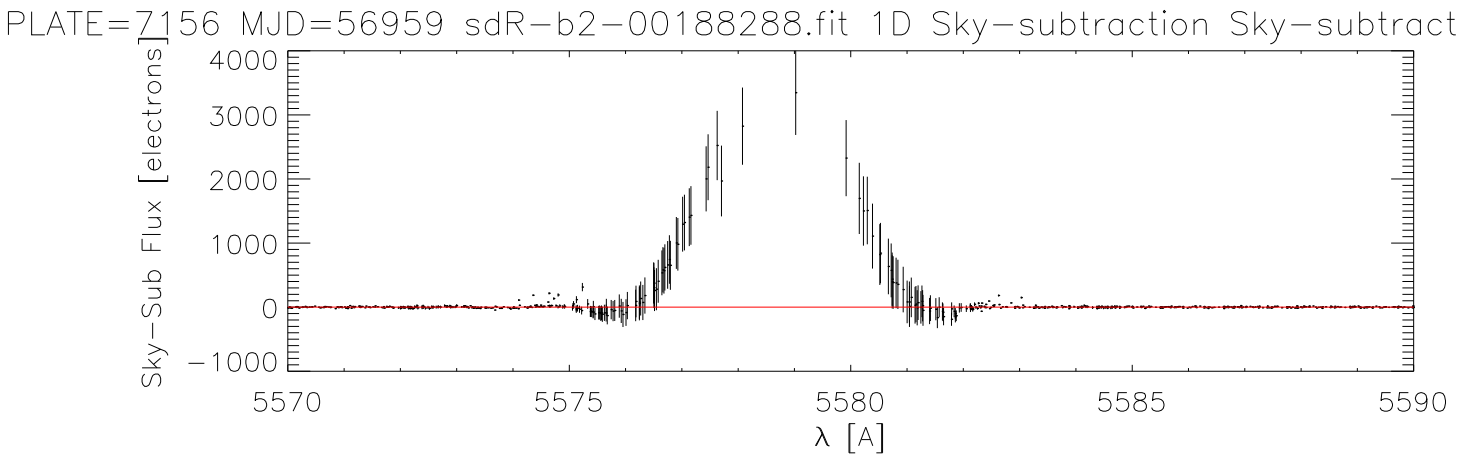

PLATE=7156 MJD=56959 Extraction chi^2 for sdR-b2-00188288.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b2-00188288.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

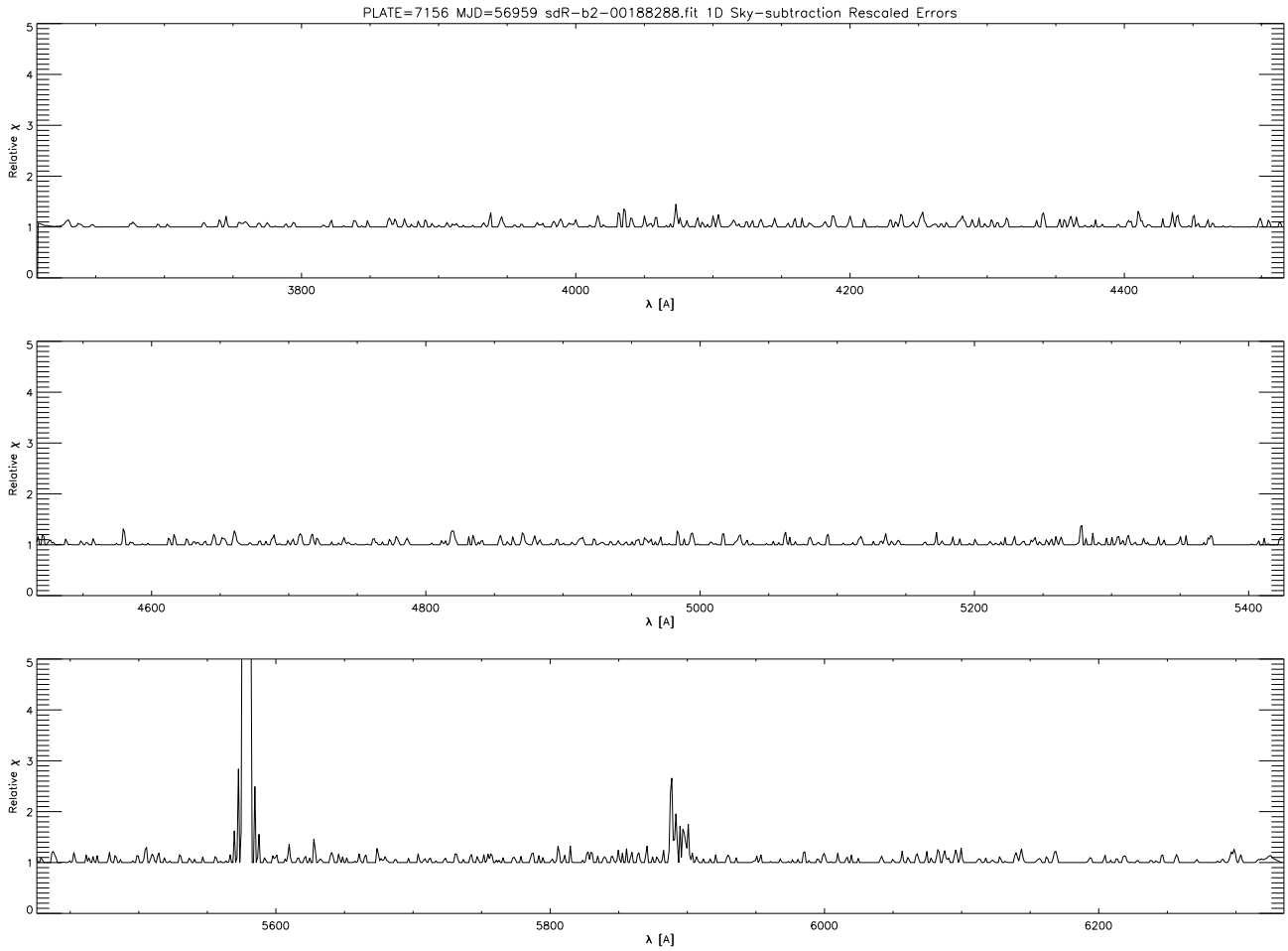

PLATE=7156 MJD=56959 Smooth superflat for sdR-b2-00188288.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

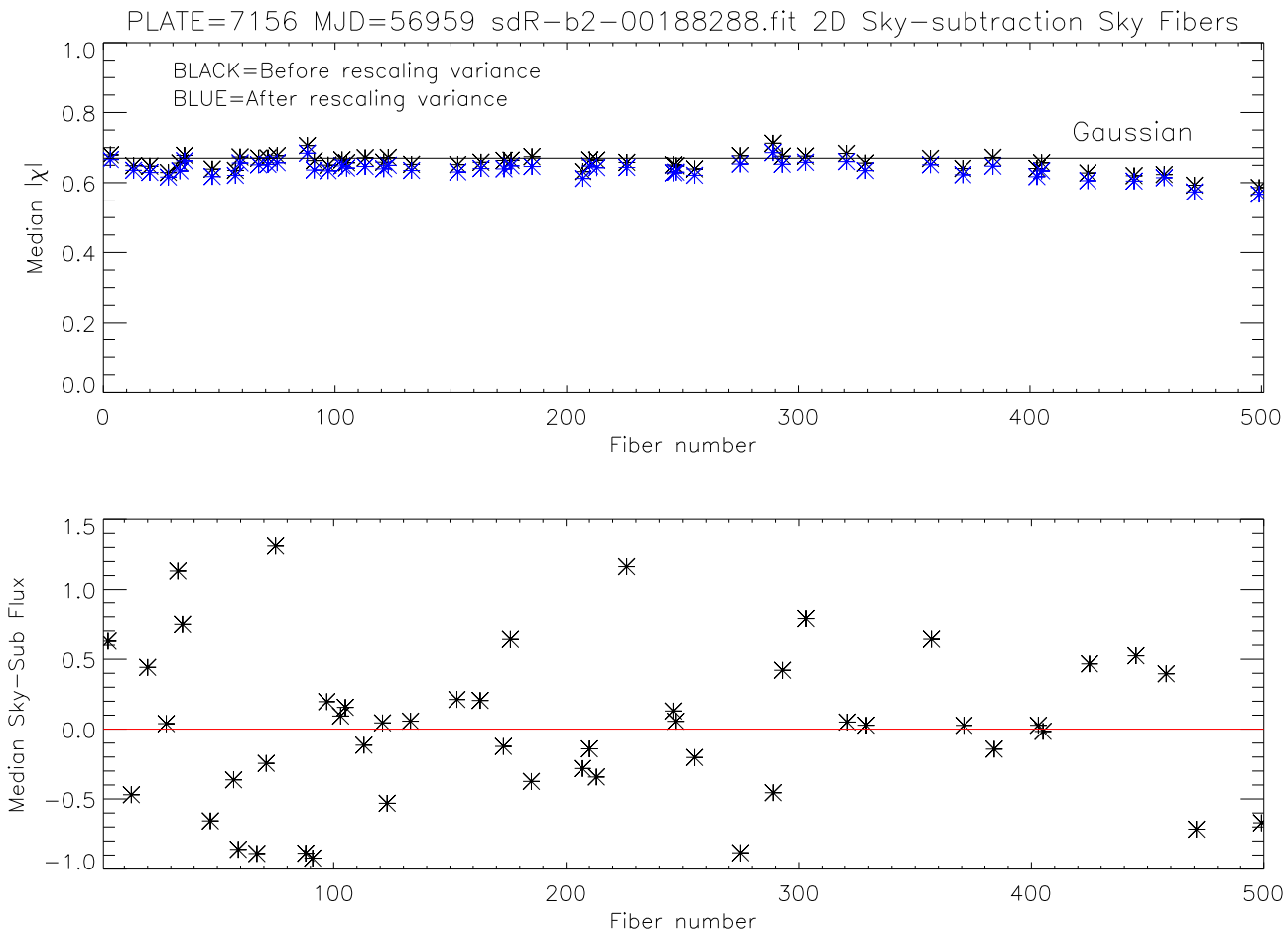

PLATE=7156 MJD=56959 sdR-b2-00188288.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

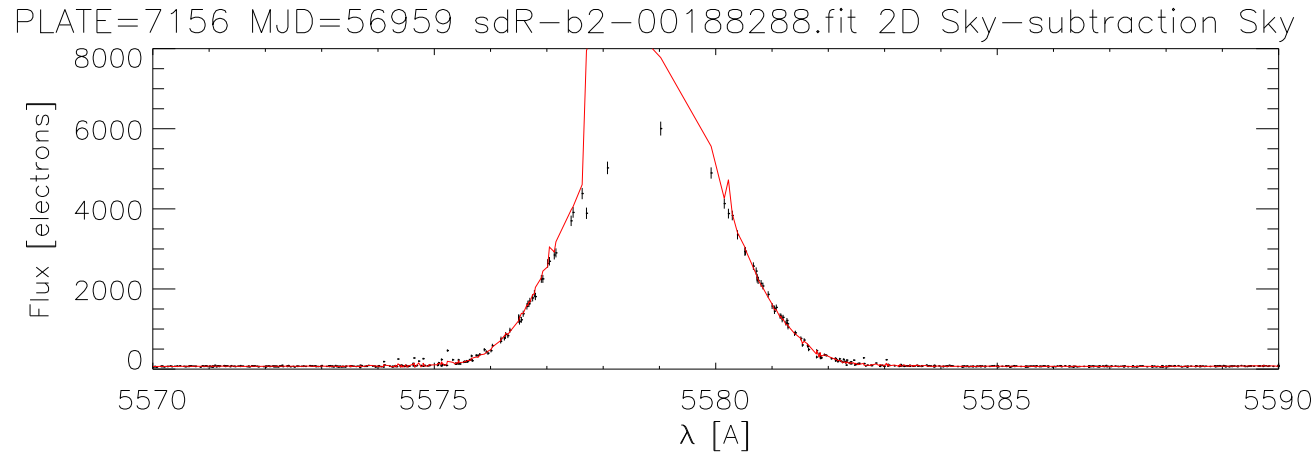

PLATE=7156 MJD=56959 sdR-b2-00188288.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

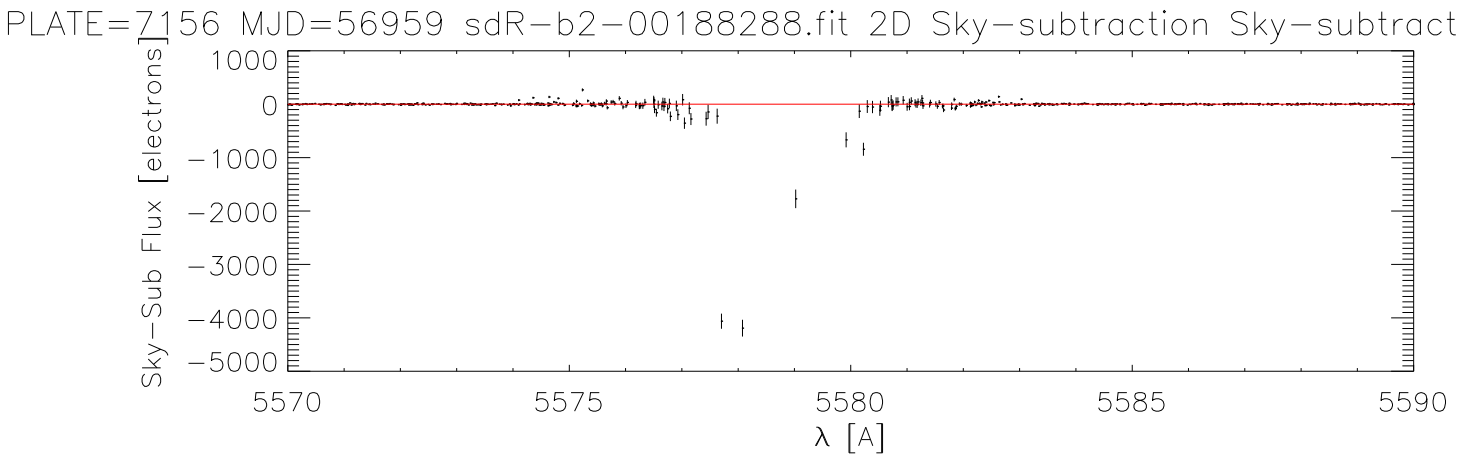

PLATE=7156 MJD=56959 sdR-b2-00188288.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
4000
3000
2000
1000
0
-1000
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 49

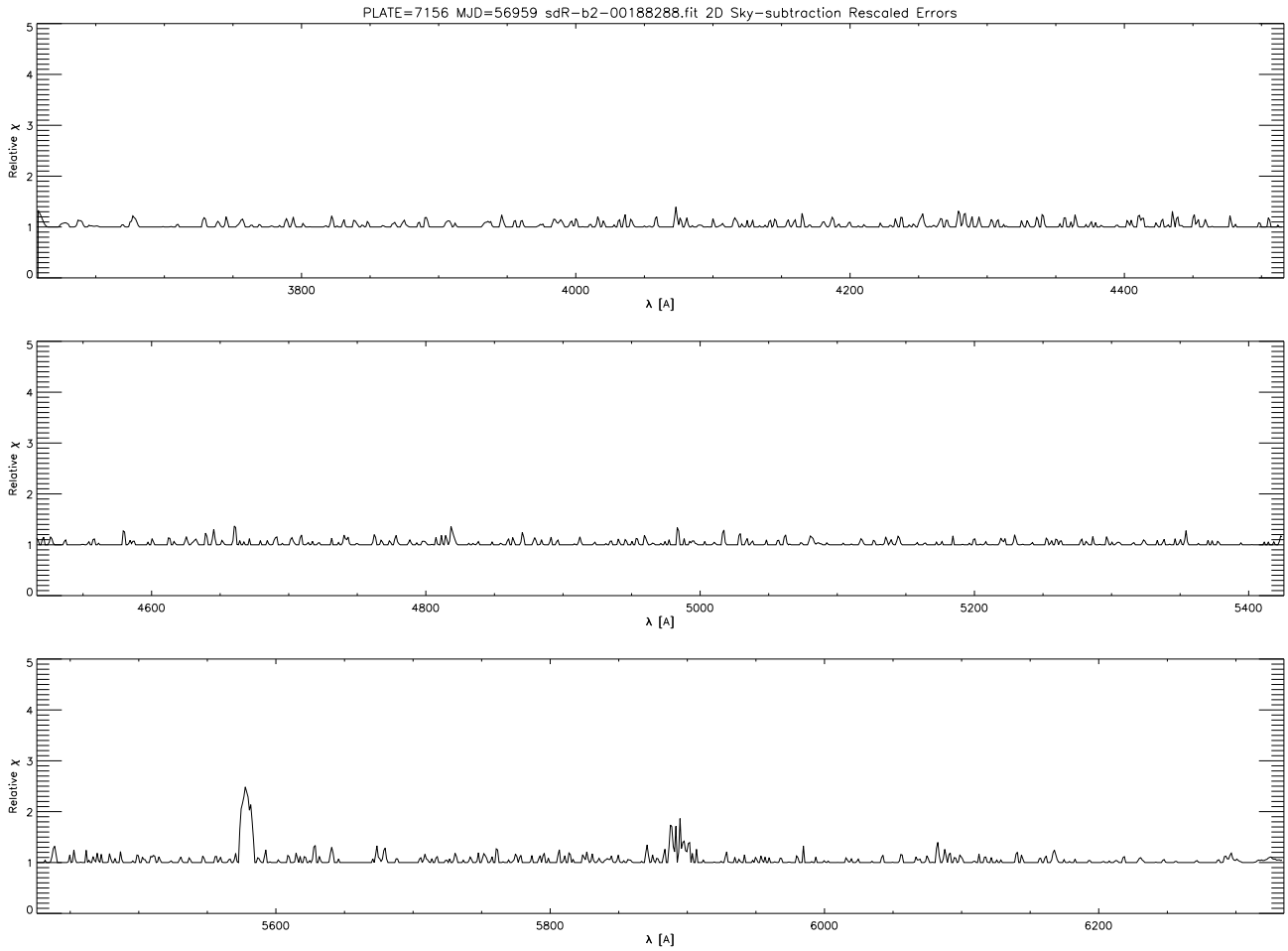


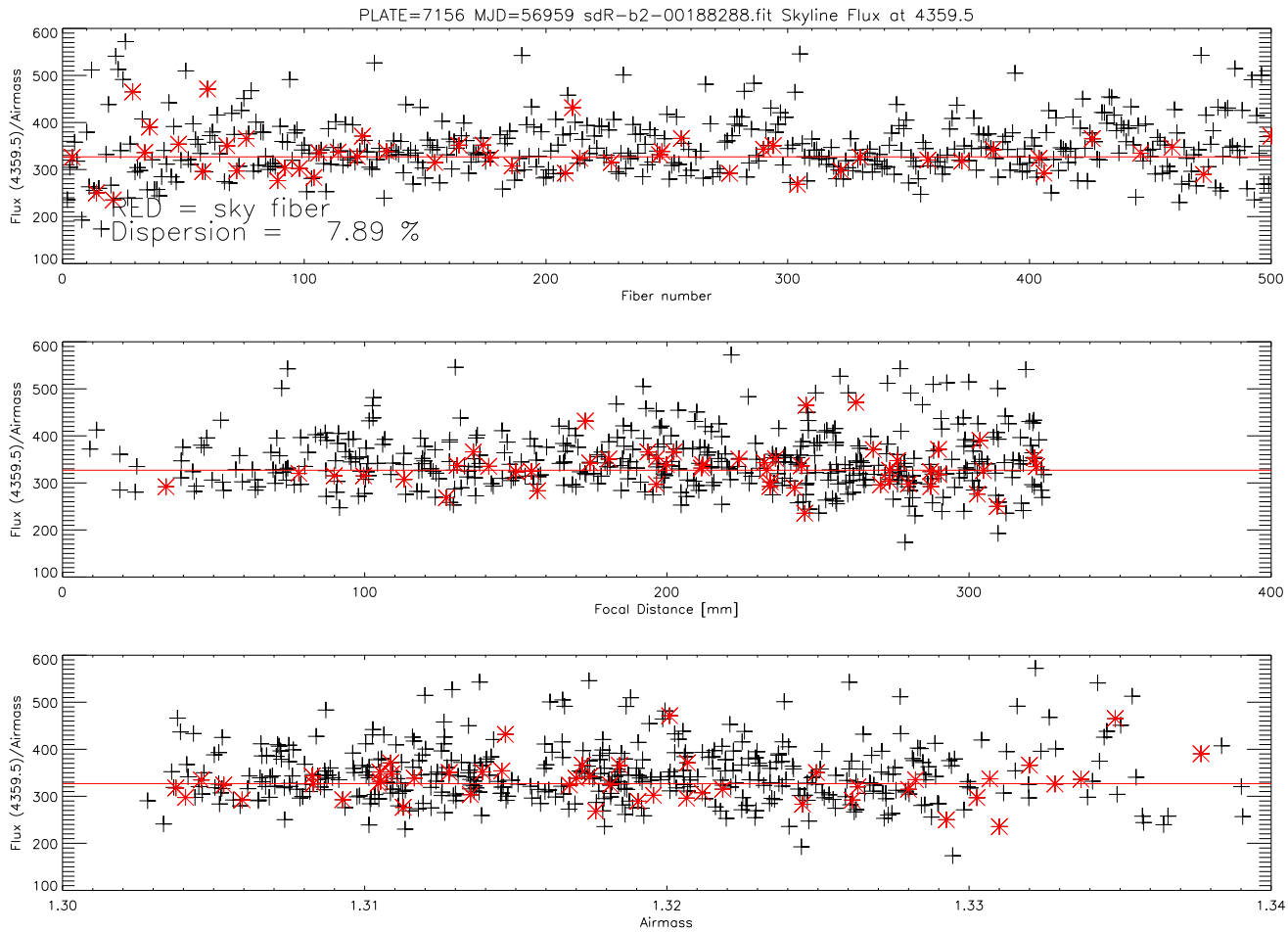

PLATE=7156 MJD=56959 sdR-b2-00188288.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

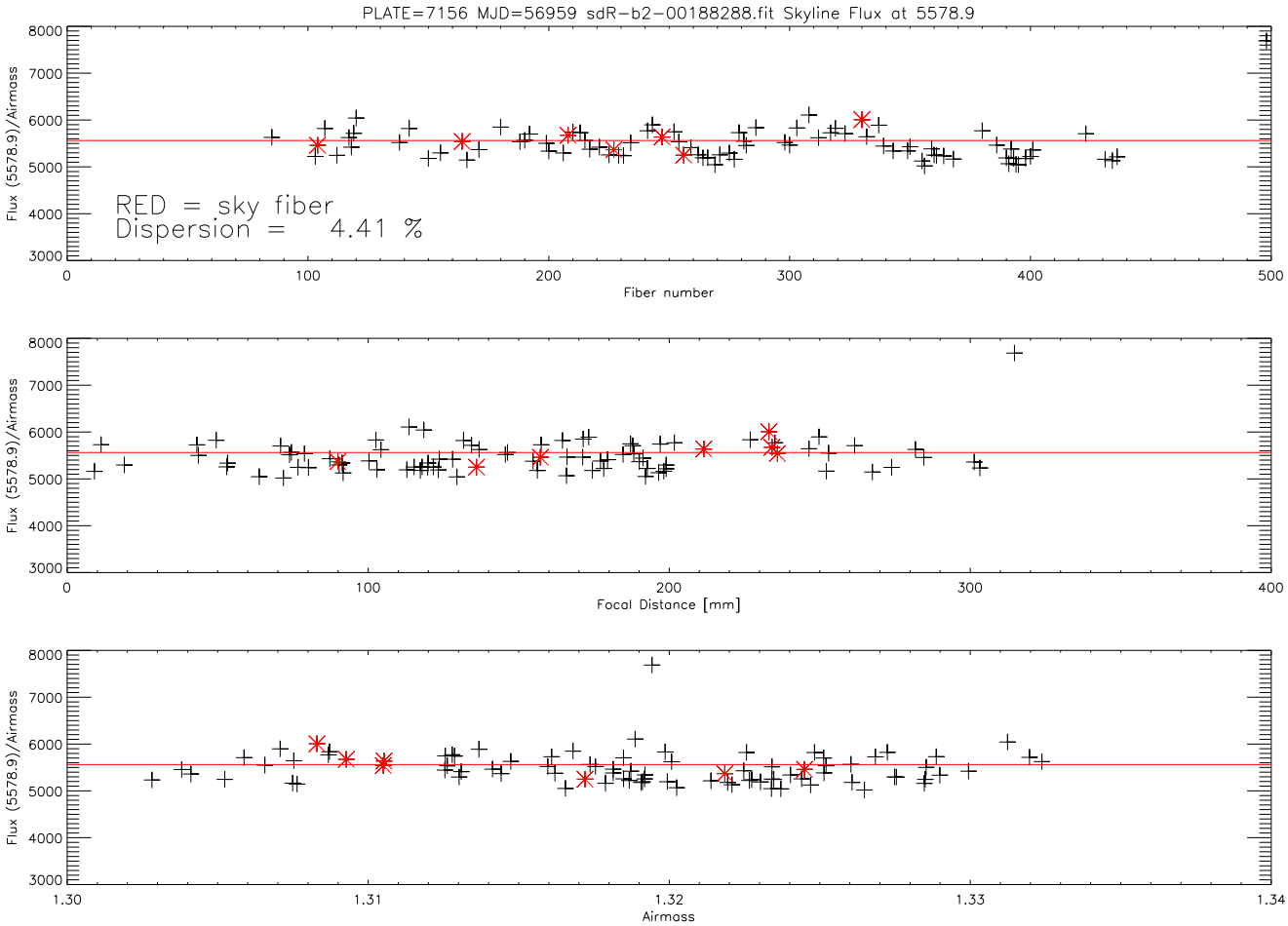

PLATE=7156 MJD=56959 sdR-b2-00188288.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

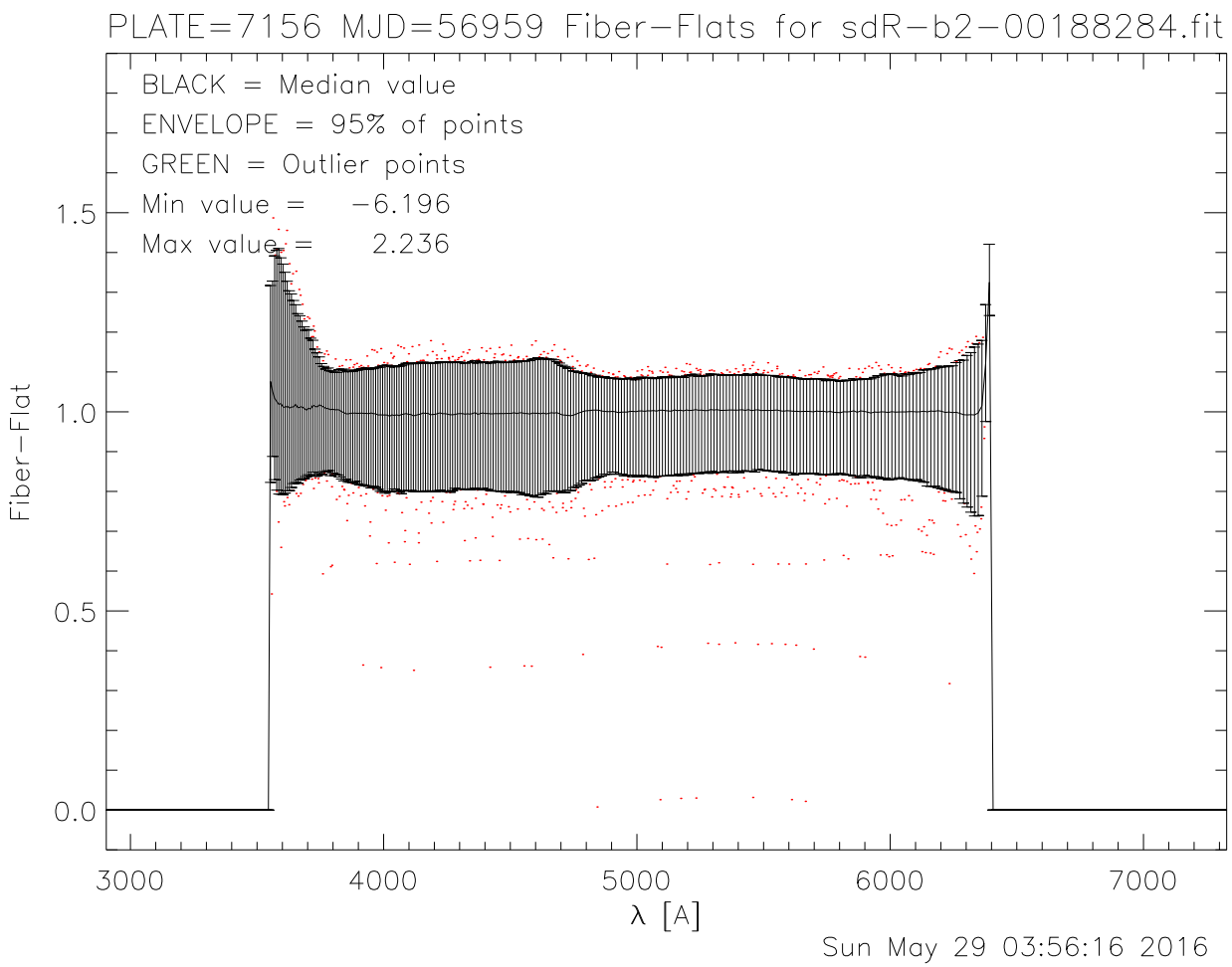

PLATE=7156 MJD=56959 sdR-b2-00188288.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
0
-1000
-2000
-3000
-4000
-5000
5570
5575
5580
5585
5590
λ [A]

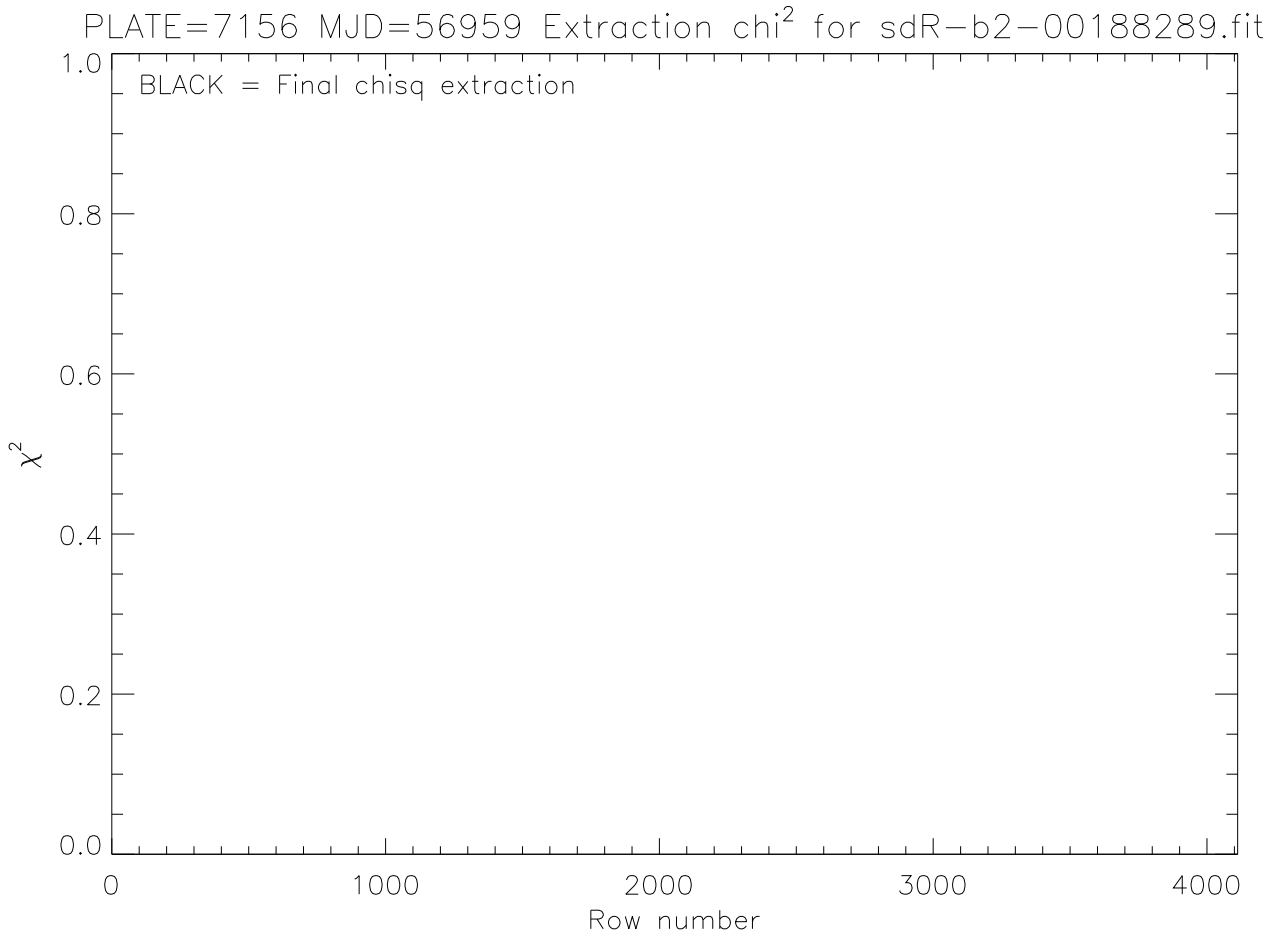
Number of sky fibers = 49

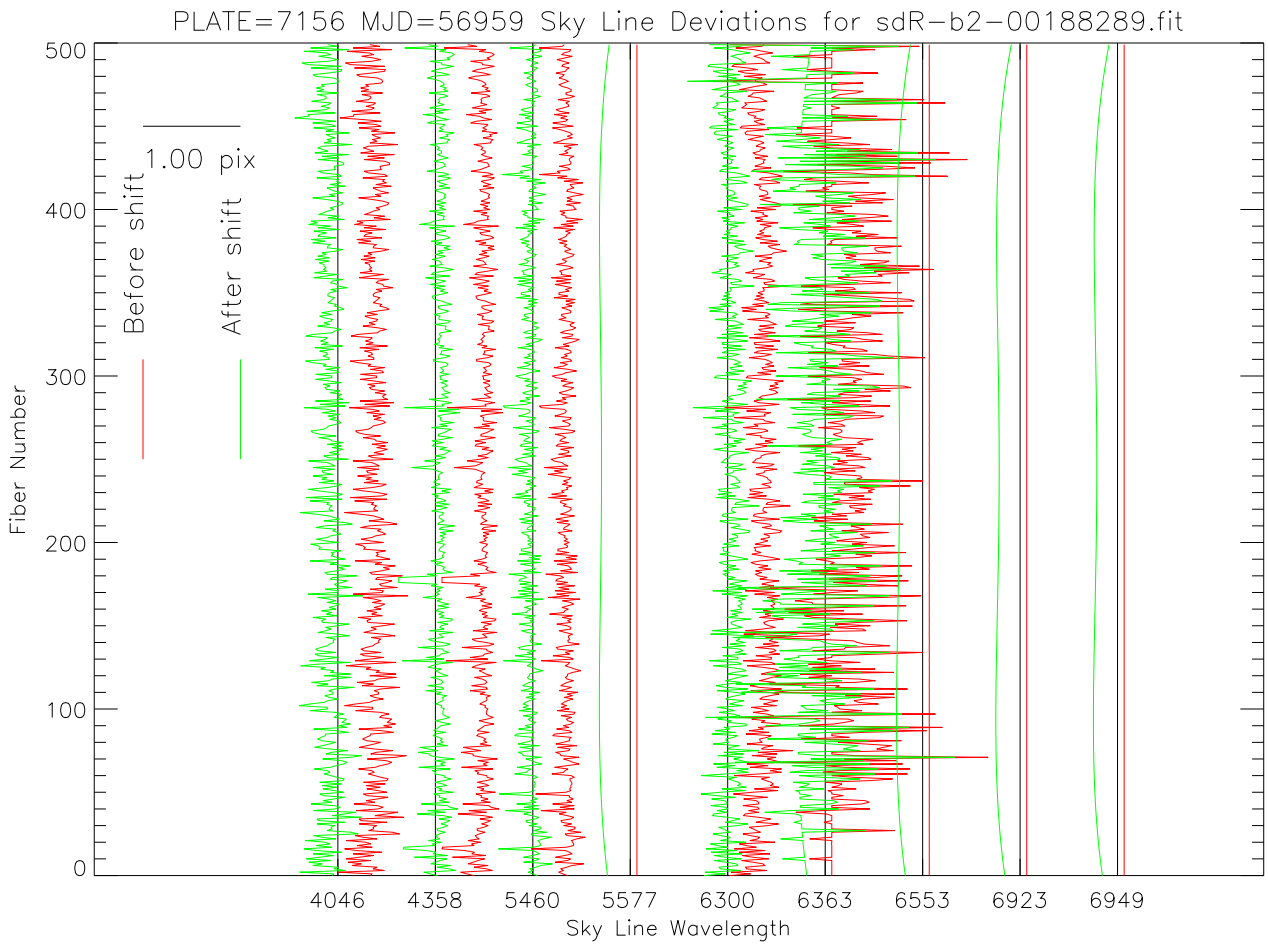


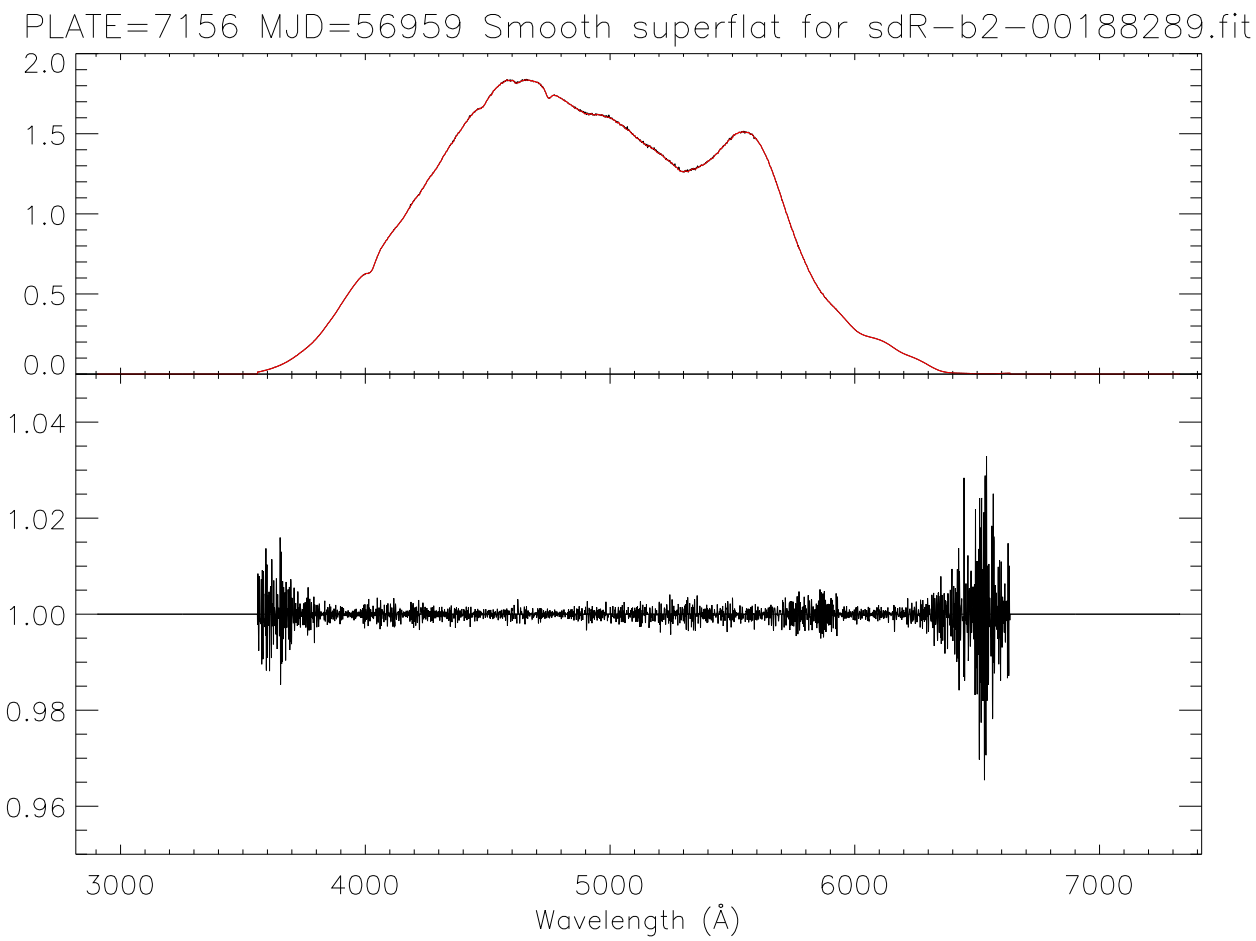

PLATE=7156 MJD=56959 sdR-b2-00188288.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
+Dispersion = 7.89 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

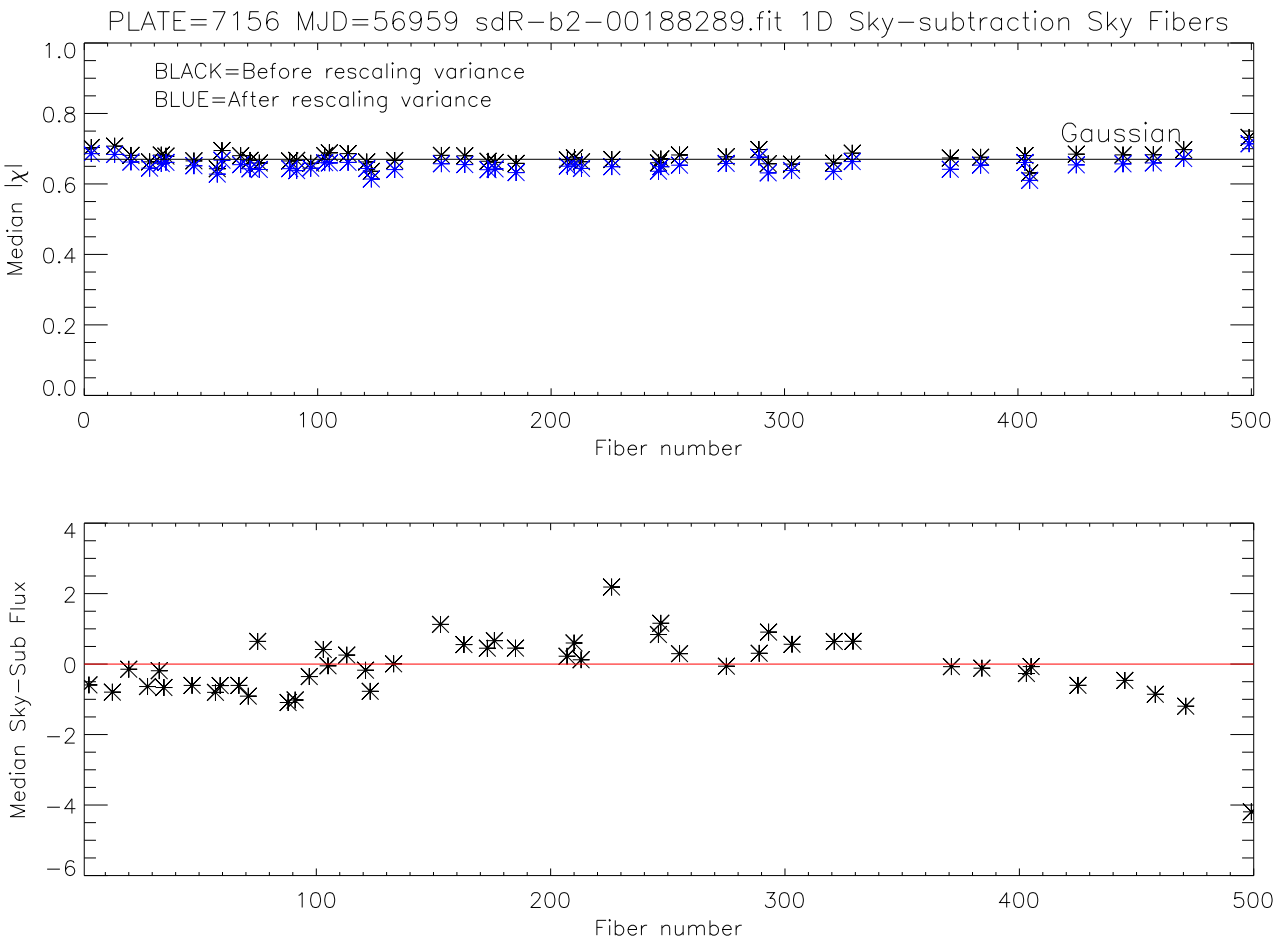

PLATE=7156 MJD=56959 sdR-b2-00188288.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 4.41 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

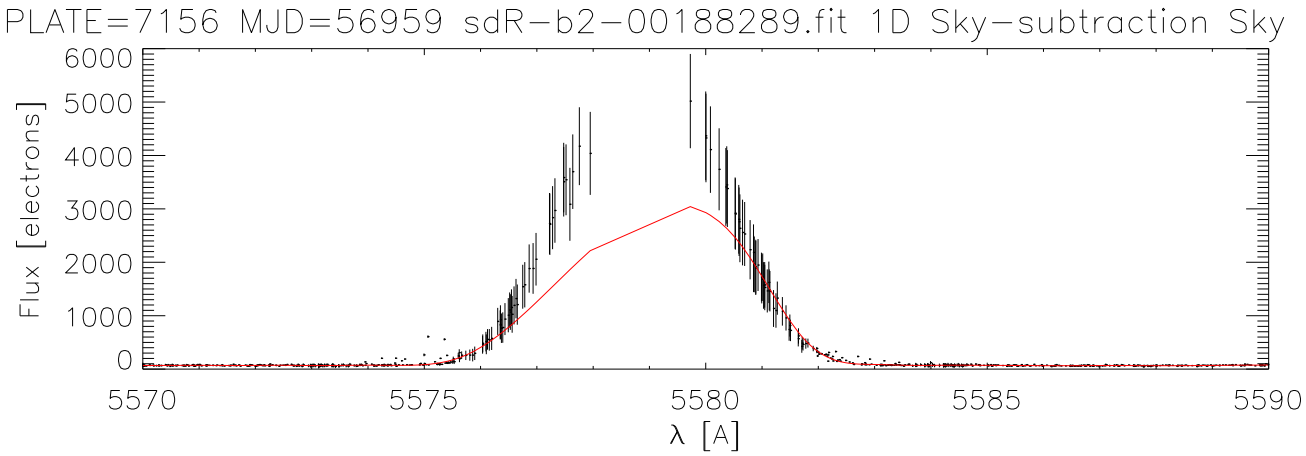

PLATE=7156 MJD=56959 Fiber−Flats for sdR−b2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −6.196
Max value = 2.236
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sun May 29 03:56:16 2016

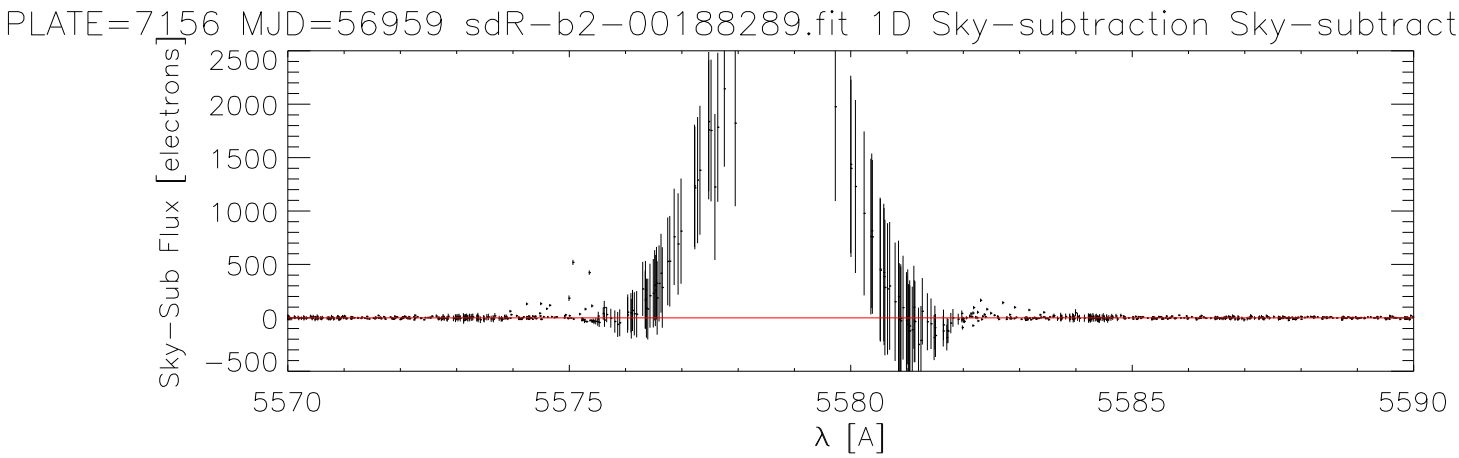

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−b2−00188289.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-b2-00188289.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

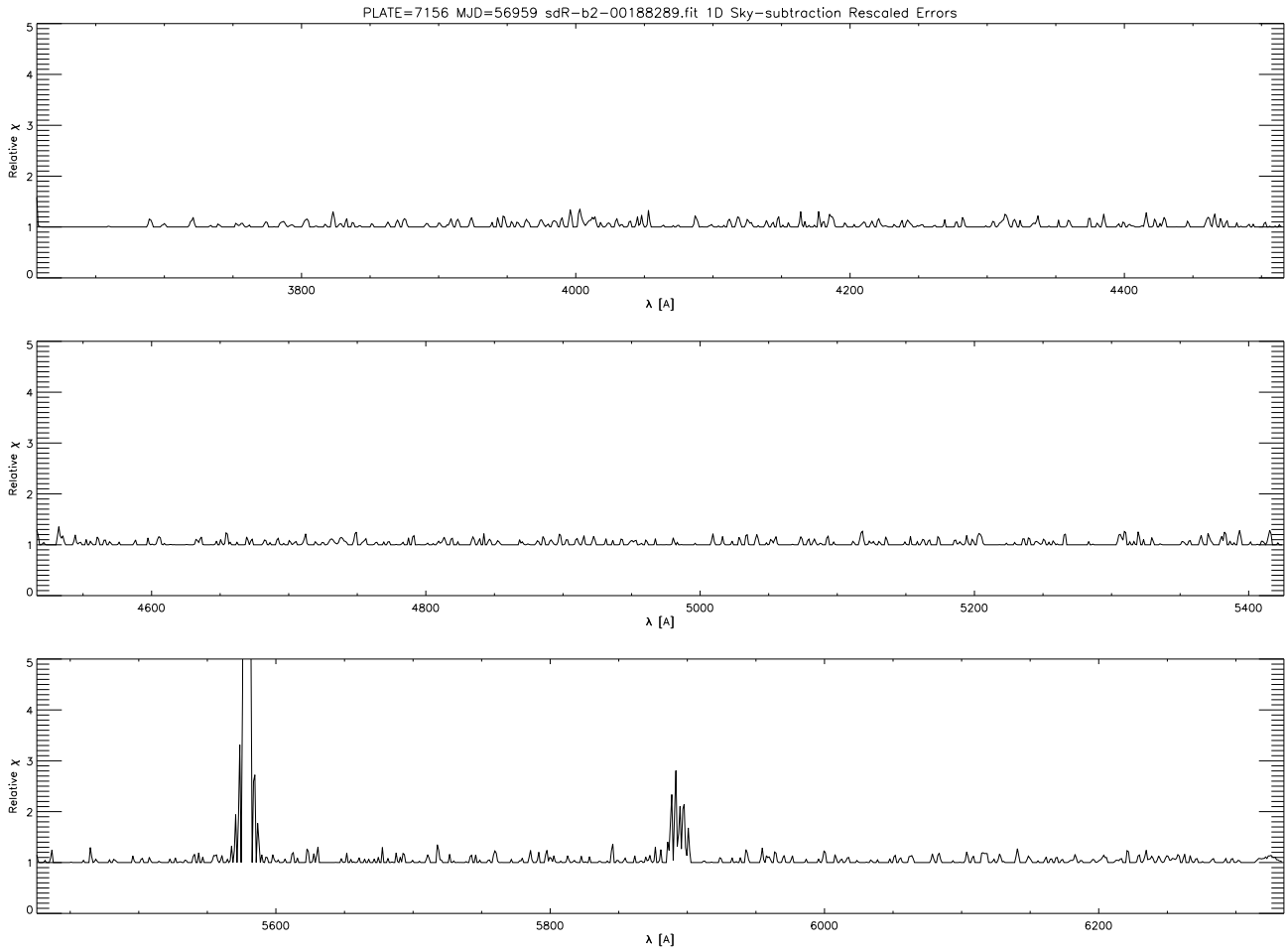

PLATE=7156 MJD=56959 Smooth superflat for sdR-b2-00188289.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

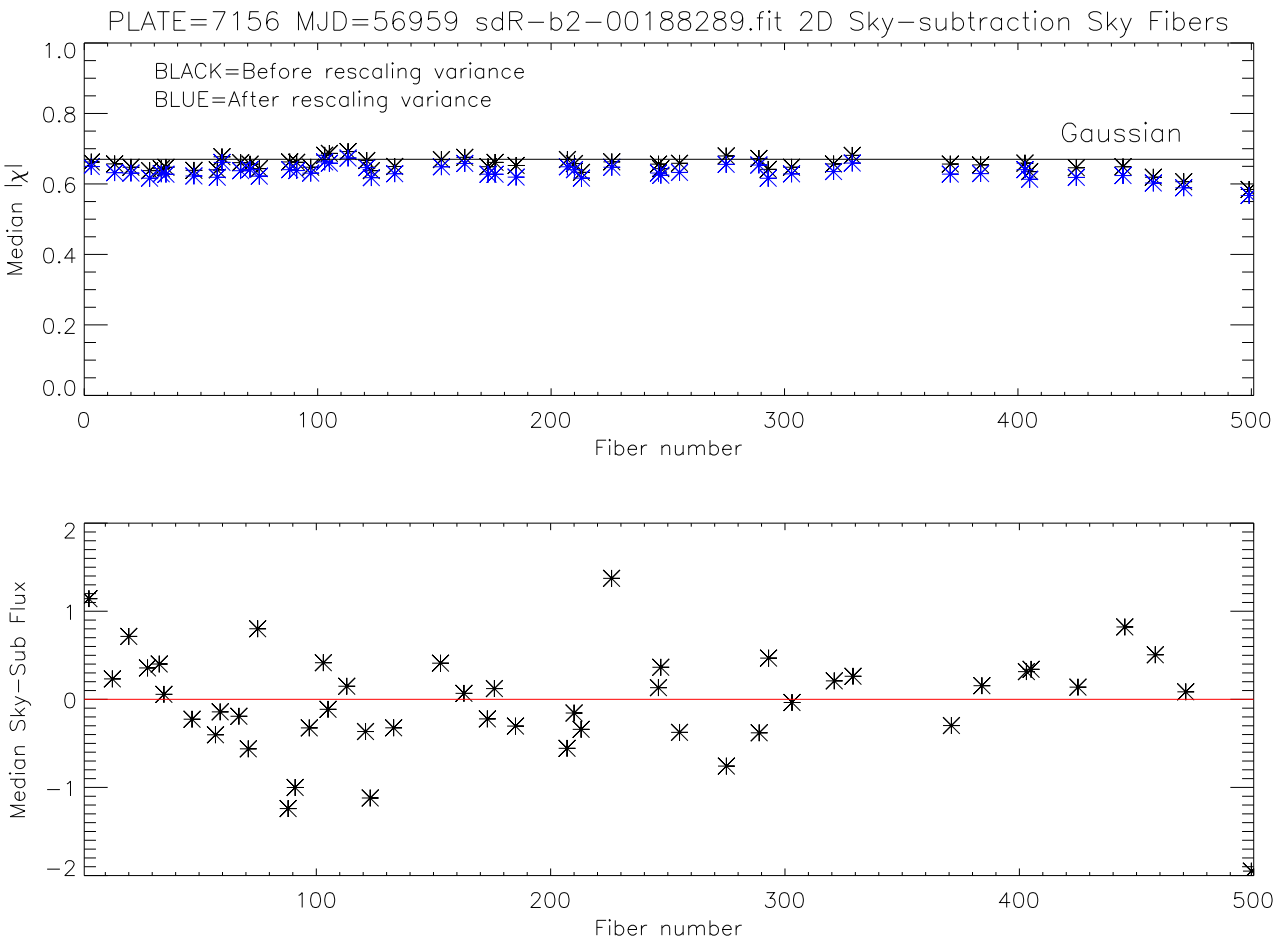

PLATE=7156 MJD=56959 sdR-b2-00188289.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

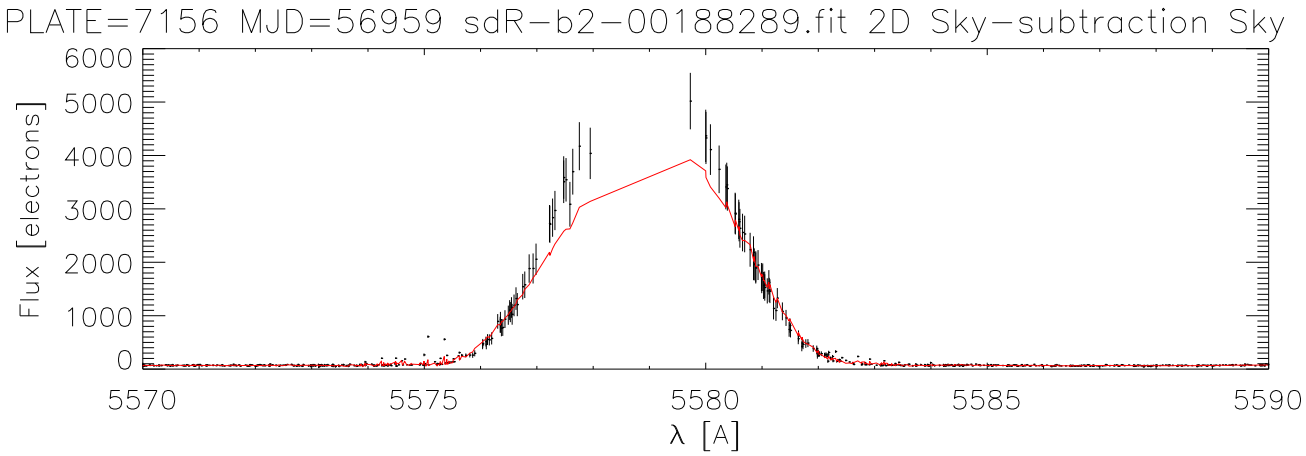

PLATE=7156 MJD=56959 sdR-b2-00188289.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

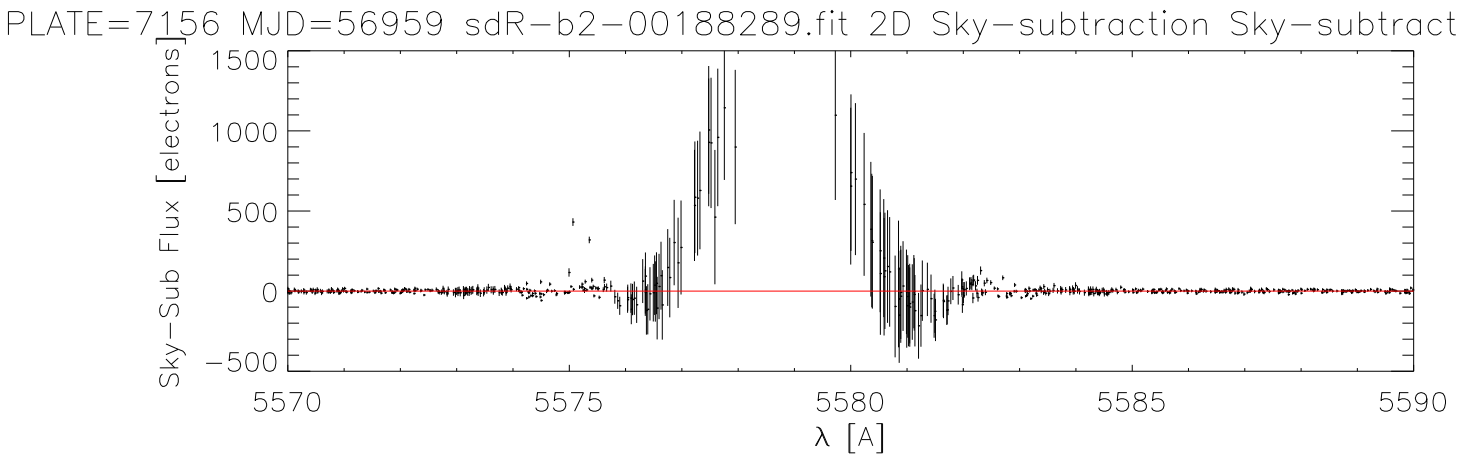

PLATE=7156 MJD=56959 sdR-b2-00188289.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 48

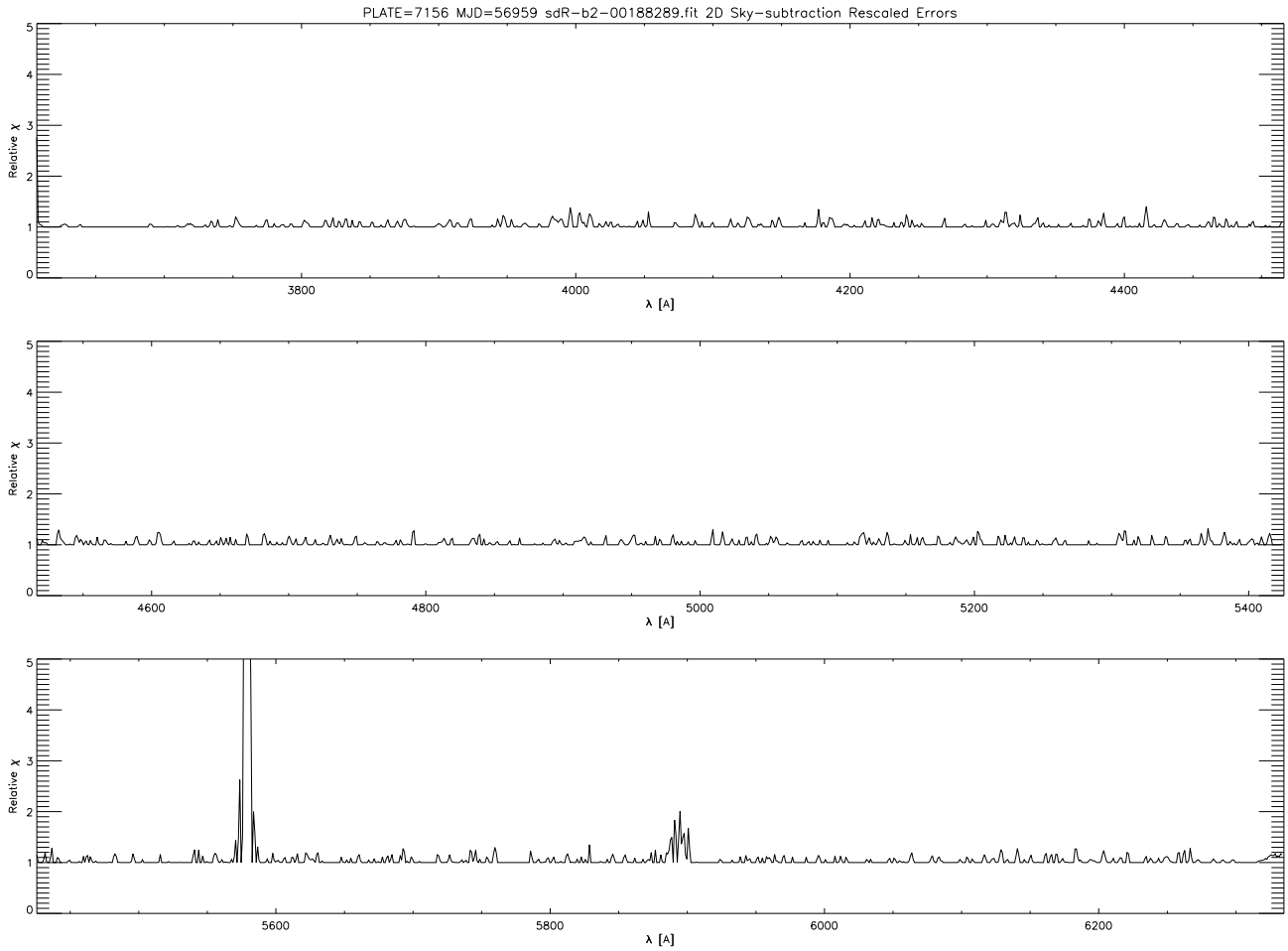


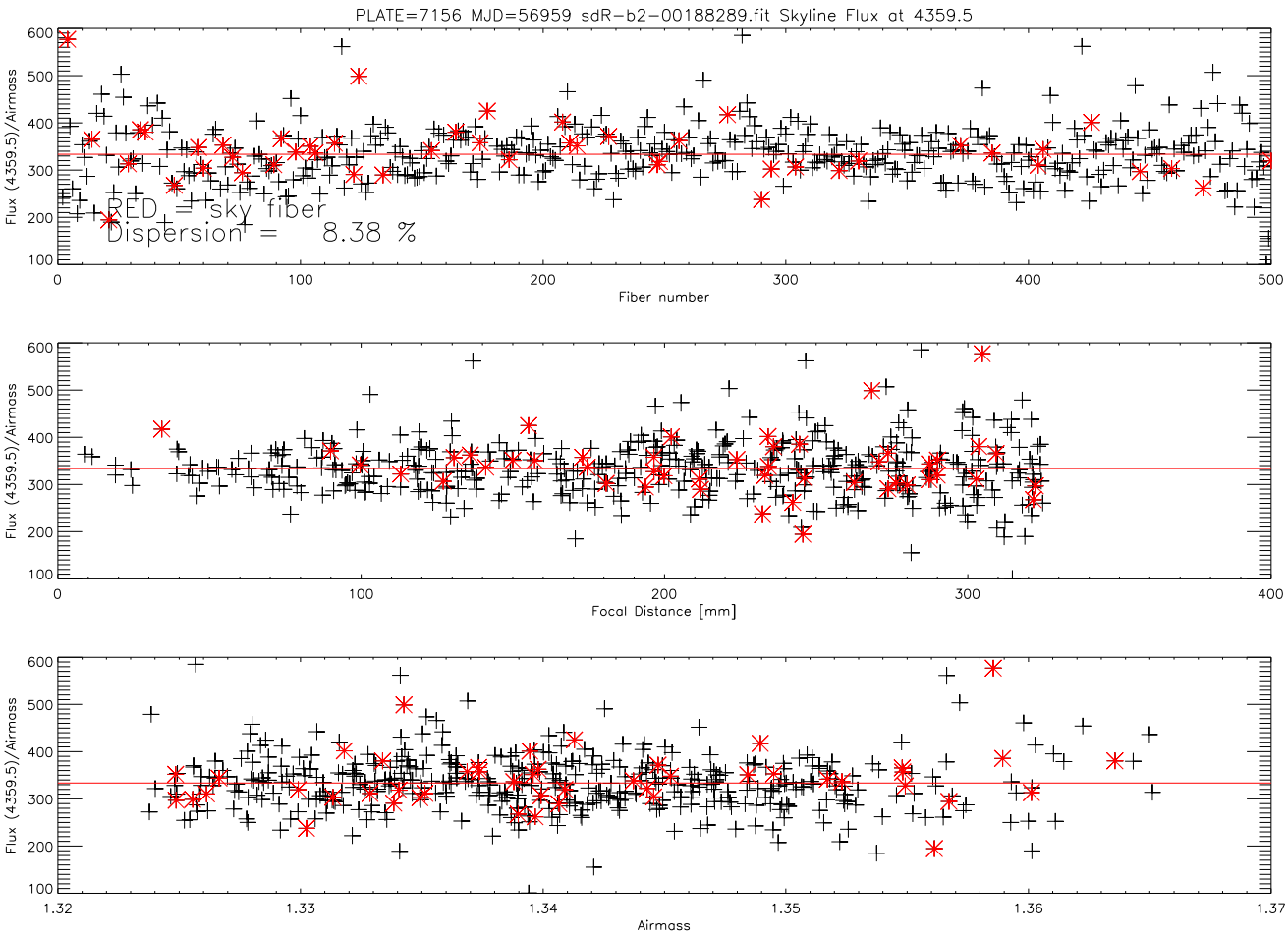

PLATE=7156 MJD=56959 sdR-b2-00188289.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

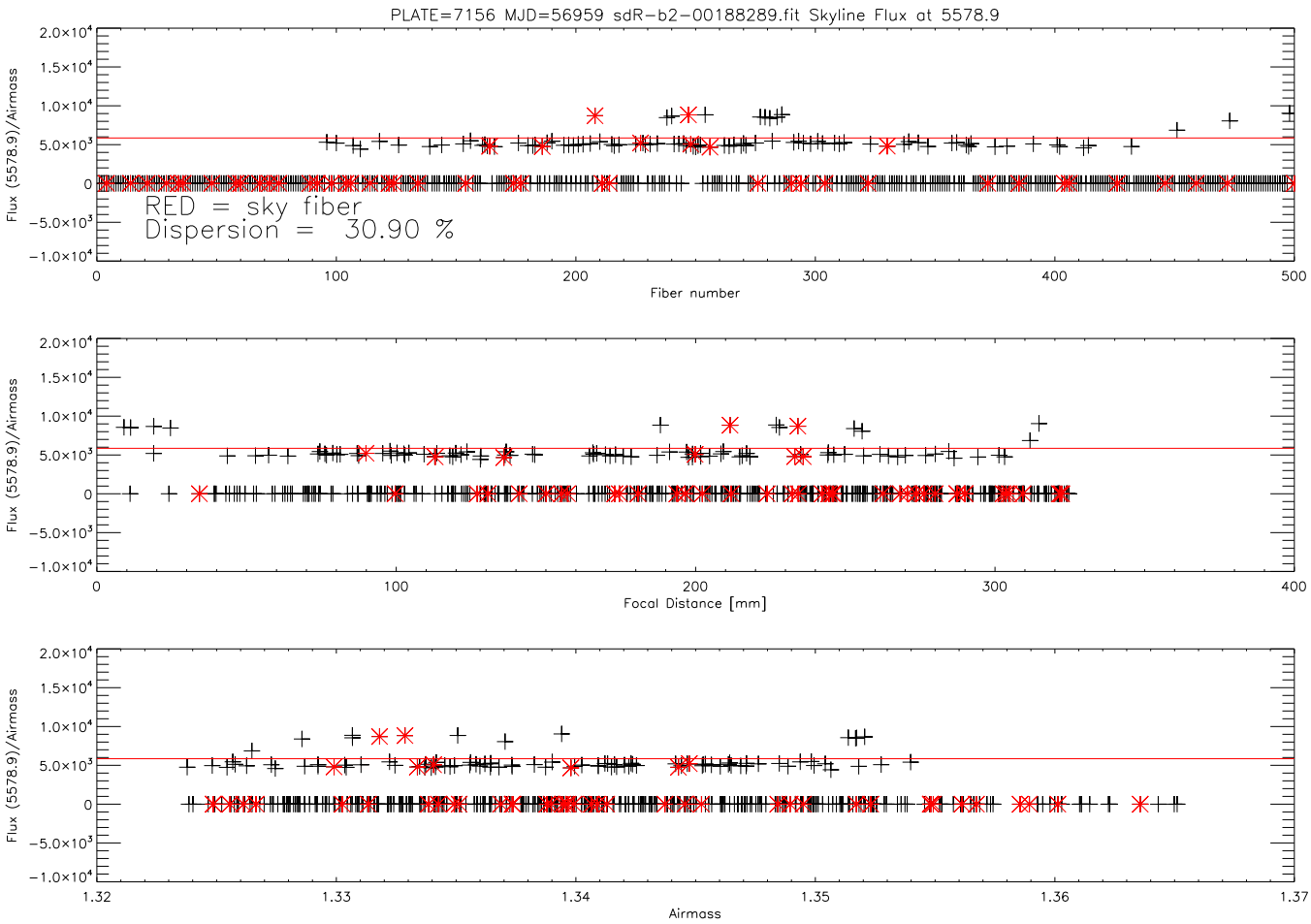

PLATE=7156 MJD=56959 sdR-b2-00188289.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=7156 MJD=56959 sdR-b2-00188289.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
5570
5575
5580
5585
5590
λ [A]

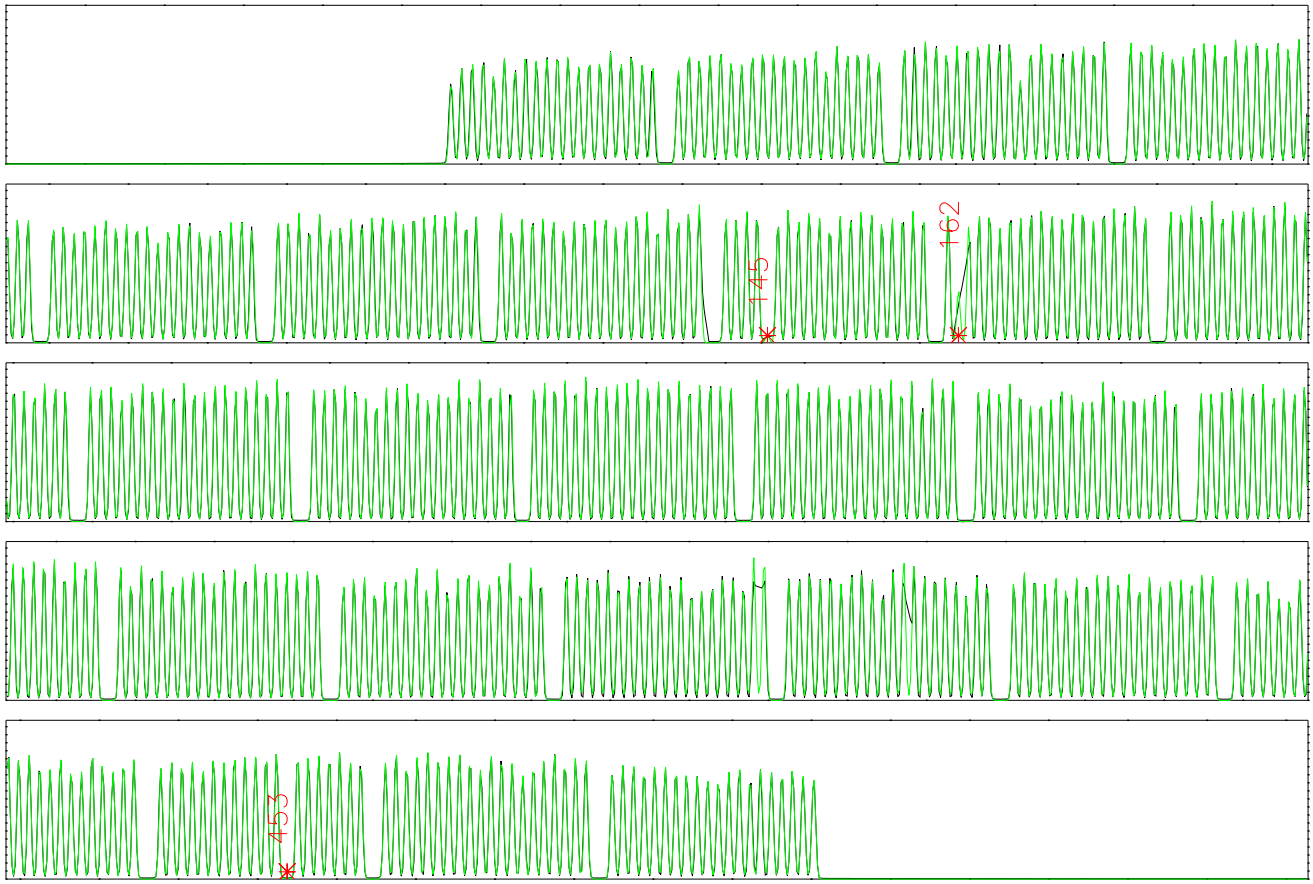
Number of sky fibers = 48

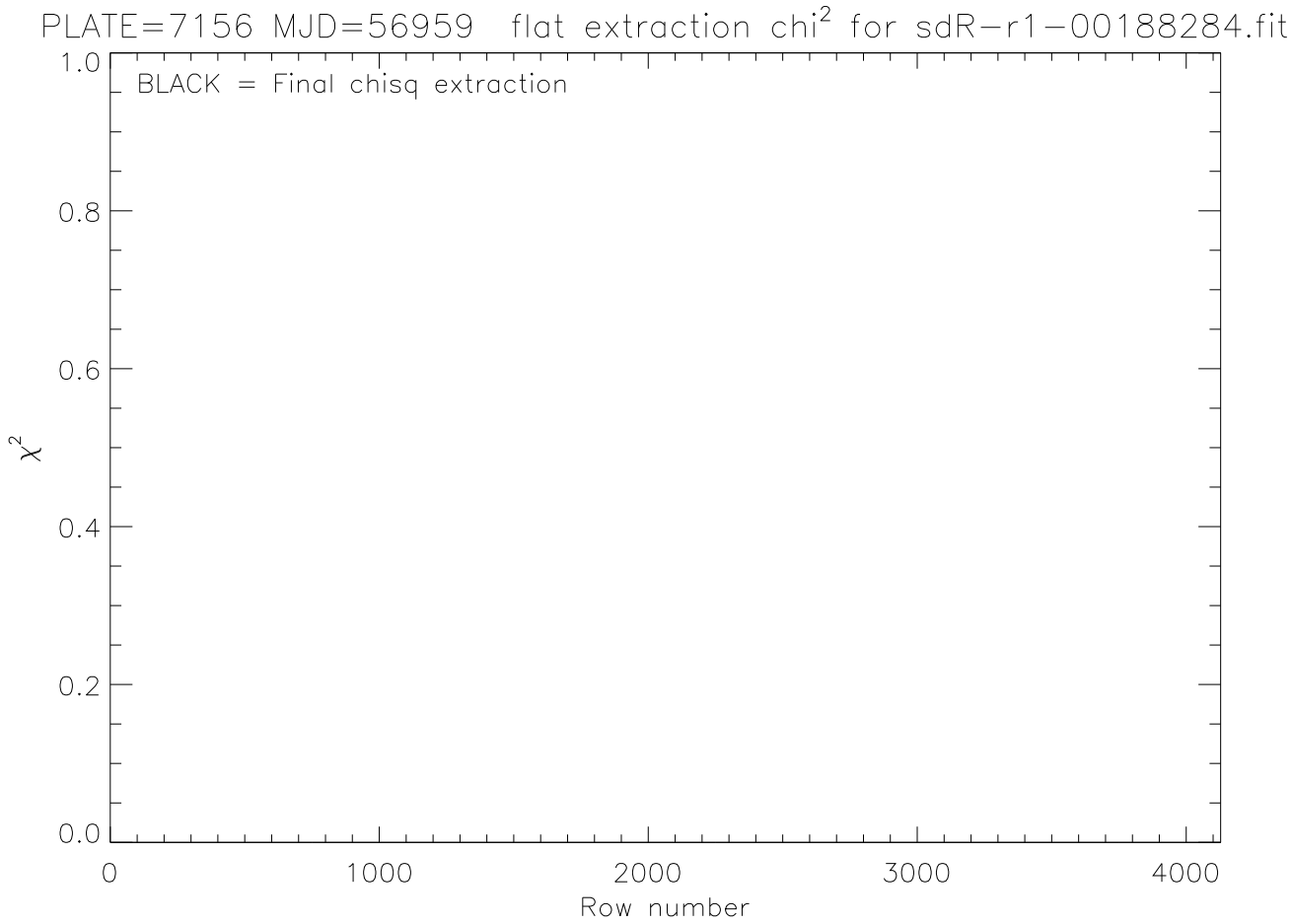


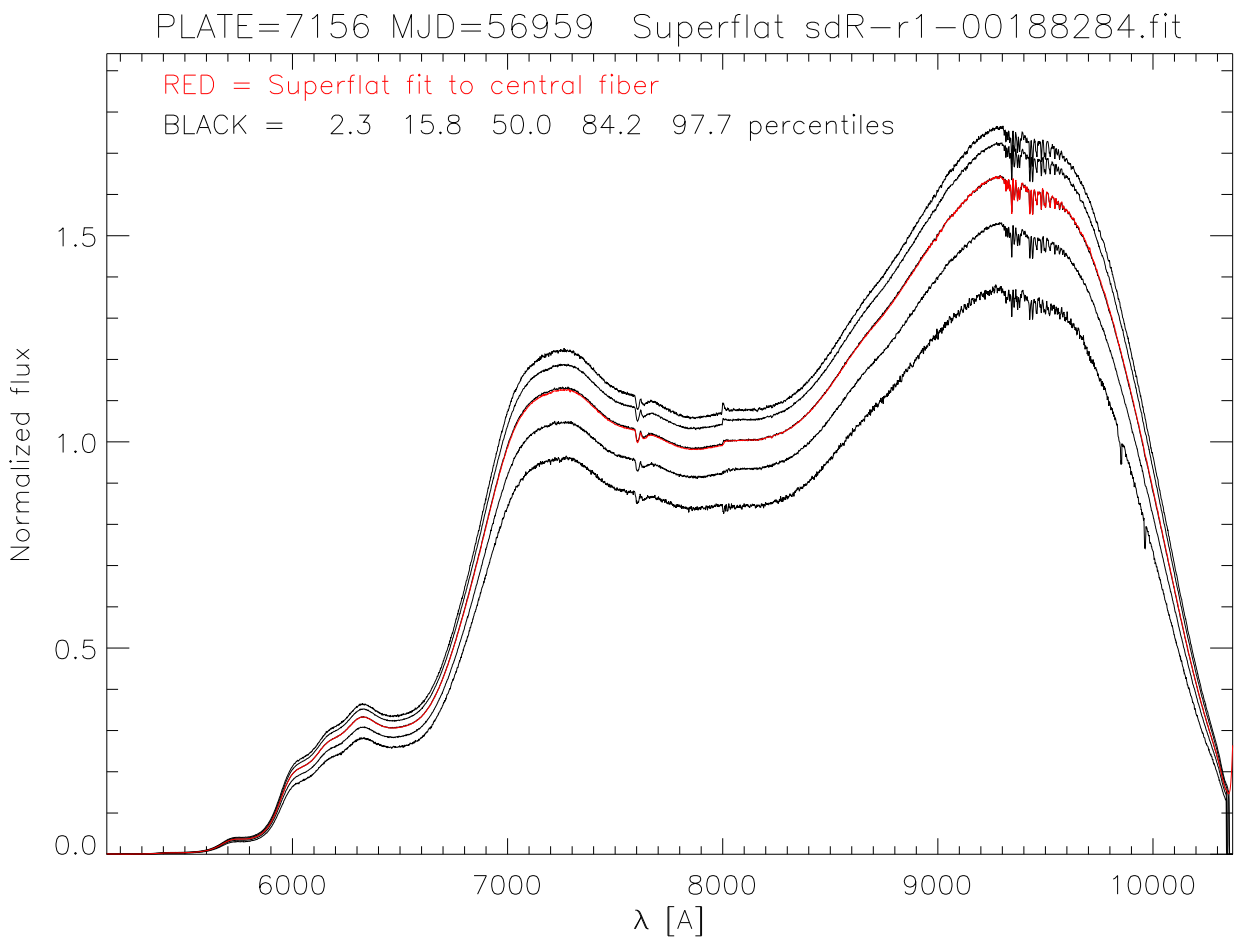

PLATE=7156 MJD=56959 sdR-b2-00188289.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 8.38 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

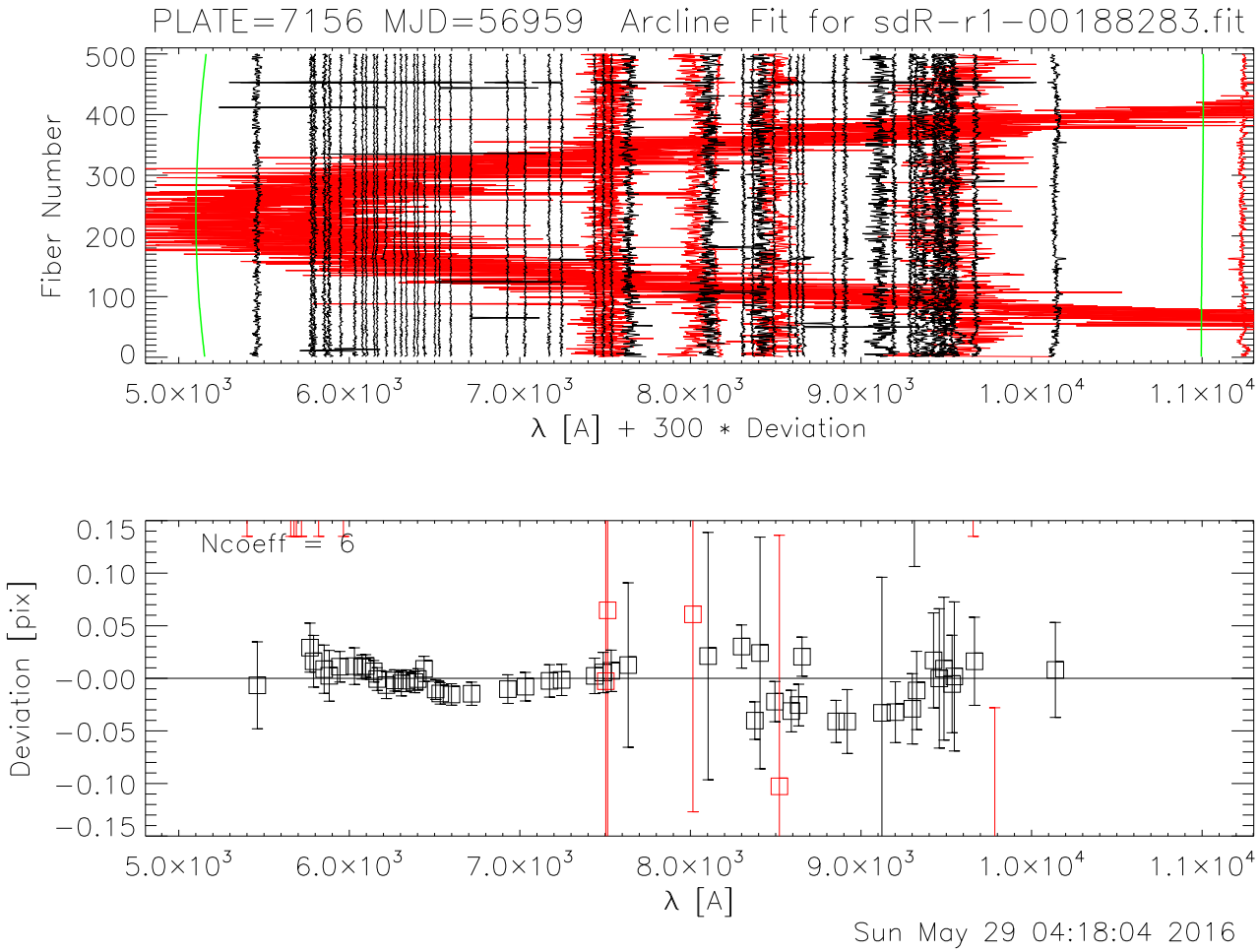

PLATE=7156 MJD=56959 sdR-b2-00188289.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 30.90 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

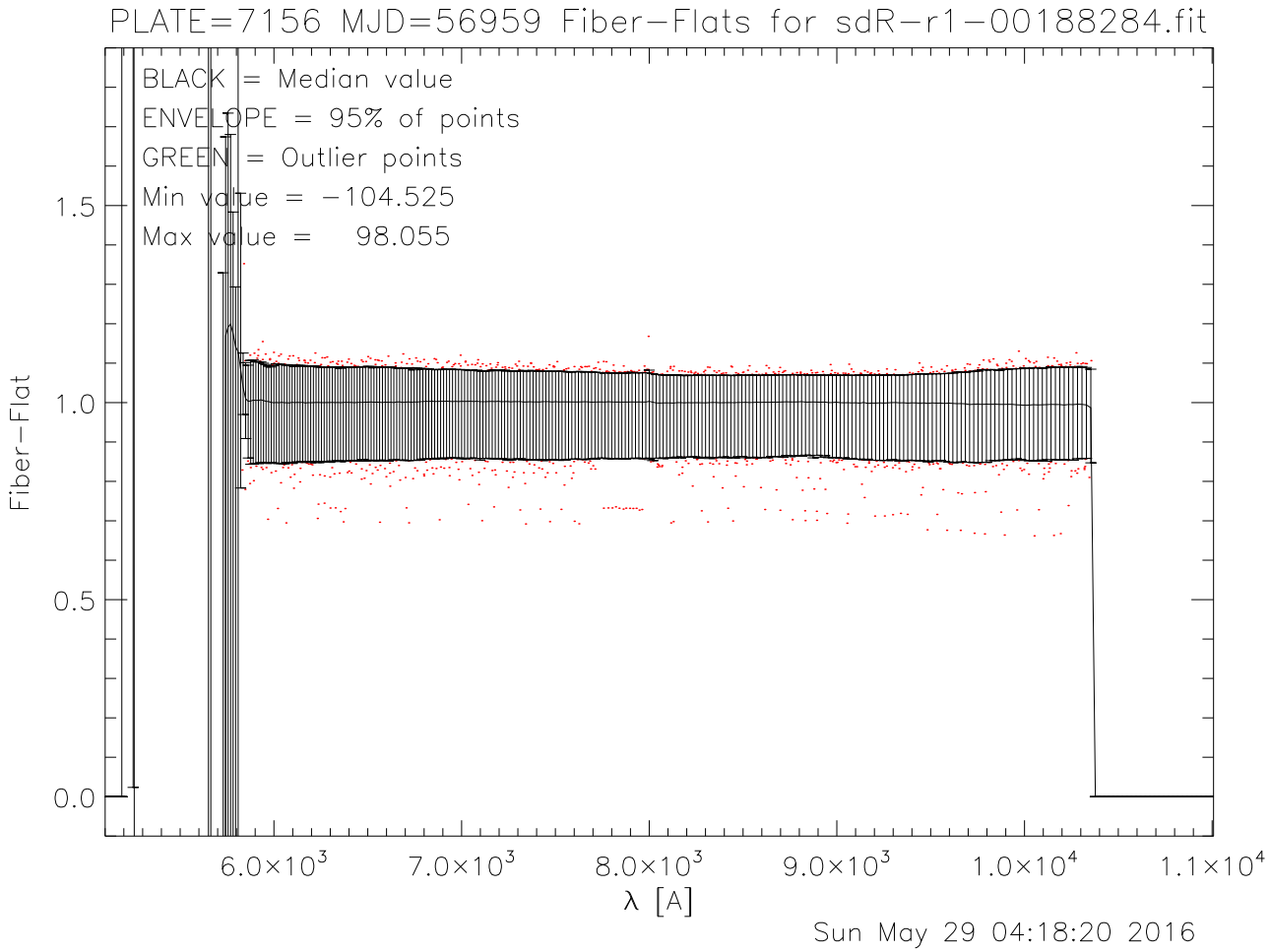
PLATE=7156 MJD=56959 Traces sdR-r1-00188284.fit

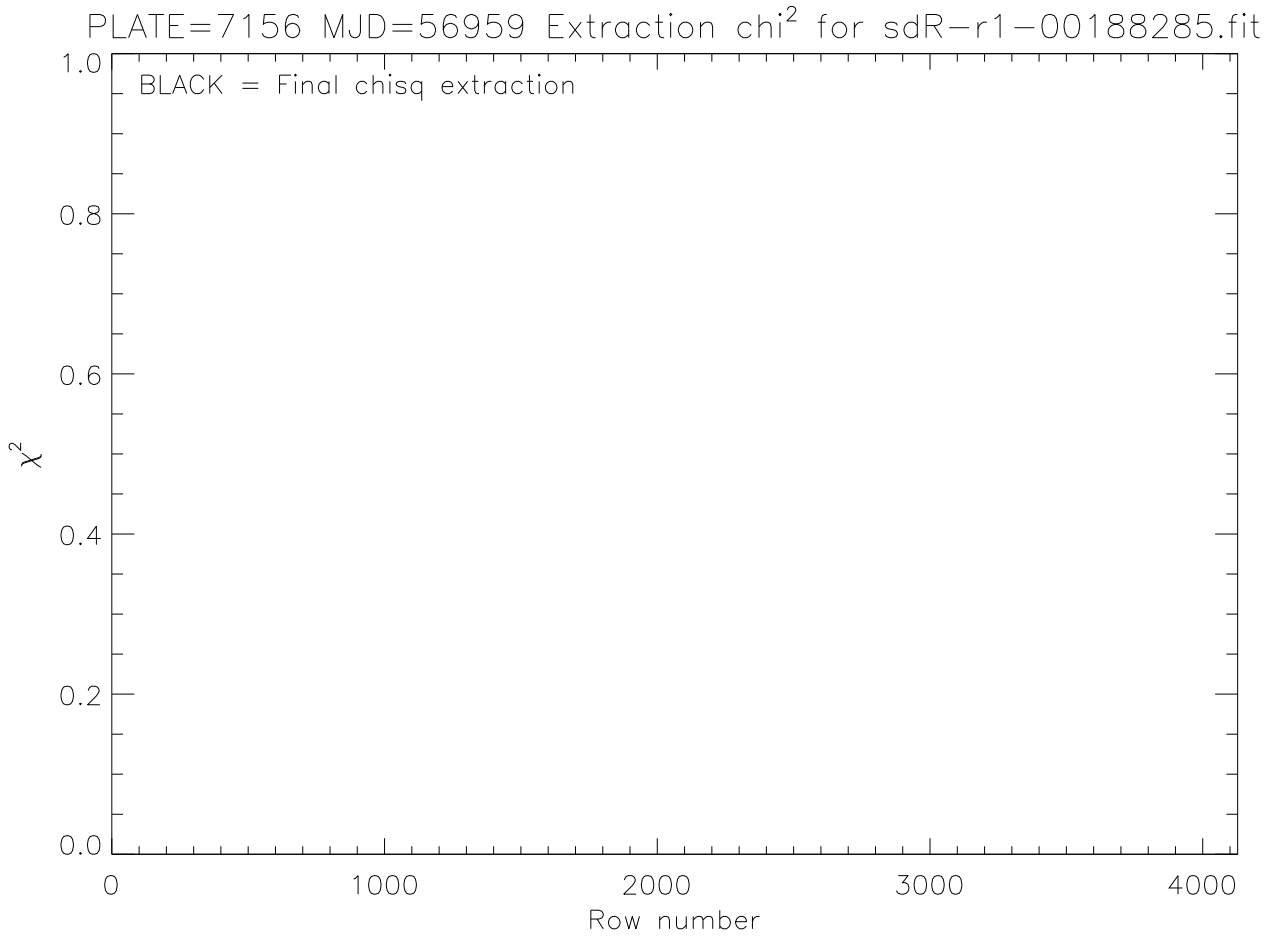


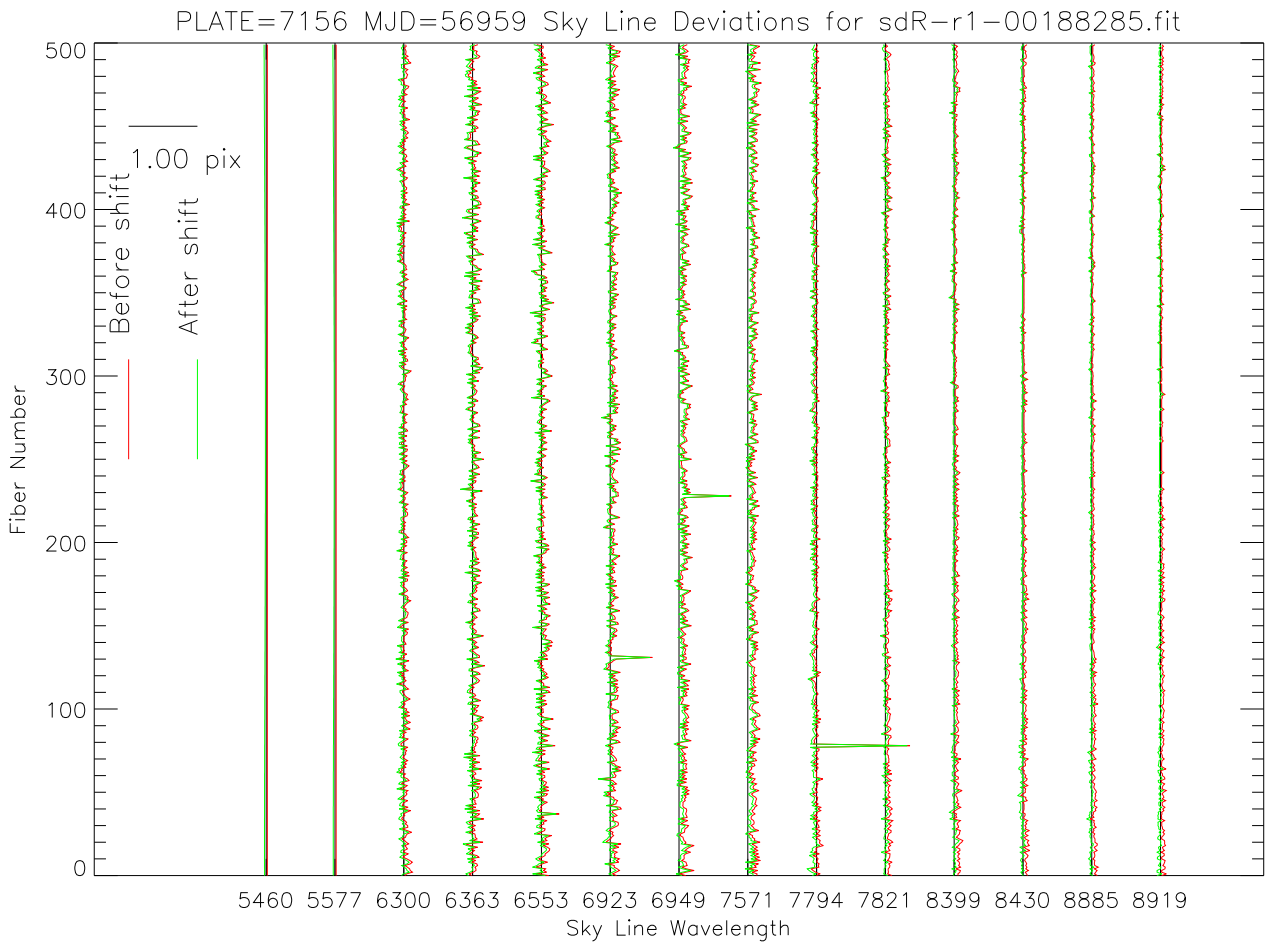

PLATE=7156 MJD=56959 flat extraction chi^2 for sdR−r1−00188284.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

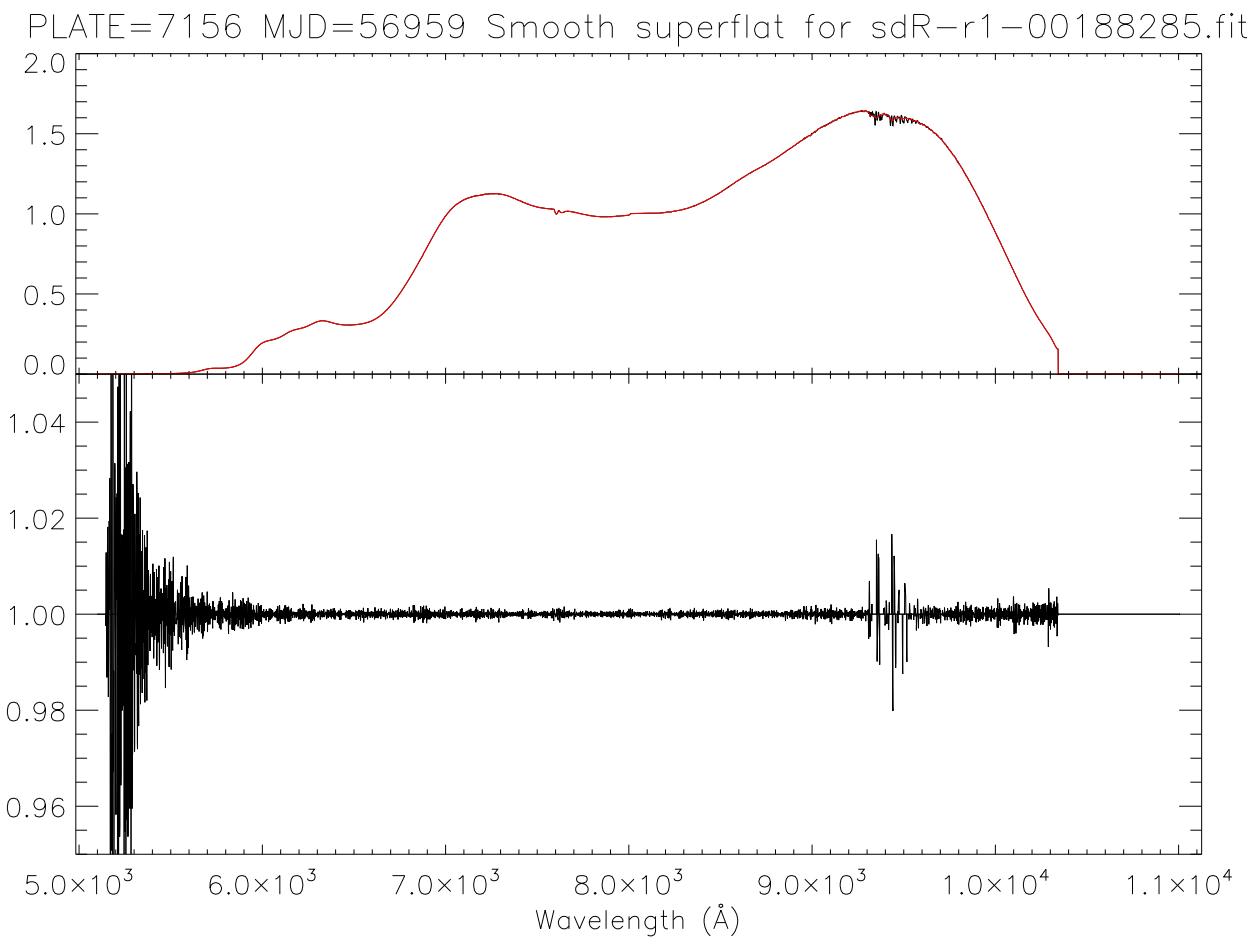

PLATE=7156 MJD=56959 Superflat sdR-r1-00188284.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

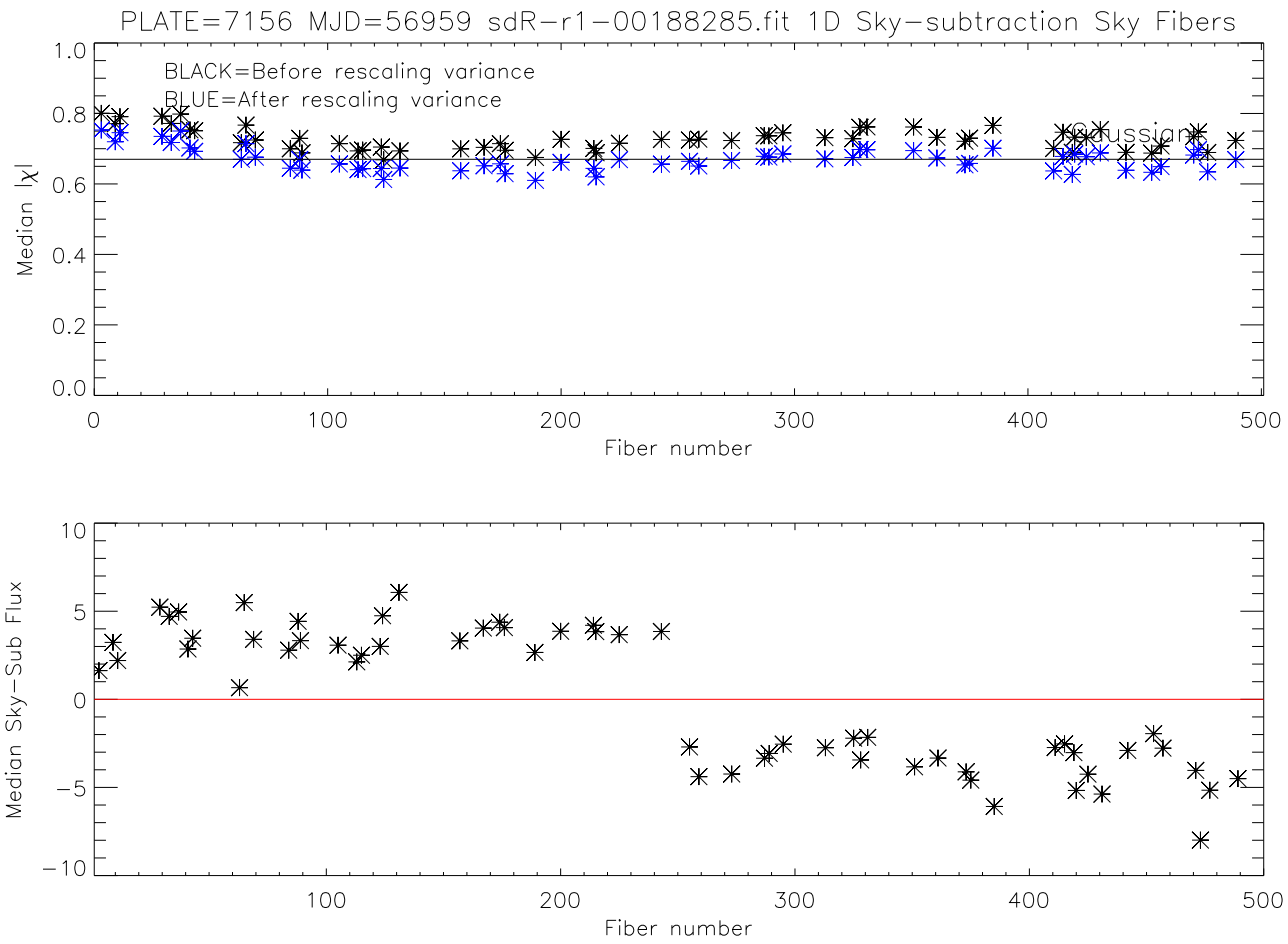

PLATE=7156 MJD=56959 Arcline Fit for sdR-r1-00188283.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sun May 29 04:18:04 2016

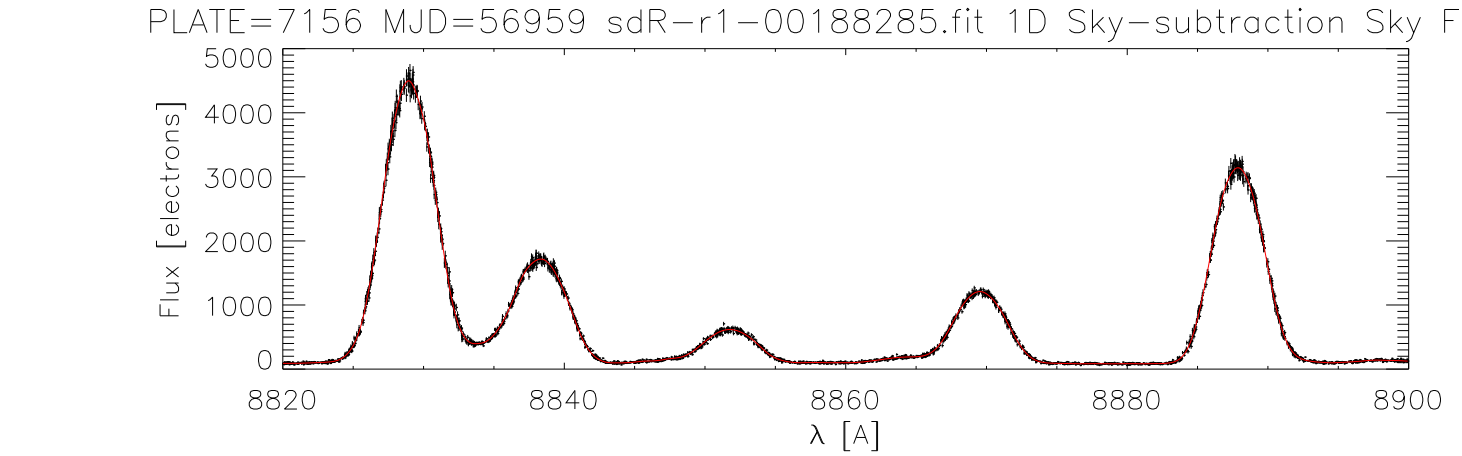

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −104.525
Max value = 98.055
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:18:20 2016

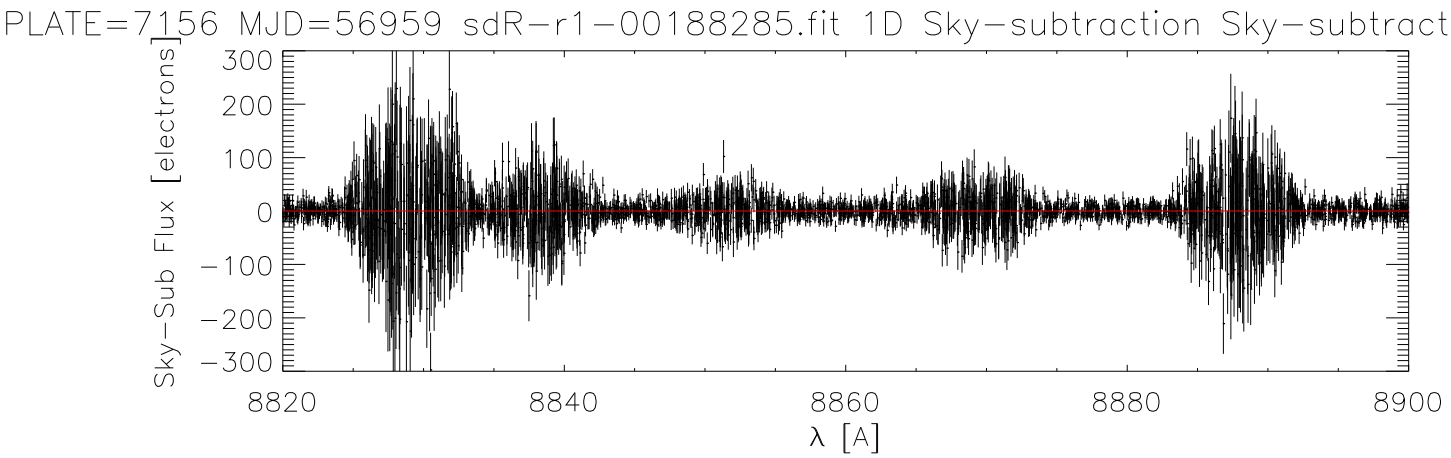

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r1−00188285.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r1-00188285.fit
Fiber Number
Sky Line Wavelength
Before shift
After shift
1.00 pix
0
100
200
300
400
500
5460 5577 6300 6363 6553 6923 6949 7571 7794 7821 8399 8430 8885 8919

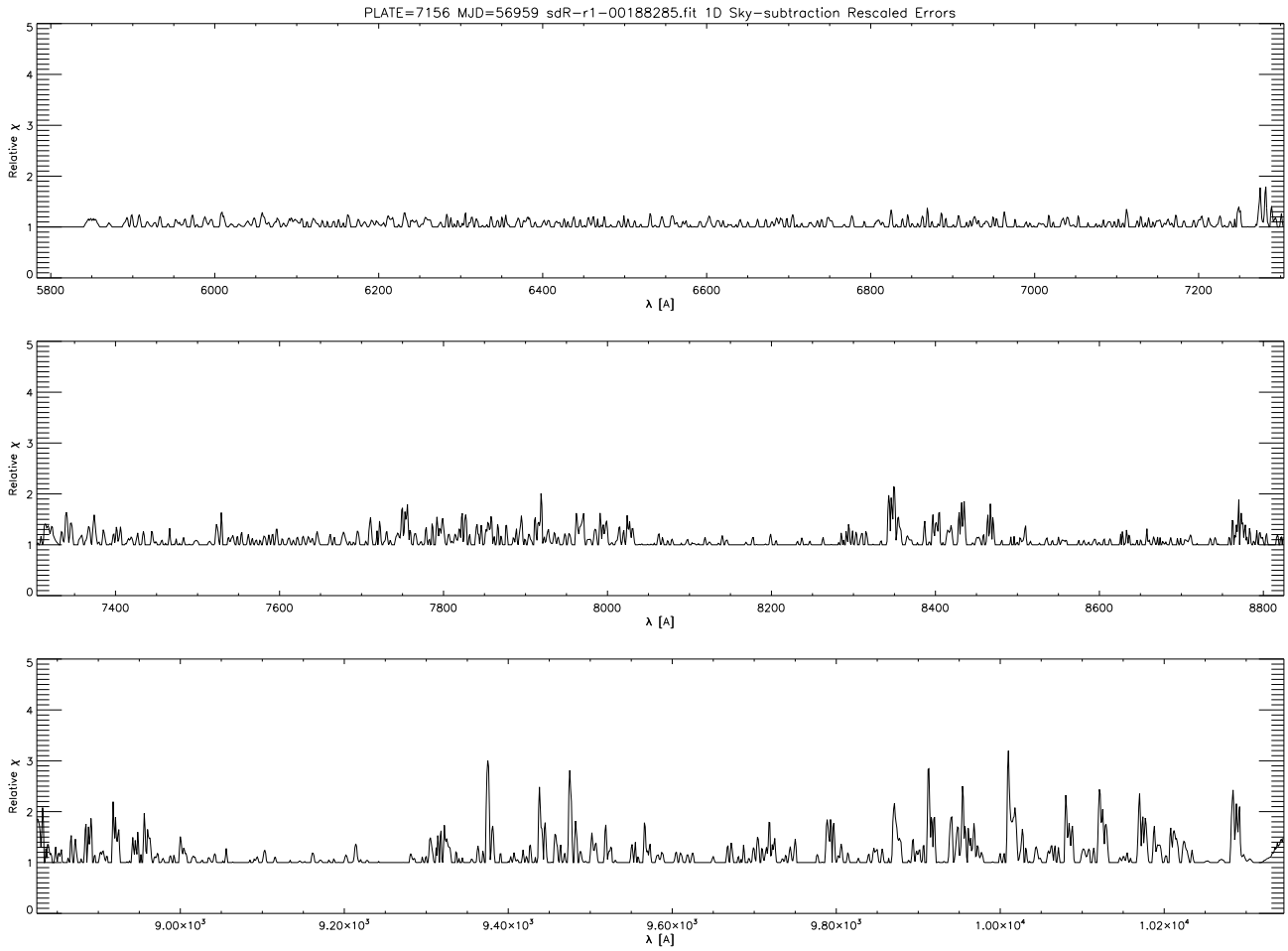

PLATE=7156 MJD=56959 Smooth superflat for sdR-r1-00188285.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

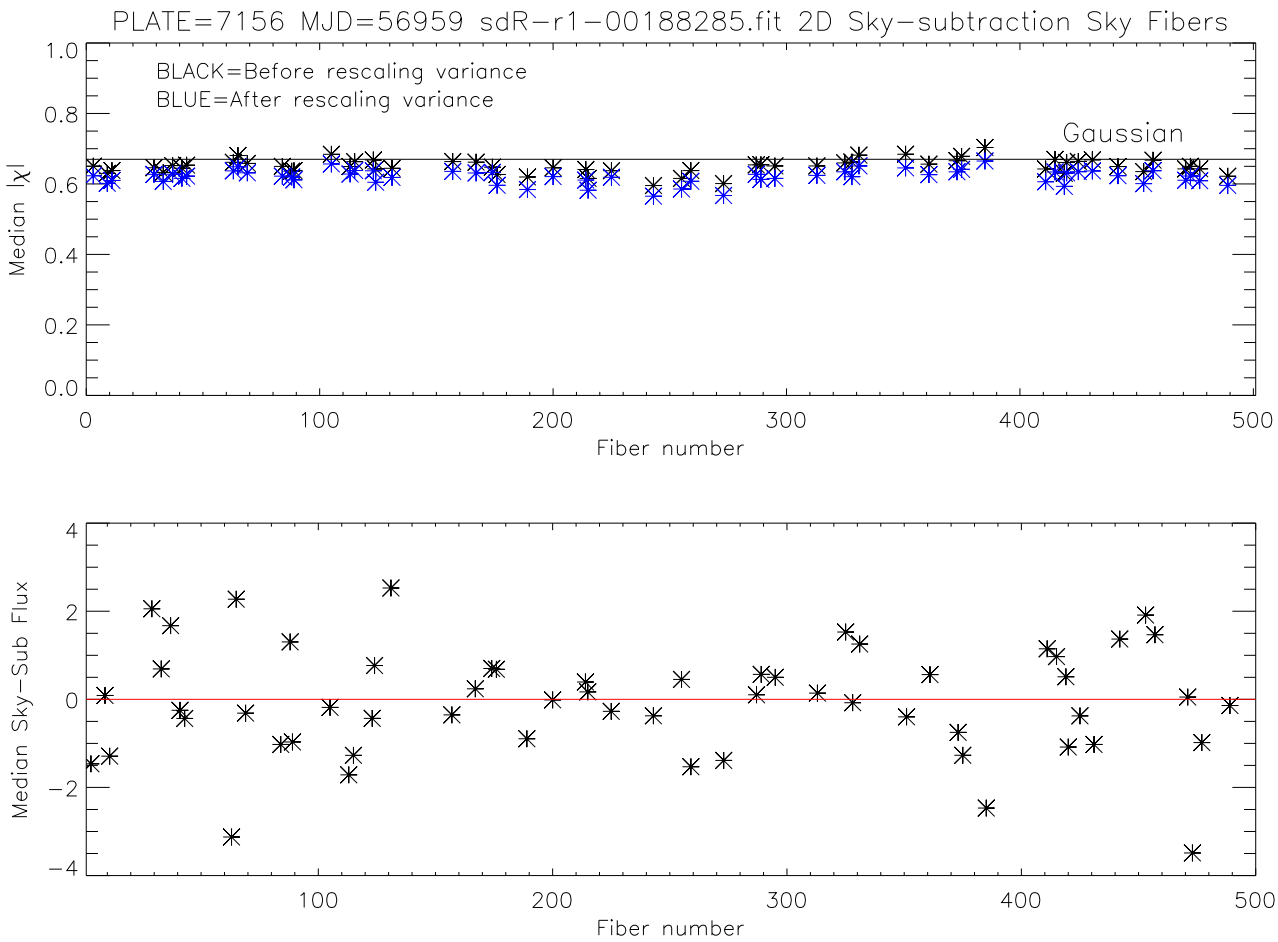

PLATE=7156 MJD=56959 sdR-r1-00188285.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussians
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

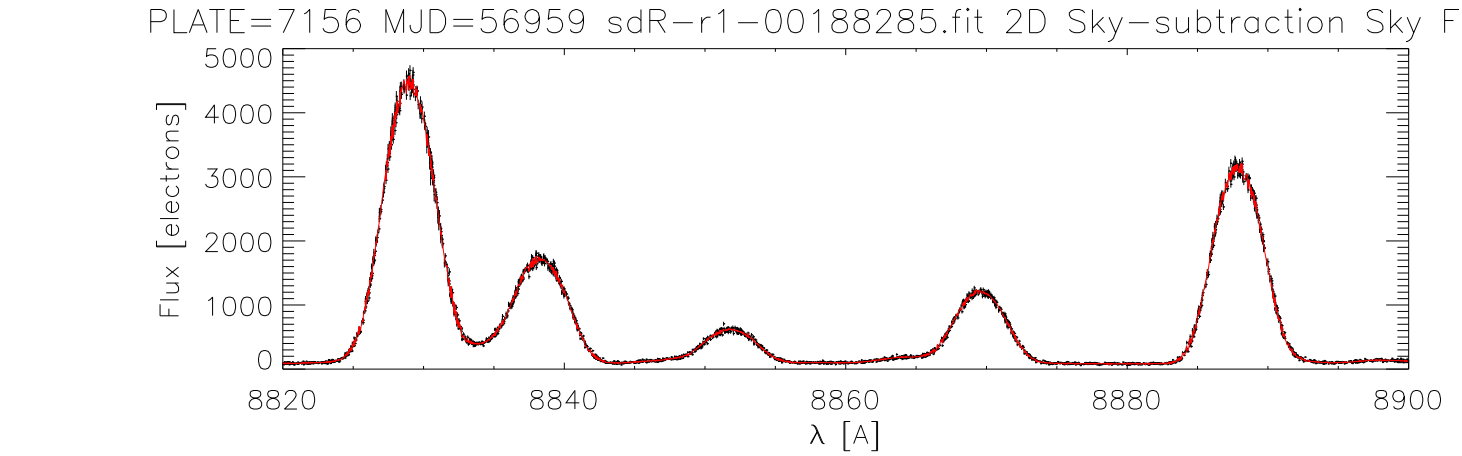

PLATE=7156 MJD=56959 sdR-r1-00188285.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

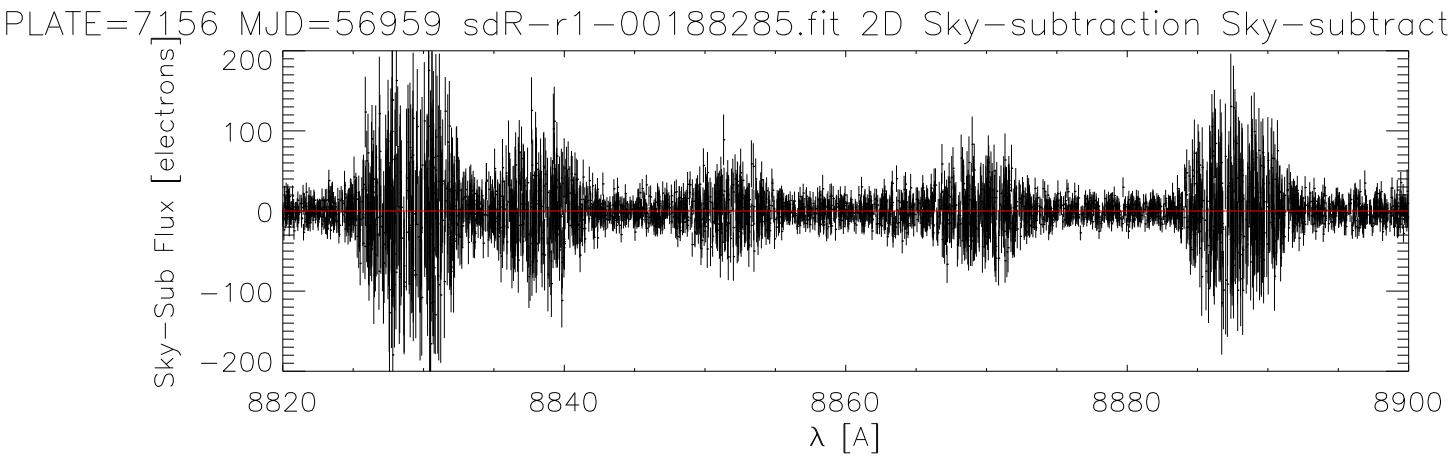

PLATE=7156 MJD=56959 sdR-r1-00188285.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 58

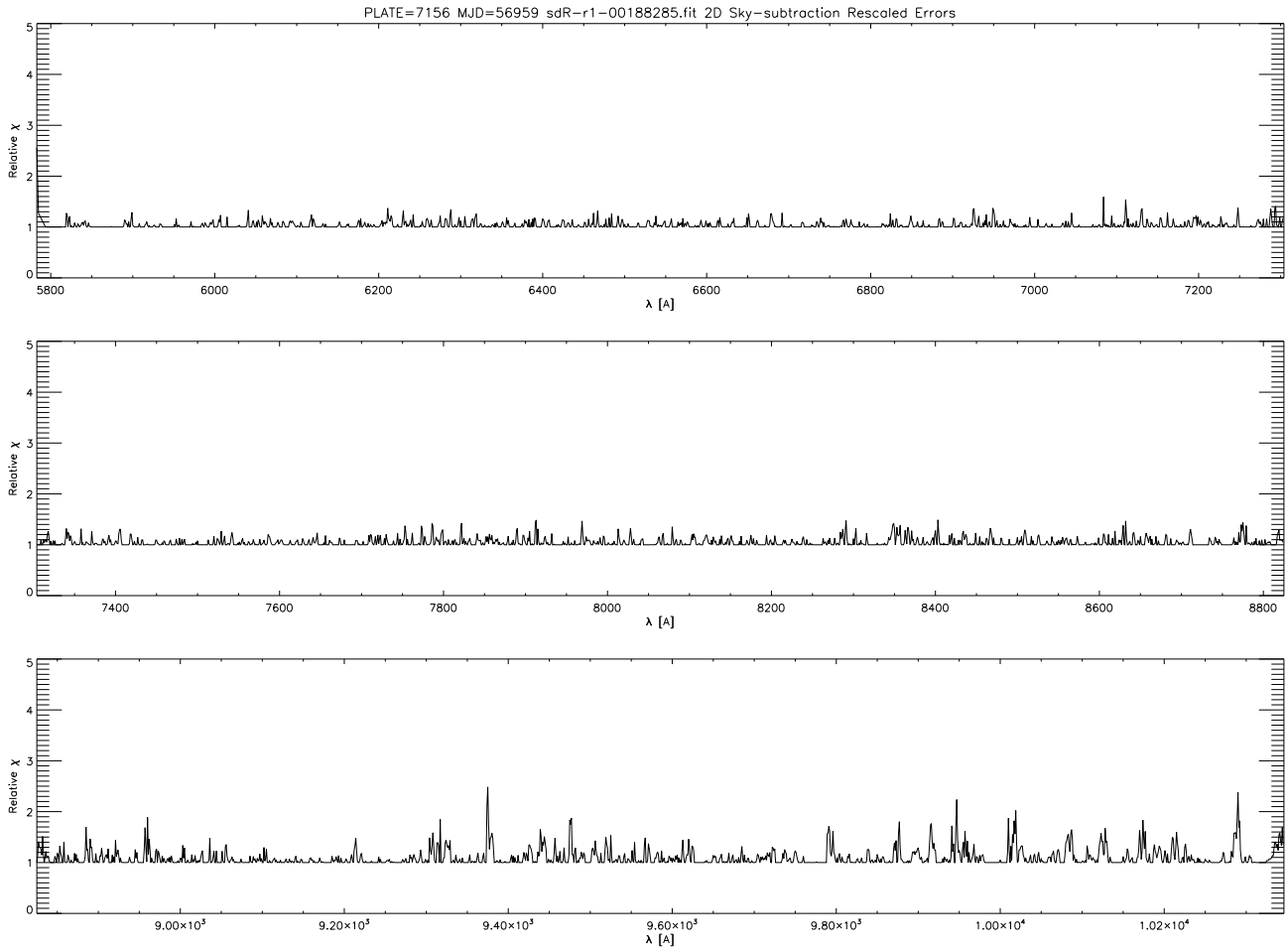


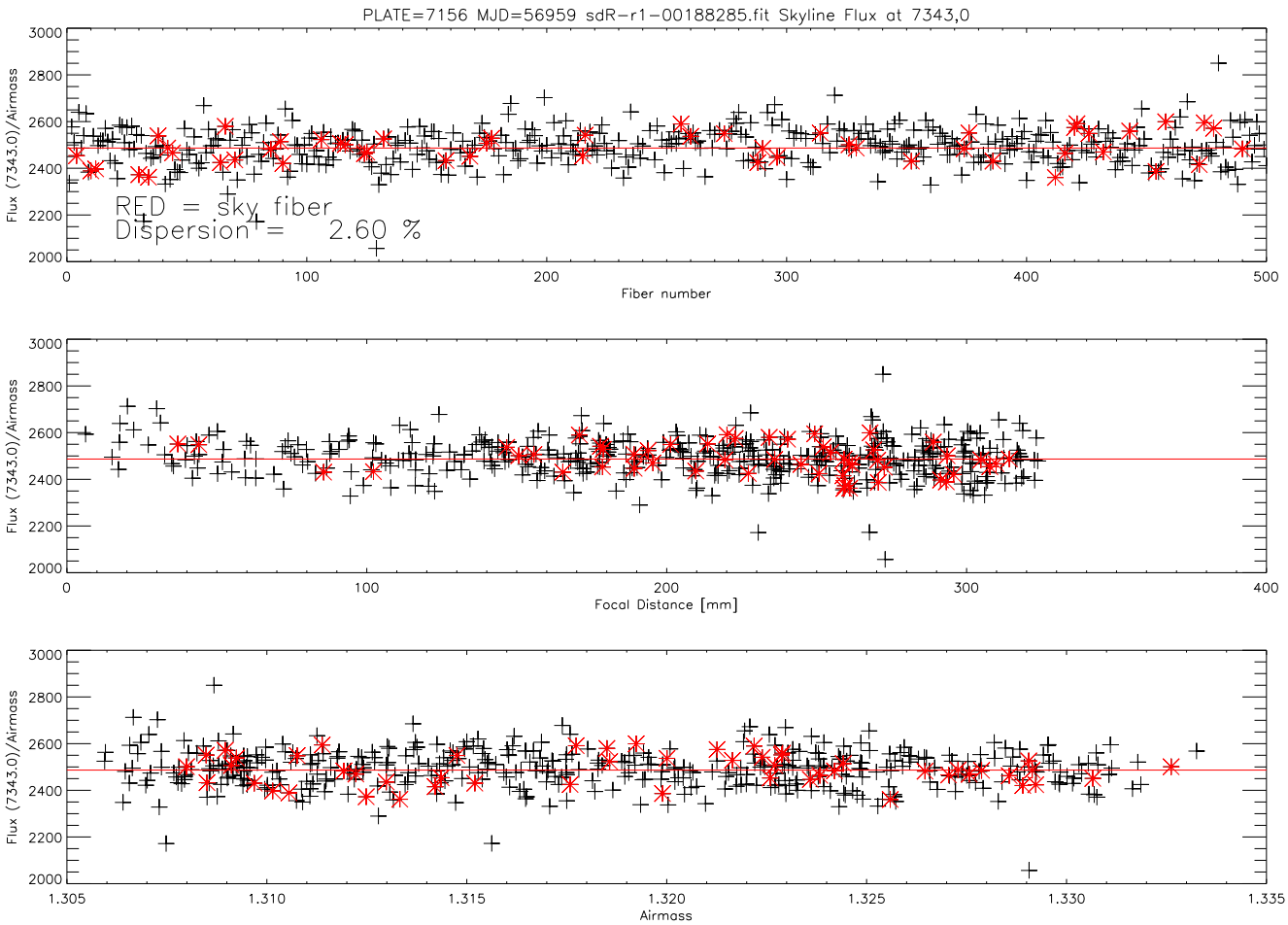

PLATE=7156 MJD=56959 sdR-r1-00188285.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

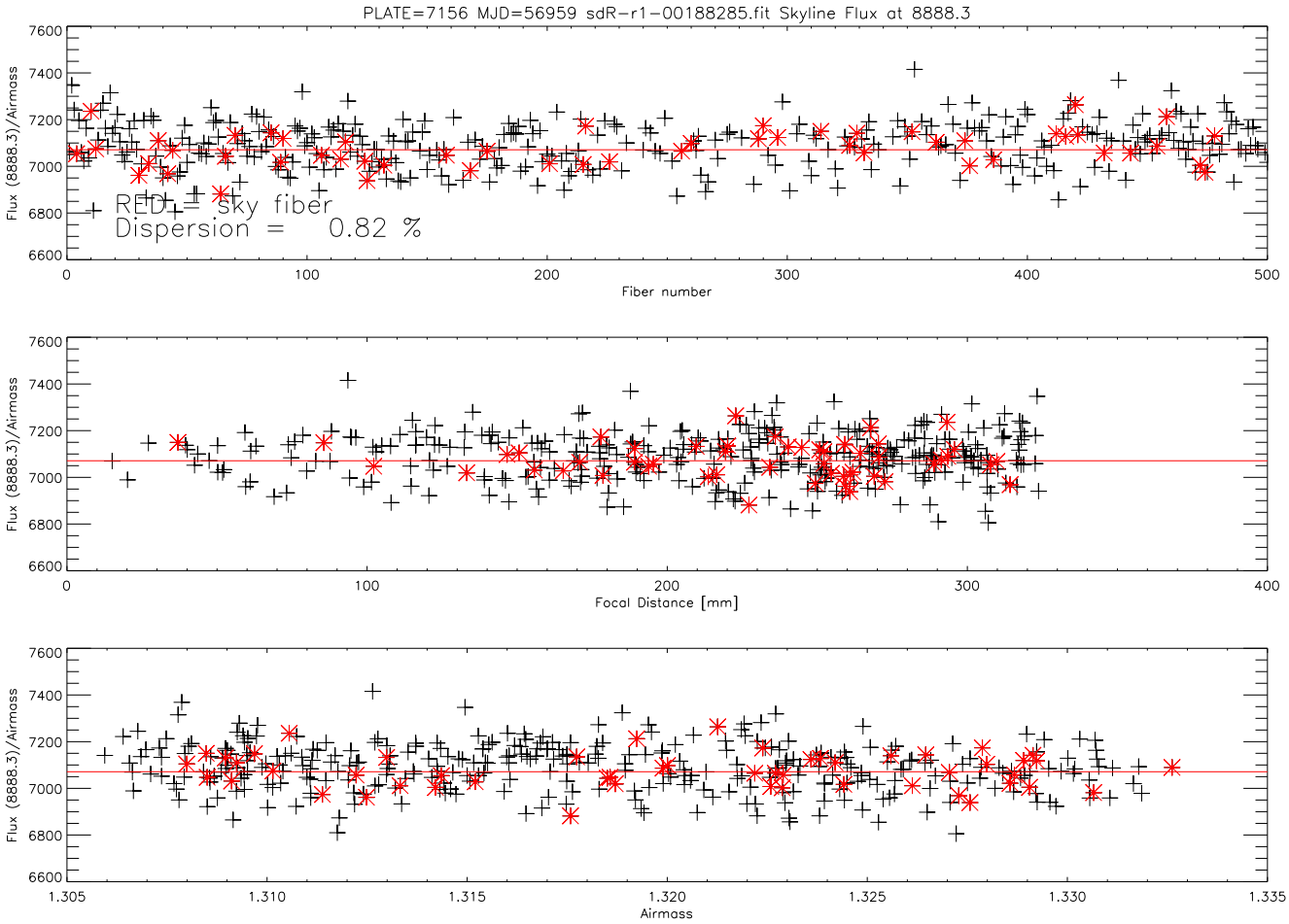

PLATE=7156 MJD=56959 sdR-r1-00188285.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

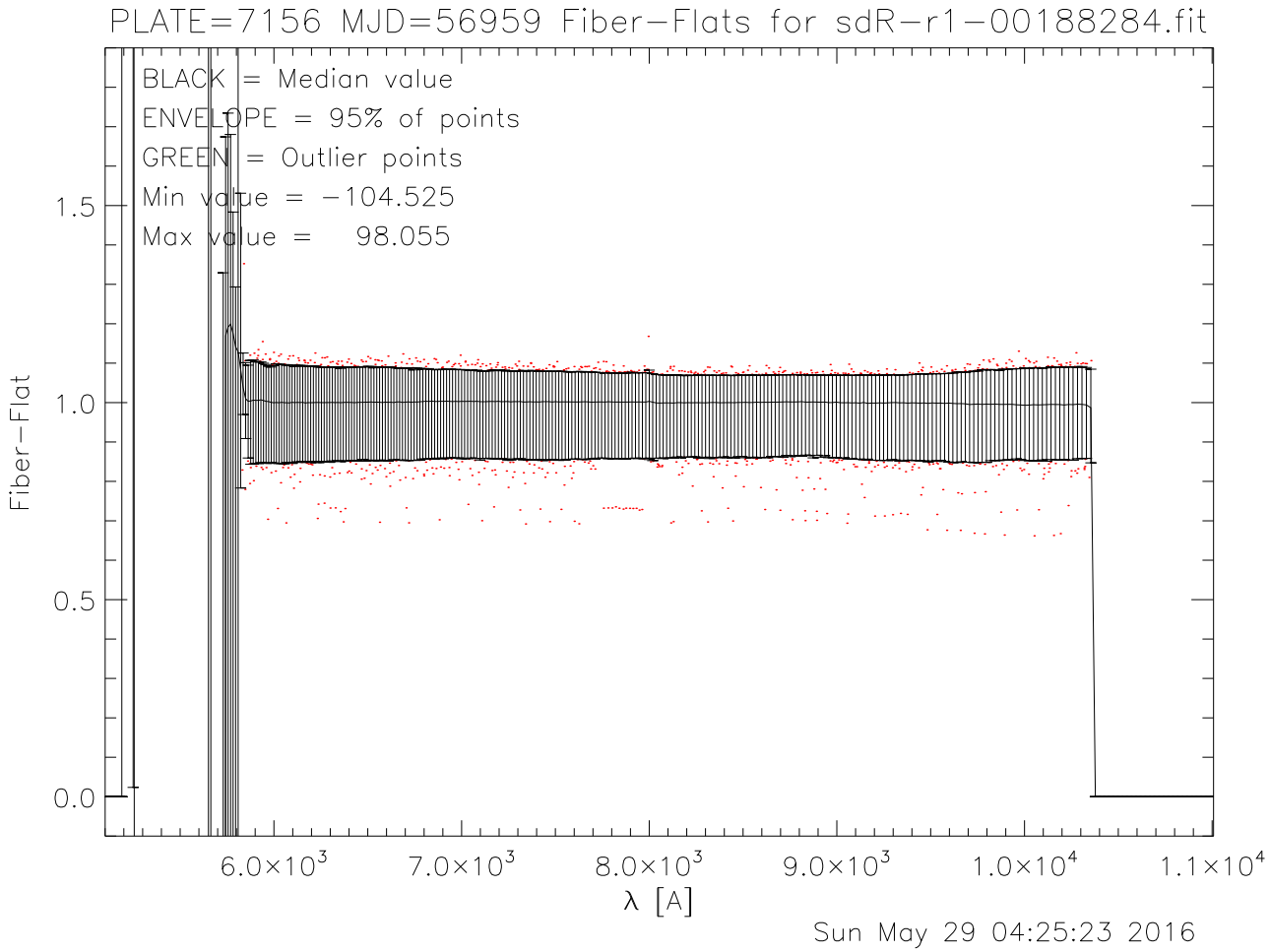

PLATE=7156 MJD=56959 sdR-r1-00188285.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

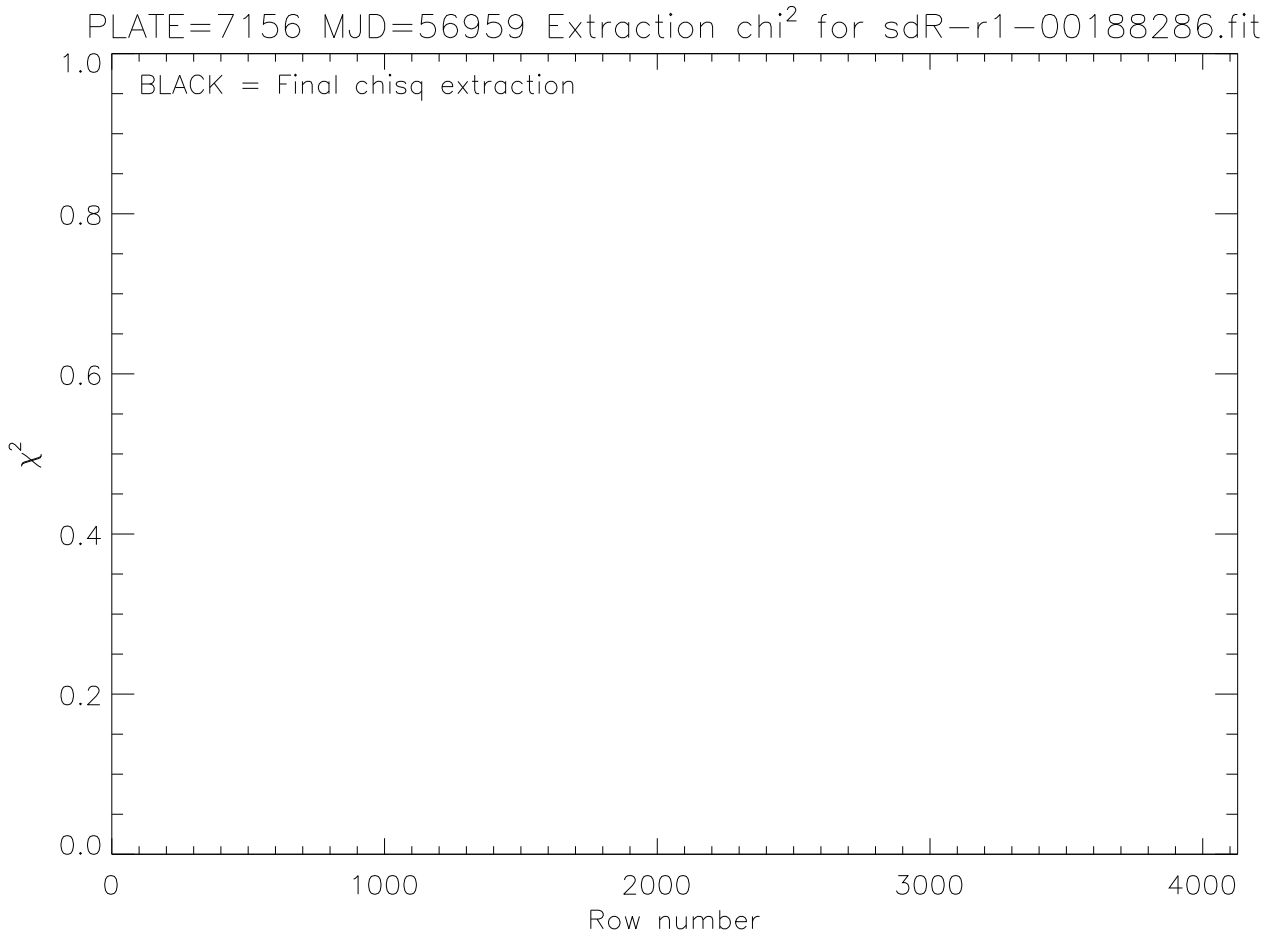
Number of sky fibers = 58

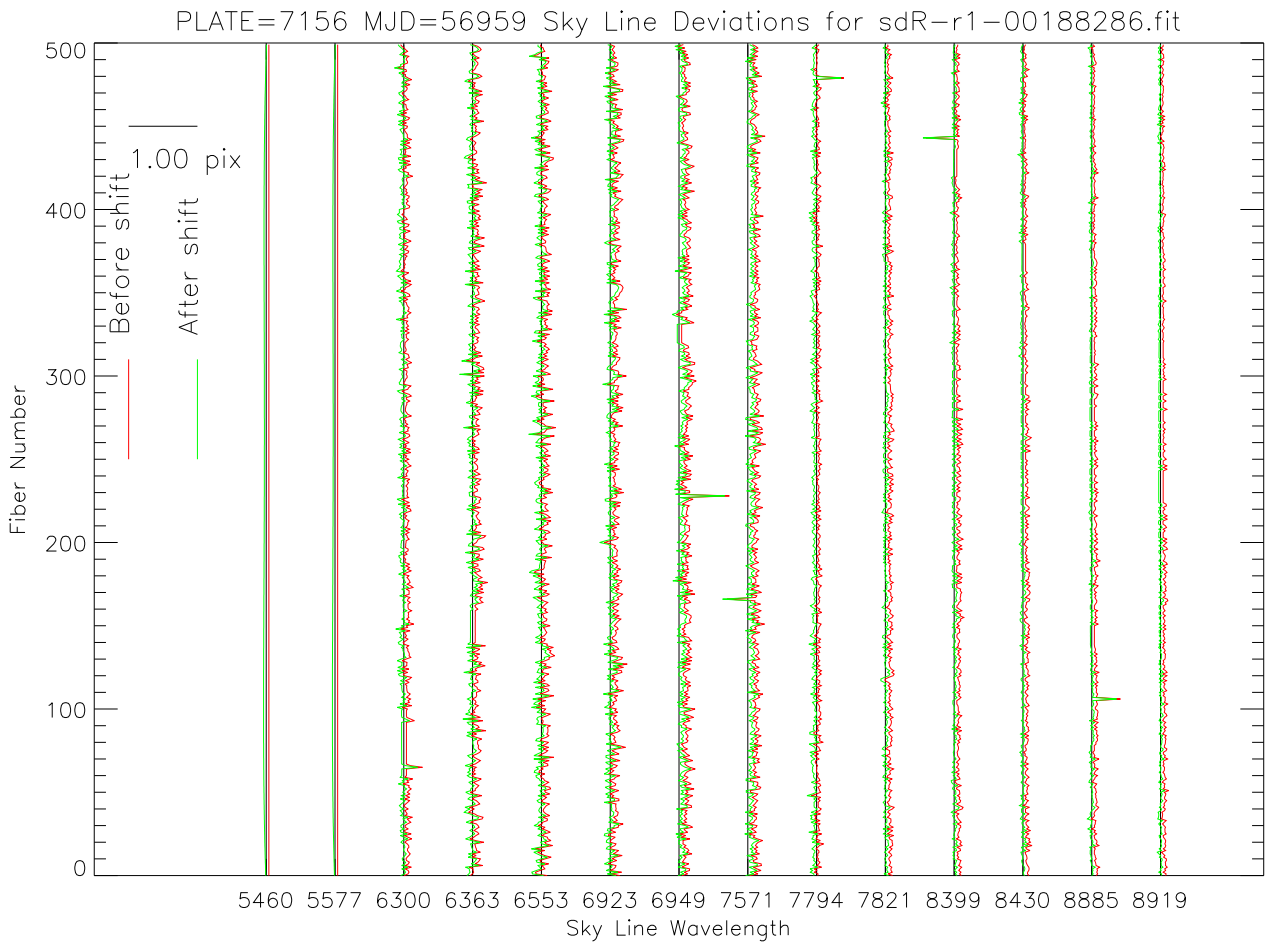


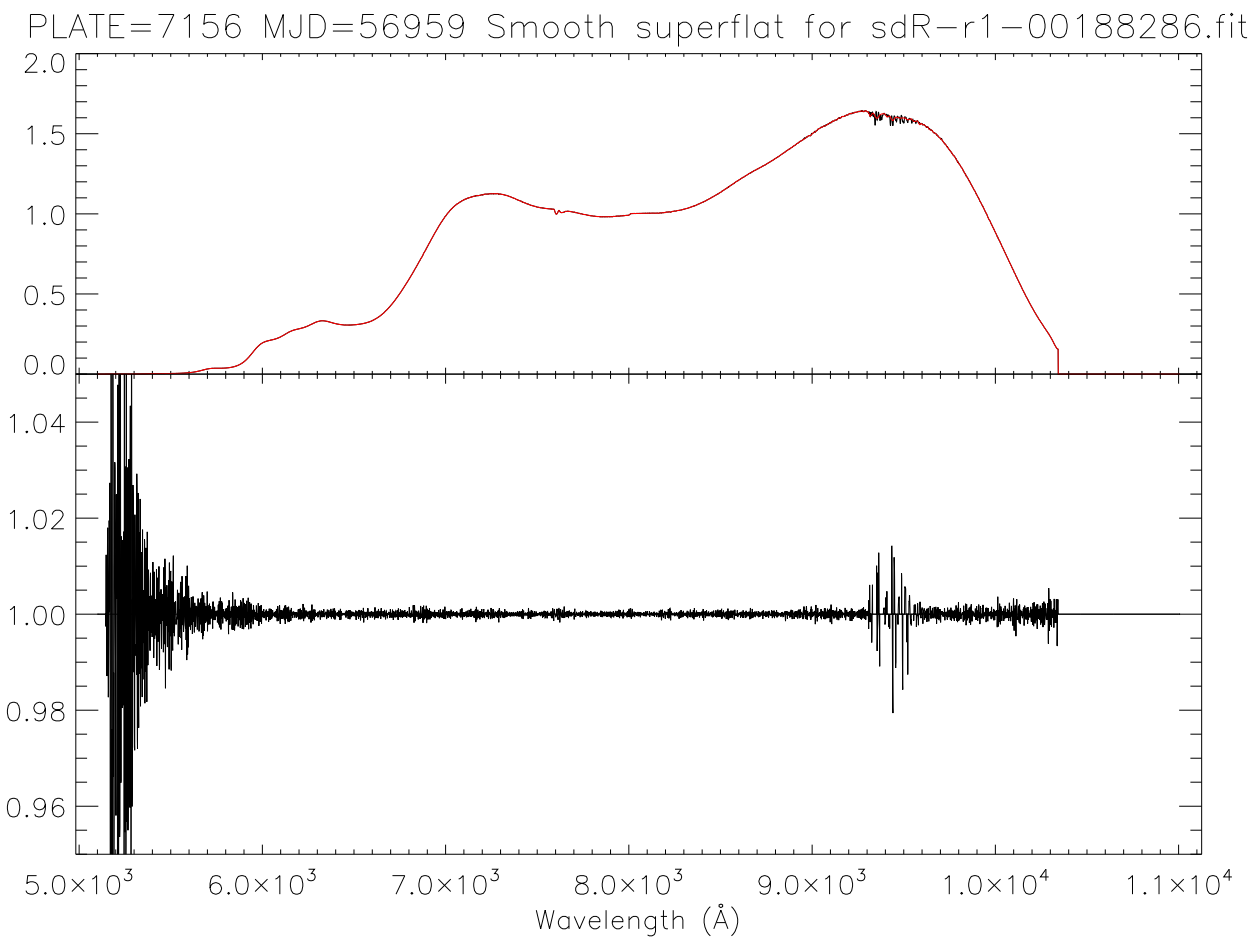

PLATE=7156 MJD=56959 sdR-r1-00188285.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.60 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

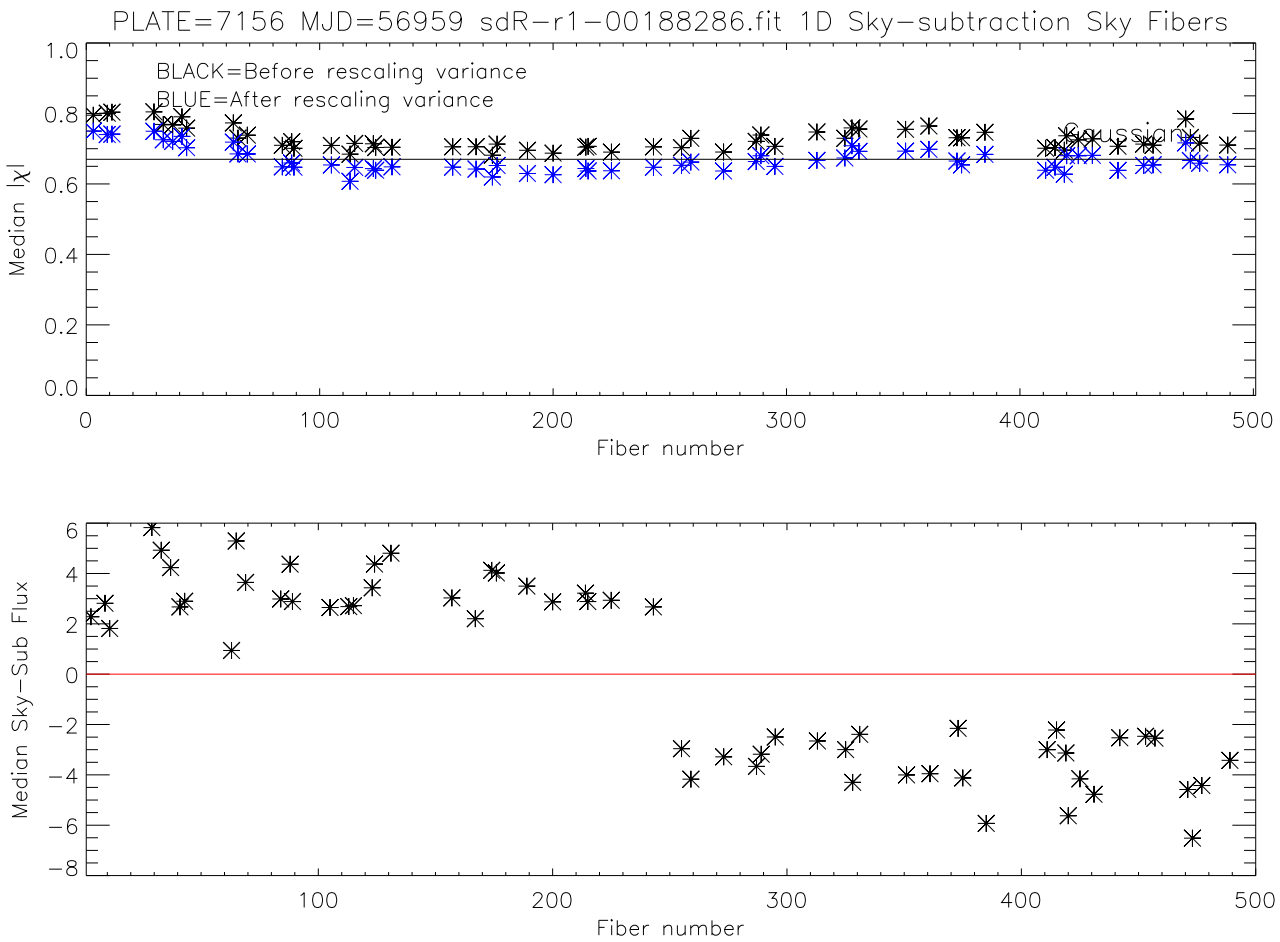

PLATE=7156 MJD=56959 sdR-r1-00188285.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 0.82 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

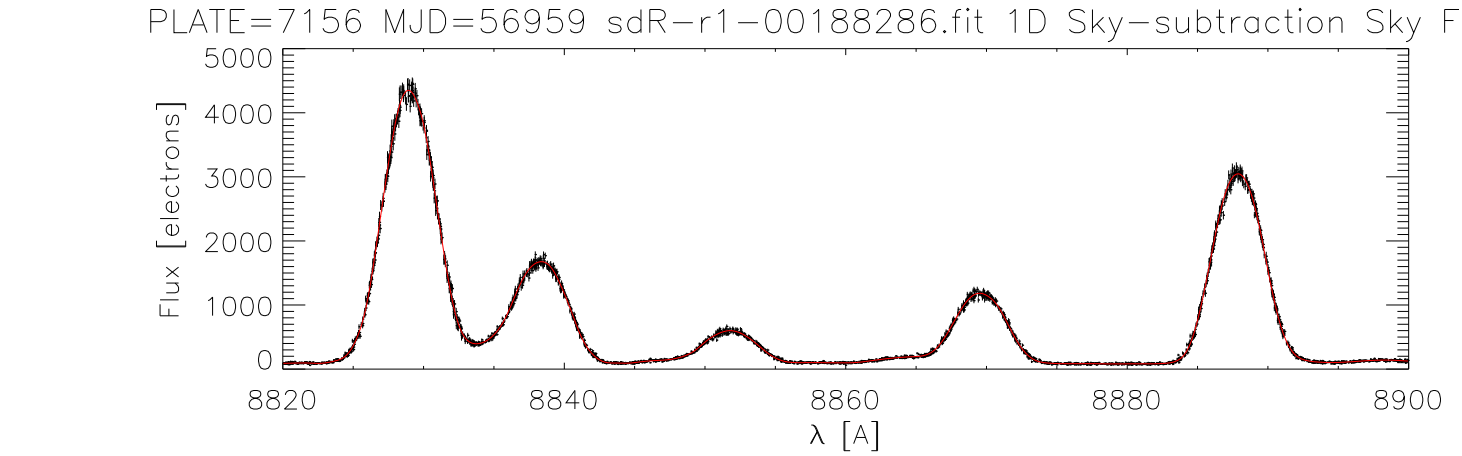

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −104.525
Max value = 98.055
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:25:23 2016

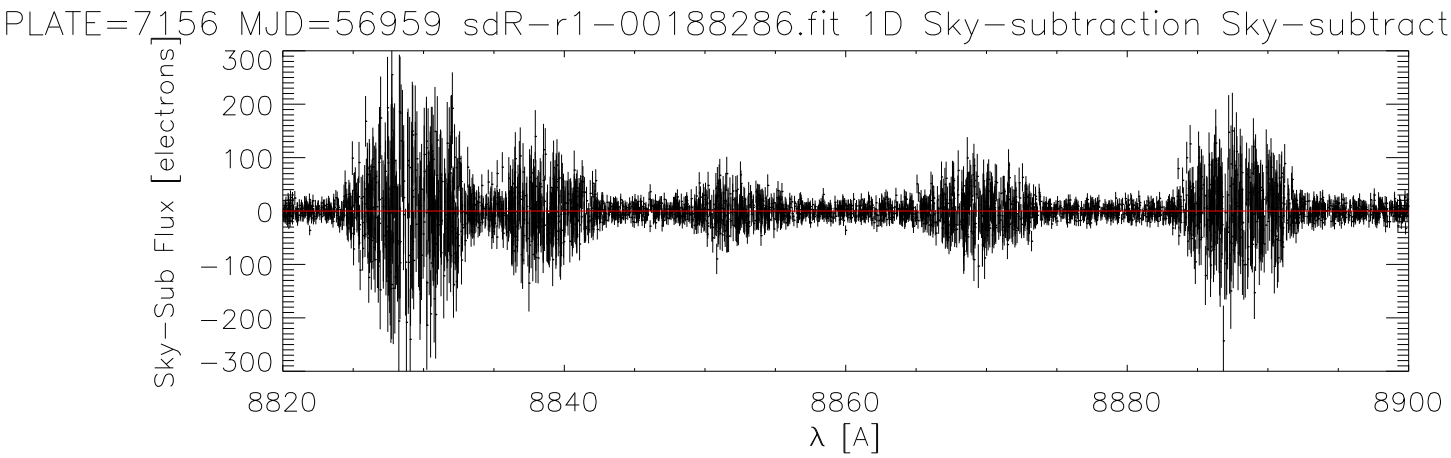

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r1−00188286.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r1-00188286.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

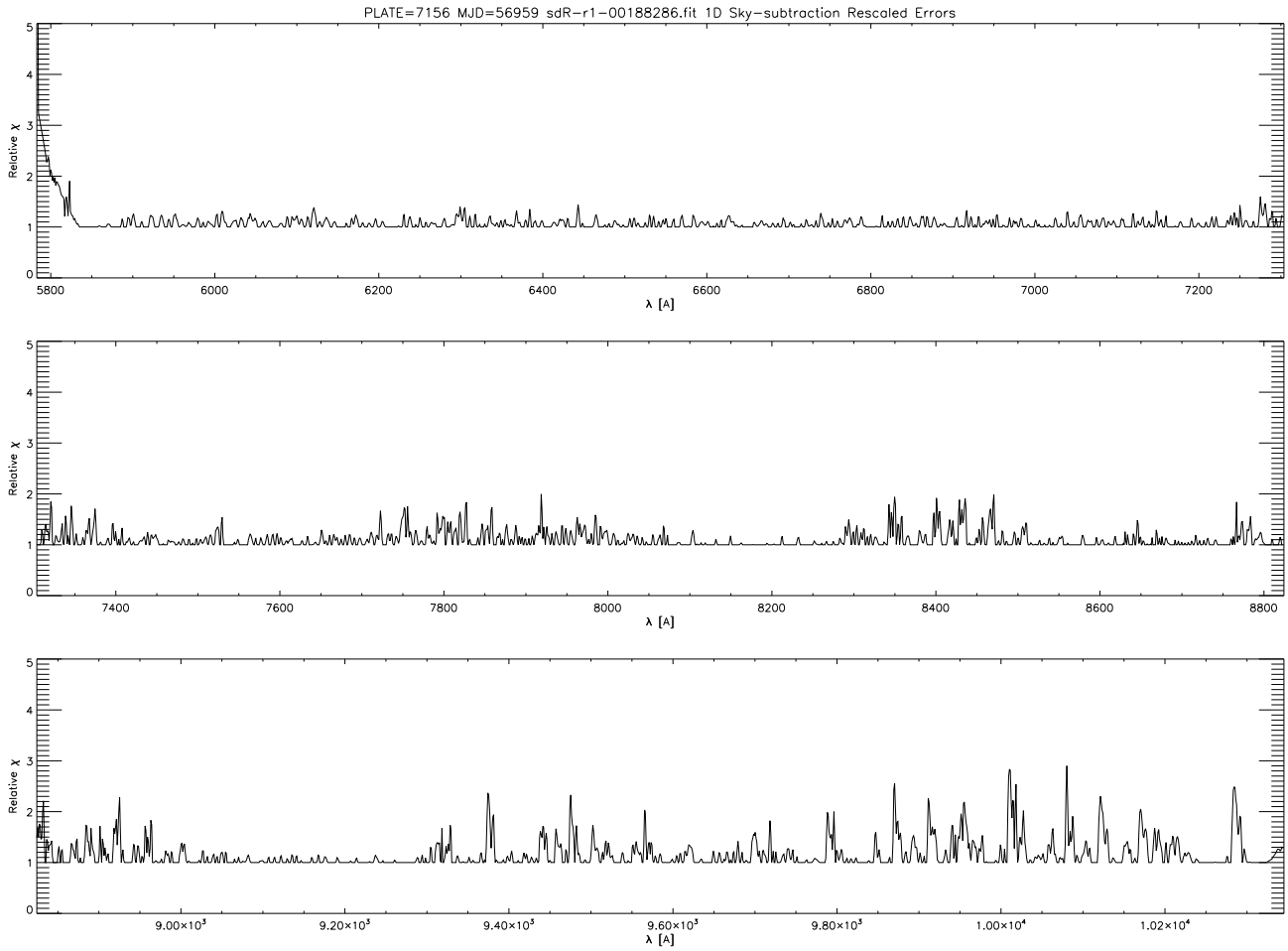

PLATE=7156 MJD=56959 Smooth superflat for sdR-r1-00188286.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

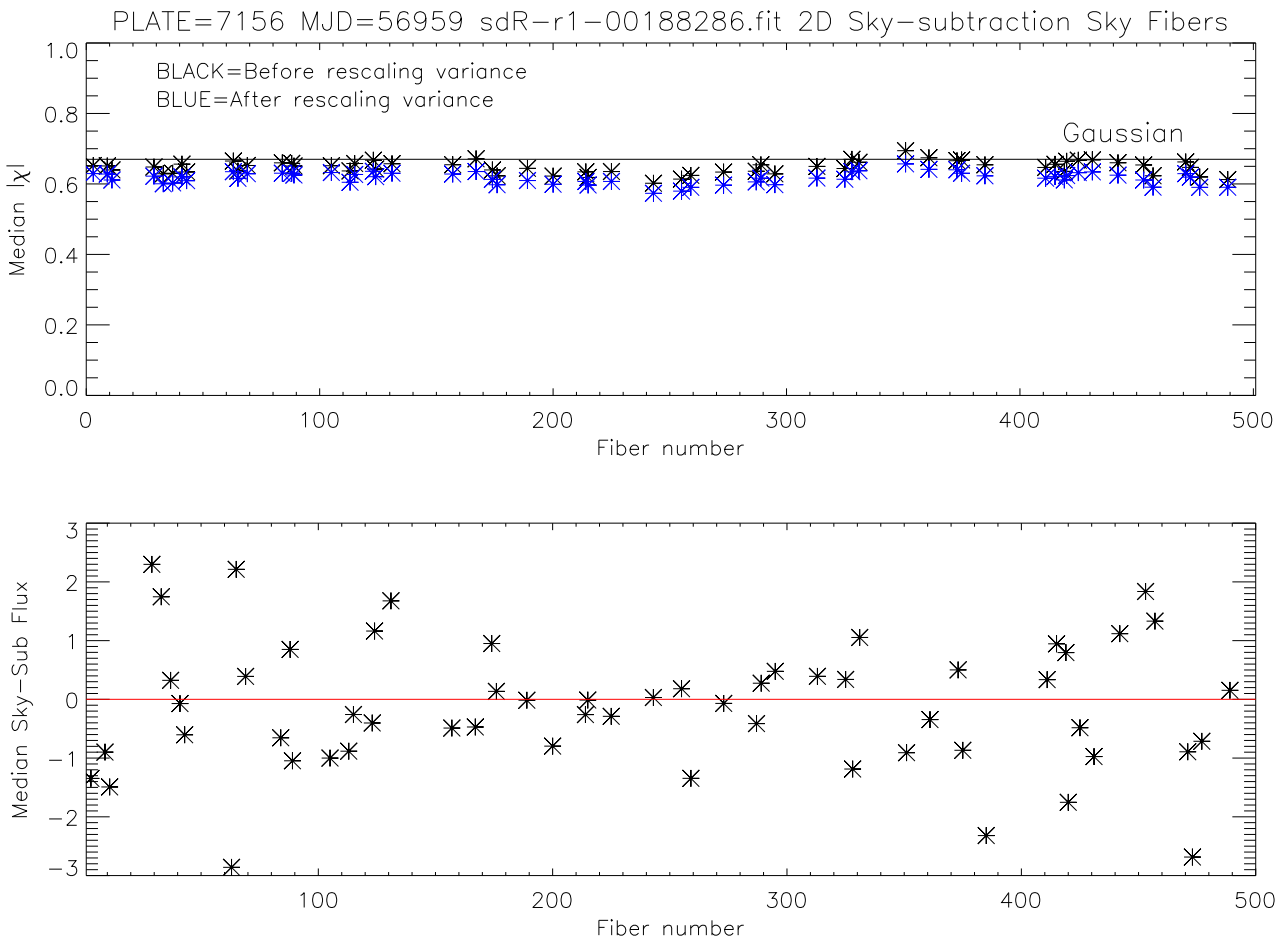

PLATE=7156 MJD=56959 sdR-r1-00188286.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

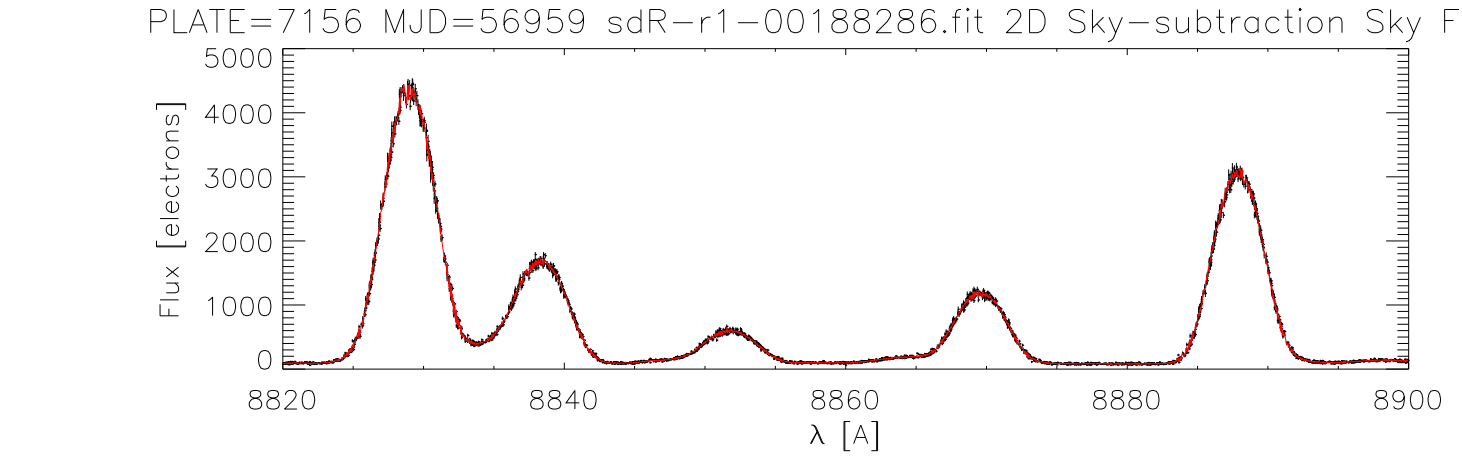

PLATE=7156 MJD=56959 sdR-r1-00188286.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

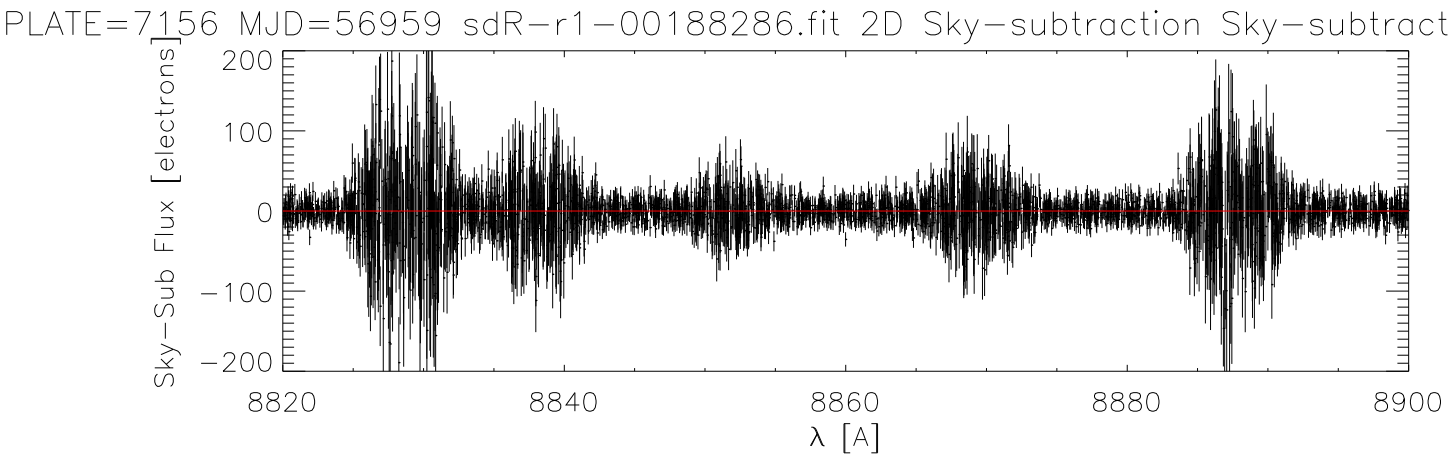

PLATE=7156 MJD=56959 sdR-r1-00188286.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 58

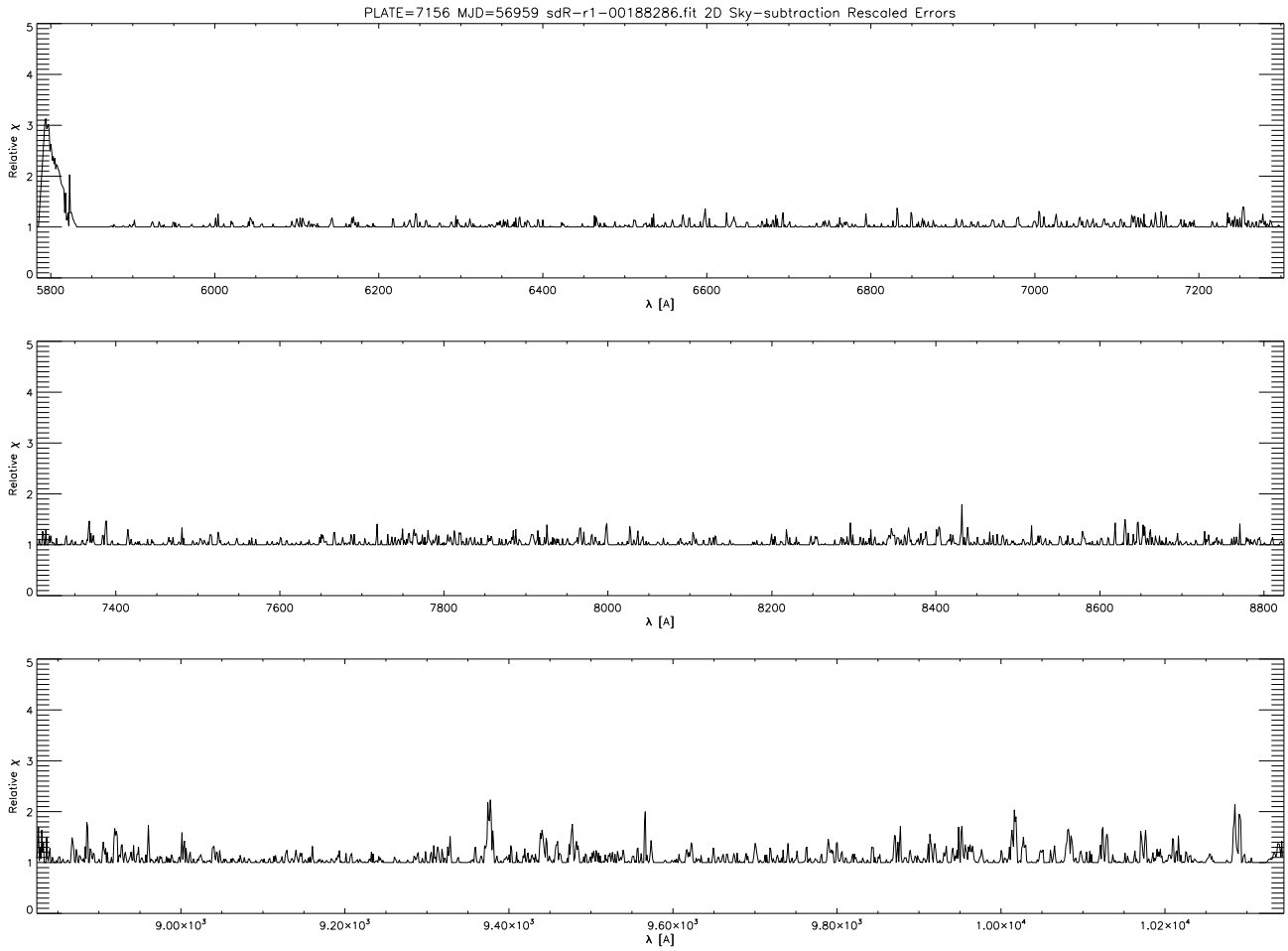


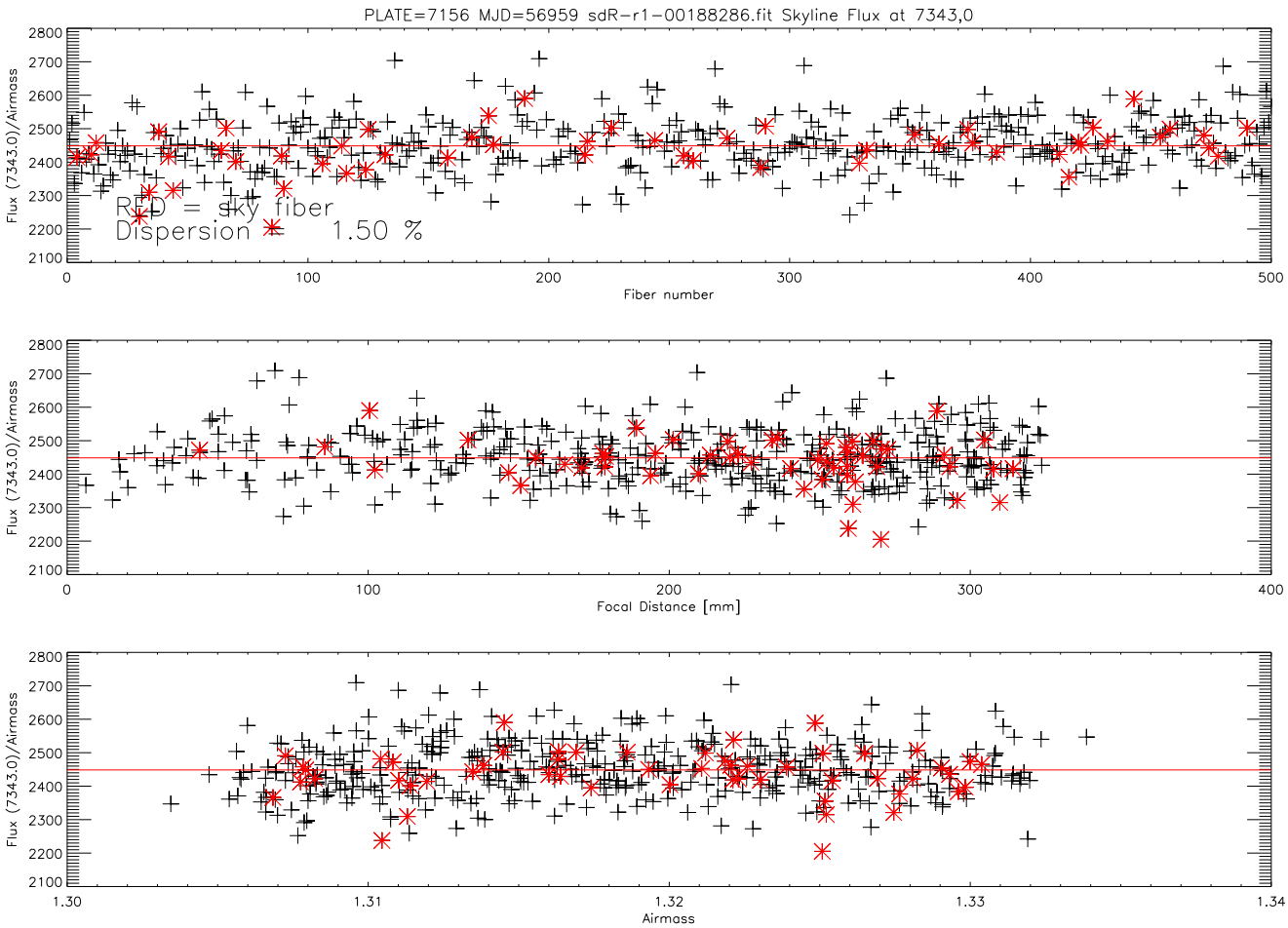

PLATE=7156 MJD=56959 sdR-r1-00188286.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

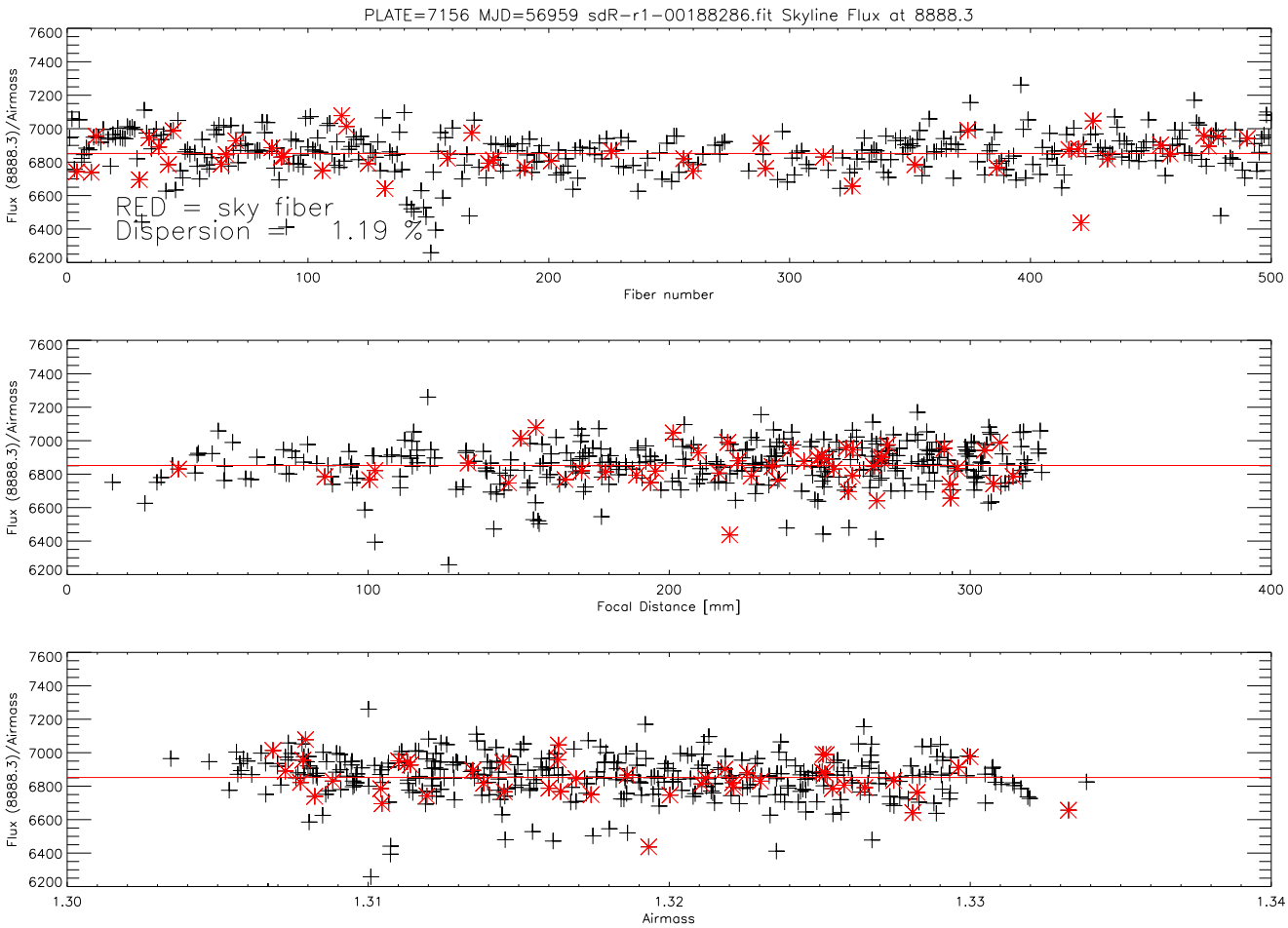

PLATE=7156 MJD=56959 sdR-r1-00188286.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

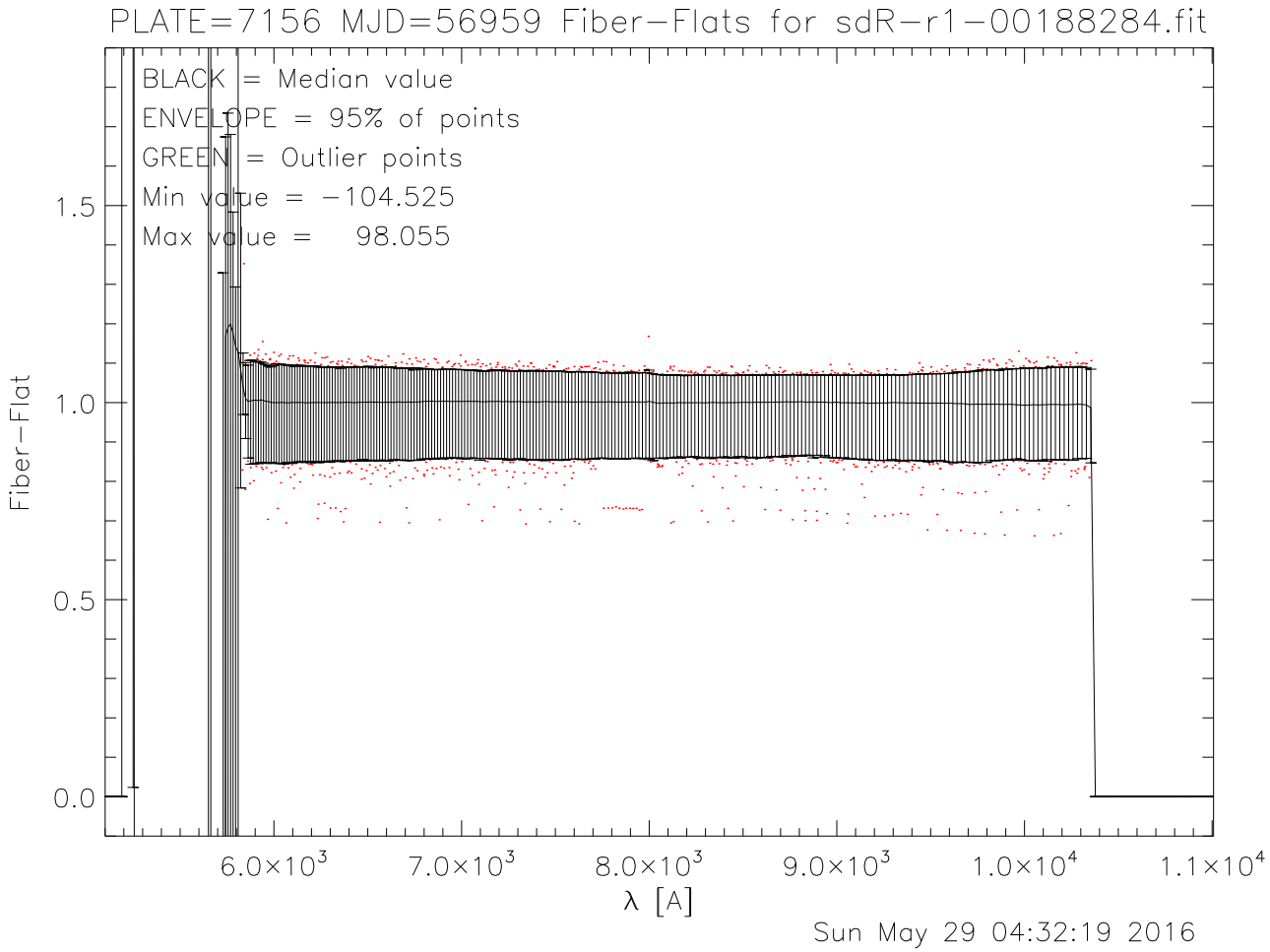

PLATE=7156 MJD=56959 sdR-r1-00188286.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

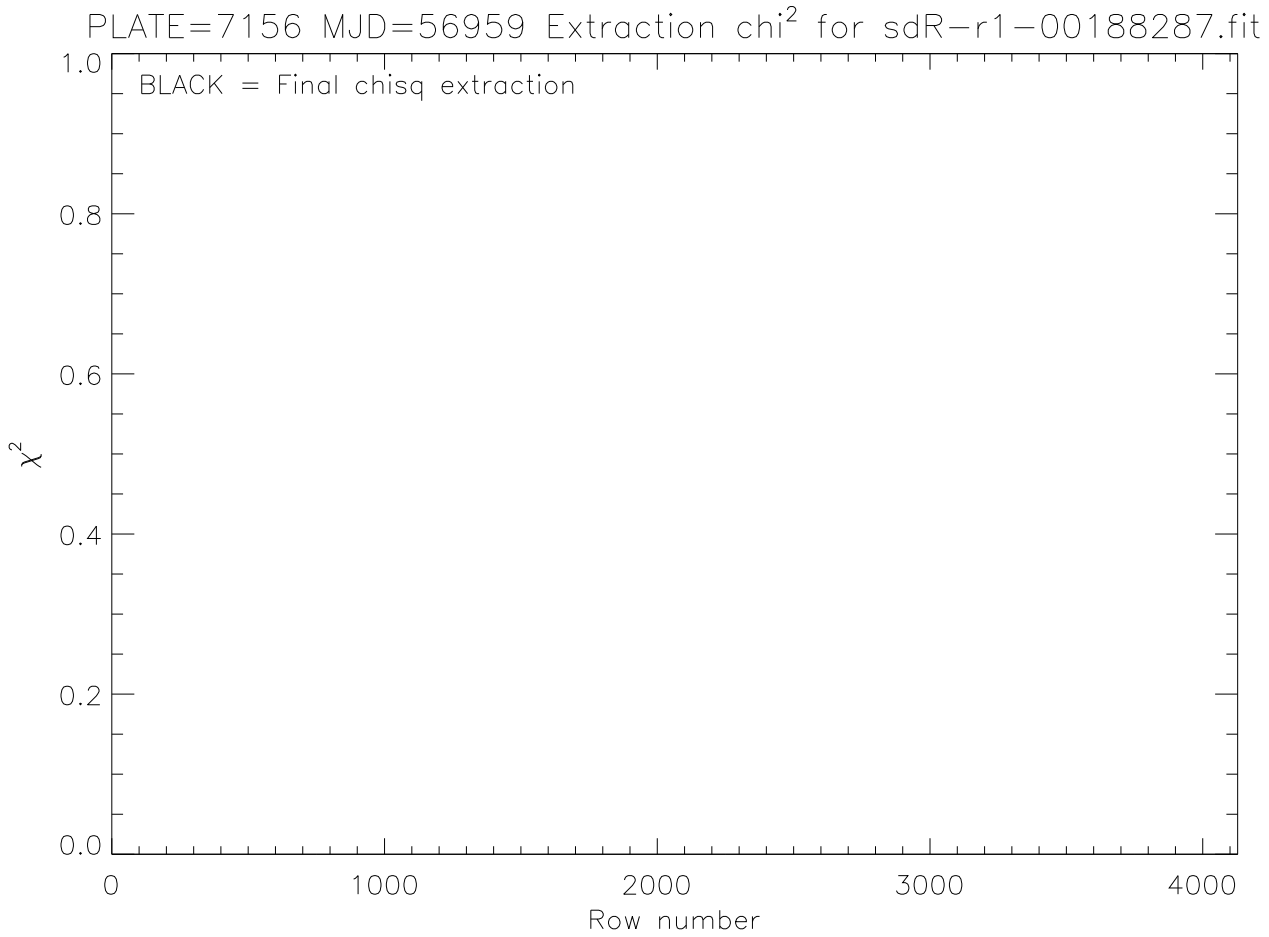
Number of sky fibers = 58

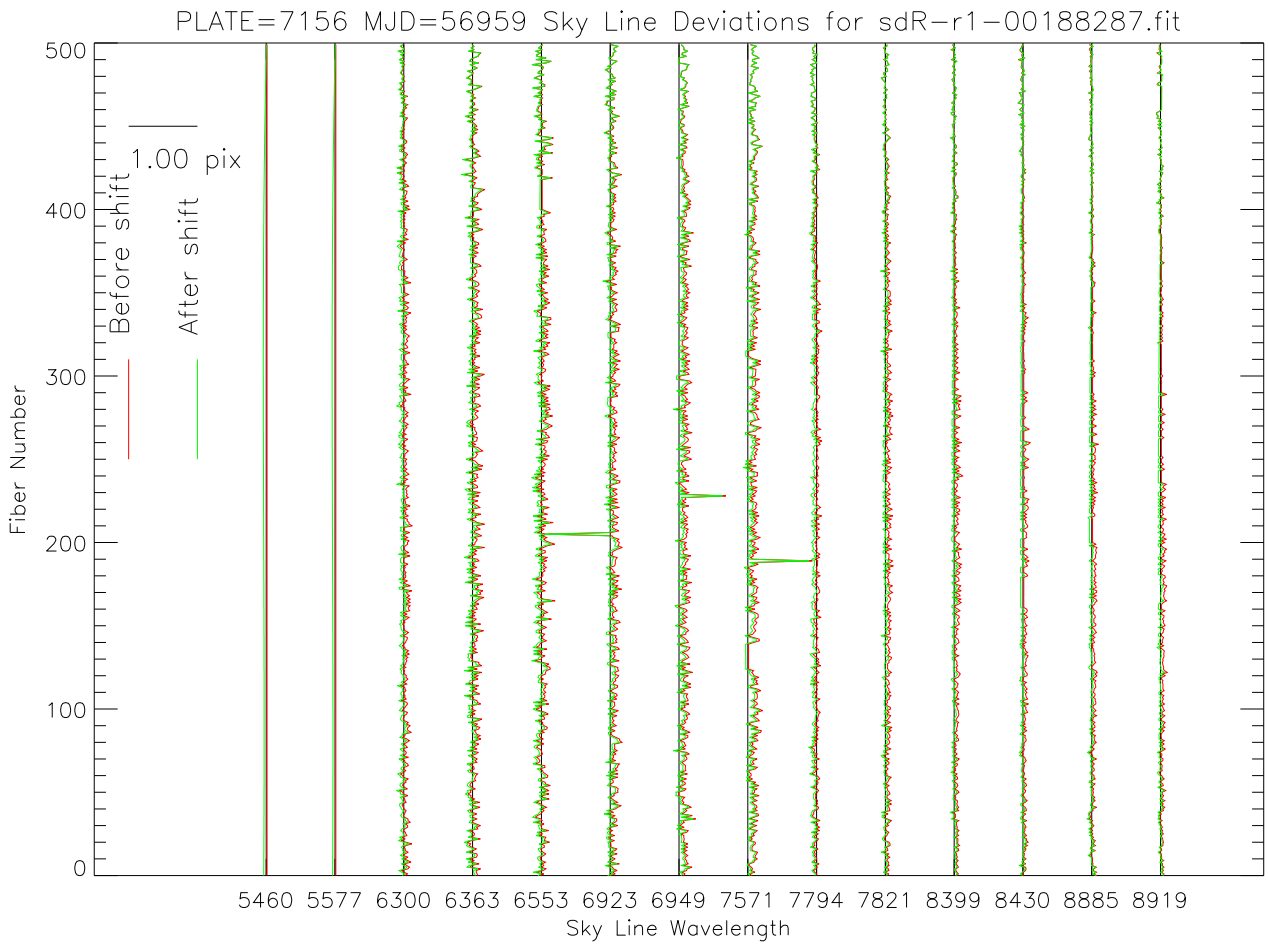


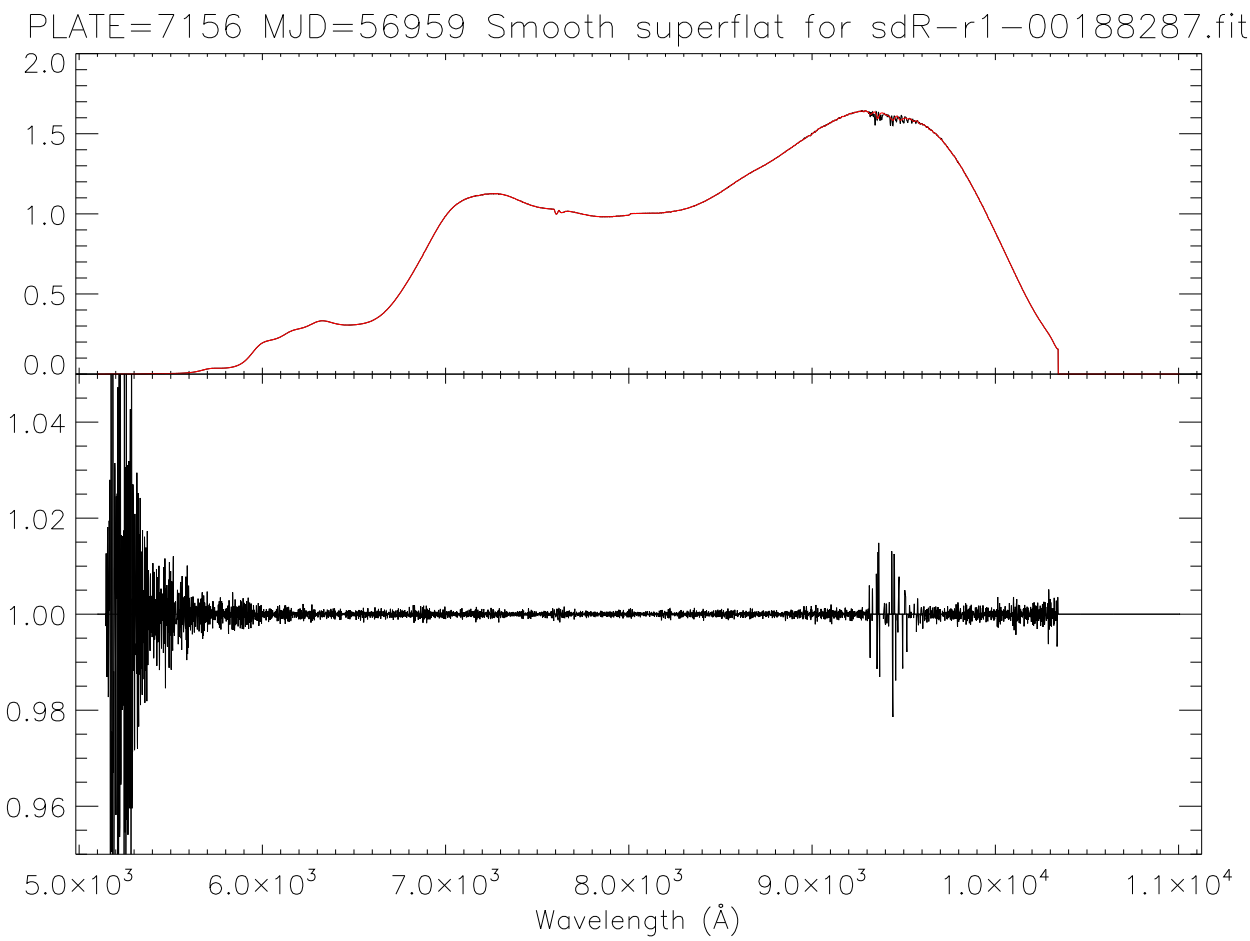

PLATE=7156 MJD=56959 sdR-r1-00188286.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.50 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

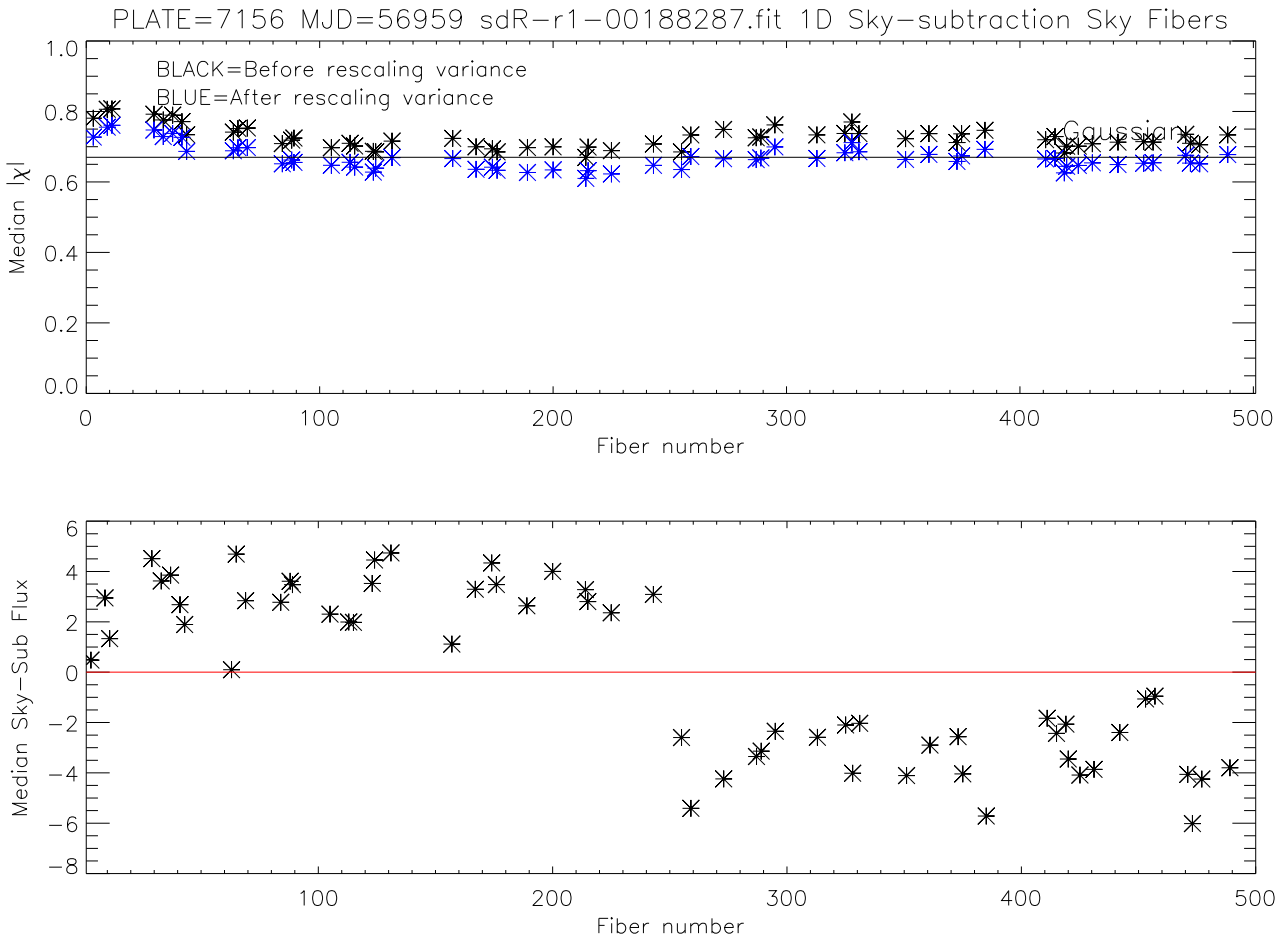

PLATE=7156 MJD=56959 sdR-r1-00188286.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.19 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

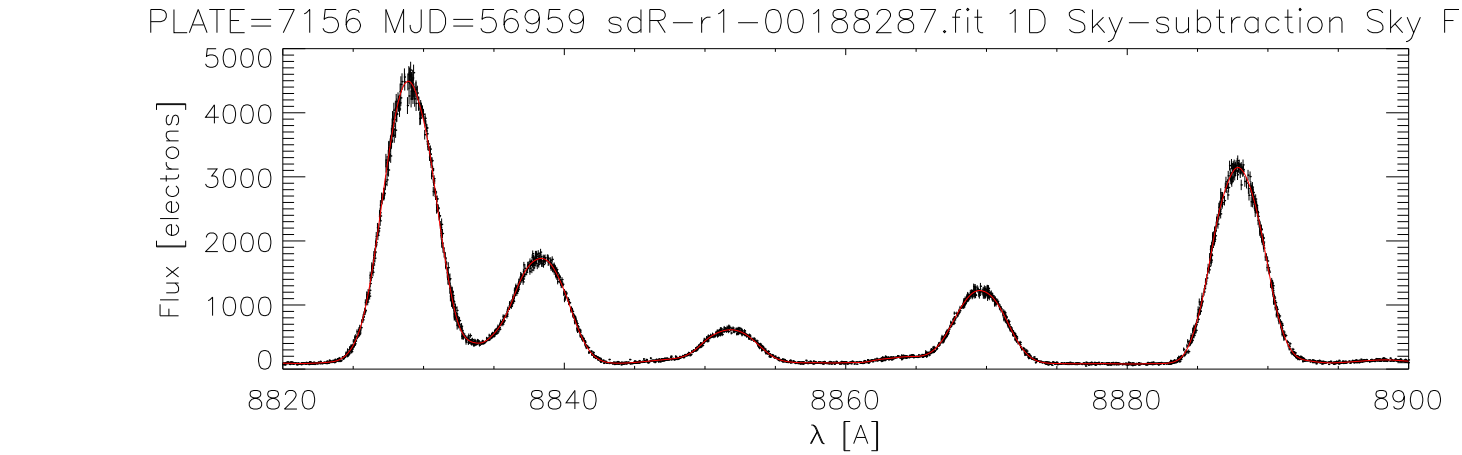

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −104.525
Max value = 98.055
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:32:19 2016

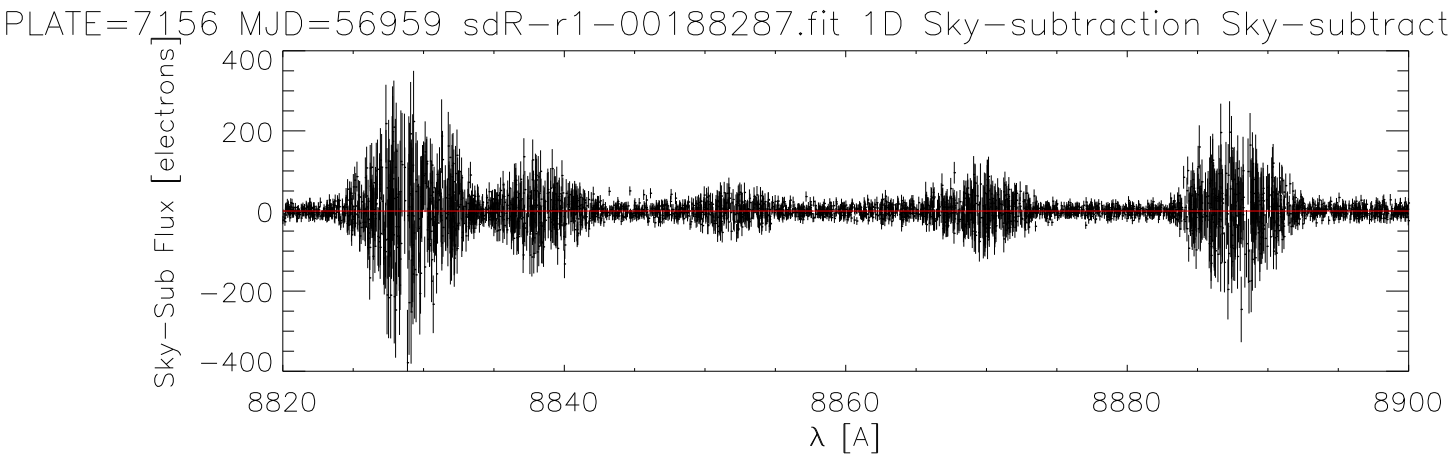

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r1−00188287.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r1-00188287.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

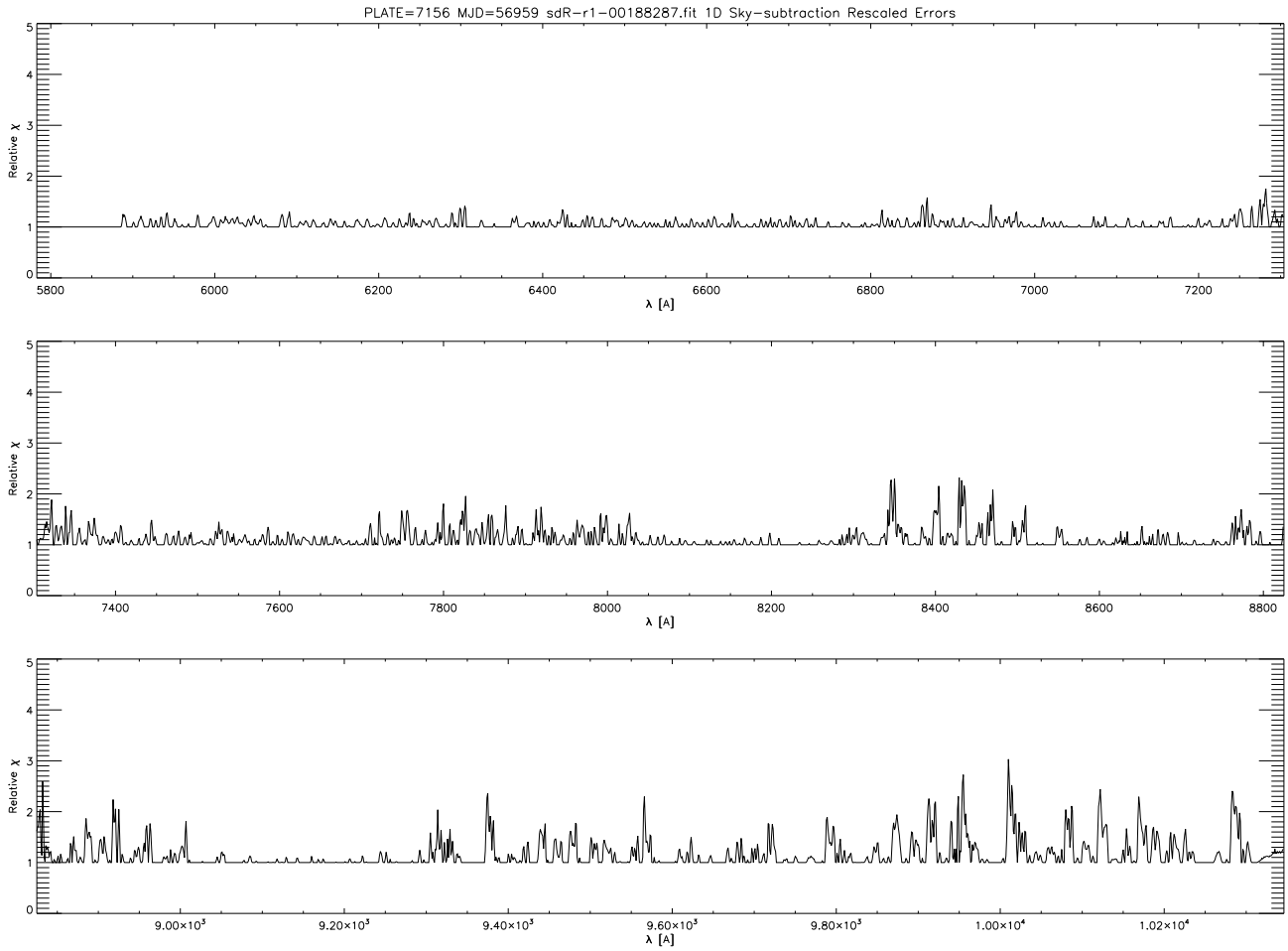

PLATE=7156 MJD=56959 Smooth superflat for sdR-r1-00188287.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

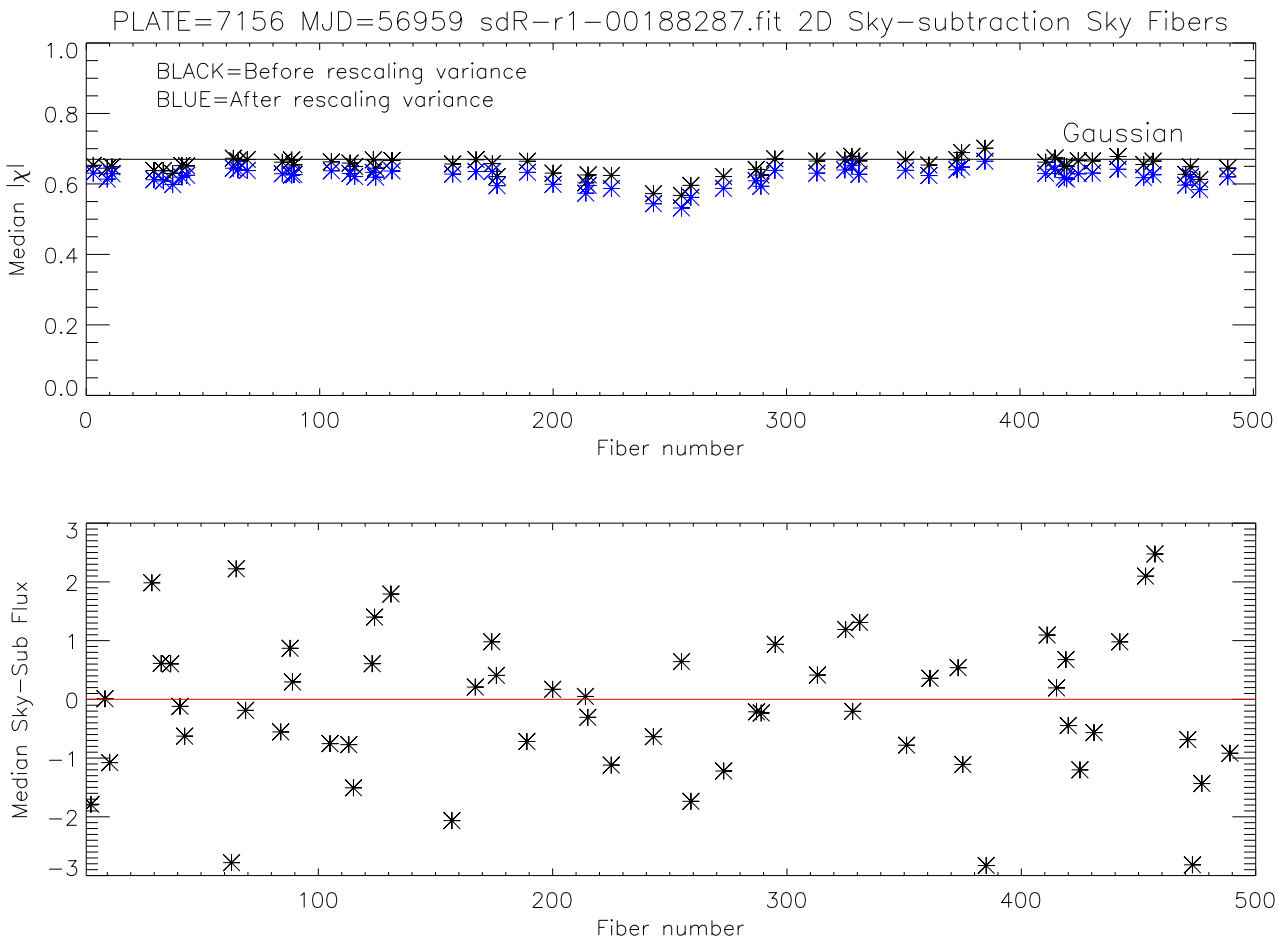

PLATE=7156 MJD=56959 sdR-r1-00188287.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

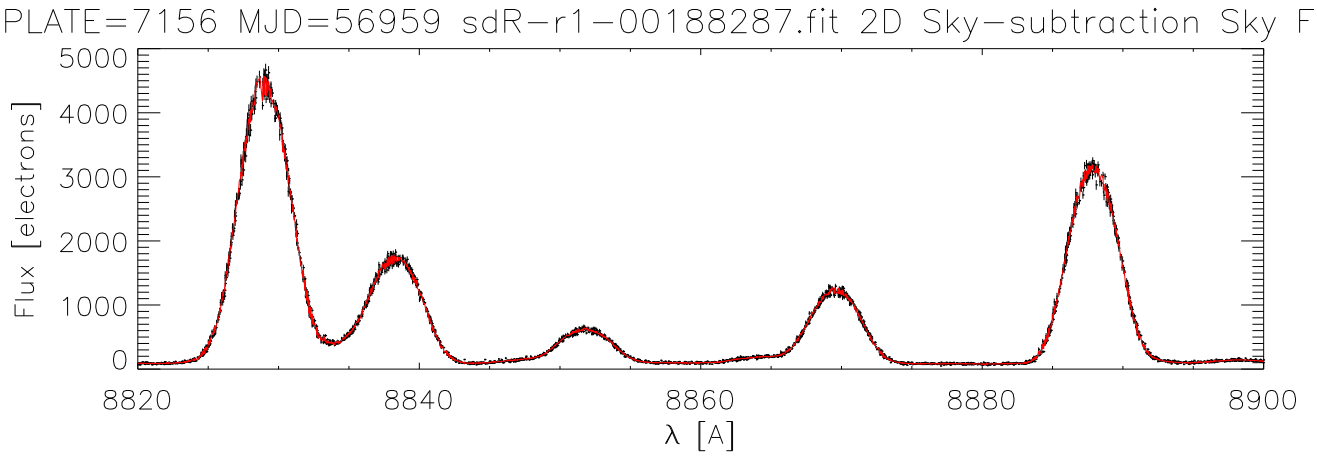

PLATE=7156 MJD=56959 sdR-r1-00188287.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

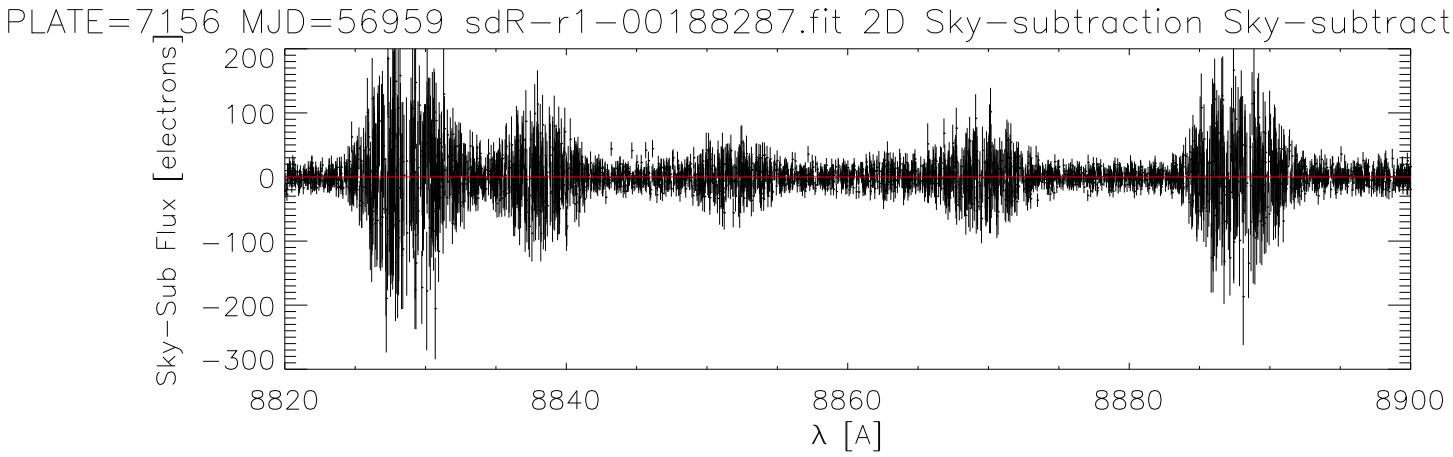

PLATE=7156 MJD=56959 sdR-r1-00188287.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 58

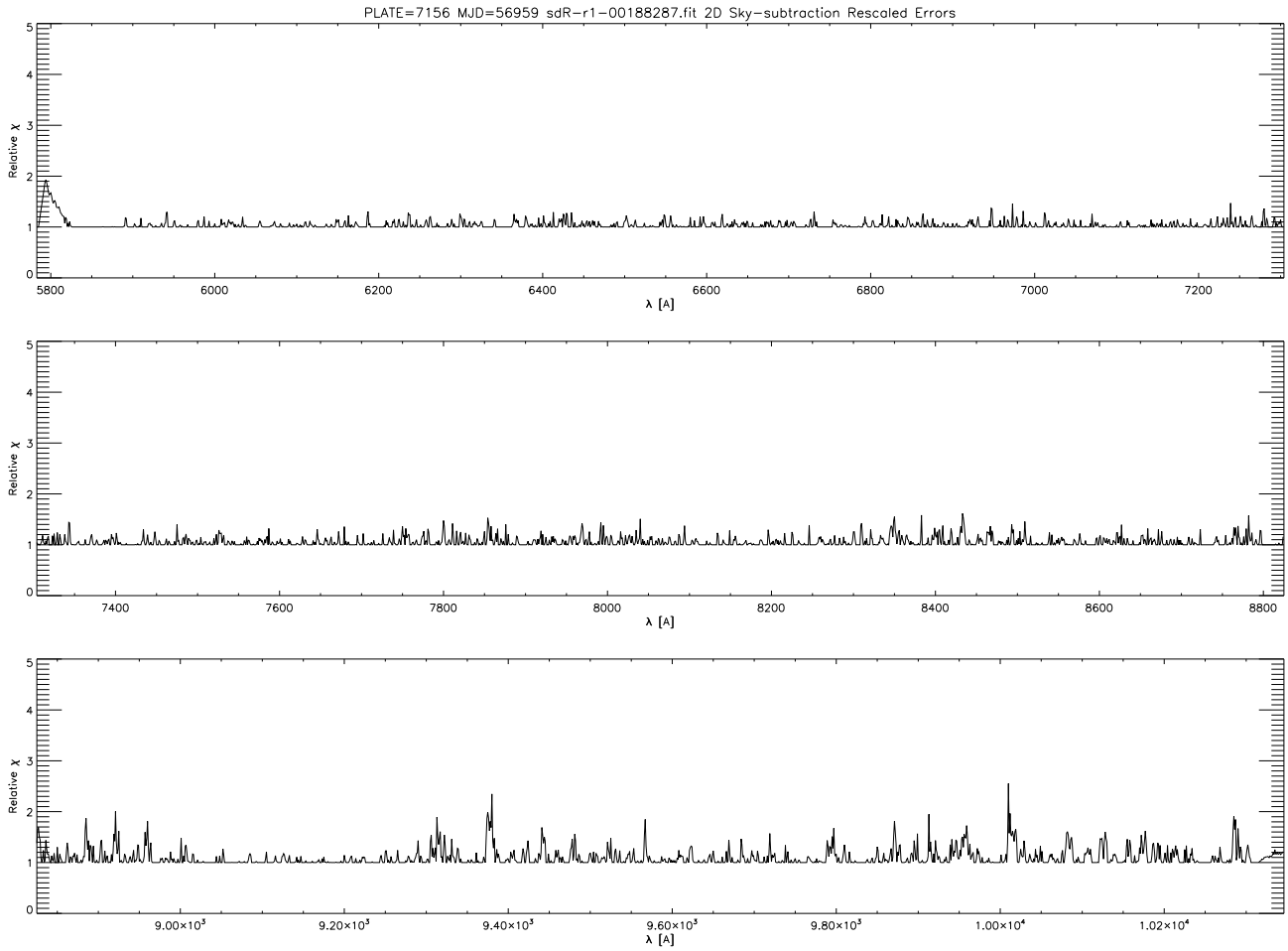


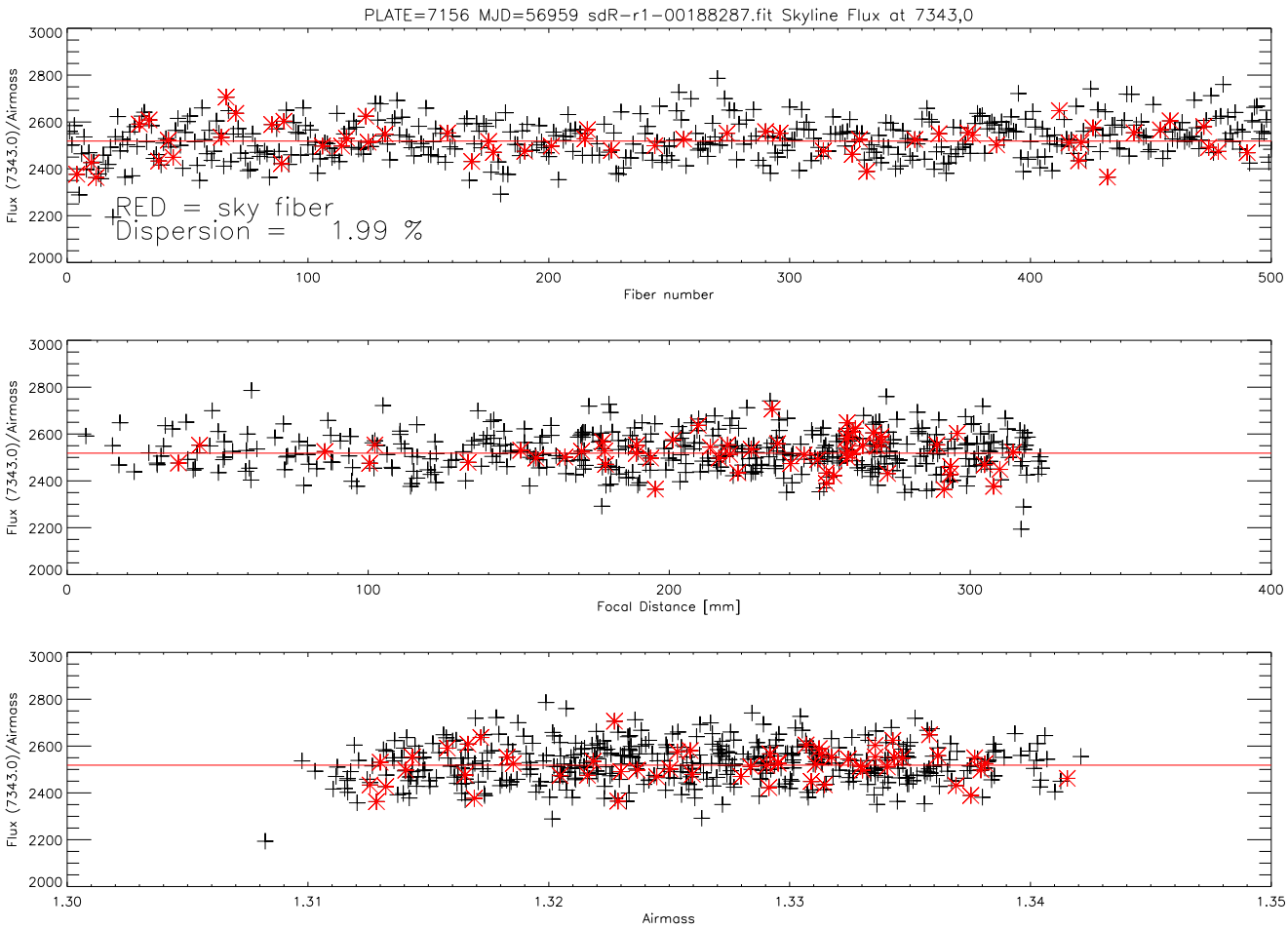

PLATE=7156 MJD=56959 sdR-r1-00188287.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

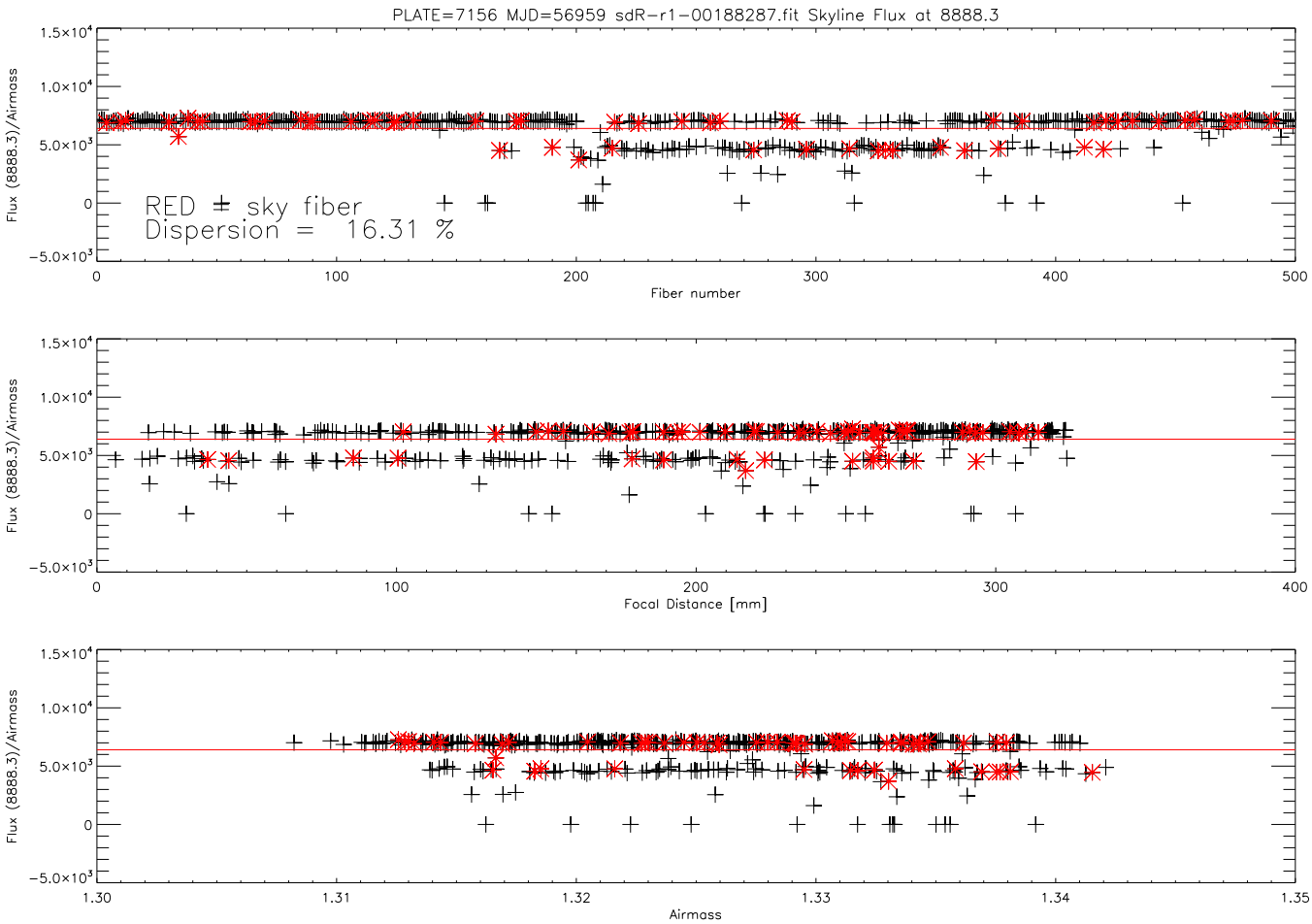

PLATE=7156 MJD=56959 sdR-r1-00188287.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

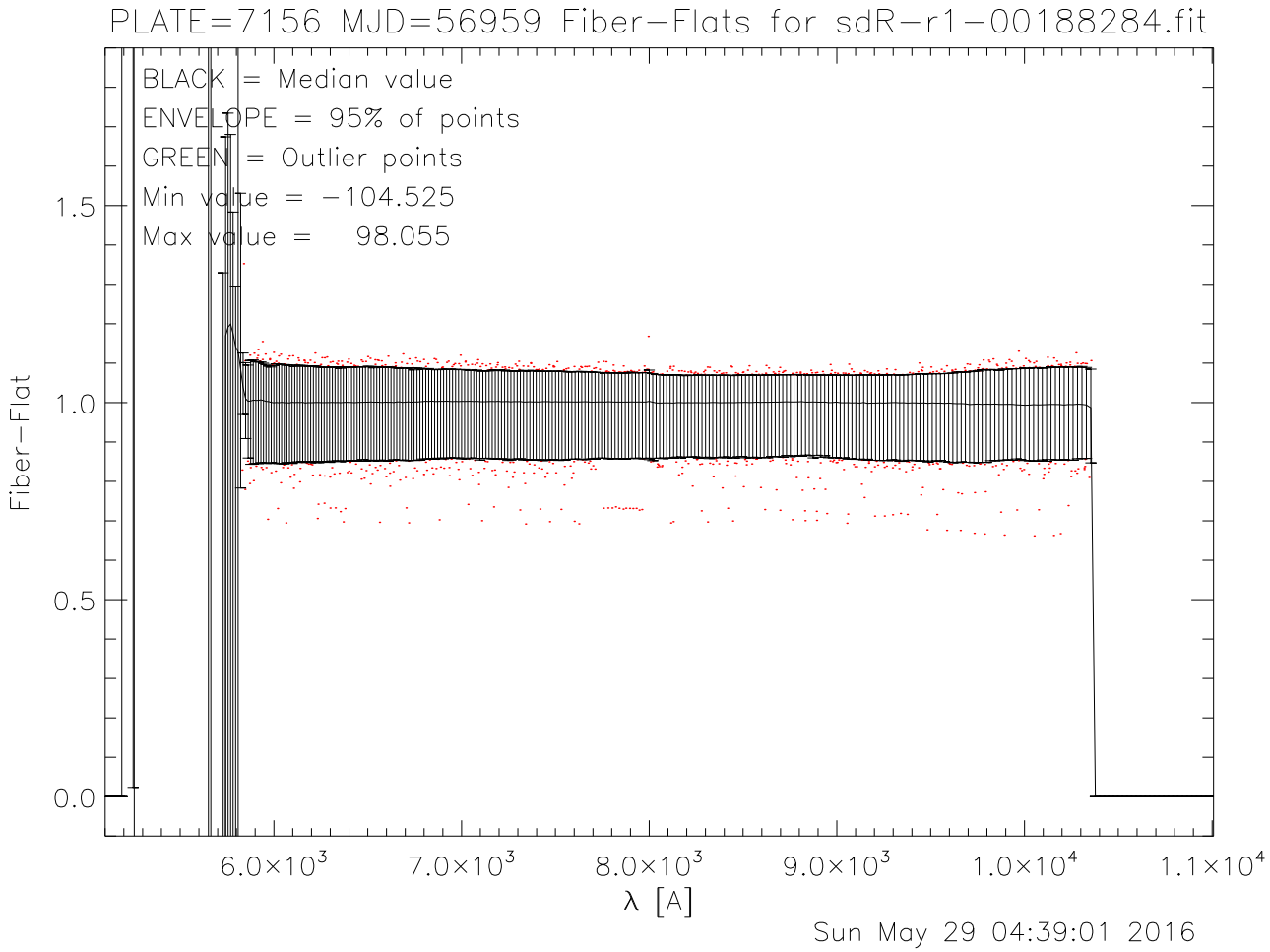

PLATE=7156 MJD=56959 sdR-r1-00188287.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

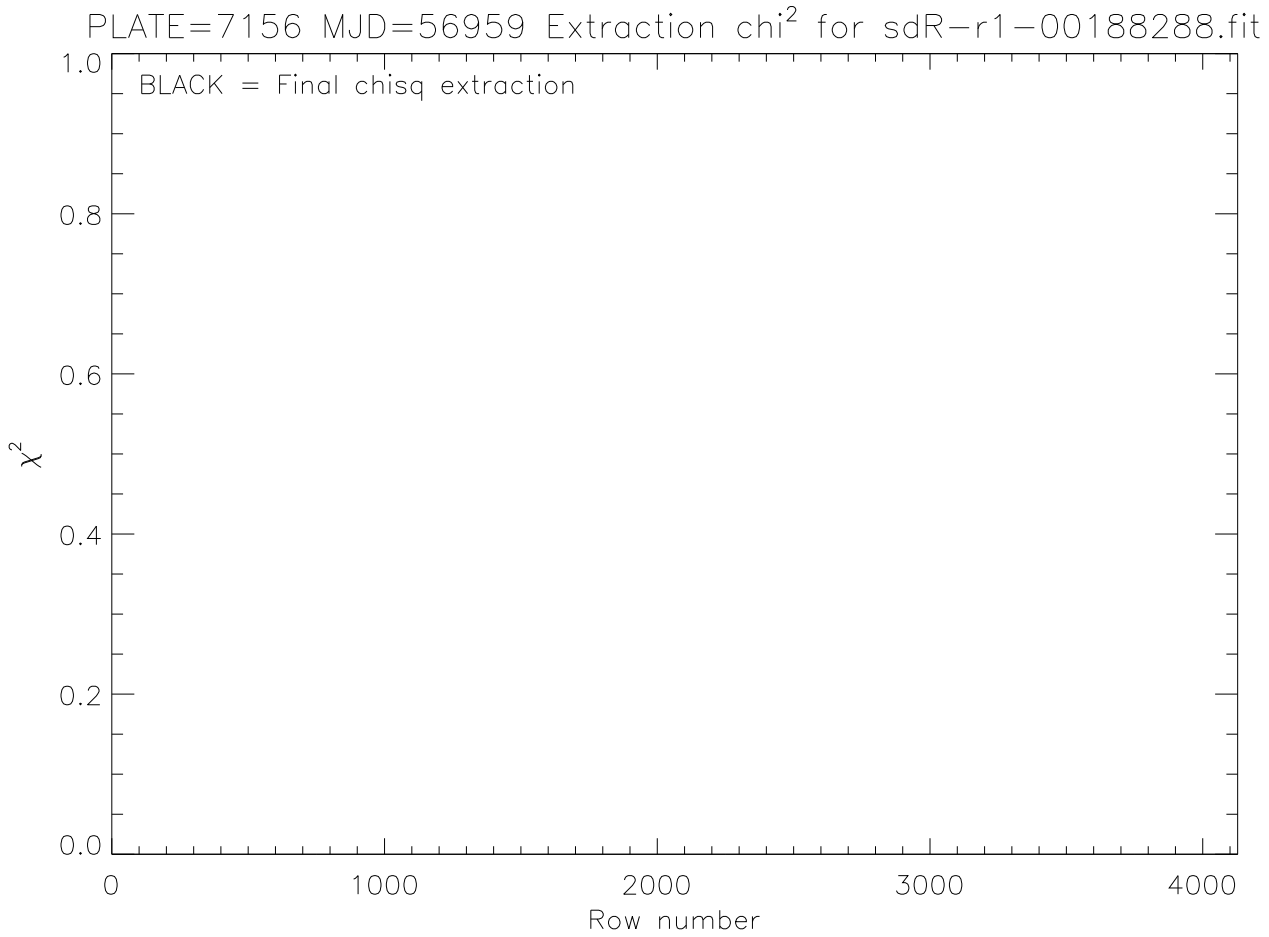
Number of sky fibers = 58

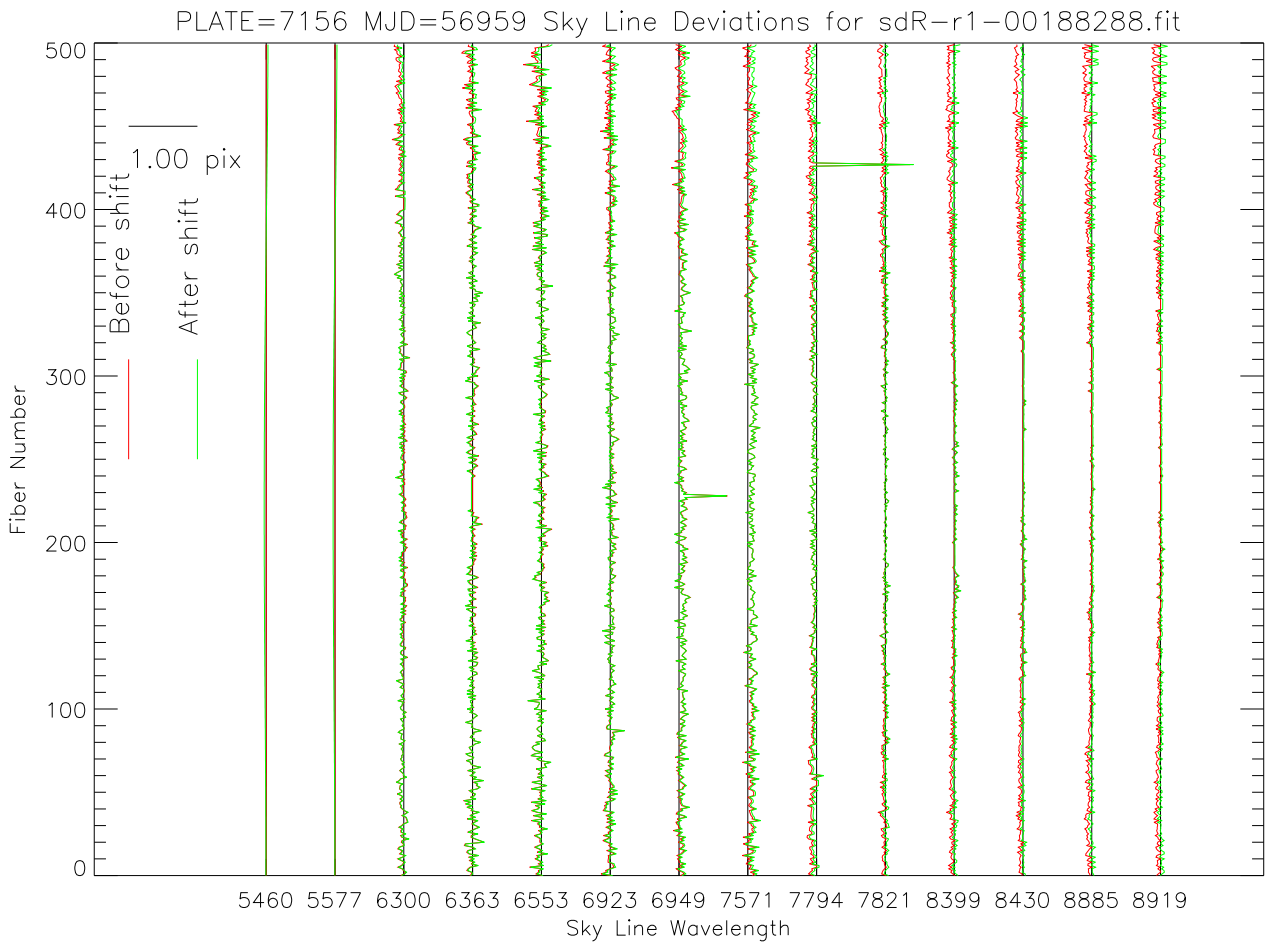


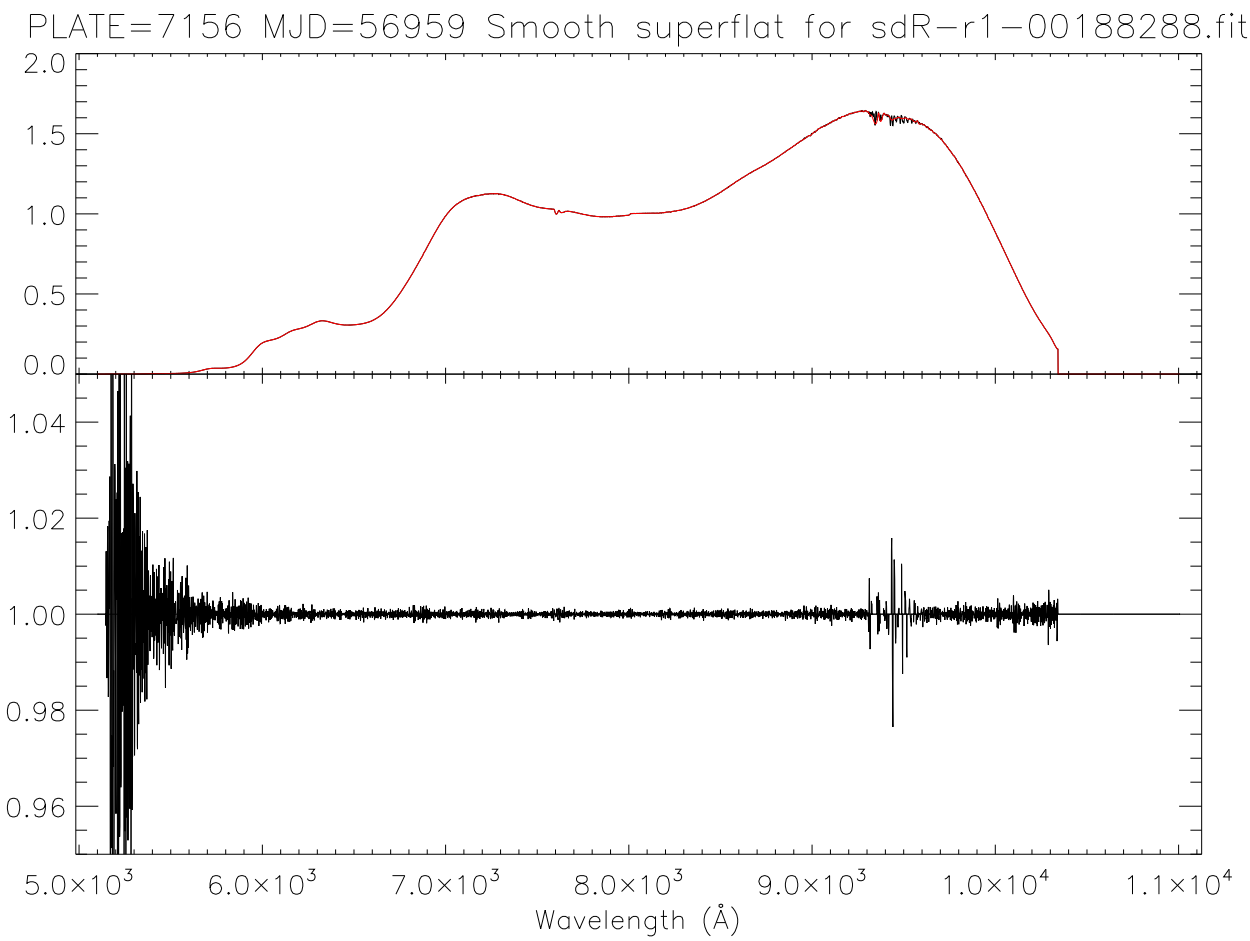

PLATE=7156 MJD=56959 sdR-r1-00188287.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.99 %
Fiber number
Focal Distance [mm]
Airmass

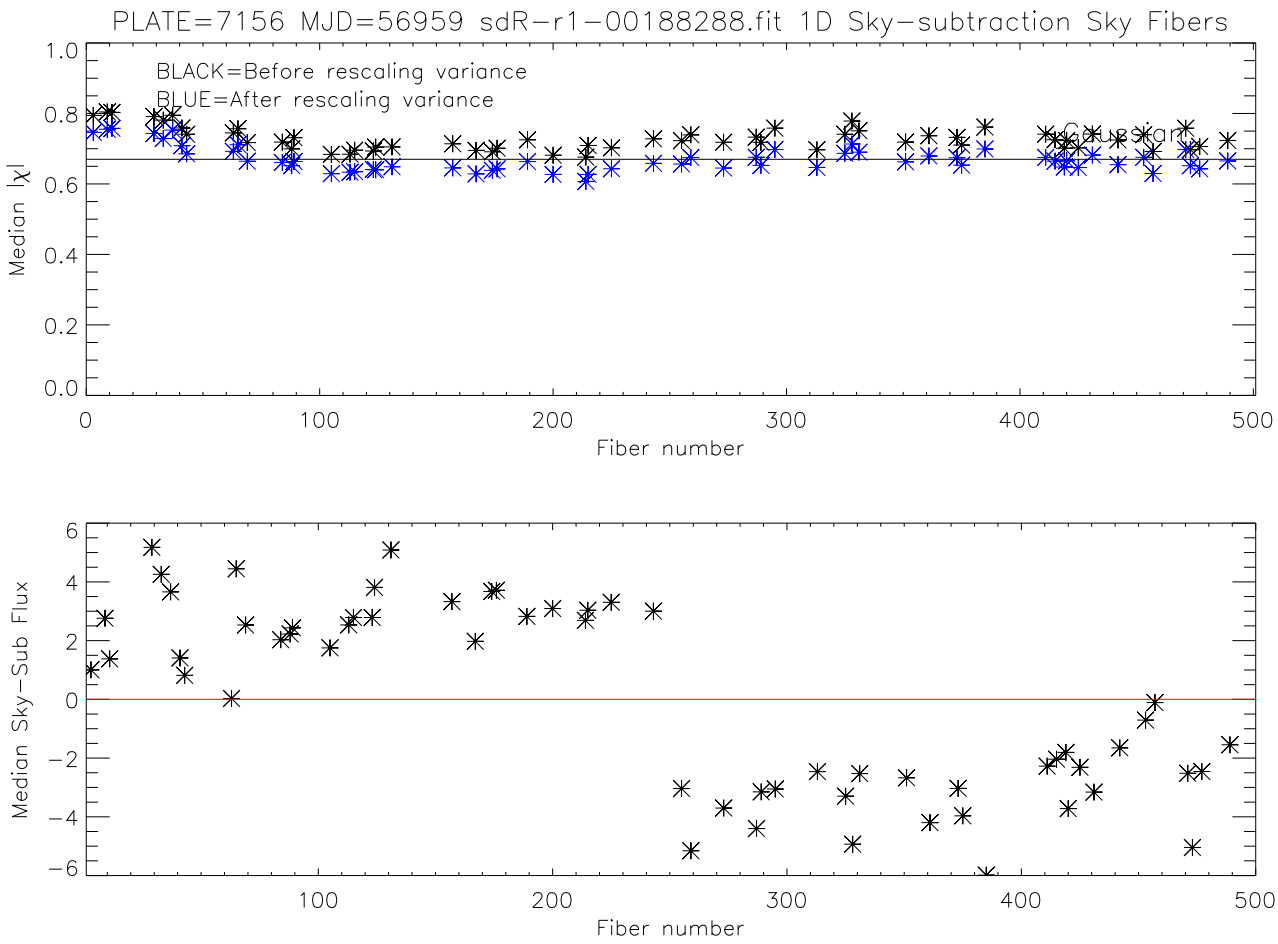

PLATE=7156 MJD=56959 sdR-r1-00188287.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
RED = sky fiber
Dispersion = 16.31 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
1.30
1.31
1.32
1.33
1.34
1.35
Airmass

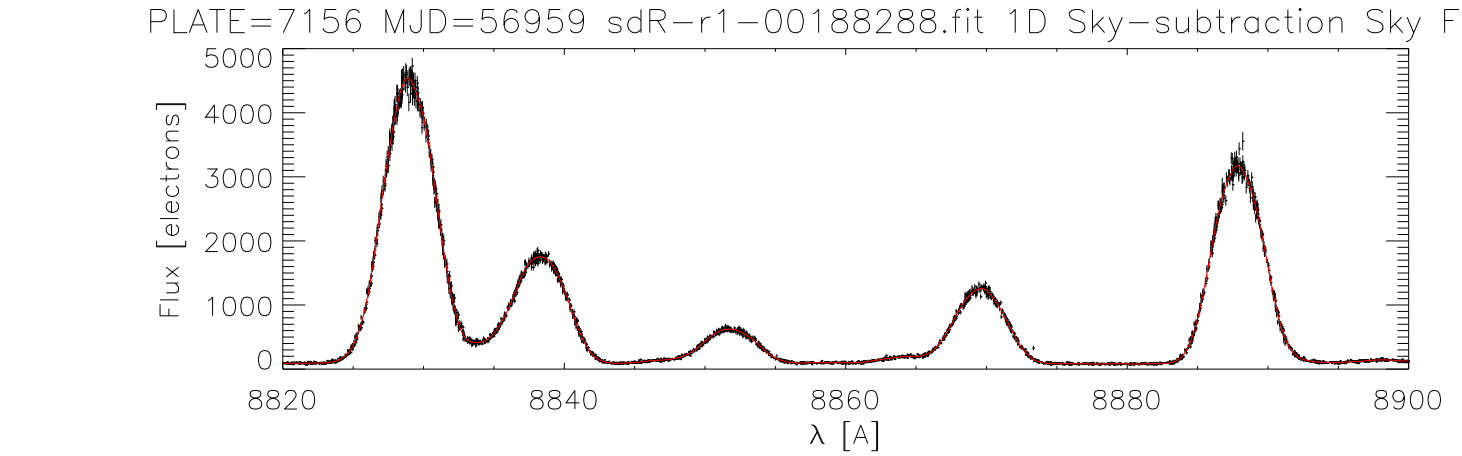

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −104.525
Max value = 98.055
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:39:01 2016

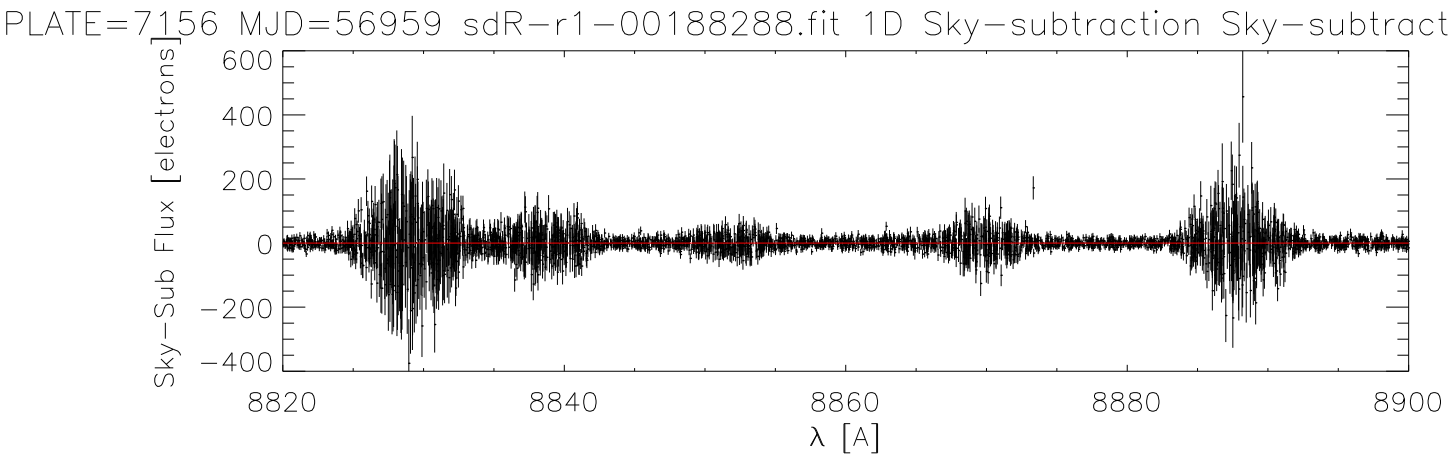

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r1−00188288.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r1-00188288.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

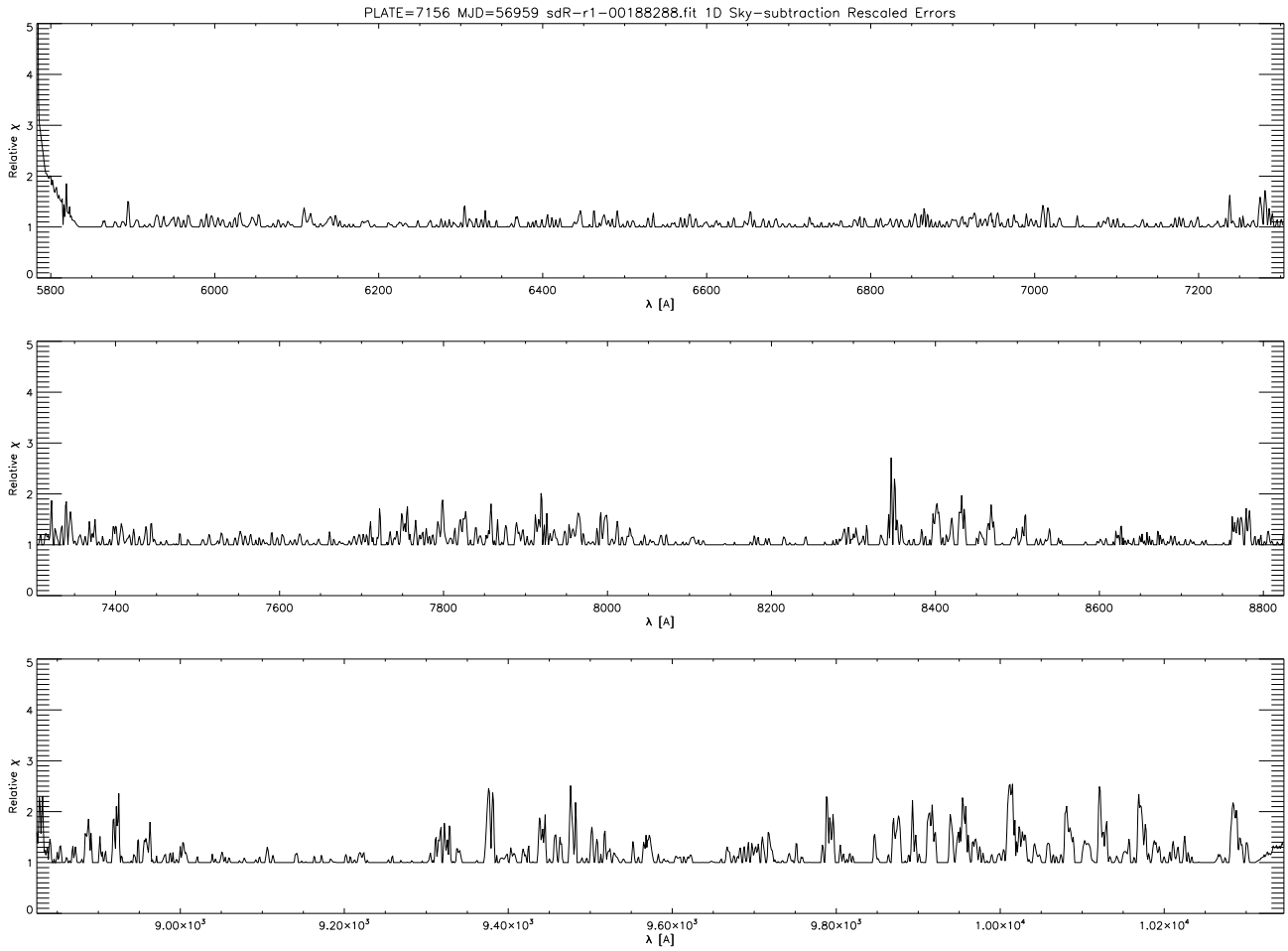

PLATE=7156 MJD=56959 Smooth superflat for sdR-r1-00188288.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

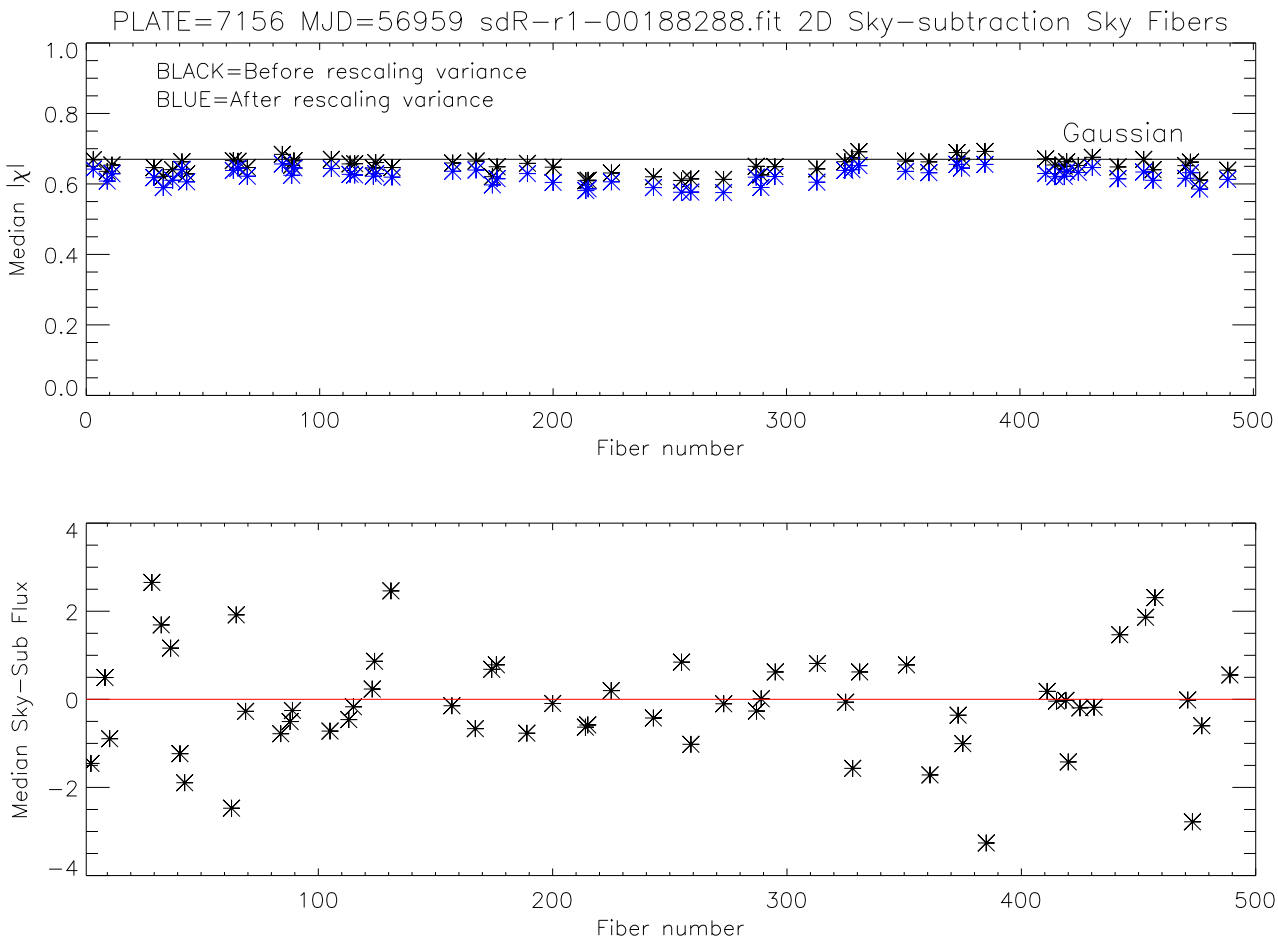

PLATE=7156 MJD=56959 sdR-r1-00188288.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

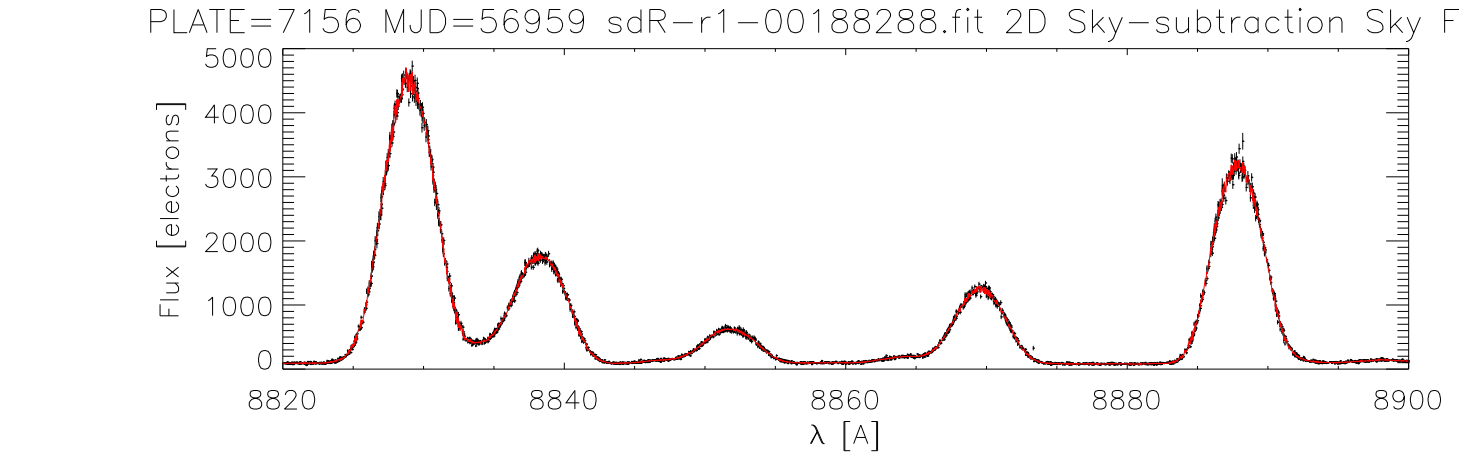

PLATE=7156 MJD=56959 sdR-r1-00188288.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

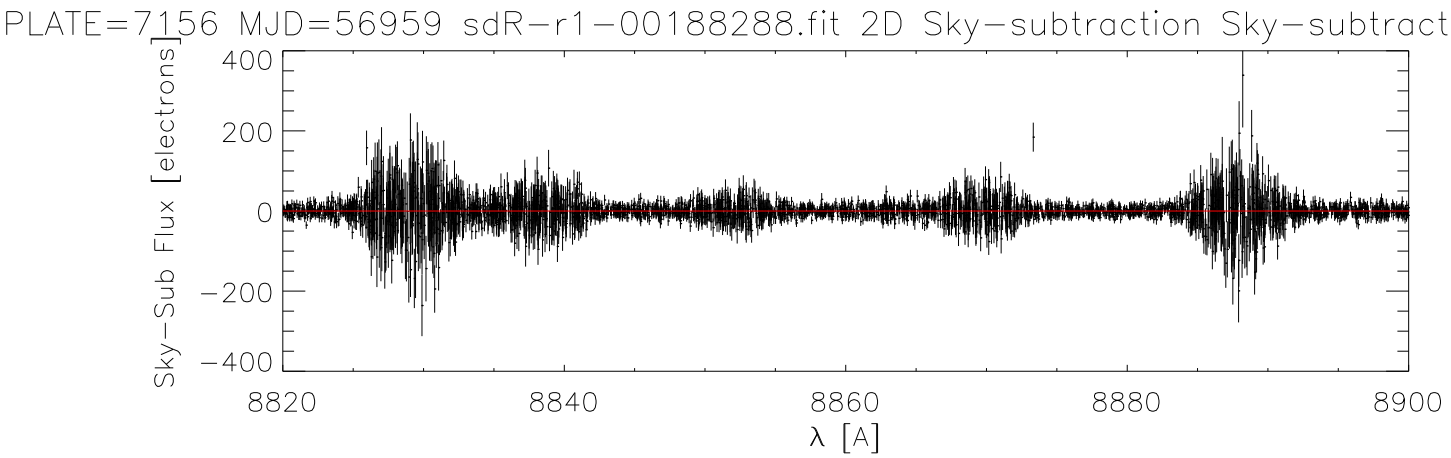

PLATE=7156 MJD=56959 sdR-r1-00188288.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 58

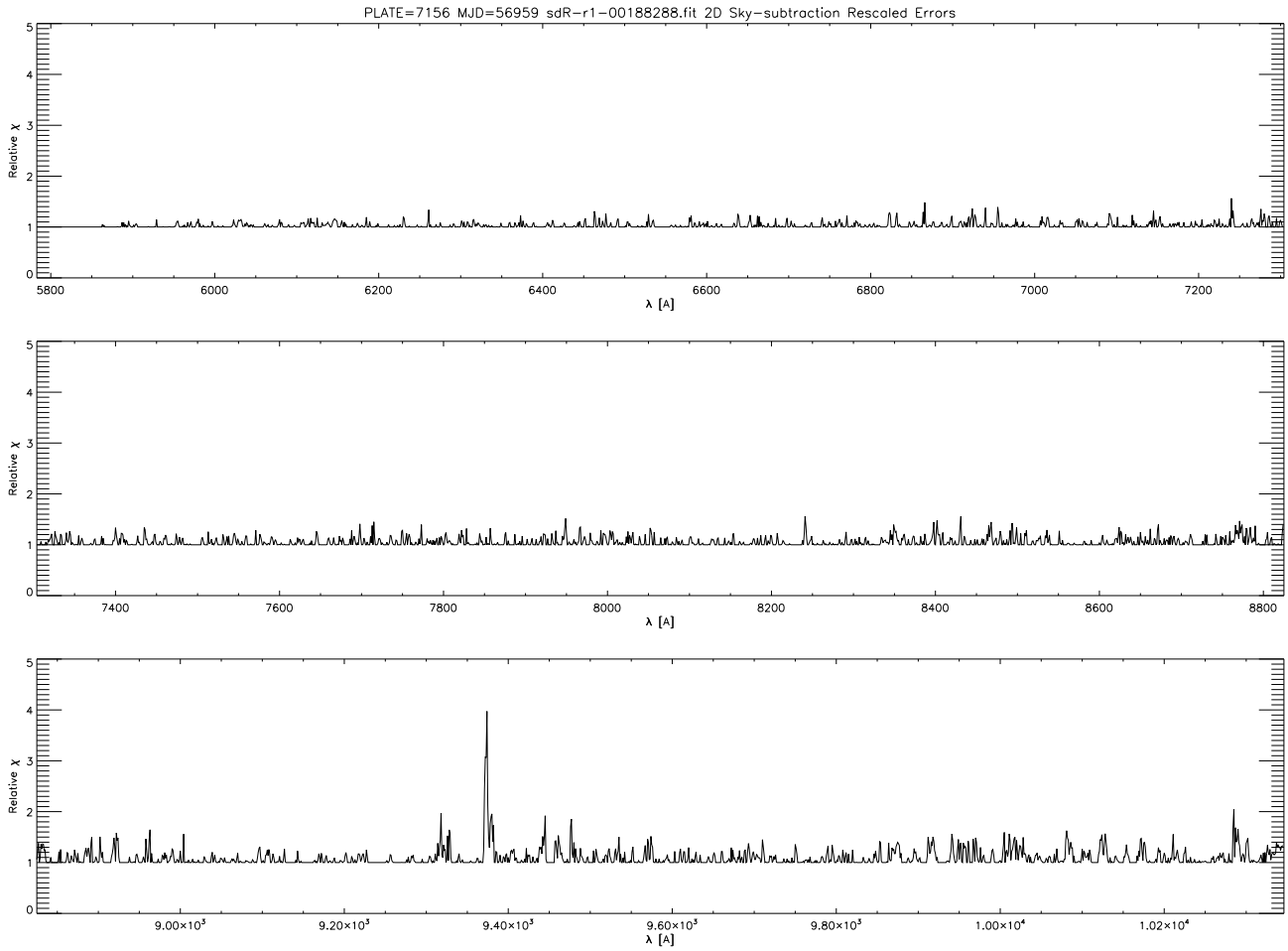


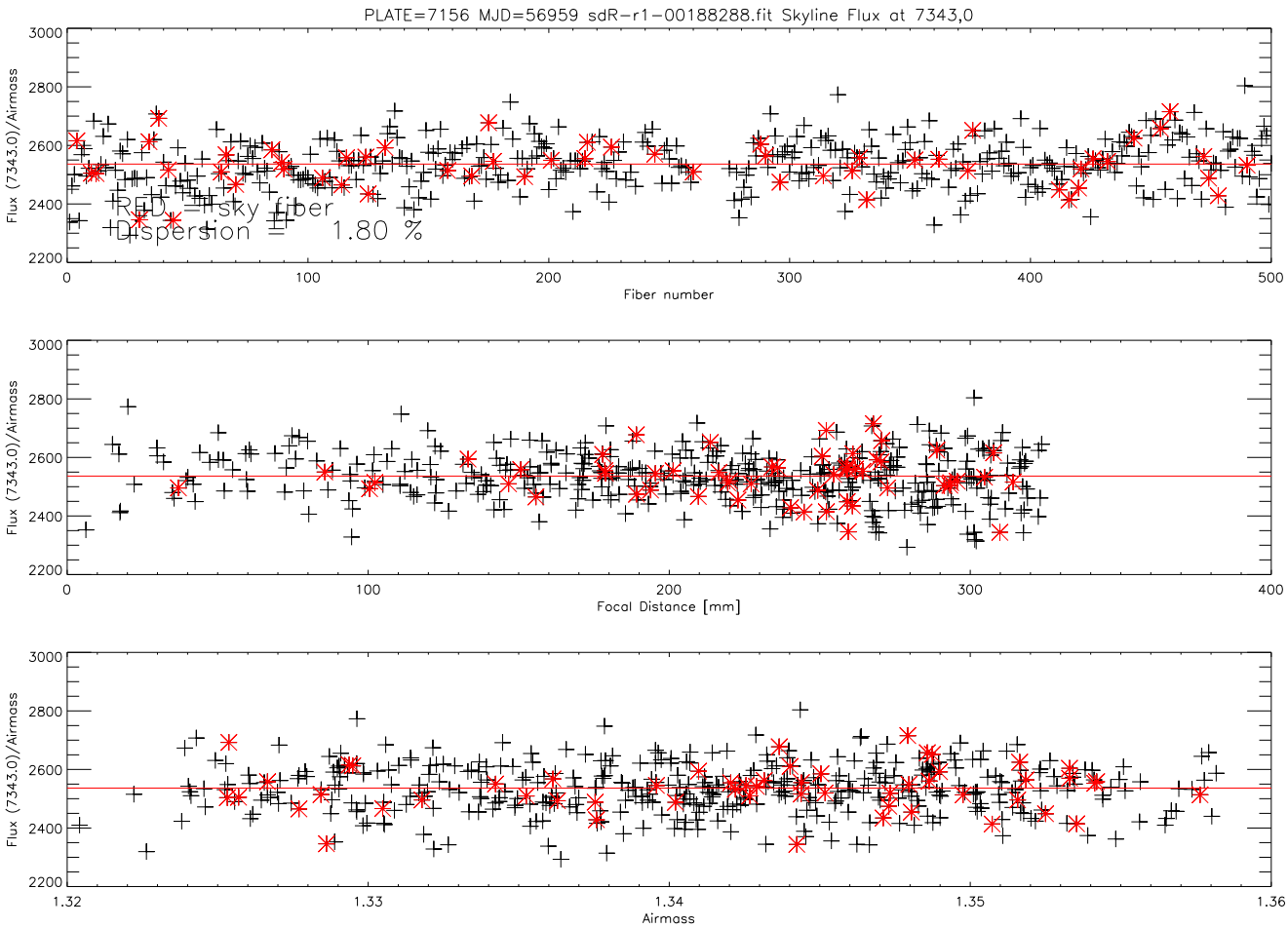

PLATE=7156 MJD=56959 sdR-r1-00188288.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

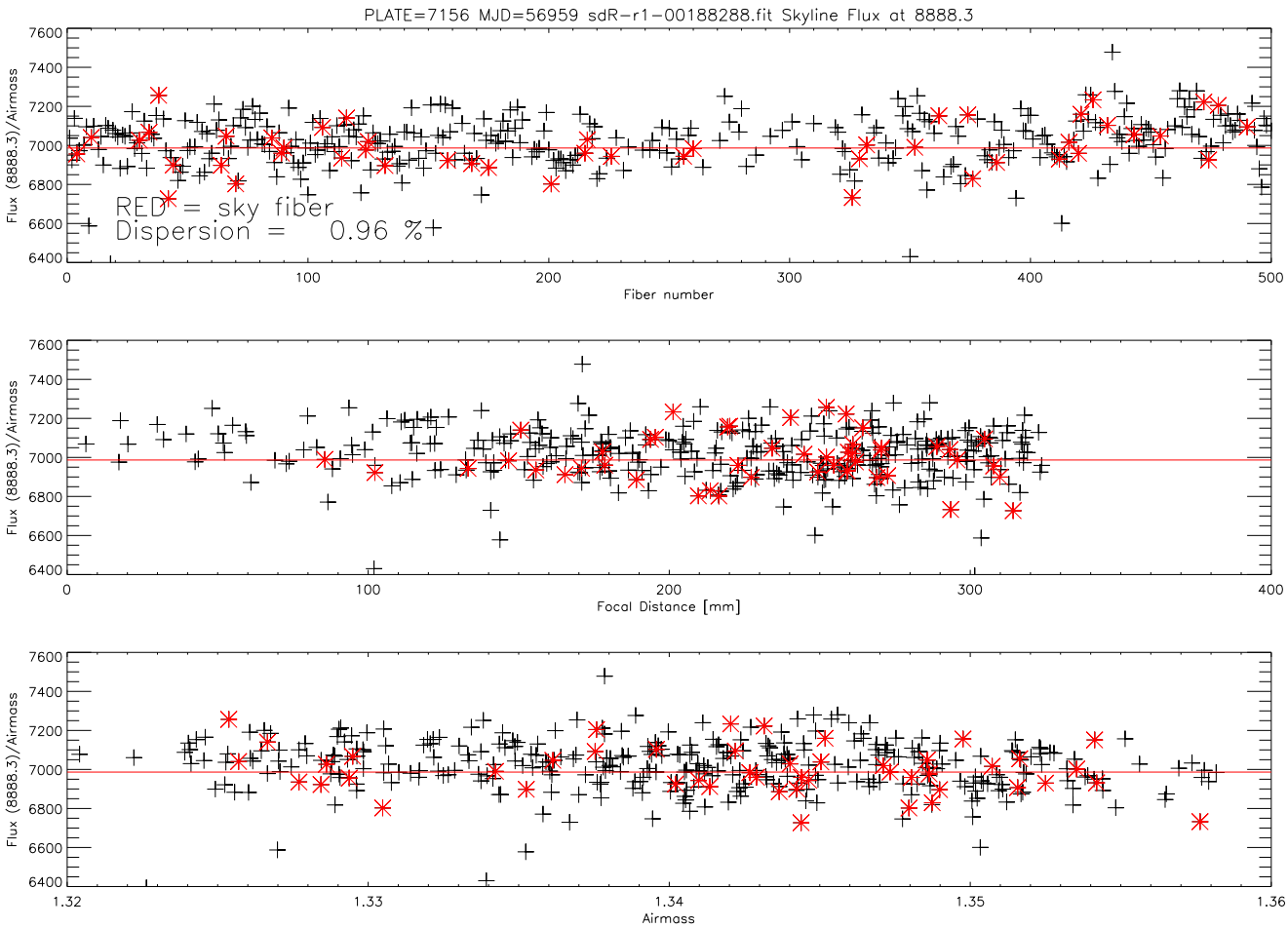

PLATE=7156 MJD=56959 sdR-r1-00188288.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

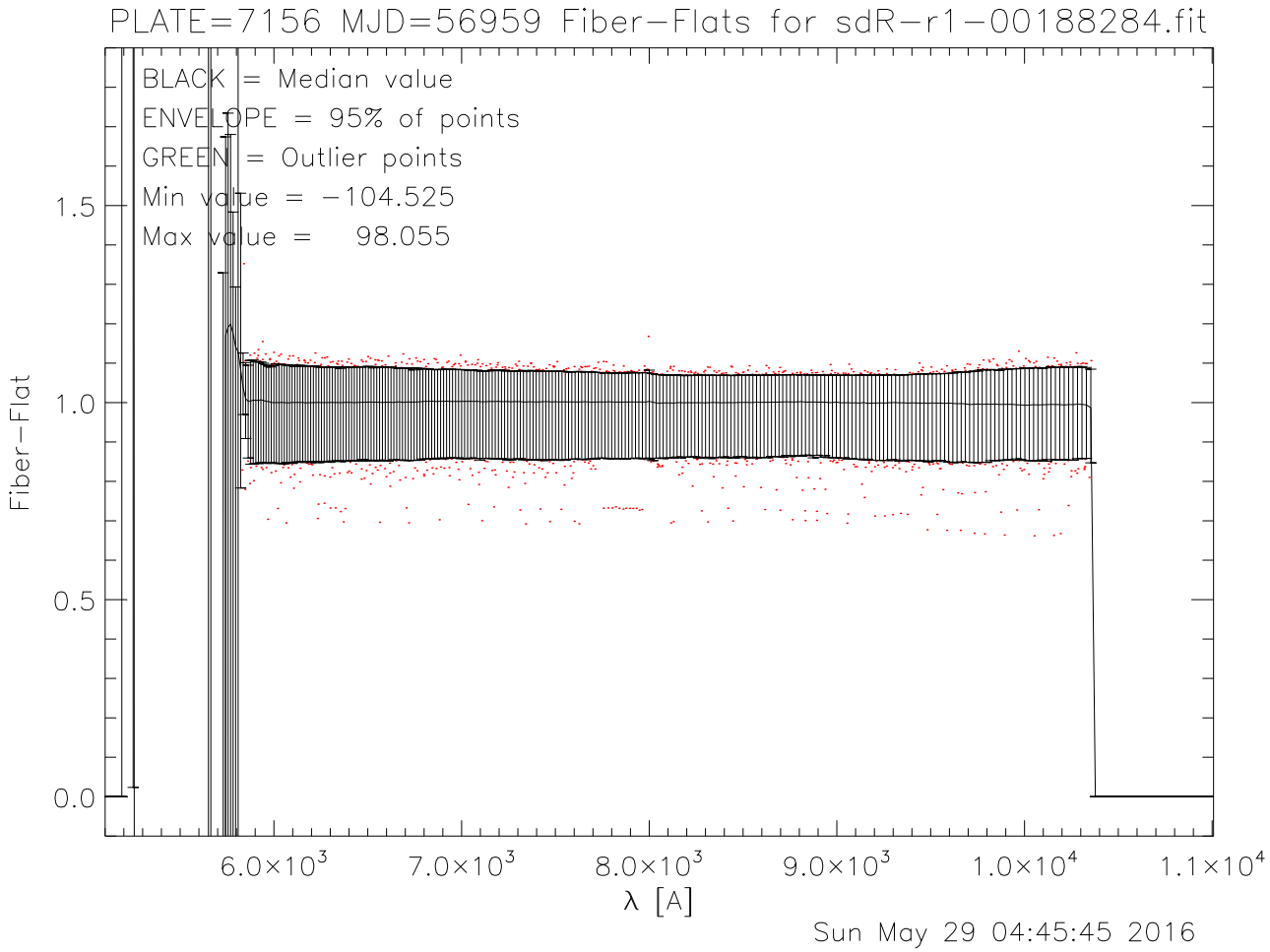

PLATE=7156 MJD=56959 sdR-r1-00188288.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

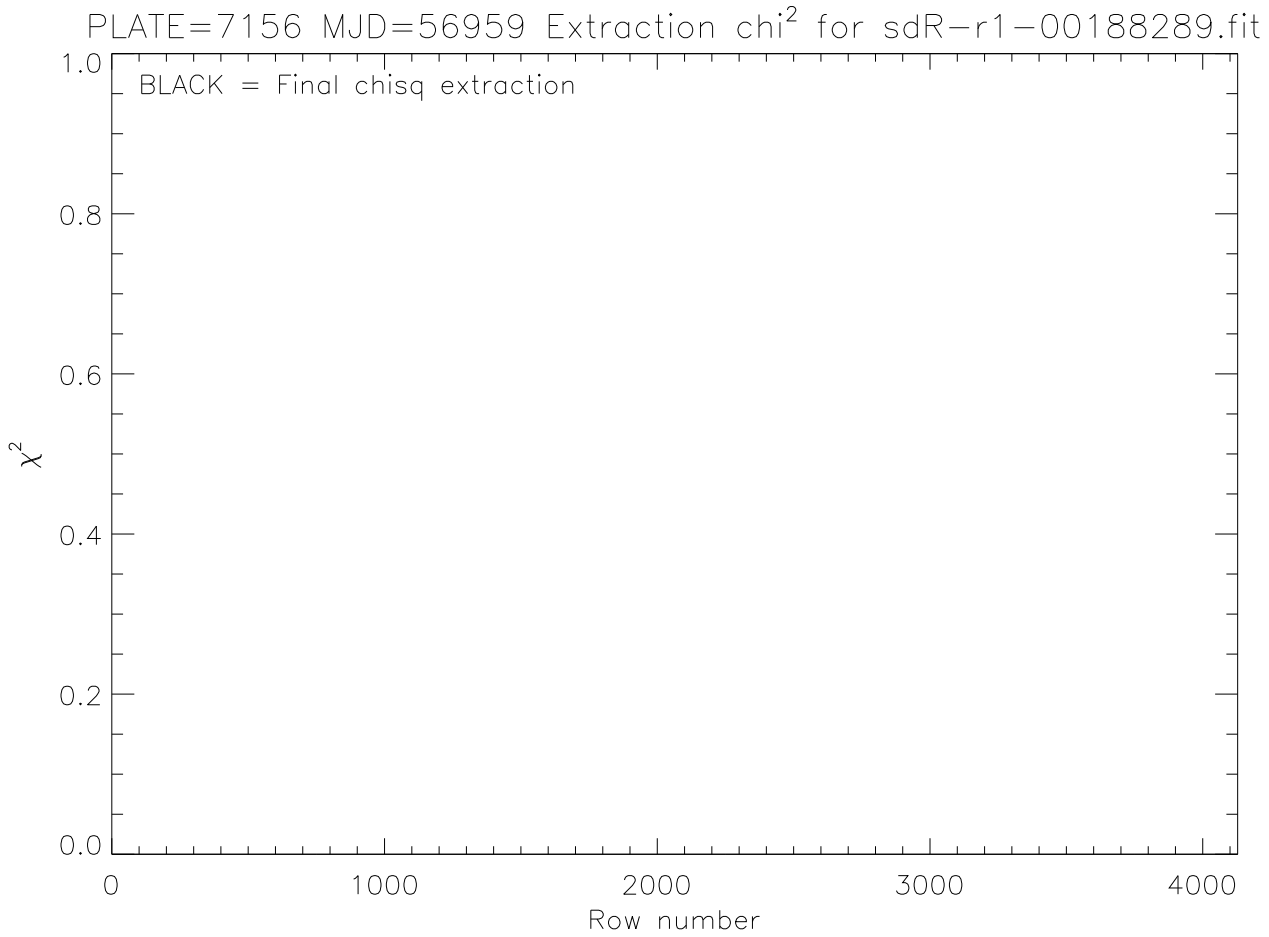
Number of sky fibers = 58

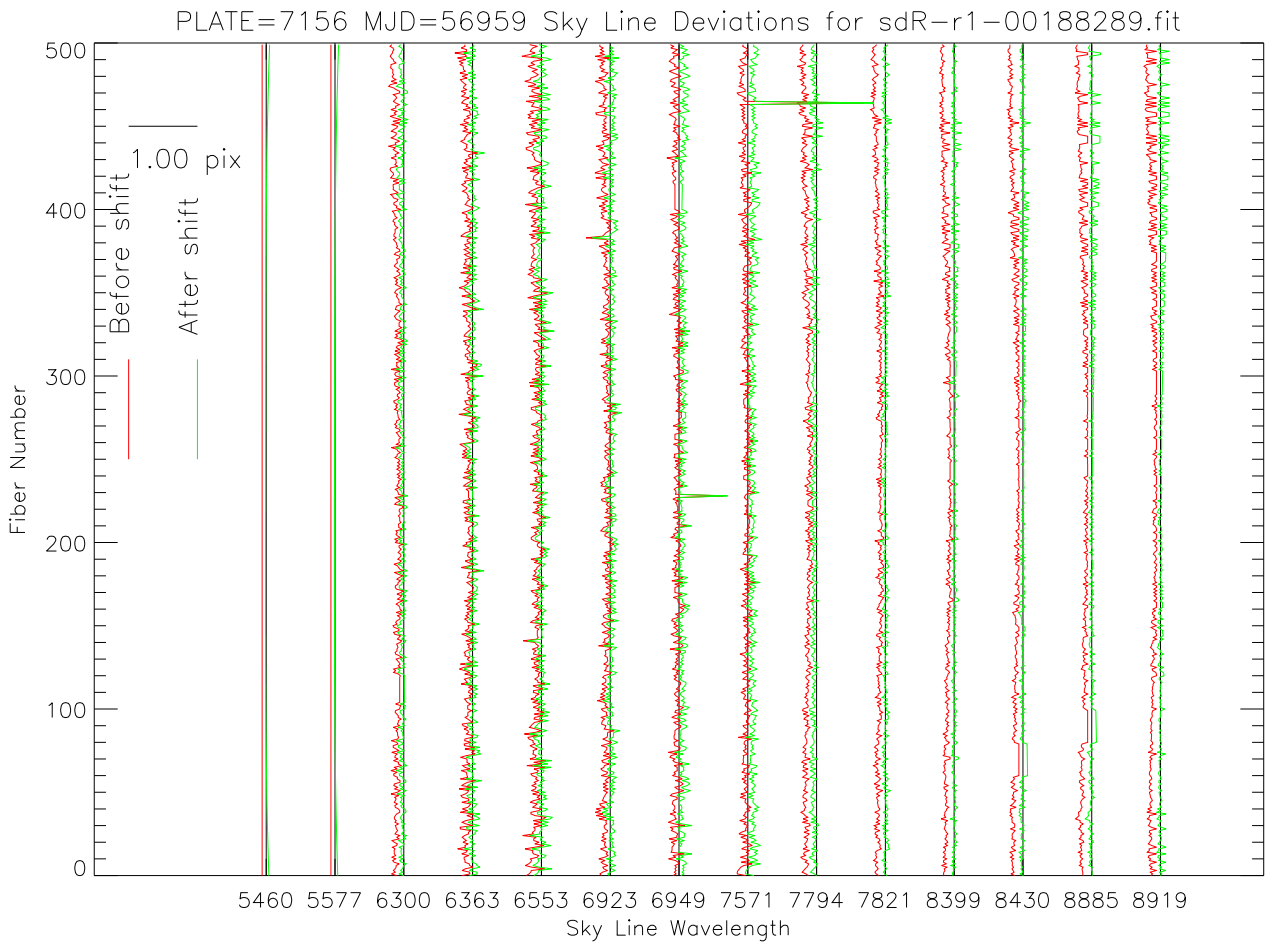


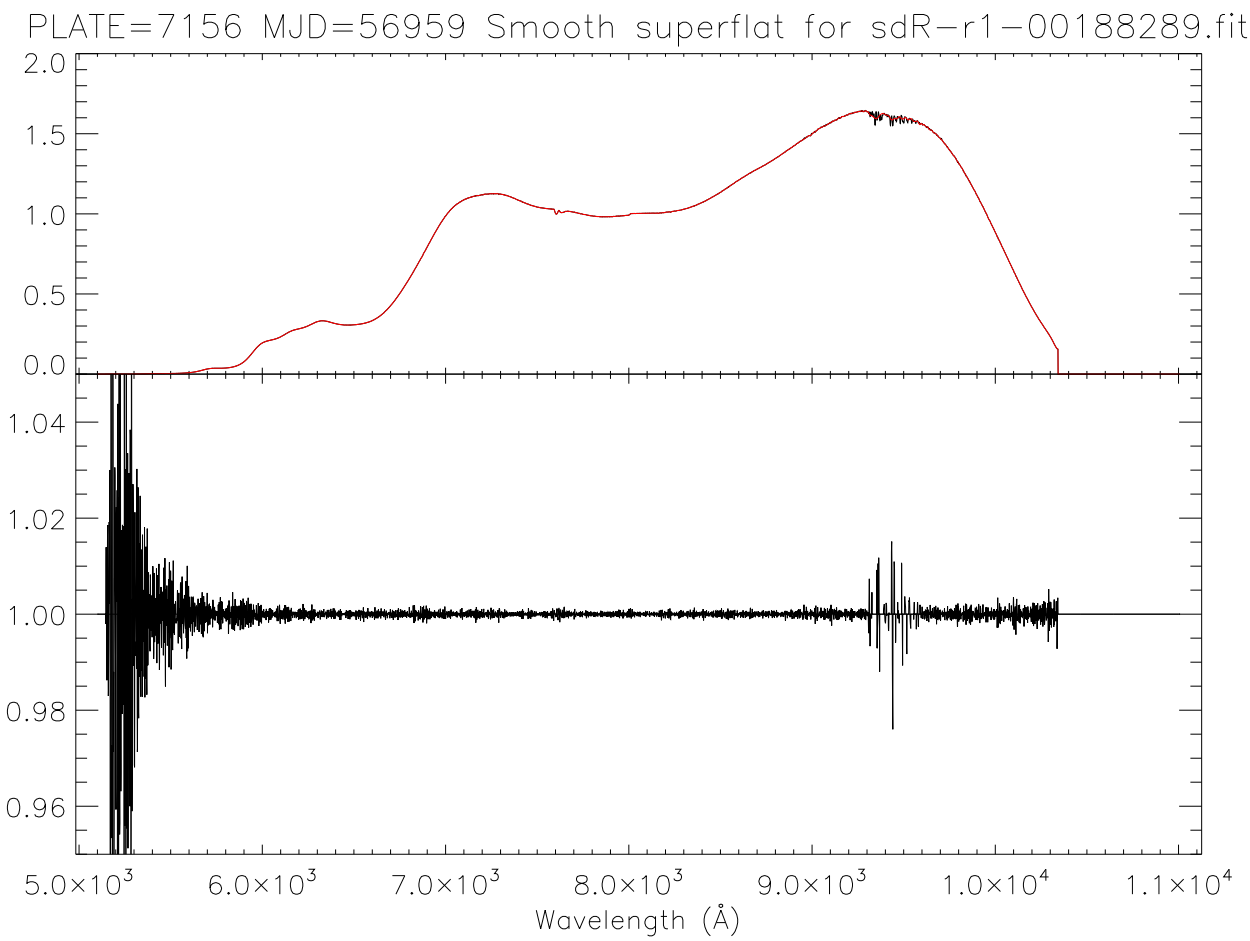

PLATE=7156 MJD=56959 sdR-r1-00188288.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
Red =sky fiber
Dispersion = 1.80 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

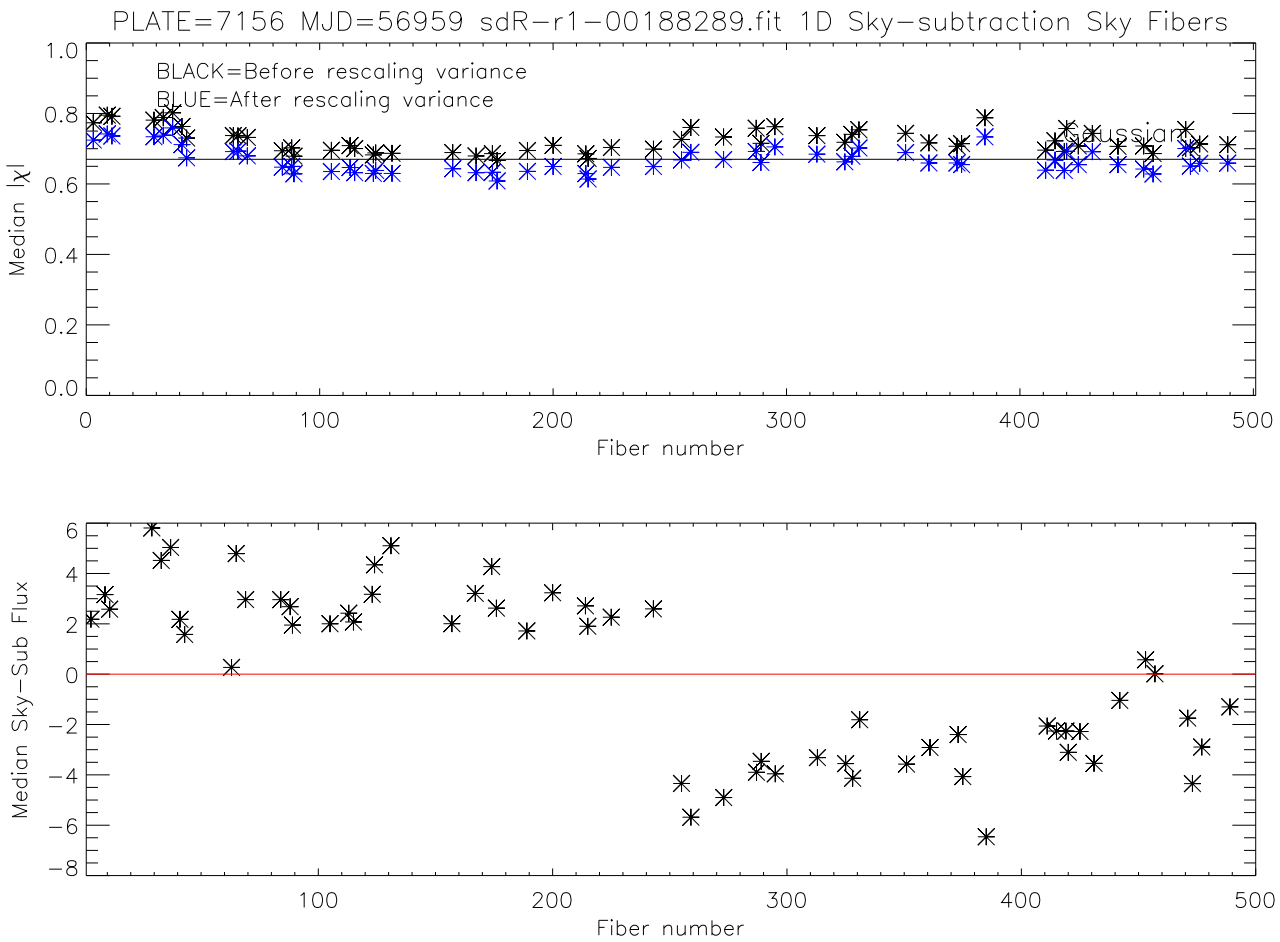

PLATE=7156 MJD=56959 sdR-r1-00188288.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 0.96 %
Fiber number
Focal Distance [mm]
Airmass

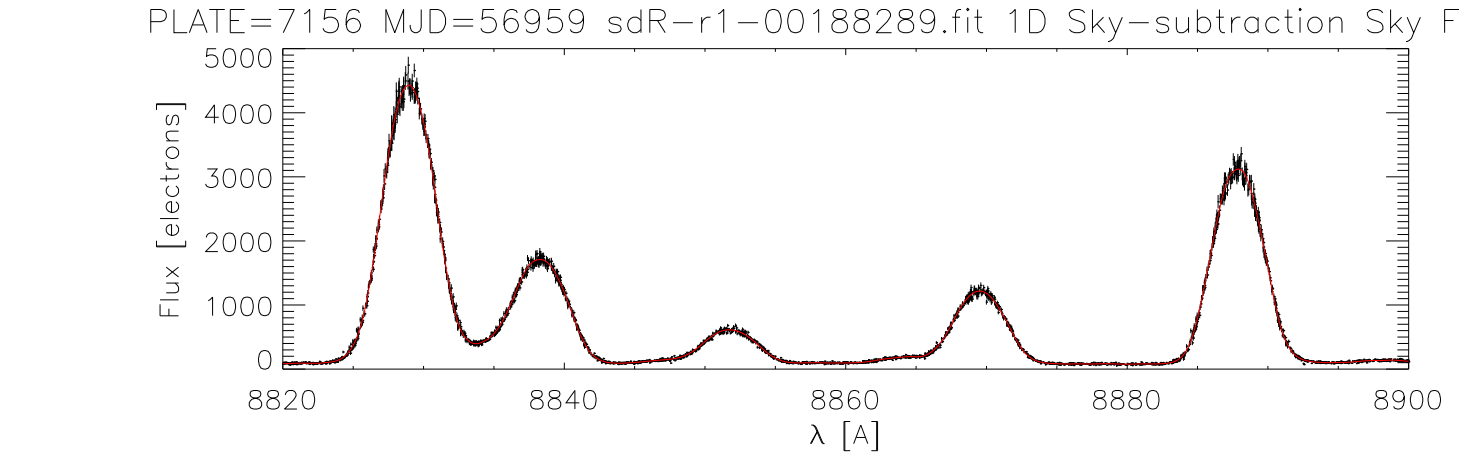

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r1−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −104.525
Max value = 98.055
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 04:45:45 2016

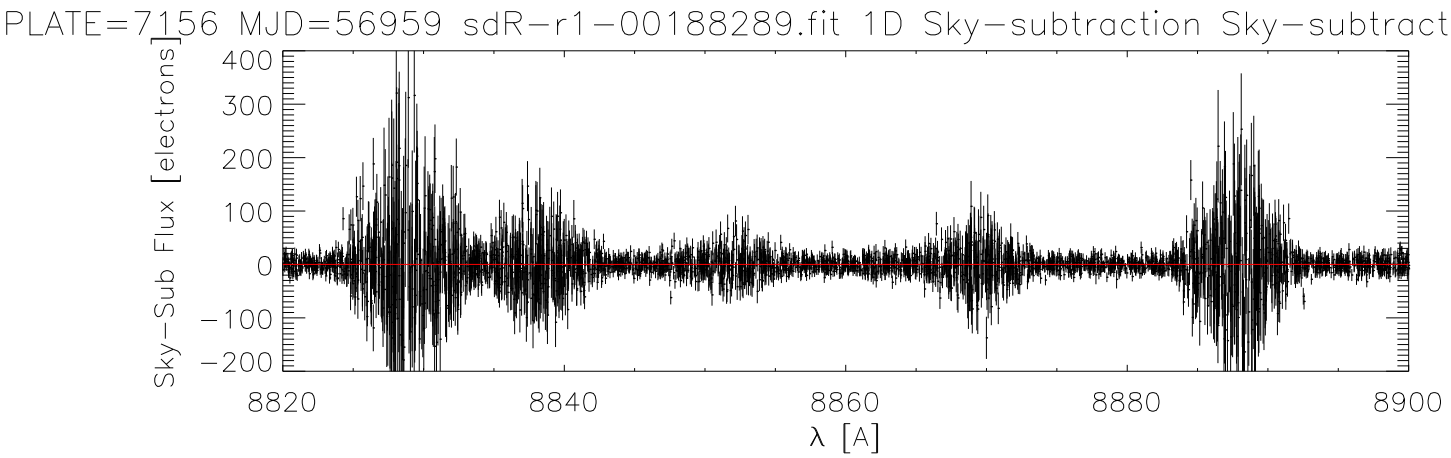

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r1−00188289.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r1-00188289.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

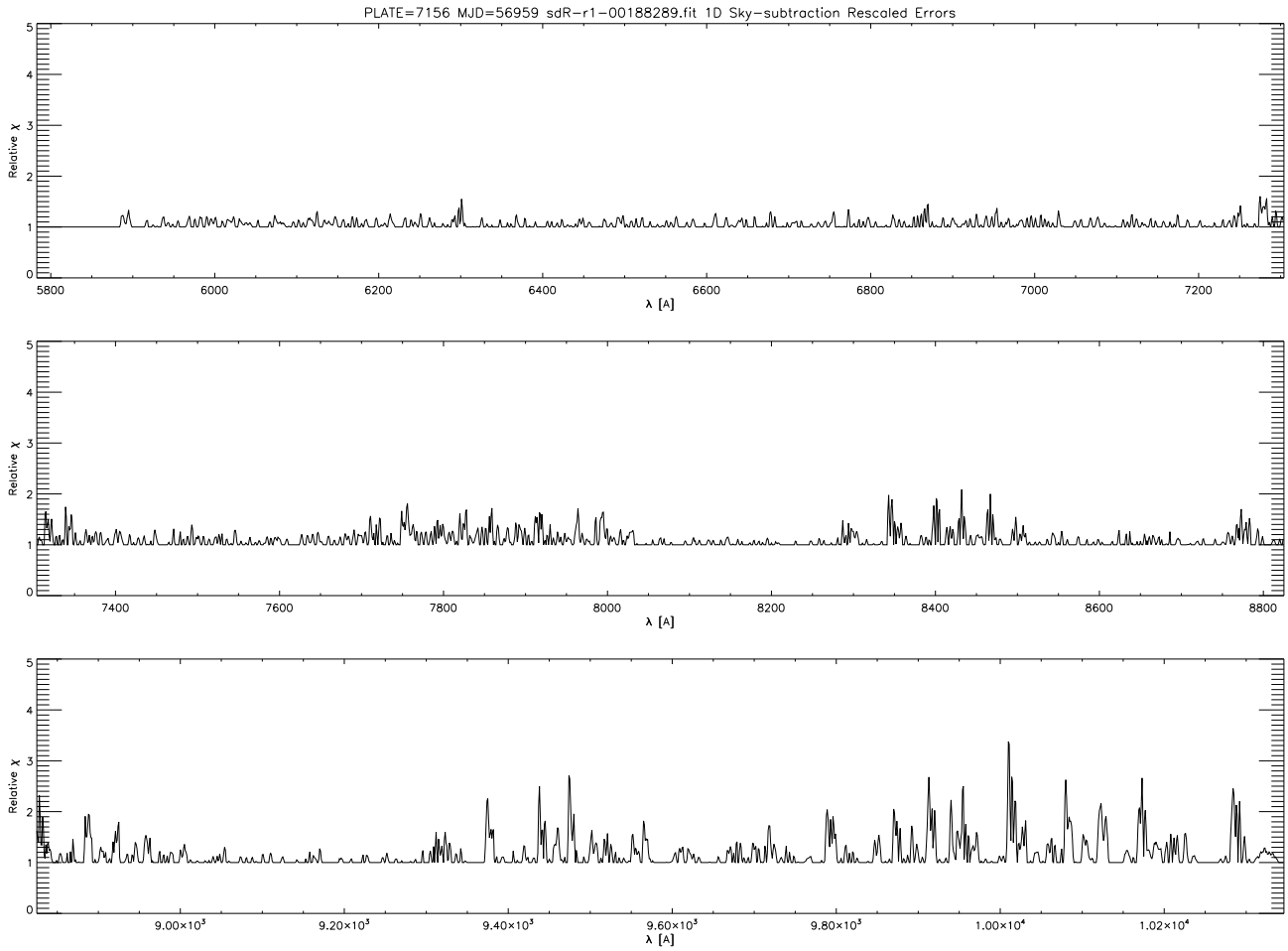

PLATE=7156 MJD=56959 Smooth superflat for sdR-r1-00188289.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

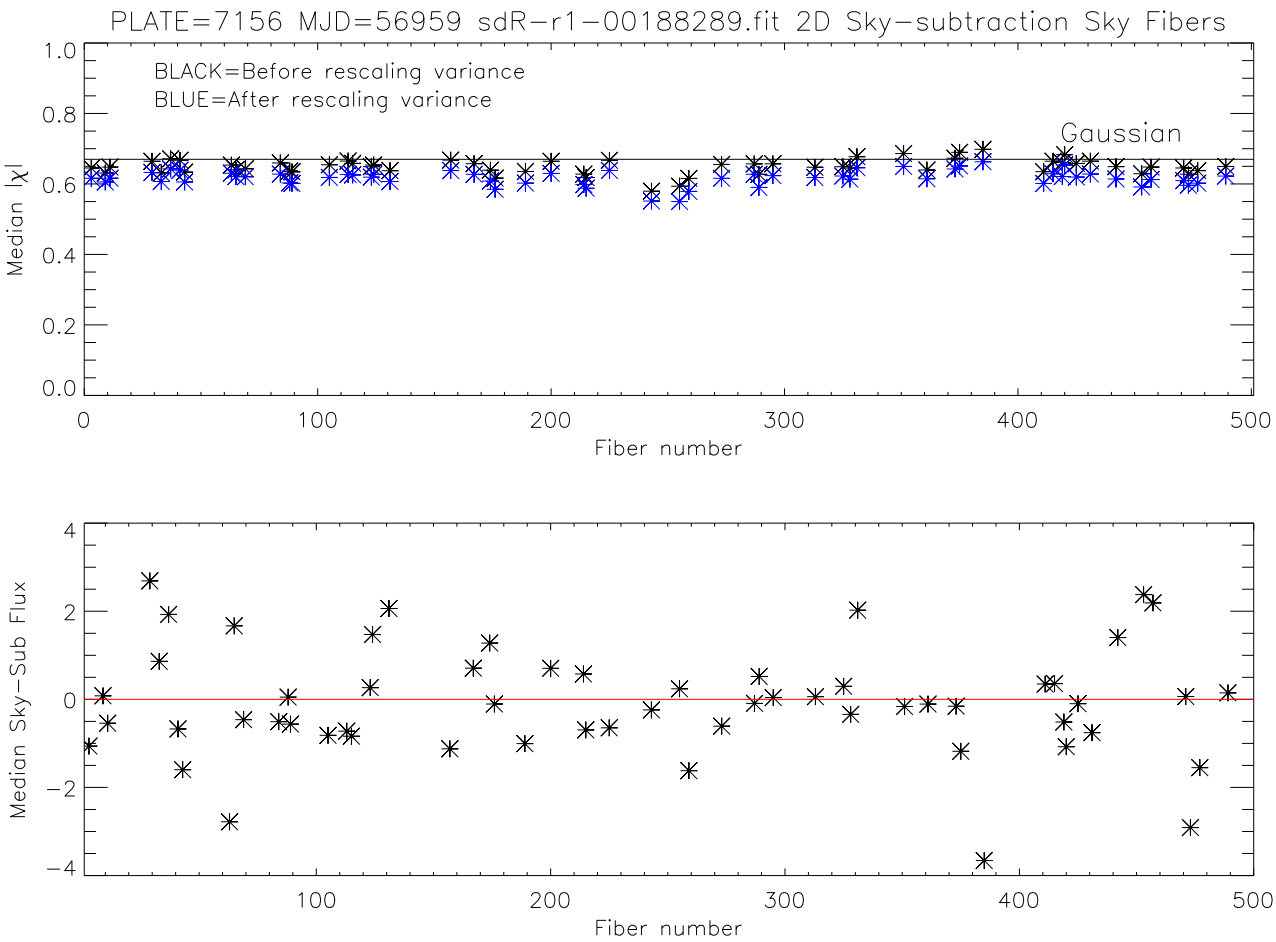

PLATE=7156 MJD=56959 sdR-r1-00188289.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

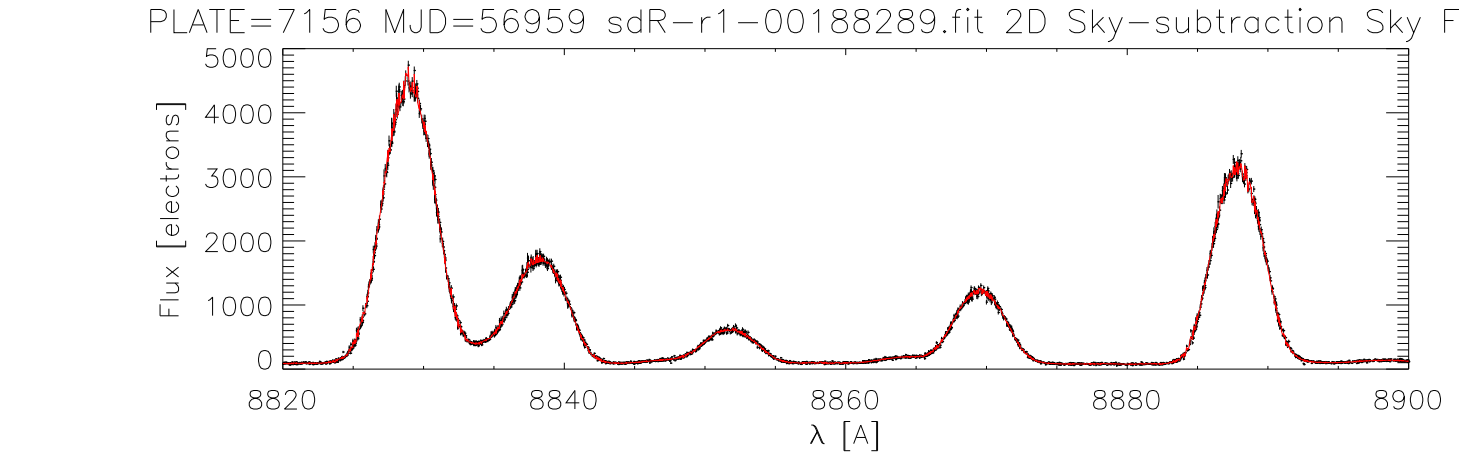

PLATE=7156 MJD=56959 sdR-r1-00188289.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

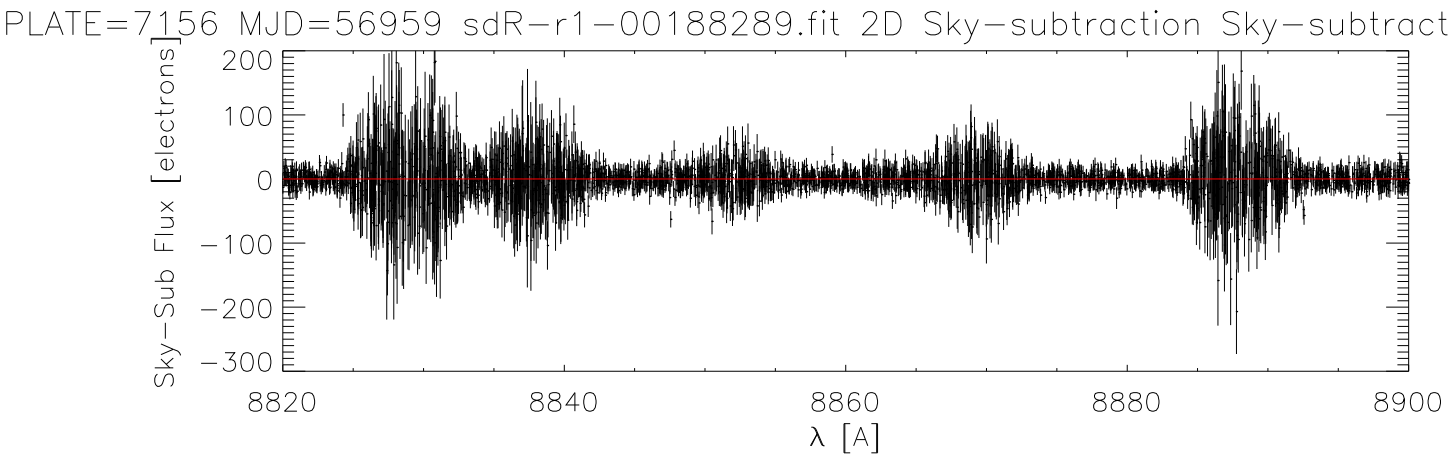

PLATE=7156 MJD=56959 sdR-r1-00188289.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 58

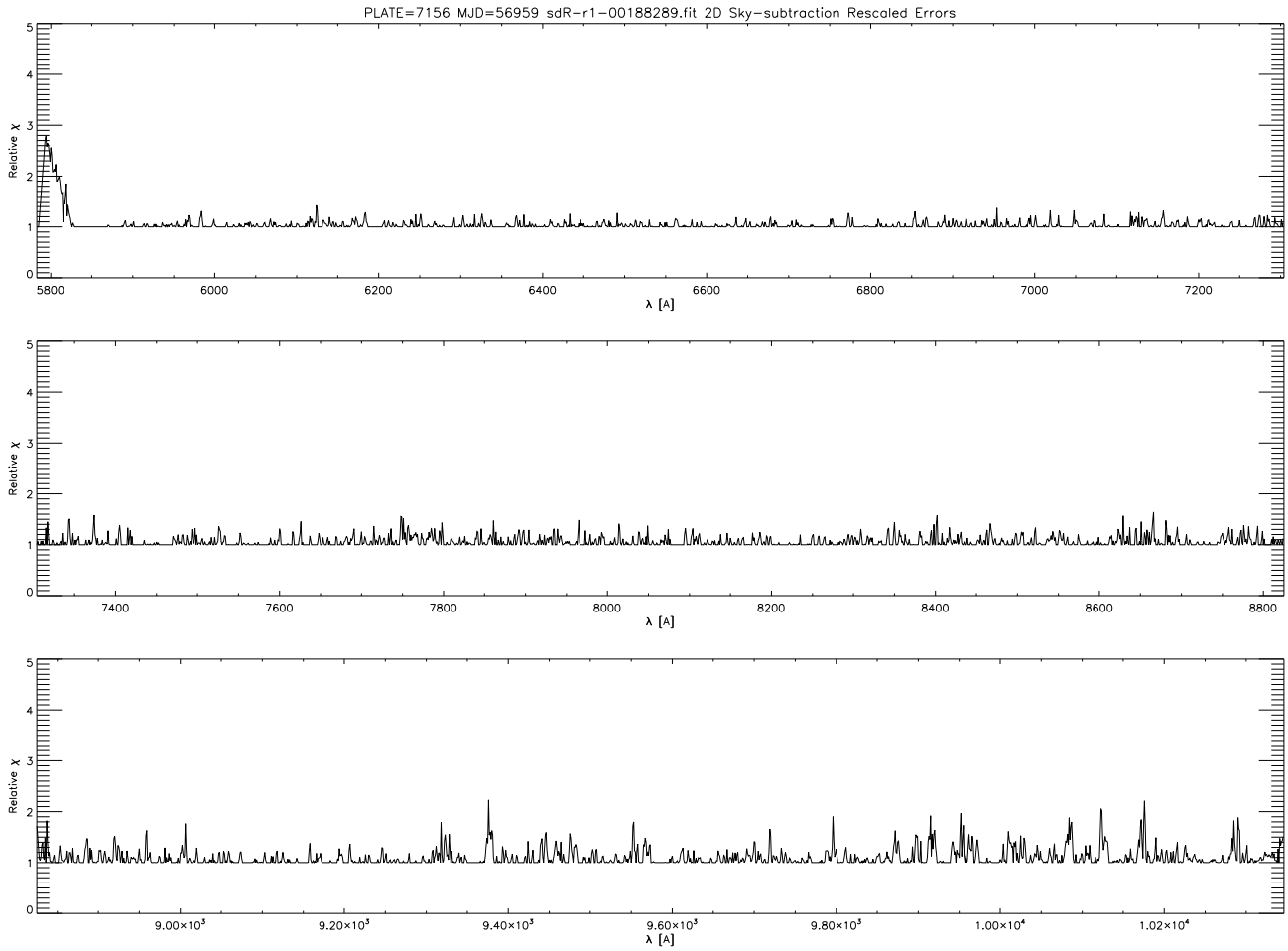


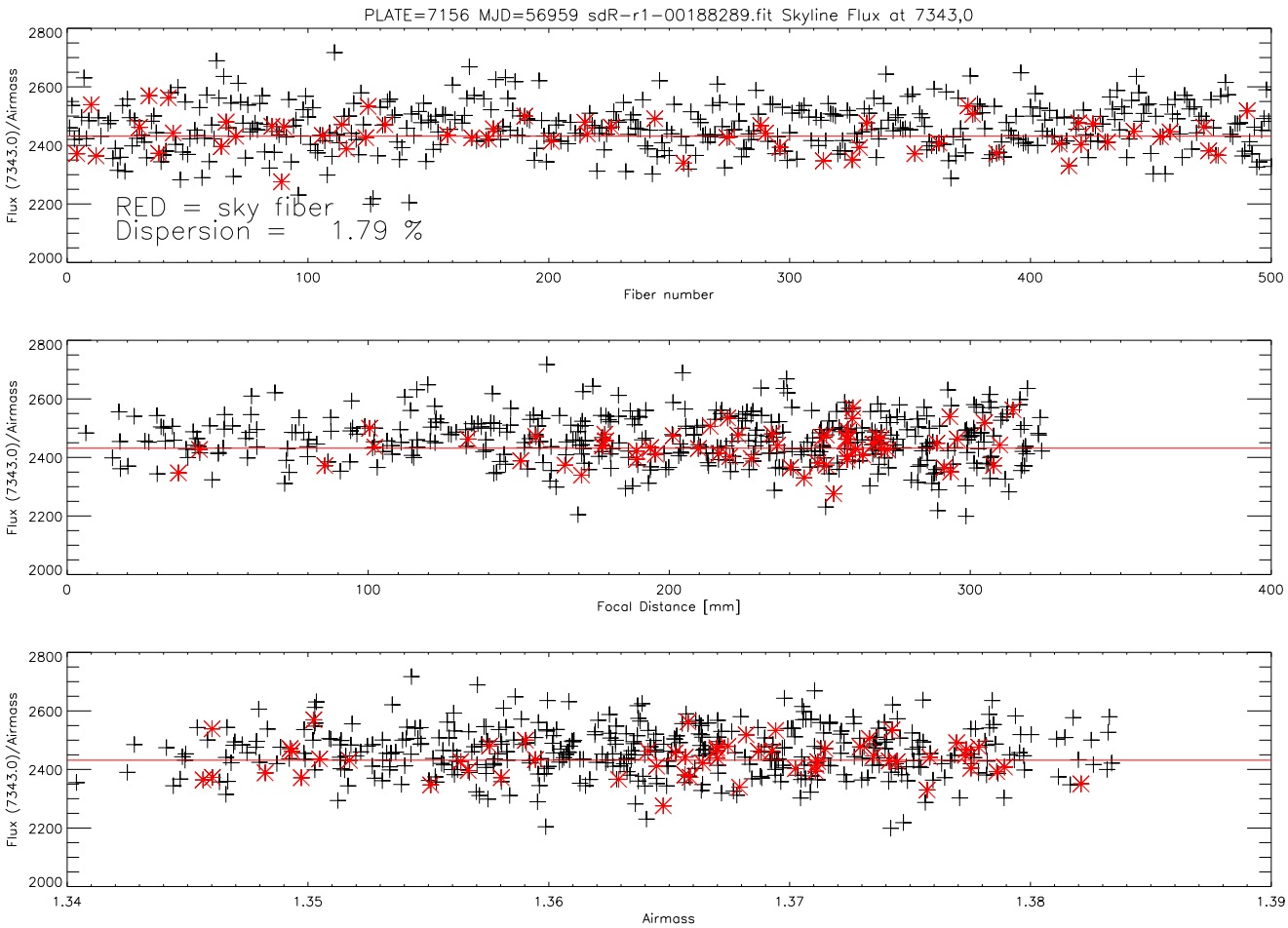

PLATE=7156 MJD=56959 sdR-r1-00188289.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

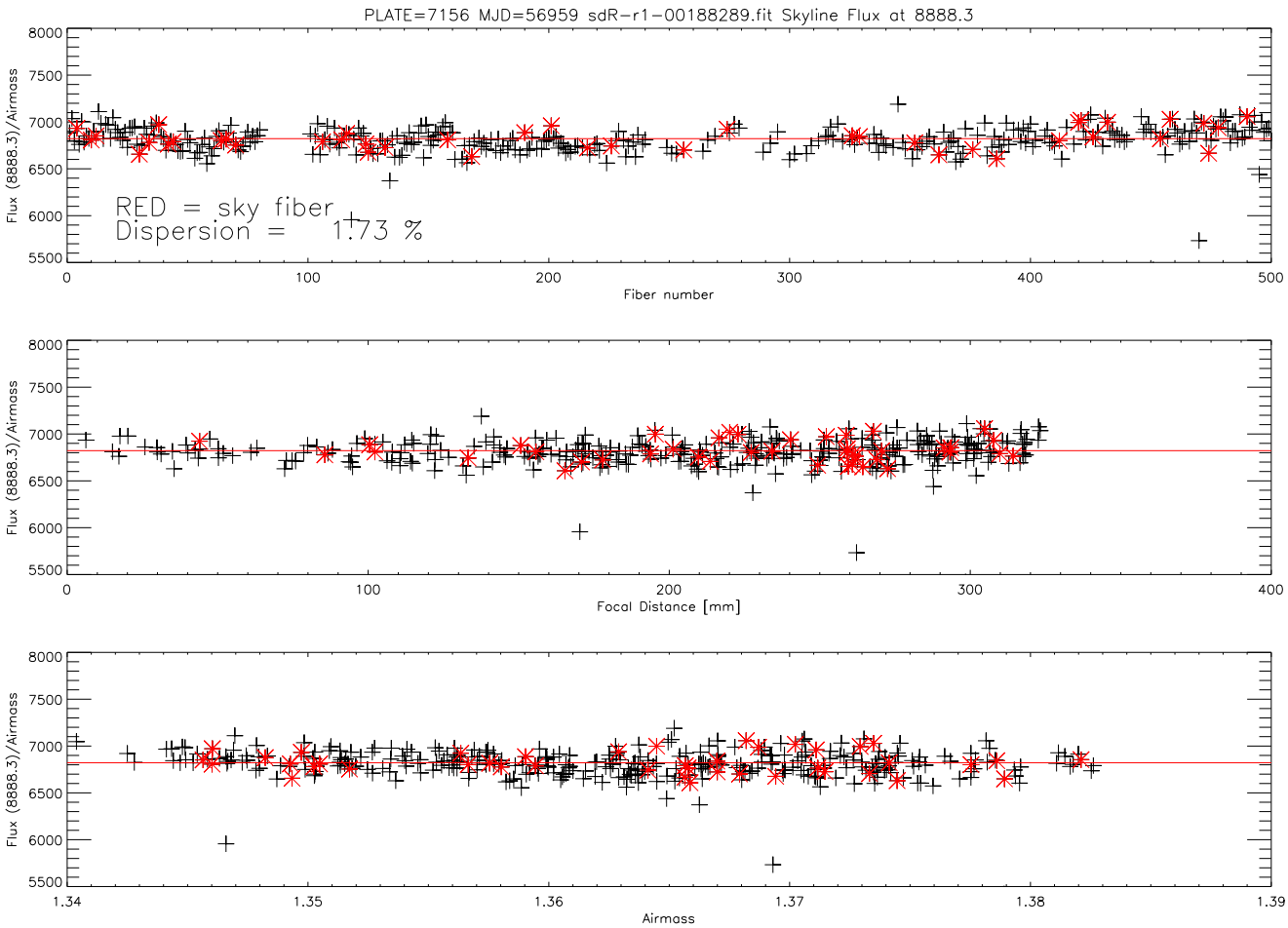

PLATE=7156 MJD=56959 sdR-r1-00188289.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=7156 MJD=56959 sdR-r1-00188289.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

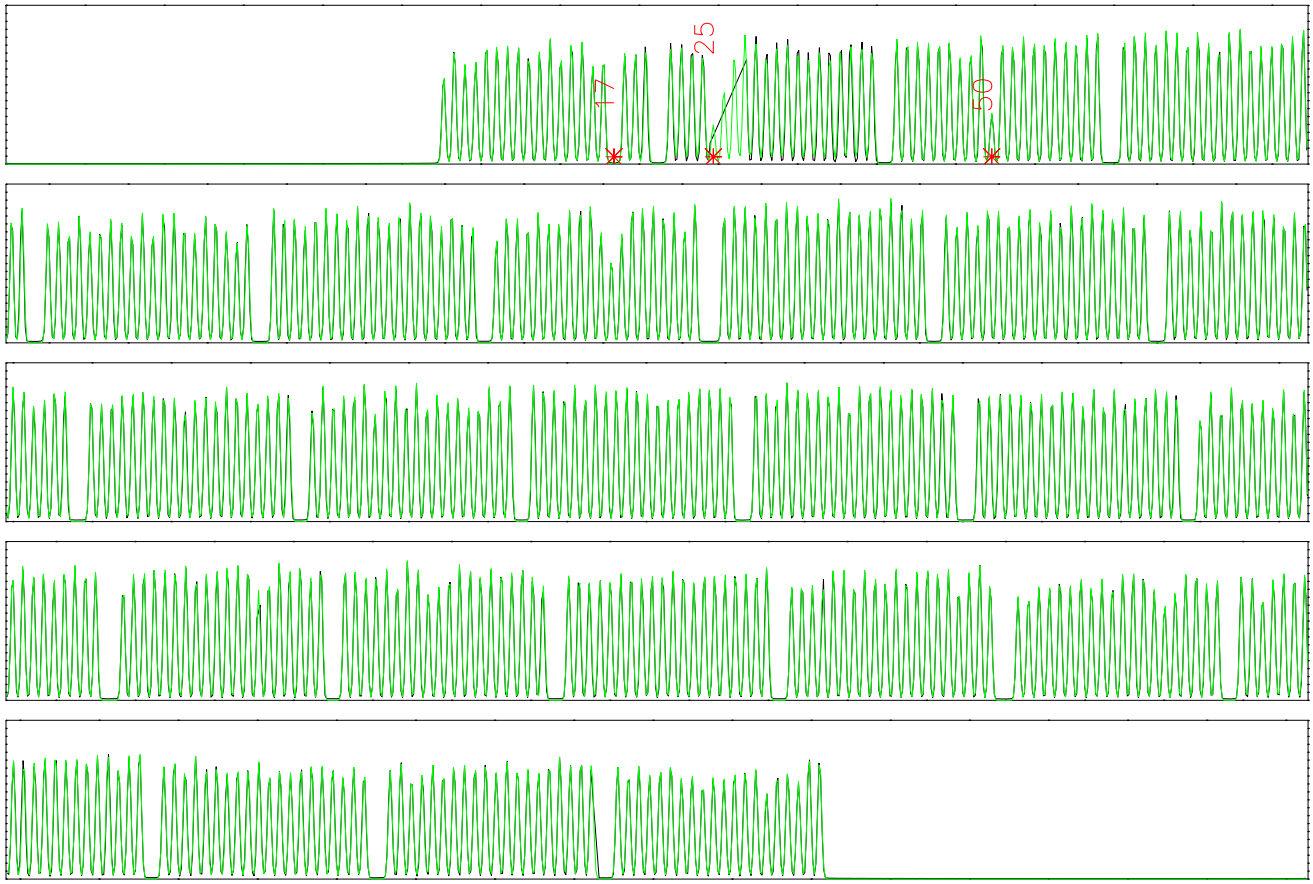
Number of sky fibers = 58

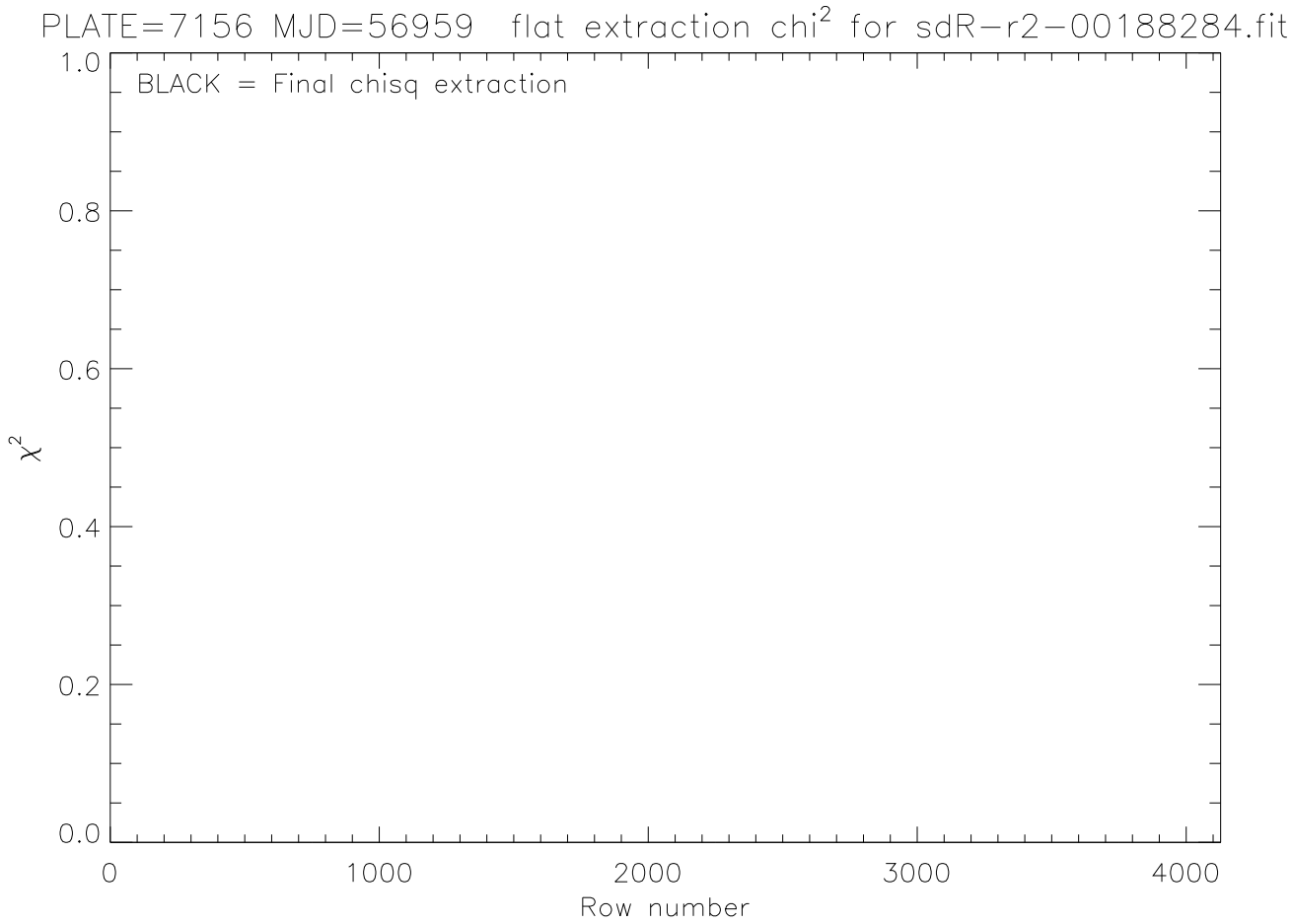


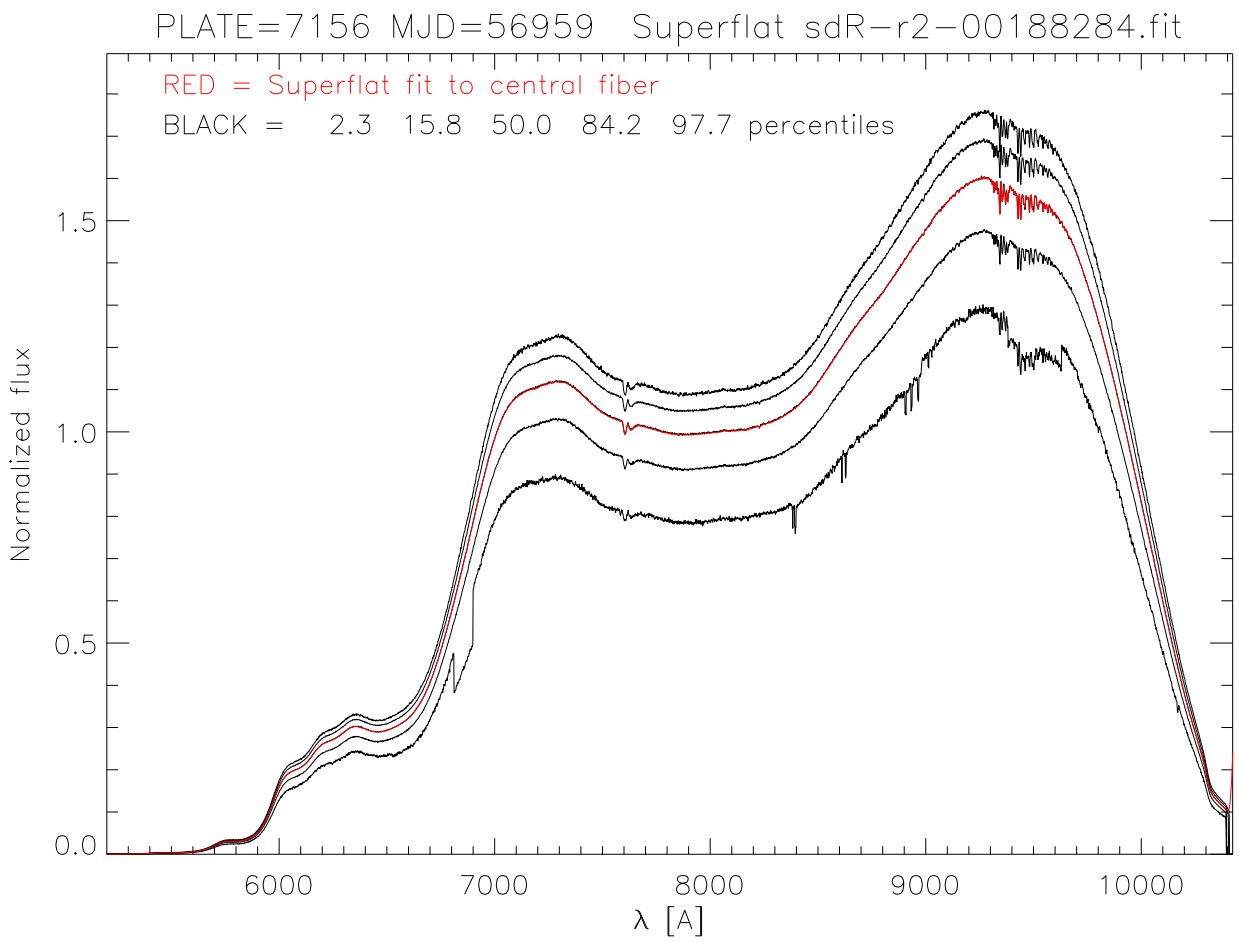

PLATE=7156 MJD=56959 sdR-r1-00188289.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.79 %
Fiber number
Focal Distance [mm]
Airmass

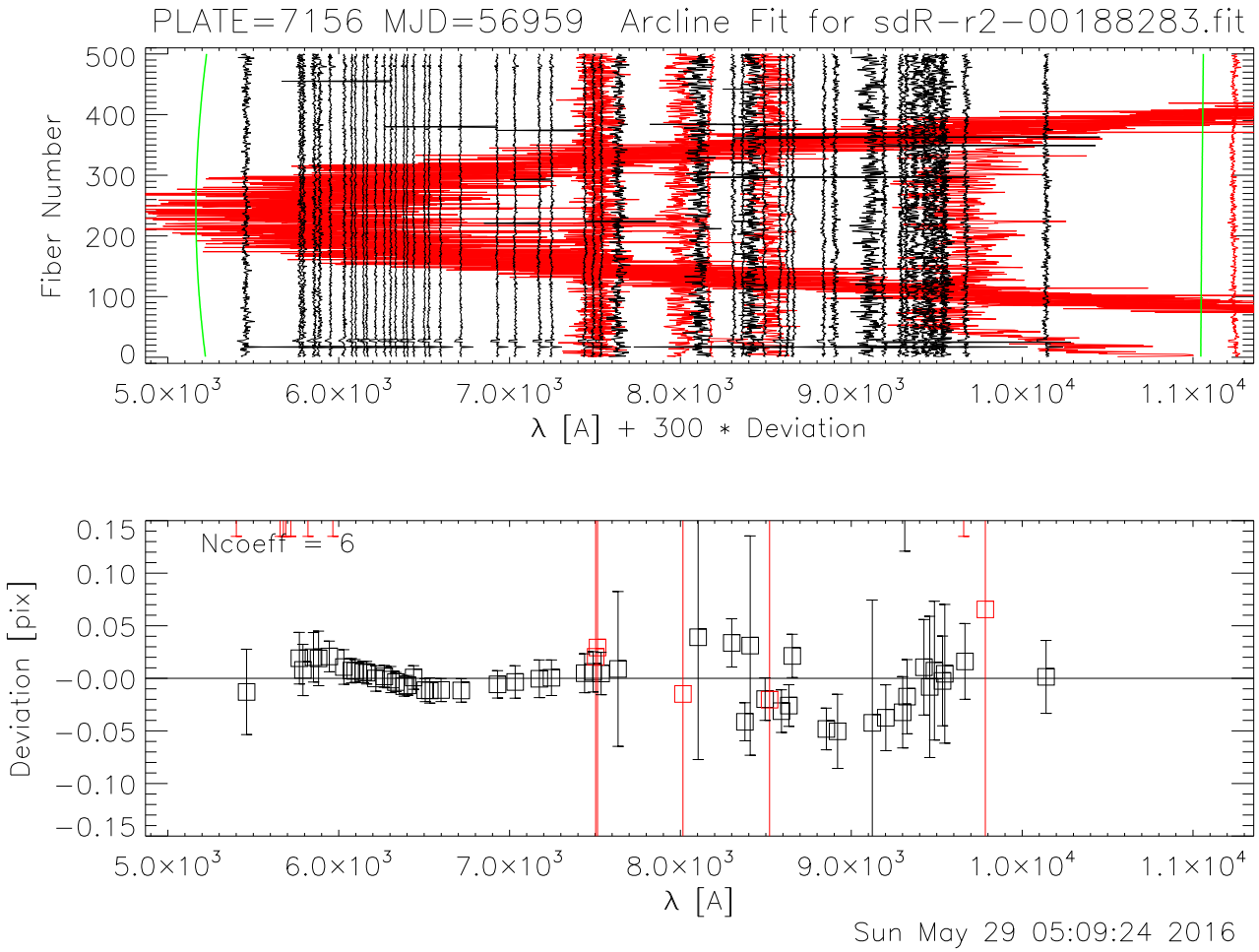

PLATE=7156 MJD=56959 sdR-r1-00188289.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.73 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

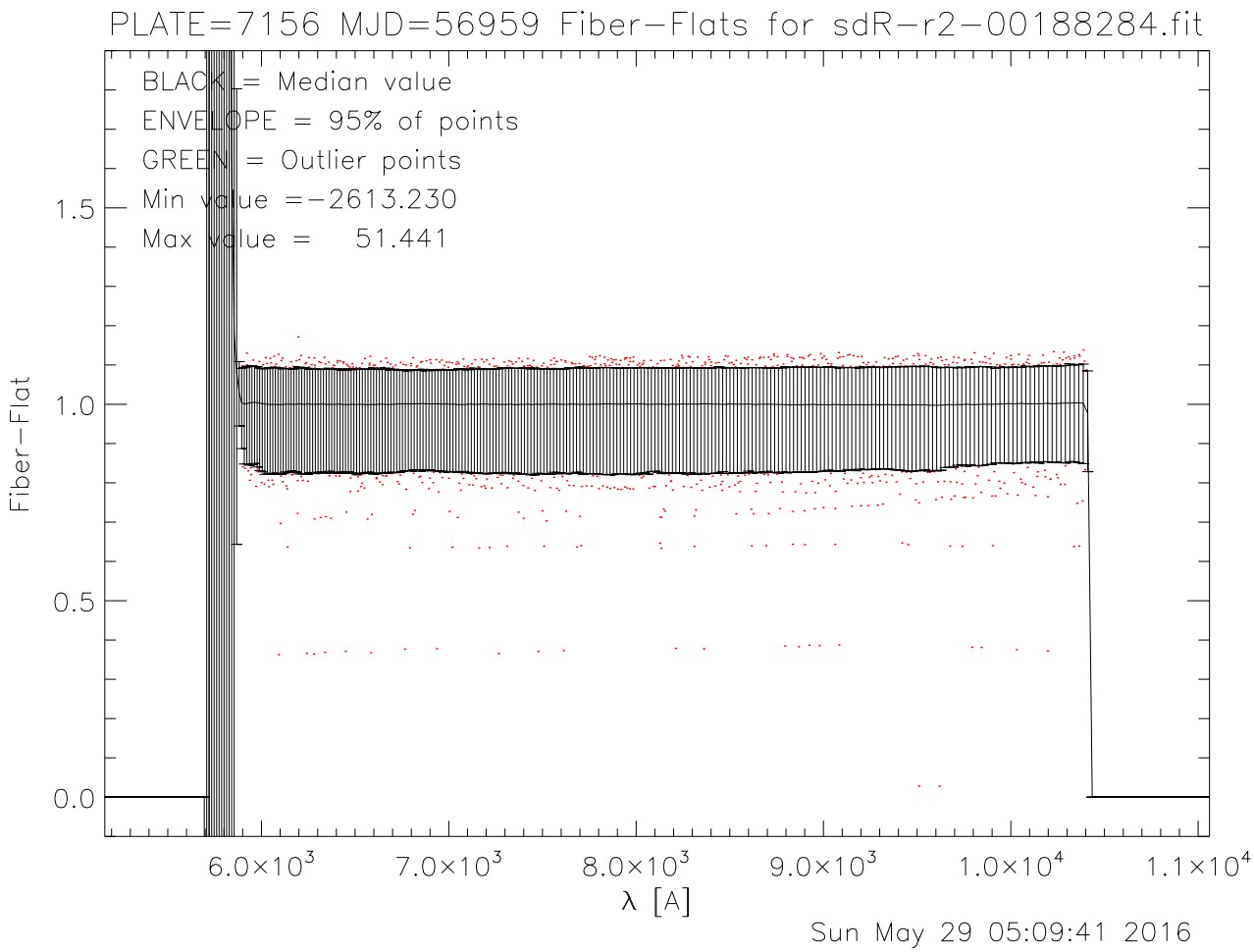
PLATE=7156 MJD=56959 Traces sdR-r2-00188284.fit

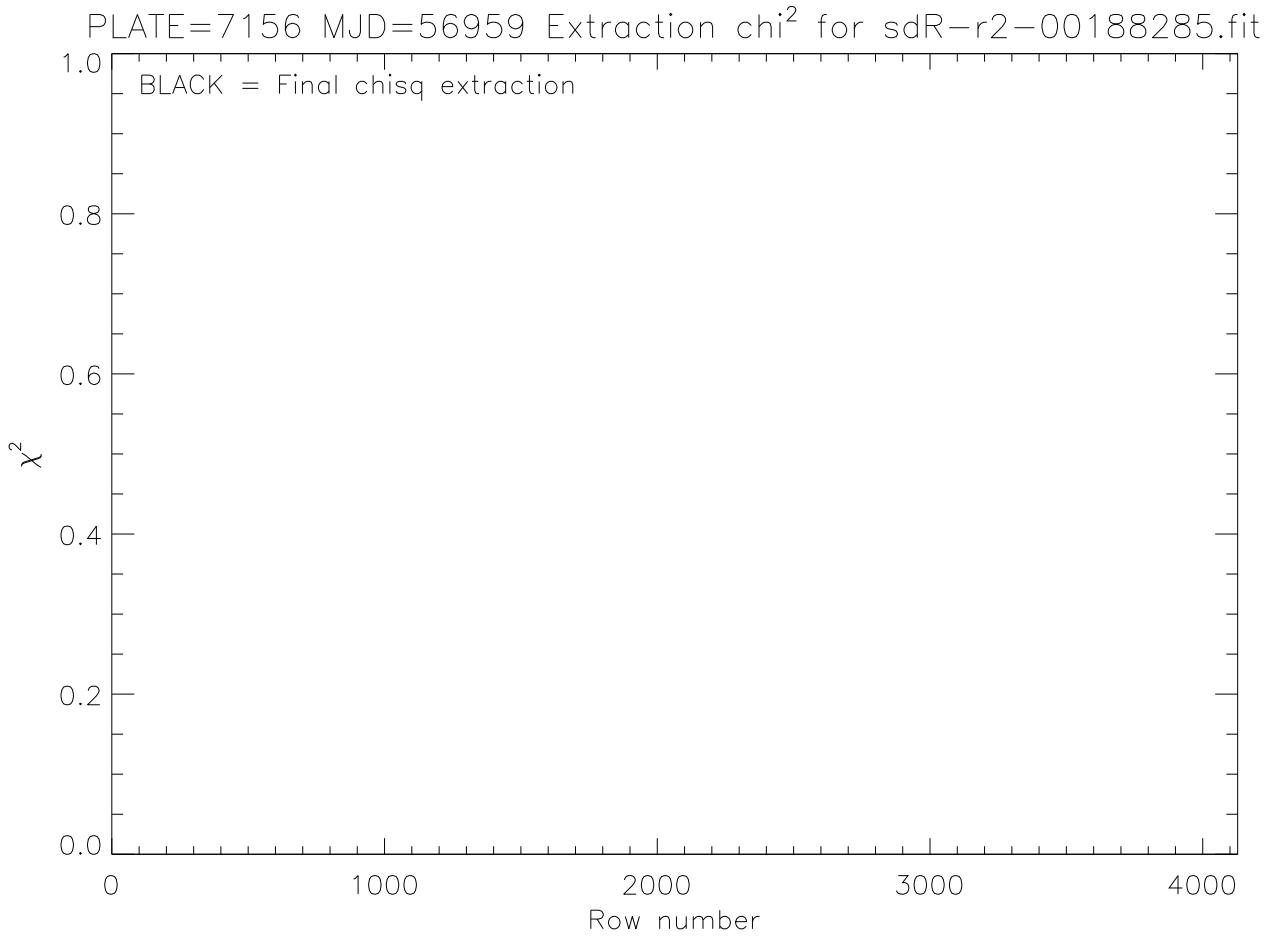


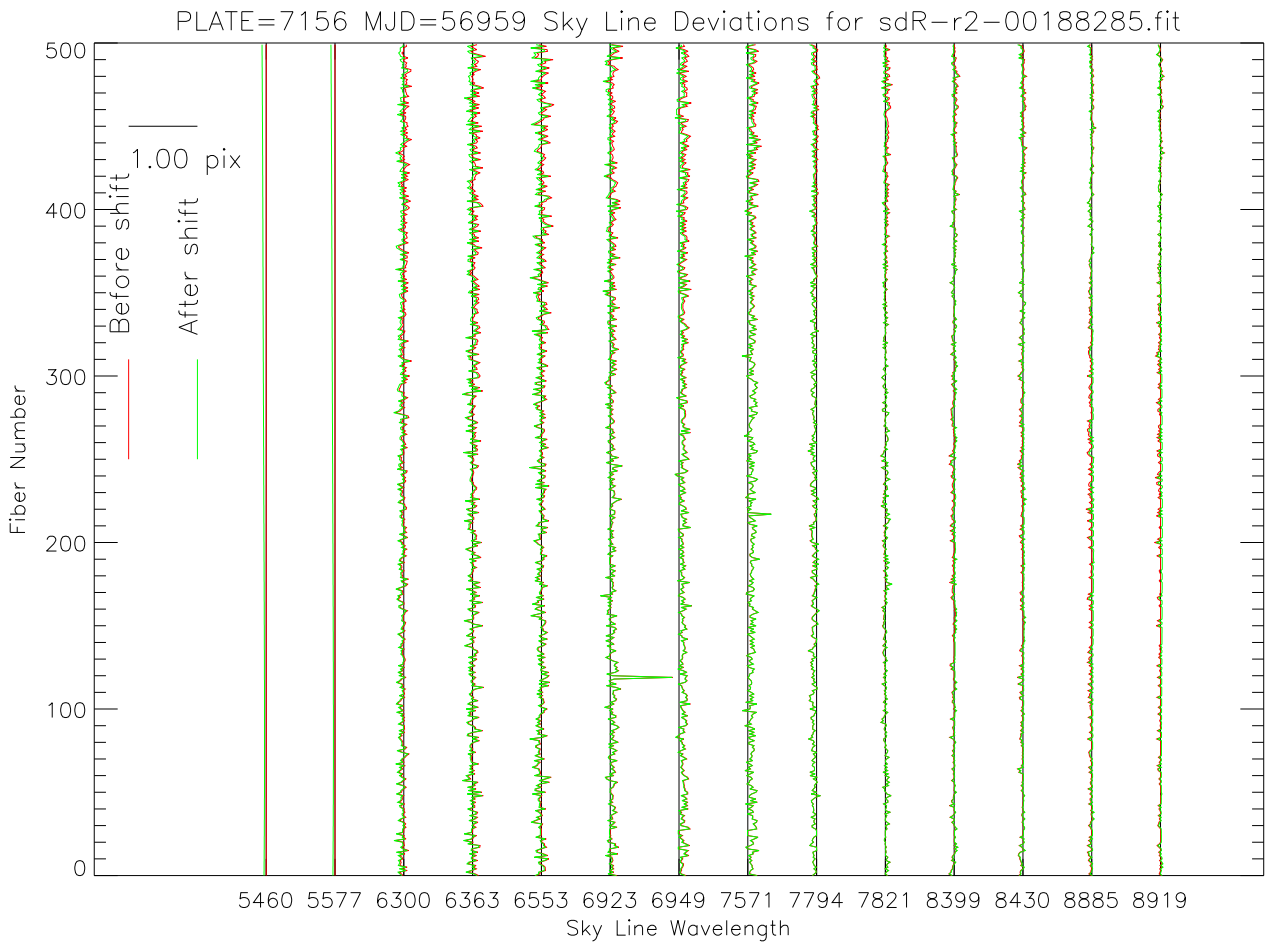

PLATE=7156 MJD=56959 flat extraction chi^2 for sdR−r2−00188284.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

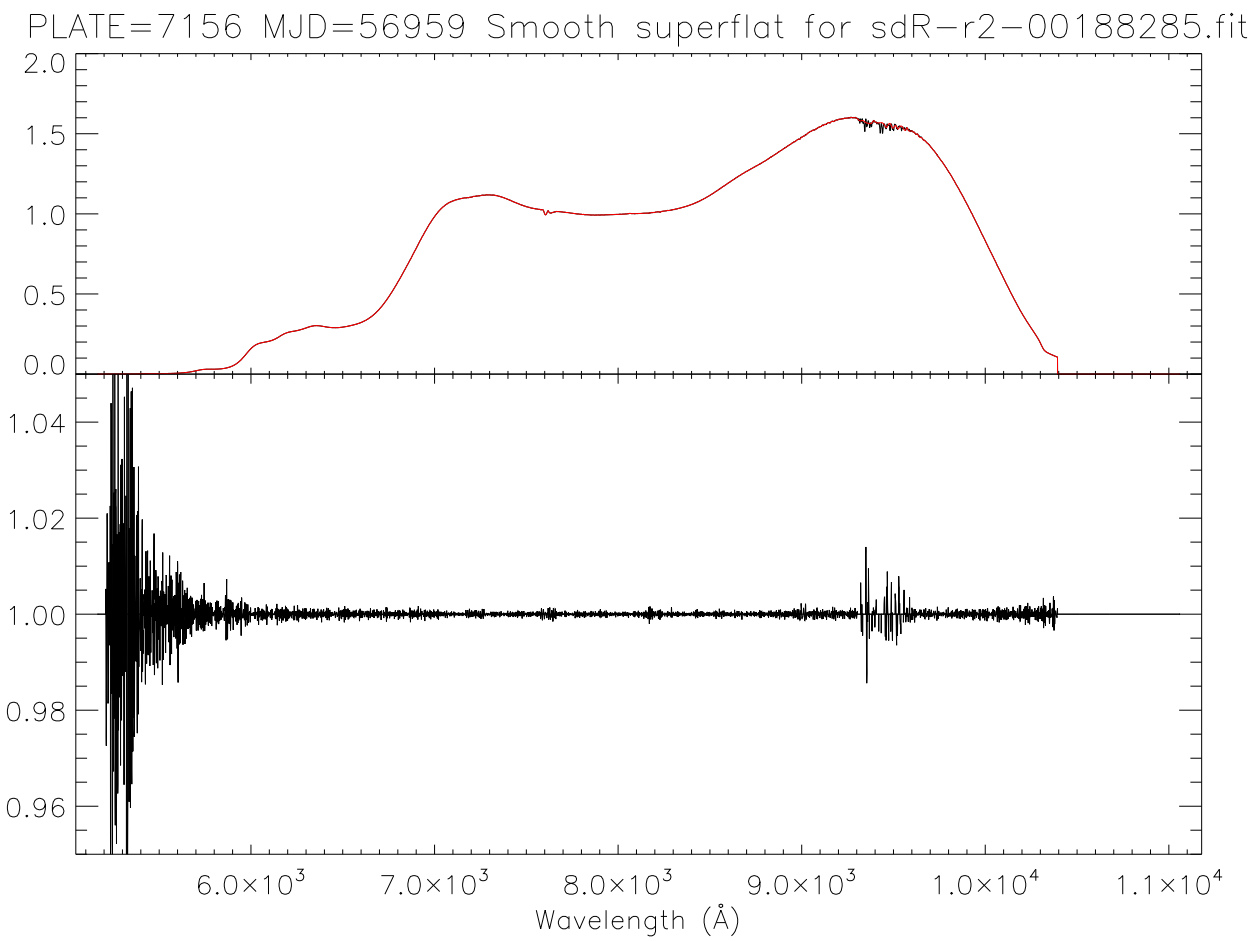

PLATE=7156 MJD=56959 Superflat sdR-r2-00188284.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

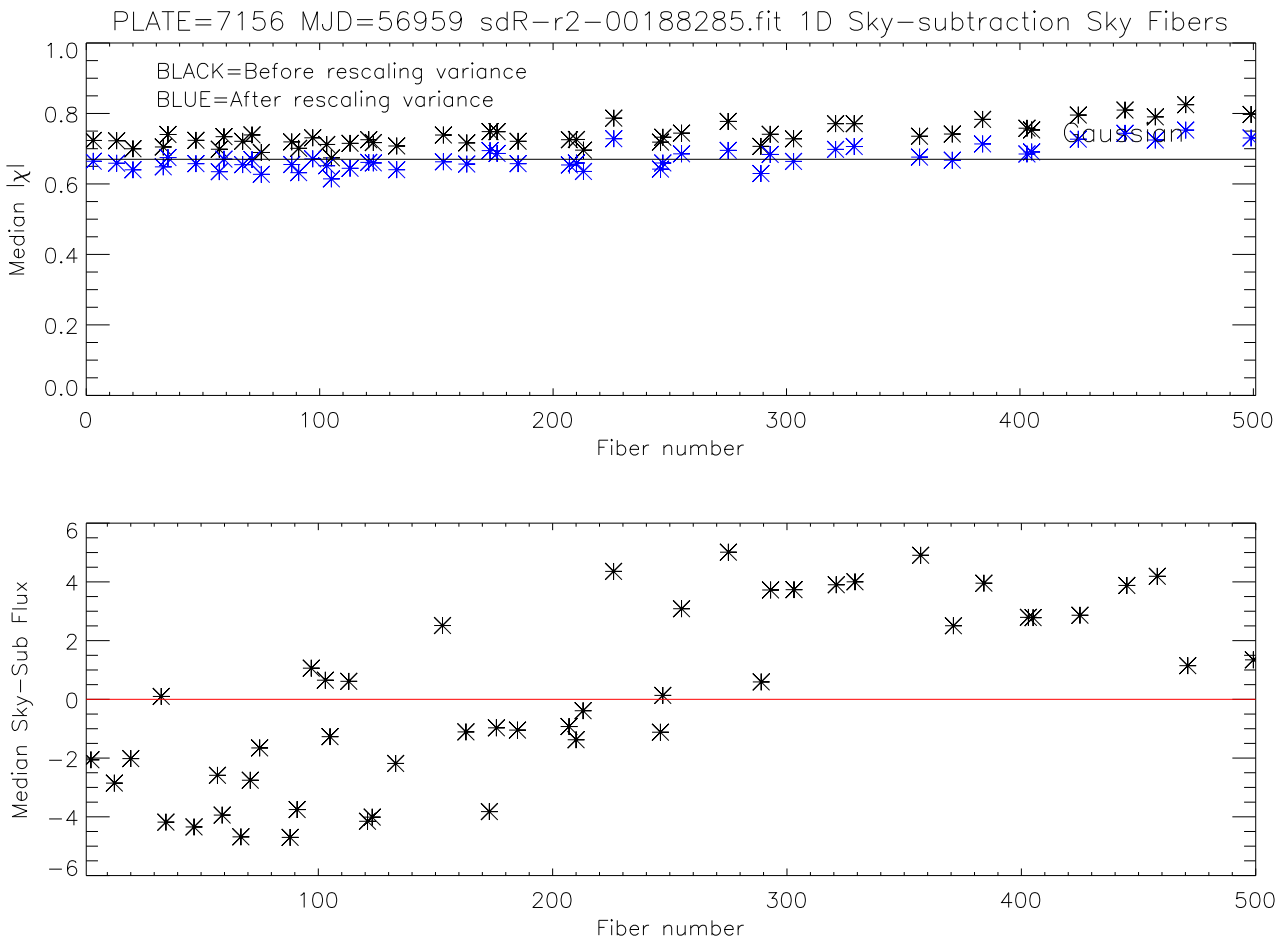

PLATE=7156 MJD=56959 Arcline Fit for sdR-r2-00188283.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sun May 29 05:09:24 2016

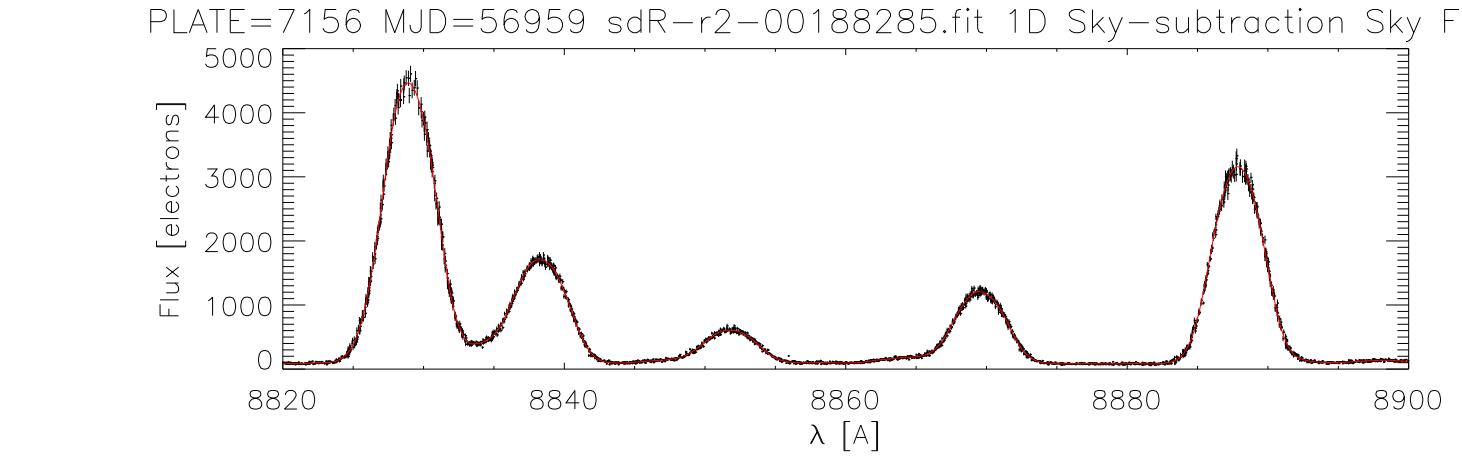

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value =−2613.230
Max value = 51.441
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:09:41 2016

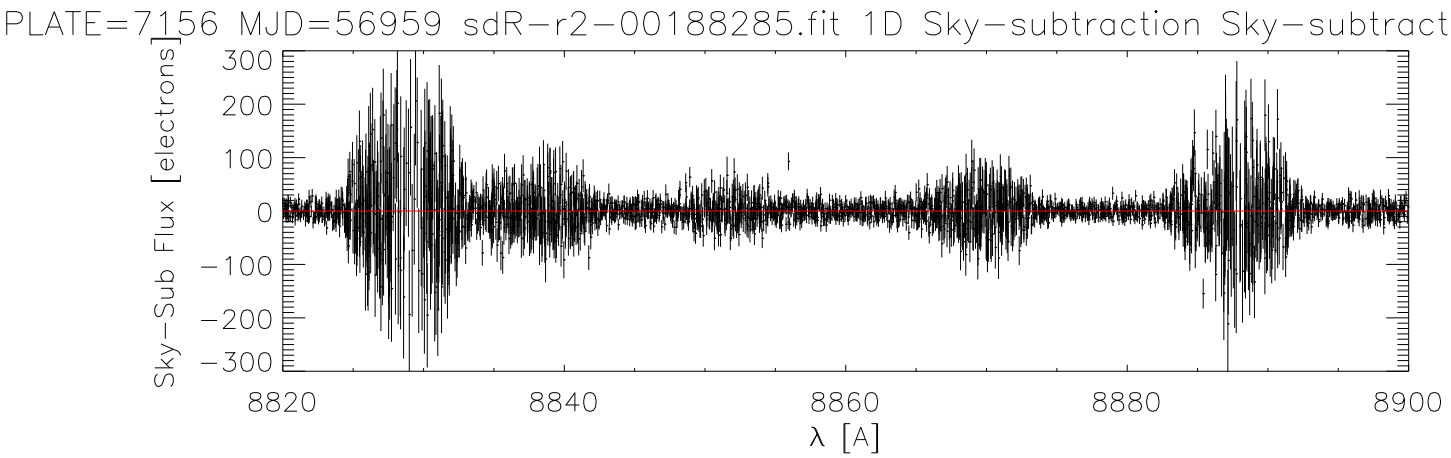

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r2−00188285.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r2-00188285.fit
Fiber Number
500
400
300
200
100
0
Before shift
After shift
1.00 pix
5460 5577 6300 6363 6553 6923 6949 7571 7794 7821 8399 8430 8885 8919
Sky Line Wavelength

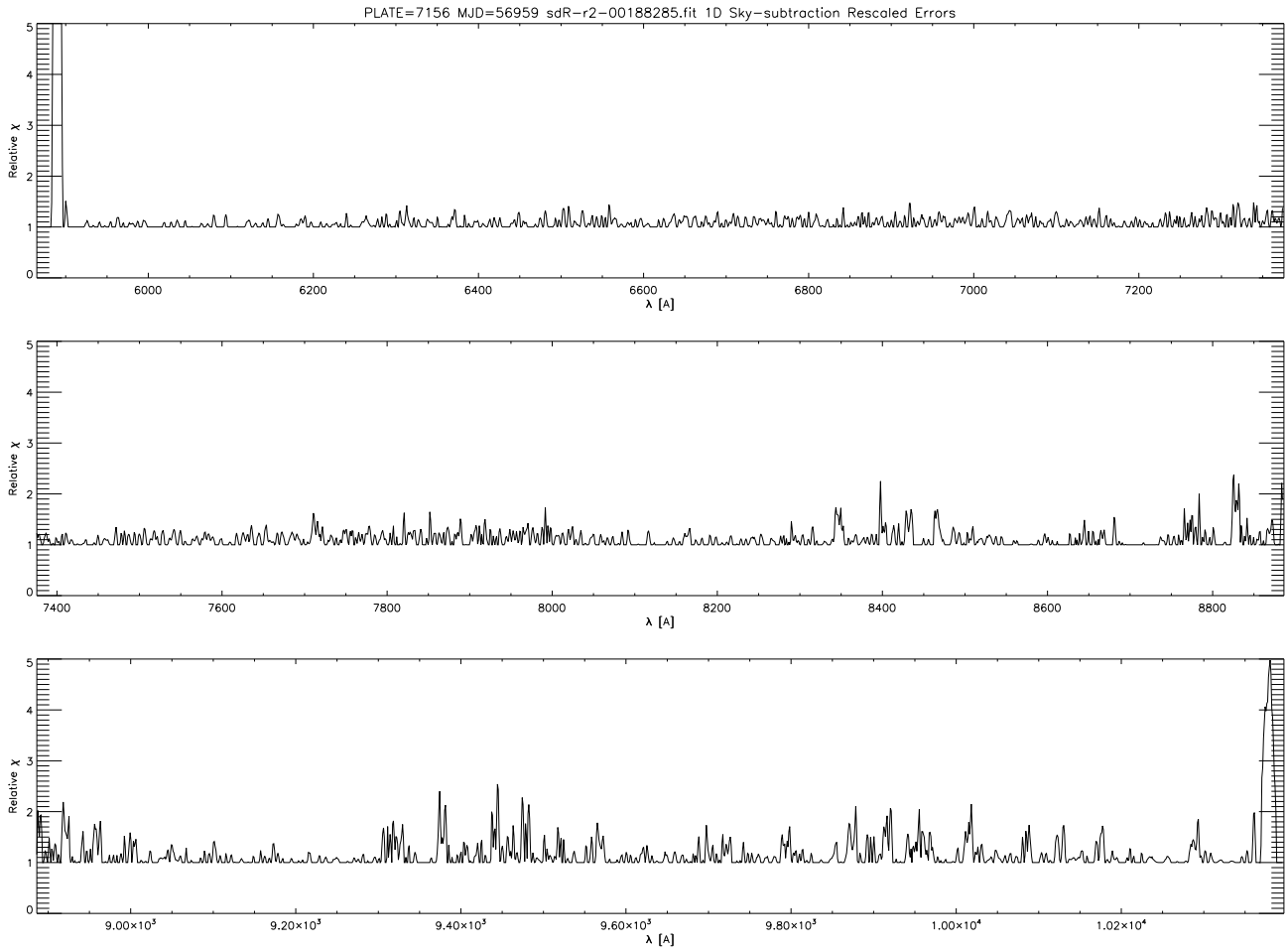

PLATE=7156 MJD=56959 Smooth superflat for sdR-r2-00188285.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

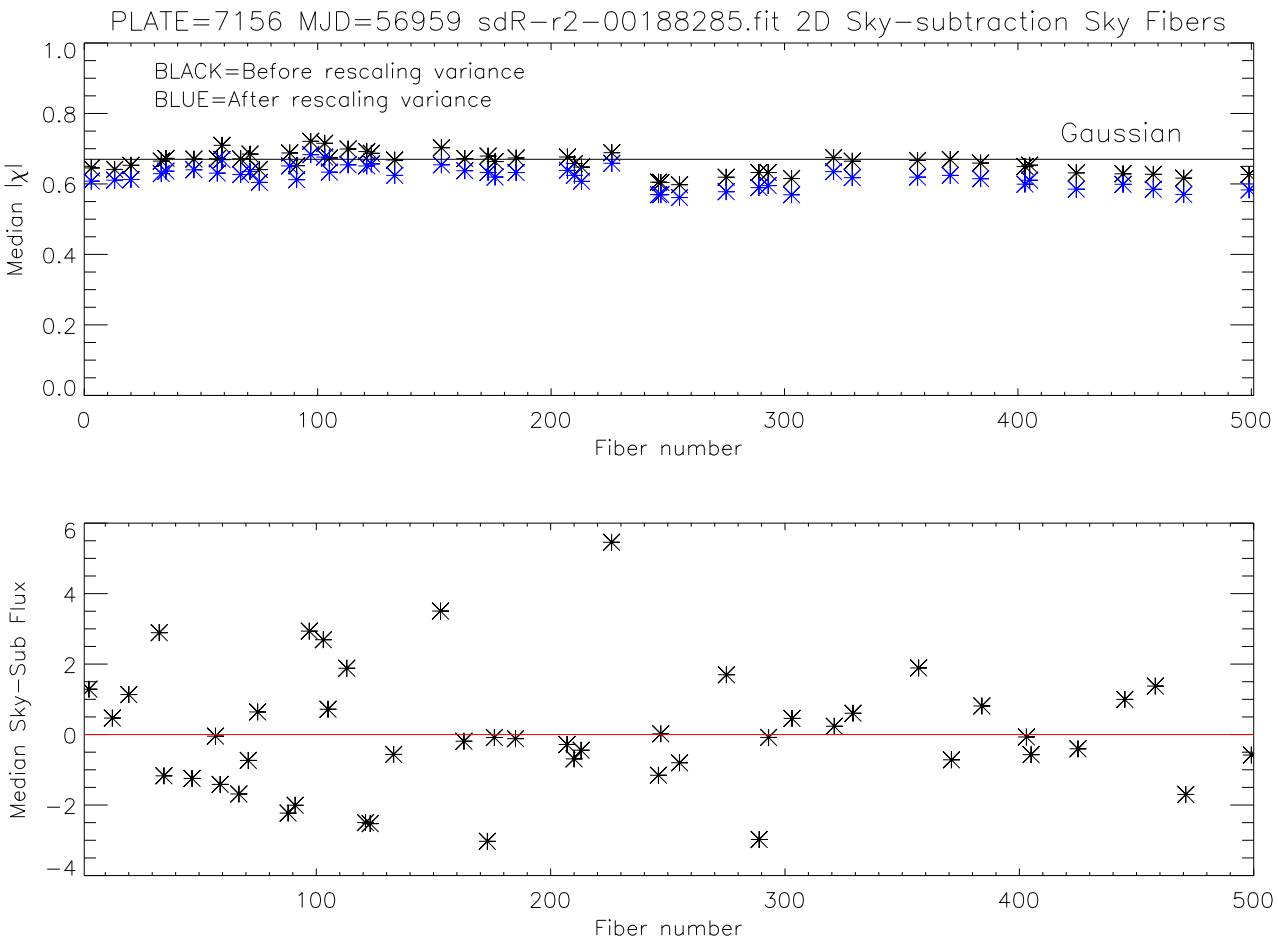

PLATE=7156 MJD=56959 sdR-r2-00188285.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

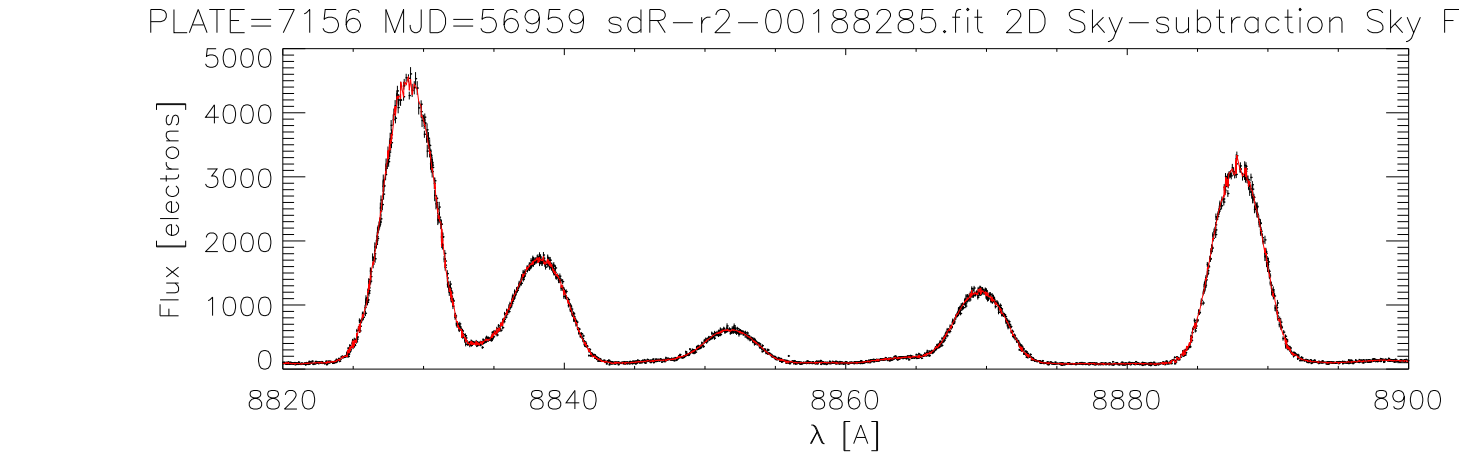

PLATE=7156 MJD=56959 sdR-r2-00188285.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

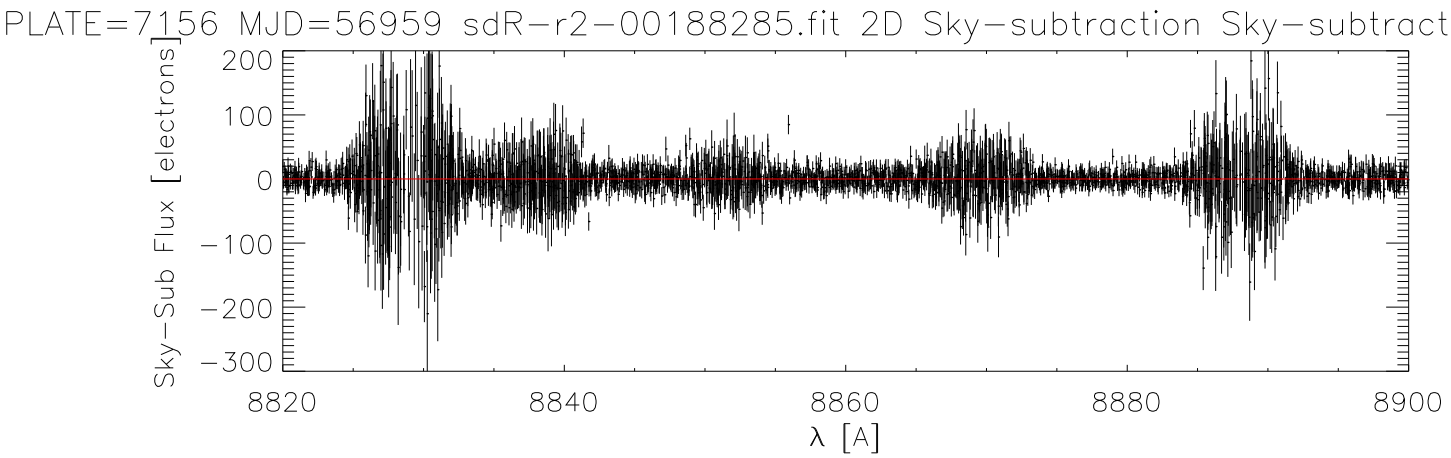

PLATE=7156 MJD=56959 sdR-r2-00188285.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48

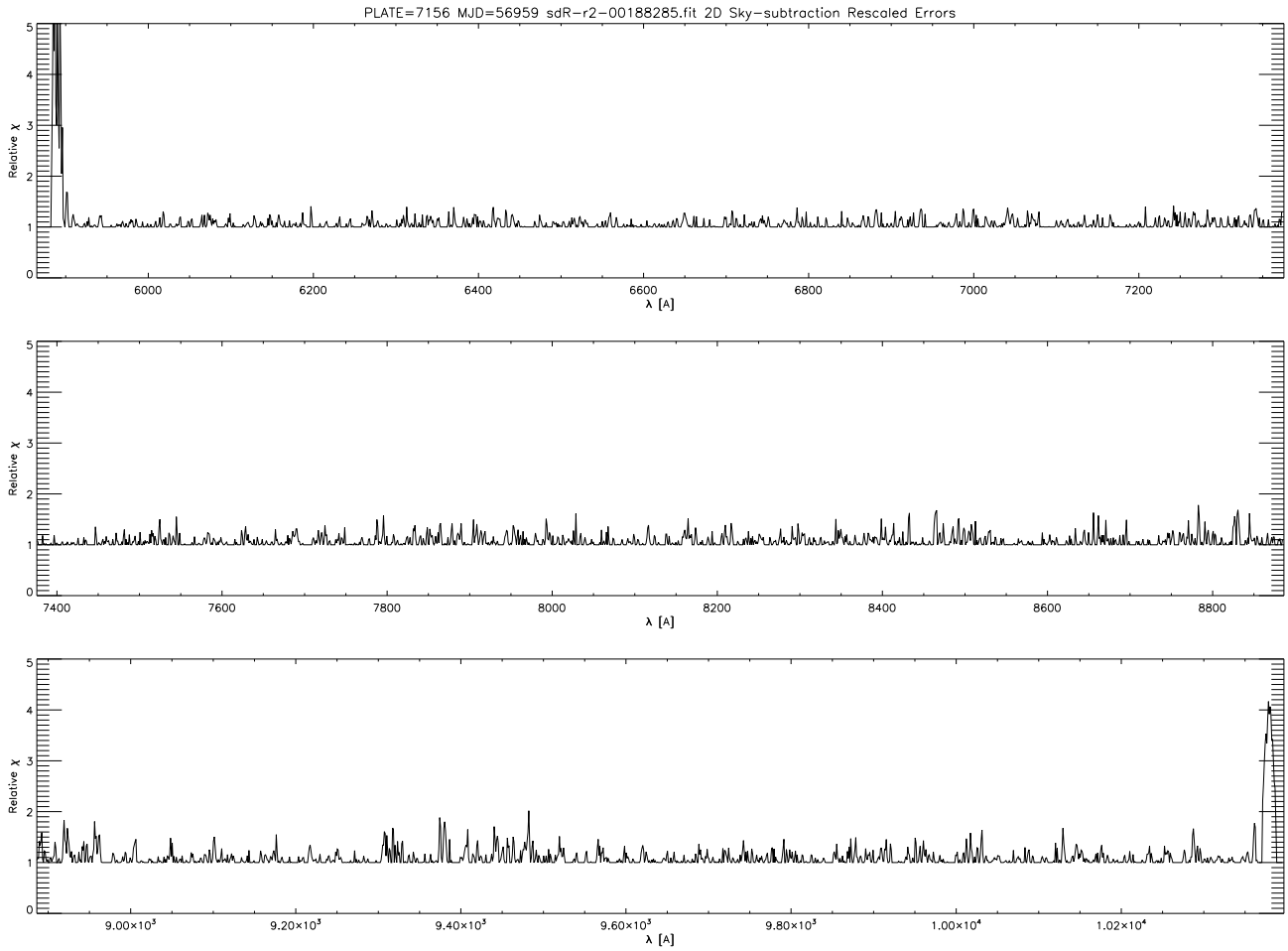


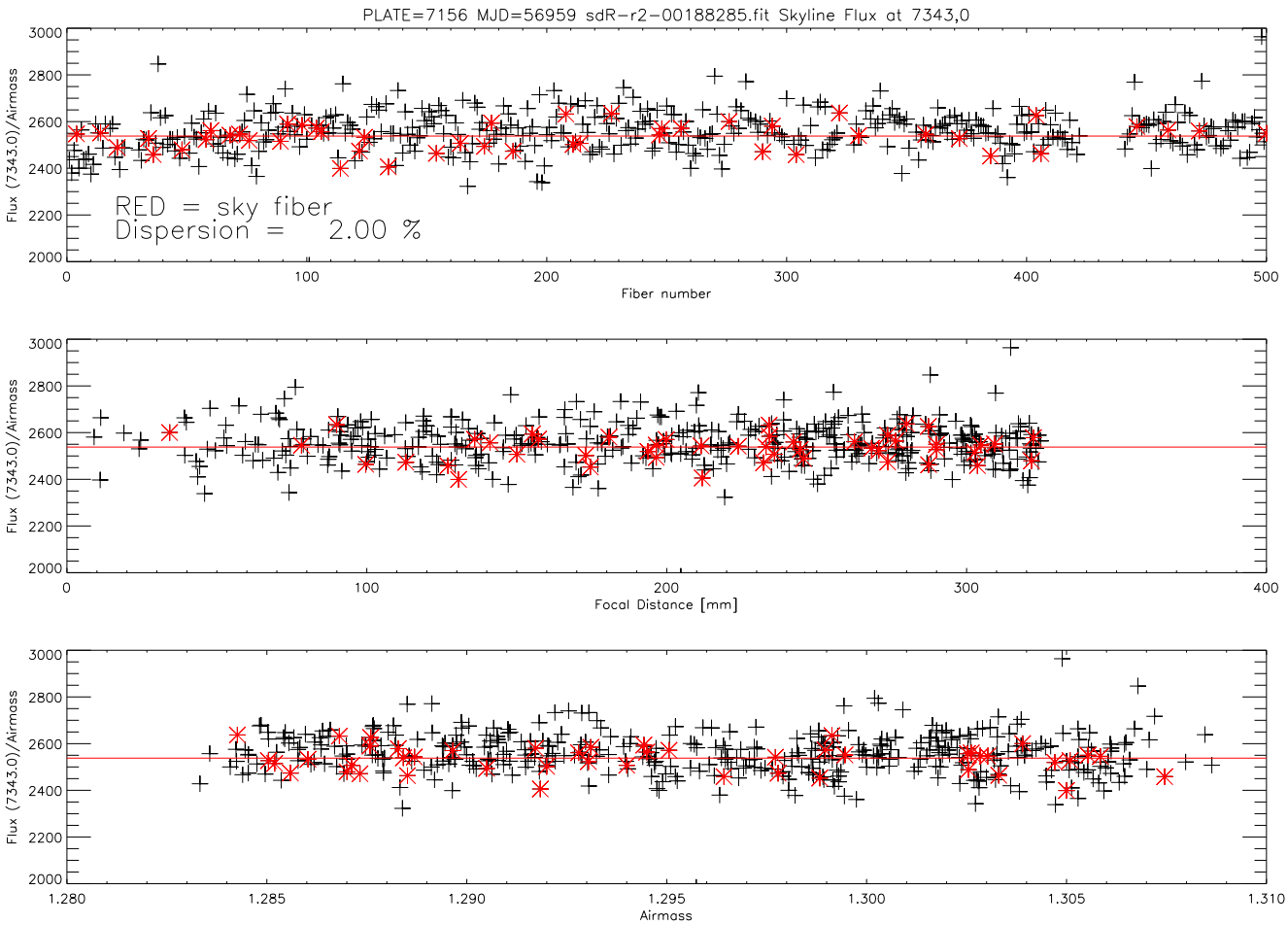

PLATE=7156 MJD=56959 sdR-r2-00188285.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

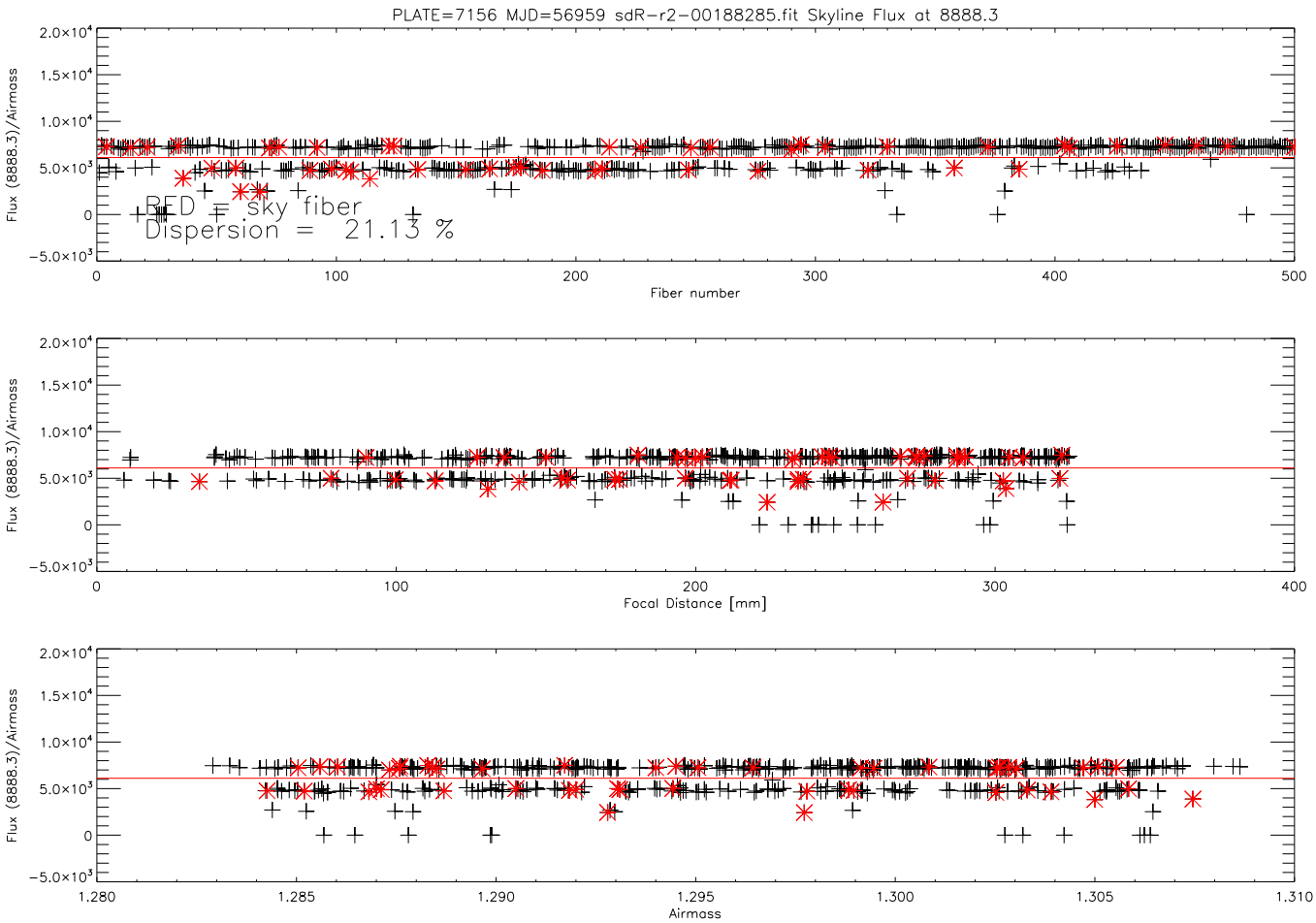

PLATE=7156 MJD=56959 sdR-r2-00188285.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

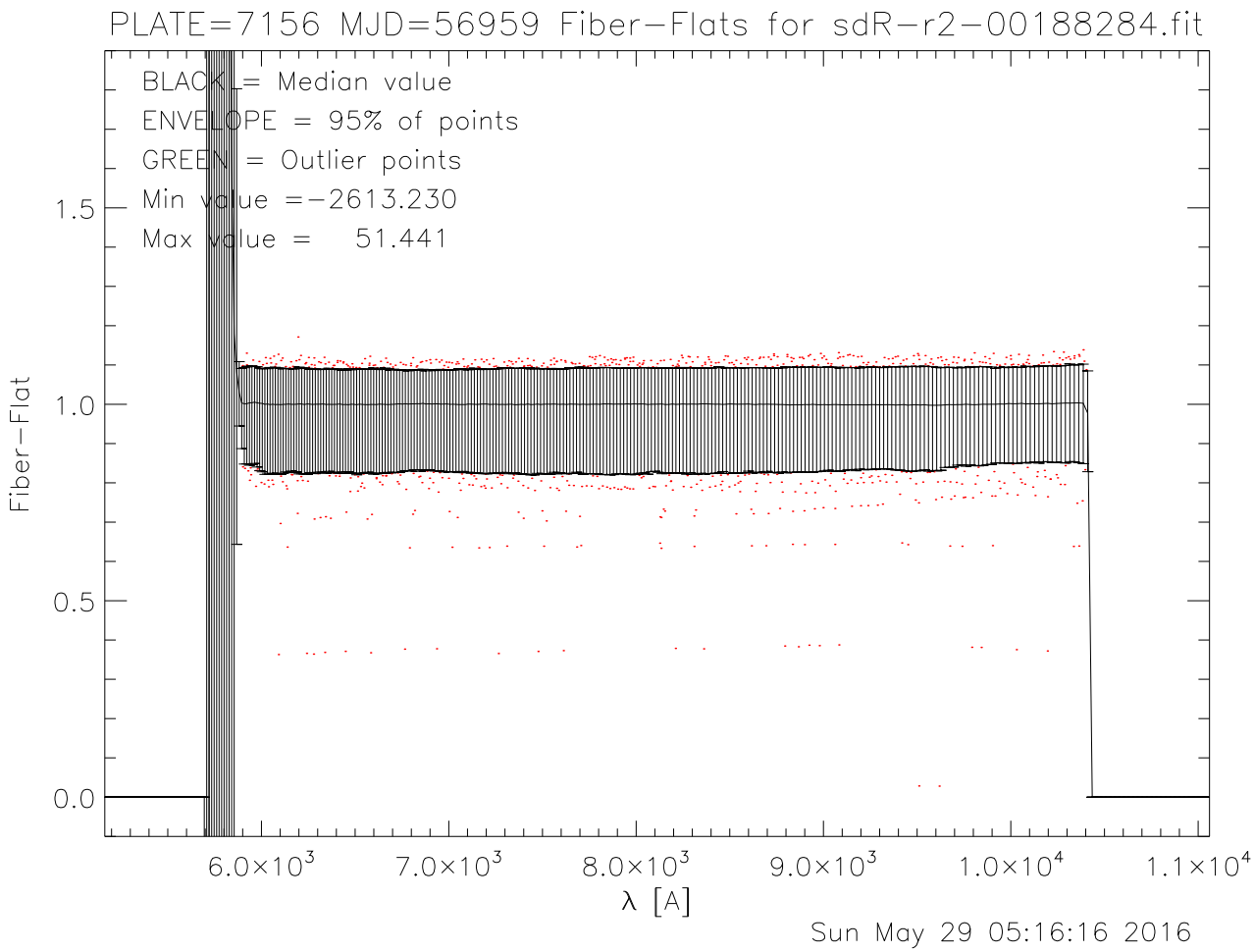

PLATE=7156 MJD=56959 sdR-r2-00188285.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

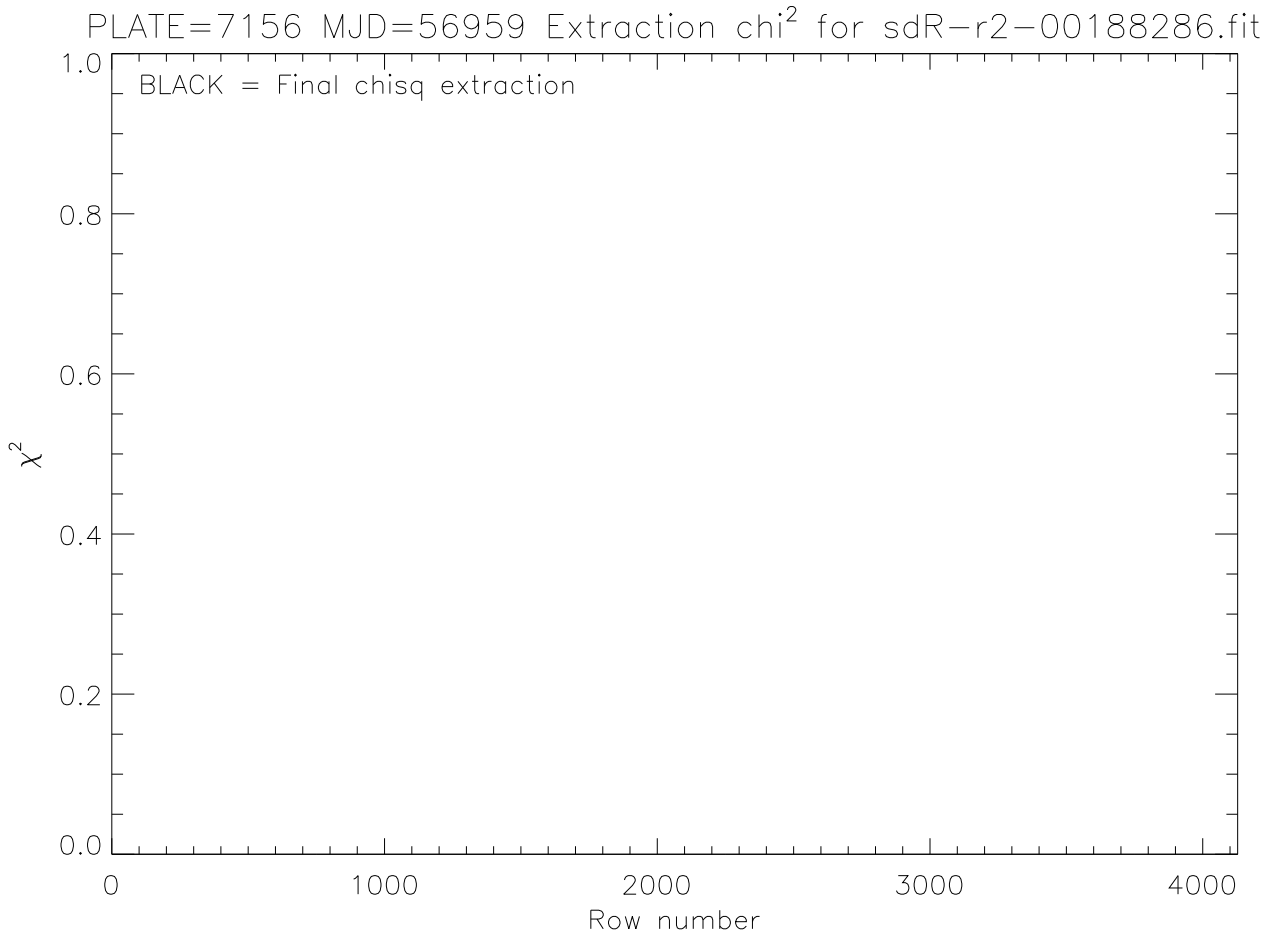
Number of sky fibers = 48

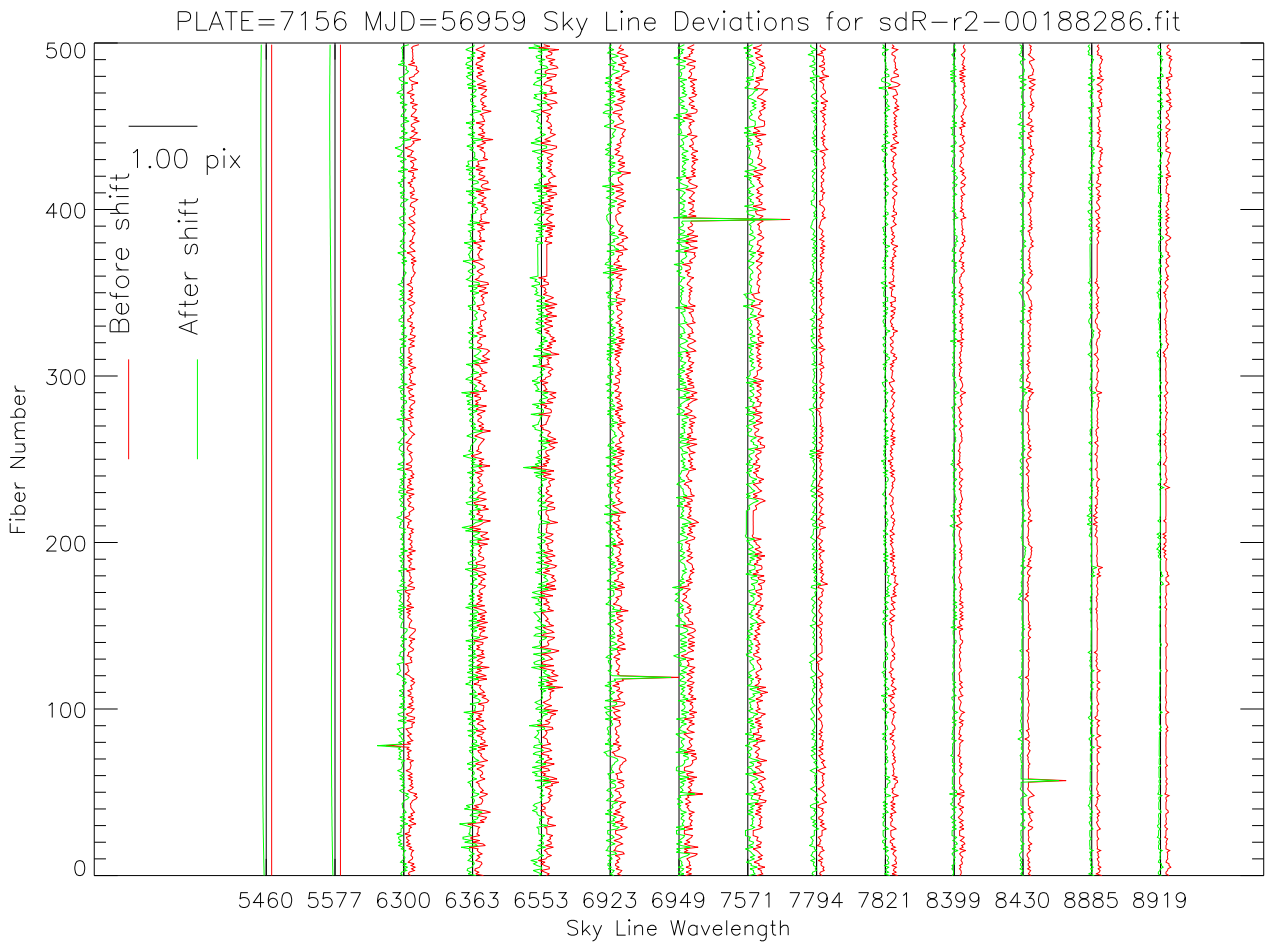


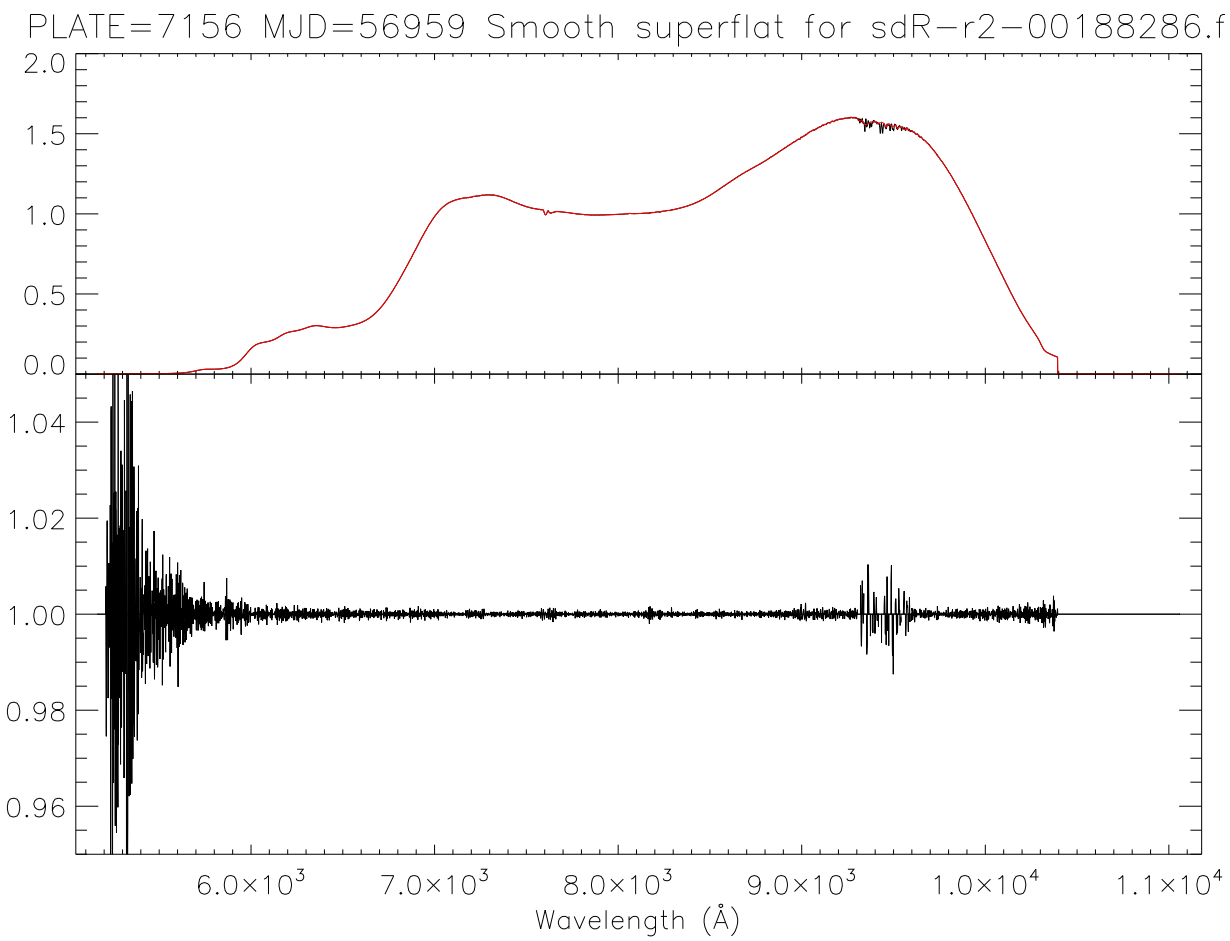

PLATE=7156 MJD=56959 sdR-r2-00188285.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

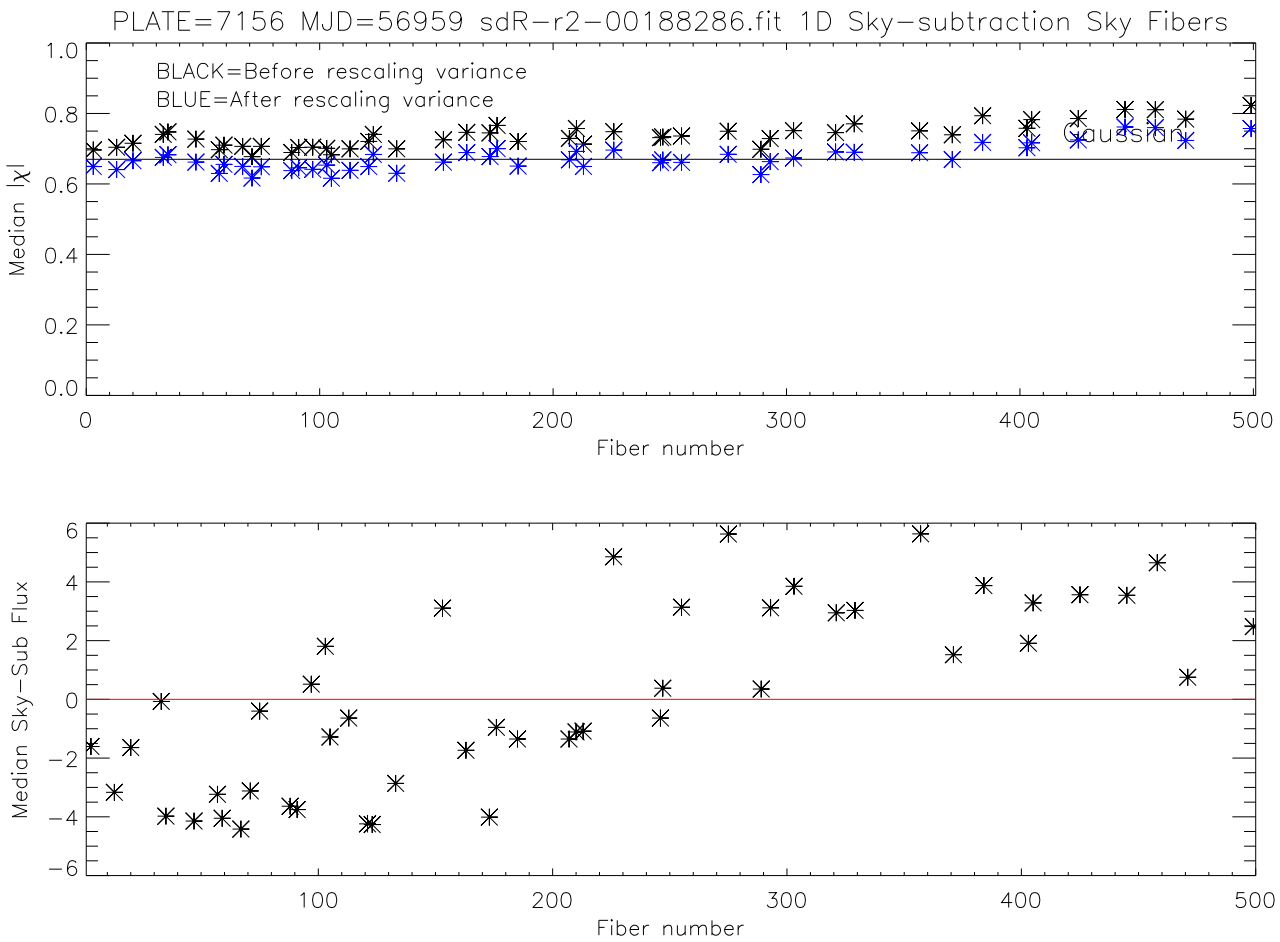

PLATE=7156 MJD=56959 sdR-r2-00188285.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 21.13 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

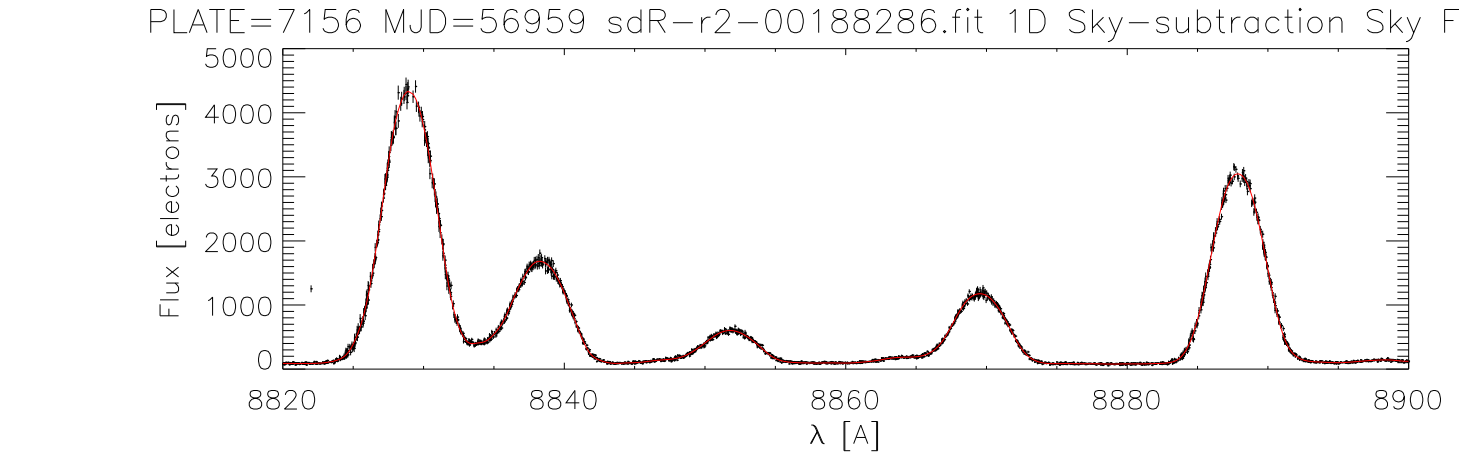

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value =−2613.230
Max value = 51.441
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:16:16 2016

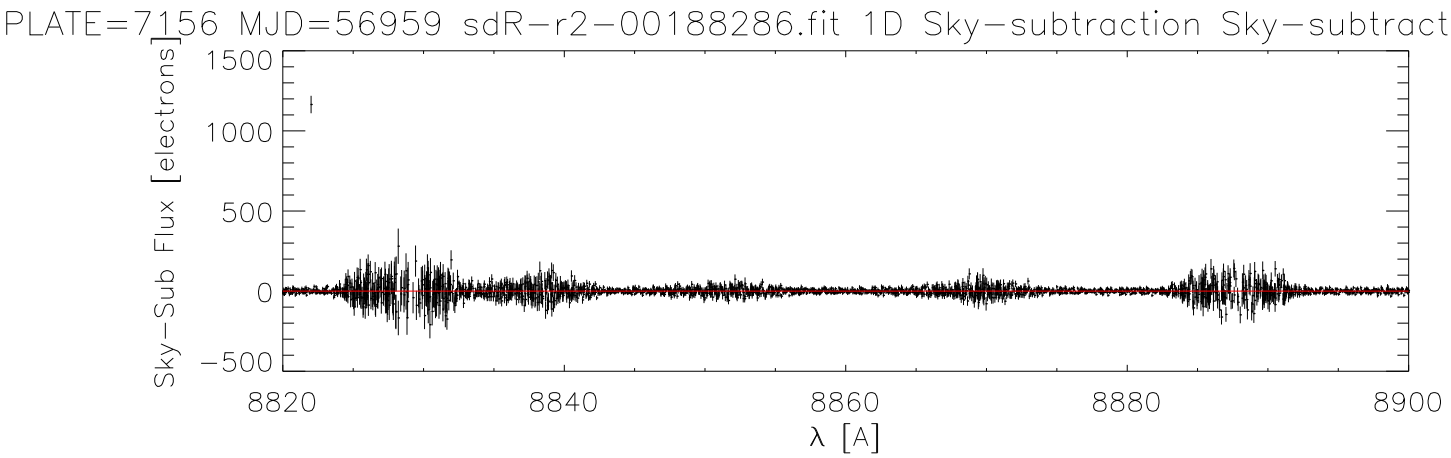

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r2−00188286.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r2-00188286.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

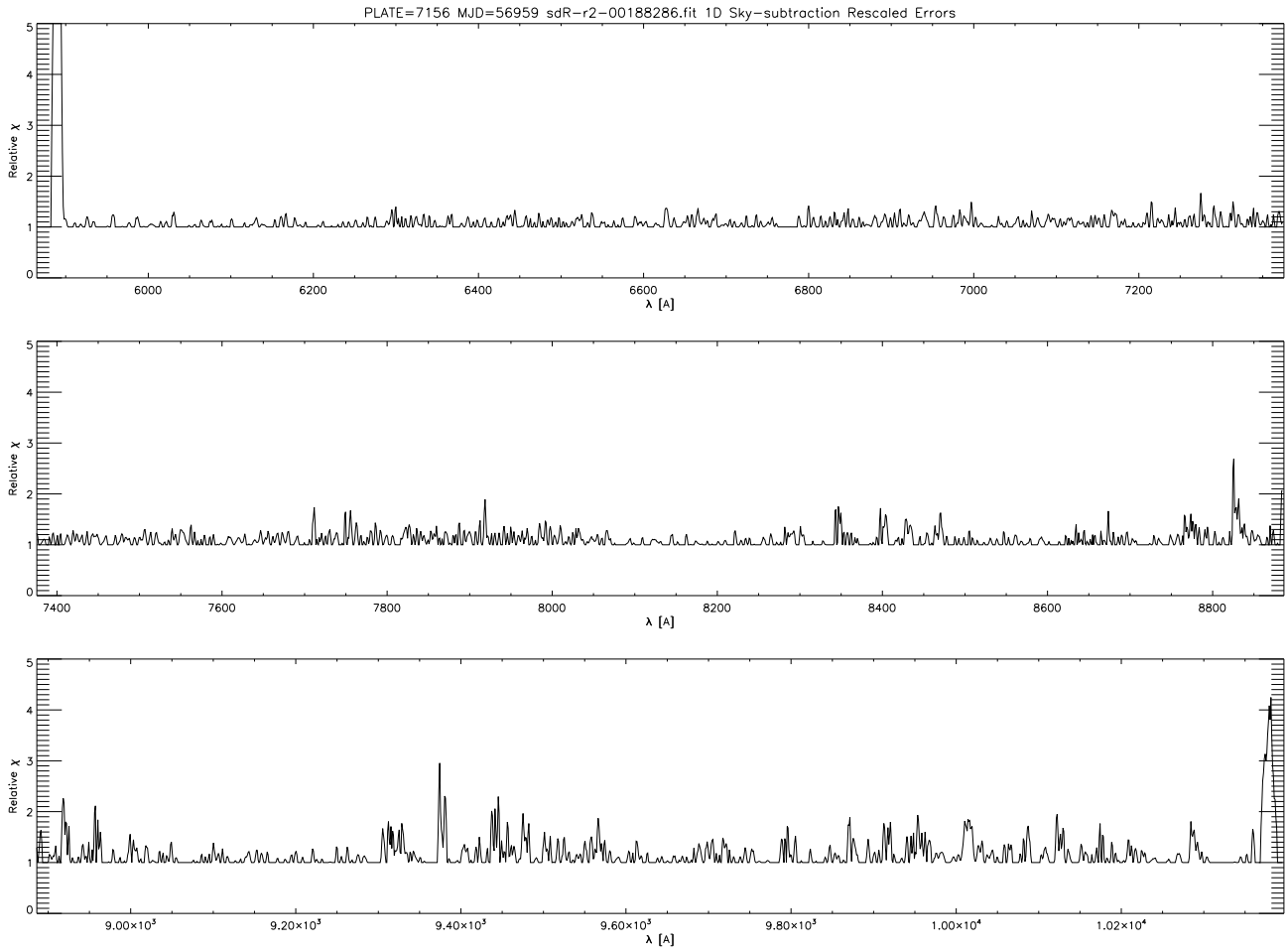

PLATE=7156 MJD=56959 Smooth superflat for sdR-r2-00188286.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

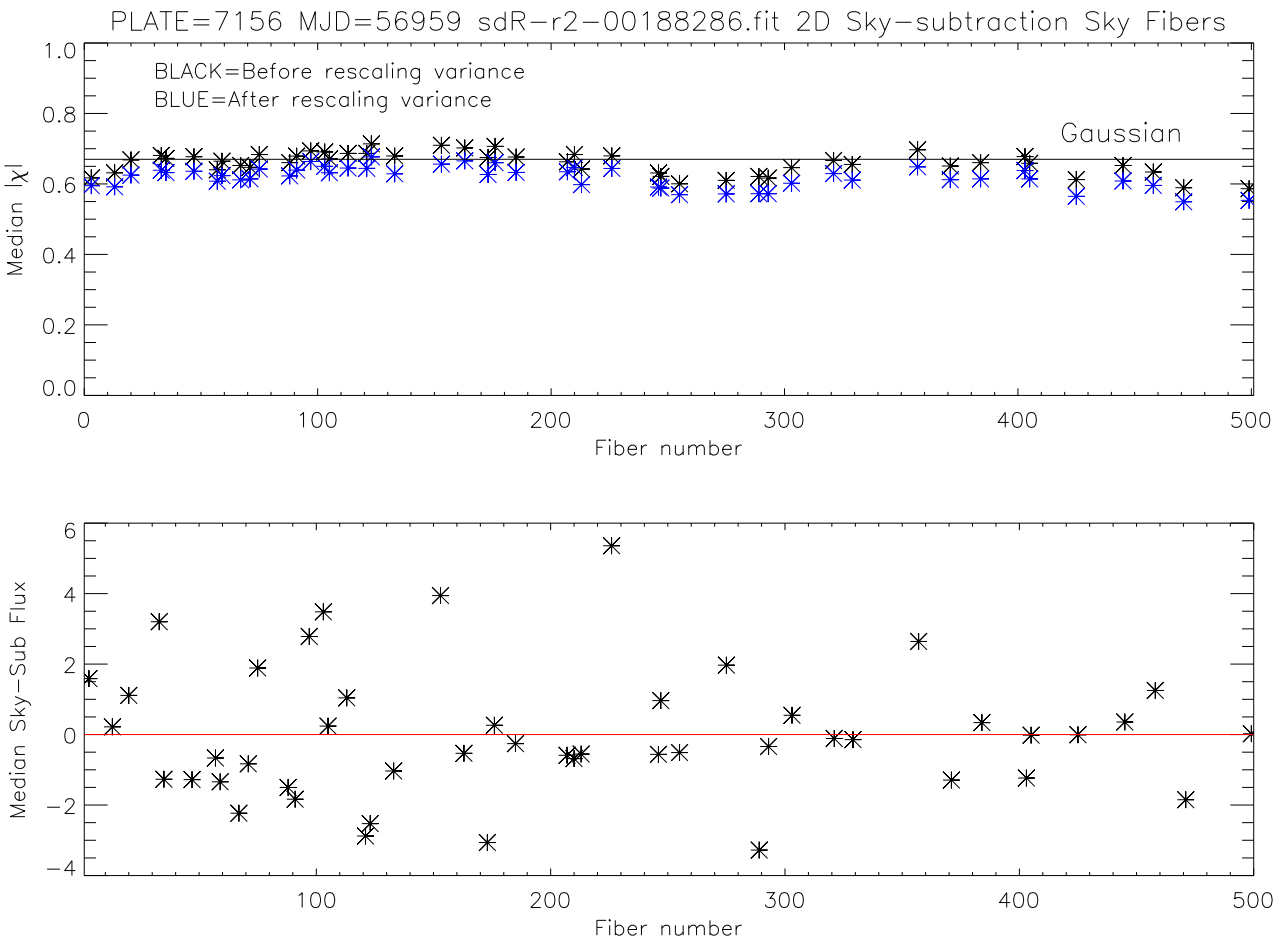

PLATE=7156 MJD=56959 sdR-r2-00188286.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

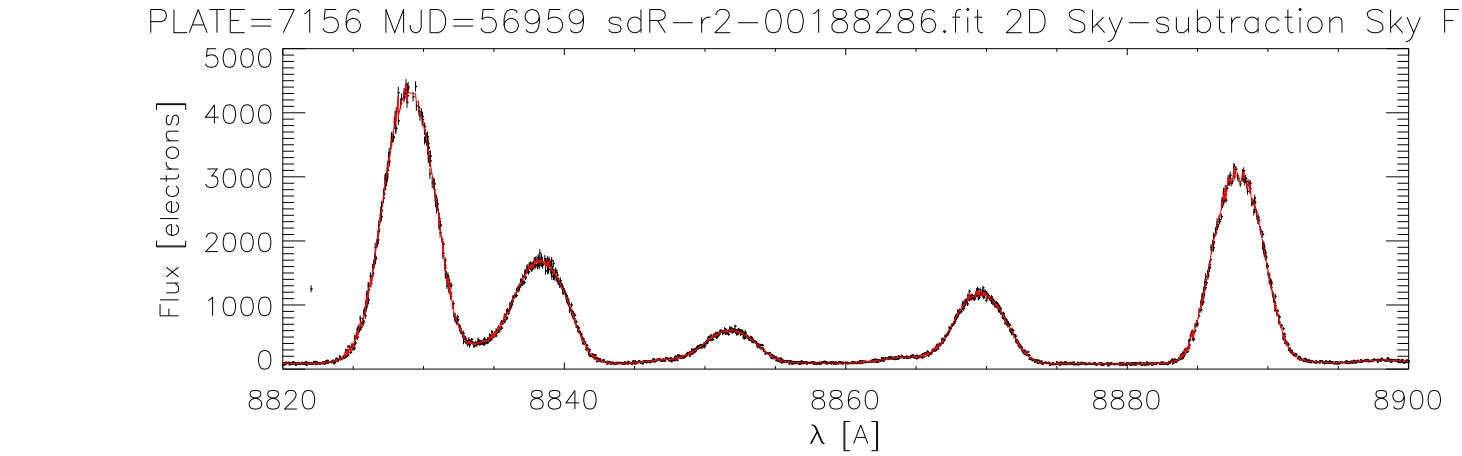

PLATE=7156 MJD=56959 sdR-r2-00188286.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

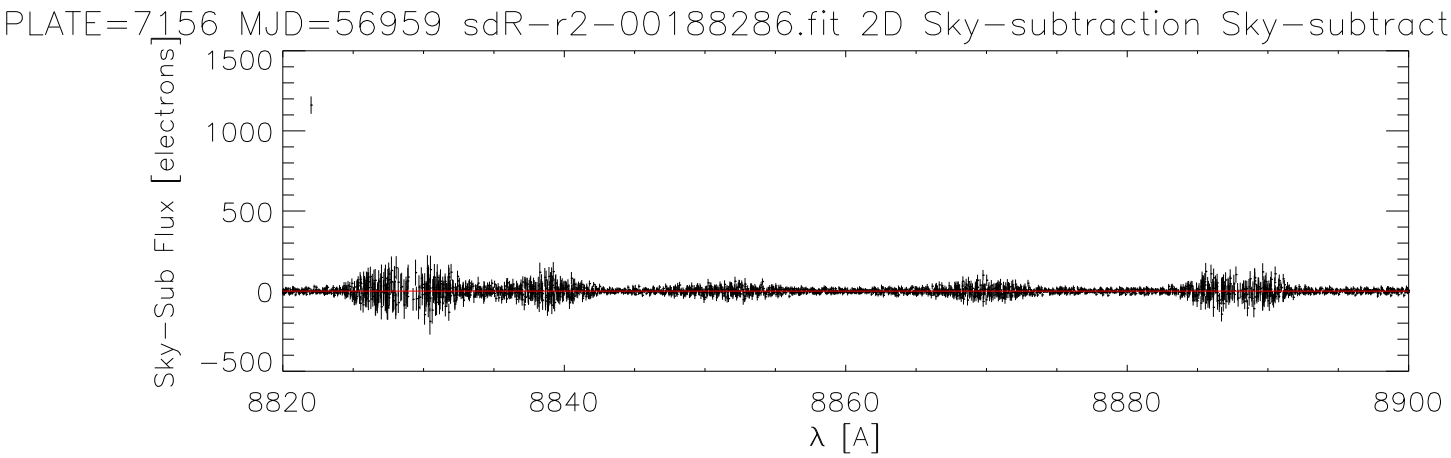

PLATE=7156 MJD=56959 sdR-r2-00188286.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48

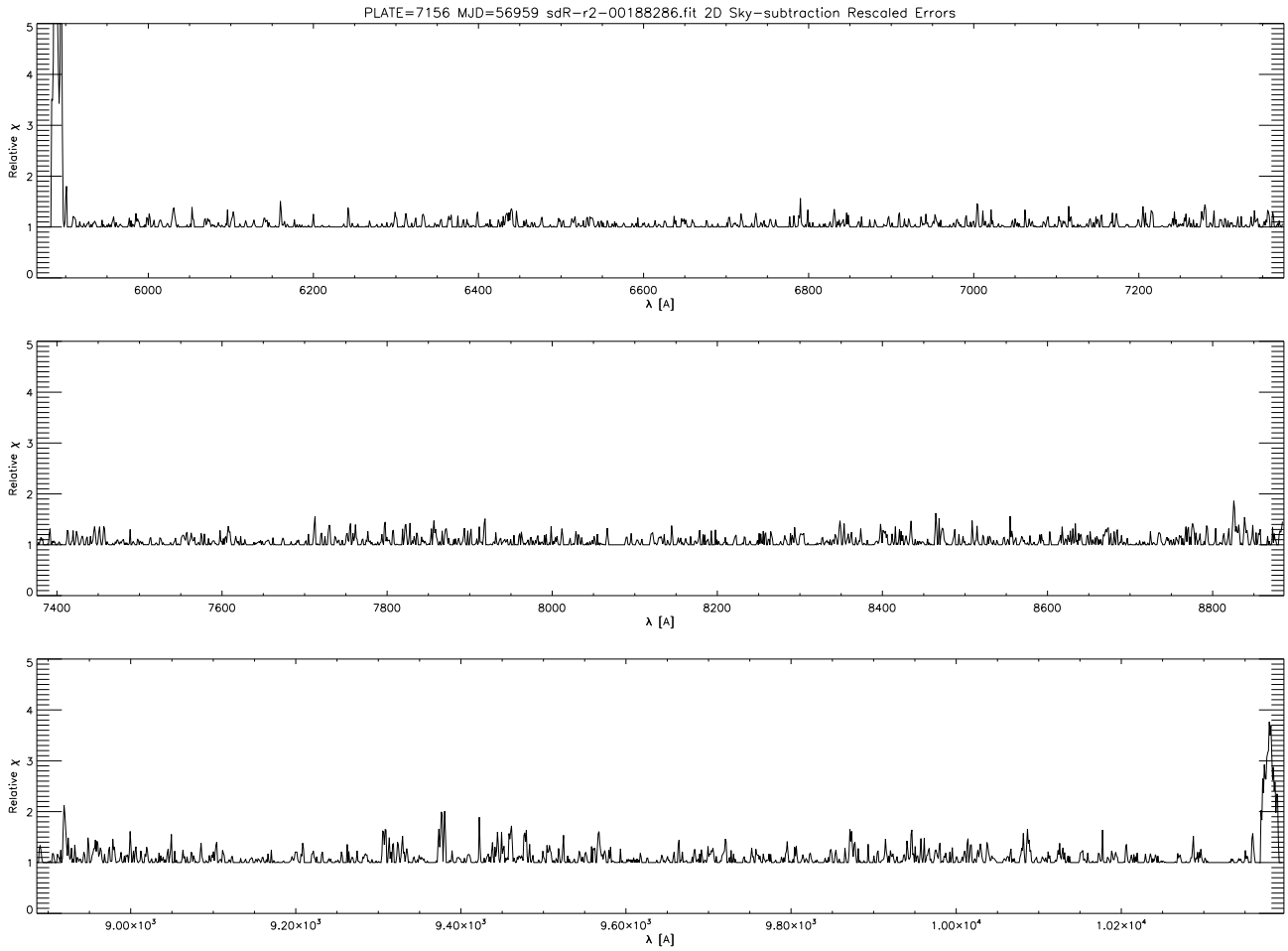


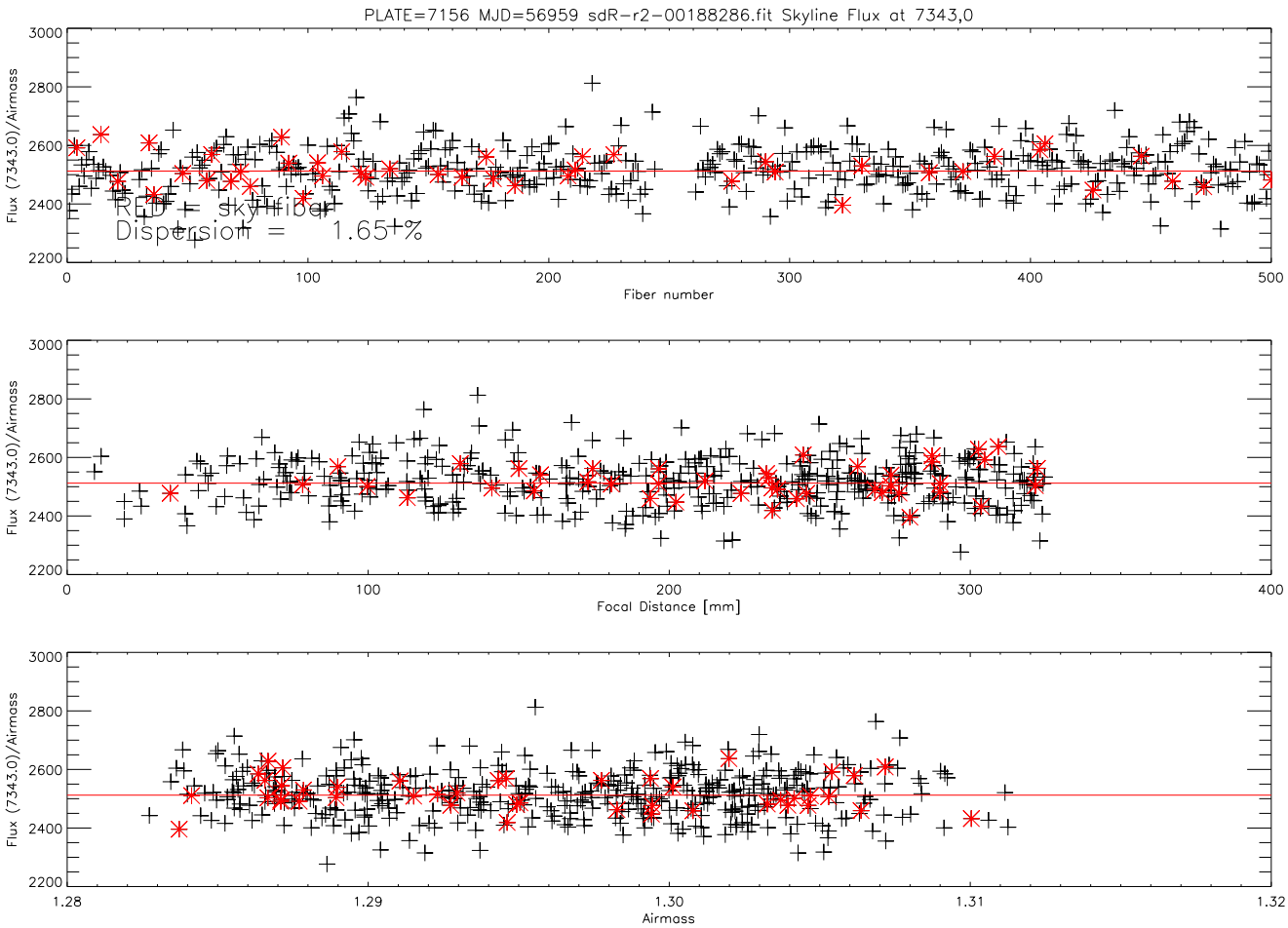

PLATE=7156 MJD=56959 sdR-r2-00188286.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

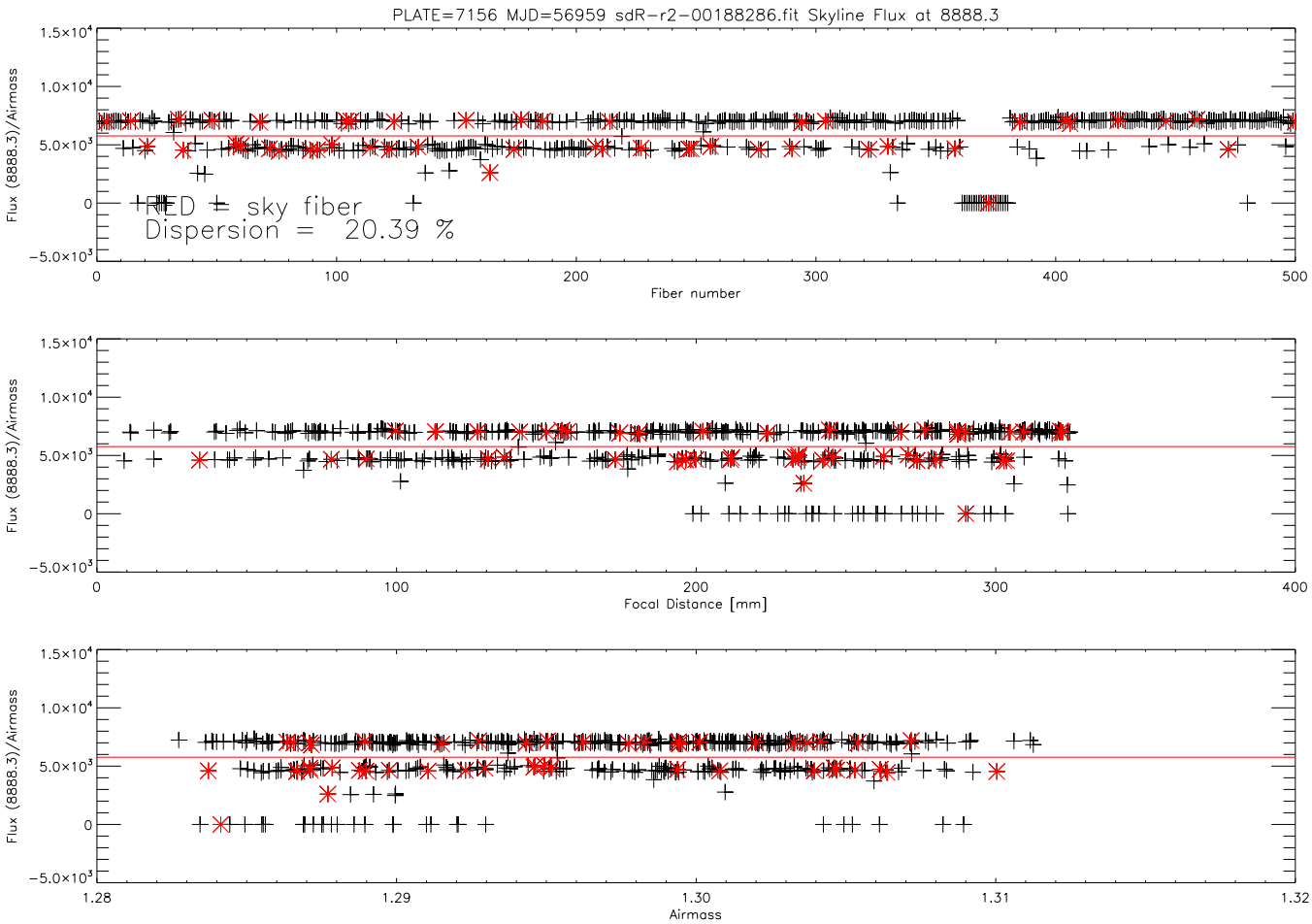

PLATE=7156 MJD=56959 sdR-r2-00188286.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

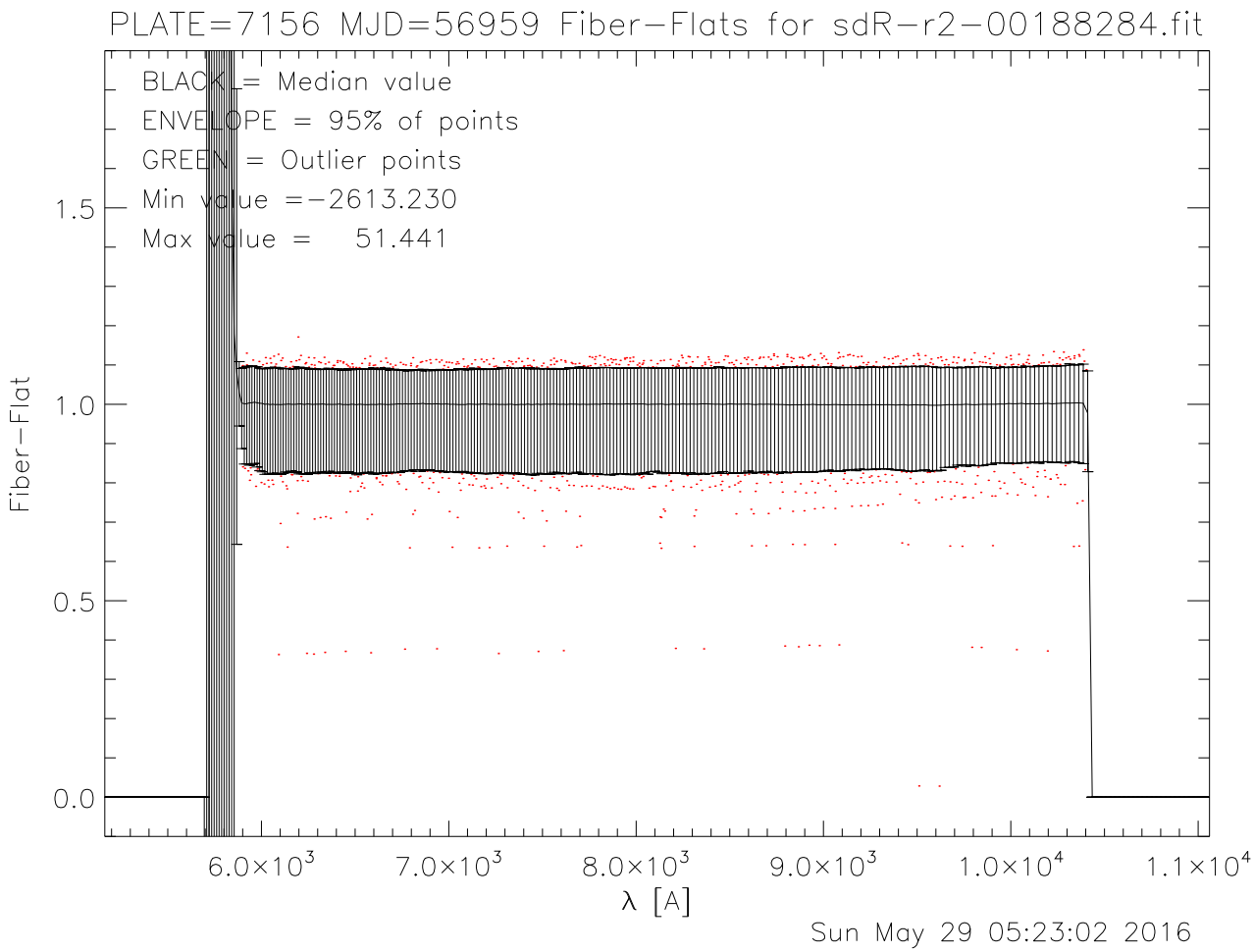

PLATE=7156 MJD=56959 sdR-r2-00188286.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

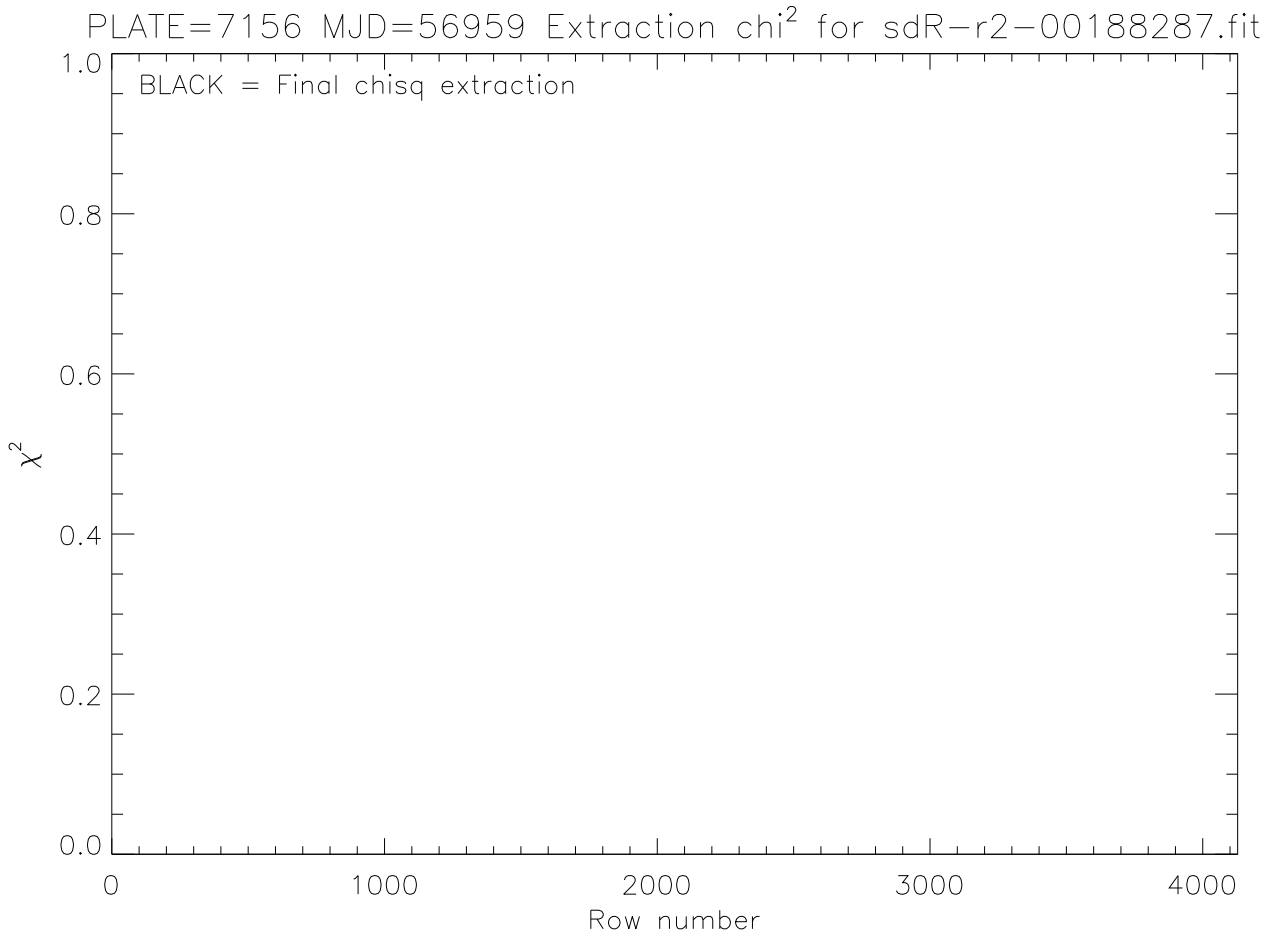
Number of sky fibers = 48

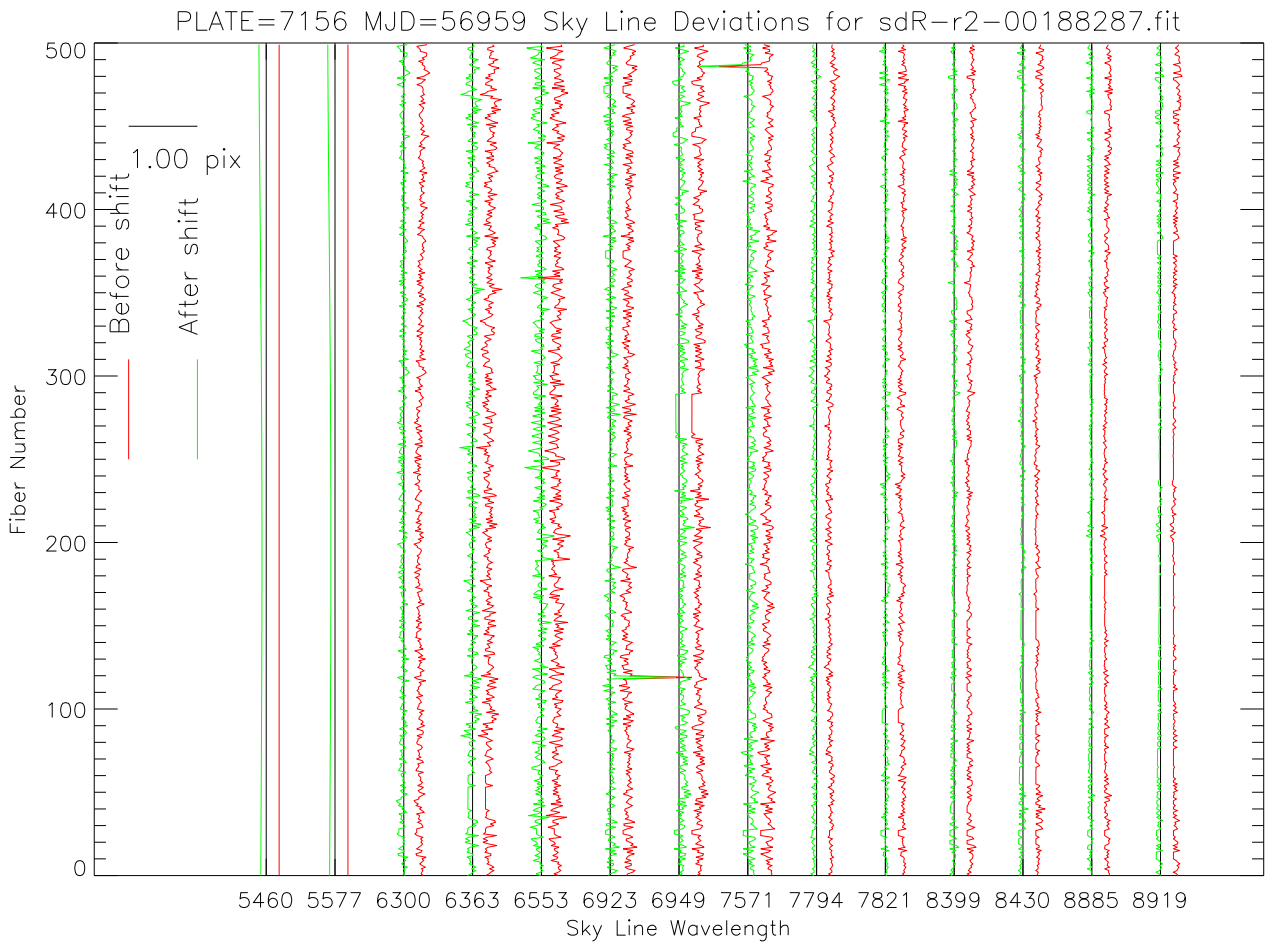


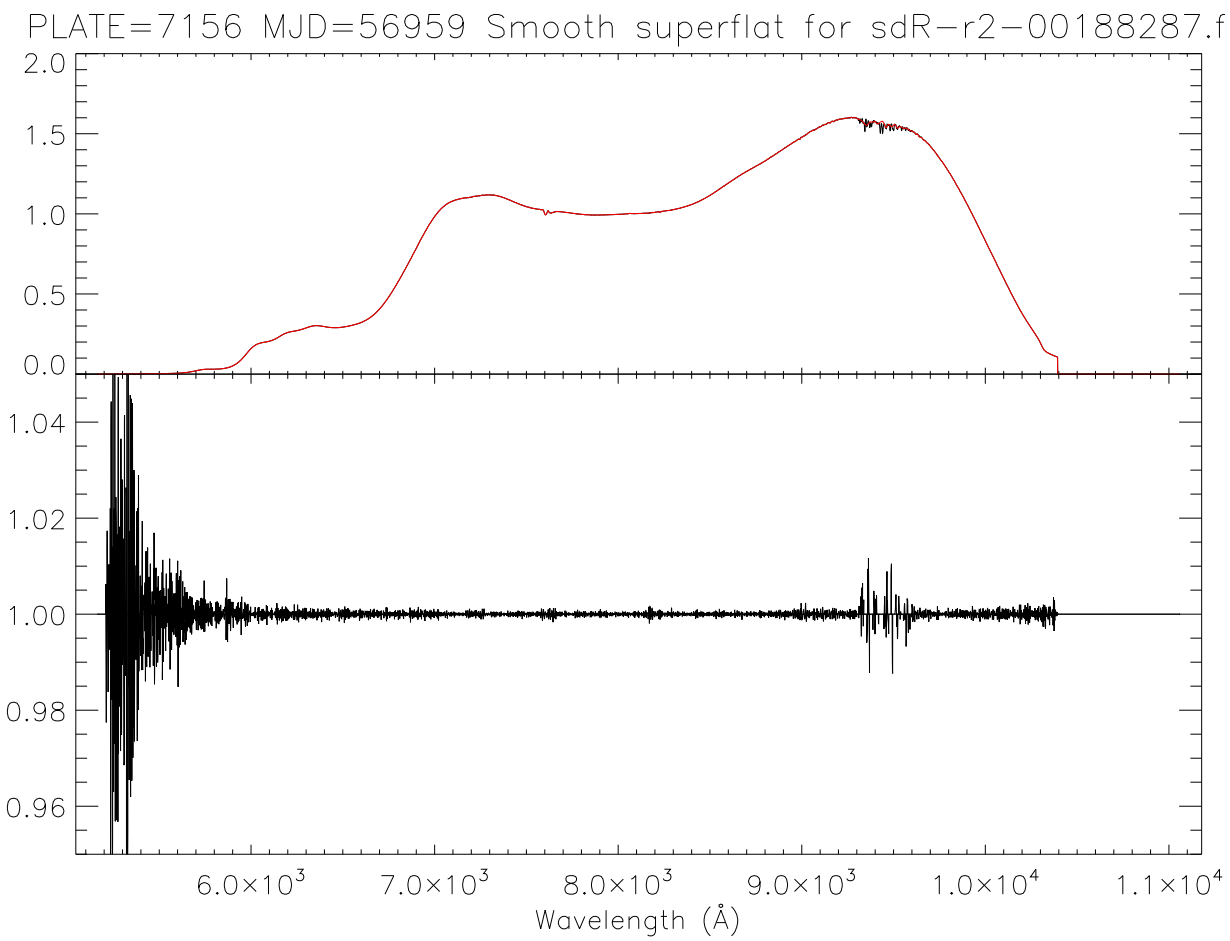

PLATE=7156 MJD=56959 sdR-r2-00188286.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
Red = skyfiber
Dispersion = 1.65+%
Focal Distance [mm]
Airmass

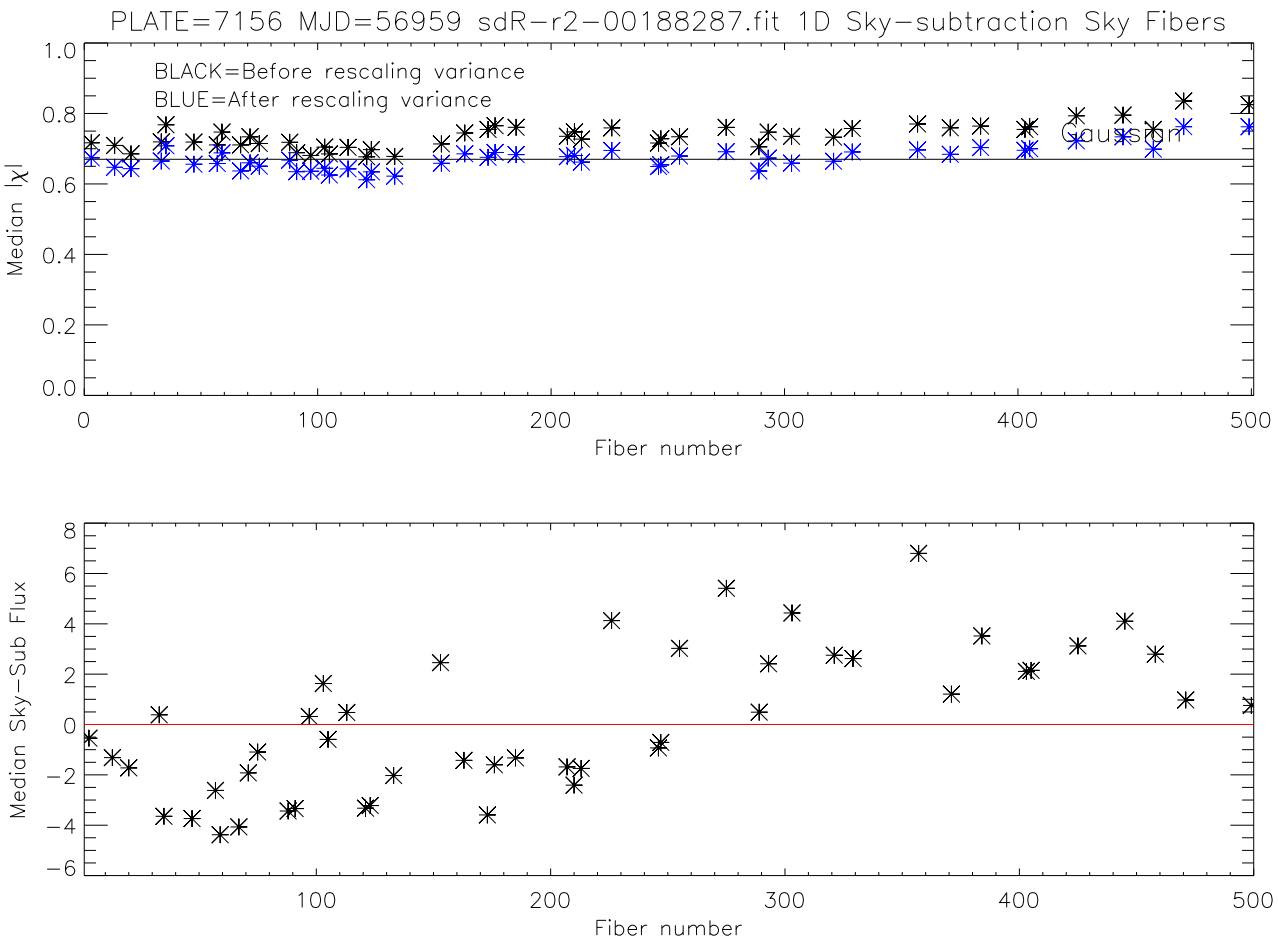

PLATE=7156 MJD=56959 sdR-r2-00188286.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 20.39 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

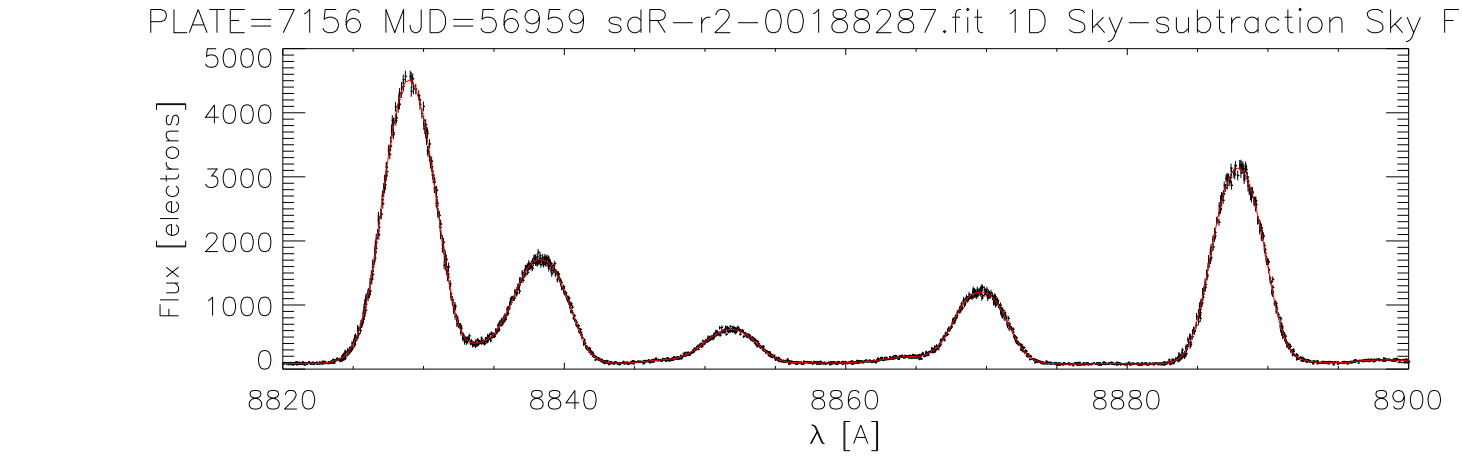

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value =−2613.230
Max value = 51.441
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:23:02 2016

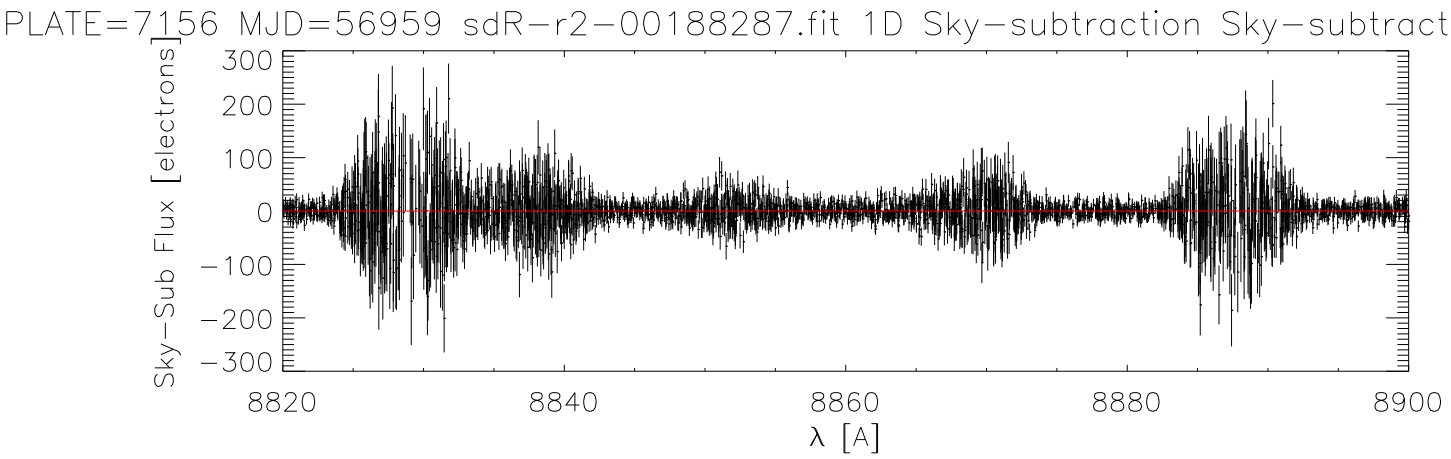

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r2−00188287.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r2-00188287.fit
Fiber Number
Sky Line Wavelength
Before shift
After shift
1.00 pix
0
100
200
300
400
500
5460
5577
6300
6363
6553
6923
6949
7571
7794
7821
8399
8430
8885
8919

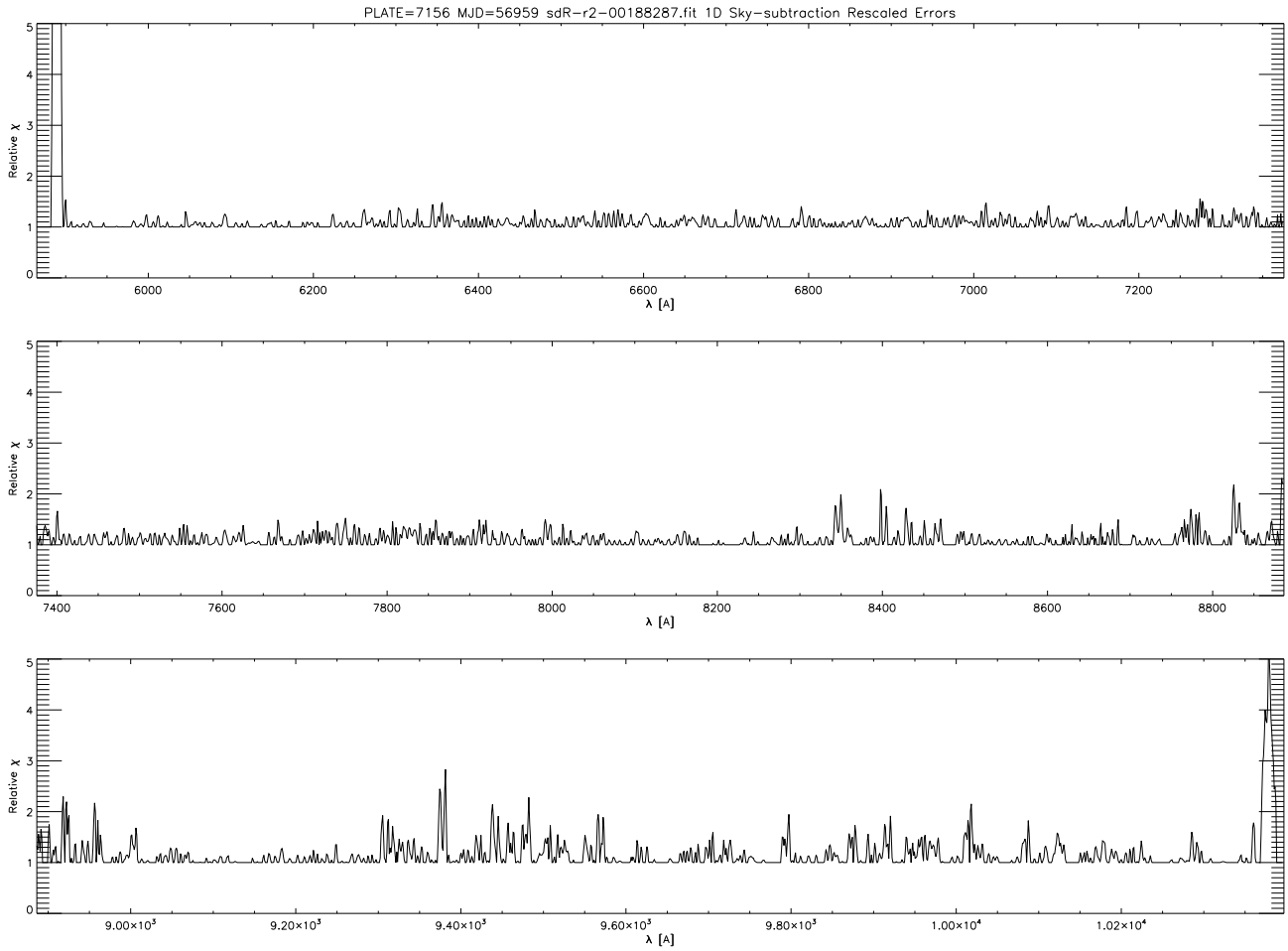

PLATE=7156 MJD=56959 Smooth superflat for sdR-r2-00188287.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

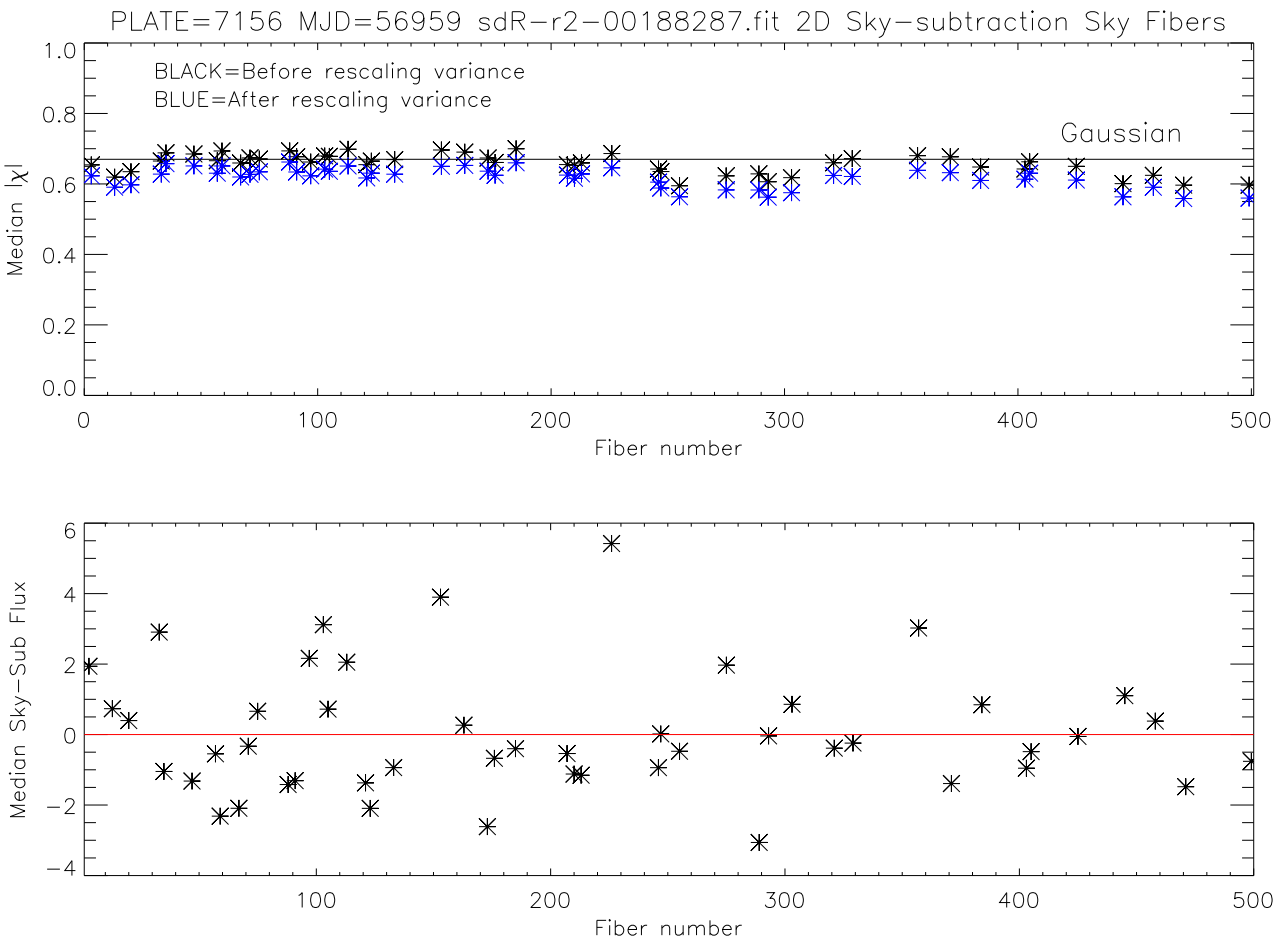

PLATE=7156 MJD=56959 sdR-r2-00188287.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

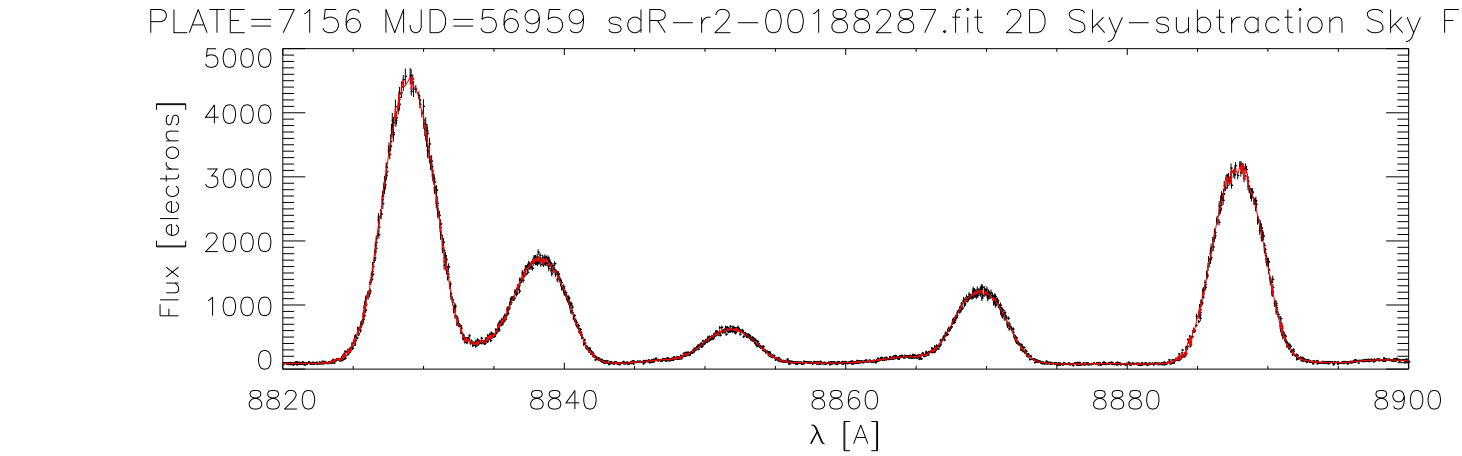

PLATE=7156 MJD=56959 sdR-r2-00188287.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

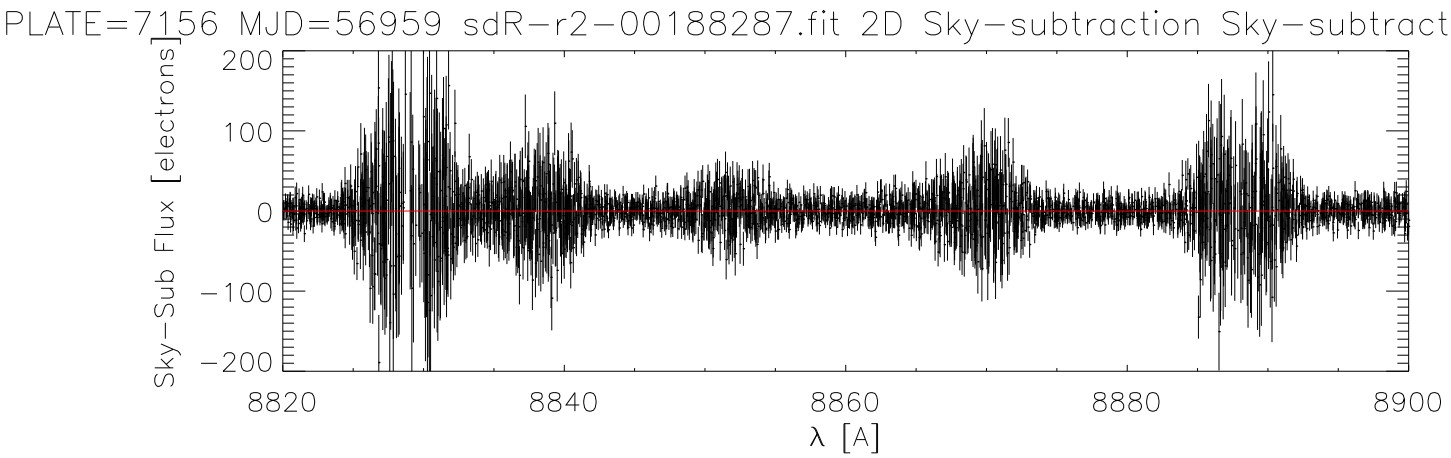

PLATE=7156 MJD=56959 sdR-r2-00188287.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48

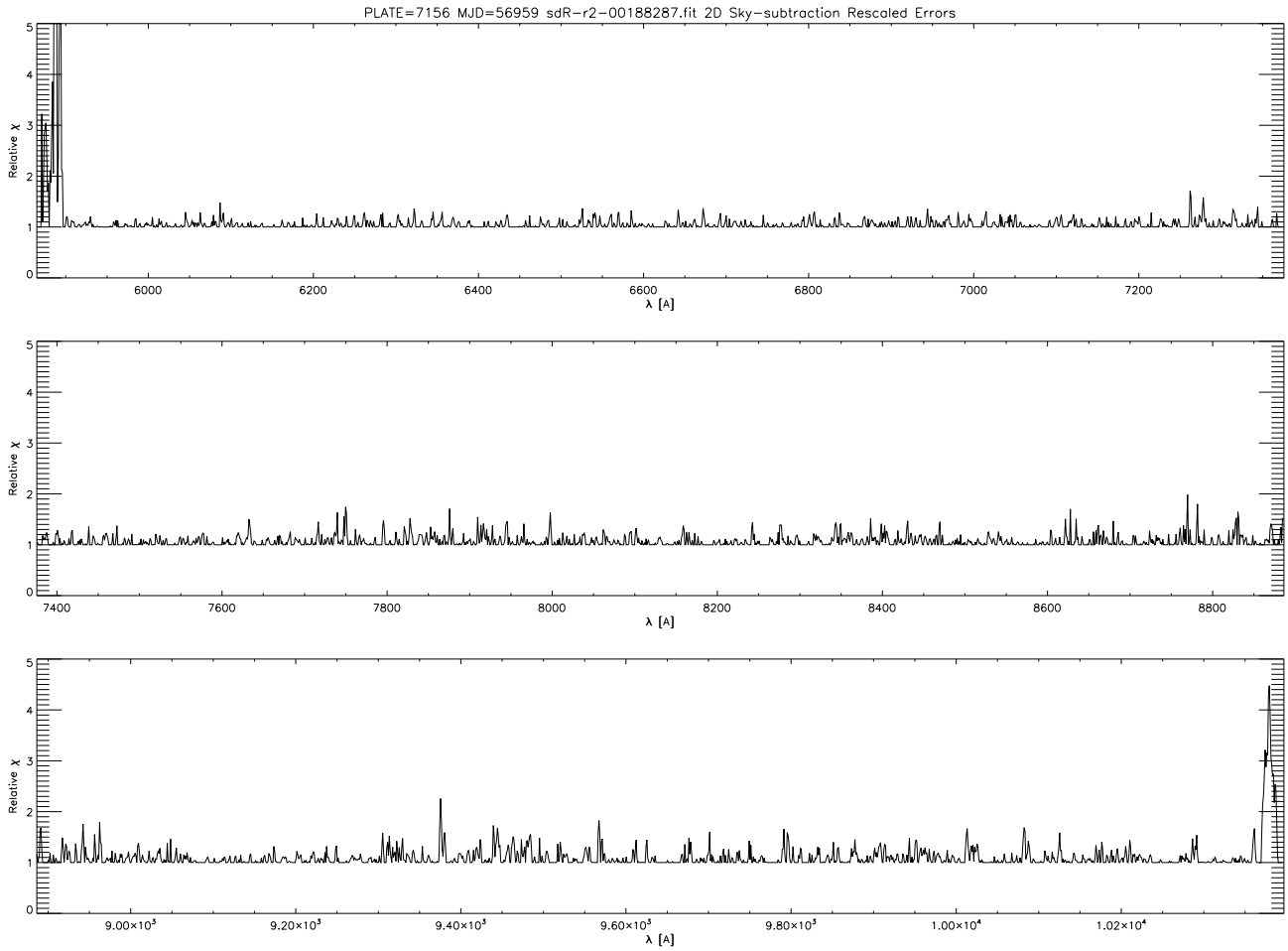


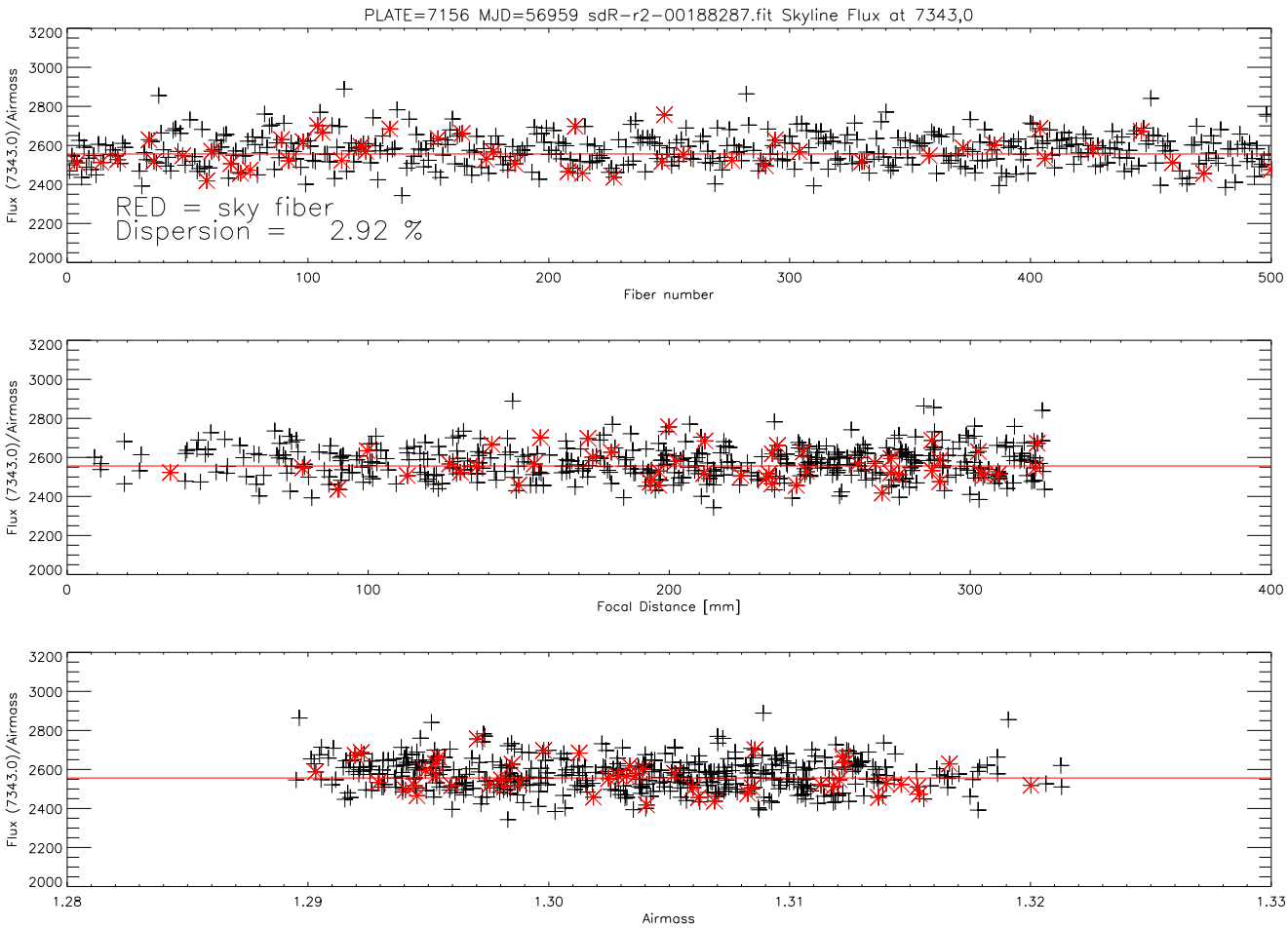

PLATE=7156 MJD=56959 sdR-r2-00188287.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

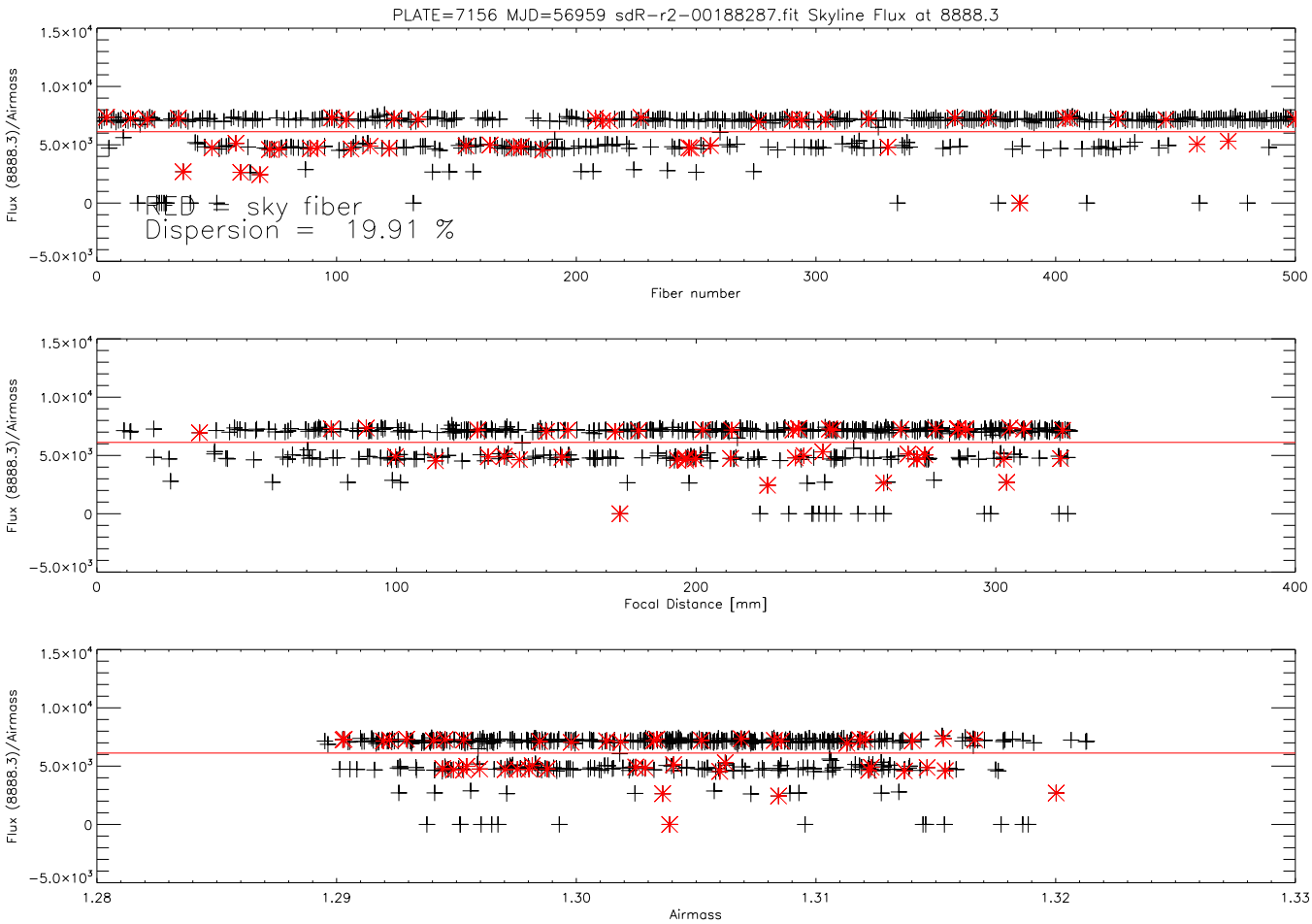

PLATE=7156 MJD=56959 sdR-r2-00188287.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

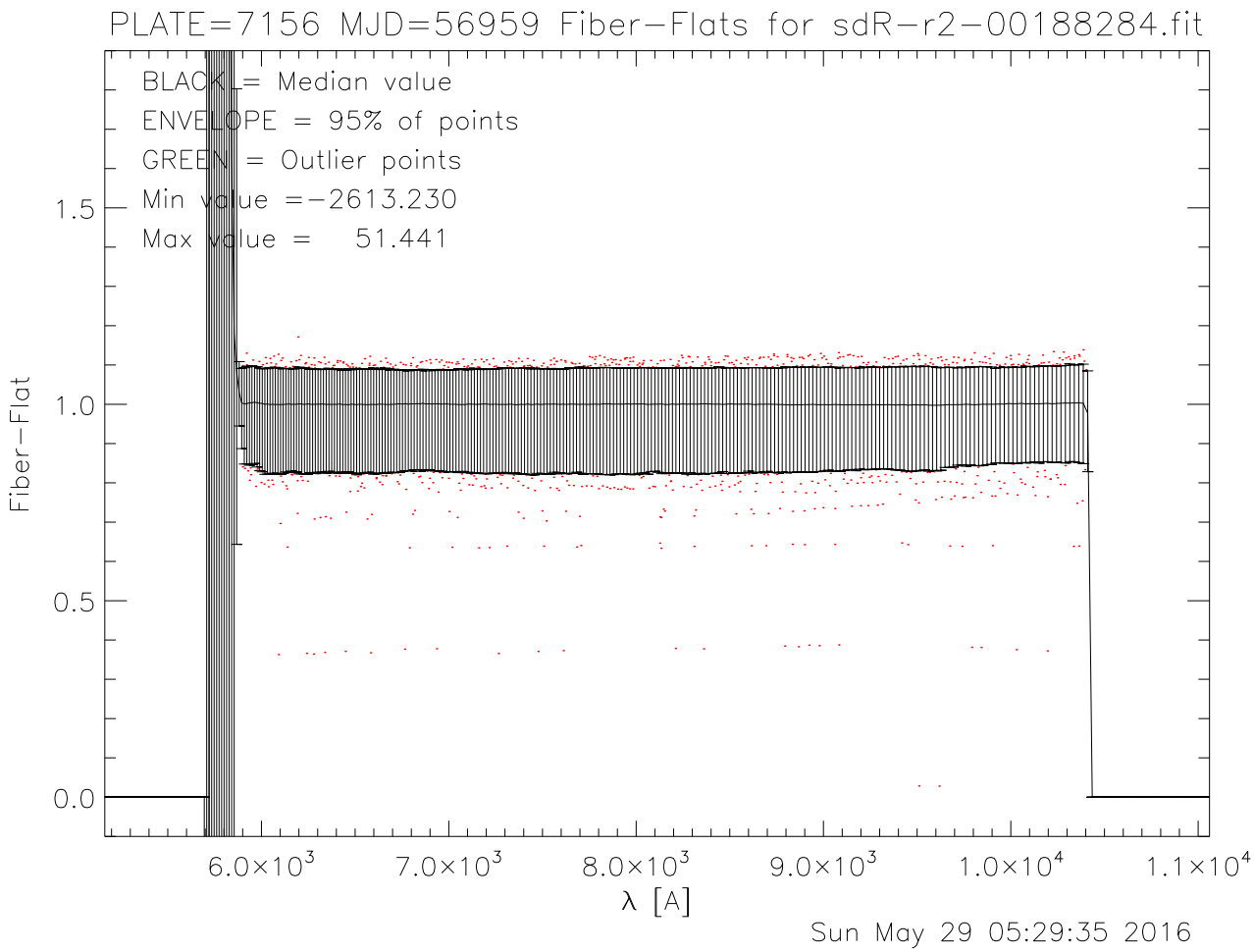

PLATE=7156 MJD=56959 sdR-r2-00188287.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

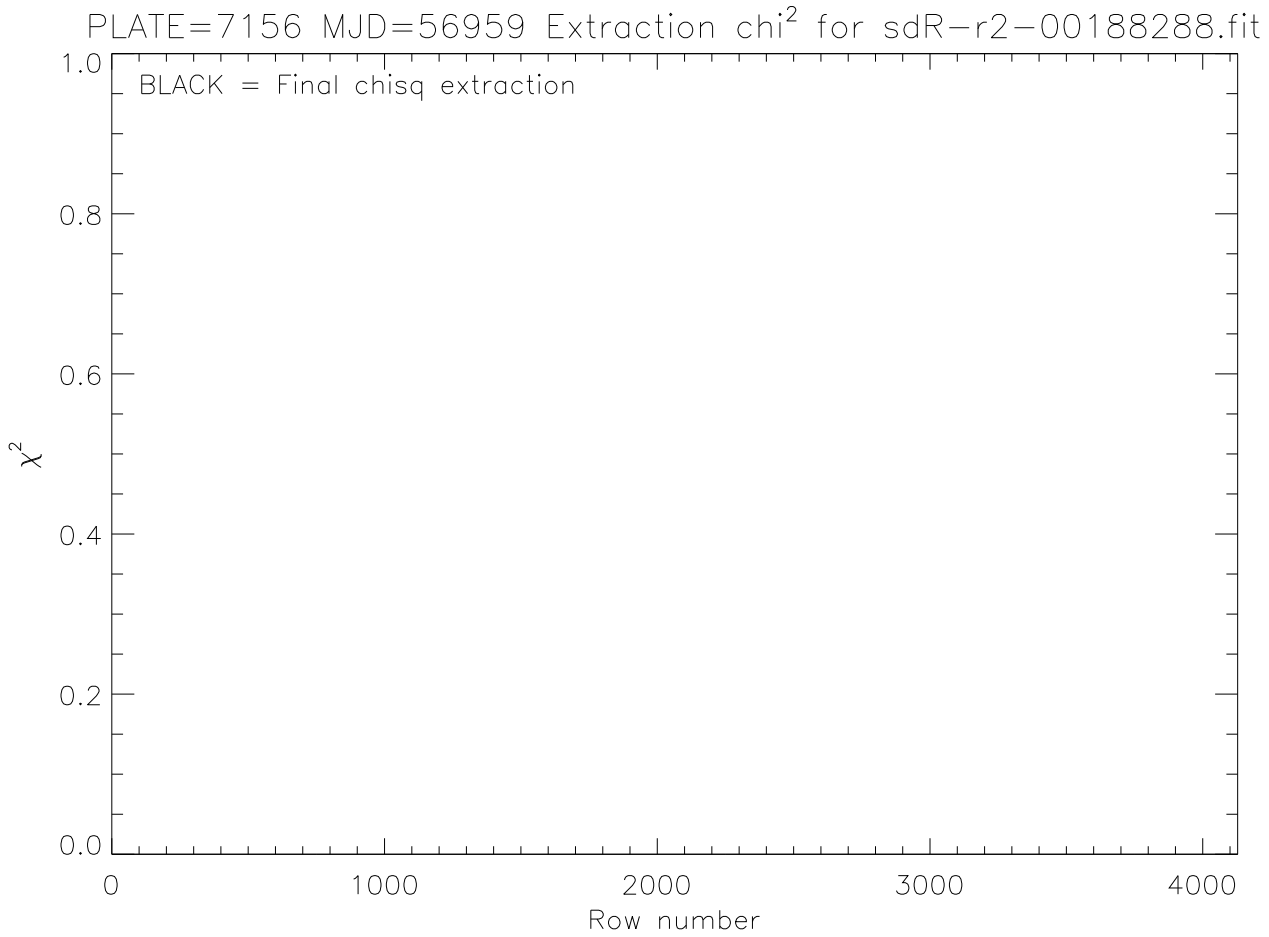
Number of sky fibers = 48

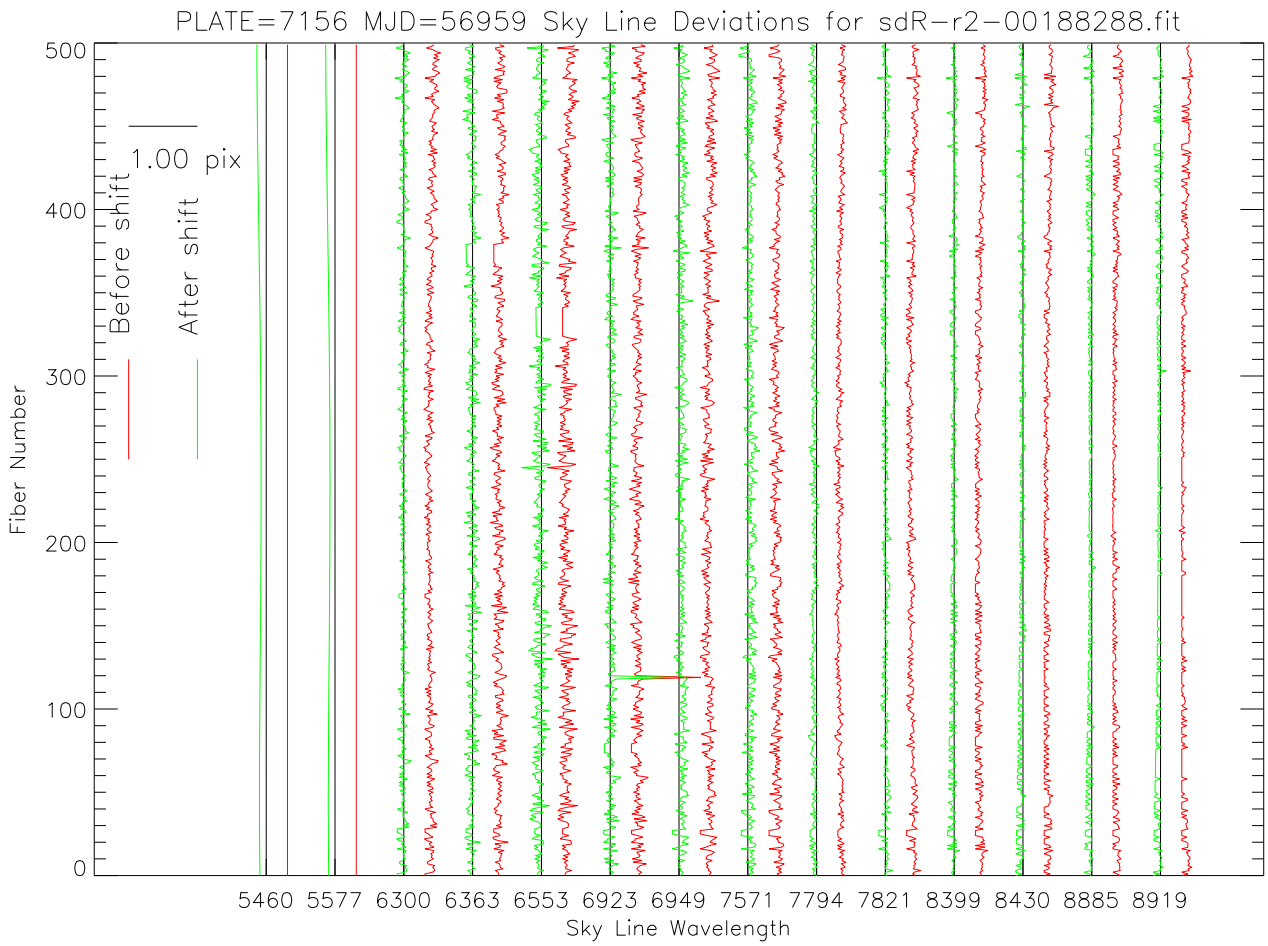


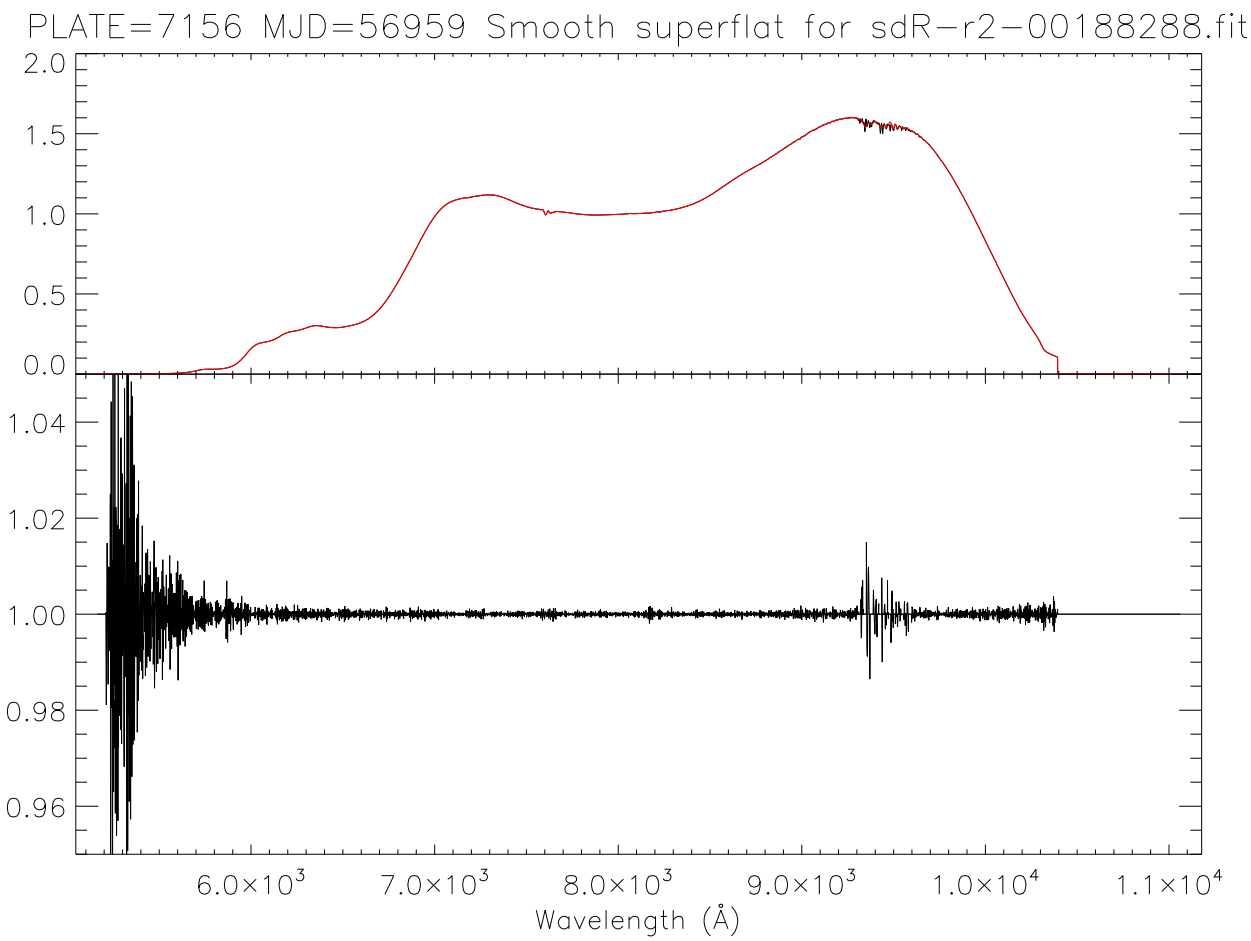

PLATE=7156 MJD=56959 sdR-r2-00188287.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.92 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

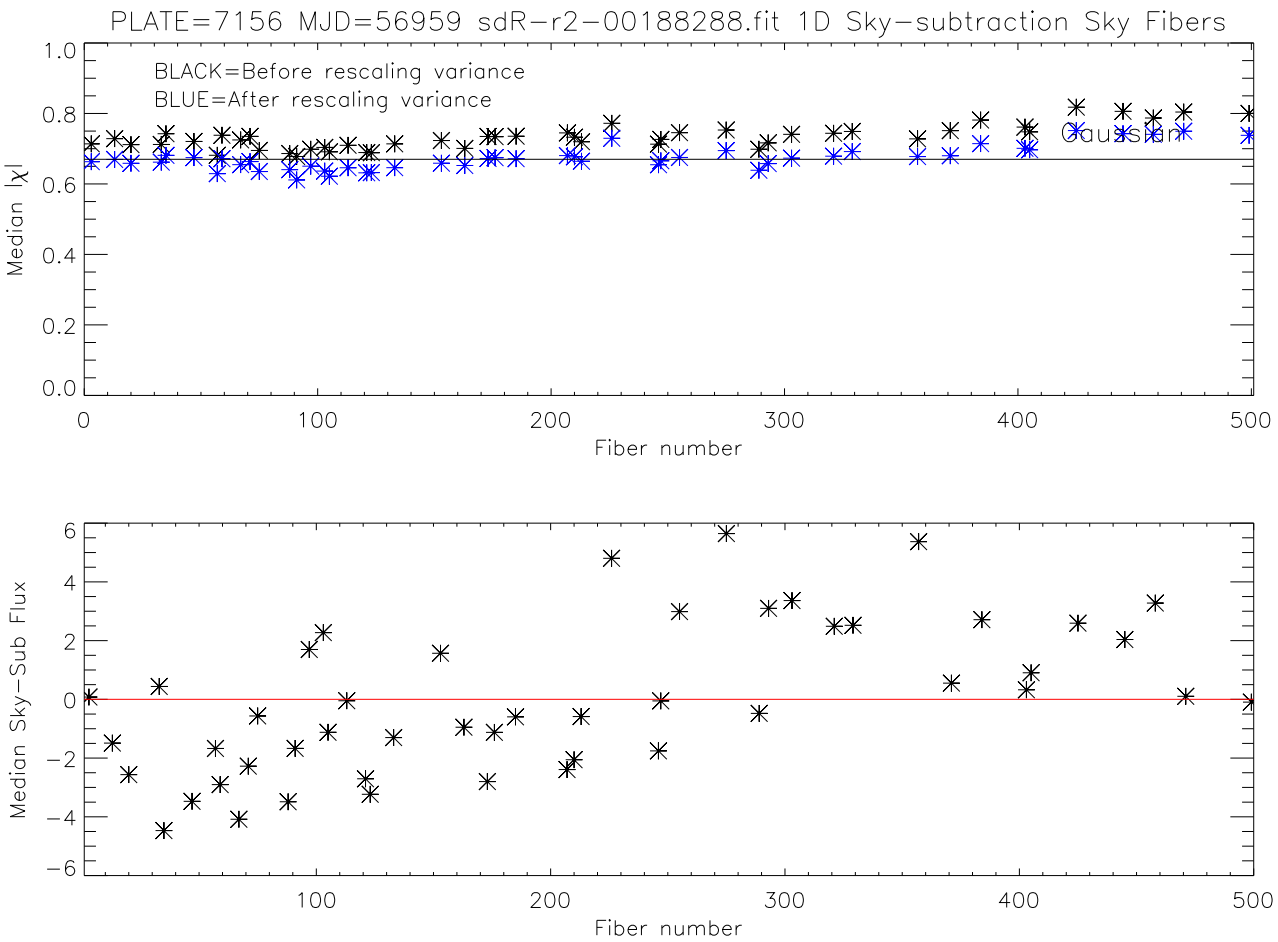

PLATE=7156 MJD=56959 sdR-r2-00188287.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 19.91 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

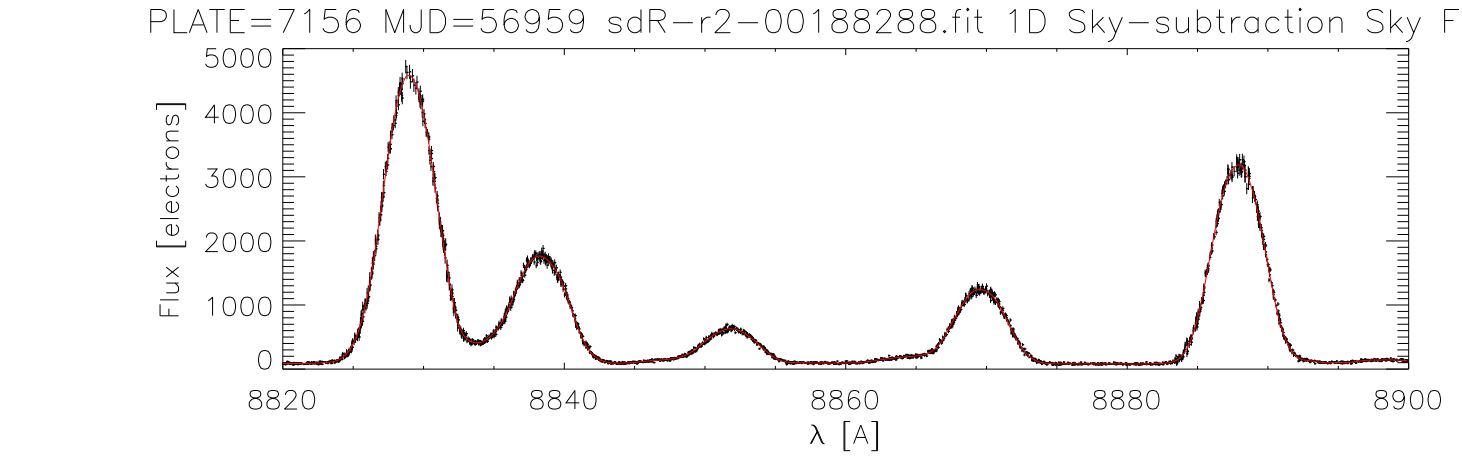

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value =−2613.230
Max value = 51.441
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:29:35 2016

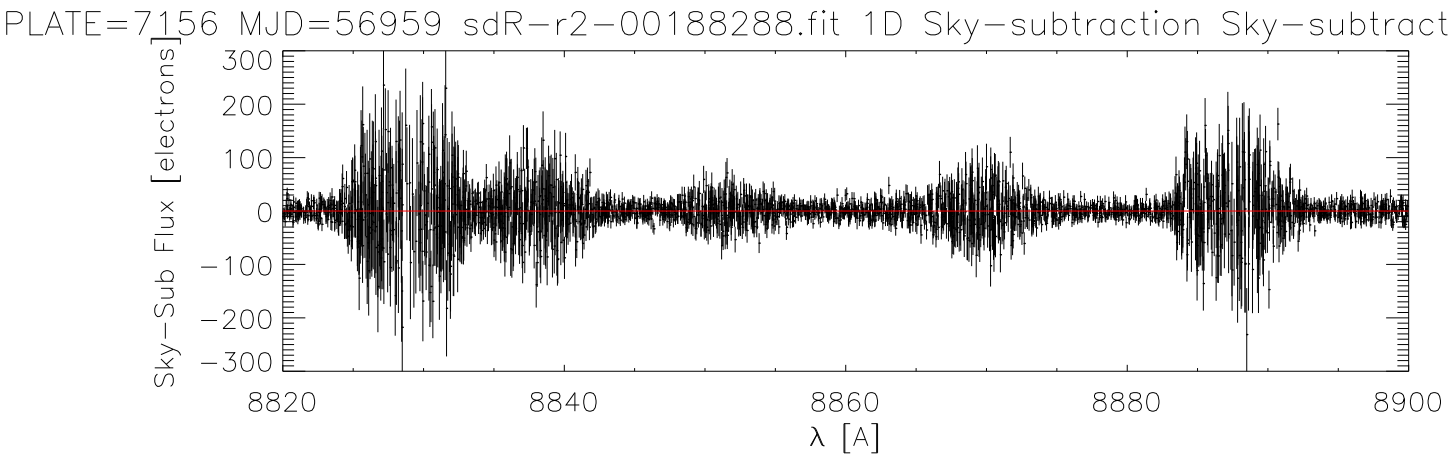

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r2−00188288.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r2-00188288.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

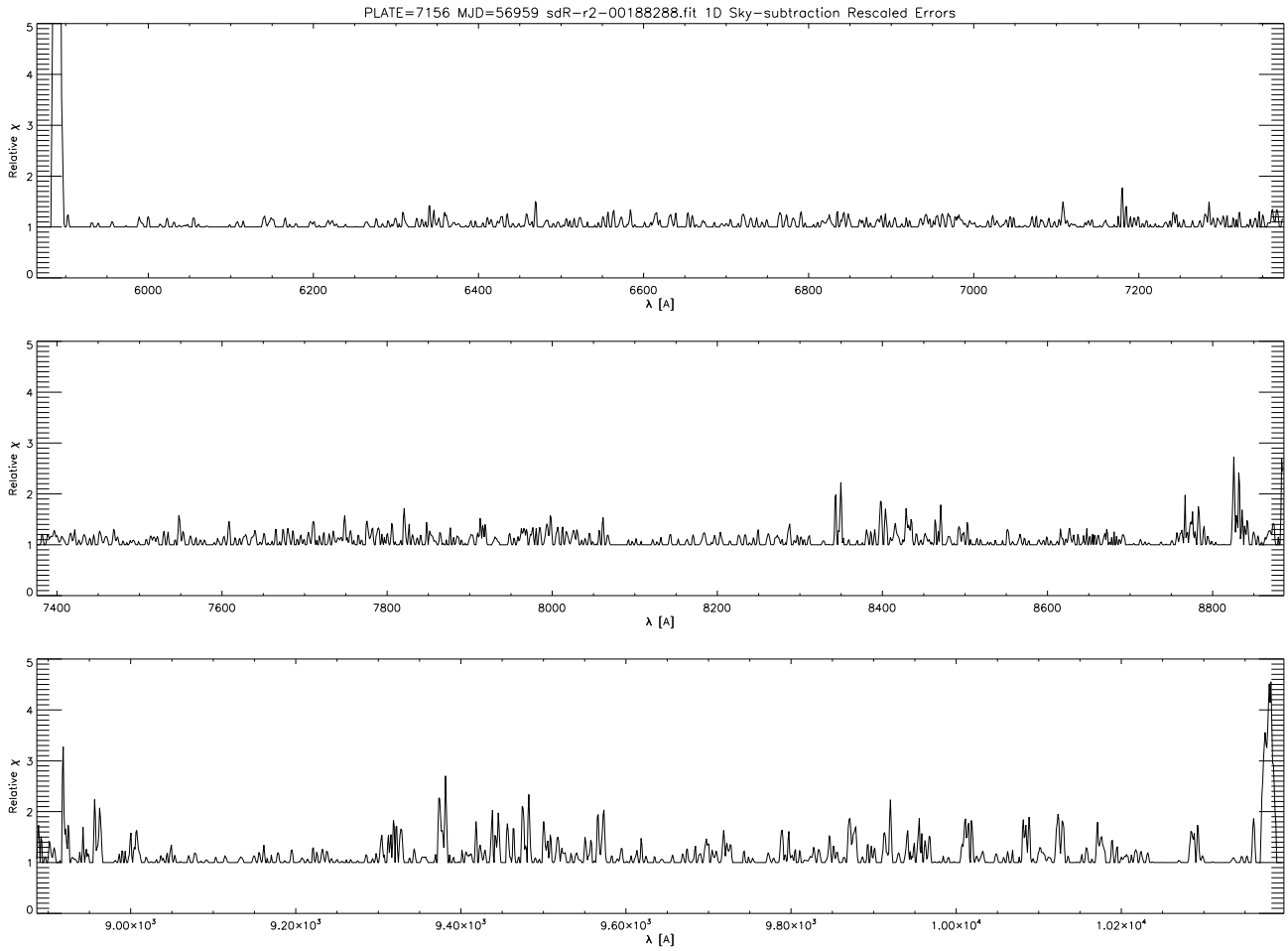

PLATE=7156 MJD=56959 Smooth superflat for sdR-r2-00188288.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

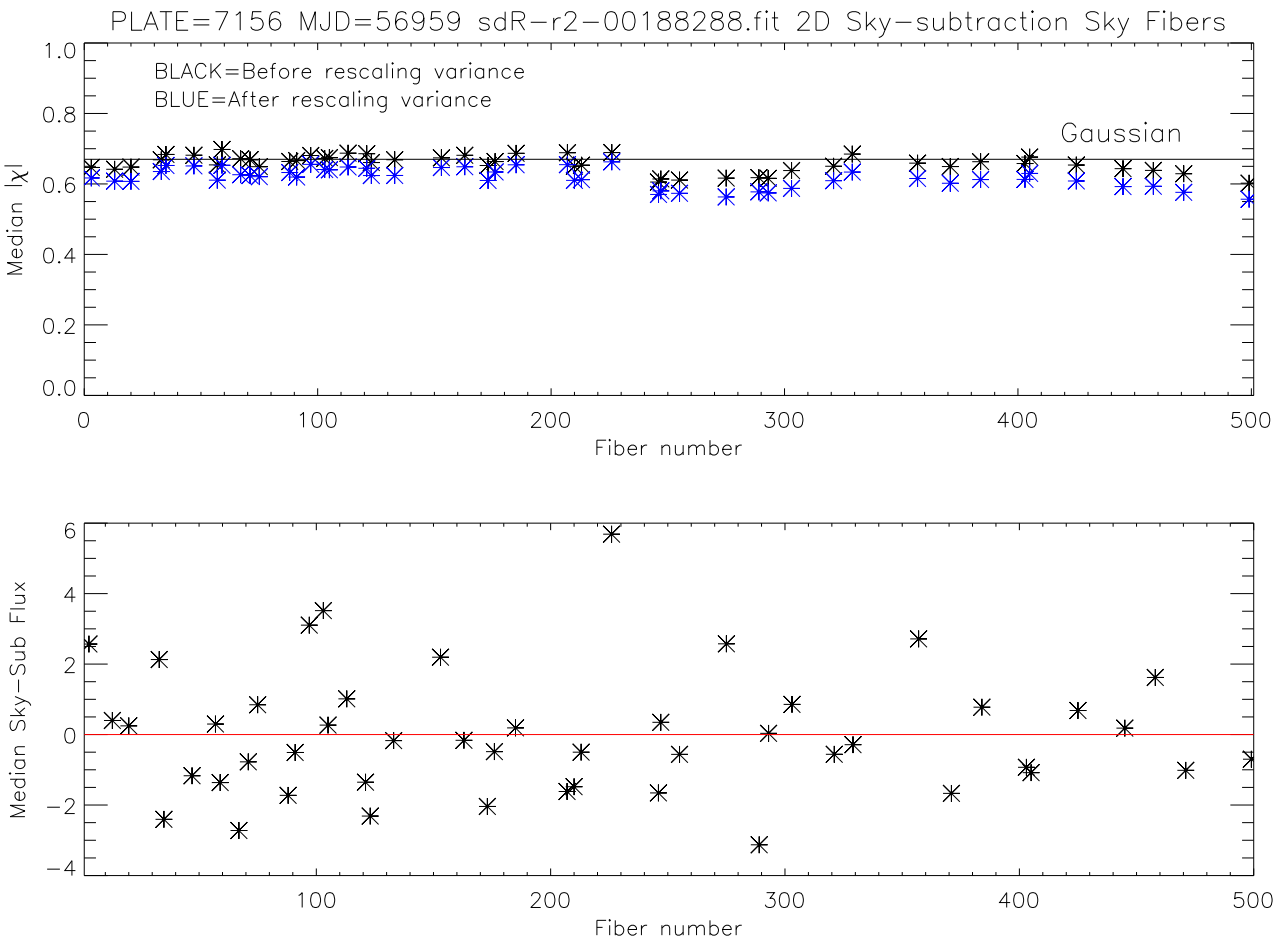

PLATE=7156 MJD=56959 sdR-r2-00188288.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

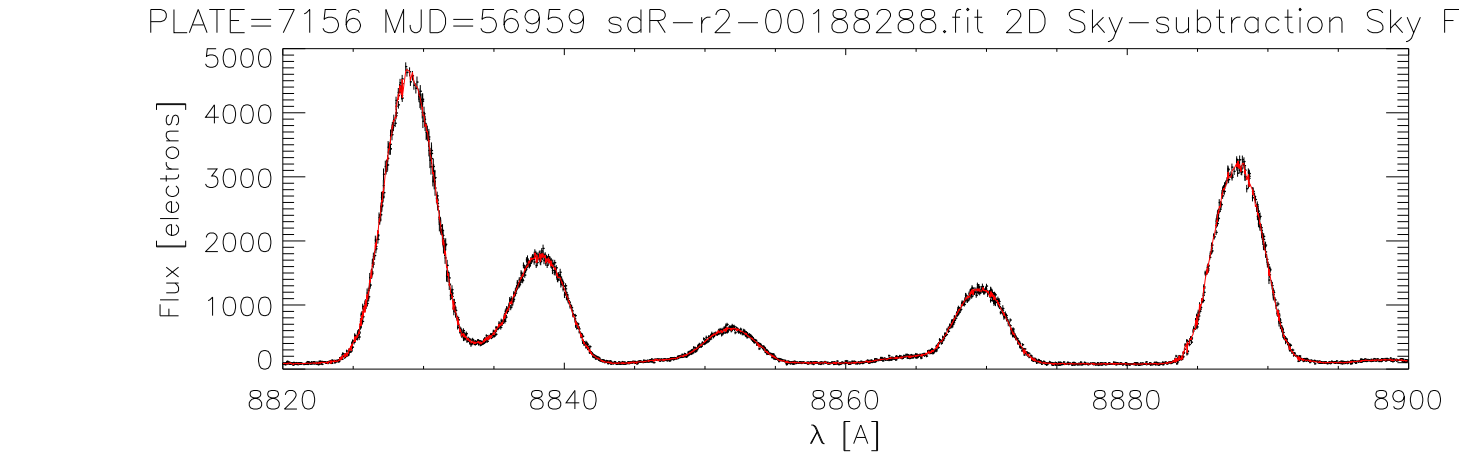

PLATE=7156 MJD=56959 sdR-r2-00188288.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

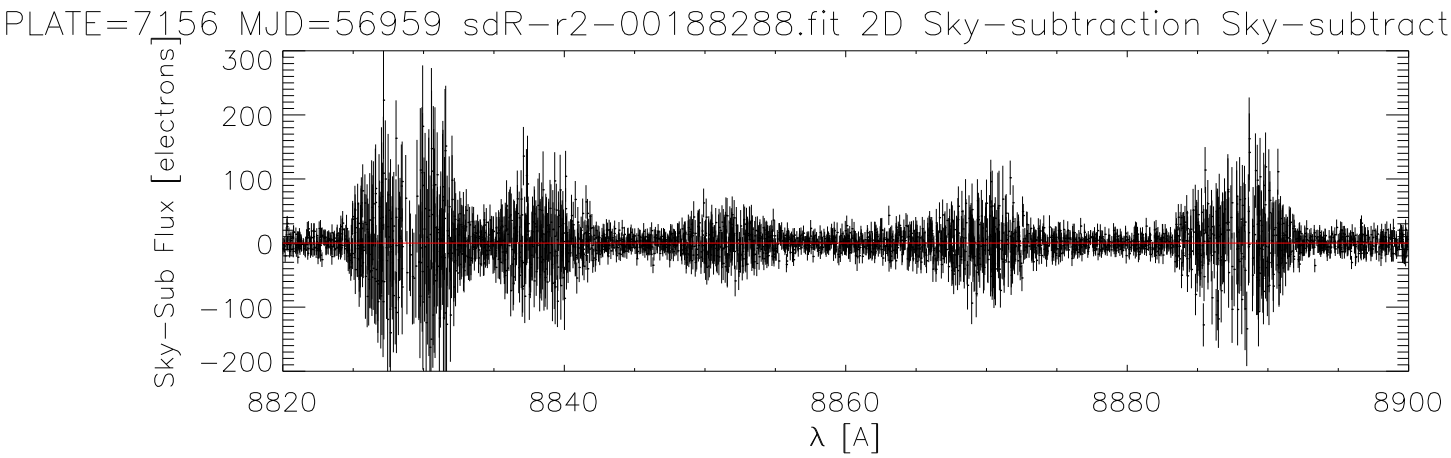

PLATE=7156 MJD=56959 sdR-r2-00188288.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48

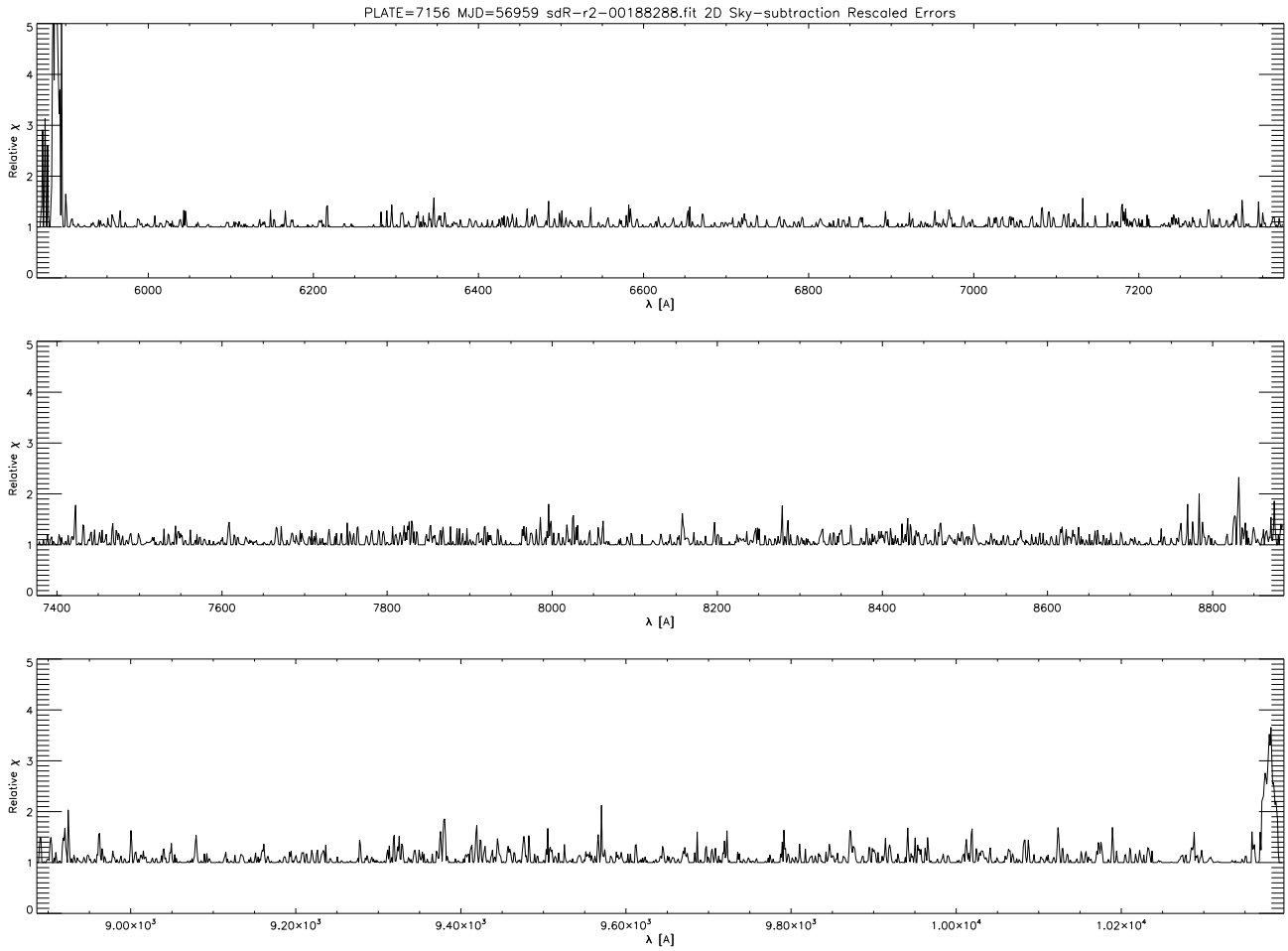


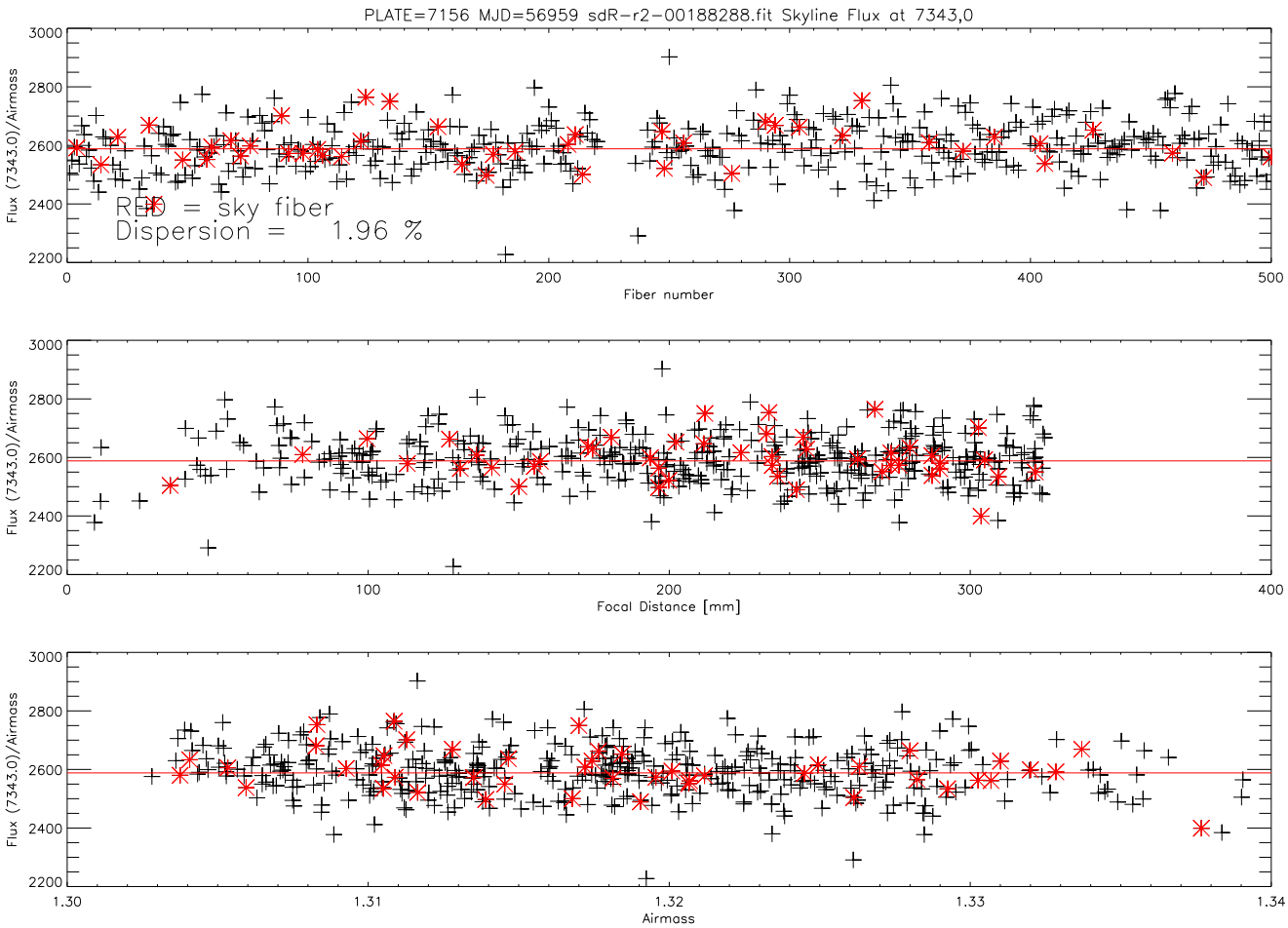

PLATE=7156 MJD=56959 sdR-r2-00188288.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

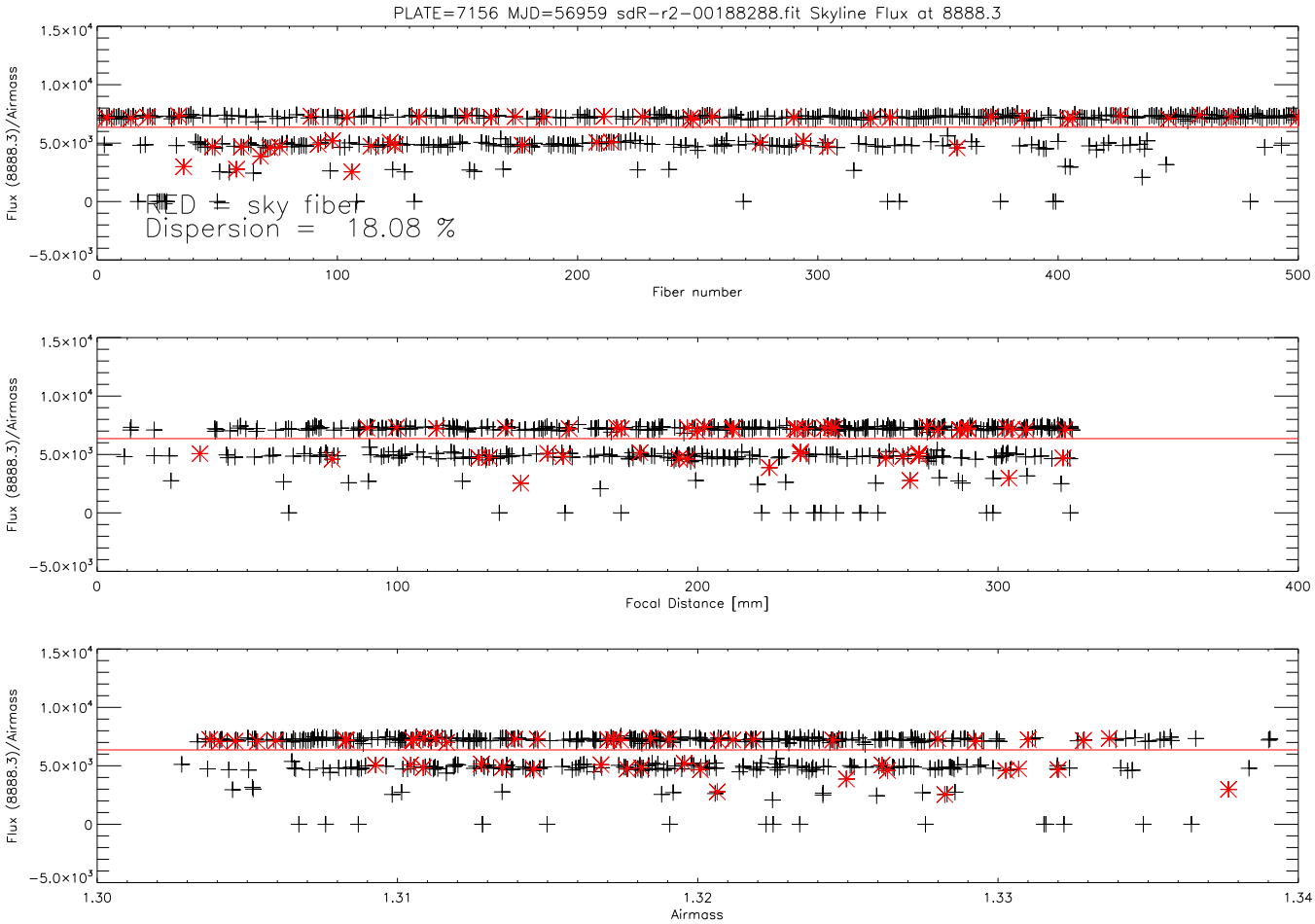

PLATE=7156 MJD=56959 sdR-r2-00188288.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

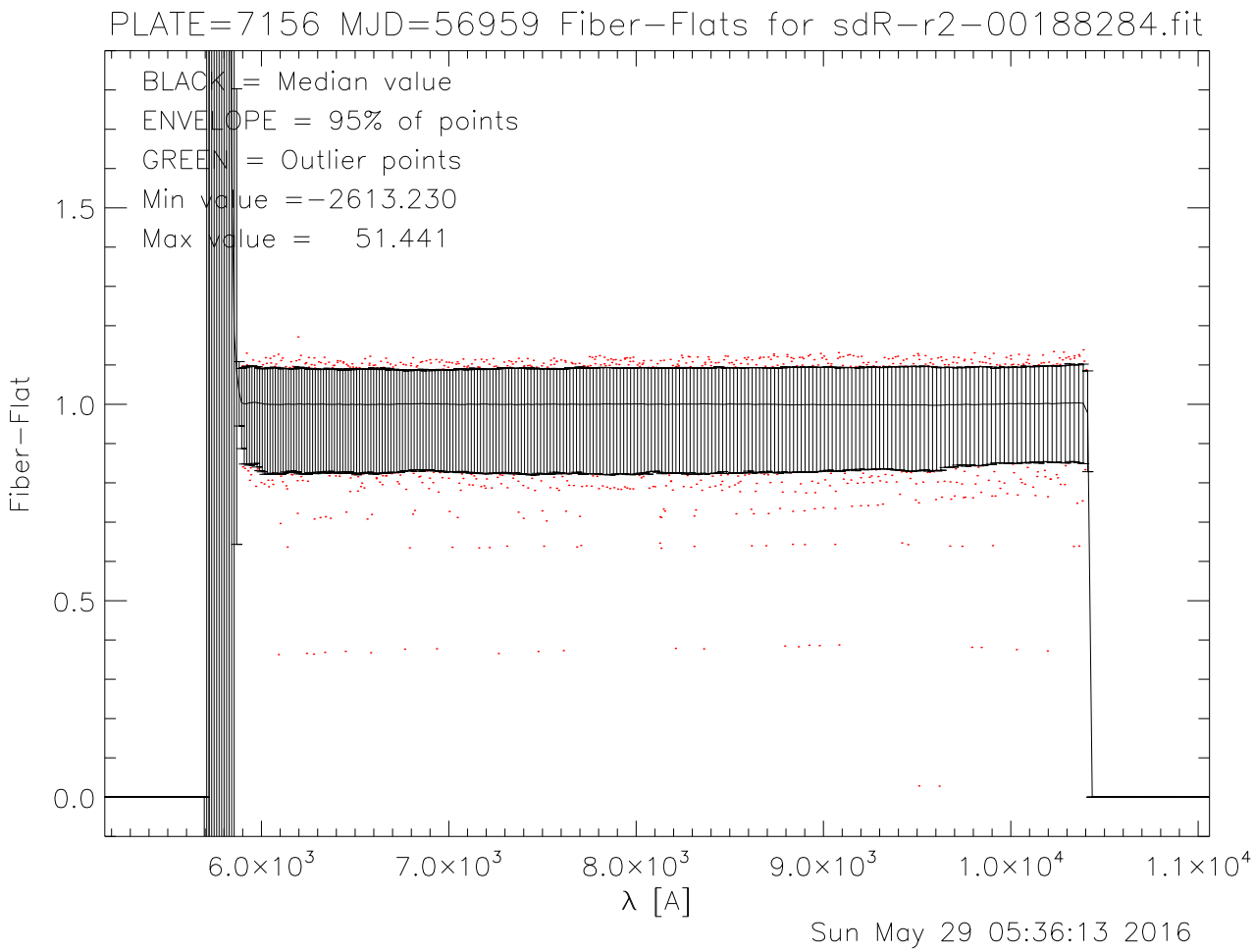

PLATE=7156 MJD=56959 sdR-r2-00188288.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

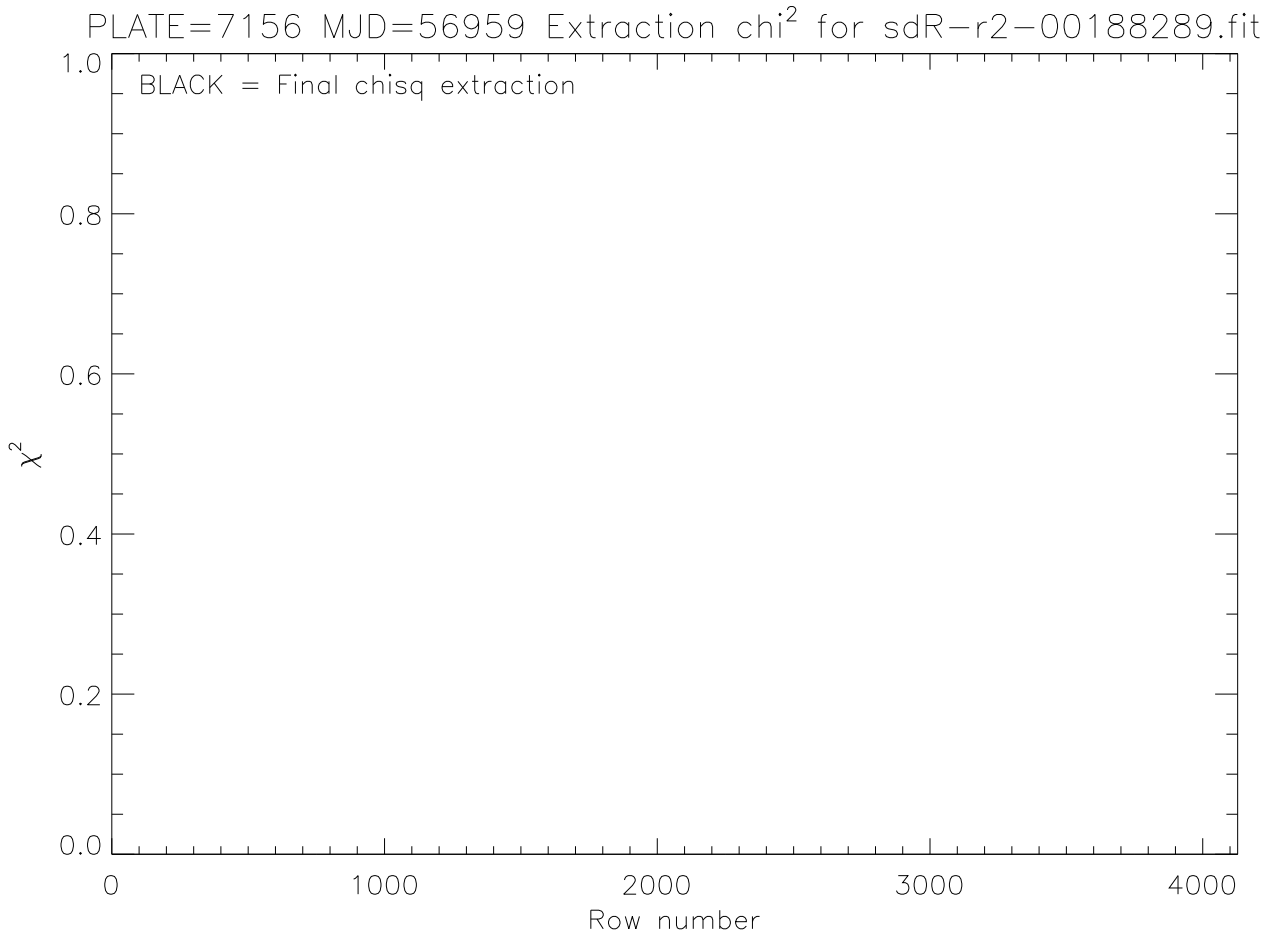
Number of sky fibers = 48

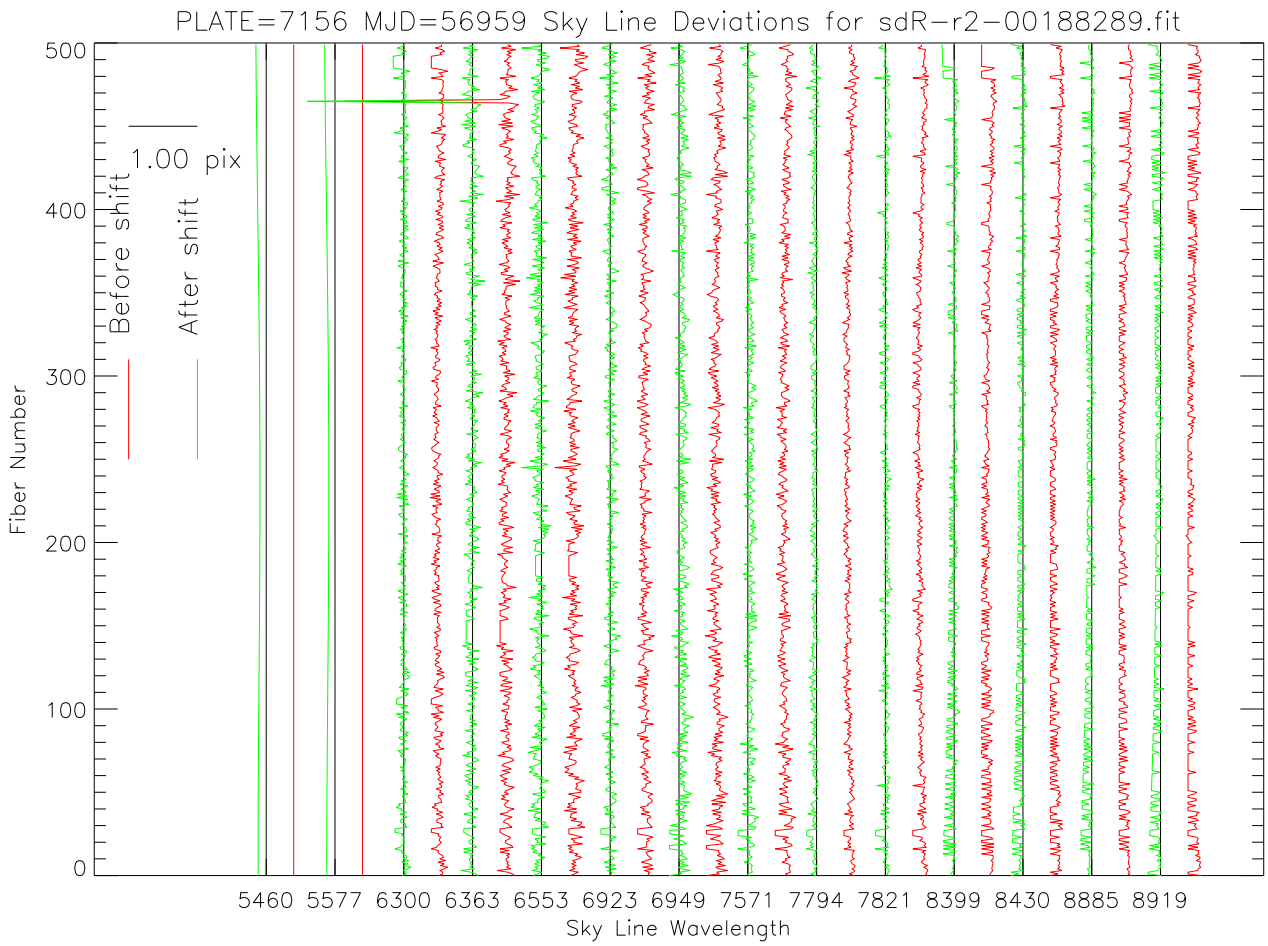


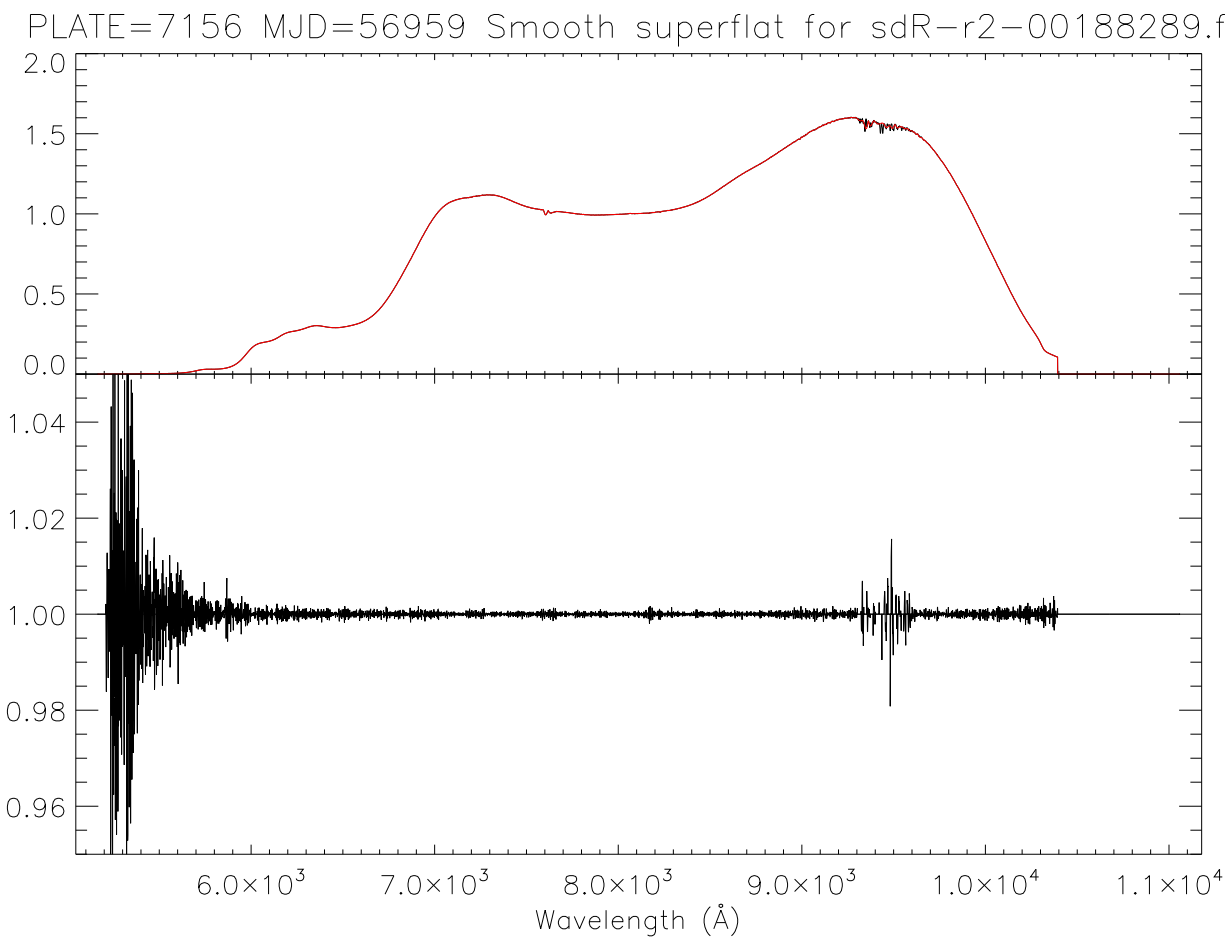

PLATE=7156 MJD=56959 sdR-r2-00188288.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.96 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

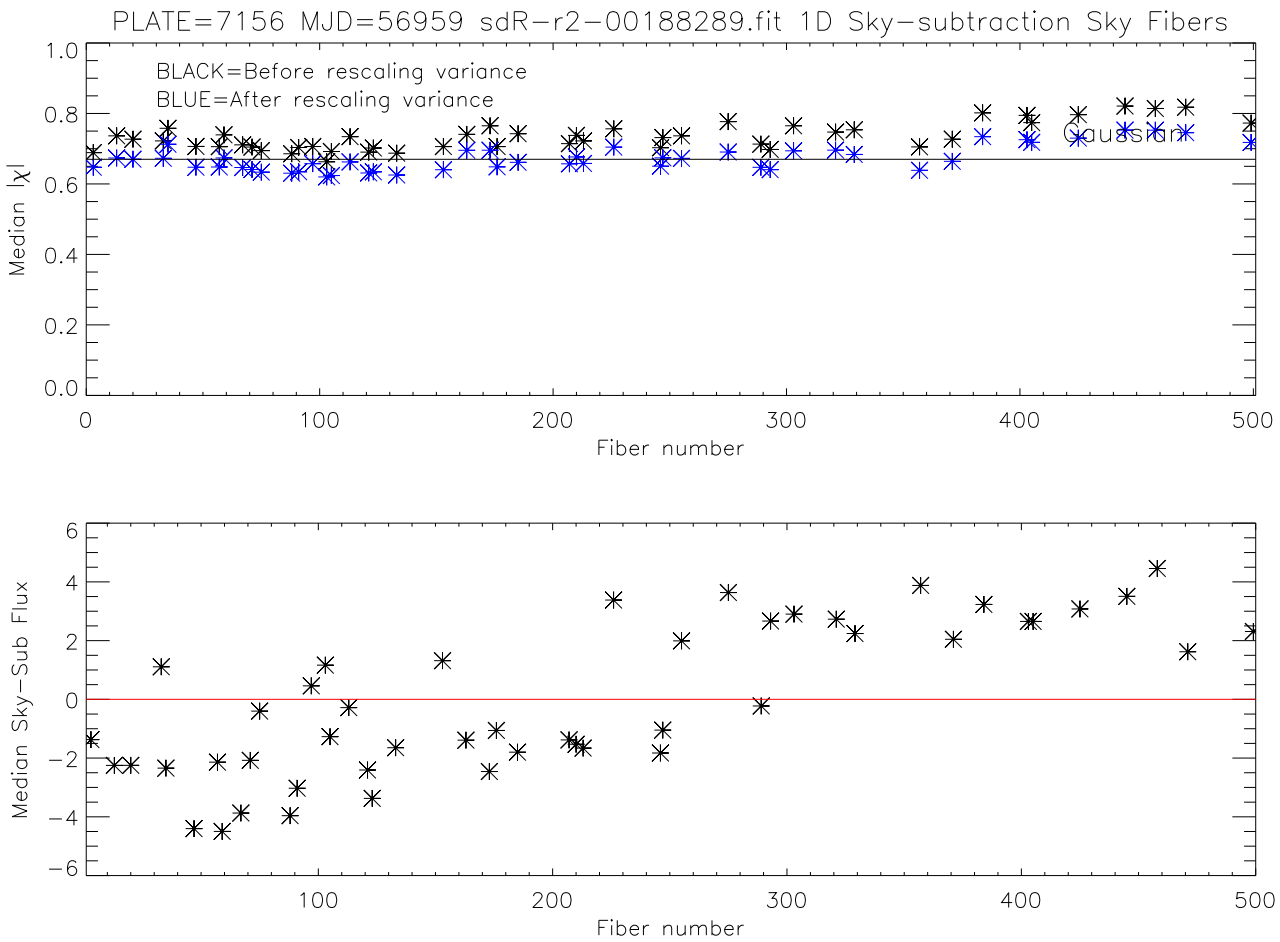

PLATE=7156 MJD=56959 sdR-r2-00188288.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
RED = sky fiber
Dispersion = 18.08 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
1.30
1.31
1.32
1.33
1.34
Airmass

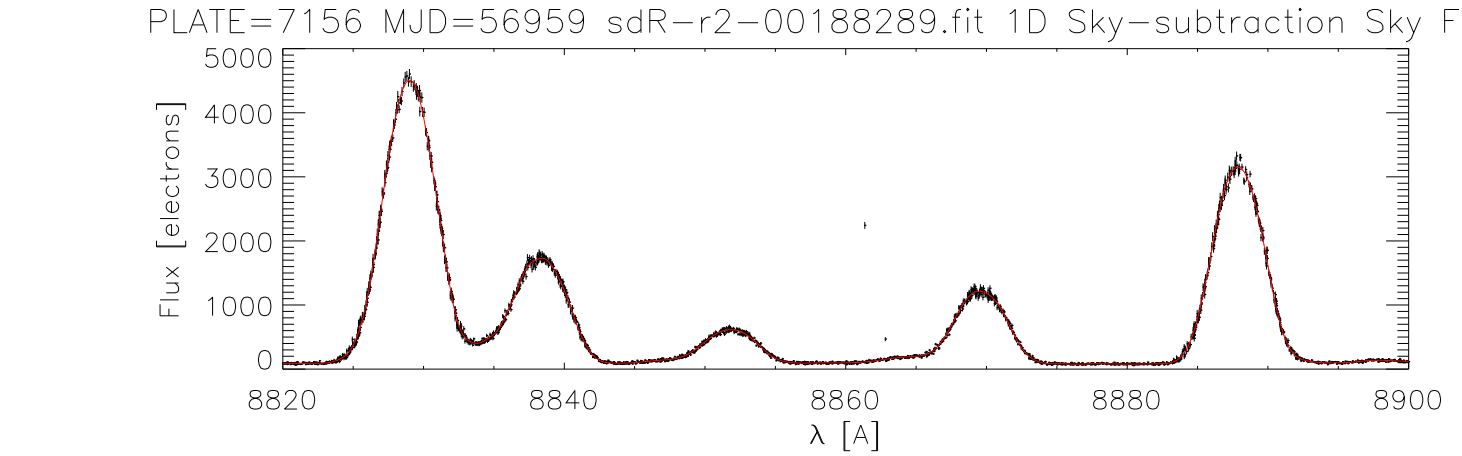

PLATE=7156 MJD=56959 Fiber−Flats for sdR−r2−00188284.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value =−2613.230
Max value = 51.441
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sun May 29 05:36:13 2016

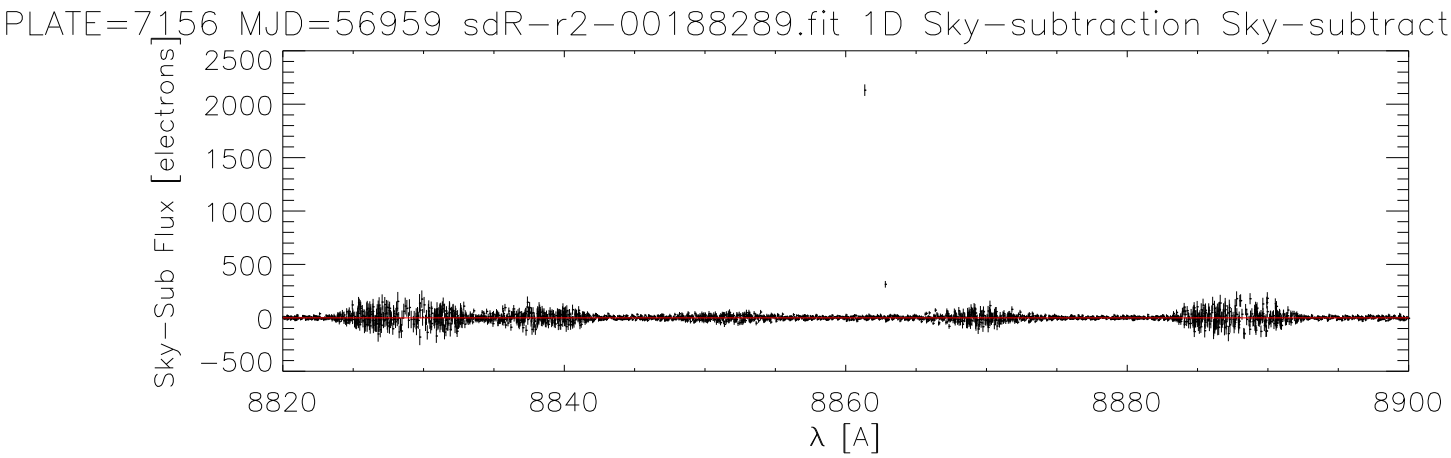

PLATE=7156 MJD=56959 Extraction chi^2 for sdR−r2−00188289.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7156 MJD=56959 Sky Line Deviations for sdR-r2-00188289.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

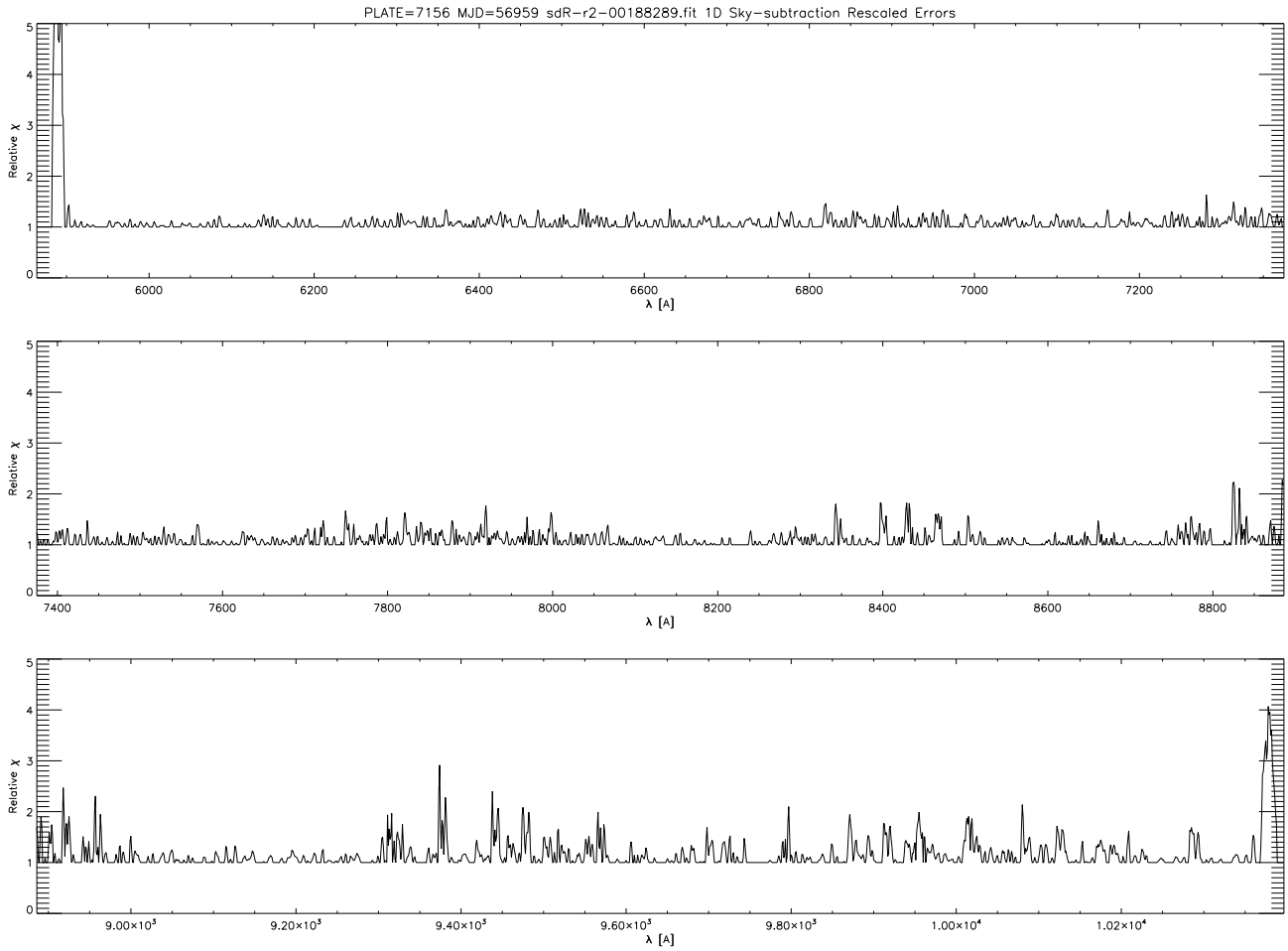

PLATE=7156 MJD=56959 Smooth superflat for sdR-r2-00188289.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

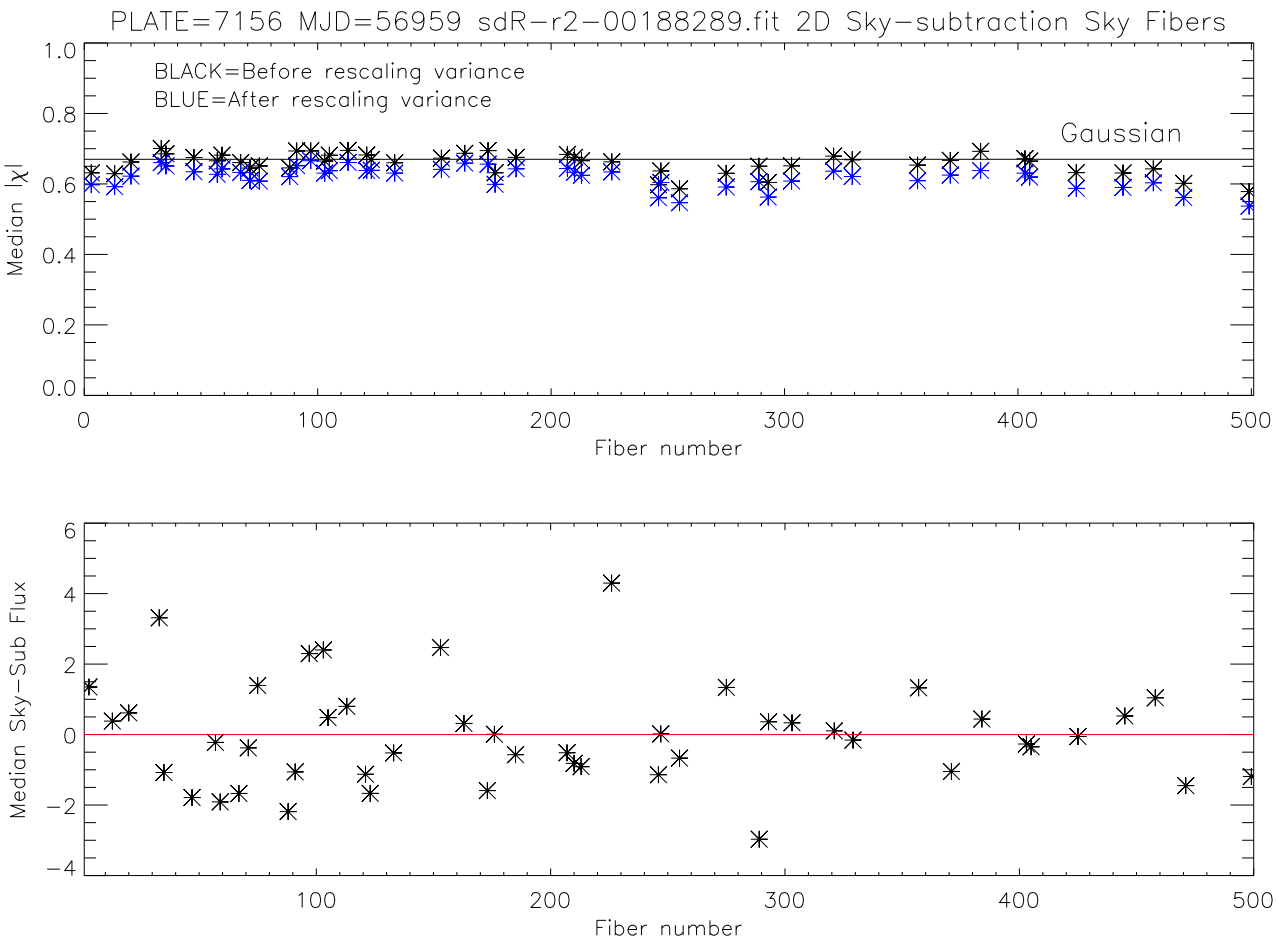

PLATE=7156 MJD=56959 sdR-r2-00188289.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

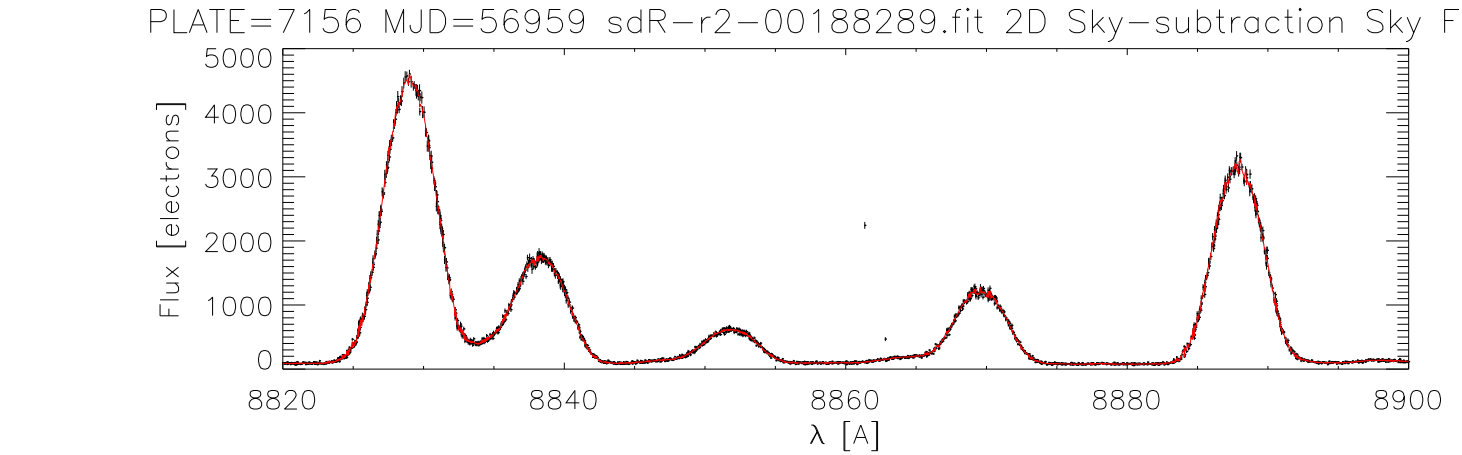

PLATE=7156 MJD=56959 sdR-r2-00188289.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

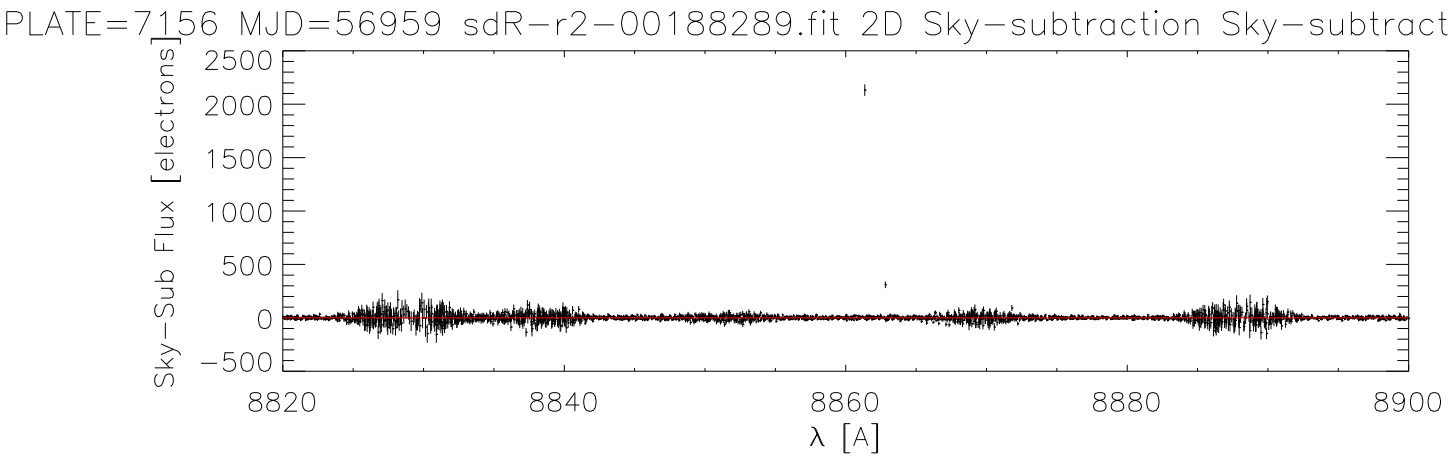

PLATE=7156 MJD=56959 sdR-r2-00188289.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48

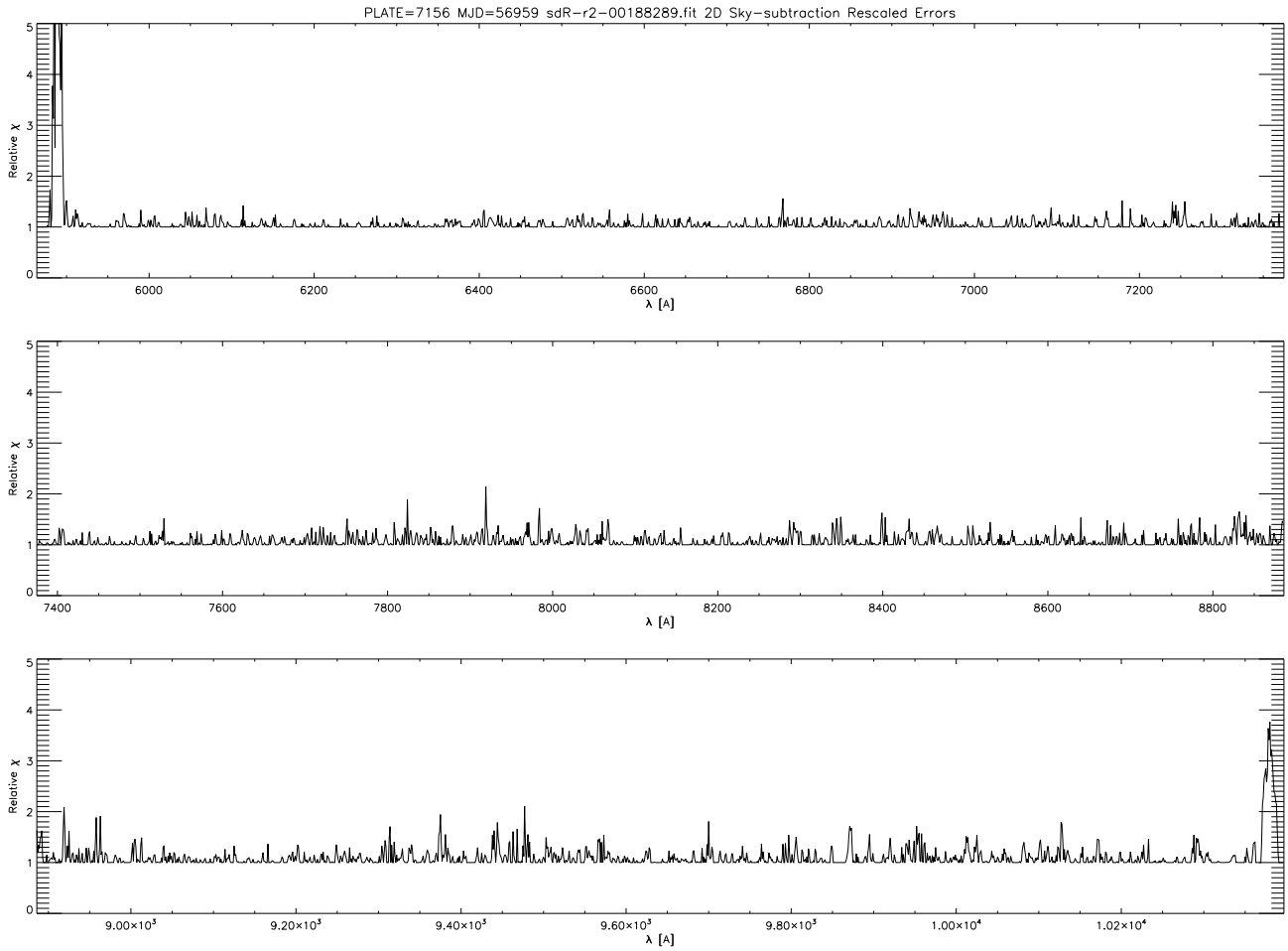


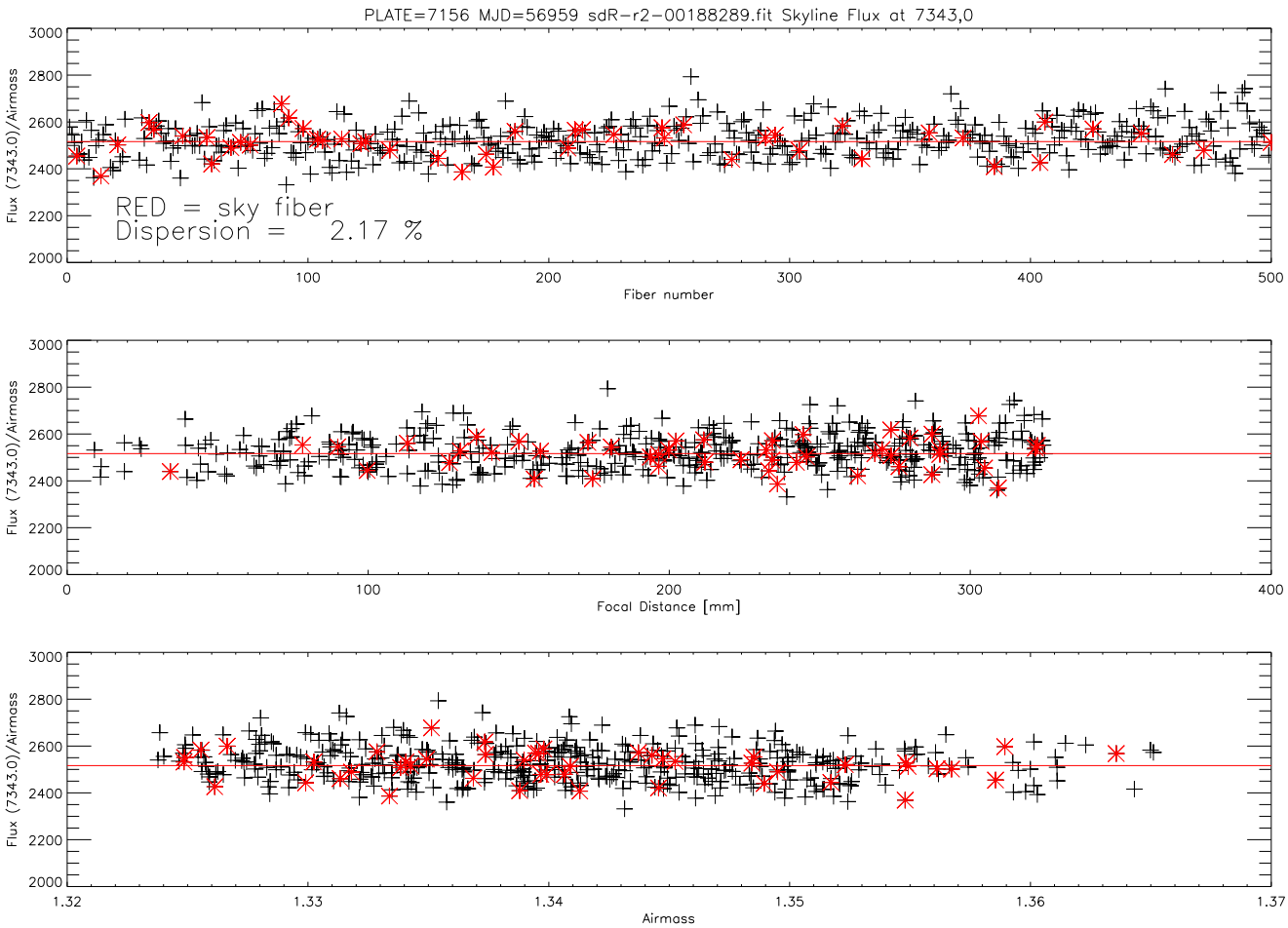

PLATE=7156 MJD=56959 sdR-r2-00188289.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

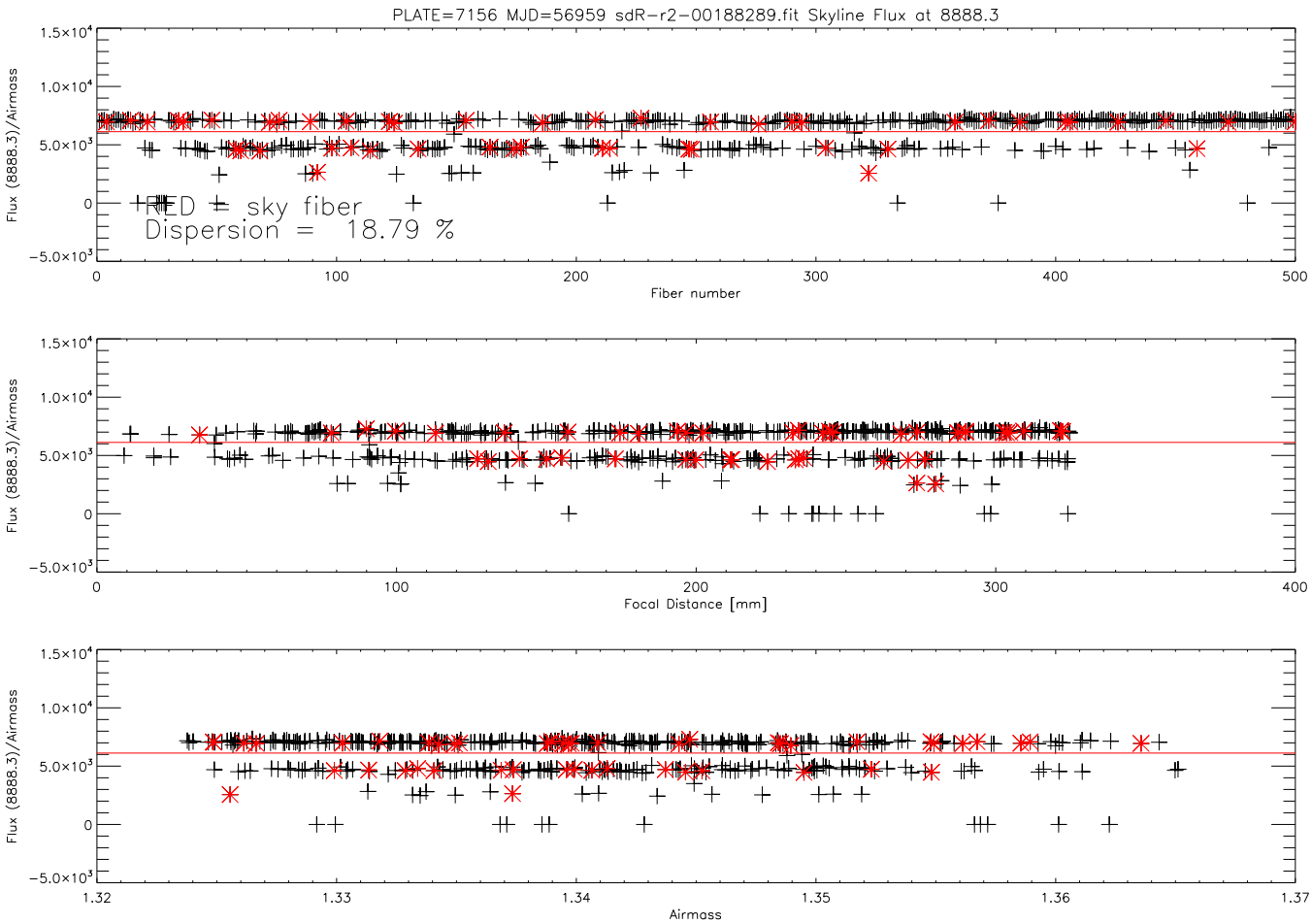

PLATE=7156 MJD=56959 sdR-r2-00188289.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=7156 MJD=56959 sdR-r2-00188289.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 = 48




PLATE=7156 MJD=56959 sdR-r2-00188289.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.17 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=7156 MJD=56959 sdR-r2-00188289.fit Skyline Flux at 8888.3
RED = sky fiber
Dispersion = 18.79 %
Flux (8888.3)/Airmass
Fiber number
Focal Distance [mm]
Airmass