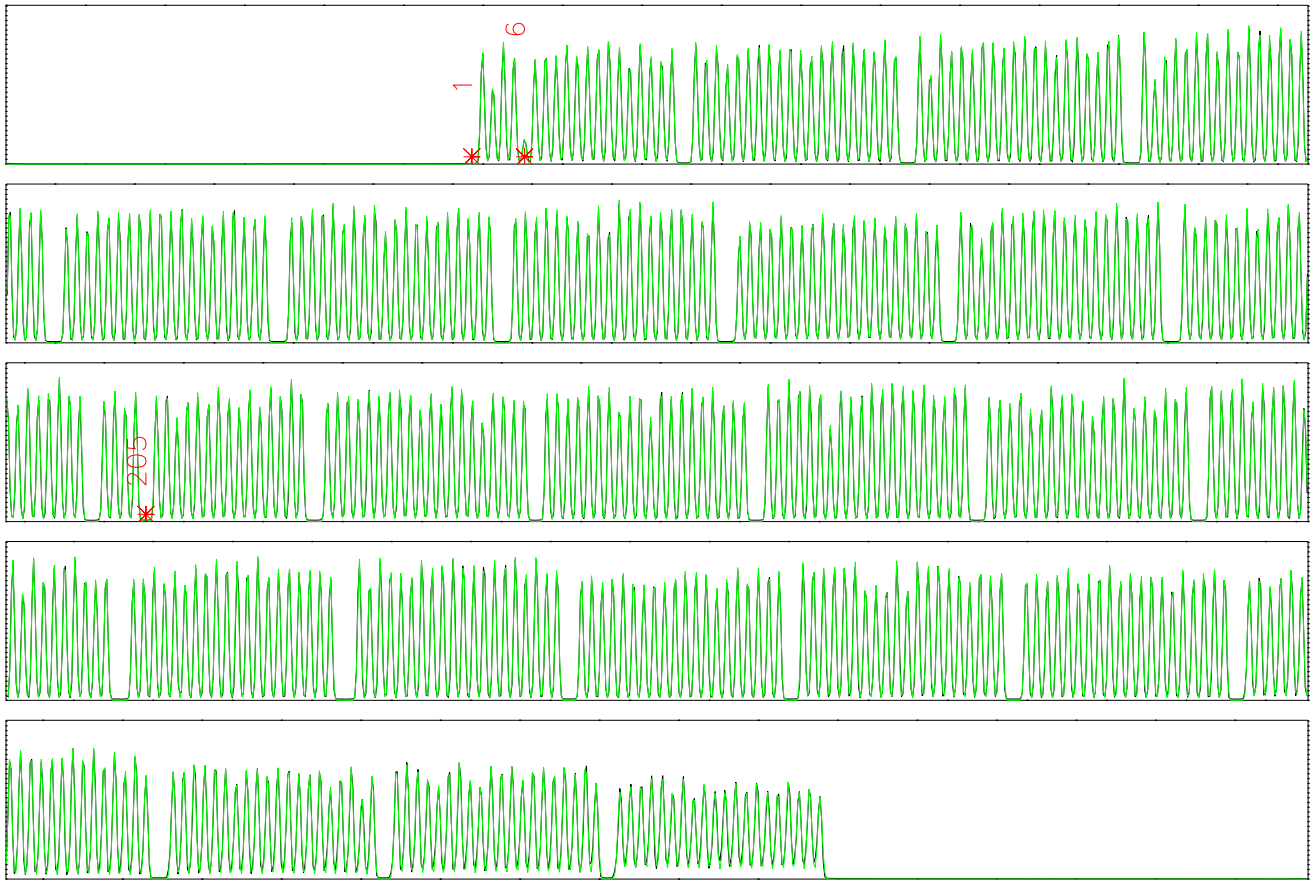
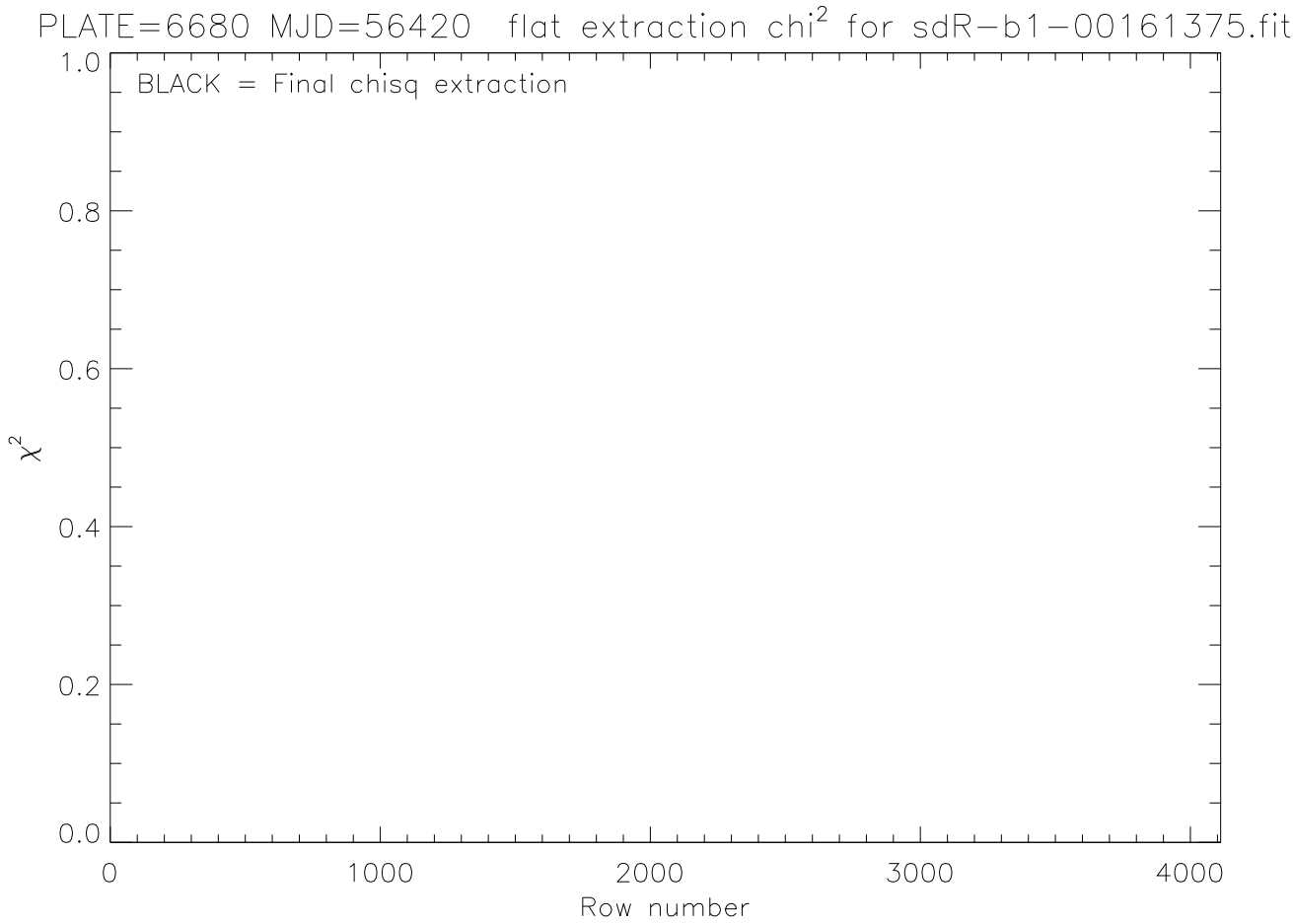
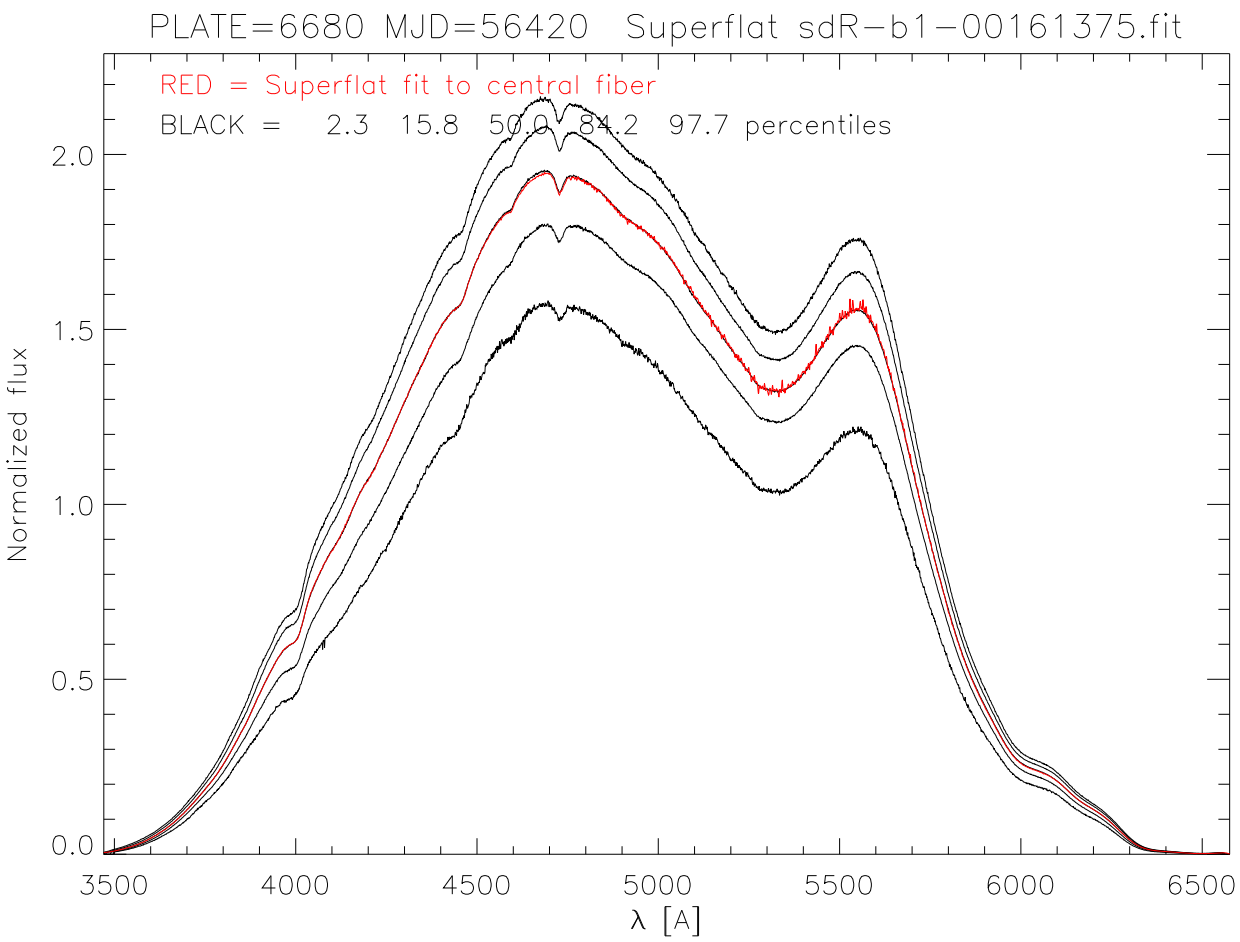
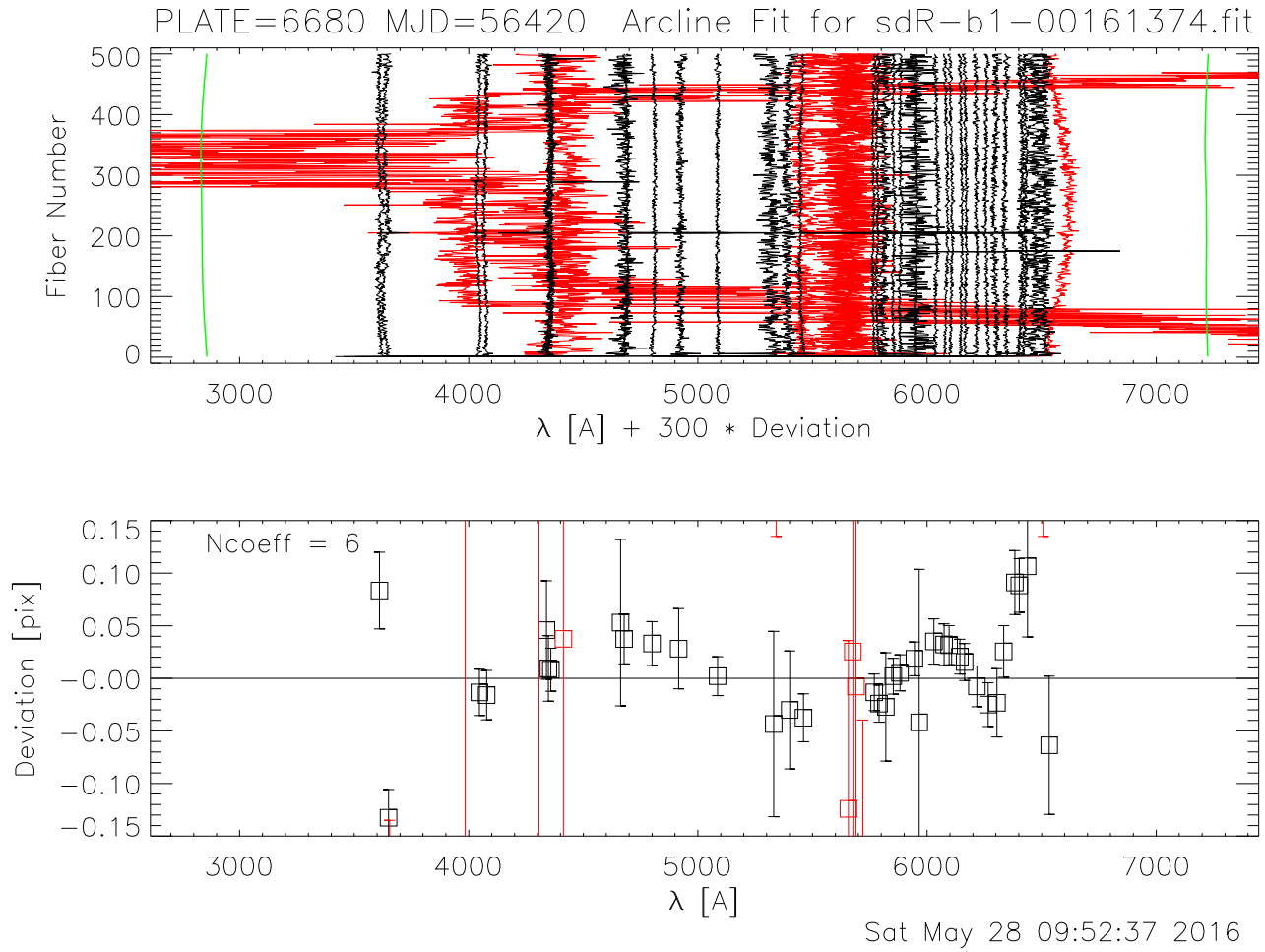
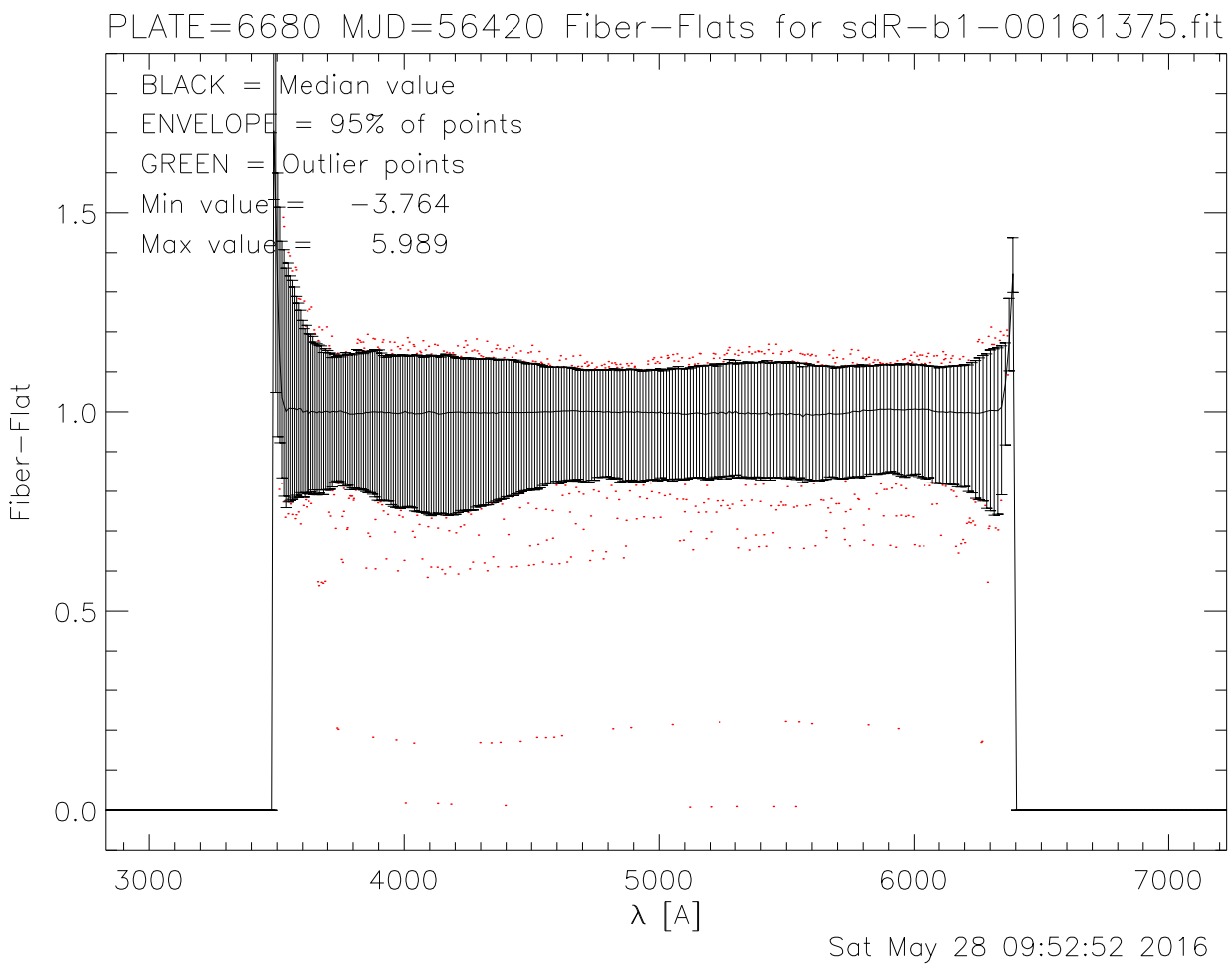
PLATE=6680 MJD=56420 Traces sdR-b1-00161375.fit

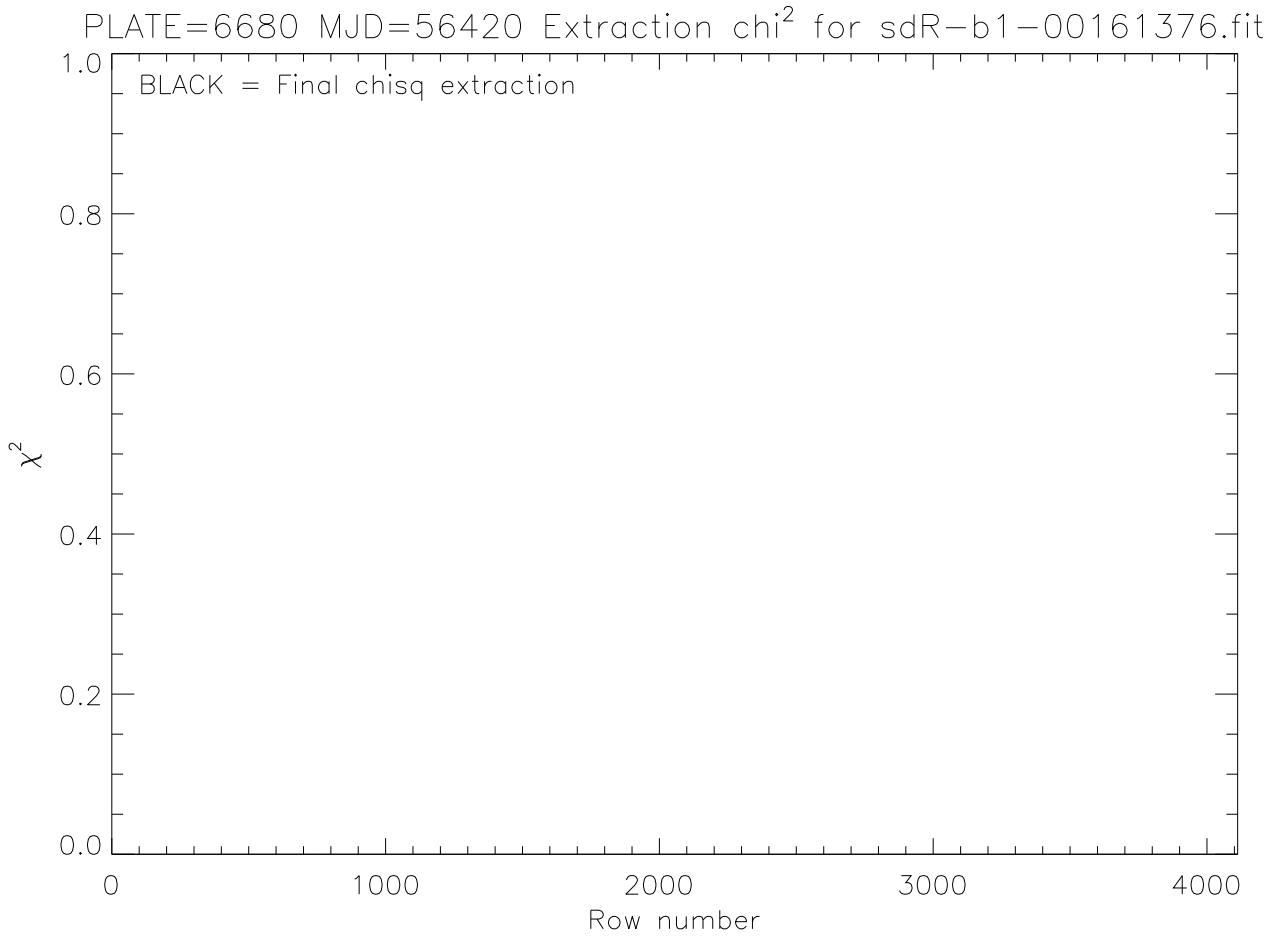


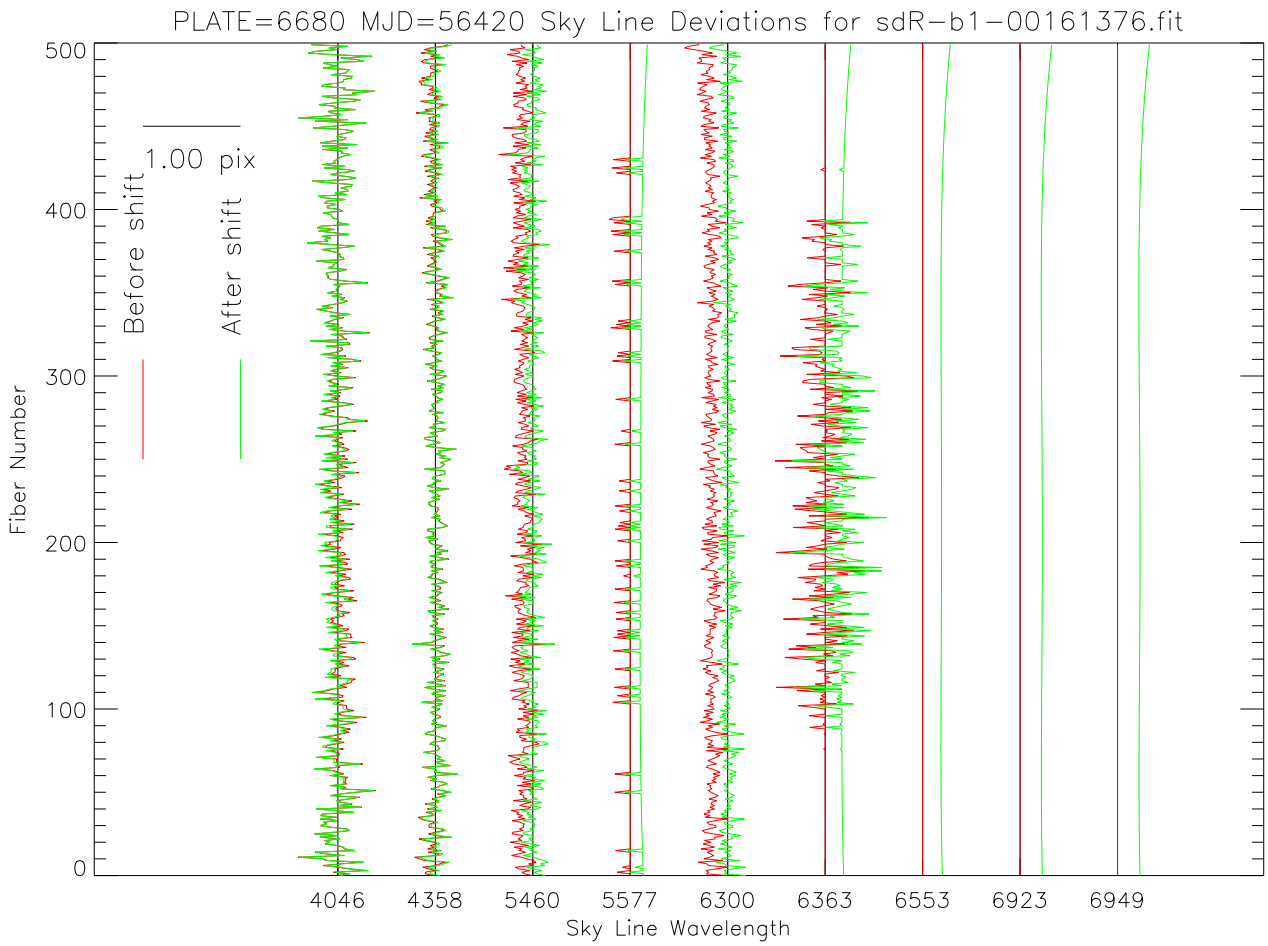

PLATE=6680 MJD=56420 flat extraction chi^2 for sdR−b1−00161375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

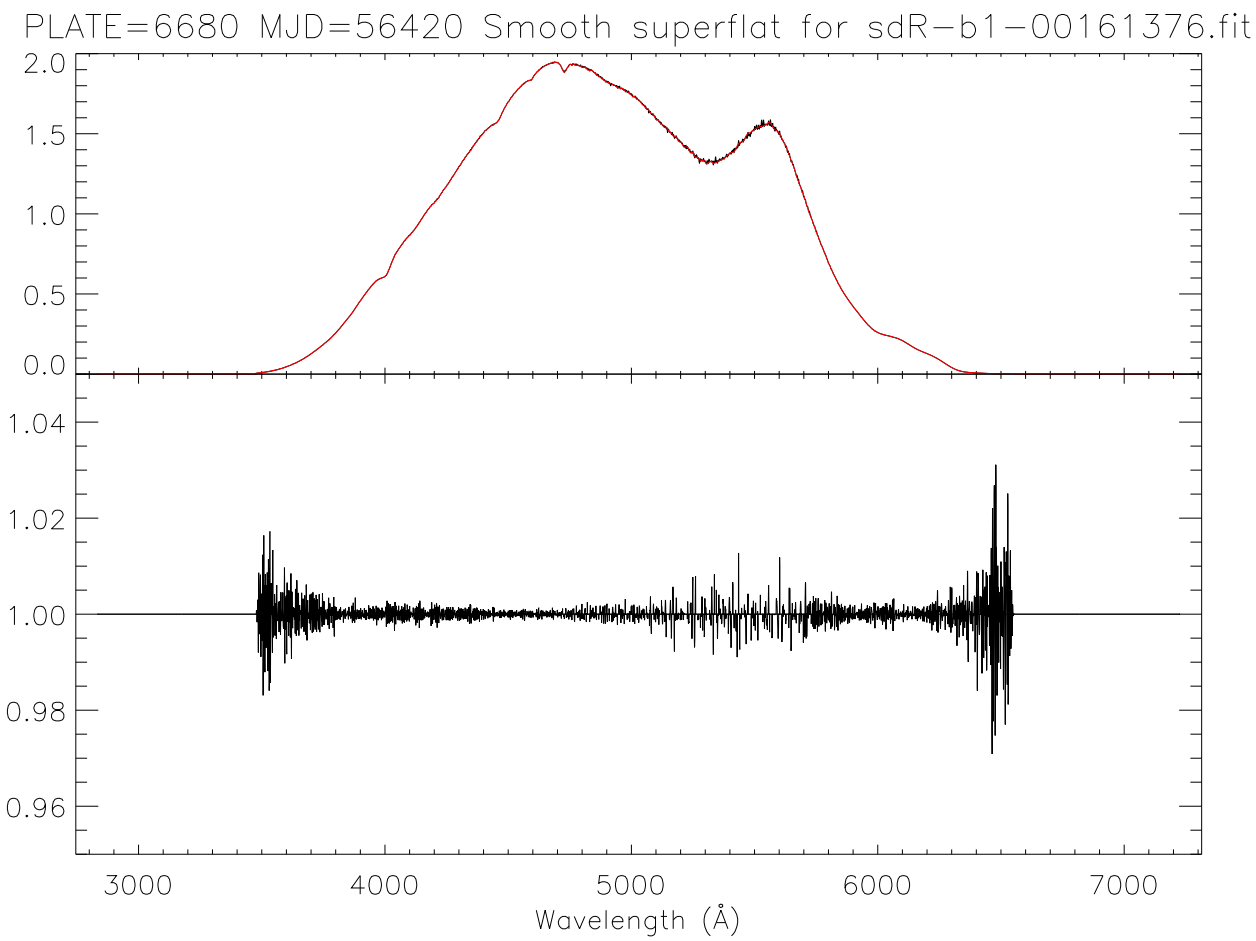

PLATE=6680 MJD=56420 Superflat sdR-b1-00161375.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
2.0
3500
4000
4500
5000
5500
6000
6500
λ [A]

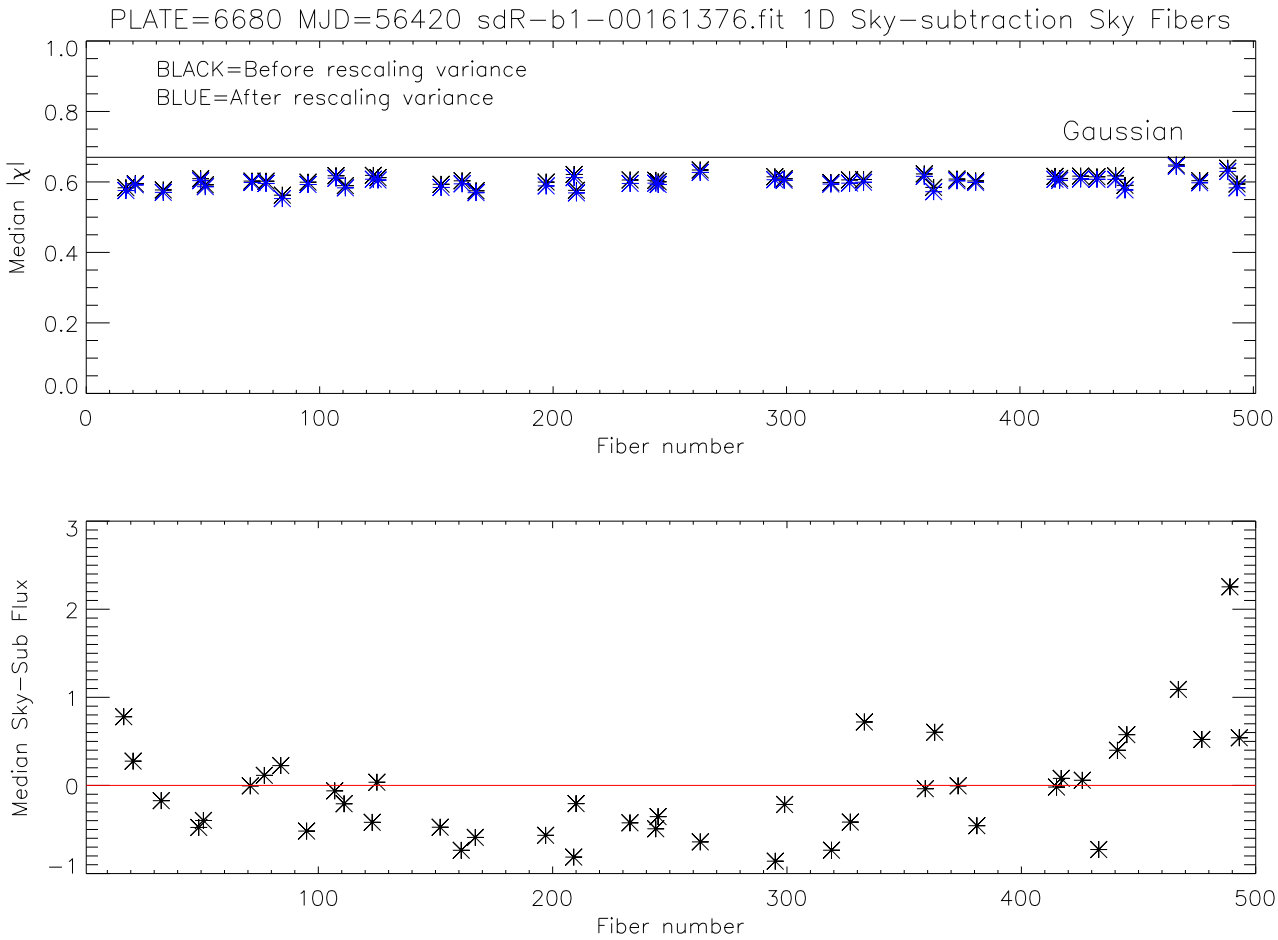

PLATE=6680 MJD=56420 Arcline Fit for sdR-b1-00161374.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sat May 28 09:52:37 2016

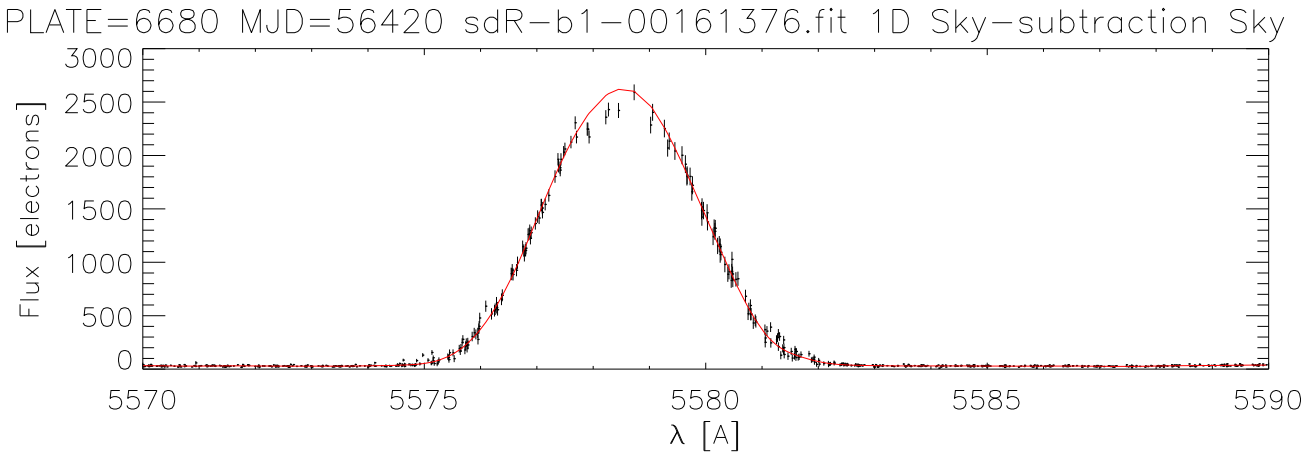

PLATE=6680 MJD=56420 Fiber-Flats for sdR-b1-00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -3.764
Max value = 5.989
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sat May 28 09:52:52 2016

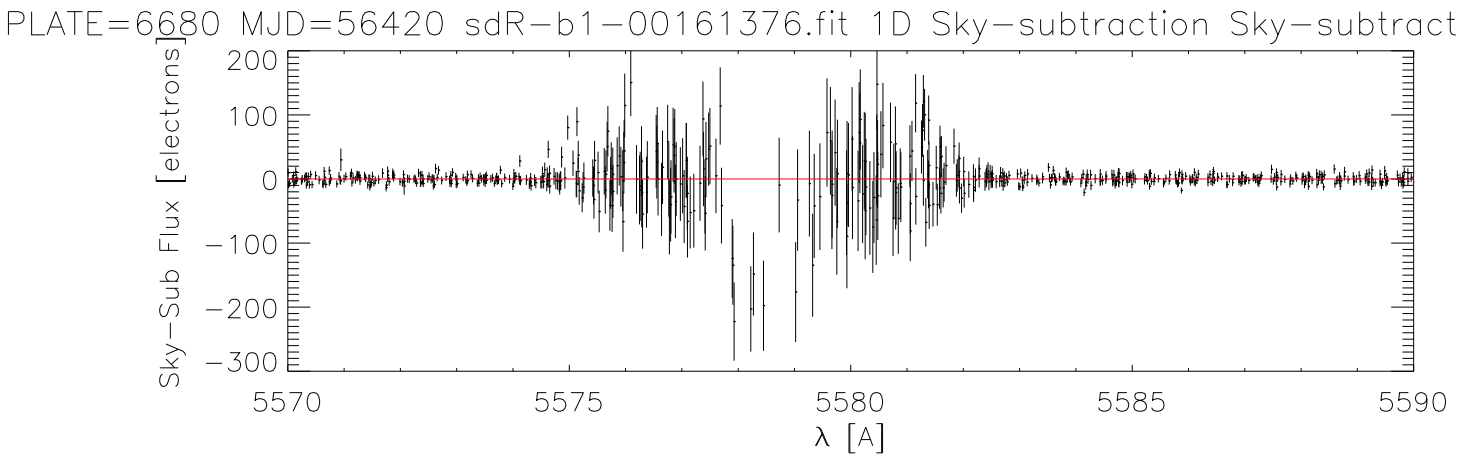

PLATE=6680 MJD=56420 Extraction chi^2 for sdR-b1-00161376.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-b1-00161376.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

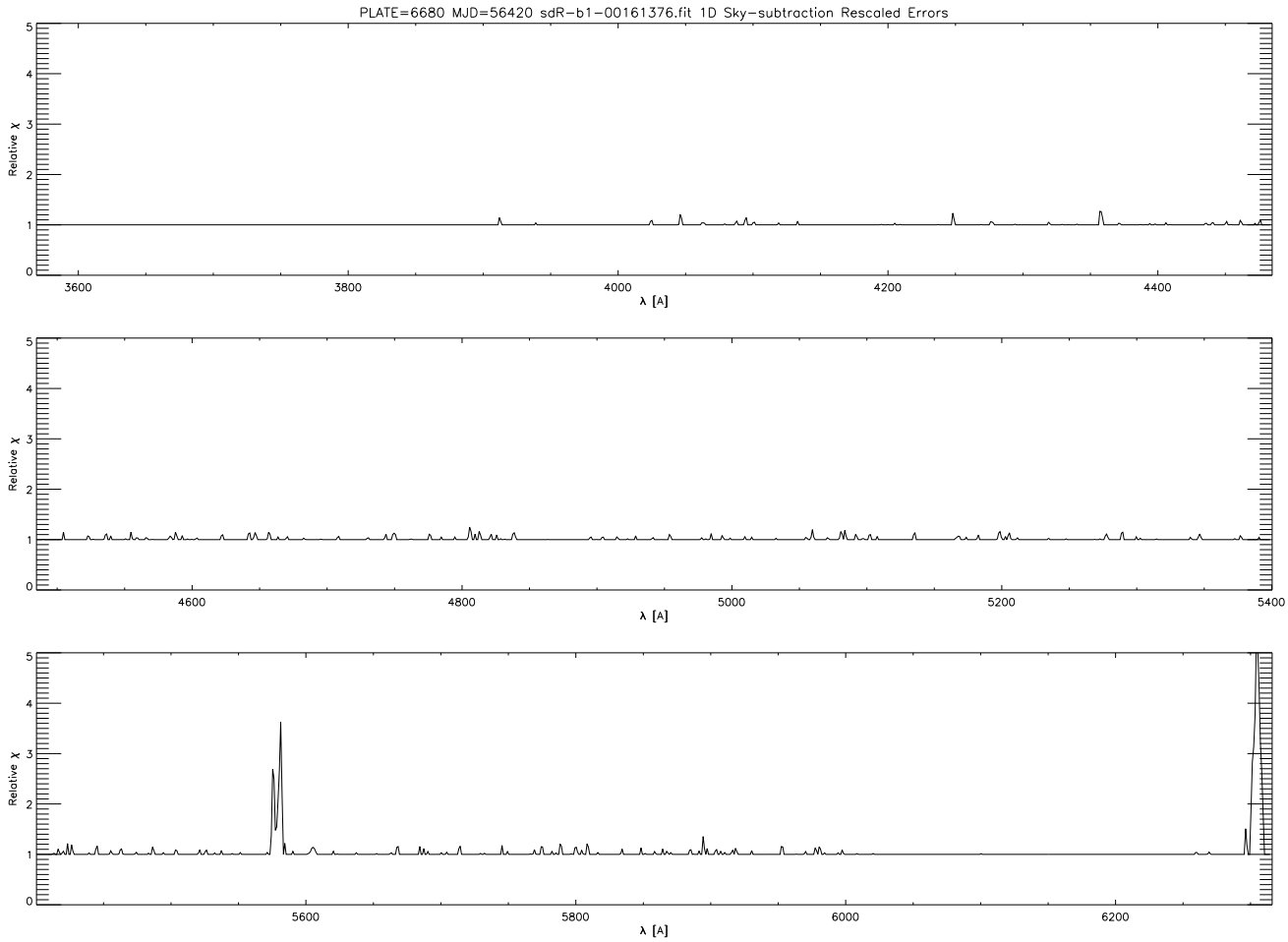

PLATE=6680 MJD=56420 Smooth superflat for sdR-b1-00161376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

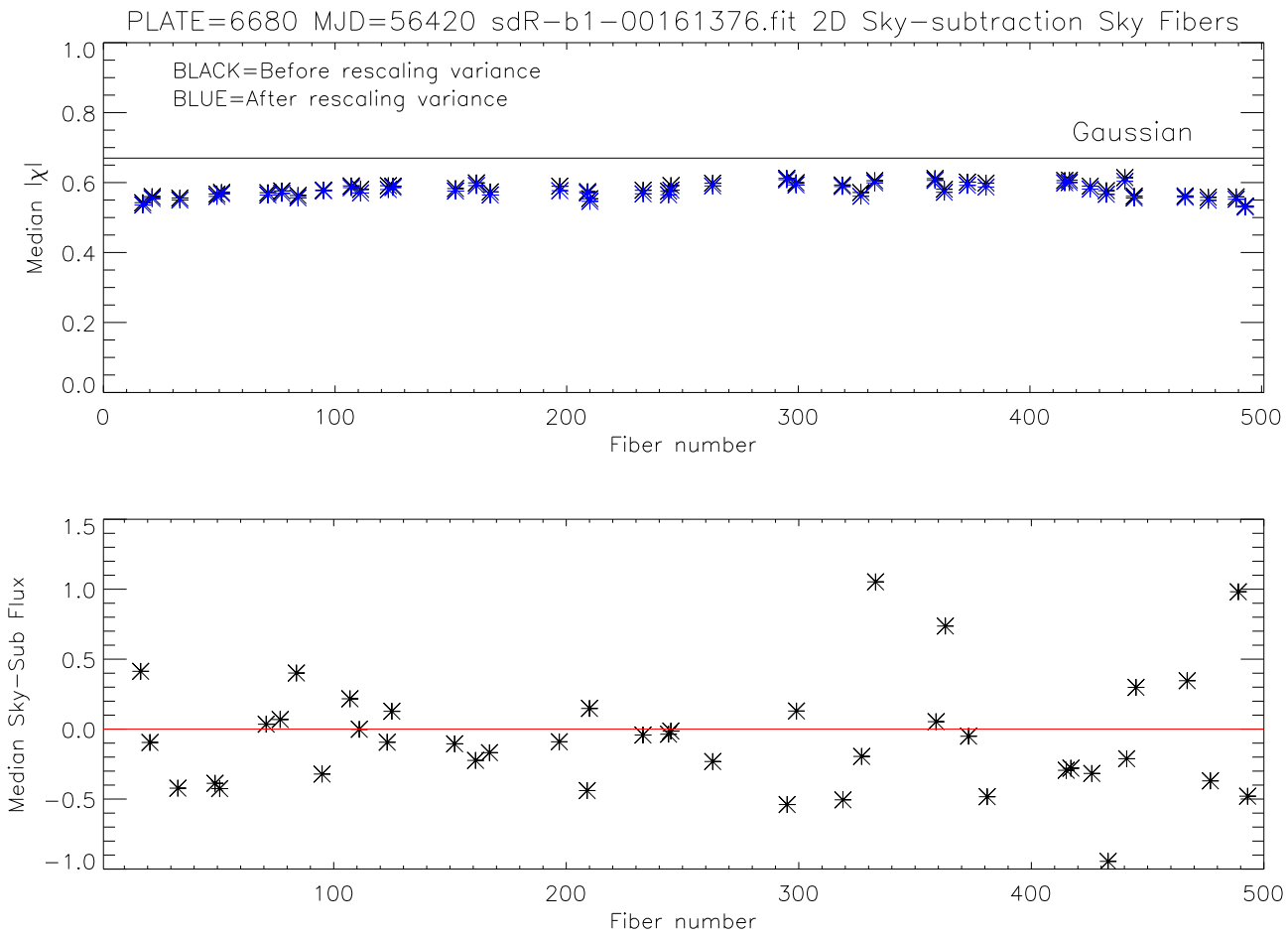

PLATE=6680 MJD=56420 sdR-b1-00161376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

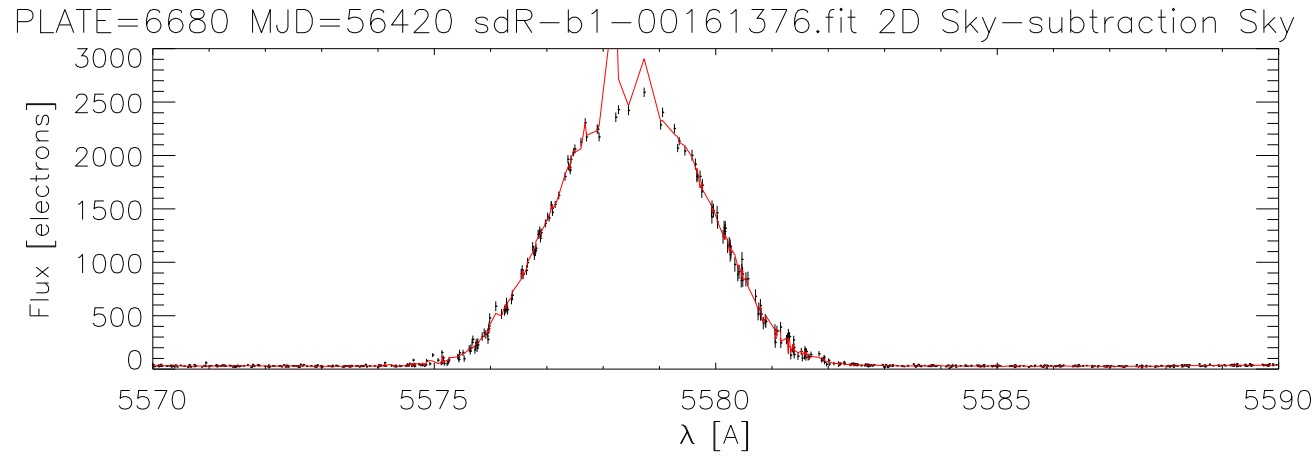

PLATE=6680 MJD=56420 sdR-b1-00161376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

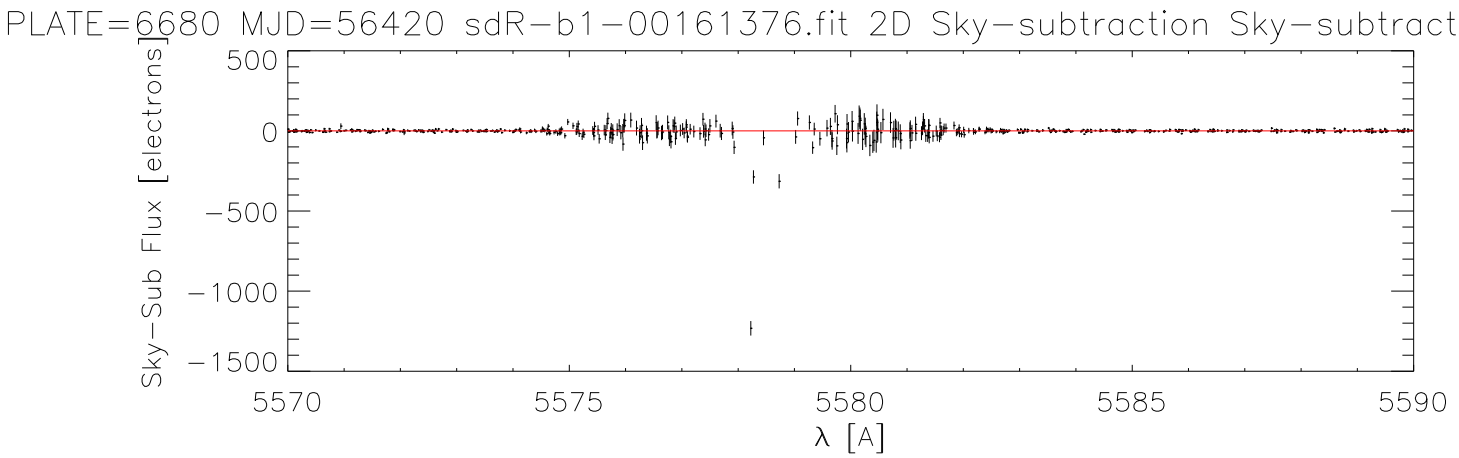

PLATE=6680 MJD=56420 sdR-b1-00161376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 42

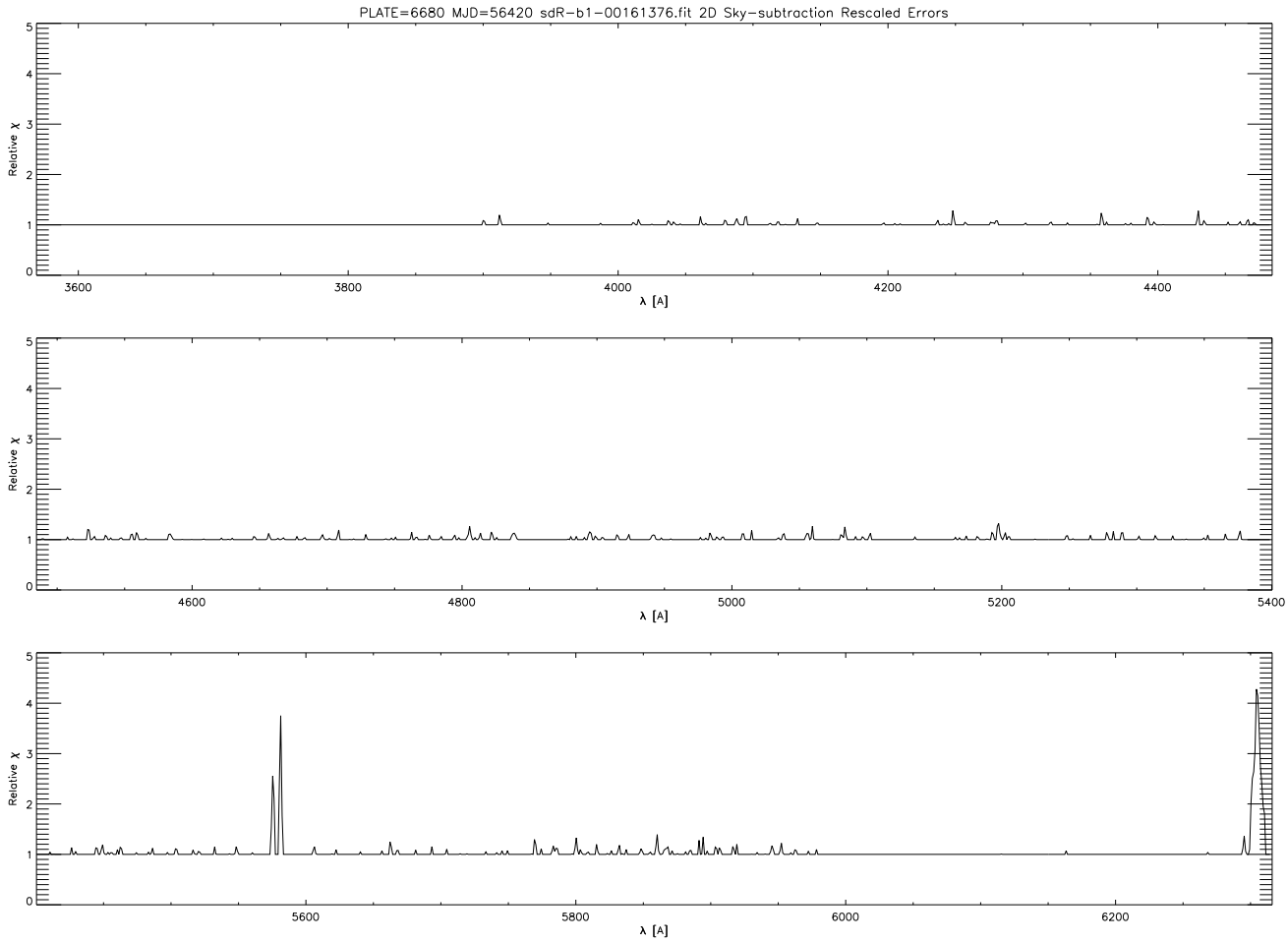


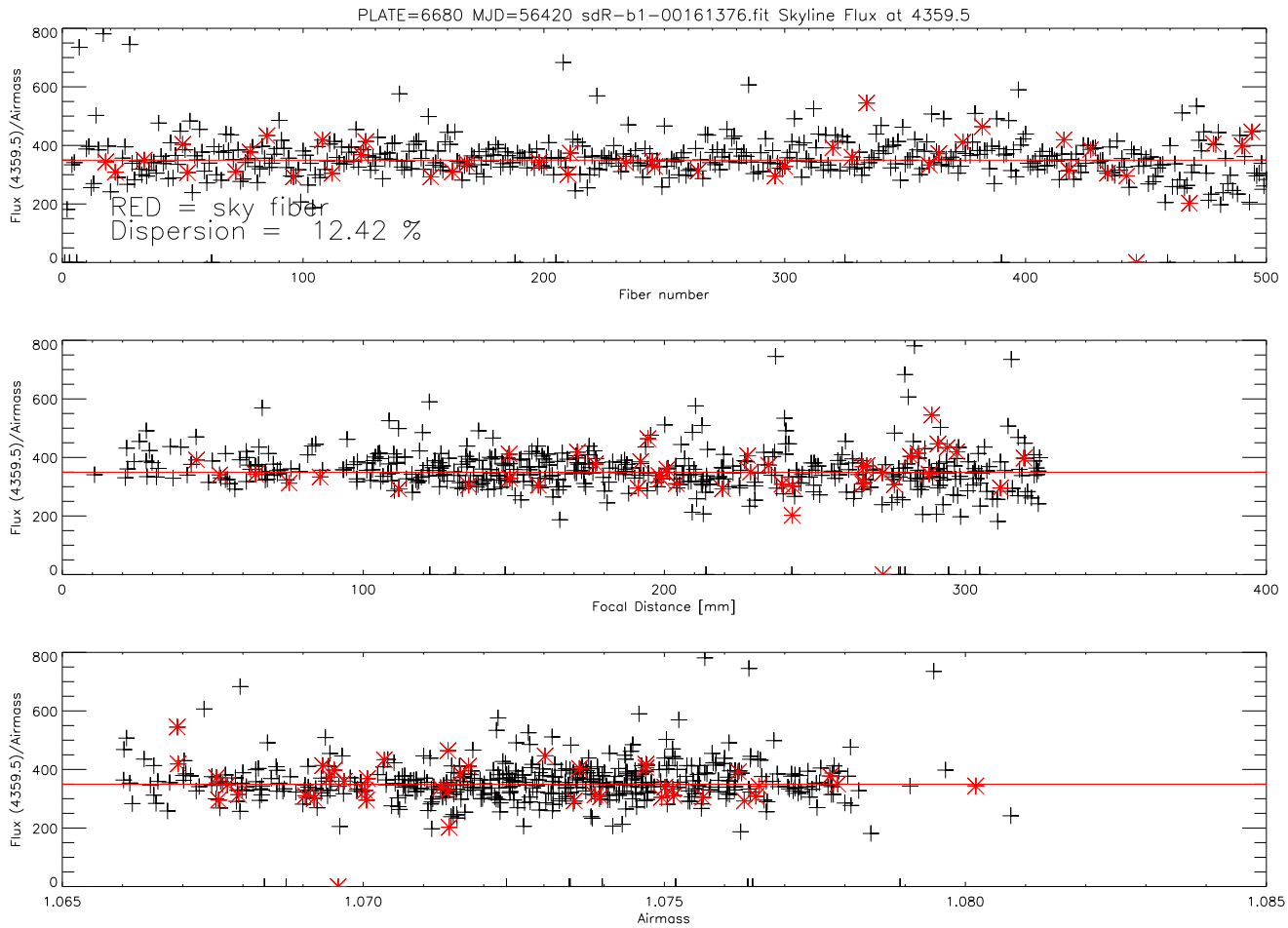

PLATE=6680 MJD=56420 sdR-b1-00161376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

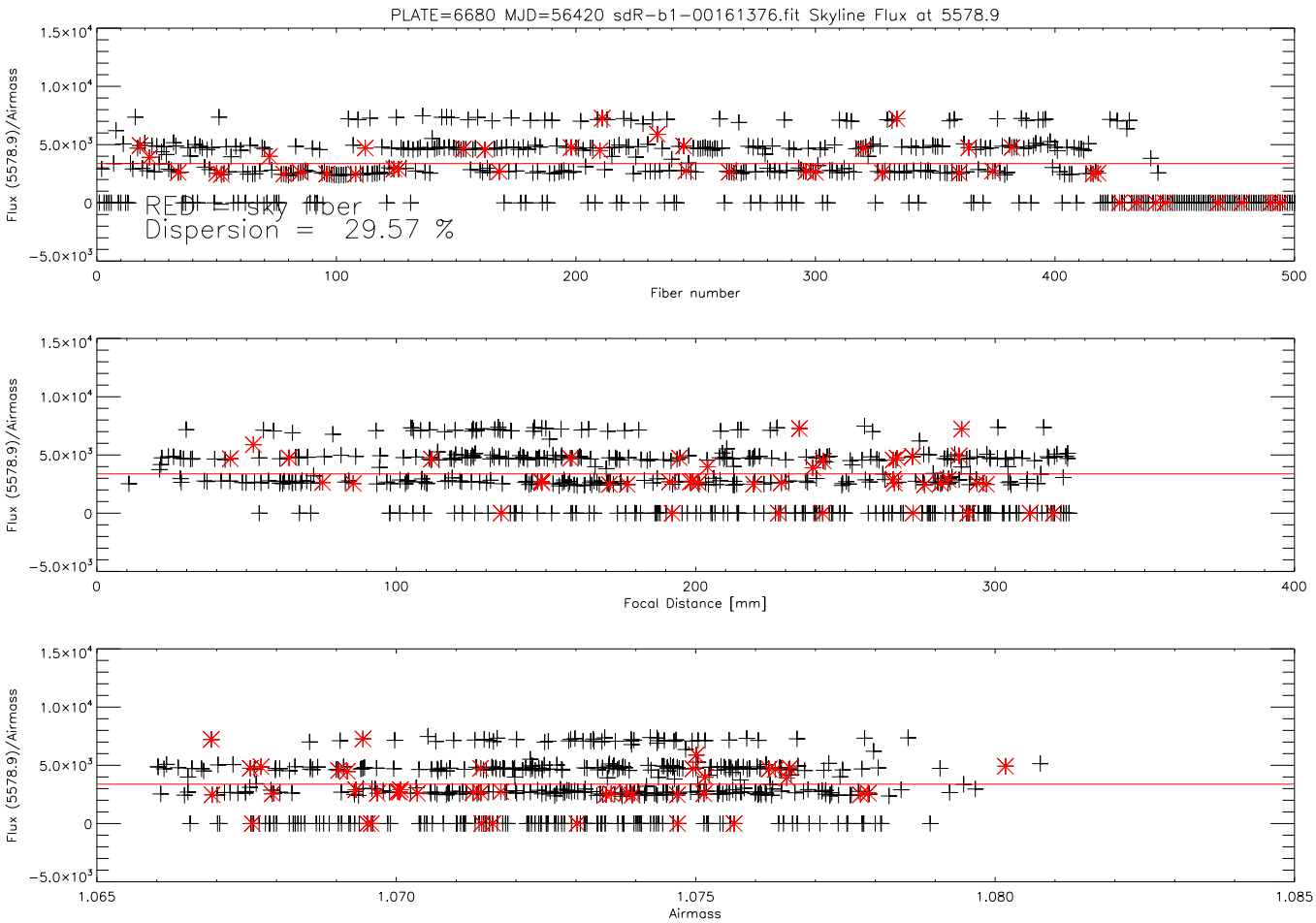

PLATE=6680 MJD=56420 sdR-b1-00161376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

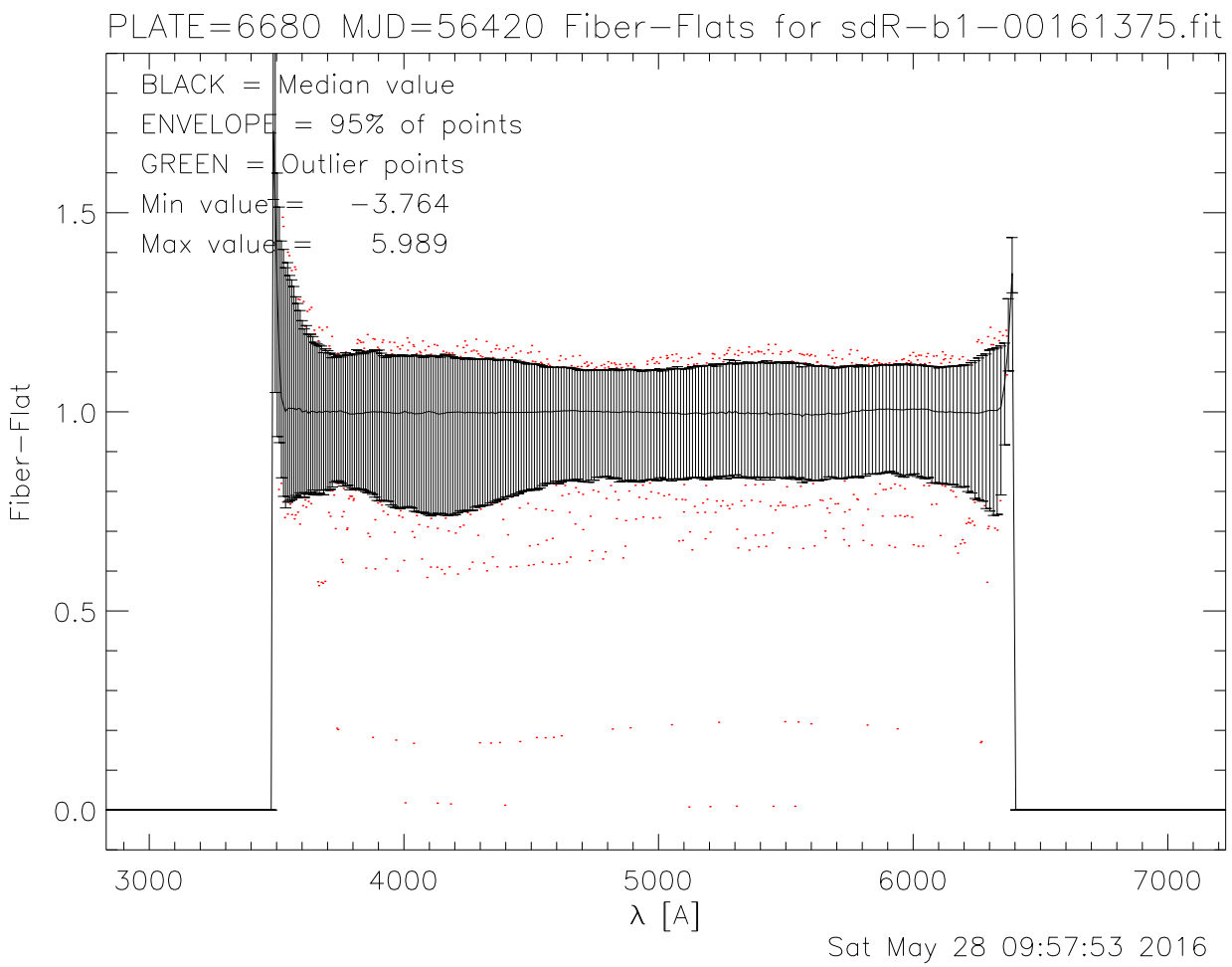

PLATE=6680 MJD=56420 sdR-b1-00161376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
500
0
-500
-1000
-1500
5570
5575
5580
5585
5590
λ [A]

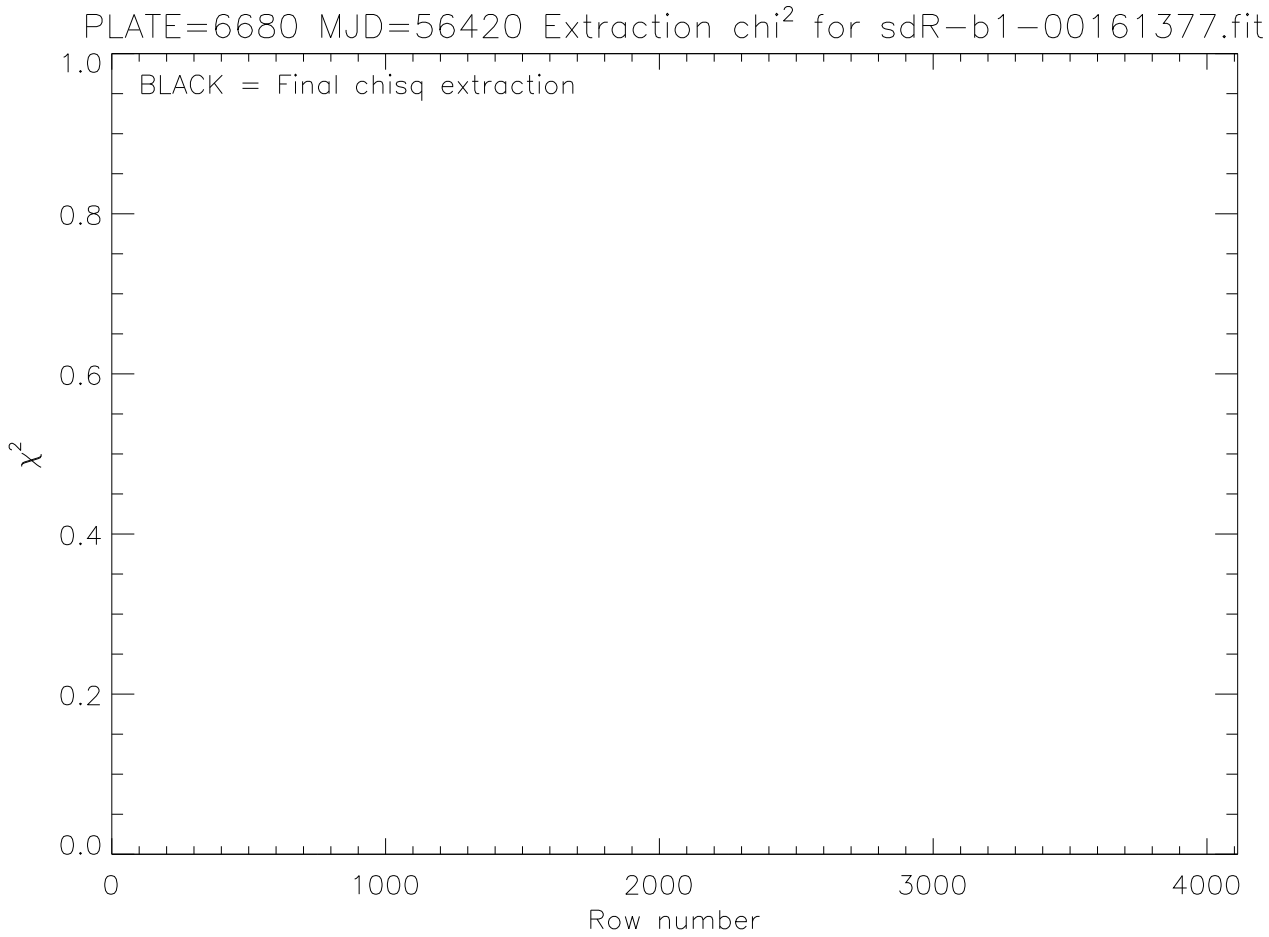
Number of sky fibers = 42

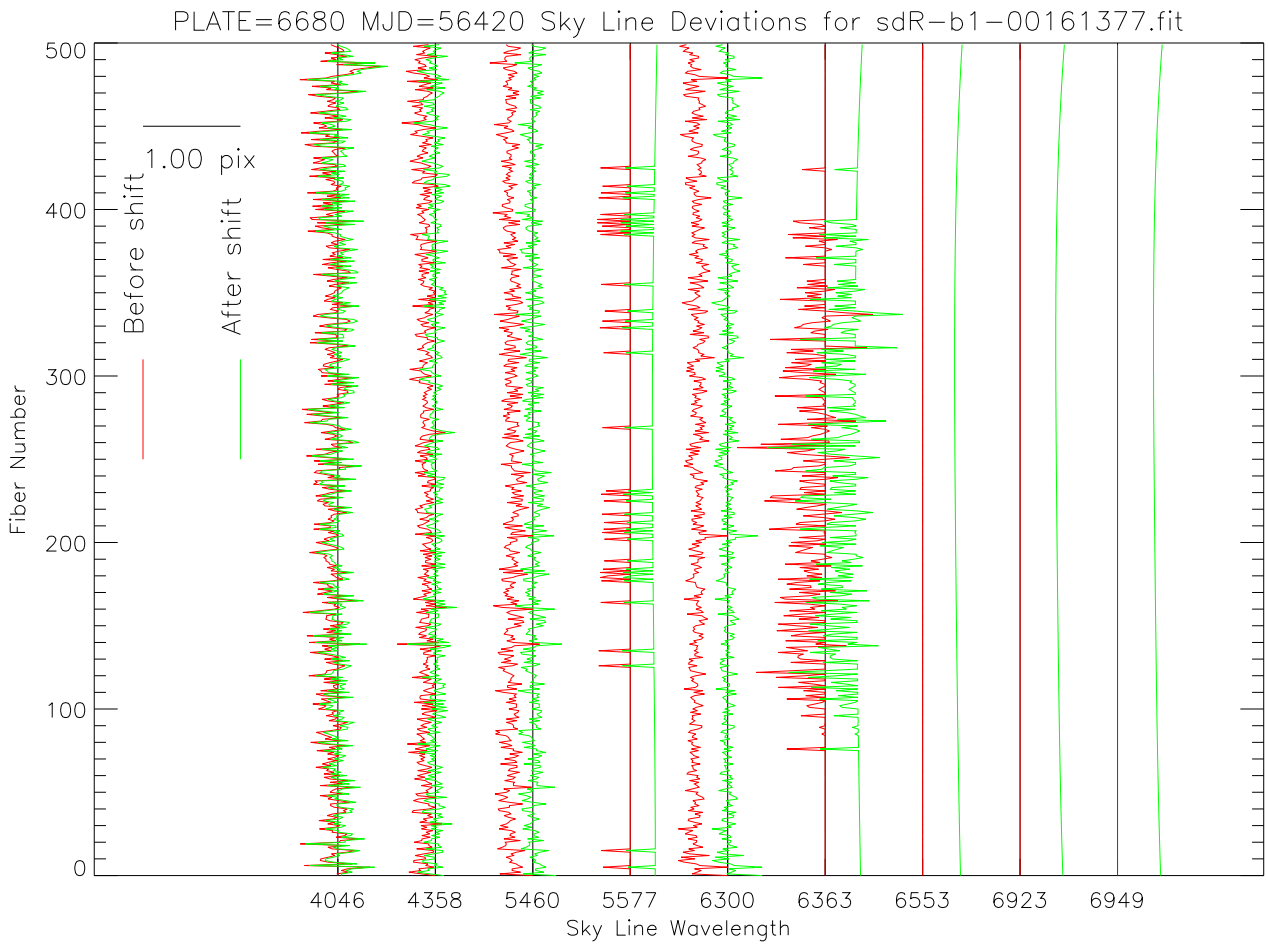


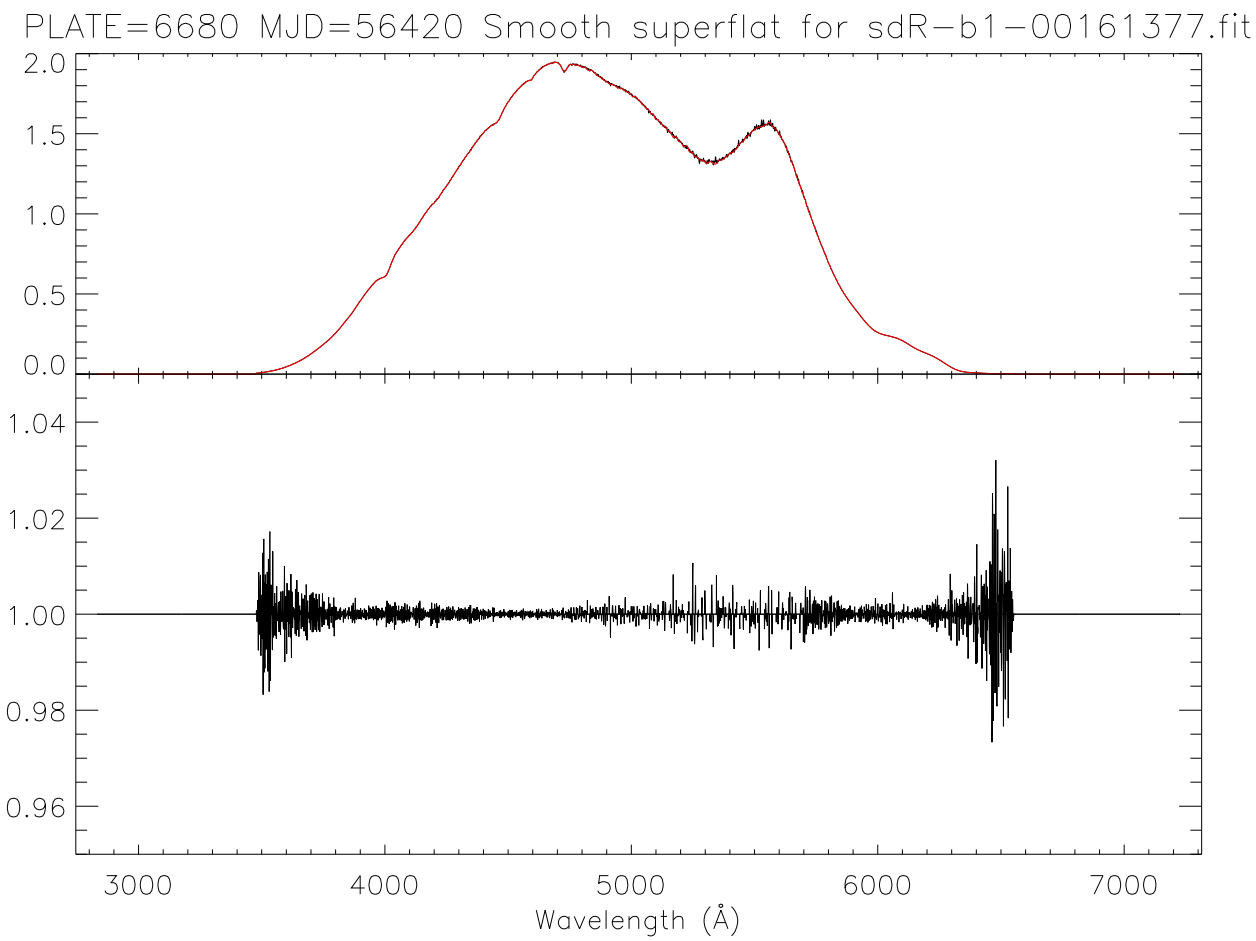

PLATE=6680 MJD=56420 sdR-b1-00161376.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.42 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

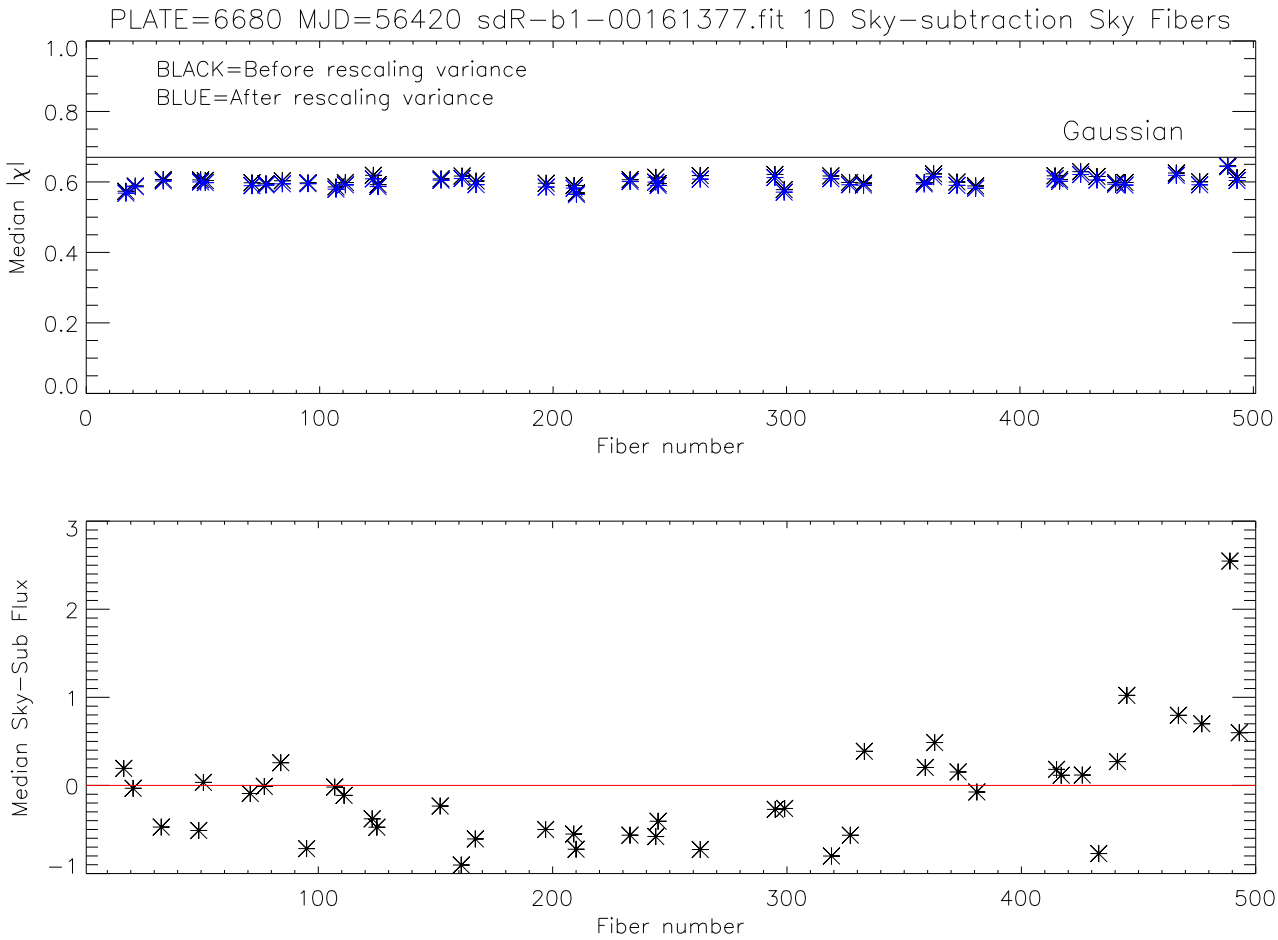

PLATE=6680 MJD=56420 sdR-b1-00161376.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
RED sky fiber
Dispersion = 29.57 %
0
100
200
300
400
500
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
1.065
1.070
1.075
1.080
1.085
Airmass

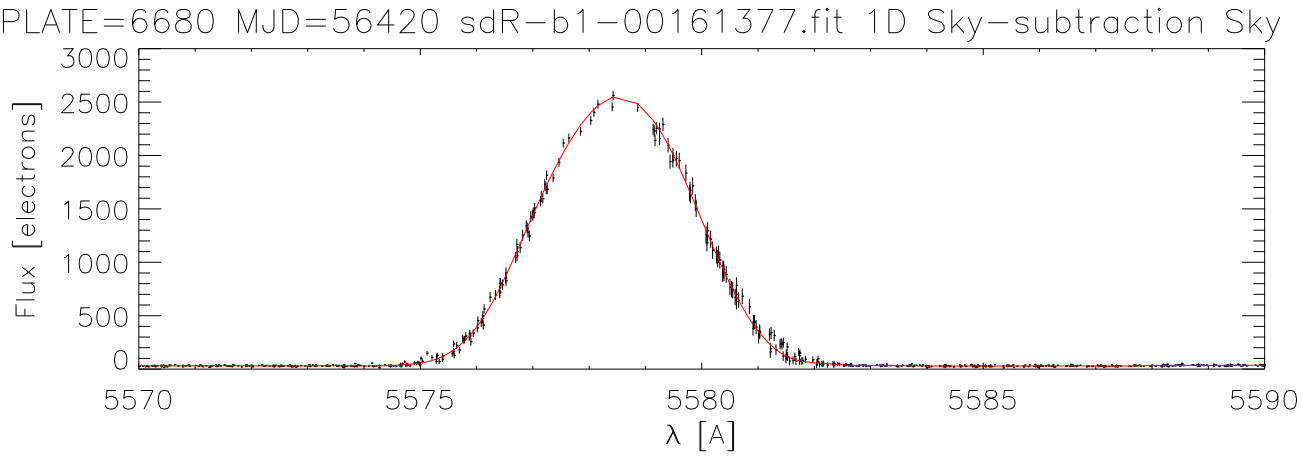

PLATE=6680 MJD=56420 Fiber−Flats for sdR−b1−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.764
Max value = 5.989
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sat May 28 09:57:53 2016

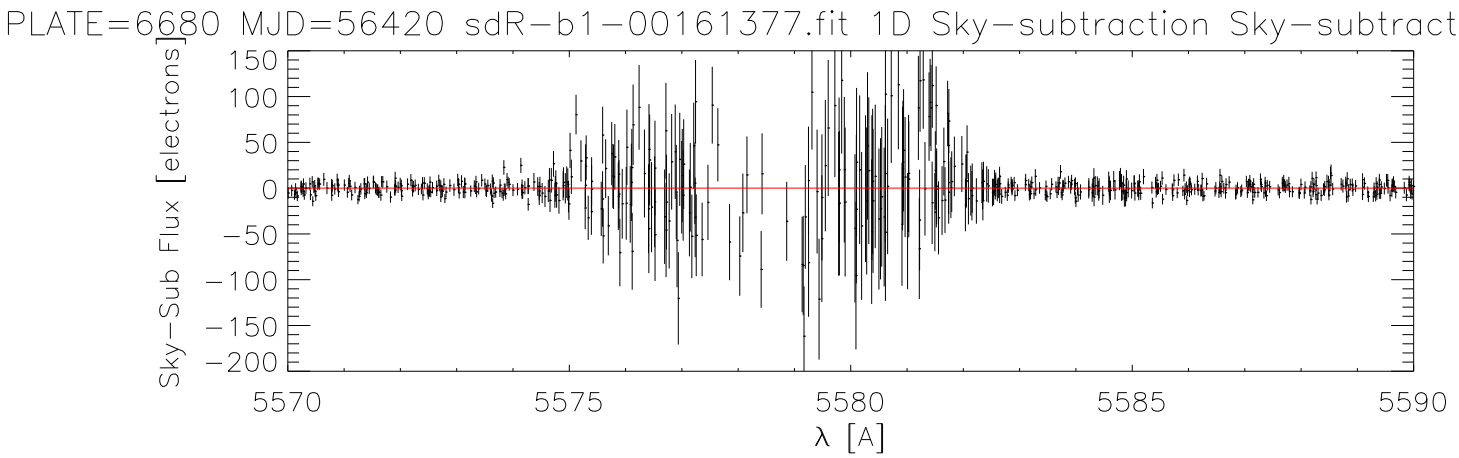

PLATE=6680 MJD=56420 Extraction chi^2 for sdR-b1-00161377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-b1-00161377.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

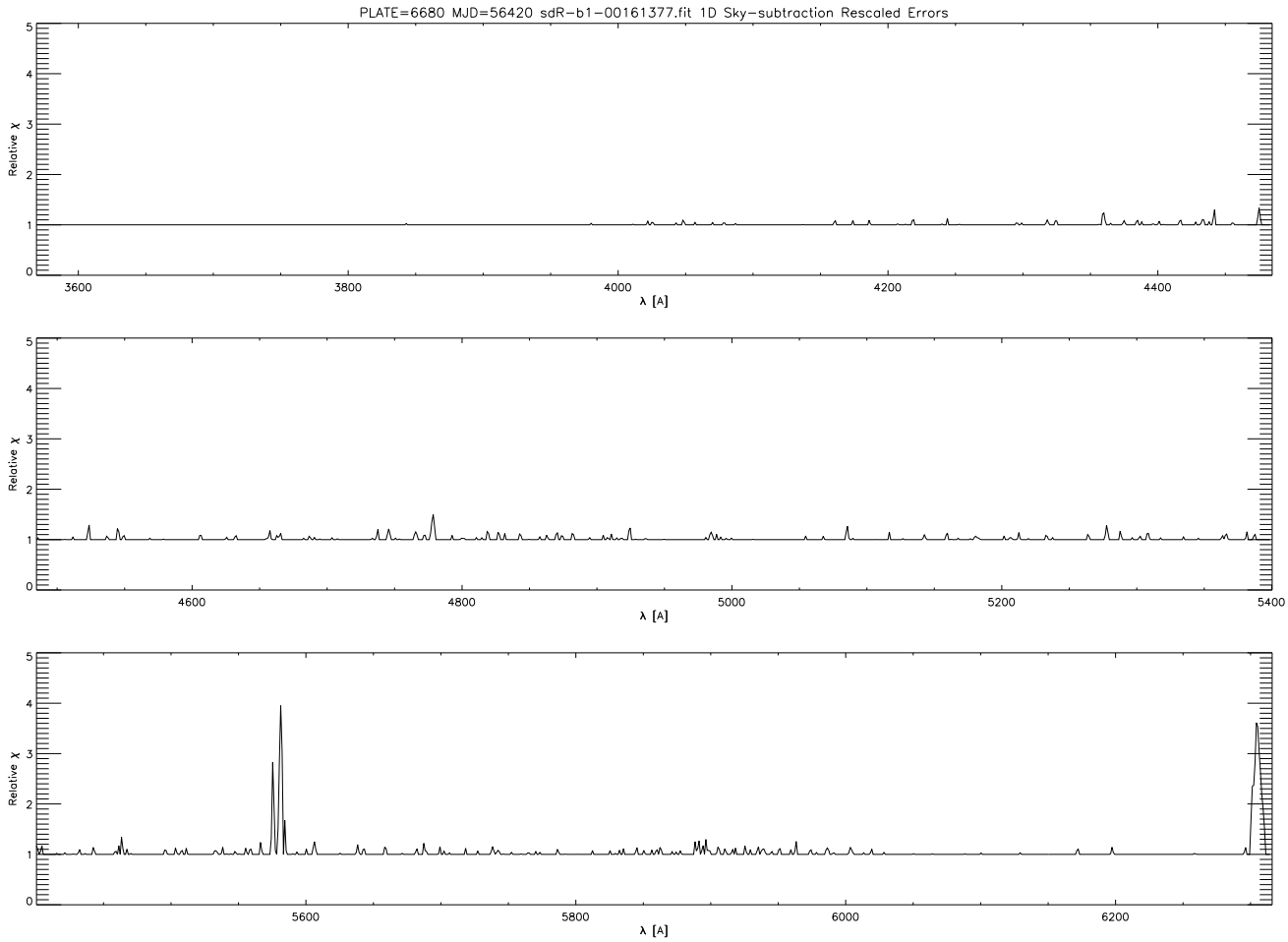

PLATE=6680 MJD=56420 Smooth superflat for sdR-b1-00161377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

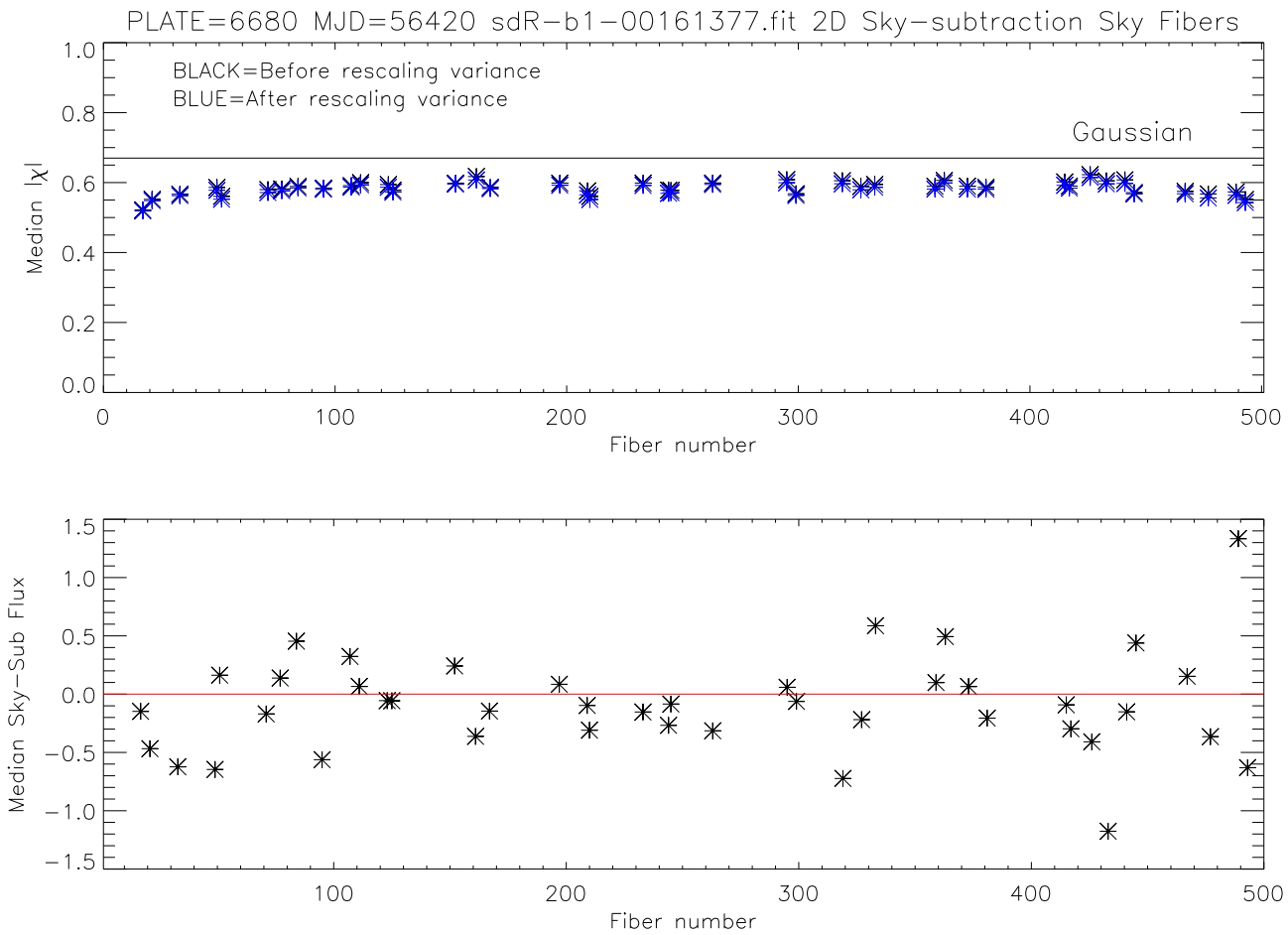

PLATE=6680 MJD=56420 sdR-b1-00161377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

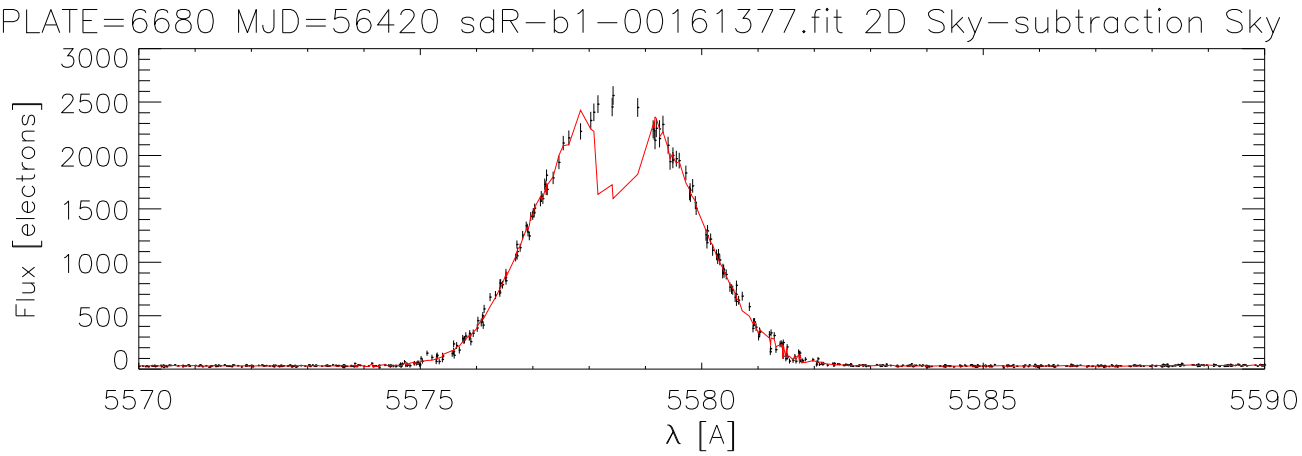

PLATE=6680 MJD=56420 sdR-b1-00161377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

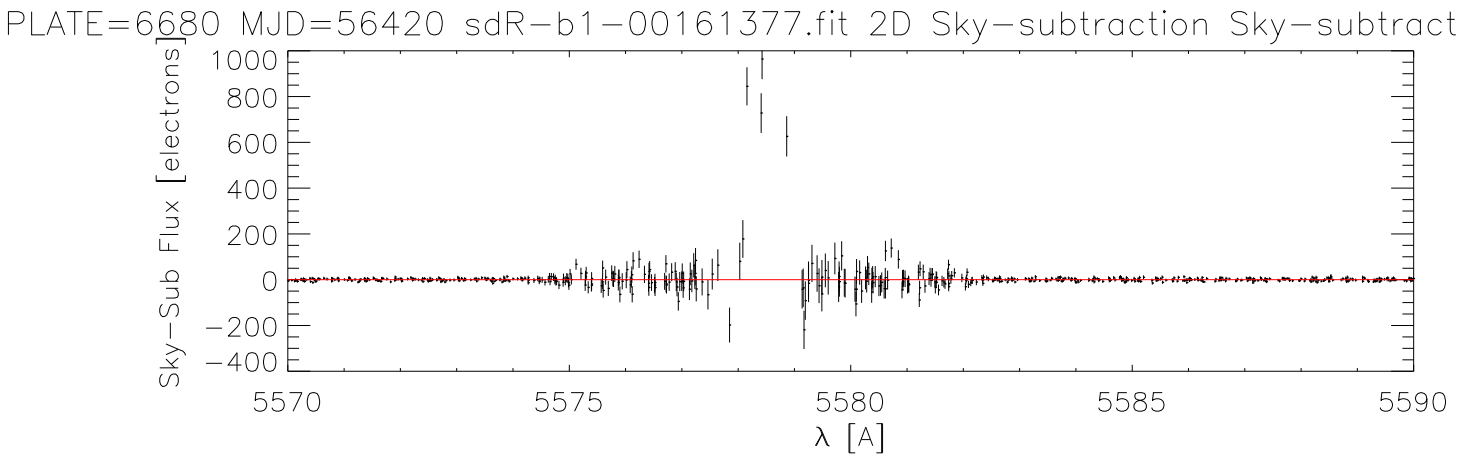

PLATE=6680 MJD=56420 sdR-b1-00161377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 42

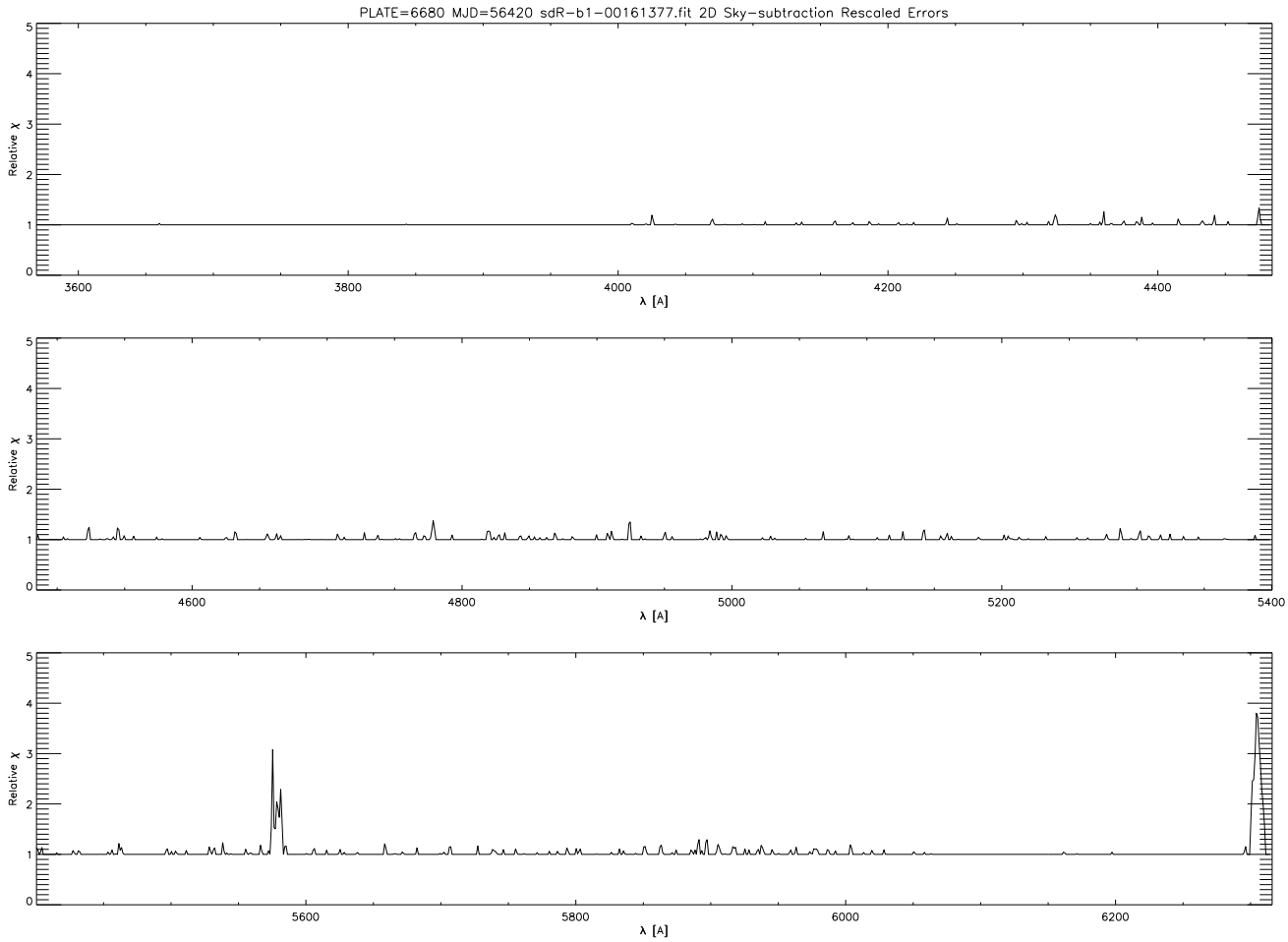


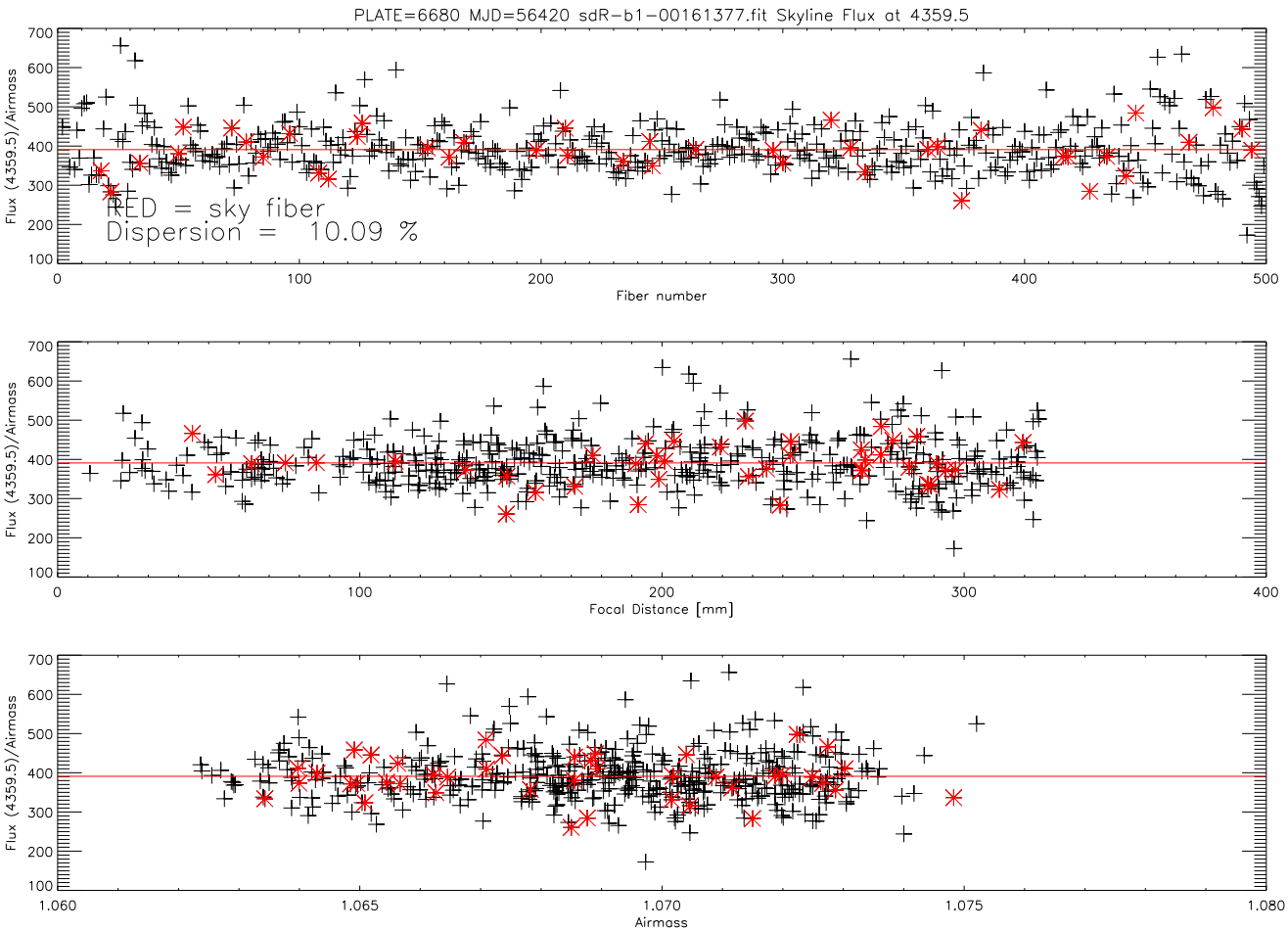

PLATE=6680 MJD=56420 sdR-b1-00161377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

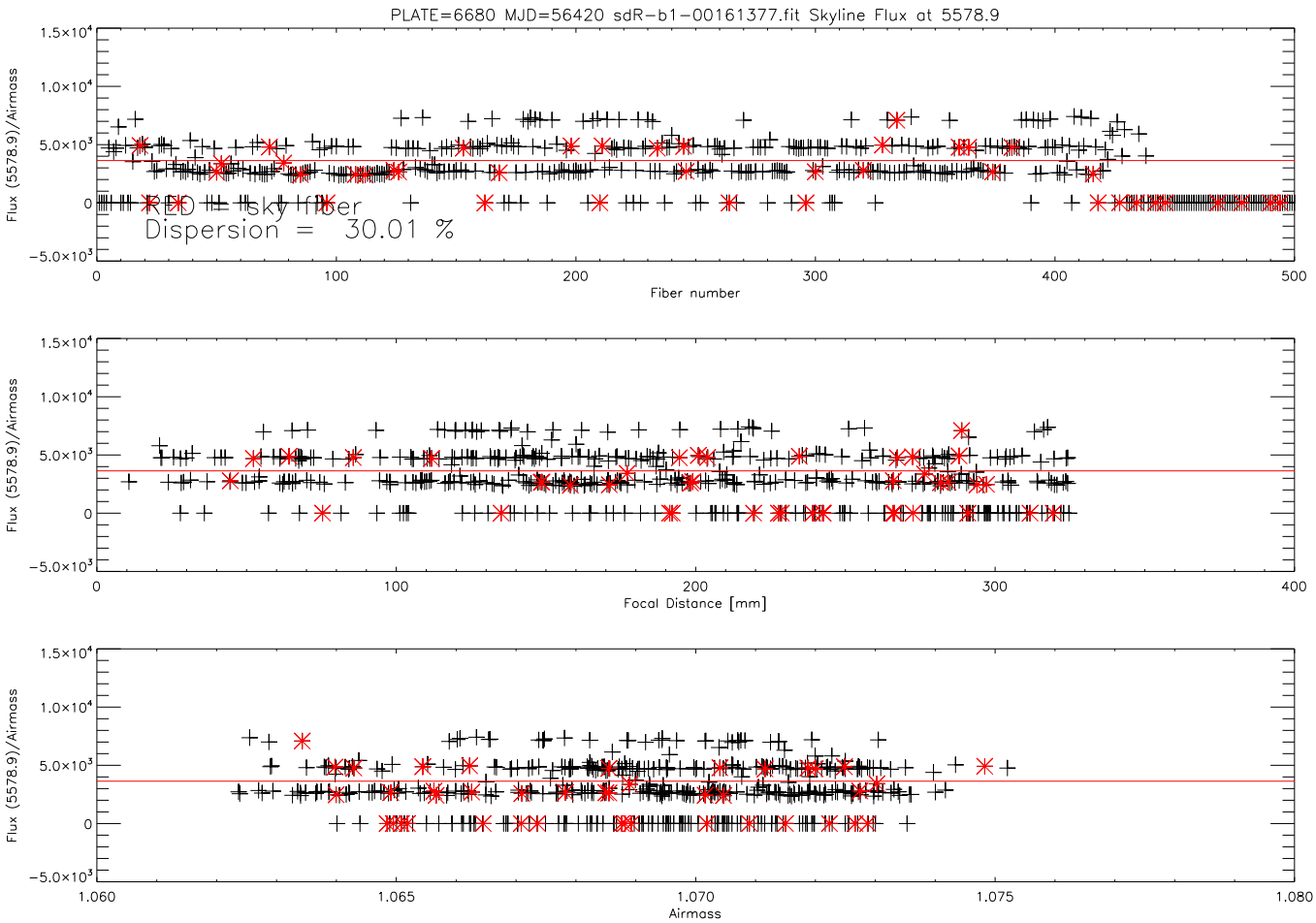

PLATE=6680 MJD=56420 sdR-b1-00161377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

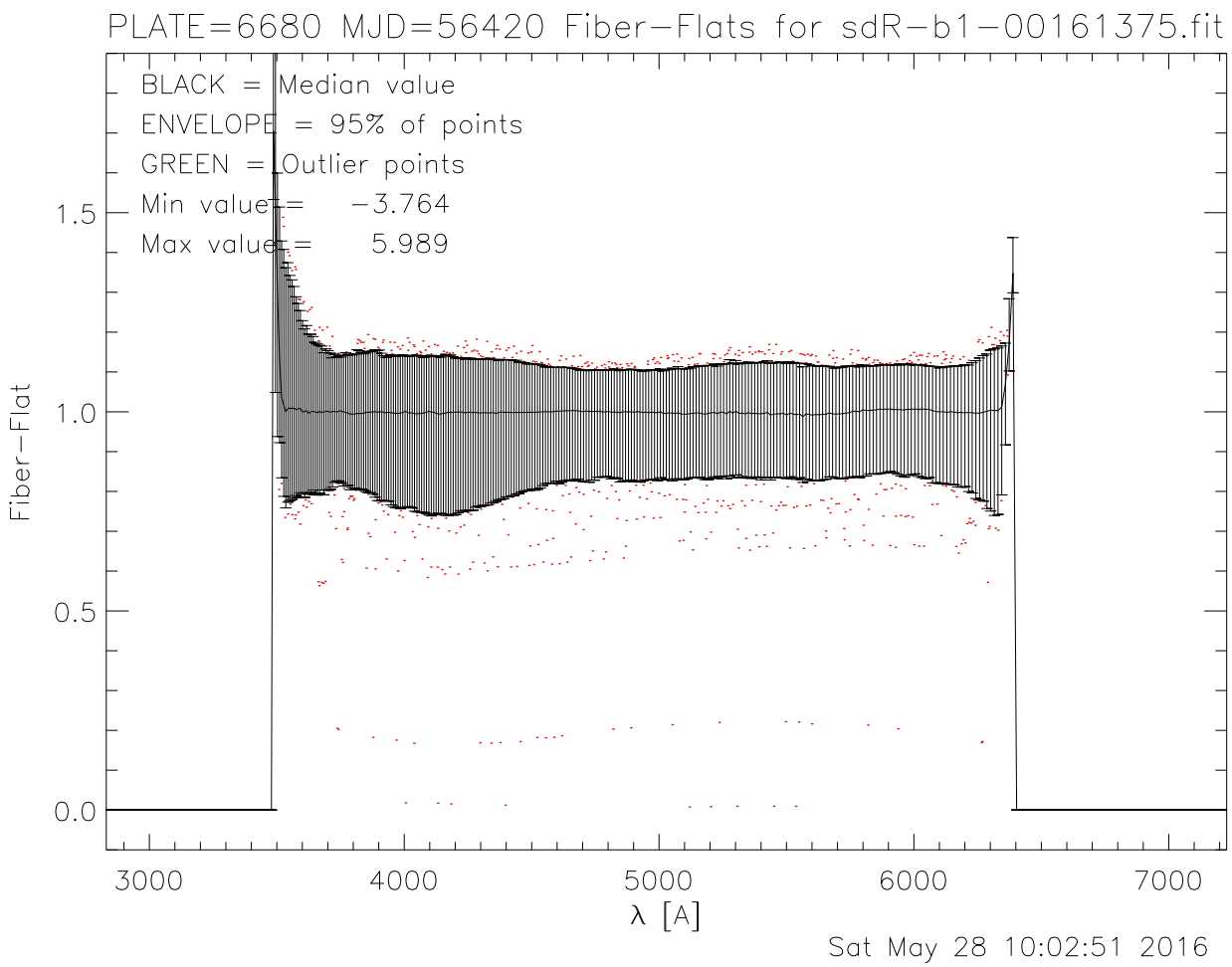

PLATE=6680 MJD=56420 sdR-b1-00161377.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

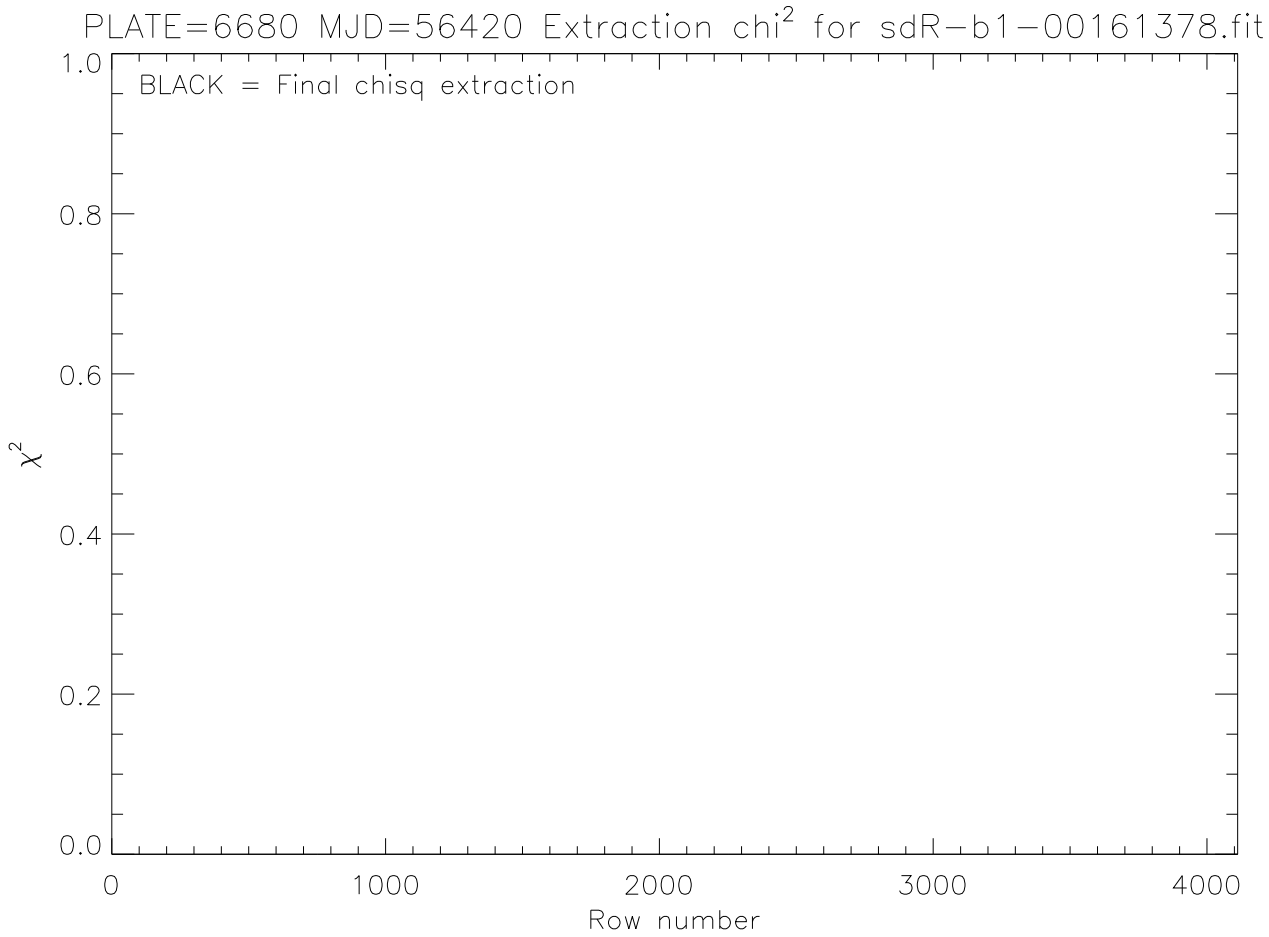
Number of sky fibers = 42

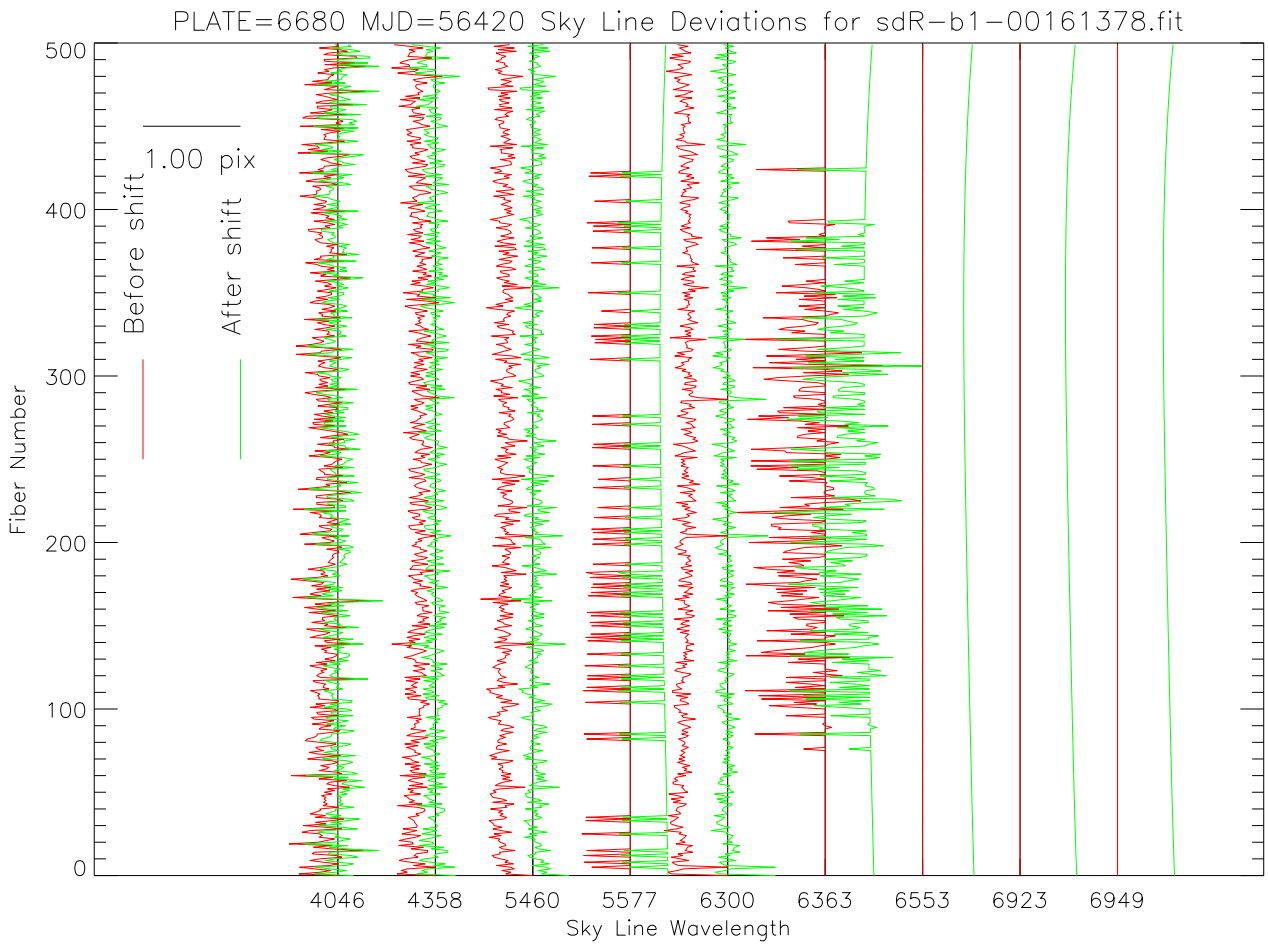


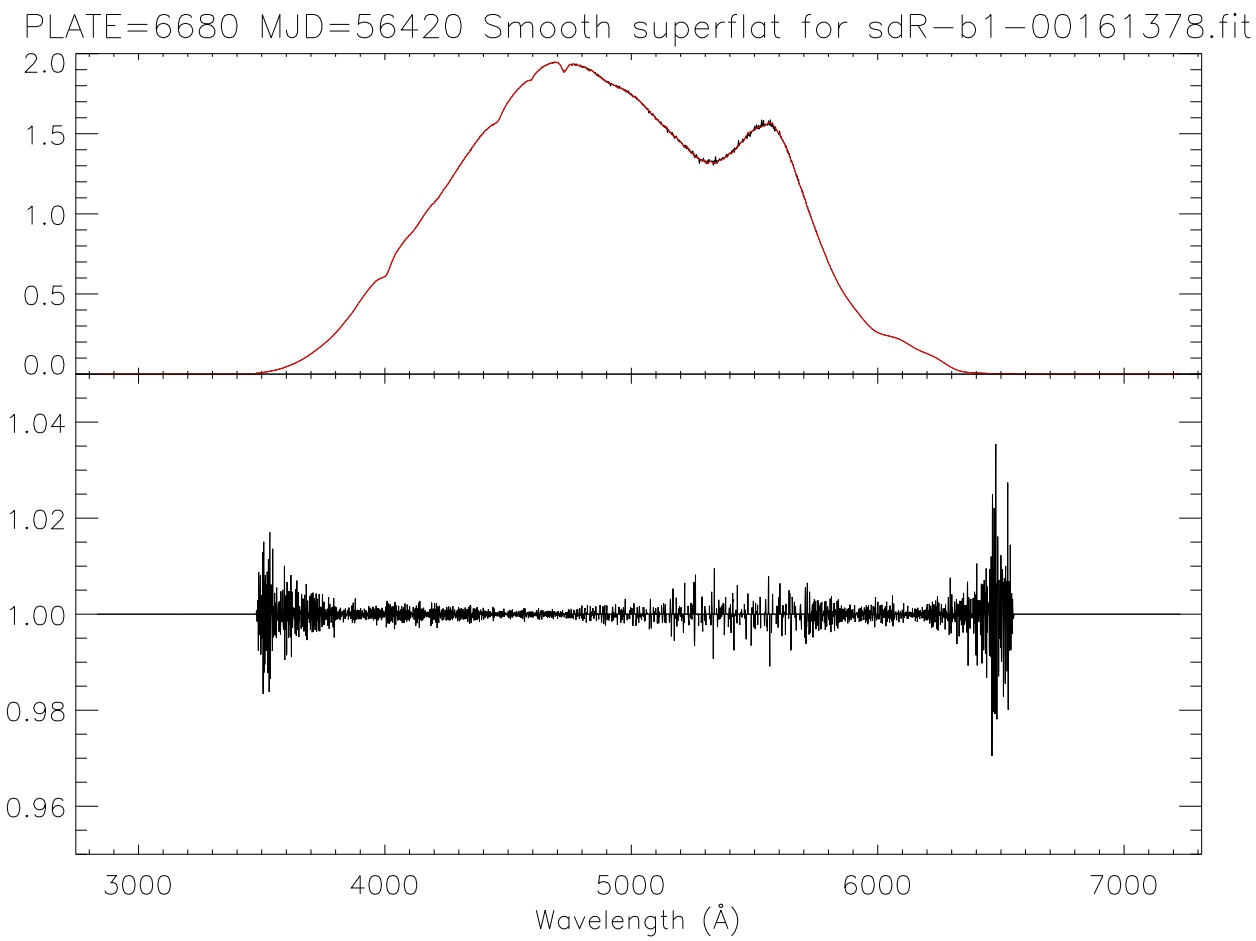

PLATE=6680 MJD=56420 sdR-b1-00161377.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.09 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

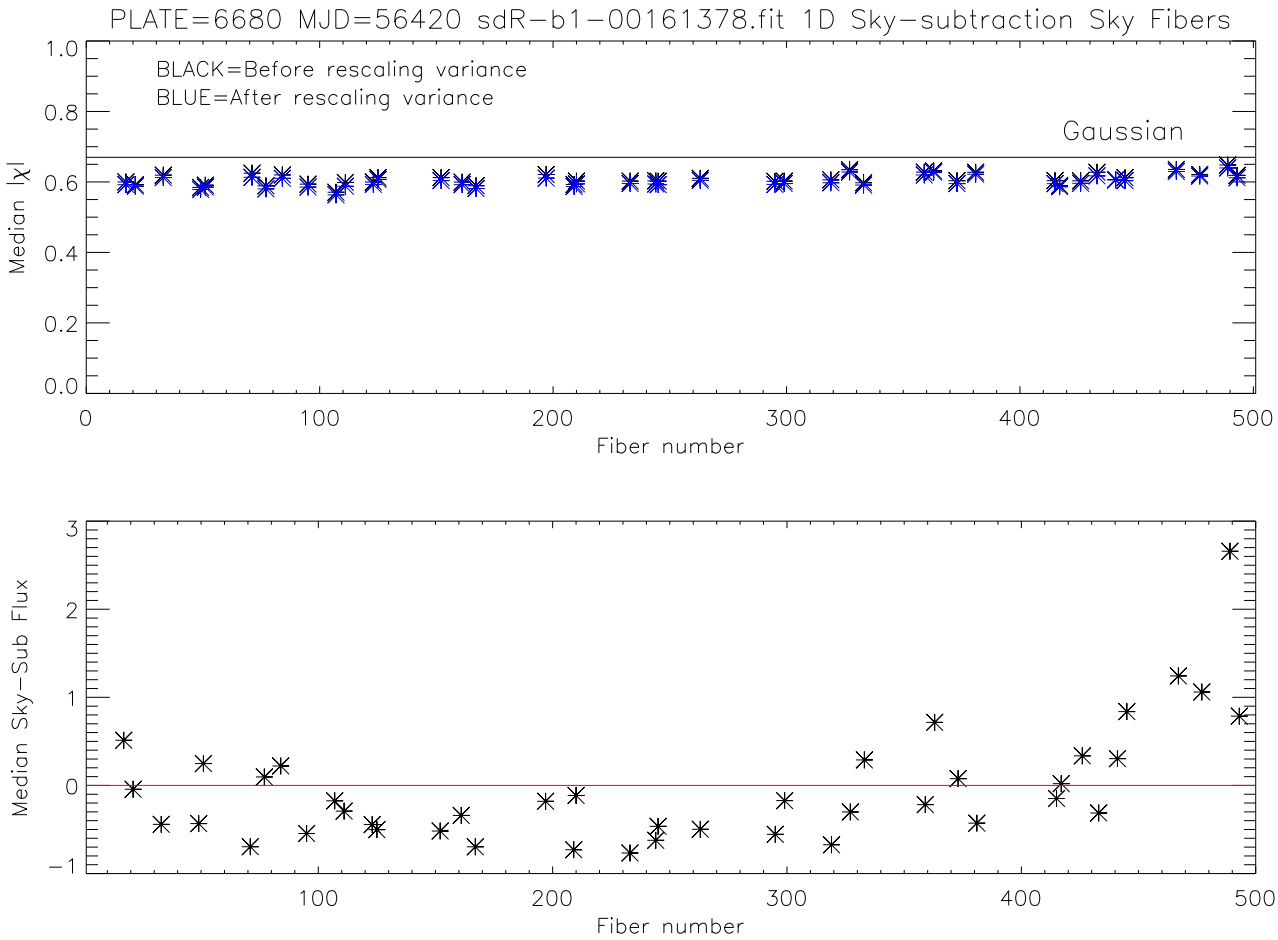

PLATE=6680 MJD=56420 sdR-b1-00161377.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
Focal Distance [mm]
Airmass
Red sky fiber
Dispersion = 30.01 %

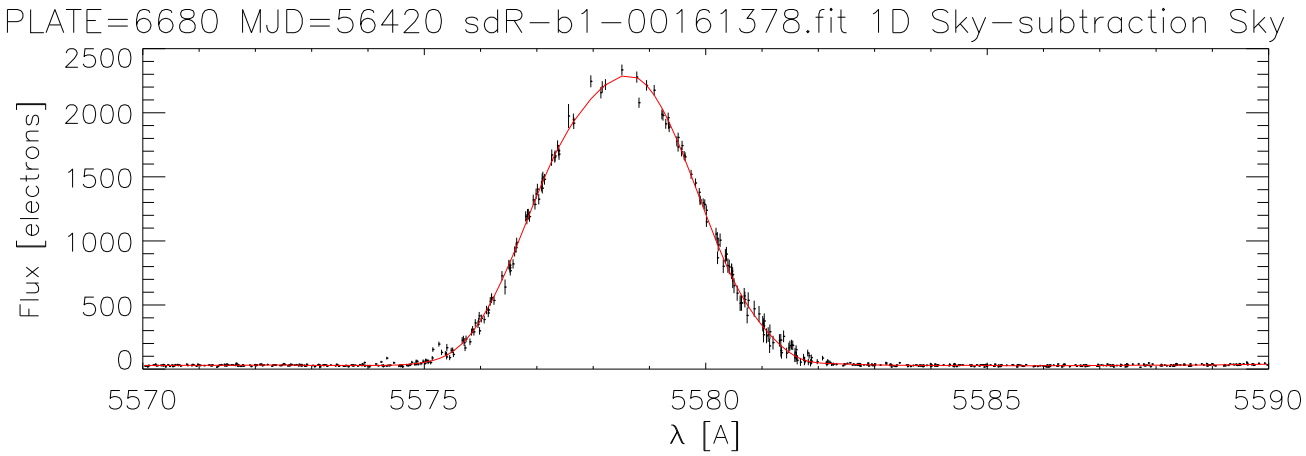

PLATE=6680 MJD=56420 Fiber−Flats for sdR−b1−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.764
Max value = 5.989
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sat May 28 10:02:51 2016

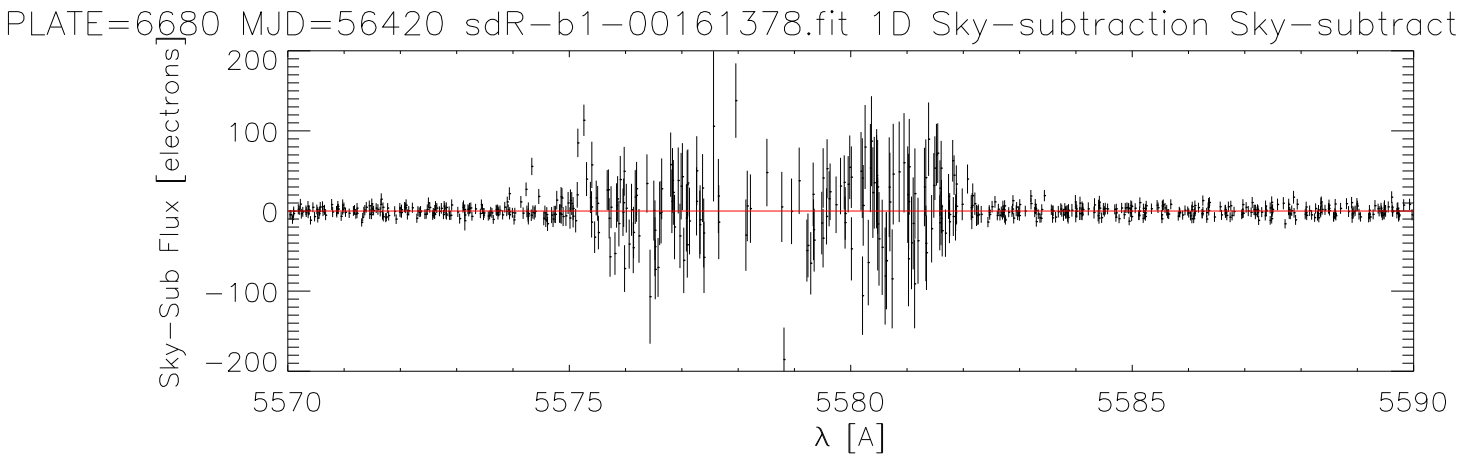

PLATE=6680 MJD=56420 Extraction chi^2 for sdR-b1-00161378.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-b1-00161378.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

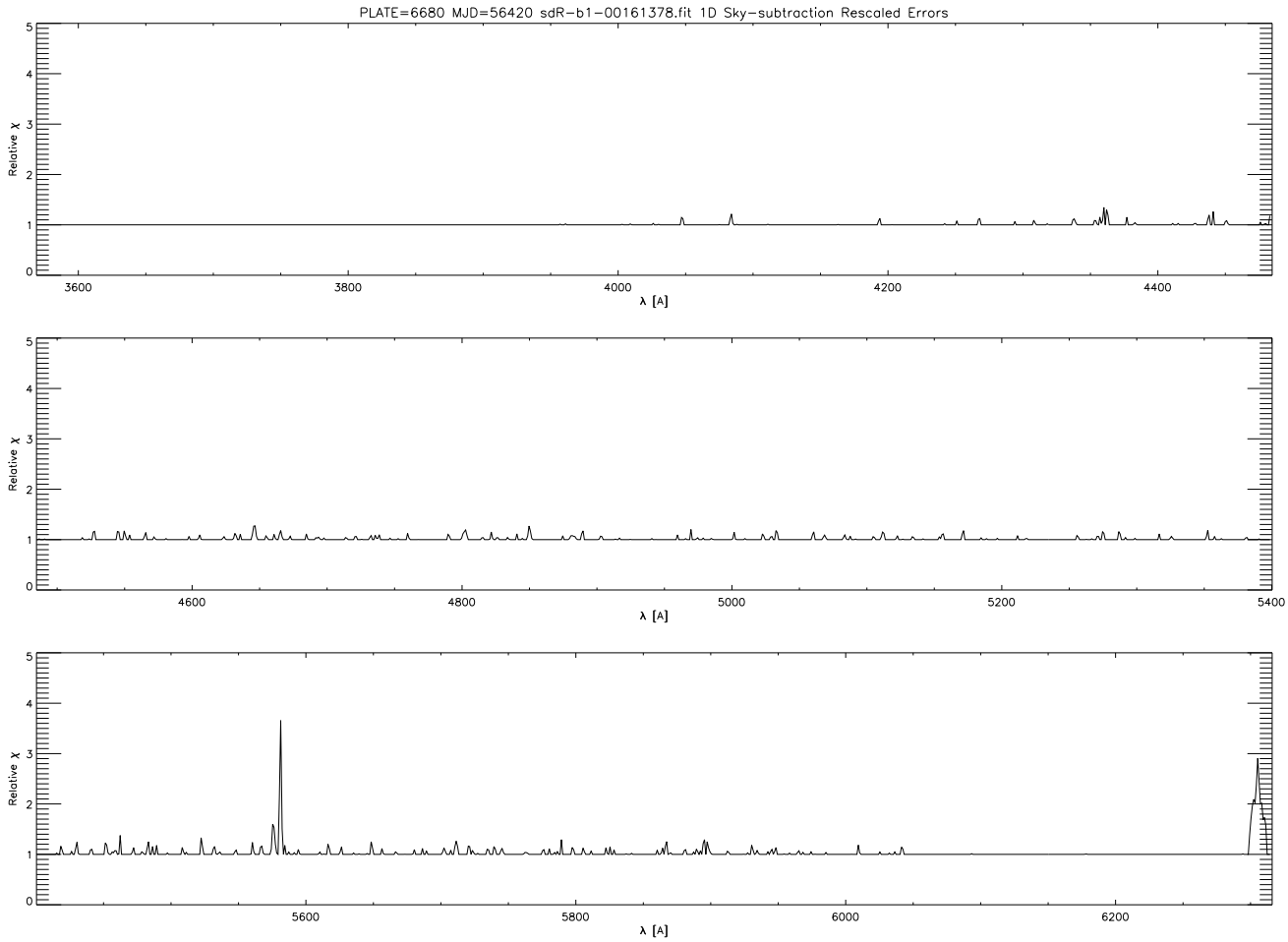

PLATE=6680 MJD=56420 Smooth superflat for sdR-b1-00161378.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

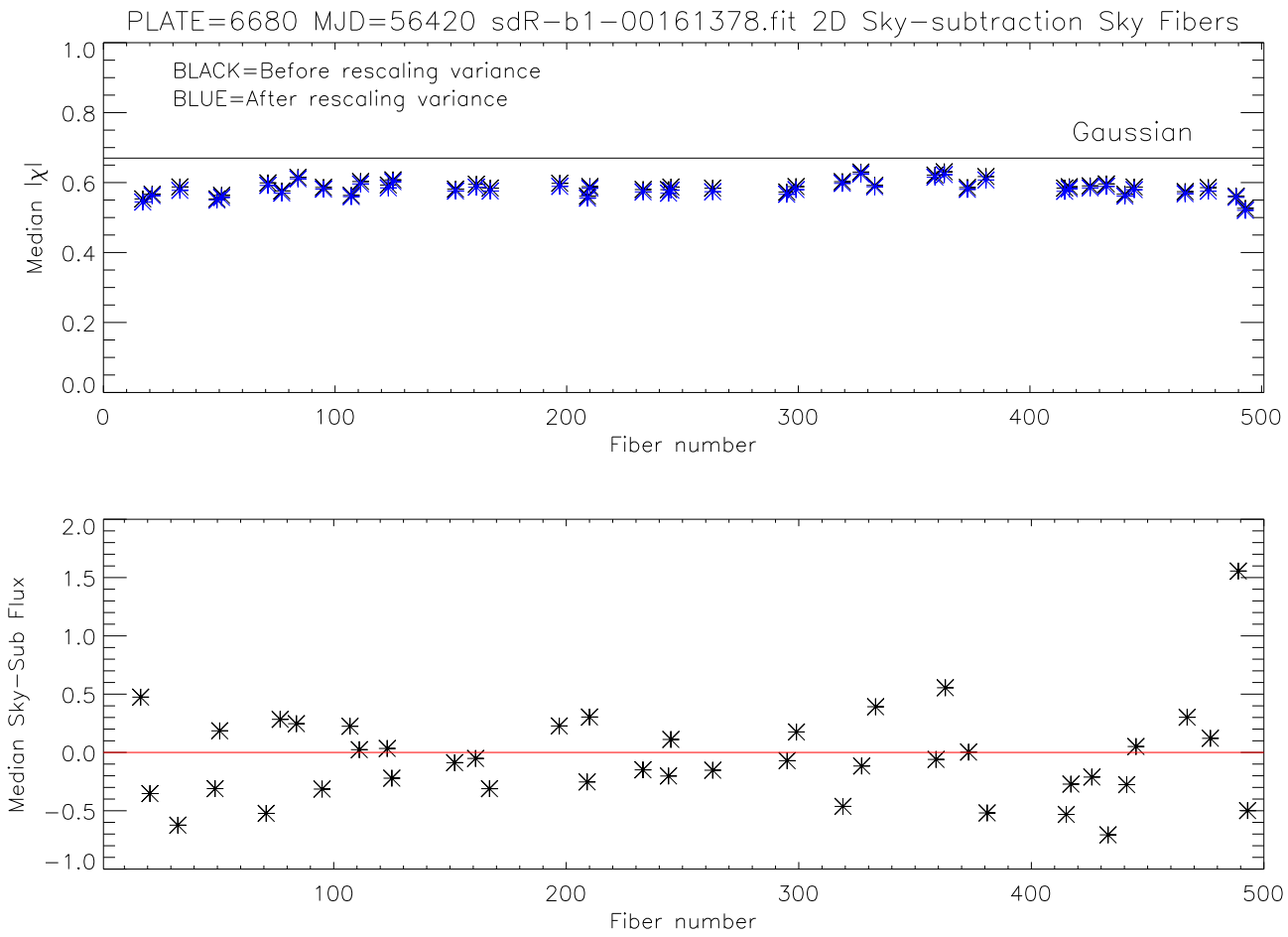

PLATE=6680 MJD=56420 sdR-b1-00161378.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

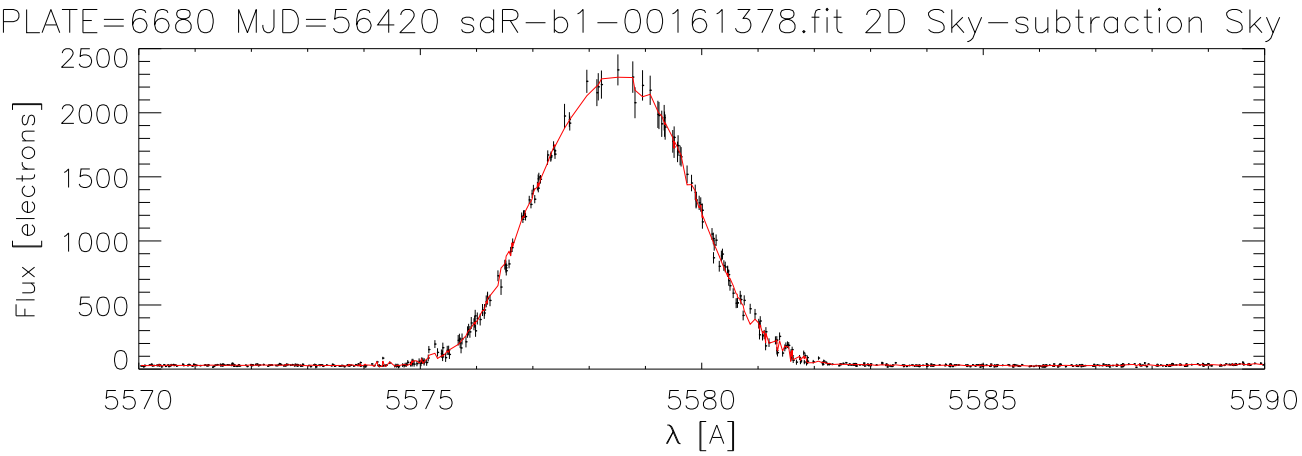

PLATE=6680 MJD=56420 sdR-b1-00161378.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

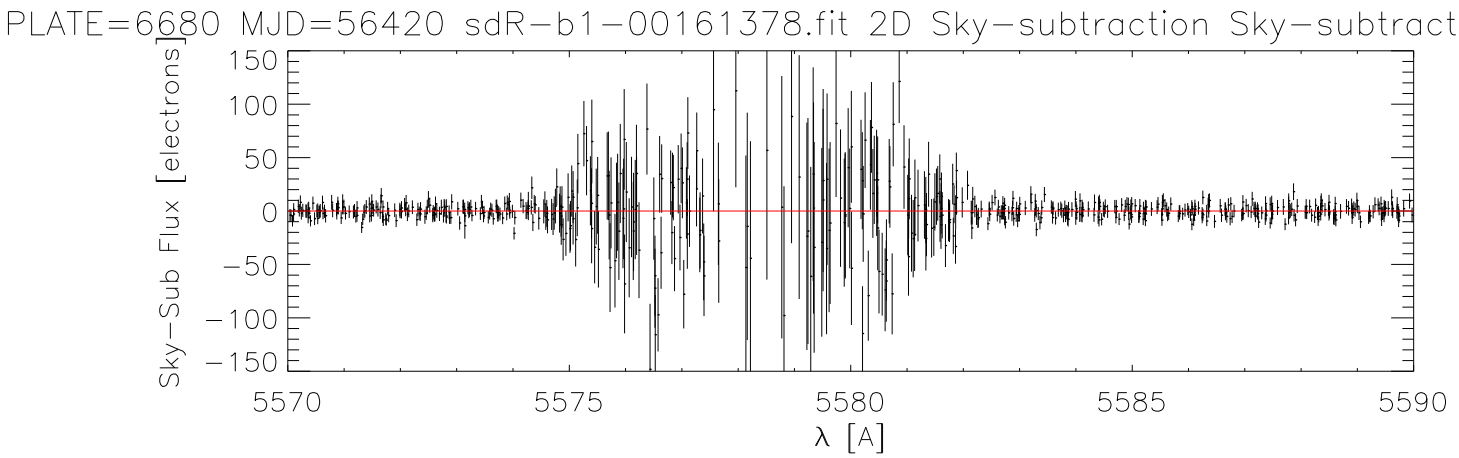

PLATE=6680 MJD=56420 sdR-b1-00161378.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 42

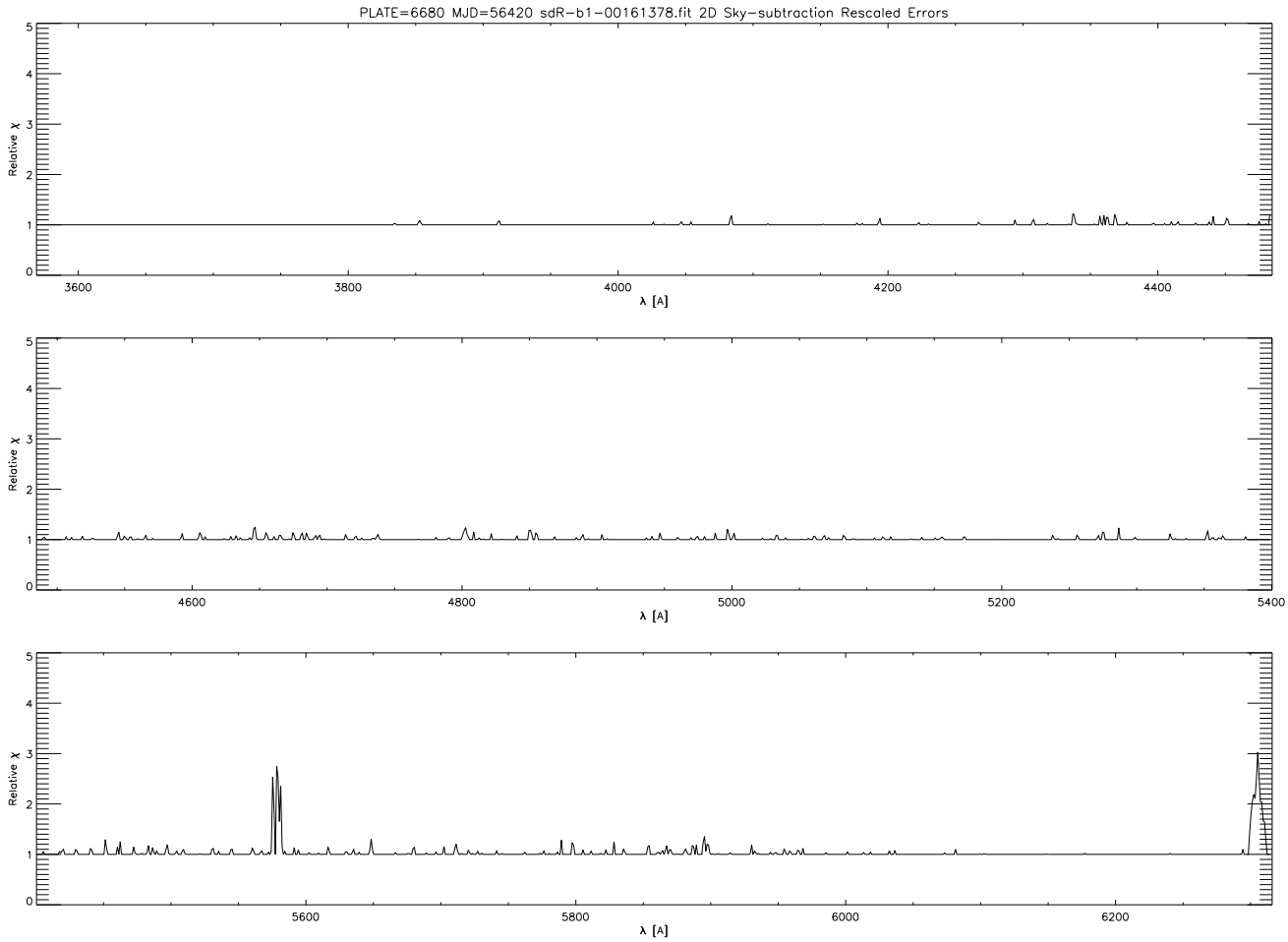


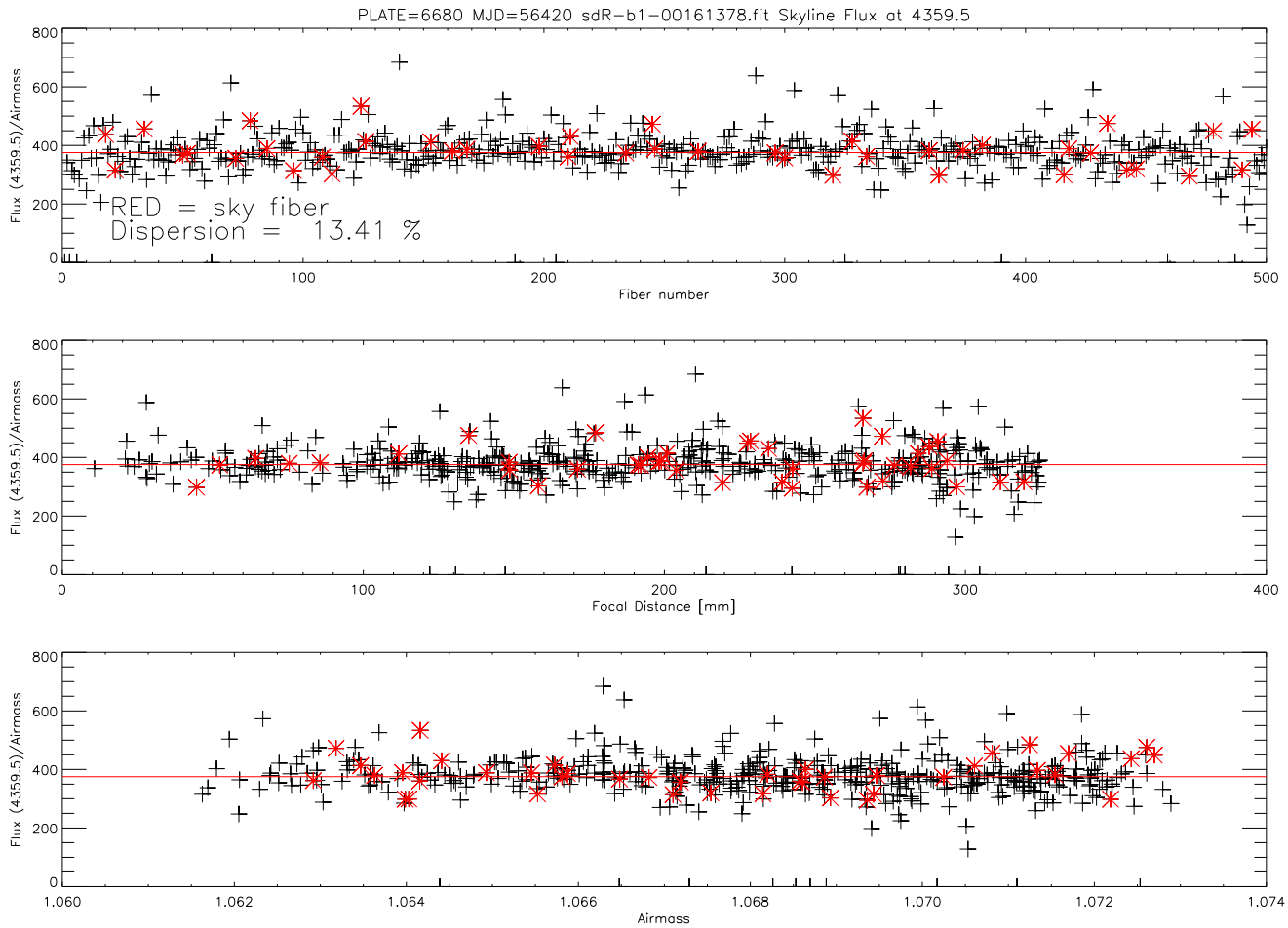

PLATE=6680 MJD=56420 sdR-b1-00161378.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

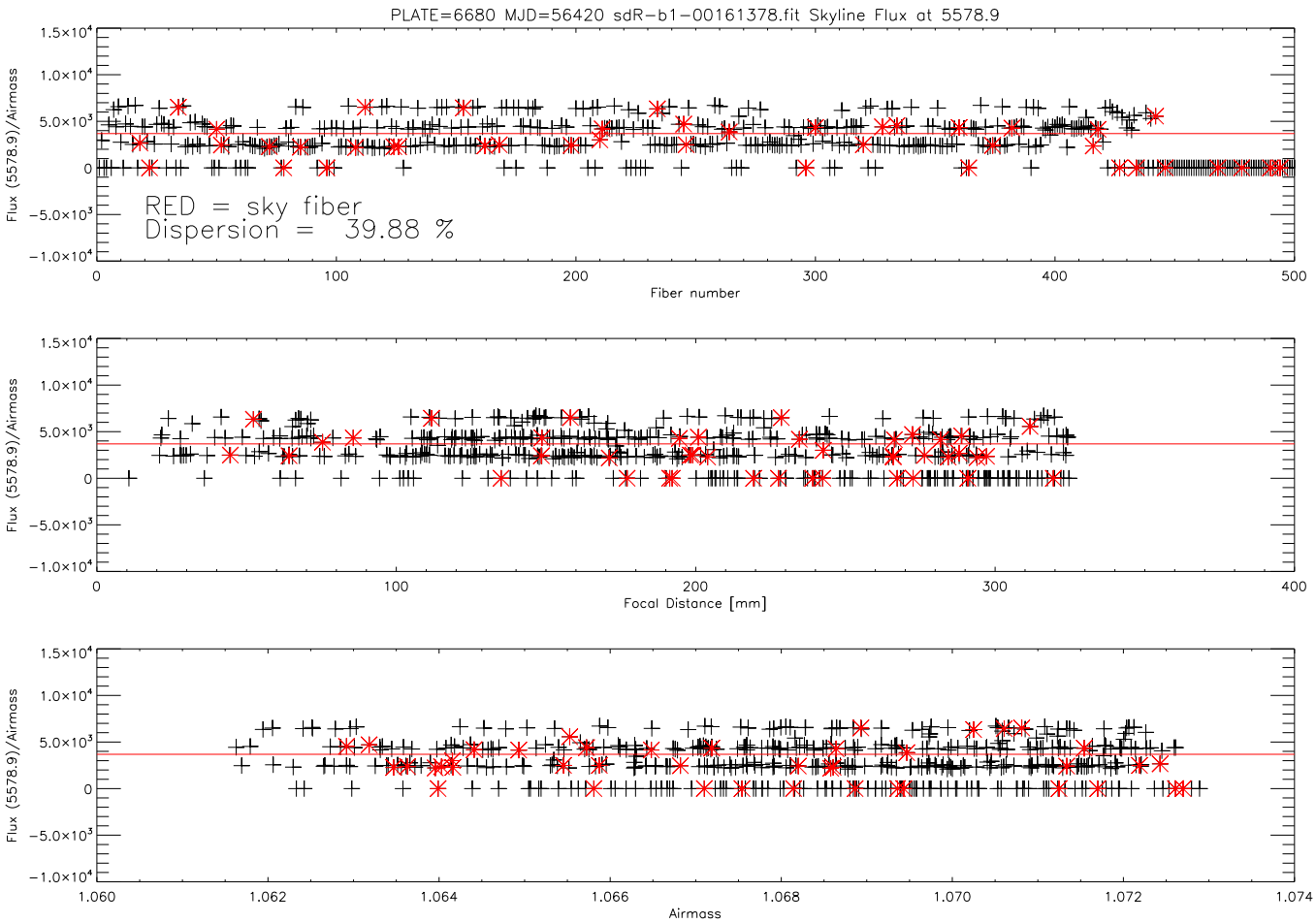

PLATE=6680 MJD=56420 sdR-b1-00161378.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]


PLATE=6680 MJD=56420 sdR-b1-00161378.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

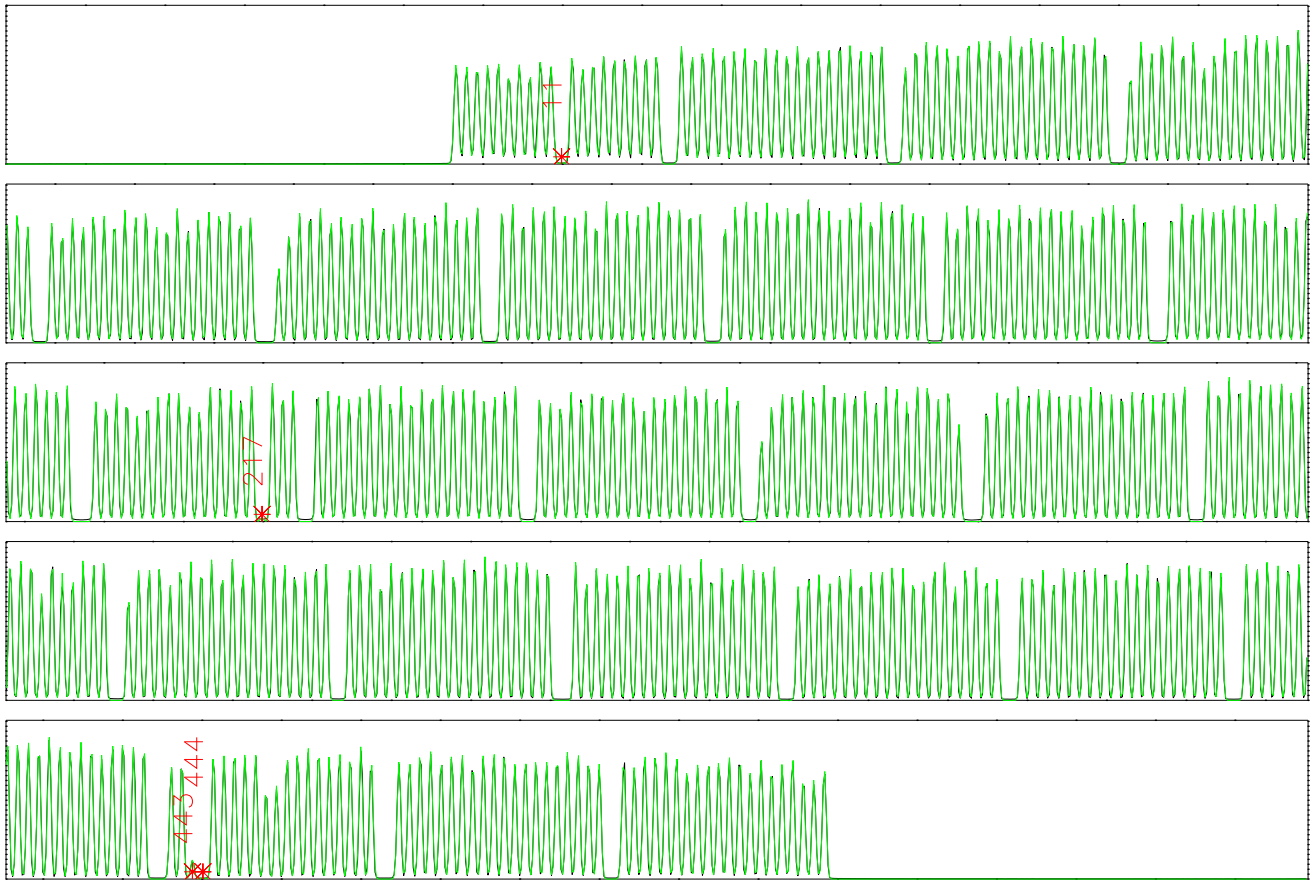
Number of sky fibers = 42

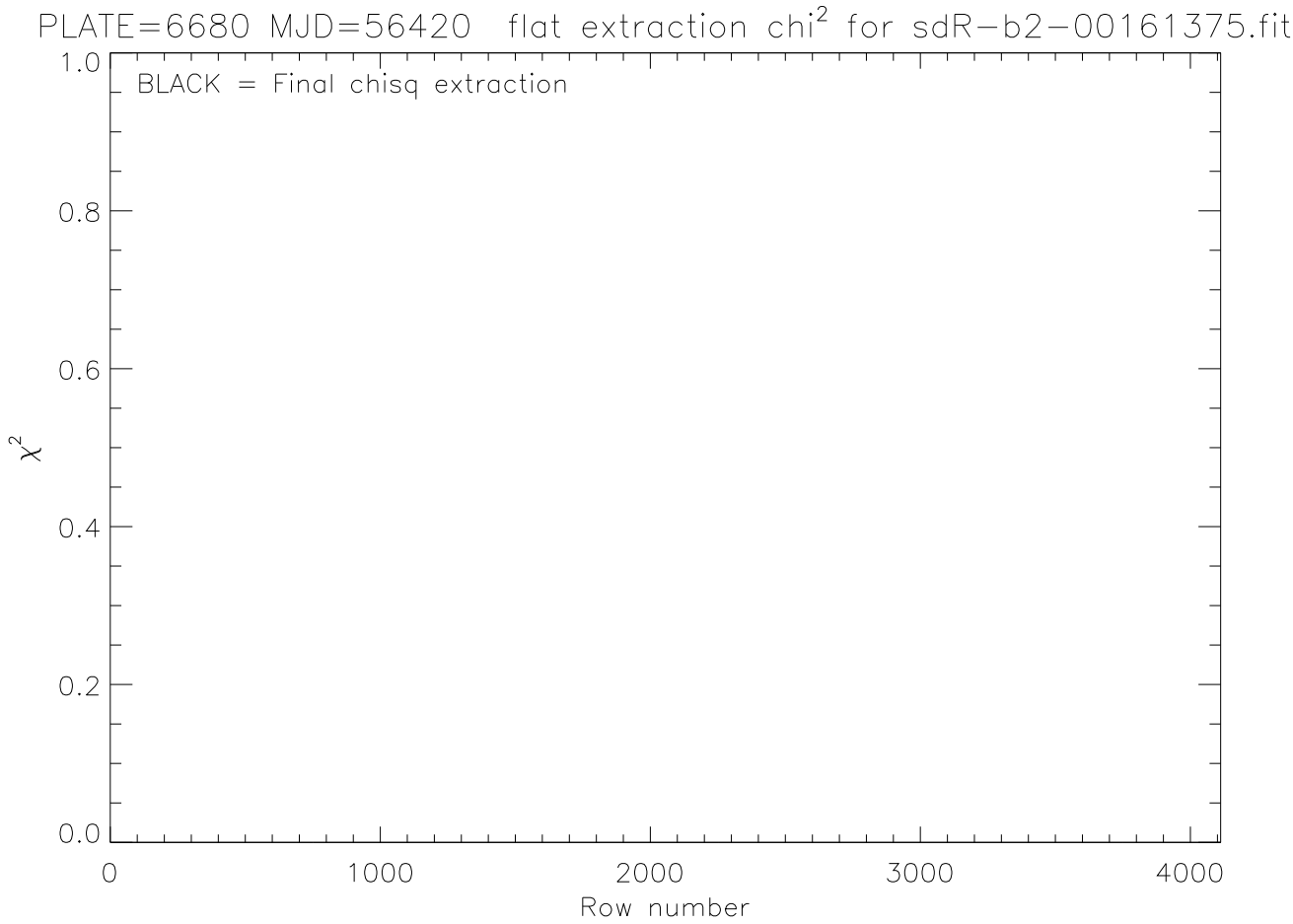


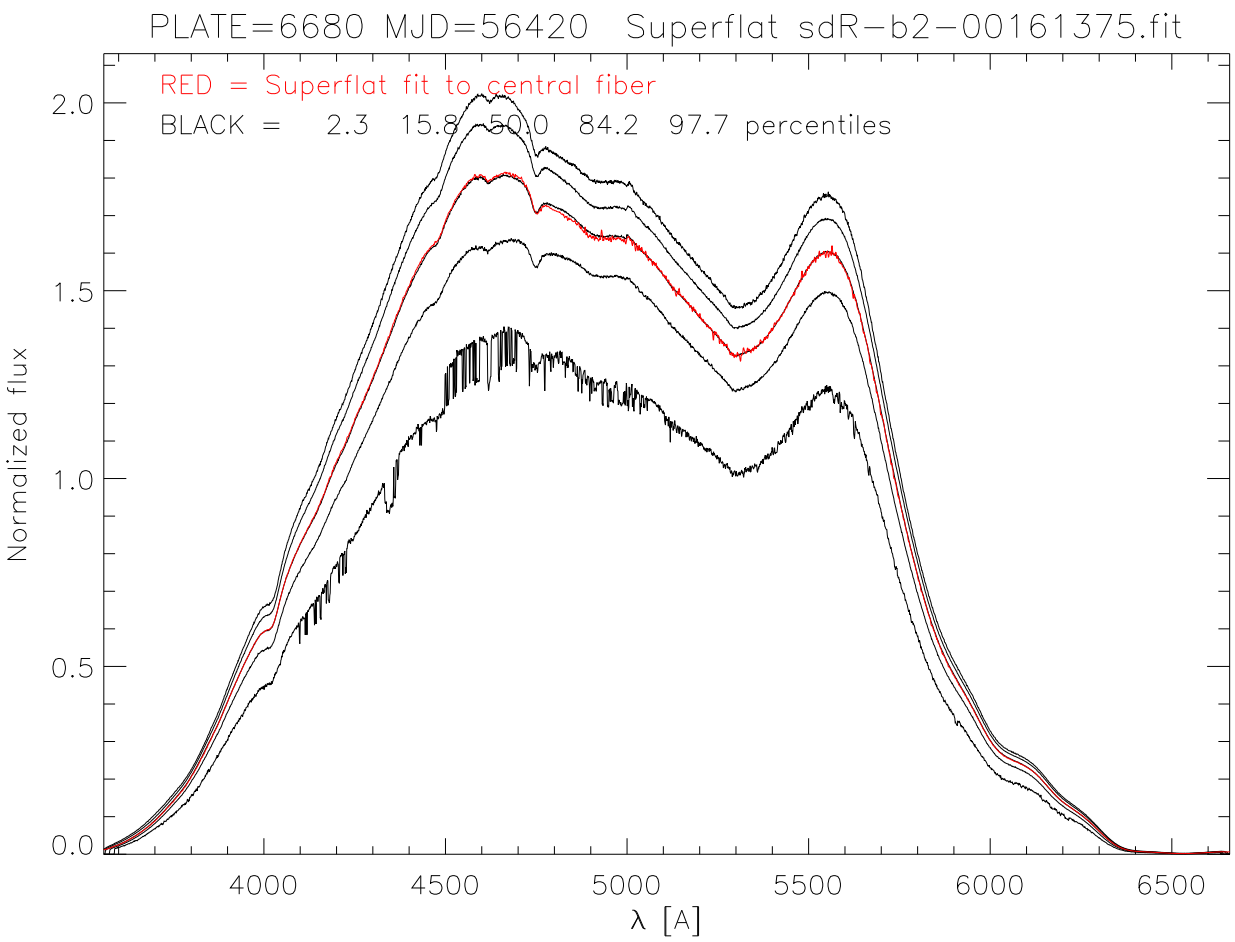

PLATE=6680 MJD=56420 sdR-b1-00161378.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 13.41 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

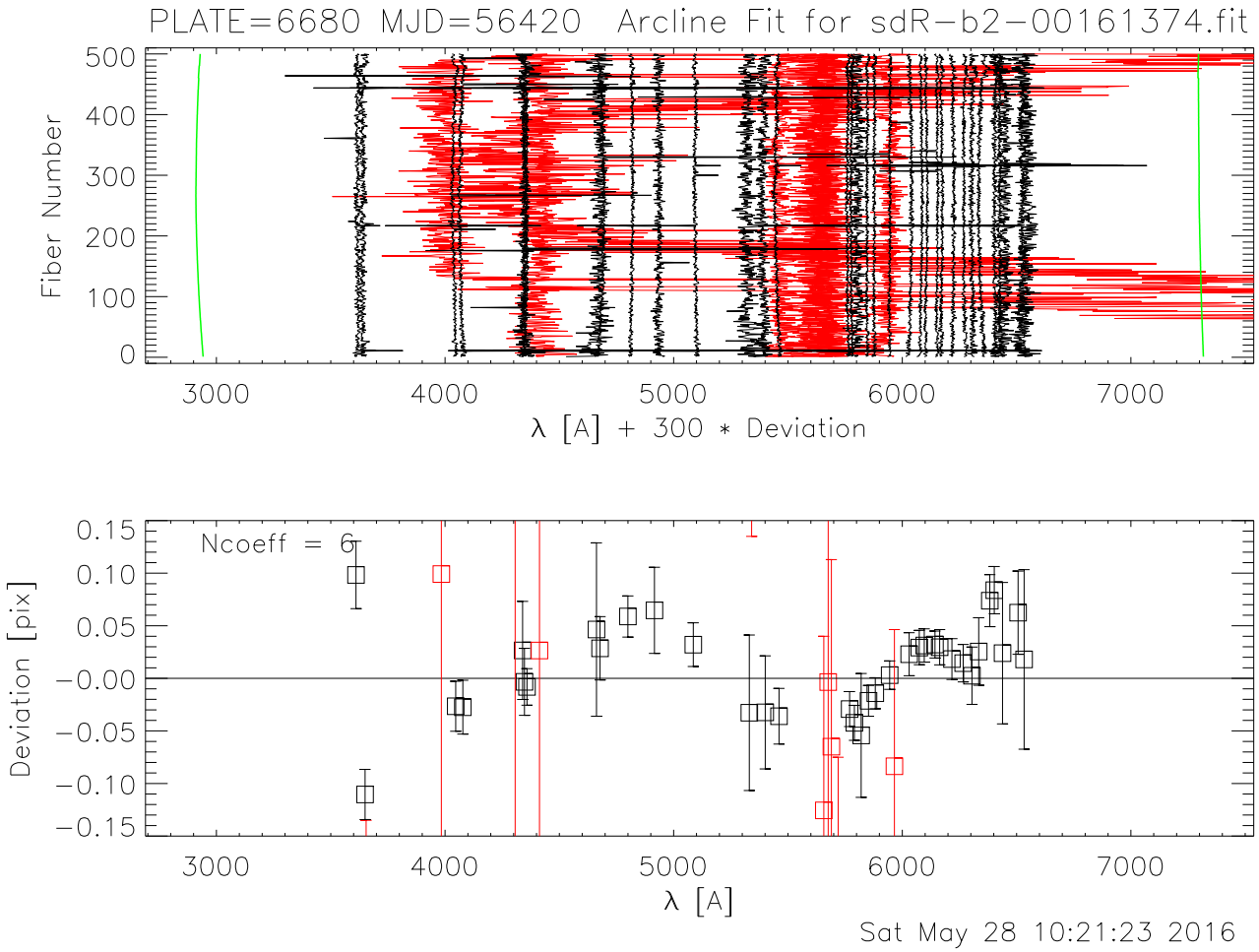

PLATE=6680 MJD=56420 sdR-b1-00161378.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 39.88 %
Fiber number
Focal Distance [mm]
Airmass

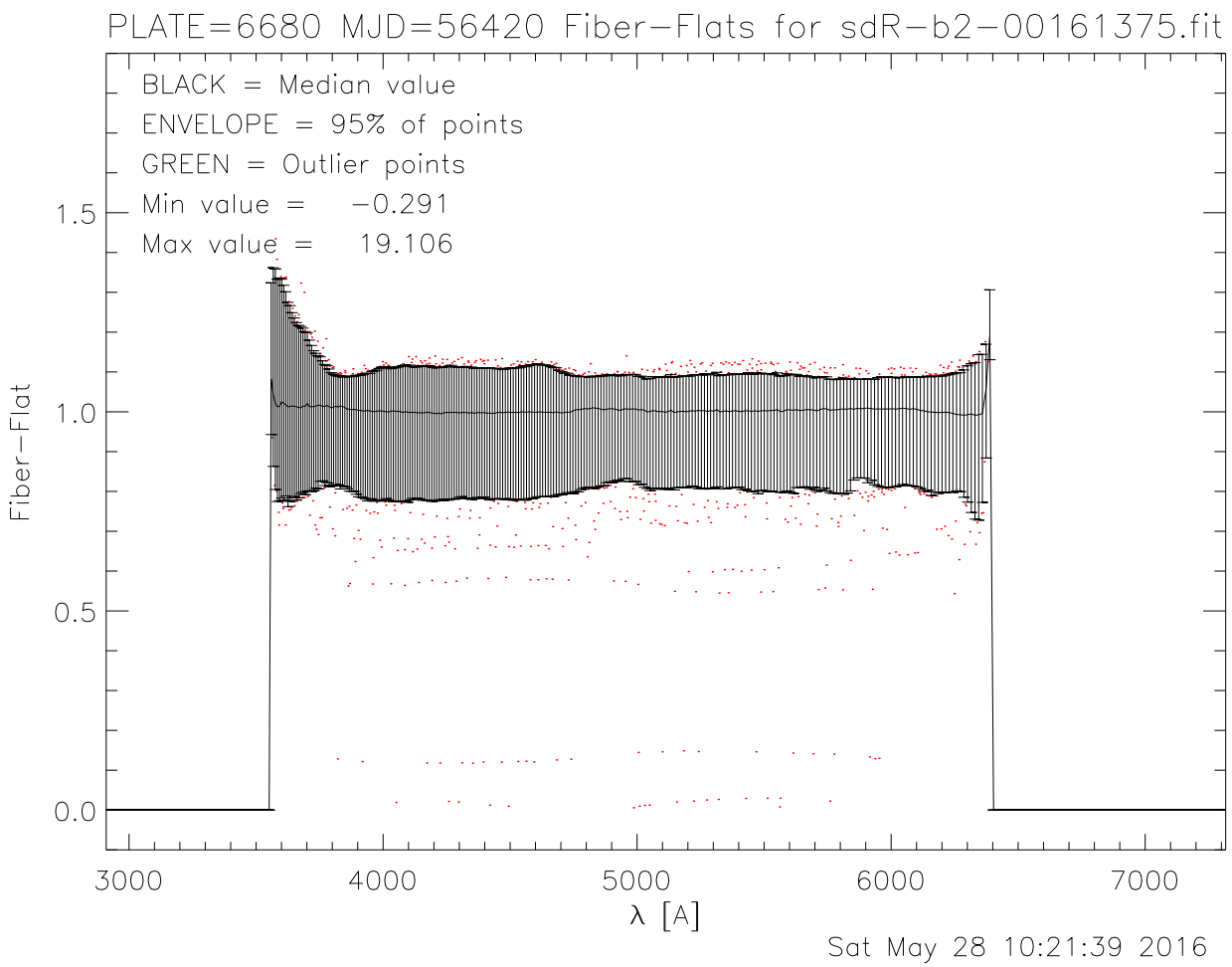
PLATE=6680 MJD=56420 Traces sdR-b2-00161375.fit

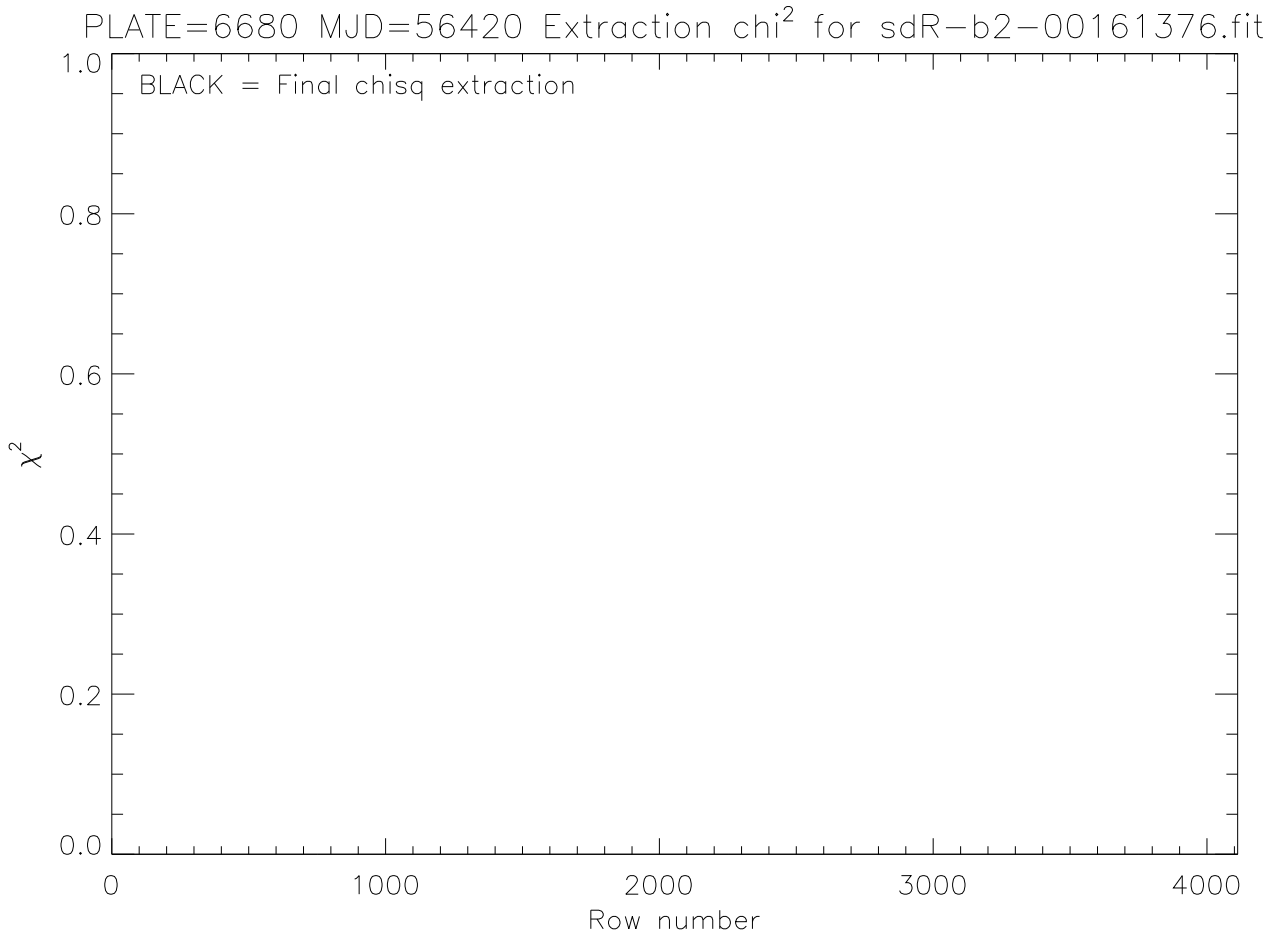


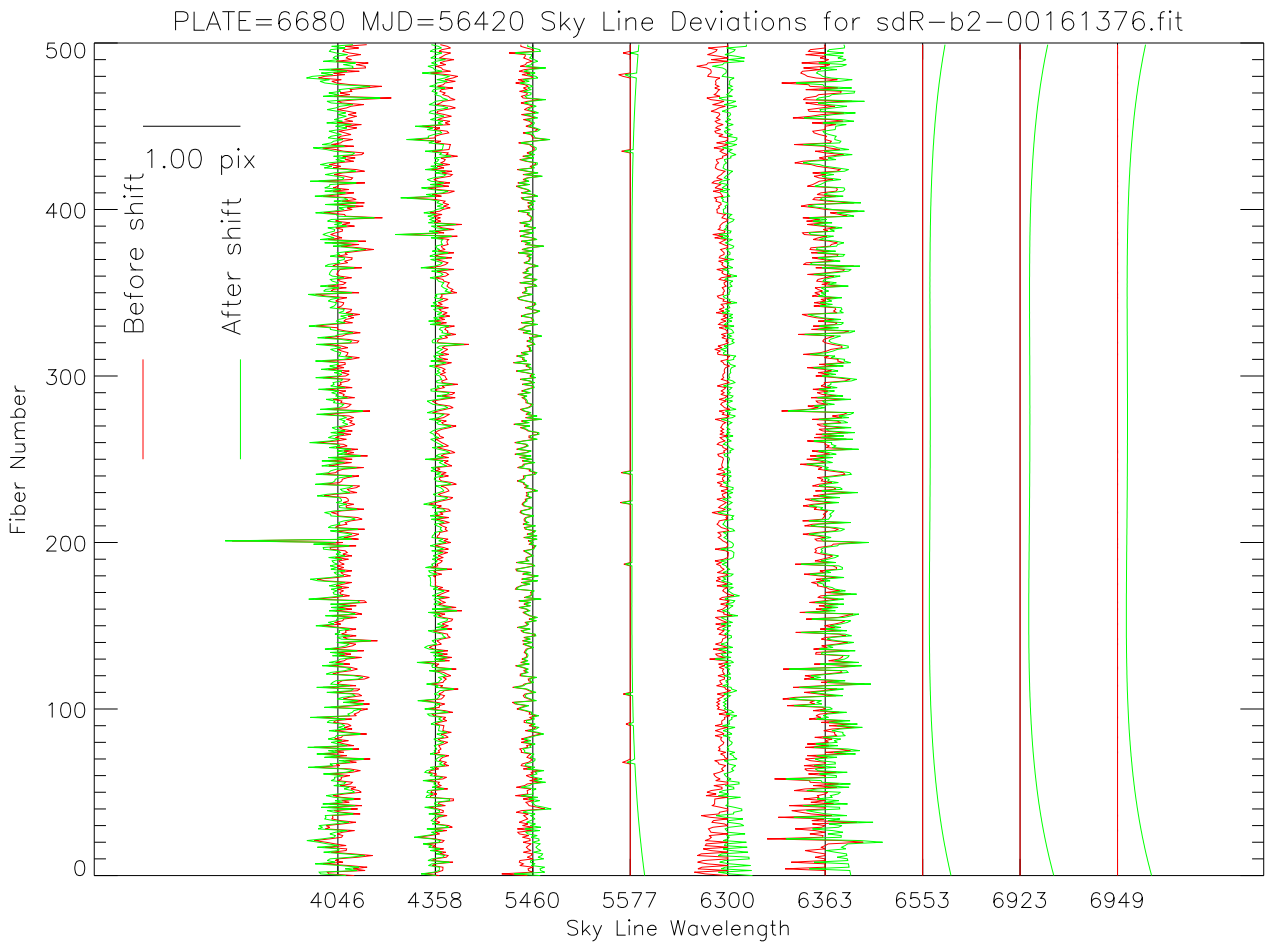

PLATE=6680 MJD=56420 flat extraction chi^2 for sdR−b2−00161375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

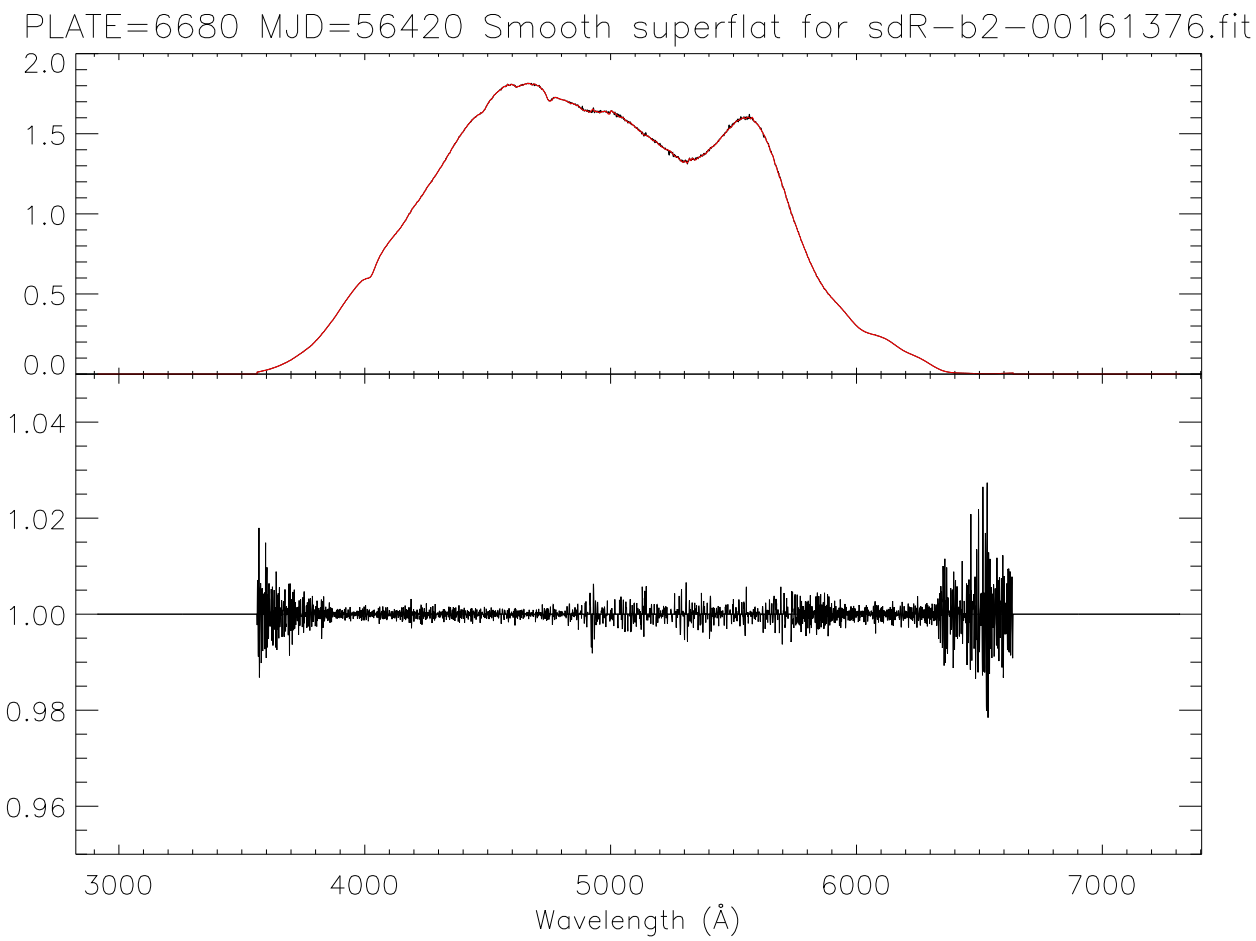

PLATE=6680 MJD=56420 Superflat sdR-b2-00161375.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
4000
4500
5000
5500
6000
6500

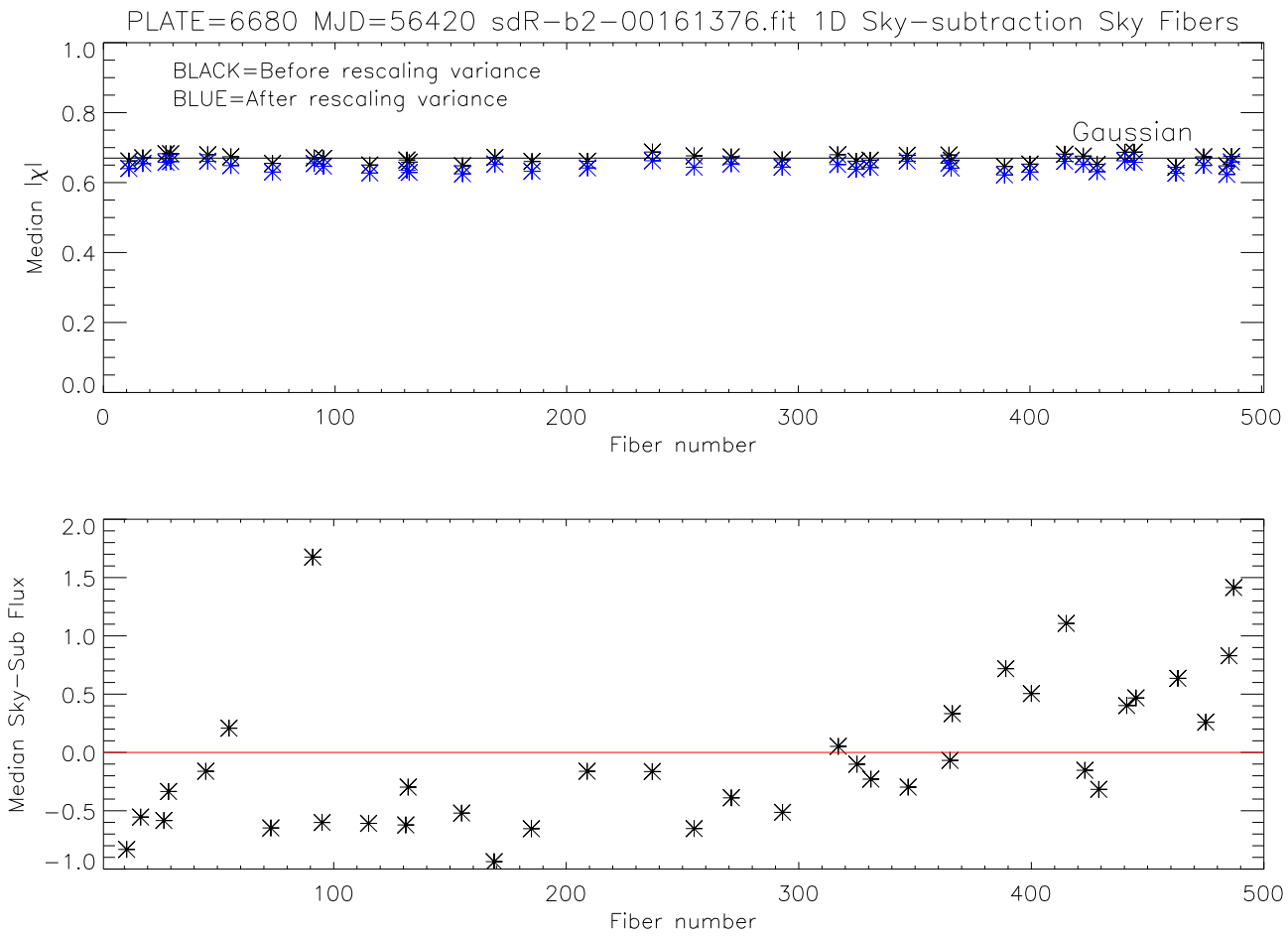

PLATE=6680 MJD=56420 Arcline Fit for sdR-b2-00161374.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Sat May 28 10:21:23 2016

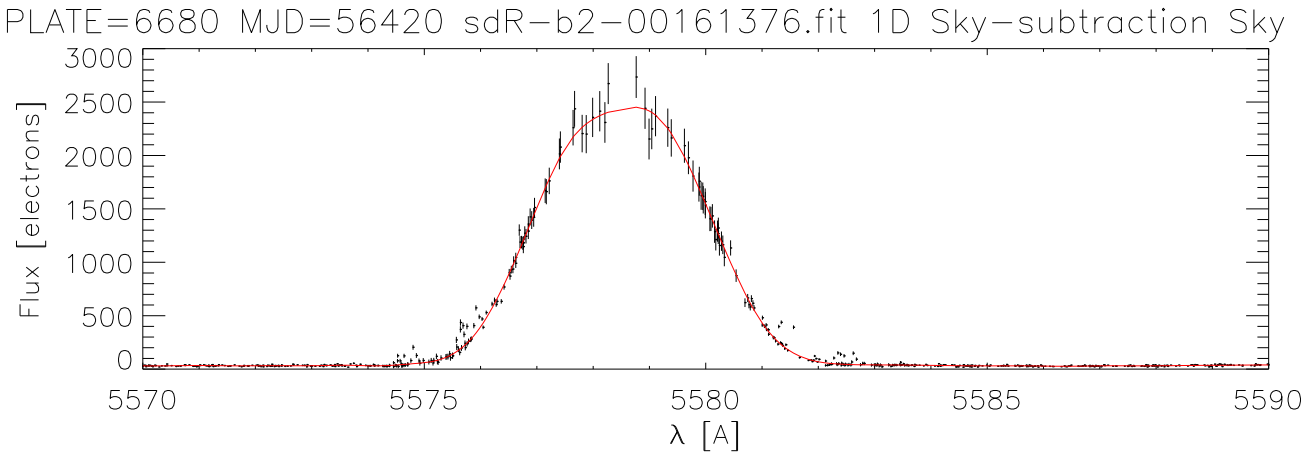

PLATE=6680 MJD=56420 Fiber−Flats for sdR−b2−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −0.291
Max value = 19.106
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sat May 28 10:21:39 2016

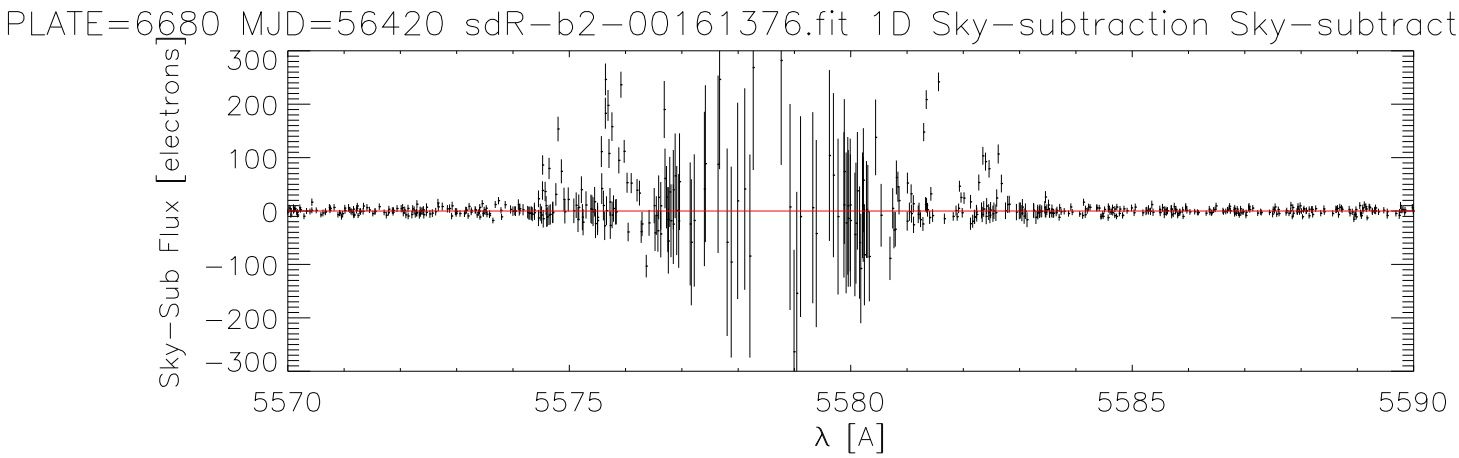

PLATE=6680 MJD=56420 Extraction chi^2 for sdR-b2-00161376.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-b2-00161376.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

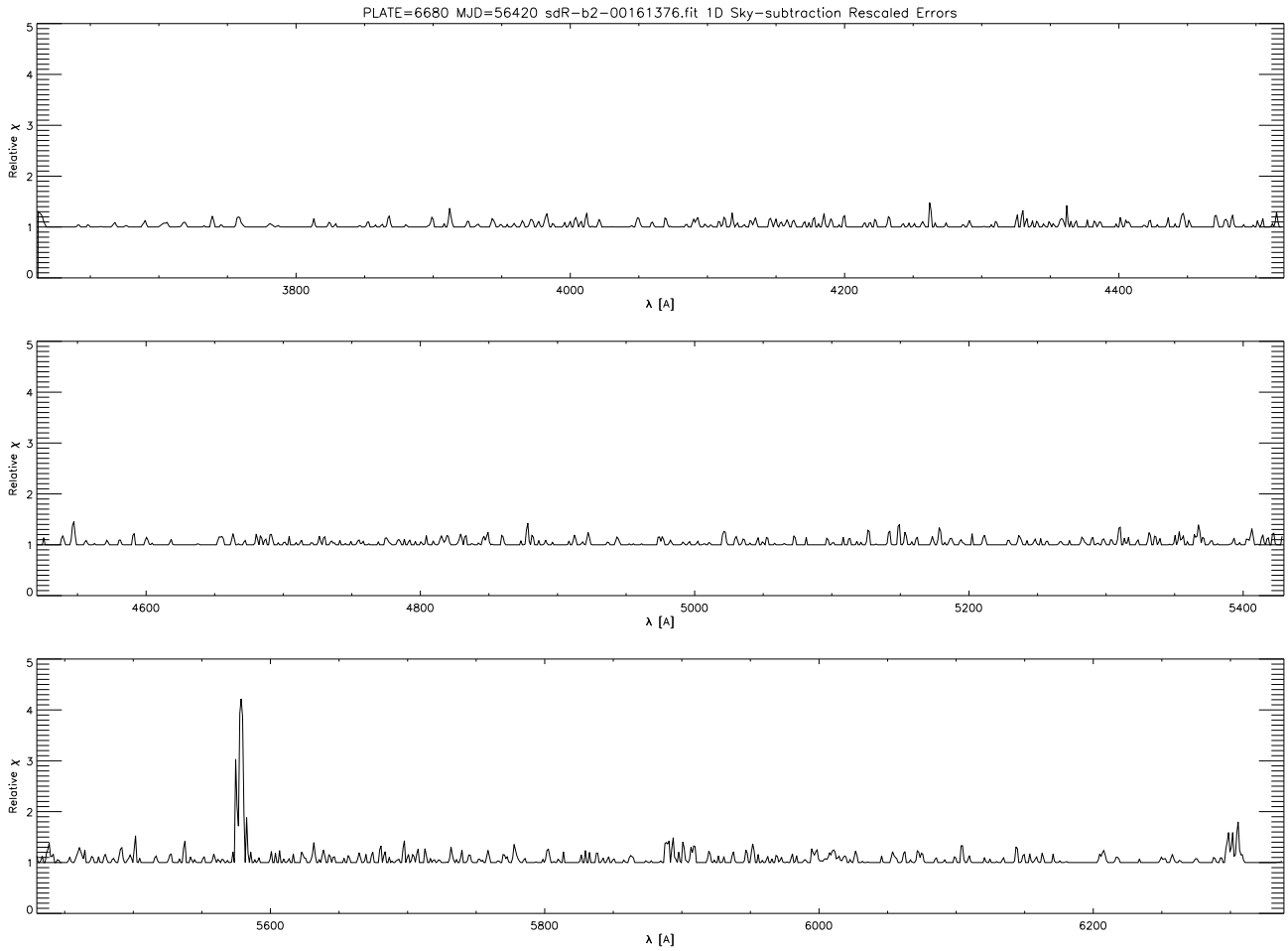

PLATE=6680 MJD=56420 Smooth superflat for sdR-b2-00161376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

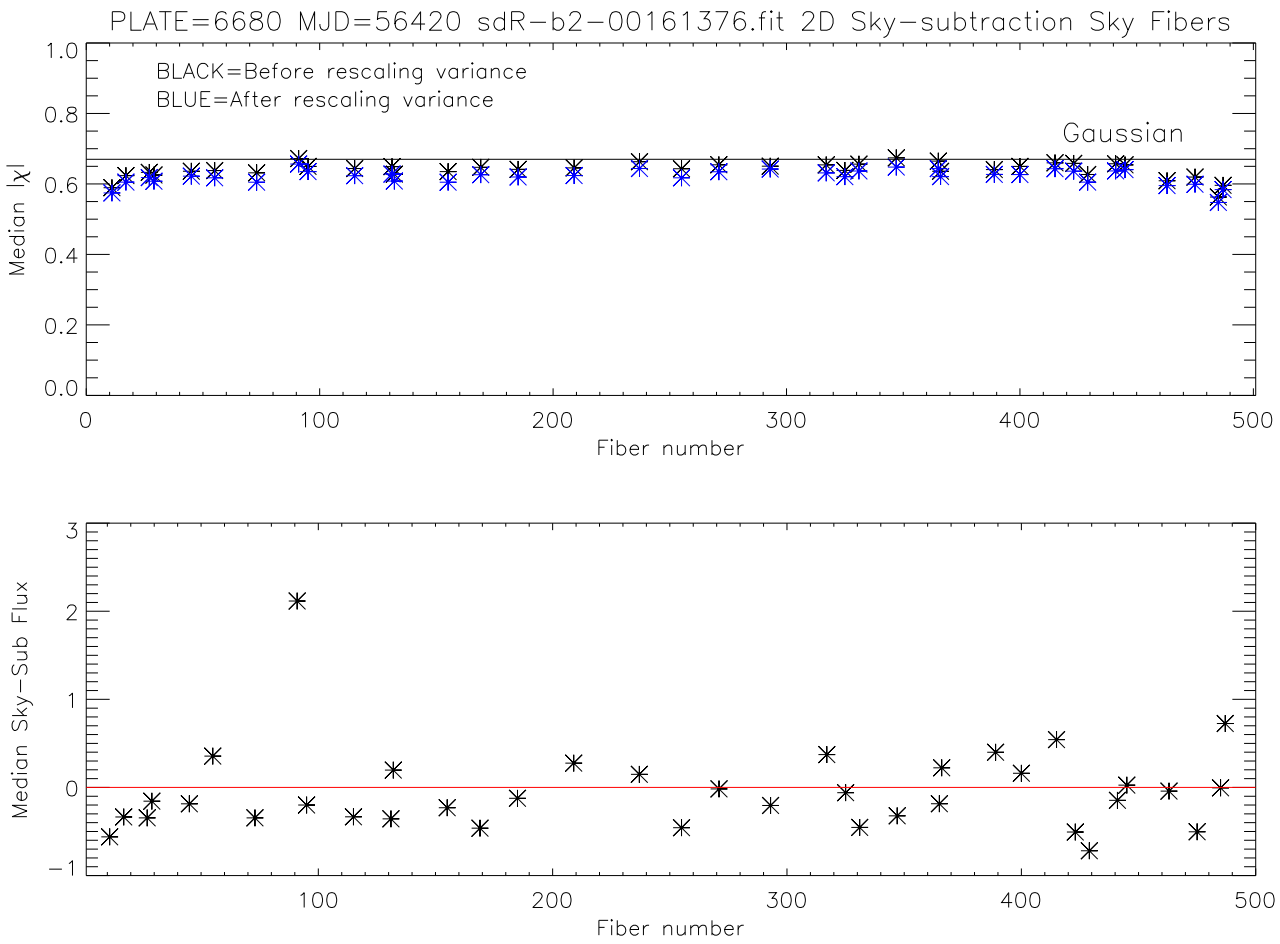

PLATE=6680 MJD=56420 sdR-b2-00161376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

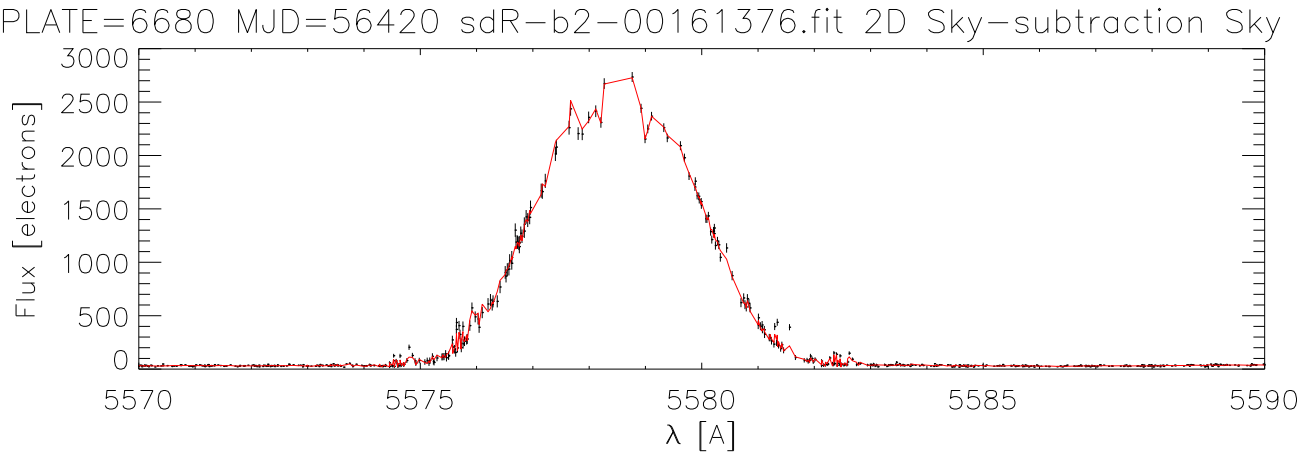

PLATE=6680 MJD=56420 sdR-b2-00161376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

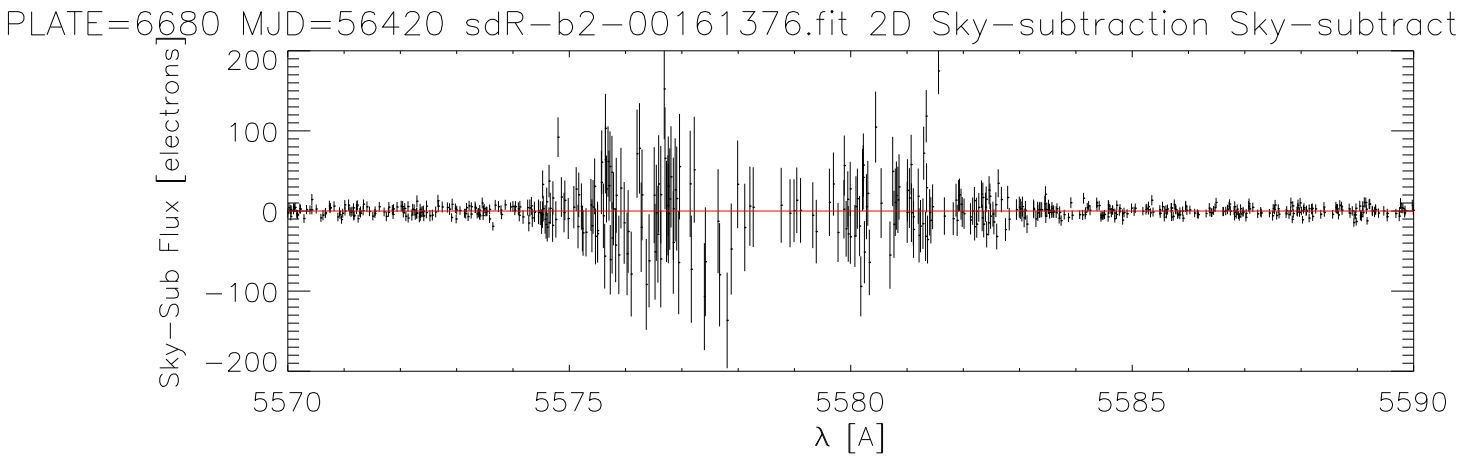

PLATE=6680 MJD=56420 sdR-b2-00161376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 37

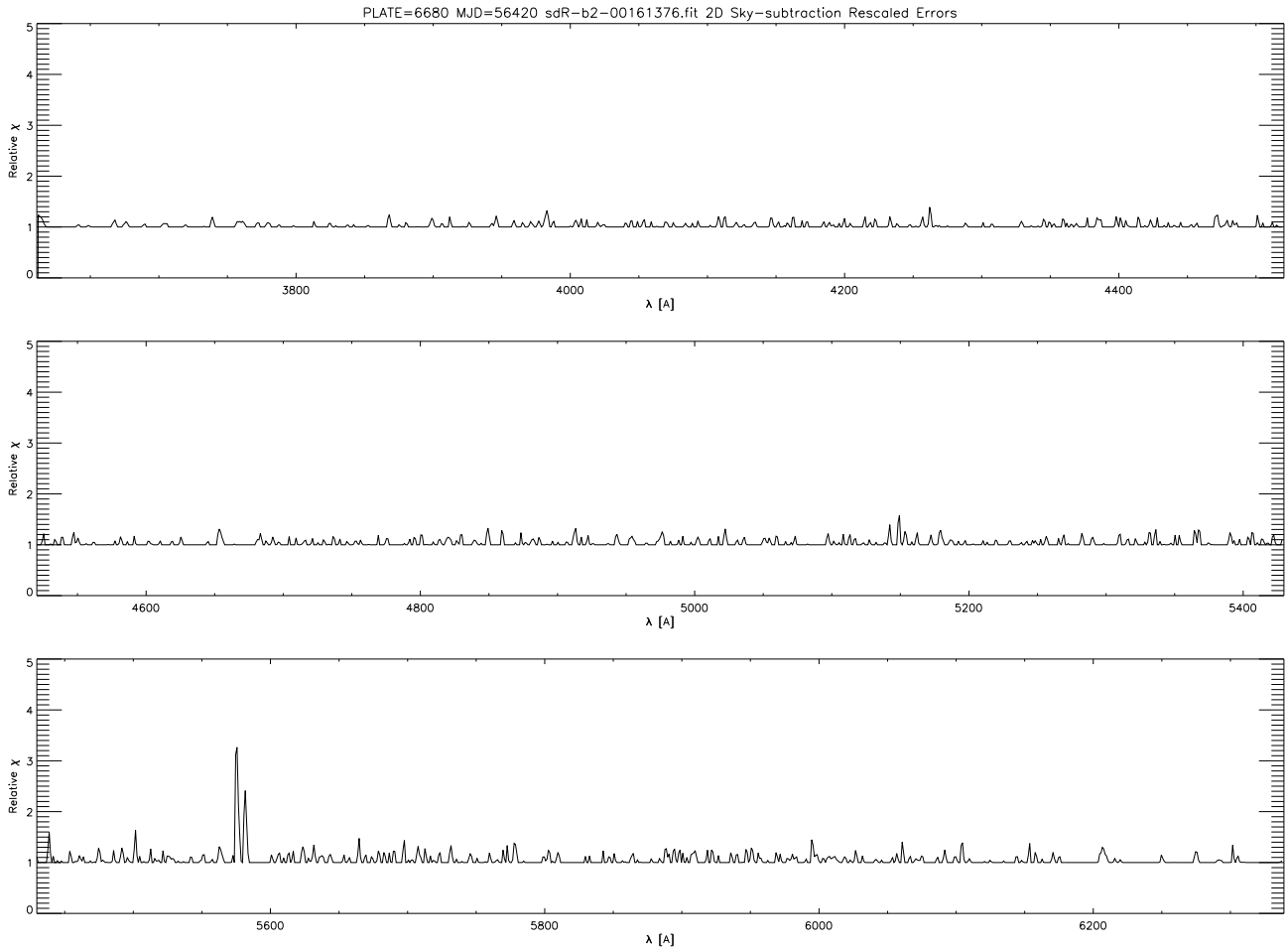


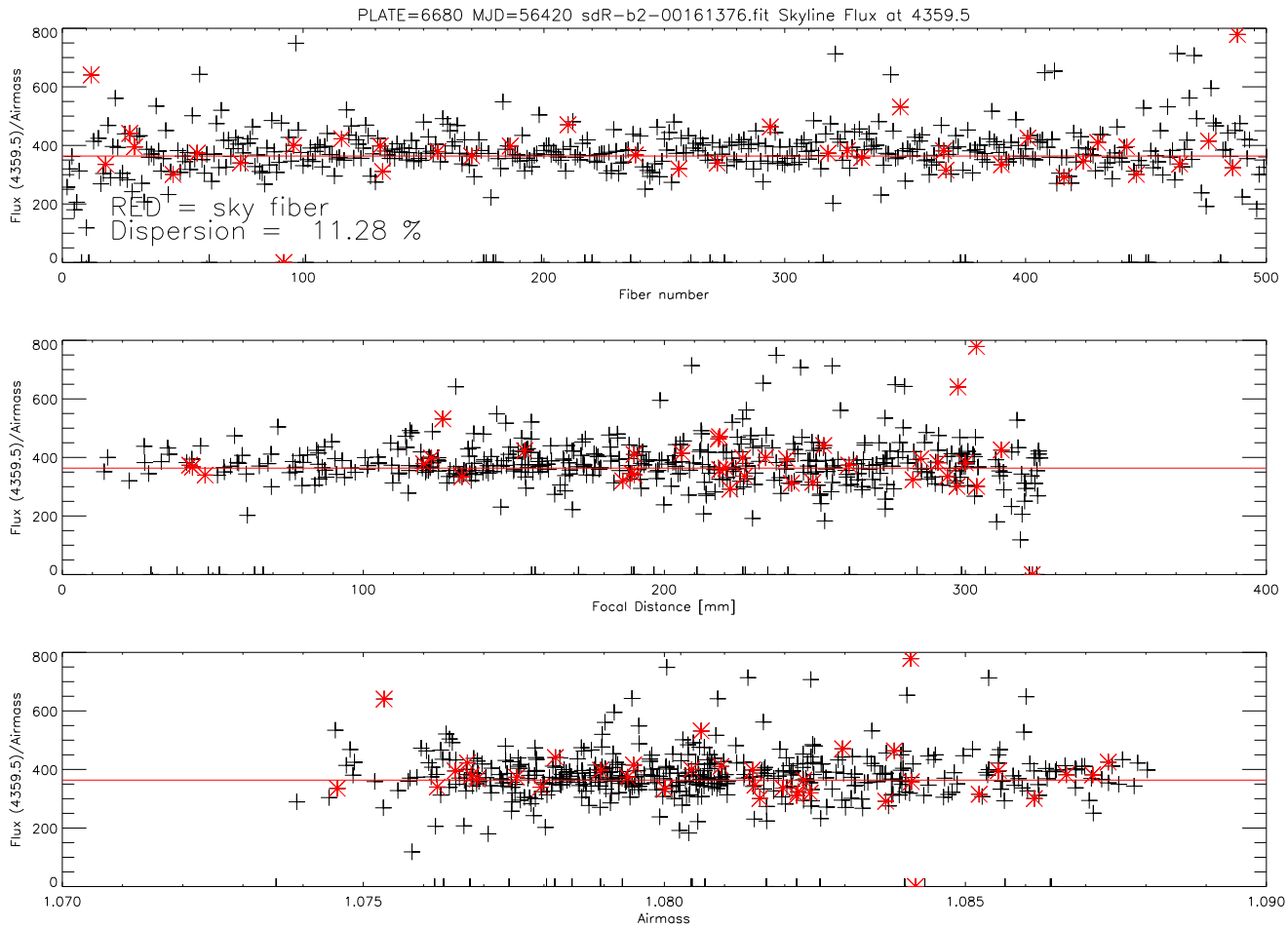

PLATE=6680 MJD=56420 sdR-b2-00161376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

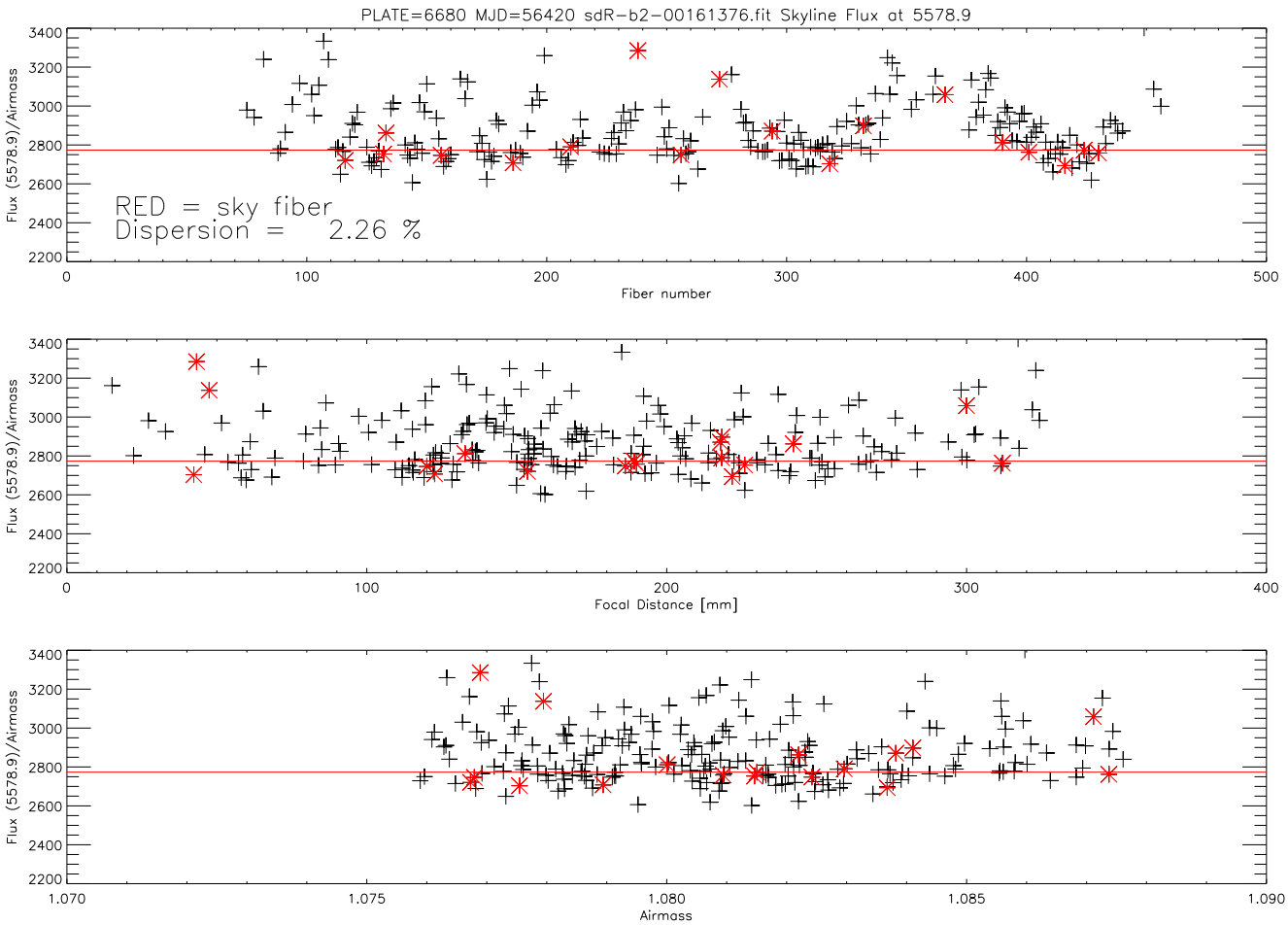

PLATE=6680 MJD=56420 sdR-b2-00161376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

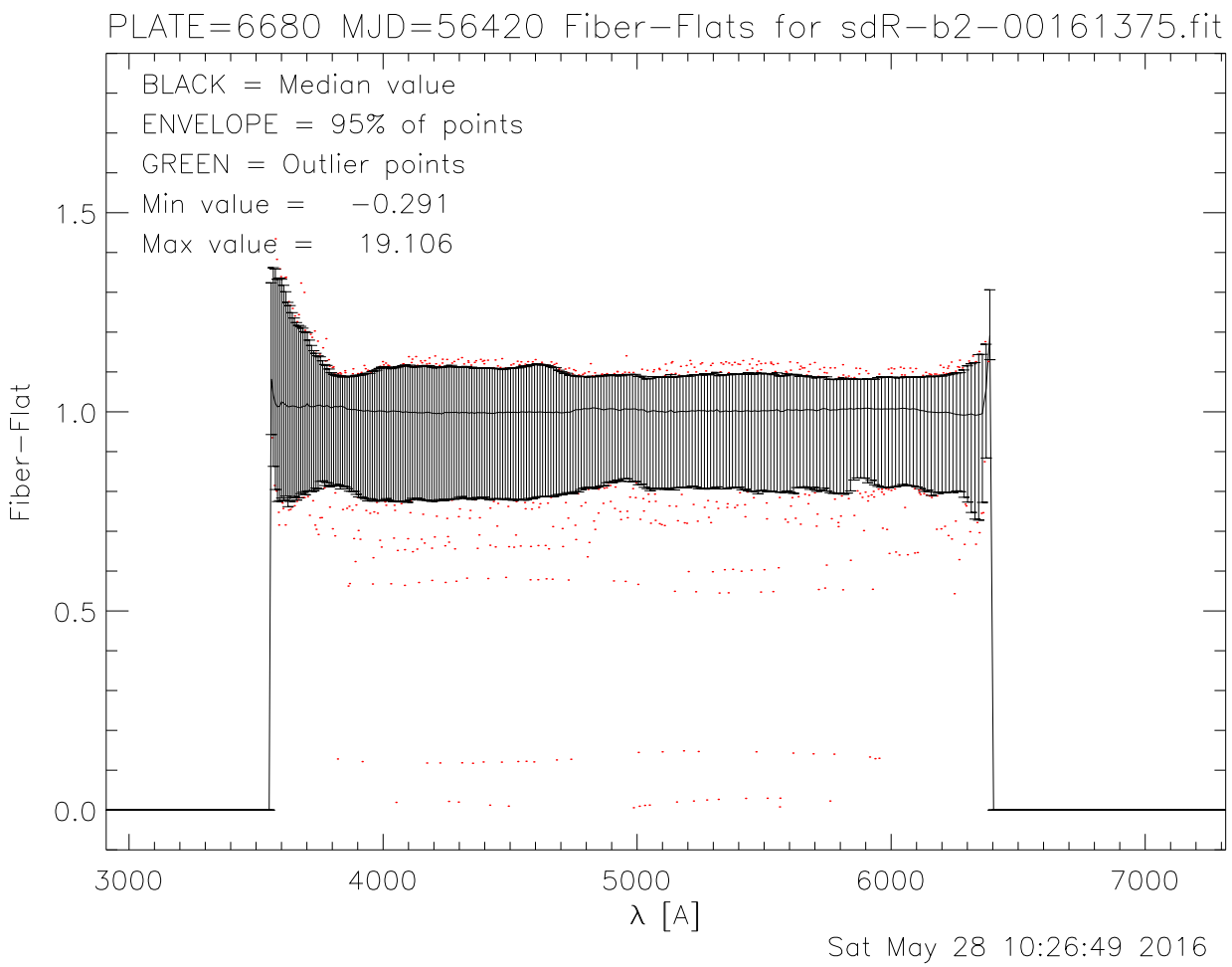

PLATE=6680 MJD=56420 sdR-b2-00161376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

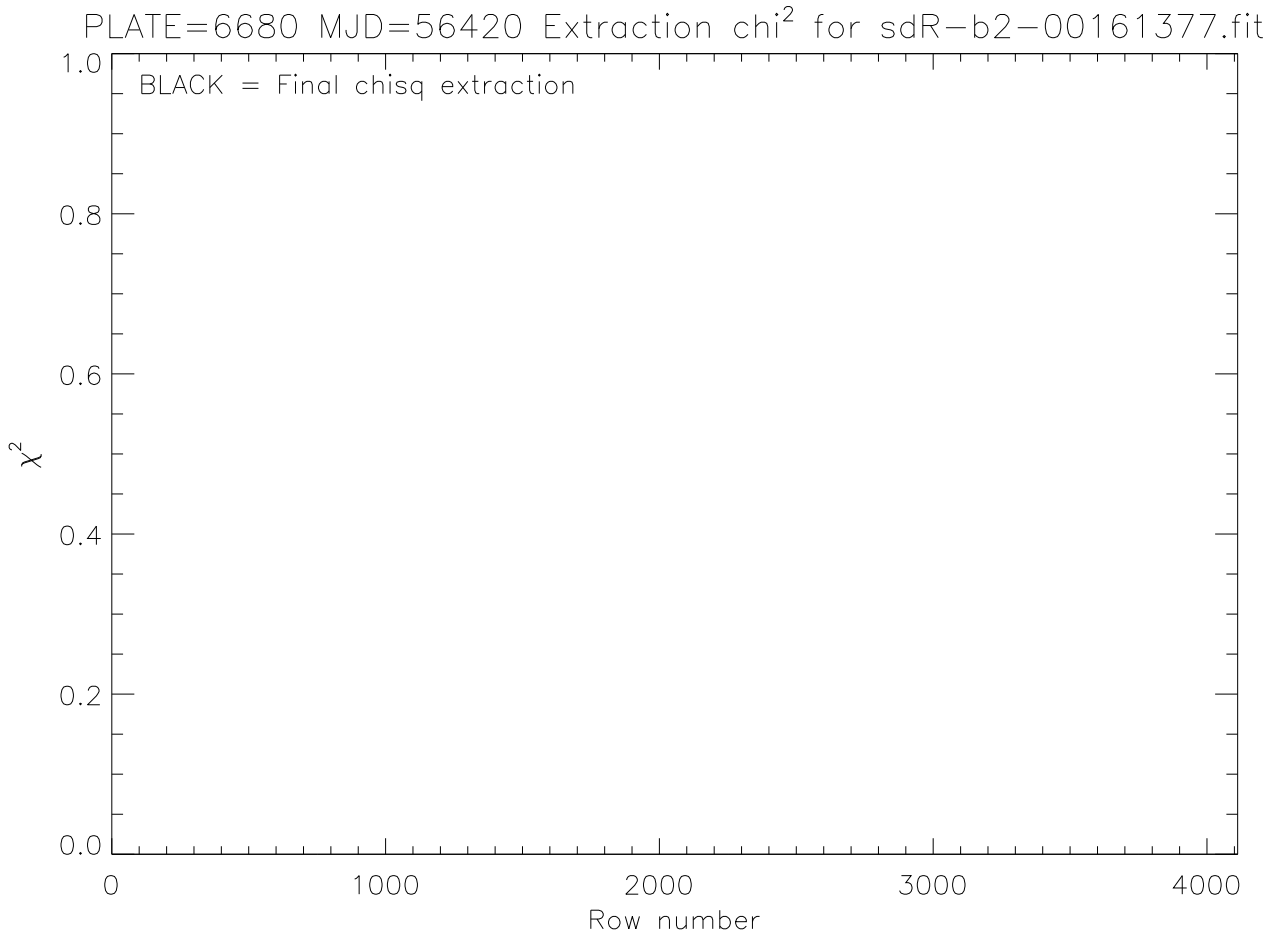
Number of sky fibers = 37

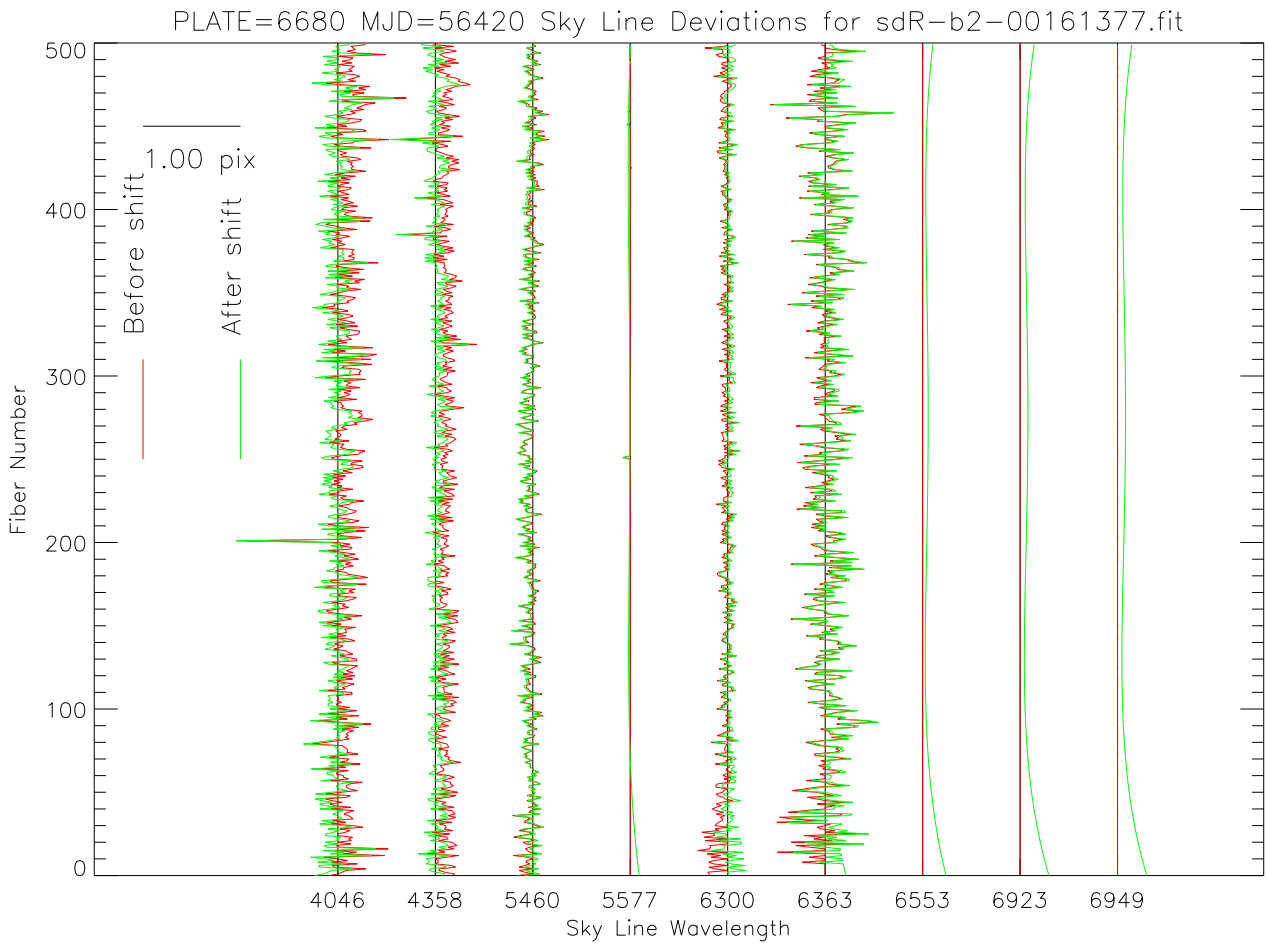


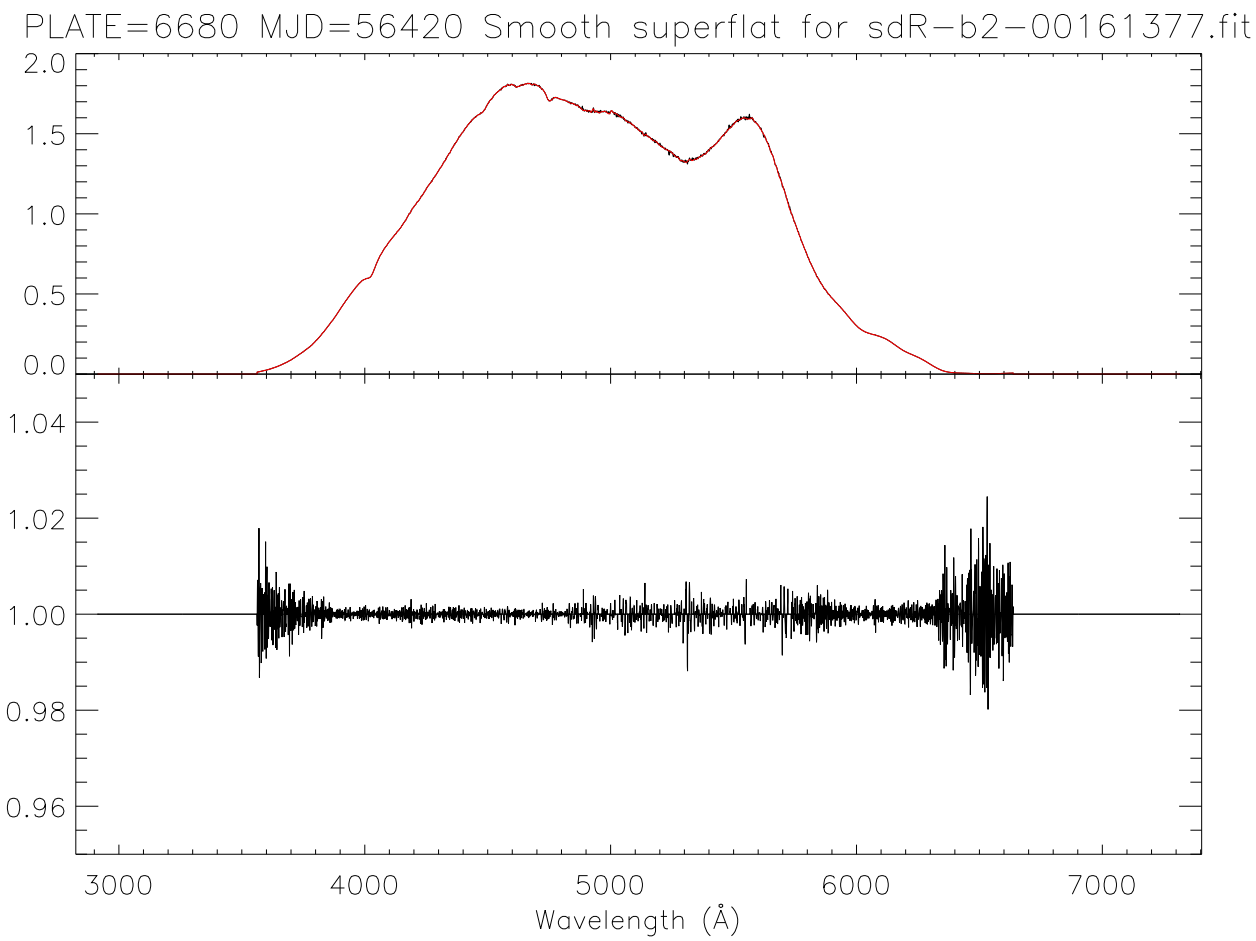

PLATE=6680 MJD=56420 sdR-b2-00161376.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.28 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

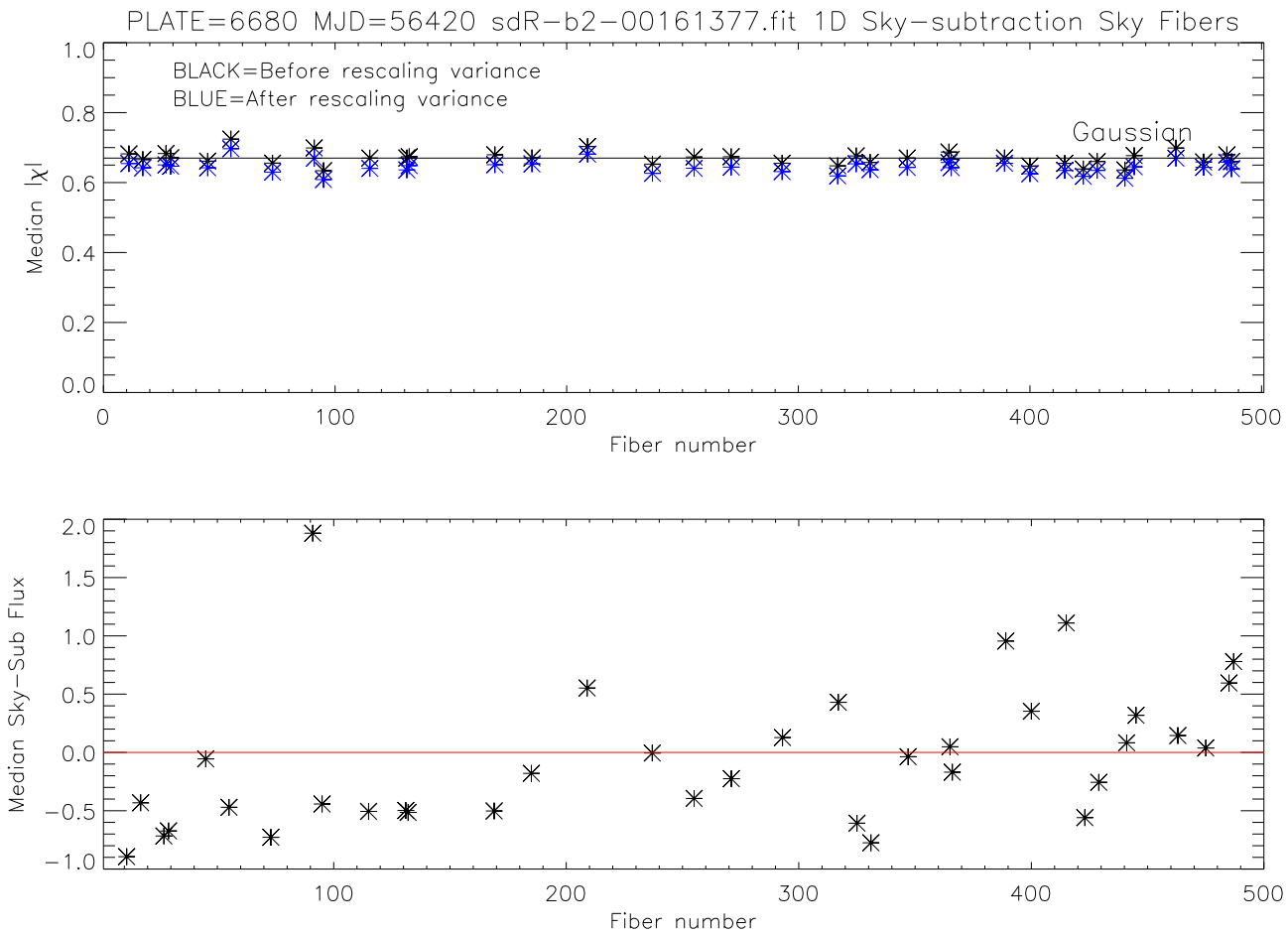

PLATE=6680 MJD=56420 sdR-b2-00161376.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 2.26 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

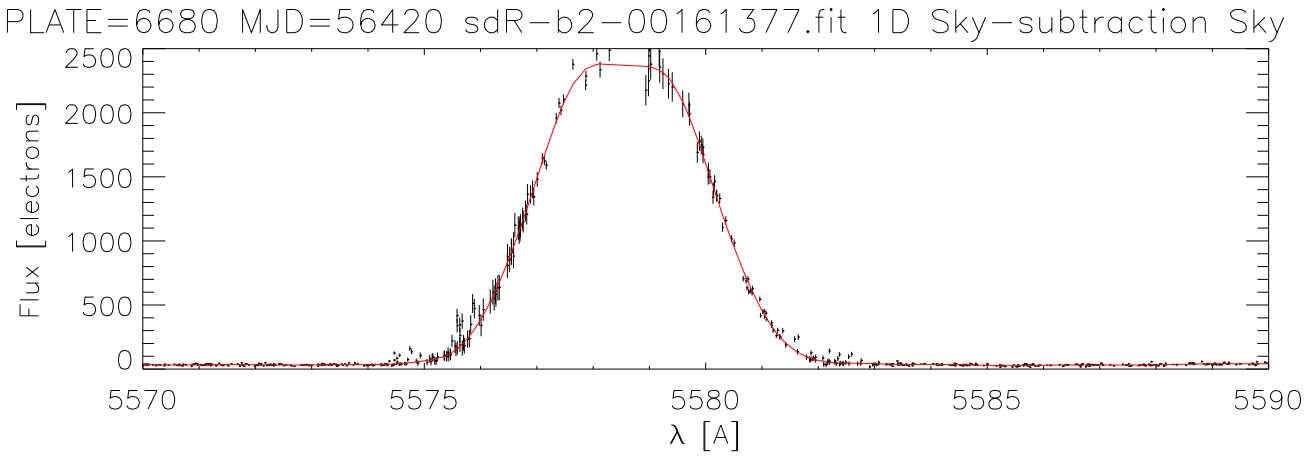

PLATE=6680 MJD=56420 Fiber−Flats for sdR−b2−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −0.291
Max value = 19.106
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sat May 28 10:26:49 2016

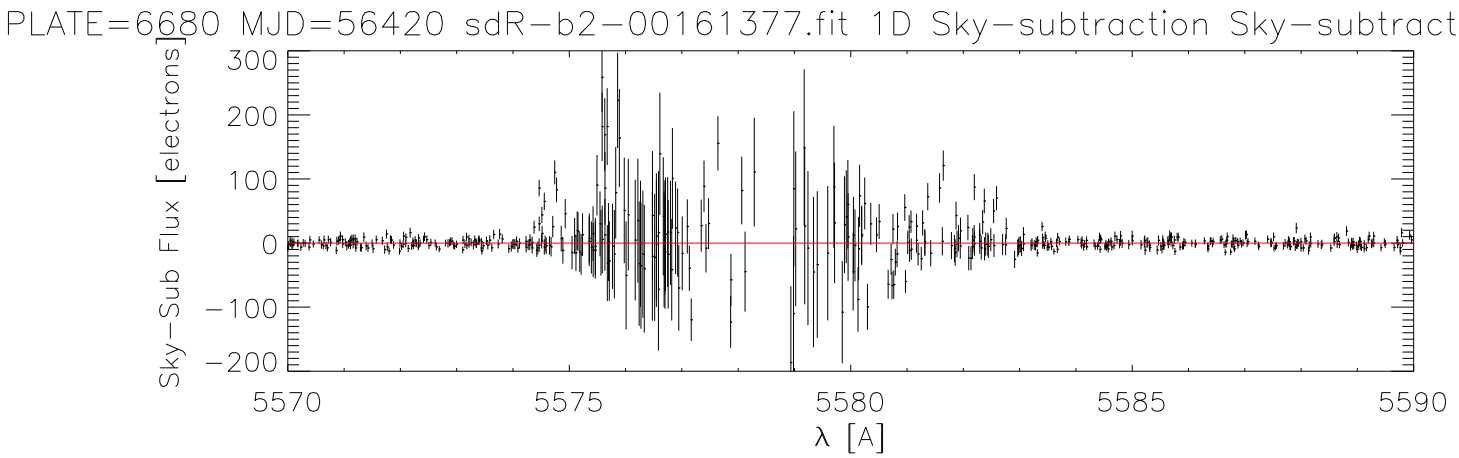

PLATE=6680 MJD=56420 Extraction chi^2 for sdR-b2-00161377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-b2-00161377.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

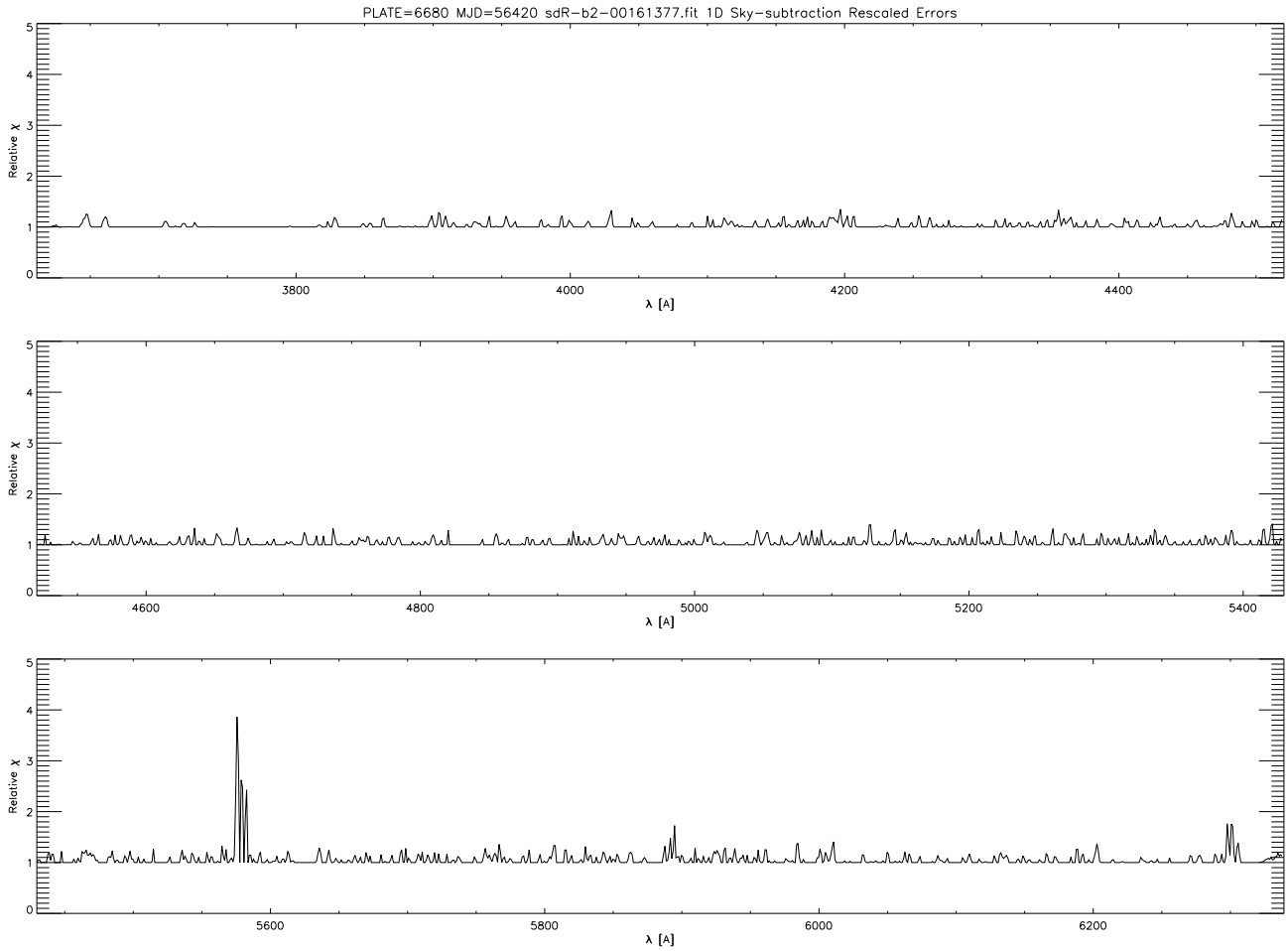

PLATE=6680 MJD=56420 Smooth superflat for sdR-b2-00161377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

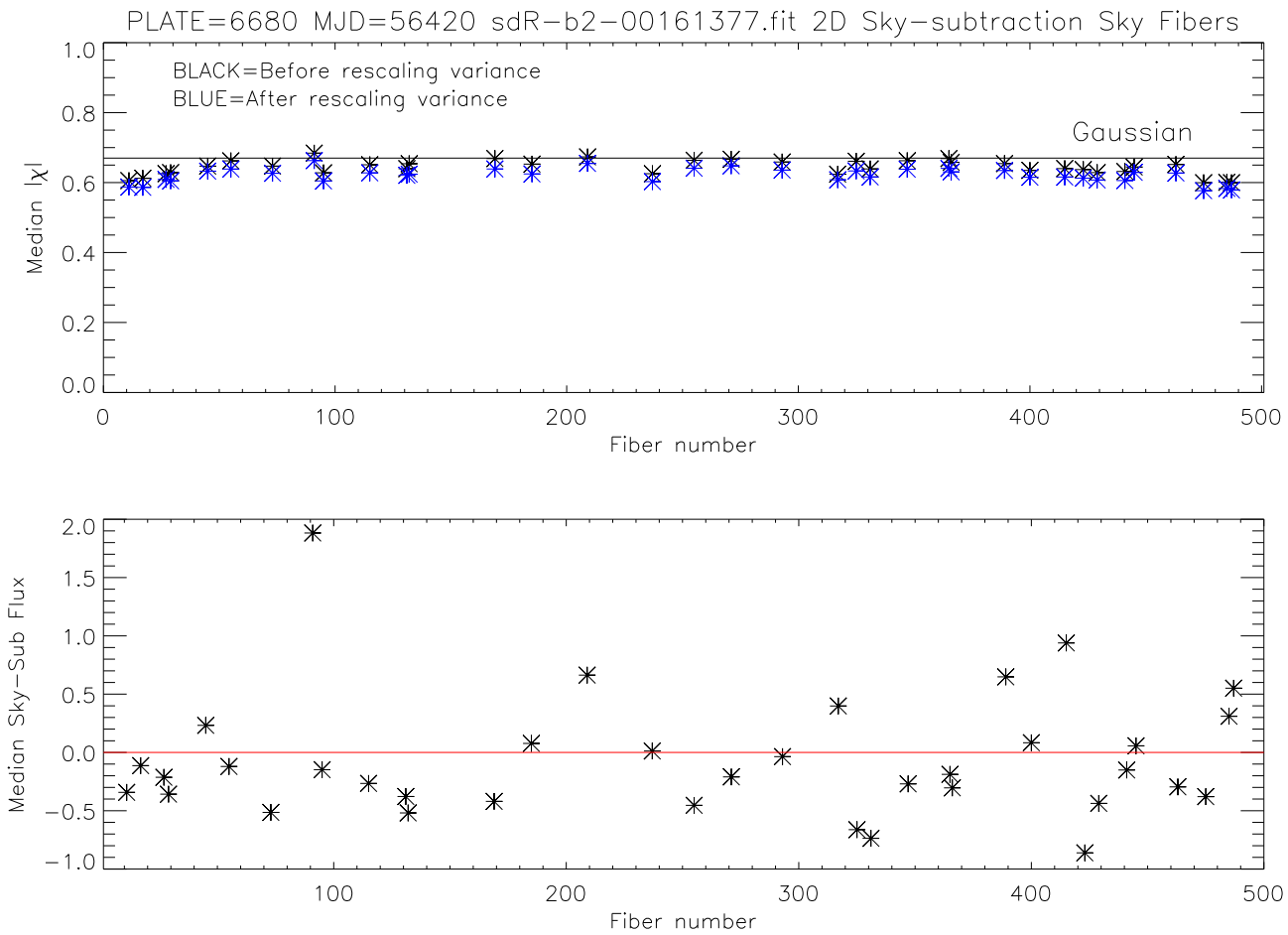

PLATE=6680 MJD=56420 sdR-b2-00161377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

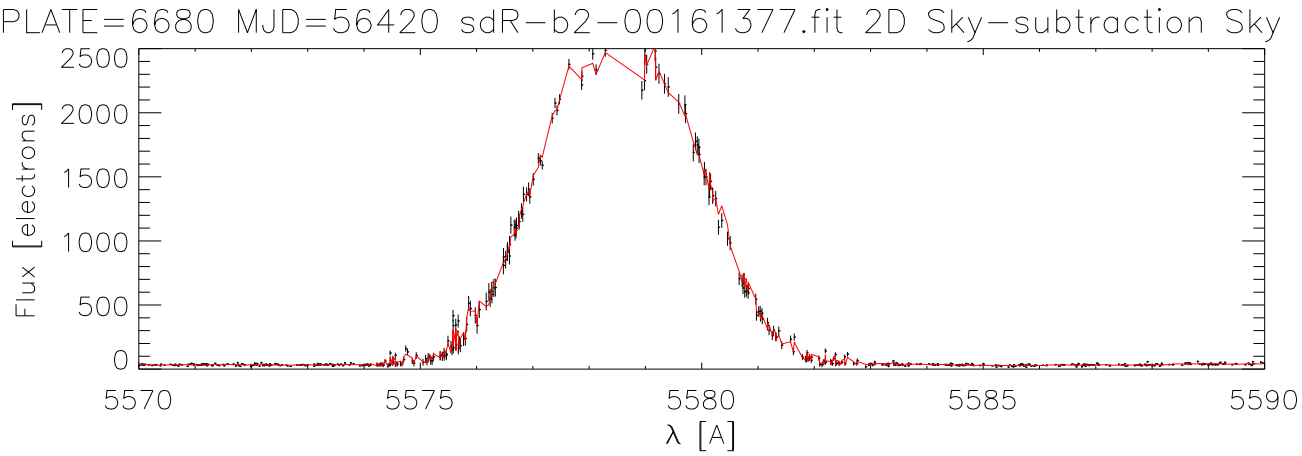

PLATE=6680 MJD=56420 sdR-b2-00161377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

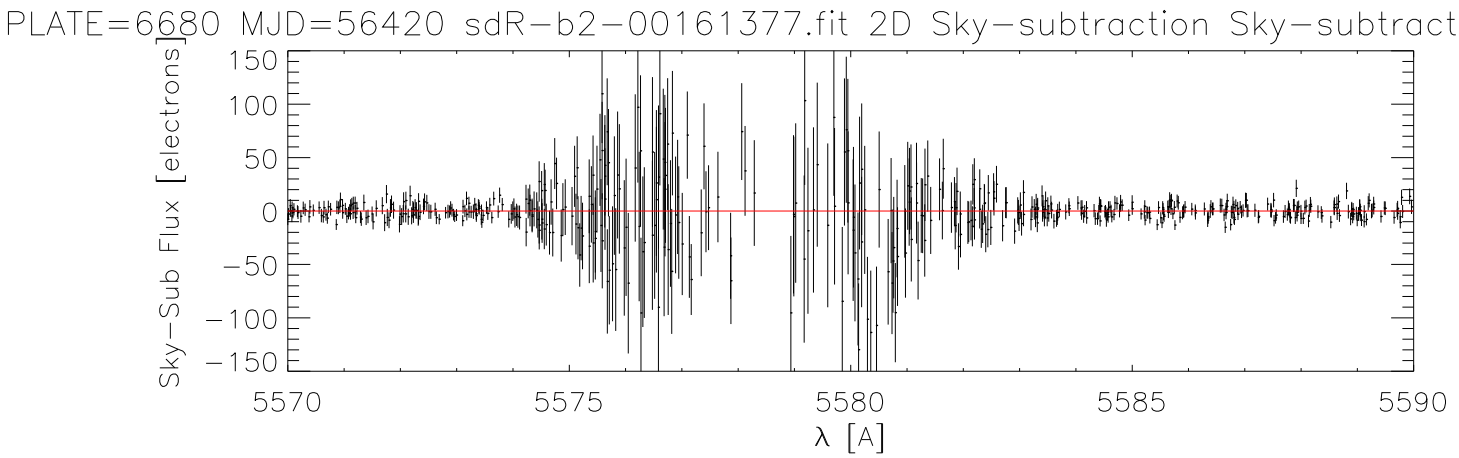

PLATE=6680 MJD=56420 sdR-b2-00161377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 36

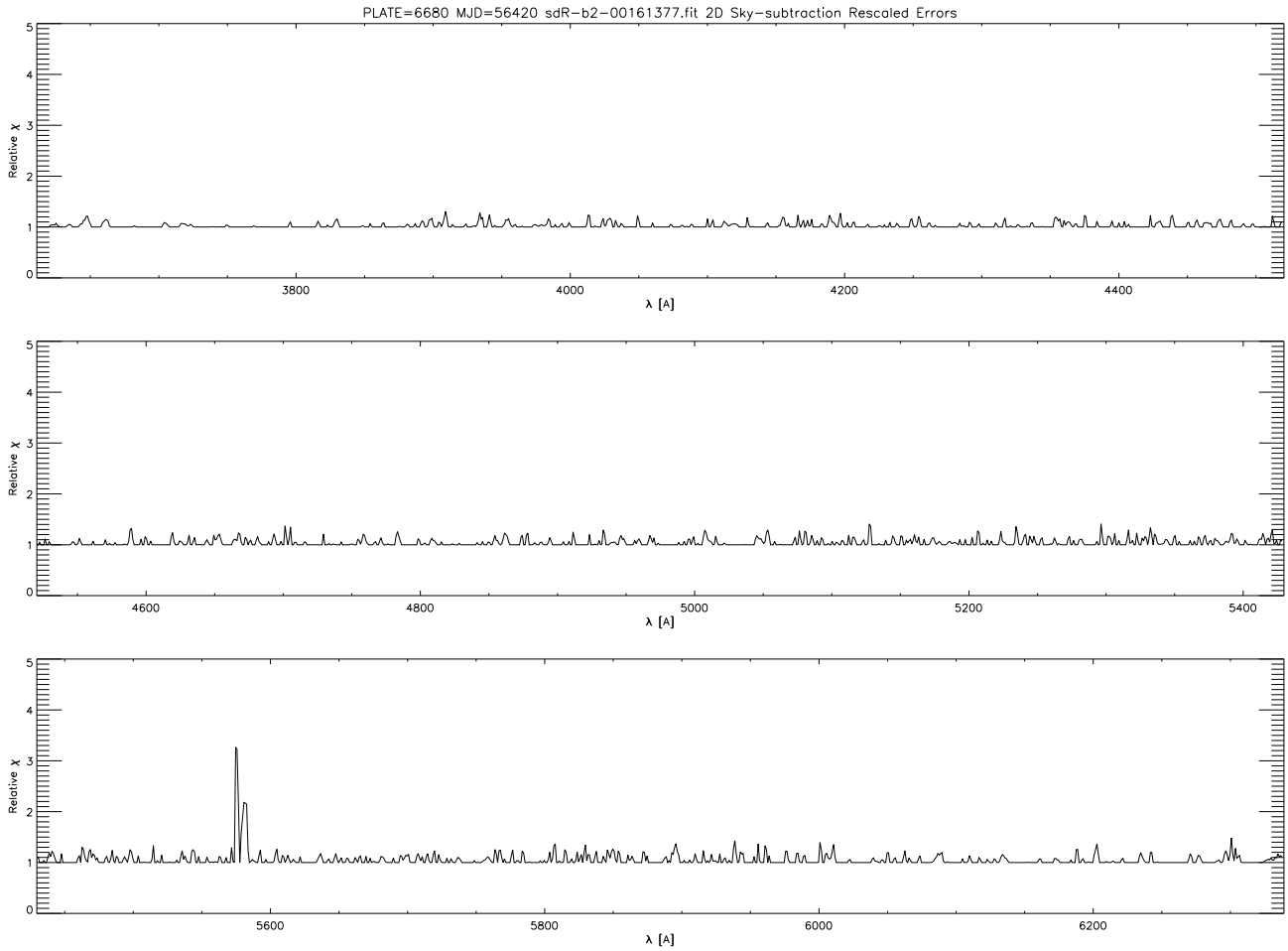


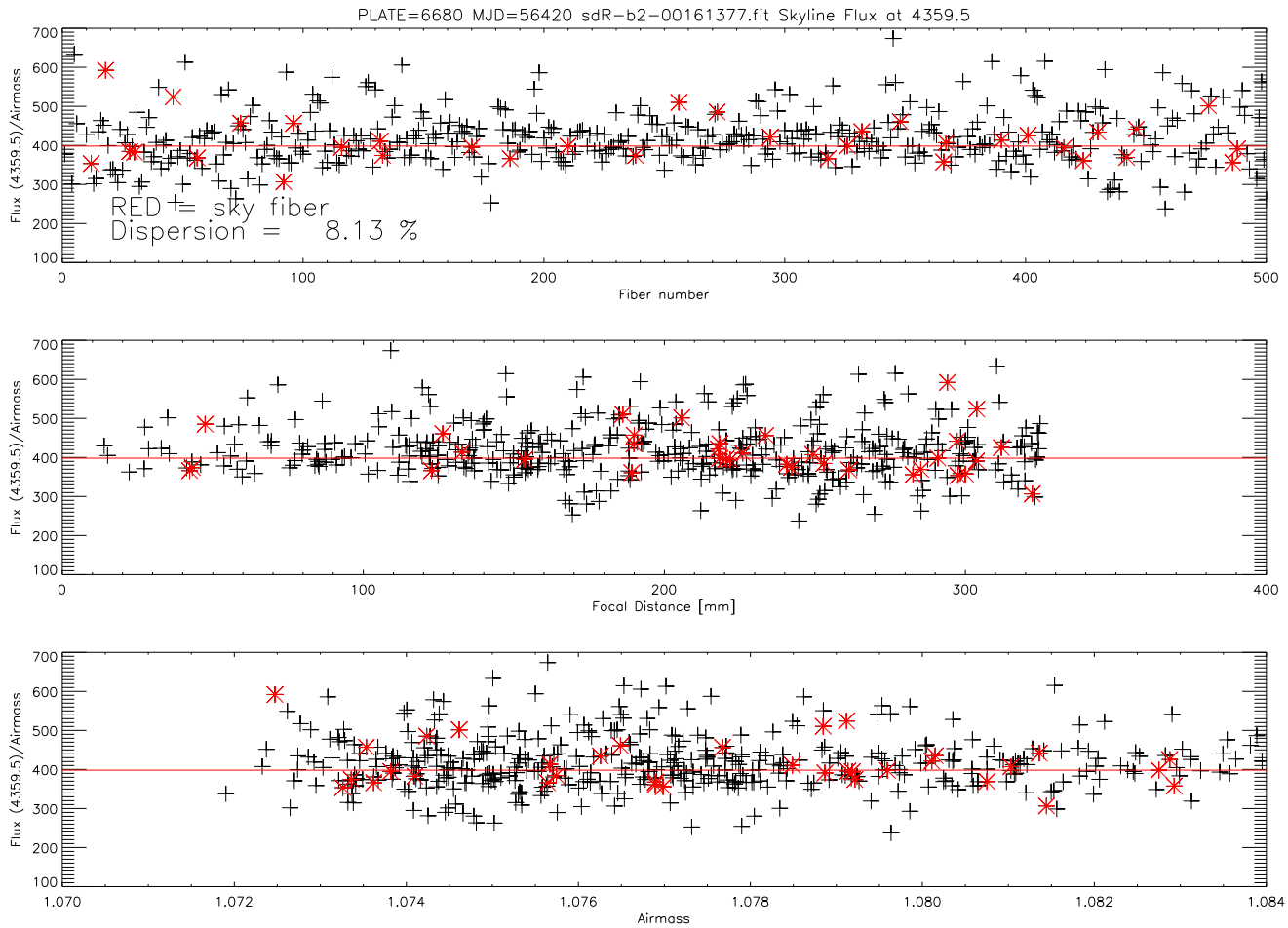

PLATE=6680 MJD=56420 sdR-b2-00161377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

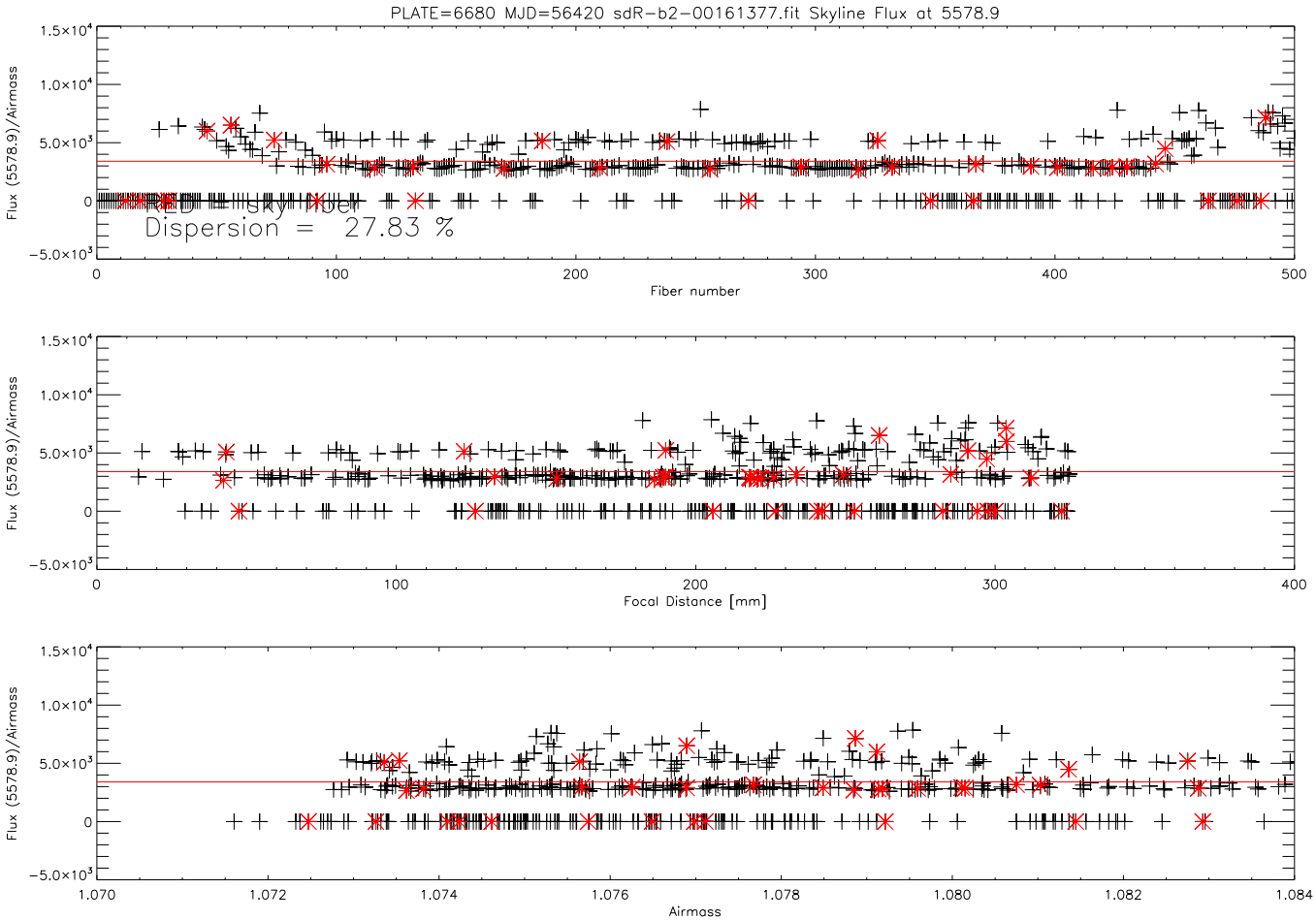

PLATE=6680 MJD=56420 sdR-b2-00161377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

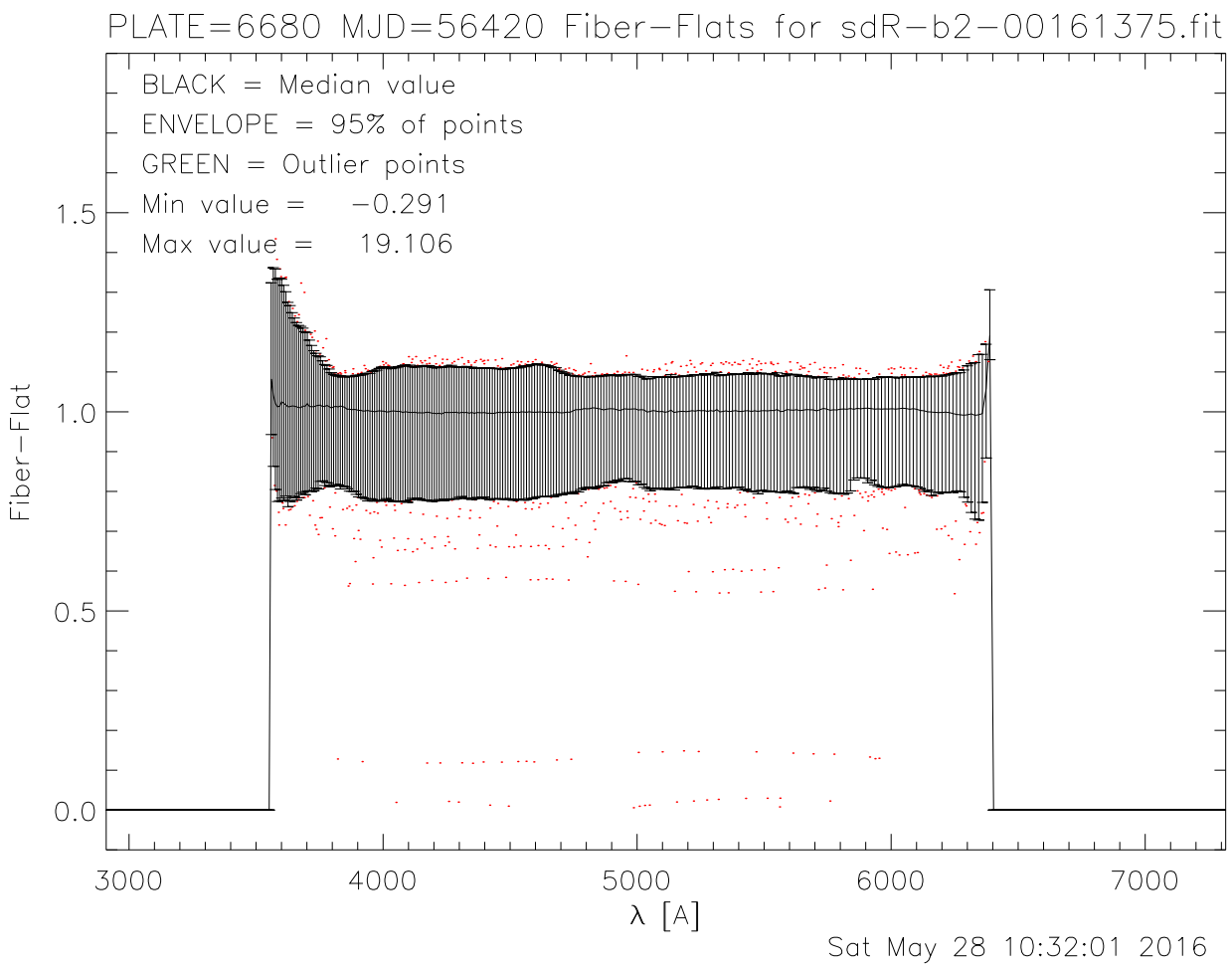

PLATE=6680 MJD=56420 sdR-b2-00161377.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
5570
5575
5580
5585
5590
λ [A]

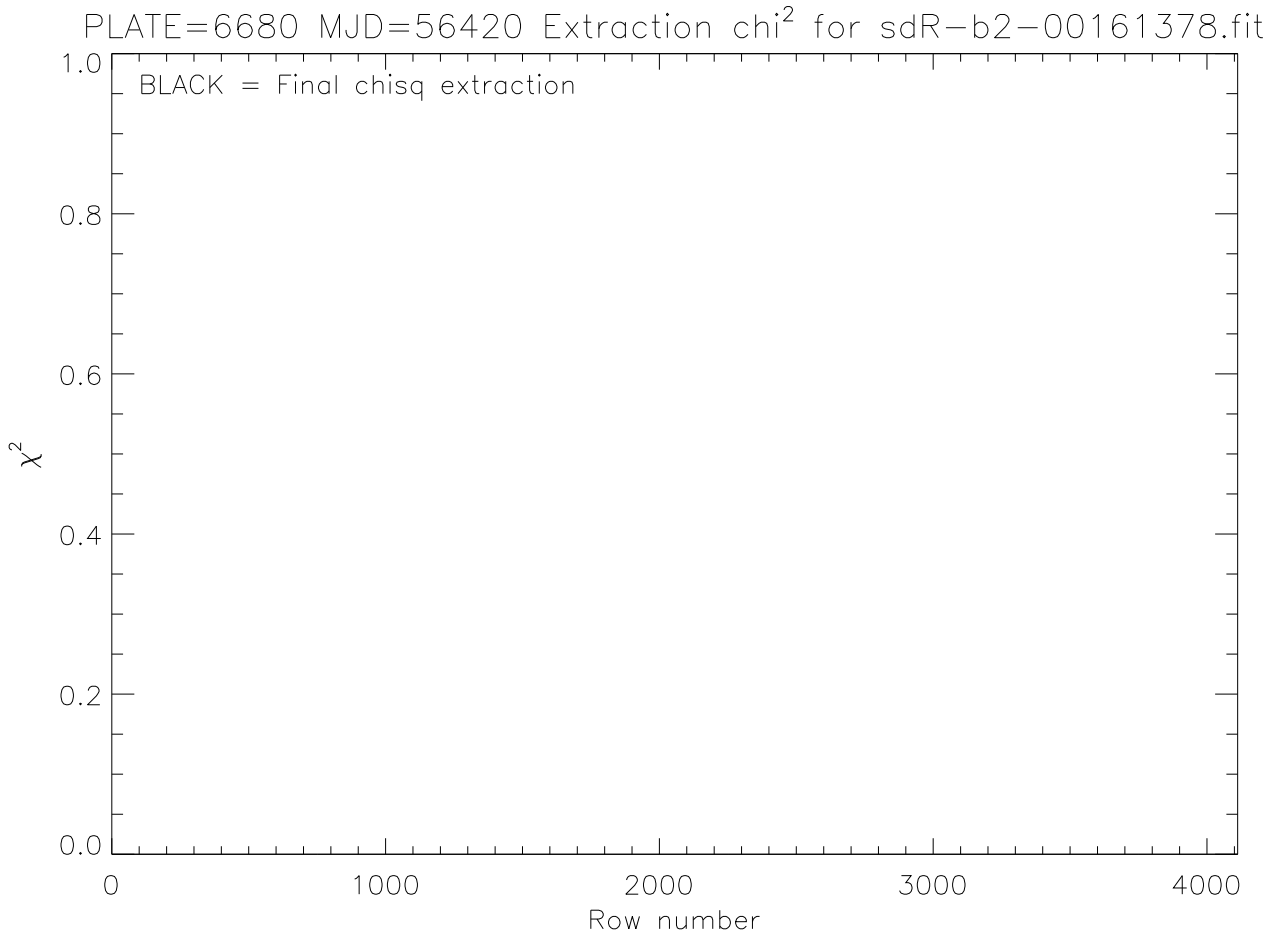
Number of sky fibers = 36

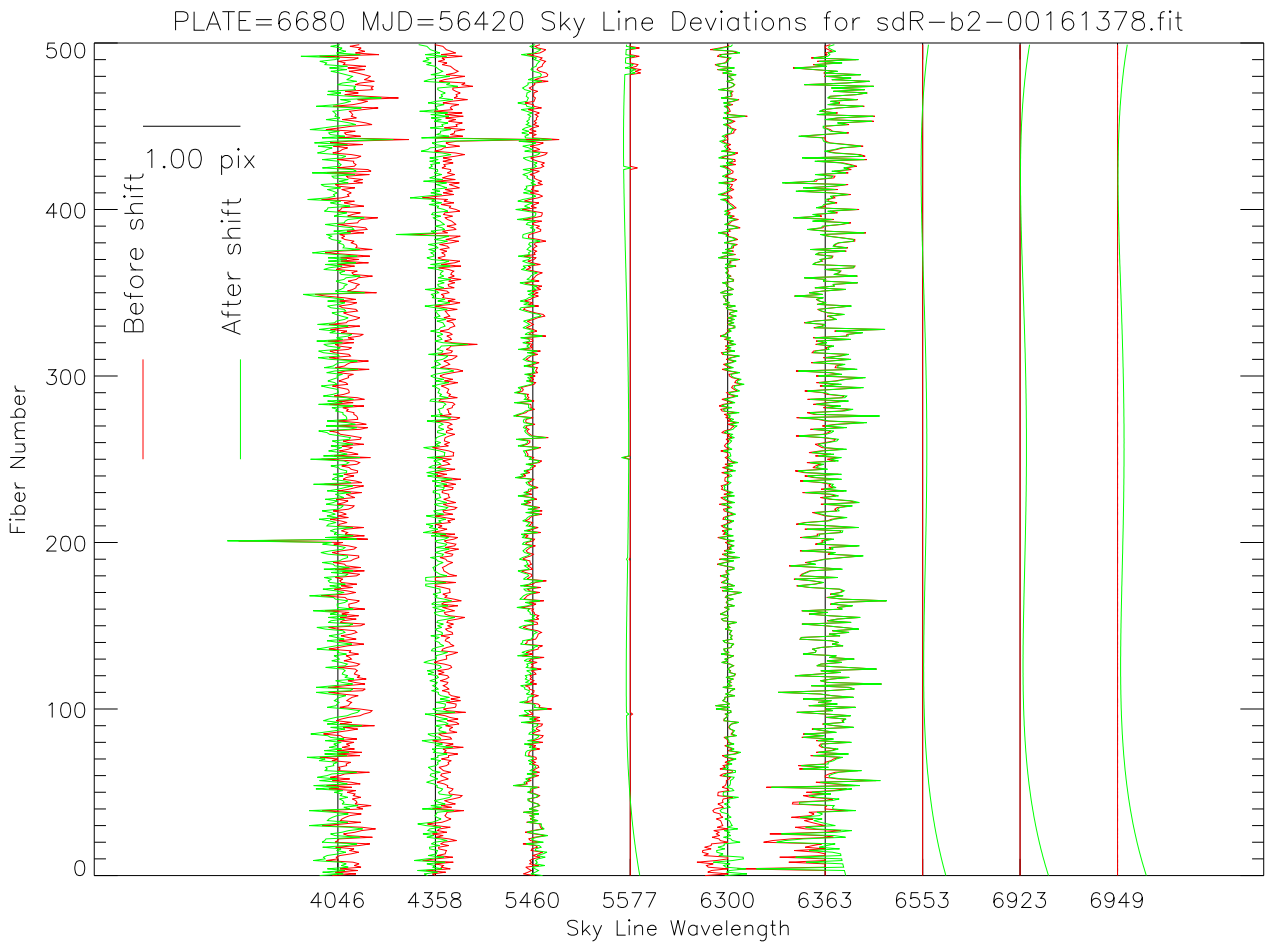


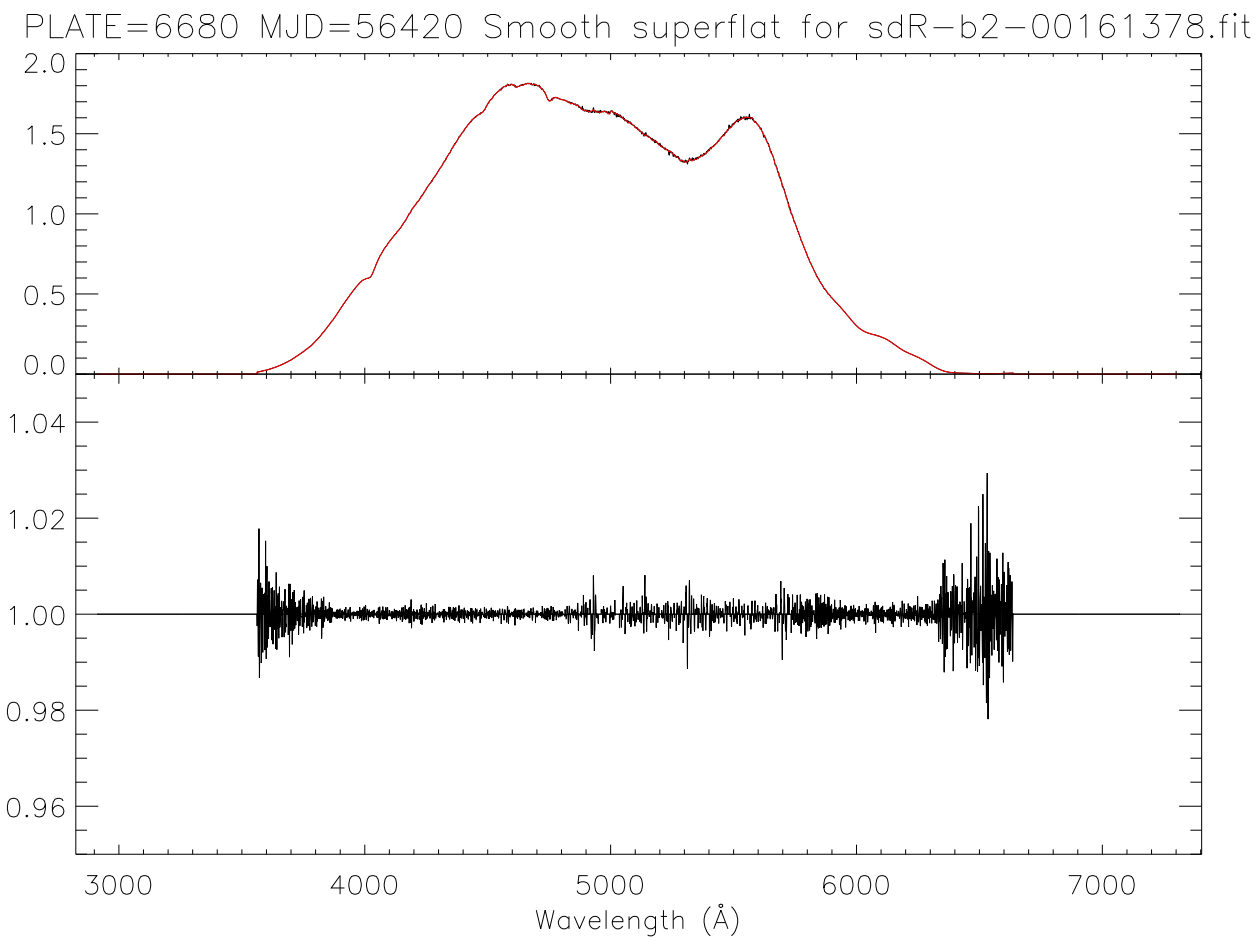

PLATE=6680 MJD=56420 sdR-b2-00161377.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 8.13 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

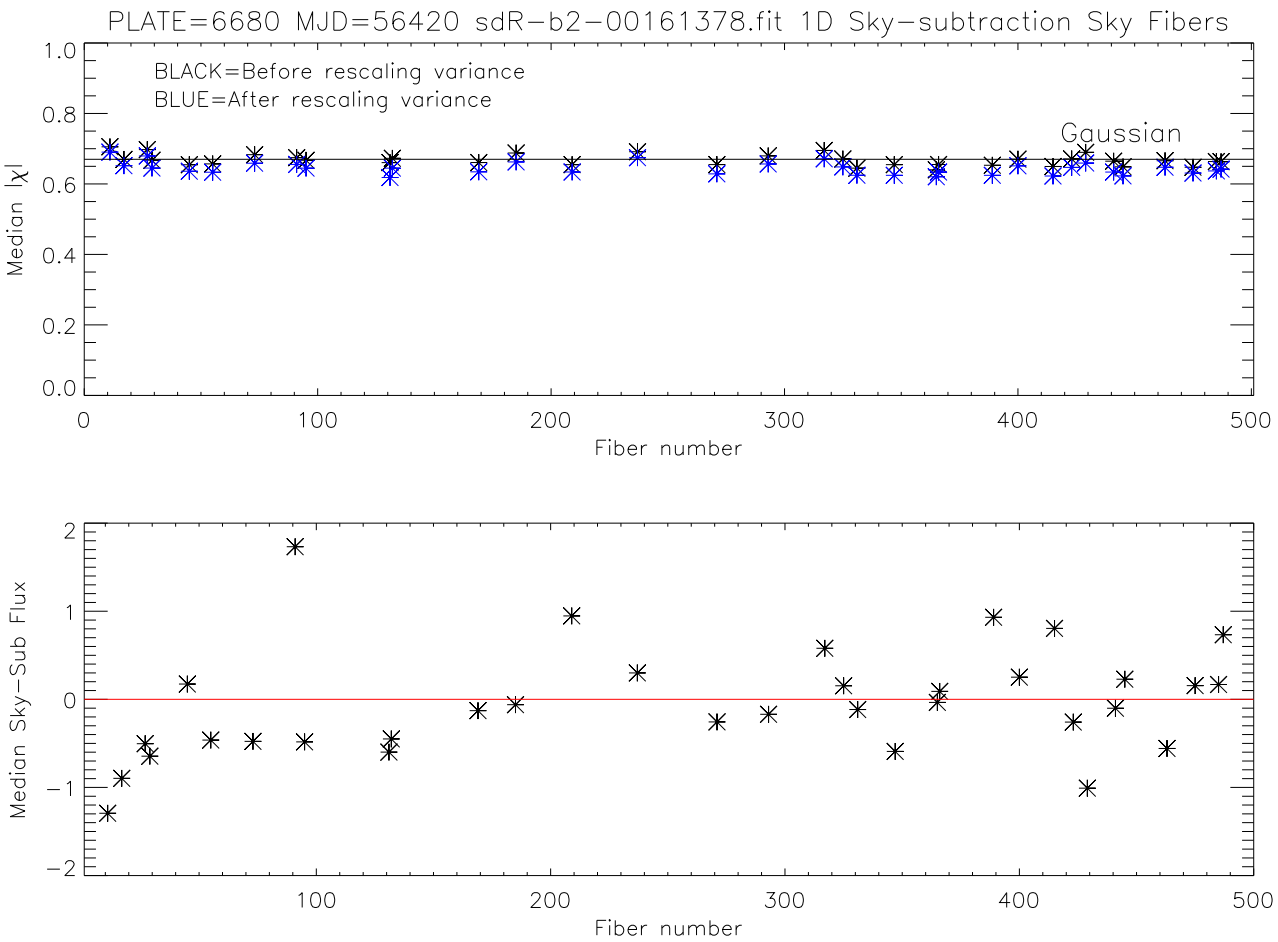

PLATE=6680 MJD=56420 sdR-b2-00161377.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Red Sky Fiber
Dispersion = 27.83 %
Fiber number
Focal Distance [mm]
Airmass

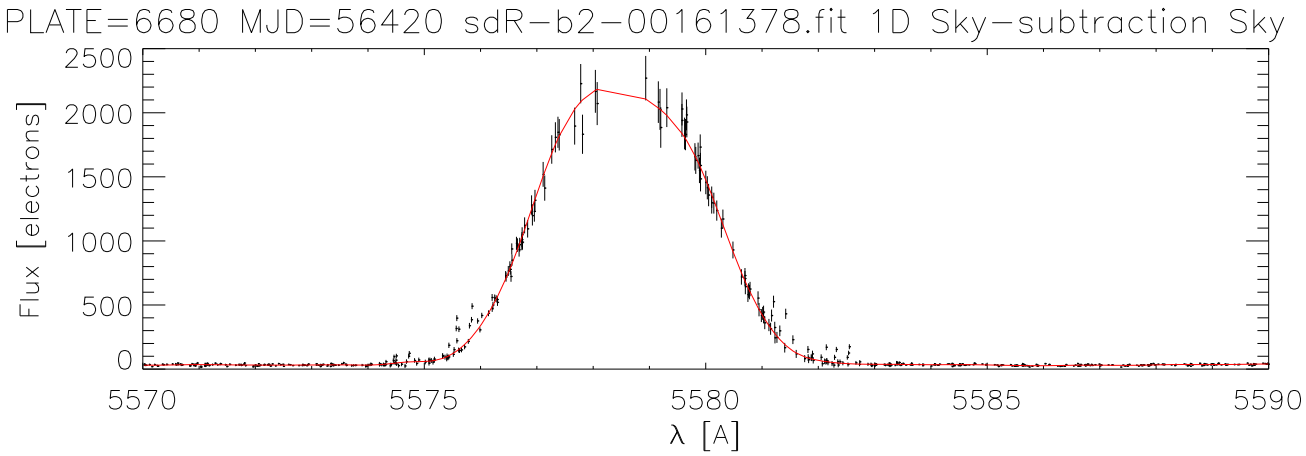

PLATE=6680 MJD=56420 Fiber−Flats for sdR−b2−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −0.291
Max value = 19.106
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Sat May 28 10:32:01 2016

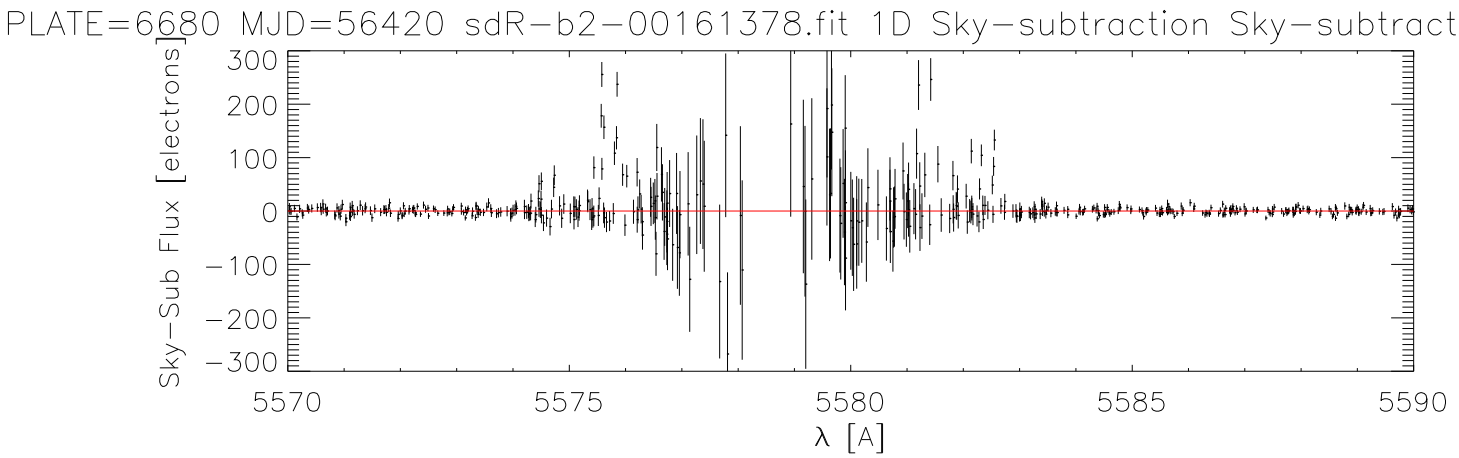

PLATE=6680 MJD=56420 Extraction chi^2 for sdR-b2-00161378.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-b2-00161378.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

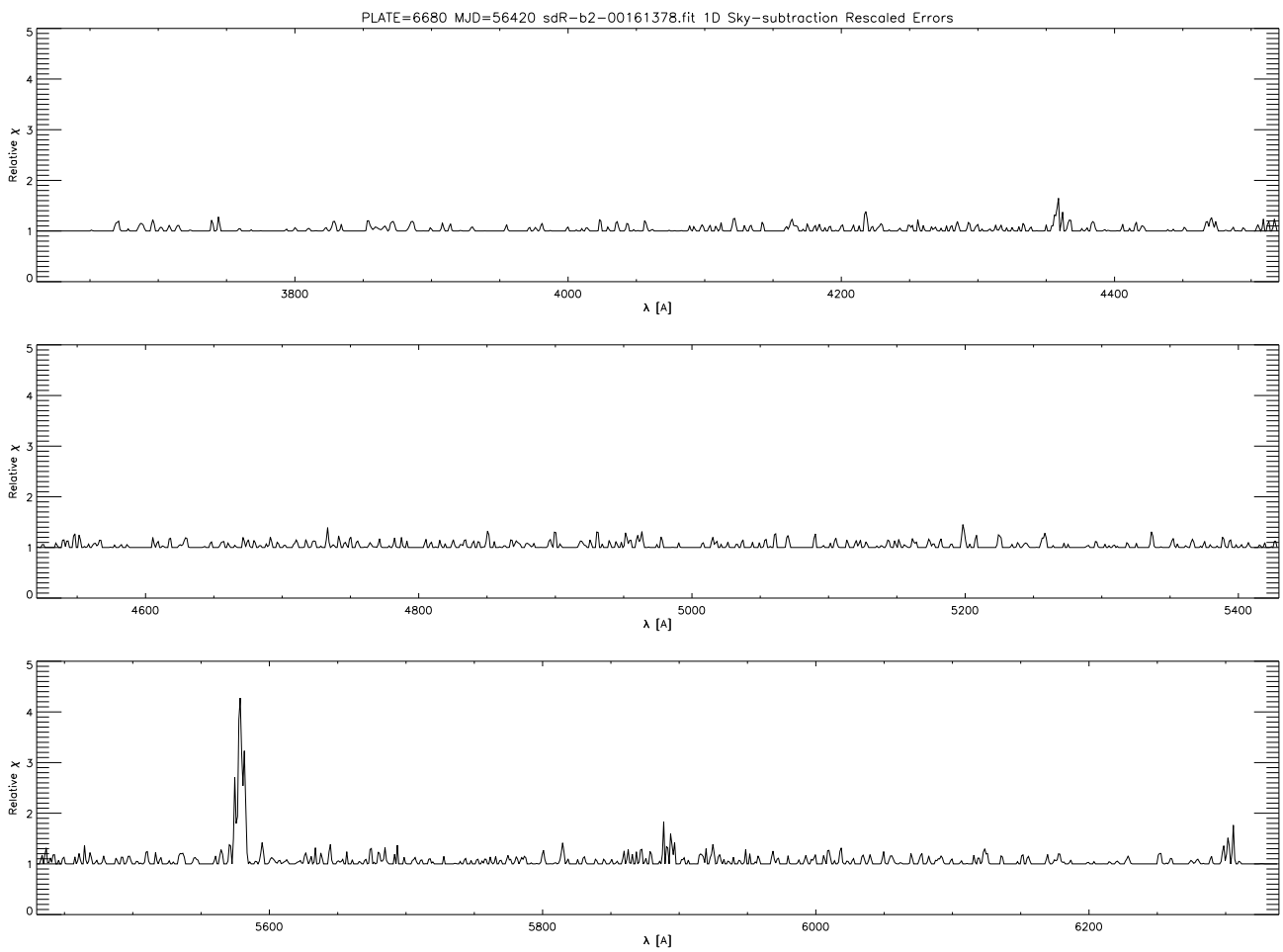

PLATE=6680 MJD=56420 Smooth superflat for sdR-b2-00161378.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

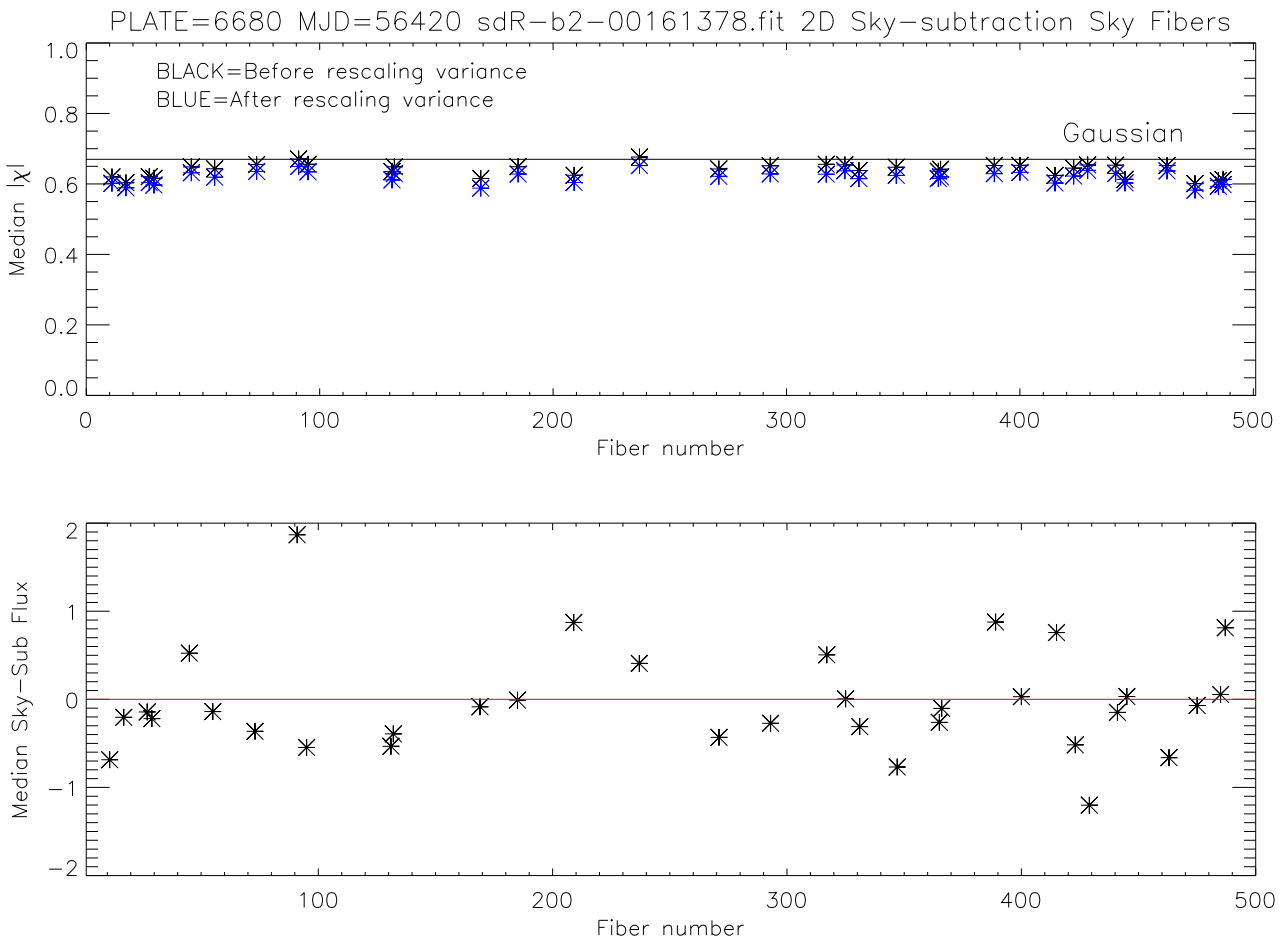

PLATE=6680 MJD=56420 sdR-b2-00161378.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

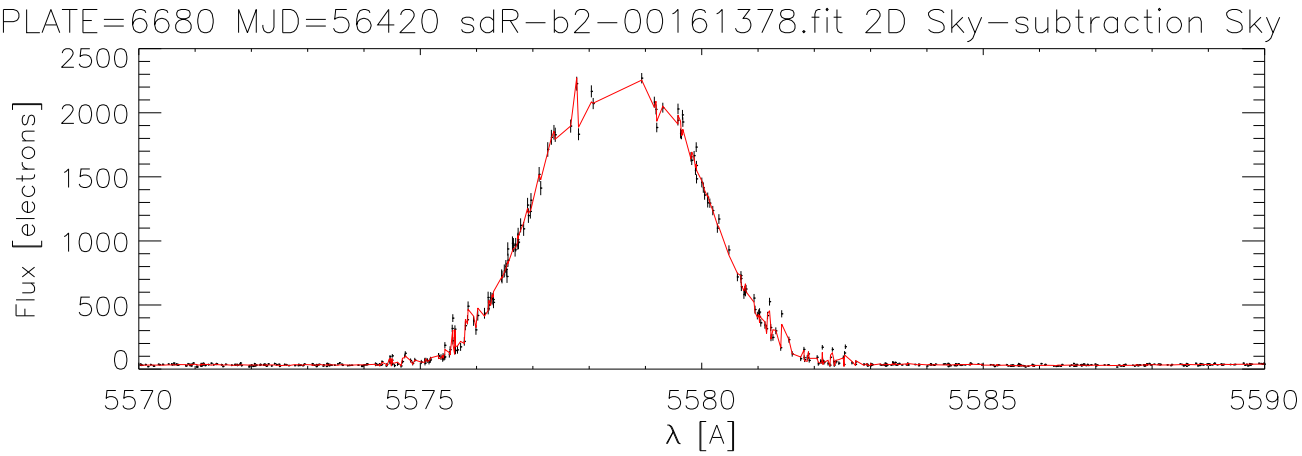

PLATE=6680 MJD=56420 sdR-b2-00161378.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]

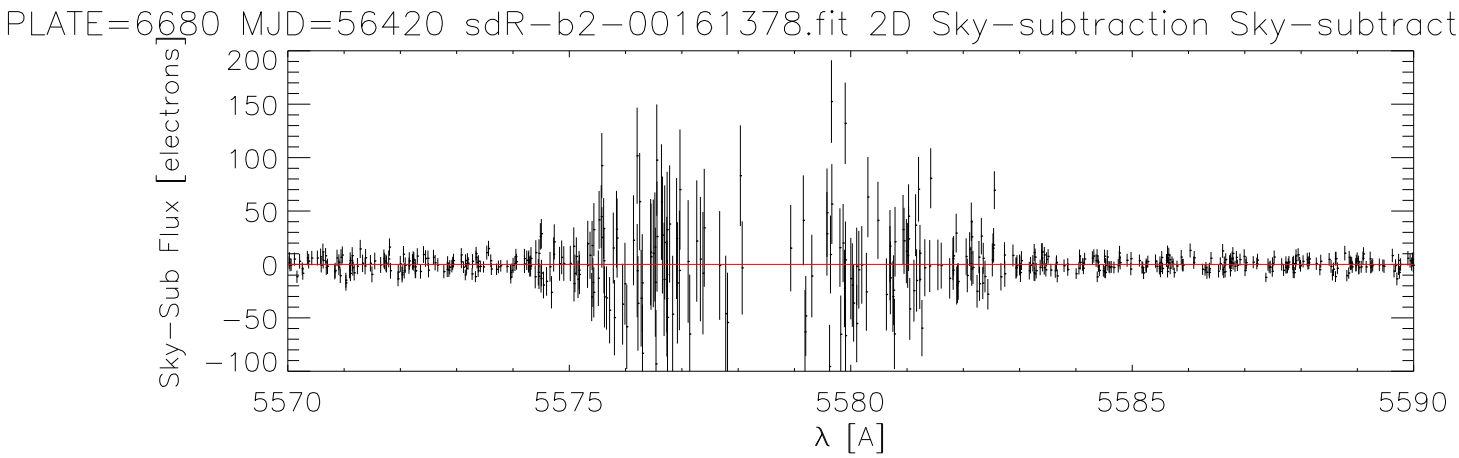

PLATE=6680 MJD=56420 sdR-b2-00161378.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 34

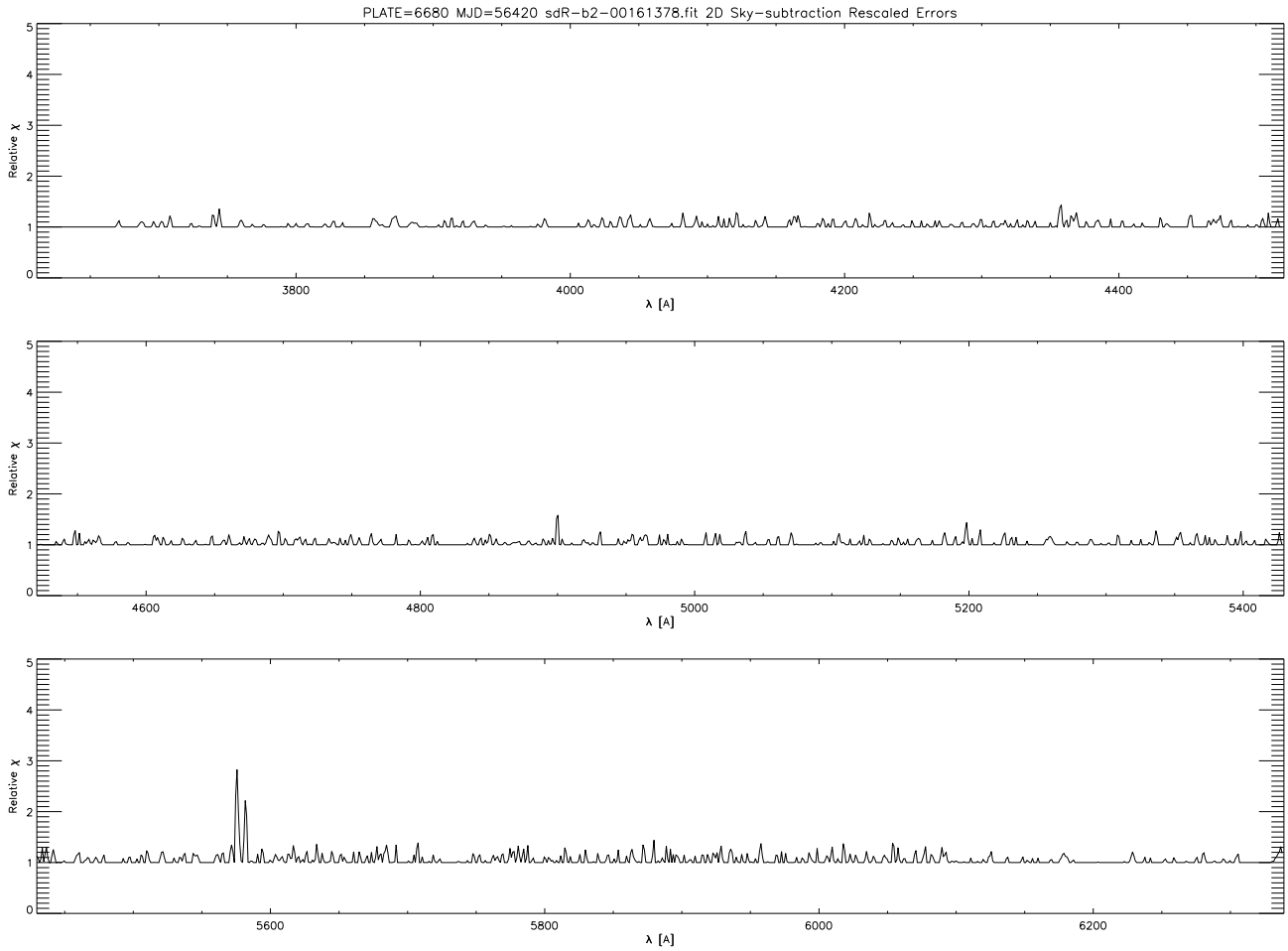


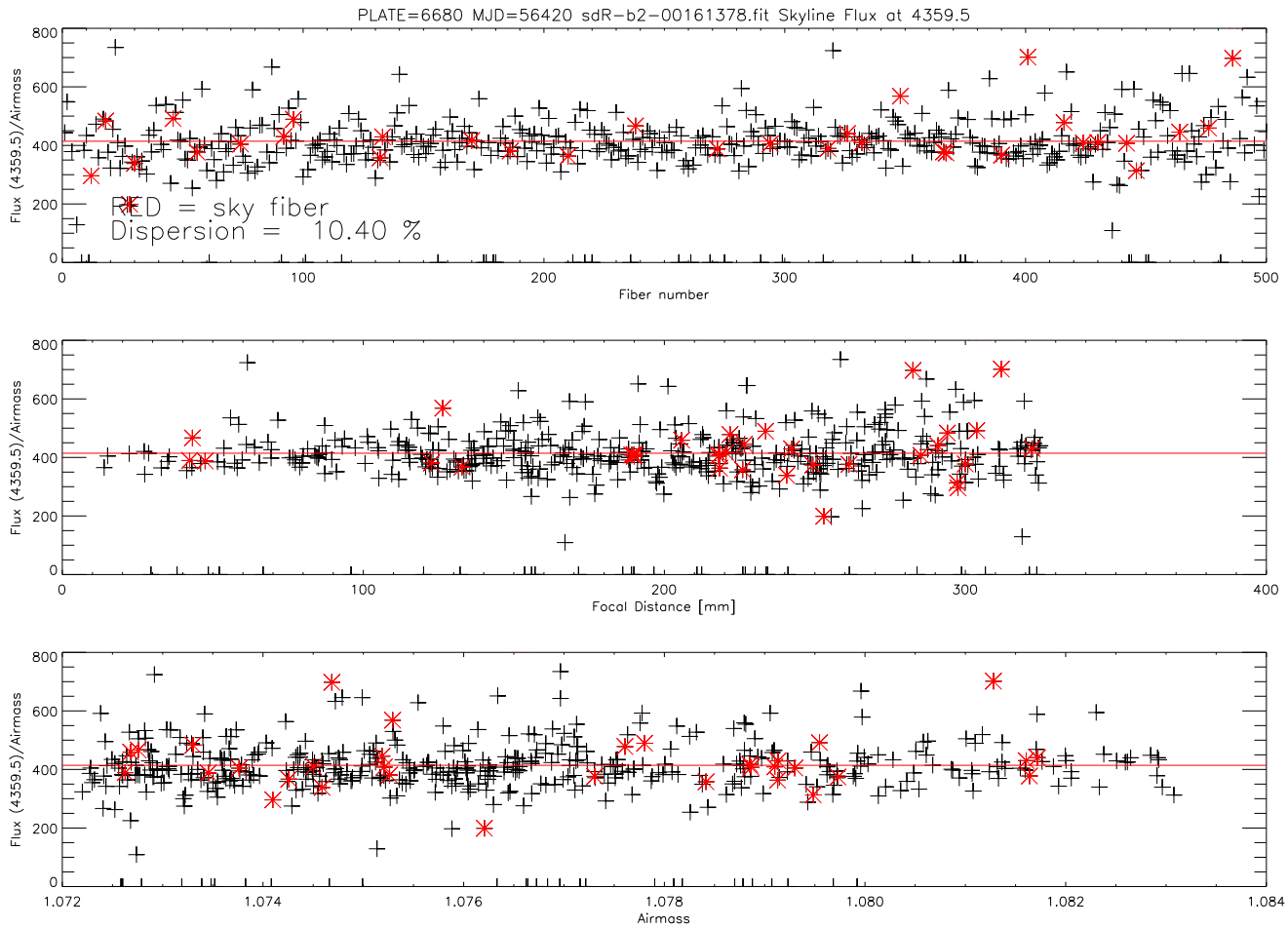

PLATE=6680 MJD=56420 sdR-b2-00161378.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

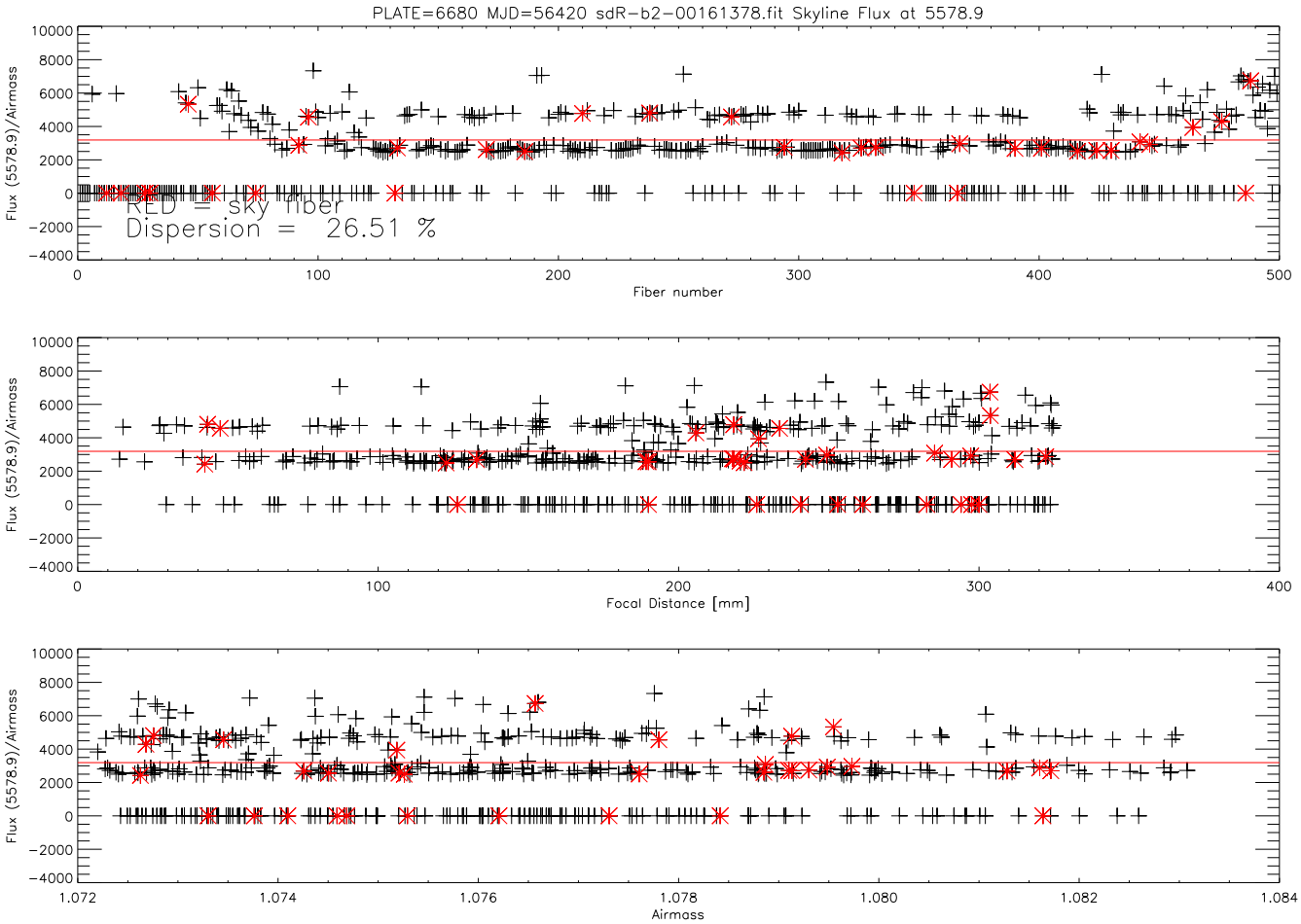

PLATE=6680 MJD=56420 sdR-b2-00161378.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
2500
2000
1500
1000
500
0
5570
5575
5580
5585
5590
λ [A]


PLATE=6680 MJD=56420 sdR-b2-00161378.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
150
100
50
0
-50
-100
5570
5575
5580
5585
5590
λ [A]

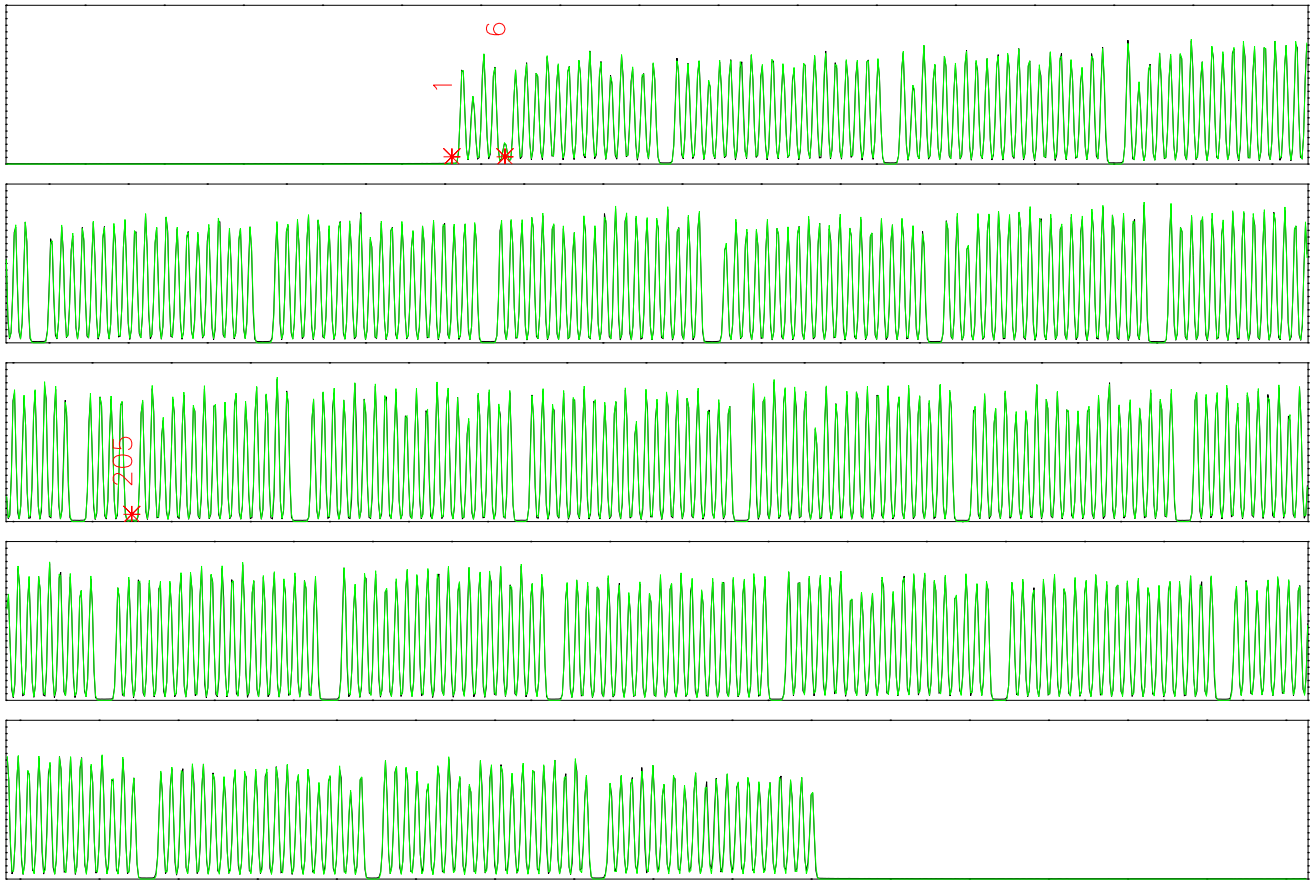
Number of sky fibers = 34

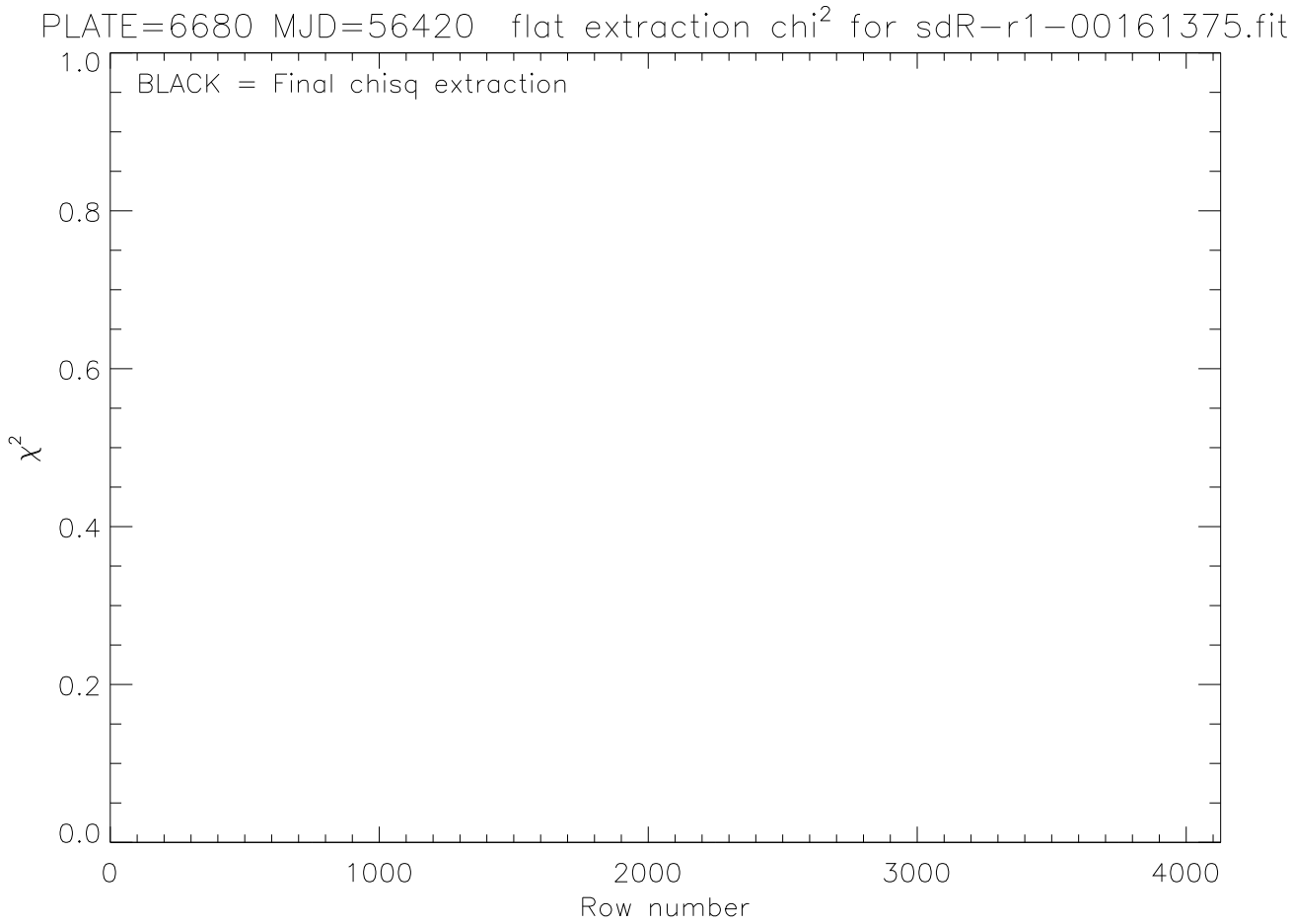


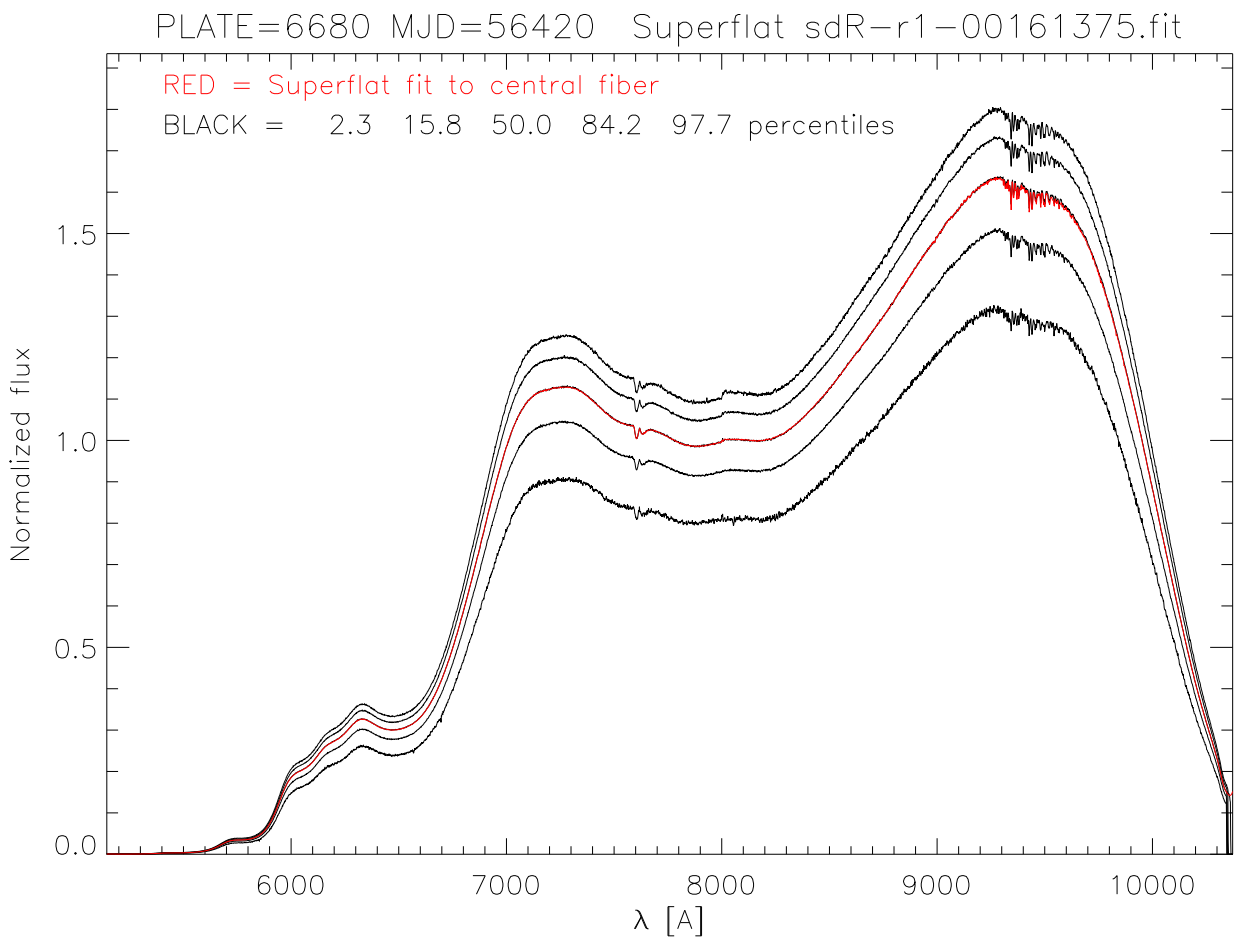

PLATE=6680 MJD=56420 sdR-b2-00161378.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 10.40 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

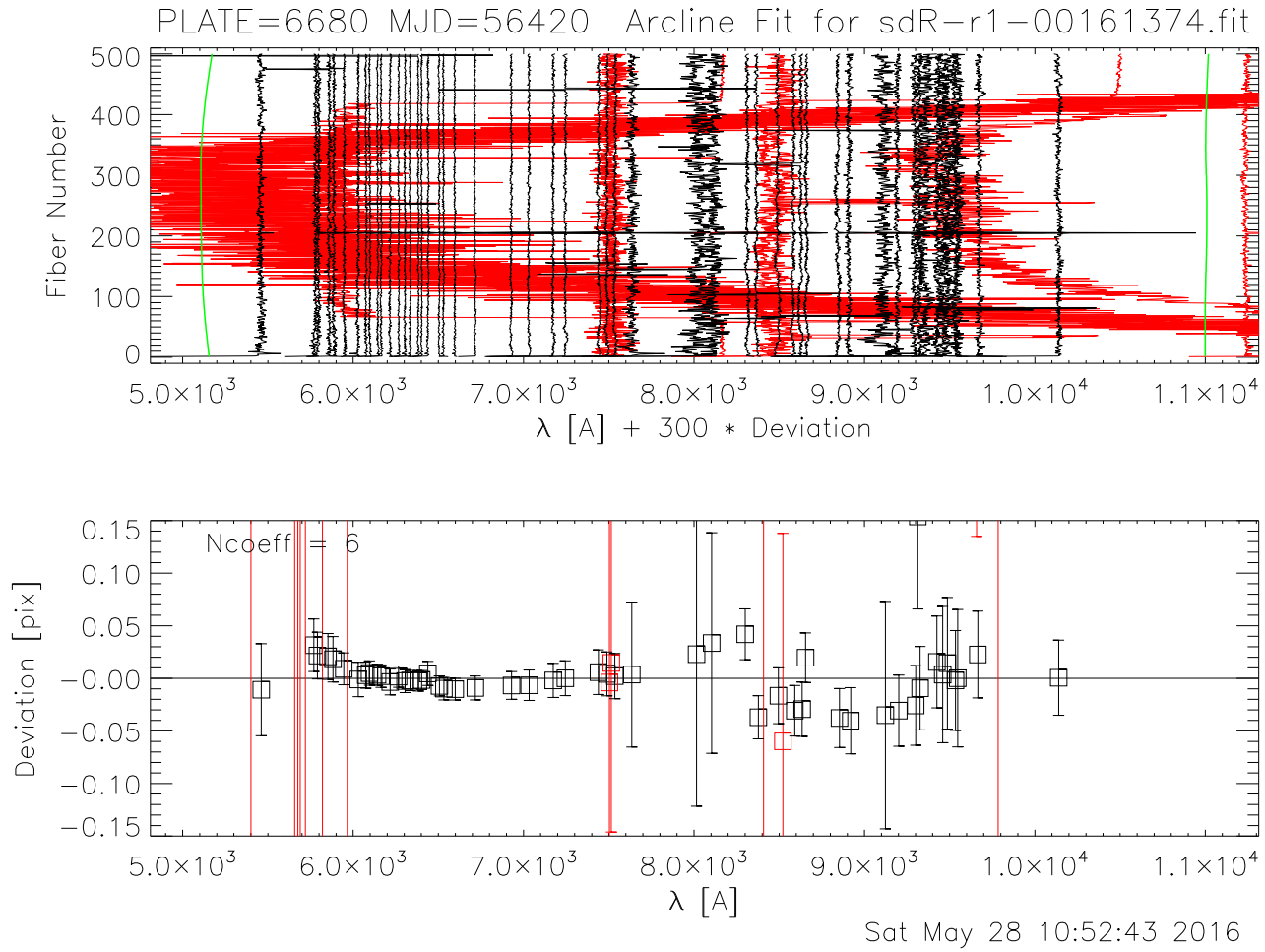

PLATE=6680 MJD=56420 sdR-b2-00161378.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 26.51 %
Fiber number
Focal Distance [mm]
Airmass

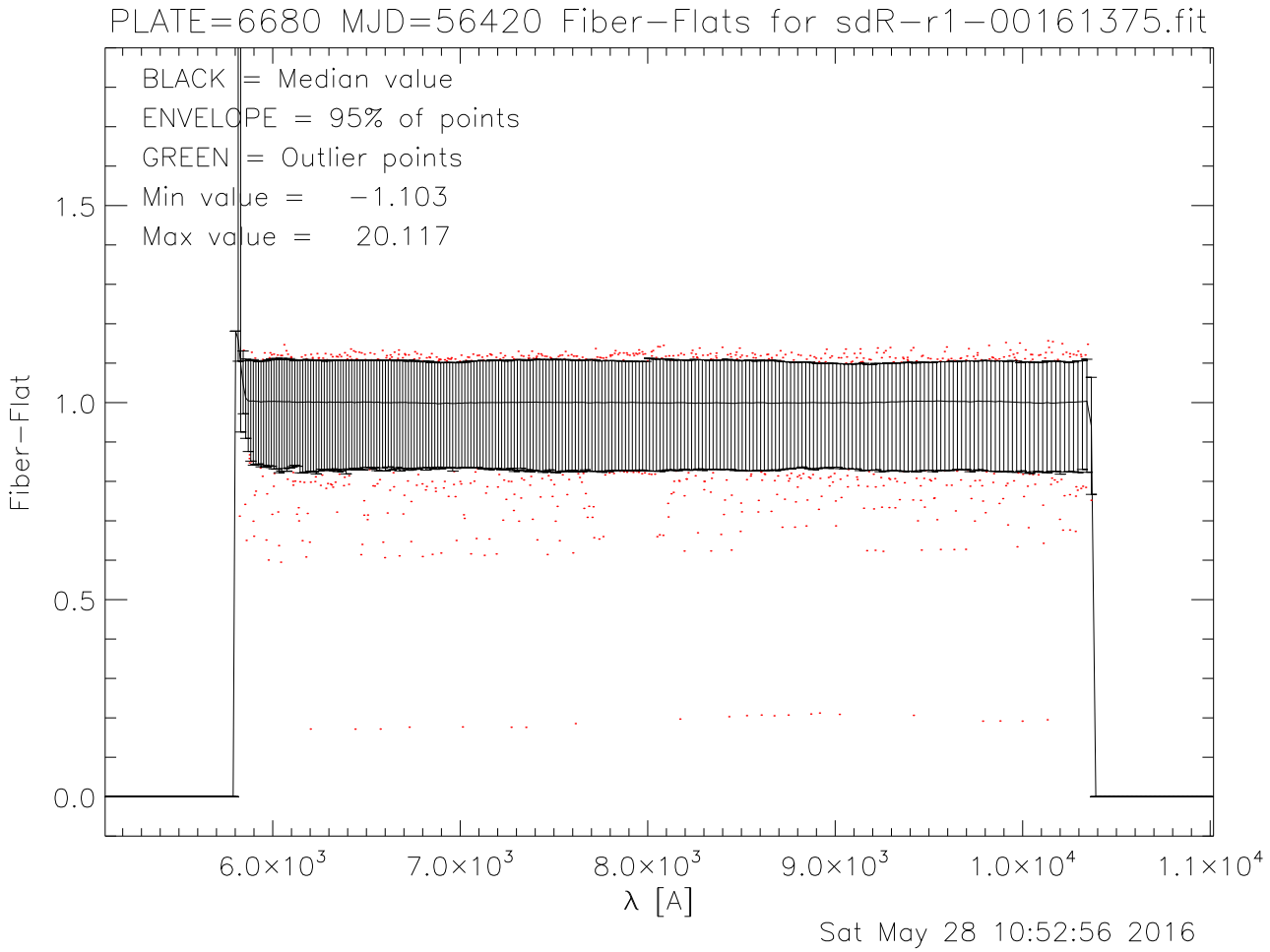
PLATE=6680 MJD=56420 Traces sdR-r1-00161375.fit

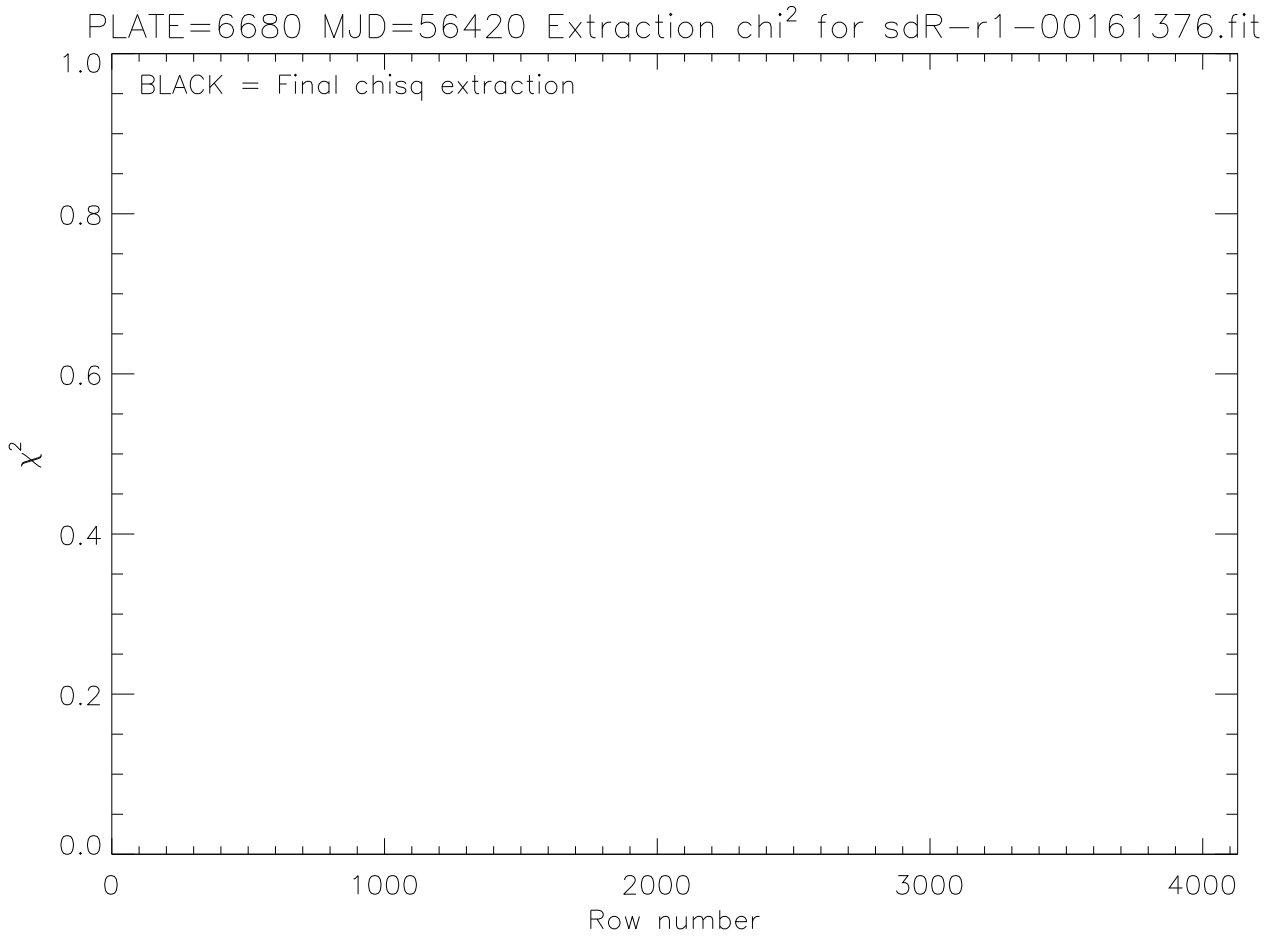


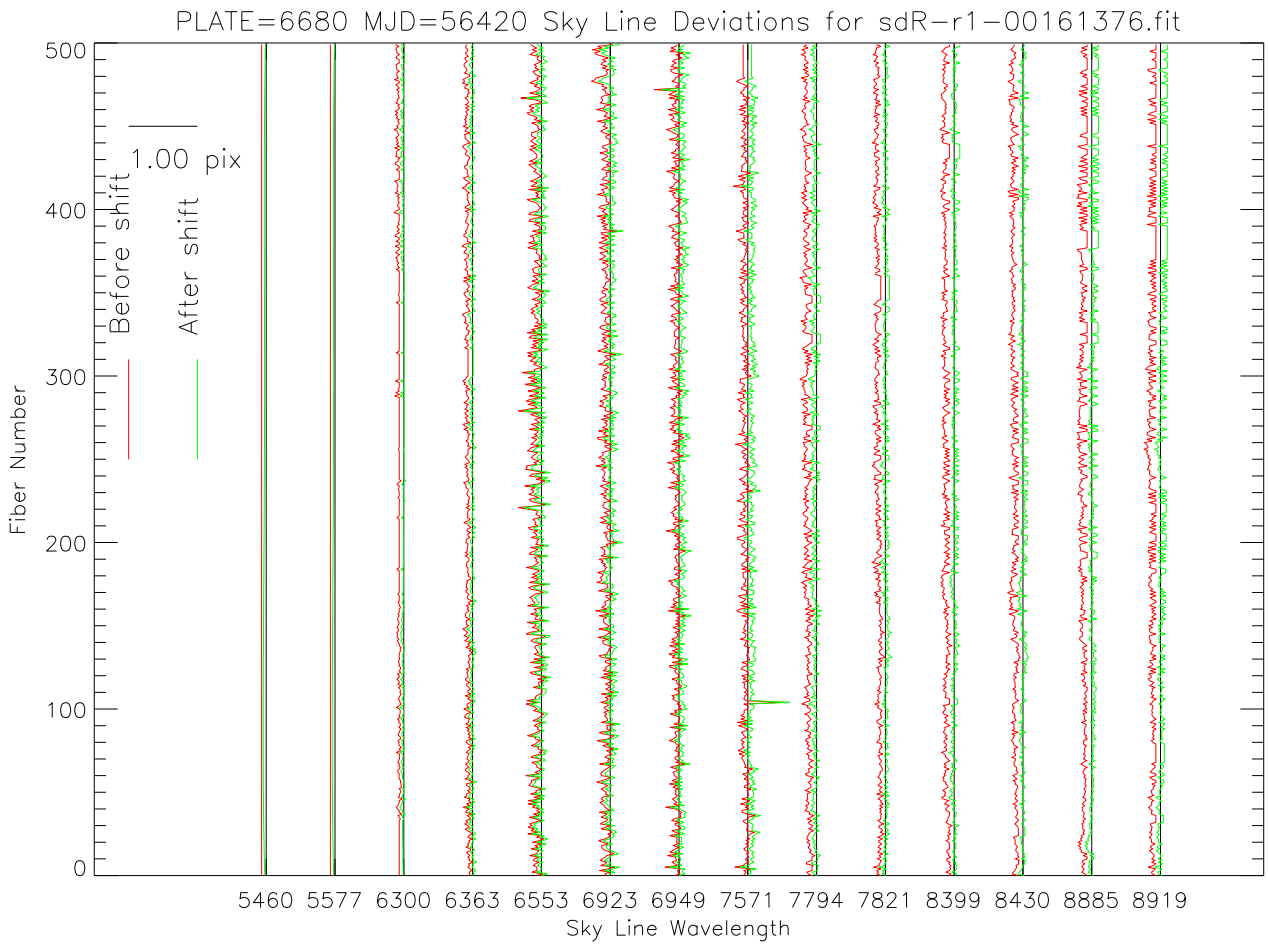

PLATE=6680 MJD=56420 flat extraction chi^2 for sdR−r1−00161375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

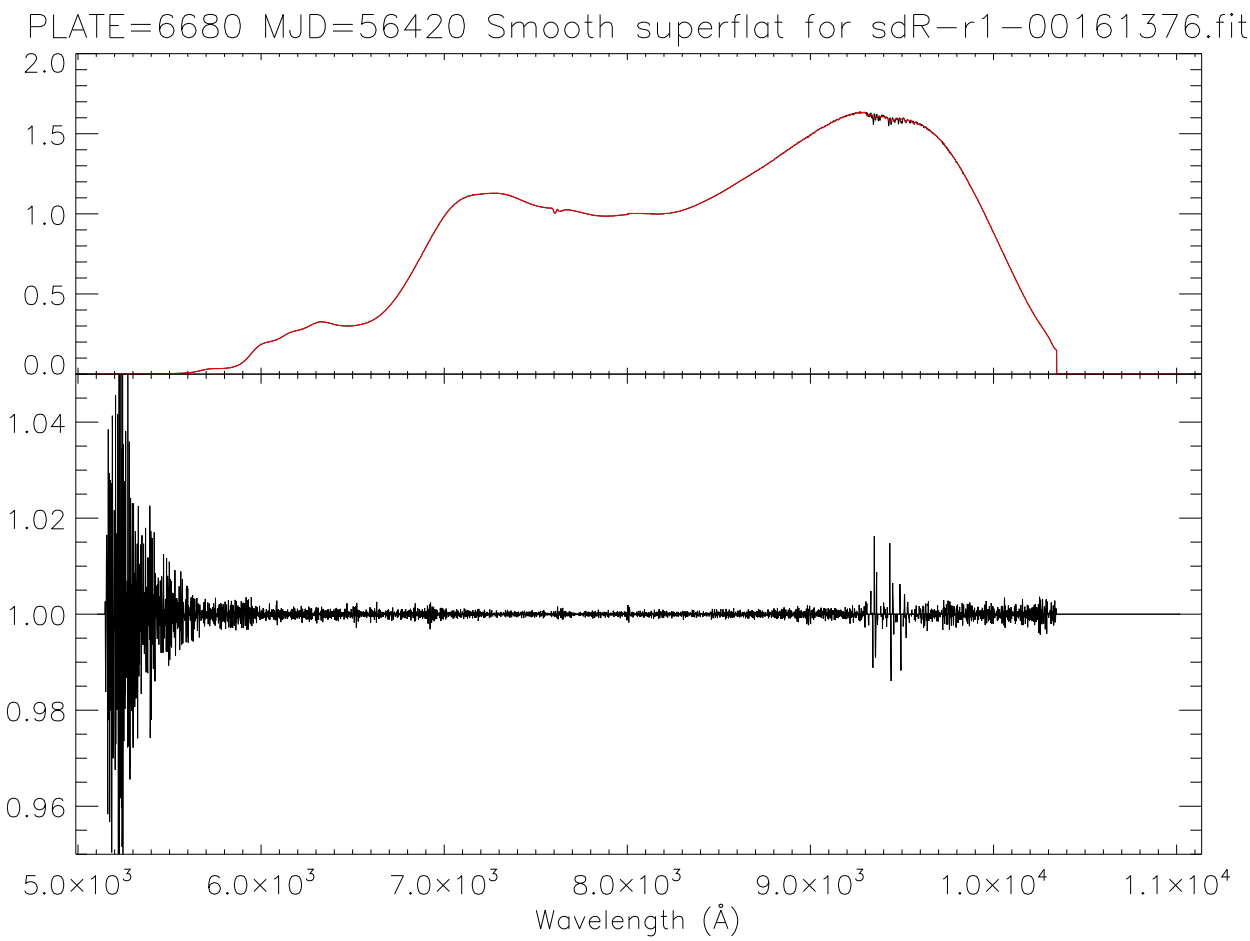

PLATE=6680 MJD=56420 Superflat sdR-r1-00161375.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

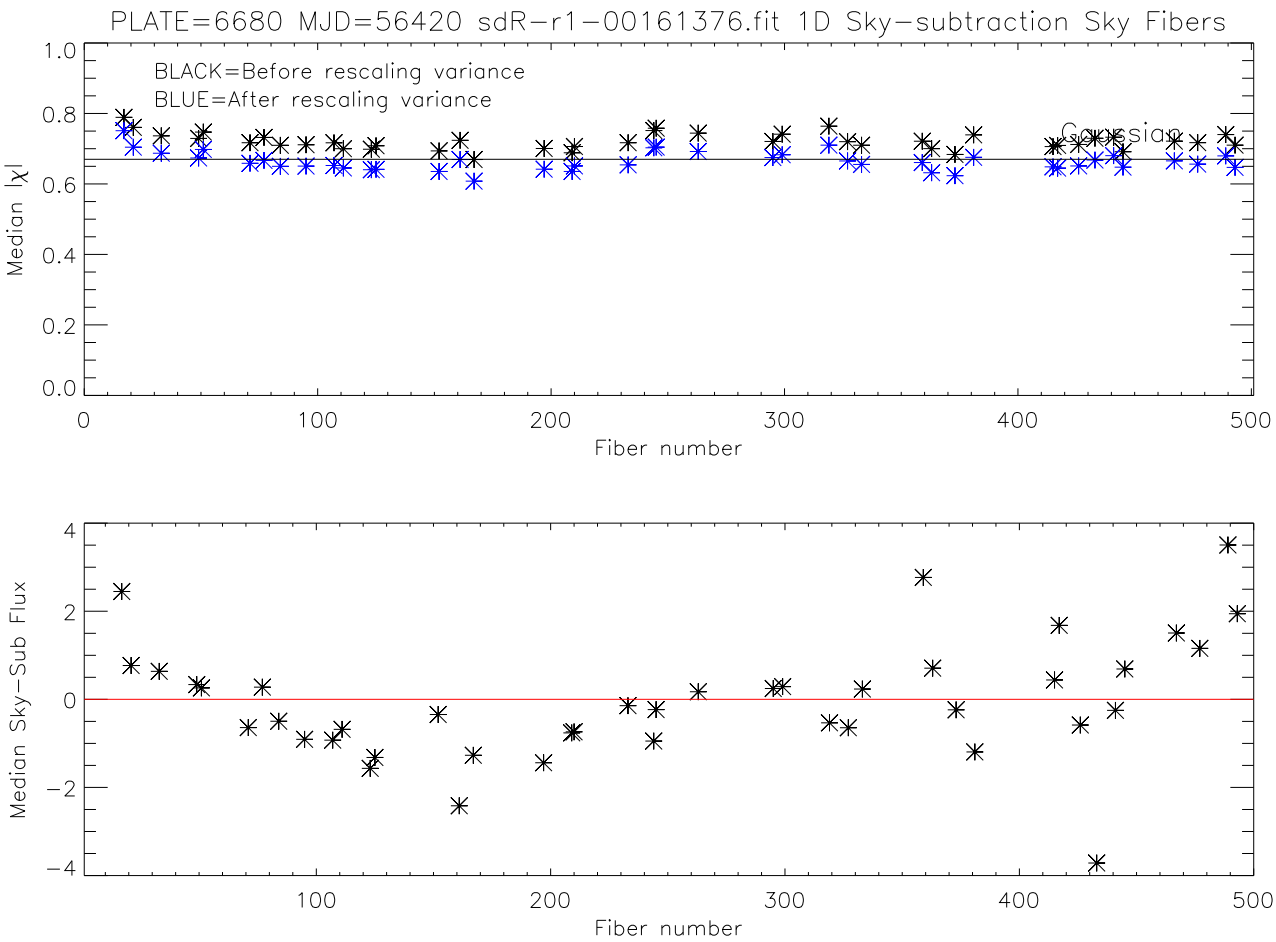

PLATE=6680 MJD=56420 Arcline Fit for sdR-r1-00161374.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sat May 28 10:52:43 2016

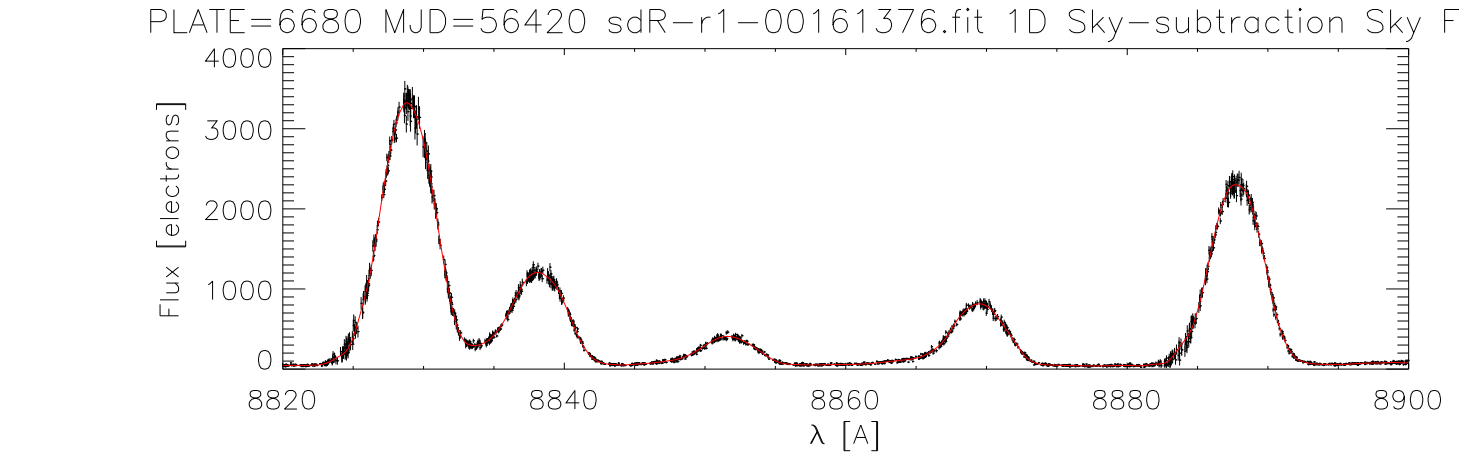

PLATE=6680 MJD=56420 Fiber−Flats for sdR−r1−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −1.103
Max value = 20.117
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 10:52:56 2016

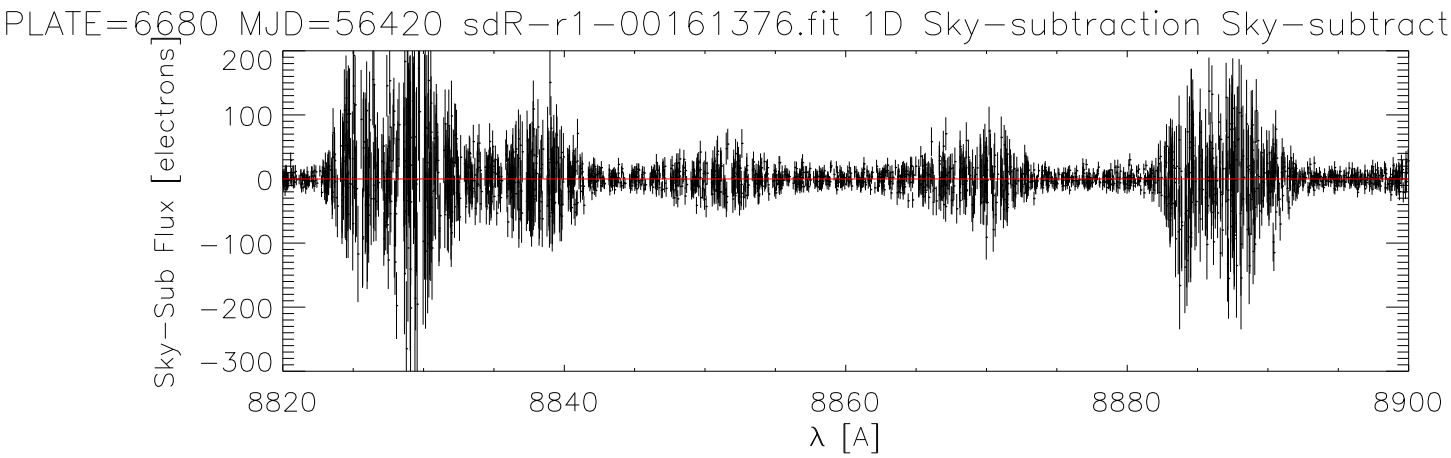

PLATE=6680 MJD=56420 Extraction chi^2 for sdR−r1−00161376.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-r1-00161376.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

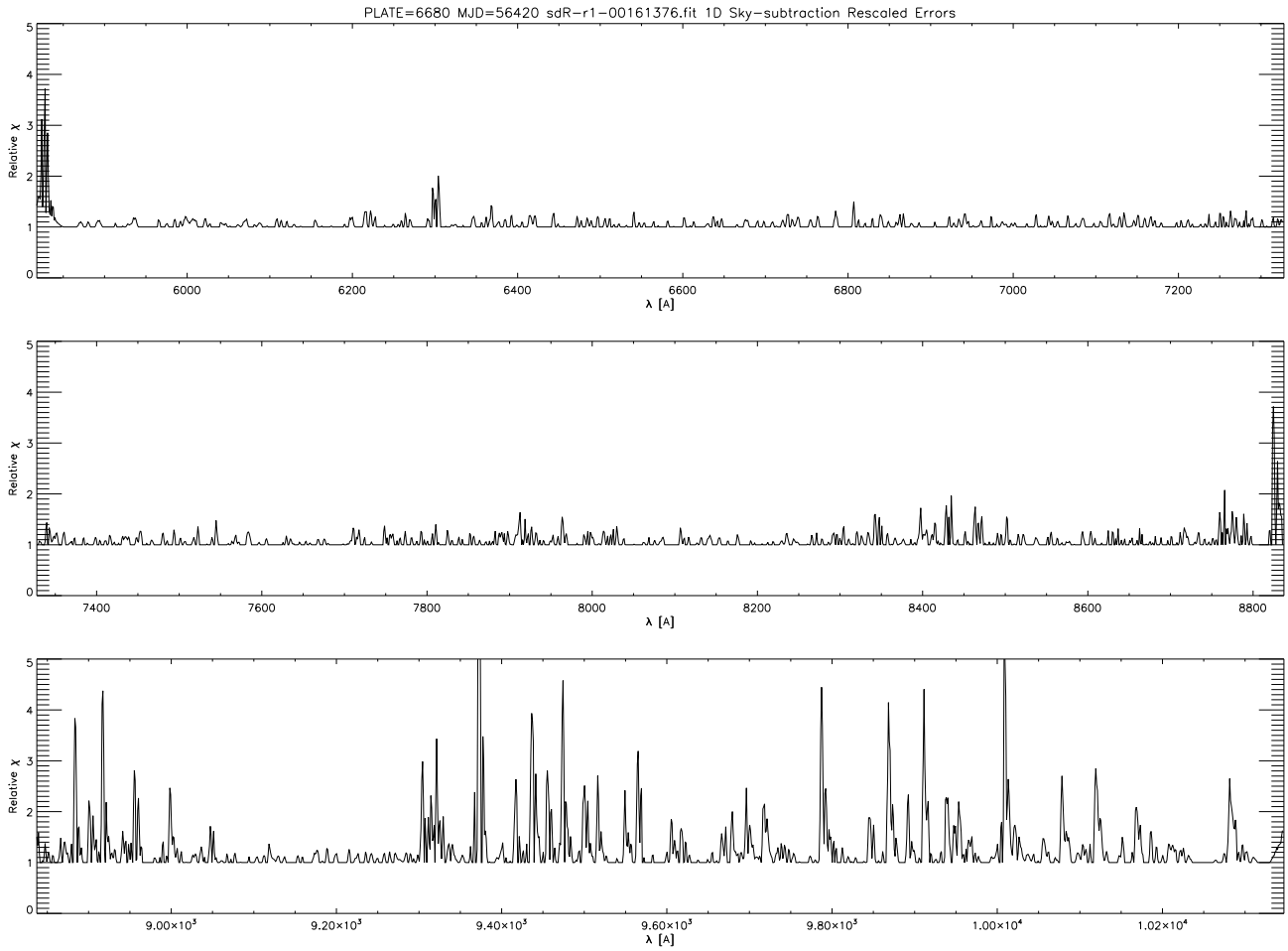

PLATE=6680 MJD=56420 Smooth superflat for sdR-r1-00161376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

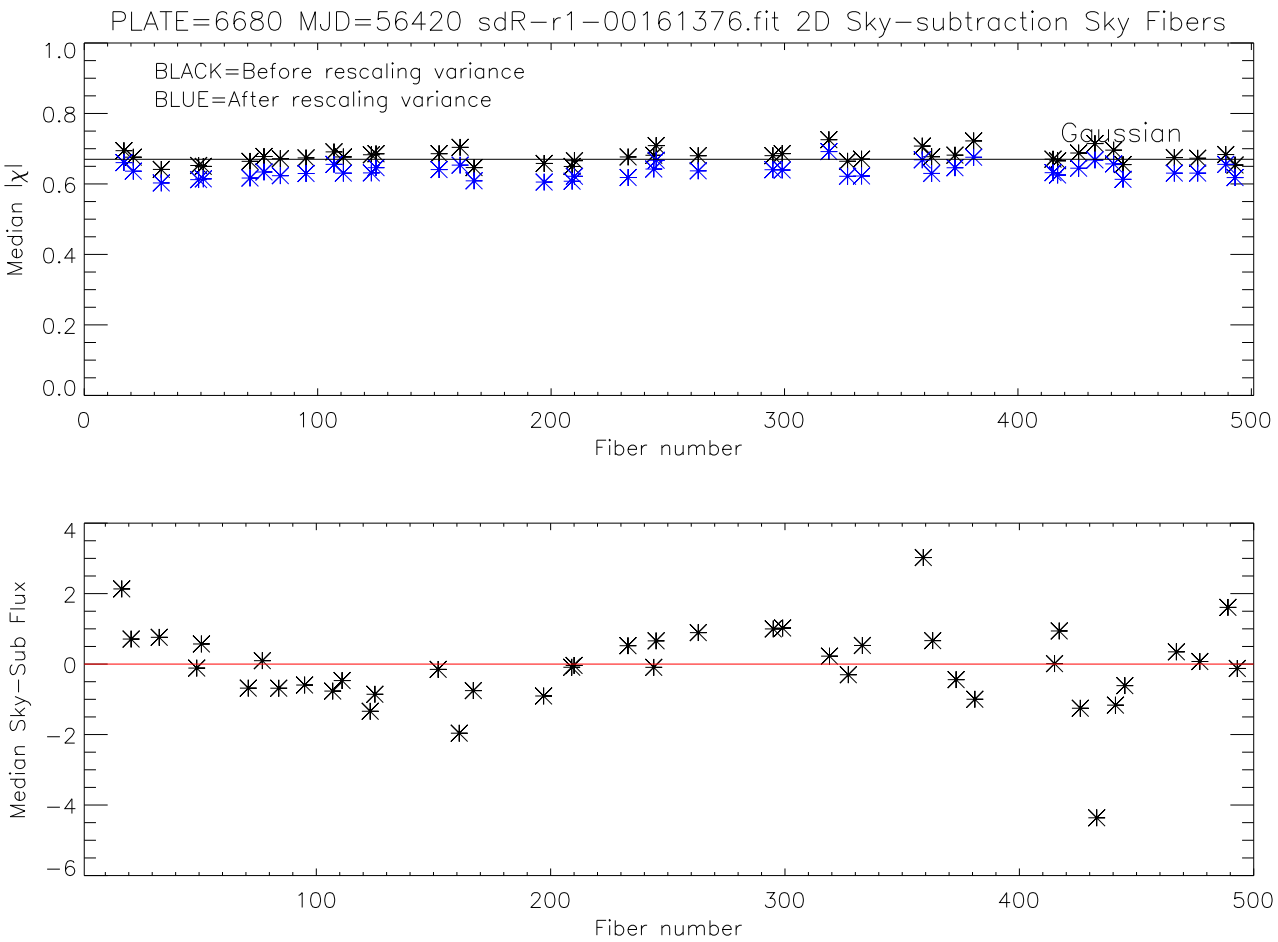

PLATE=6680 MJD=56420 sdR-r1-00161376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

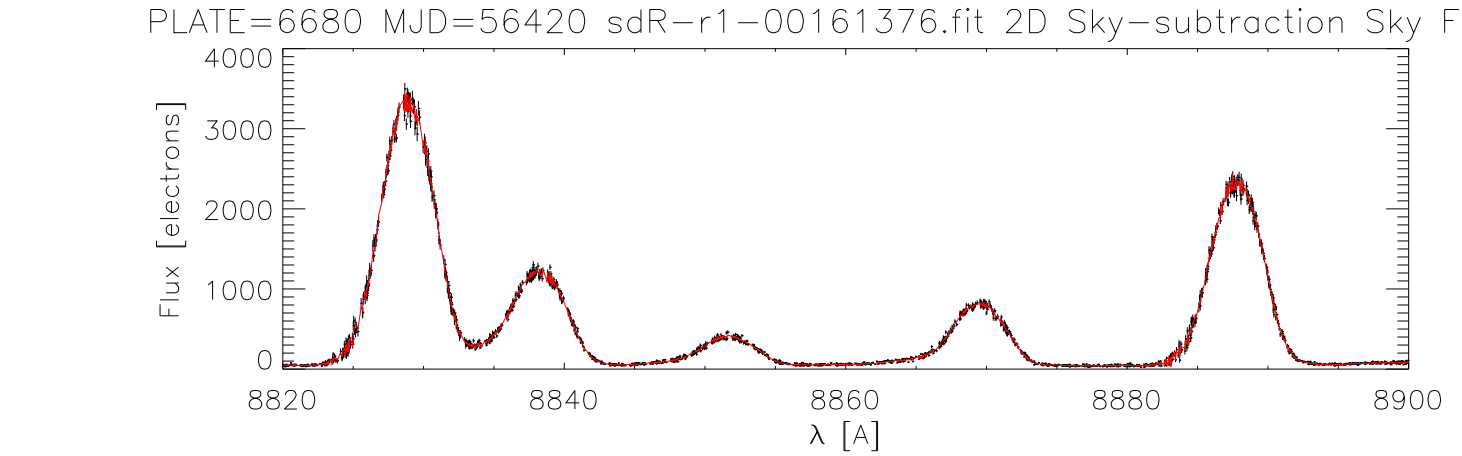

PLATE=6680 MJD=56420 sdR-r1-00161376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

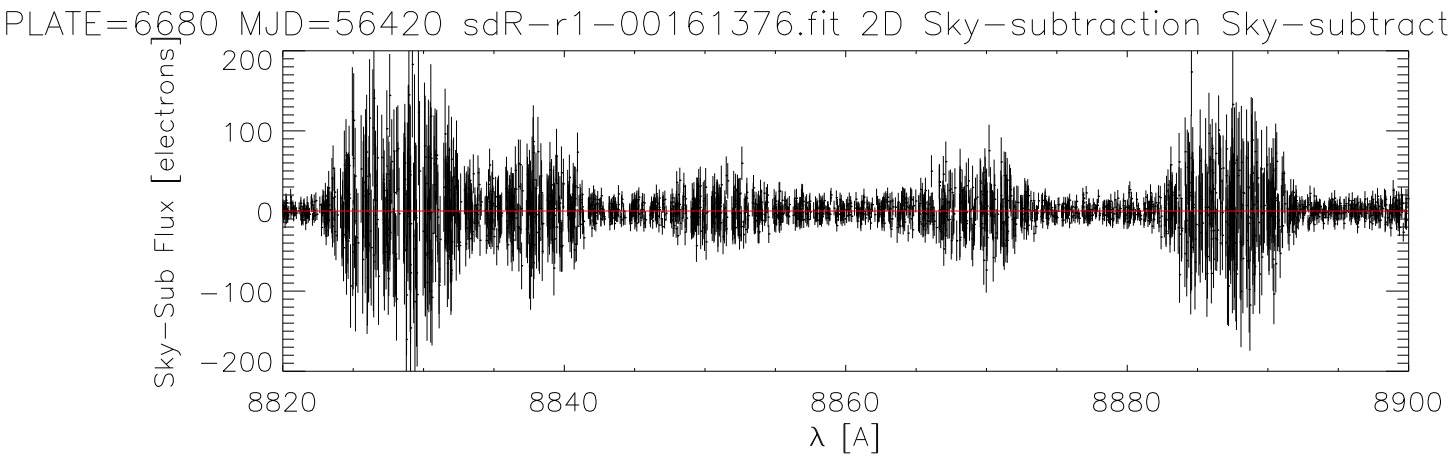

PLATE=6680 MJD=56420 sdR-r1-00161376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 42

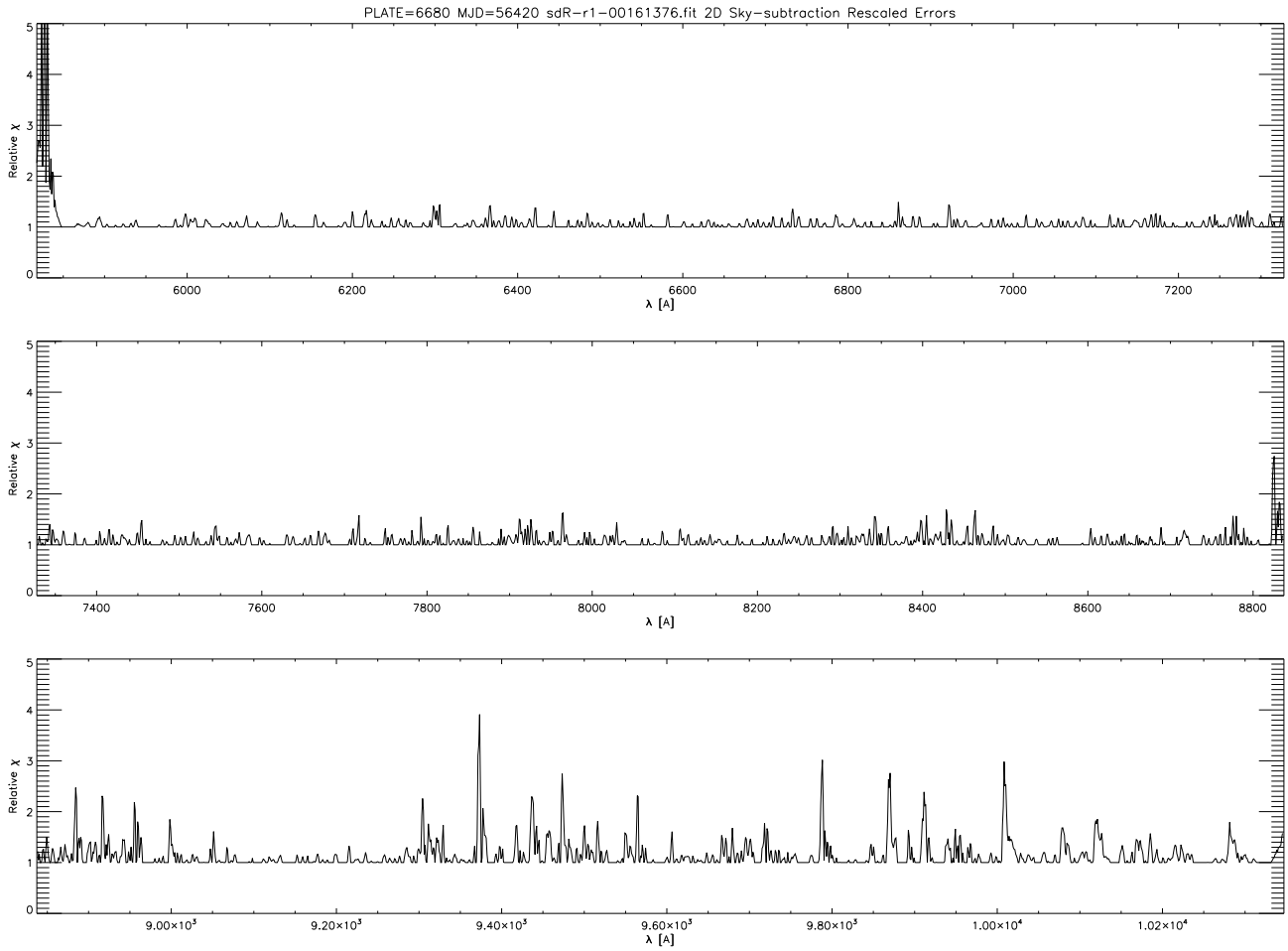


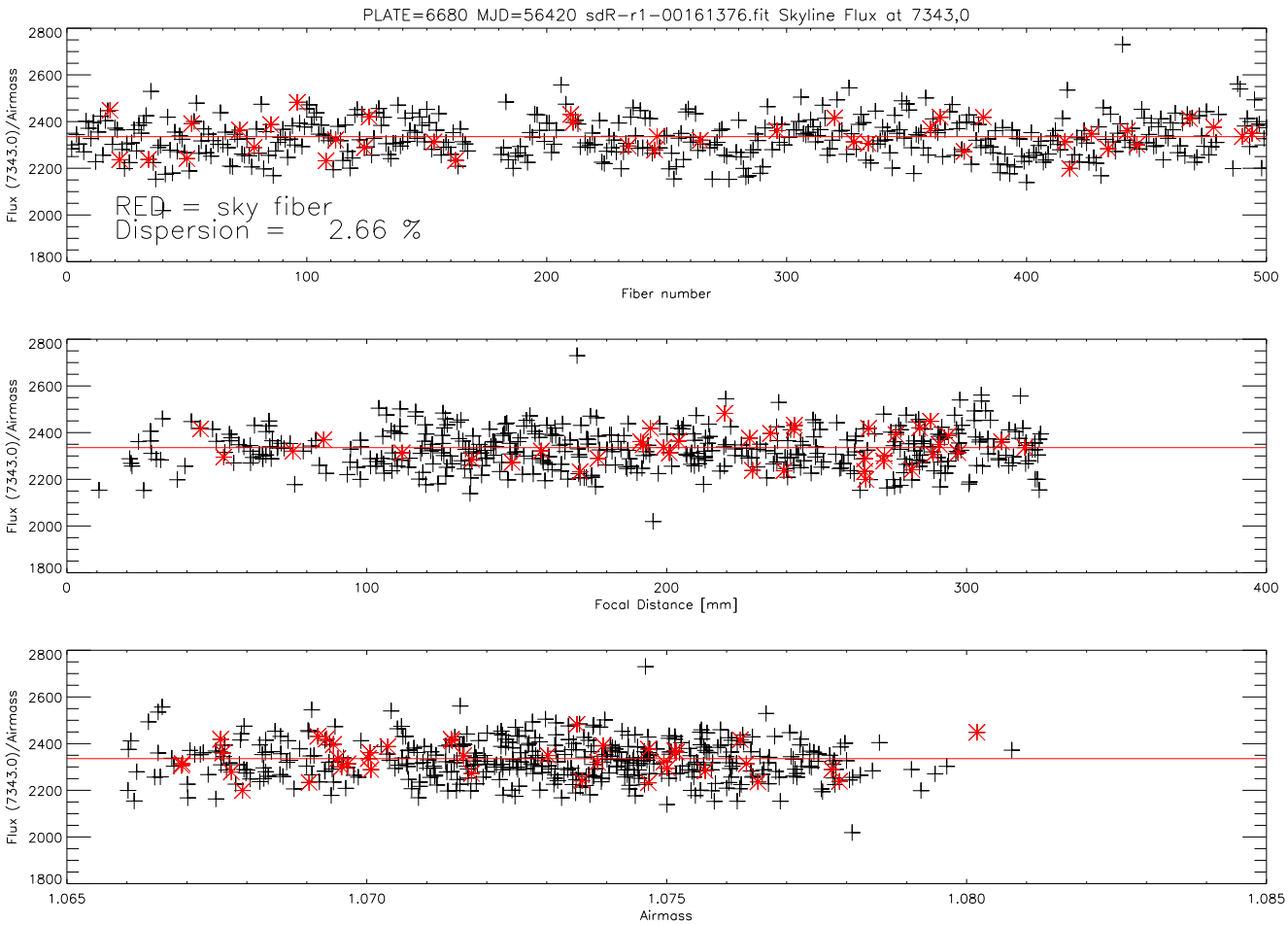

PLATE=6680 MJD=56420 sdR-r1-00161376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

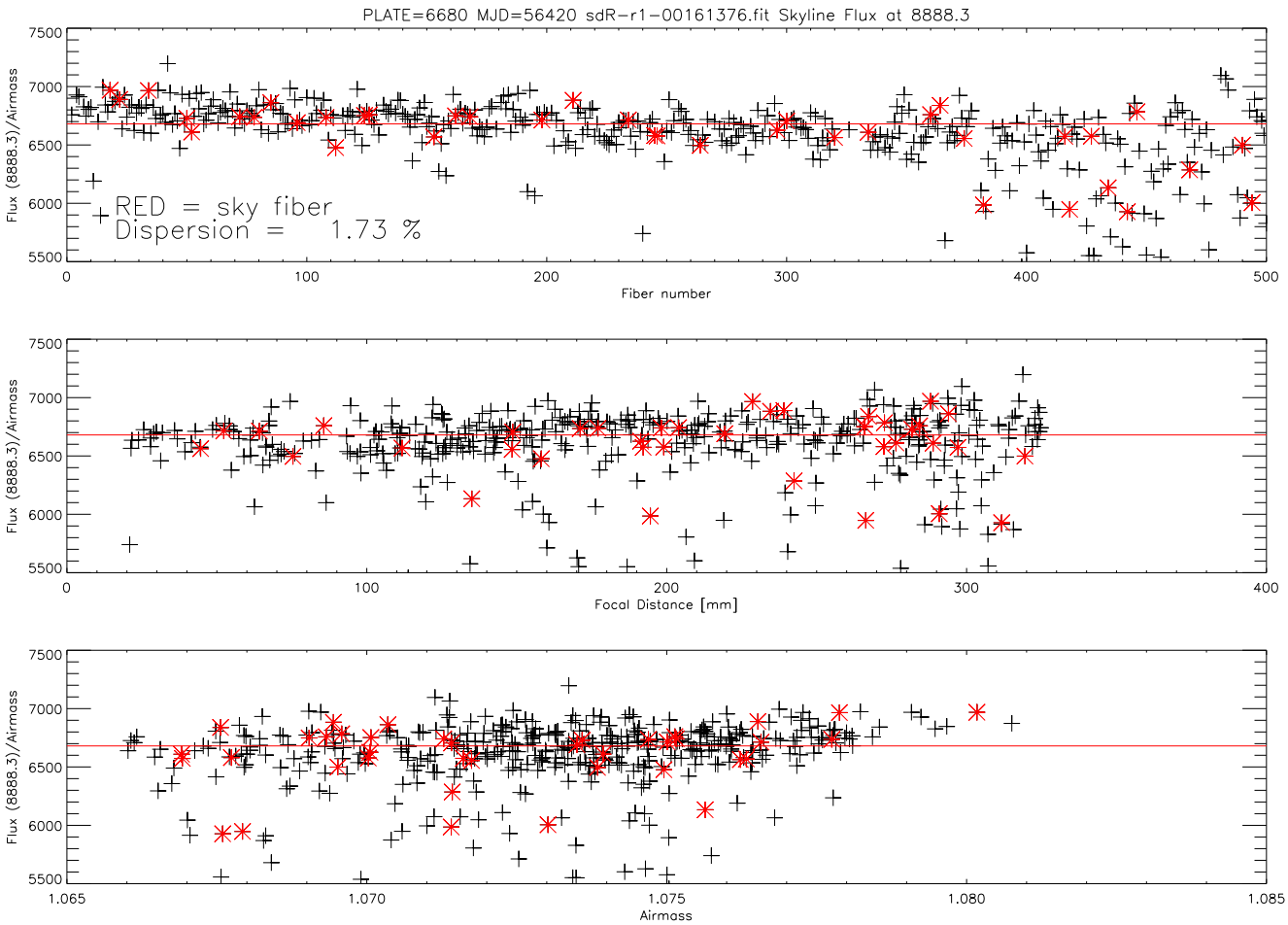

PLATE=6680 MJD=56420 sdR-r1-00161376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

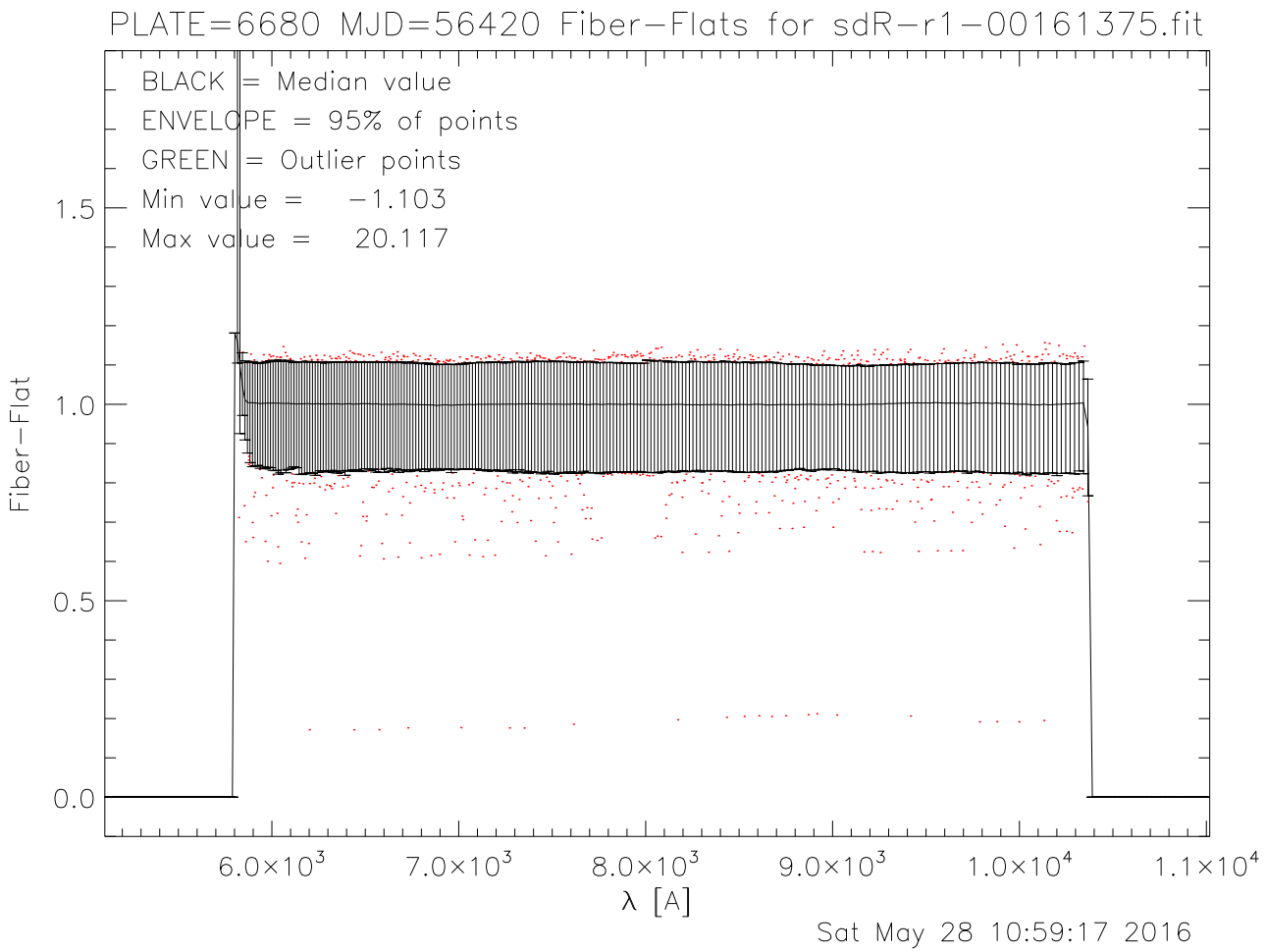

PLATE=6680 MJD=56420 sdR-r1-00161376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

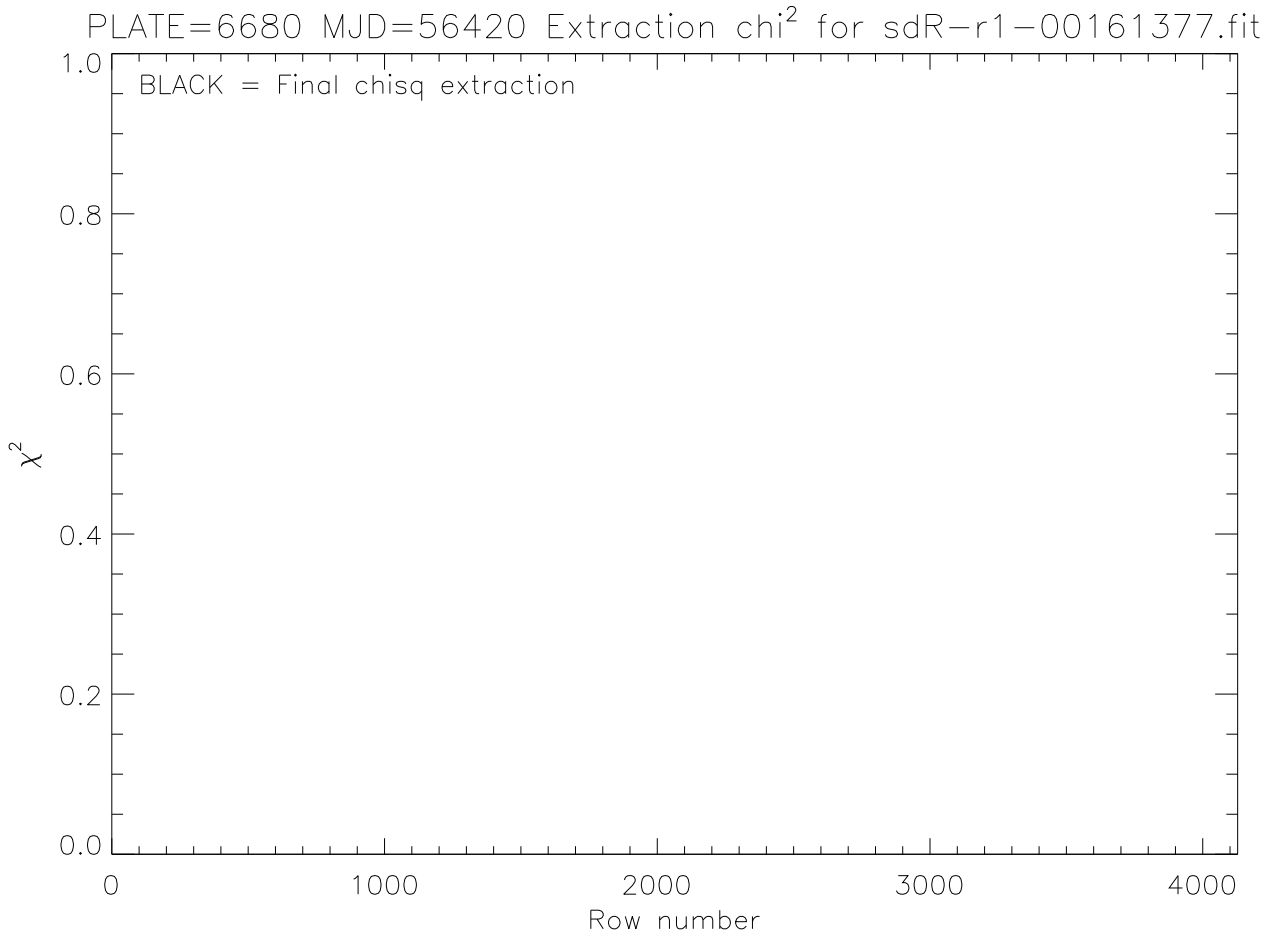
Number of sky fibers = 42

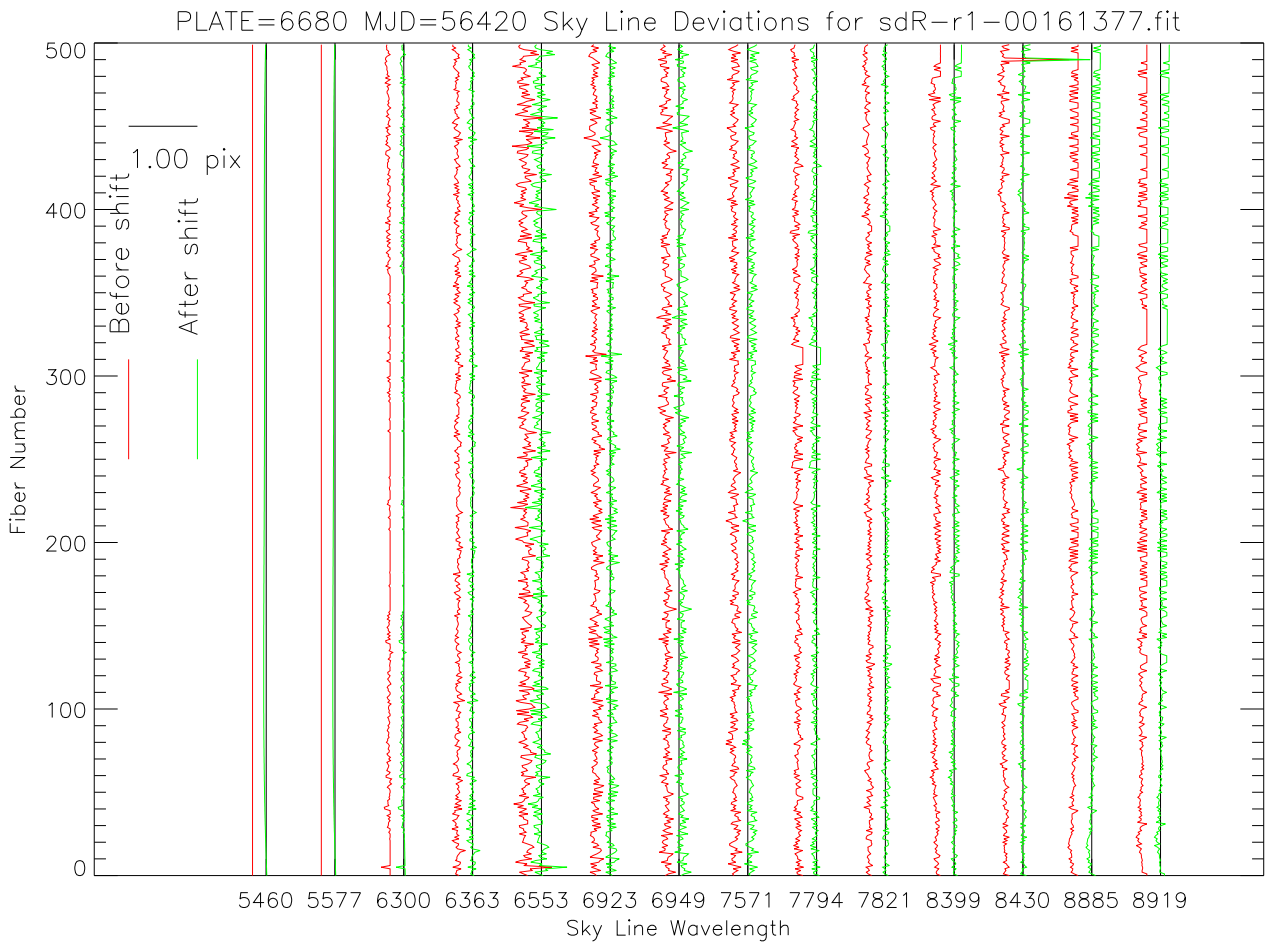


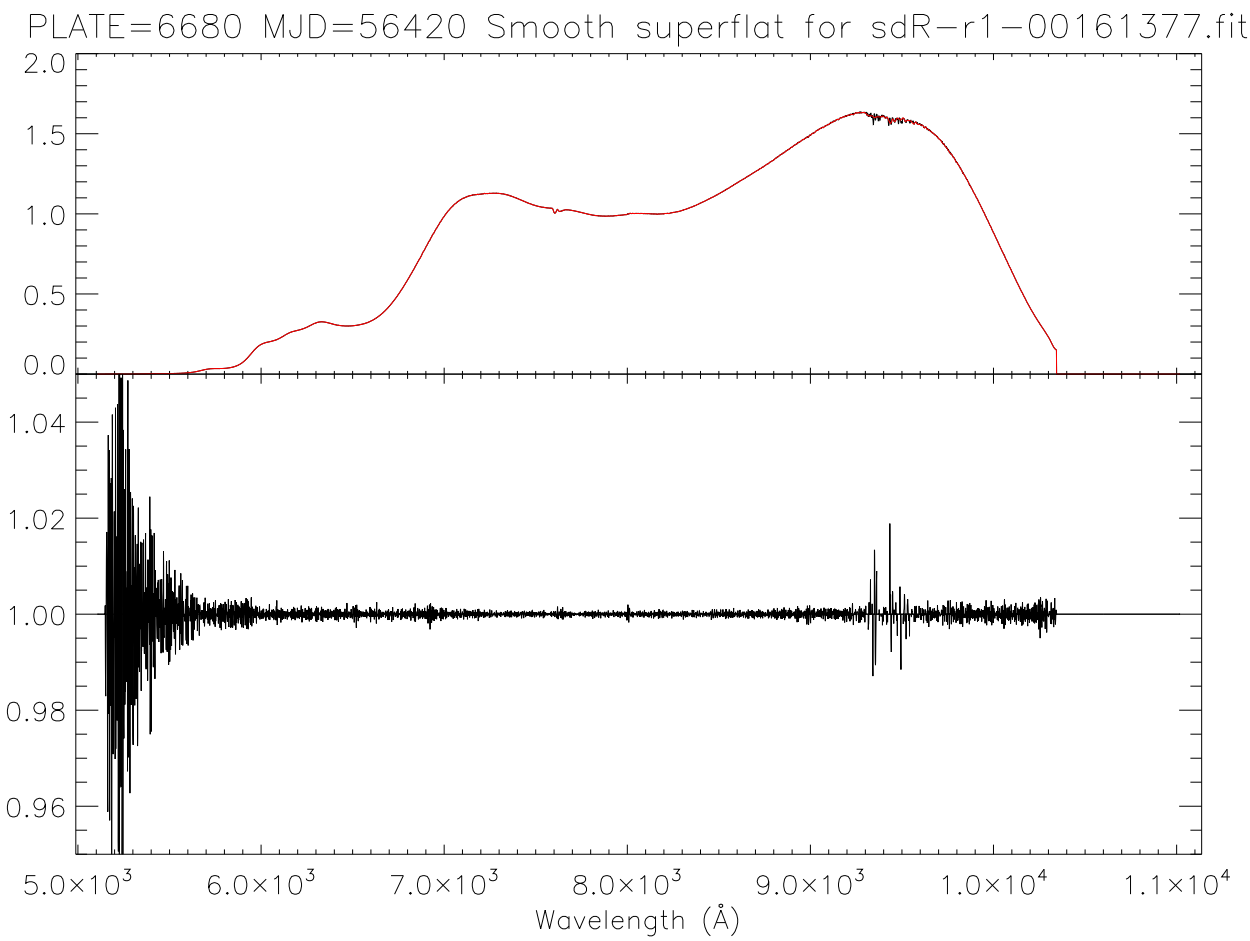

PLATE=6680 MJD=56420 sdR-r1-00161376.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.66 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

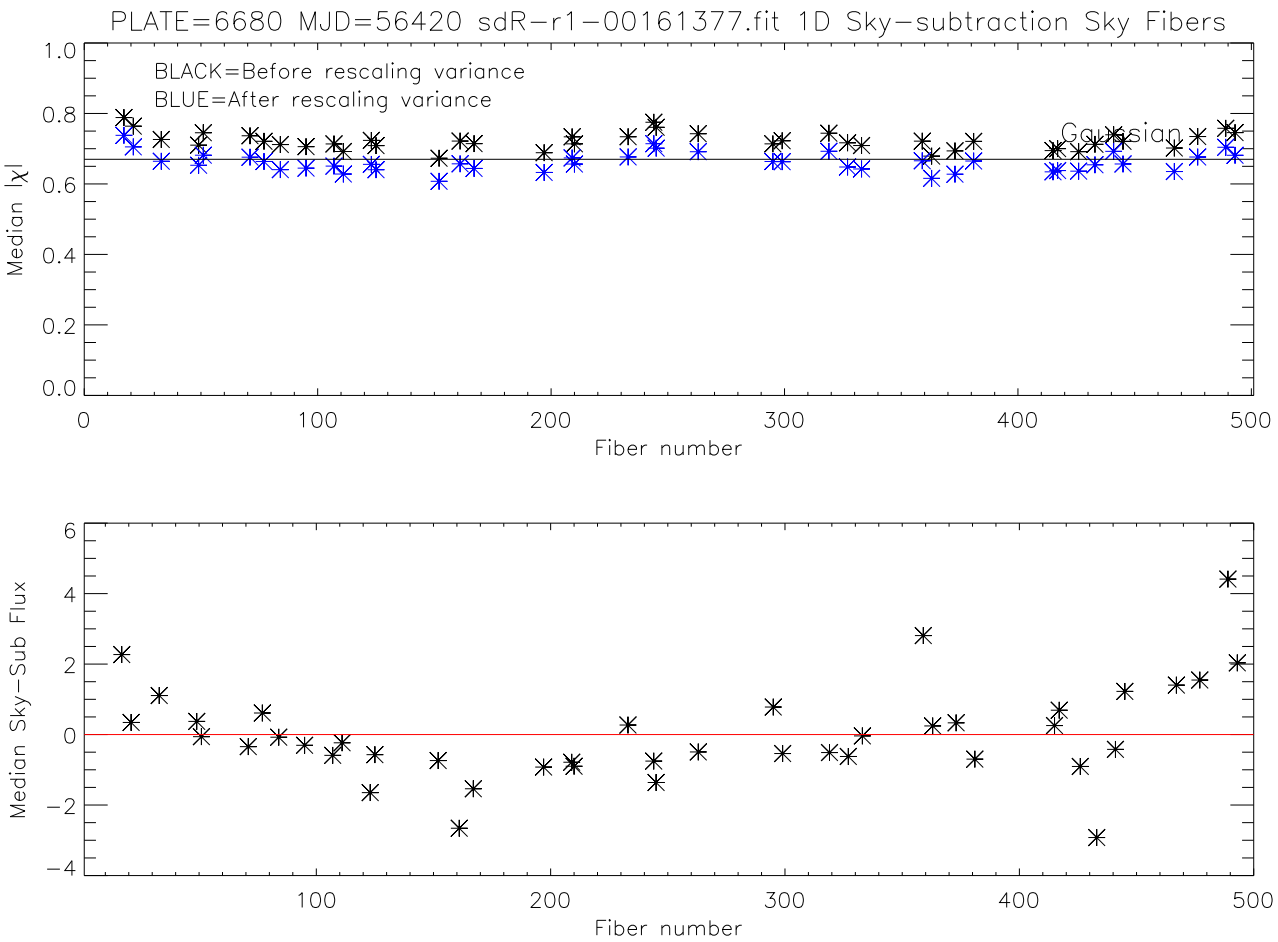

PLATE=6680 MJD=56420 sdR-r1-00161376.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.73 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

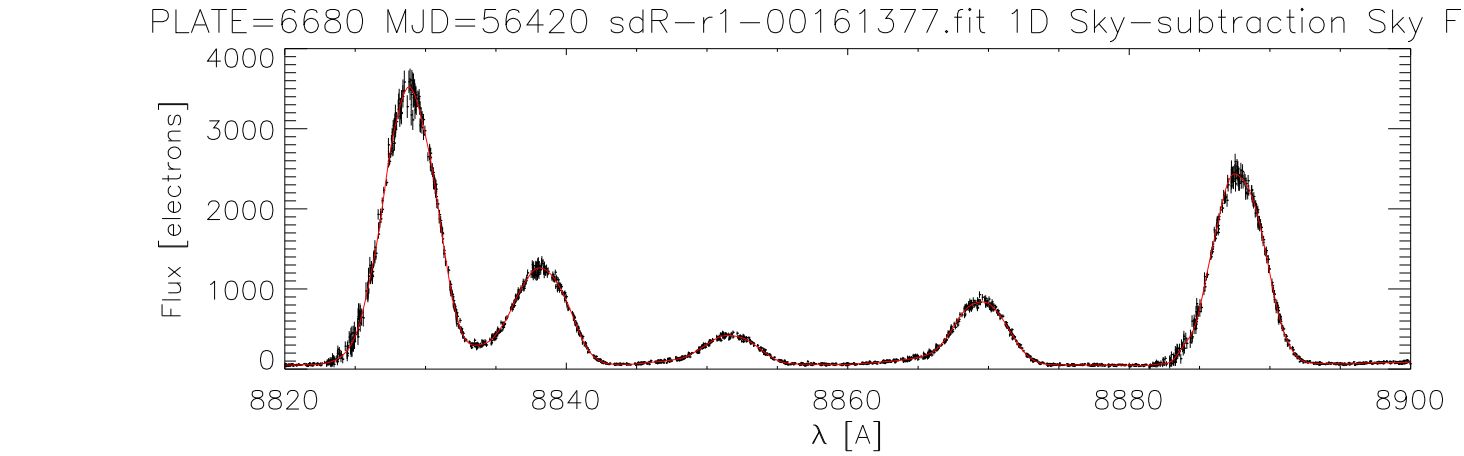

PLATE=6680 MJD=56420 Fiber−Flats for sdR−r1−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −1.103
Max value = 20.117
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 10:59:17 2016

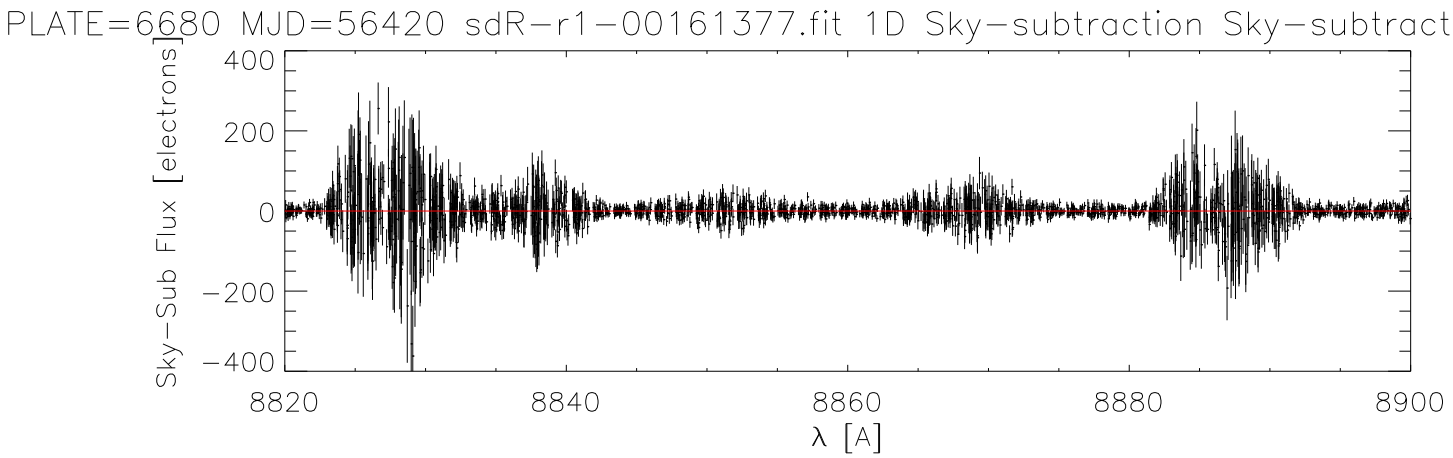

PLATE=6680 MJD=56420 Extraction chi^2 for sdR−r1−00161377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-r1-00161377.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

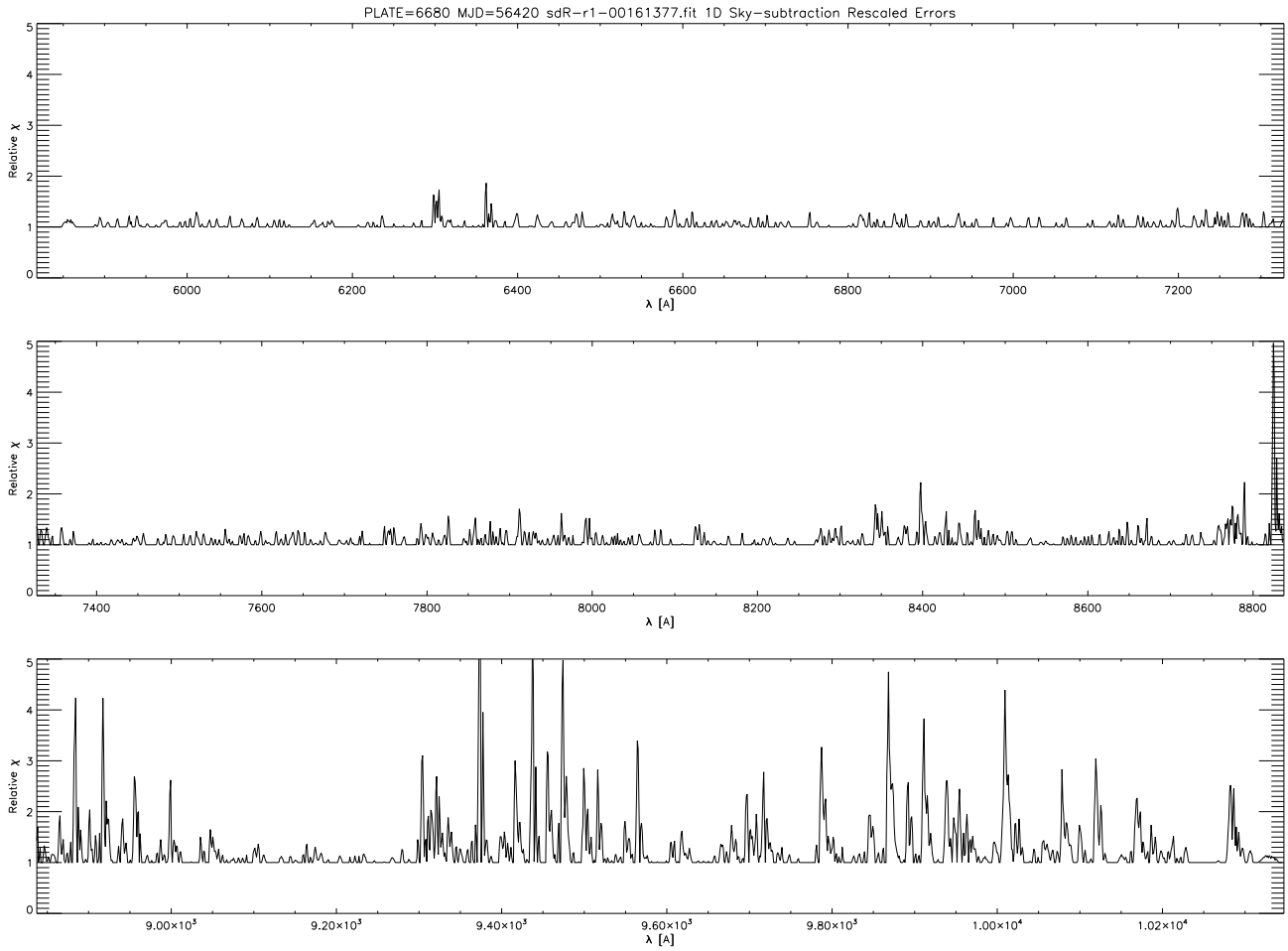

PLATE=6680 MJD=56420 Smooth superflat for sdR-r1-00161377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

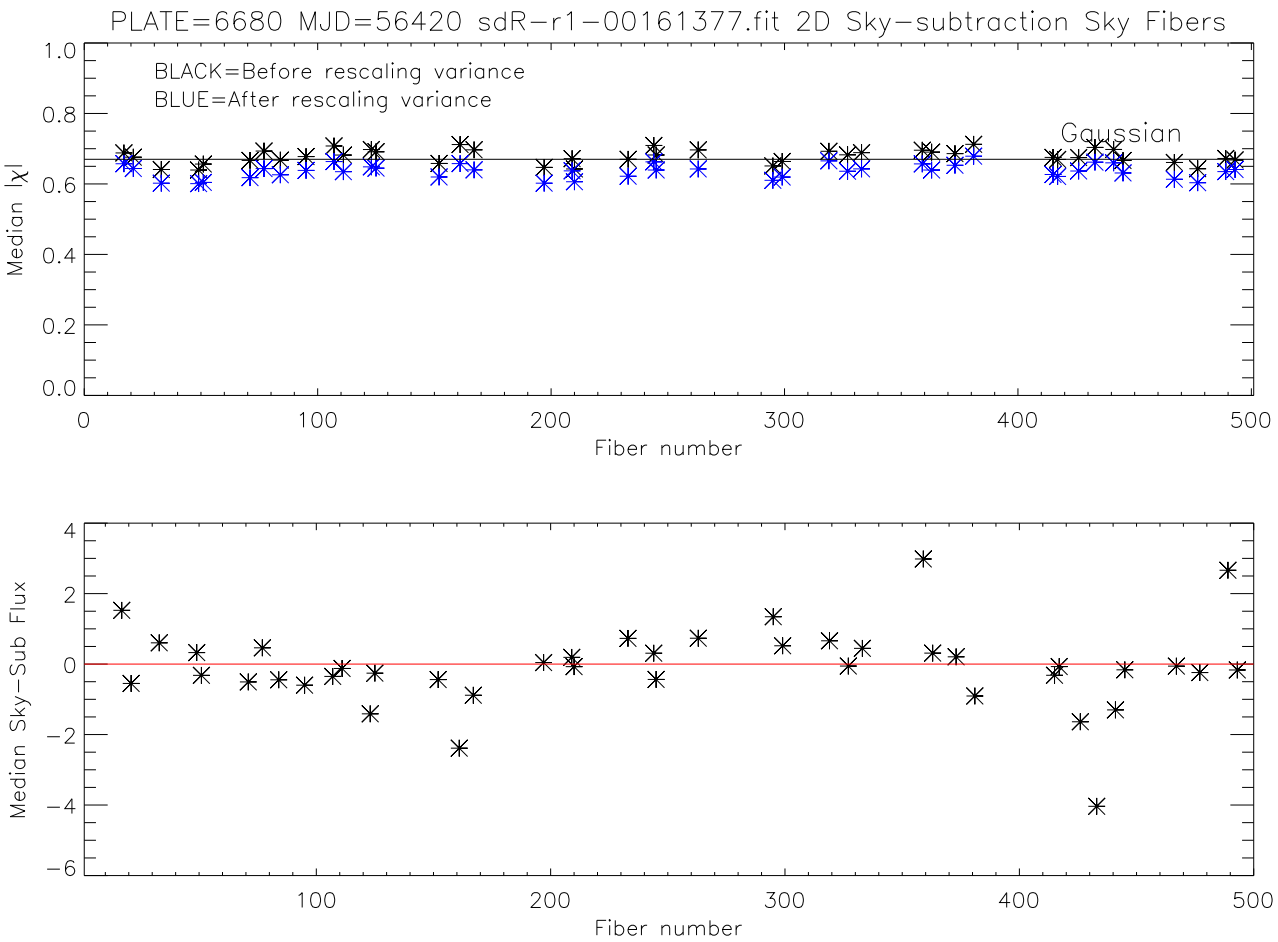

PLATE=6680 MJD=56420 sdR-r1-00161377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

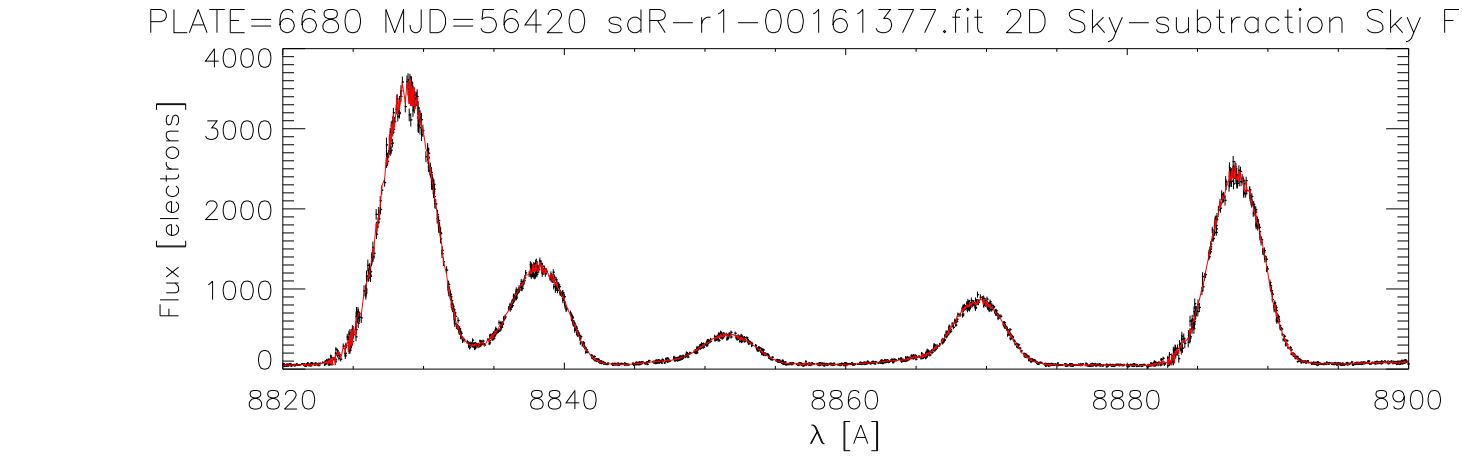

PLATE=6680 MJD=56420 sdR-r1-00161377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

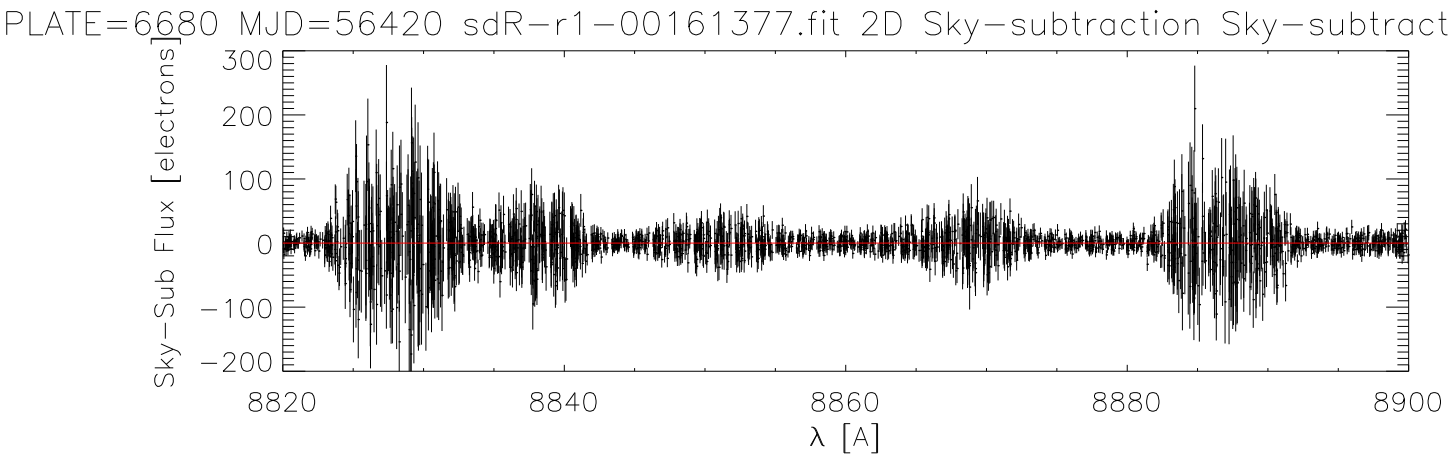

PLATE=6680 MJD=56420 sdR-r1-00161377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 42

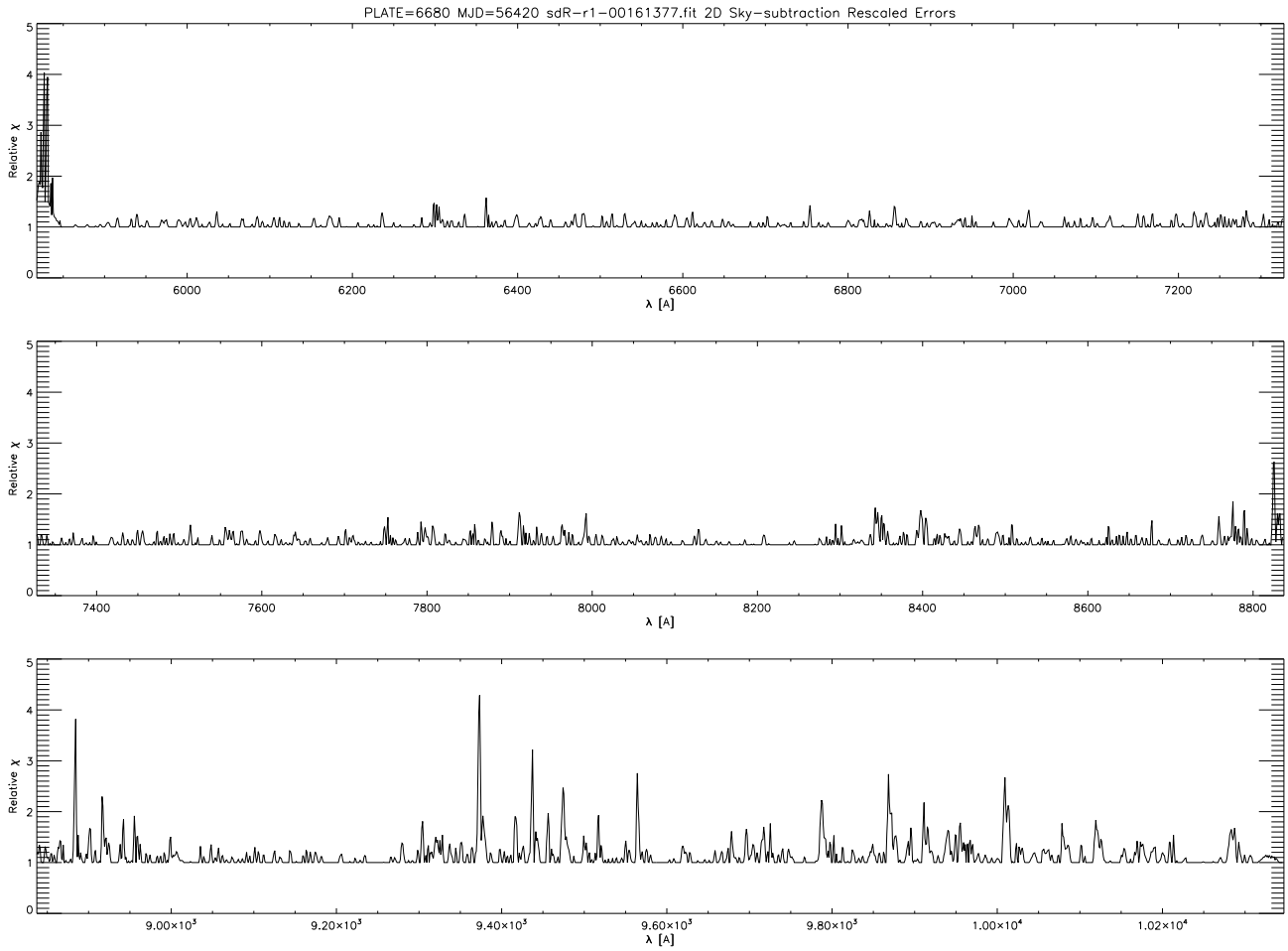


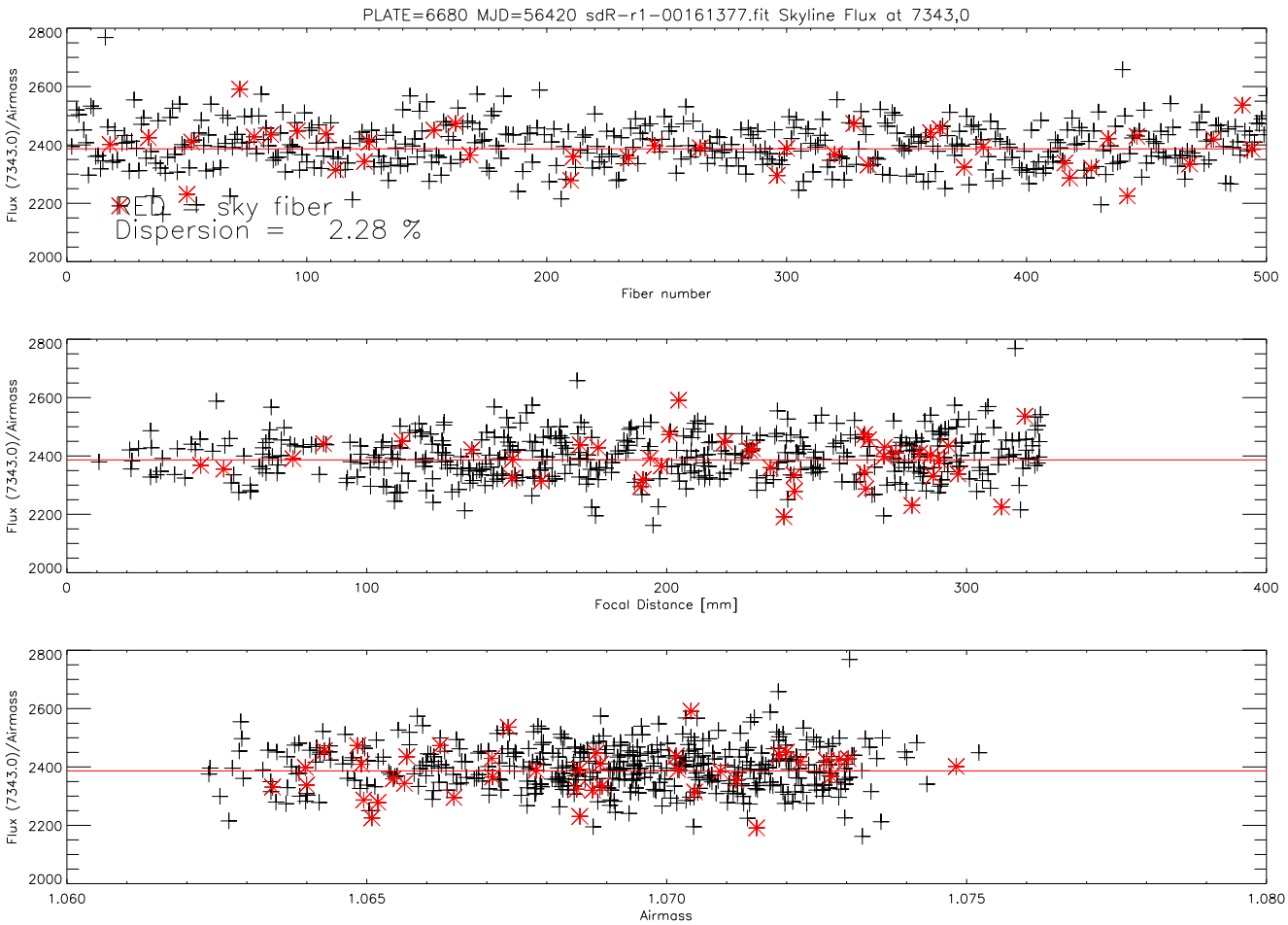

PLATE=6680 MJD=56420 sdR-r1-00161377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

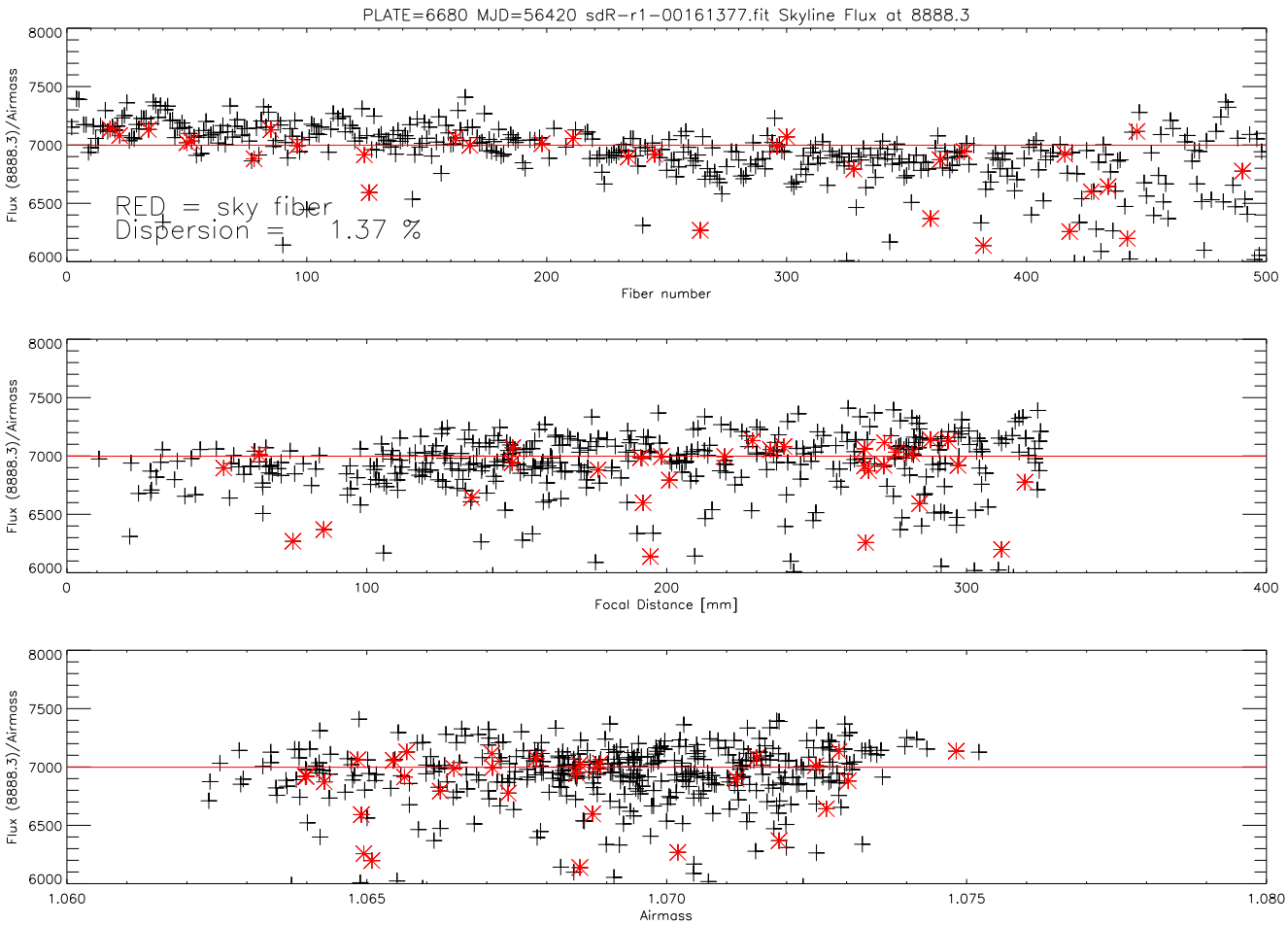

PLATE=6680 MJD=56420 sdR-r1-00161377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

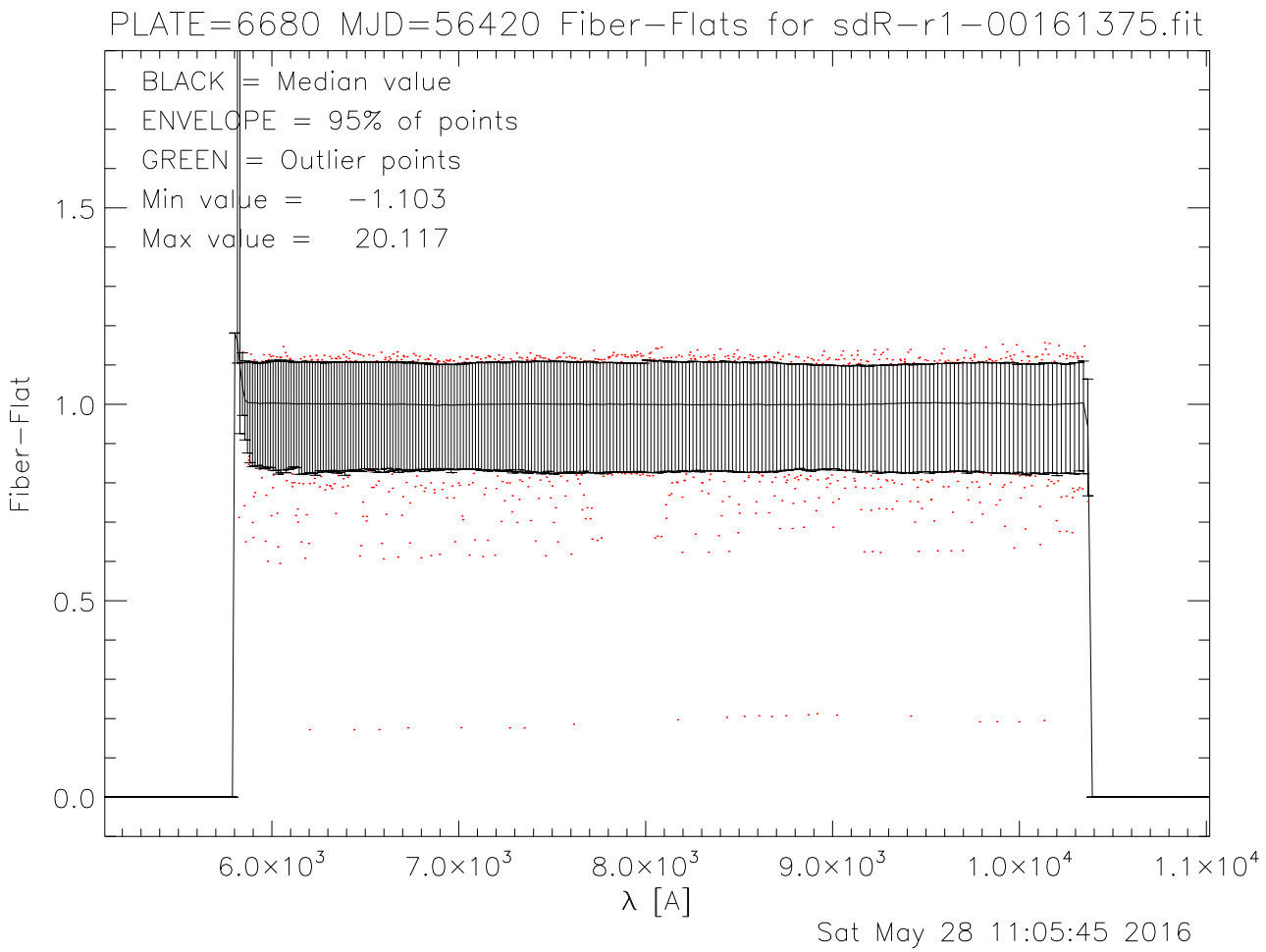

PLATE=6680 MJD=56420 sdR-r1-00161377.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

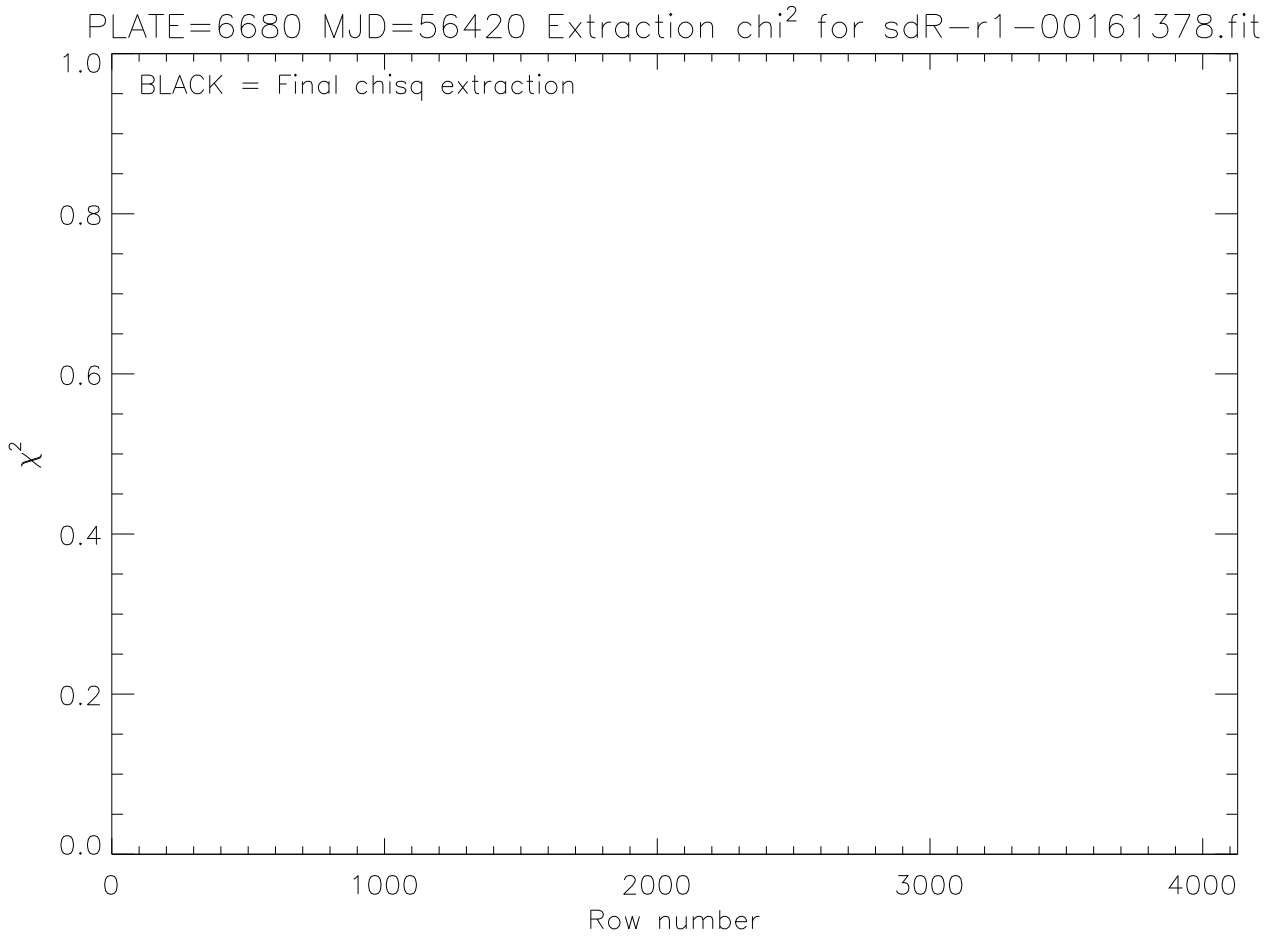
Number of sky fibers = 42

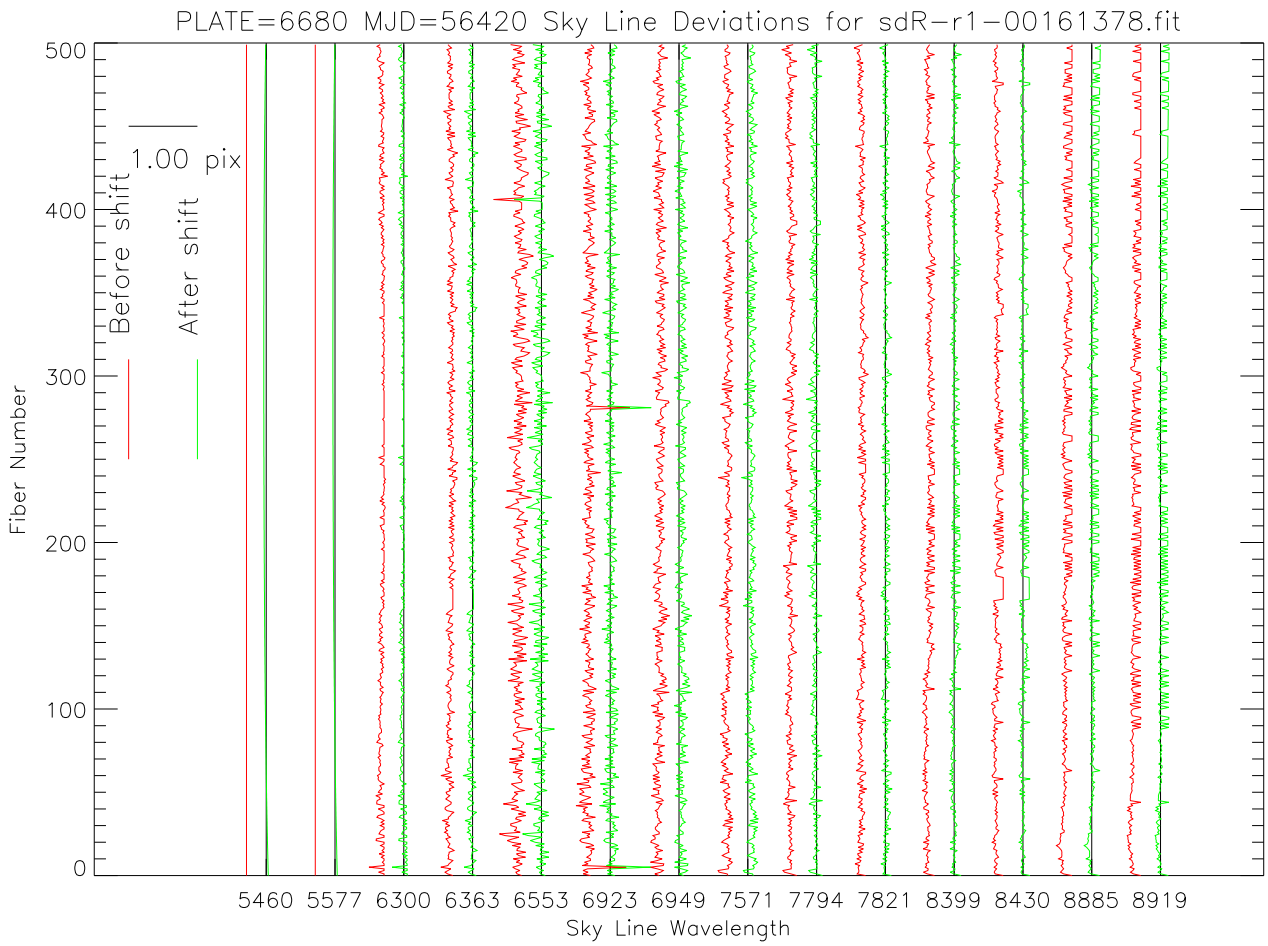


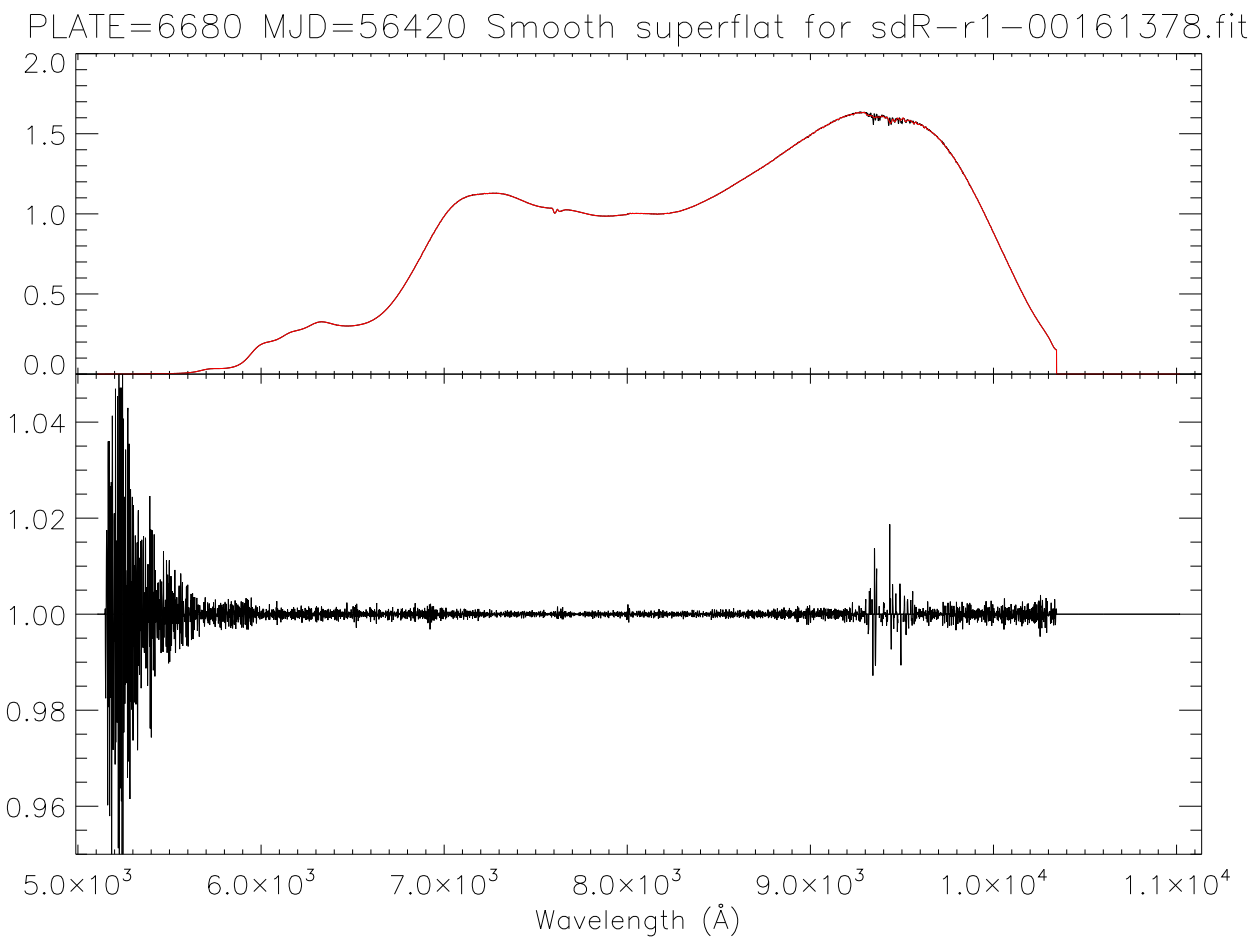

PLATE=6680 MJD=56420 sdR-r1-00161377.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 2.28 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

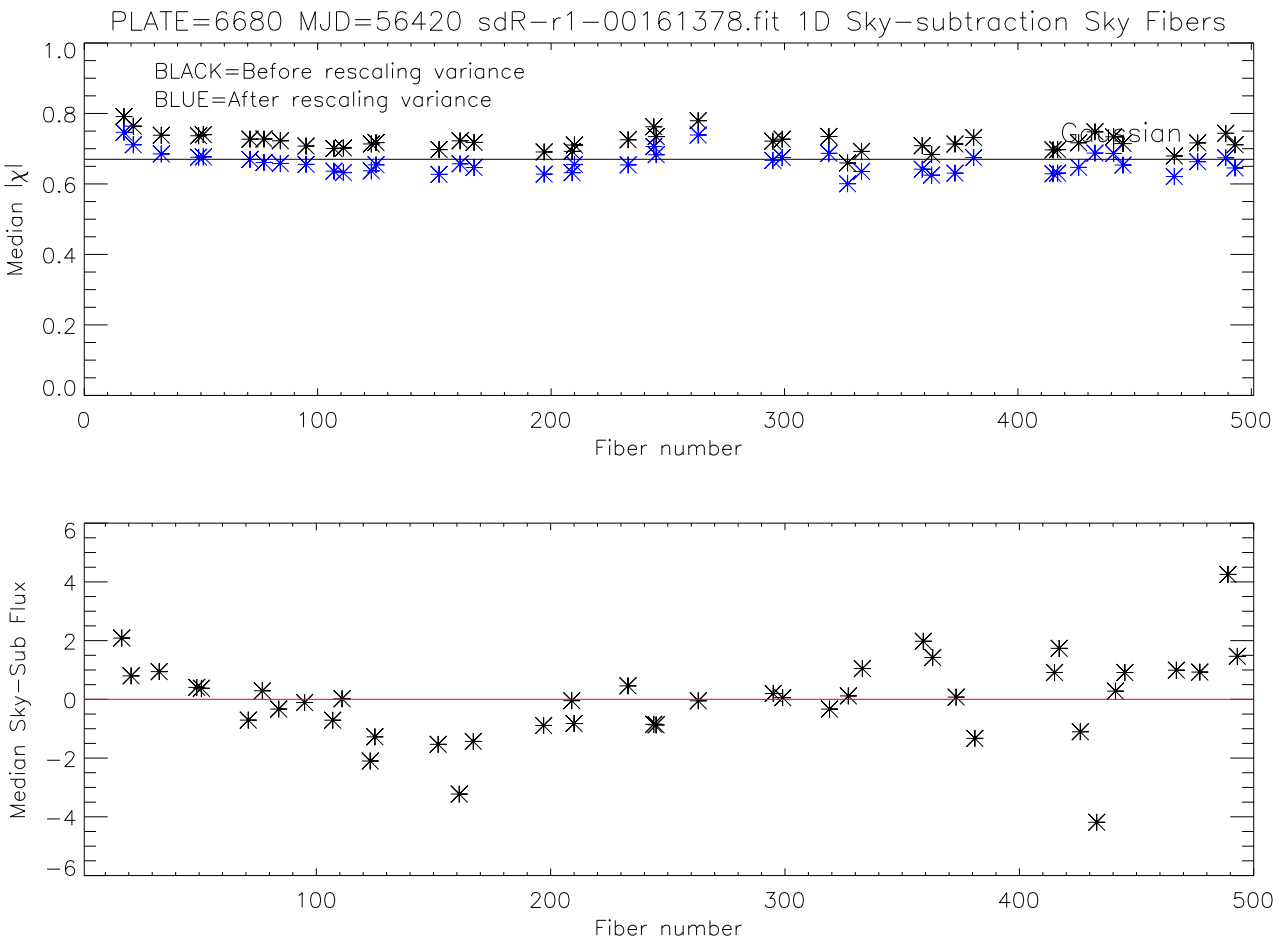

PLATE=6680 MJD=56420 sdR-r1-00161377.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.37 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

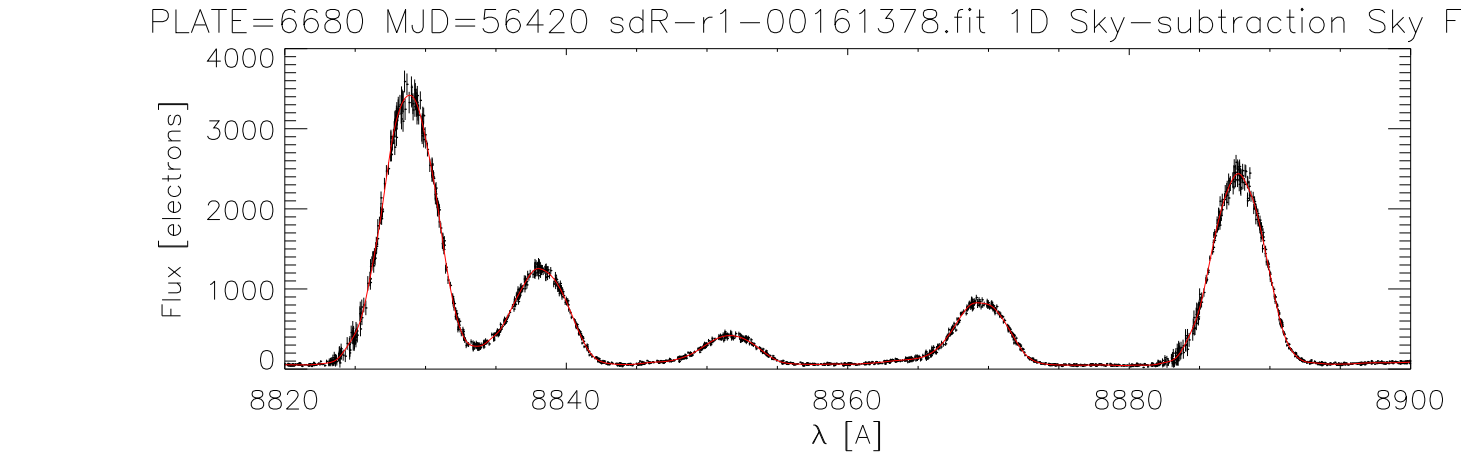

PLATE=6680 MJD=56420 Fiber−Flats for sdR−r1−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −1.103
Max value = 20.117
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 11:05:45 2016

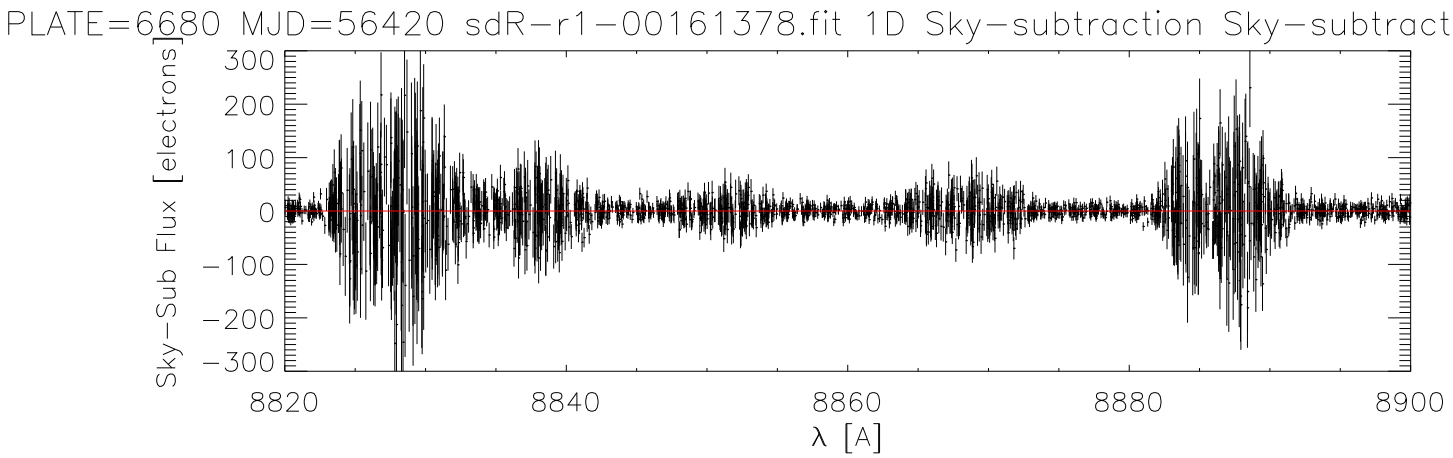

PLATE=6680 MJD=56420 Extraction chi^2 for sdR−r1−00161378.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-r1-00161378.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

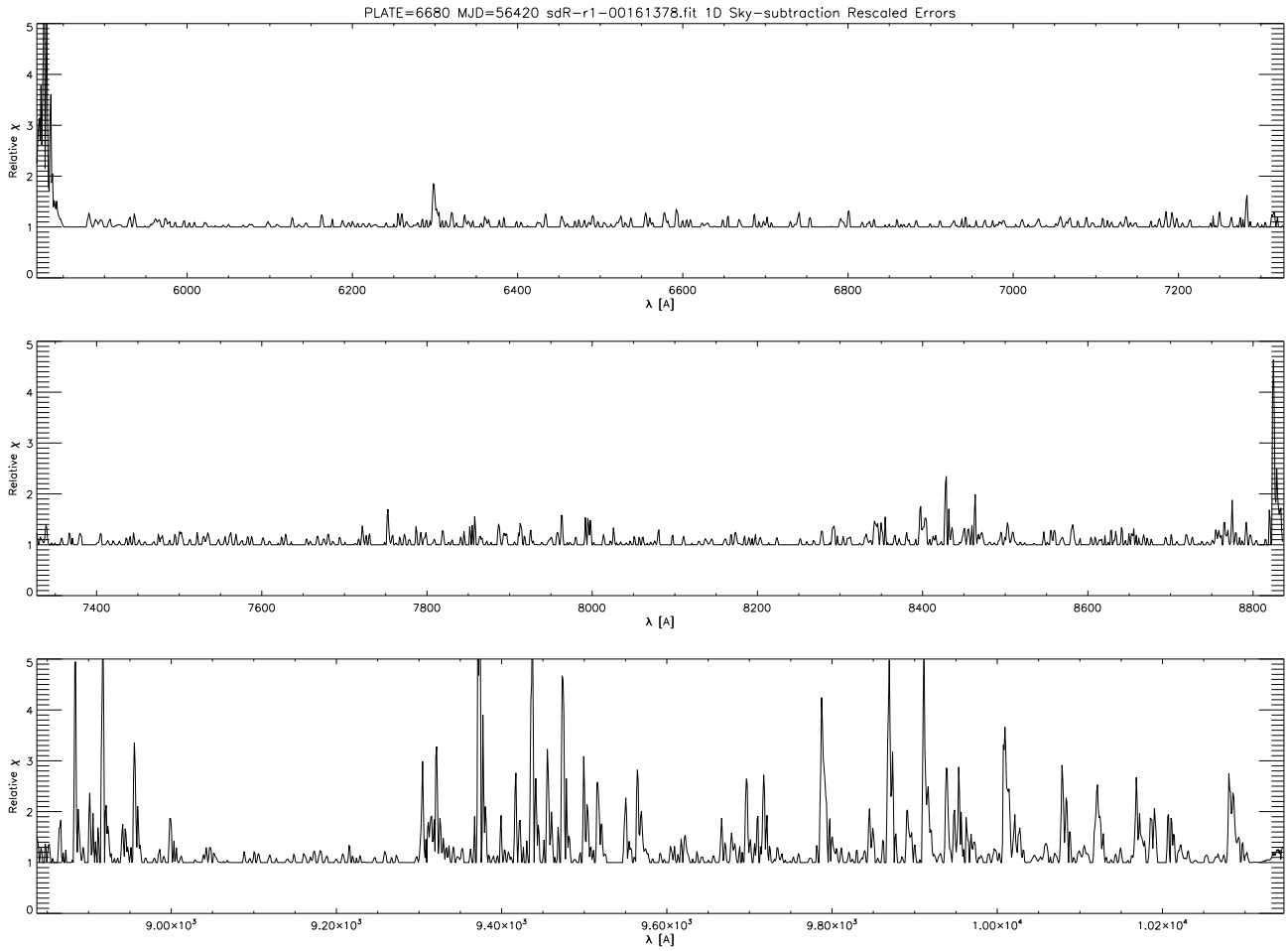

PLATE=6680 MJD=56420 Smooth superflat for sdR-r1-00161378.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

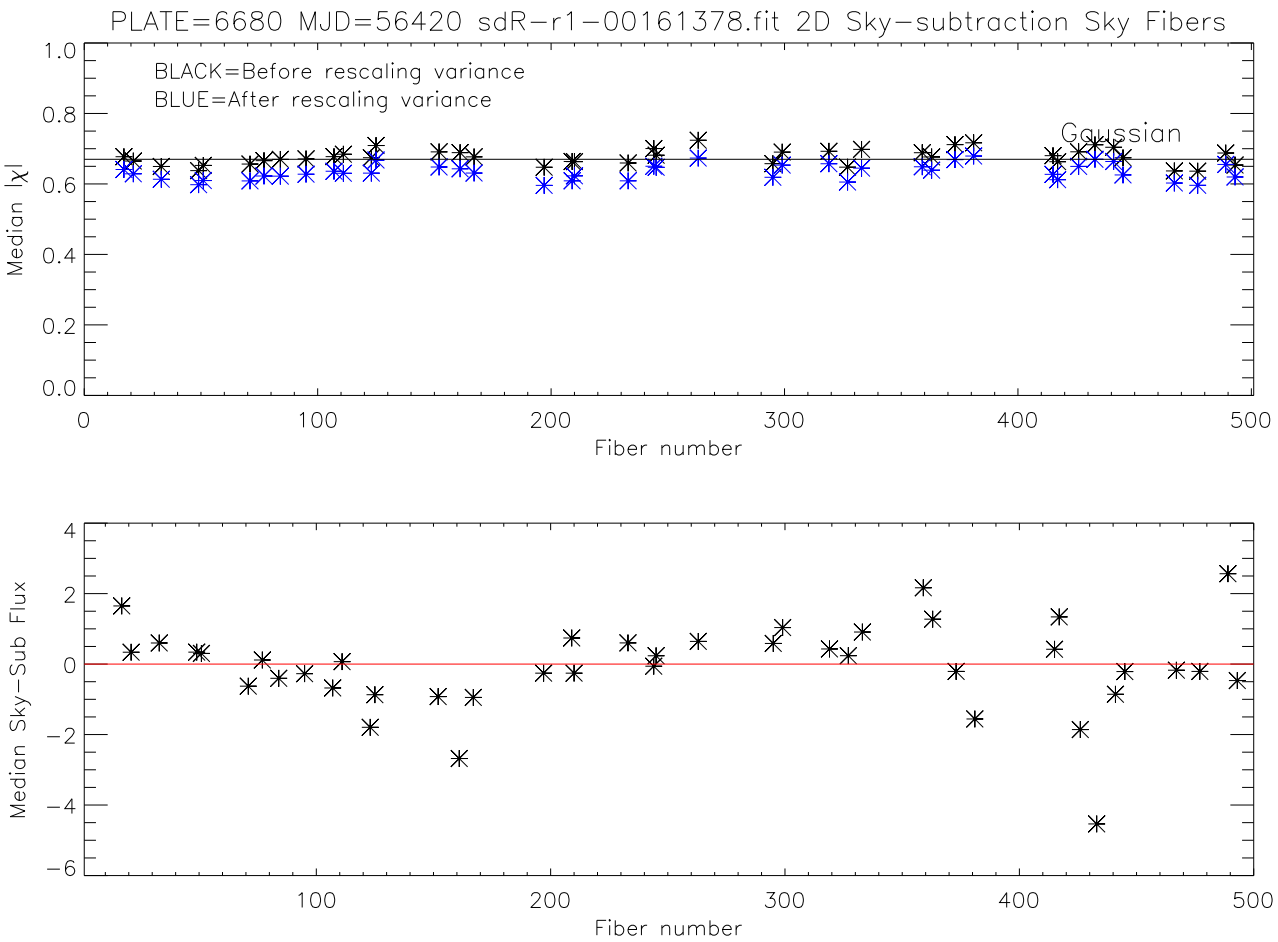

PLATE=6680 MJD=56420 sdR-r1-00161378.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=6680 MJD=56420 sdR-r1-00161378.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

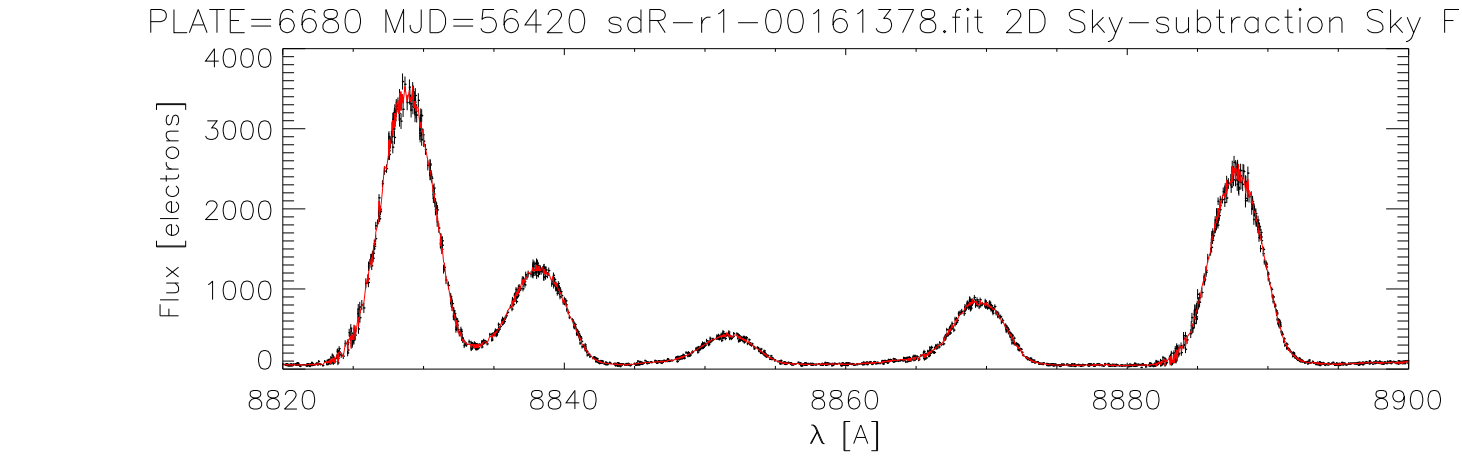

PLATE=6680 MJD=56420 sdR-r1-00161378.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

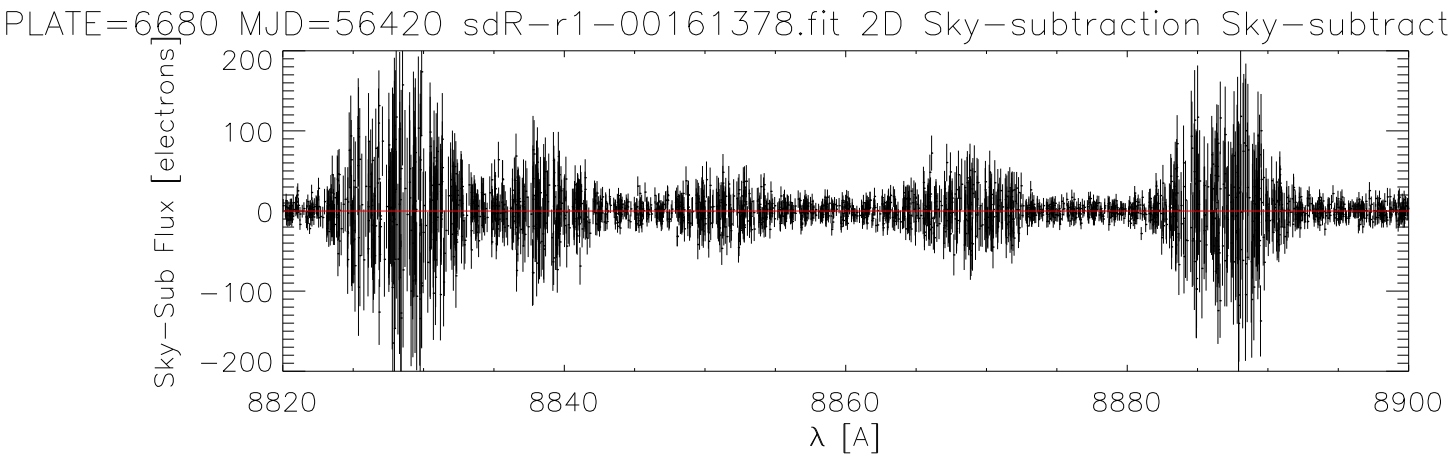
Number of sky fibers = 42



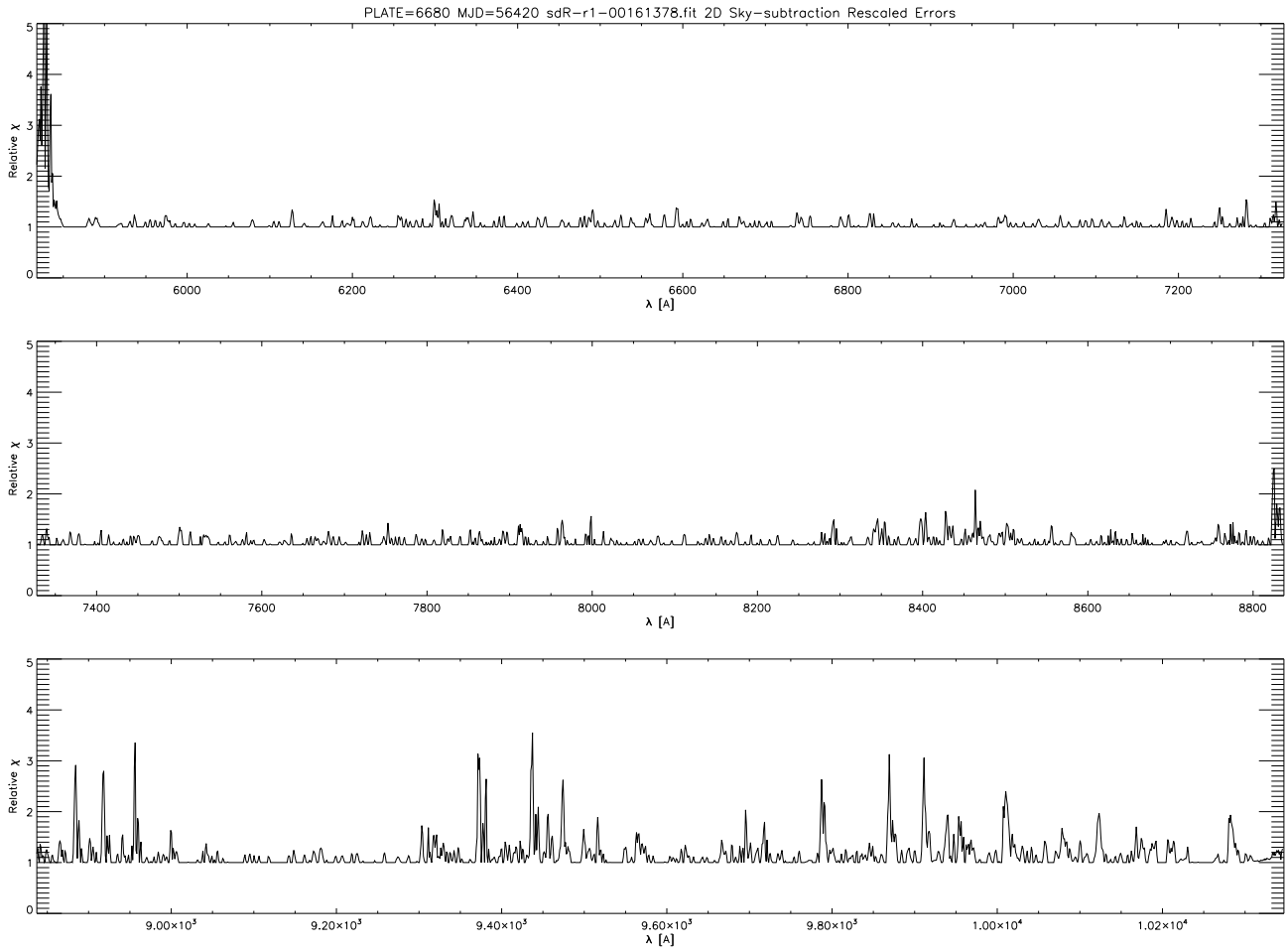

PLATE=6680 MJD=56420 sdR-r1-00161378.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number

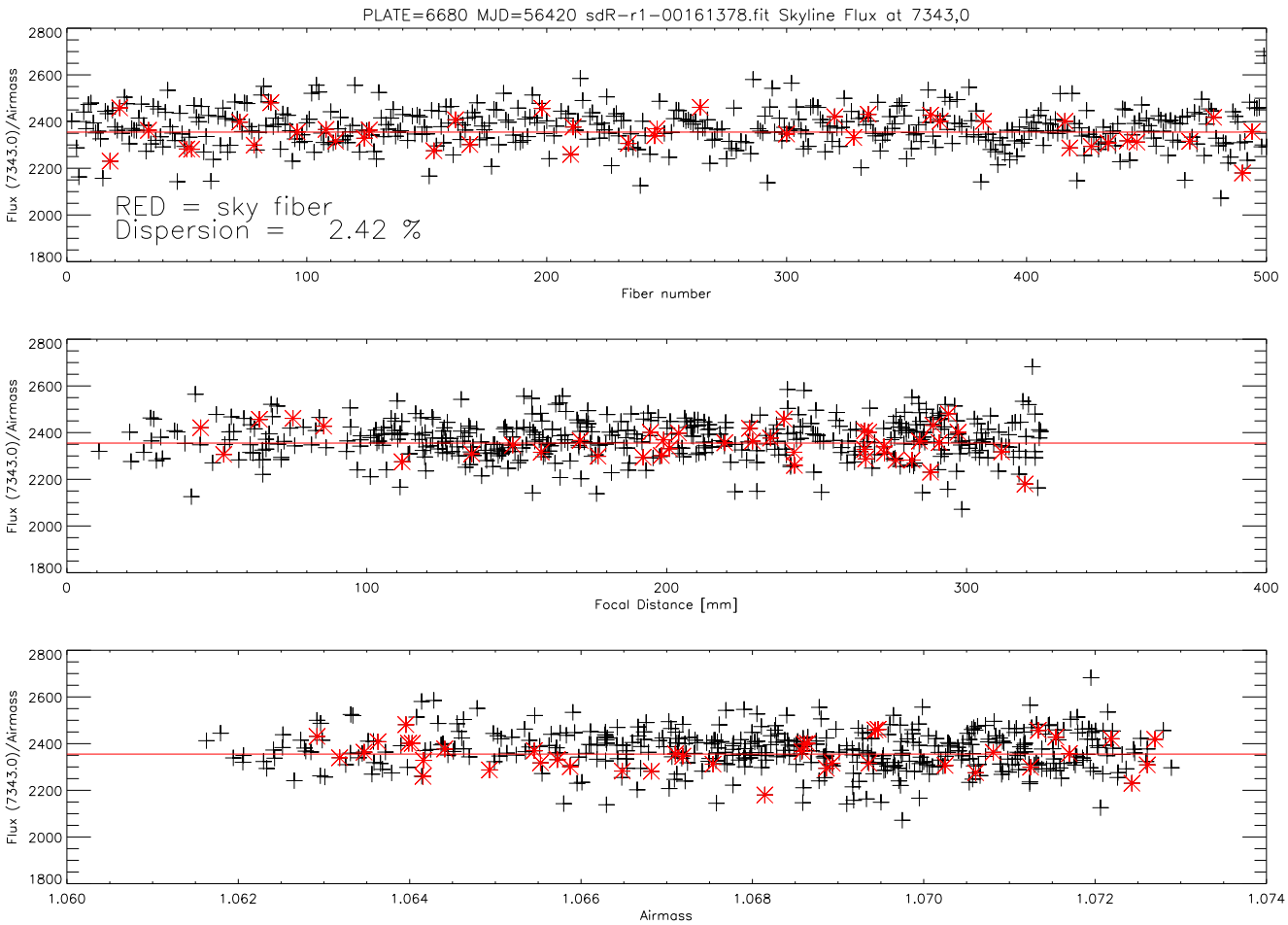
Median Sky-Sub Flux
Fiber number

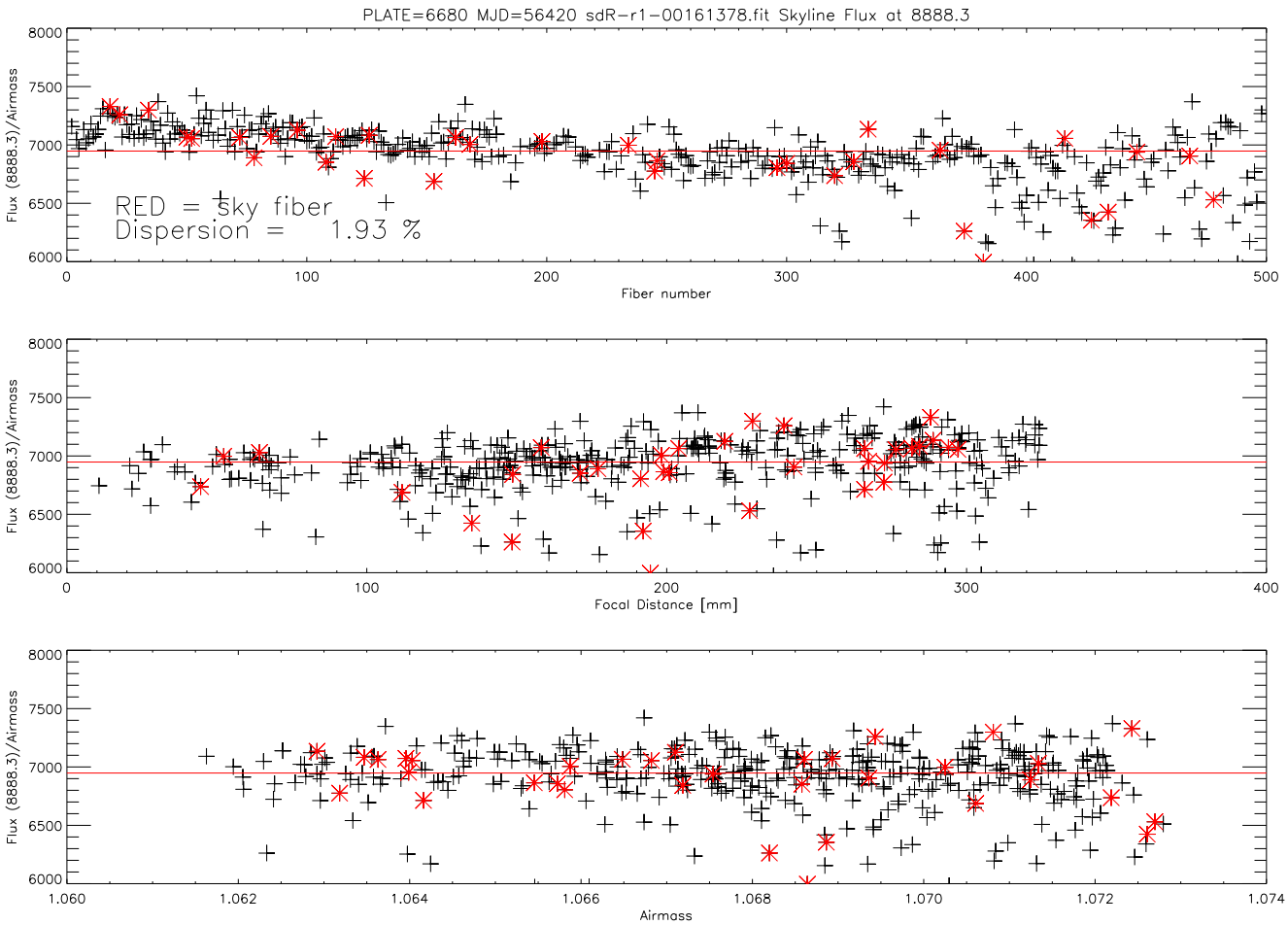

PLATE=6680 MJD=56420 sdR-r1-00161378.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=6680 MJD=56420 sdR-r1-00161378.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

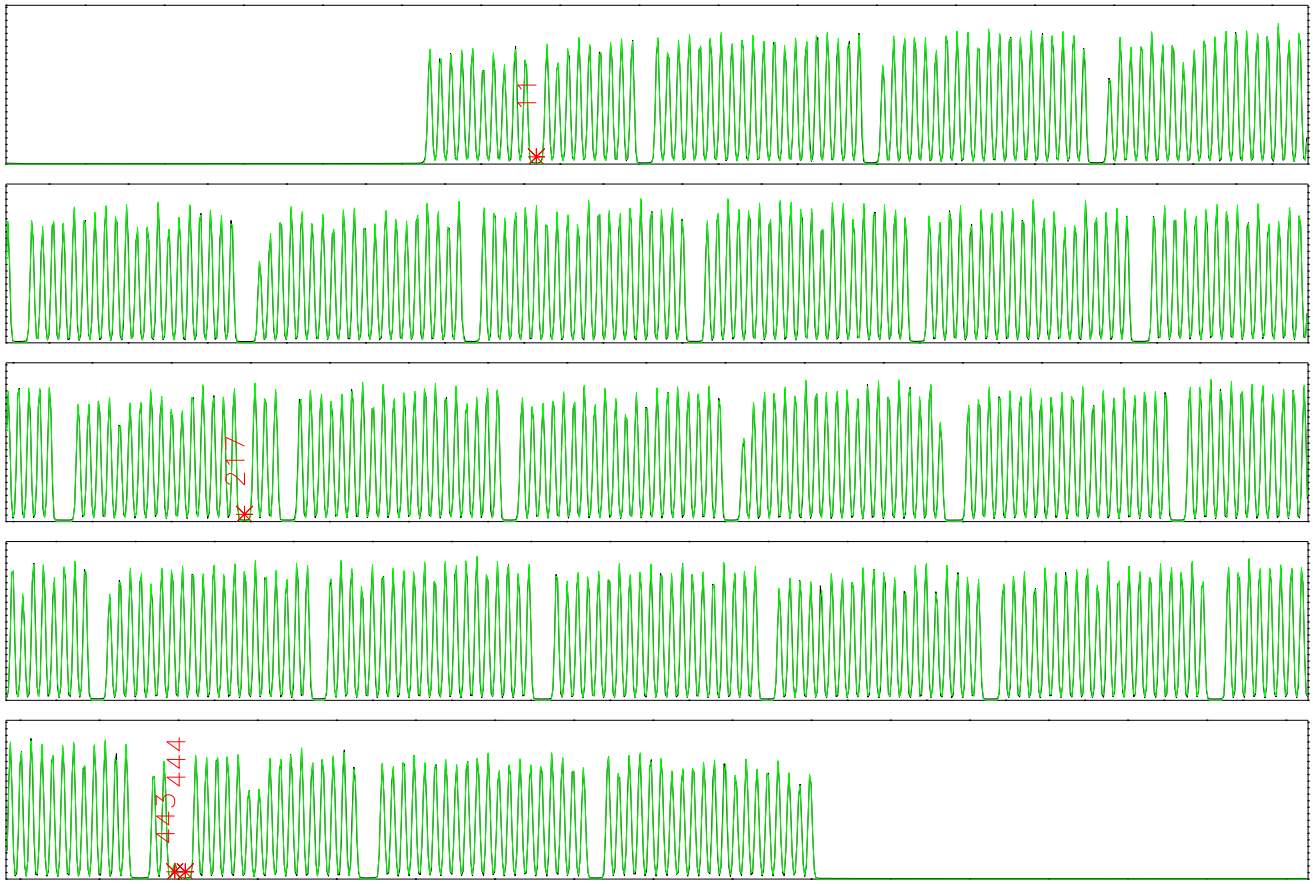
Number of sky fibers = 42

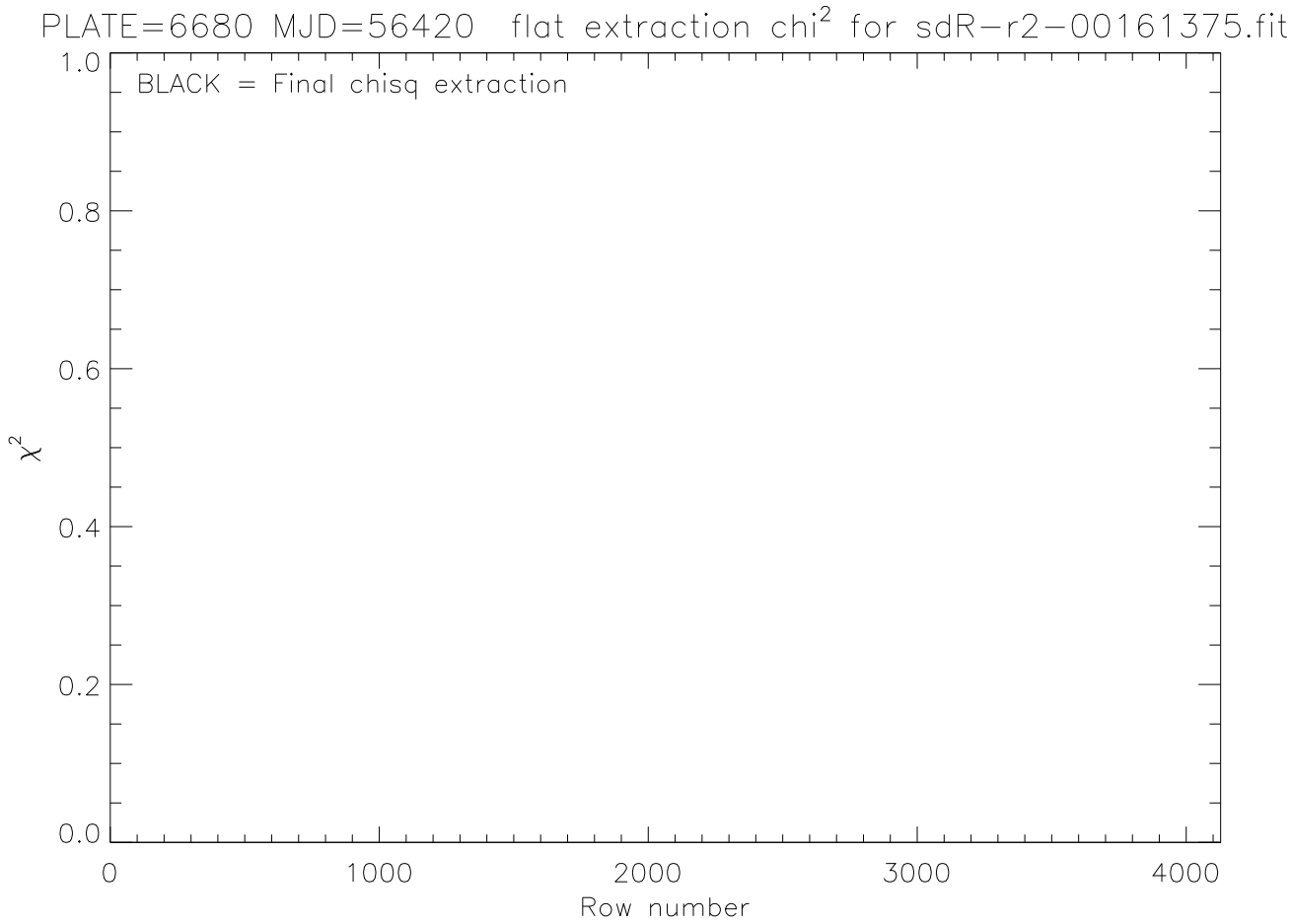


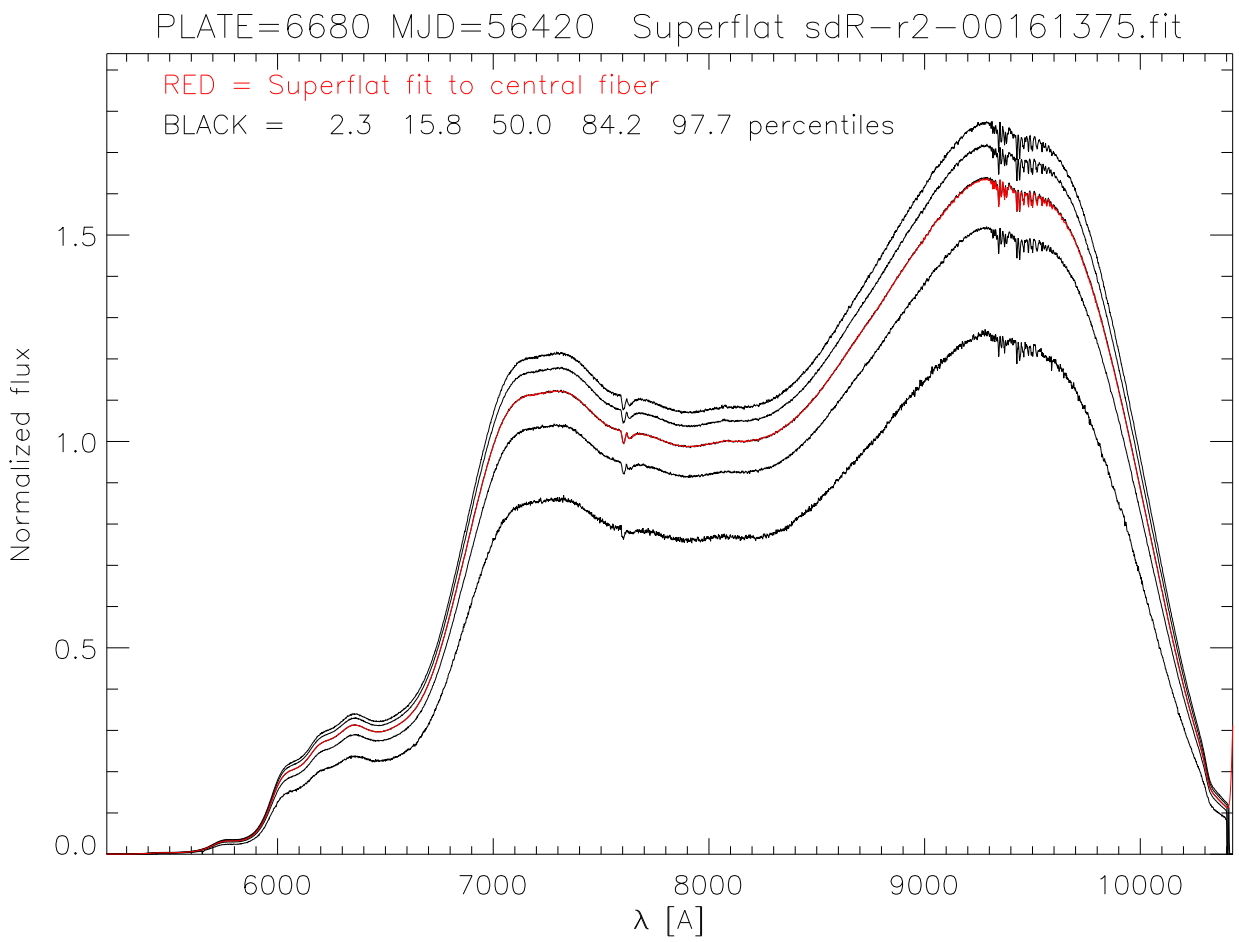

PLATE=6680 MJD=56420 sdR-r1-00161378.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.42 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

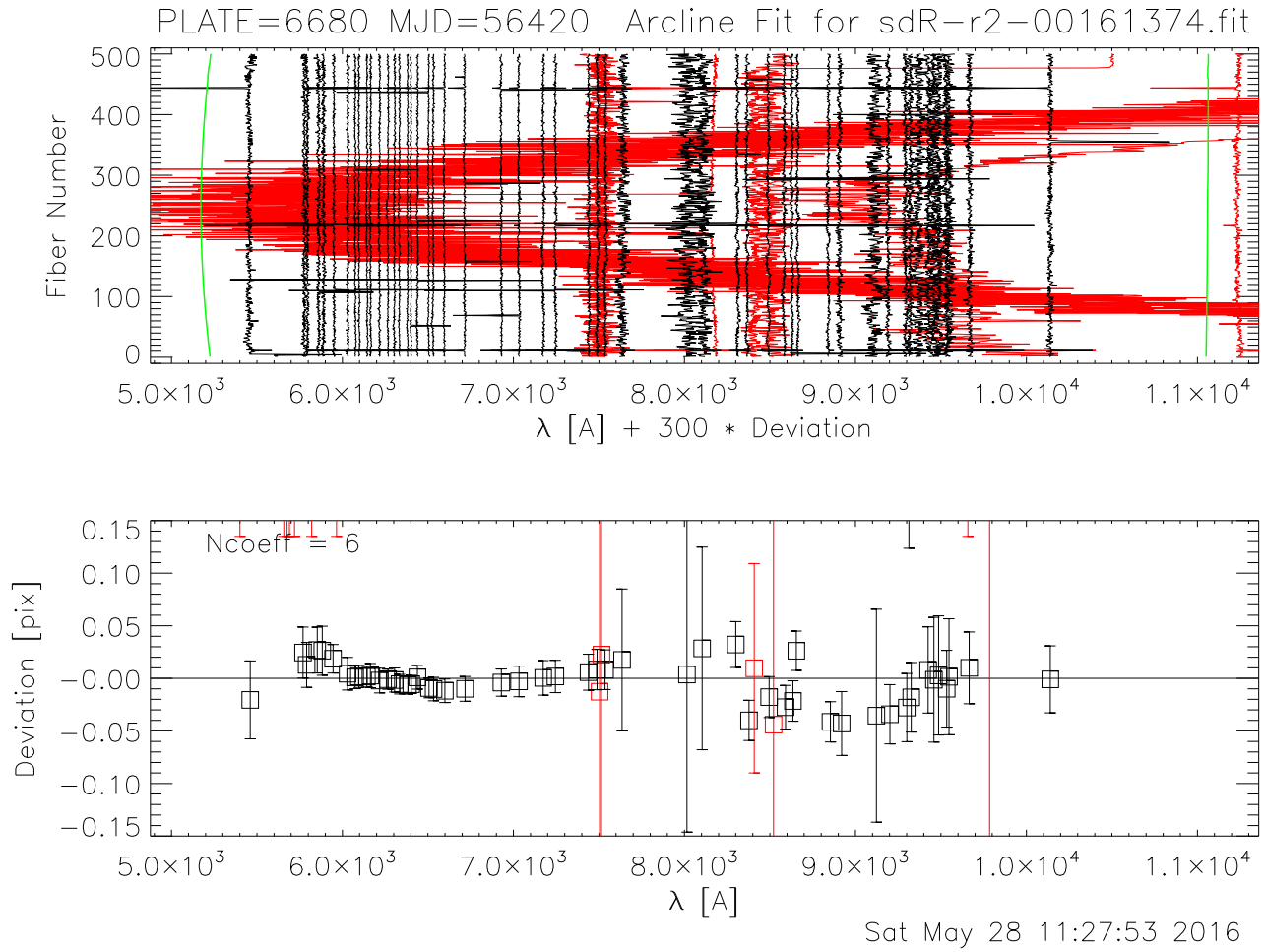

PLATE=6680 MJD=56420 sdR-r1-00161378.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.93 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

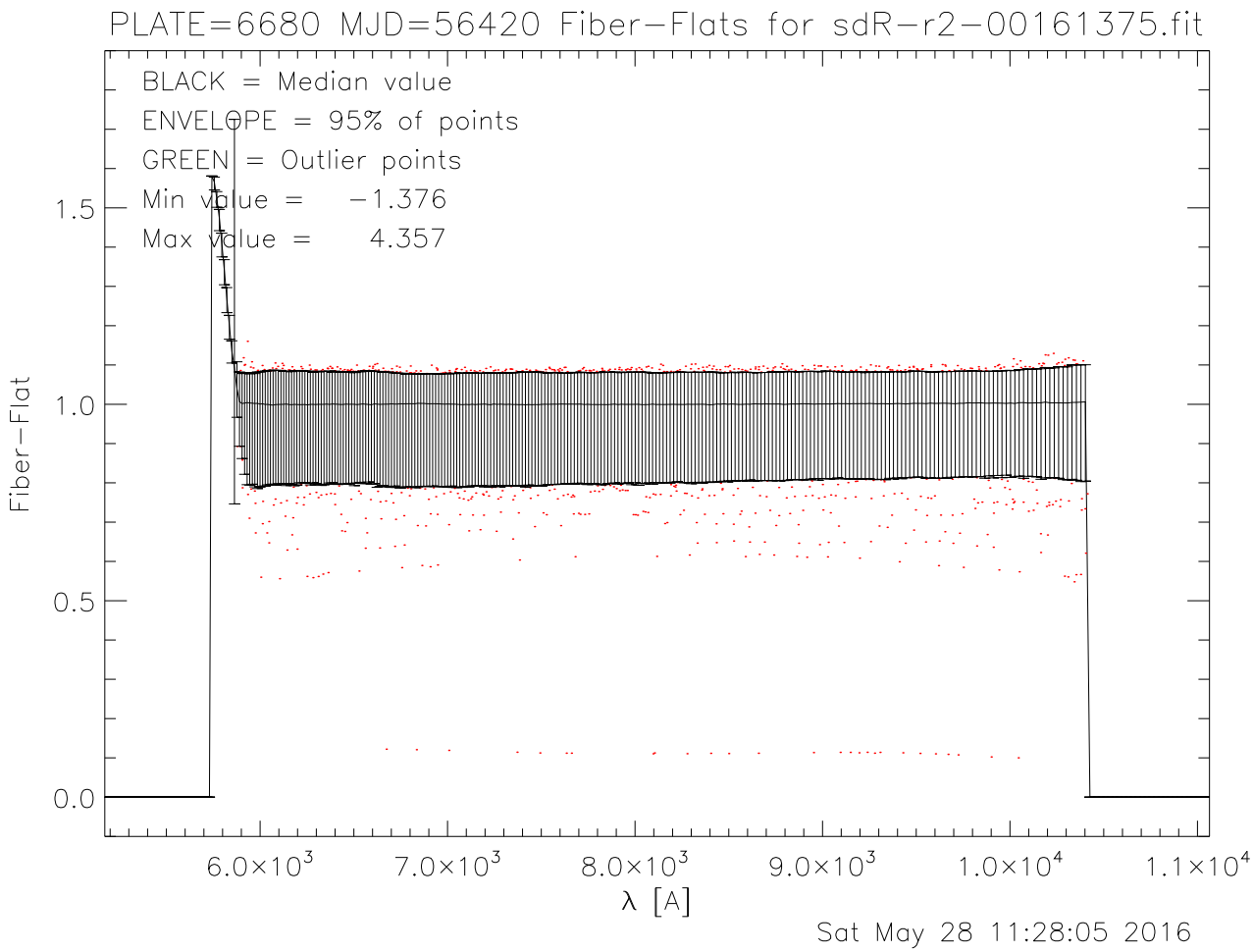
PLATE=6680 MJD=56420 Traces sdR-r2-00161375.fit

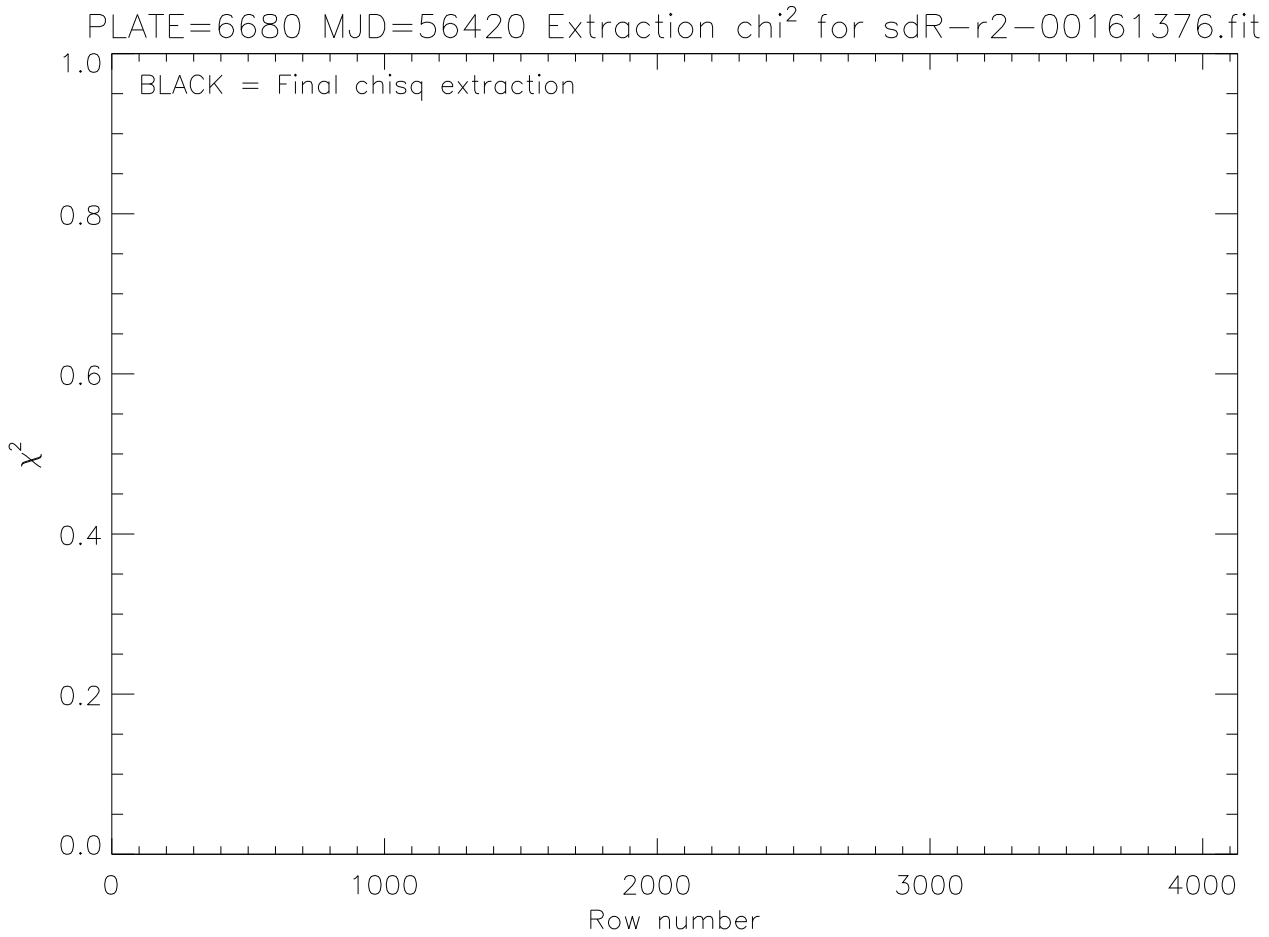


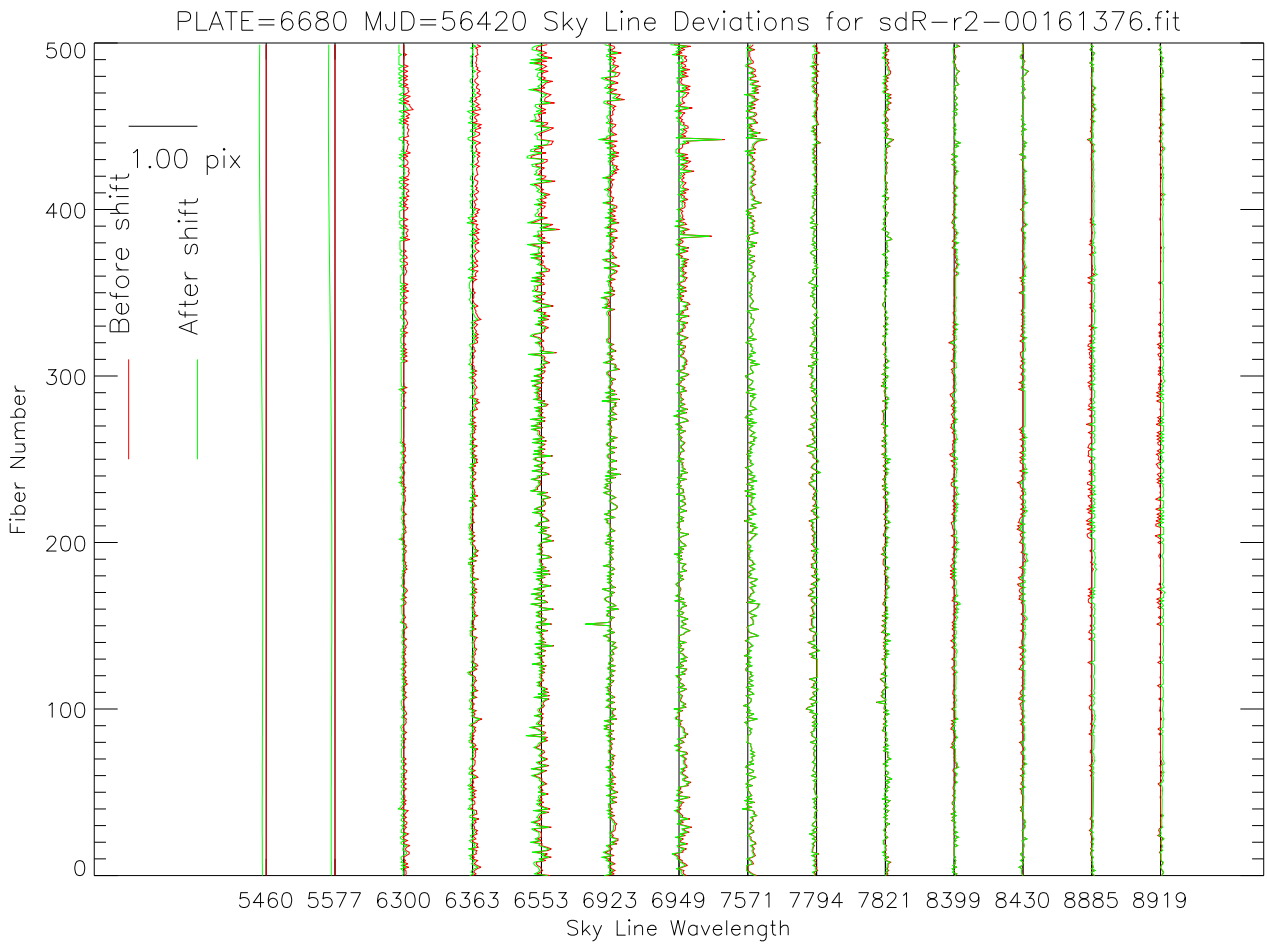

PLATE=6680 MJD=56420 flat extraction chi^2 for sdR-r2-00161375.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

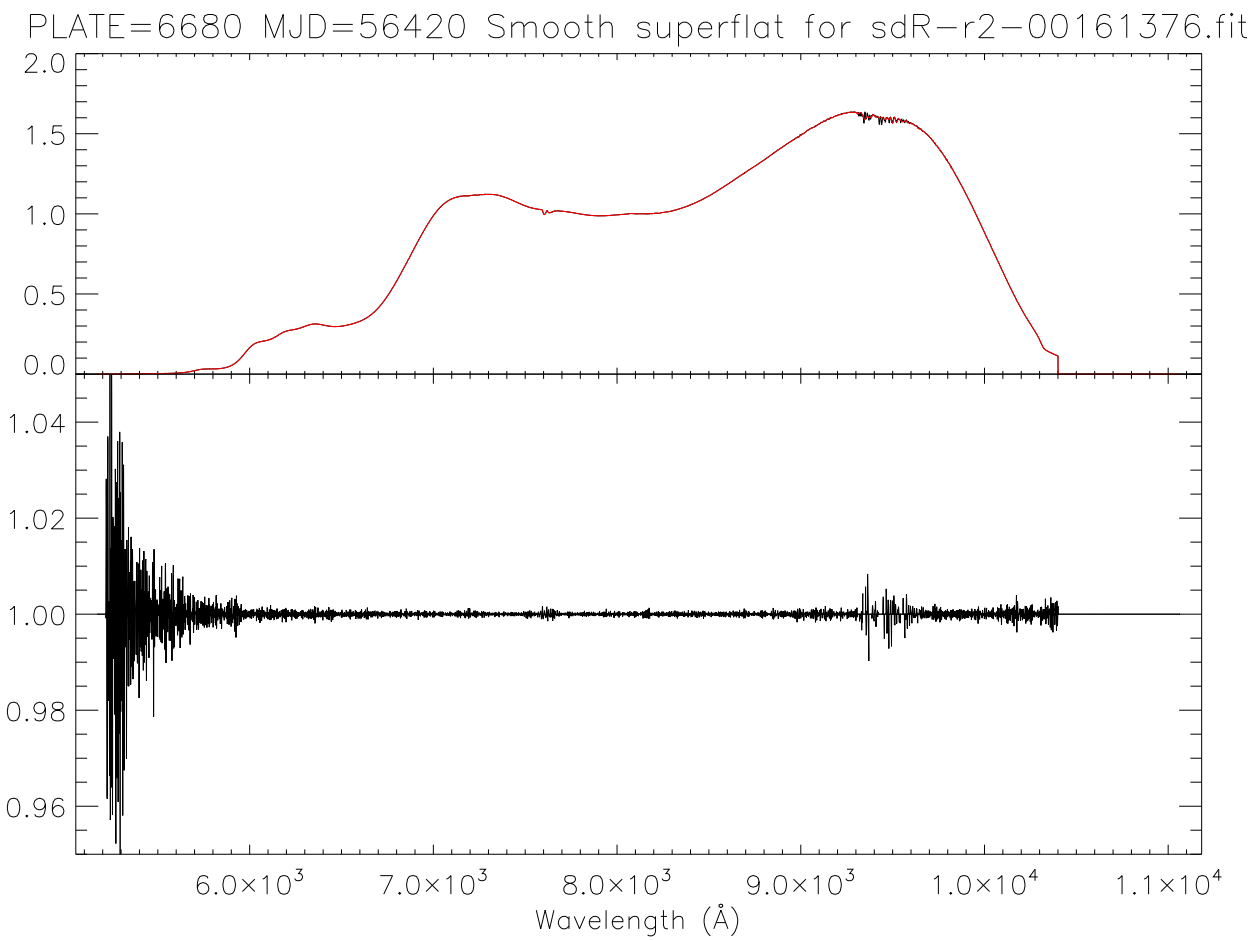

PLATE=6680 MJD=56420 Superflat sdR-r2-00161375.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

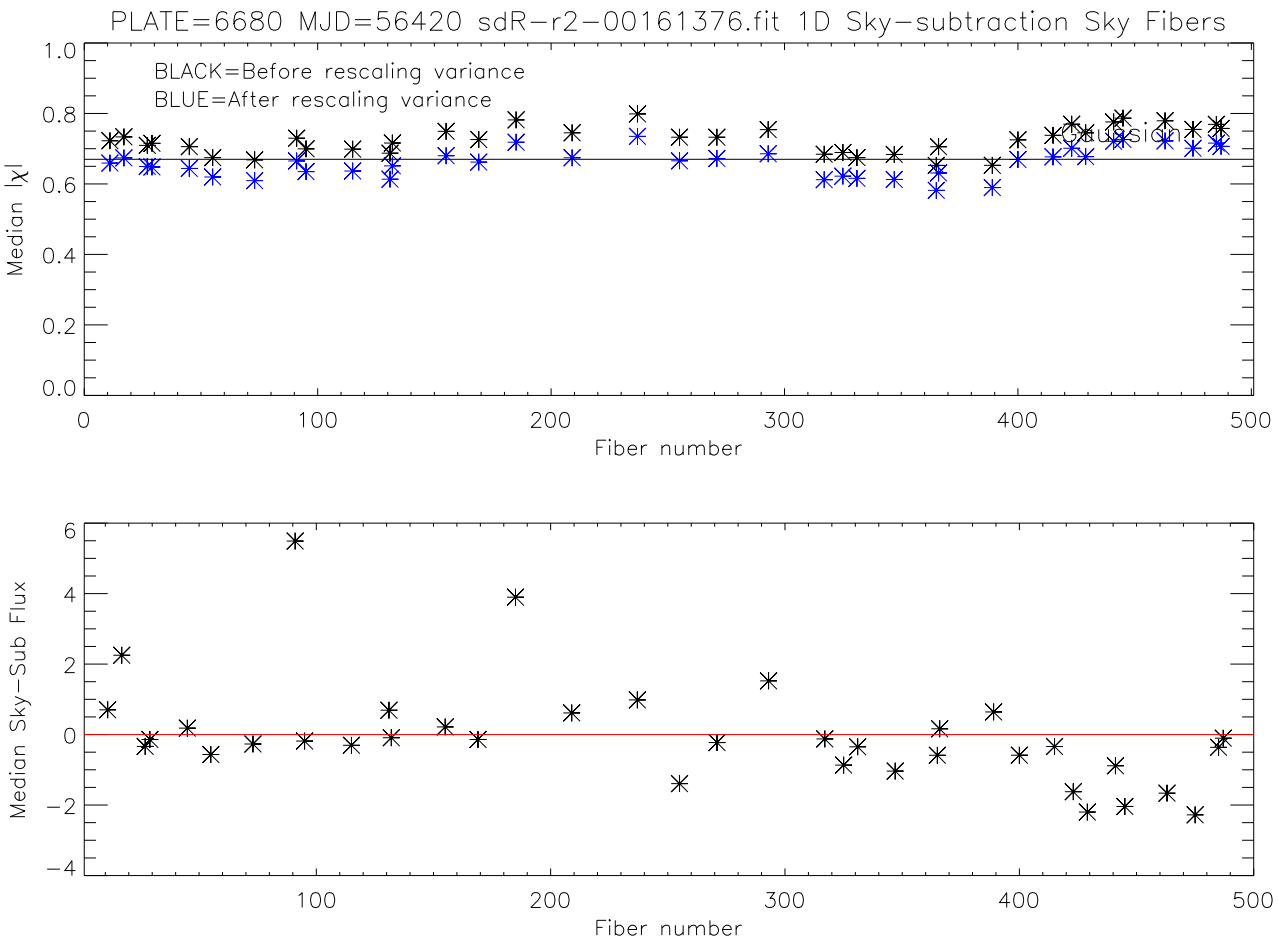

PLATE=6680 MJD=56420 Arcline Fit for sdR-r2-00161374.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
λ [A]
Sat May 28 11:27:53 2016

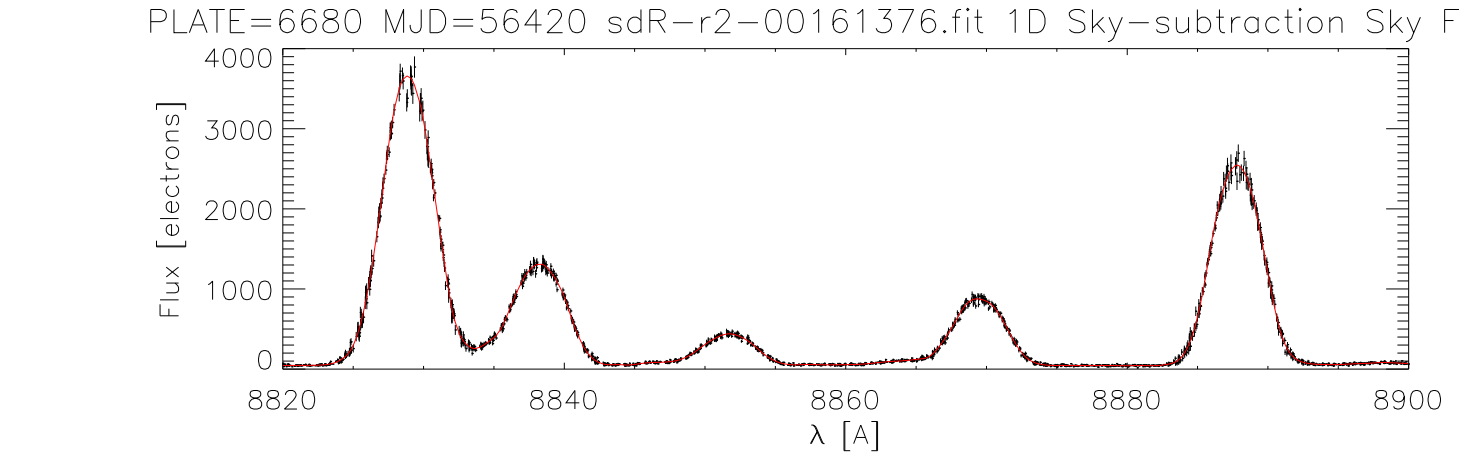

PLATE=6680 MJD=56420 Fiber−Flats for sdR−r2−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −1.376
Max value = 4.357
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 11:28:05 2016

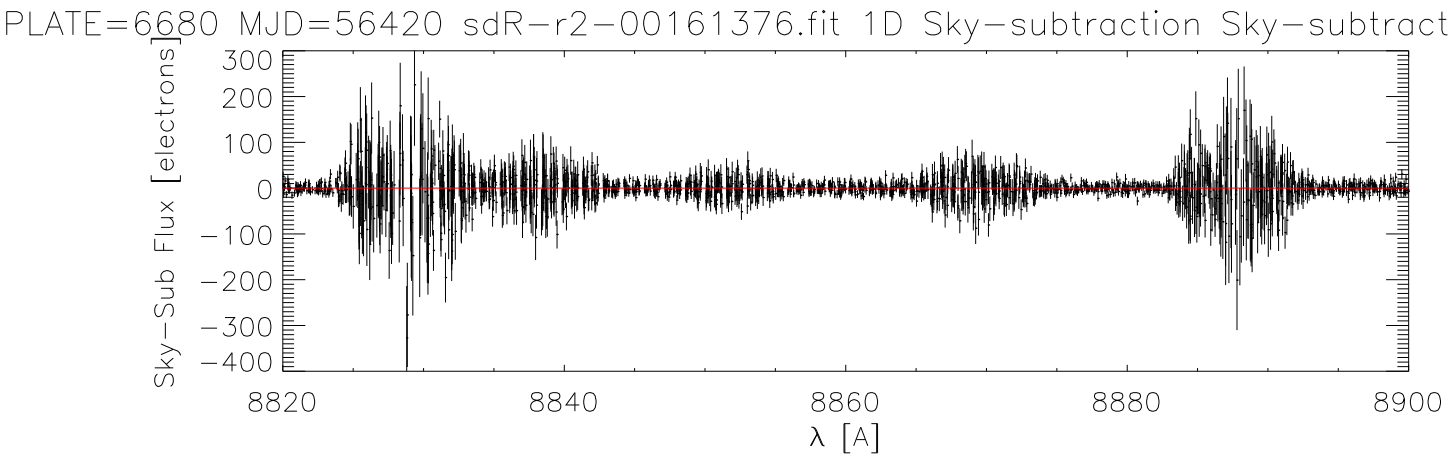

PLATE=6680 MJD=56420 Extraction chi^2 for sdR-r2-00161376.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-r2-00161376.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

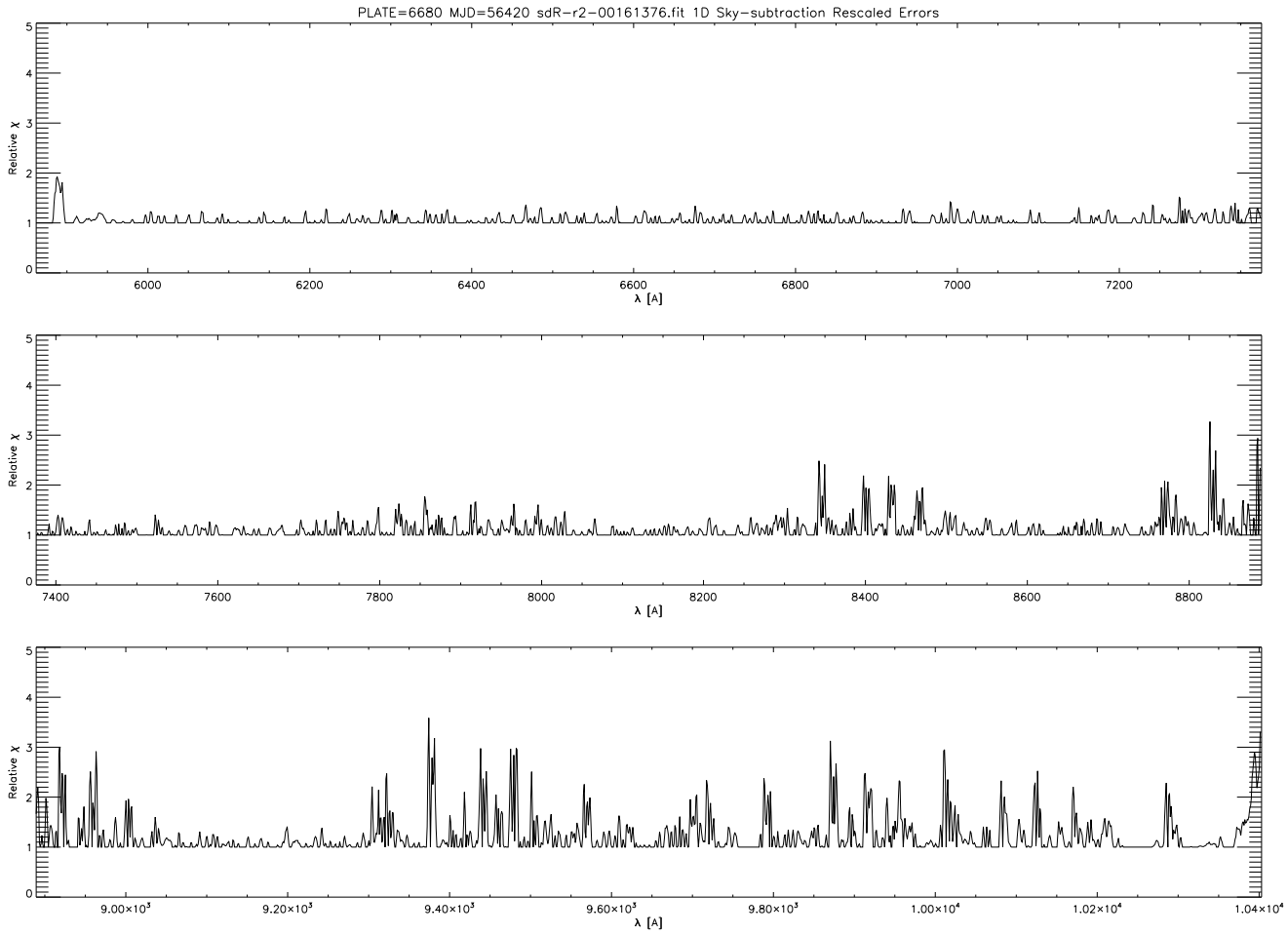

PLATE=6680 MJD=56420 Smooth superflat for sdR-r2-00161376.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

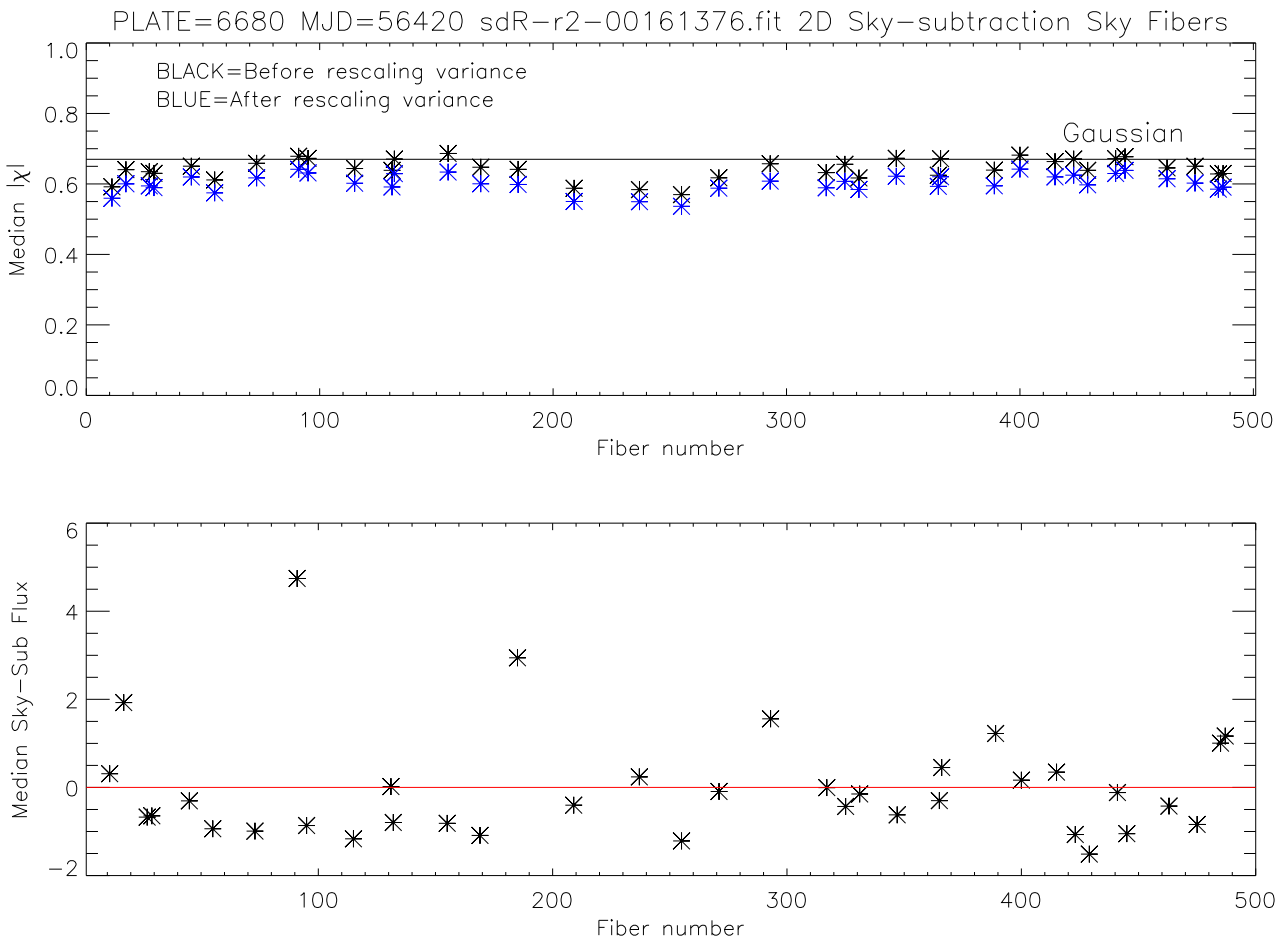

PLATE=6680 MJD=56420 sdR-r2-00161376.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

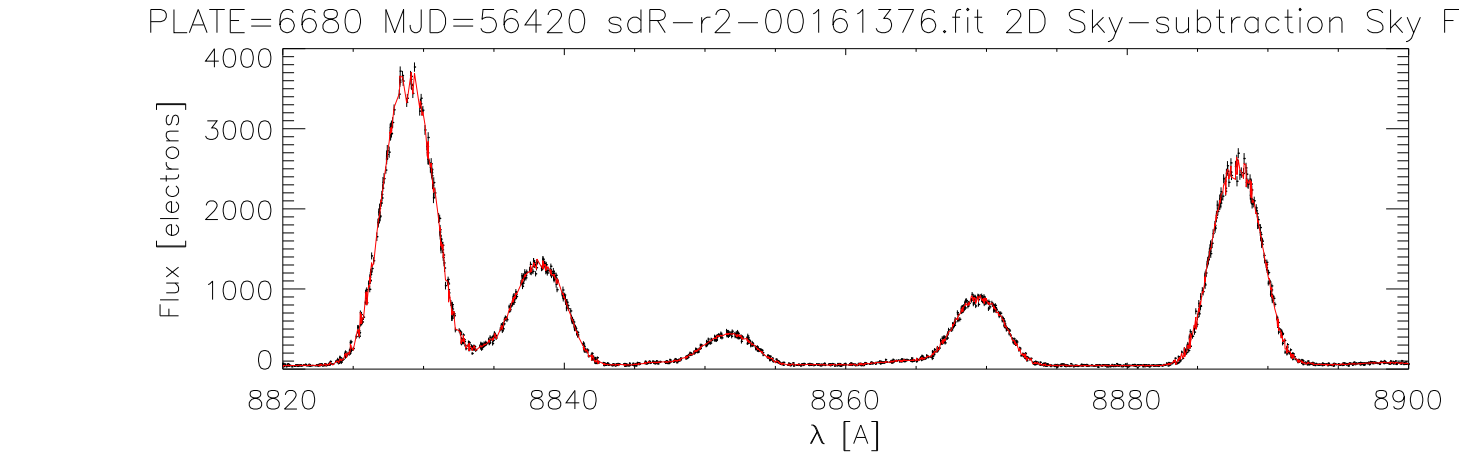

PLATE=6680 MJD=56420 sdR-r2-00161376.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

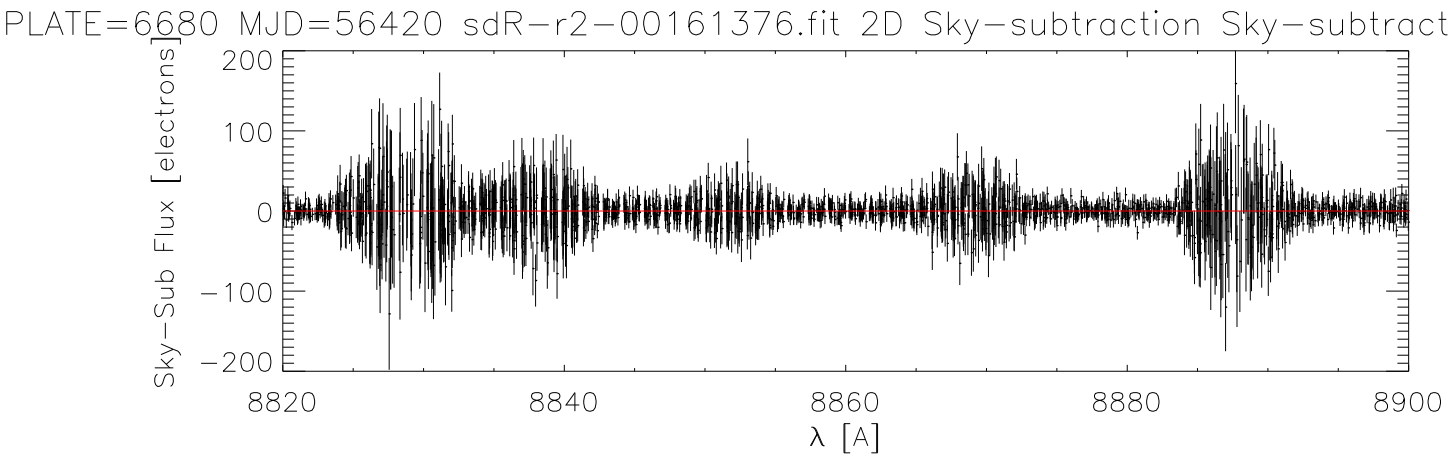

PLATE=6680 MJD=56420 sdR-r2-00161376.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 37

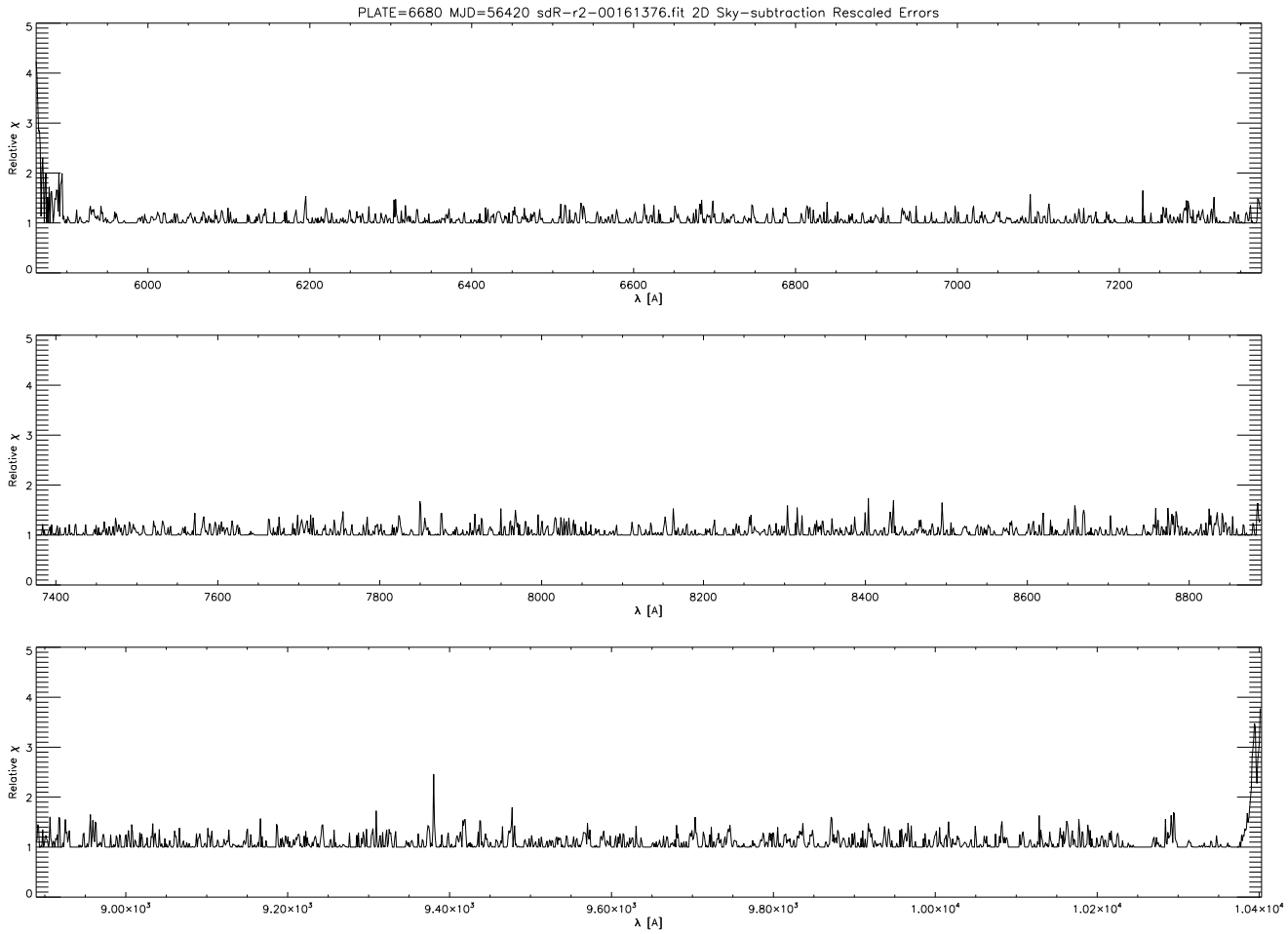


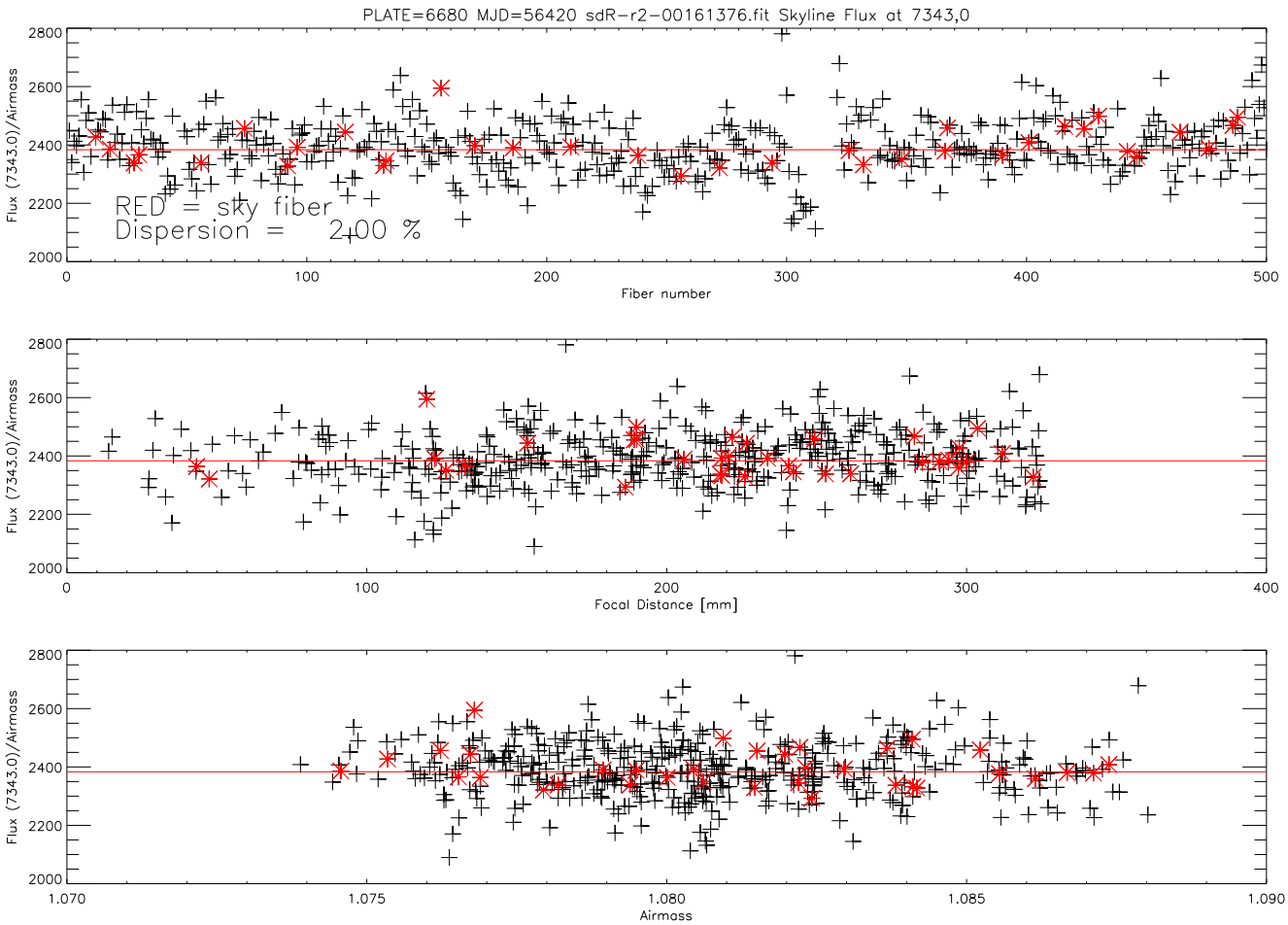

PLATE=6680 MJD=56420 sdR-r2-00161376.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

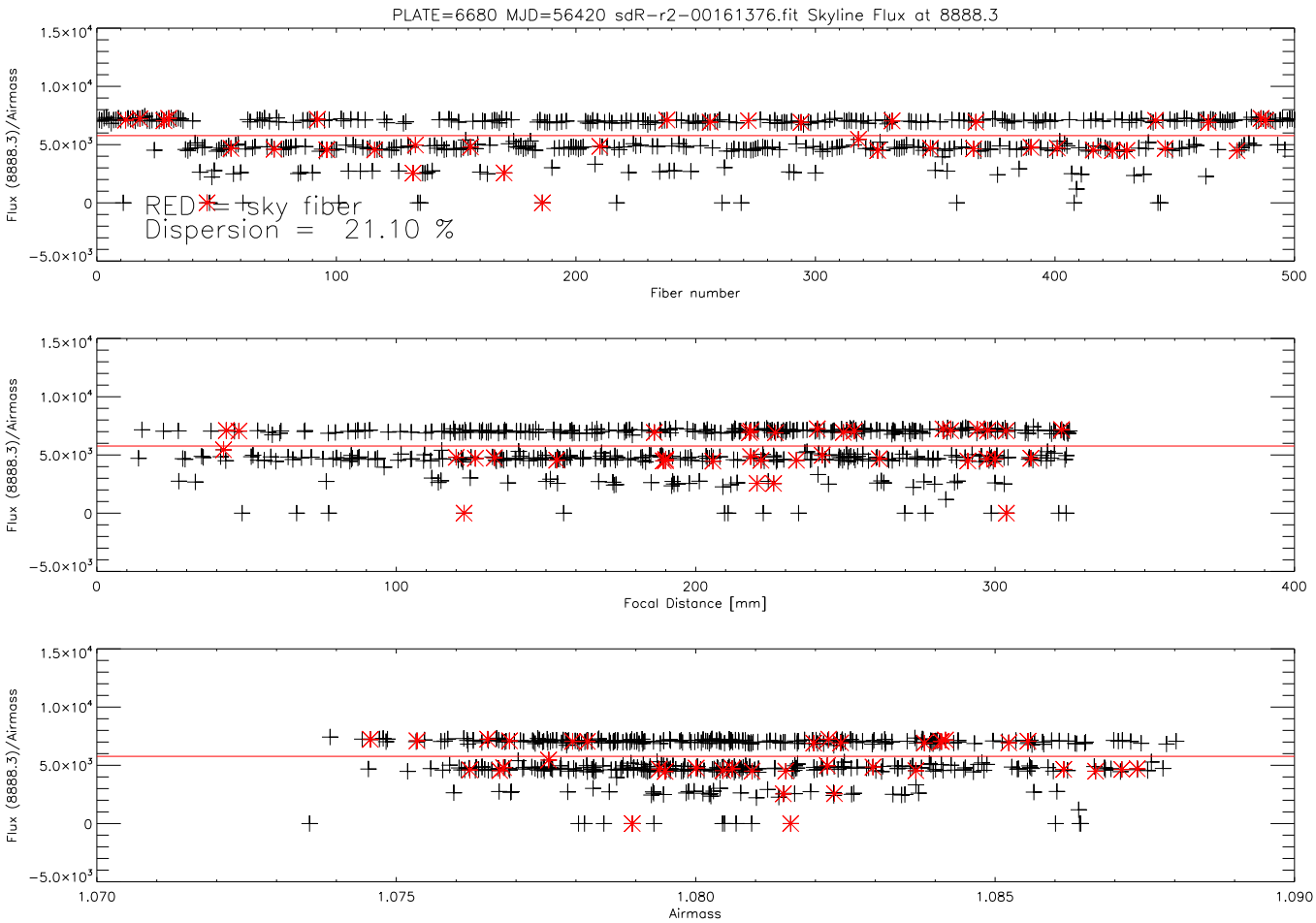

PLATE=6680 MJD=56420 sdR-r2-00161376.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

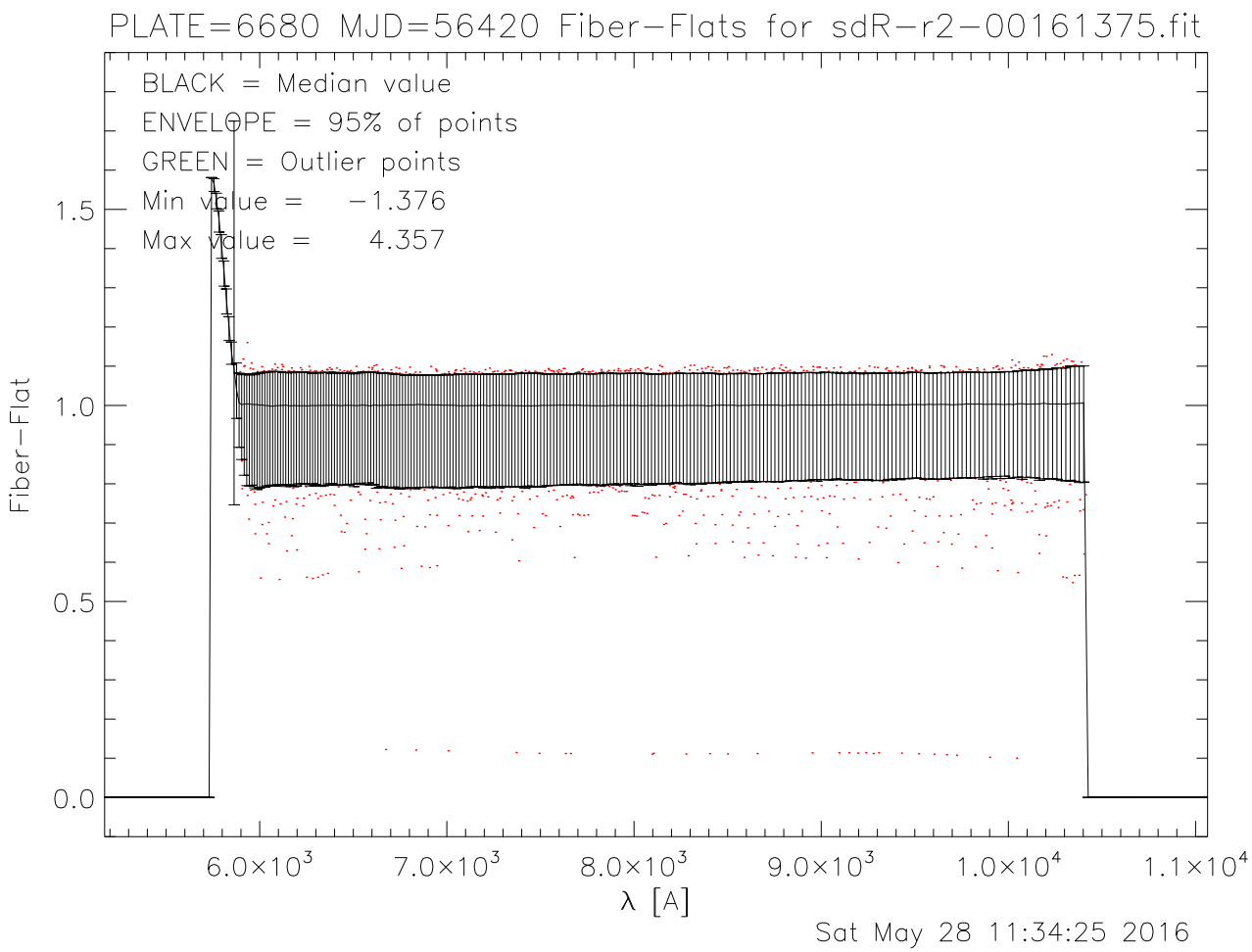

PLATE=6680 MJD=56420 sdR-r2-00161376.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

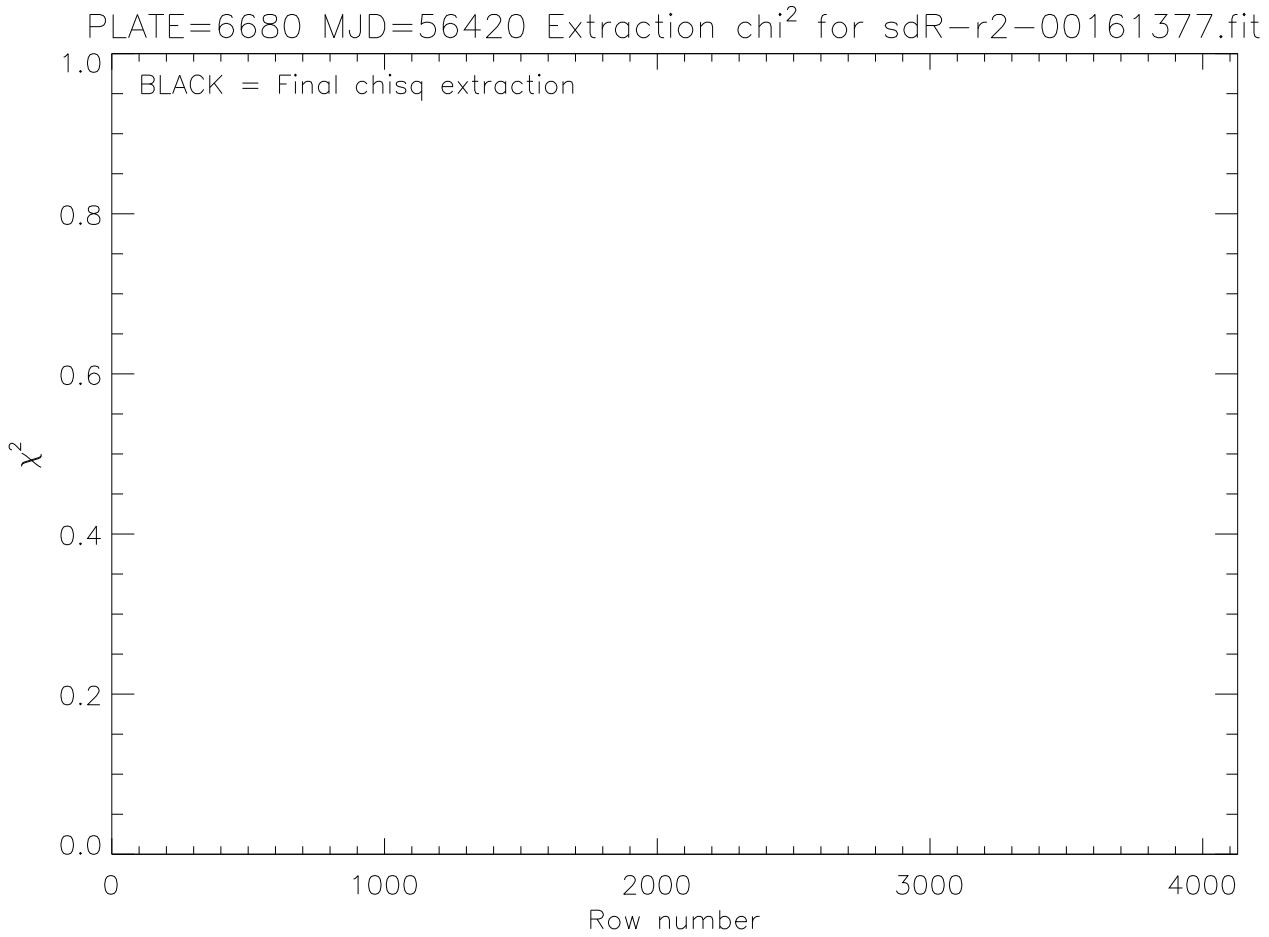
Number of sky fibers = 37

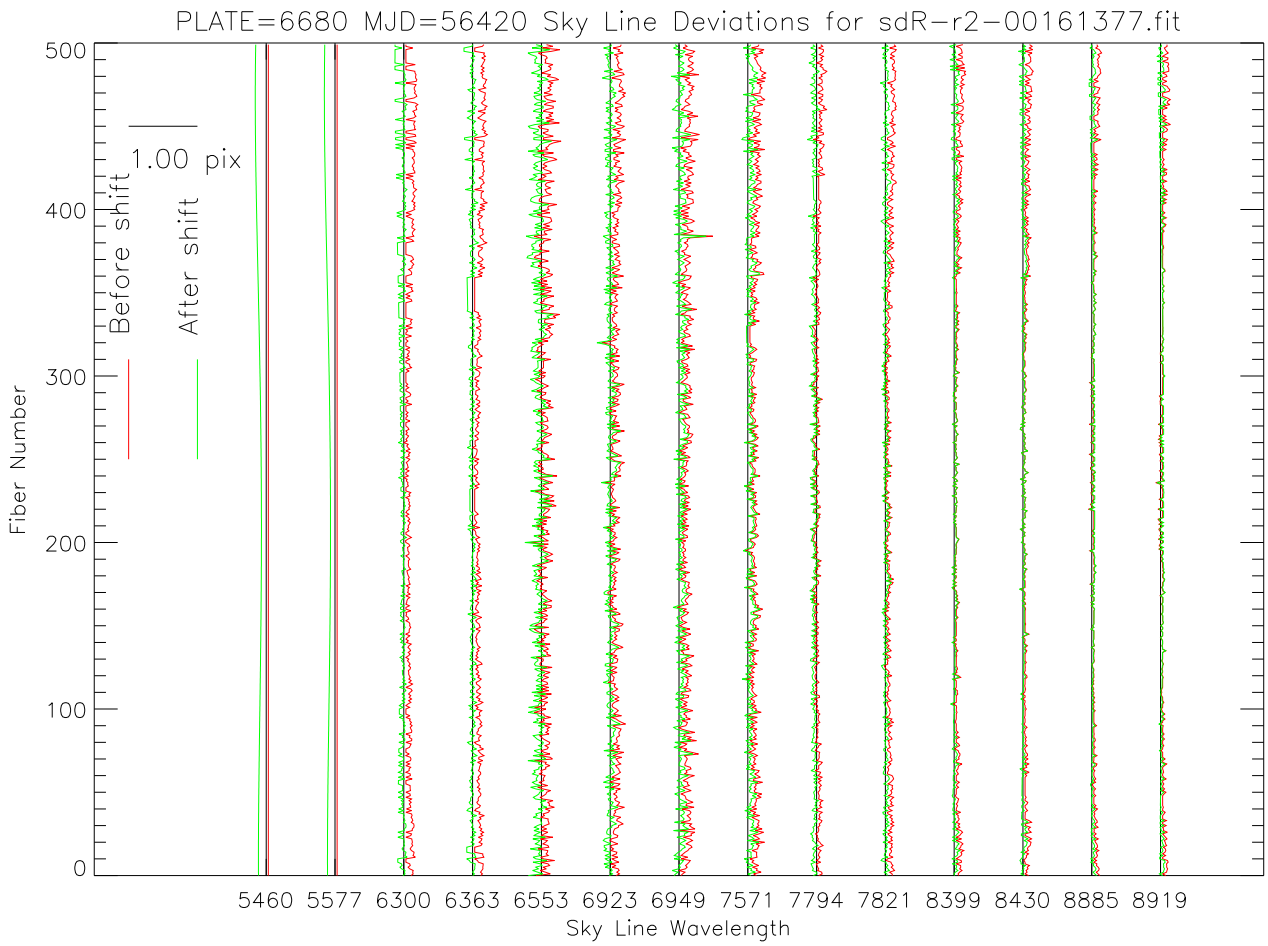


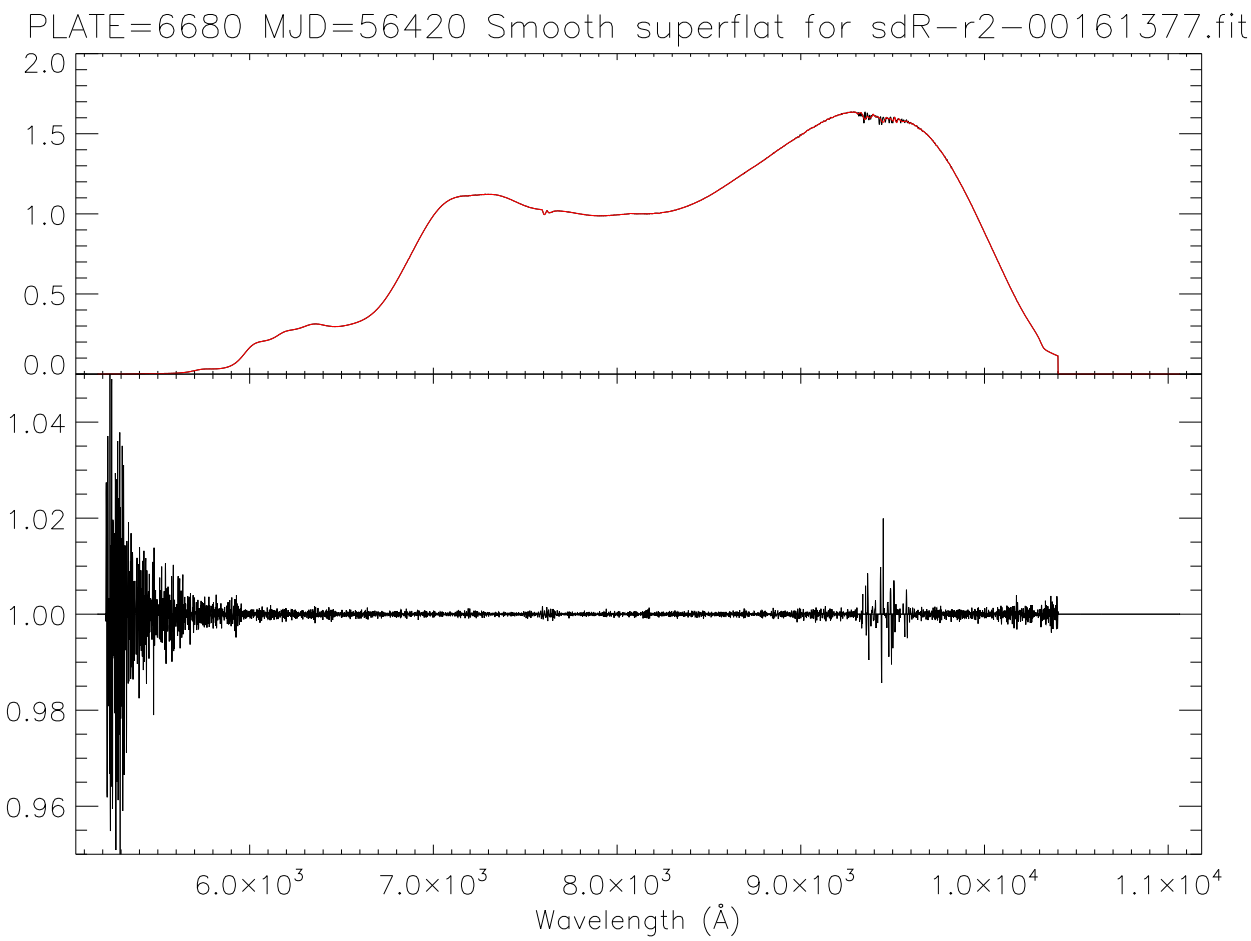

PLATE=6680 MJD=56420 sdR-r2-00161376.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Focal Distance [mm]
Airmass

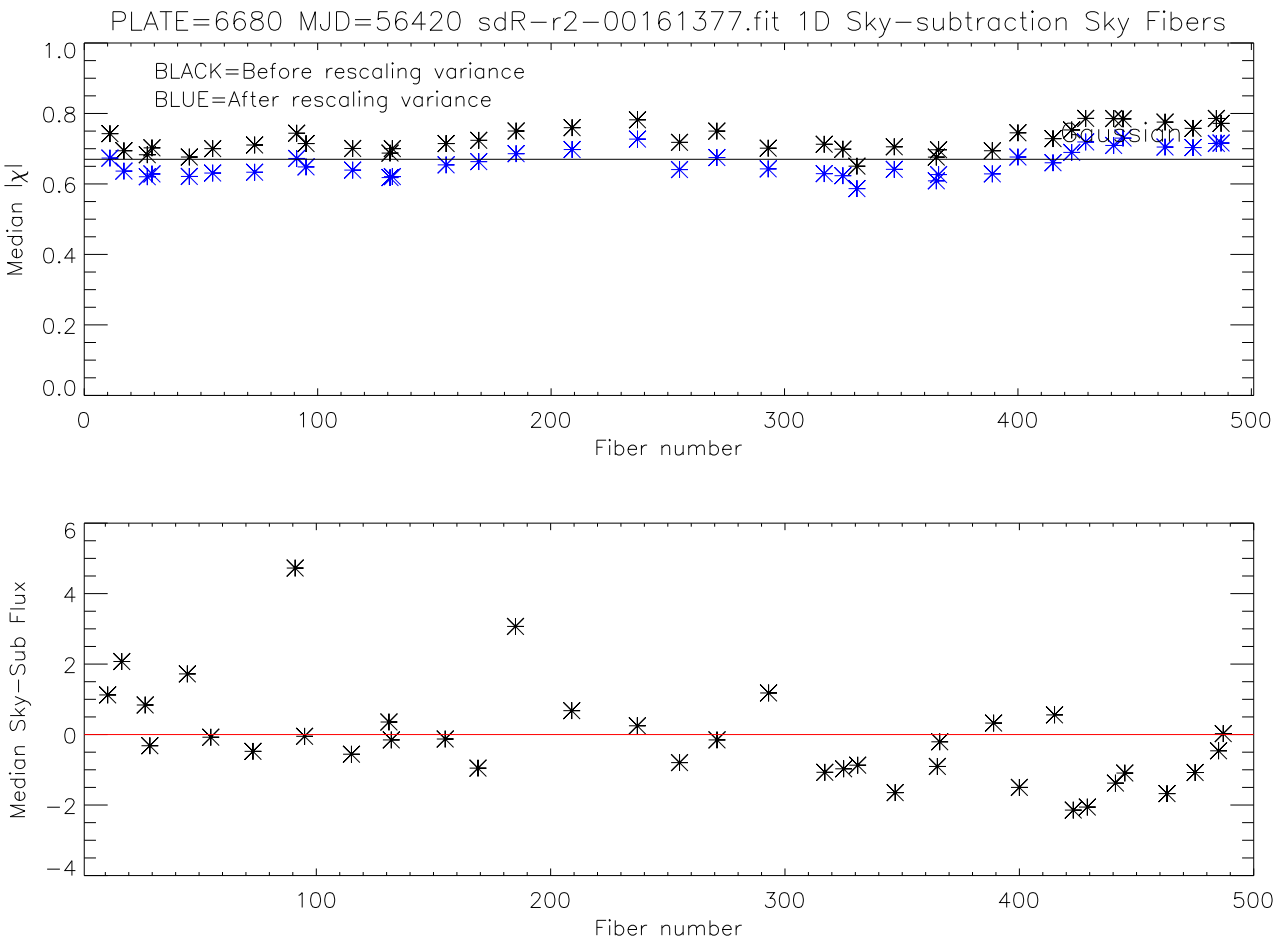

PLATE=6680 MJD=56420 sdR-r2-00161376.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
RED = sky fiber
Dispersion = 21.10 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
1.070
1.075
1.080
1.085
1.090
Airmass

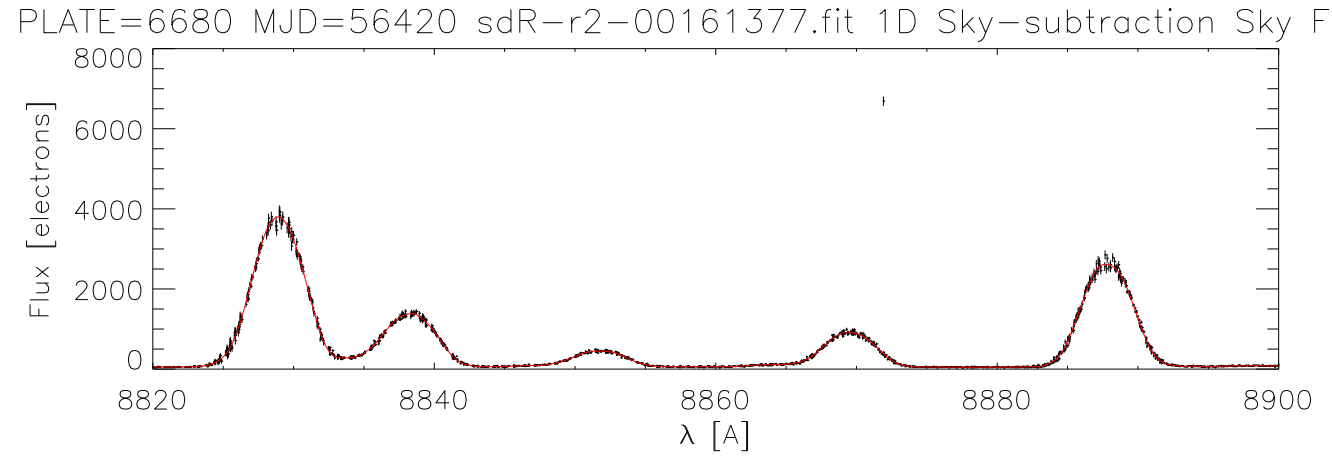

PLATE=6680 MJD=56420 Fiber−Flats for sdR−r2−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −1.376
Max value = 4.357
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 11:34:25 2016

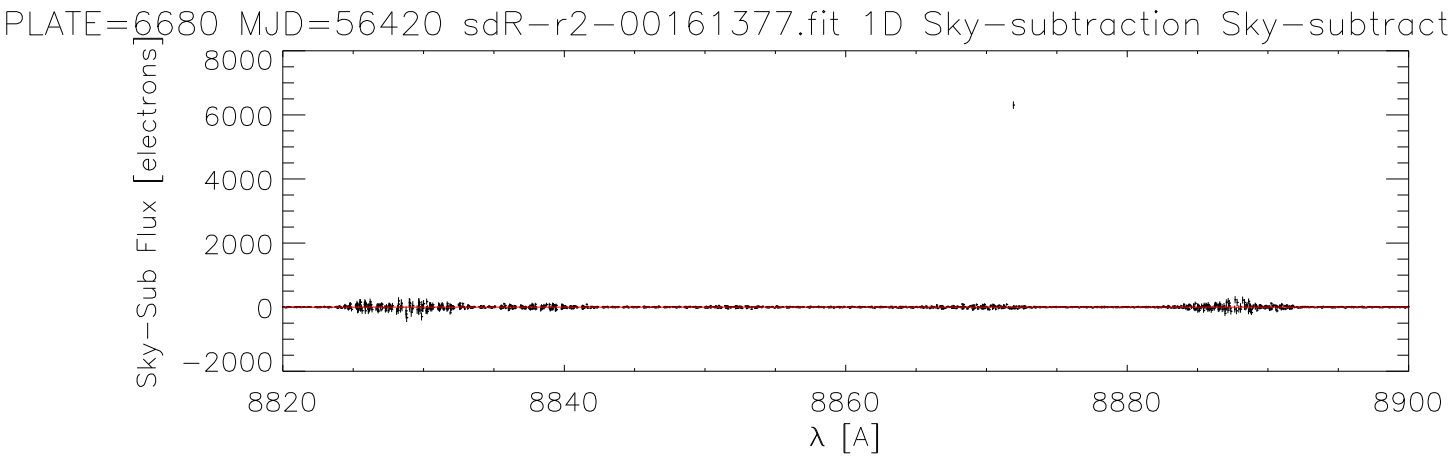

PLATE=6680 MJD=56420 Extraction chi^2 for sdR−r2−00161377.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-r2-00161377.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

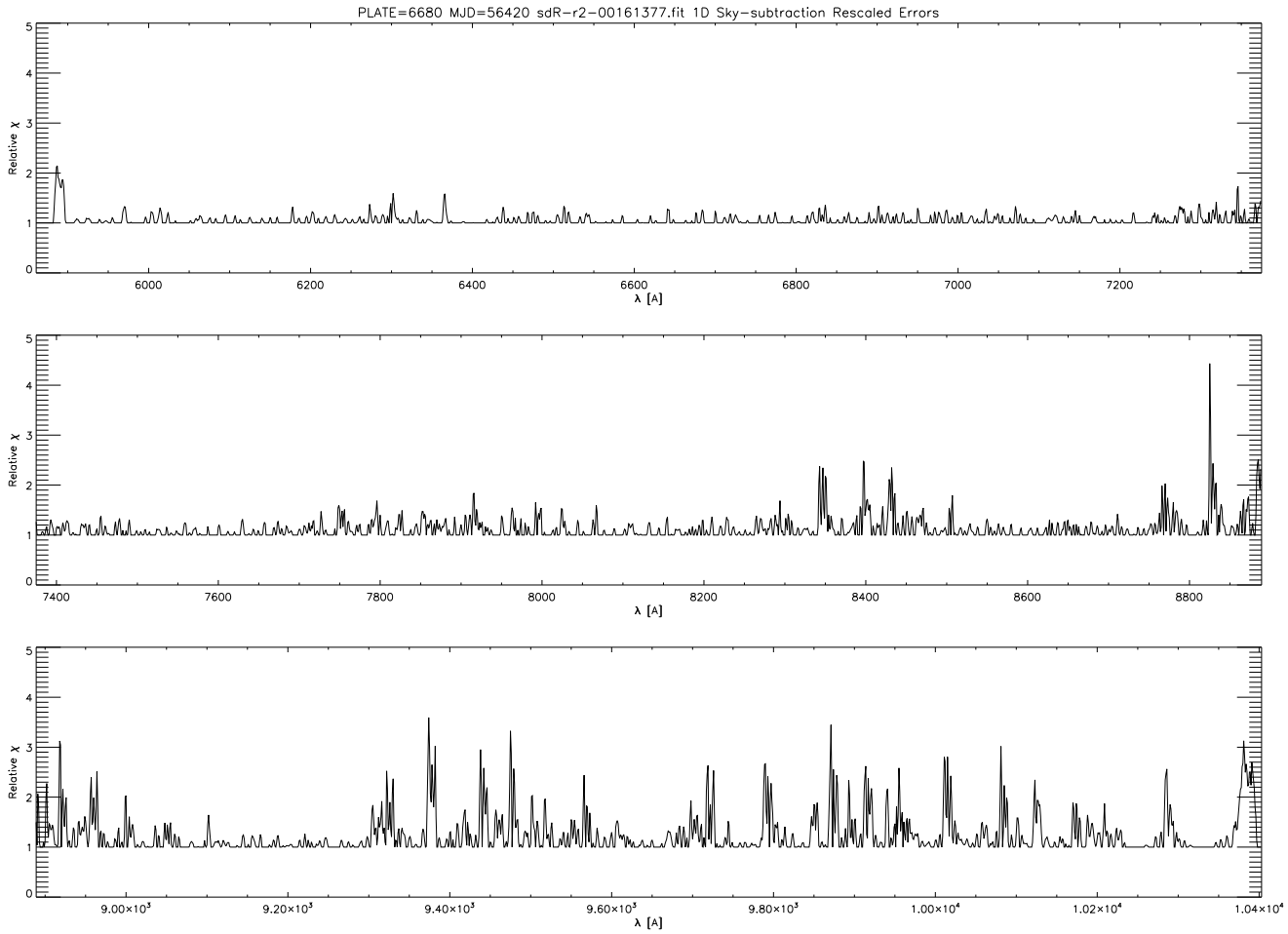

PLATE=6680 MJD=56420 Smooth superflat for sdR-r2-00161377.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

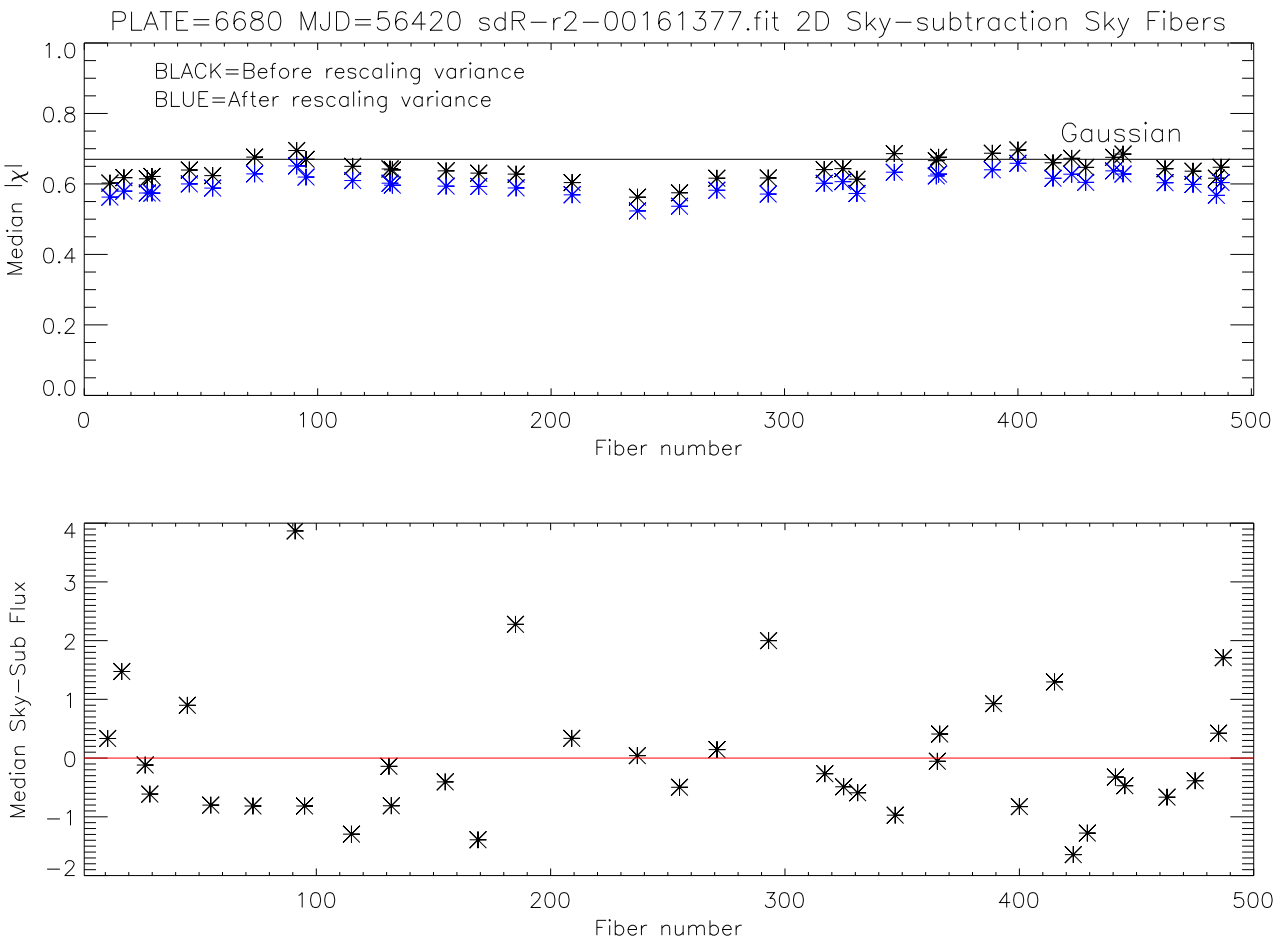

PLATE=6680 MJD=56420 sdR-r2-00161377.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number


PLATE=6680 MJD=56420 sdR-r2-00161377.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

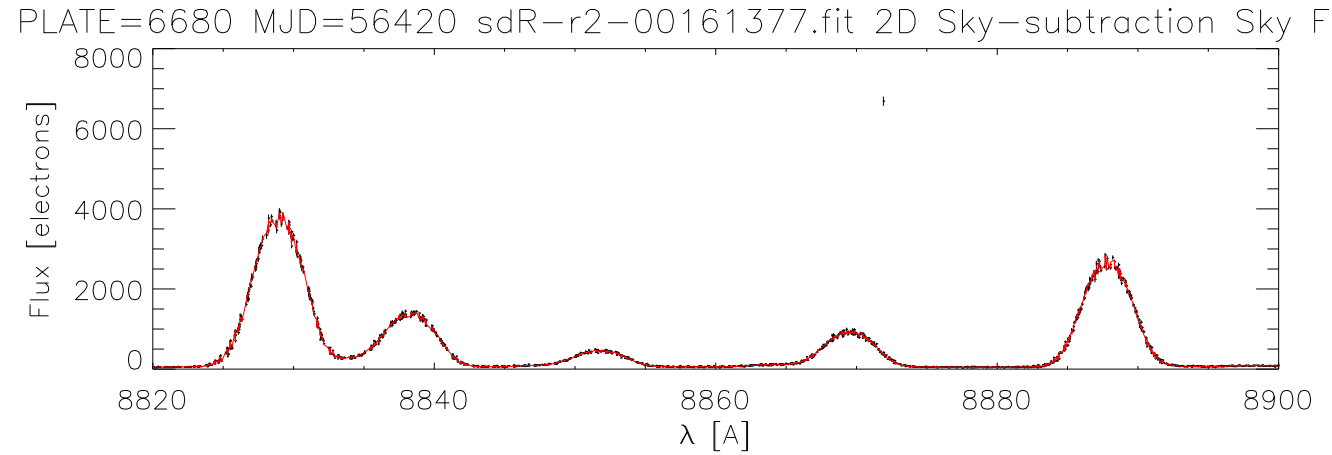

PLATE=6680 MJD=56420 sdR-r2-00161377.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

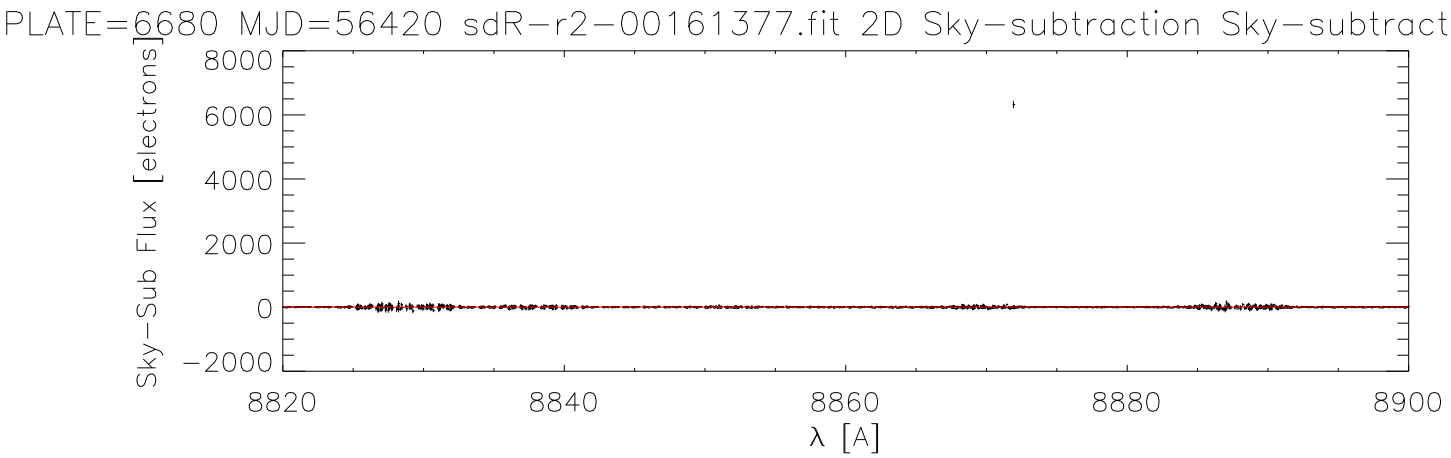
Number of sky fibers = 37



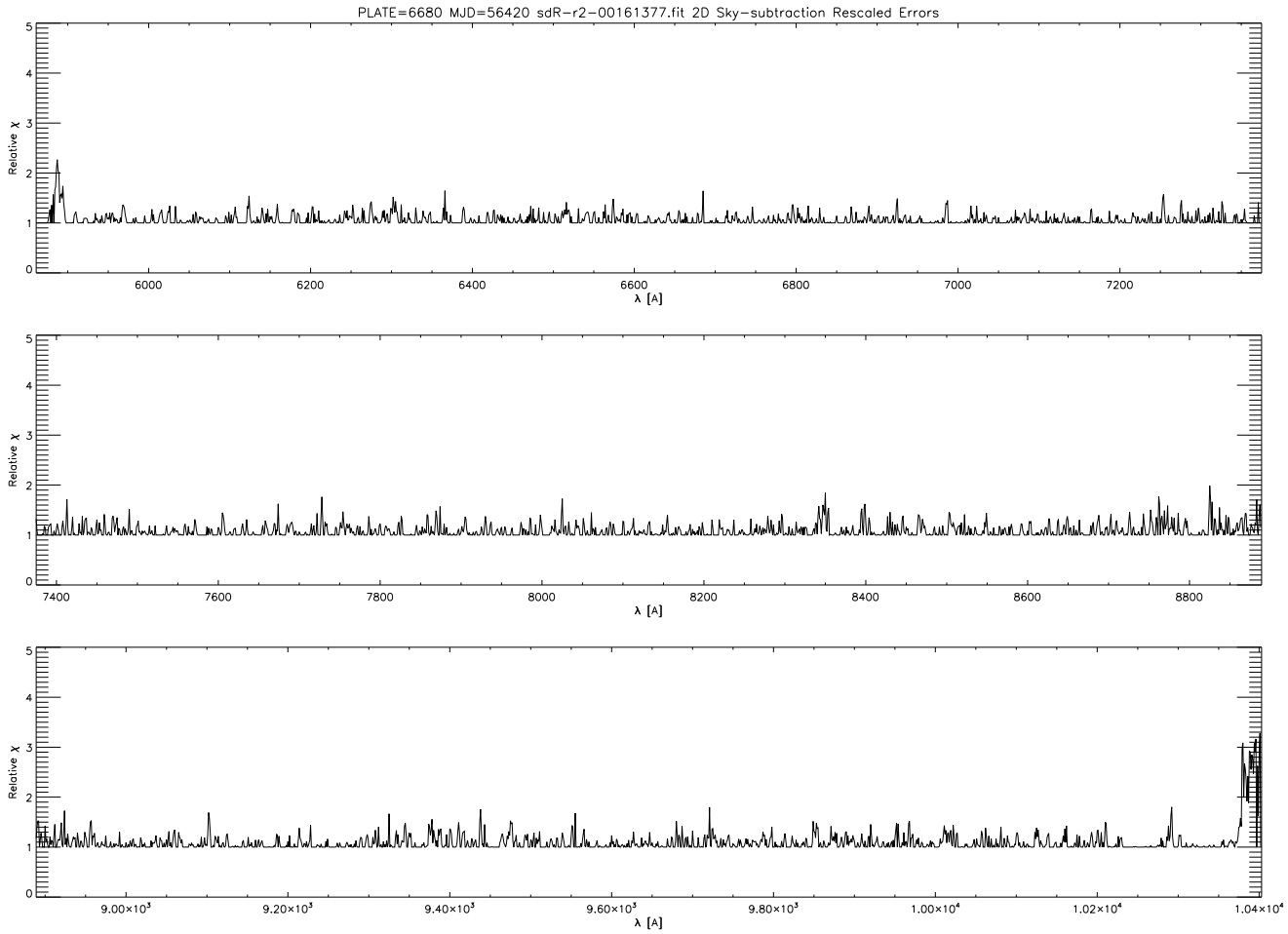

PLATE=6680 MJD=56420 sdR-r2-00161377.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number

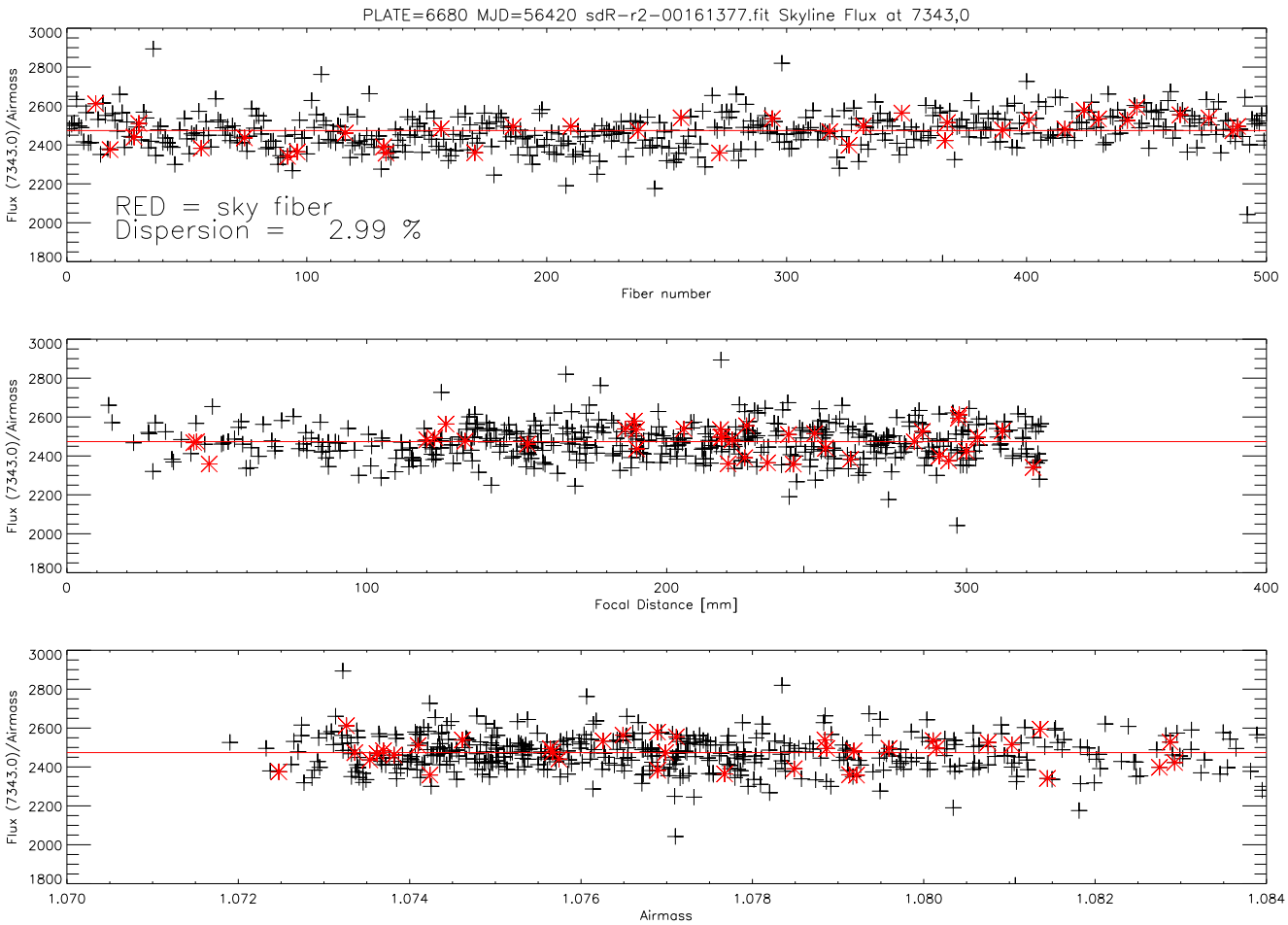
Median Sky-Sub Flux
Fiber number

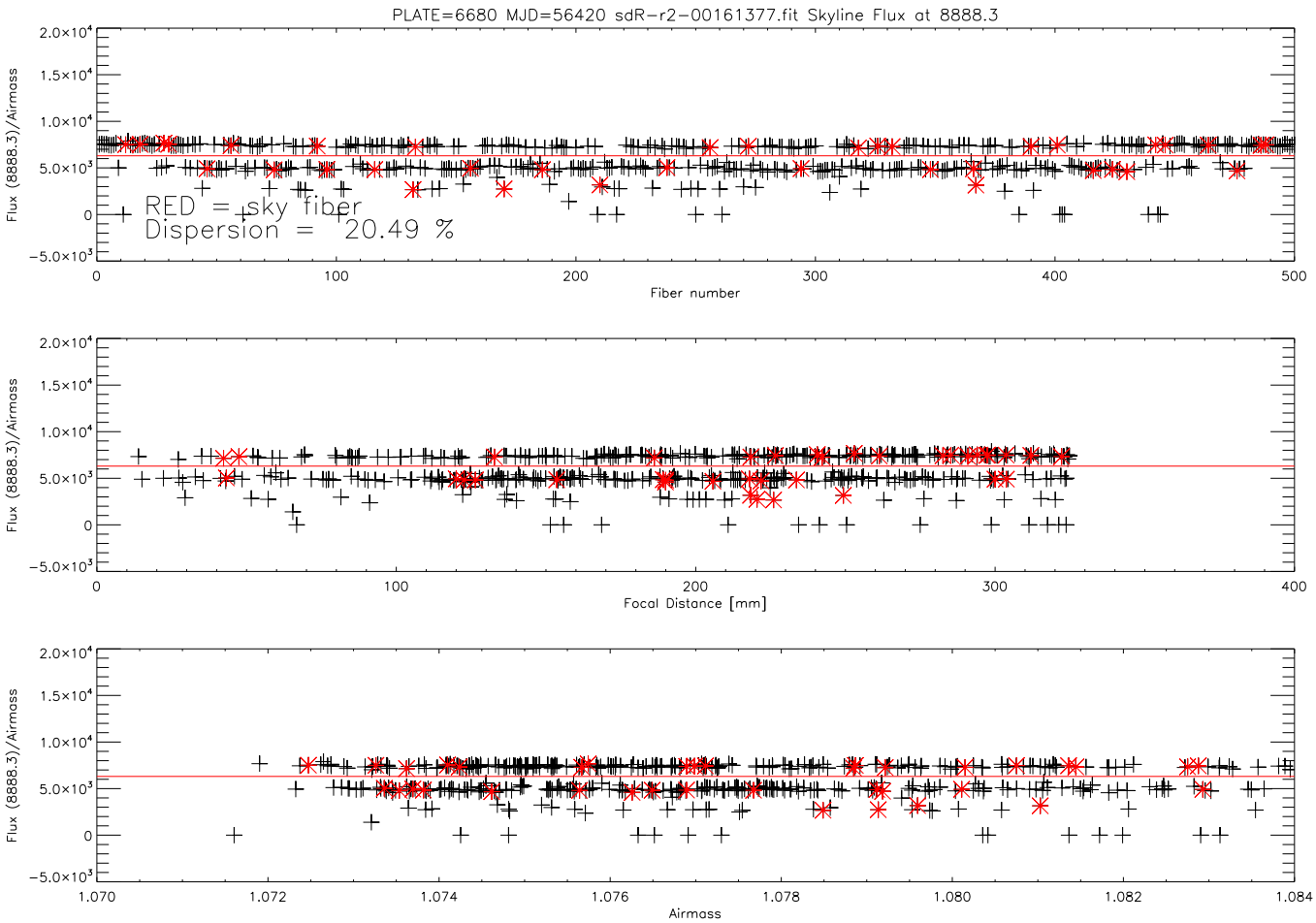

PLATE=6680 MJD=56420 sdR-r2-00161377.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
8820
8840
8860
8880
8900
λ [A]

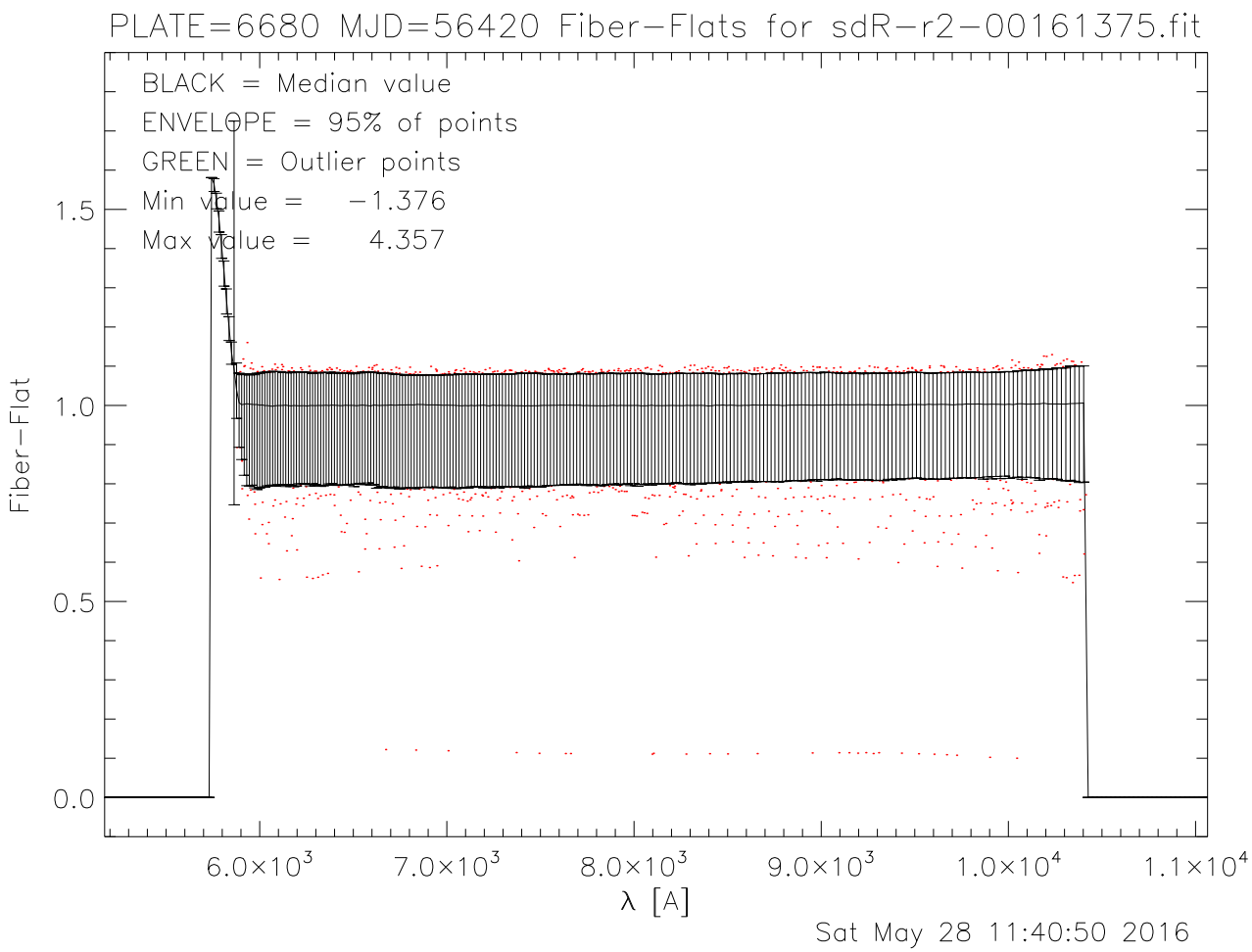

PLATE=6680 MJD=56420 sdR-r2-00161377.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
8000
6000
4000
2000
0
-2000
8820
8840
8860
8880
8900
λ [A]

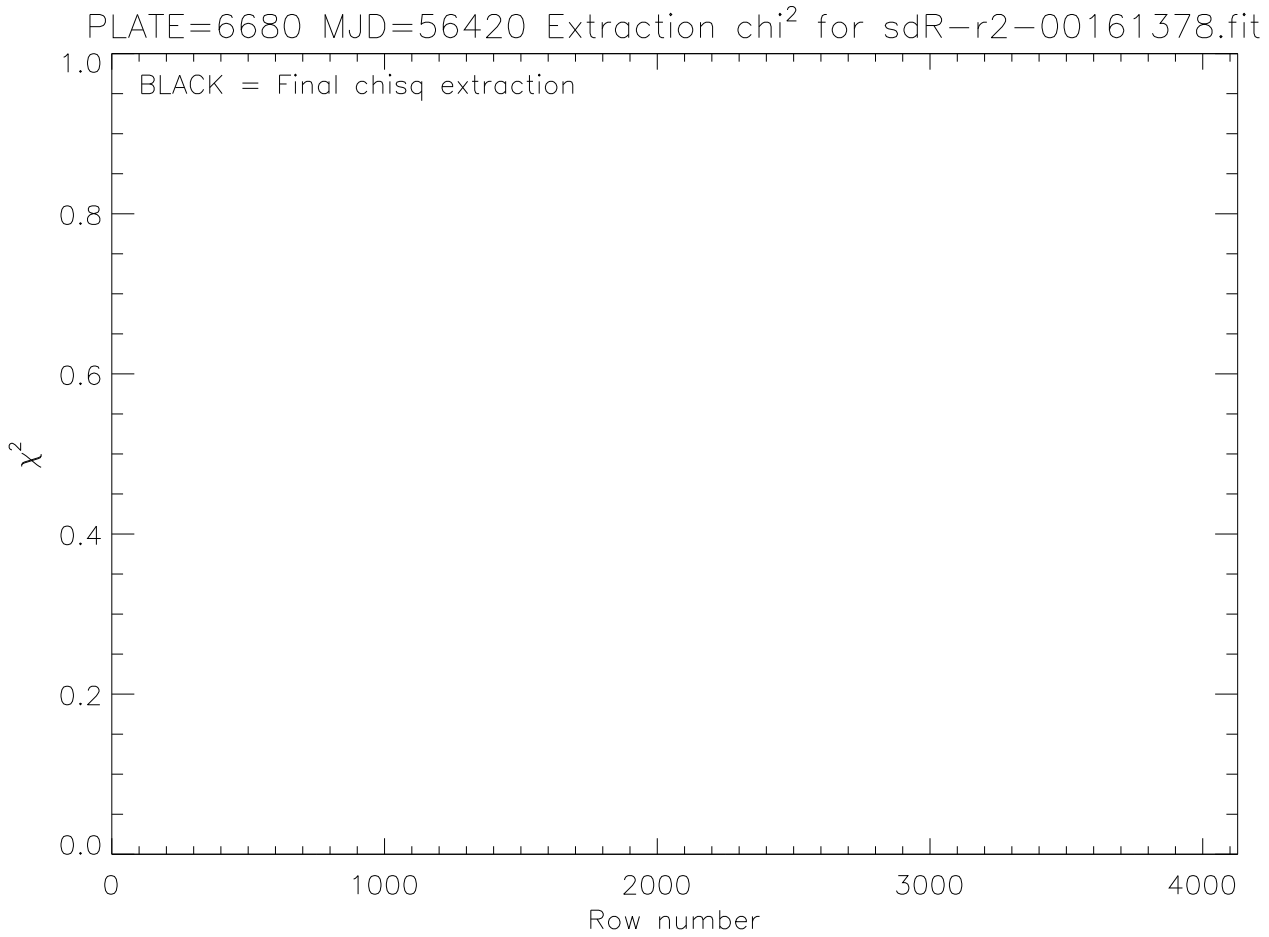
Number of sky fibers = 37

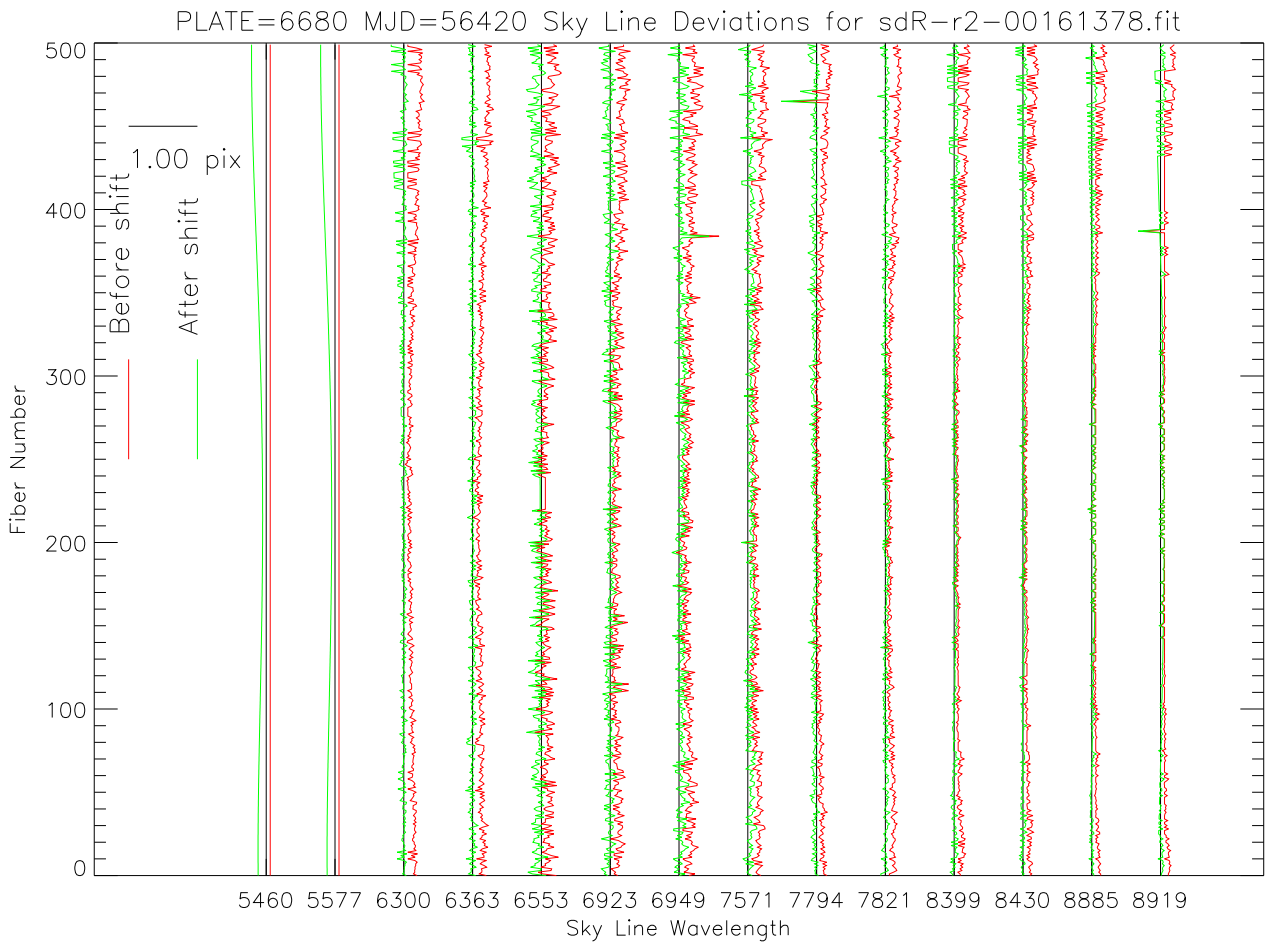


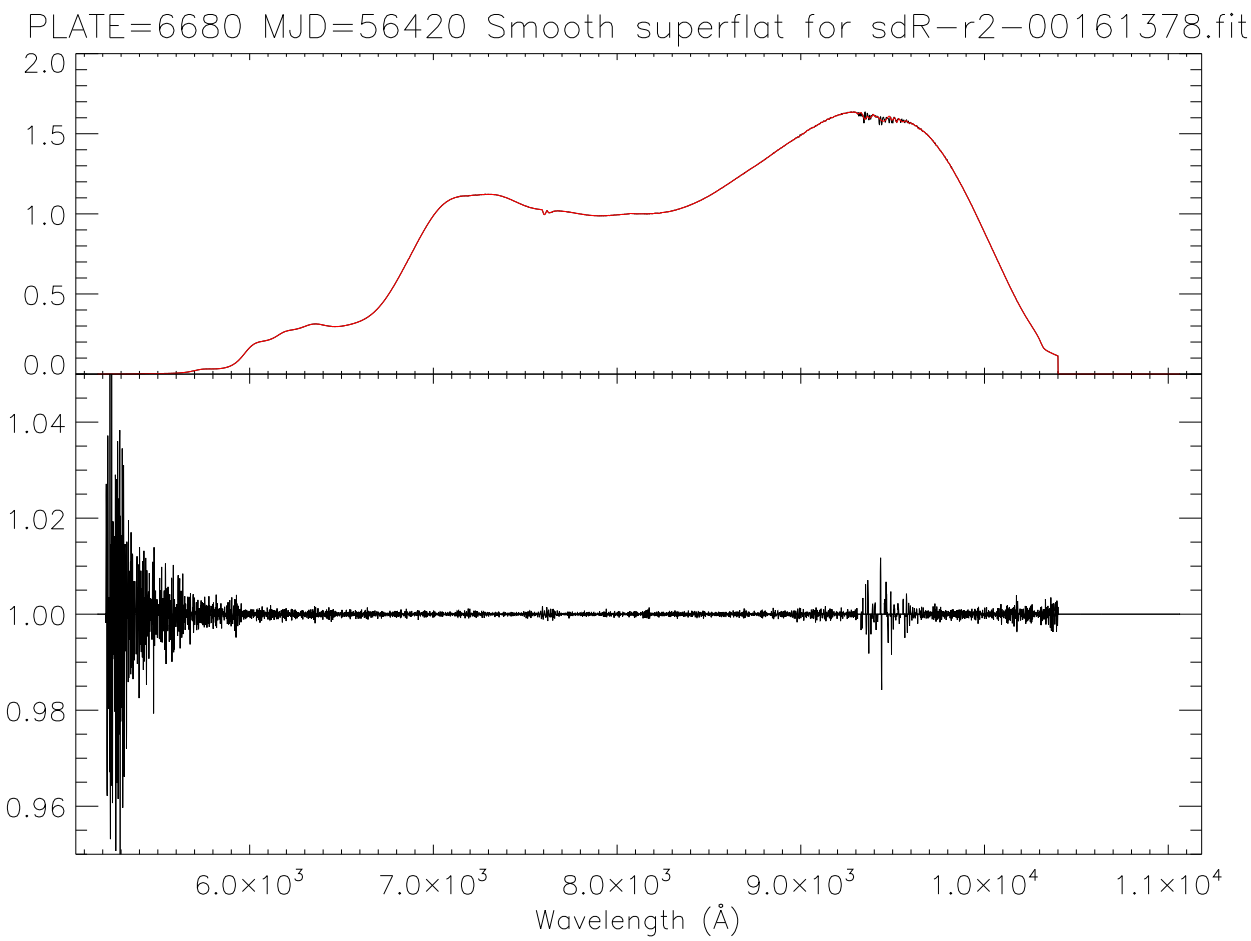

PLATE=6680 MJD=56420 sdR-r2-00161377.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.99 %
Fiber number
Focal Distance [mm]
Airmass

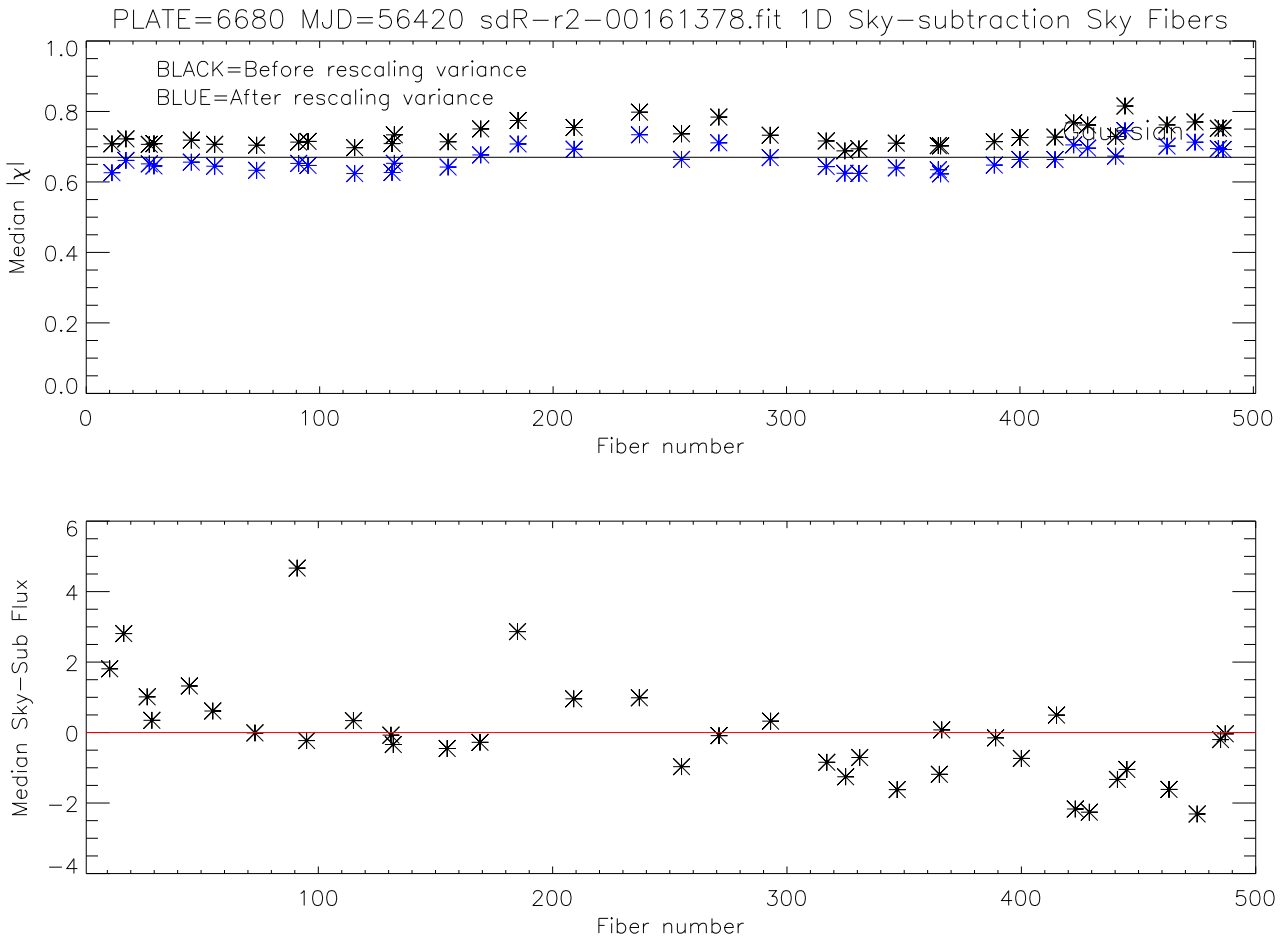

PLATE=6680 MJD=56420 sdR-r2-00161377.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 20.49 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

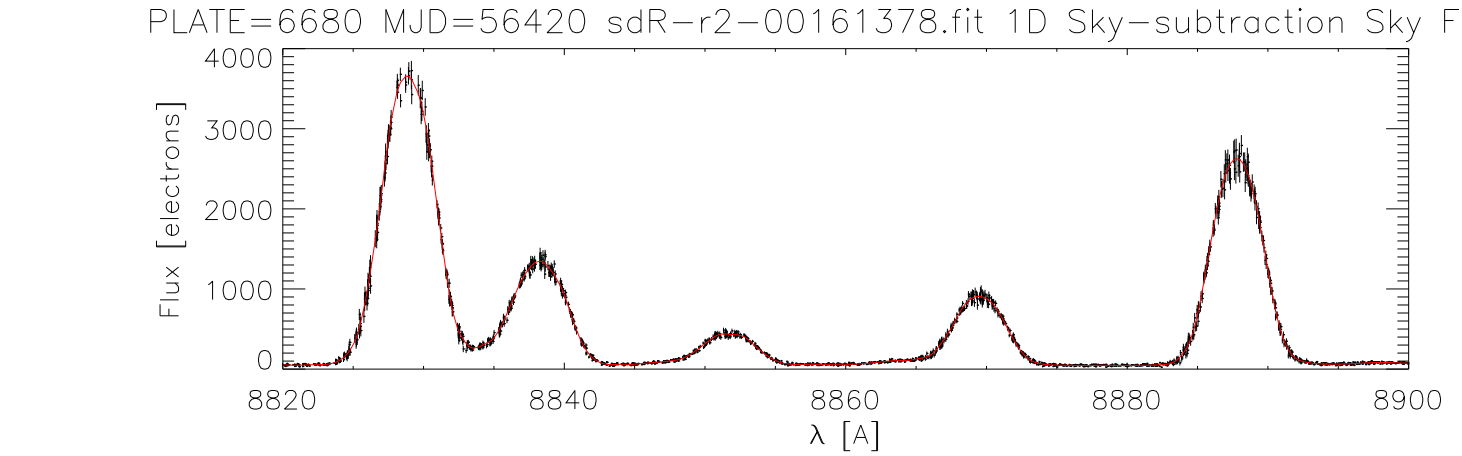

PLATE=6680 MJD=56420 Fiber−Flats for sdR−r2−00161375.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −1.376
Max value = 4.357
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Sat May 28 11:40:50 2016

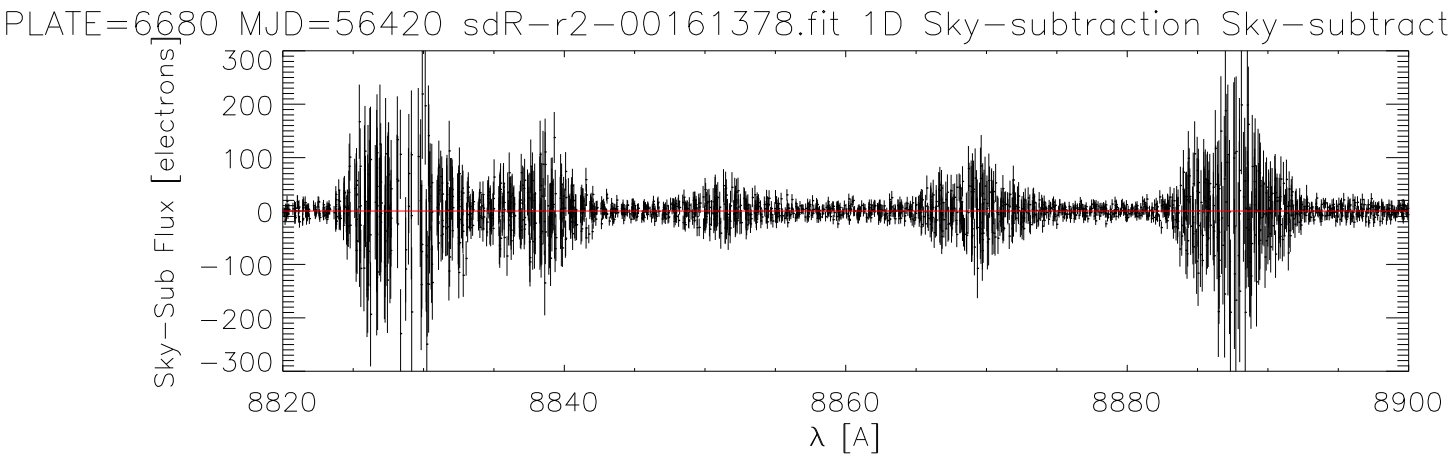

PLATE=6680 MJD=56420 Extraction chi^2 for sdR−r2−00161378.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=6680 MJD=56420 Sky Line Deviations for sdR-r2-00161378.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

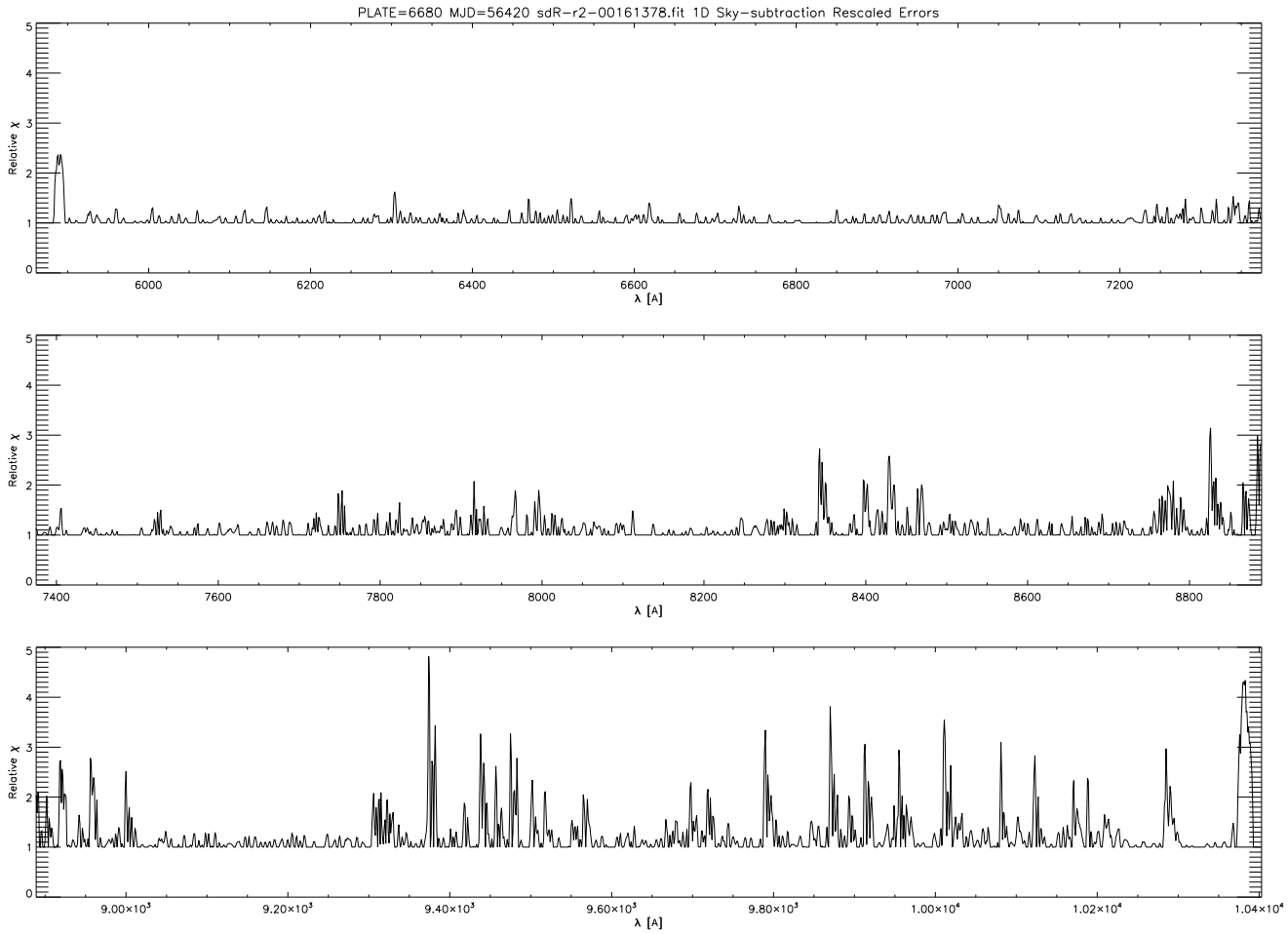

PLATE=6680 MJD=56420 Smooth superflat for sdR-r2-00161378.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

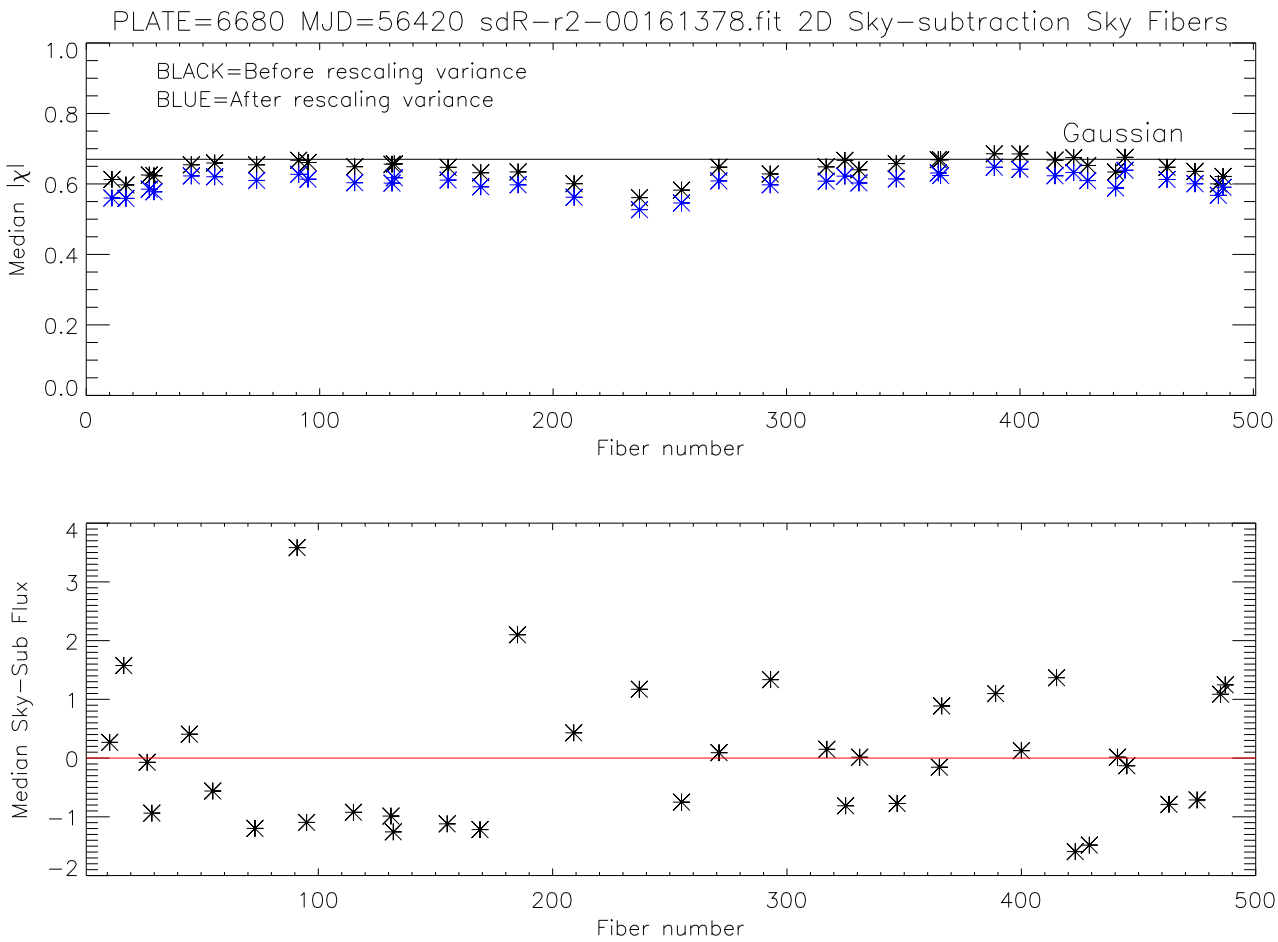

PLATE=6680 MJD=56420 sdR-r2-00161378.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

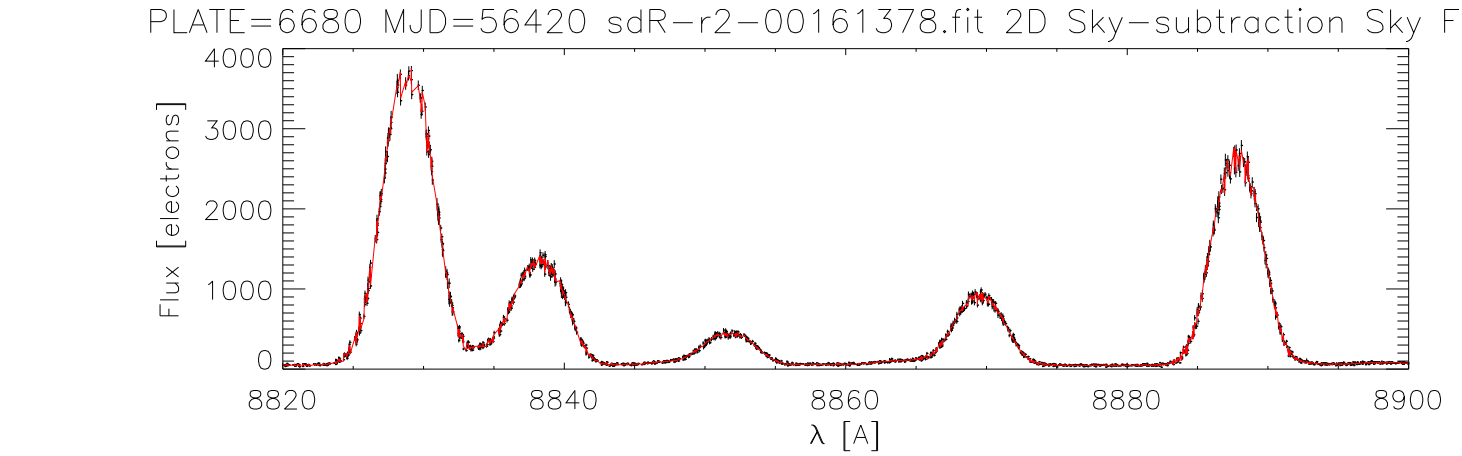

PLATE=6680 MJD=56420 sdR-r2-00161378.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

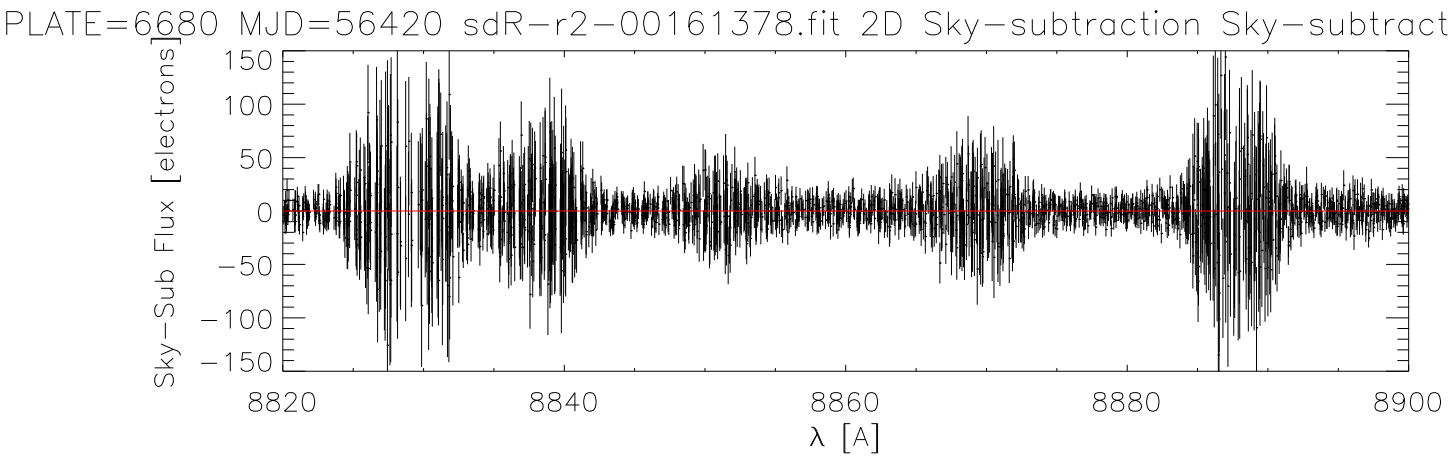

PLATE=6680 MJD=56420 sdR-r2-00161378.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 37

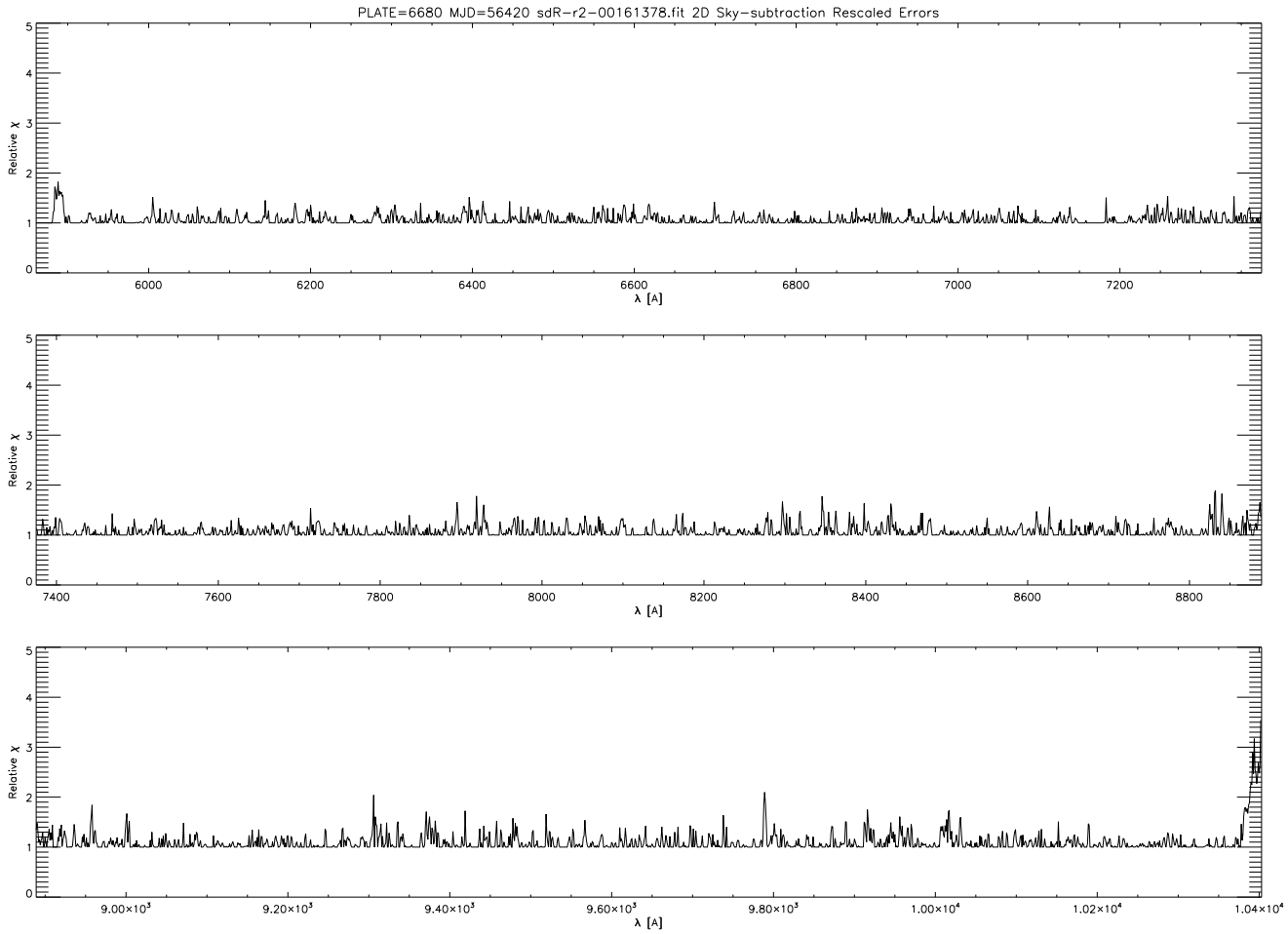


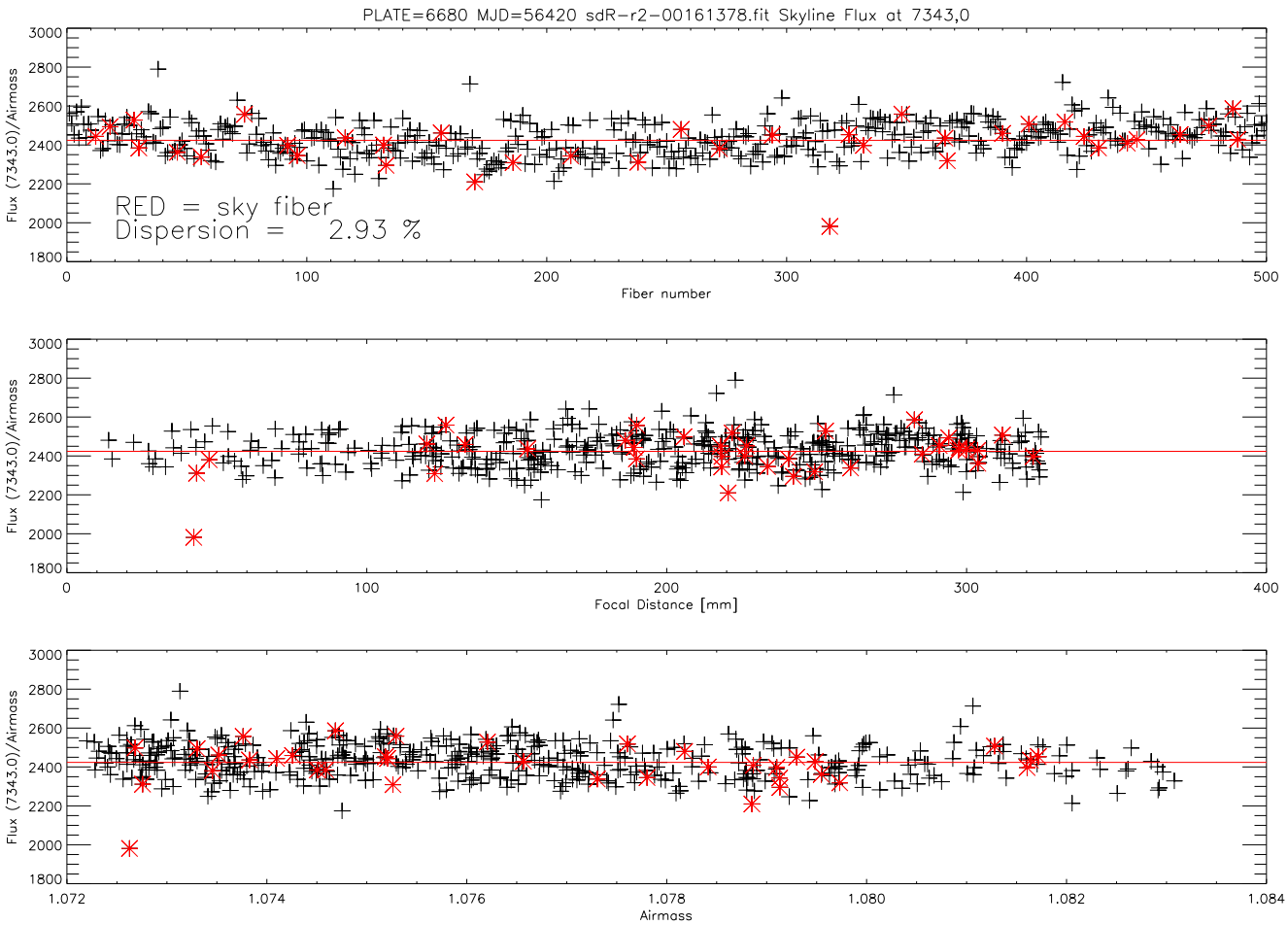

PLATE=6680 MJD=56420 sdR-r2-00161378.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

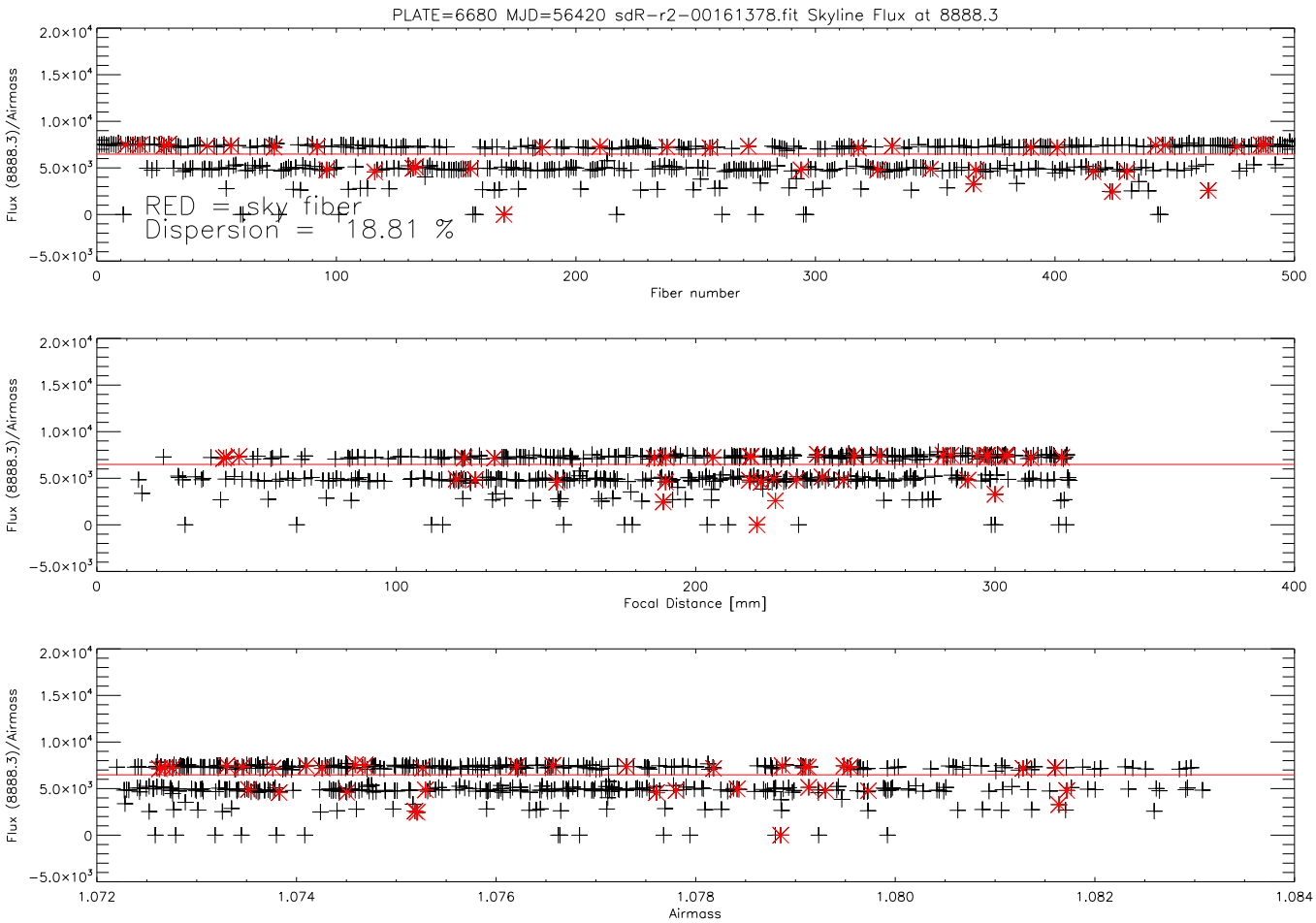

PLATE=6680 MJD=56420 sdR-r2-00161378.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=6680 MJD=56420 sdR-r2-00161378.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
-50
-100
-150
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 37




PLATE=6680 MJD=56420 sdR-r2-00161378.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.93 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=6680 MJD=56420 sdR-r2-00161378.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
Fiber number
RED = sky fiber
Dispersion = 18.81 %
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass