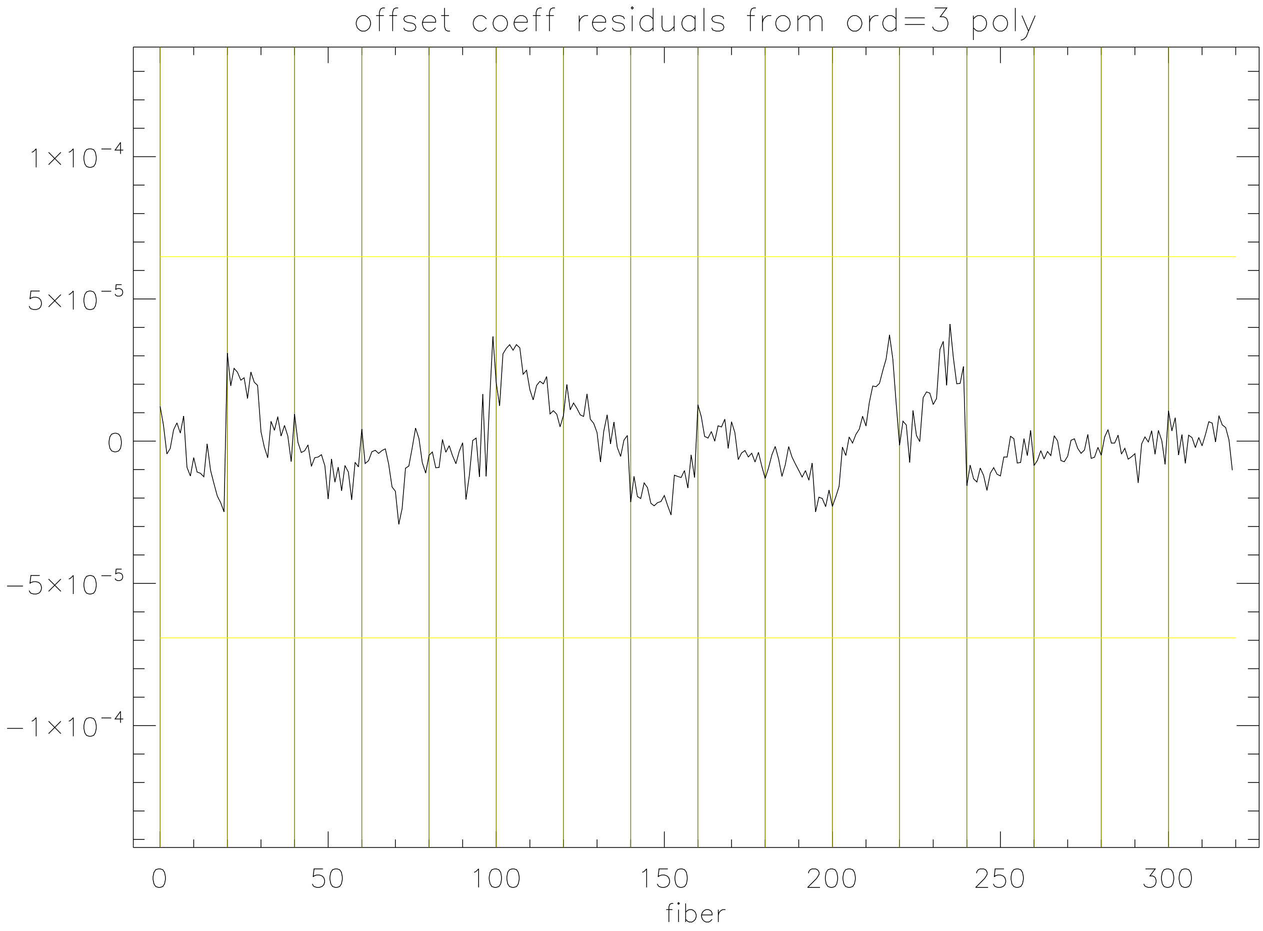
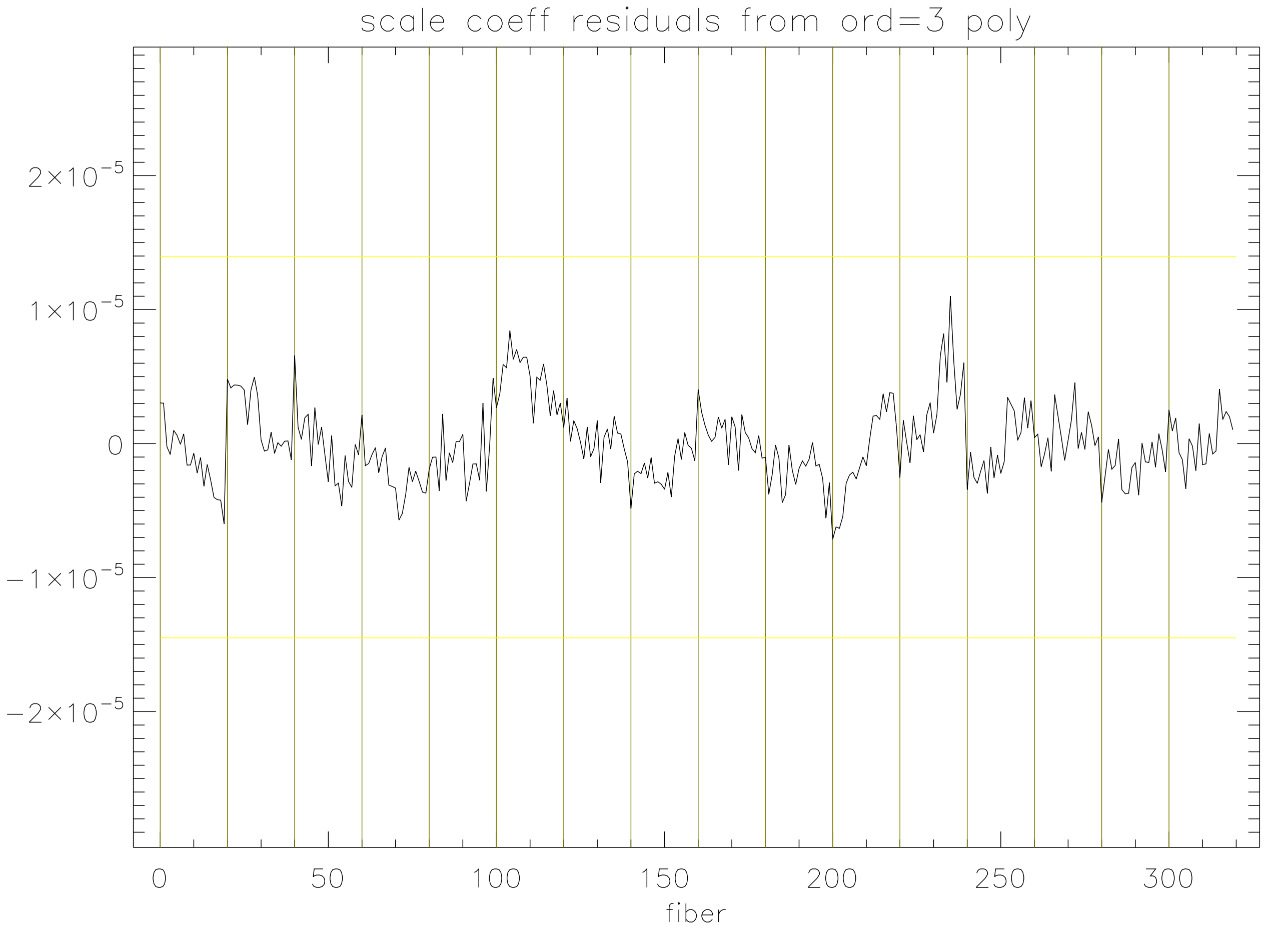
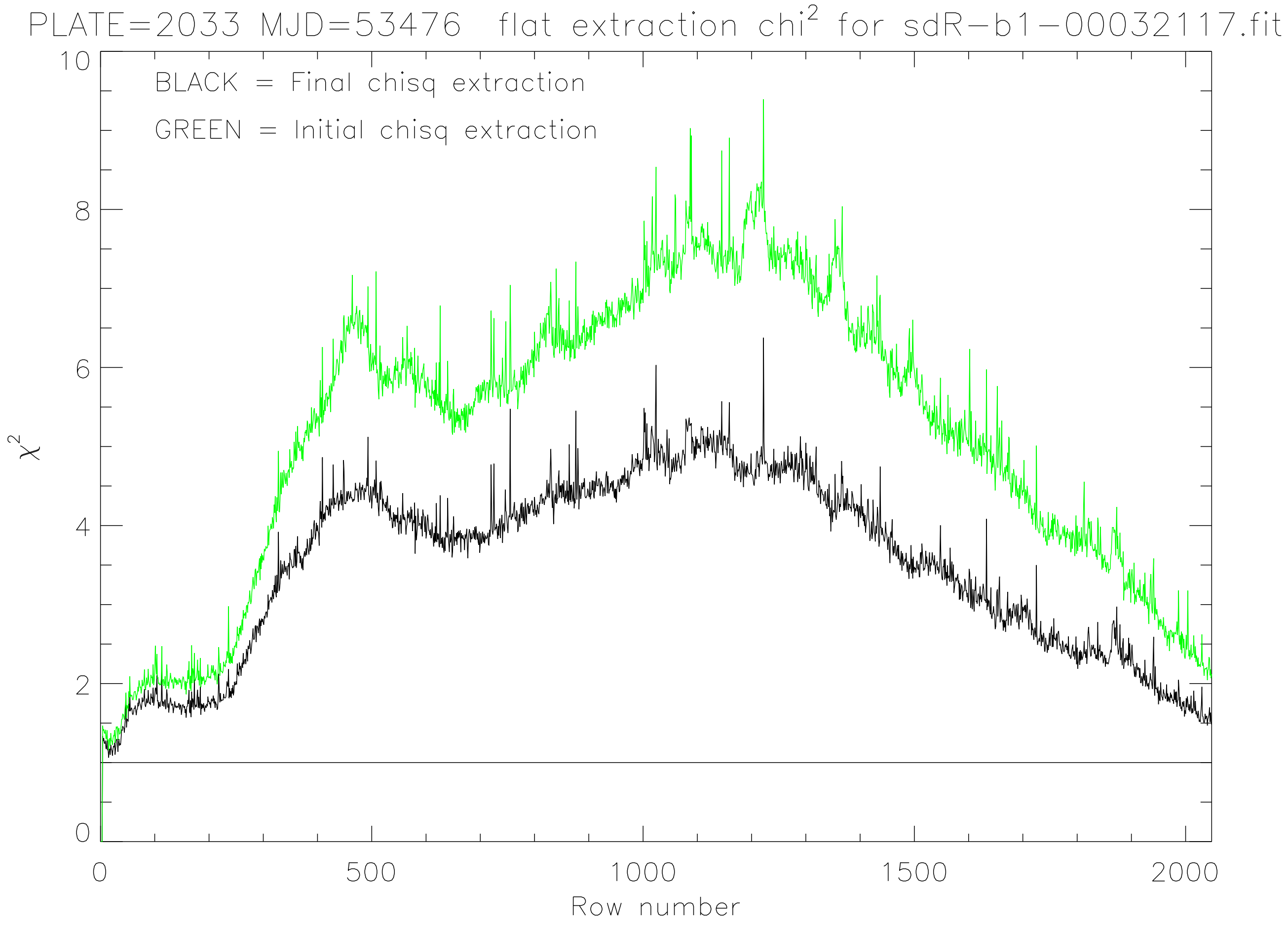
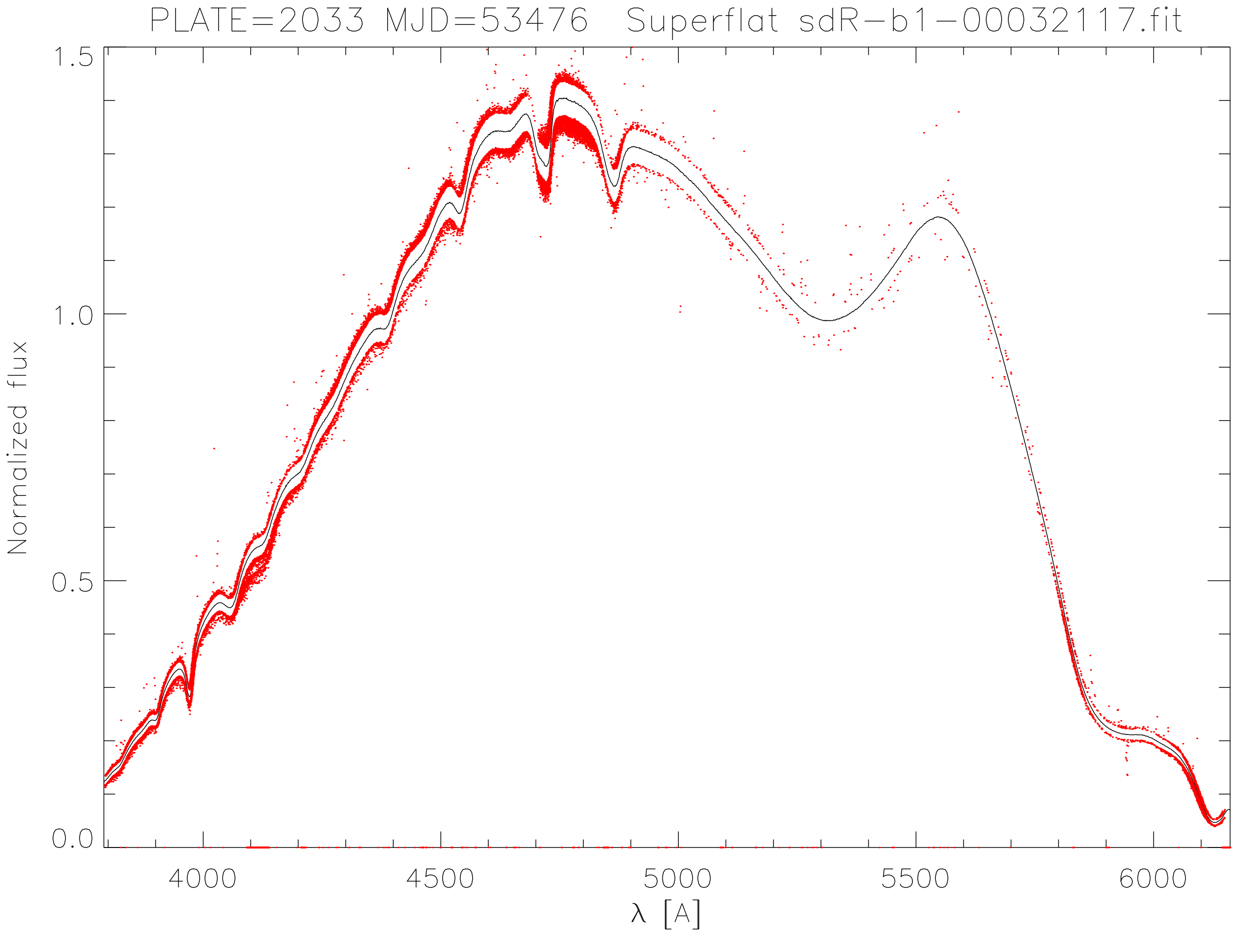
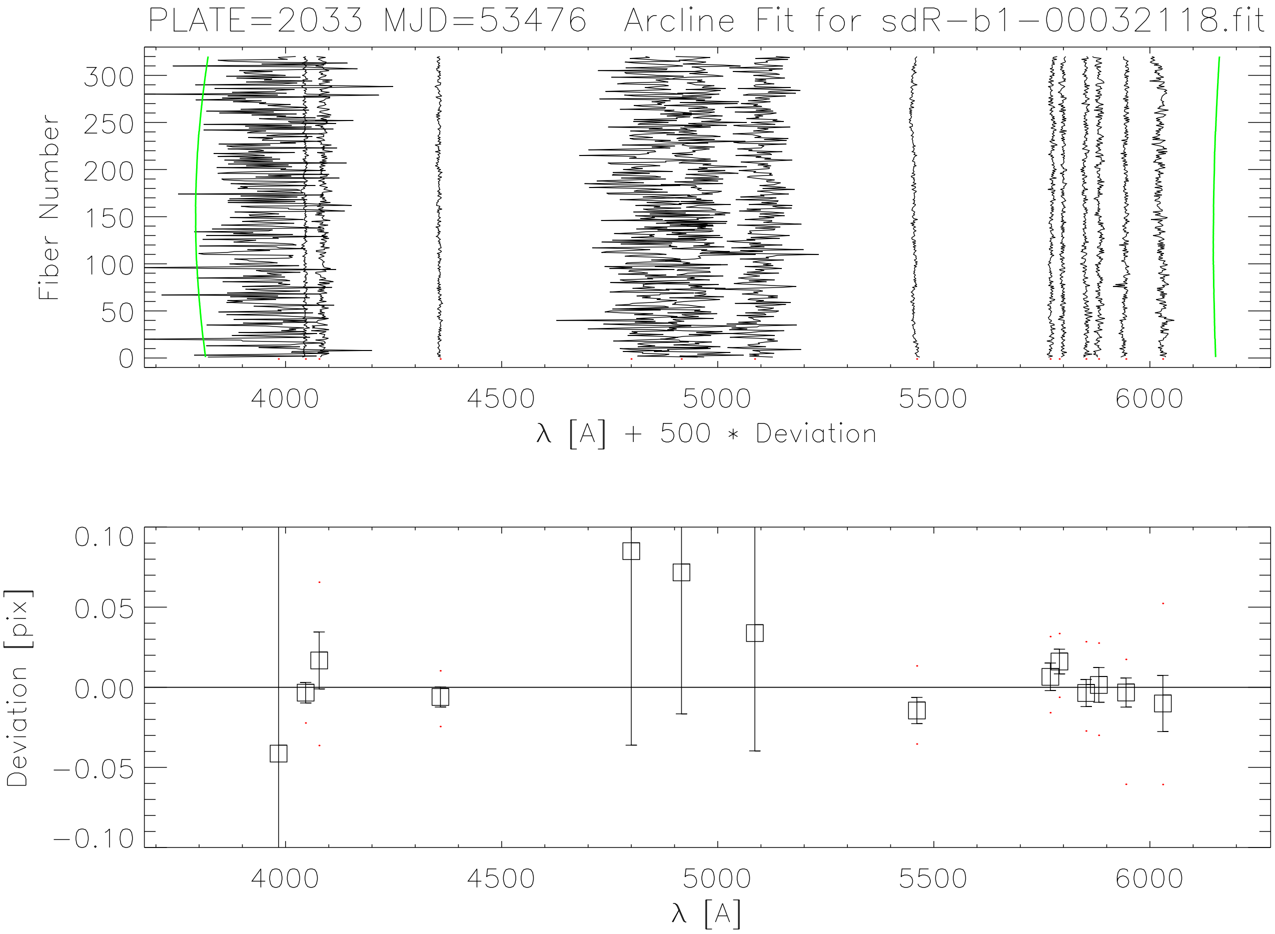

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber


scale coeff residuals from ord=3 poly
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
0
50
100
150
200
250
300
fiber

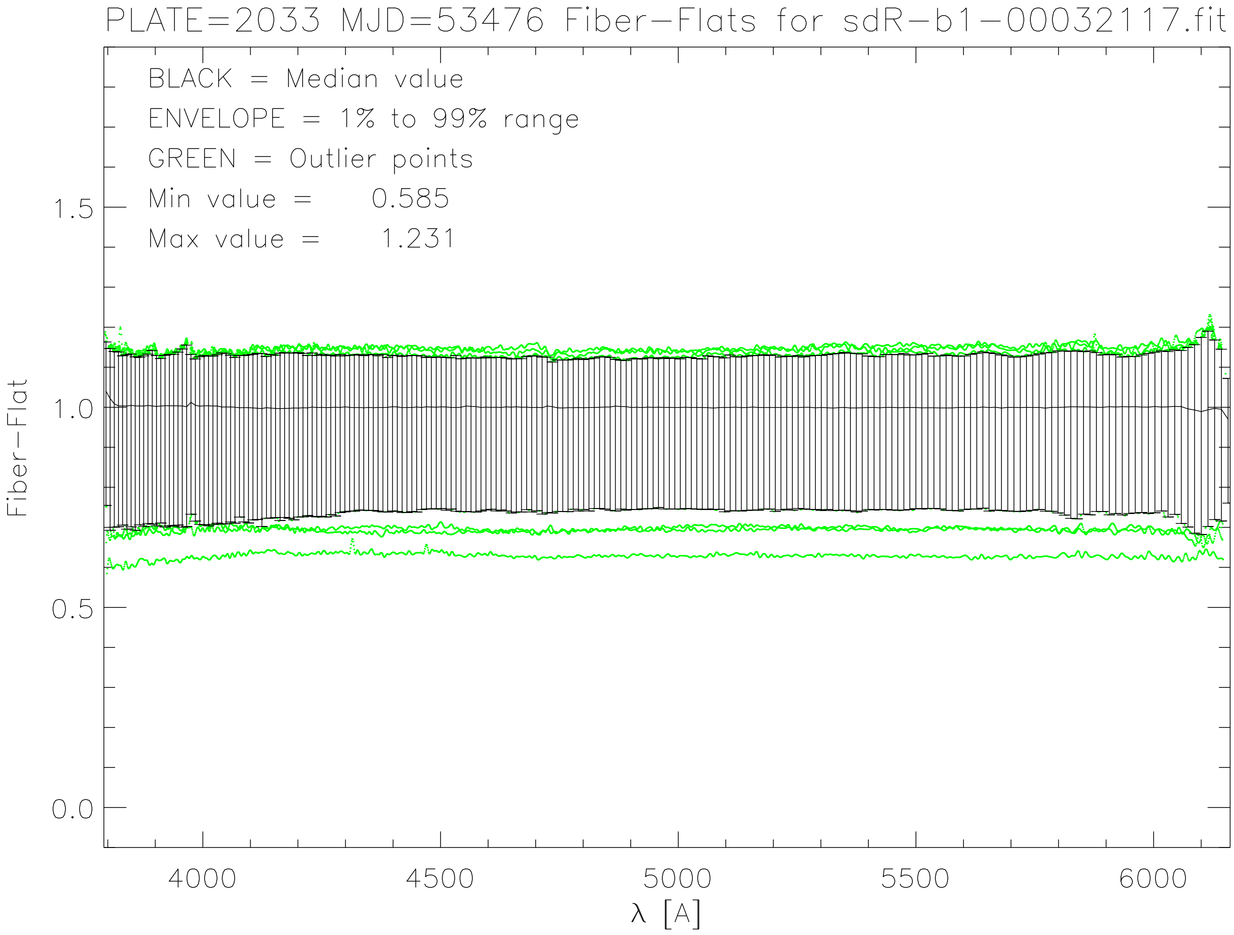


PLATE=2033 MJD=53476 flat extraction chi^2 for sdR-b1-00032117.fit

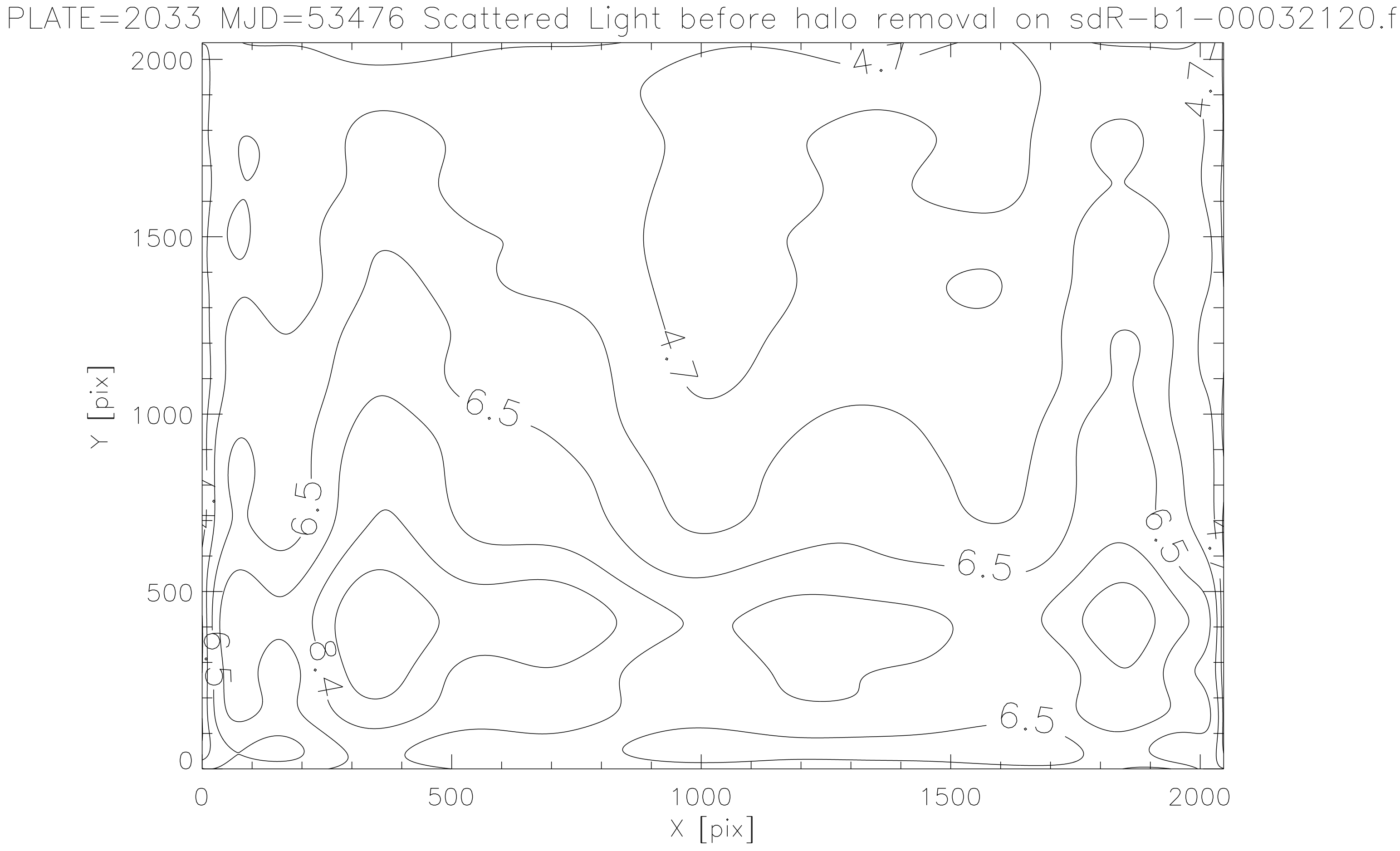

PLATE=2033 MJD=53476 Superflat sdR-b1-00032117.fit
Normalized flux
0.0
0.5
1.0
1.5
λ [A]
4000
4500
5000
5500
6000



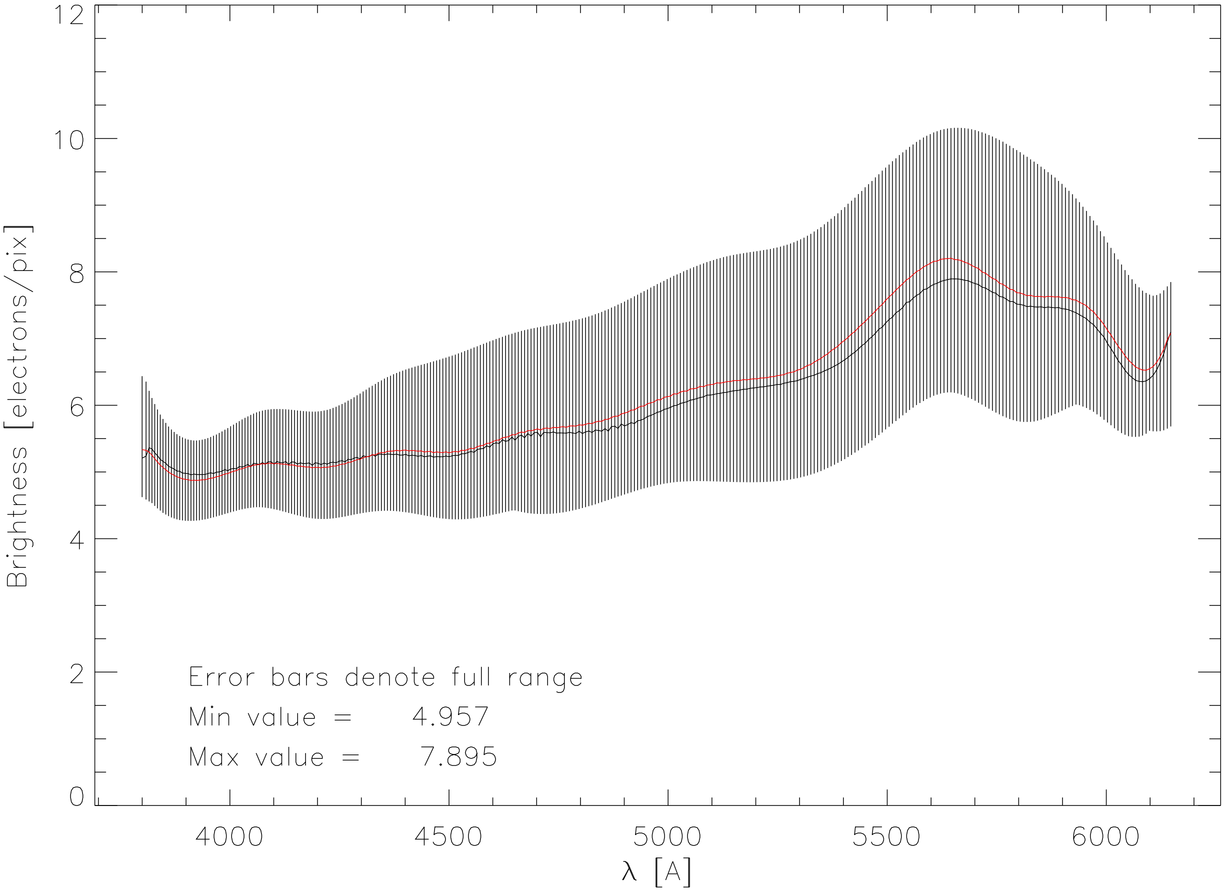
Sun Feb 17 18:04:39 2008



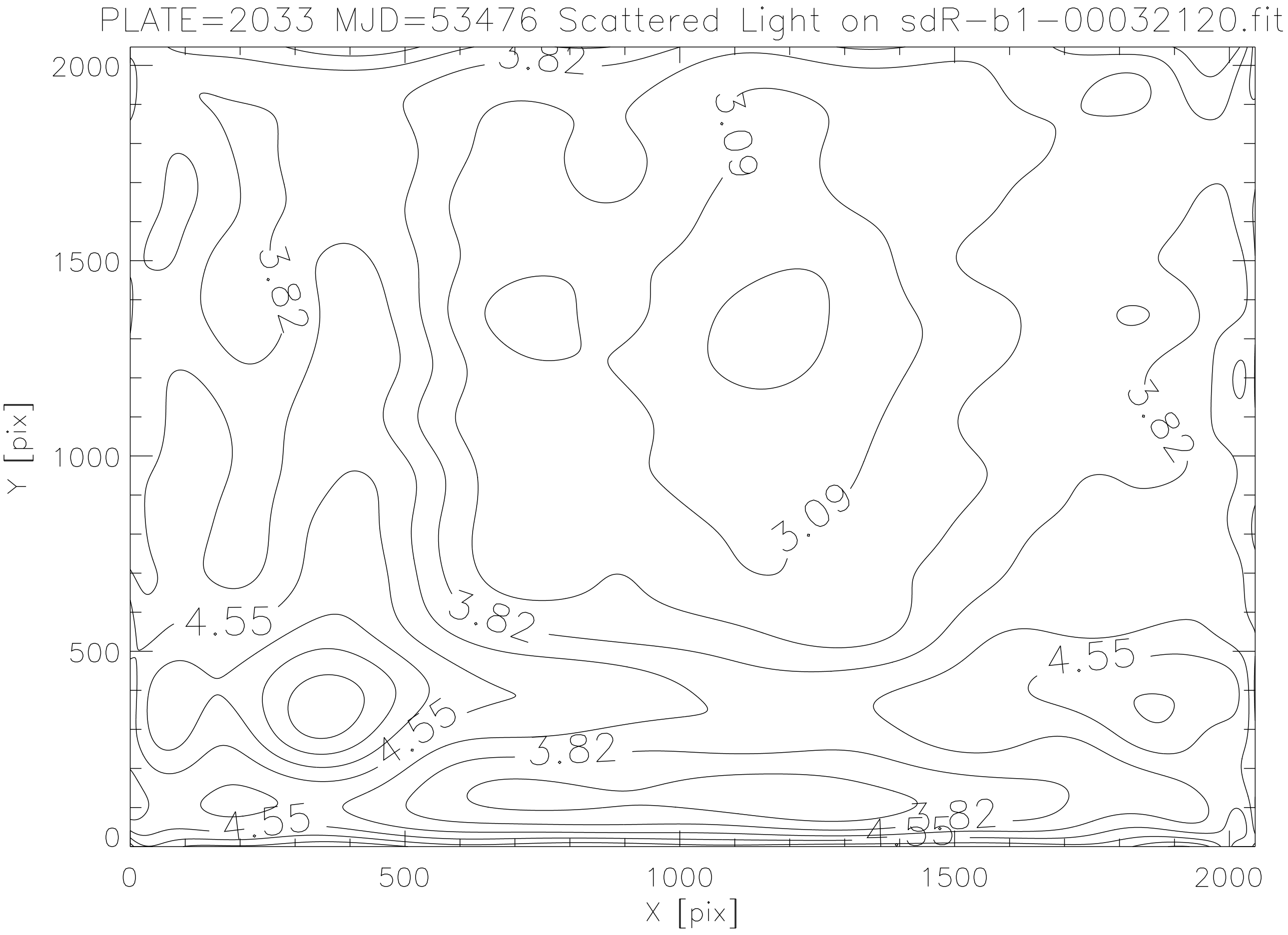
Sun Feb 17 18:04:49 2008

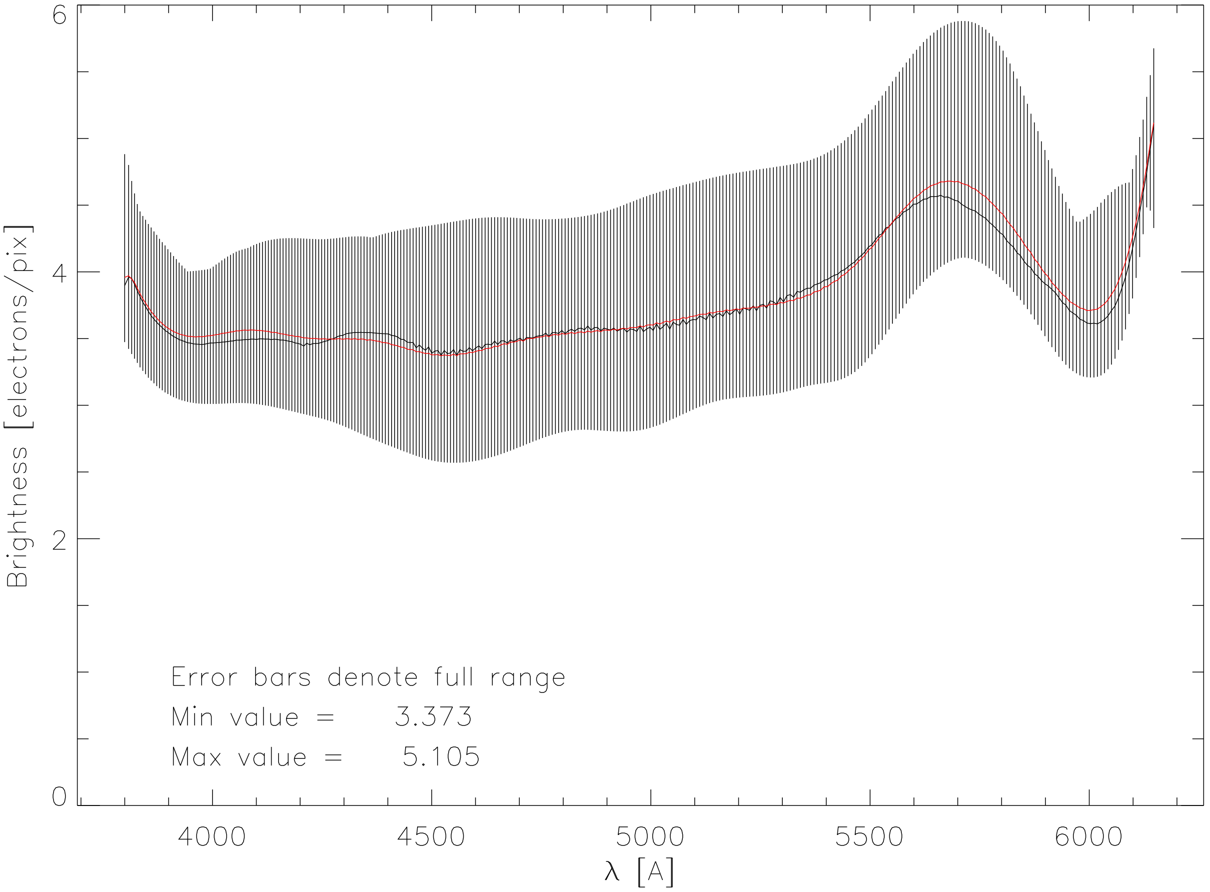

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b1-00032120.f
Y [pix]
2000
1500
1000
500
0
X [pix]
0
500
1000
1500
2000
4.7
4.7
4.7
6.5
6.5
6.5
6.5
6.5
6.5
6.5
8.4

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b1-00032120.f



Sun Feb 17 18:05:44 2008


PLATE=2033 MJD=53476 Scattered Light on sdR-b1-00032120.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
3.82
3.09
4.55



PLATE=2033 MJD=53476 Scattered Light on sdR-b1-00032120.fit

Error bars denote full range

Min value = 3.373

Max value = 5.105

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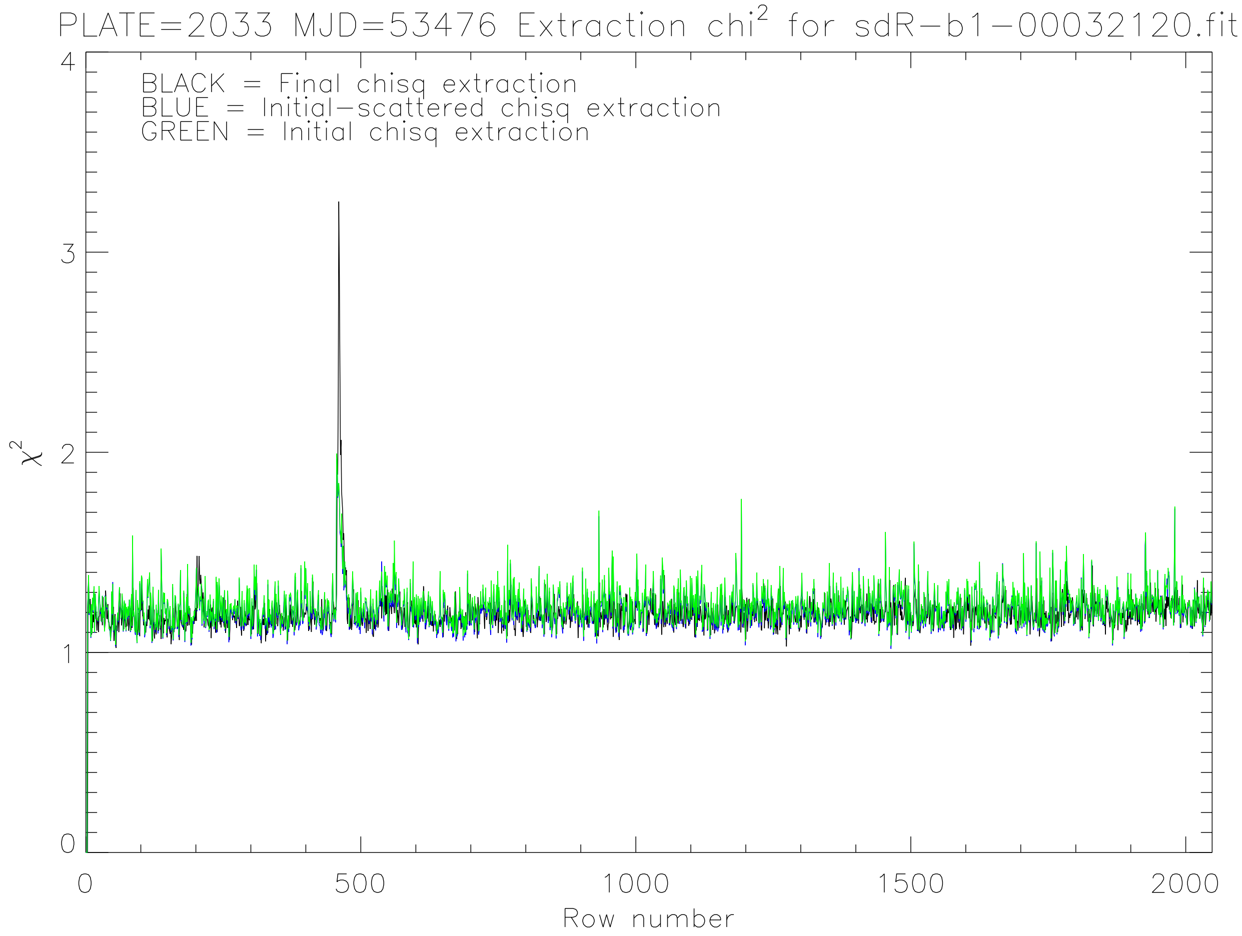
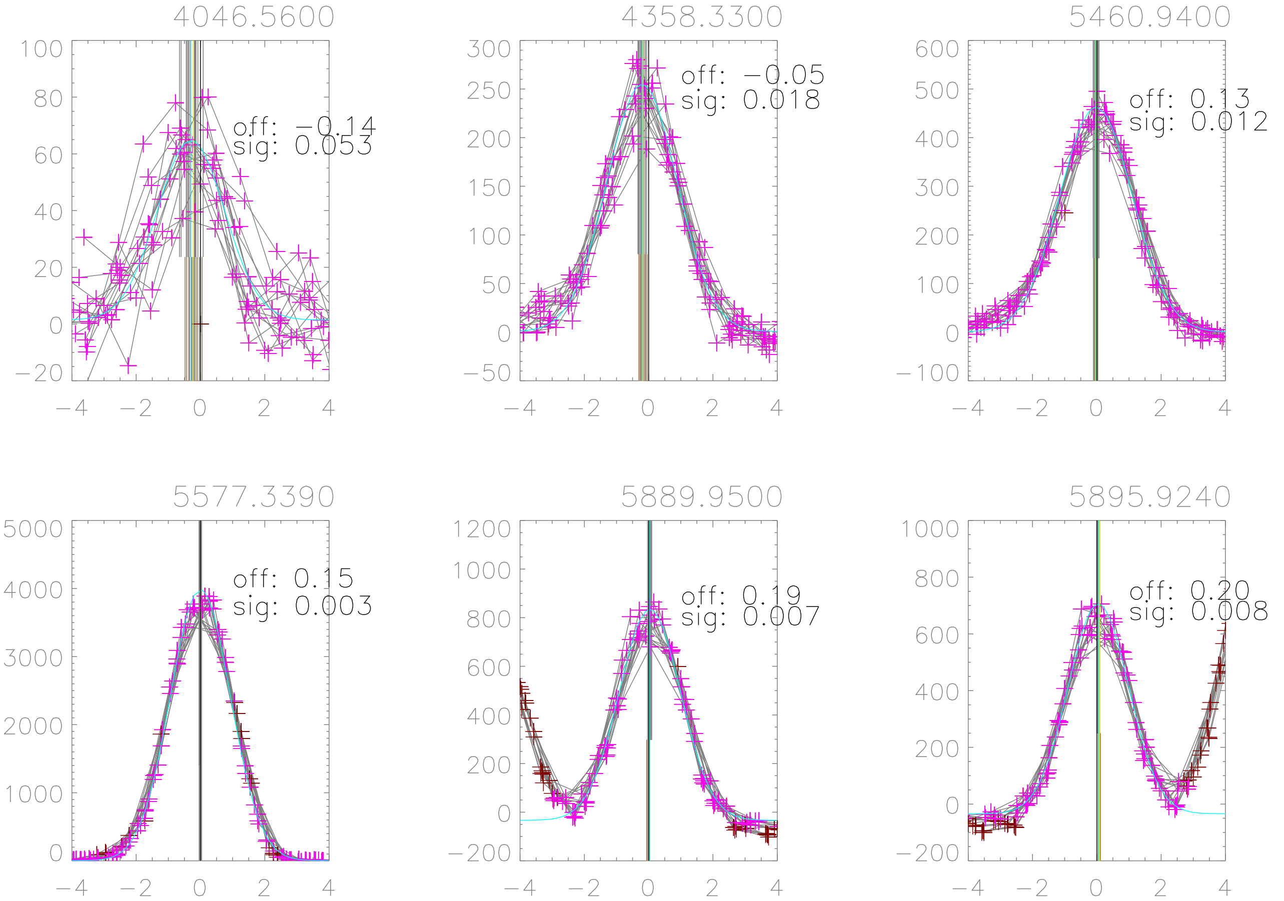
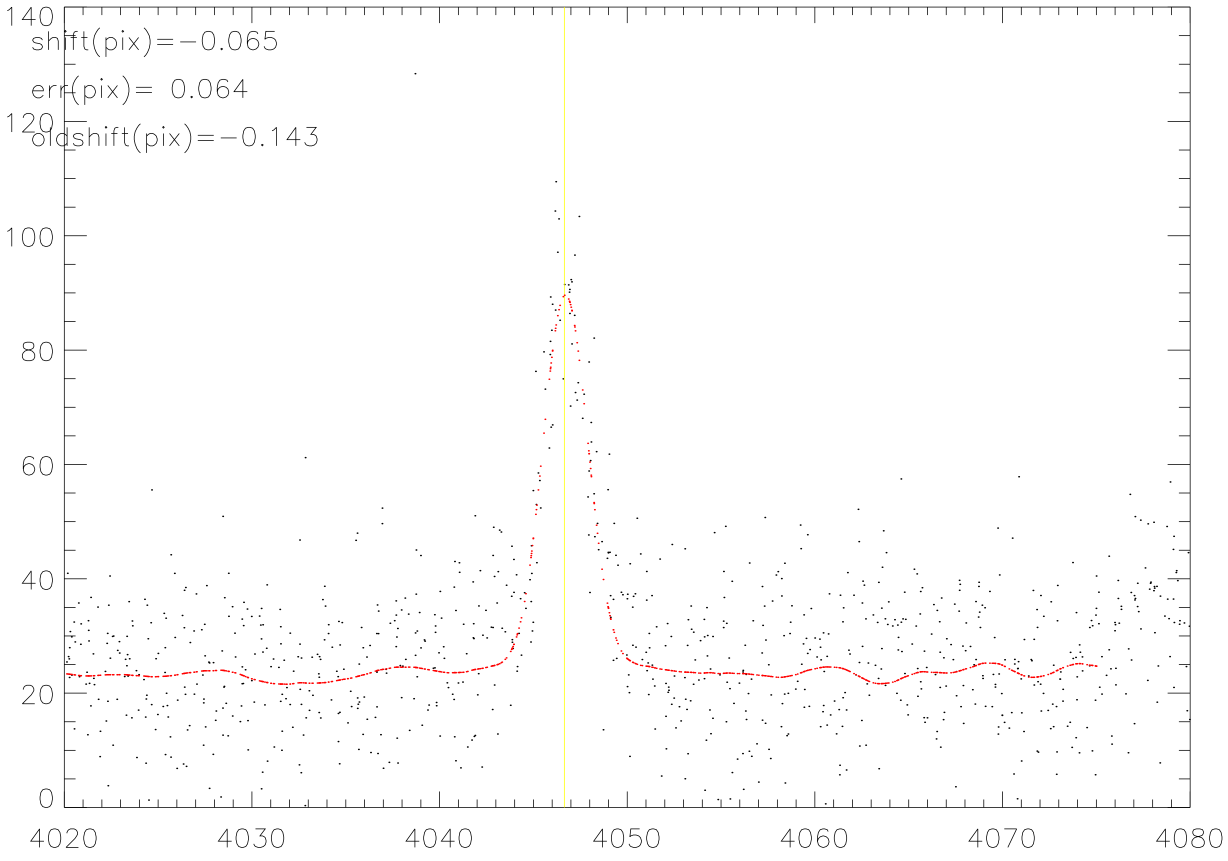
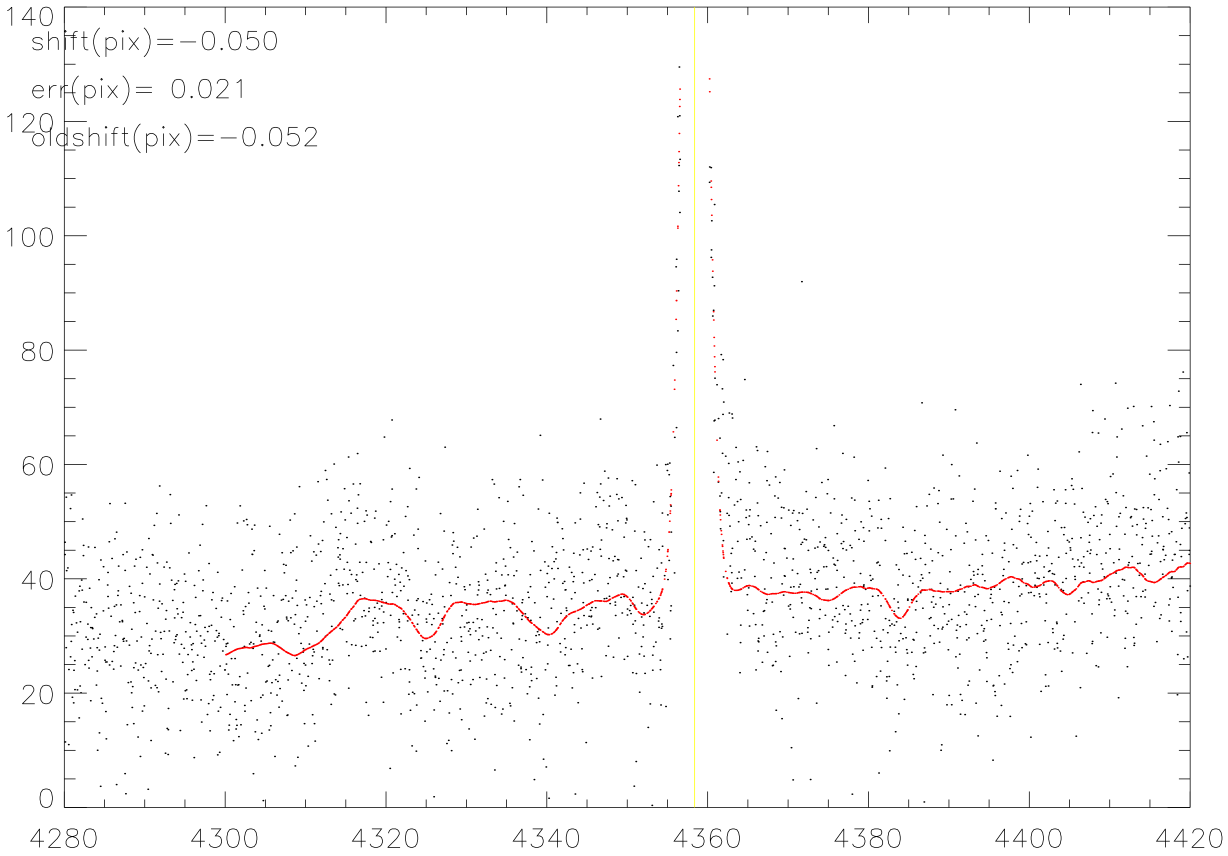
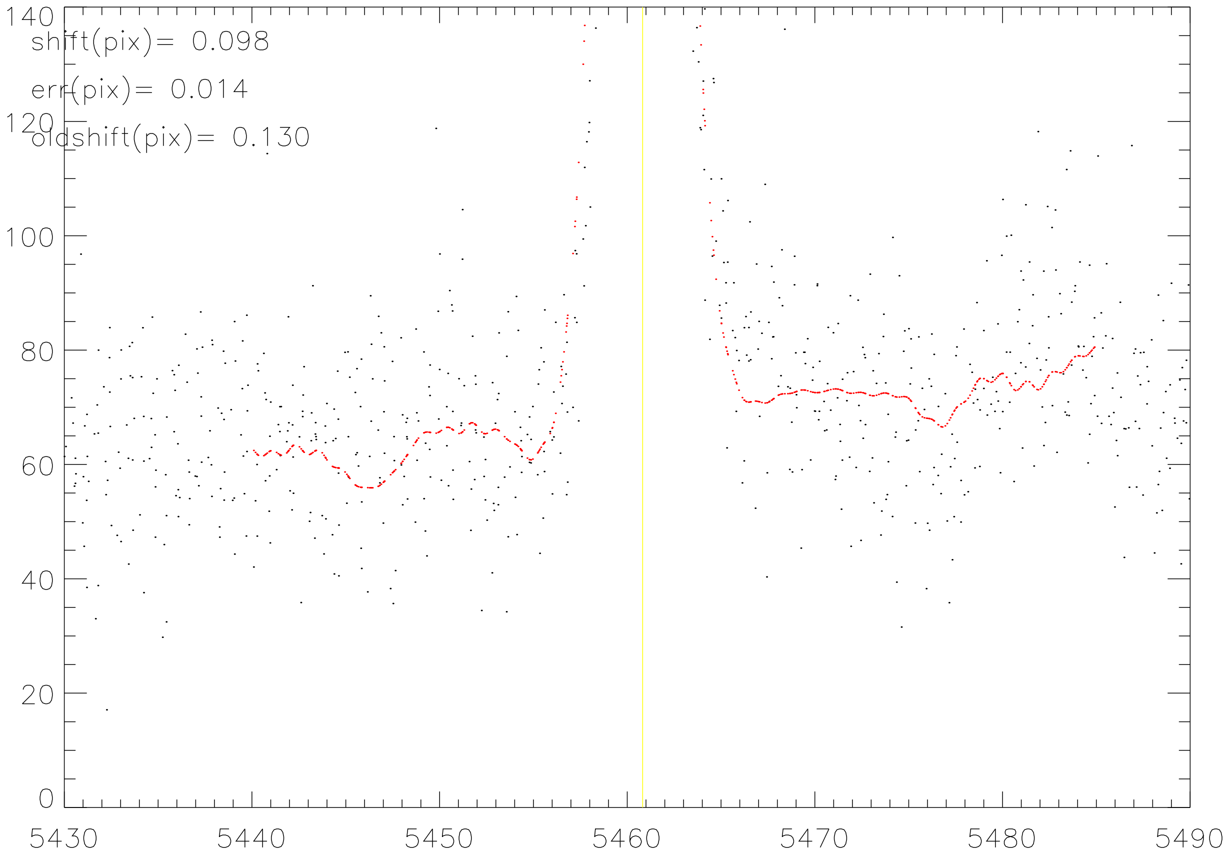
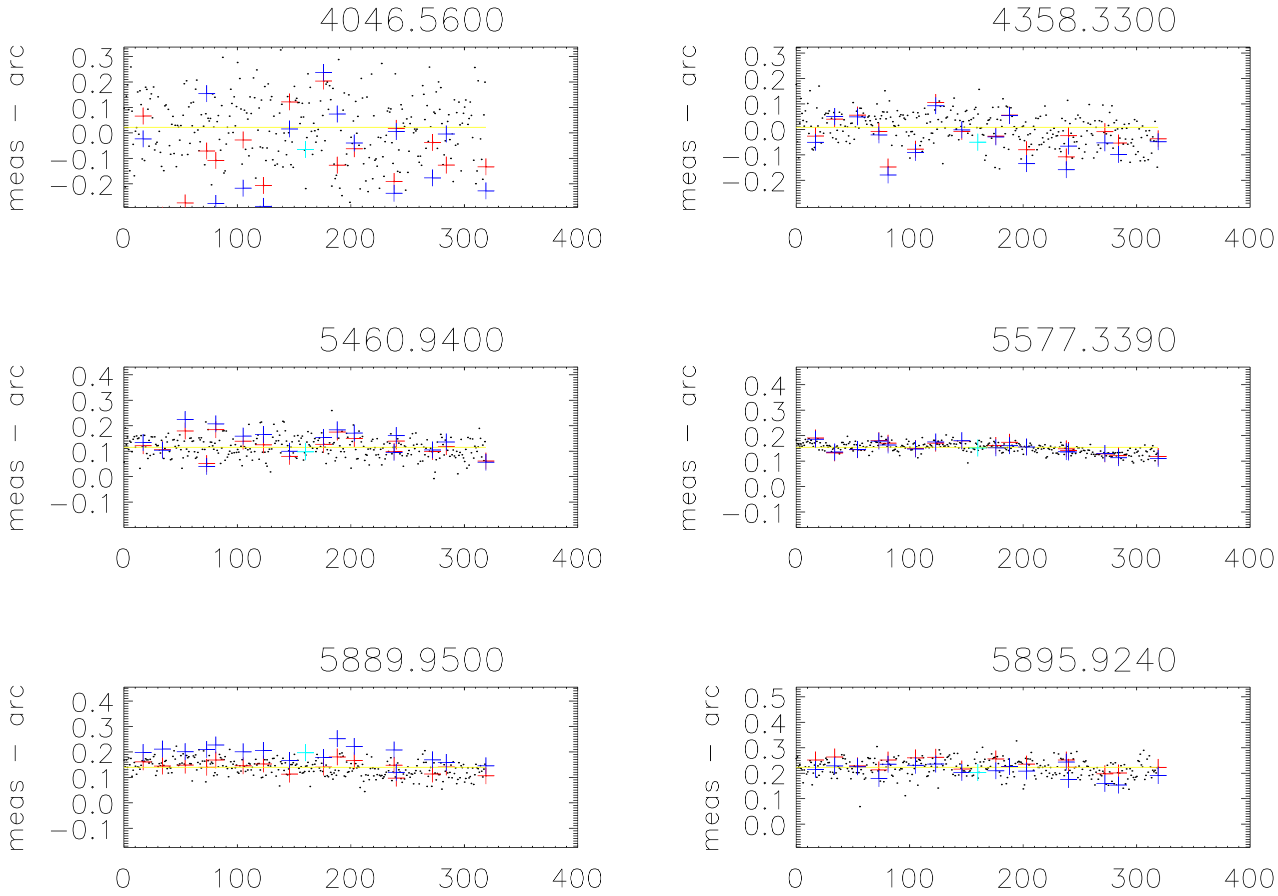

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-b1-00032120.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

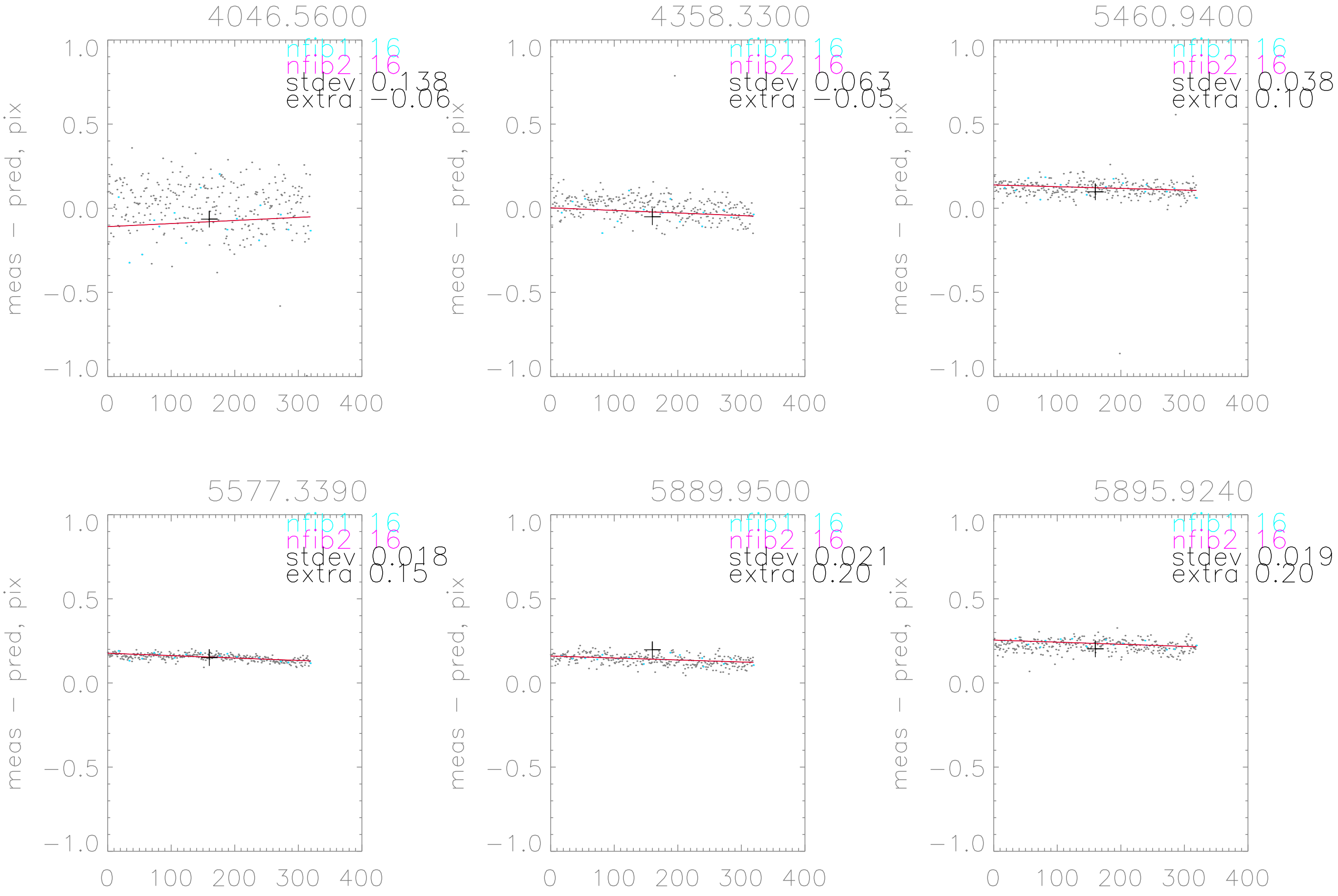

4046.5600
off: −0.14
sig: 0.053
100
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.05
sig: 0.018
300
250
200
150
100
50
0
−50
−4
−2
0
2
4
5460.9400
off: 0.13
sig: 0.012
600
500
400
300
200
100
0
−100
−4
−2
0
2
4
5577.3390
off: 0.15
sig: 0.003
5000
4000
3000
2000
1000
0
−4
−2
0
2
4
5889.9500
off: 0.19
sig: 0.007
1200
1000
800
600
400
200
0
−200
−4
−2
0
2
4
5895.9240
off: 0.20
sig: 0.008
1000
800
600
400
200
0
−200
−4
−2
0
2
4

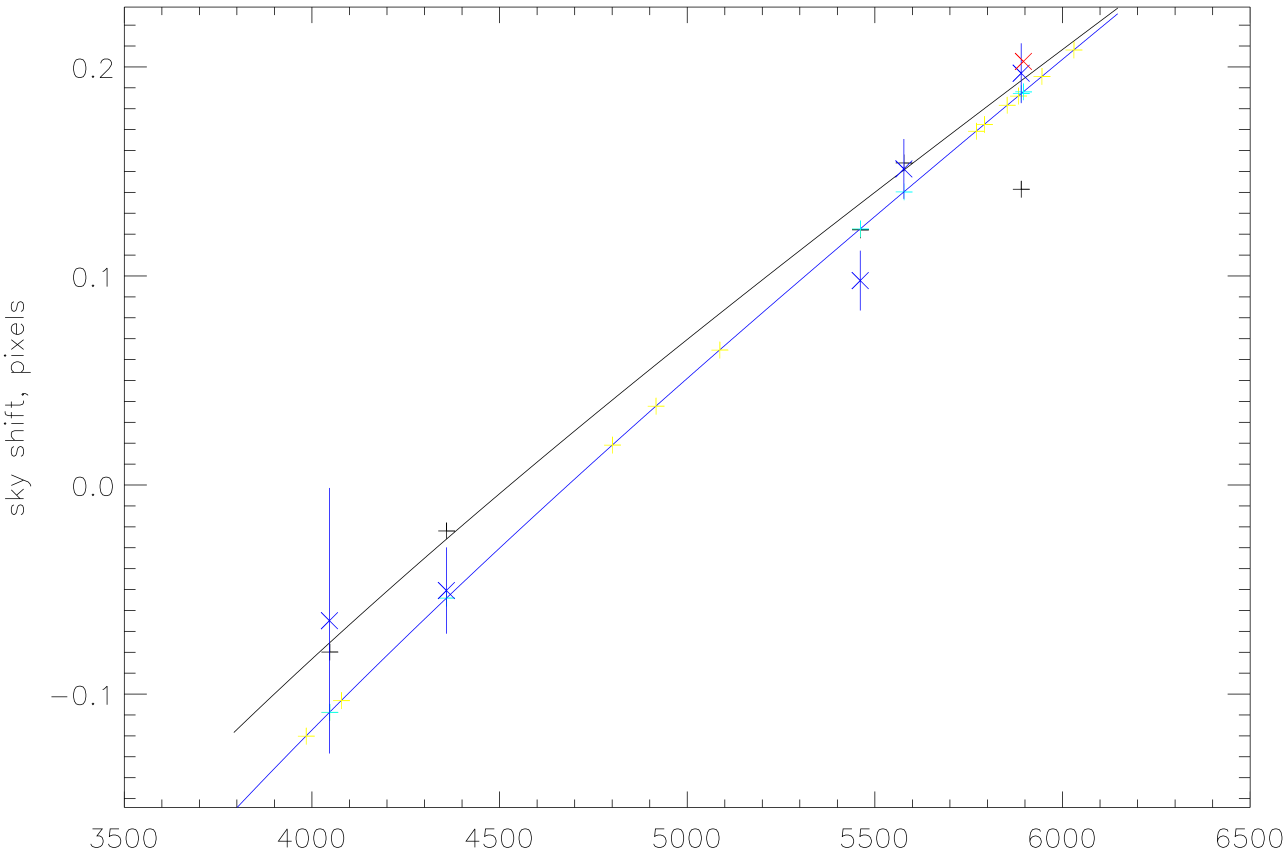

shift(pix)=−0.065
err(pix)= 0.064
oldshift(pix)=−0.143
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080

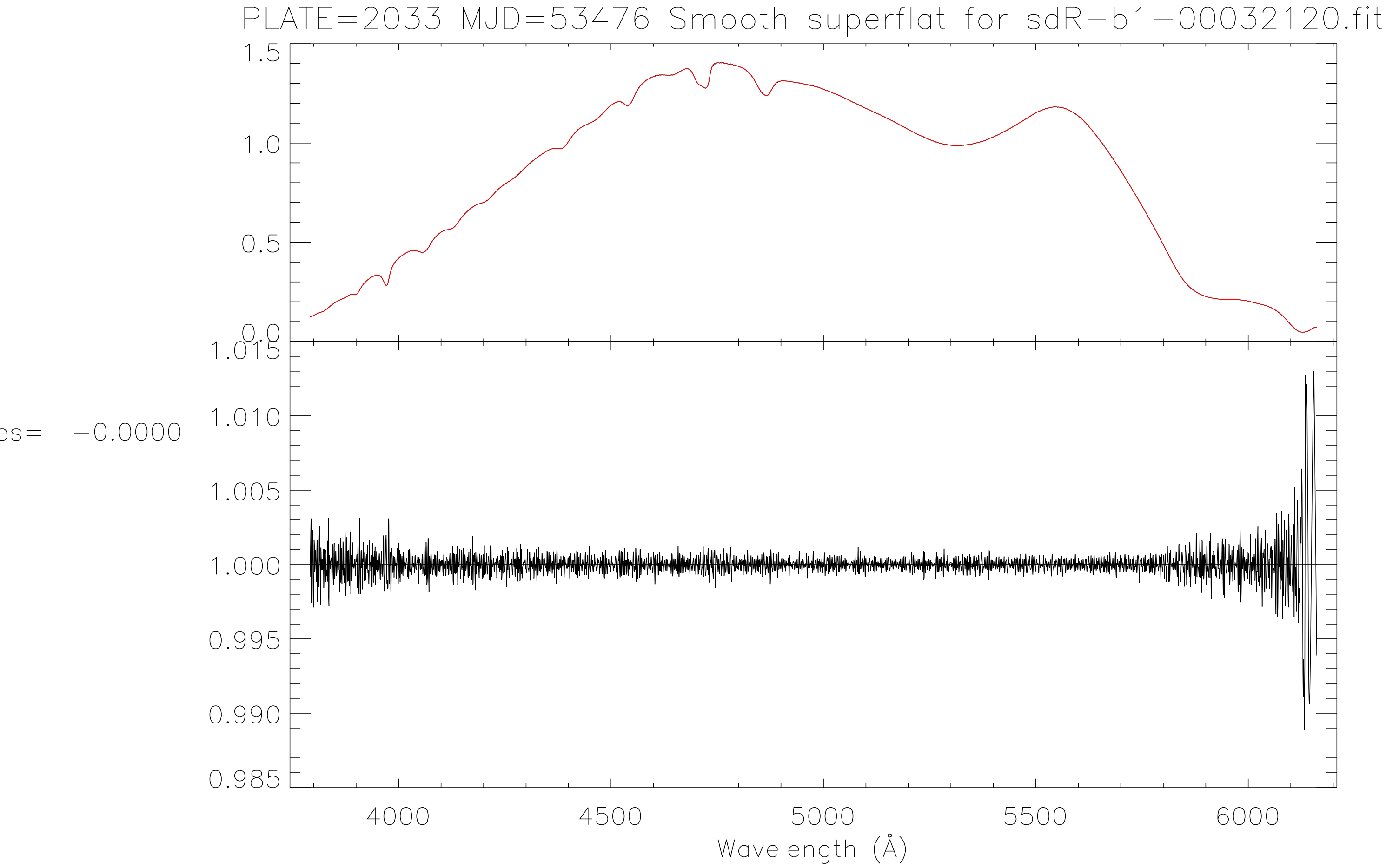

shift(pix)=−0.050
err(pix)= 0.021
oldshift(pix)=−0.052
0
20
40
60
80
100
120
140
4280
4300
4320
4340
4360
4380
4400
4420

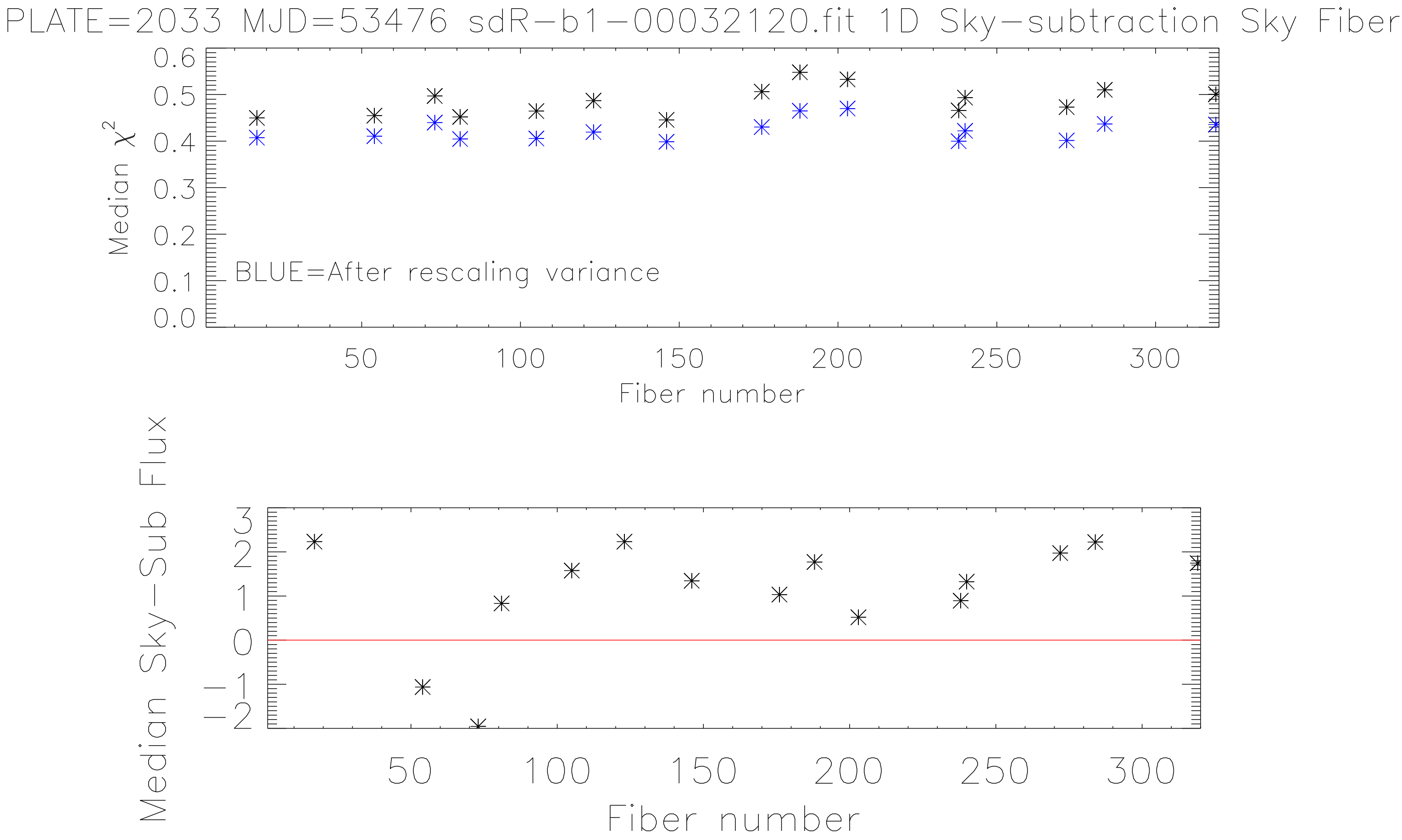

shift(pix)= 0.098
err(pix)= 0.014
oldshift(pix)= 0.130
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

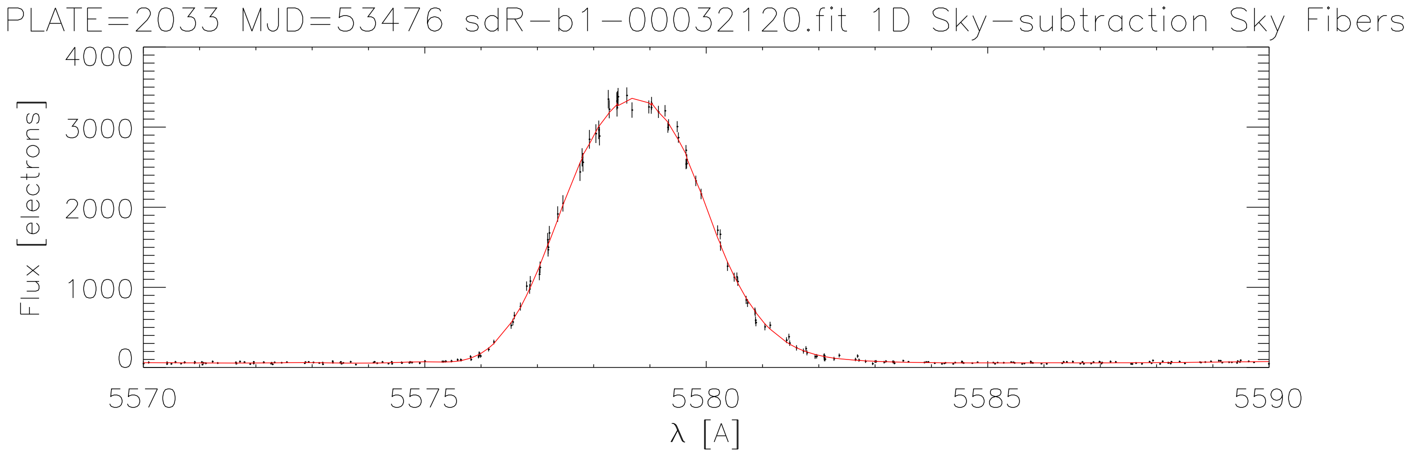

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0.4
0.5
0
100
200
300
400


4046.5600
nfib1 16
nfib2 16
stdev 0.138
extra −0.06
4358.3300
nfib1 16
nfib2 16
stdev 0.063
extra −0.05
5460.9400
nfib1 16
nfib2 16
stdev 0.038
extra 0.10
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra 0.15
5889.9500
nfib1 16
nfib2 16
stdev 0.021
extra 0.20
5895.9240
nfib1 16
nfib2 16
stdev 0.019
extra 0.20
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

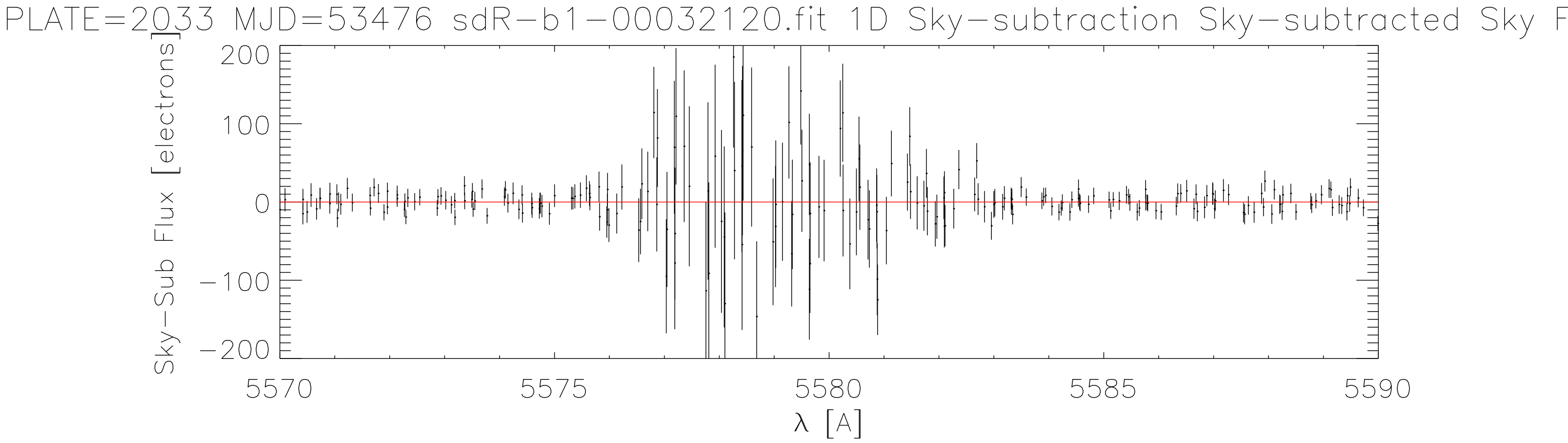

sky shift, pixels
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500


PLATE=2033 MJD=53476 Smooth superflat for sdR-b1-00032120.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=2033 MJD=53476 sdR-b1-00032120.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
3
2
1
0
−1
−2
50
100
150
200
250
300
Fiber number



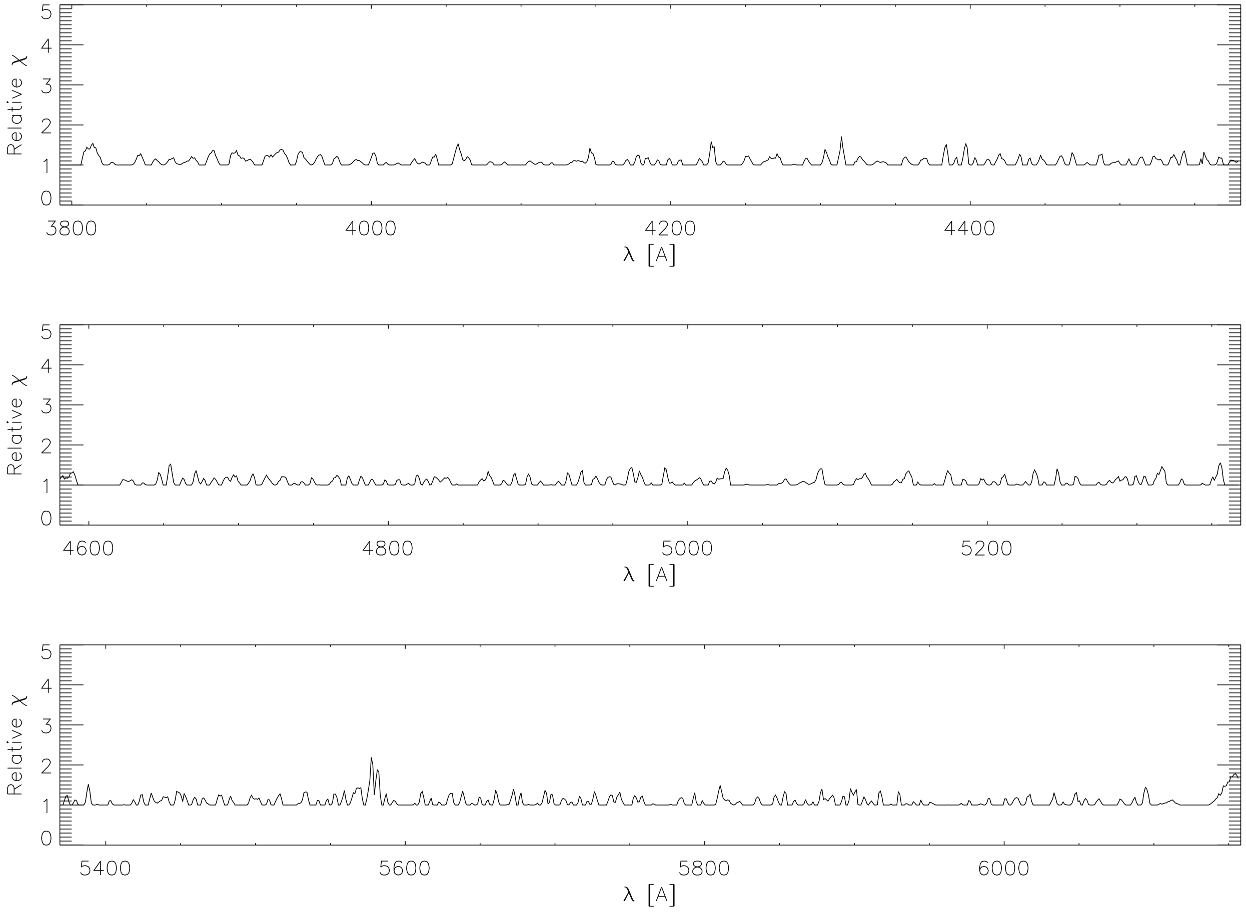
PLATE=2033 MJD=53476 sdR-b1-00032120.fit 1D Sky-subtraction Sky Fibers

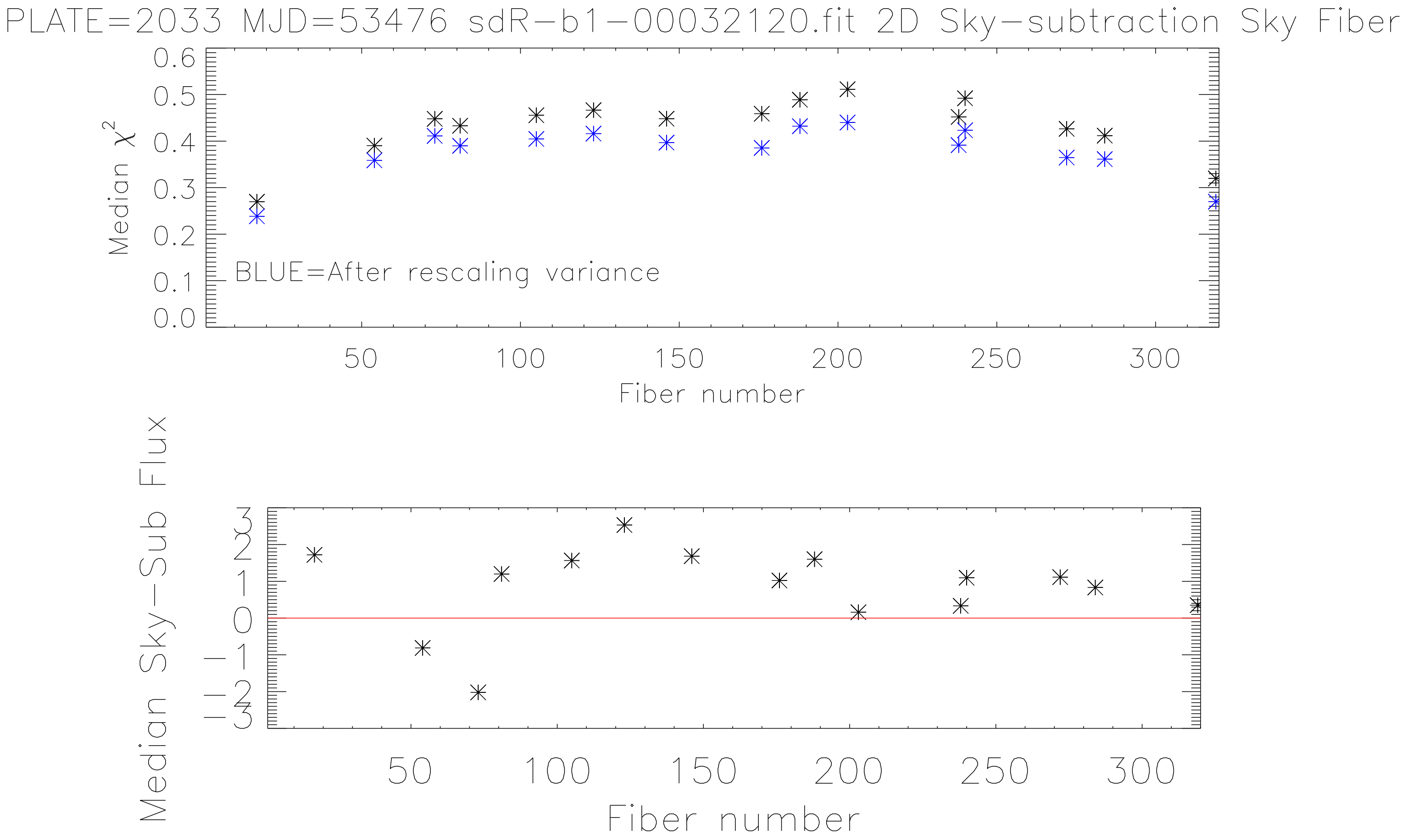


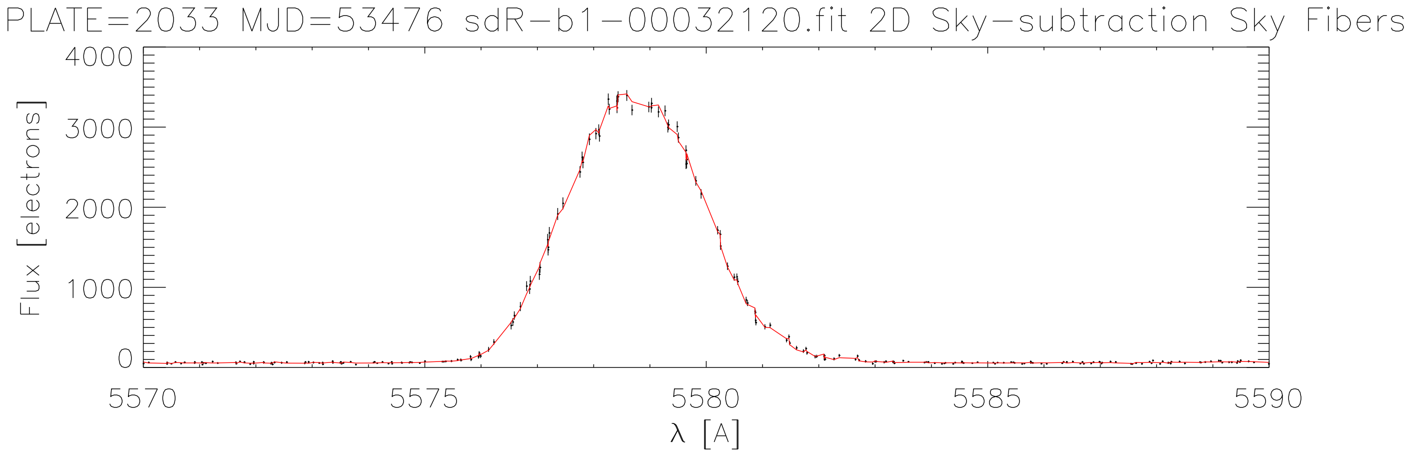
PLATE=2033 MJD=53476 sdR-b1-00032120.fit 1D Sky-subtraction Sky-subtracted Sky F

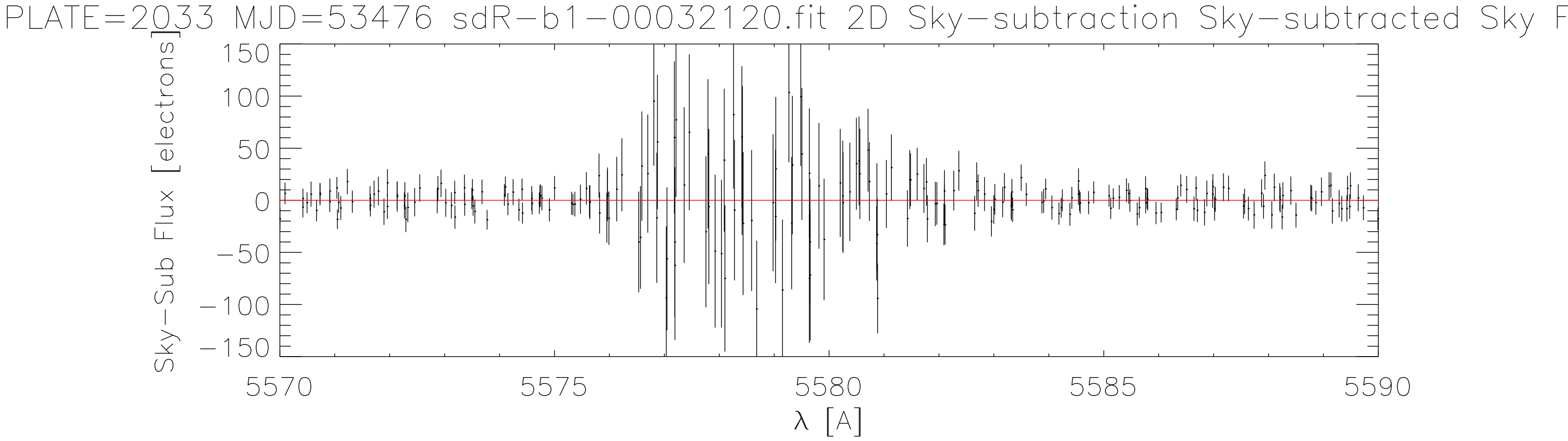
Number of sky fibers = 15

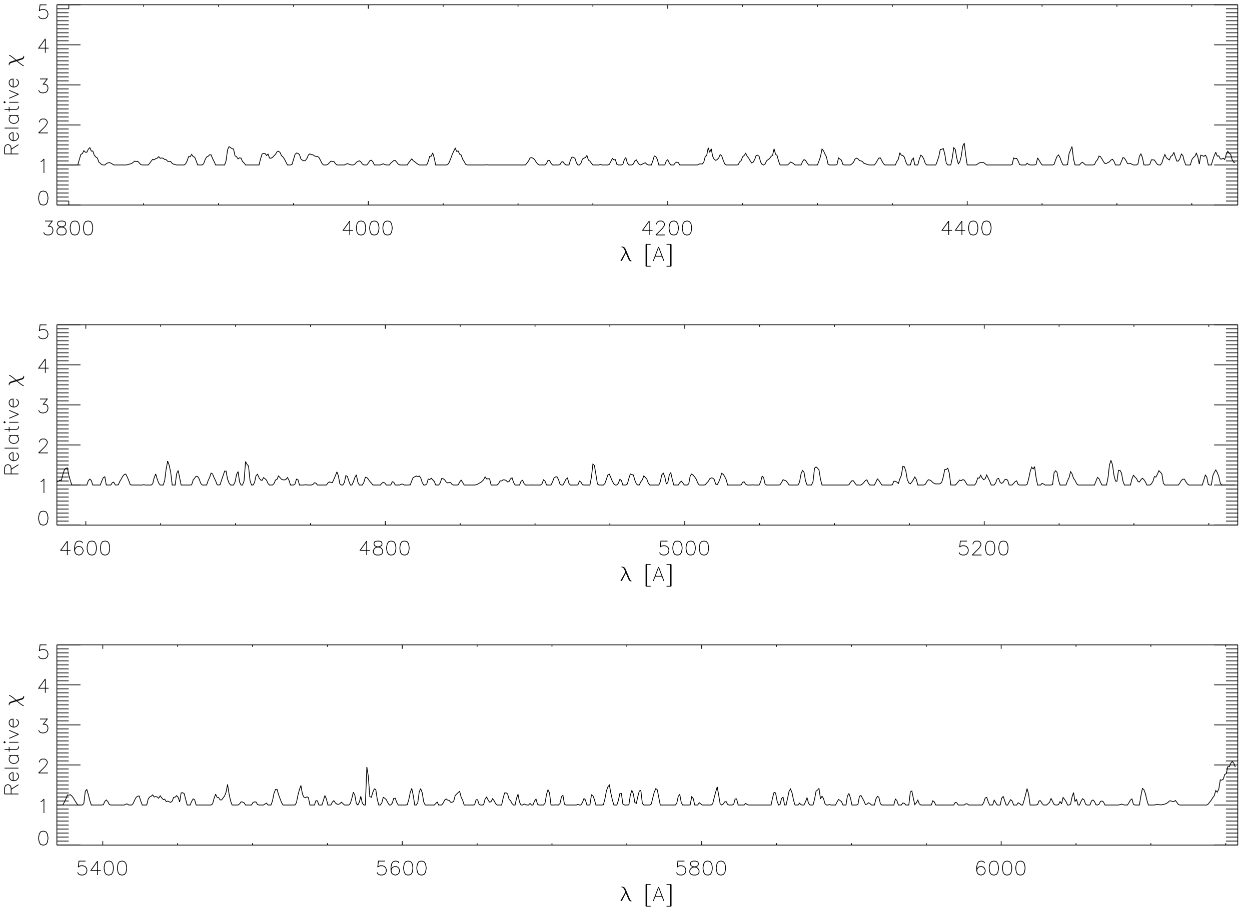
PLATE=2033 MJD=53476 sdR-b1-00032120.fit 1D Sky-subtraction Rescaled Errors




PLATE=2033 MJD=53476 sdR-b1-00032120.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

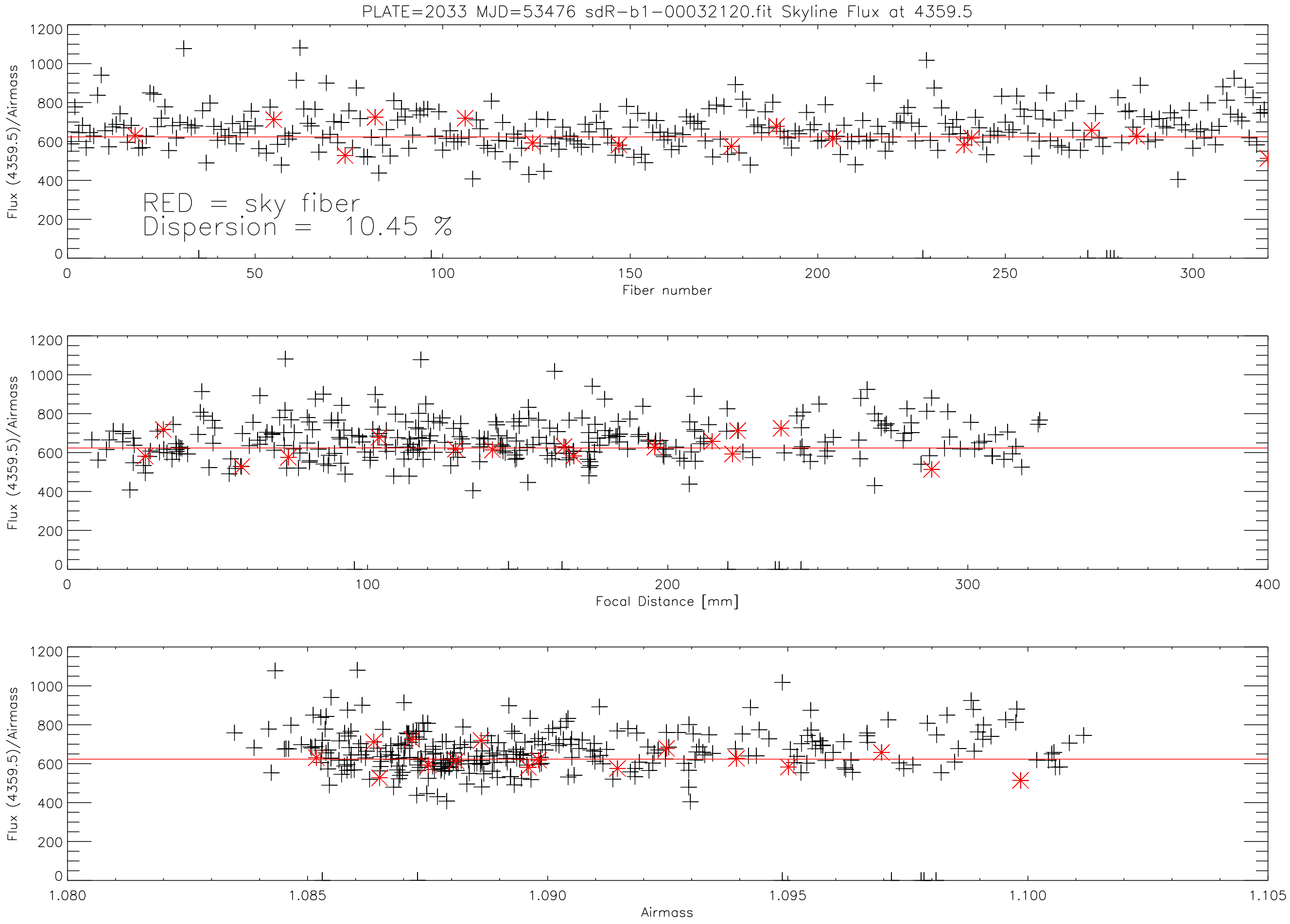

PLATE=2033 MJD=53476 sdR-b1-00032120.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
4000
3000
2000
1000
0
5570
5575
5580
5585
5590
λ [A]

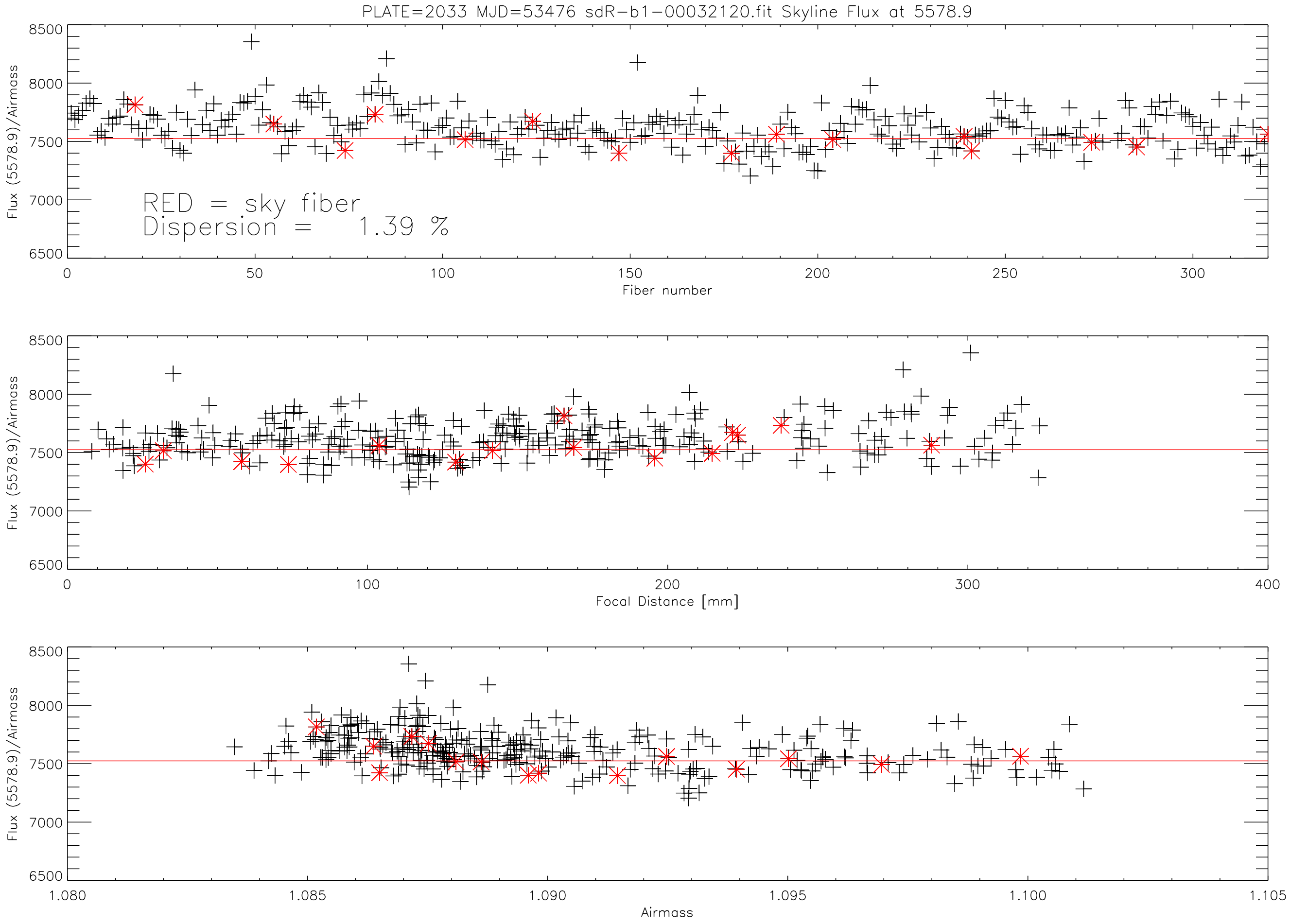

PLATE=2033 MJD=53476 sdR-b1-00032120.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
150
100
50
0
−50
−100
−150
5570
5575
5580
5585
5590
λ [A]

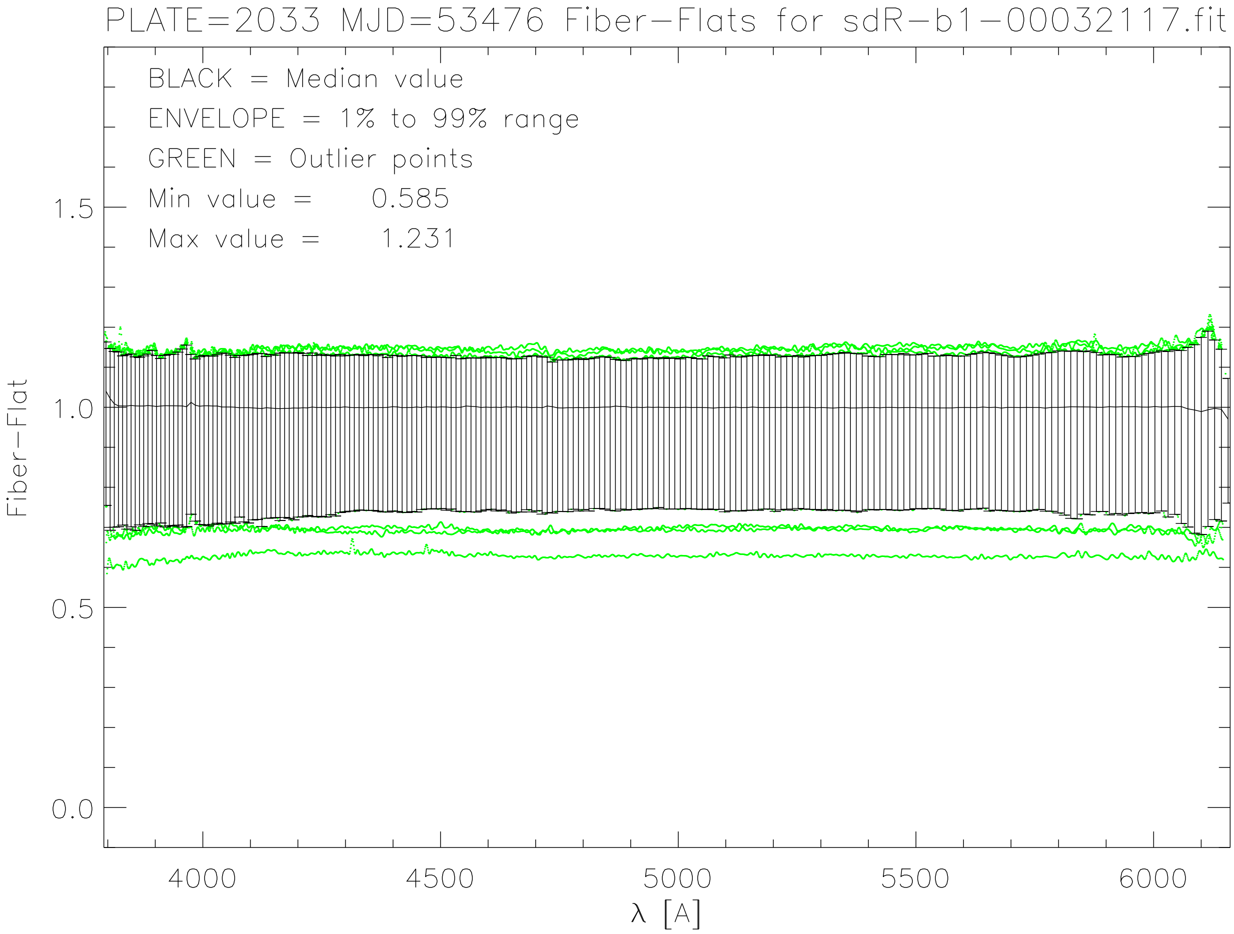


Number of sky fibers = 15

PLATE=2033 MJD=53476 sdR-b1-00032120.fit 2D Sky-subtraction Rescaled Errors


PLATE=2033 MJD=53476 sdR-b1-00032120.fit Skyline Flux at 4359.5


PLATE=2033 MJD=53476 sdR-b1-00032120.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
8500
8000
7500
7000
6500
RED = sky fiber
Dispersion = 1.39 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
8500
8000
7500
7000
6500
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
8500
8000
7500
7000
6500
1.080
1.085
1.090
1.095
1.100
1.105
Airmass



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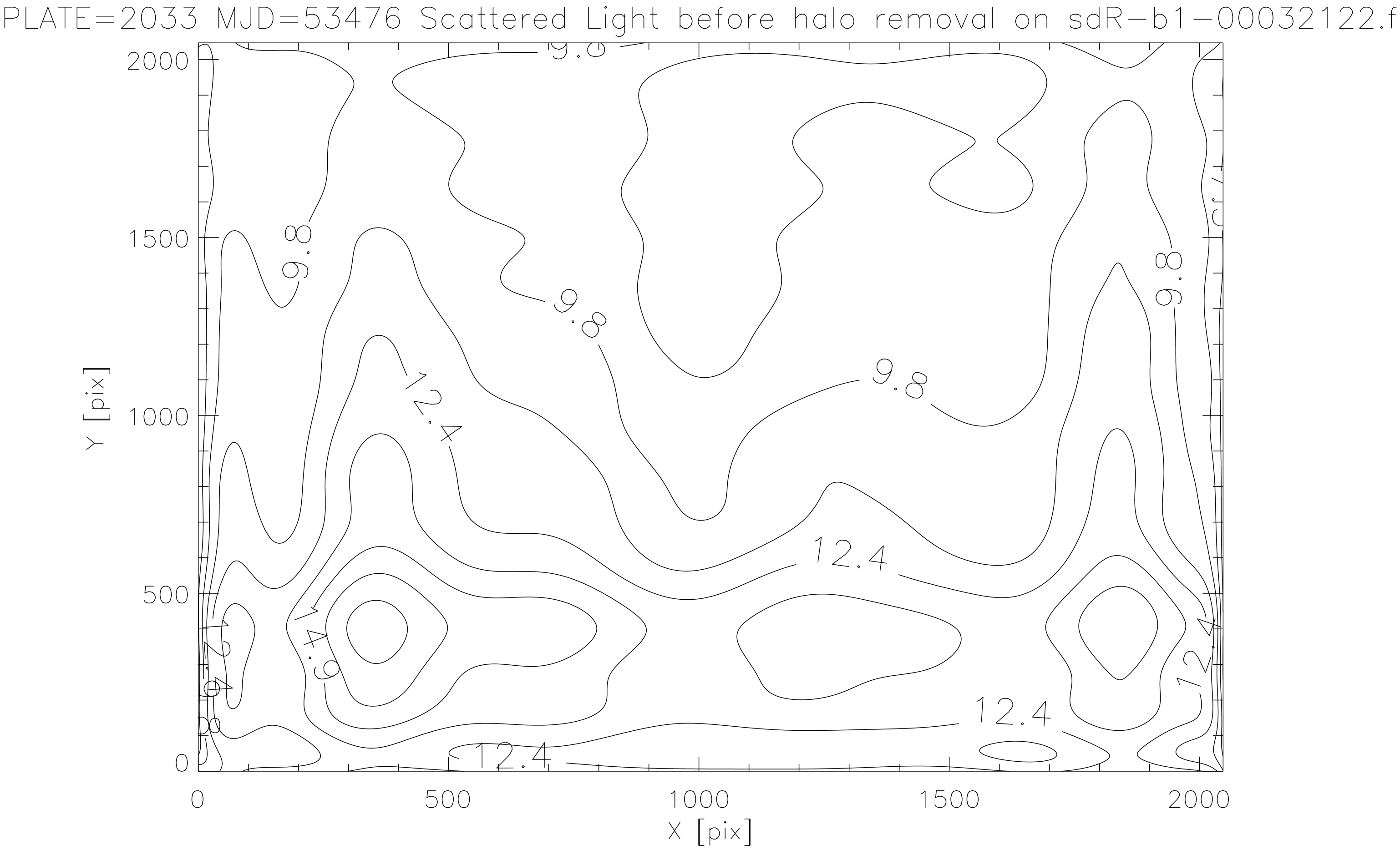
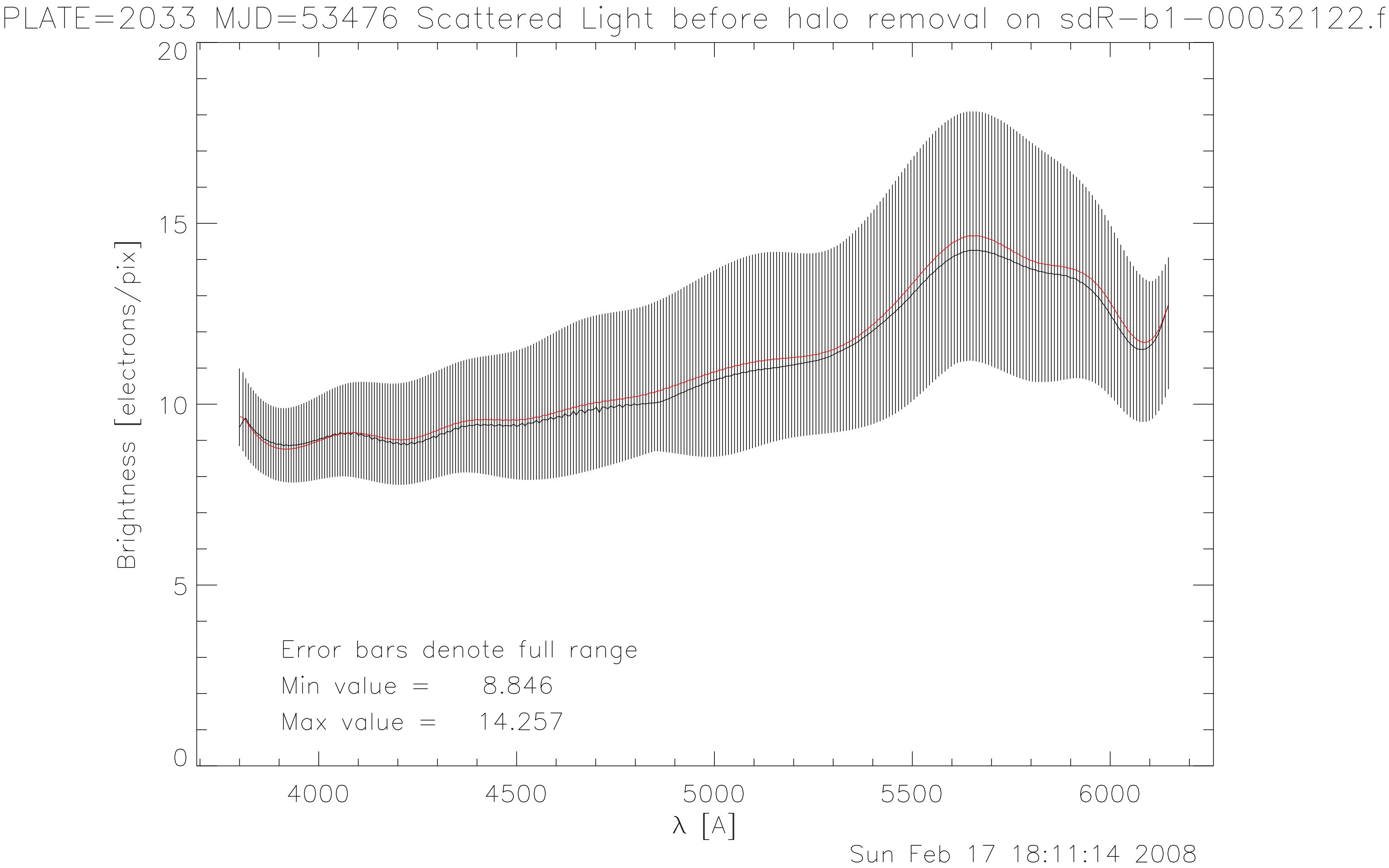
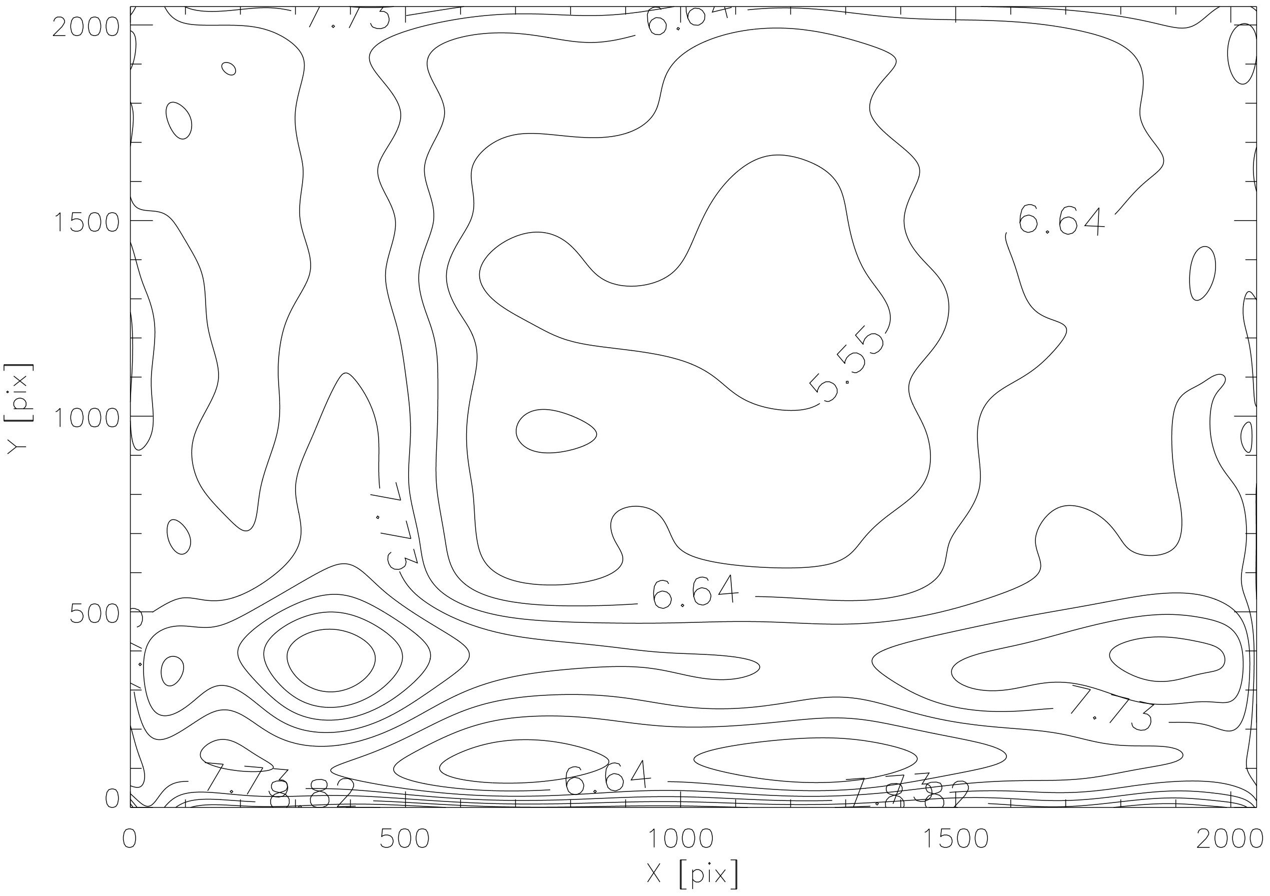
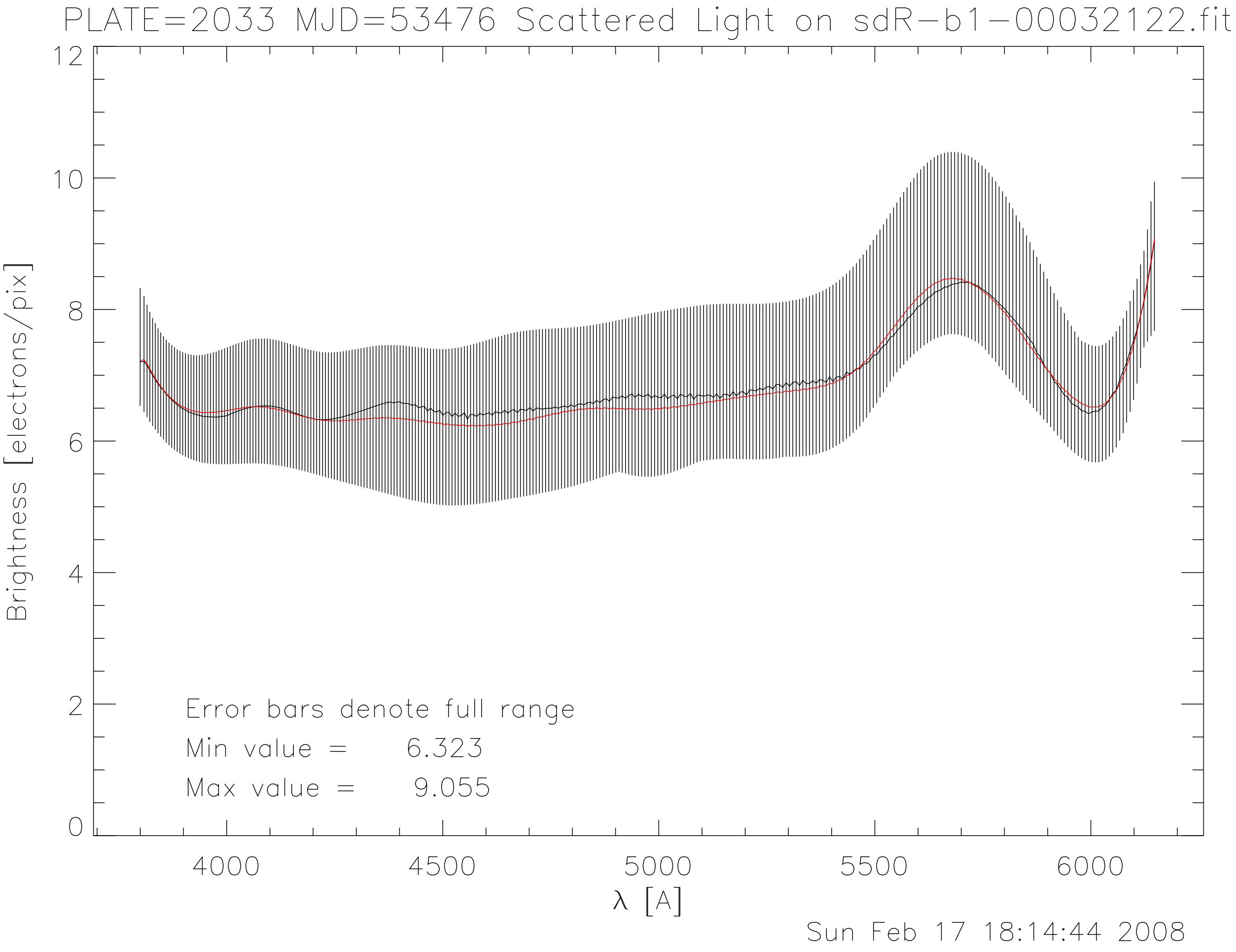
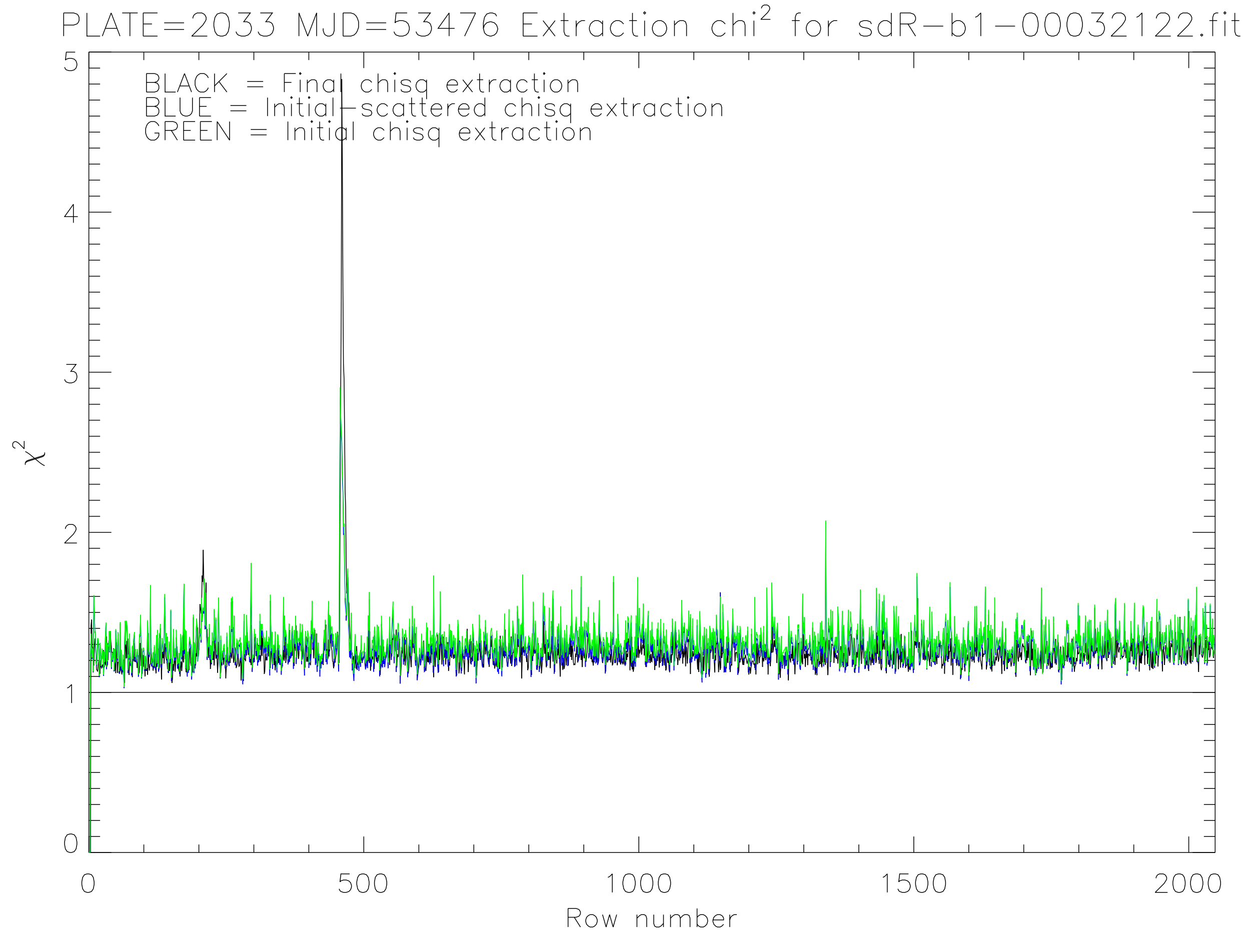

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b1-00032122.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
9.8
9.8
9.8
9.8
9.8
12.4
12.4
12.4
12.4
12.4
12.4
14.9

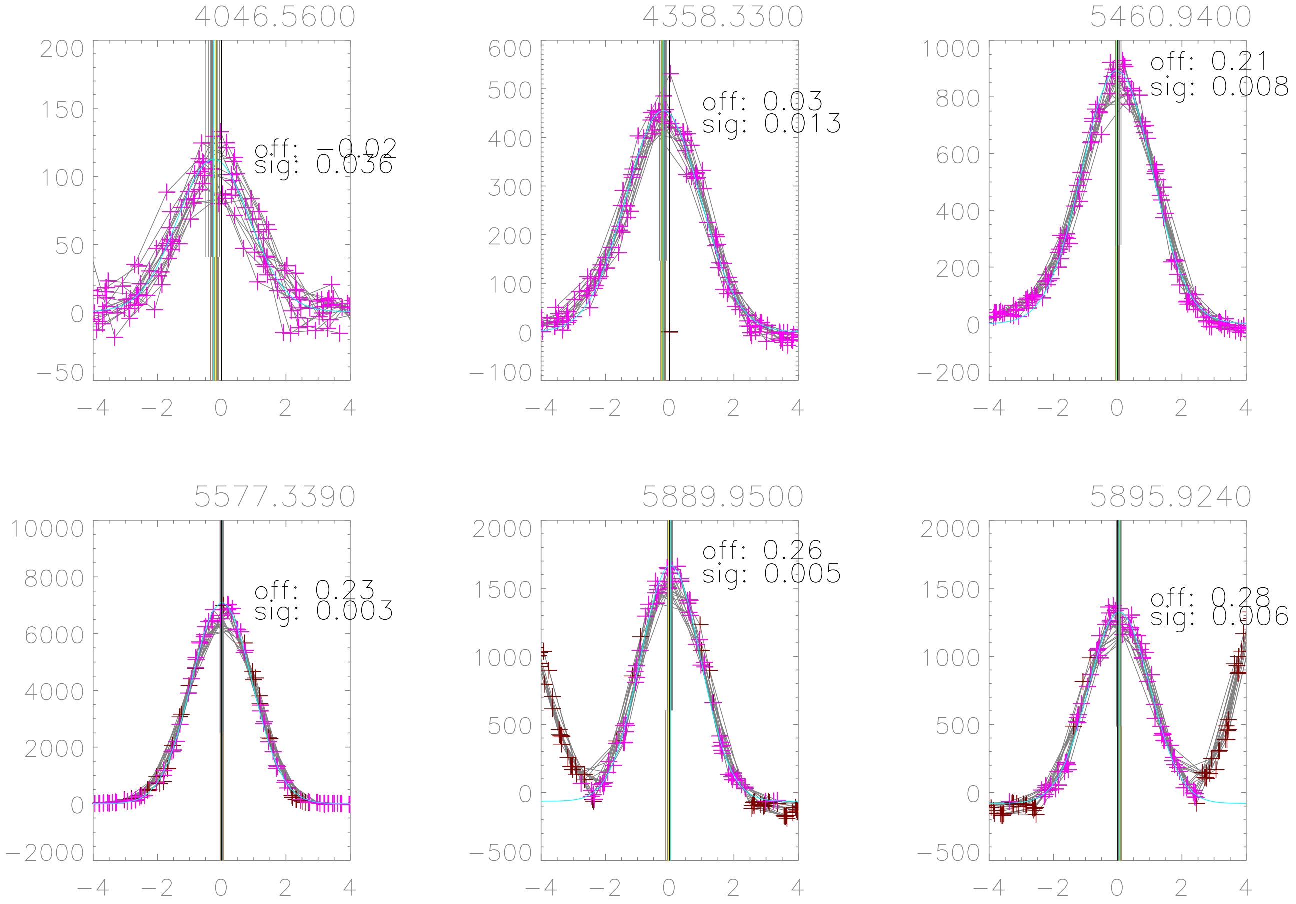

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b1-00032122.f
Brightness [electrons/pix]
20
15
10
5
0
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.846
Max value = 14.257
Sun Feb 17 18:11:14 2008

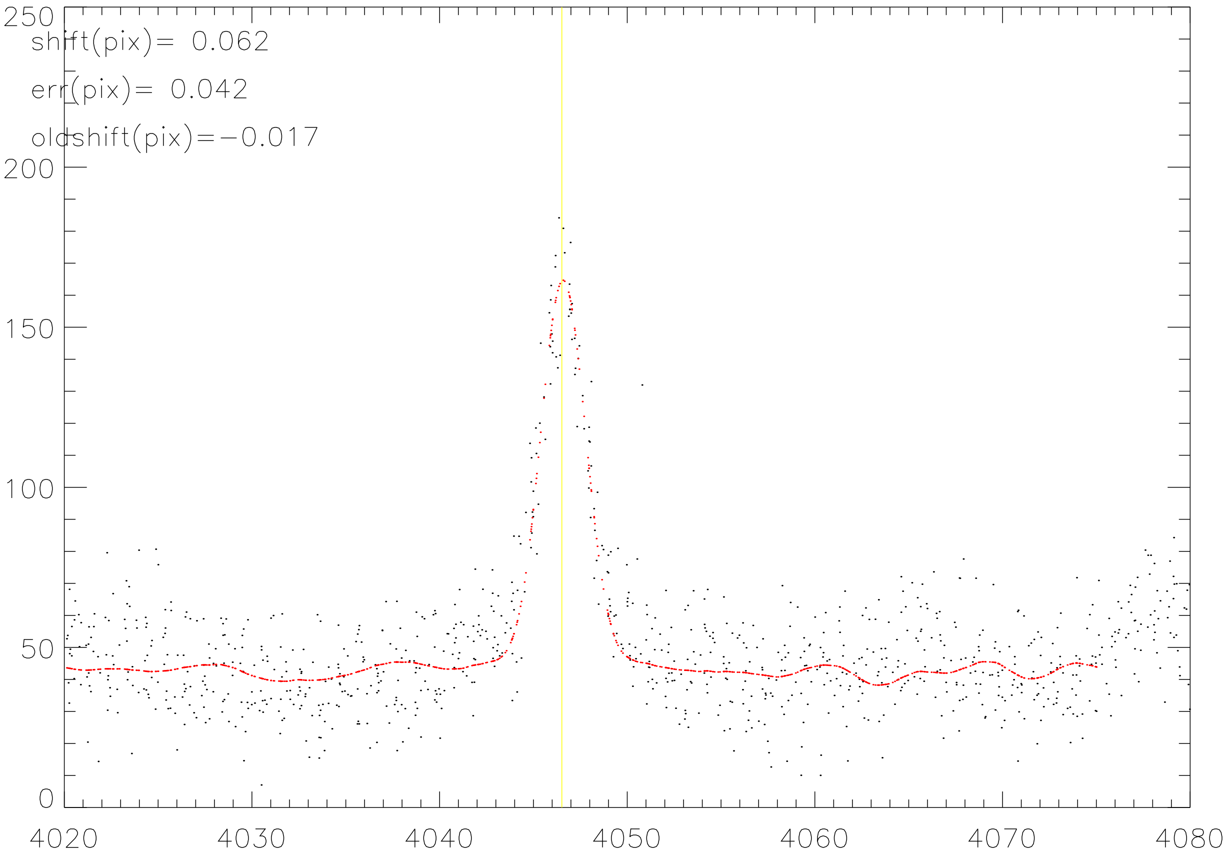


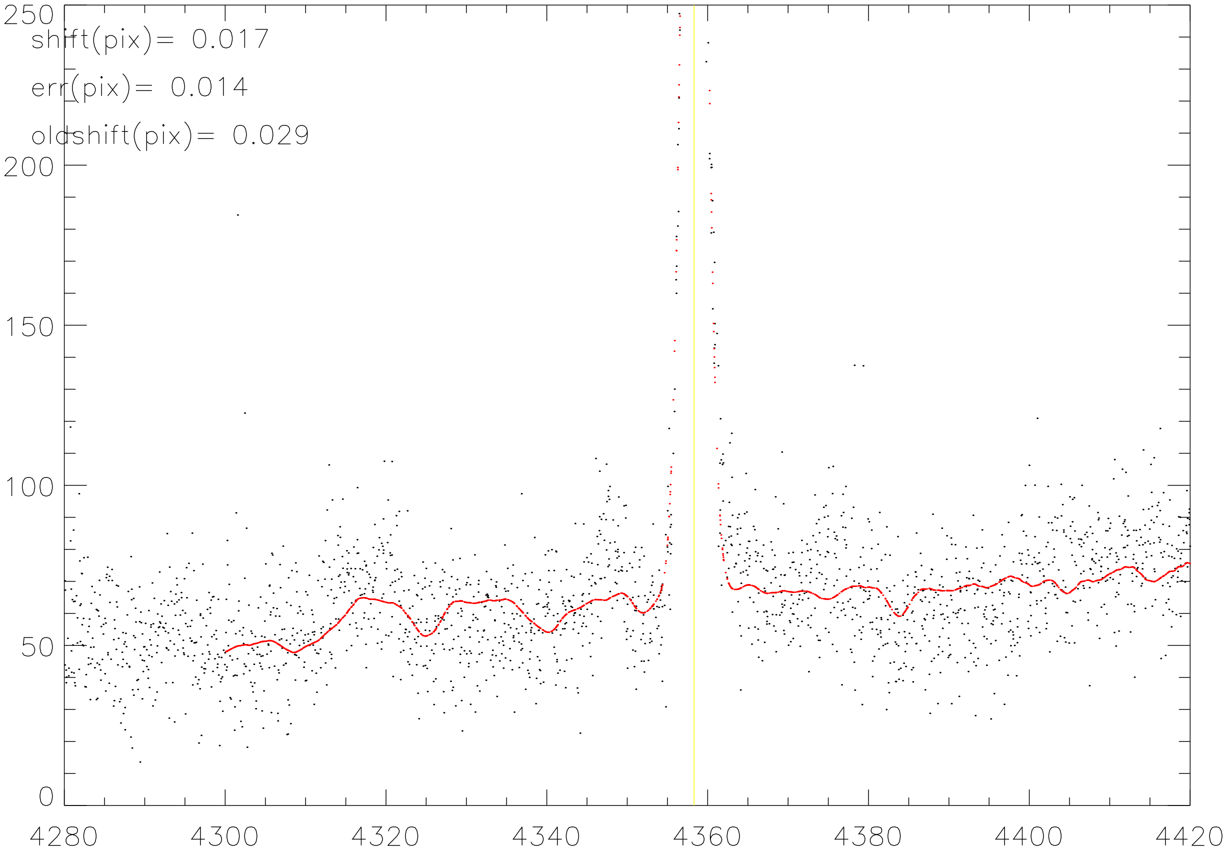
PLATE=2033 MJD=53476 Scattered Light on sdR-b1-00032122.fit

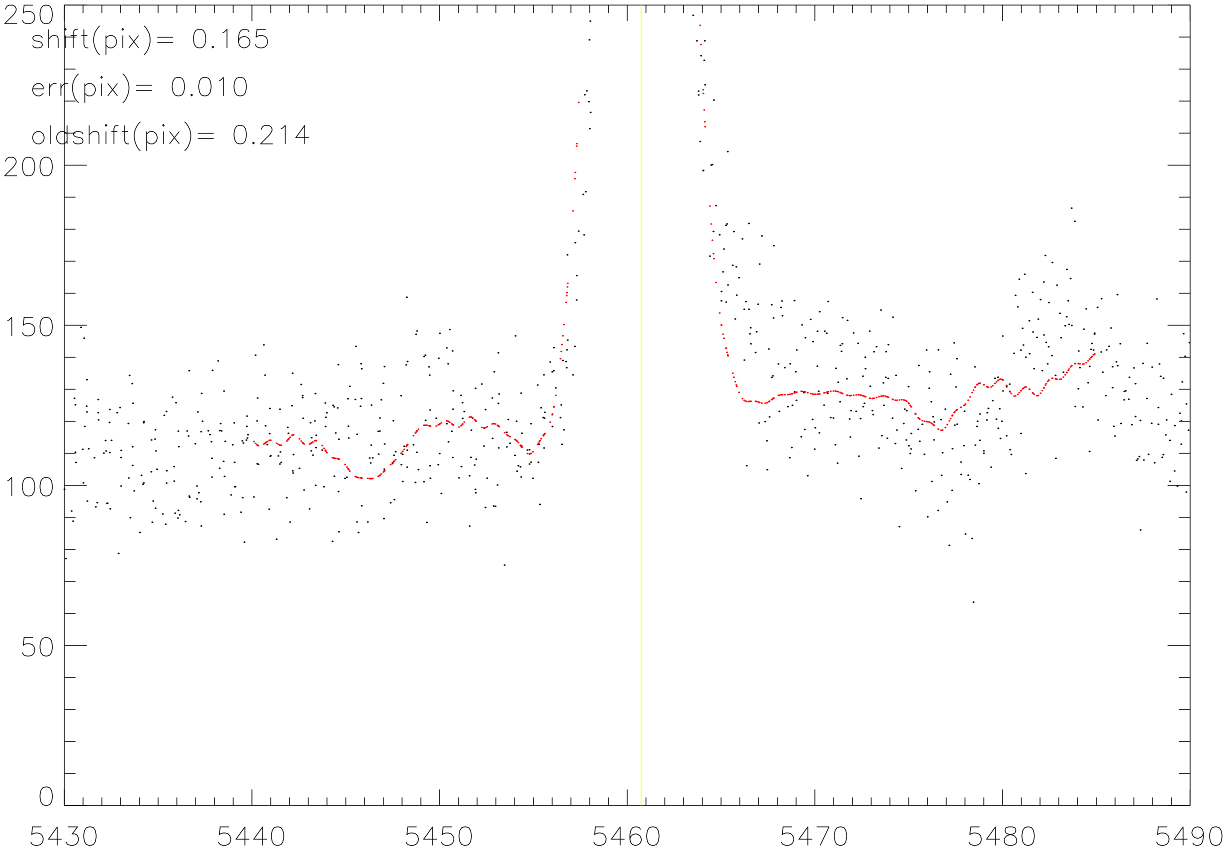

PLATE=2033 MJD=53476 Scattered Light on sdR-b1-00032122.fit
Brightness [electrons/pix]
λ [A]
0
2
4
6
8
10
12
4000
4500
5000
5500
6000
Error bars denote full range
Min value = 6.323
Max value = 9.055
Sun Feb 17 18:14:44 2008

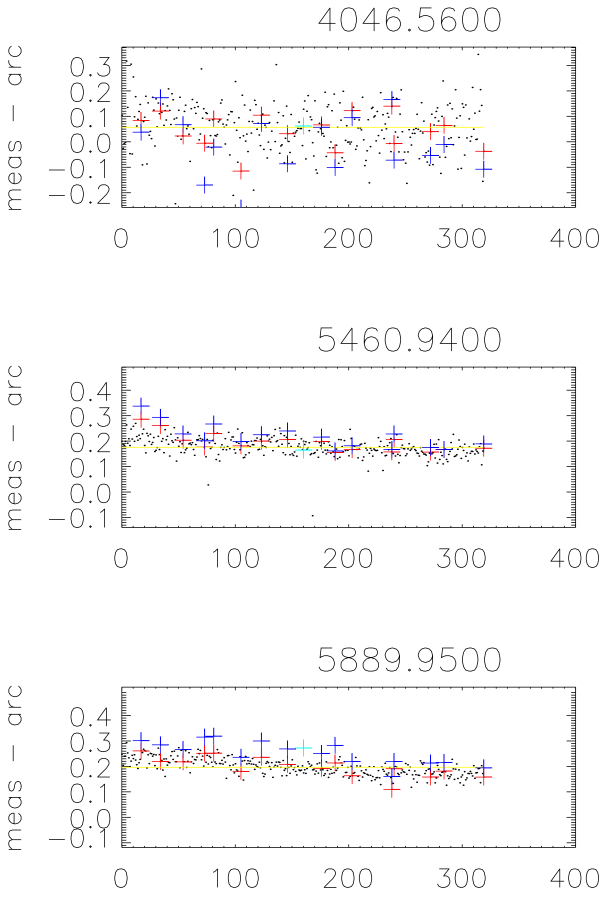

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-b1-00032122.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

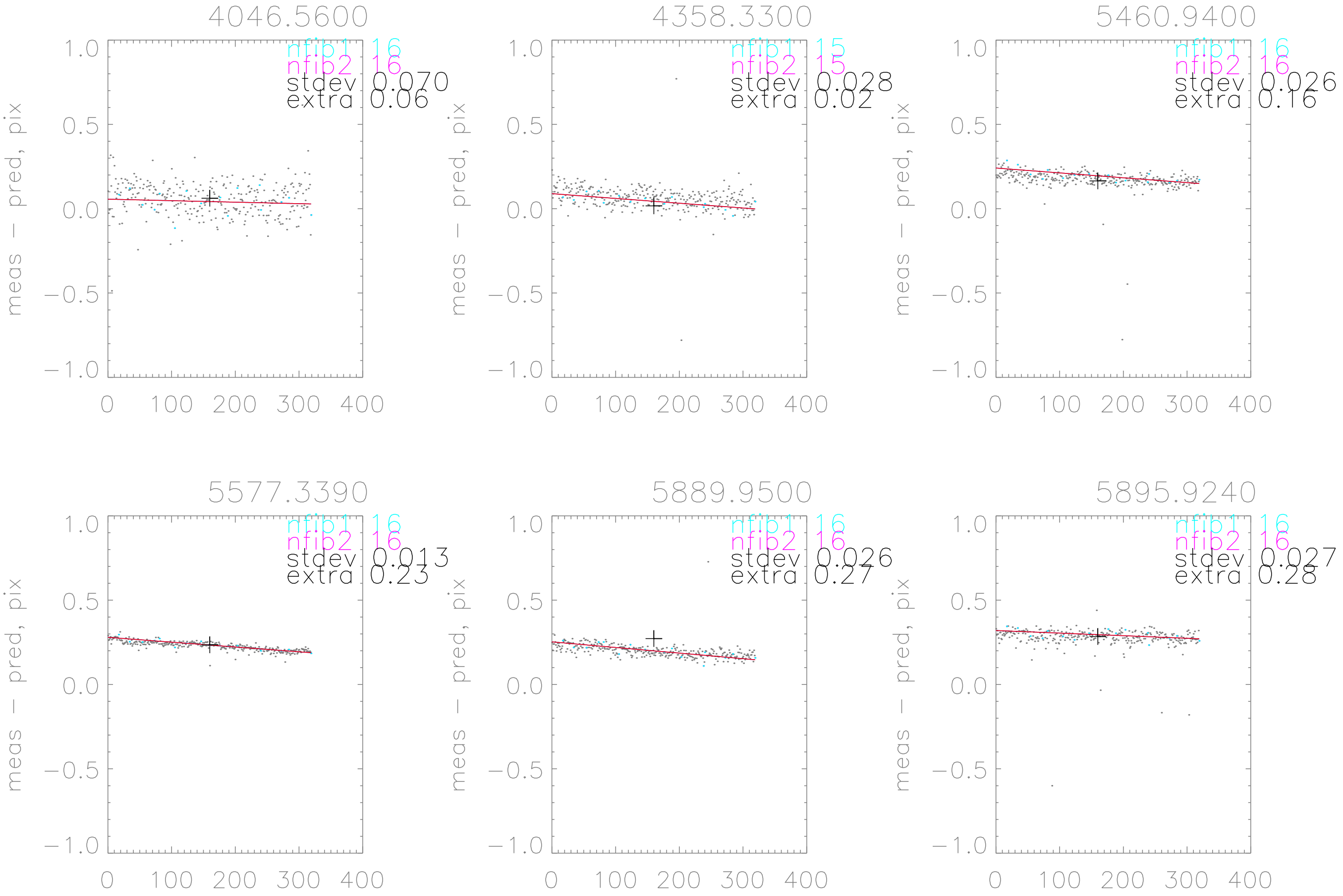

4046.5600
off: −0.02
sig: 0.036
200
150
100
50
0
−50
−4
−2
0
2
4
4358.3300
off: 0.03
sig: 0.013
600
500
400
300
200
100
0
−100
5460.9400
off: 0.21
sig: 0.008
1000
800
600
400
200
0
−200
5577.3390
off: 0.23
sig: 0.003
10000
8000
6000
4000
2000
0
−2000
5889.9500
off: 0.26
sig: 0.005
2000
1500
1000
500
0
−500
5895.9240
off: 0.28
sig: 0.006

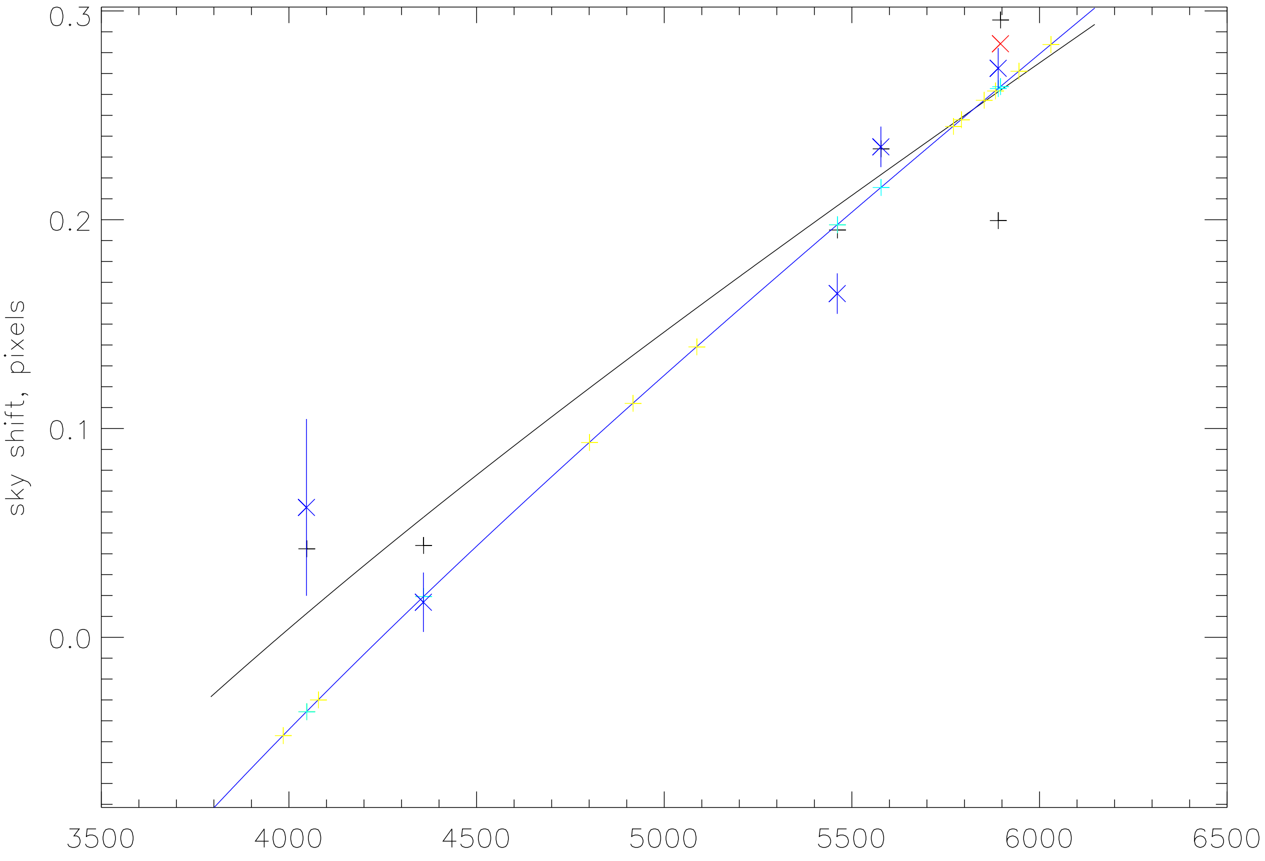

shift(pix)= 0.062
err(pix)= 0.042
oldshift(pix)=−0.017
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

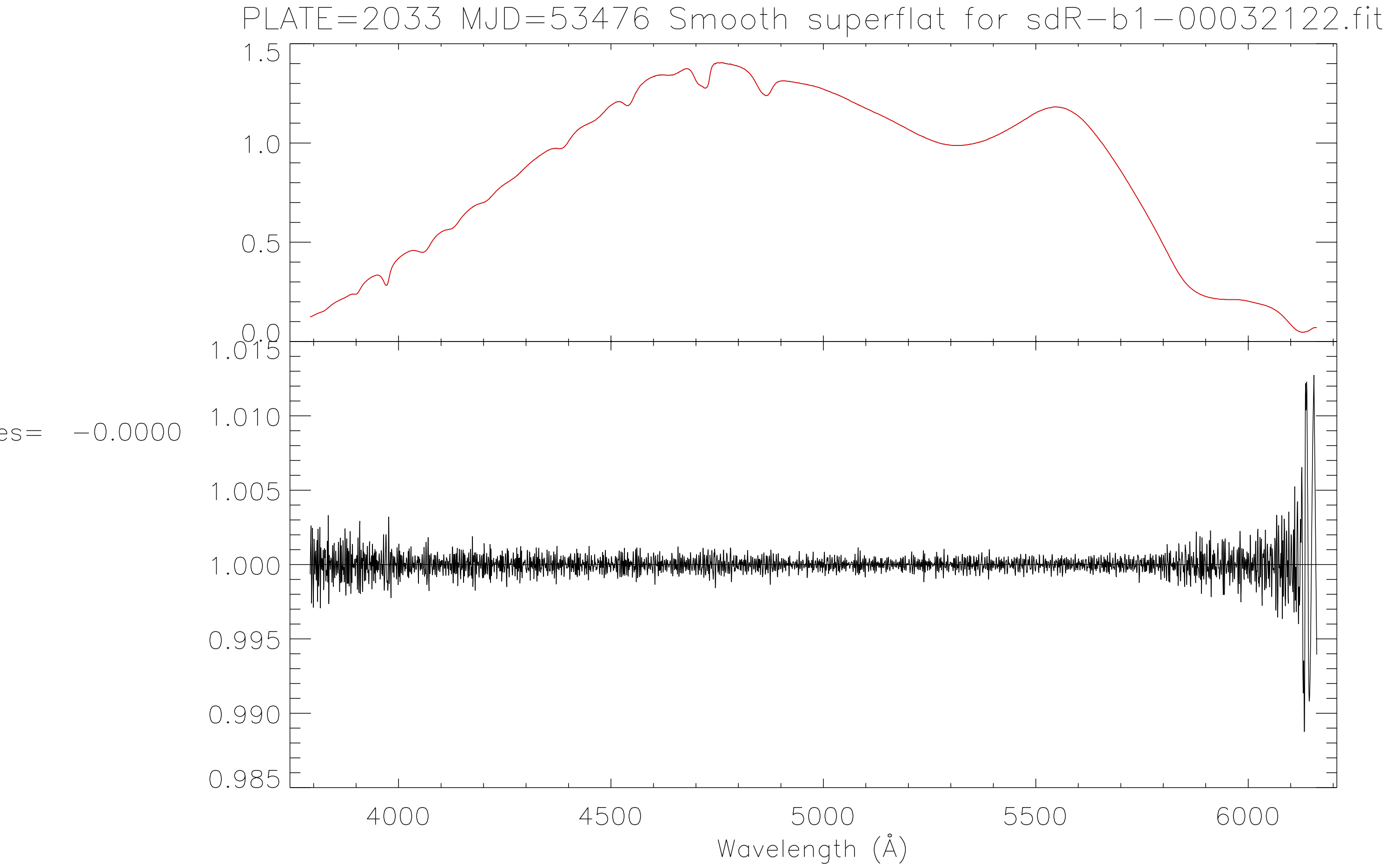

shift(pix)= 0.017
err(pix)= 0.014
oldshift(pix)= 0.029
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420


shift(pix)= 0.165
err(pix)= 0.010
oldshift(pix)= 0.214
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

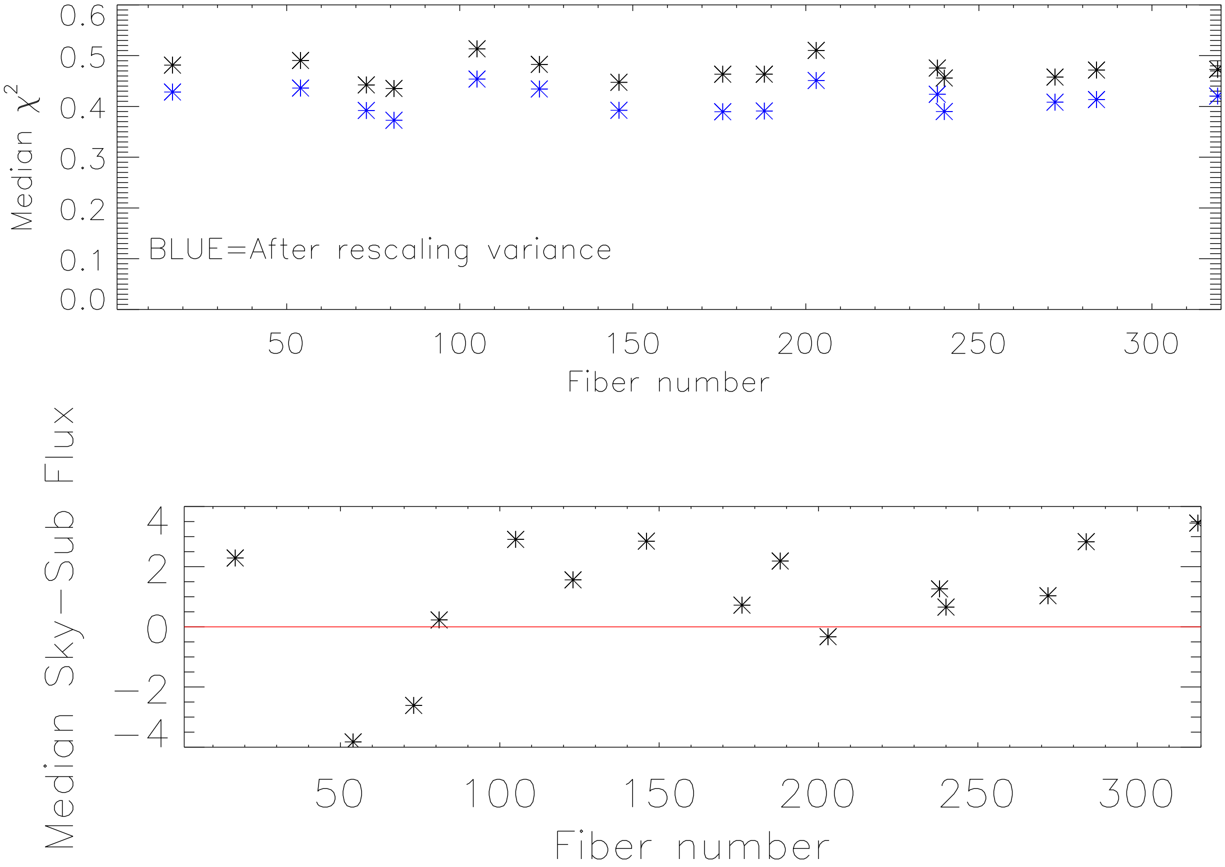

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400
−0.2
−0.1
0.0
0.1
0.2
0.3
0.4
0.5

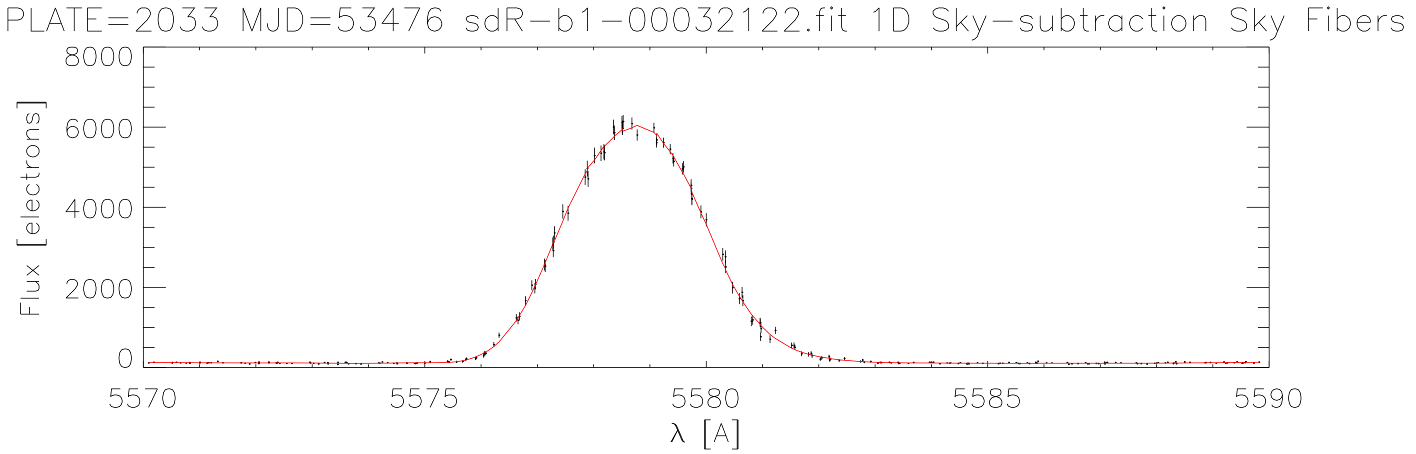

4046.5600
nfib1 16
nfib2 16
stdev 0.070
extra 0.06
4358.3300
nfib1 15
nfib2 15
stdev 0.028
extra 0.02
5460.9400
nfib1 16
nfib2 16
stdev 0.026
extra 0.16
5577.3390
nfib1 16
nfib2 16
stdev 0.013
extra 0.23
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extra 0.27
5895.9240
nfib1 16
nfib2 16
stdev 0.027
extra 0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

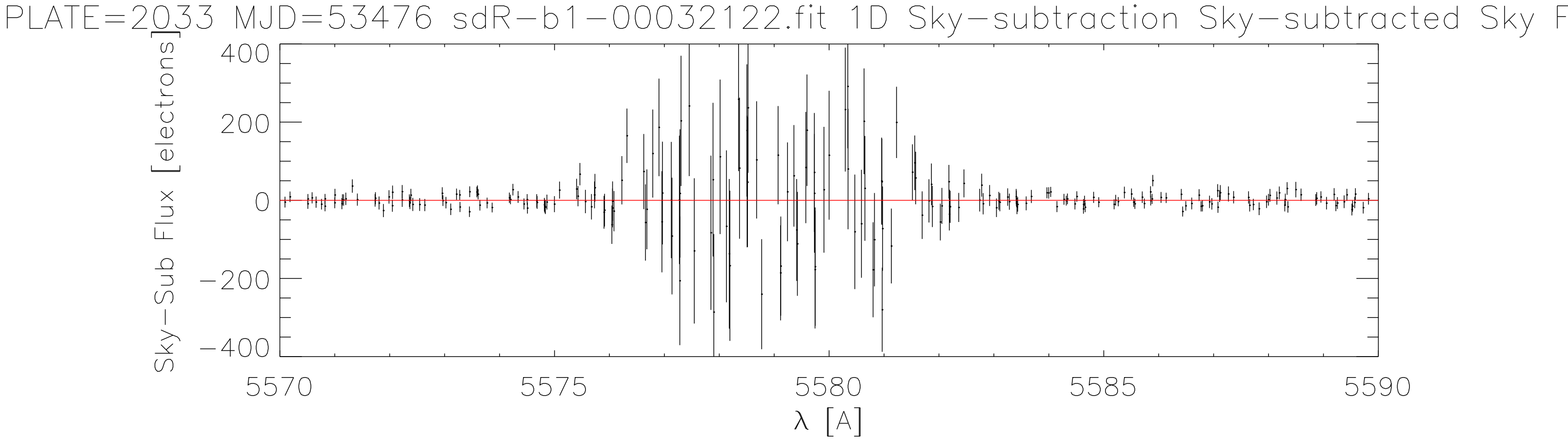

sky shift, pixels
0.3
0.2
0.1
0.0
3500
4000
4500
5000
5500
6000
6500


PLATE=2033 MJD=53476 Smooth superflat for sdR-b1-00032122.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es=   −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

PLATE=2033 MJD=53476 sdR-b1-00032122.fit 1D Sky-subtraction Sky Fiber

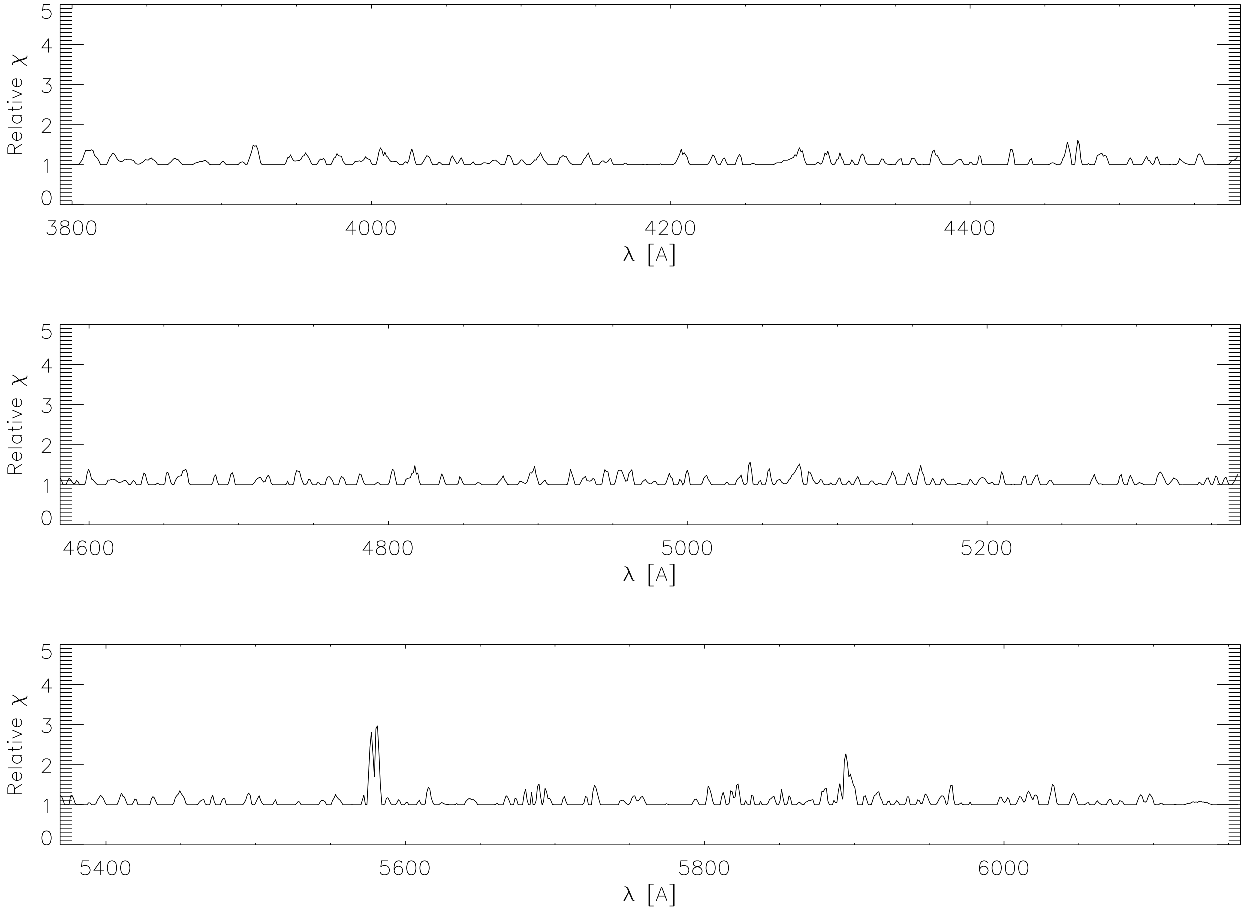


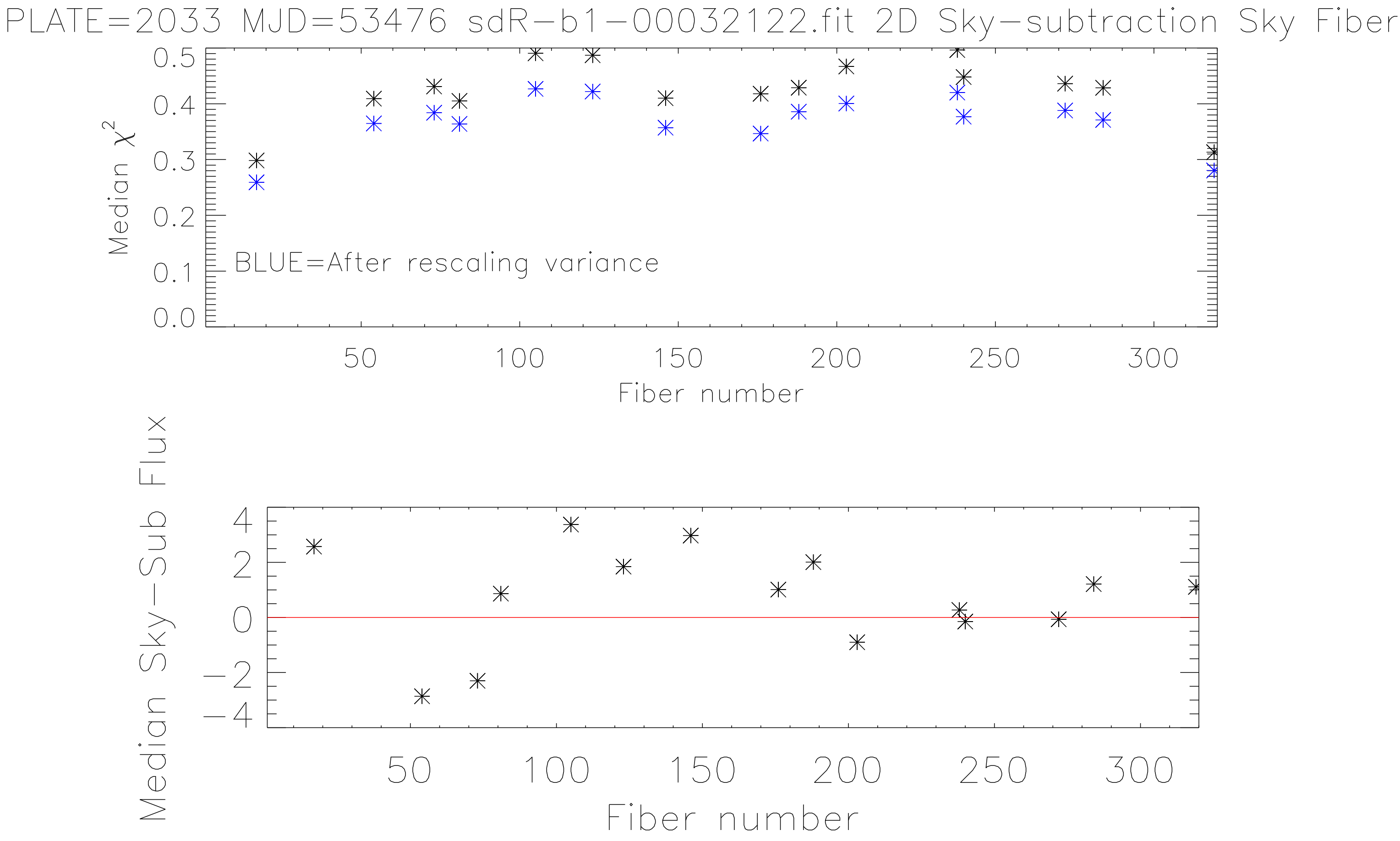

PLATE=2033 MJD=53476 sdR-b1-00032122.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2033 MJD=53476 sdR-b1-00032122.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
-200
-400
5570
5575
5580
5585
5590
λ [A]

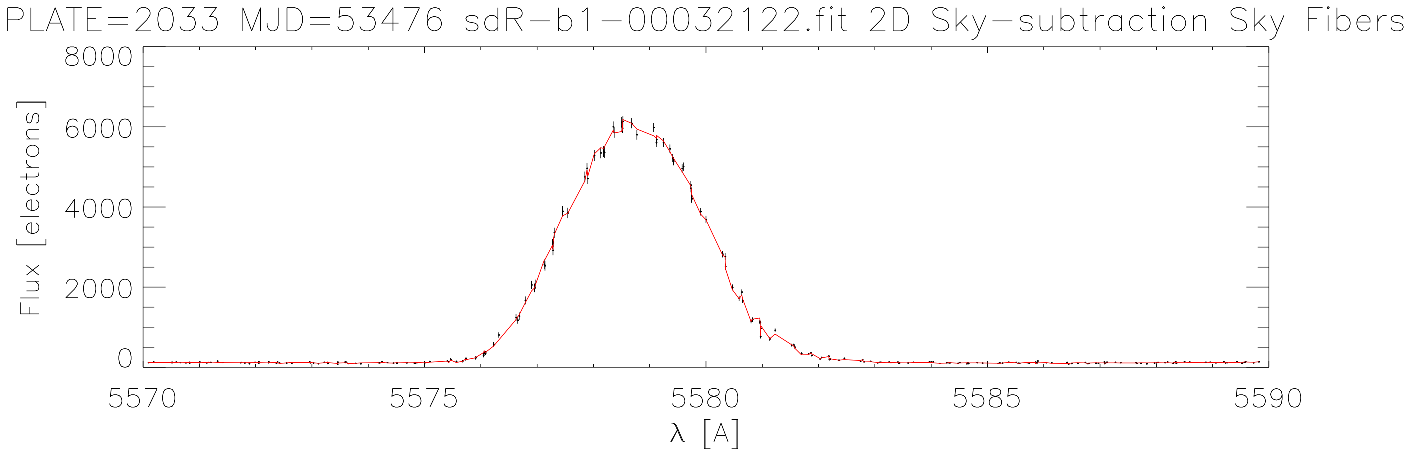
Number of sky fibers = 15

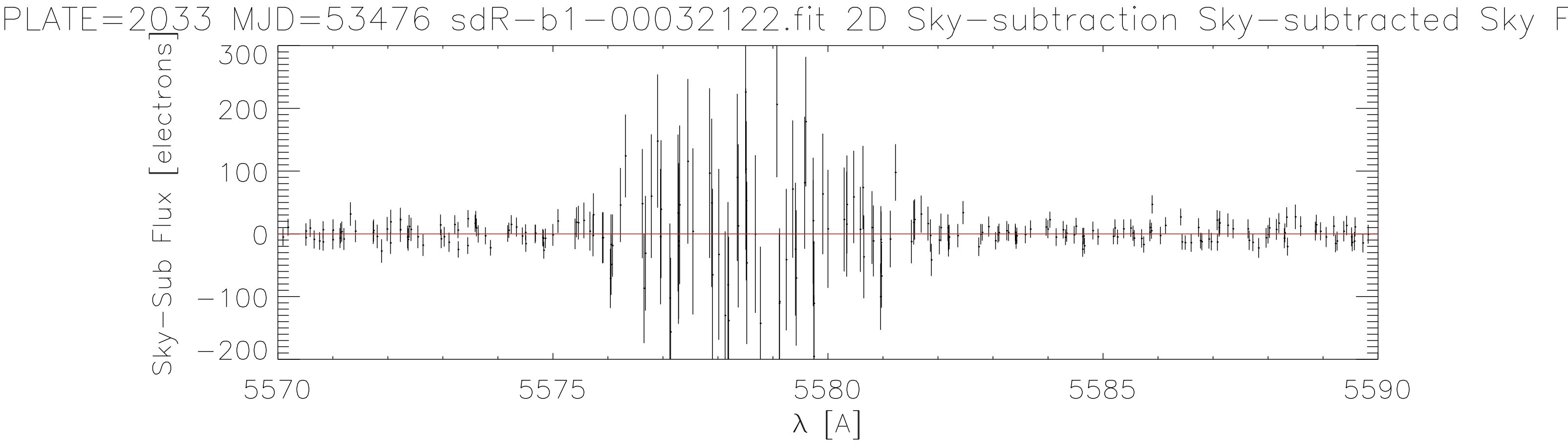
PLATE=2033 MJD=53476 sdR-b1-00032122.fit 1D Sky-subtraction Rescaled Errors

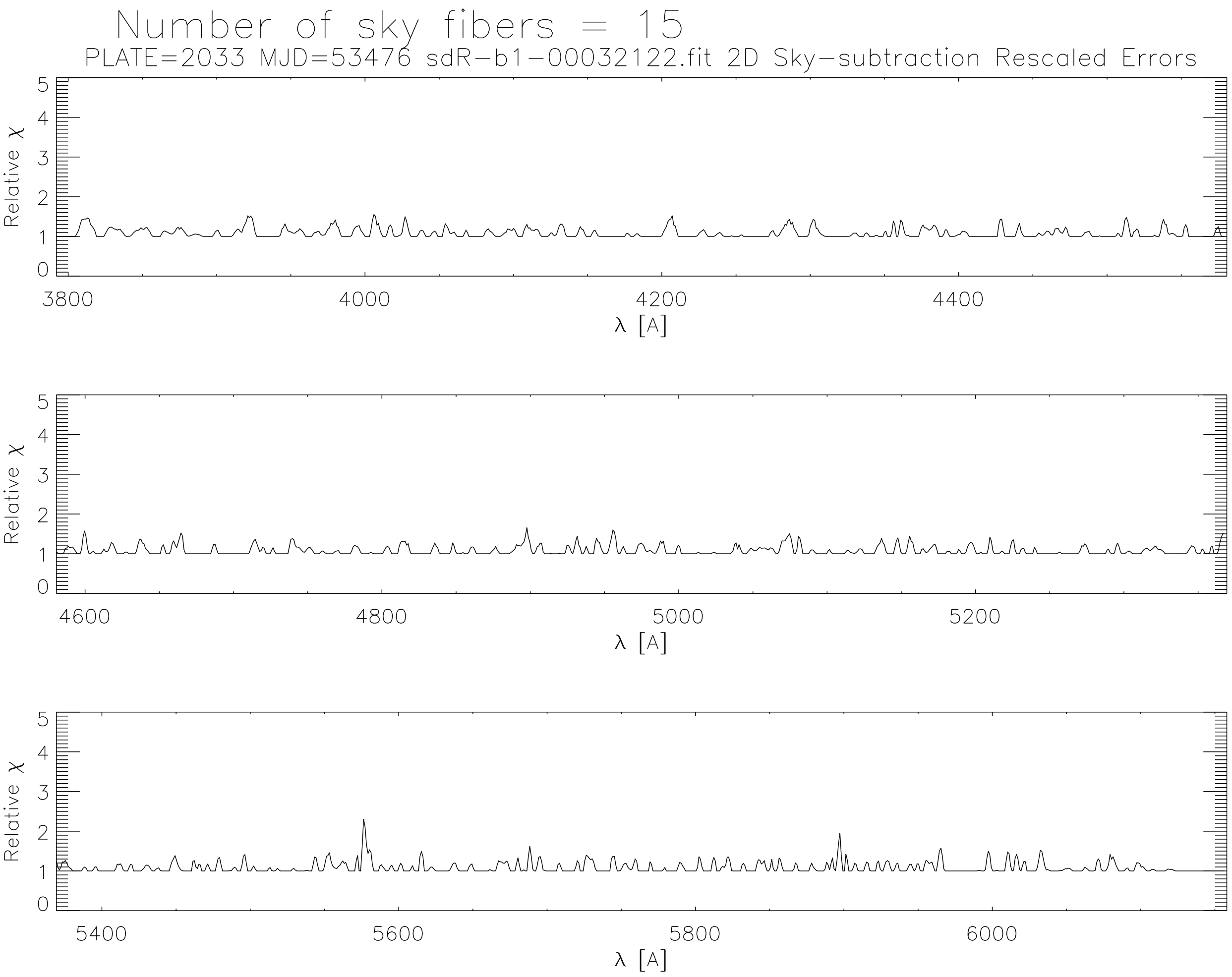




PLATE=2033 MJD=53476 sdR-b1-00032122.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
50
100
150
200
250
300
Fiber number

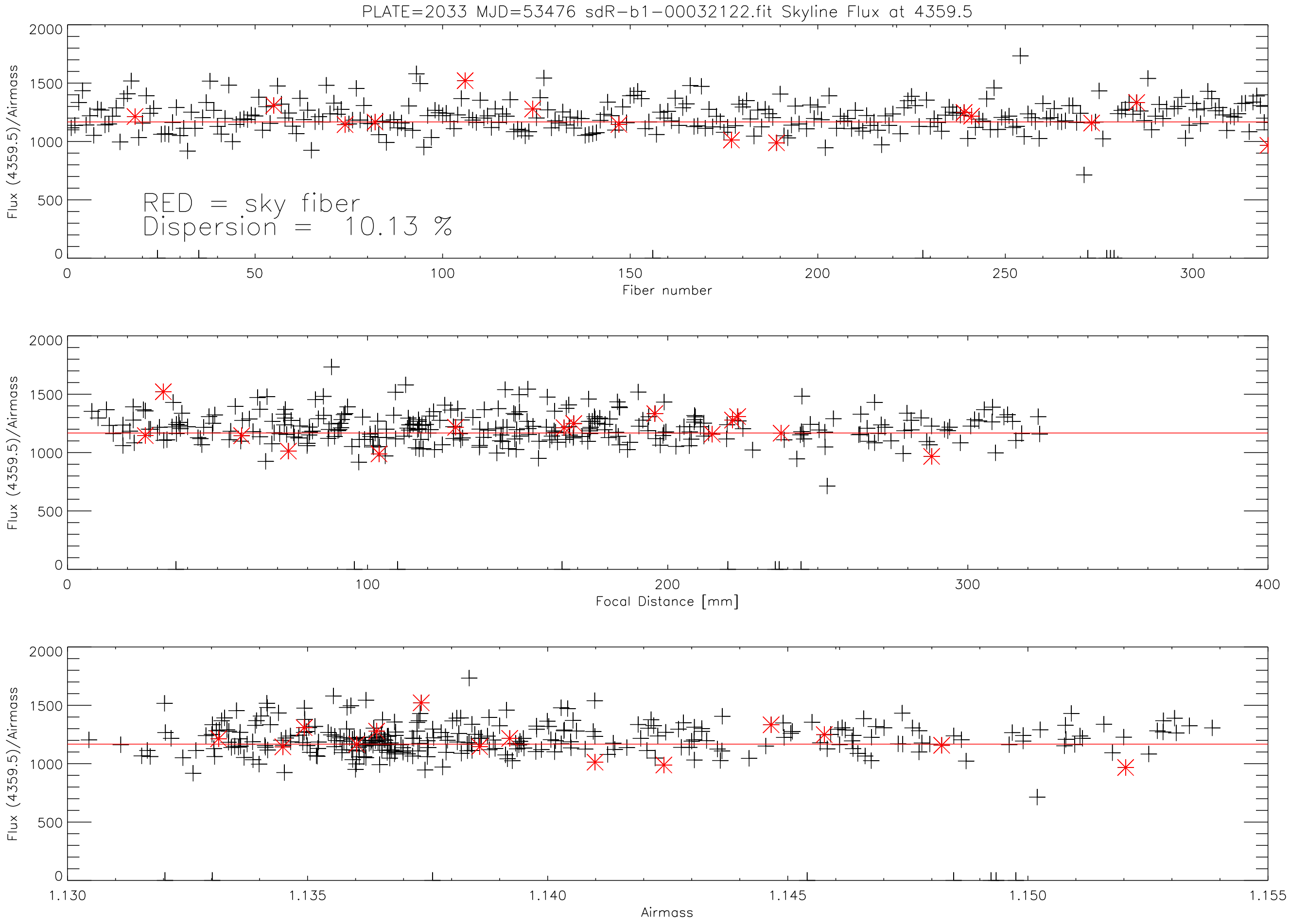

PLATE=2033 MJD=53476 sdR-b1-00032122.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

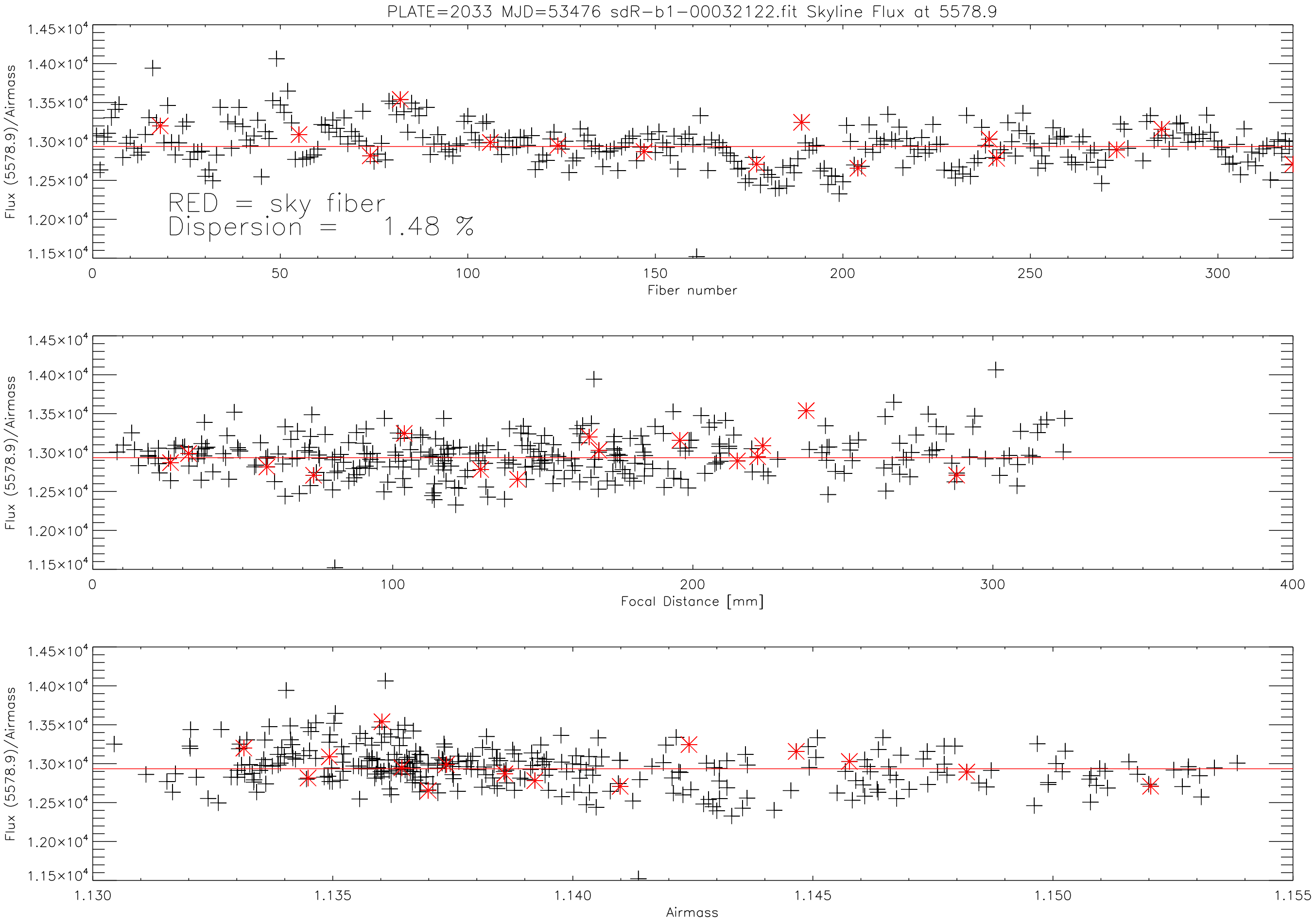

PLATE=2033 MJD=53476 sdR-b1-00032122.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
300
200
100
0
−100
−200
5570
5575
5580
5585
5590
λ [A]

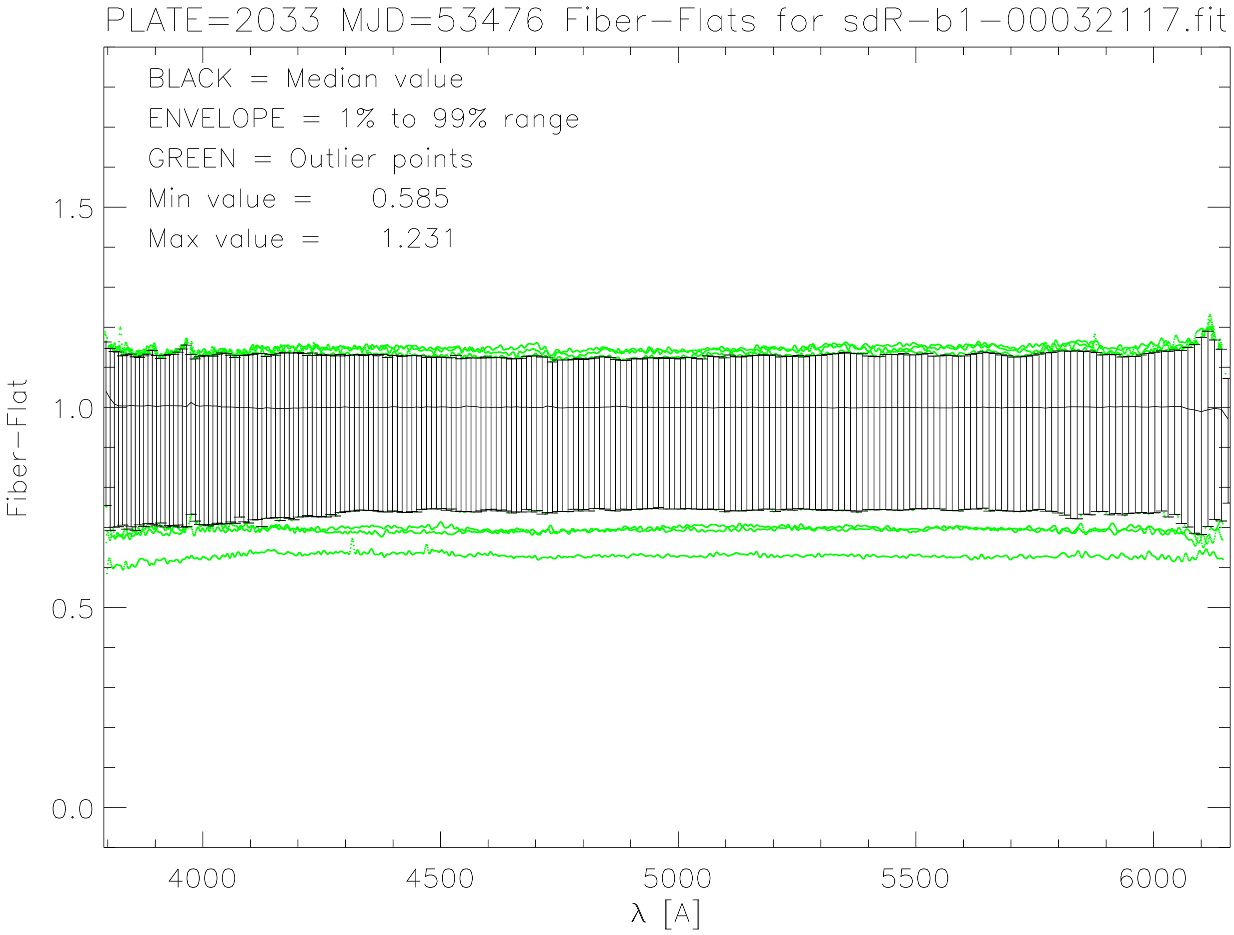


Number of sky fibers = 15

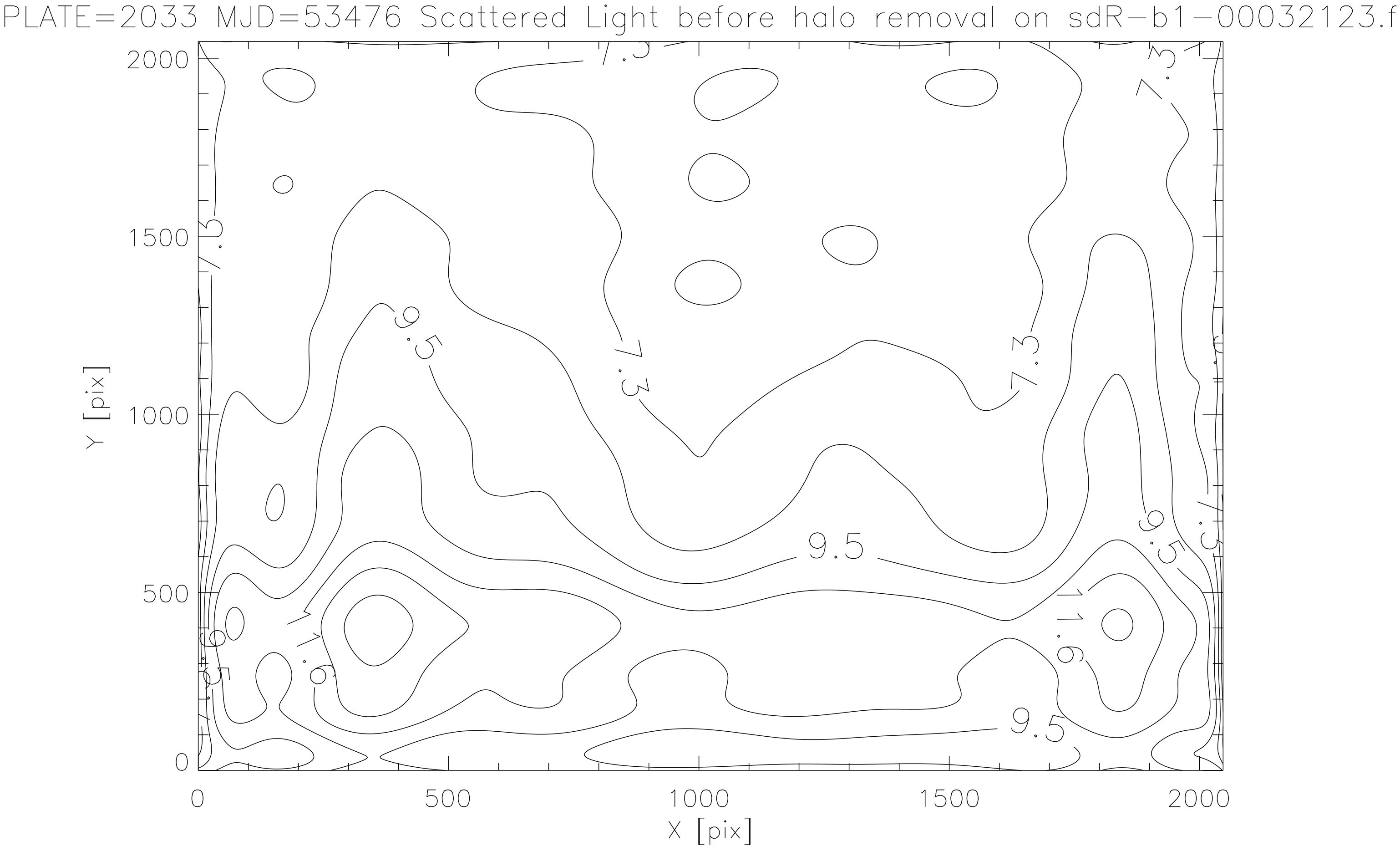
PLATE=2033 MJD=53476 sdR-b1-00032122.fit 2D Sky-subtraction Rescaled Errors

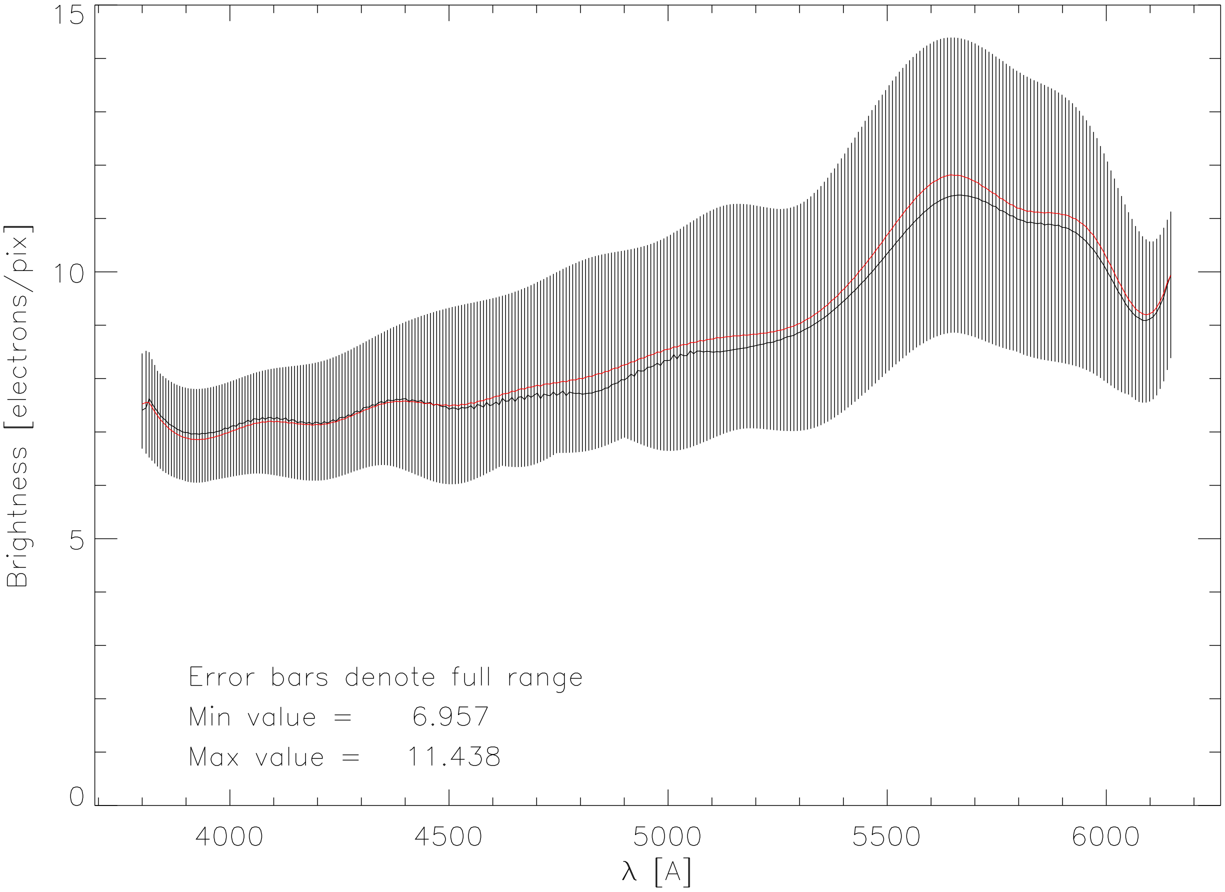

PLATE=2033 MJD=53476 sdR-b1-00032122.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2000
1500
1000
500
0
RED = sky fiber
Dispersion = 10.13 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2000
1500
1000
500
0
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2000
1500
1000
500
0
1.130
1.135
1.140
1.145
1.150
1.155
Airmass


PLATE=2033 MJD=53476 sdR-b1-00032122.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.45×10^4
1.40×10^4
1.35×10^4
1.30×10^4
1.25×10^4
1.20×10^4
1.15×10^4
RED = sky fiber
Dispersion = 1.48 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.130
1.135
1.140
1.145
1.150
1.155
Airmass



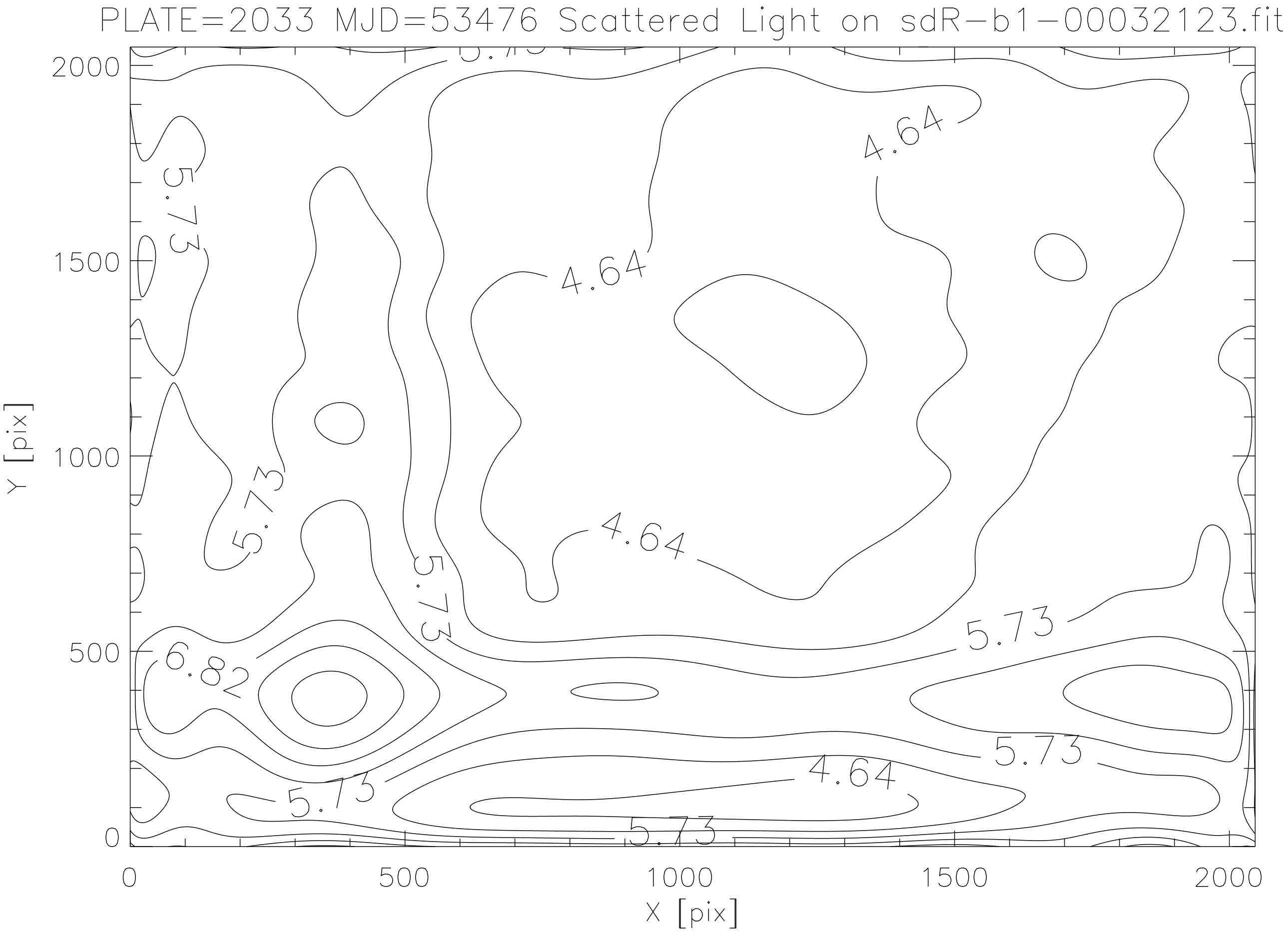
Sun Feb 17 18:16:00 2008

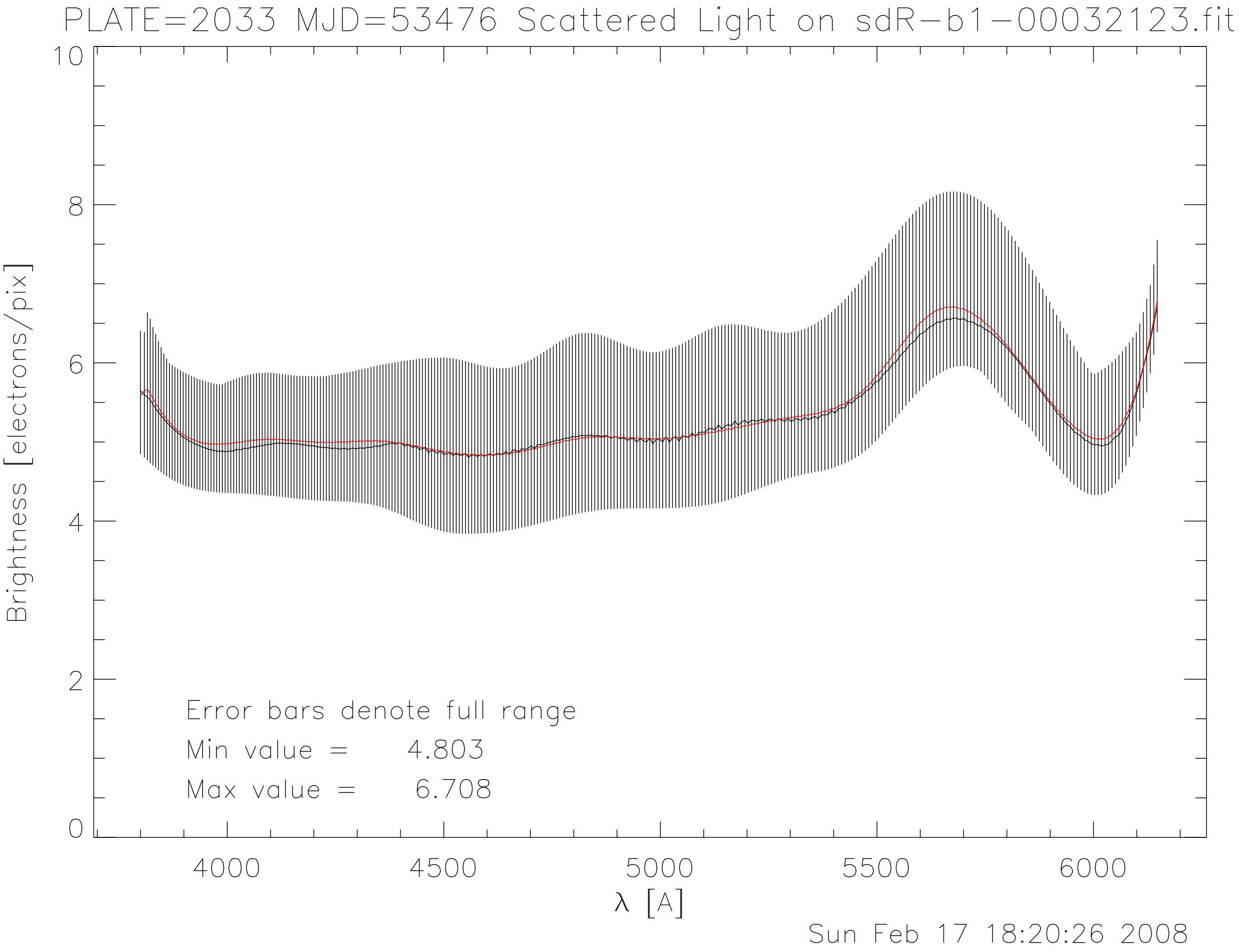

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b1-00032123.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
7.3
7.3
7.3
7.3
7.3
9.5
9.5
9.5
9.5
9.5
11.6
11.6

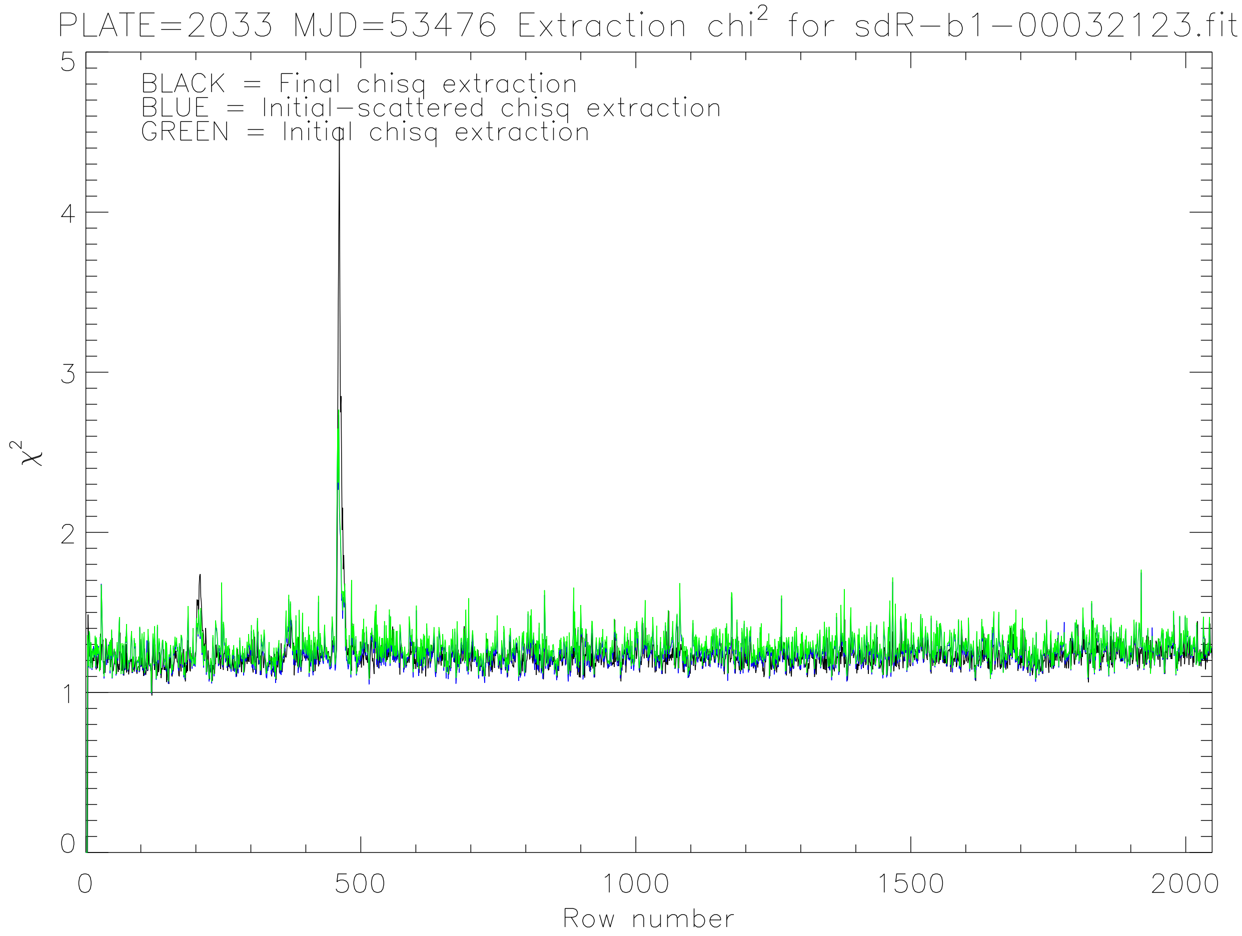


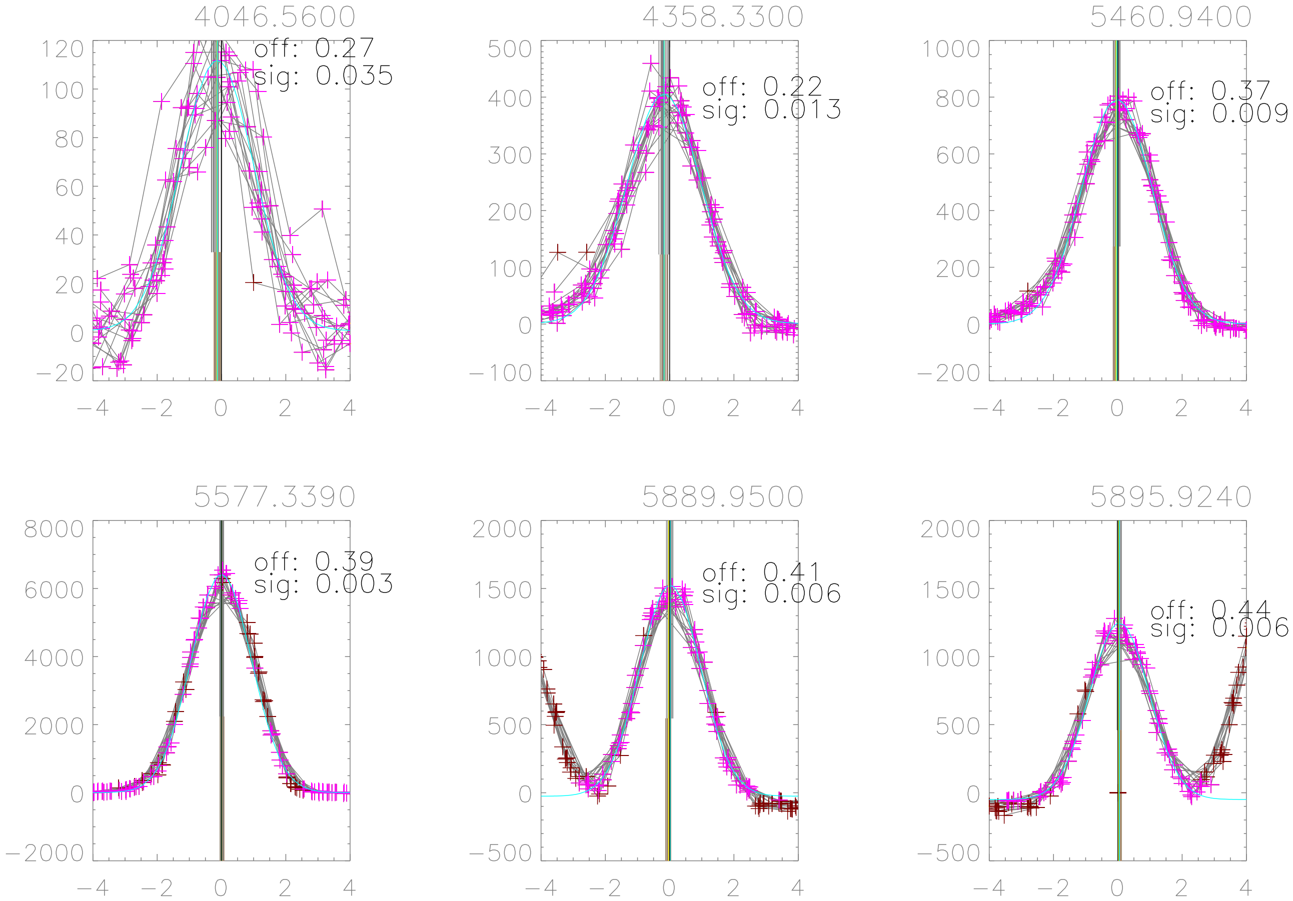
PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b1-00032123.f

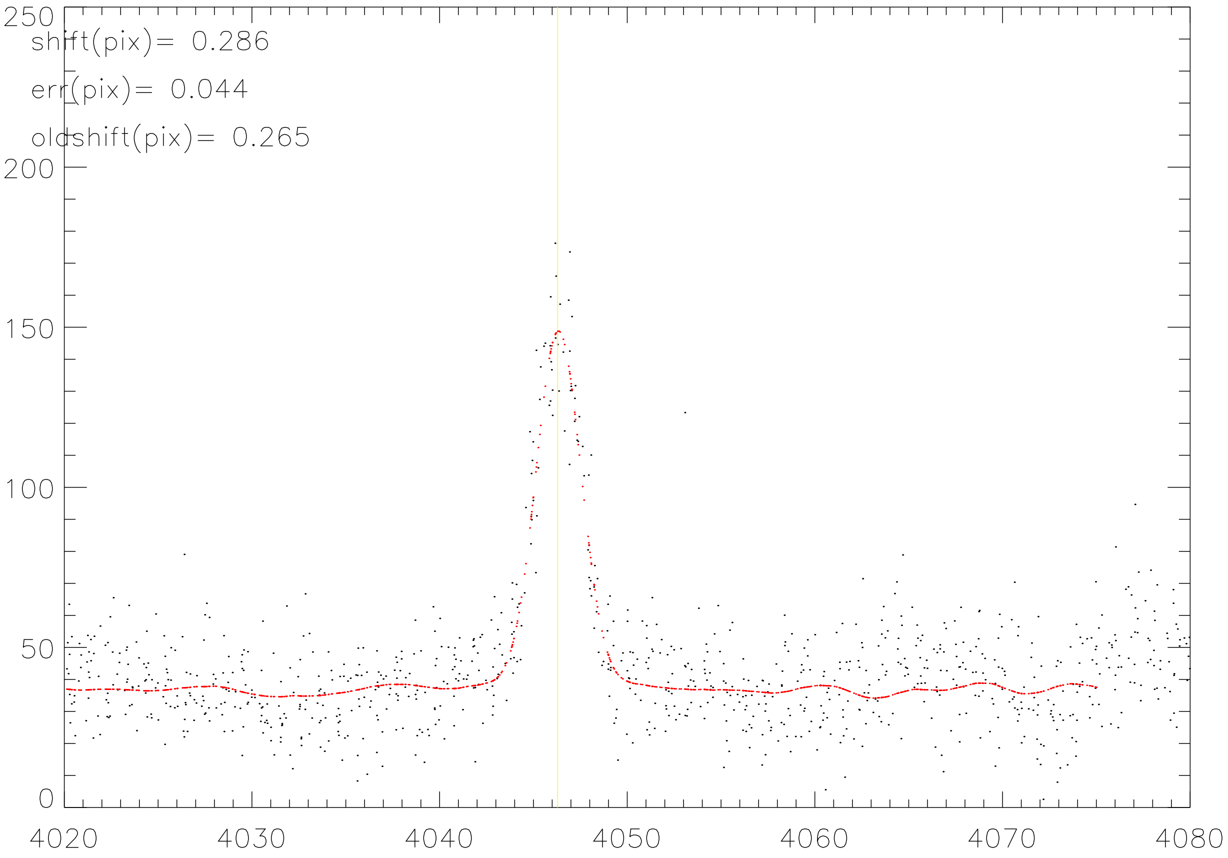
Sun Feb 17 18:17:00 2008

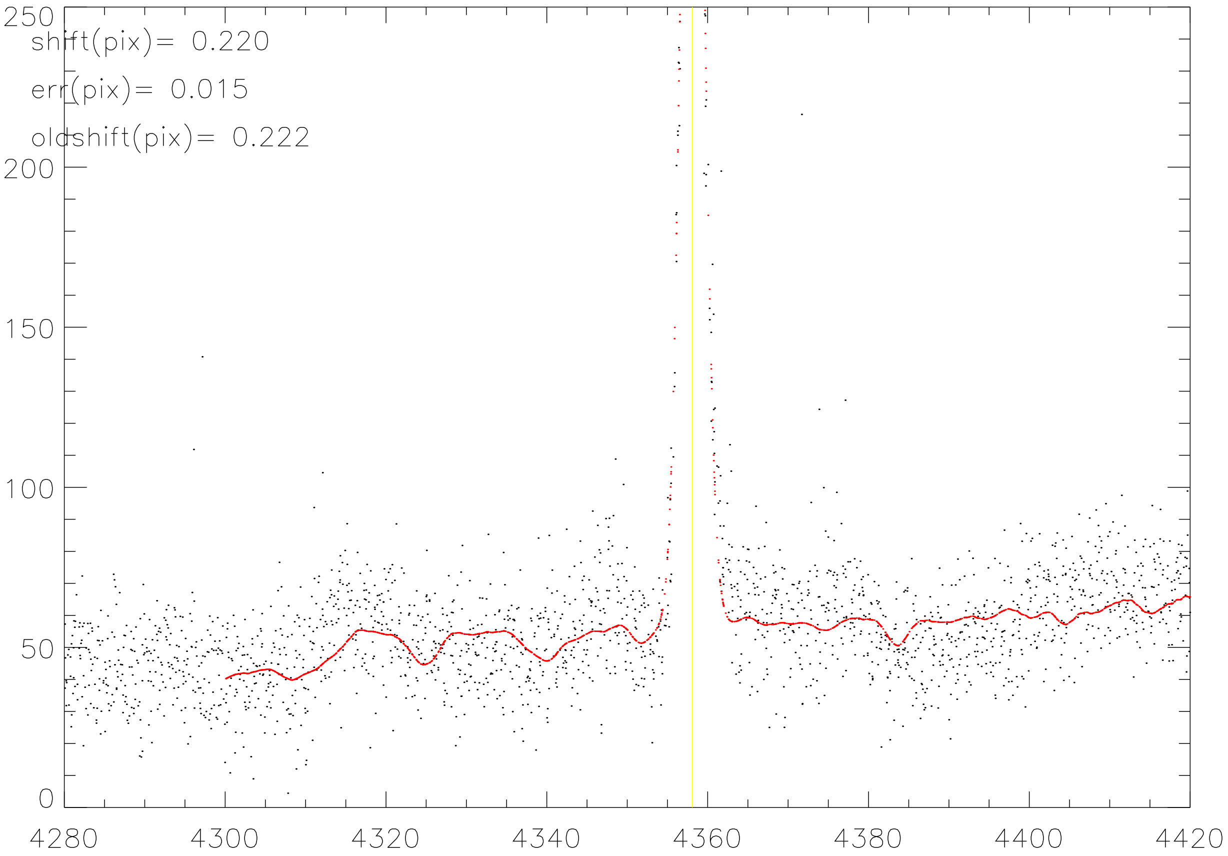

PLATE=2033 MJD=53476 Scattered Light on sdR-b1-00032123.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
5.73
5.73
5.73
5.73
5.73
5.73
5.73
5.73
4.64
4.64
4.64
4.64
6.82

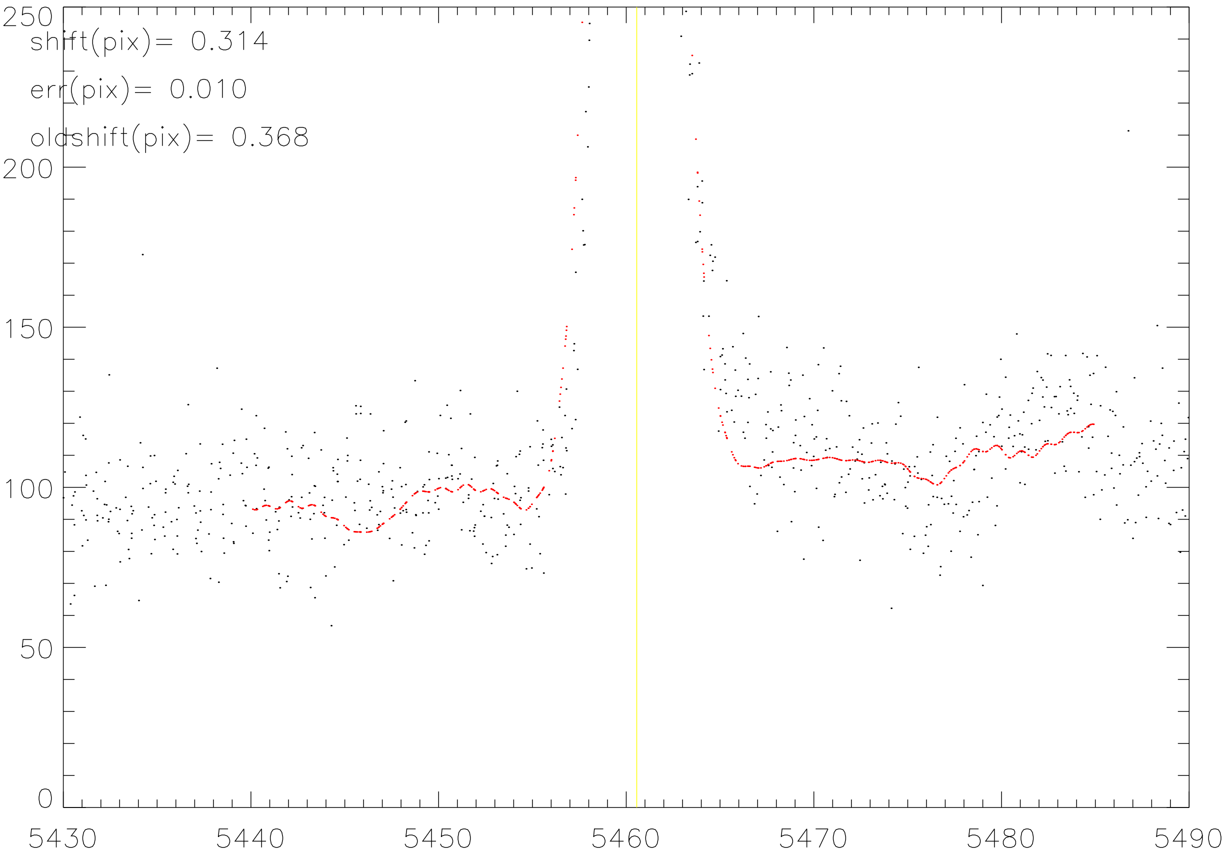

PLATE=2033 MJD=53476 Scattered Light on sdR-b1-00032123.fit
Brightness [electrons/pix]
0
2
4
6
8
10
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.803
Max value = 6.708
Sun Feb 17 18:20:26 2008

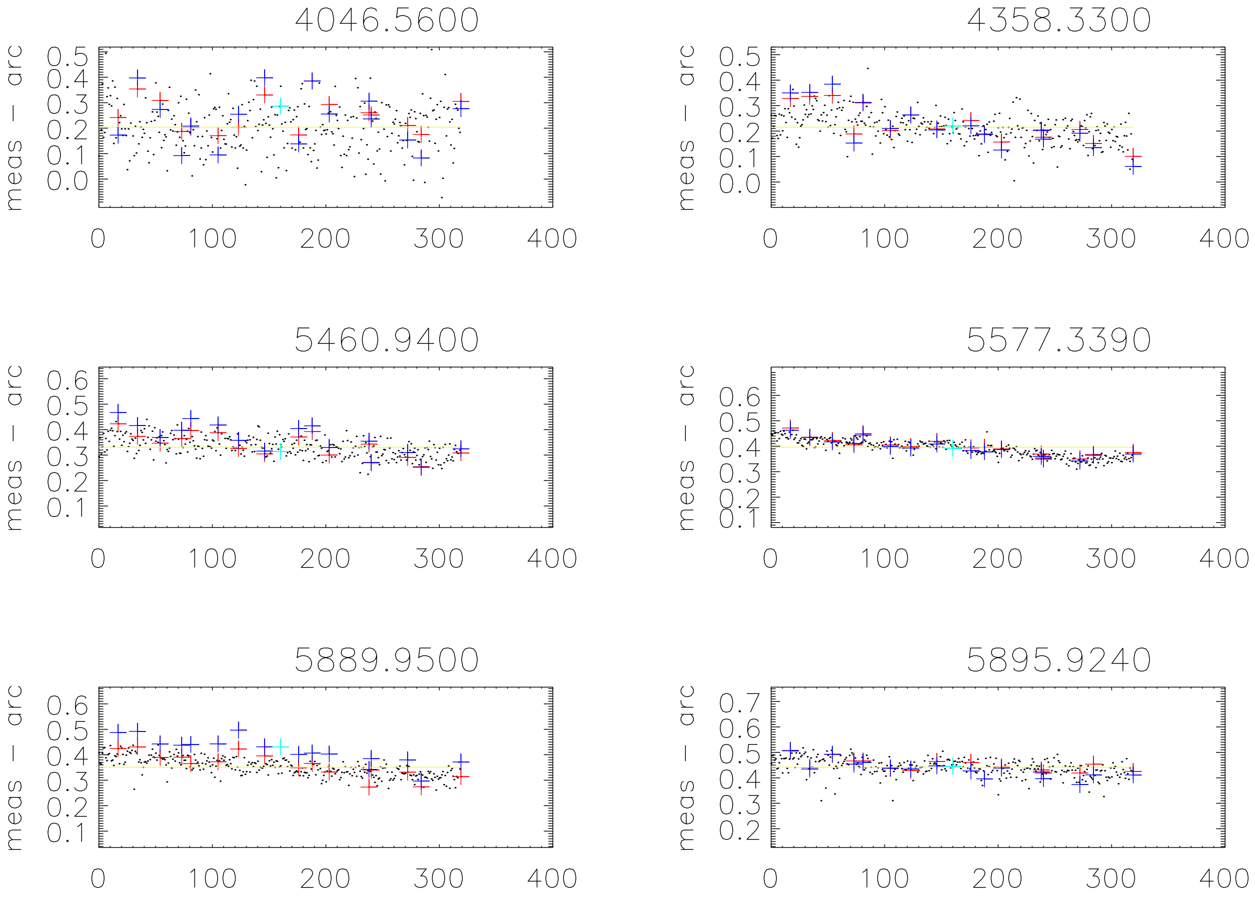

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-b1-00032123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

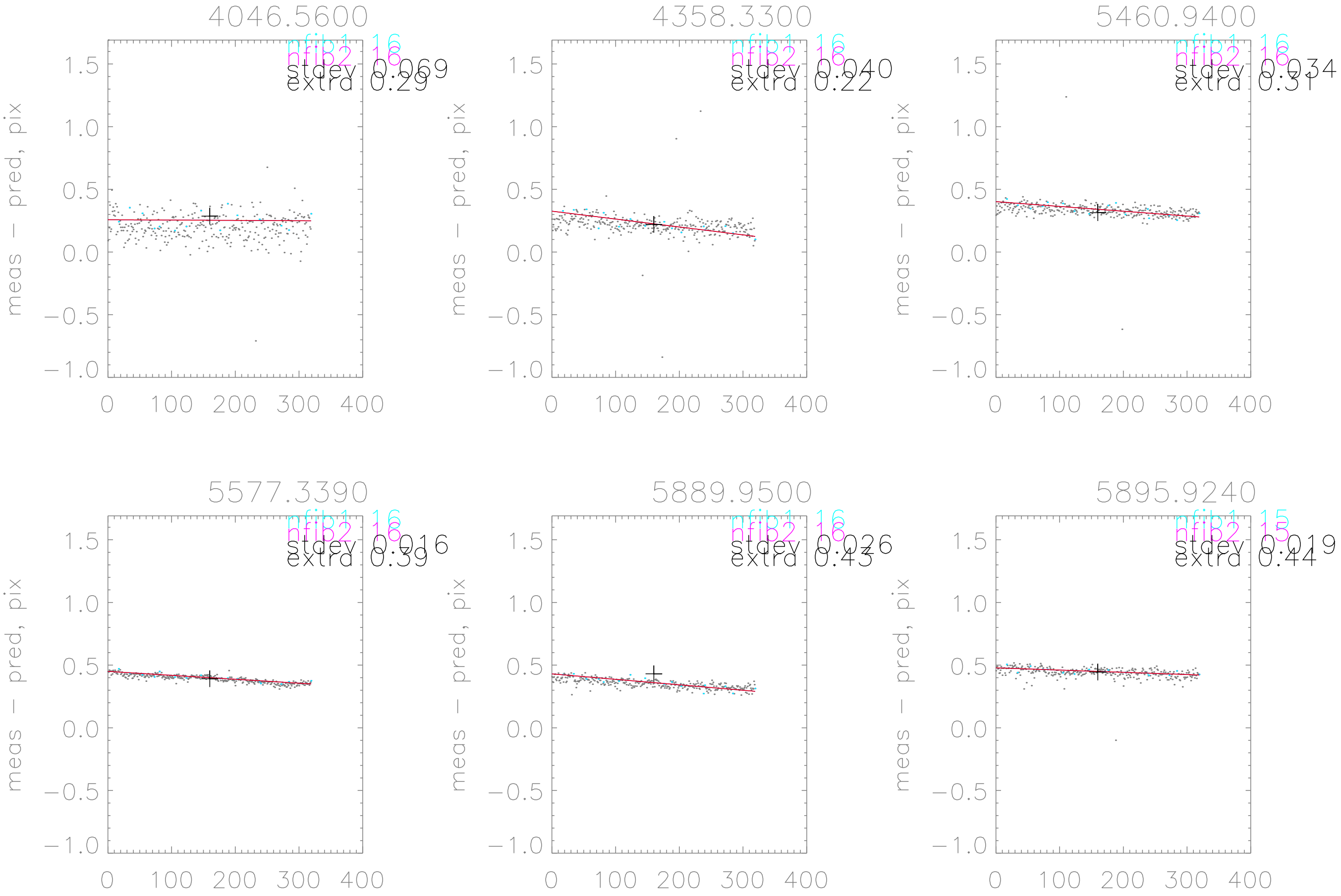

4046.5600
off: 0.27
sig: 0.035
120
100
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: 0.22
sig: 0.013
500
400
300
200
100
0
−100
5460.9400
off: 0.37
sig: 0.009
1000
800
600
400
200
0
−200
5577.3390
off: 0.39
sig: 0.003
8000
6000
4000
2000
0
−2000
5889.9500
off: 0.41
sig: 0.006
2000
1500
1000
500
0
−500
5895.9240
off: 0.44
sig: 0.006

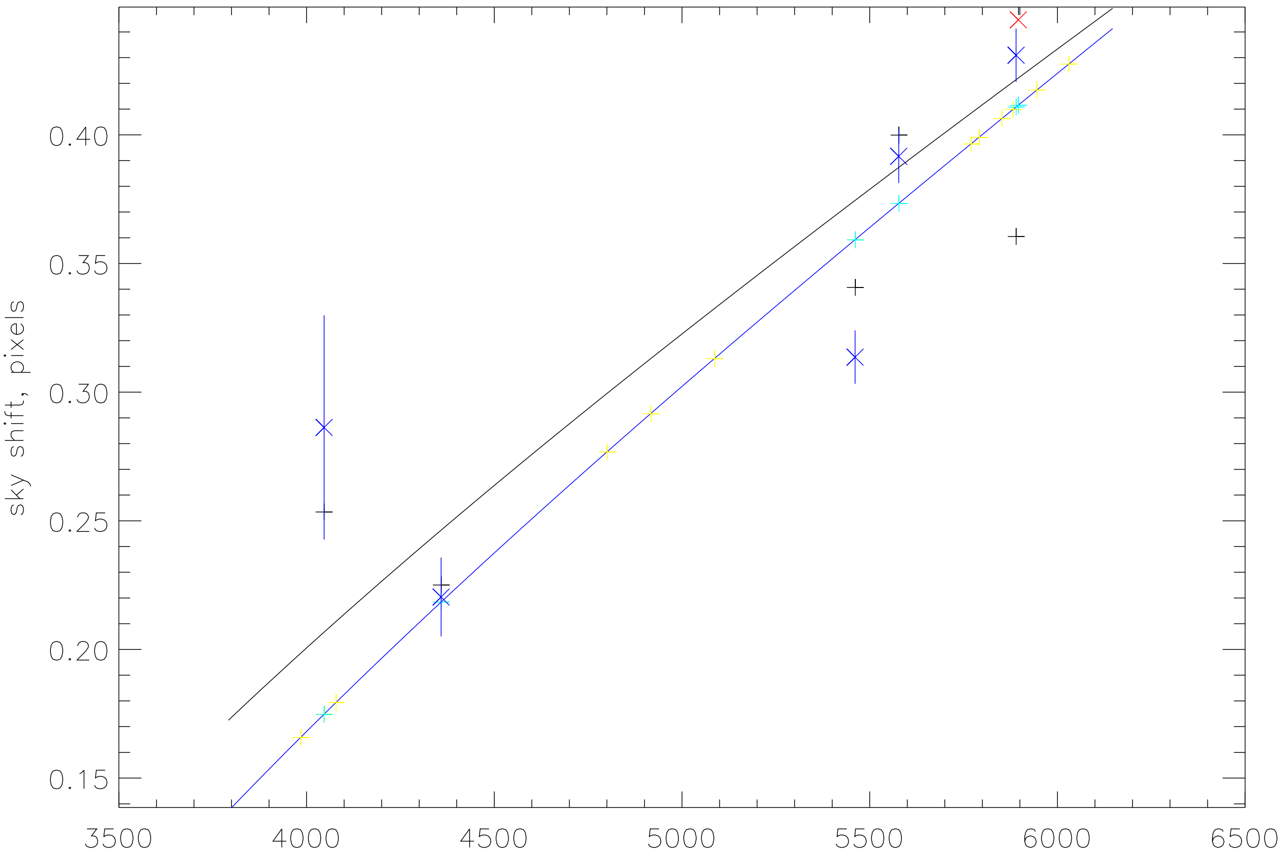

shift(pix)= 0.286
err(pix)= 0.044
oldshift(pix)= 0.265
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

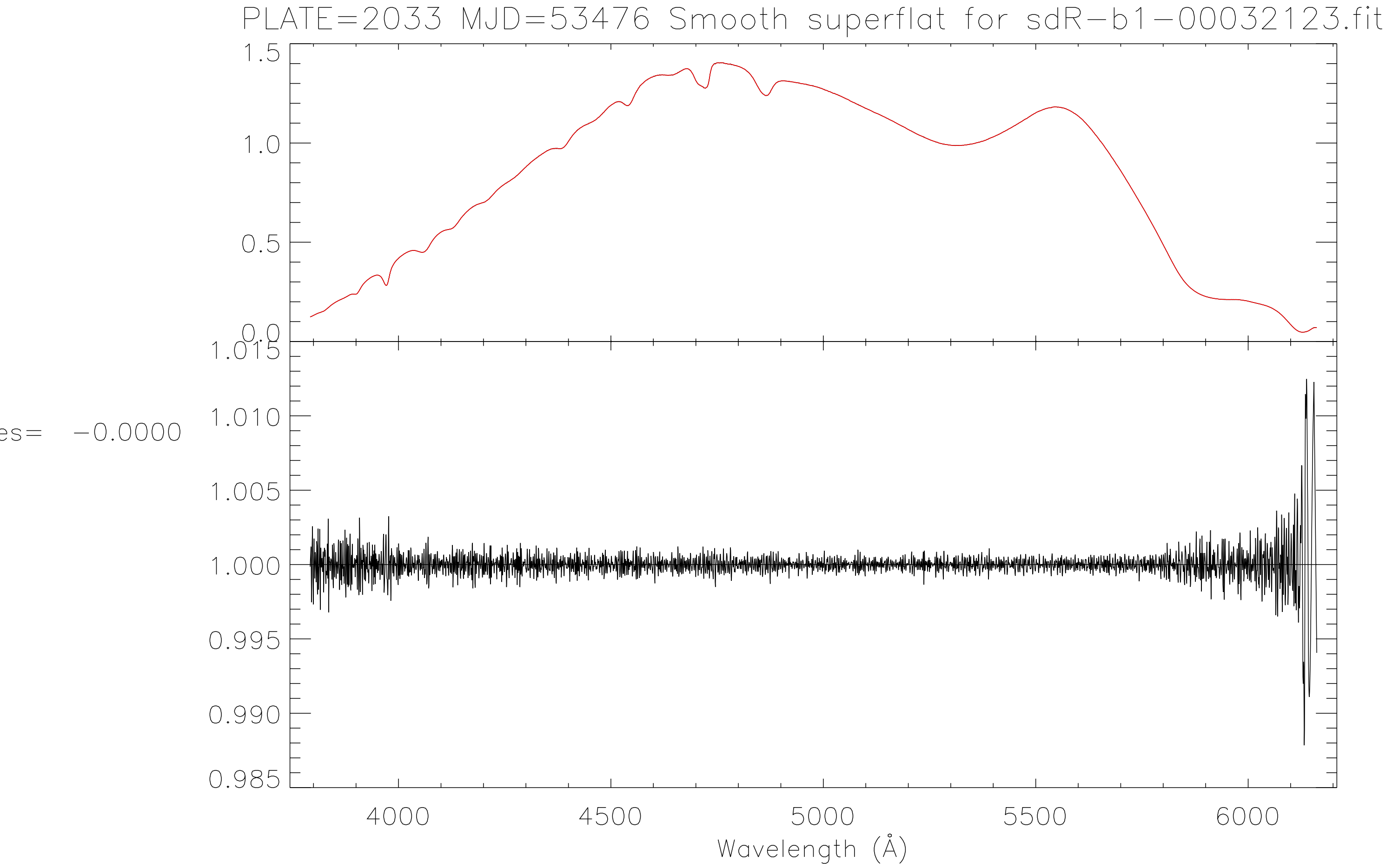

shift(pix)= 0.220
err(pix)= 0.015
oldshift(pix)= 0.222
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

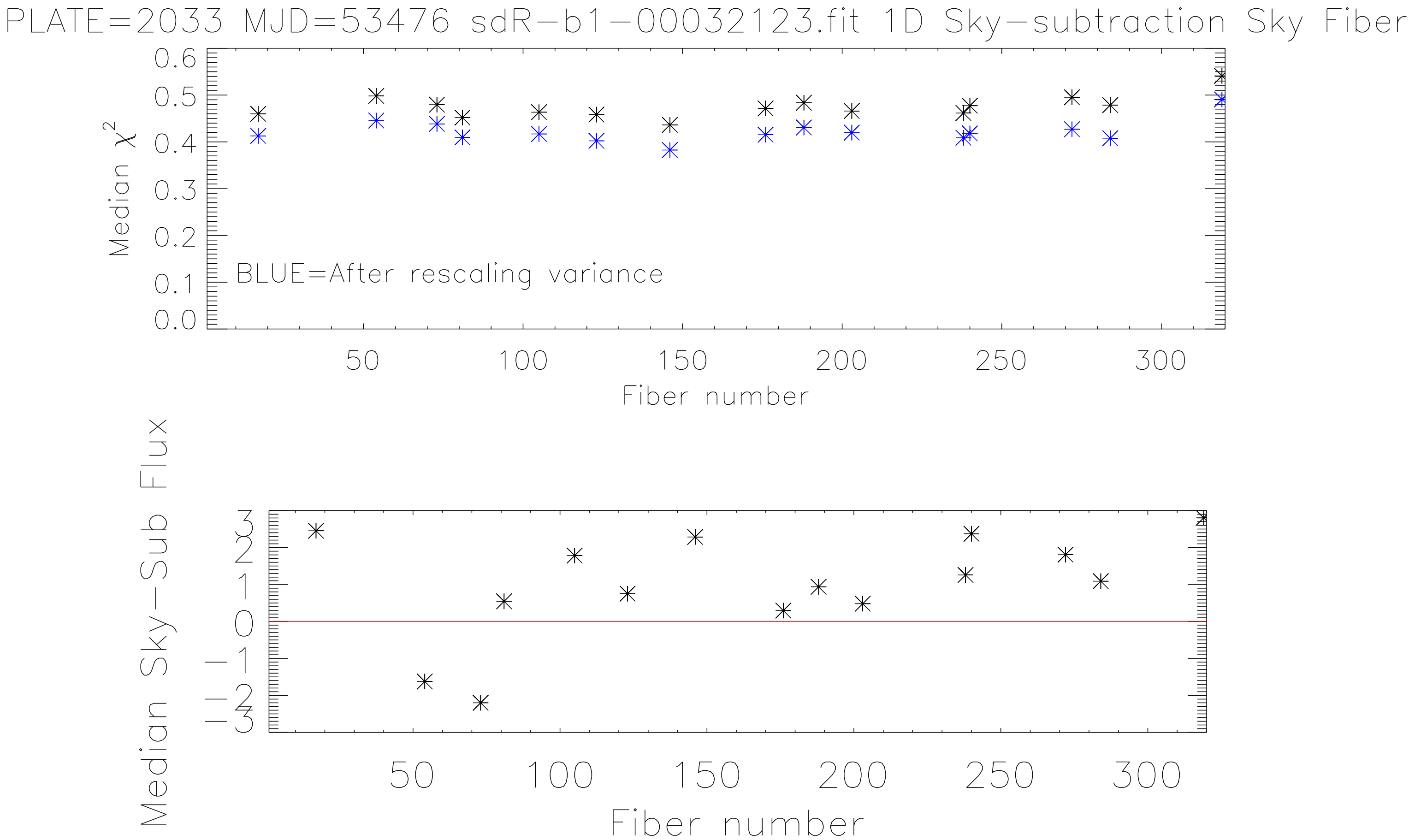

shift(pix)= 0.314
err(pix)= 0.010
oldshift(pix)= 0.368
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

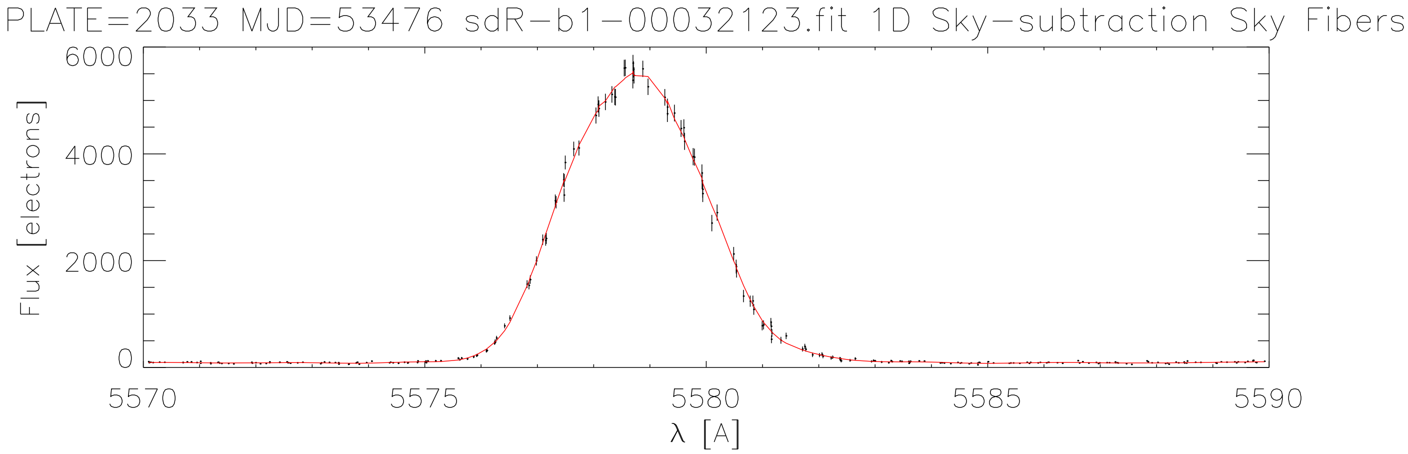

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0
100
200
300
400

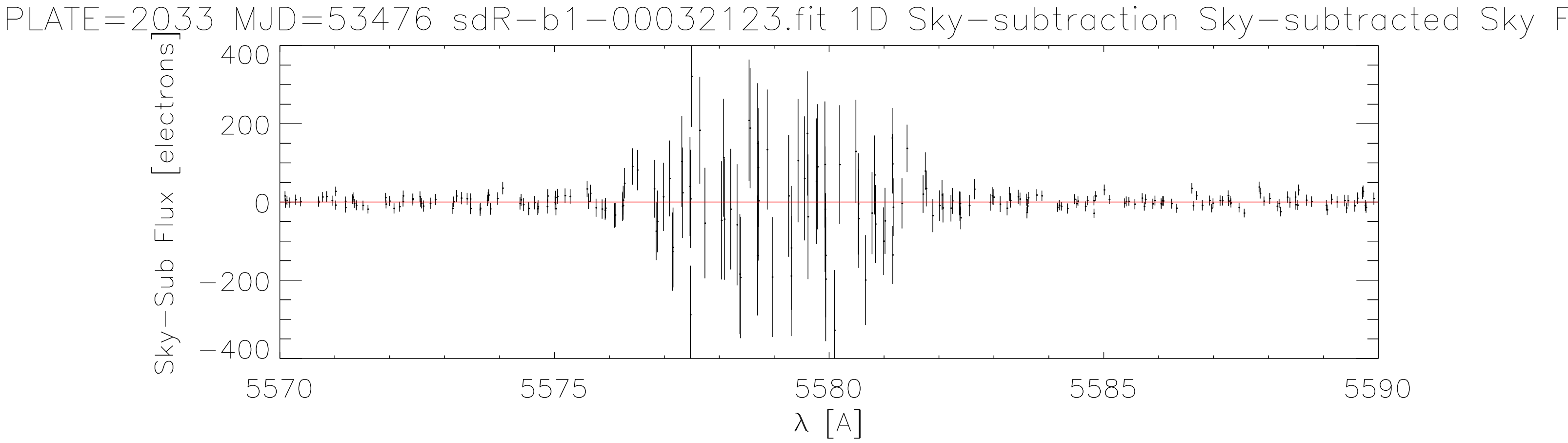

4046.5600
nfib1 16
nfib2 16
stdev 0.069
extrd 0.29
4358.3300
nfib1 16
nfib2 16
stdev 0.040
extrd 0.22
5460.9400
nfib1 16
nfib2 16
stdev 0.034
extrd 0.31
5577.3390
nfib1 16
nfib2 16
stdev 0.016
extrd 0.39
5889.9500
nfib1 16
nfib2 16
stdev 0.026
extrd 0.43
5895.9240
nfib1 15
nfib2 15
stdev 0.019
extrd 0.44
meas – pred, pix
1.5
1.0
0.5
0.0
–0.5
–1.0
0
100
200
300
400

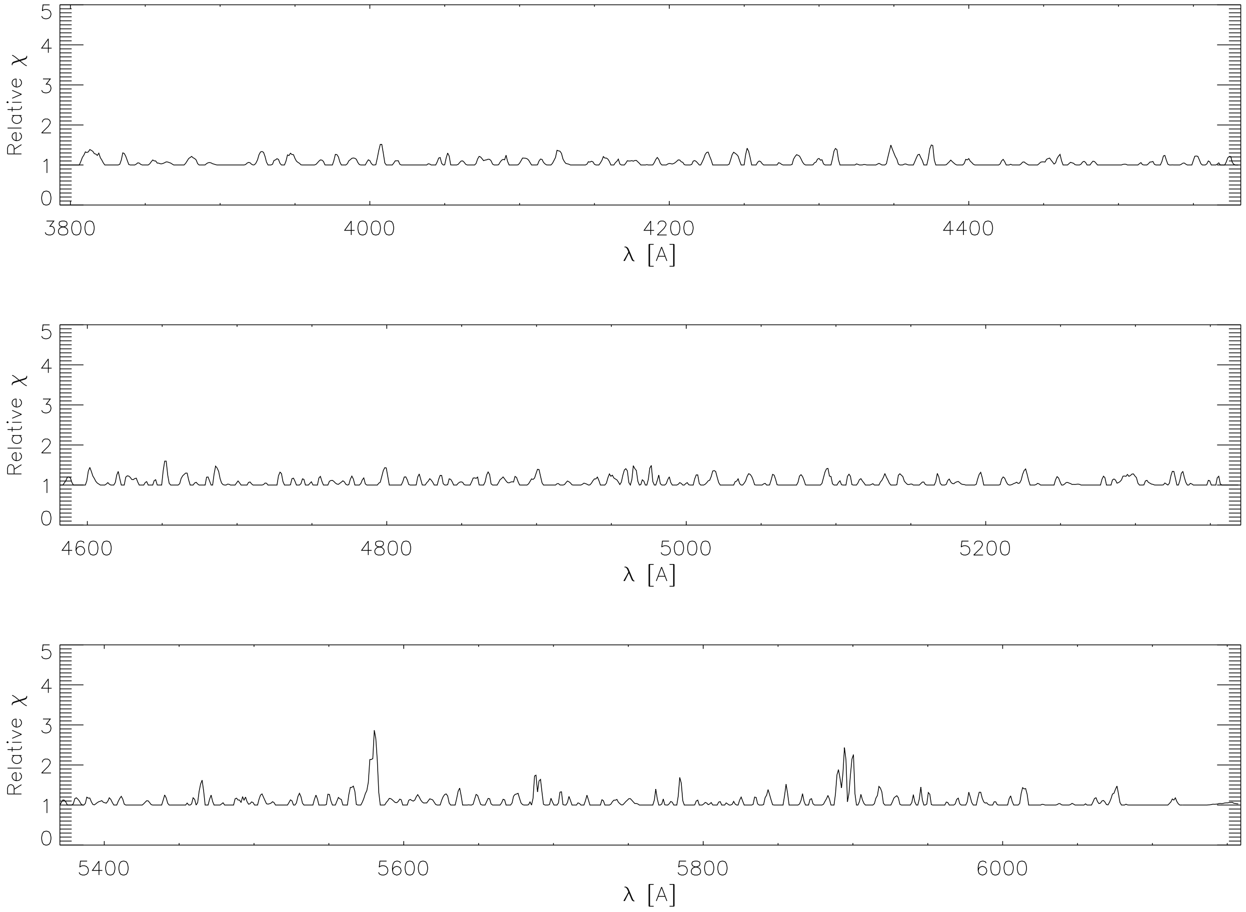

sky shift, pixels
0.15
0.20
0.25
0.30
0.35
0.40
3500
4000
4500
5000
5500
6000
6500


PLATE=2033 MJD=53476 Smooth superflat for sdR-b1-00032123.fit
1.5
1.0
0.5
0.0
1.015
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

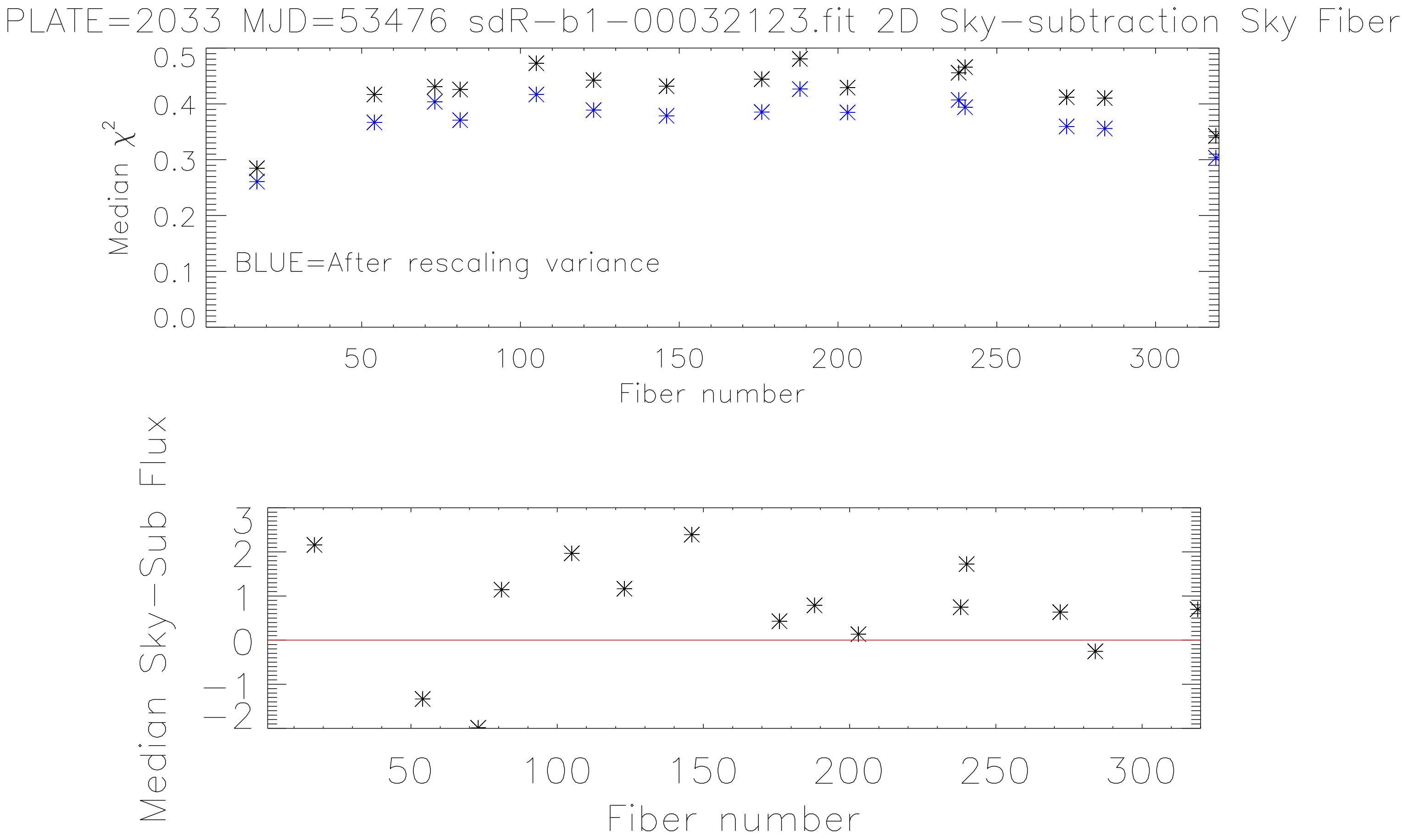

PLATE=2033 MJD=53476 sdR-b1-00032123.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

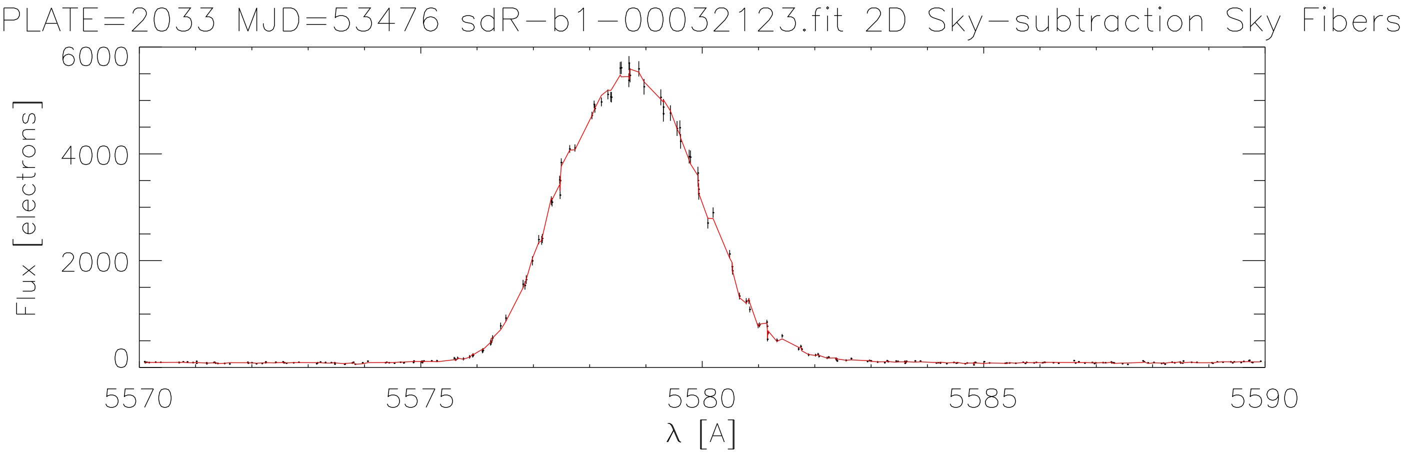

PLATE=2033 MJD=53476 sdR-b1-00032123.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

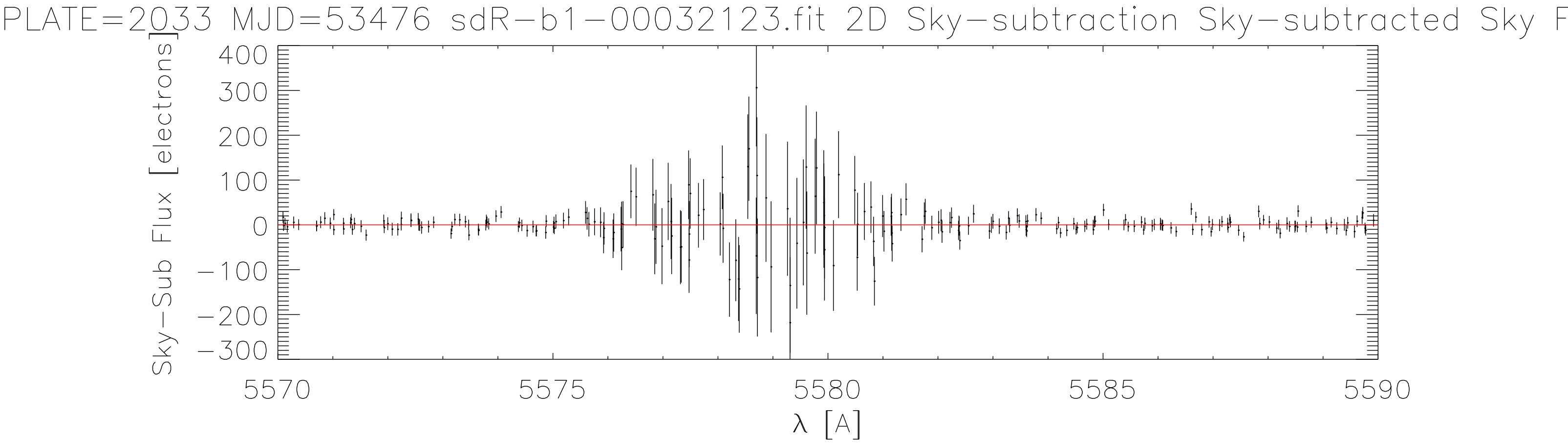

PLATE=2033 MJD=53476 sdR-b1-00032123.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]


Number of sky fibers = 15

PLATE=2033 MJD=53476 sdR-b1-00032123.fit 1D Sky-subtraction Rescaled Errors

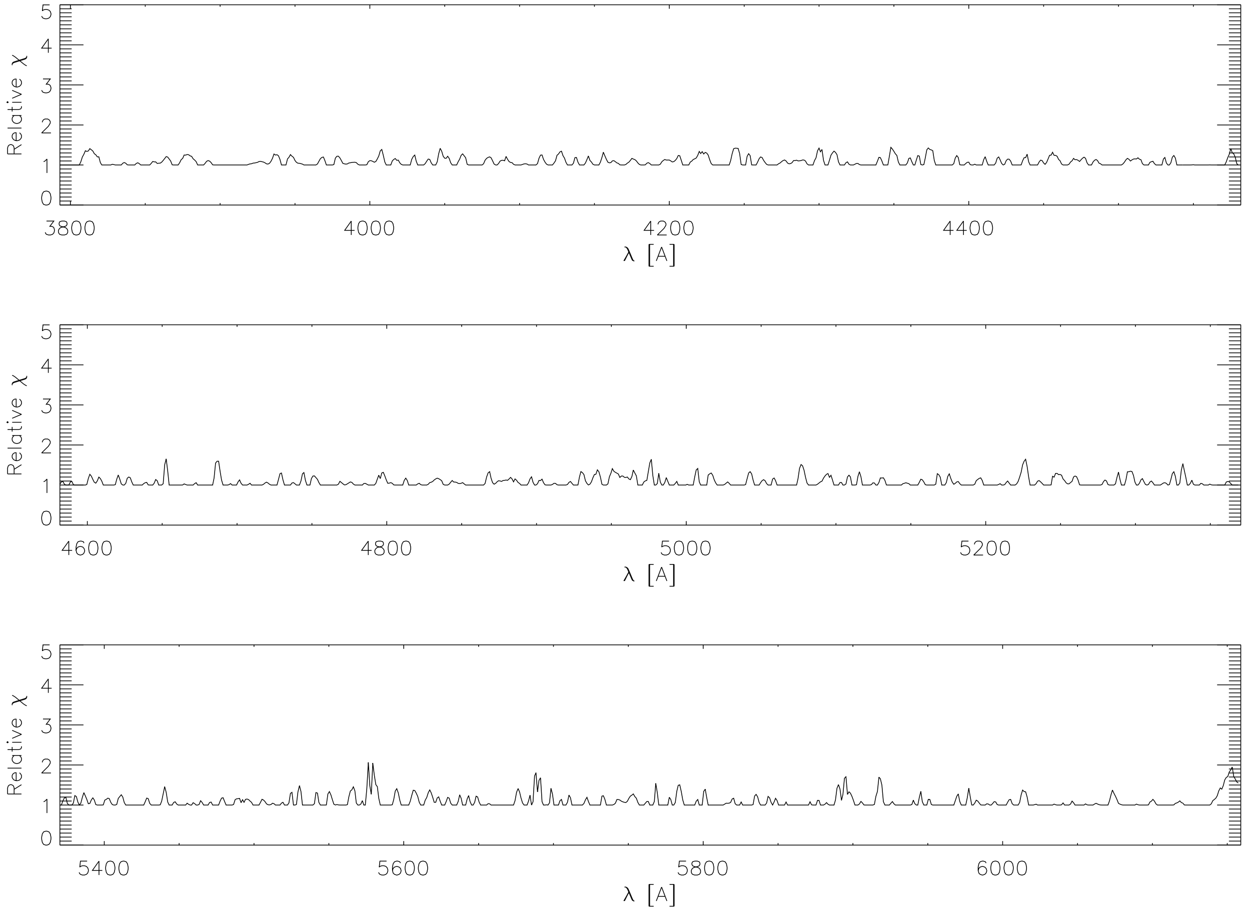

PLATE=2033 MJD=53476 sdR-b1-00032123.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

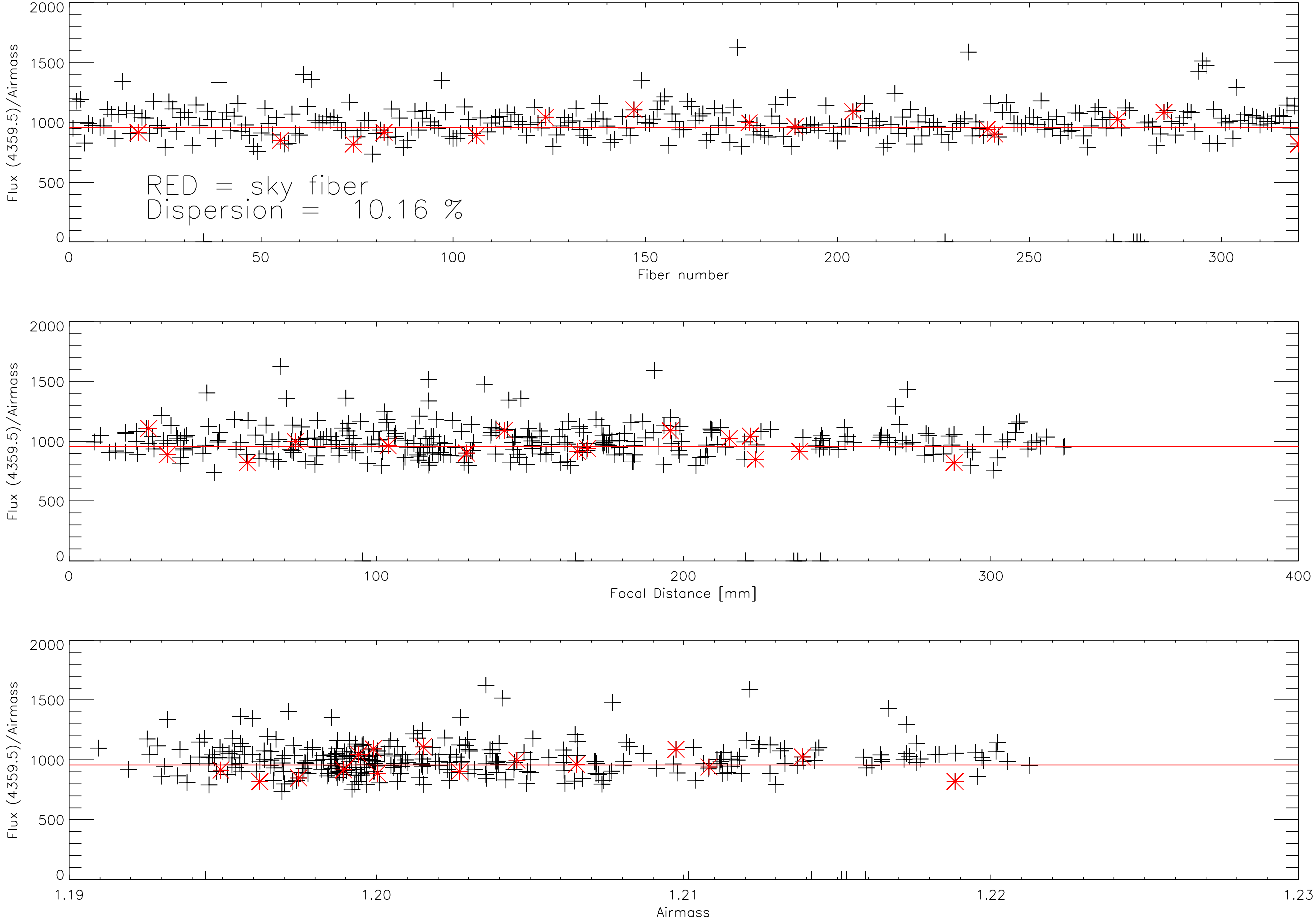

PLATE=2033 MJD=53476 sdR-b1-00032123.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2033 MJD=53476 sdR-b1-00032123.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
400
300
200
100
0
−100
−200
−300
5570
5575
5580
5585
5590
λ [A]

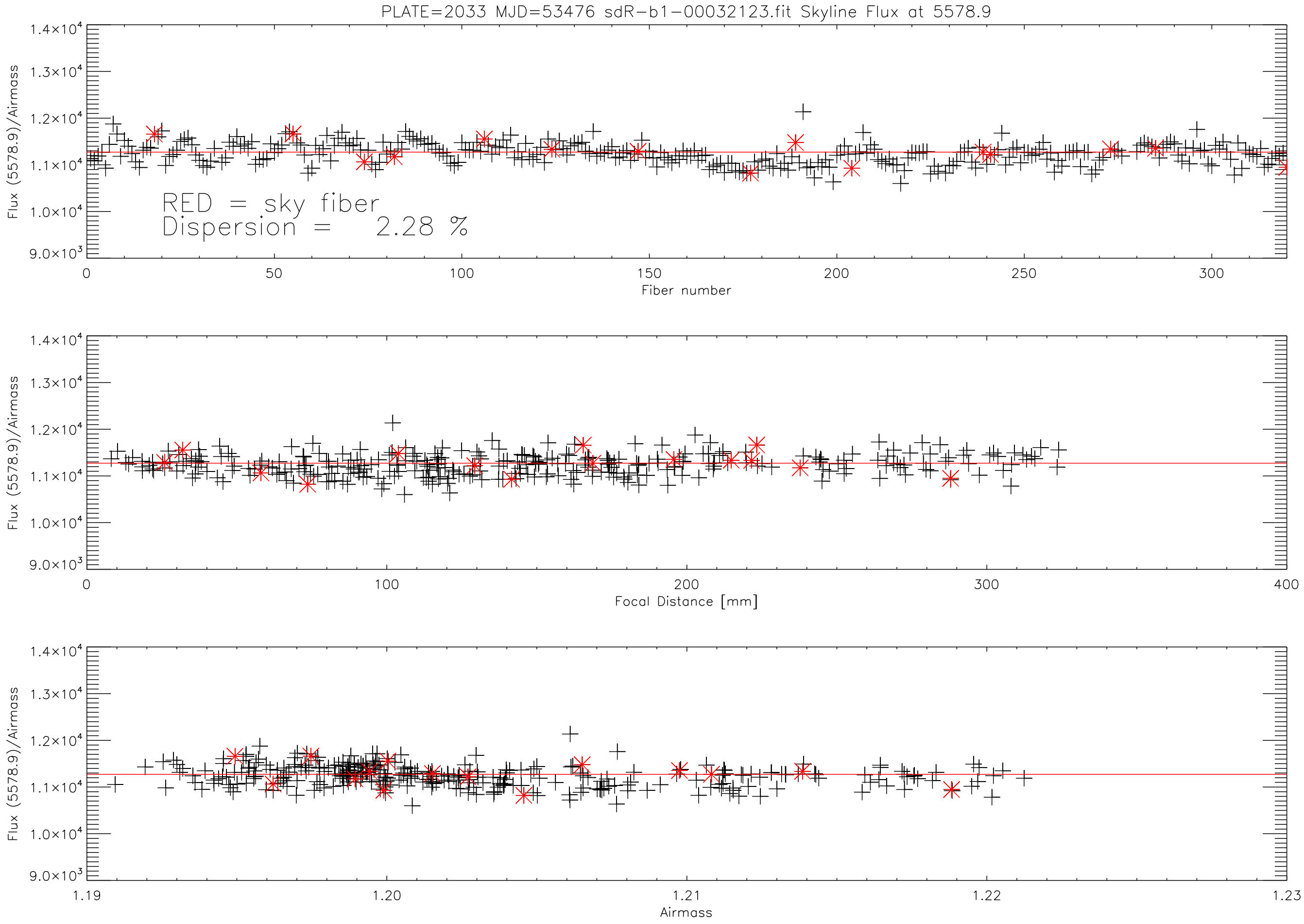
Number of sky fibers = 15

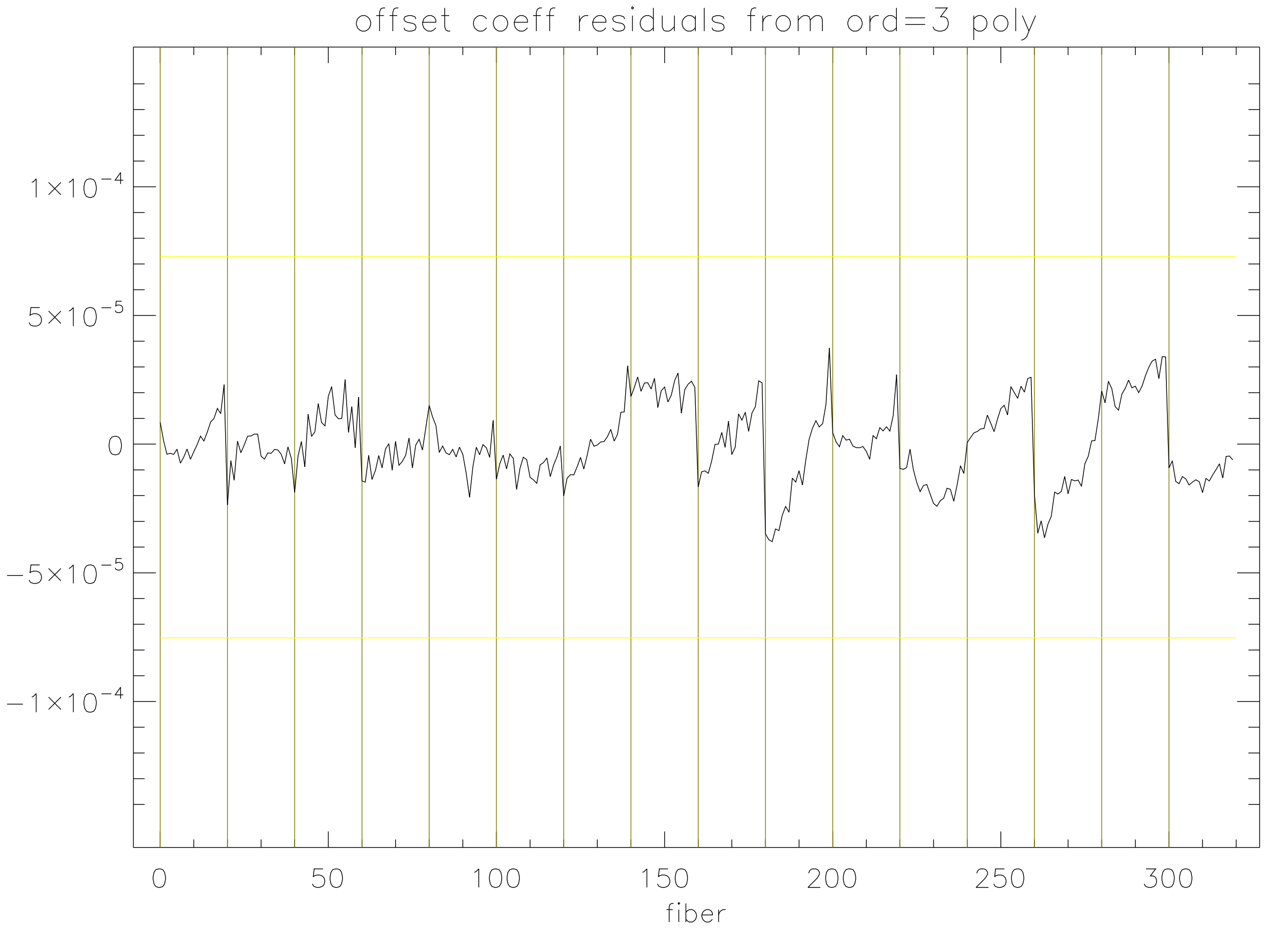
PLATE=2033 MJD=53476 sdR-b1-00032123.fit 2D Sky-subtraction Rescaled Errors

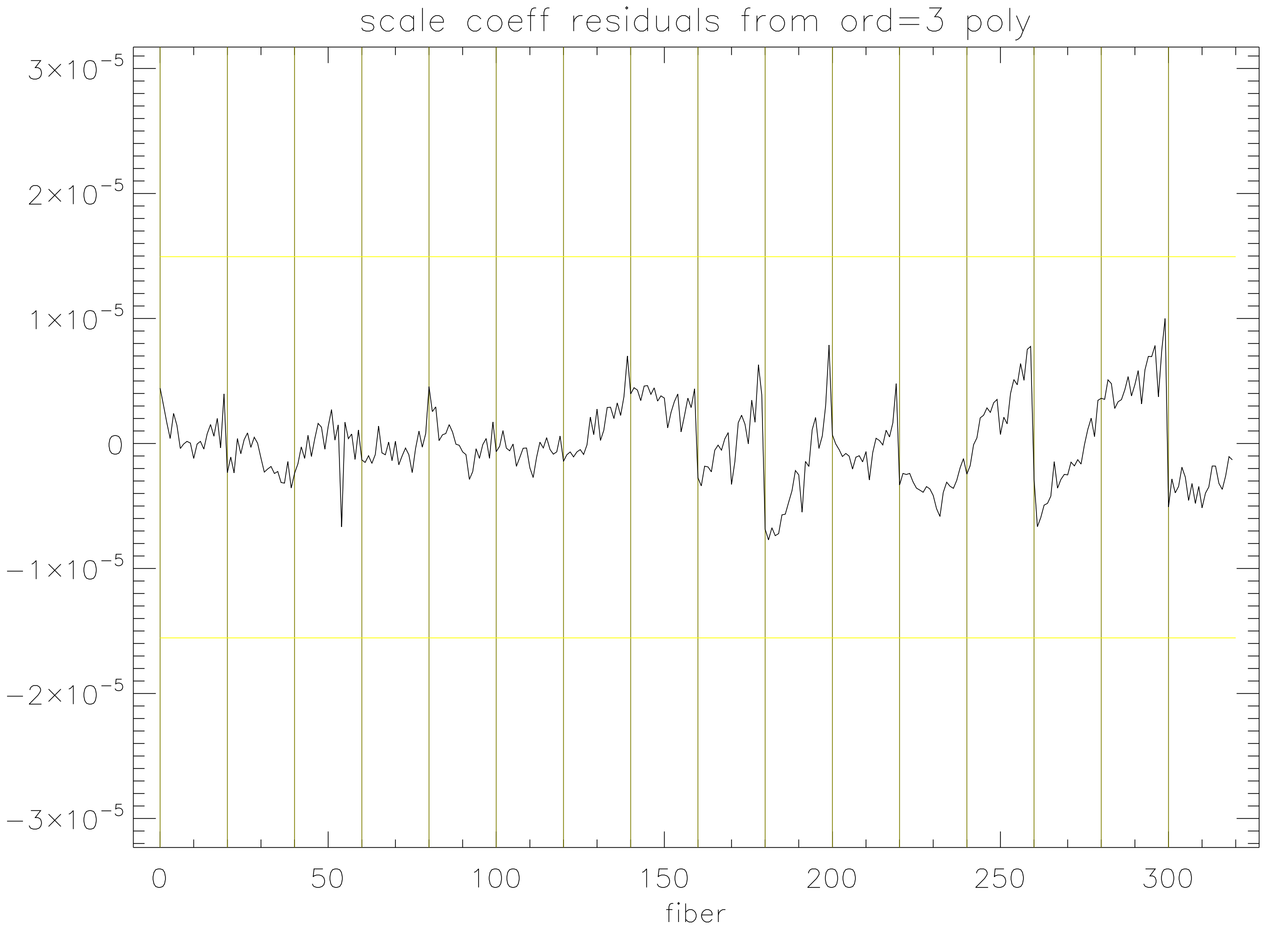


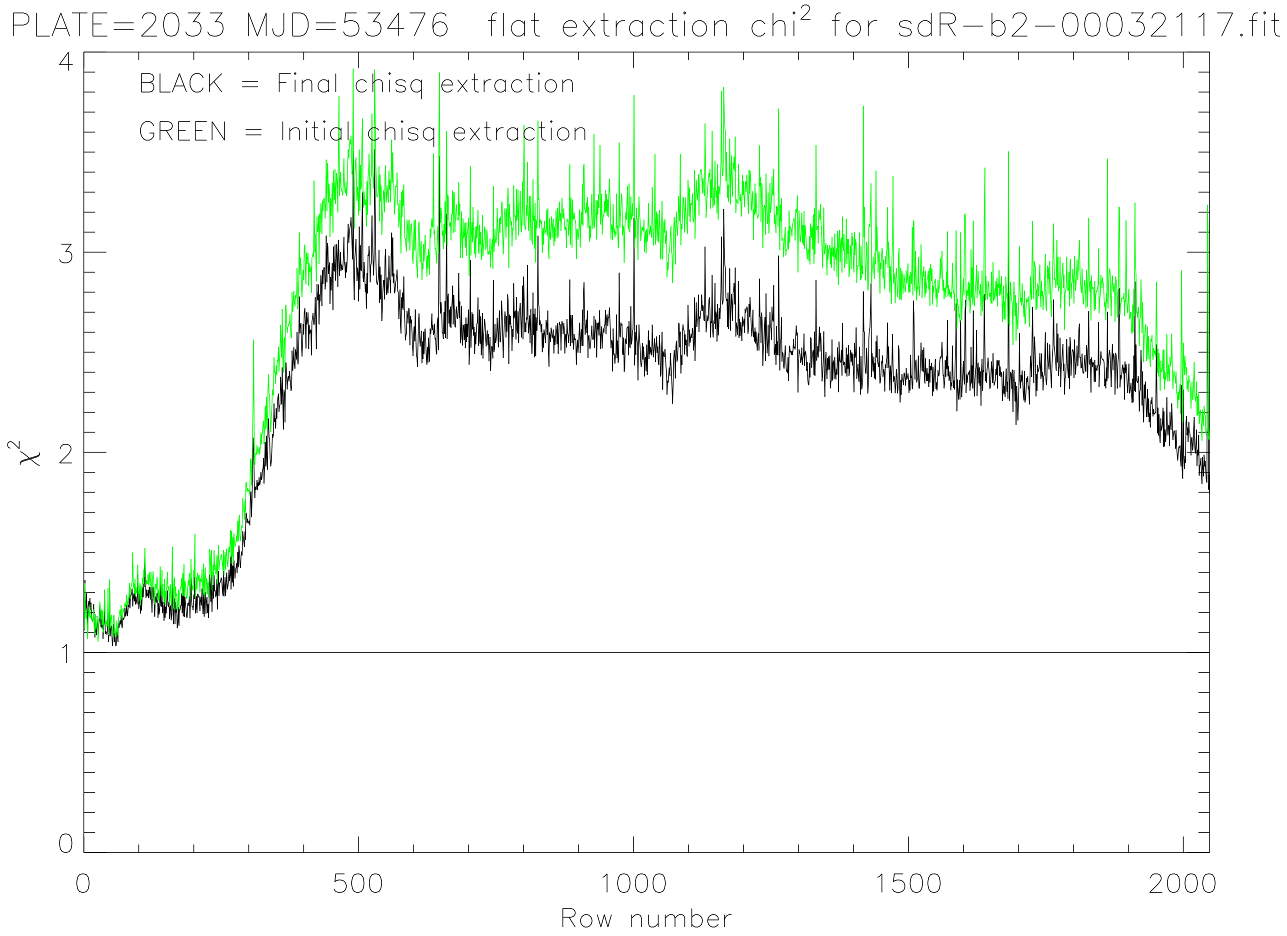


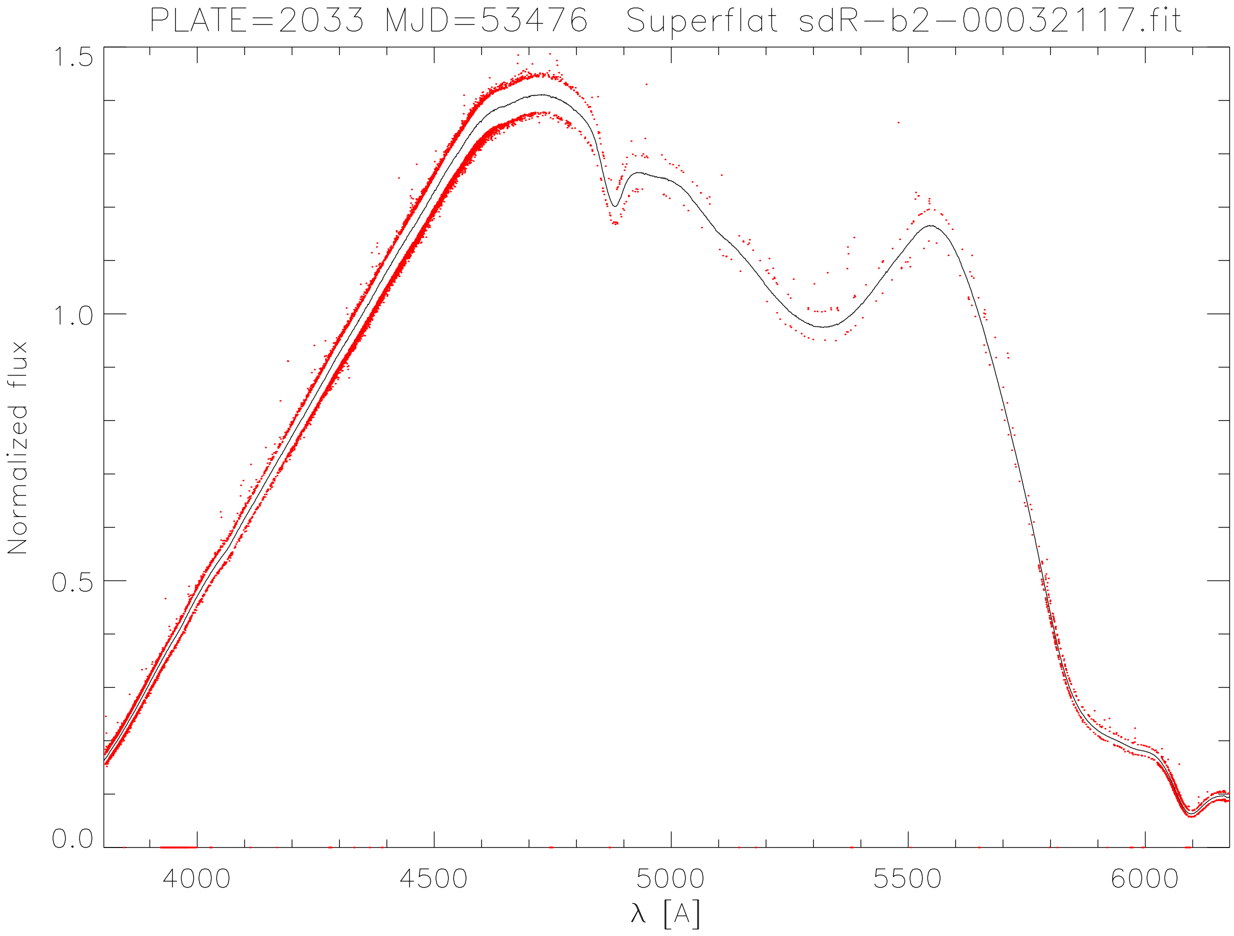
PLATE=2033 MJD=53476 sdR-b1-00032123.fit Skyline Flux at 4359.5

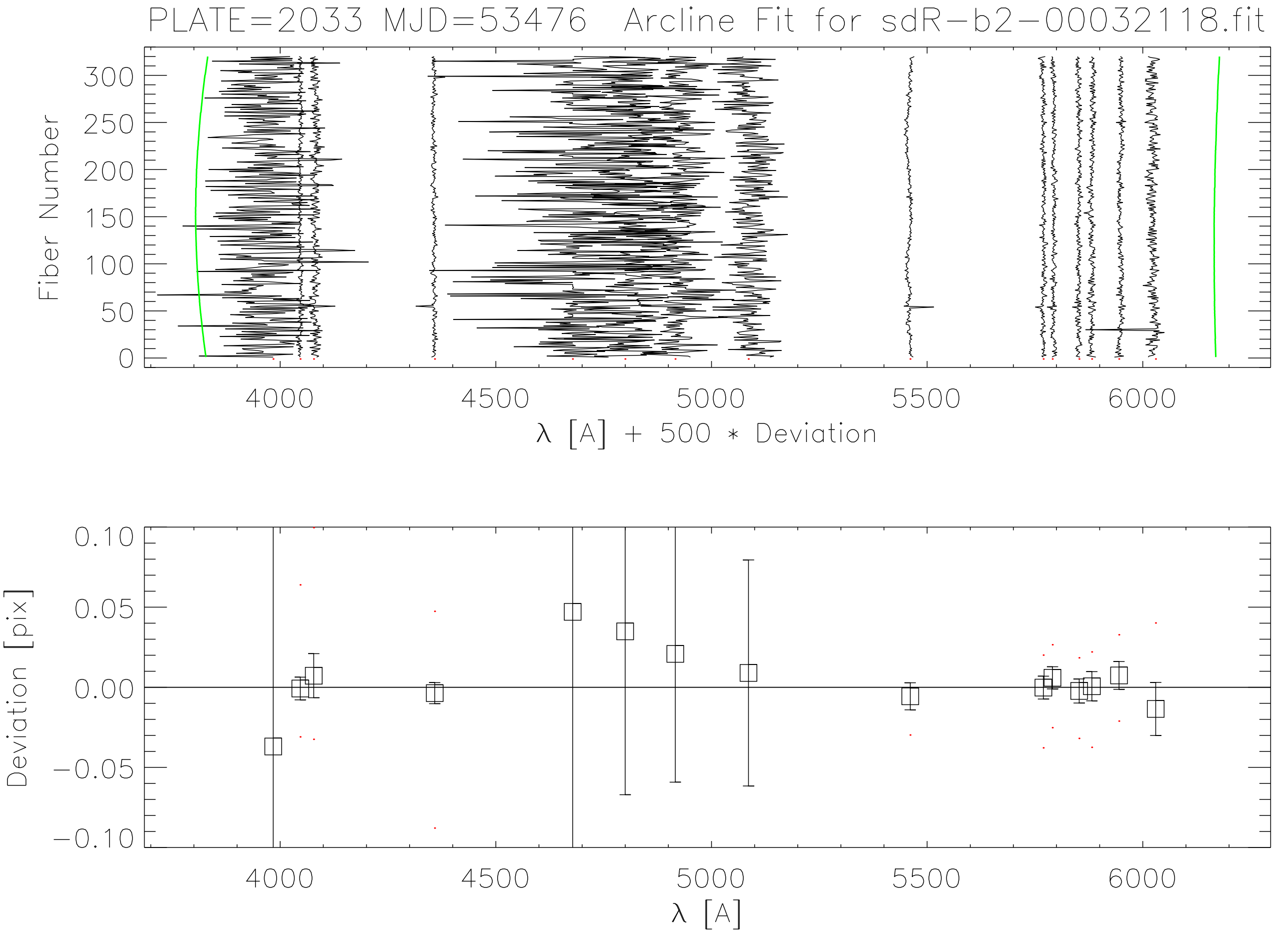

PLATE=2033 MJD=53476 sdR-b1-00032123.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.1×10⁴
1.0×10⁴
9.0×10³
RED = sky fiber
Dispersion = 2.28 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.19
1.20
1.21
1.22
1.23
Airmass


offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber


scale coeff residuals from ord=3 poly
3×10⁻⁵
2×10⁻⁵
1×10⁻⁵
0
−1×10⁻⁵
−2×10⁻⁵
−3×10⁻⁵
0
50
100
150
200
250
300
fiber


PLATE=2033 MJD=53476 flat extraction chi^2 for sdR-b2-00032117.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number


PLATE=2033 MJD=53476 Superflat sdR-b2-00032117.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]



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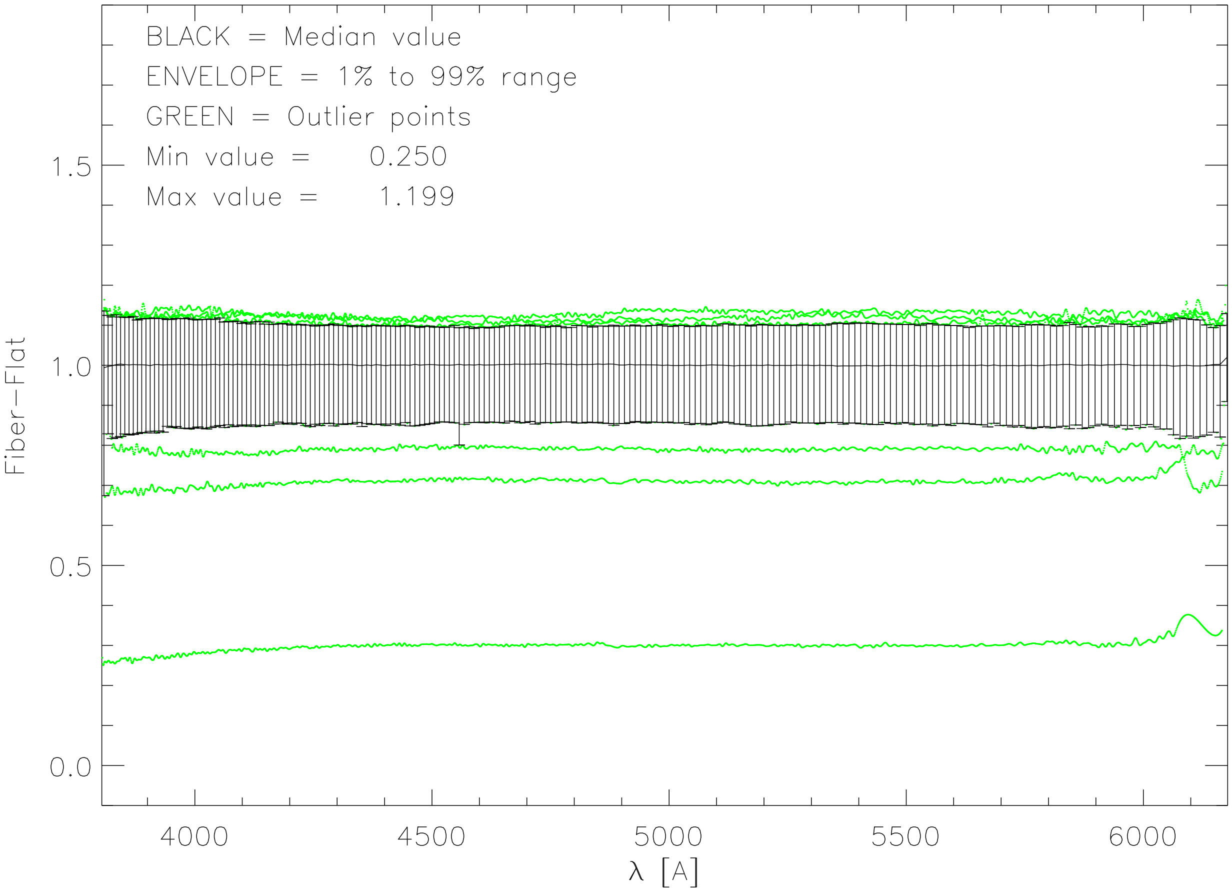
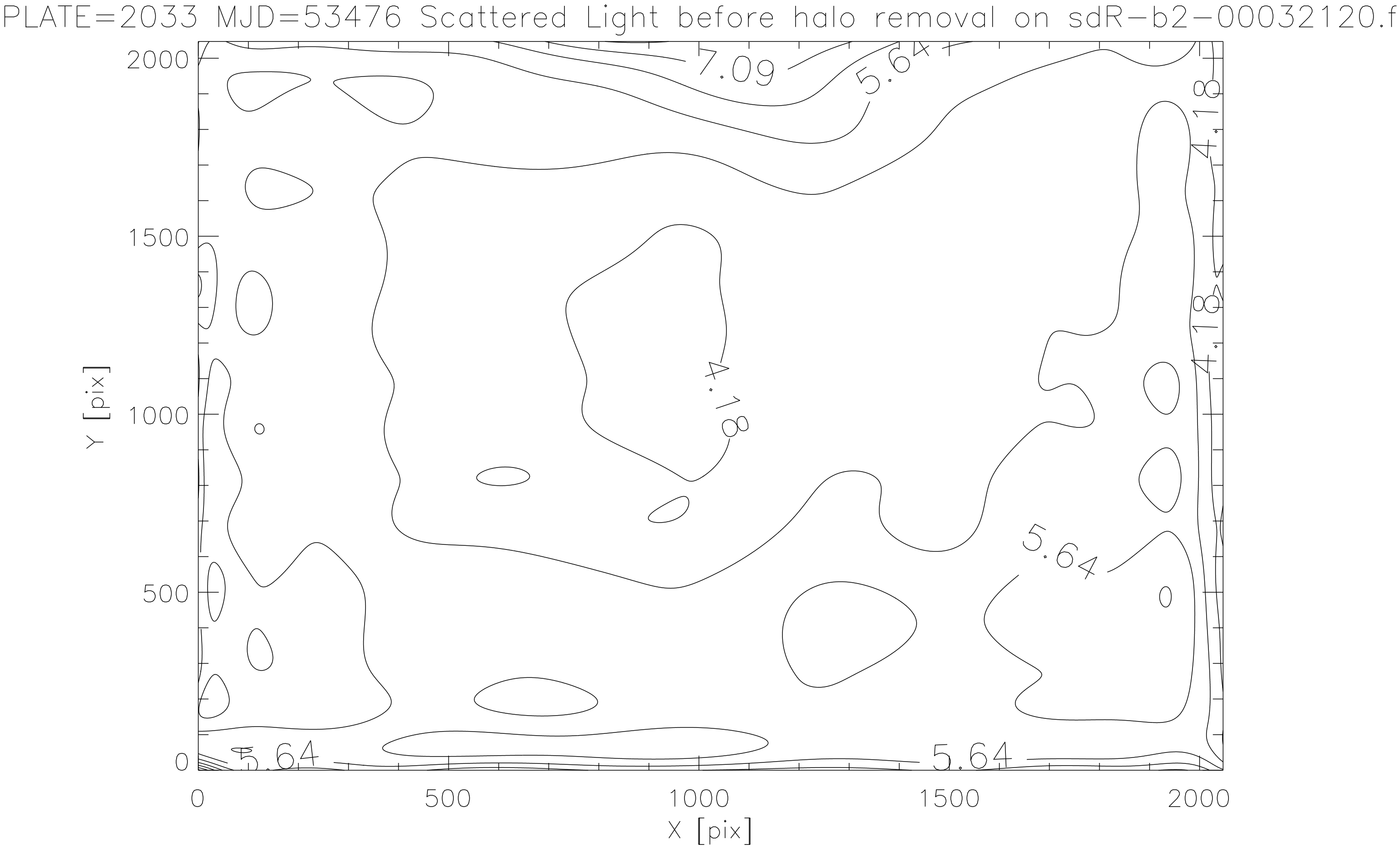
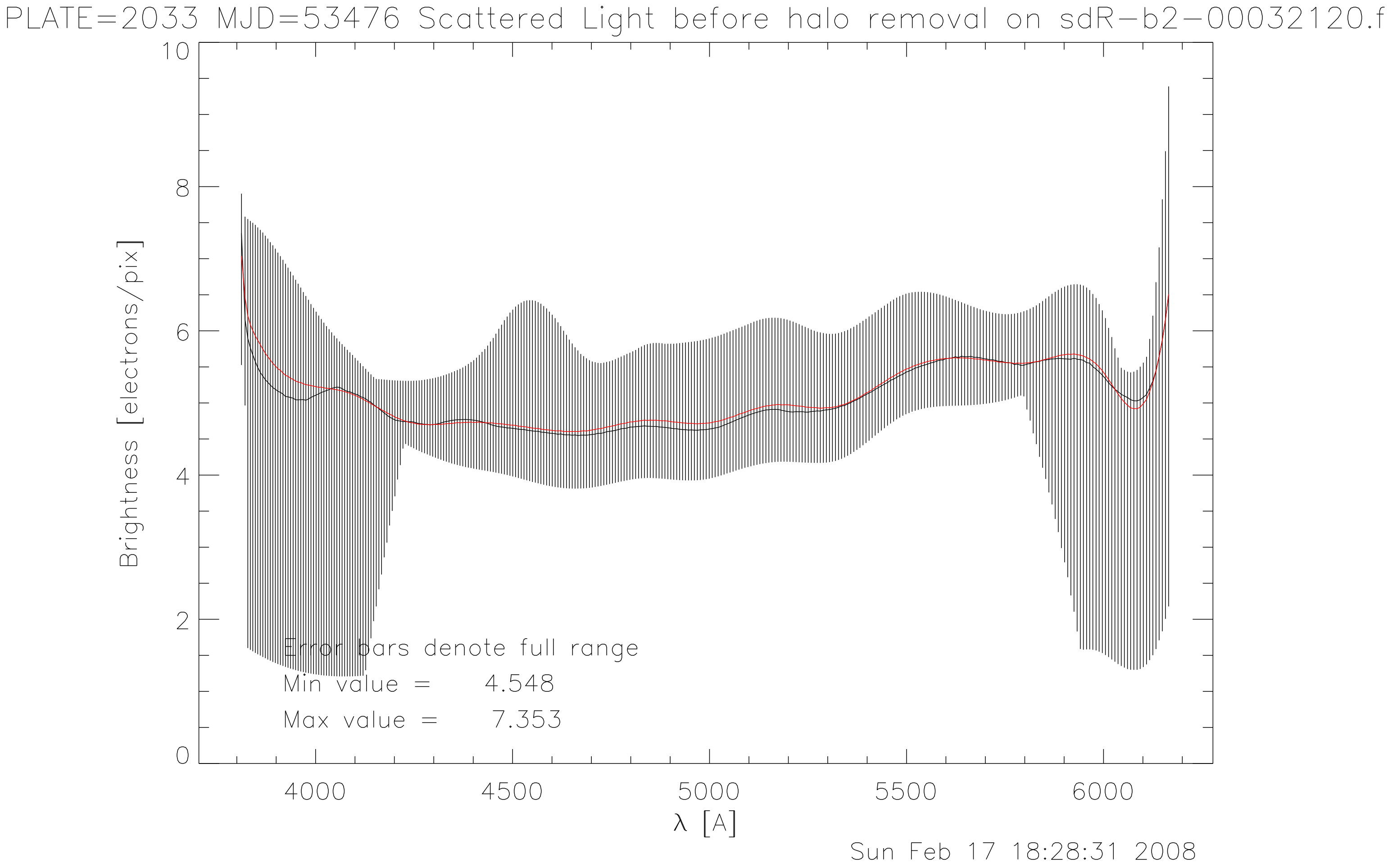
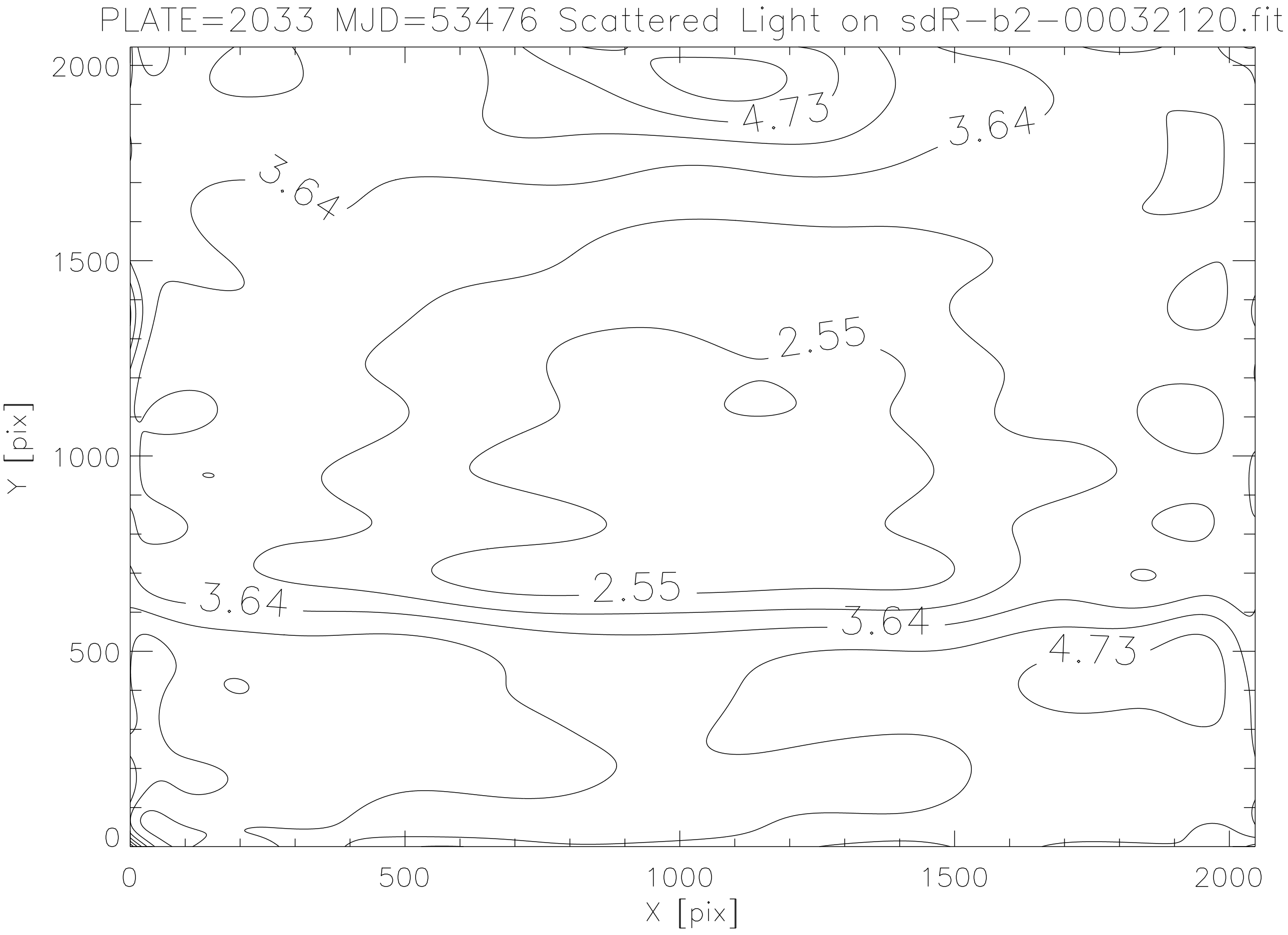
PLATE=2033 MJD=53476 Fiber−Flats for sdR−b2−00032117.fit

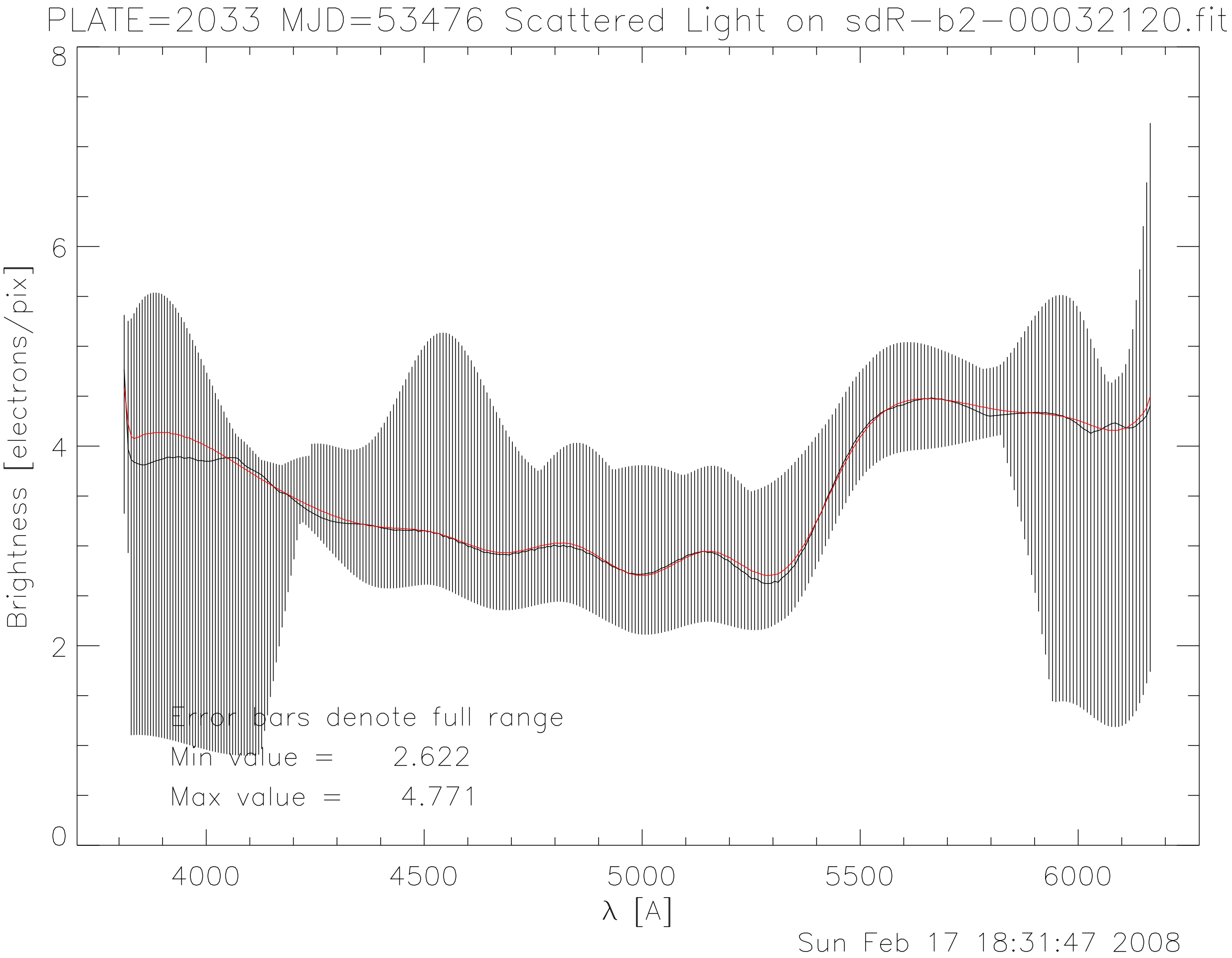


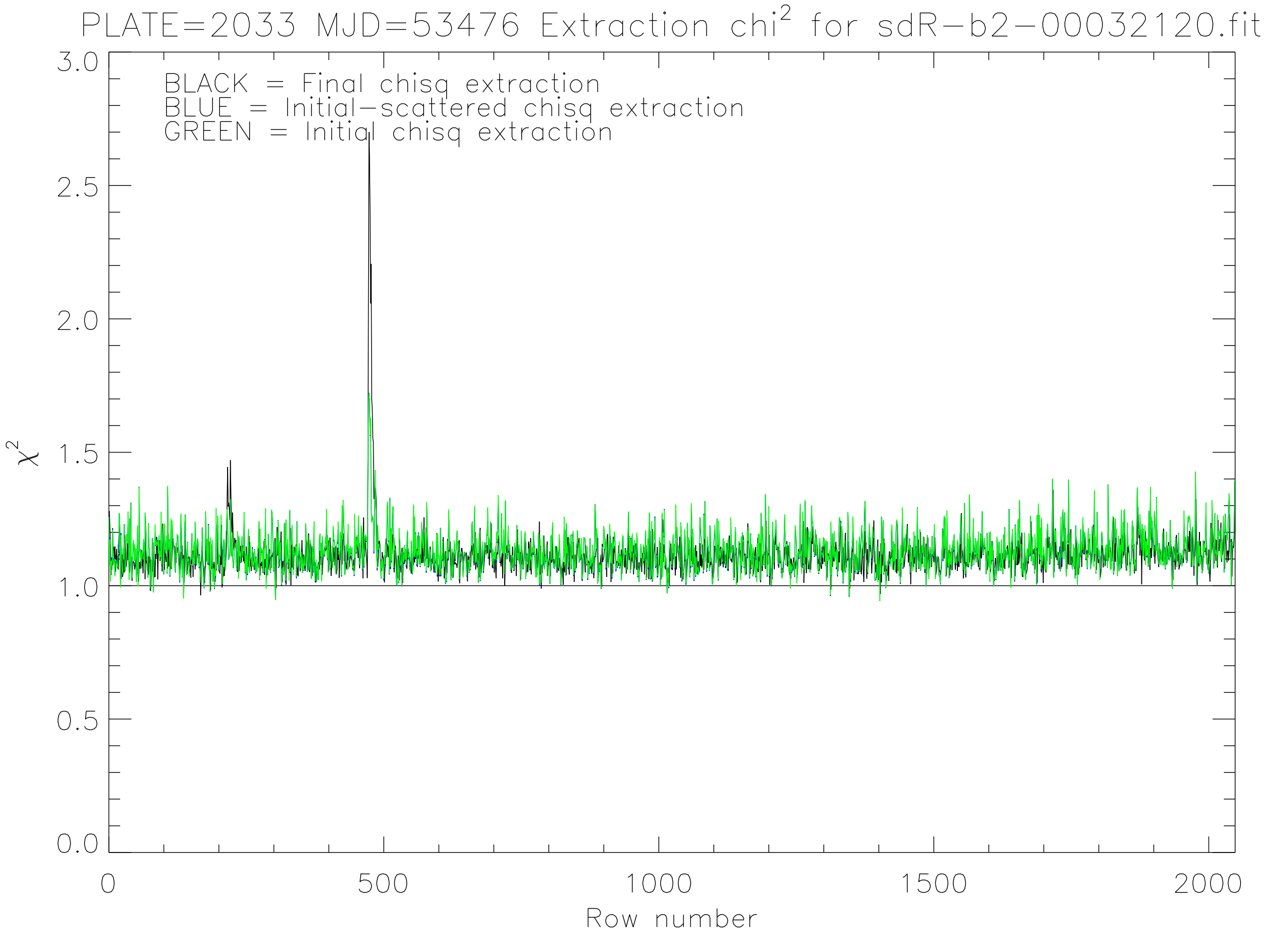
Sun Feb 17 18:27:39 2008

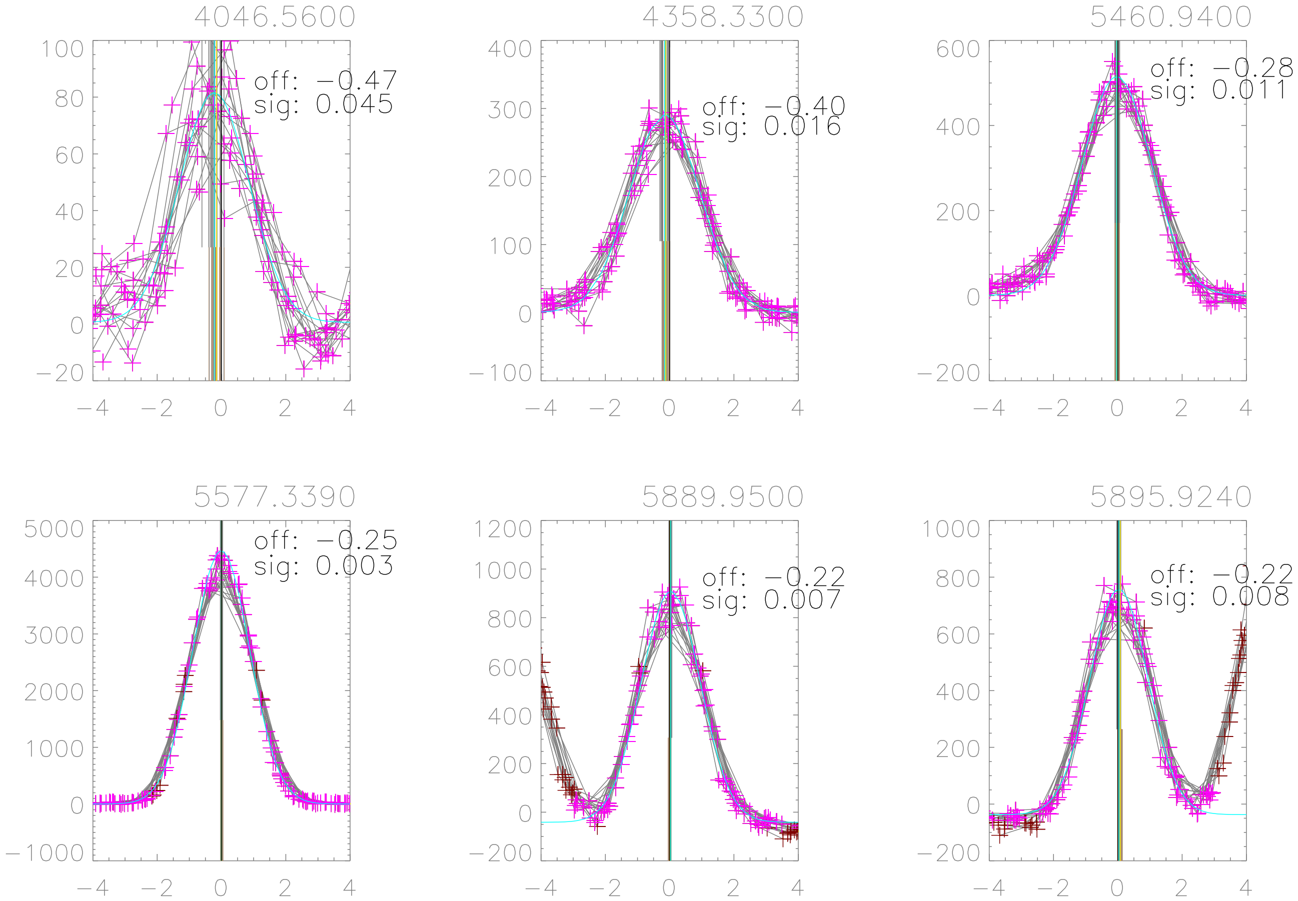

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b2-00032120.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
7.09
5.64
4.18
4.18
4.18
4.18
5.64
5.64
5.64
0

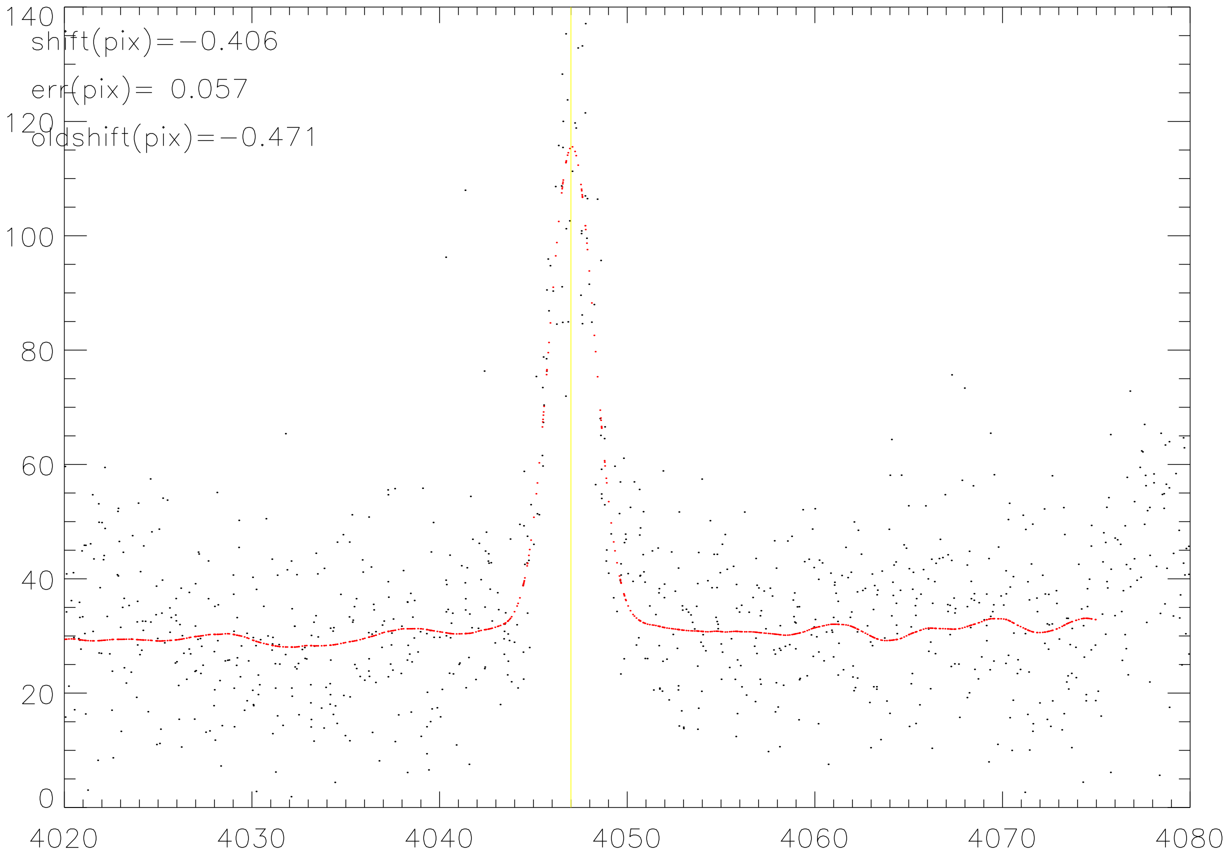

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b2-00032120.f
Brightness [electrons/pix]
0
2
4
6
8
10
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.548
Max value = 7.353
Sun Feb 17 18:28:31 2008

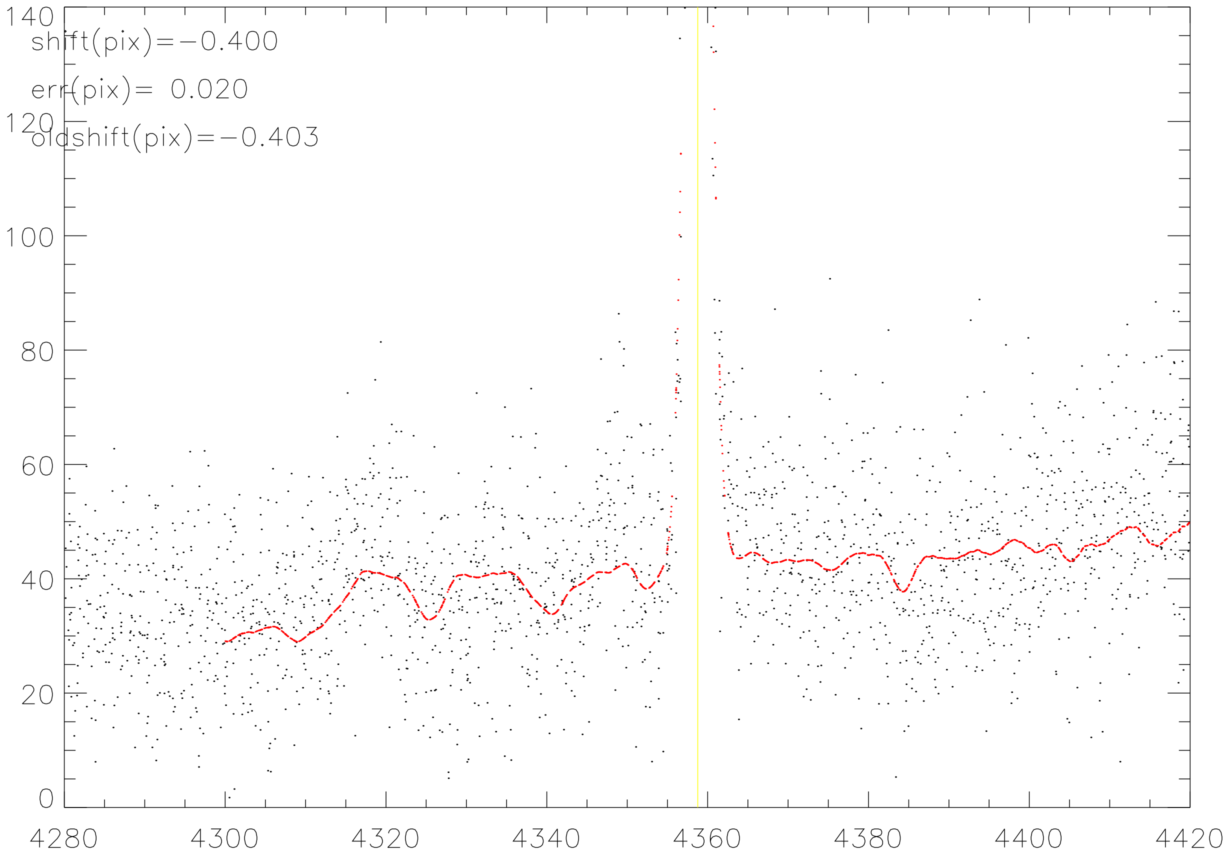

PLATE=2033 MJD=53476 Scattered Light on sdR-b2-00032120.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
4.73
3.64
3.64
2.55
2.55
3.64
3.64
4.73

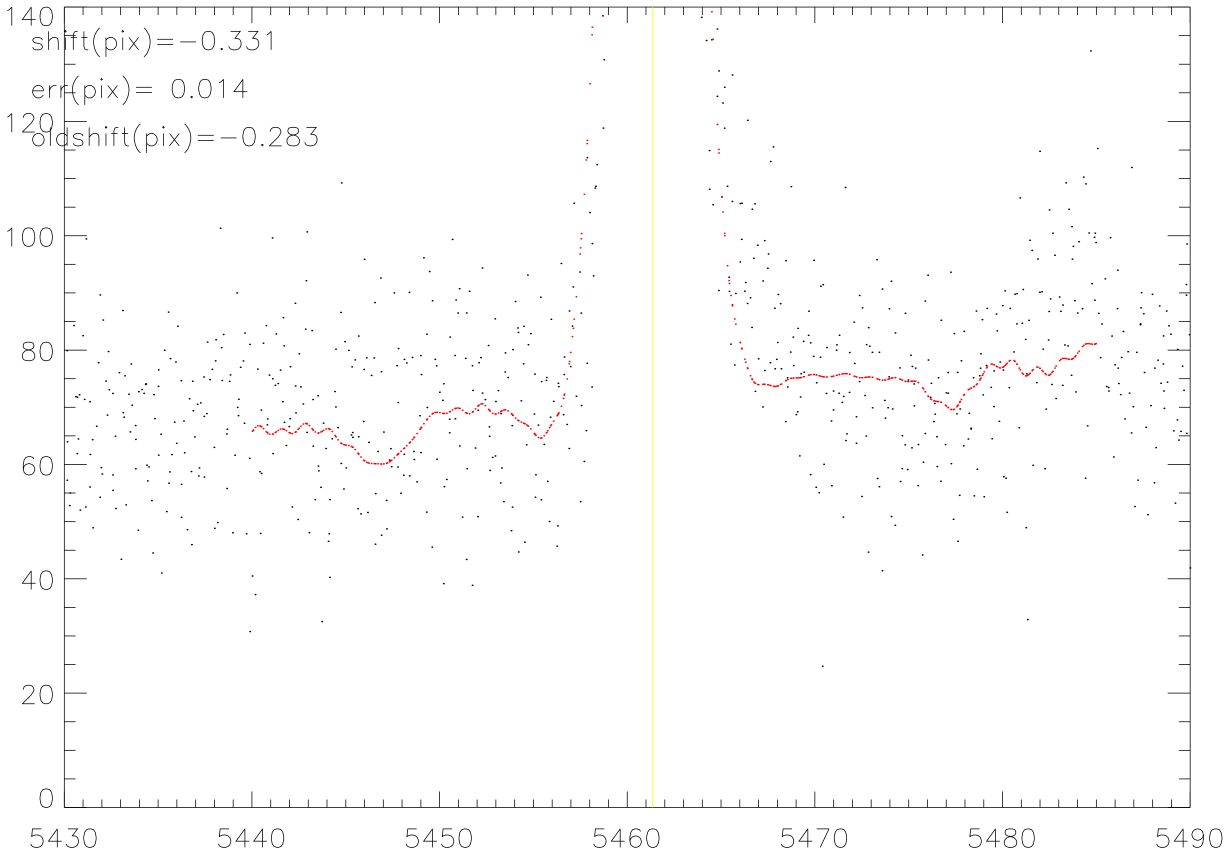

PLATE=2033 MJD=53476 Scattered Light on sdR-b2-00032120.fit
Brightness [electrons/pix]
λ [A]
0
2
4
6
8
4000
4500
5000
5500
6000
Error bars denote full range
Min value = 2.622
Max value = 4.771
Sun Feb 17 18:31:47 2008

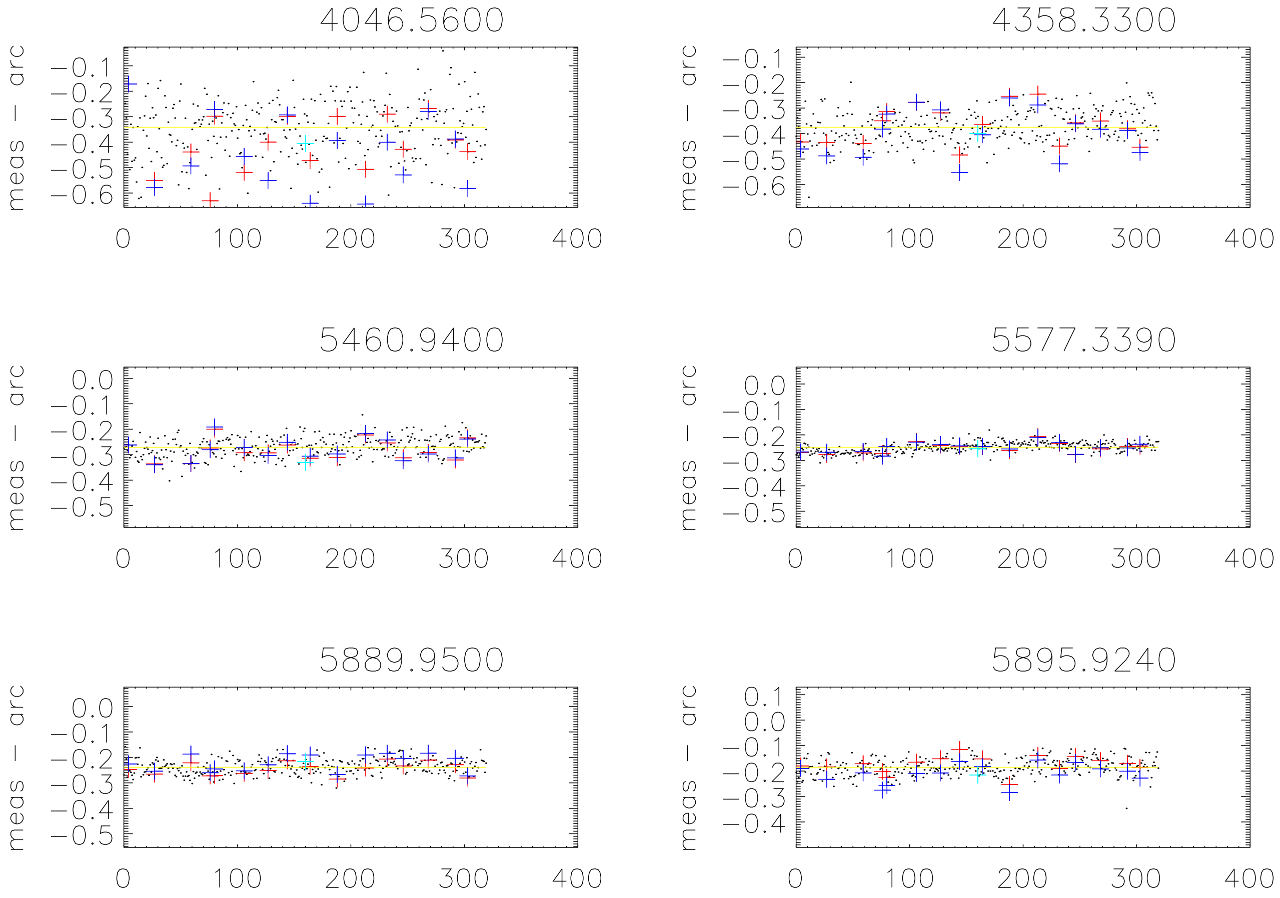

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-b2-00032120.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

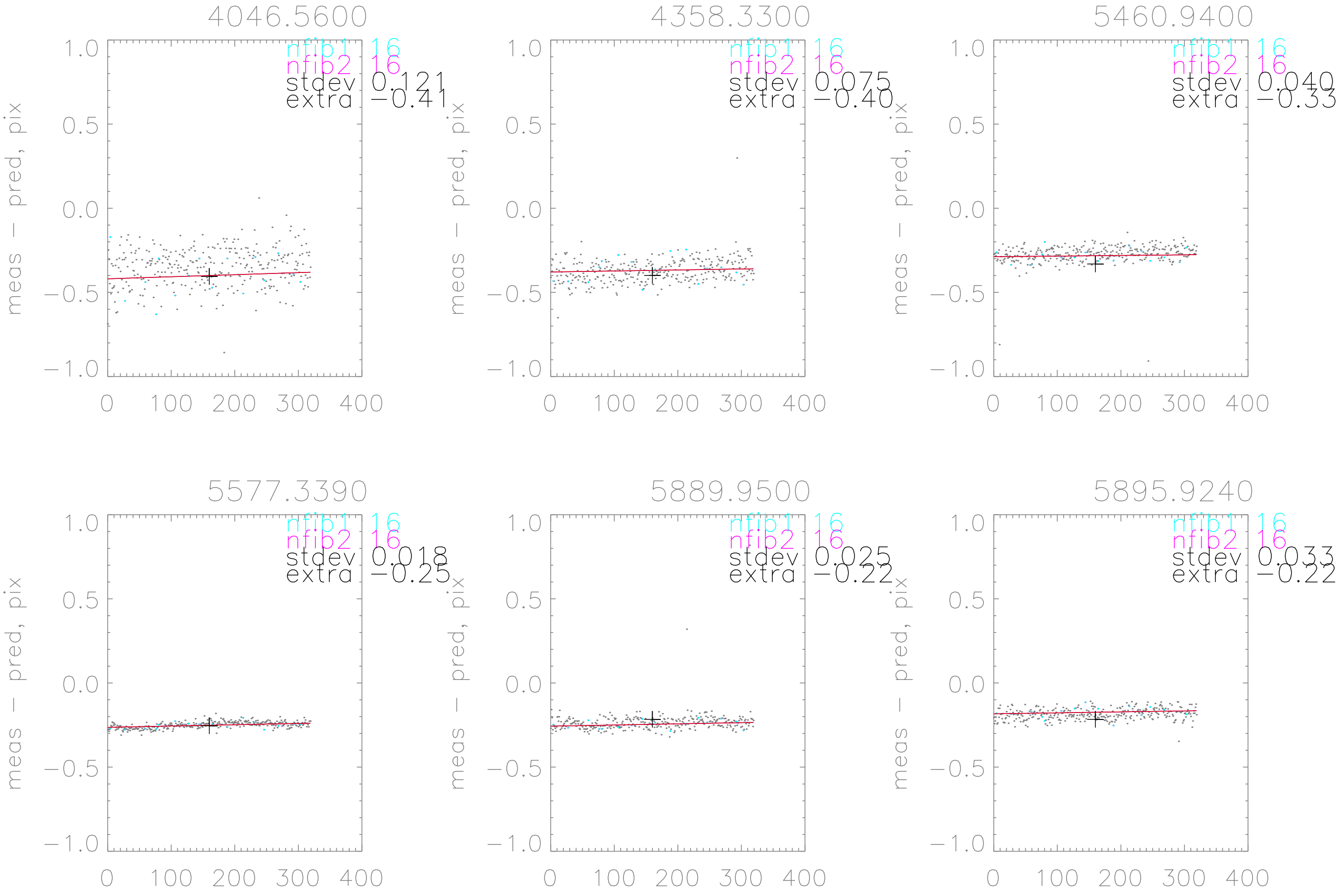

4046.5600
off: −0.47
sig: 0.045
100
80
60
40
20
0
−20
−4
−2
0
2
4
4358.3300
off: −0.40
sig: 0.016
400
300
200
100
0
−100
5460.9400
off: −0.28
sig: 0.011
600
400
200
0
−200
5577.3390
off: −0.25
sig: 0.003
5000
4000
3000
2000
1000
0
−1000
5889.9500
off: −0.22
sig: 0.007
1200
1000
800
600
400
200
0
−200
5895.9240
off: −0.22
sig: 0.008
1000
800
600
400
200
0
−200

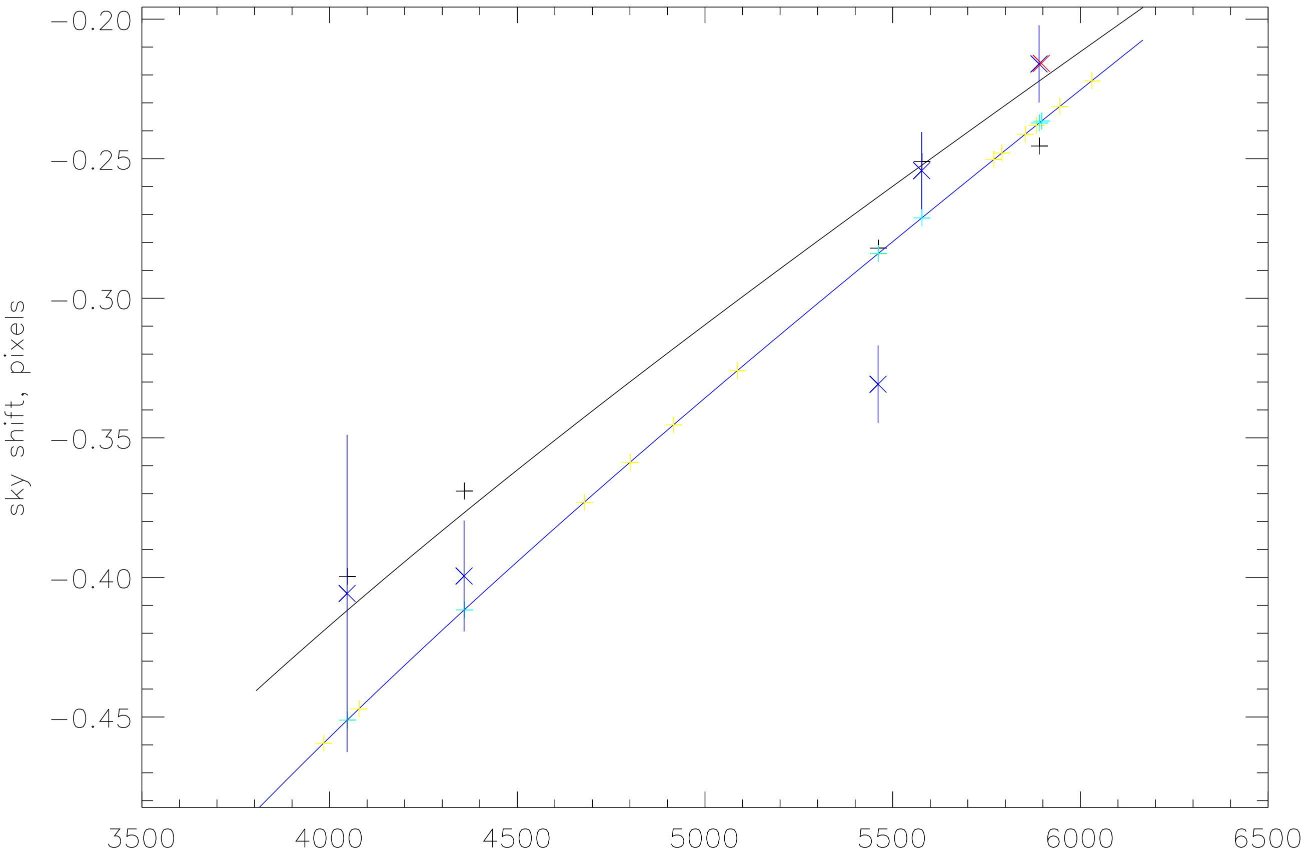

shift(pix)=−0.406
err(pix)= 0.057
oldshift(pix)=−0.471
140
120
100
80
60
40
20
0
4020
4030
4040
4050
4060
4070
4080


shift(pix)=−0.400
err(pix)= 0.020
oldshift(pix)=−0.403
140
120
100
80
60
40
20
0
4280
4300
4320
4340
4360
4380
4400
4420

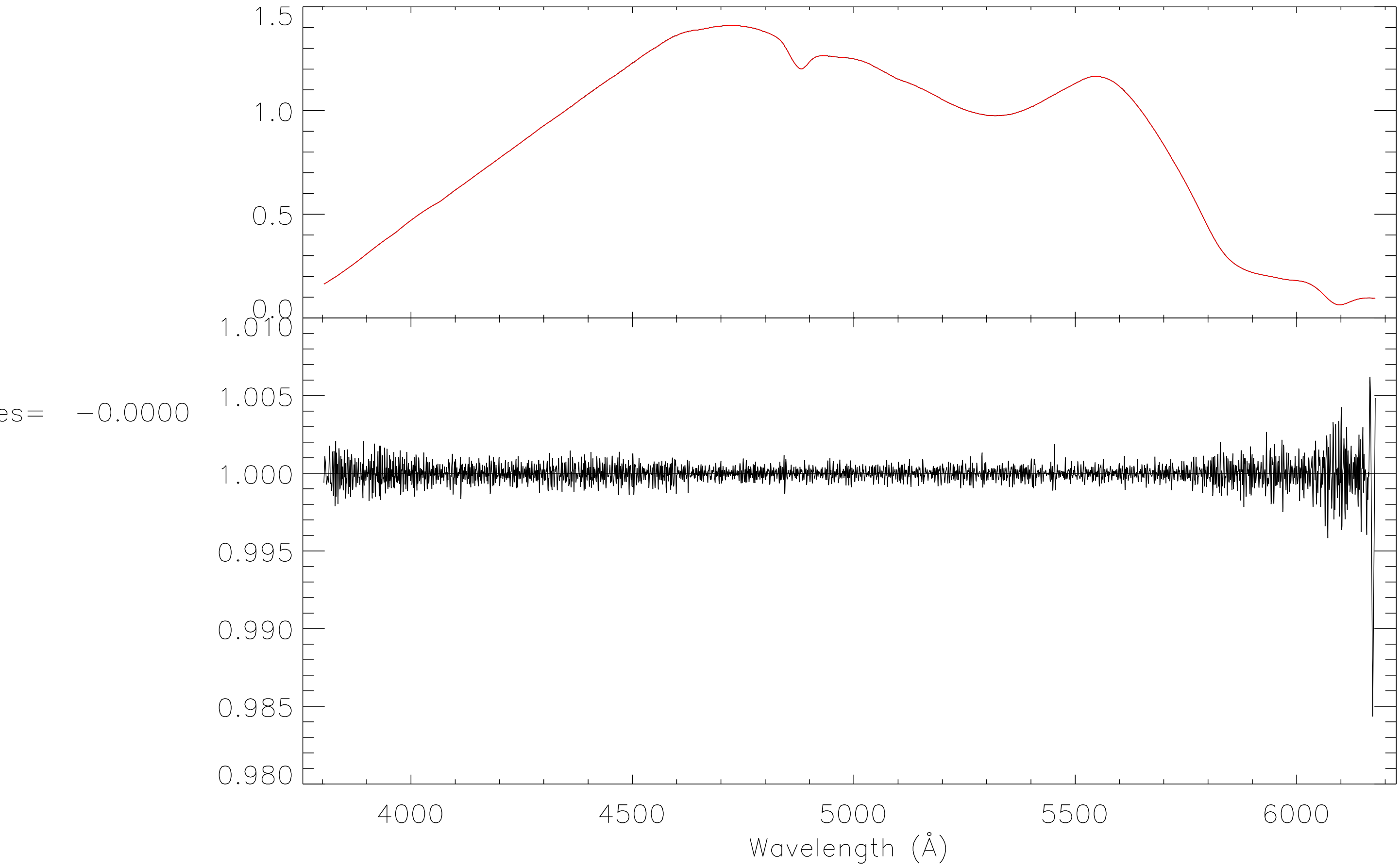

shift(pix)=−0.331
err(pix)= 0.014
oldshift(pix)=−0.283
140
120
100
80
60
40
20
0
5430
5440
5450
5460
5470
5480
5490

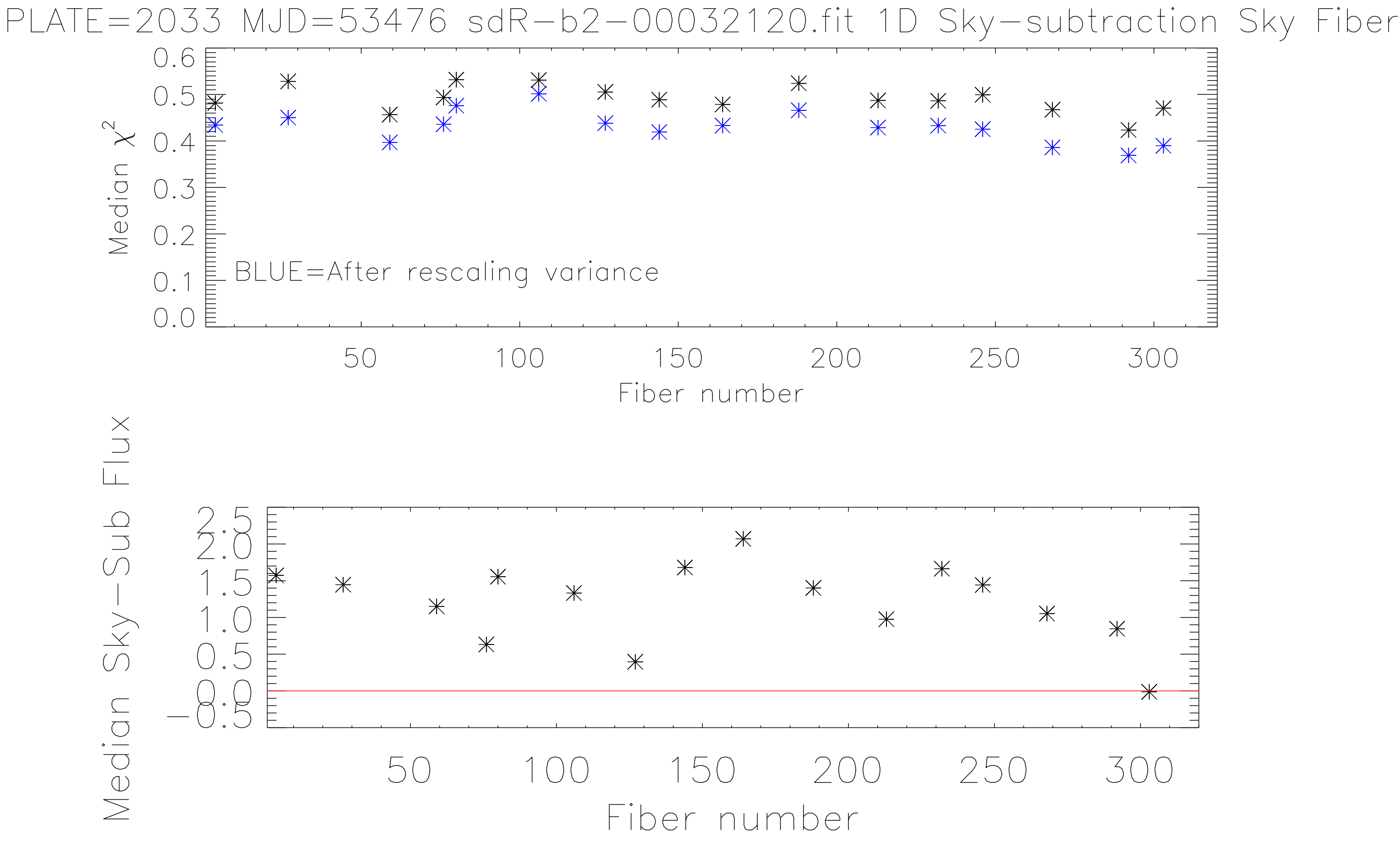

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
−0.1
−0.2
−0.3
−0.4
−0.5
−0.6
0.1
0.0
0
100
200
300
400

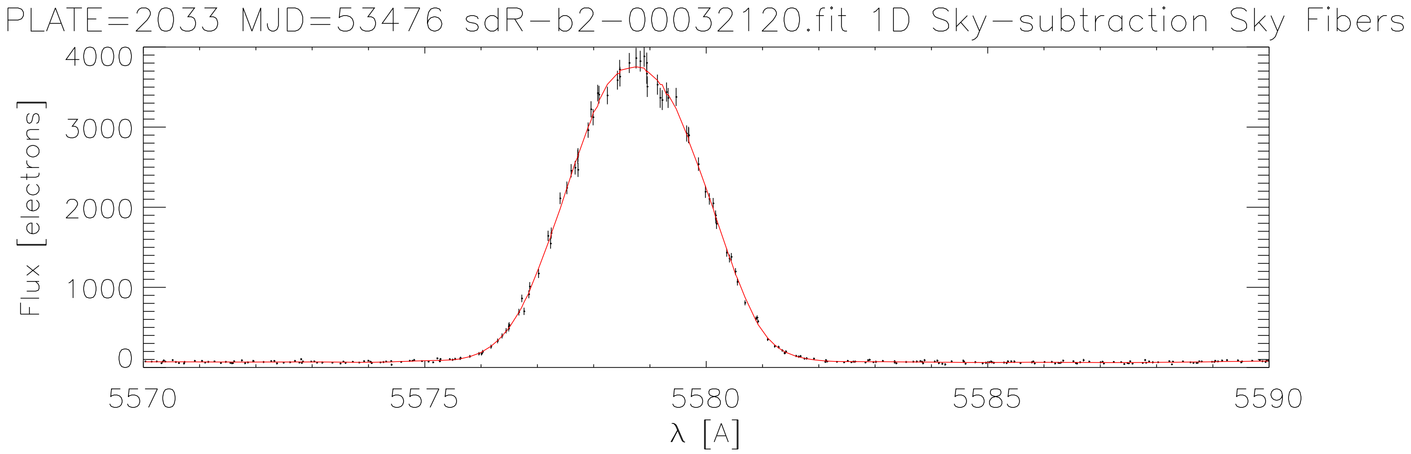

4046.5600
nfib1 16
nfib2 16
stdev 0.121
extra −0.41
4358.3300
nfib1 16
nfib2 16
stdev 0.075
extra −0.40
5460.9400
nfib1 16
nfib2 16
stdev 0.040
extra −0.33
5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.25
5889.9500
nfib1 16
nfib2 16
stdev 0.025
extra −0.22
5895.9240
nfib1 16
nfib2 16
stdev 0.033
extra −0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
−0.20
−0.25
−0.30
−0.35
−0.40
−0.45
3500
4000
4500
5000
5500
6000
6500

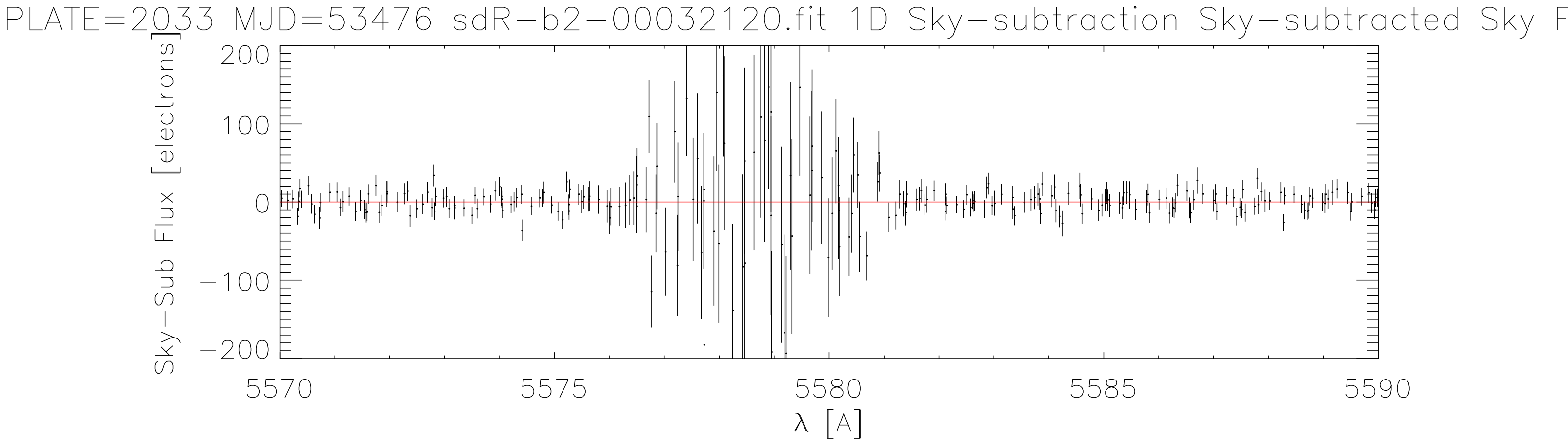
PLATE=2033 MJD=53476 Smooth superflat for sdR-b2-00032120.fit




PLATE=2033 MJD=53476 sdR-b2-00032120.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-0.5
0.0
0.5
1.0
1.5
2.0
2.5
50
100
150
200
250
300
Fiber number



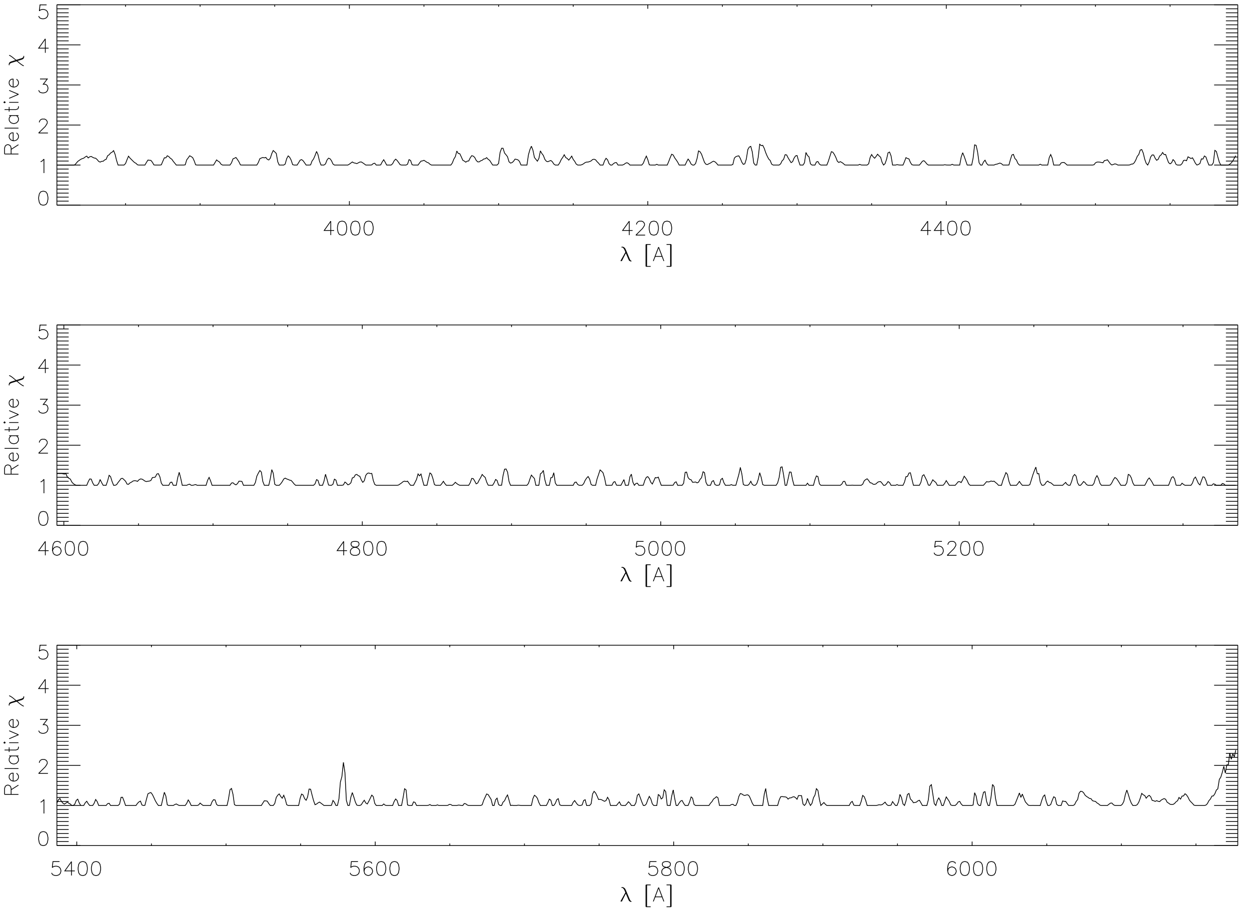
PLATE=2033 MJD=53476 sdR-b2-00032120.fit 1D Sky-subtraction Sky Fibers



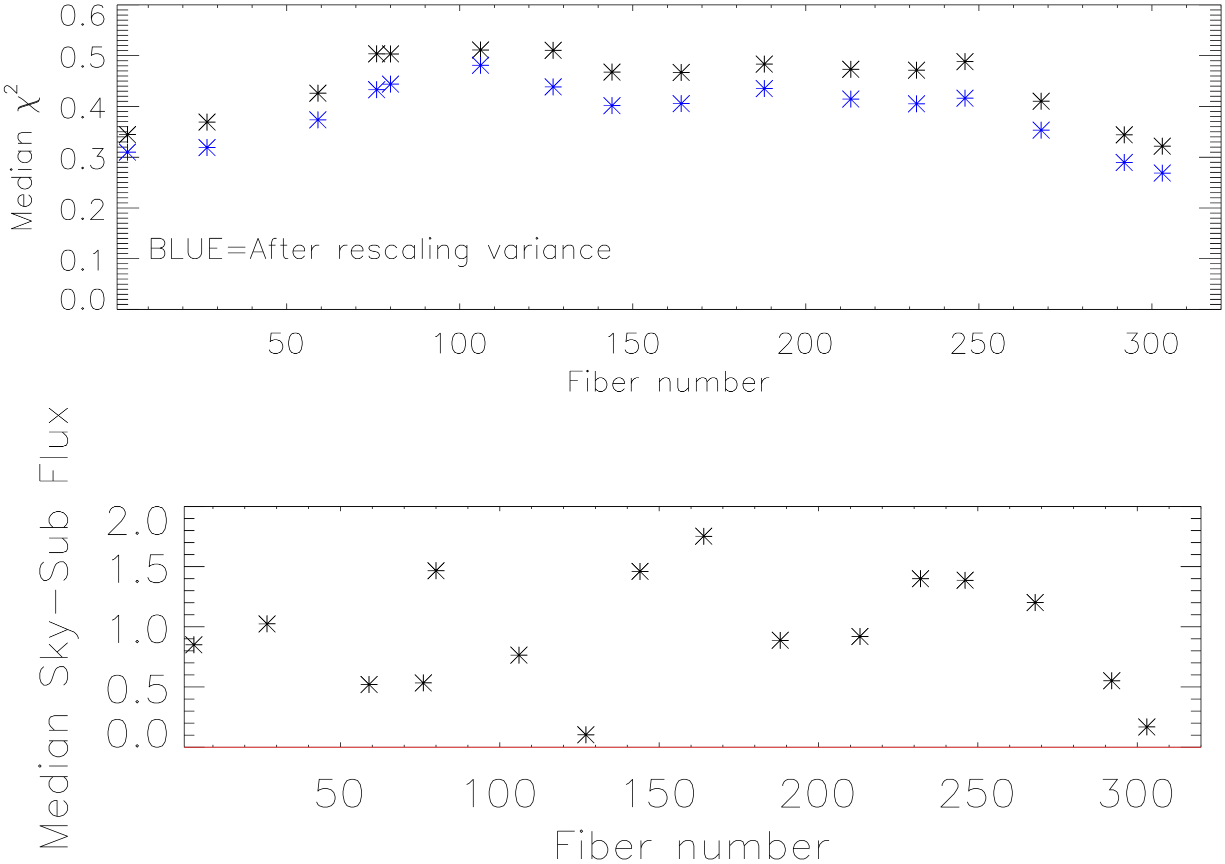
PLATE=2033 MJD=53476 sdR-b2-00032120.fit 1D Sky-subtraction Sky-subtracted Sky F

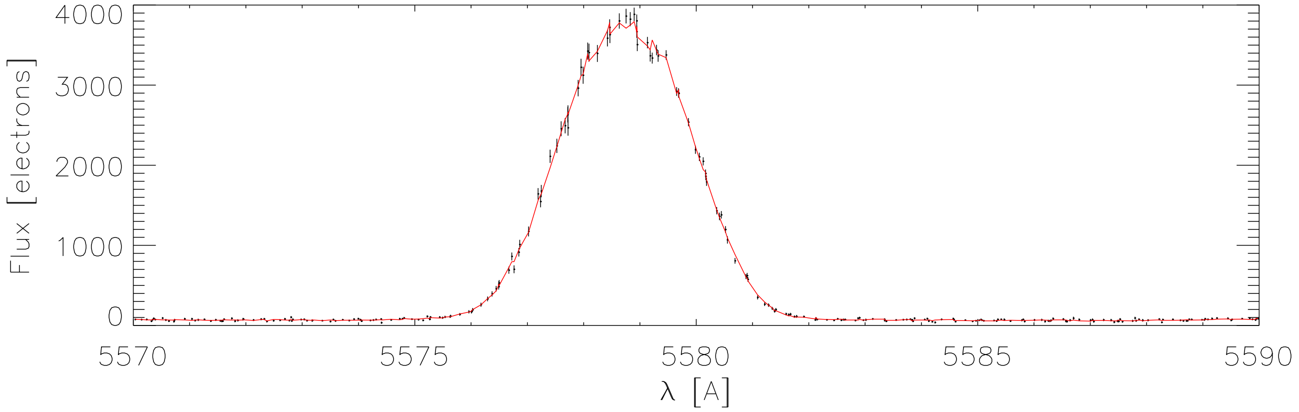
Number of sky fibers = 16

PLATE=2033 MJD=53476 sdR-b2-00032120.fit 1D Sky-subtraction Rescaled Errors

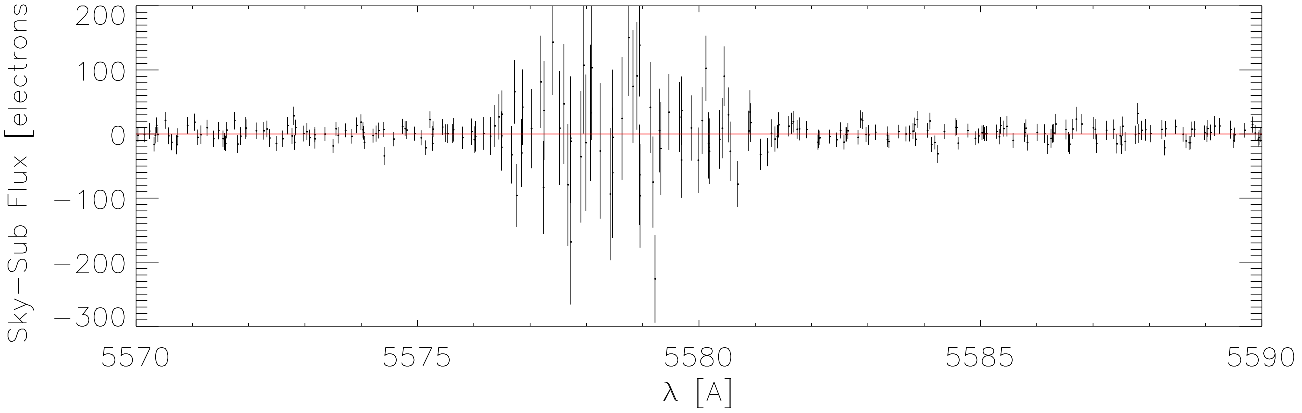


PLATE=2033 MJD=53476 sdR-b2-00032120.fit 2D Sky-subtraction Sky Fiber





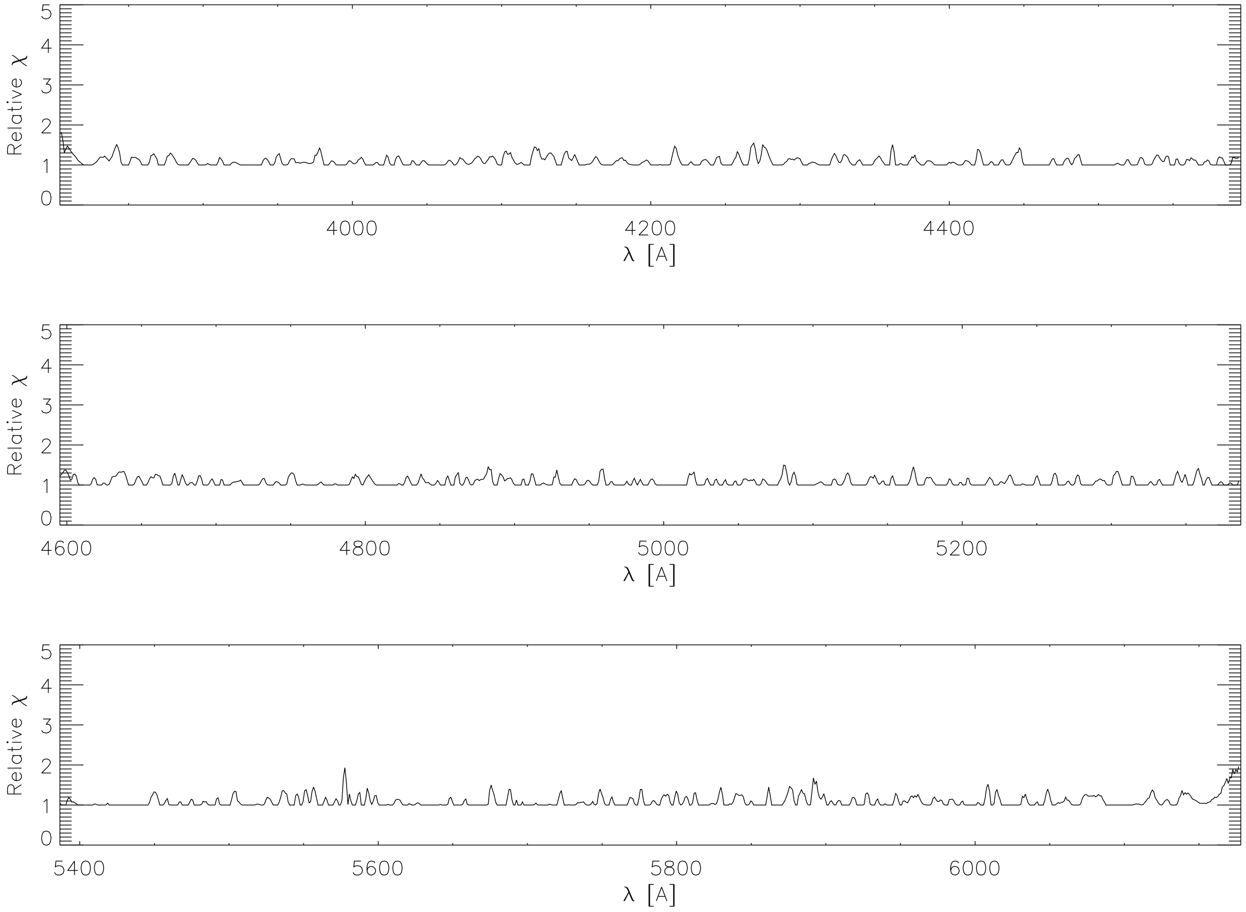
PLATE=2033 MJD=53476 sdR-b2-00032120.fit 2D Sky-subtraction Sky Fibers

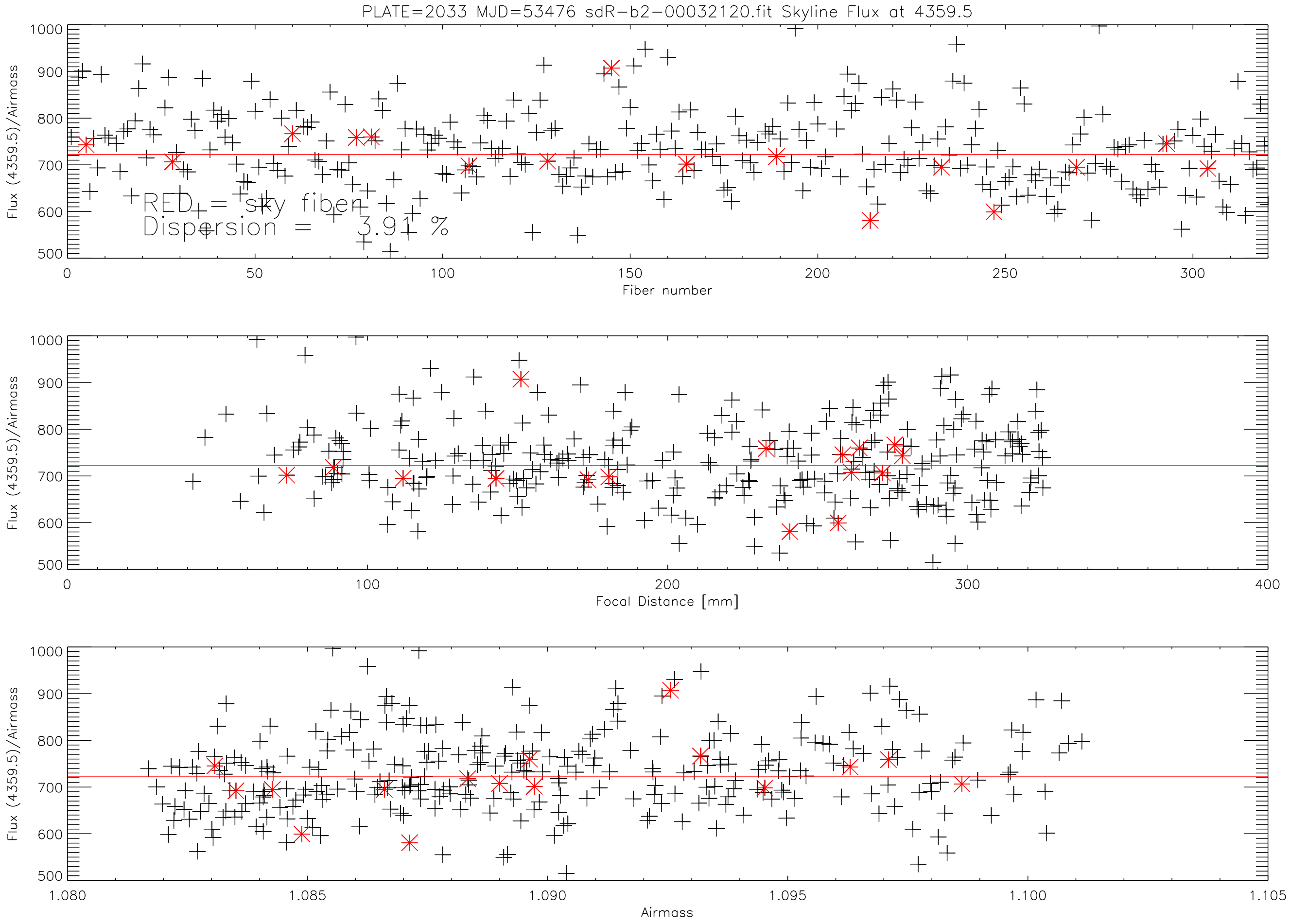


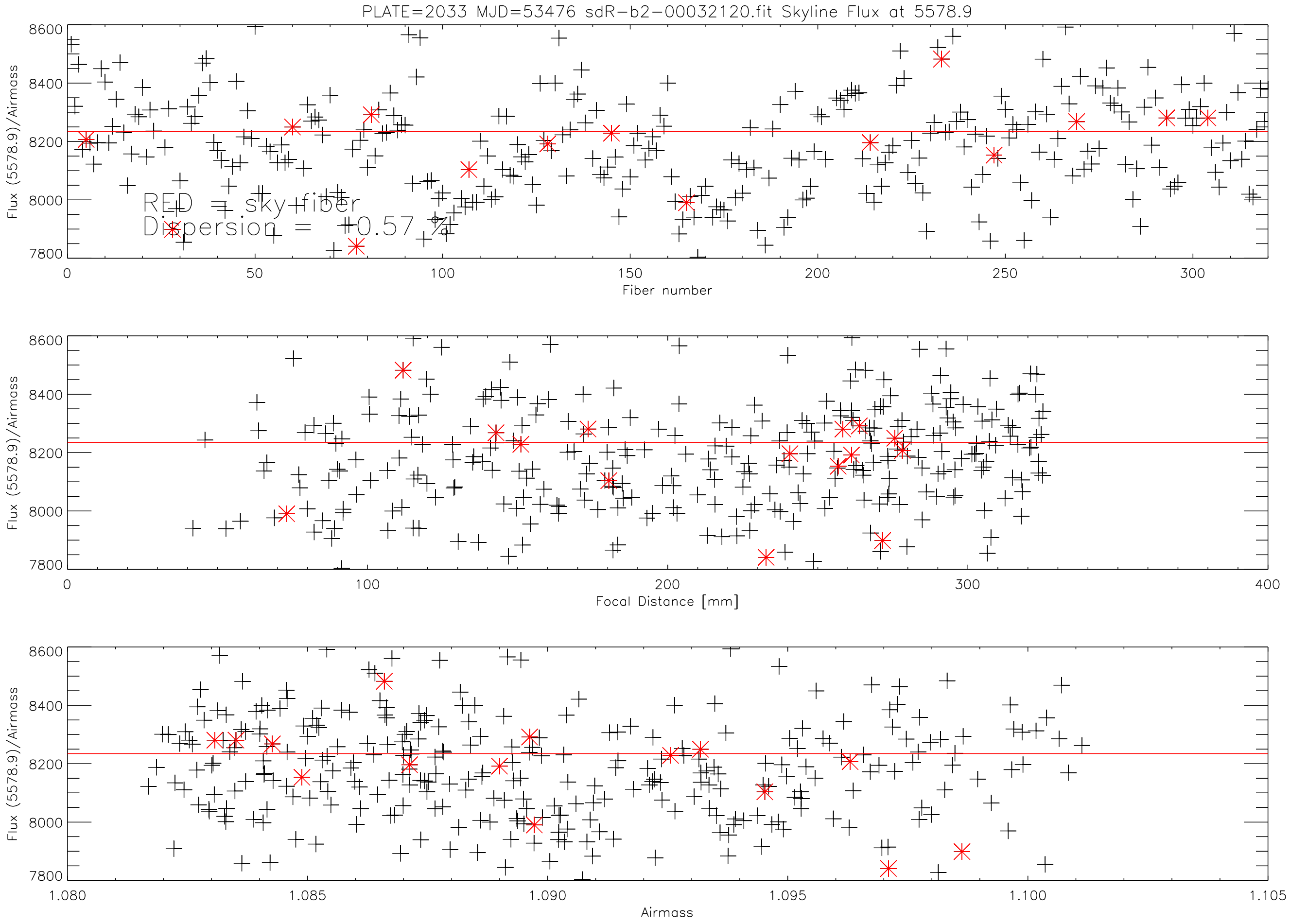
PLATE=2033 MJD=53476 sdR-b2-00032120.fit 2D Sky-subtraction Sky-subtracted Sky F

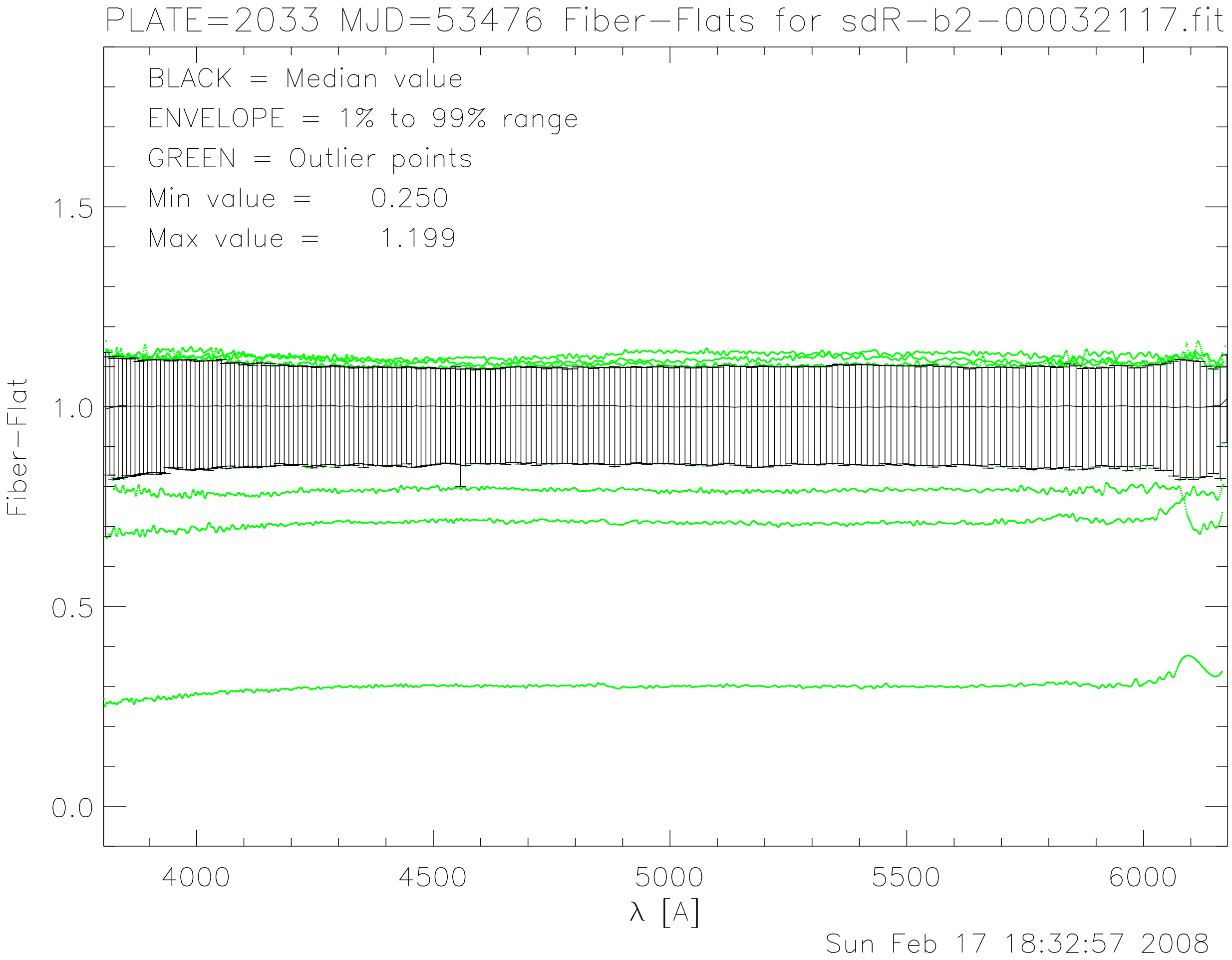
Number of sky fibers = 16

PLATE=2033 MJD=53476 sdR-b2-00032120.fit 2D Sky-subtraction Rescaled Errors




PLATE=2033 MJD=53476 sdR-b2-00032120.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
RED = sky fiber
Dispersion = 3.91 %
1000
900
800
700
600
500
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1.080
1.085
1.090
1.095
1.100
1.105
Airmass


PLATE=2033 MJD=53476 sdR-b2-00032120.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
8600
8400
8200
8000
7800
0
50
100
150
200
250
300
Fiber number
RED = sky-fiber
Dispersion = +0.57 %
Flux (5578.9)/Airmass
8600
8400
8200
8000
7800
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
8600
8400
8200
8000
7800
1.080
1.085
1.090
1.095
1.100
1.105
Airmass



PLATE=2033 MJD=53476 Fiber-Flats for sdR-b2-00032117.fit

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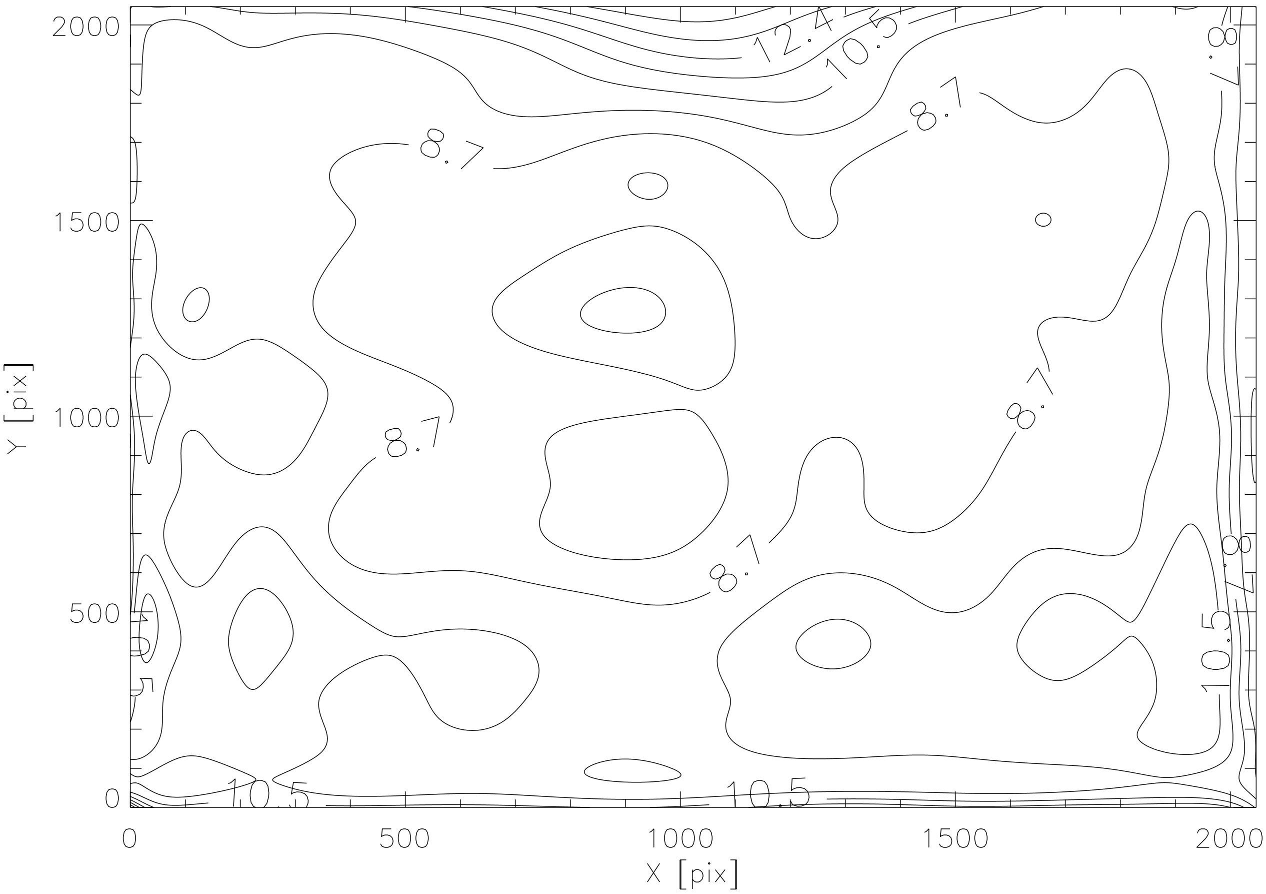
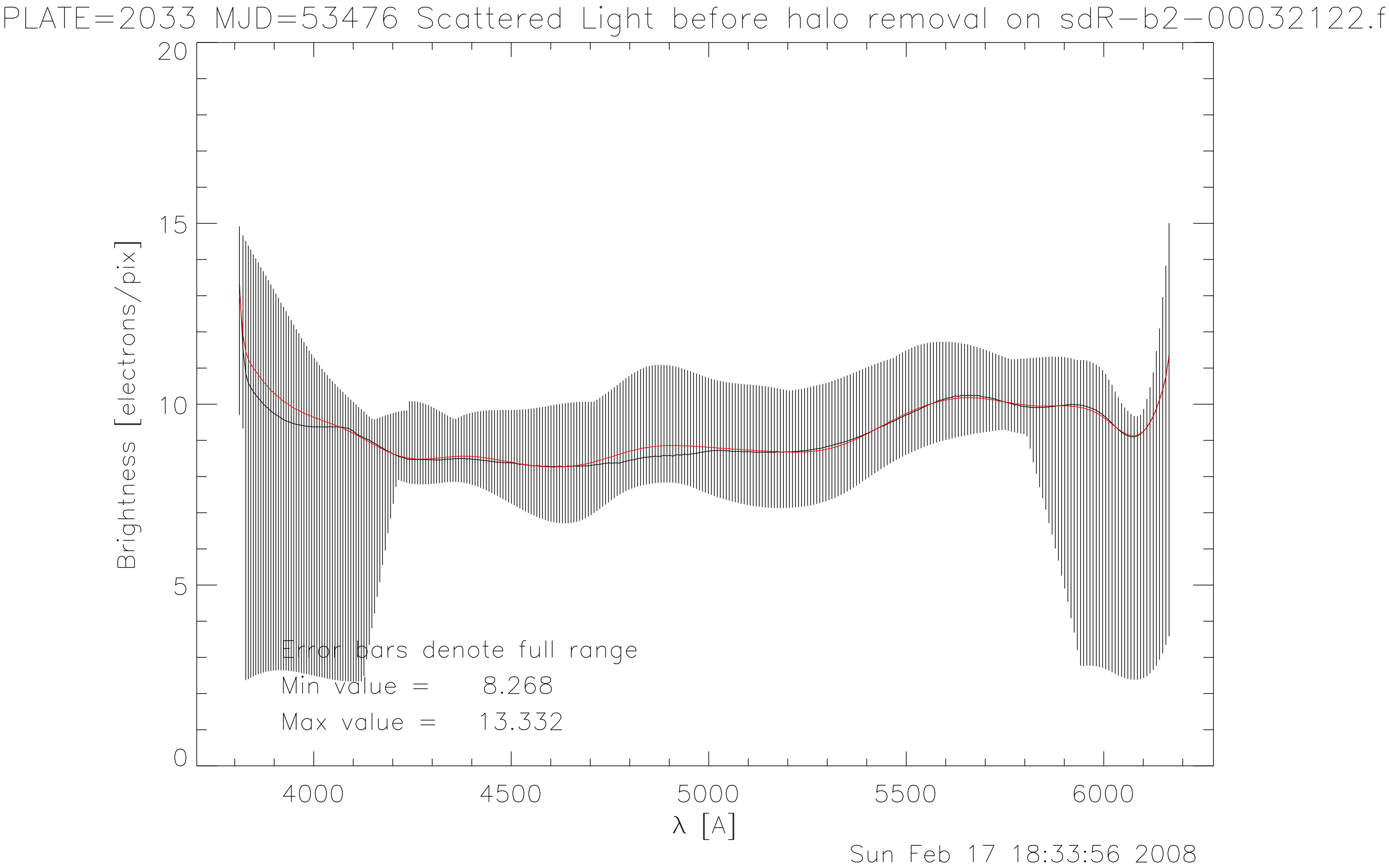
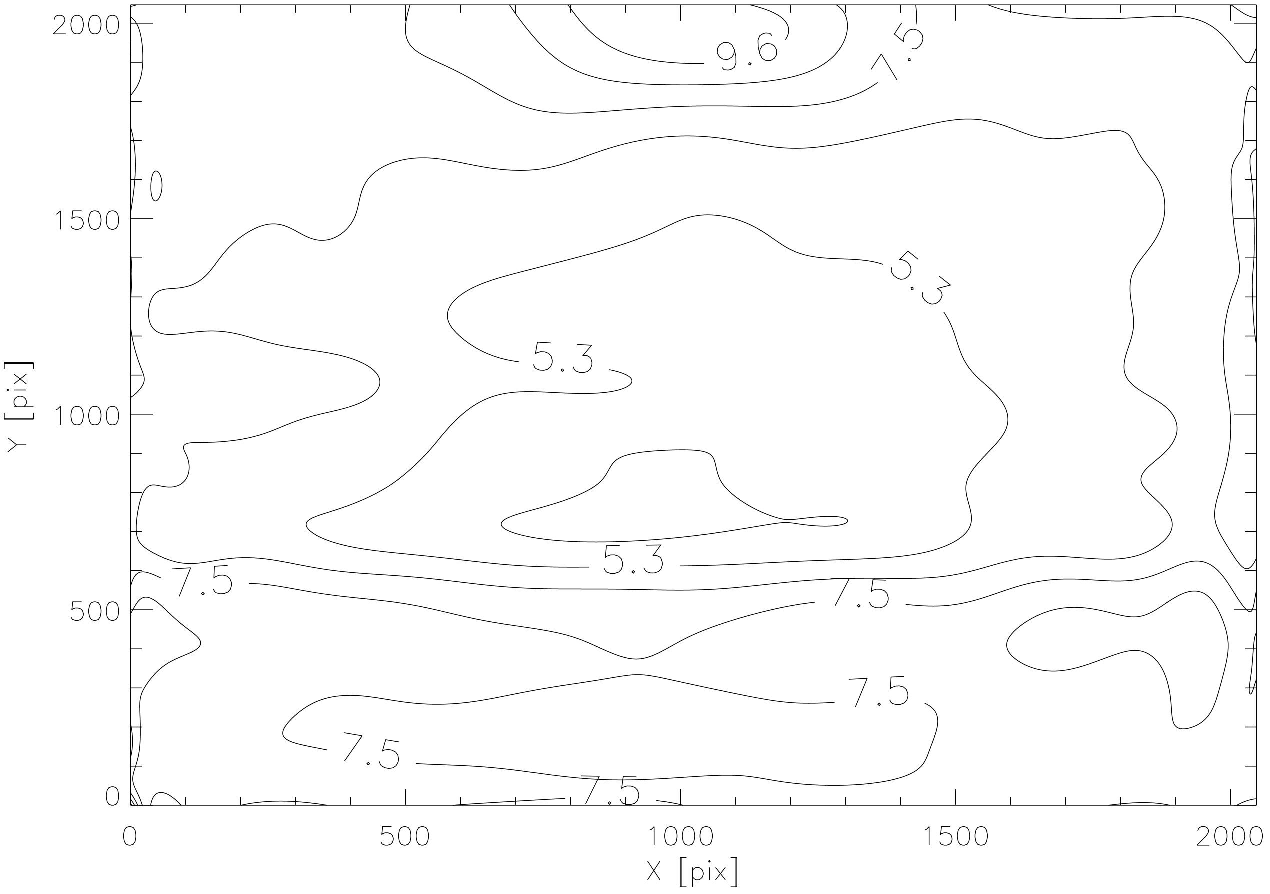
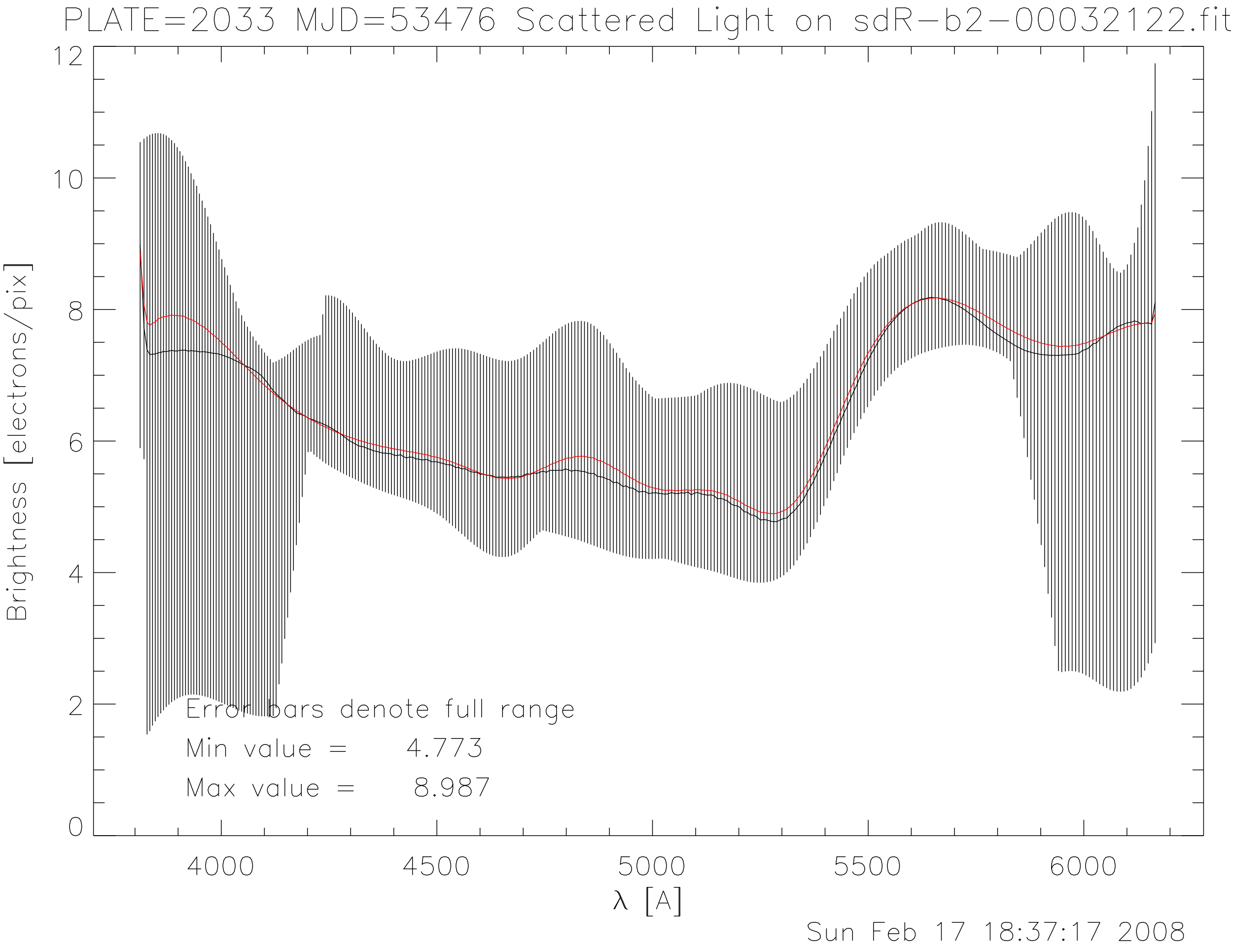


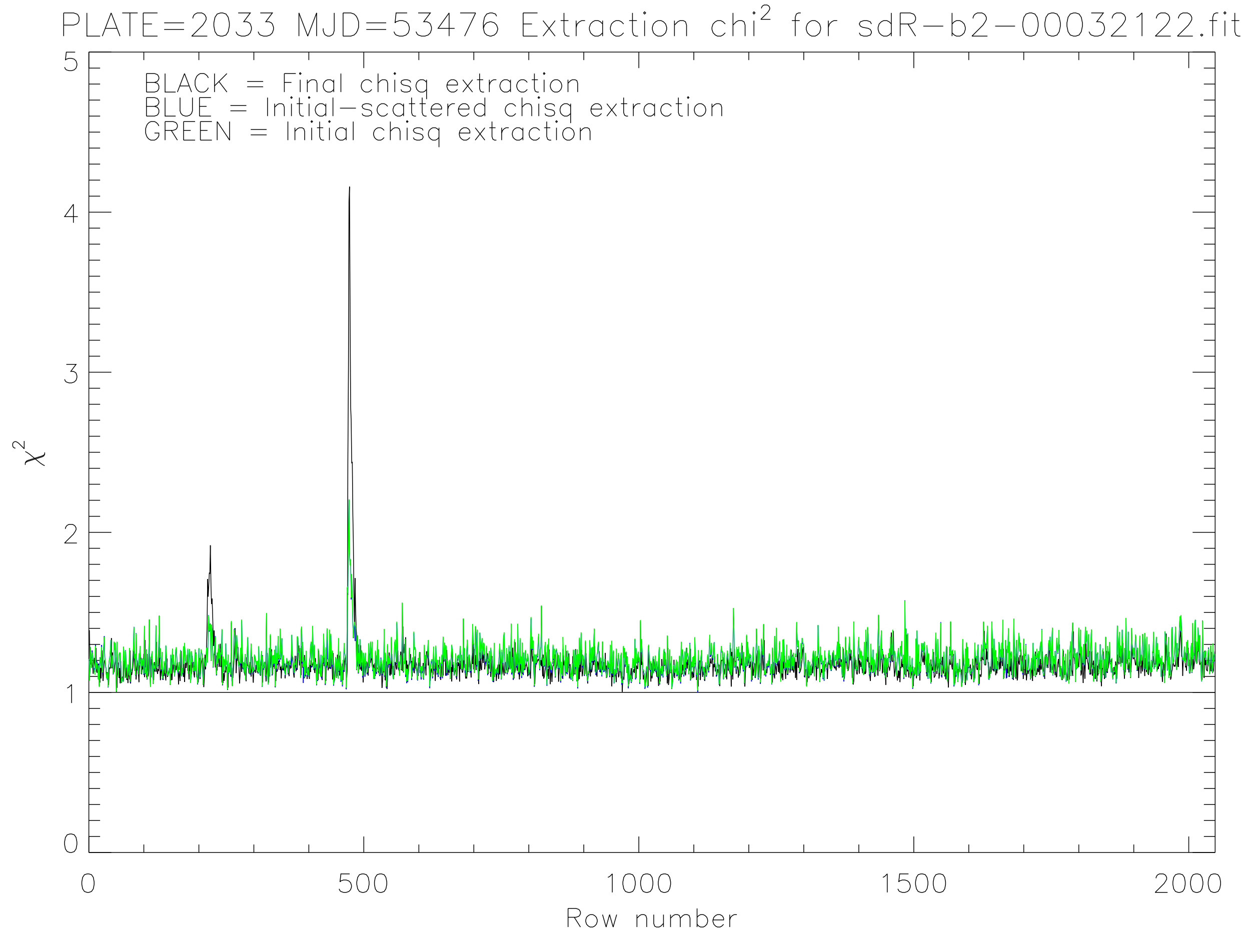
PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b2-00032122.f


PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b2-00032122.f
Brightness [electrons/pix]
0
5
10
15
20
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 8.268
Max value = 13.332
Sun Feb 17 18:33:56 2008

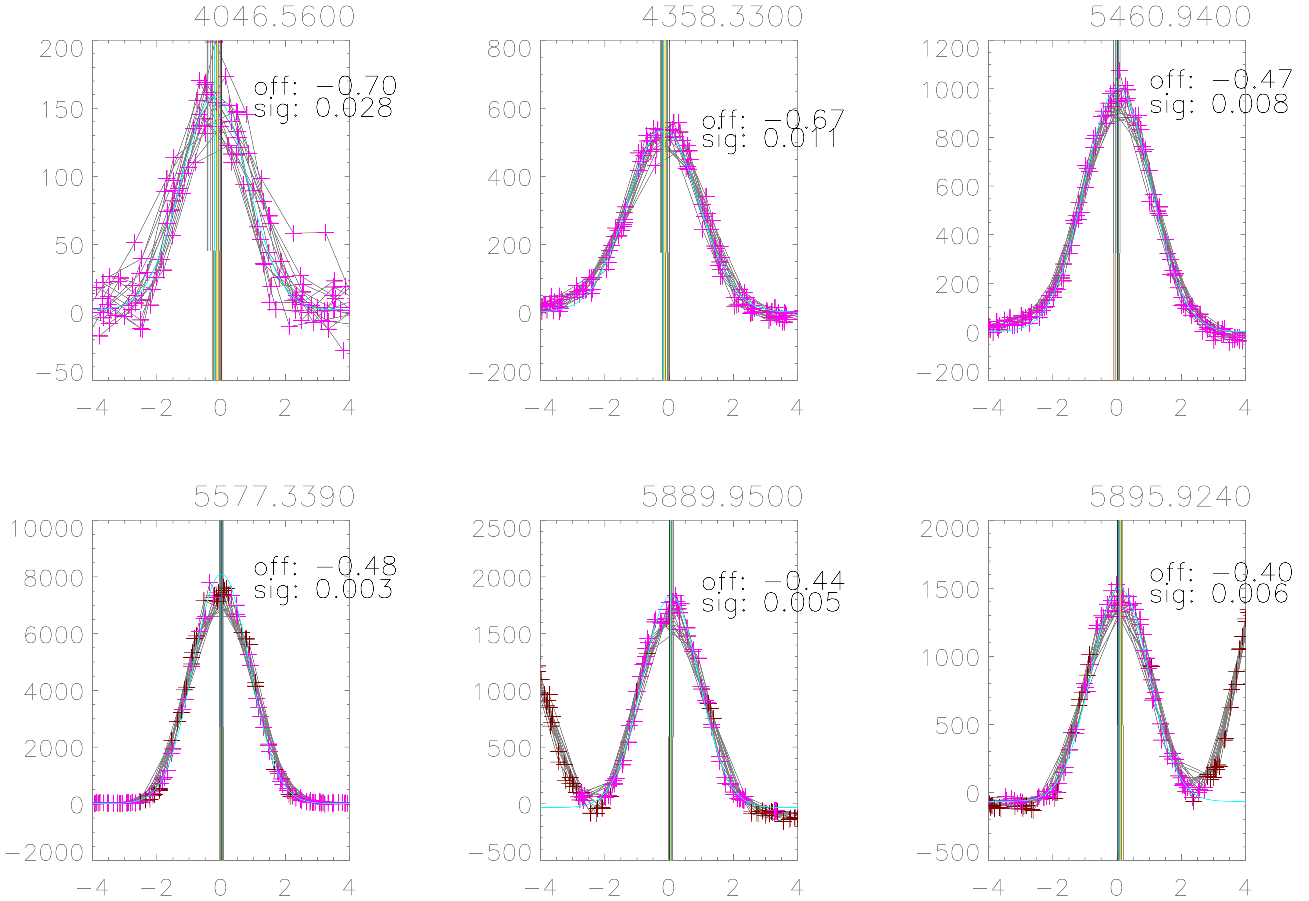
PLATE=2033 MJD=53476 Scattered Light on sdR-b2-00032122.fit

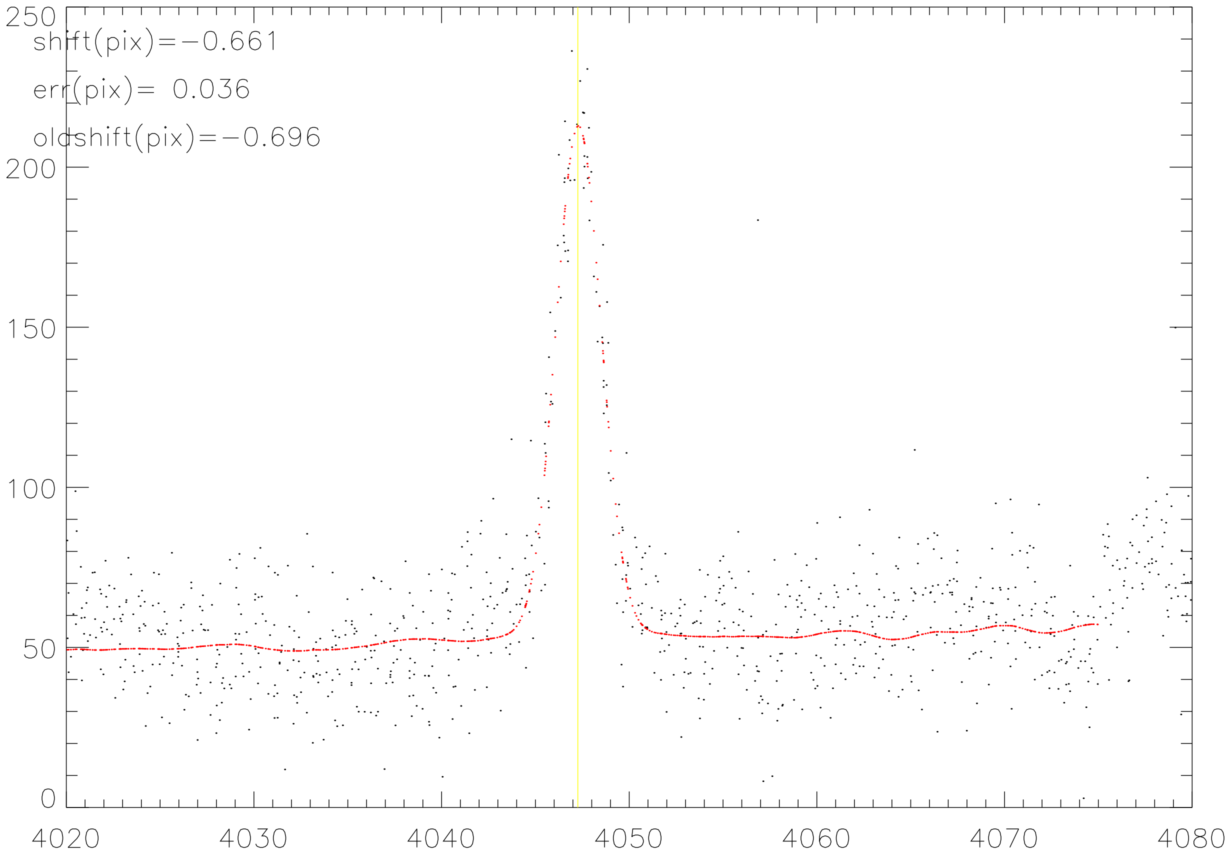


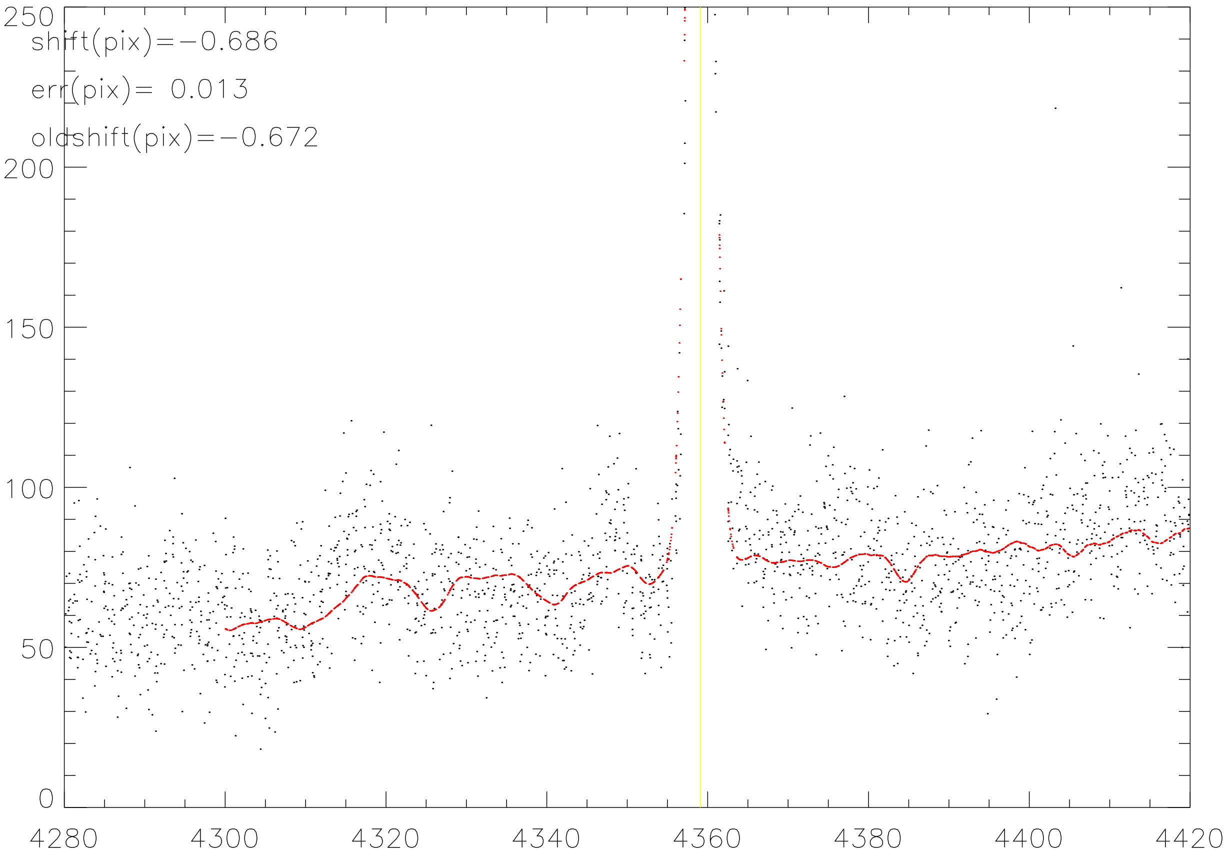

PLATE=2033 MJD=53476 Scattered Light on sdR-b2-00032122.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 4.773
Max value = 8.987
Sun Feb 17 18:37:17 2008

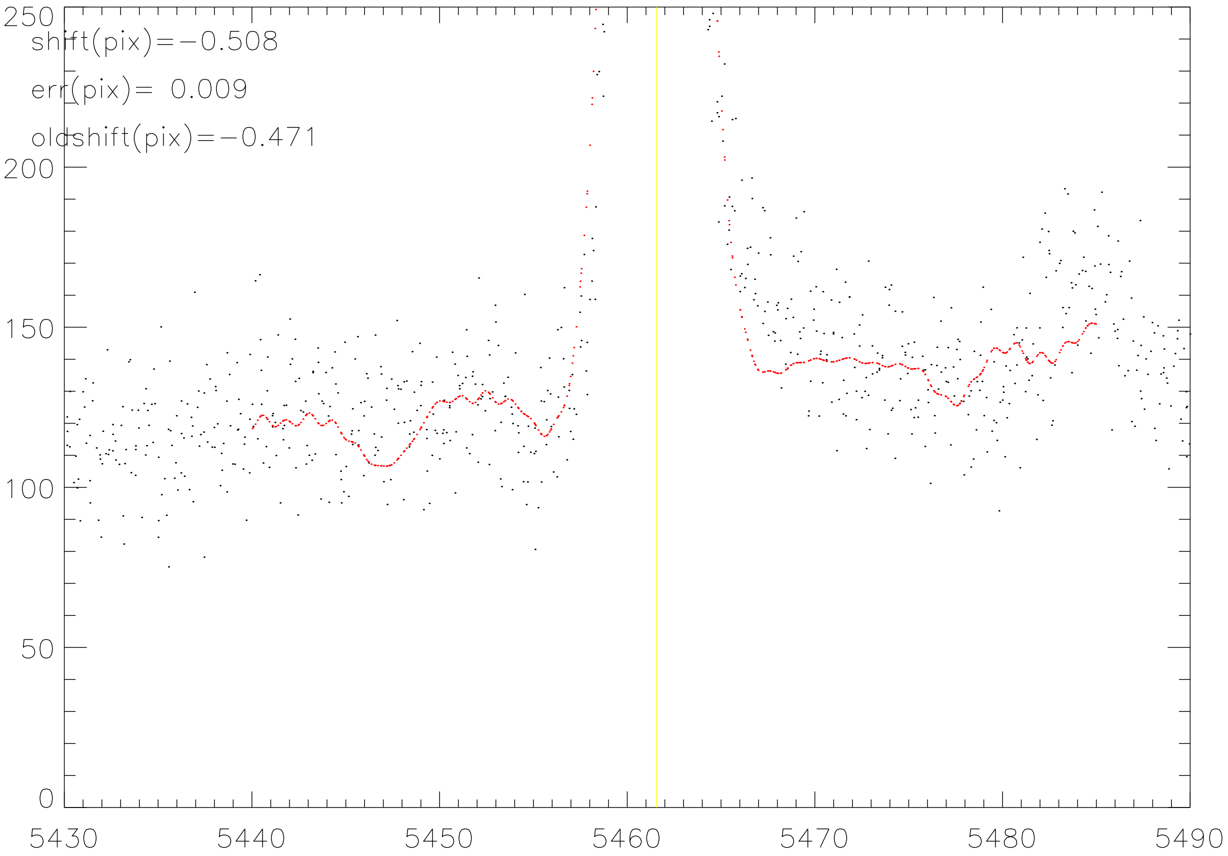


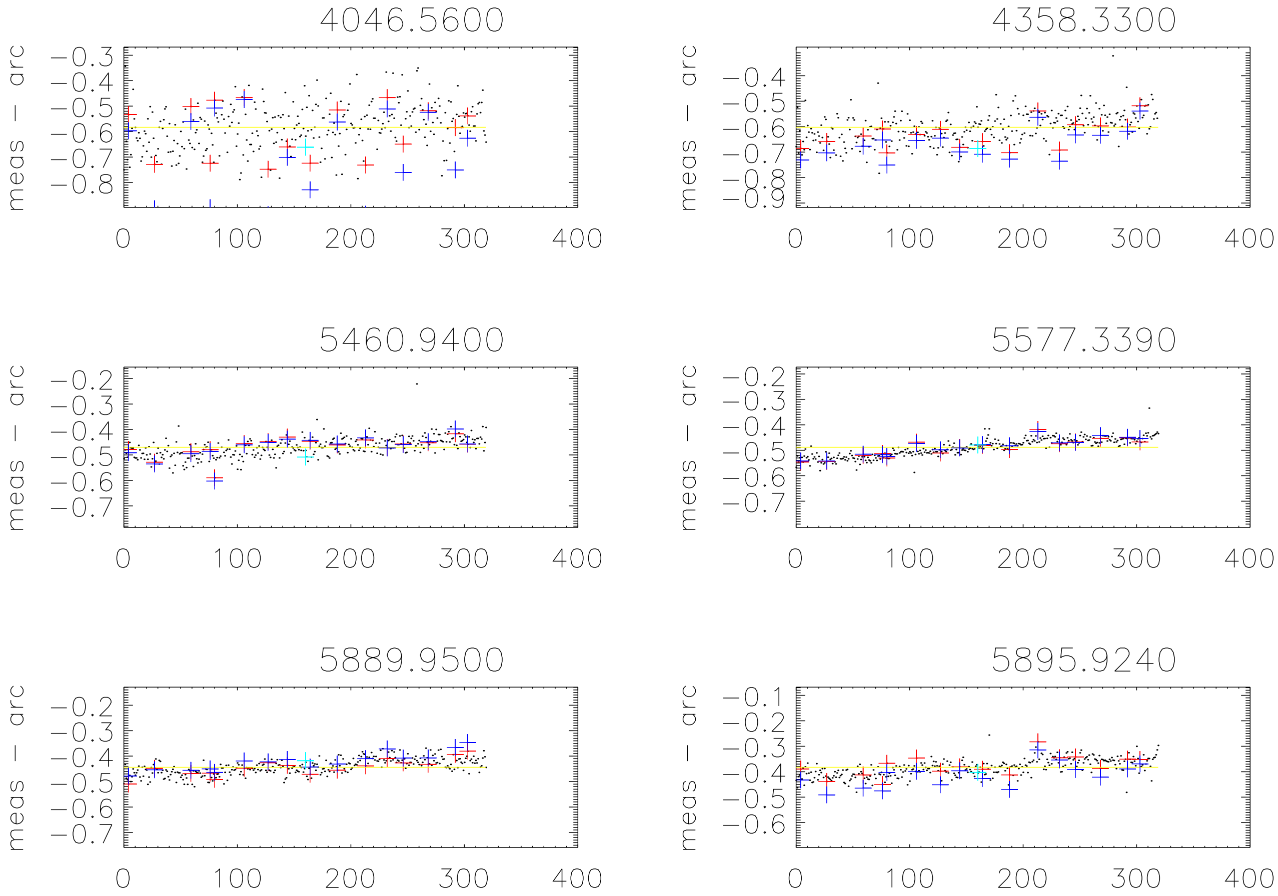
PLATE=2033 MJD=53476 Extraction chi^2 for sdR-b2-00032122.fit

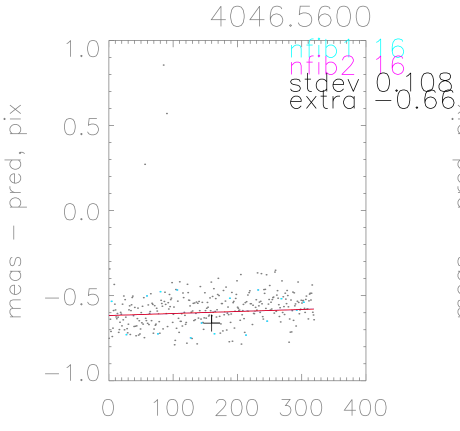

4046.5600
off: −0.70
sig: 0.028
4358.3300
off: −0.67
sig: 0.011
5460.9400
off: −0.47
sig: 0.008
5577.3390
off: −0.48
sig: 0.003
5889.9500
off: −0.44
sig: 0.005
5895.9240
off: −0.40
sig: 0.006
200
150
100
50
0
−50
800
600
400
200
0
−200
1200
1000
800
600
400
200
0
−200
10000
8000
6000
4000
2000
0
−2000
2500
2000
1500
1000
500
0
−500
2000
1500
1000
500
0
−500
−4
−2
0
2
4

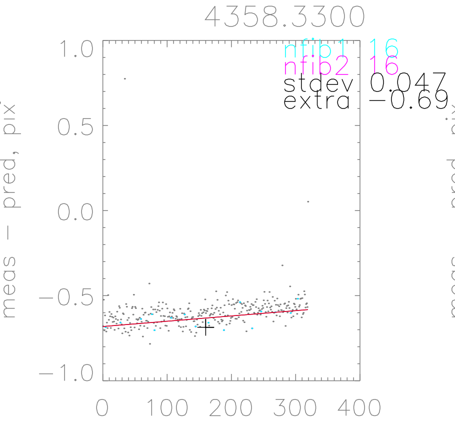

shift(pix)=−0.661
err(pix)= 0.036
oldshift(pix)=−0.696
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

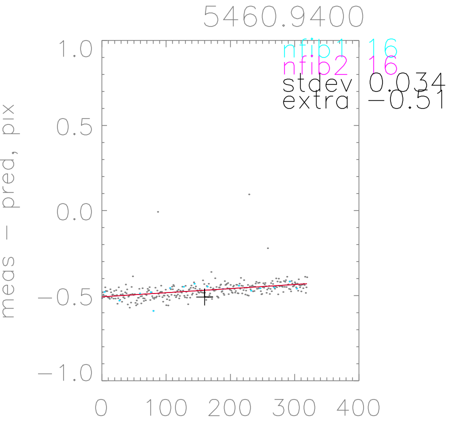

shift(pix)=−0.686
err(pix)= 0.013
oldshift(pix)=−0.672
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

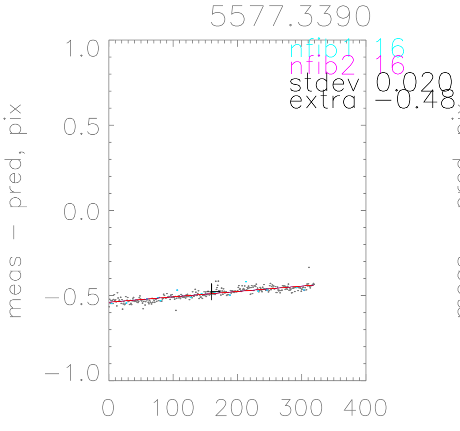

shift(pix)=−0.508
err(pix)= 0.009
oldshift(pix)=−0.471
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

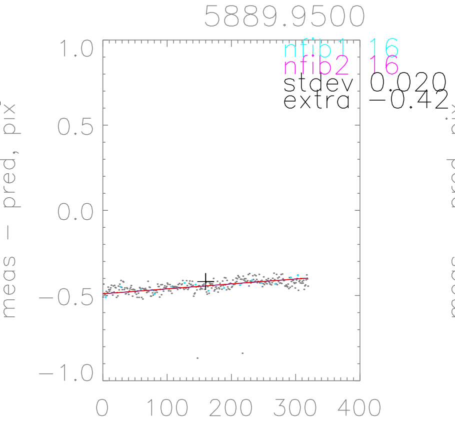

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400

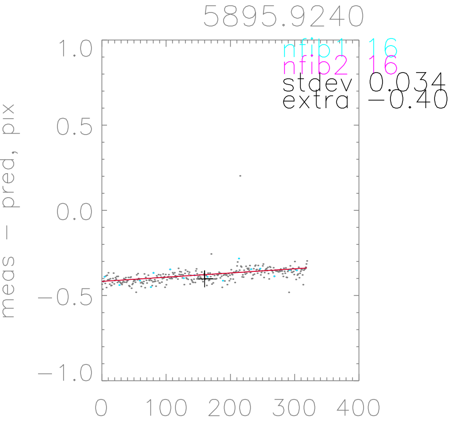

4046.5600
nfib1 16
nfib2 16
stdev 0.108
extra −0.66
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

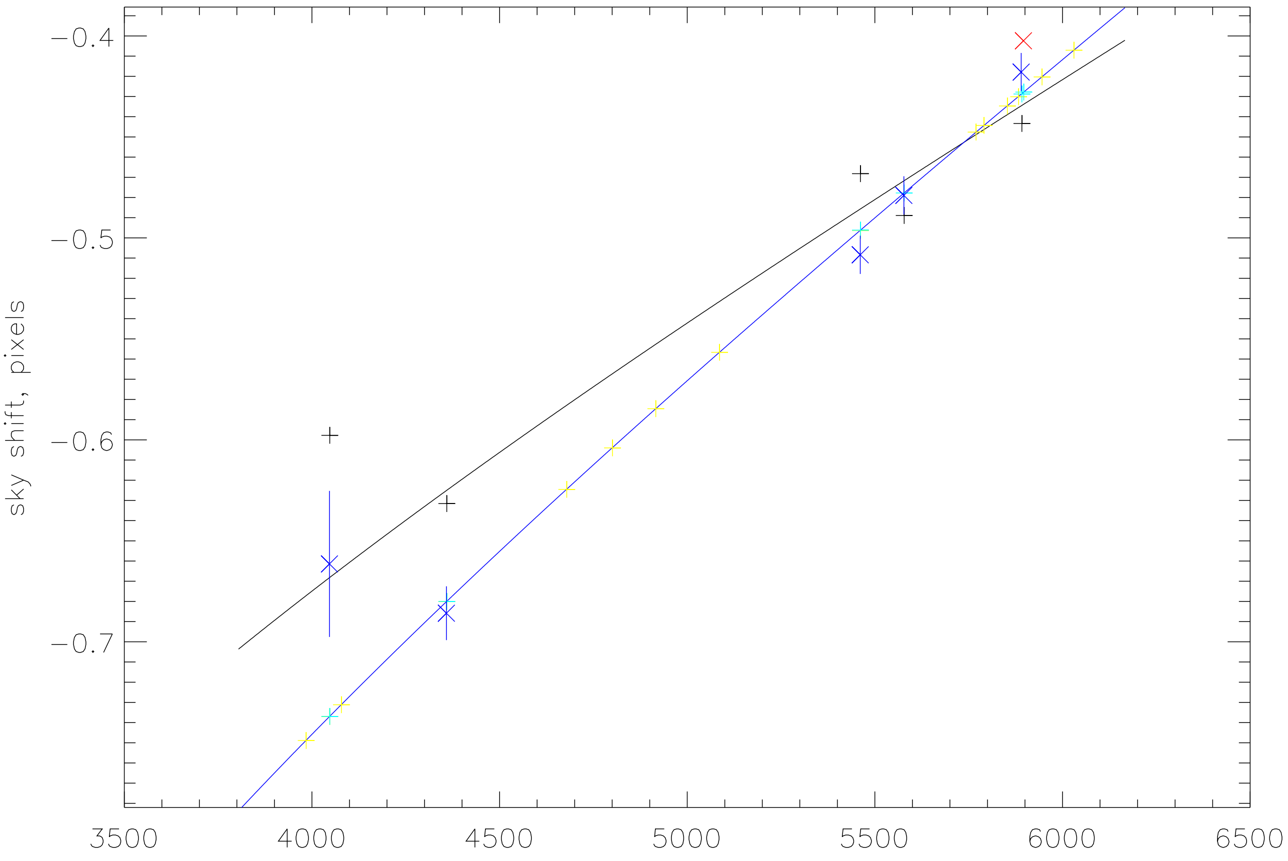

4358.3300
nfib1 16
nfib2 16
stdev 0.047
extra −0.69
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

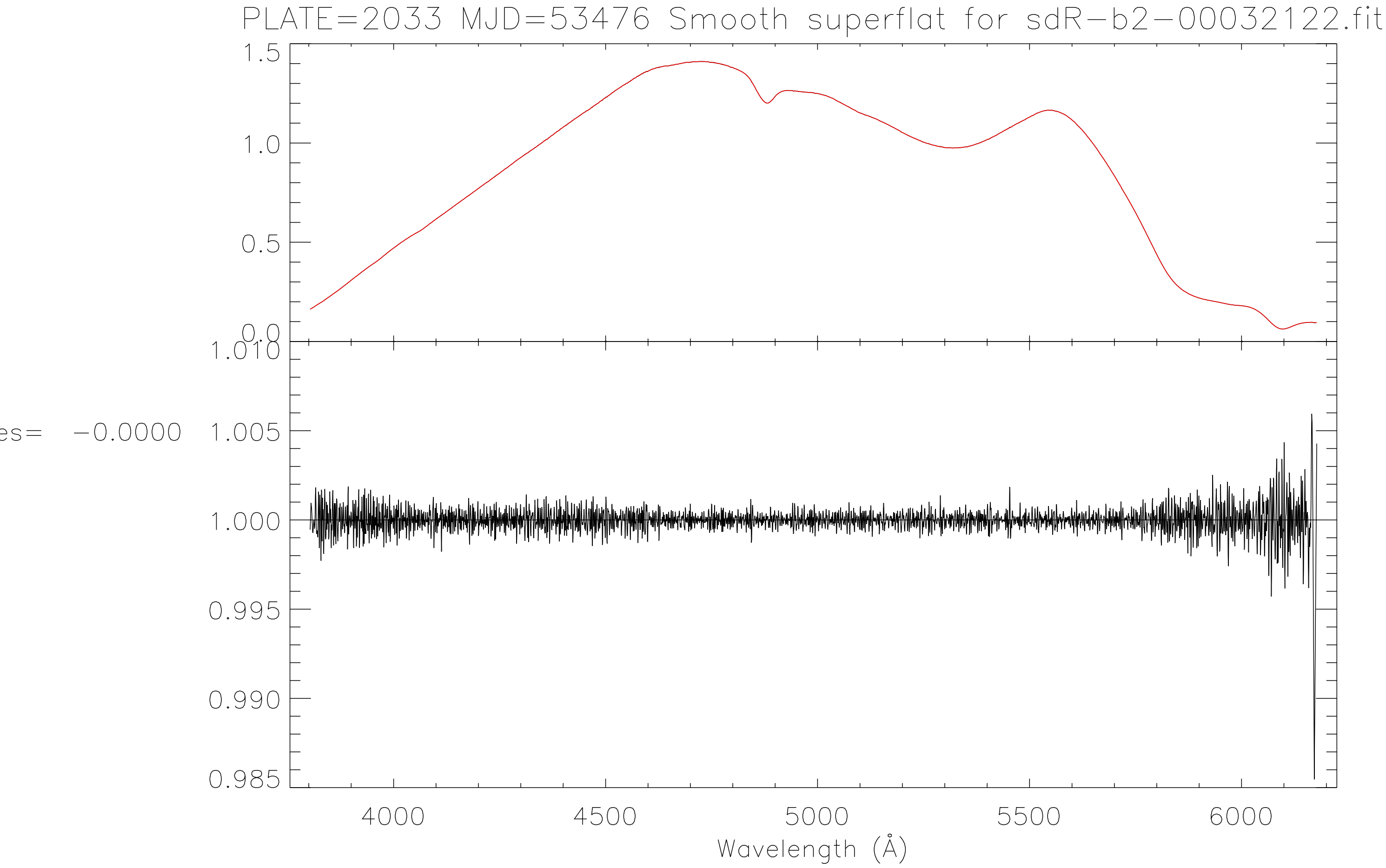

5460.9400
nfib1 16
nfib2 16
stdev 0.034
extra −0.51
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

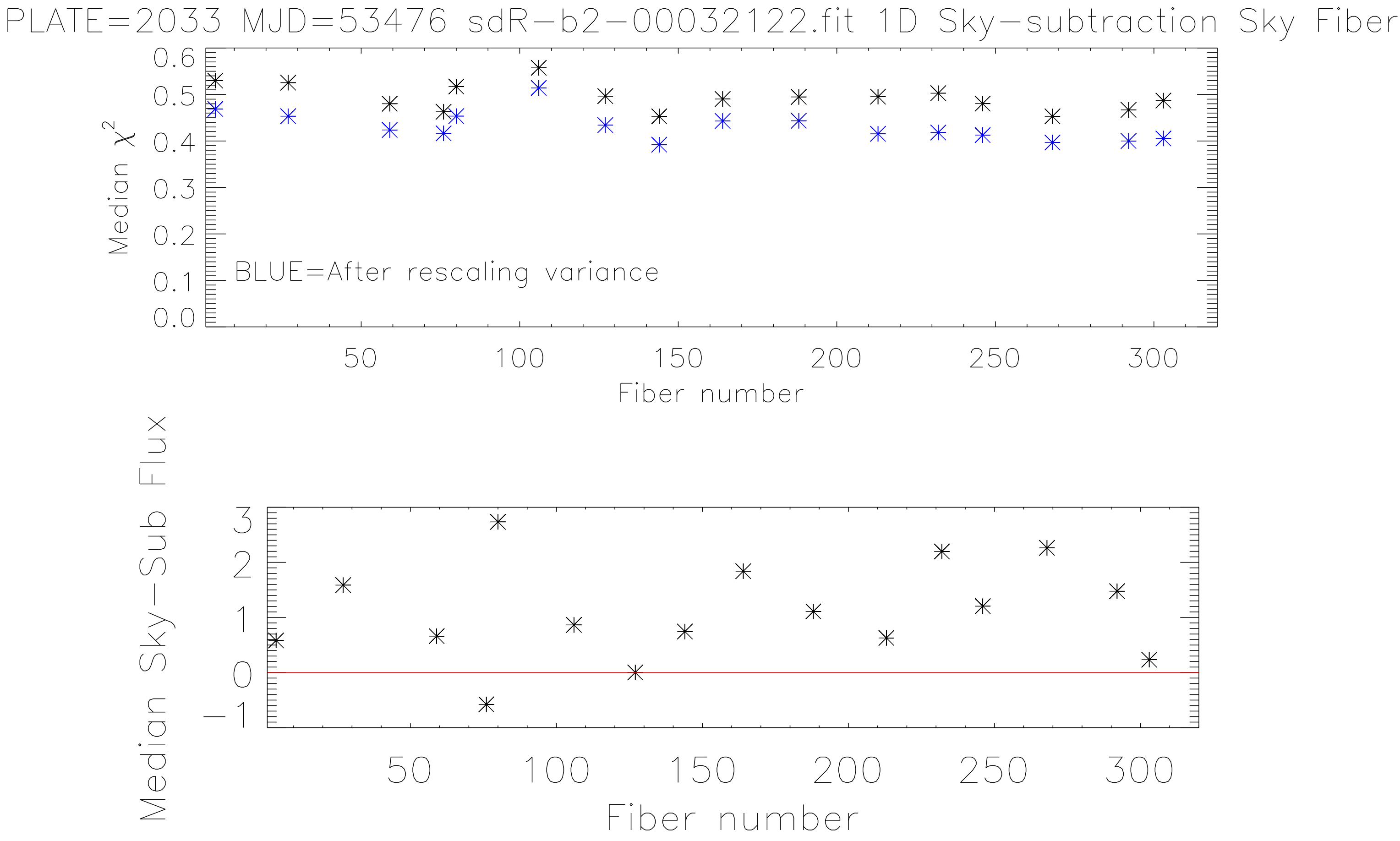

5577.3390
nfib1 16
nfib2 16
stdev 0.020
extra −0.48
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

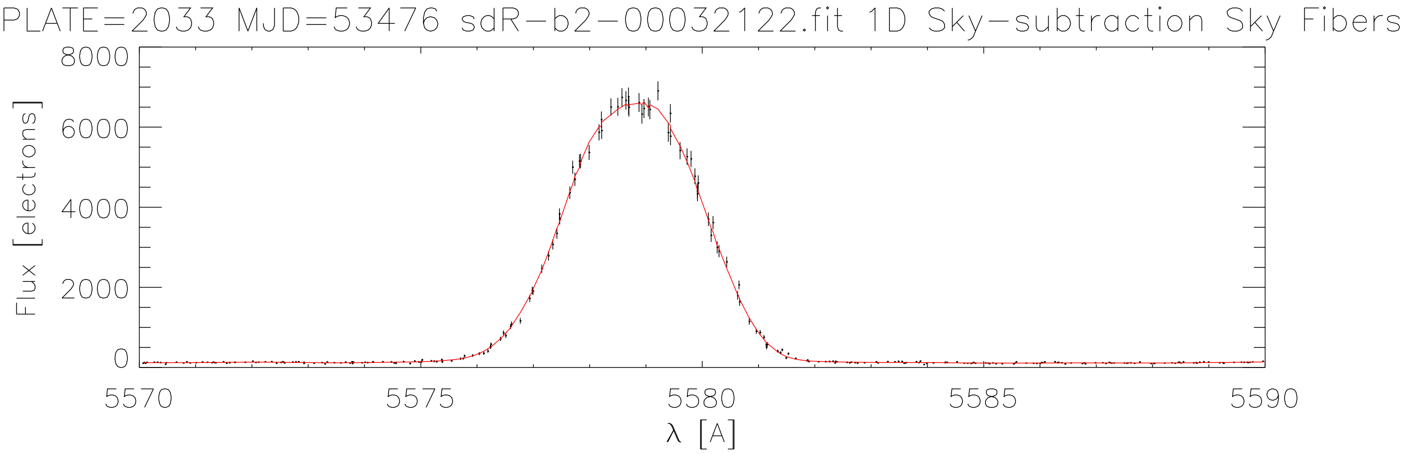

5889.9500
nfib1 16
nfib2 16
stdev 0.020
extra −0.42
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

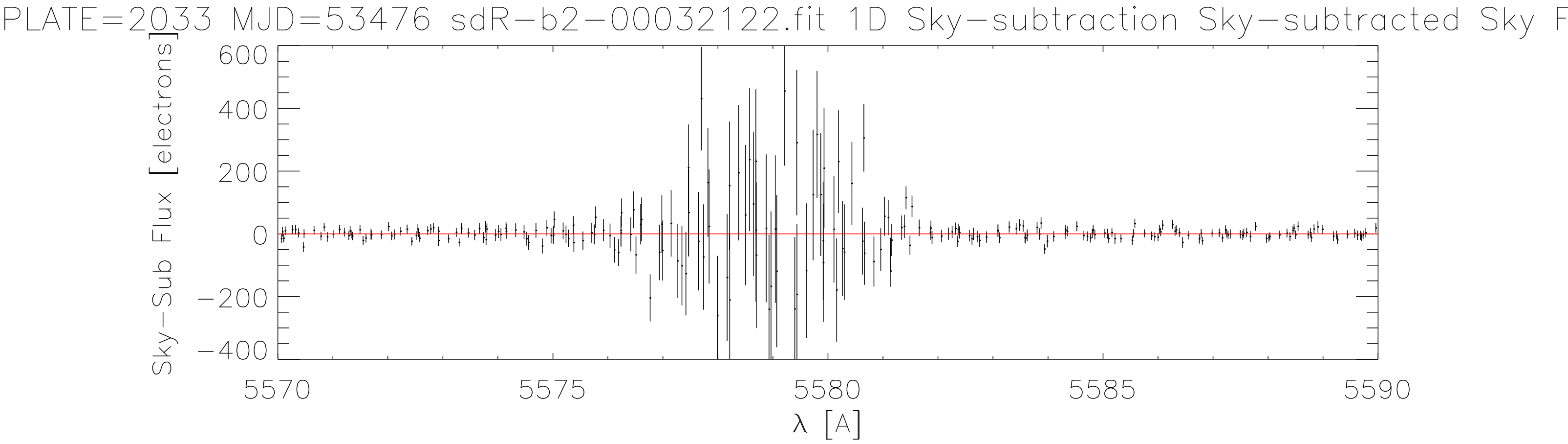

5895.9240
nfib1 16
nfib2 16
stdev 0.034
extra −0.40
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

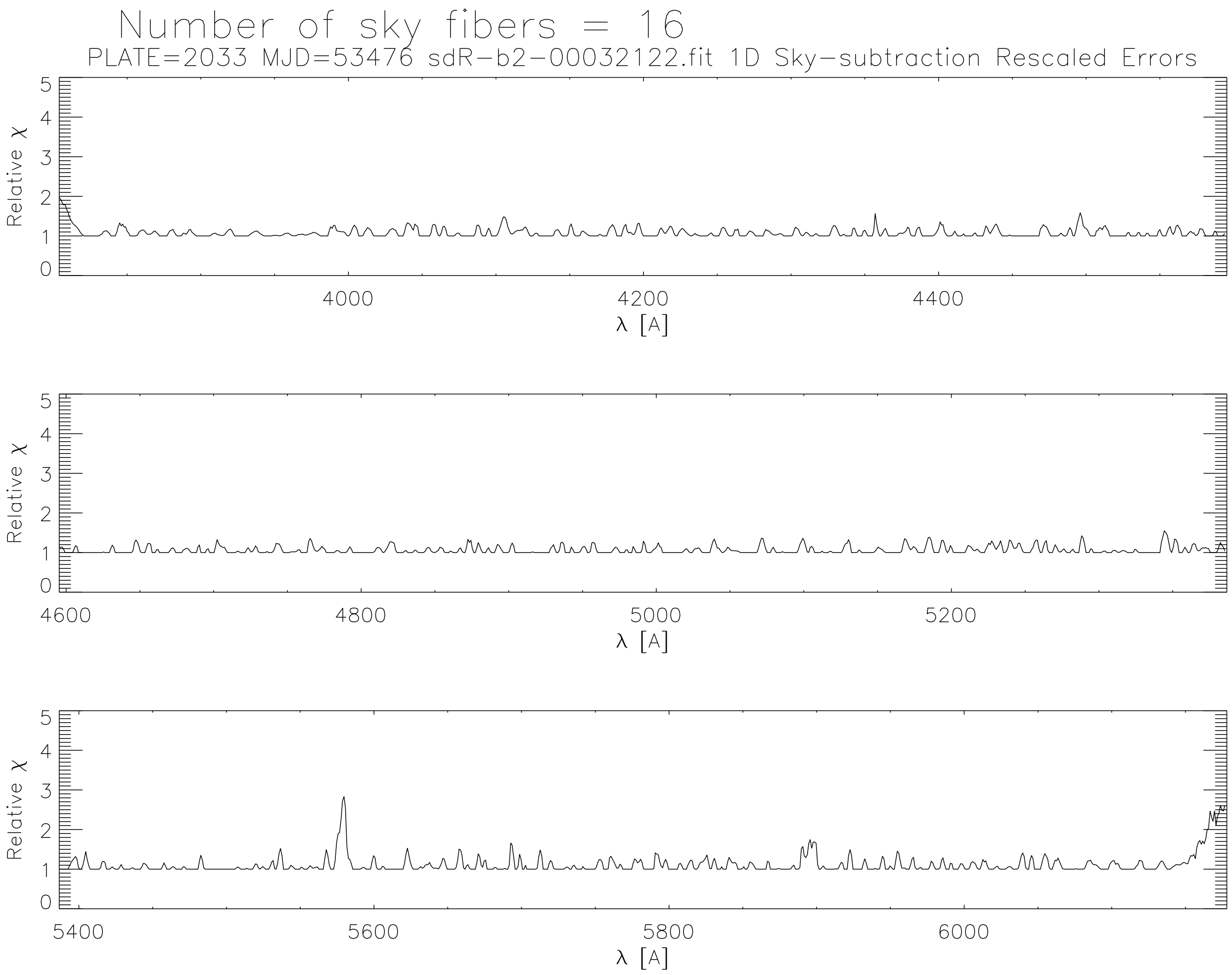

sky shift, pixels
−0.4
−0.5
−0.6
−0.7
3500
4000
4500
5000
5500
6000
6500


PLATE=2033 MJD=53476 Smooth superflat for sdR-b2-00032122.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

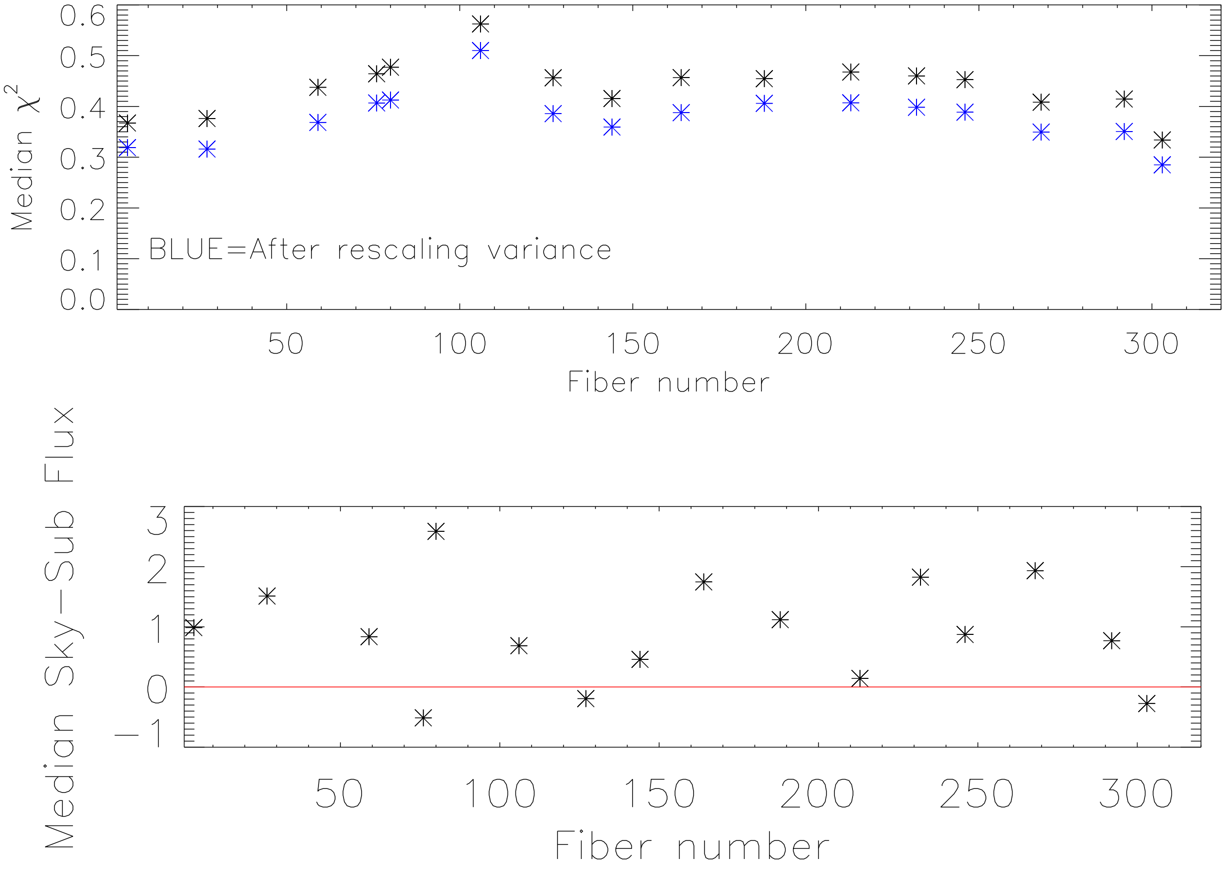

PLATE=2033 MJD=53476 sdR-b2-00032122.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−1
0
1
2
3
50
100
150
200
250
300
Fiber number

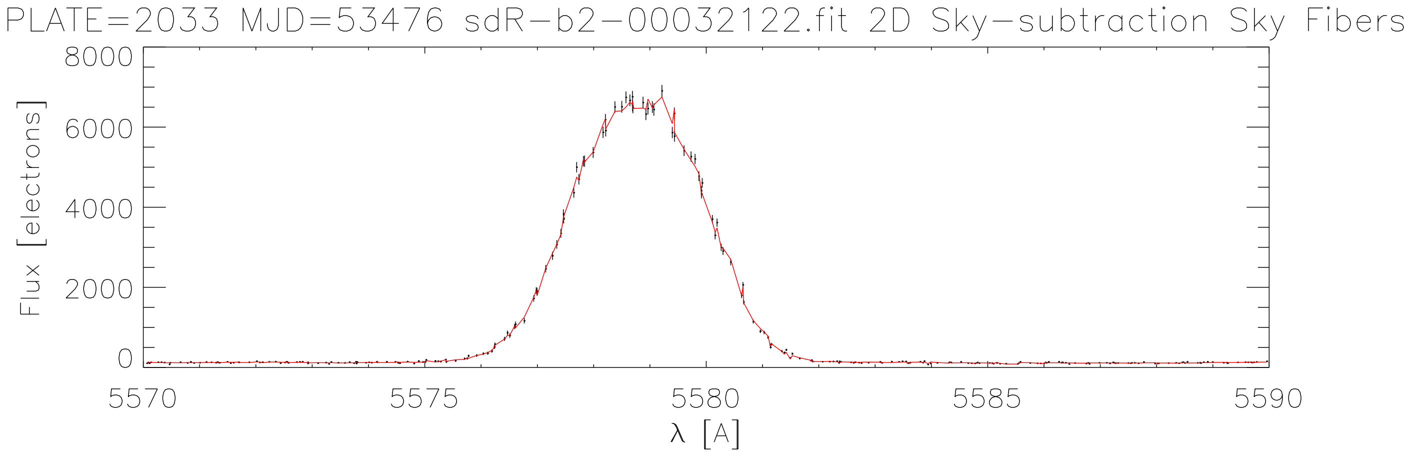

PLATE=2033 MJD=53476 sdR-b2-00032122.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]

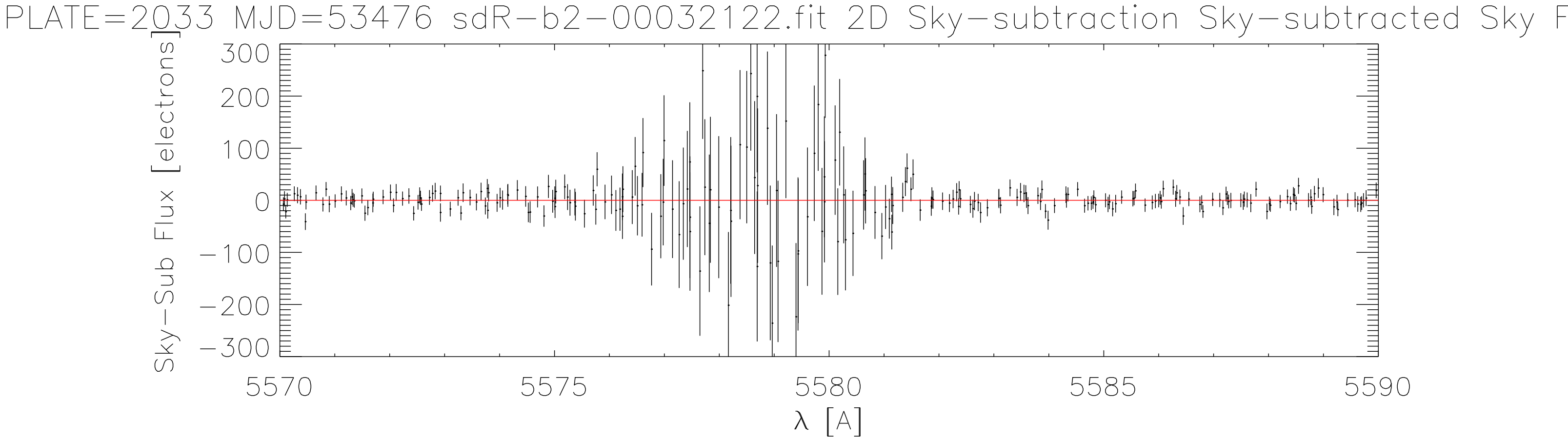

PLATE=2033 MJD=53476 sdR-b2-00032122.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

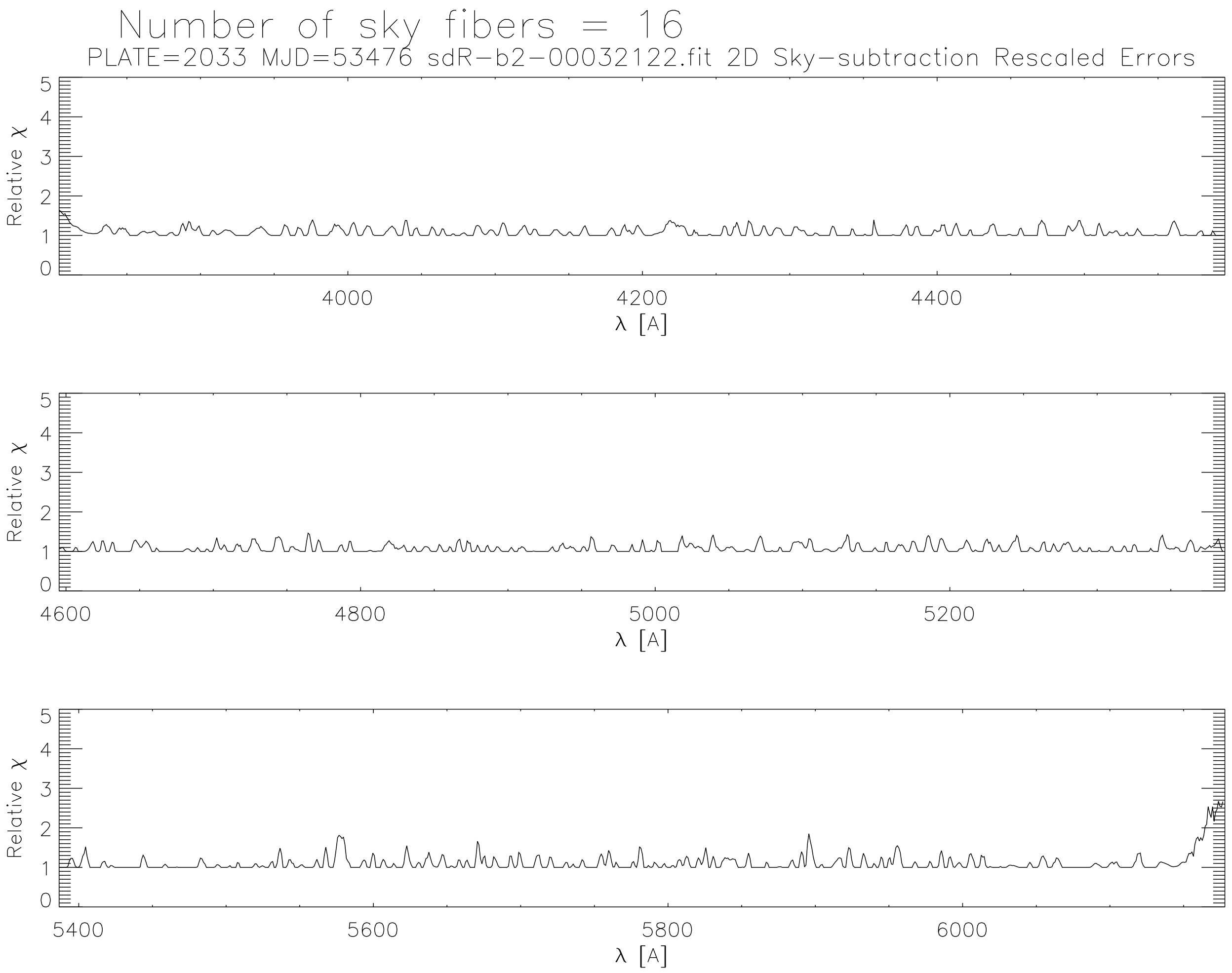

Number of sky fibers = 16
PLATE=2033 MJD=53476 sdR-b2-00032122.fit 1D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

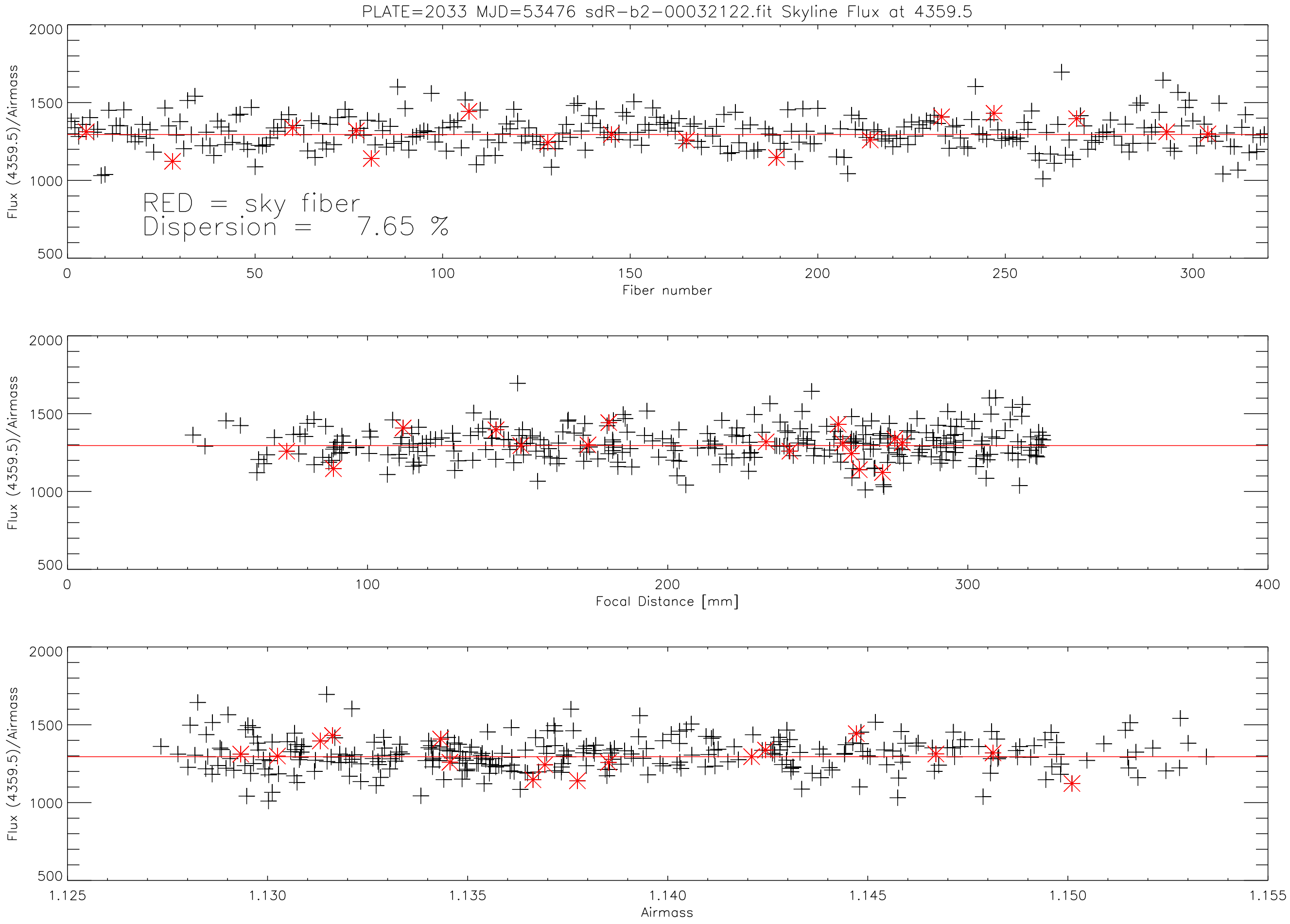
PLATE=2033 MJD=53476 sdR-b2-00032122.fit 2D Sky-subtraction Sky Fiber

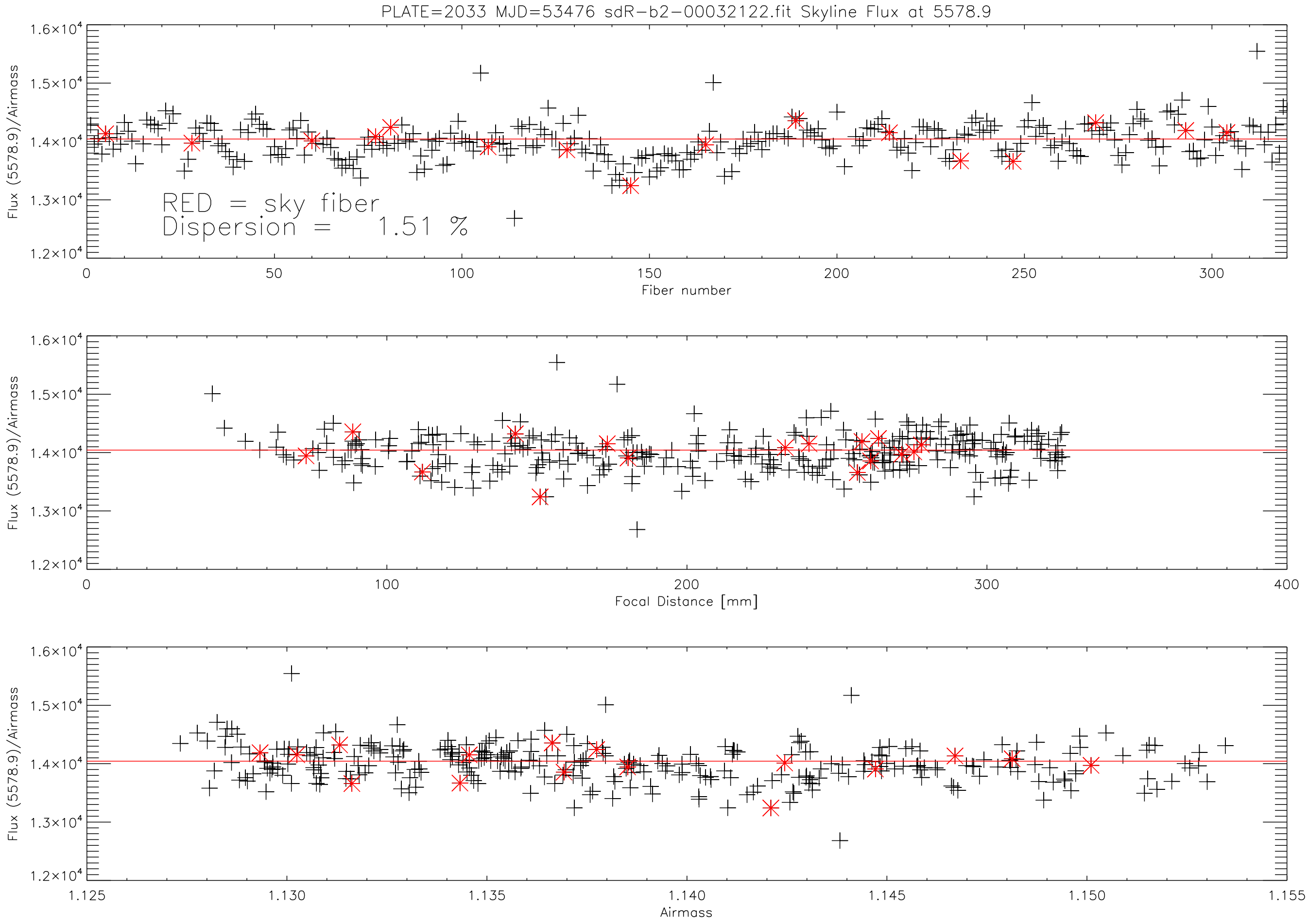


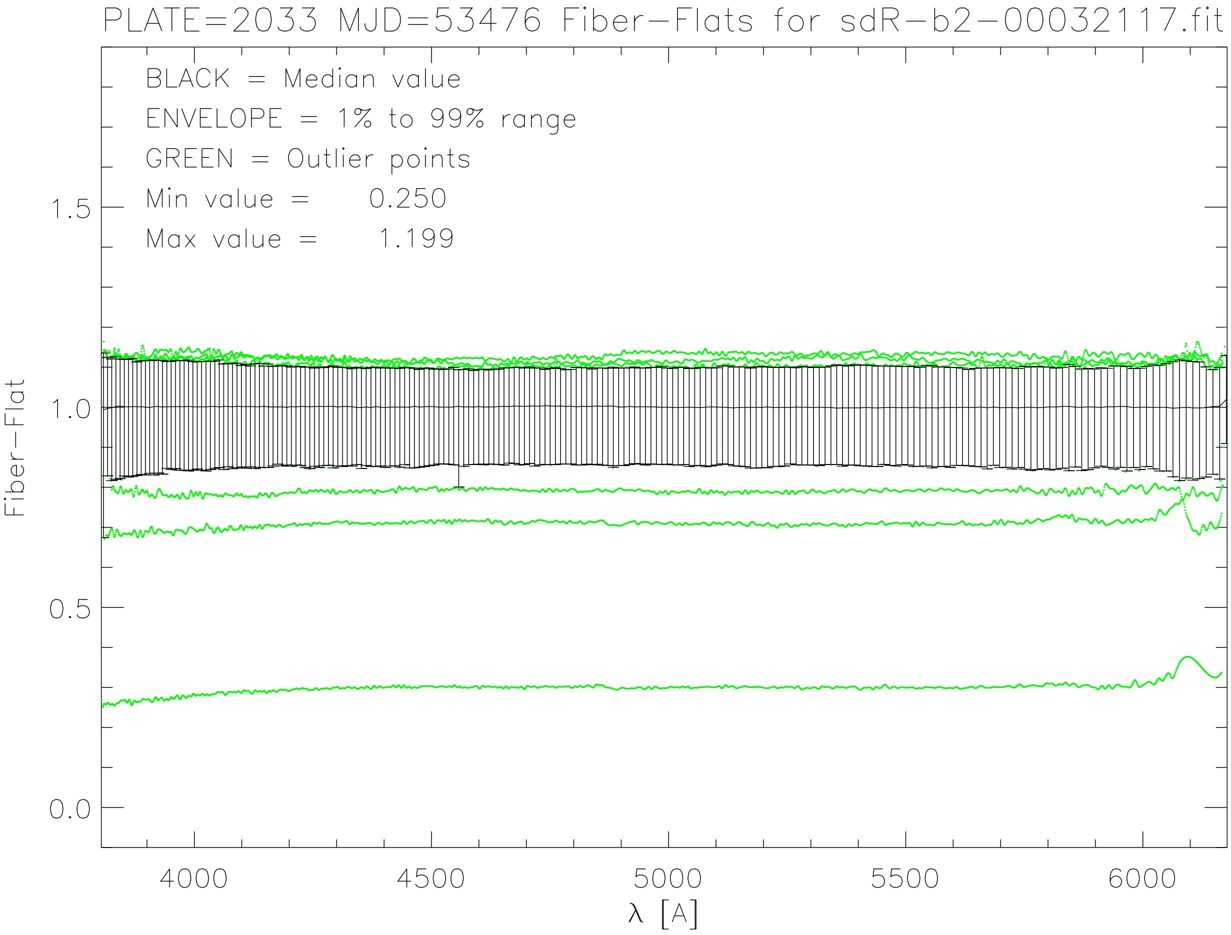

PLATE=2033 MJD=53476 sdR-b2-00032122.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2033 MJD=53476 sdR-b2-00032122.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]

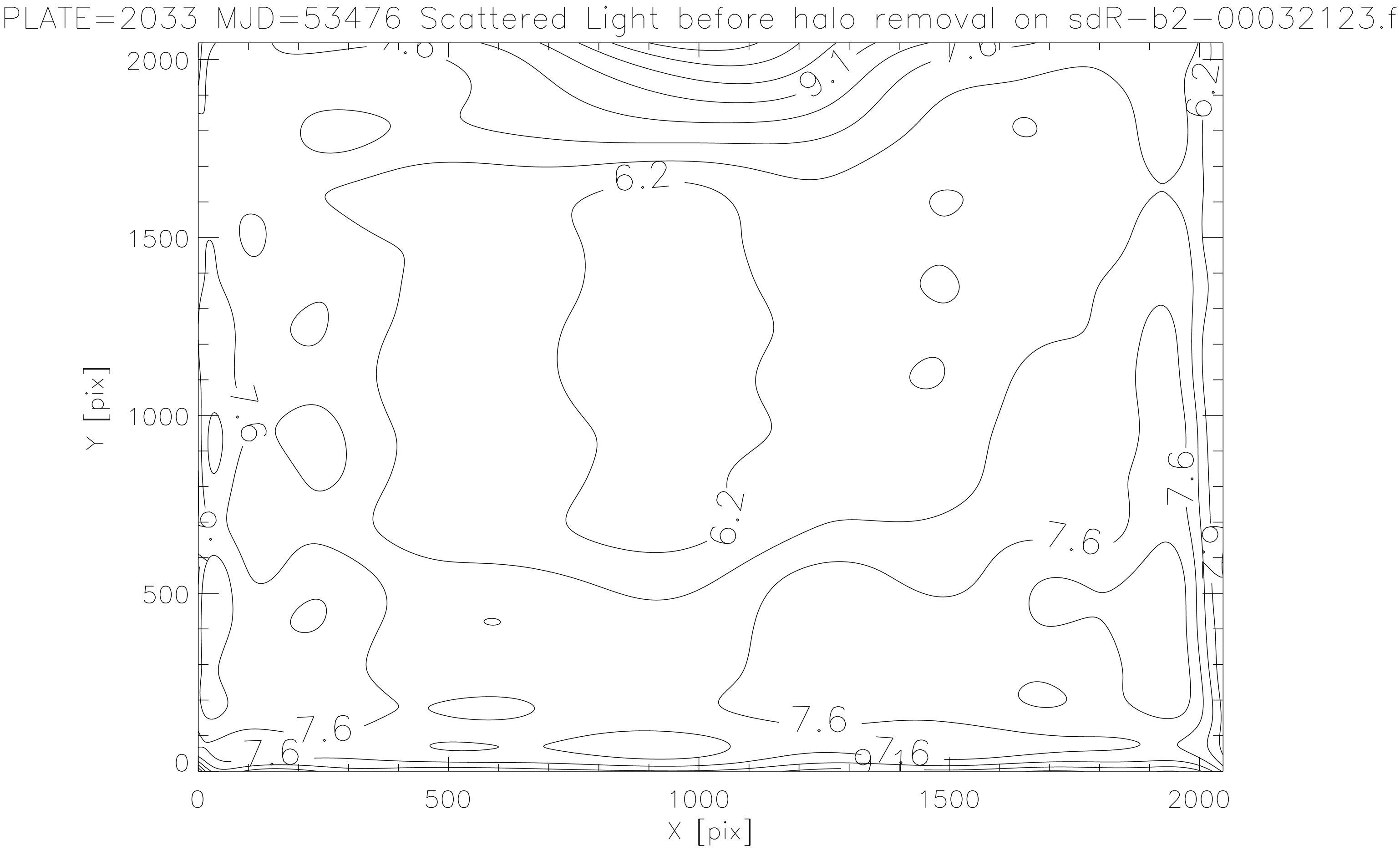

Number of sky fibers = 16
PLATE=2033 MJD=53476 sdR-b2-00032122.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]


PLATE=2033 MJD=53476 sdR-b2-00032122.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
2000
1500
1000
500
RED = sky fiber
Dispersion = 7.65 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
2000
1500
1000
500
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
2000
1500
1000
500
1.125
1.130
1.135
1.140
1.145
1.150
1.155
Airmass


PLATE=2033 MJD=53476 sdR-b2-00032122.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
RED = sky fiber
Dispersion = 1.51 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
1.6×10⁴
1.5×10⁴
1.4×10⁴
1.3×10⁴
1.2×10⁴
1.125
1.130
1.135
1.140
1.145
1.150
1.155
Airmass

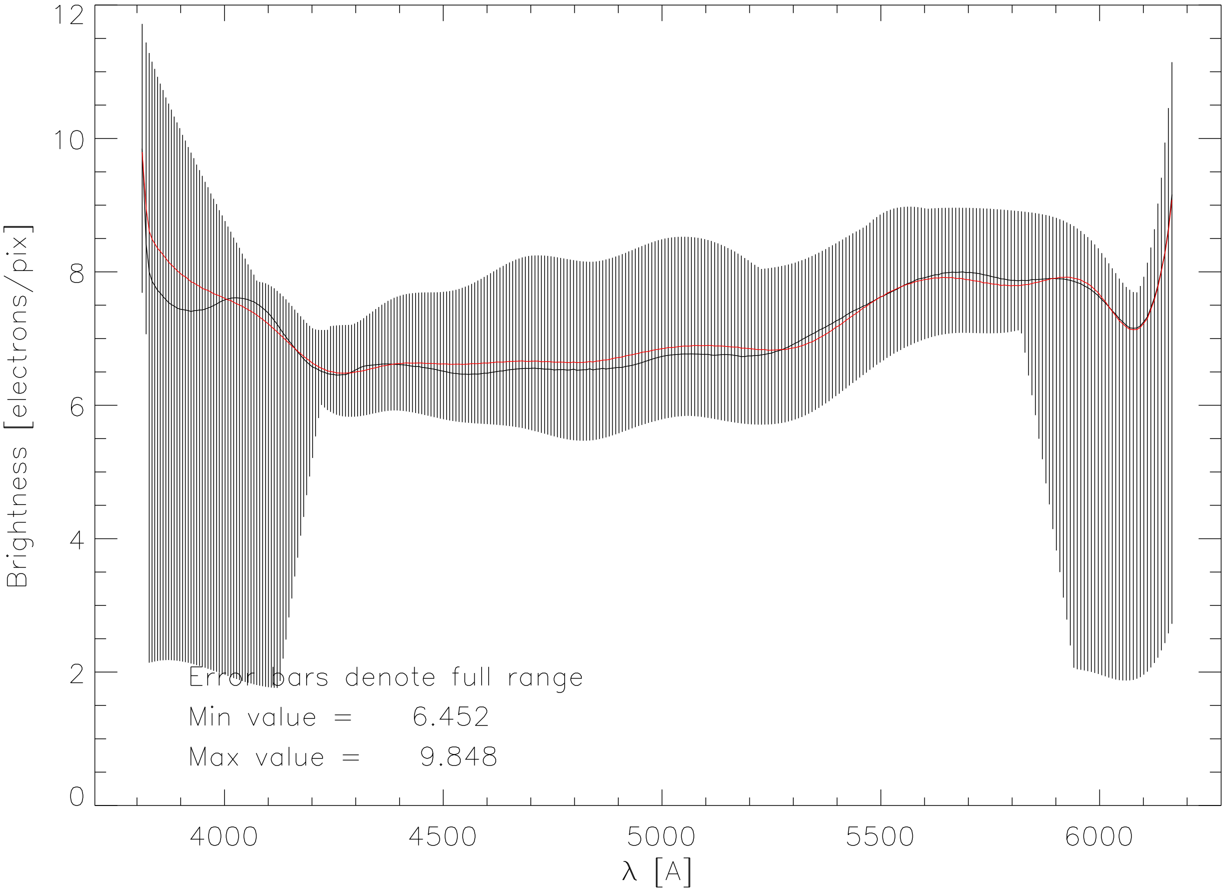


Sun Feb 17 18:38:31 2008

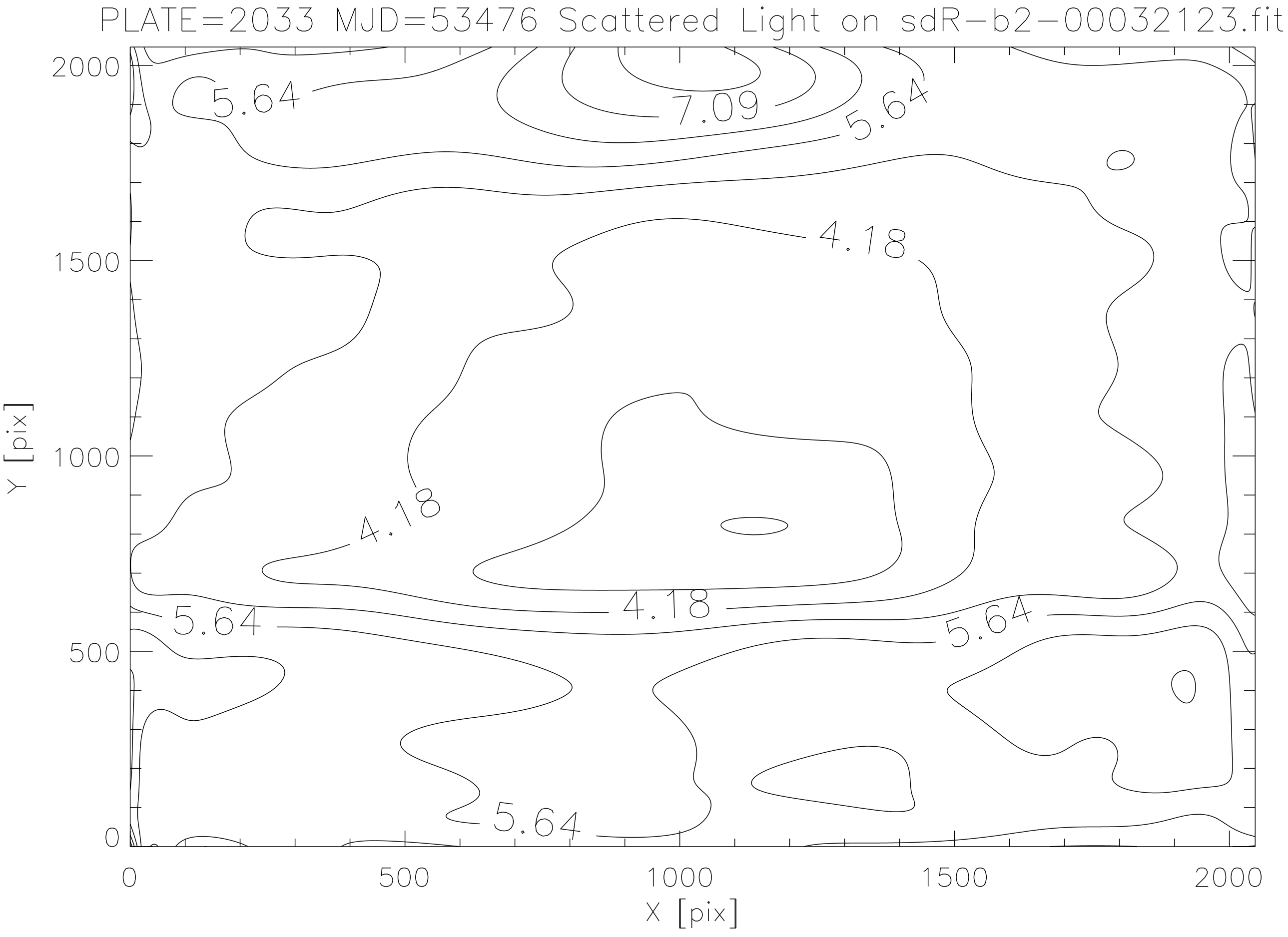


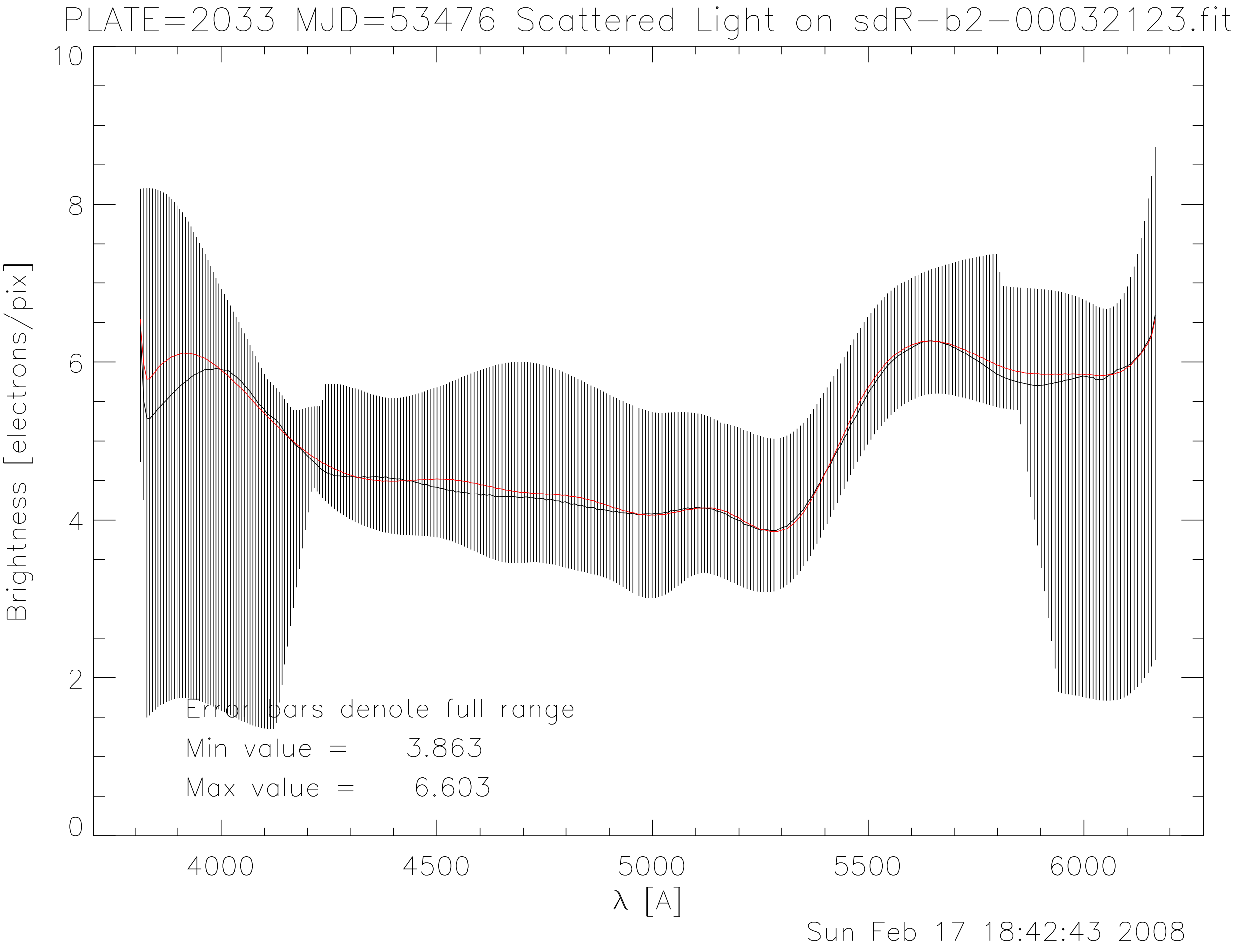
PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b2-00032123.f

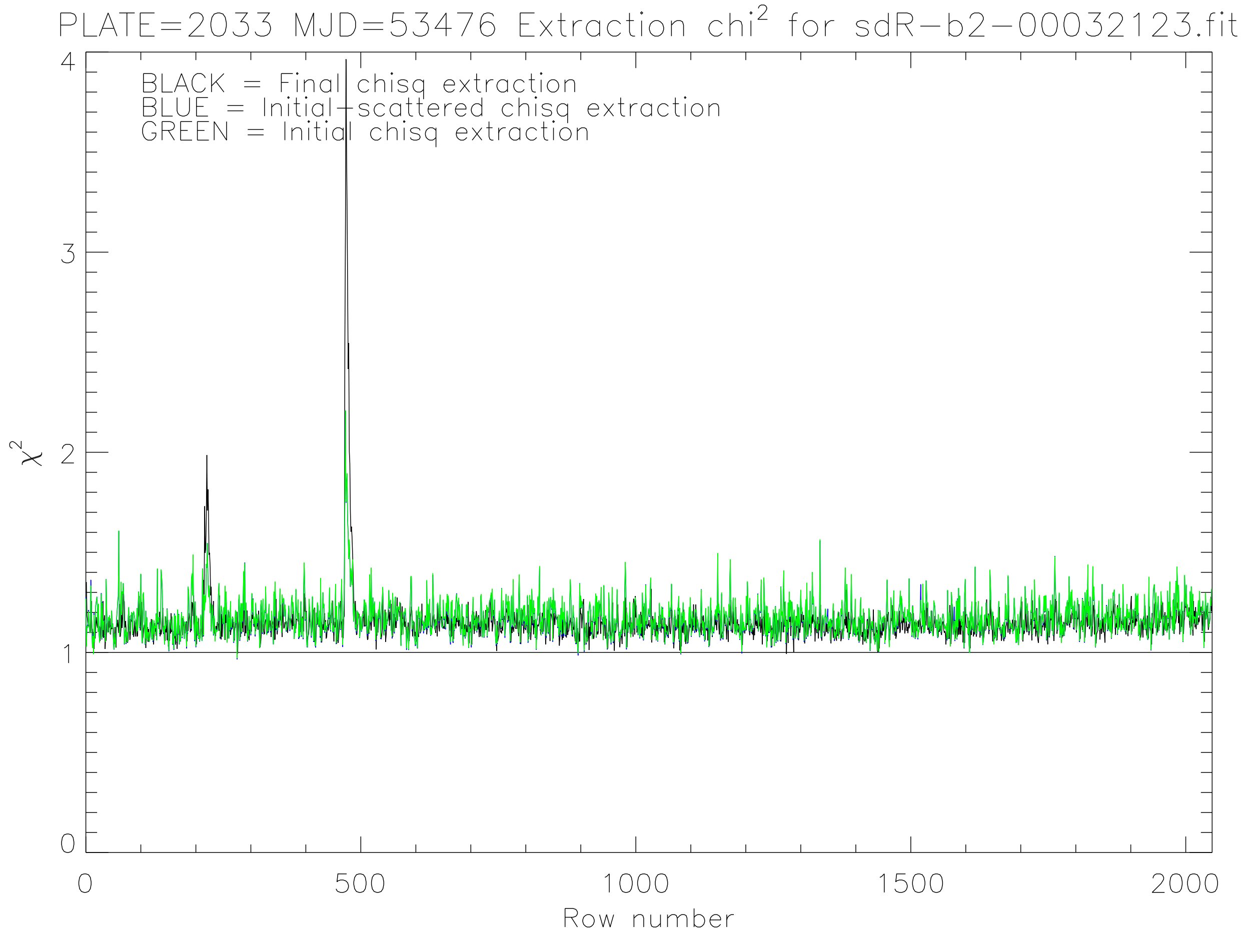
PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-b2-00032123.f

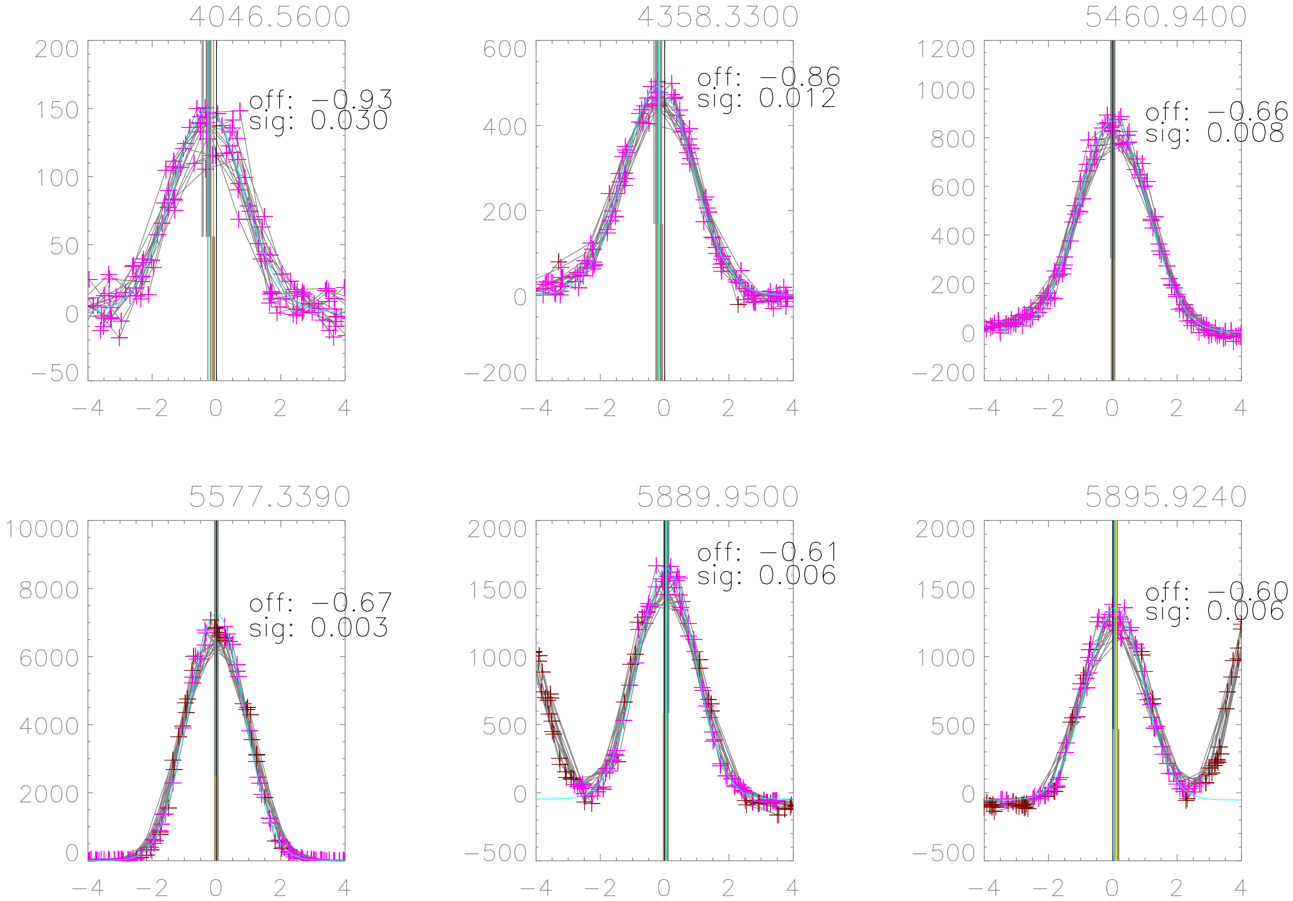


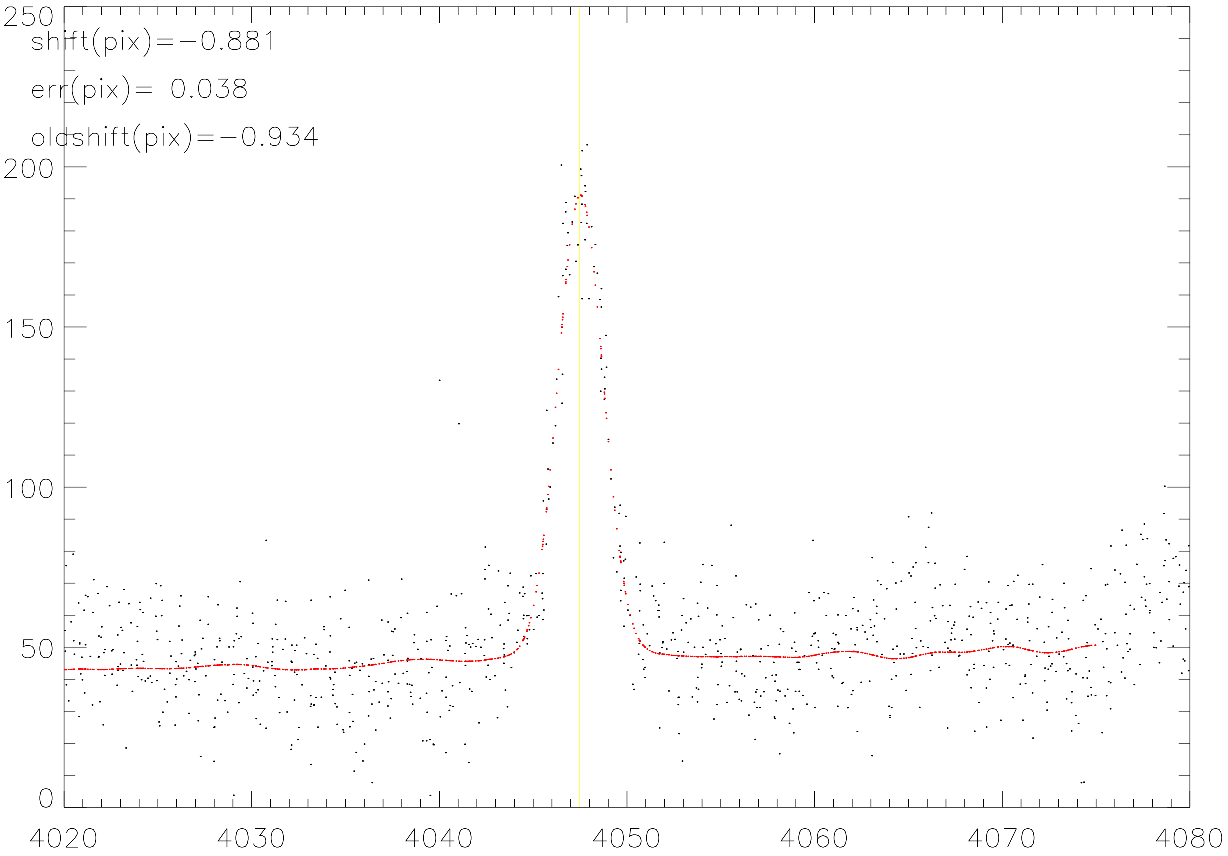
Sun Feb 17 18:39:26 2008

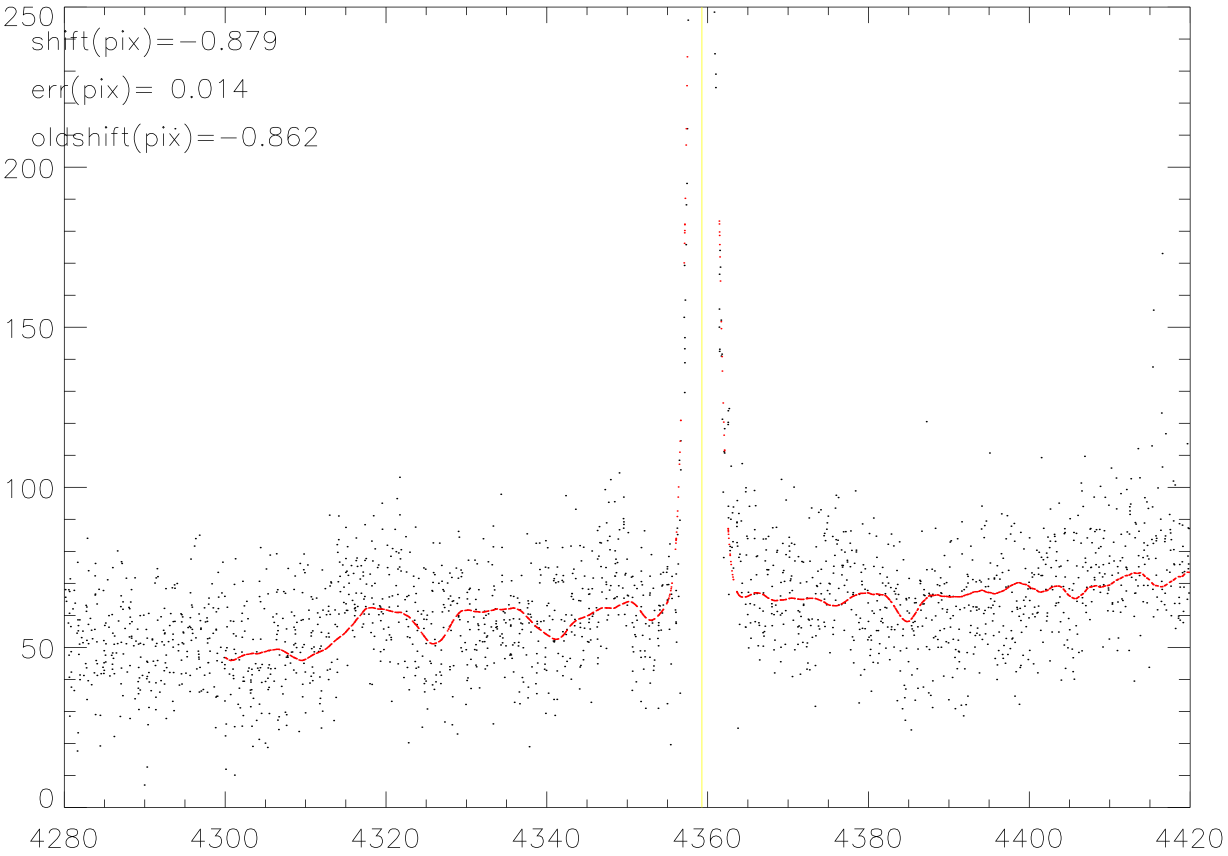

PLATE=2033 MJD=53476 Scattered Light on sdR-b2-00032123.fit
5.64
7.09
5.64
4.18
4.18
4.18
5.64
5.64
5.64
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000

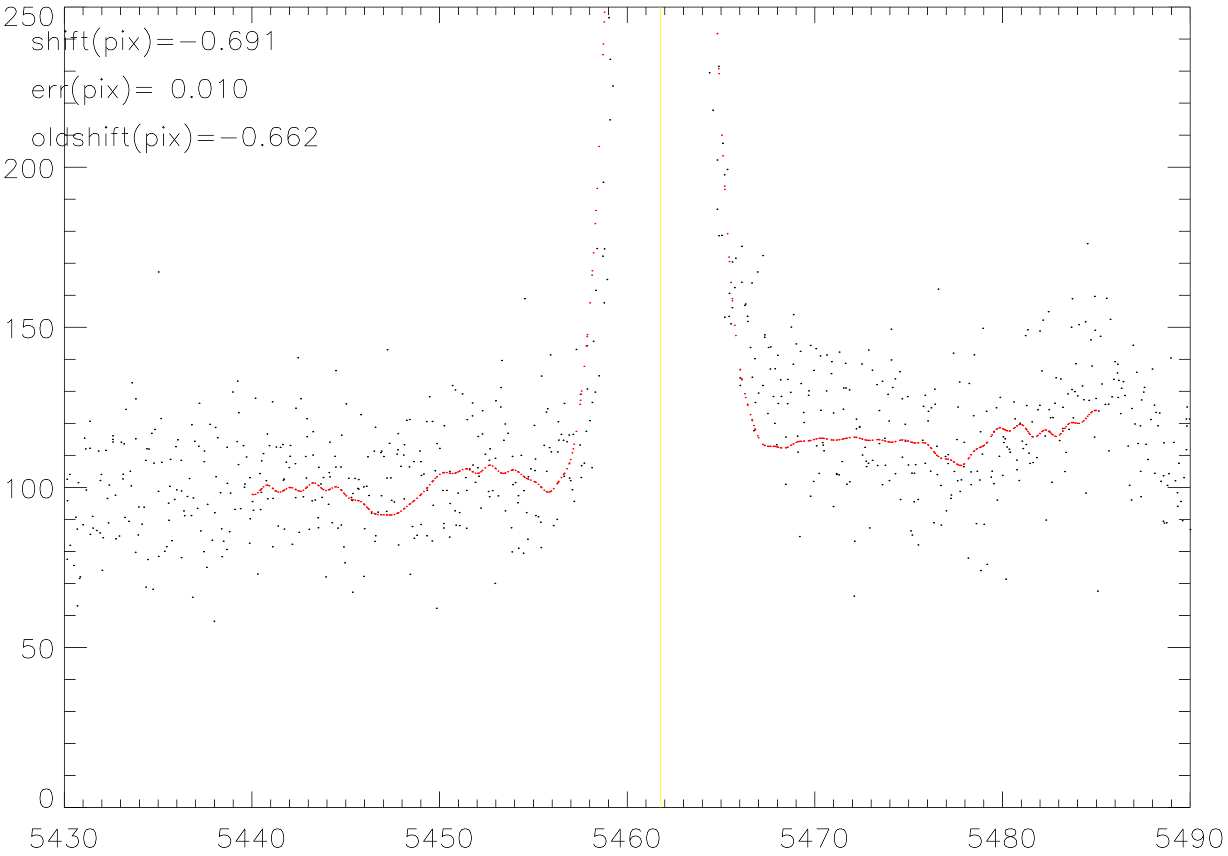

PLATE=2033 MJD=53476 Scattered Light on sdR-b2-00032123.fit
Brightness [electrons/pix]
0
2
4
6
8
10
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 3.863
Max value = 6.603
Sun Feb 17 18:42:43 2008

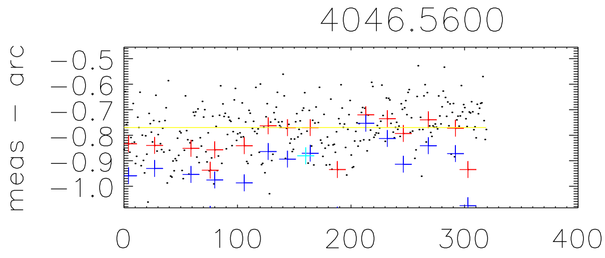

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-b2-00032123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

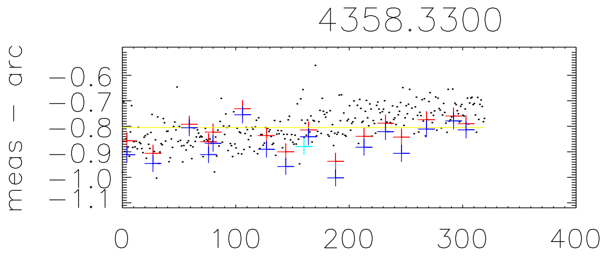

4046.5600
off: −0.93
sig: 0.030
4358.3300
off: −0.86
sig: 0.012
5460.9400
off: −0.66
sig: 0.008
5577.3390
off: −0.67
sig: 0.003
5889.9500
off: −0.61
sig: 0.006
5895.9240
off: −0.60
sig: 0.006
−4
−2
0
2
4
200
150
100
50
0
−50
600
400
200
0
−200
1200
1000
800
600
400
200
0
−200
10000
8000
6000
4000
2000
0
2000
1500
1000
500
0
−500

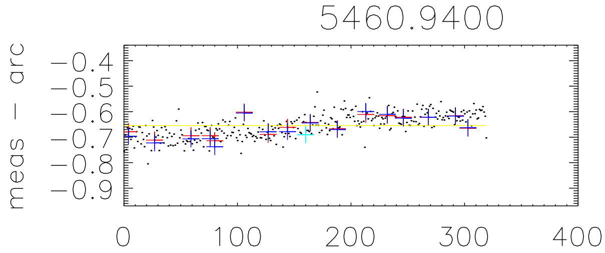

shift(pix)=−0.881
err(pix)= 0.038
oldshift(pix)=−0.934
250
200
150
100
50
0
4020
4030
4040
4050
4060
4070
4080

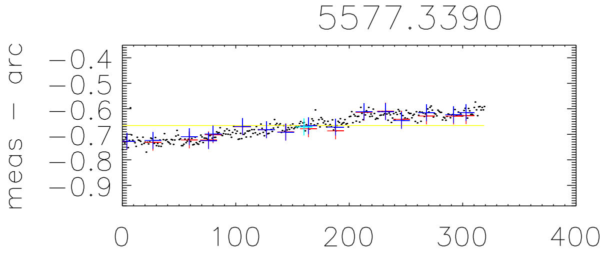

shift(pix)=−0.879
err(pix)= 0.014
oldshift(pix)=−0.862
250
200
150
100
50
0
4280
4300
4320
4340
4360
4380
4400
4420

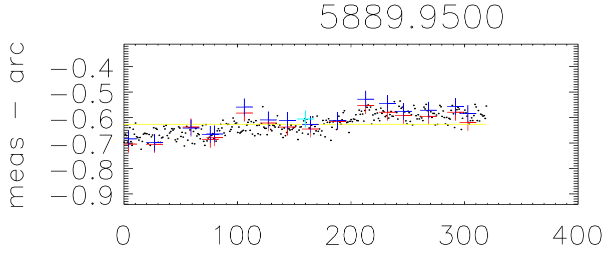

shift(pix)=−0.691
err(pix)= 0.010
oldshift(pix)=−0.662
250
200
150
100
50
0
5430
5440
5450
5460
5470
5480
5490

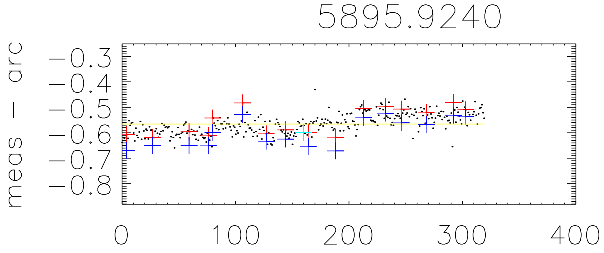

4046.5600
meas − arc
−0.5
−0.6
−0.7
−0.8
−0.9
−1.0
0
100
200
300
400

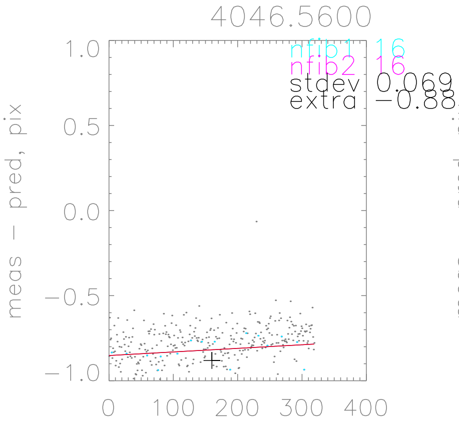

4358.3300
meas − arc
−0.6
−0.7
−0.8
−0.9
−1.0
−1.1
0
100
200
300
400

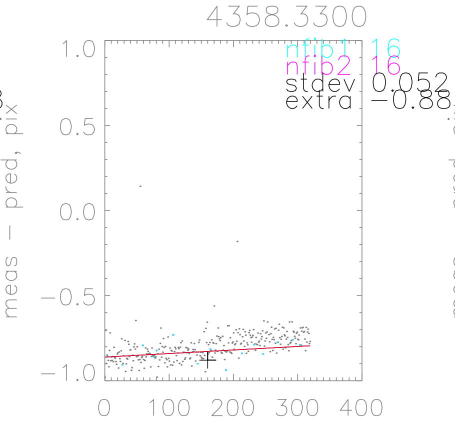

5460.9400
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

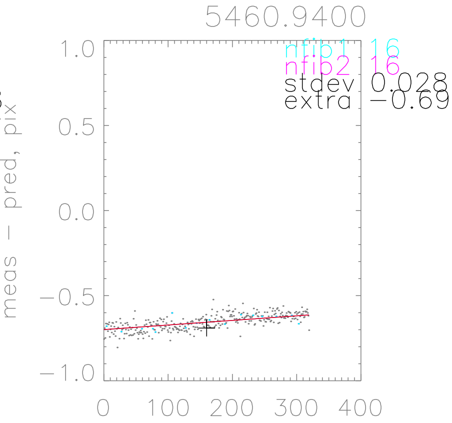

5577.3390
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

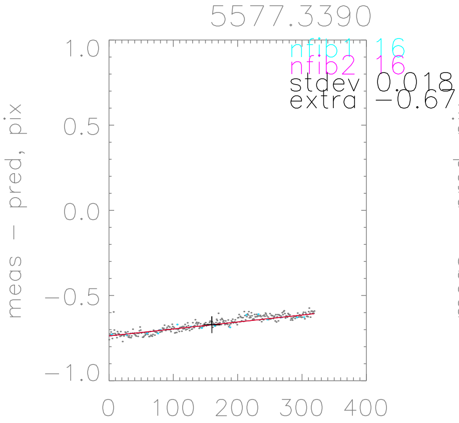

5889.9500
meas − arc
−0.4
−0.5
−0.6
−0.7
−0.8
−0.9
0
100
200
300
400

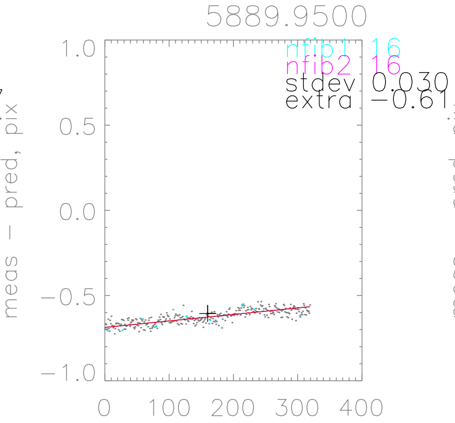

5895.9240
meas − arc
−0.3
−0.4
−0.5
−0.6
−0.7
−0.8
0
100
200
300
400

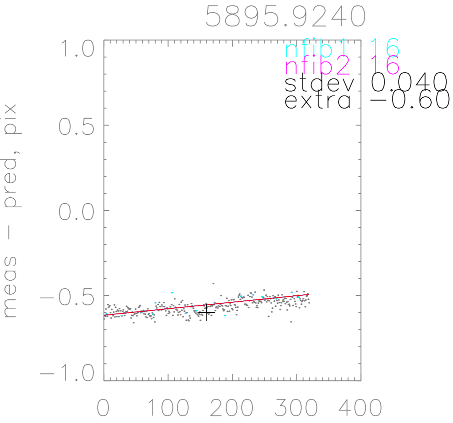

4046.5600
nfib1 16
nfib2 16
stdev 0.069
extra −0.88
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

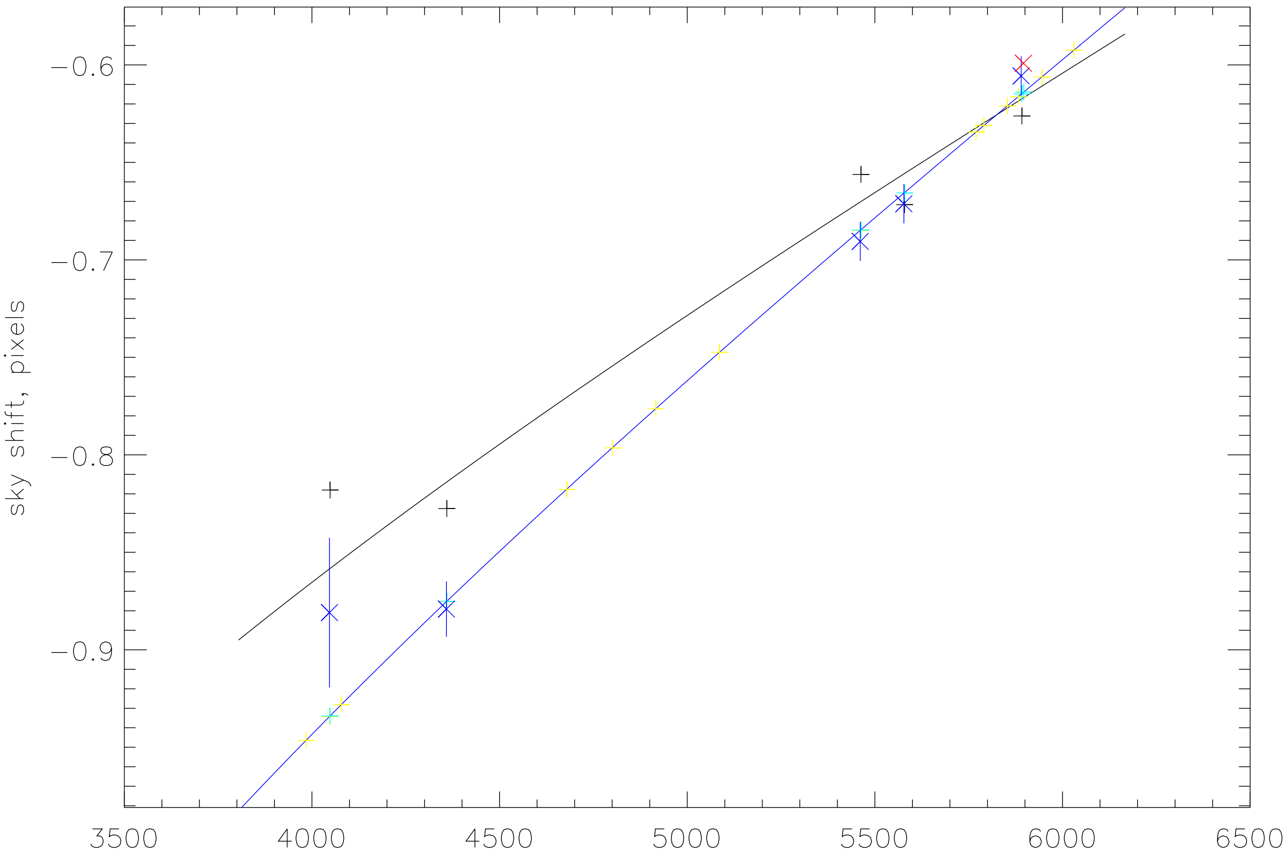

4358.3300
nfib1 16
nfib2 16
stdev 0.052
extra −0.88
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

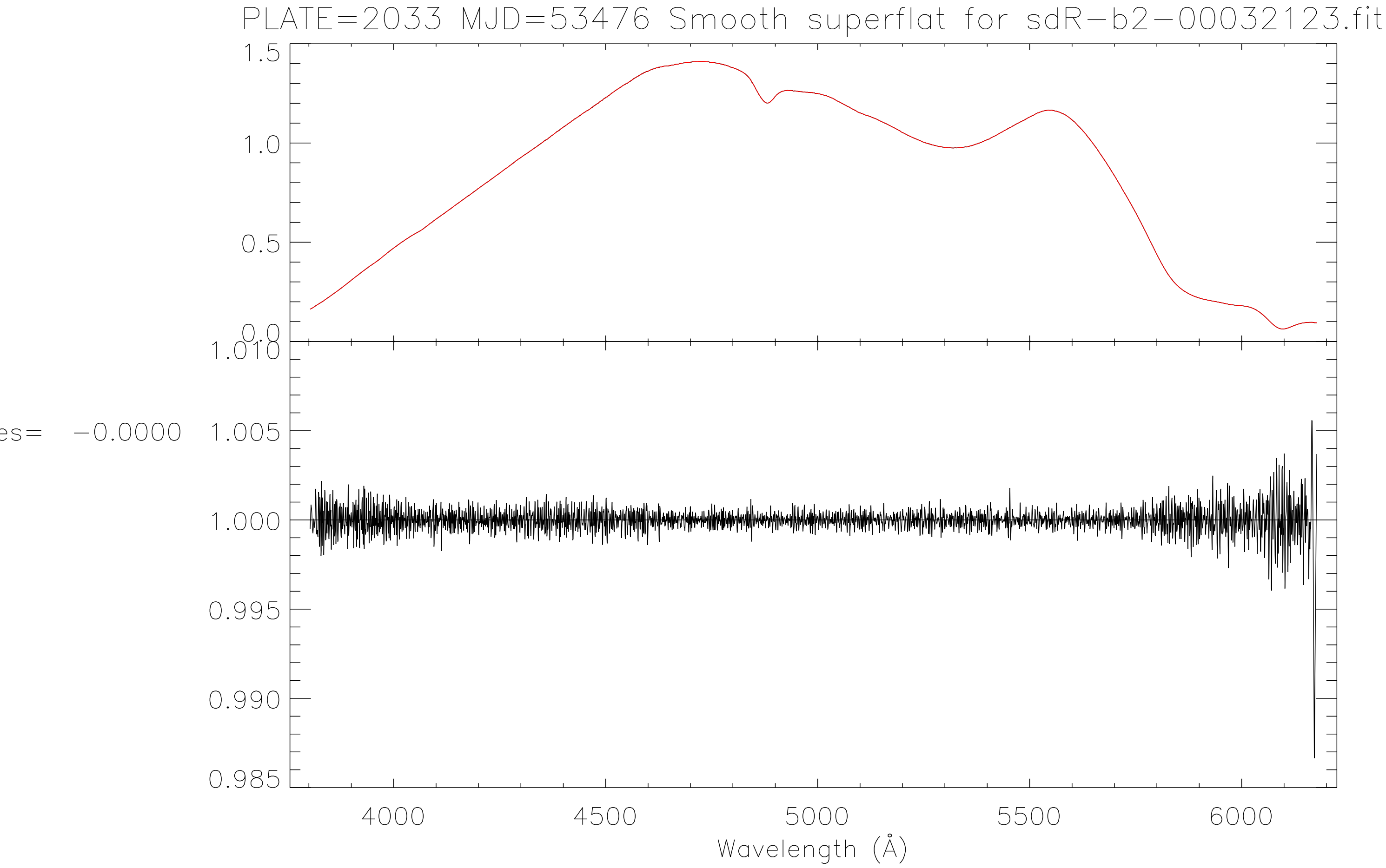

5460.9400
nfib1 16
nfib2 16
stdev 0.028
extra −0.69
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

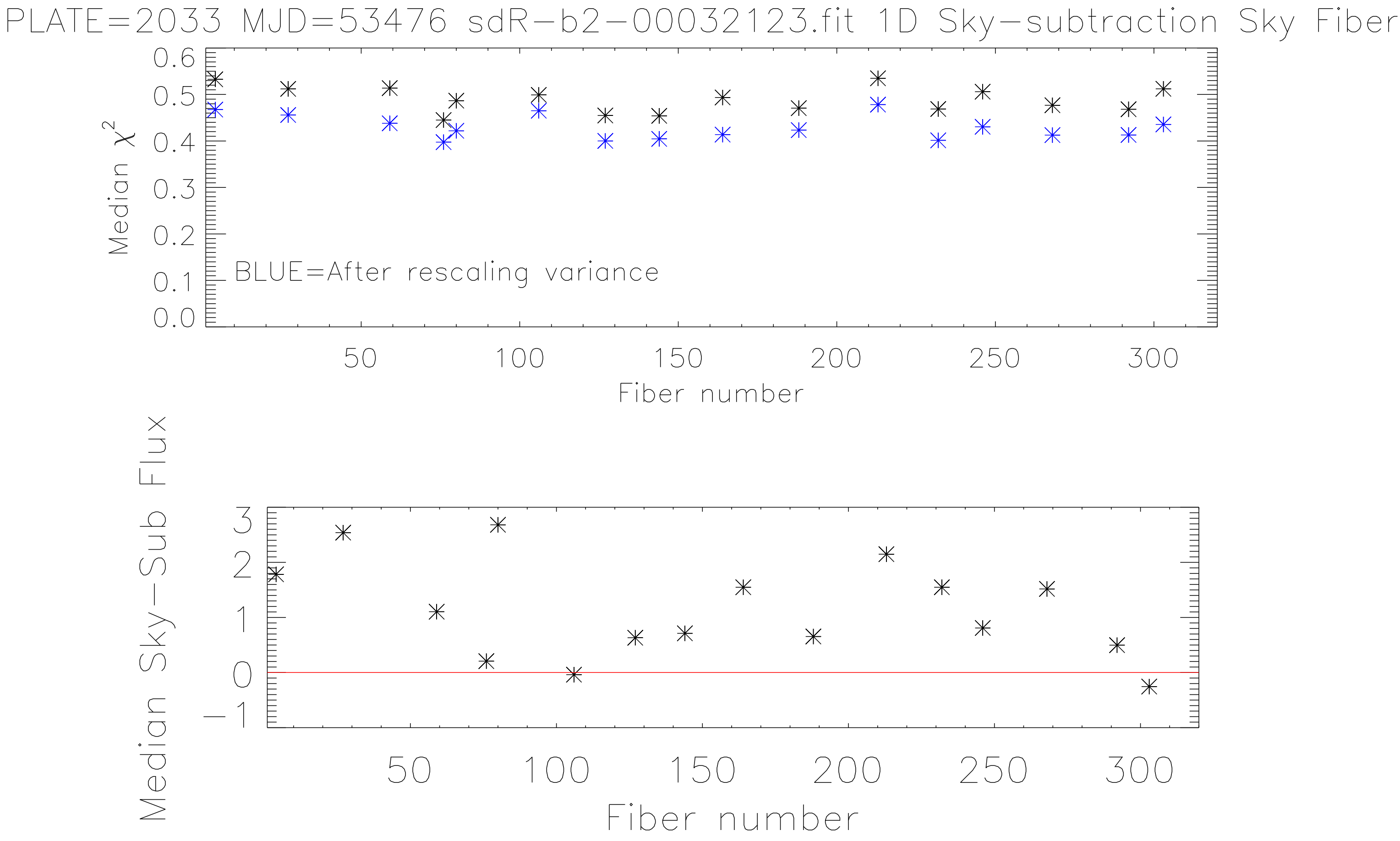

5577.3390
nfib1 16
nfib2 16
stdev 0.018
extra −0.67
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

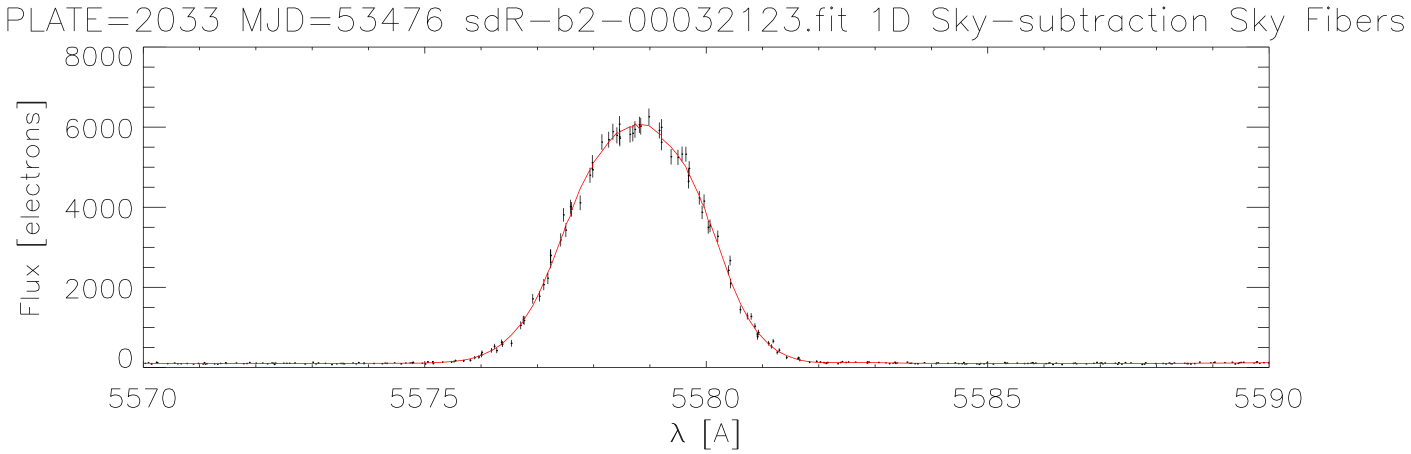

5889.9500
nfib1 16
nfib2 16
stdev 0.030
extra −0.61
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

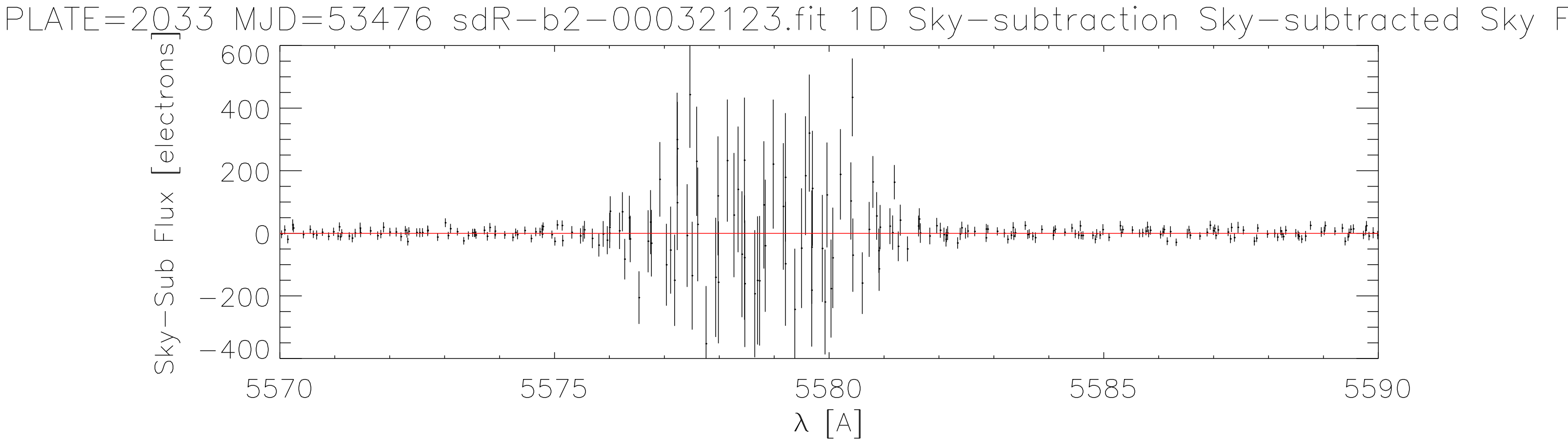

5895.9240
nfib1 16
nfib2 16
stdev 0.040
extra −0.60
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
−0.6
−0.7
−0.8
−0.9
3500
4000
4500
5000
5500
6000
6500


PLATE=2033 MJD=53476 Smooth superflat for sdR-b2-00032123.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)

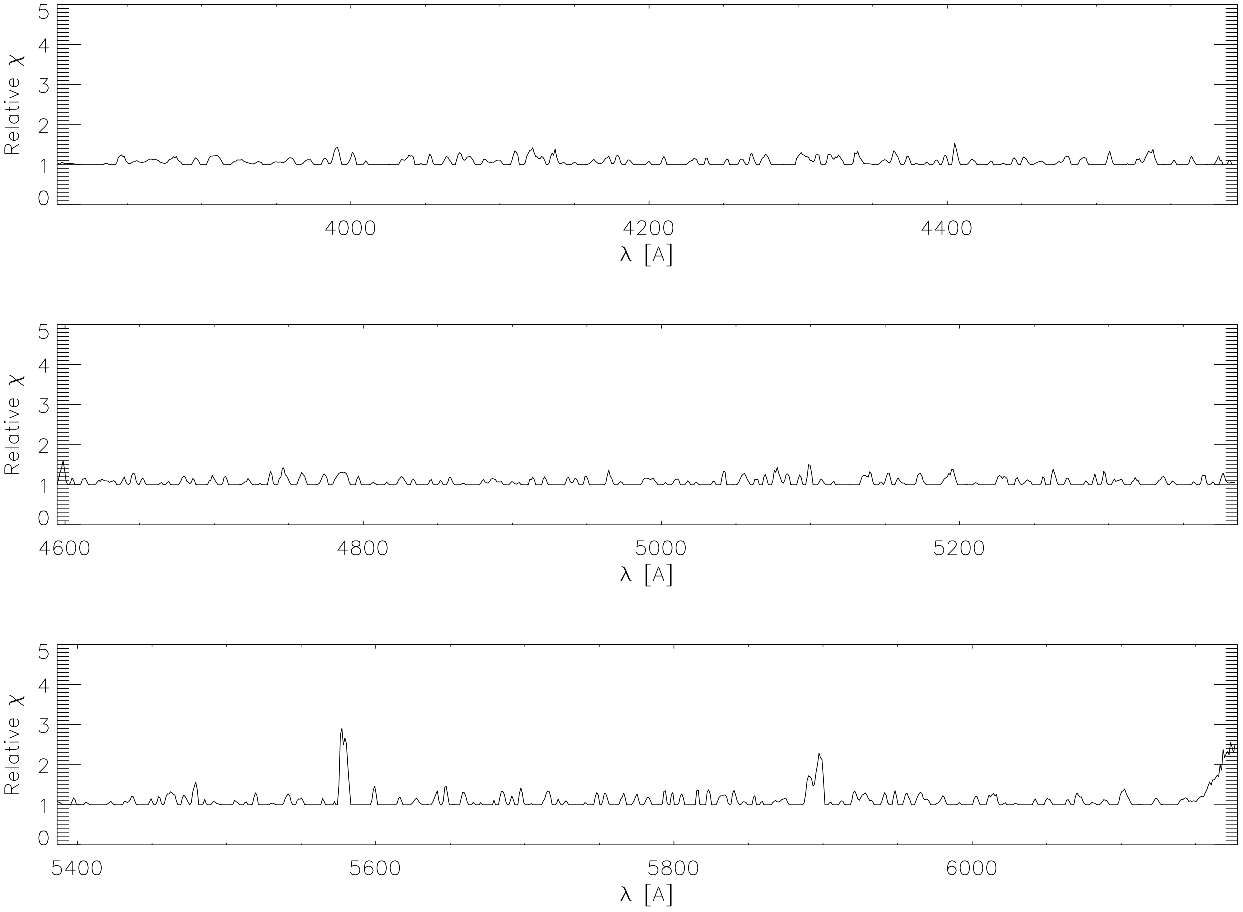

PLATE=2033 MJD=53476 sdR-b2-00032123.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
3
2
1
0
−1
50
100
150
200
250
300
Fiber number

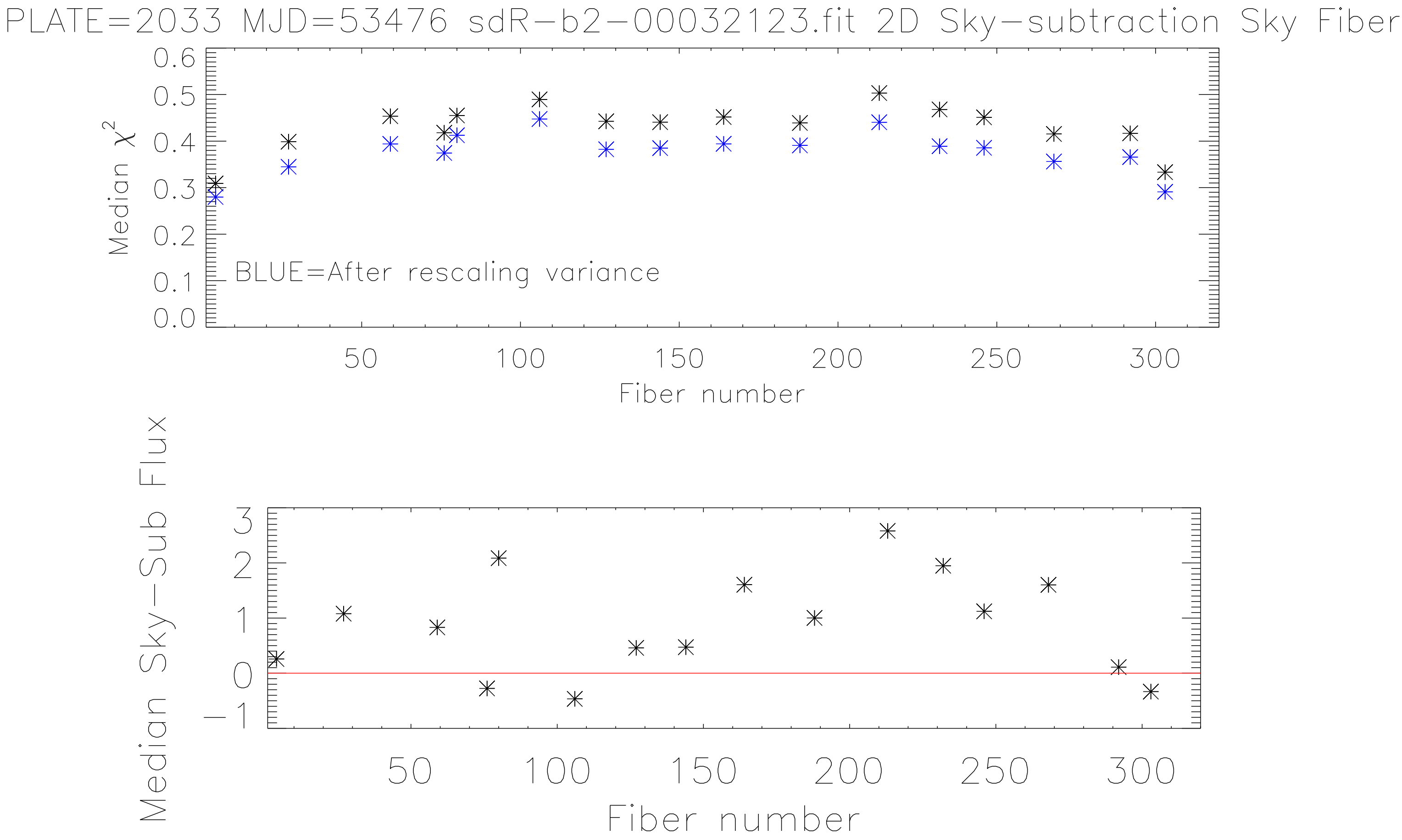

PLATE=2033 MJD=53476 sdR-b2-00032123.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
8000
6000
4000
2000
0
5570
5575
5580
5585
5590
λ [A]


PLATE=2033 MJD=53476 sdR-b2-00032123.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
600
400
200
0
−200
−400
5570
5575
5580
5585
5590
λ [A]

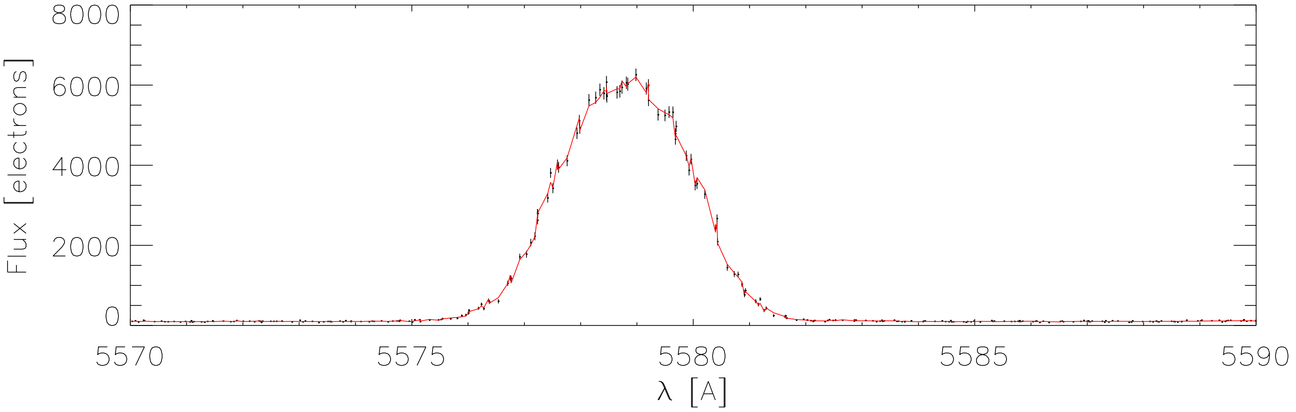
Number of sky fibers = 16

PLATE=2033 MJD=53476 sdR-b2-00032123.fit 1D Sky-subtraction Rescaled Errors

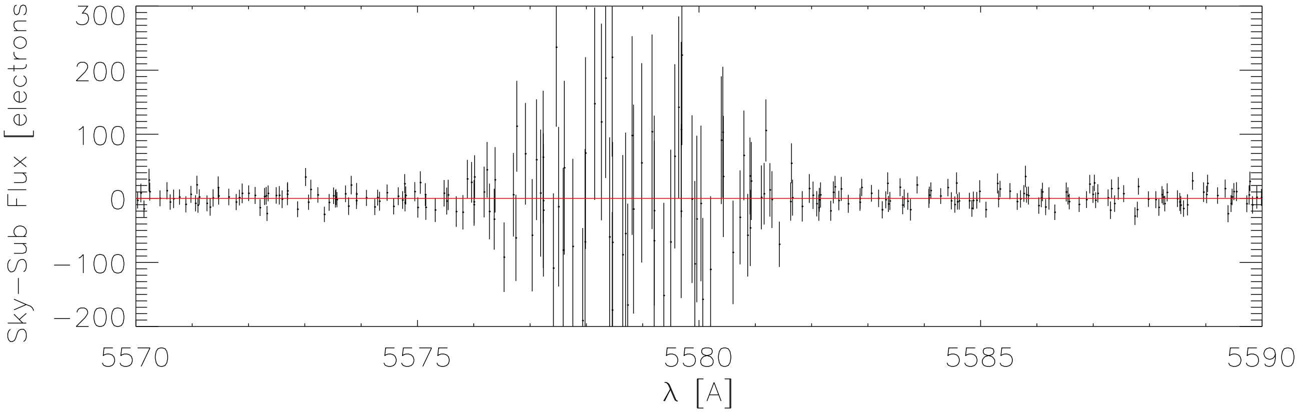


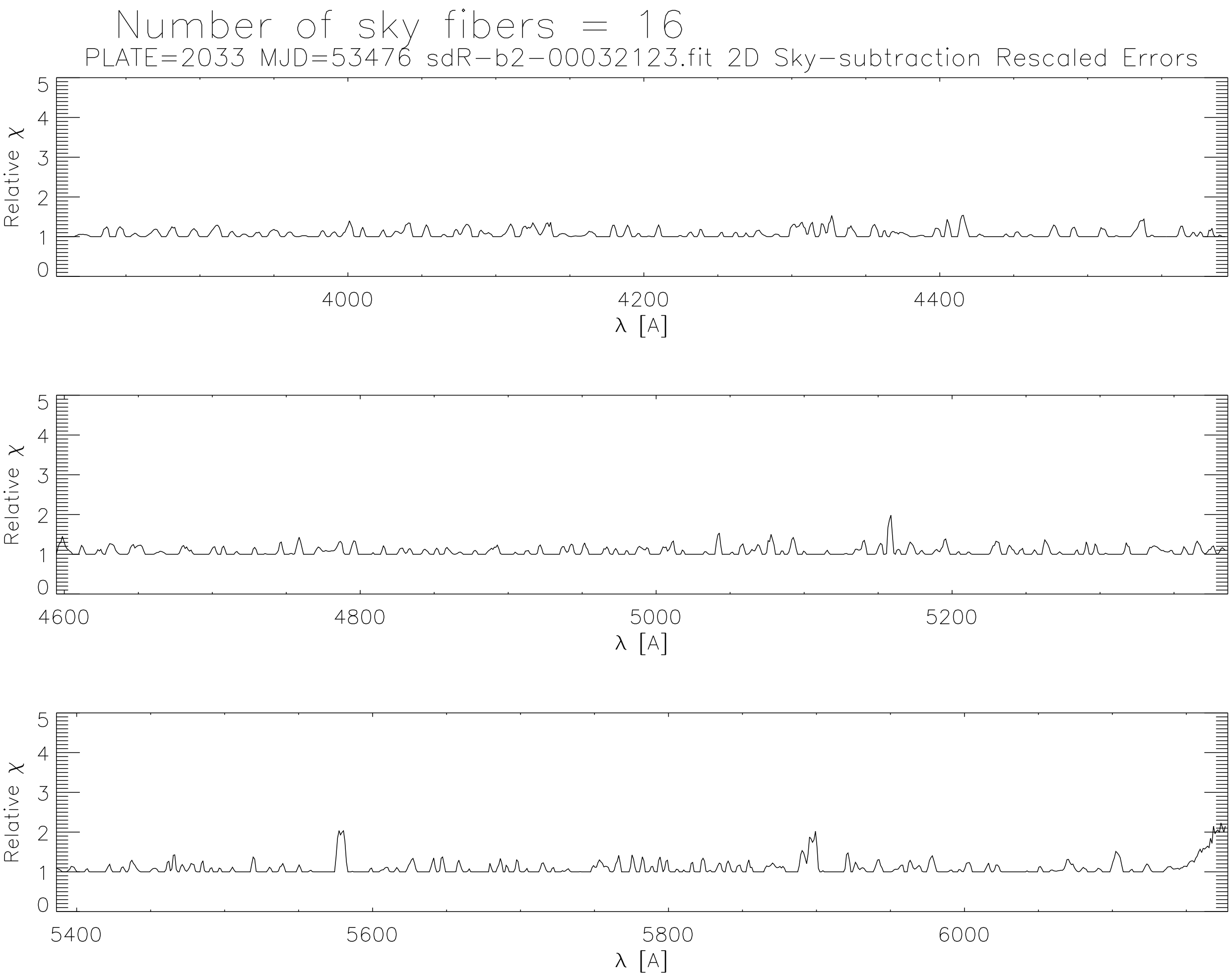

PLATE=2033 MJD=53476 sdR-b2-00032123.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-1
0
1
2
3
50
100
150
200
250
300
Fiber number

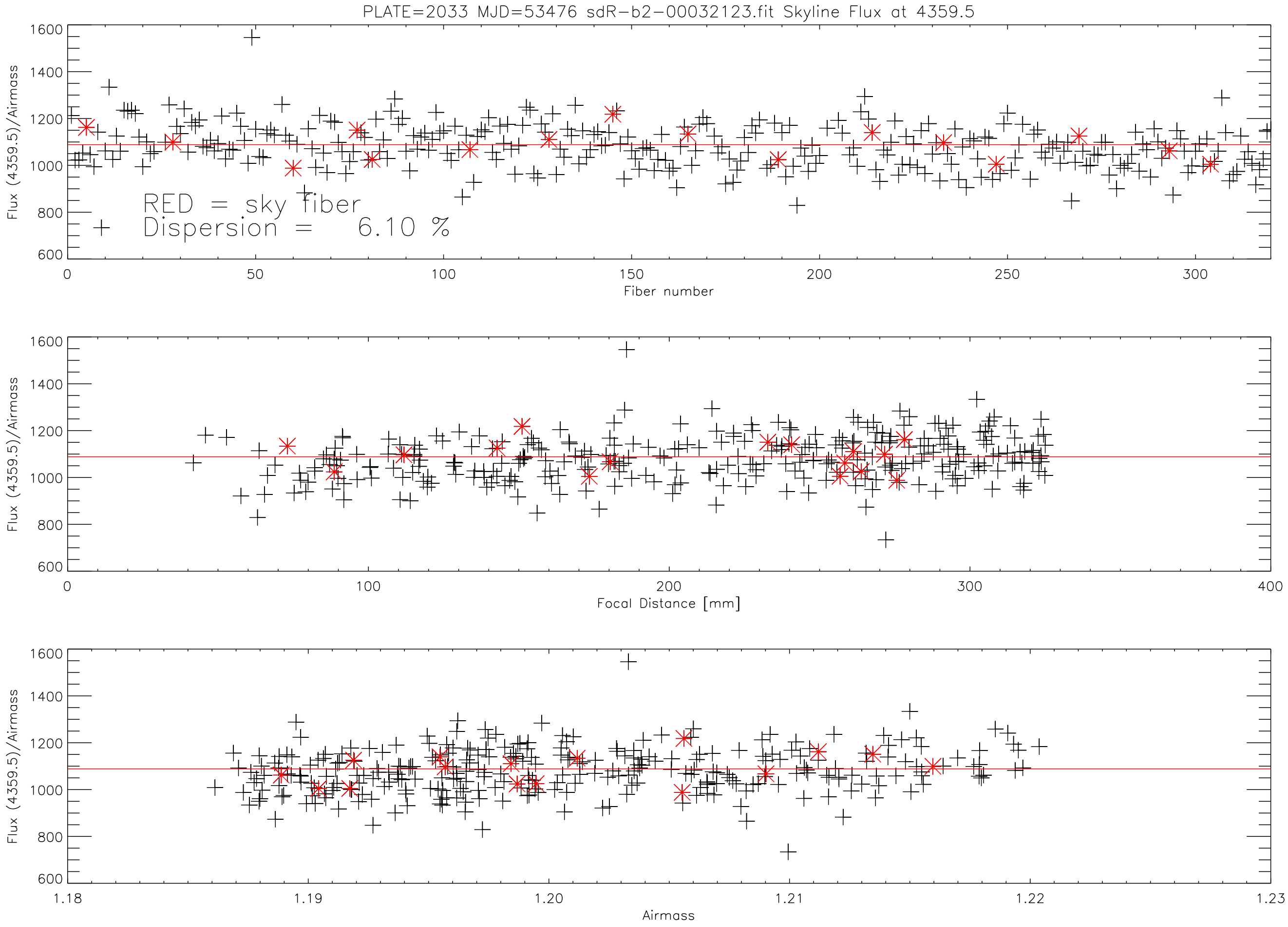
PLATE=2033 MJD=53476 sdR-b2-00032123.fit 2D Sky-subtraction Sky Fibers

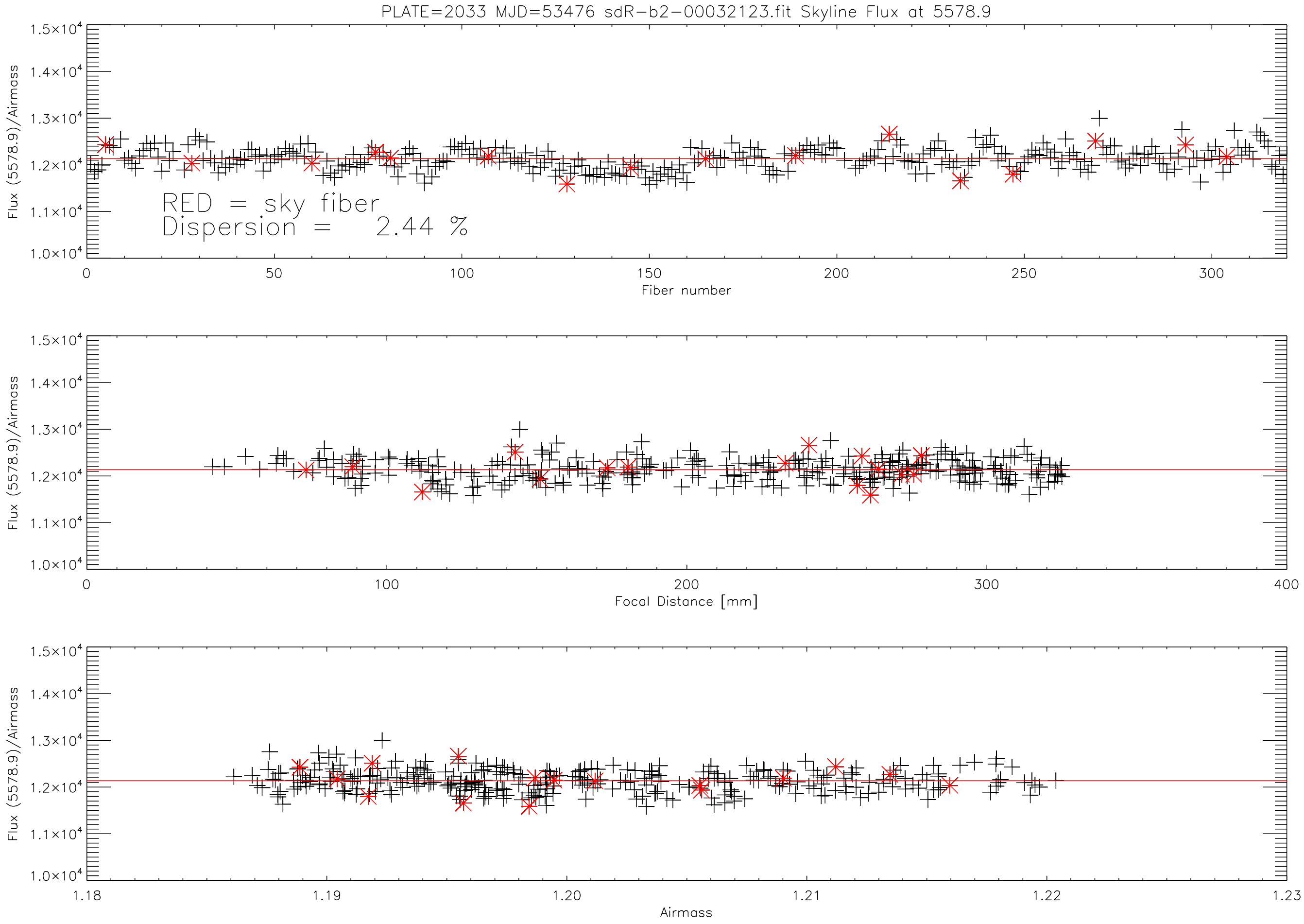


PLATE=2033 MJD=53476 sdR-b2-00032123.fit 2D Sky-subtraction Sky-subtracted Sky F

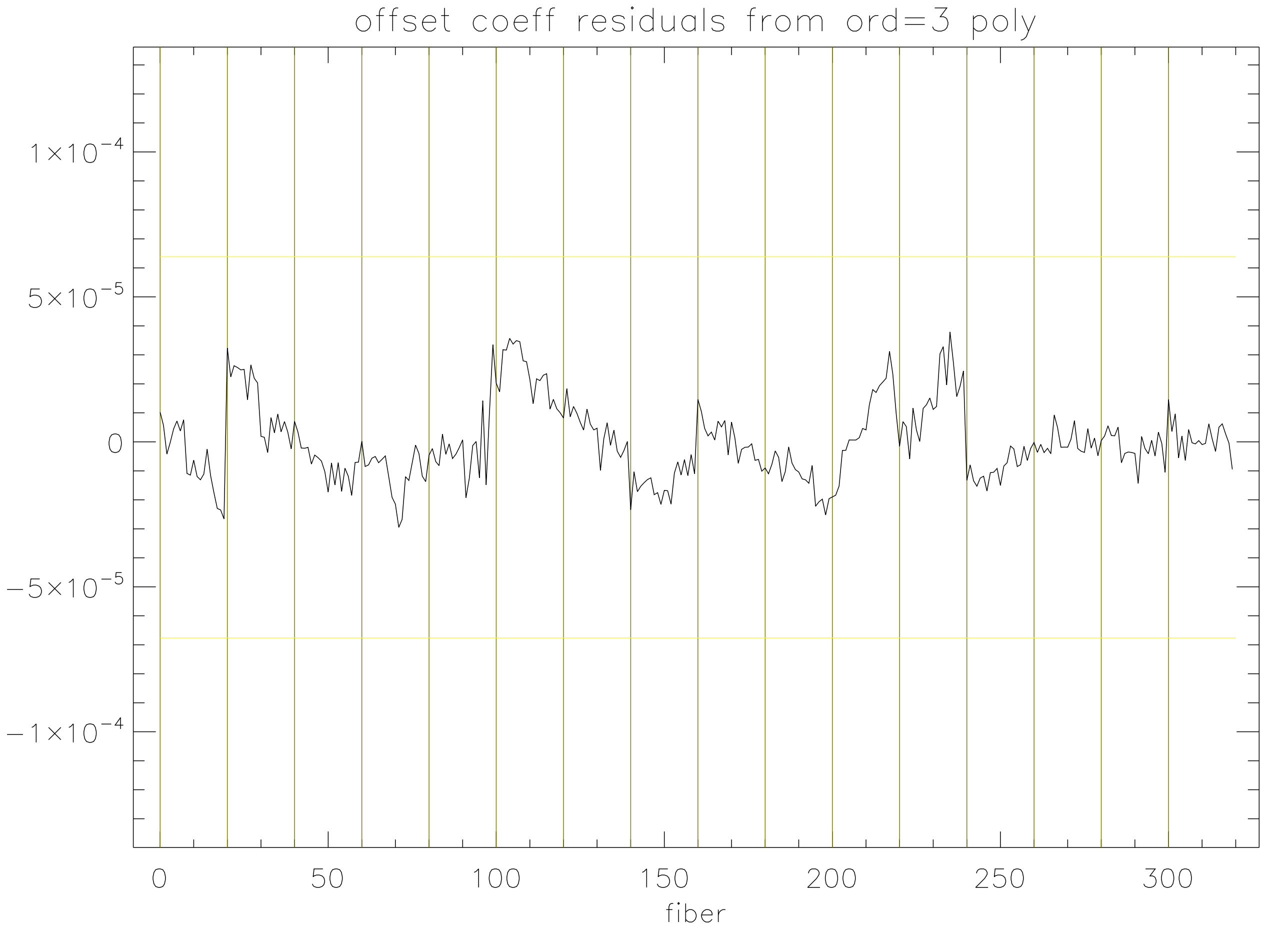


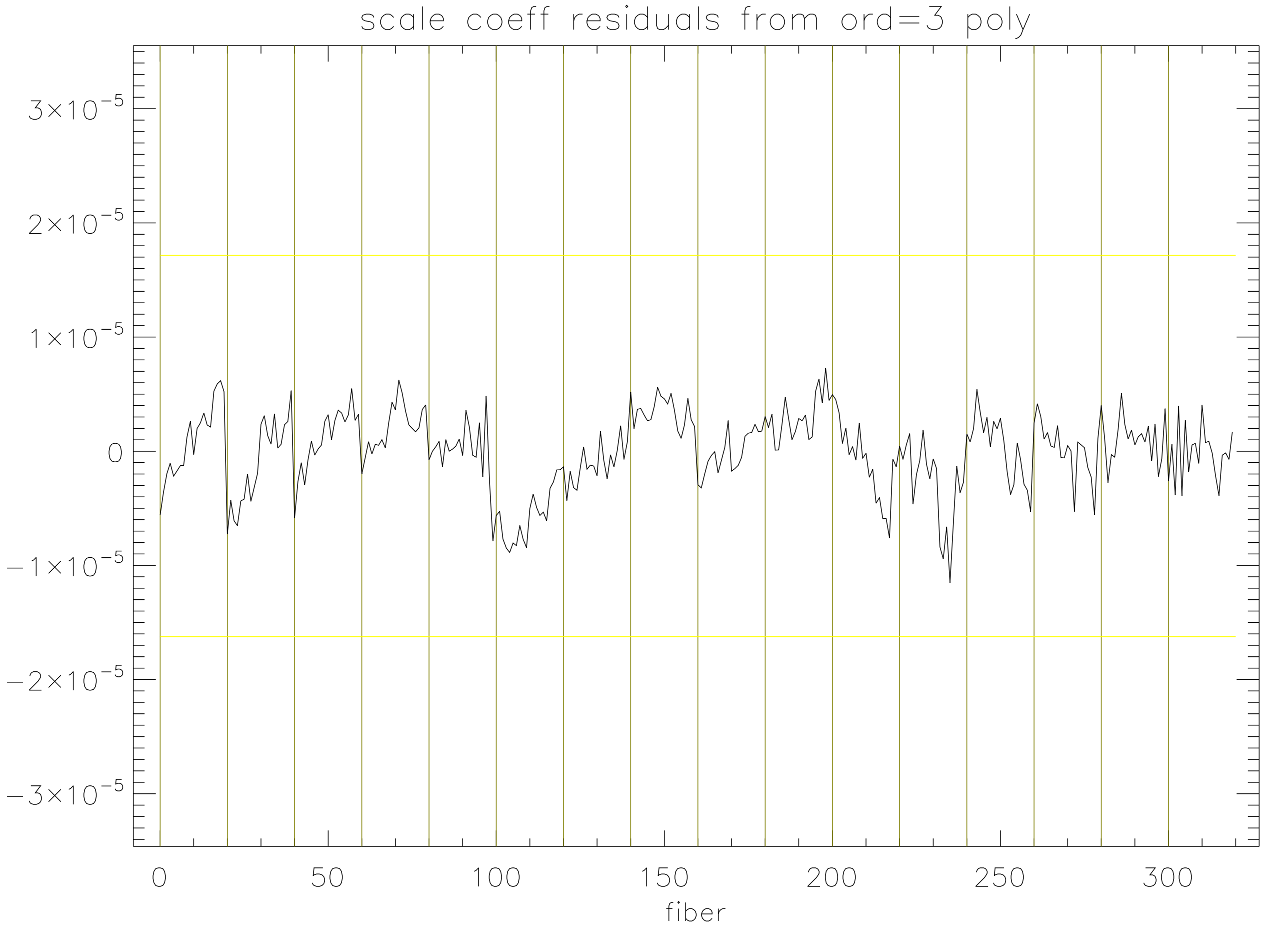

Number of sky fibers = 16
PLATE=2033 MJD=53476 sdR-b2-00032123.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
4000
4200
4400
λ [A]
Relative χ
0
1
2
3
4
5
4600
4800
5000
5200
λ [A]
Relative χ
0
1
2
3
4
5
5400
5600
5800
6000
λ [A]

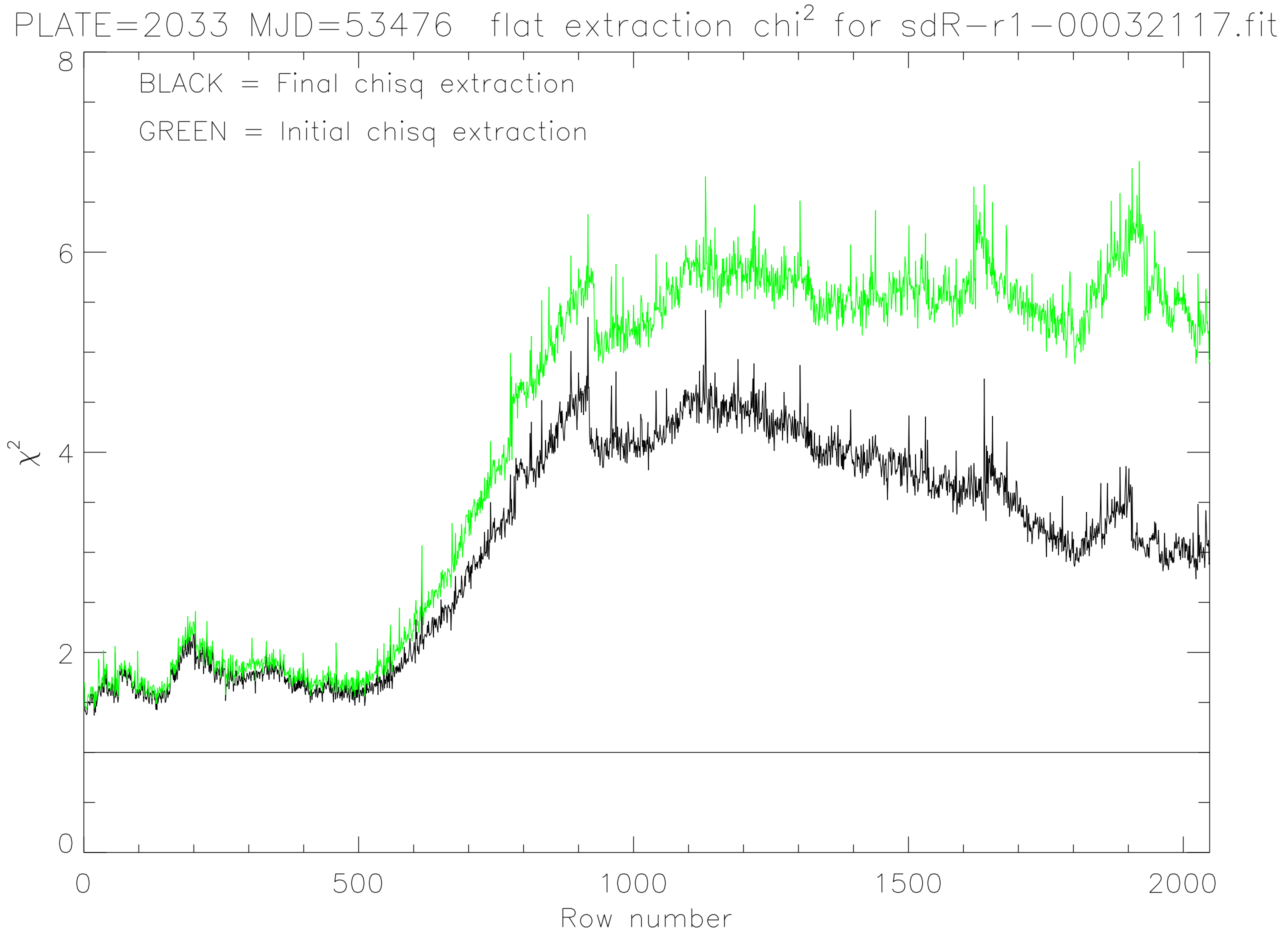

PLATE=2033 MJD=53476 sdR-b2-00032123.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
RED = sky fiber
Dispersion = 6.10 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
1600
1400
1200
1000
800
600
1.18
1.19
1.20
1.21
1.22
1.23
Airmass

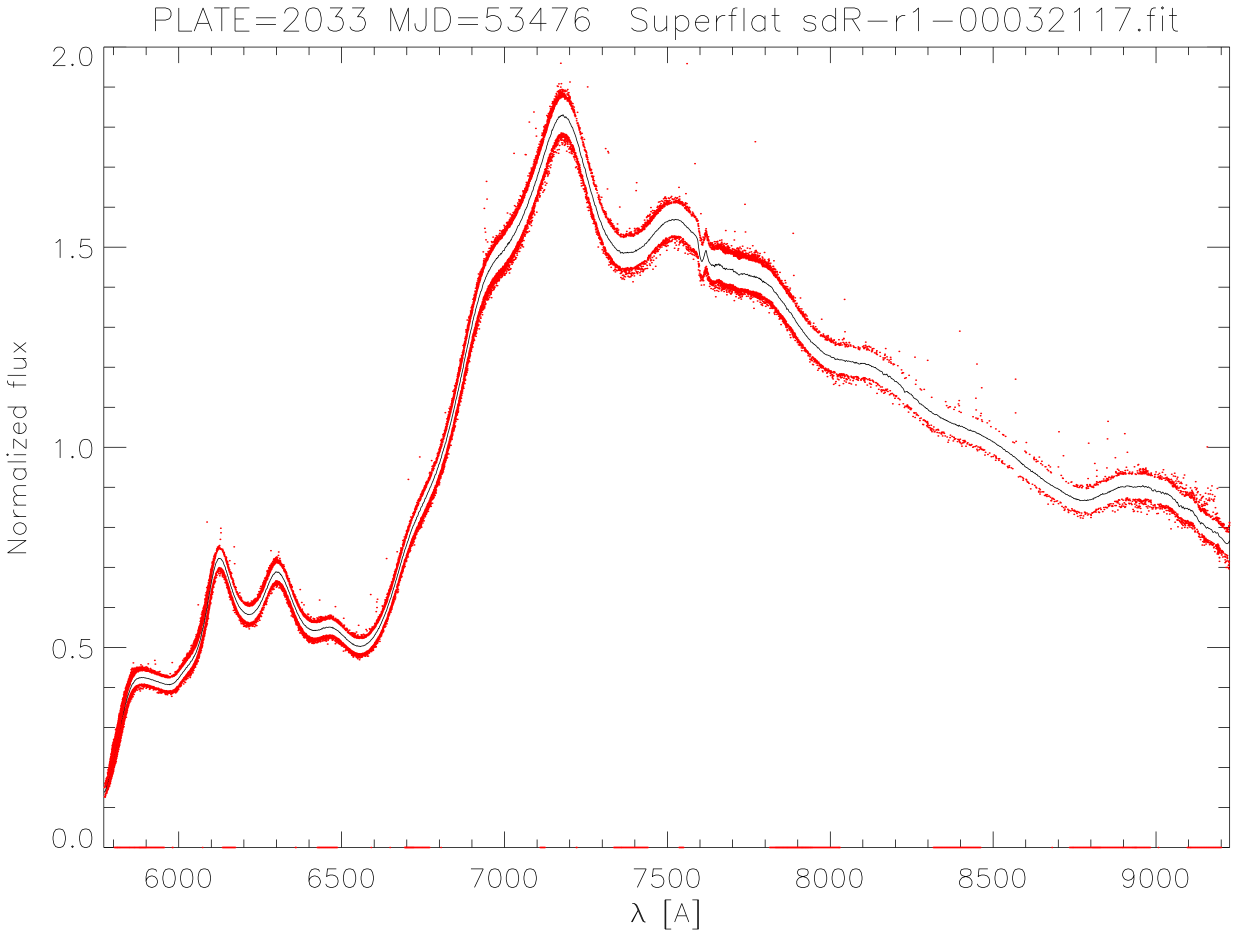


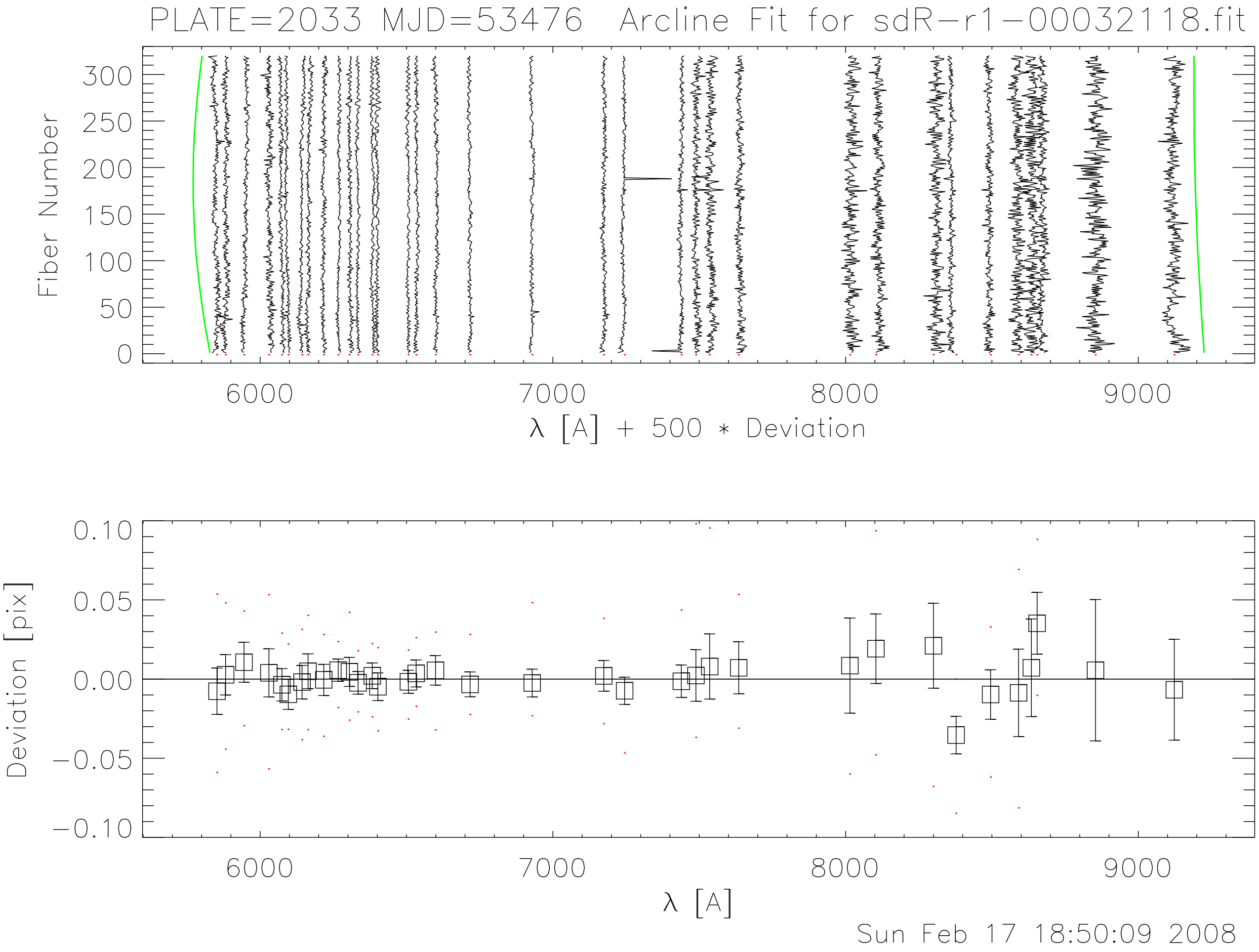
PLATE=2033 MJD=53476 sdR-b2-00032123.fit Skyline Flux at 5578.9


offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber

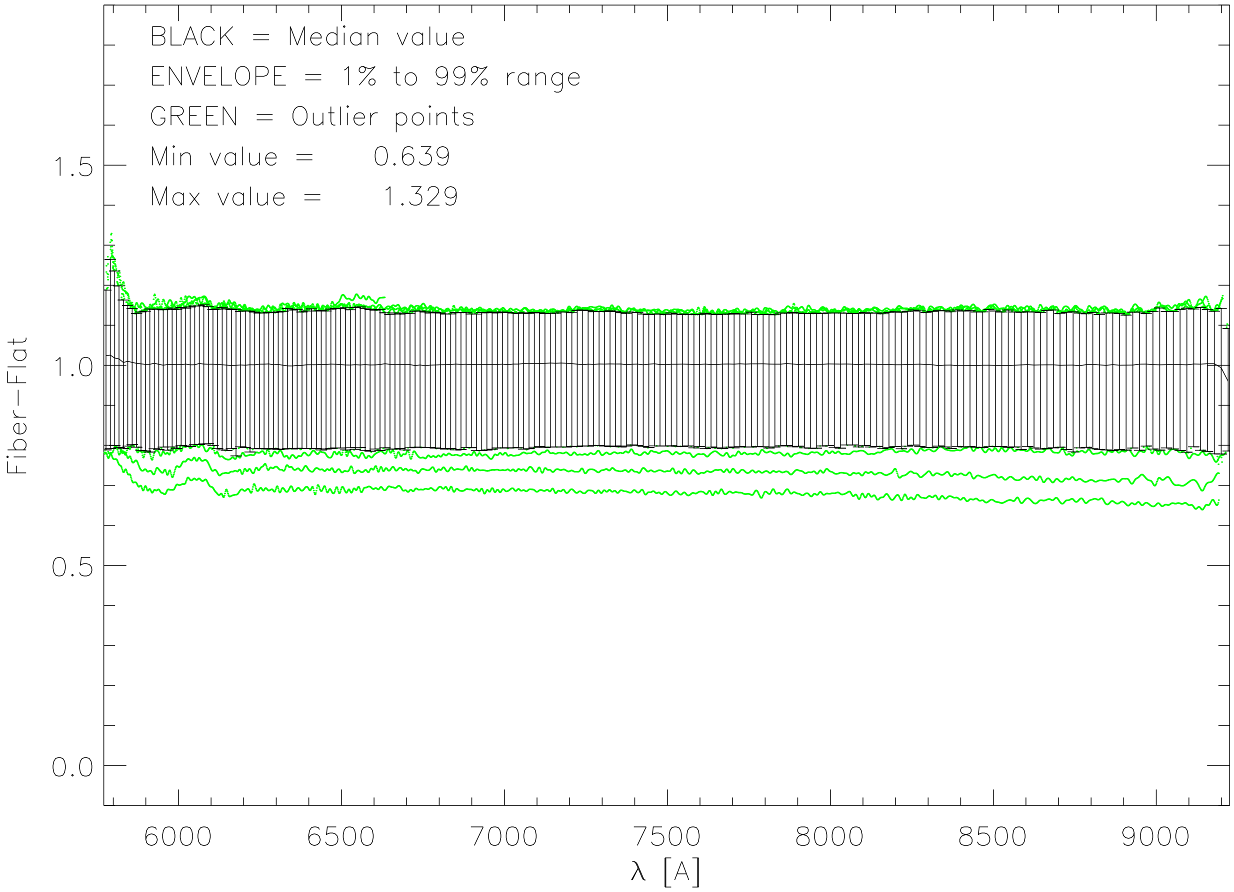

scale coeff residuals from ord=3 poly
3×10^{-5}
2×10^{-5}
1×10^{-5}
0
−1×10^{-5}
−2×10^{-5}
−3×10^{-5}
0
50
100
150
200
250
300
fiber


PLATE=2033 MJD=53476 flat extraction χ^2 for sdR-r1-00032117.fit


PLATE=2033 MJD=53476 Superflat sdR-r1-00032117.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

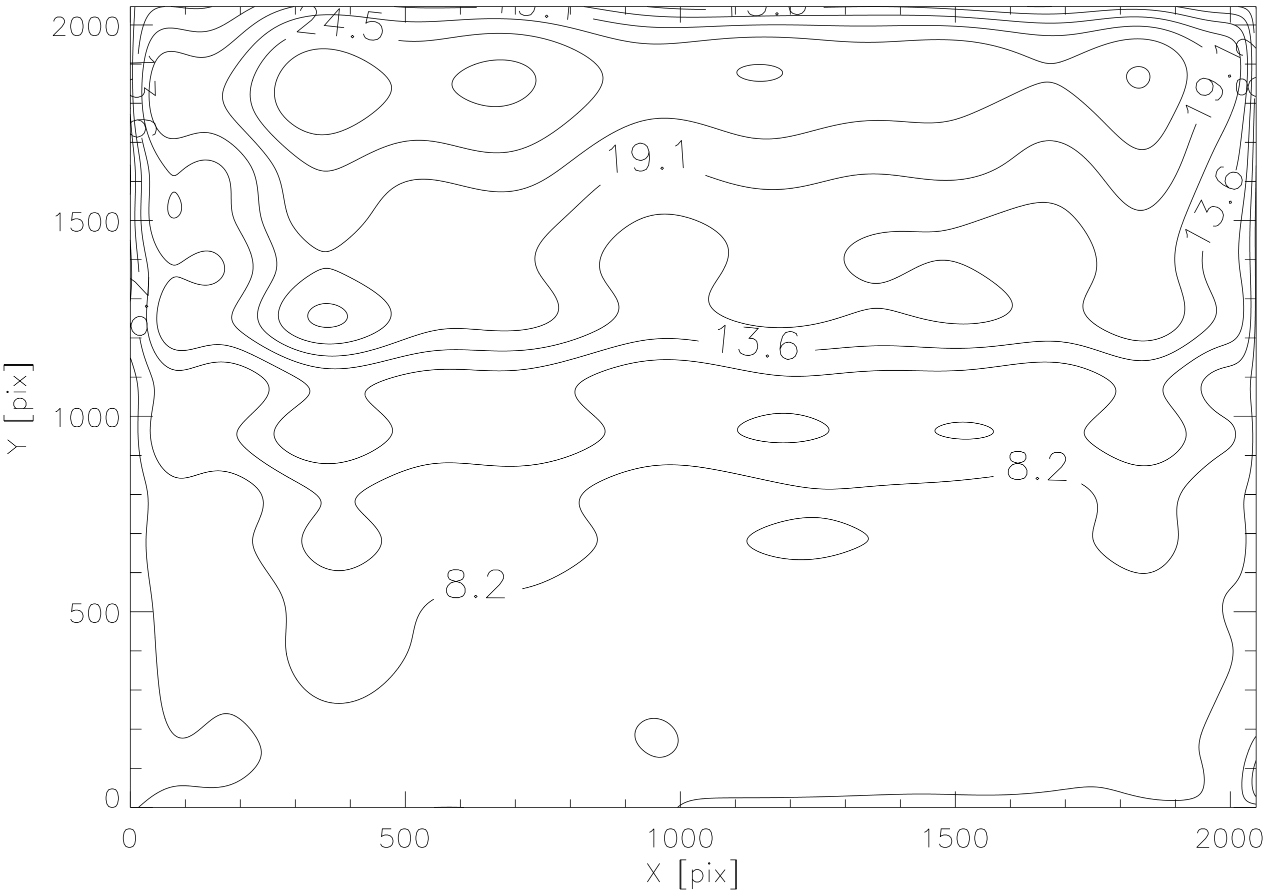

PLATE=2033 MJD=53476 Arcline Fit for sdR-r1-00032118.fit
Fiber Number
0
50
100
150
200
250
300
6000
7000
8000
9000
λ [A] + 500 * Deviation
Deviation [pix]
0.10
0.05
0.00
−0.05
−0.10
6000
7000
8000
9000
λ [A]
Sun Feb 17 18:50:09 2008

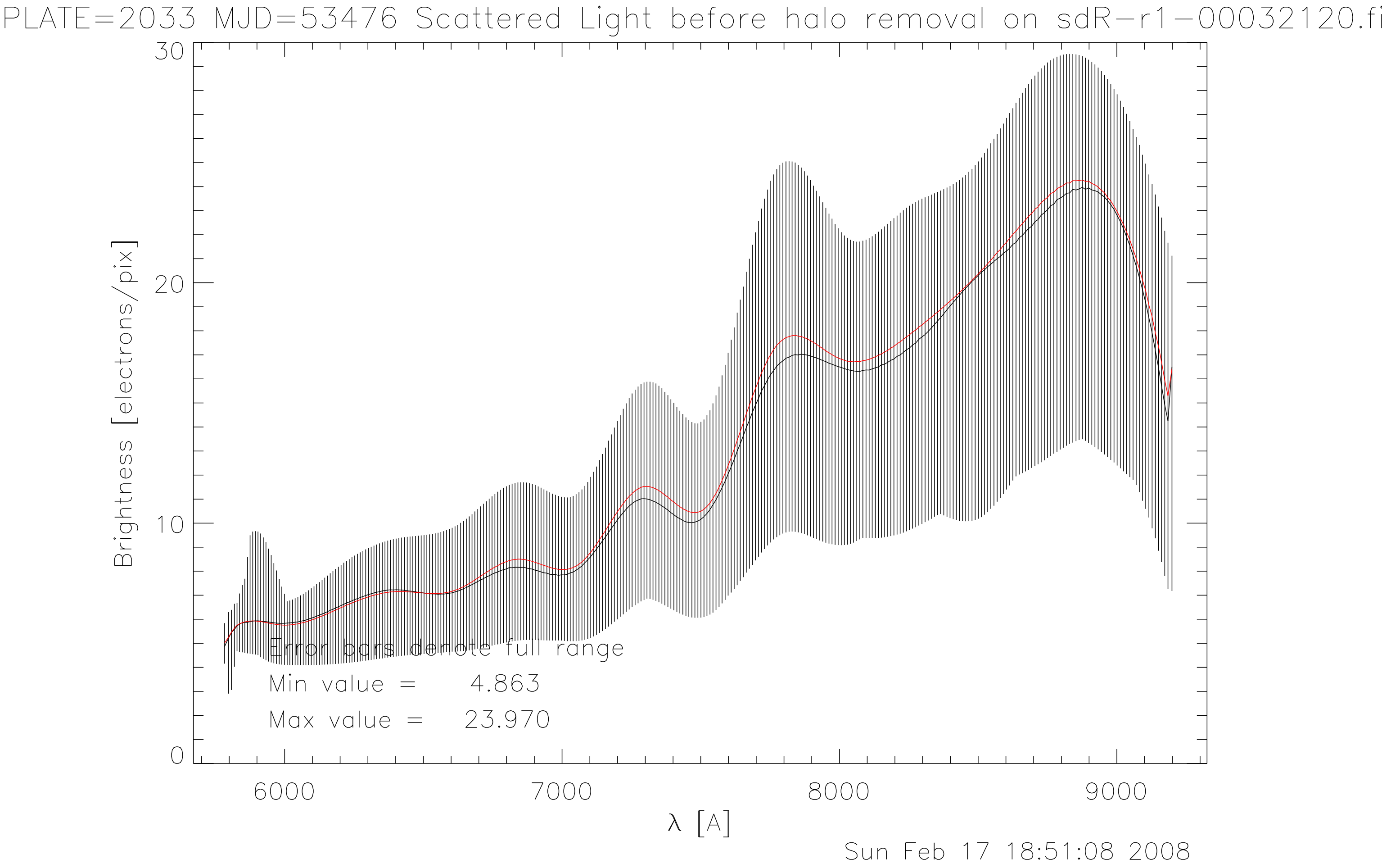
PLATE=2033 MJD=53476 Fiber-Flats for sdR-r1-00032117.fit

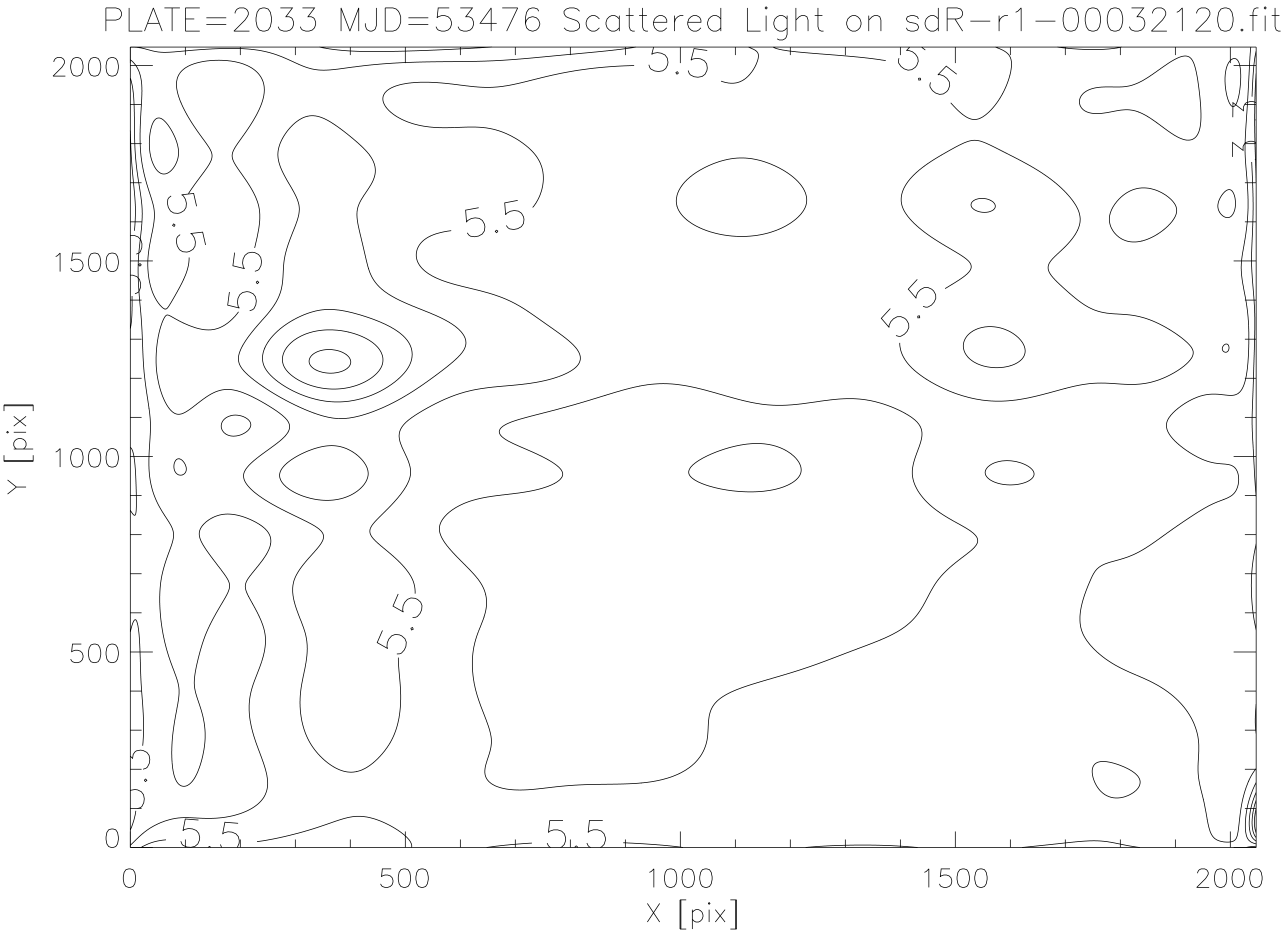


Sun Feb 17 18:50:18 2008

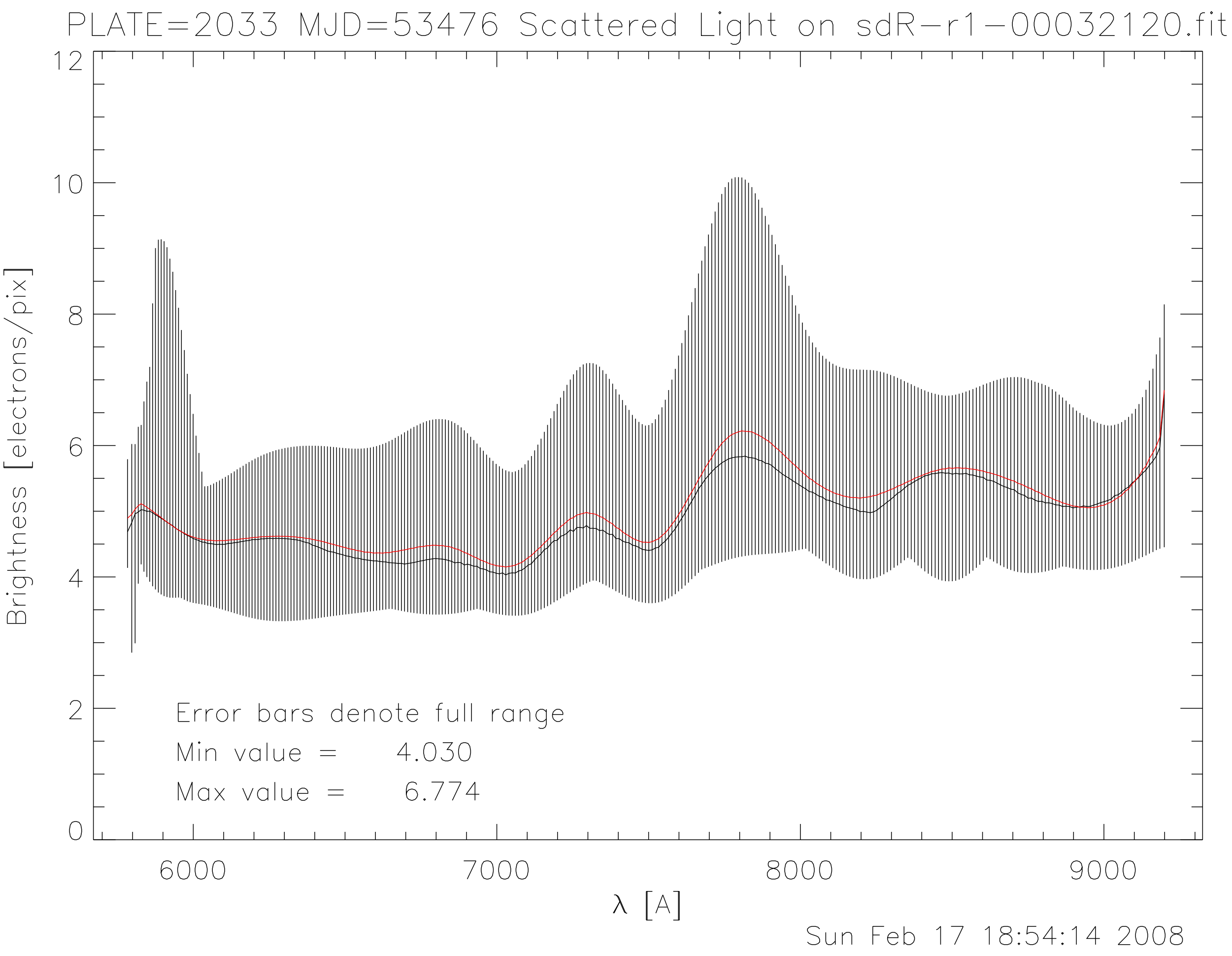
PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r1-00032120.fi




PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r1-00032120.fi
Brightness [electrons/pix]
0
10
20
30
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.863
Max value = 23.970
Sun Feb 17 18:51:08 2008



PLATE=2033 MJD=53476 Scattered Light on sdR-r1-00032120.fit



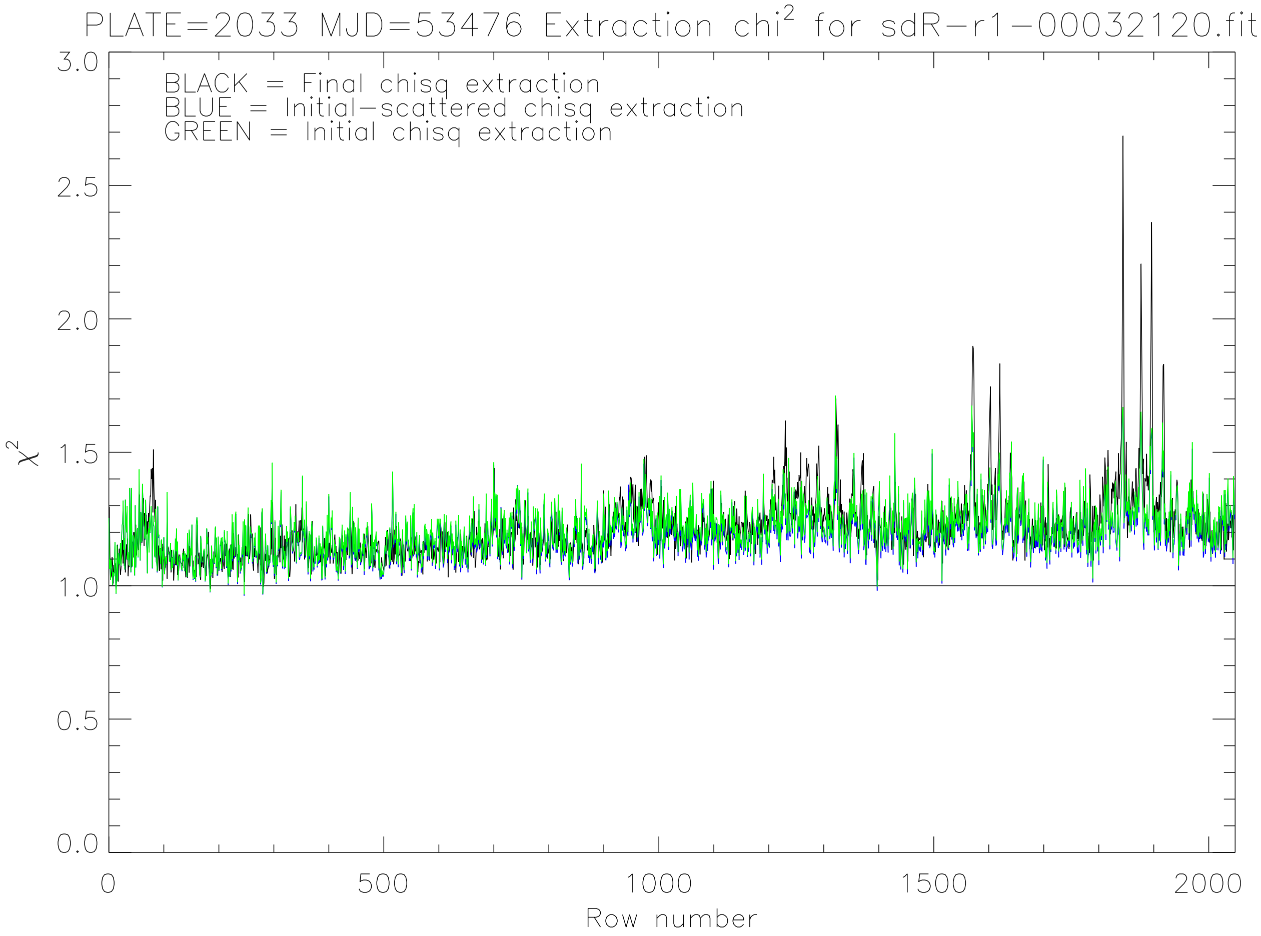
PLATE=2033 MJD=53476 Scattered Light on sdR-r1-00032120.fit

Error bars denote full range

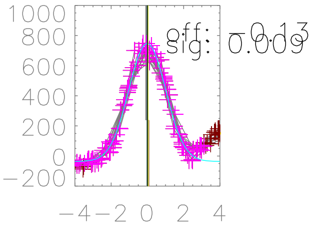
Min value = 4.030

Max value = 6.774

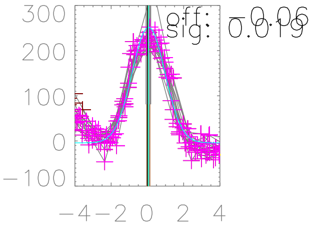
Sun Feb 17 18:54:14 2008


PLATE=2033 MJD=53476 Extraction chi^2 for sdR-r1-00032120.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

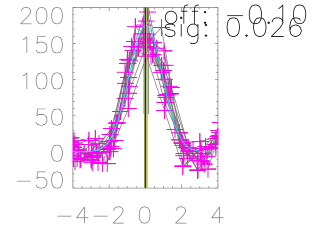
6300.3040



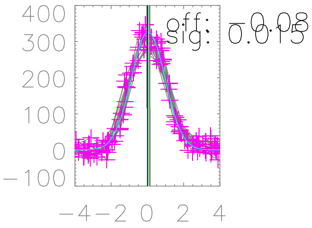
6363.7760



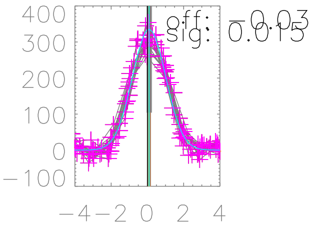
6553.6100



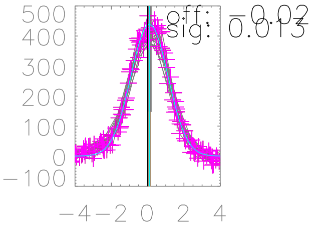
6923.2100



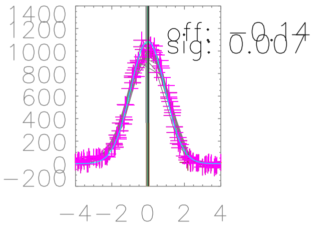
6949.0300



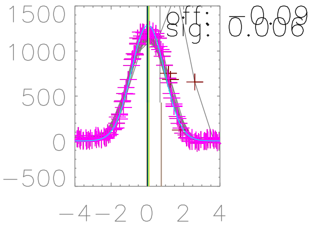
7571.7500



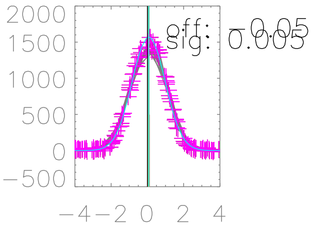
7794.1200



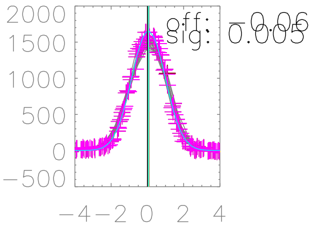
7821.5100



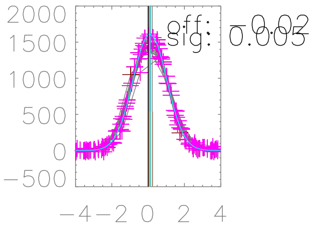
8399.1600



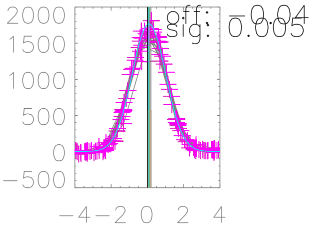
8430.1700

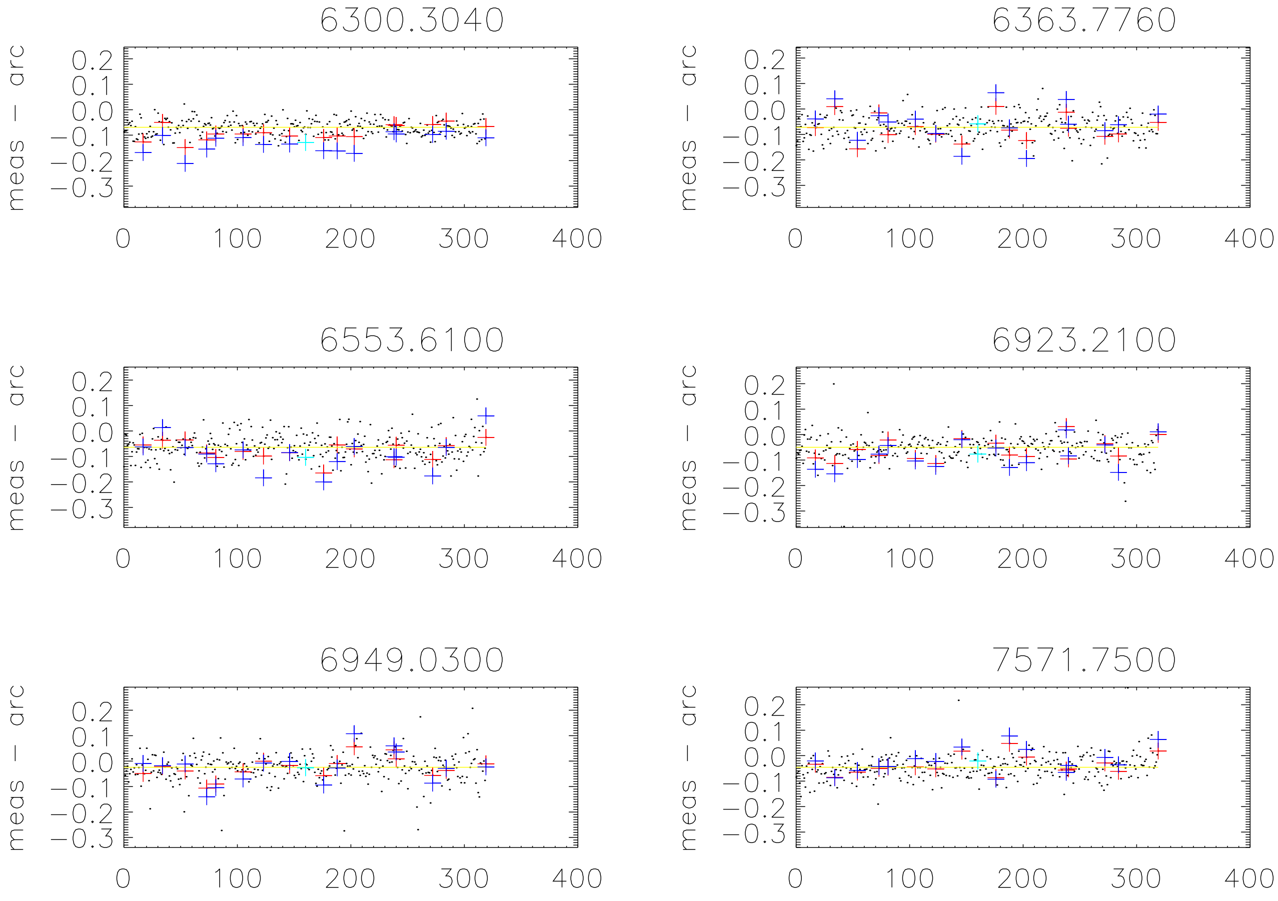


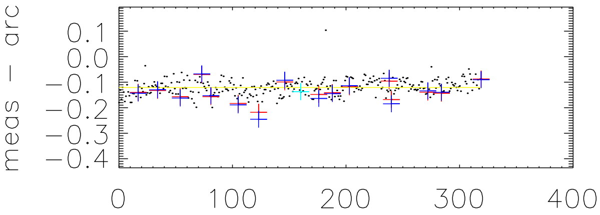
8885.8300

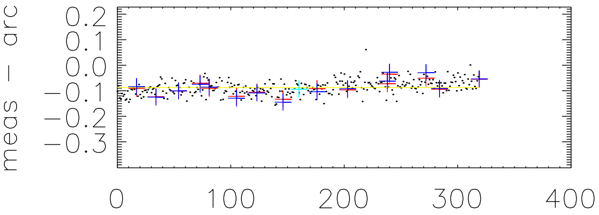


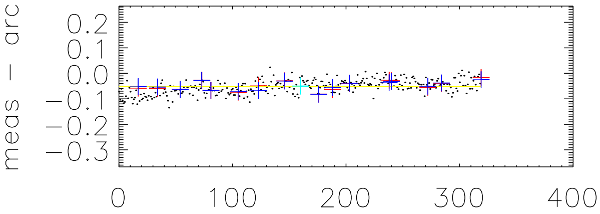
8919.6100

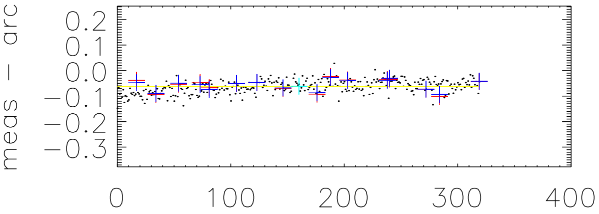


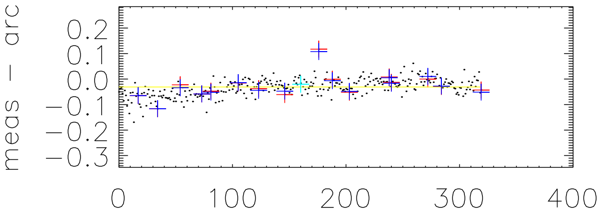

6300.3040
6363.7760
6553.6100
6923.2100
6949.0300
7571.7500
meas – arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

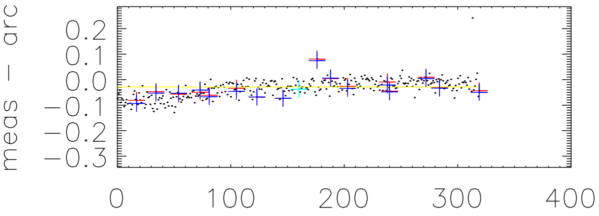

7794.1200

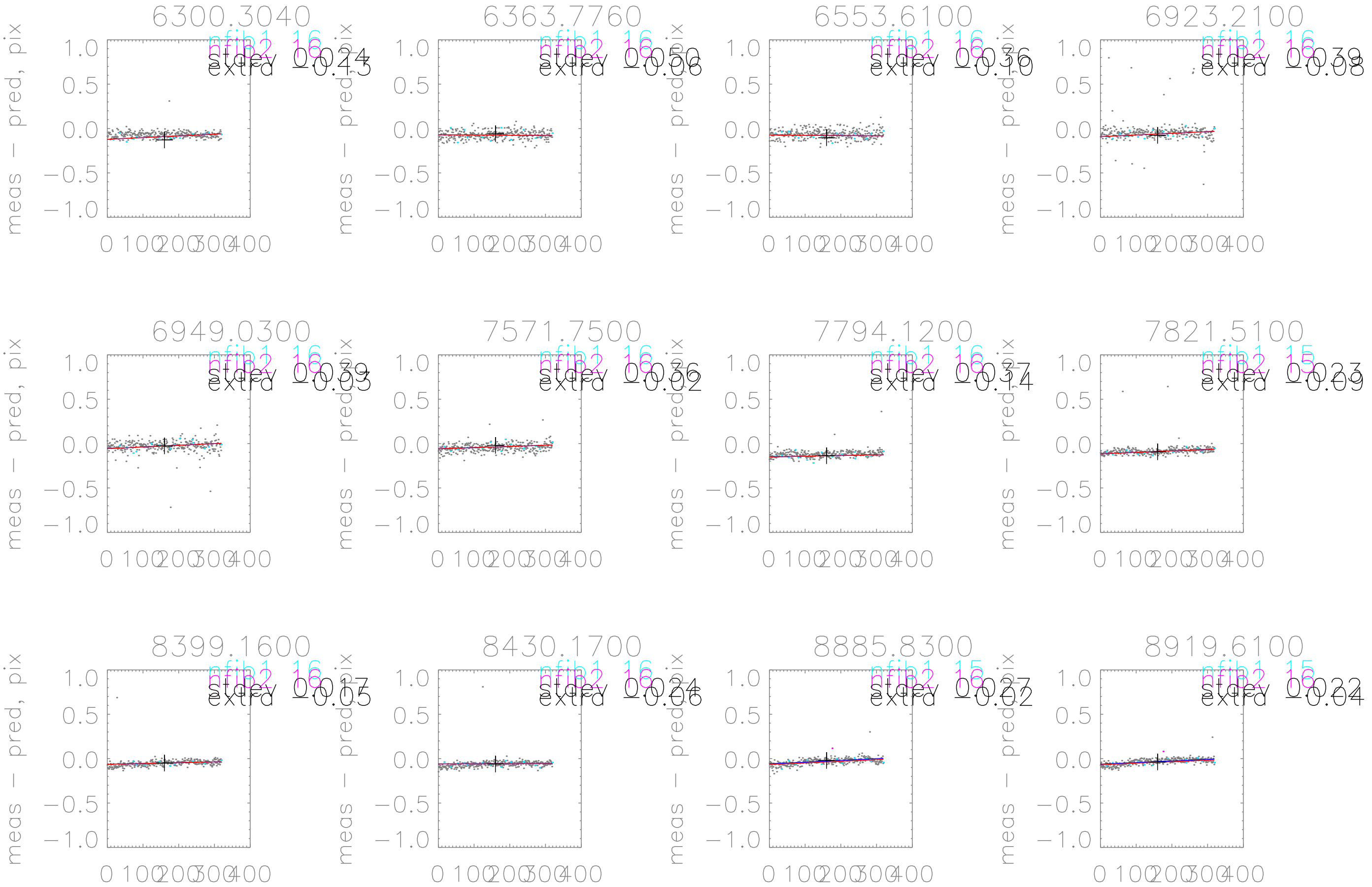

7821.5100

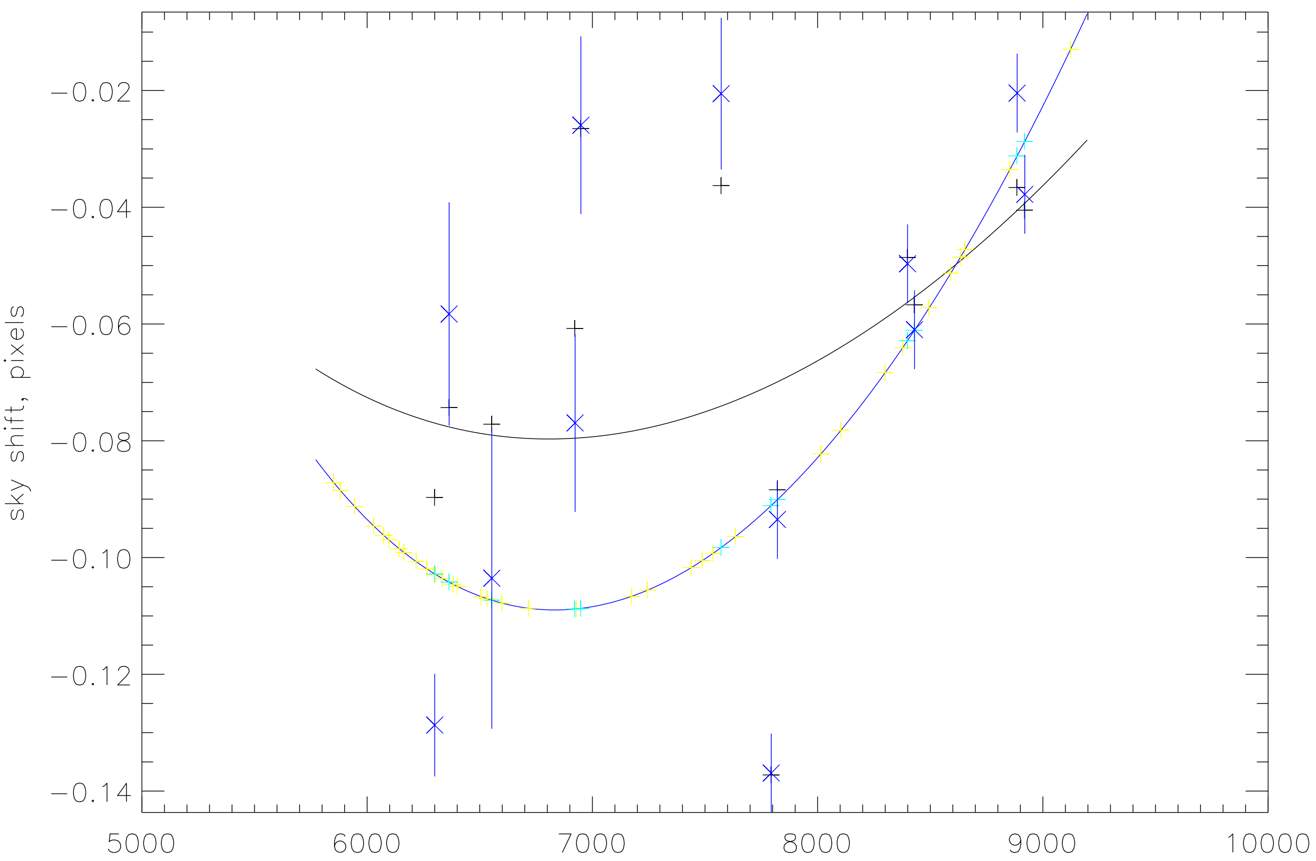

8399.1600

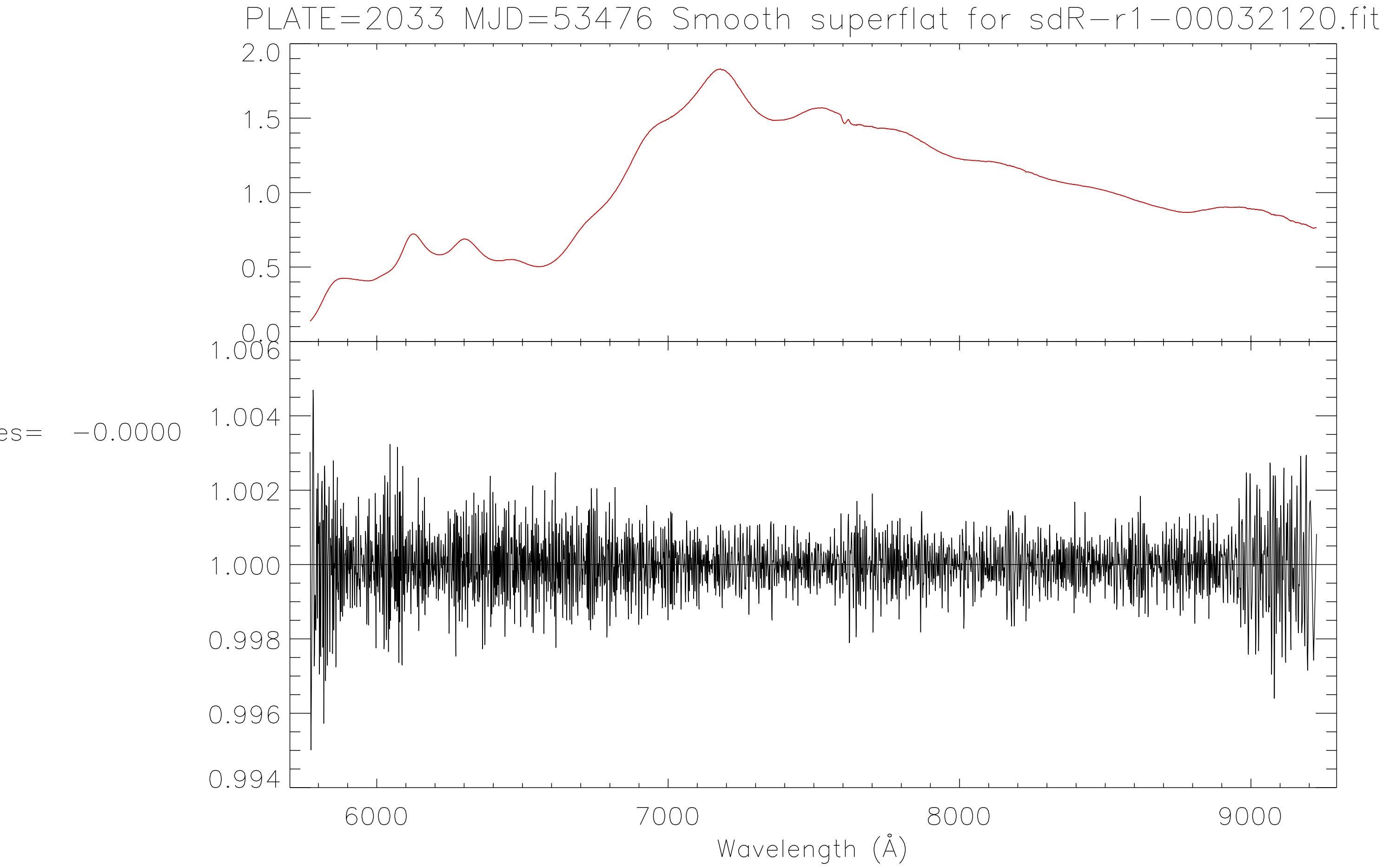

8430.1700

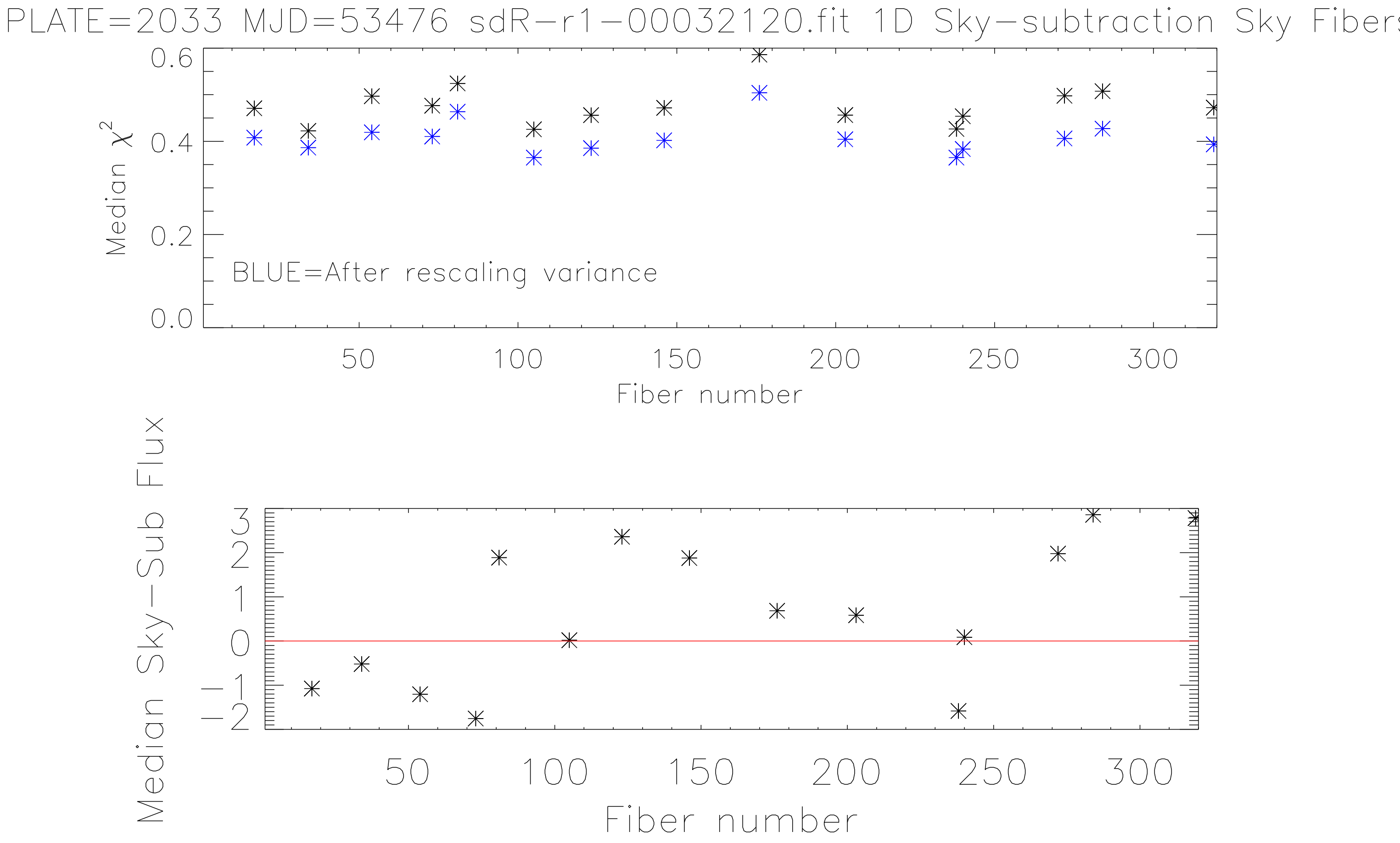

8885.8300

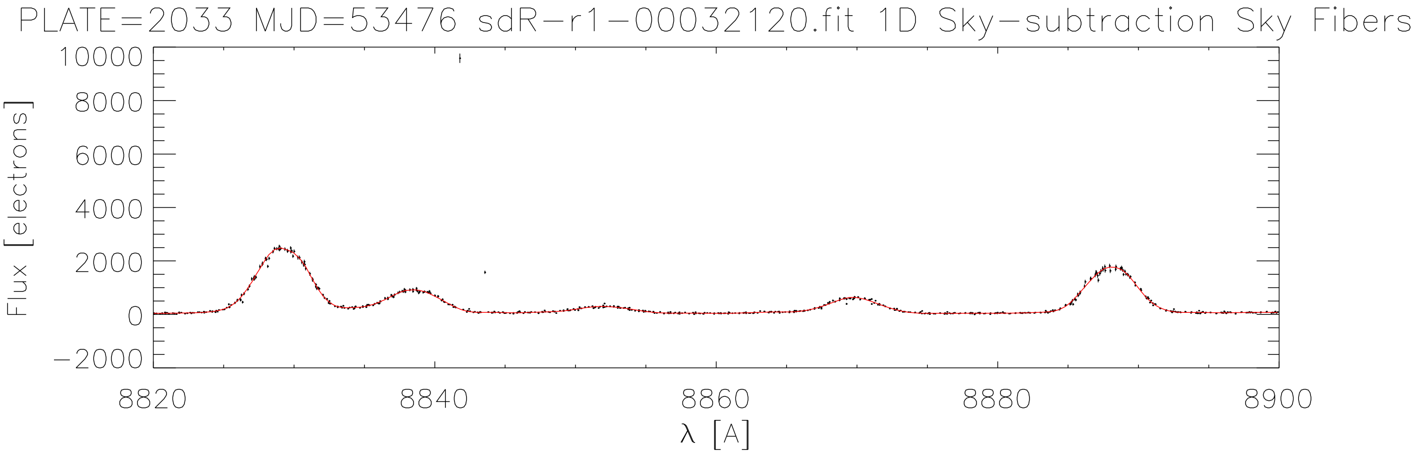

8919.6100


6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd −0.13
6363.7760
nfib1 16
nfib2 16
stdev 0.050
extrd −0.06
6553.6100
nfib1 16
nfib2 16
stdev 0.036
extrd −0.10
6923.2100
nfib1 16
nfib2 16
stdev 0.039
extrd −0.08
6949.0300
nfib1 16
nfib2 16
stdev 0.039
extrd −0.03
7571.7500
nfib1 16
nfib2 16
stdev 0.036
extrd −0.02
7794.1200
nfib1 16
nfib2 16
stdev 0.037
extrd −0.14
7821.5100
nfib1 15
nfib2 15
stdev 0.023
extrd −0.09
8399.1600
nfib1 16
nfib2 16
stdev 0.017
extrd −0.05
8430.1700
nfib1 16
nfib2 16
stdev 0.024
extrd −0.06
8885.8300
nfib1 15
nfib2 16
stdev 0.027
extrd −0.02
8919.6100
nfib1 15
nfib2 16
stdev 0.022
extrd −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

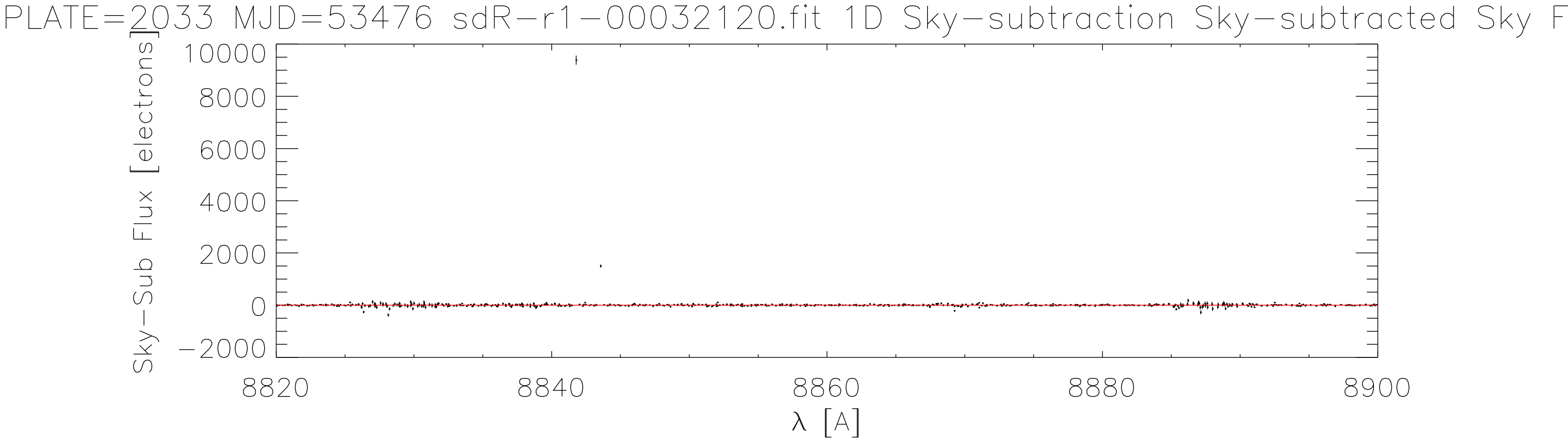

sky shift, pixels
−0.02
−0.04
−0.06
−0.08
−0.10
−0.12
−0.14
5000
6000
7000
8000
9000
10000


PLATE=2033 MJD=53476 Smooth superflat for sdR-r1-00032120.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=2033 MJD=53476 sdR-r1-00032120.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−2
−1
0
1
2
3
50
100
150
200
250
300
Fiber number



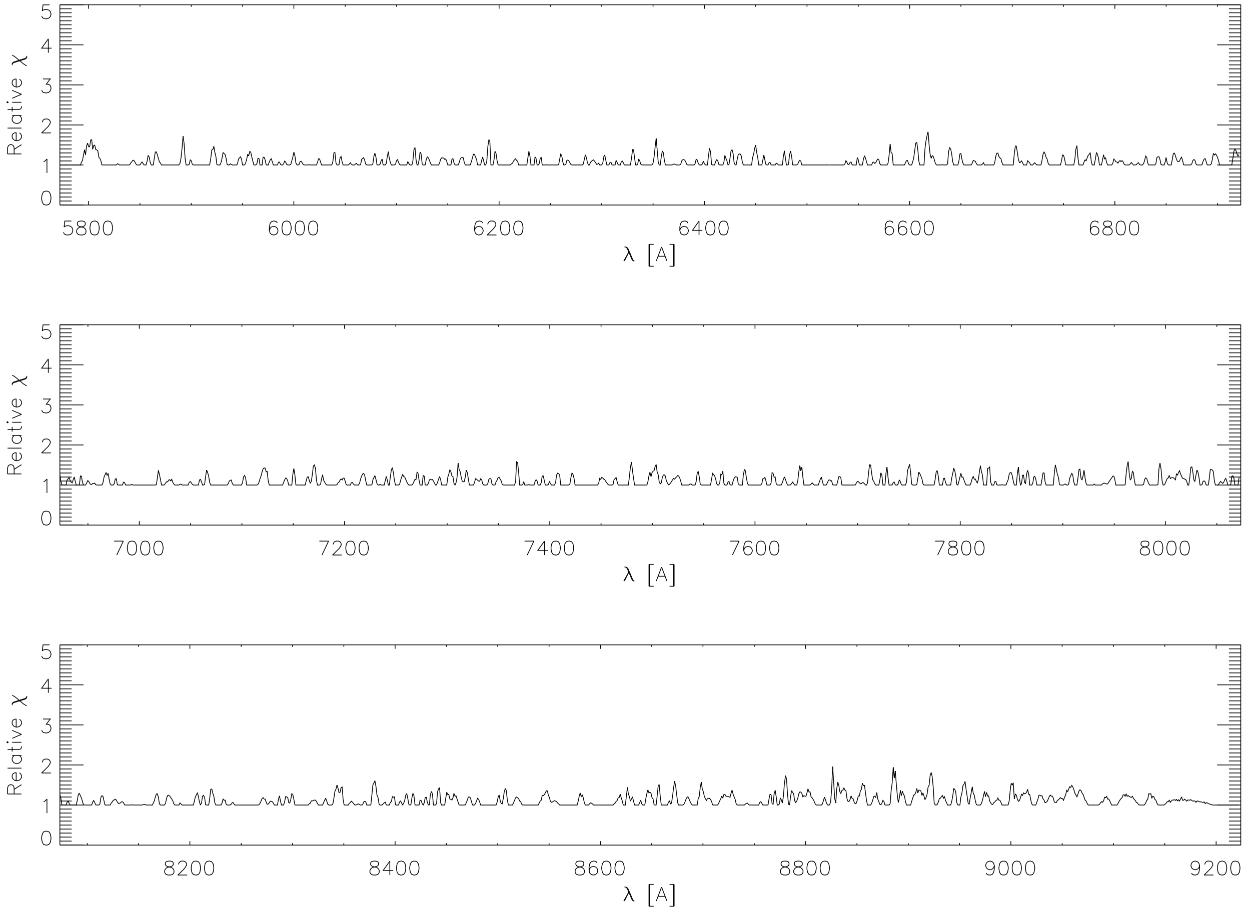
PLATE=2033 MJD=53476 sdR-r1-00032120.fit 1D Sky-subtraction Sky Fibers

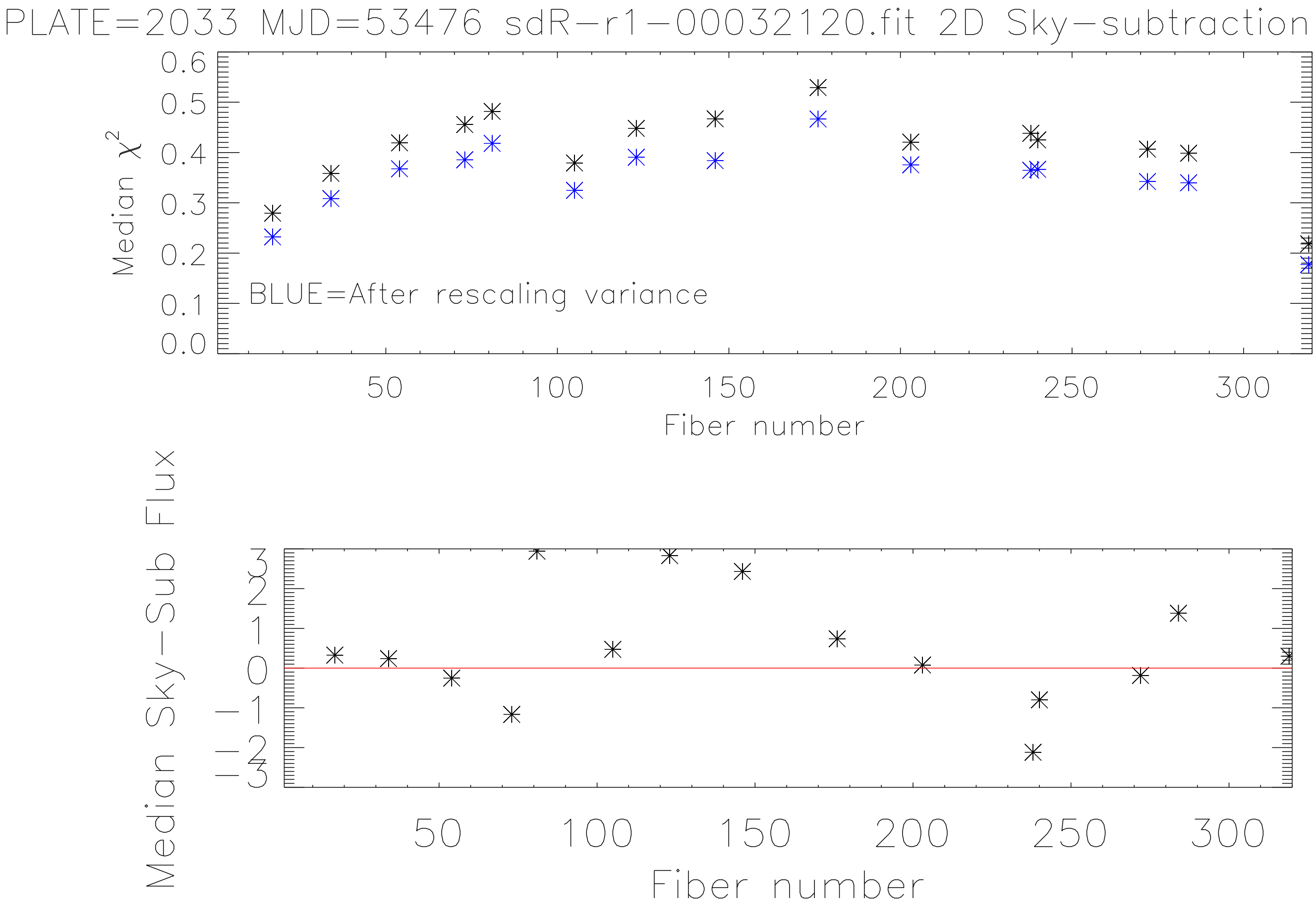


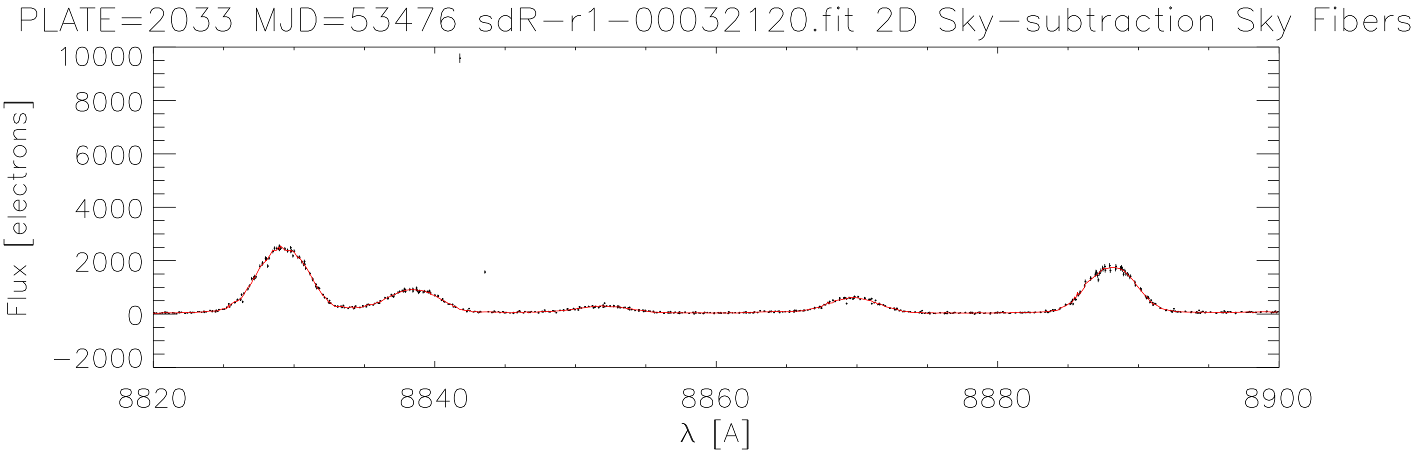
PLATE=2033 MJD=53476 sdR-r1-00032120.fit 1D Sky-subtraction Sky-subtracted Sky F

Number of sky fibers = 15

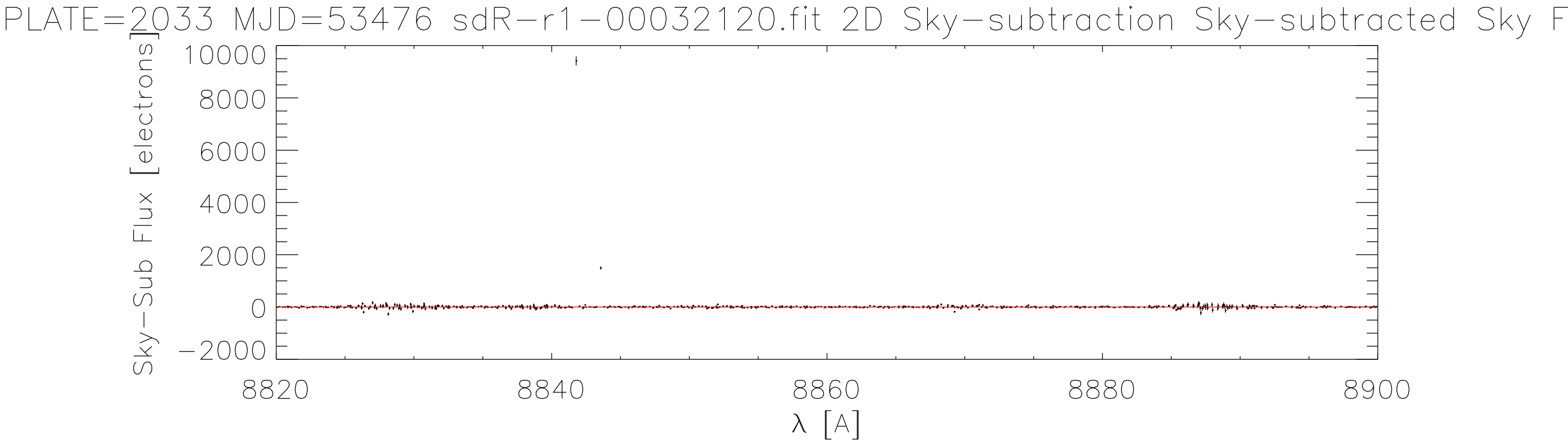
PLATE=2033 MJD=53476 sdR-r1-00032120.fit 1D Sky-subtraction Rescaled Errors




PLATE=2033 MJD=53476 sdR-r1-00032120.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-3
-2
-1
0
1
2
3
50
100
150
200
250
300
Fiber number



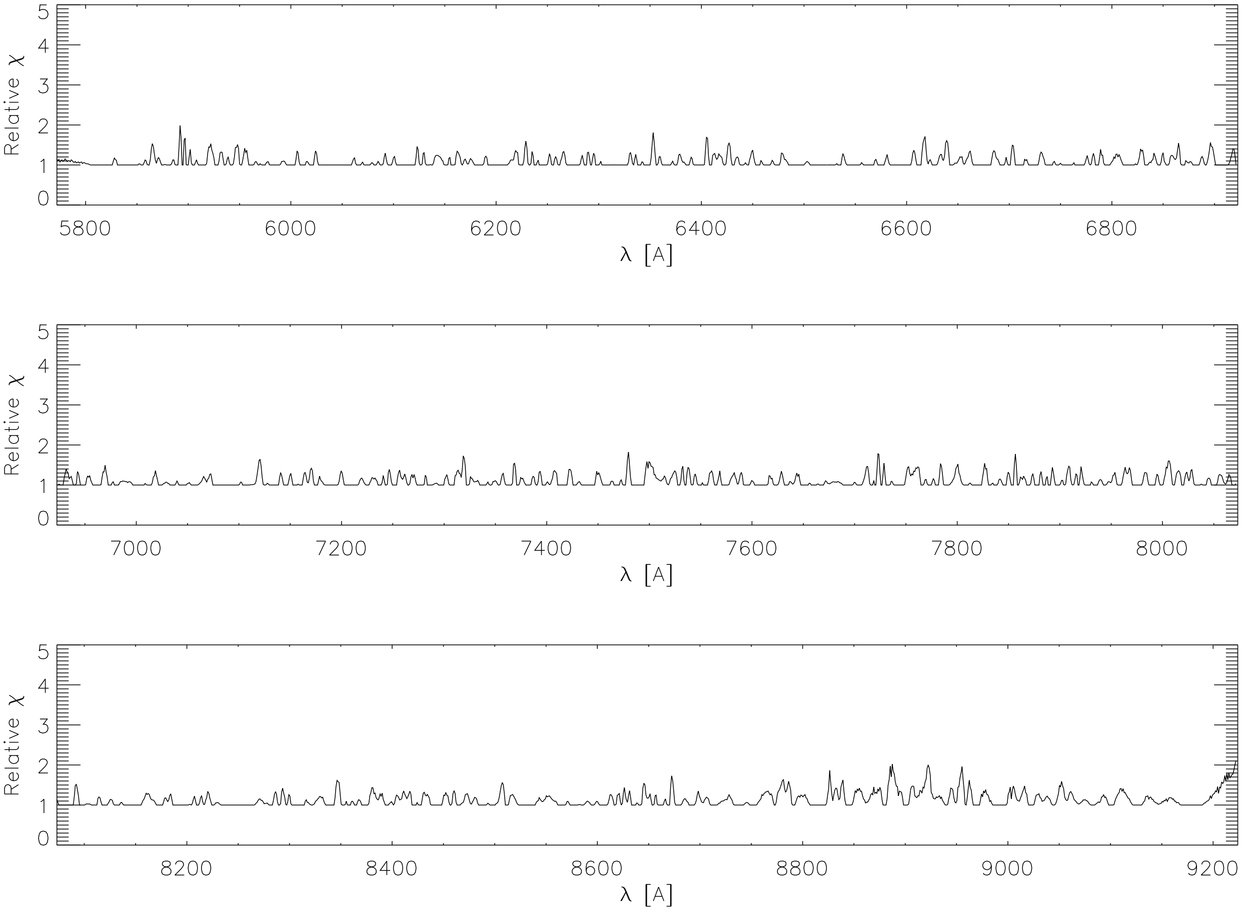
PLATE=2033 MJD=53476 sdR-r1-00032120.fit 2D Sky-subtraction Sky Fibers

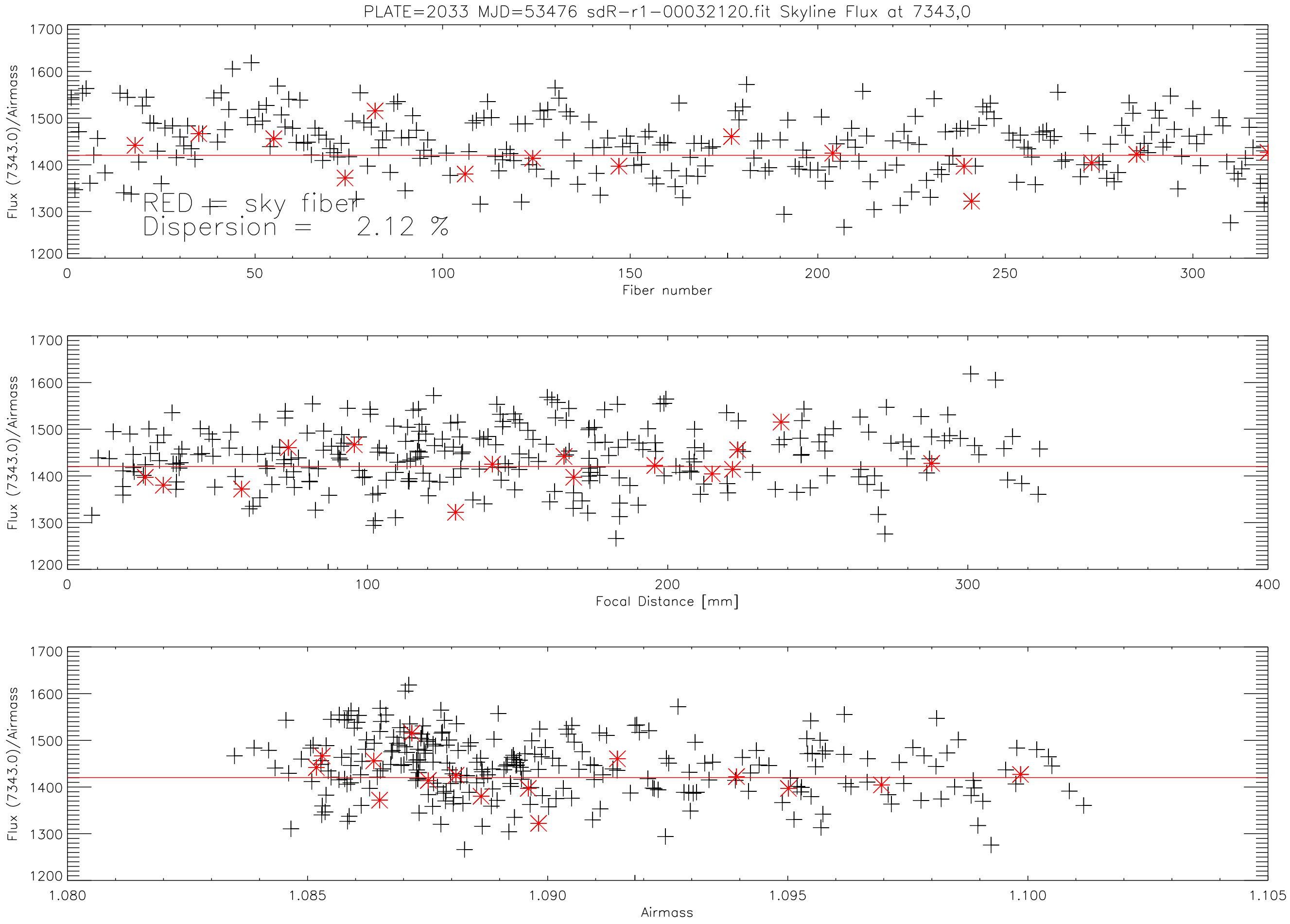


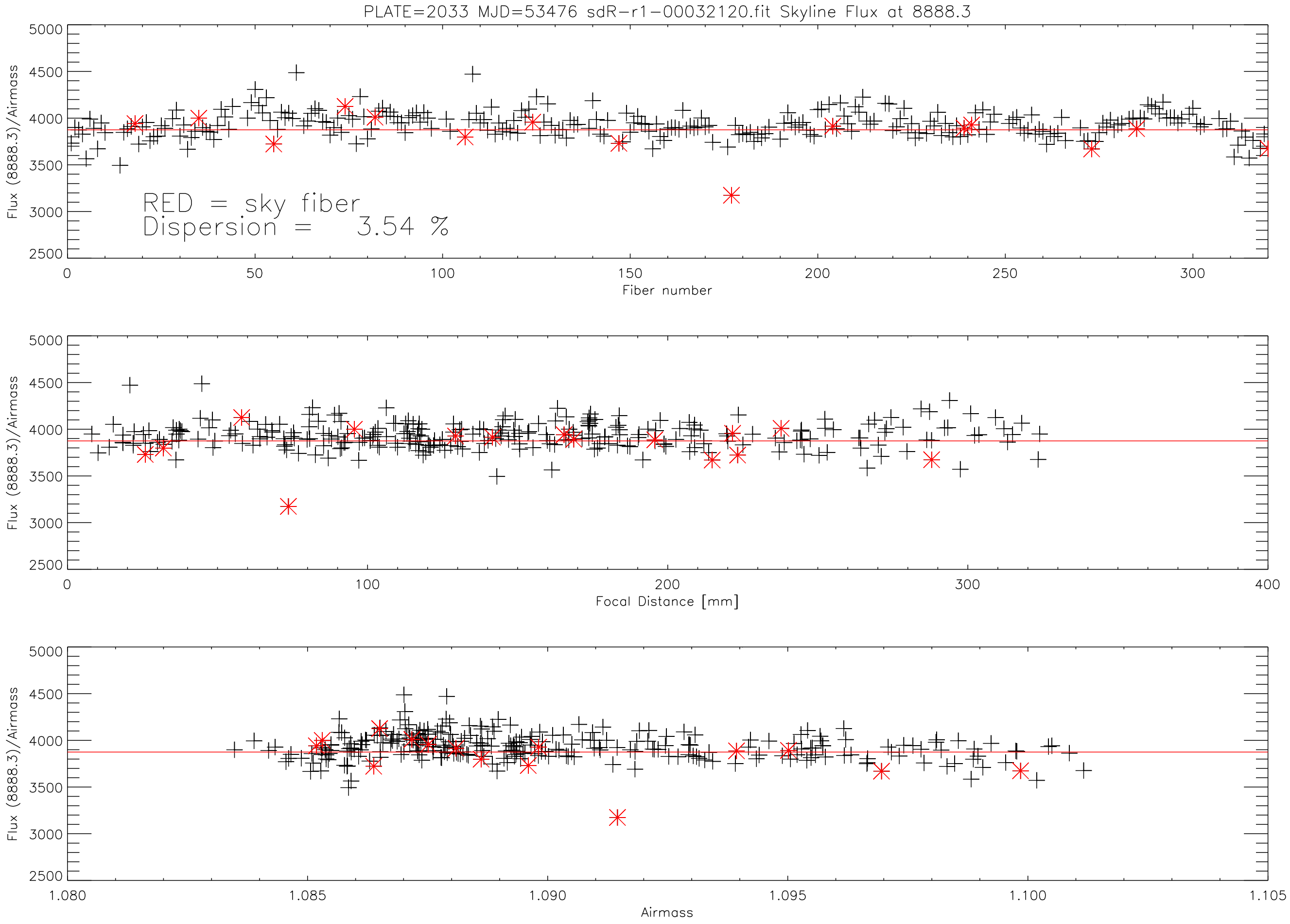
PLATE=2033 MJD=53476 sdR-r1-00032120.fit 2D Sky-subtraction Sky-subtracted Sky F

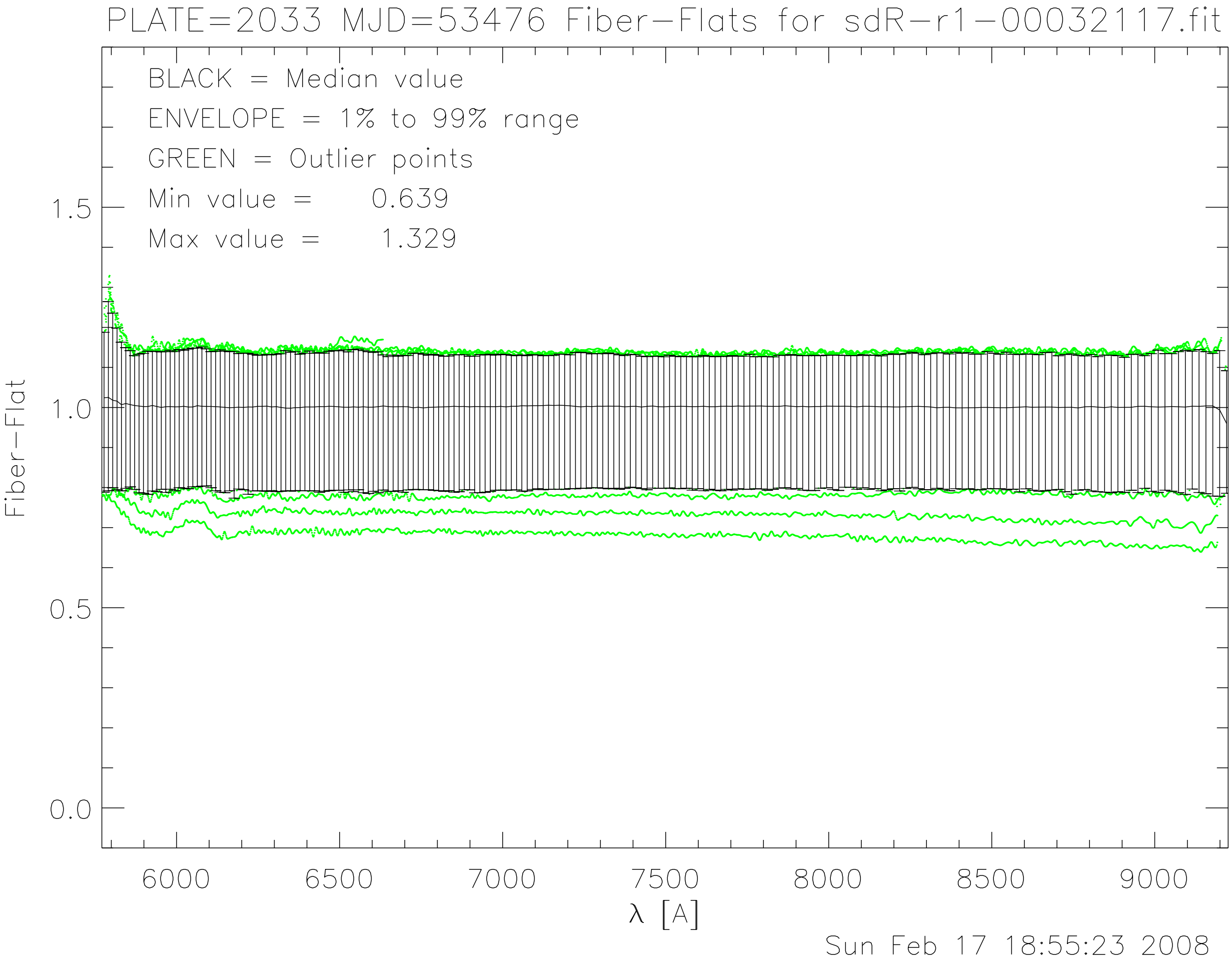
Number of sky fibers = 15

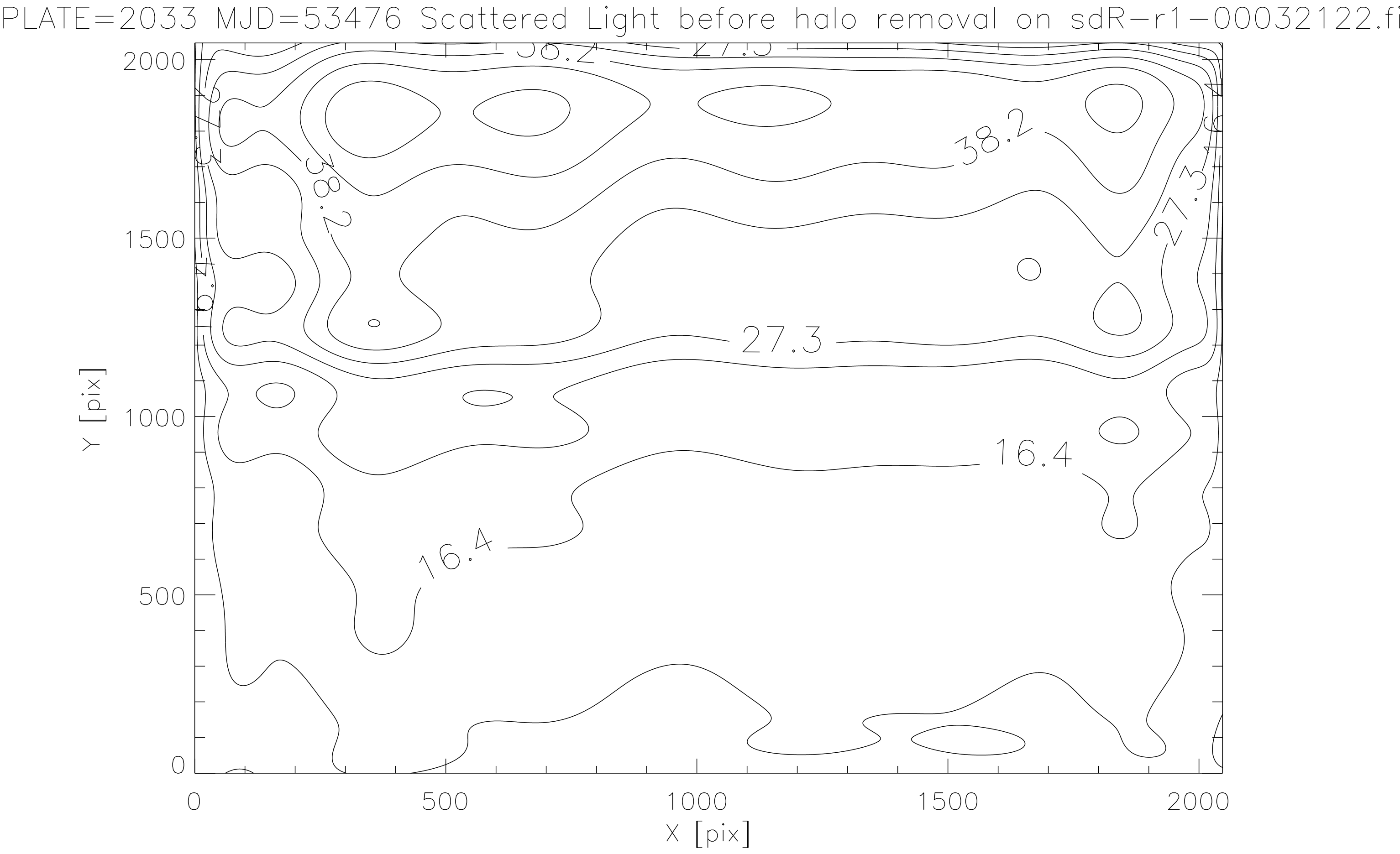
PLATE=2033 MJD=53476 sdR-r1-00032120.fit 2D Sky-subtraction Rescaled Errors



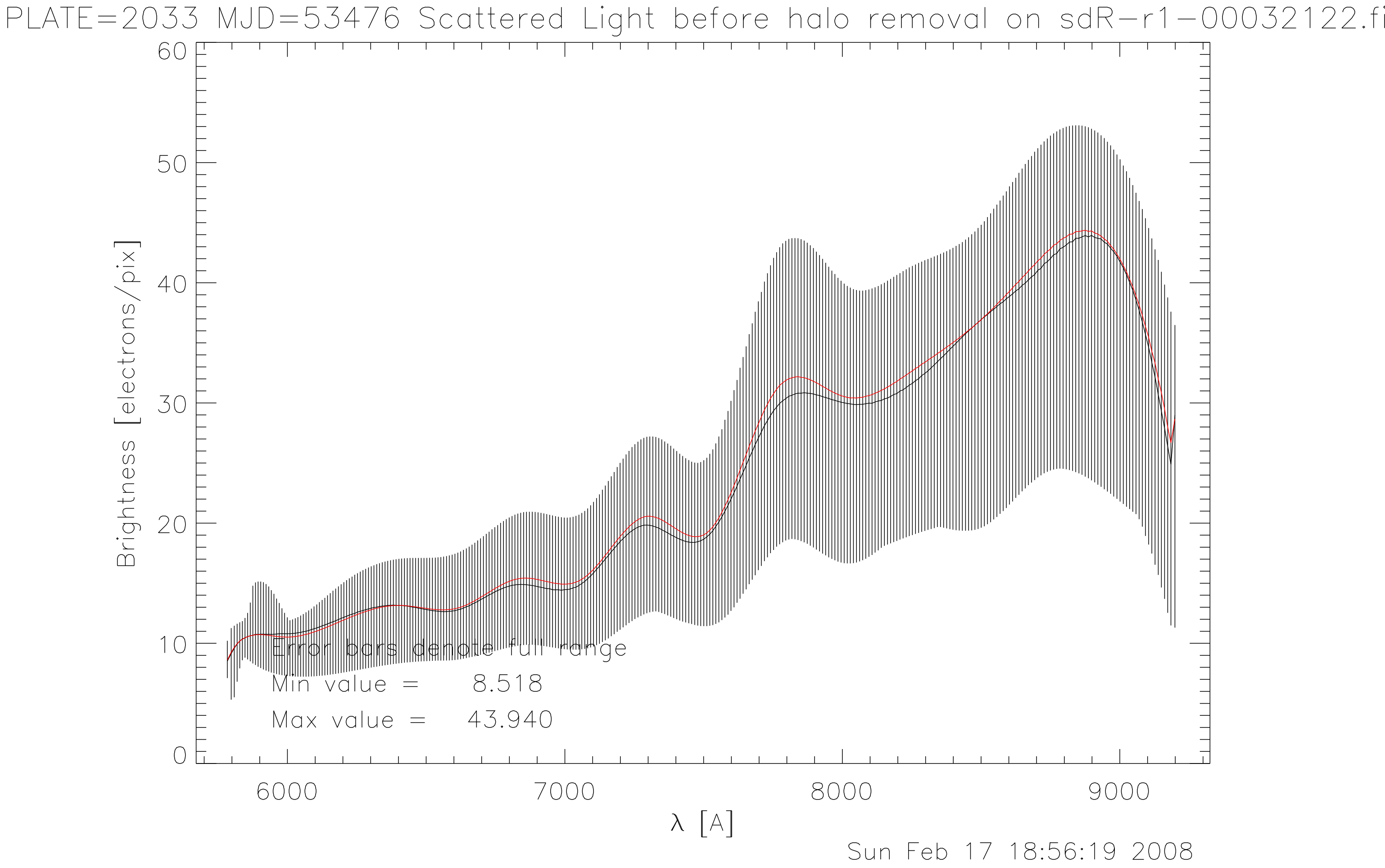

PLATE=2033 MJD=53476 sdR-r1-00032120.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1200
1300
1400
1500
1600
1700
RED = sky fiber
Dispersion = 2.12 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
1200
1300
1400
1500
1600
1700
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1200
1300
1400
1500
1600
1700
1.080
1.085
1.090
1.095
1.100
1.105
Airmass

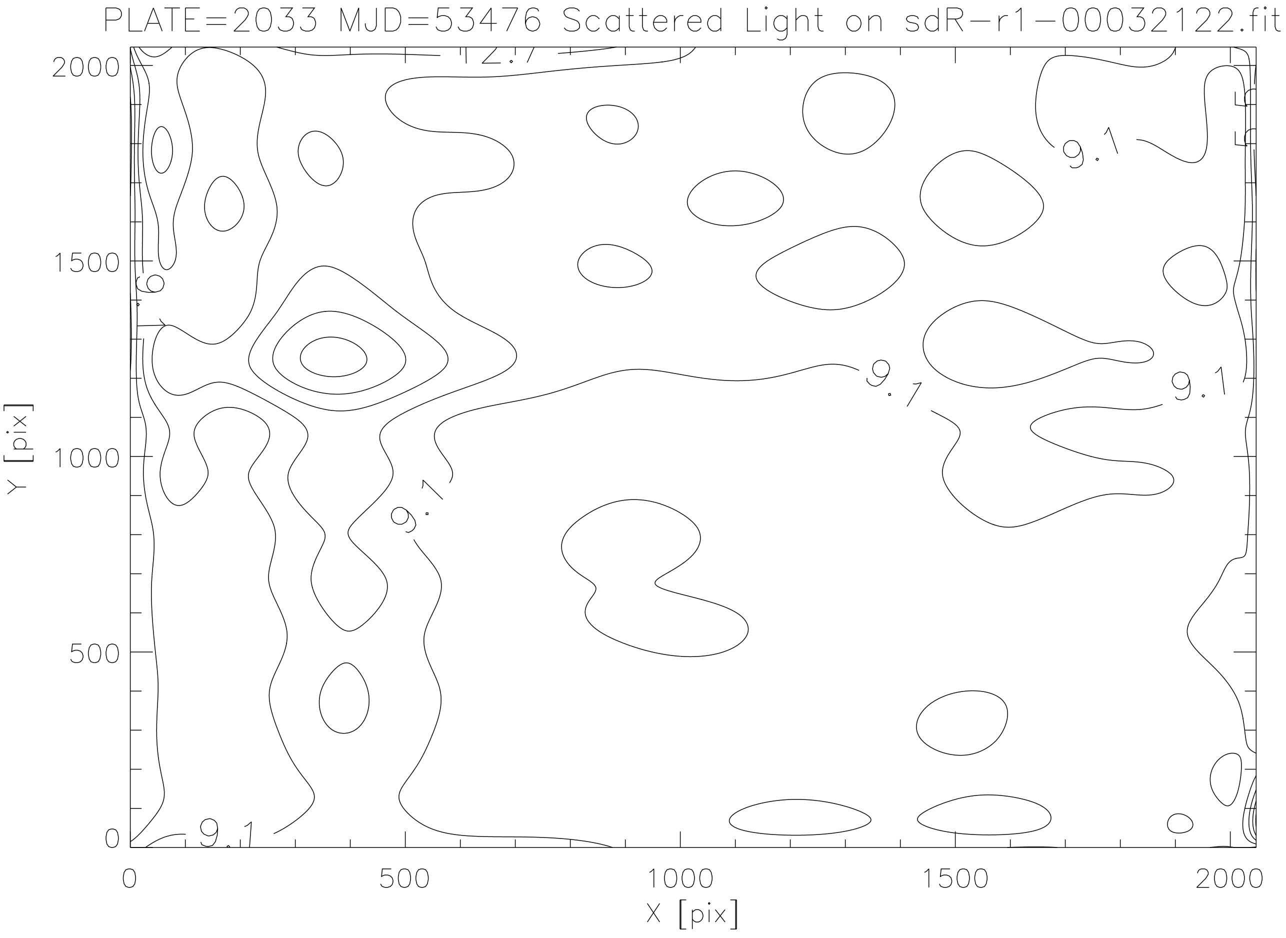

PLATE=2033 MJD=53476 sdR-r1-00032120.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
5000
4500
4000
3500
3000
2500
RED = sky fiber
Dispersion = 3.54 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
5000
4500
4000
3500
3000
2500
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
5000
4500
4000
3500
3000
2500
1.080
1.085
1.090
1.095
1.100
1.105
Airmass

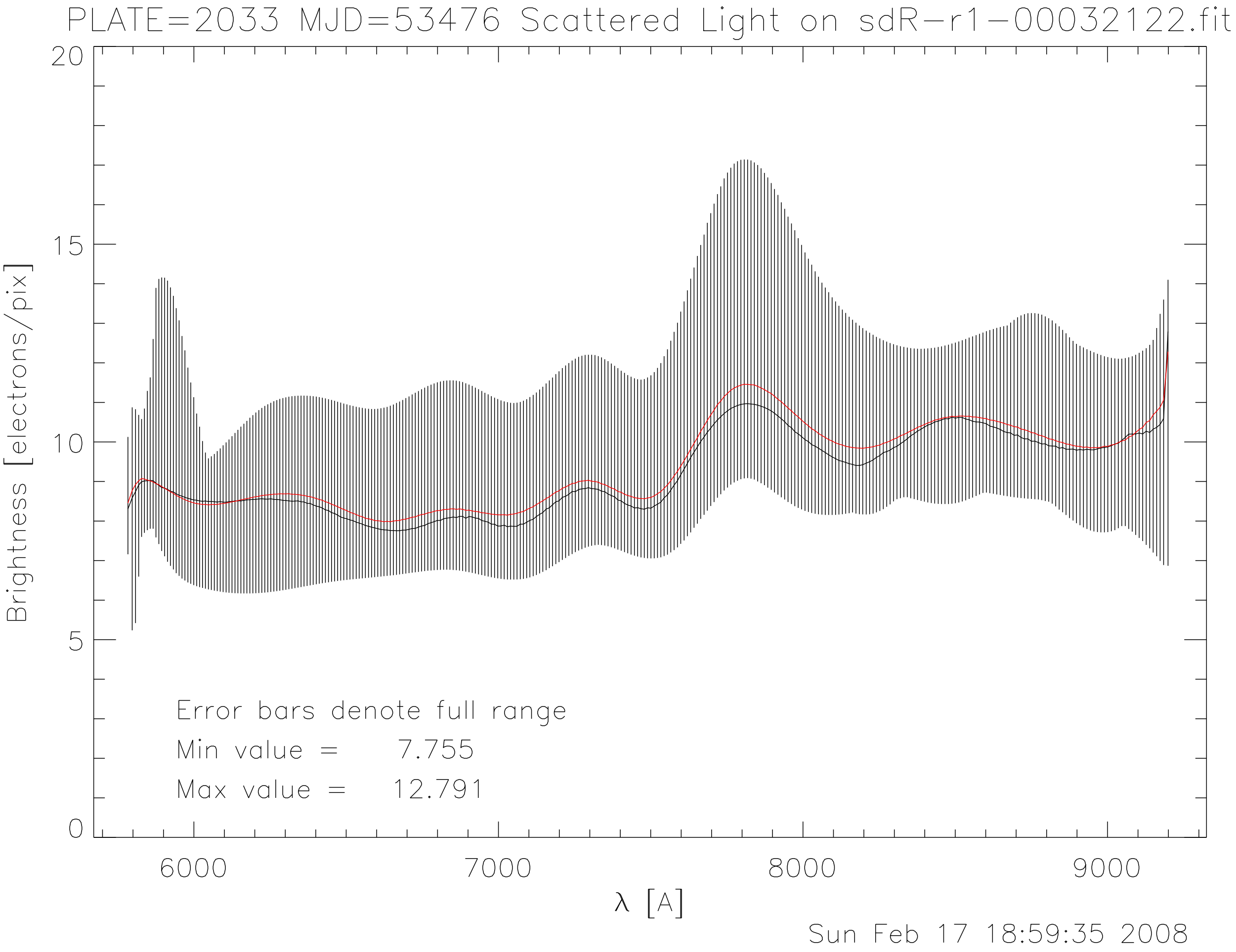

PLATE=2033 MJD=53476 Fiber−Flats for sdR−r1−00032117.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.639
Max value = 1.329
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 18:55:23 2008

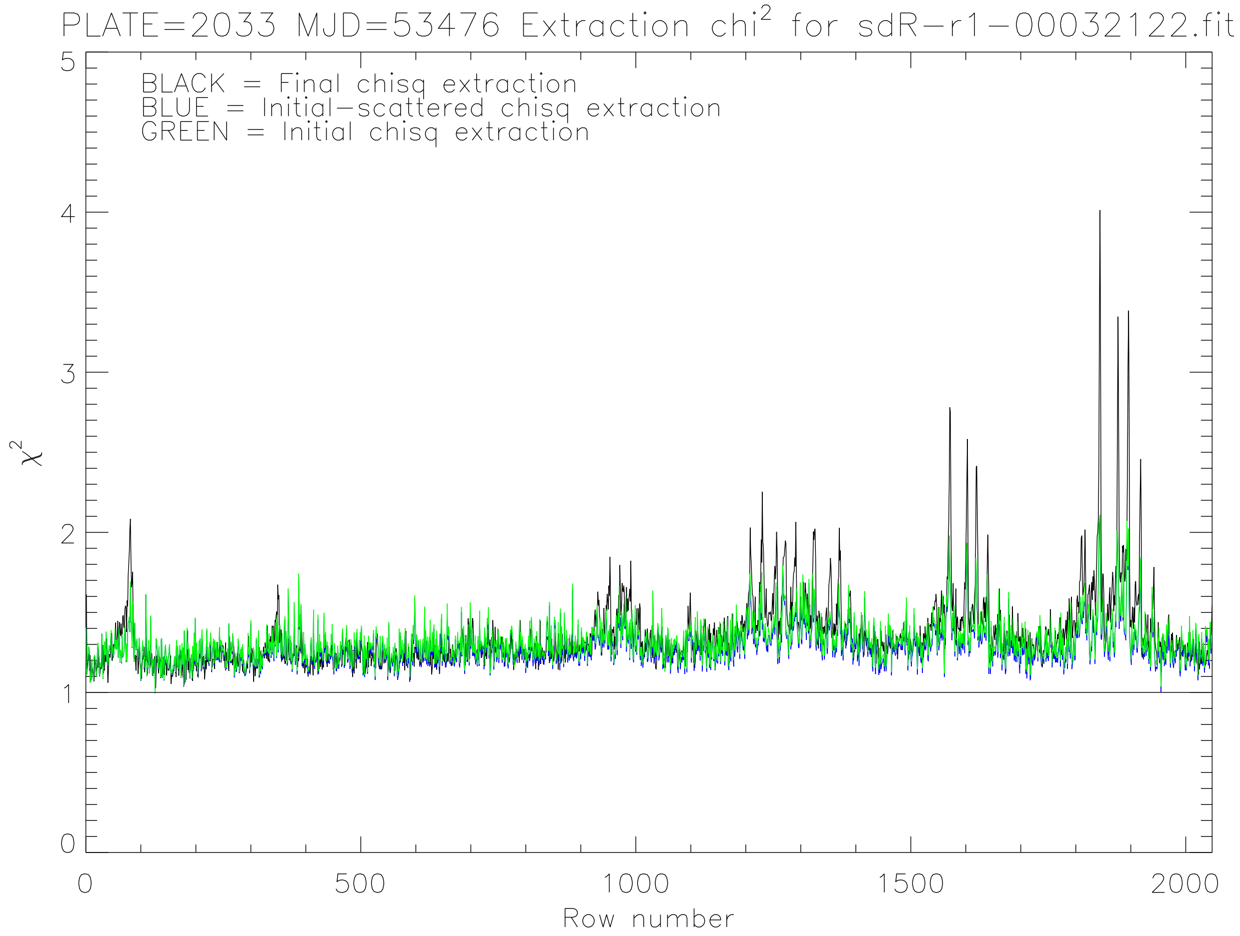


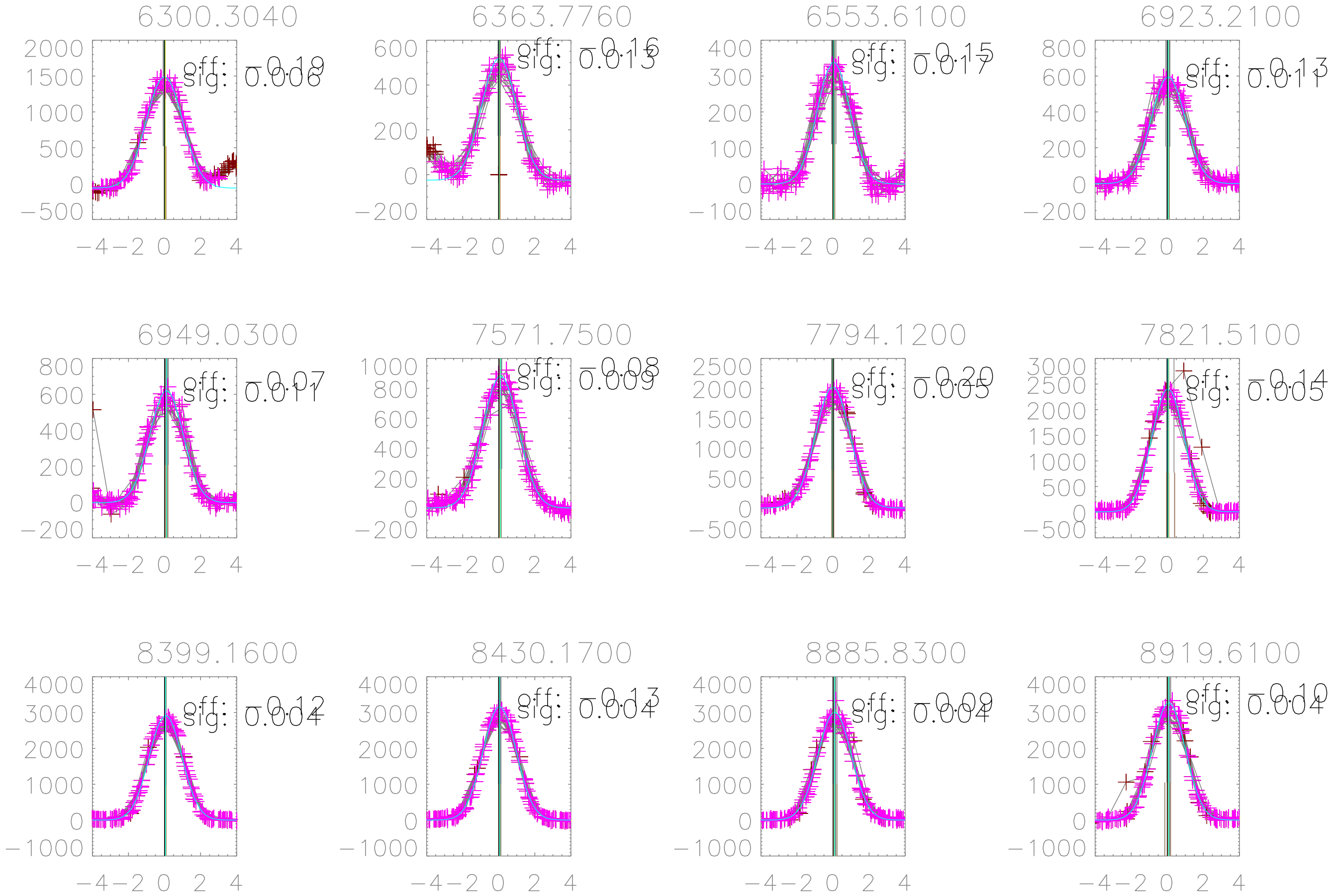
PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r1-00032122.fi

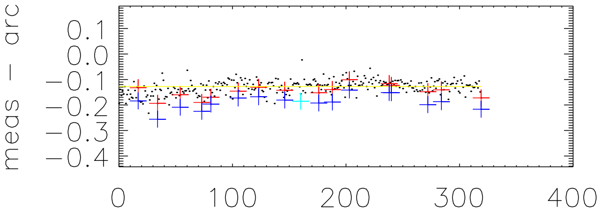

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r1-00032122.fi
Brightness [electrons/pix]
0
10
20
30
40
50
60
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.518
Max value = 43.940
Sun Feb 17 18:56:19 2008

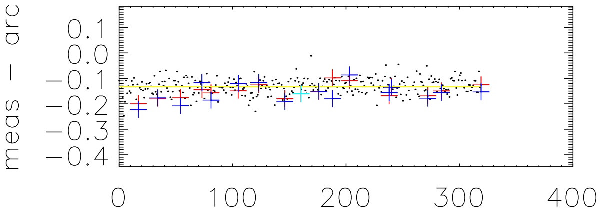

PLATE=2033 MJD=53476 Scattered Light on sdR-r1-00032122.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
12.7
9.1
9.1
9.1
9.1
9.1
5.5

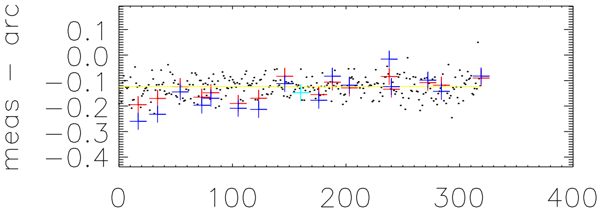

PLATE=2033 MJD=53476 Scattered Light on sdR-r1-00032122.fit
Brightness [electrons/pix]
0
5
10
15
20
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.755
Max value = 12.791
Sun Feb 17 18:59:35 2008

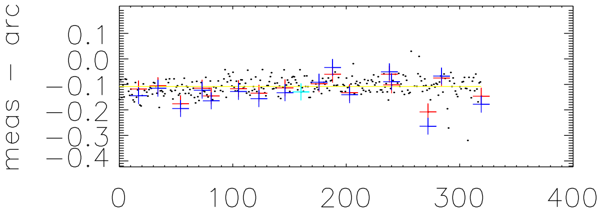

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-r1-00032122.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

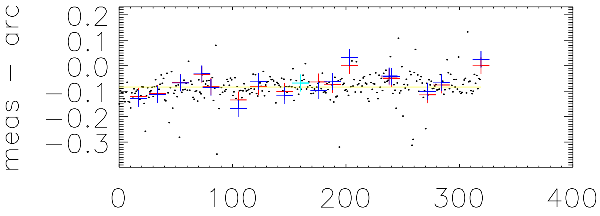

6300.3040
off: −0.19
sig: 0.006
6363.7760
off: −0.16
sig: 0.013
6553.6100
off: −0.15
sig: 0.017
6923.2100
off: −0.13
sig: 0.011
6949.0300
off: −0.07
sig: 0.011
7571.7500
off: −0.08
sig: 0.009
7794.1200
off: −0.20
sig: 0.005
7821.5100
off: −0.14
sig: 0.005
8399.1600
off: −0.12
sig: 0.004
8430.1700
off: −0.13
sig: 0.004
8885.8300
off: −0.09
sig: 0.004
8919.6100
off: −0.10
sig: 0.004
−4 −2 0 2 4

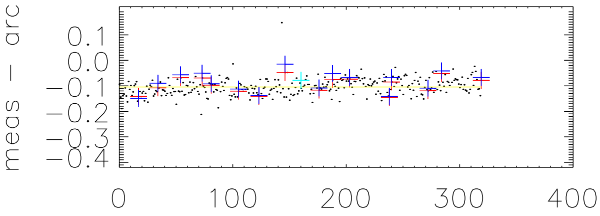

6300.3040


6363.7760

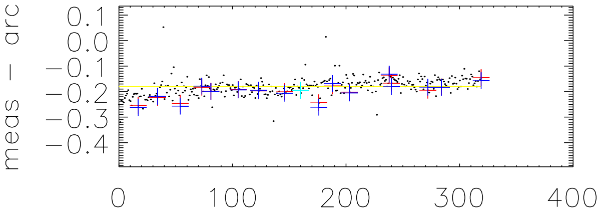

6553.6100


6923.2100

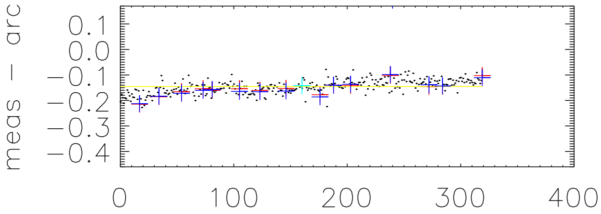

6949.0300


7571.7500

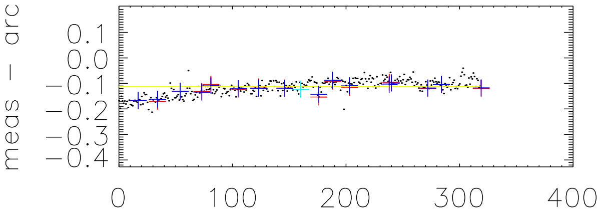
7794.1200



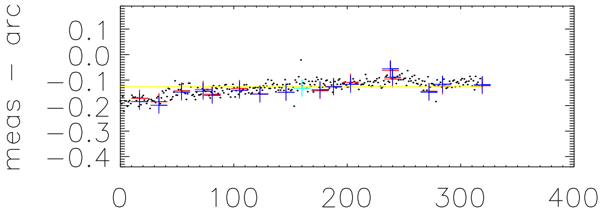
7821.5100



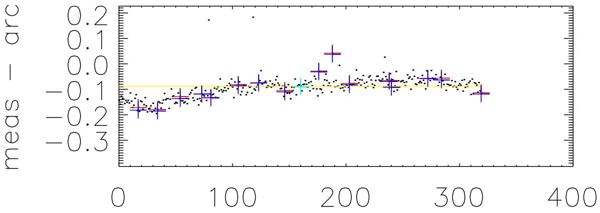
8399.1600



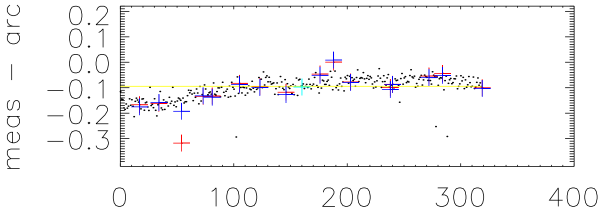
8430.1700

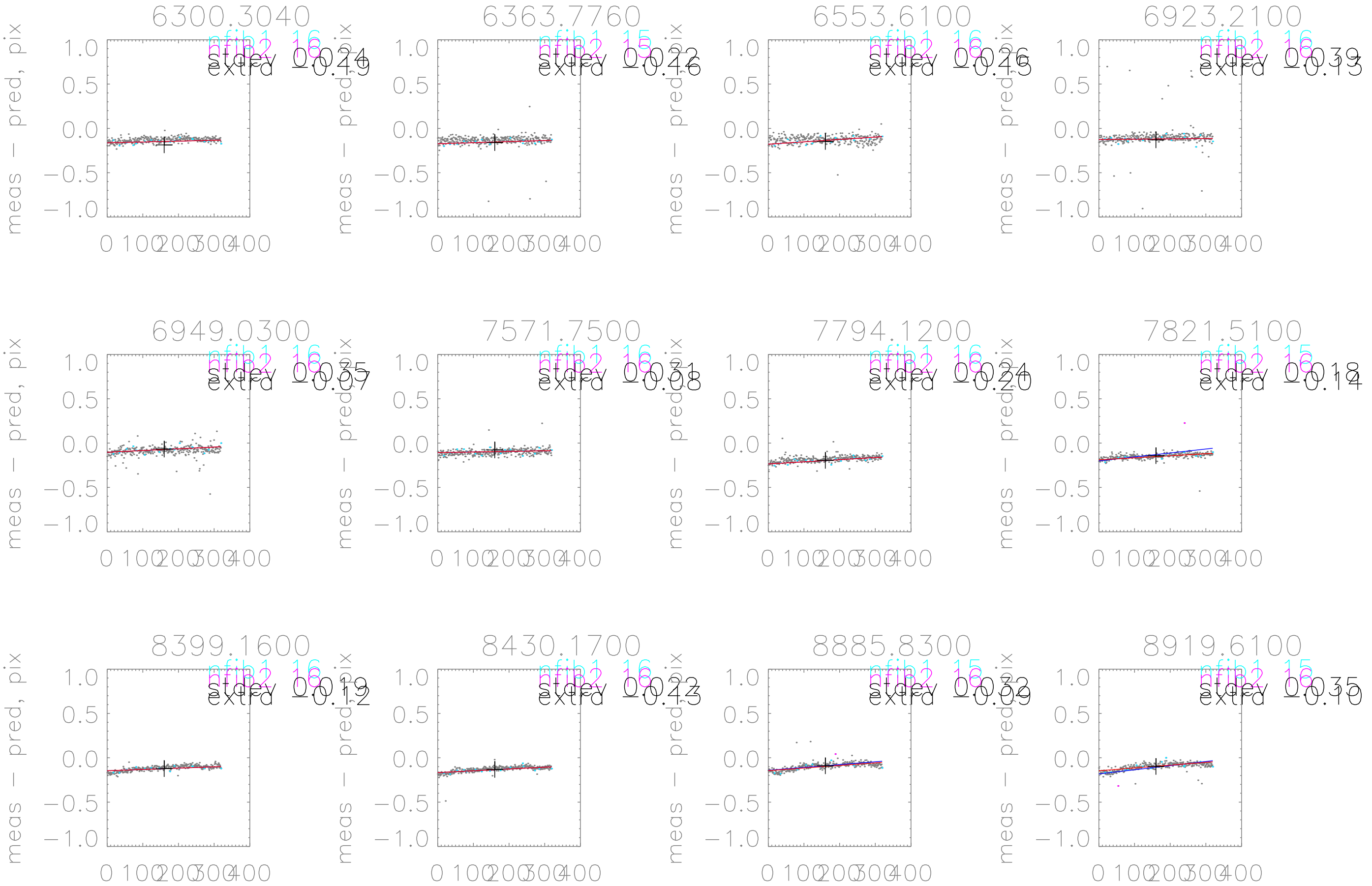


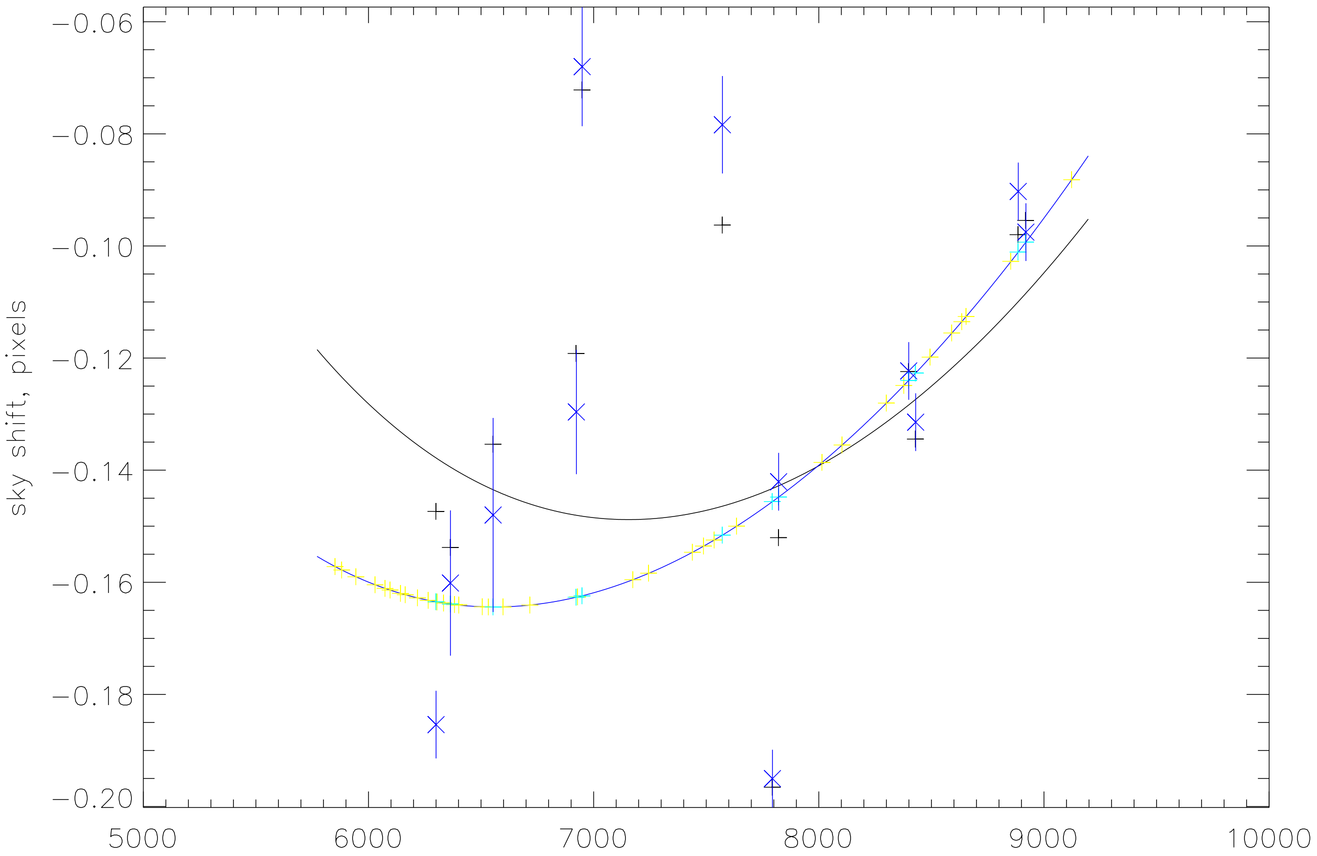
8885.8300

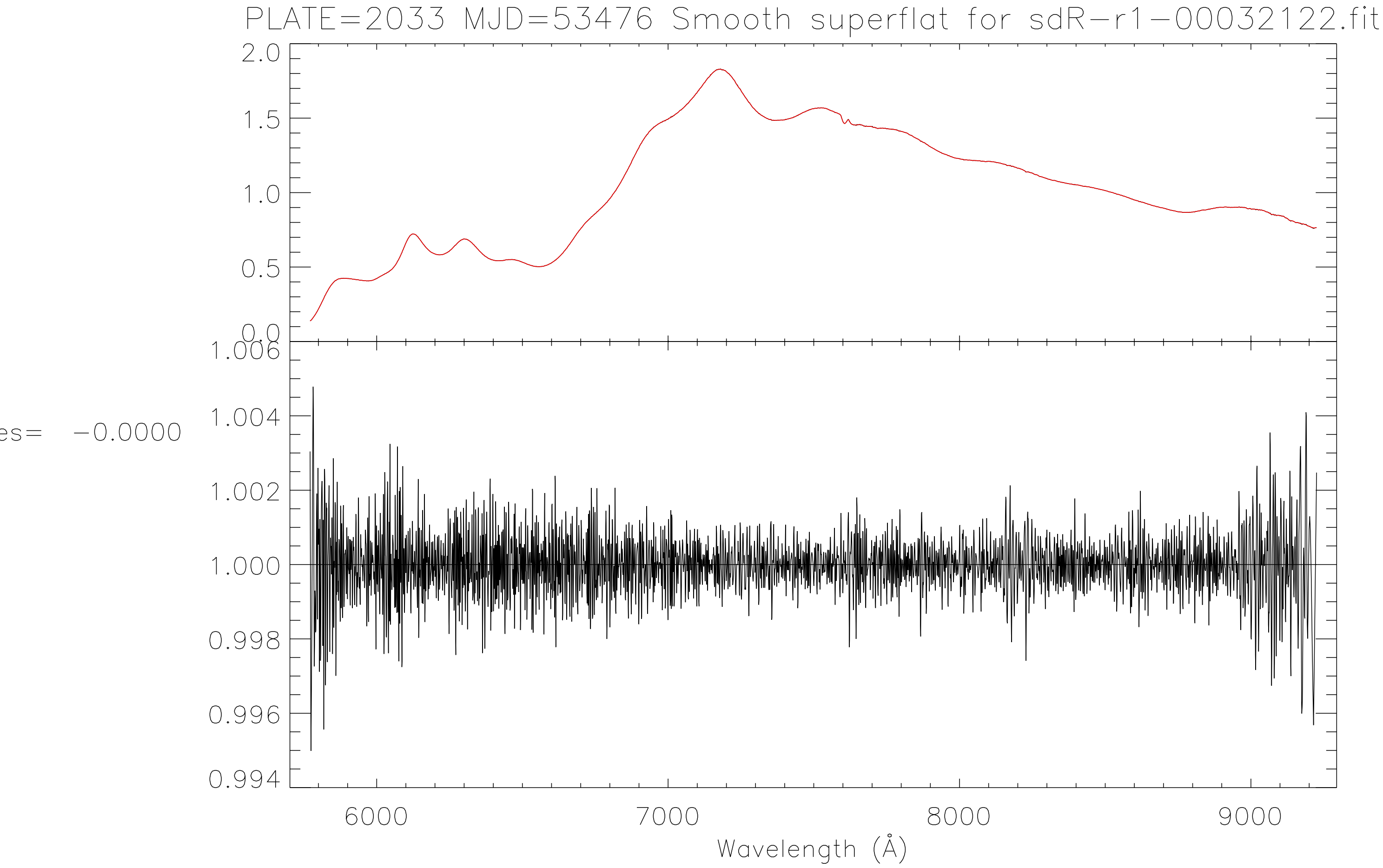


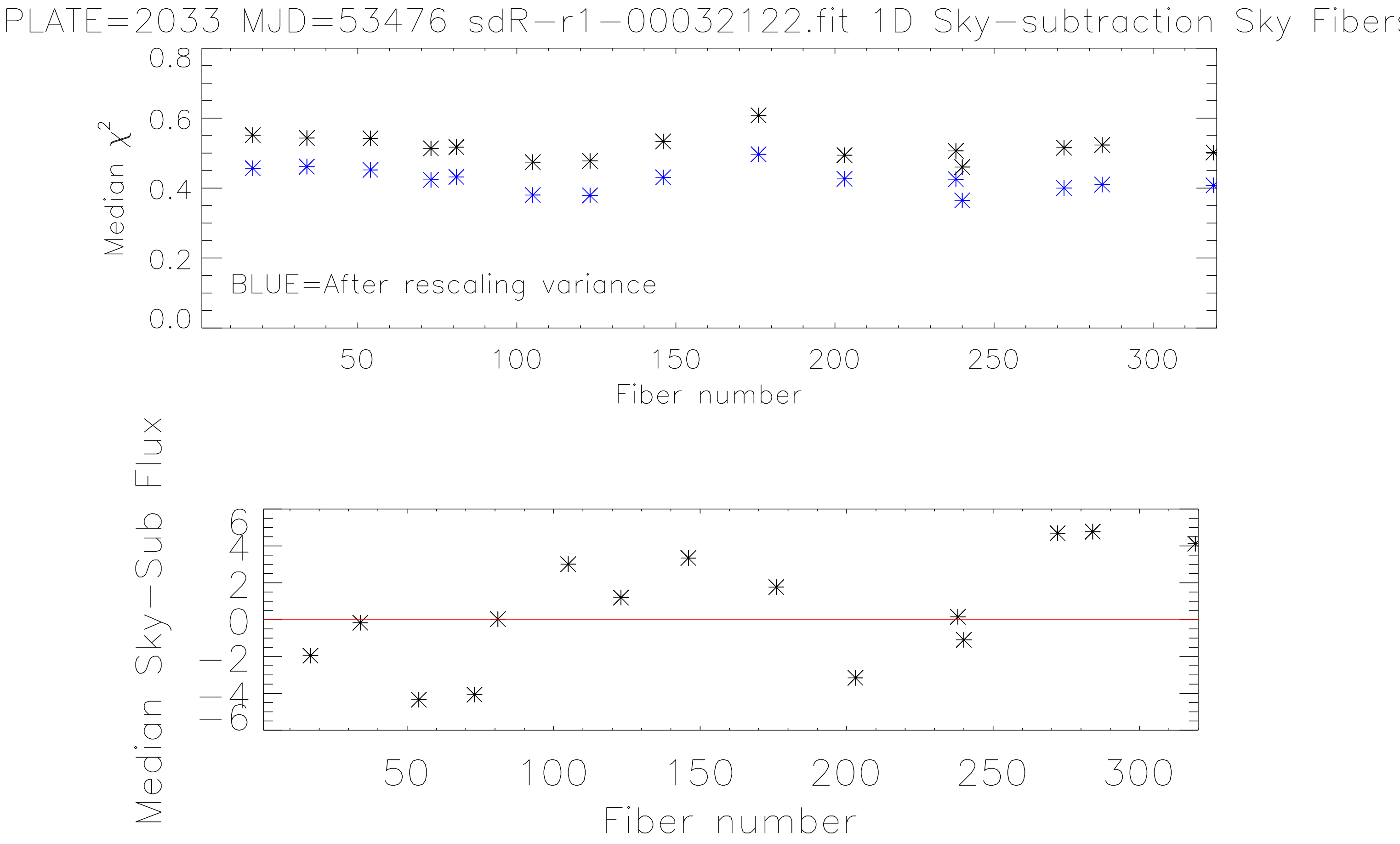
8919.6100

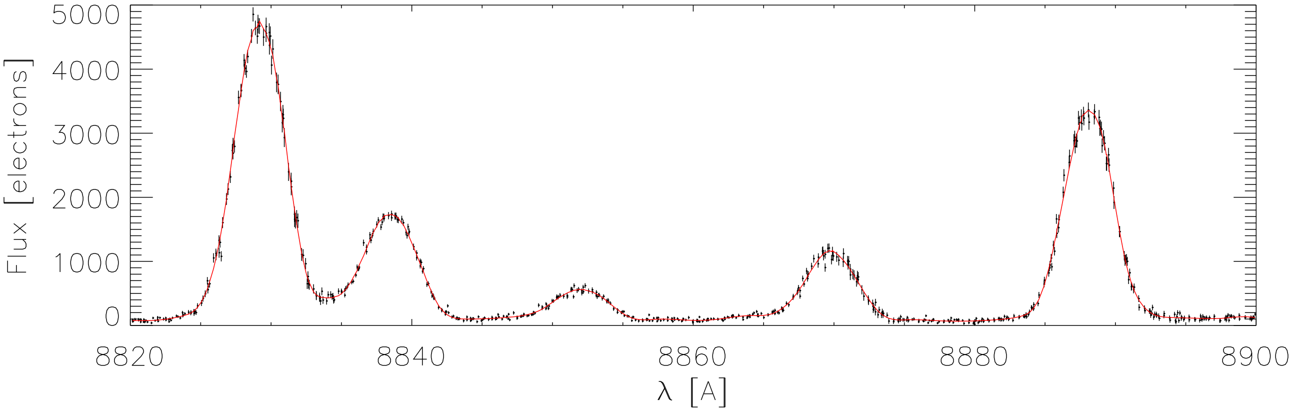



6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd −0.19
6363.7760
nfib1 15
nfib2 15
stdev 0.022
extrd −0.16
6553.6100
nfib1 16
nfib2 16
stdev 0.026
extrd −0.15
6923.2100
nfib1 16
nfib2 16
stdev 0.039
extrd −0.13
6949.0300
nfib1 16
nfib2 16
stdev 0.035
extrd −0.07
7571.7500
nfib1 16
nfib2 16
stdev 0.031
extrd −0.08
7794.1200
nfib1 16
nfib2 16
stdev 0.024
extrd −0.20
7821.5100
nfib1 15
nfib2 16
stdev 0.018
extrd −0.14
8399.1600
nfib1 16
nfib2 16
stdev 0.019
extrd −0.12
8430.1700
nfib1 16
nfib2 16
stdev 0.022
extrd −0.13
8885.8300
nfib1 15
nfib2 16
stdev 0.032
extrd −0.09
8919.6100
nfib1 15
nfib2 16
stdev 0.035
extrd −0.10
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

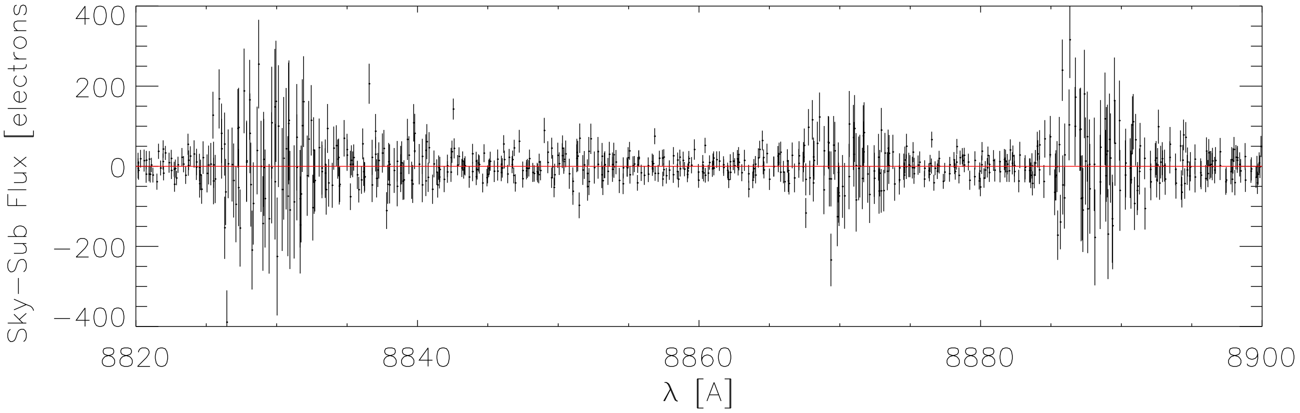

sky shift, pixels
−0.06
−0.08
−0.10
−0.12
−0.14
−0.16
−0.18
−0.20
5000
6000
7000
8000
9000
10000


PLATE=2033 MJD=53476 Smooth superflat for sdR-r1-00032122.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= -0.0000
6000
7000
8000
9000
Wavelength (Å)

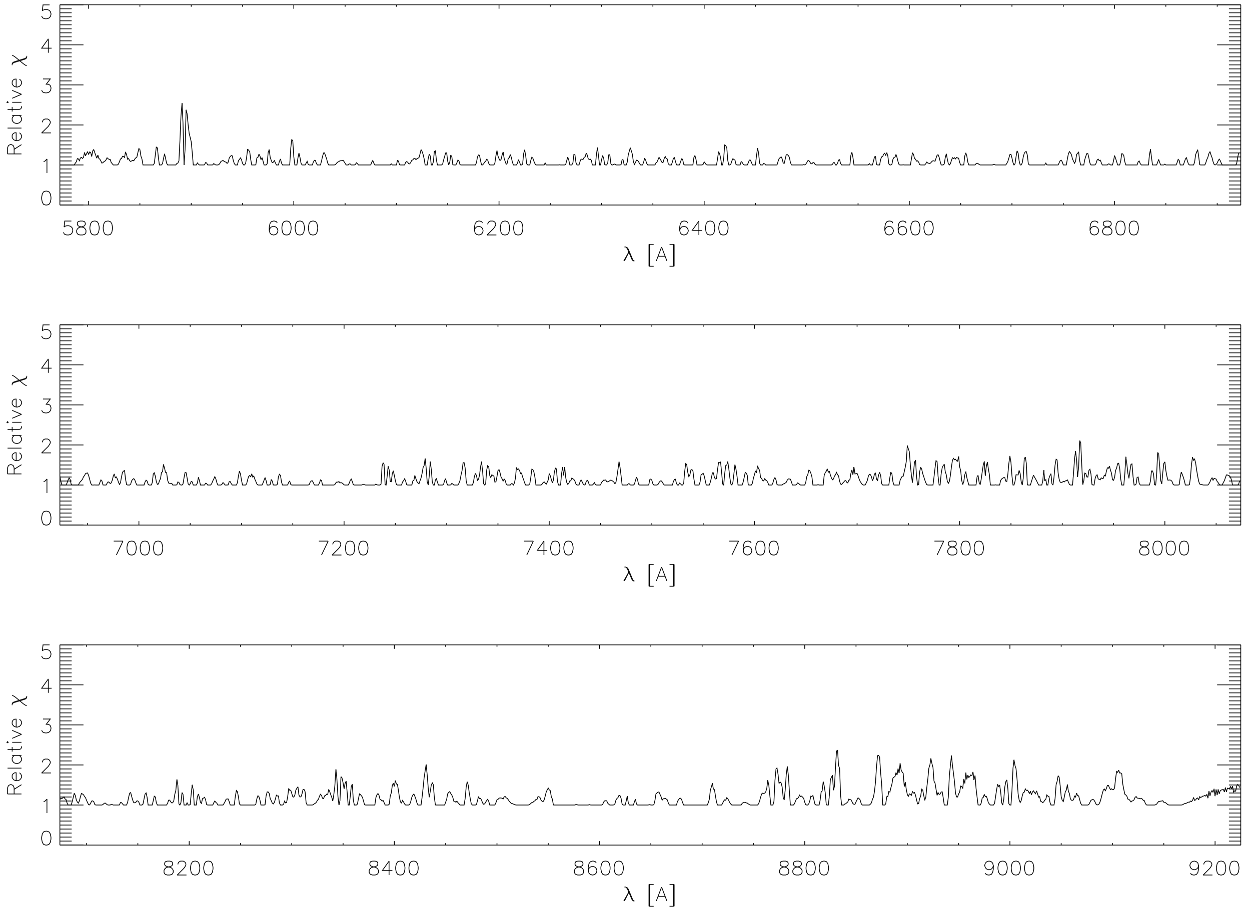

PLATE=2033 MJD=53476 sdR-r1-00032122.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number



PLATE=2033 MJD=53476 sdR-r1-00032122.fit 1D Sky-subtraction Sky Fibers

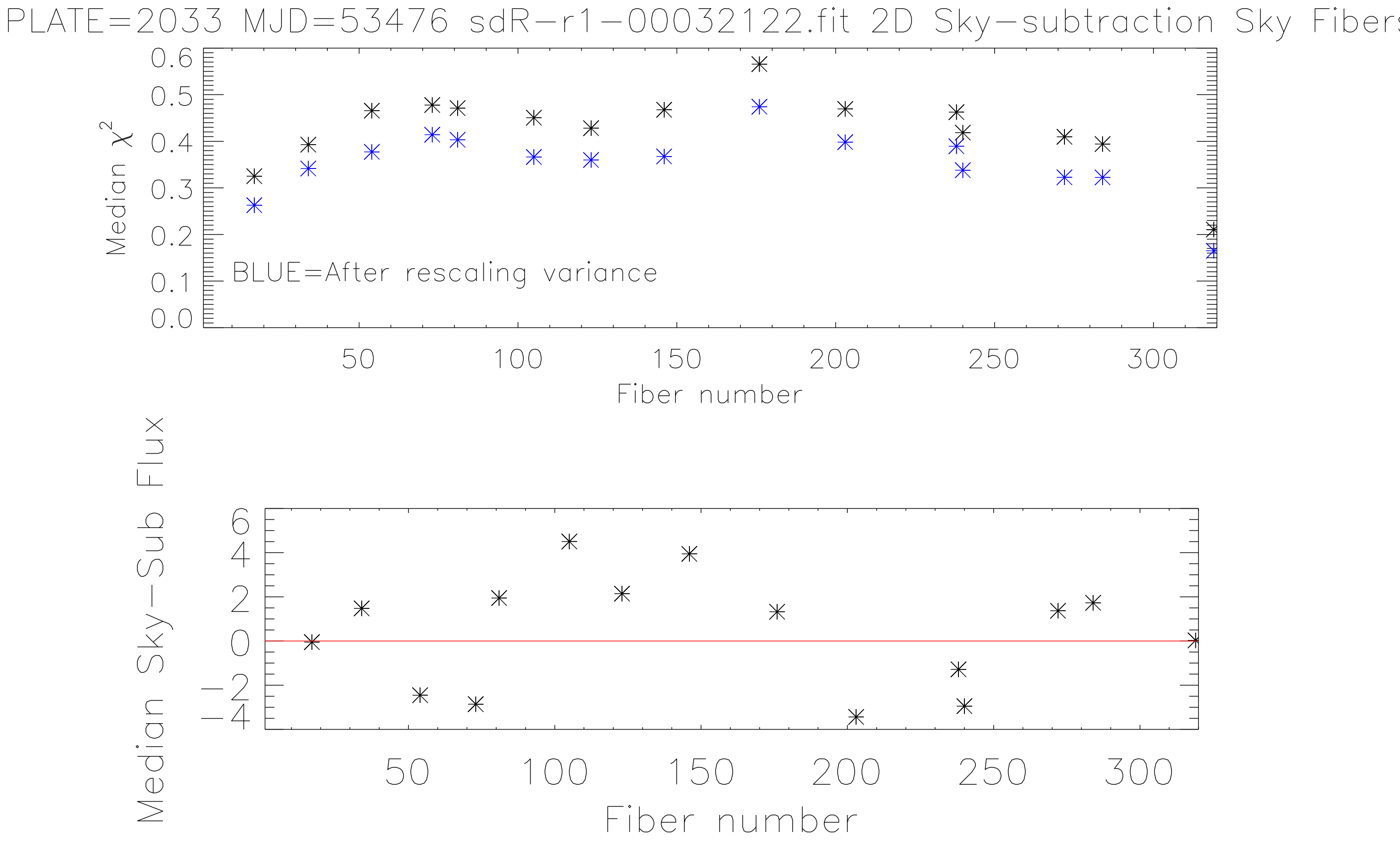


PLATE=2033 MJD=53476 sdR-r1-00032122.fit 1D Sky-subtraction Sky-subtracted Sky F

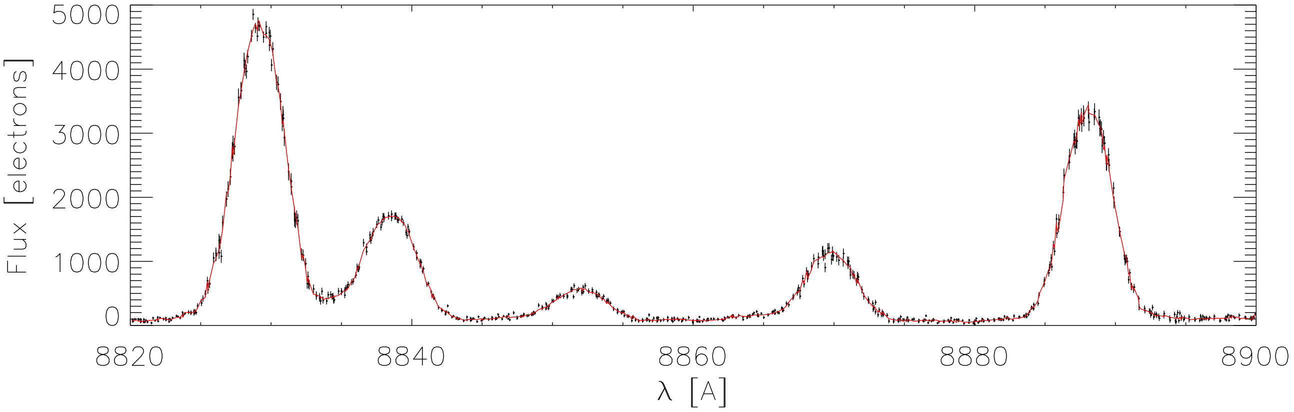


Number of sky fibers = 15

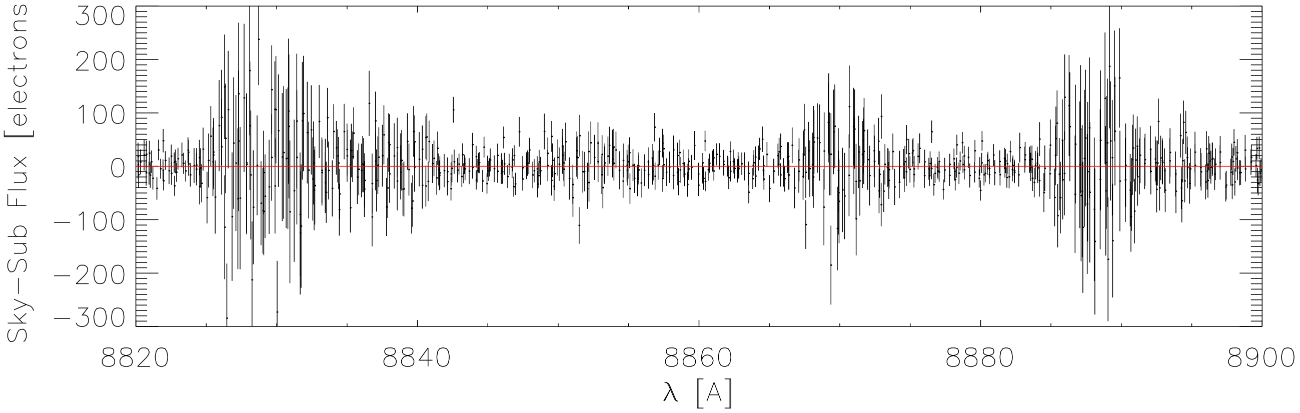
PLATE=2033 MJD=53476 sdR-r1-00032122.fit 1D Sky-subtraction Rescaled Errors


PLATE=2033 MJD=53476 sdR-r1-00032122.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−4
−2
0
2
4
6
50
100
150
200
250
300
Fiber number

PLATE=2033 MJD=53476 sdR-r1-00032122.fit 2D Sky-subtraction Sky Fibers

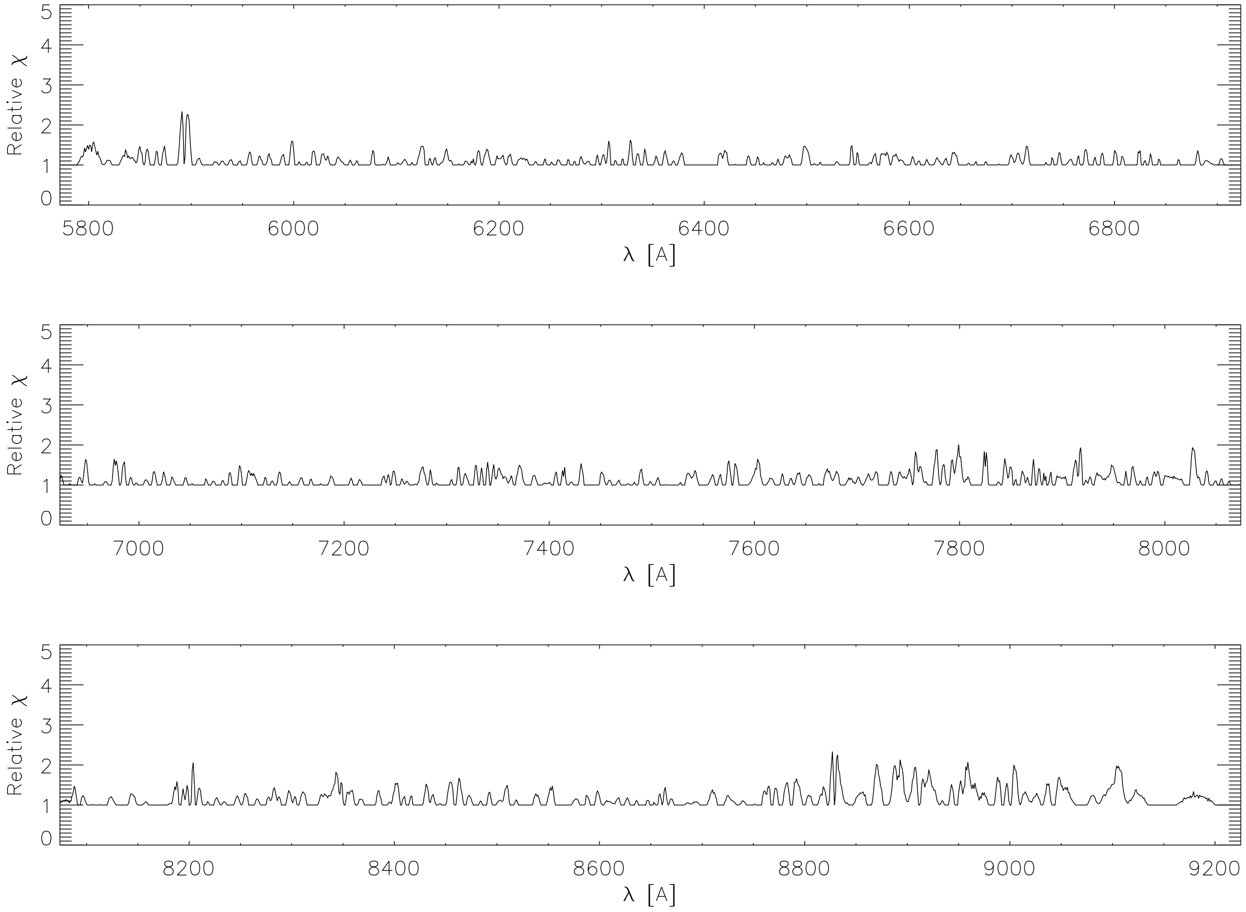


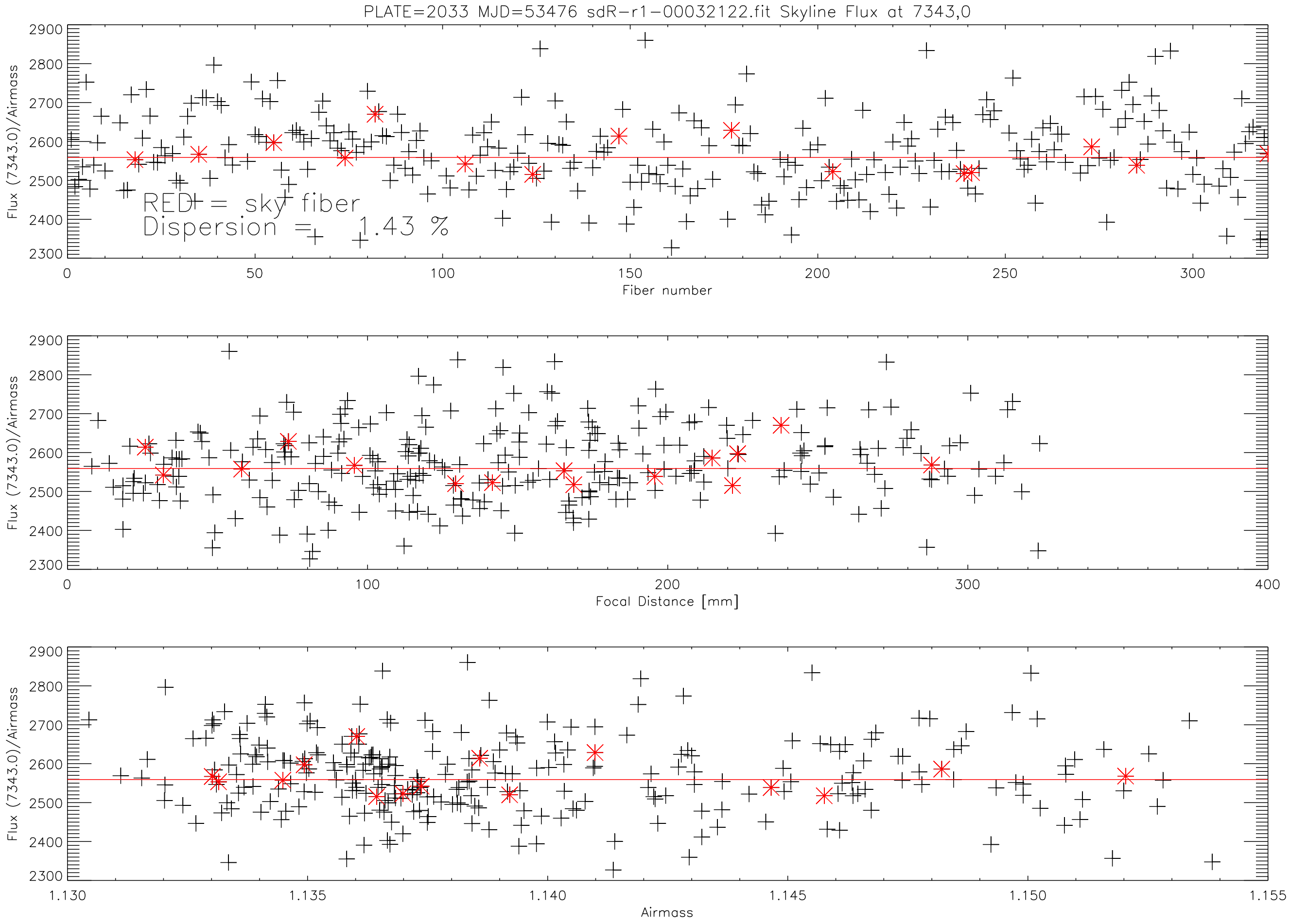
PLATE=2033 MJD=53476 sdR-r1-00032122.fit 2D Sky-subtraction Sky-subtracted Sky F

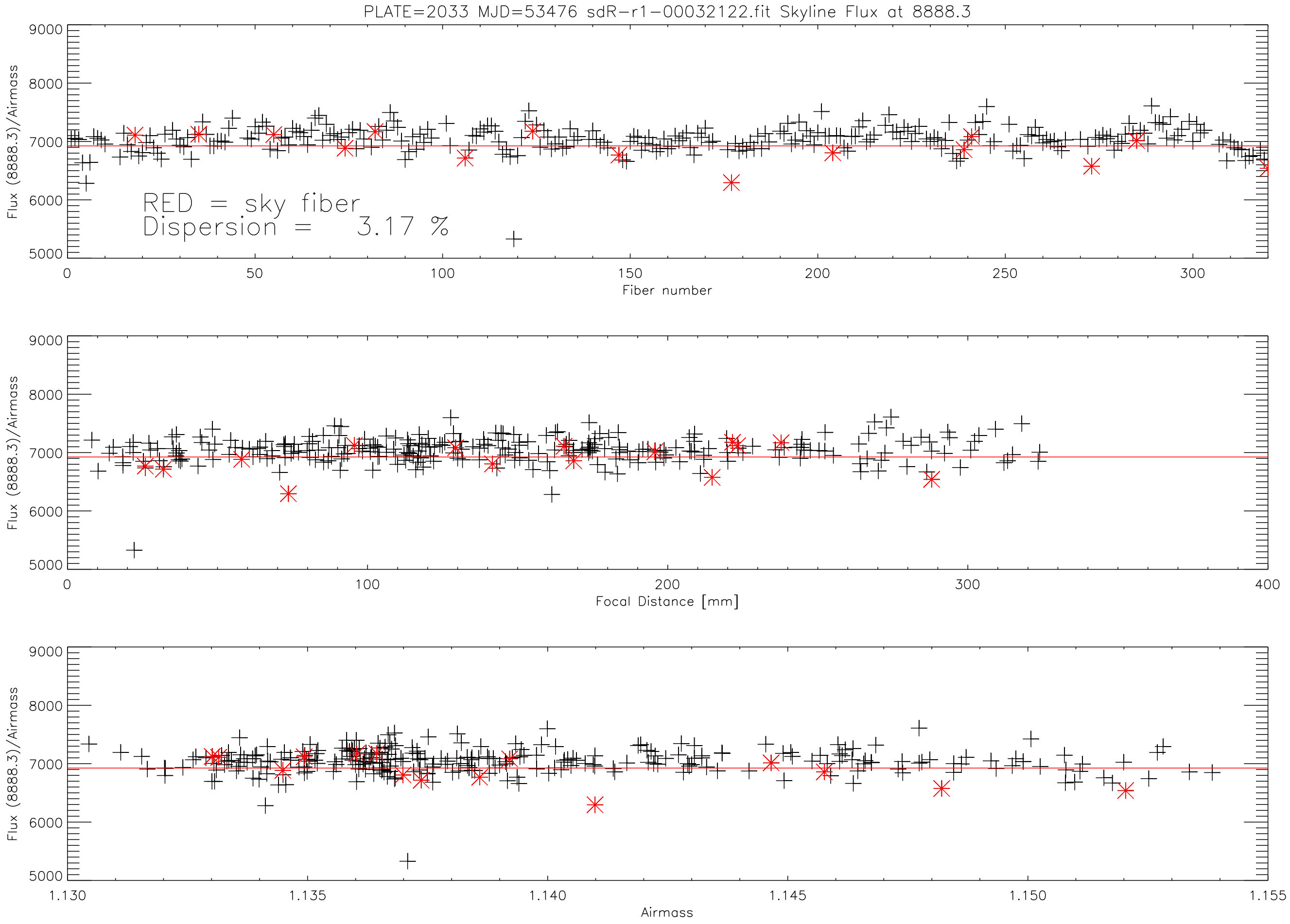


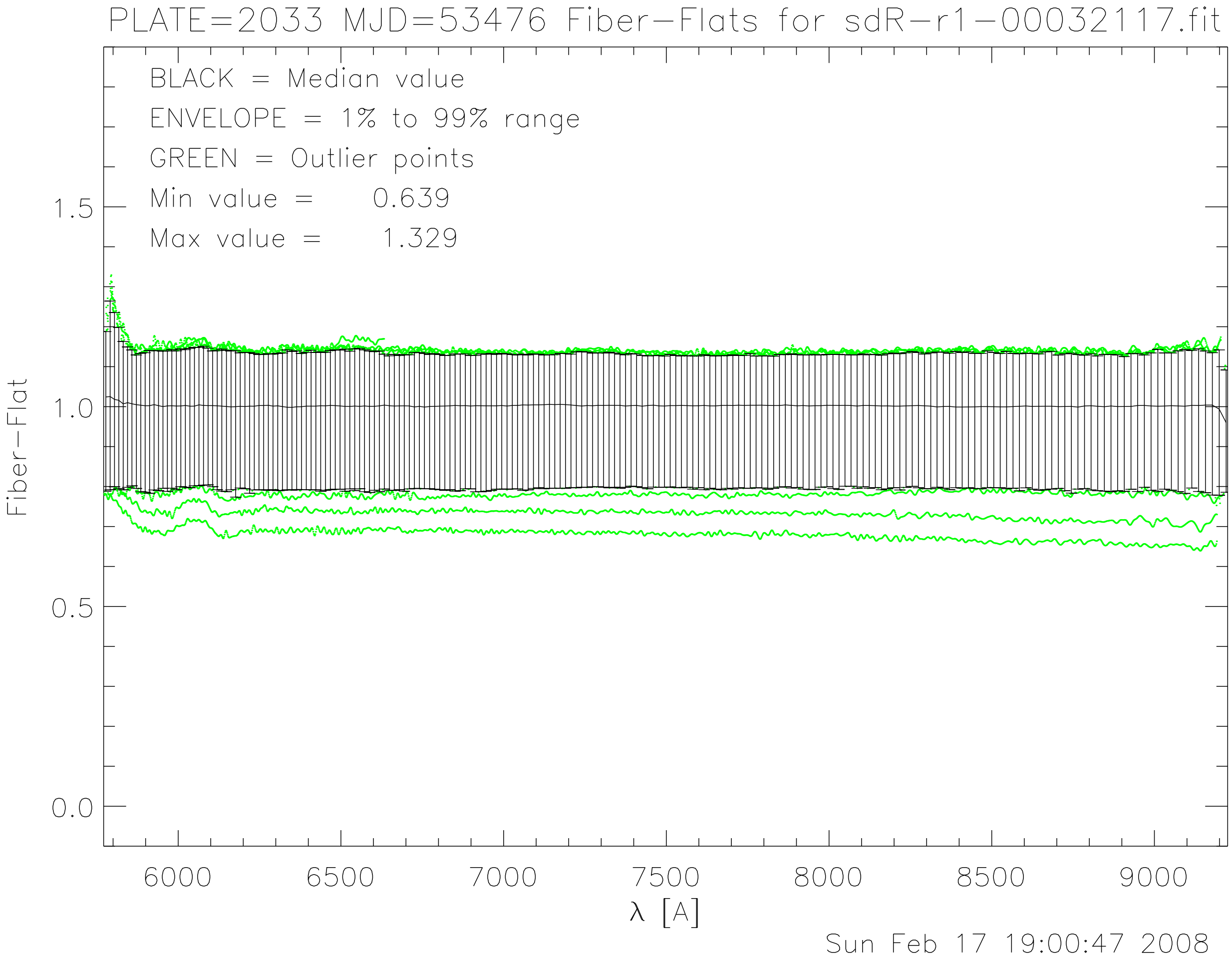
Number of sky fibers = 15

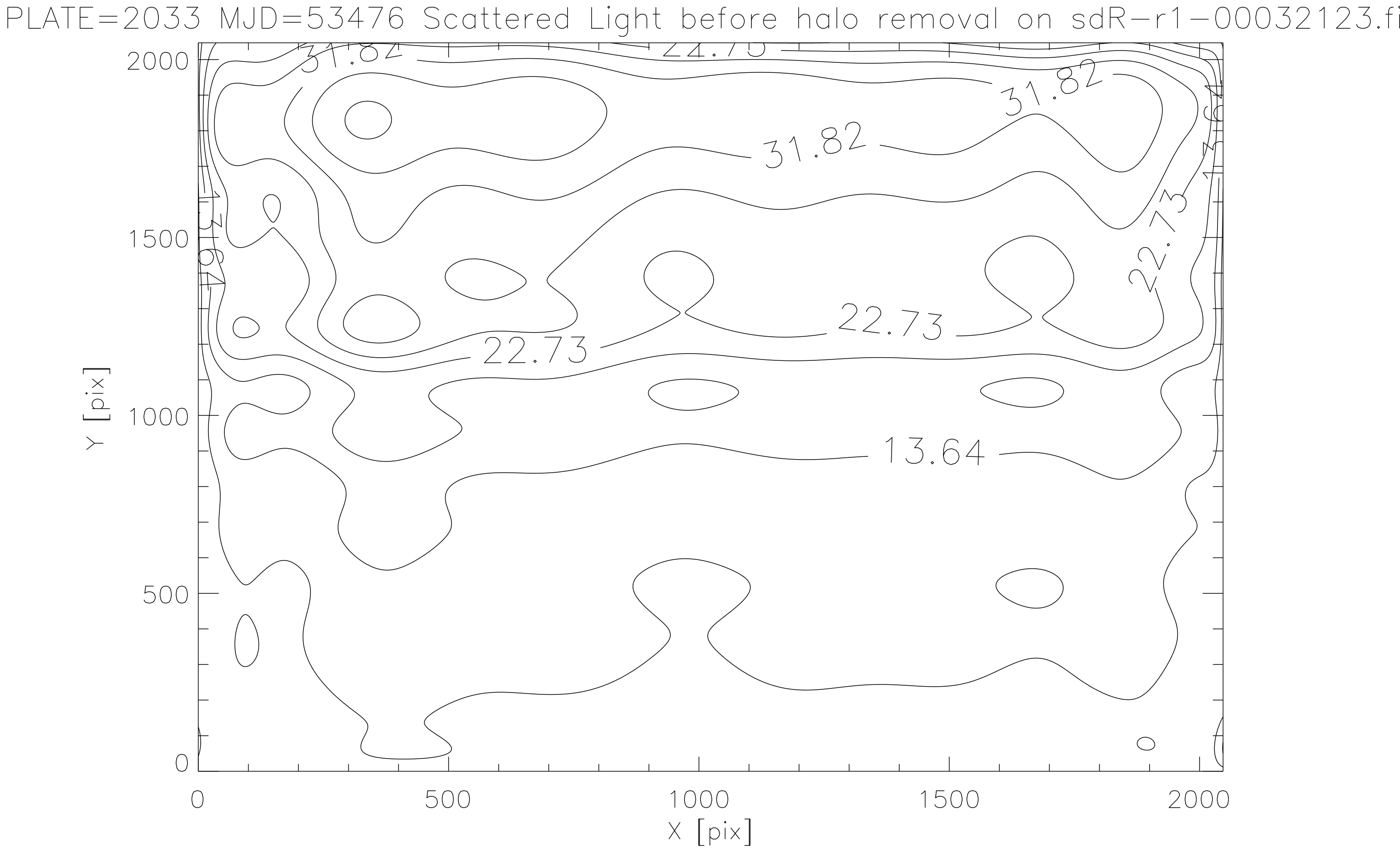
PLATE=2033 MJD=53476 sdR-r1-00032122.fit 2D Sky-subtraction Rescaled Errors

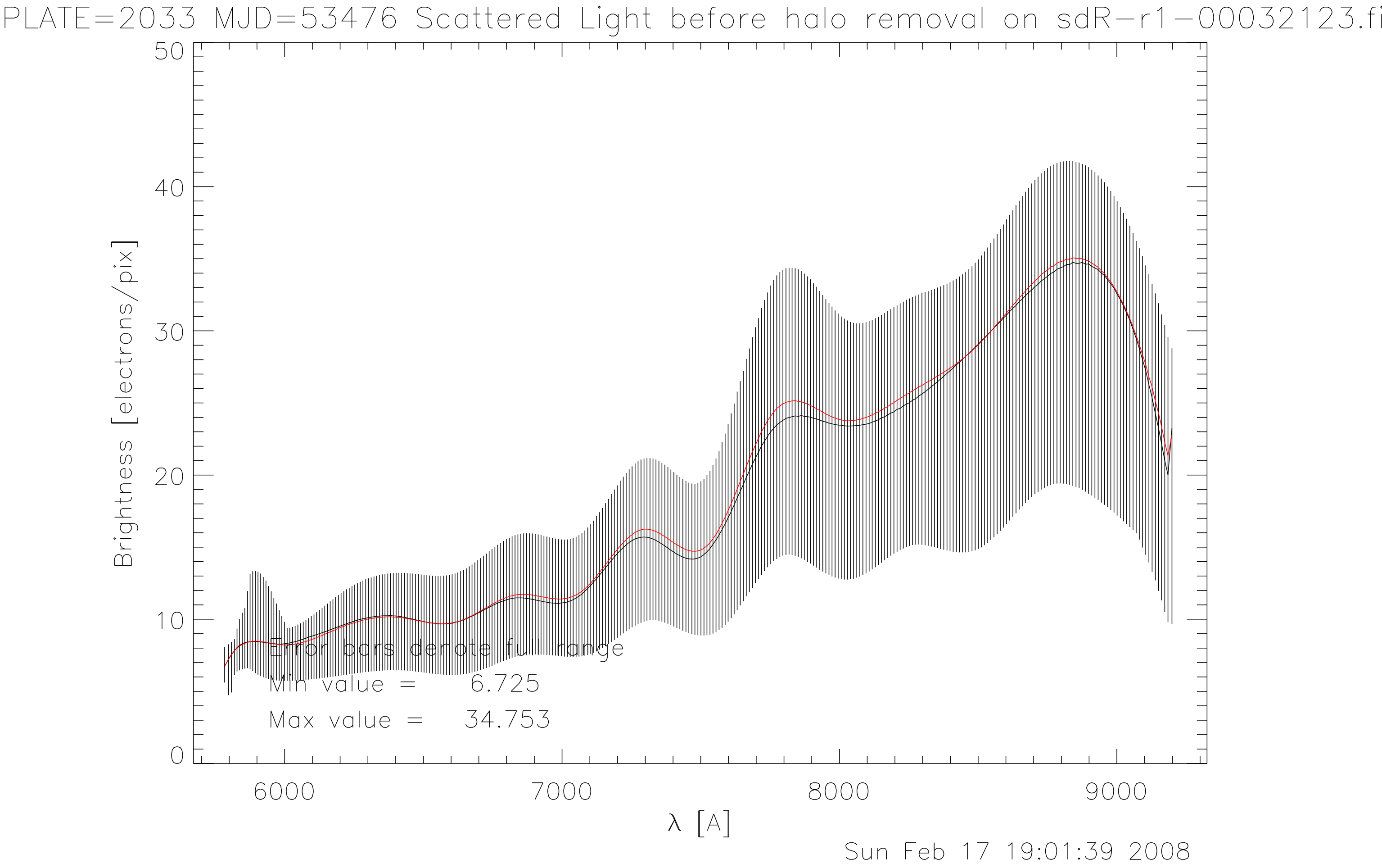


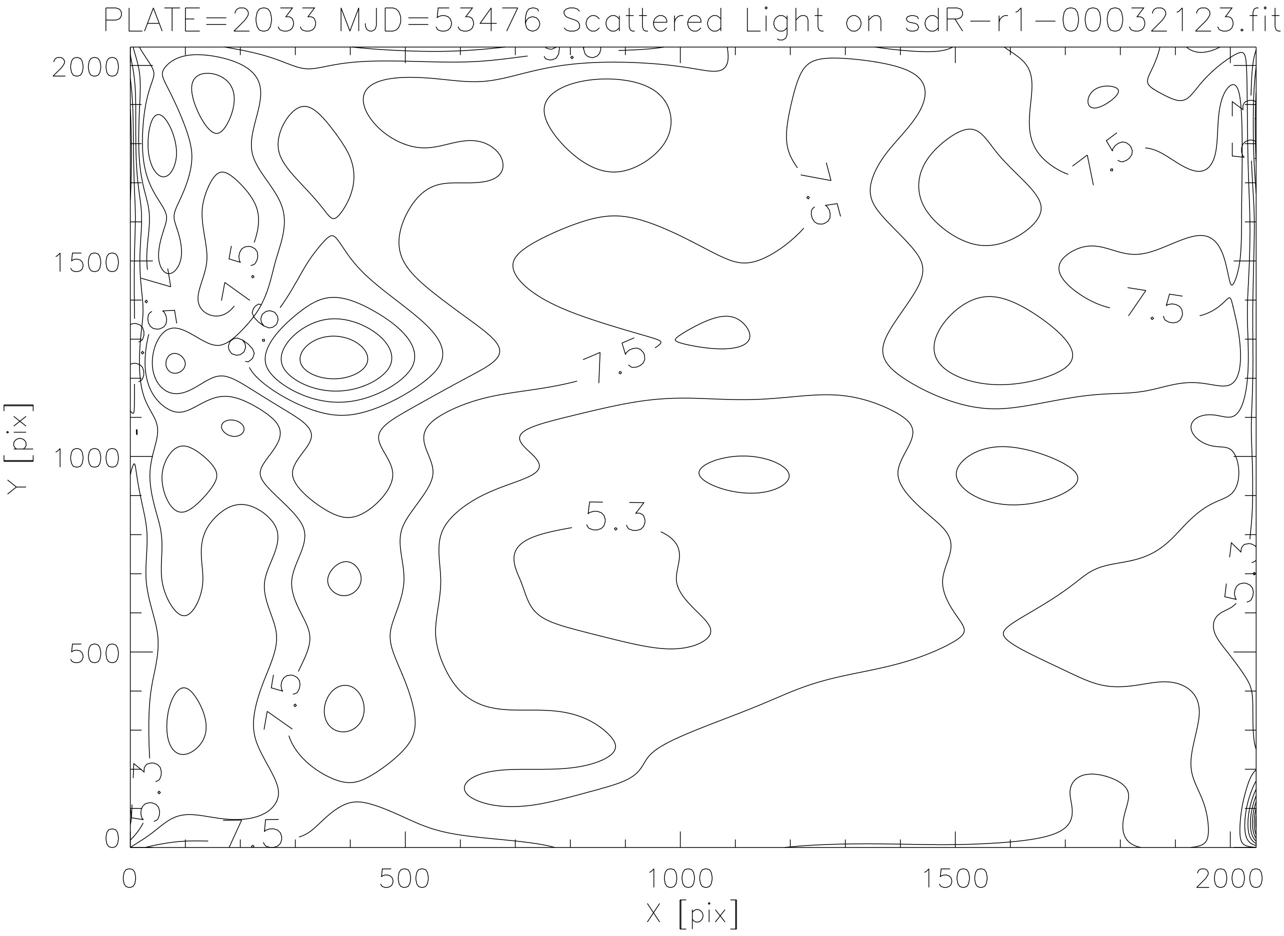

PLATE=2033 MJD=53476 sdR-r1-00032122.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 1.43 %
Flux (7343.0)/Airmass
2300
2400
2500
2600
2700
2800
2900
0
50
100
150
200
250
300
Fiber number
Focal Distance [mm]
400
1.130
1.135
1.140
1.145
1.150
1.155
Airmass

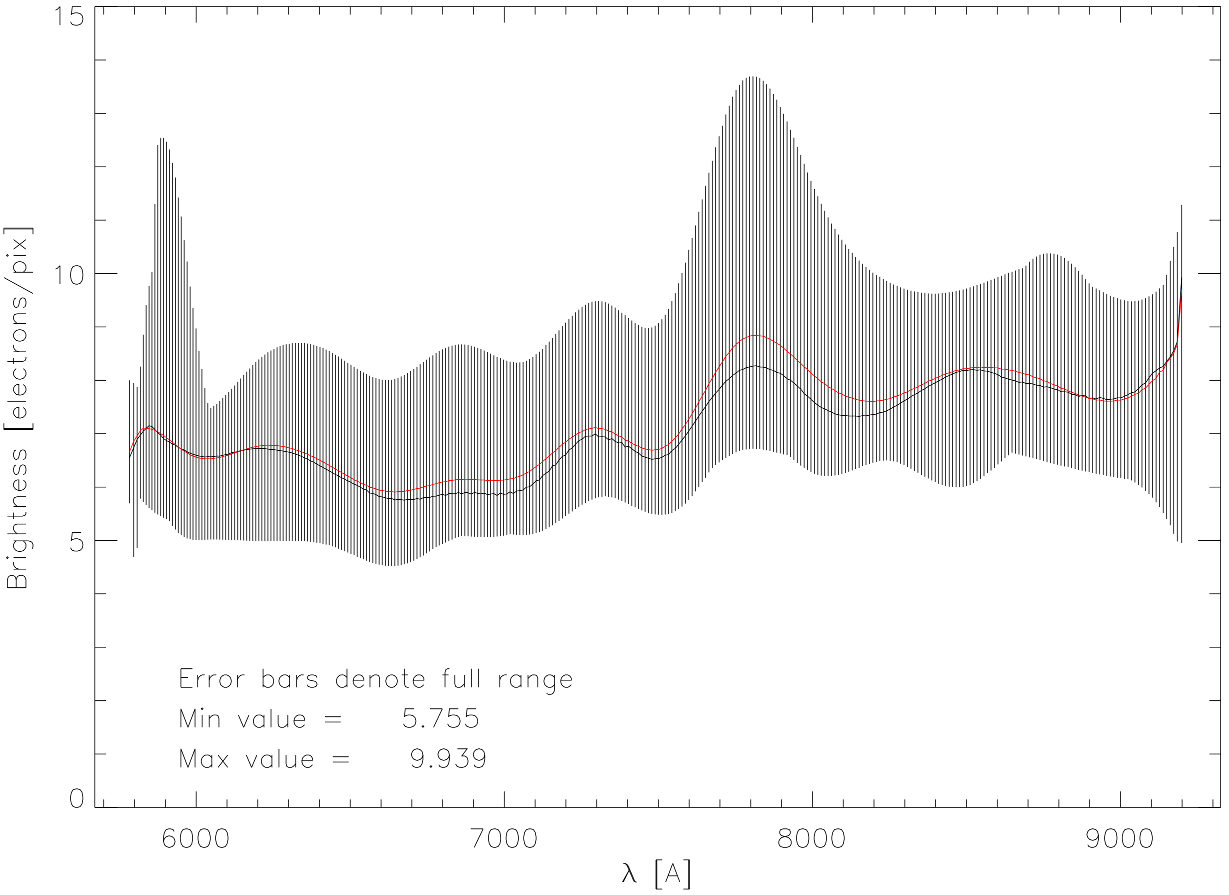

PLATE=2033 MJD=53476 sdR−r1−00032122.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
9000
8000
7000
6000
5000
RED = sky fiber
Dispersion = 3.17 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
9000
8000
7000
6000
5000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
9000
8000
7000
6000
5000
1.130
1.135
1.140
1.145
1.150
1.155
Airmass


PLATE=2033 MJD=53476 Fiber-Flats for sdR-r1-00032117.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.639
Max value = 1.329
Fiber-Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 19:00:47 2008


PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r1-00032123.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
31.82
31.82
31.82
22.73
22.73
22.73
22.73
13.64
13.64
13.64


PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r1-00032123.fi
Brightness [electrons/pix]
0
10
20
30
40
50
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.725
Max value = 34.753
Sun Feb 17 19:01:39 2008


PLATE=2033 MJD=53476 Scattered Light on sdR-r1-00032123.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
9.6
7.5
7.5
7.5
7.5
9.6
7.5
5.3
7.5
7.5
5.3
5.3
7.5
5.3
7.5
5.3



PLATE=2033 MJD=53476 Scattered Light on sdR-r1-00032123.fit

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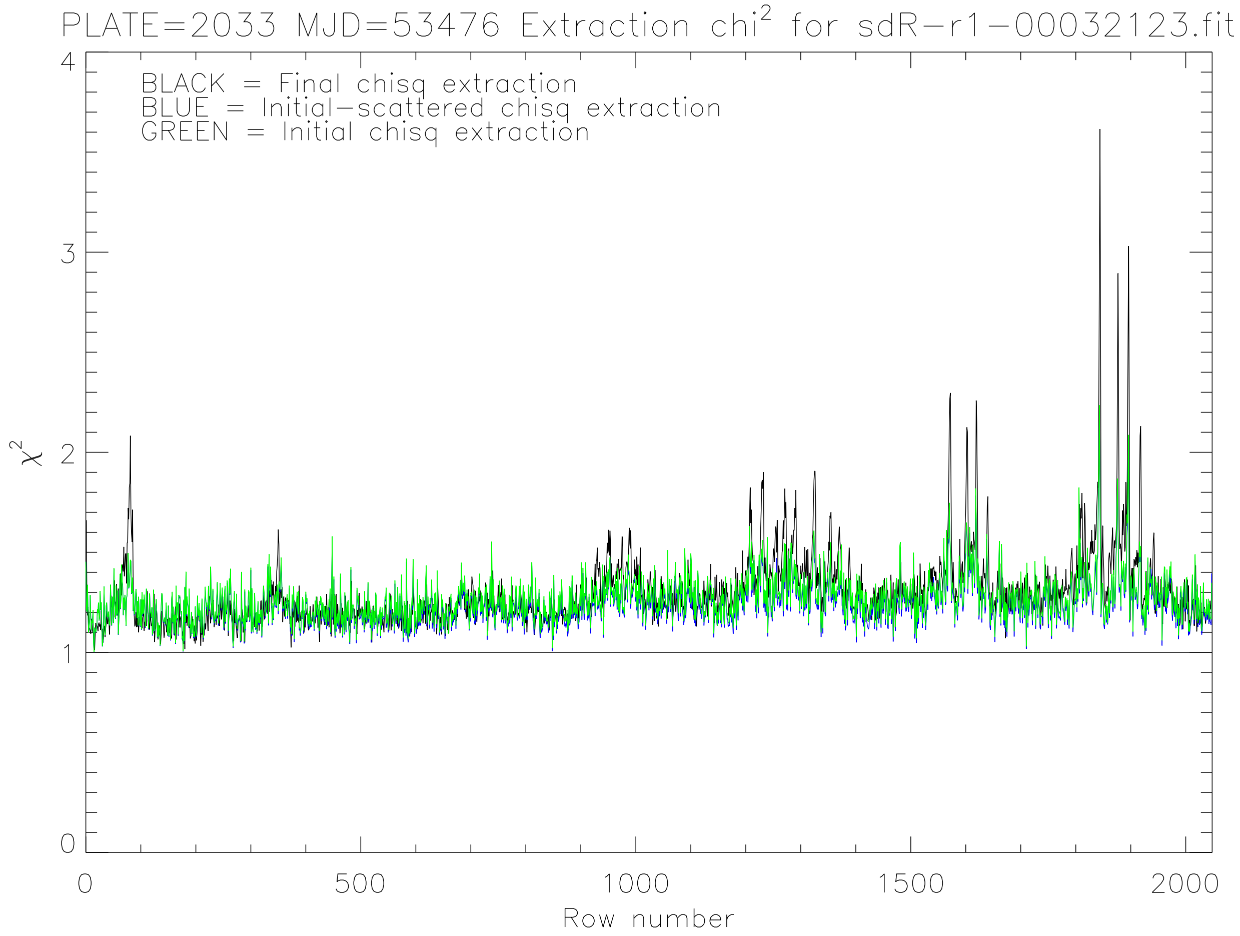
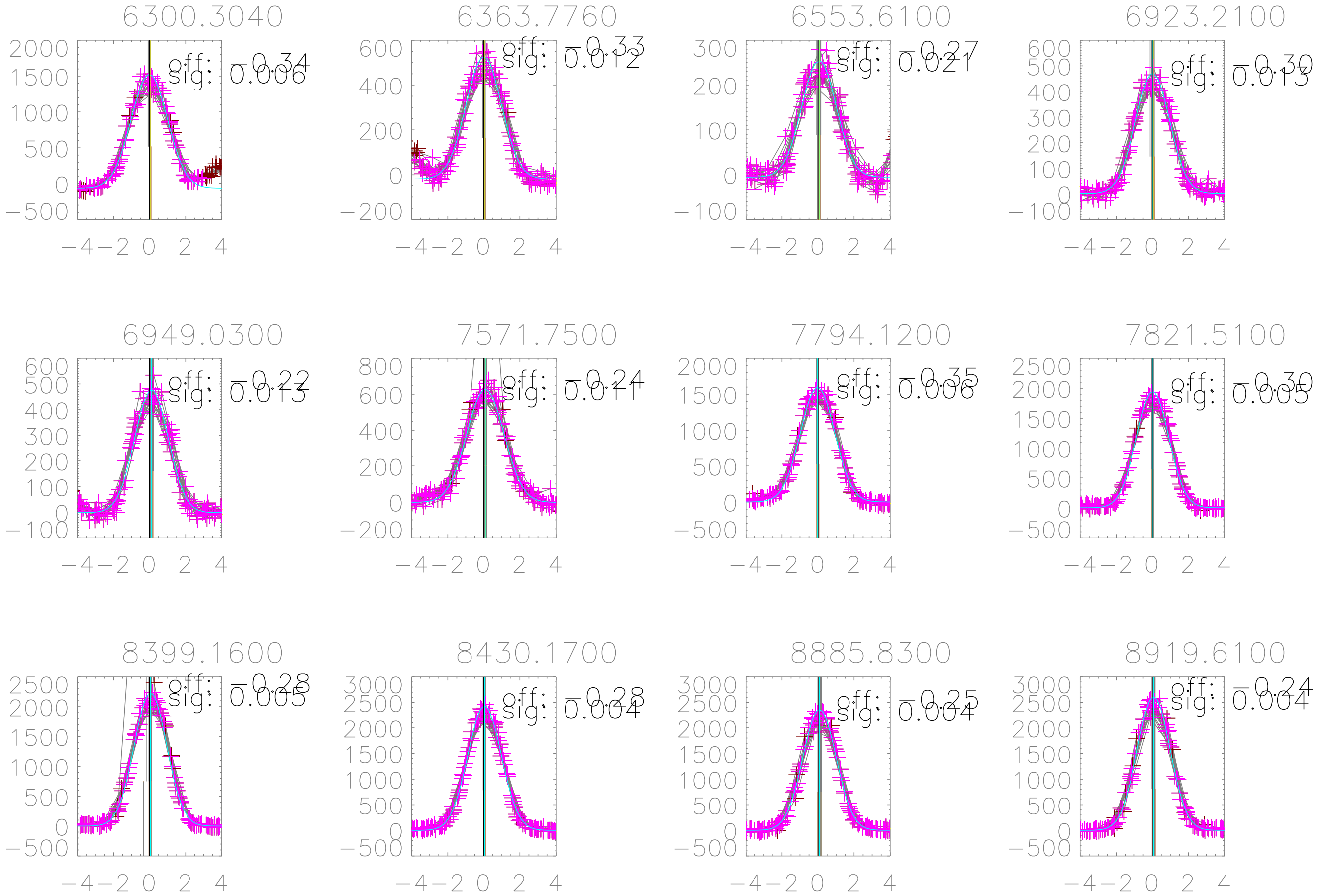
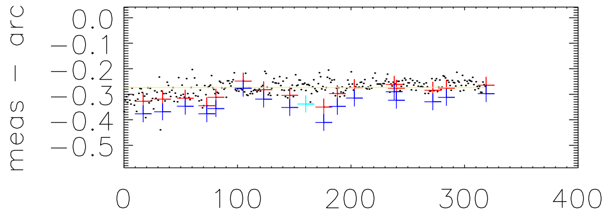
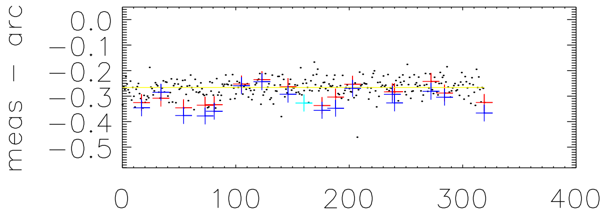

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-r1-00032123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
Row number
0
500
1000
1500
2000


6300.3040
off: −0.34
sig: 0.006
6363.7760
off: −0.33
sig: 0.012
6553.6100
off: −0.27
sig: 0.021
6923.2100
off: −0.30
sig: 0.013
6949.0300
off: −0.22
sig: 0.013
7571.7500
off: −0.24
sig: 0.011
7794.1200
off: −0.35
sig: 0.006
7821.5100
off: −0.30
sig: 0.005
8399.1600
off: −0.28
sig: 0.005
8430.1700
off: −0.28
sig: 0.004
8885.8300
off: −0.25
sig: 0.004
8919.6100
off: −0.24
sig: 0.004
−4 −2 0 2 4

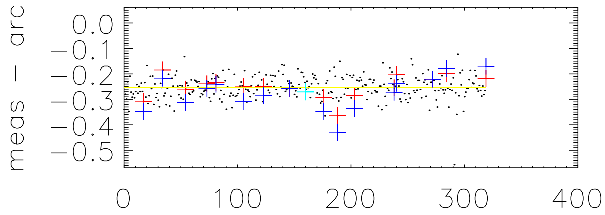
6300.3040



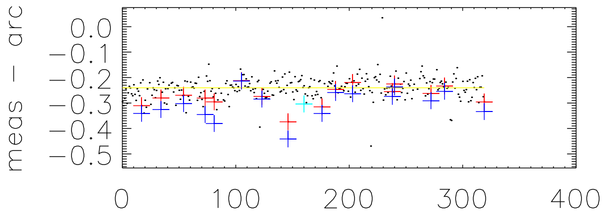
6363.7760



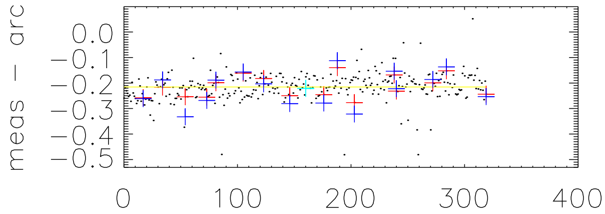
6553.6100



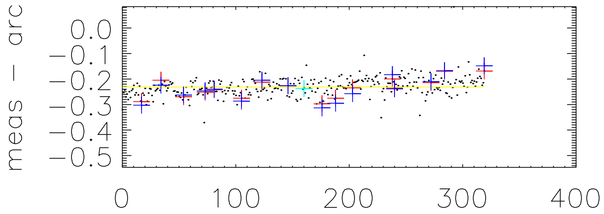
6923.2100

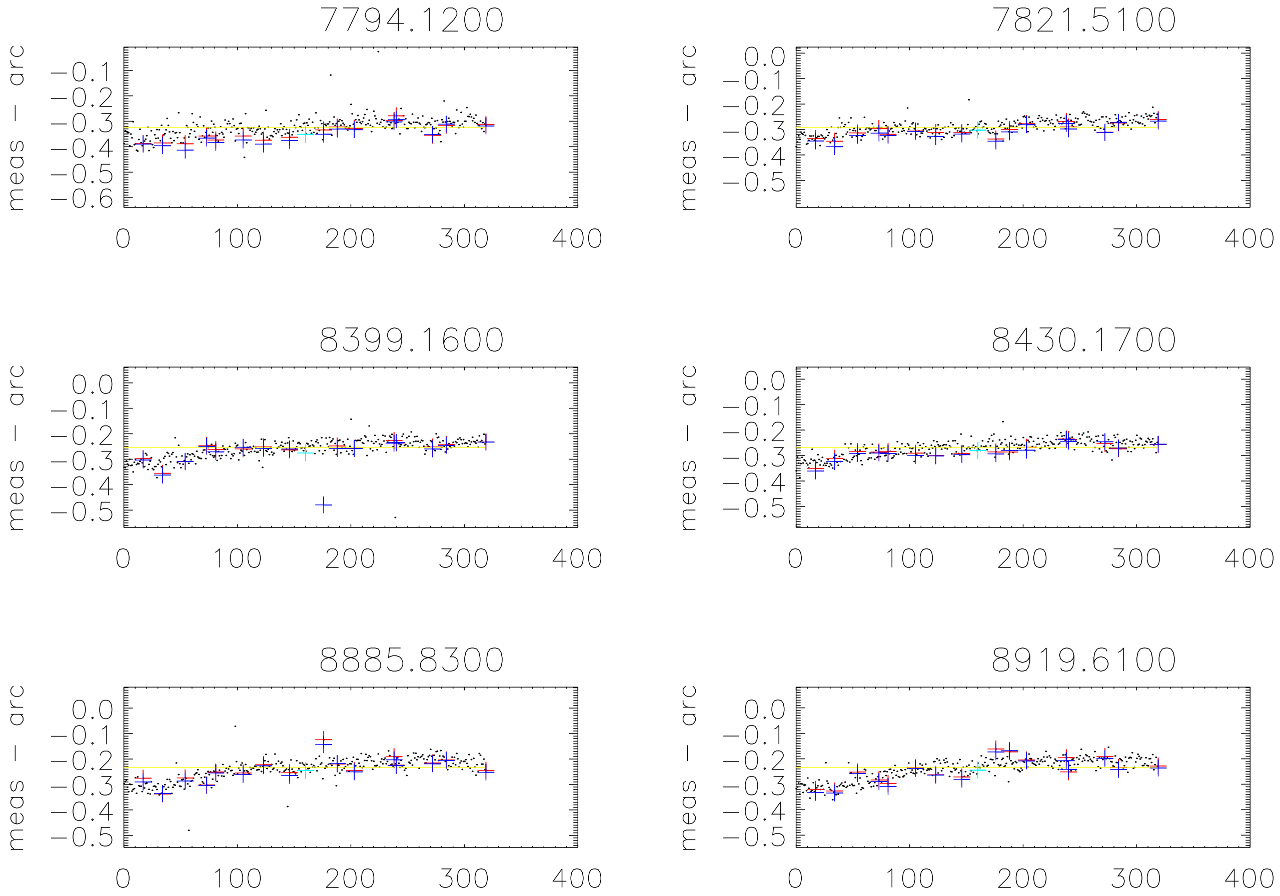


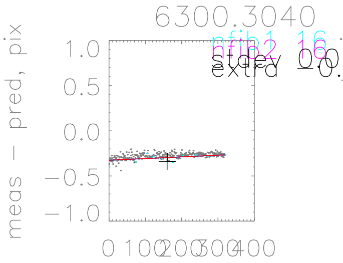
6949.0300

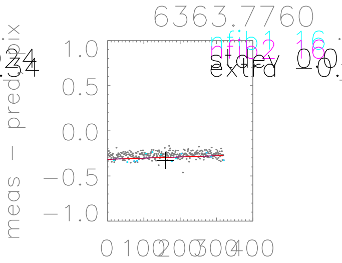


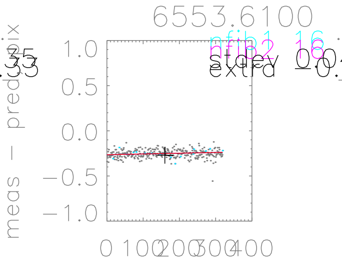
7571.7500

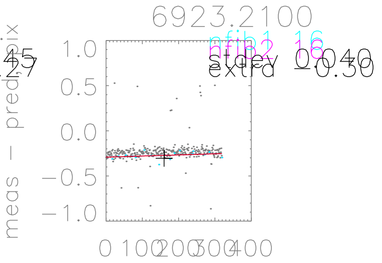


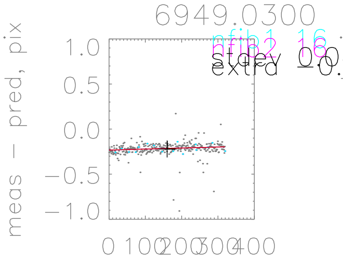

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
−0.6
−0.5
−0.4
−0.3
−0.2
−0.1
0.0
0
100
200
300
400

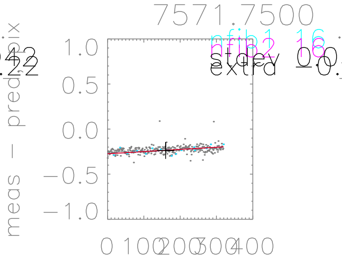

6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd −0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

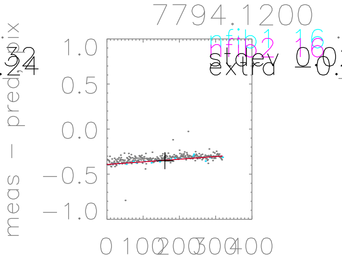

6363.7760
nfib1 16
nfib2 16
stdev 0.035
extrd −0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

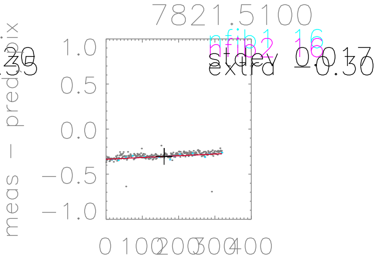

6553.6100
nfib1 16
nfib2 16
stdev 0.045
extrd −0.27
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

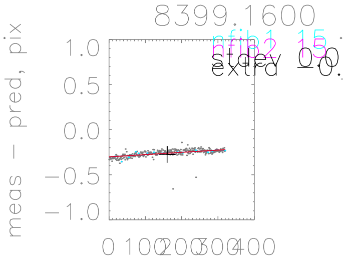

6923.2100
nfib1 16
nfib2 16
stdev 0.040
extrd −0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

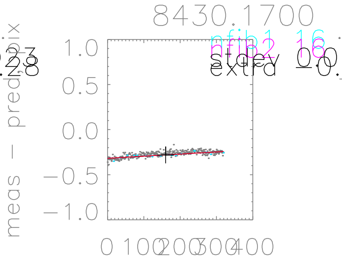

6949.0300
nfib1 16
nfib2 16
stdev 0.042
extrd −0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

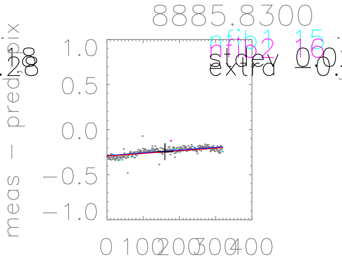

7571.7500
nfib1 16
nfib2 16
stdev 0.032
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

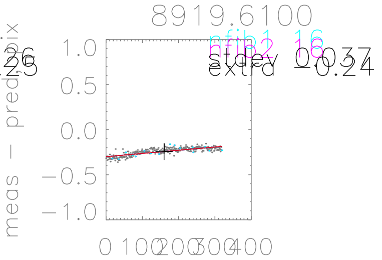

7794.1200
nfib1 16
nfib2 16
stdev 0.020
extrd −0.35
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

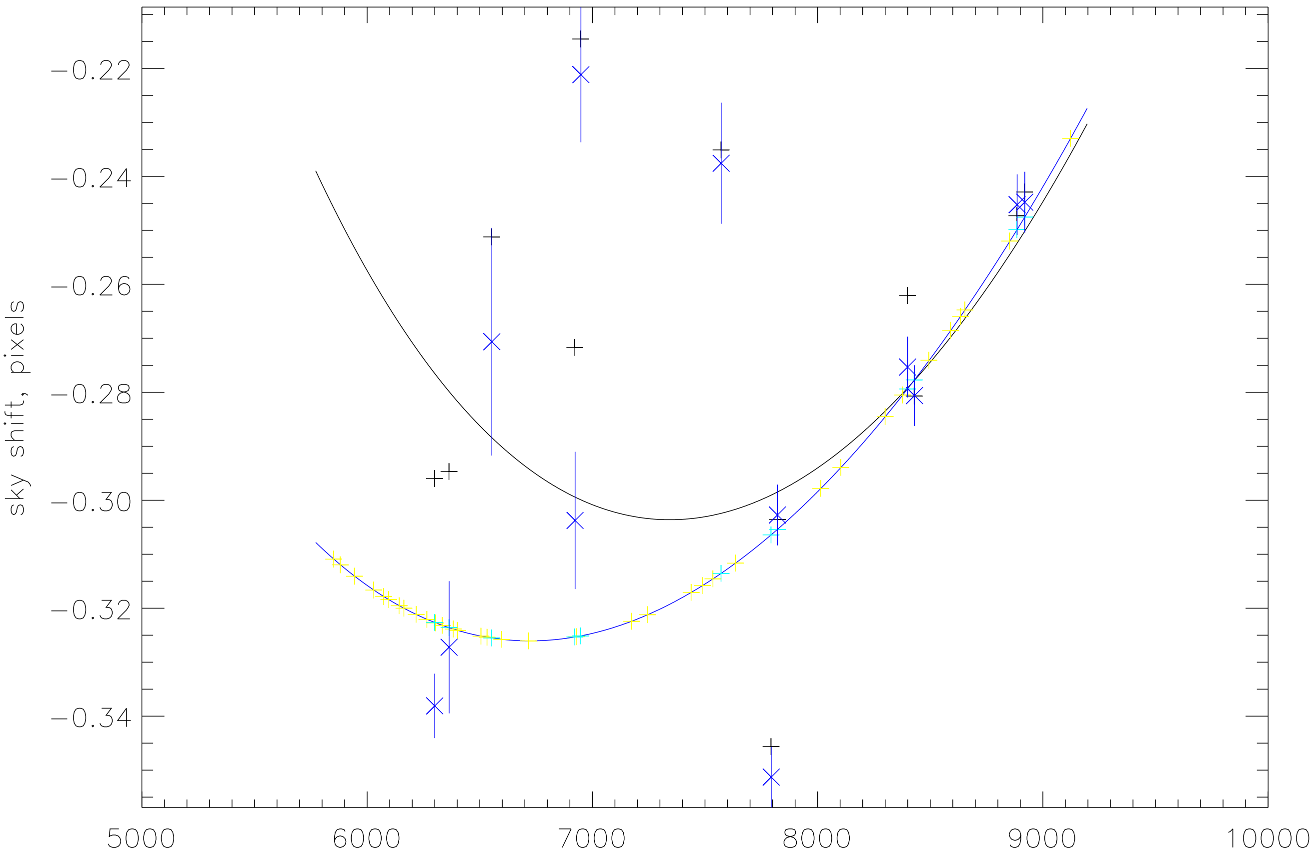

7821.5100
nfib1 16
nfib2 16
stdev 0.017
extrd −0.30
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

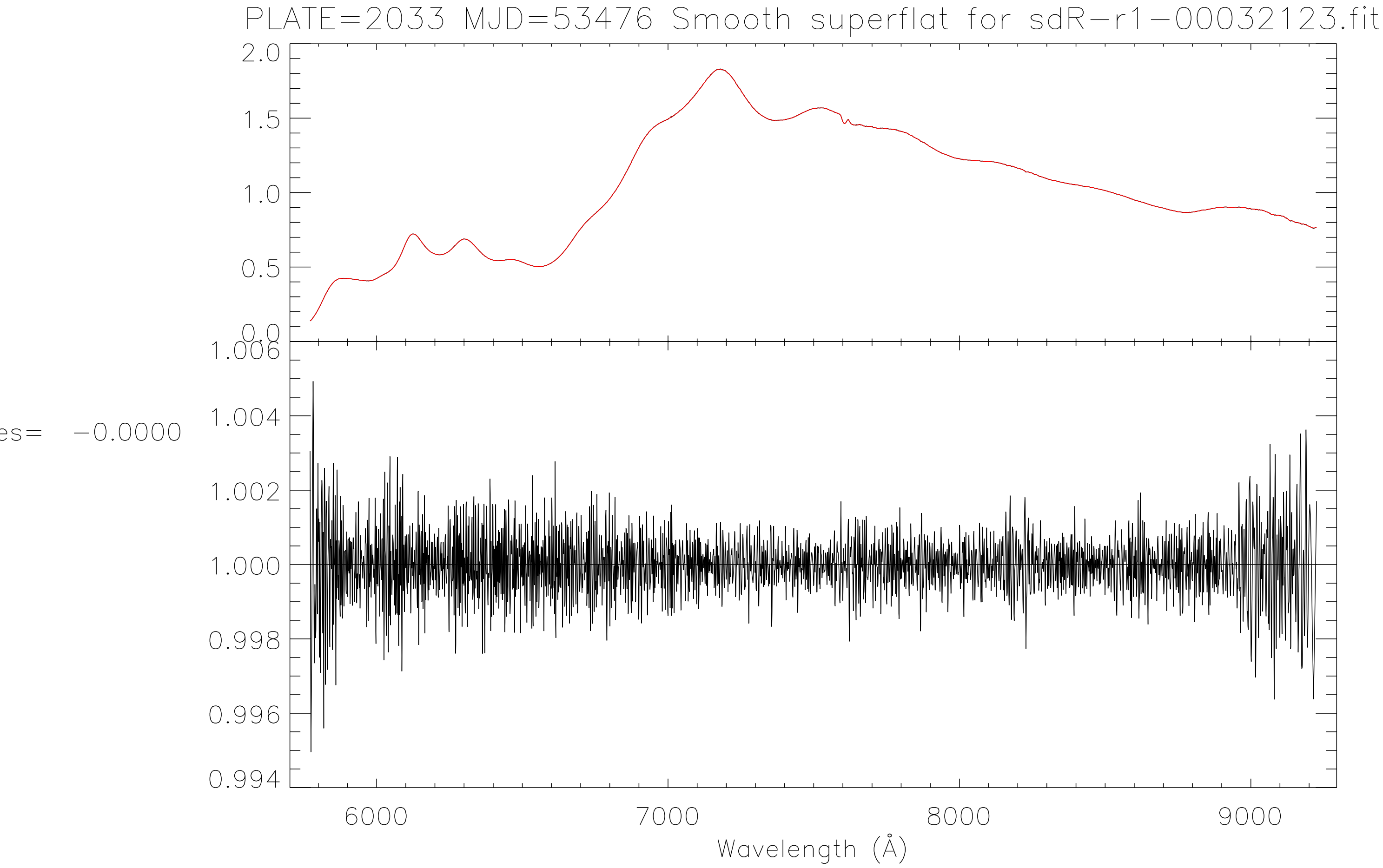

8399.1600
nfib1 15
nfib2 15
stdev 0.023
extrd −0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

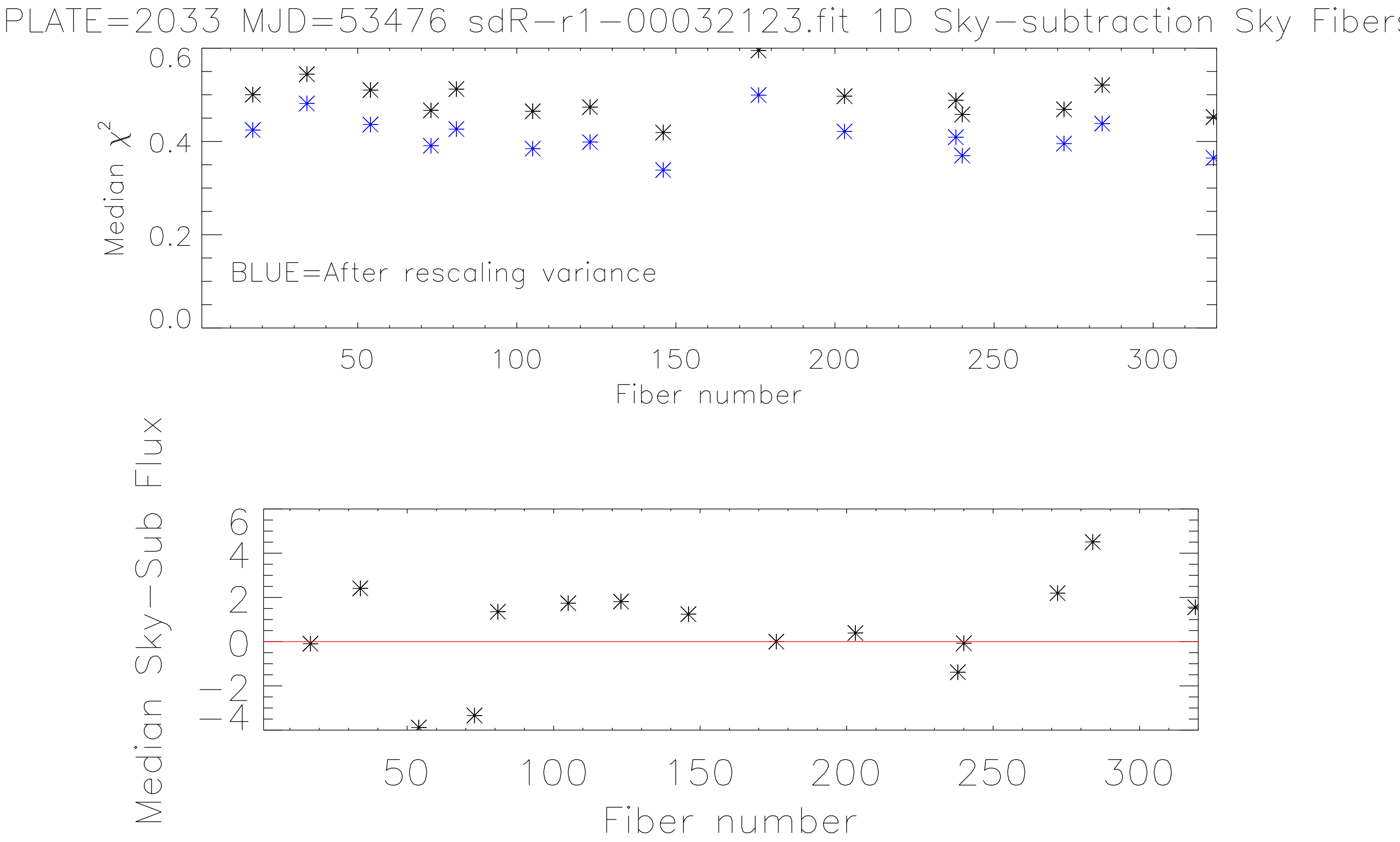

8430.1700
nfib1 16
nfib2 16
stdev 0.018
extrd −0.28
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

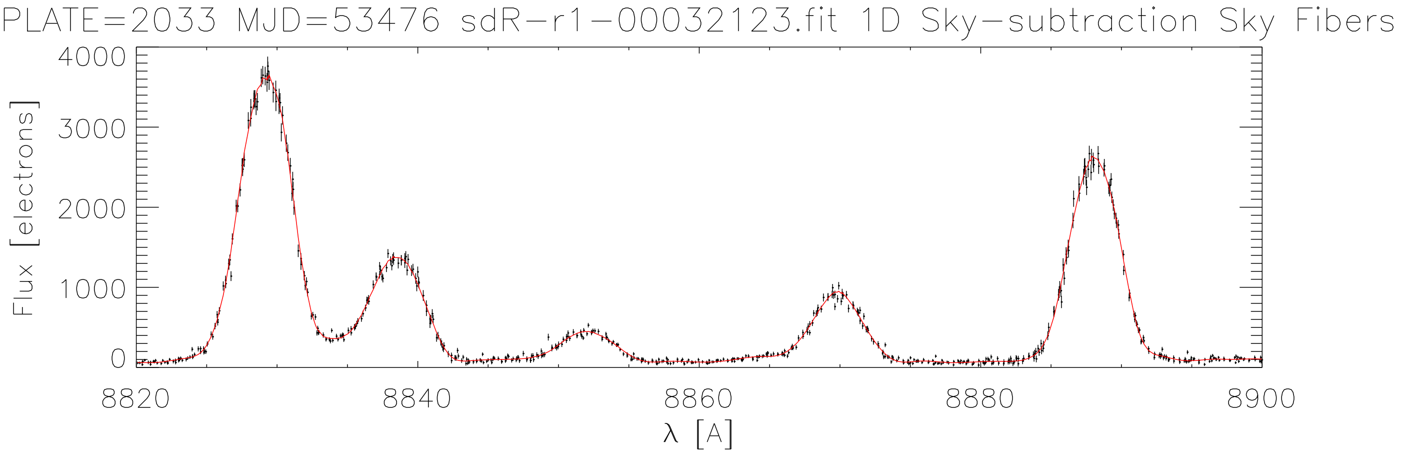

8885.8300
nfib1 15
nfib2 16
stdev 0.026
extrd −0.25
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

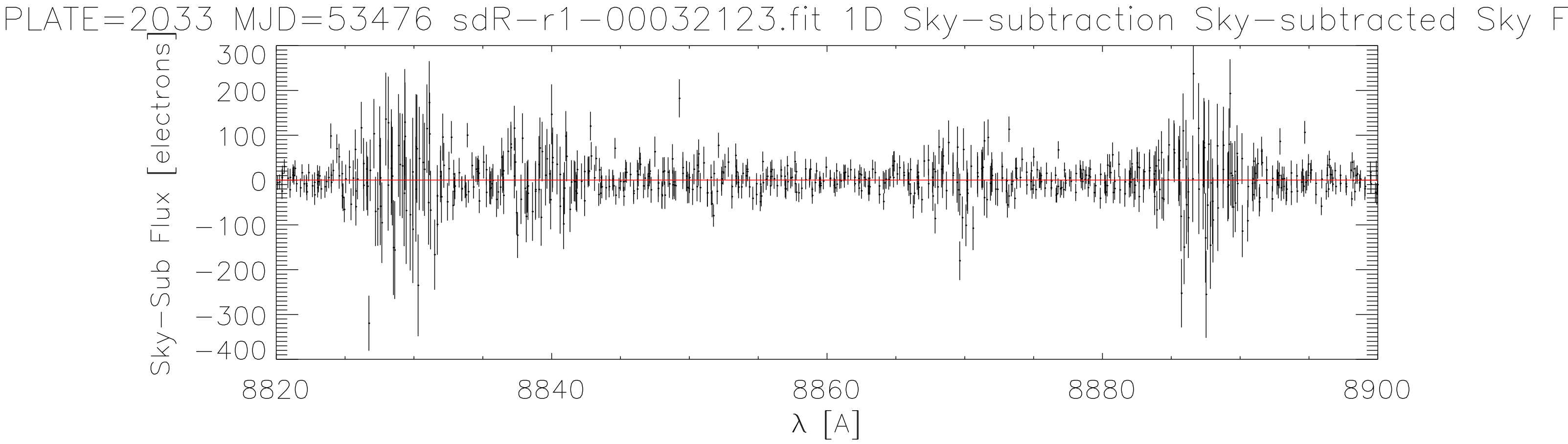

8919.6100
nfib1 16
nfib2 16
stdev 0.037
extrd −0.24
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400

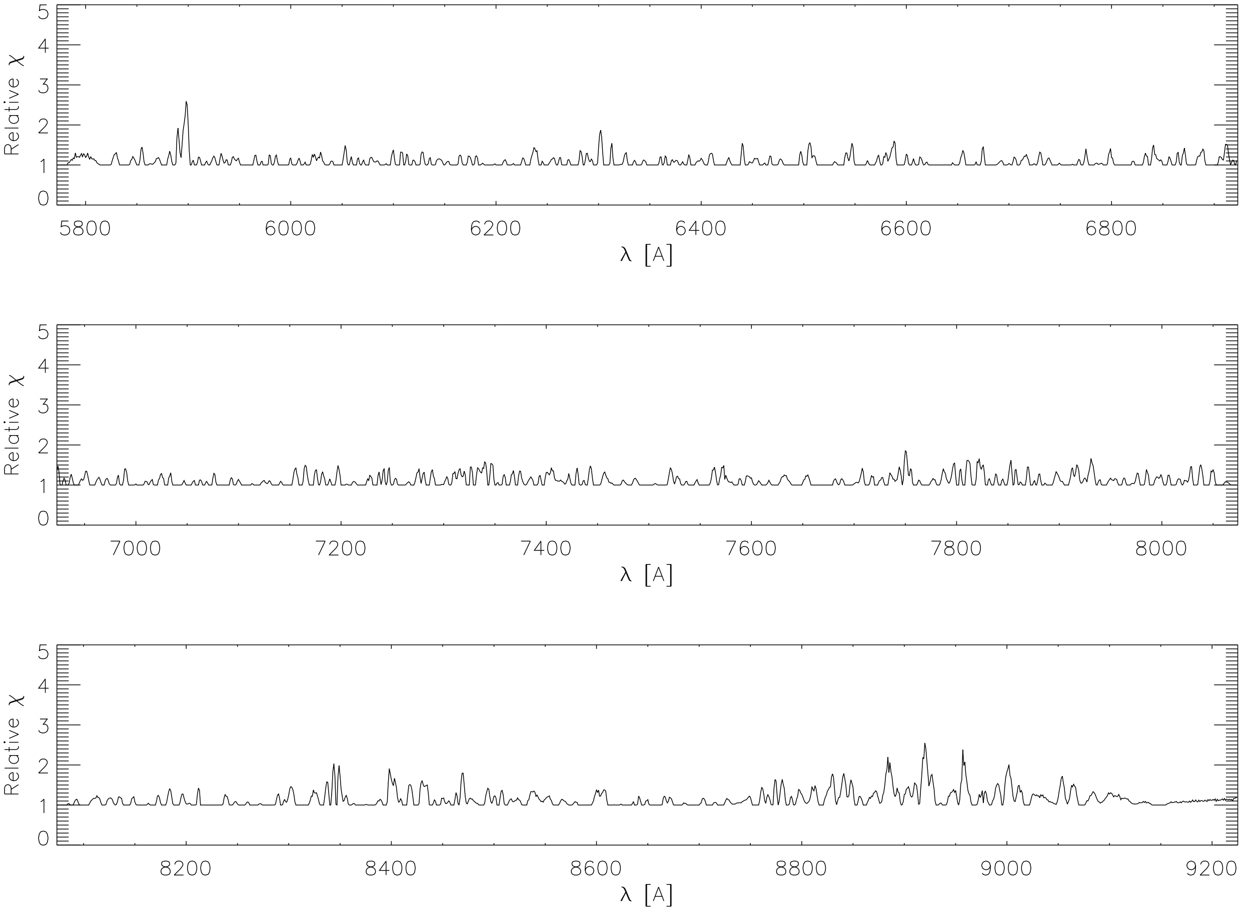

sky shift, pixels
−0.22
−0.24
−0.26
−0.28
−0.30
−0.32
−0.34
5000
6000
7000
8000
9000
10000


PLATE=2033 MJD=53476 Smooth superflat for sdR-r1-00032123.fit
2.0
1.5
1.0
0.5
0.0
1.006
1.004
1.002
1.000
0.998
0.996
0.994
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

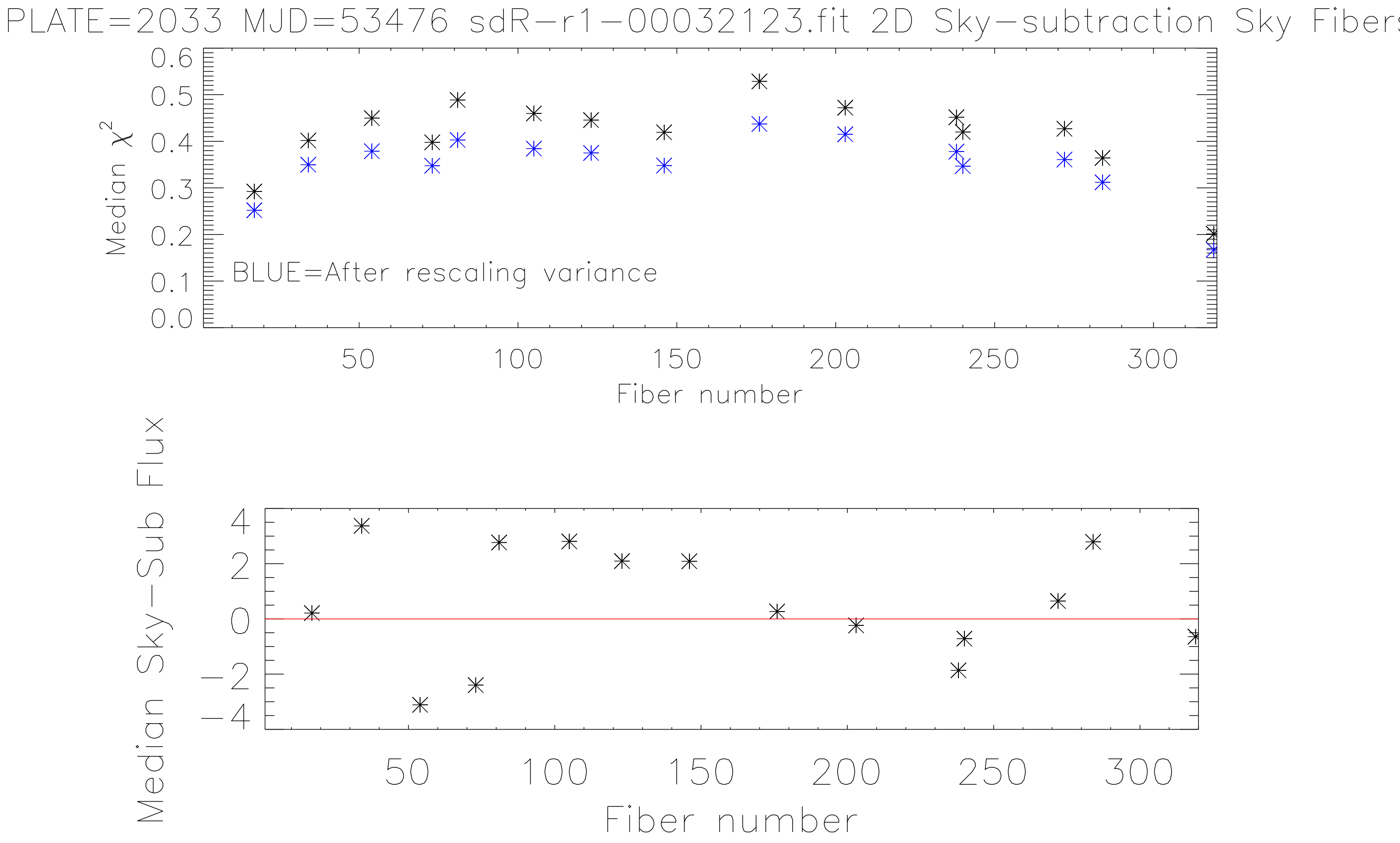

PLATE=2033 MJD=53476 sdR-r1-00032123.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
6
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number


PLATE=2033 MJD=53476 sdR-r1-00032123.fit 1D Sky-subtraction Sky Fibers

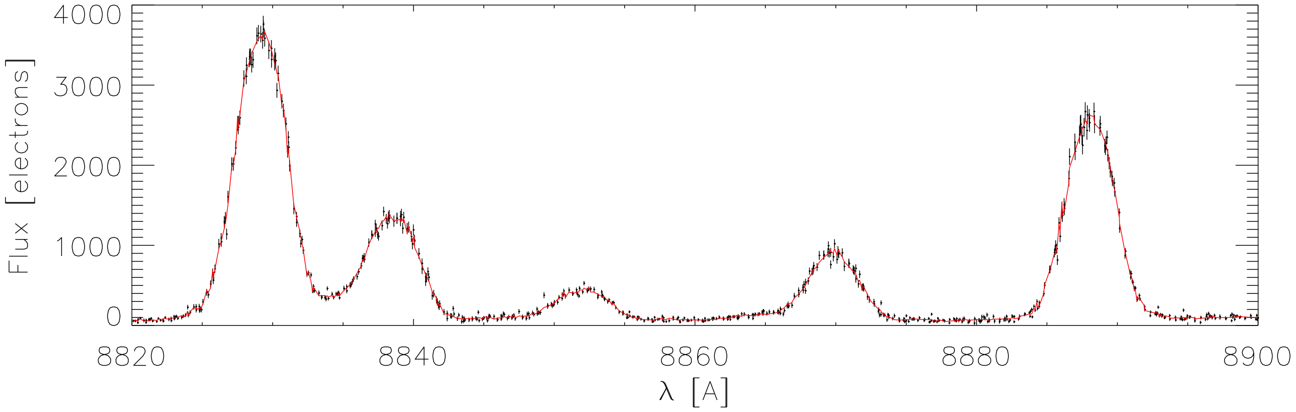

PLATE=2033 MJD=53476 sdR-r1-00032123.fit 1D Sky-subtraction Sky-subtracted Sky F


Number of sky fibers = 15

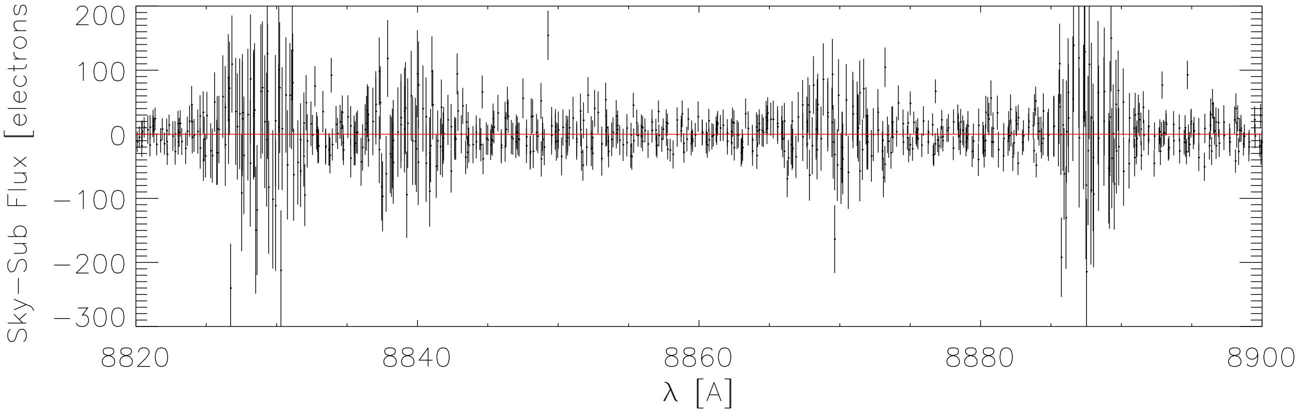
PLATE=2033 MJD=53476 sdR-r1-00032123.fit 1D Sky-subtraction Rescaled Errors

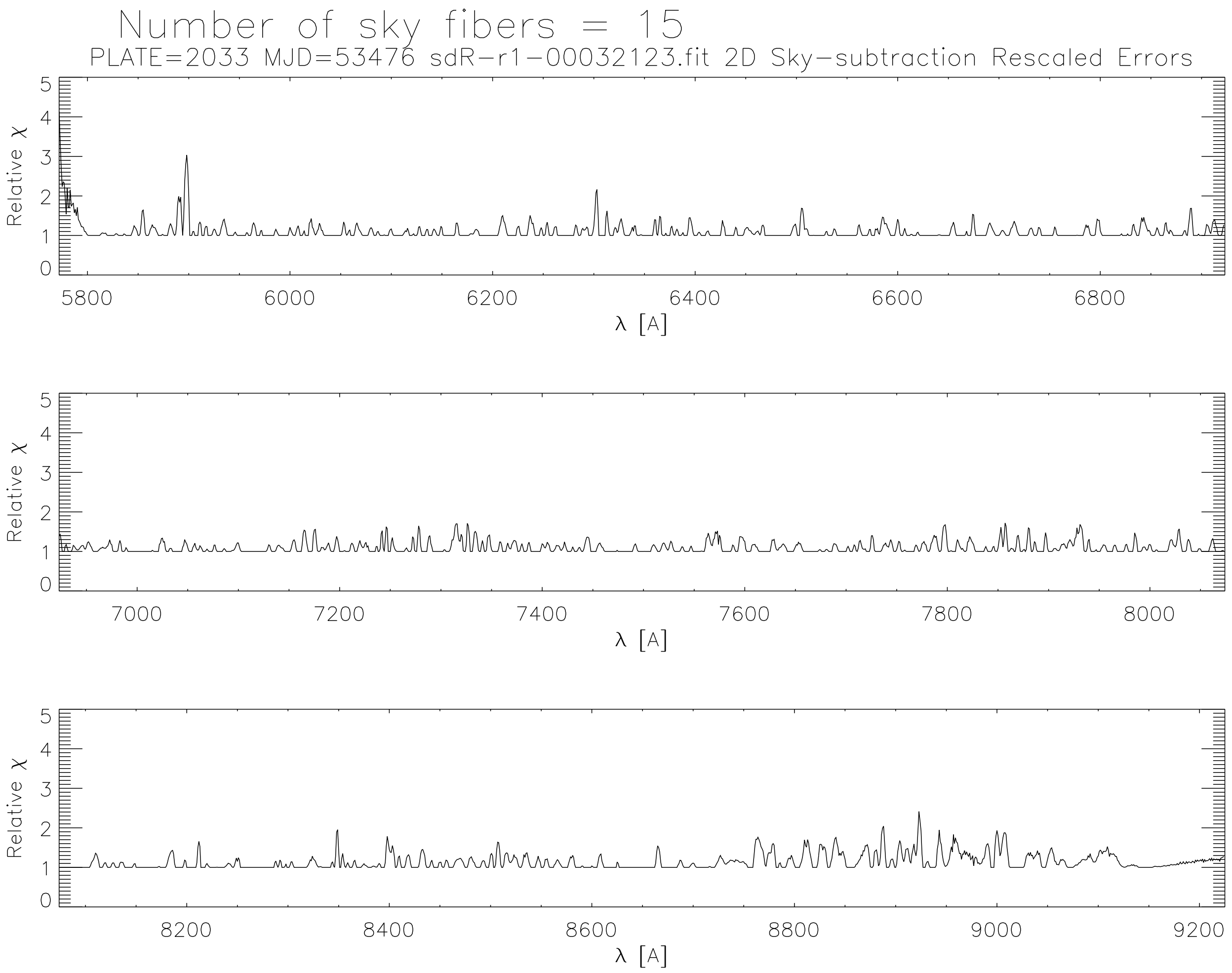

PLATE=2033 MJD=53476 sdR-r1-00032123.fit 2D Sky-subtraction Sky Fiber
Median χ^2
0.6
0.5
0.4
0.3
0.2
0.1
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
4
2
0
−2
−4
50
100
150
200
250
300
Fiber number

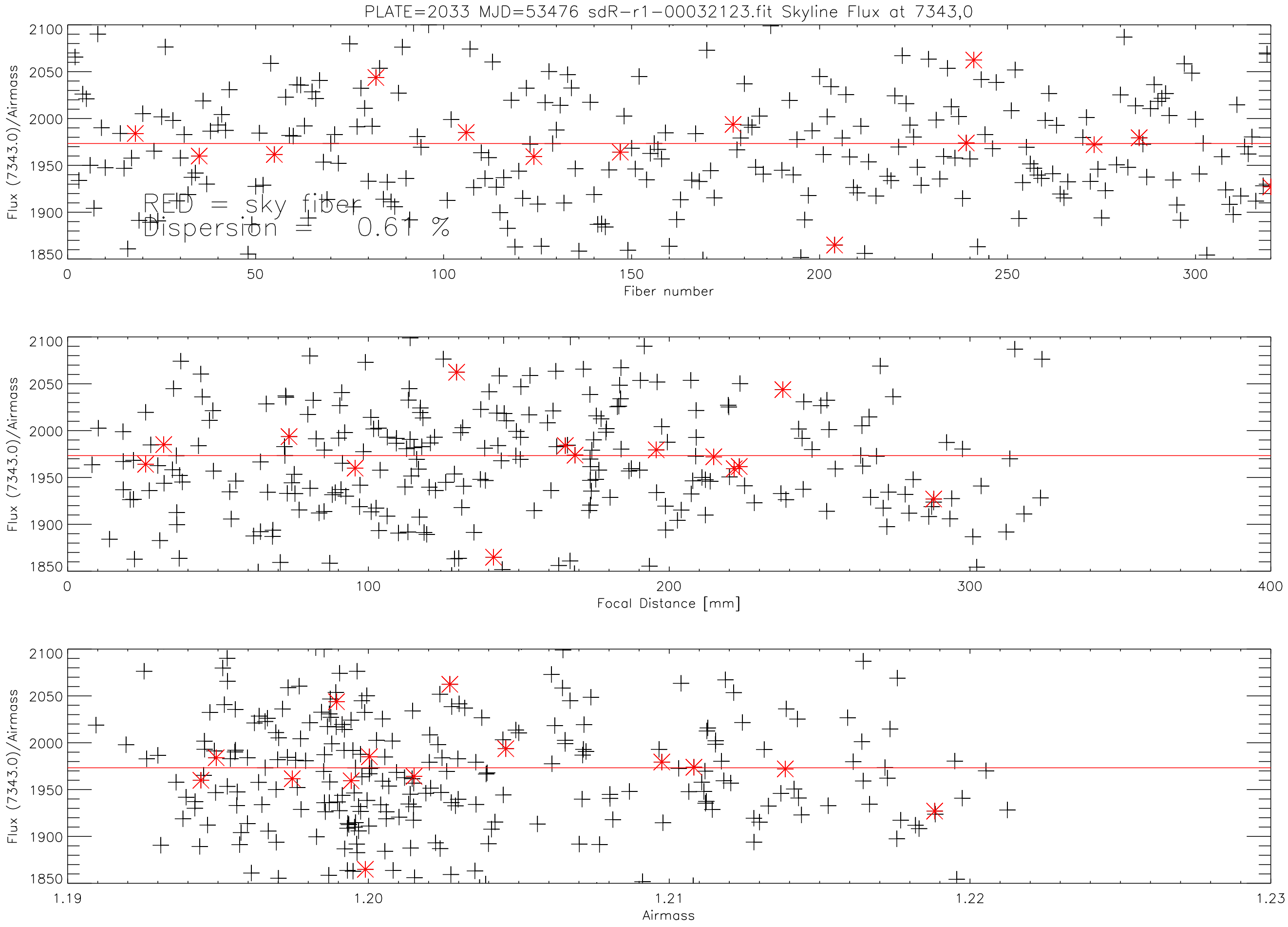
PLATE=2033 MJD=53476 sdR-r1-00032123.fit 2D Sky-subtraction Sky Fibers

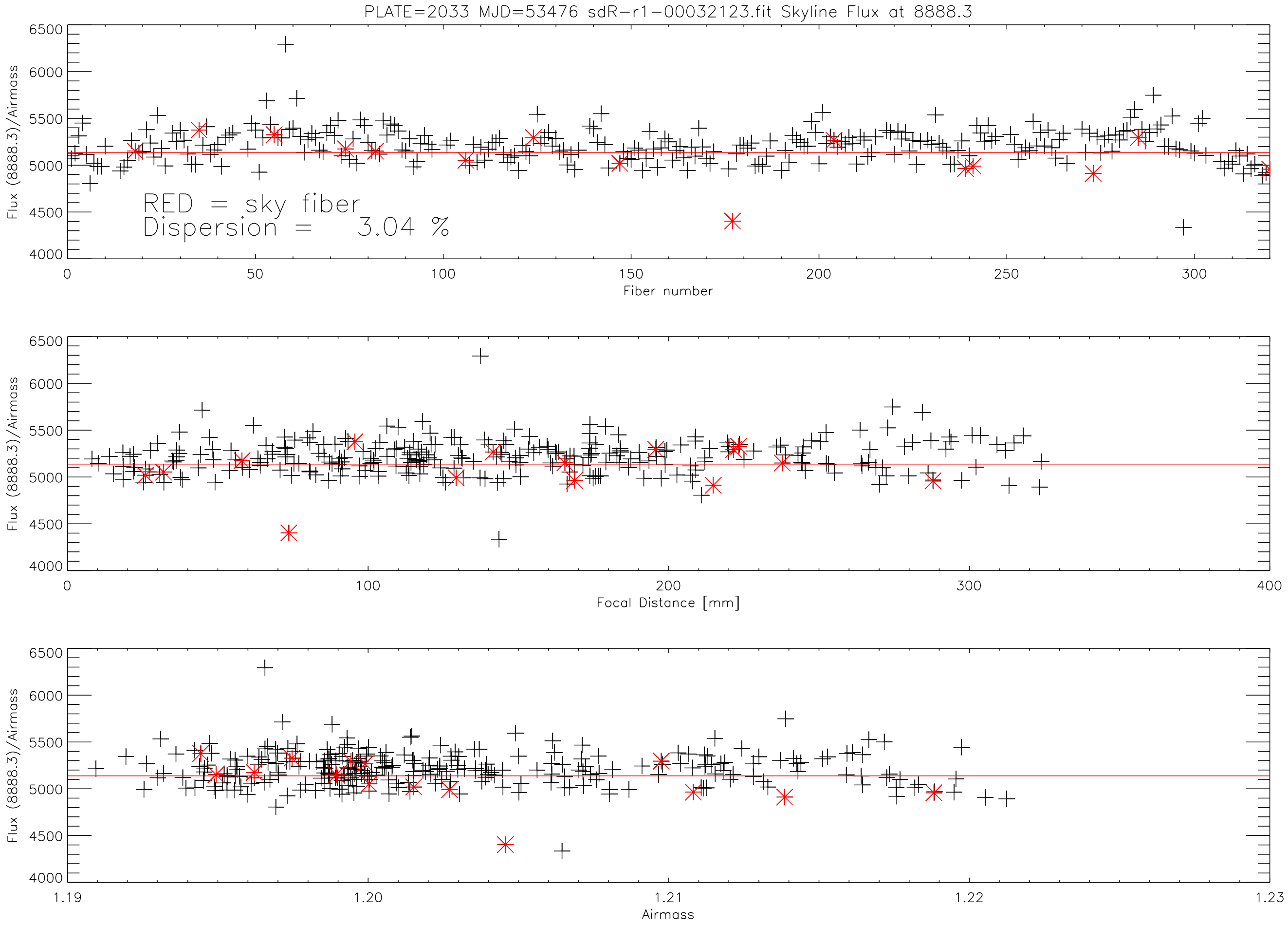


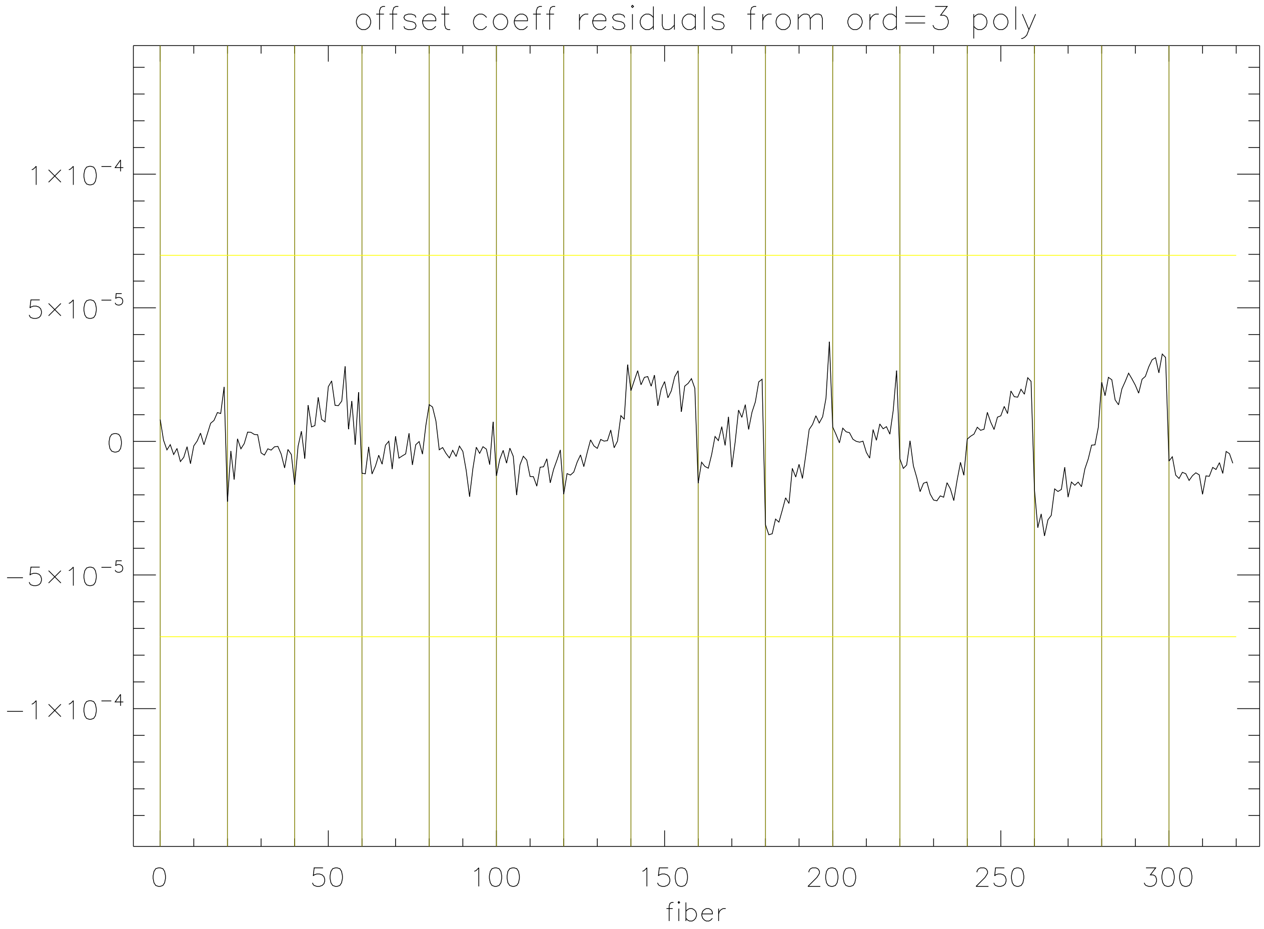
PLATE=2033 MJD=53476 sdR-r1-00032123.fit 2D Sky-subtraction Sky-subtracted Sky F

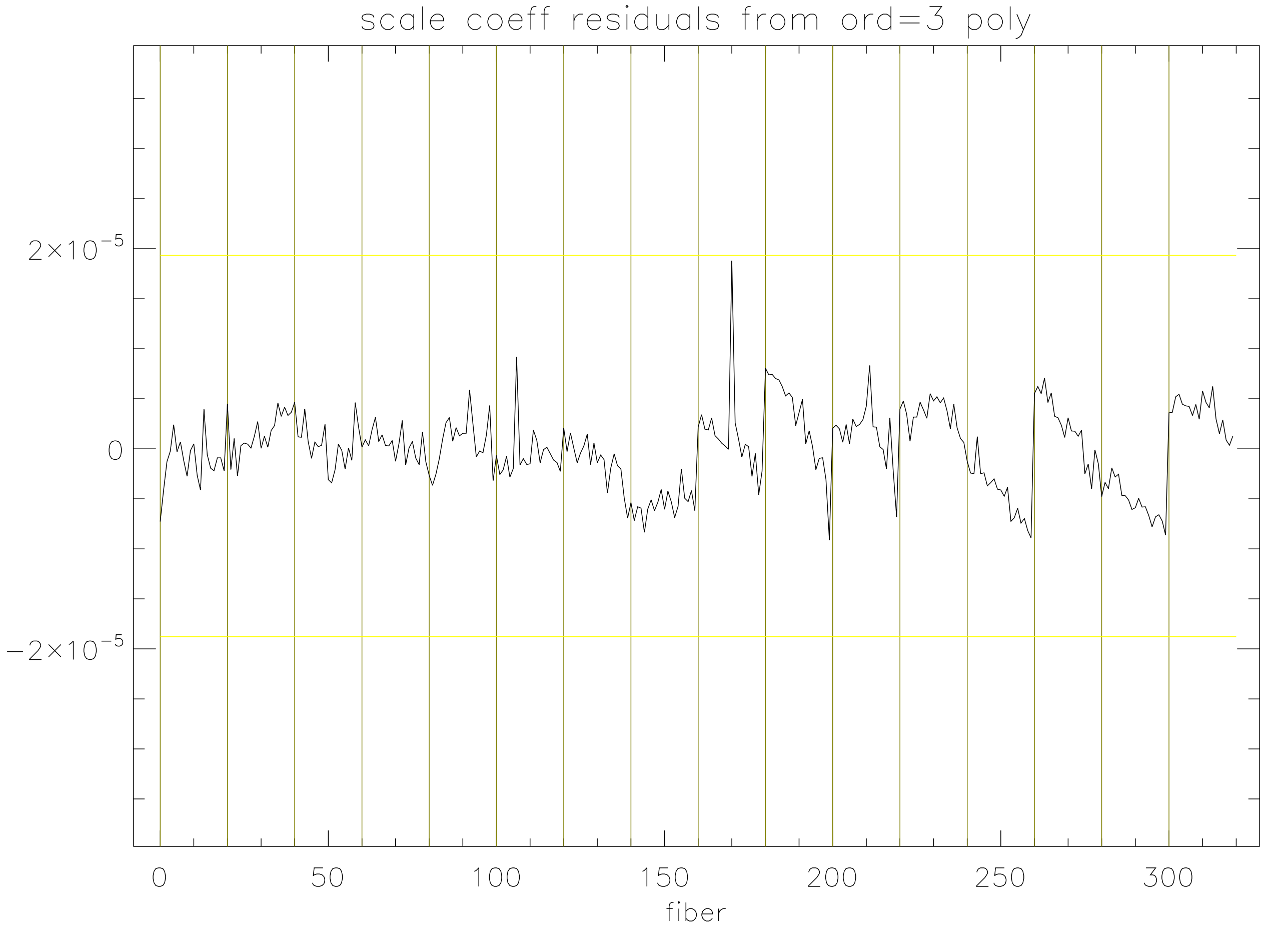


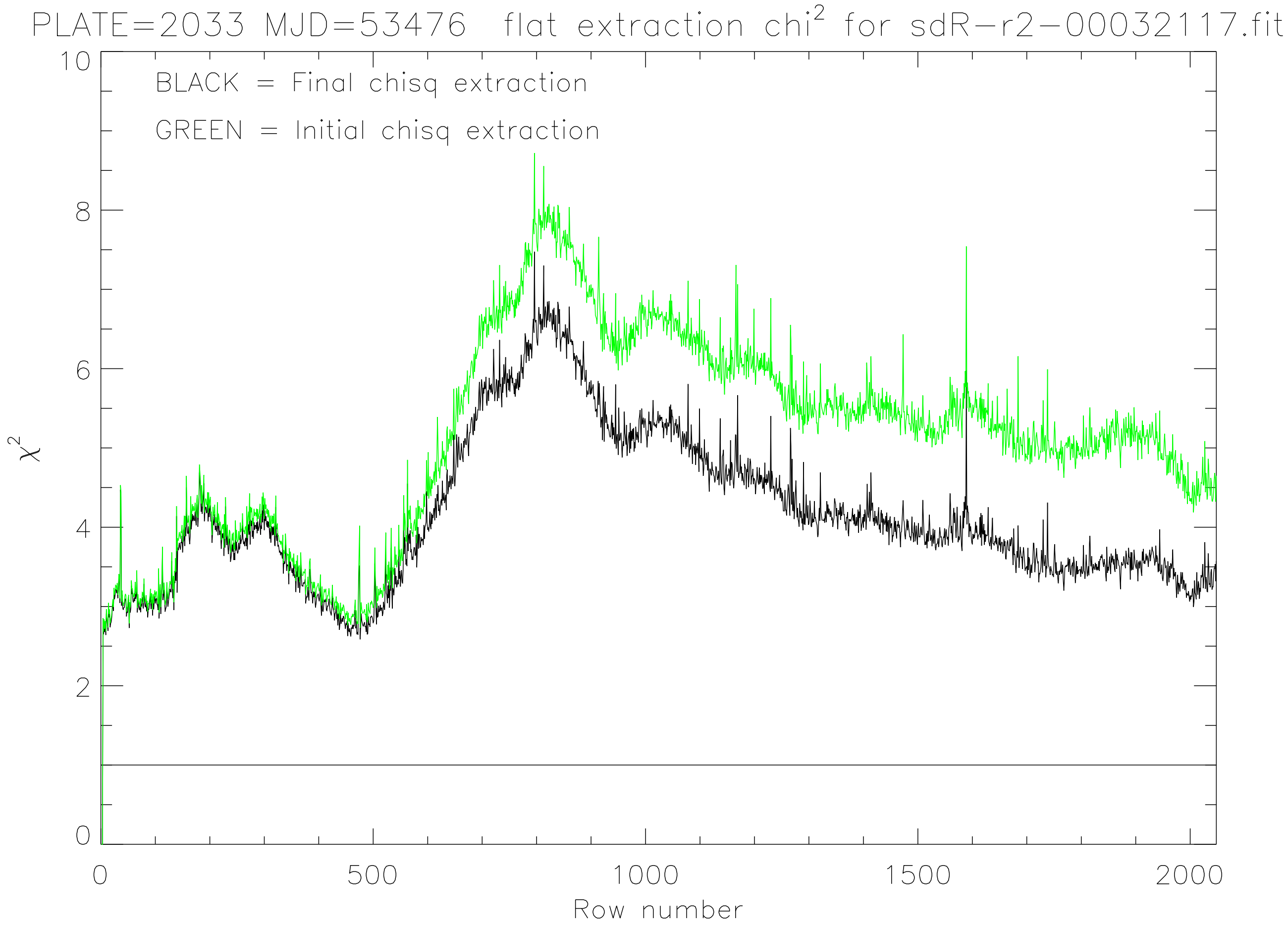

Number of sky fibers = 15
PLATE=2033 MJD=53476 sdR-r1-00032123.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200
λ [A]

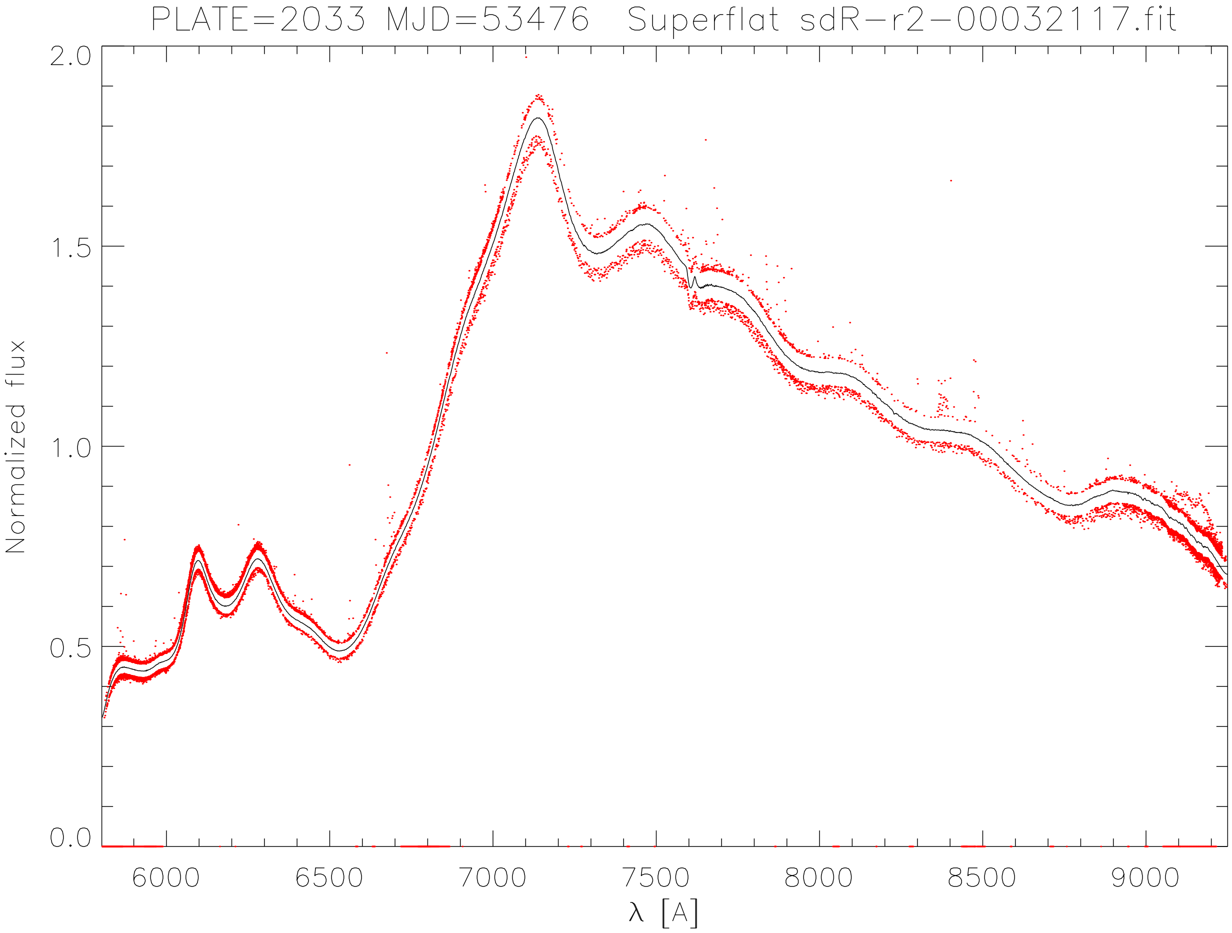

PLATE=2033 MJD=53476 sdR-r1-00032123.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 0.61 %
Flux (7343.0)/Airmass
2100
2050
2000
1950
1900
1850
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.19
1.20
1.21
1.22
1.23
Airmass

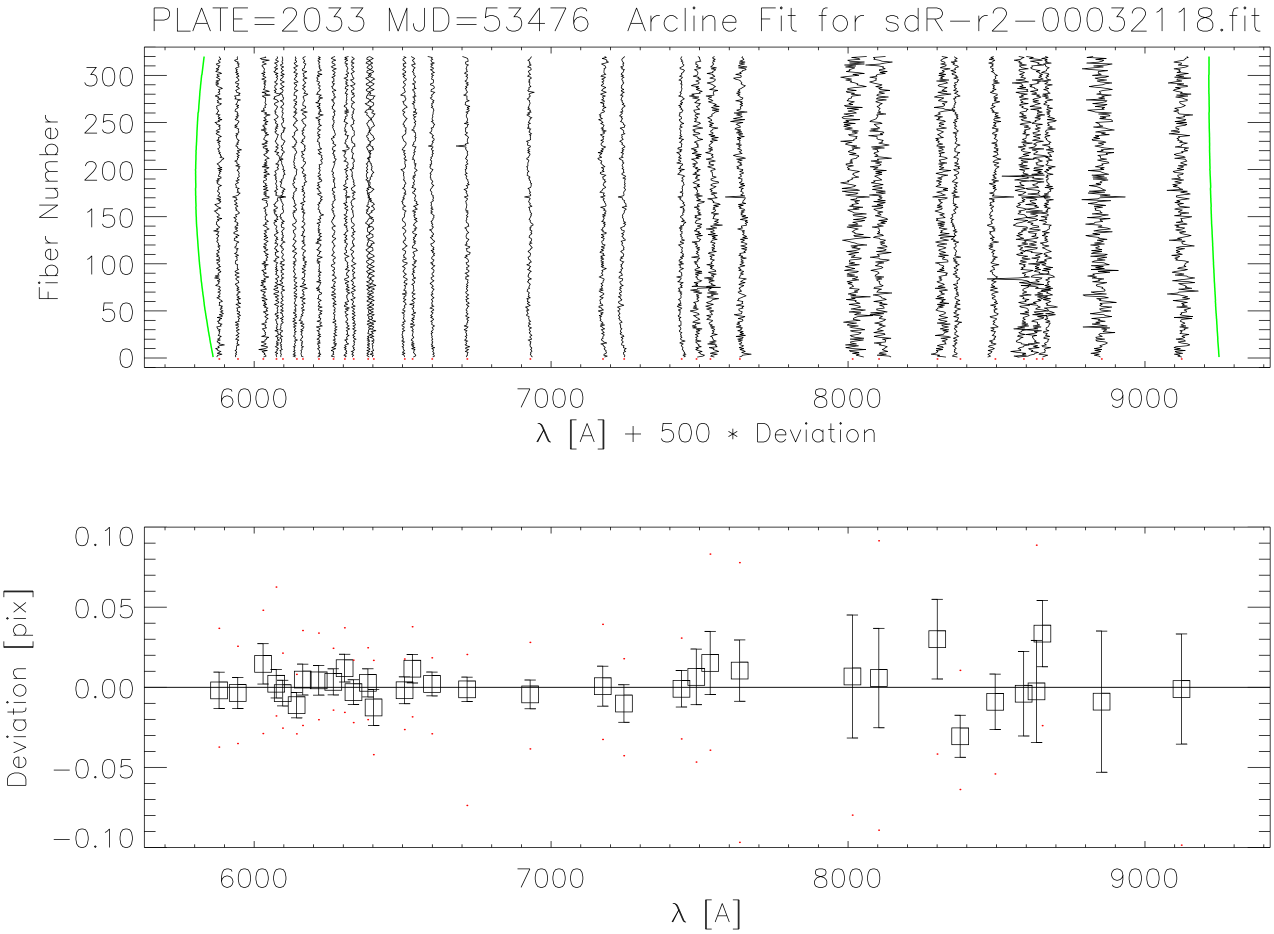

PLATE=2033 MJD=53476 sdR-r1-00032123.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
RED = sky fiber
Dispersion = 3.04 %
Fiber number
Focal Distance [mm]
Airmass
6500
6000
5500
5000
4500
4000
0
50
100
150
200
250
300
400
1.19
1.20
1.21
1.22
1.23


offset coeff residuals from ord=3 poly
1×10^{-4}
5×10^{-5}
0
-5×10^{-5}
-1×10^{-4}
0
50
100
150
200
250
300
fiber


scale coeff residuals from ord=3 poly
2×10^{-5}
0
−2×10^{-5}
0
50
100
150
200
250
300
fiber


PLATE=2033 MJD=53476 flat extraction chi^2 for sdR-r2-00032117.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
8
10
0
500
1000
1500
2000
Row number


PLATE=2033 MJD=53476 Superflat sdR-r2-00032117.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]



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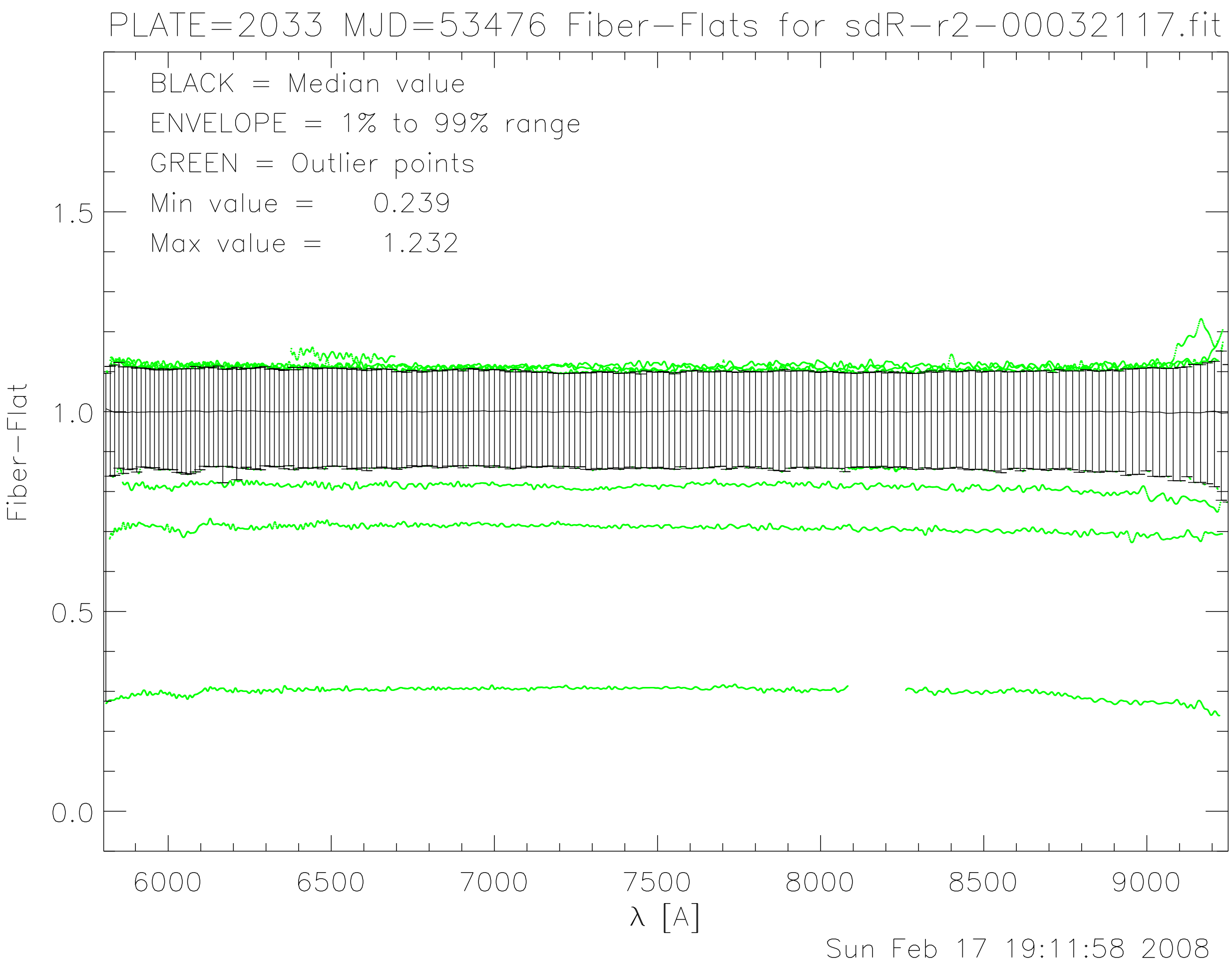
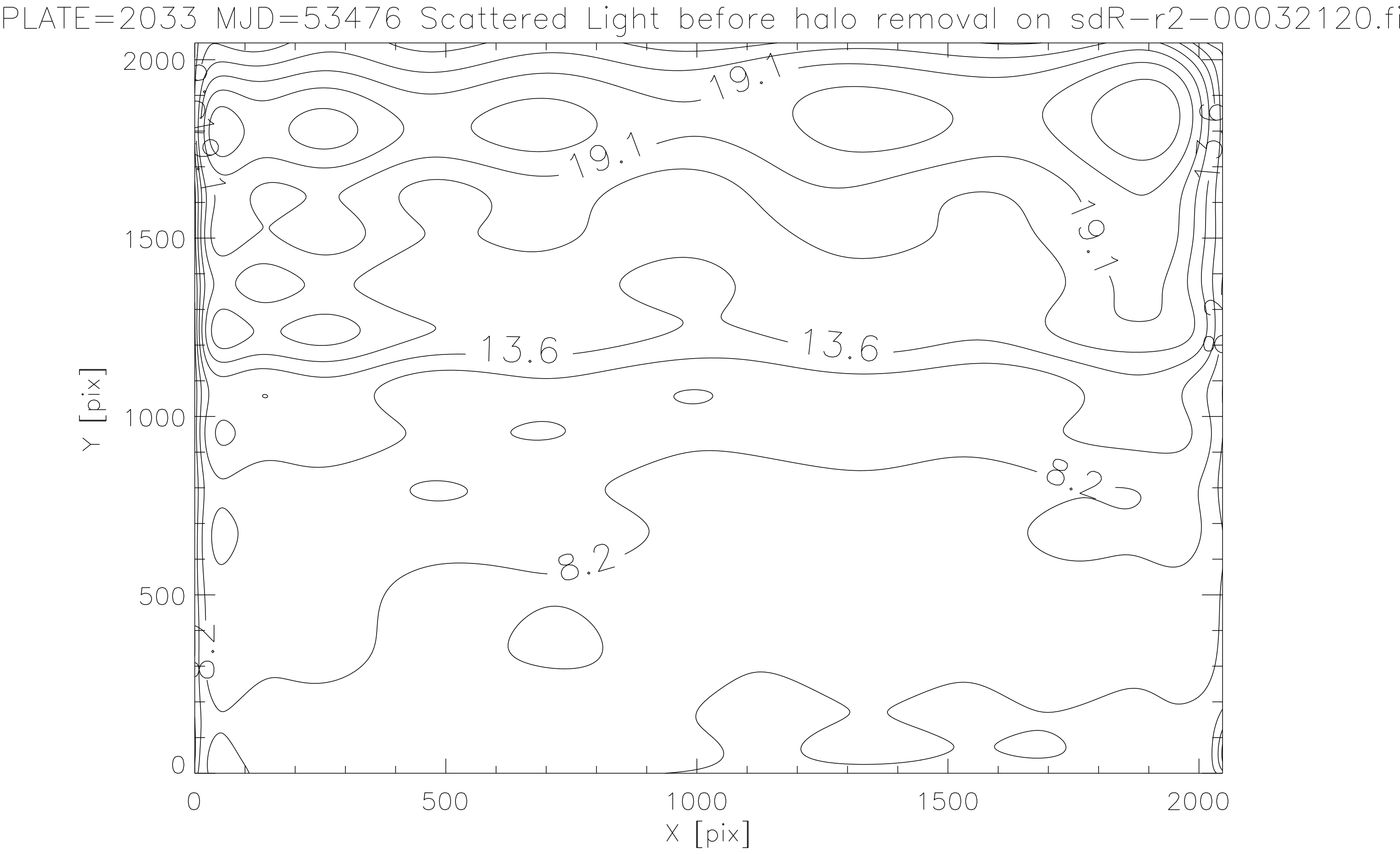
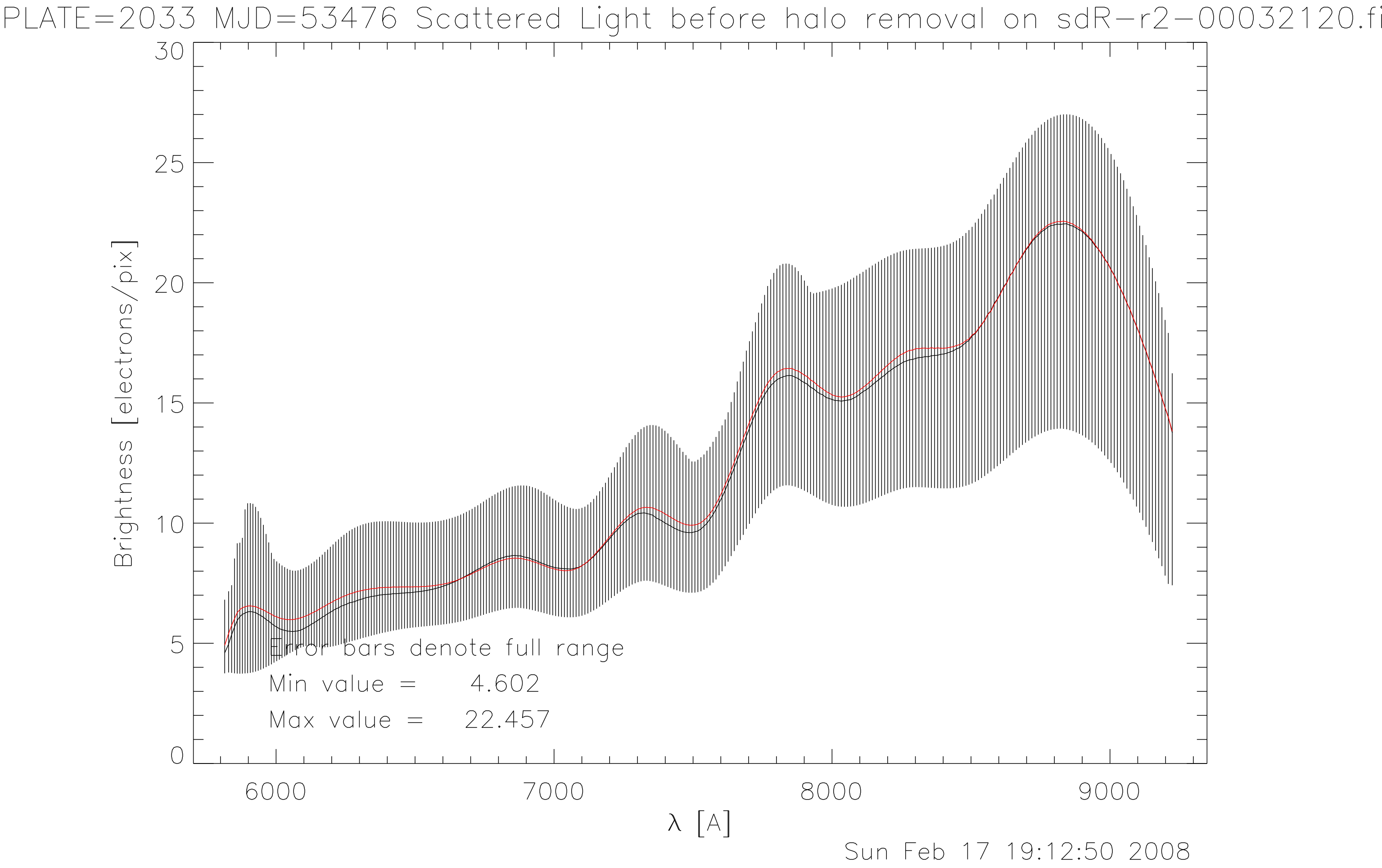
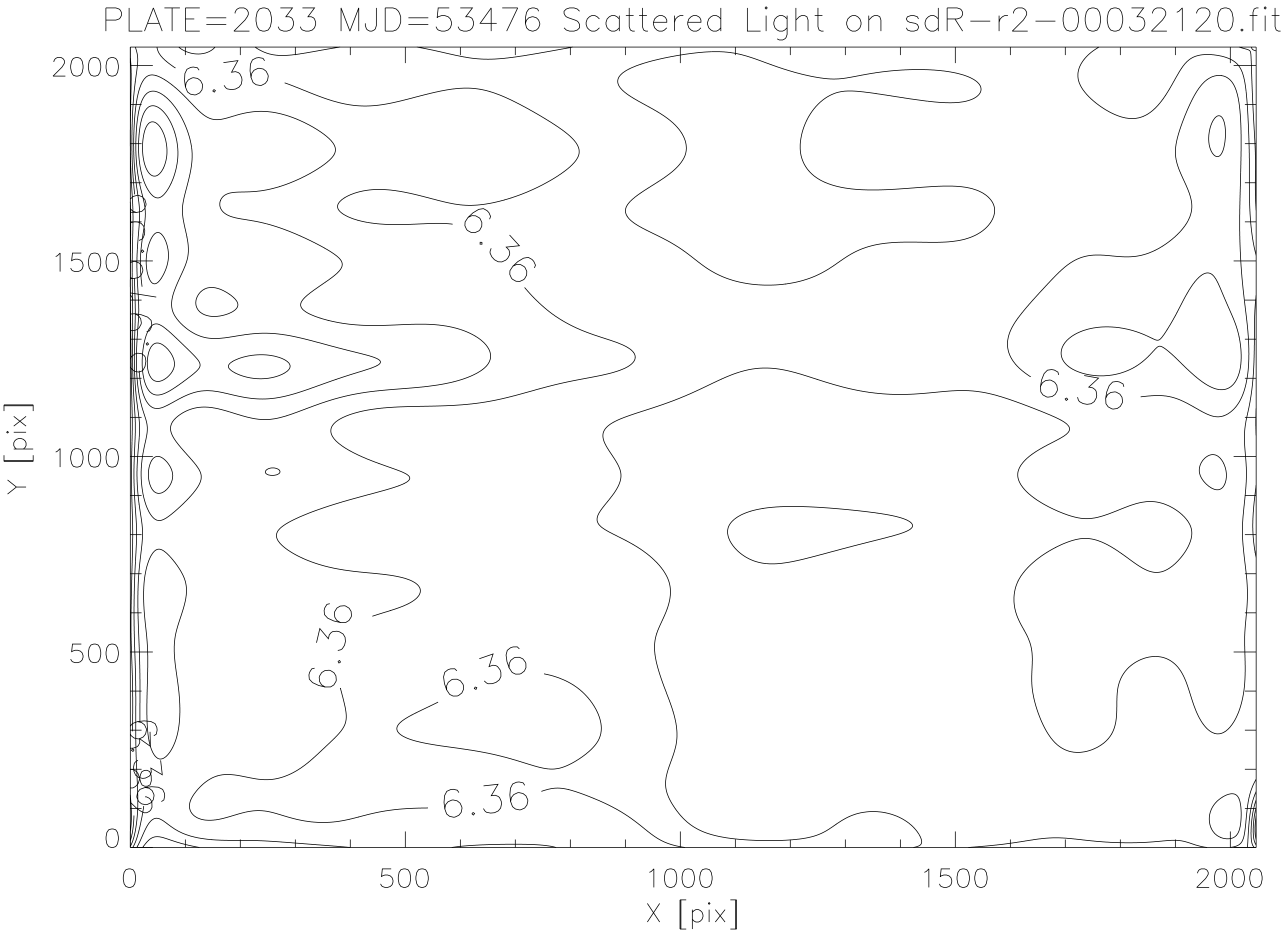
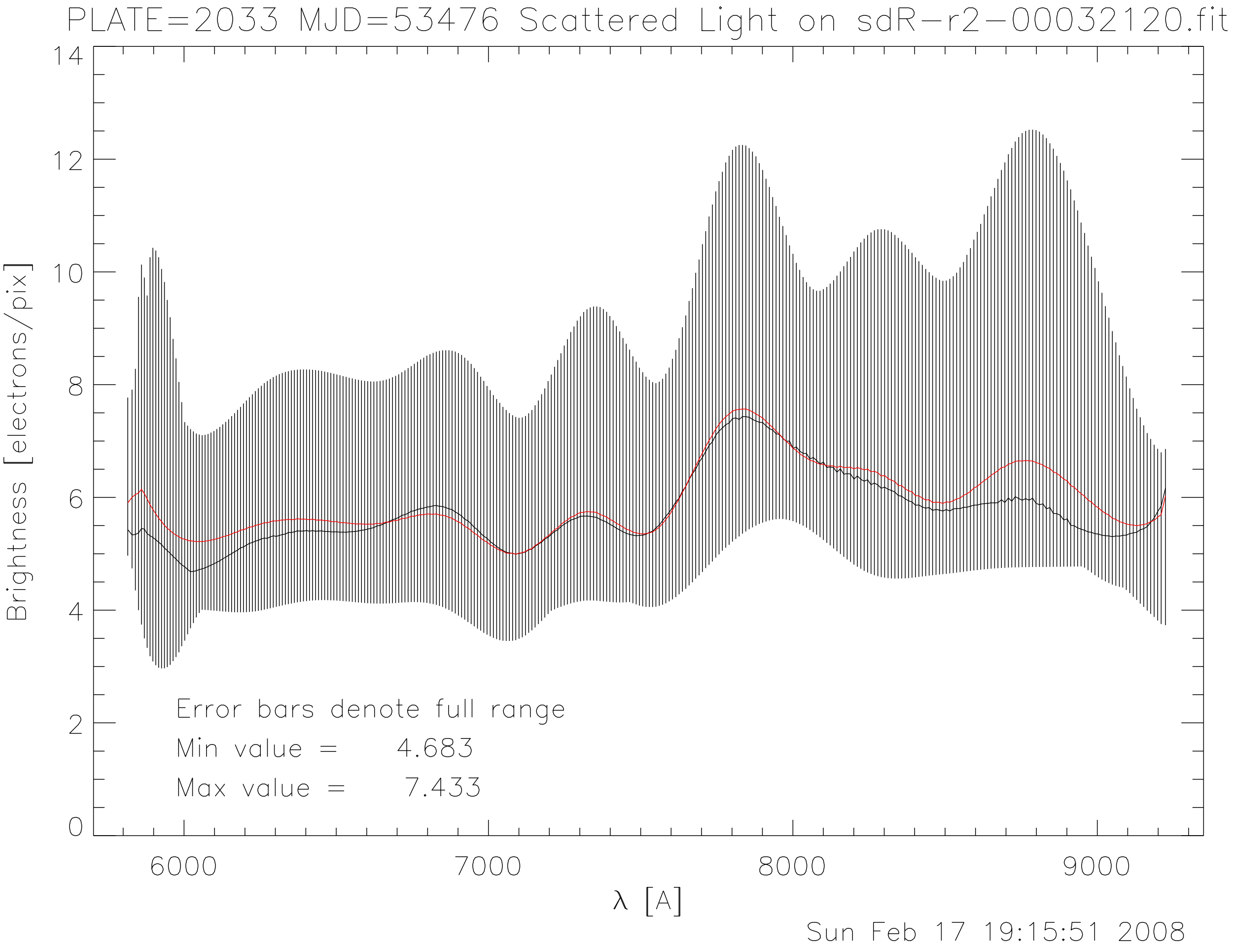
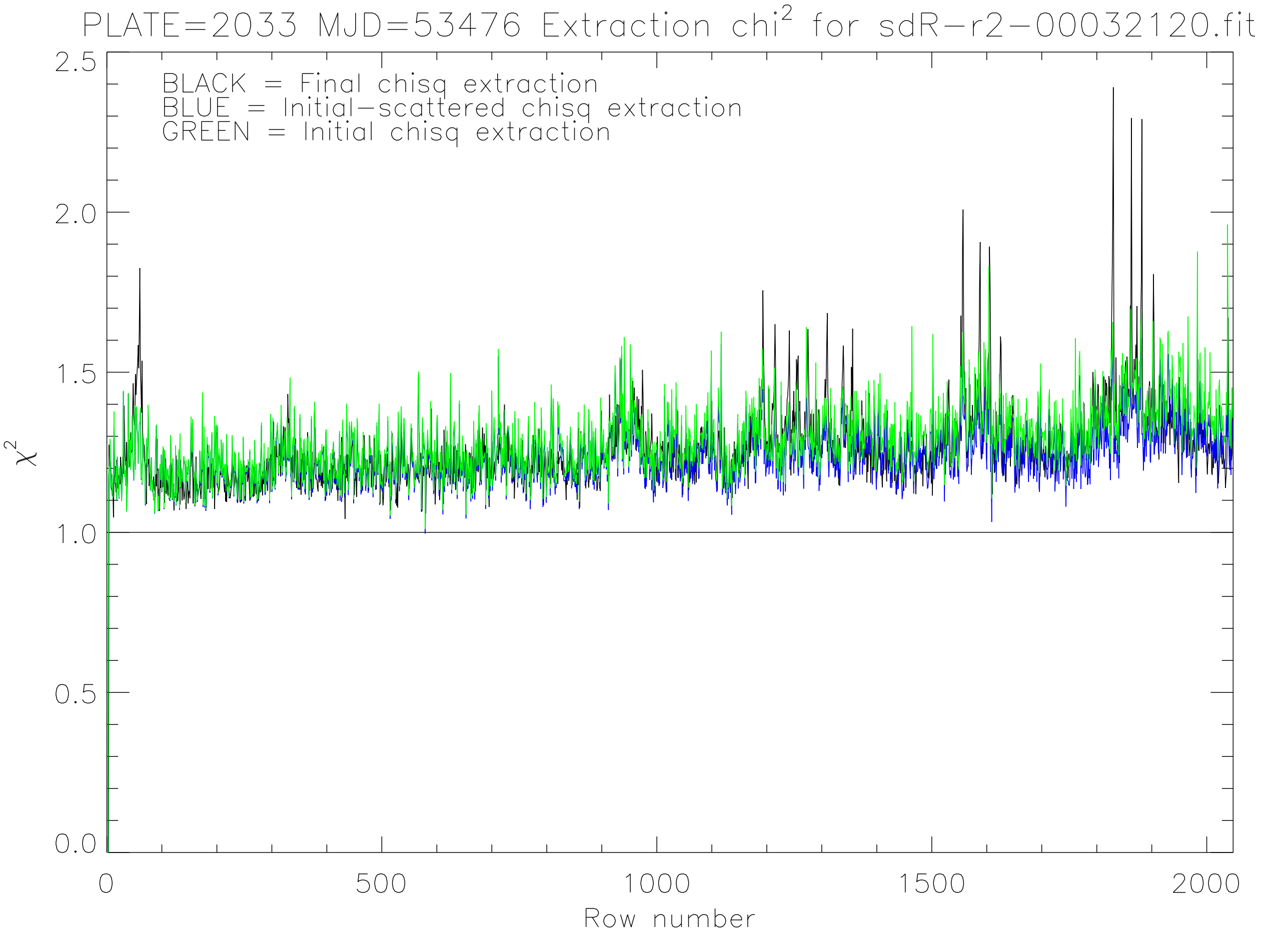

PLATE=2033 MJD=53476 Fiber-Flats for sdR-r2-00032117.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.232
Fiber-Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 19:11:58 2008

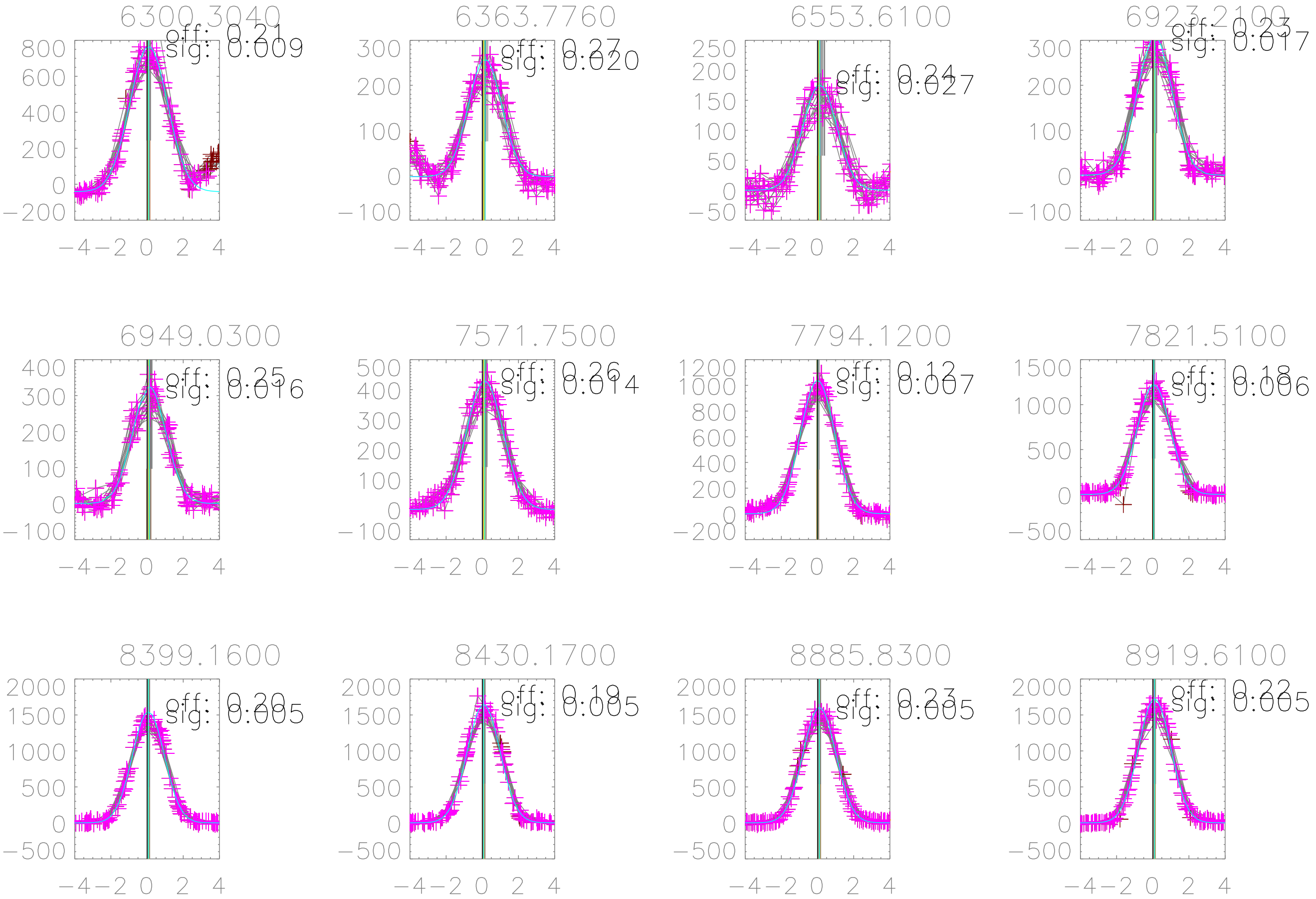

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r2-00032120.fi


PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r2-00032120.fi
Brightness [electrons/pix]
0
5
10
15
20
25
30
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 4.602
Max value = 22.457
Sun Feb 17 19:12:50 2008

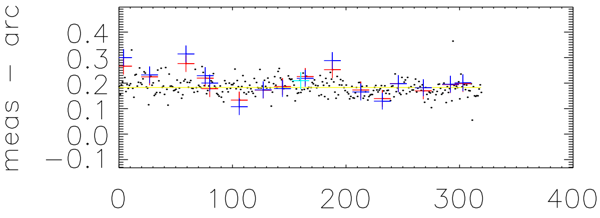

PLATE=2033 MJD=53476 Scattered Light on sdR-r2-00032120.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
6.36
6.36
6.36
6.36
6.36
6.36
6.36


PLATE=2033 MJD=53476 Scattered Light on sdR-r2-00032120.fit
Brightness [electrons/pix]
0
2
4
6
8
10
12
14
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value =   4.683
Max value =   7.433
Sun Feb 17 19:15:51 2008

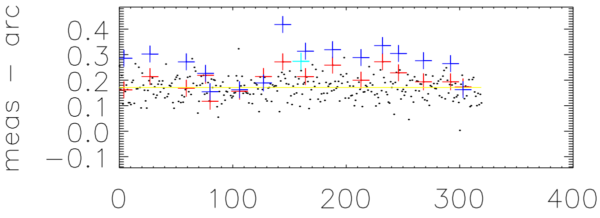

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-r2-00032120.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.5
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number


6300.3040
off: 0.21
sig: 0.009
800
600
400
200
0
−200
−4−2 0 2 4
6363.7760
off: 0.27
sig: 0.020
300
200
100
0
−100
−4−2 0 2 4
6553.6100
off: 0.24
sig: 0.027
250
200
150
100
50
0
−50
−4−2 0 2 4
6923.2100
off: 0.23
sig: 0.017
300
200
100
0
−100
−4−2 0 2 4
6949.0300
off: 0.25
sig: 0.016
400
300
200
100
0
−100
−4−2 0 2 4
7571.7500
off: 0.26
sig: 0.014
500
400
300
200
100
0
−100
−4−2 0 2 4
7794.1200
off: 0.12
sig: 0.007
1200
1000
800
600
400
200
0
−200
−4−2 0 2 4
7821.5100
off: 0.18
sig: 0.006
1500
1000
500
0
−500
−4−2 0 2 4
8399.1600
off: 0.20
sig: 0.005
2000
1500
1000
500
0
−500
−4−2 0 2 4
8430.1700
off: 0.19
sig: 0.005
2000
1500
1000
500
0
−500
−4−2 0 2 4
8885.8300
off: 0.23
sig: 0.005
2000
1500
1000
500
0
−500
−4−2 0 2 4
8919.6100
off: 0.22
sig: 0.005
2000
1500
1000
500
0
−500
−4−2 0 2 4

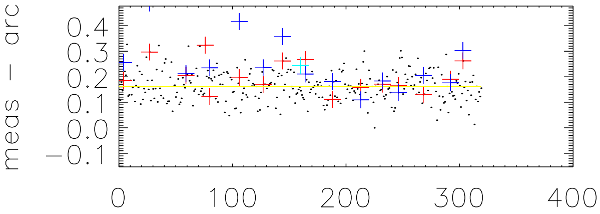
6300.3040



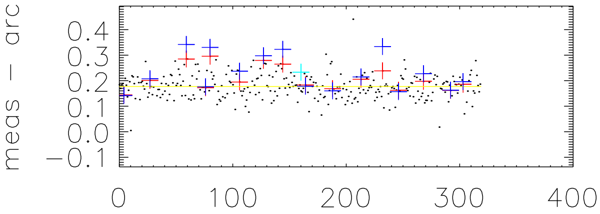
6363.7760



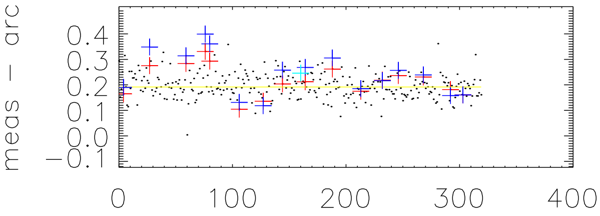
6553.6100



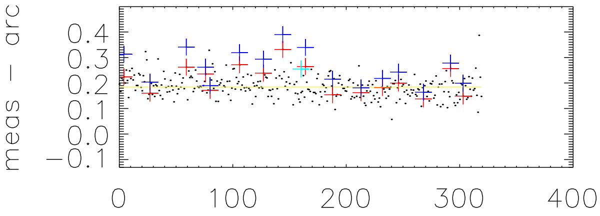
6923.2100

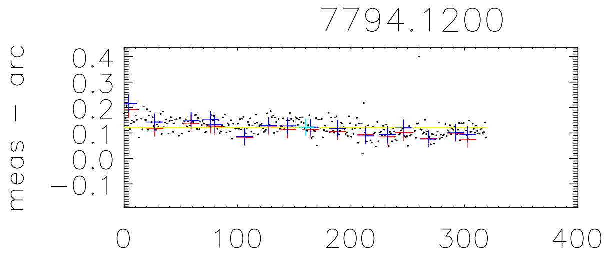


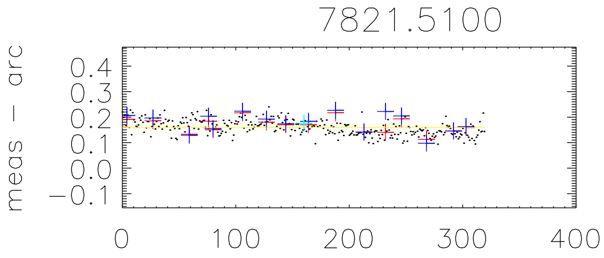
6949.0300

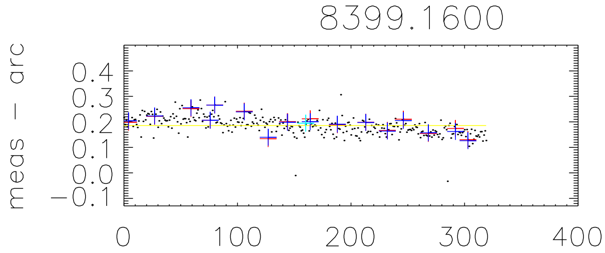


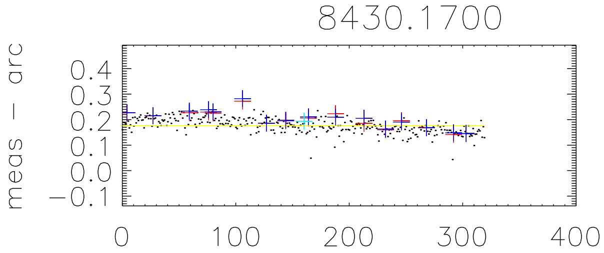
7571.7500

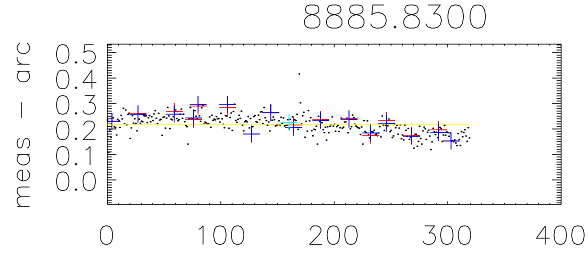


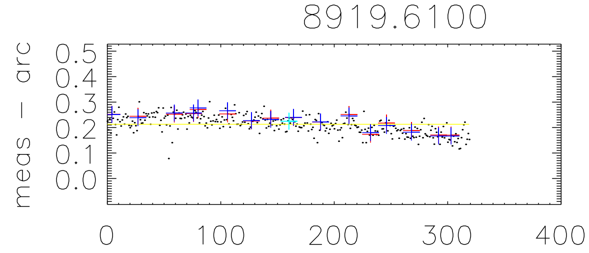

7794.1200

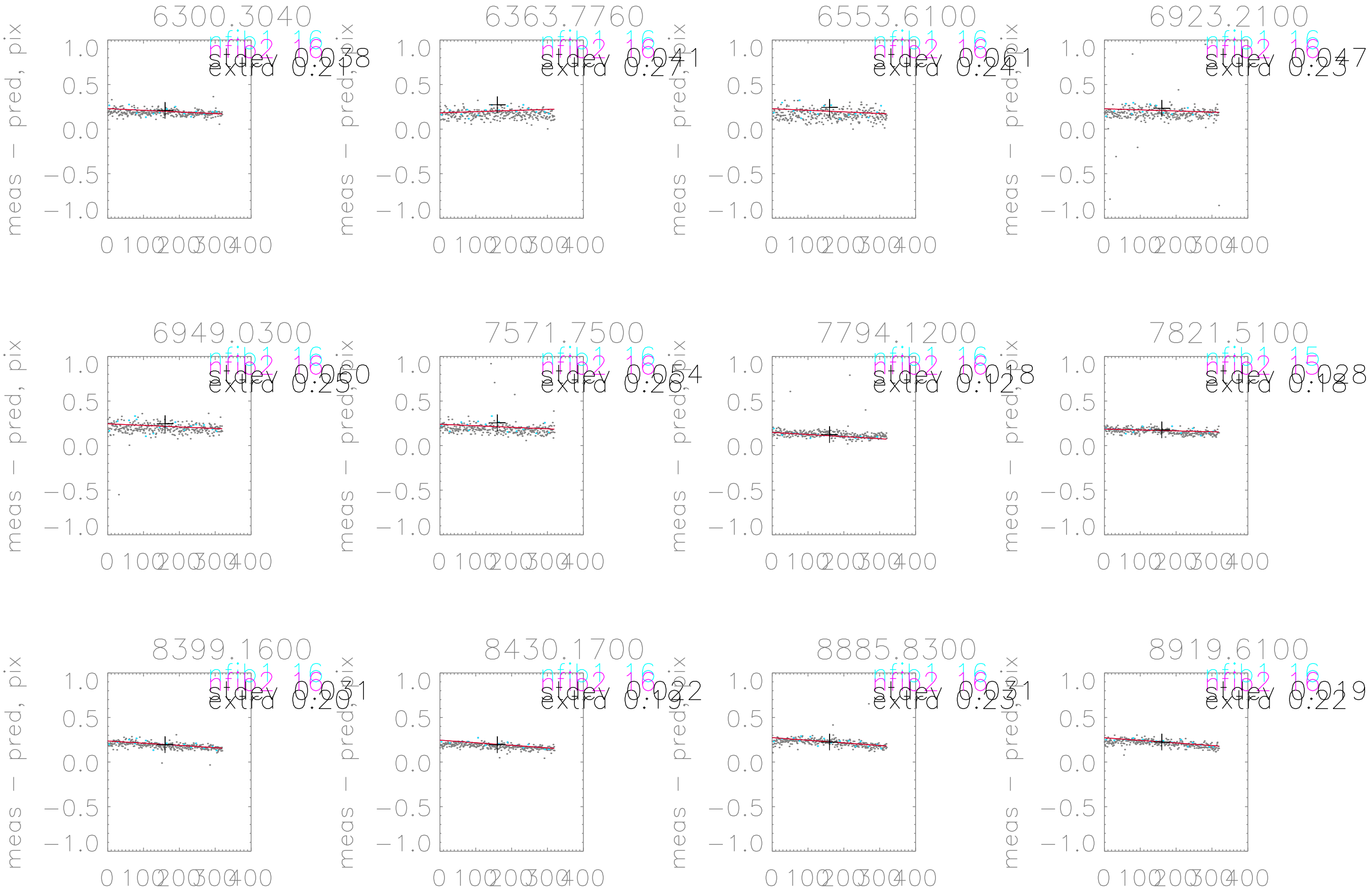

7821.5100

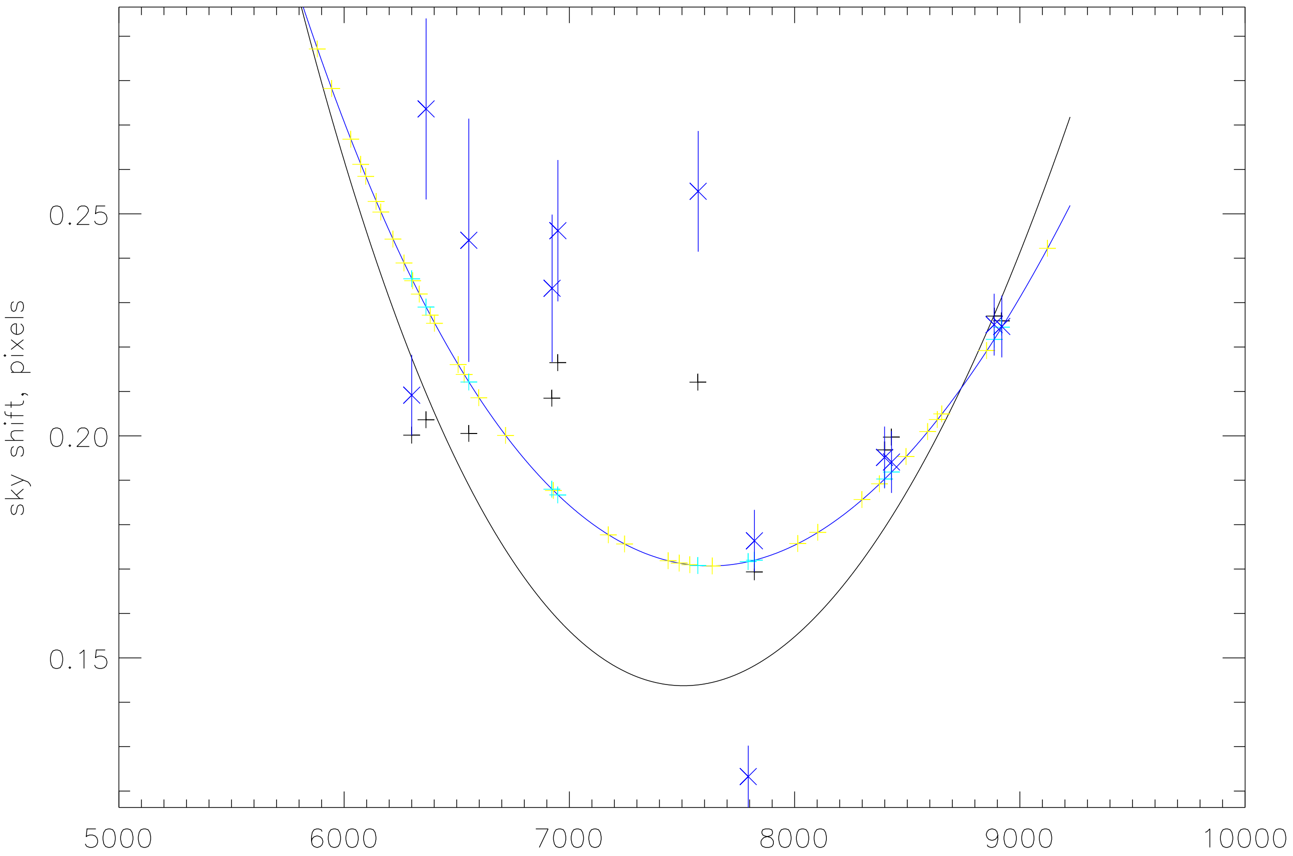

8399.1600

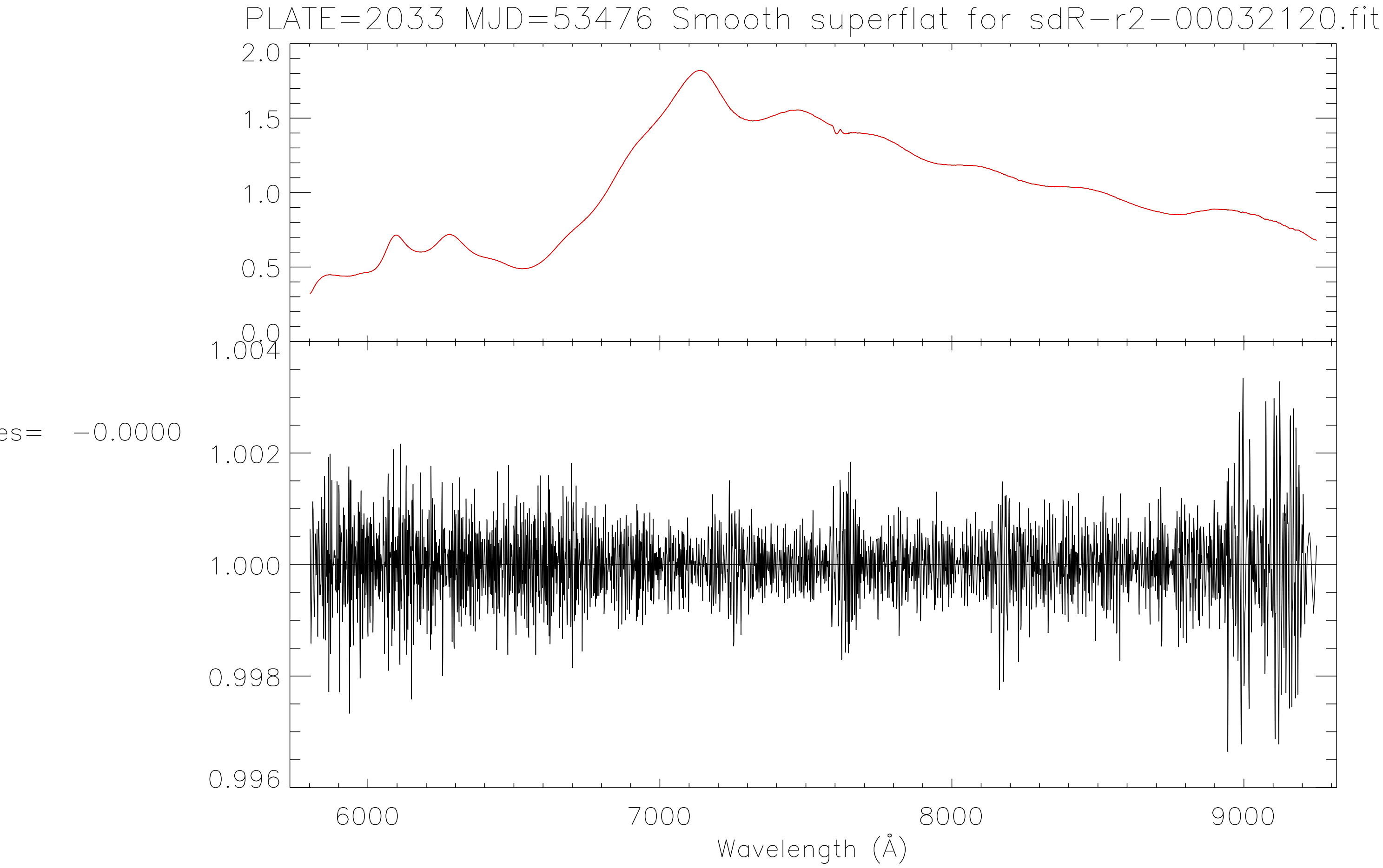

8430.1700

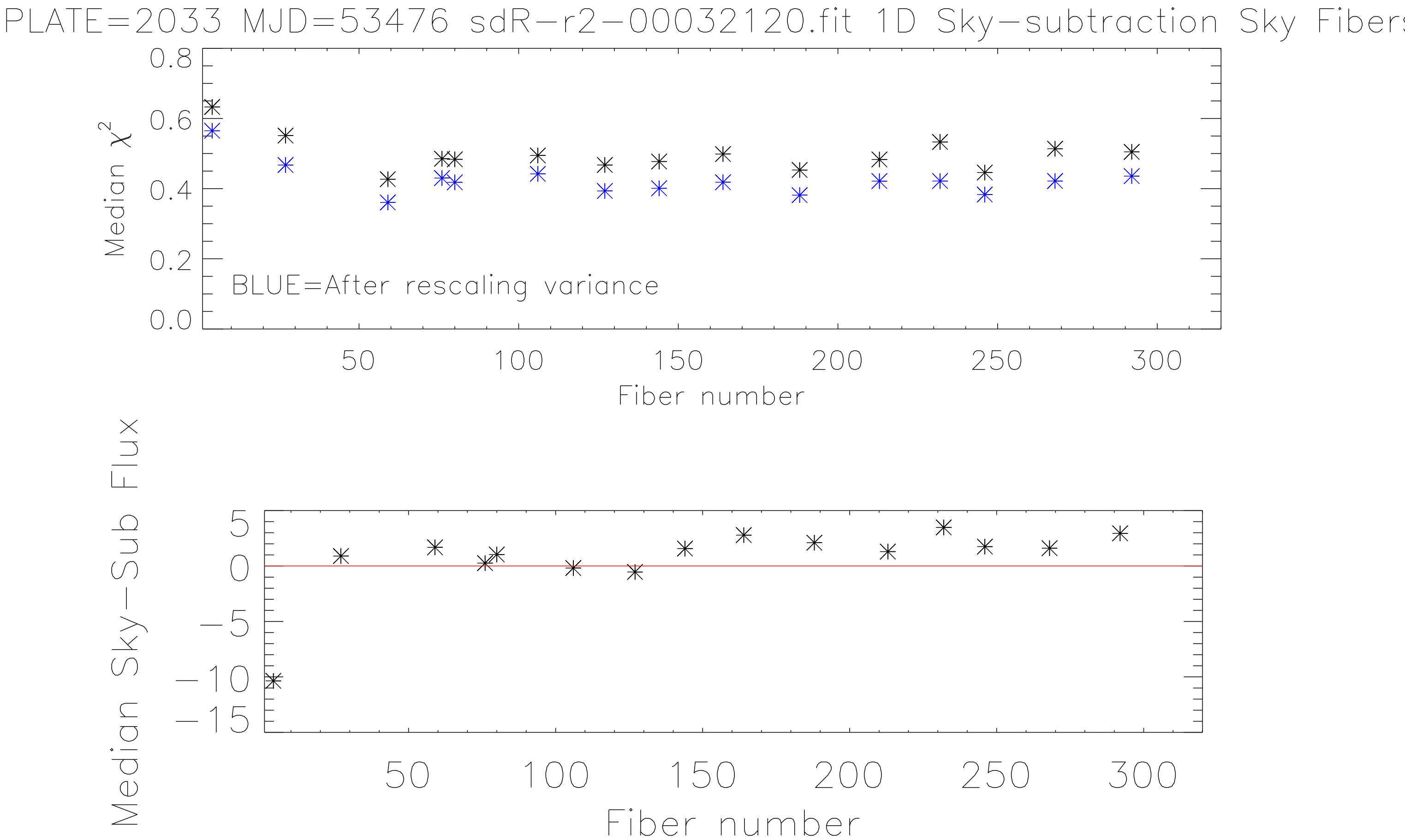

8885.8300

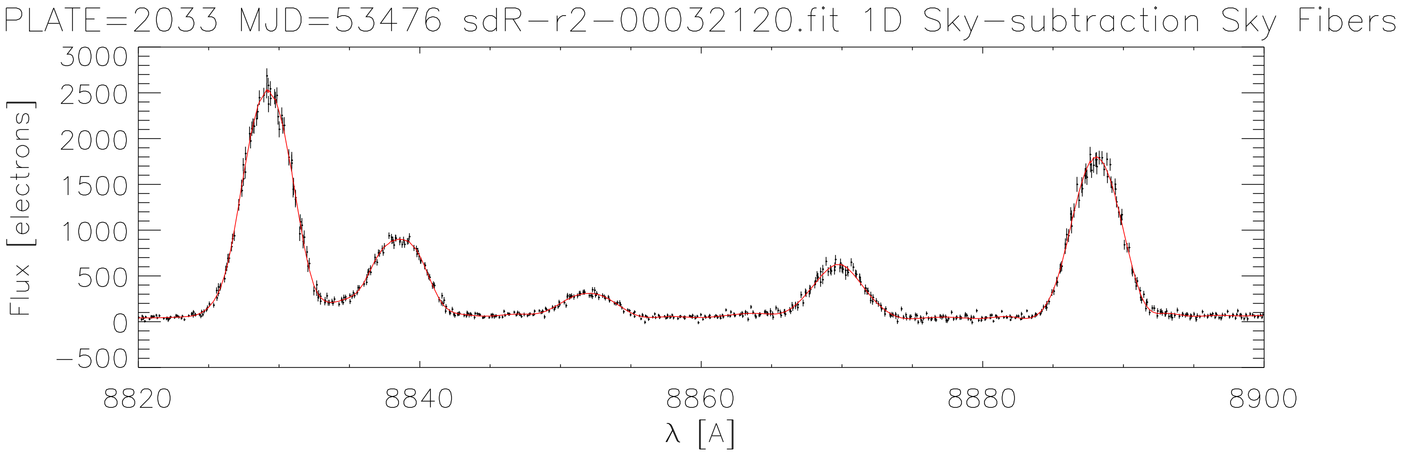

8919.6100

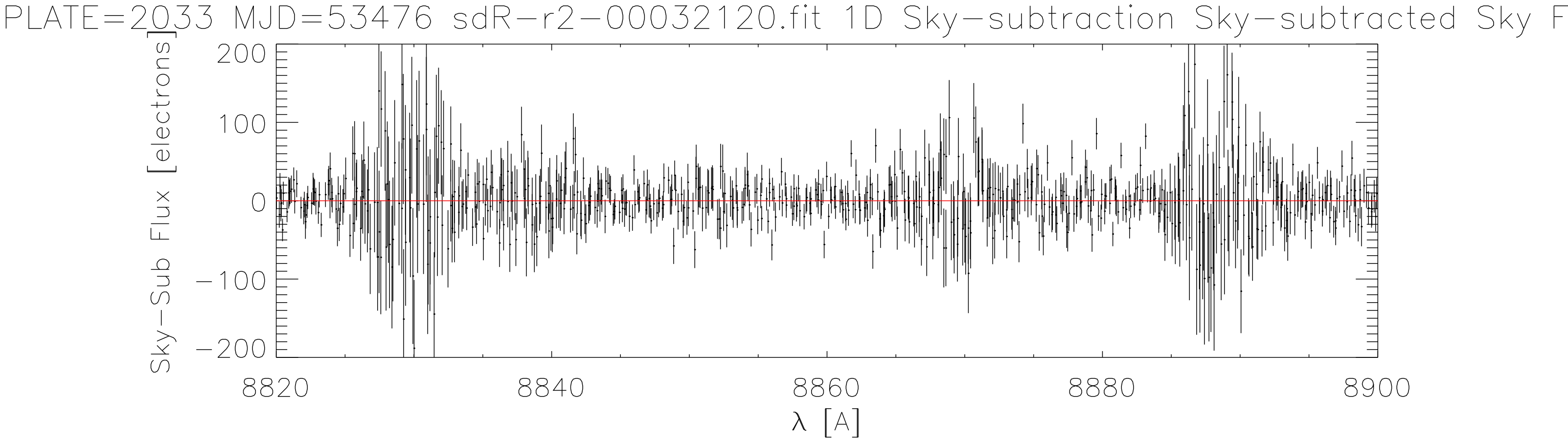

6300.3040
nfib1 16
nfib2 16
stdev 0.038
extrd 0.21
6363.7760
nfib1 16
nfib2 16
stdev 0.041
extrd 0.27
6553.6100
nfib1 16
nfib2 16
stdev 0.061
extrd 0.24
6923.2100
nfib1 16
nfib2 16
stdev 0.047
extrd 0.23
6949.0300
nfib1 16
nfib2 16
stdev 0.060
extrd 0.25
7571.7500
nfib1 16
nfib2 16
stdev 0.054
extrd 0.26
7794.1200
nfib1 16
nfib2 16
stdev 0.018
extrd 0.12
7821.5100
nfib1 15
nfib2 15
stdev 0.028
extrd 0.18
8399.1600
nfib1 16
nfib2 16
stdev 0.031
extrd 0.20
8430.1700
nfib1 16
nfib2 16
stdev 0.022
extrd 0.19
8885.8300
nfib1 16
nfib2 16
stdev 0.031
extrd 0.23
8919.6100
nfib1 16
nfib2 16
stdev 0.019
extrd 0.22
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


sky shift, pixels
0.25
0.20
0.15
5000
6000
7000
8000
9000
10000


PLATE=2033 MJD=53476 Smooth superflat for sdR-r2-00032120.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

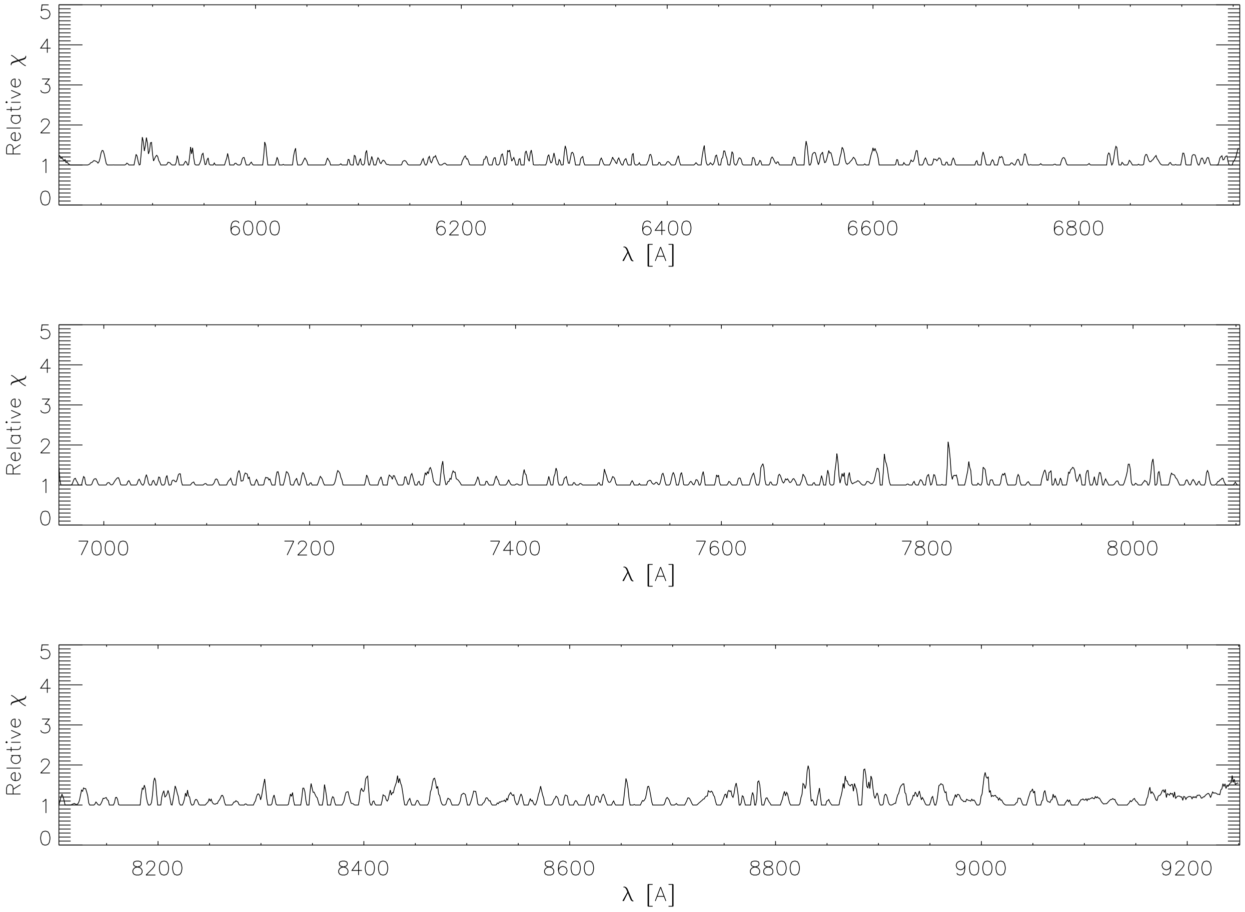

PLATE=2033 MJD=53476 sdR-r2-00032120.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number

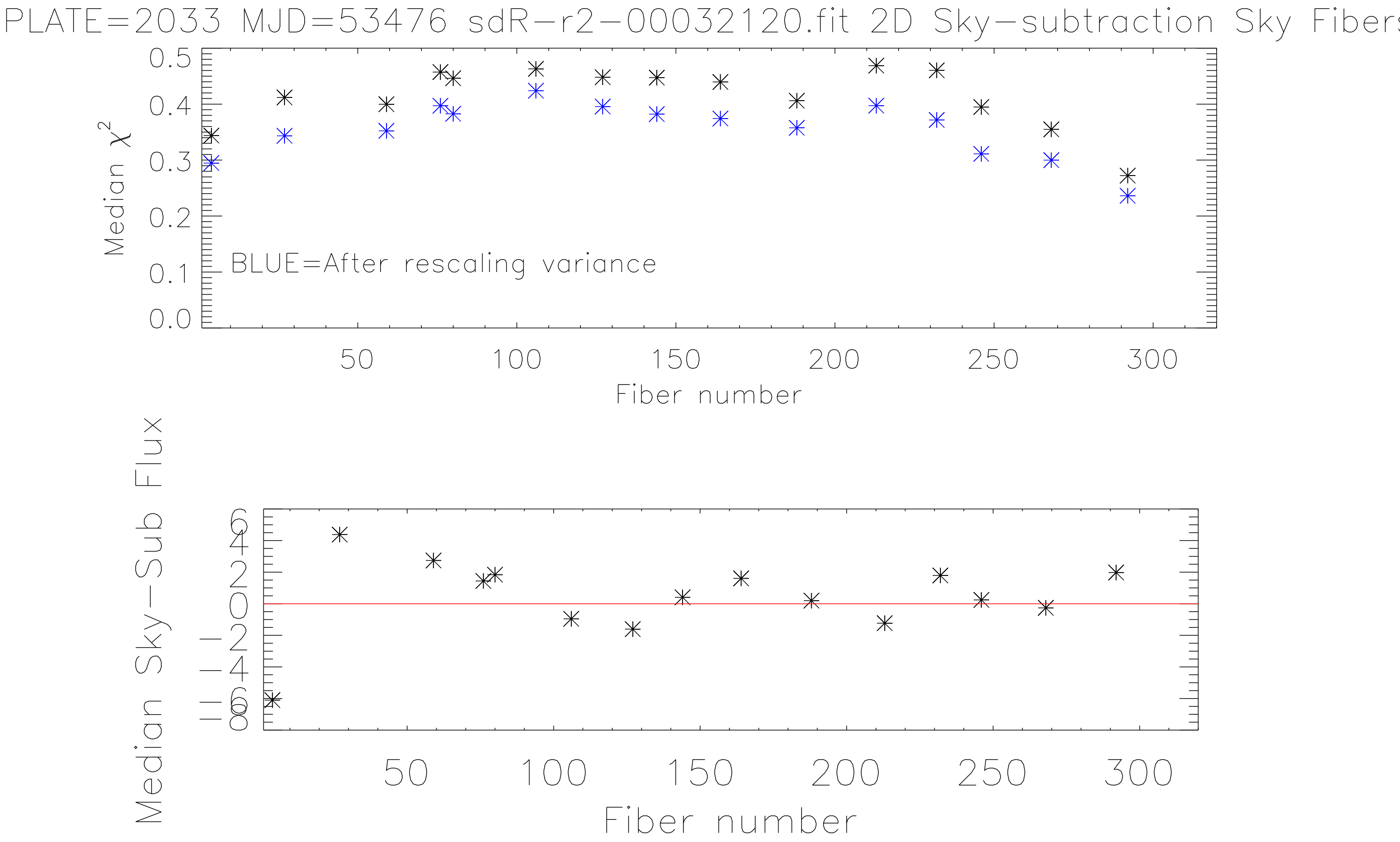

PLATE=2033 MJD=53476 sdR-r2-00032120.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
3000
2500
2000
1500
1000
500
0
−500
8820
8840
8860
8880
8900
λ [A]


PLATE=2033 MJD=53476 sdR-r2-00032120.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

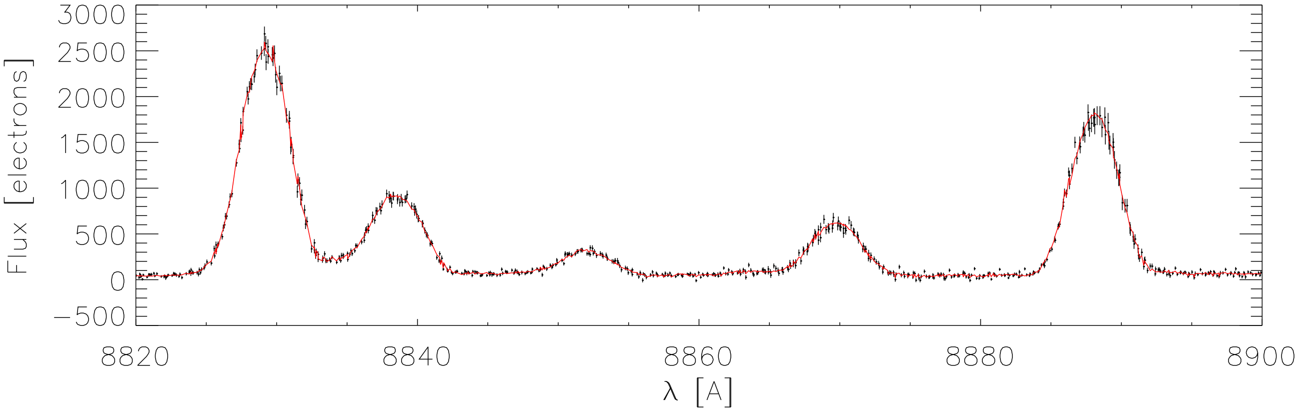
Number of sky fibers = 15

PLATE=2033 MJD=53476 sdR-r2-00032120.fit 1D Sky-subtraction Rescaled Errors

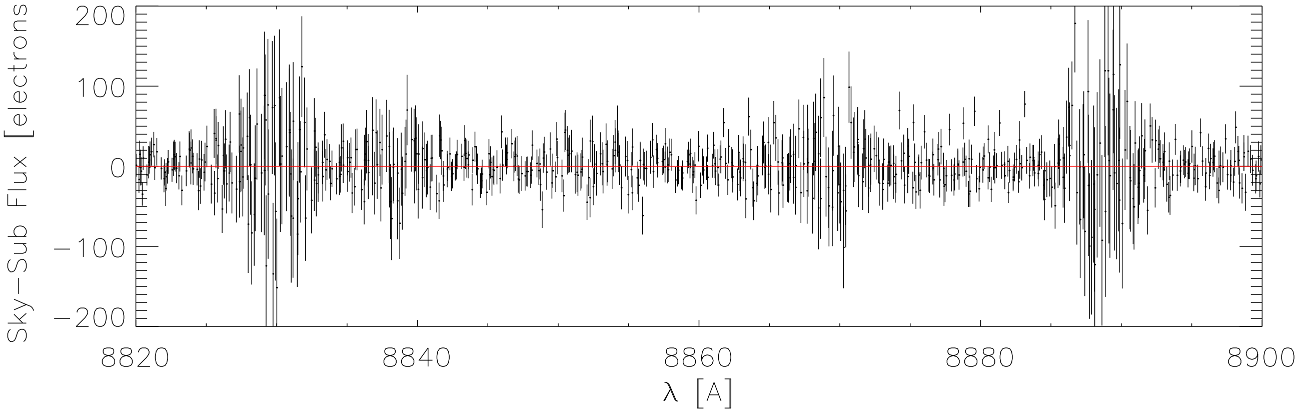



PLATE=2033 MJD=53476 sdR-r2-00032120.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
-8
-6
-4
-2
0
2
4
6
50
100
150
200
250
300
Fiber number

PLATE=2033 MJD=53476 sdR-r2-00032120.fit 2D Sky-subtraction Sky Fibers

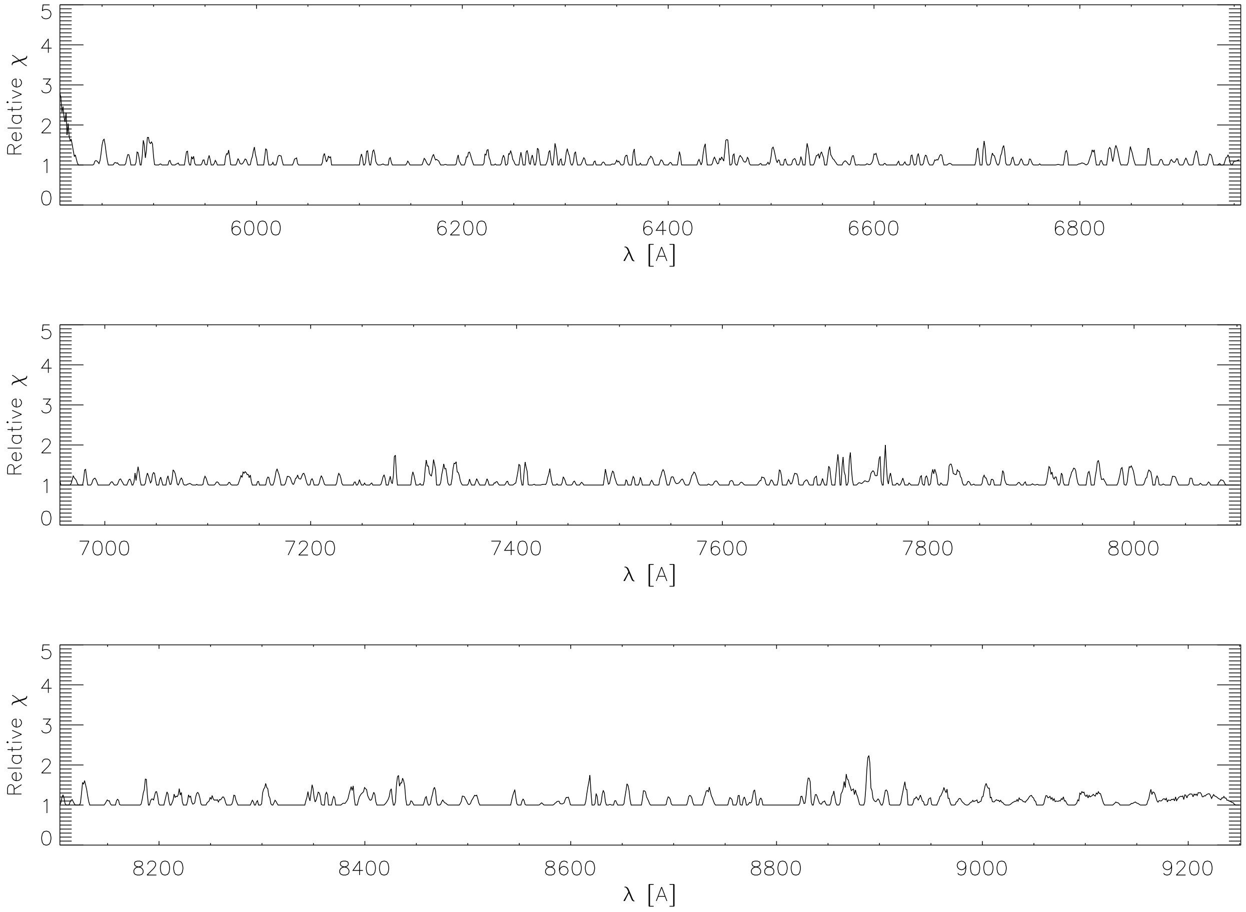


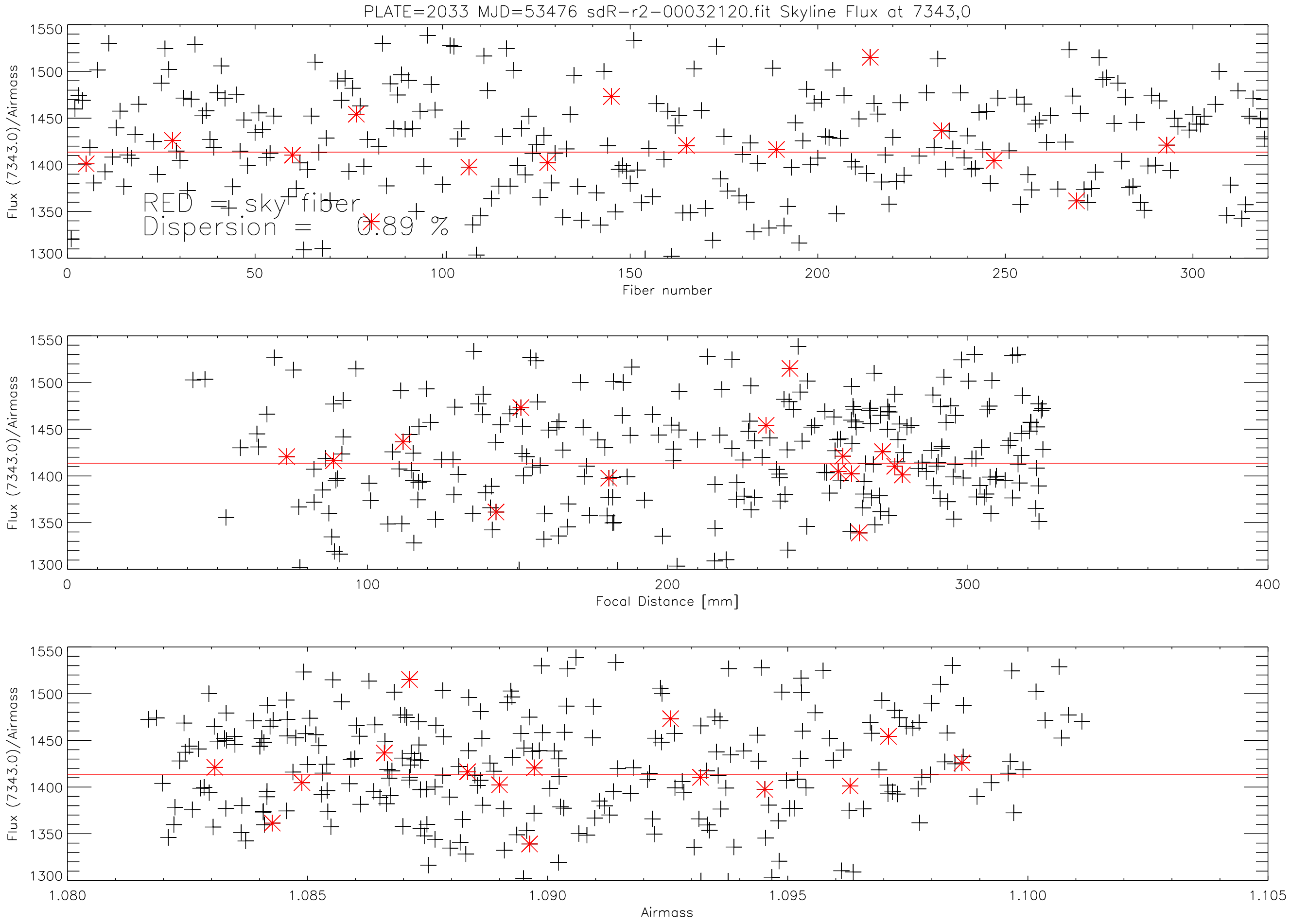
PLATE=2033 MJD=53476 sdR-r2-00032120.fit 2D Sky-subtraction Sky-subtracted Sky F

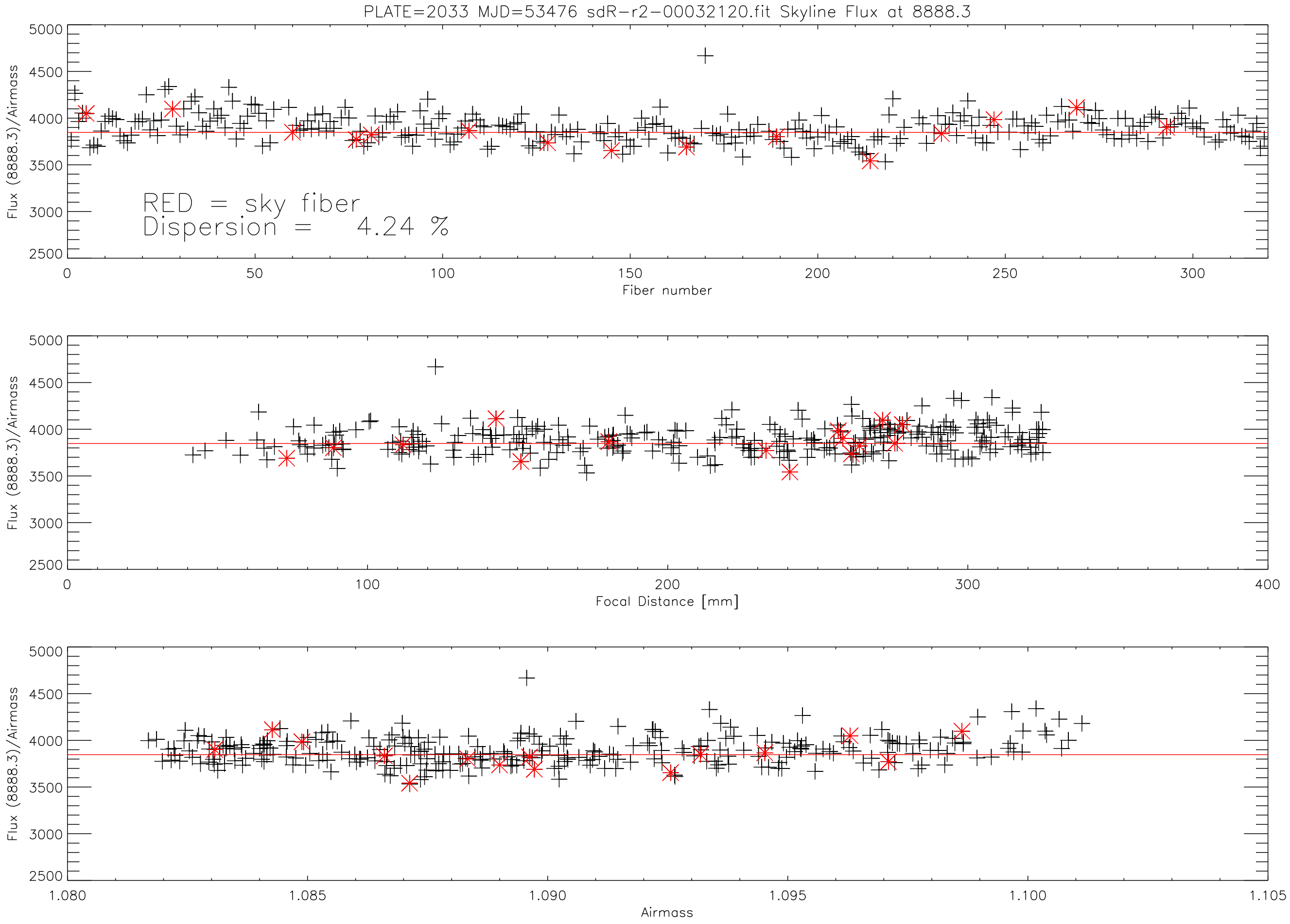


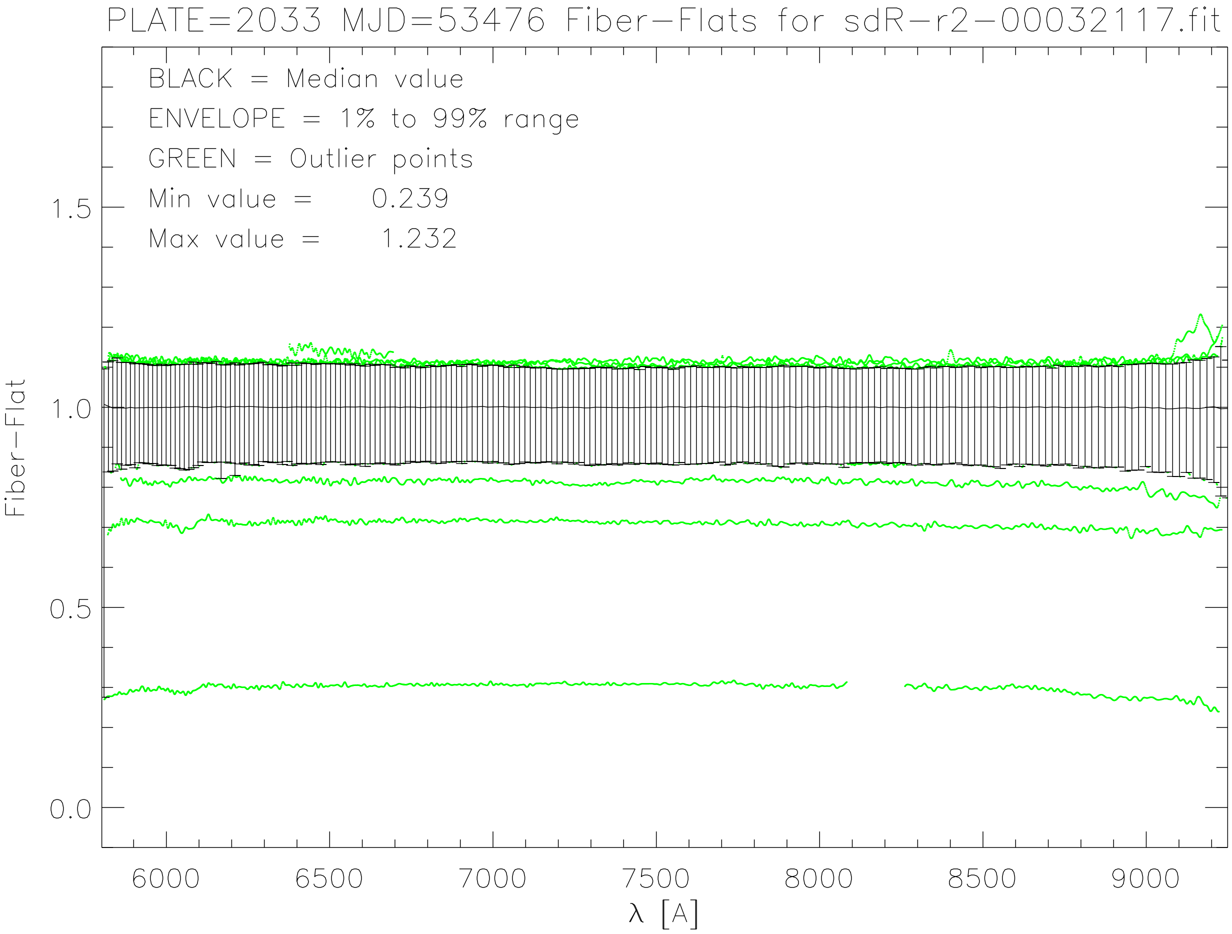
Number of sky fibers = 15

PLATE=2033 MJD=53476 sdR-r2-00032120.fit 2D Sky-subtraction Rescaled Errors




PLATE=2033 MJD=53476 sdR-r2-00032120.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
1550
1500
1450
1400
1350
1300
RED = sky fiber
Dispersion = 0.89 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
1550
1500
1450
1400
1350
1300
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1550
1500
1450
1400
1350
1300
1.080
1.085
1.090
1.095
1.100
1.105
Airmass


PLATE=2033 MJD=53476 sdR-r2-00032120.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
5000
4500
4000
3500
3000
2500
RED = sky fiber
Dispersion = 4.24 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.080
1.085
1.090
1.095
1.100
1.105
Airmass



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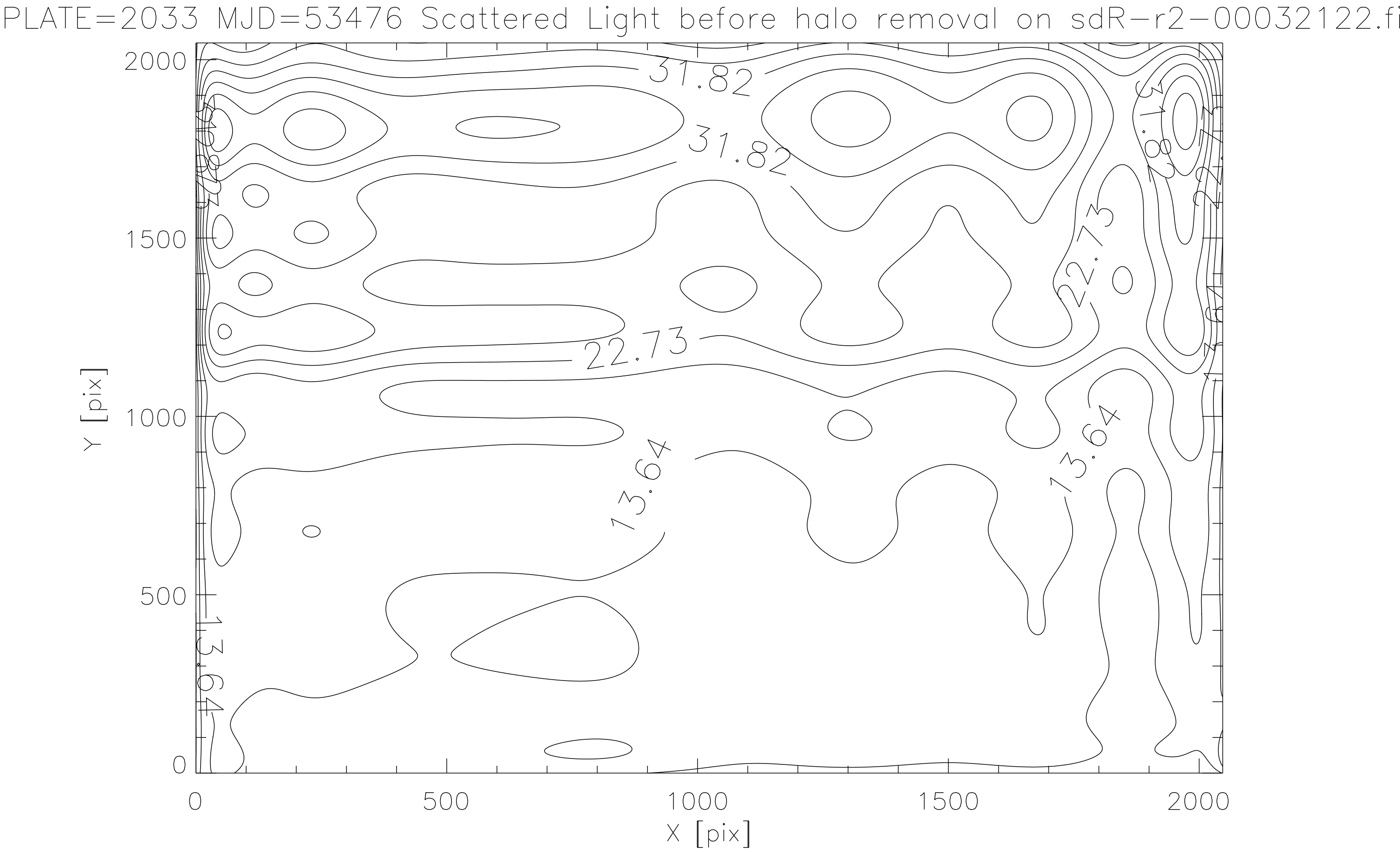
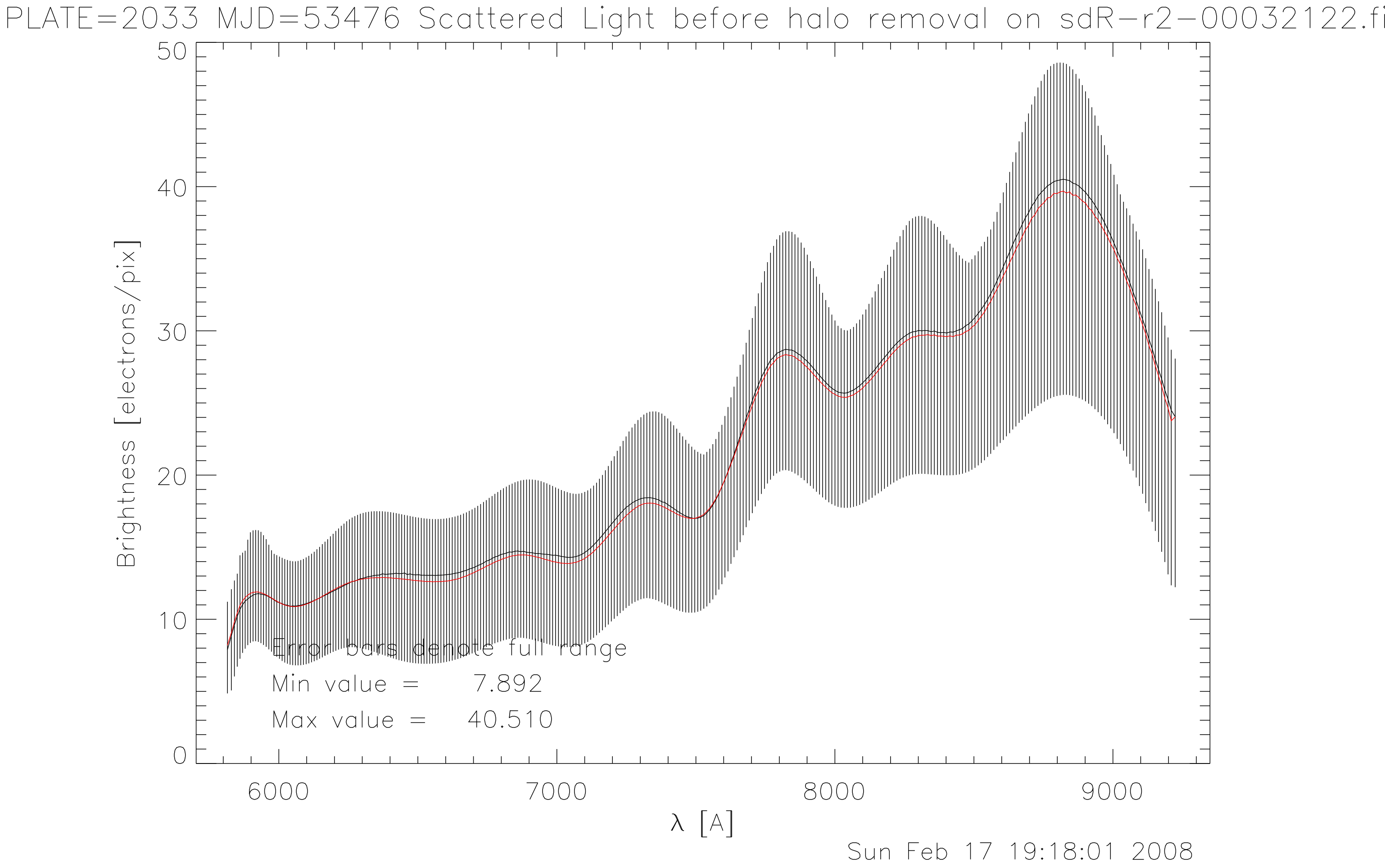
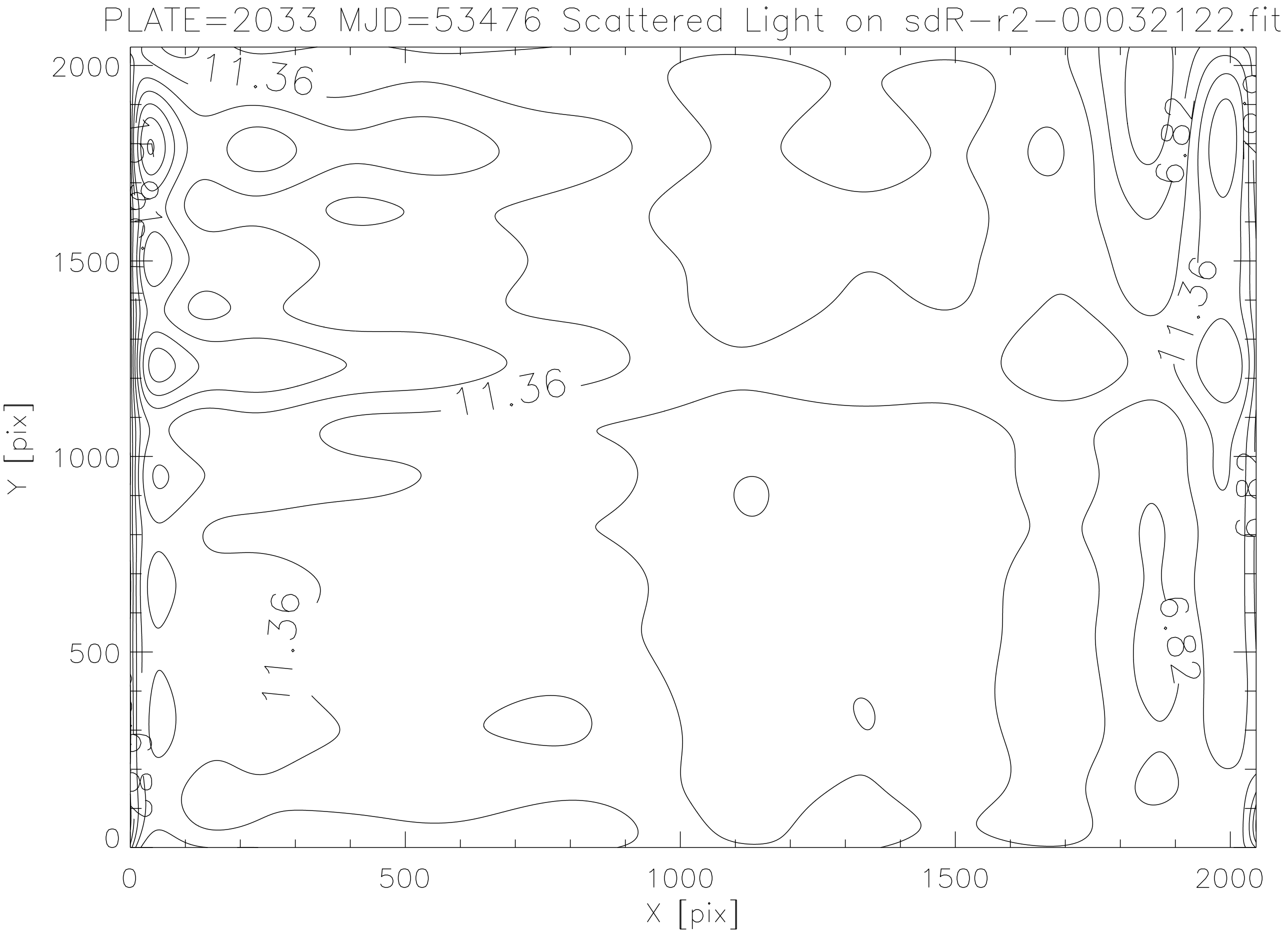
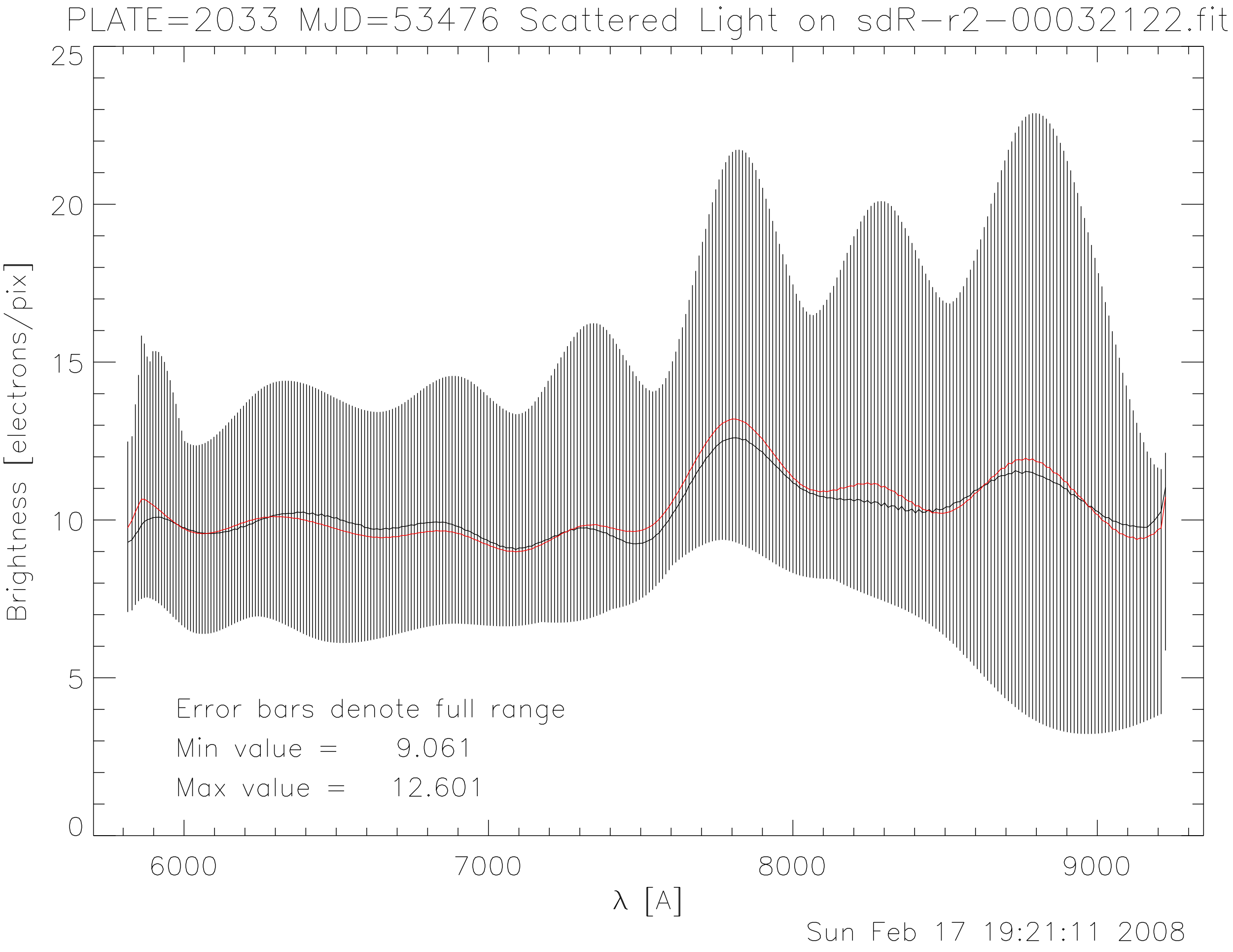
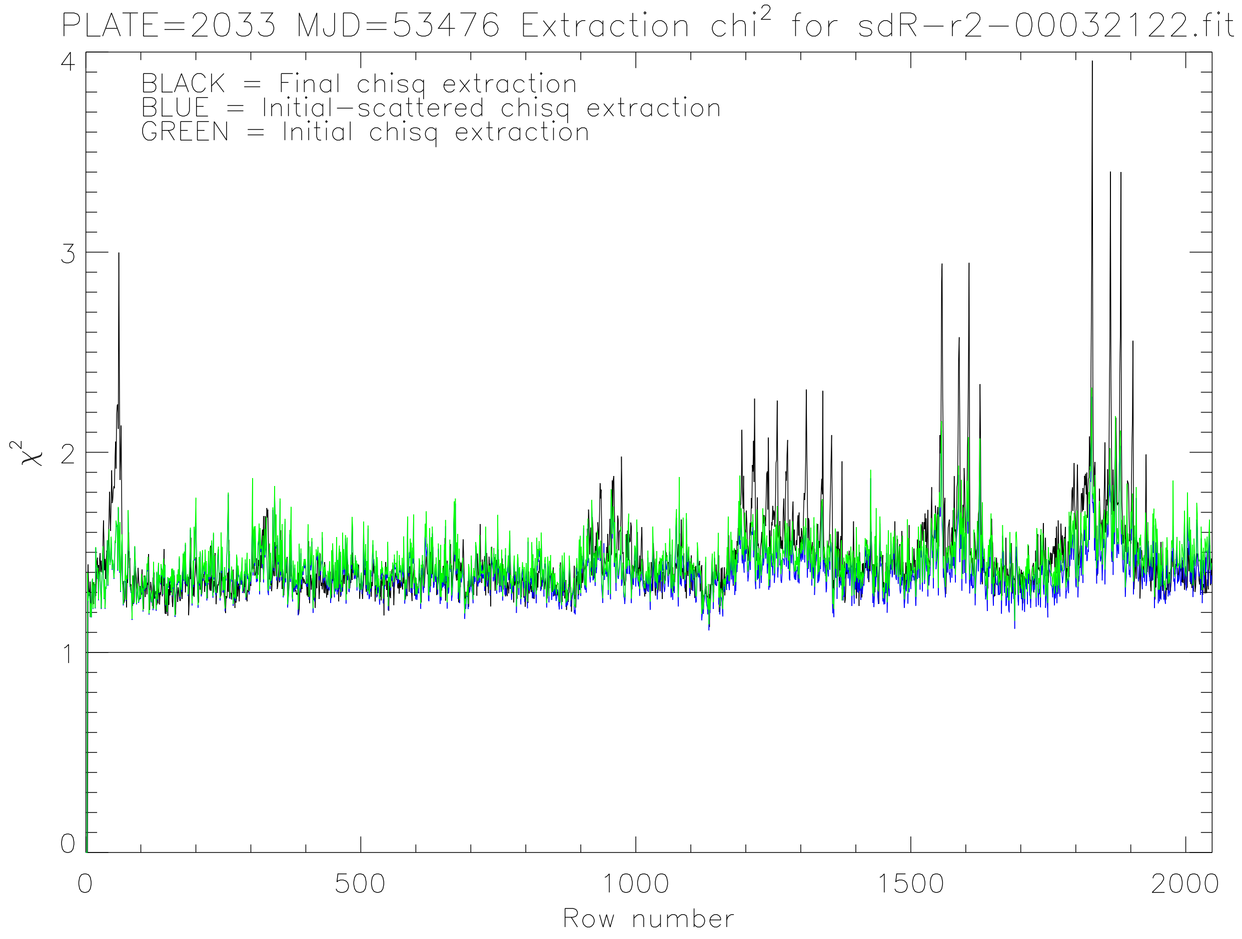

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r2-00032122.fi
31.82
31.82
22.73
22.73
13.64
13.64
13.64
Y [pix]
0
500
1000
1500
2000
X [pix]
0
500
1000
1500
2000

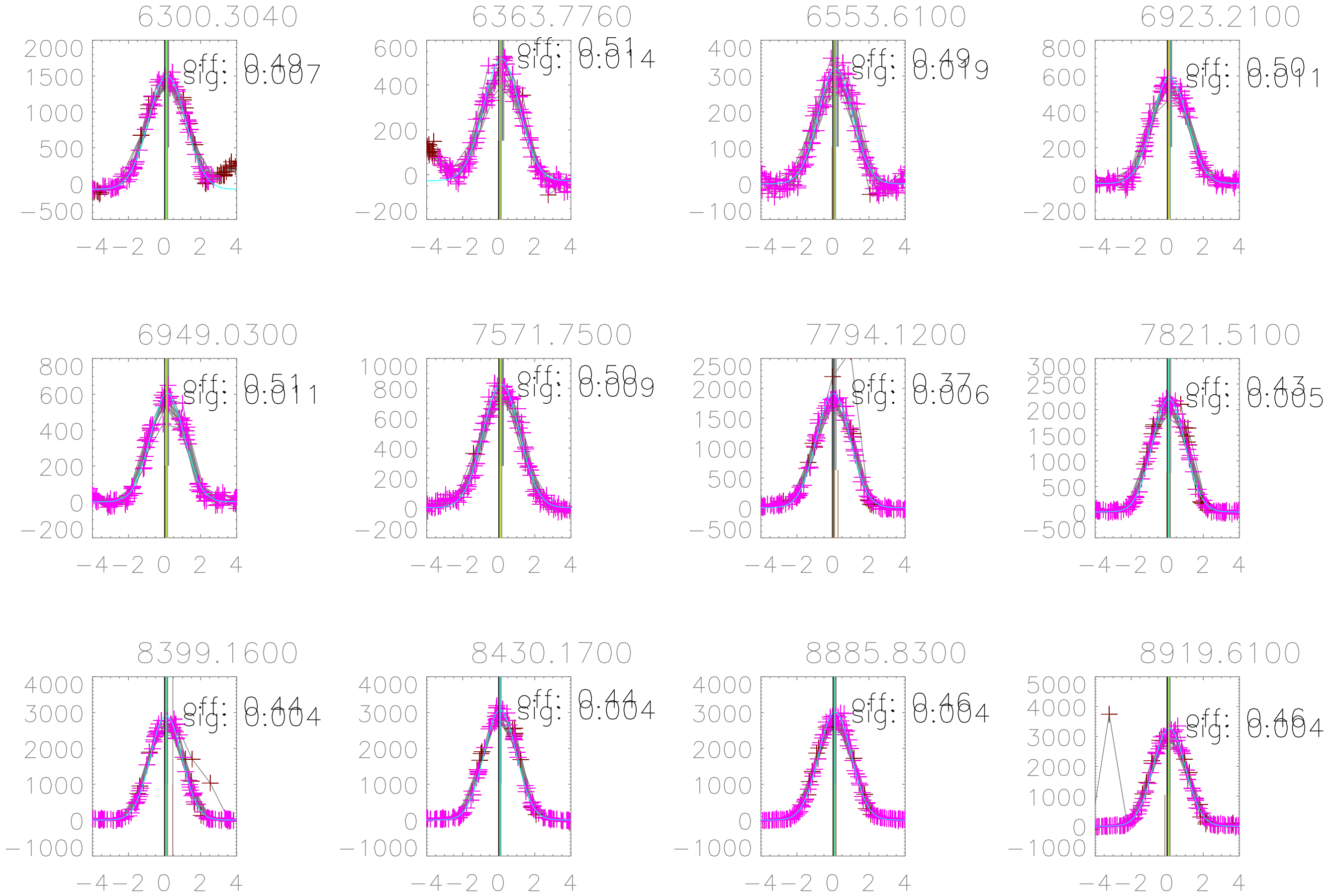

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r2-00032122.fi
Brightness [electrons/pix]
0
10
20
30
40
50
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 7.892
Max value = 40.510
Sun Feb 17 19:18:01 2008

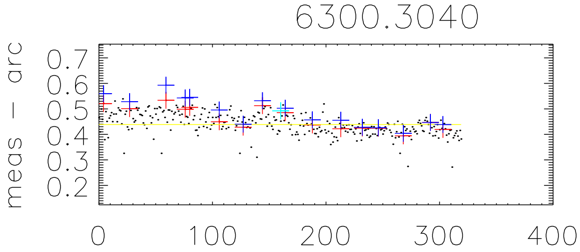


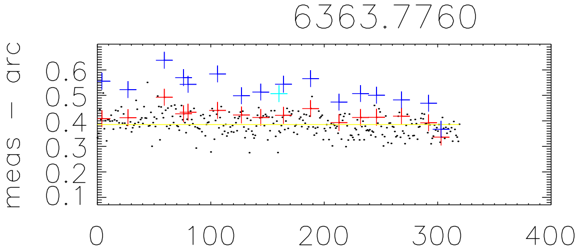
PLATE=2033 MJD=53476 Scattered Light on sdR-r2-00032122.fit

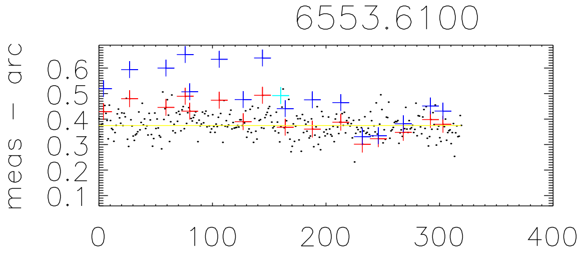

PLATE=2033 MJD=53476 Scattered Light on sdR-r2-00032122.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.061
Max value = 12.601
Sun Feb 17 19:21:11 2008

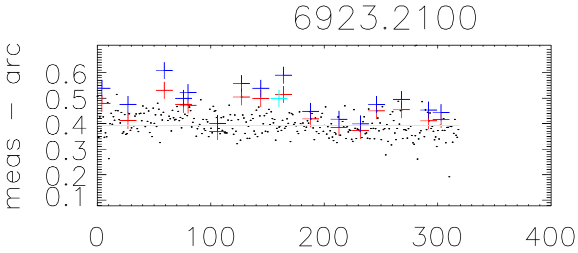

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-r2-00032122.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

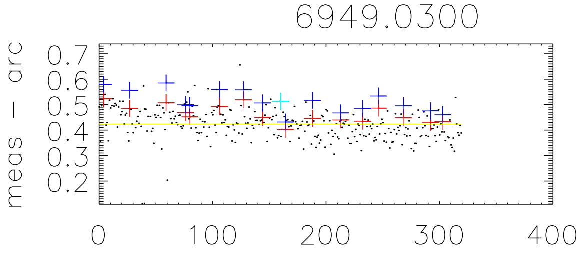

6300.3040
off: 0.49
sig: 0.007
6363.7760
off: 0.51
sig: 0.014
6553.6100
off: 0.49
sig: 0.019
6923.2100
off: 0.50
sig: 0.011
6949.0300
off: 0.51
sig: 0.011
7571.7500
off: 0.50
sig: 0.009
7794.1200
off: 0.37
sig: 0.006
7821.5100
off: 0.43
sig: 0.005
8399.1600
off: 0.44
sig: 0.004
8430.1700
off: 0.44
sig: 0.004
8885.8300
off: 0.46
sig: 0.004
8919.6100
off: 0.46
sig: 0.004
−4 −2 0 2 4

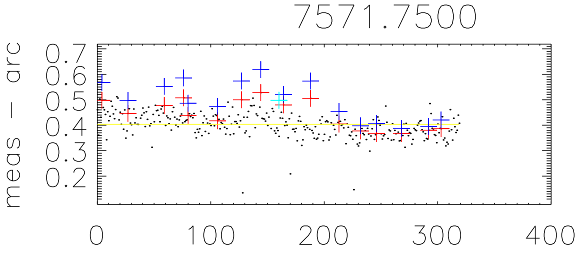

6300.3040
meas - arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


6363.7760
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

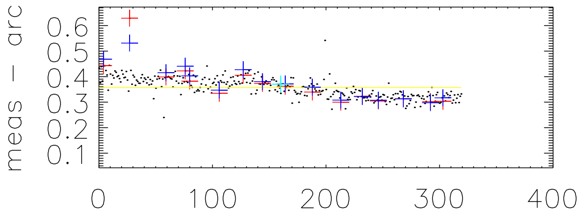

6553.6100
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400


6923.2100
meas - arc
0.6
0.5
0.4
0.3
0.2
0.1
0
100
200
300
400

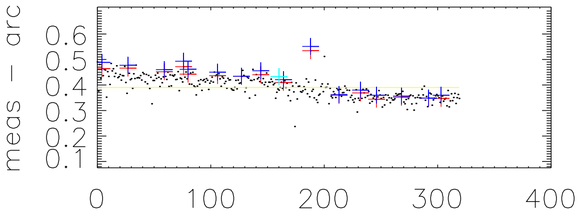

6949.0300
meas - arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400


7571.7500
meas - arc
0.7
0.6
0.5
0.4
0.3
0.2
0
100
200
300
400

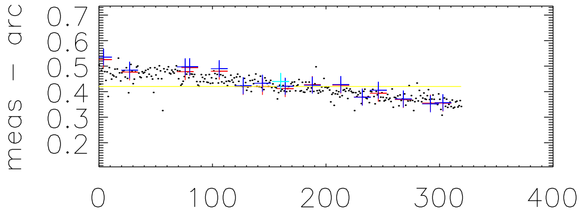
7794.1200



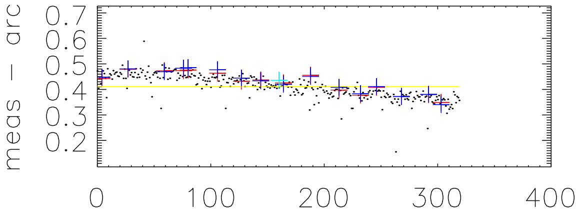
7821.5100



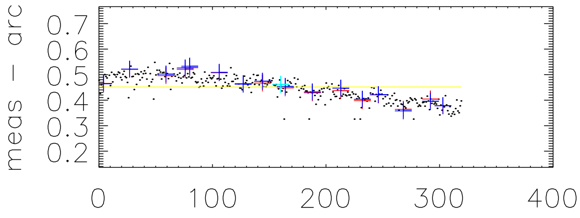
8399.1600



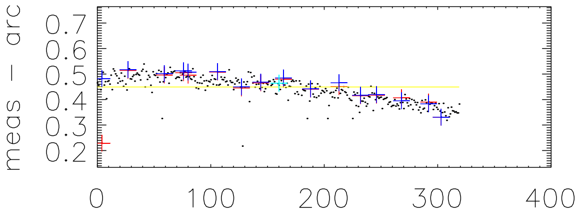
8430.1700

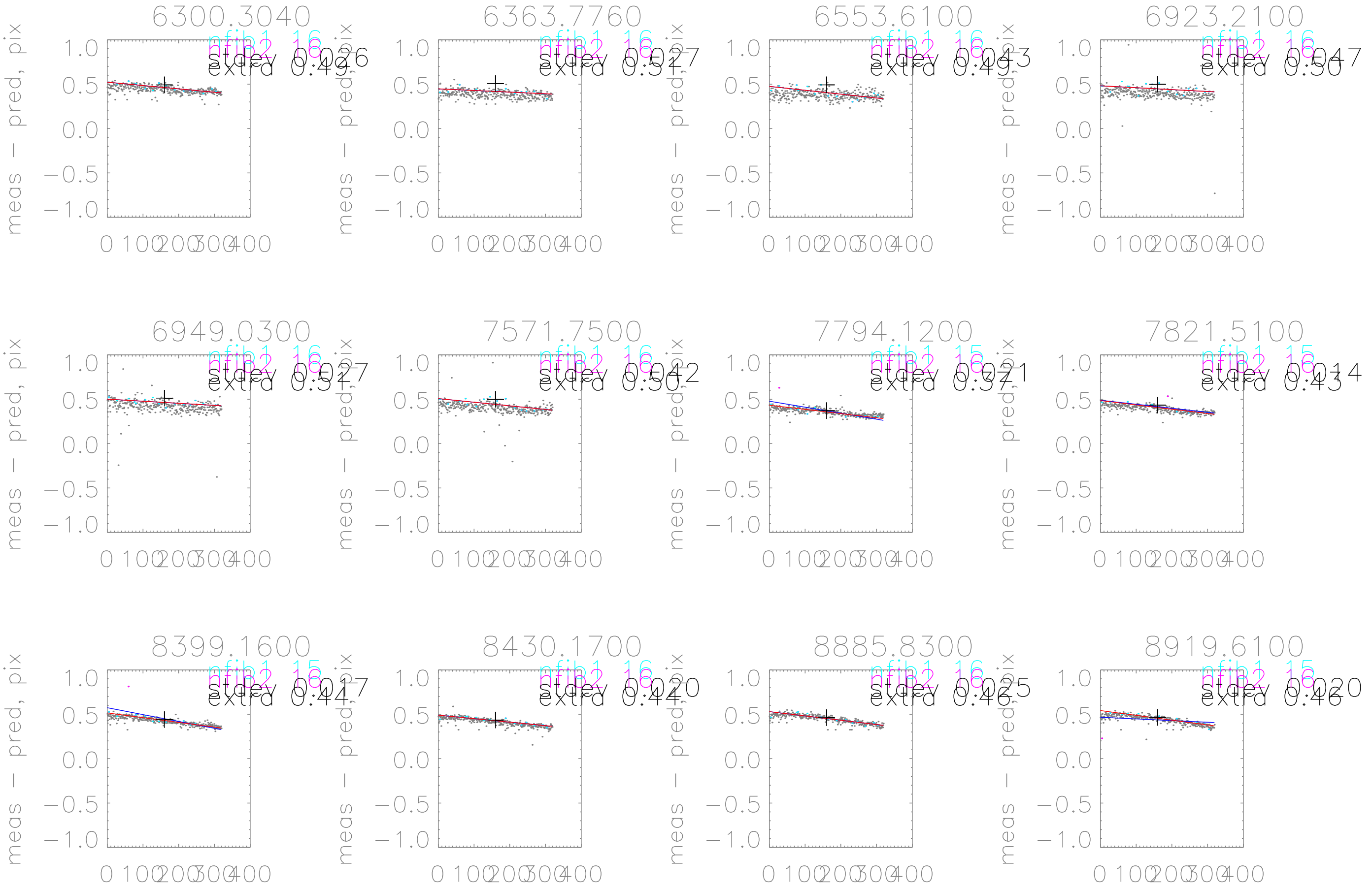


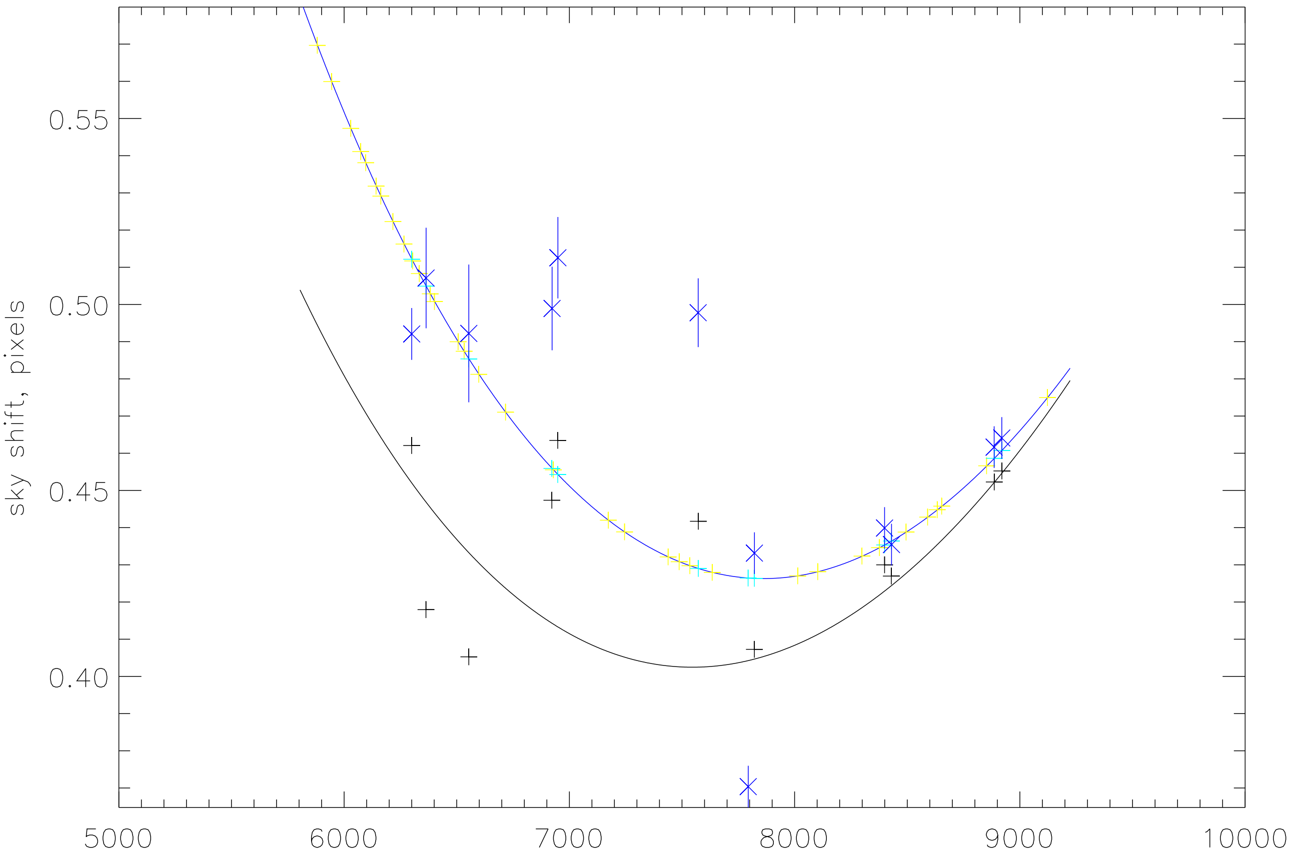
8885.8300

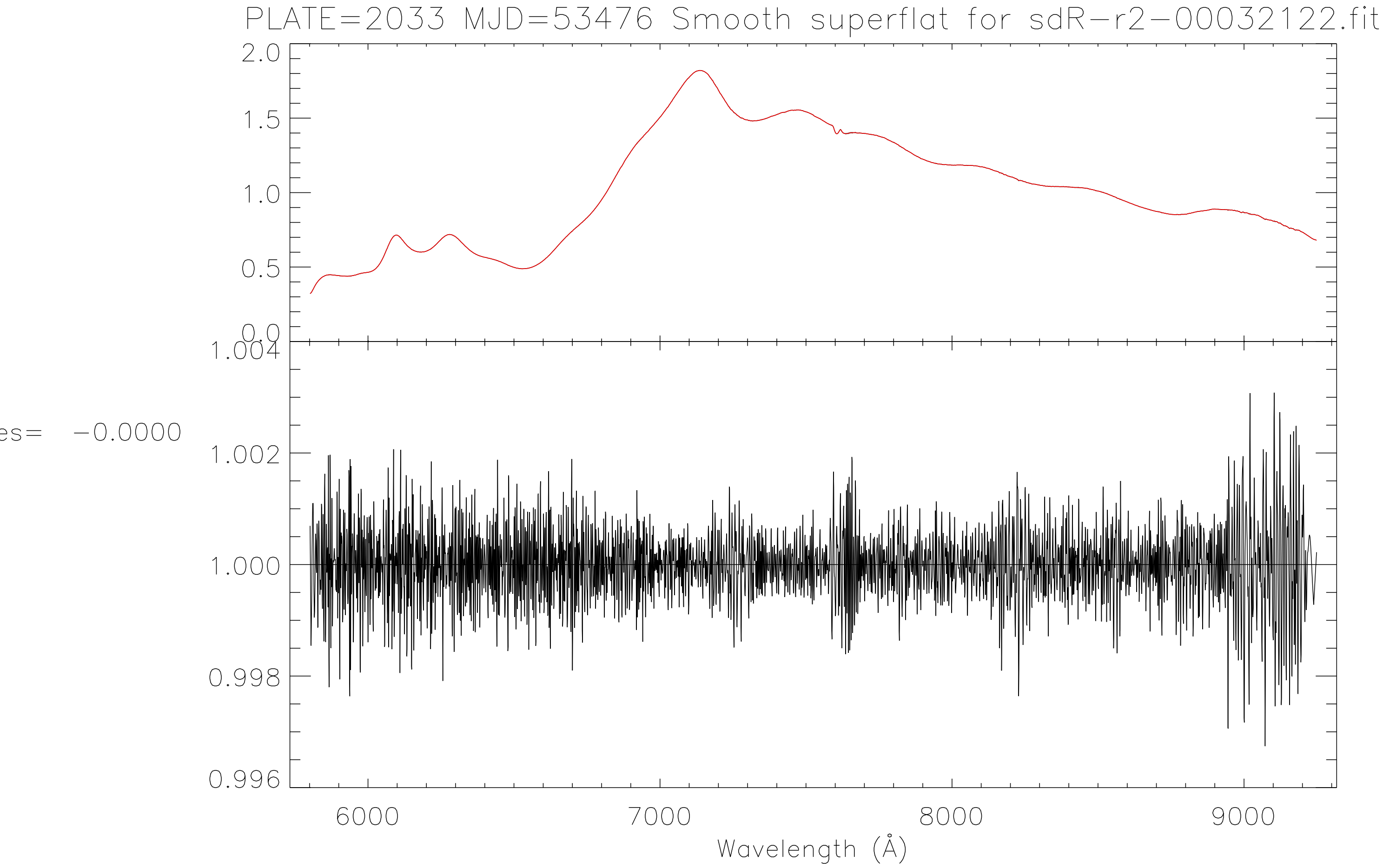


8919.6100



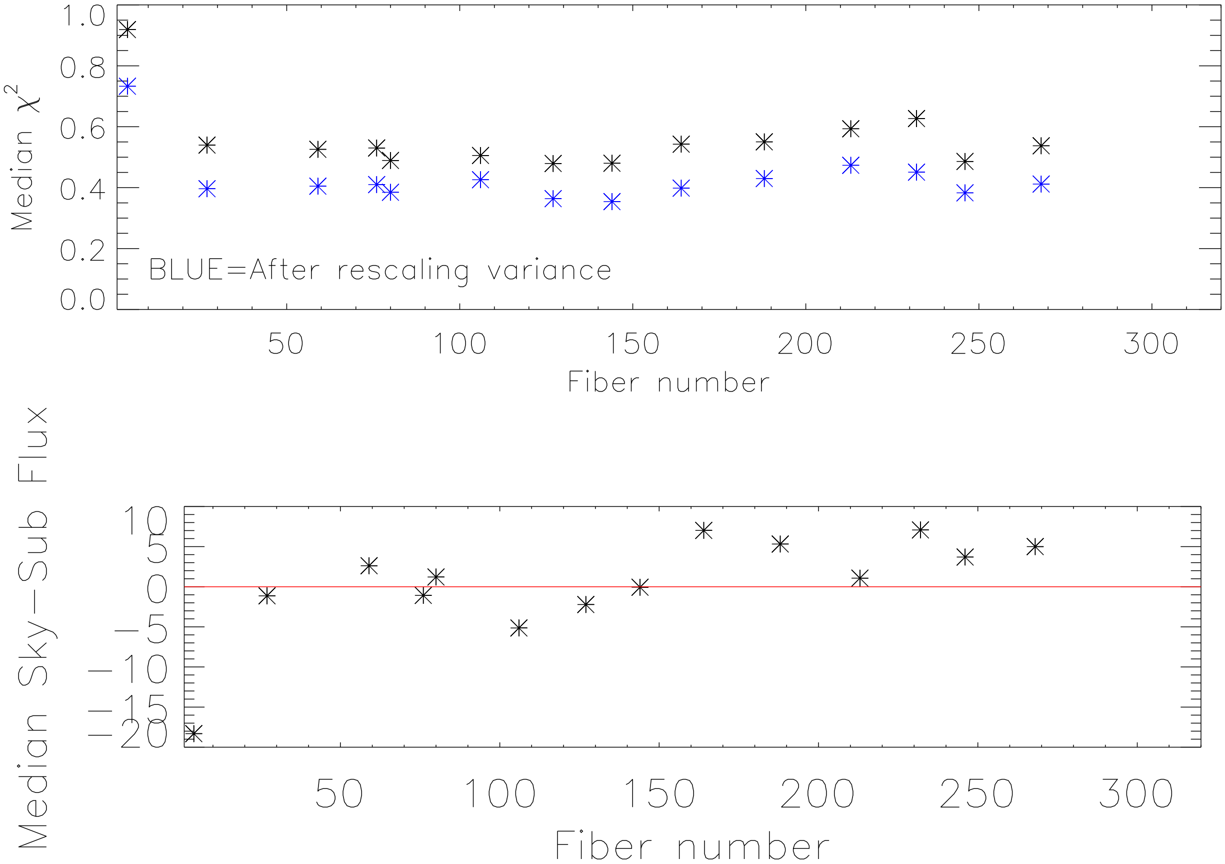

6300.3040
nfib1 16
nfib2 16
stdev 0.026
extrd 0.49
6363.7760
nfib1 16
nfib2 16
stdev 0.027
extrd 0.51
6553.6100
nfib1 16
nfib2 16
stdev 0.043
extrd 0.49
6923.2100
nfib1 16
nfib2 16
stdev 0.047
extrd 0.50
6949.0300
nfib1 16
nfib2 16
stdev 0.027
extrd 0.51
7571.7500
nfib1 16
nfib2 16
stdev 0.042
extrd 0.50
7794.1200
nfib1 15
nfib2 16
stdev 0.021
extrd 0.37
7821.5100
nfib1 15
nfib2 16
stdev 0.014
extrd 0.43
8399.1600
nfib1 15
nfib2 16
stdev 0.017
extrd 0.44
8430.1700
nfib1 16
nfib2 16
stdev 0.020
extrd 0.44
8885.8300
nfib1 16
nfib2 16
stdev 0.025
extrd 0.46
8919.6100
nfib1 15
nfib2 16
stdev 0.020
extrd 0.46
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

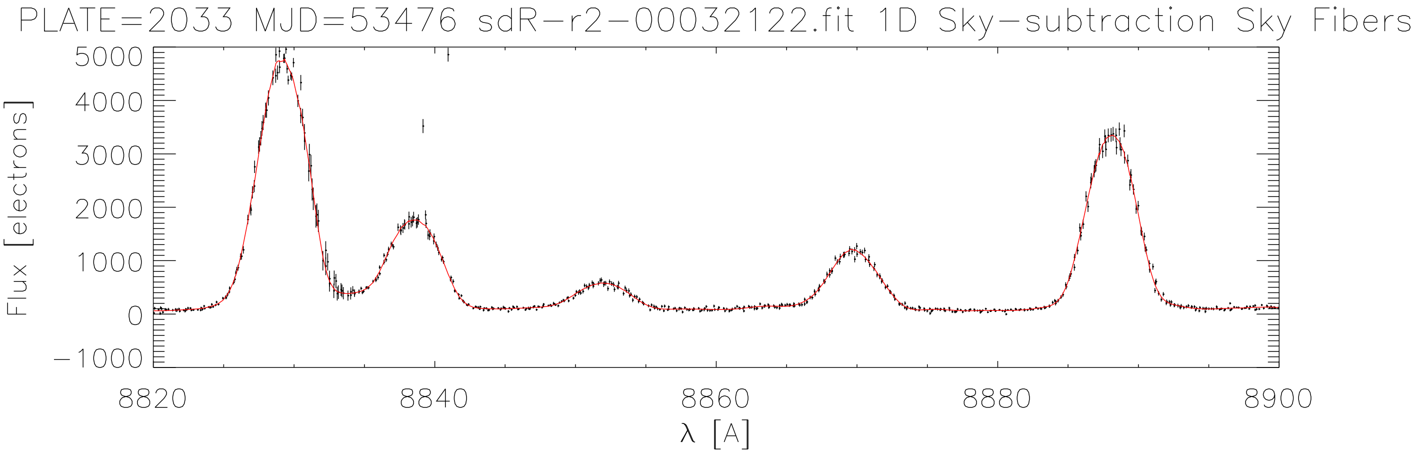

sky shift, pixels
0.55
0.50
0.45
0.40
5000
6000
7000
8000
9000
10000

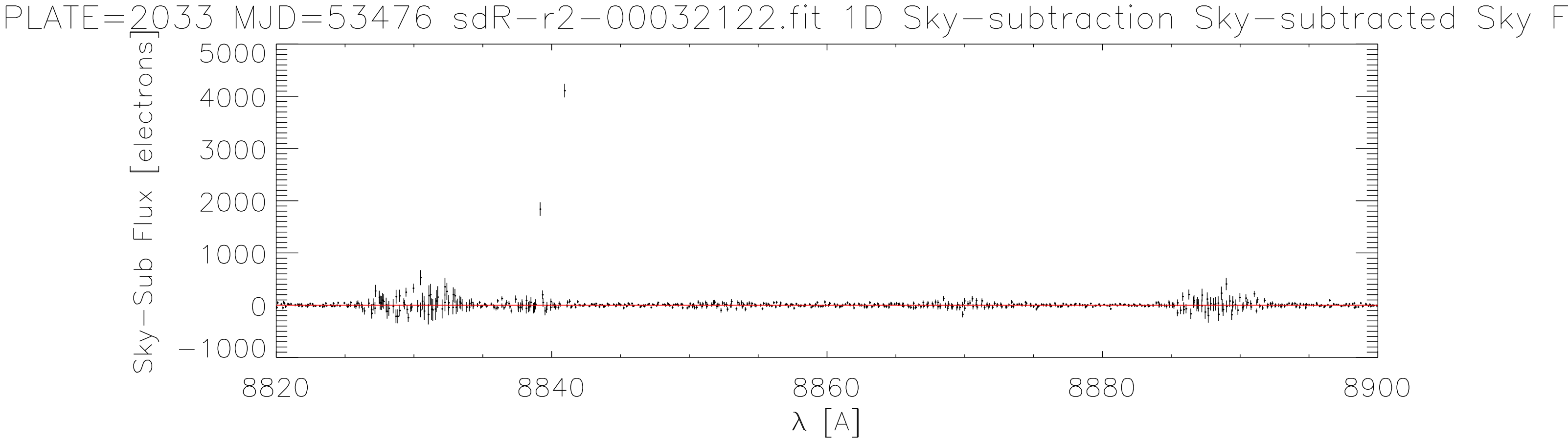


PLATE=2033 MJD=53476 Smooth superflat for sdR-r2-00032122.fit

PLATE=2033 MJD=53476 sdR-r2-00032122.fit 1D Sky-subtraction Sky Fiber

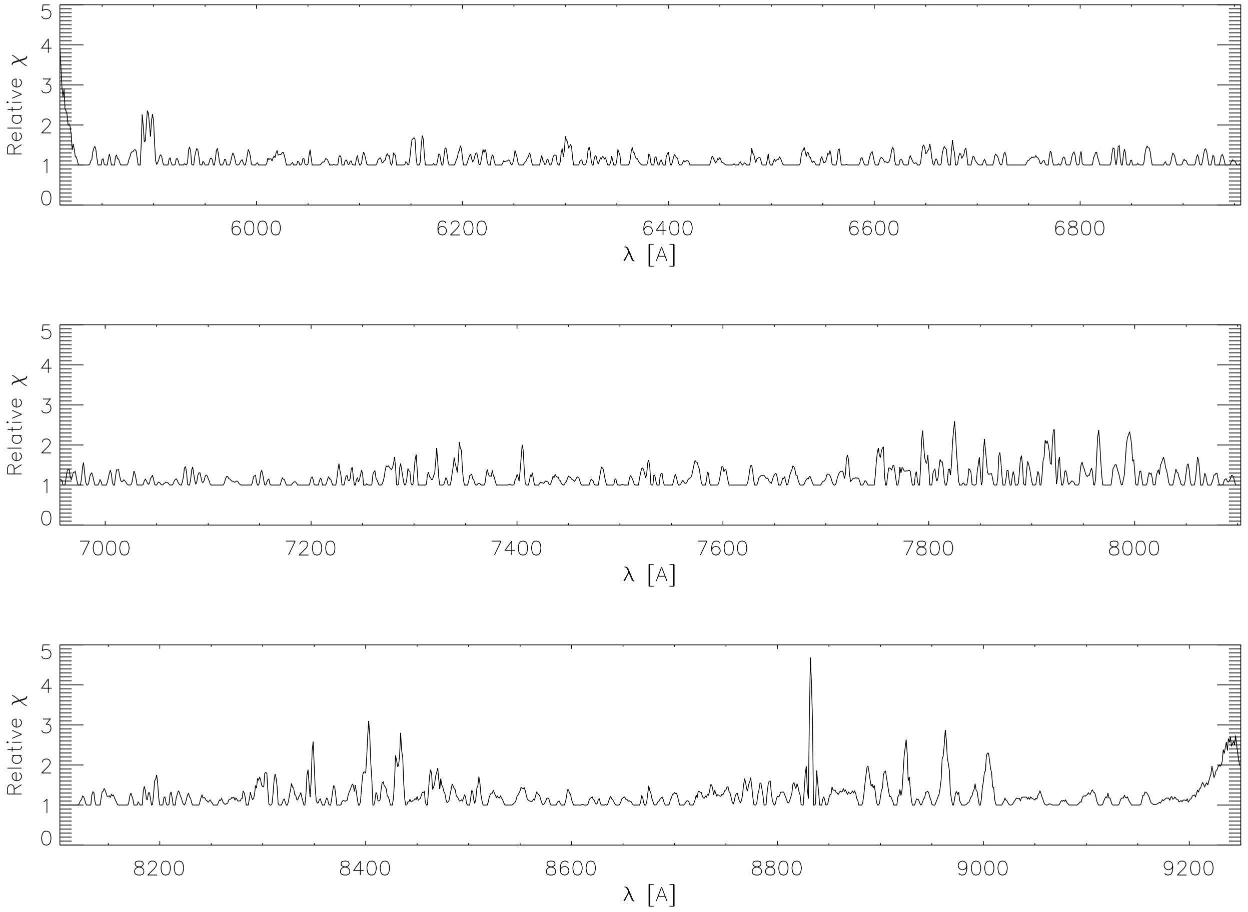


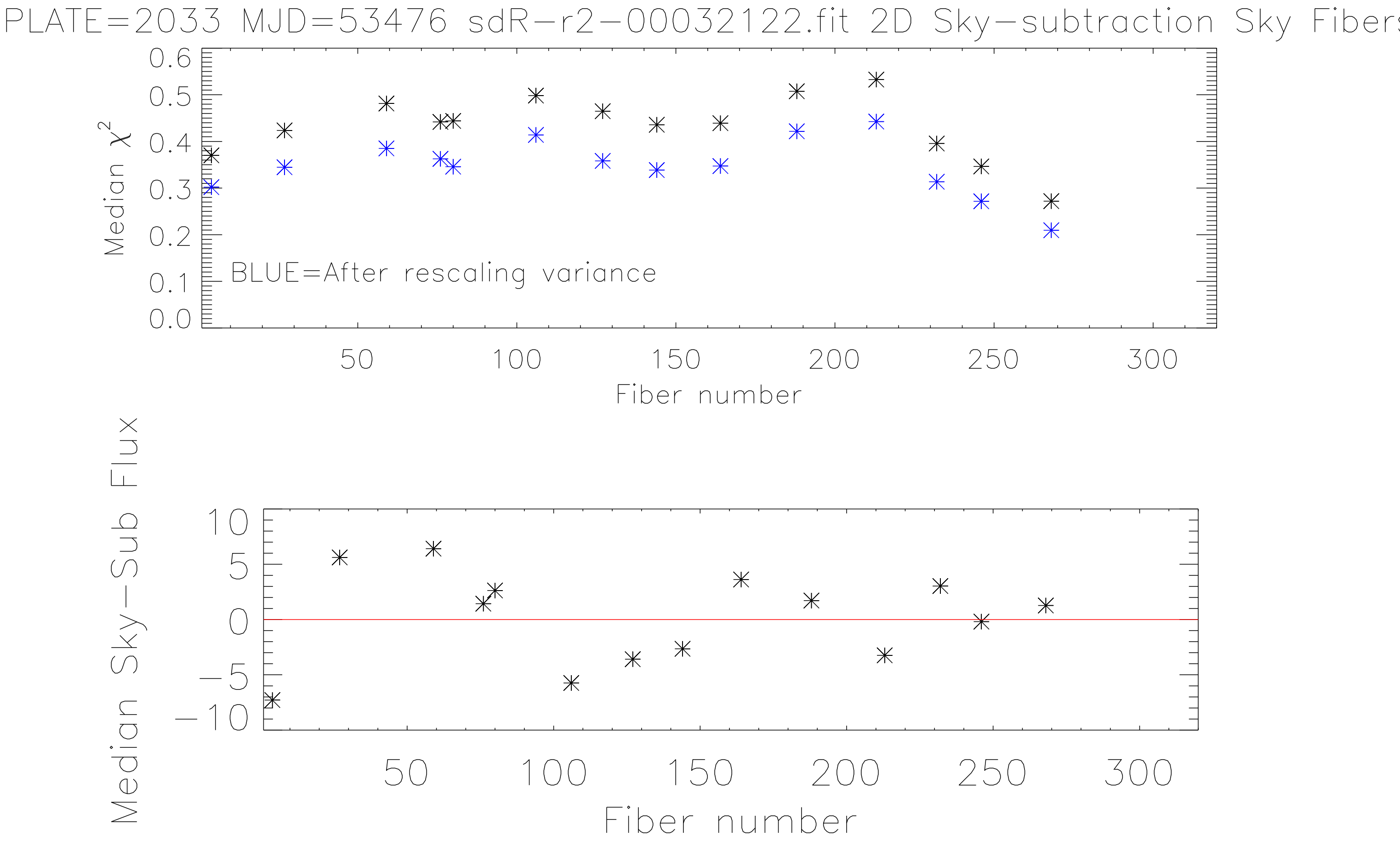

PLATE=2033 MJD=53476 sdR-r2-00032122.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

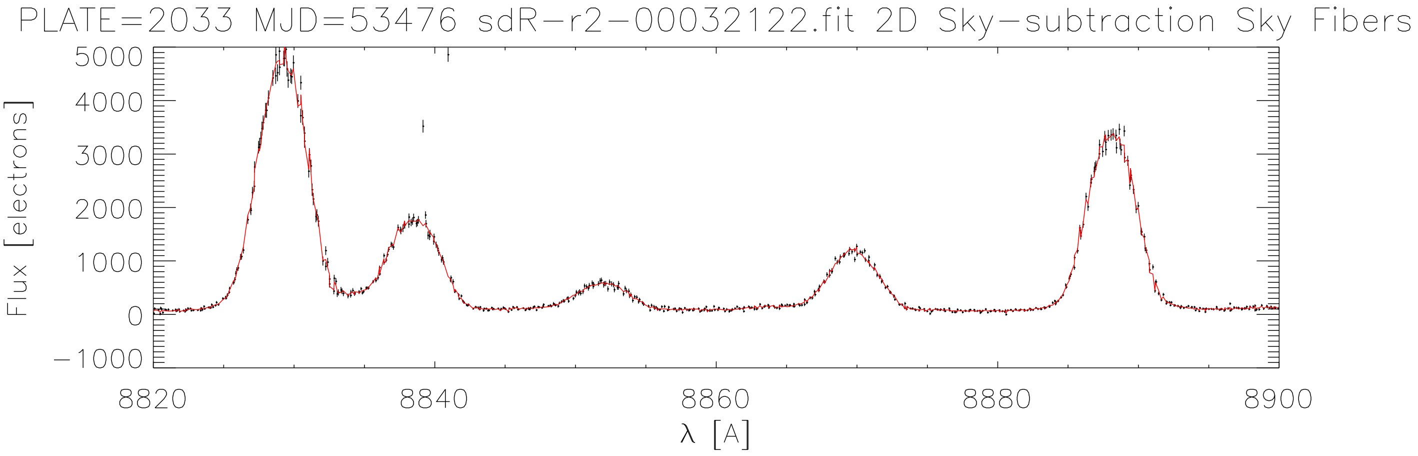

PLATE=2033 MJD=53476 sdR-r2-00032122.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
5000
4000
3000
2000
1000
0
−1000
8820
8840
8860
8880
8900
λ [A]

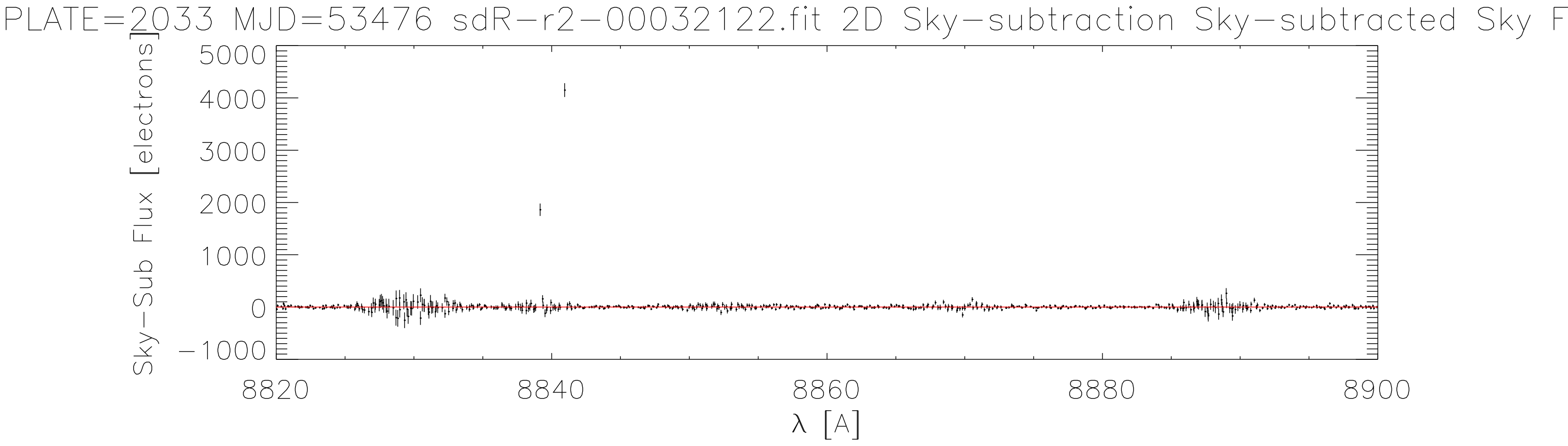
Number of sky fibers = 14

PLATE=2033 MJD=53476 sdR-r2-00032122.fit 1D Sky-subtraction Rescaled Errors



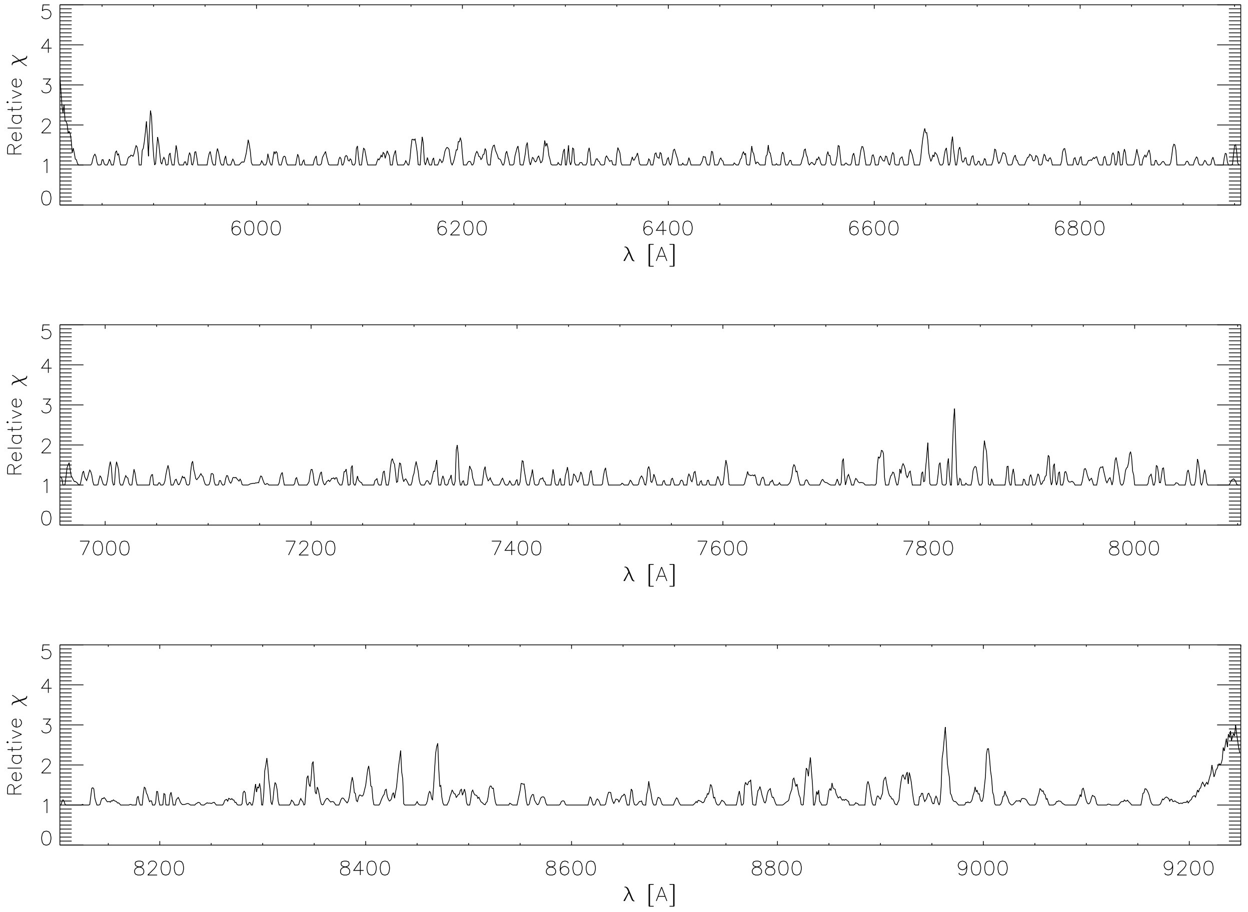

PLATE=2033 MJD=53476 sdR-r2-00032122.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0.0
0.1
0.2
0.3
0.4
0.5
0.6
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

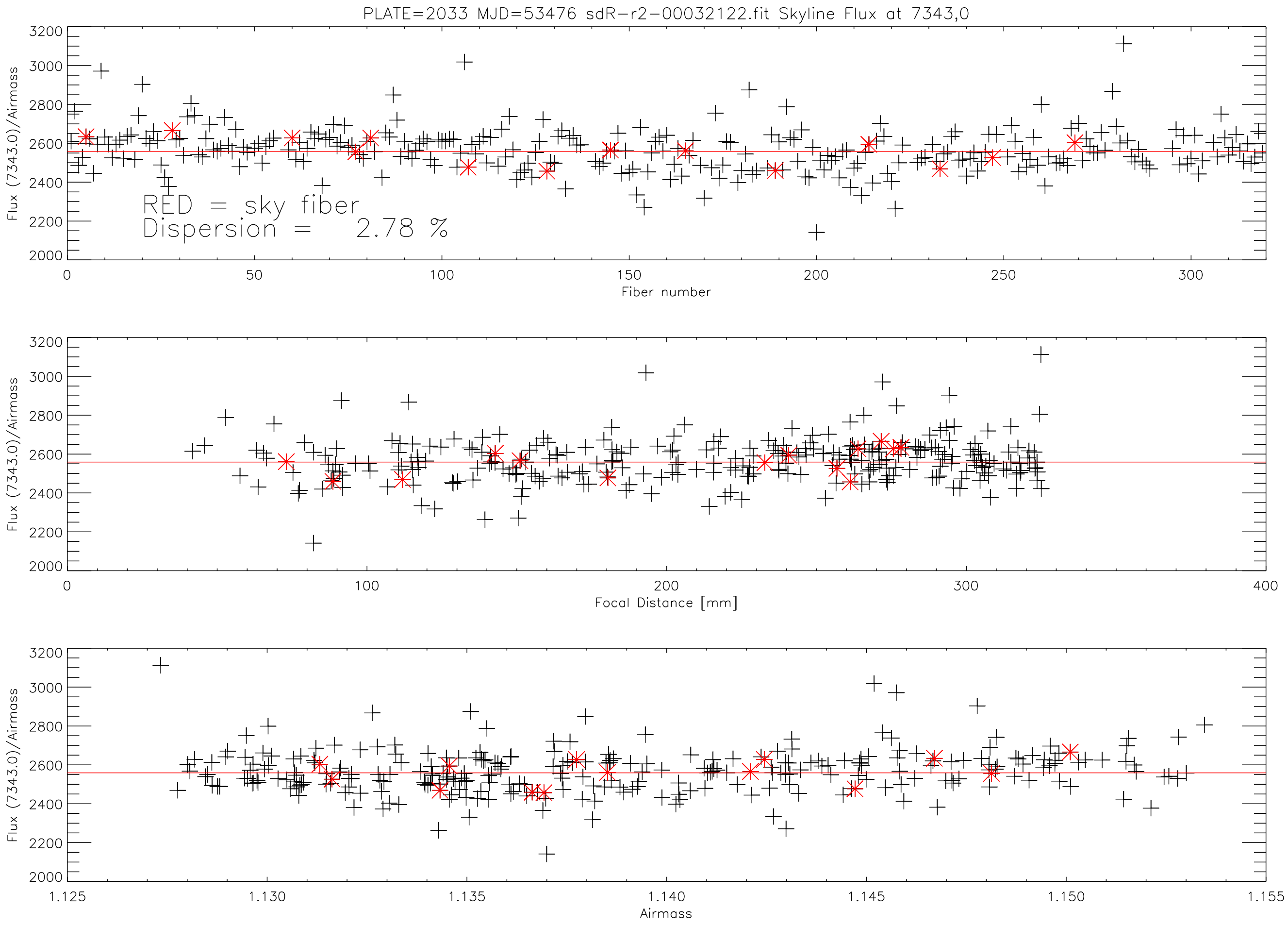

PLATE=2033 MJD=53476 sdR-r2-00032122.fit 2D Sky-subtraction Sky Fibers

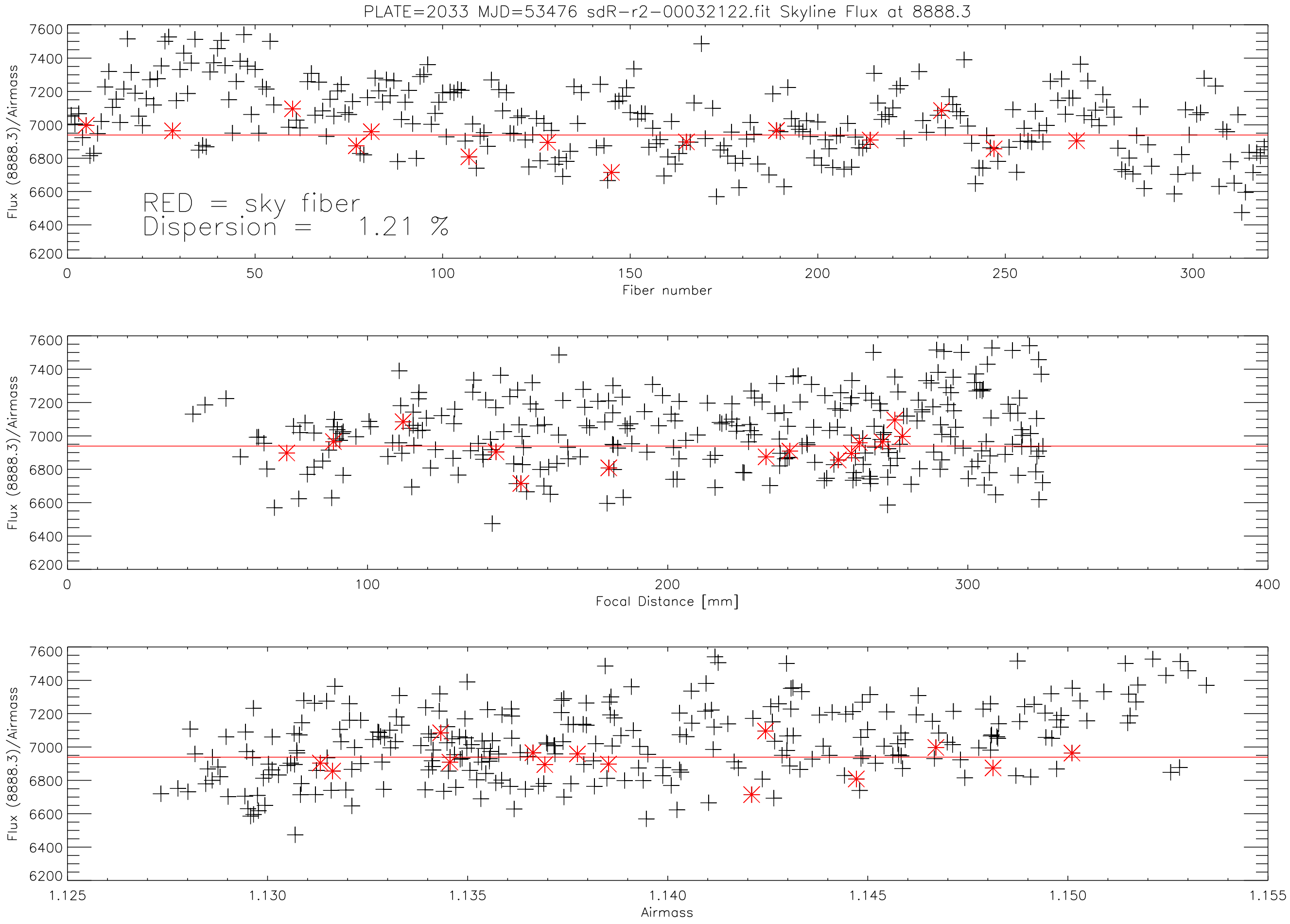

PLATE=2033 MJD=53476 sdR-r2-00032122.fit 2D Sky-subtraction Sky-subtracted Sky F

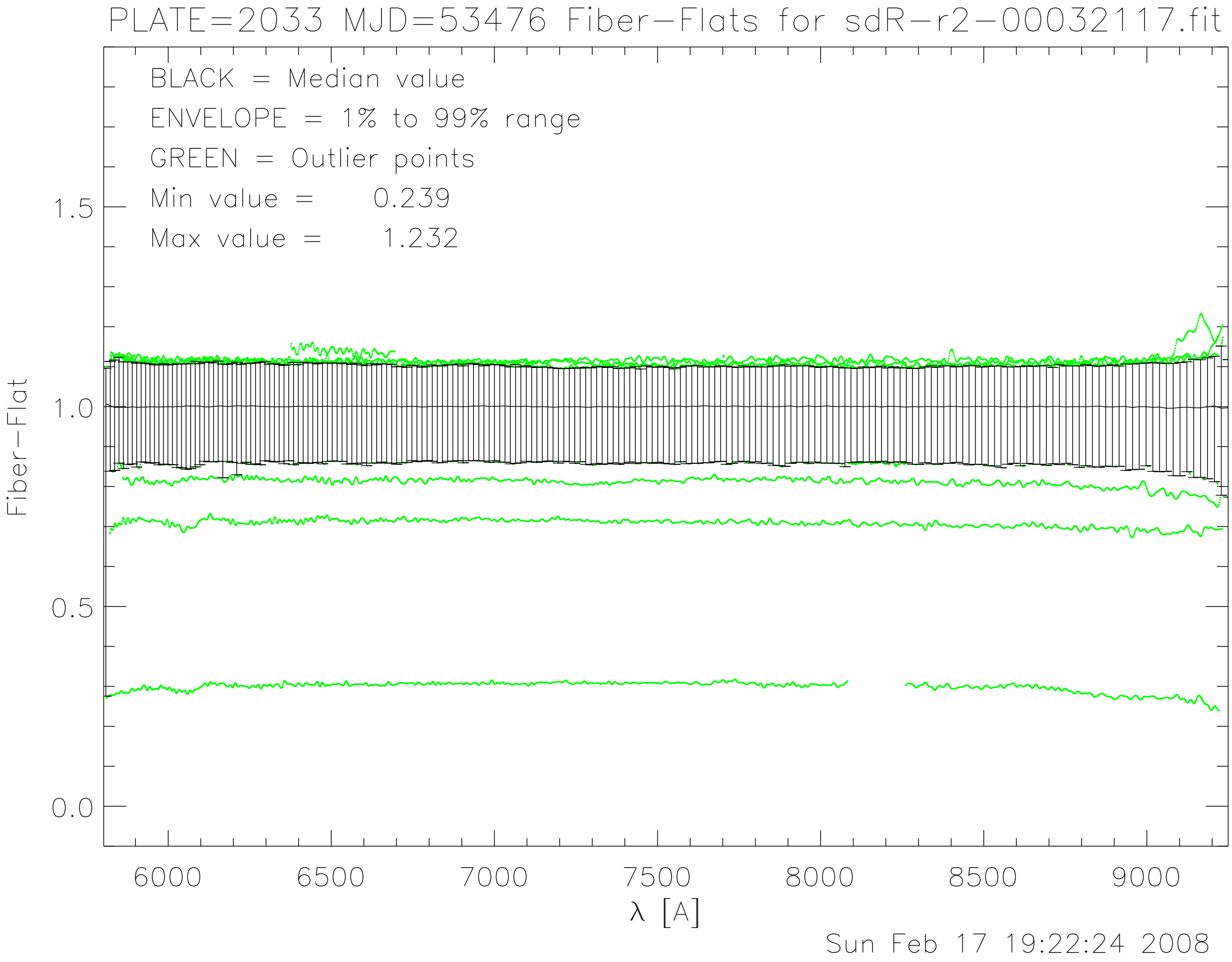
Number of sky fibers = 14

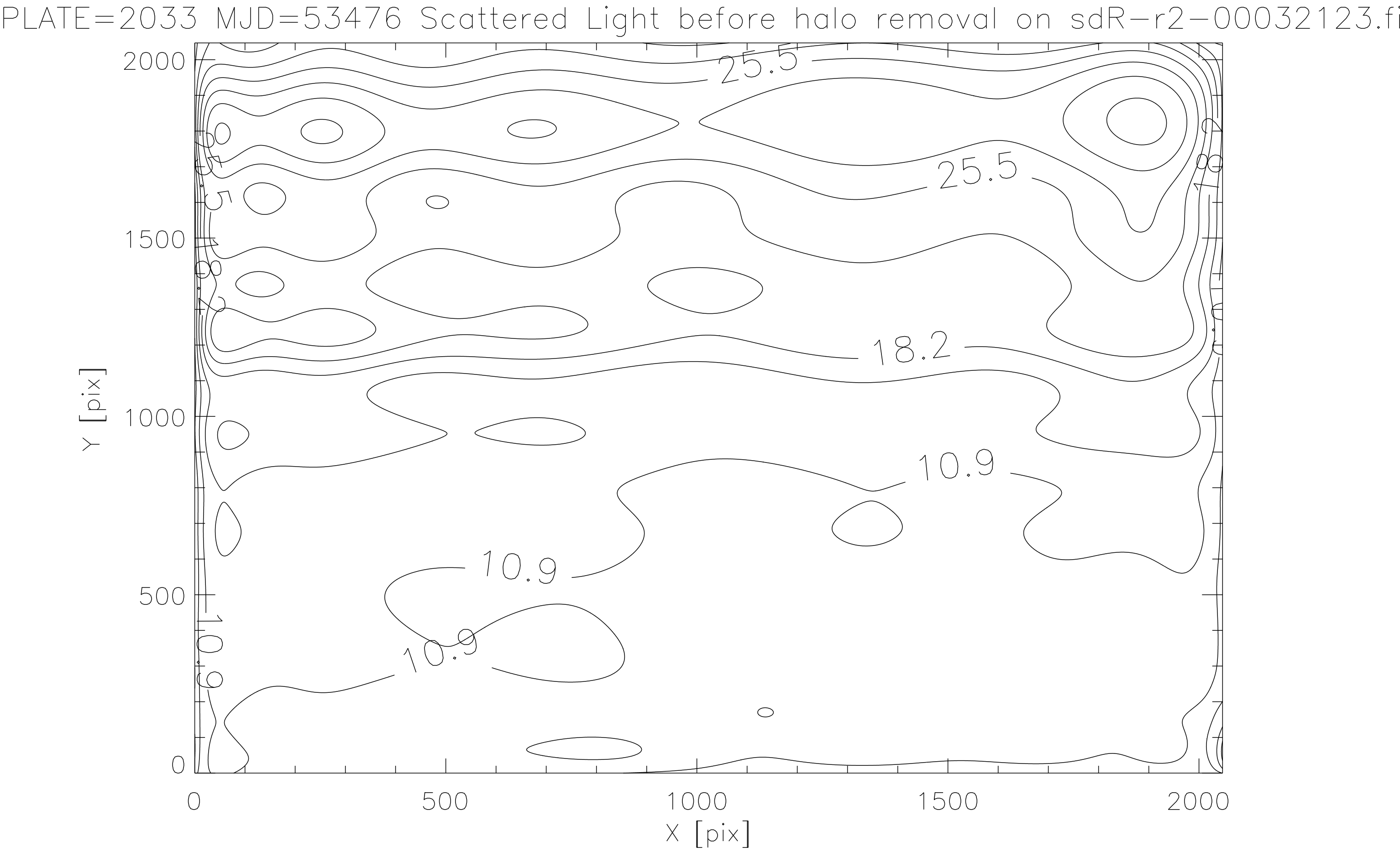
PLATE=2033 MJD=53476 sdR-r2-00032122.fit 2D Sky-subtraction Rescaled Errors



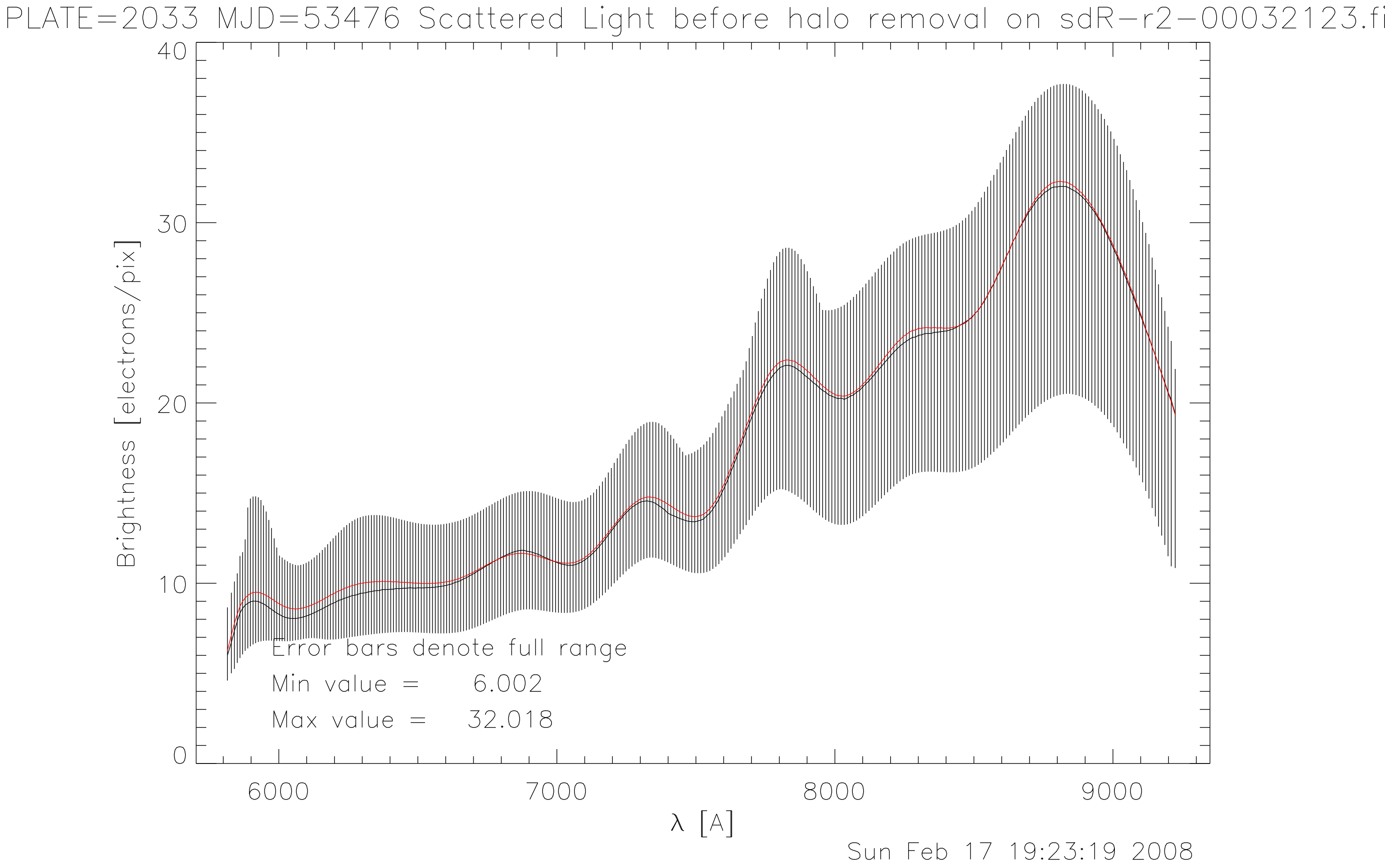

PLATE=2033 MJD=53476 sdR-r2-00032122.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
2000
RED = sky fiber
Dispersion = 2.78 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
2000
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
3200
3000
2800
2600
2400
2200
2000
1.125
1.130
1.135
1.140
1.145
1.150
1.155
Airmass

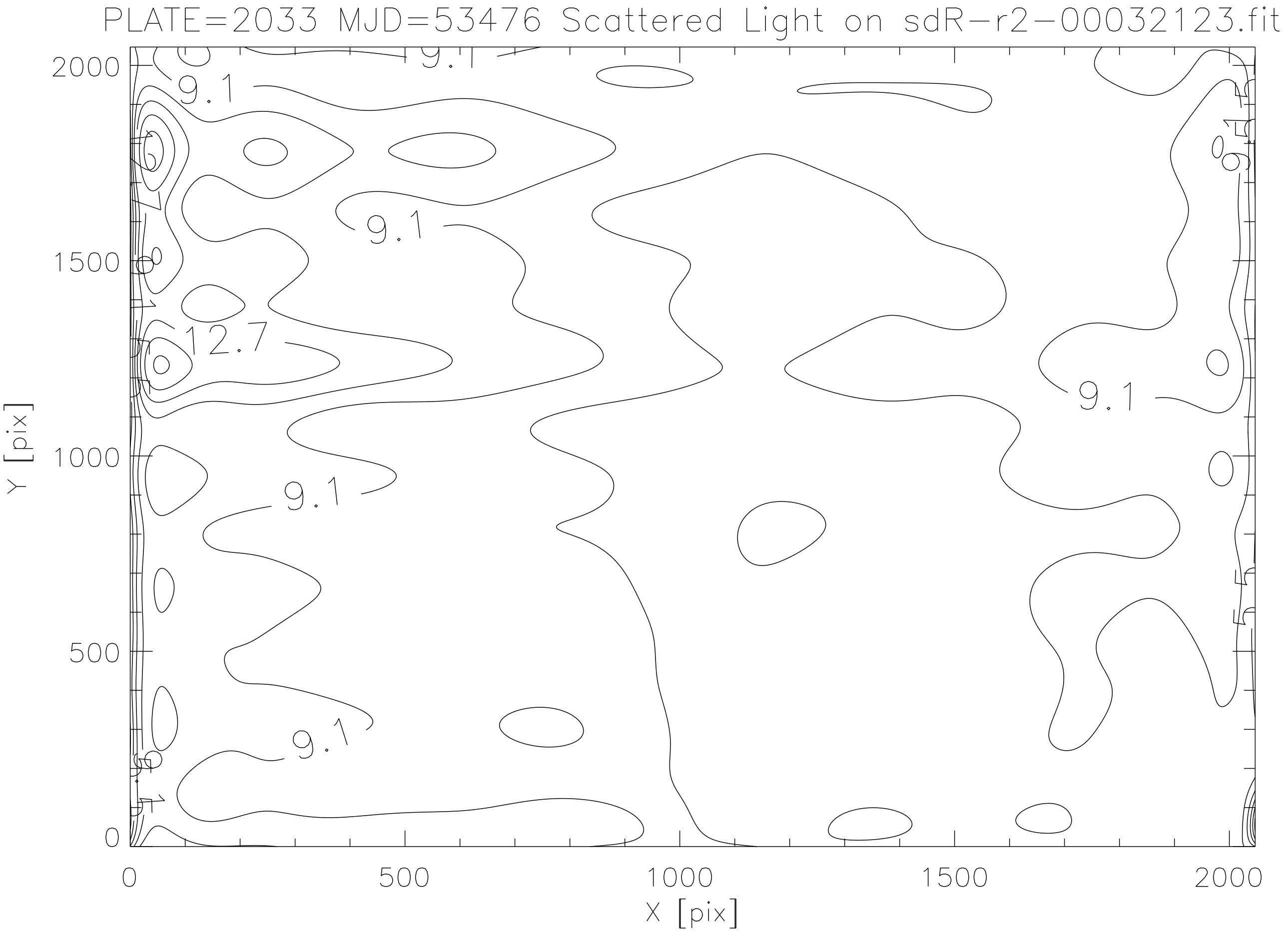

PLATE=2033 MJD=53476 sdR-r2-00032122.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
7600
7400
7200
7000
6800
6600
6400
6200
RED = sky fiber
Dispersion = 1.21 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
1.125
1.130
1.135
1.140
1.145
1.150
1.155
Airmass

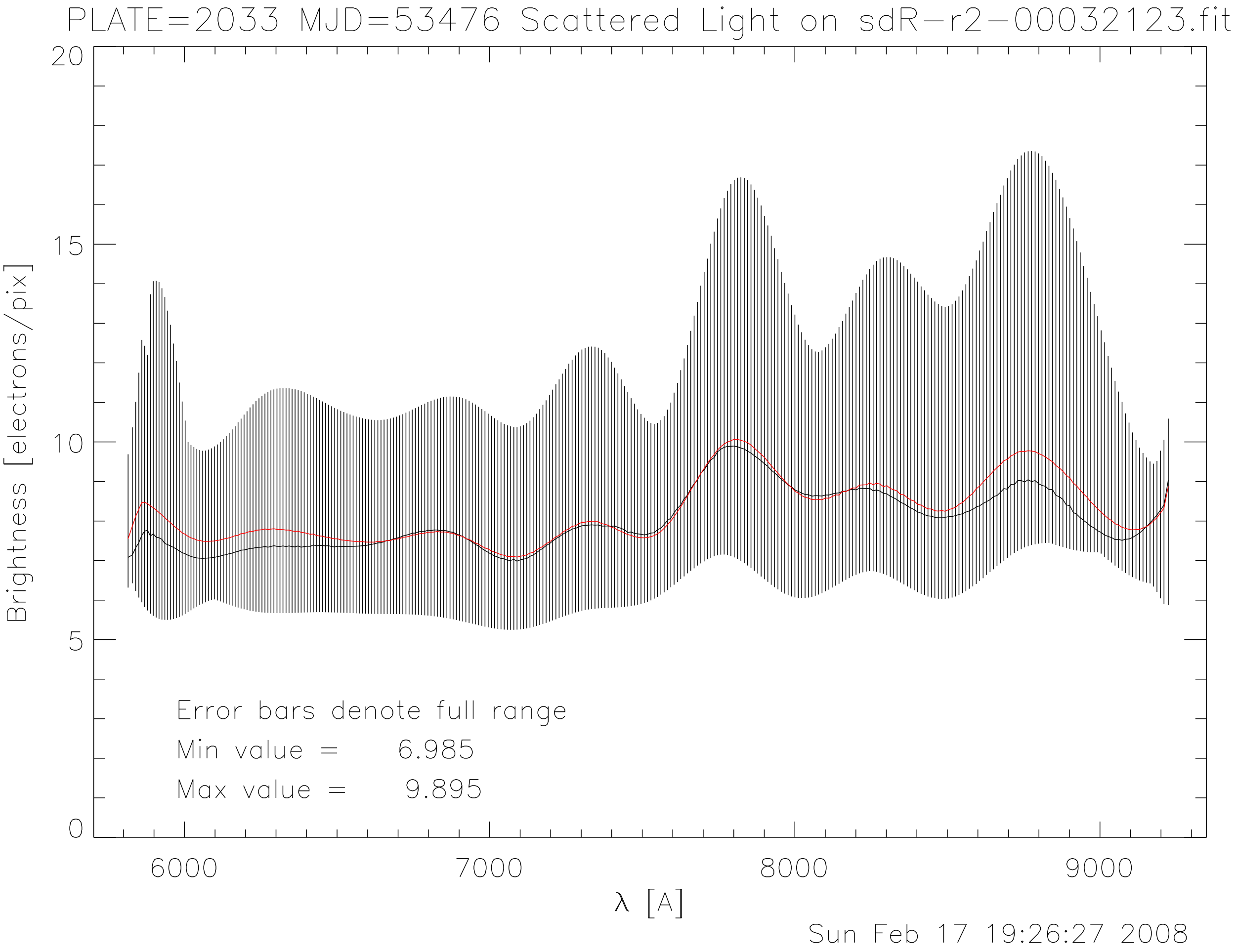

PLATE=2033 MJD=53476 Fiber−Flats for sdR−r2−00032117.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.239
Max value = 1.232
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Sun Feb 17 19:22:24 2008

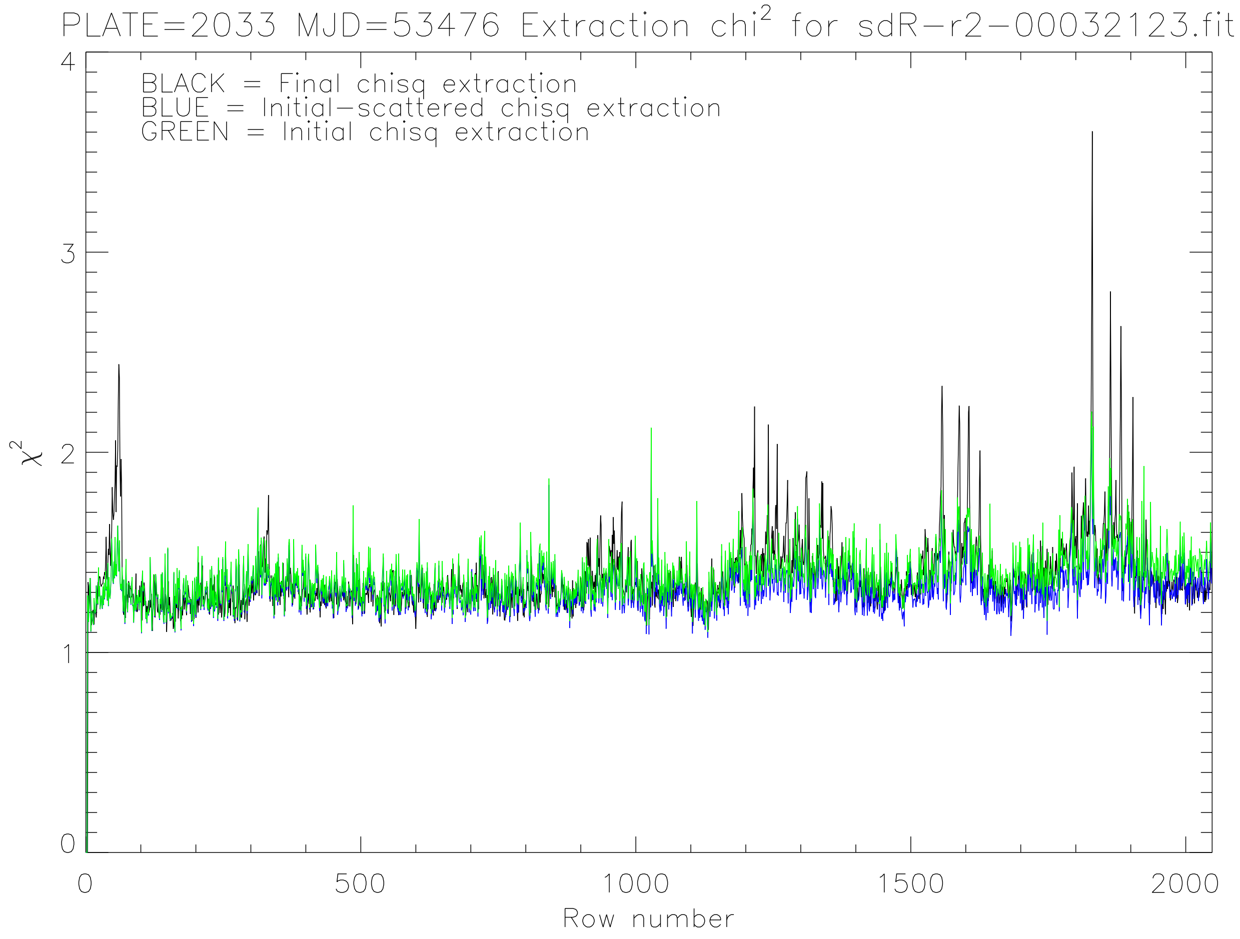


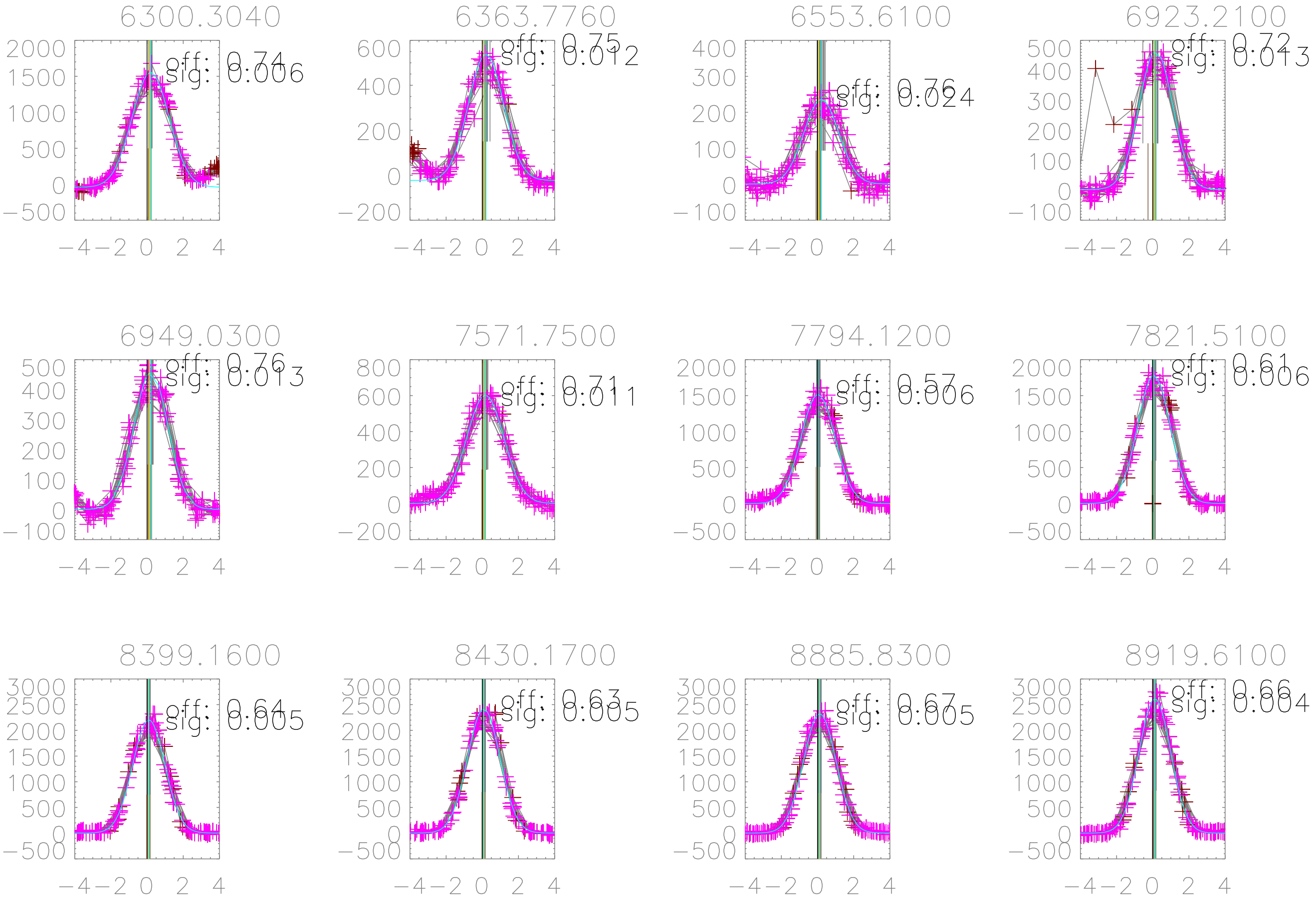
PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r2-00032123.fi

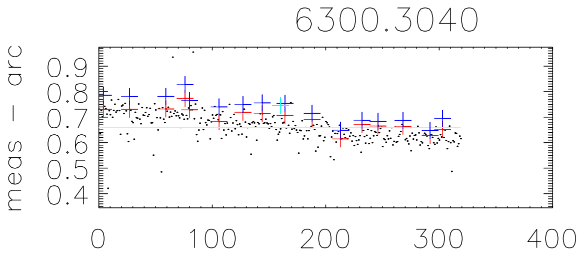

PLATE=2033 MJD=53476 Scattered Light before halo removal on sdR-r2-00032123.fi
Brightness [electrons/pix]
40
30
20
10
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.002
Max value = 32.018
Sun Feb 17 19:23:19 2008

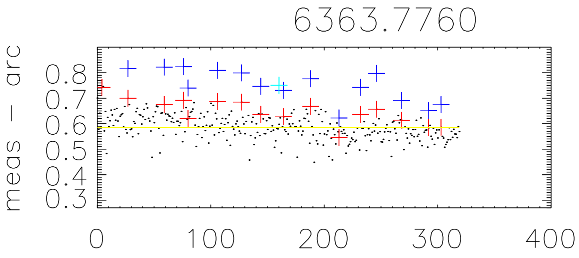

PLATE=2033 MJD=53476 Scattered Light on sdR-r2-00032123.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
9.1
9.1
9.1
12.7
9.1
9.1
9.1
9.1

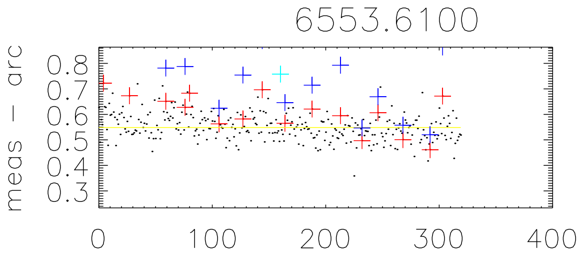

PLATE=2033 MJD=53476 Scattered Light on sdR-r2-00032123.fit
Brightness [electrons/pix]
0
5
10
15
20
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.985
Max value = 9.895
Sun Feb 17 19:26:27 2008

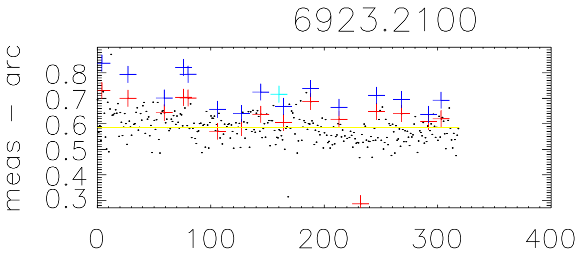

PLATE=2033 MJD=53476 Extraction chi^2 for sdR-r2-00032123.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
0
500
1000
1500
2000
Row number

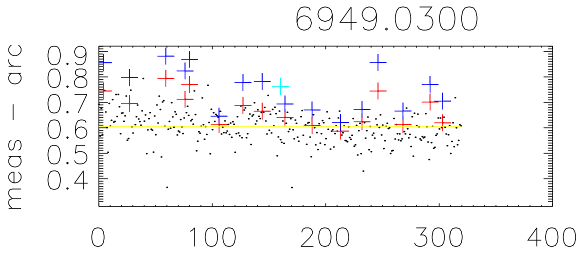

6300.3040
off: 0.74
sig: 0.006
6363.7760
off: 0.75
sig: 0.012
6553.6100
off: 0.76
sig: 0.024
6923.2100
off: 0.72
sig: 0.013
6949.0300
off: 0.76
sig: 0.013
7571.7500
off: 0.71
sig: 0.011
7794.1200
off: 0.57
sig: 0.006
7821.5100
off: 0.61
sig: 0.006
8399.1600
off: 0.64
sig: 0.005
8430.1700
off: 0.63
sig: 0.005
8885.8300
off: 0.67
sig: 0.005
8919.6100
off: 0.66
sig: 0.004
−4 −2 0 2 4

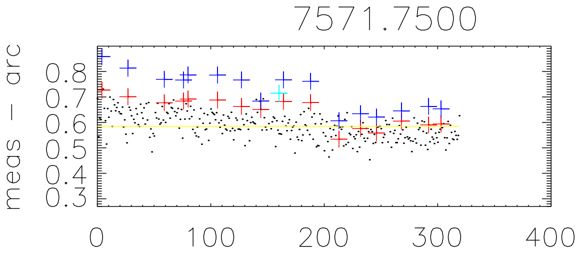

6300.3040
meas - arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

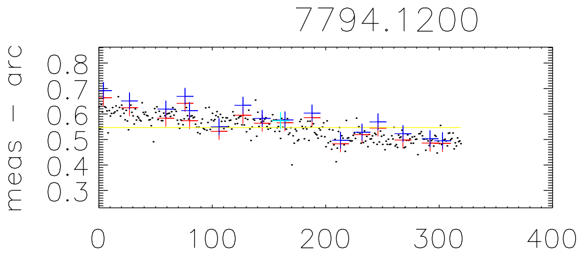

6363.7760
meas - arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

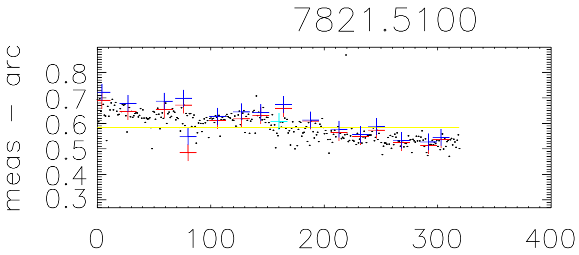

6553.6100
meas - arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

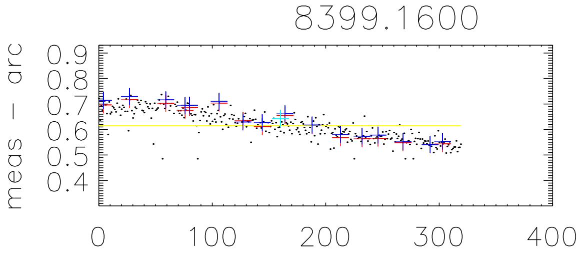

6923.2100
meas - arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

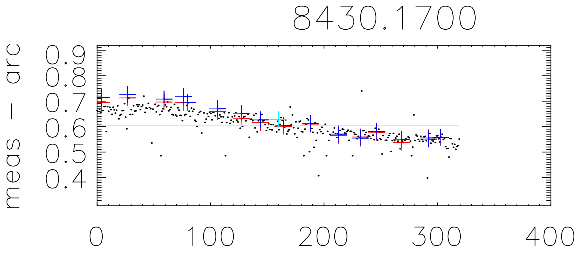

6949.0300
meas - arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

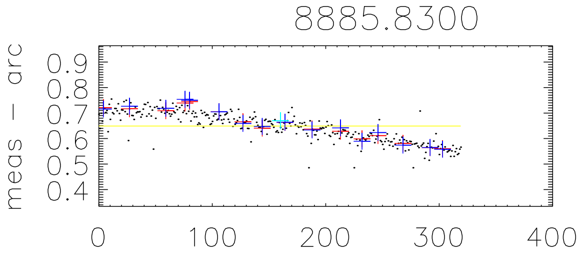

7571.7500
meas - arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

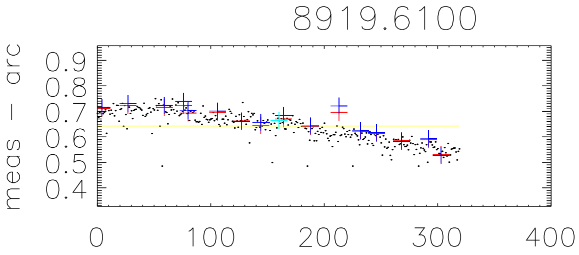

7794.1200
meas – arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

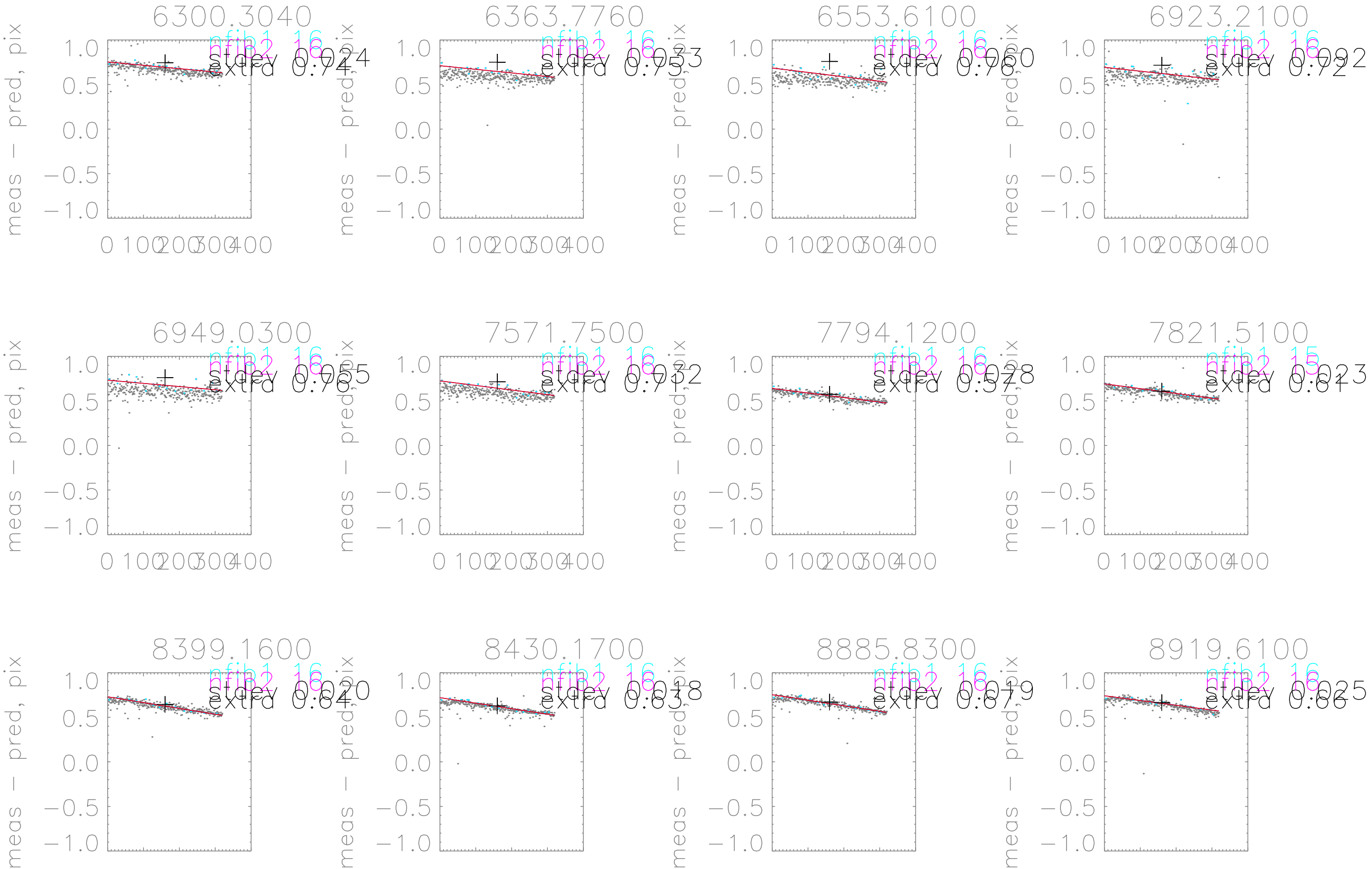

7821.5100
meas – arc
0.8
0.7
0.6
0.5
0.4
0.3
0
100
200
300
400

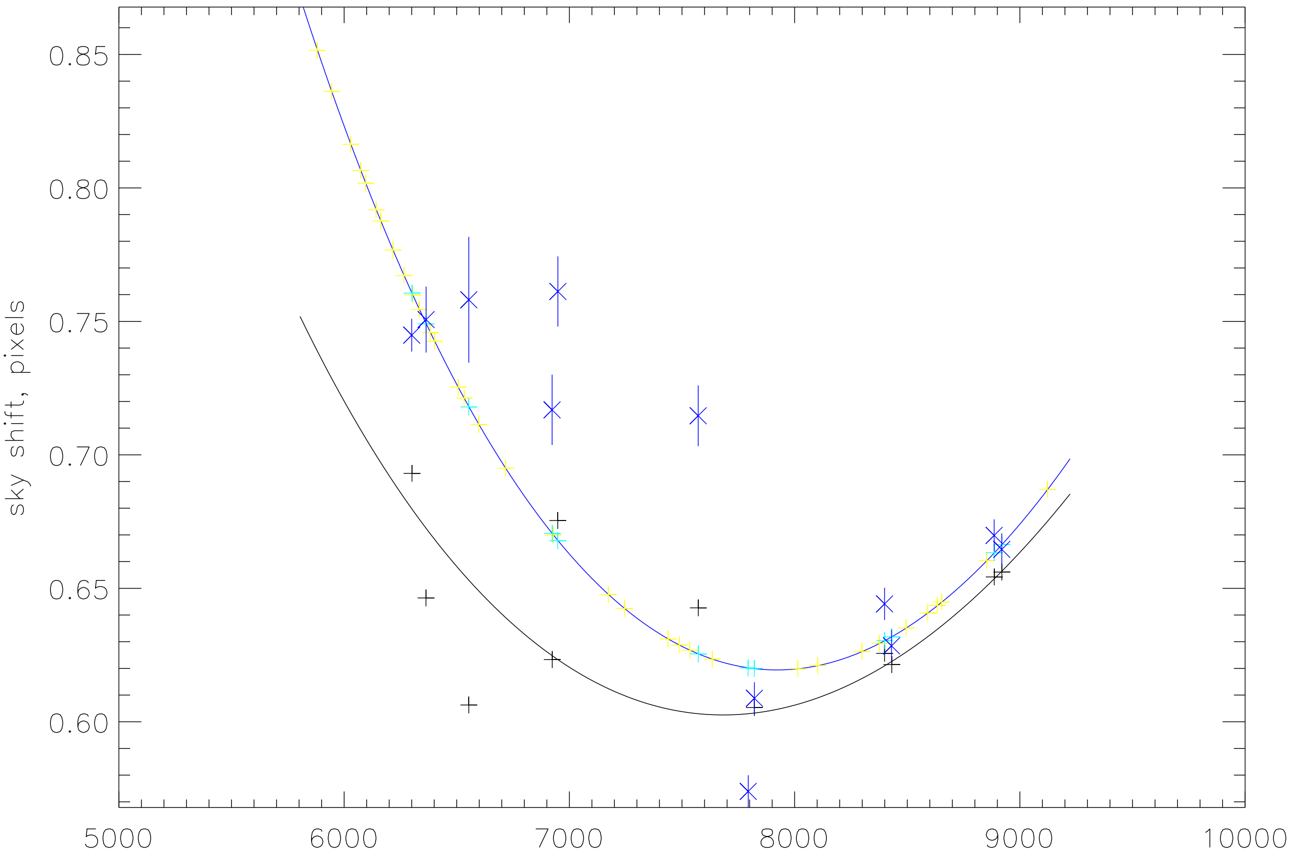

8399.1600
meas – arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

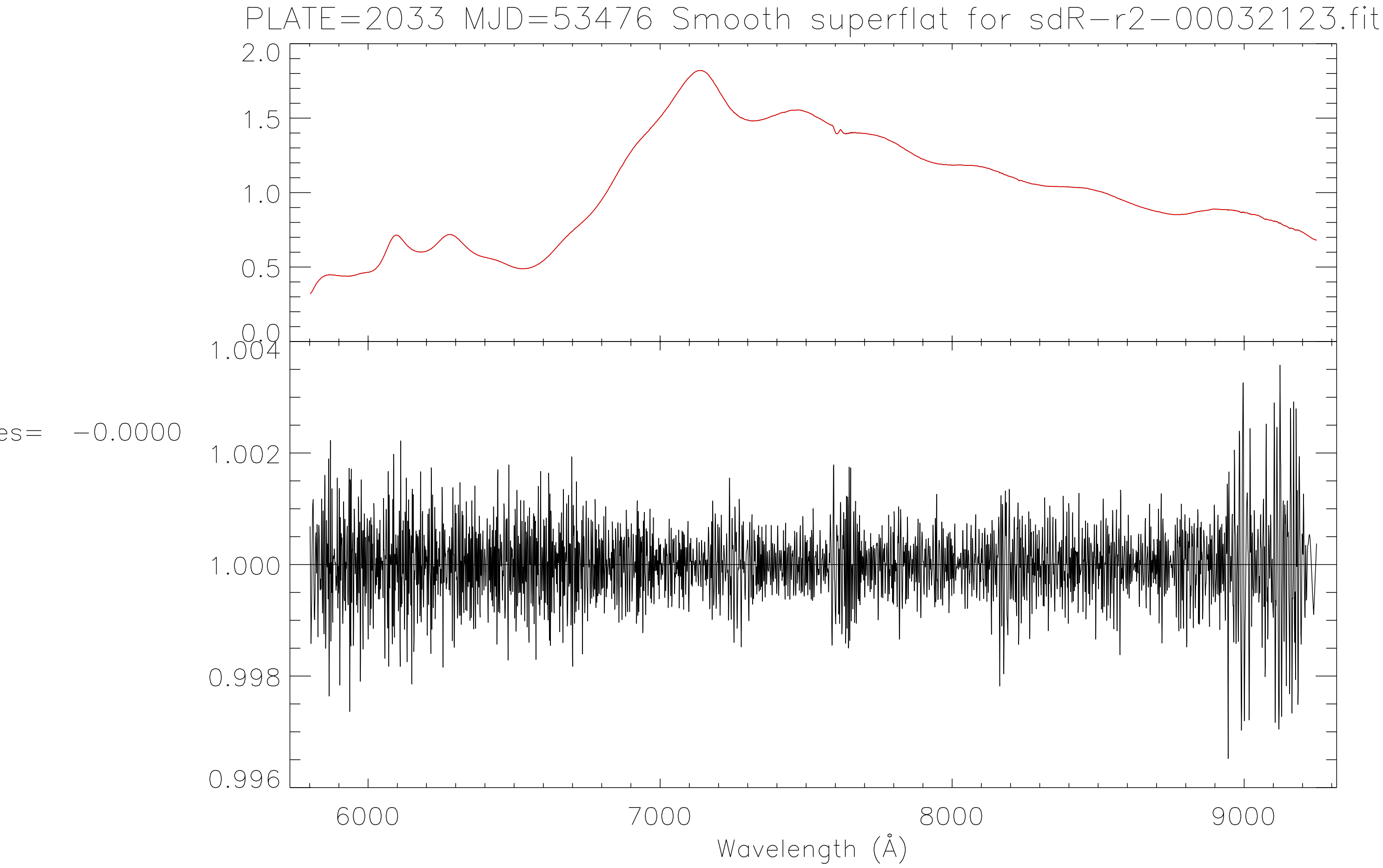

8430.1700
meas – arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

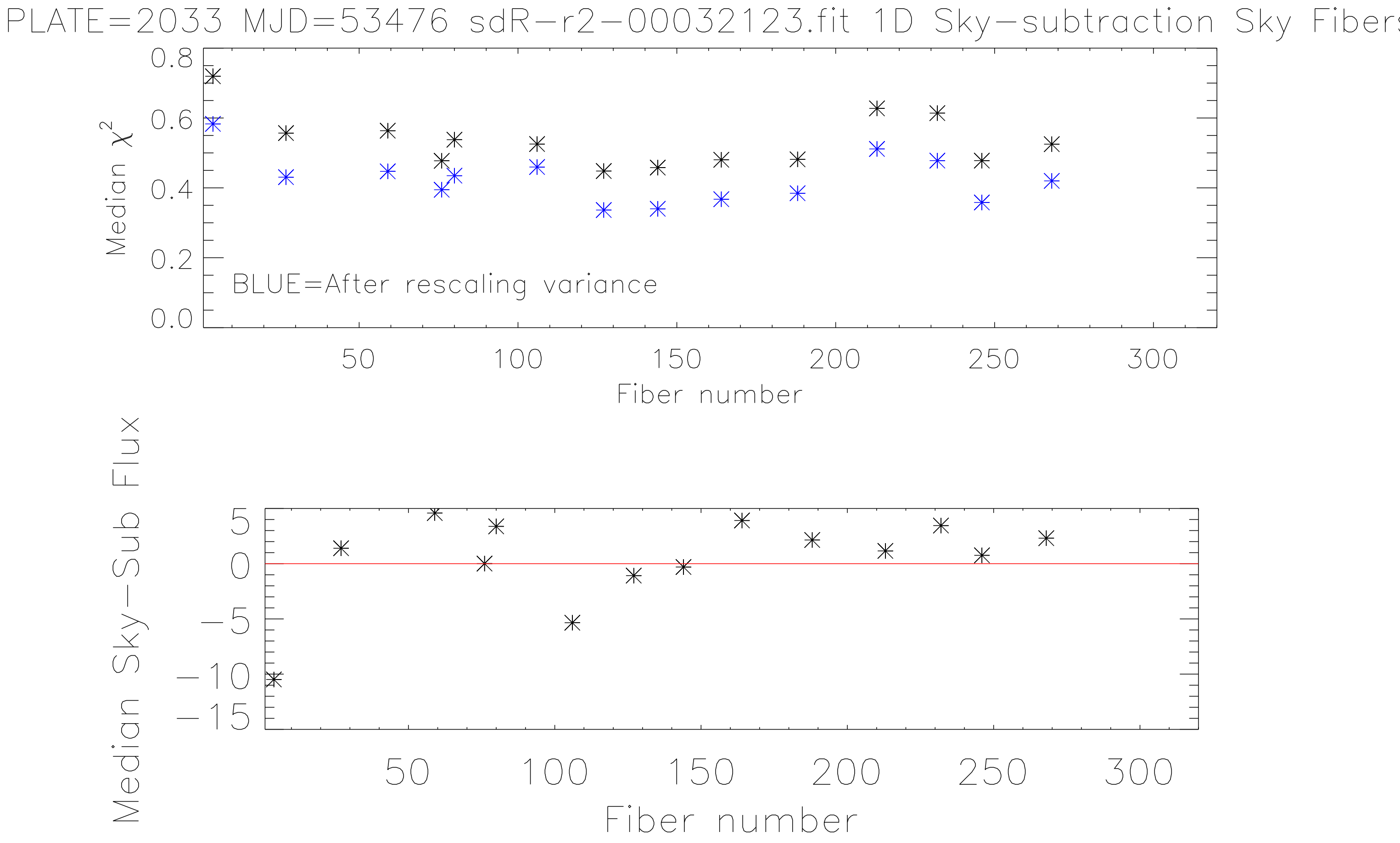

8885.8300
meas – arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

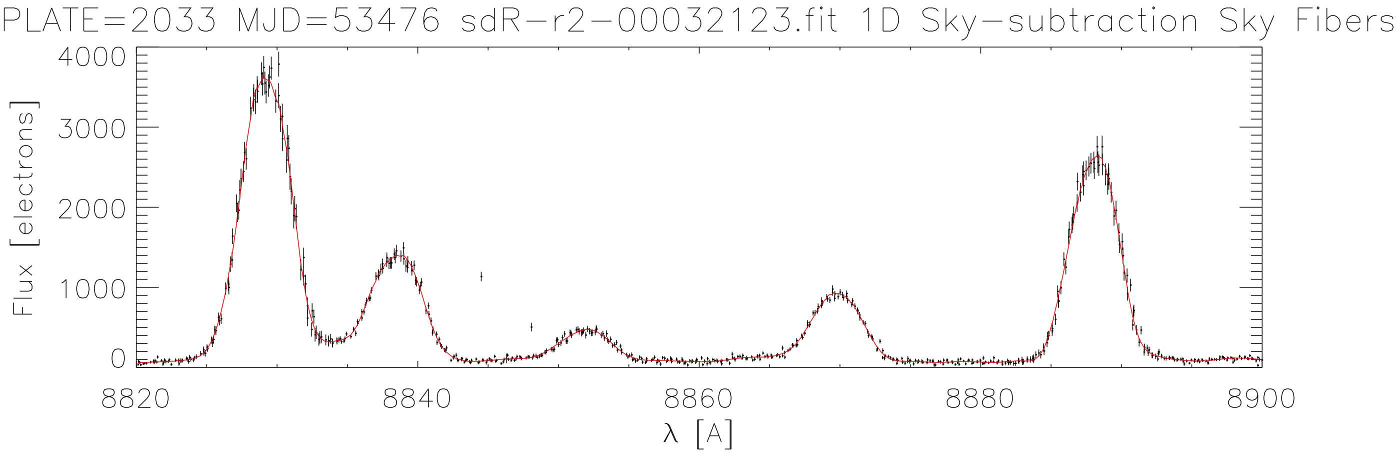

8919.6100
meas – arc
0.9
0.8
0.7
0.6
0.5
0.4
0
100
200
300
400

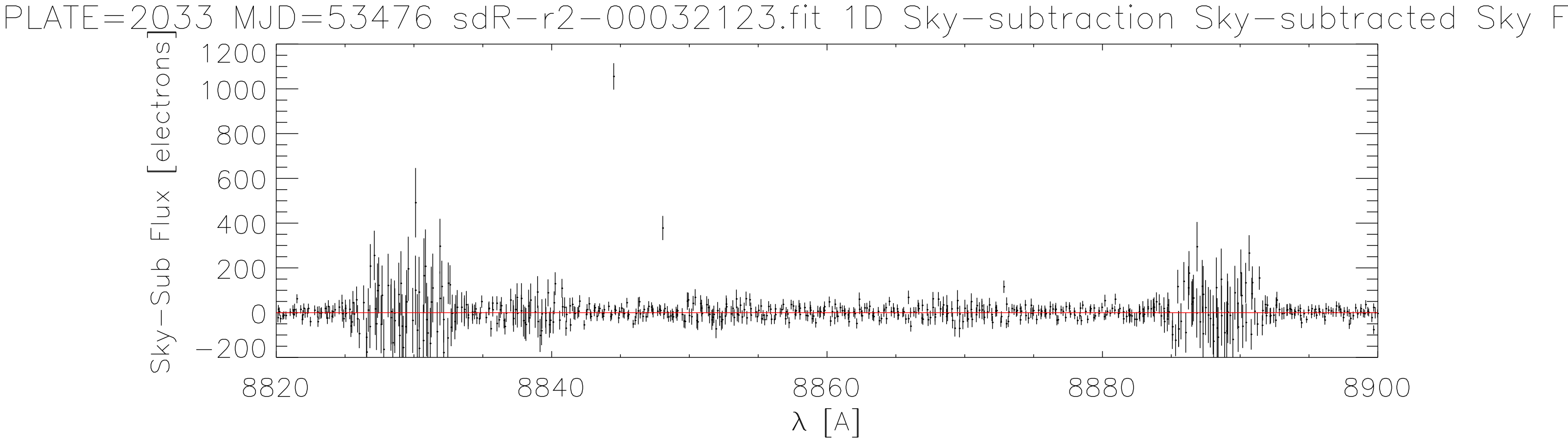

6300.3040
nfib1 16
nfib2 16
stdev 0.024
extrd 0.74
6363.7760
nfib1 16
nfib2 16
stdev 0.053
extrd 0.75
6553.6100
nfib1 16
nfib2 16
stdev 0.060
extrd 0.76
6923.2100
nfib1 16
nfib2 16
stdev 0.092
extrd 0.72
6949.0300
nfib1 16
nfib2 16
stdev 0.055
extrd 0.76
7571.7500
nfib1 16
nfib2 16
stdev 0.032
extrd 0.71
7794.1200
nfib1 16
nfib2 16
stdev 0.028
extrd 0.57
7821.5100
nfib1 15
nfib2 15
stdev 0.023
extrd 0.61
8399.1600
nfib1 16
nfib2 16
stdev 0.020
extrd 0.64
8430.1700
nfib1 16
nfib2 16
stdev 0.018
extrd 0.63
8885.8300
nfib1 16
nfib2 16
stdev 0.019
extrd 0.67
8919.6100
nfib1 16
nfib2 16
stdev 0.025
extrd 0.66
meas – pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


sky shift, pixels
0.85
0.80
0.75
0.70
0.65
0.60
5000
6000
7000
8000
9000
10000


PLATE=2033 MJD=53476 Smooth superflat for sdR-r2-00032123.fit
2.0
1.5
1.0
0.5
0.0
1.004
1.002
1.000
0.998
0.996
es=   −0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=2033 MJD=53476 sdR-r2-00032123.fit 1D Sky-subtraction Sky Fiber
Median χ^2
0.0
0.2
0.4
0.6
0.8
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number


PLATE=2033 MJD=53476 sdR-r2-00032123.fit 1D Sky-subtraction Sky Fibers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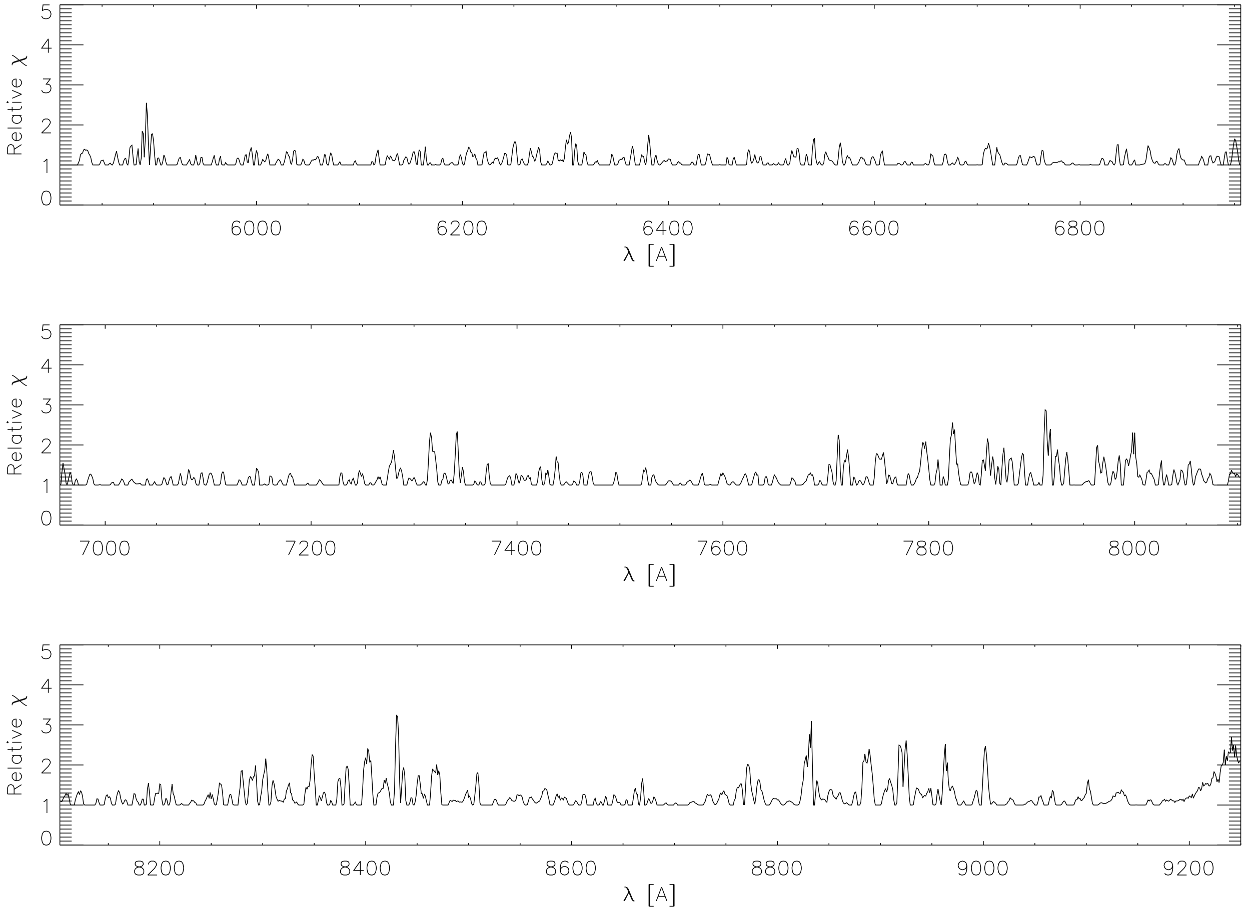
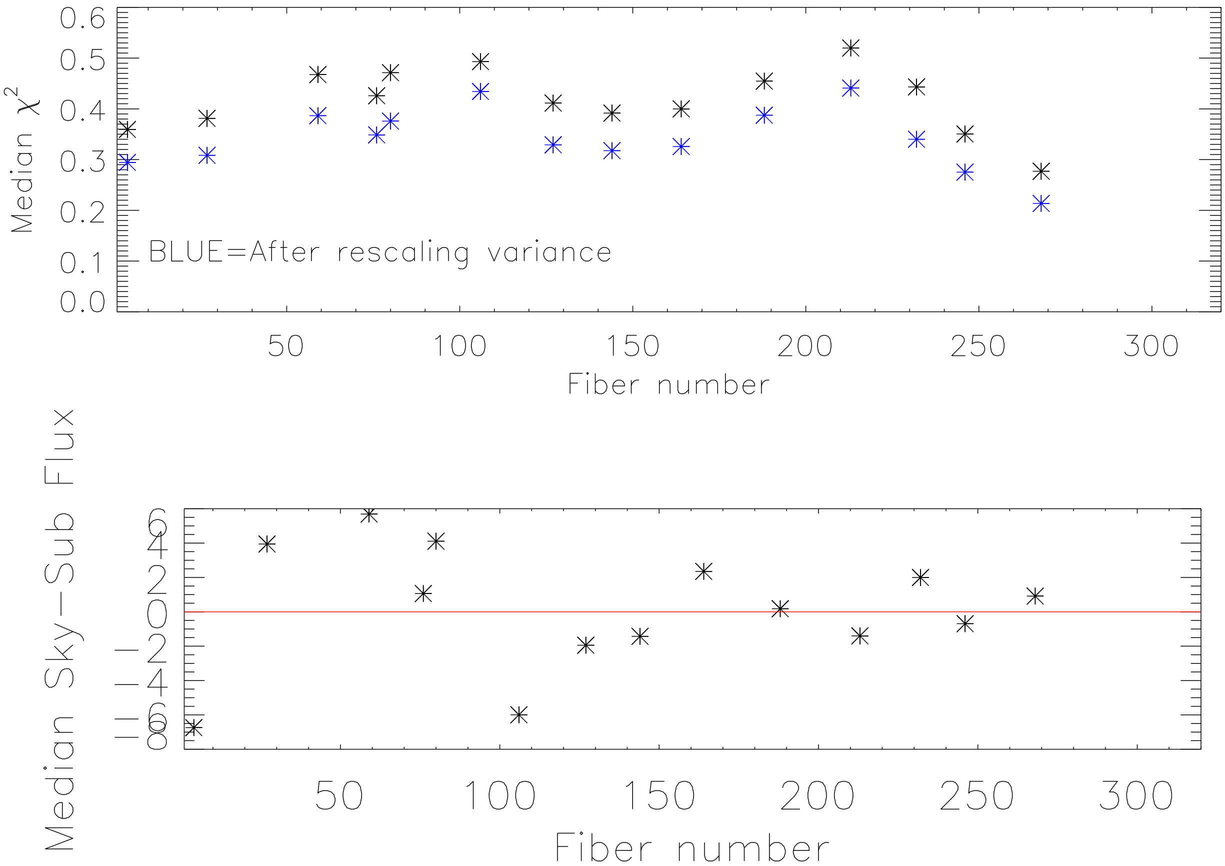


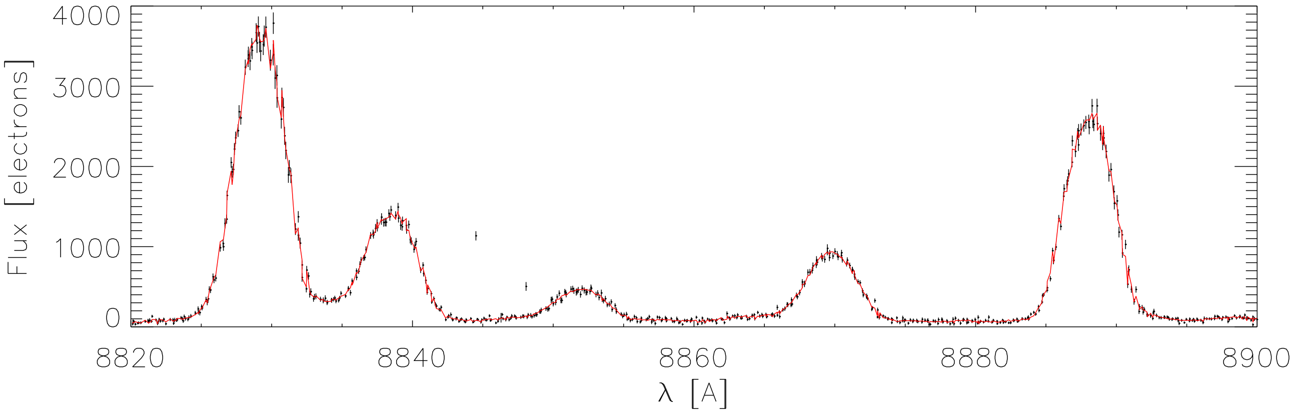
Number of sky fibers = 14

PLATE=2033 MJD=53476 sdR-r2-00032123.fit 1D Sky-subtraction Rescaled Errors

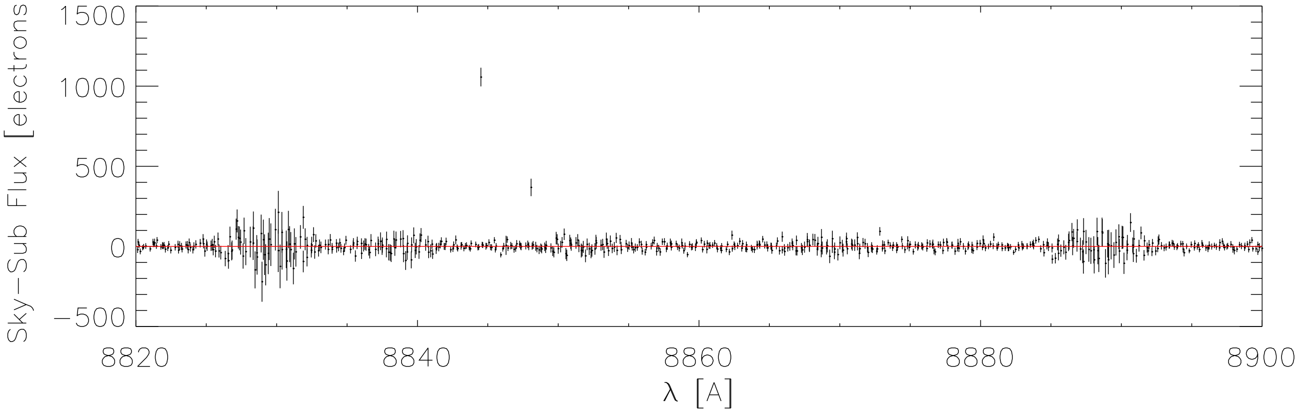


PLATE=2033 MJD=53476 sdR-r2-00032123.fit 2D Sky-subtraction Sky Fiber

PLATE=2033 MJD=53476 sdR-r2-00032123.fit 2D Sky−subtraction Sky Fibers

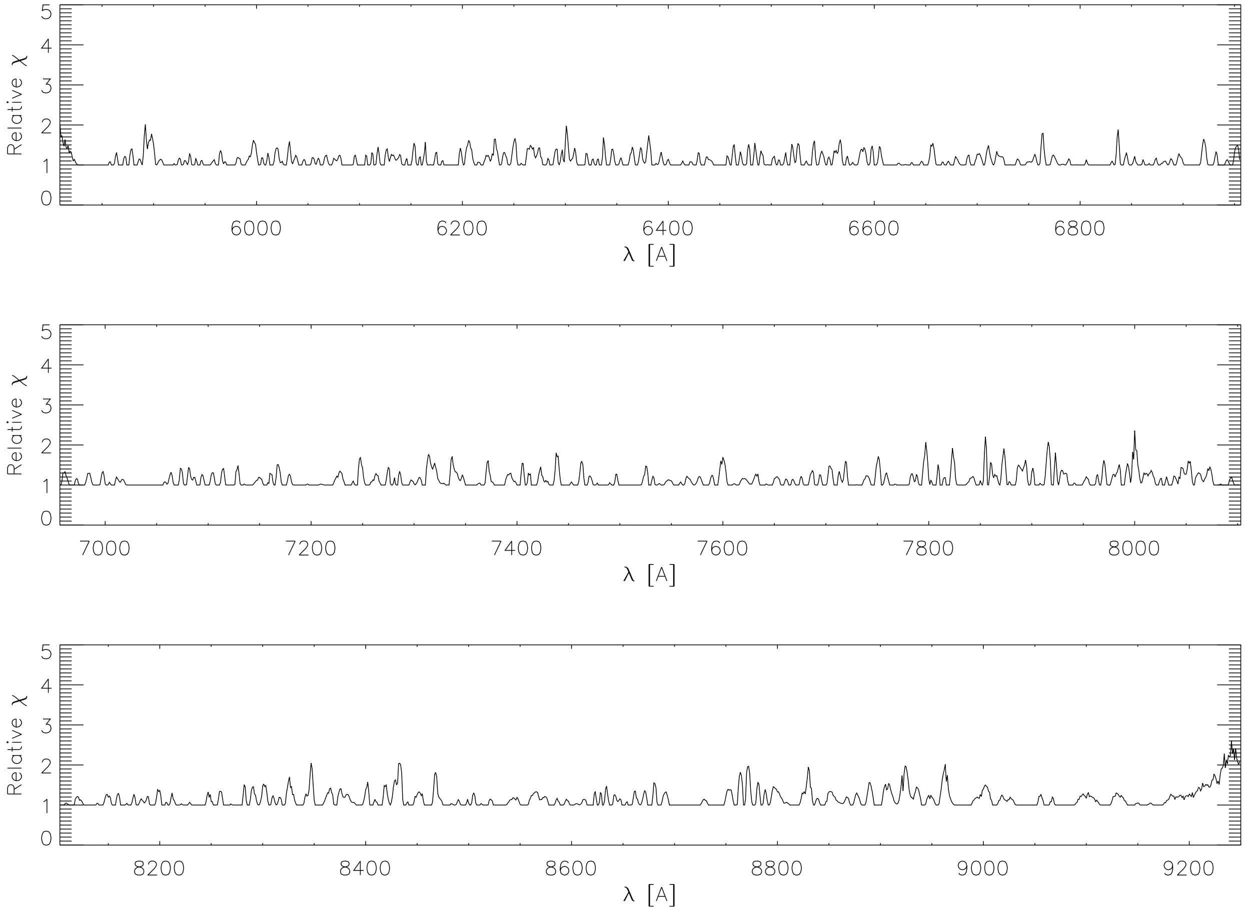


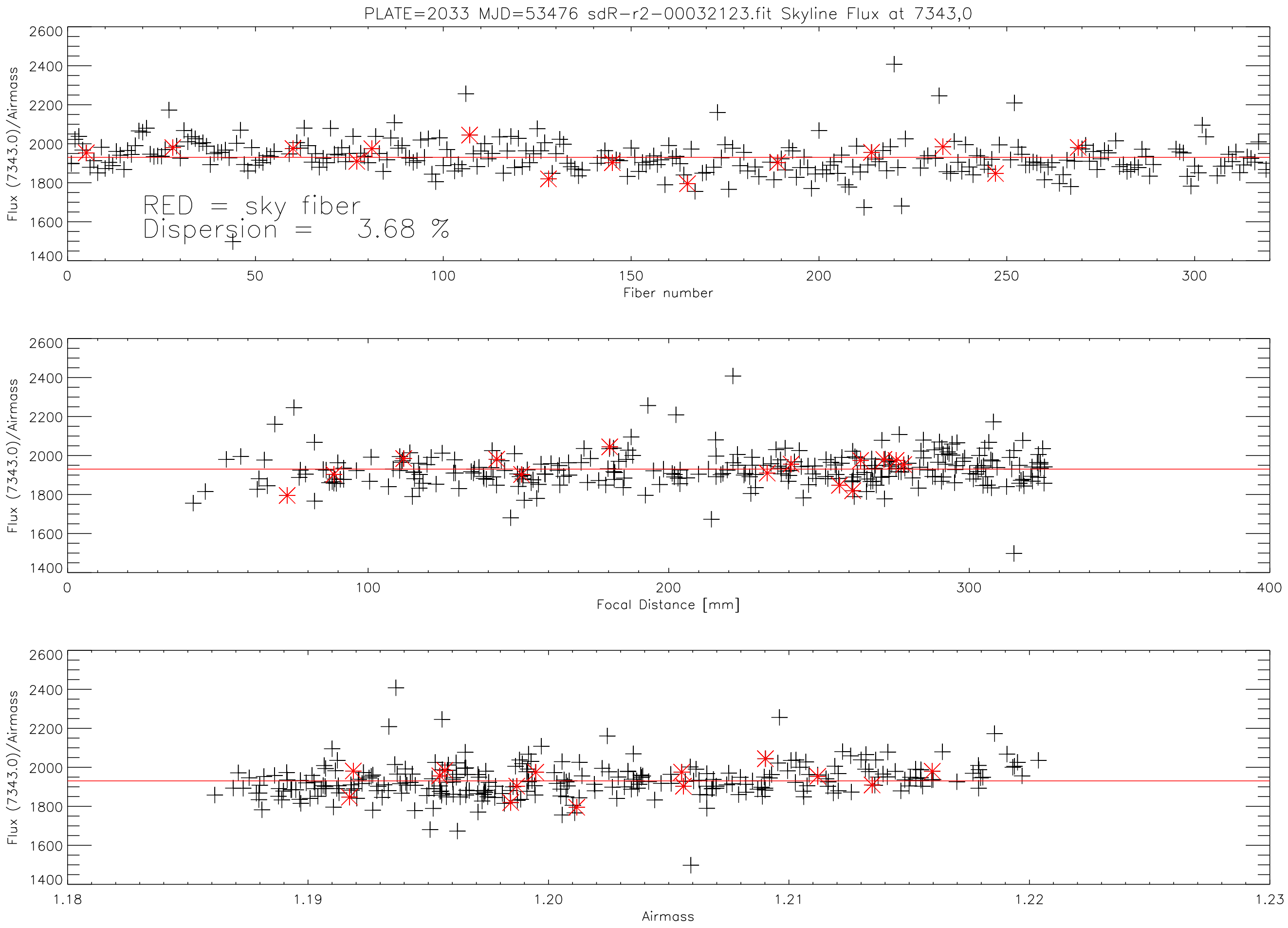
PLATE=2033 MJD=53476 sdR-r2-00032123.fit 2D Sky−subtraction Sky−subtracted Sky F

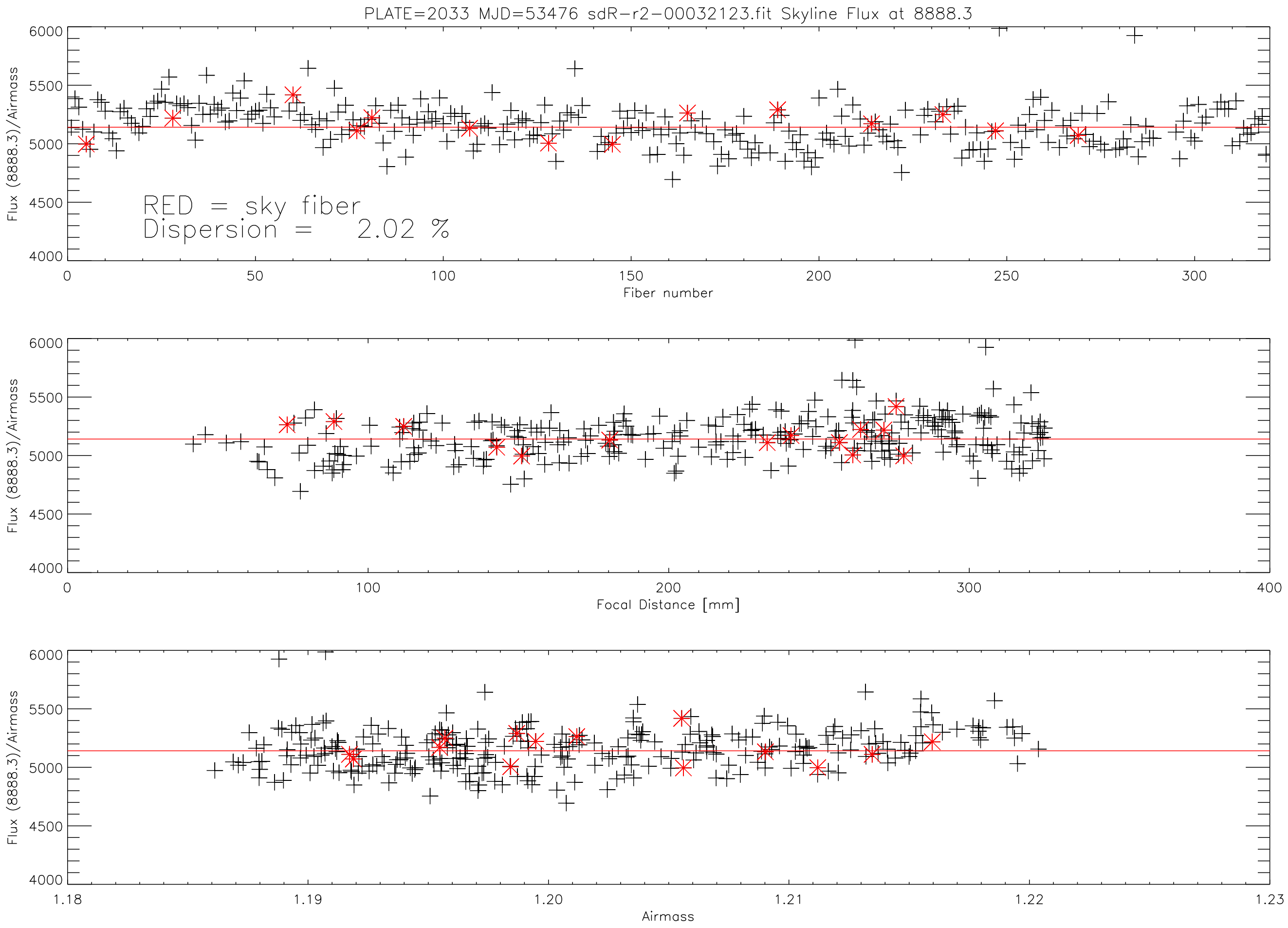


Number of sky fibers = 14

PLATE=2033 MJD=53476 sdR-r2-00032123.fit 2D Sky-subtraction Rescaled Errors




PLATE=2033 MJD=53476 sdR-r2-00032123.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
2600
2400
2200
2000
1800
1600
1400
RED = sky fiber
Dispersion = 3.68 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
2600
2400
2200
2000
1800
1600
1400
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
2600
2400
2200
2000
1800
1600
1400
1.18
1.19
1.20
1.21
1.22
1.23
Airmass


PLATE=2033 MJD=53476 sdR−r2−00032123.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
RED = sky fiber
Dispersion = 2.02 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
6000
5500
5000
4500
4000
1.18
1.19
1.20
1.21
1.22
1.23
Airmass