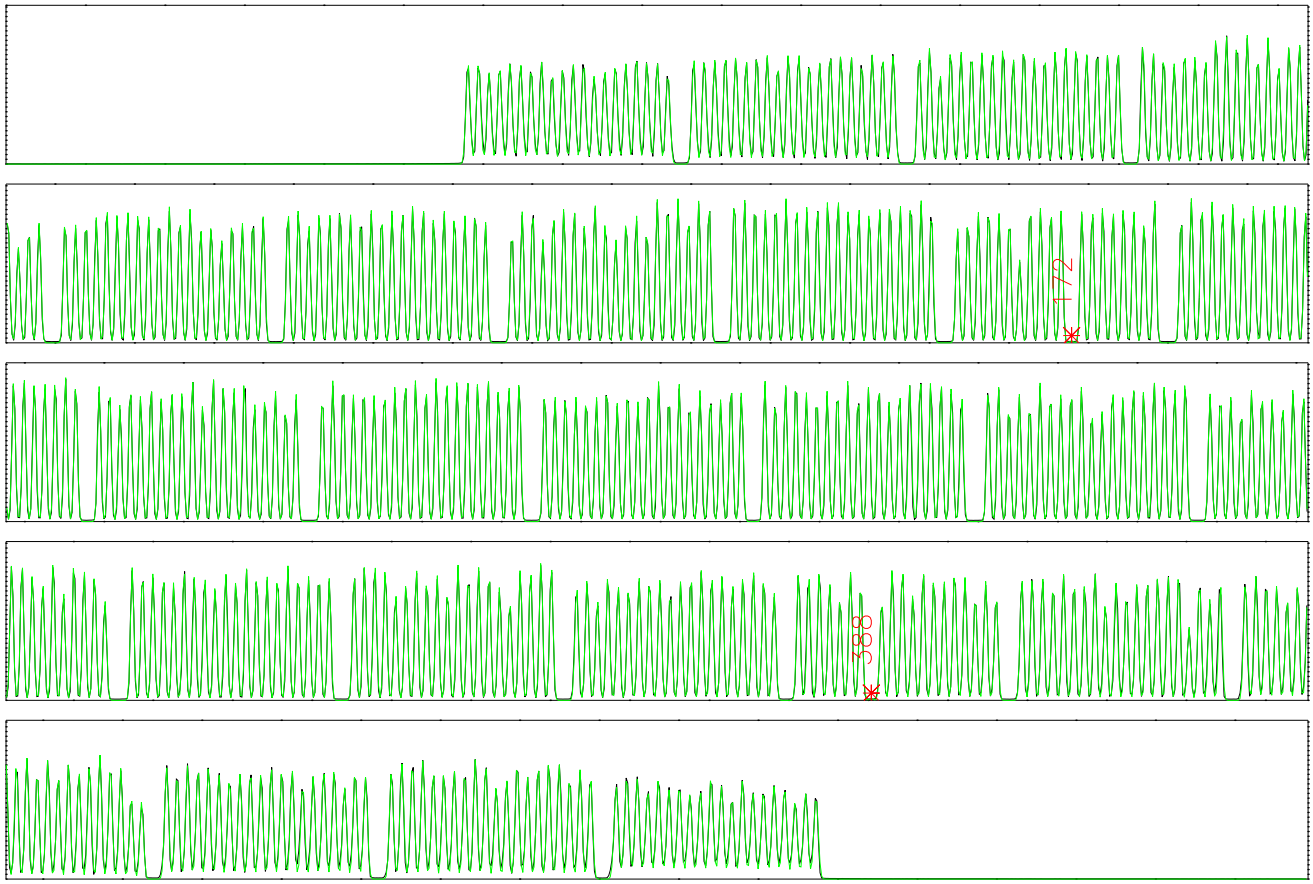
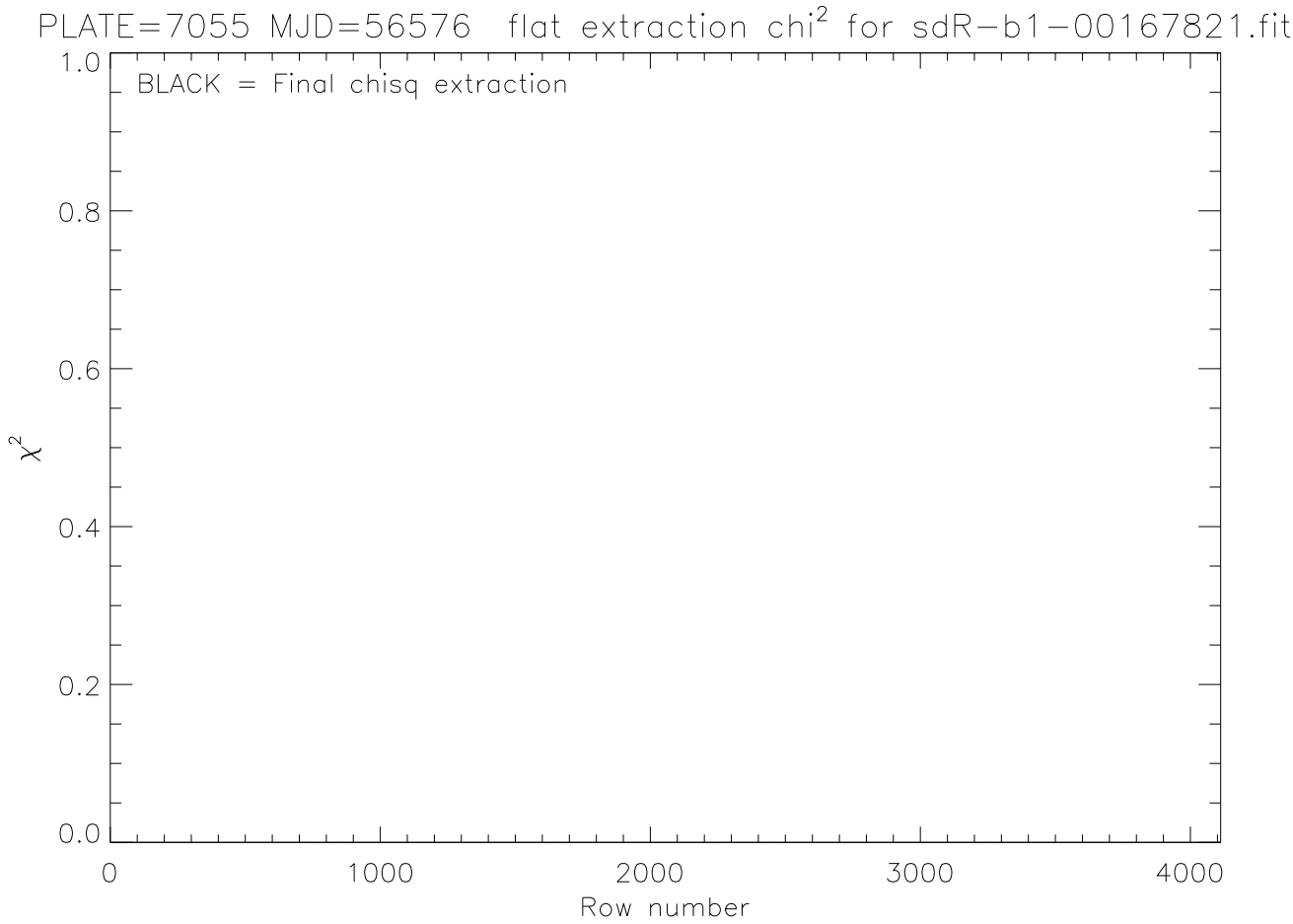
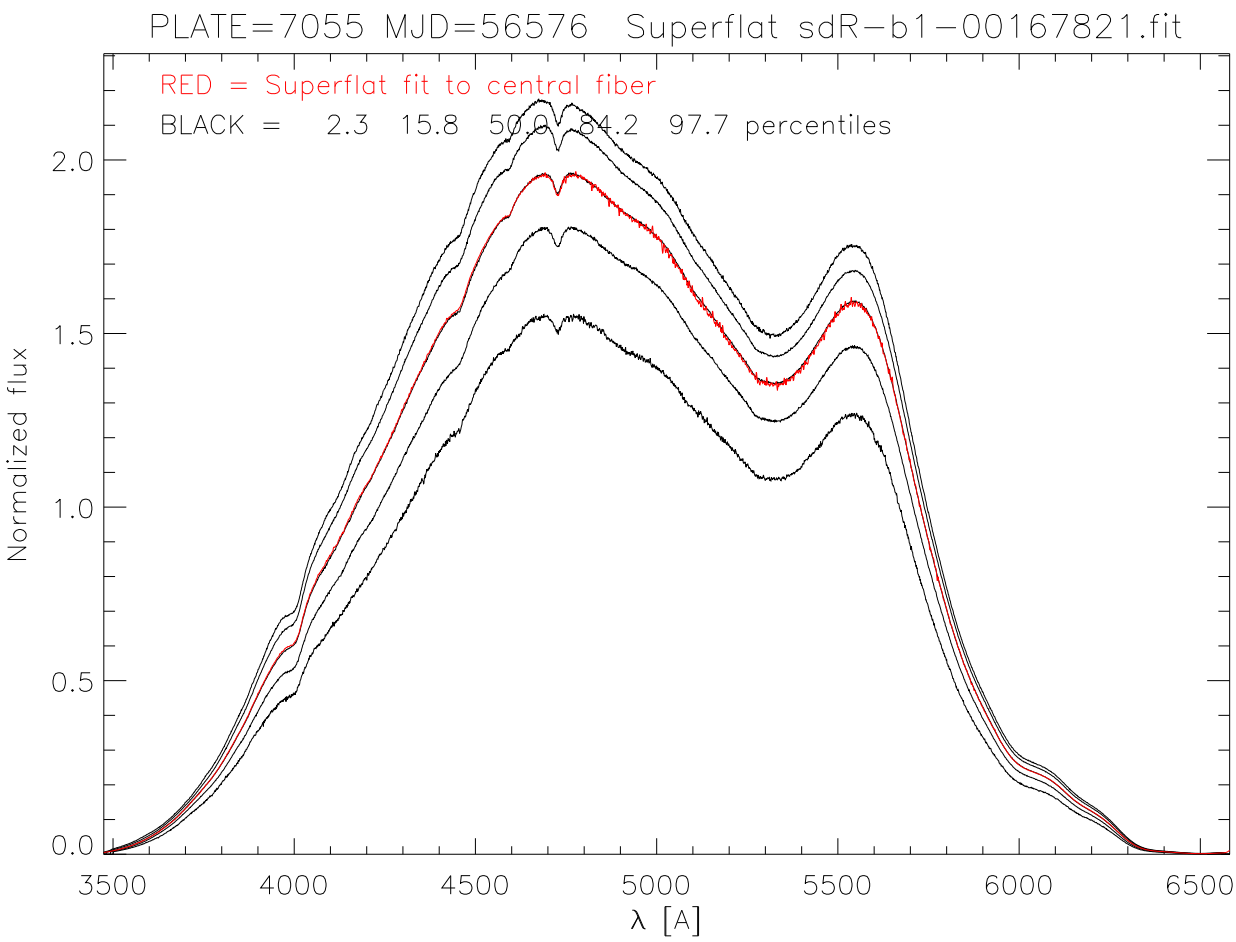
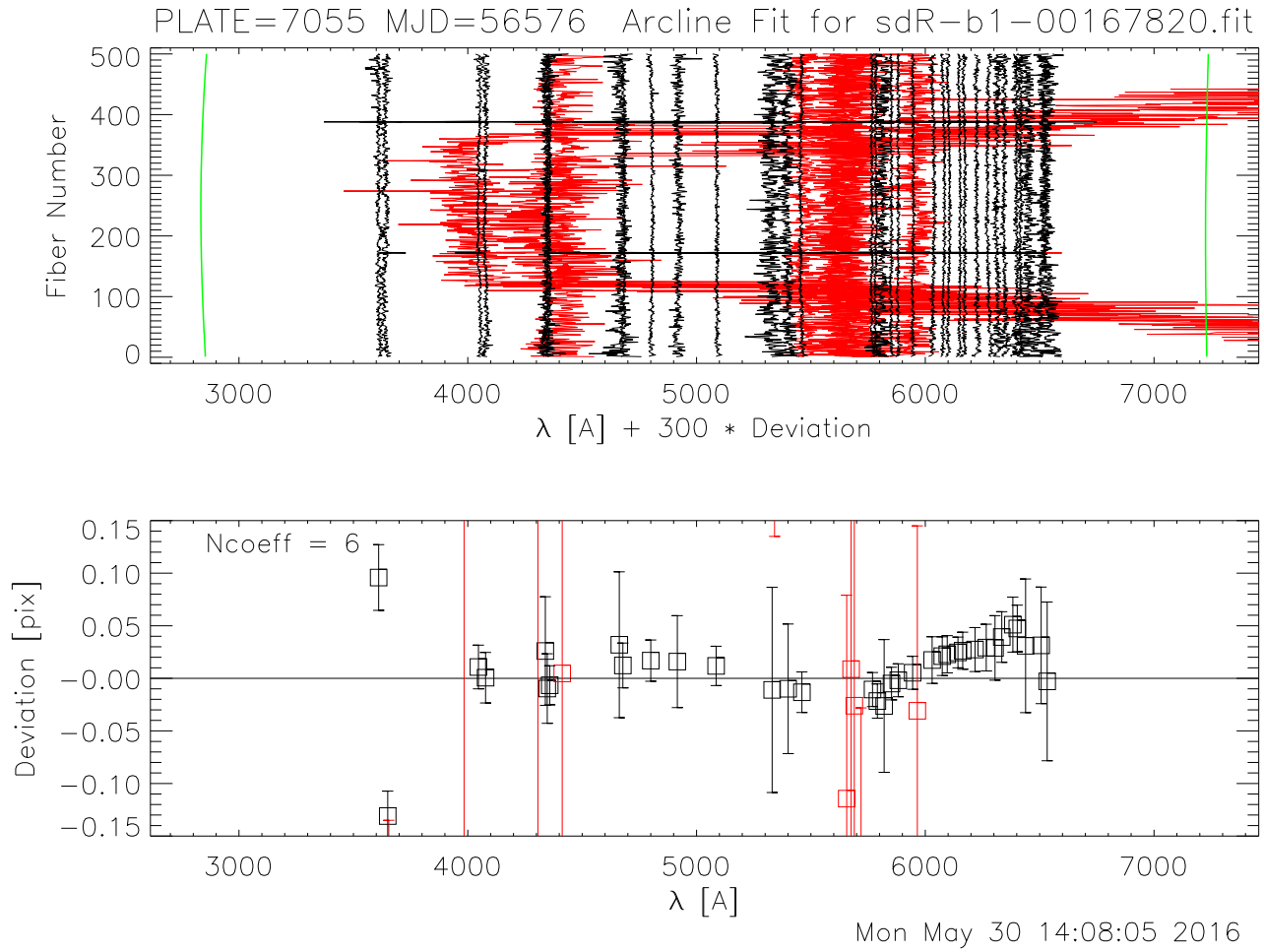
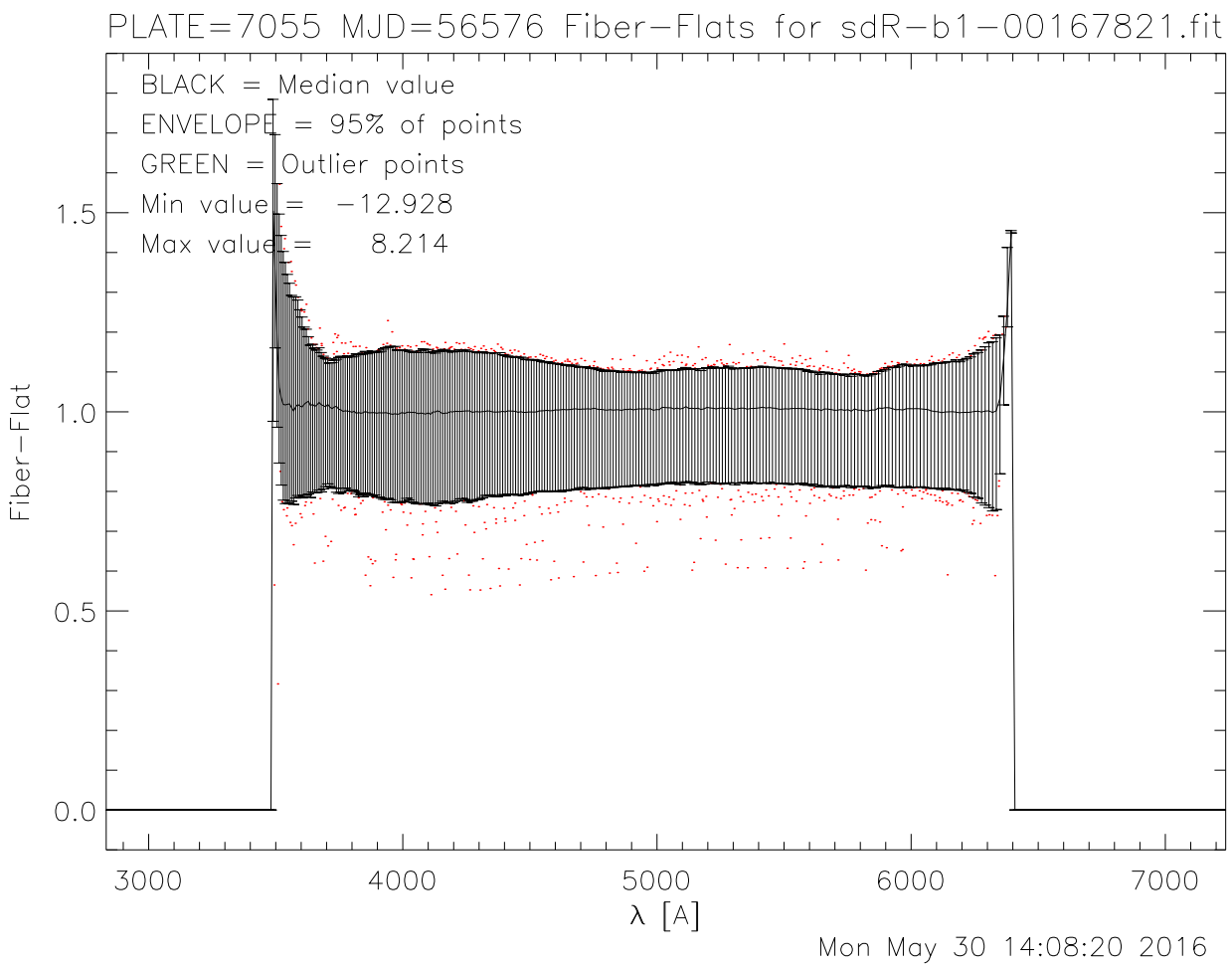
PLATE=7055 MJD=56576 Traces sdR-b1-00167821.fit

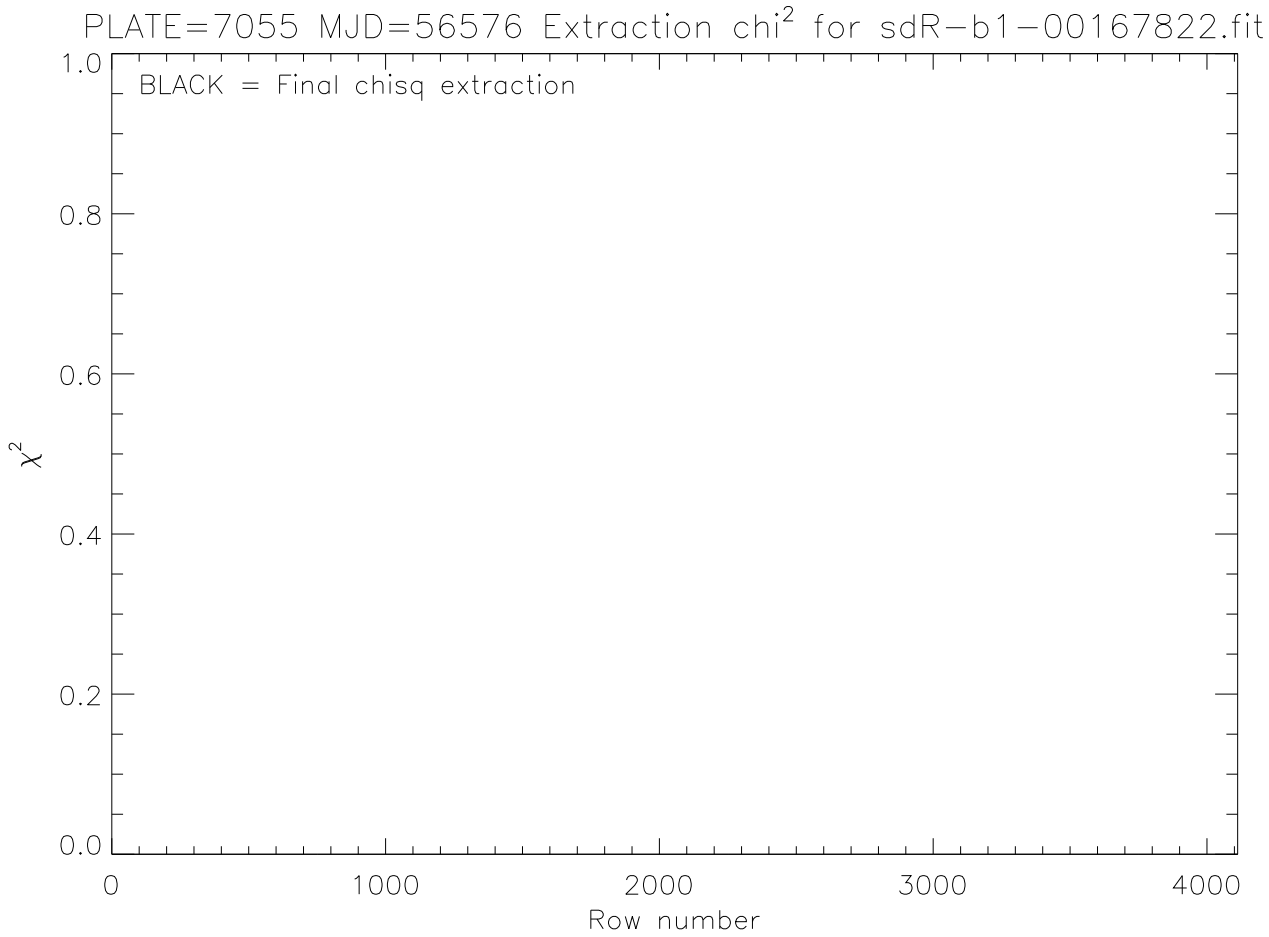


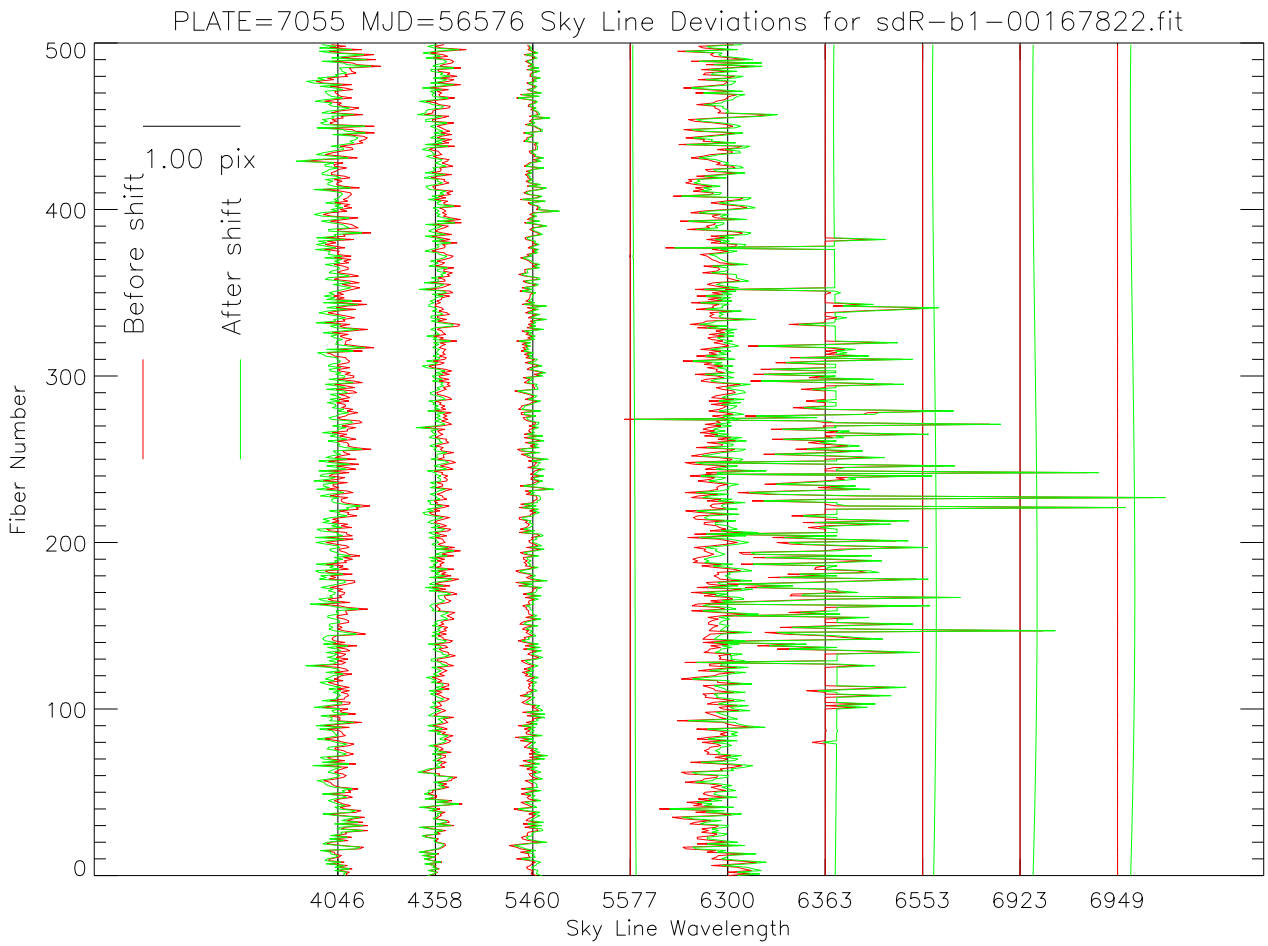

PLATE=7055 MJD=56576 flat extraction chi^2 for sdR−b1−00167821.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

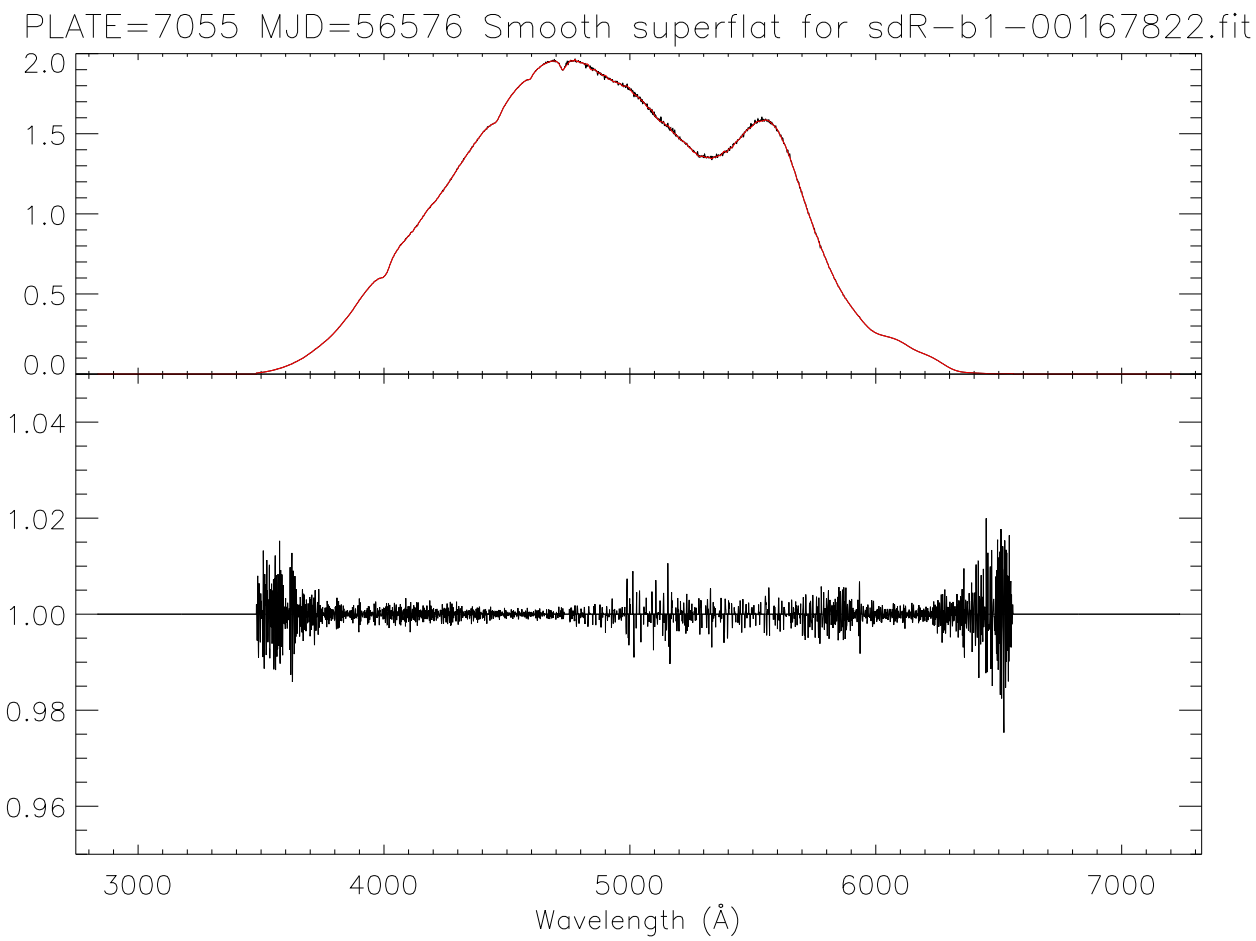

PLATE=7055 MJD=56576 Superflat sdR-b1-00167821.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
3500
4000
4500
5000
5500
6000
6500

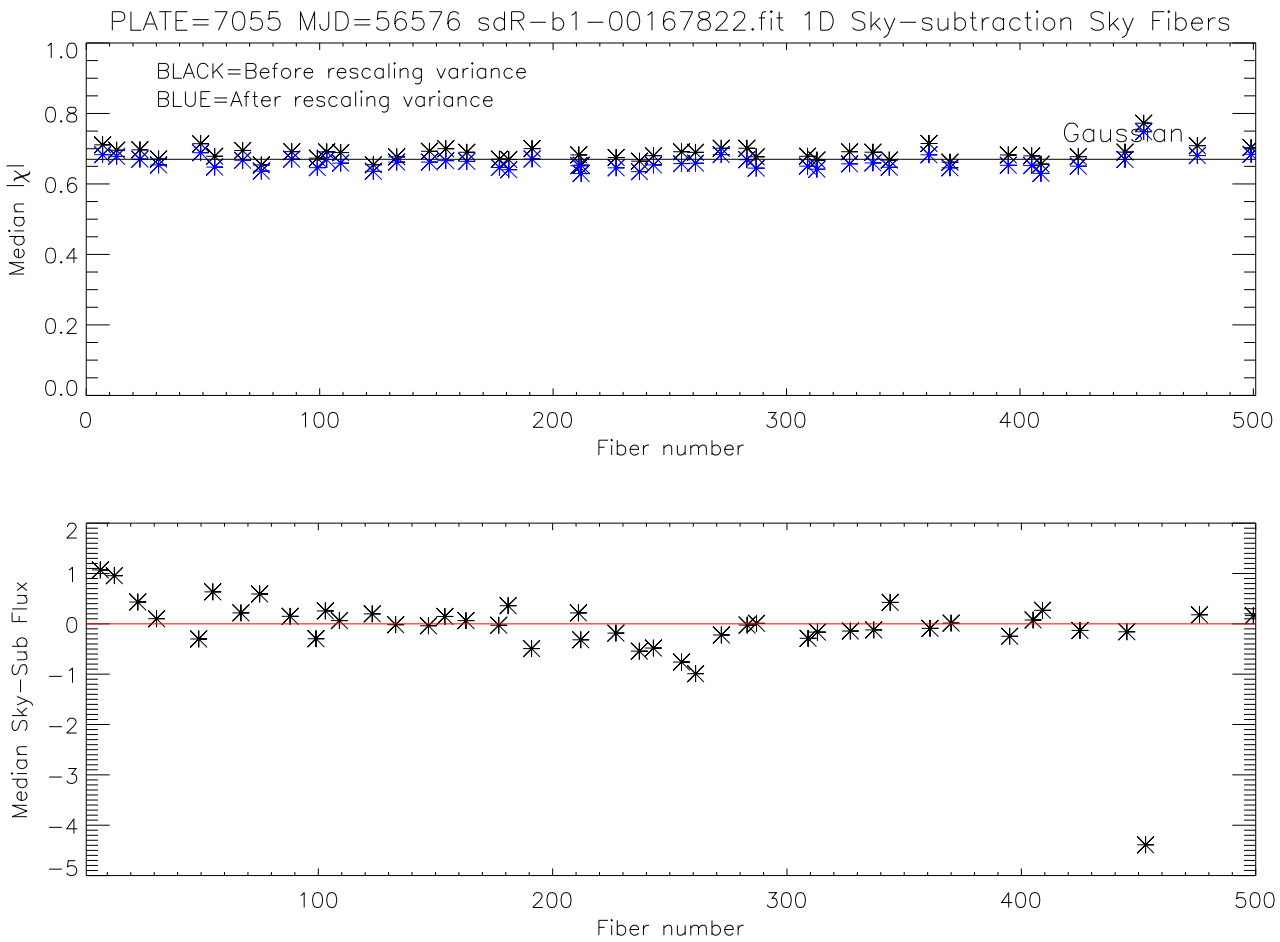

PLATE=7055 MJD=56576 Arcline Fit for sdR-b1-00167820.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:08:05 2016

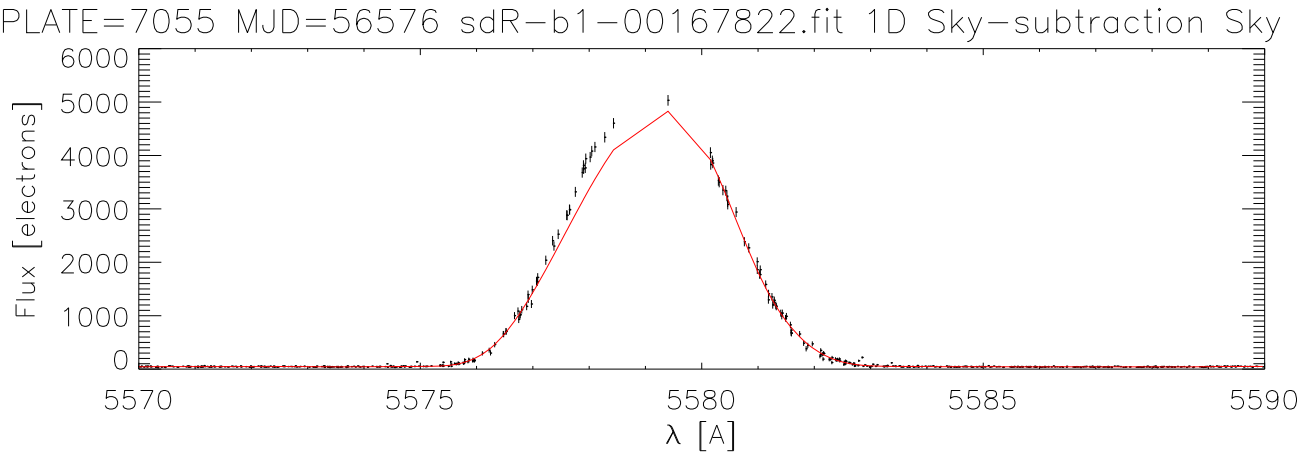

PLATE=7055 MJD=56576 Fiber-Flats for sdR-b1-00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -12.928
Max value = 8.214
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:08:20 2016

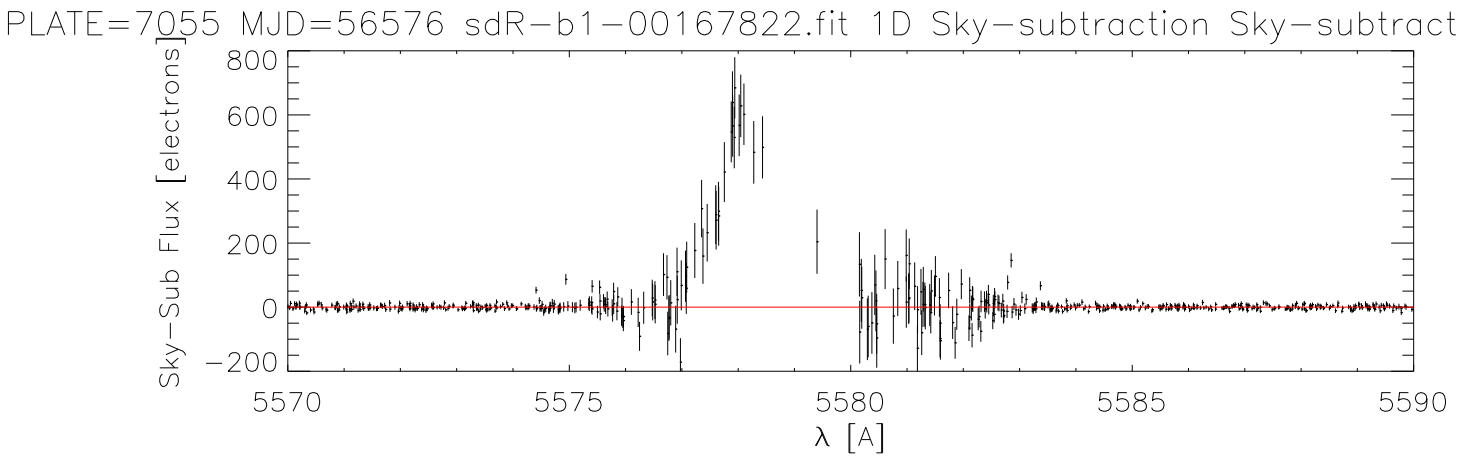

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−b1−00167822.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b1-00167822.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

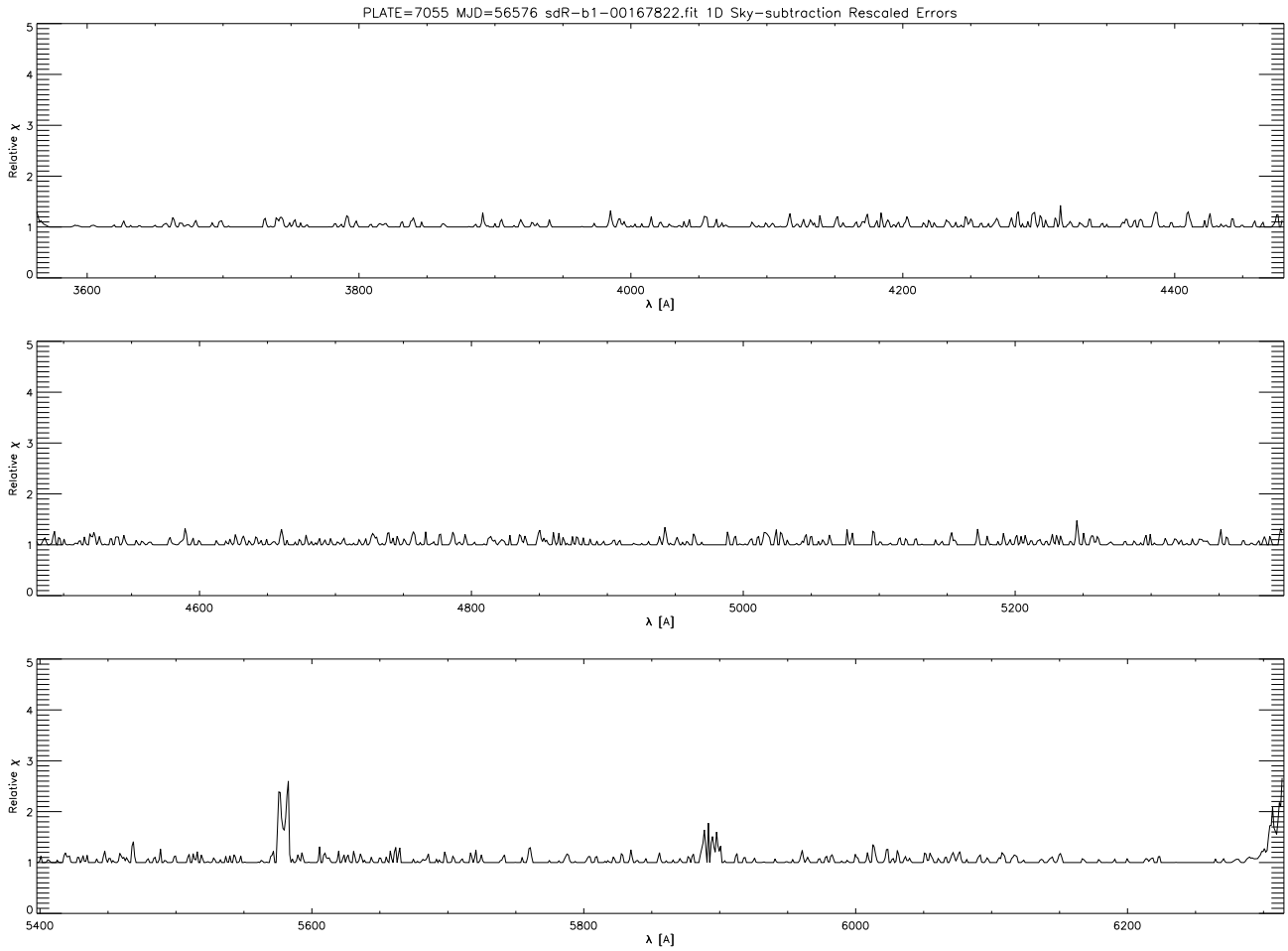

PLATE=7055 MJD=56576 Smooth superflat for sdR-b1-00167822.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

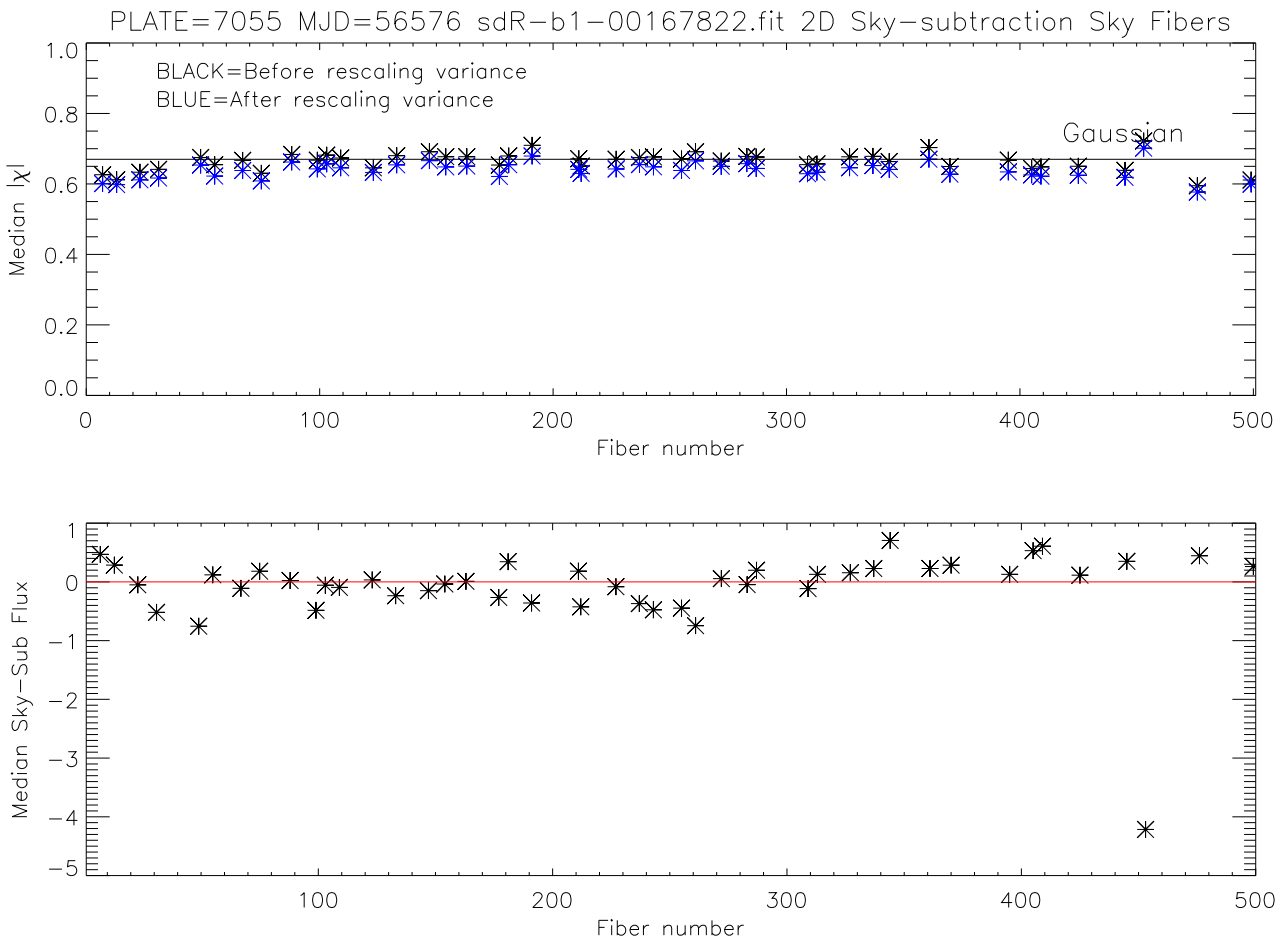

PLATE=7055 MJD=56576 sdR-b1-00167822.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

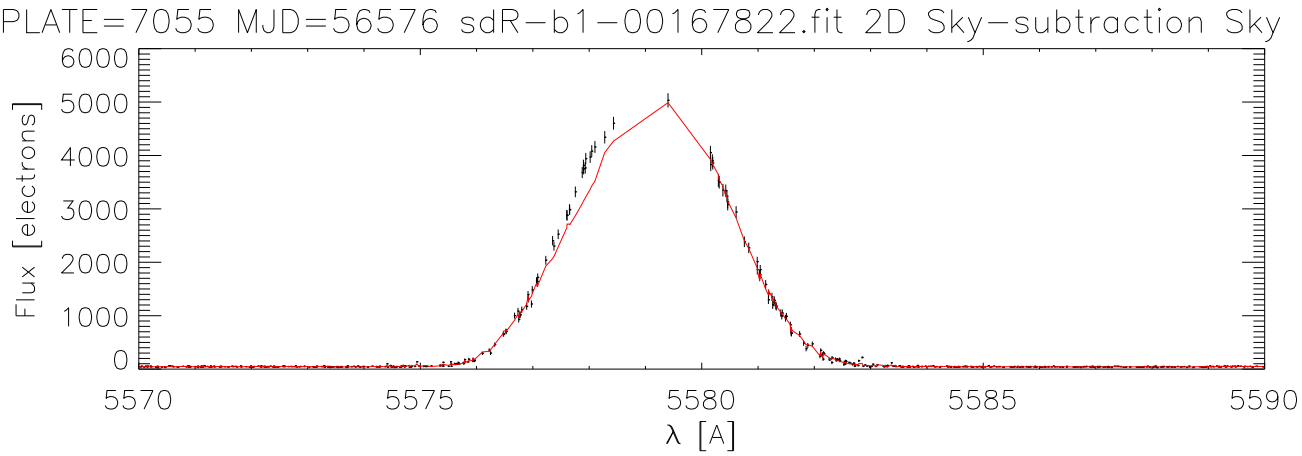

PLATE=7055 MJD=56576 sdR-b1-00167822.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

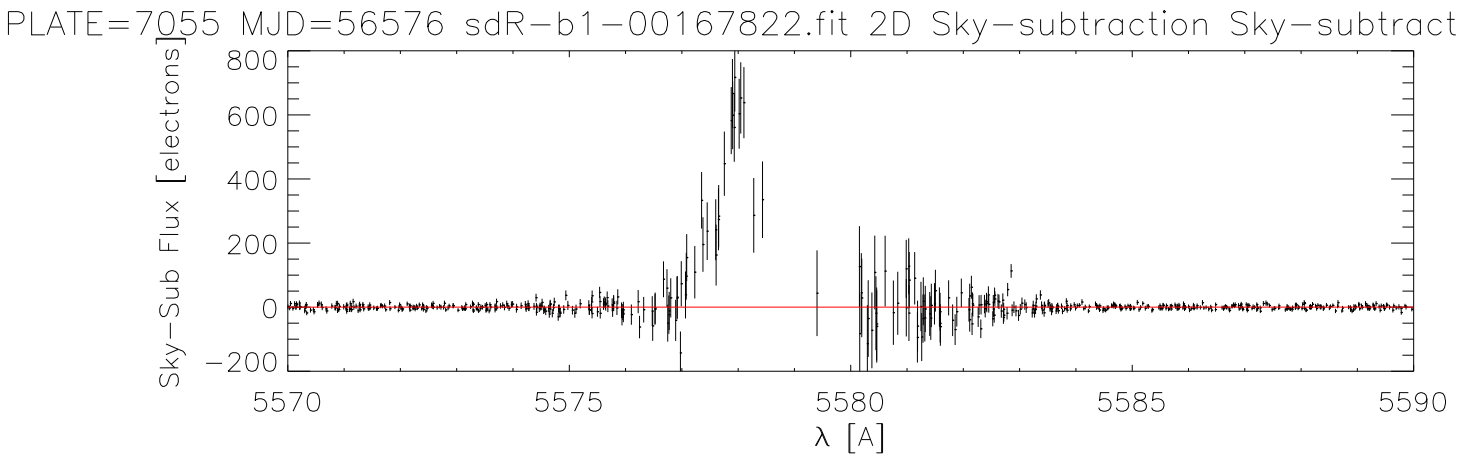

PLATE=7055 MJD=56576 sdR-b1-00167822.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 45

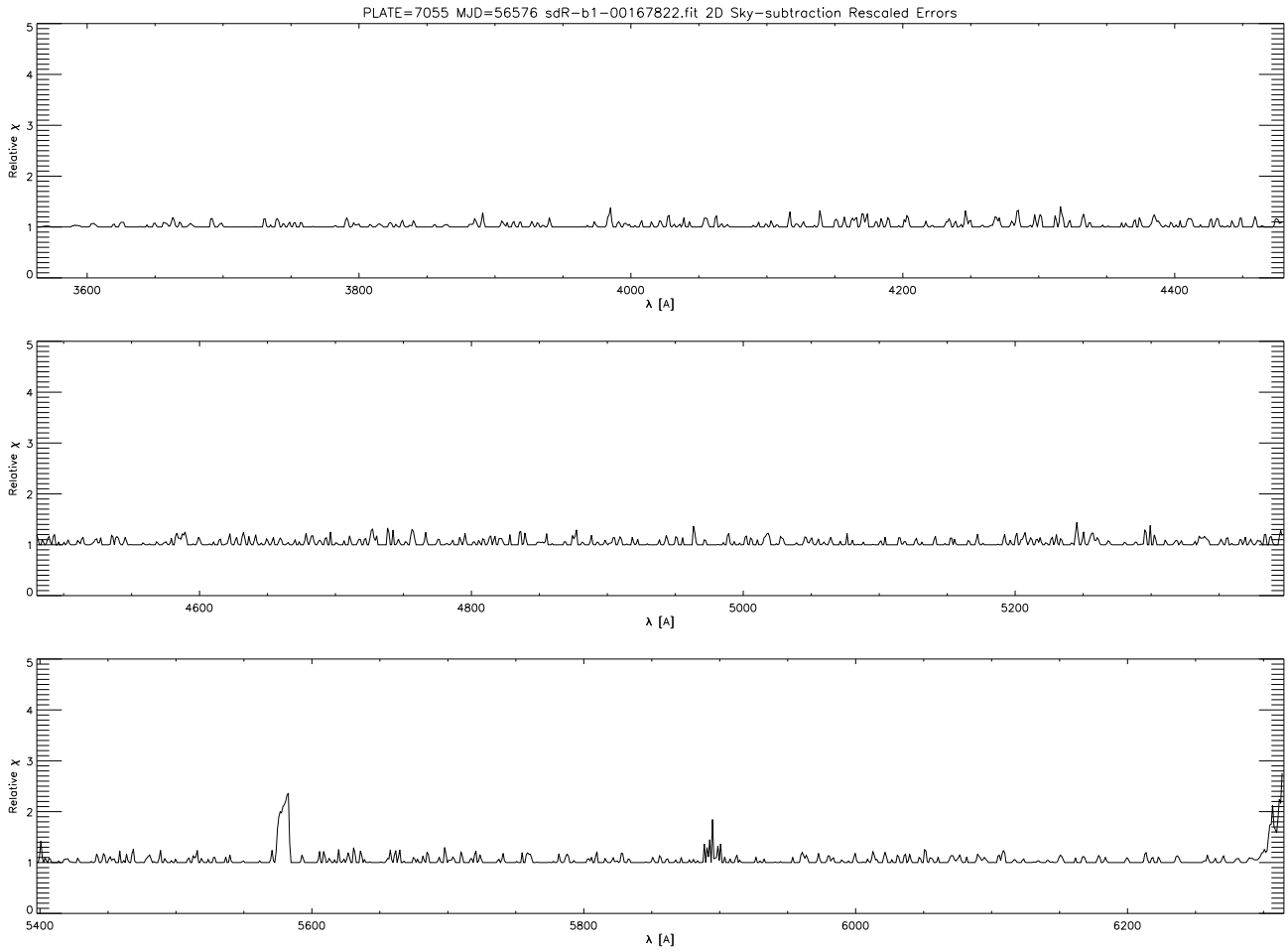


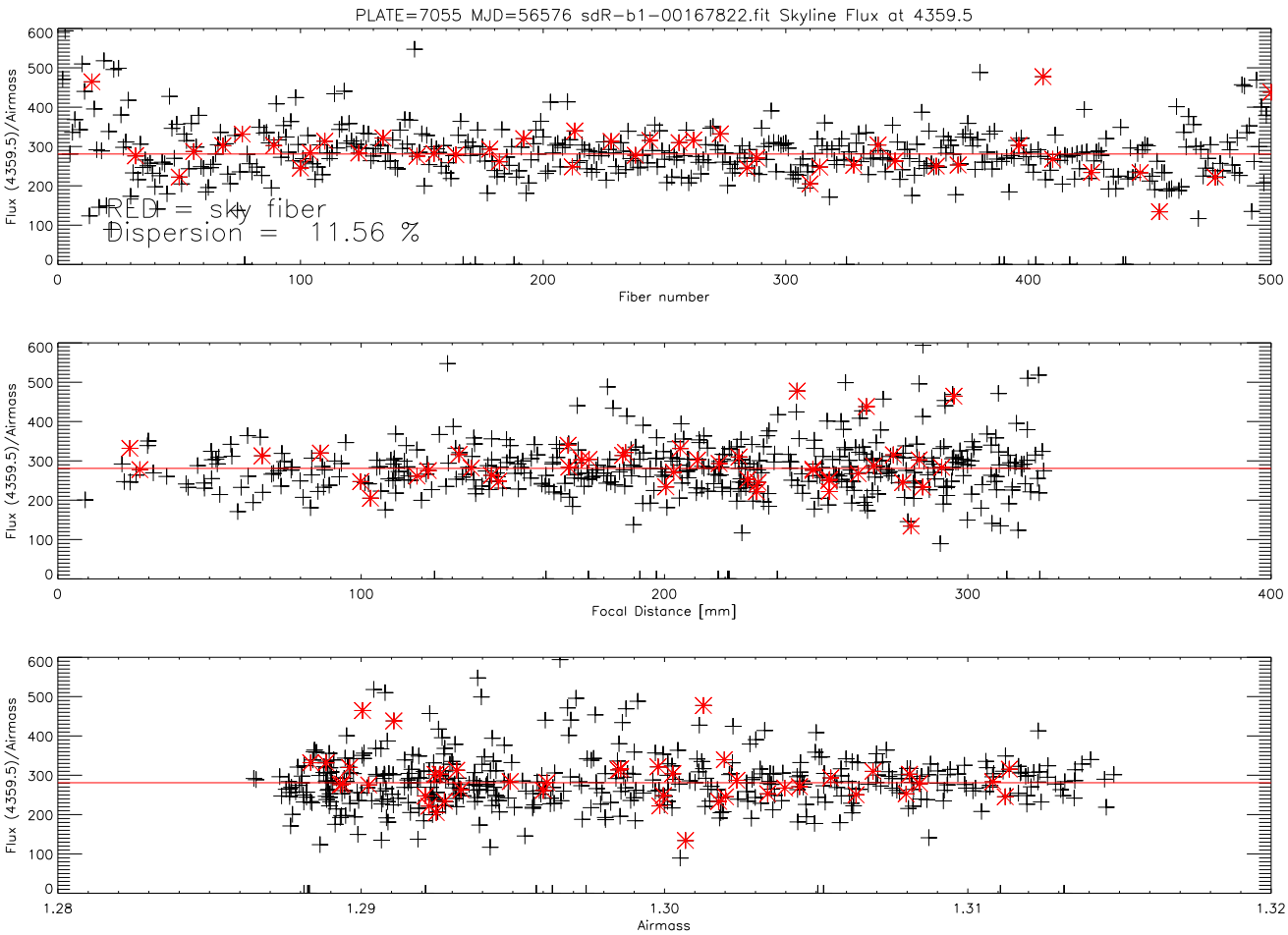

PLATE=7055 MJD=56576 sdR-b1-00167822.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

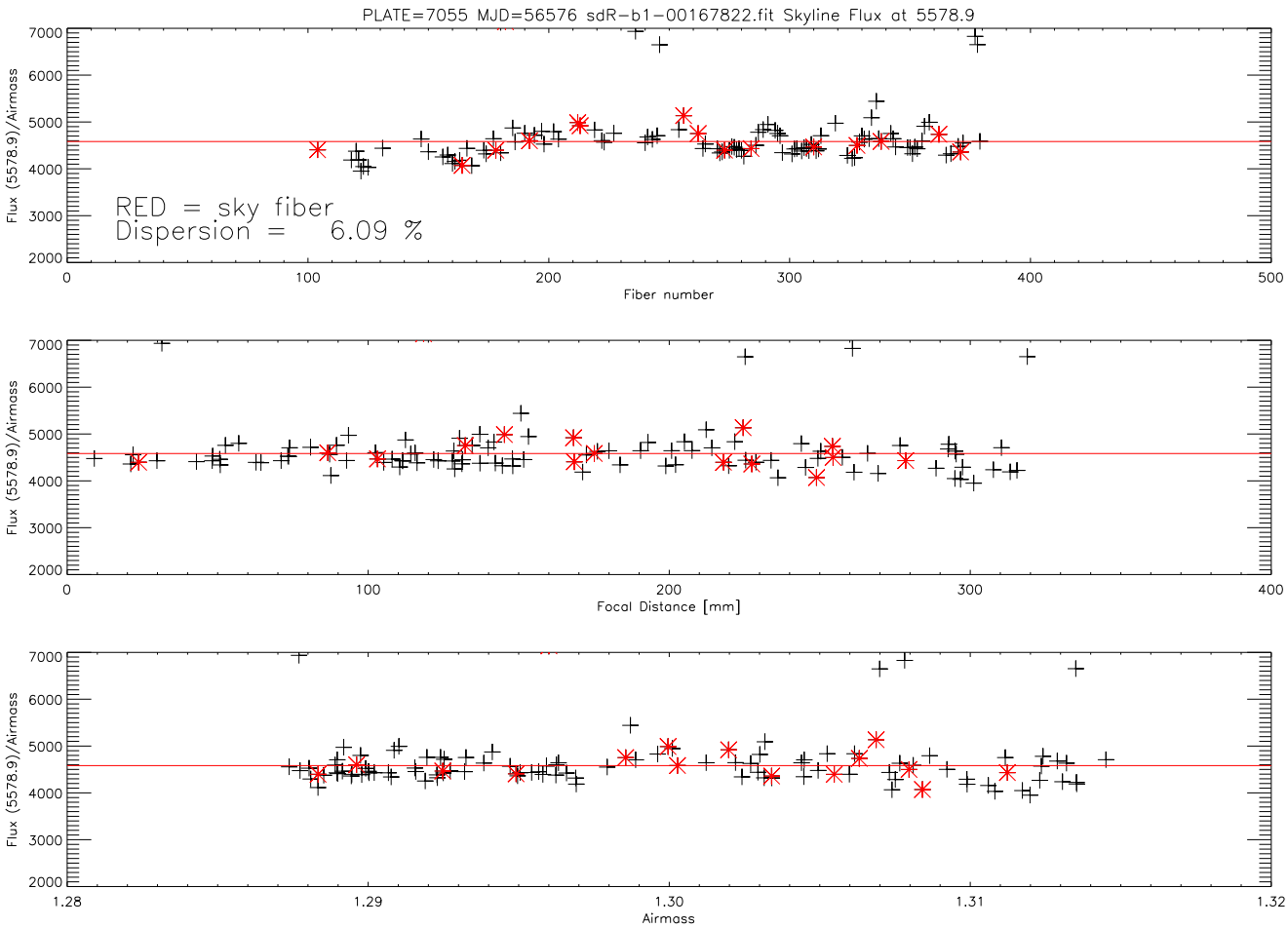

PLATE=7055 MJD=56576 sdR-b1-00167822.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

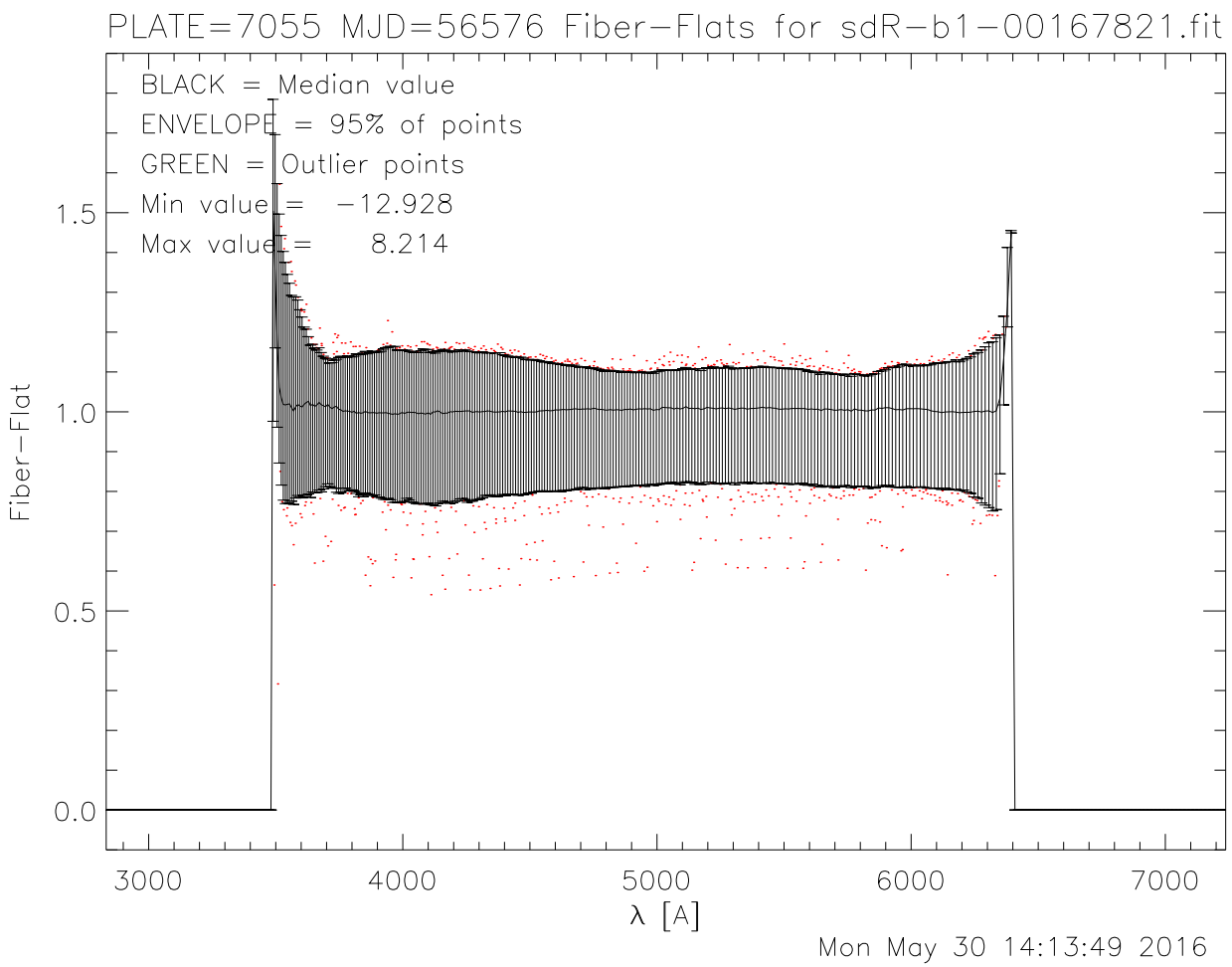

PLATE=7055 MJD=56576 sdR-b1-00167822.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

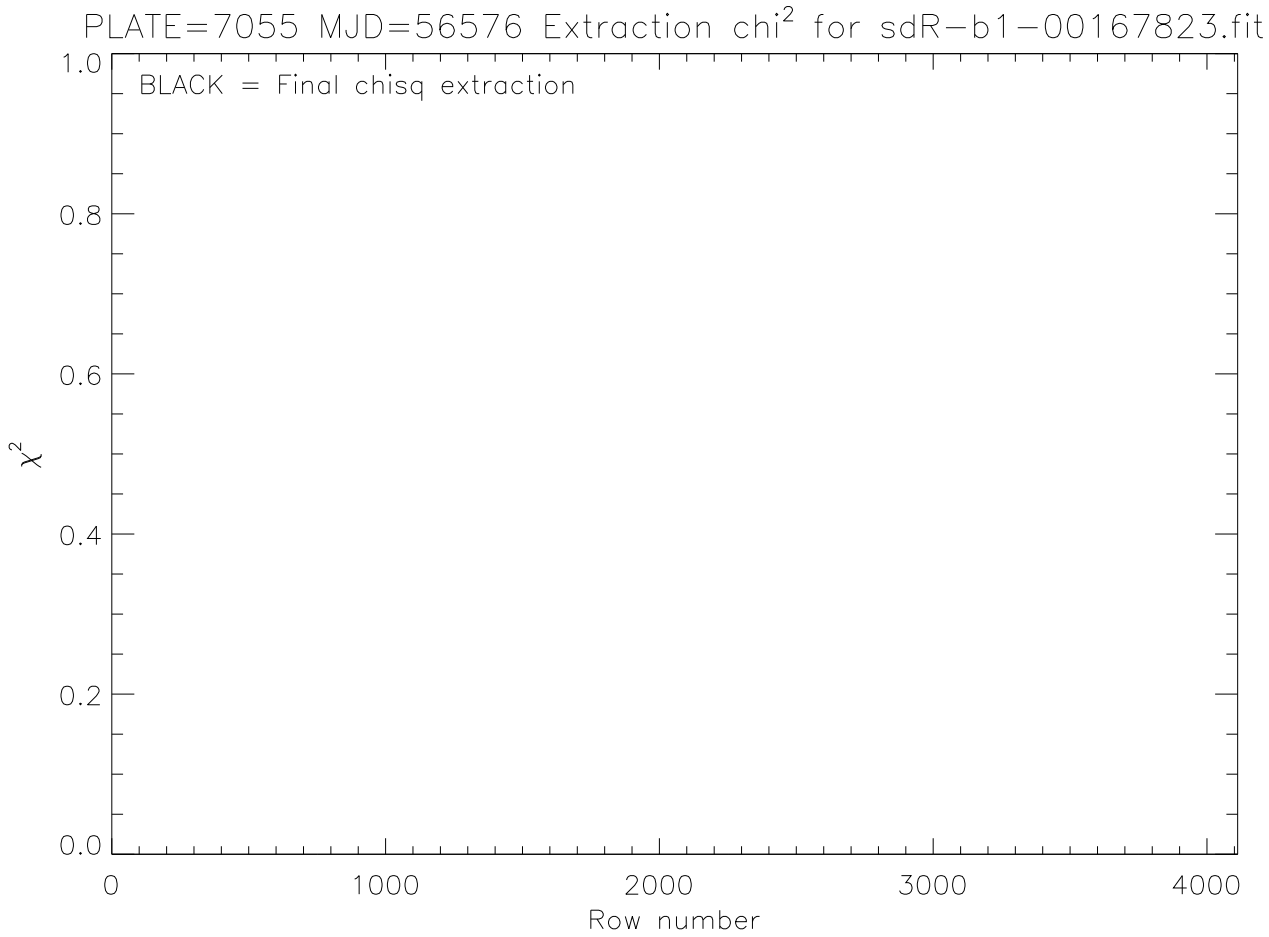
Number of sky fibers = 45

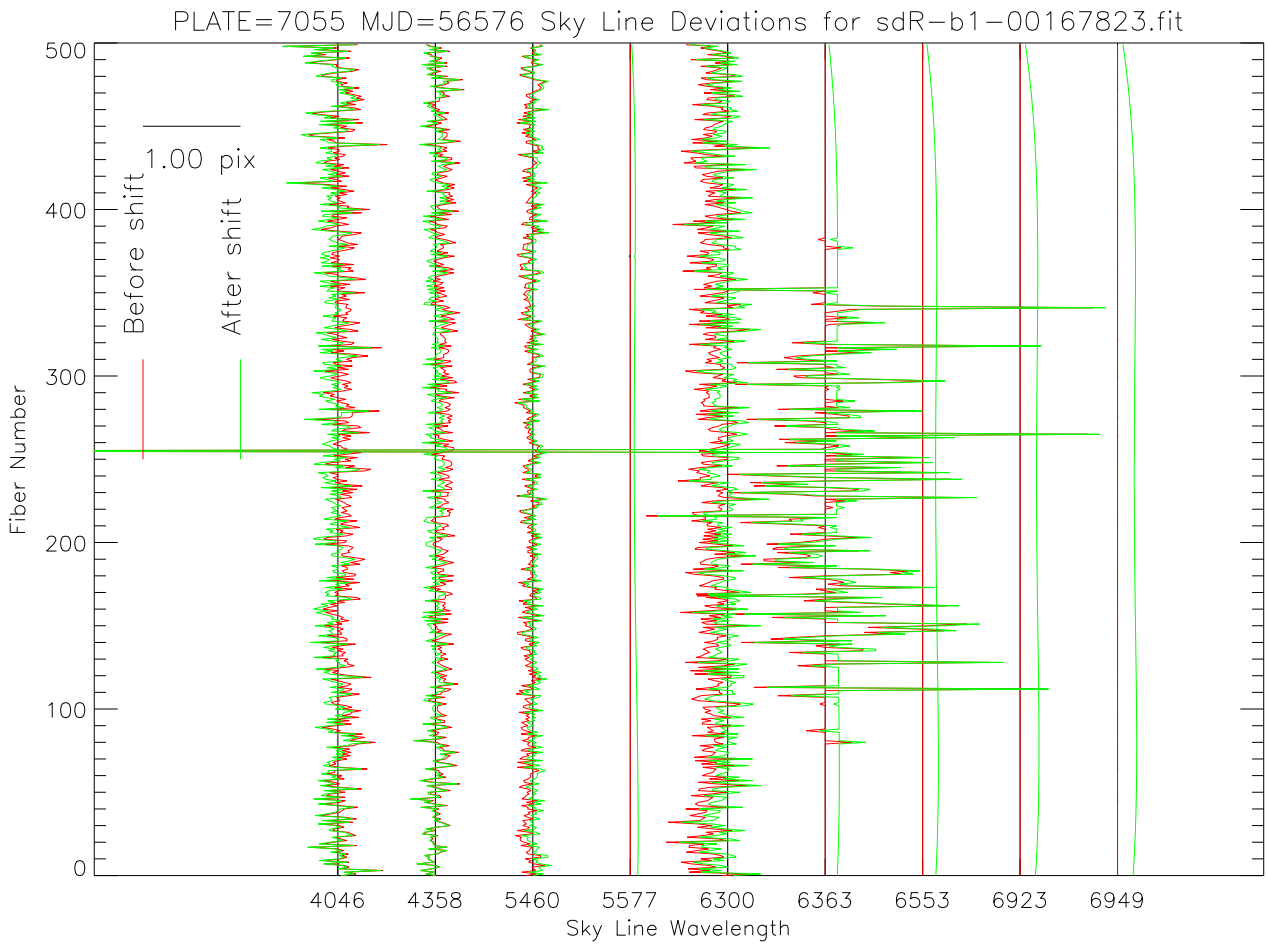


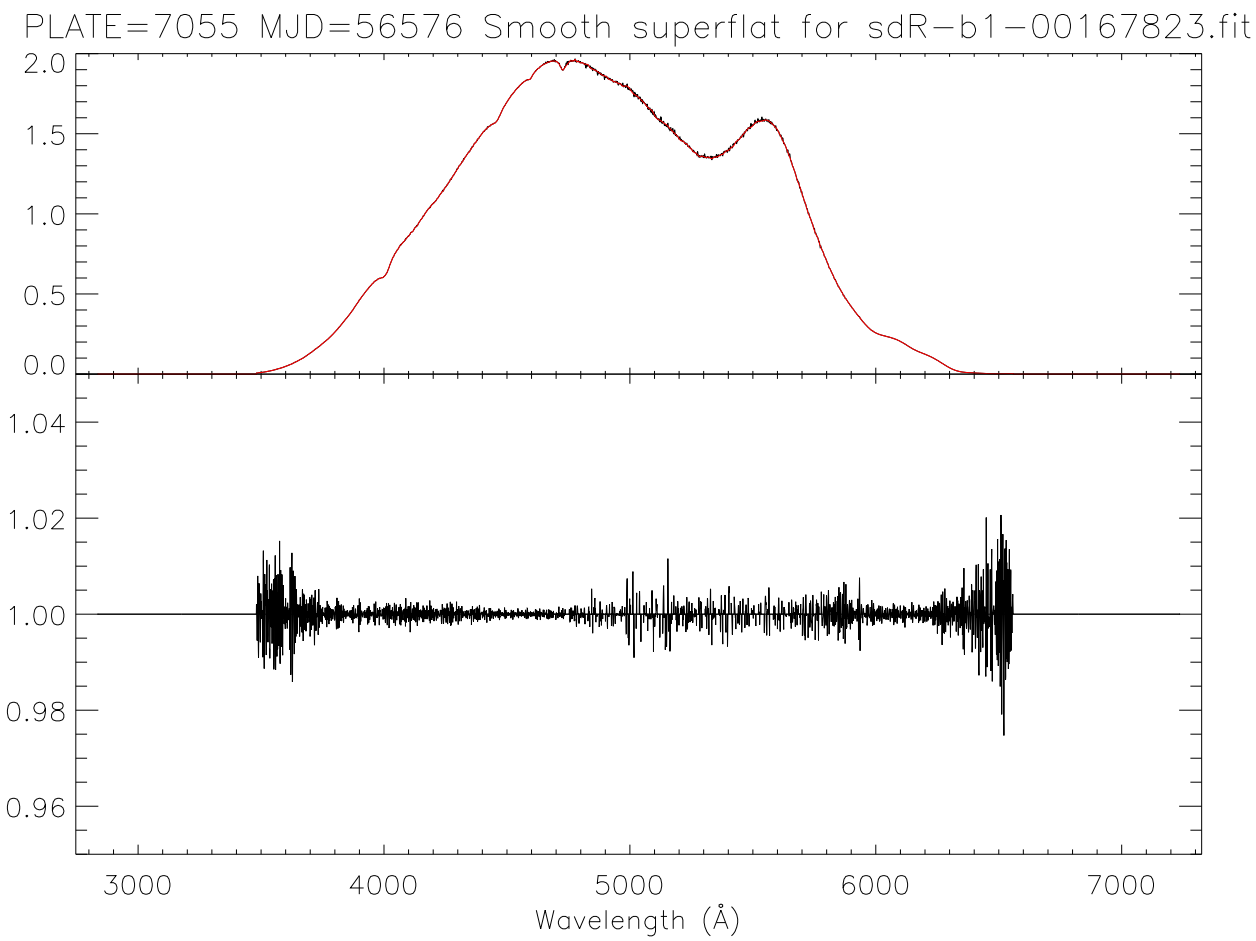

PLATE=7055 MJD=56576 sdR-b1-00167822.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 11.56 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

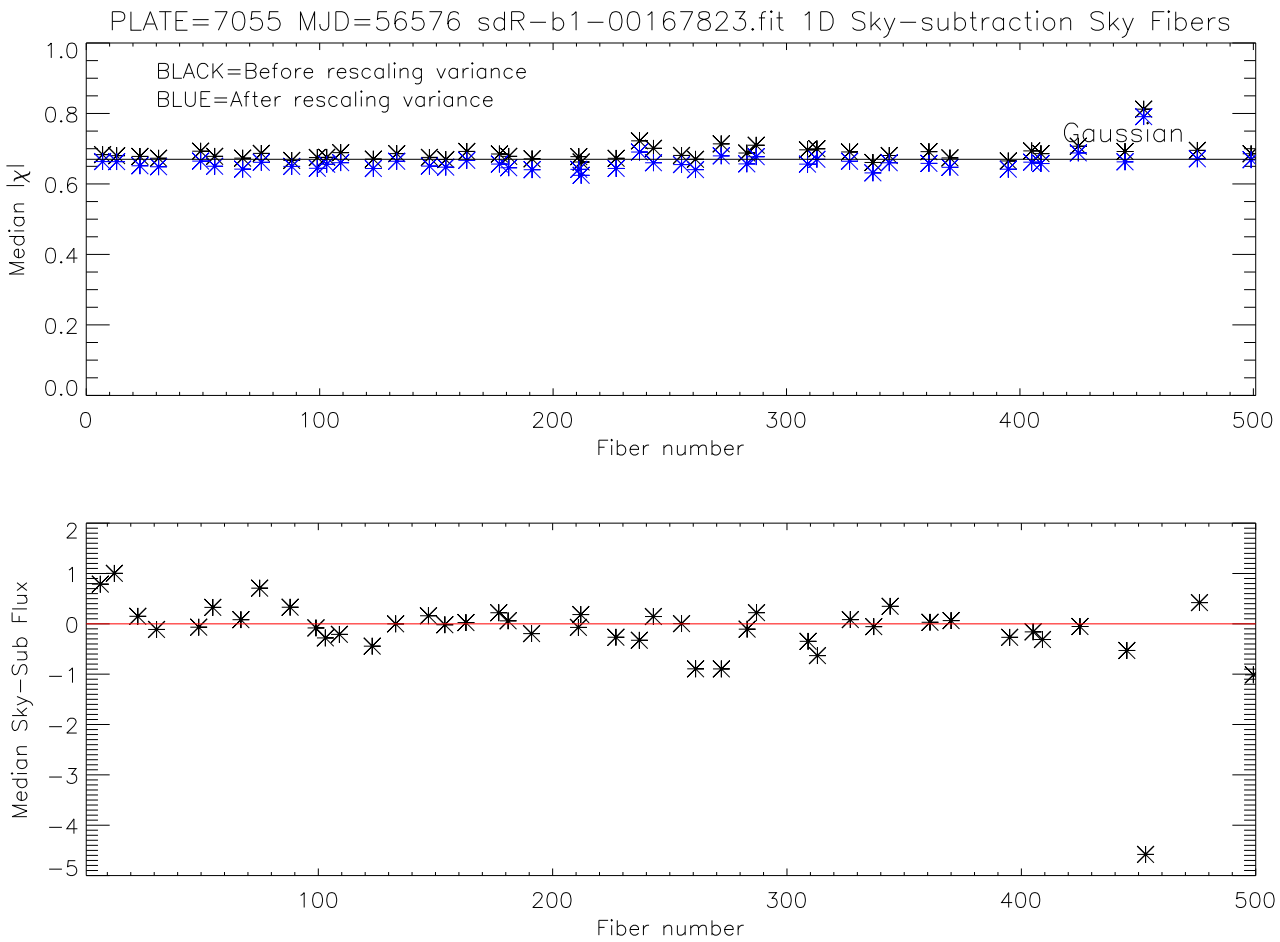

PLATE=7055 MJD=56576 sdR-b1-00167822.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 6.09 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

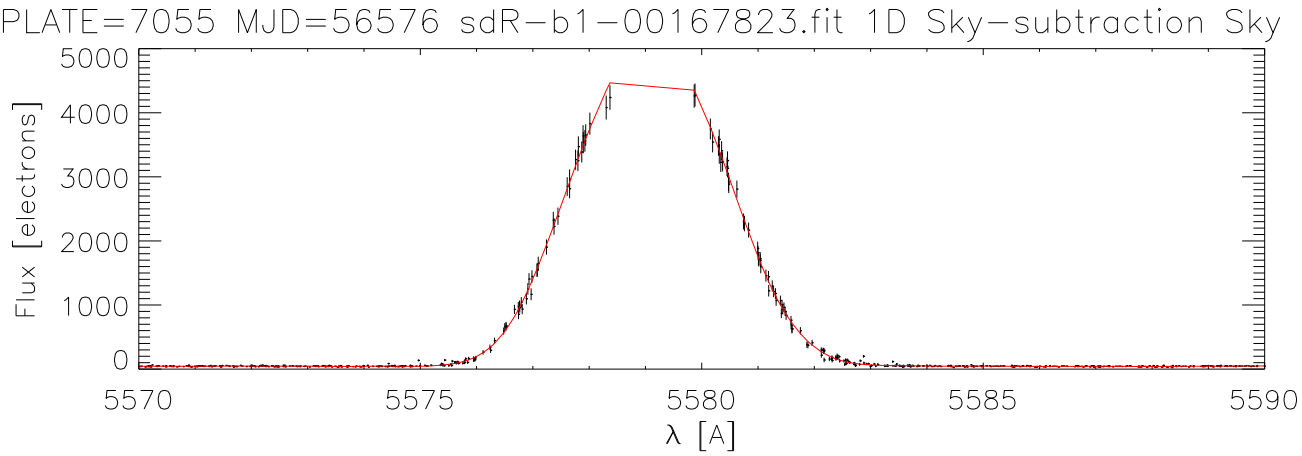

PLATE=7055 MJD=56576 Fiber-Flats for sdR-b1-00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -12.928
Max value = 8.214
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:13:49 2016

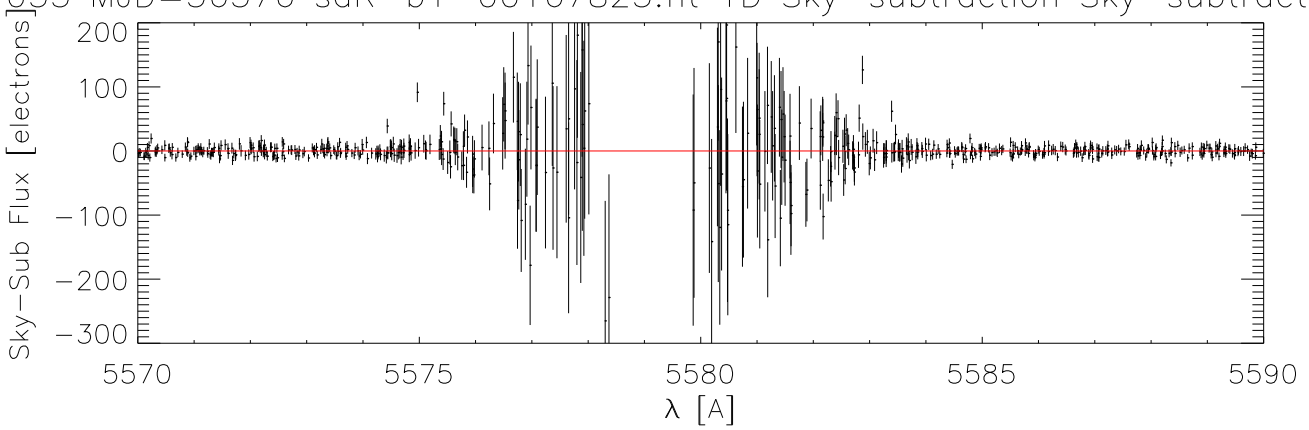

PLATE=7055 MJD=56576 Extraction chi^2 for sdR-b1-00167823.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b1-00167823.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

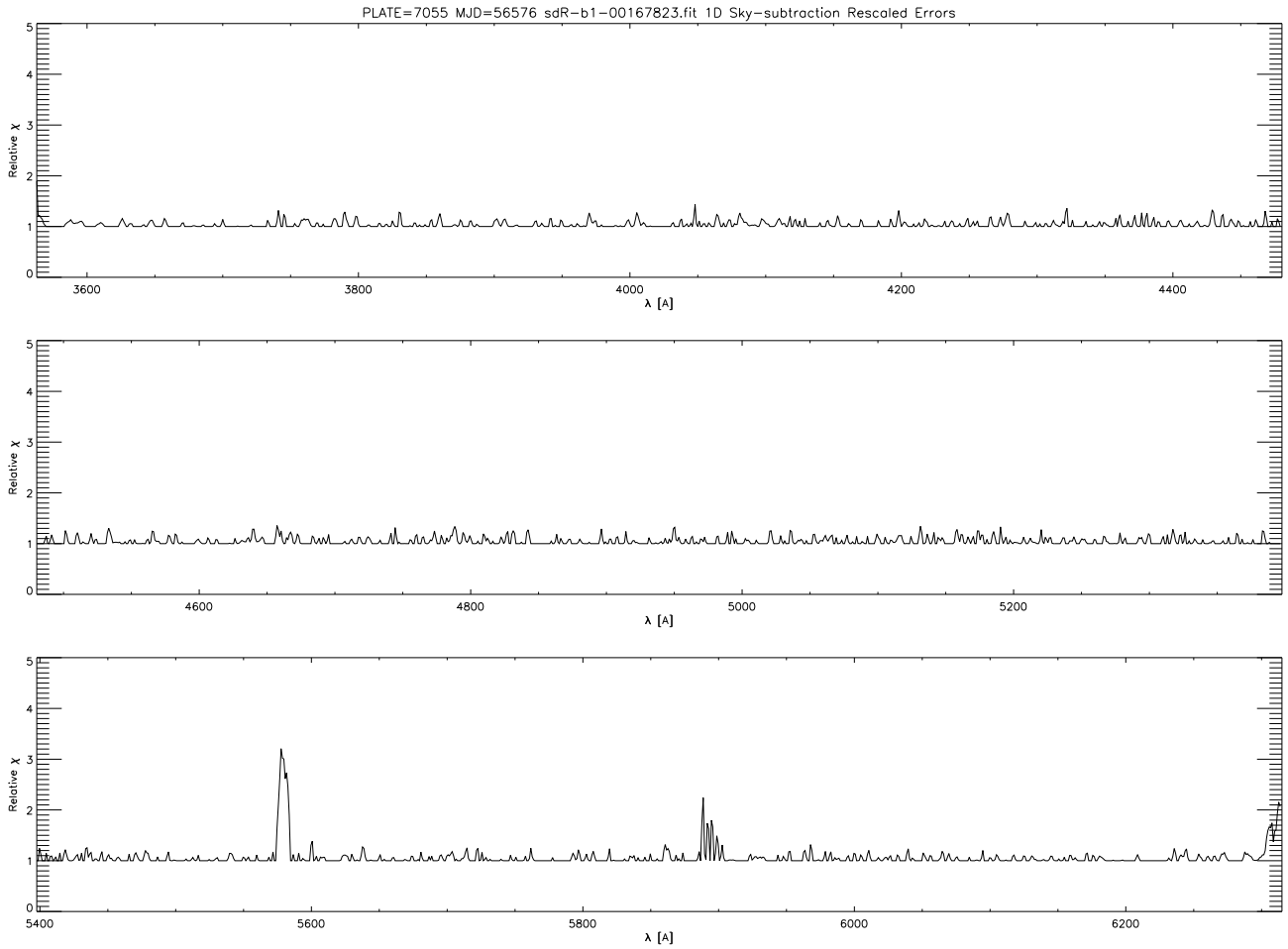

PLATE=7055 MJD=56576 Smooth superflat for sdR-b1-00167823.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

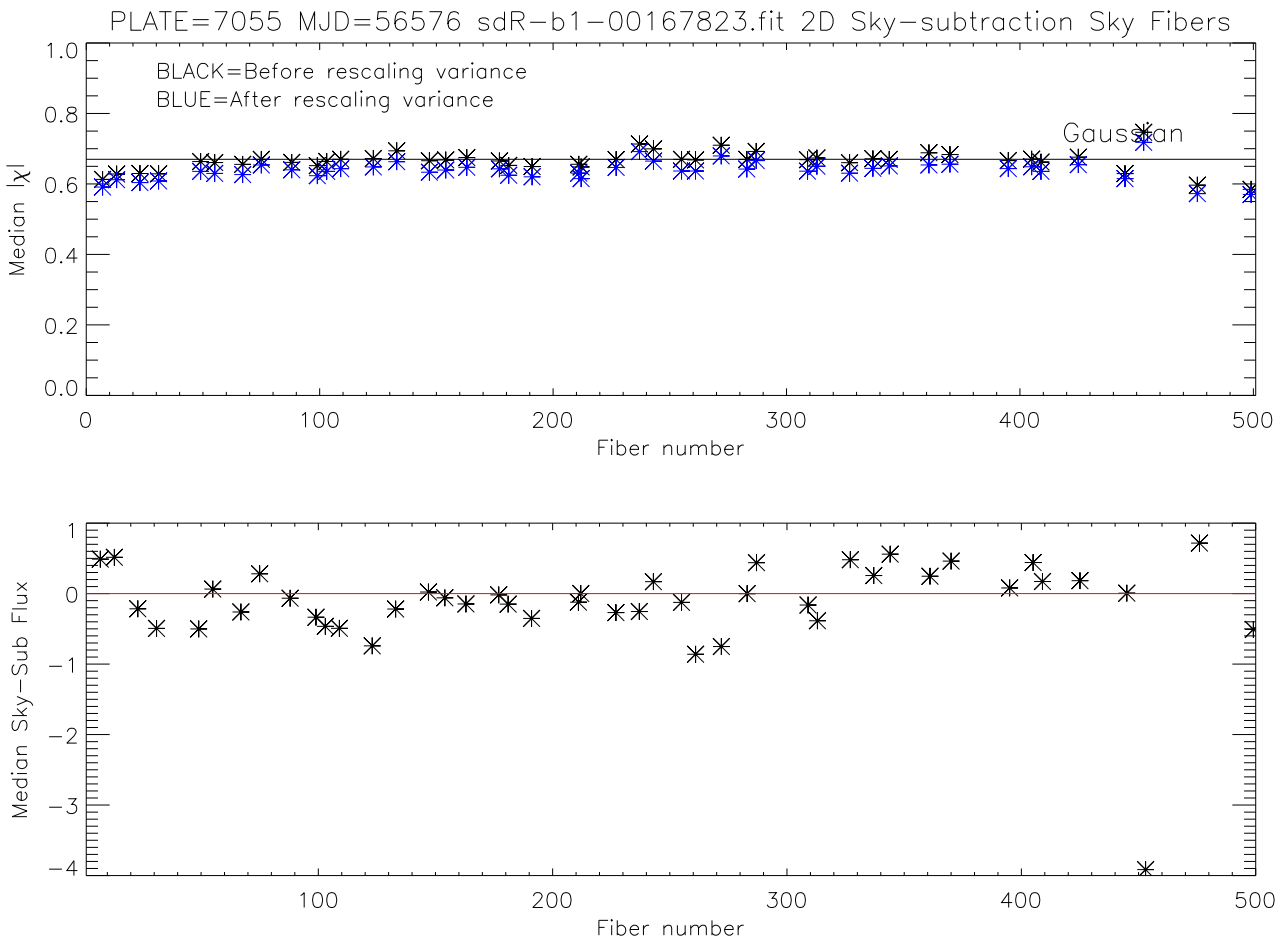

PLATE=7055 MJD=56576 sdR-b1-00167823.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

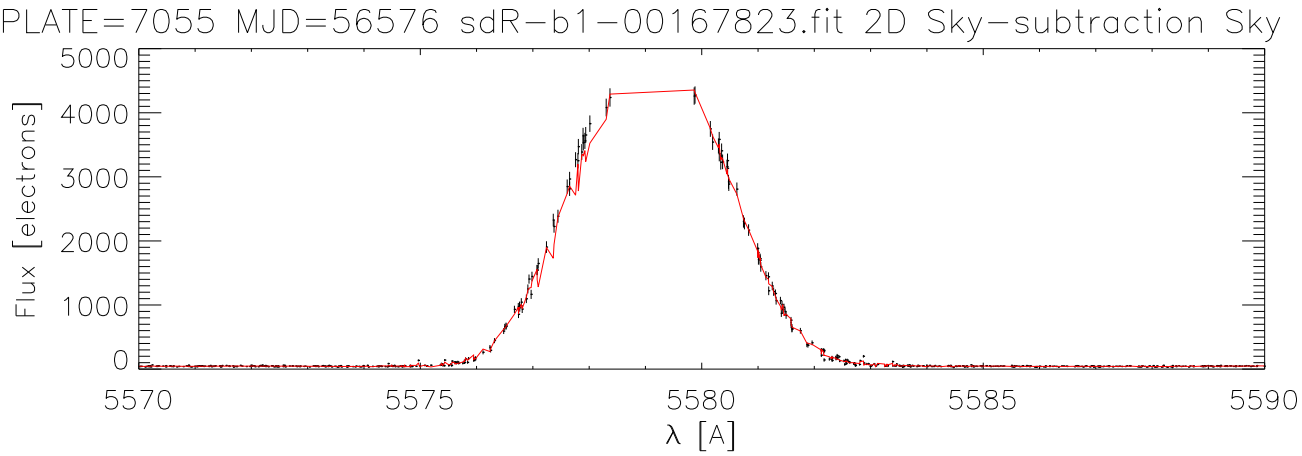

PLATE=7055 MJD=56576 sdR-b1-00167823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

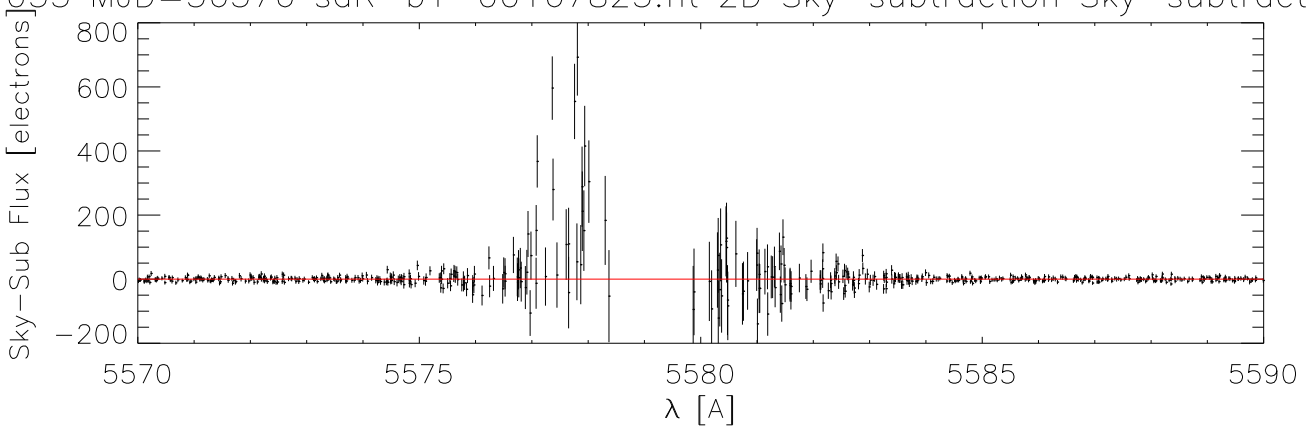

PLATE=7055 MJD=56576 sdR-b1-00167823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 45

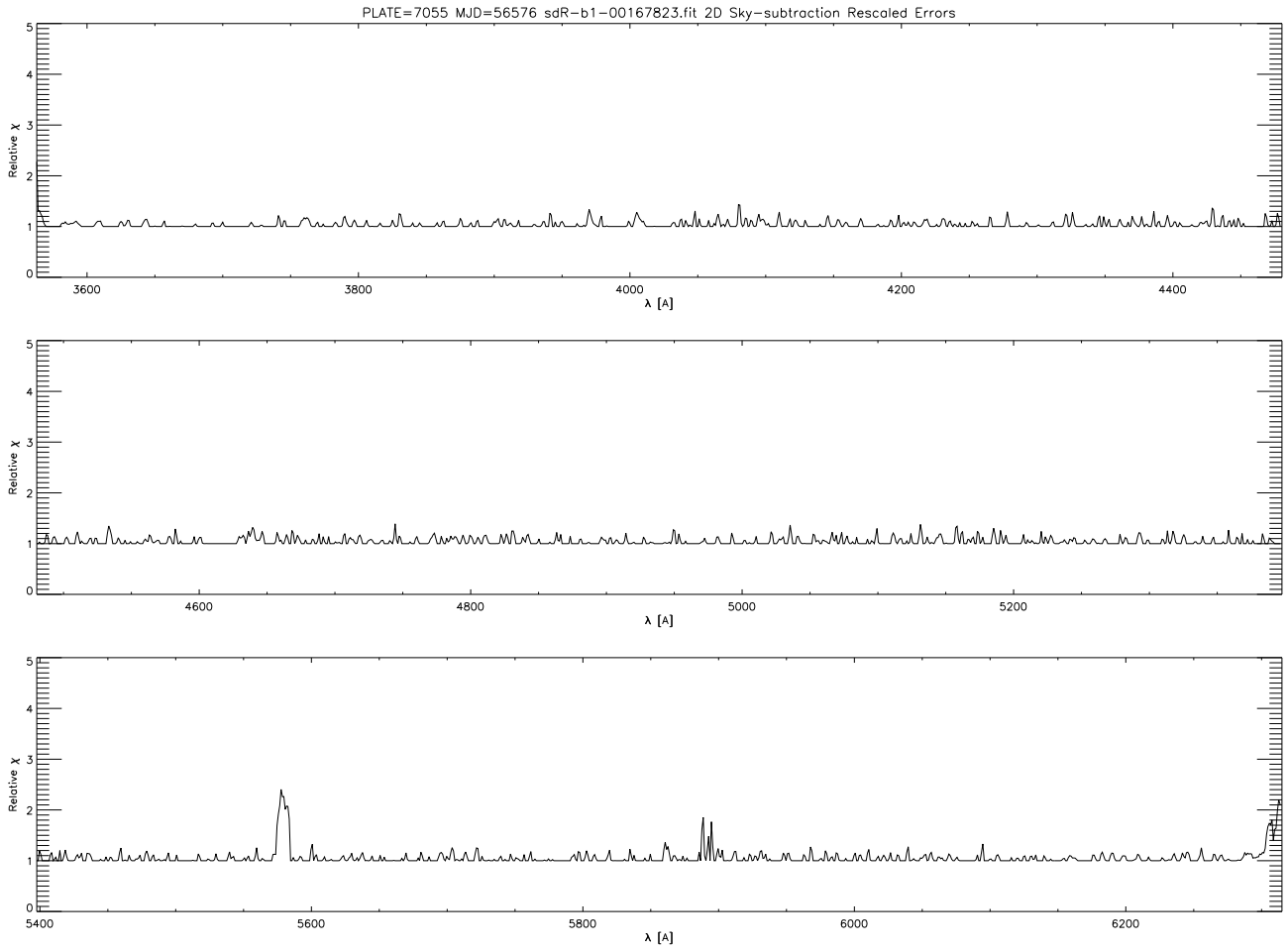


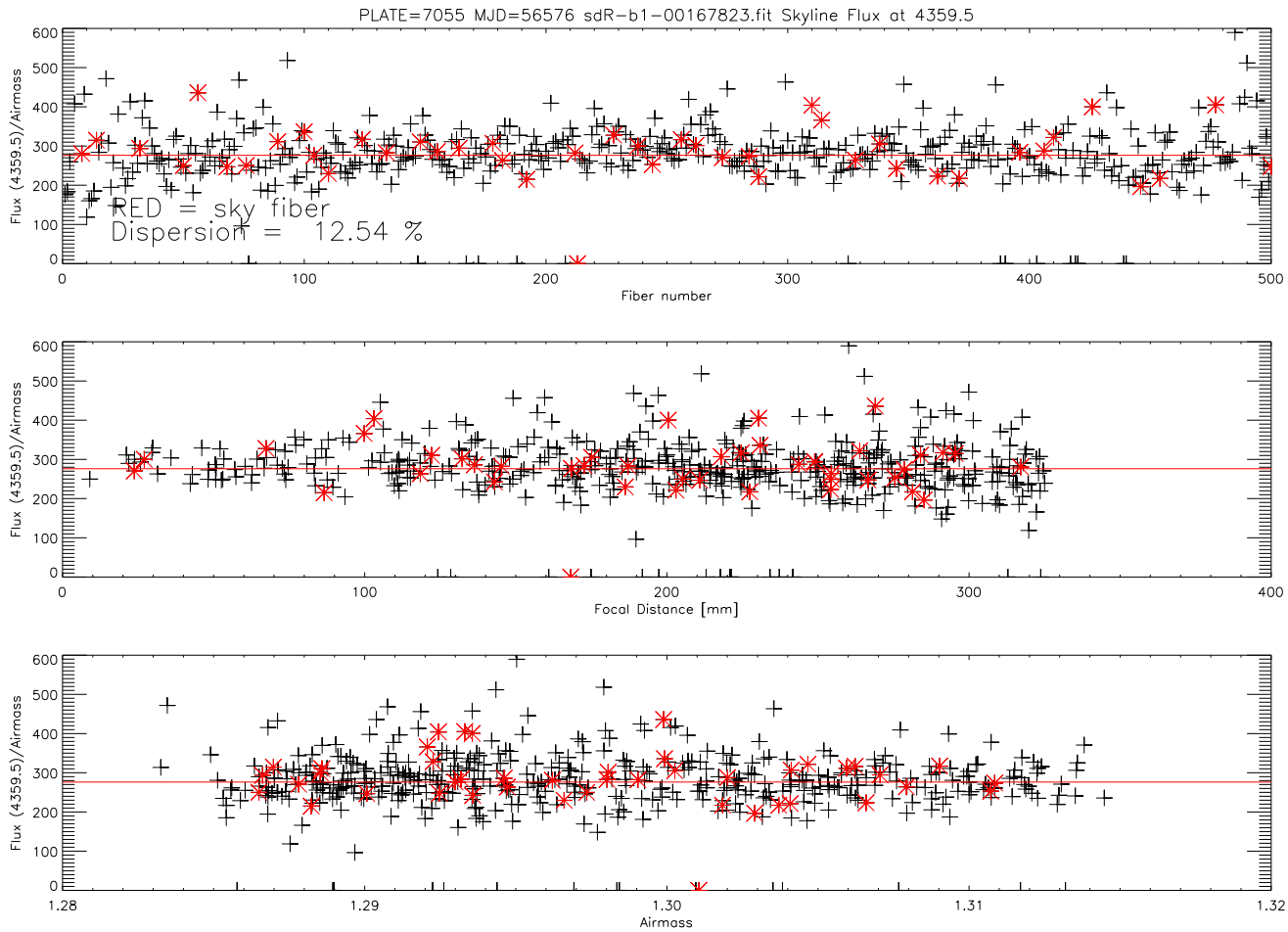

PLATE=7055 MJD=56576 sdR-b1-00167823.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

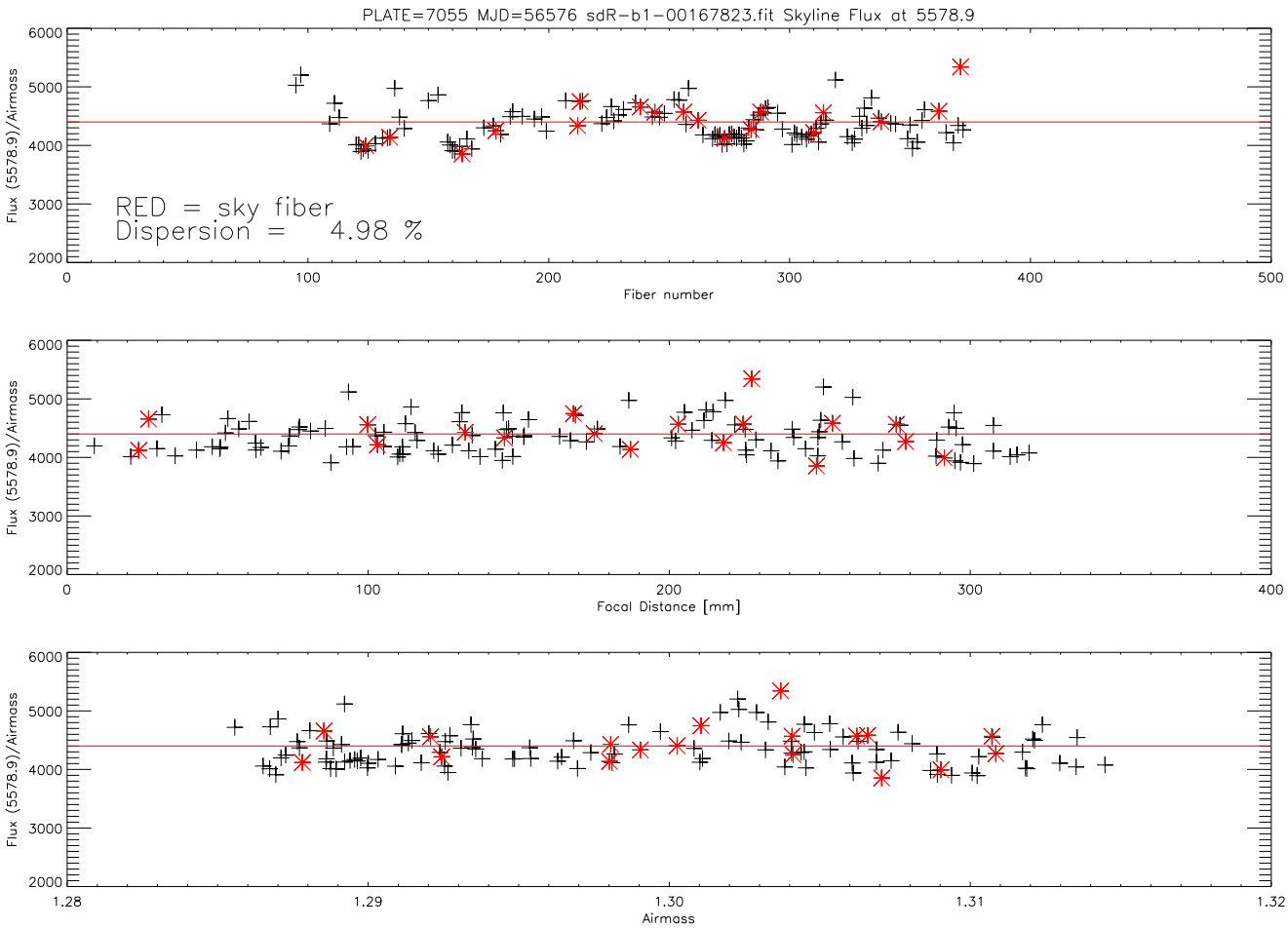

PLATE=7055 MJD=56576 sdR-b1-00167823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

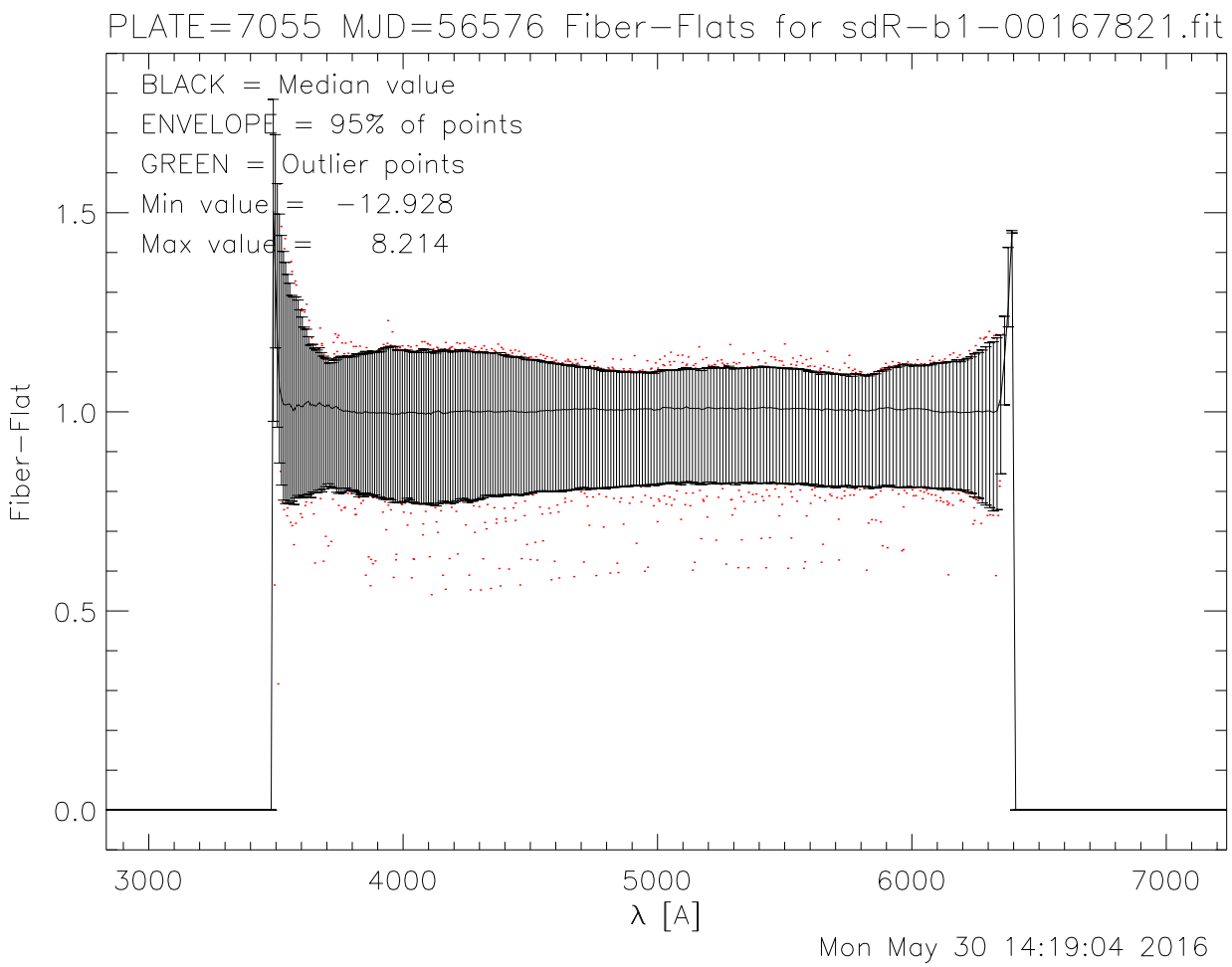

PLATE=7055 MJD=56576 sdR-b1-00167823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
−200
5570
5575
5580
5585
5590
λ [A]

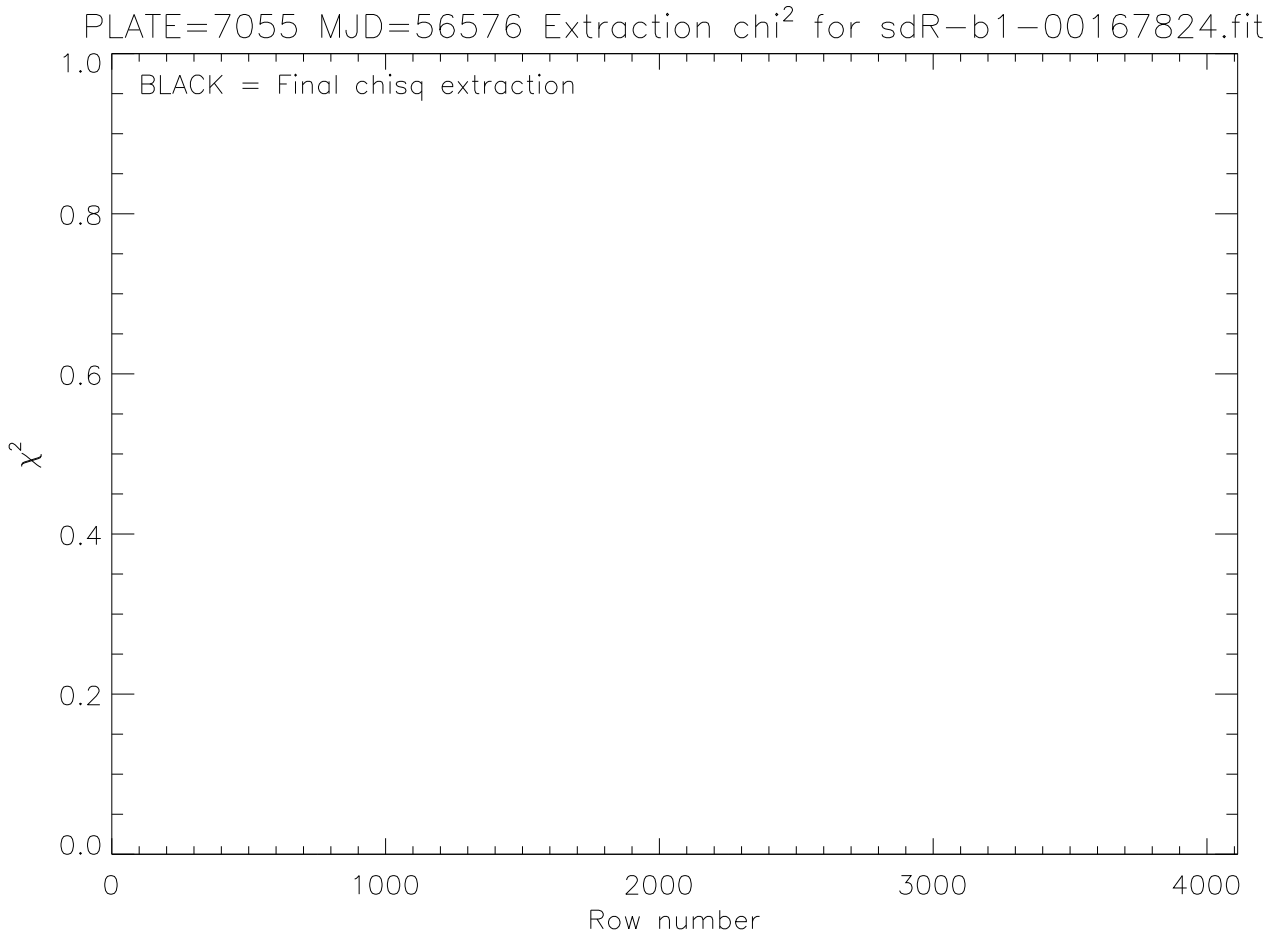
Number of sky fibers = 45

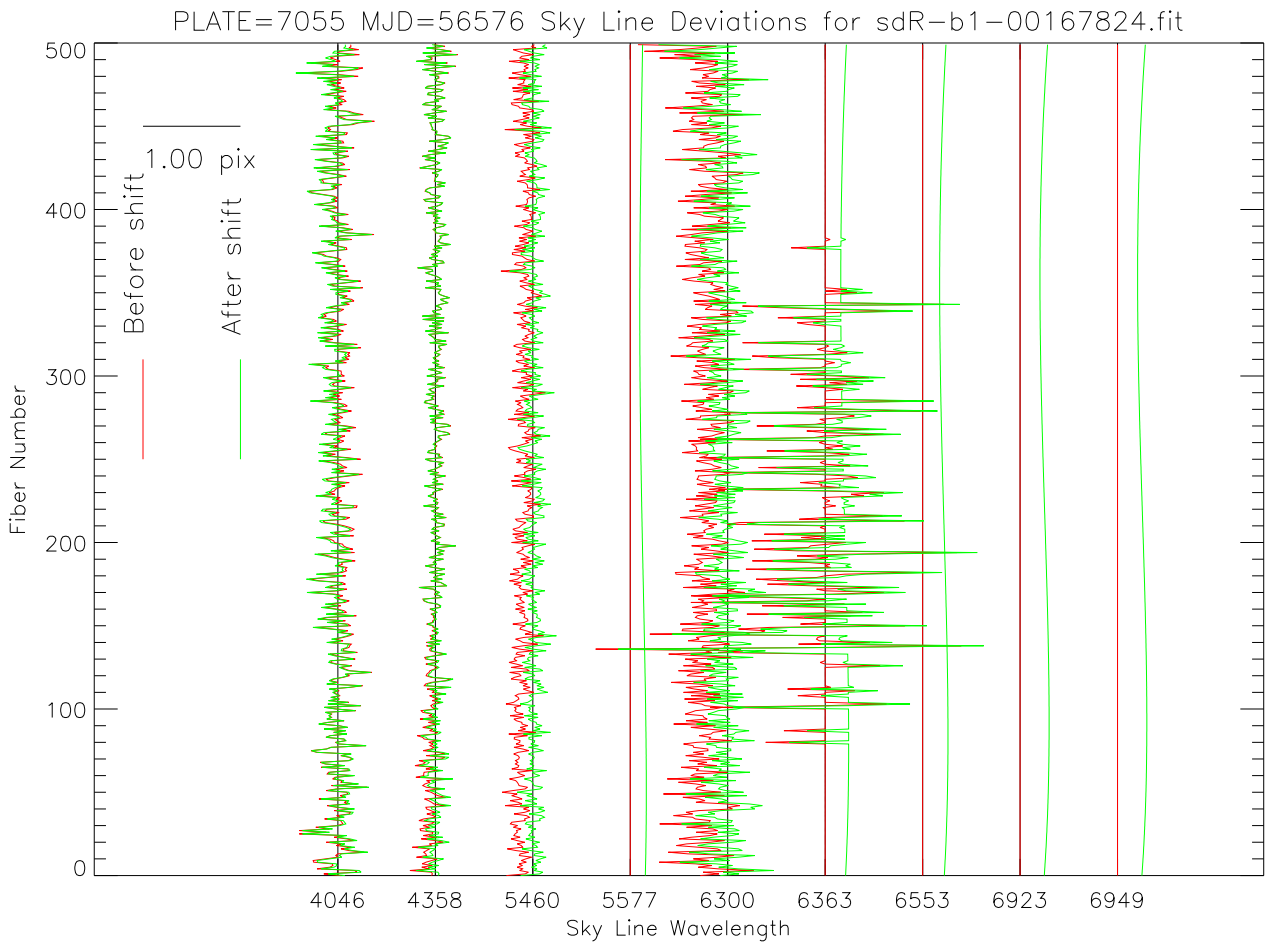


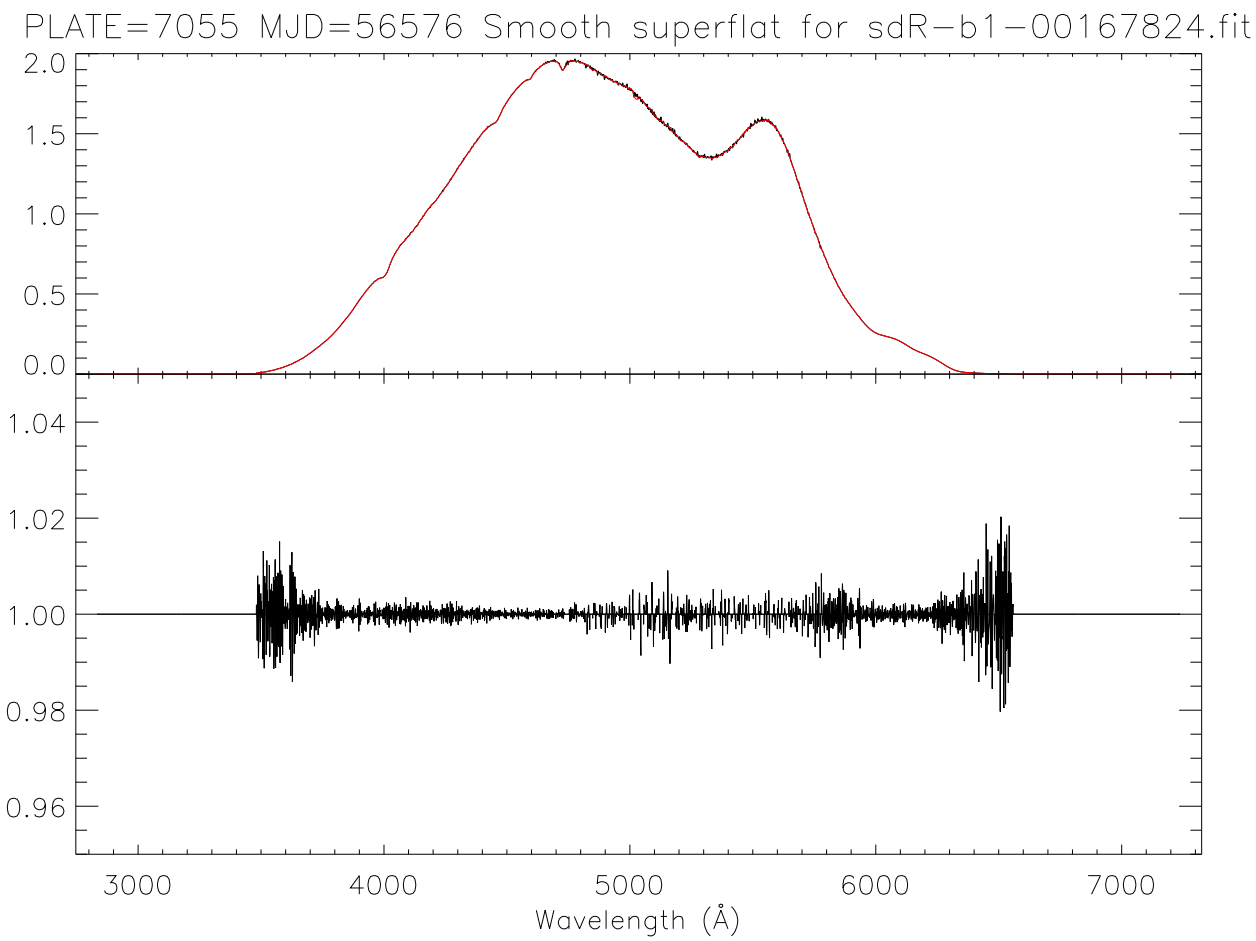

PLATE=7055 MJD=56576 sdR-b1-00167823.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 12.54 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

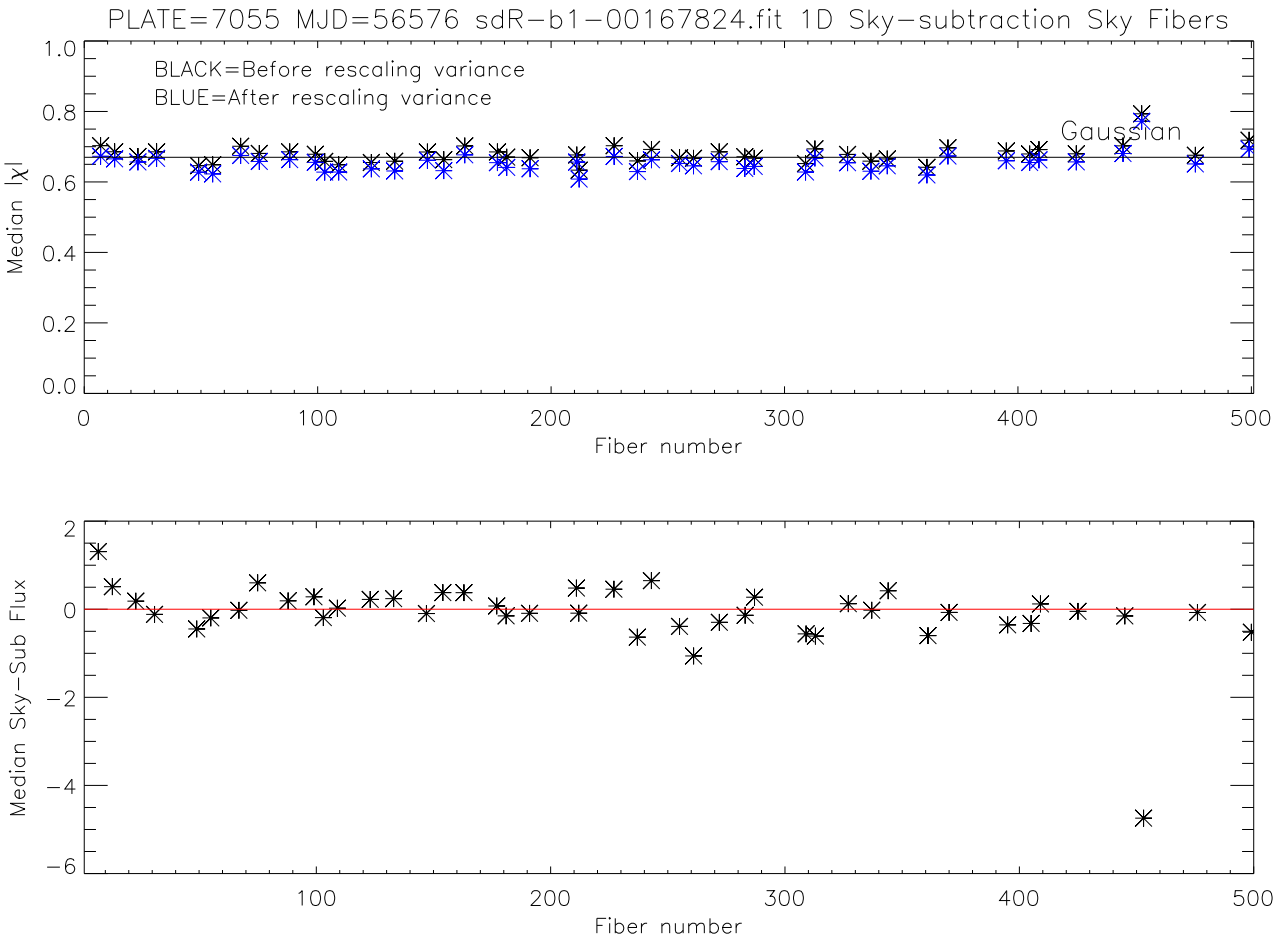

PLATE=7055 MJD=56576 sdR-b1-00167823.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 4.98 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

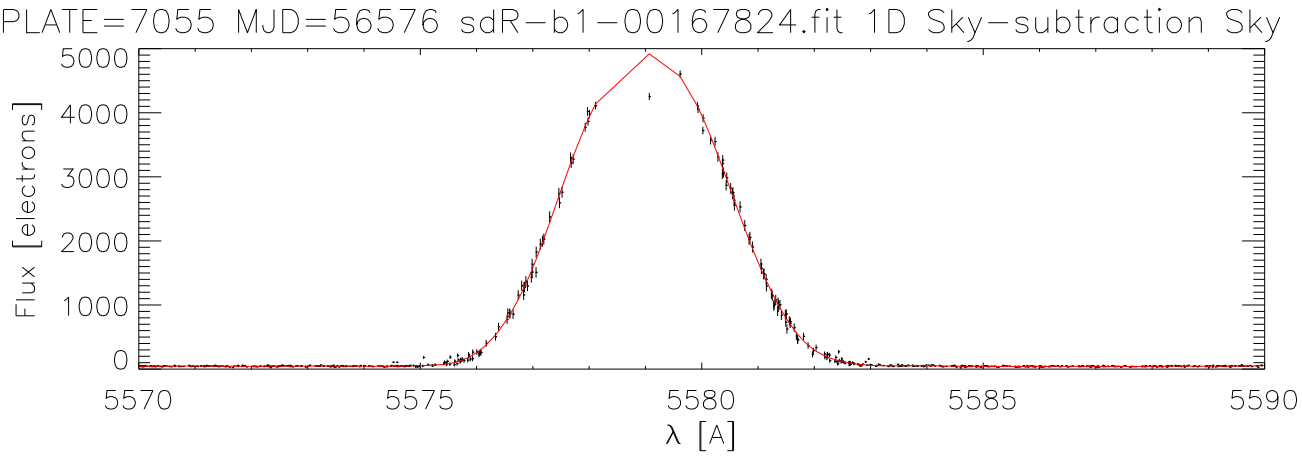

PLATE=7055 MJD=56576 Fiber−Flats for sdR−b1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −12.928
Max value = 8.214
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:19:04 2016

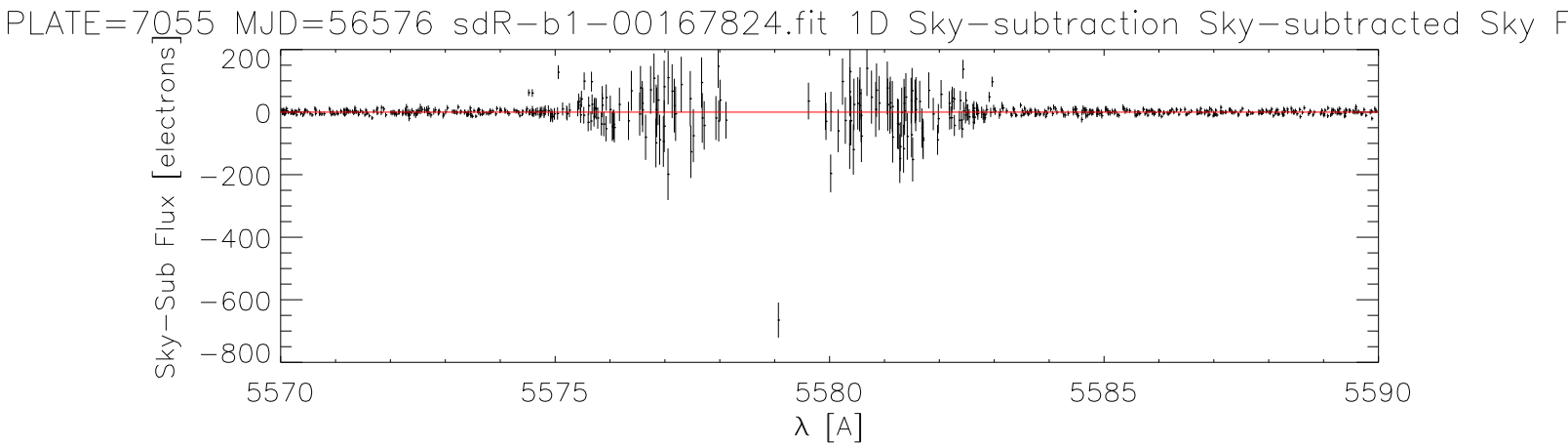

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−b1−00167824.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b1-00167824.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

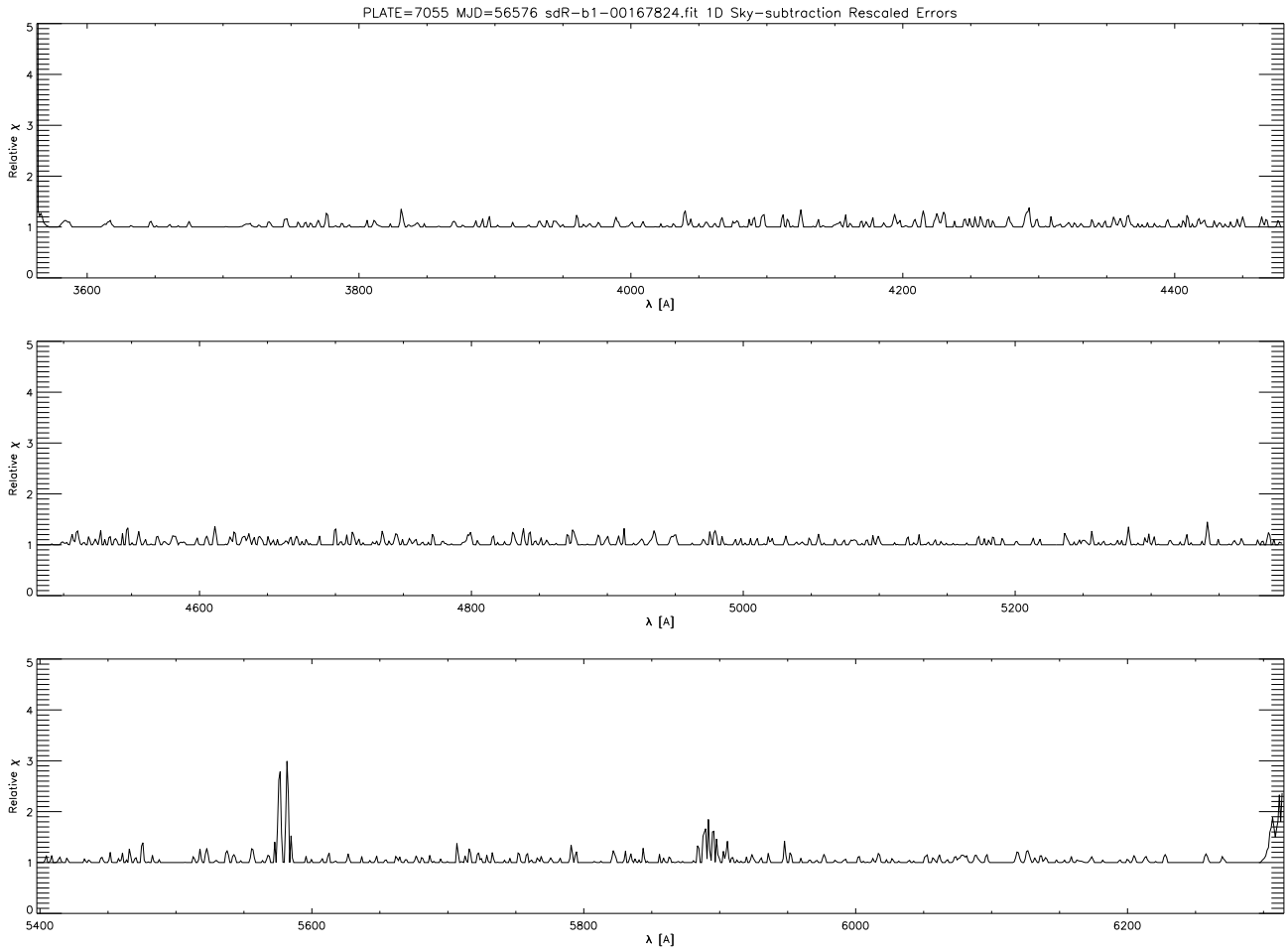

PLATE=7055 MJD=56576 Smooth superflat for sdR-b1-00167824.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

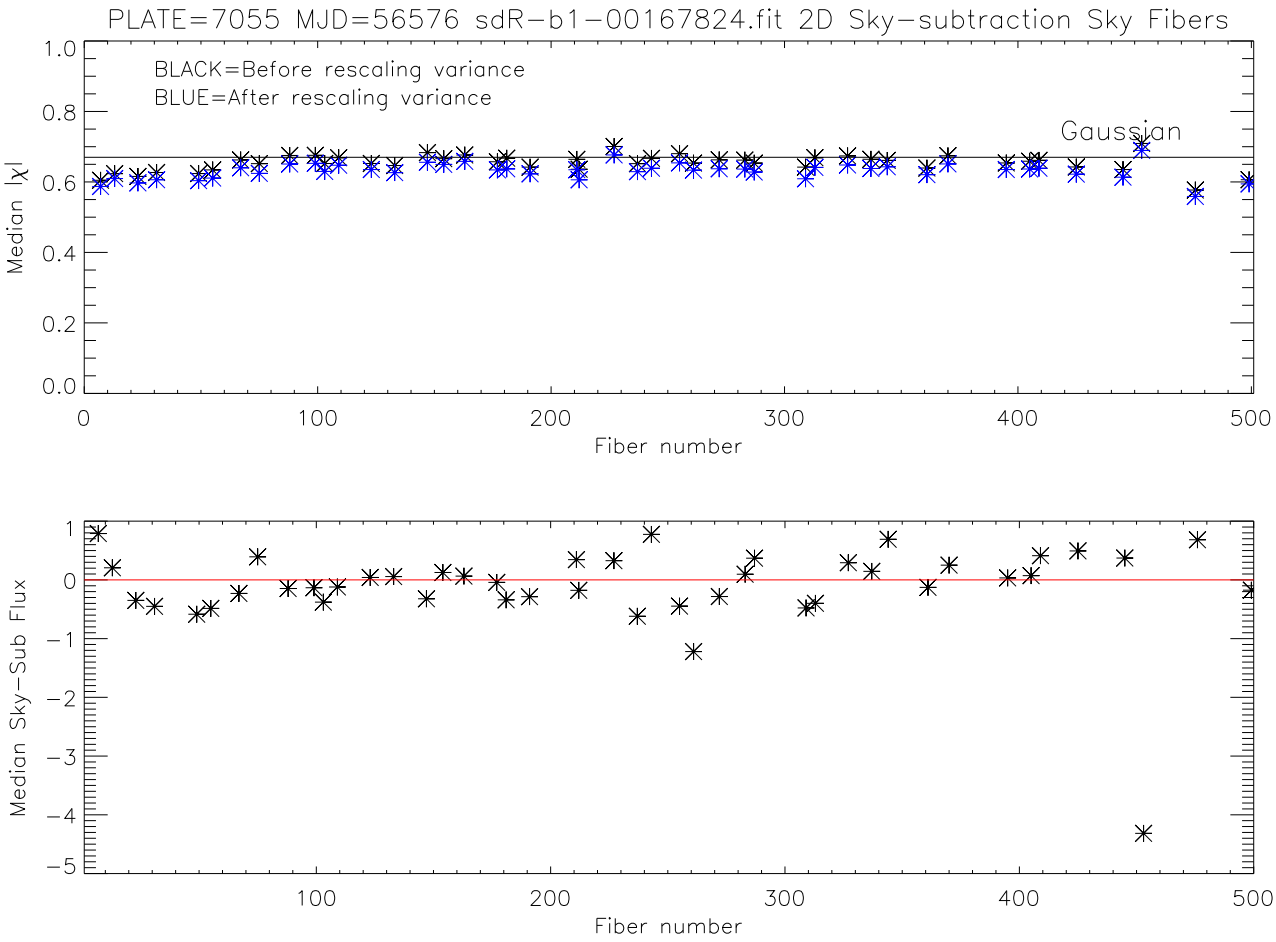

PLATE=7055 MJD=56576 sdR-b1-00167824.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

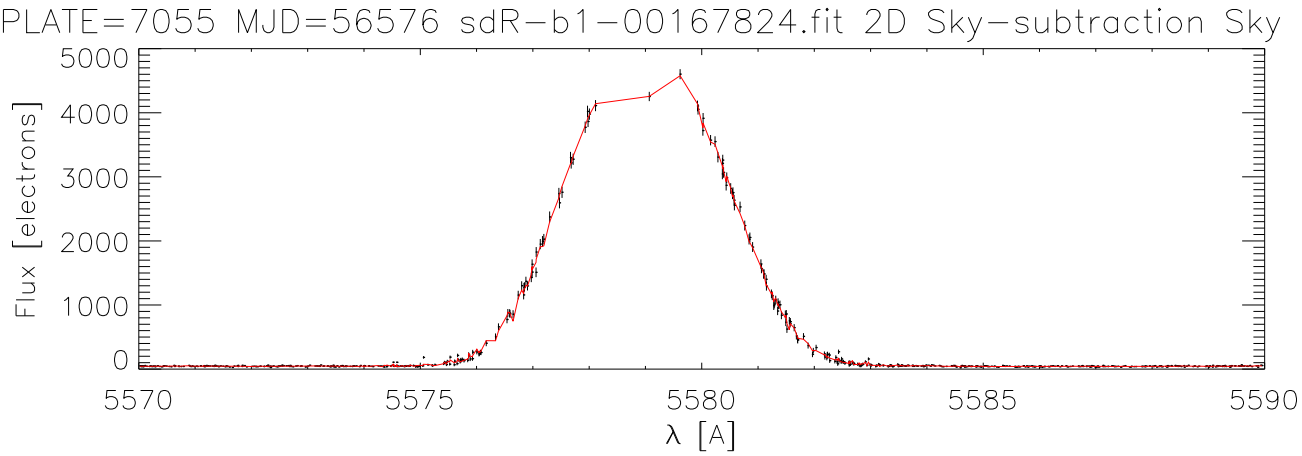

PLATE=7055 MJD=56576 sdR-b1-00167824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

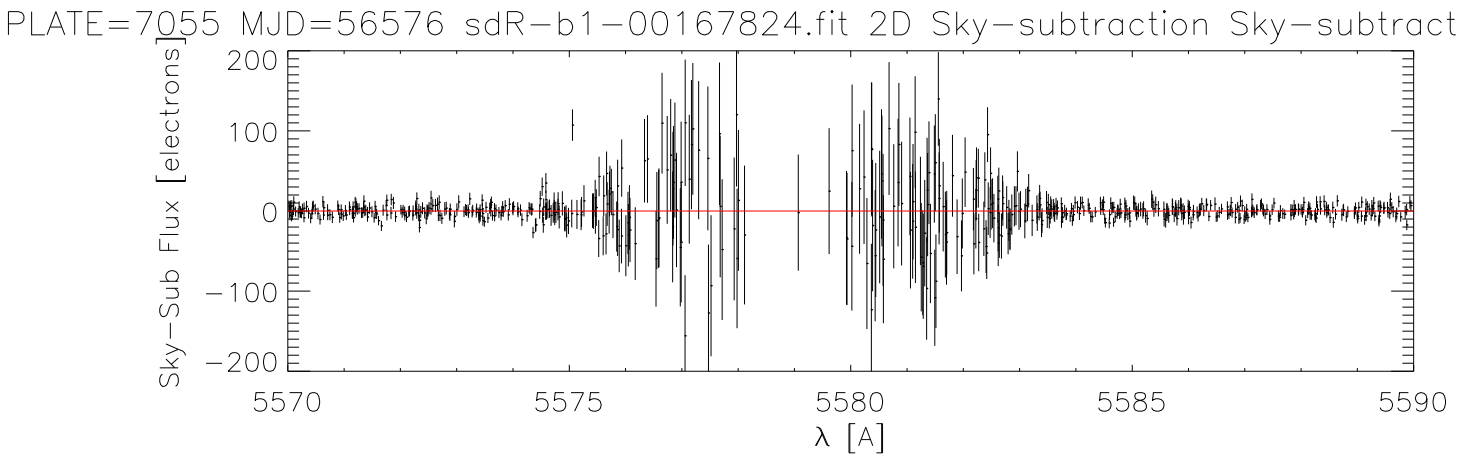

PLATE=7055 MJD=56576 sdR-b1-00167824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
0
-200
-400
-600
-800
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 45

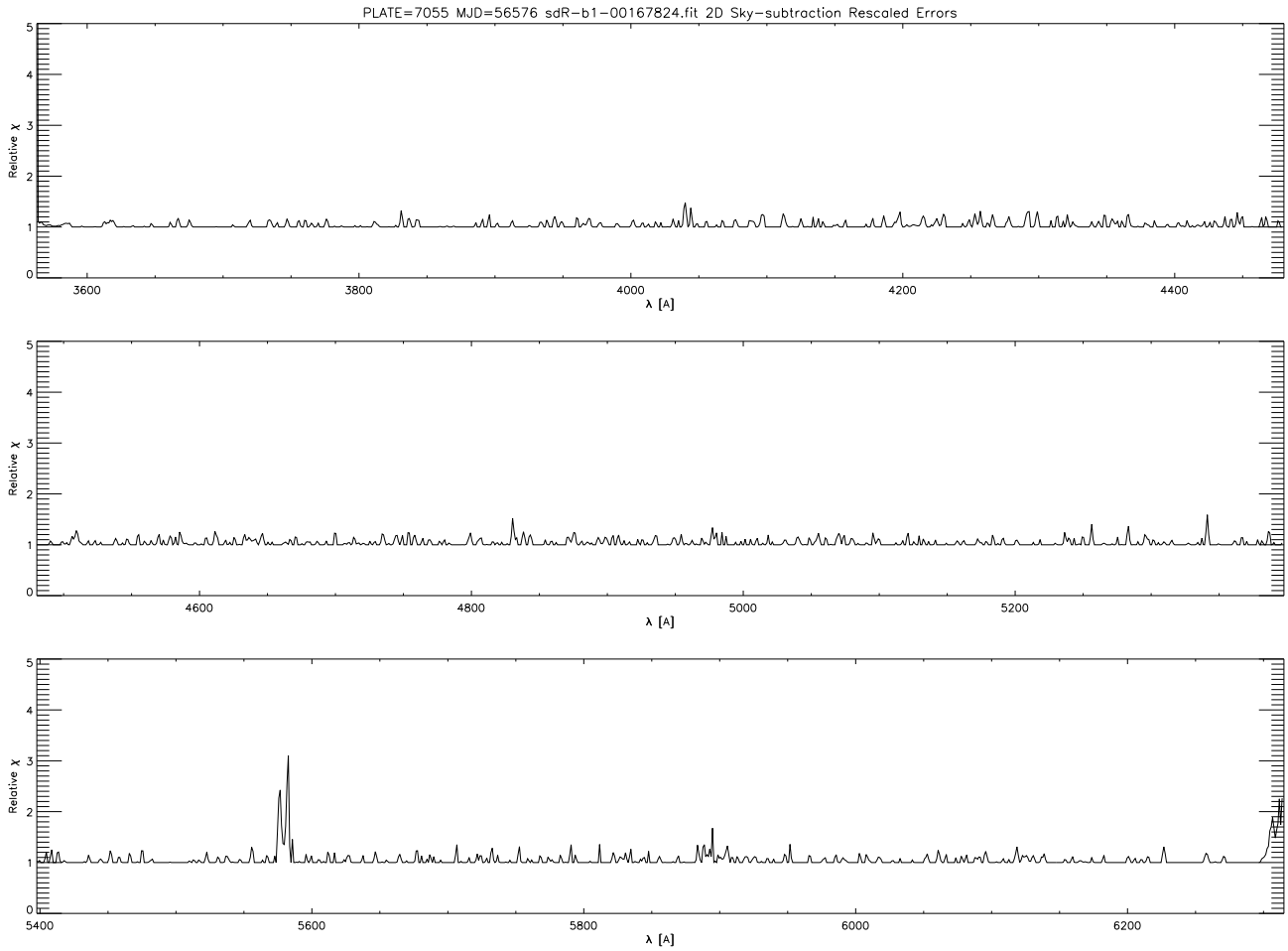


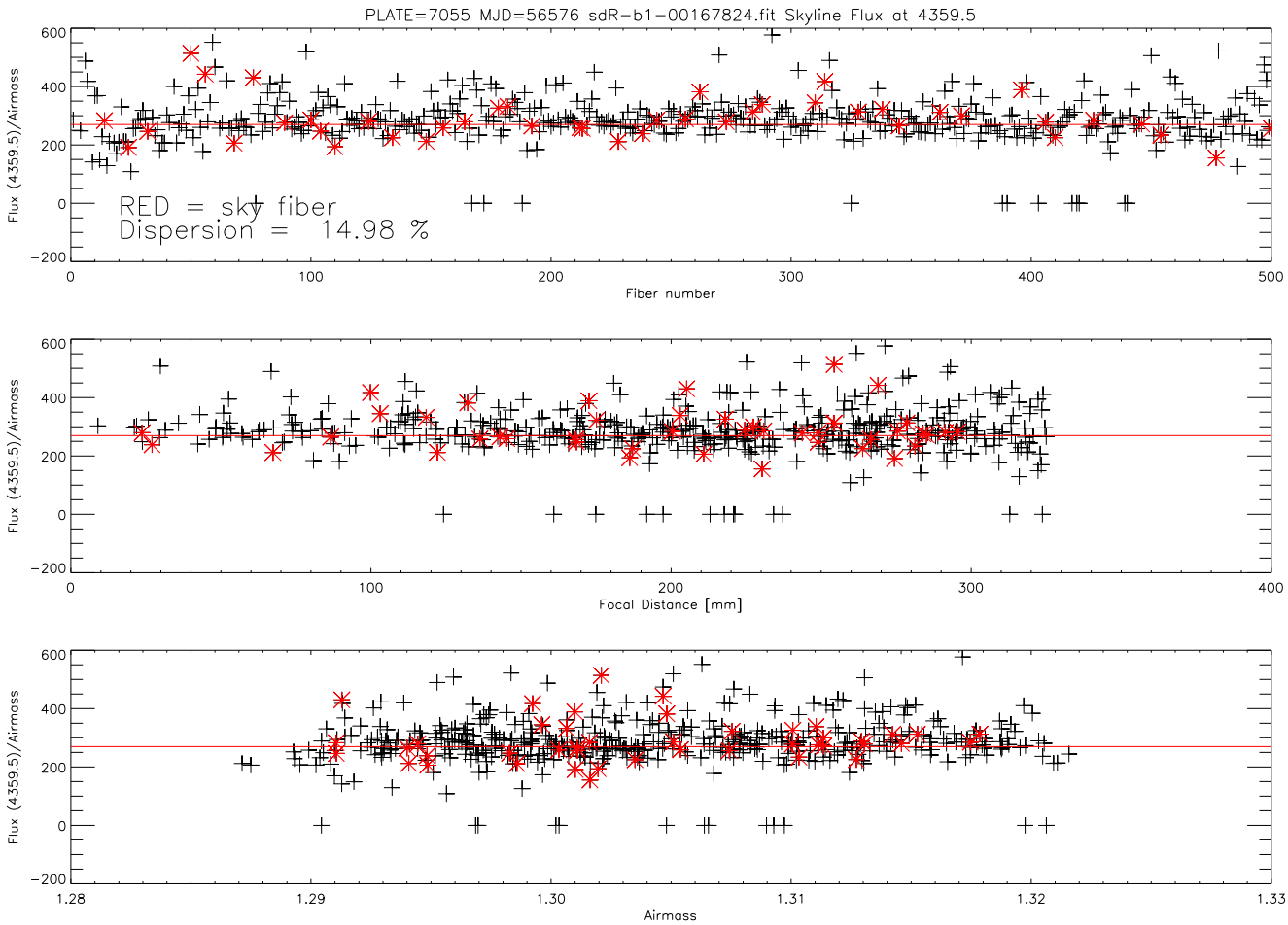

PLATE=7055 MJD=56576 sdR-b1-00167824.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

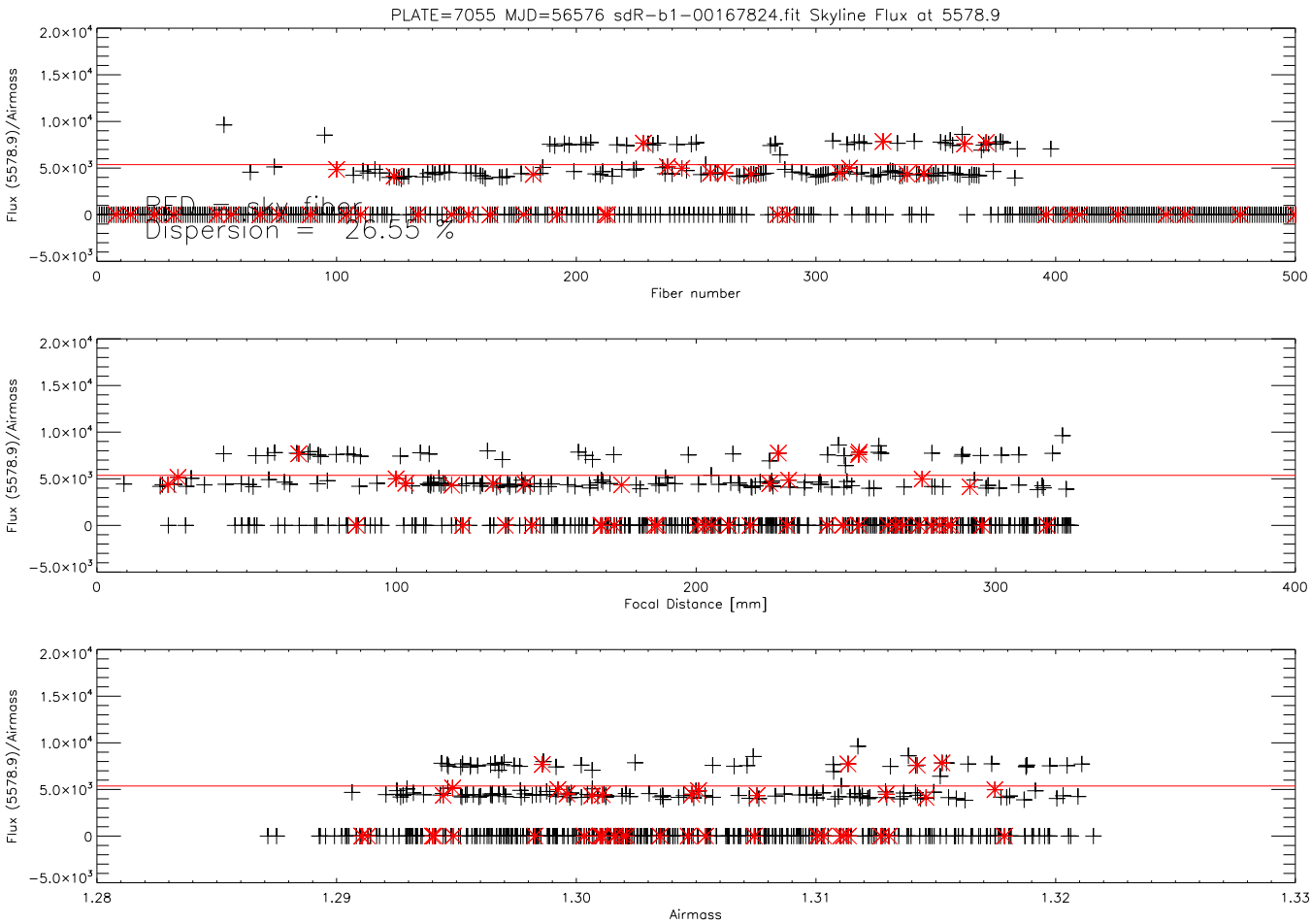

PLATE=7055 MJD=56576 sdR-b1-00167824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

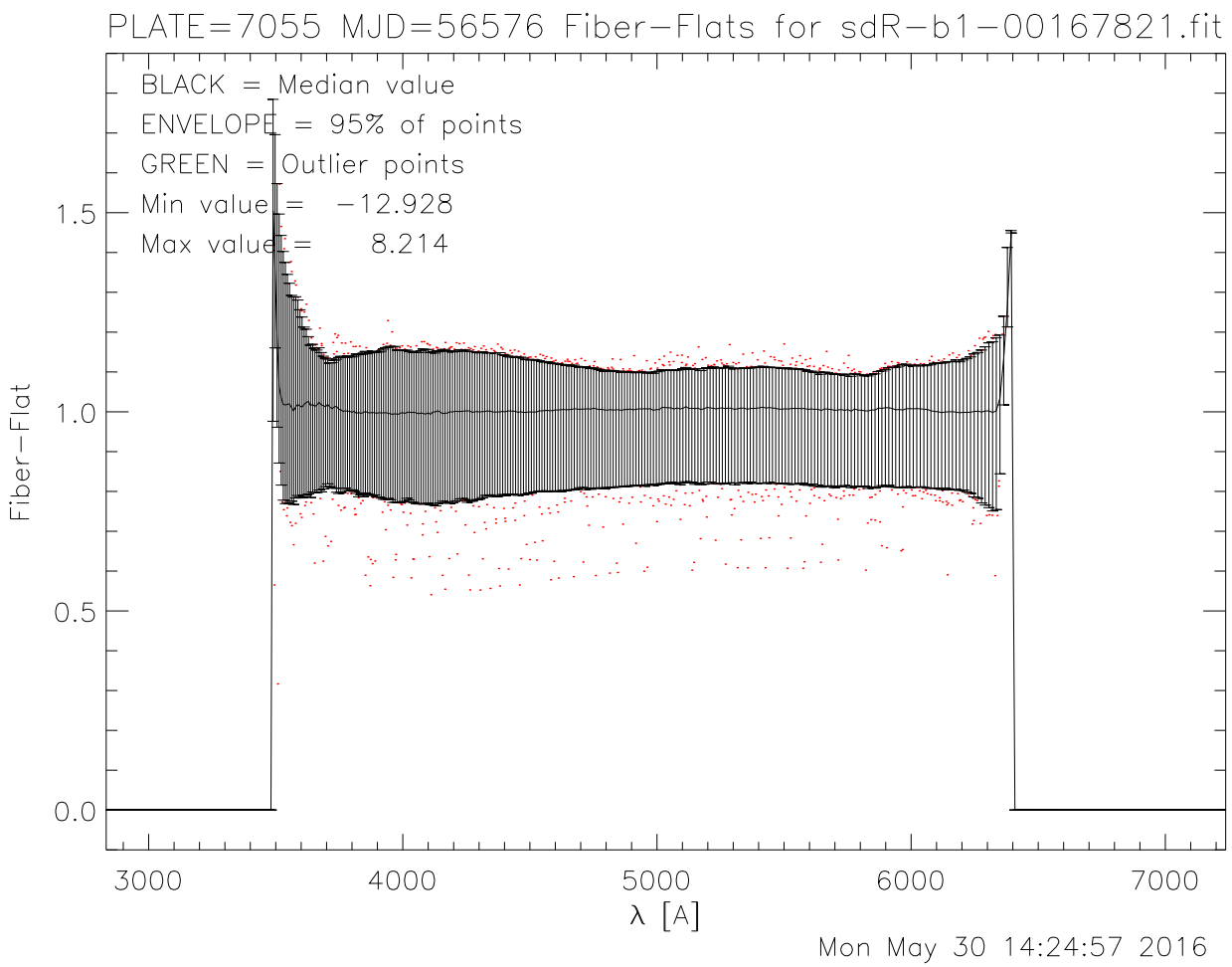

PLATE=7055 MJD=56576 sdR-b1-00167824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

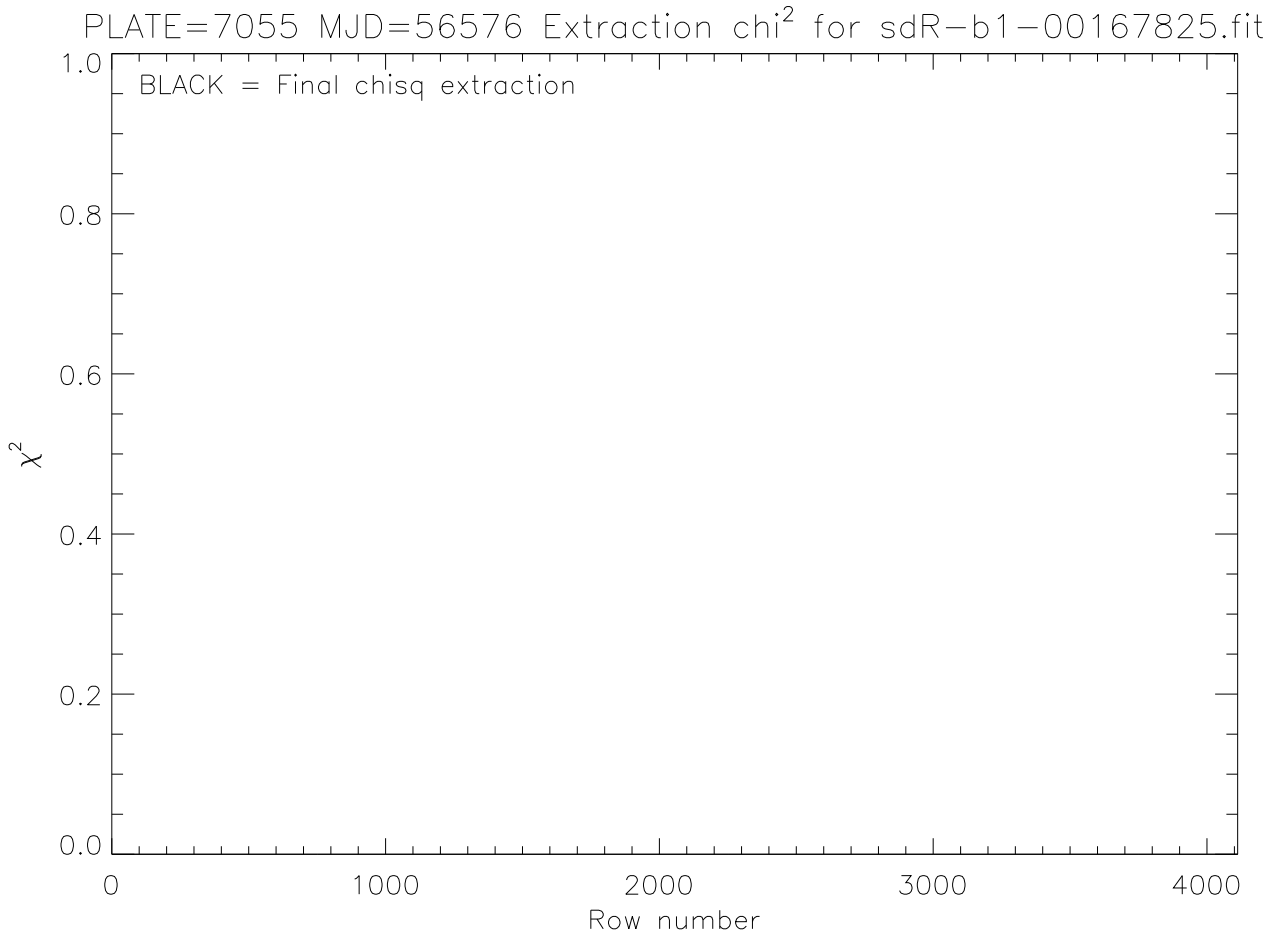
Number of sky fibers = 45

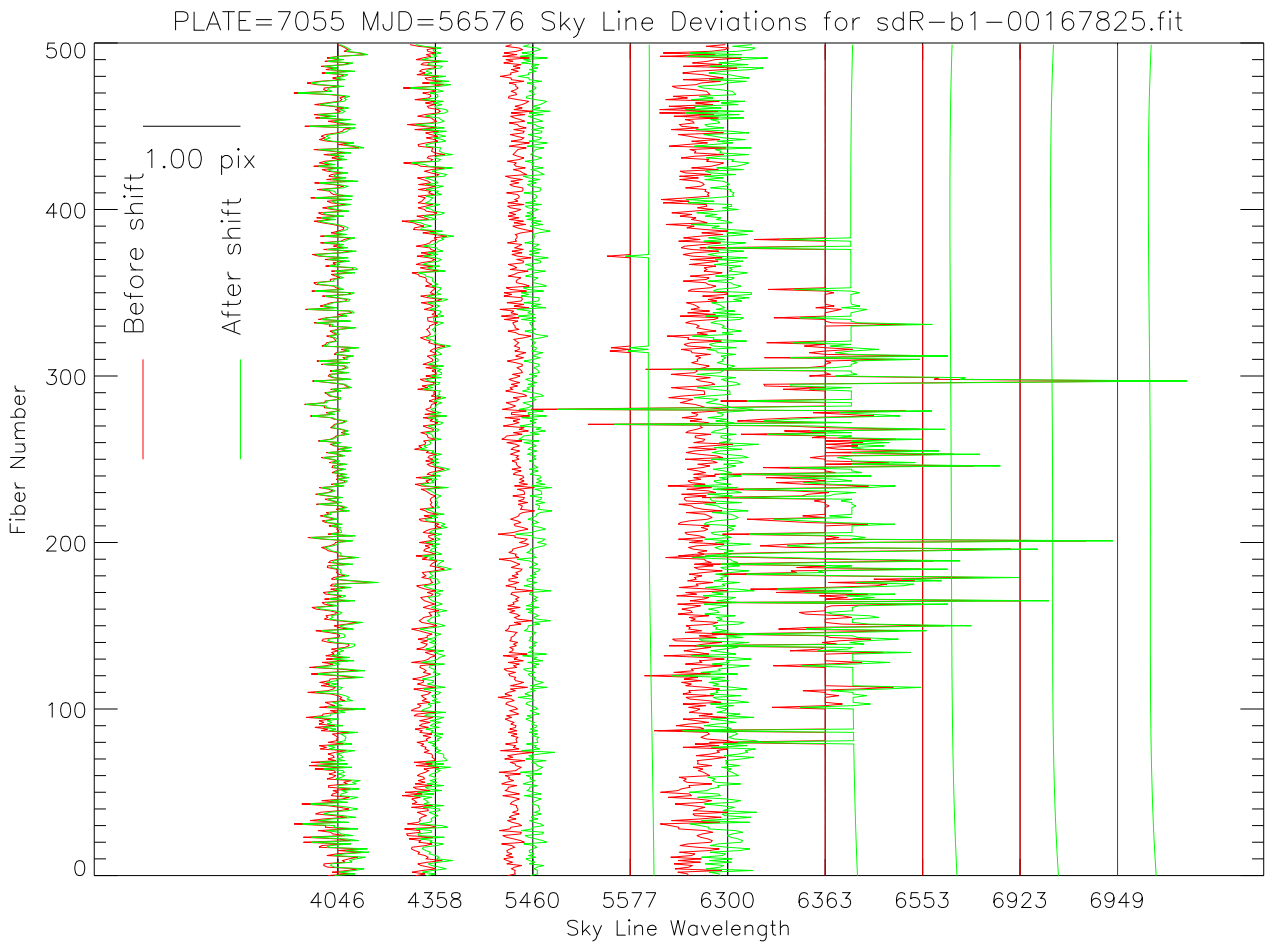


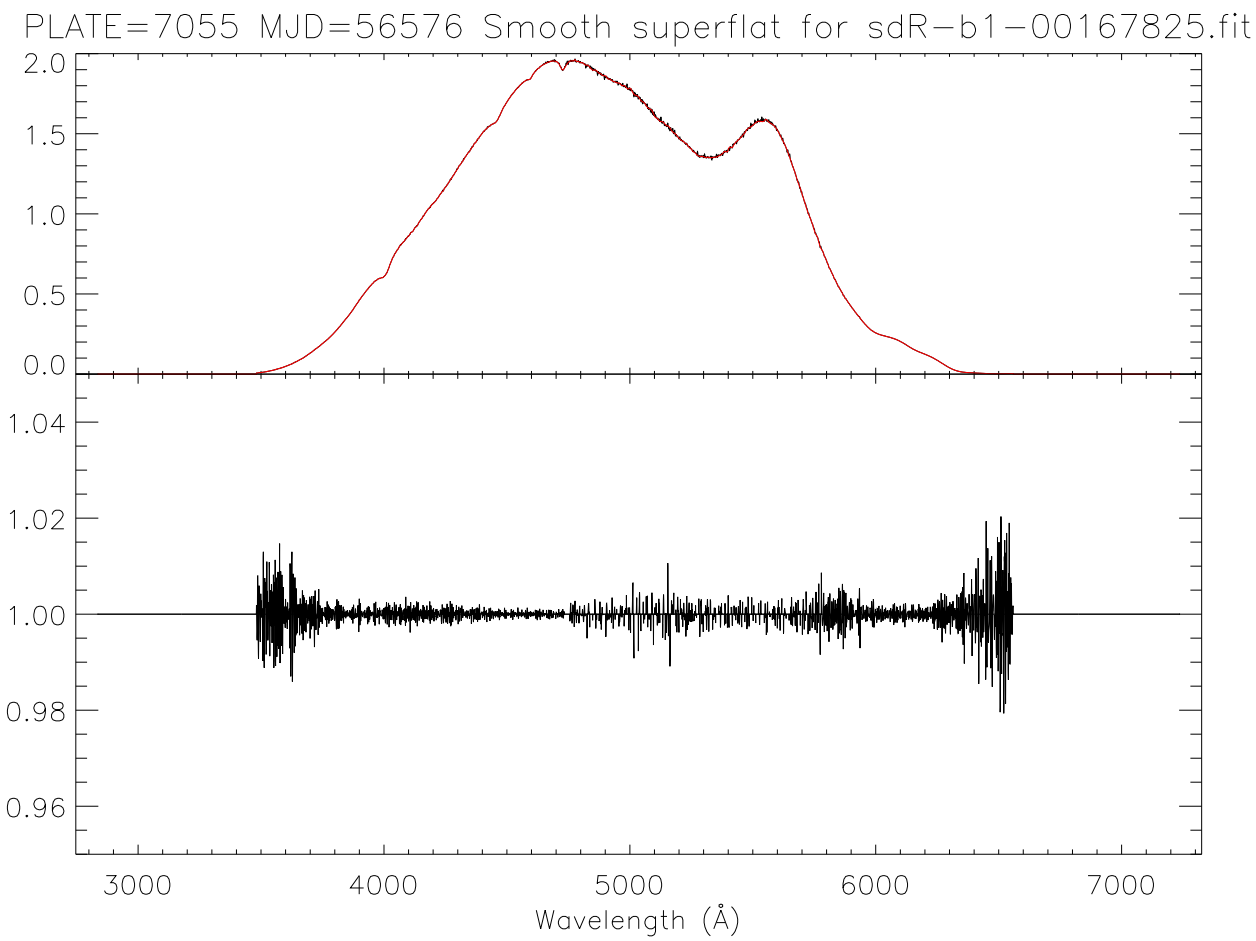

PLATE=7055 MJD=56576 sdR-b1-00167824.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 14.98 %
Fiber number
Focal Distance [mm]
Airmass

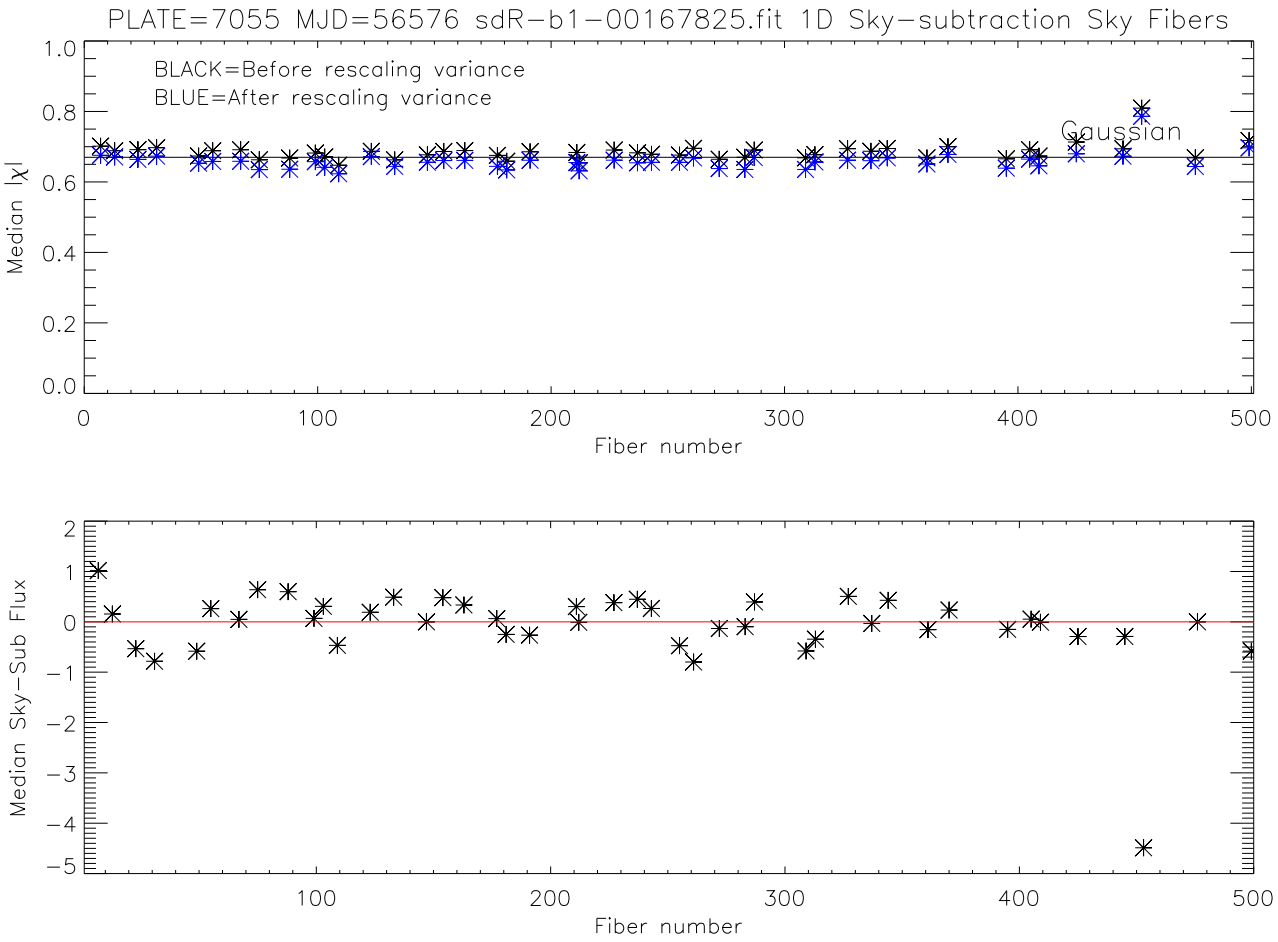

PLATE=7055 MJD=56576 sdR-b1-00167824.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 26.55 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

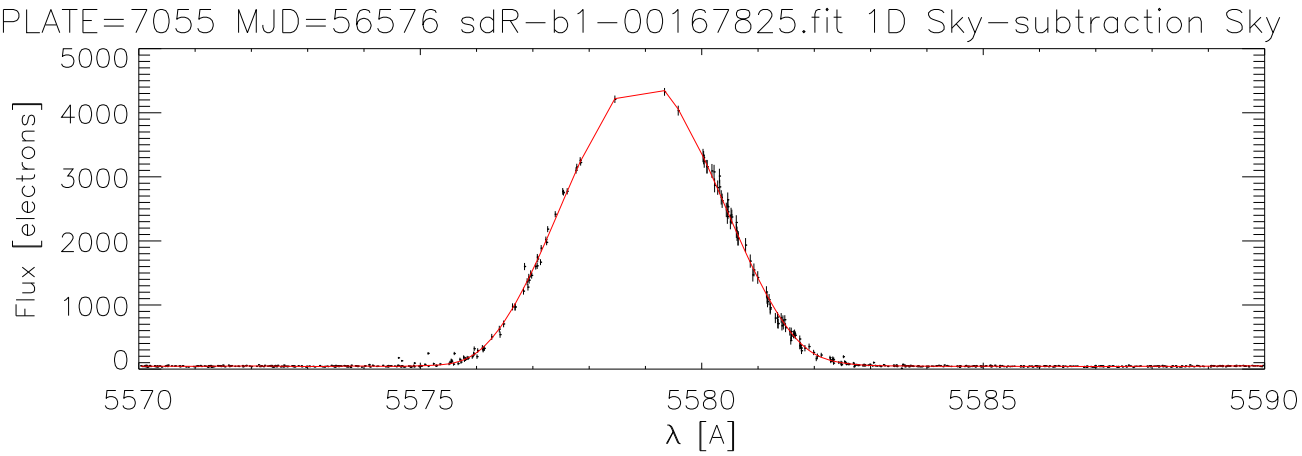

PLATE=7055 MJD=56576 Fiber−Flats for sdR−b1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −12.928
Max value = 8.214
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:24:57 2016

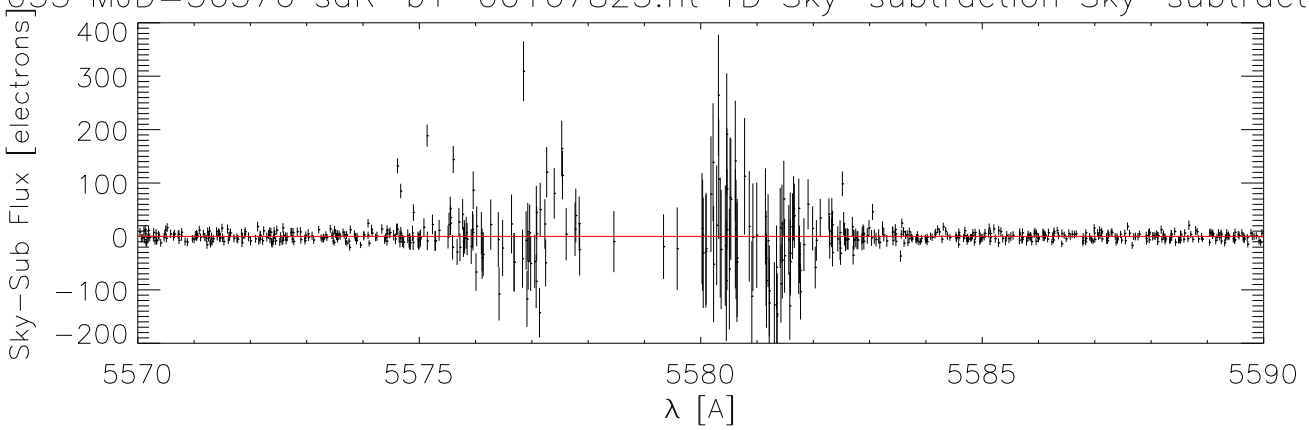

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−b1−00167825.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b1-00167825.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

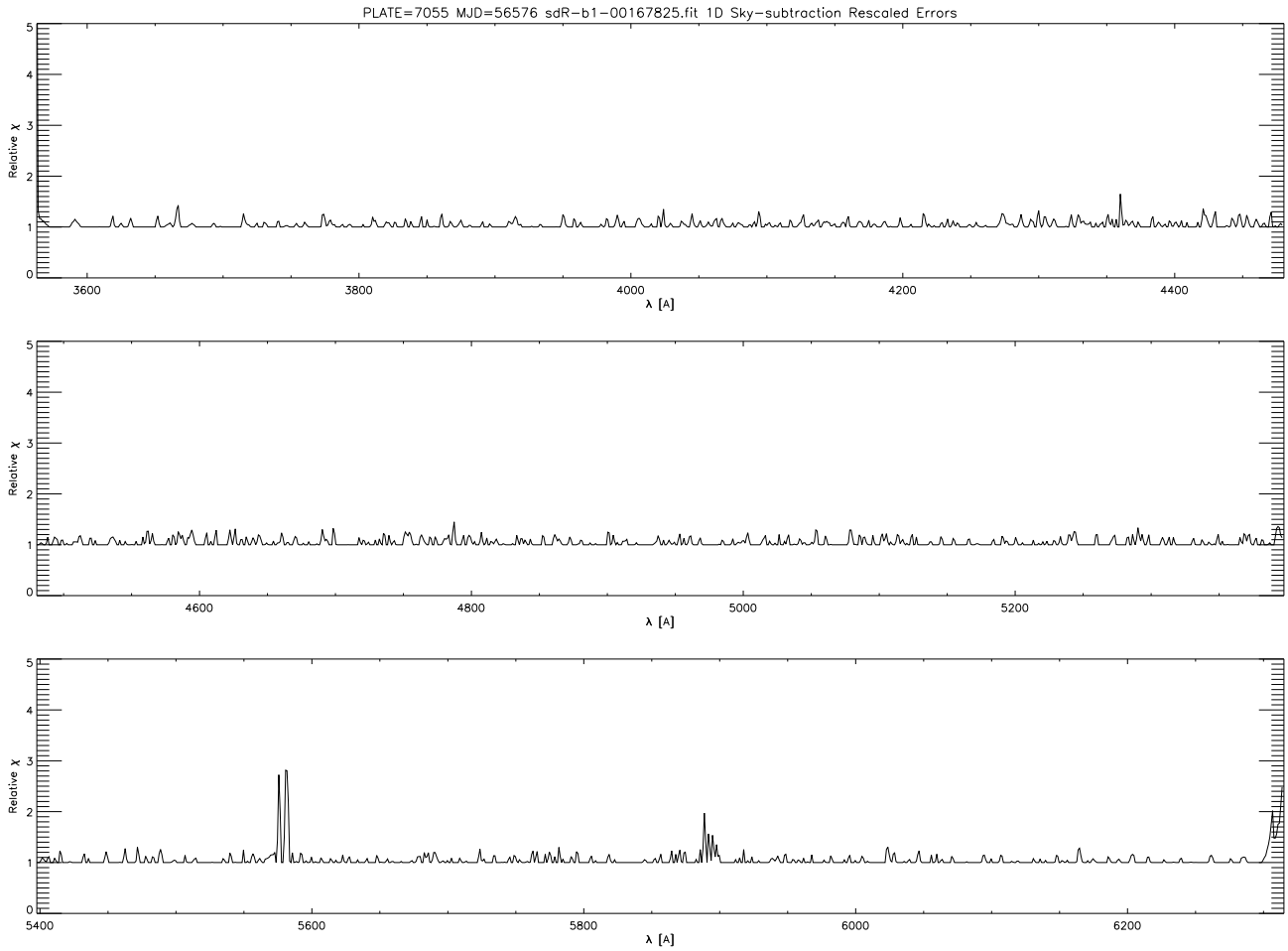

PLATE=7055 MJD=56576 Smooth superflat for sdR-b1-00167825.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

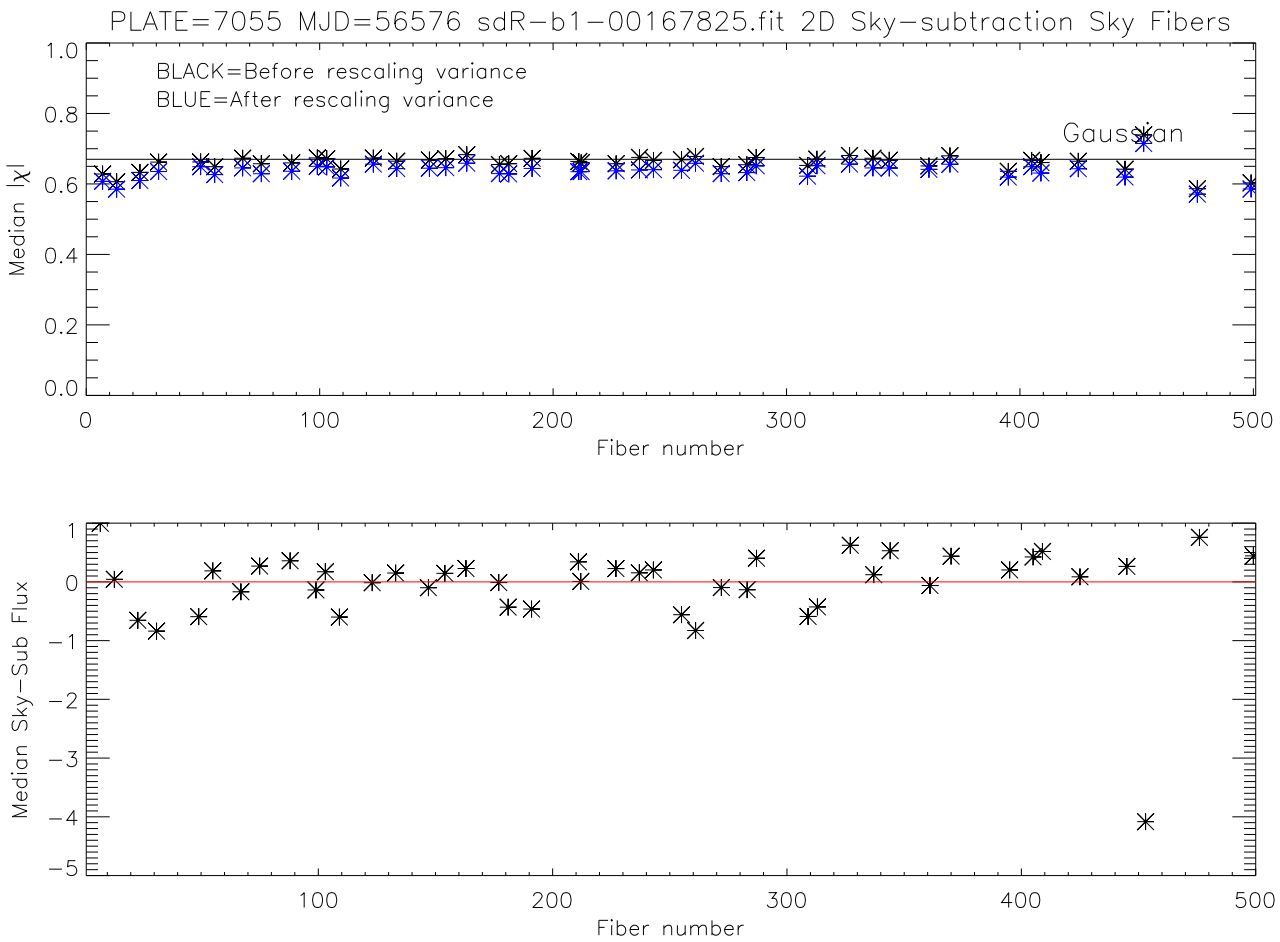

PLATE=7055 MJD=56576 sdR-b1-00167825.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

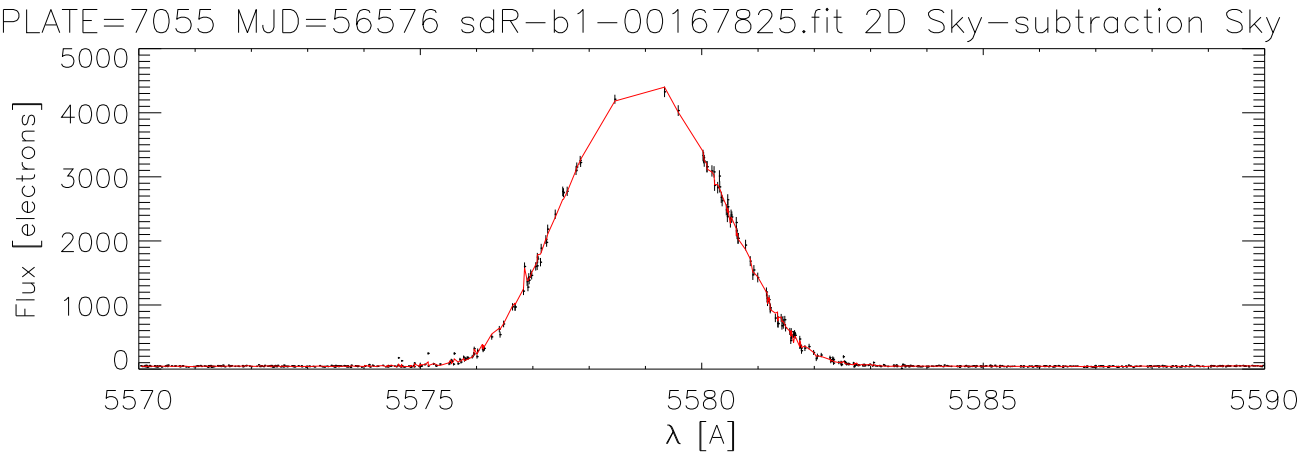

PLATE=7055 MJD=56576 sdR-b1-00167825.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

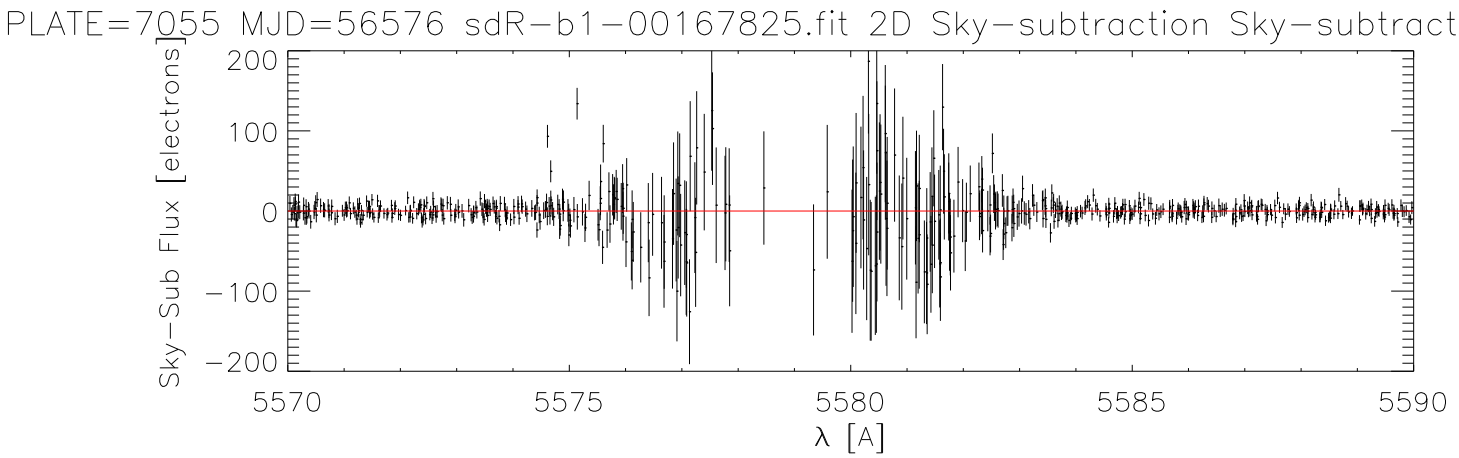

PLATE=7055 MJD=56576 sdR-b1-00167825.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 45

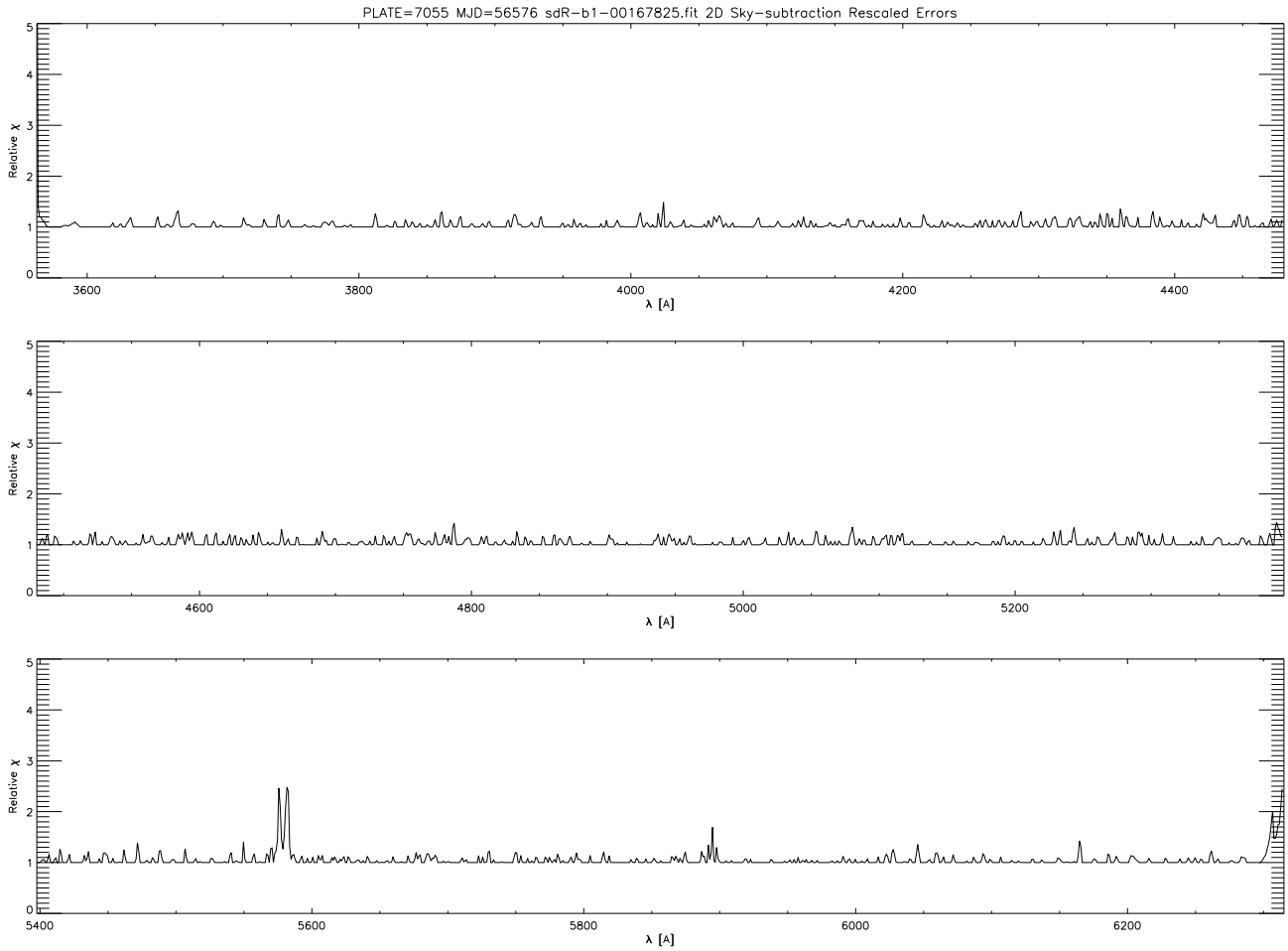


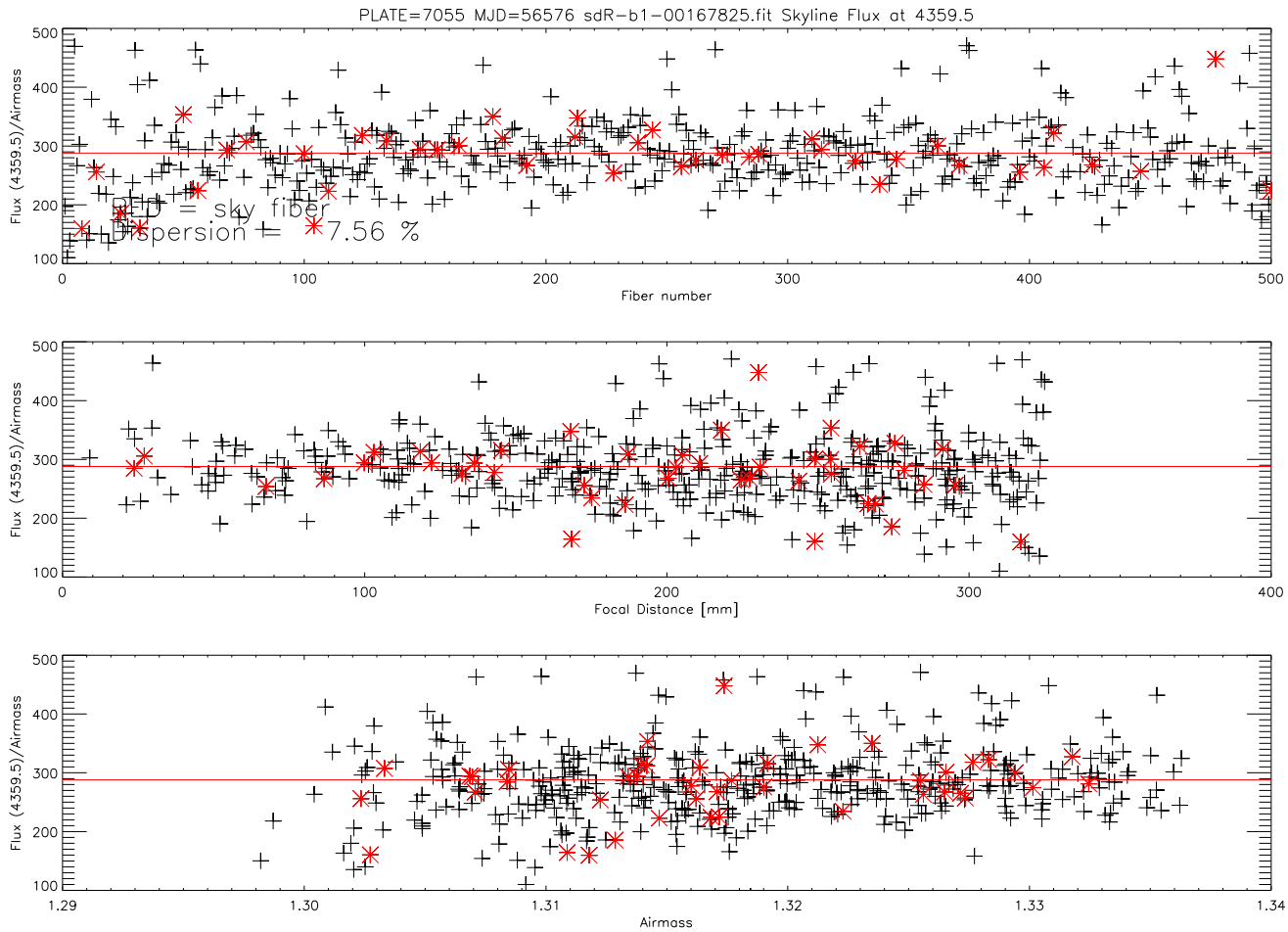

PLATE=7055 MJD=56576 sdR-b1-00167825.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

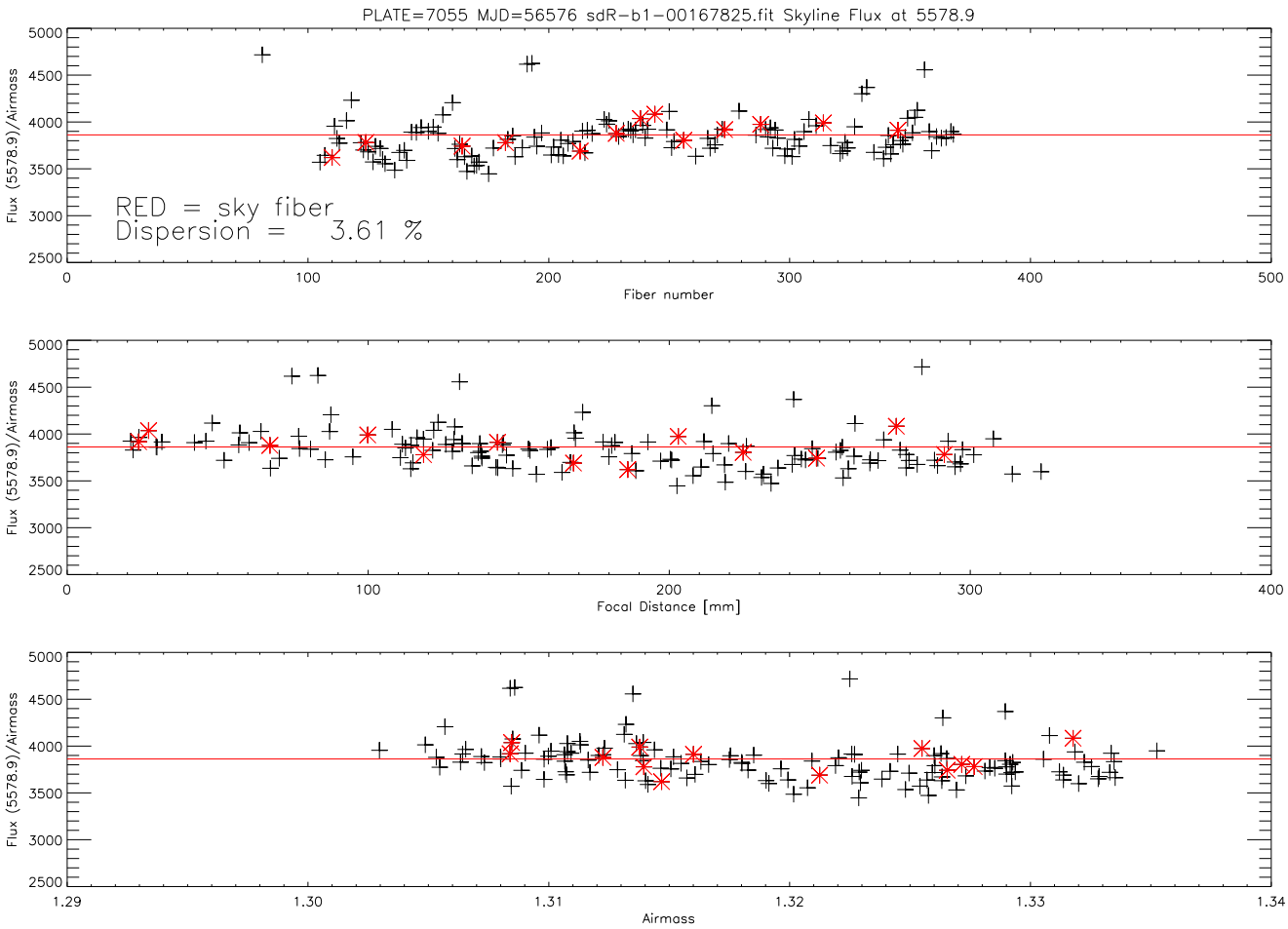

PLATE=7055 MJD=56576 sdR-b1-00167825.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

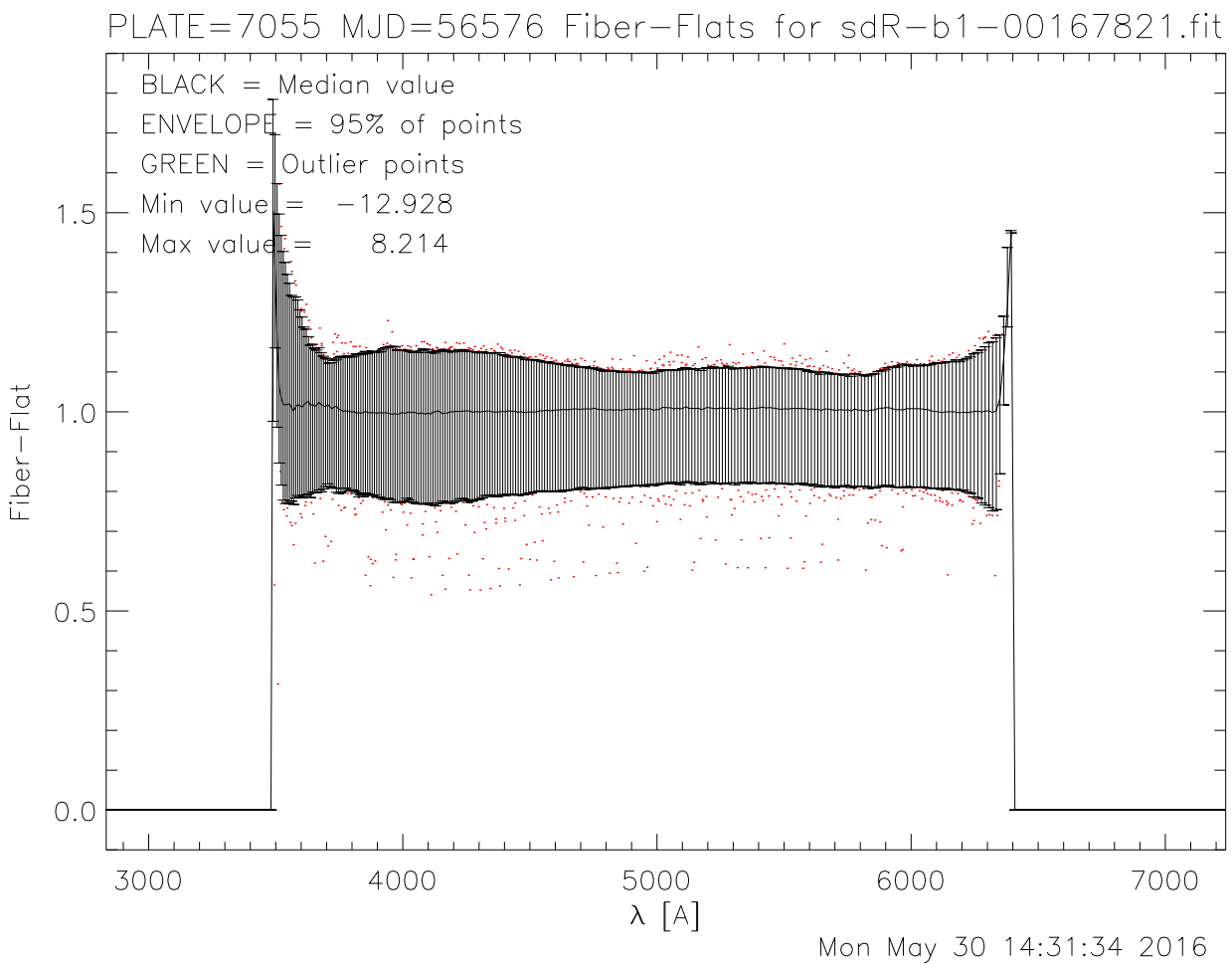

PLATE=7055 MJD=56576 sdR-b1-00167825.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
5570
5575
5580
5585
5590
λ [A]

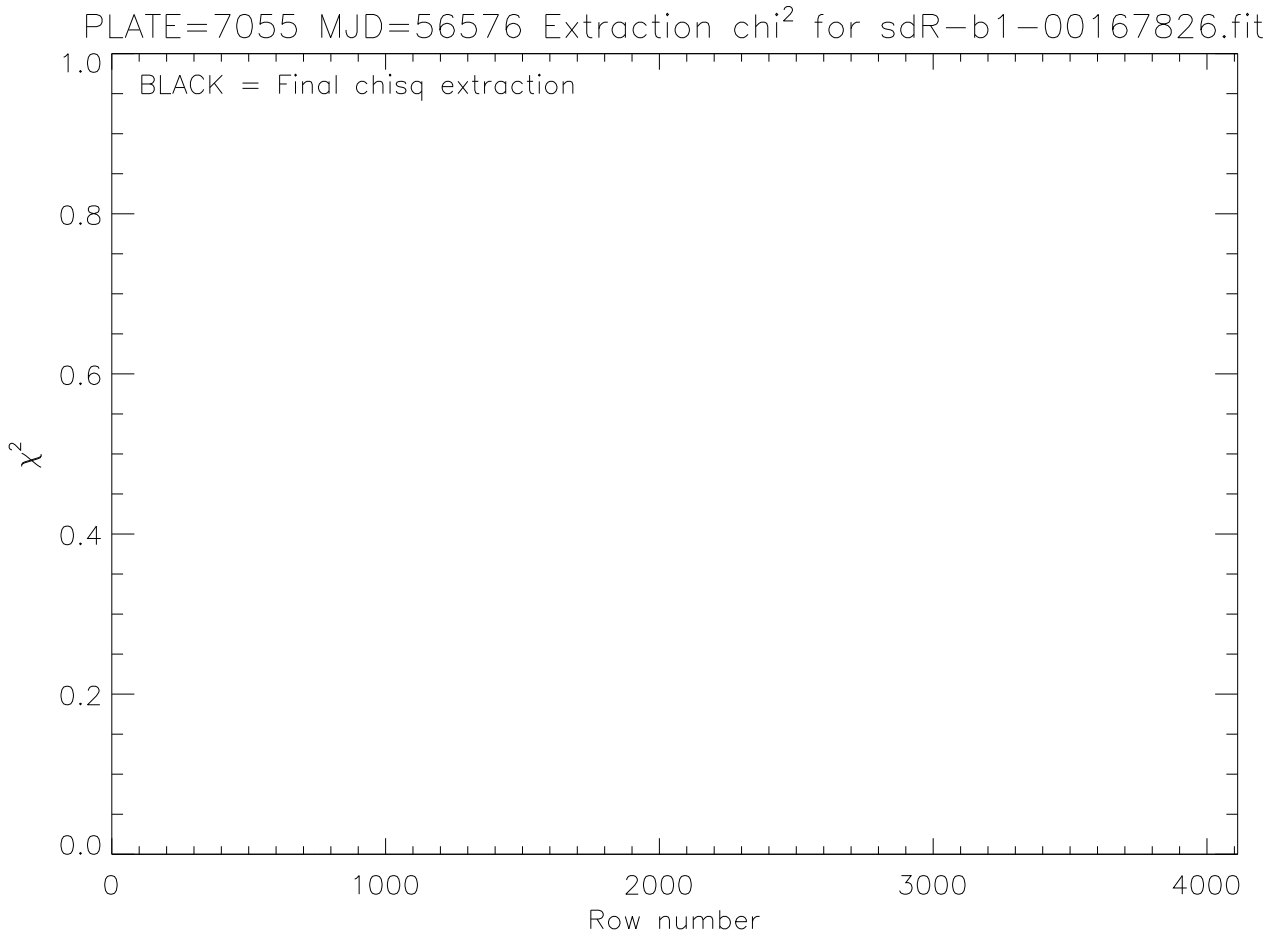
Number of sky fibers = 45

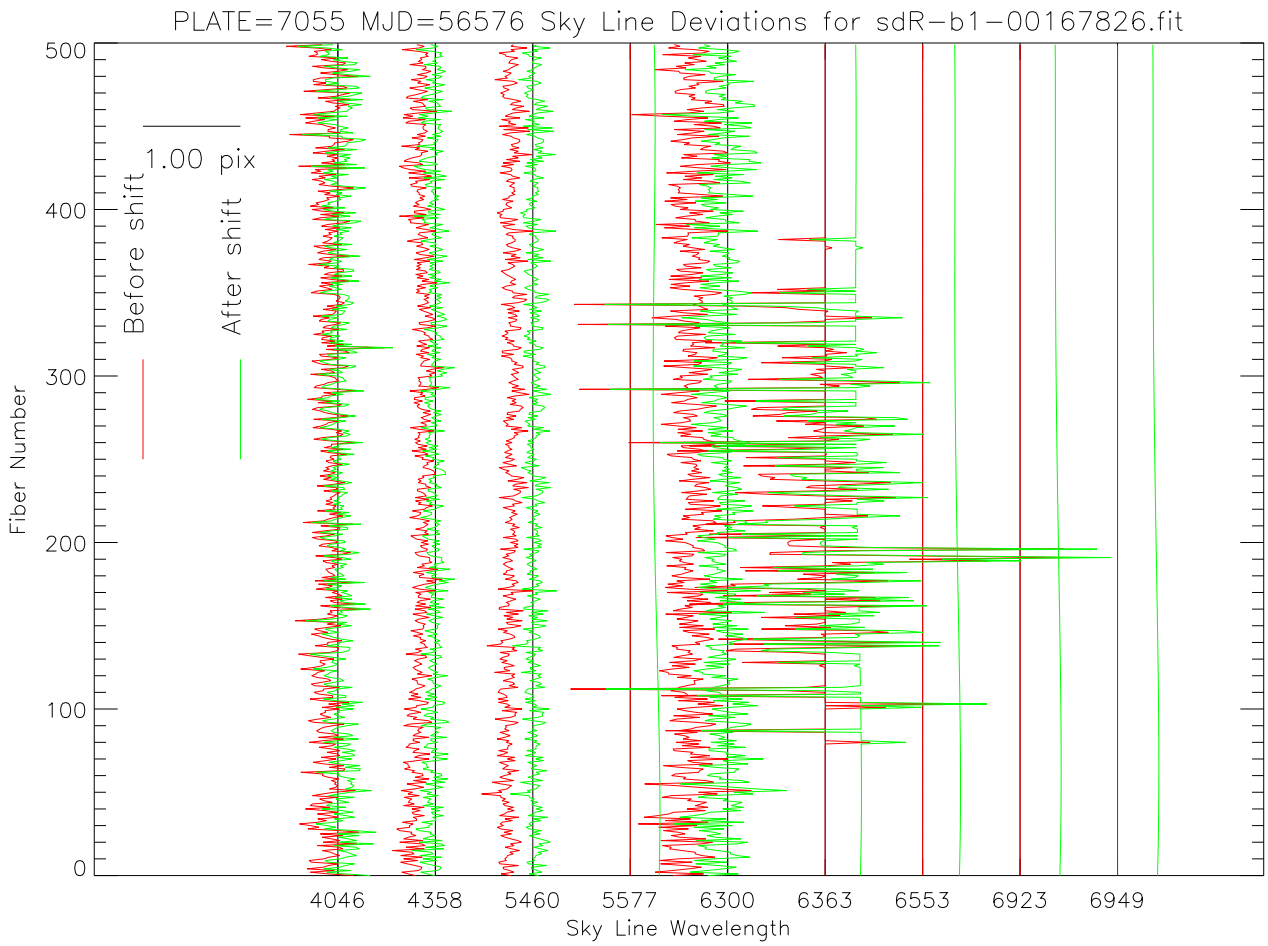


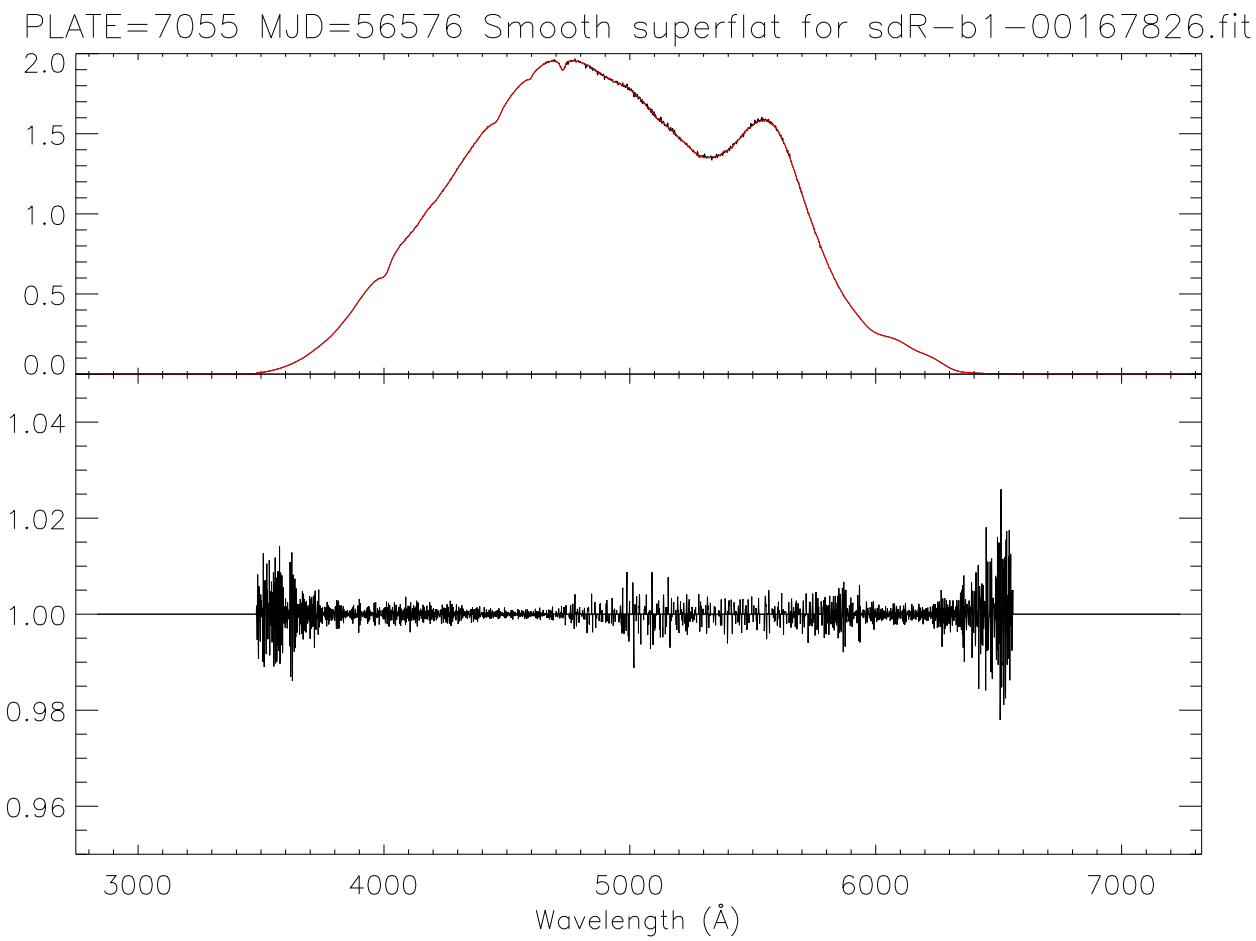

PLATE=7055 MJD=56576 sdR-b1-00167825.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 7.56 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

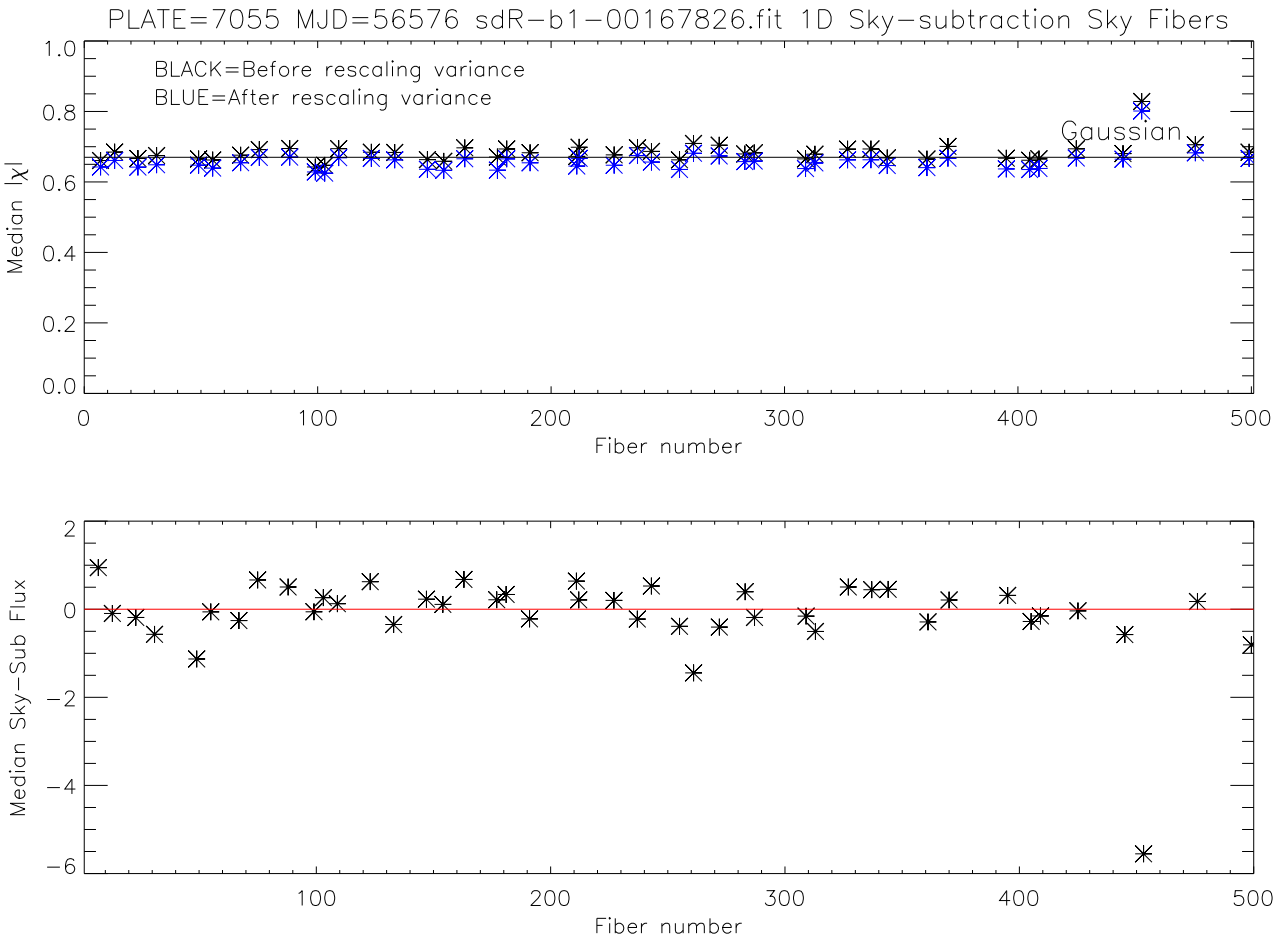

PLATE=7055 MJD=56576 sdR-b1-00167825.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.61 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

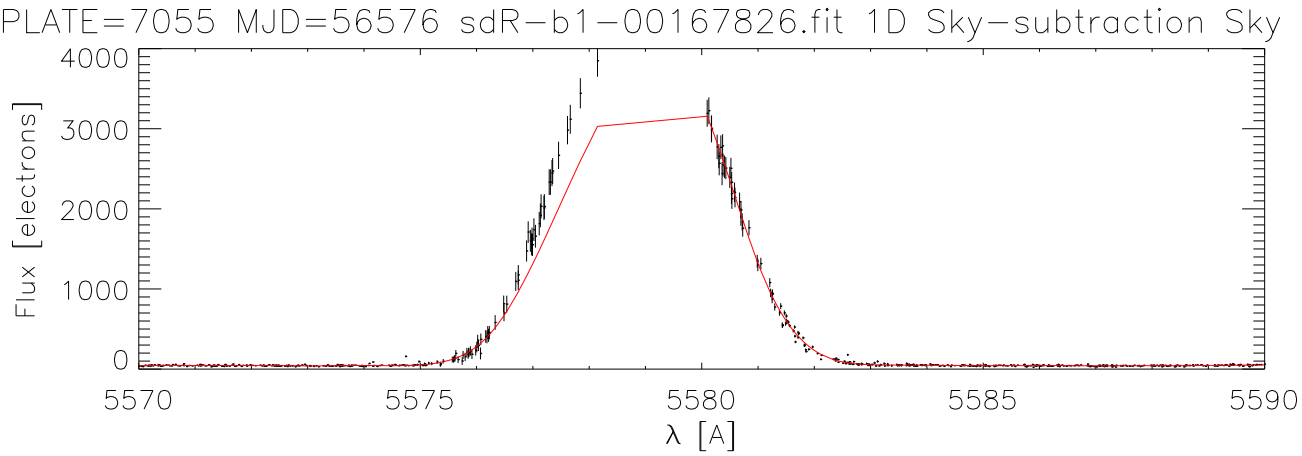

PLATE=7055 MJD=56576 Fiber−Flats for sdR−b1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −12.928
Max value = 8.214
Fiber−Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:31:34 2016

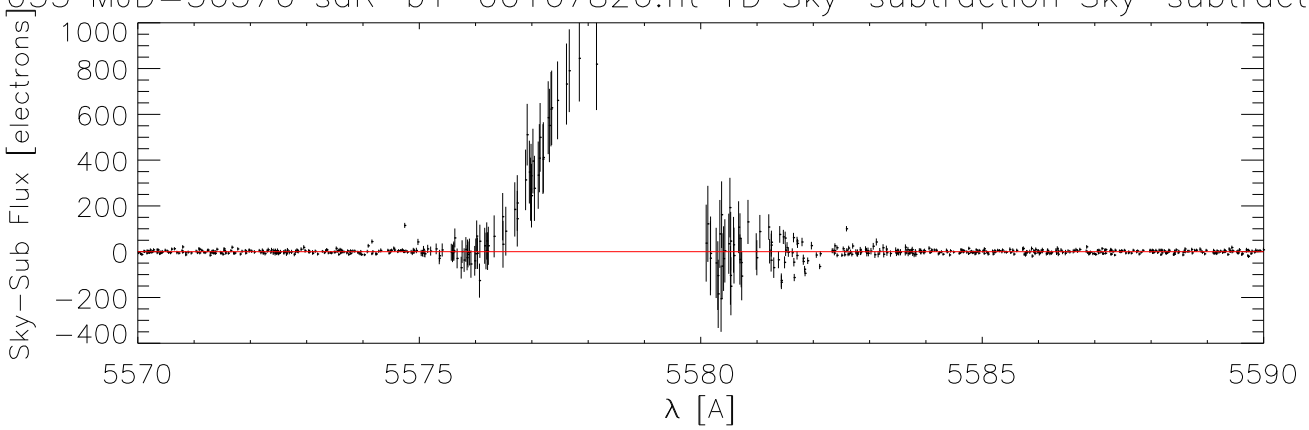

PLATE=7055 MJD=56576 Extraction chi^2 for sdR-b1-00167826.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b1-00167826.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

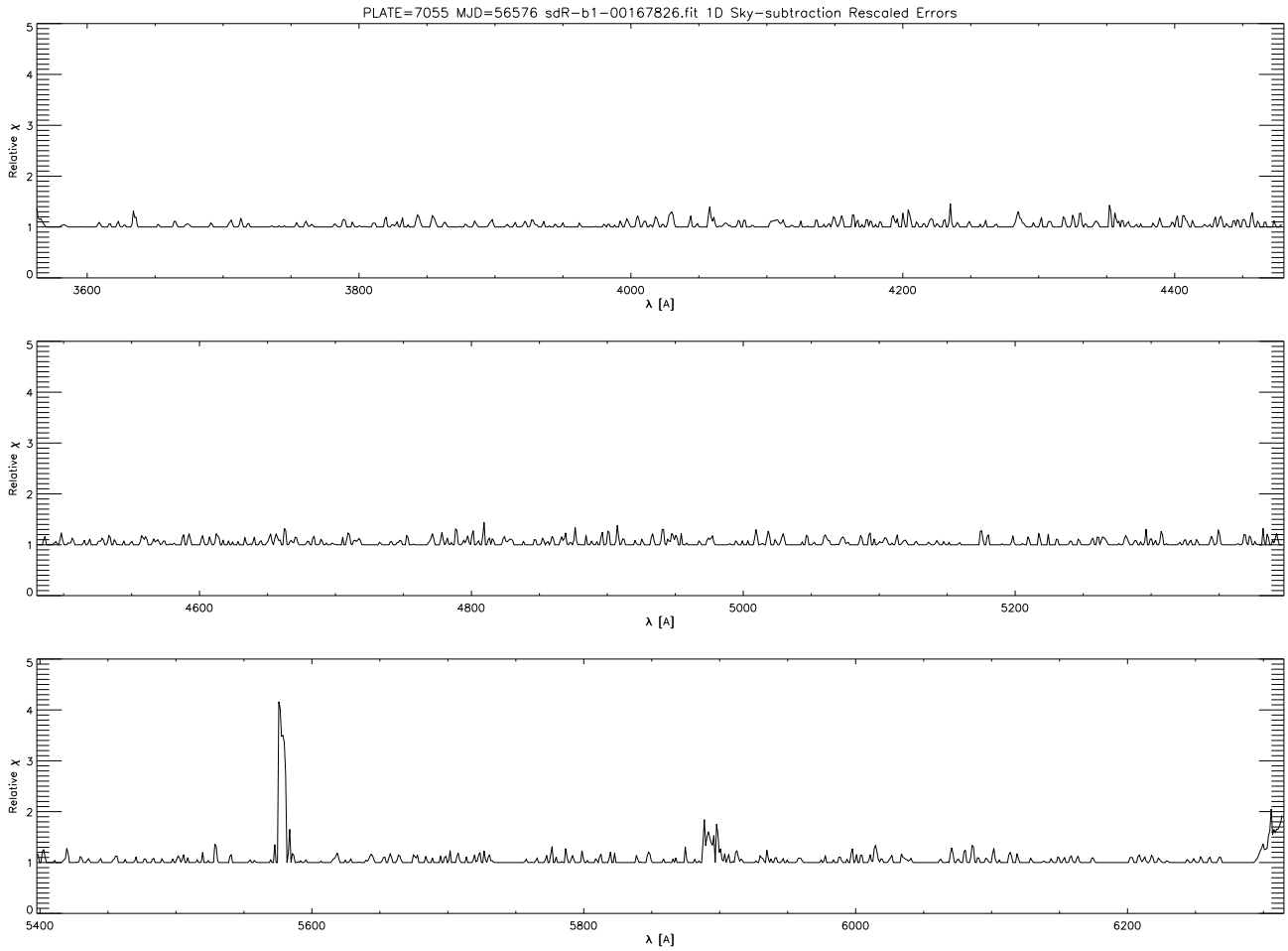

PLATE=7055 MJD=56576 Smooth superflat for sdR-b1-00167826.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

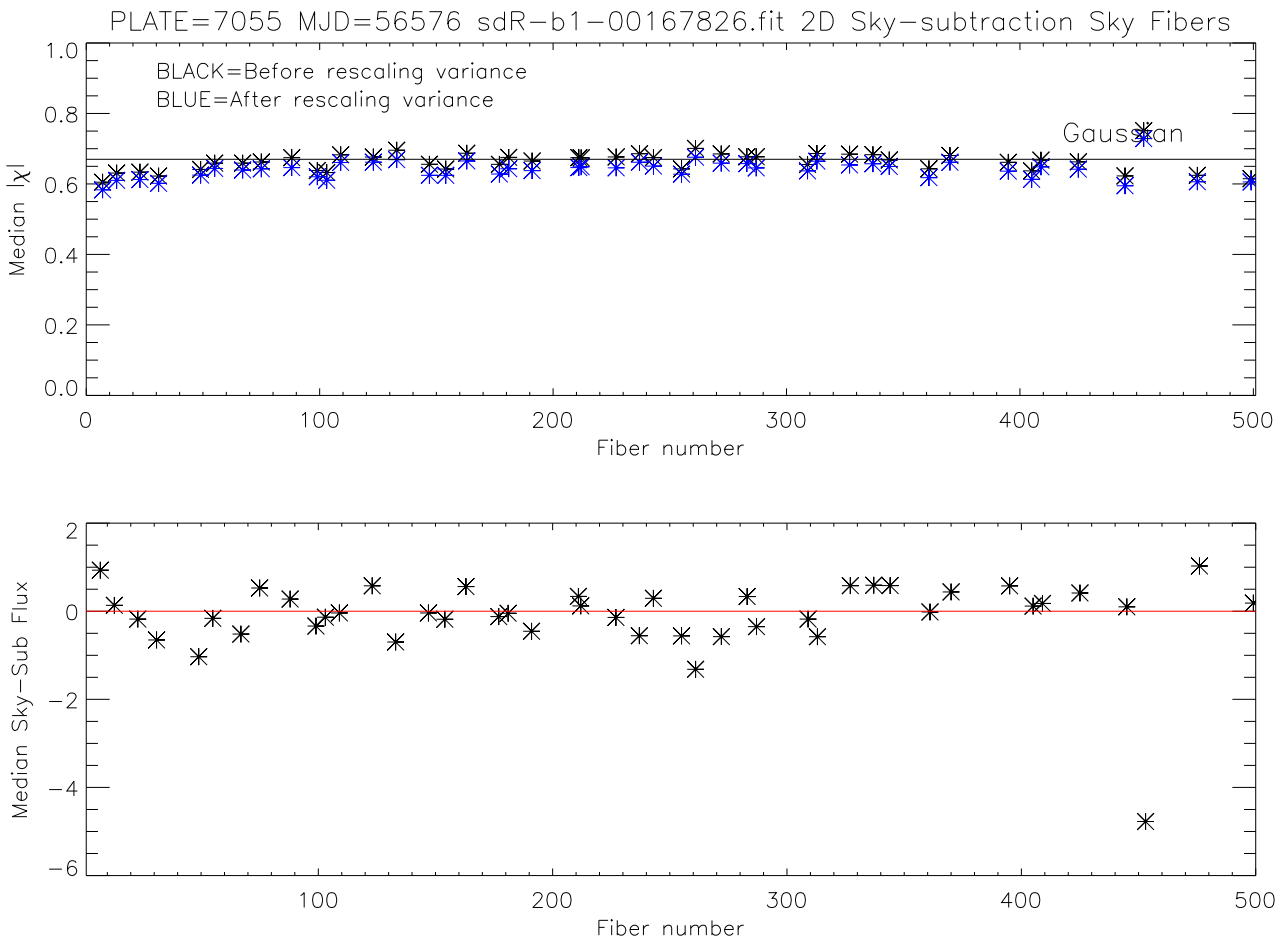

PLATE=7055 MJD=56576 sdR-b1-00167826.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

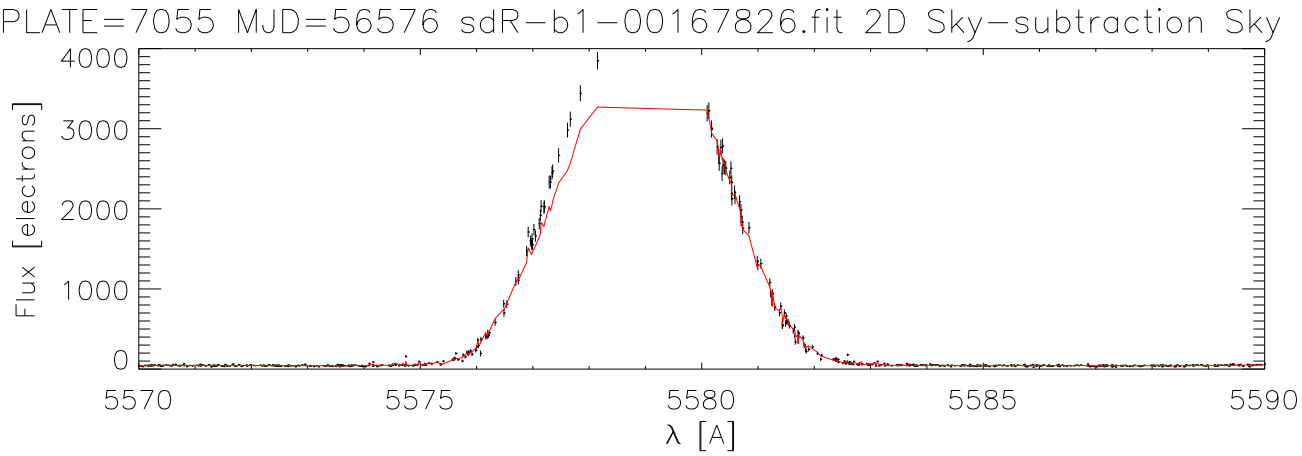

PLATE=7055 MJD=56576 sdR-b1-00167826.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

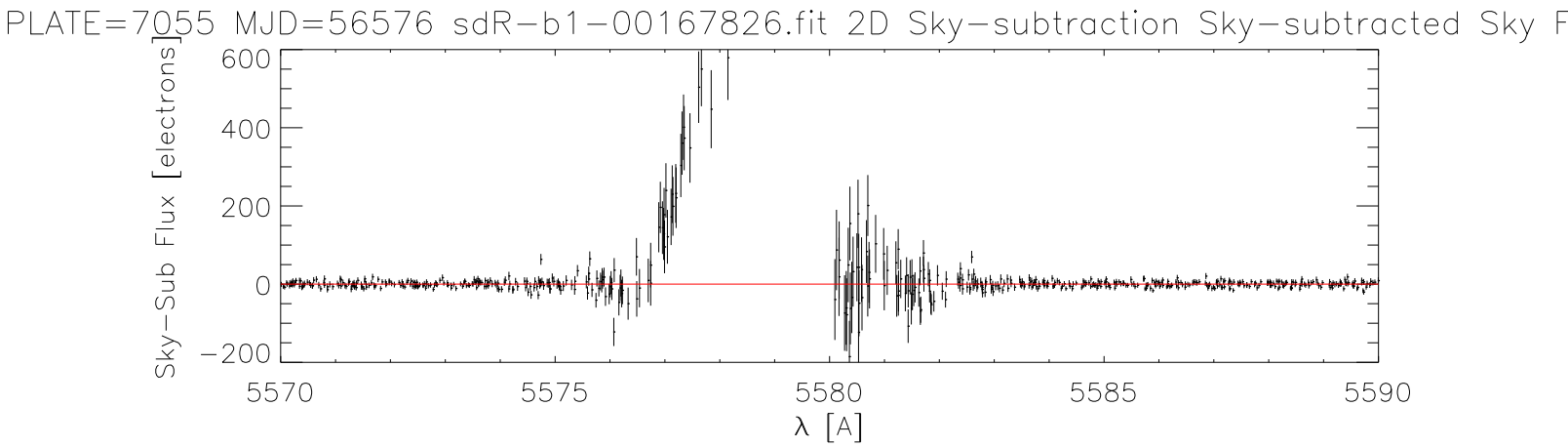

PLATE=7055 MJD=56576 sdR-b1-00167826.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 45

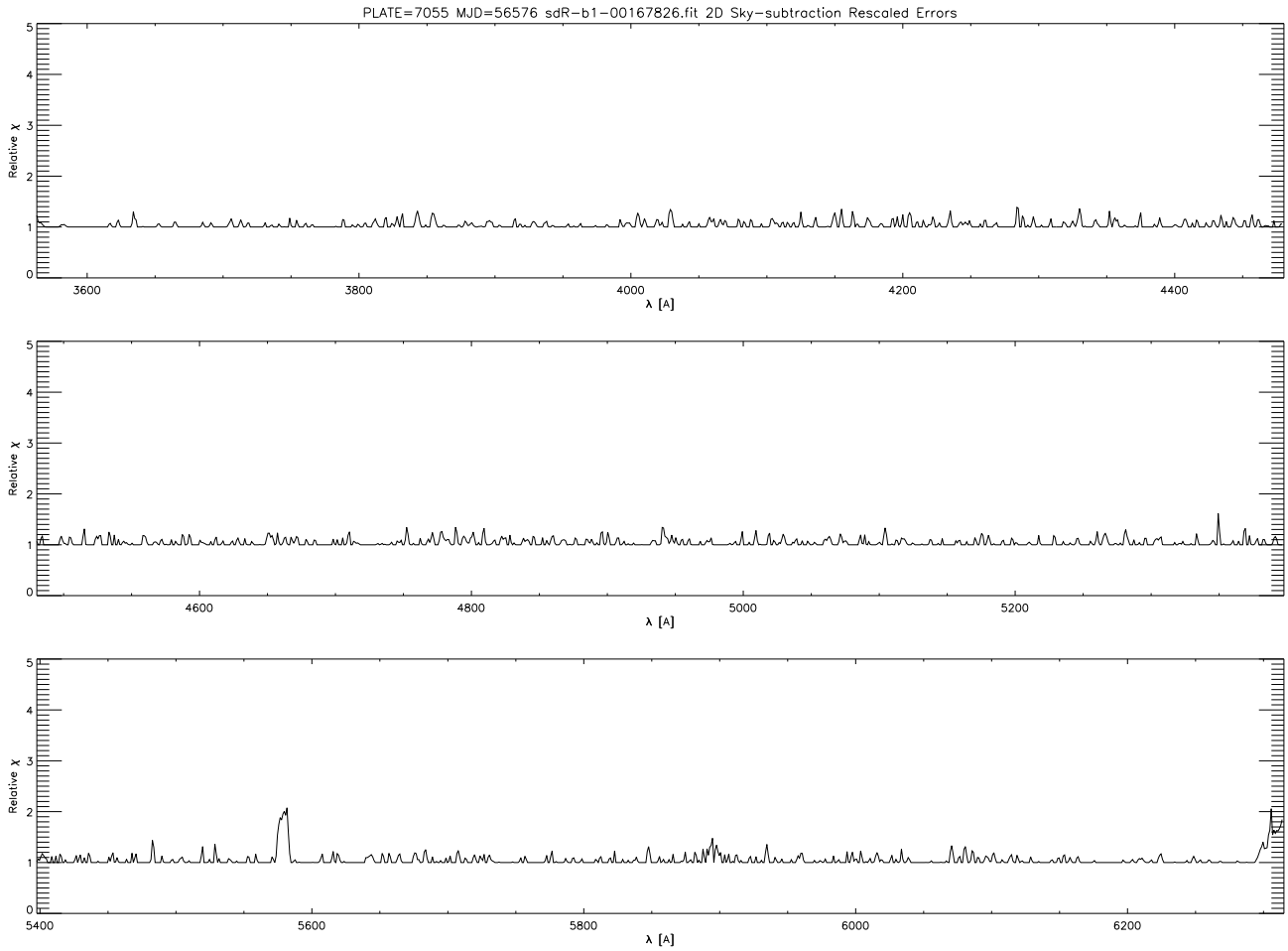


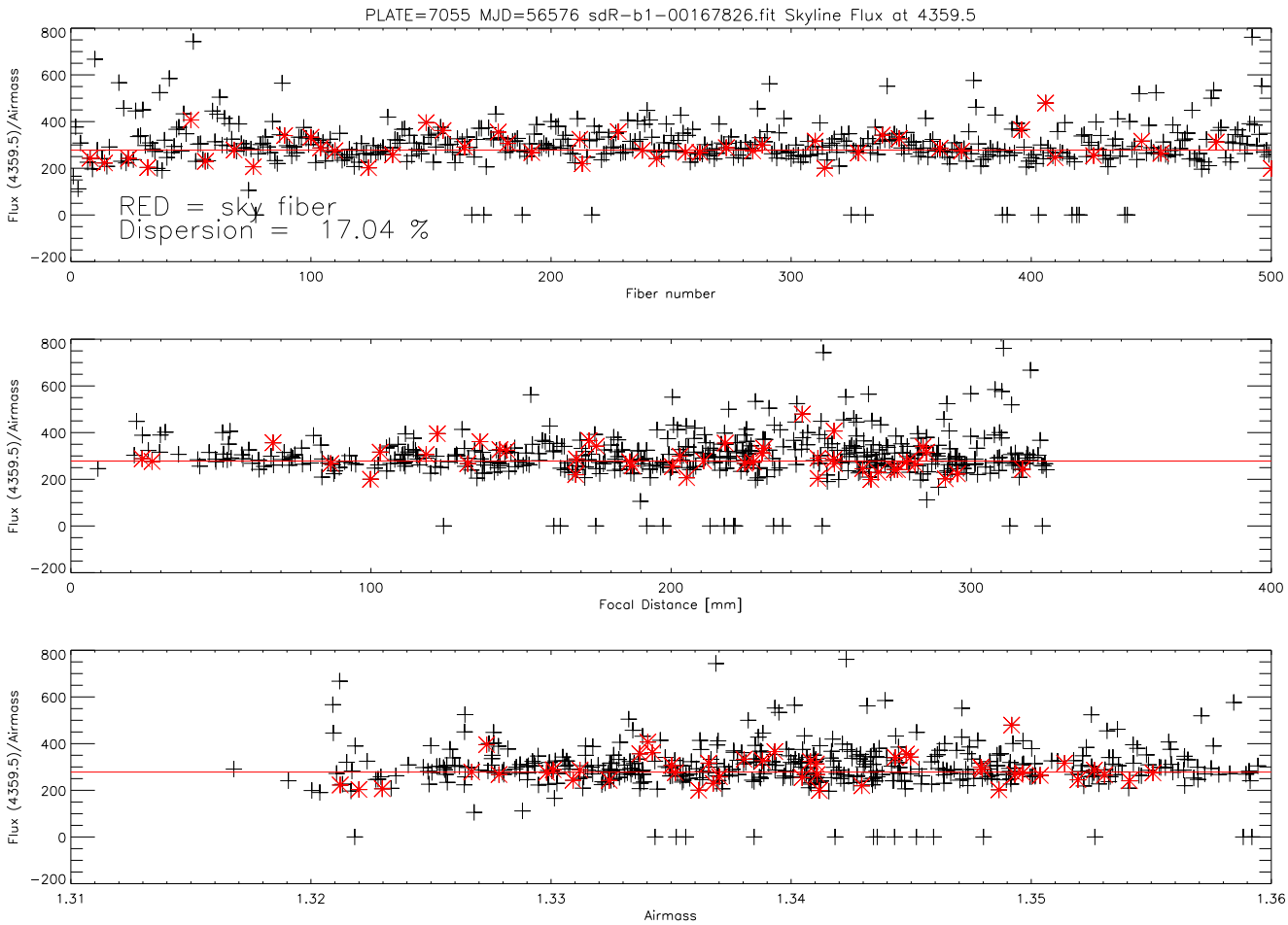

PLATE=7055 MJD=56576 sdR-b1-00167826.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

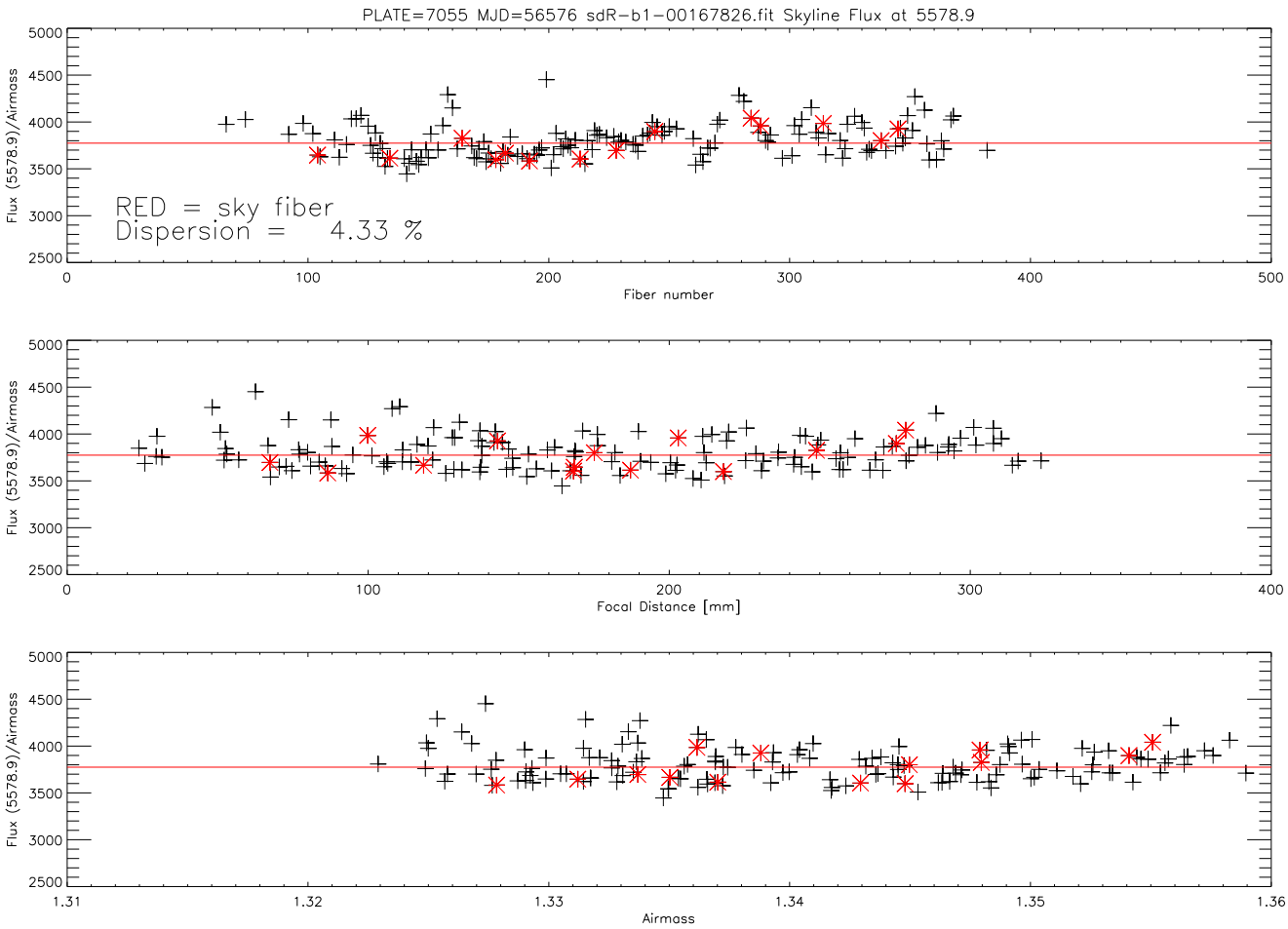

PLATE=7055 MJD=56576 sdR-b1-00167826.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=7055 MJD=56576 sdR-b1-00167826.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
5570
5575
5580
5585
5590
λ [A]

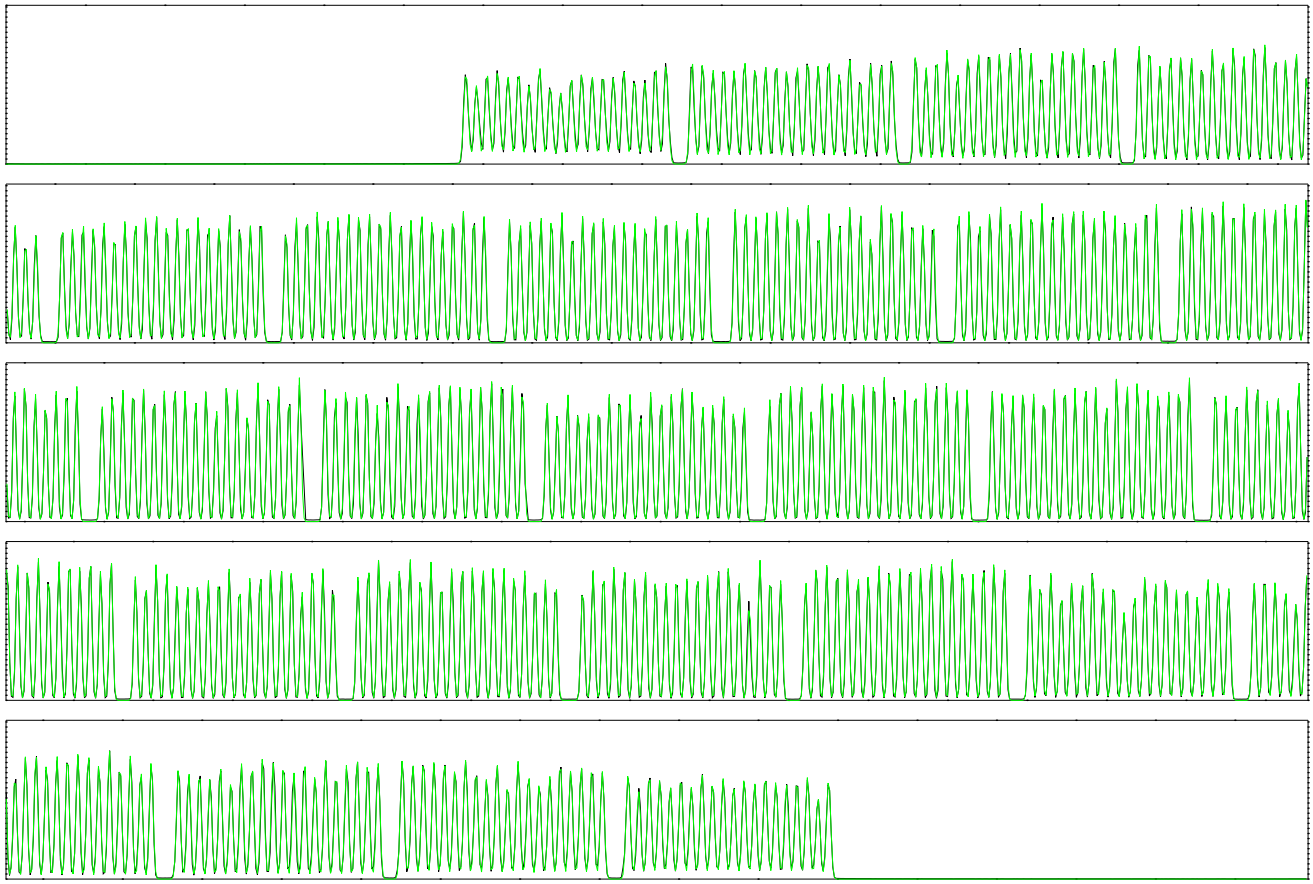
Number of sky fibers = 45

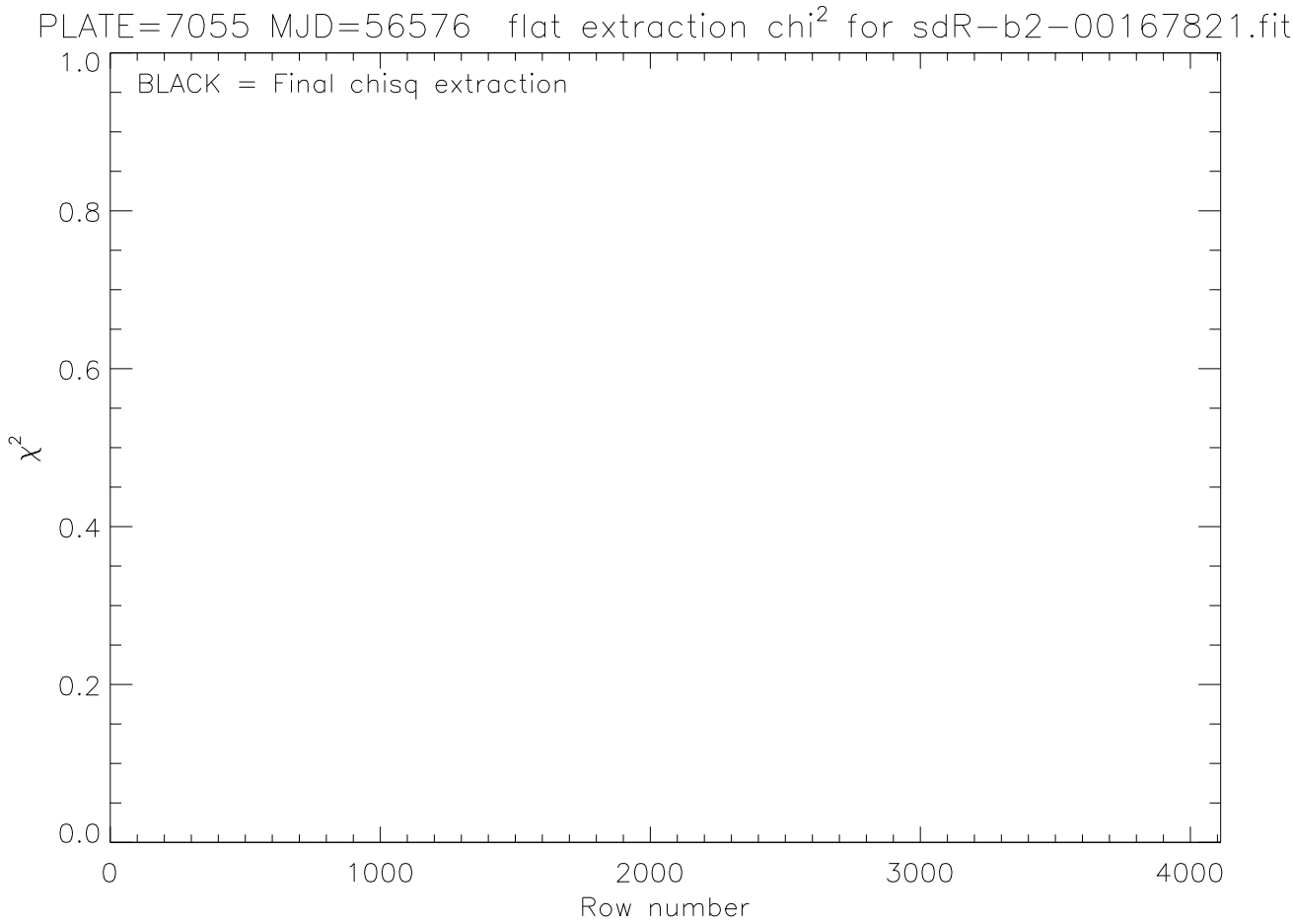


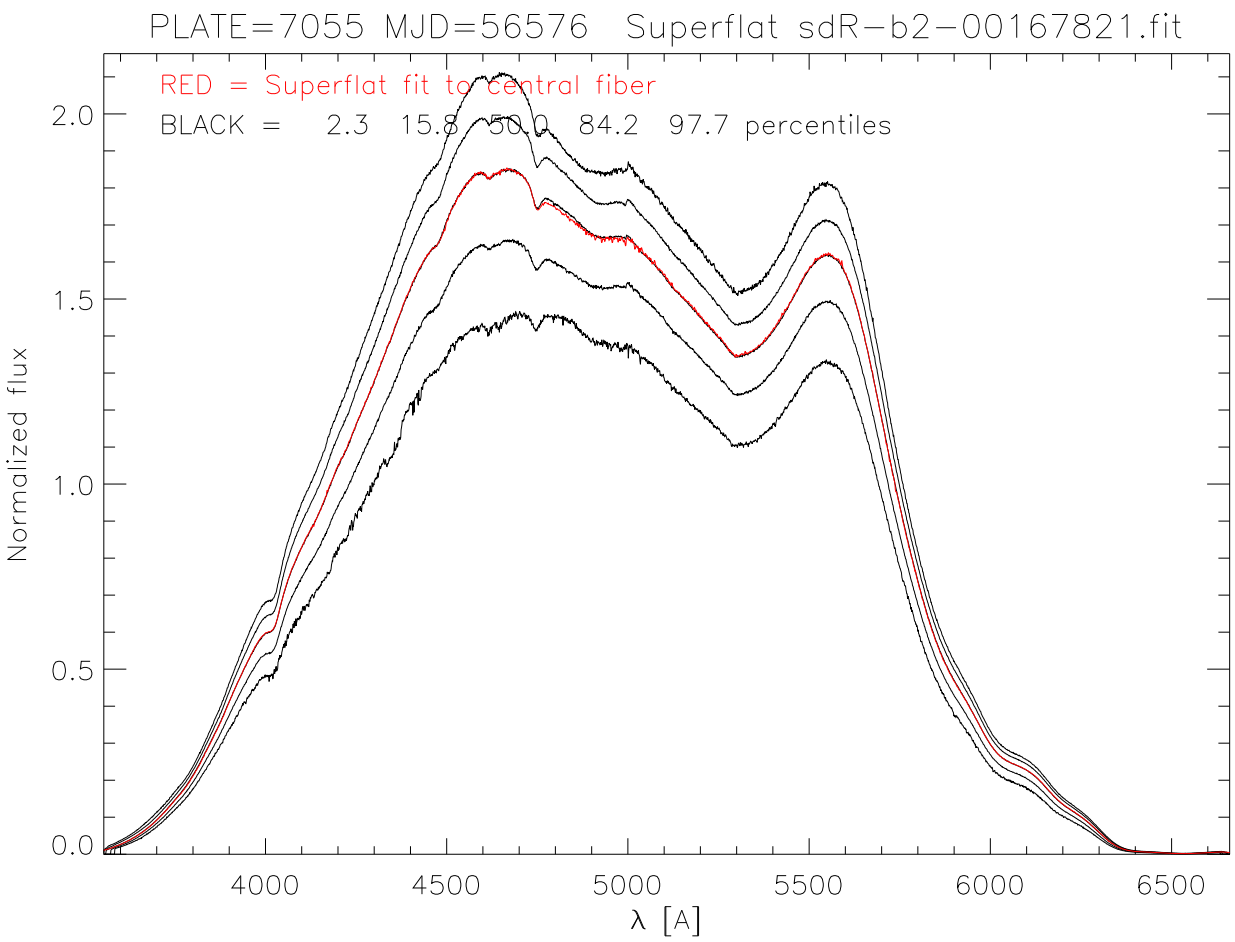

PLATE=7055 MJD=56576 sdR-b1-00167826.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 17.04 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

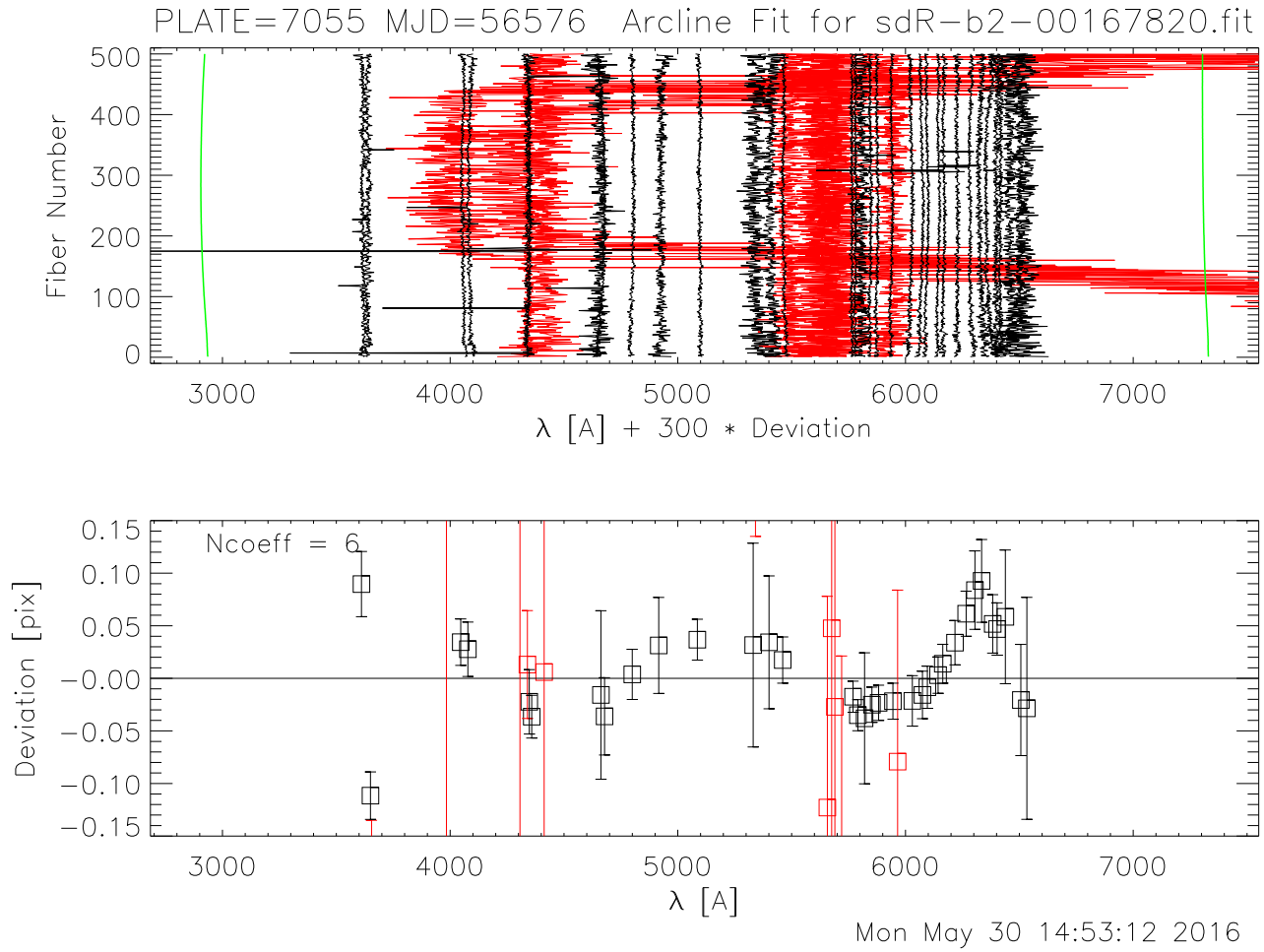

PLATE=7055 MJD=56576 sdR-b1-00167826.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 4.33 %
Fiber number
Focal Distance [mm]
Airmass

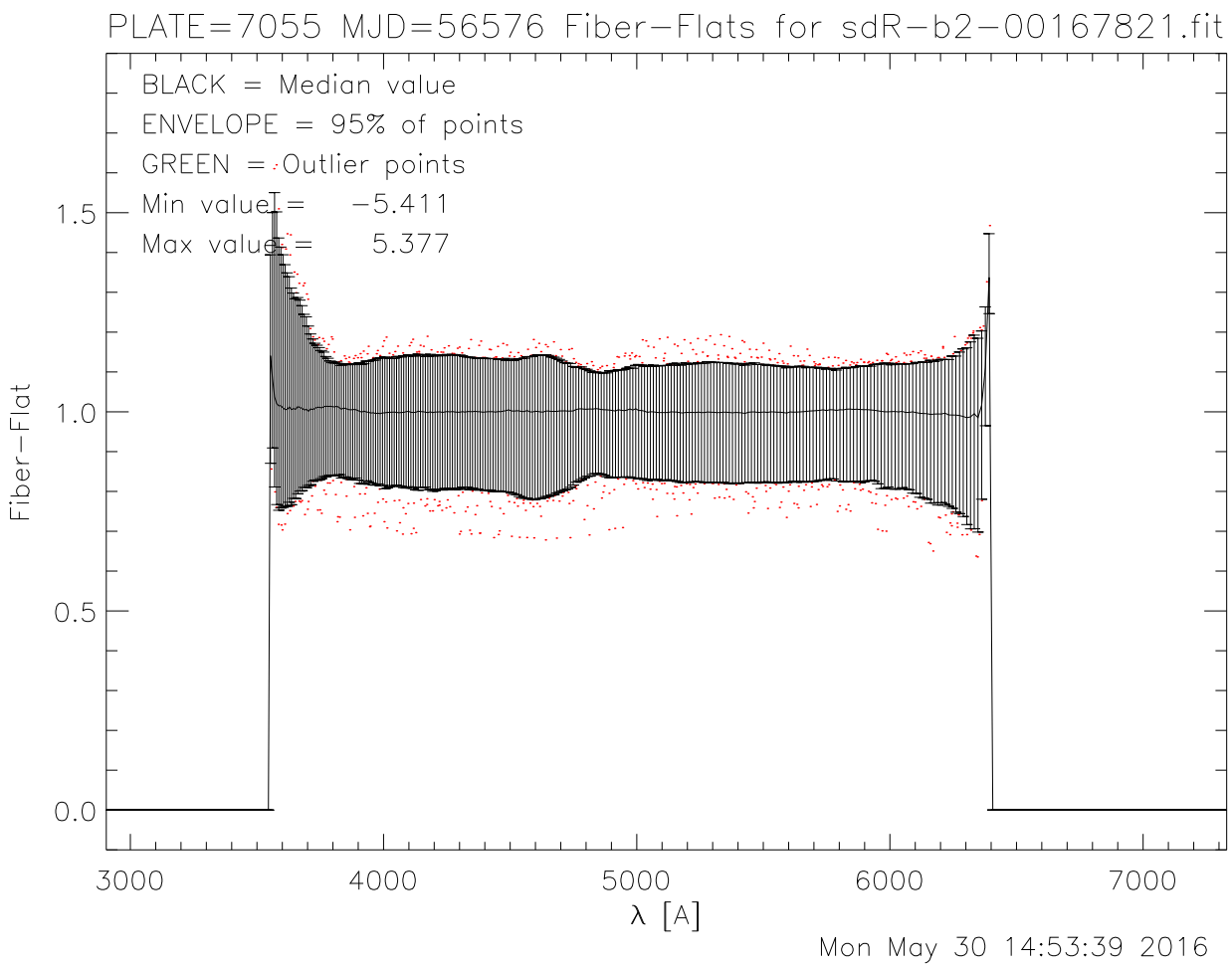
PLATE=7055 MJD=56576 Traces sdR-b2-00167821.fit

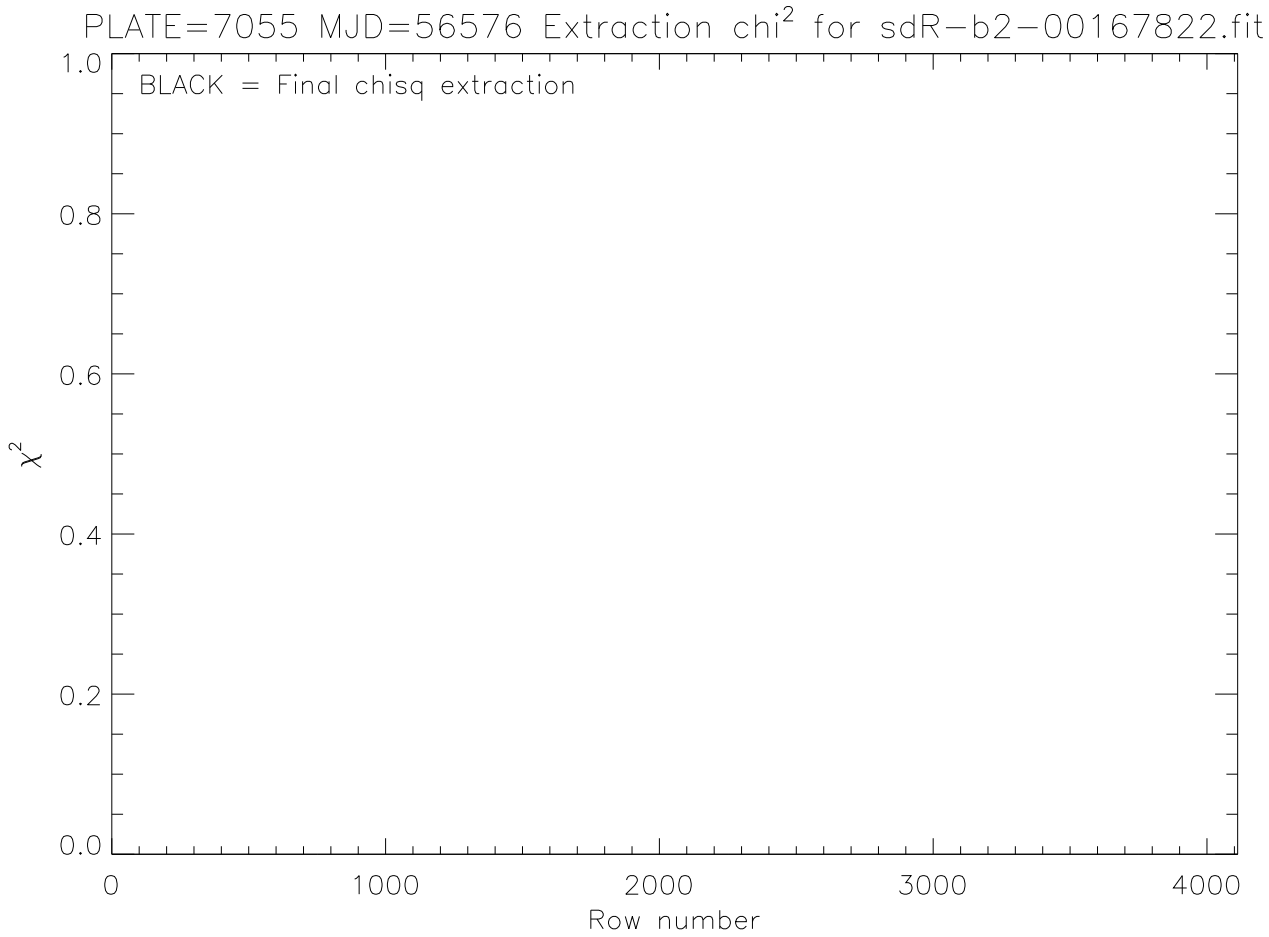


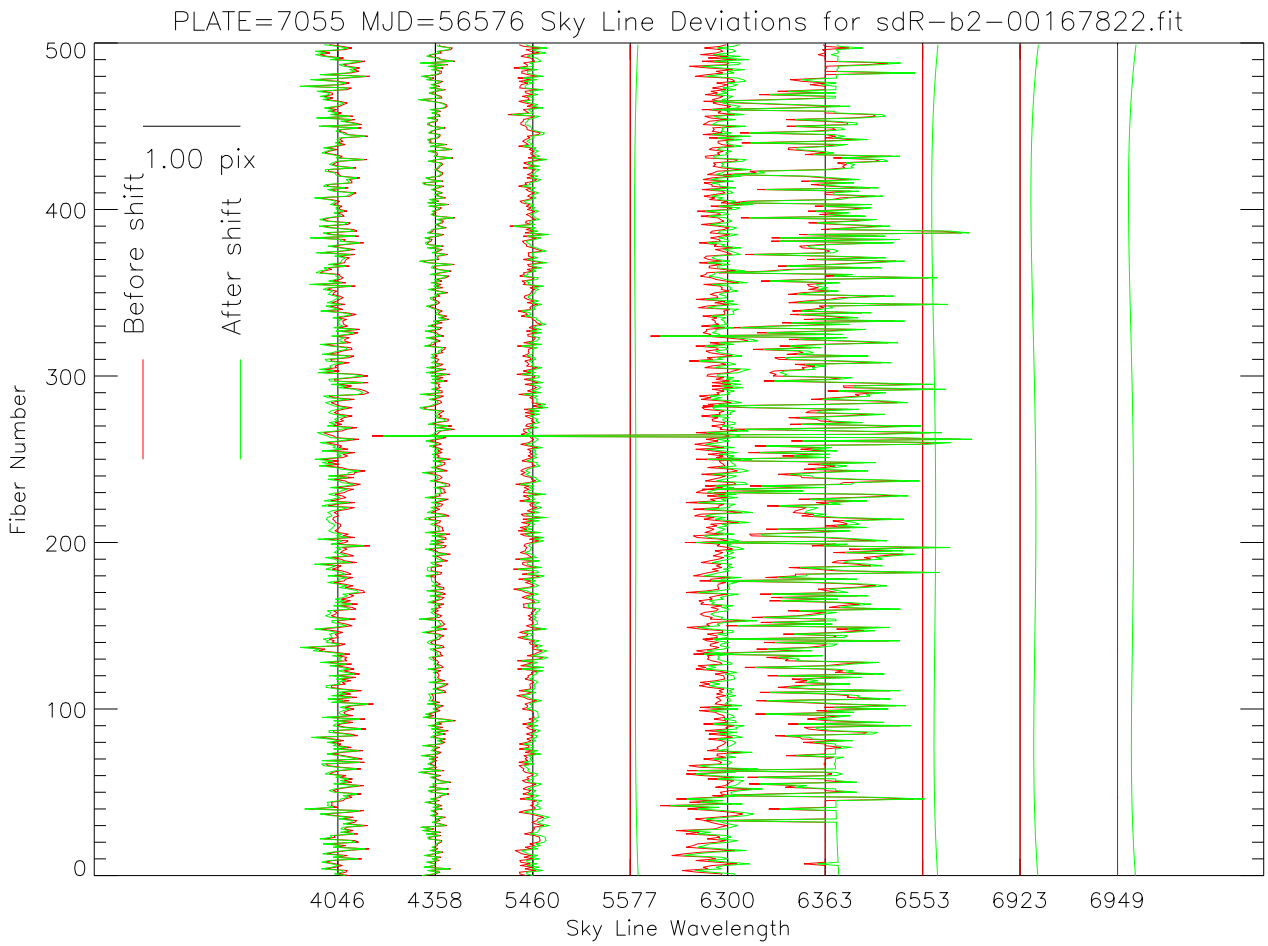

PLATE=7055 MJD=56576 flat extraction chi^2 for sdR−b2−00167821.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number

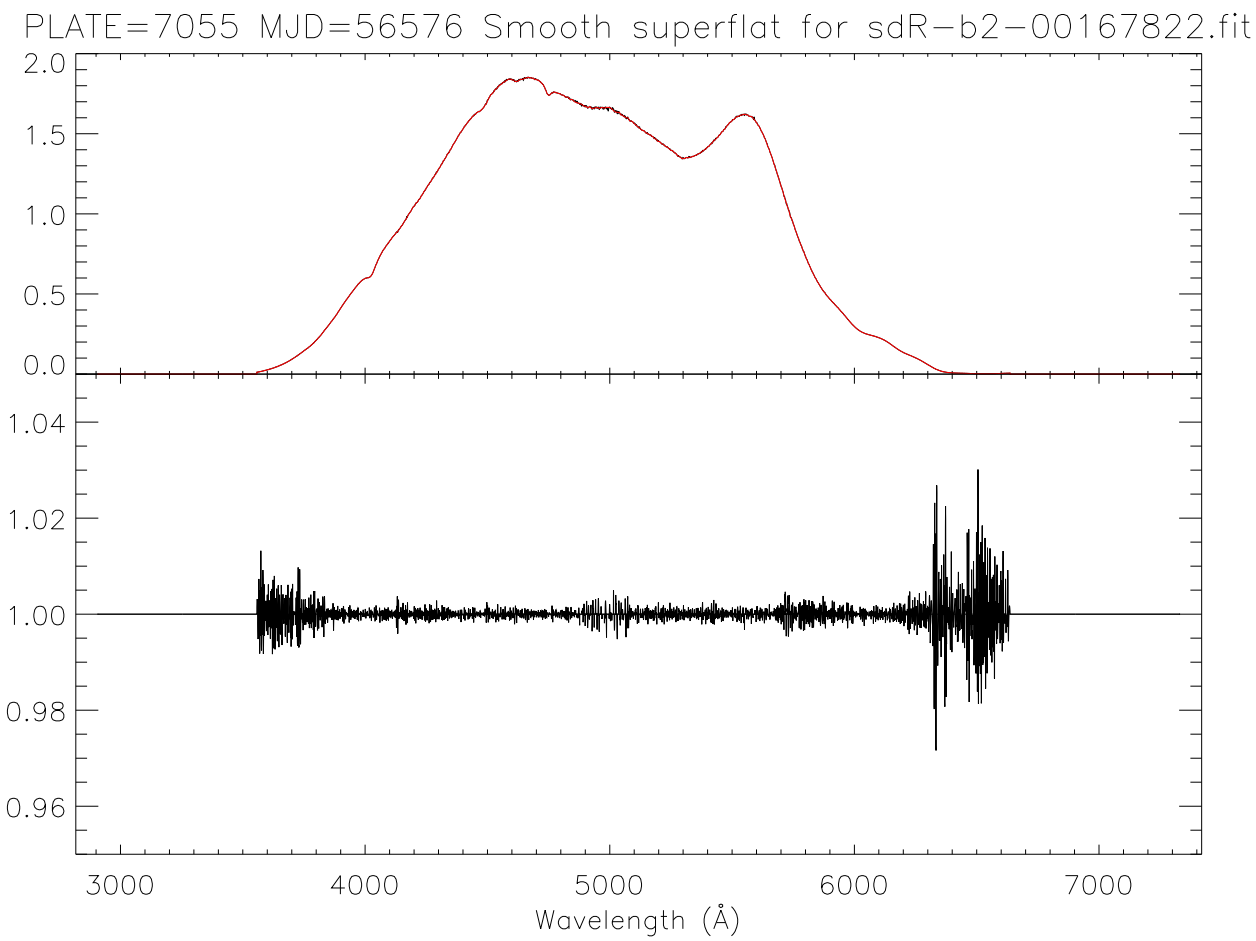

PLATE=7055 MJD=56576 Superflat sdR-b2-00167821.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
4000
4500
5000
5500
6000
6500

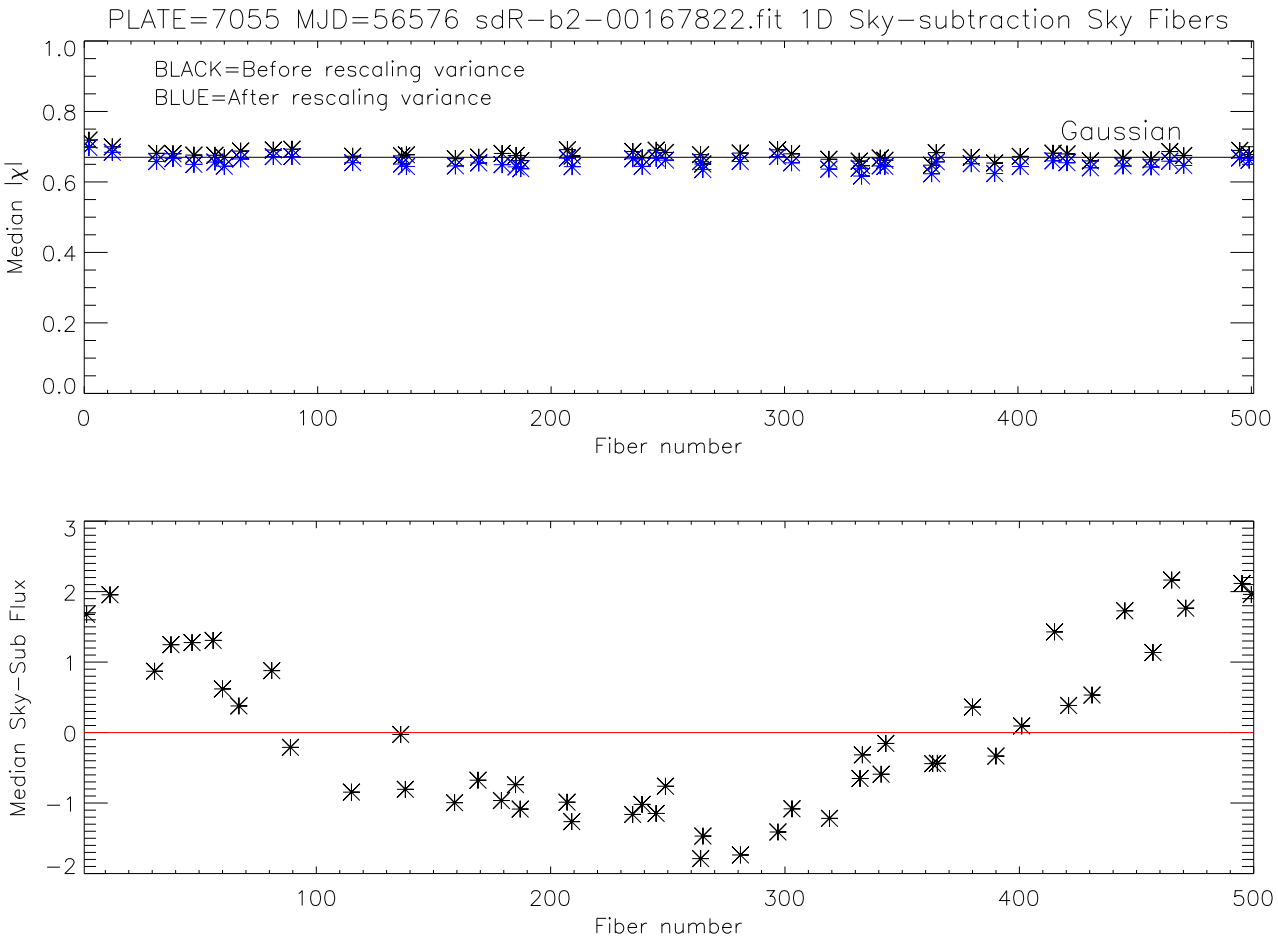

PLATE=7055 MJD=56576 Arcline Fit for sdR-b2-00167820.fit
Fiber Number
500
400
300
200
100
0
3000
4000
5000
6000
7000
λ [A] + 300 * Deviation
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:53:12 2016

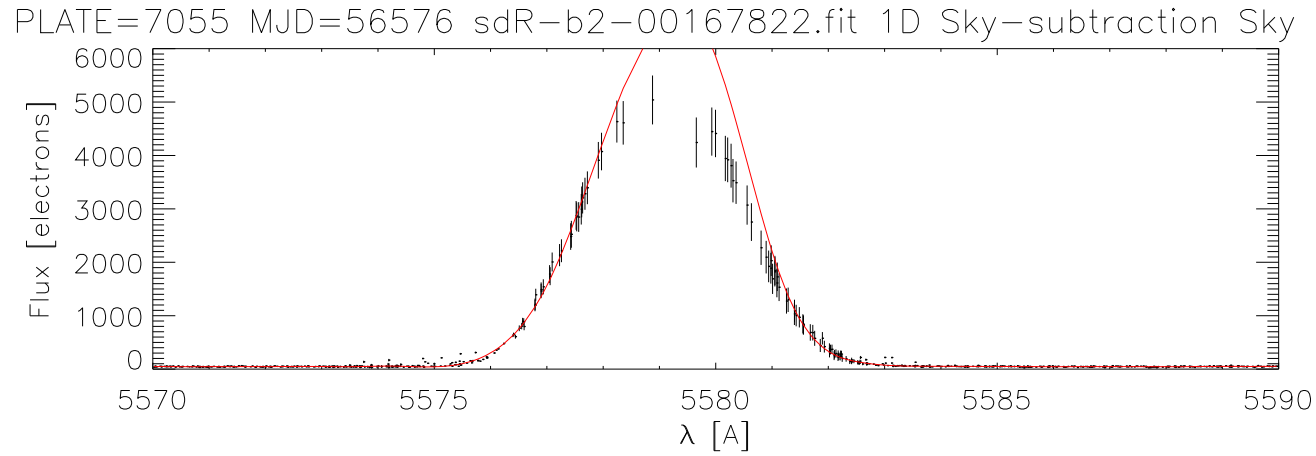

PLATE=7055 MJD=56576 Fiber-Flats for sdR-b2-00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -5.411
Max value = 5.377
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 14:53:39 2016

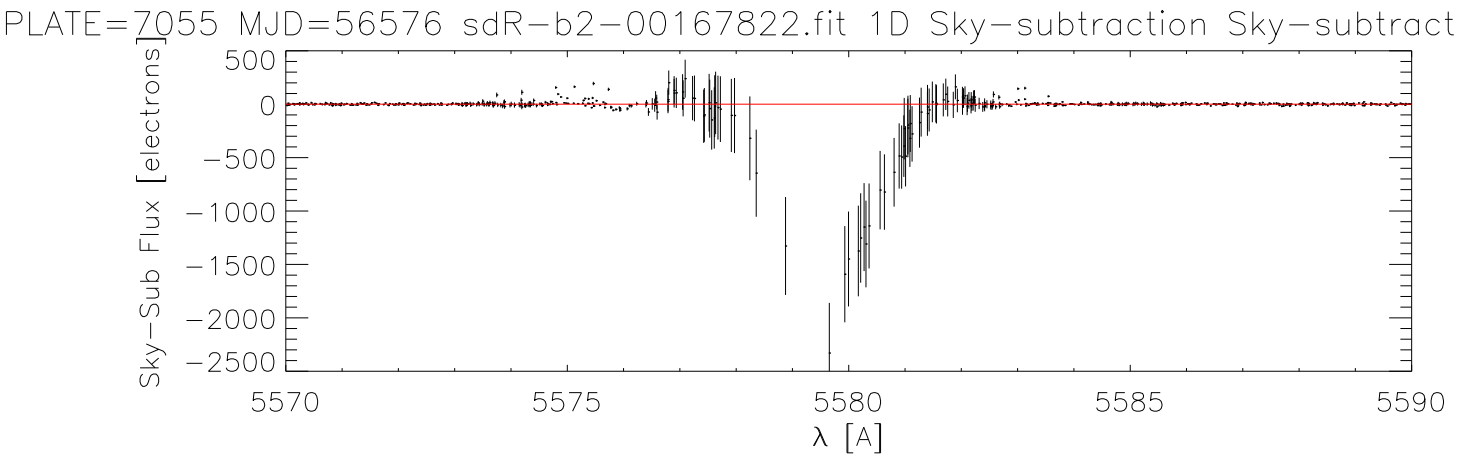

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−b2−00167822.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b2-00167822.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

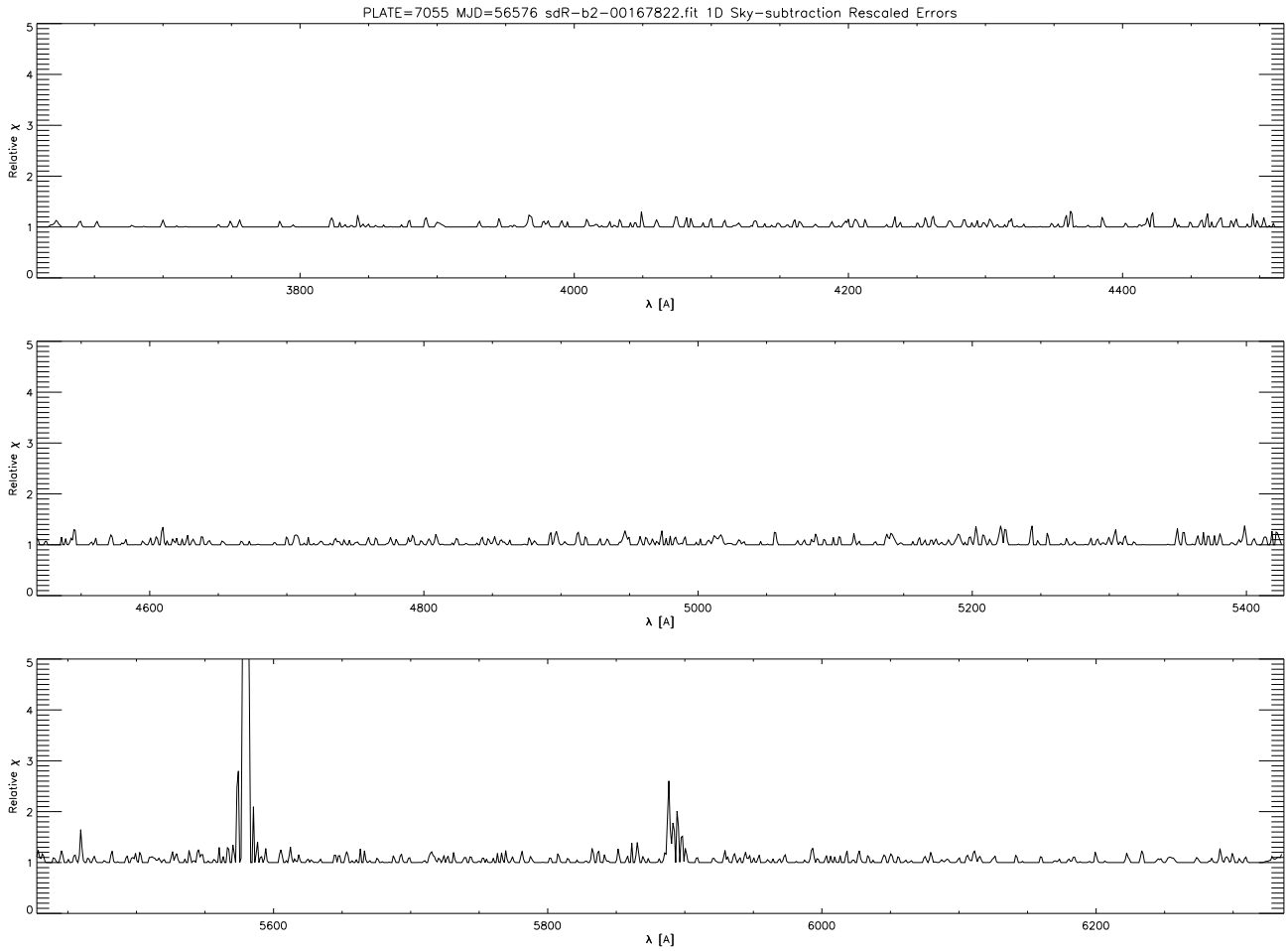

PLATE=7055 MJD=56576 Smooth superflat for sdR-b2-00167822.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

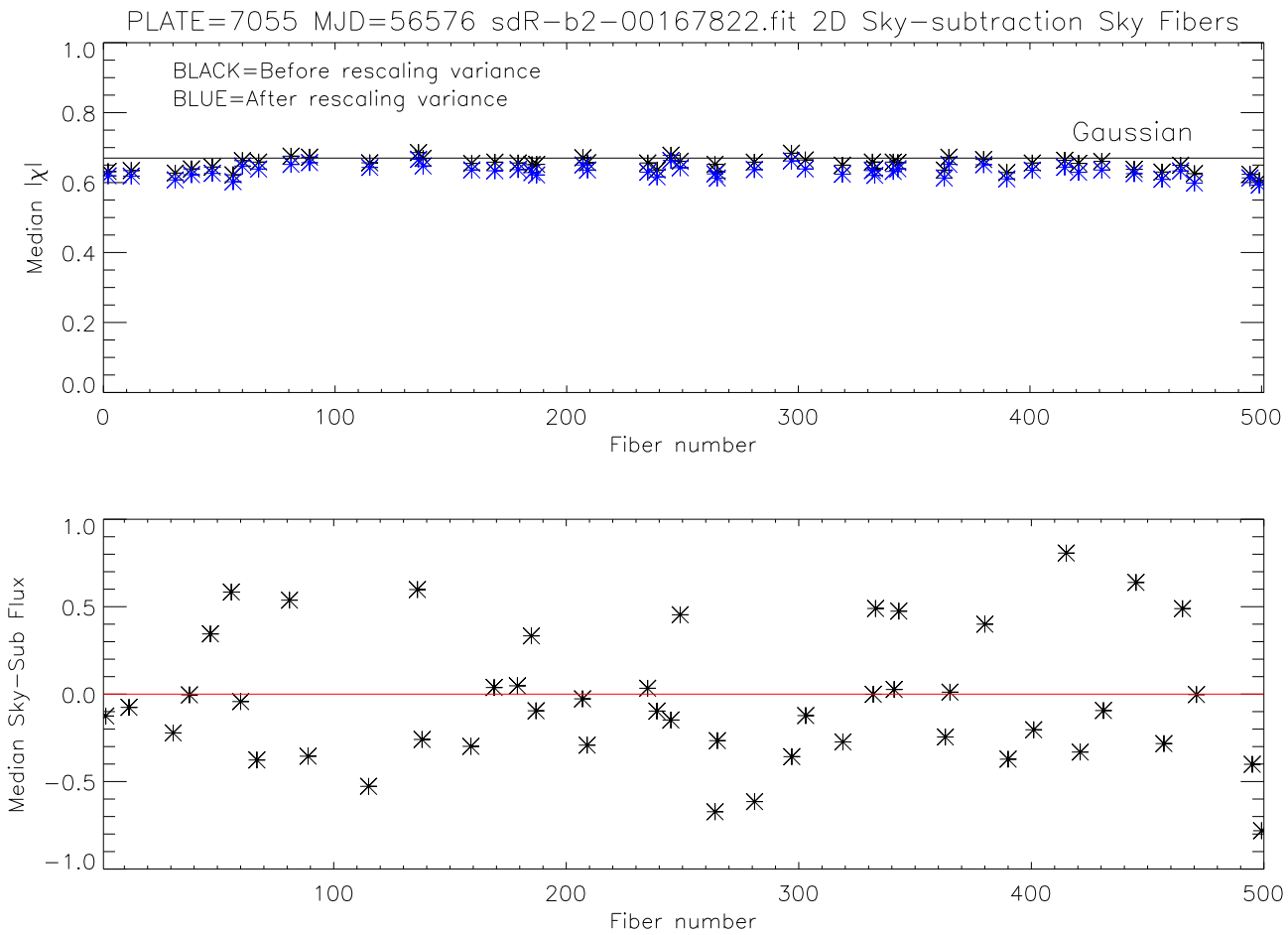

PLATE=7055 MJD=56576 sdR-b2-00167822.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

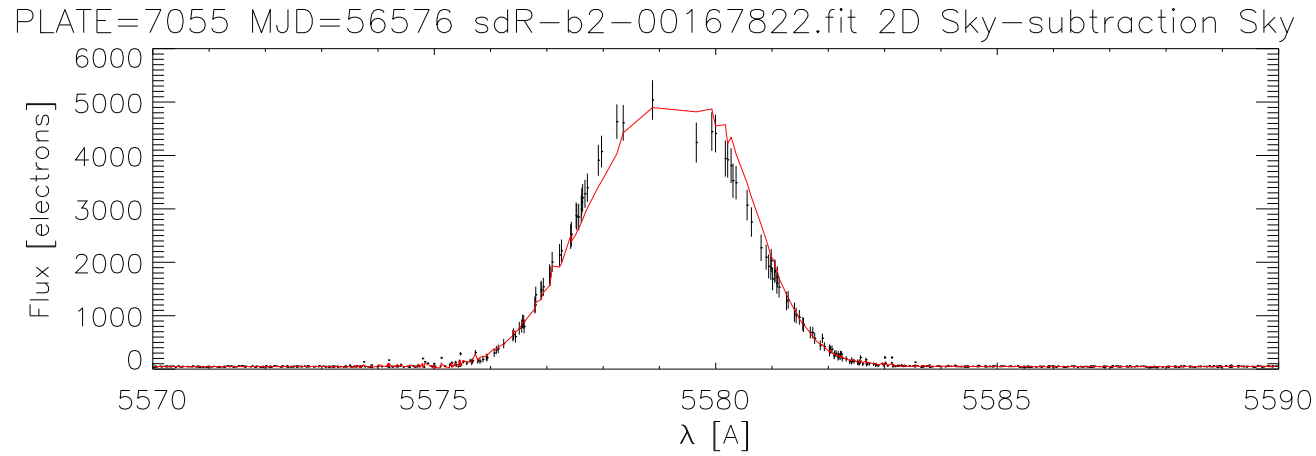

PLATE=7055 MJD=56576 sdR-b2-00167822.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

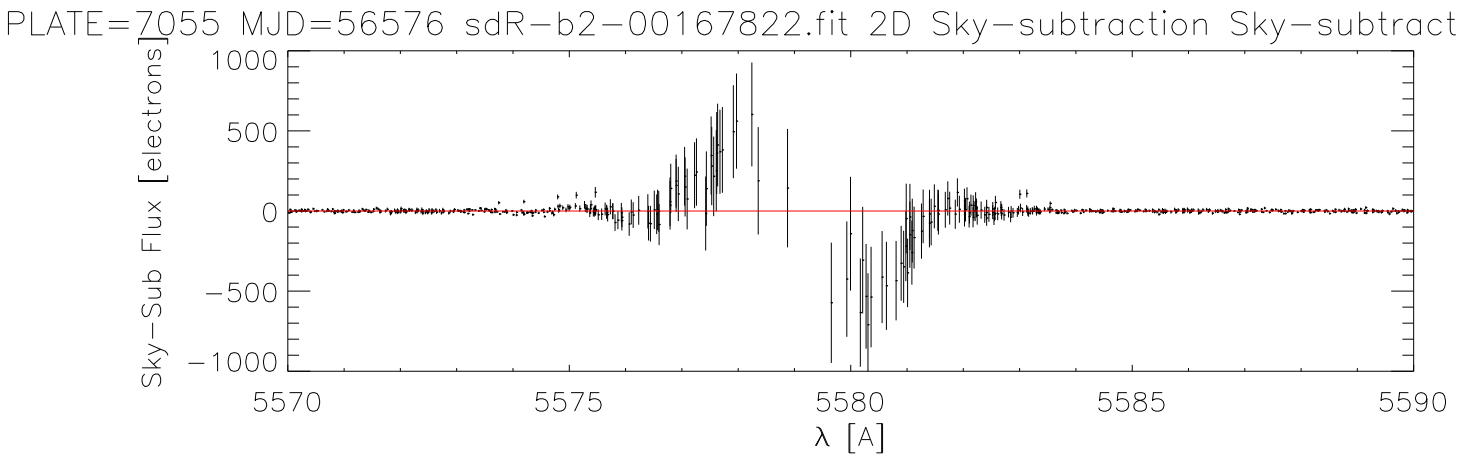

PLATE=7055 MJD=56576 sdR-b2-00167822.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
500
0
-500
-1000
-1500
-2000
-2500
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 48

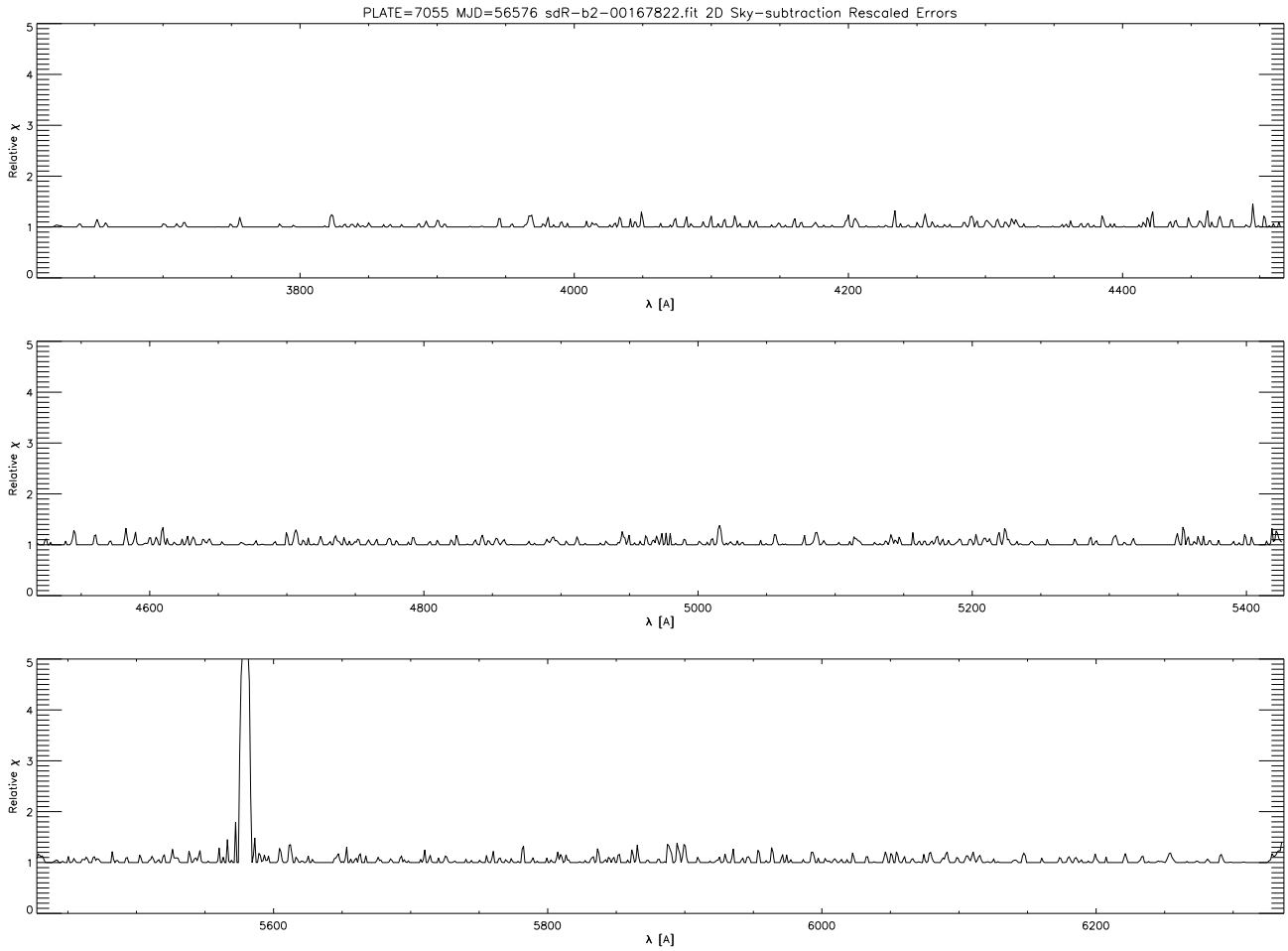


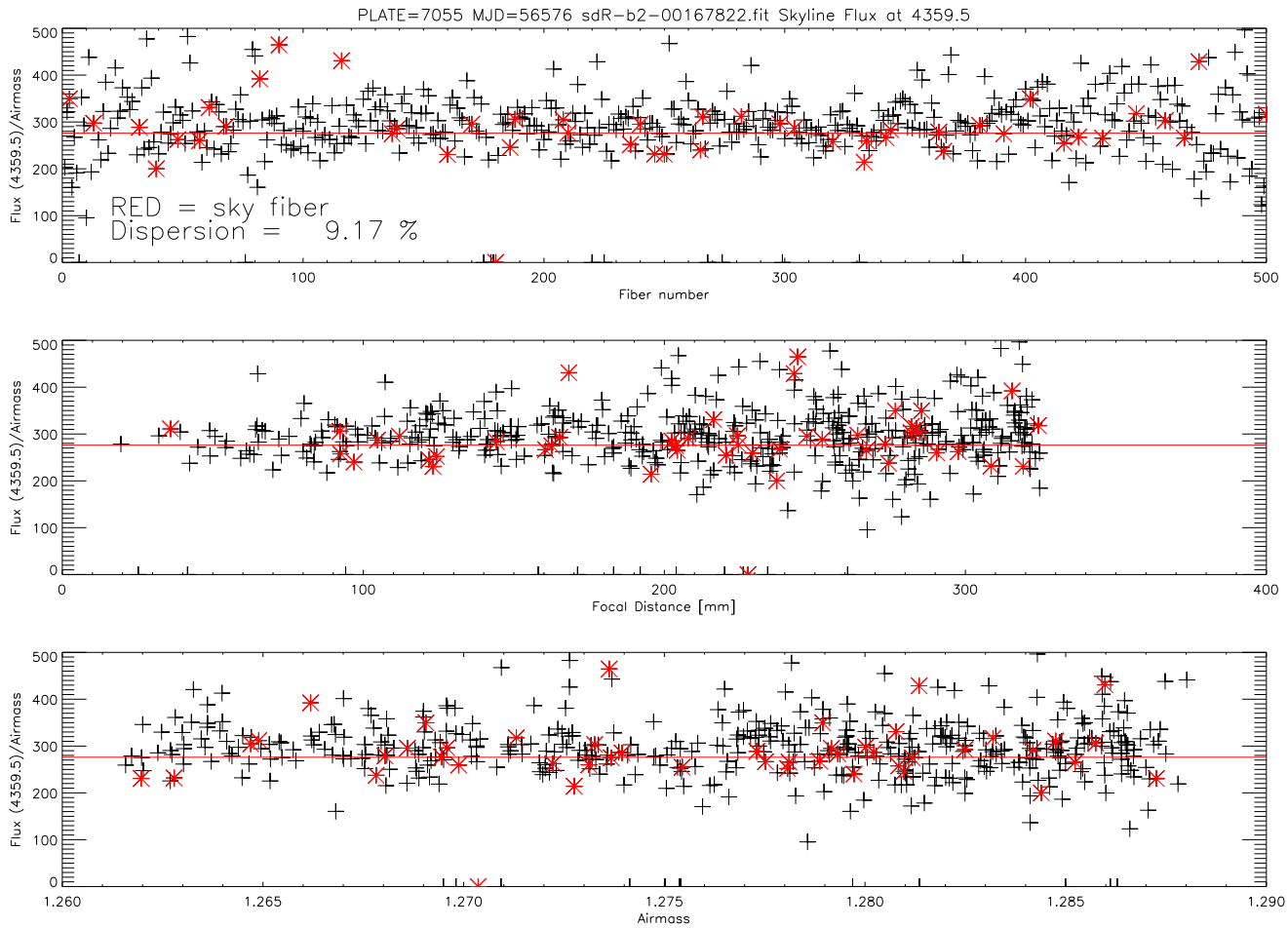

PLATE=7055 MJD=56576 sdR-b2-00167822.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

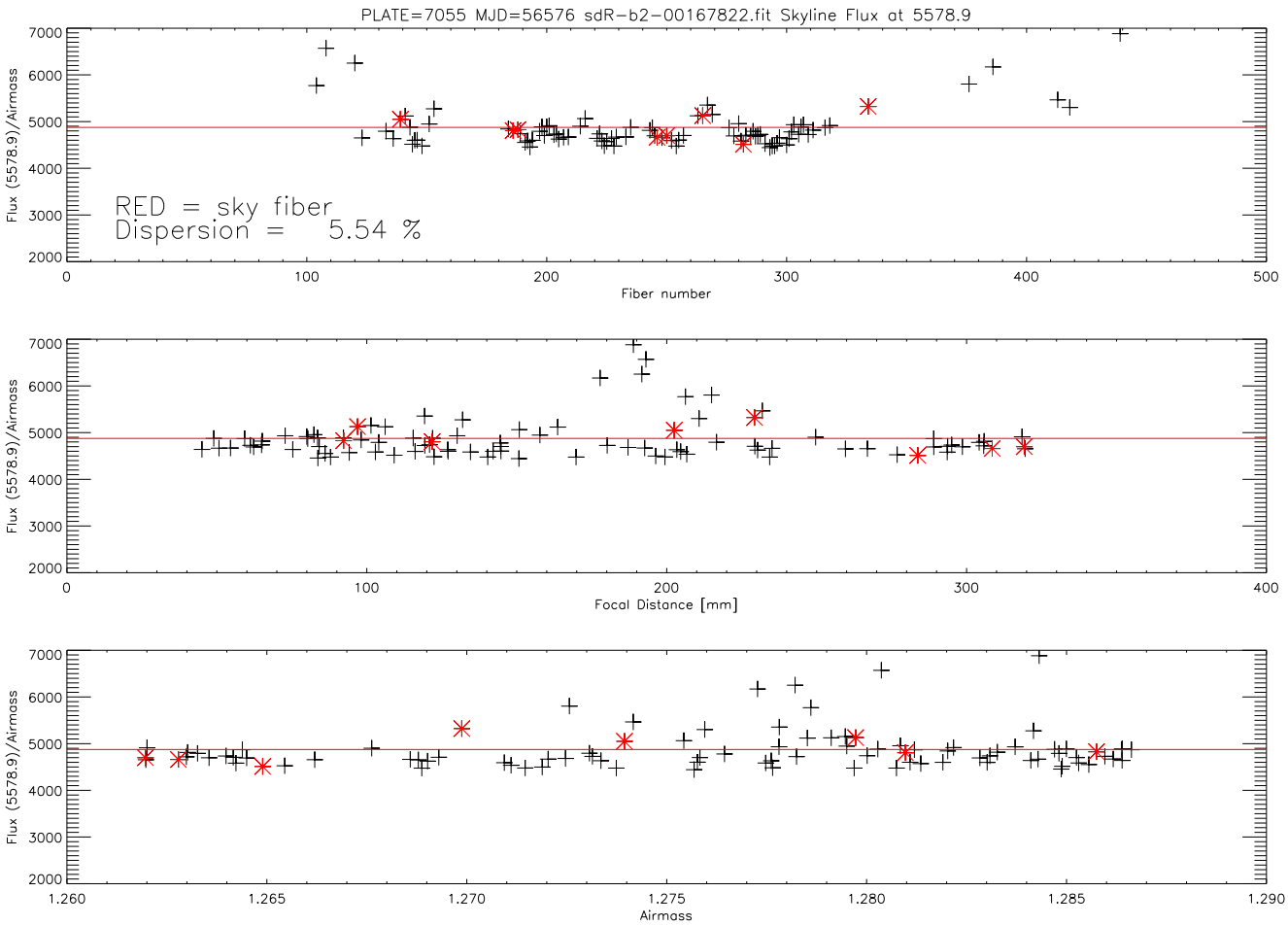

PLATE=7055 MJD=56576 sdR-b2-00167822.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

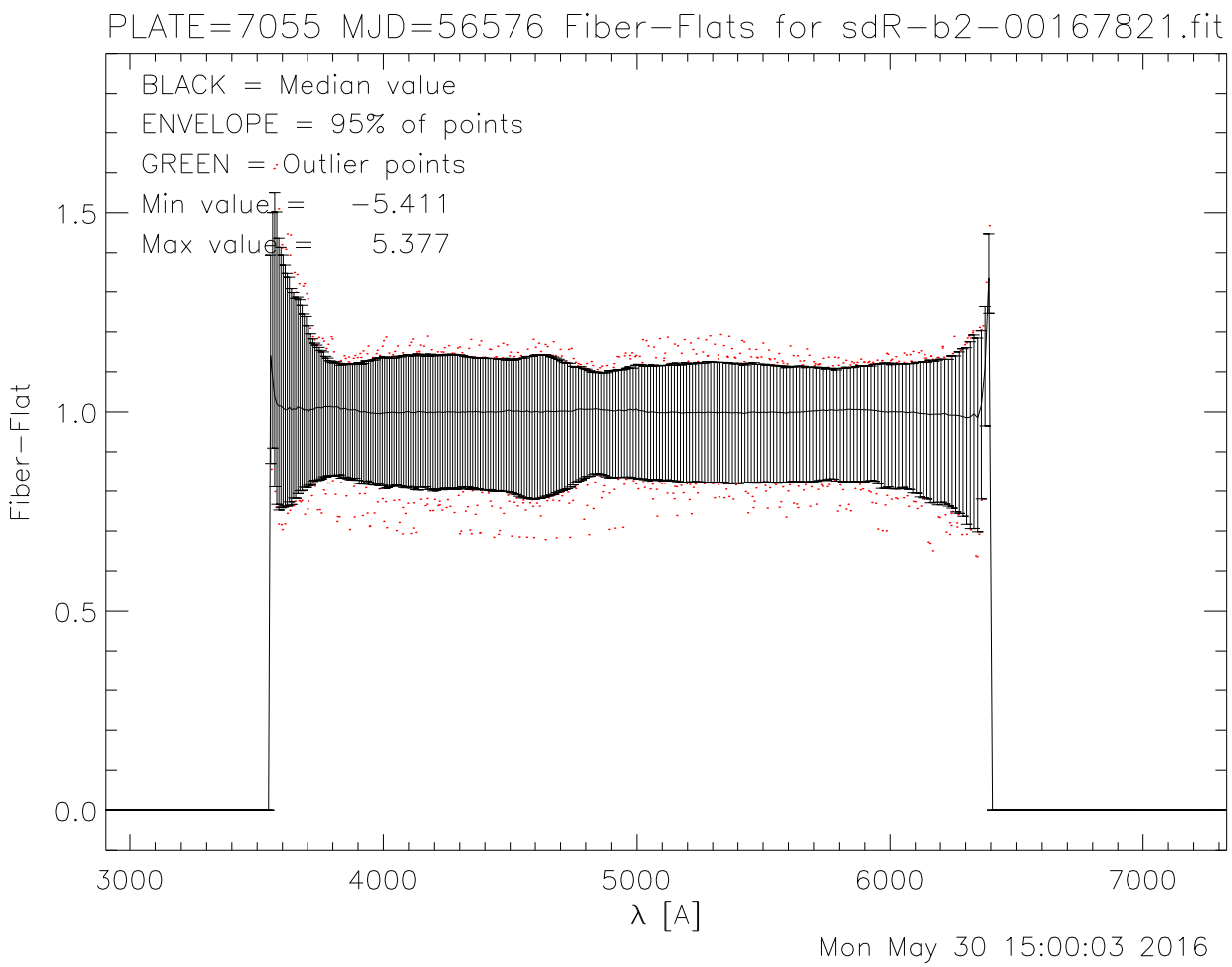

PLATE=7055 MJD=56576 sdR-b2-00167822.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
500
0
-500
-1000
5570
5575
5580
5585
5590
λ [A]

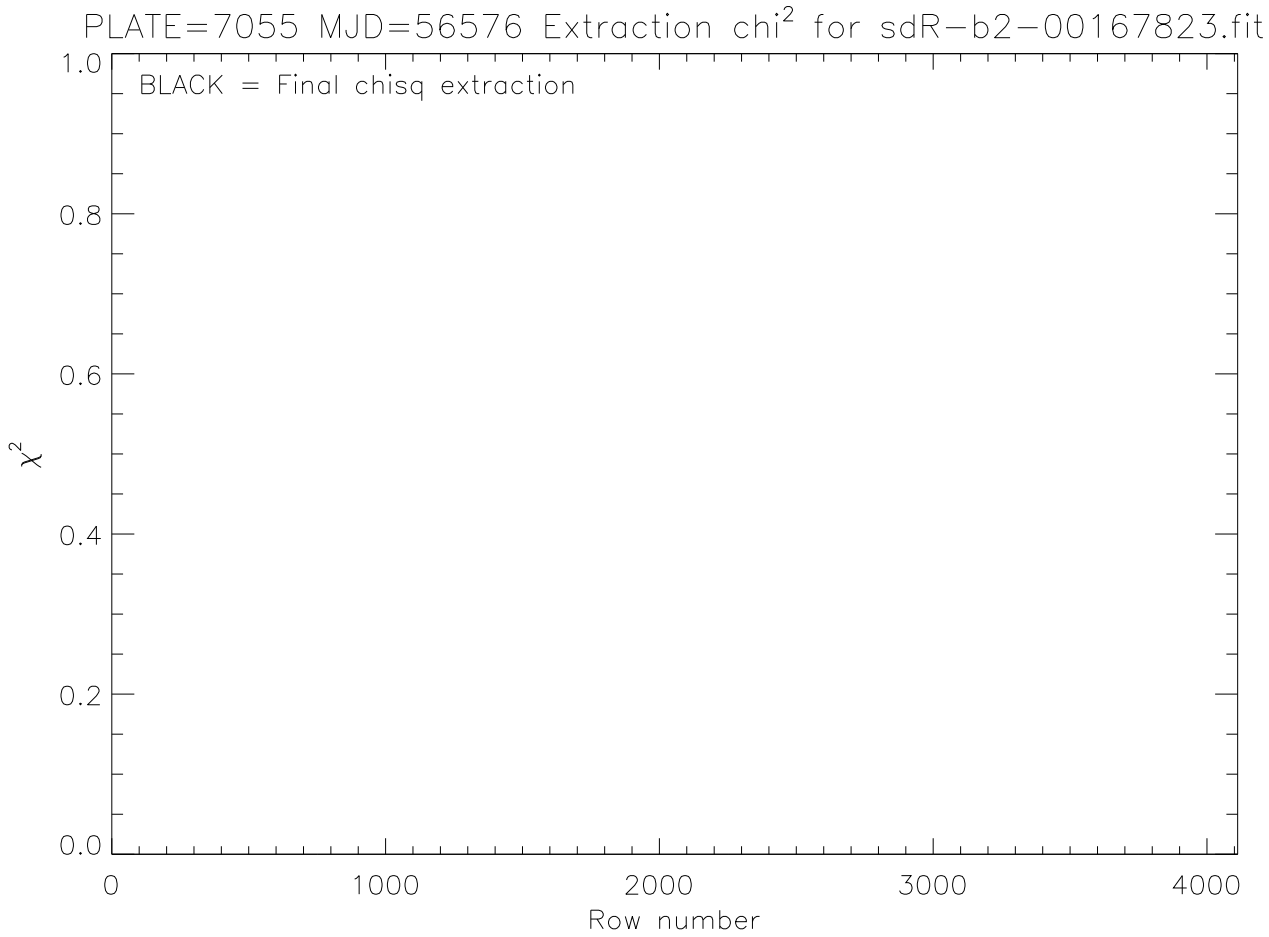
Number of sky fibers = 48

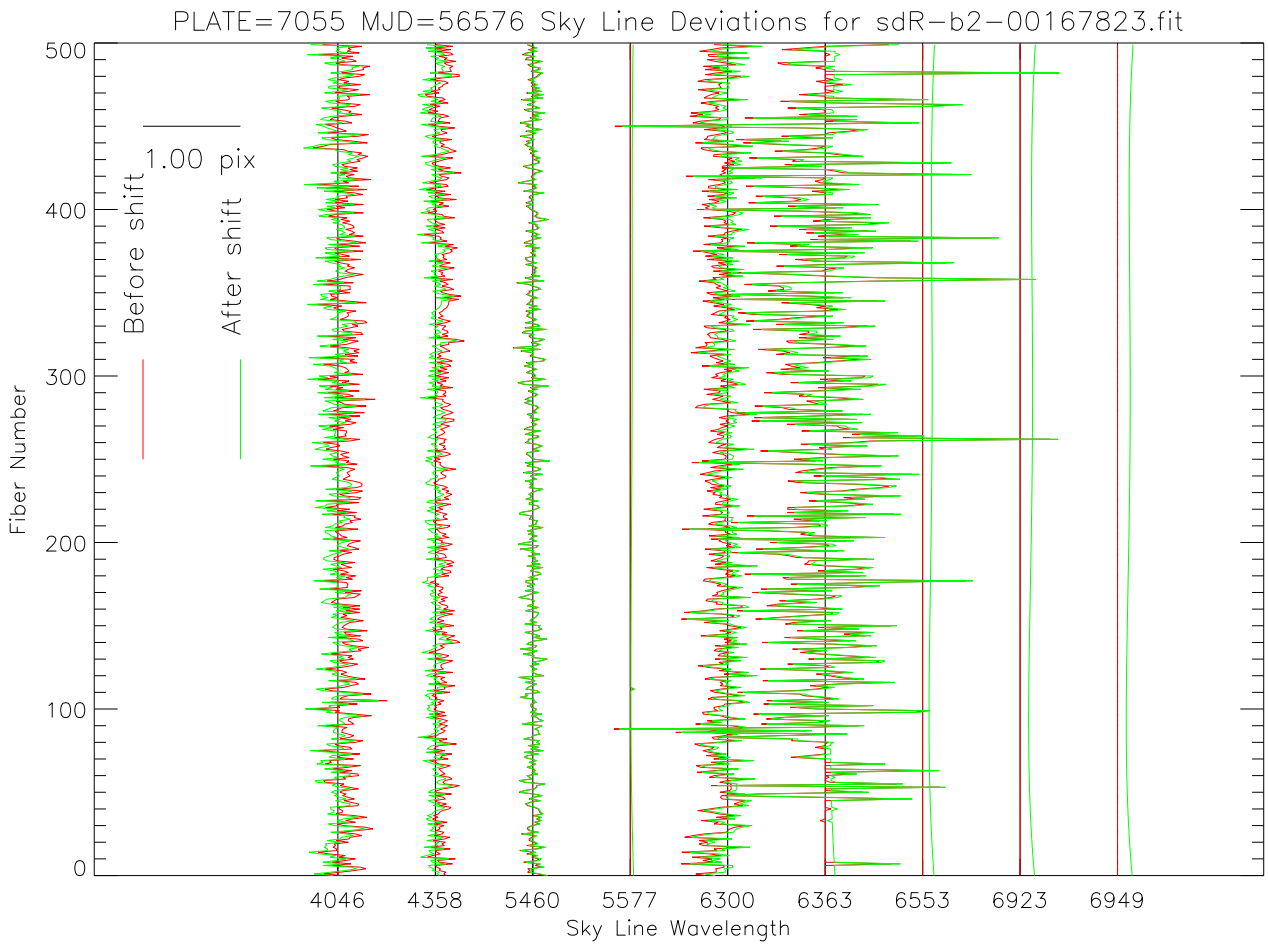


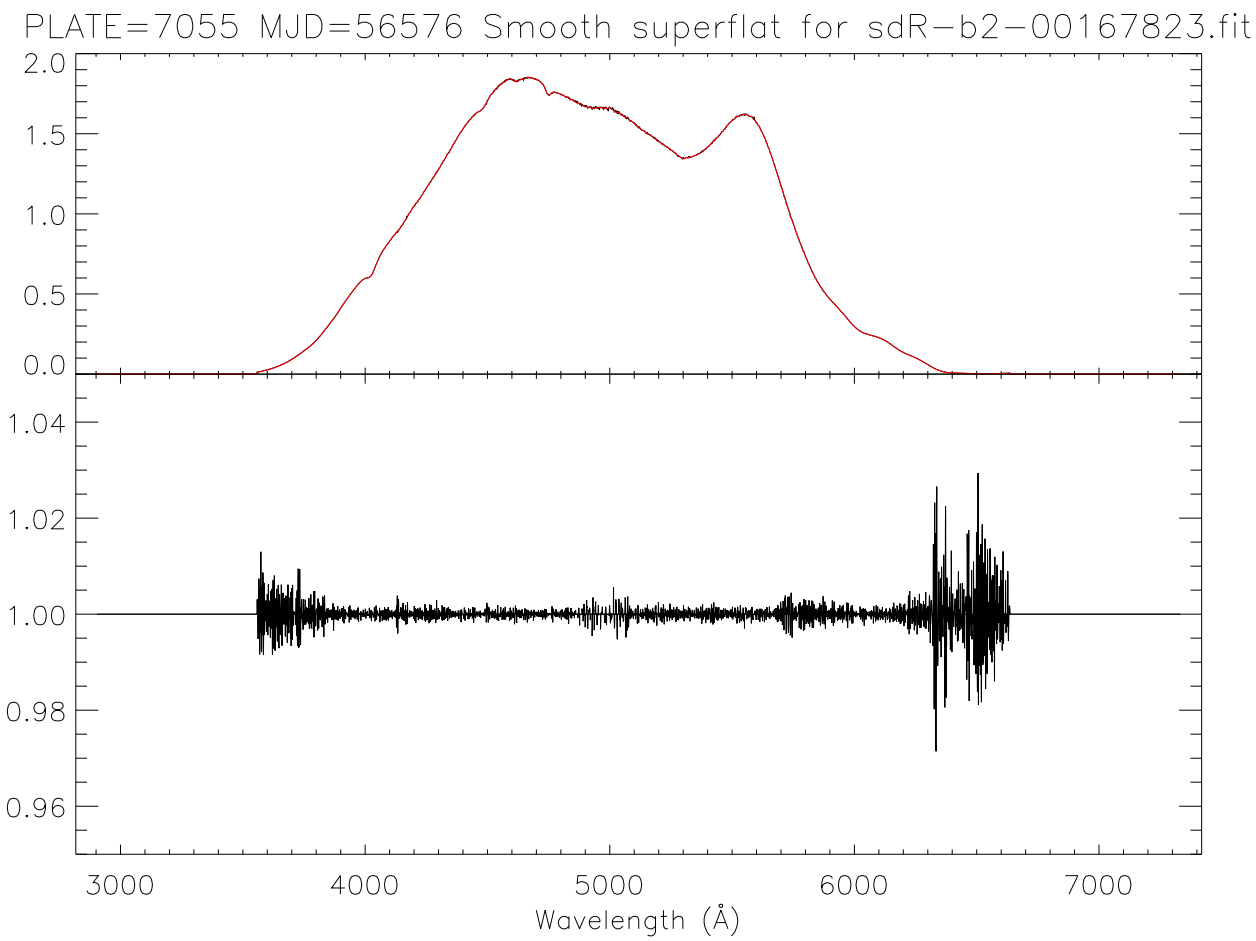

PLATE=7055 MJD=56576 sdR-b2-00167822.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 9.17 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

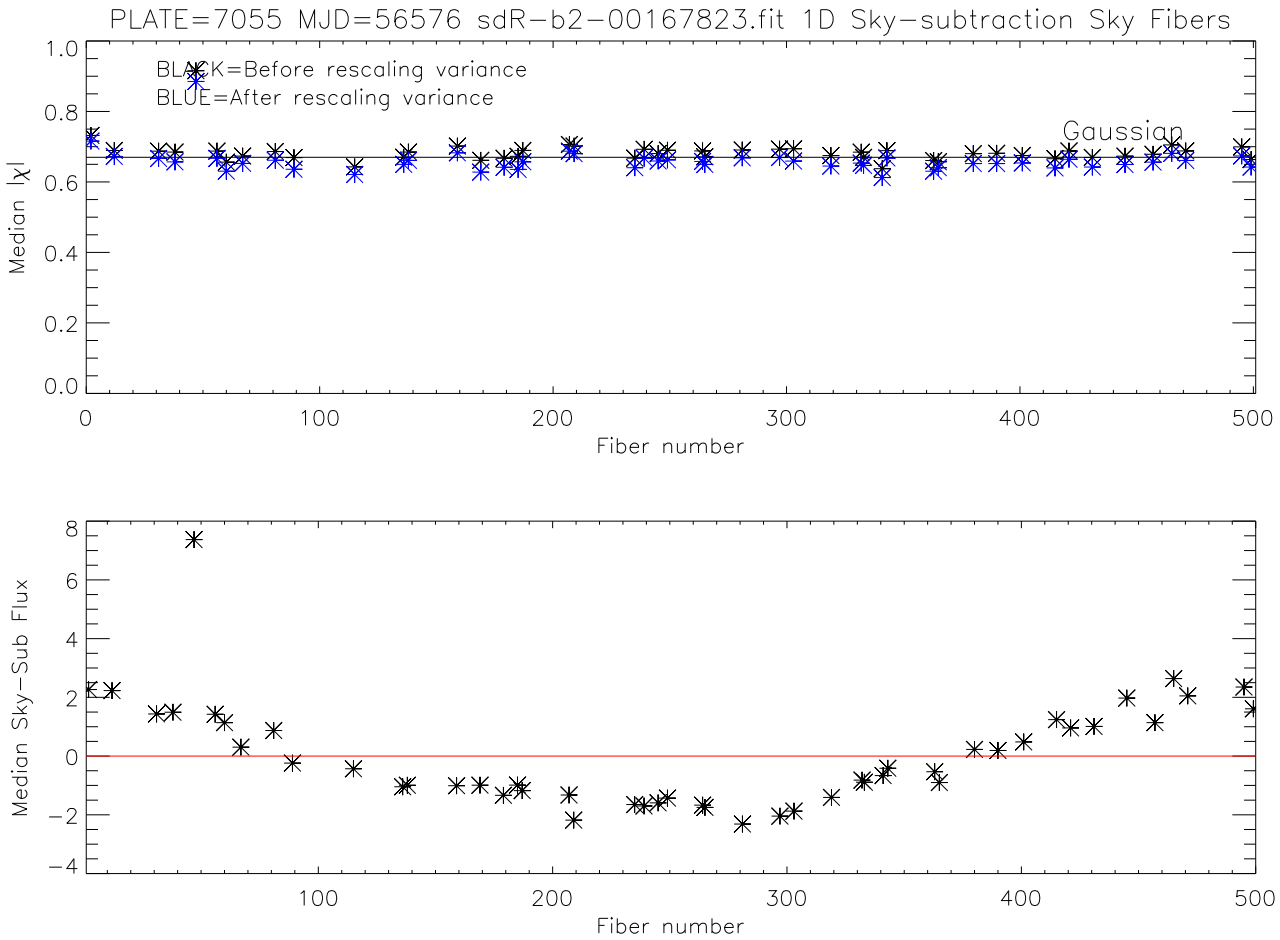

PLATE=7055 MJD=56576 sdR-b2-00167822.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 5.54 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

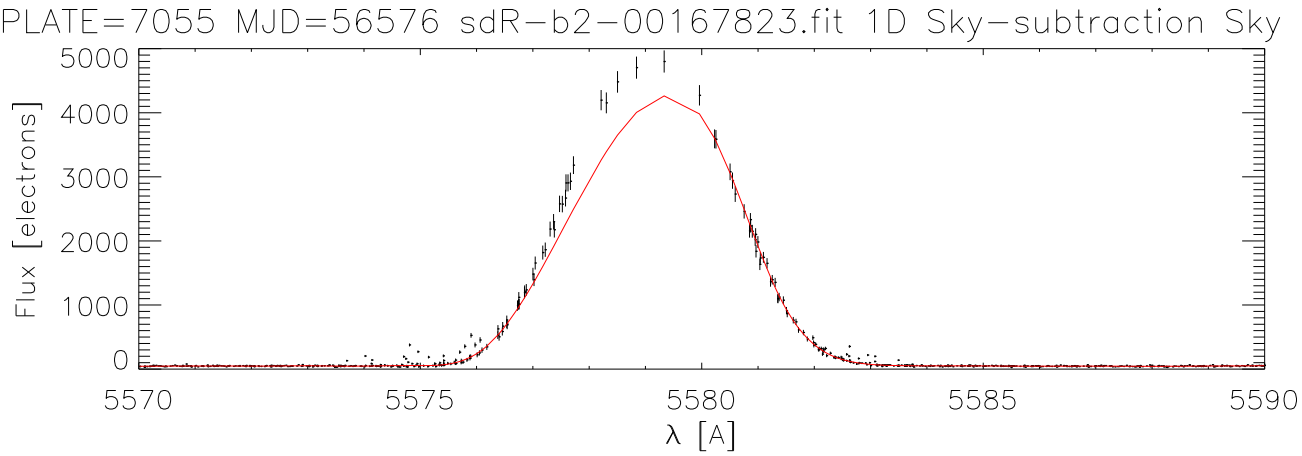

PLATE=7055 MJD=56576 Fiber-Flats for sdR-b2-00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -5.411
Max value = 5.377
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 15:00:03 2016

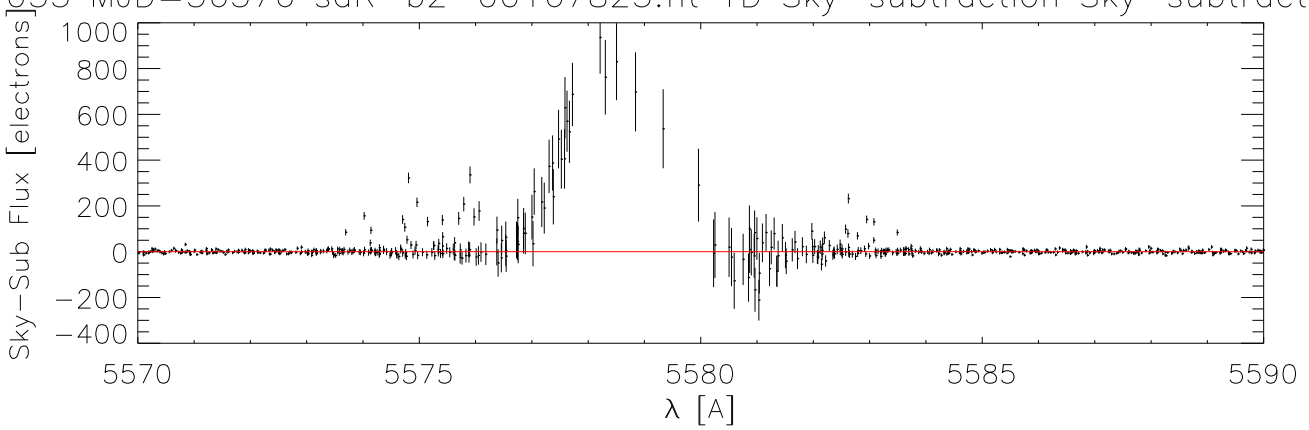

PLATE=7055 MJD=56576 Extraction chi^2 for sdR-b2-00167823.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b2-00167823.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

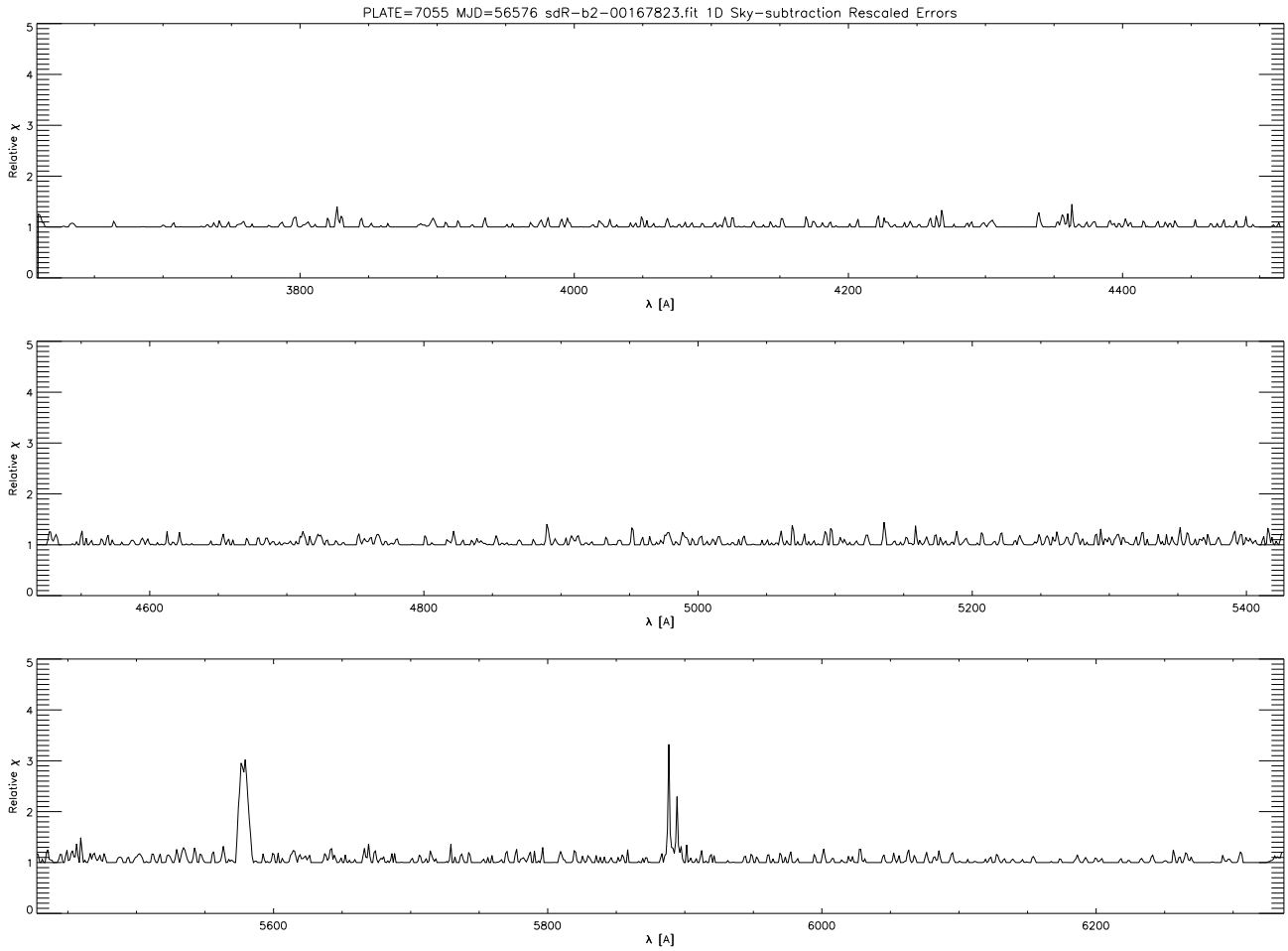

PLATE=7055 MJD=56576 Smooth superflat for sdR-b2-00167823.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

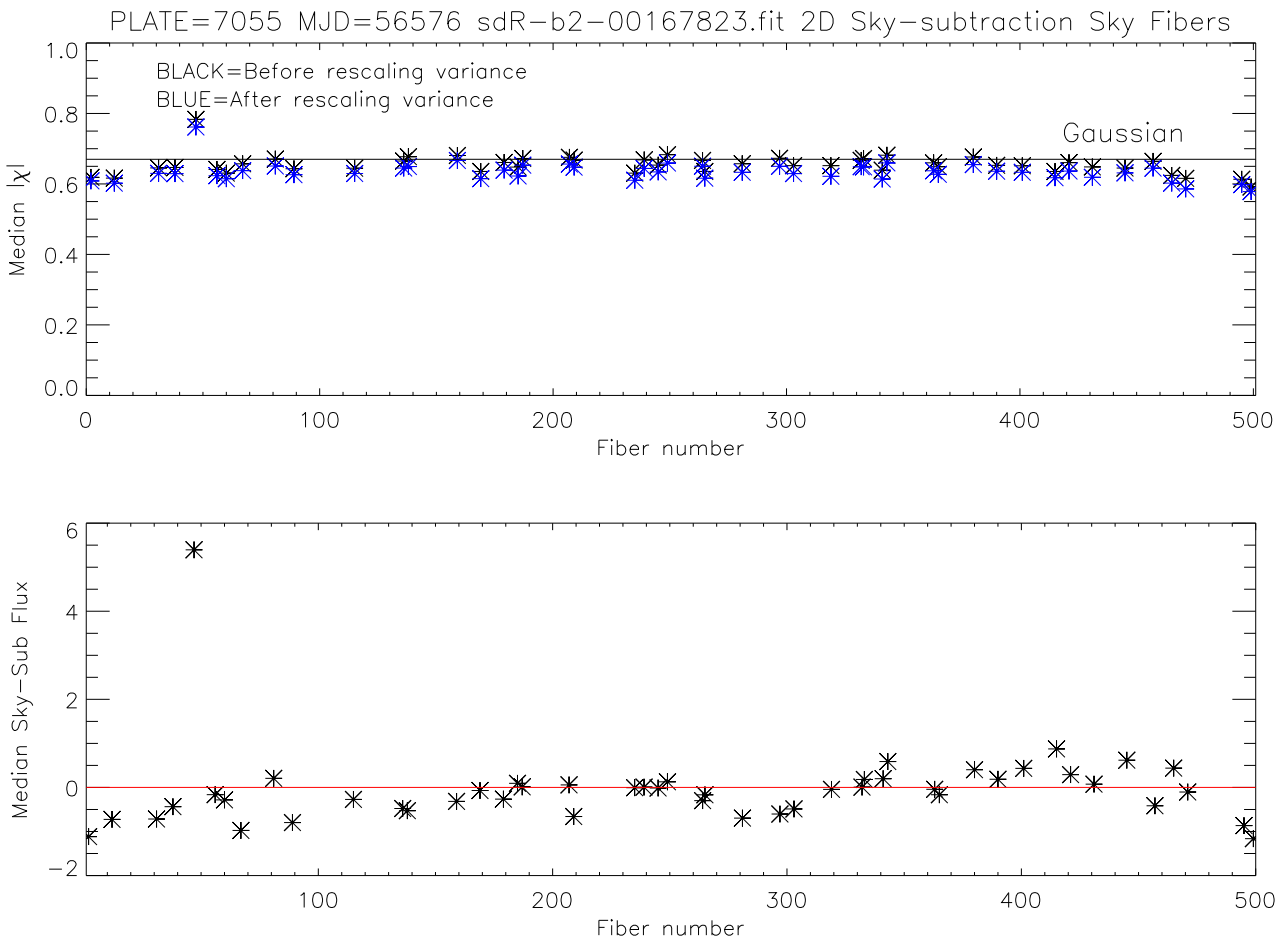

PLATE=7055 MJD=56576 sdR-b2-00167823.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

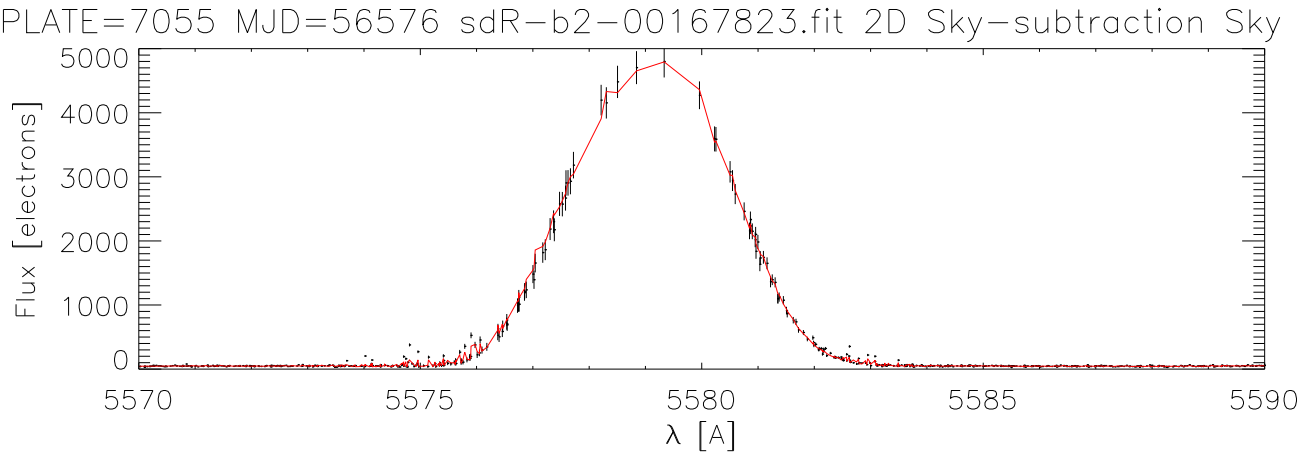

PLATE=7055 MJD=56576 sdR-b2-00167823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

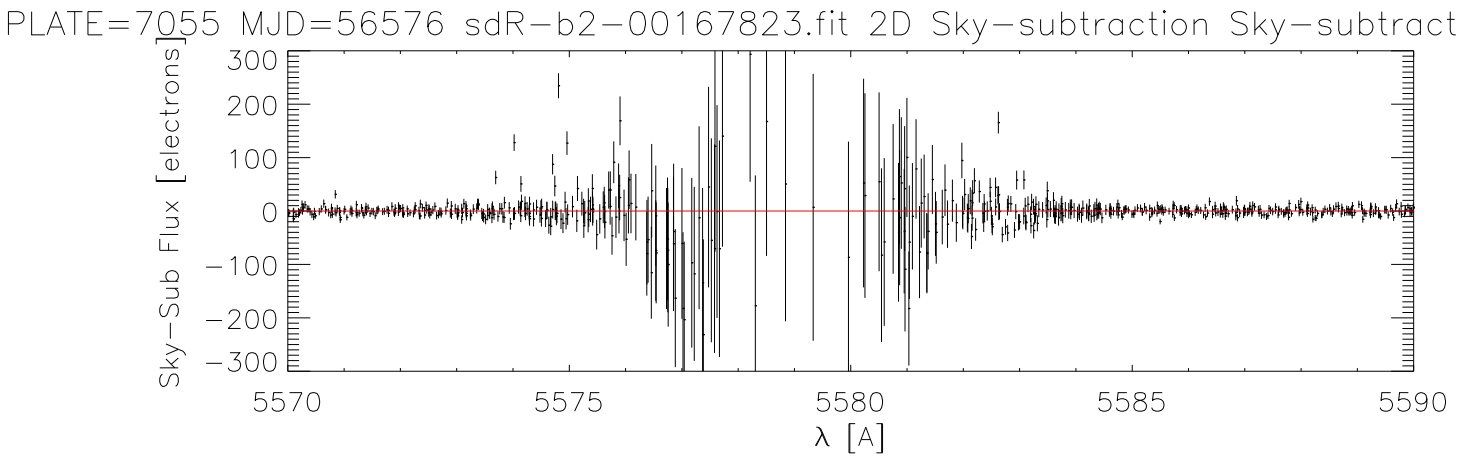

PLATE=7055 MJD=56576 sdR-b2-00167823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 48

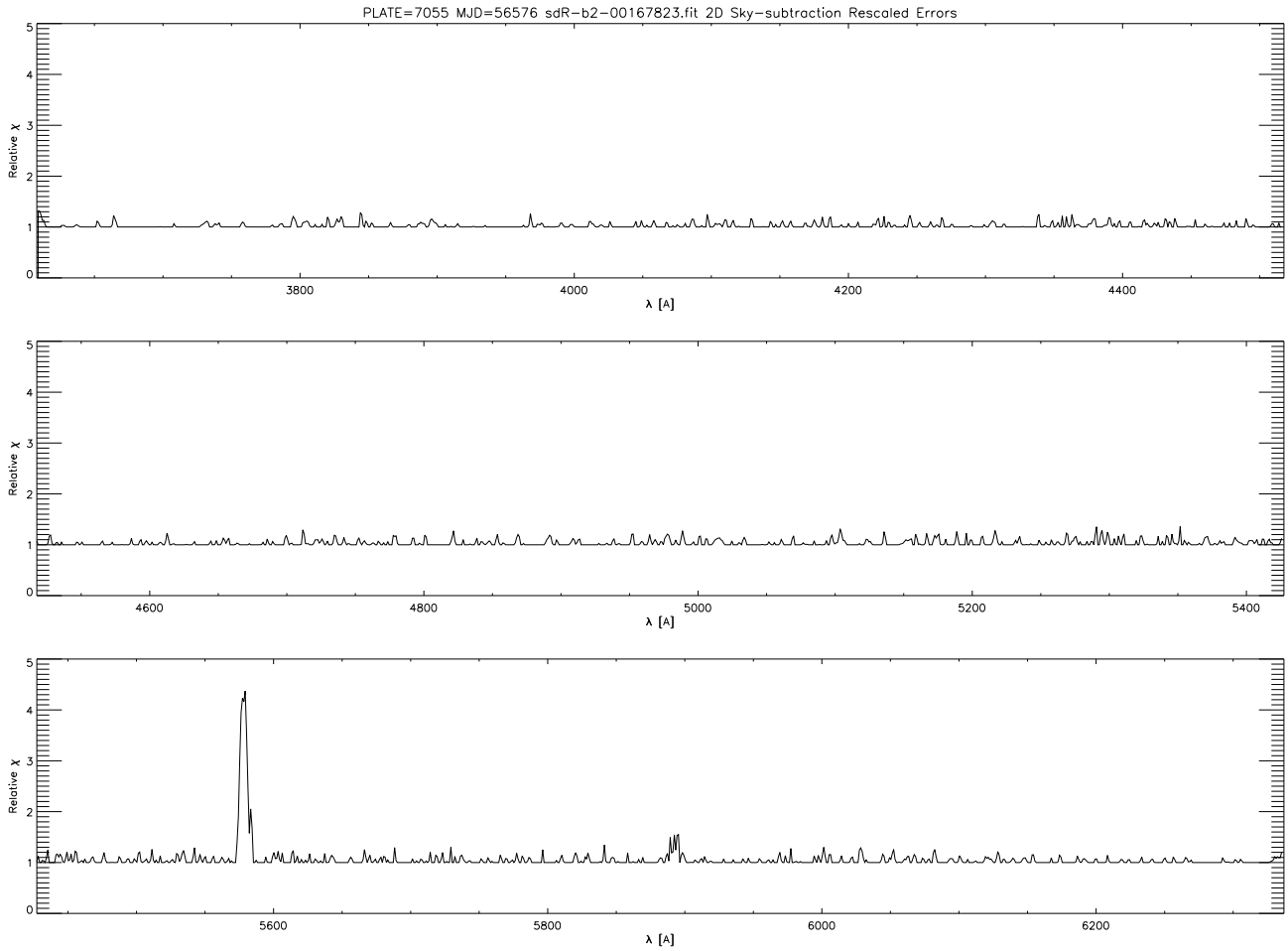


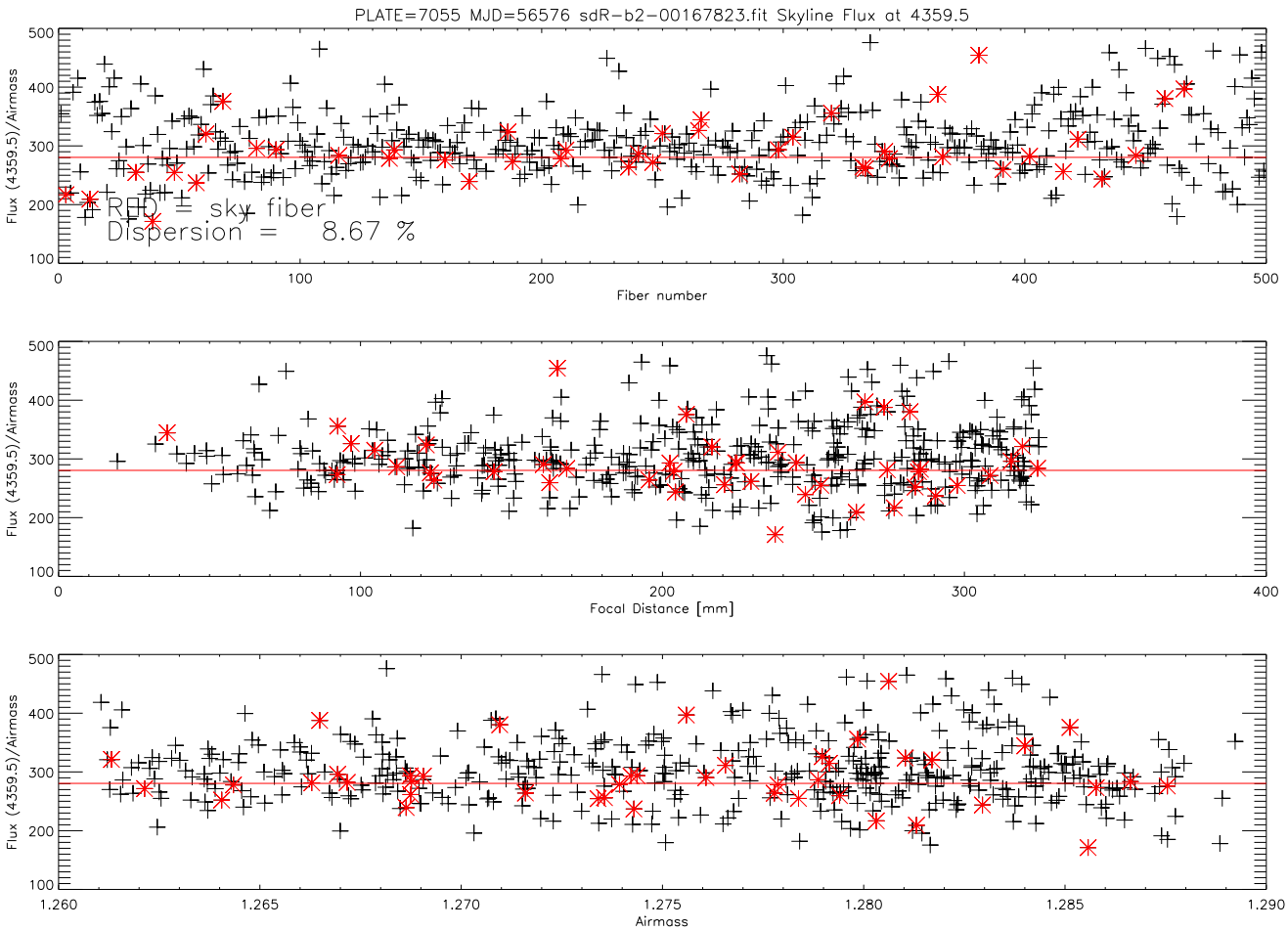

PLATE=7055 MJD=56576 sdR-b2-00167823.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

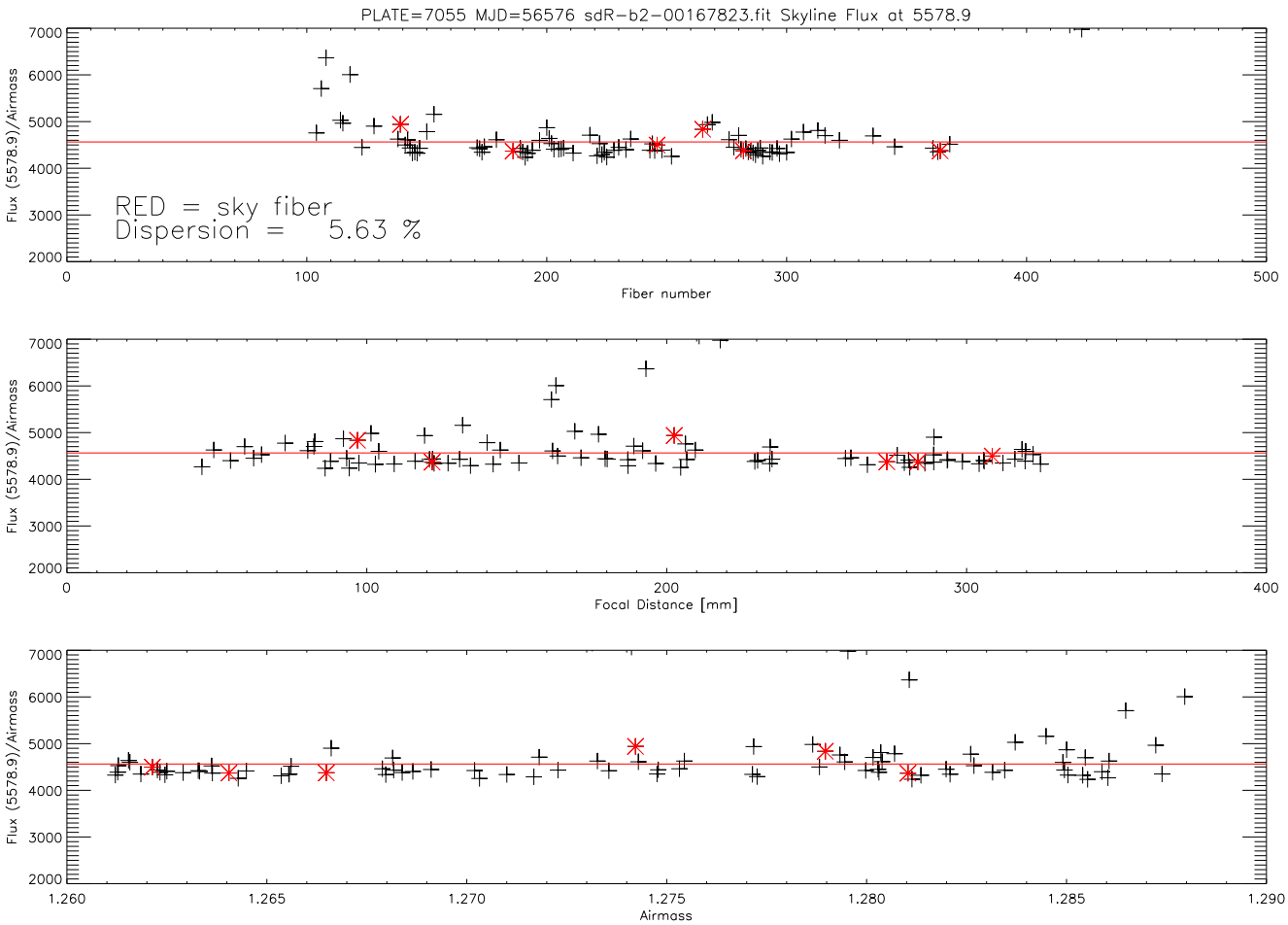

PLATE=7055 MJD=56576 sdR-b2-00167823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

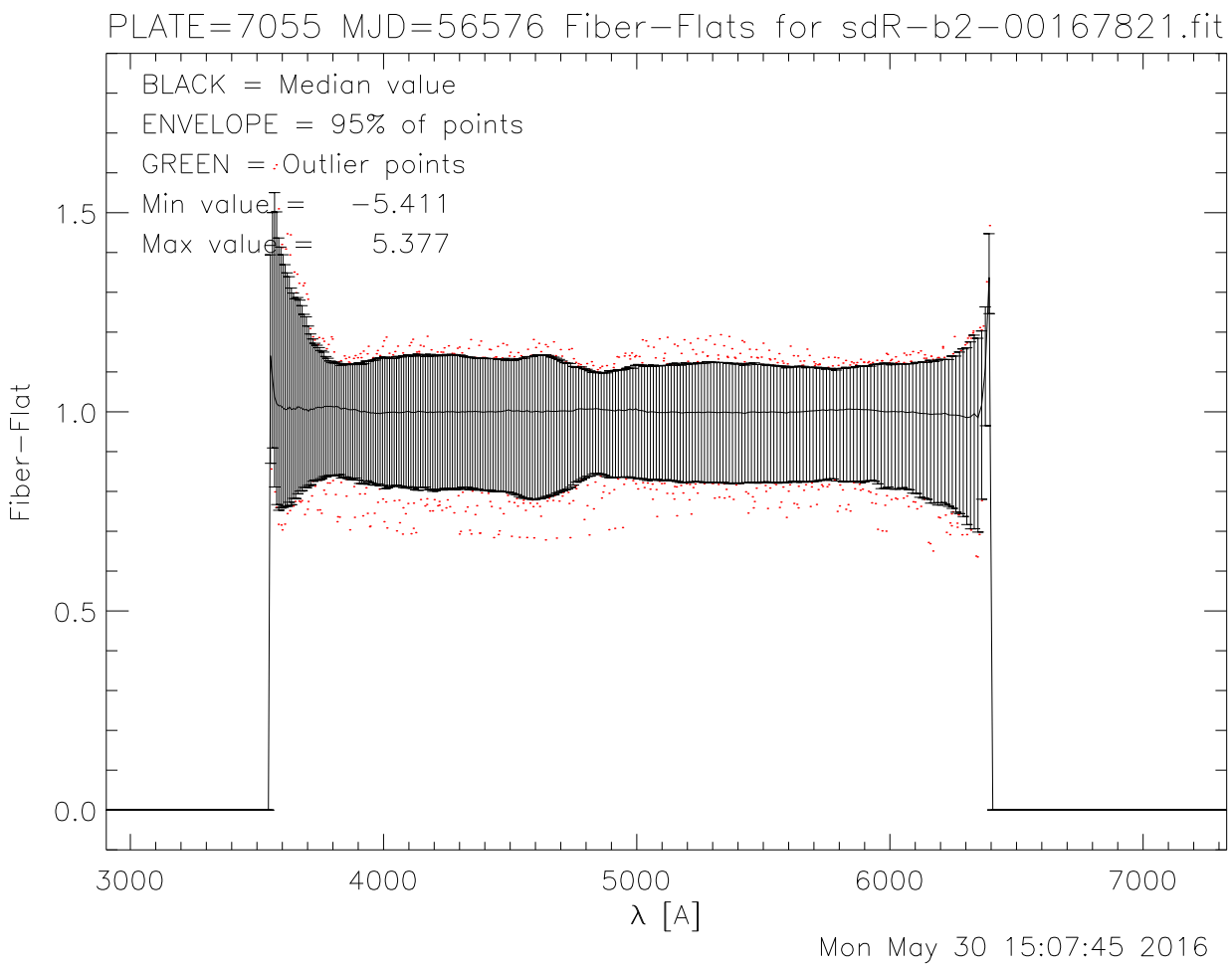

PLATE=7055 MJD=56576 sdR-b2-00167823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
5570
5575
5580
5585
5590
λ [A]

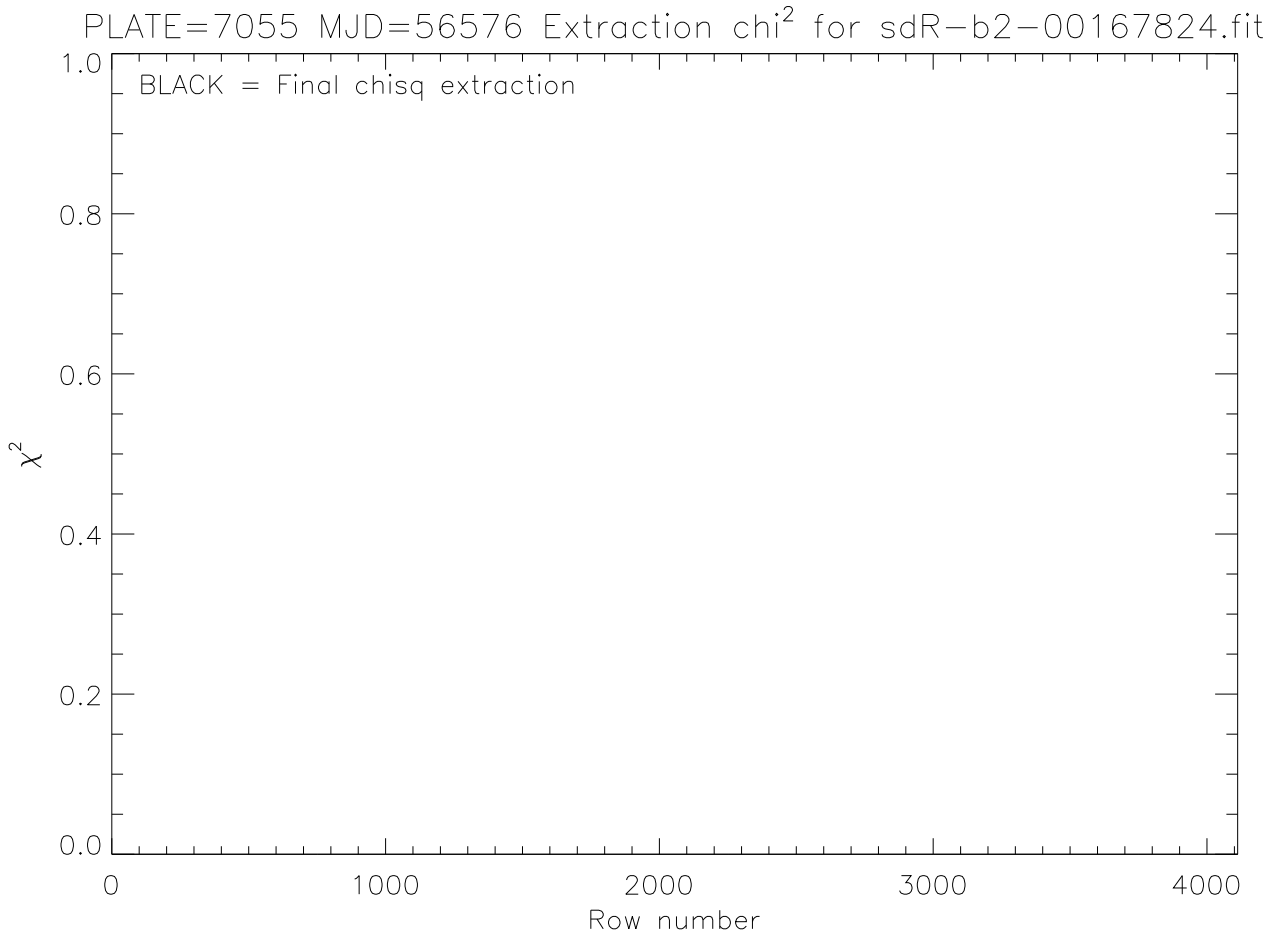
Number of sky fibers = 48

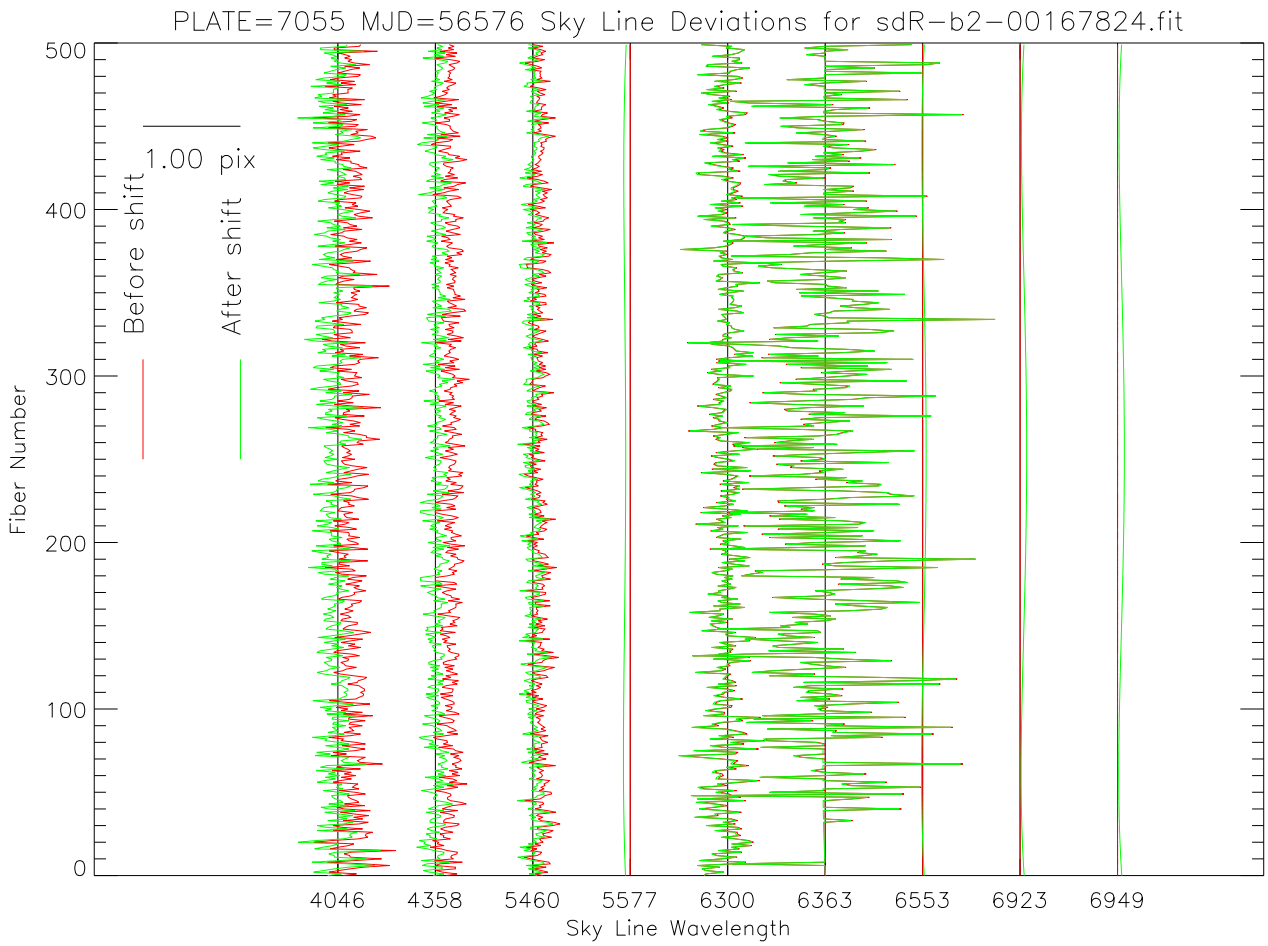


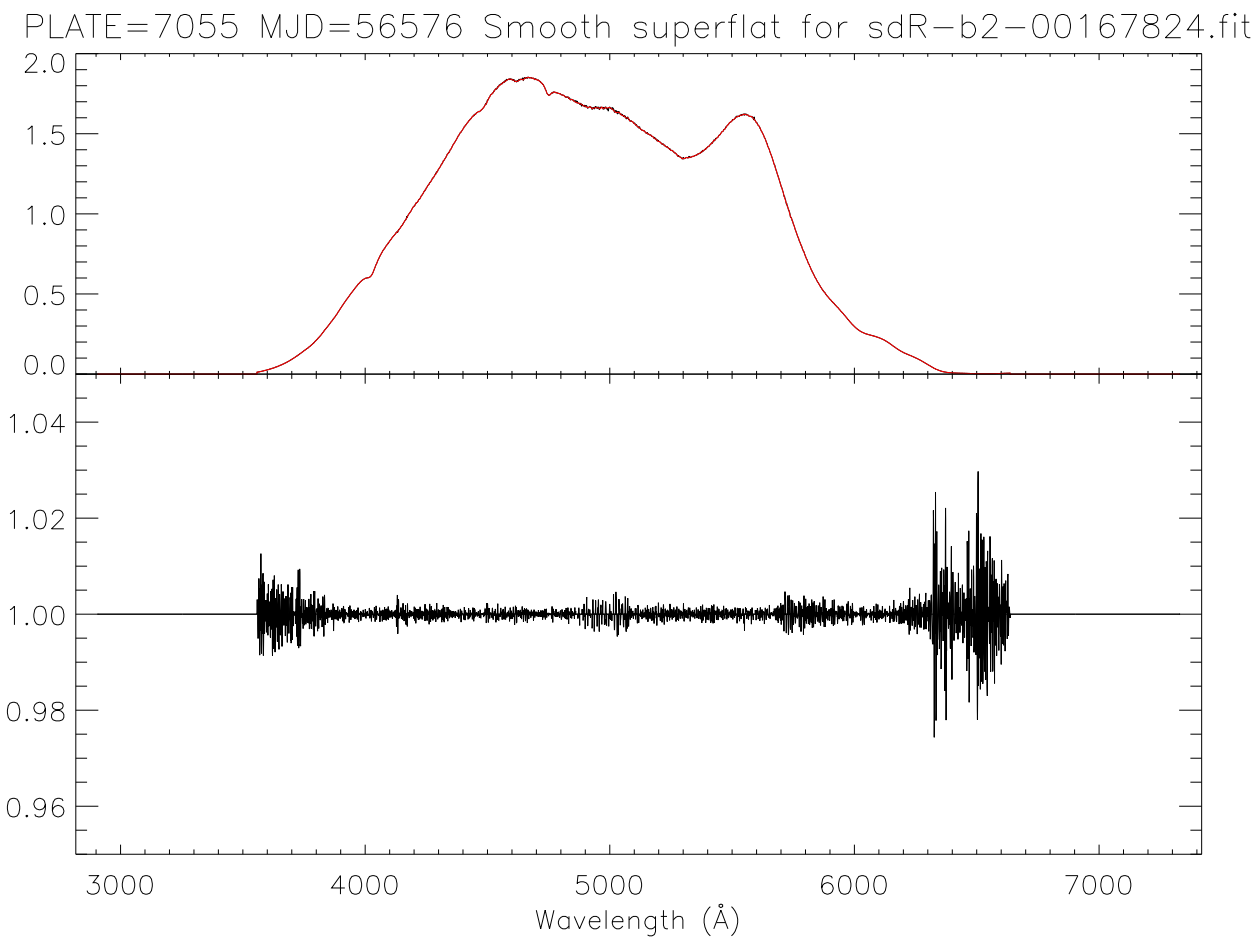

PLATE=7055 MJD=56576 sdR-b2-00167823.fit Skyline Flux at 4359.5
Red = sky fiber
Dispersion = 8.67 %
Flux (4359.5)/Airmass
Fiber number
Focal Distance [mm]
Airmass

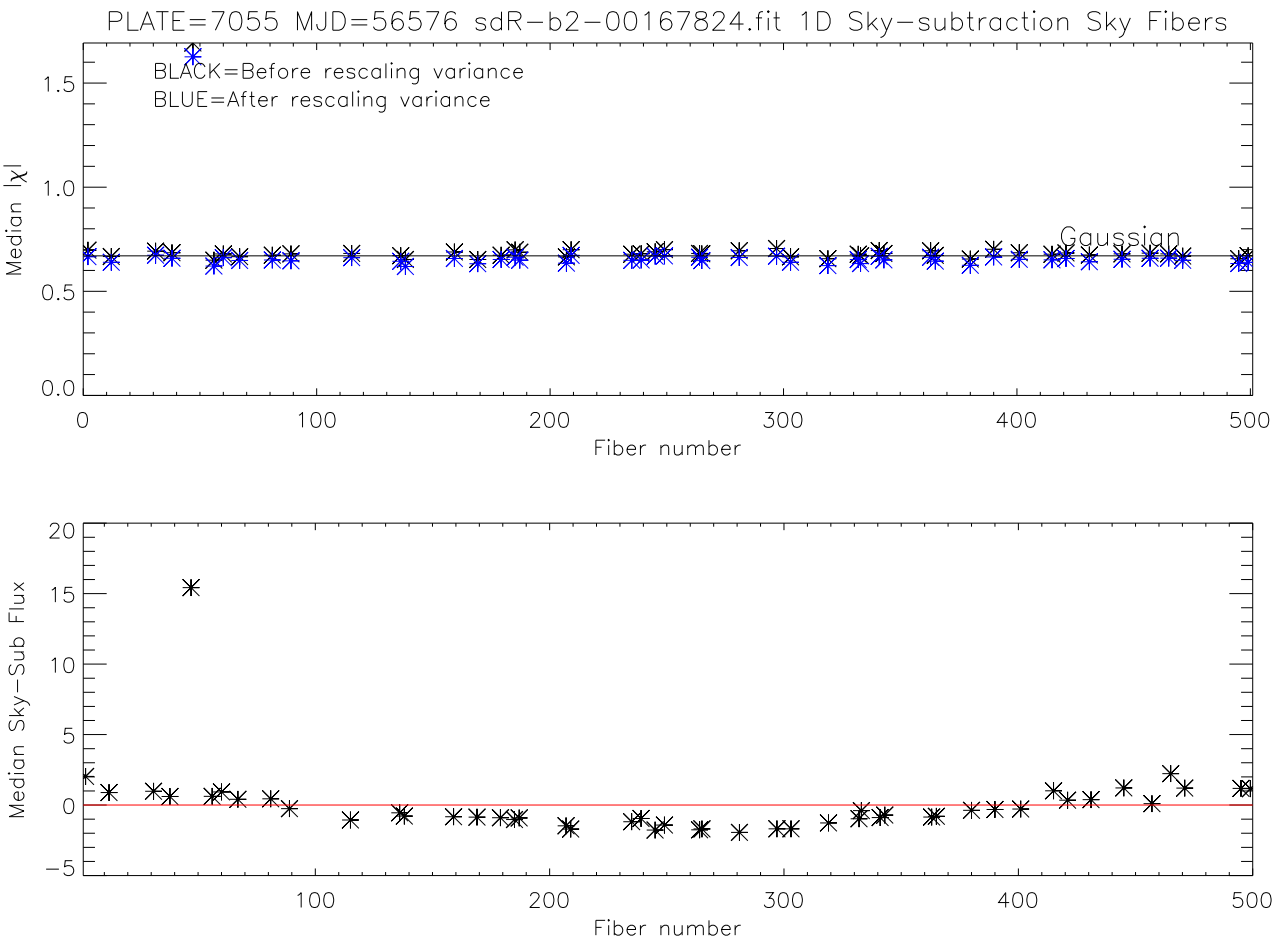

PLATE=7055 MJD=56576 sdR-b2-00167823.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 5.63 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

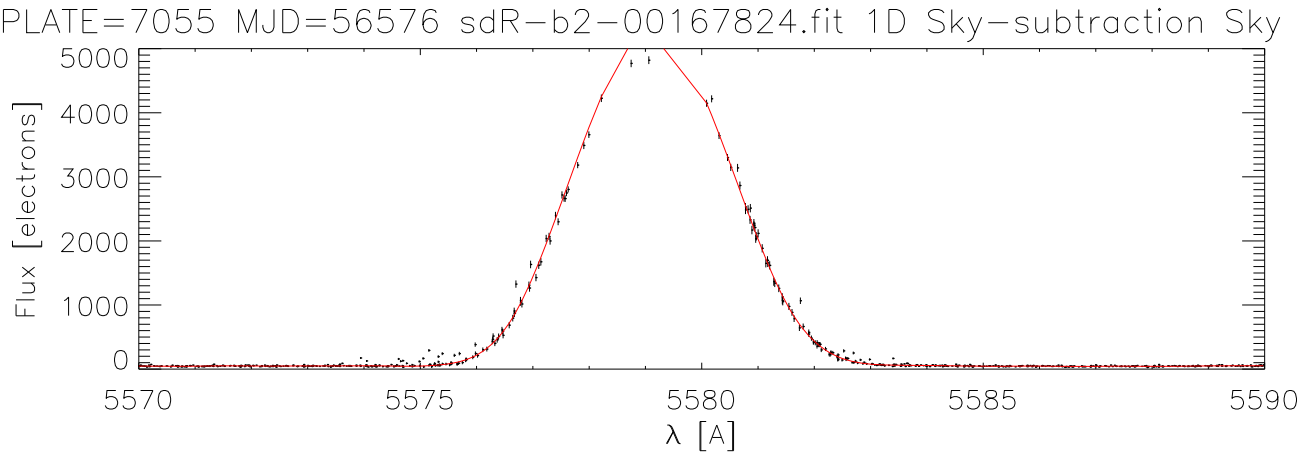

PLATE=7055 MJD=56576 Fiber-Flats for sdR-b2-00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -5.411
Max value = 5.377
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 15:07:45 2016

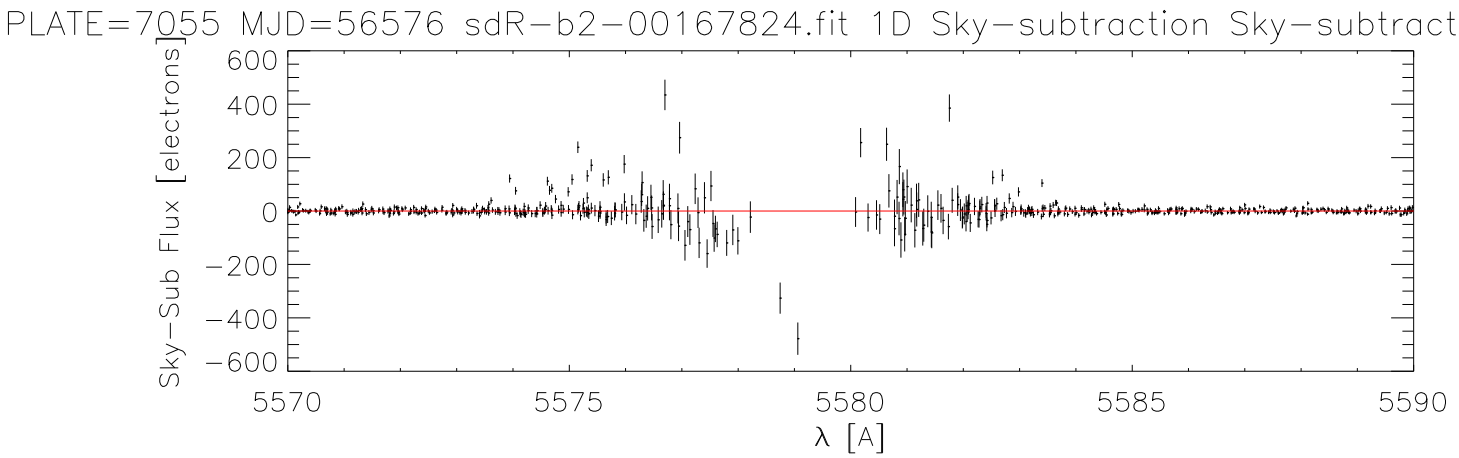

PLATE=7055 MJD=56576 Extraction chi^2 for sdR-b2-00167824.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b2-00167824.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

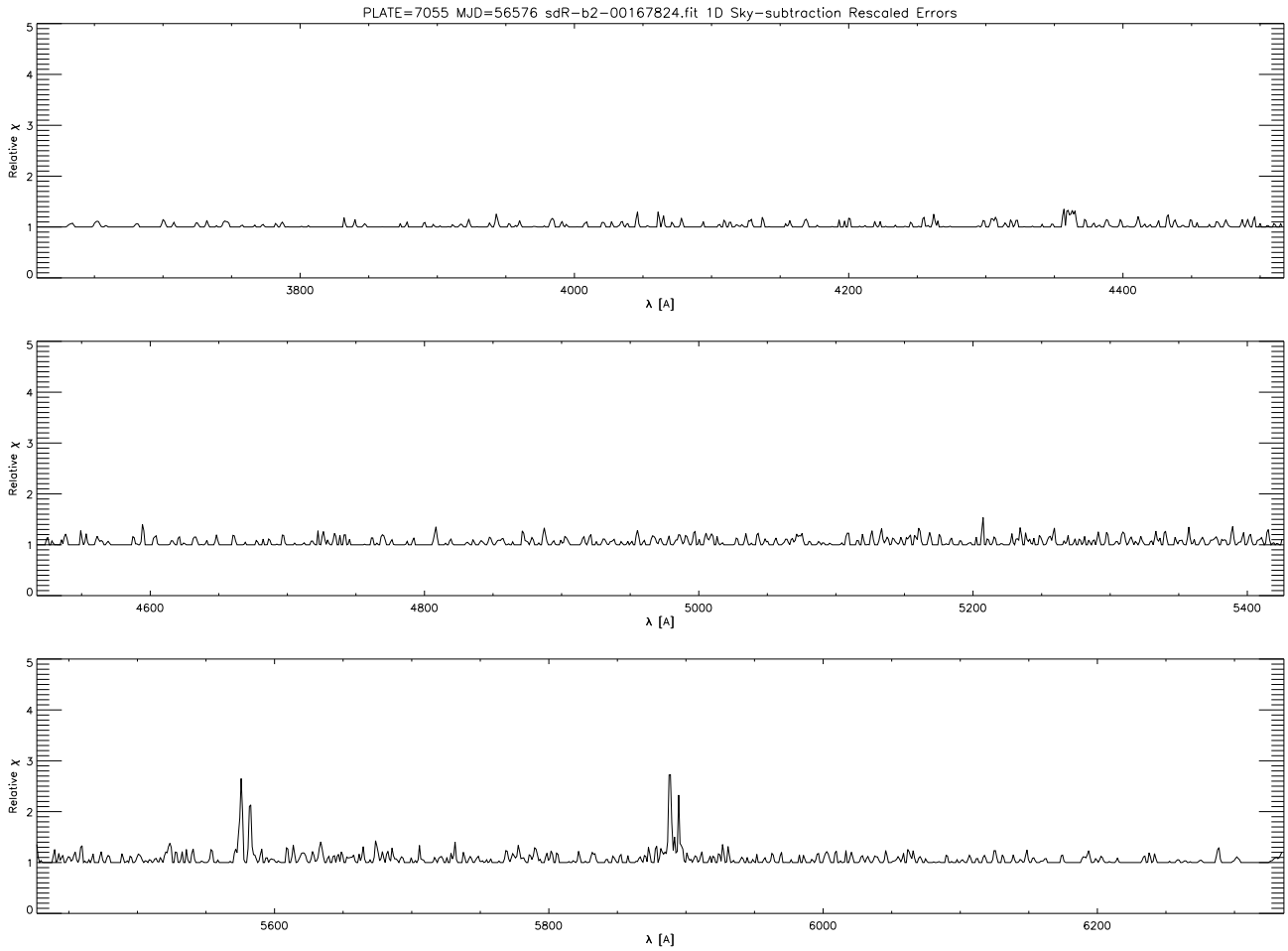

PLATE=7055 MJD=56576 Smooth superflat for sdR-b2-00167824.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

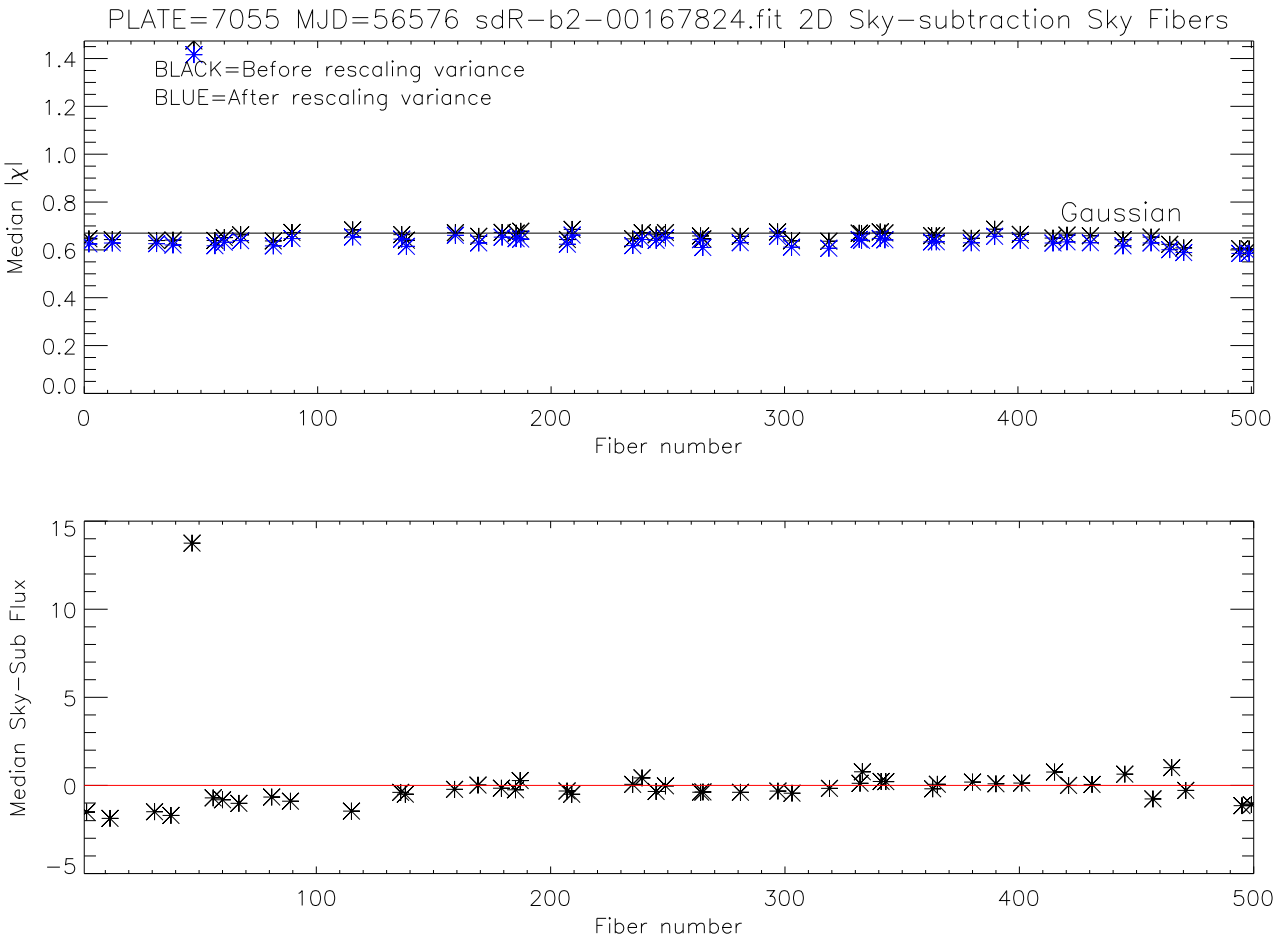

PLATE=7055 MJD=56576 sdR-b2-00167824.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Gaussian
Fiber number
Median Sky-Sub Flux
Fiber number

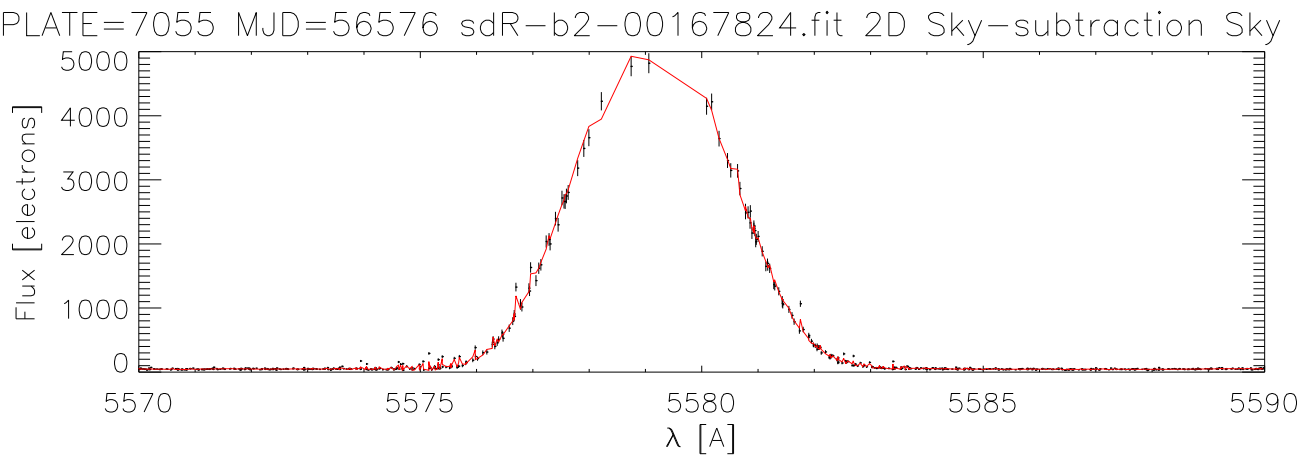

PLATE=7055 MJD=56576 sdR-b2-00167824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

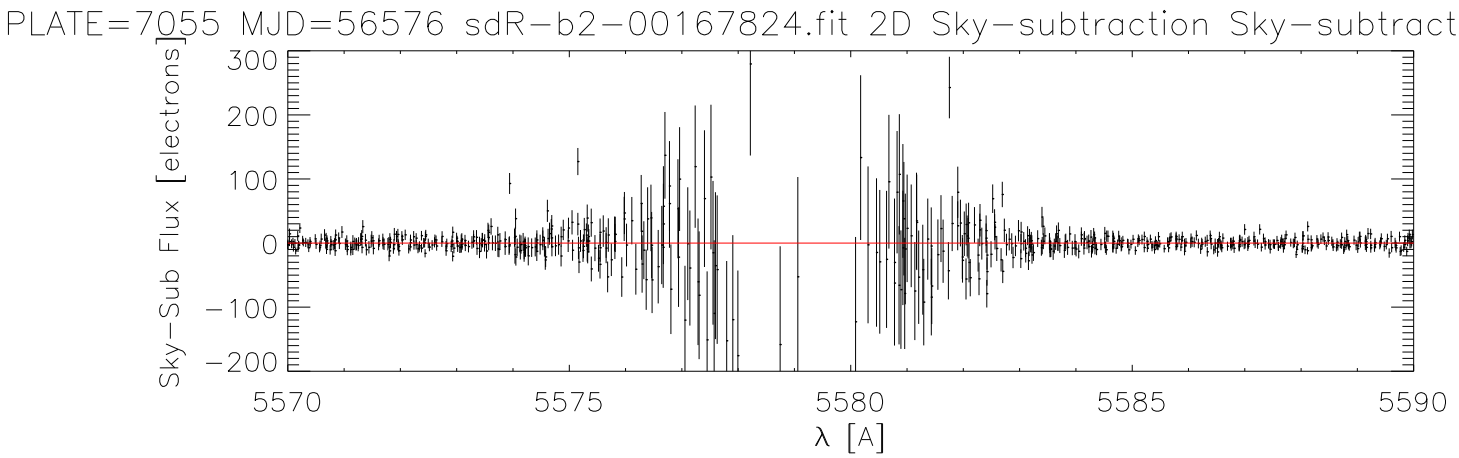

PLATE=7055 MJD=56576 sdR-b2-00167824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 48

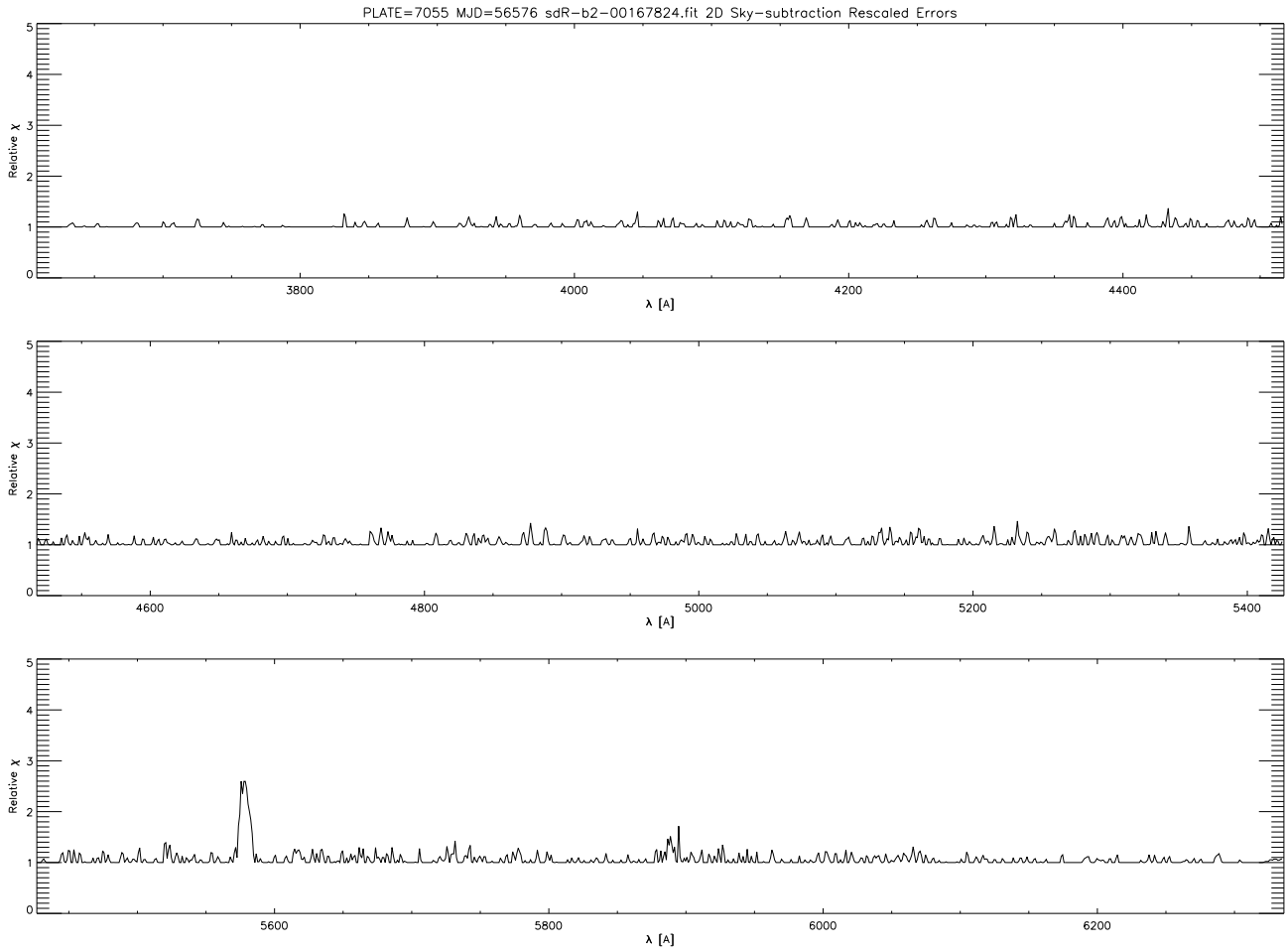


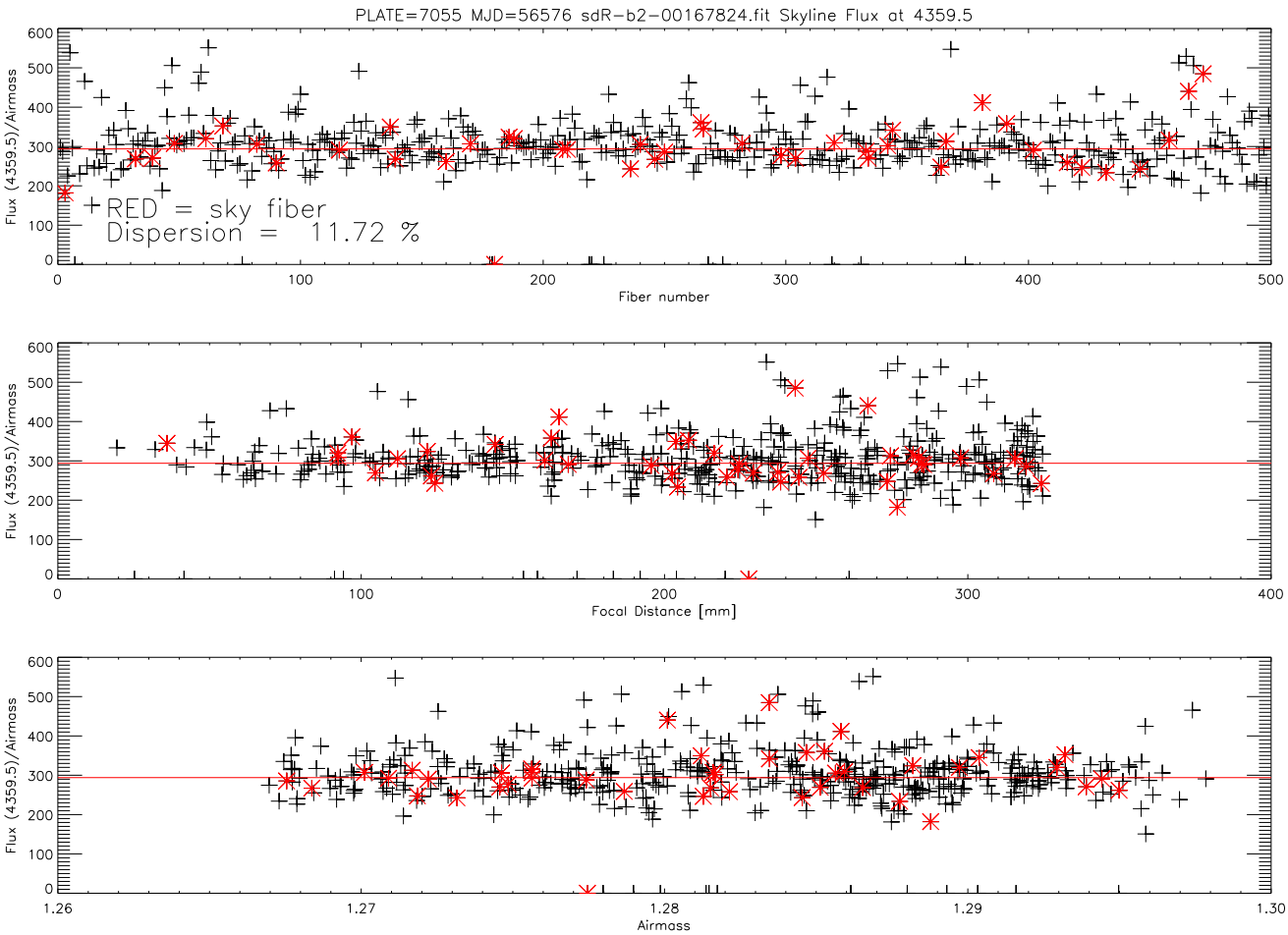

PLATE=7055 MJD=56576 sdR-b2-00167824.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

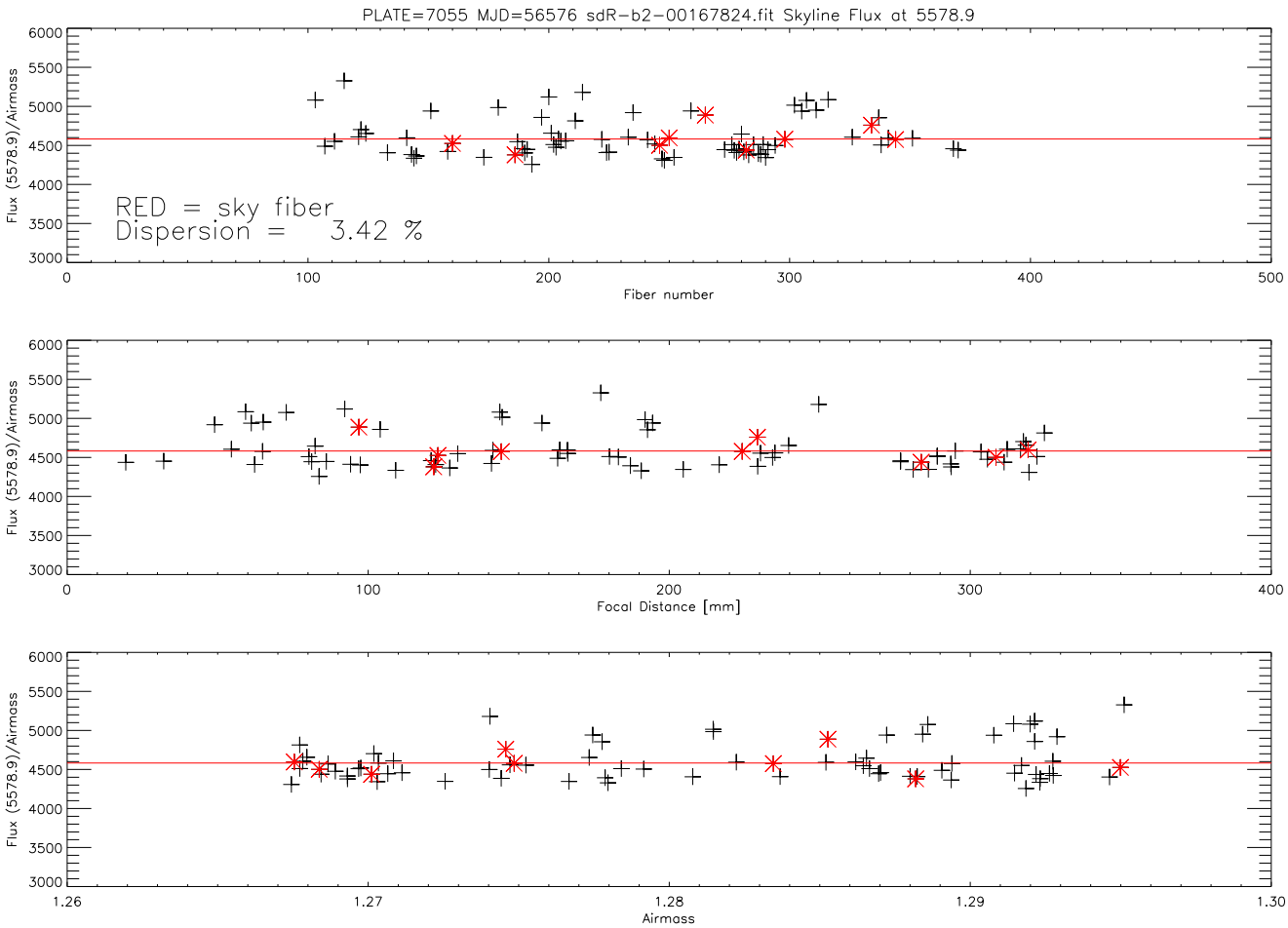

PLATE=7055 MJD=56576 sdR-b2-00167824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

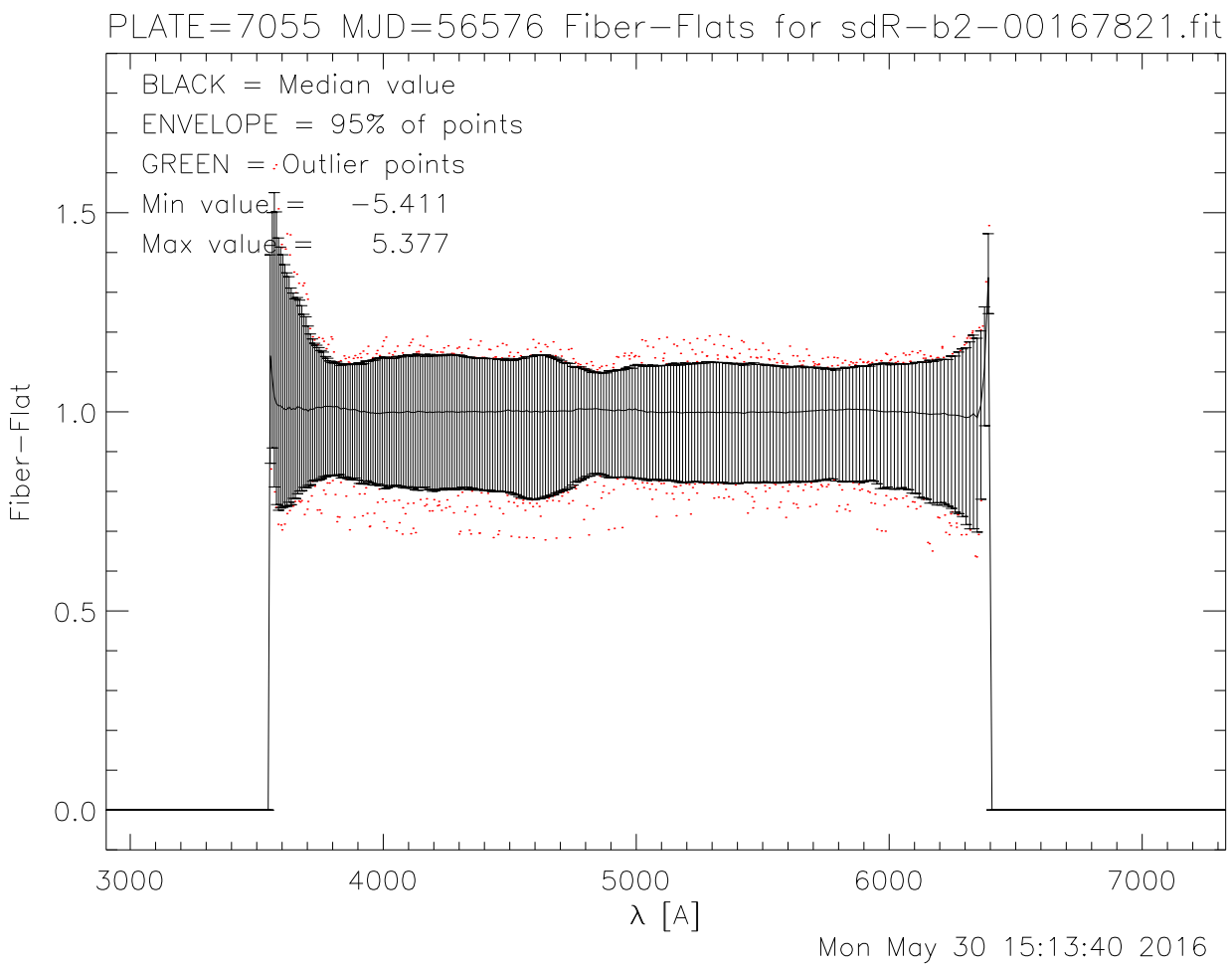

PLATE=7055 MJD=56576 sdR-b2-00167824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

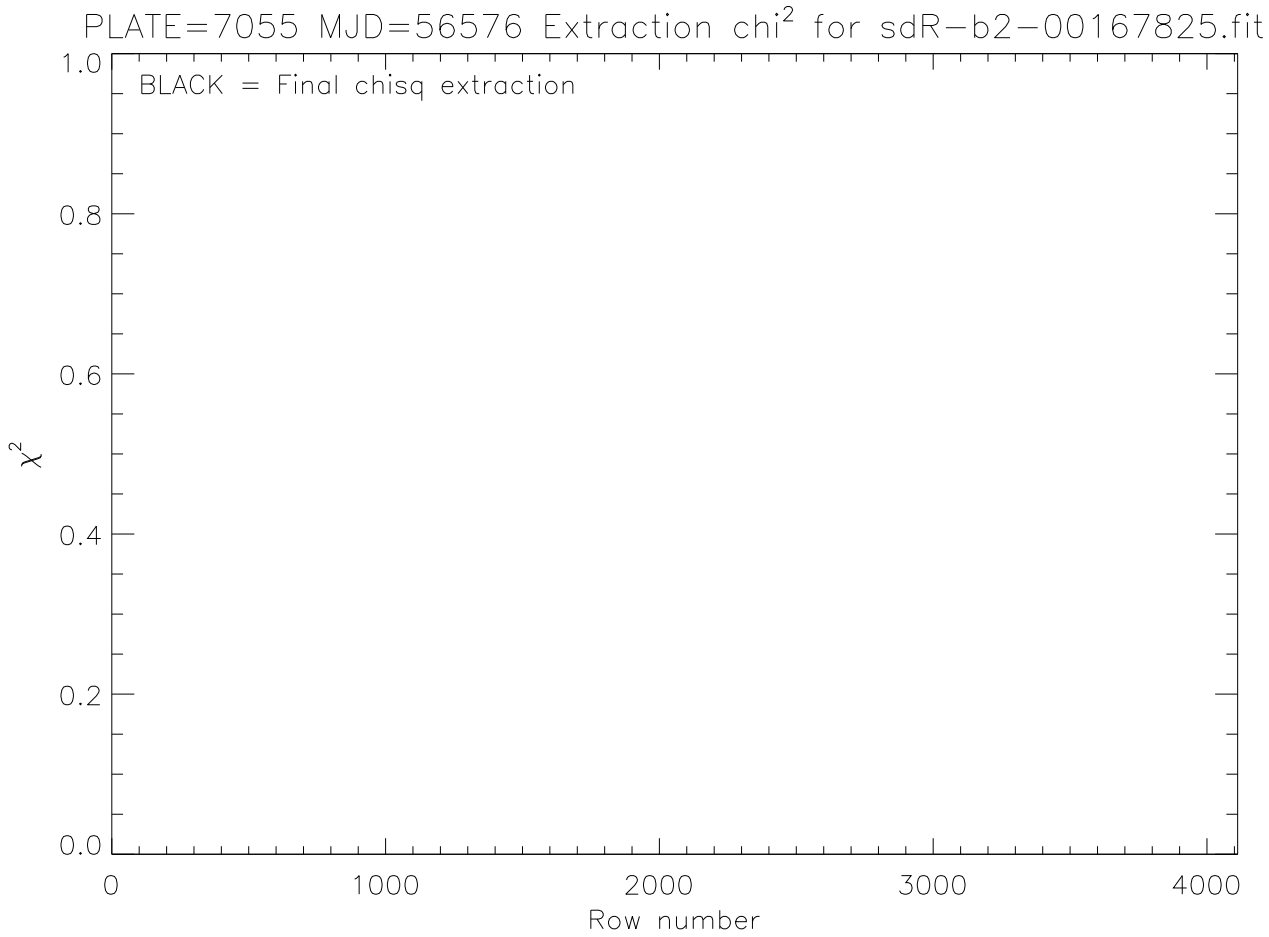
Number of sky fibers = 48

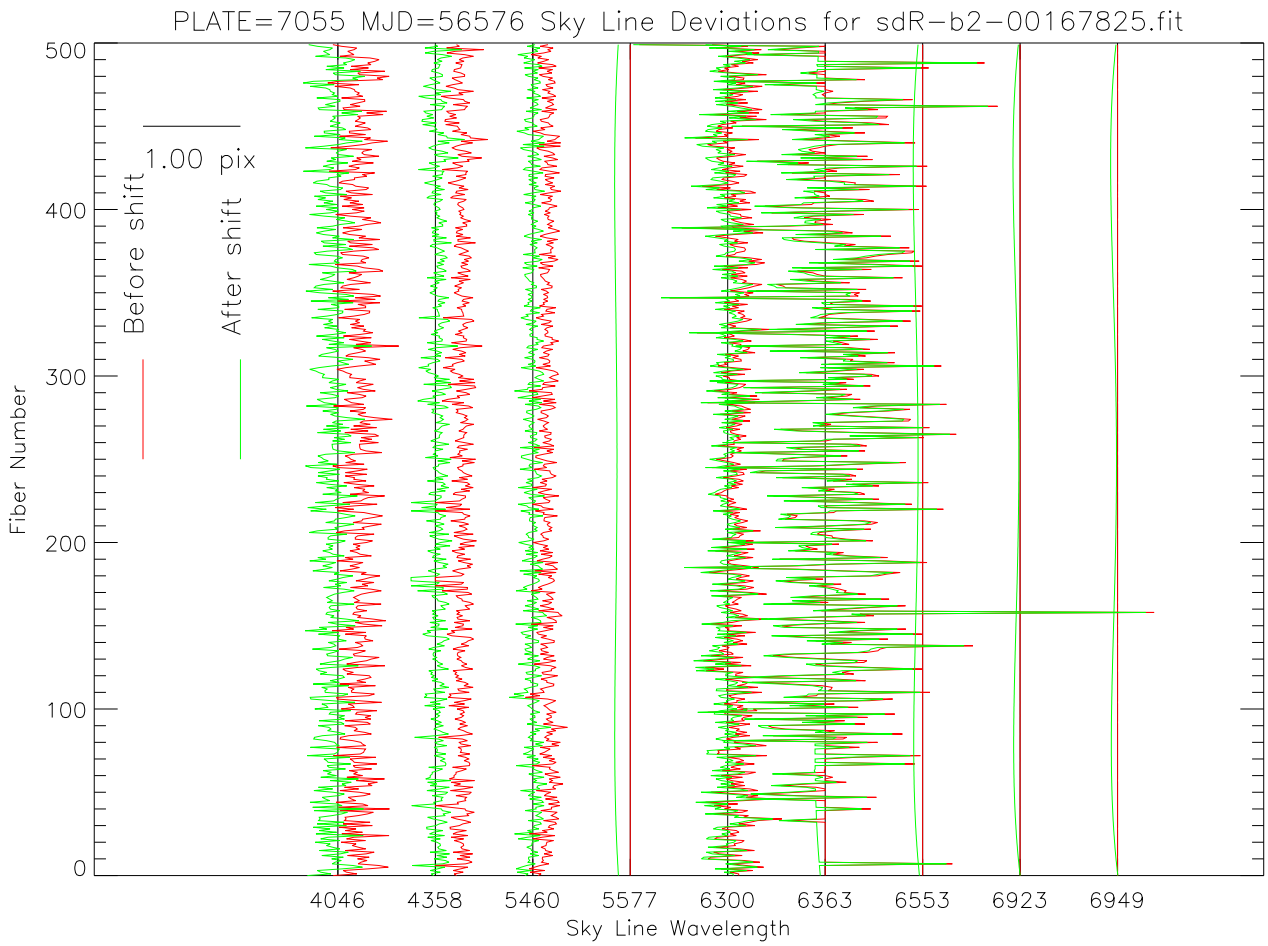


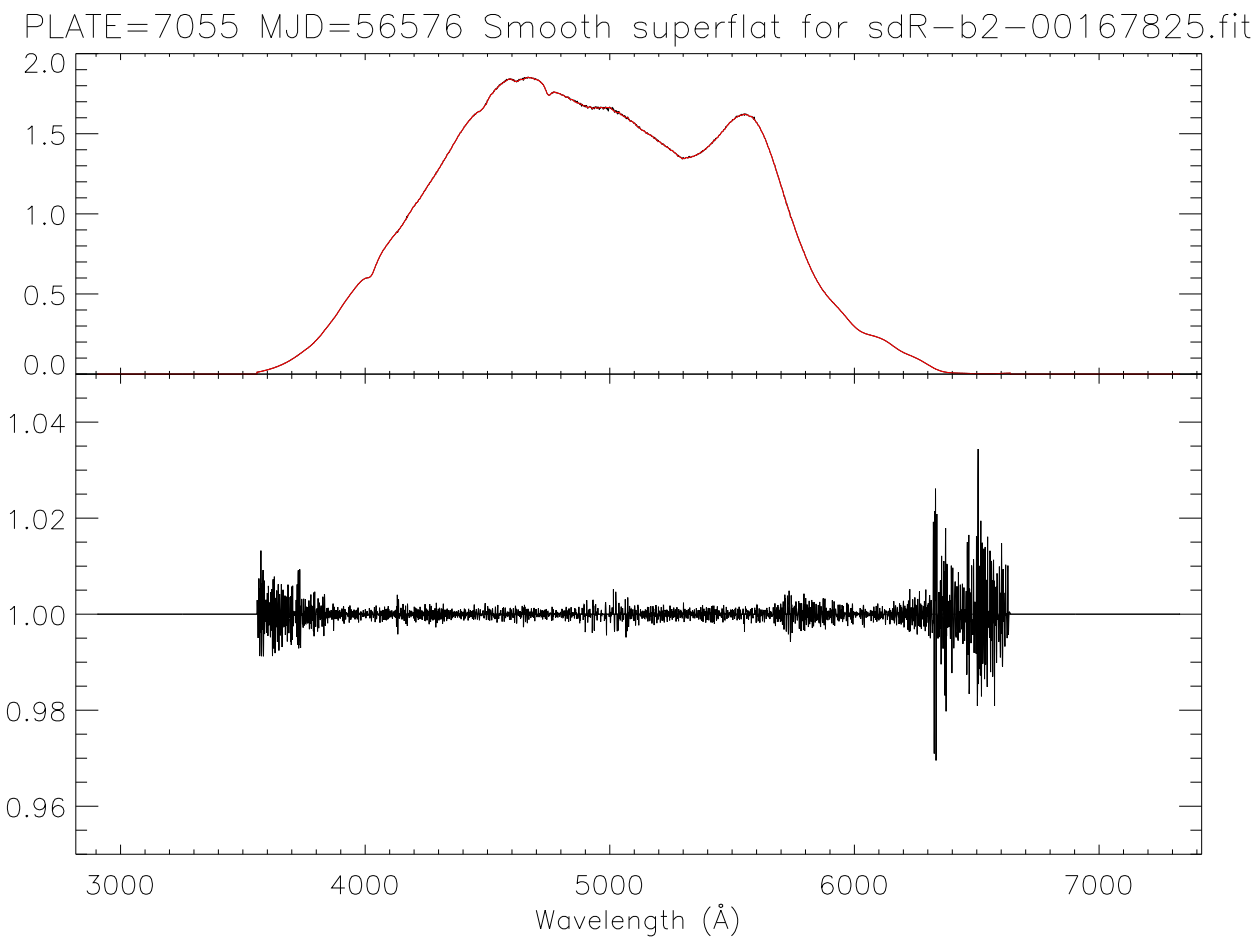

PLATE=7055 MJD=56576 sdR-b2-00167824.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.72 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

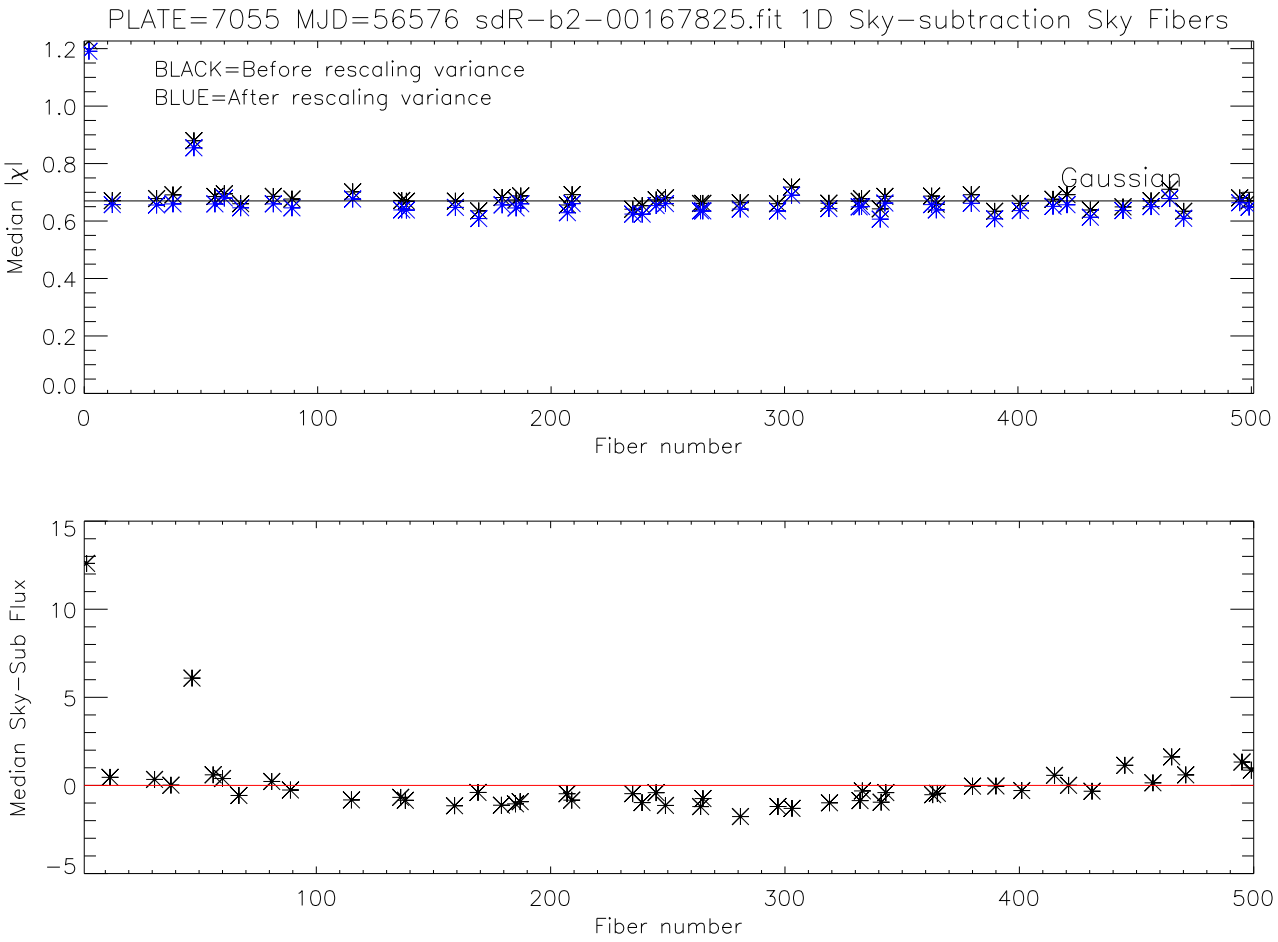

PLATE=7055 MJD=56576 sdR-b2-00167824.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.42 %
Fiber number
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

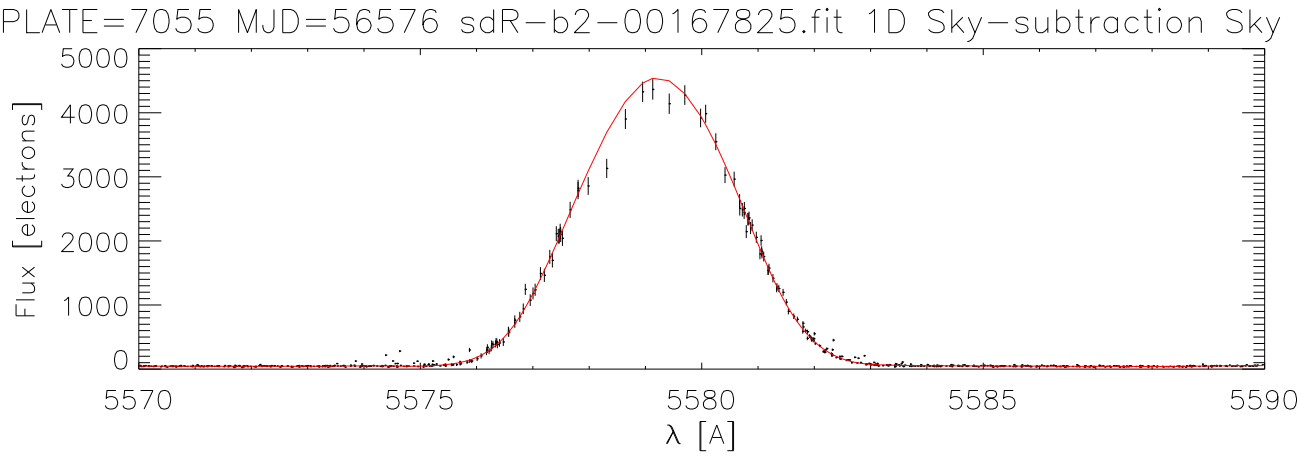

PLATE=7055 MJD=56576 Fiber-Flats for sdR-b2-00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -5.411
Max value = 5.377
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 15:13:40 2016

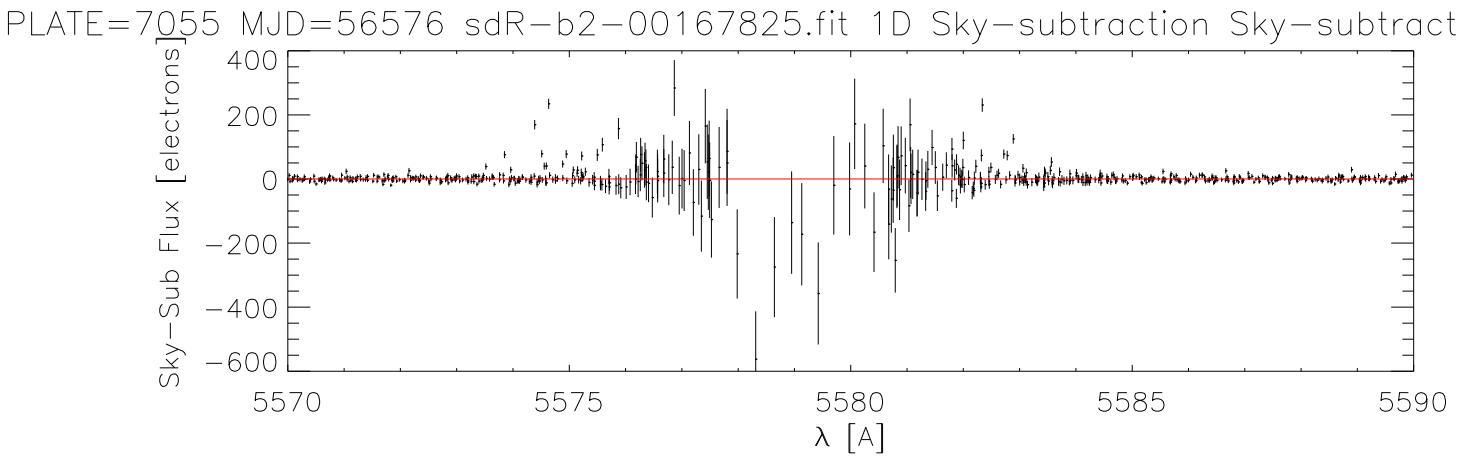

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−b2−00167825.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b2-00167825.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

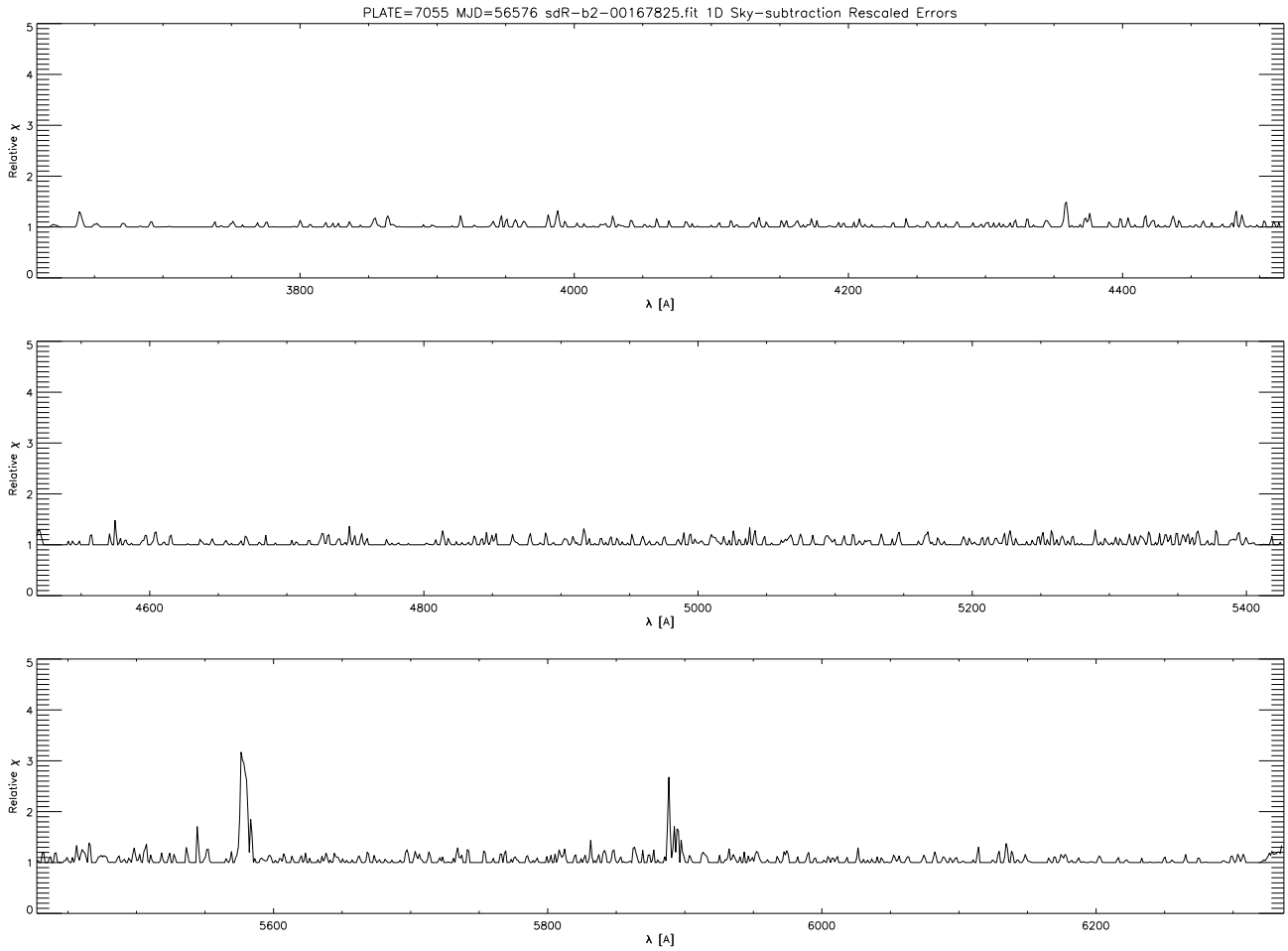

PLATE=7055 MJD=56576 Smooth superflat for sdR-b2-00167825.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

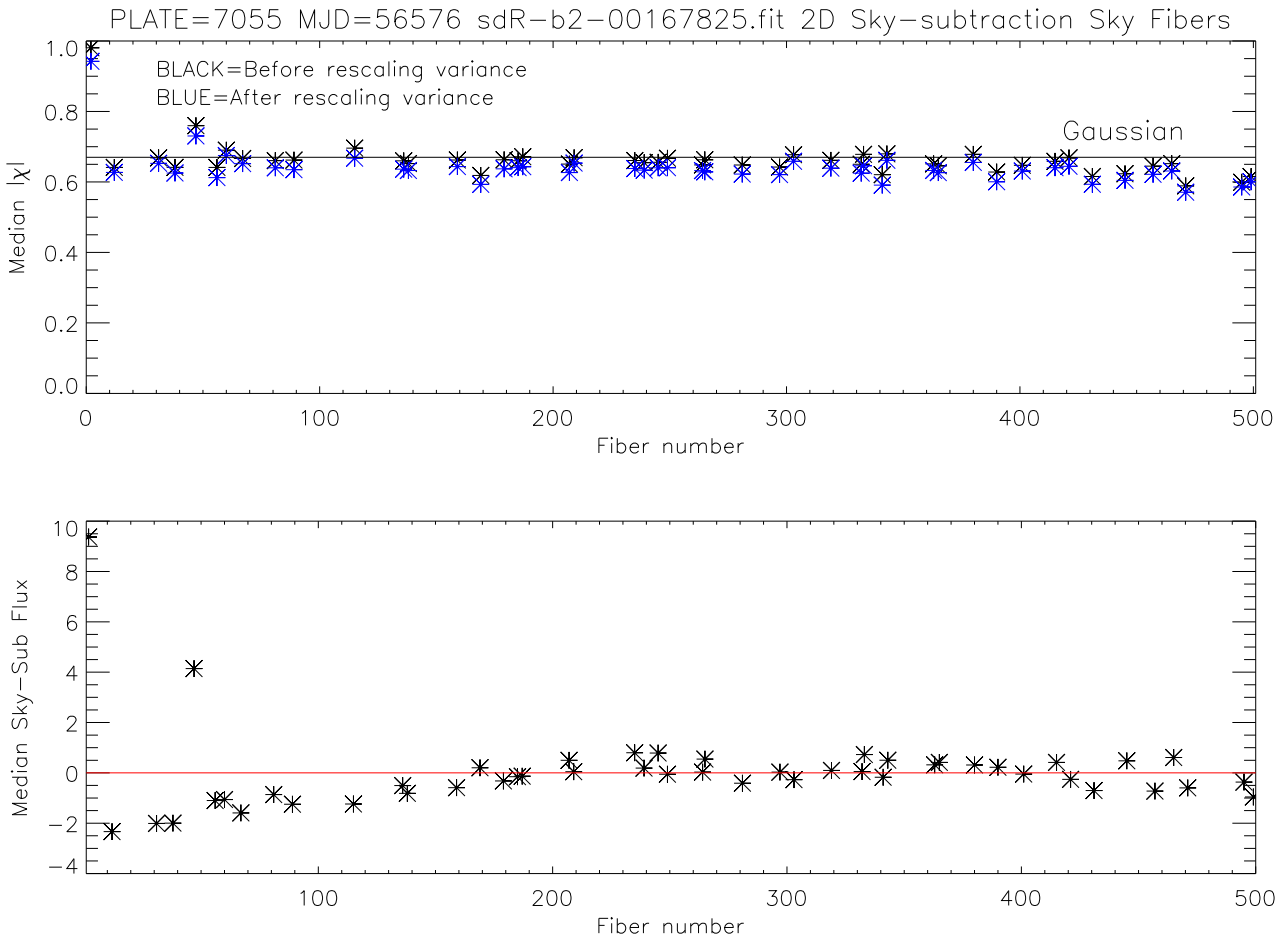

PLATE=7055 MJD=56576 sdR-b2-00167825.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

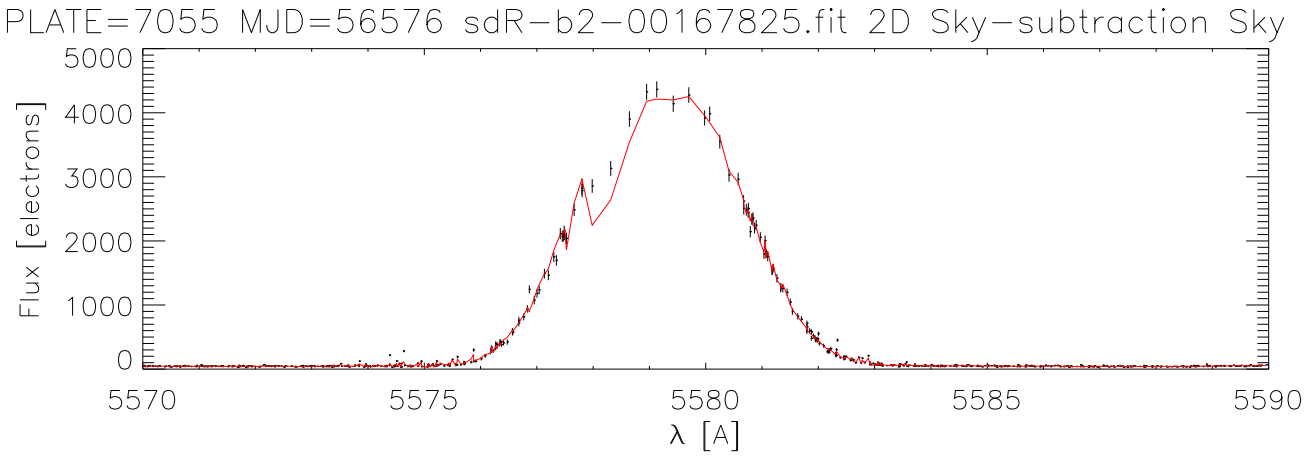

PLATE=7055 MJD=56576 sdR-b2-00167825.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

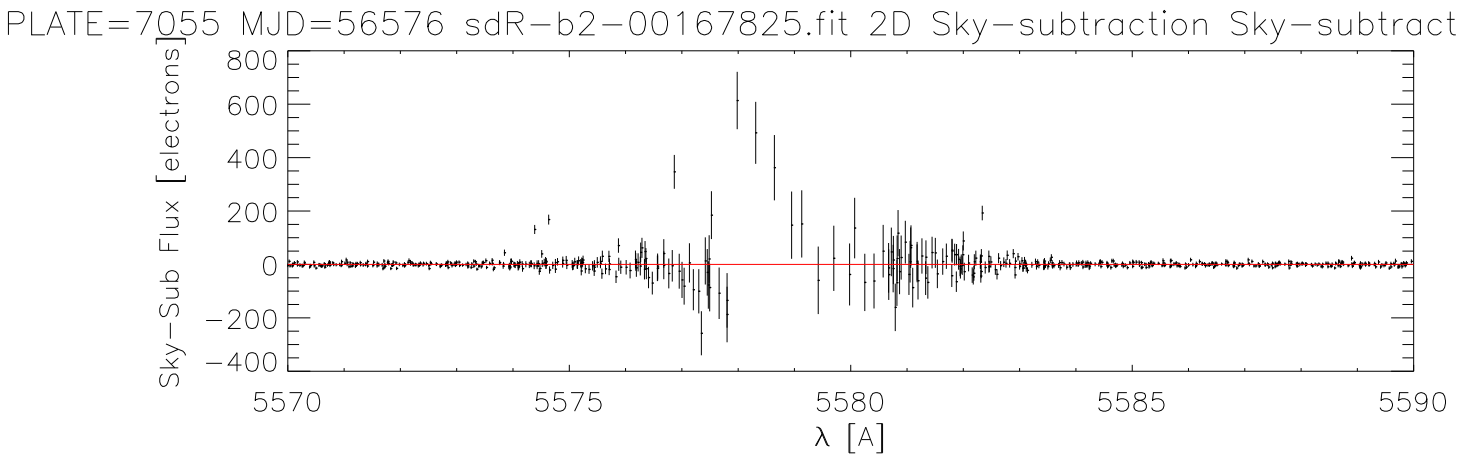

PLATE=7055 MJD=56576 sdR-b2-00167825.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 48

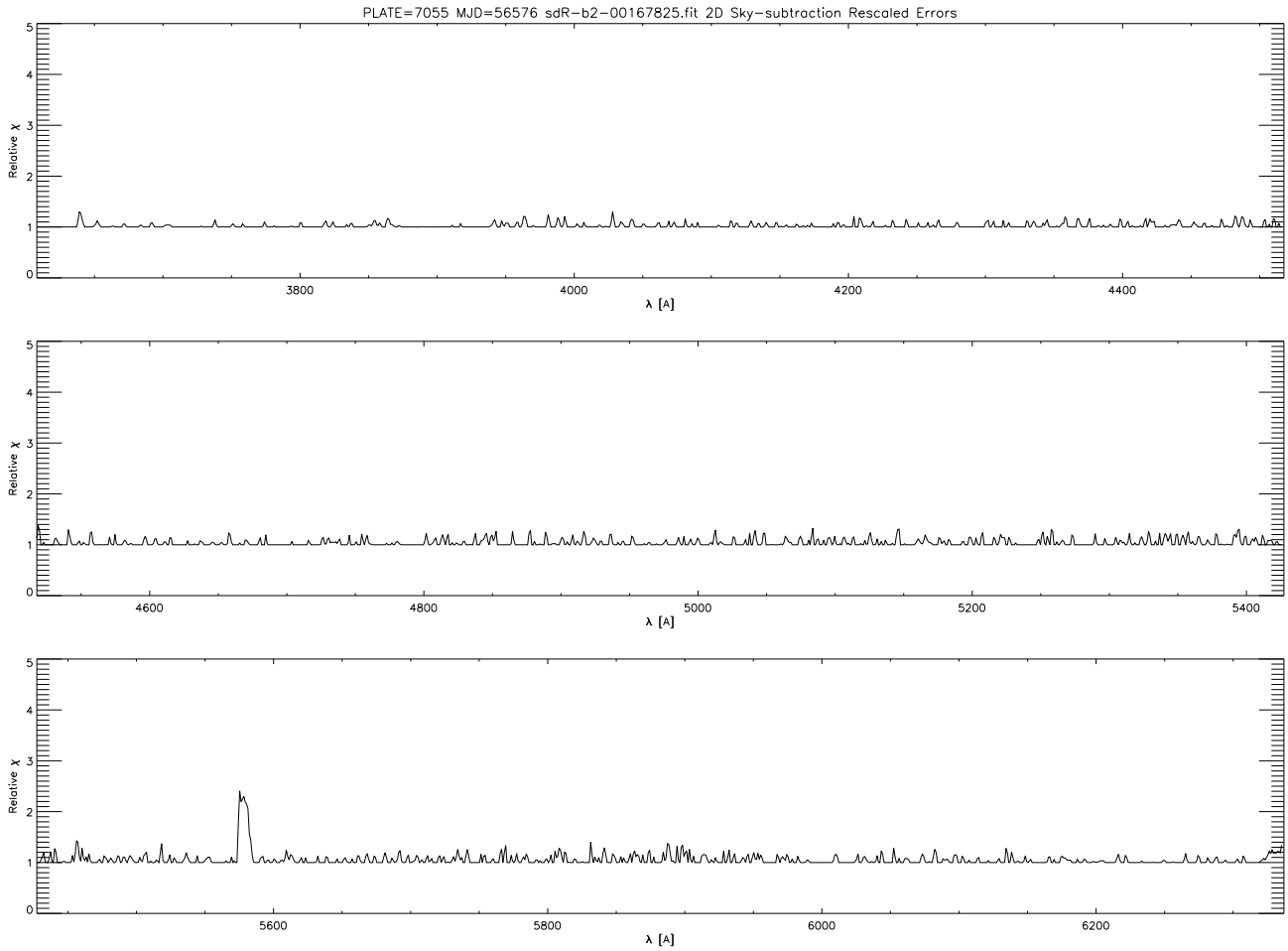


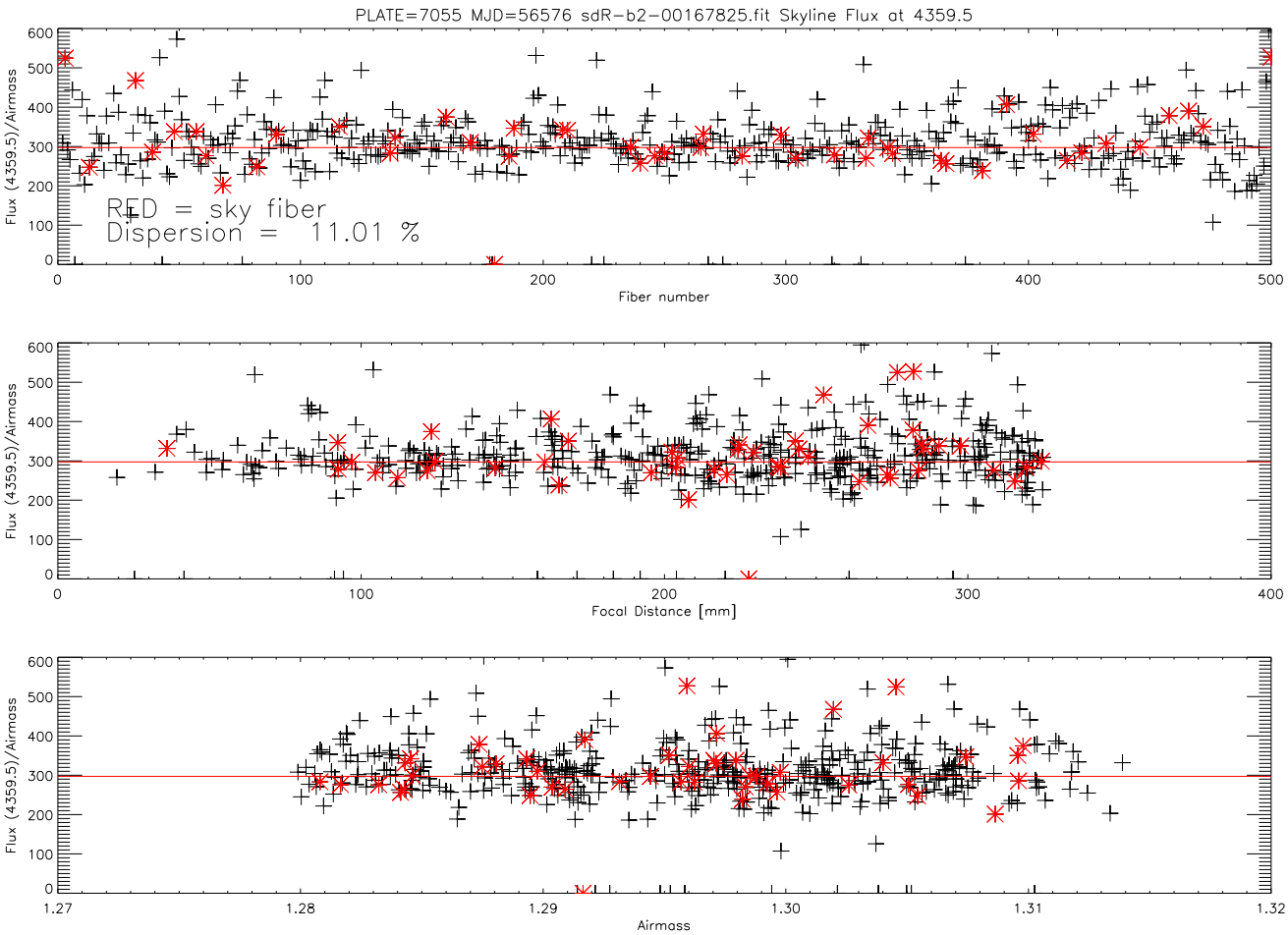

PLATE=7055 MJD=56576 sdR-b2-00167825.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

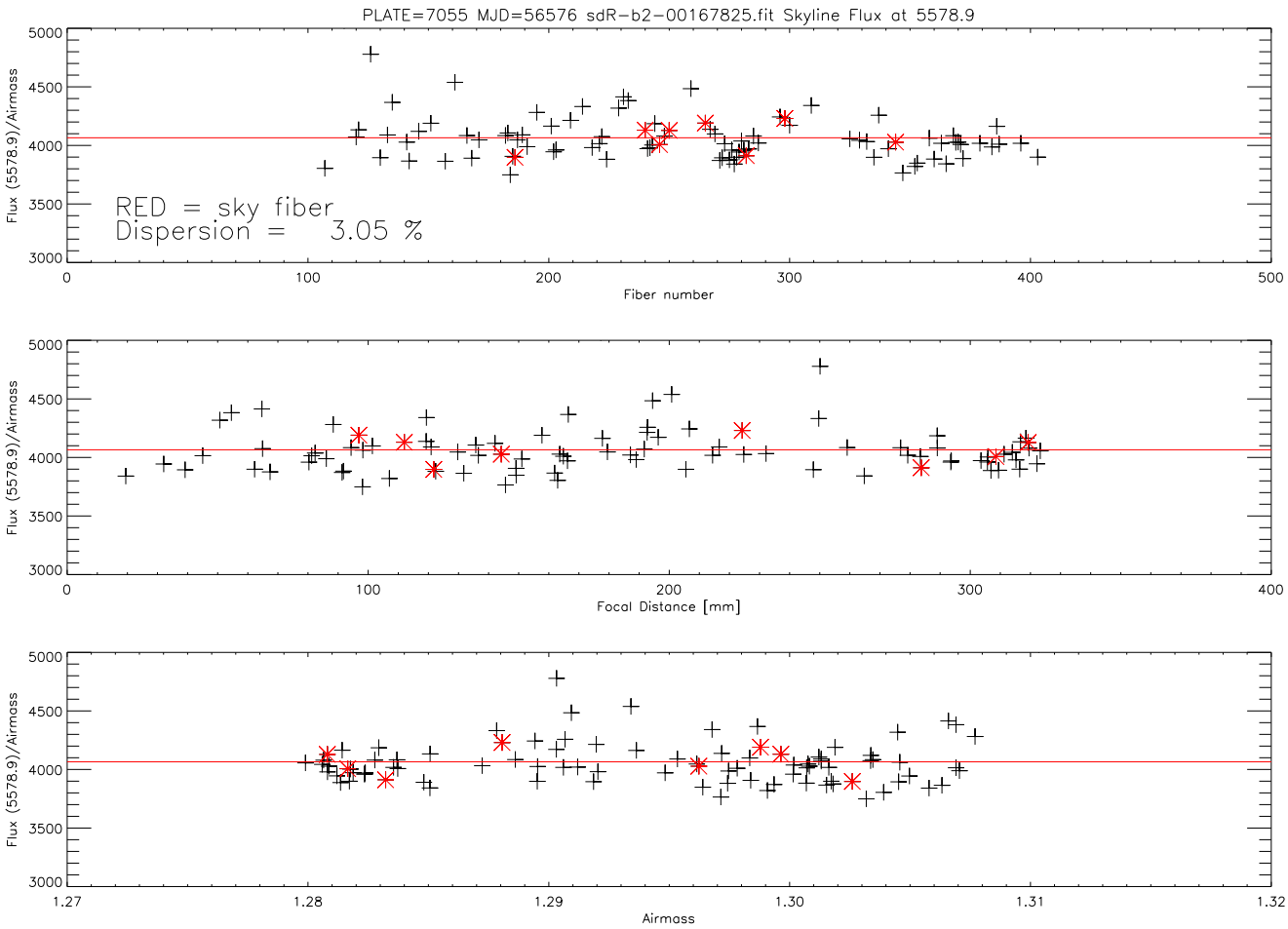

PLATE=7055 MJD=56576 sdR-b2-00167825.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

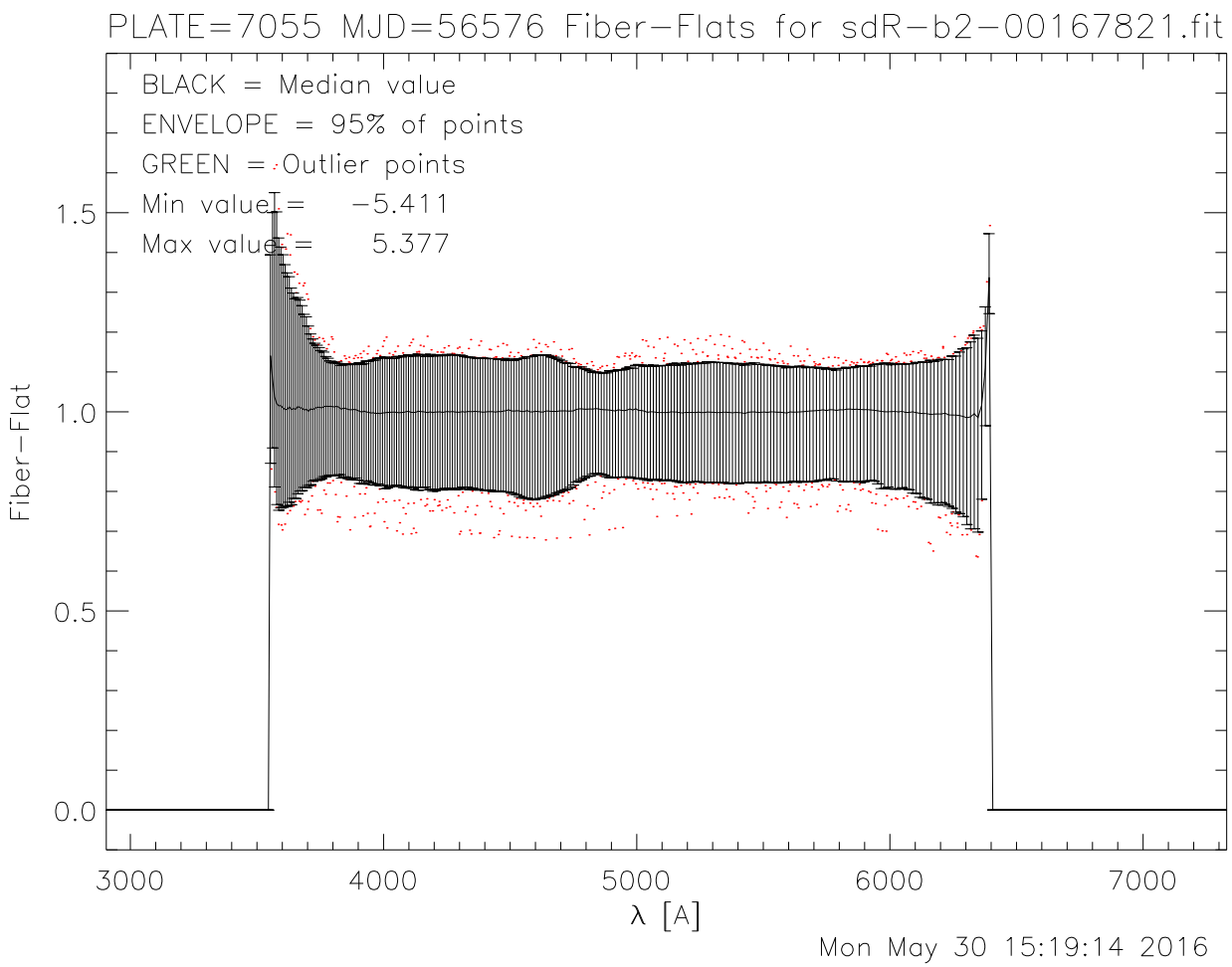

PLATE=7055 MJD=56576 sdR-b2-00167825.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
800
600
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

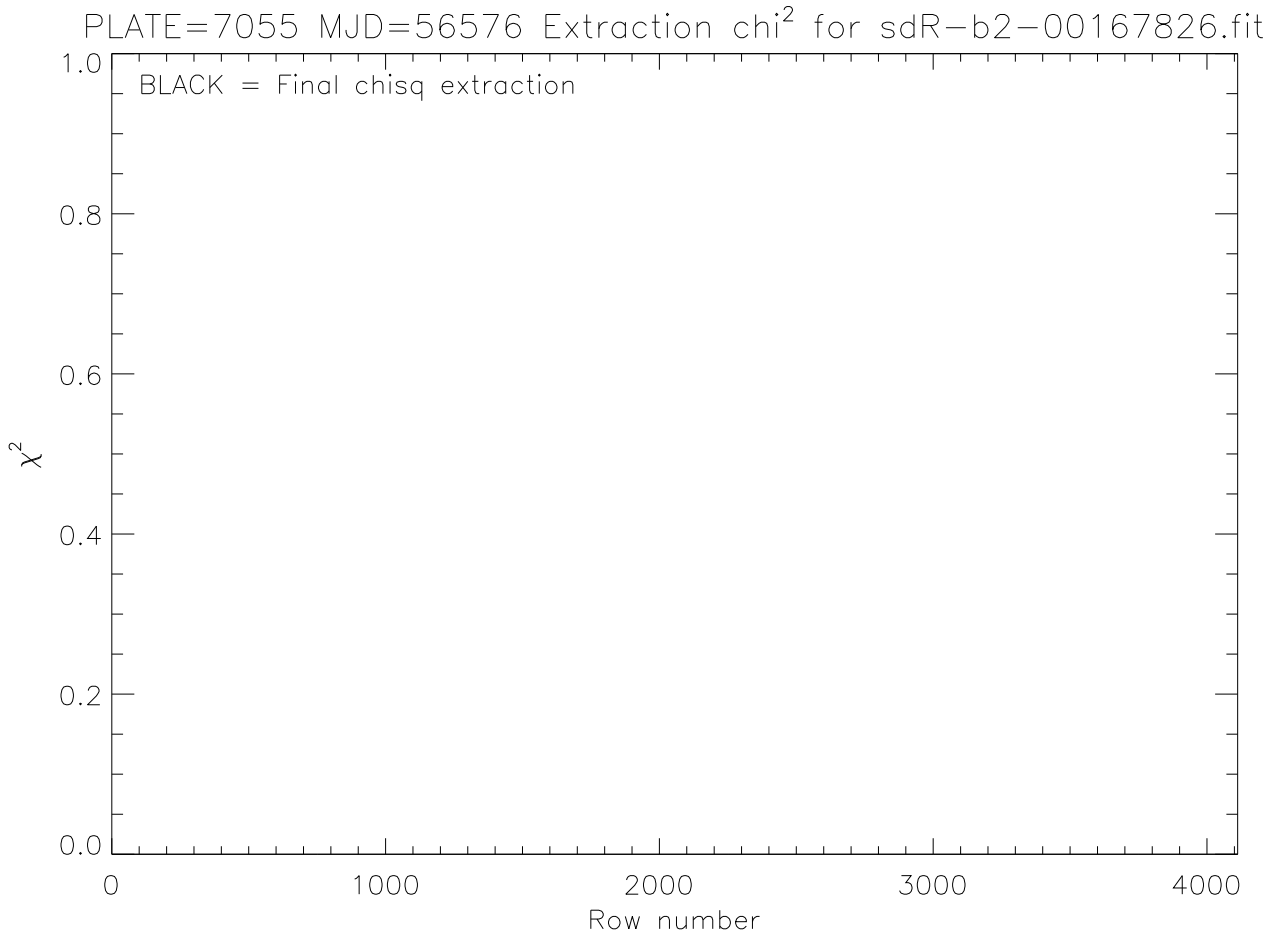
Number of sky fibers = 48

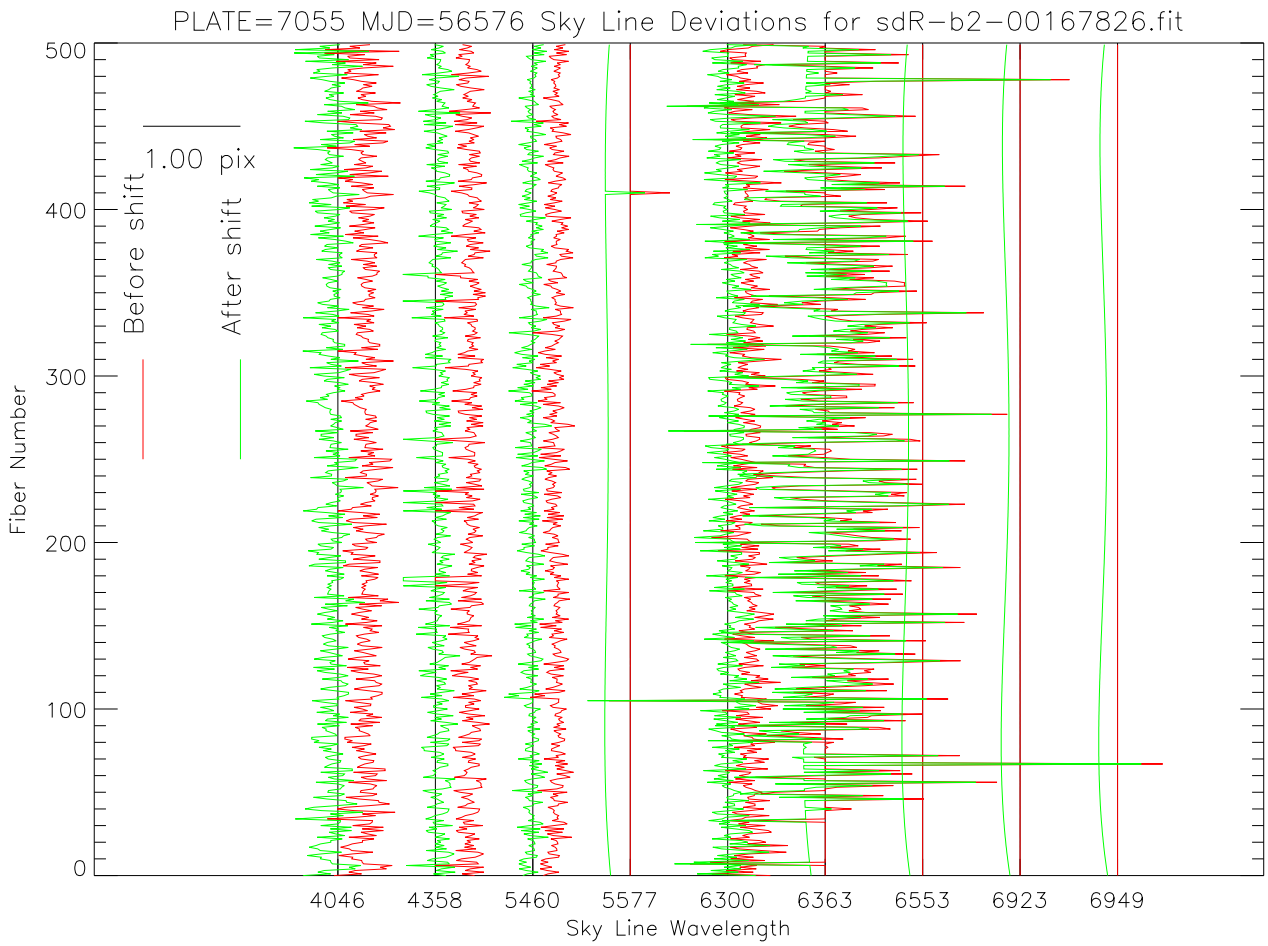


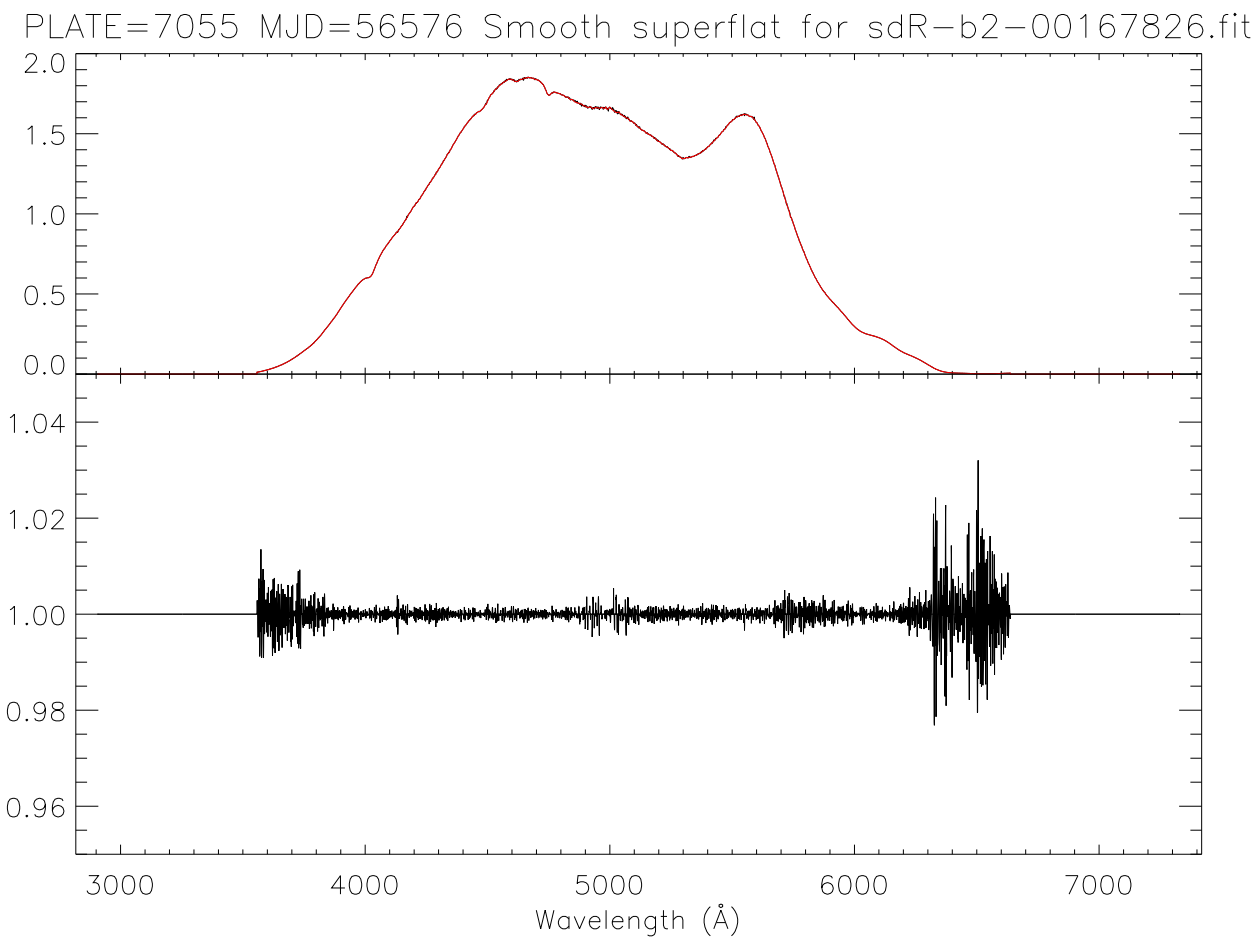

PLATE=7055 MJD=56576 sdR-b2-00167825.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 11.01 %
Fiber number
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass

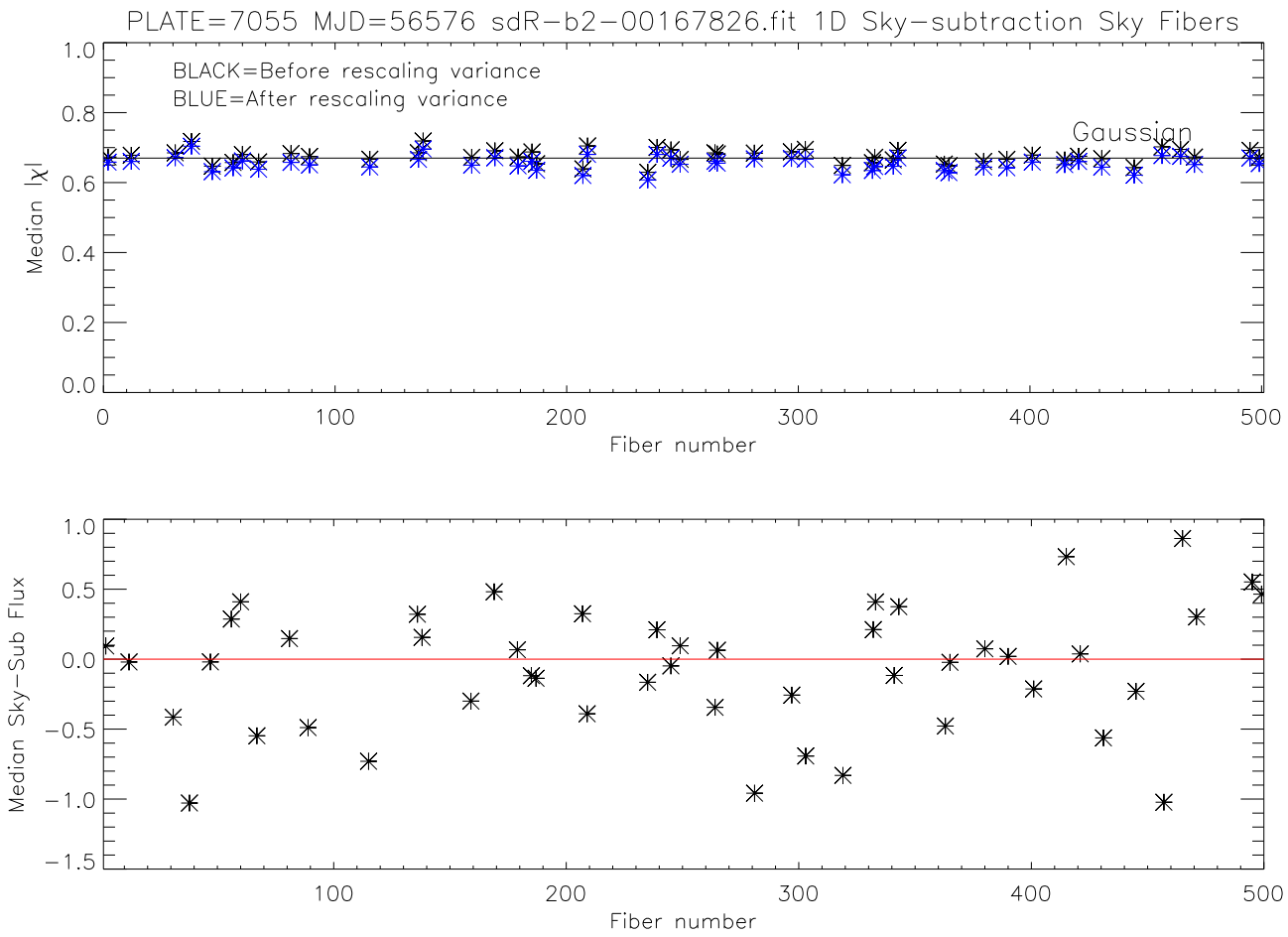

PLATE=7055 MJD=56576 sdR-b2-00167825.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
RED = sky fiber
Dispersion = 3.05 %
Fiber number
Focal Distance [mm]
Airmass

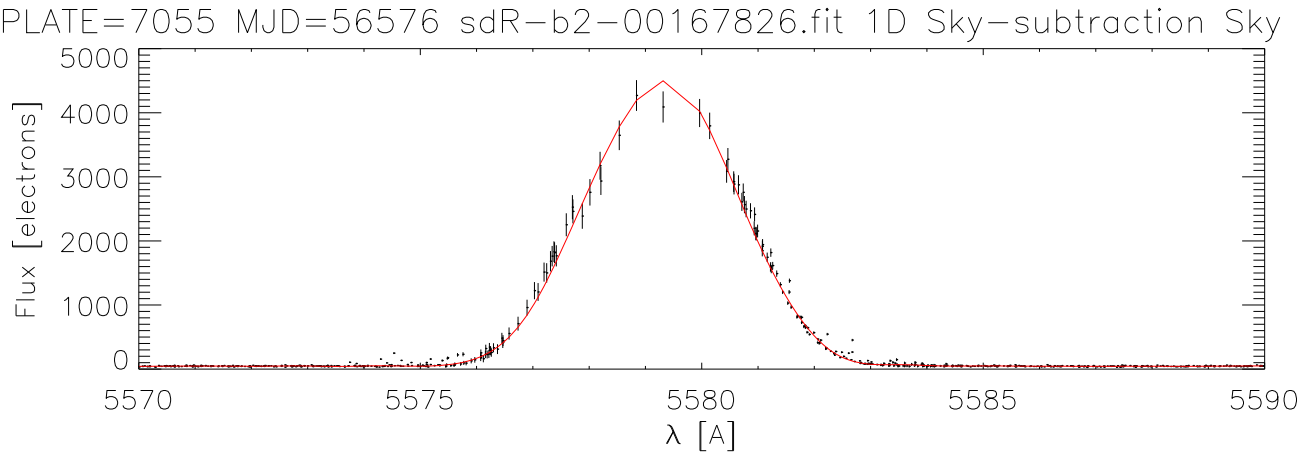

PLATE=7055 MJD=56576 Fiber-Flats for sdR-b2-00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = -5.411
Max value = 5.377
Fiber-Flat
1.5
1.0
0.5
0.0
3000
4000
5000
6000
7000
λ [A]
Mon May 30 15:19:14 2016

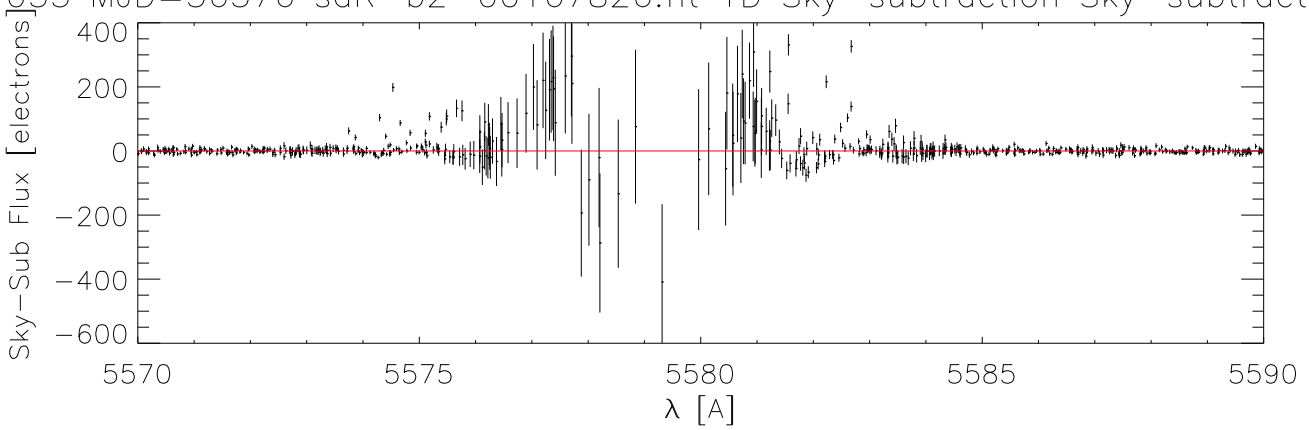

PLATE=7055 MJD=56576 Extraction chi^2 for sdR-b2-00167826.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-b2-00167826.fit
1.00 pix
Before shift
After shift
Fiber Number
500
400
300
200
100
0
4046
4358
5460
5577
6300
6363
6553
6923
6949
Sky Line Wavelength

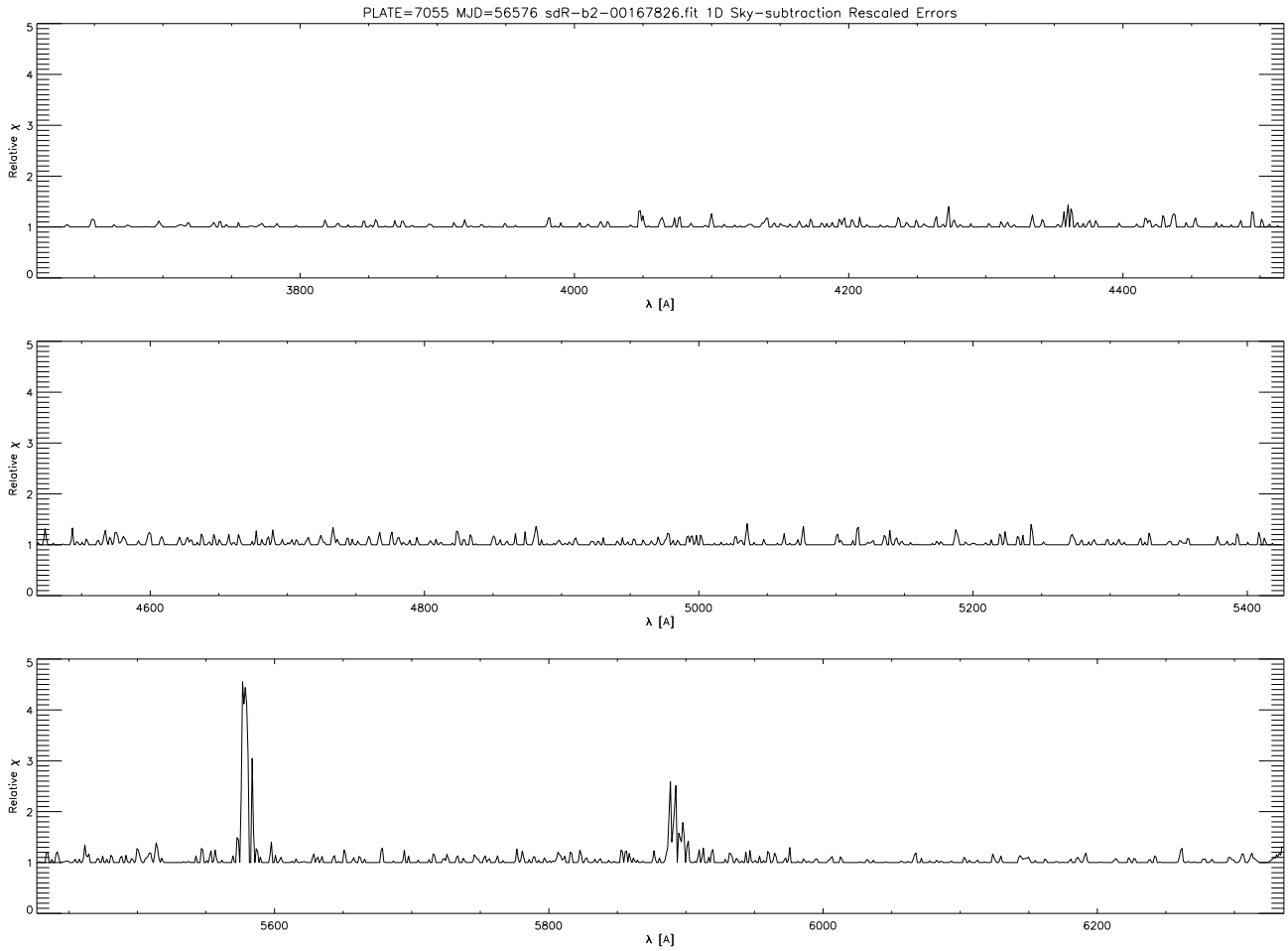

PLATE=7055 MJD=56576 Smooth superflat for sdR-b2-00167826.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
3000
4000
5000
6000
7000
Wavelength (Å)

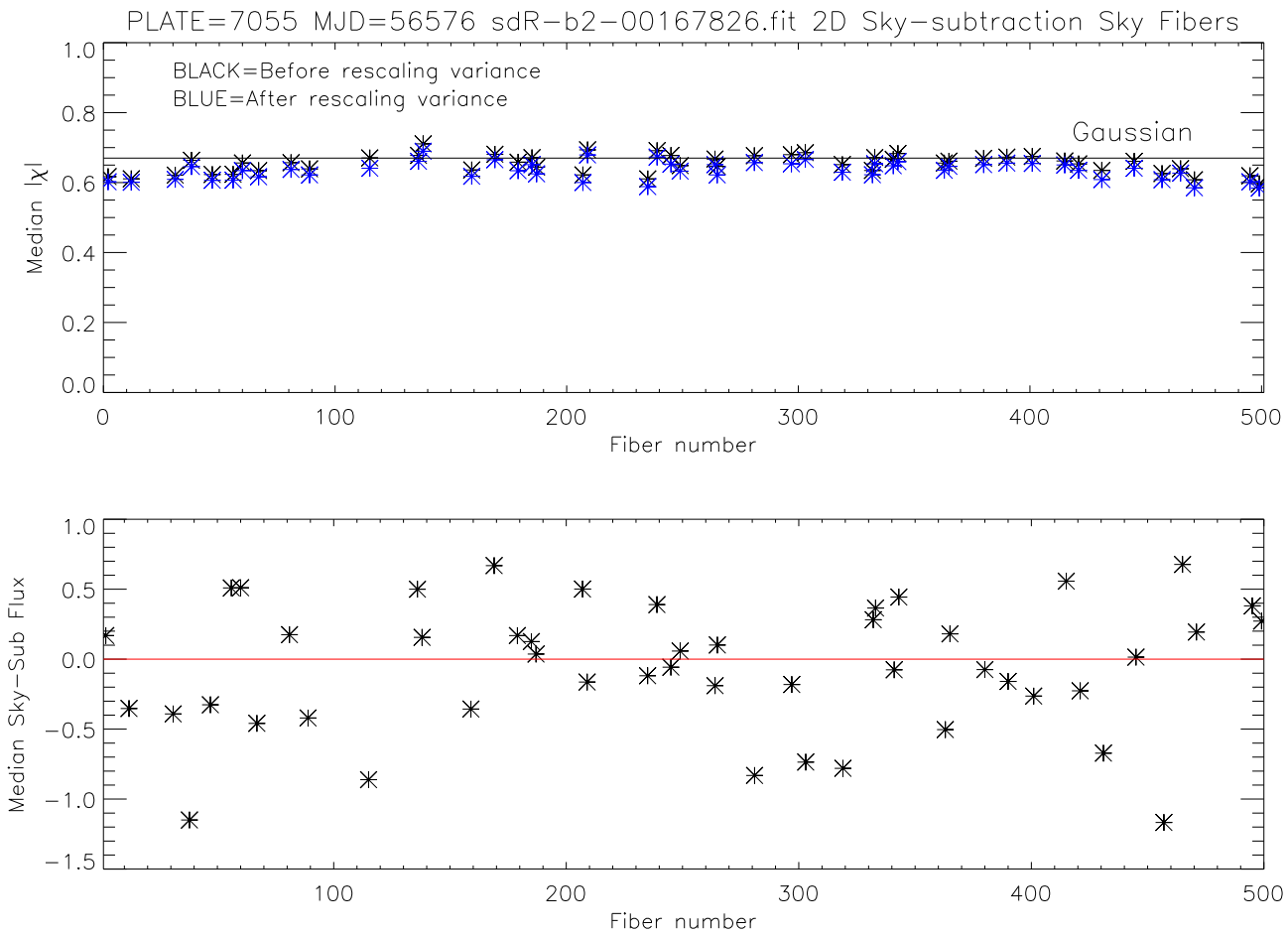

PLATE=7055 MJD=56576 sdR-b2-00167826.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

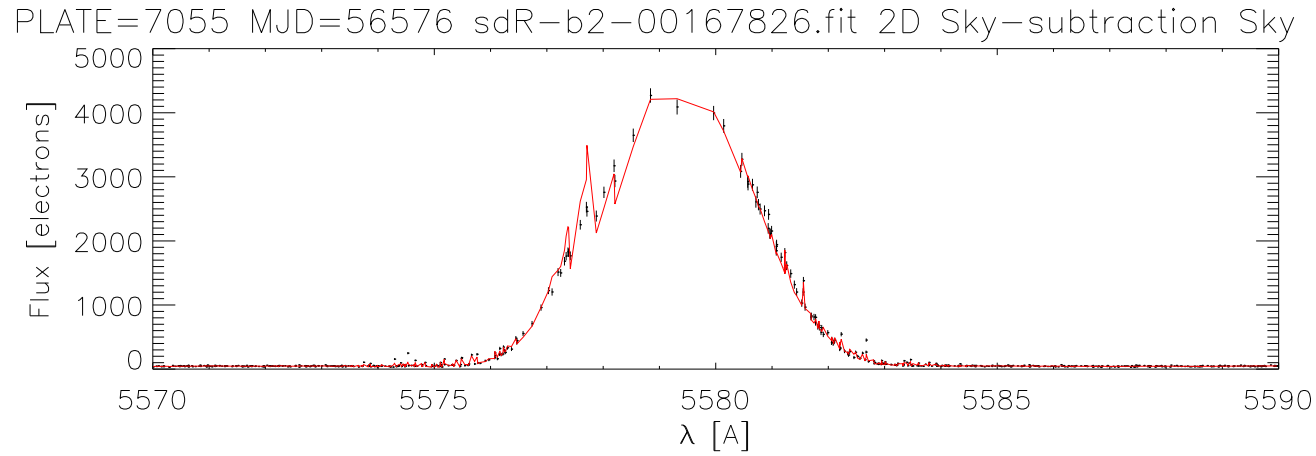

PLATE=7055 MJD=56576 sdR-b2-00167826.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

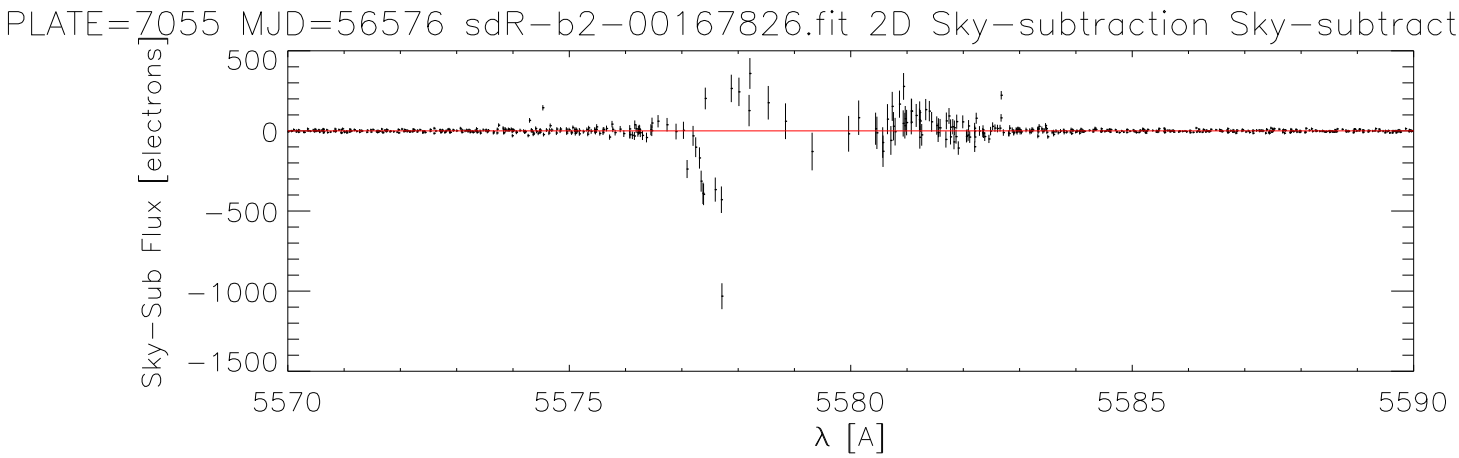

PLATE=7055 MJD=56576 sdR-b2-00167826.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
-600
5570
5575
5580
5585
5590
λ [A]

Number of sky fibers = 48

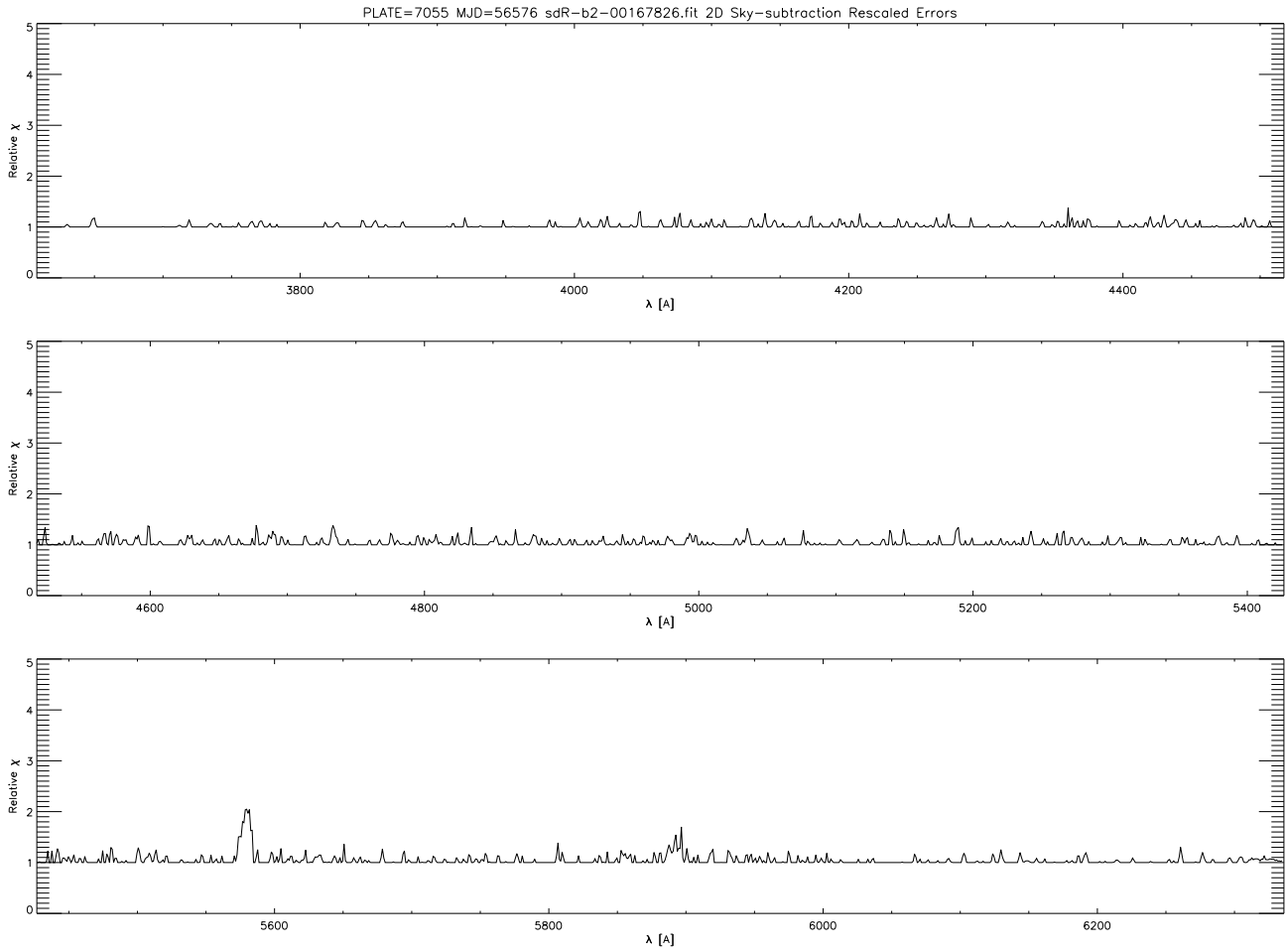


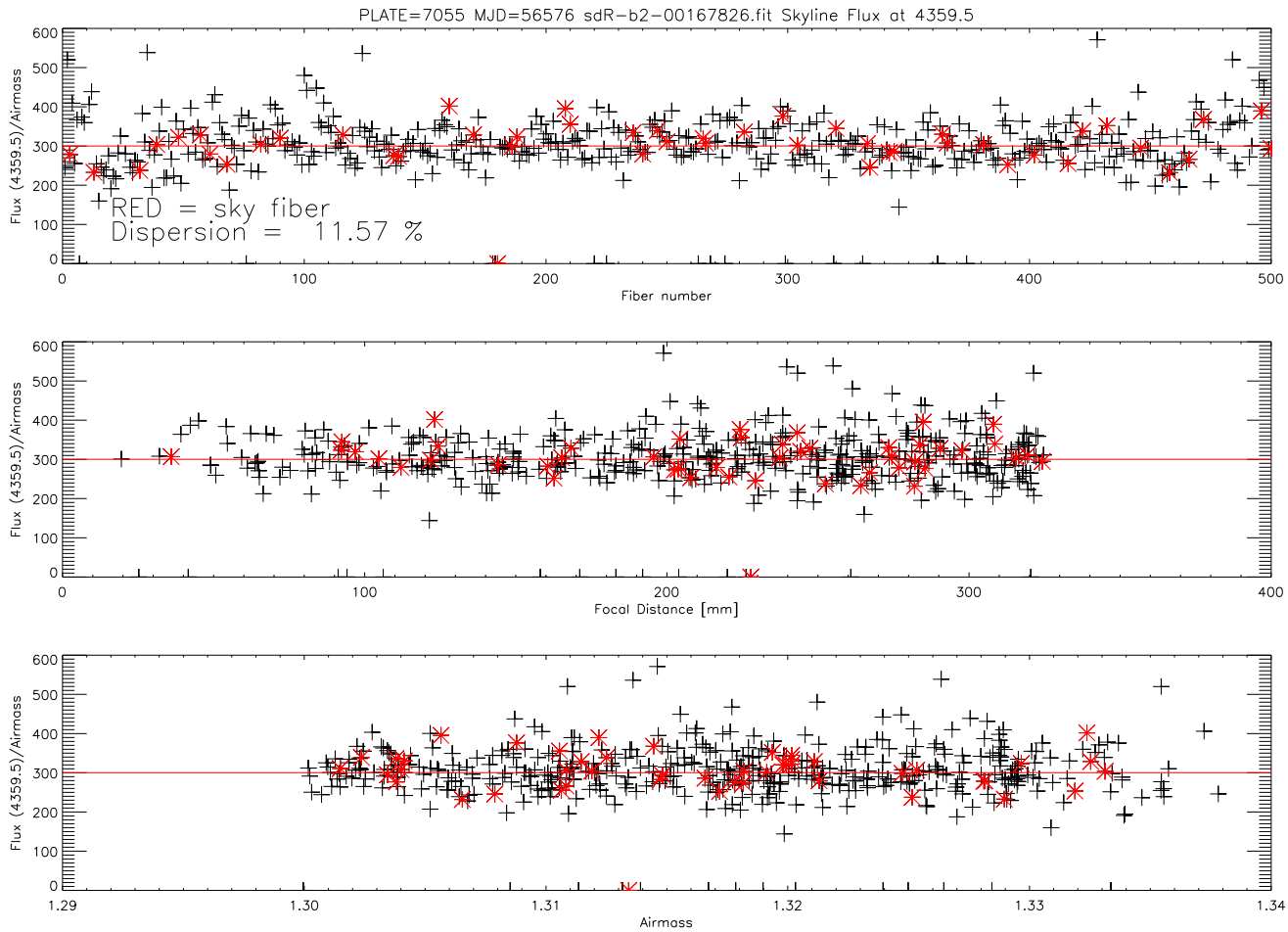

PLATE=7055 MJD=56576 sdR-b2-00167826.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

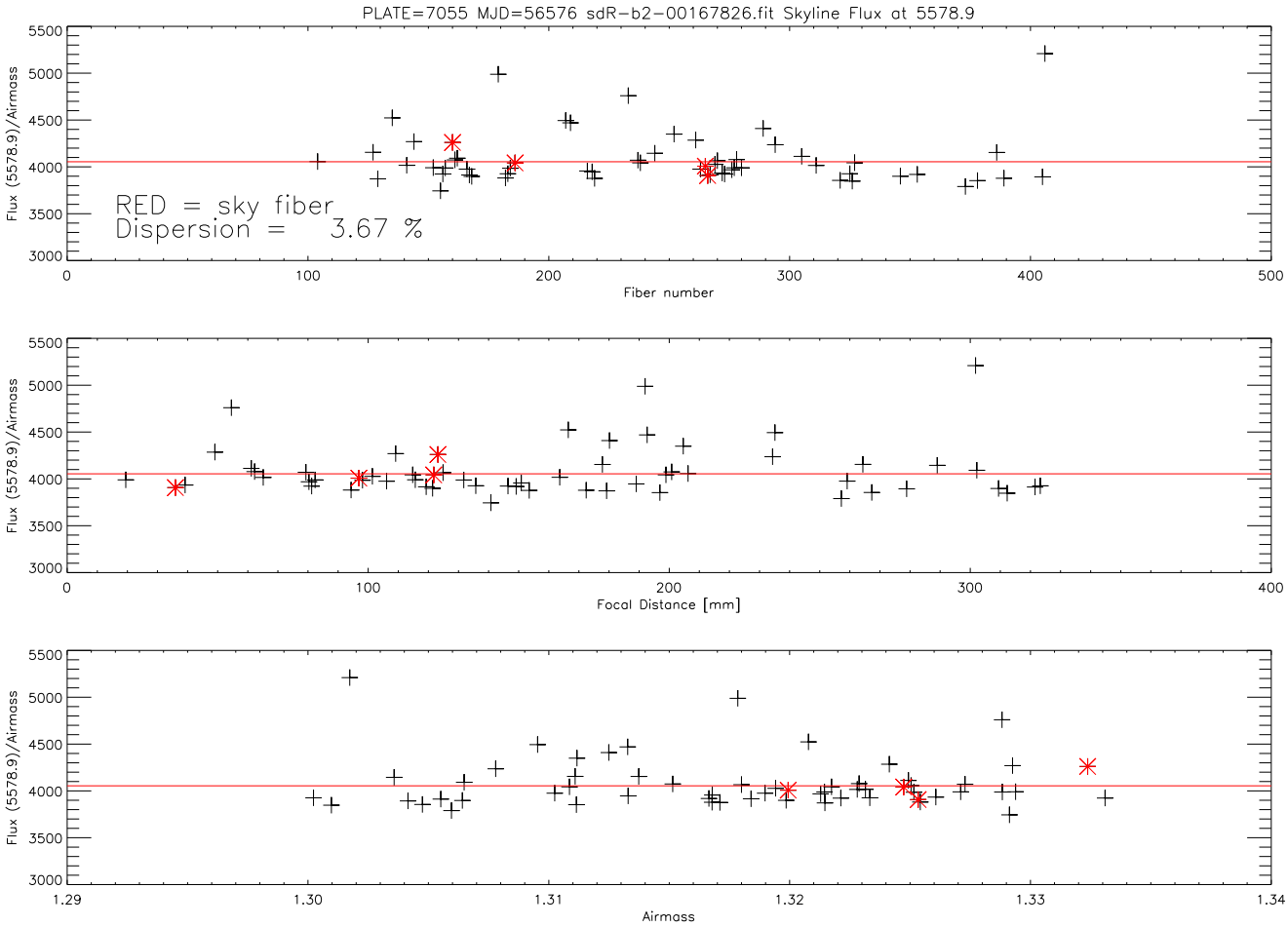

PLATE=7055 MJD=56576 sdR-b2-00167826.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

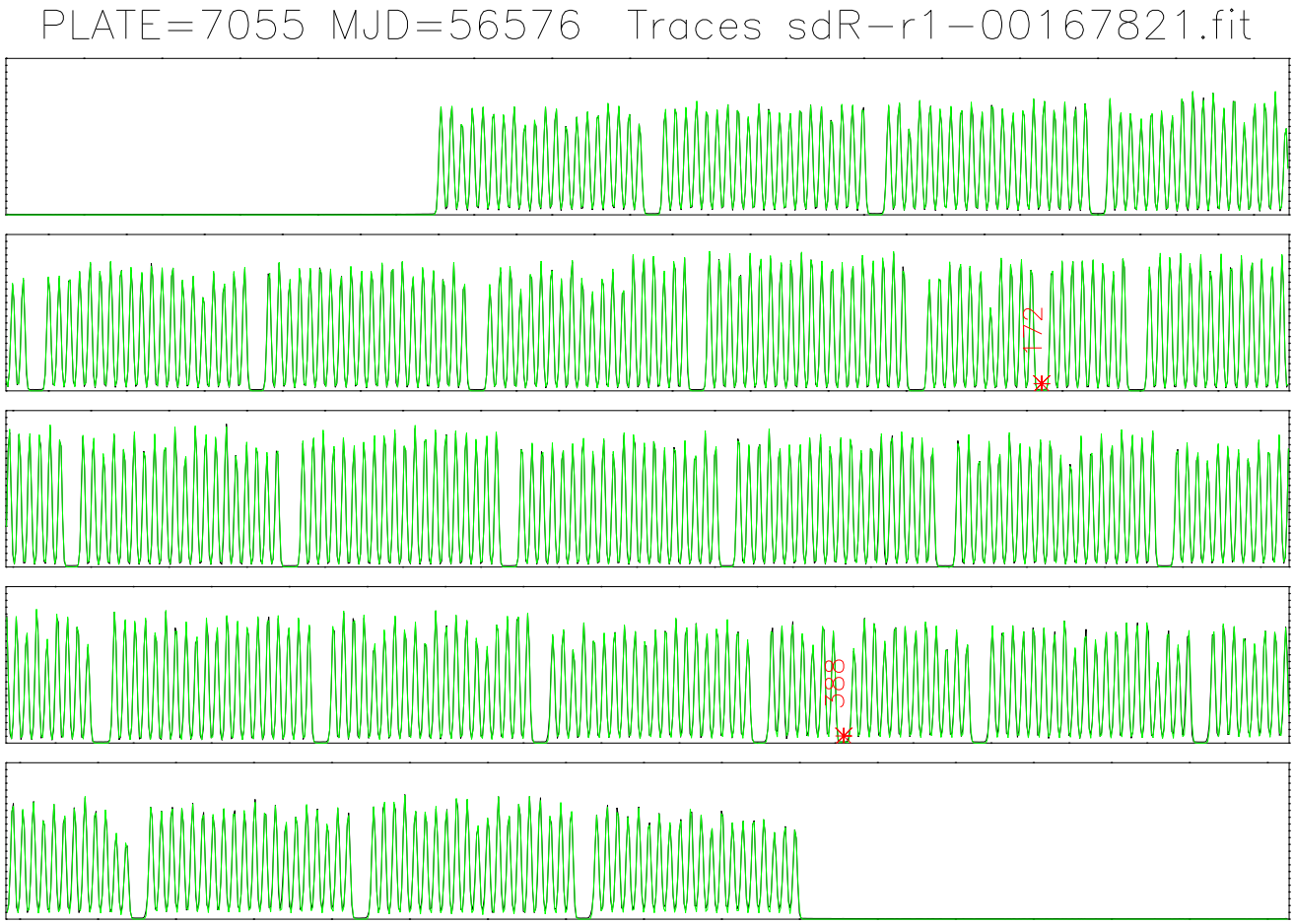

PLATE=7055 MJD=56576 sdR-b2-00167826.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
500
0
-500
-1000
-1500
5570
5575
5580
5585
5590
λ [A]

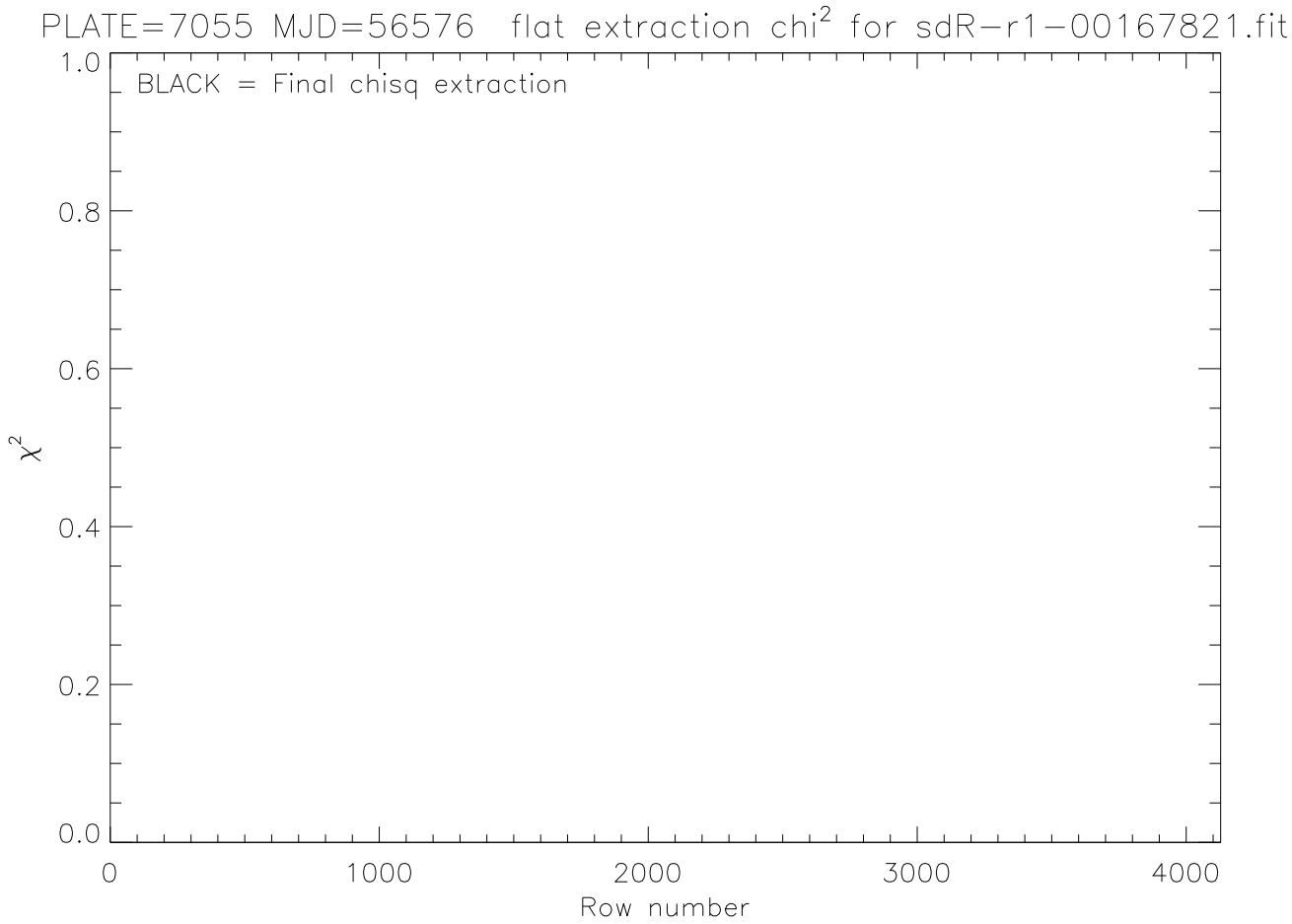
Number of sky fibers = 48

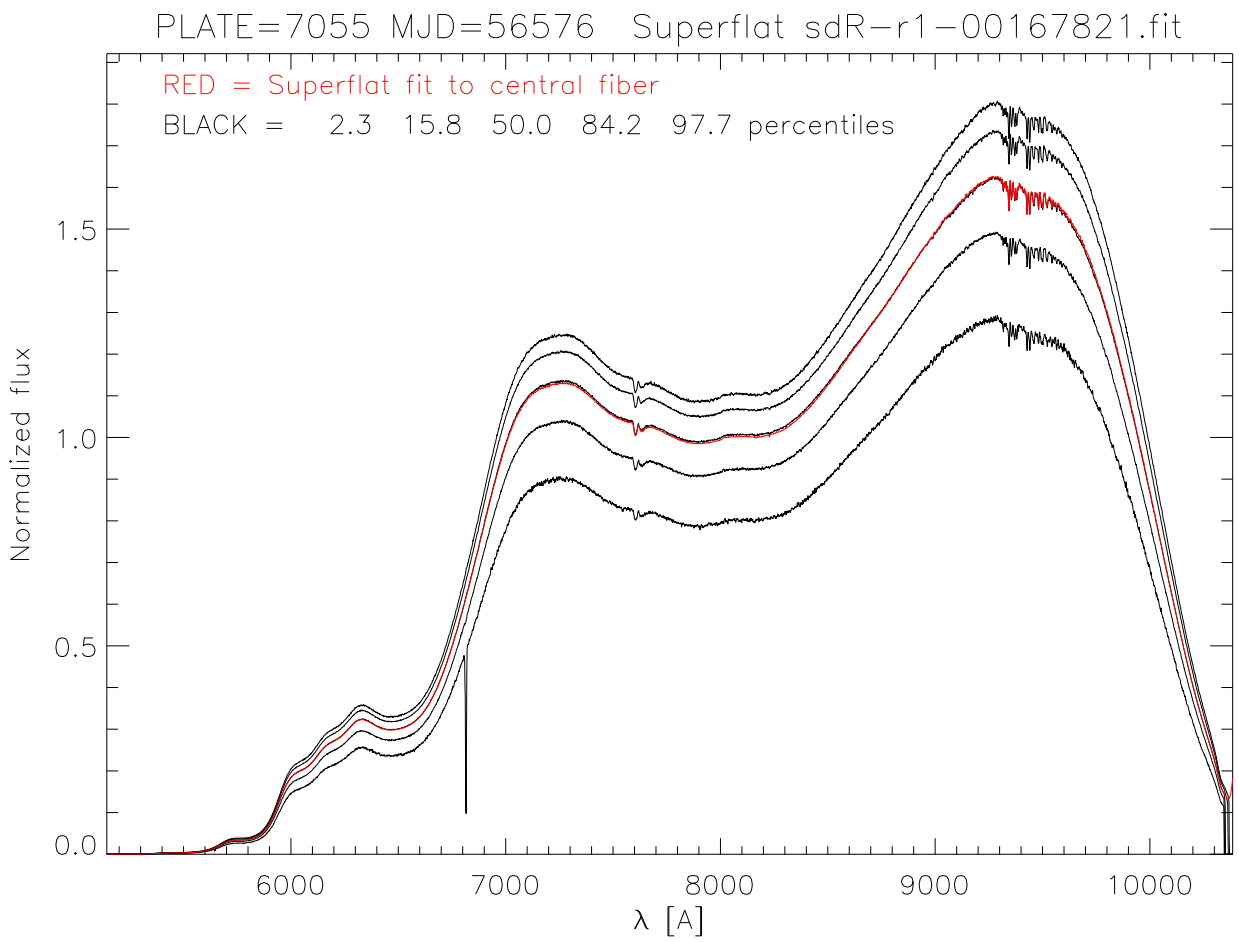


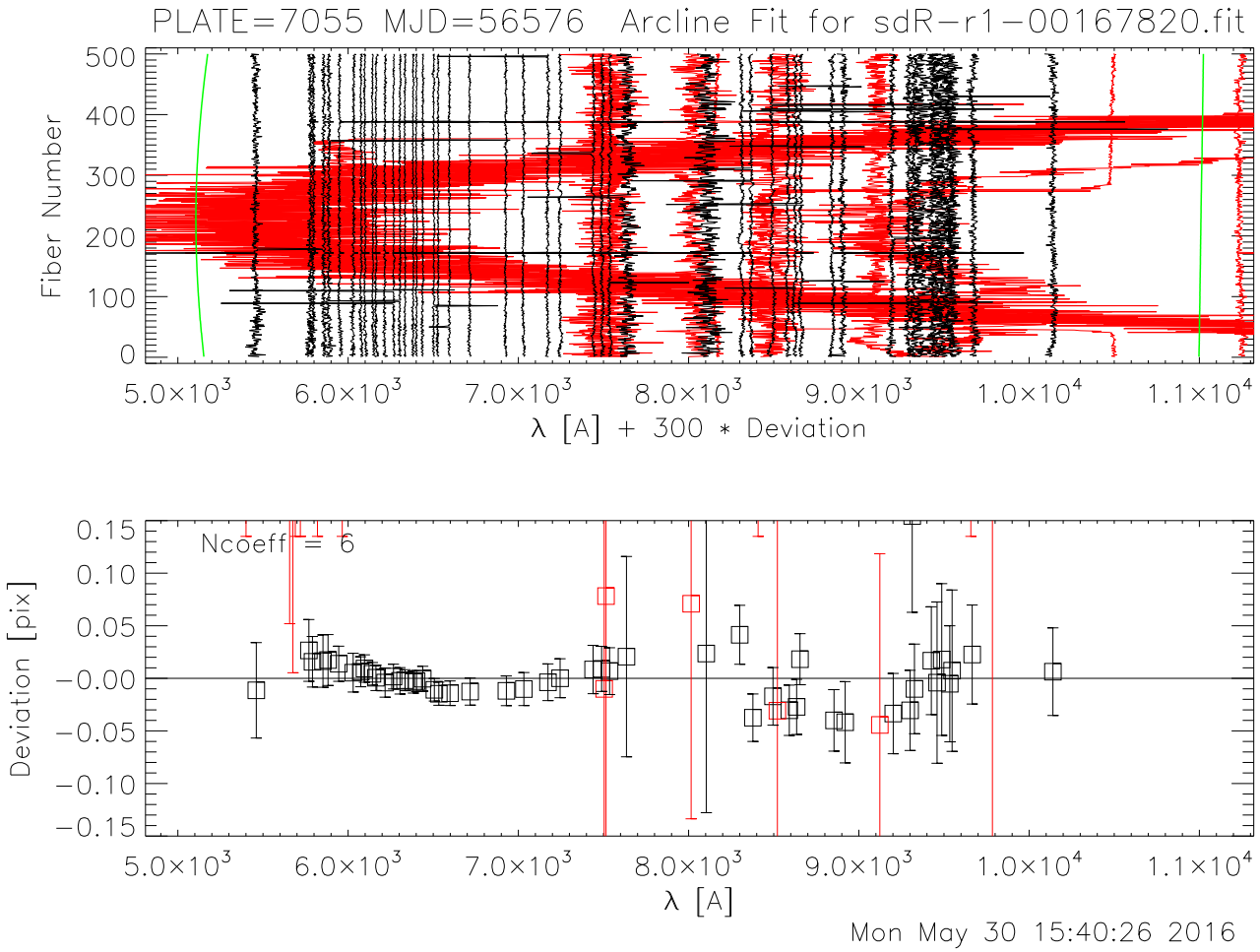

PLATE=7055 MJD=56576 sdR-b2-00167826.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
Fiber number
RED = sky fiber
Dispersion = 11.57 %
Flux (4359.5)/Airmass
Focal Distance [mm]
Flux (4359.5)/Airmass
Airmass


PLATE=7055 MJD=56576 sdR-b2-00167826.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
Fiber number
RED = sky fiber
Dispersion = 3.67 %
Flux (5578.9)/Airmass
Focal Distance [mm]
Flux (5578.9)/Airmass
Airmass

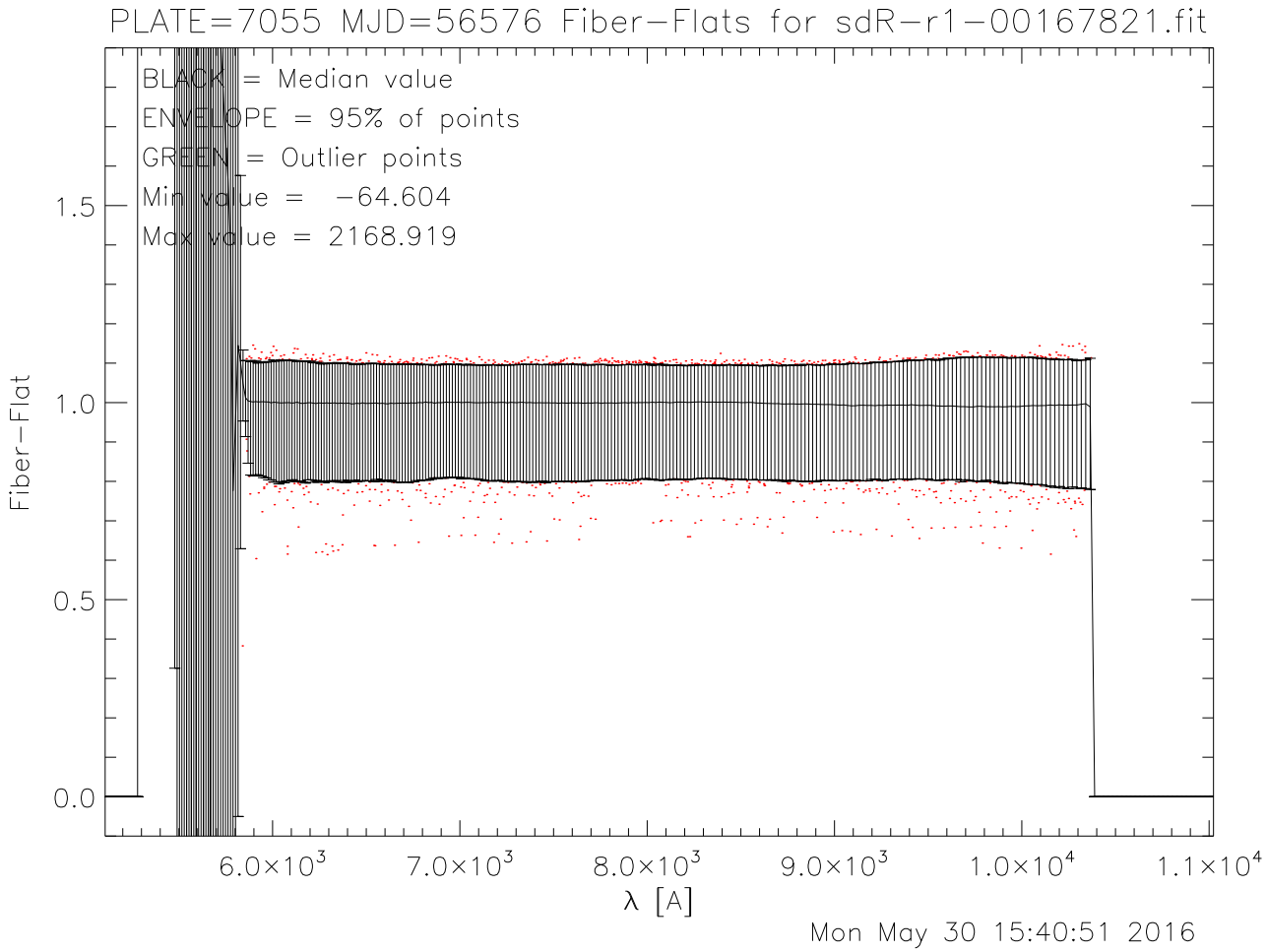

PLATE=7055 MJD=56576 Traces sdR-r1-00167821.fit
172
398

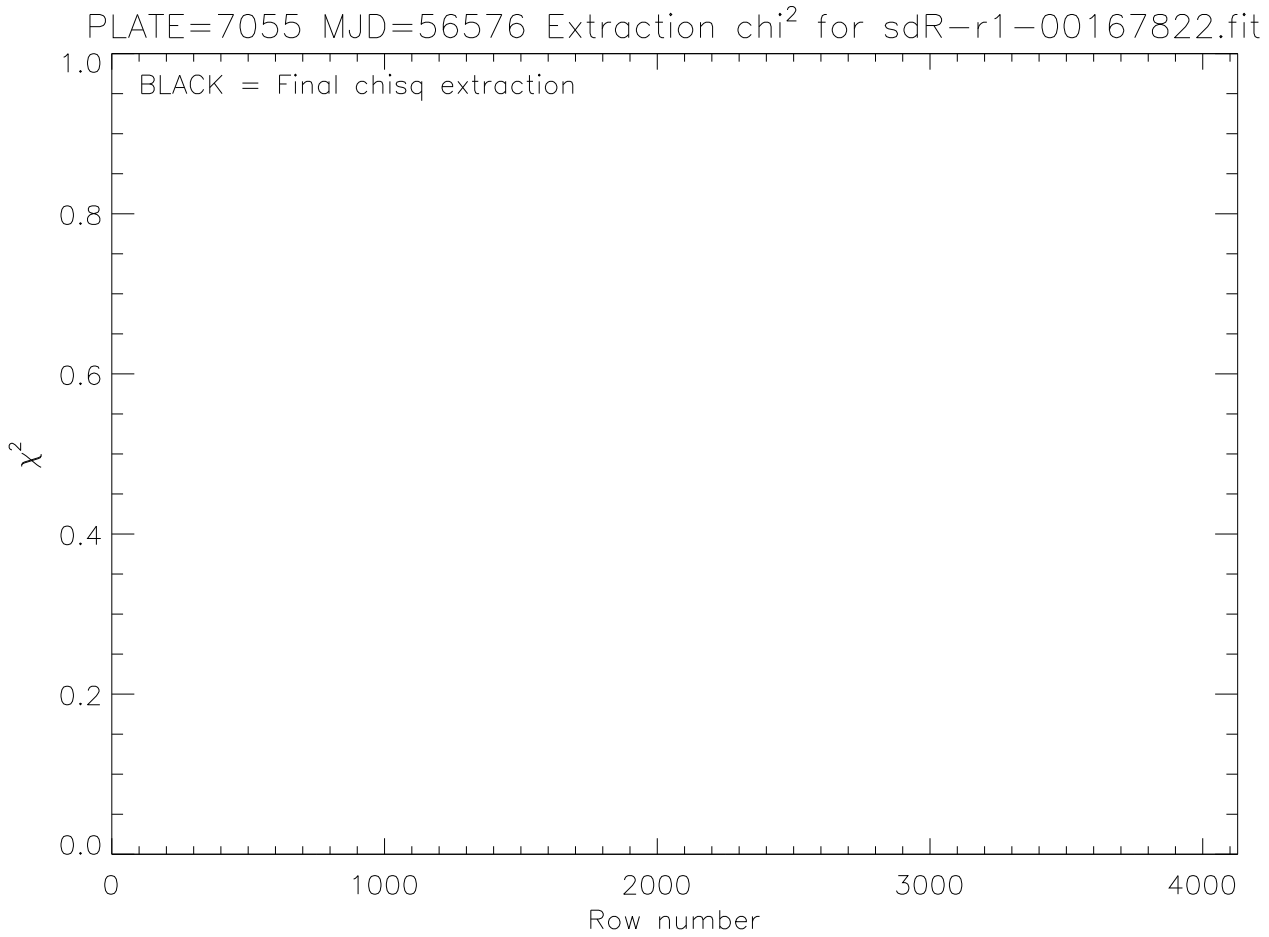

PLATE=7055 MJD=56576 flat extraction chi^2 for sdR−r1−00167821.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

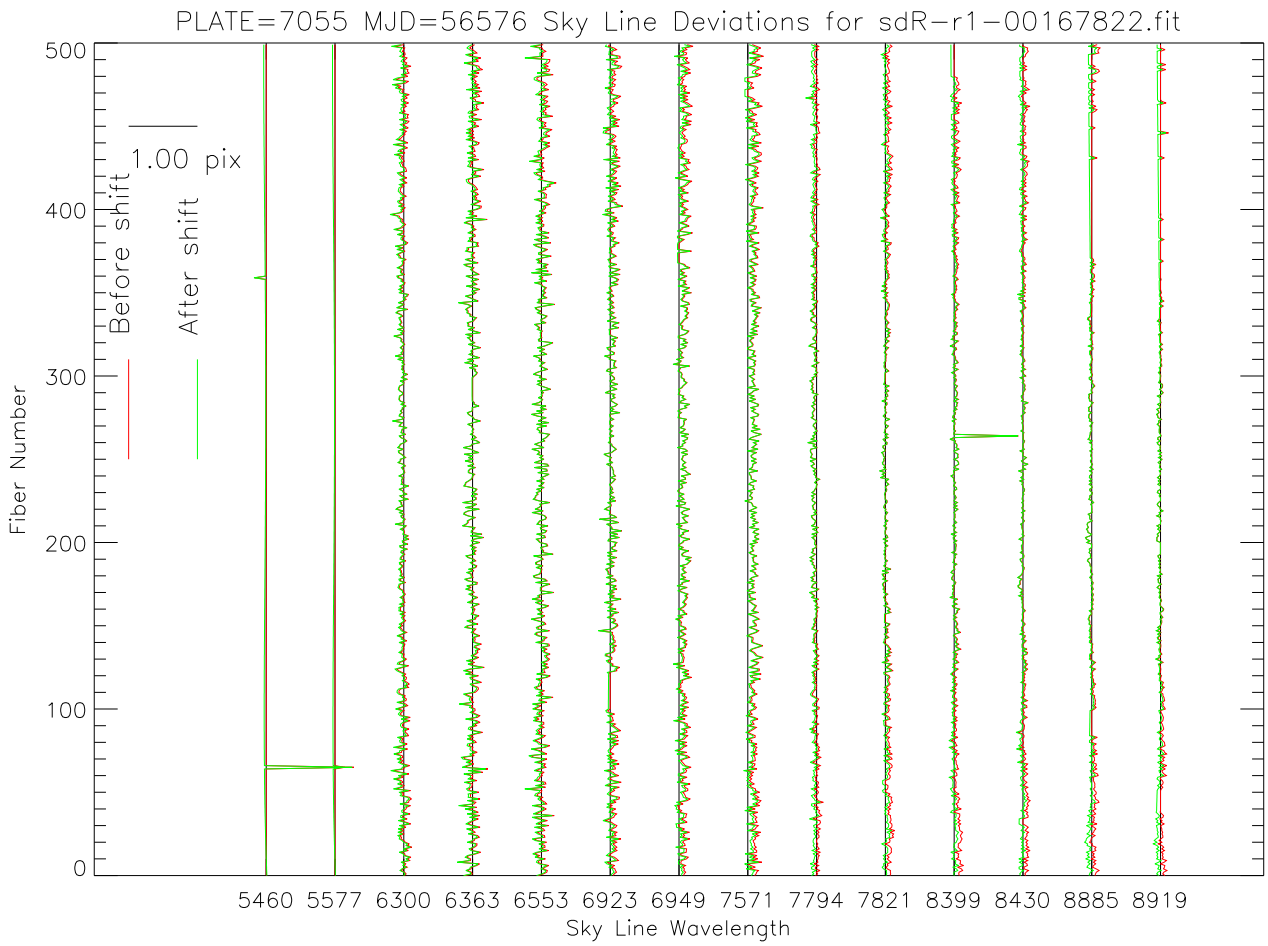

PLATE=7055 MJD=56576 Superflat sdR-r1-00167821.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

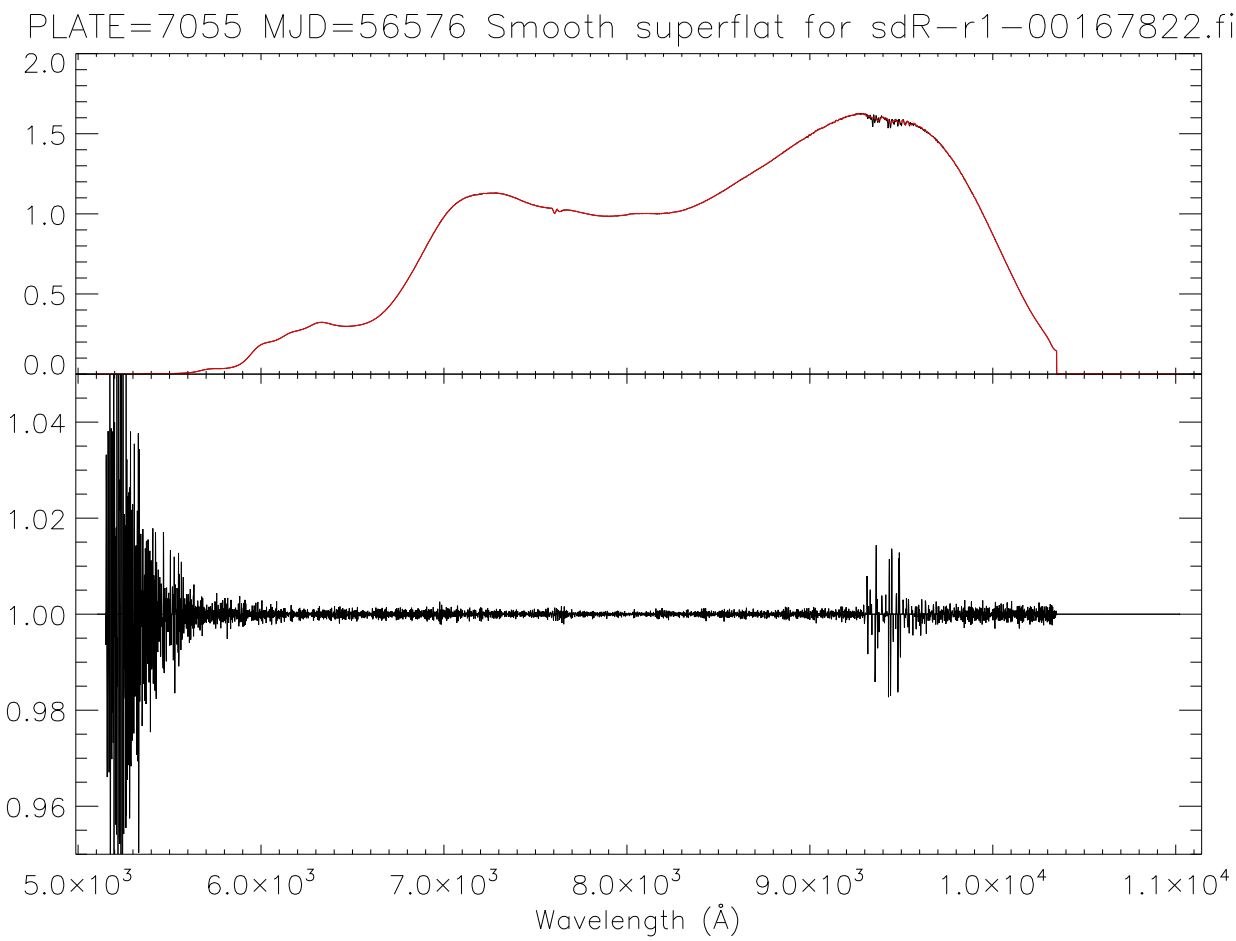

PLATE=7055 MJD=56576 Arcline Fit for sdR-r1-00167820.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation

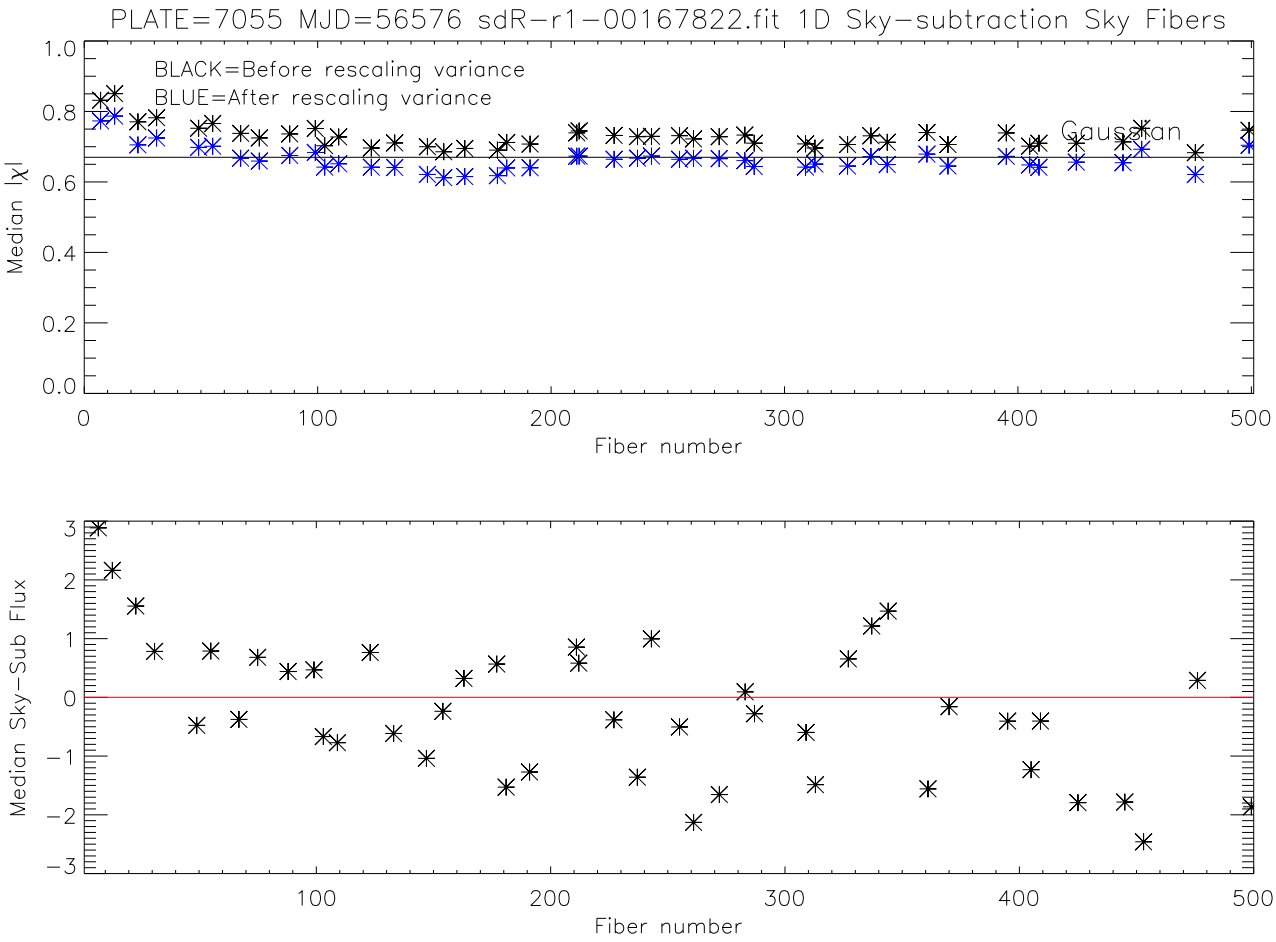
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 15:40:26 2016

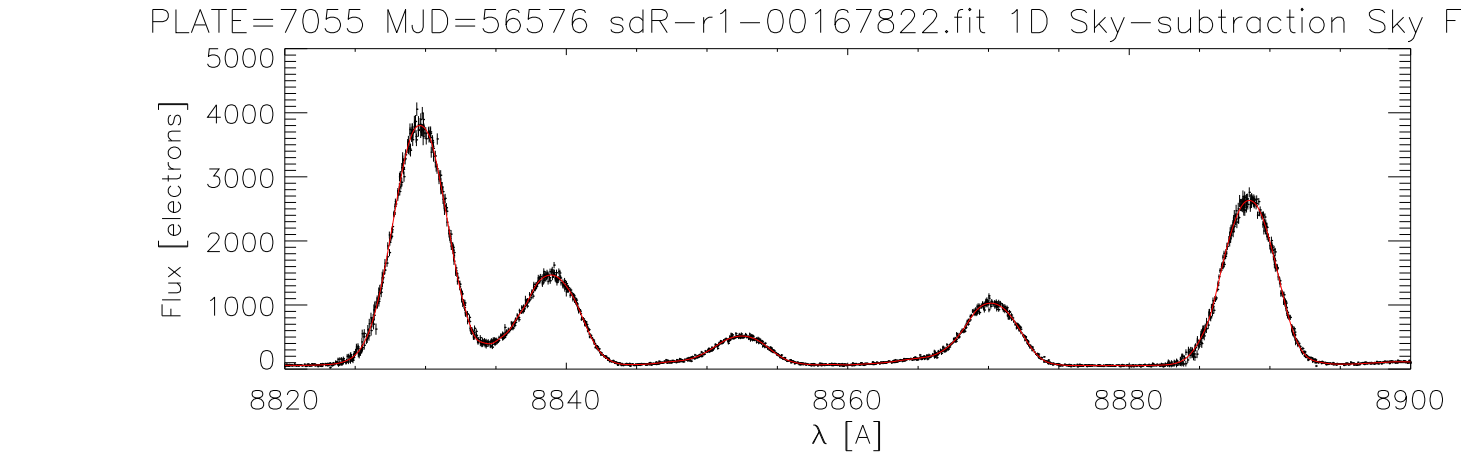

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −64.604
Max value = 2168.919
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 15:40:51 2016

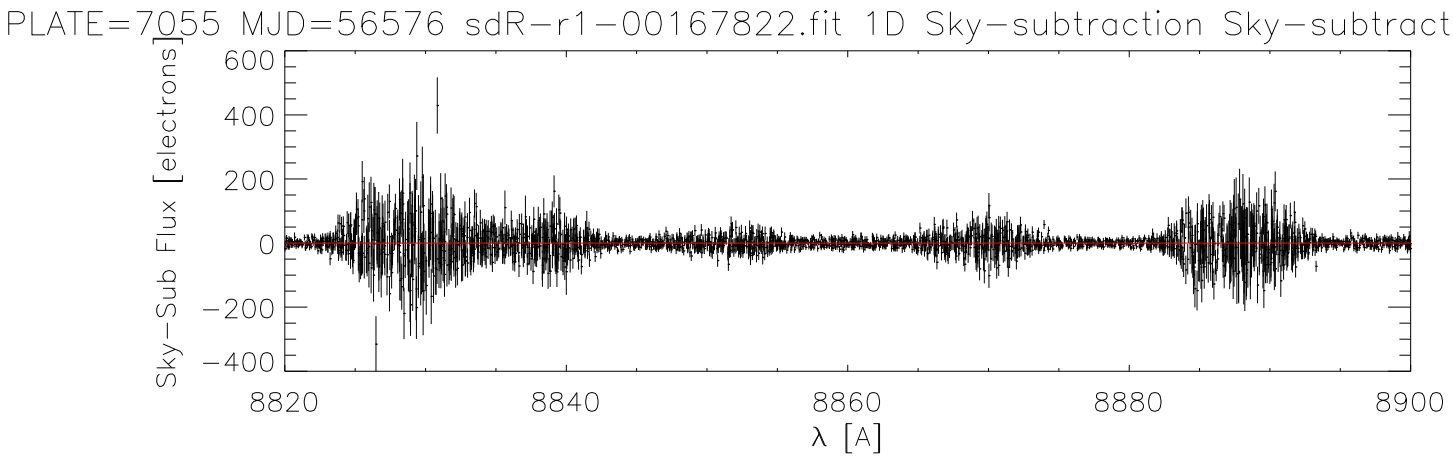

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r1−00167822.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r1-00167822.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

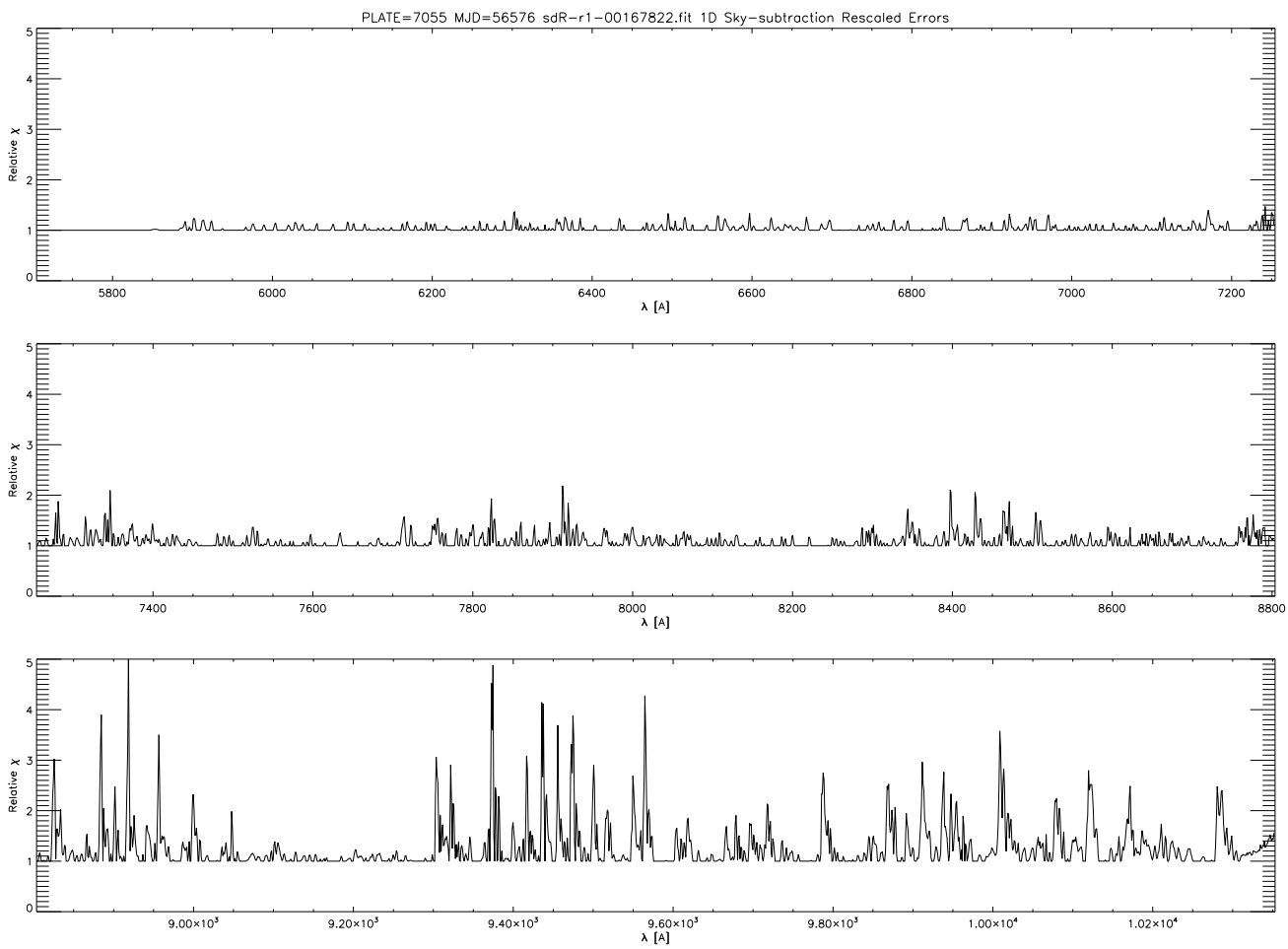

PLATE=7055 MJD=56576 Smooth superflat for sdR-r1-00167822.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

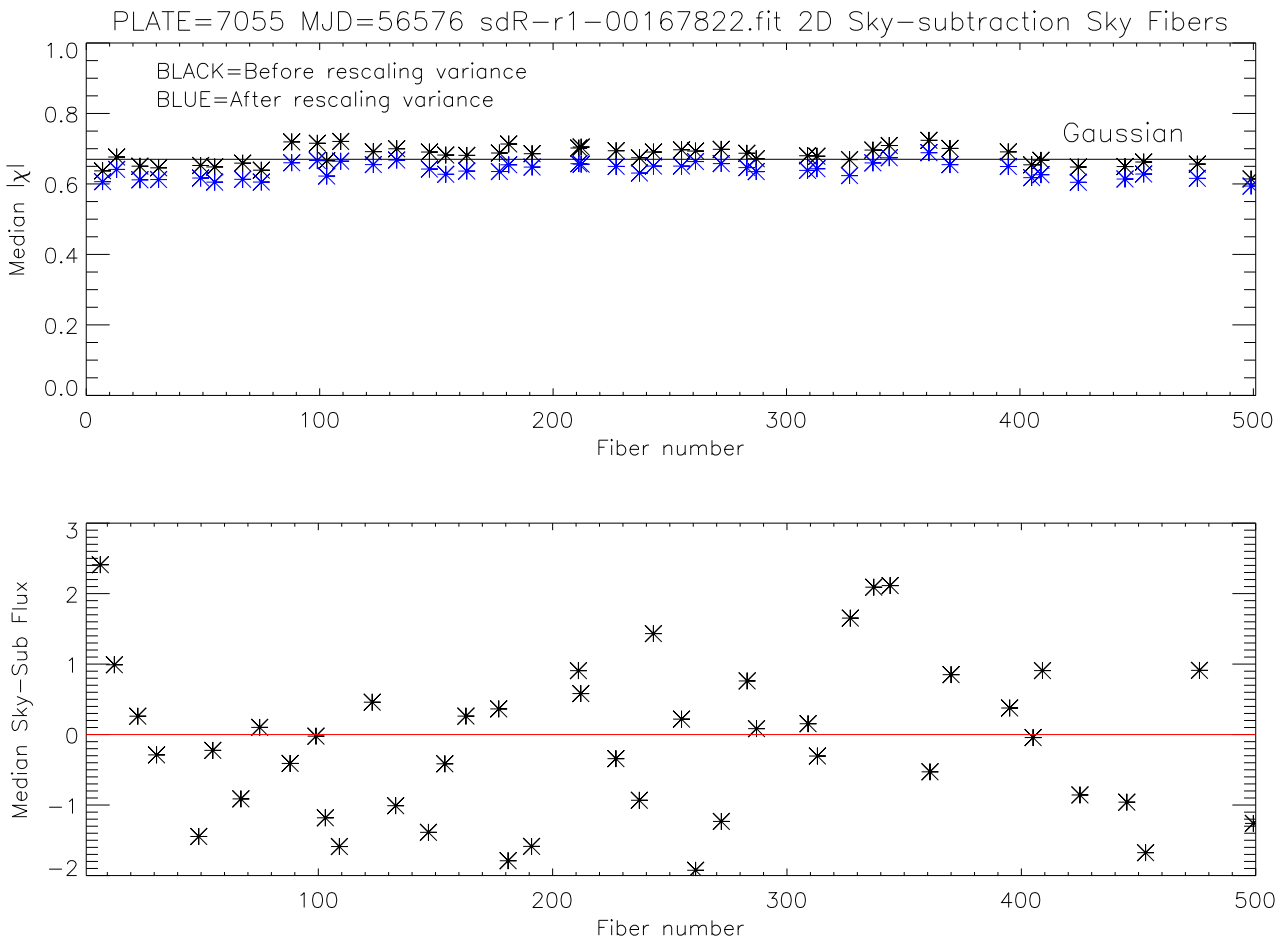

PLATE=7055 MJD=56576 sdR-r1-00167822.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

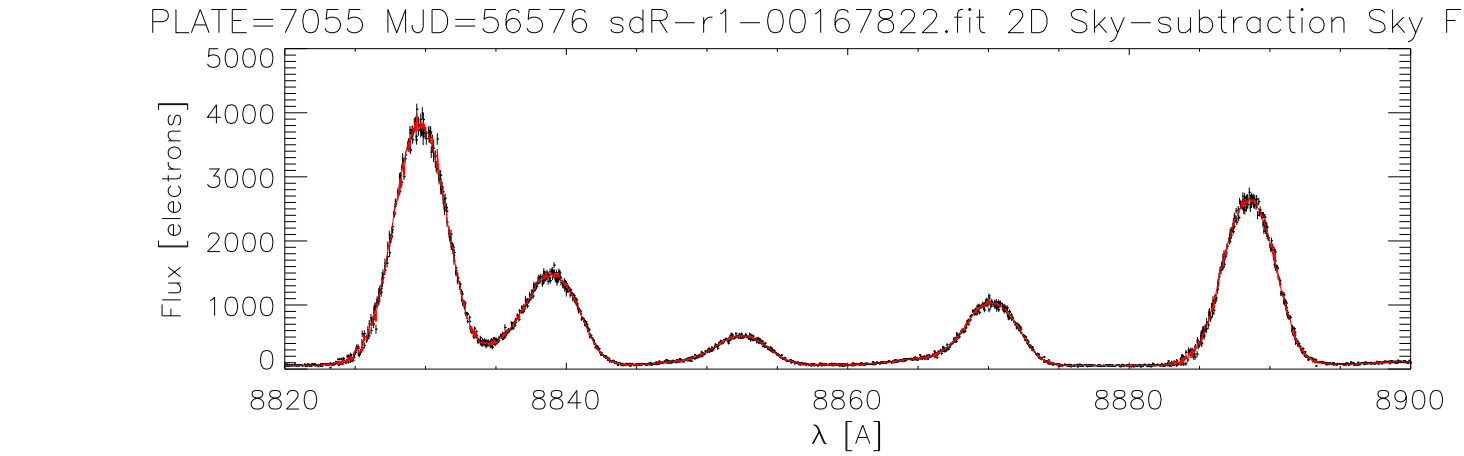

PLATE=7055 MJD=56576 sdR-r1-00167822.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

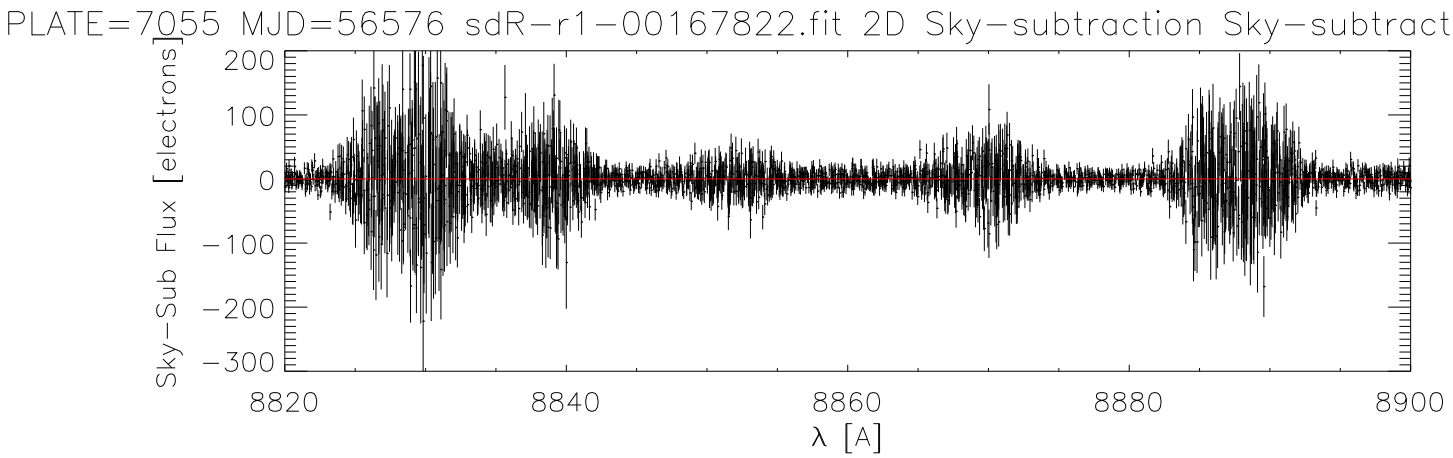

PLATE=7055 MJD=56576 sdR-r1-00167822.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 45

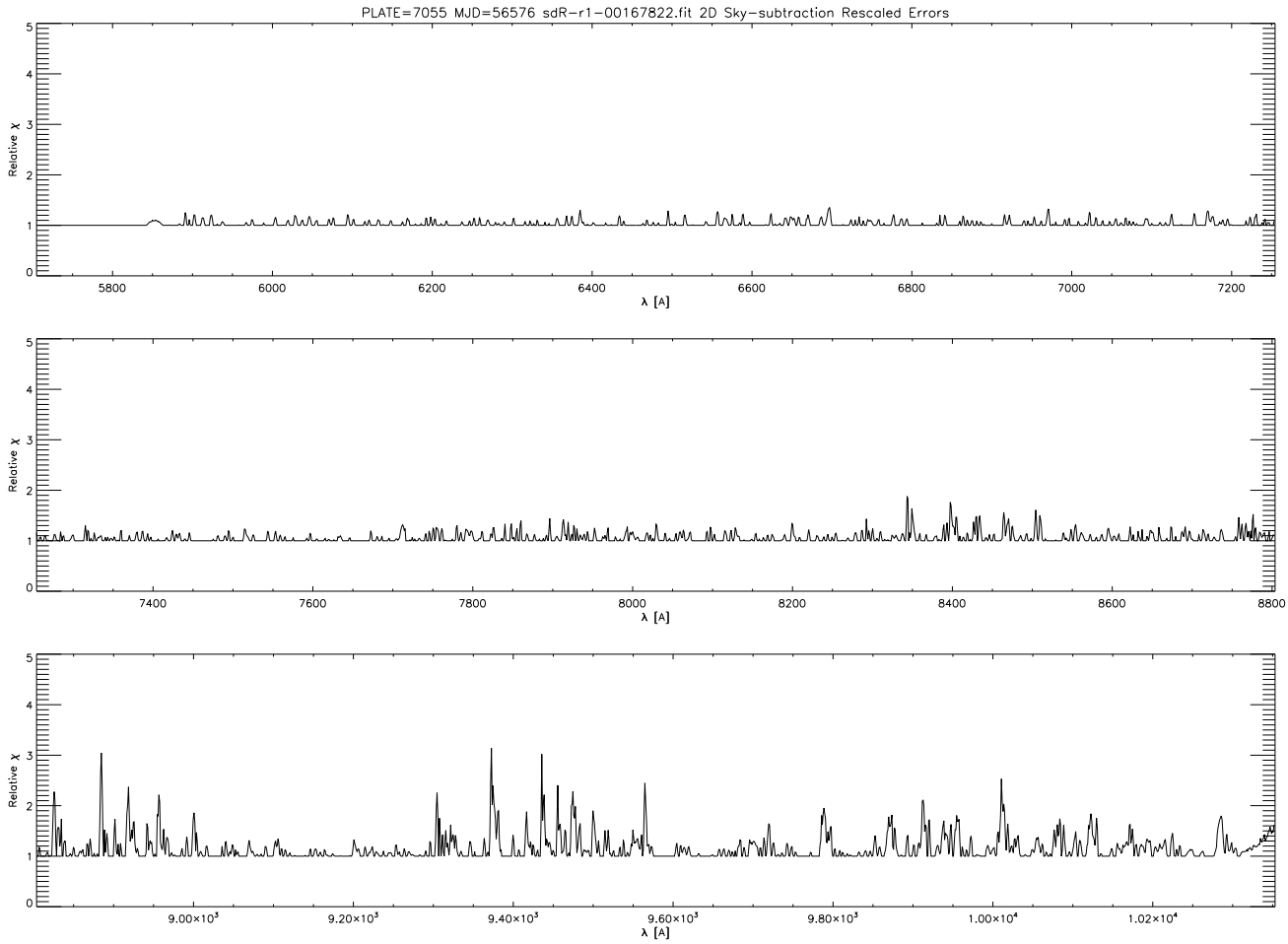


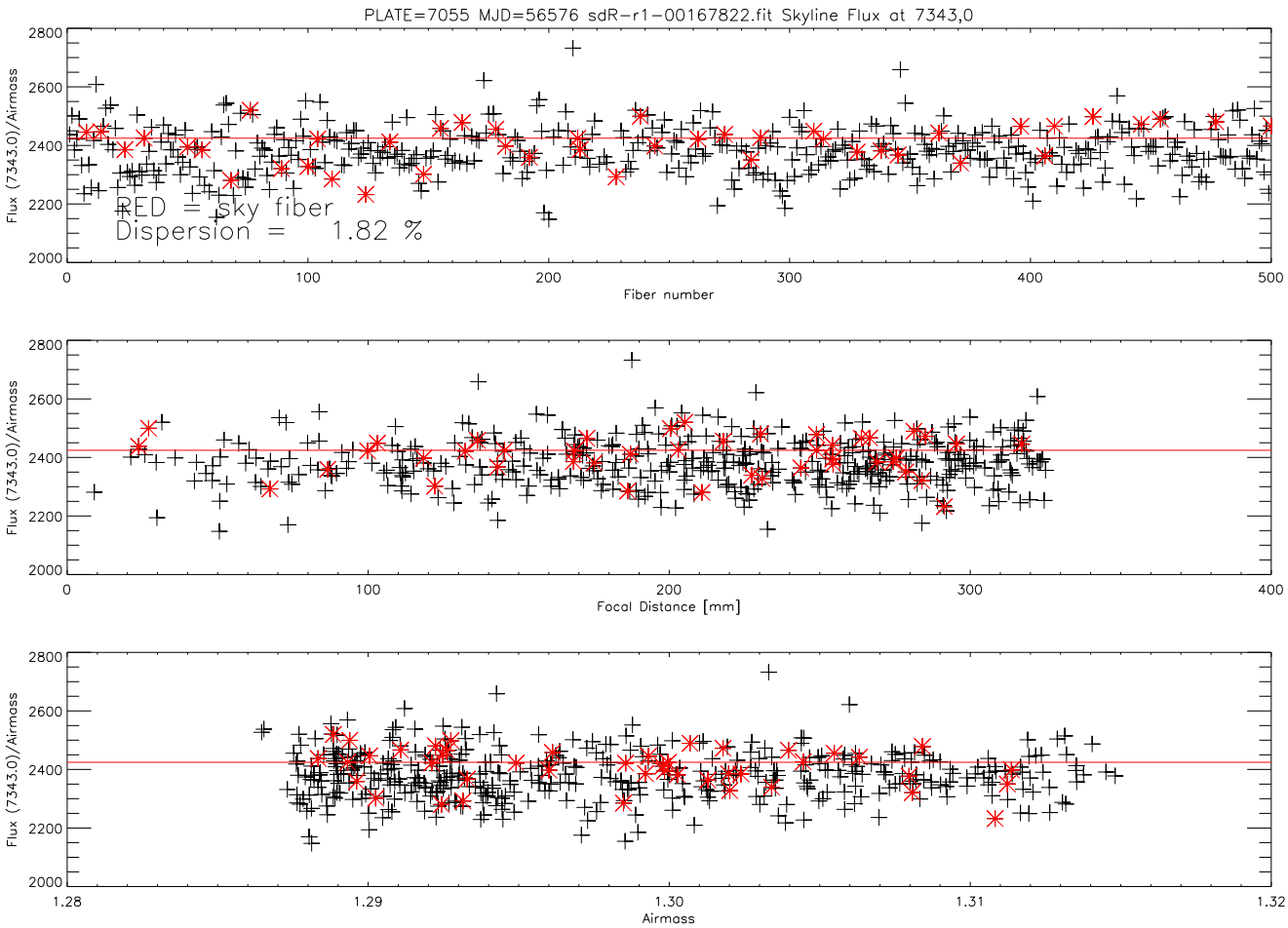

PLATE=7055 MJD=56576 sdR-r1-00167822.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

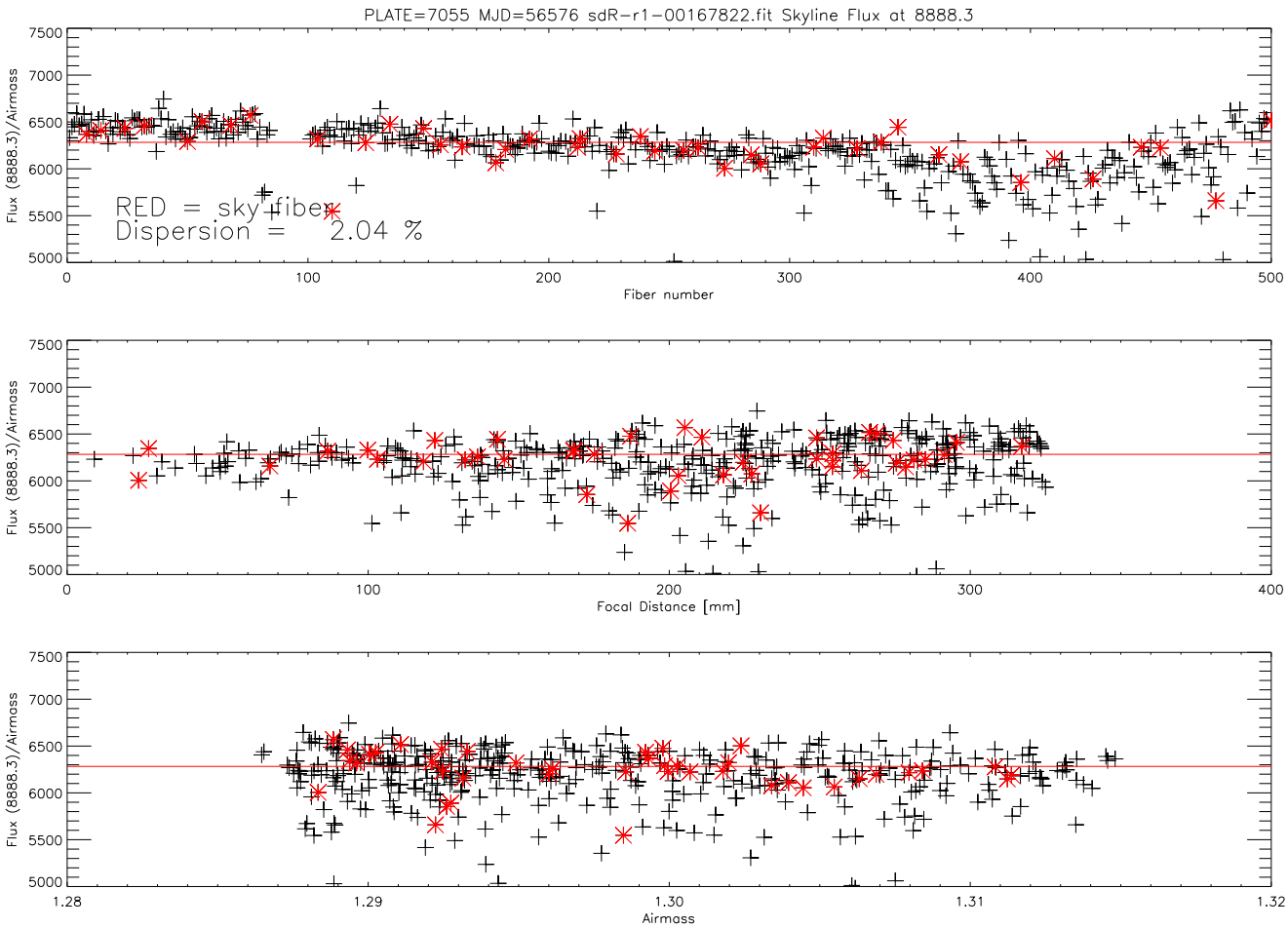

PLATE=7055 MJD=56576 sdR-r1-00167822.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

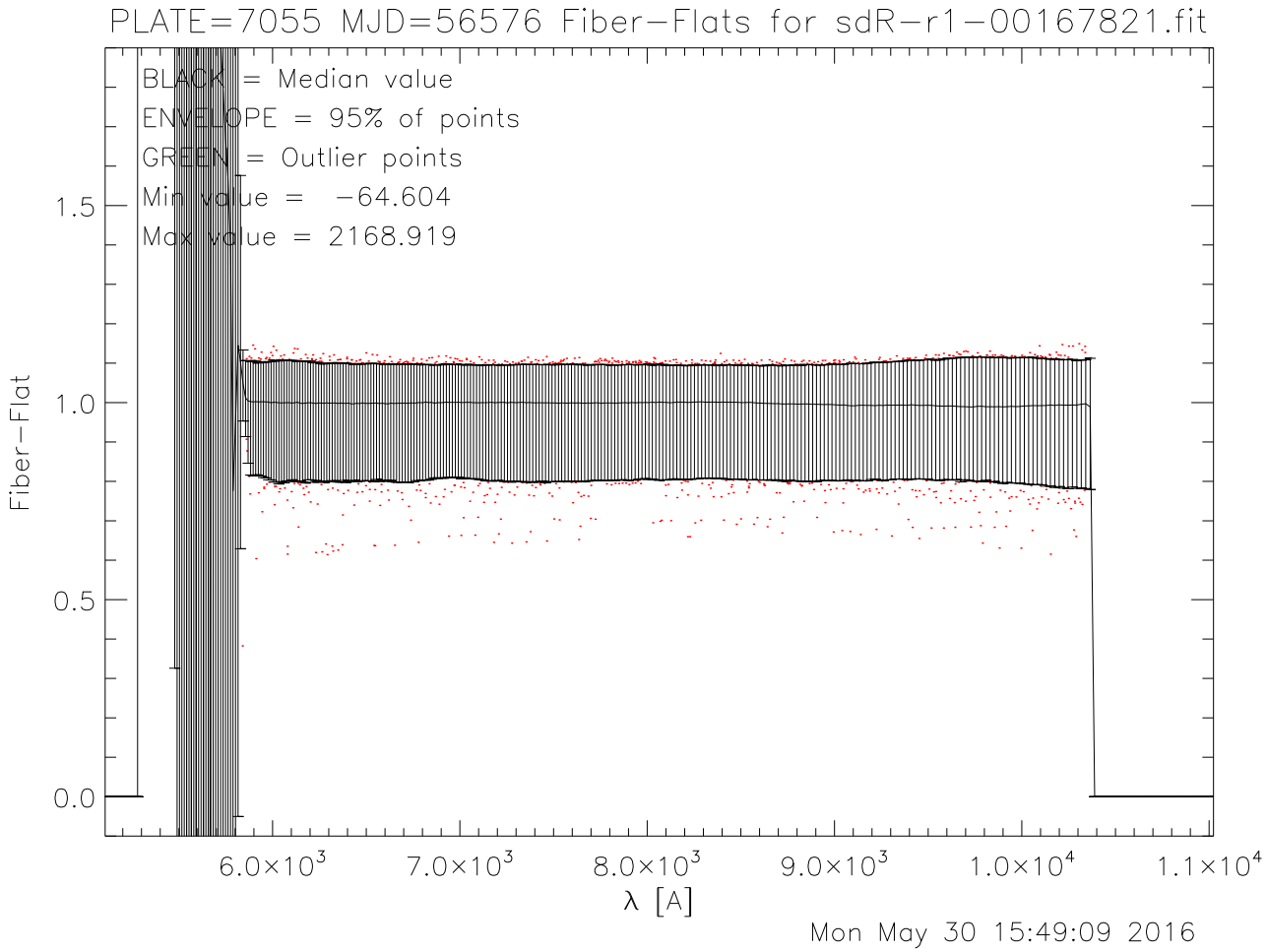

PLATE=7055 MJD=56576 sdR-r1-00167822.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

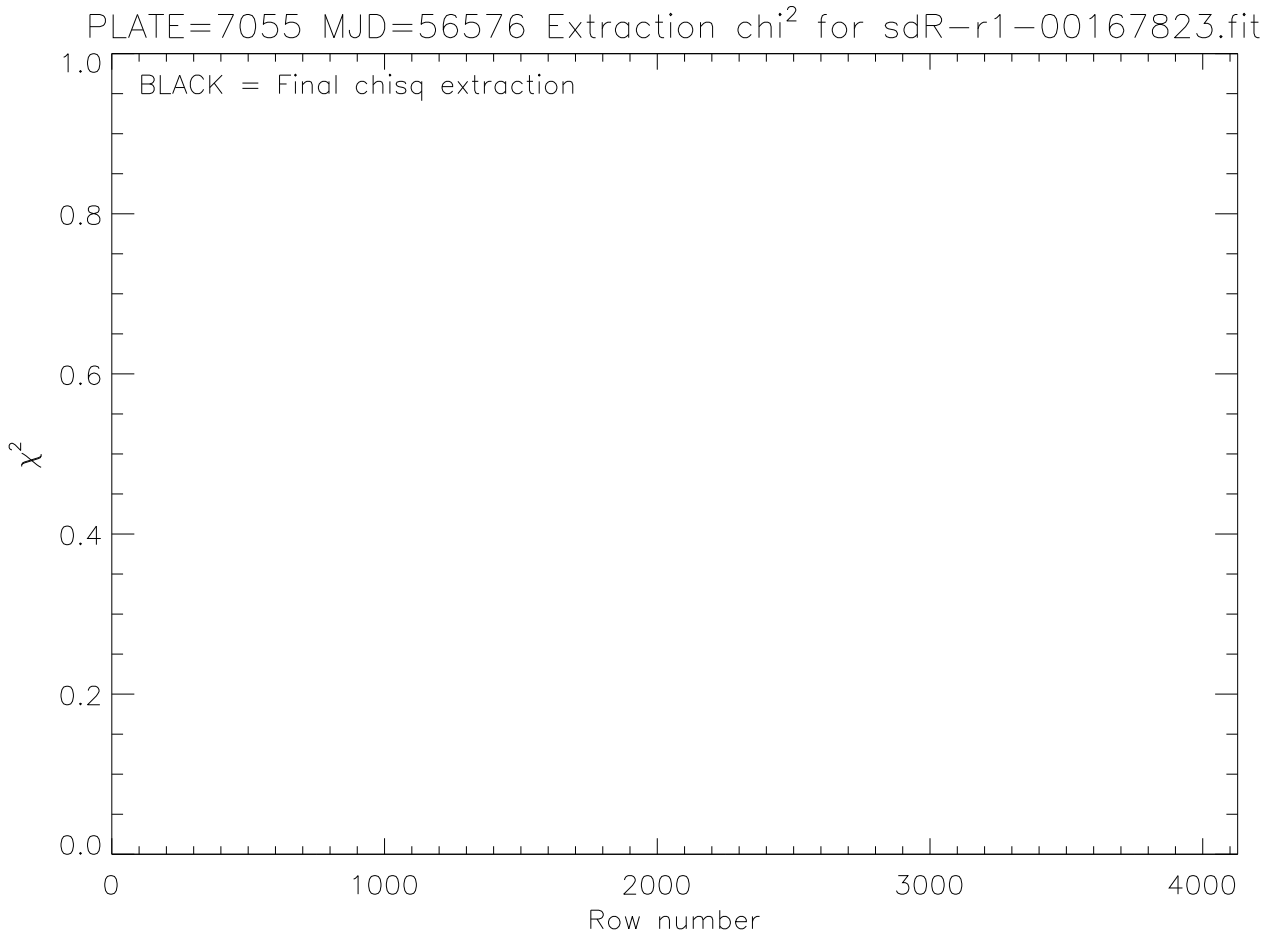
Number of sky fibers = 45

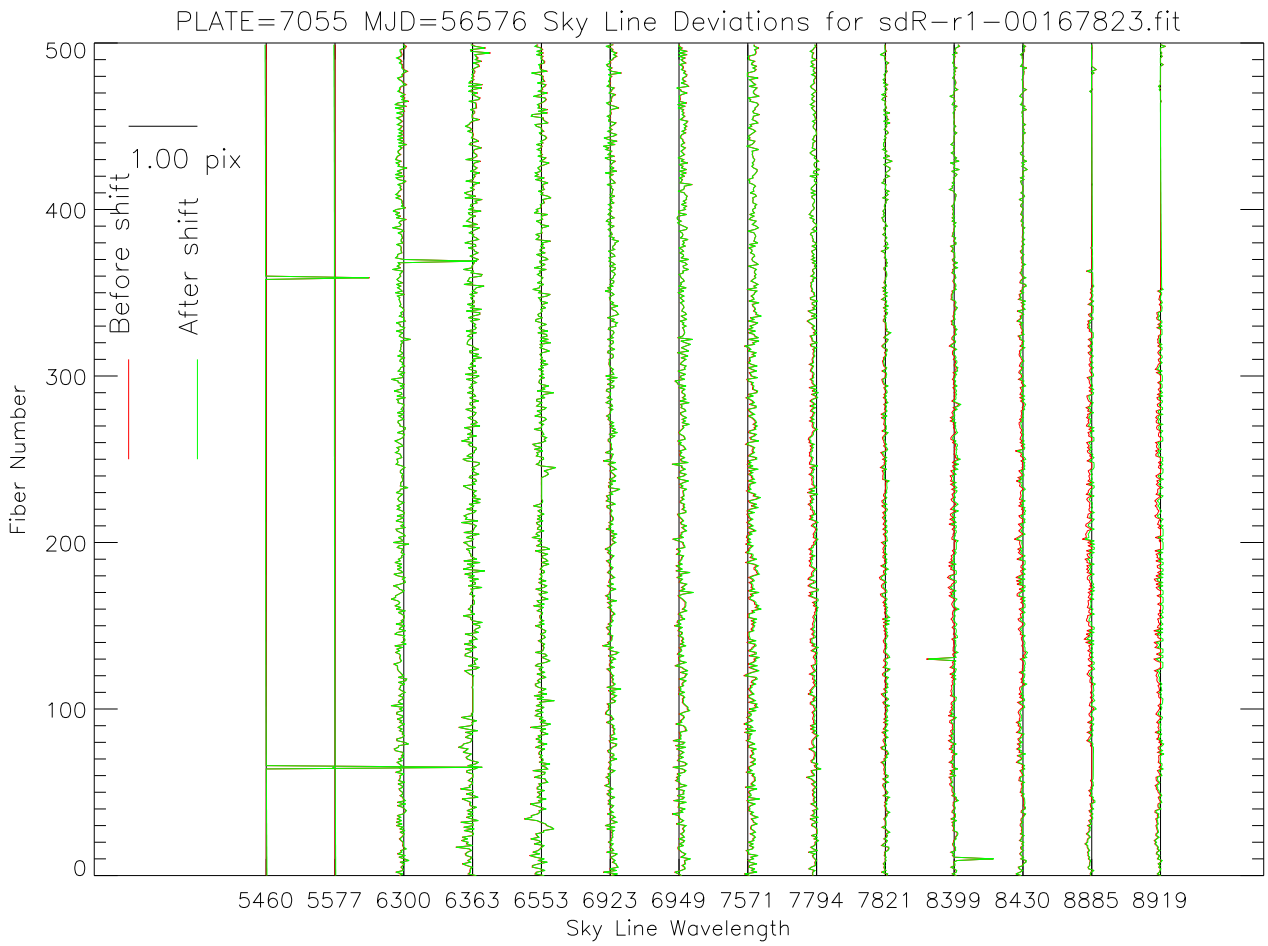


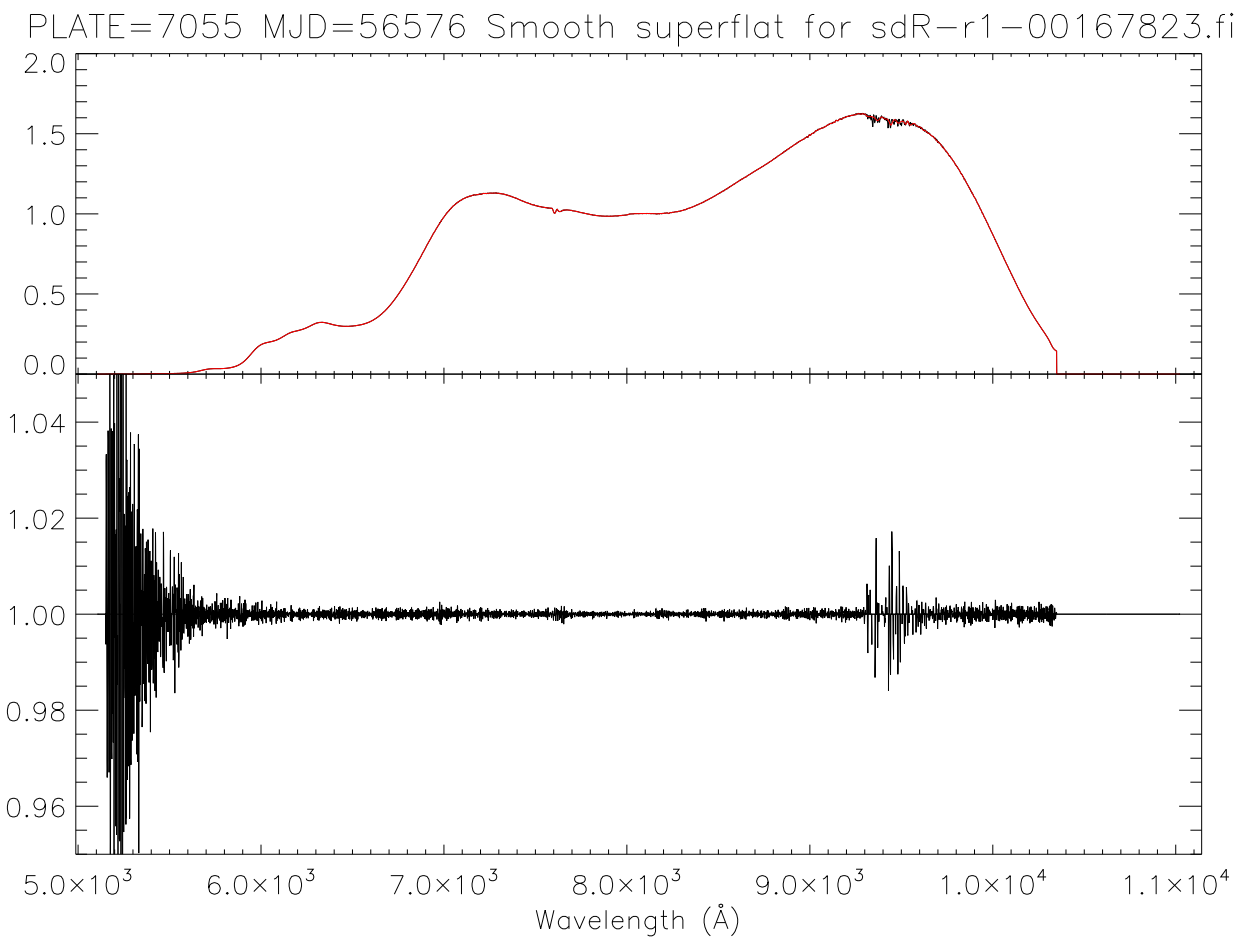

PLATE=7055 MJD=56576 sdR-r1-00167822.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.82 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

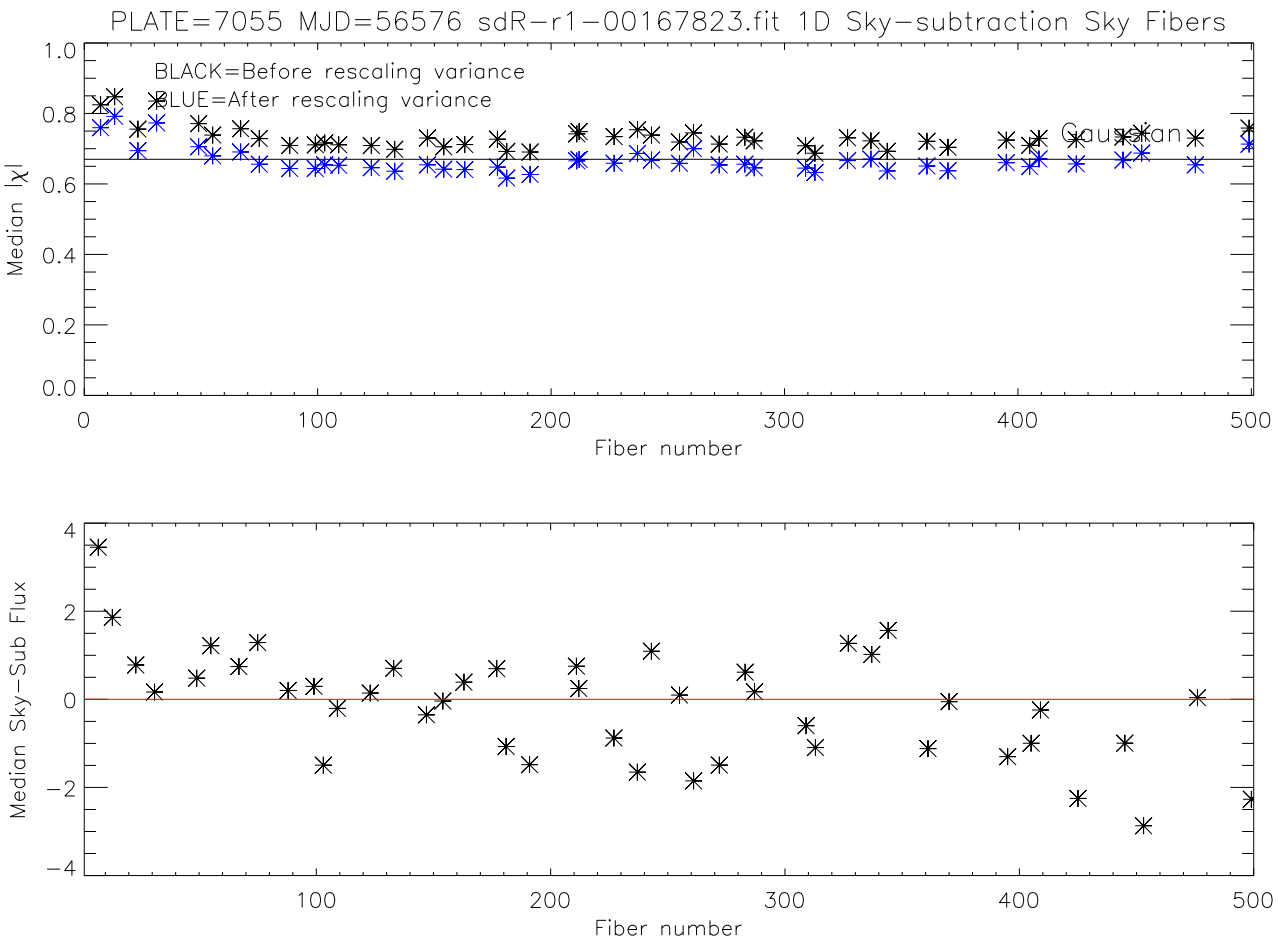

PLATE=7055 MJD=56576 sdR-r1-00167822.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.04 %
Fiber number
Focal Distance [mm]
Airmass

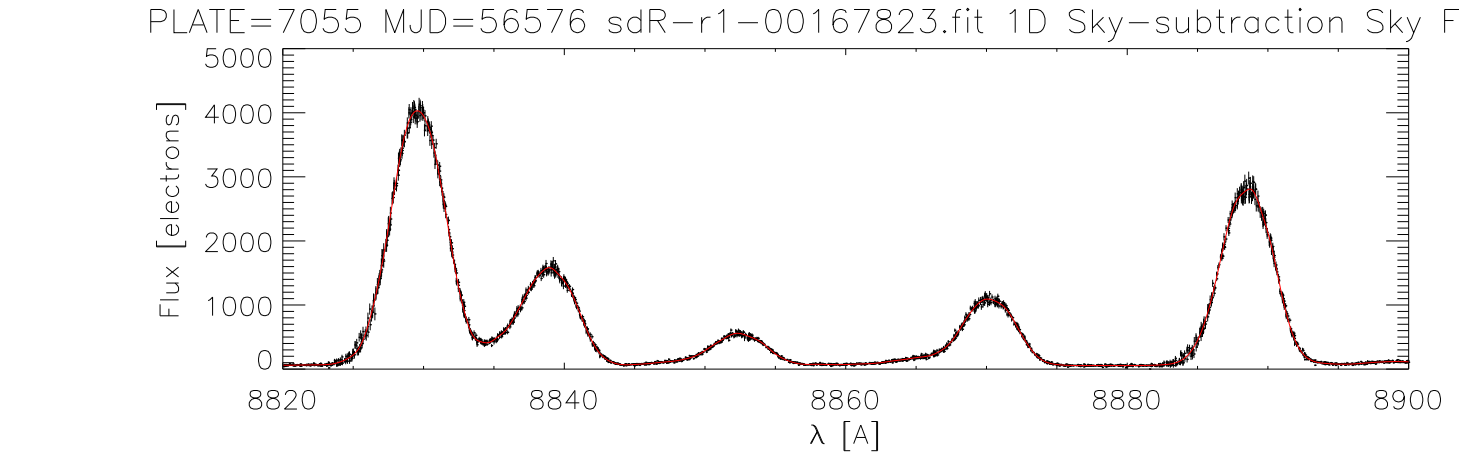

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −64.604
Max value = 2168.919
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 15:49:09 2016

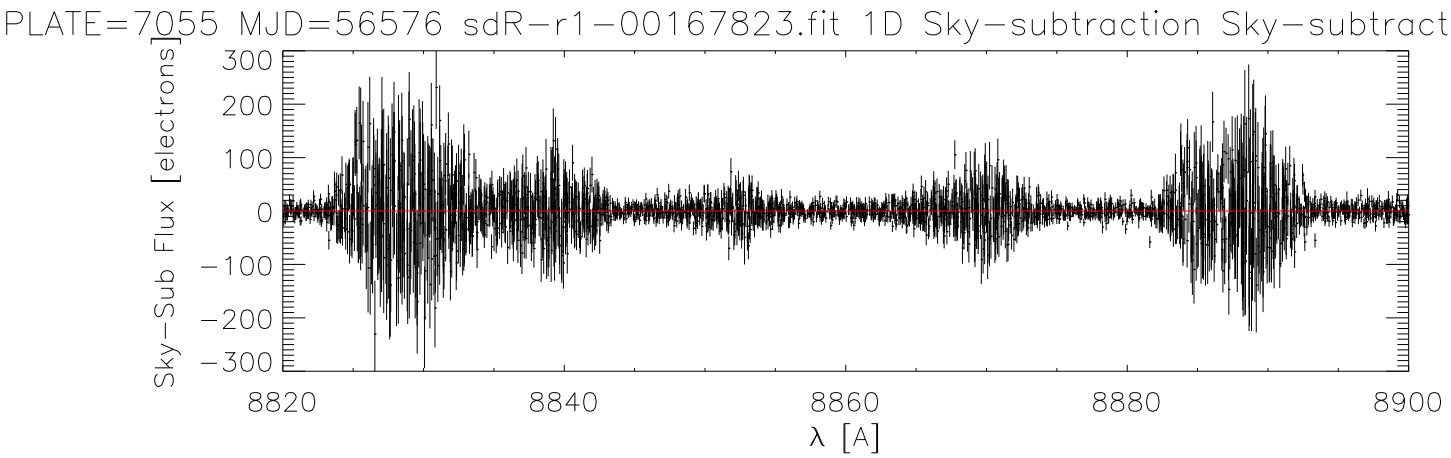

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r1−00167823.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r1-00167823.fit
1.00 pix
Before shift
After shift
Fiber Number
0
100
200
300
400
500
5460 5577 6300 6363 6553 6923 6949 7571 7794 7821 8399 8430 8885 8919
Sky Line Wavelength

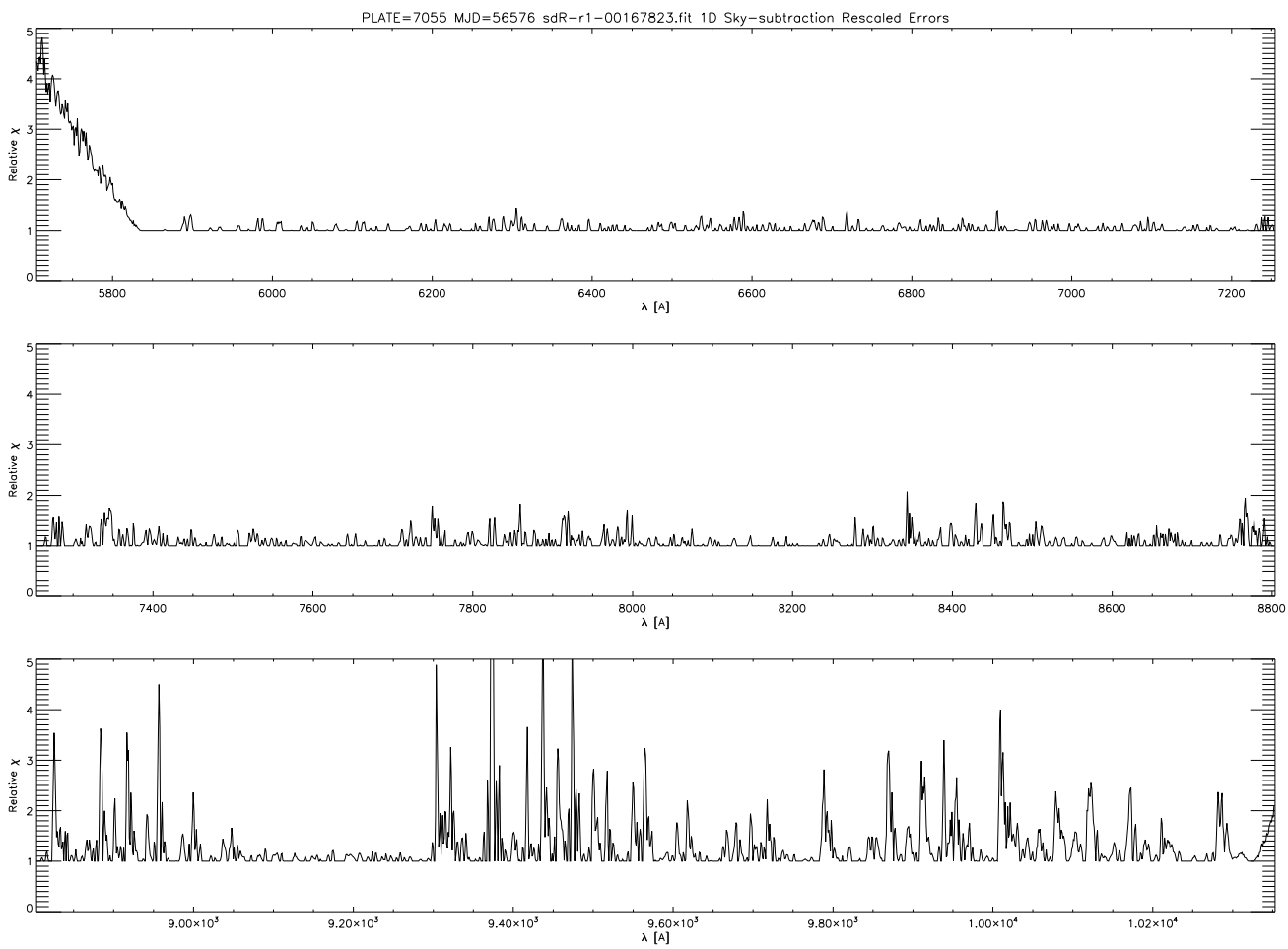

PLATE=7055 MJD=56576 Smooth superflat for sdR-r1-00167823.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

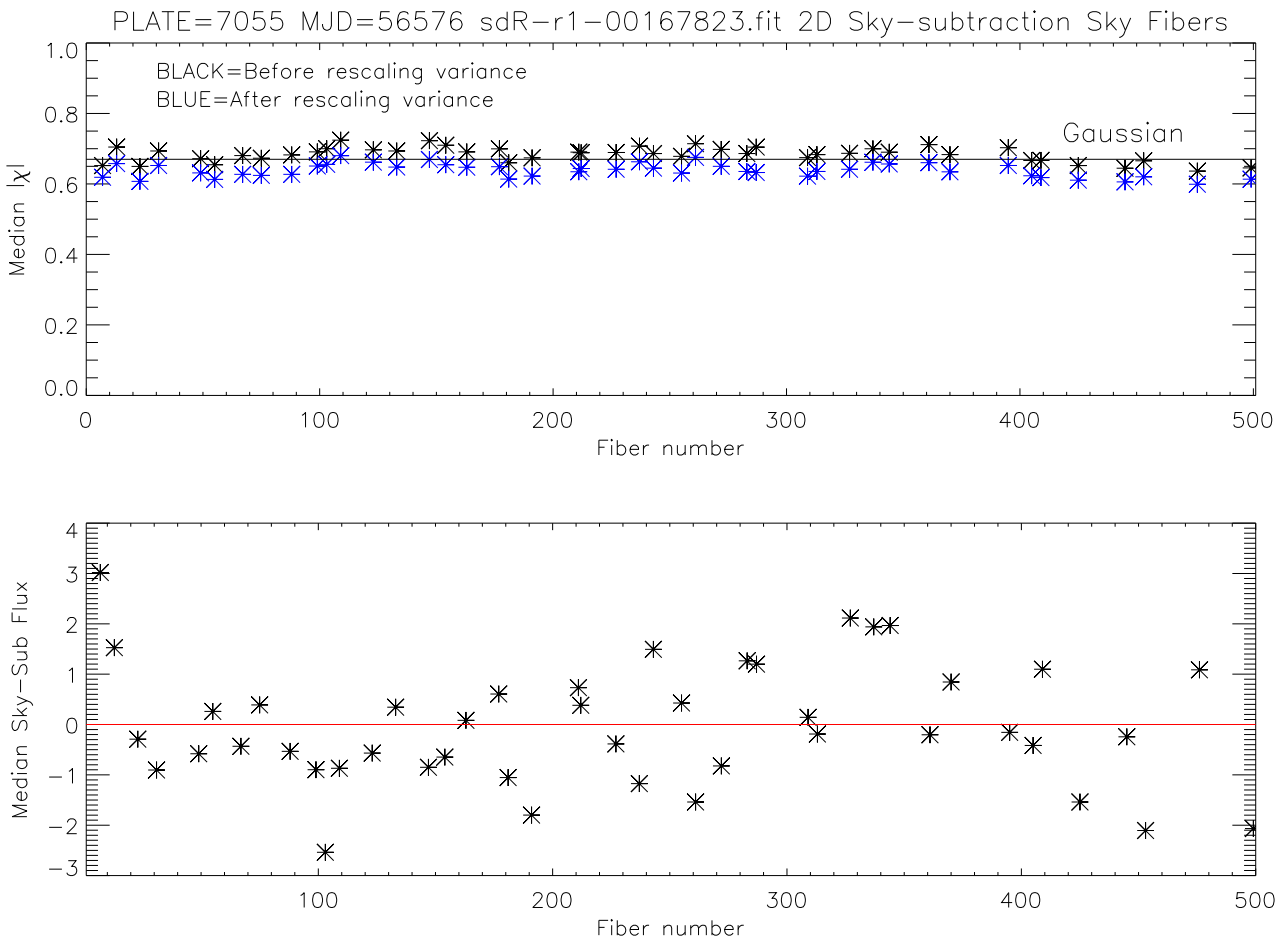

PLATE=7055 MJD=56576 sdR-r1-00167823.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

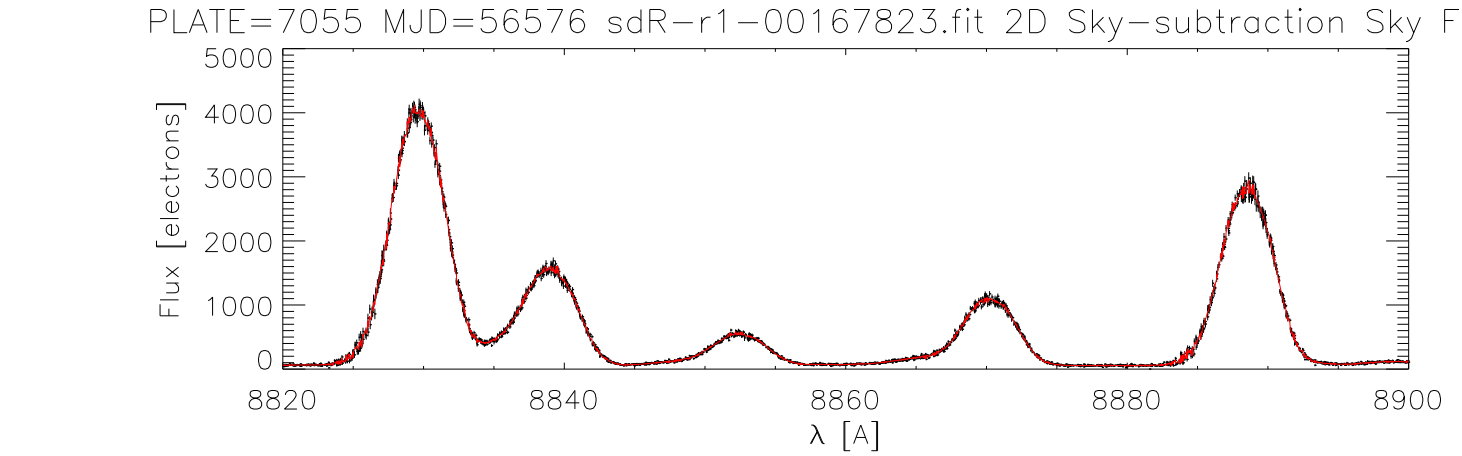

PLATE=7055 MJD=56576 sdR-r1-00167823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

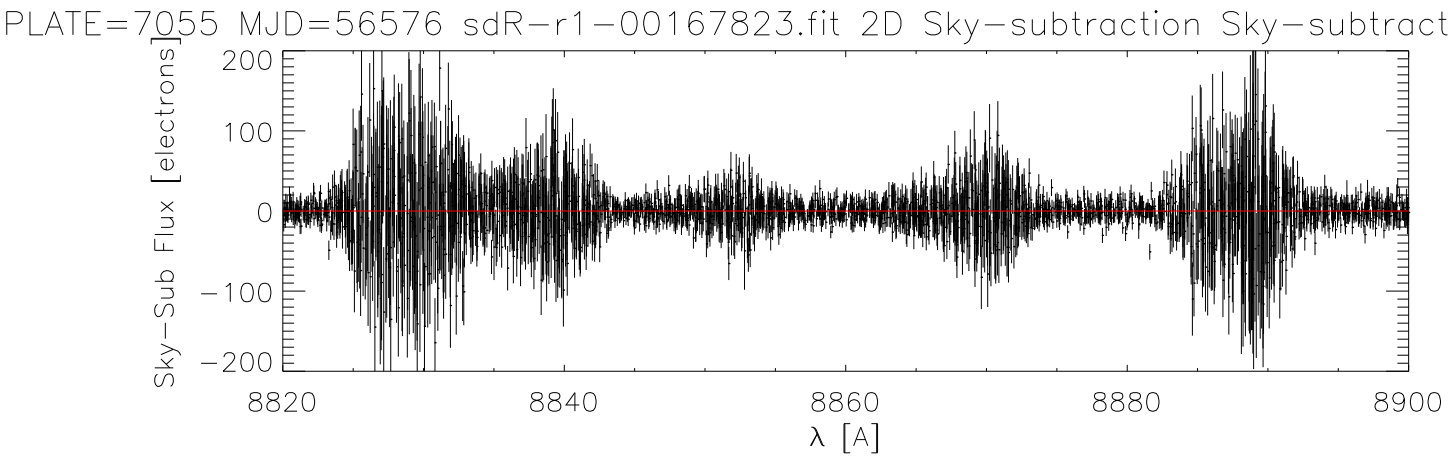

PLATE=7055 MJD=56576 sdR-r1-00167823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 45

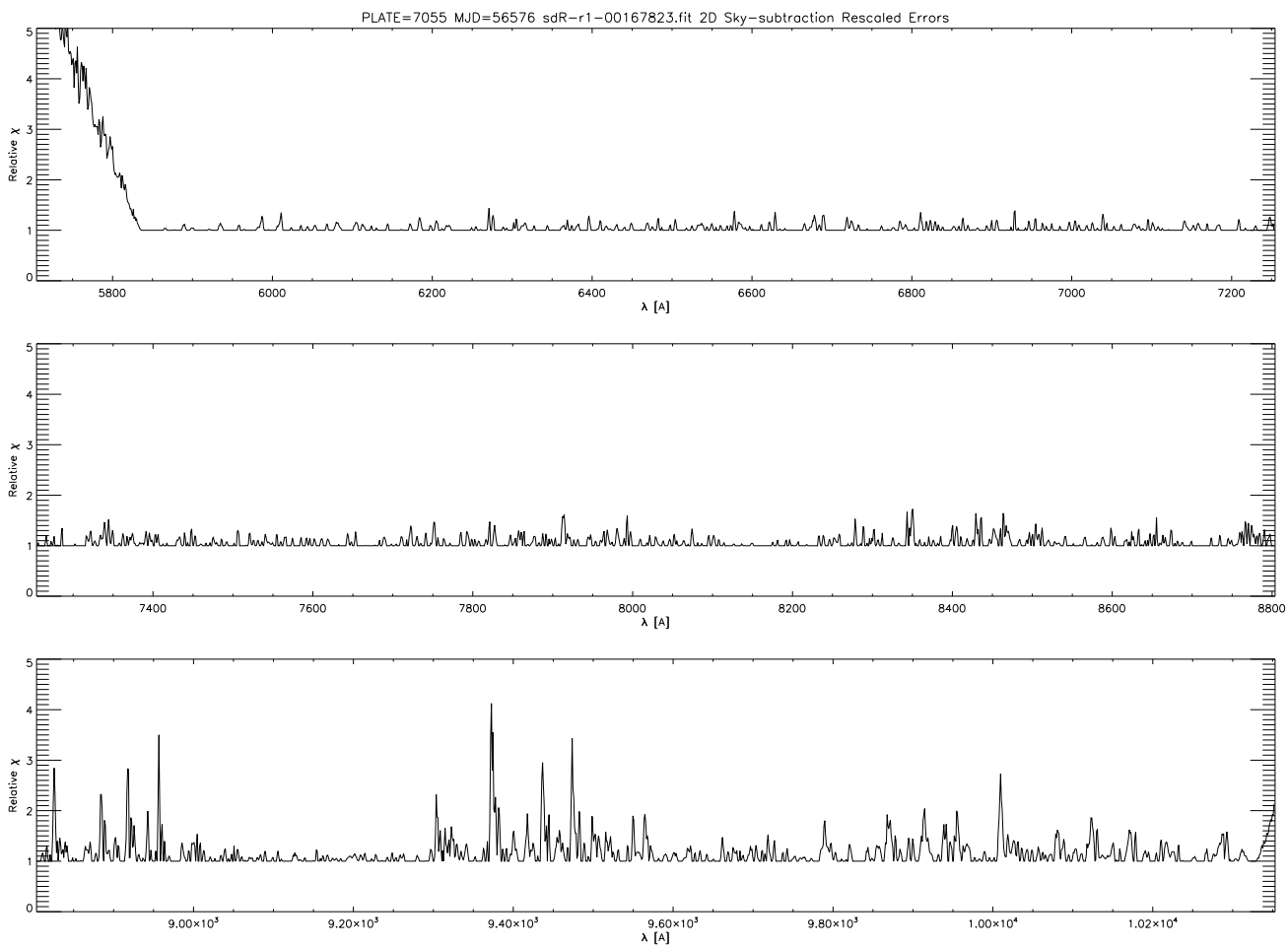


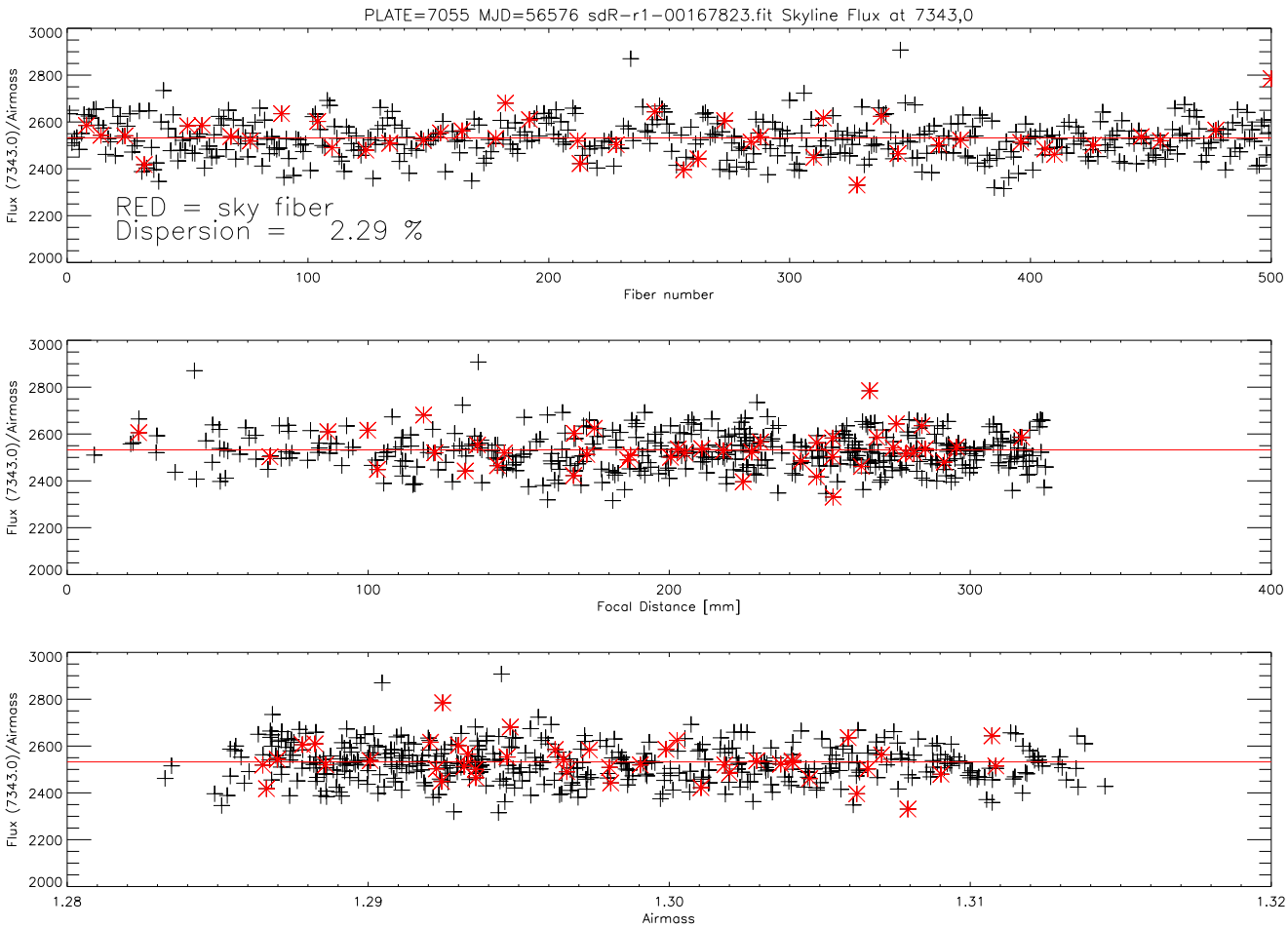

PLATE=7055 MJD=56576 sdR-r1-00167823.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

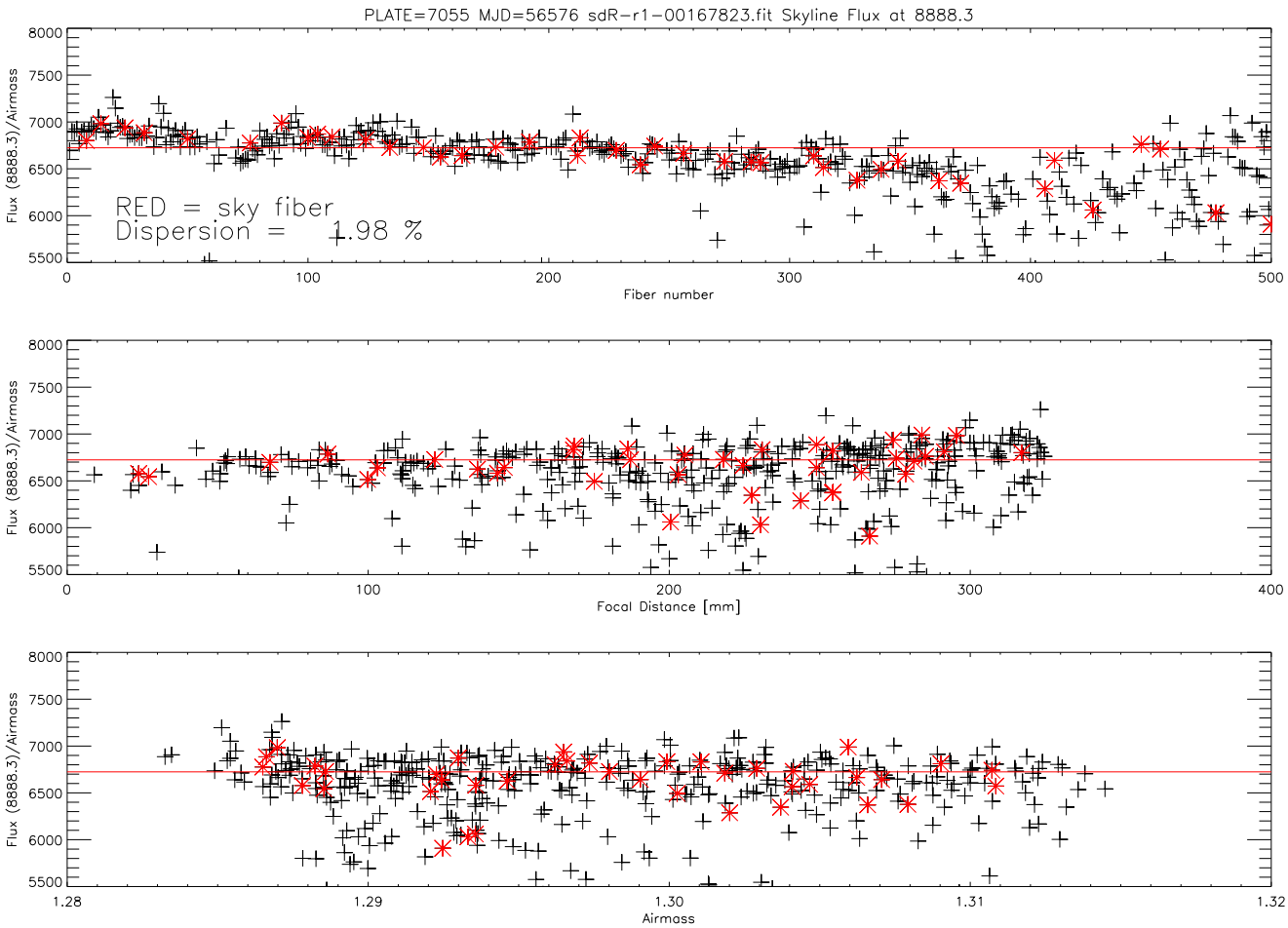

PLATE=7055 MJD=56576 sdR-r1-00167823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

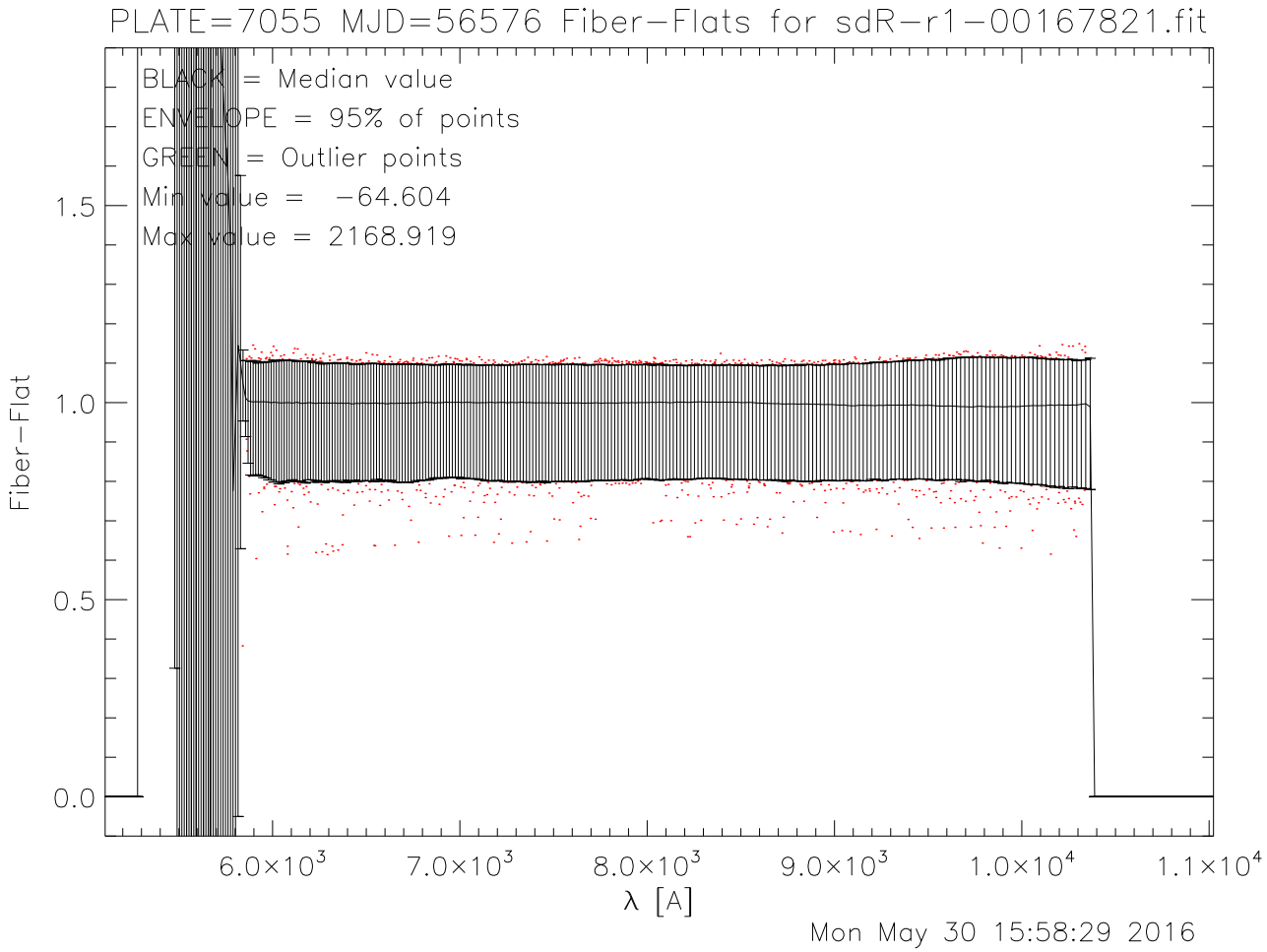

PLATE=7055 MJD=56576 sdR-r1-00167823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

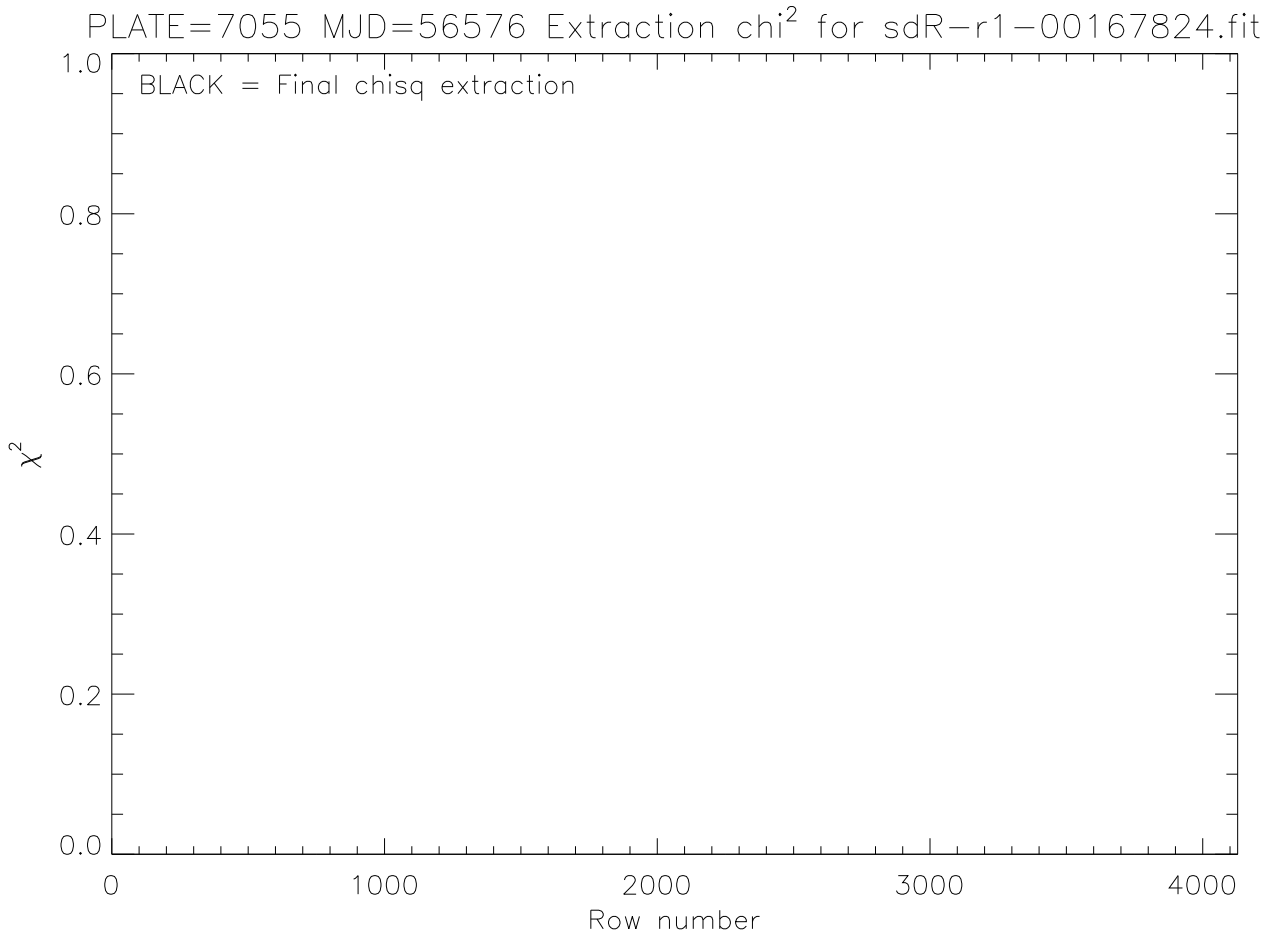
Number of sky fibers = 45

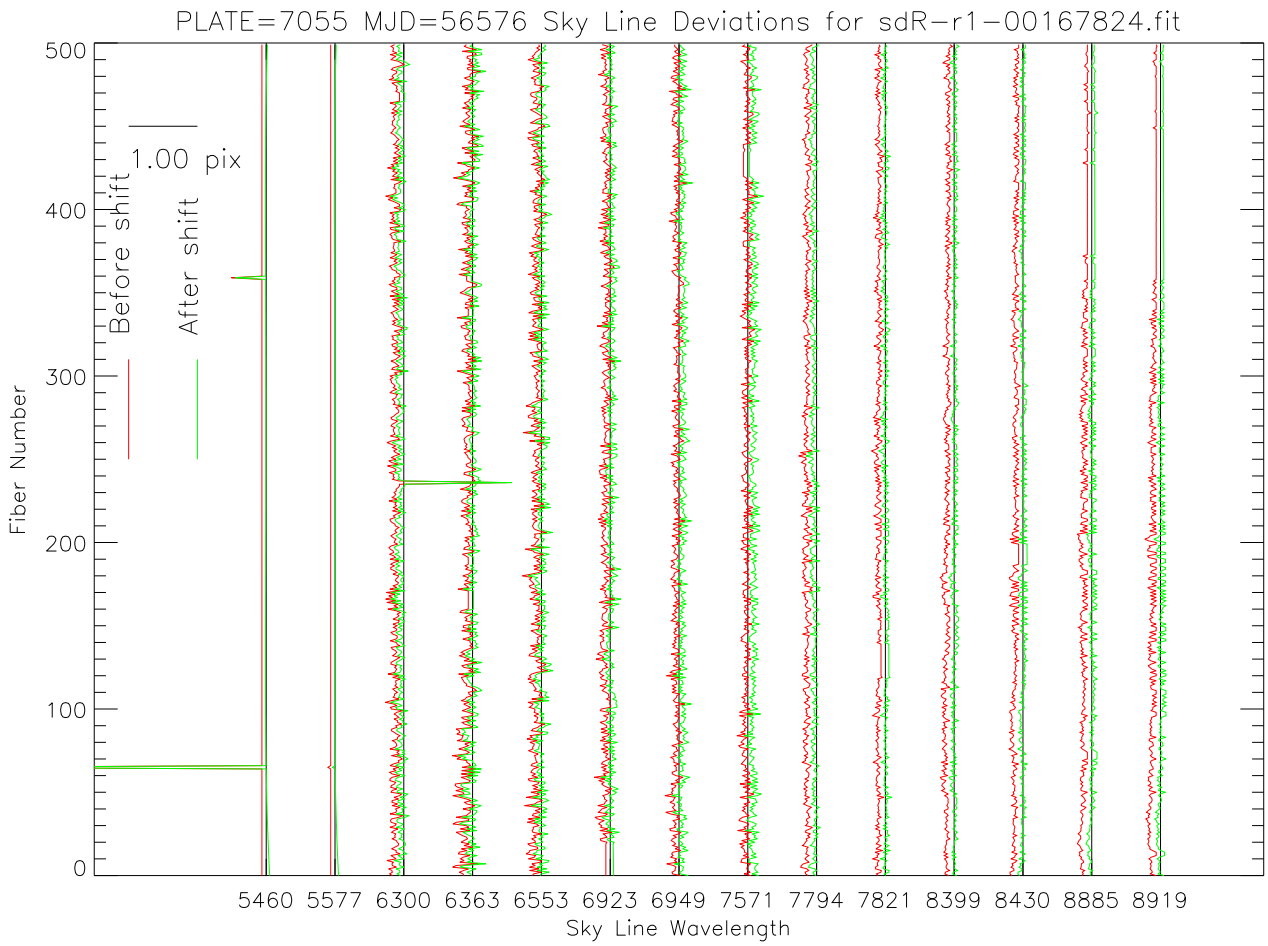


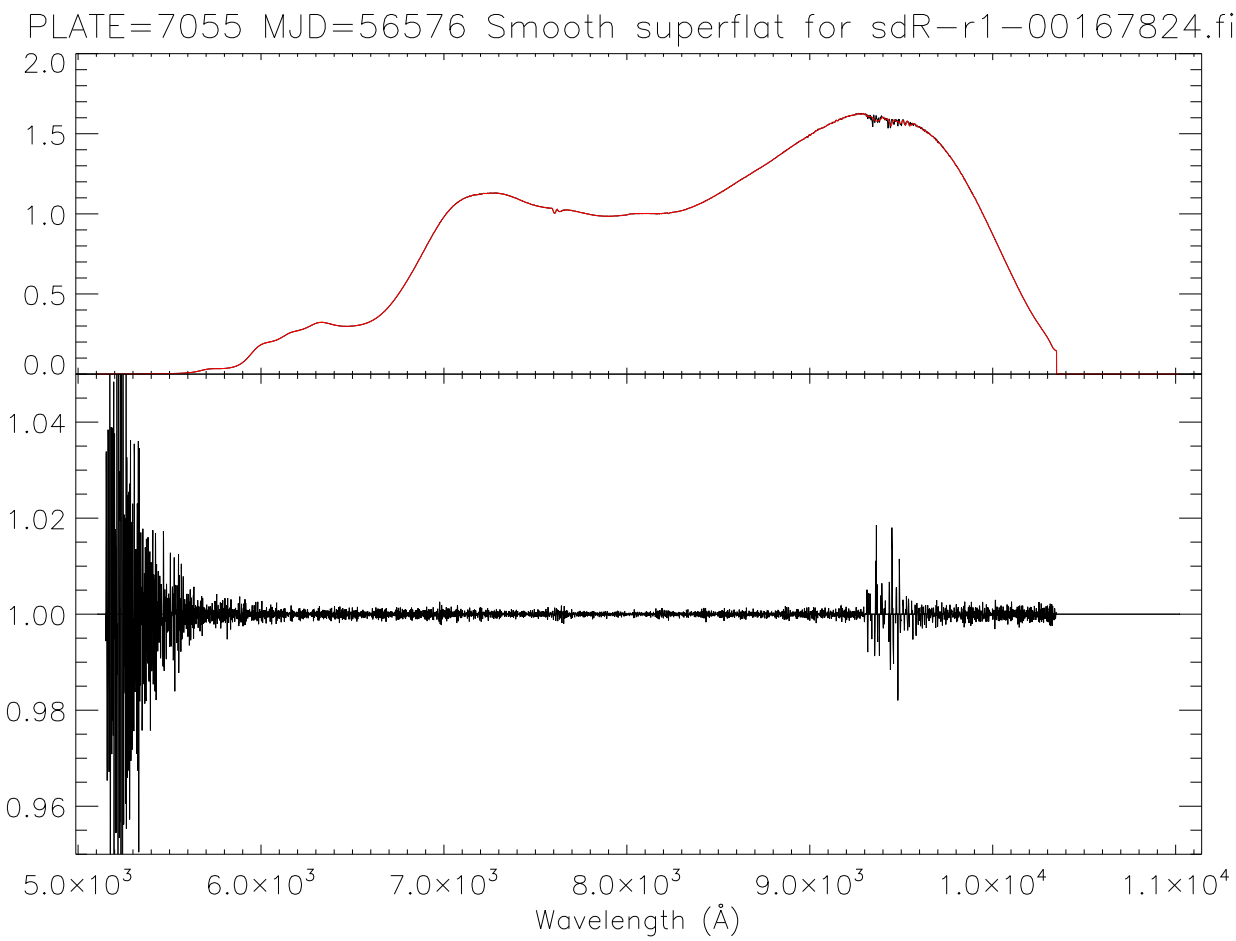

PLATE=7055 MJD=56576 sdR-r1-00167823.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.29 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

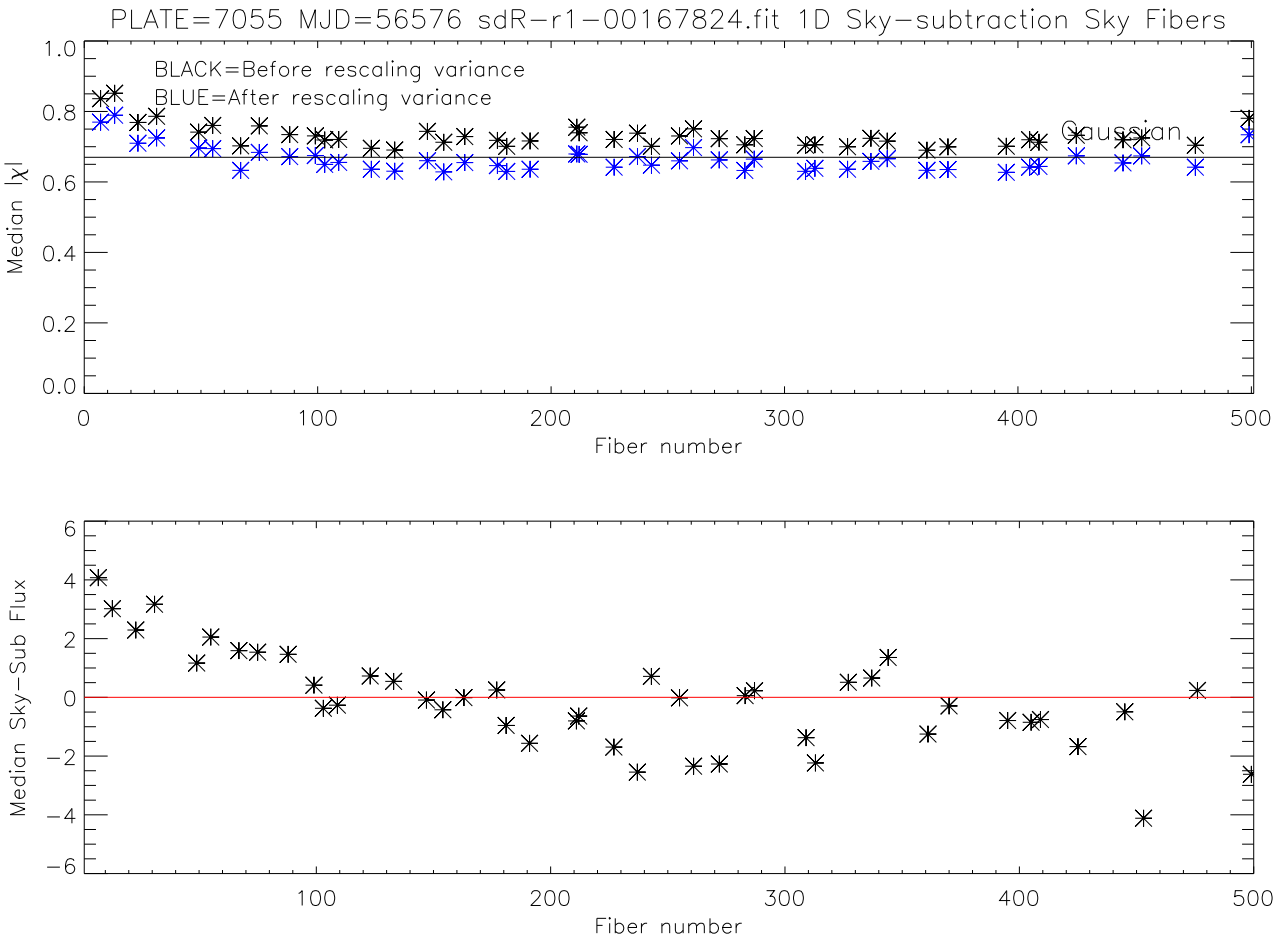

PLATE=7055 MJD=56576 sdR-r1-00167823.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 1.98 %
Fiber number
Focal Distance [mm]
Airmass

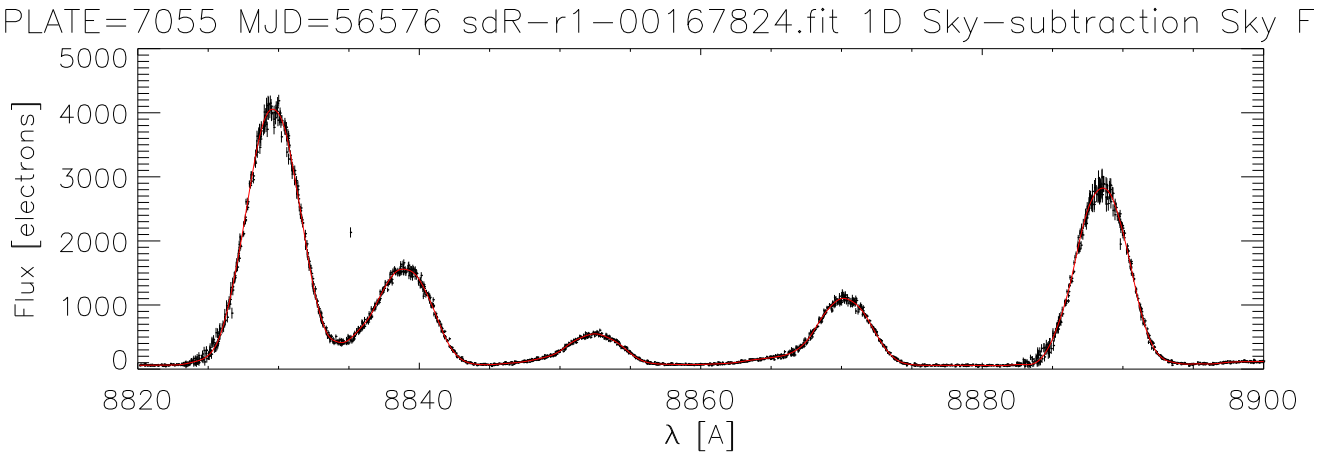

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −64.604
Max value = 2168.919
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 15:58:29 2016

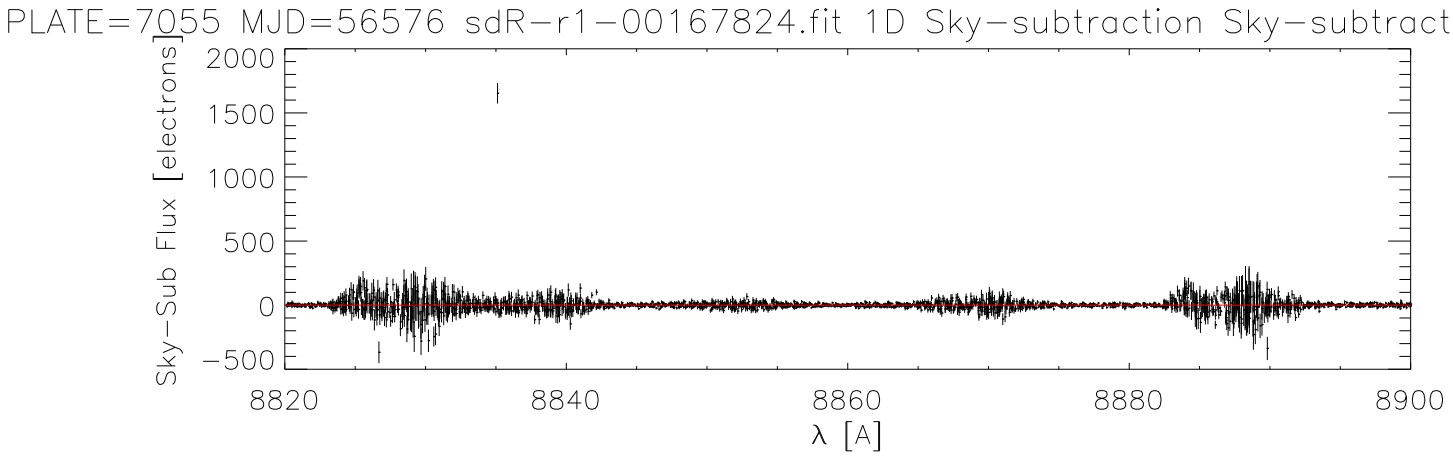

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r1−00167824.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r1-00167824.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

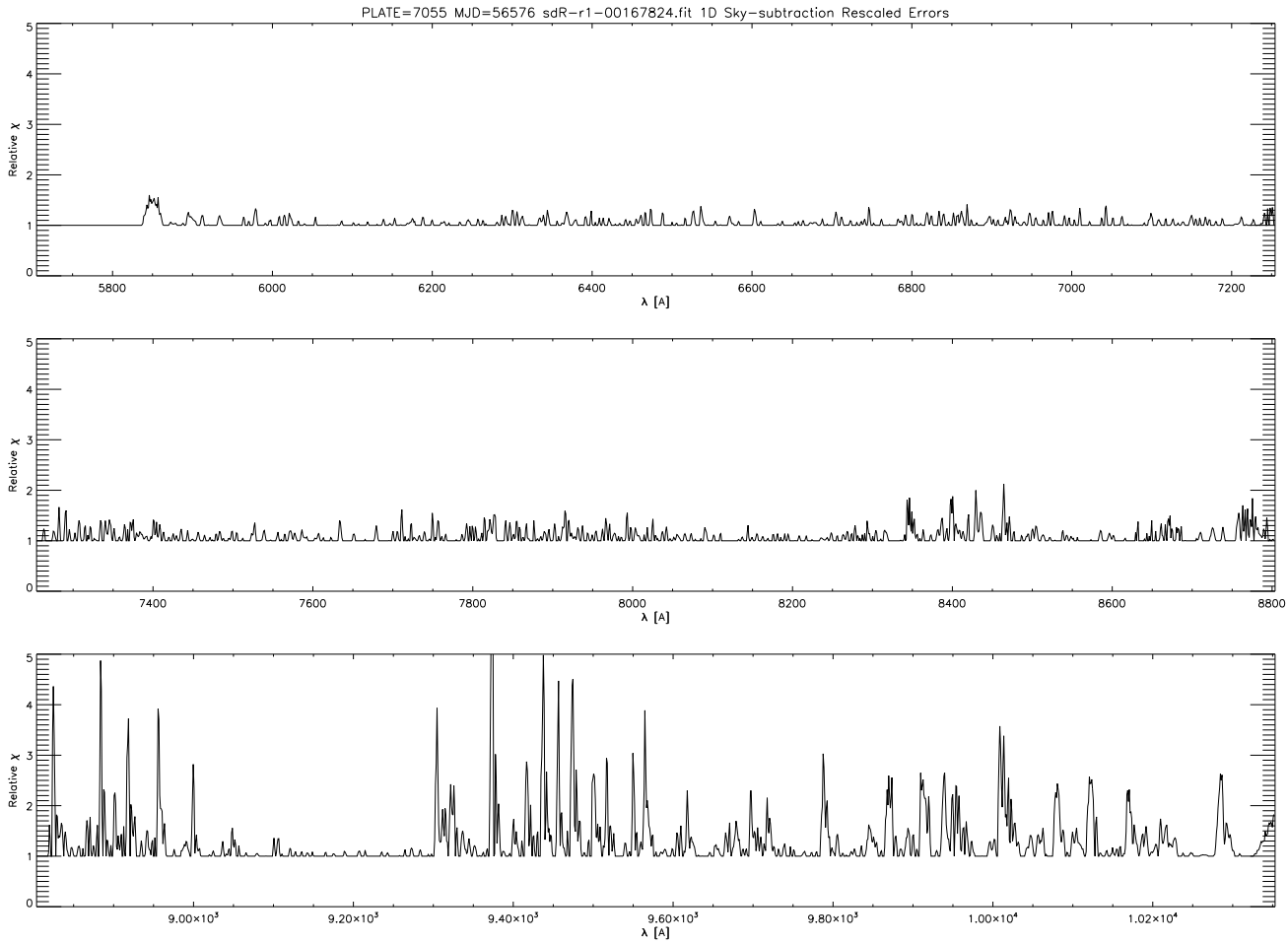

PLATE=7055 MJD=56576 Smooth superflat for sdR-r1-00167824.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

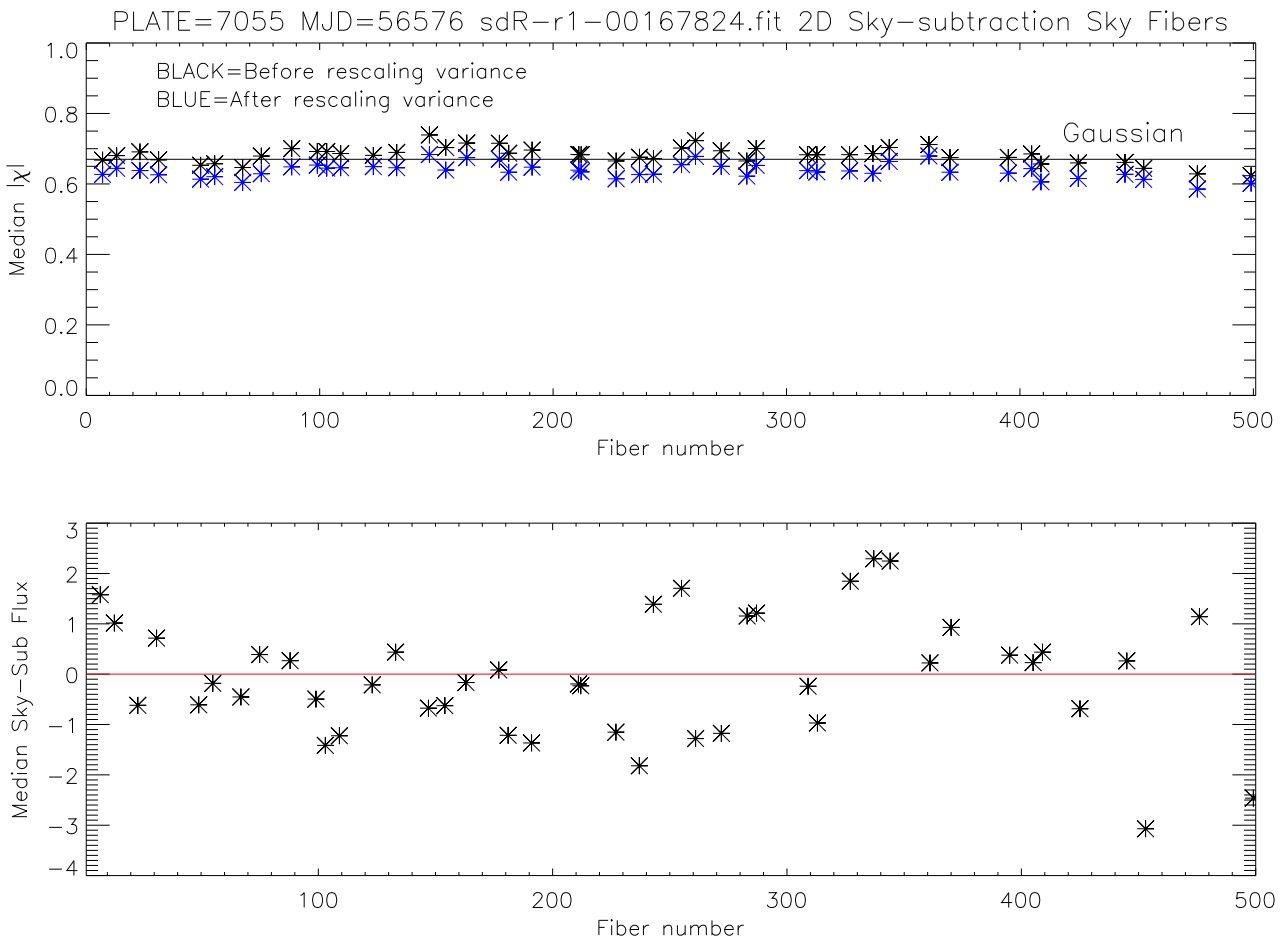

PLATE=7055 MJD=56576 sdR-r1-00167824.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

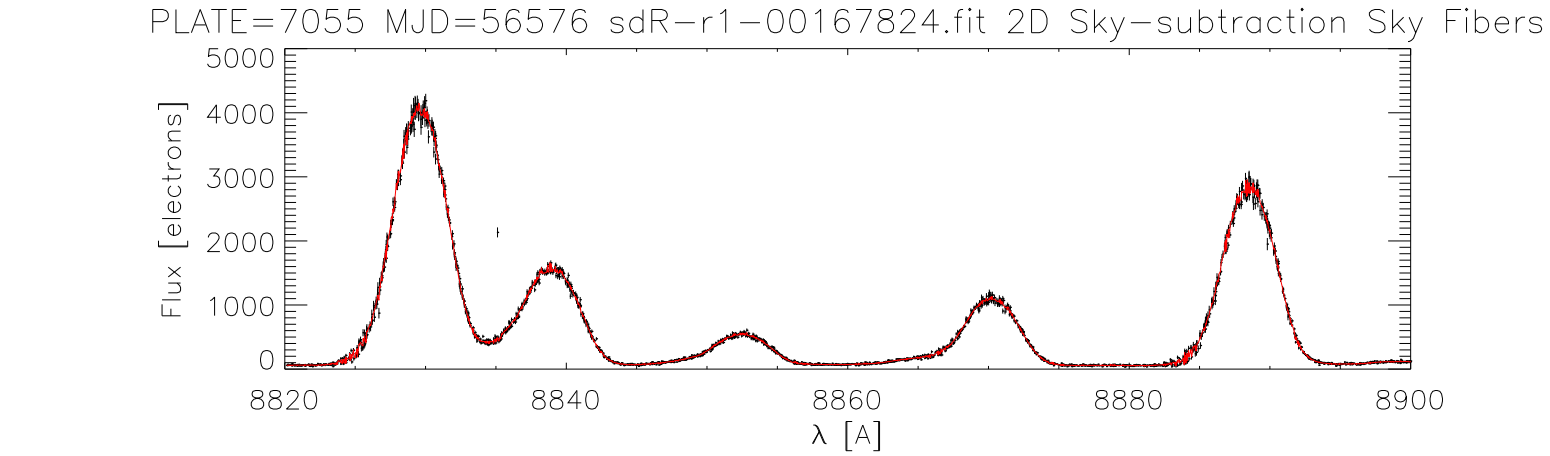

PLATE=7055 MJD=56576 sdR-r1-00167824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

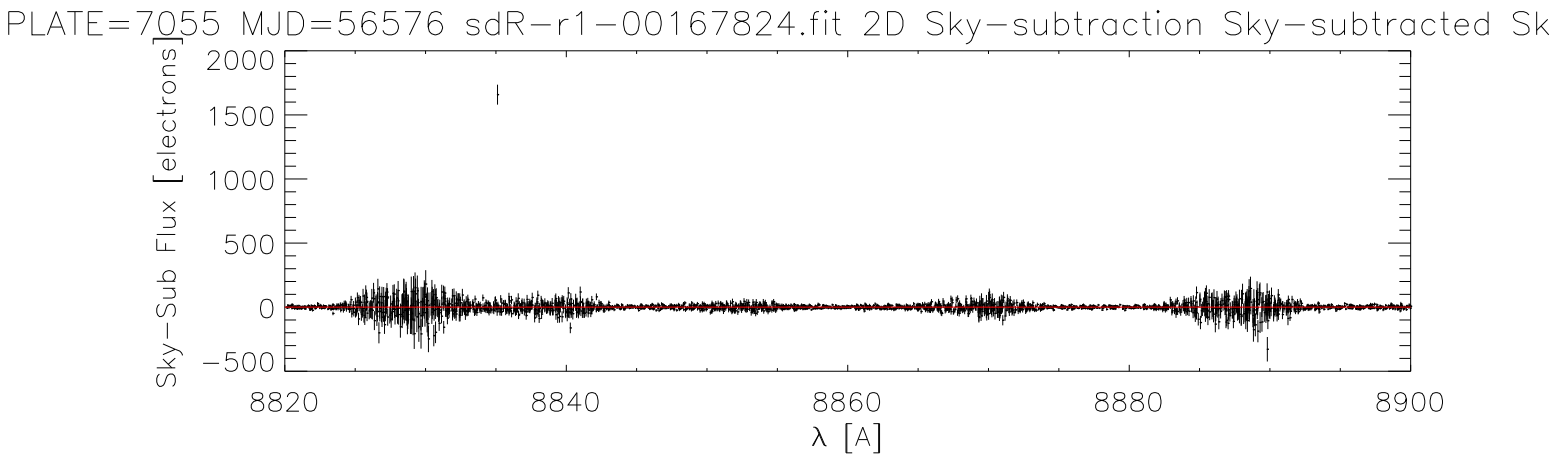

PLATE=7055 MJD=56576 sdR-r1-00167824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 45

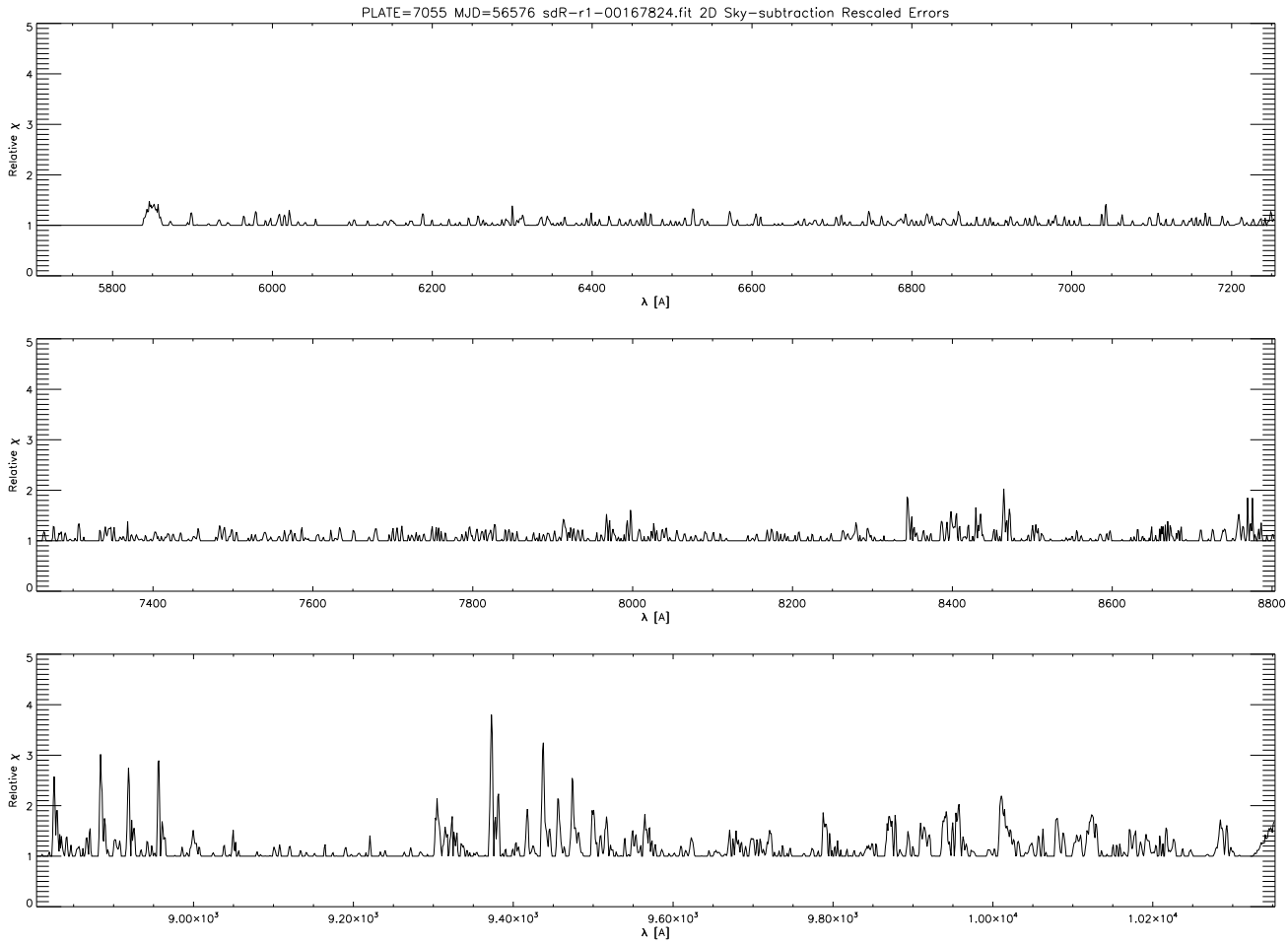


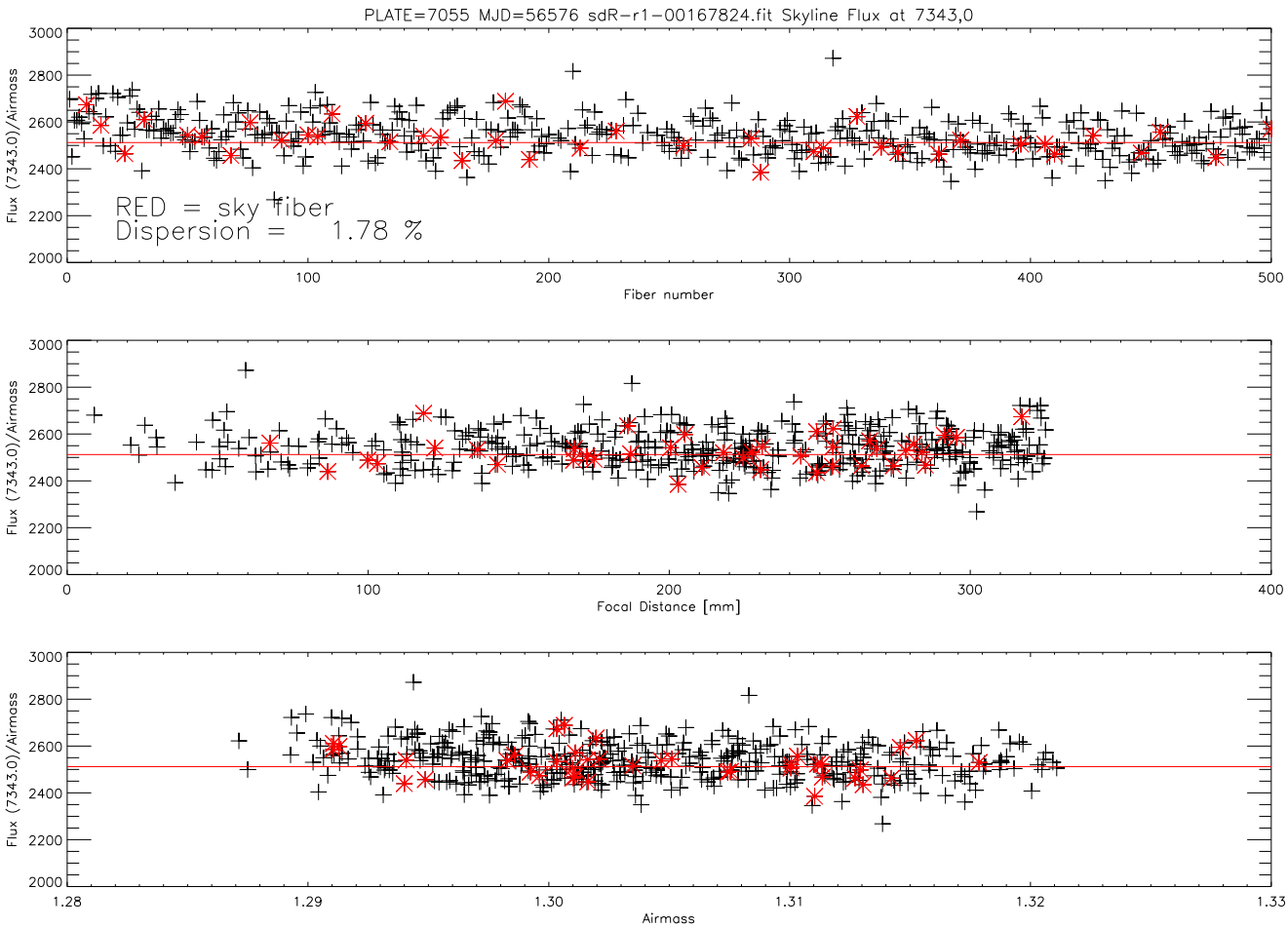

PLATE=7055 MJD=56576 sdR-r1-00167824.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

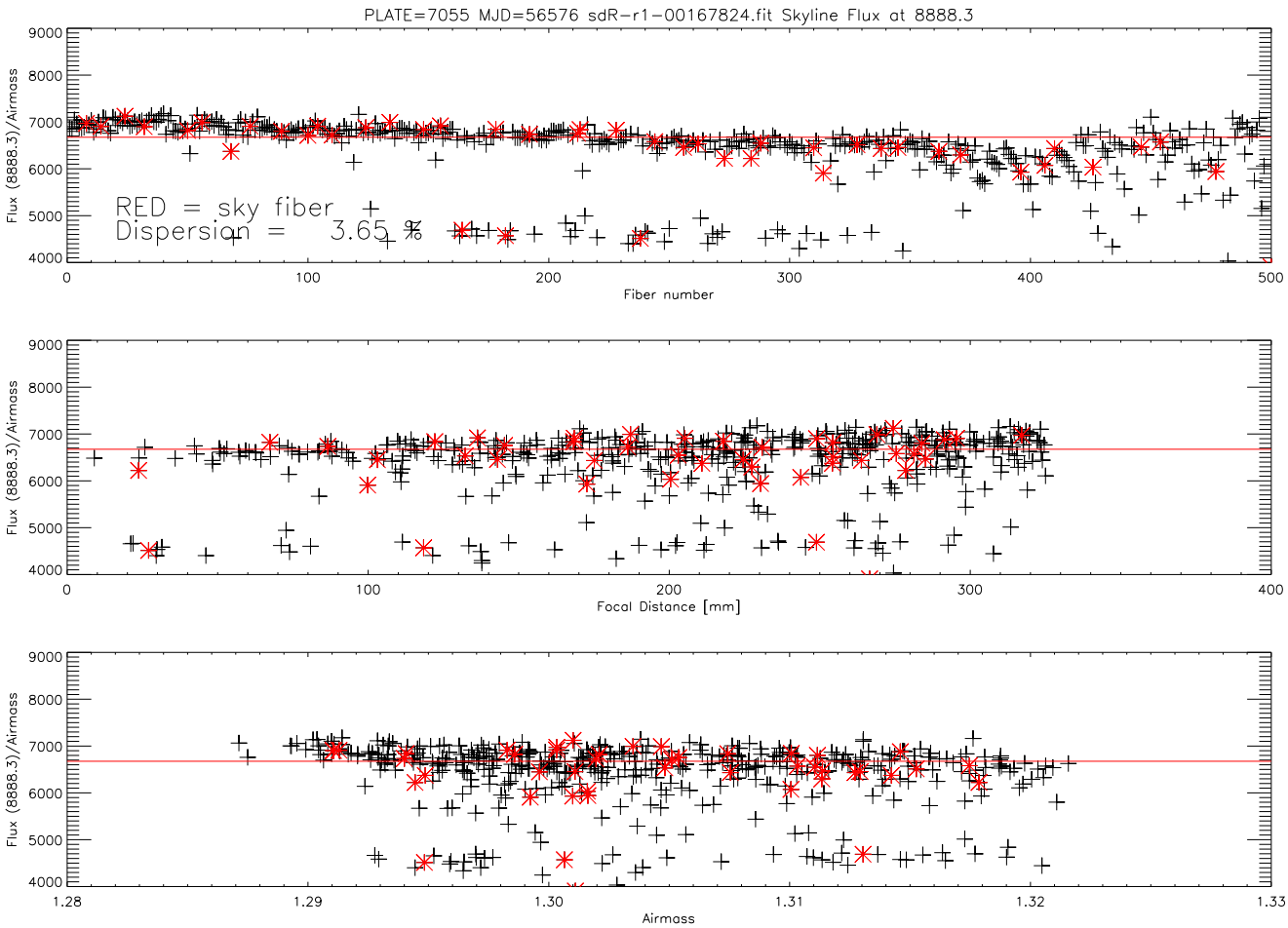

PLATE=7055 MJD=56576 sdR-r1-00167824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

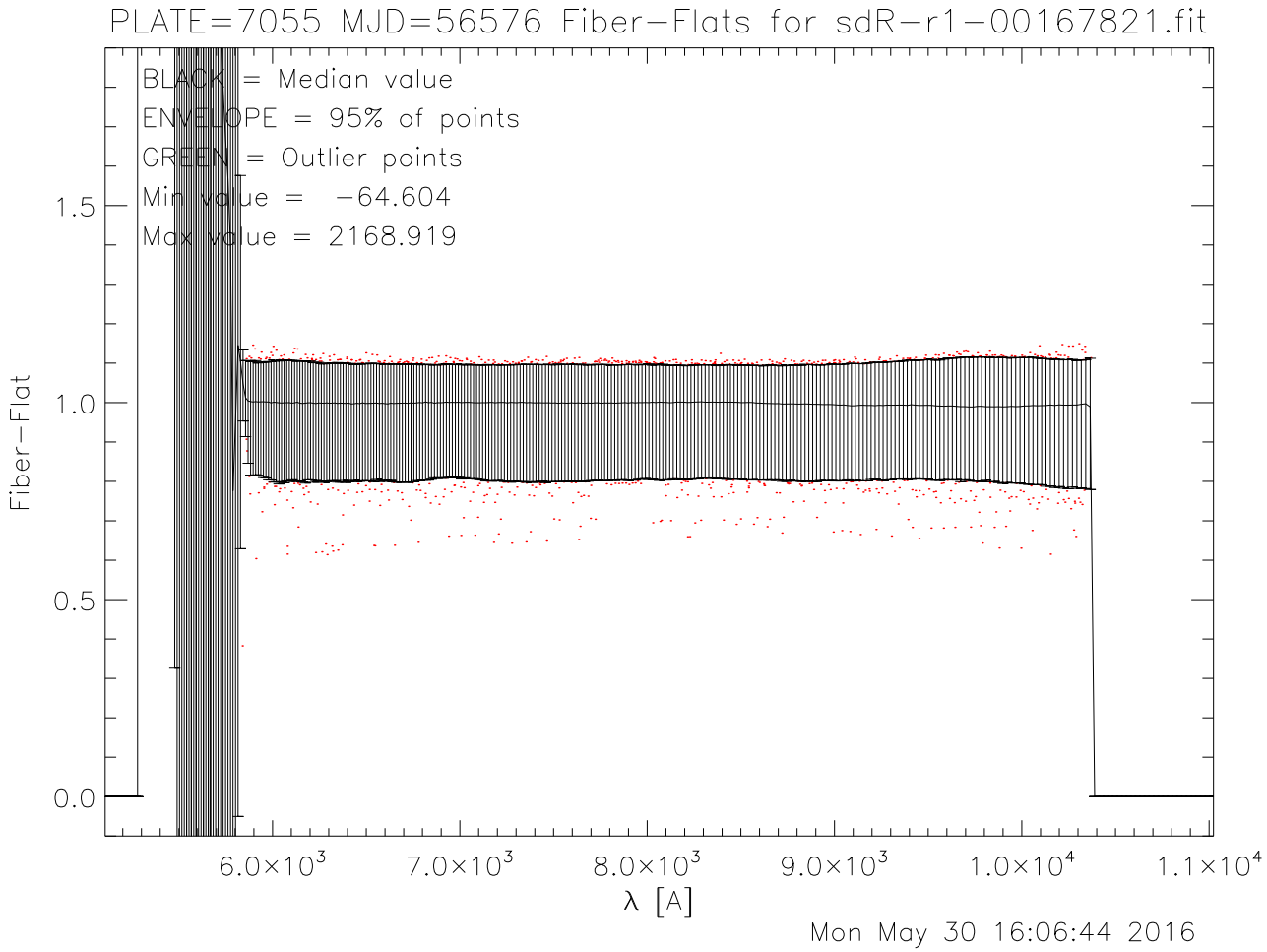

PLATE=7055 MJD=56576 sdR-r1-00167824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

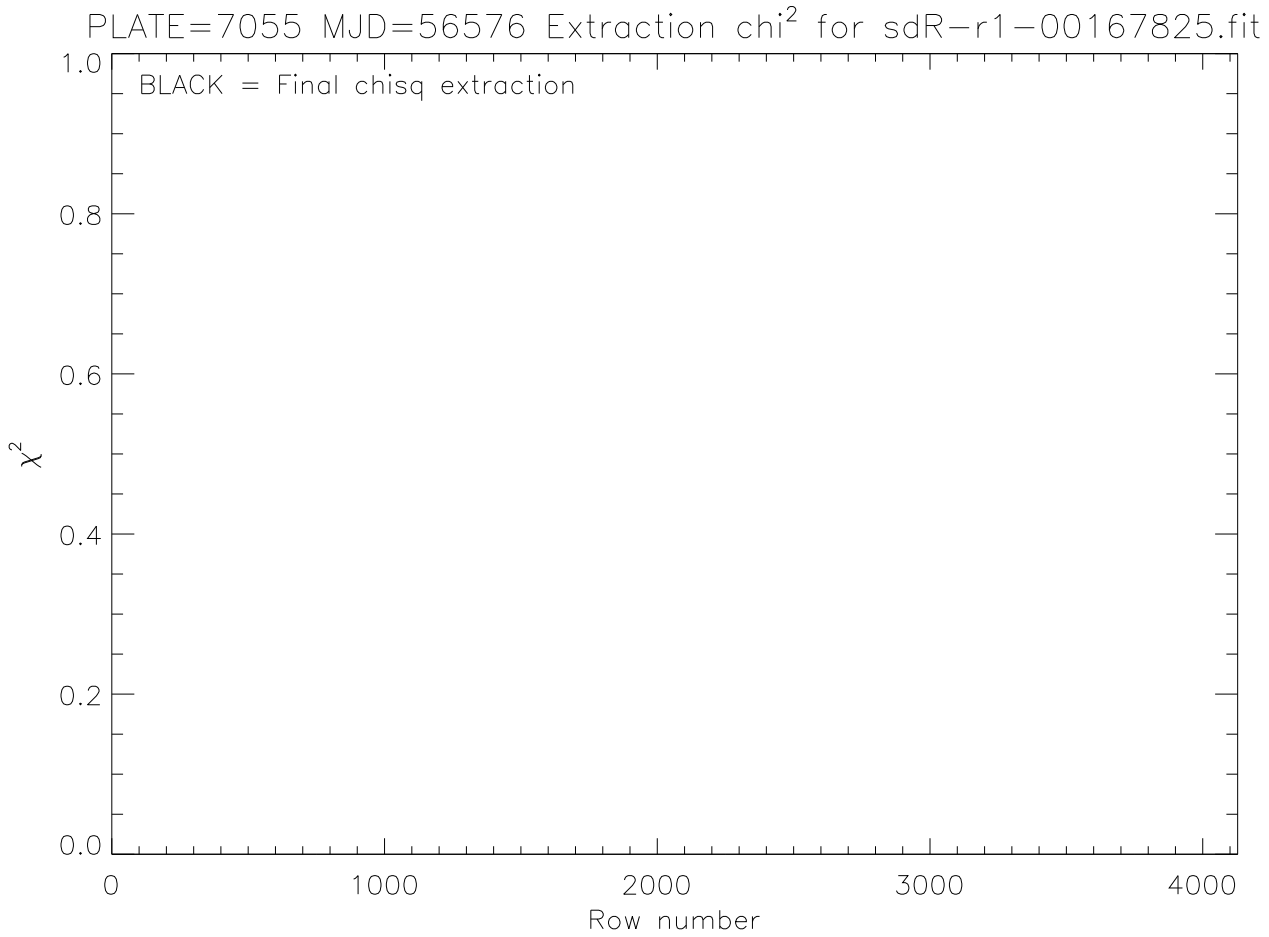
Number of sky fibers = 45

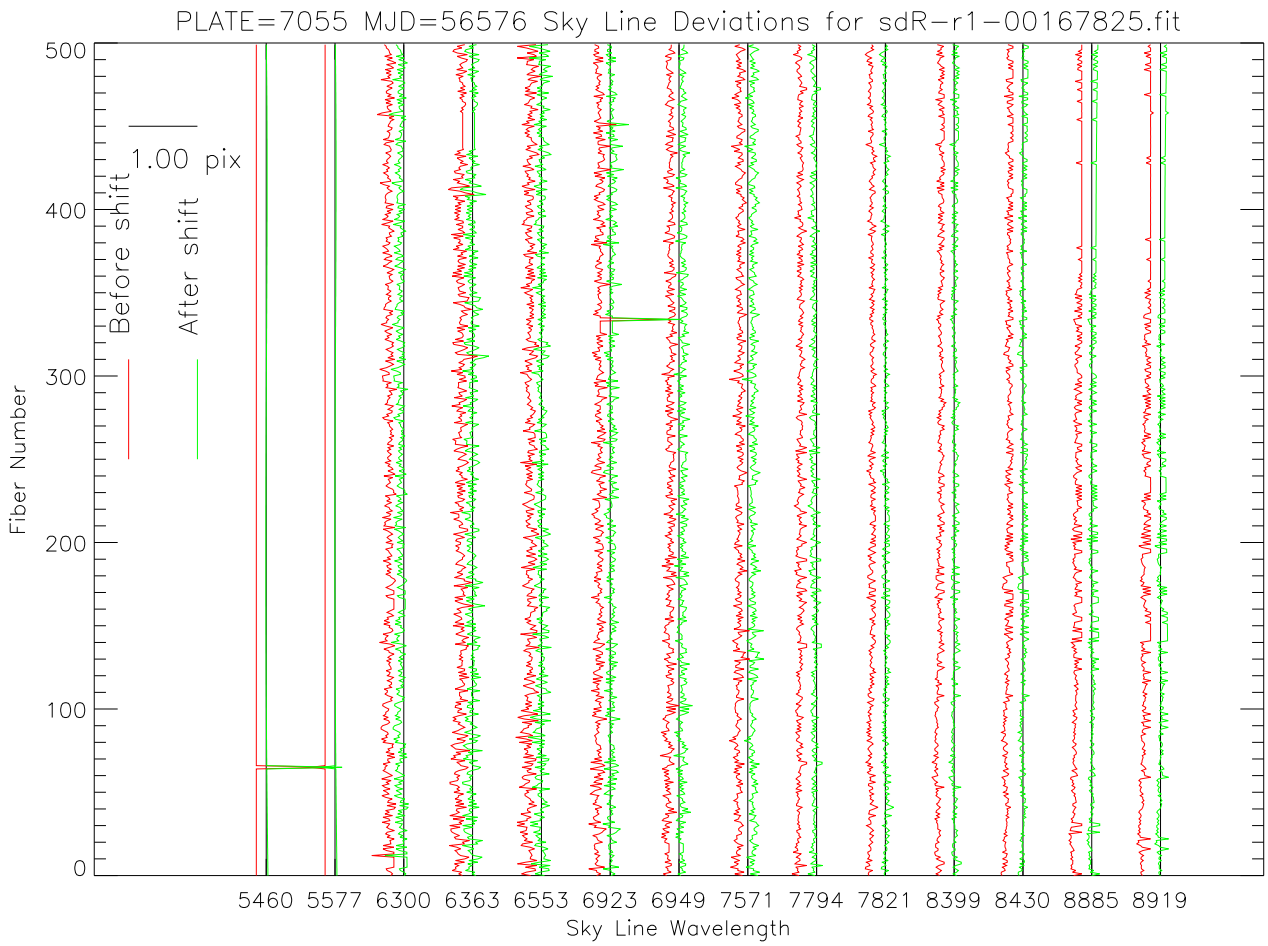


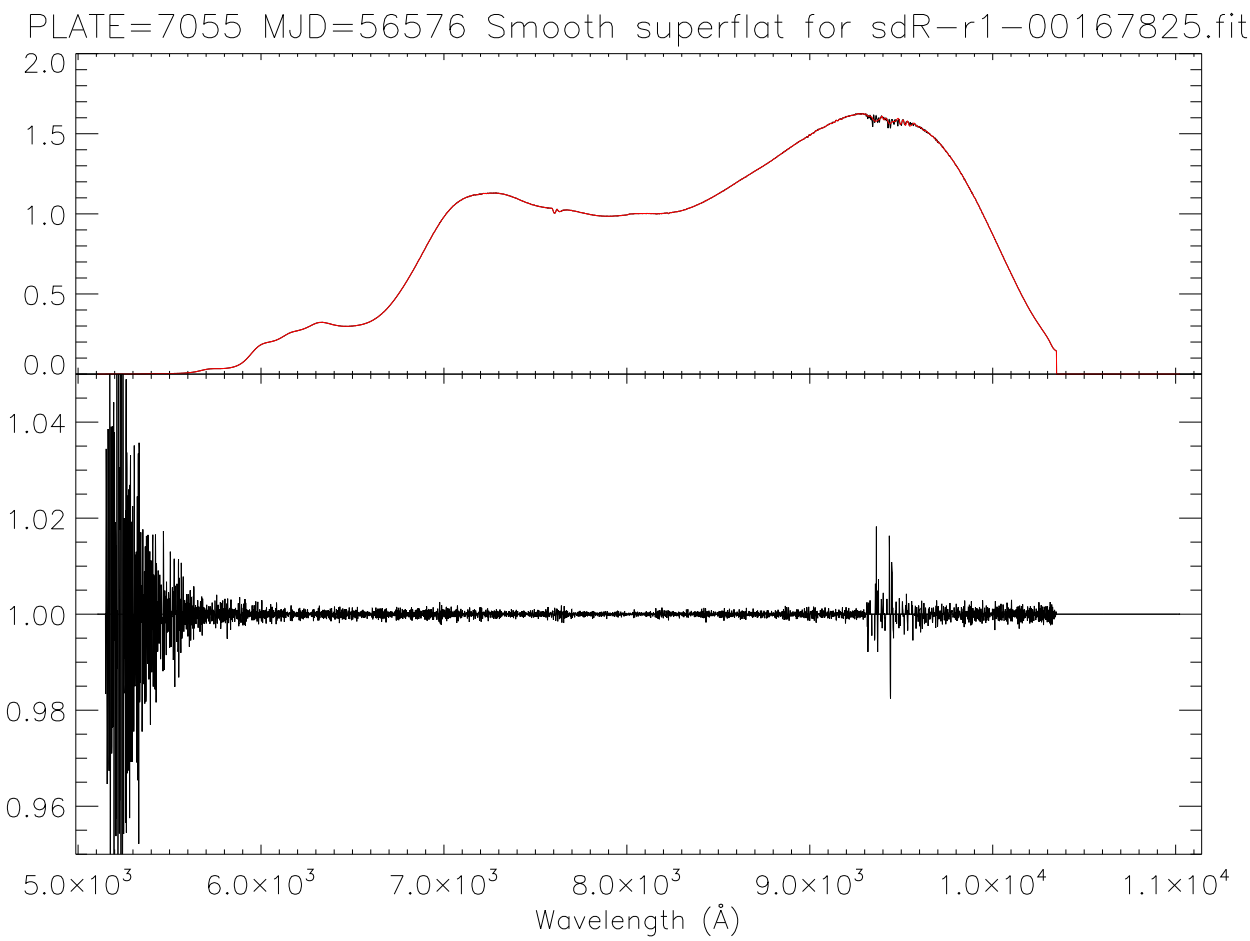

PLATE=7055 MJD=56576 sdR-r1-00167824.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.78 %
Fiber number
Focal Distance [mm]
Airmass

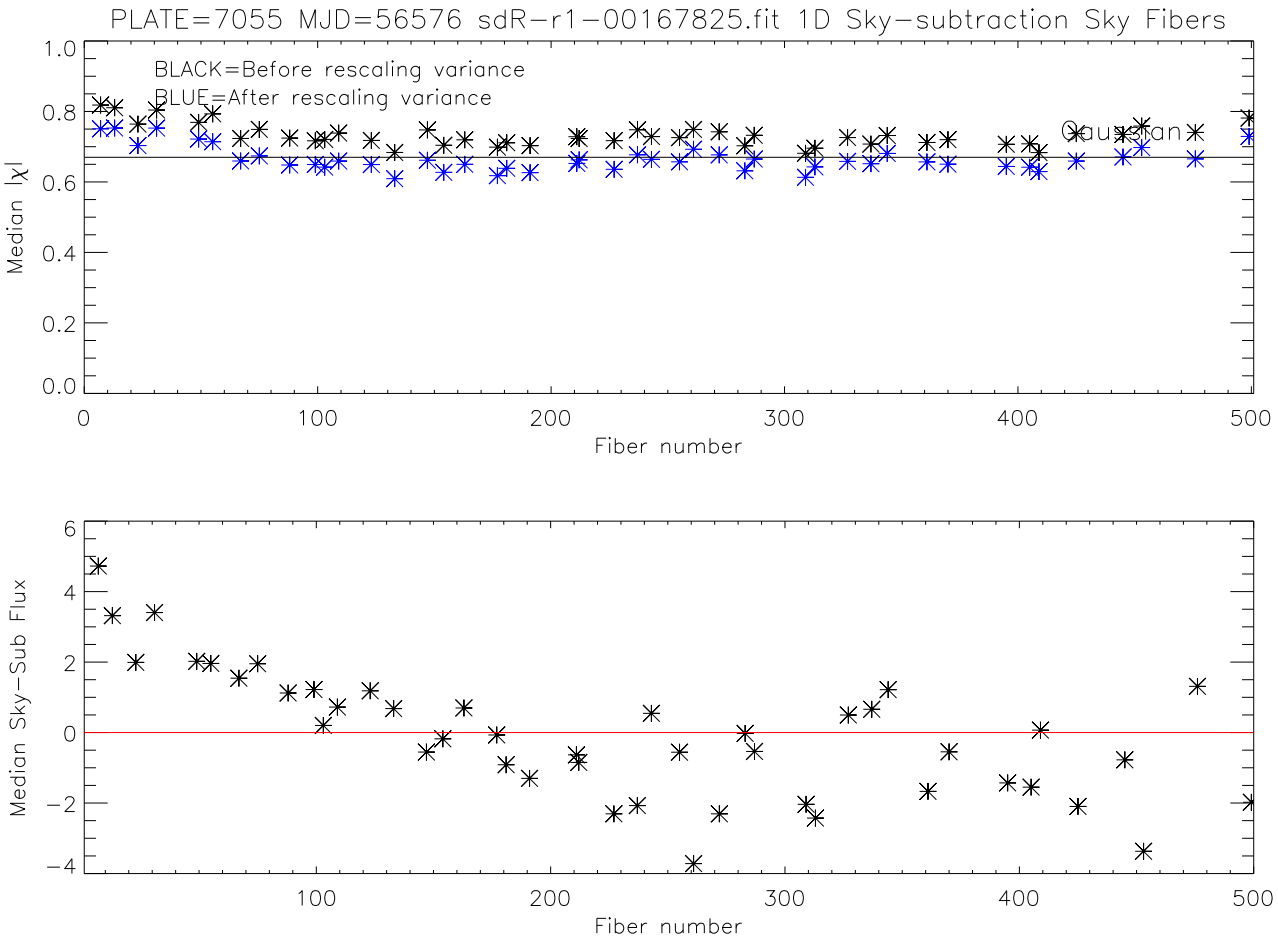

PLATE=7055 MJD=56576 sdR-r1-00167824.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.65 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

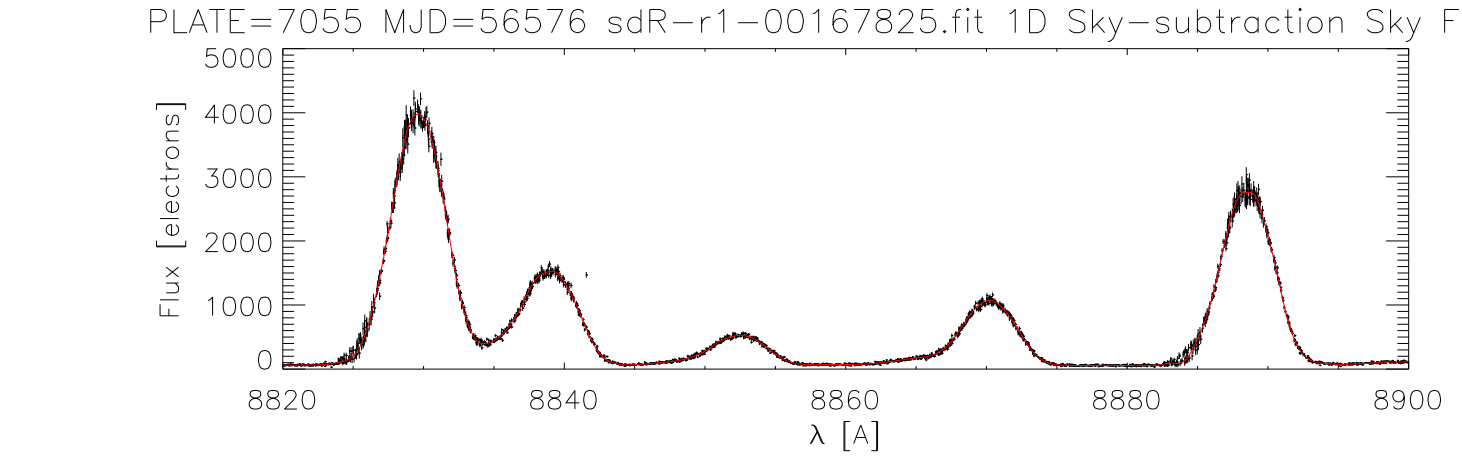

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −64.604
Max value = 2168.919
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 16:06:44 2016

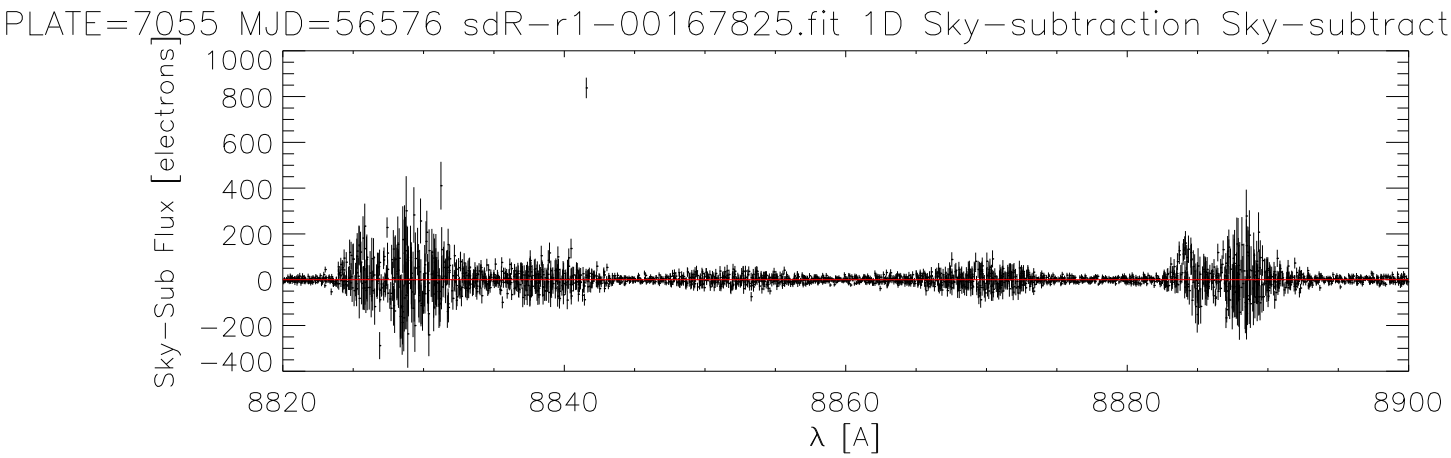

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r1−00167825.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r1-00167825.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

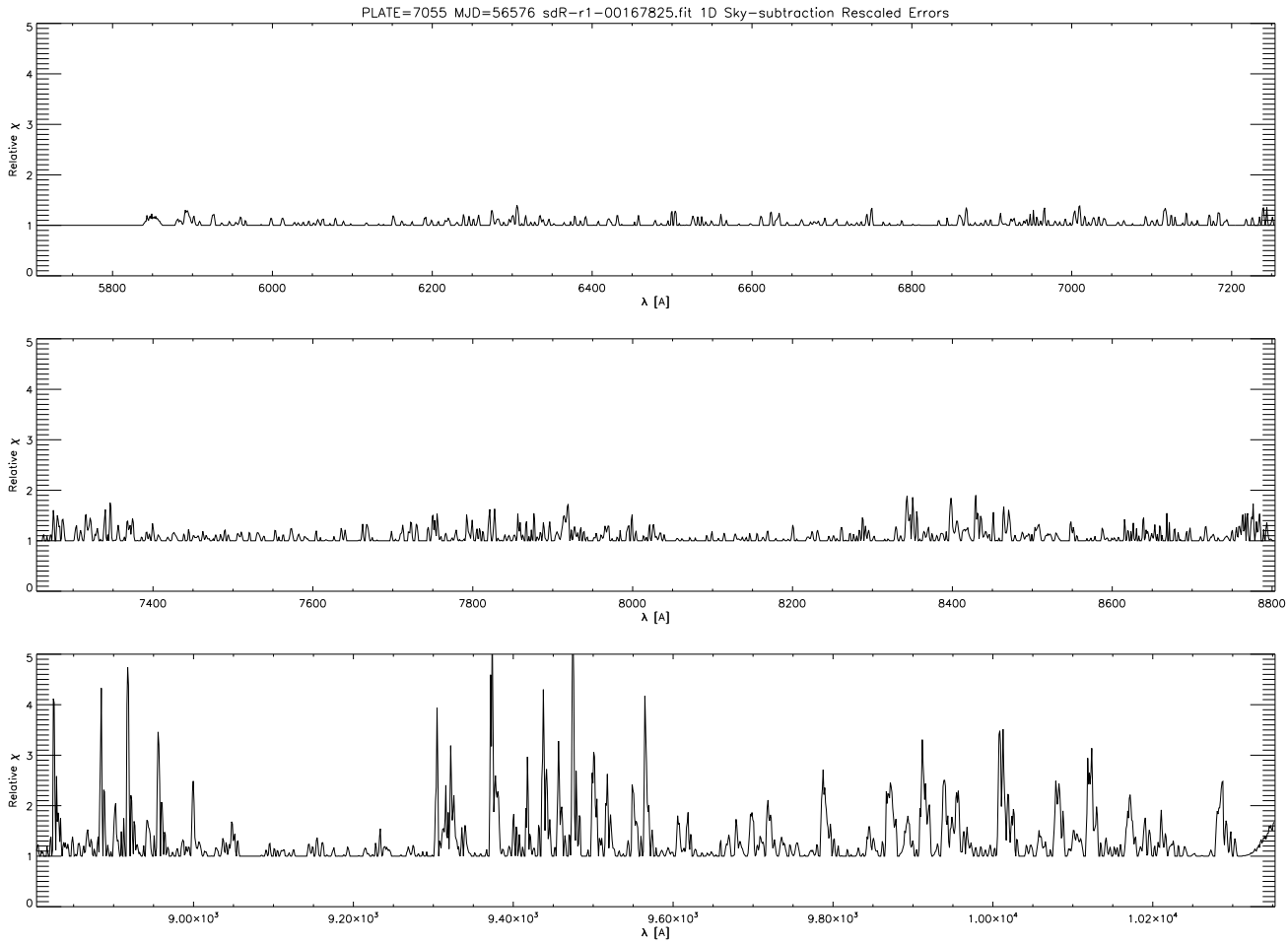

PLATE=7055 MJD=56576 Smooth superflat for sdR-r1-00167825.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

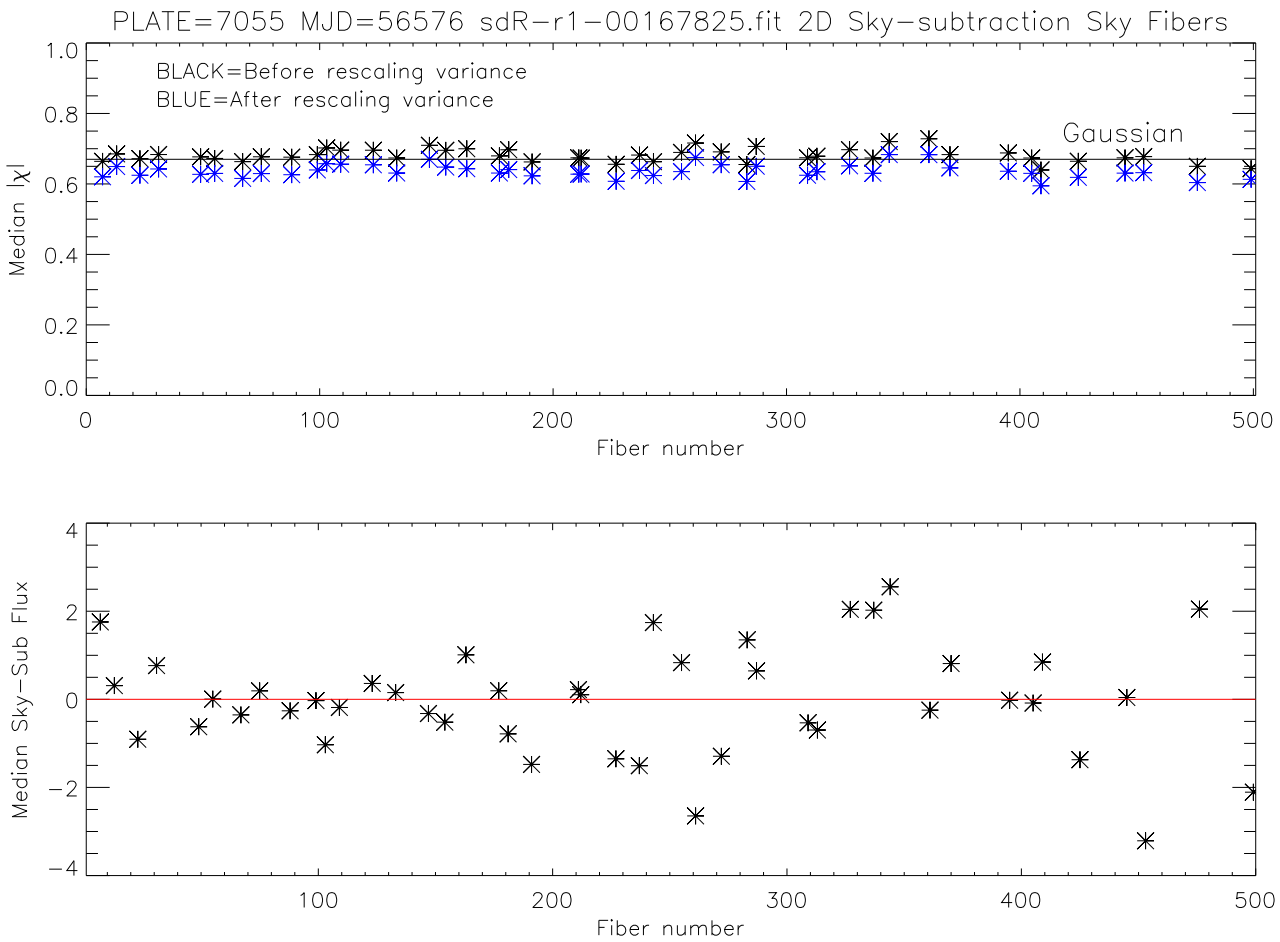

PLATE=7055 MJD=56576 sdR-r1-00167825.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
©Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

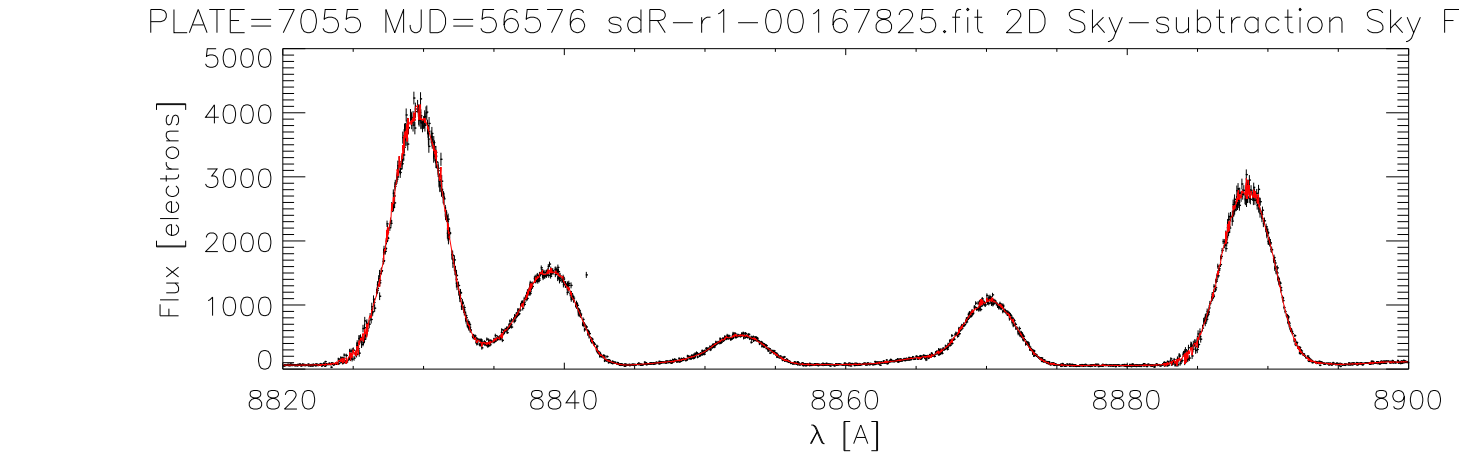

PLATE=7055 MJD=56576 sdR-r1-00167825.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

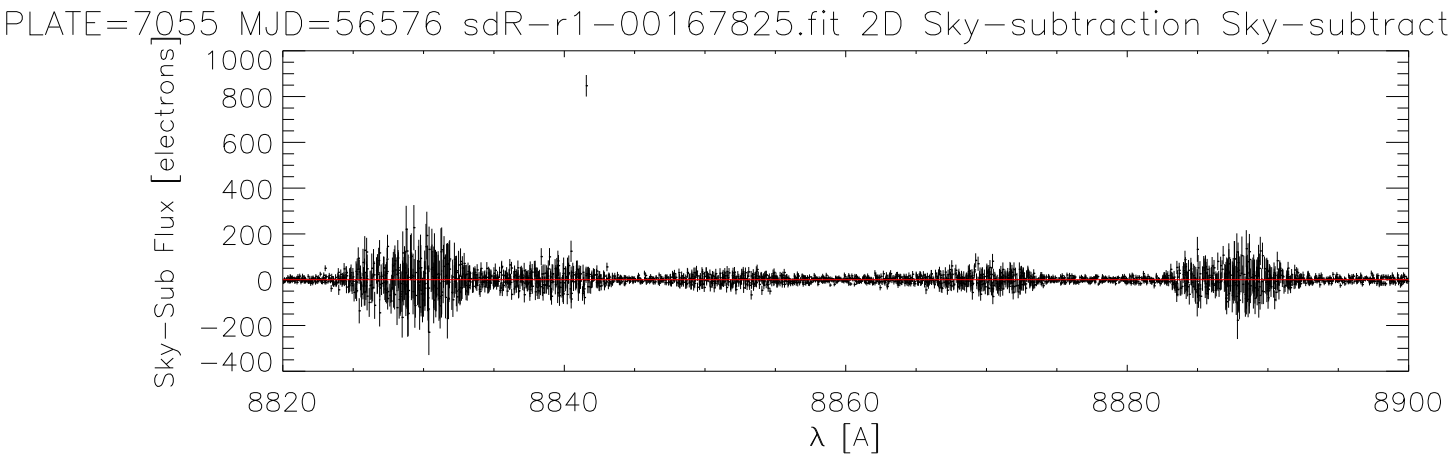

PLATE=7055 MJD=56576 sdR-r1-00167825.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 45

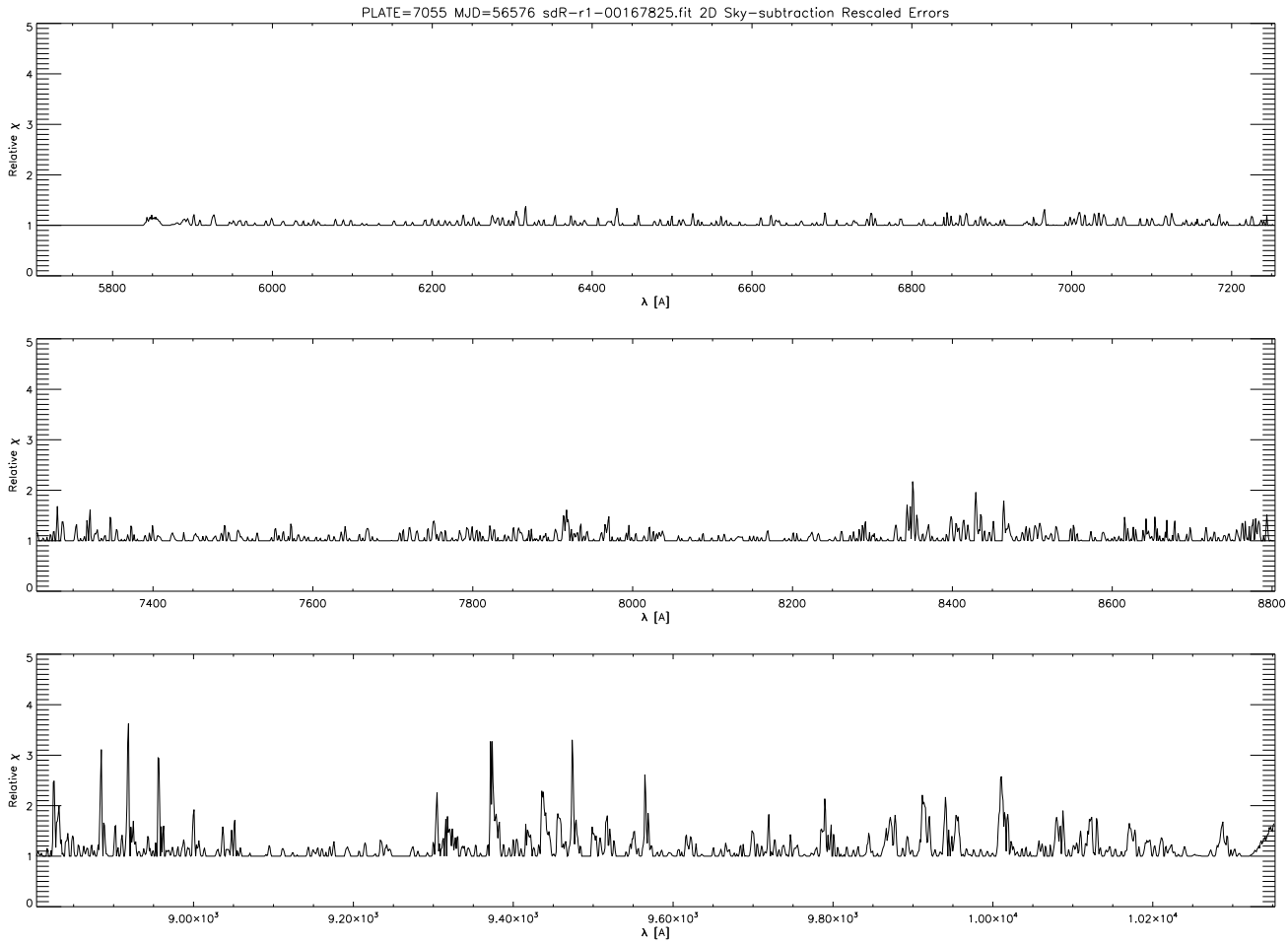


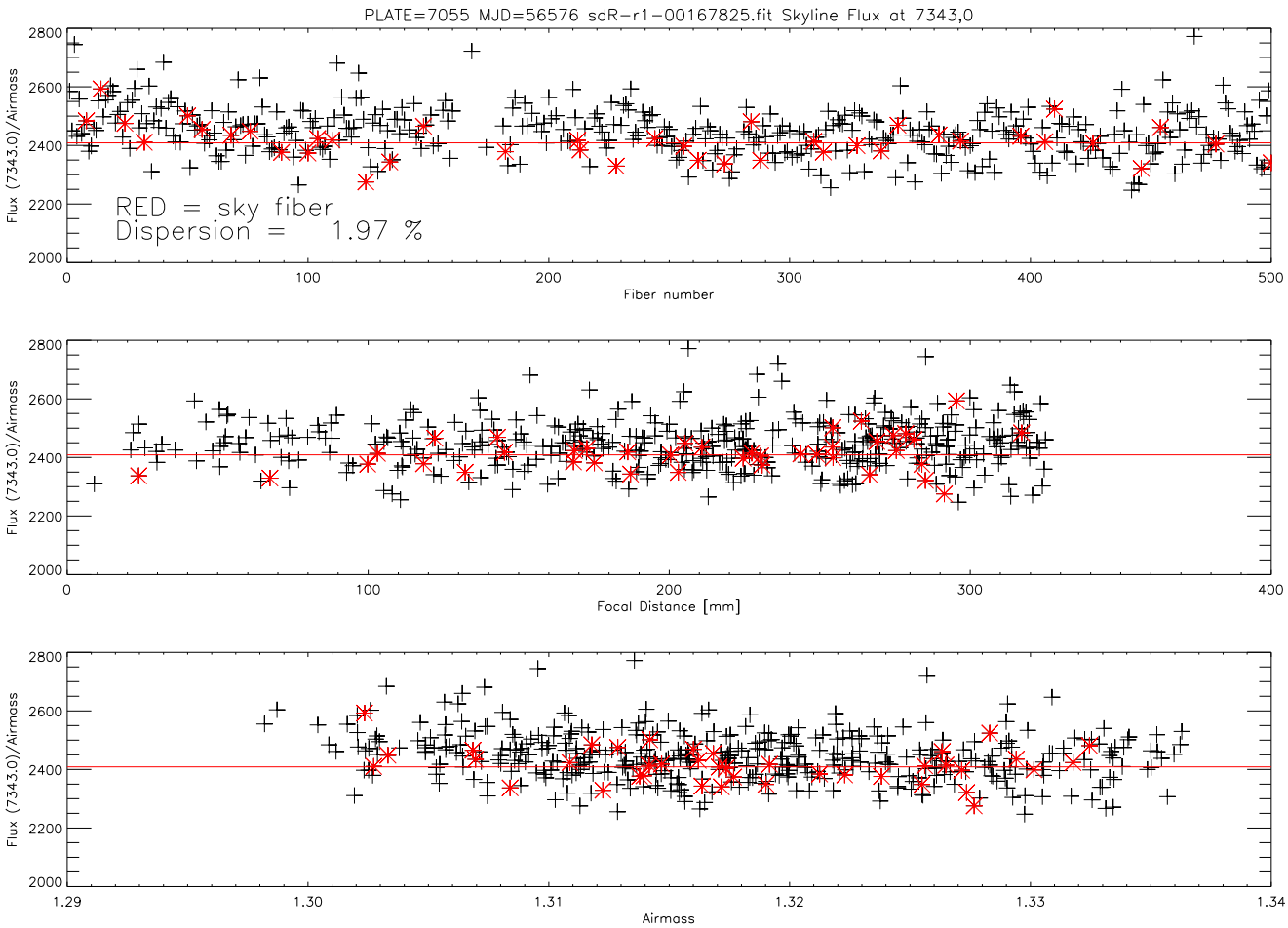

PLATE=7055 MJD=56576 sdR-r1-00167825.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

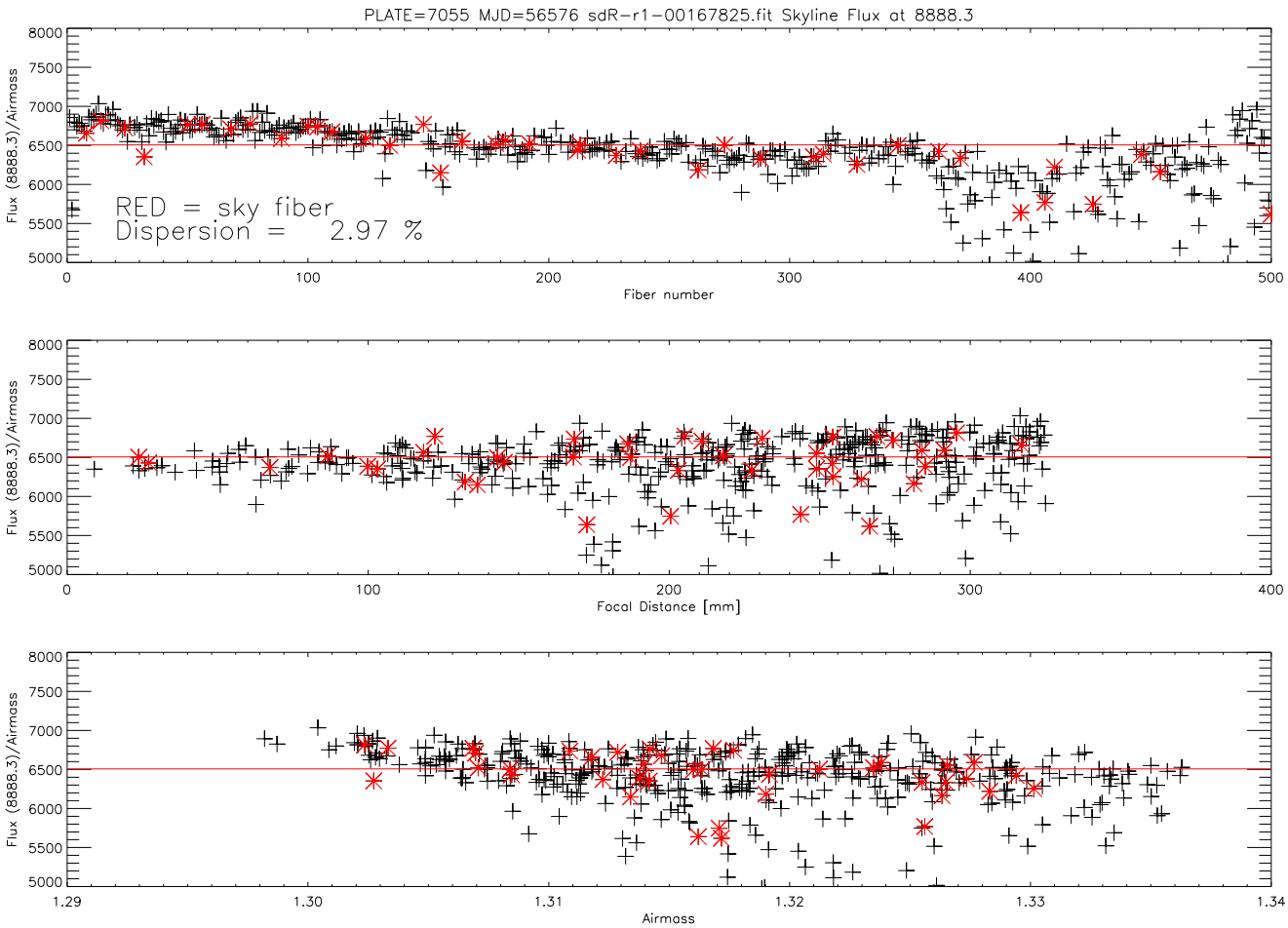

PLATE=7055 MJD=56576 sdR-r1-00167825.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

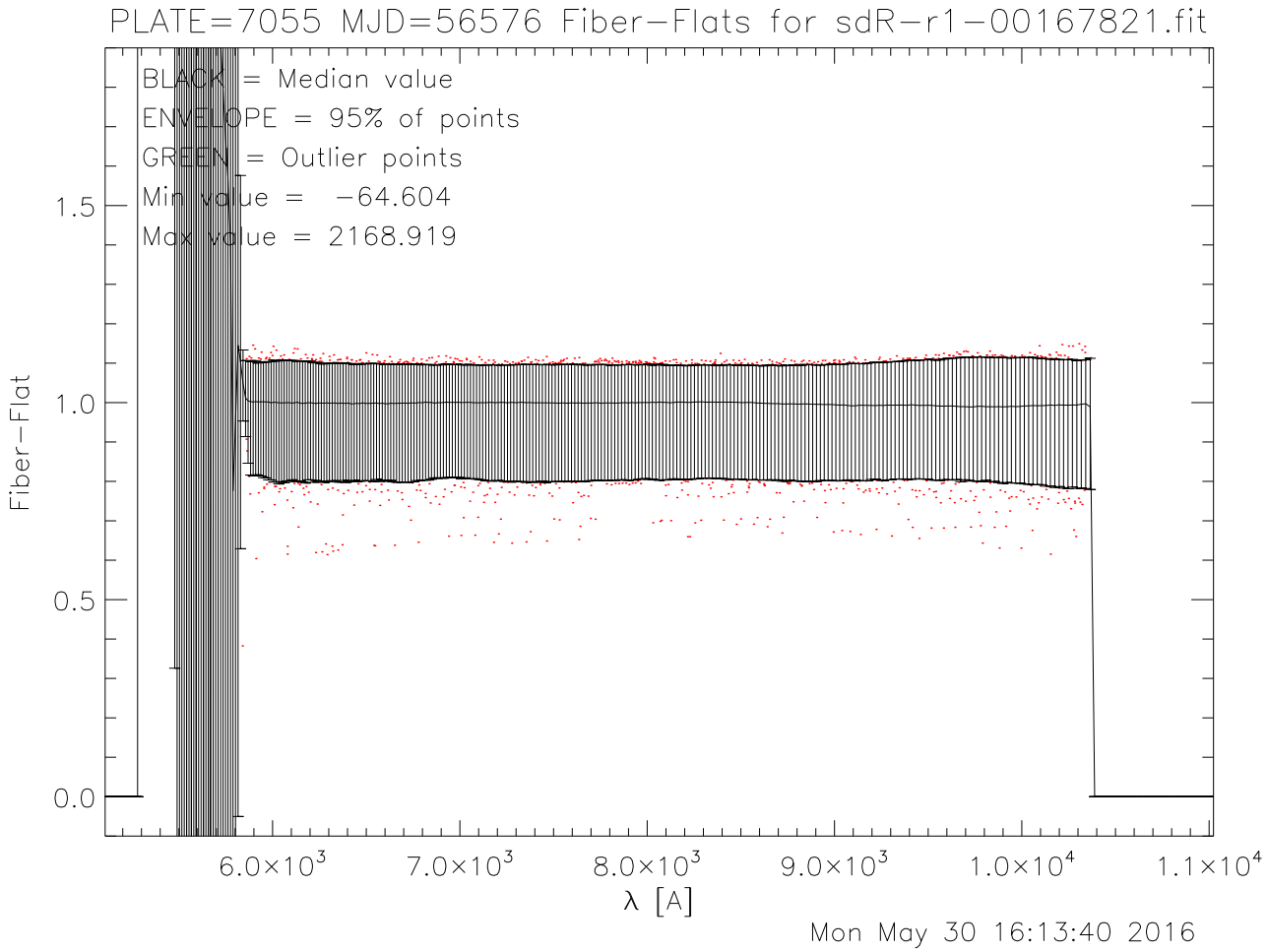

PLATE=7055 MJD=56576 sdR-r1-00167825.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1000
800
600
400
200
0
-200
-400
8820
8840
8860
8880
8900
λ [A]

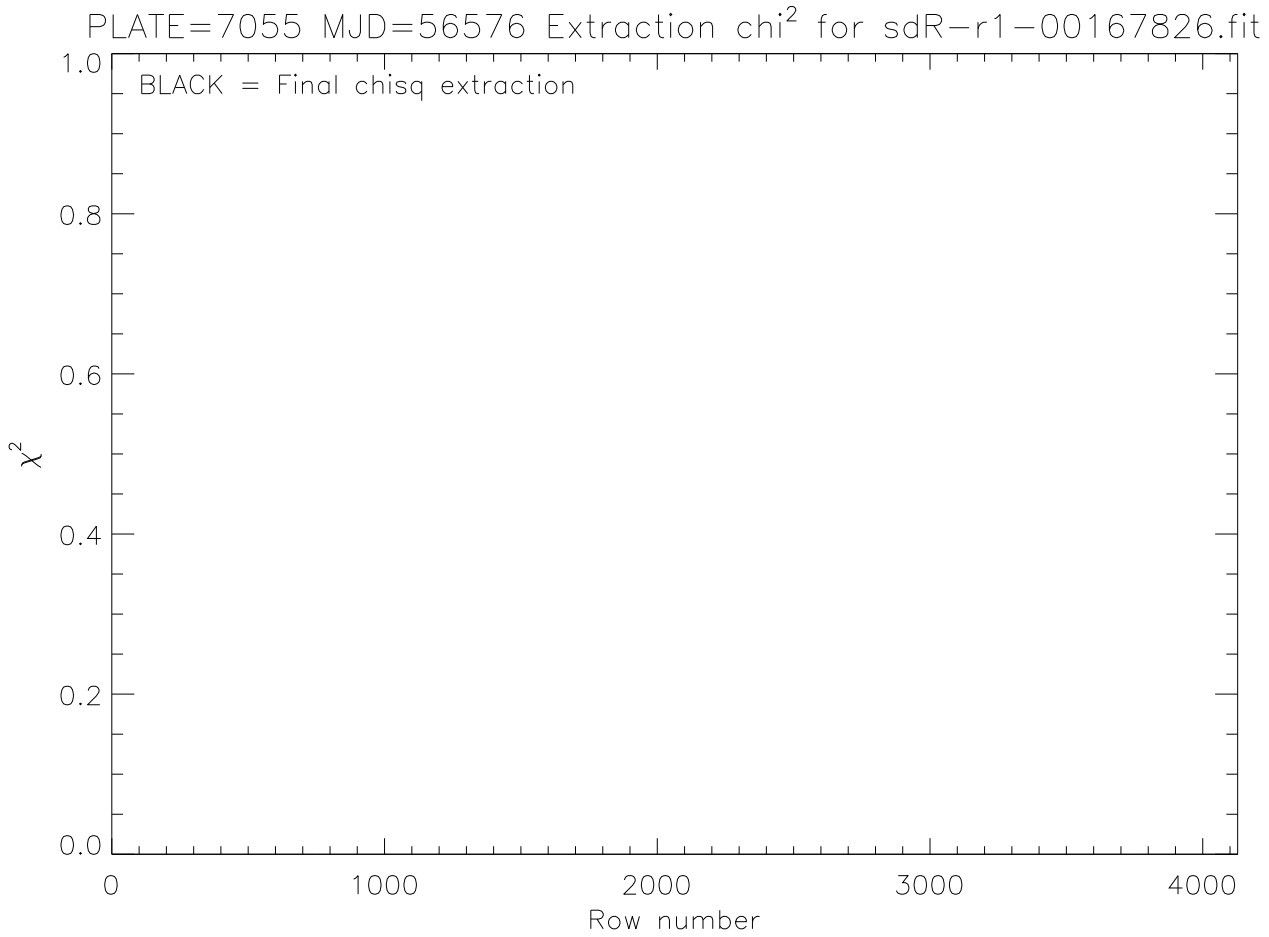
Number of sky fibers = 45

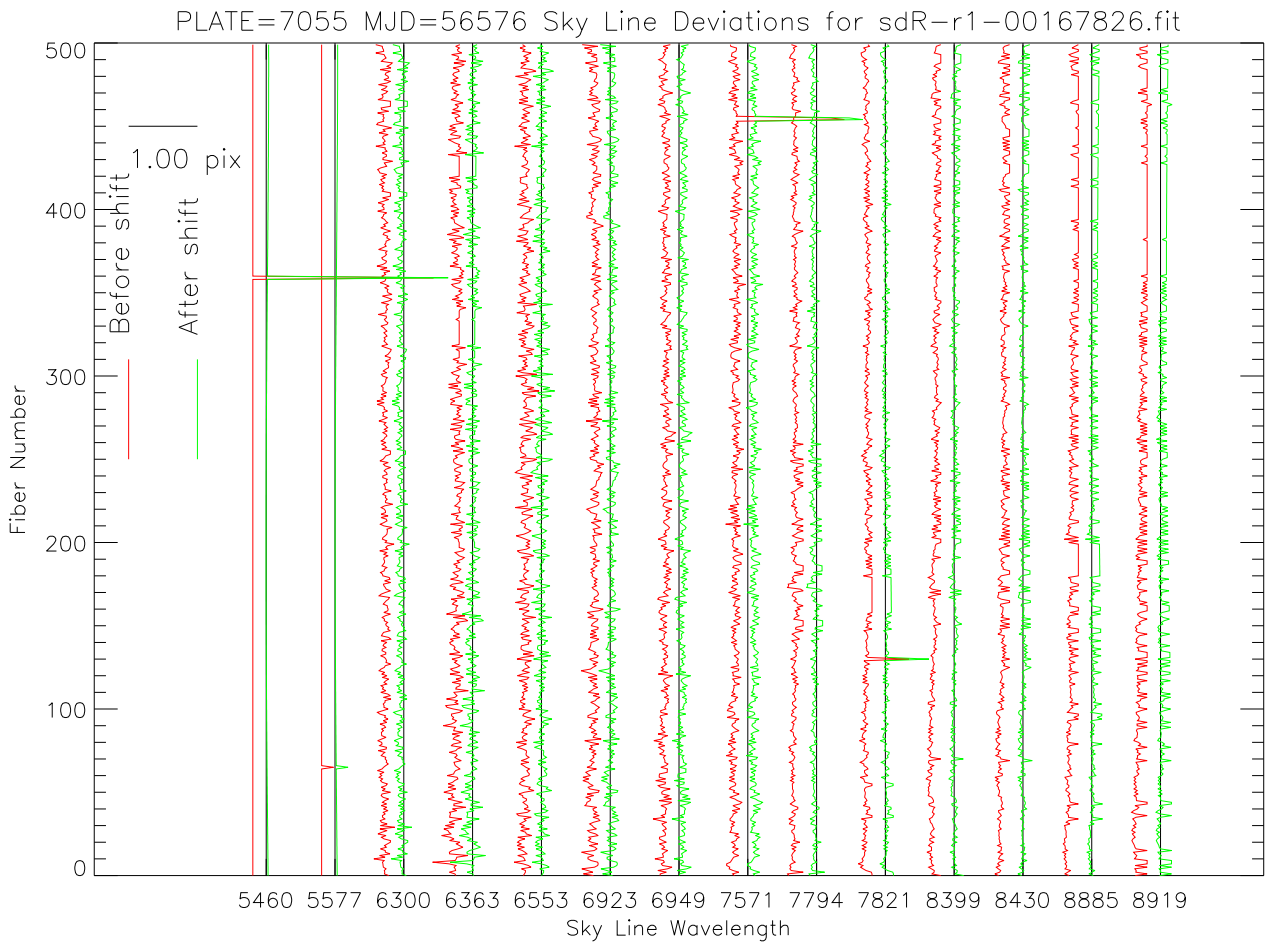


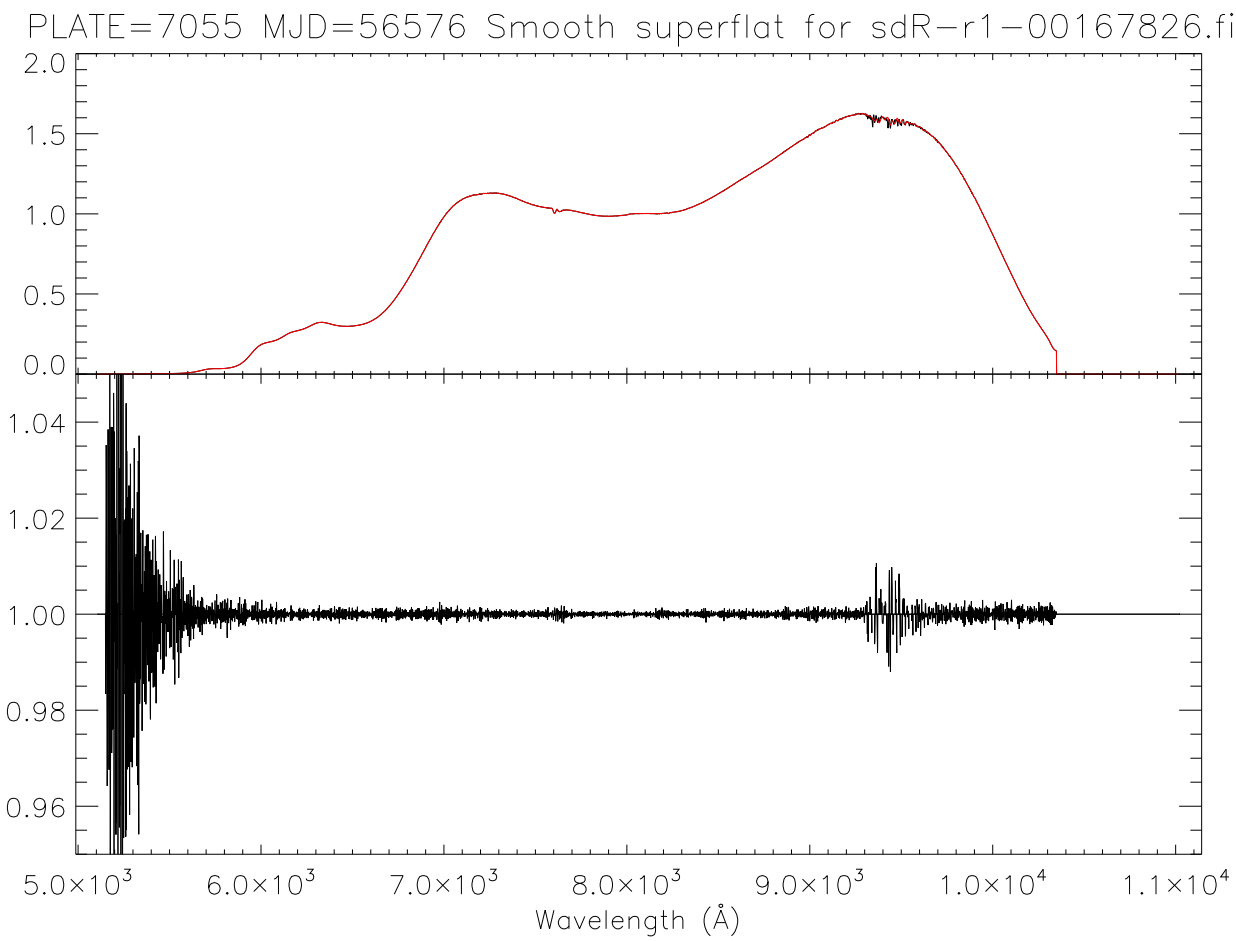

PLATE=7055 MJD=56576 sdR-r1-00167825.fit Skyline Flux at 7343.0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.97 %
Fiber number
Focal Distance [mm]
Airmass

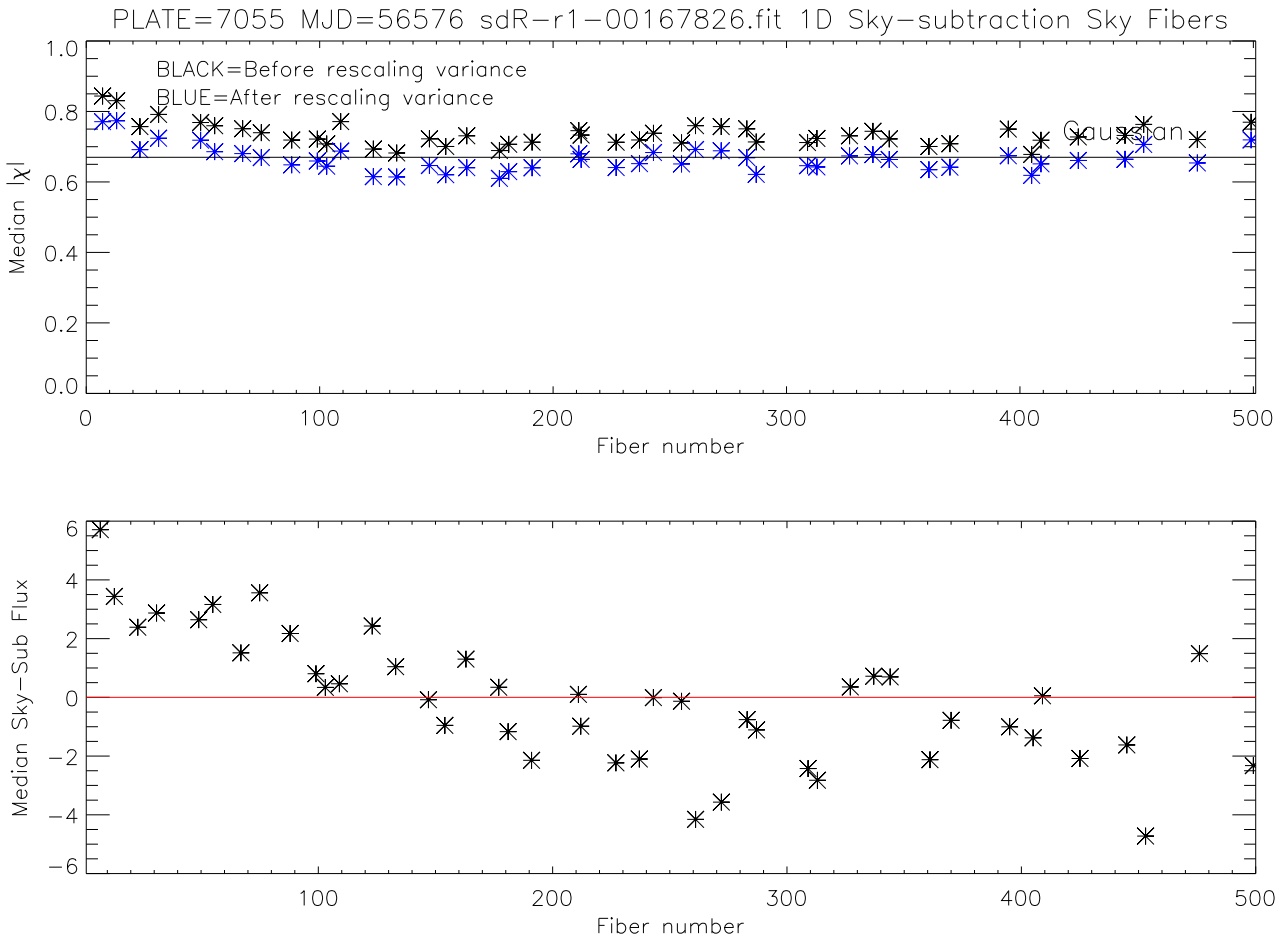

PLATE=7055 MJD=56576 sdR-r1-00167825.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 2.97 %
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
Airmass

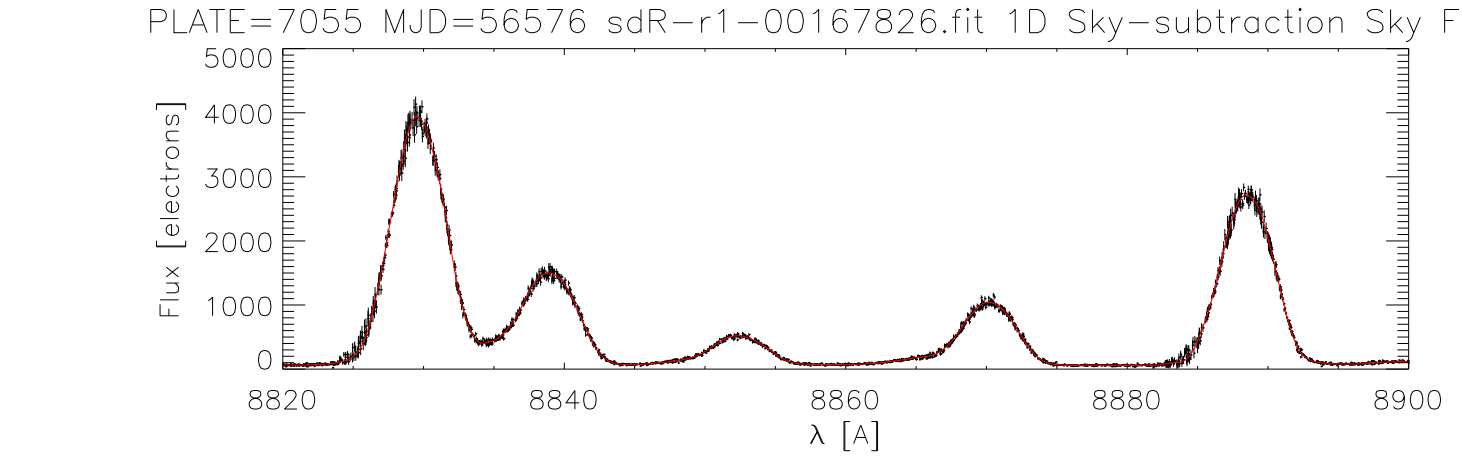

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r1−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −64.604
Max value = 2168.919
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 16:13:40 2016

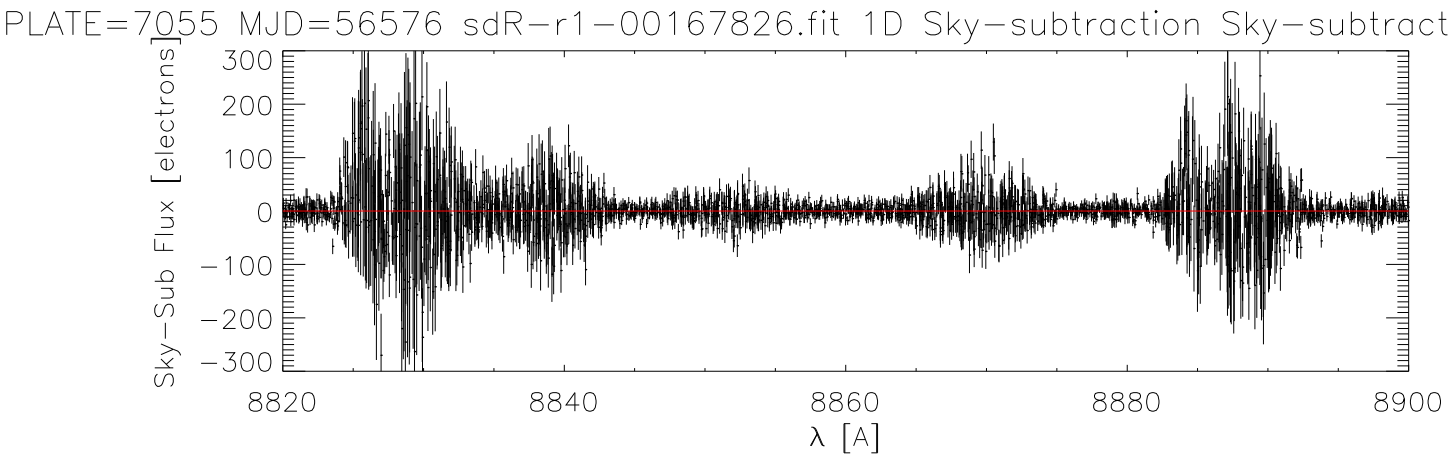

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r1−00167826.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r1-00167826.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

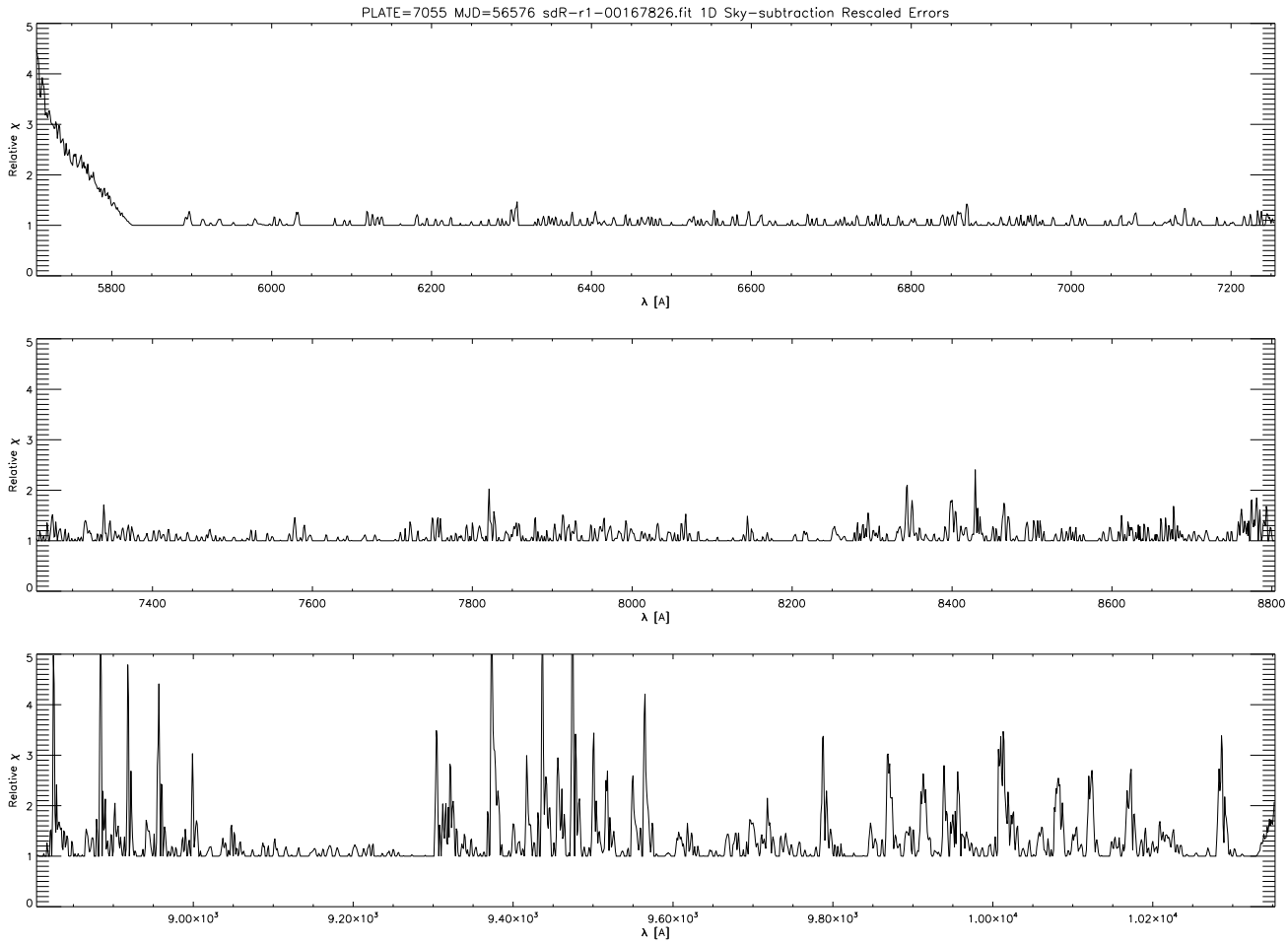

PLATE=7055 MJD=56576 Smooth superflat for sdR-r1-00167826.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

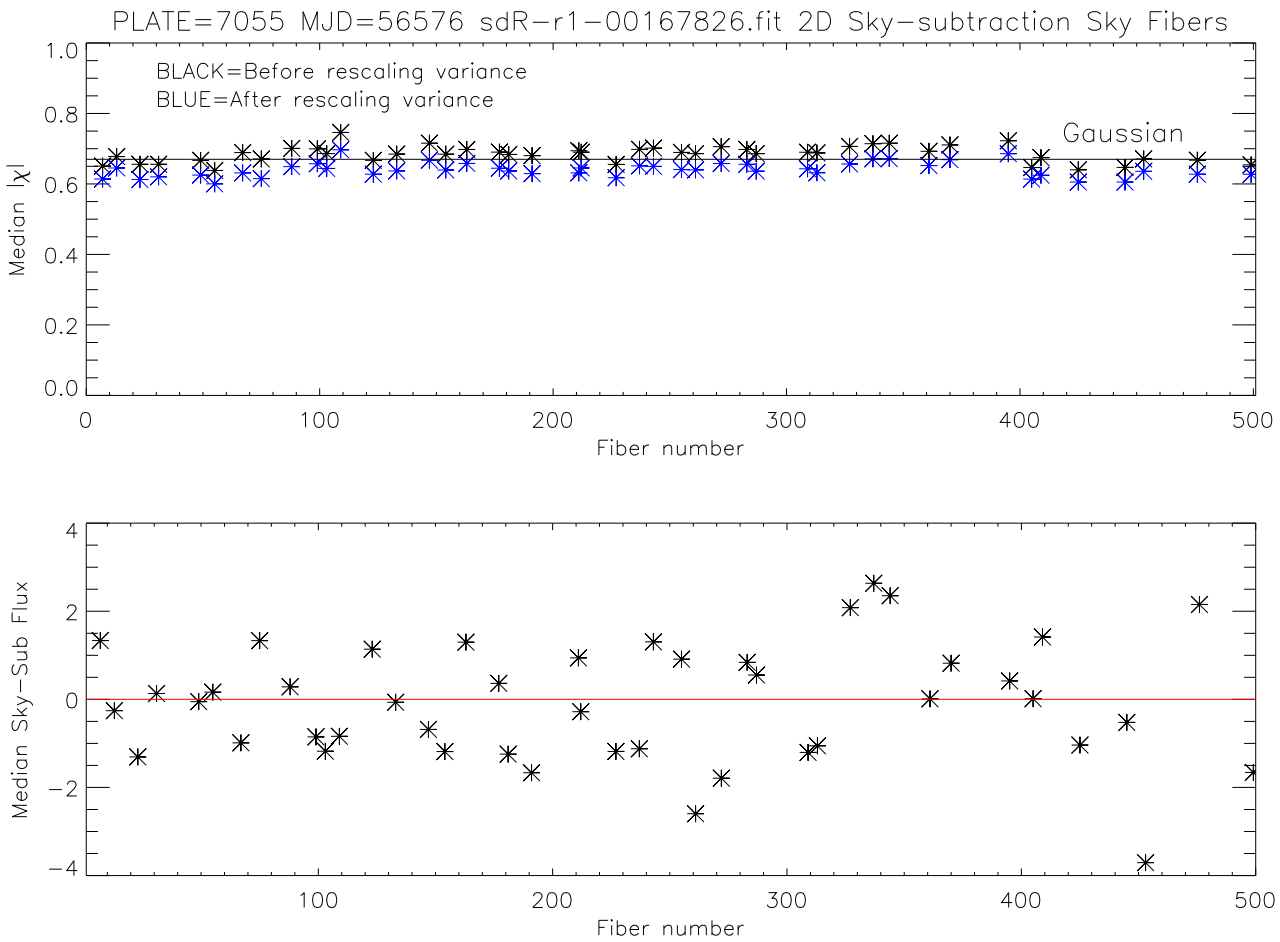

PLATE=7055 MJD=56576 sdR-r1-00167826.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

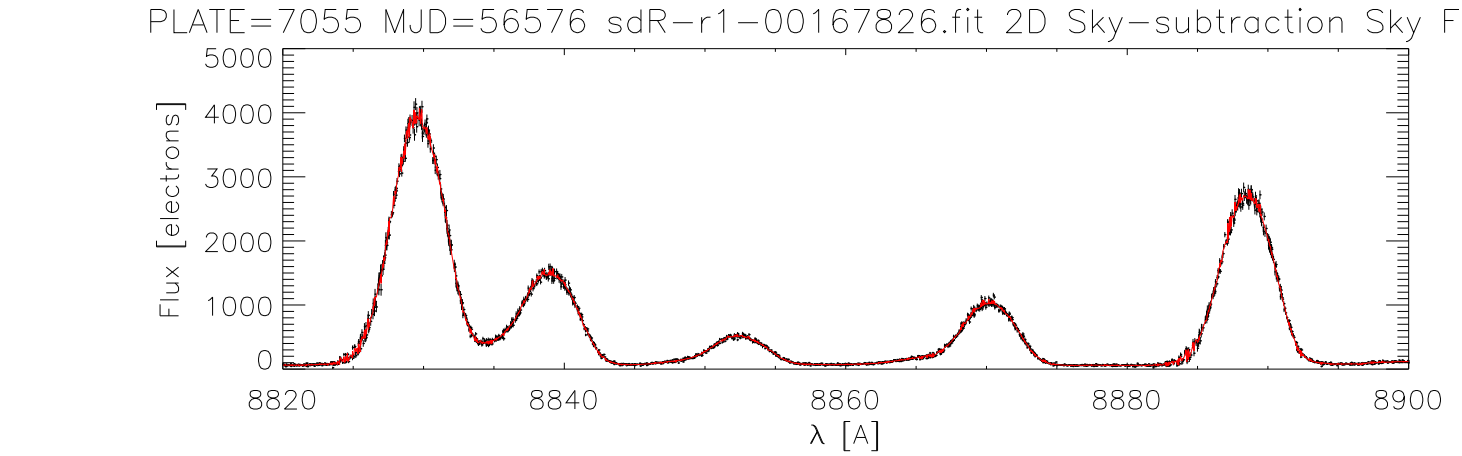

PLATE=7055 MJD=56576 sdR-r1-00167826.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

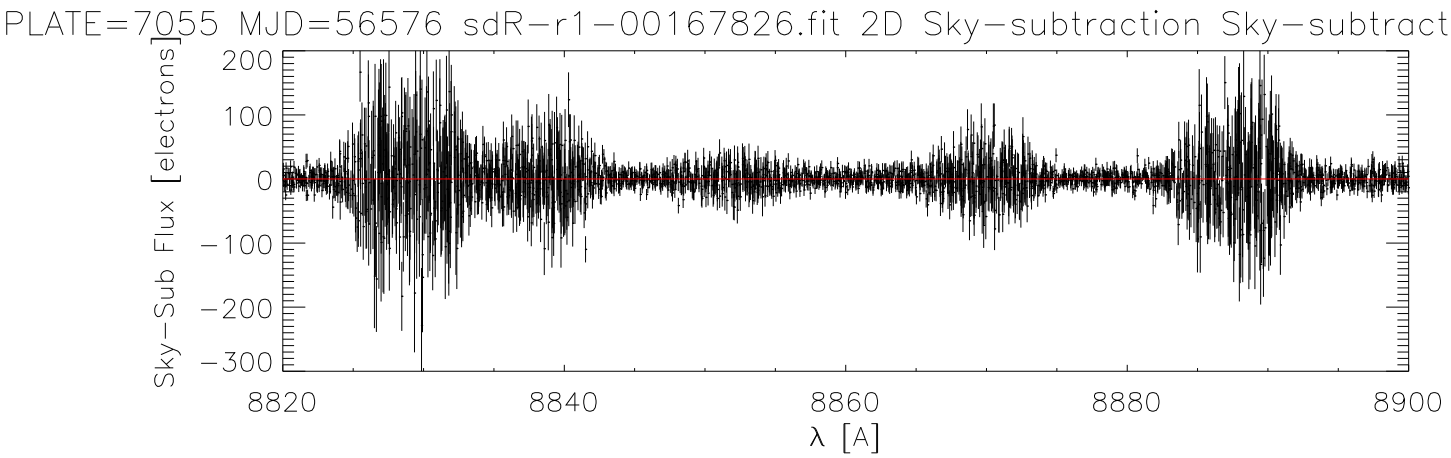

PLATE=7055 MJD=56576 sdR-r1-00167826.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 45

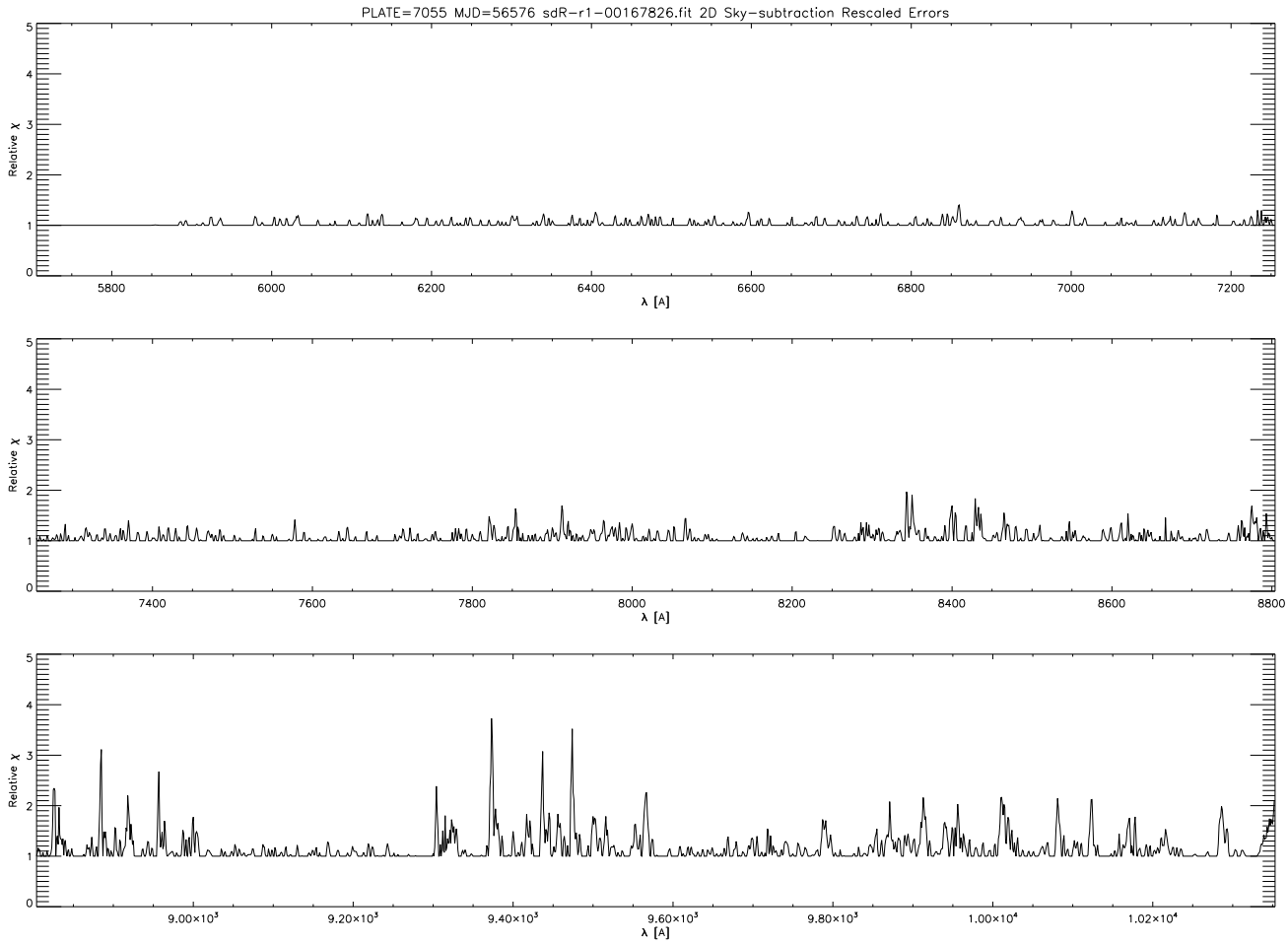


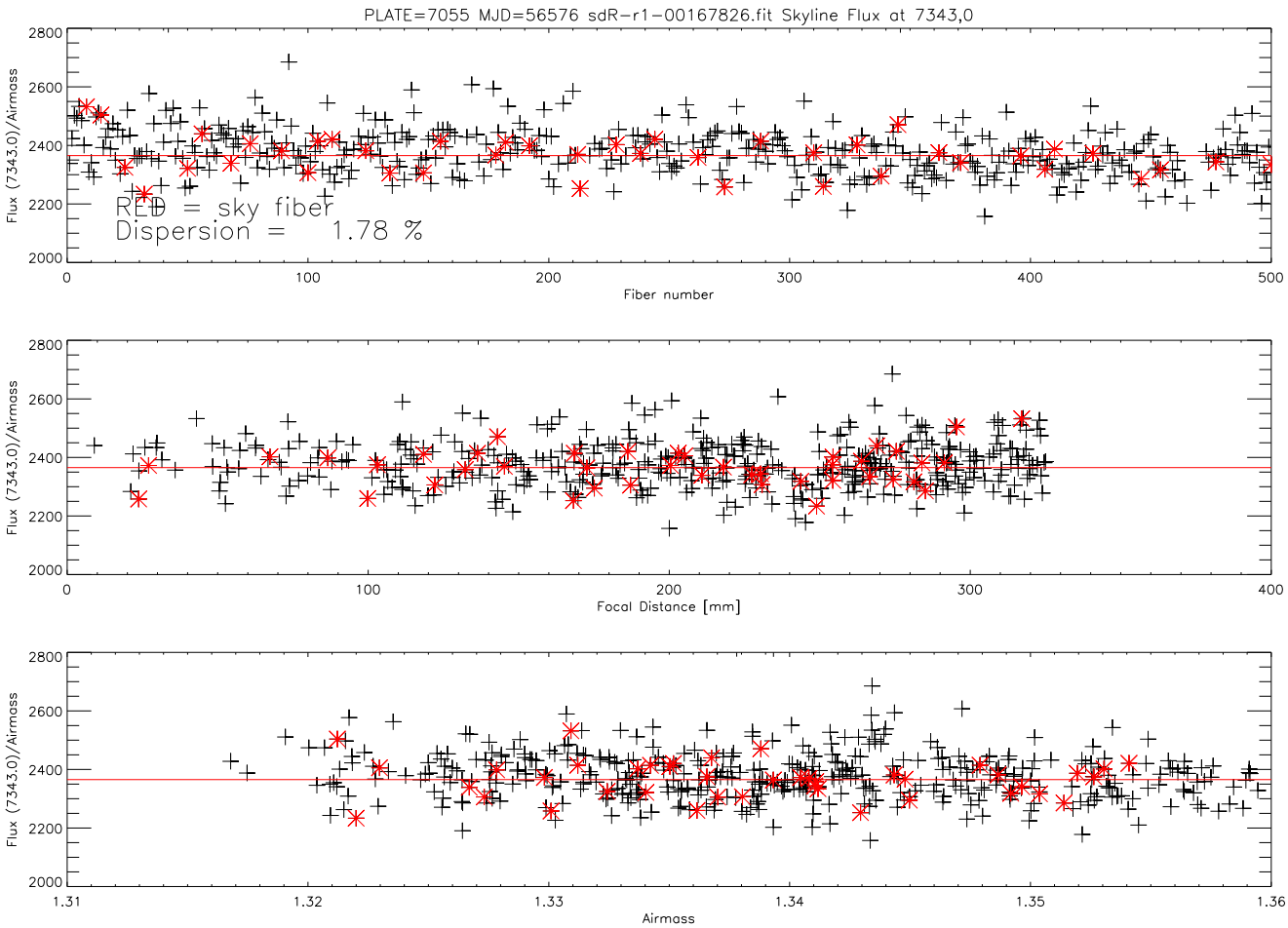

PLATE=7055 MJD=56576 sdR-r1-00167826.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

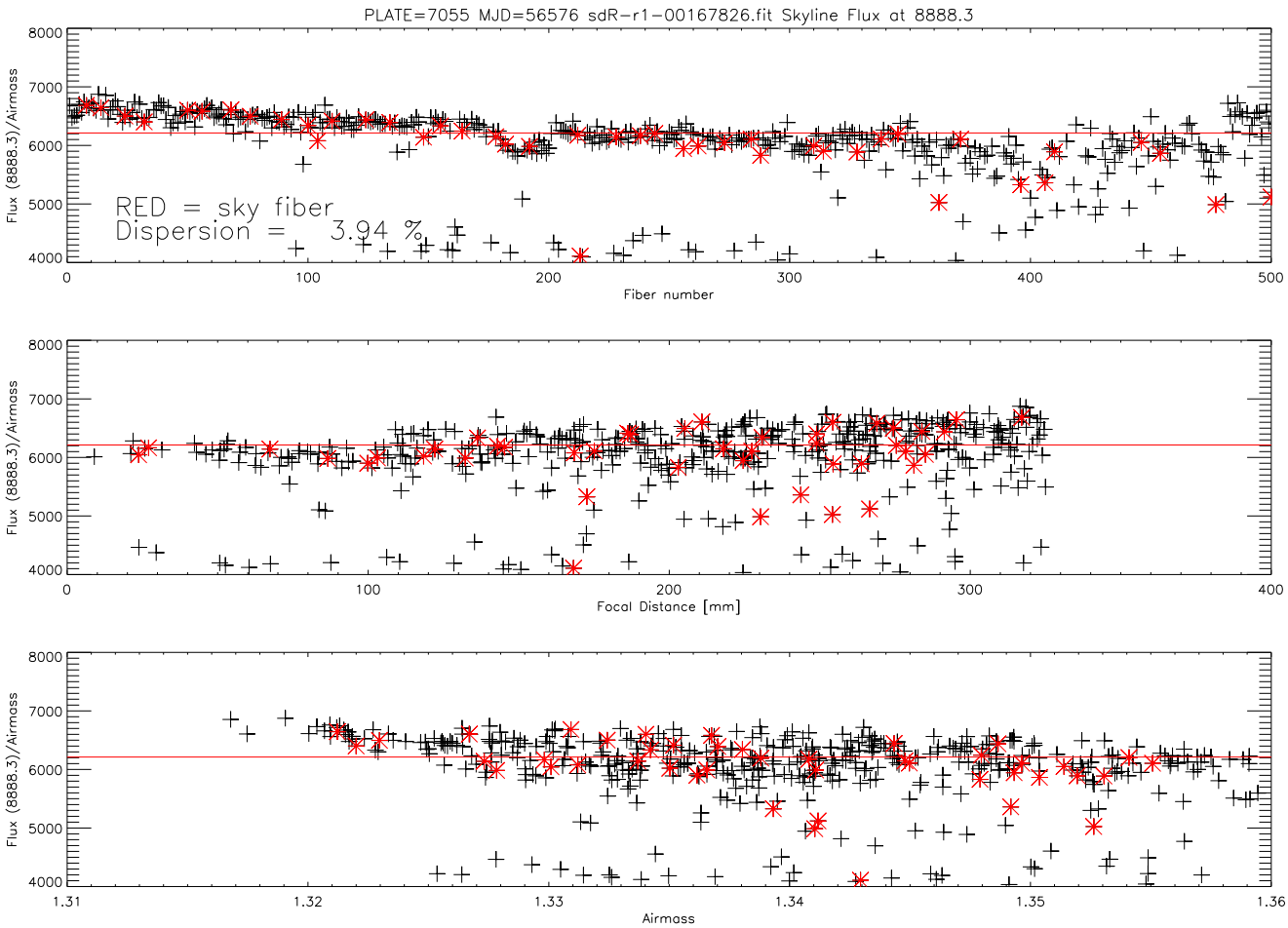

PLATE=7055 MJD=56576 sdR-r1-00167826.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=7055 MJD=56576 sdR-r1-00167826.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]

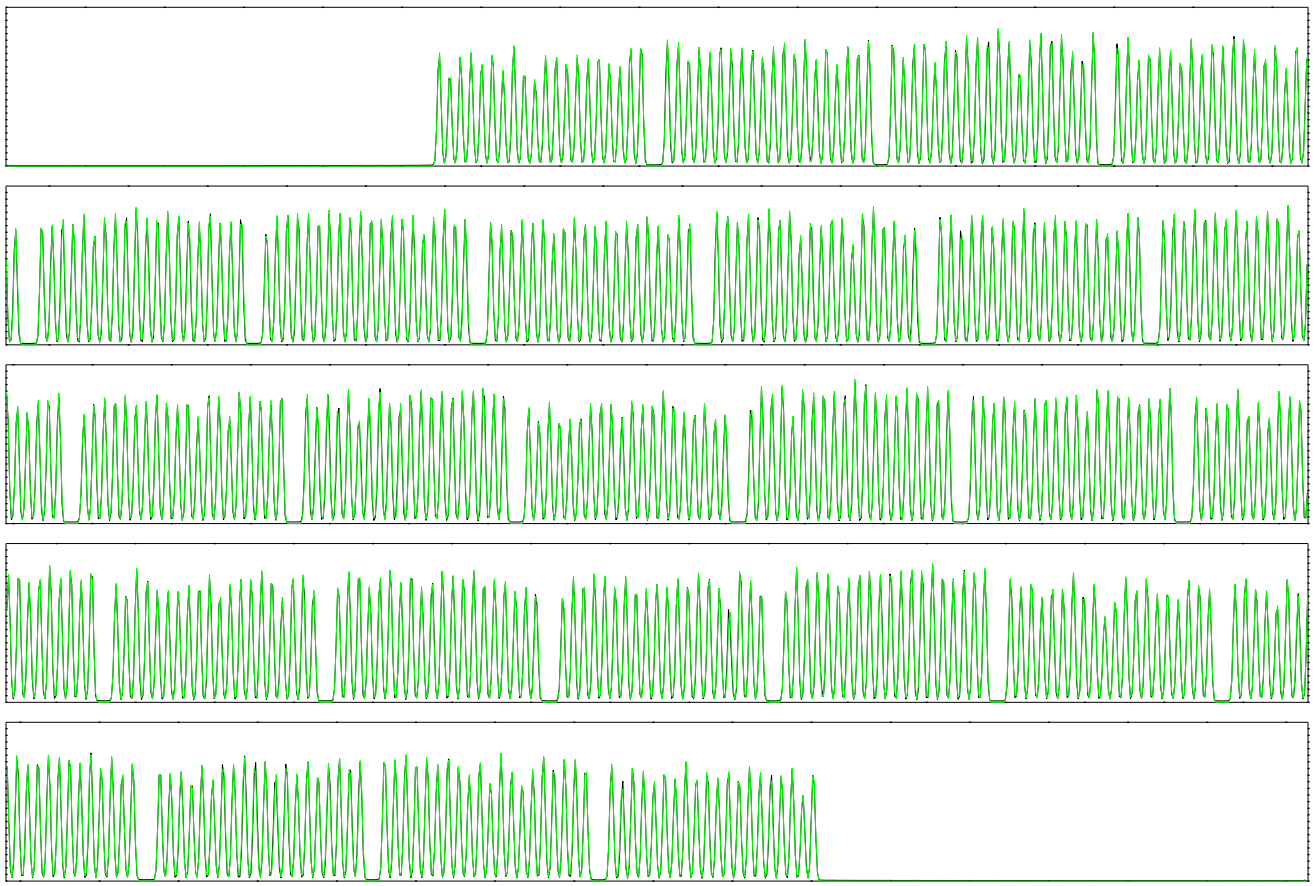
Number of sky fibers = 45

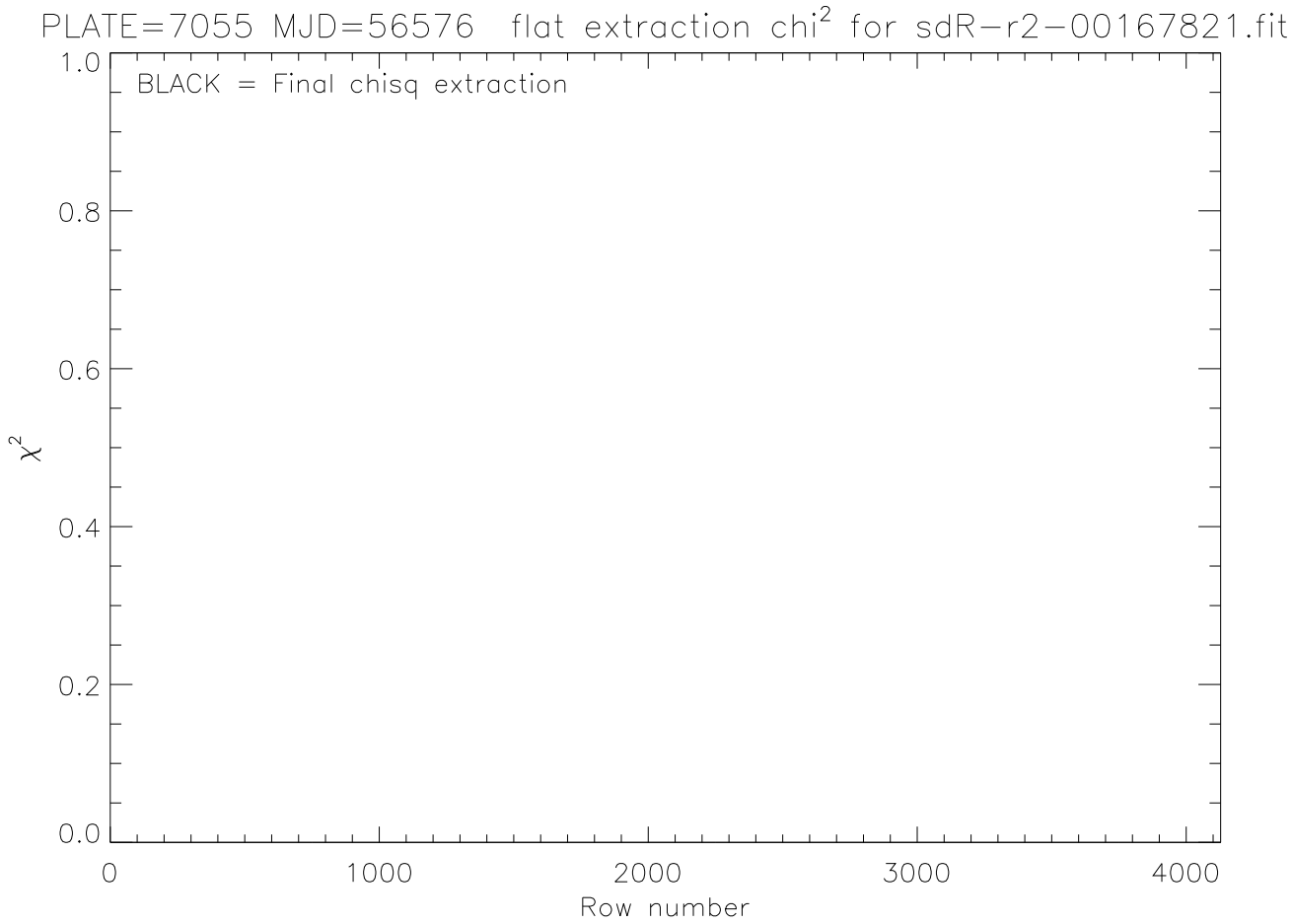


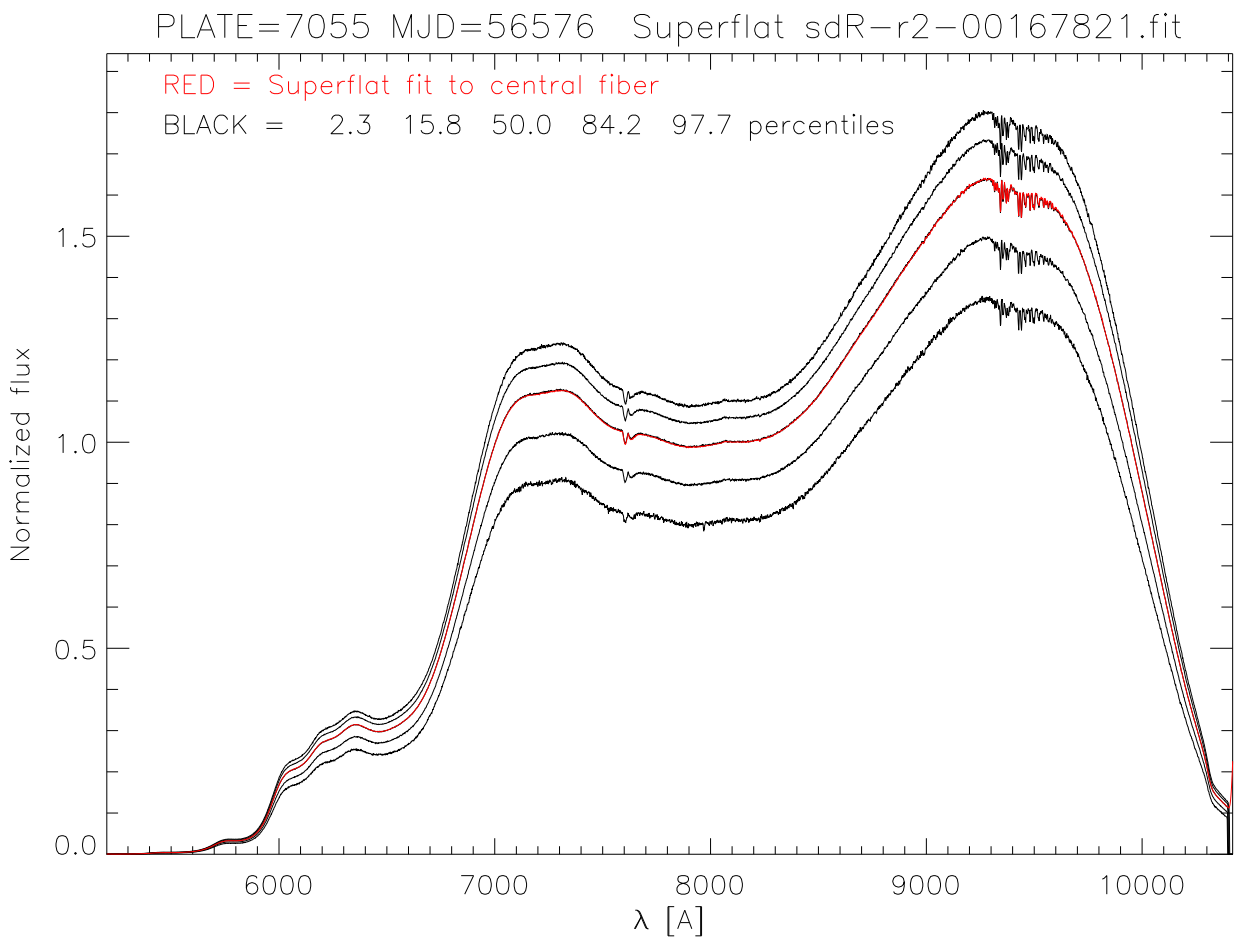

PLATE=7055 MJD=56576 sdR-r1-00167826.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.78 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass

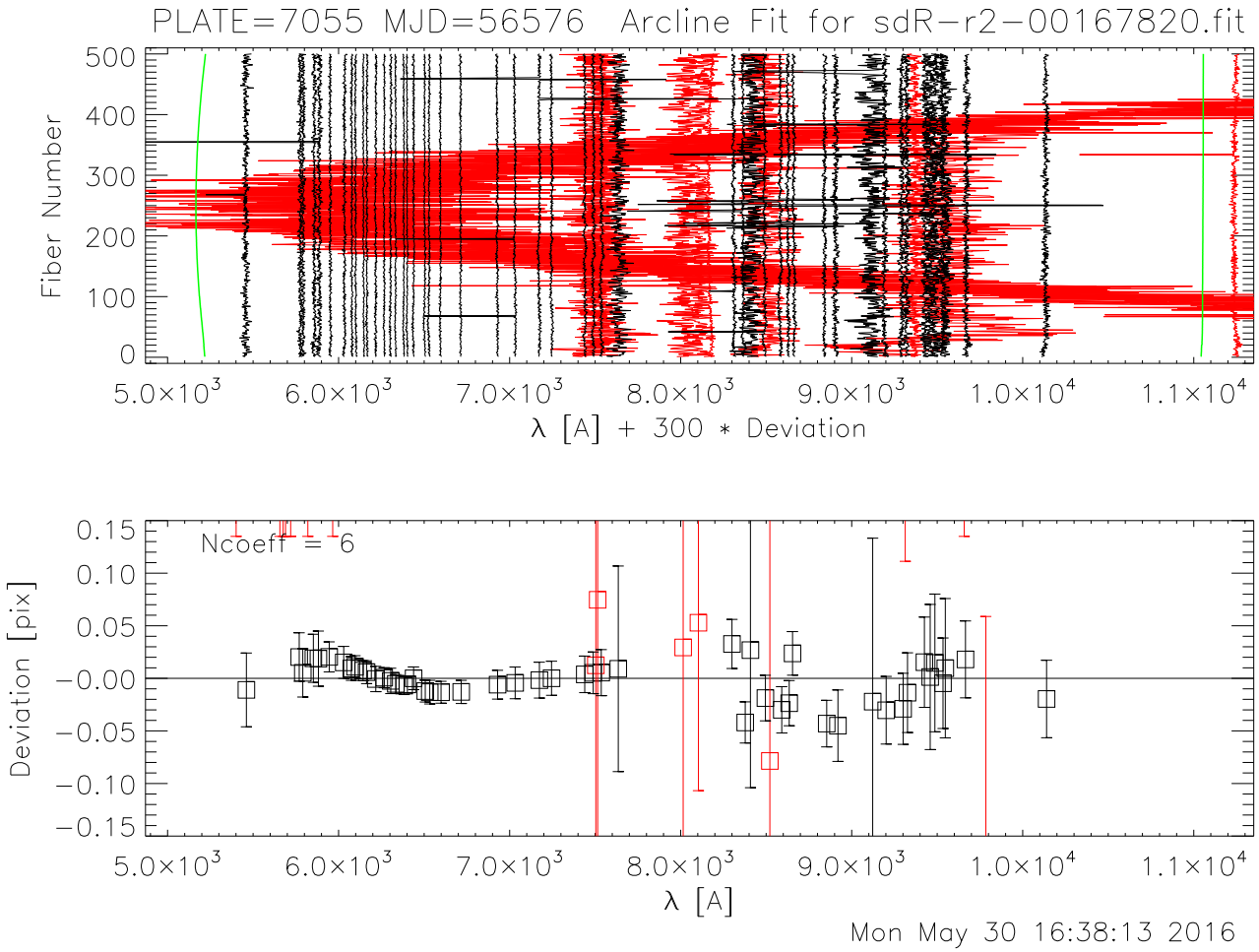

PLATE=7055 MJD=56576 sdR-r1-00167826.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.94 %
Fiber number
Focal Distance [mm]
Airmass

PLATE=7055 MJD=56576 Traces sdR-r2-00167821.fit

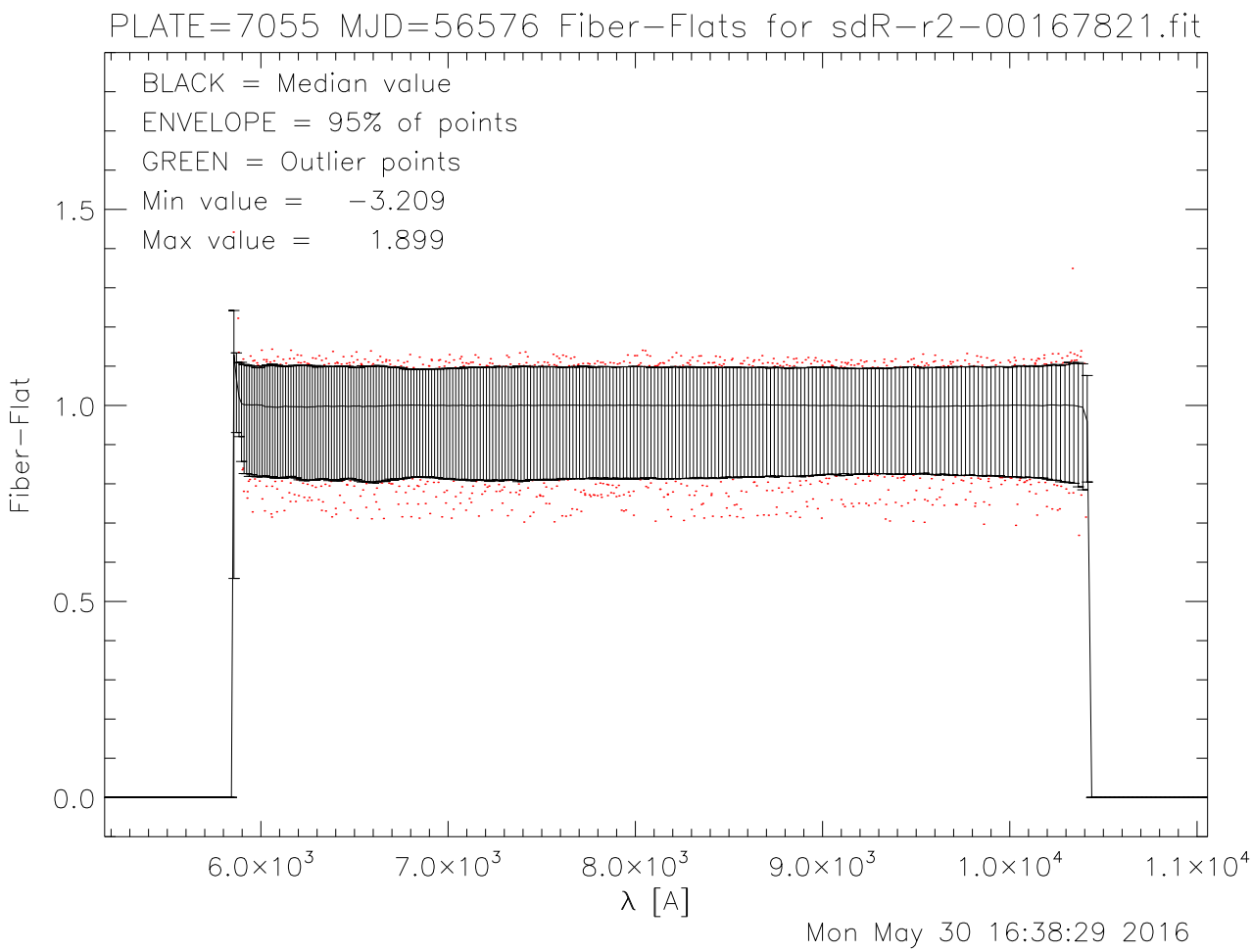


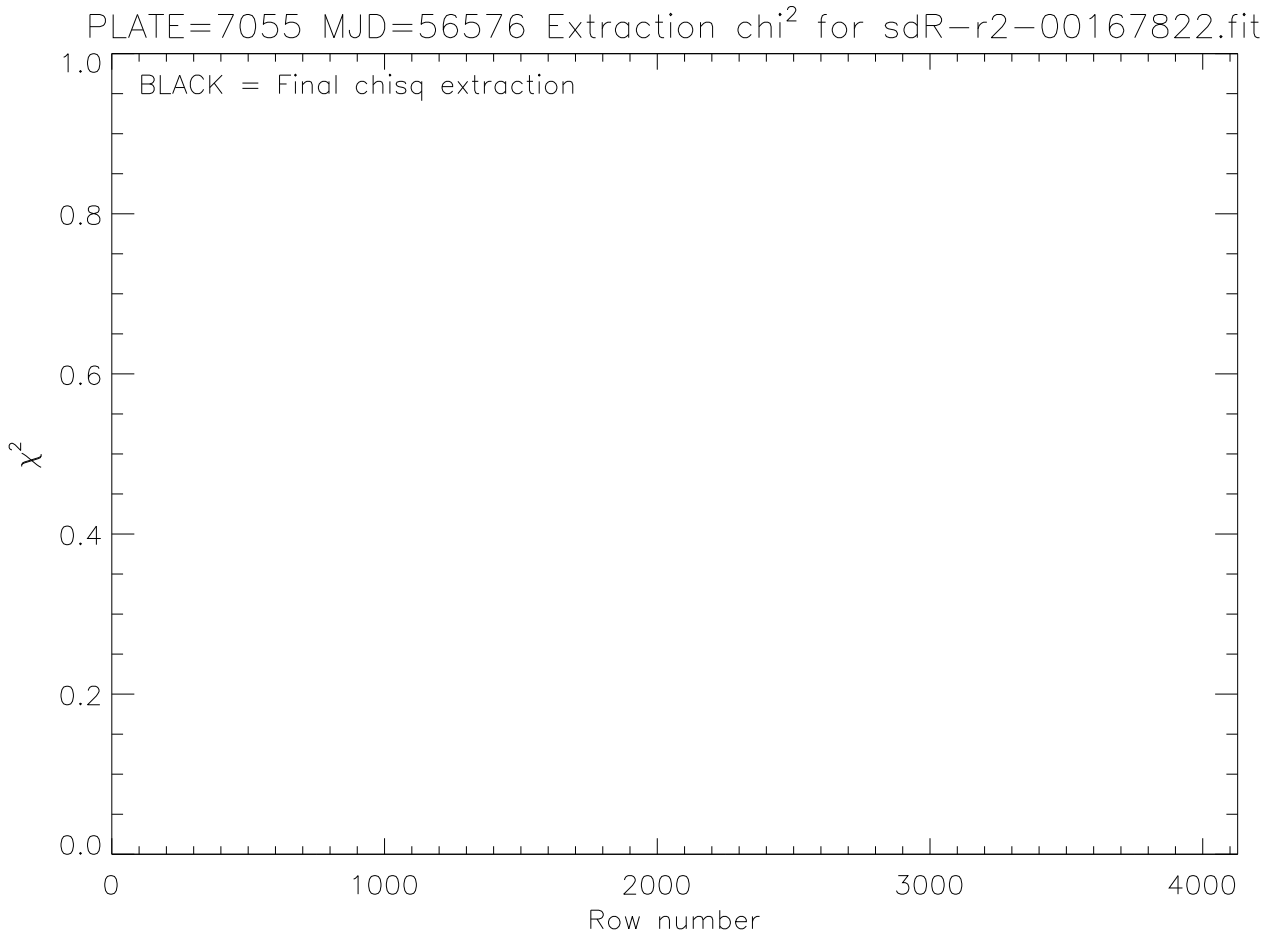

PLATE=7055 MJD=56576 flat extraction chi^2 for sdR−r2−00167821.fit
BLACK = Final chisq extraction
1.0
0.8
0.6
0.4
0.2
0.0
χ^2
0
1000
2000
3000
4000
Row number

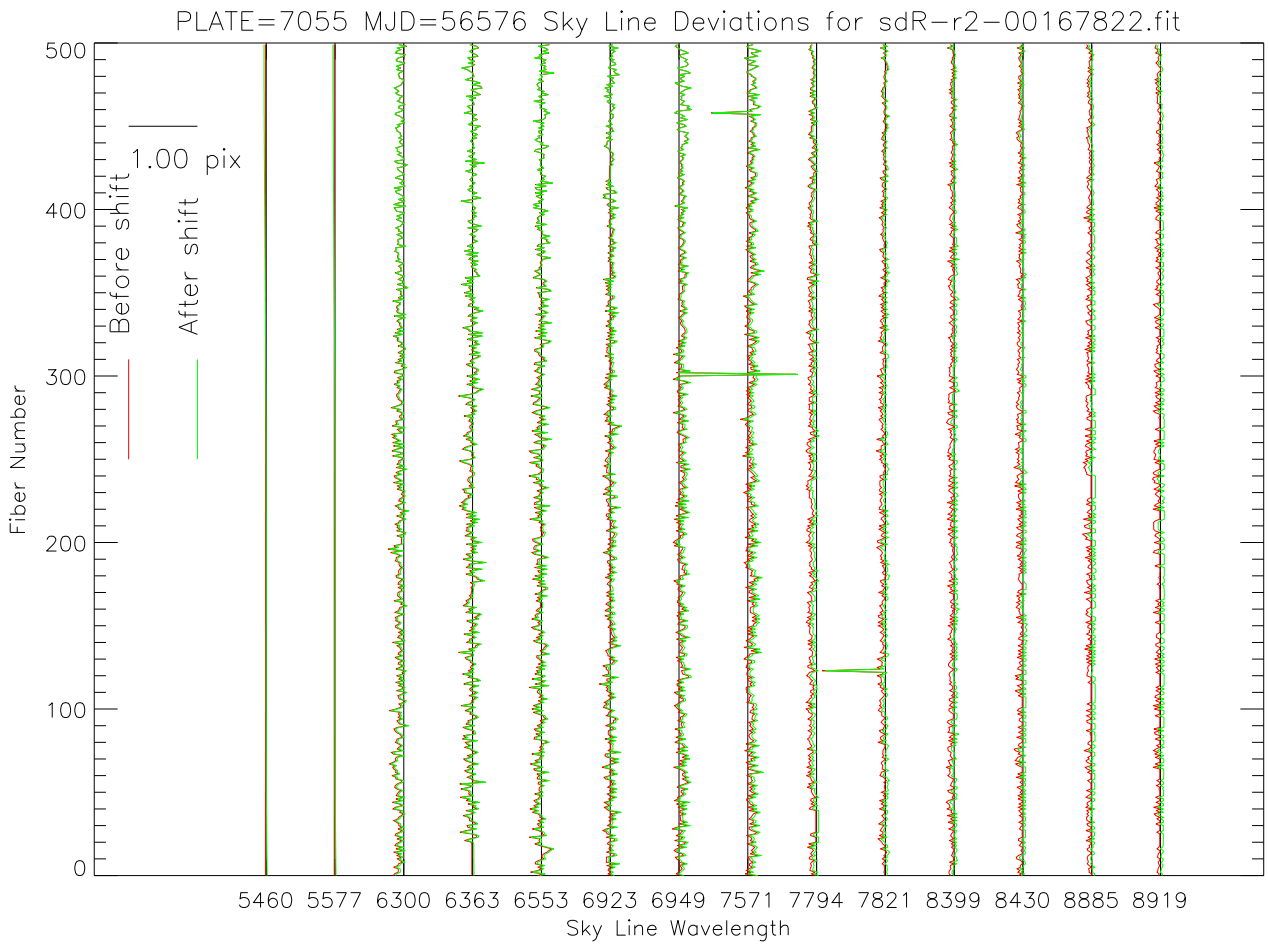

PLATE=7055 MJD=56576 Superflat sdR-r2-00167821.fit
RED = Superflat fit to central fiber
BLACK = 2.3 15.8 50.0 84.2 97.7 percentiles
Normalized flux
0.0
0.5
1.0
1.5
6000
7000
8000
9000
10000
λ [A]

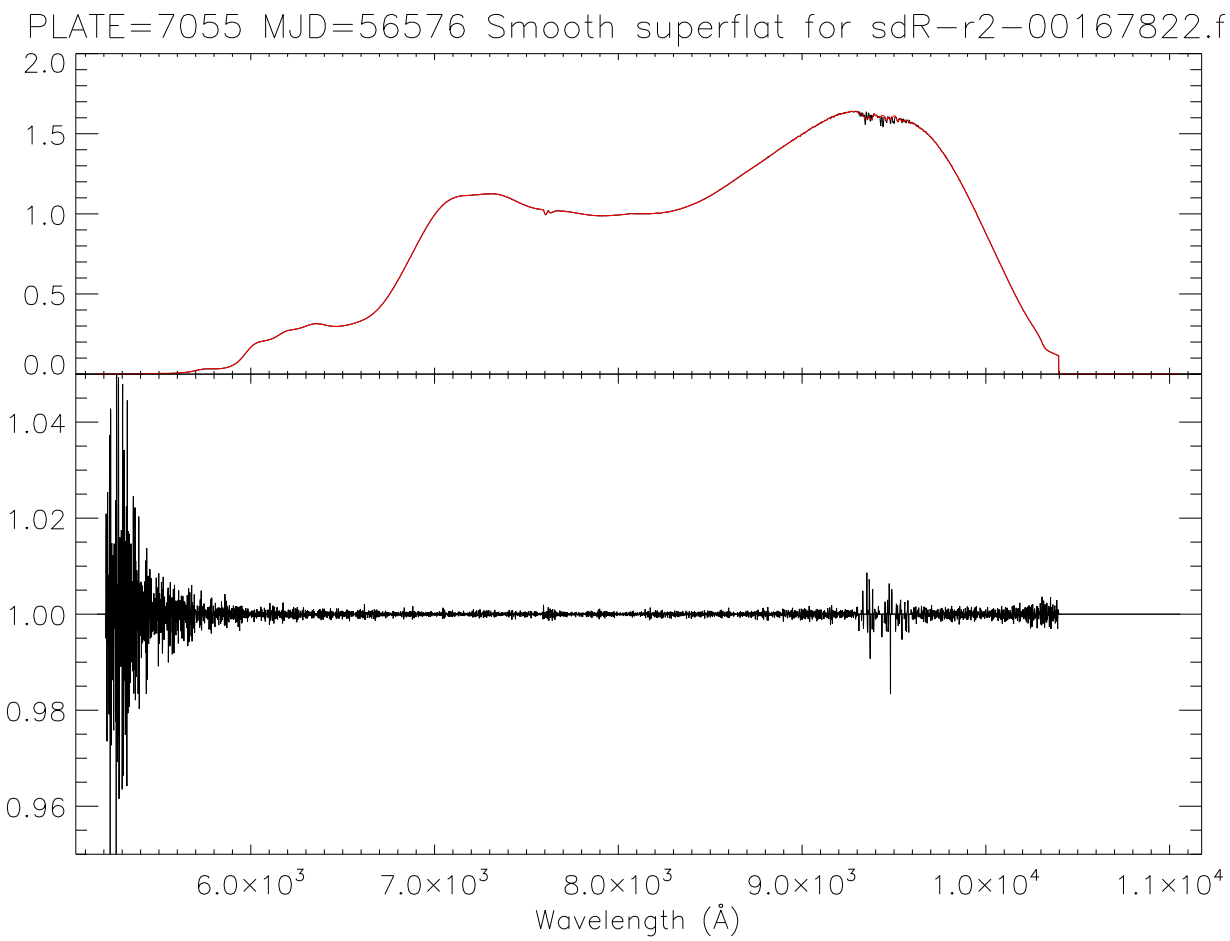

PLATE=7055 MJD=56576 Arcline Fit for sdR-r2-00167820.fit
Fiber Number
500
400
300
200
100
0
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A] + 300 * Deviation

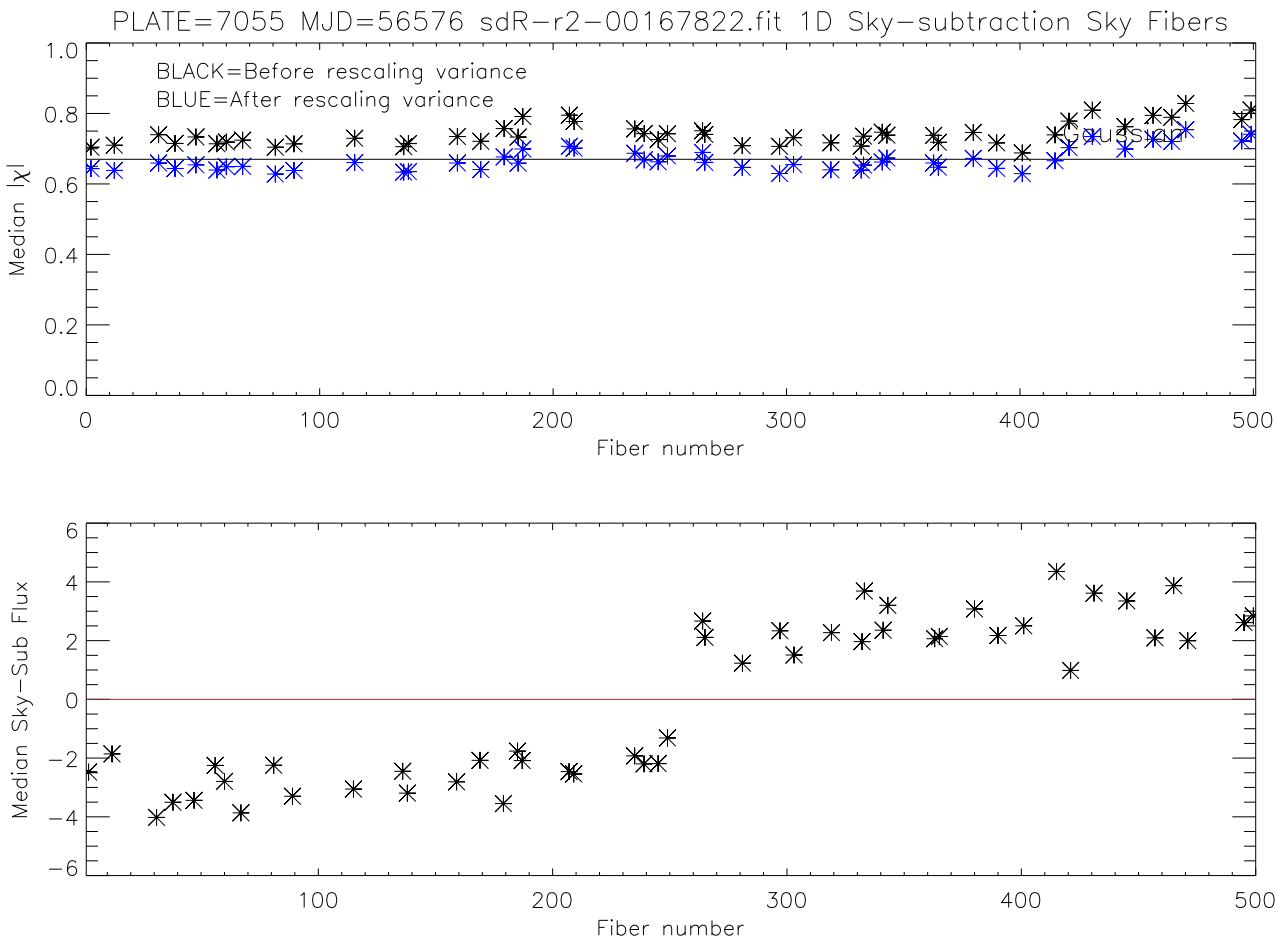
Ncoeff = 6
Deviation [pix]
0.15
0.10
0.05
−0.00
−0.05
−0.10
−0.15
5.0×10^3
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 16:38:13 2016

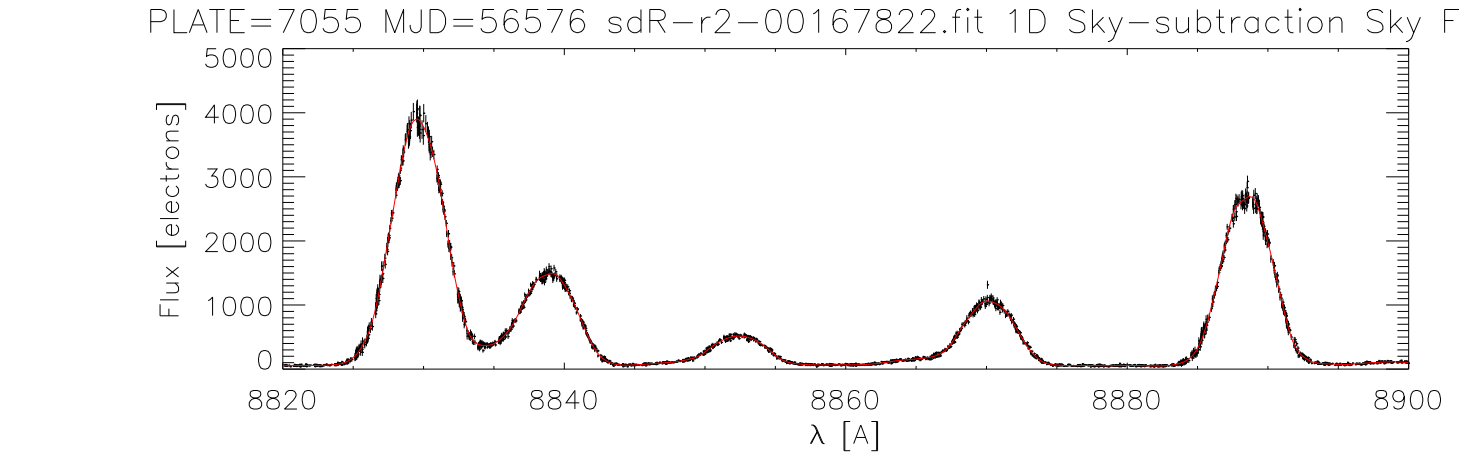

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r2−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.209
Max value = 1.899
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 16:38:29 2016

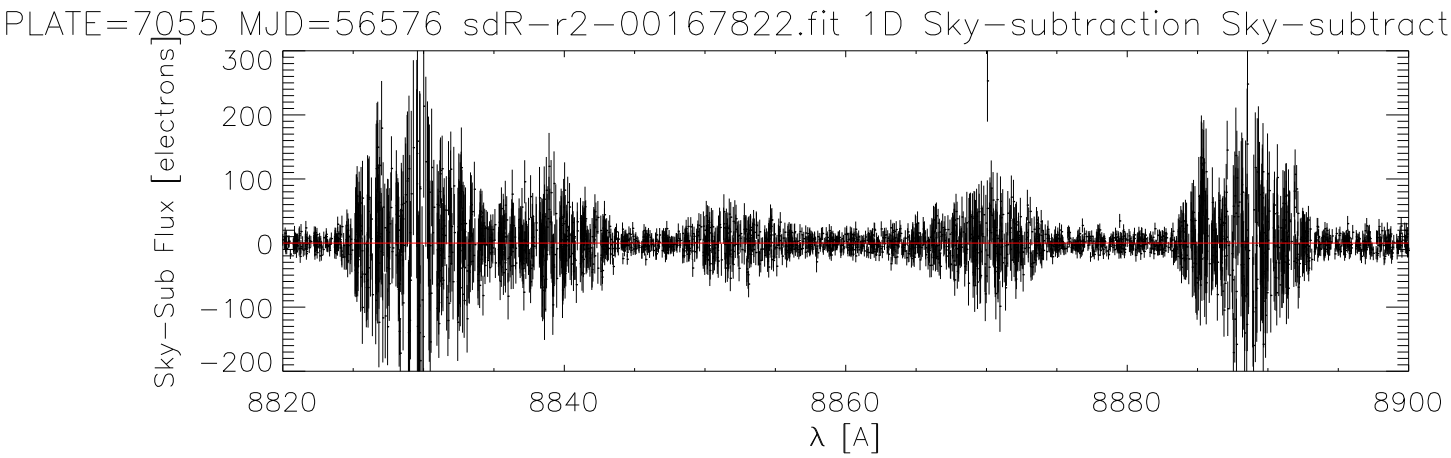

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r2−00167822.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r2-00167822.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

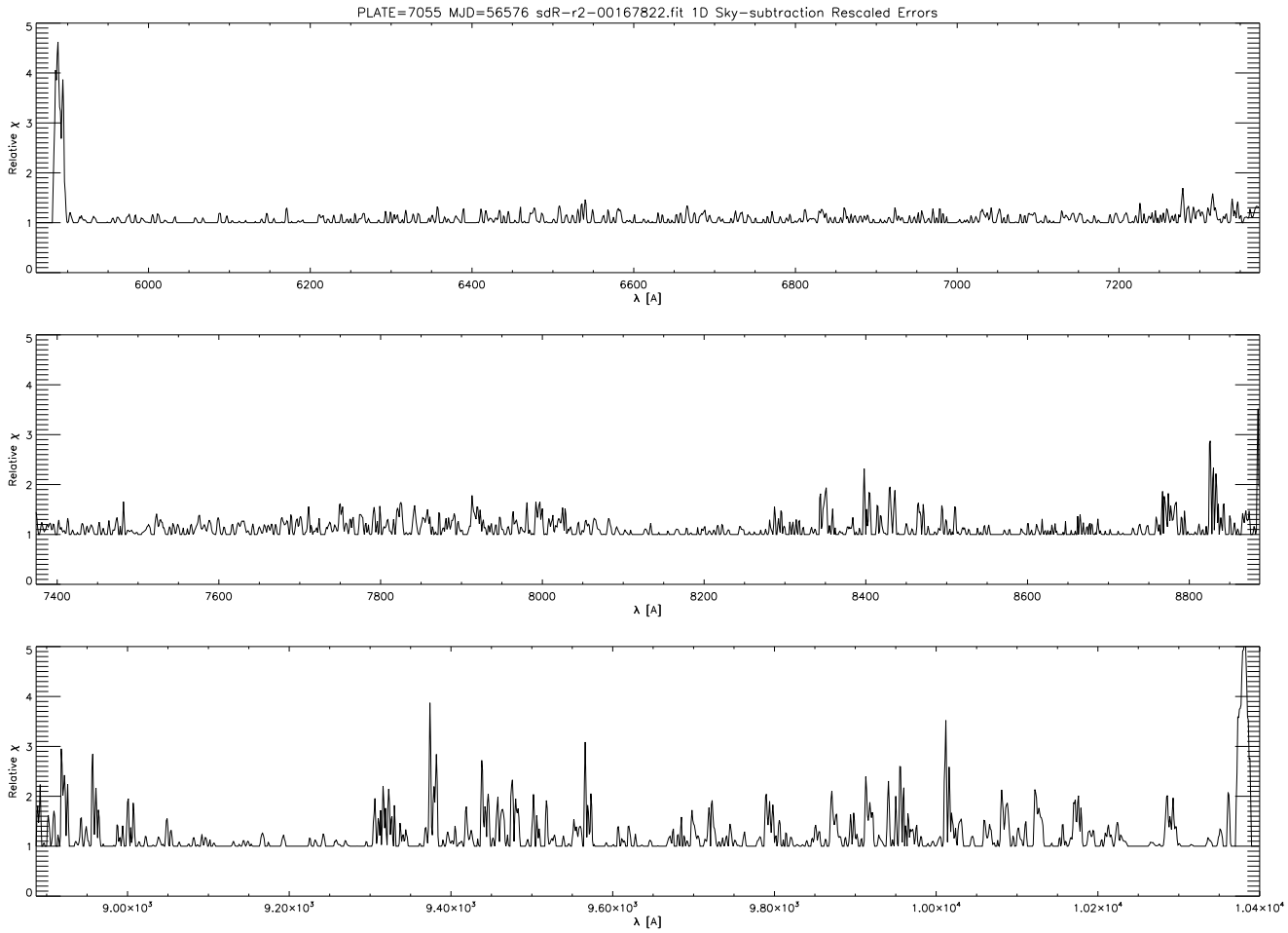

PLATE=7055 MJD=56576 Smooth superflat for sdR-r2-00167822.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

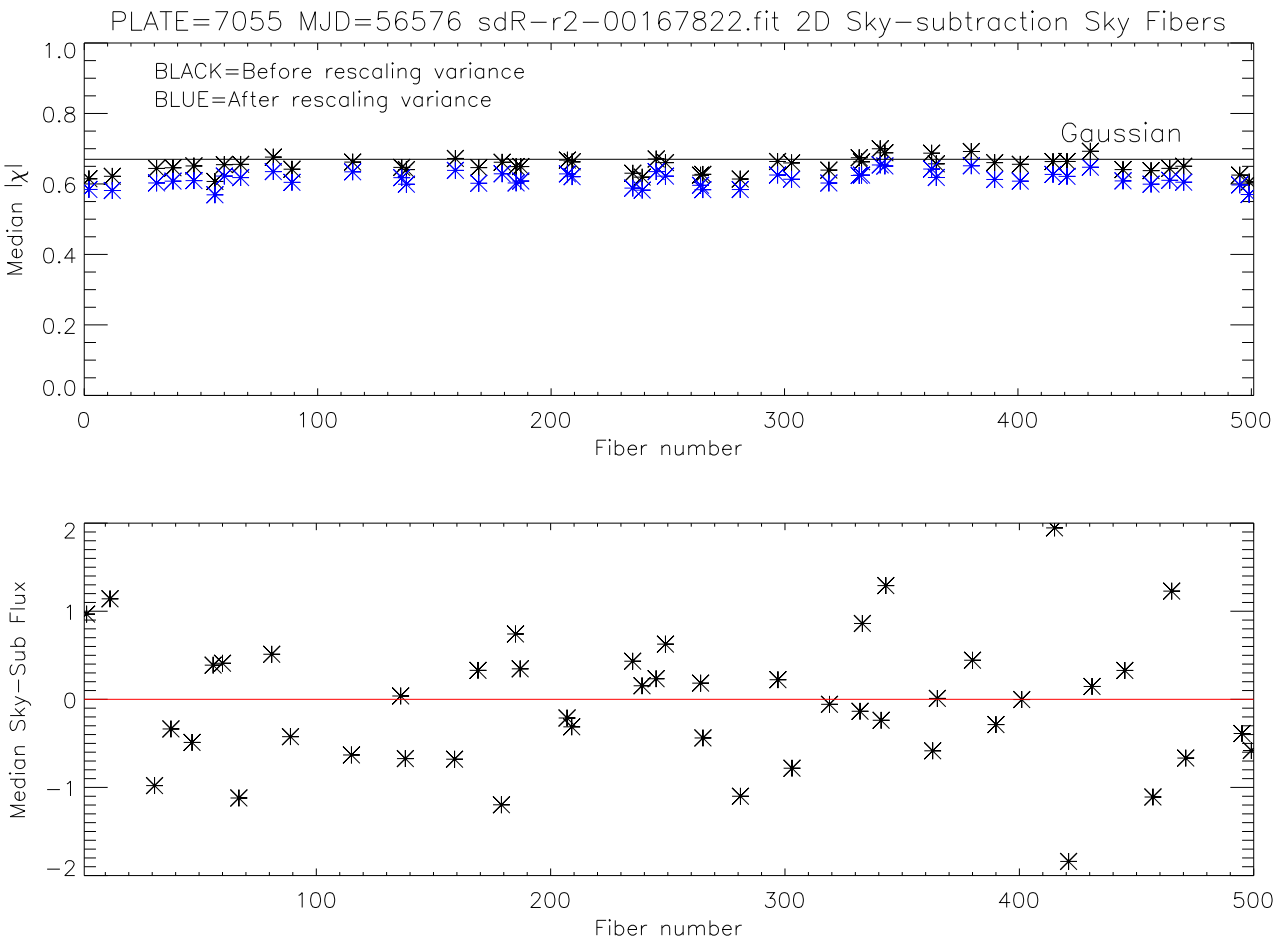

PLATE=7055 MJD=56576 sdR-r2-00167822.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

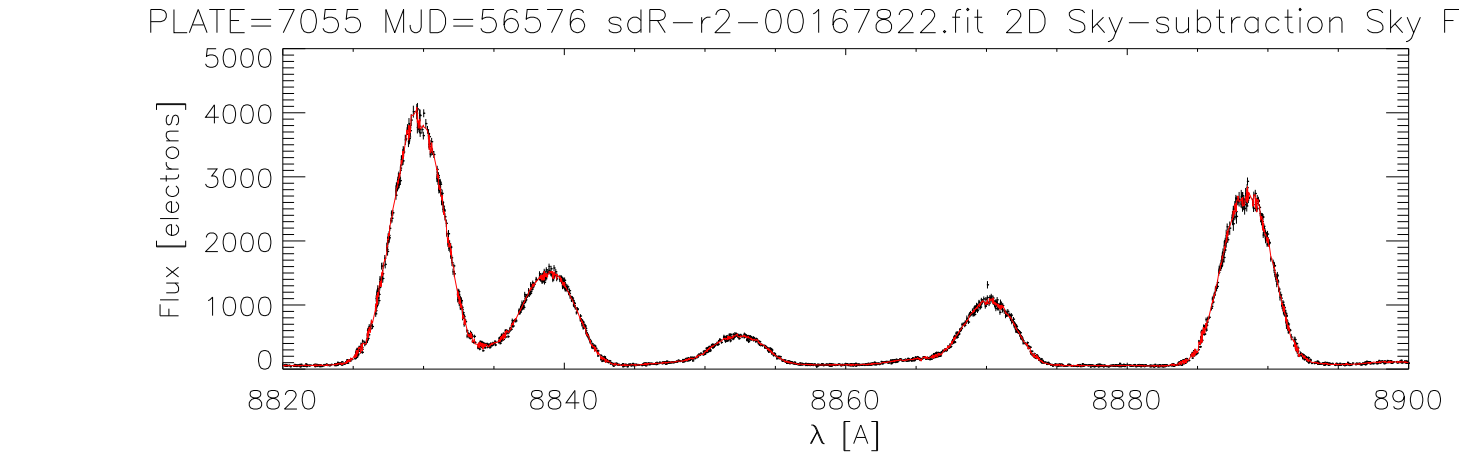

PLATE=7055 MJD=56576 sdR-r2-00167822.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

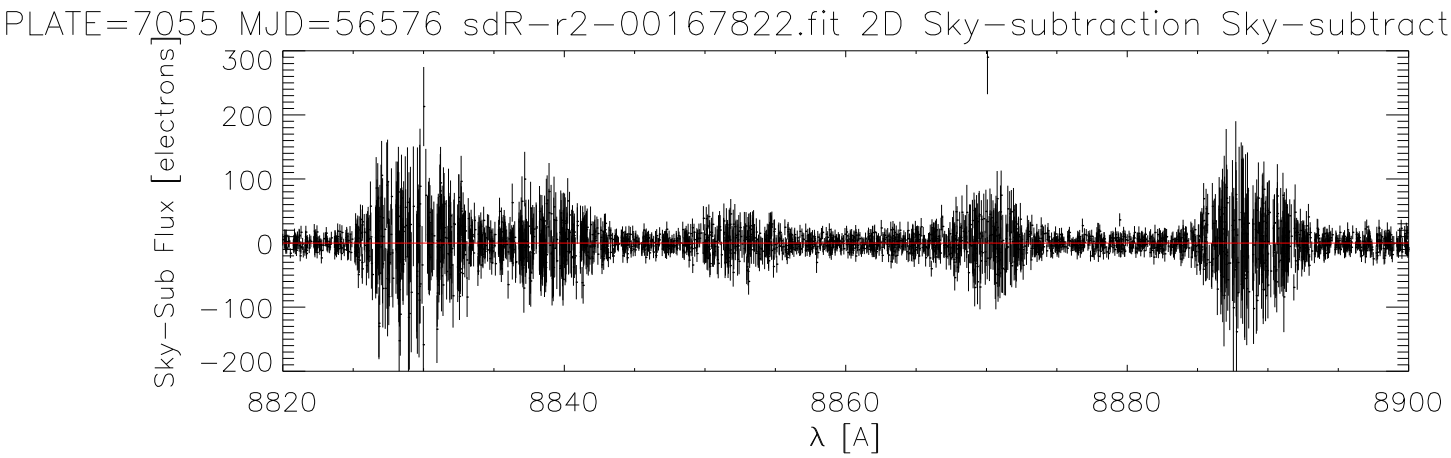

PLATE=7055 MJD=56576 sdR-r2-00167822.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48

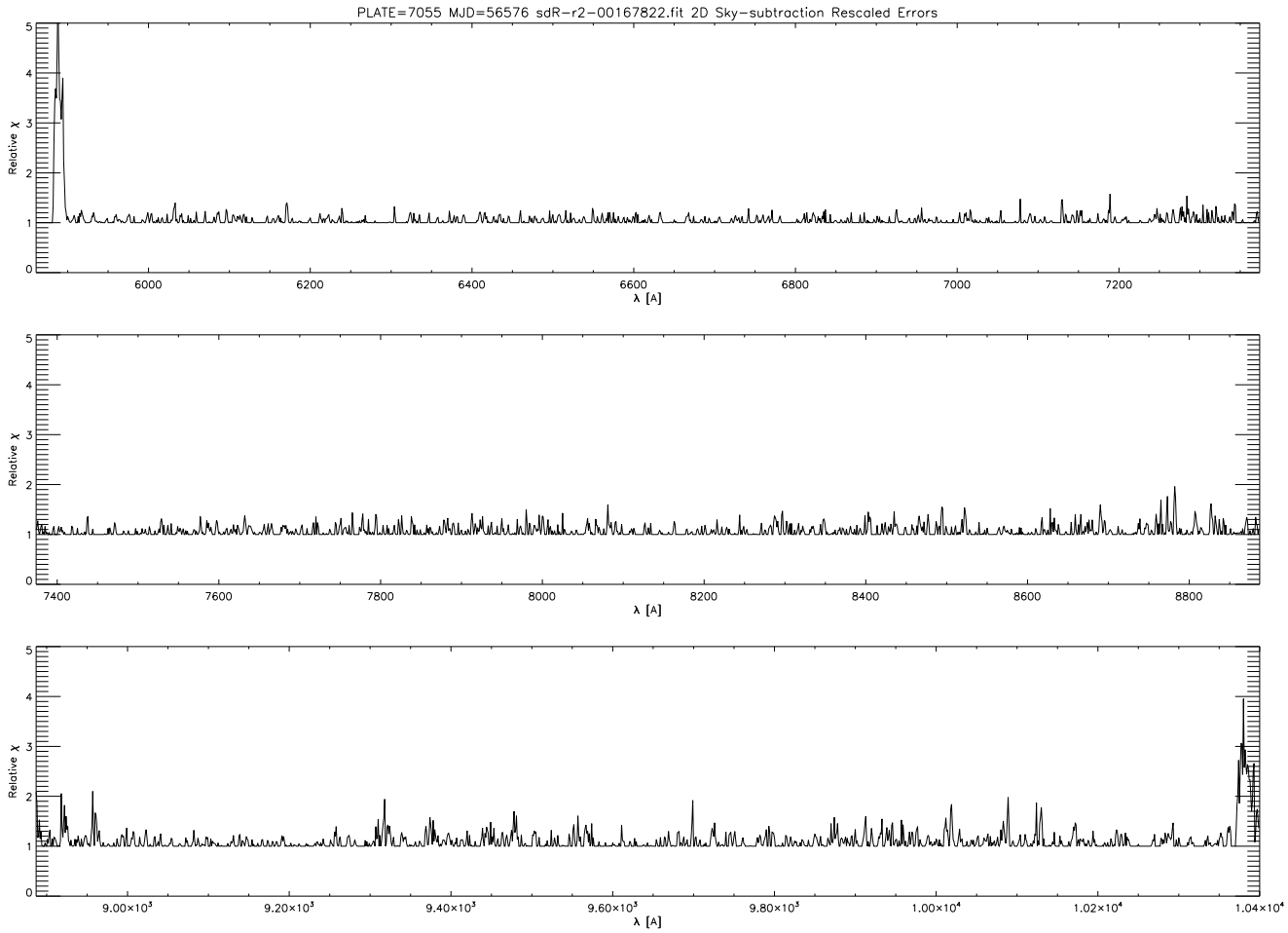


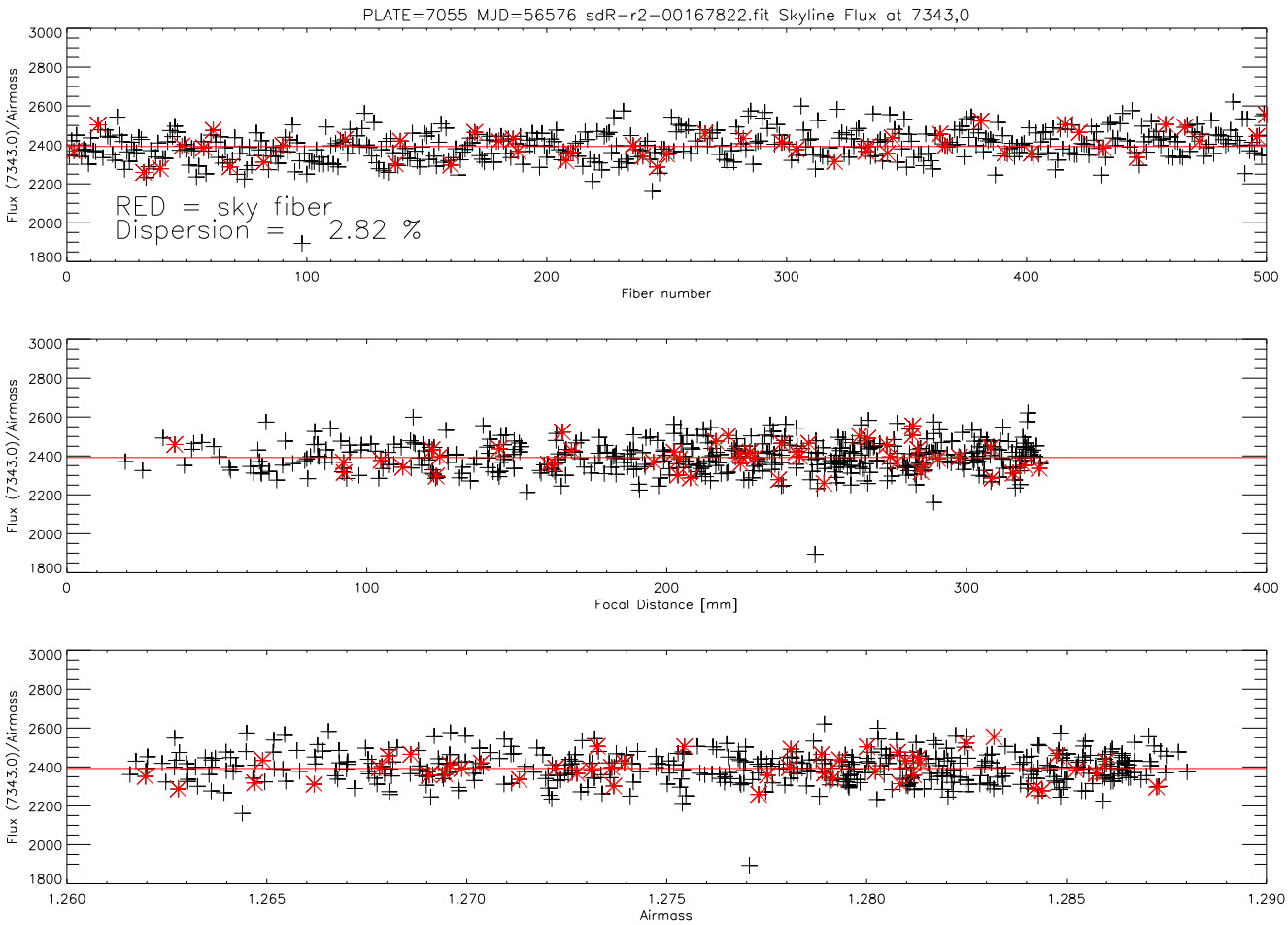

PLATE=7055 MJD=56576 sdR-r2-00167822.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

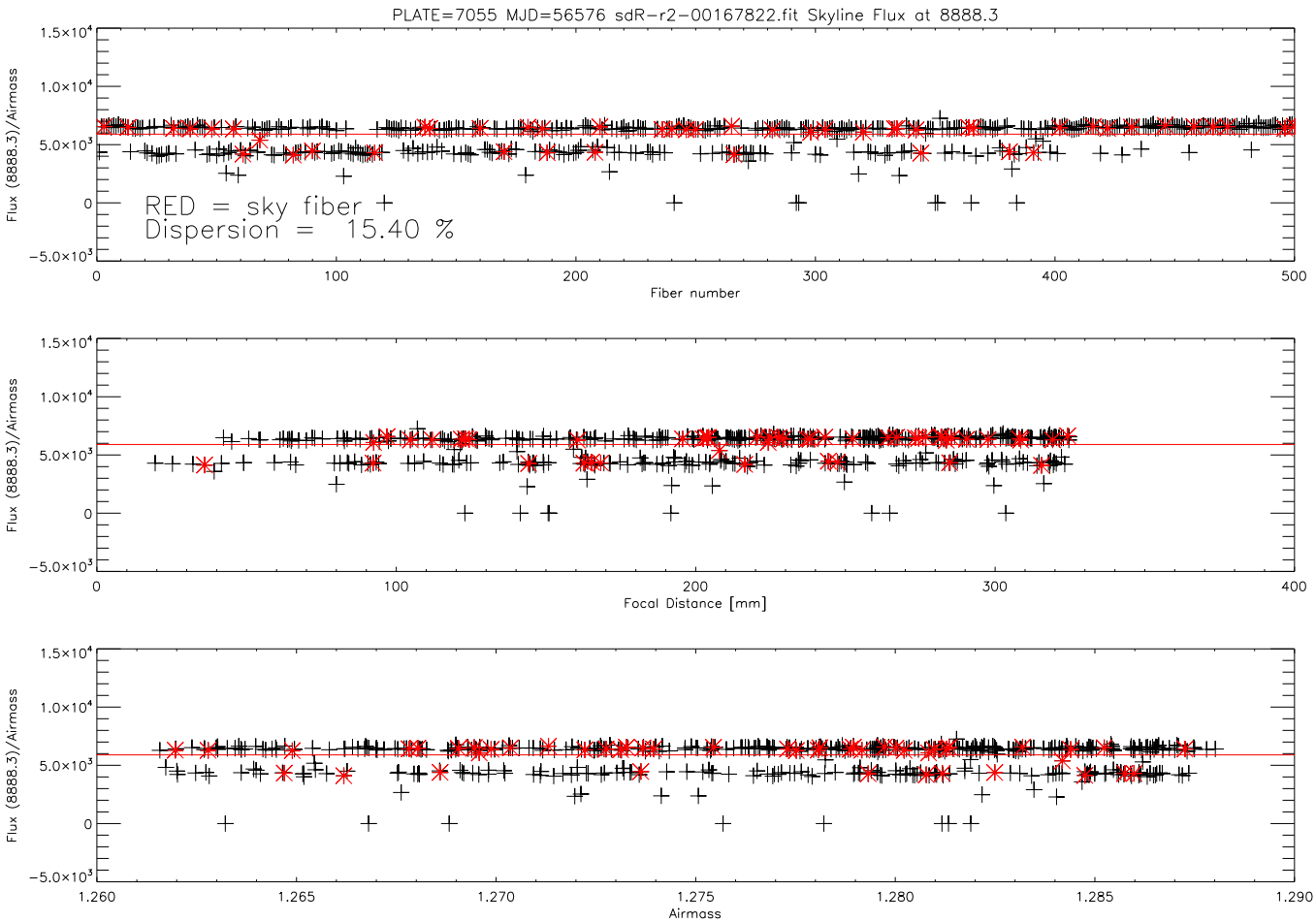

PLATE=7055 MJD=56576 sdR-r2-00167822.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

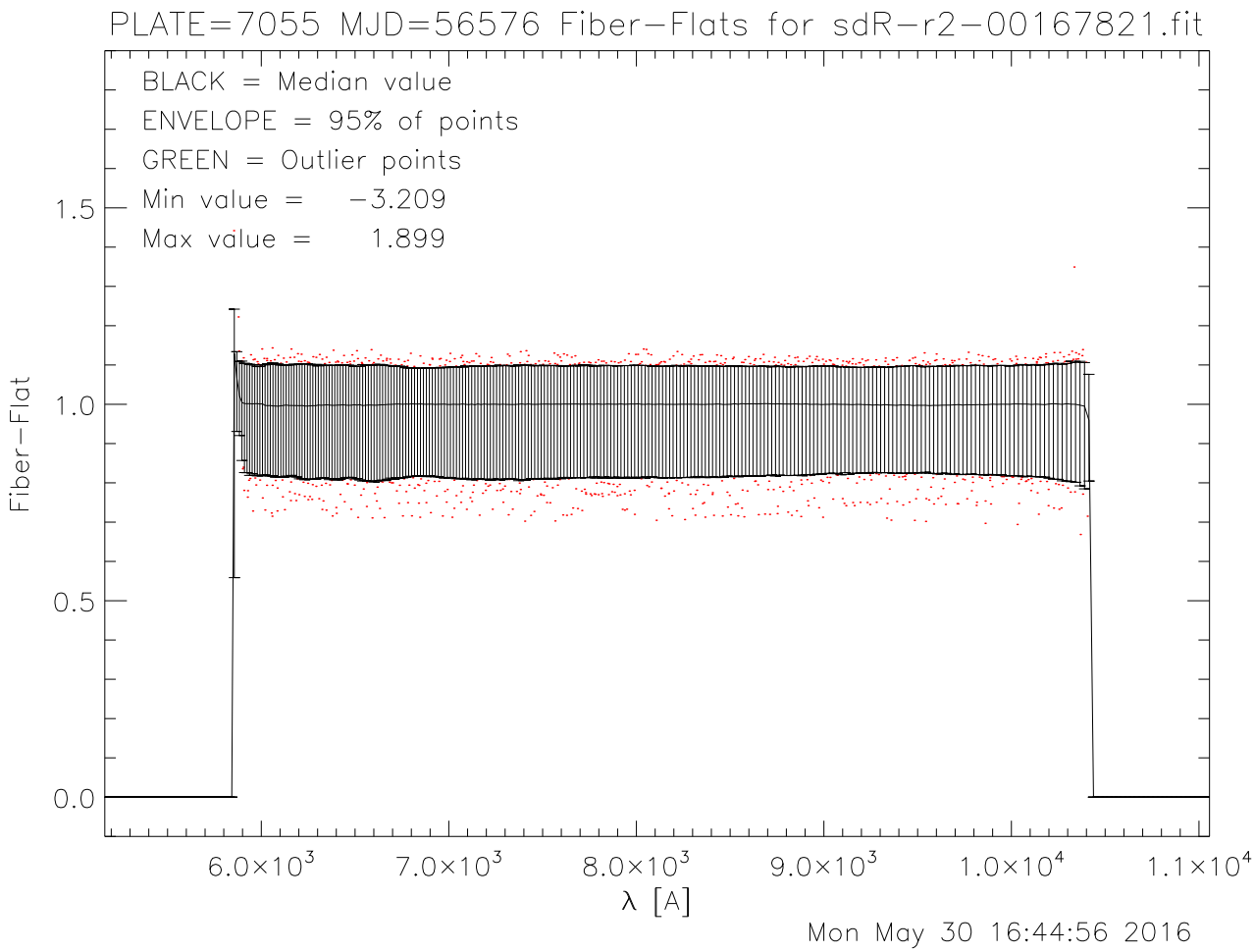

PLATE=7055 MJD=56576 sdR-r2-00167822.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48




PLATE=7055 MJD=56576 sdR-r2-00167822.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.82 %
Fiber number
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=7055 MJD=56576 sdR-r2-00167822.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber +
Dispersion = 15.40 %
Fiber number
Focal Distance [mm]
Airmass


PLATE=7055 MJD=56576 Fiber−Flats for sdR−r2−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.209
Max value = 1.899
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]
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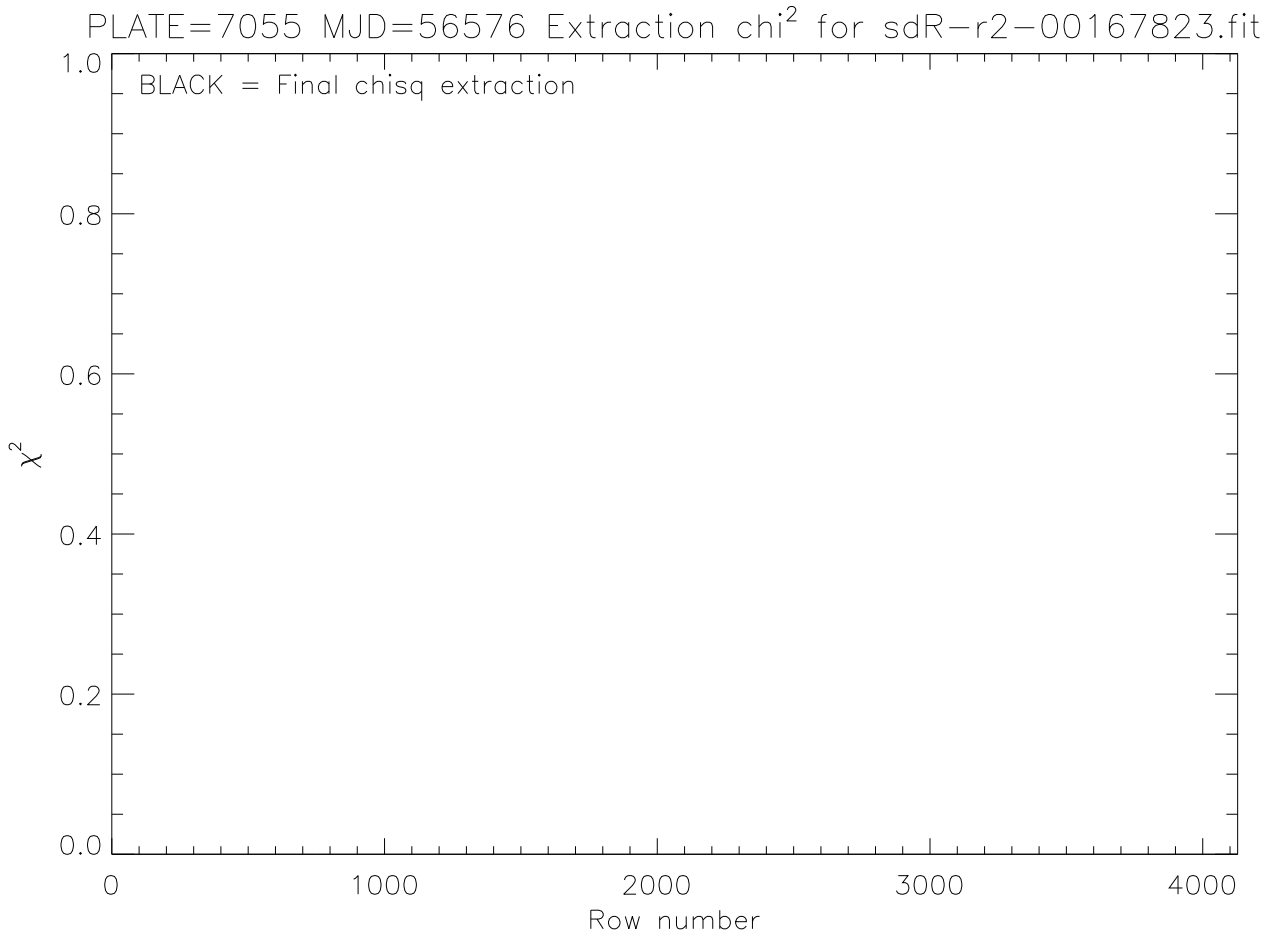
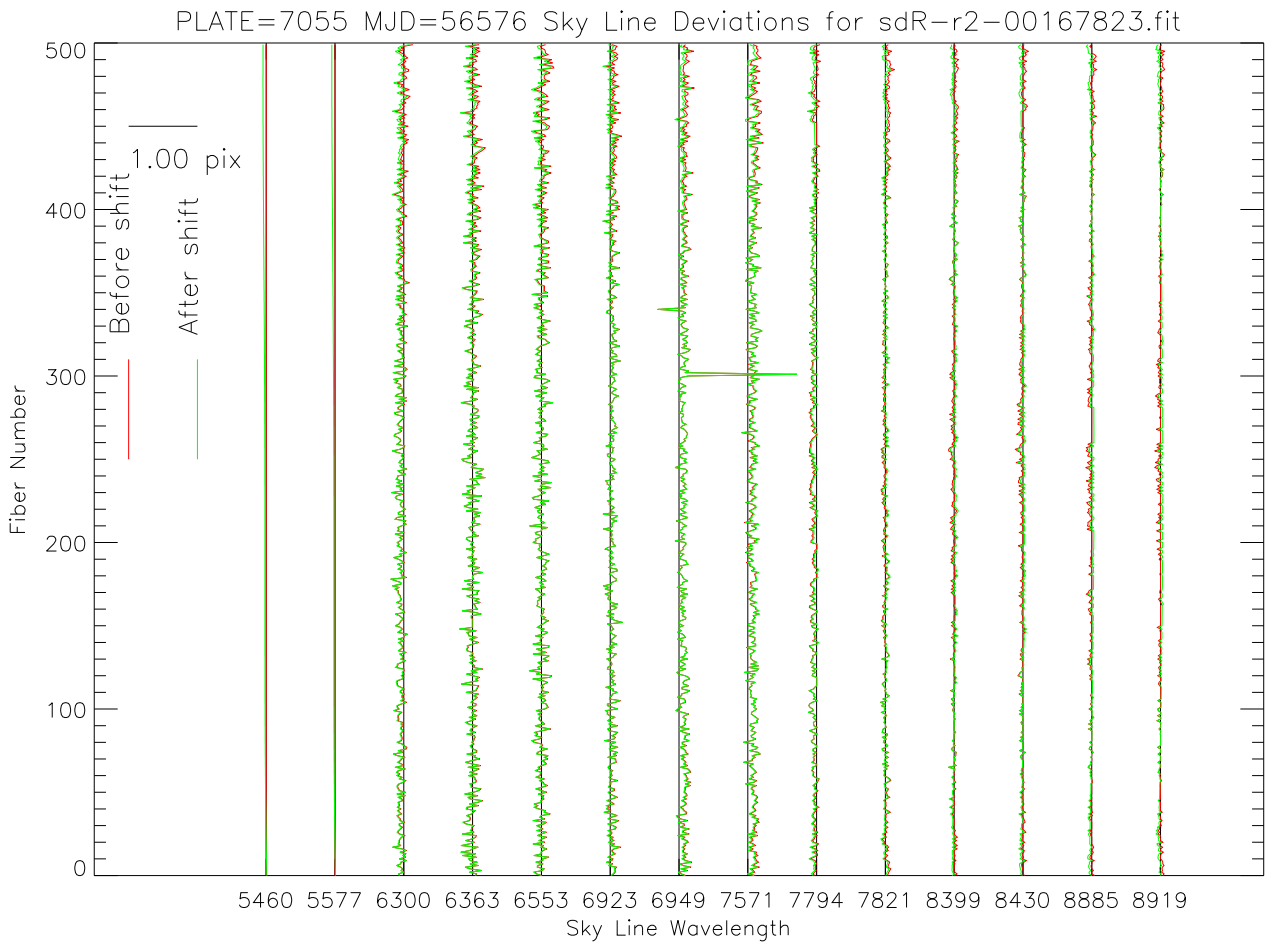
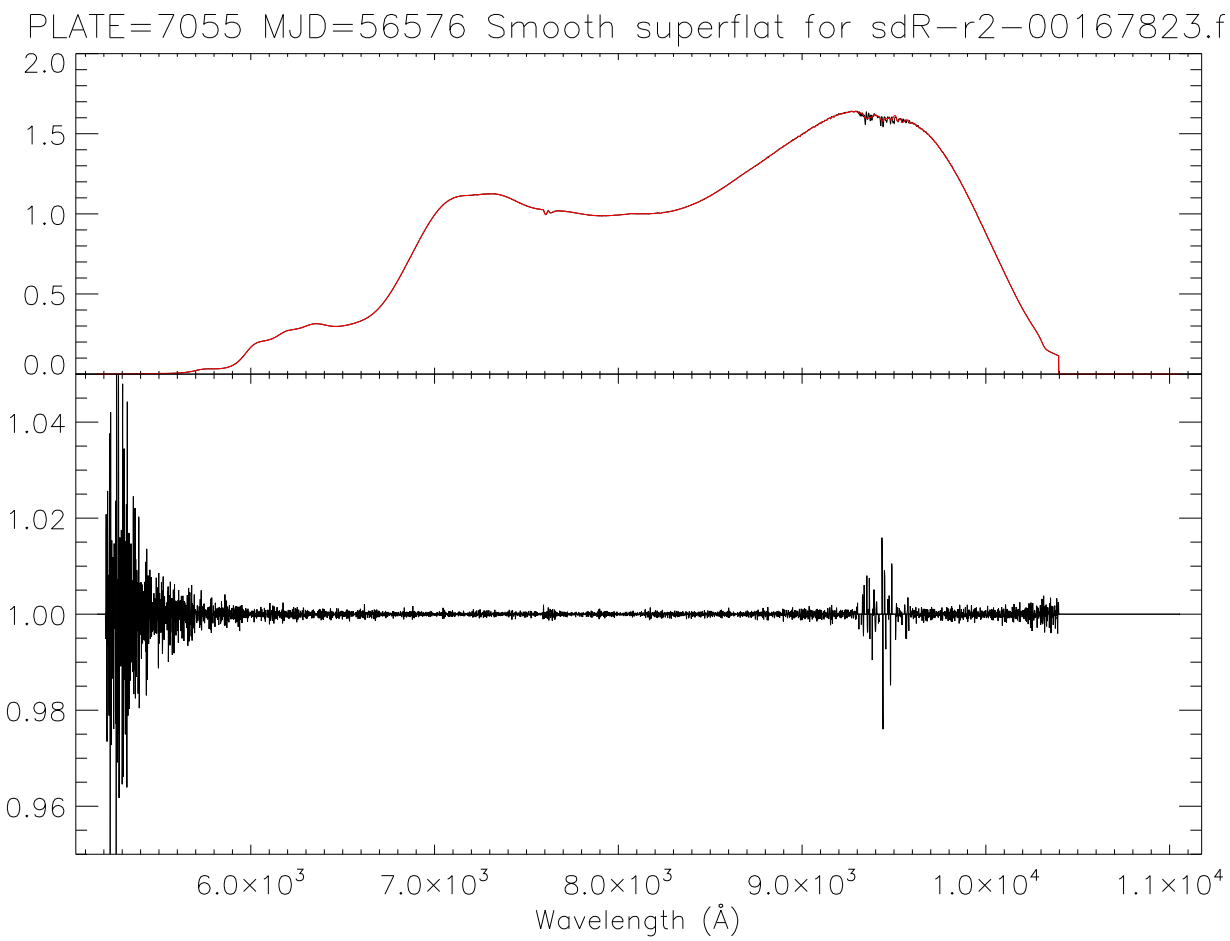
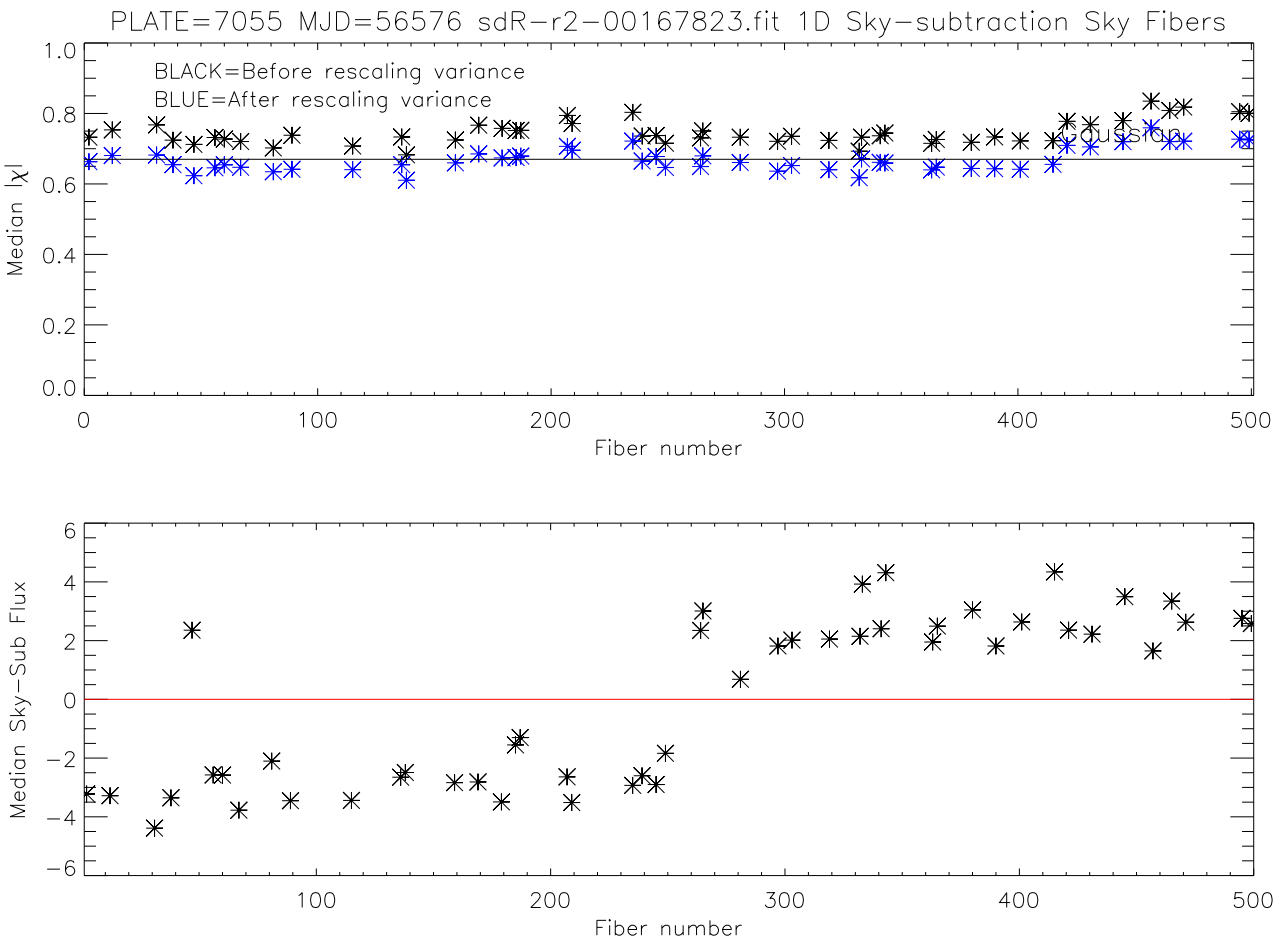
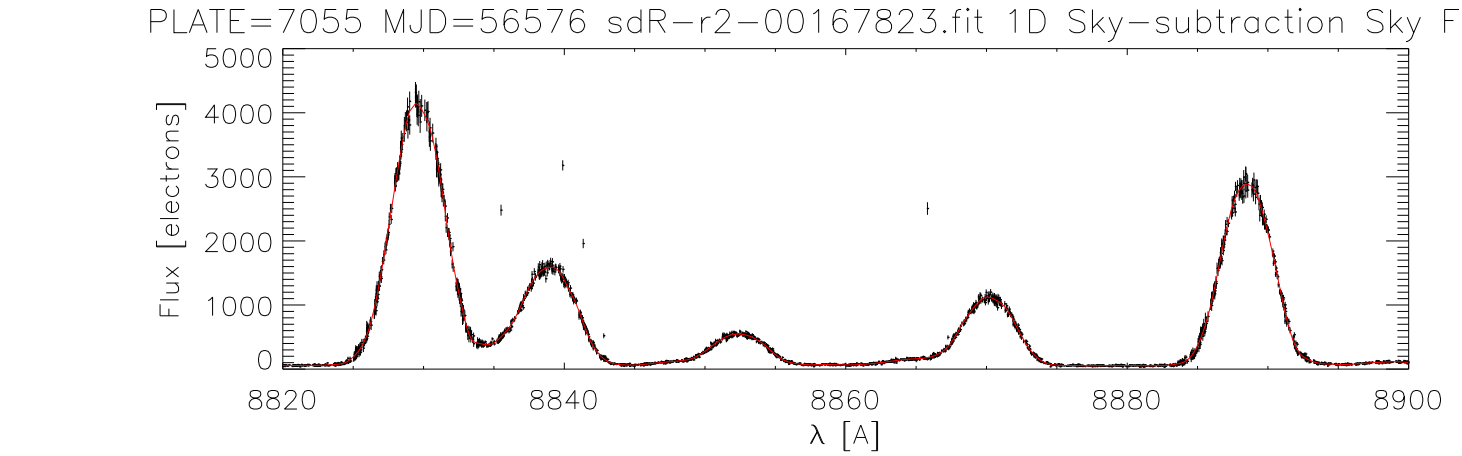
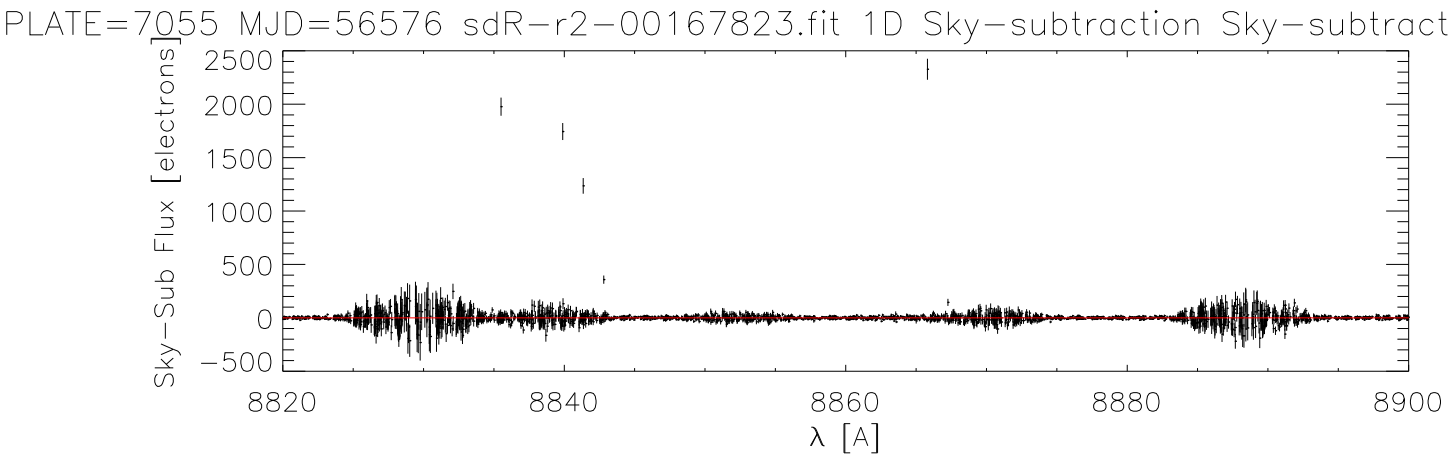

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r2−00167823.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r2-00167823.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

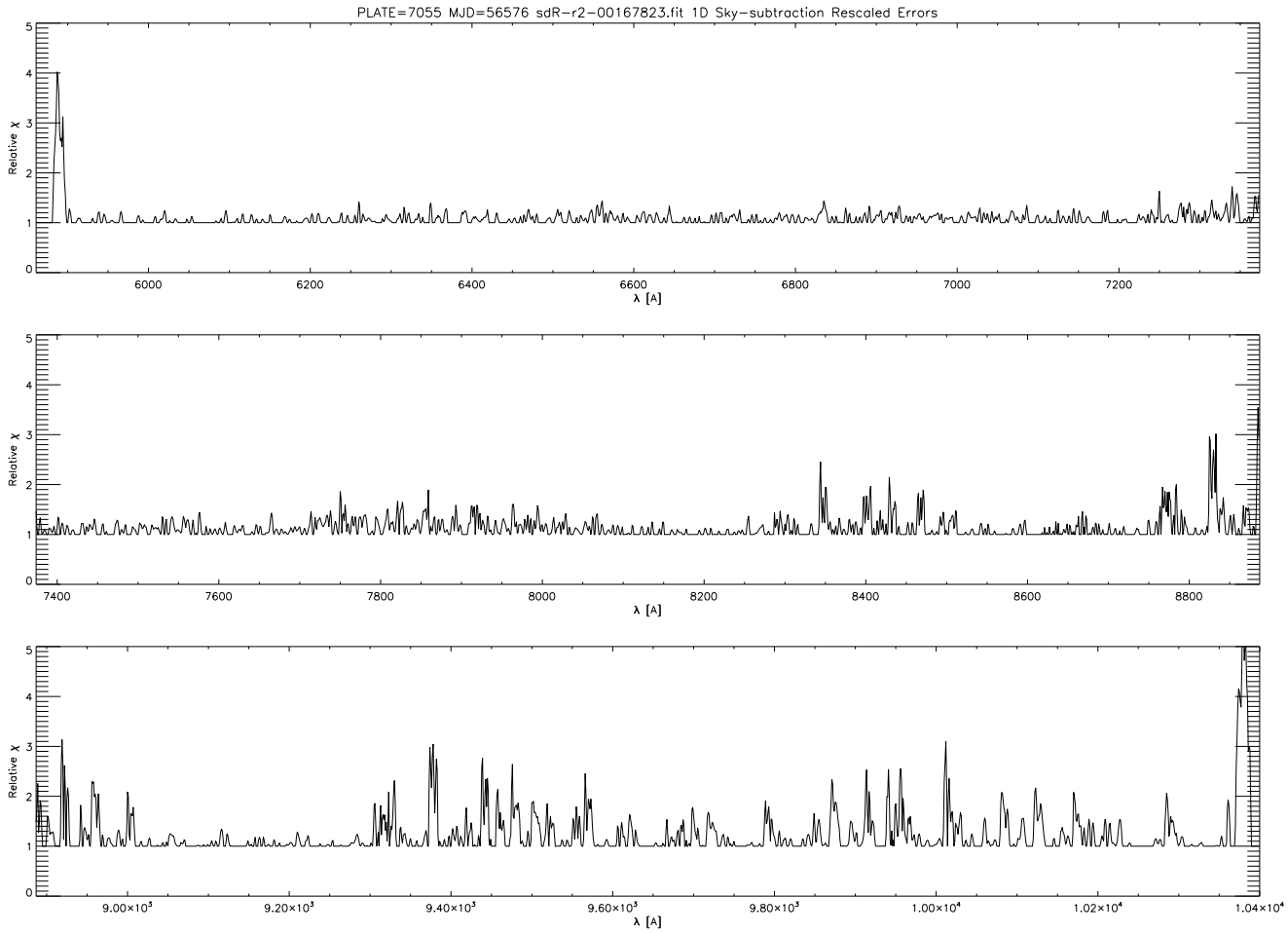

PLATE=7055 MJD=56576 Smooth superflat for sdR-r2-00167823.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

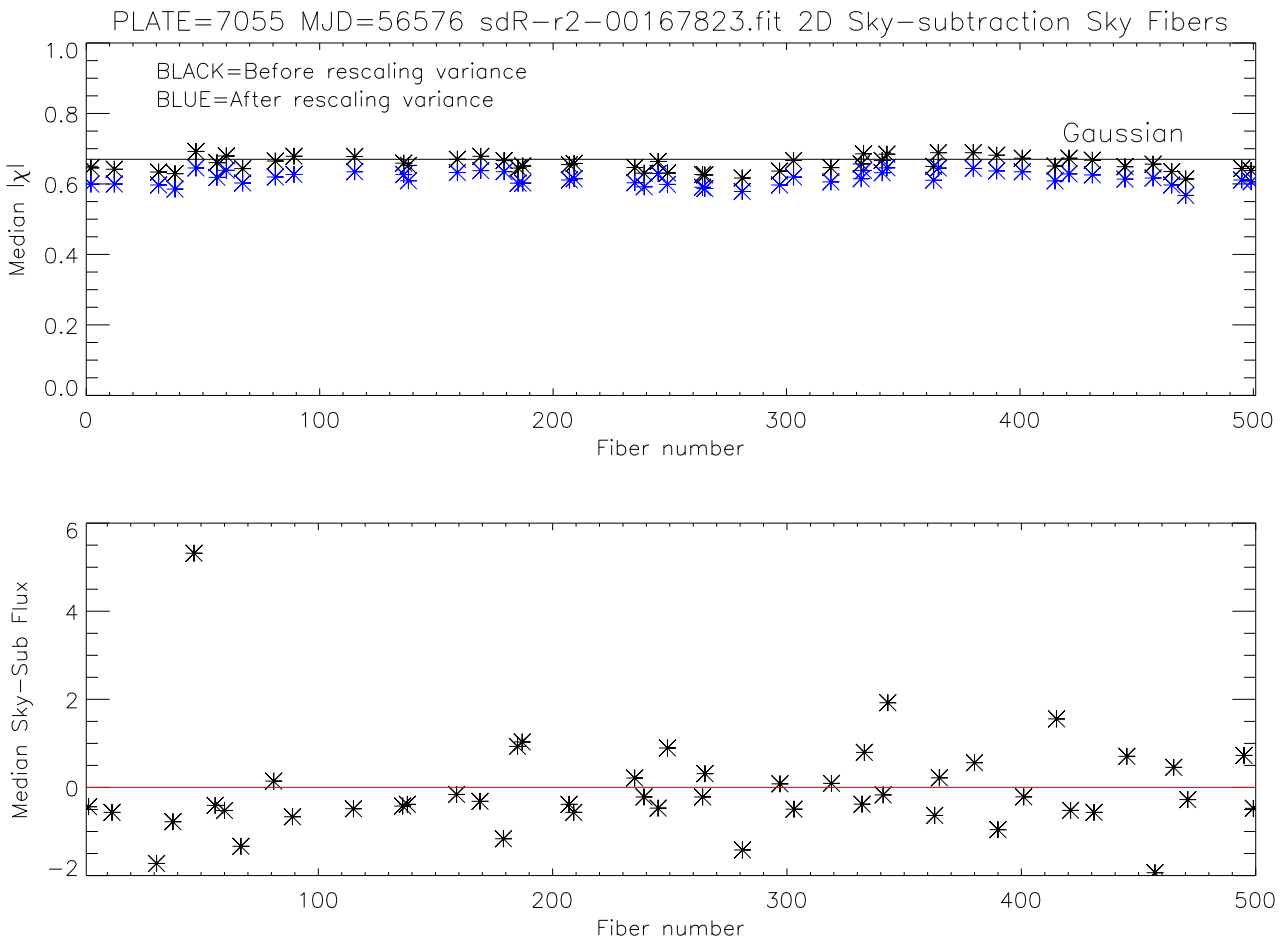

PLATE=7055 MJD=56576 sdR-r2-00167823.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

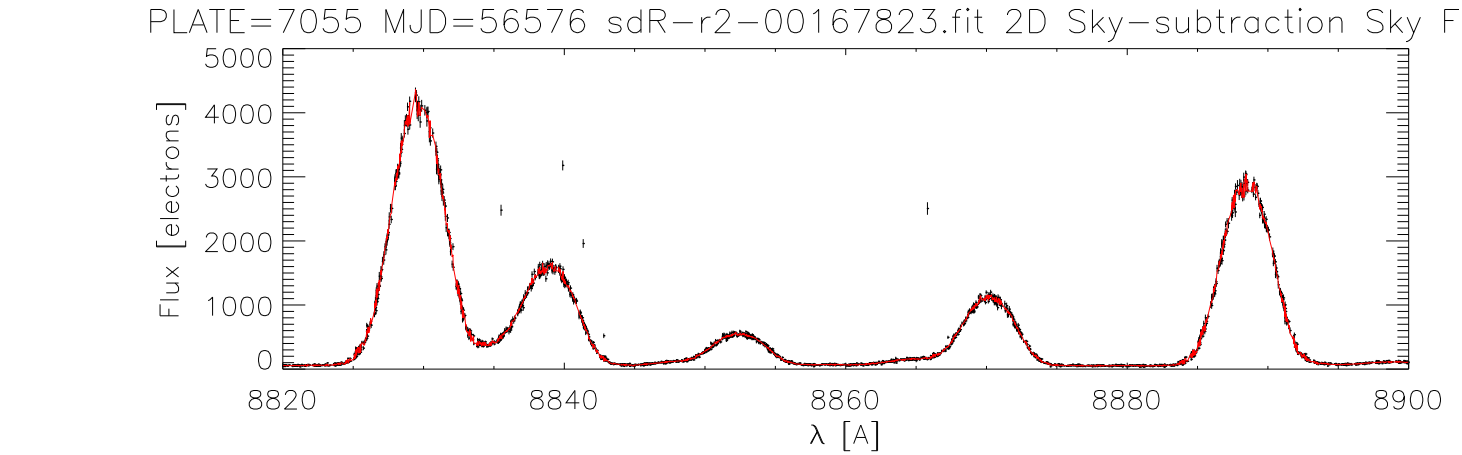

PLATE=7055 MJD=56576 sdR-r2-00167823.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

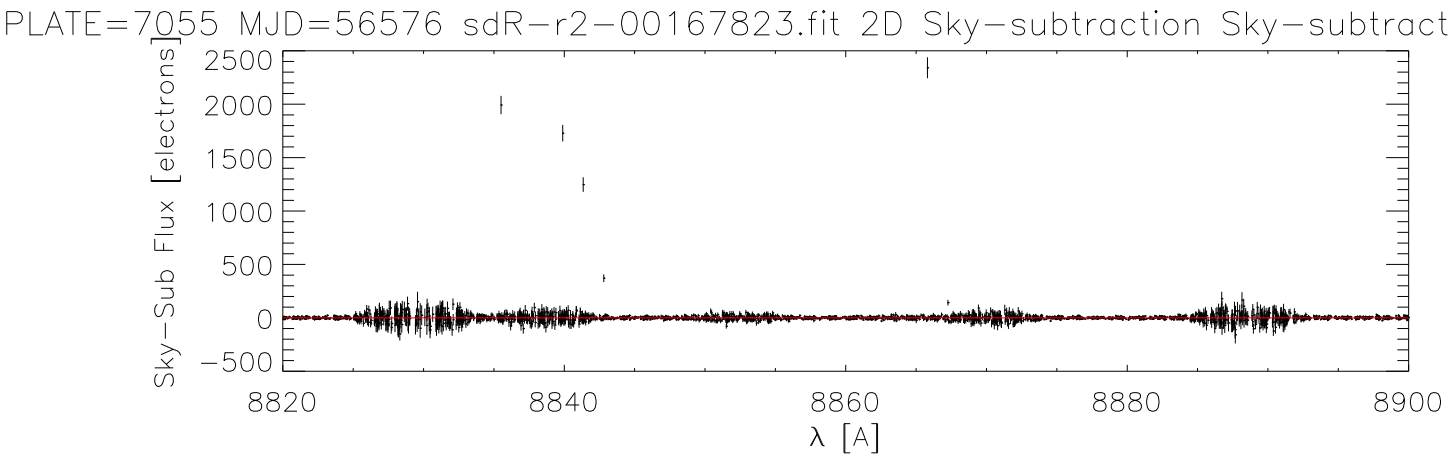

PLATE=7055 MJD=56576 sdR-r2-00167823.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 48

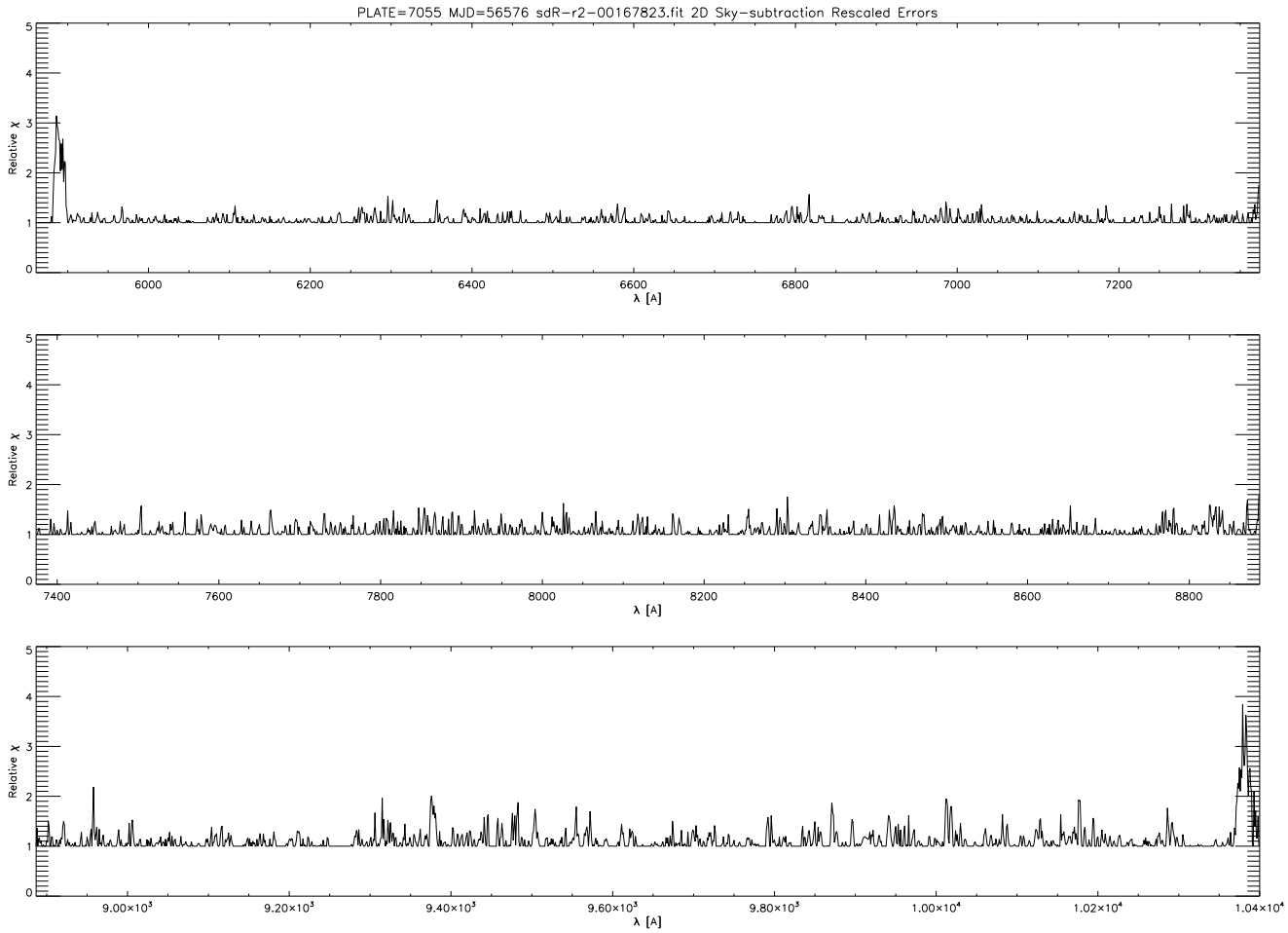


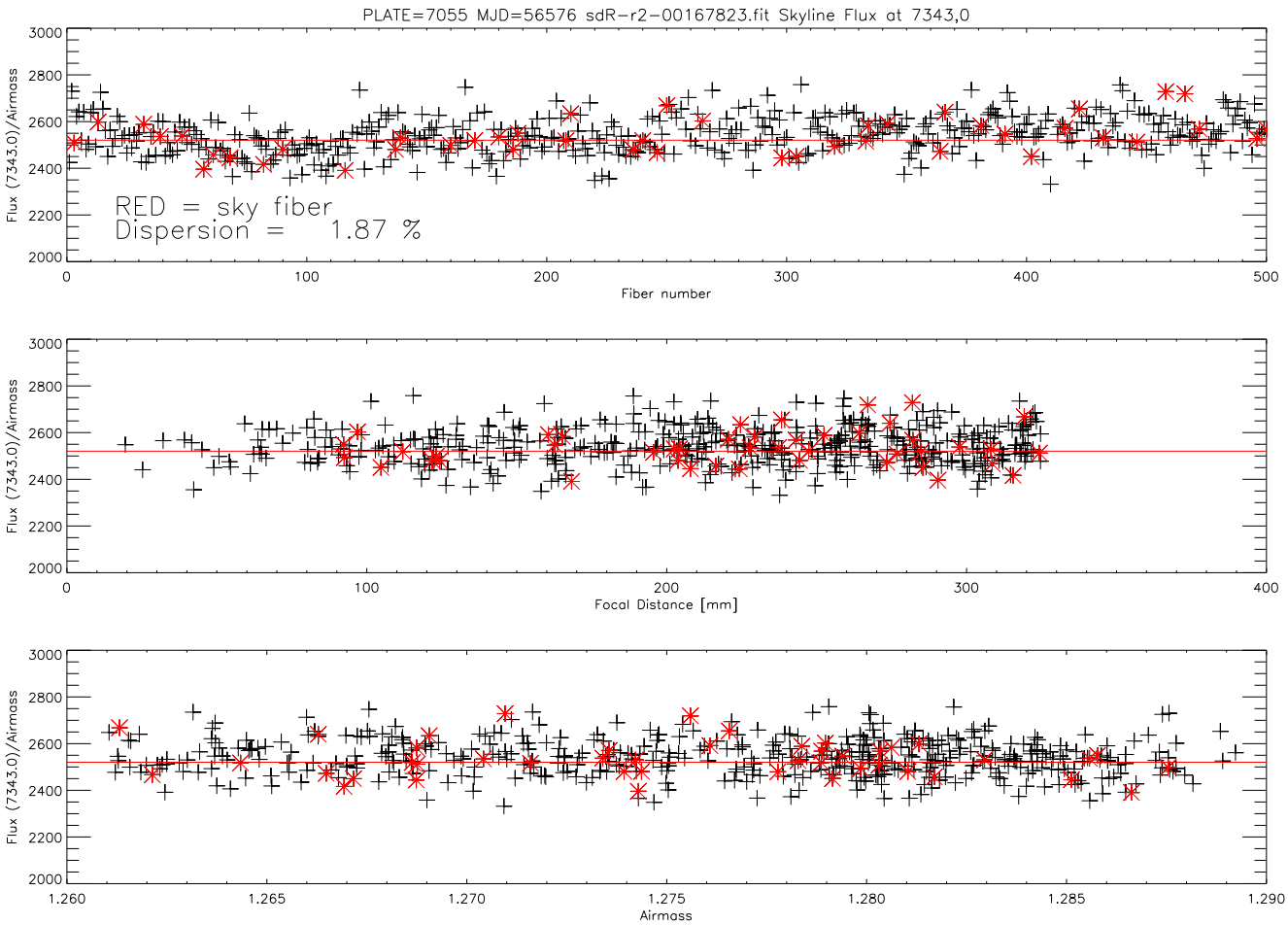

PLATE=7055 MJD=56576 sdR-r2-00167823.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

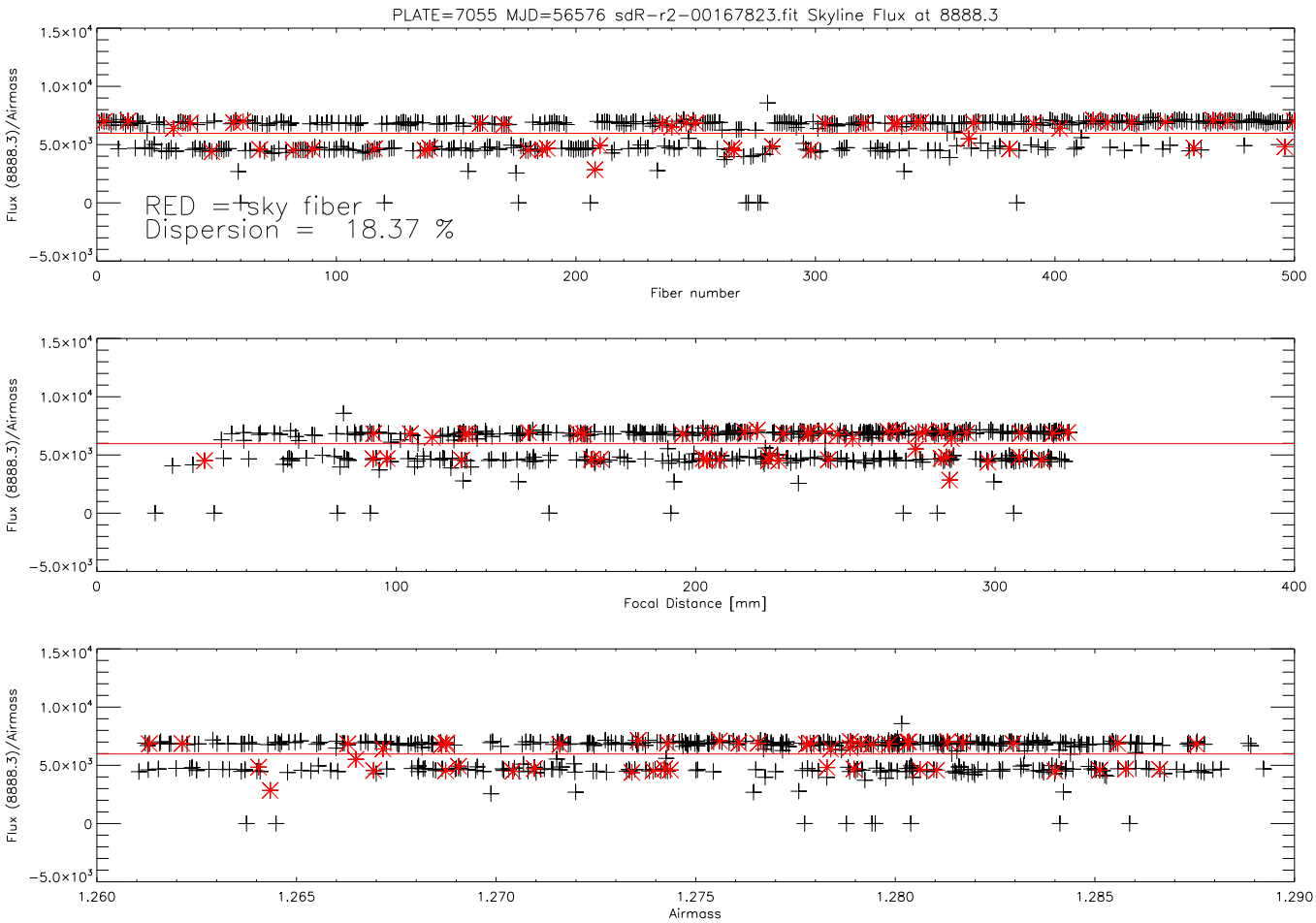

PLATE=7055 MJD=56576 sdR-r2-00167823.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

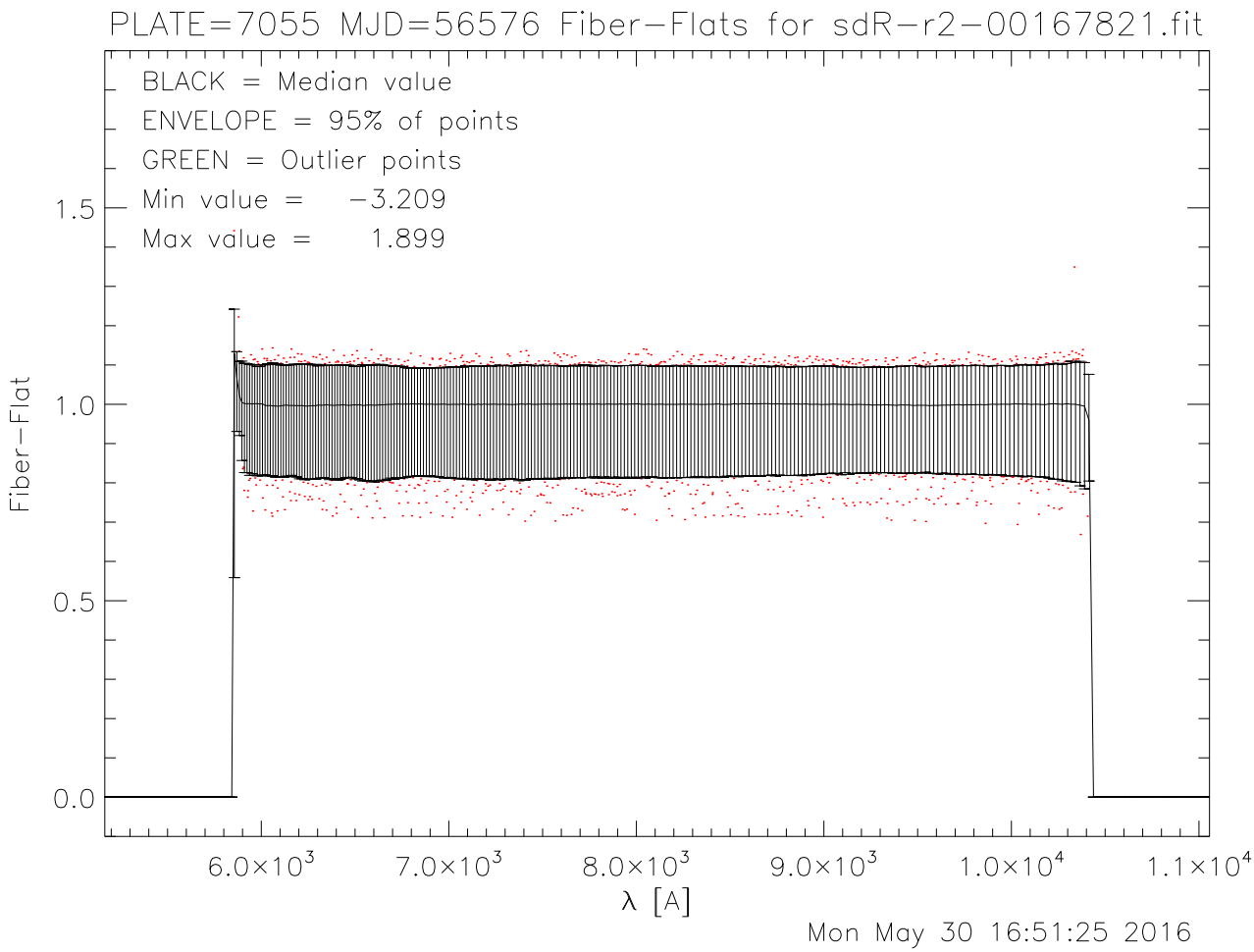

PLATE=7055 MJD=56576 sdR-r2-00167823.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
2500
2000
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

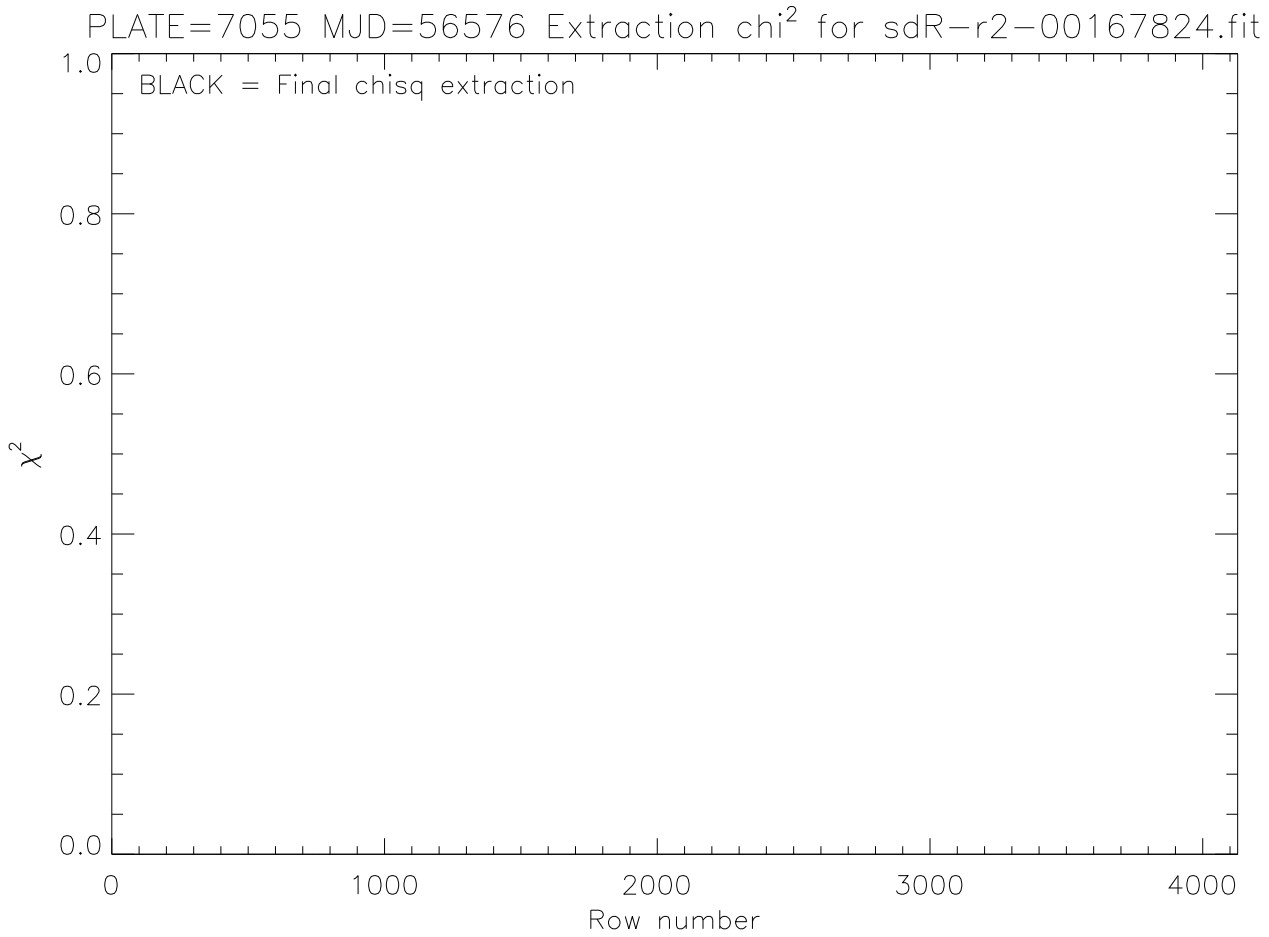
Number of sky fibers = 48

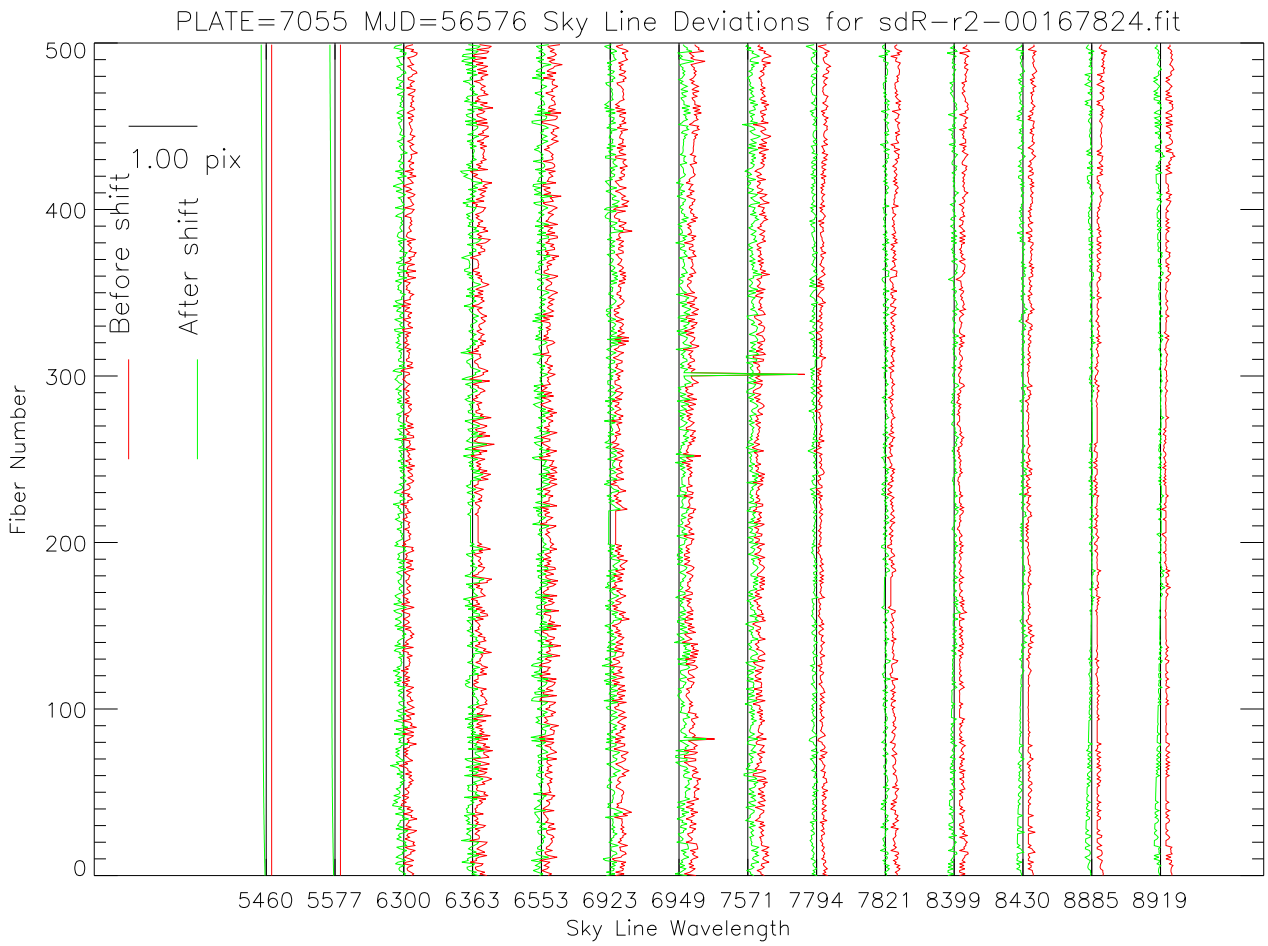


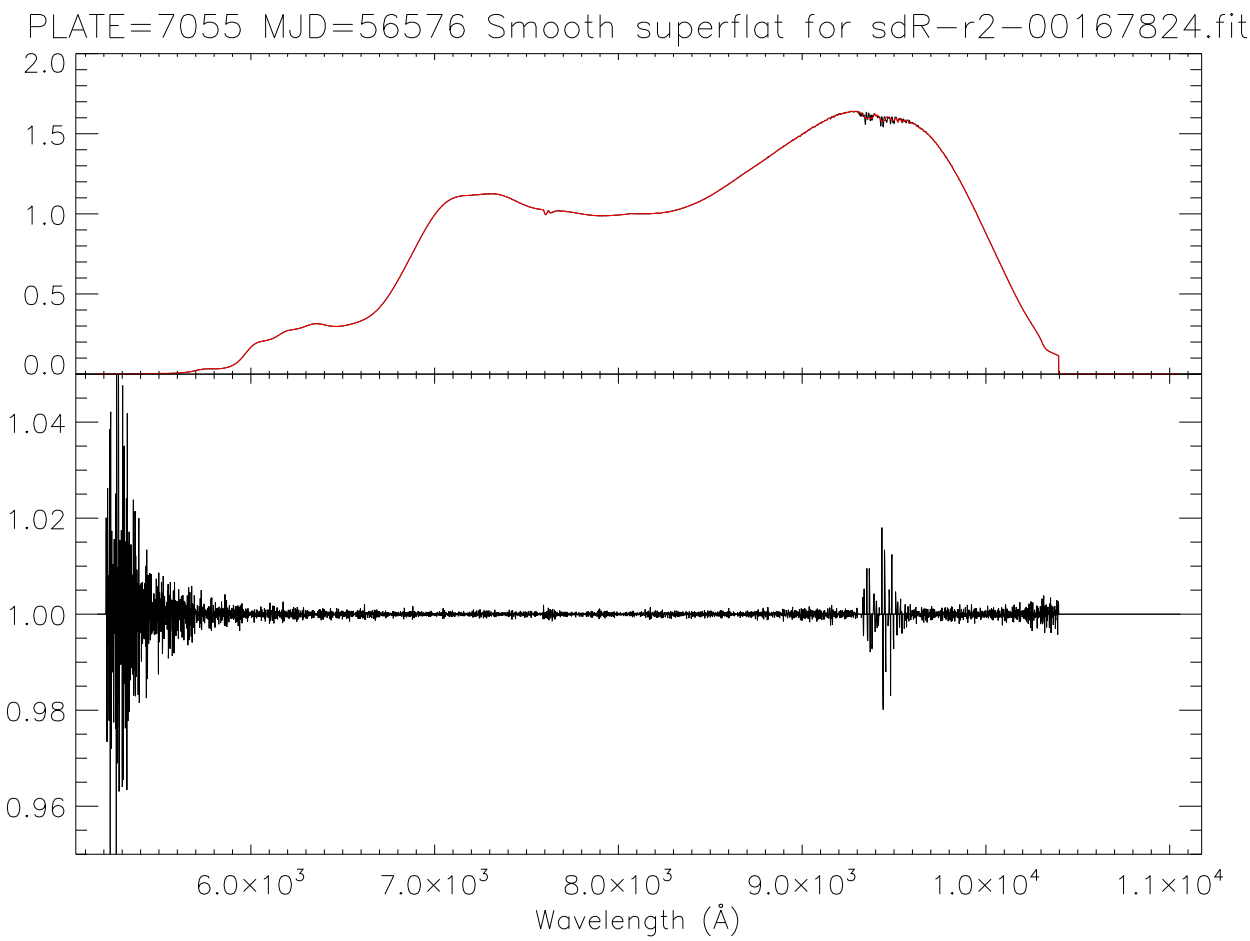

PLATE=7055 MJD=56576 sdR-r2-00167823.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.87 %
Fiber number
Focal Distance [mm]
Airmass

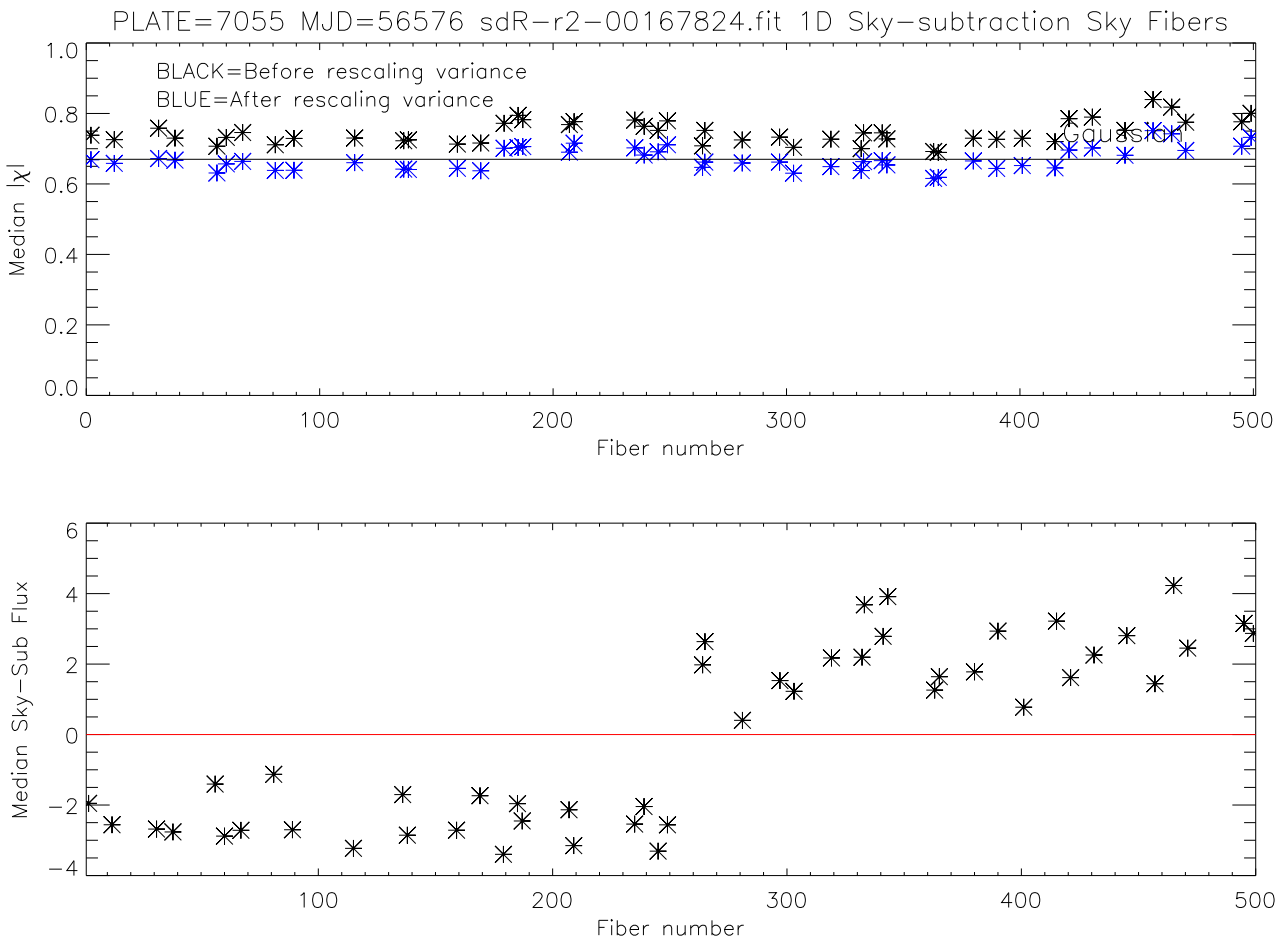

PLATE=7055 MJD=56576 sdR-r2-00167823.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
RED = sky fiber
Dispersion = 18.37 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.5×10⁴
1.0×10⁴
5.0×10³
0
−5.0×10³
1.260
1.265
1.270
1.275
1.280
1.285
1.290
Airmass

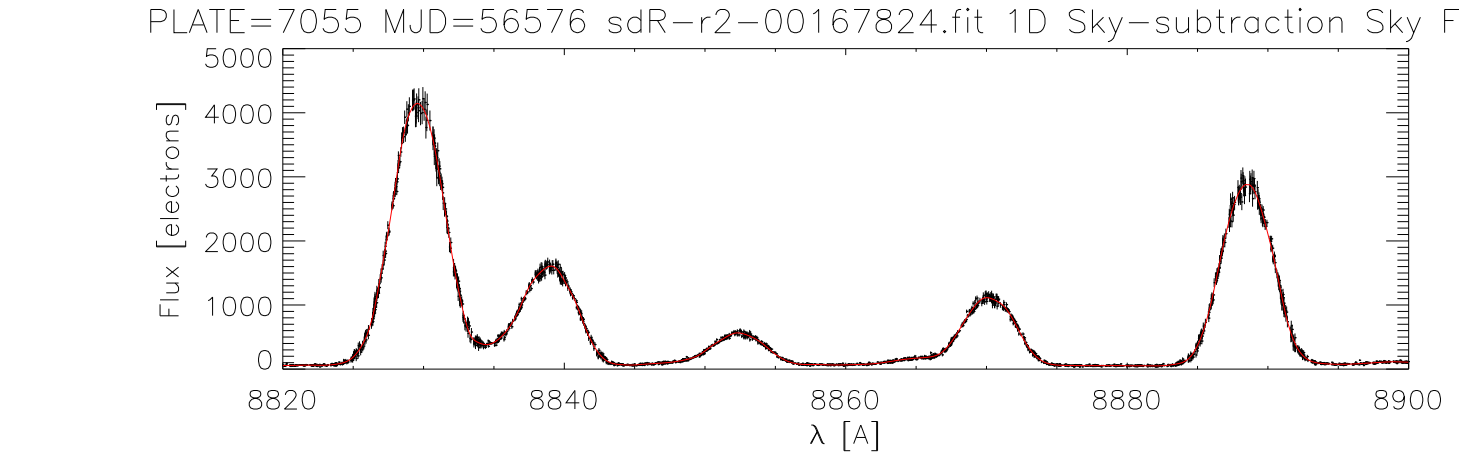

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r2−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.209
Max value = 1.899
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 16:51:25 2016

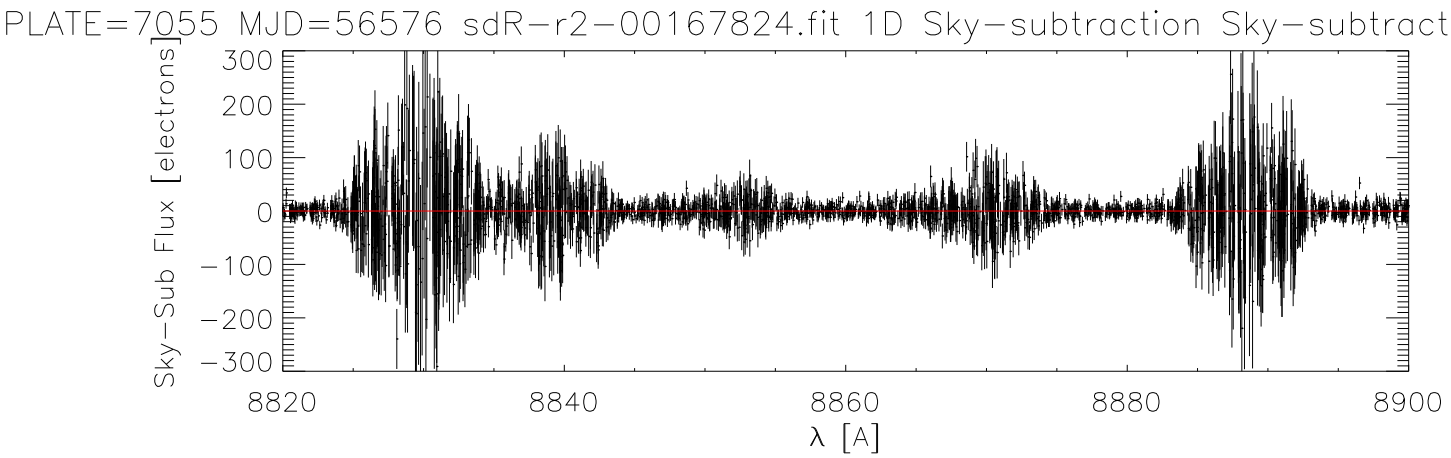

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r2−00167824.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r2-00167824.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

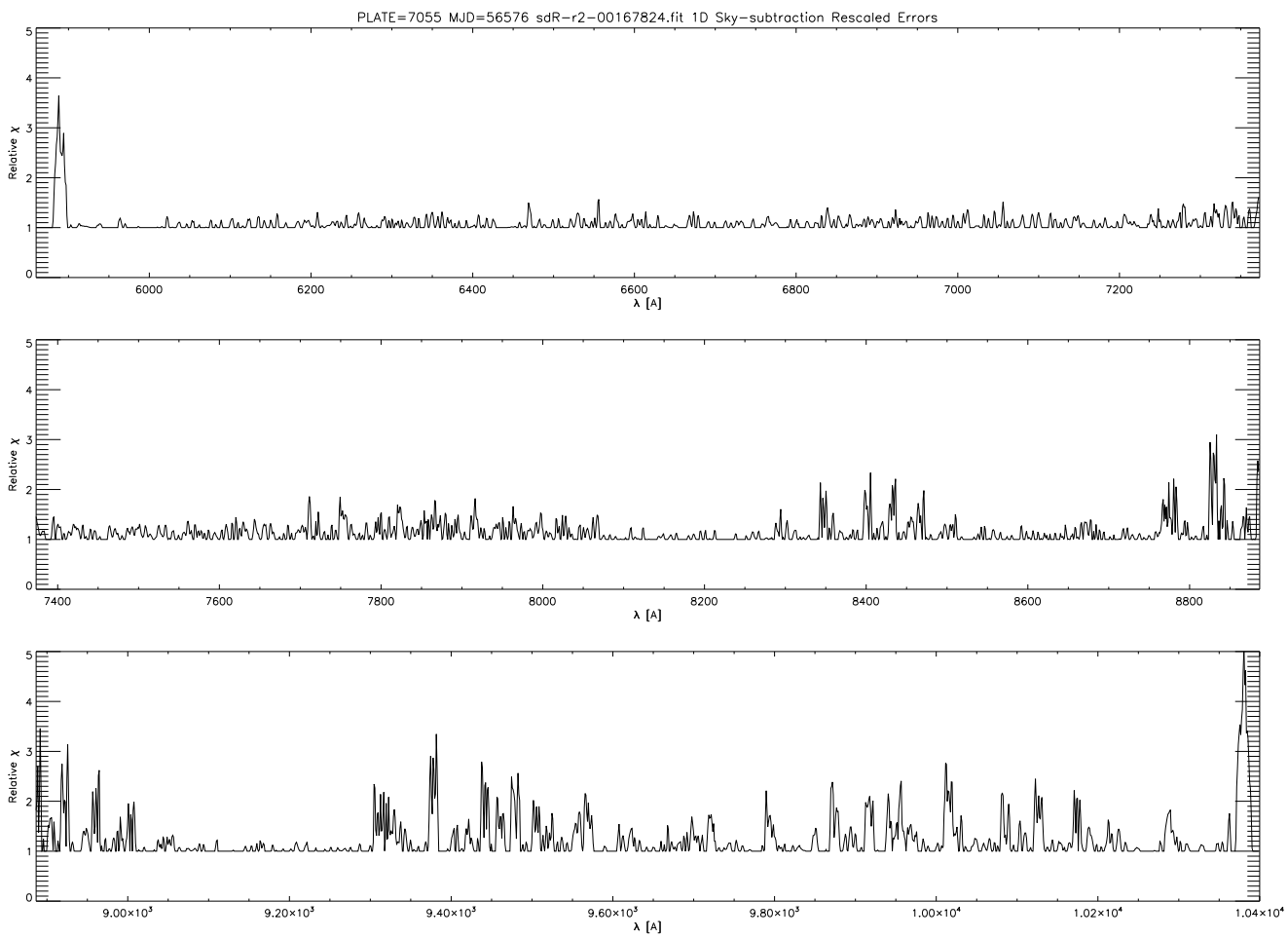

PLATE=7055 MJD=56576 Smooth superflat for sdR-r2-00167824.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

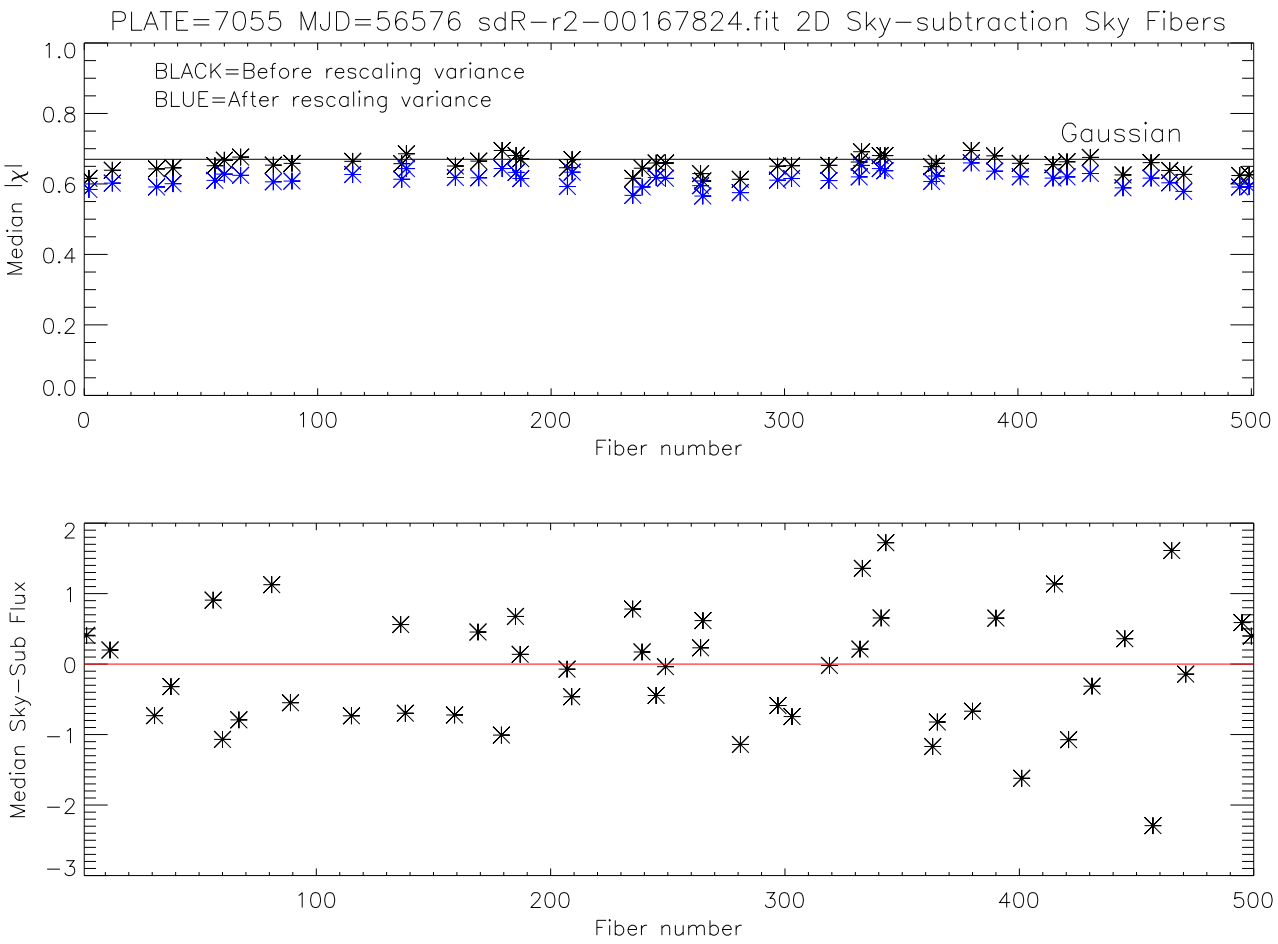

PLATE=7055 MJD=56576 sdR-r2-00167824.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

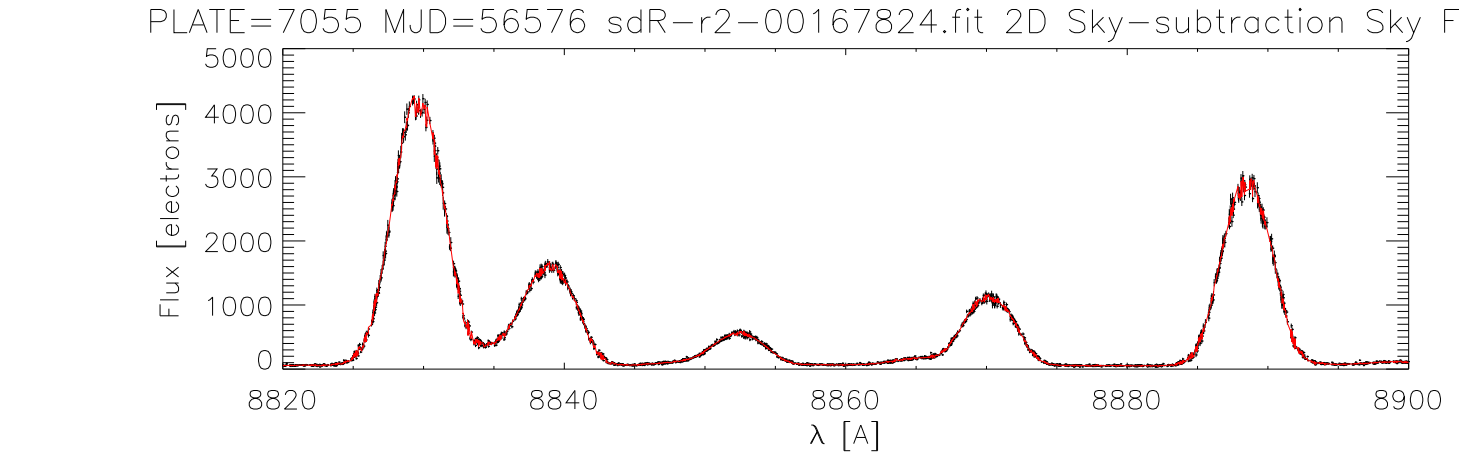

PLATE=7055 MJD=56576 sdR-r2-00167824.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

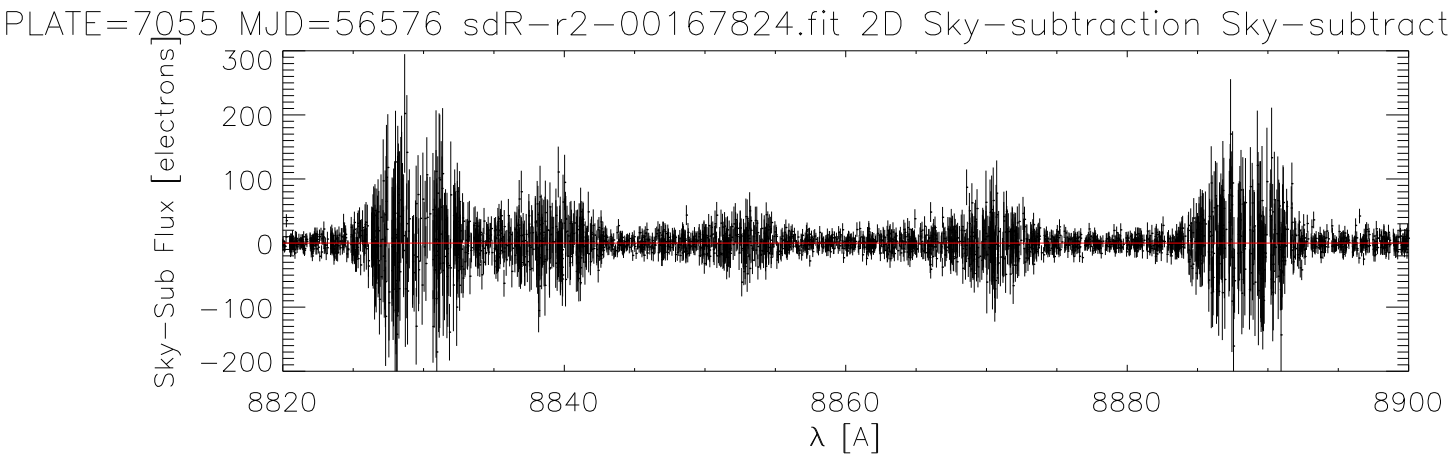

PLATE=7055 MJD=56576 sdR-r2-00167824.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 47

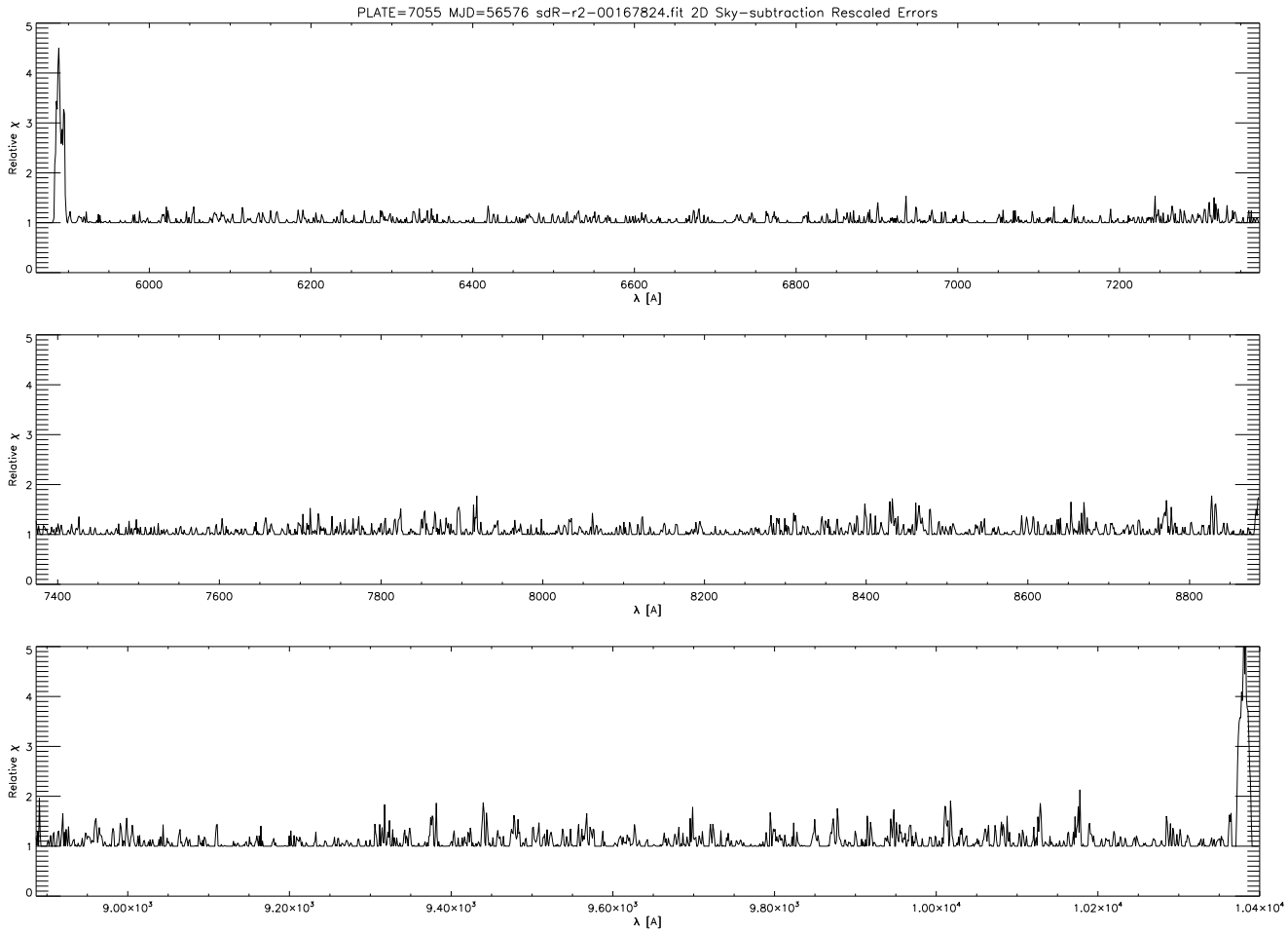


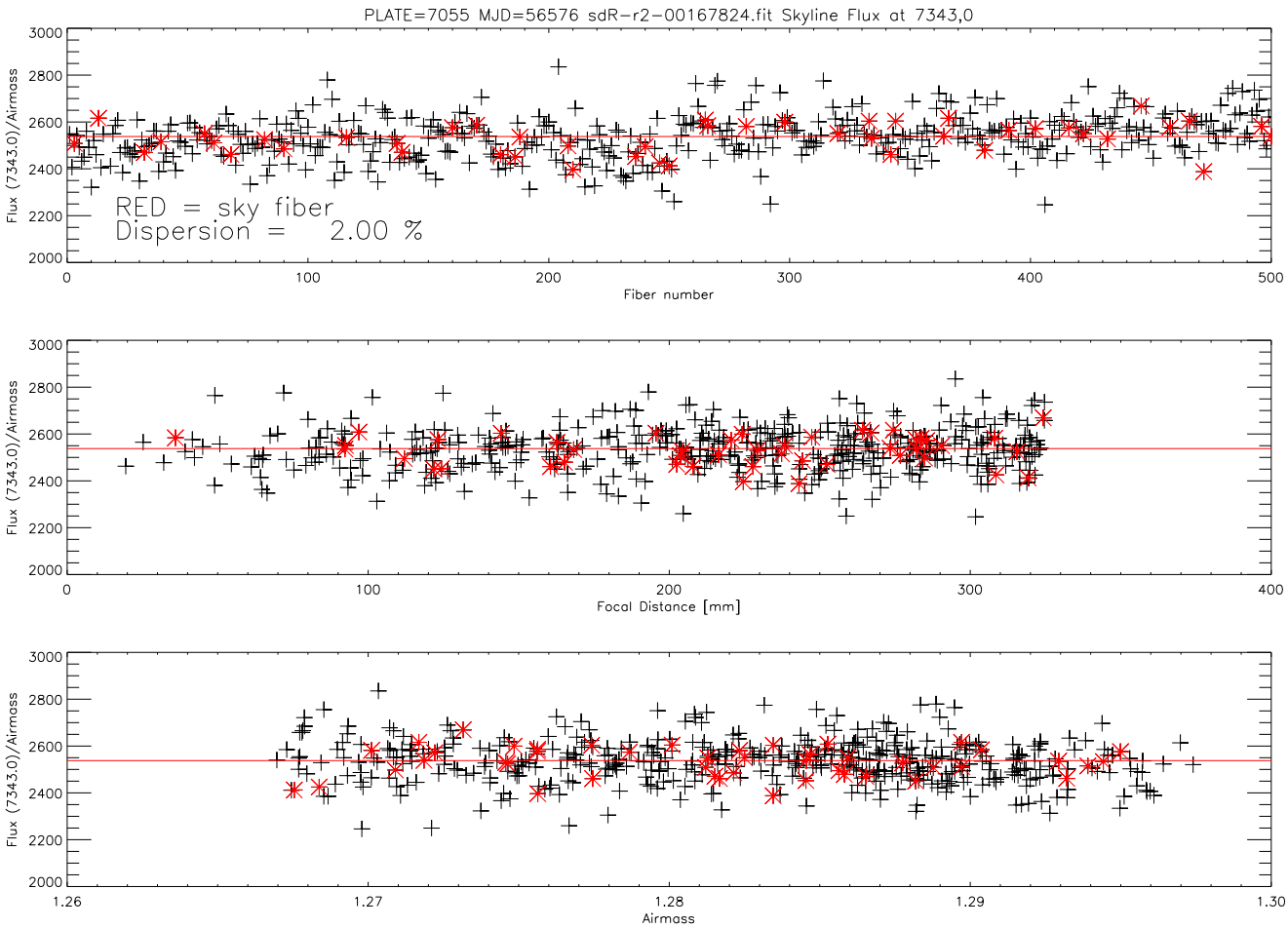

PLATE=7055 MJD=56576 sdR-r2-00167824.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

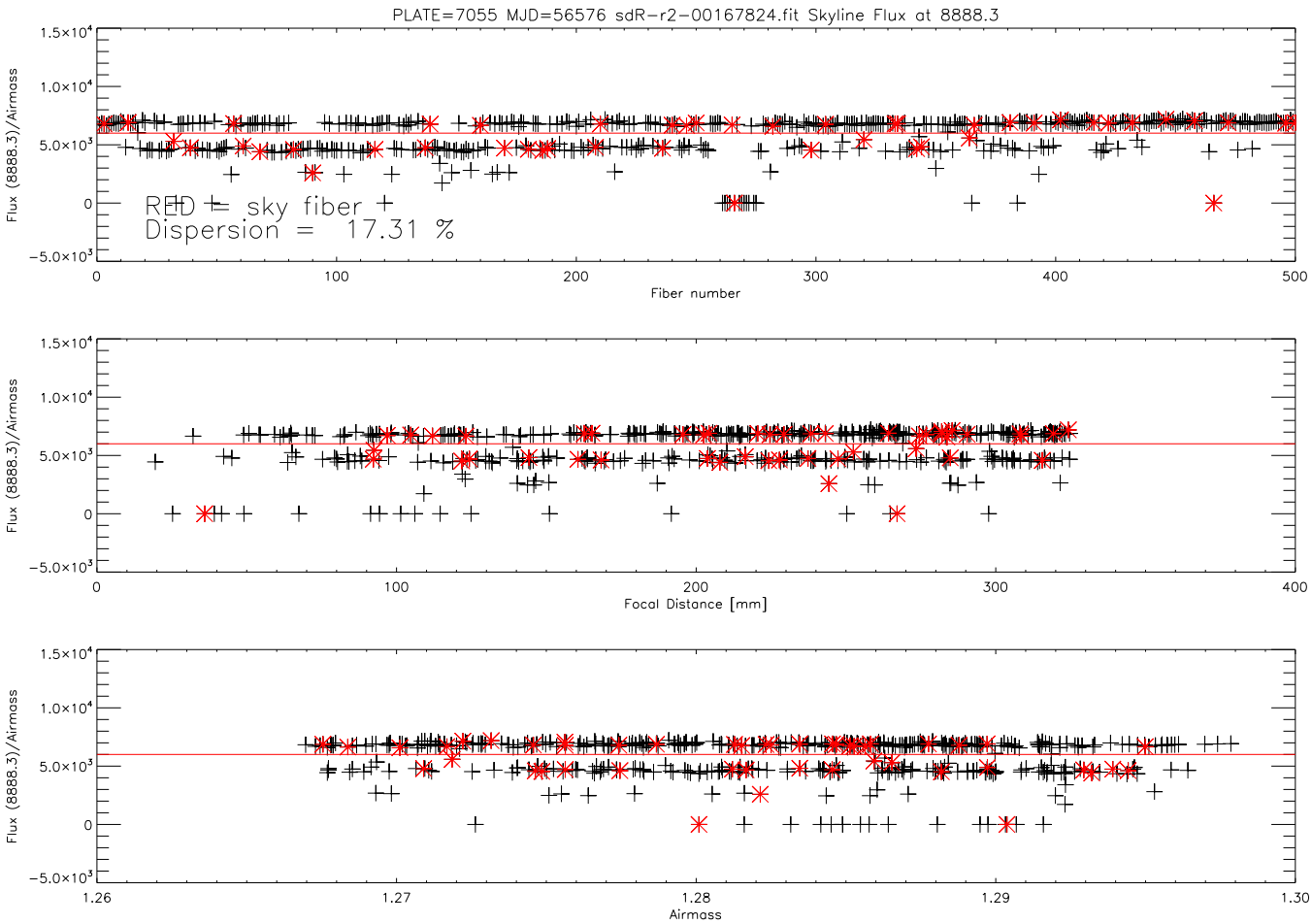

PLATE=7055 MJD=56576 sdR-r2-00167824.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

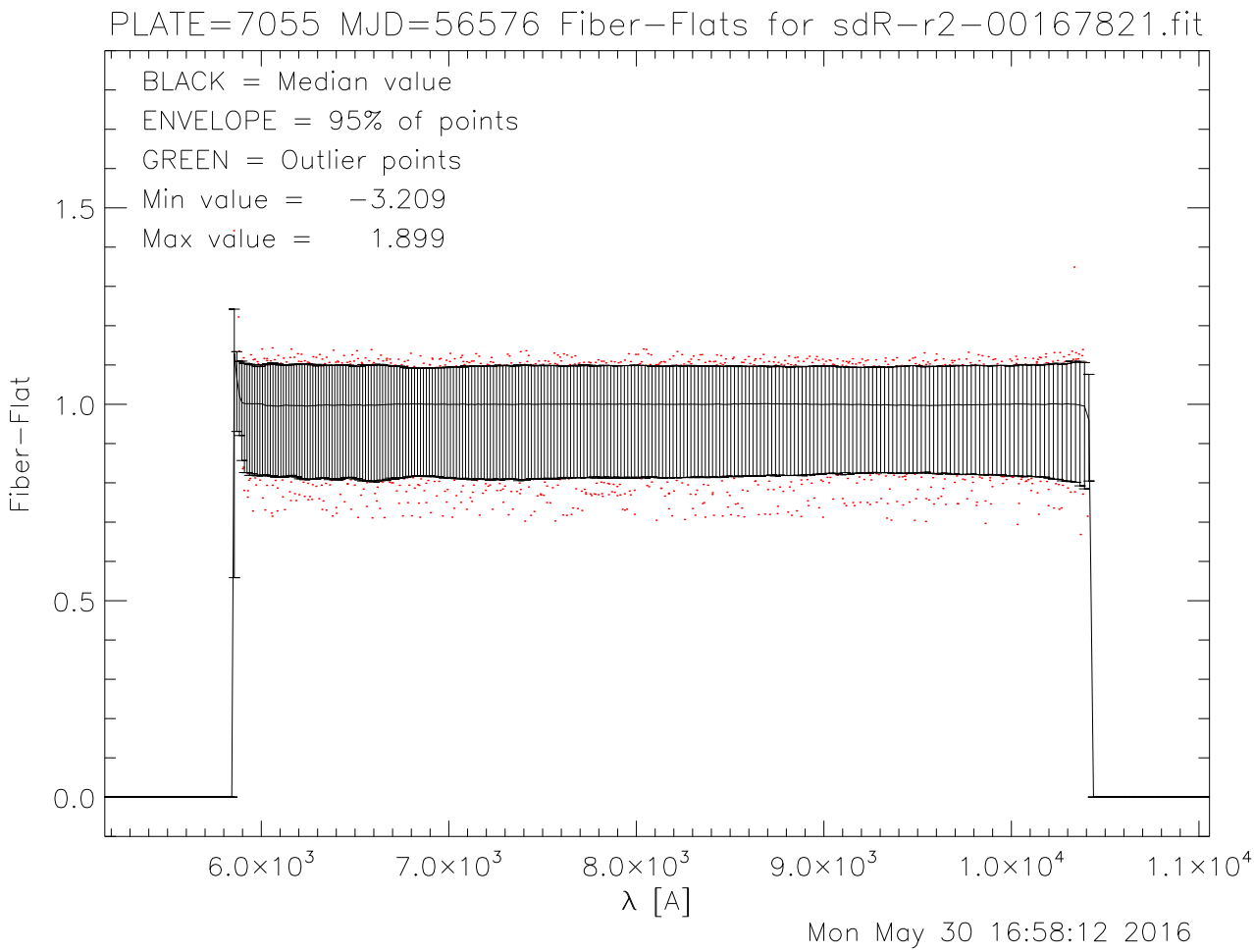

PLATE=7055 MJD=56576 sdR-r2-00167824.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
8820
8840
8860
8880
8900
λ [A]

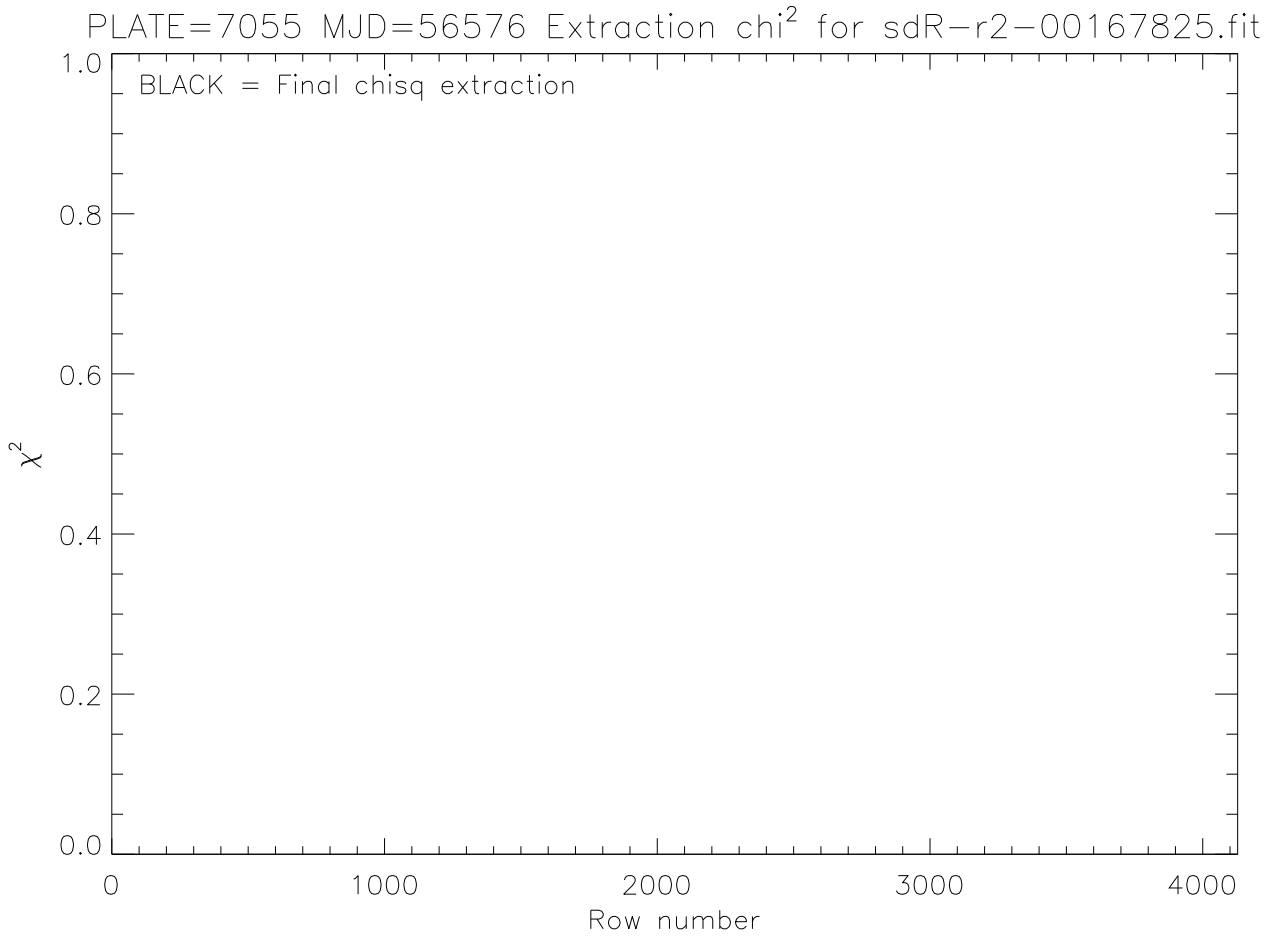
Number of sky fibers = 47

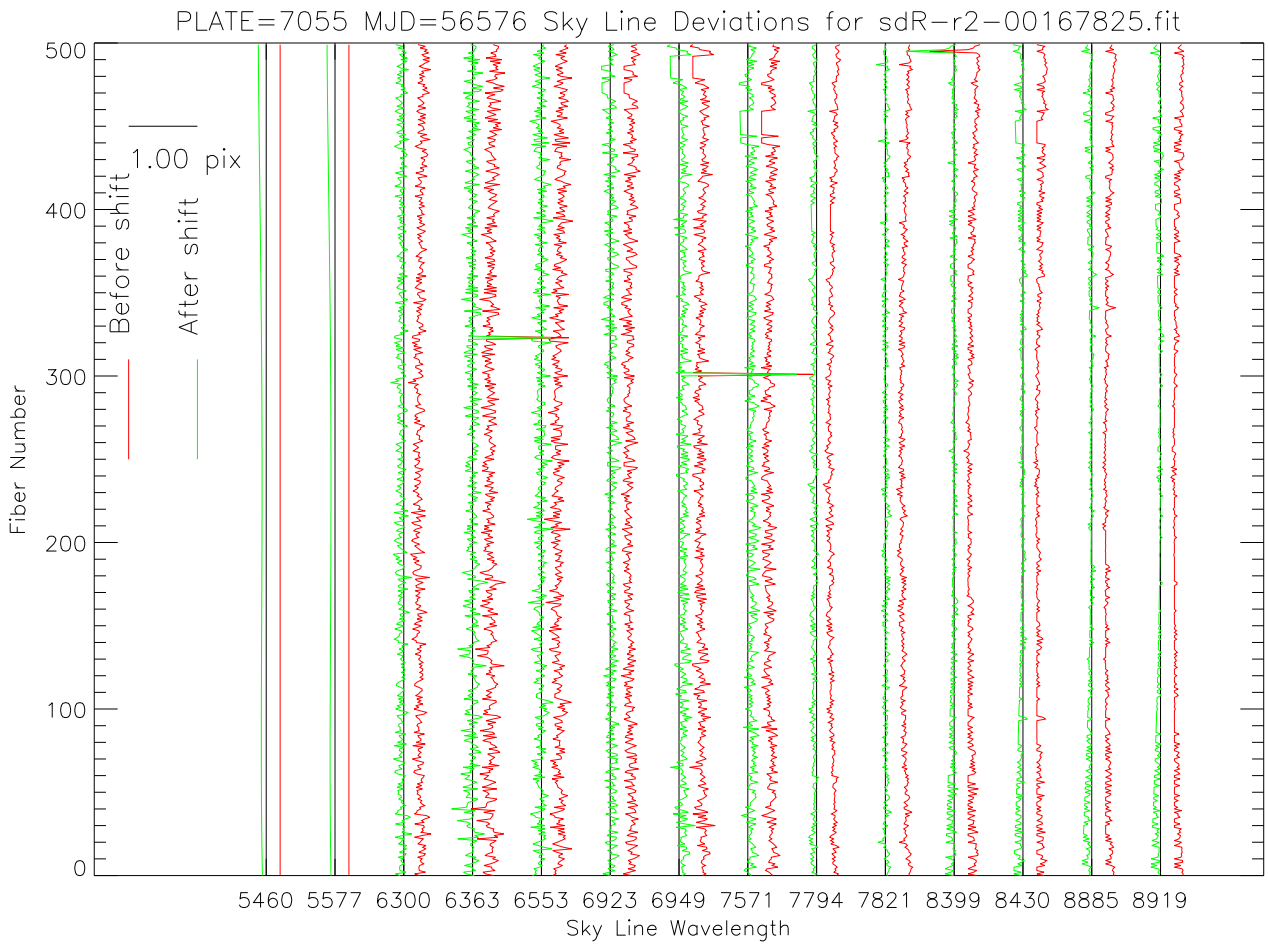


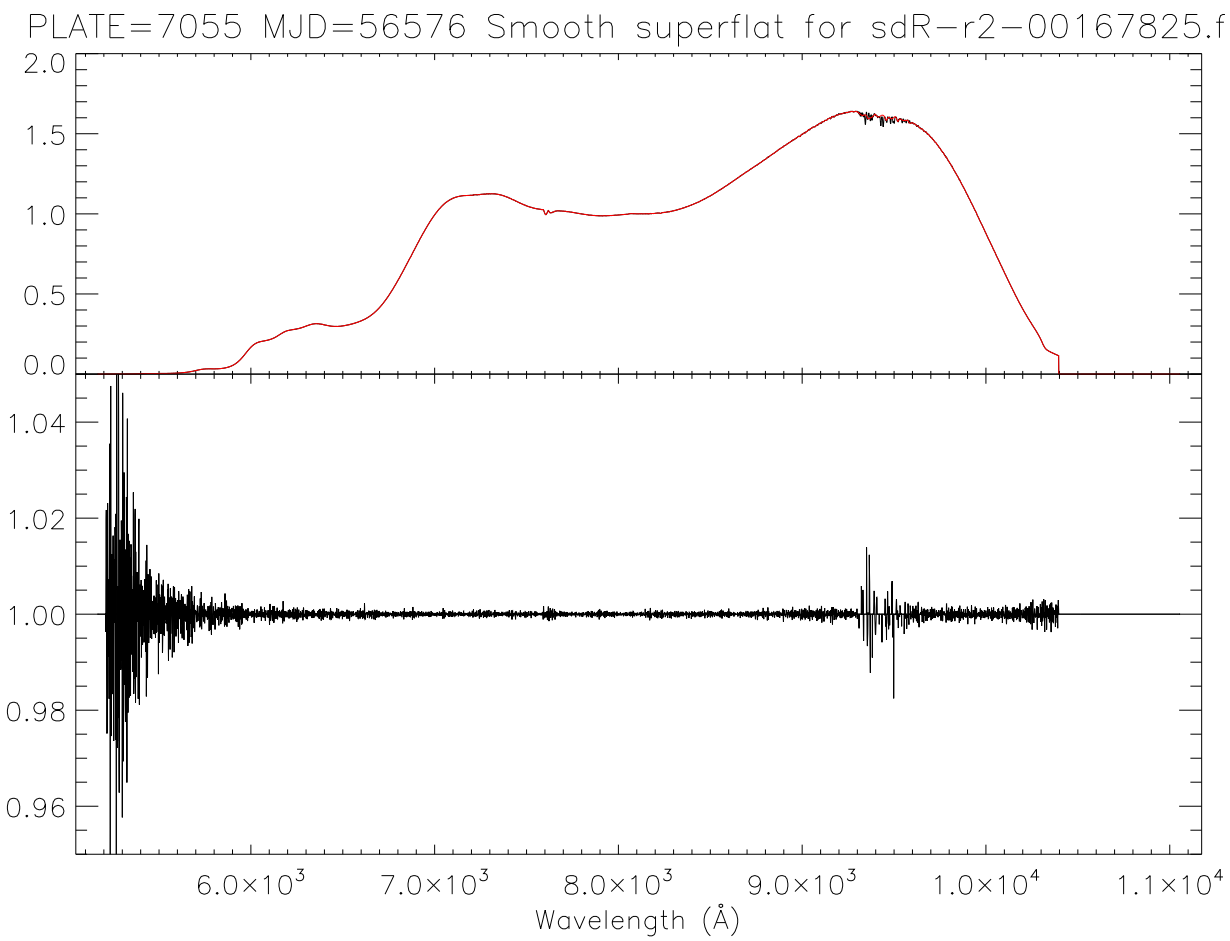

PLATE=7055 MJD=56576 sdR-r2-00167824.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 2.00 %
Fiber number
Focal Distance [mm]
Airmass

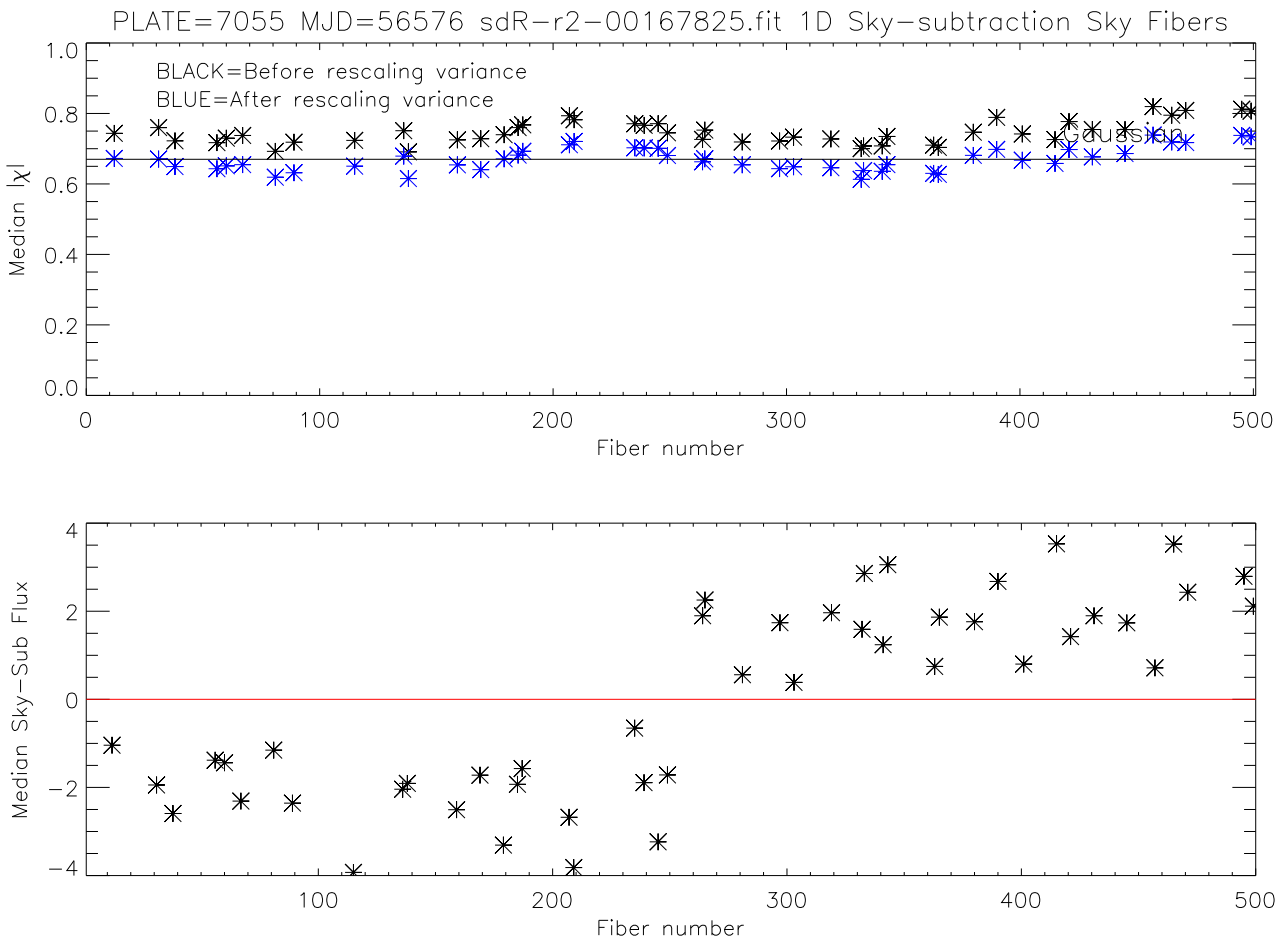

PLATE=7055 MJD=56576 sdR-r2-00167824.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
1.5×10^4
1.0×10^4
5.0×10^3
0
−5.0×10^3
RED = sky fiber
Dispersion = 17.31 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
1.26
1.27
1.28
1.29
1.30
Airmass

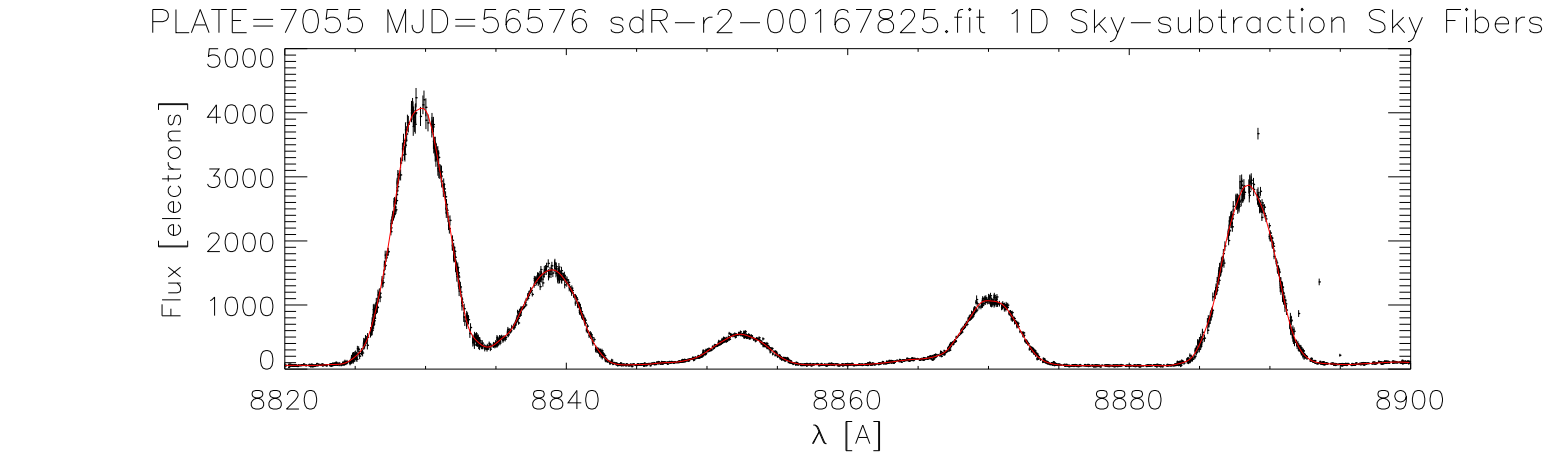

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r2−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.209
Max value = 1.899
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 16:58:12 2016

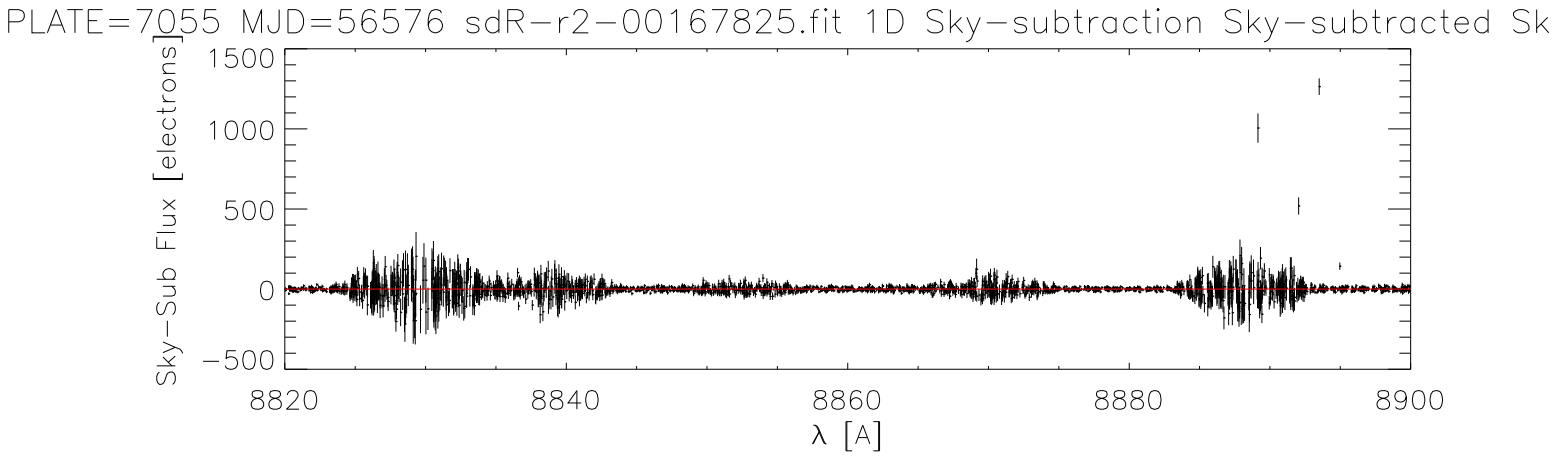

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r2−00167825.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r2-00167825.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

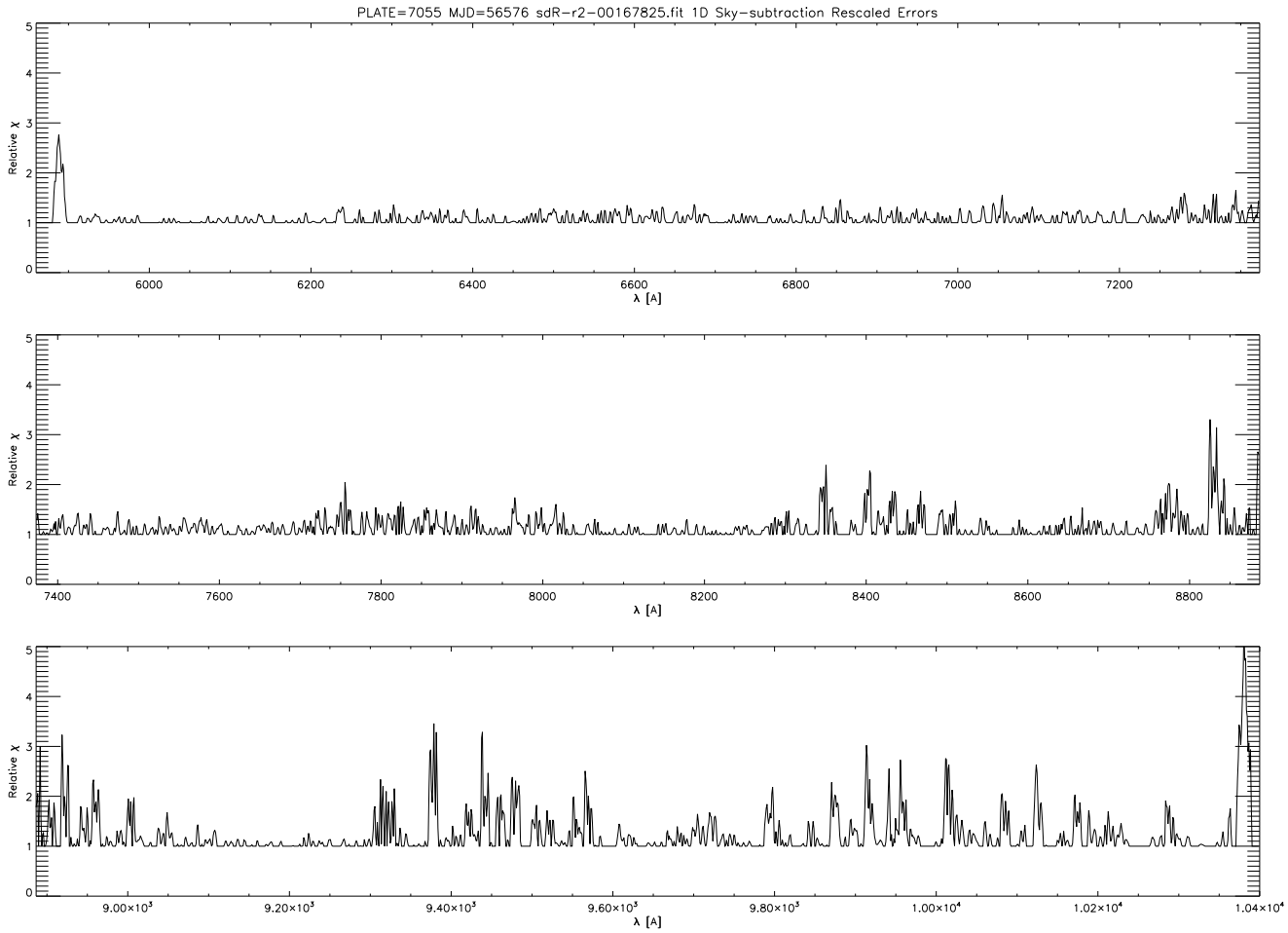

PLATE=7055 MJD=56576 Smooth superflat for sdR-r2-00167825.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

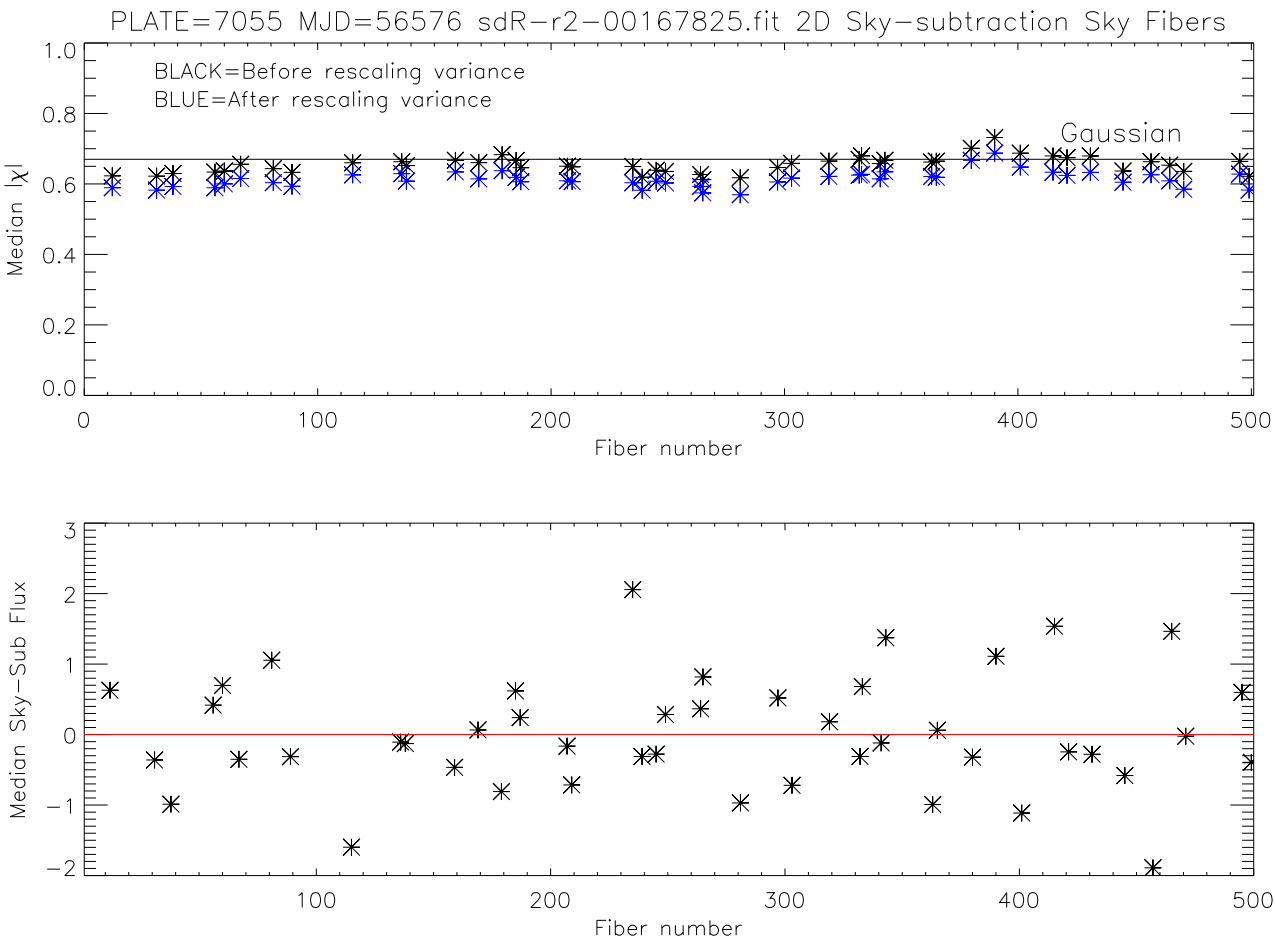

PLATE=7055 MJD=56576 sdR-r2-00167825.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

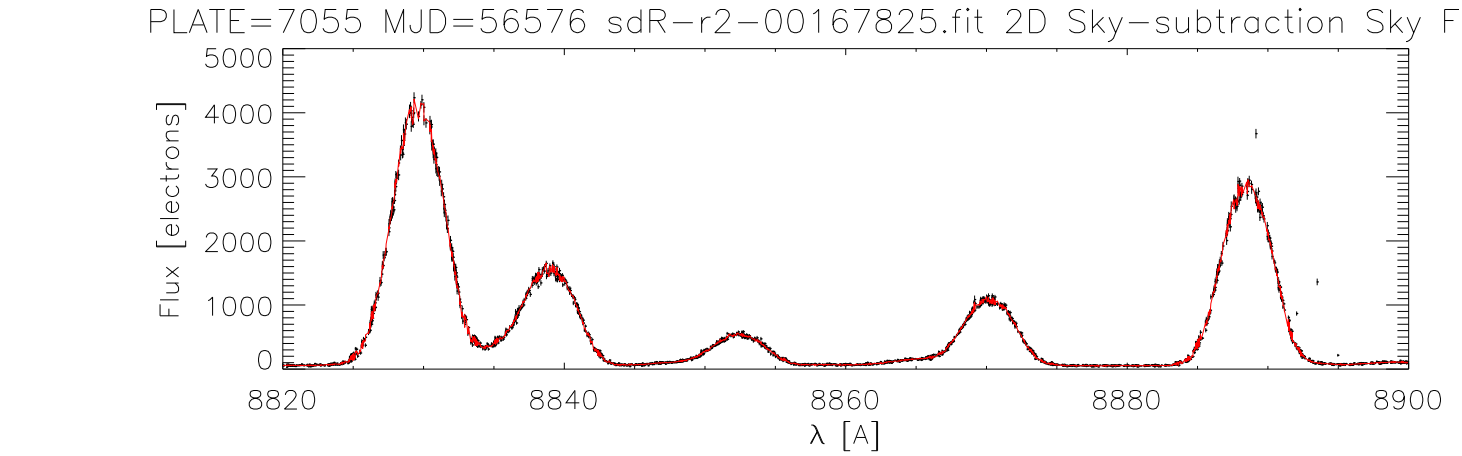

PLATE=7055 MJD=56576 sdR-r2-00167825.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

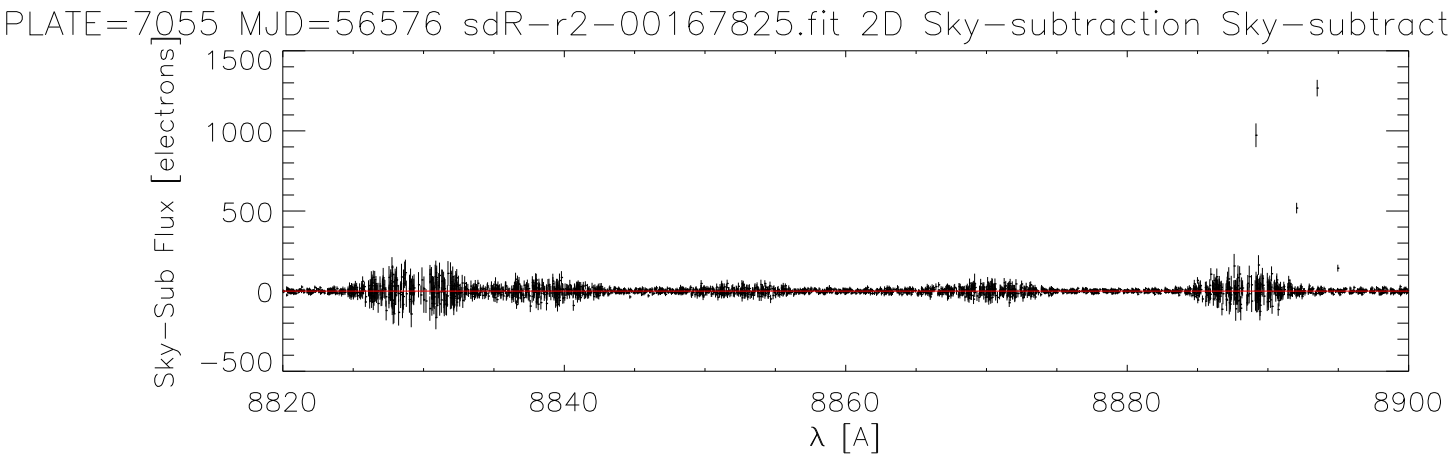

PLATE=7055 MJD=56576 sdR-r2-00167825.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 46

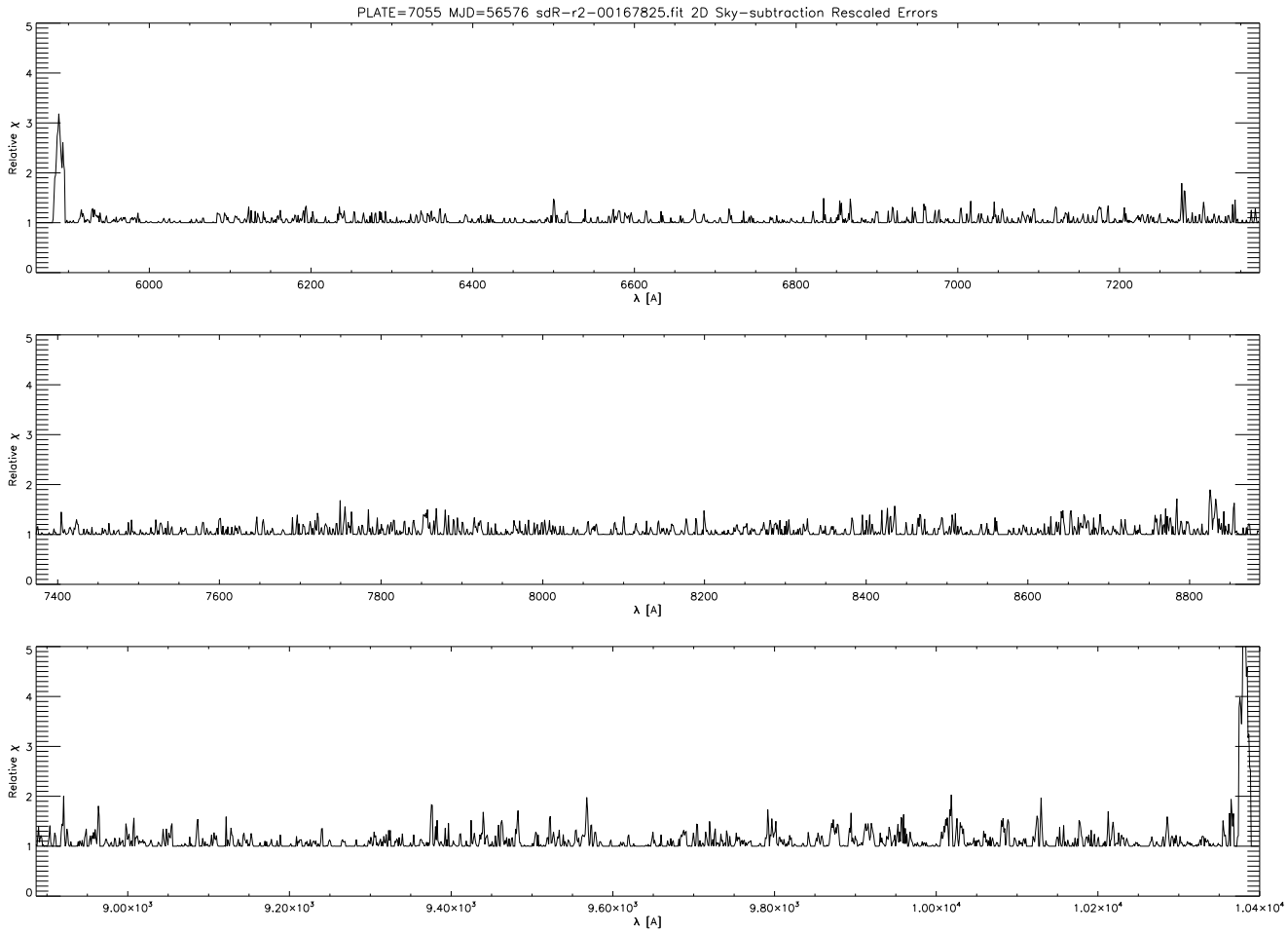


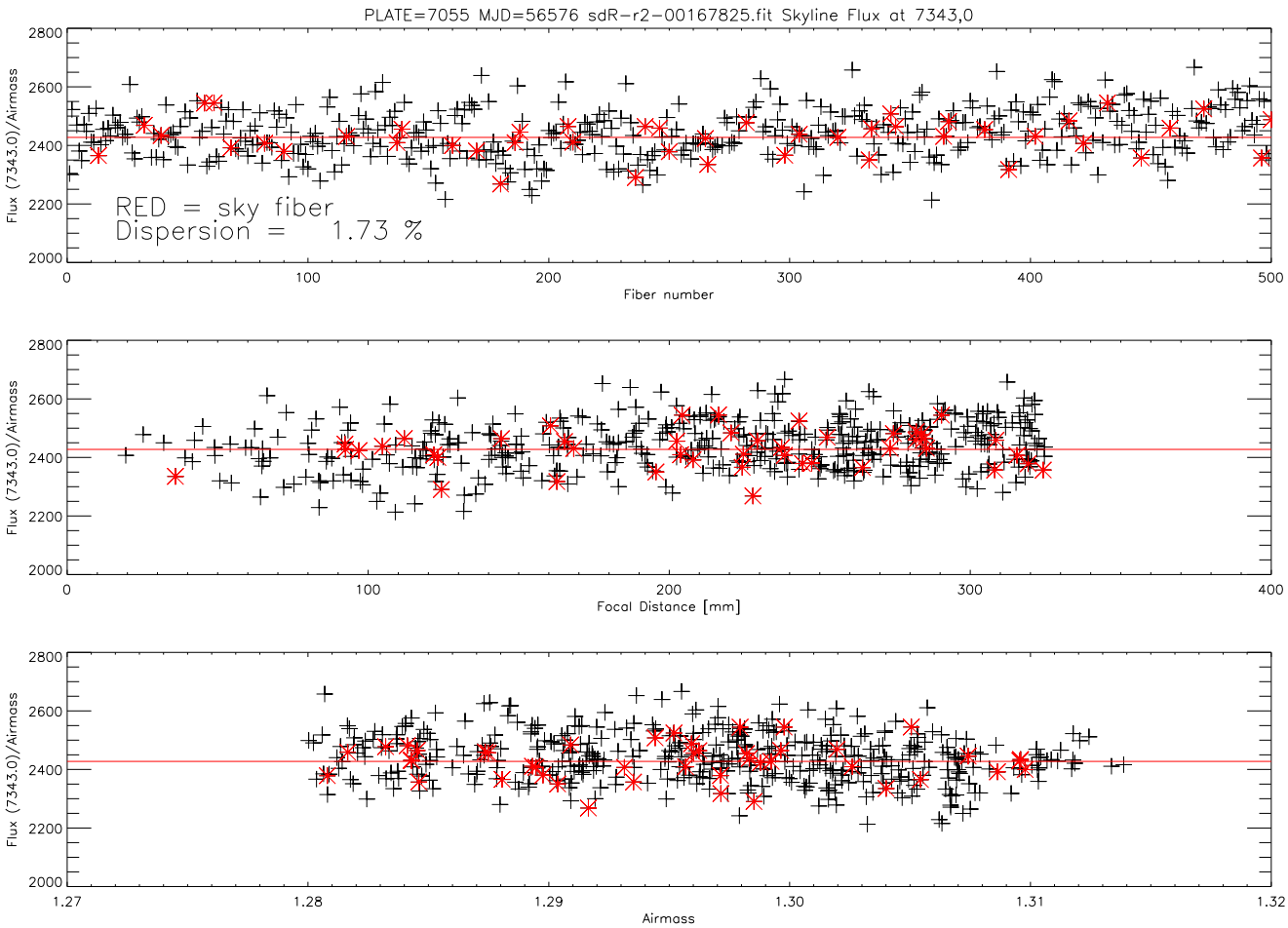

PLATE=7055 MJD=56576 sdR-r2-00167825.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

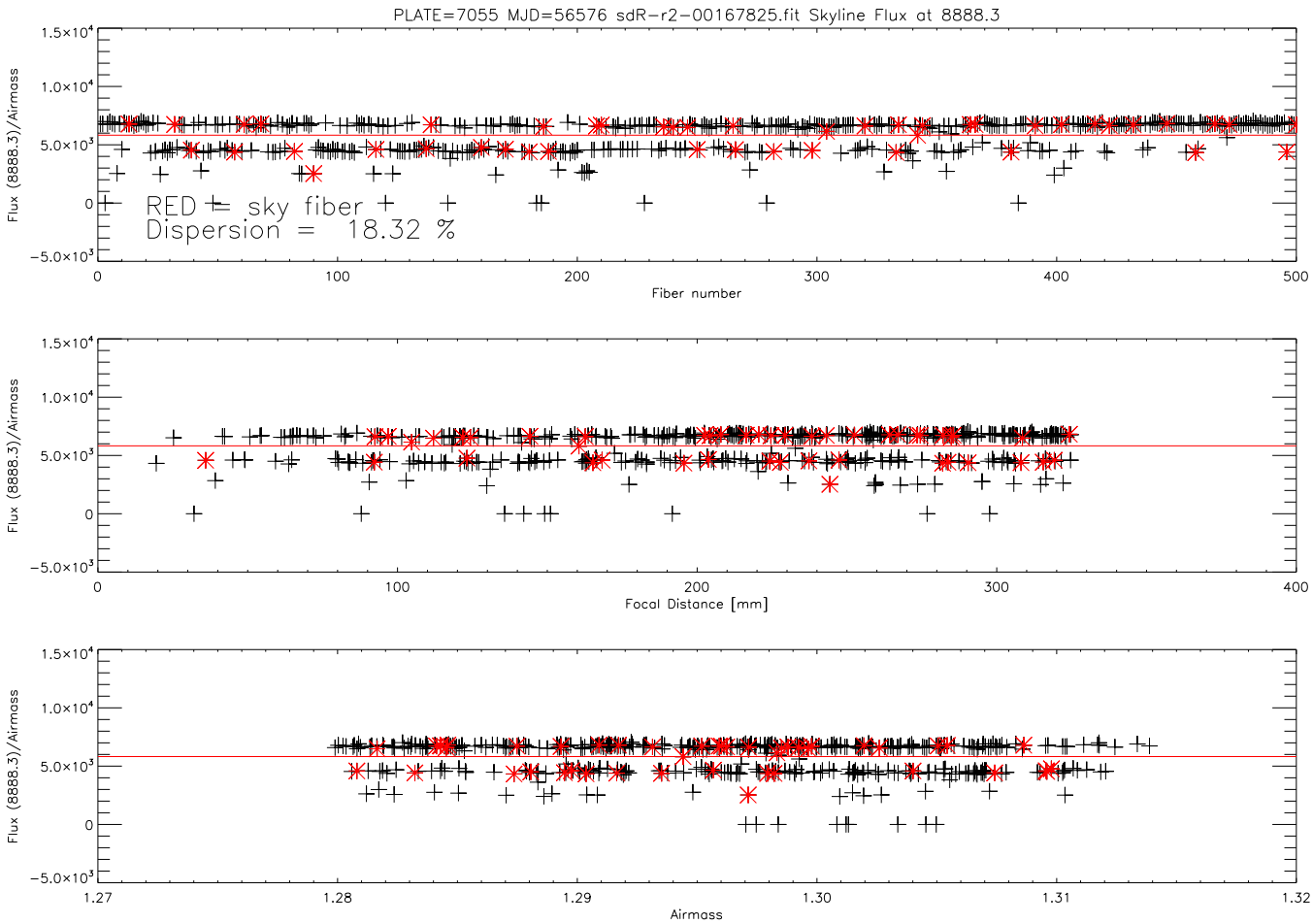

PLATE=7055 MJD=56576 sdR-r2-00167825.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

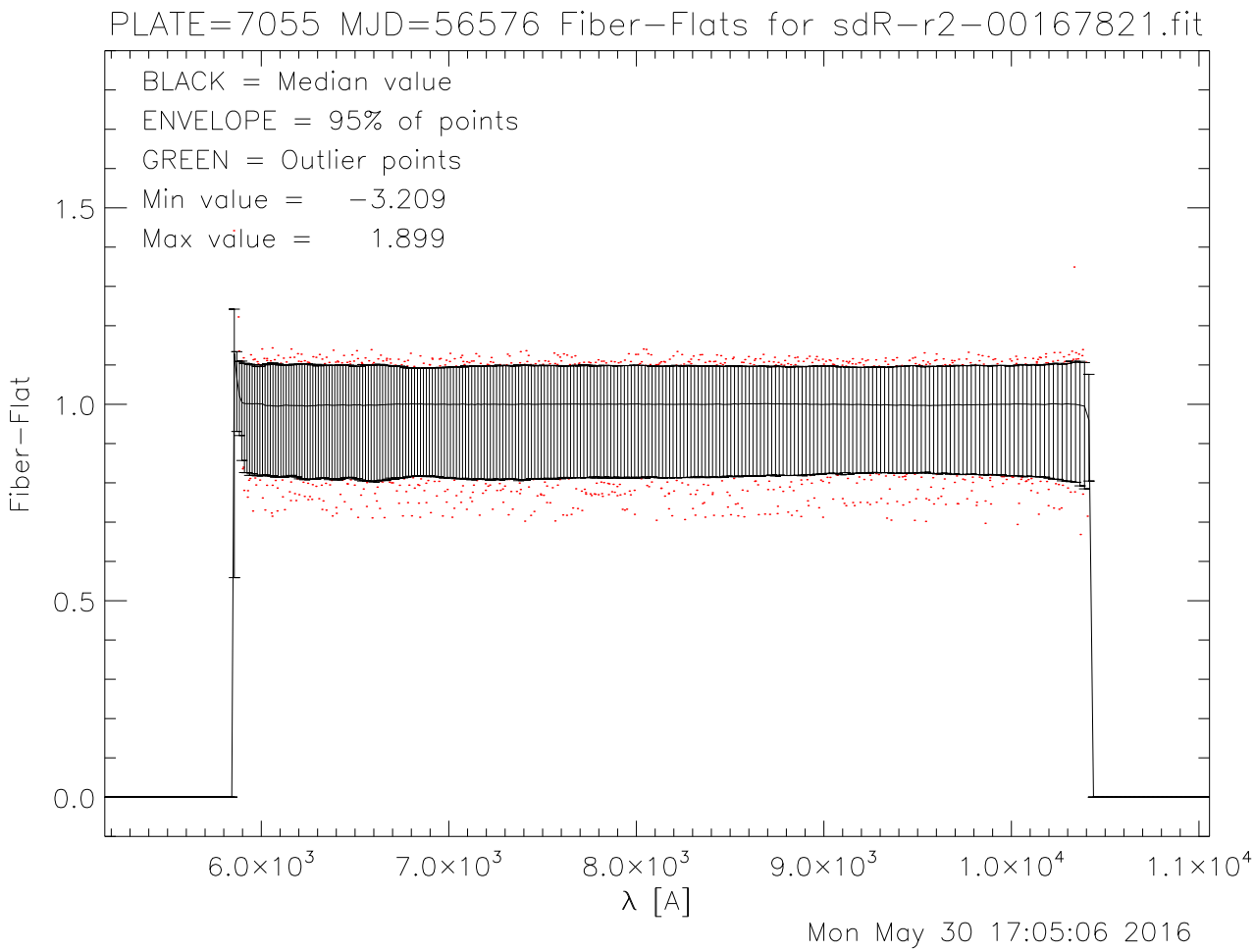

PLATE=7055 MJD=56576 sdR-r2-00167825.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
1500
1000
500
0
-500
8820
8840
8860
8880
8900
λ [A]

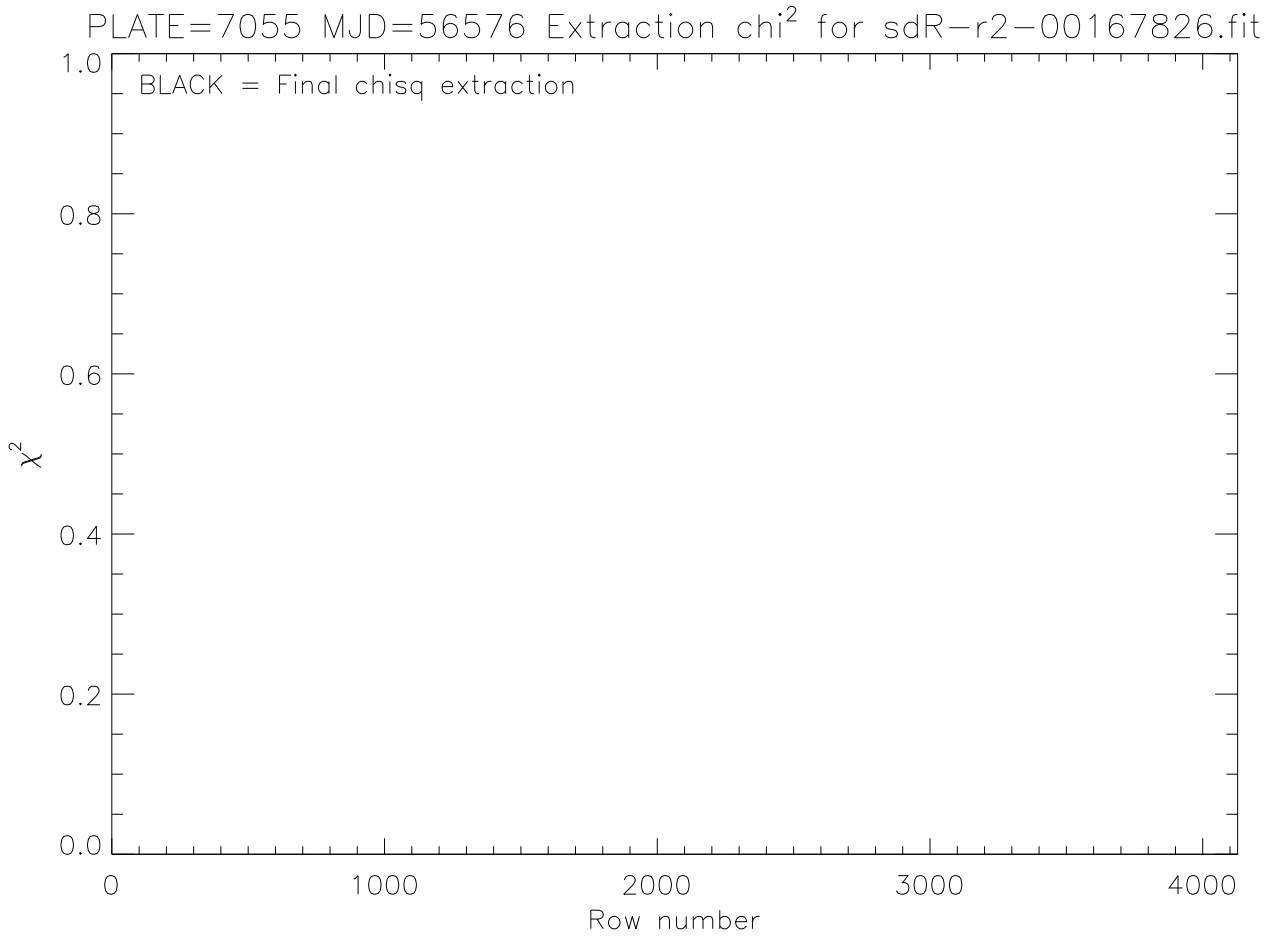
Number of sky fibers = 46

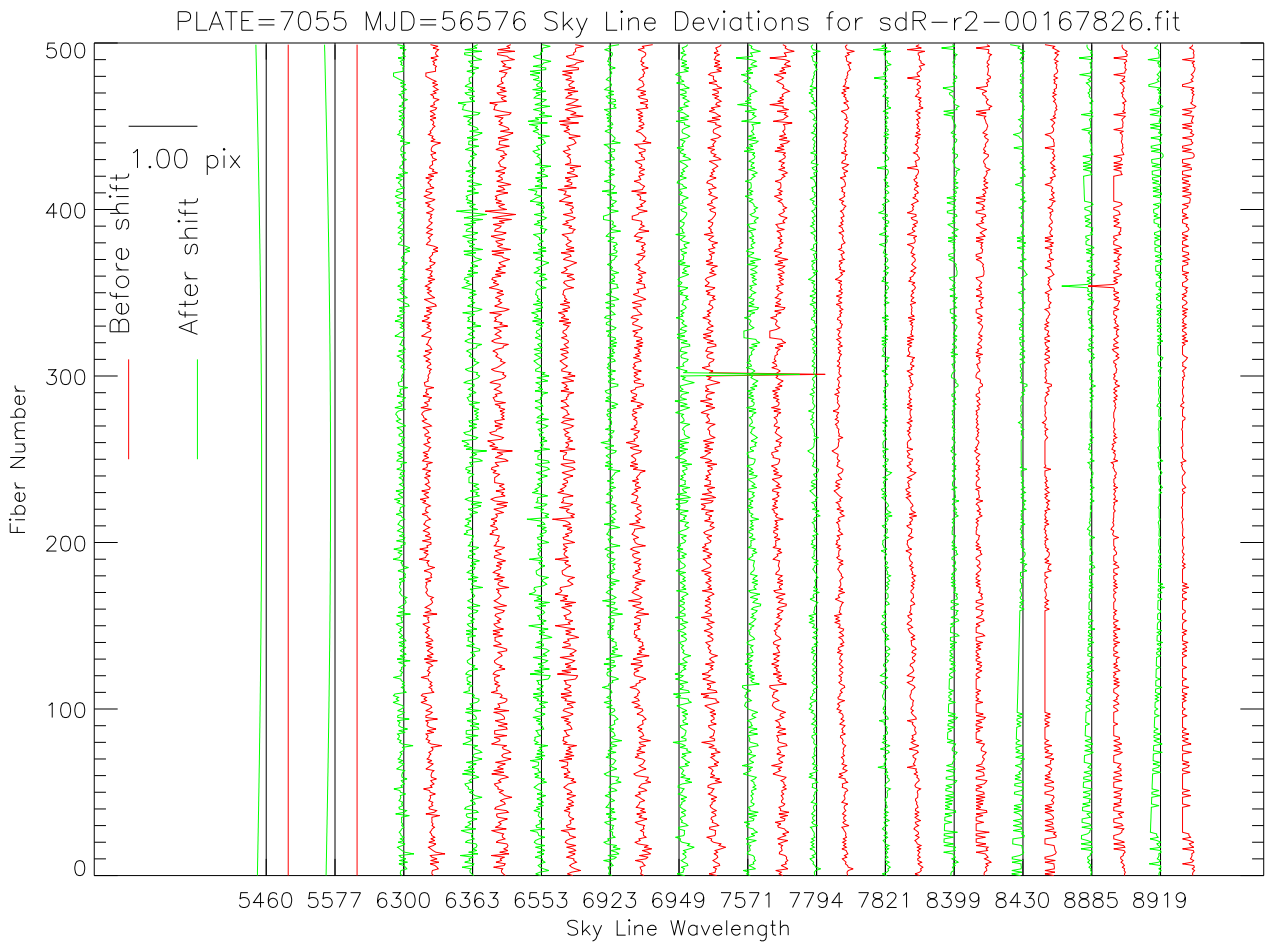


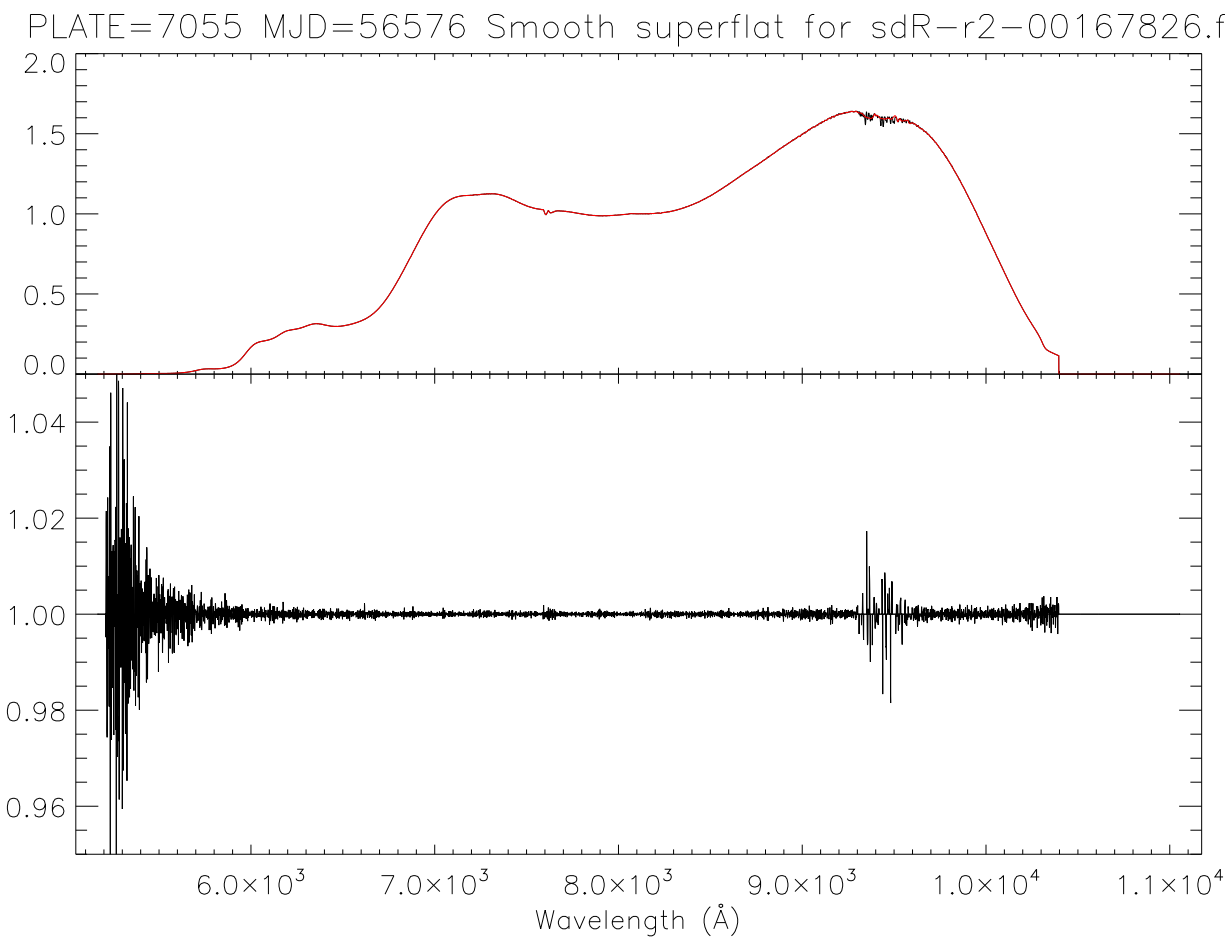

PLATE=7055 MJD=56576 sdR-r2-00167825.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
RED = sky fiber
Dispersion = 1.73 %
Fiber number
Focal Distance [mm]
Airmass

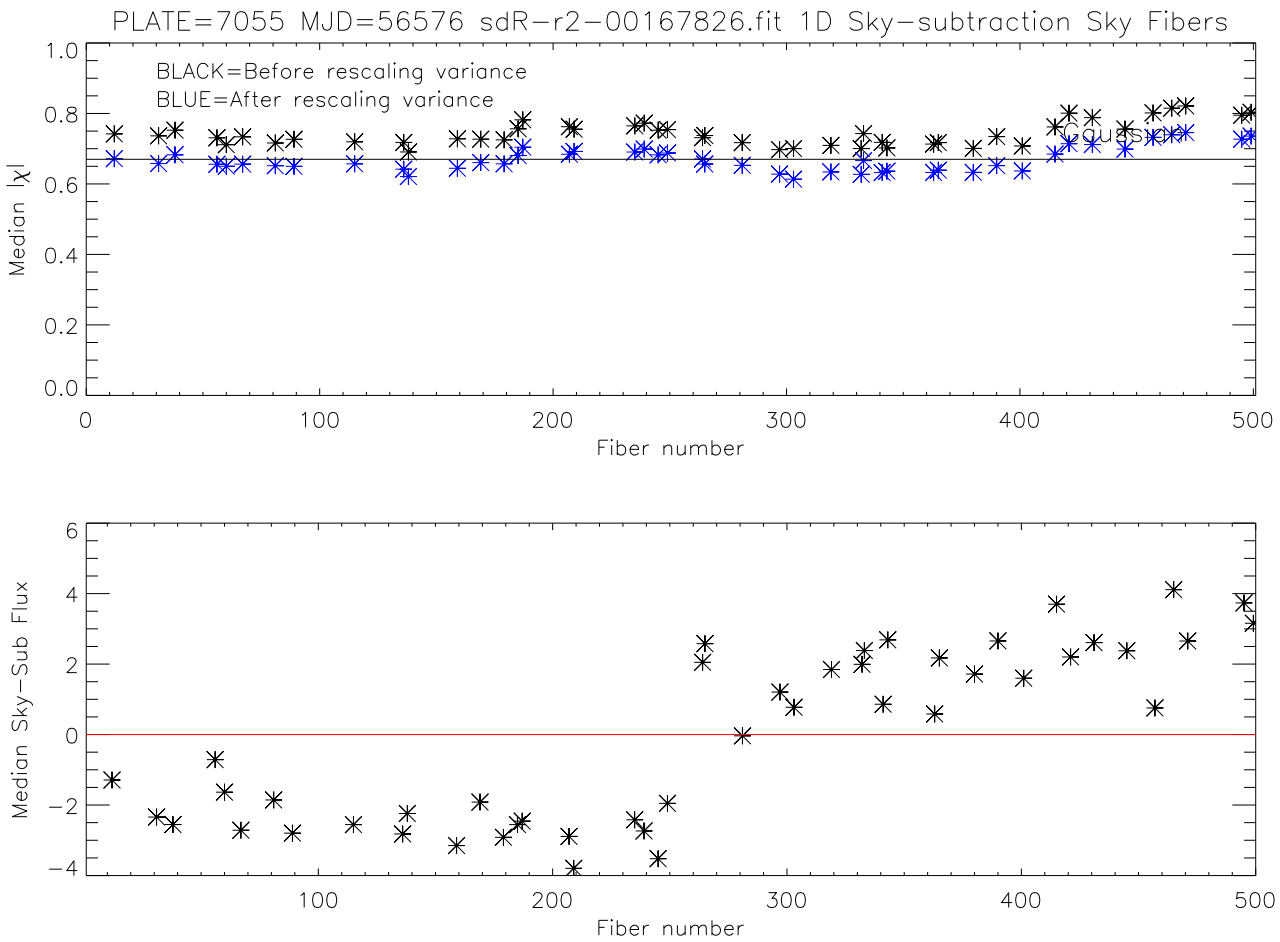

PLATE=7055 MJD=56576 sdR-r2-00167825.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 18.32 %
Fiber number
Focal Distance [mm]
Airmass

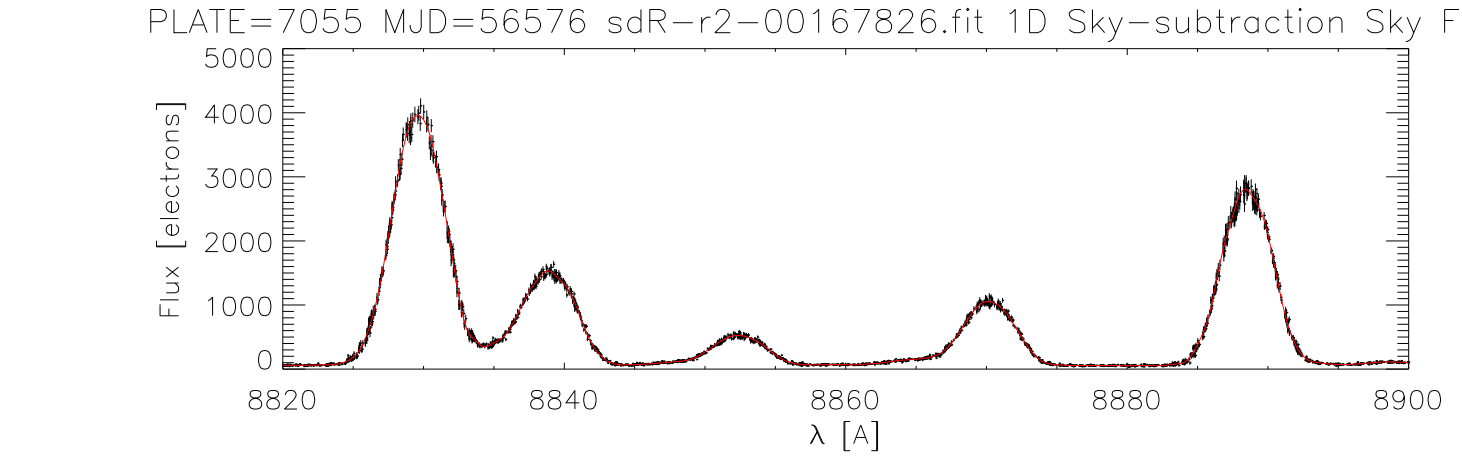

PLATE=7055 MJD=56576 Fiber−Flats for sdR−r2−00167821.fit
BLACK = Median value
ENVELOPE = 95% of points
GREEN = Outlier points
Min value = −3.209
Max value = 1.899
Fiber−Flat
1.5
1.0
0.5
0.0
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
λ [A]
Mon May 30 17:05:06 2016

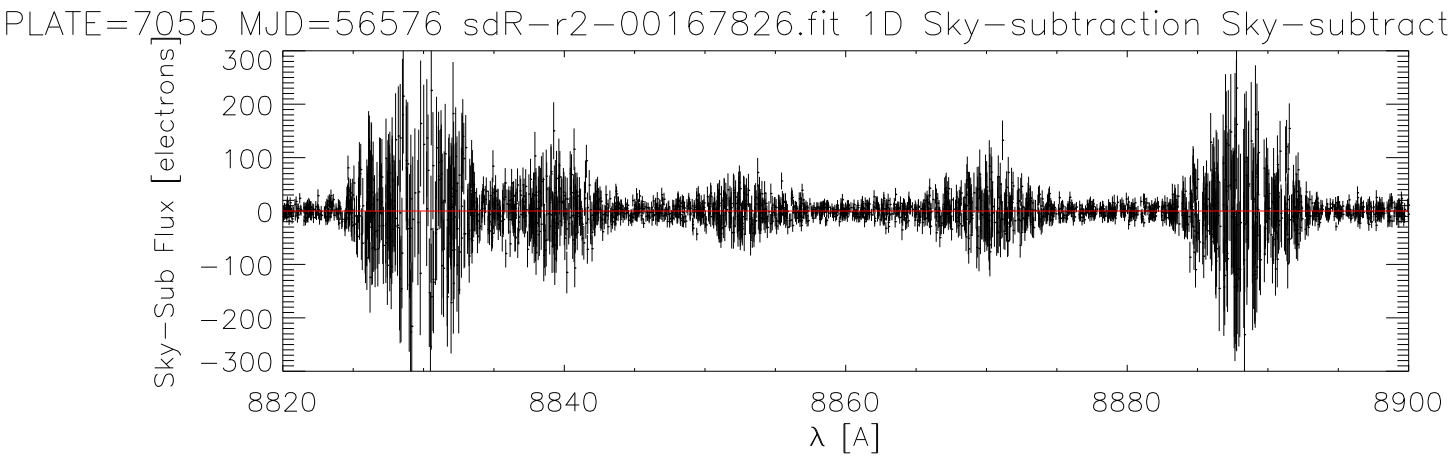

PLATE=7055 MJD=56576 Extraction chi^2 for sdR−r2−00167826.fit
BLACK = Final chisq extraction
χ^2
1.0
0.8
0.6
0.4
0.2
0.0
0
1000
2000
3000
4000
Row number


PLATE=7055 MJD=56576 Sky Line Deviations for sdR-r2-00167826.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

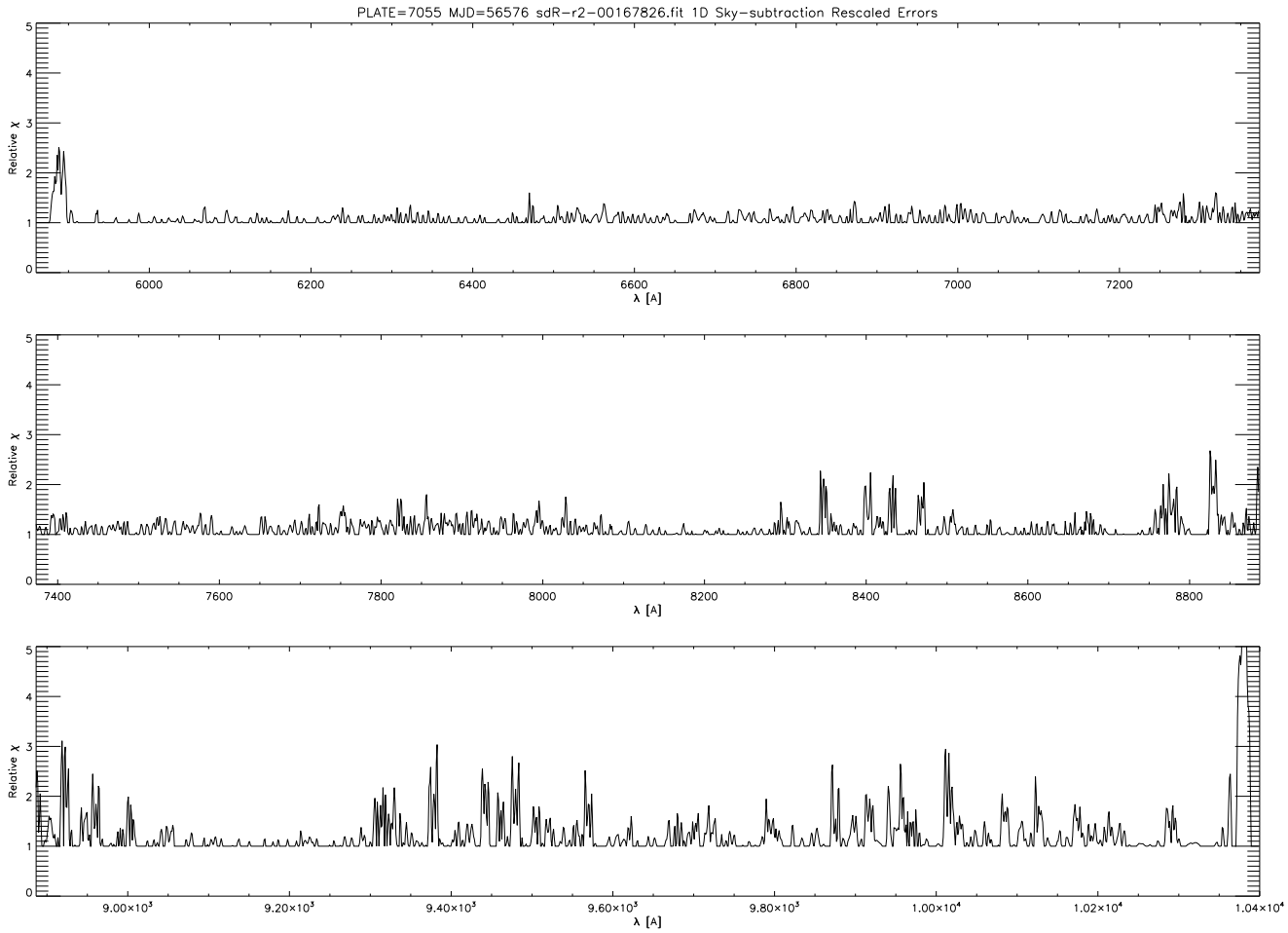

PLATE=7055 MJD=56576 Smooth superflat for sdR-r2-00167826.fit
2.0
1.5
1.0
0.5
0.0
1.04
1.02
1.00
0.98
0.96
6.0×10^3
7.0×10^3
8.0×10^3
9.0×10^3
1.0×10^4
1.1×10^4
Wavelength (Å)

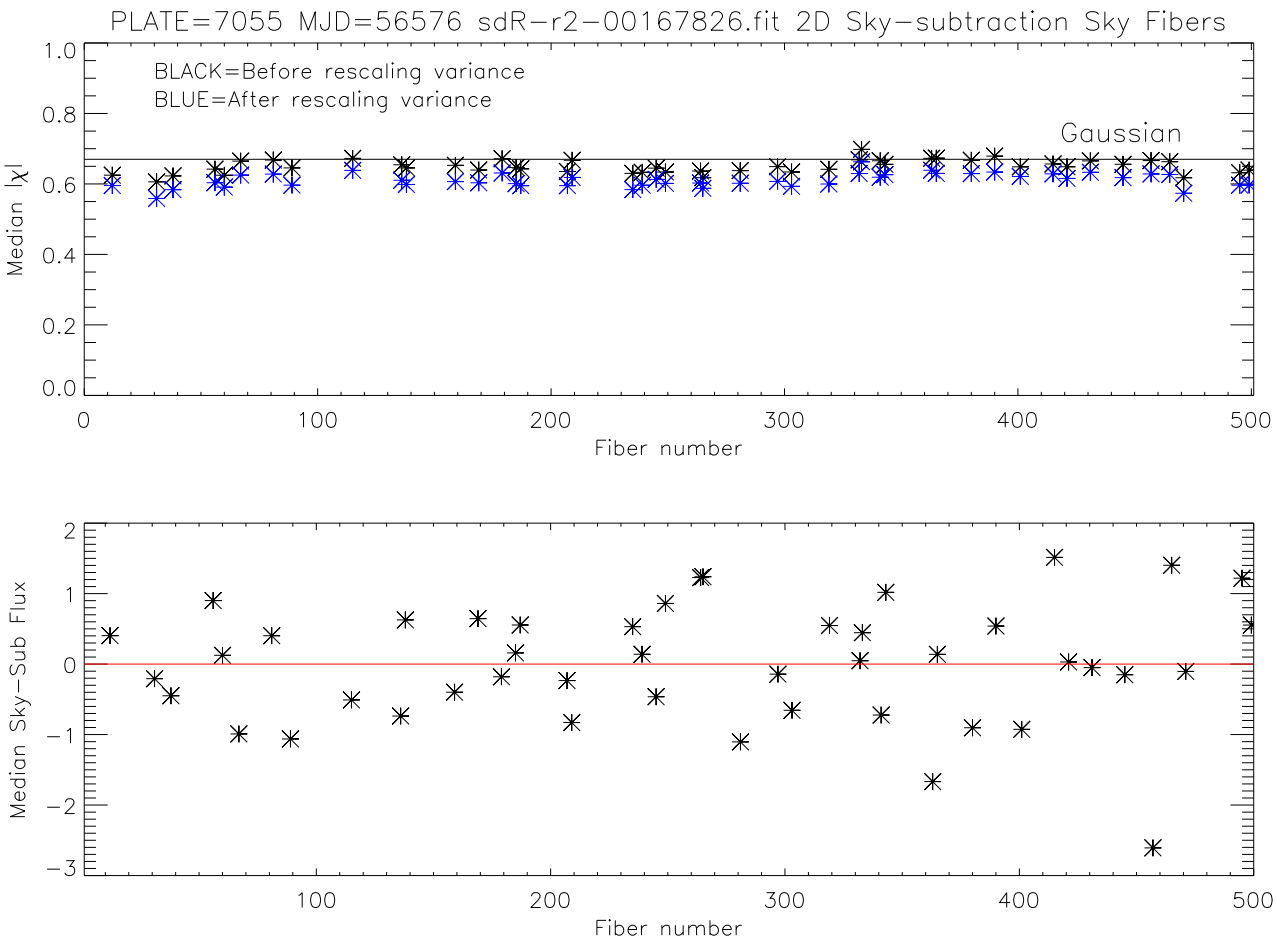

PLATE=7055 MJD=56576 sdR-r2-00167826.fit 1D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

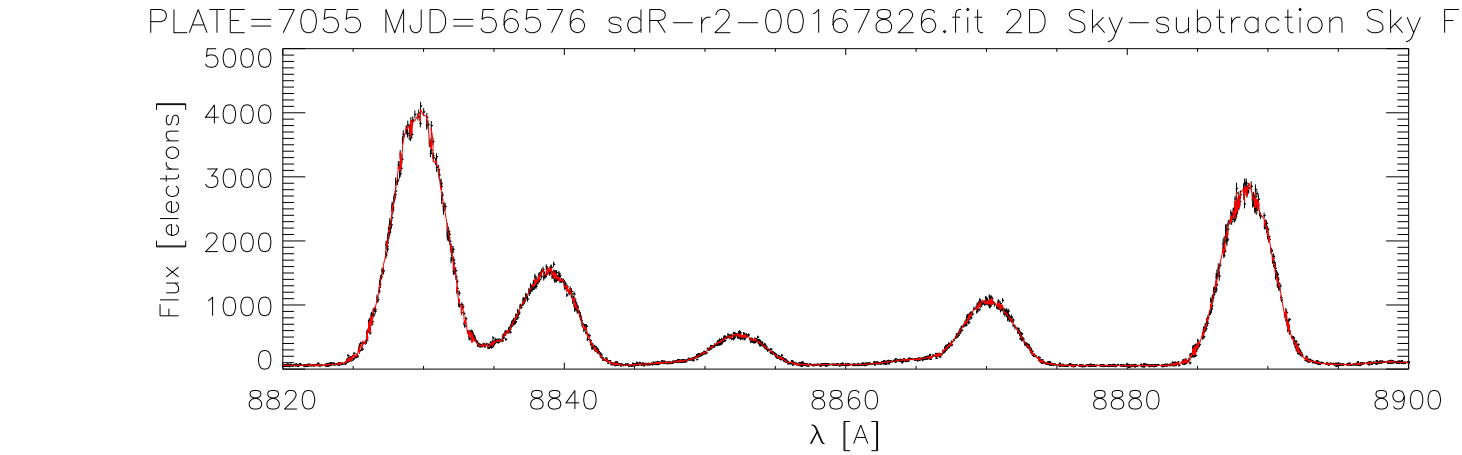

PLATE=7055 MJD=56576 sdR-r2-00167826.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]

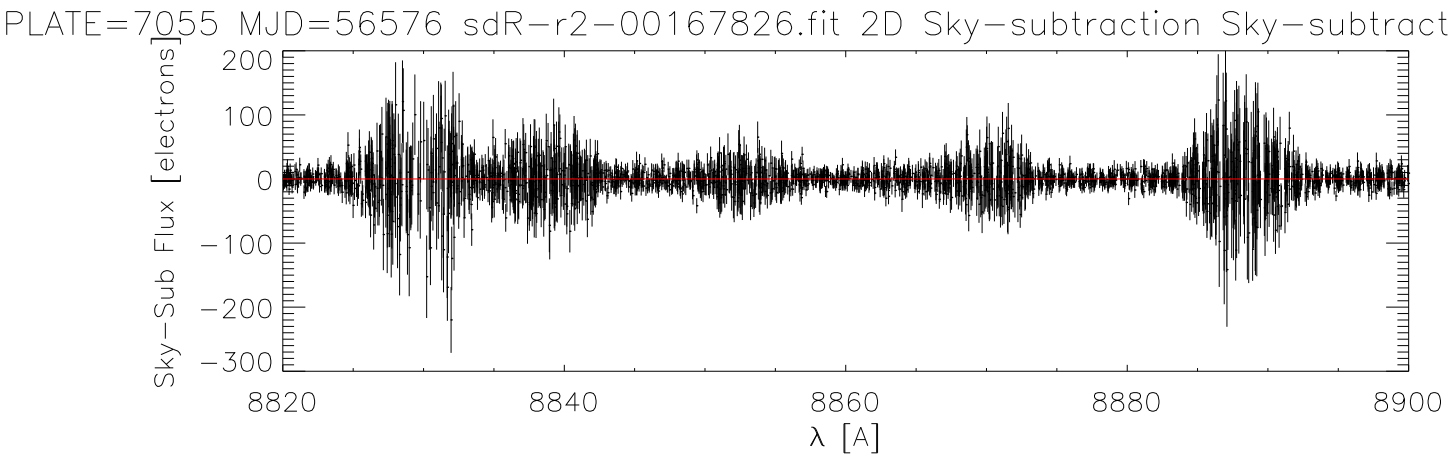

PLATE=7055 MJD=56576 sdR-r2-00167826.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
-100
-200
-300
8820
8840
8860
8880
8900
λ [A]

Number of sky fibers = 46

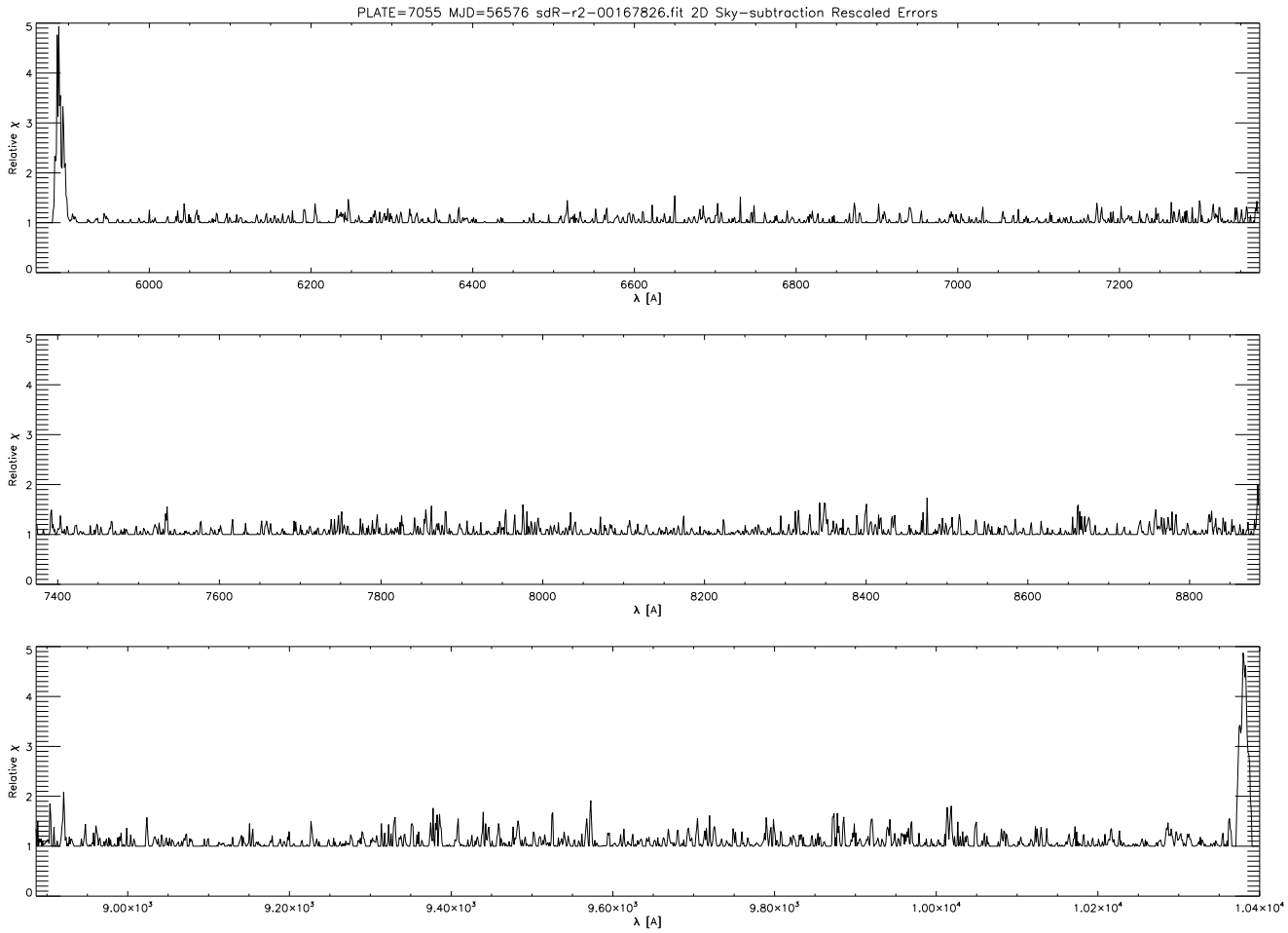


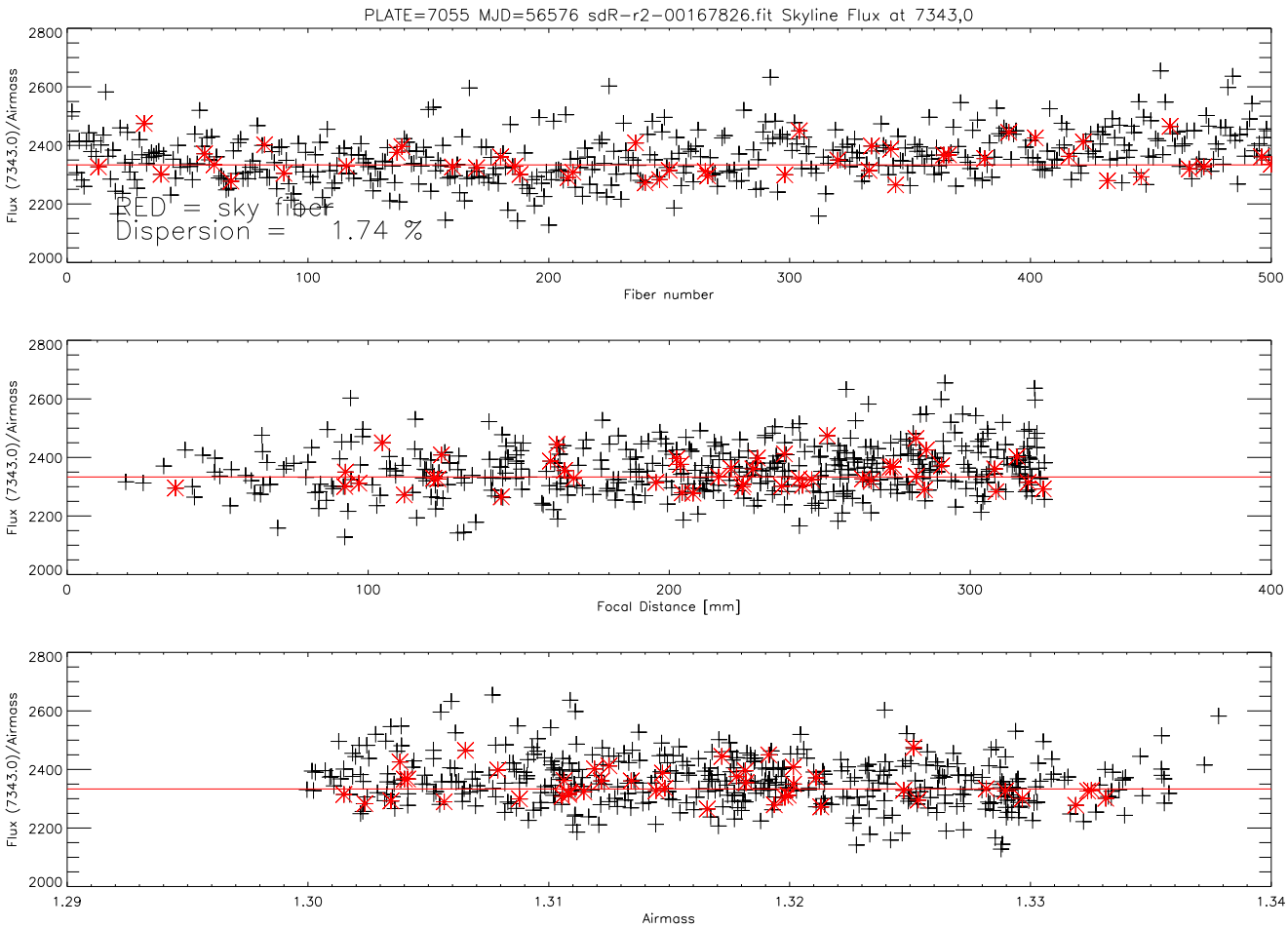

PLATE=7055 MJD=56576 sdR-r2-00167826.fit 2D Sky-subtraction Sky Fibers
BLACK=Before rescaling variance
BLUE=After rescaling variance
Gaussian
Median |χ|
Fiber number
Median Sky-Sub Flux
Fiber number

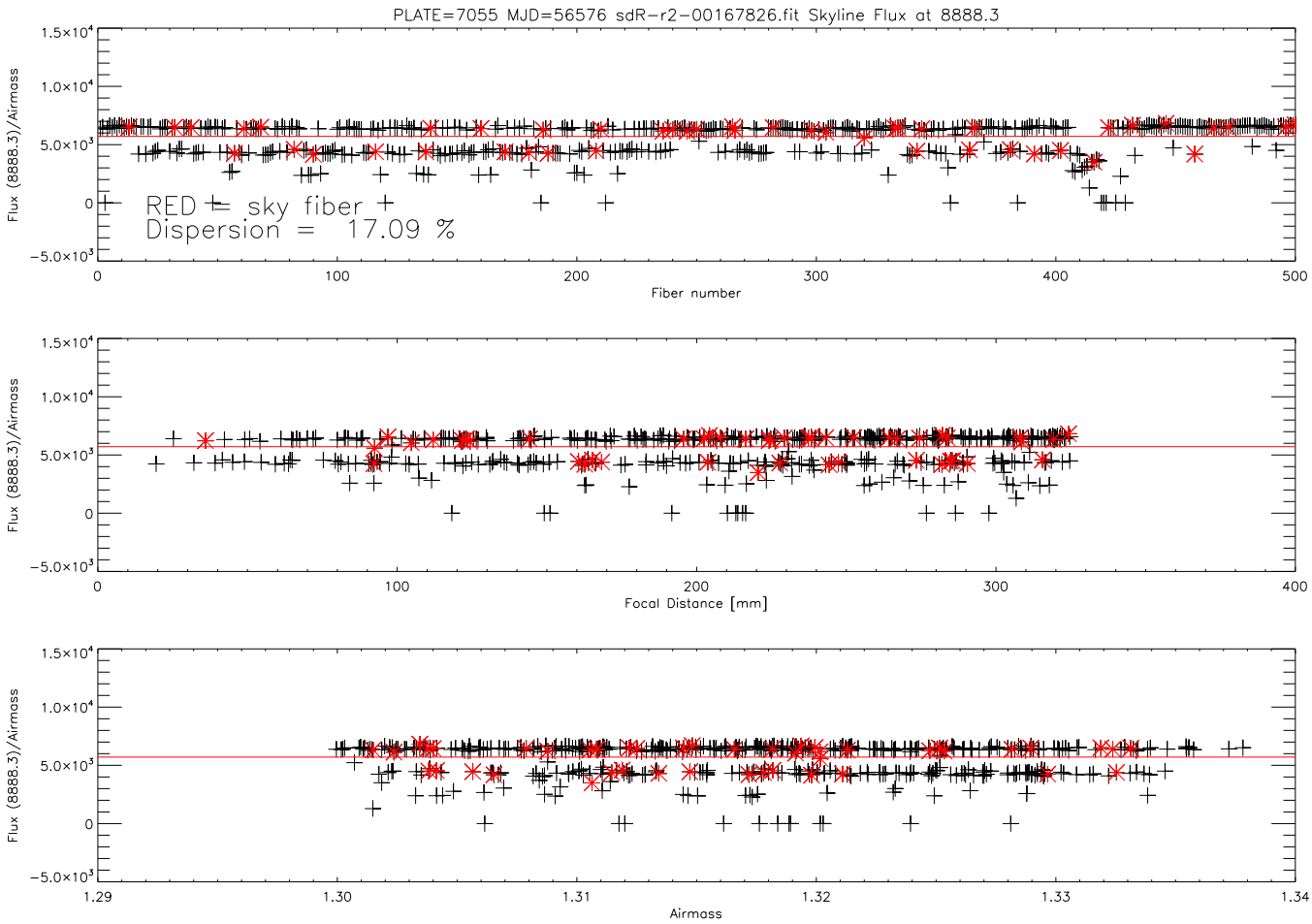

PLATE=7055 MJD=56576 sdR-r2-00167826.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
8820
8840
8860
8880
8900
λ [A]


PLATE=7055 MJD=56576 sdR-r2-00167826.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 = 46




PLATE=7055 MJD=56576 sdR-r2-00167826.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
Fiber number
RED = sky fiber
Dispersion = 1.74 %
Flux (7343.0)/Airmass
Focal Distance [mm]
Flux (7343.0)/Airmass
Airmass


PLATE=7055 MJD=56576 sdR-r2-00167826.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 = 17.09 %
0
100
200
300
400
500
Fiber number
Flux (8888.3)/Airmass
Focal Distance [mm]
Flux (8888.3)/Airmass
1.29
1.30
1.31
1.32
1.33
1.34
Airmass