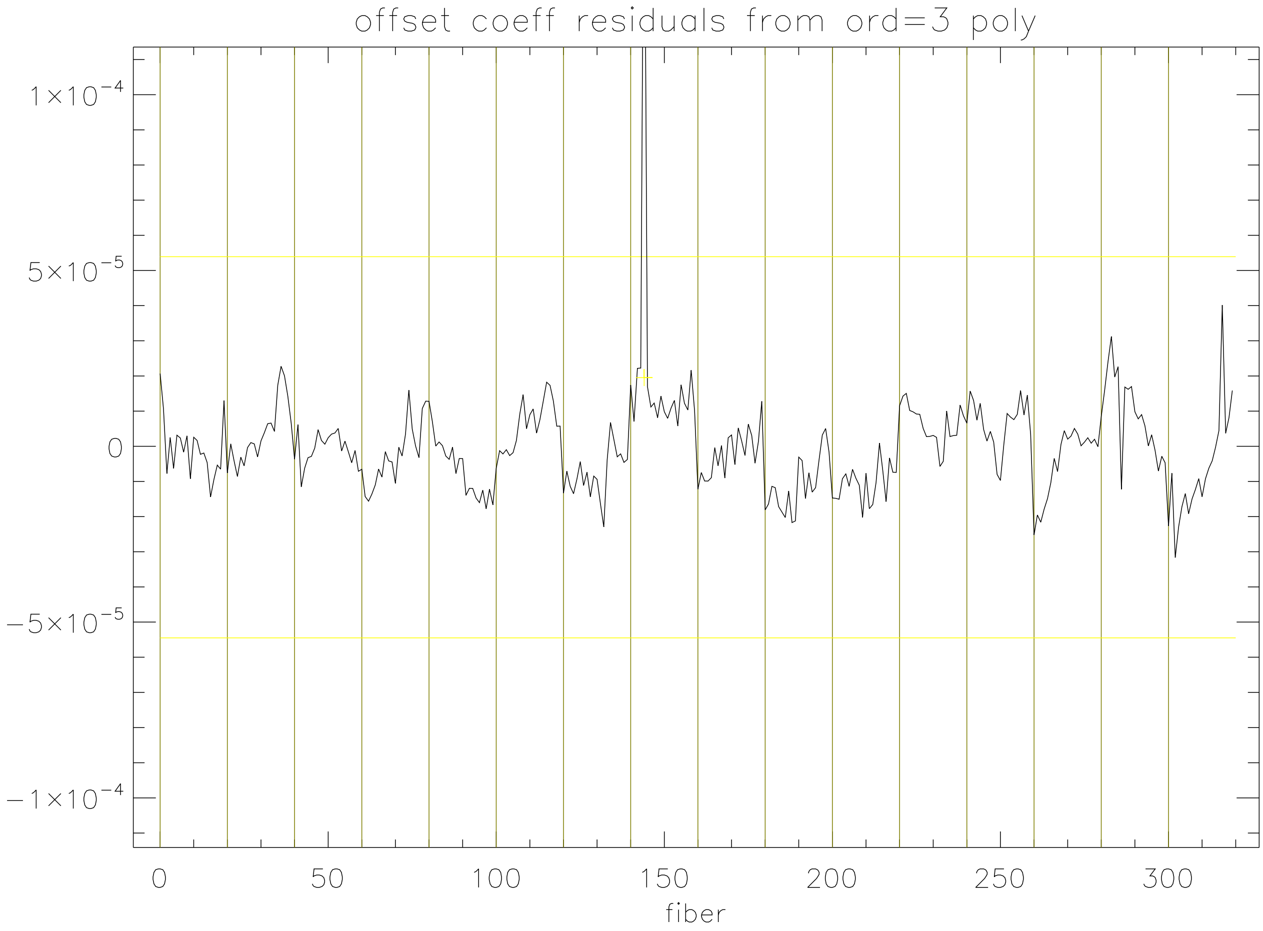
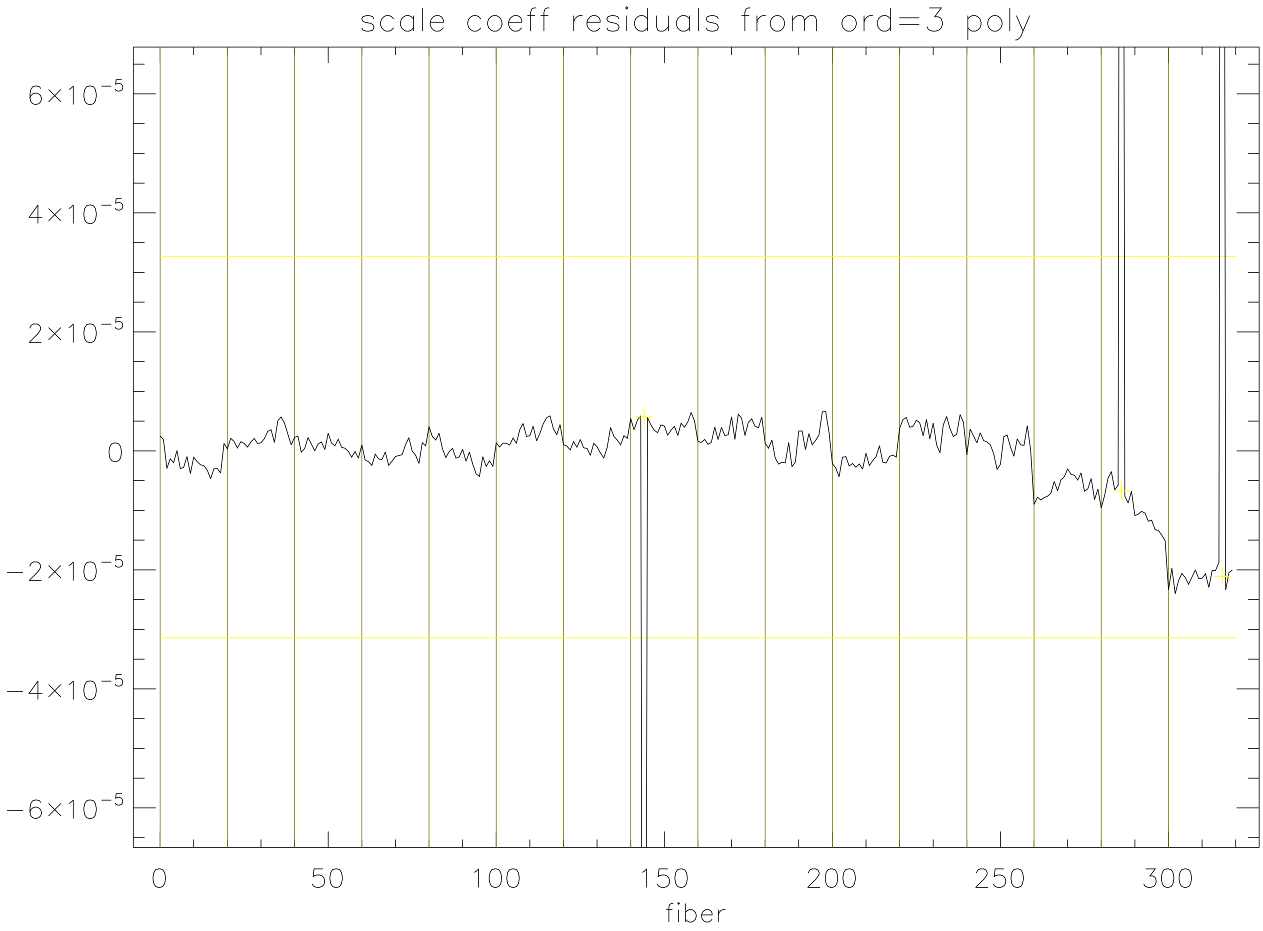
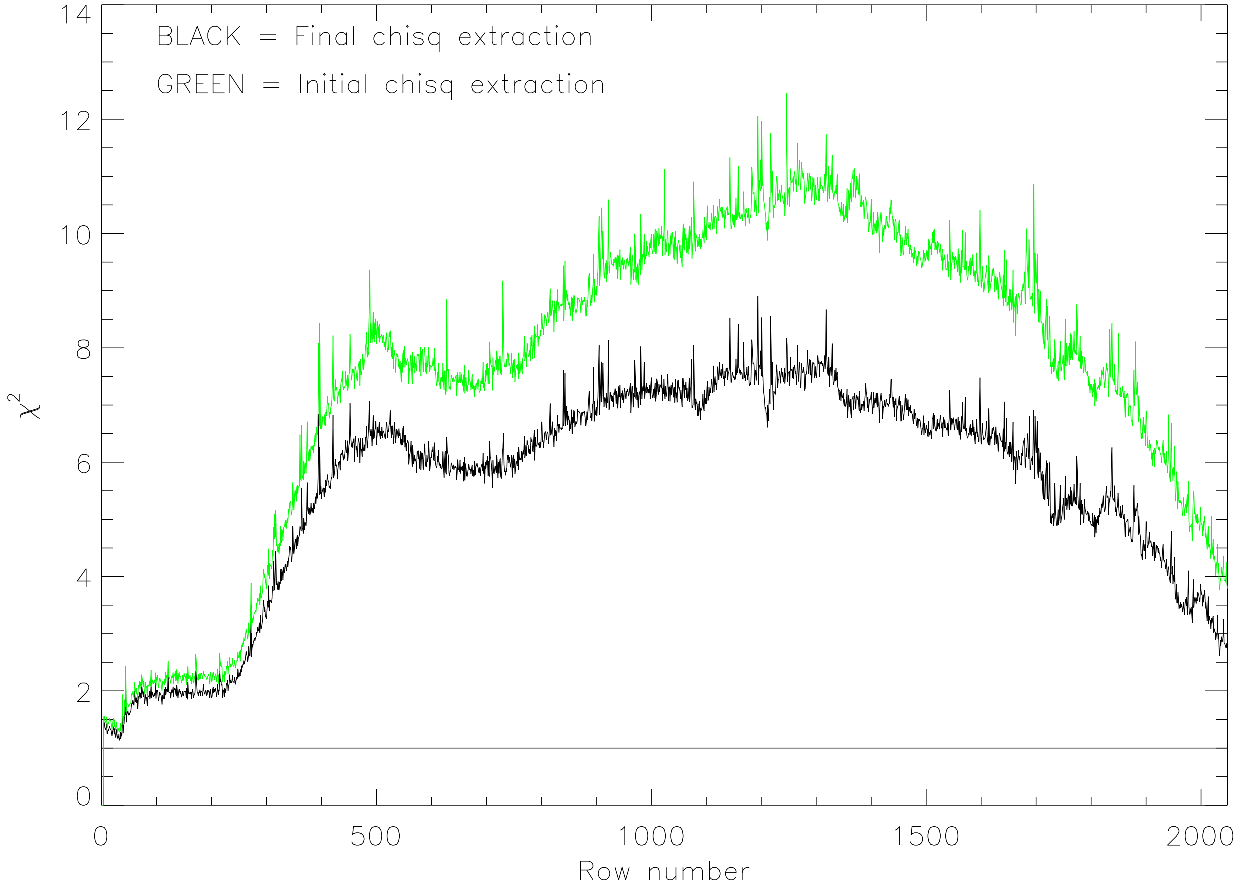
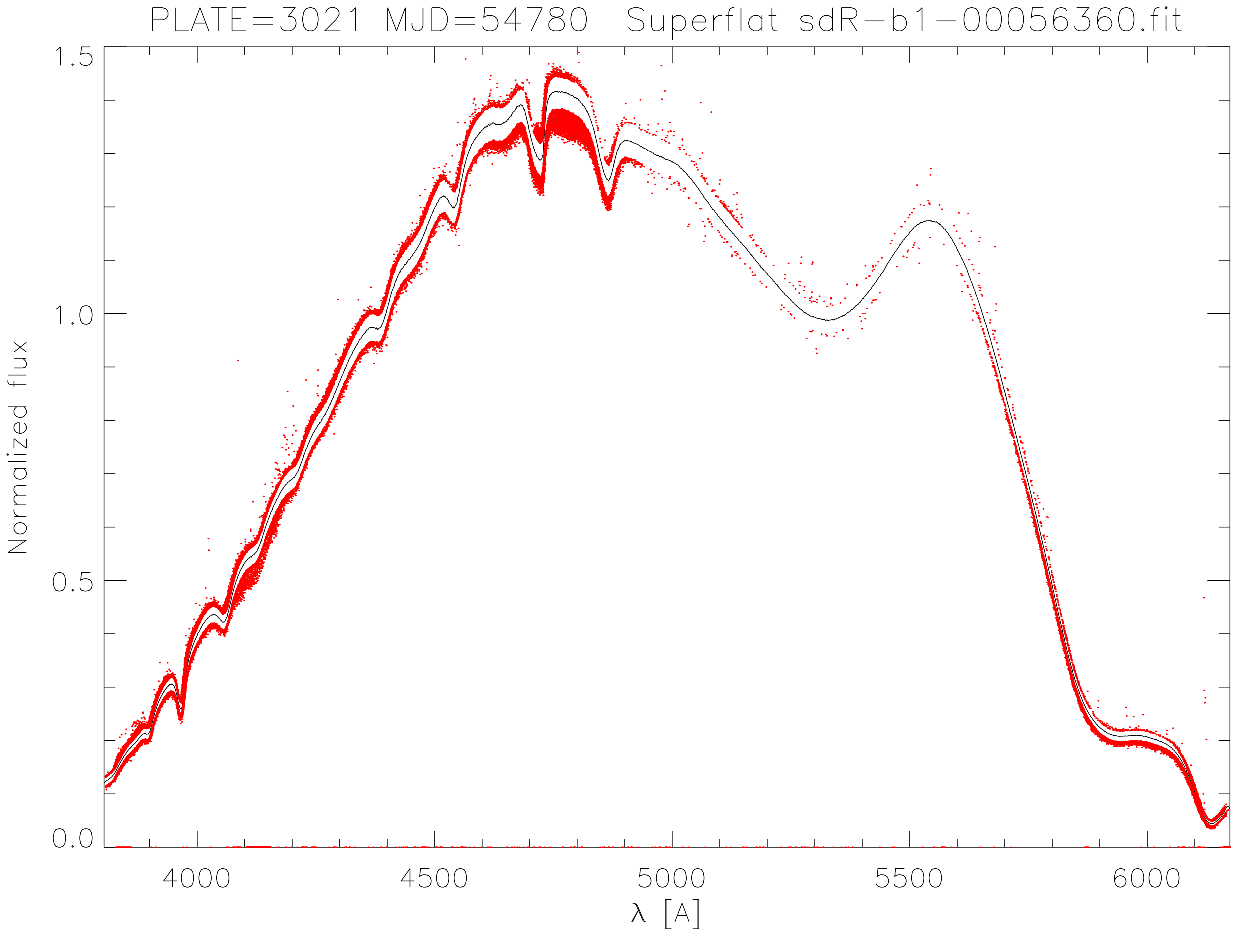
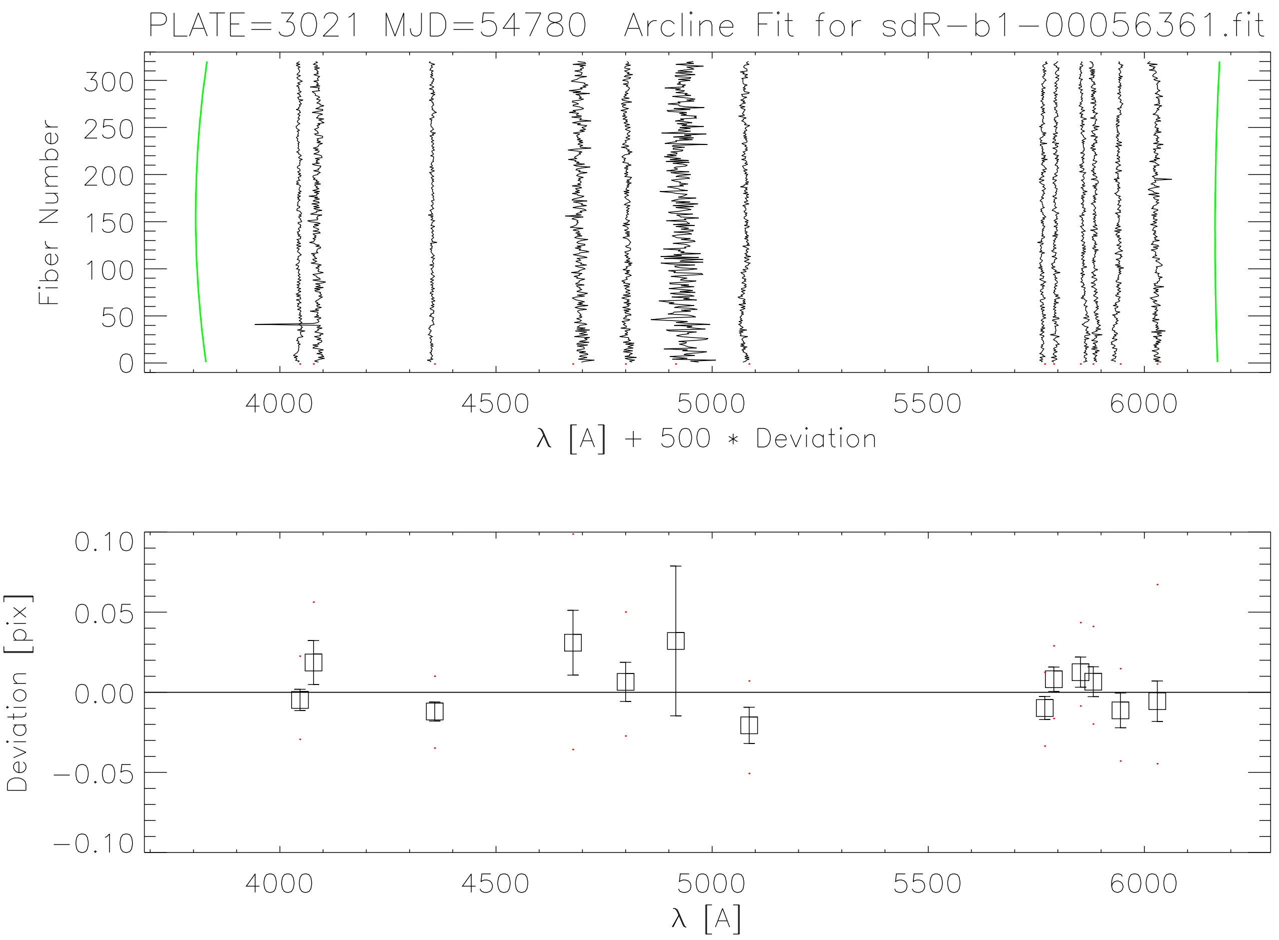

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber


scale coeff residuals from ord=3 poly
6×10⁻⁵
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
−6×10⁻⁵
0
50
100
150
200
250
300
fiber



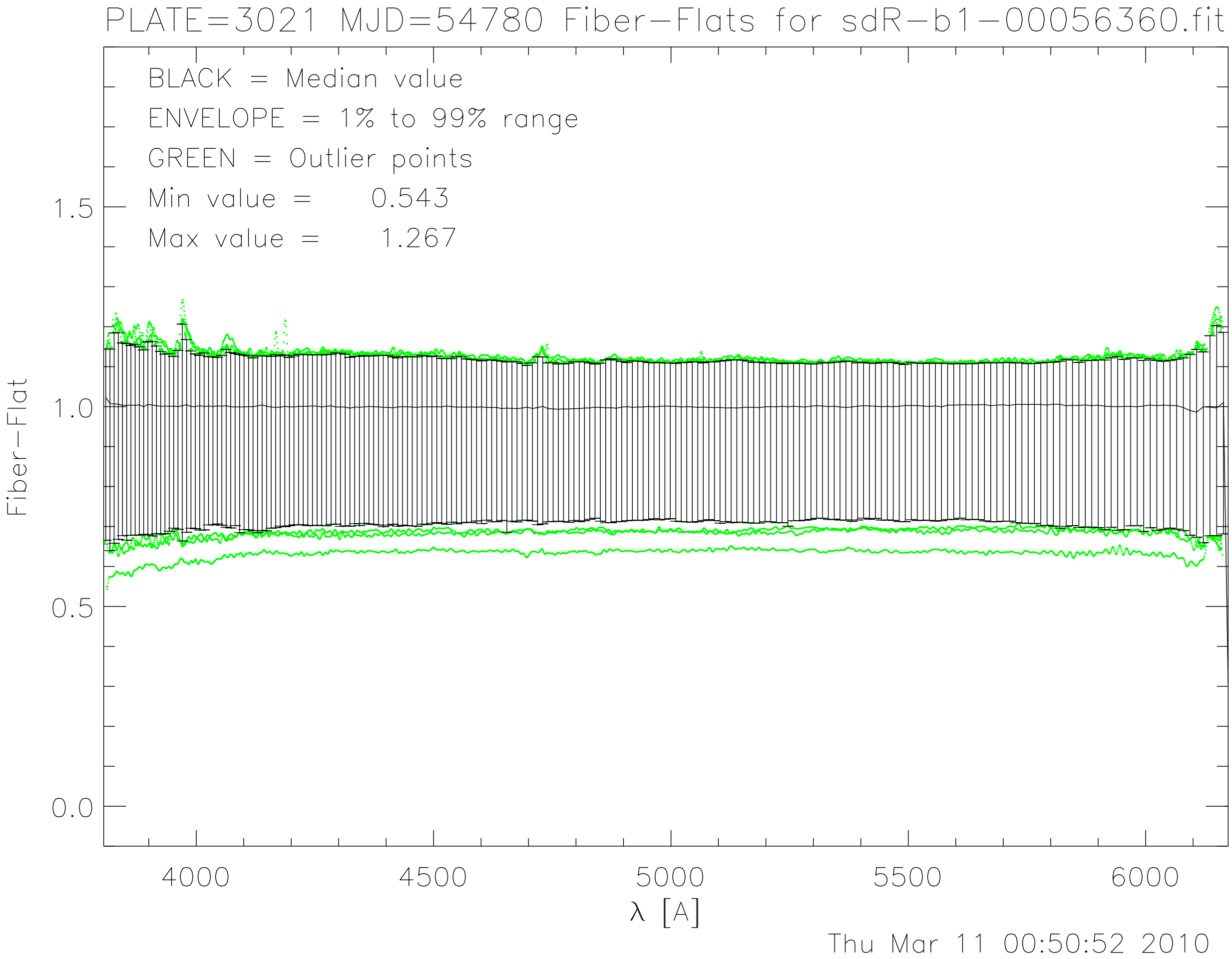
PLATE=3021 MJD=54780 flat extraction χ^2 for sdR-b1-00056360.fit

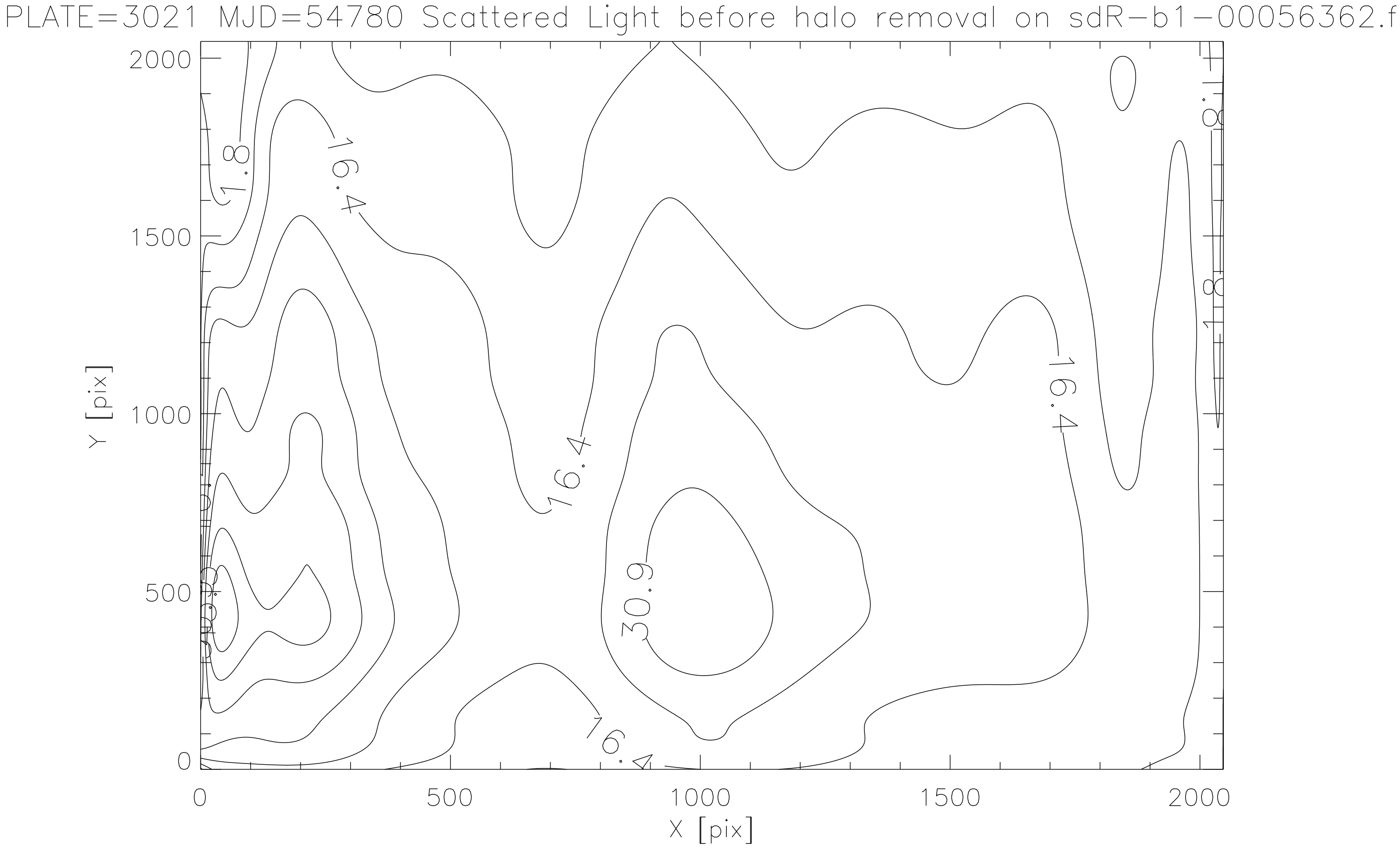

PLATE=3021 MJD=54780 Superflat sdR-b1-00056360.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

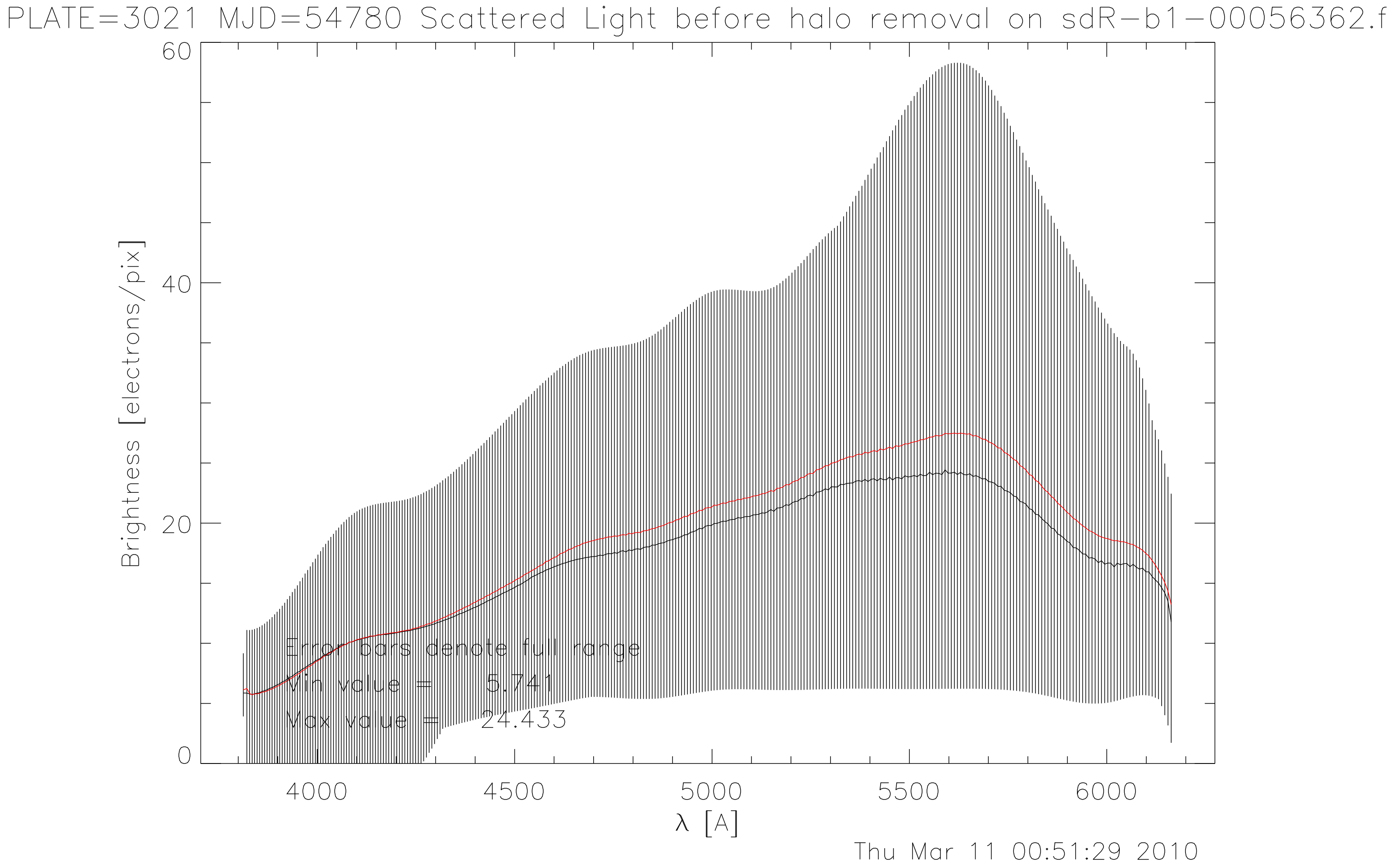


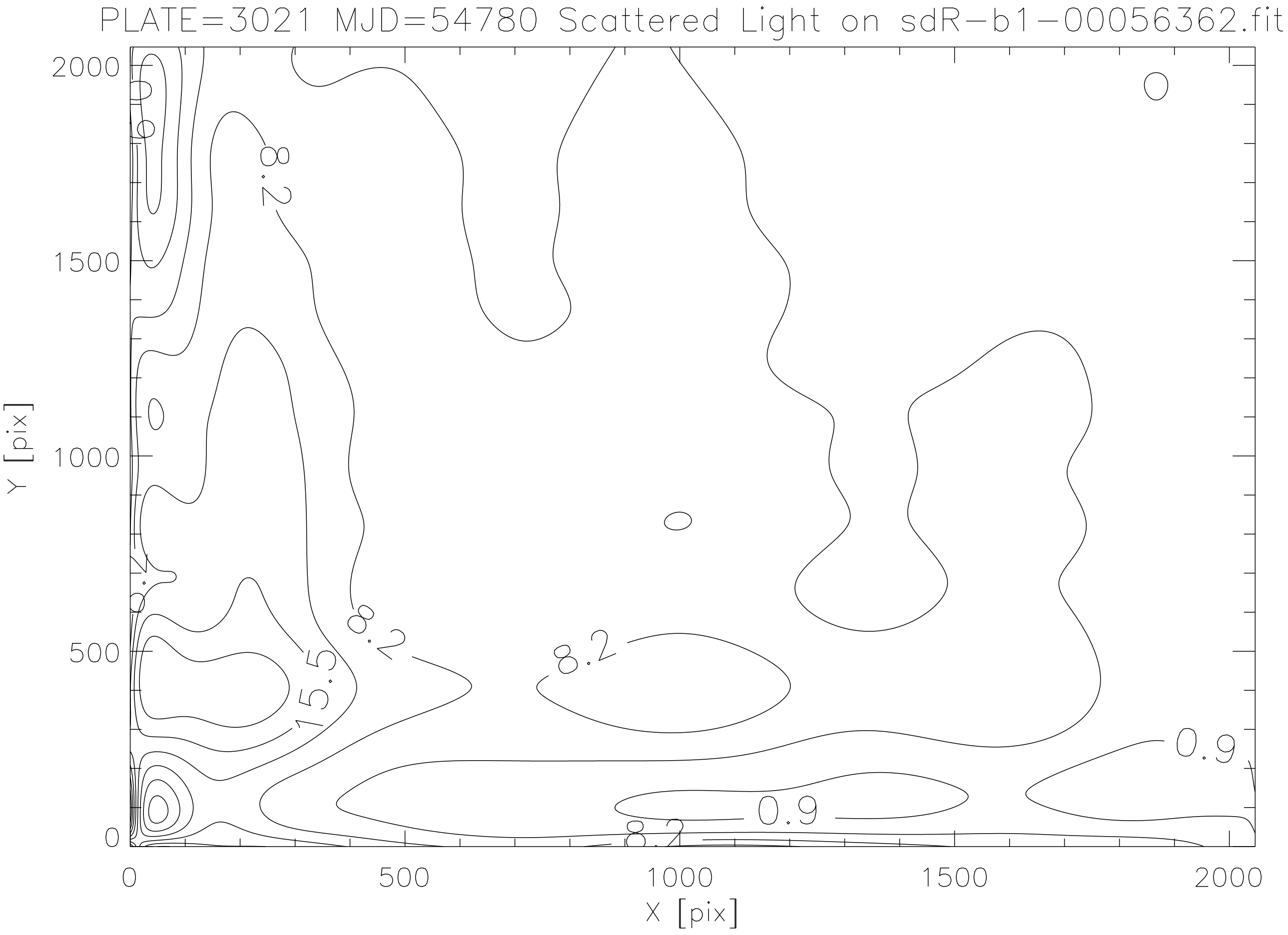
PLATE=3021 MJD=54780 Arcline Fit for sdR-b1-00056361.fit

Thu Mar 11 00:50:40 2010

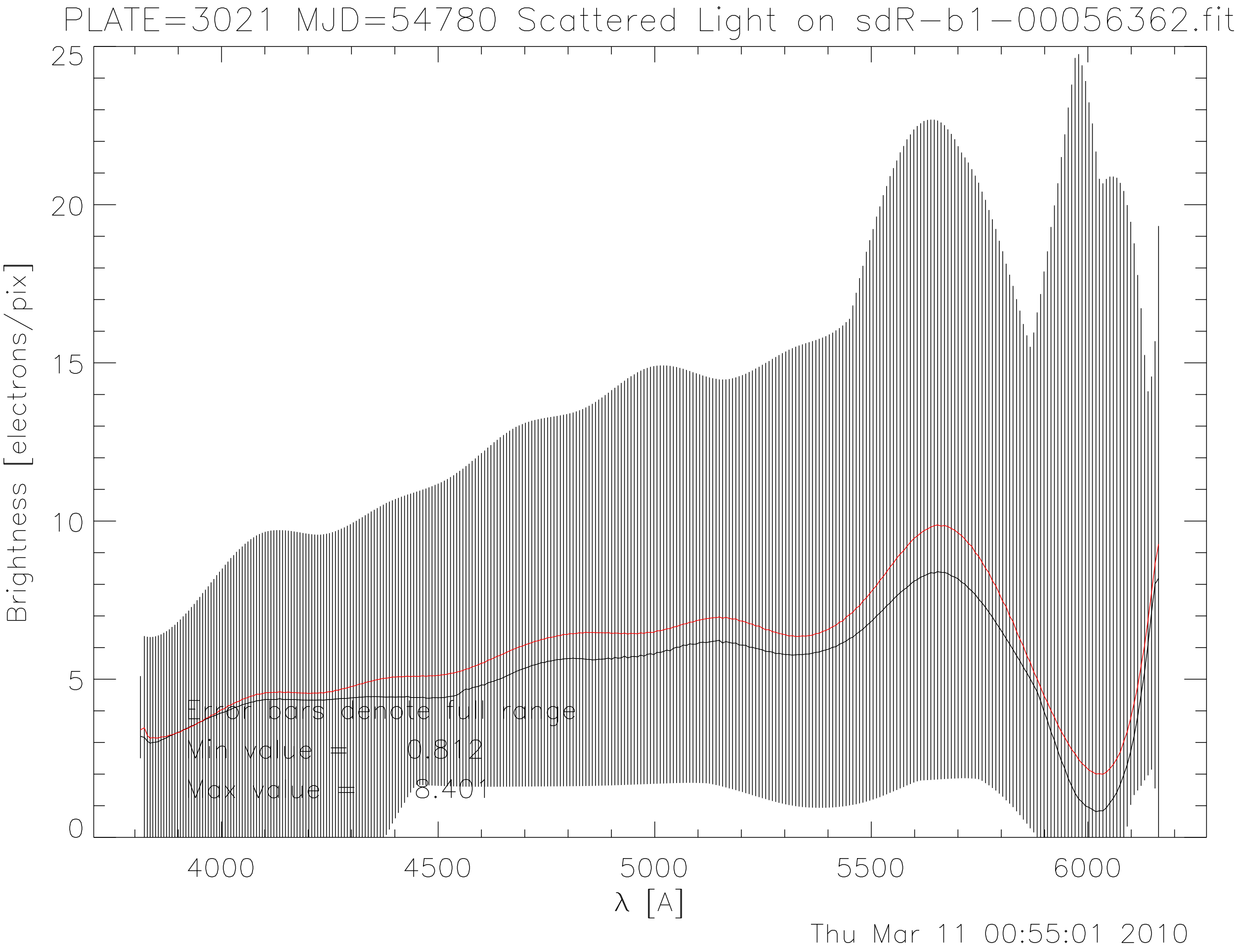

PLATE=3021 MJD=54780 Fiber-Flats for sdR-b1-00056360.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.543
Max value = 1.267
Fiber-Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Mar 11 00:50:52 2010

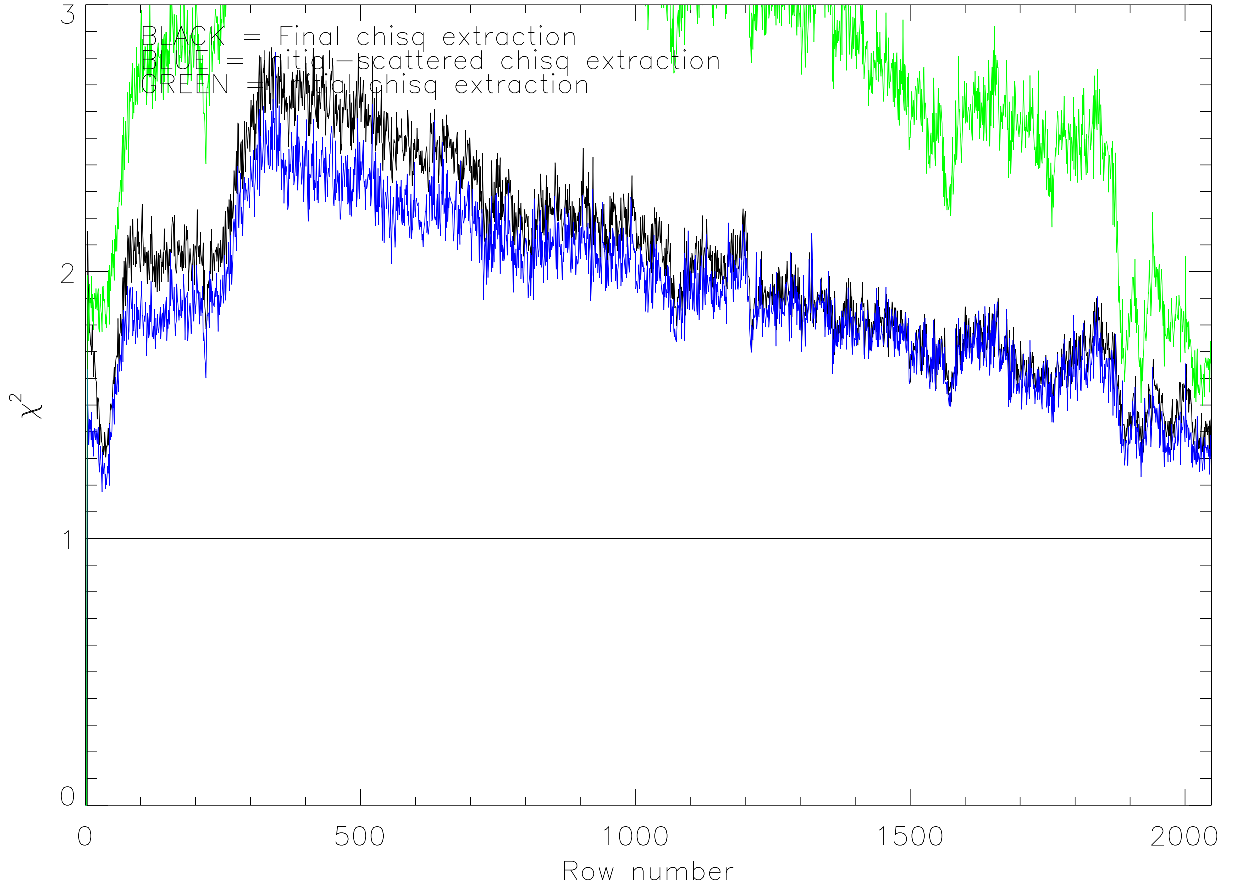

PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b1-00056362.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
1.8
16.4
16.4
16.4
16.4
30.9
1.8
1.8


PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b1-00056362.f
Brightness [electrons/pix]
0
20
40
60
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 5.741
Max value = 24.433
Thu Mar 11 00:51:29 2010

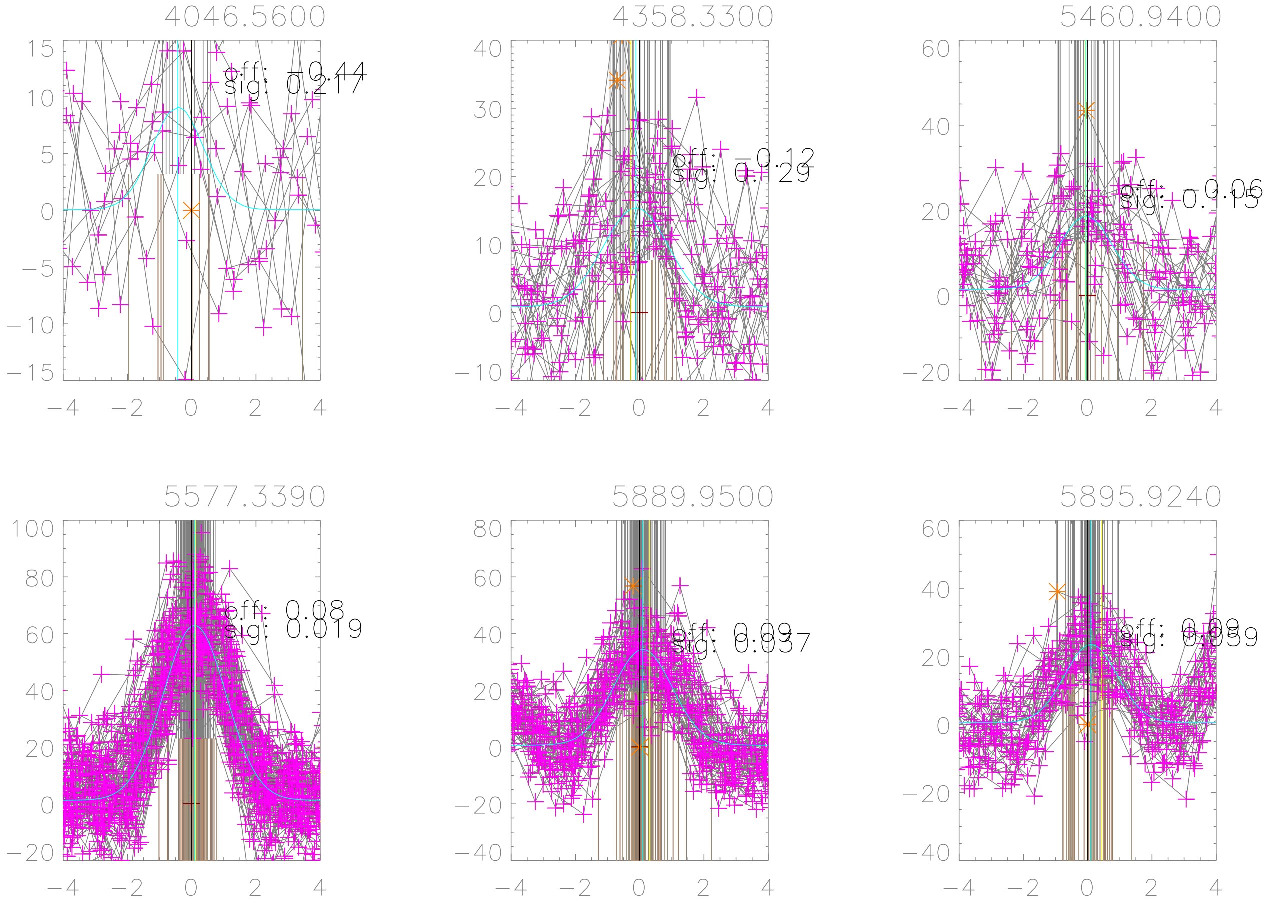


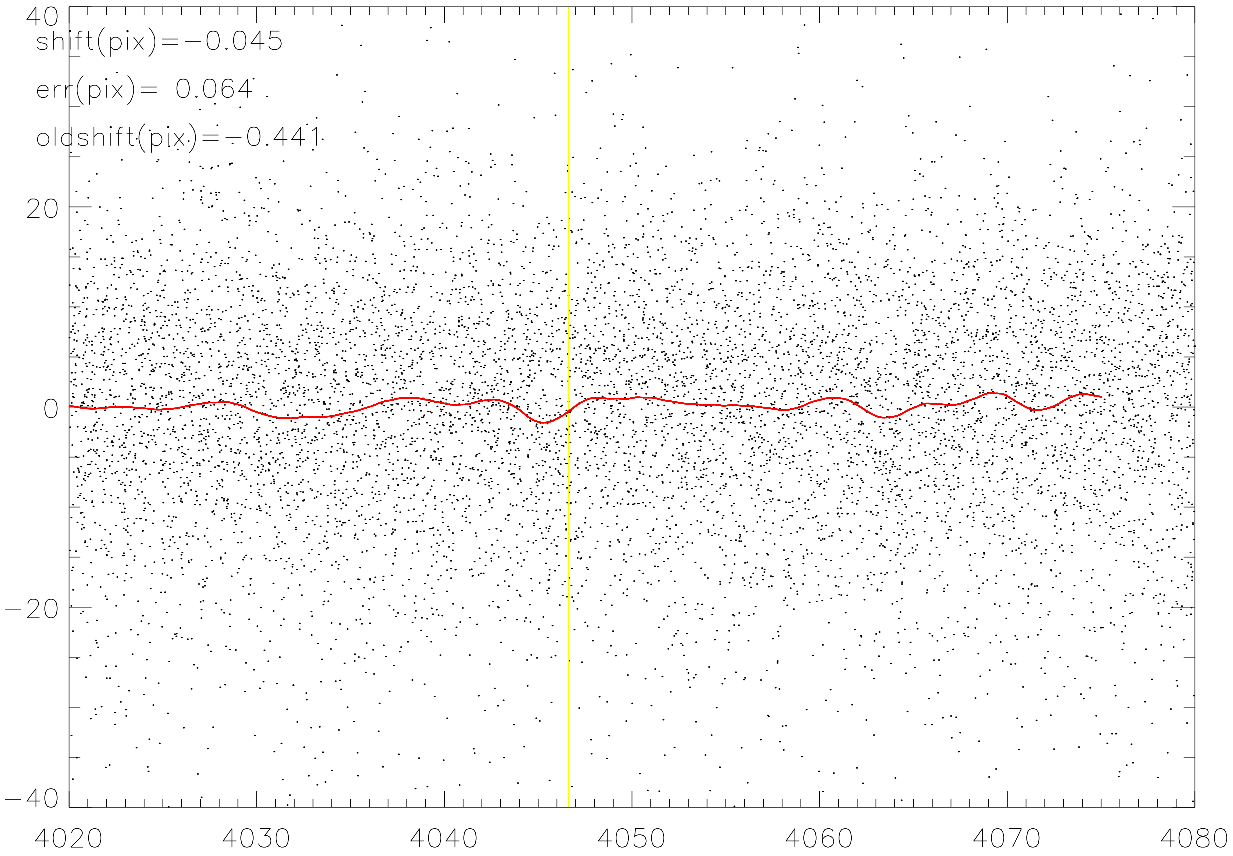
PLATE=3021 MJD=54780 Scattered Light on sdR-b1-00056362.fit

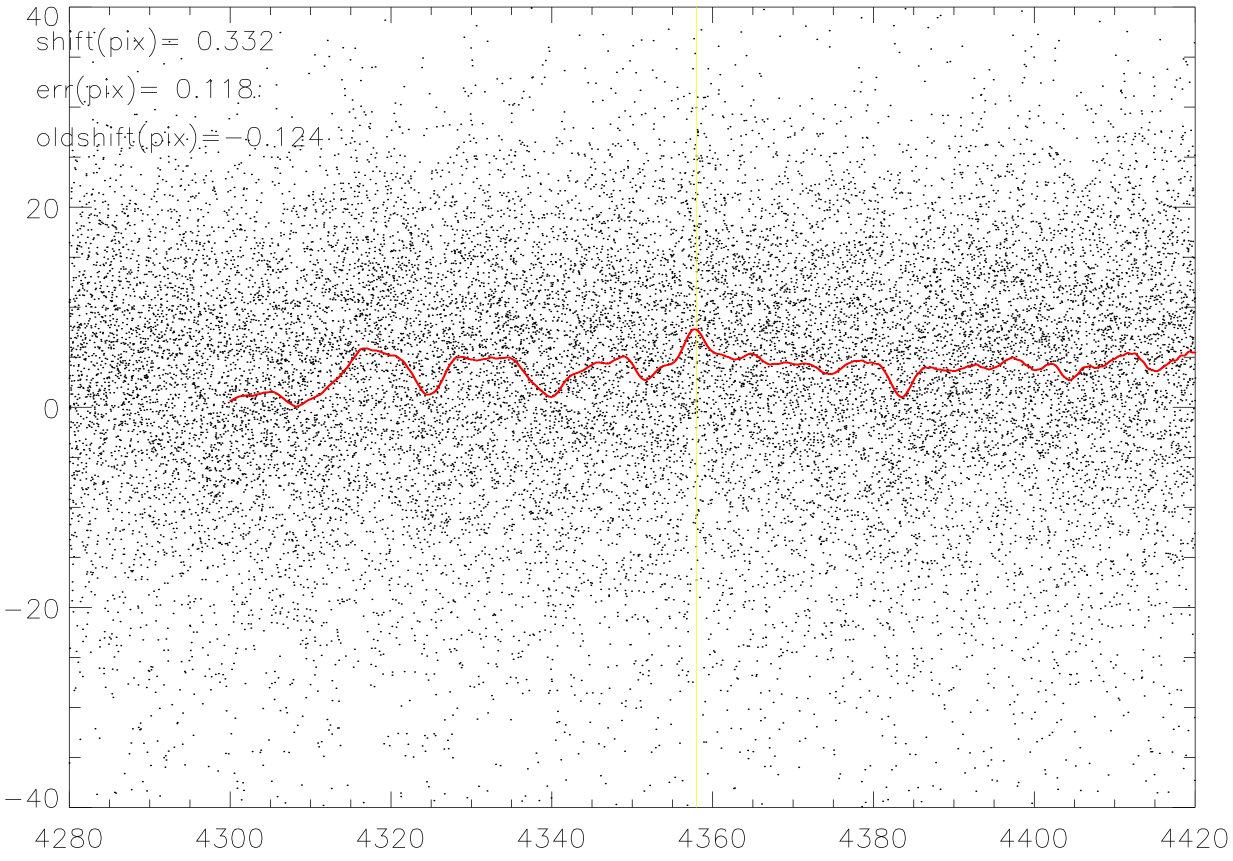

PLATE=3021 MJD=54780 Scattered Light on sdR-b1-00056362.fit
Brightness [electrons/pix]
0
5
10
15
20
25
4000
4500
5000
5500
6000
λ [A]
Error bars denote full range
Min value = 0.812
Max value = 8.401
Thu Mar 11 00:55:01 2010

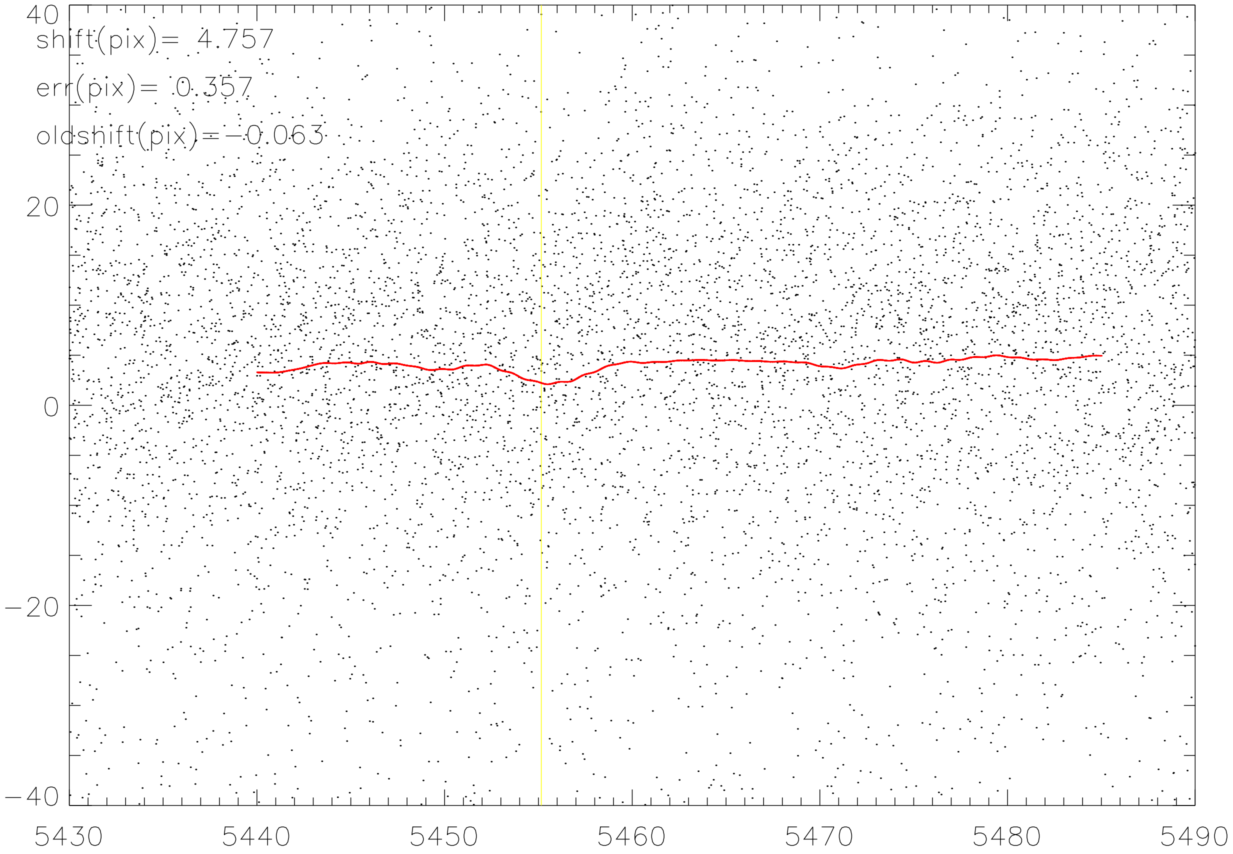


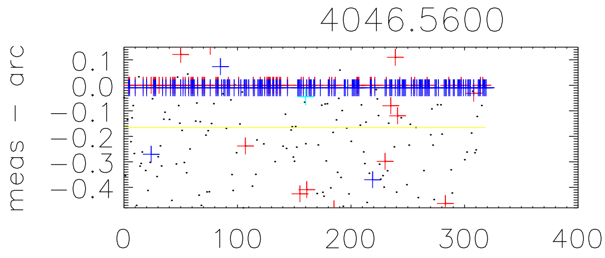
PLATE=3021 MJD=54780 Extraction chi^2 for sdR-b1-00056362.fit

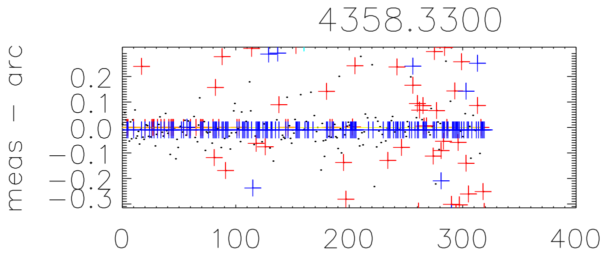

4046.5600
off: −0.44
sig: 0.217
15
10
5
0
−5
−10
−15
−4
−2
0
2
4
4358.3300
off: −0.12
sig: 0.129
40
30
20
10
0
−10
5460.9400
off: −0.06
sig: 0.115
60
40
20
0
−20
5577.3390
off: 0.08
sig: 0.019
100
80
60
40
20
0
−20
5889.9500
off: 0.09
sig: 0.037
80
60
40
20
0
−20
−40
5895.9240
off: 0.09
sig: 0.039
60
40
20
0
−20
−40

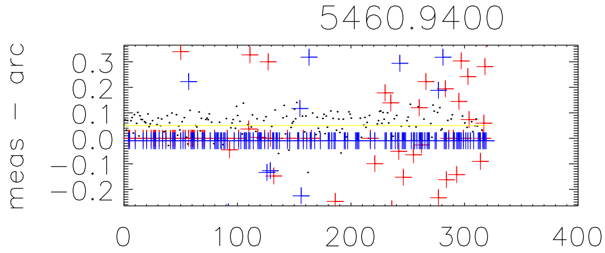

shift(pix)=−0.045
err(pix)= 0.064
oldshift(pix)=−0.441
40
20
0
−20
−40
4020
4030
4040
4050
4060
4070
4080

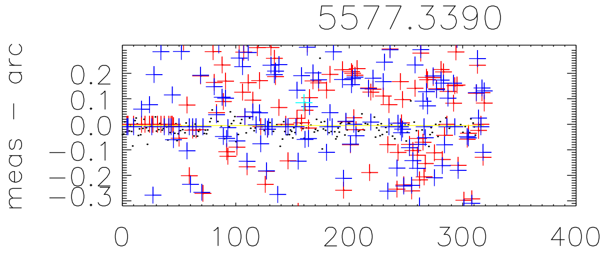

shift(pix)= 0.332
err(pix)= 0.118
oldshift(pix)=−0.124
40
20
0
−20
−40
4280
4300
4320
4340
4360
4380
4400
4420

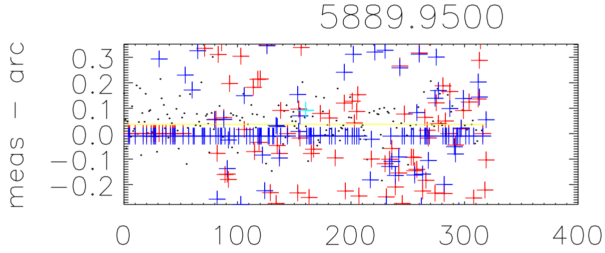

shift(pix)= 4.757
err(pix)= 0.357
oldshift(pix)=−0.063
40
20
0
−20
−40
5430
5440
5450
5460
5470
5480
5490

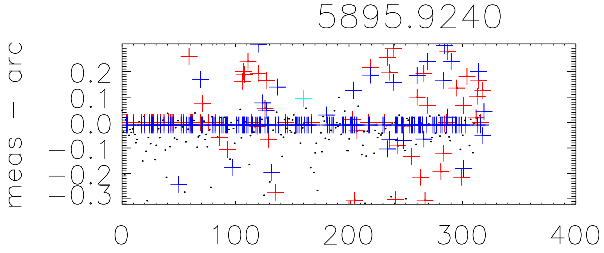

4046.5600
meas − arc
0.1
0.0
−0.1
−0.2
−0.3
−0.4
0
100
200
300
400

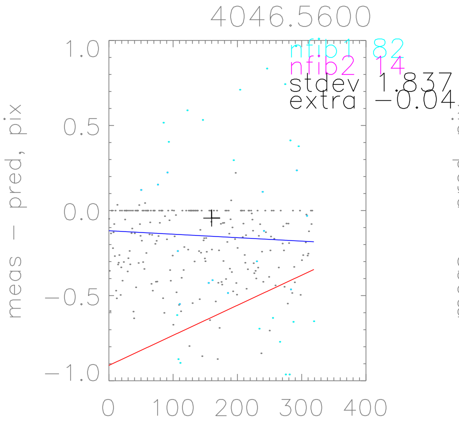

4358.3300
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

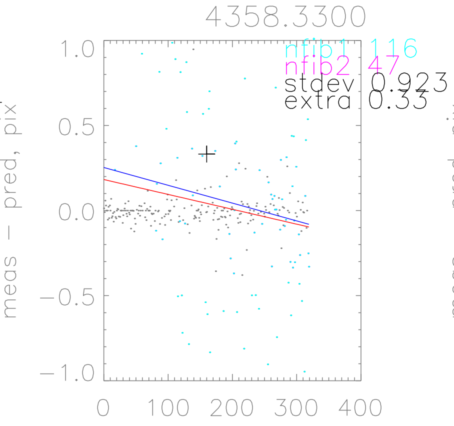

5460.9400
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

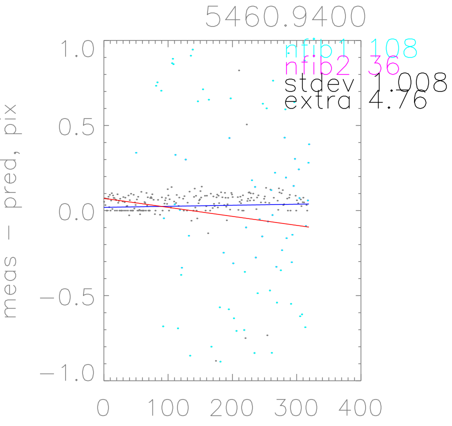

5577.3390
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

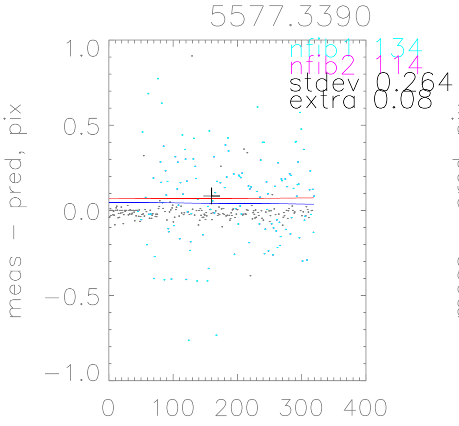

5889.9500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

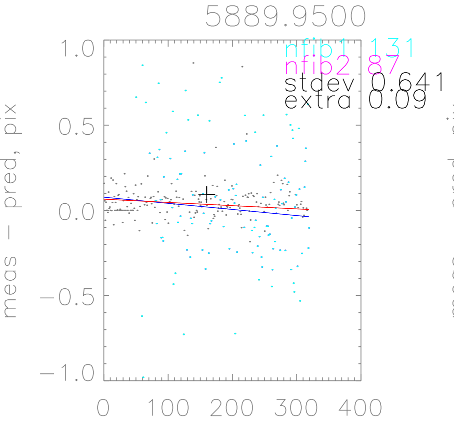

5895.9240
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

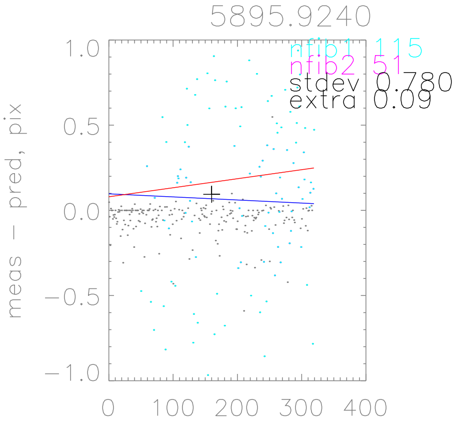

4046.5600
nfib1 82
nfib2 14
stdev 1.837
extra −0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

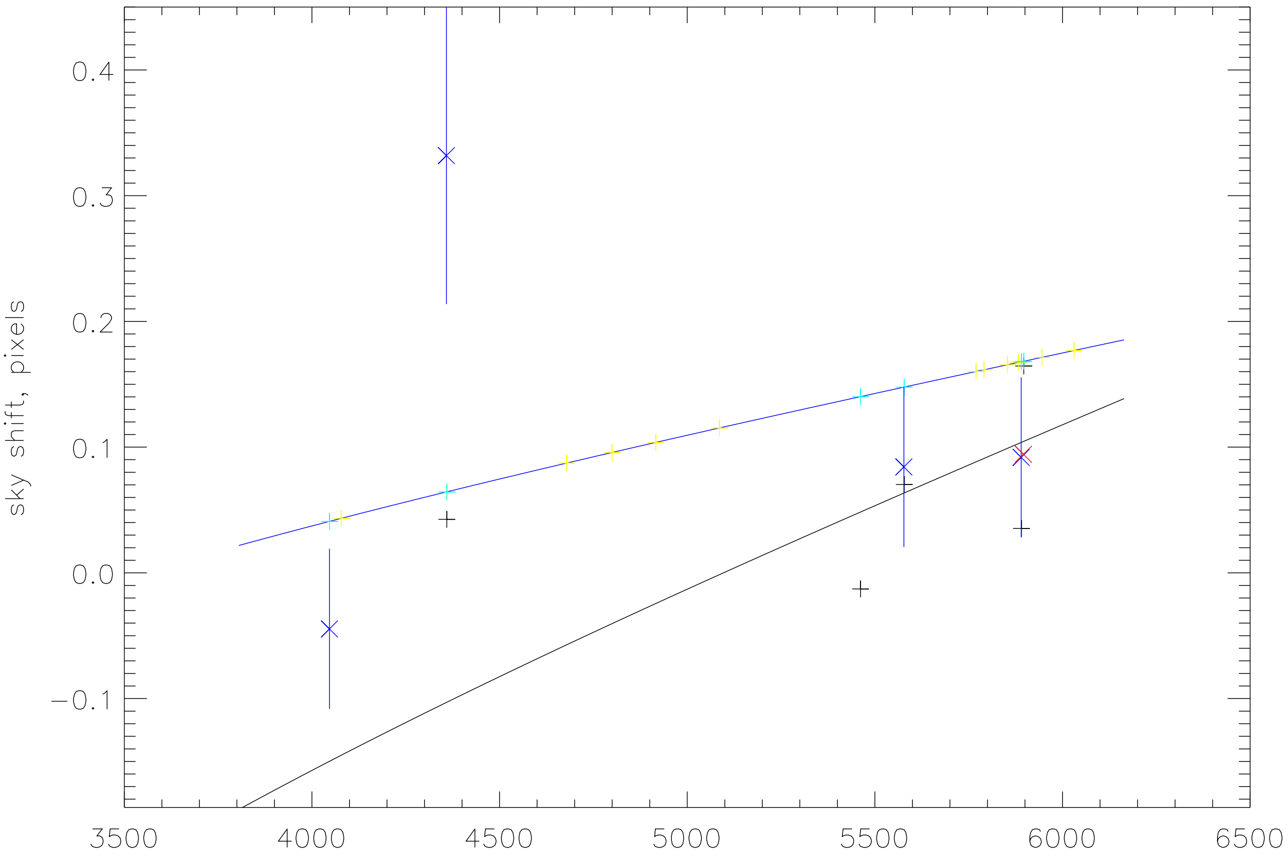

4358.3300
nfib1 116
nfib2 47
stdev 0.923
extra 0.33
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

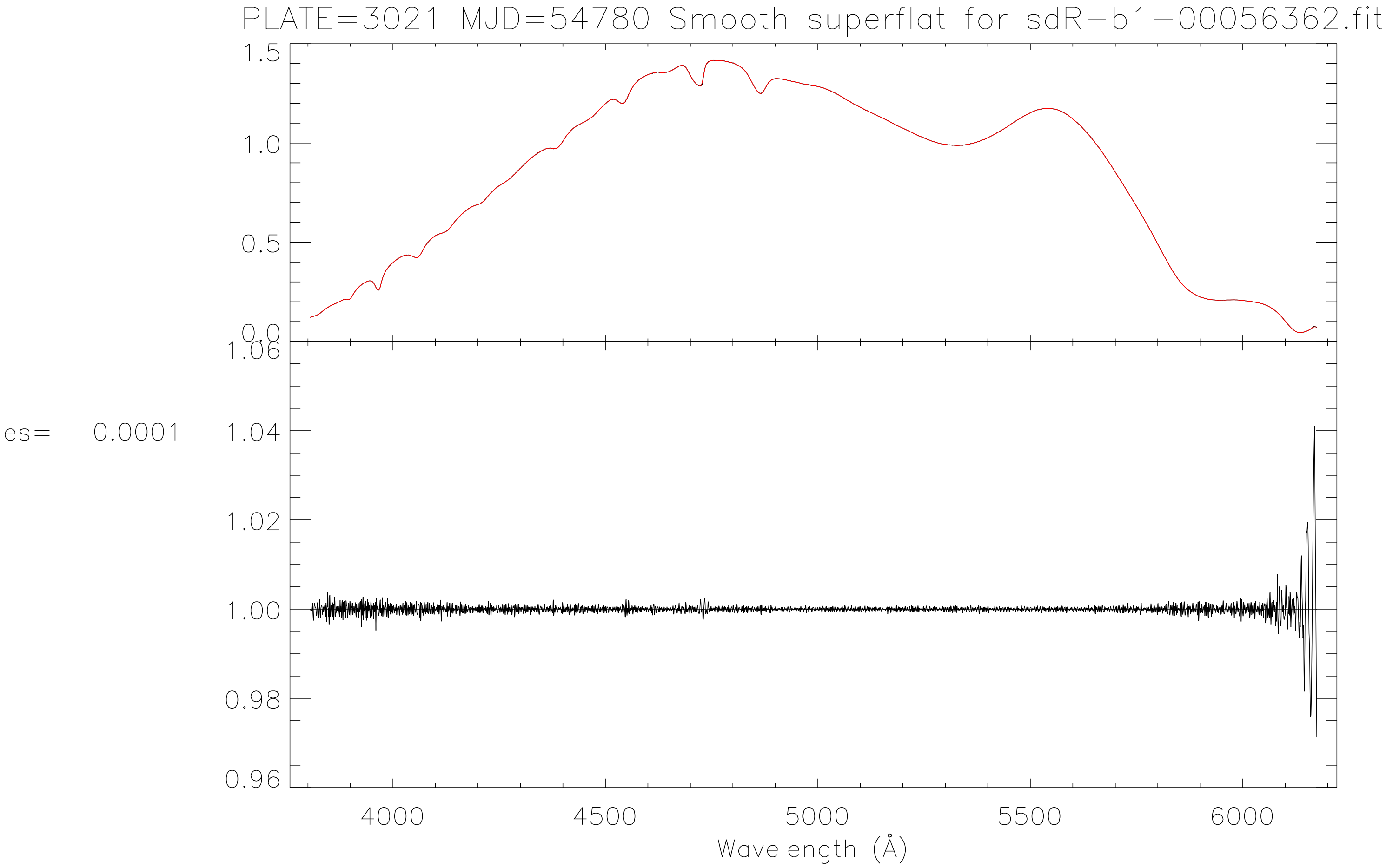

5460.9400
nfib1 108
nfib2 36
stdev 1.008
extra 4.76
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

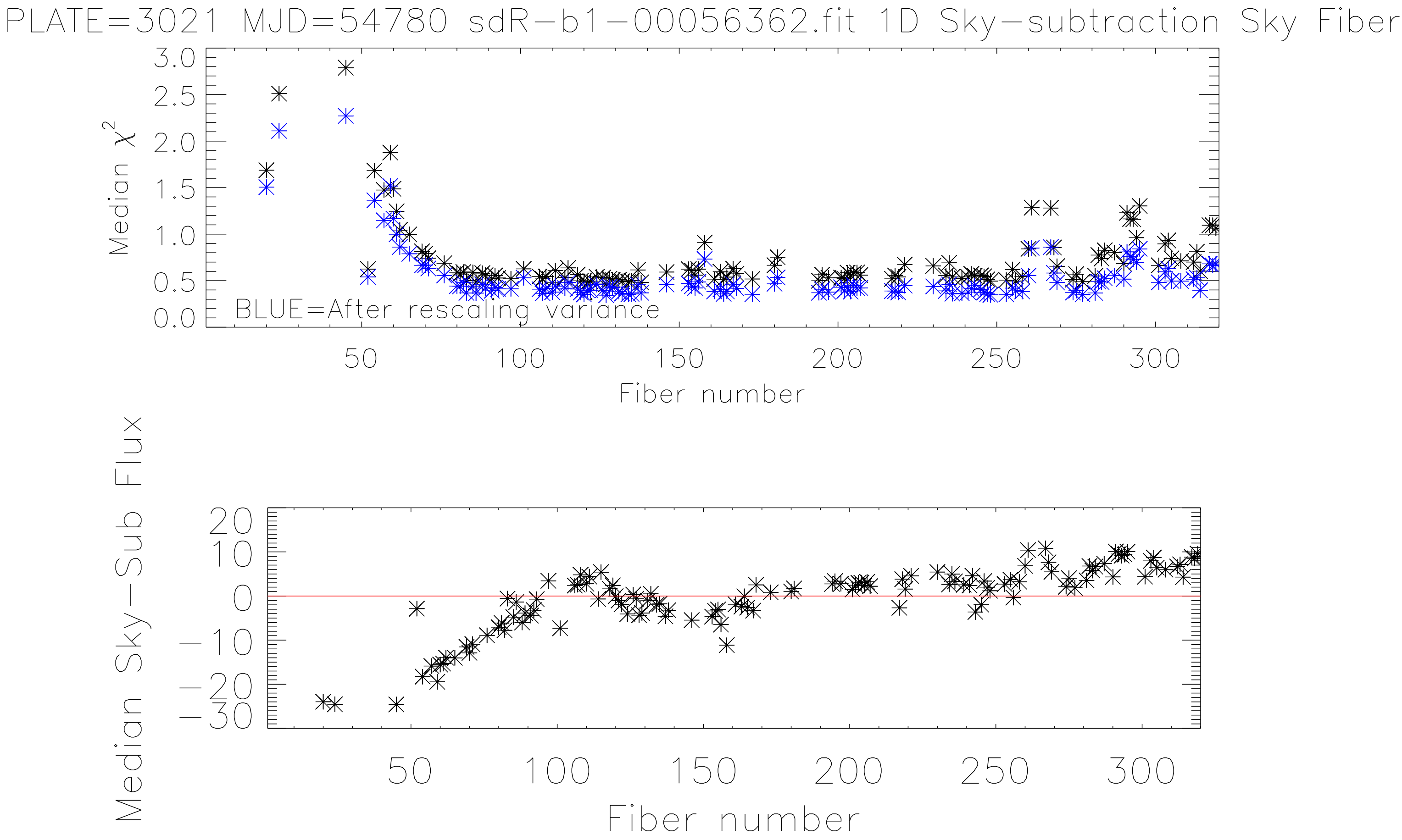

5577.3390
nfib1 134
nfib2 114
stdev 0.264
extra 0.08
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

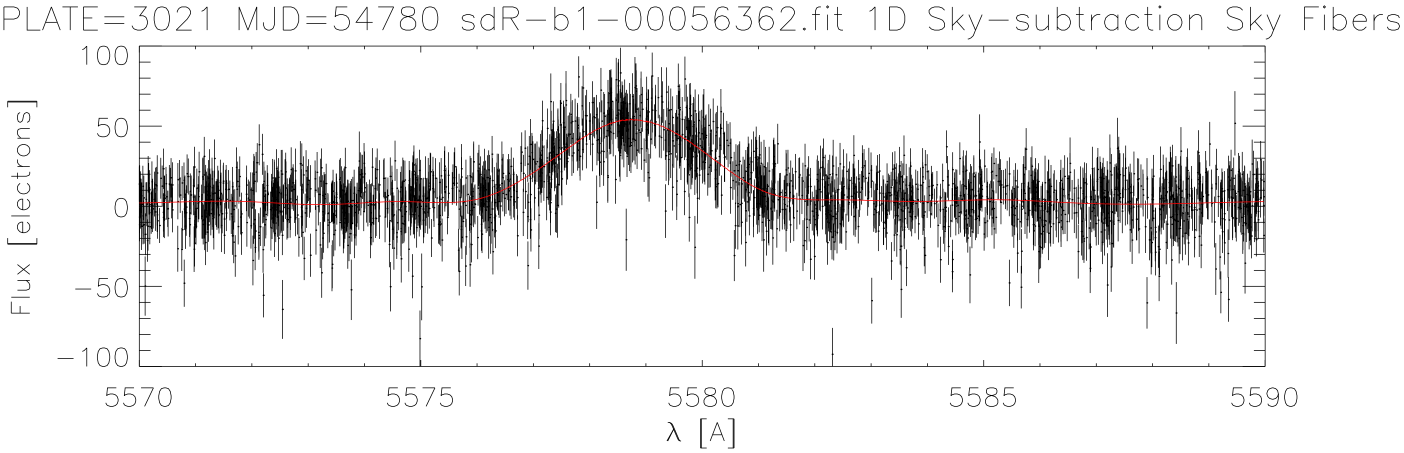

5889.9500
nfib1 131
nfib2 87
stdev 0.641
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

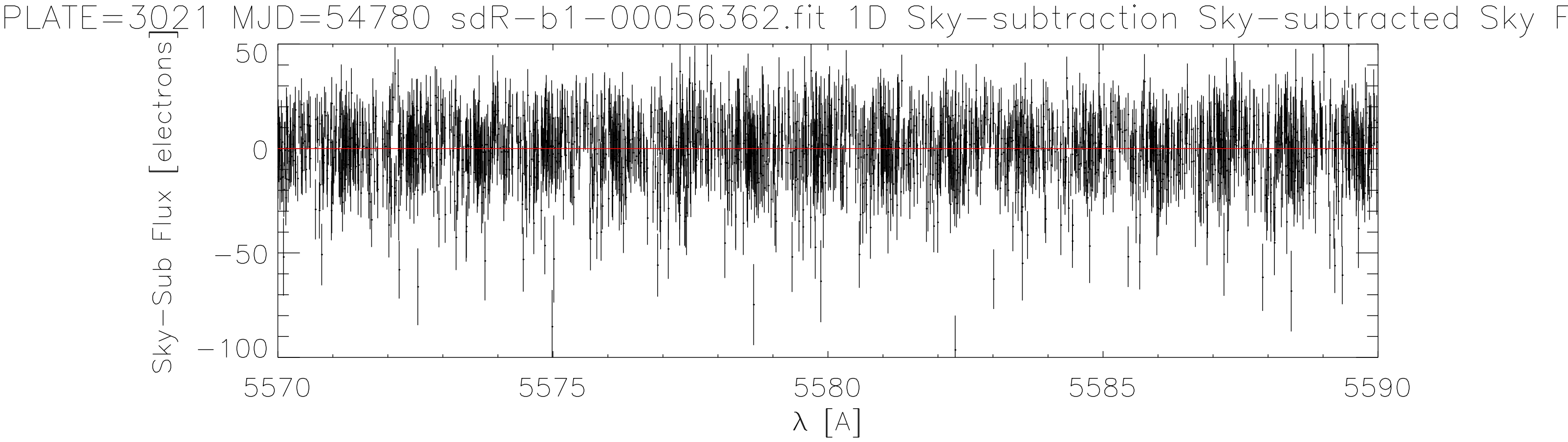

5895.9240
nfib1 115
nfib2 51
stdev 0.780
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.4
0.3
0.2
0.1
0.0
−0.1
3500
4000
4500
5000
5500
6000
6500


PLATE=3021 MJD=54780 Smooth superflat for sdR-b1-00056362.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
es= 0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

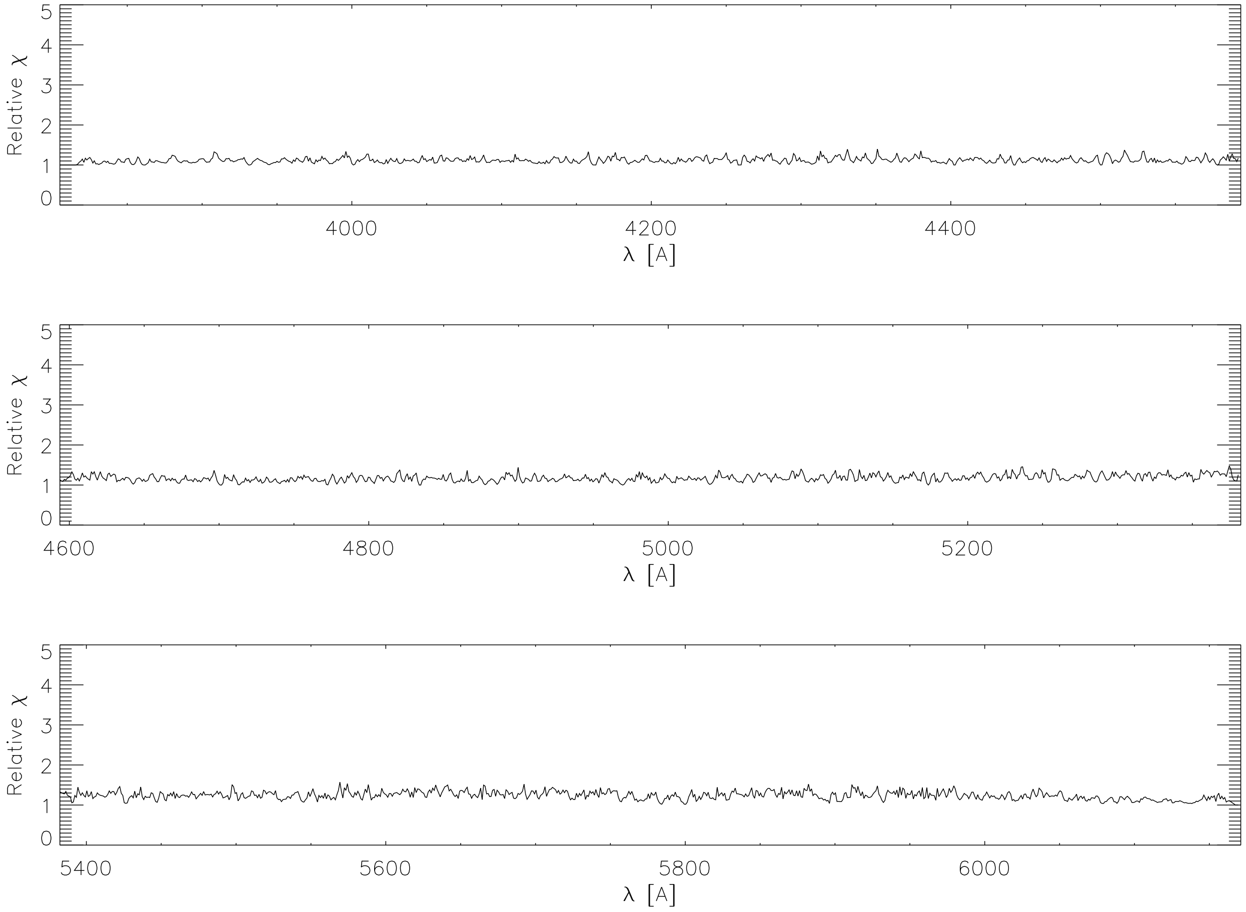

PLATE=3021 MJD=54780 sdR-b1-00056362.fit 1D Sky-subtraction Sky Fiber
Median χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
−10
−20
−30
50
100
150
200
250
300
Fiber number

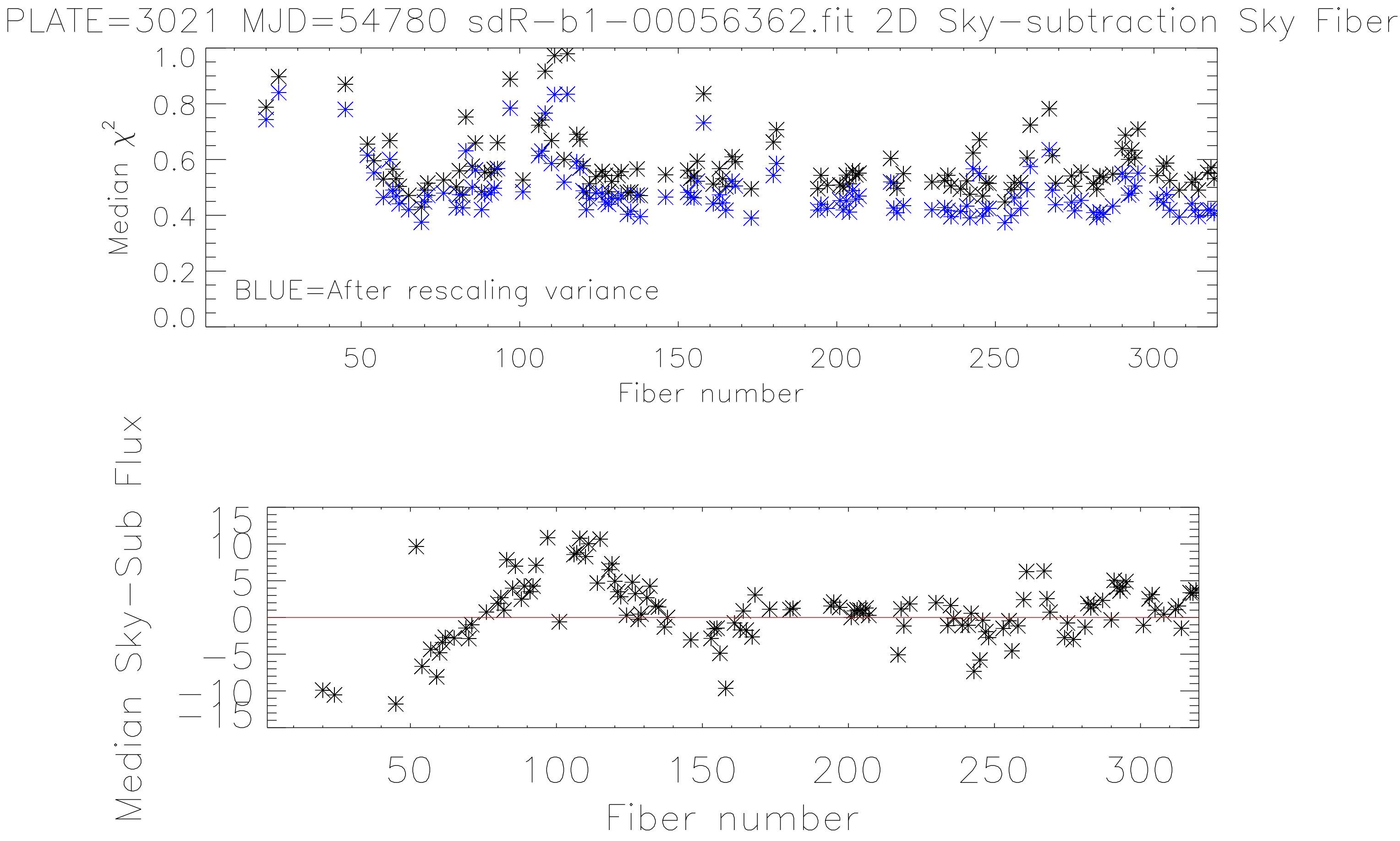

PLATE=3021 MJD=54780 sdR-b1-00056362.fit 1D Sky-subtraction Sky Fibers


PLATE=3021 MJD=54780 sdR-b1-00056362.fit 1D Sky-subtraction Sky-subtracted Sky F

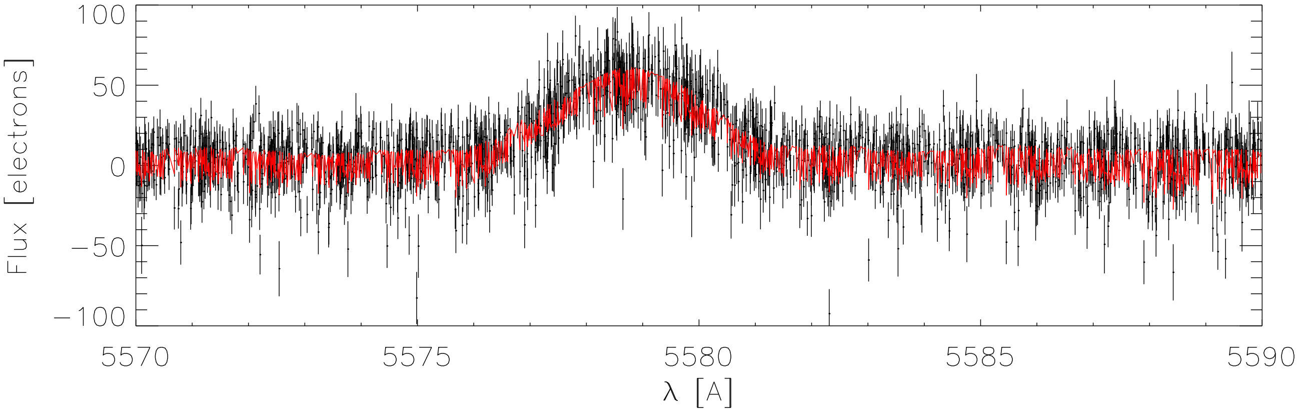
Number of sky fibers = 126

PLATE=3021 MJD=54780 sdR-b1-00056362.fit 1D Sky-subtraction Rescaled Errors

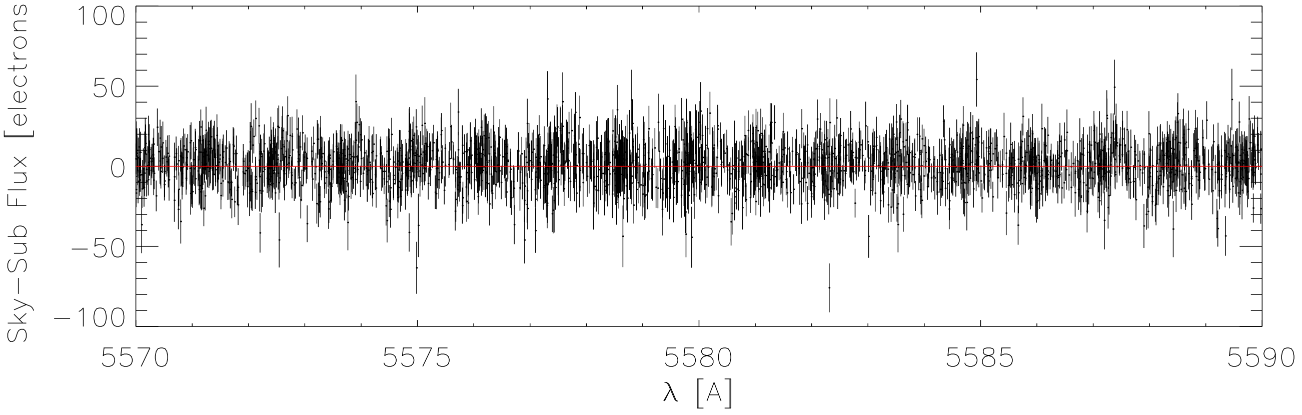



PLATE=3021 MJD=54780 sdR-b1-00056362.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.0
0.8
0.6
0.4
0.2
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
-5
-10
-15
50
100
150
200
250
300
Fiber number

PLATE=3021 MJD=54780 sdR-b1-00056362.fit 2D Sky-subtraction Sky Fibers

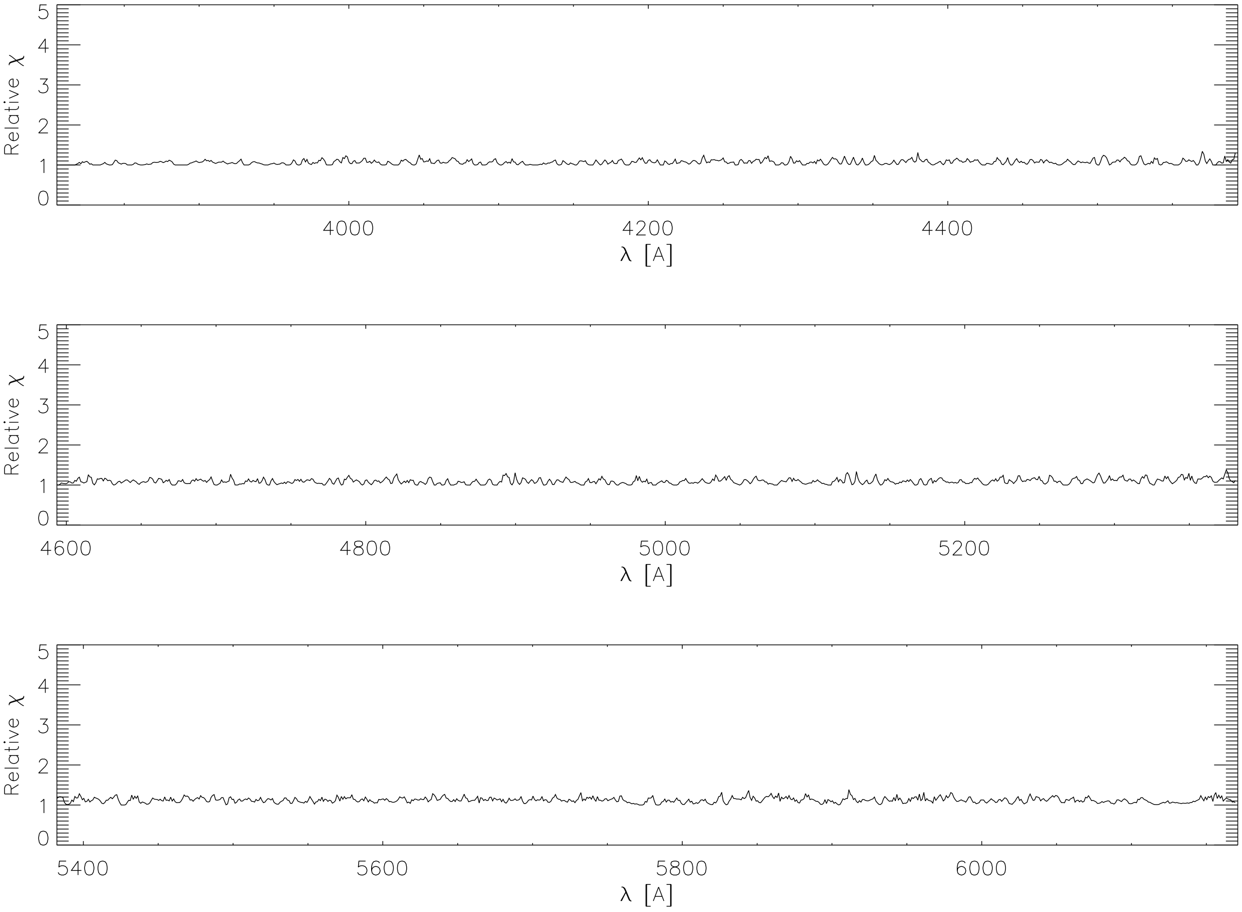


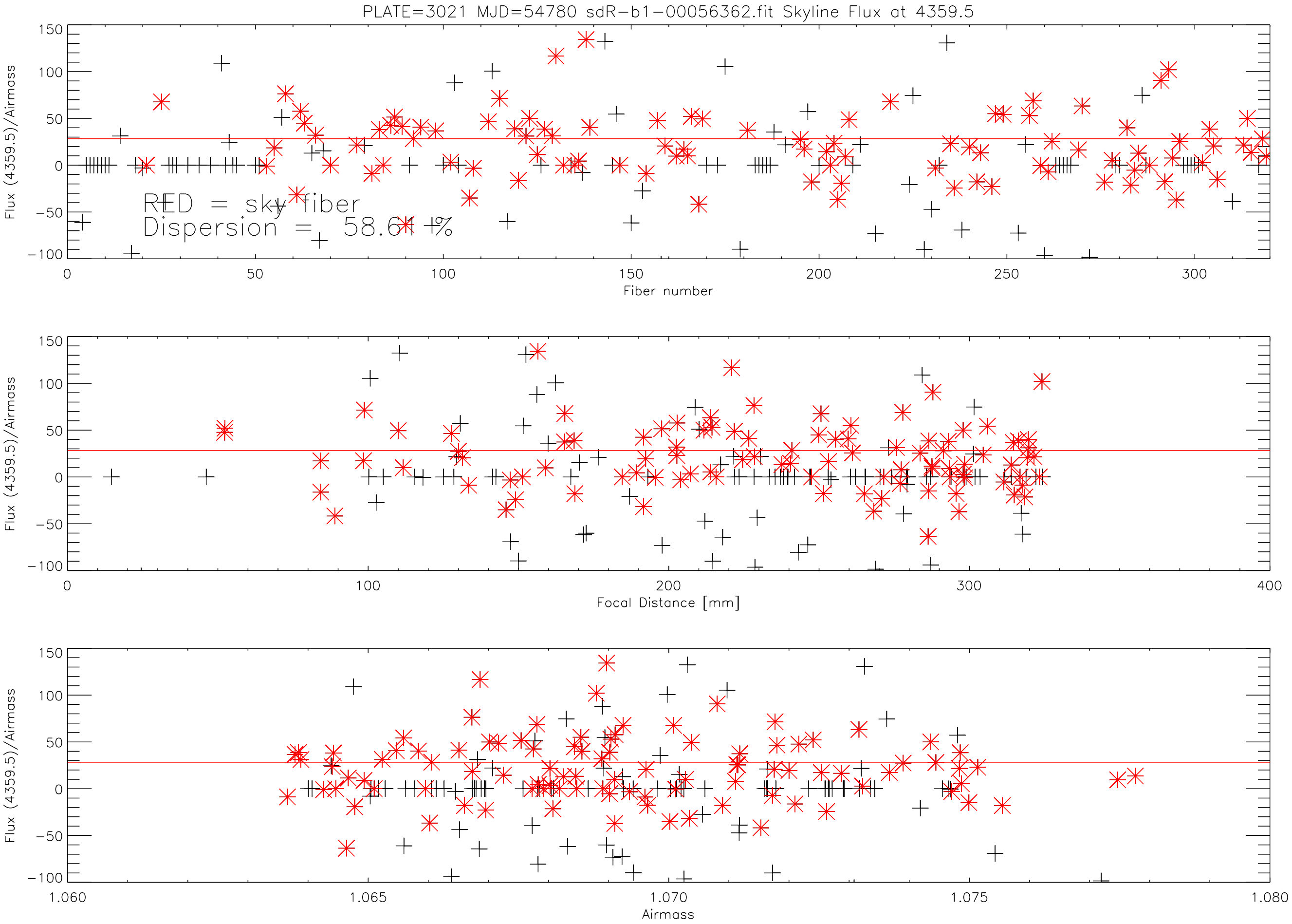
PLATE=3021 MJD=54780 sdR-b1-00056362.fit 2D Sky-subtraction Sky-subtracted Sky F

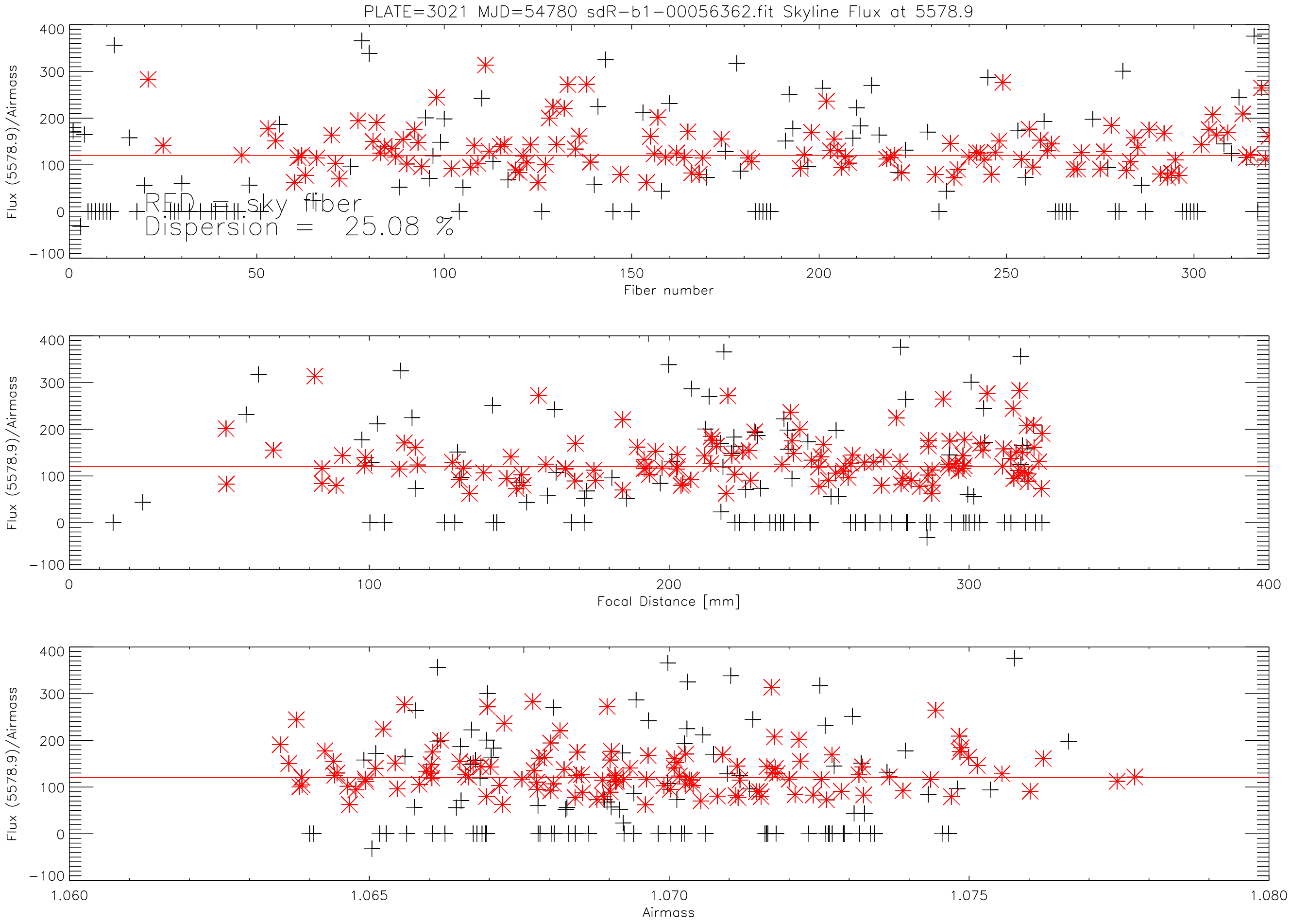


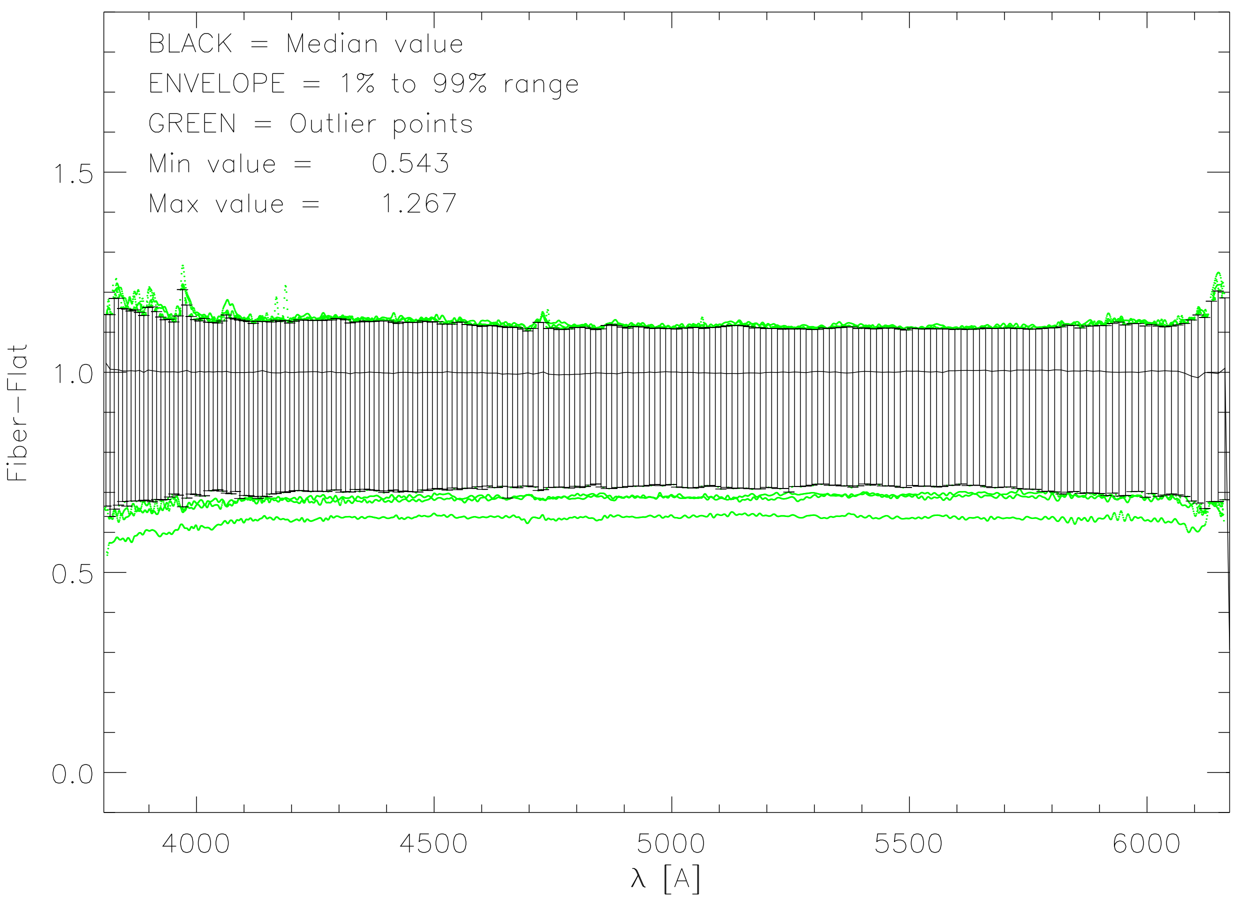
Number of sky fibers = 126

PLATE=3021 MJD=54780 sdR-b1-00056362.fit 2D Sky-subtraction Rescaled Errors



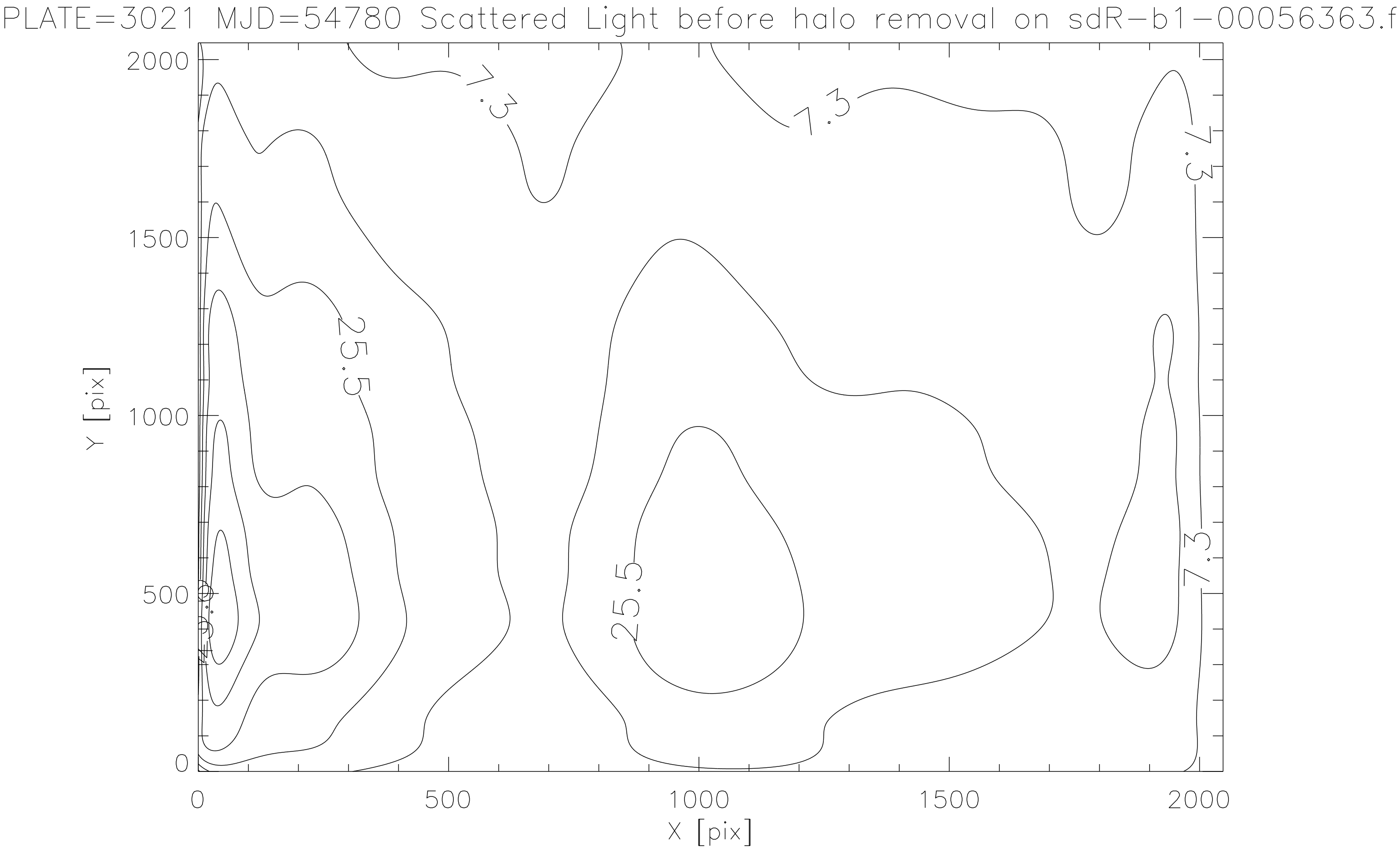

PLATE=3021 MJD=54780 sdR-b1-00056362.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
150
100
50
0
-50
-100
RED = sky fiber
Dispersion = 58.61 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
150
100
50
0
-50
-100
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
150
100
50
0
-50
-100
1.060
1.065
1.070
1.075
1.080
Airmass

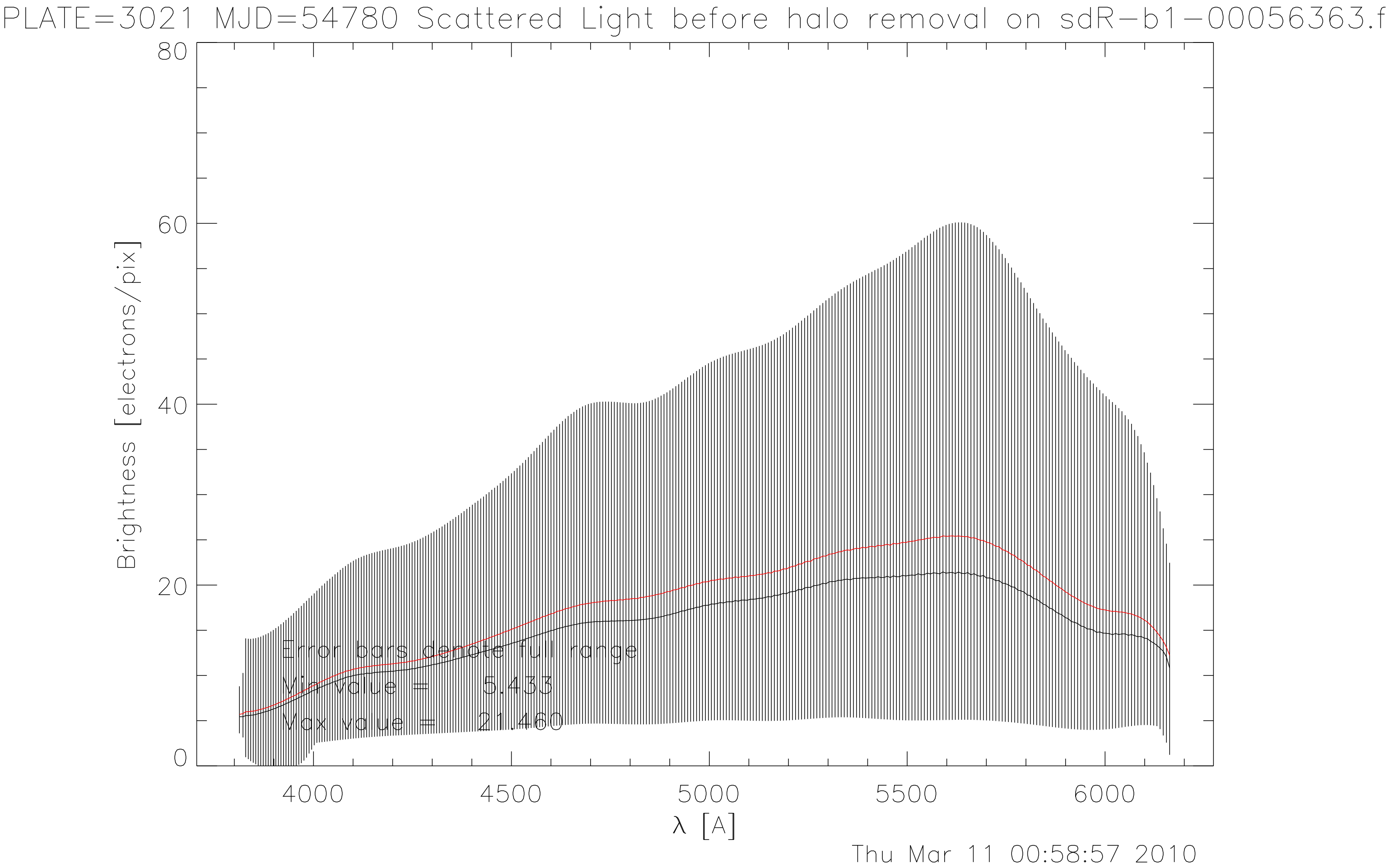

PLATE=3021 MJD=54780 sdR-b1-00056362.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
400
300
200
100
0
-100
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 25.08 %
Flux (5578.9)/Airmass
400
300
200
100
0
-100
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
400
300
200
100
0
-100
1.060
1.065
1.070
1.075
1.080
Airmass

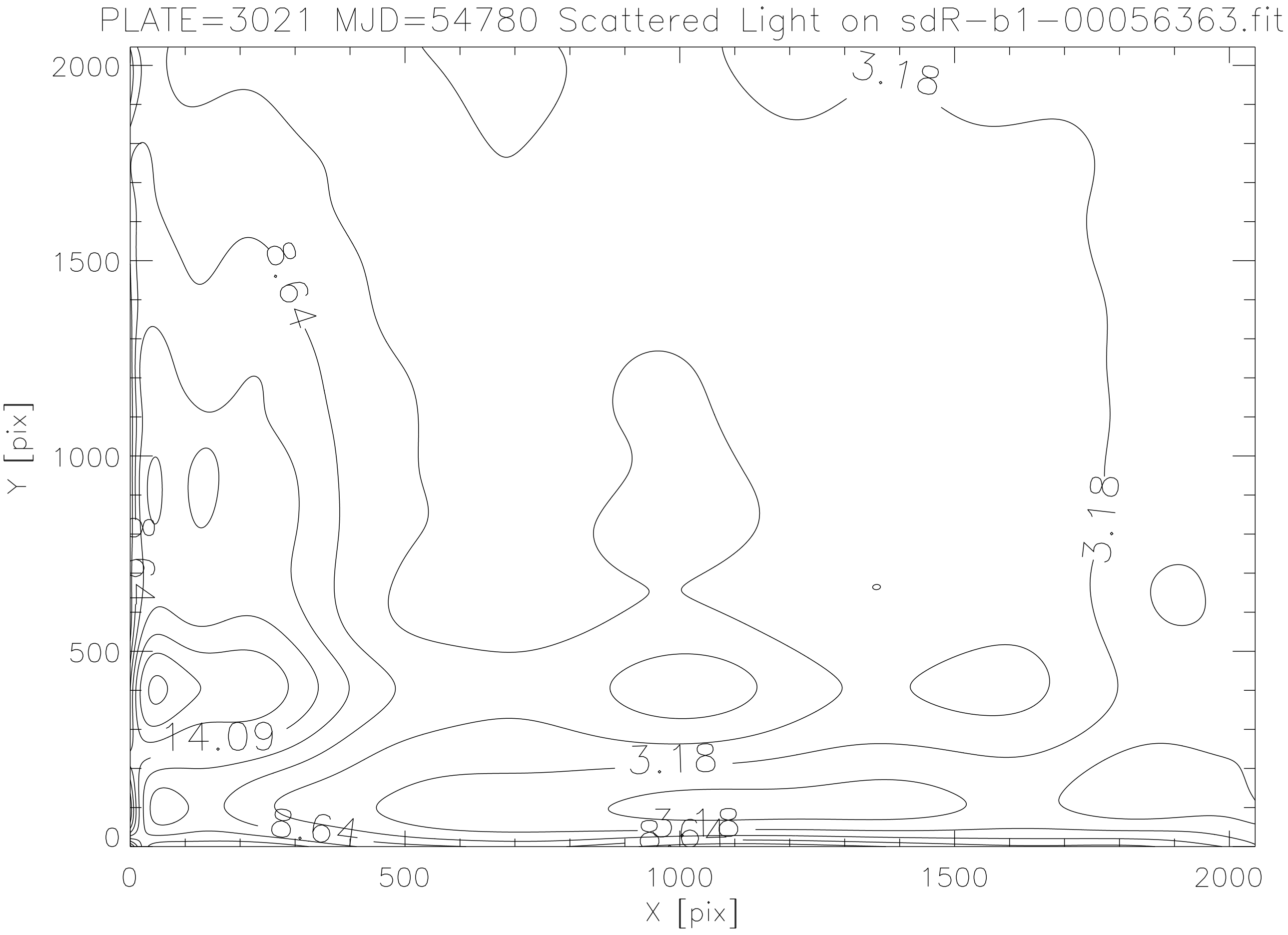


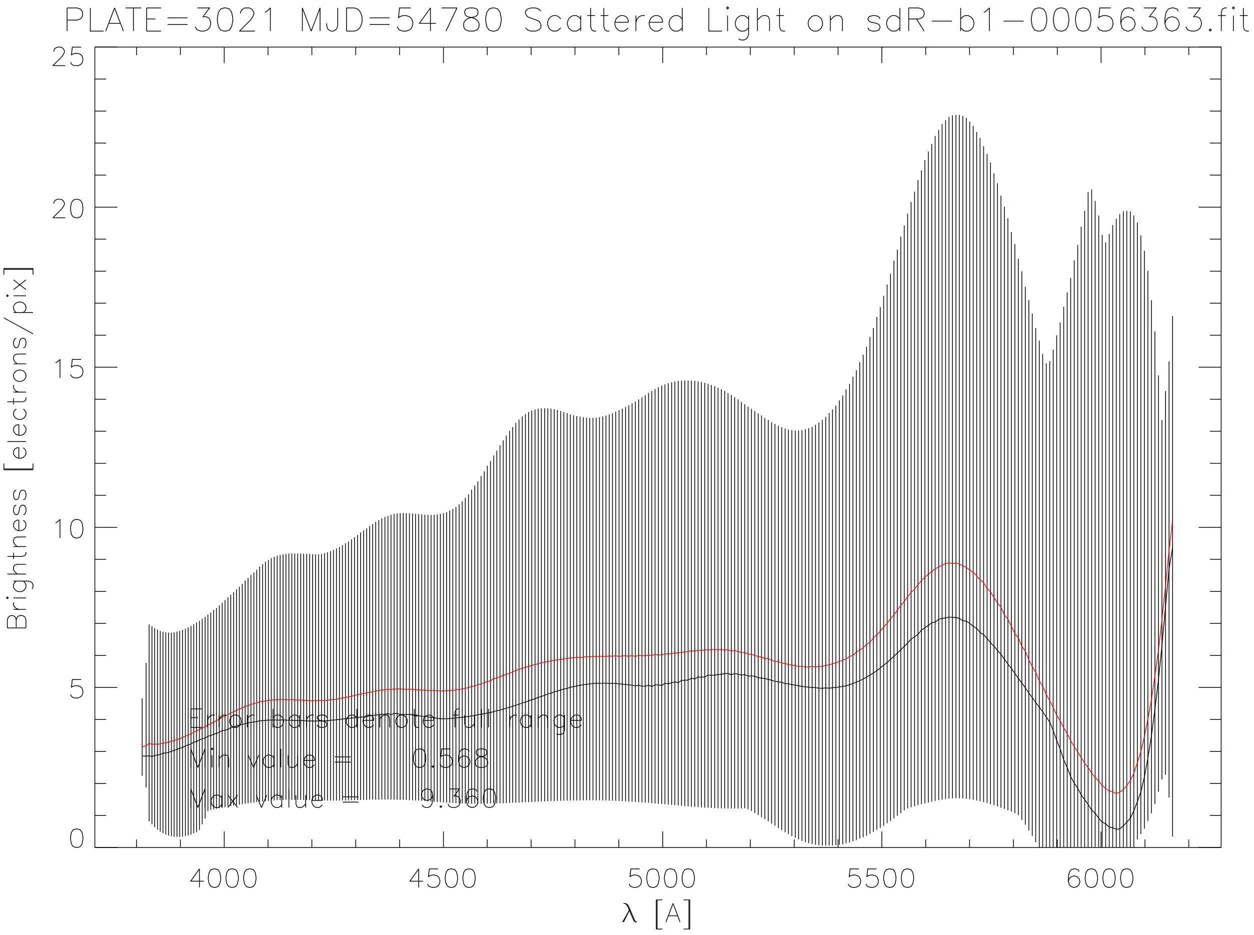
PLATE=3021 MJD=54780 Fiber-Flats for sdR-b1-00056360.fit

Thu Mar 11 00:58:21 2010


PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b1-00056363.f
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
7.3
7.3
7.3
7.3
25.5
25.5

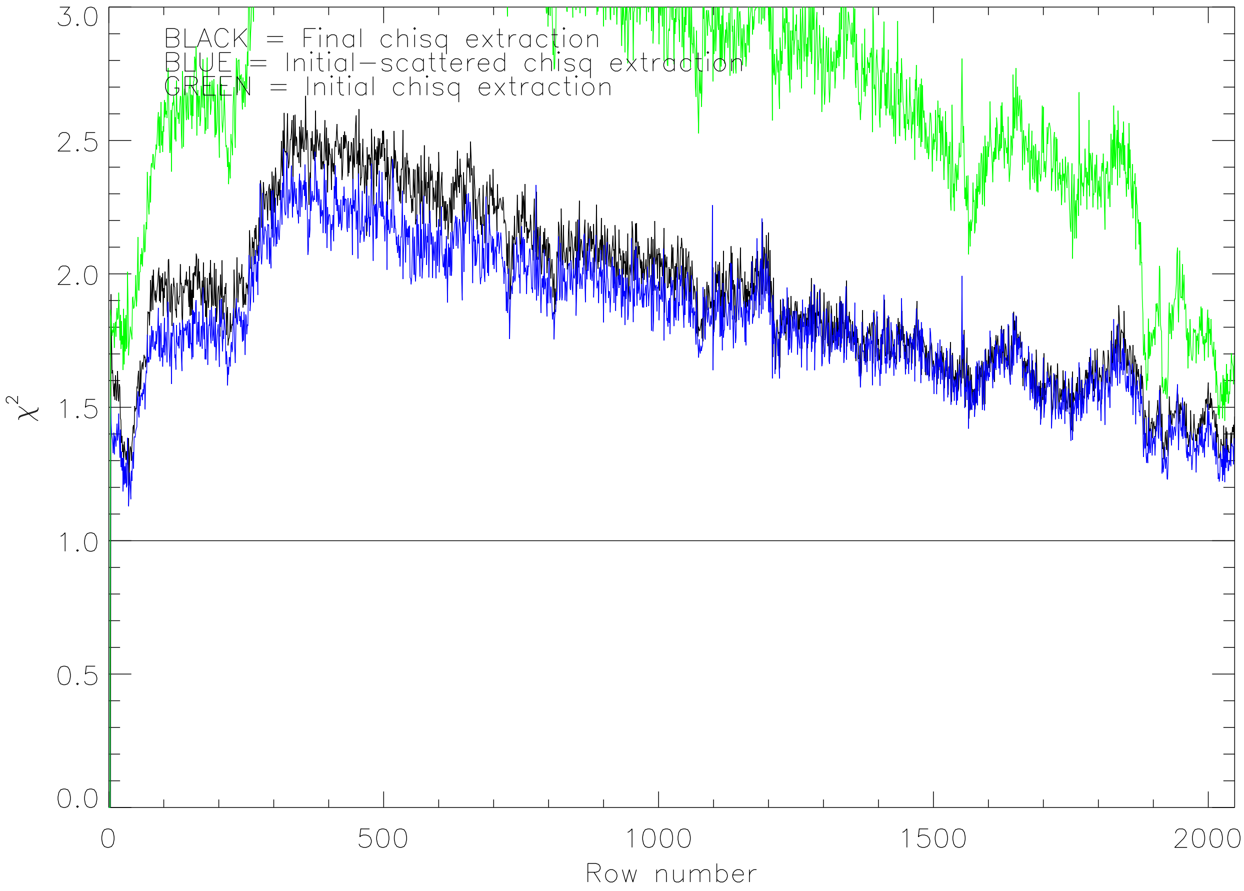

PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b1-00056363.f
Brightness [electrons/pix]
0
20
40
60
80
λ [A]
4000
4500
5000
5500
6000
Error bars denote full range
Min value = 5.433
Max value = 21.460
Thu Mar 11 00:58:57 2010

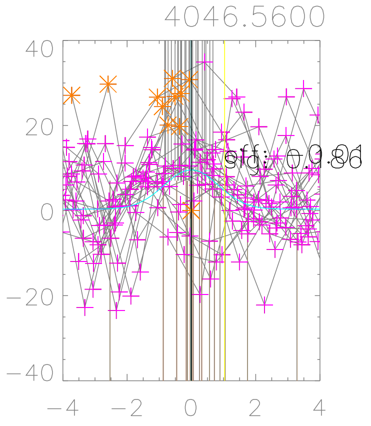

PLATE=3021 MJD=54780 Scattered Light on sdR-b1-00056363.fit
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
3.18
8.64
8.64
3.18
14.09
3.18
8.64
3.18
8.64

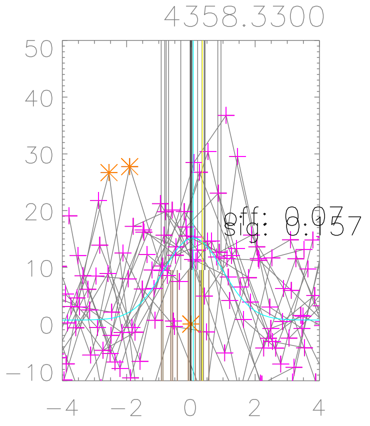


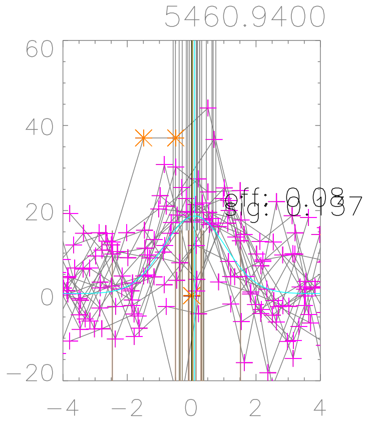
Thu Mar 11 01:02:22 2010

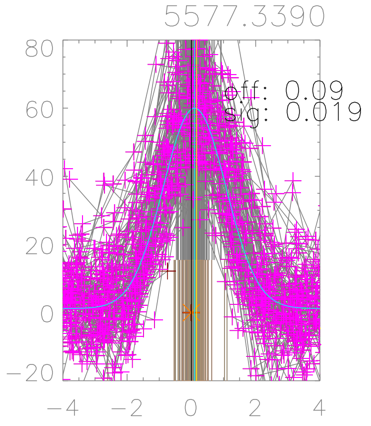
PLATE=3021 MJD=54780 Extraction chi^2 for sdR-b1-00056363.fit

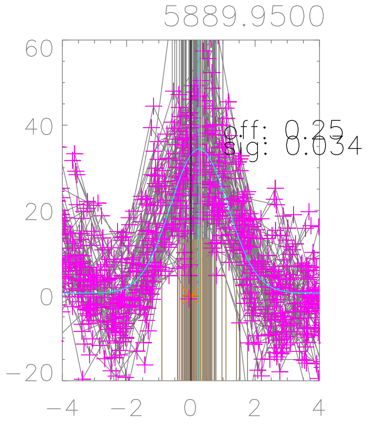


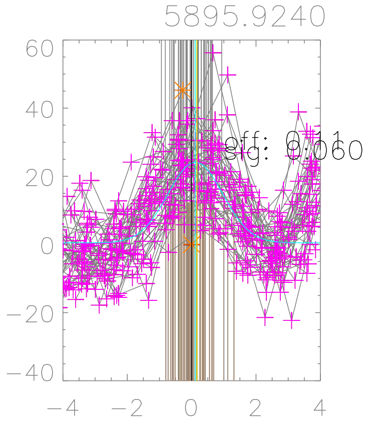

4046.5600
off: 0.01
sig: 0.86
40
20
0
−20
−40
−4
−2
0
2
4

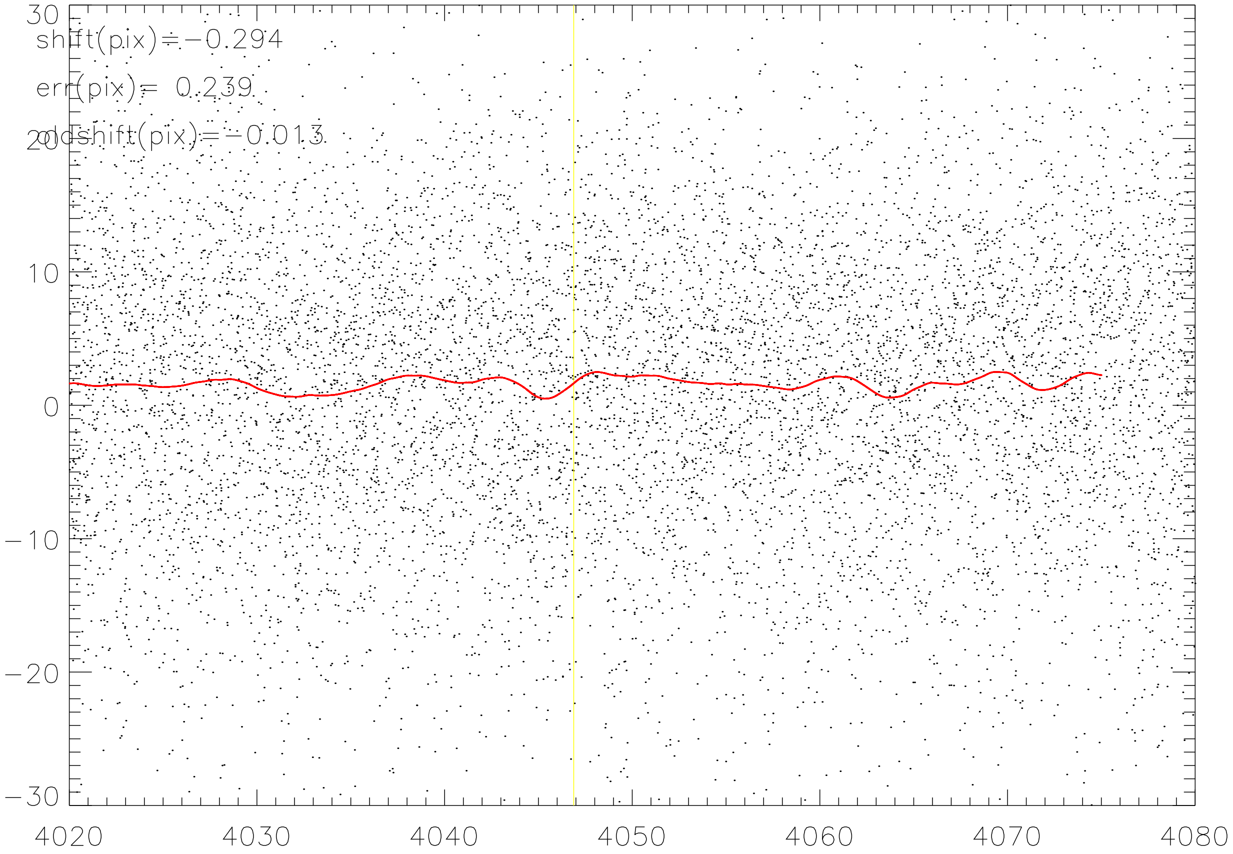

4358.3300
off: 0.07
sig: 0.157
50
40
30
20
10
0
−10
−4
−2
0
2
4

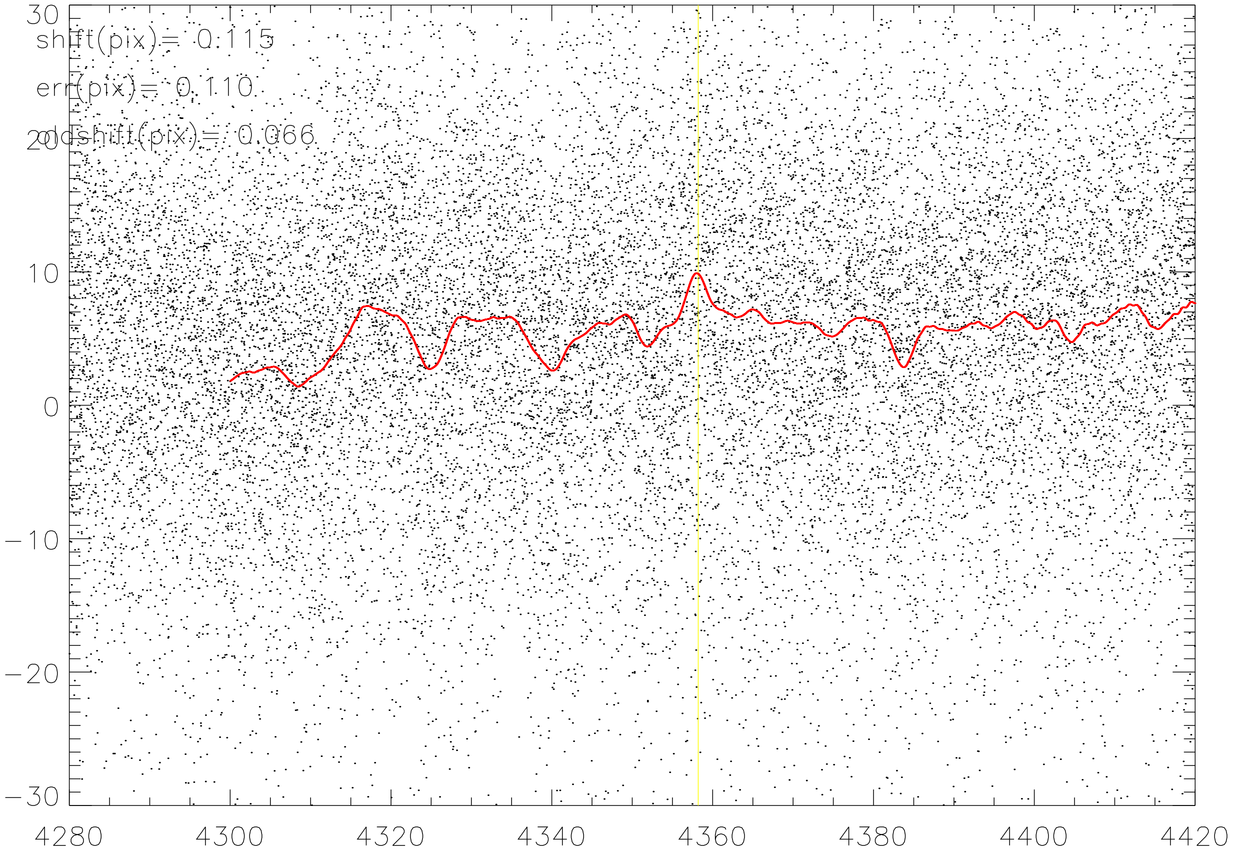

5460.9400
off: 0.08
sig: 0.137
60
40
20
0
−20
−4
−2
0
2
4

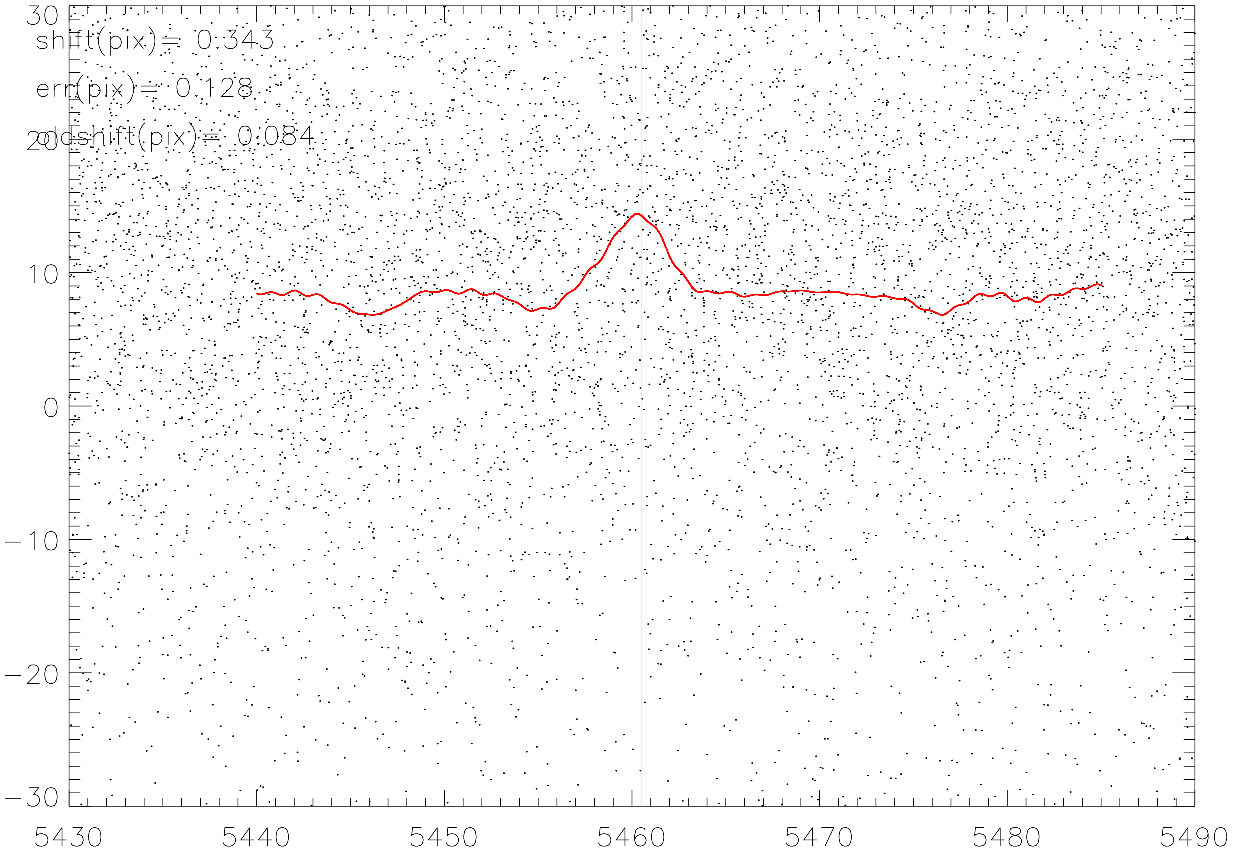

5577.3390
off: 0.09
sig: 0.019
80
60
40
20
0
−20
−4
−2
0
2
4


5889.9500
off: 0.25
sig: 0.034
60
40
20
0
−20
−4
−2
0
2
4

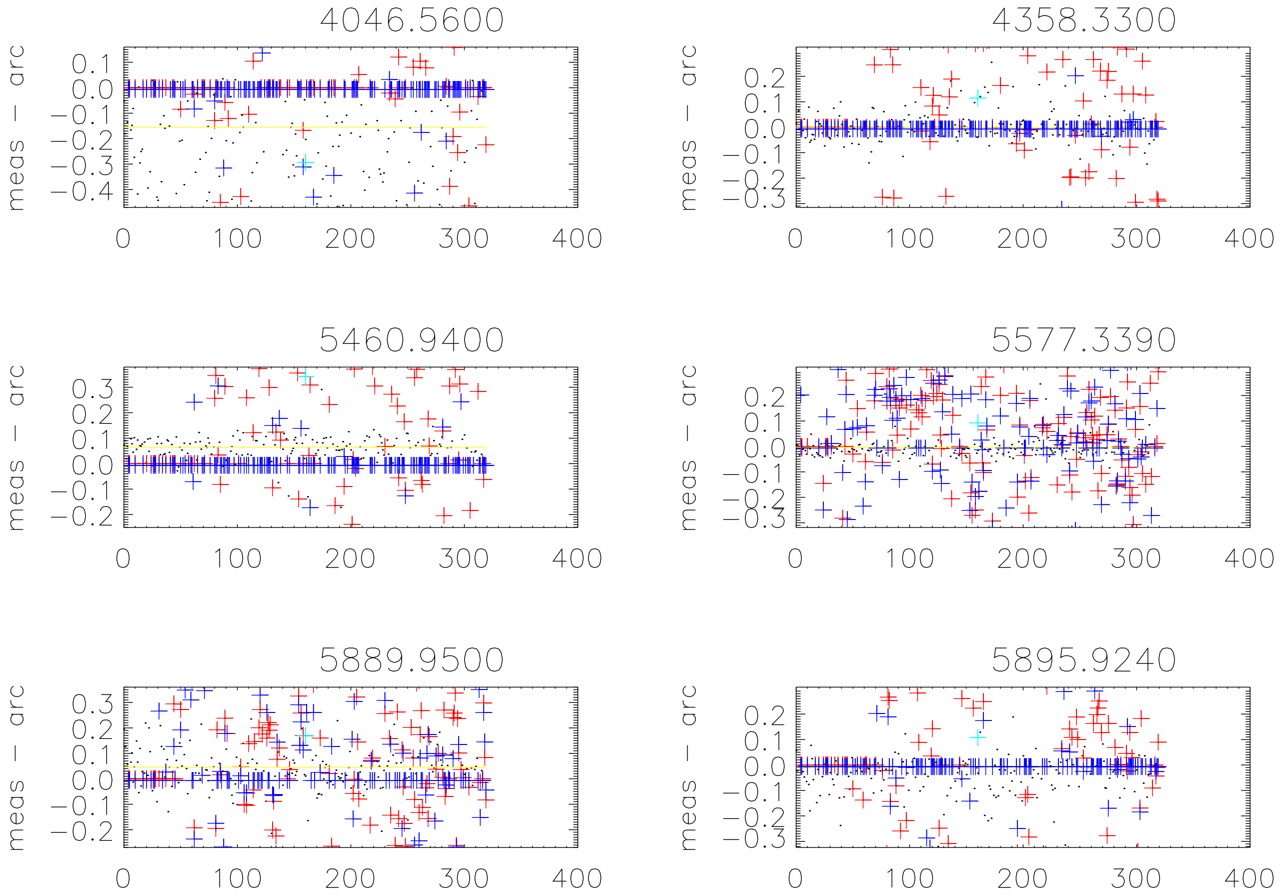

5895.9240
off: 0.11
sig: 0.060
60
40
20
0
−20
−40
−4
−2
0
2
4

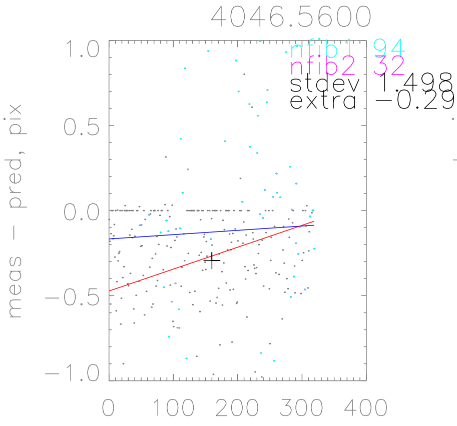

shift(pix)= −0.294
err(pix)= 0.239
oldshift(pix)= −0.013
30
20
10
0
−10
−20
−30
4020
4030
4040
4050
4060
4070
4080

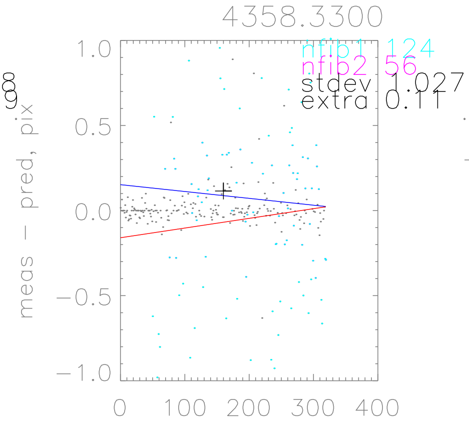

shift(pix)= 0.115
err(pix)= 0.110
oldshift(pix)= 0.066
30
20
10
0
−10
−20
−30
4280
4300
4320
4340
4360
4380
4400
4420

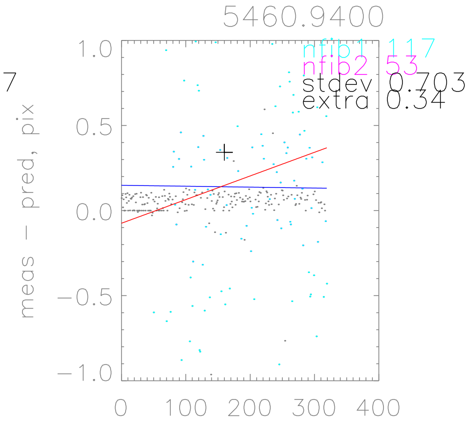


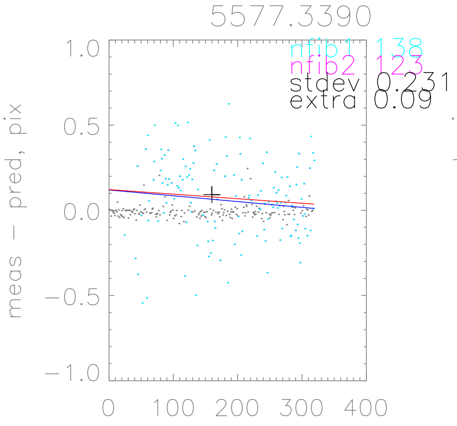
shift(pix)= 0.343
err(pix)= 0.128
oldshift(pix)= 0.084
30
20
10
0
−10
−20
−30
5430
5440
5450
5460
5470
5480
5490

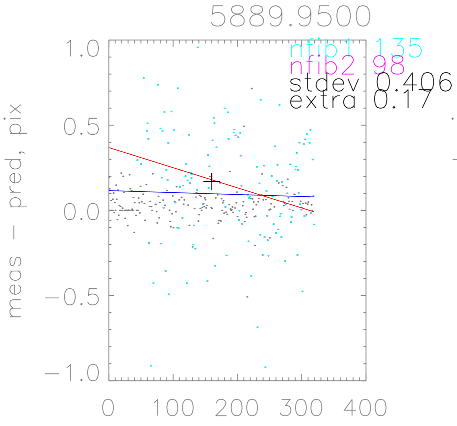

4046.5600
4358.3300
5460.9400
5577.3390
5889.9500
5895.9240
meas − arc
0
100
200
300
400

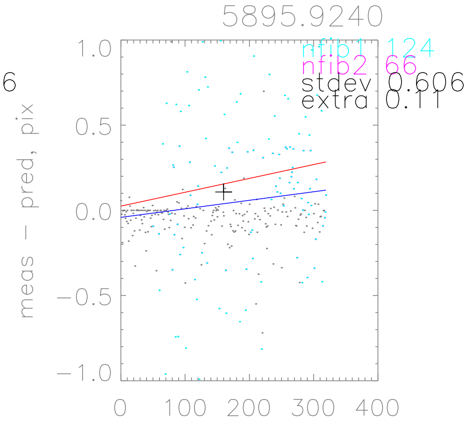

4046.5600
nfib1 94
nfib2 32
stdev 1.498
extra −0.29
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

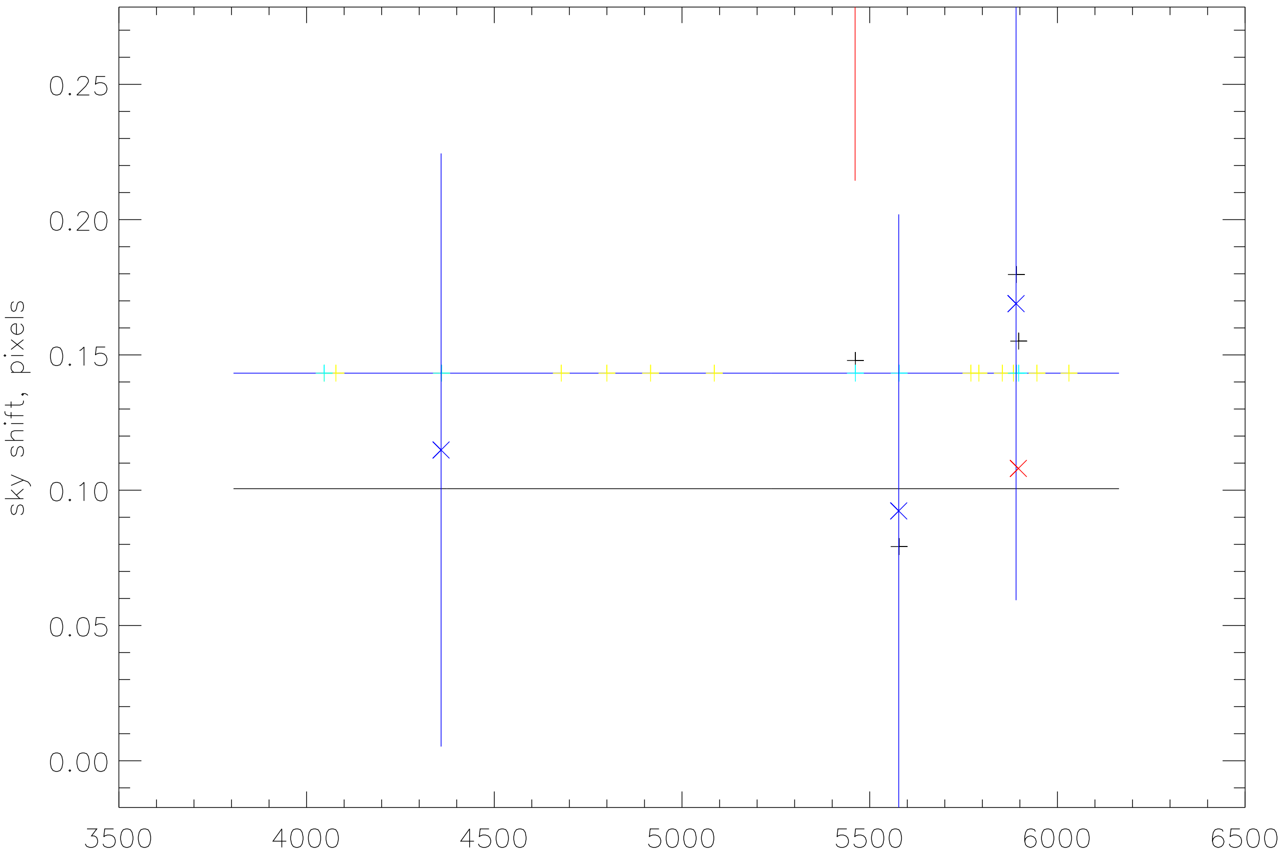

4358.3300
nfib1 124
nfib2 56
stdev 1.027
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

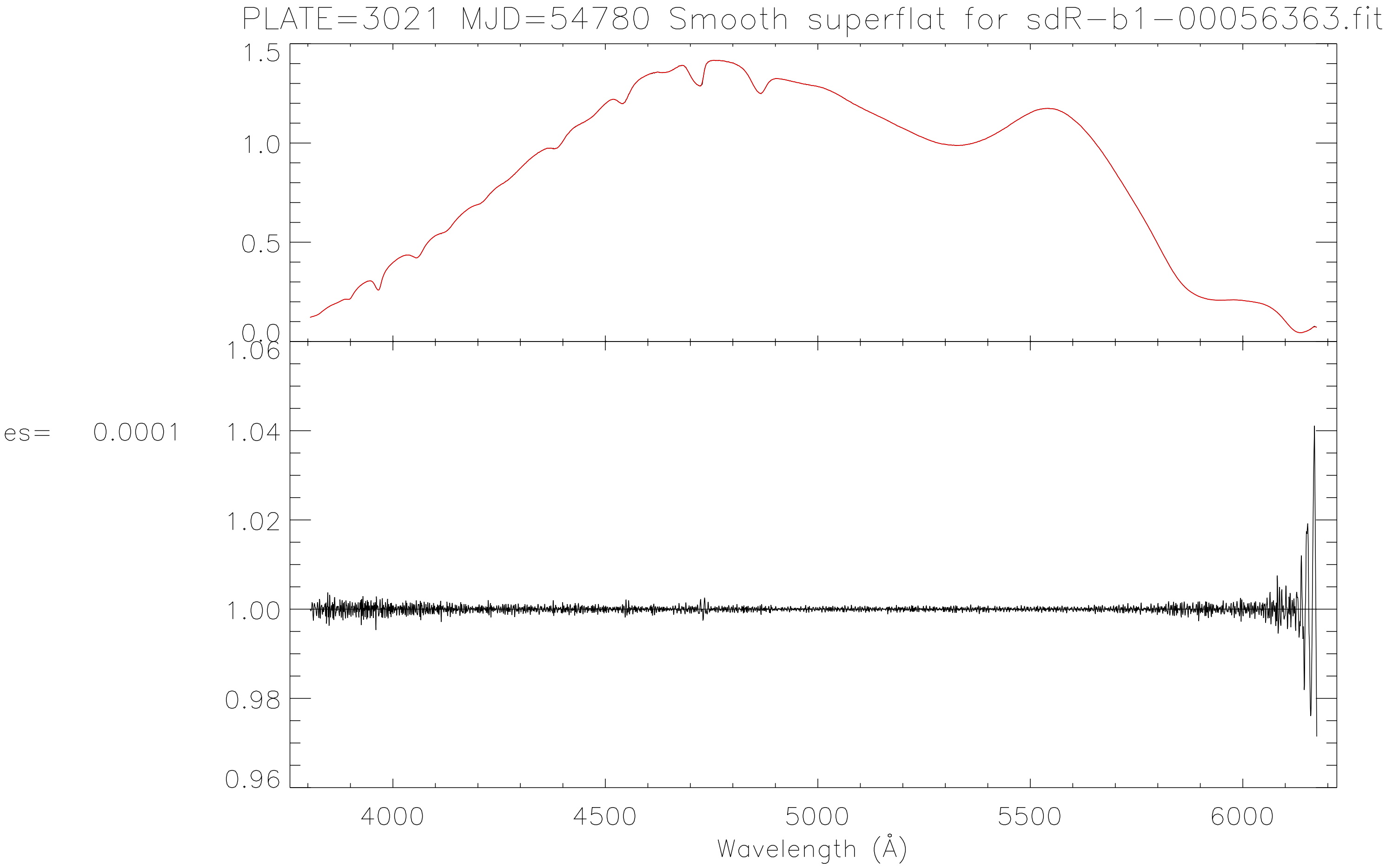

5460.9400
nfib1 117
nfib2 53
stdev 0.703
extra 0.34
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

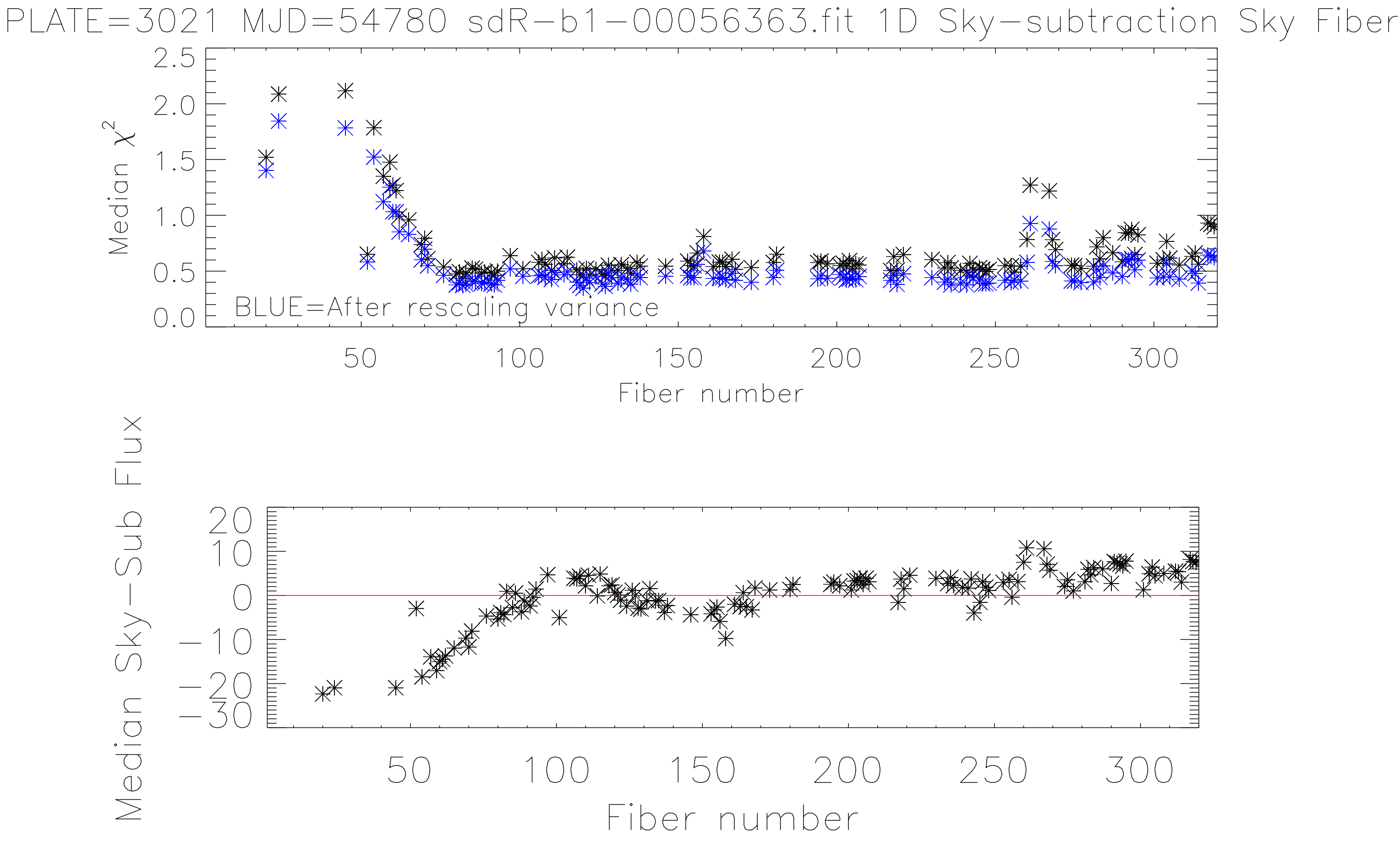

5577.3390
nfib1 138
nfib2 123
stdev 0.231
extra 0.09
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

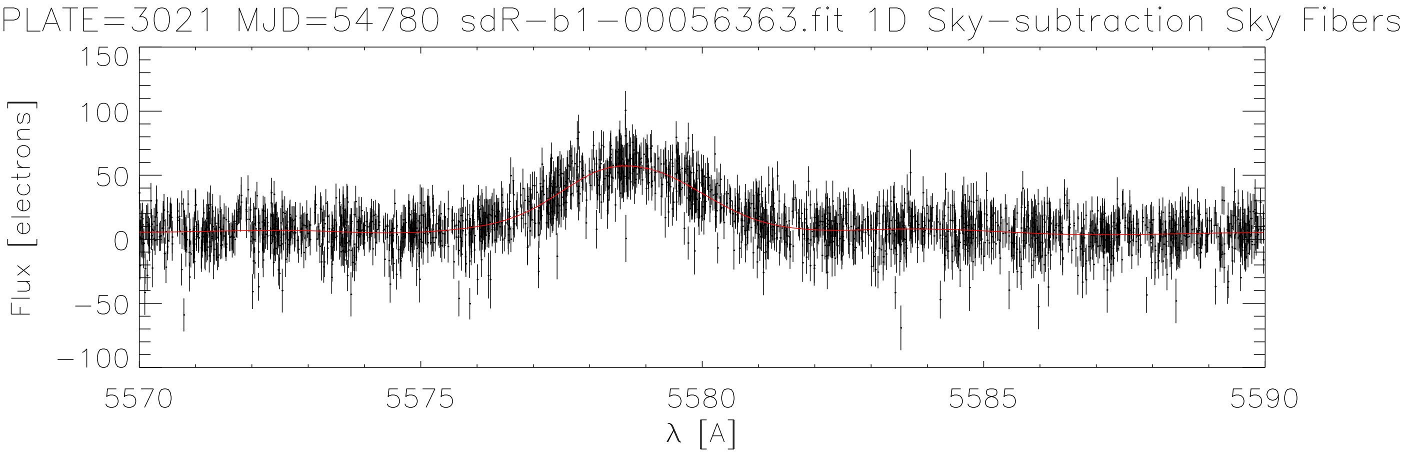

5889.9500
nfib1 135
nfib2 98
stdev 0.406
extra 0.17
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

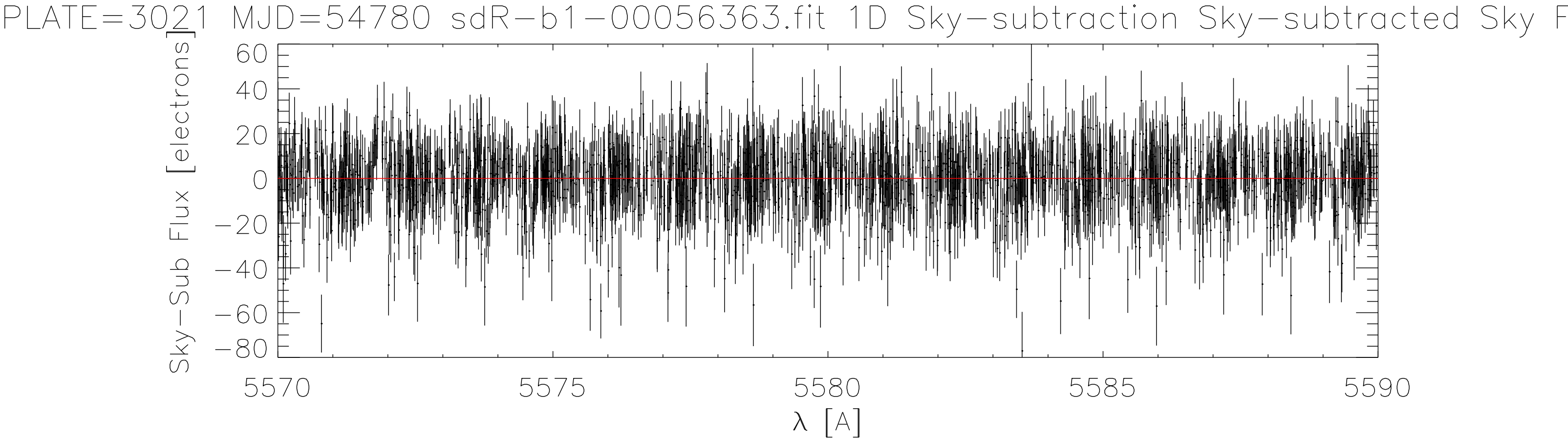

5895.9240
nfib1 124
nfib2 66
stdev 0.606
extra 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.00
0.05
0.10
0.15
0.20
0.25
3500
4000
4500
5000
5500
6000
6500


PLATE=3021 MJD=54780 Smooth superflat for sdR-b1-00056363.fit
1.5
1.0
0.5
0.0
1.06
1.04
1.02
1.00
0.98
0.96
es= 0.0001
4000
4500
5000
5500
6000
Wavelength (Å)

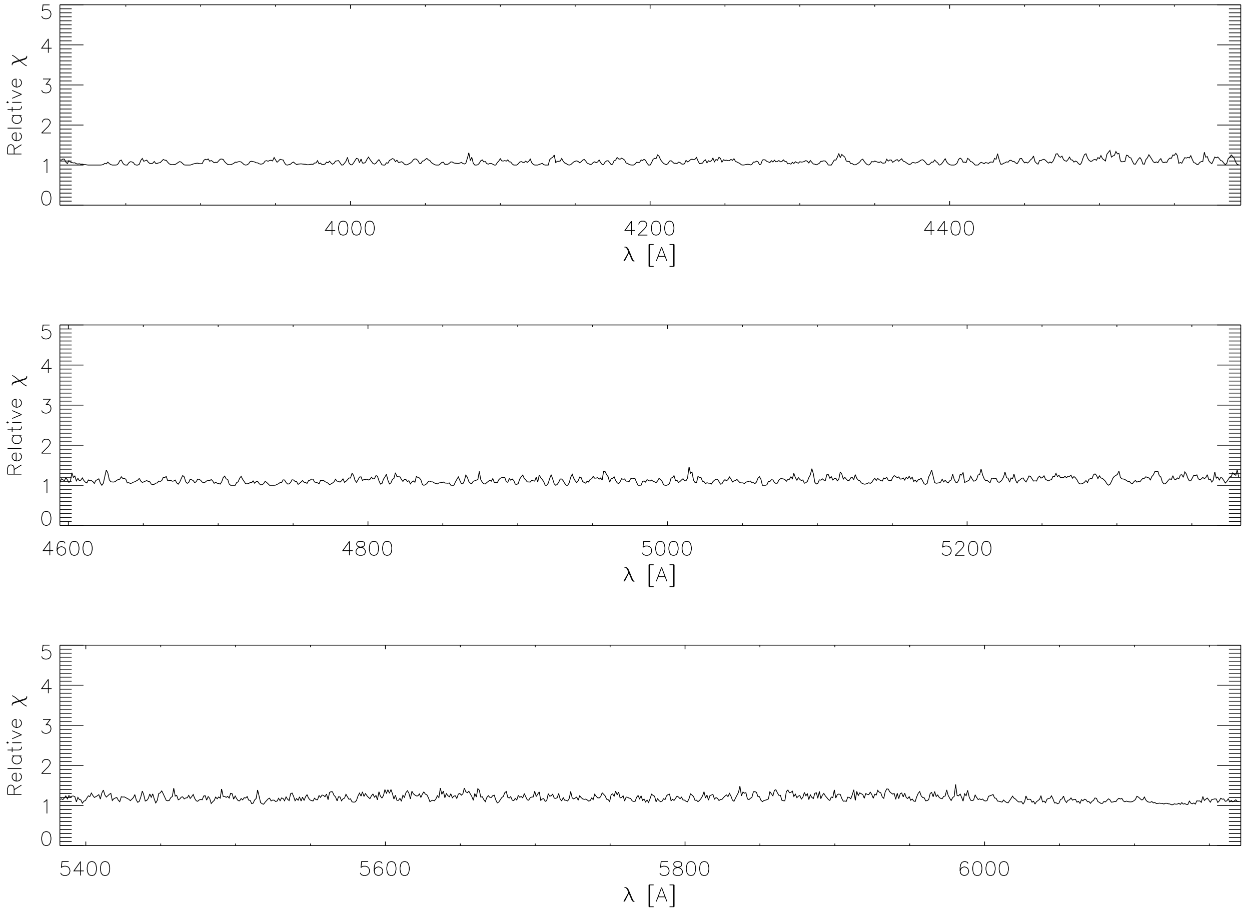

PLATE=3021 MJD=54780 sdR-b1-00056363.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number

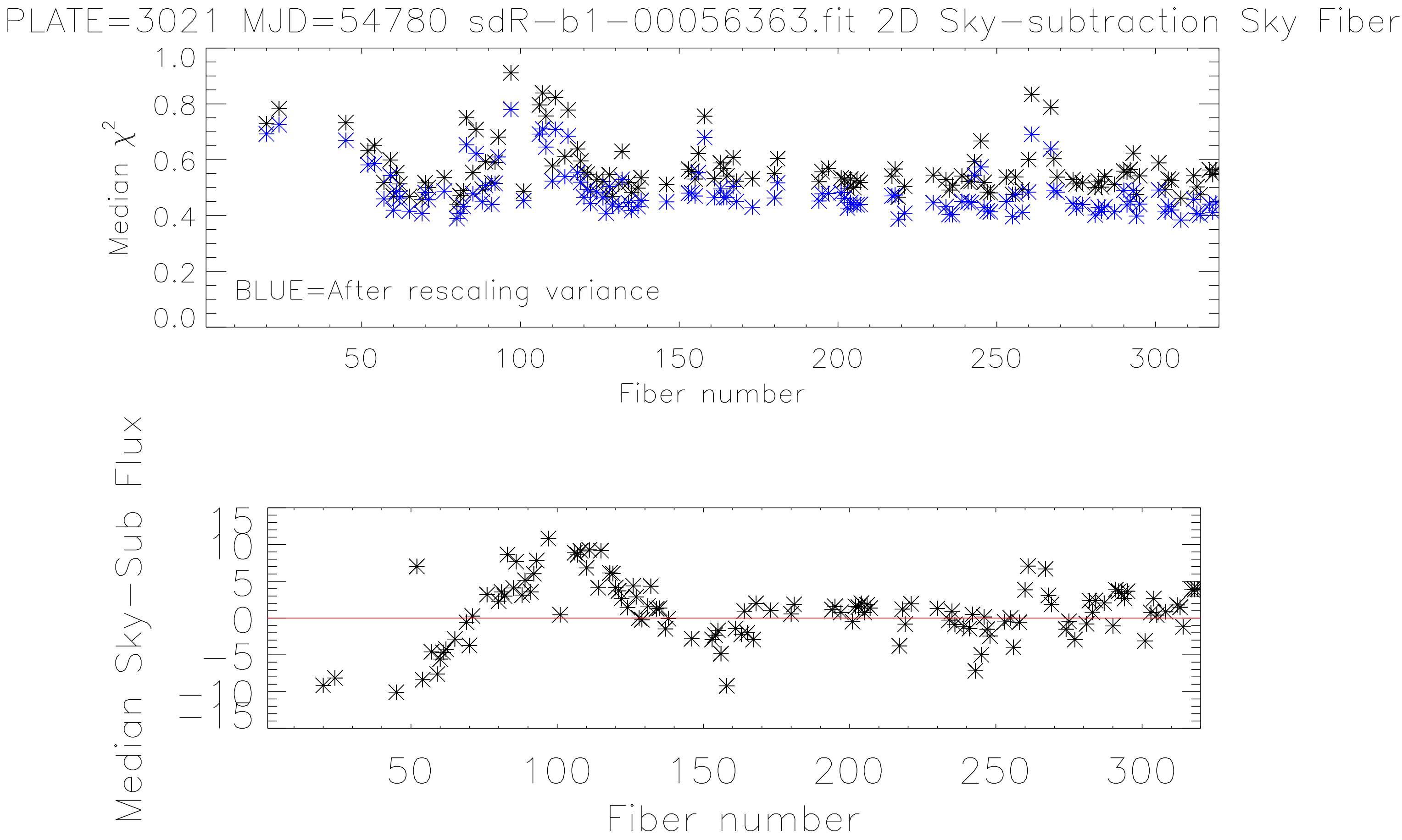

PLATE=3021 MJD=54780 sdR-b1-00056363.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

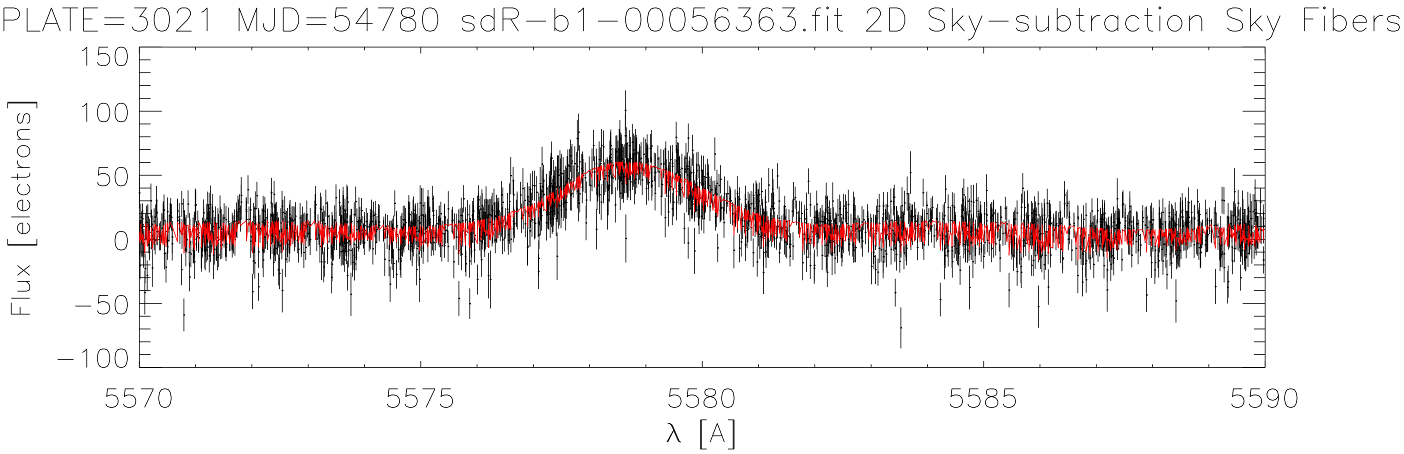

PLATE=3021 MJD=54780 sdR-b1-00056363.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
−20
−40
−60
−80
5570
5575
5580
5585
5590
λ [A]

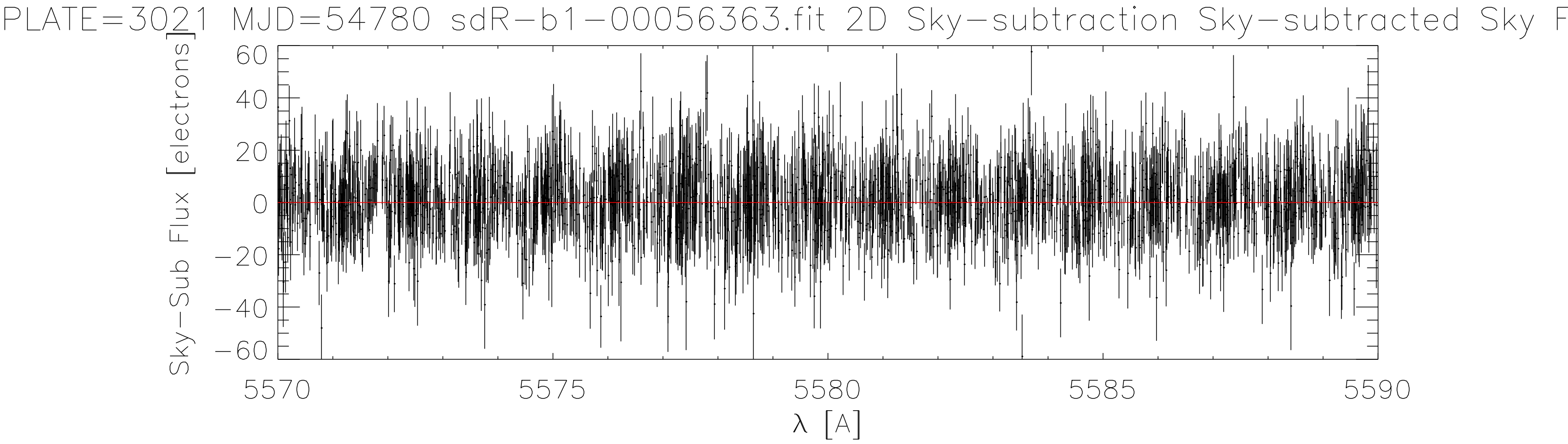
Number of sky fibers = 126

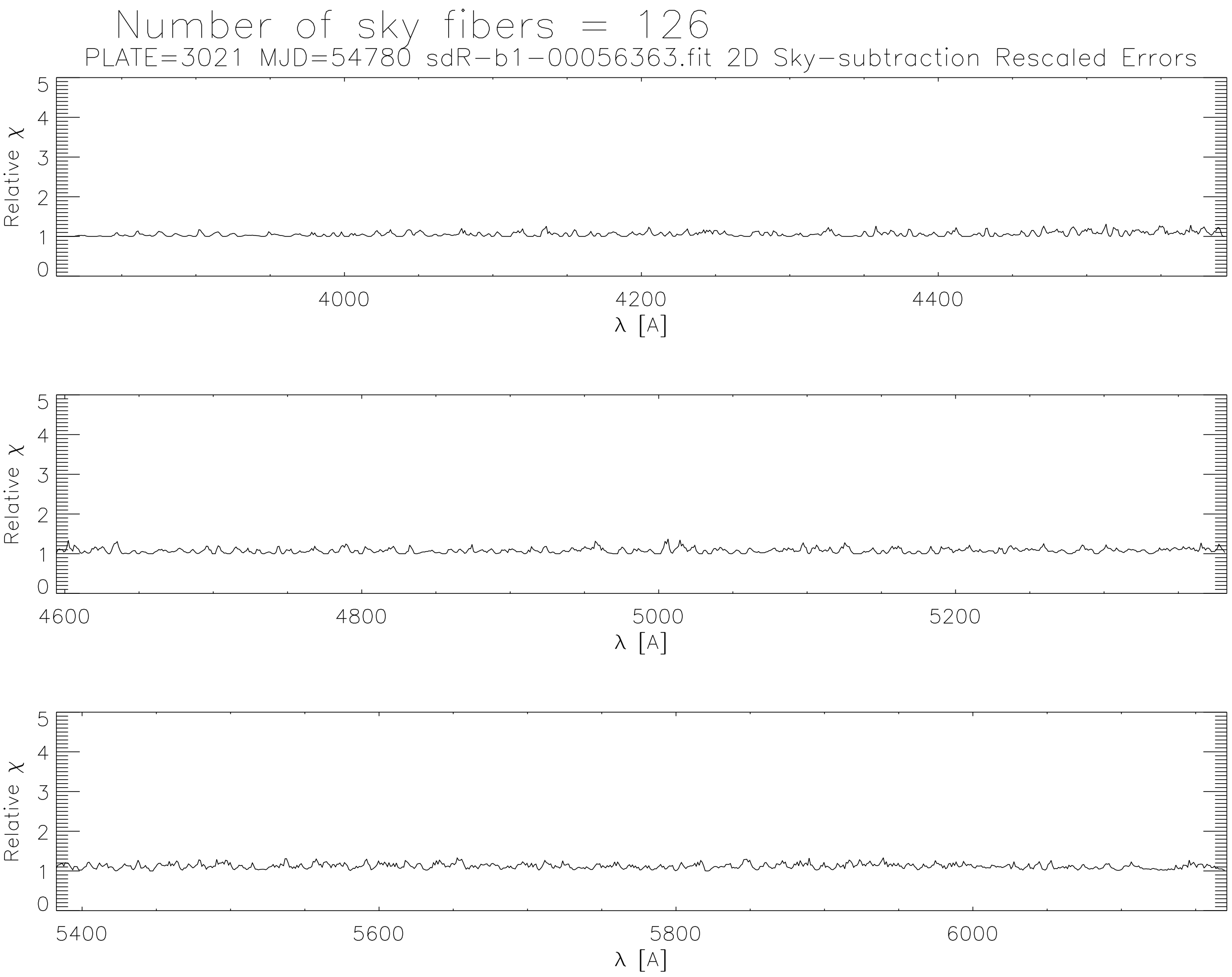
PLATE=3021 MJD=54780 sdR-b1-00056363.fit 1D Sky-subtraction Rescaled Errors




PLATE=3021 MJD=54780 sdR-b1-00056363.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.0
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
15
10
5
0
−5
−10
−15
50
100
150
200
250
300
Fiber number

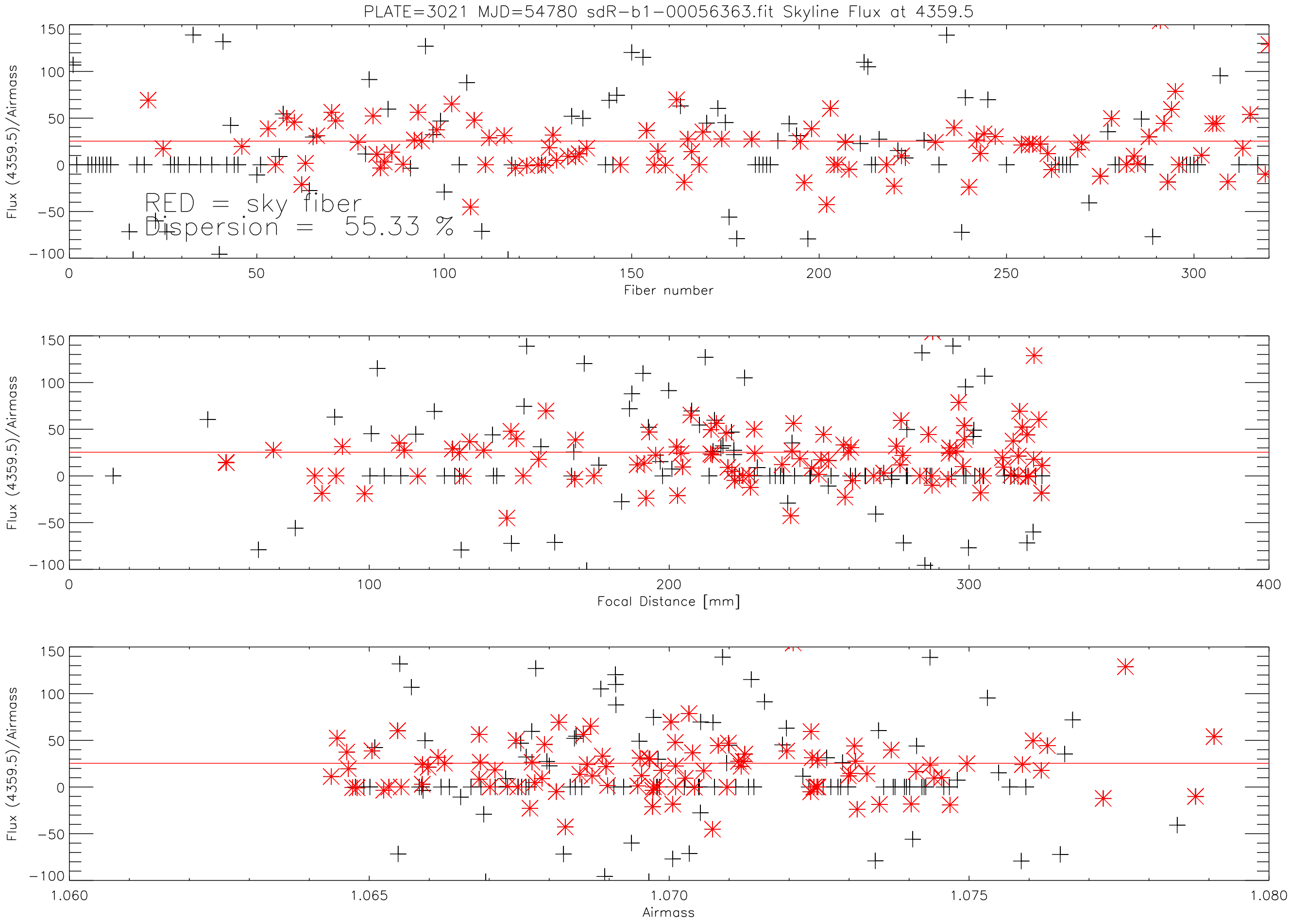

PLATE=3021 MJD=54780 sdR-b1-00056363.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
150
100
50
0
−50
−100
5570
5575
5580
5585
5590
λ [A]

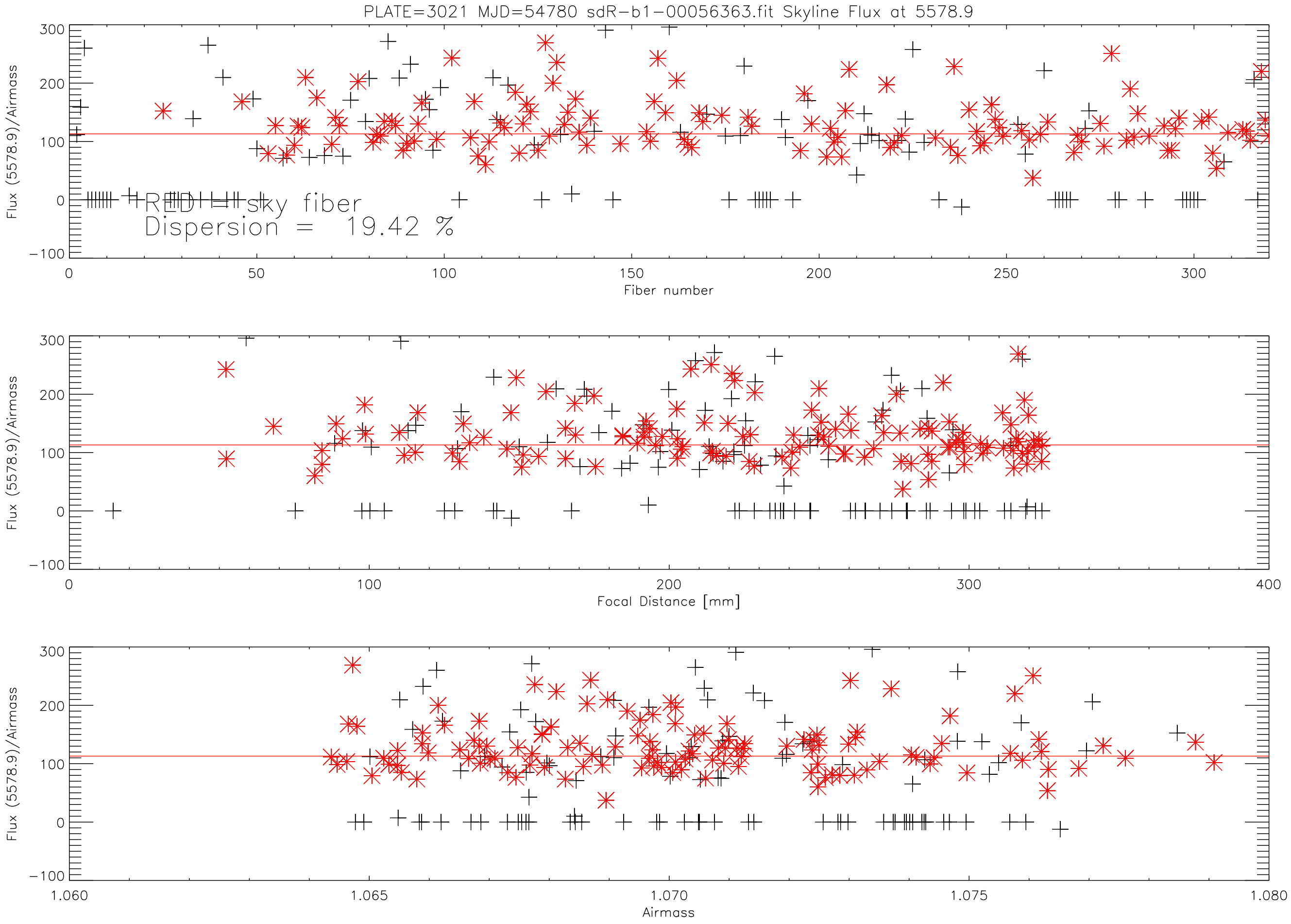

PLATE=3021 MJD=54780 sdR-b1-00056363.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky−Sub Flux [electrons]
60
40
20
0
−20
−40
−60
5570
5575
5580
5585
5590
λ [A]

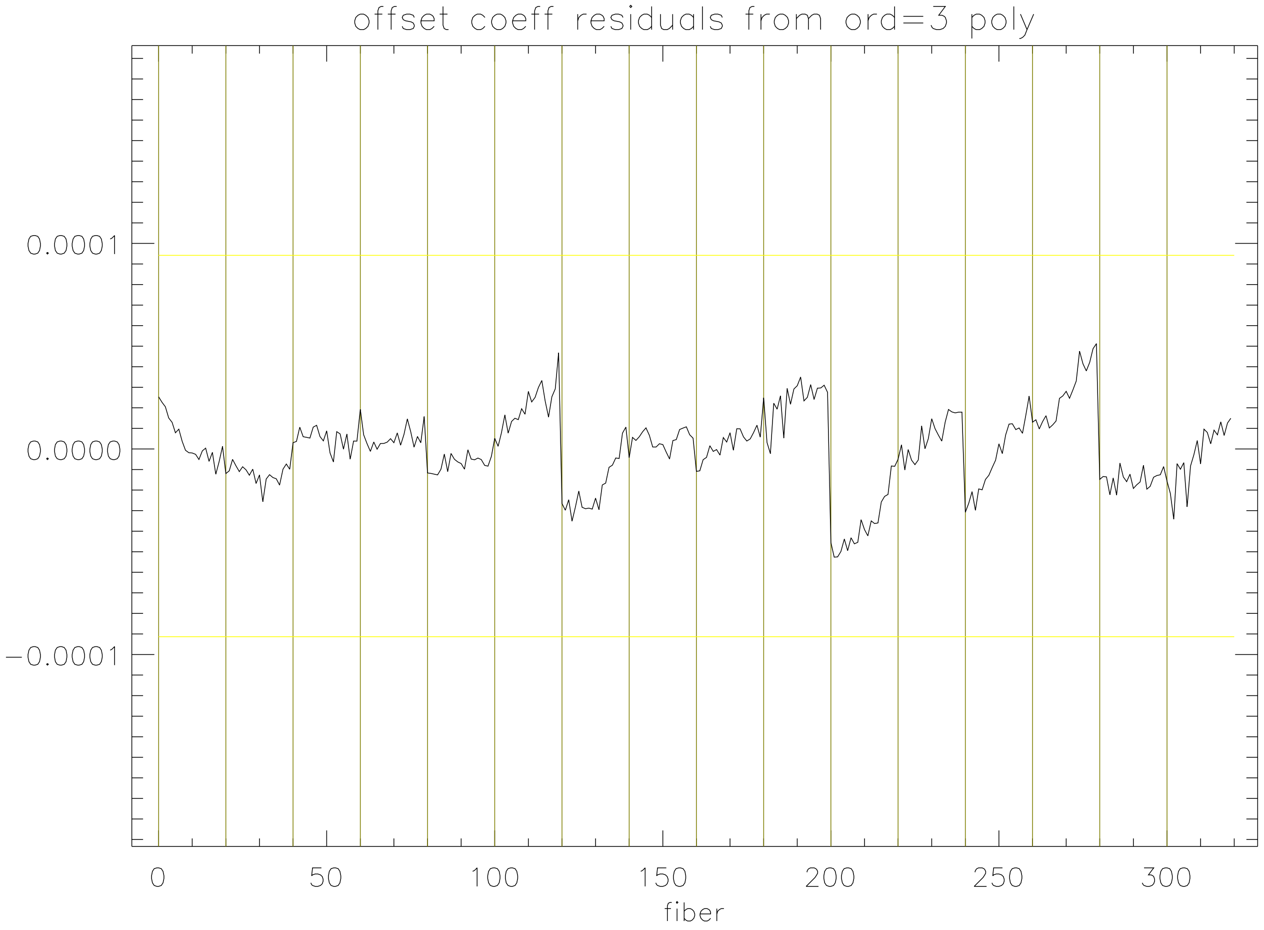


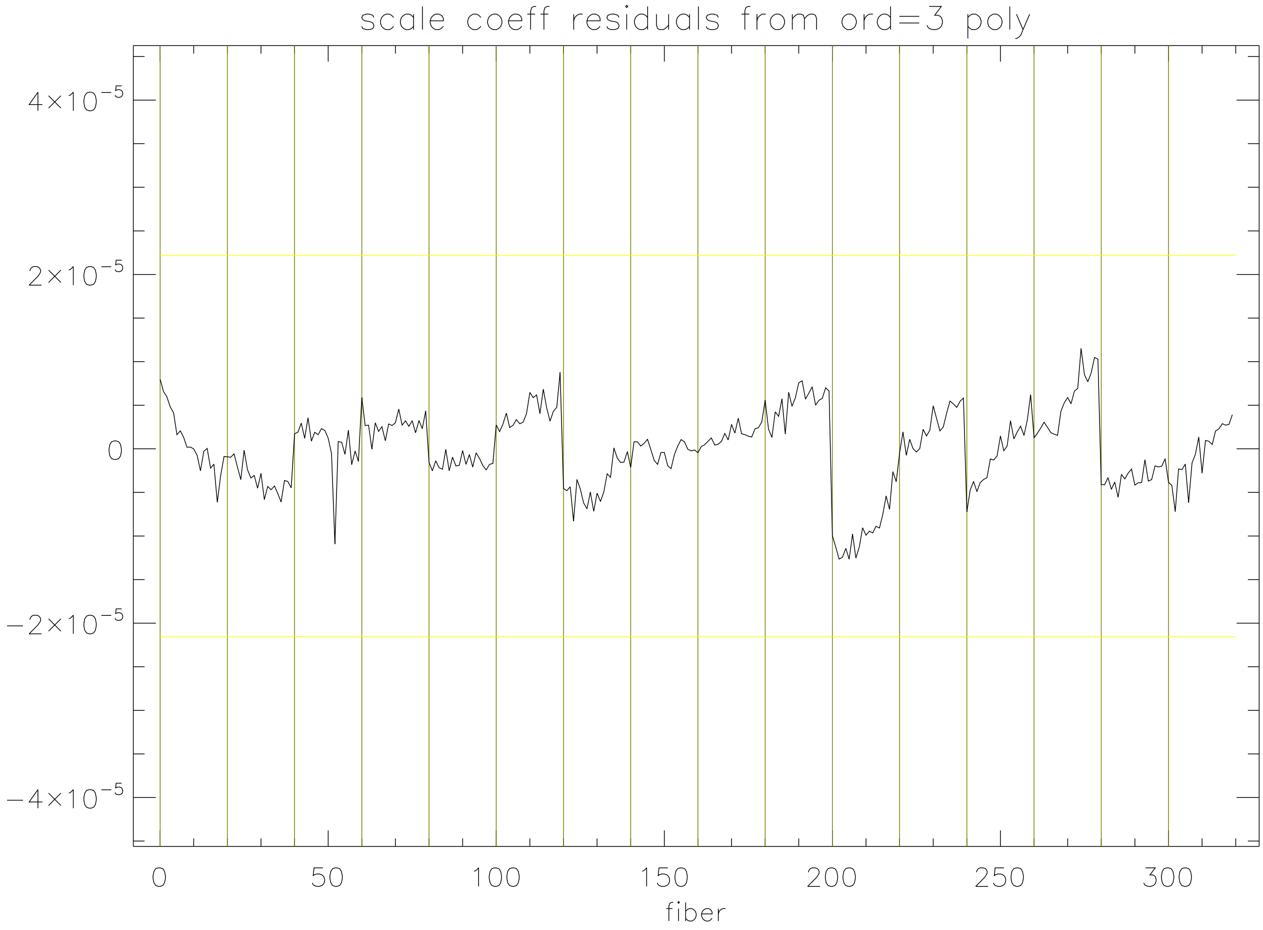
Number of sky fibers = 126

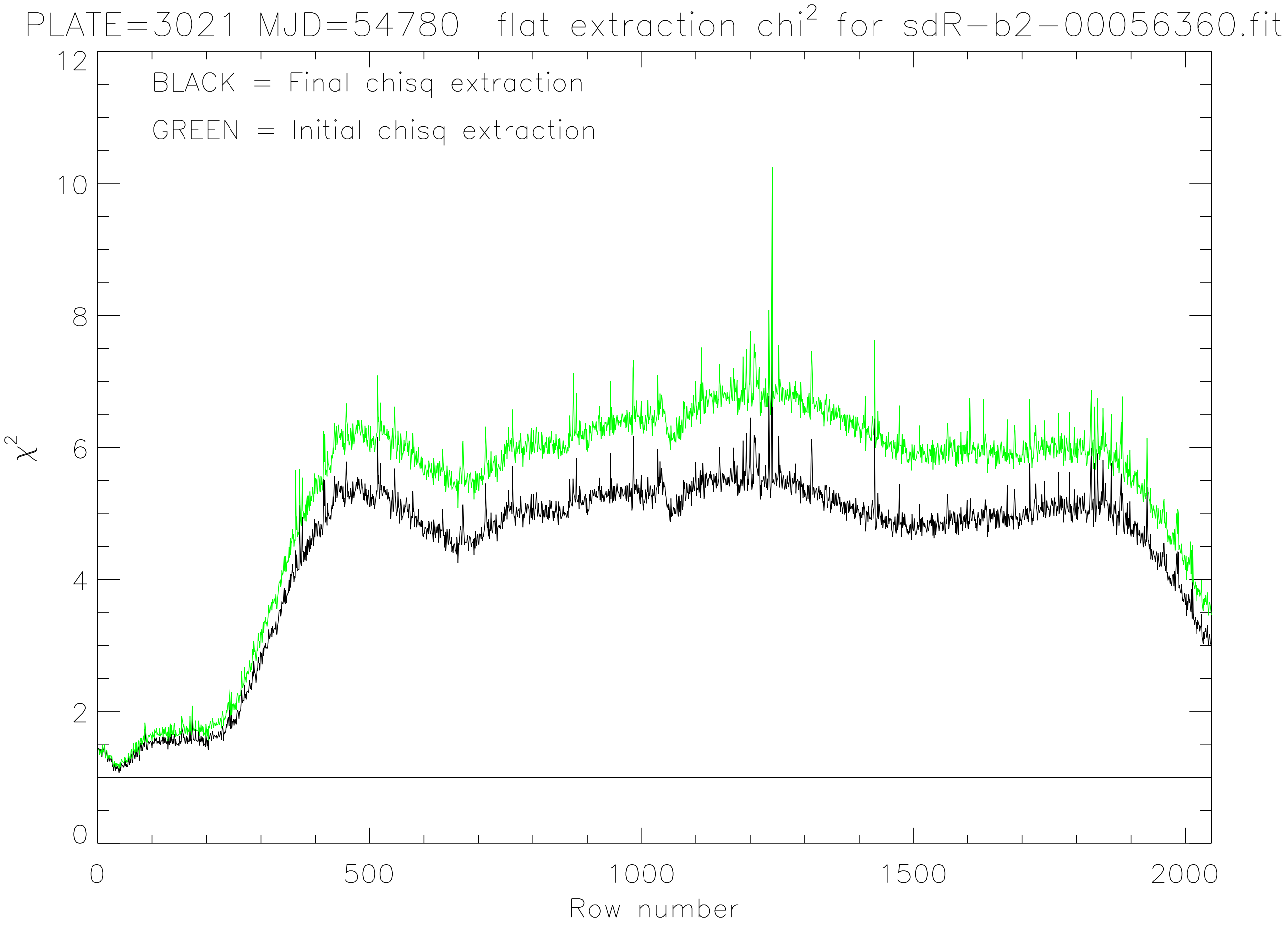
PLATE=3021 MJD=54780 sdR-b1-00056363.fit 2D Sky-subtraction Rescaled Errors

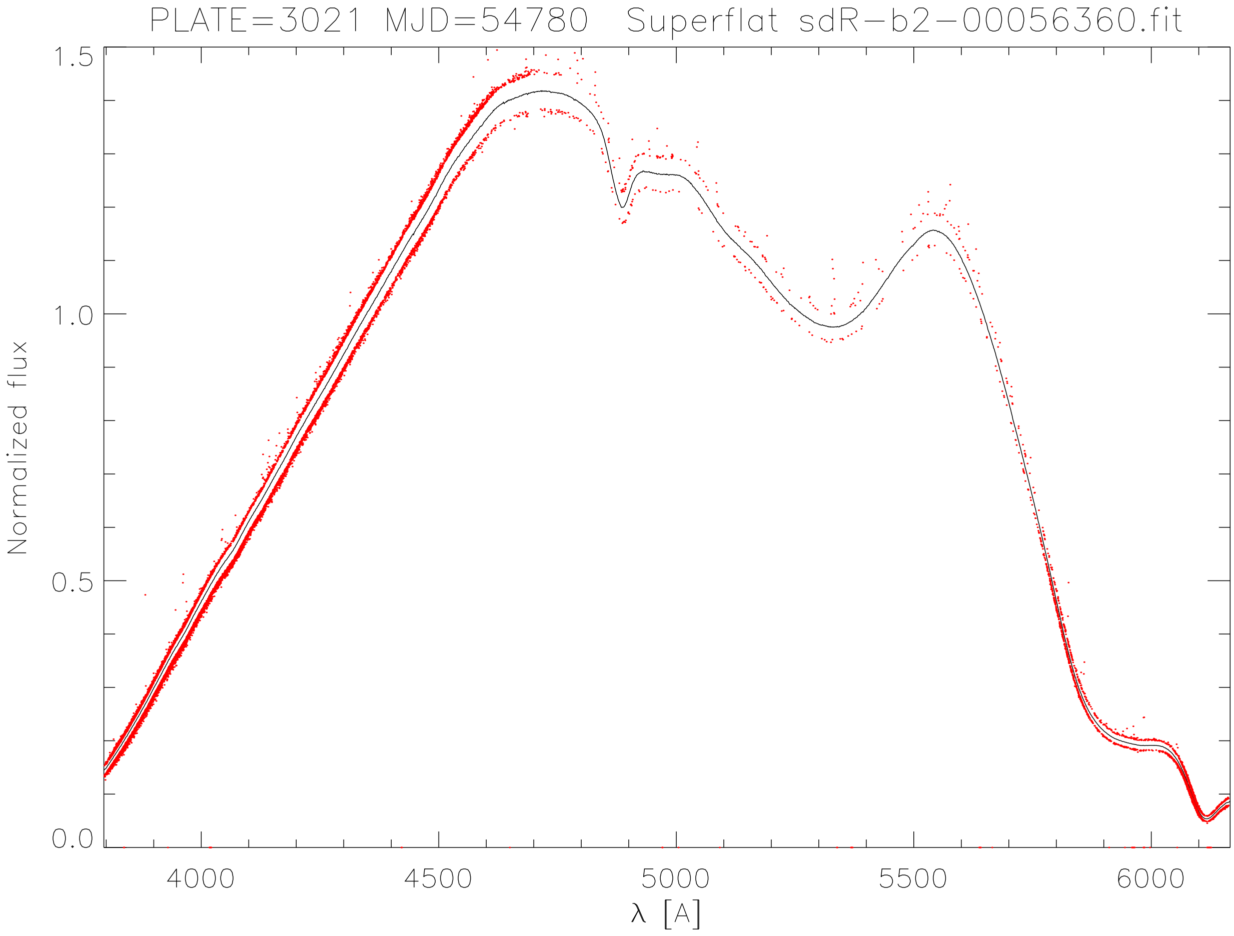

PLATE=3021 MJD=54780 sdR-b1-00056363.fit Skyline Flux at 4359.5
Flux (4359.5)/Airmass
150
100
50
0
−50
−100
RED = sky fiber
Dispersion = 55.33 %
0
50
100
150
200
250
300
Fiber number
Flux (4359.5)/Airmass
150
100
50
0
−50
−100
0
100
200
300
400
Focal Distance [mm]
Flux (4359.5)/Airmass
150
100
50
0
−50
−100
1.060
1.065
1.070
1.075
1.080
Airmass


PLATE=3021 MJD=54780 sdR-b1-00056363.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
300
200
100
0
-100
0
50
100
150
200
250
300
Fiber number
RED = sky fiber
Dispersion = 19.42 %
Flux (5578.9)/Airmass
300
200
100
0
-100
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
300
200
100
0
-100
1.060
1.065
1.070
1.075
1.080
Airmass

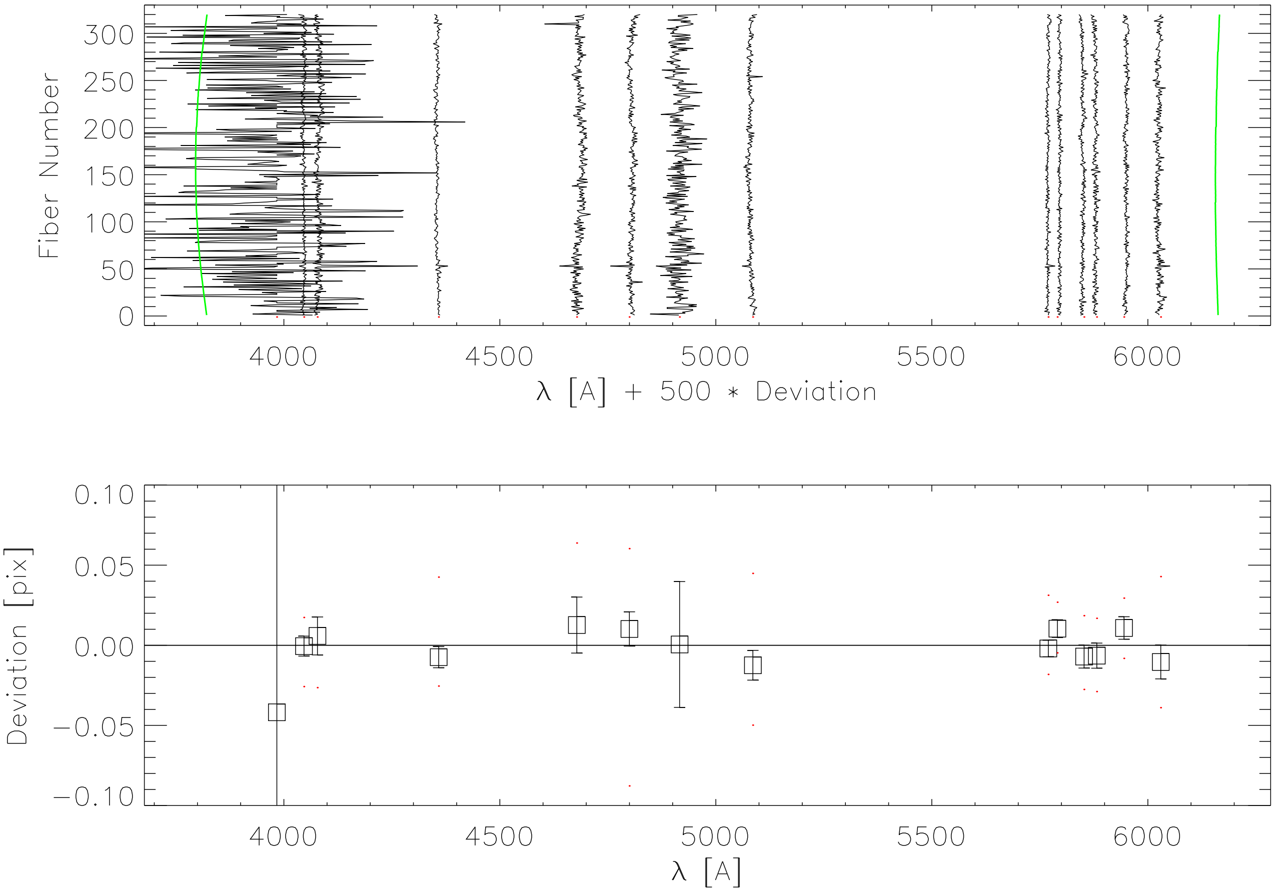

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber


scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

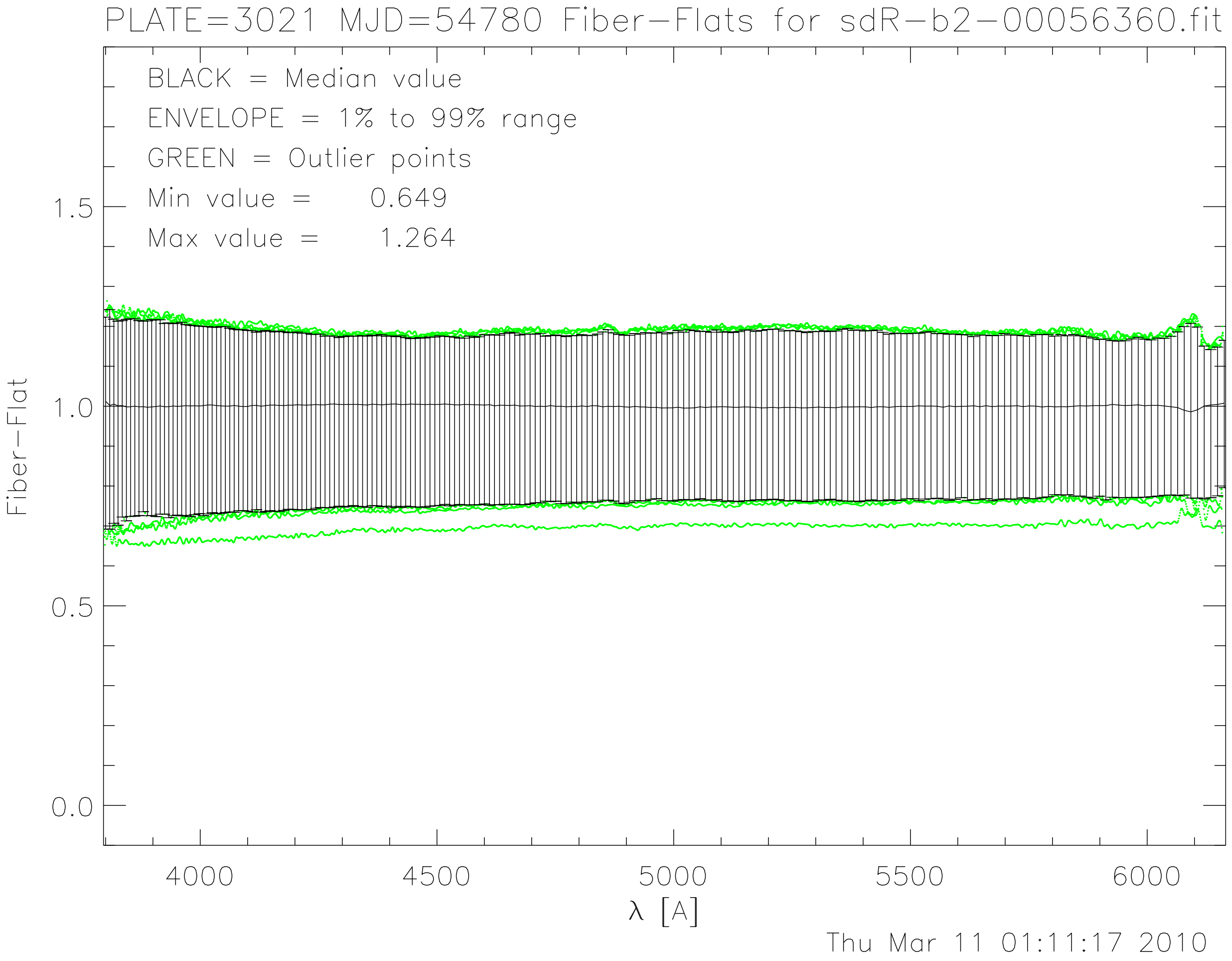

PLATE=3021 MJD=54780 flat extraction chi^2 for sdR-b2-00056360.fit

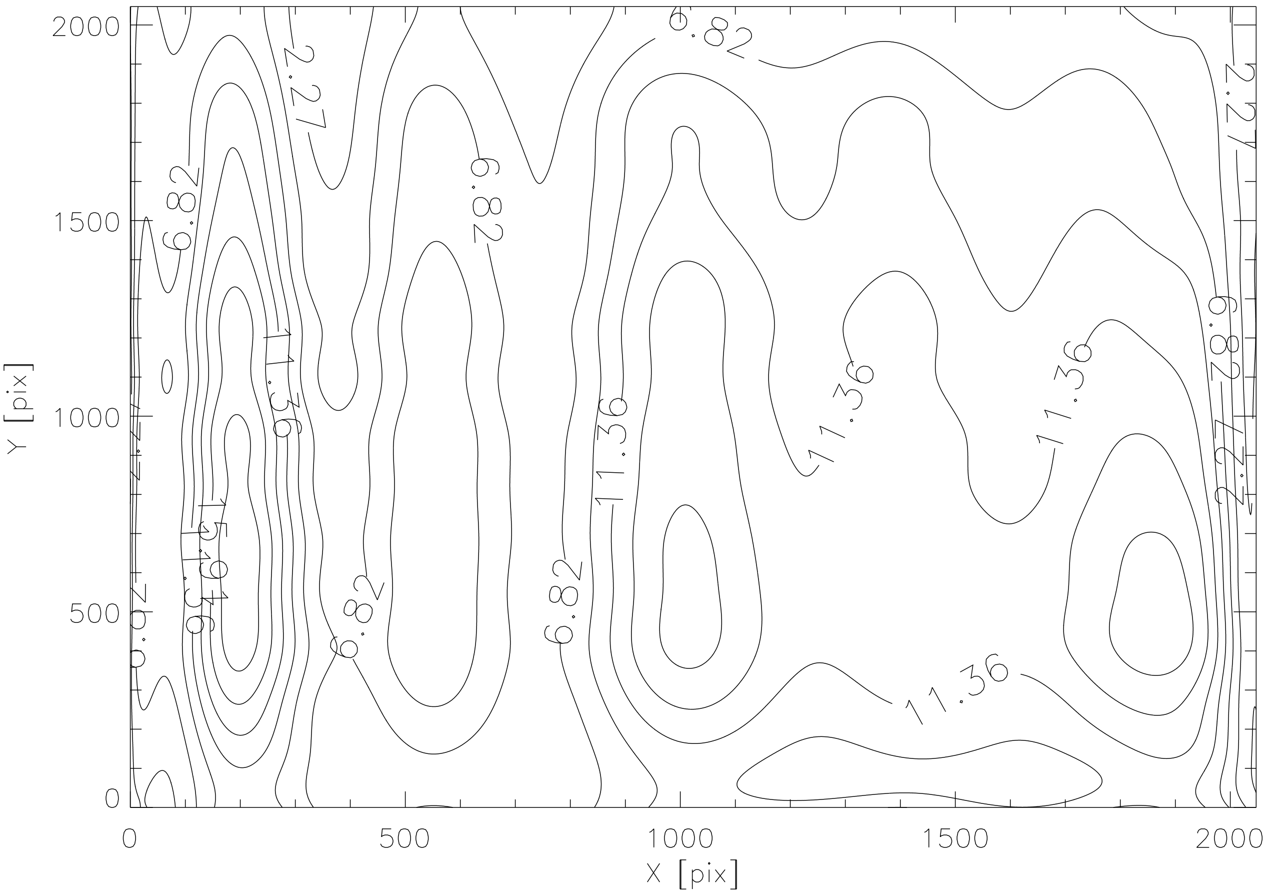

PLATE=3021 MJD=54780 Superflat sdR-b2-00056360.fit
Normalized flux
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]

PLATE=3021 MJD=54780 Arcline Fit for sdR-b2-00056361.fit



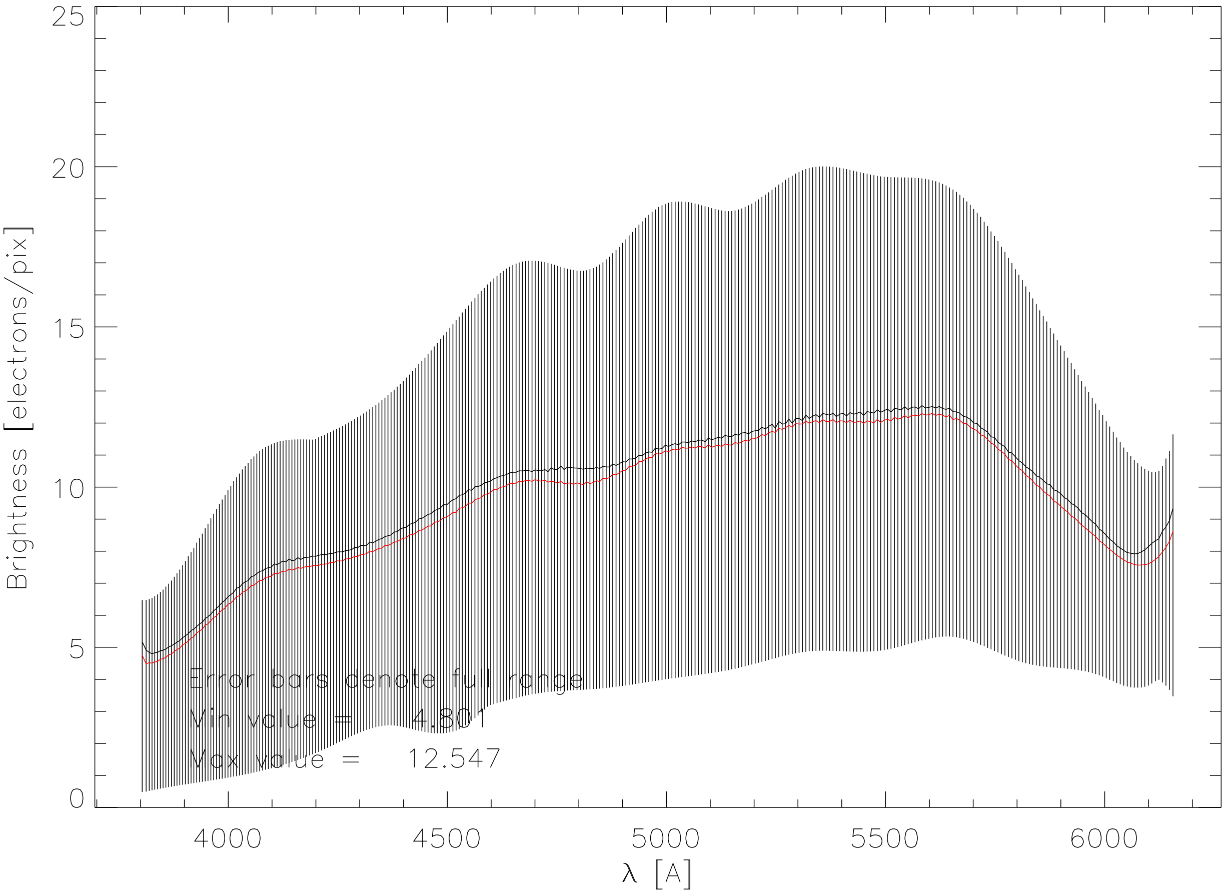
Thu Mar 11 01:11:08 2010


PLATE=3021 MJD=54780 Fiber-Flats for sdR-b2-00056360.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.649
Max value = 1.264
1.5
1.0
0.5
0.0
Fiber-Flat
4000
4500
5000
5500
6000
λ [A]
Thu Mar 11 01:11:17 2010

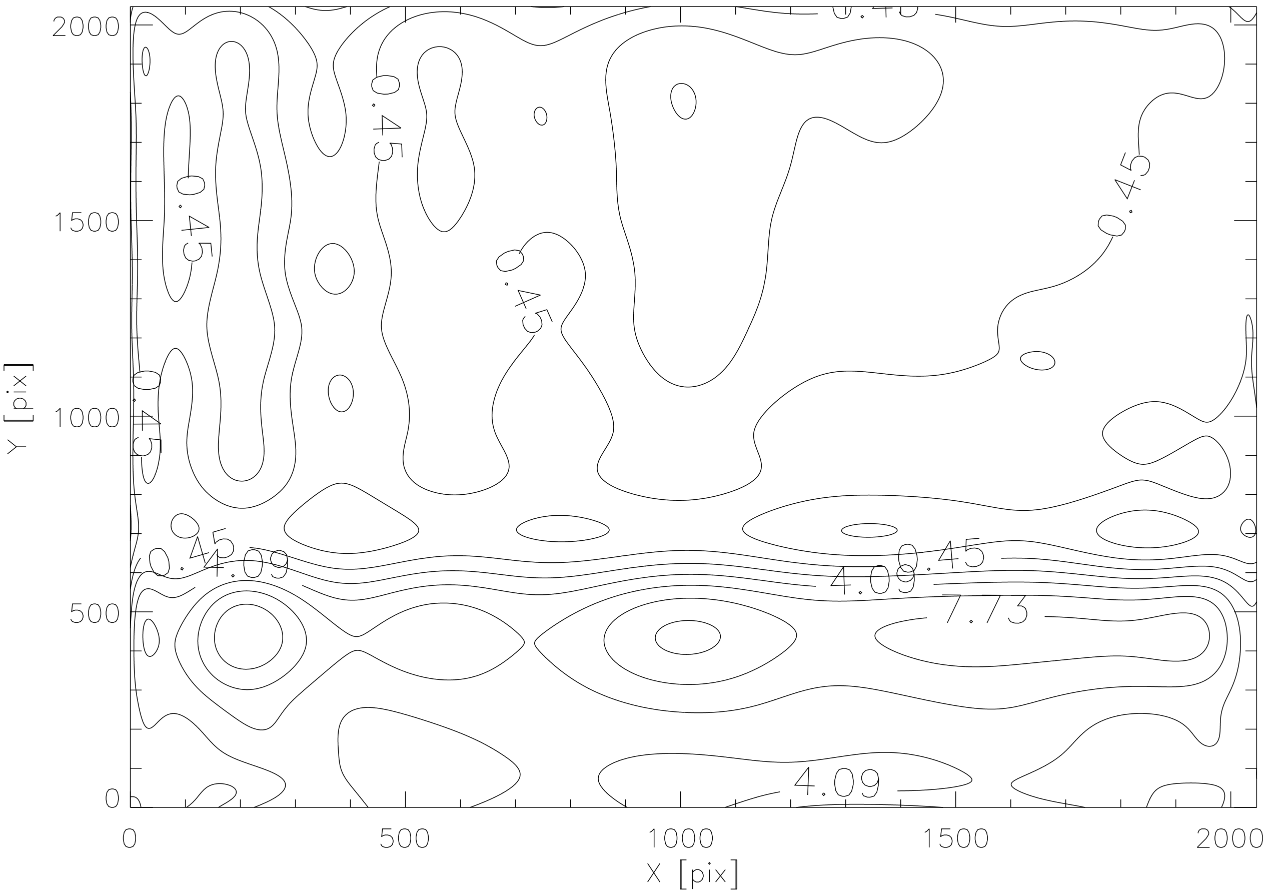


PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b2-00056362.f

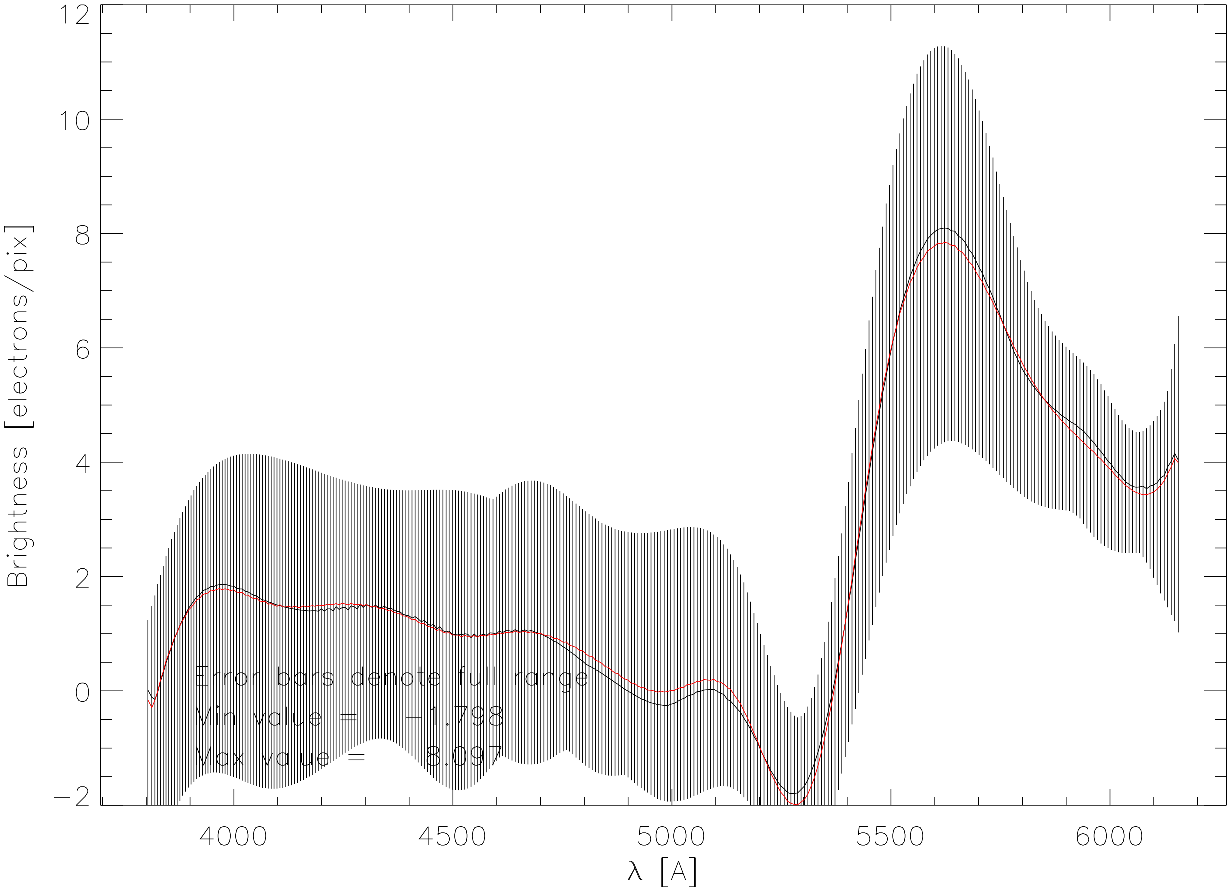
PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b2-00056362.f



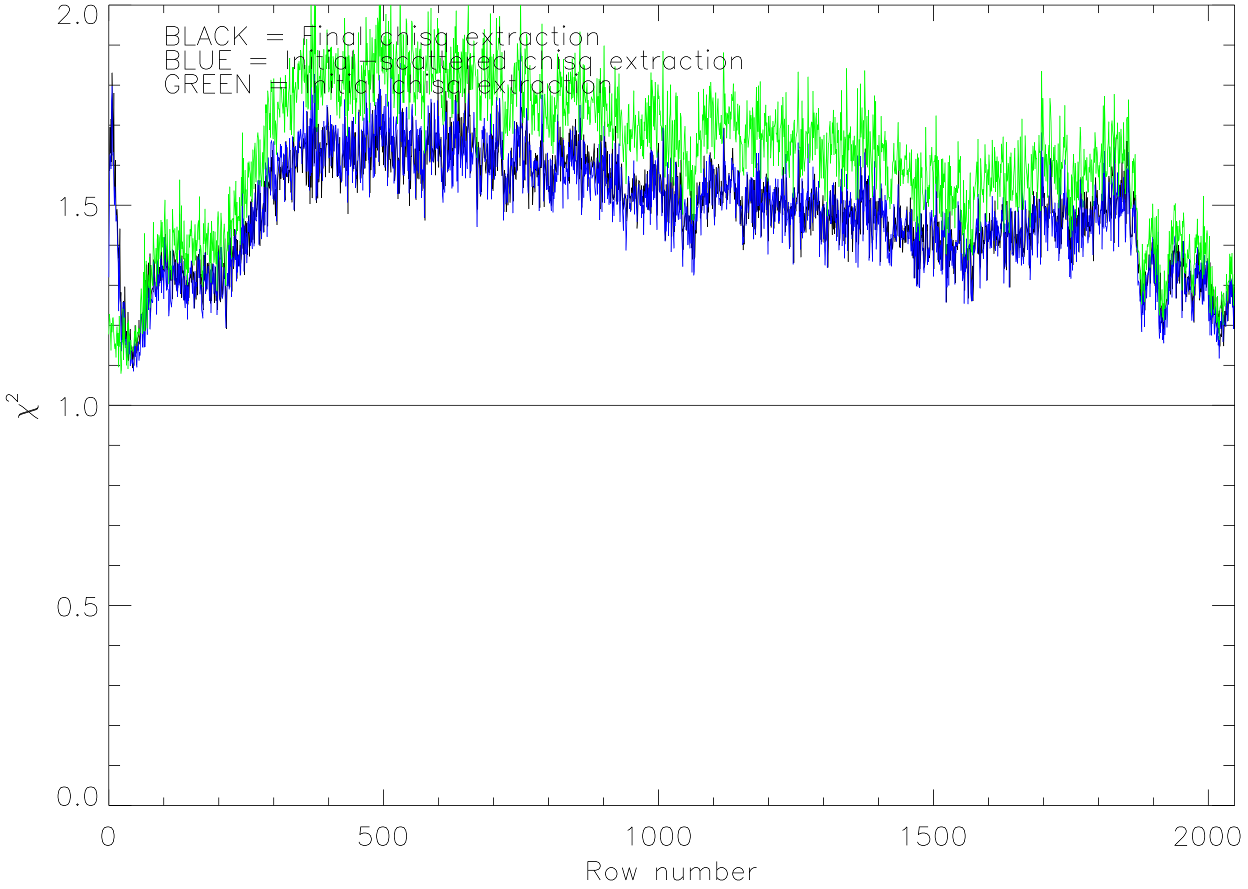
Thu Mar 11 01:11:58 2010


PLATE=3021 MJD=54780 Scattered Light on sdR-b2-00056362.fit

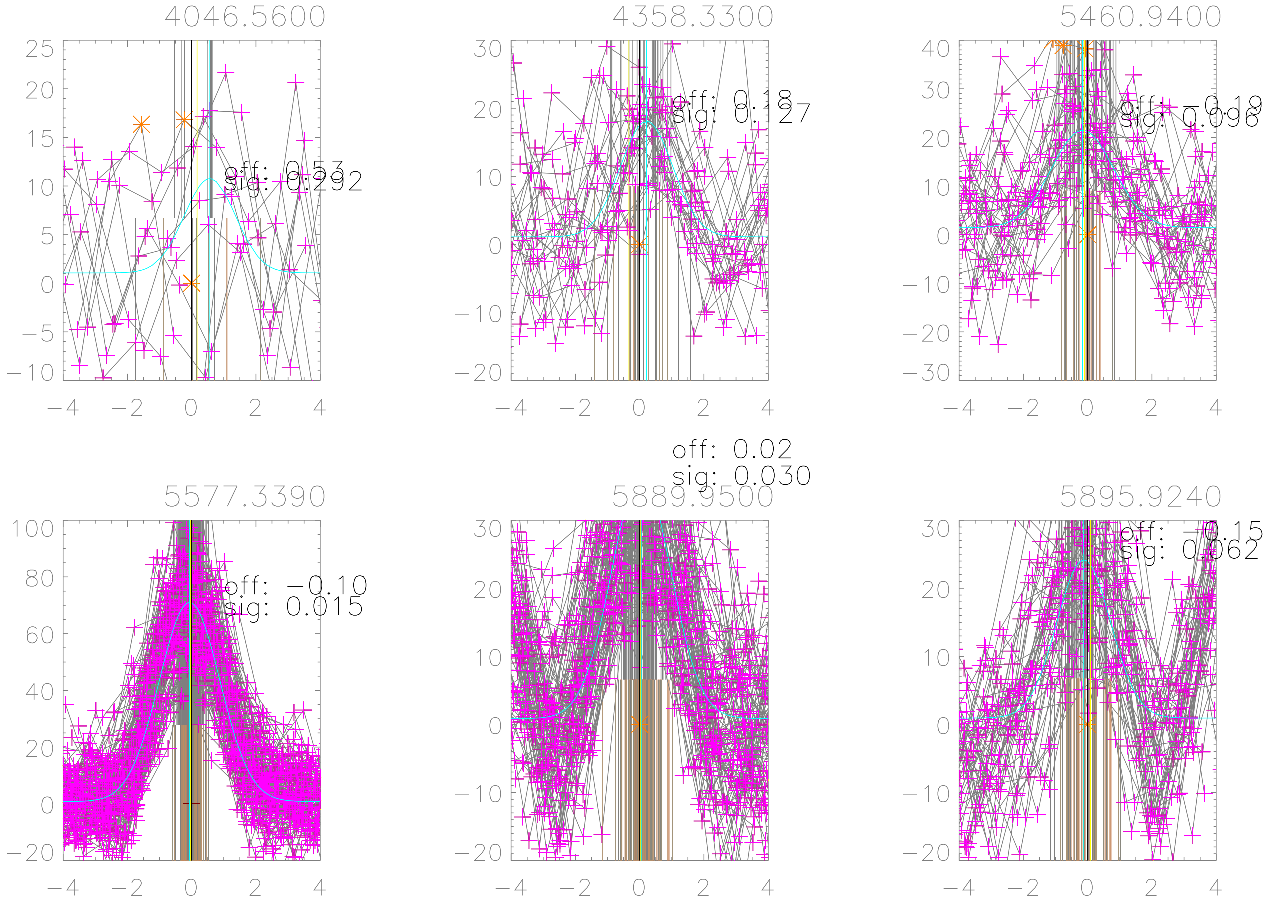
PLATE=3021 MJD=54780 Scattered Light on sdR-b2-00056362.fit

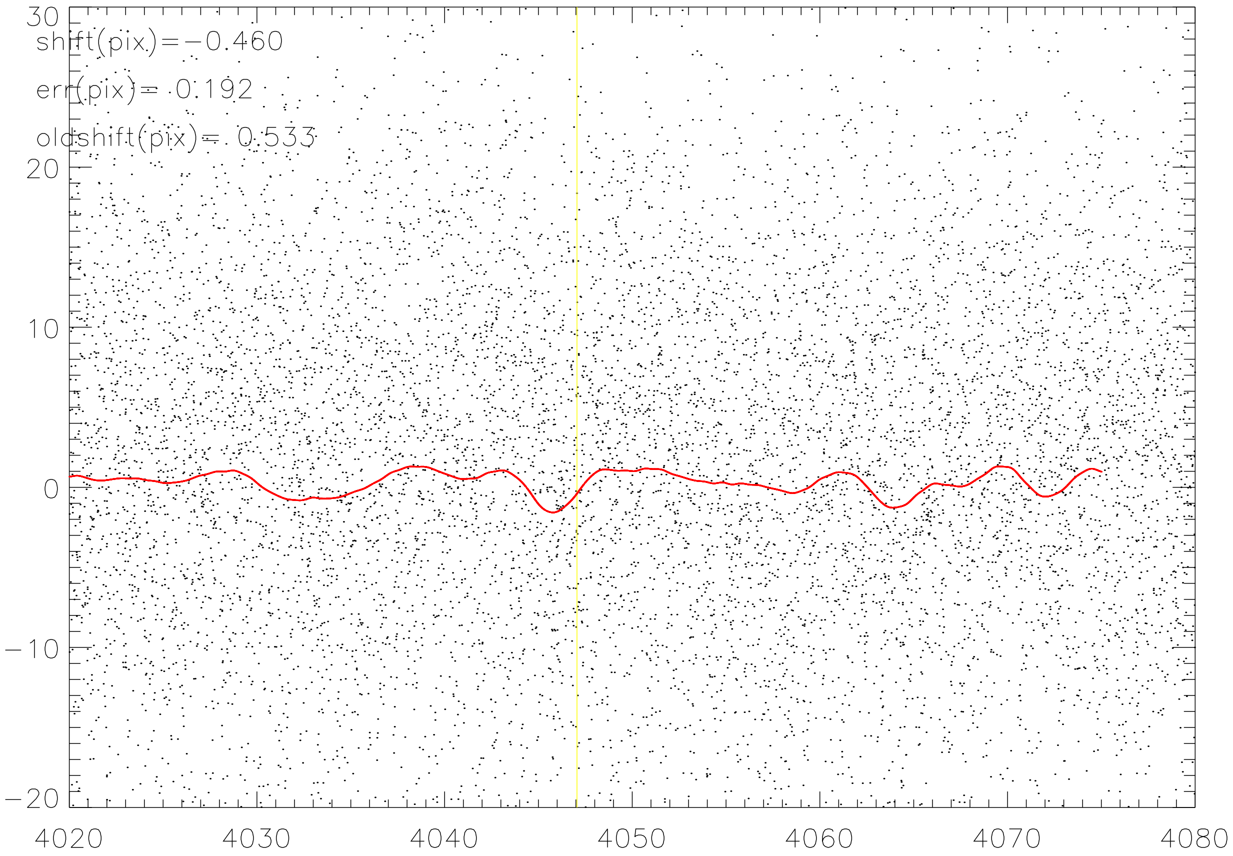


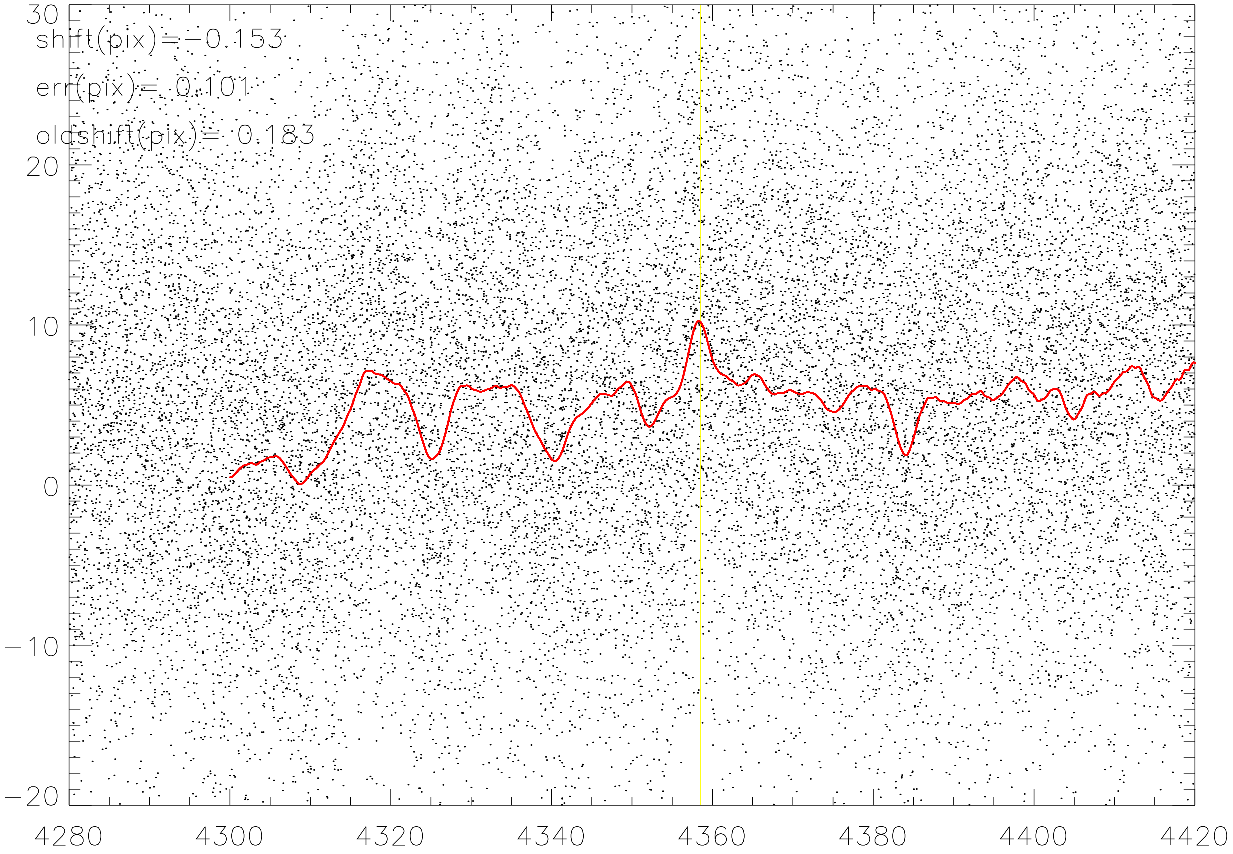
Thu Mar 11 01:15:16 2010

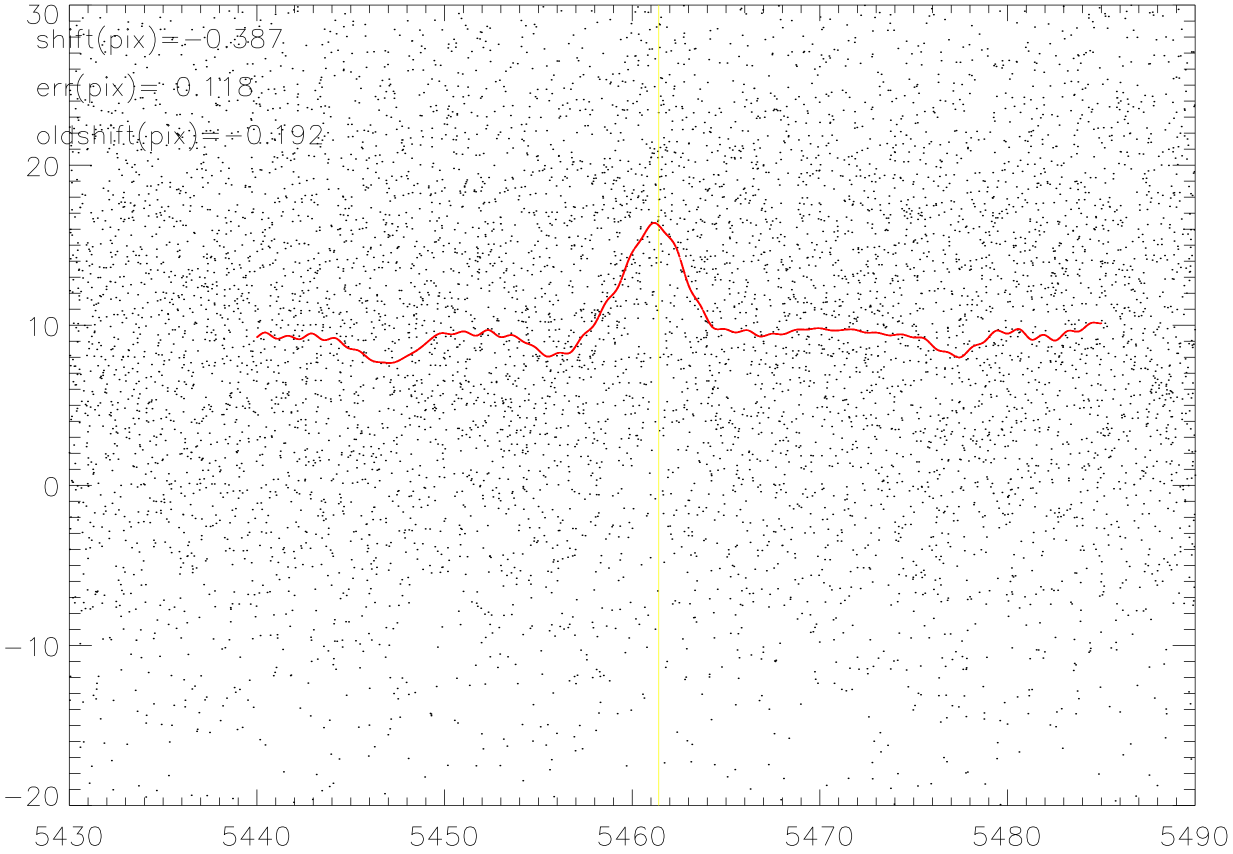


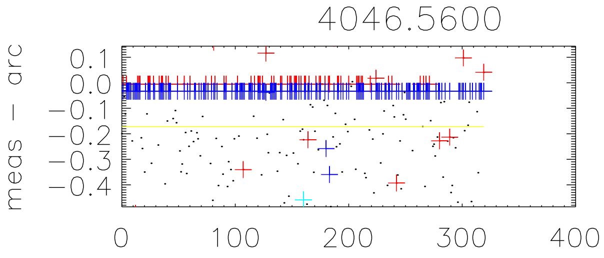
PLATE=3021 MJD=54780 Extraction chi^2 for sdR-b2-00056362.fit

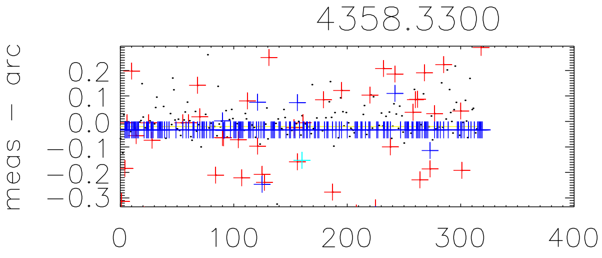

4046.5600
off: 0.53
sig: 0.292
25
20
15
10
5
0
−5
−10
−4
−2
0
2
4
4358.3300
off: 0.18
sig: 0.127
30
20
10
0
−10
−20
−4
−2
0
2
4
5460.9400
off: −0.19
sig: 0.096
40
30
20
10
0
−10
−20
−30
−4
−2
0
2
4
5577.3390
off: −0.10
sig: 0.015
100
80
60
40
20
0
−20
−4
−2
0
2
4
off: 0.02
sig: 0.030
5889.9500
30
20
10
0
−10
−20
−4
−2
0
2
4
5895.9240
off: −0.15
sig: 0.062
30
20
10
0
−10
−20
−4
−2
0
2
4

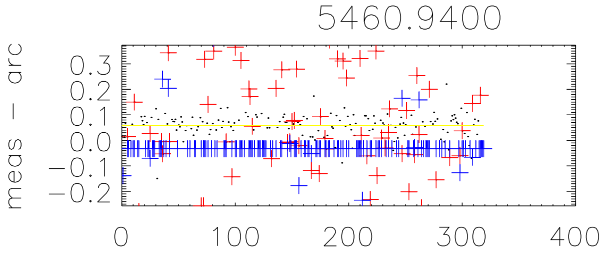

shift(pix)=−0.460
err(pix)= 0.192
oldshift(pix)= 0.533
30
20
10
0
−10
−20
4020
4030
4040
4050
4060
4070
4080

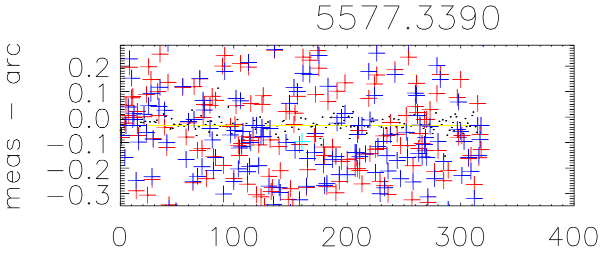

shift(pix)=−0.153
err(pix)= 0.101
oldshift(pix)= 0.183
30
20
10
0
−10
−20
4280
4300
4320
4340
4360
4380
4400
4420

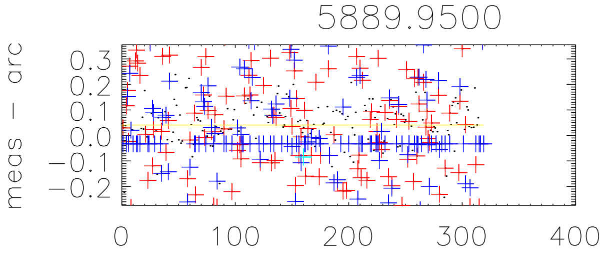

shift(pix)=−0.387
err(pix)= 0.118
oldshift(pix)=−0.192
30
20
10
0
−10
−20
5430
5440
5450
5460
5470
5480
5490

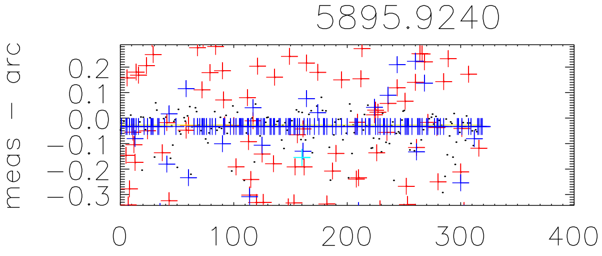

4046.5600

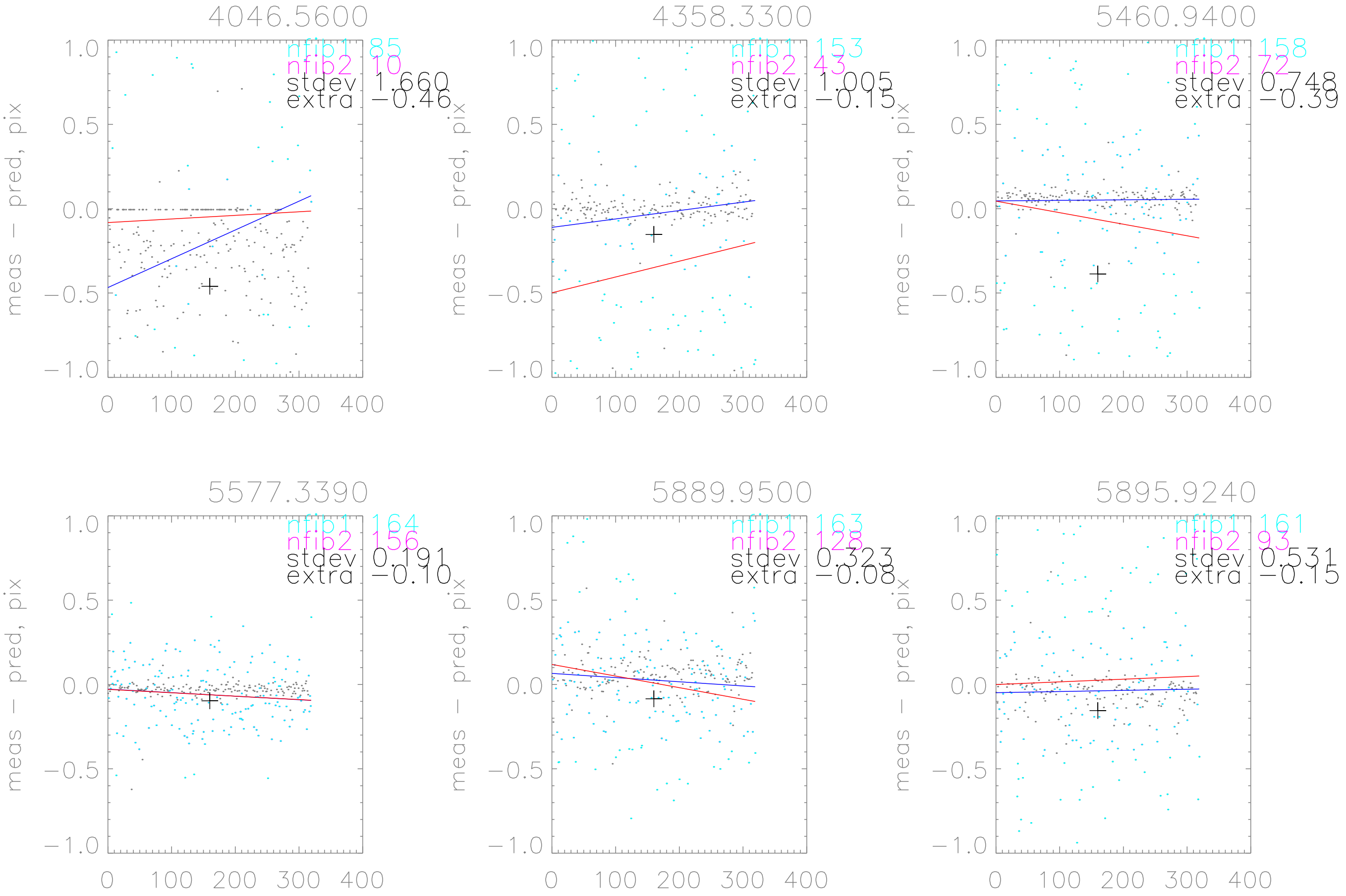

4358.3300

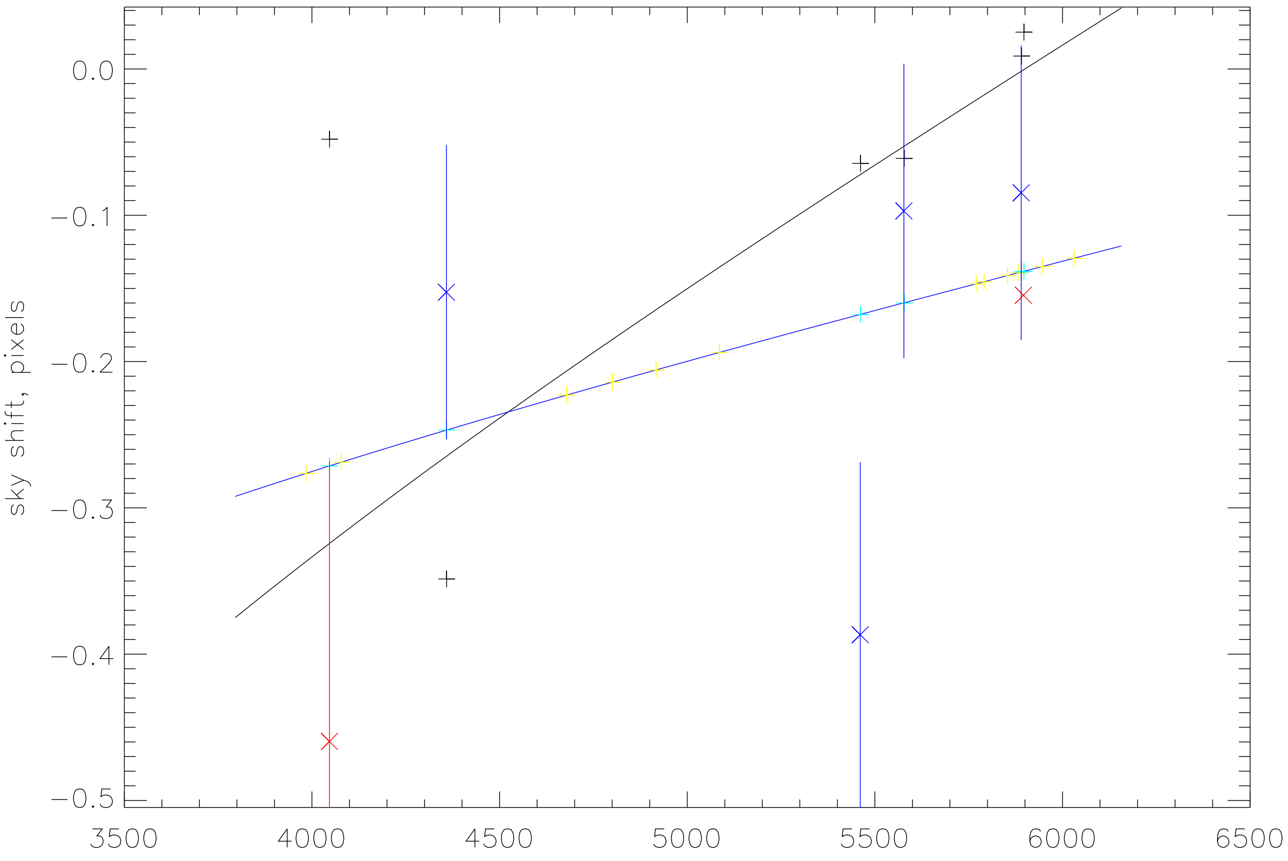

5460.9400

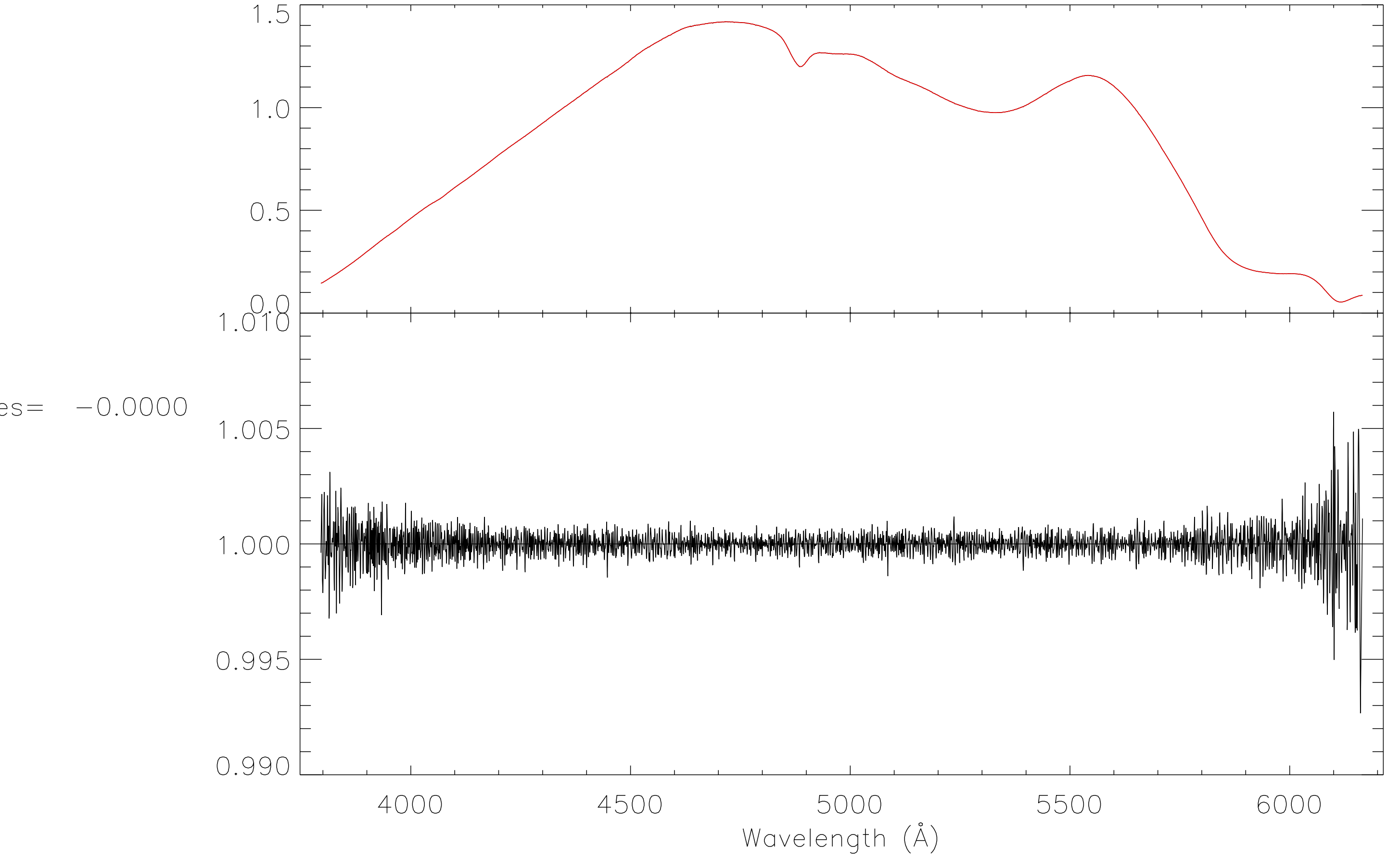

5577.3390


5889.9500

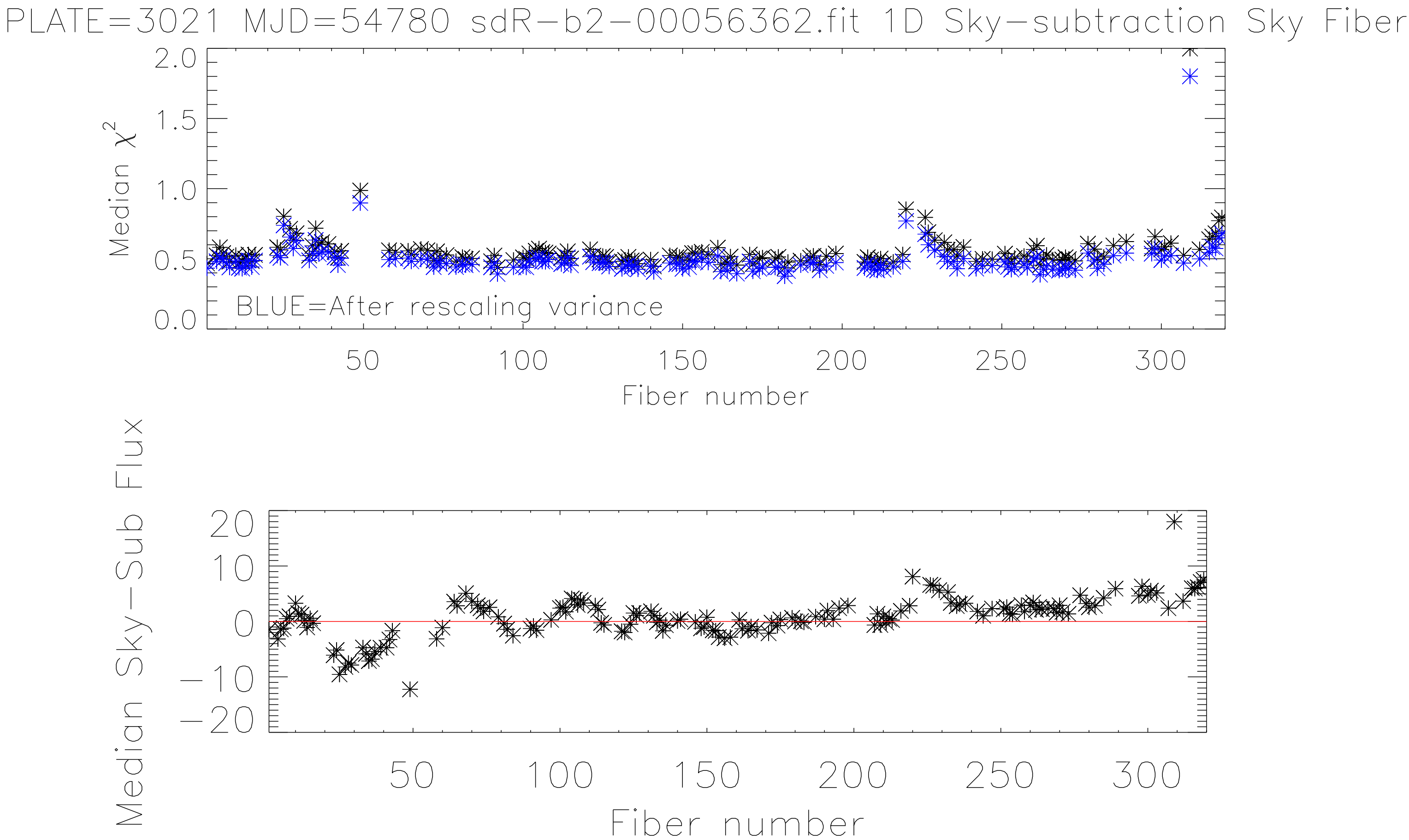

5895.9240

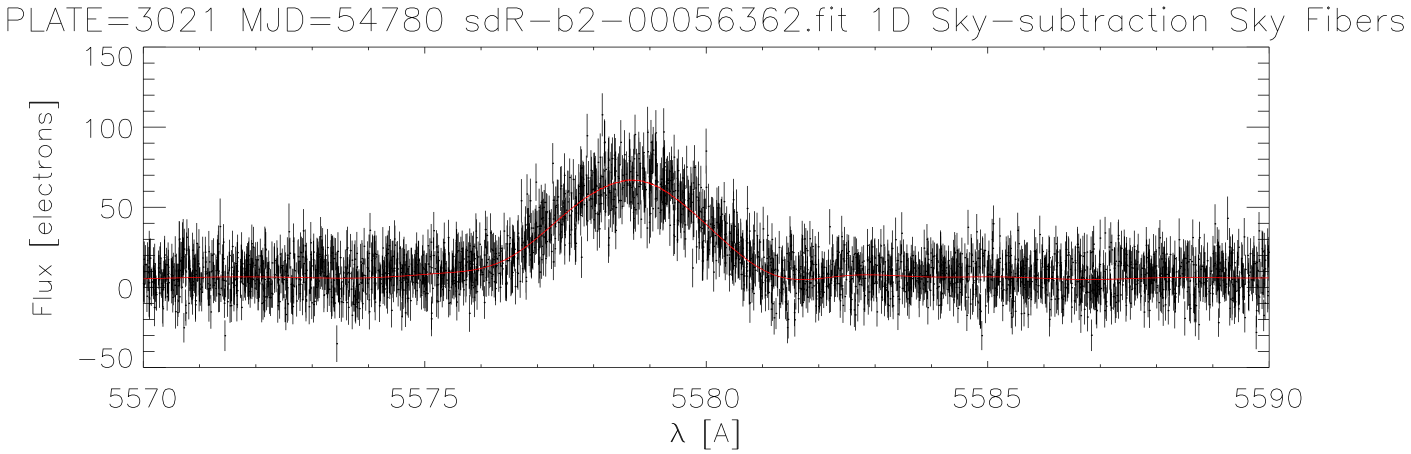

4046.5600
nfib1 85
nfib2 10
stdev 1.660
extra −0.46
4358.3300
nfib1 153
nfib2 43
stdev 1.005
extra −0.15
5460.9400
nfib1 158
nfib2 72
stdev 0.748
extra −0.39
5577.3390
nfib1 164
nfib2 156
stdev 0.191
extra −0.10
5889.9500
nfib1 163
nfib2 128
stdev 0.323
extra −0.08
5895.9240
nfib1 161
nfib2 93
stdev 0.531
extra −0.15
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

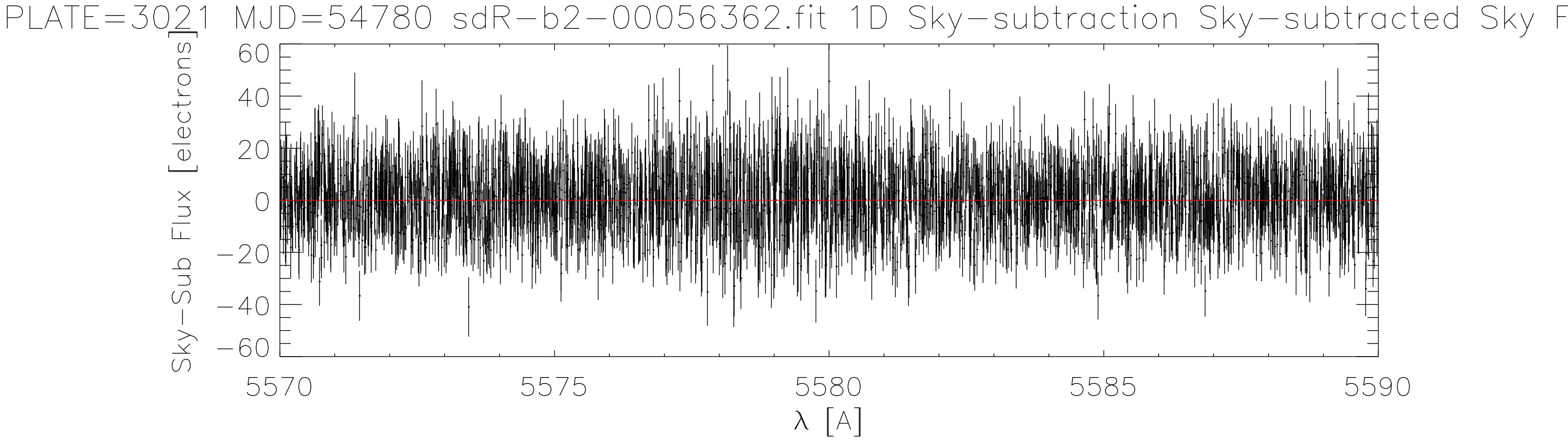

sky shift, pixels
0.0
−0.1
−0.2
−0.3
−0.4
−0.5
3500
4000
4500
5000
5500
6000
6500



PLATE=3021 MJD=54780 Smooth superflat for sdR-b2-00056362.fit

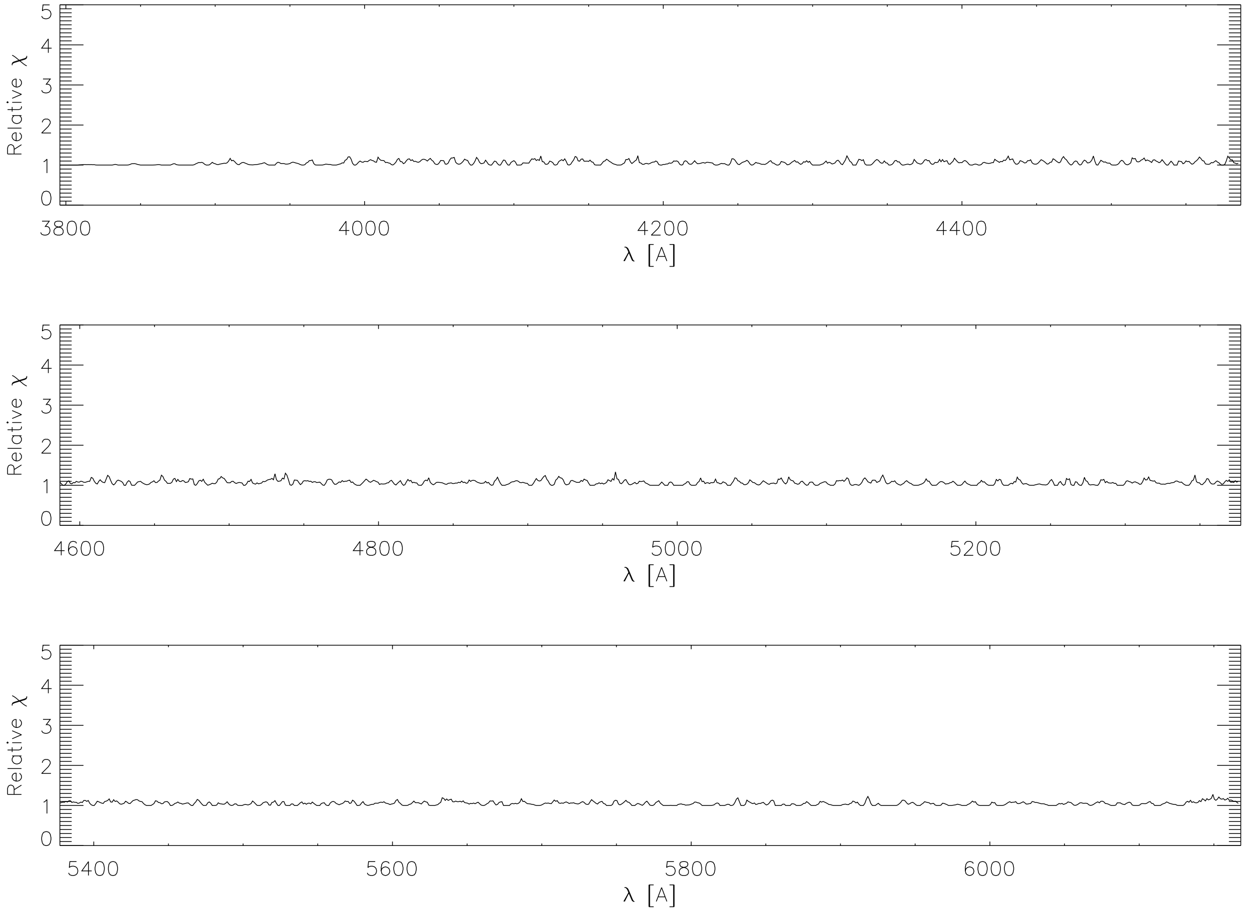

PLATE=3021 MJD=54780 sdR-b2-00056362.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

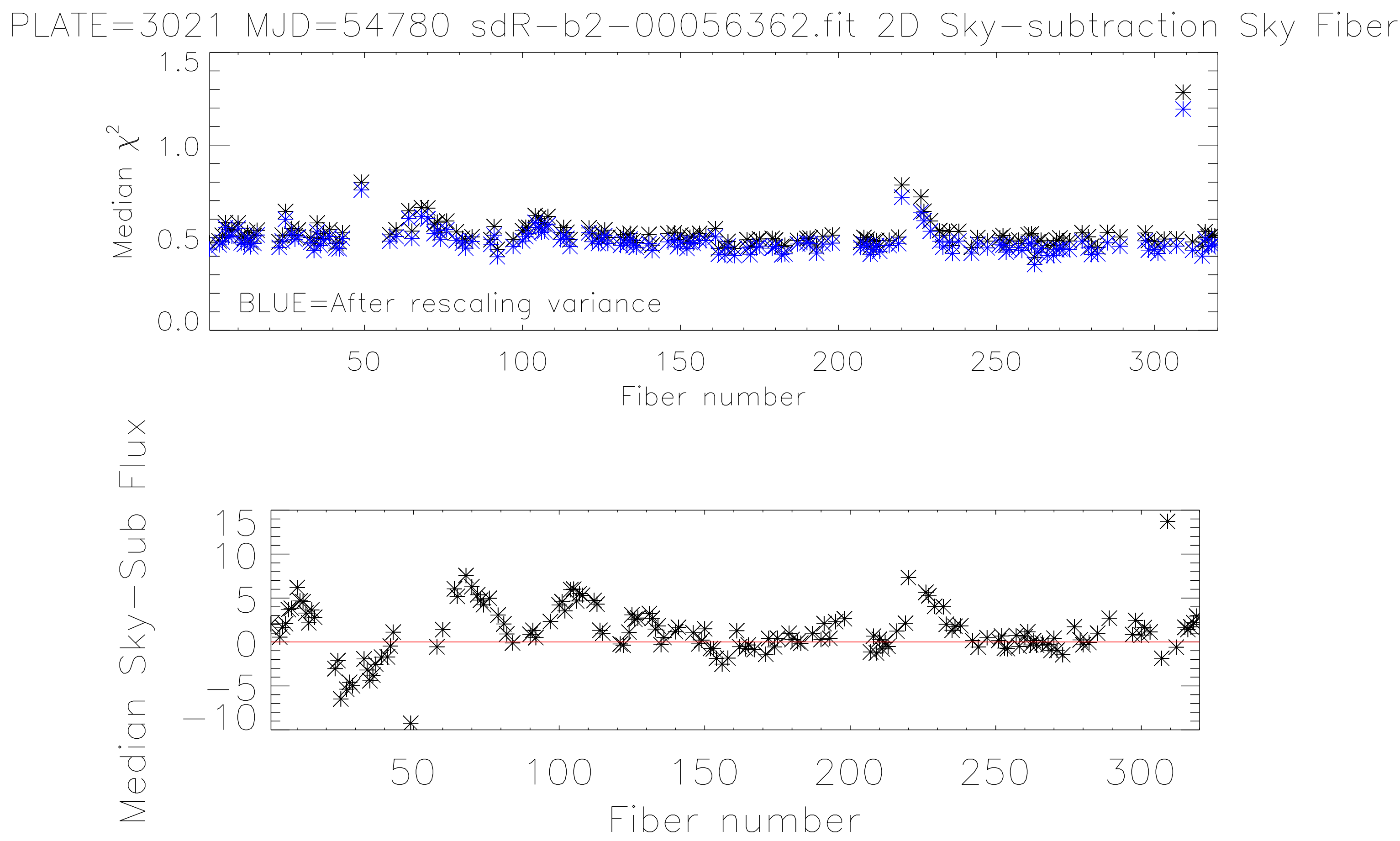

PLATE=3021 MJD=54780 sdR-b2-00056362.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
150
100
50
0
-50
5570
5575
5580
5585
5590
λ [A]


PLATE=3021 MJD=54780 sdR-b2-00056362.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
60
40
20
0
-20
-40
-60
5570
5575
5580
5585
5590
λ [A]

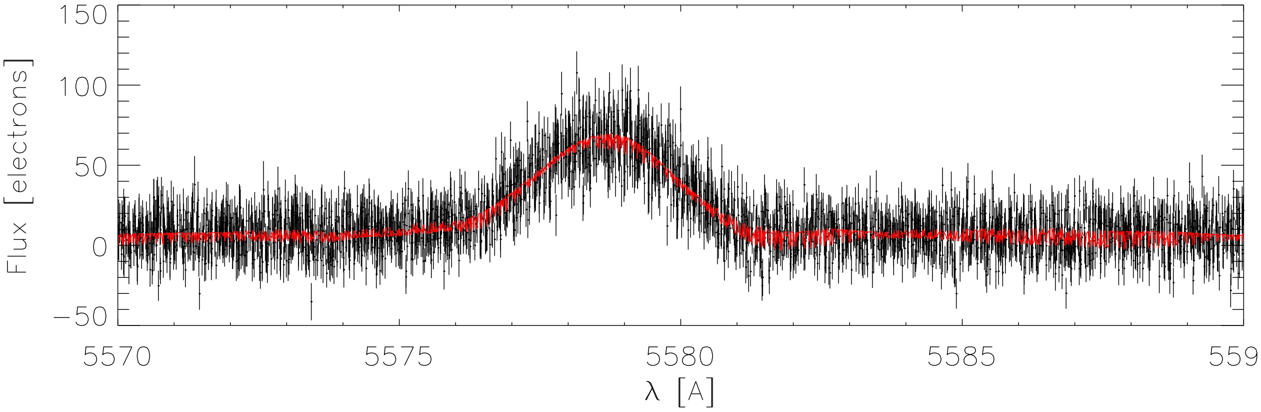
Number of sky fibers = 158

PLATE=3021 MJD=54780 sdR-b2-00056362.fit 1D Sky-subtraction Rescaled Errors

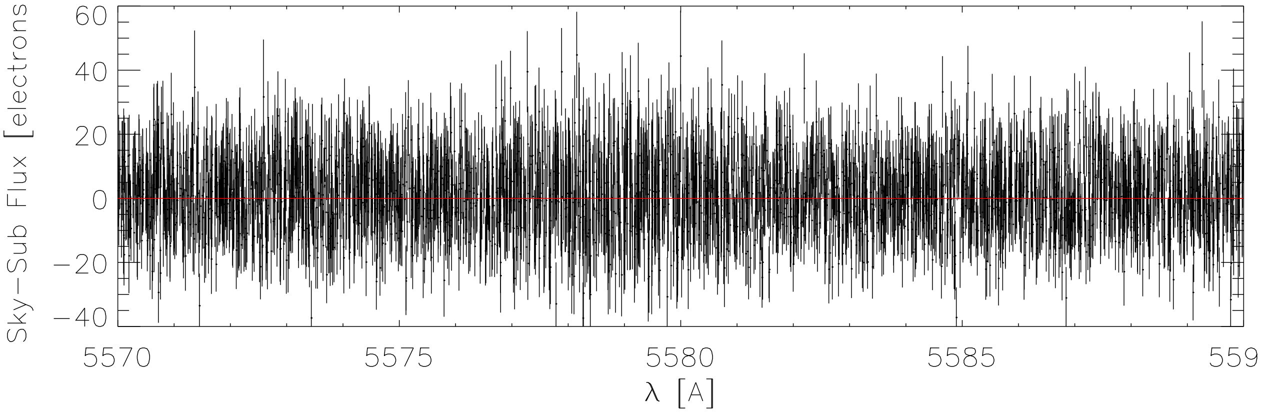



PLATE=3021 MJD=54780 sdR-b2-00056362.fit 2D Sky-subtraction Sky Fiber
Median χ^2
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
15
10
5
0
−5
−10
50
100
150
200
250
300
Fiber number

PLATE=3021 MJD=54780 sdR-b2-00056362.fit 2D Sky-subtraction Sky Fibers

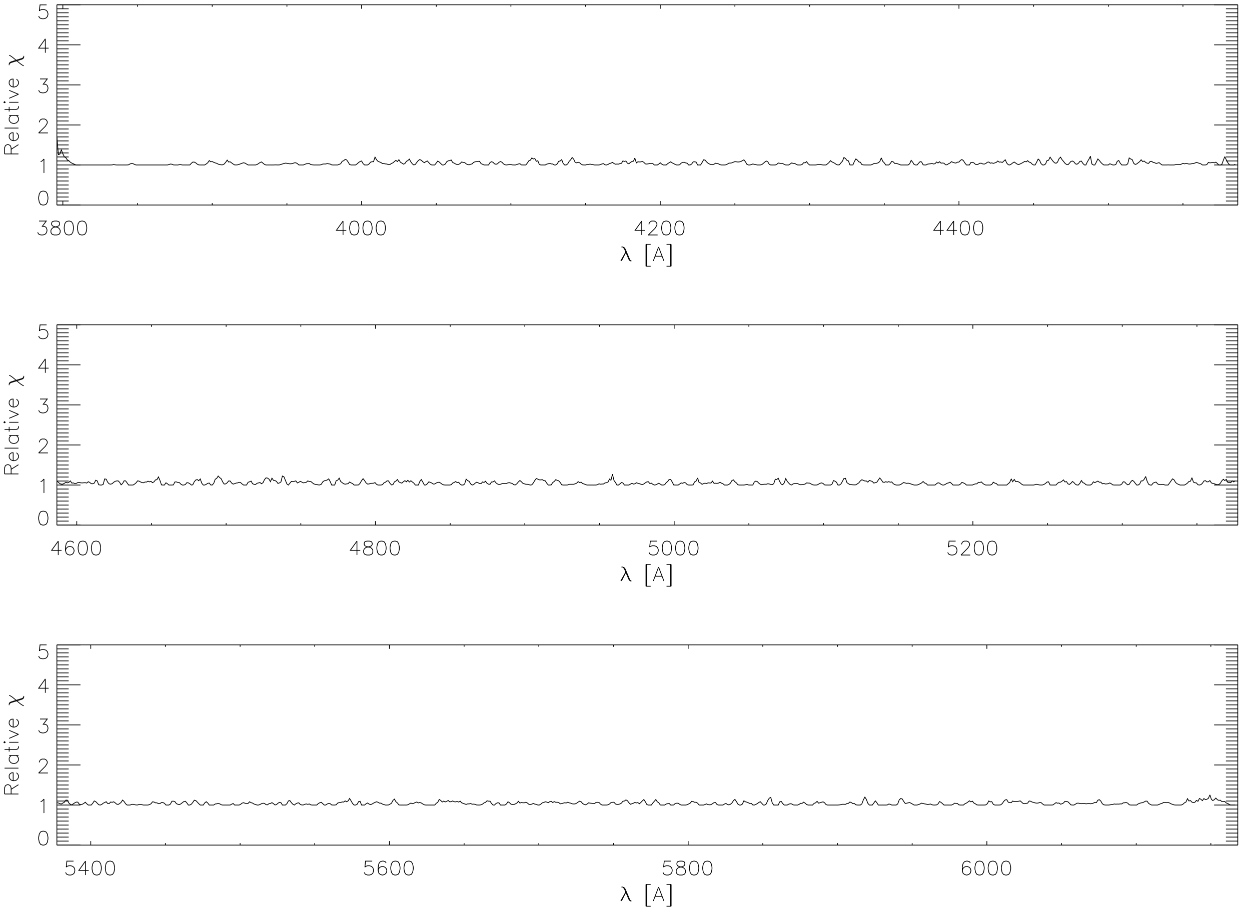


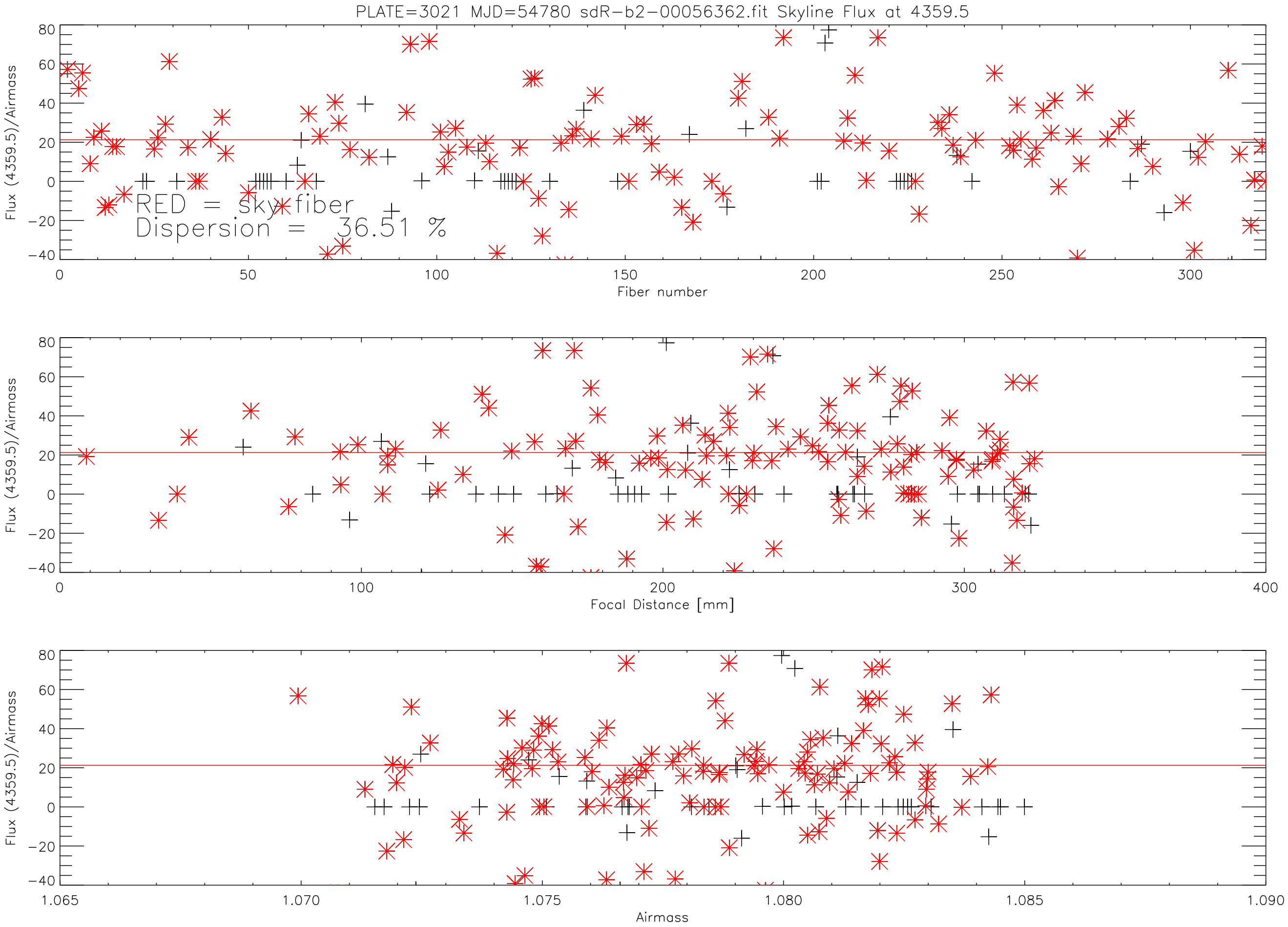
PLATE=3021 MJD=54780 sdR-b2-00056362.fit 2D Sky-subtraction Sky-subtracted Sky F

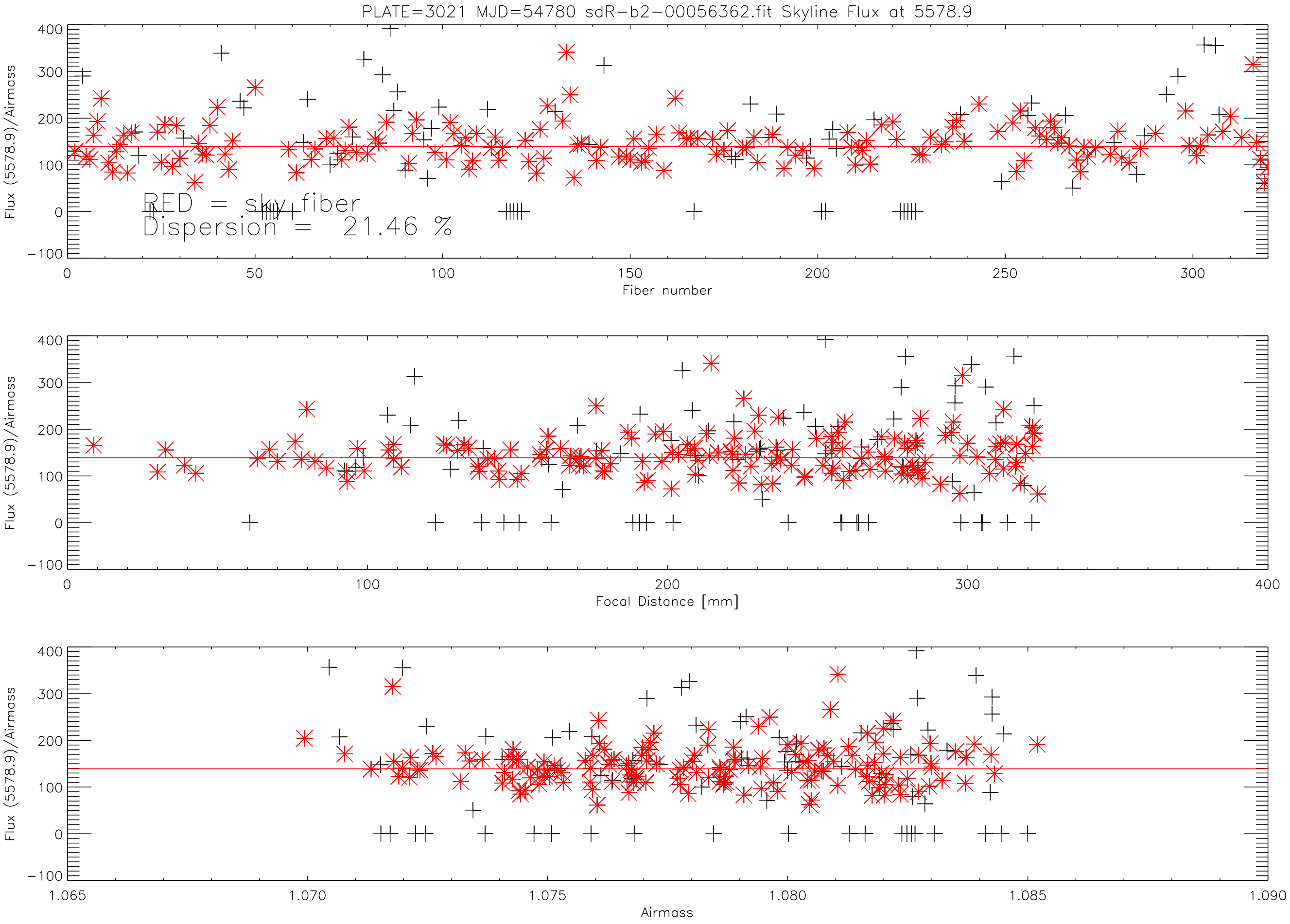


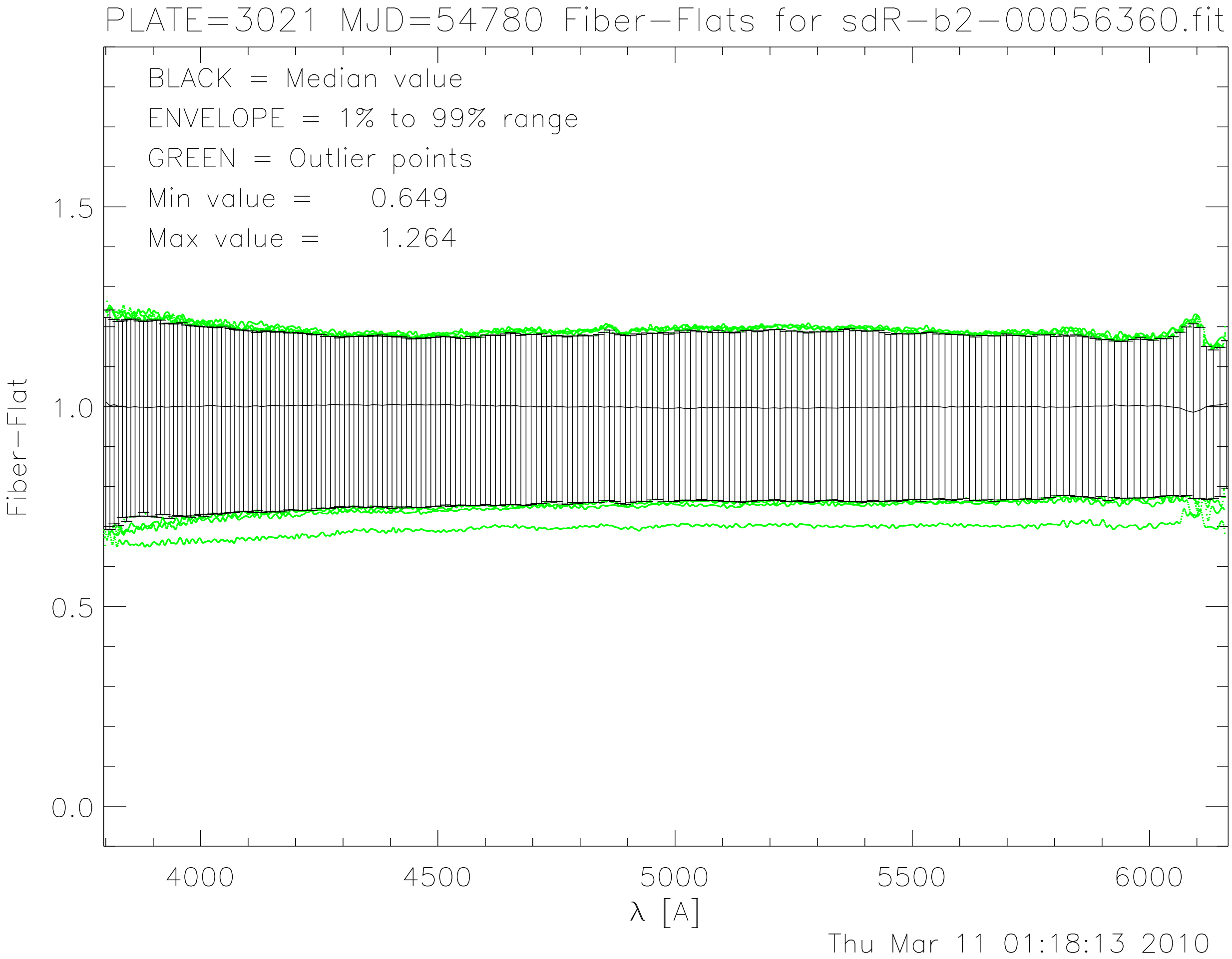
Number of sky fibers = 158

PLATE=3021 MJD=54780 sdR-b2-00056362.fit 2D Sky-subtraction Rescaled Errors

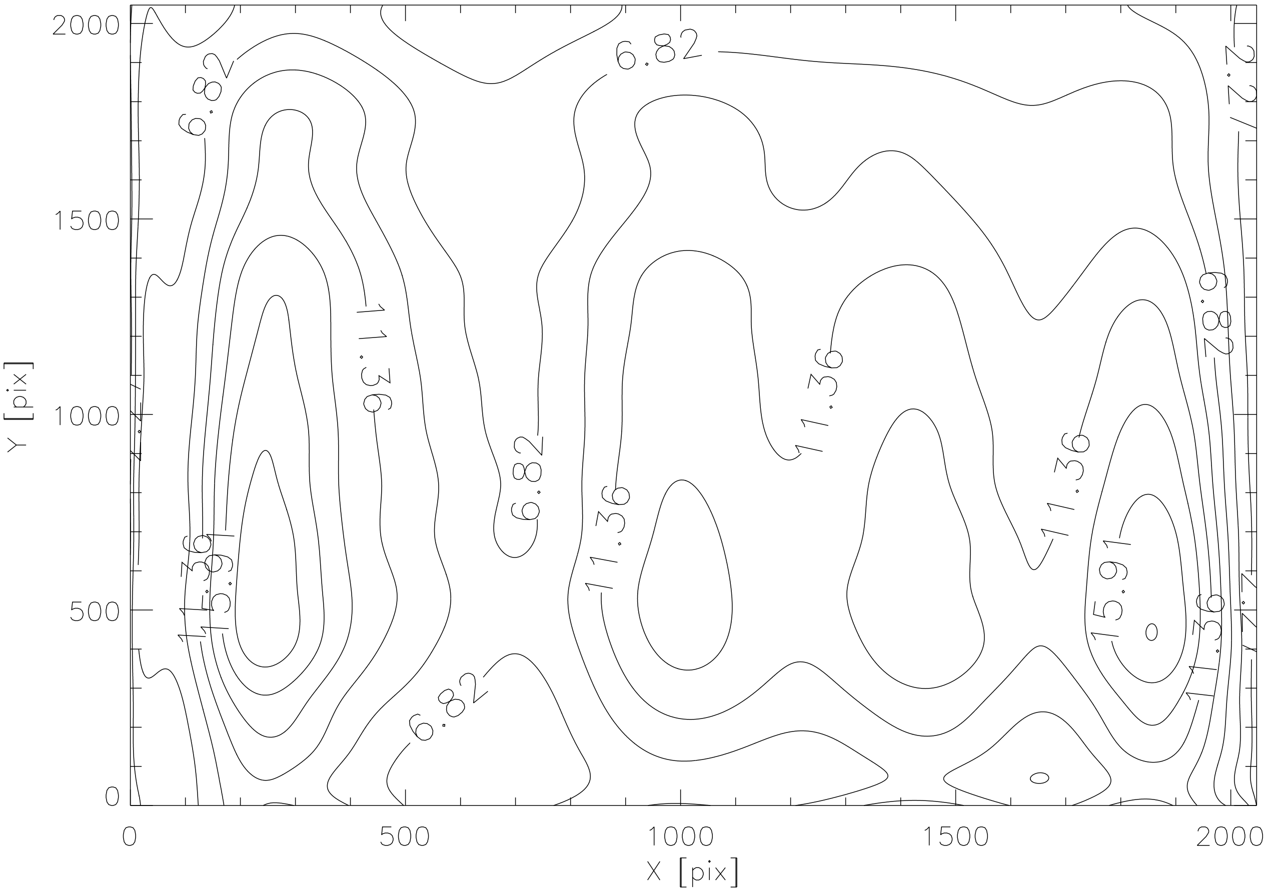



PLATE=3021 MJD=54780 sdR-b2-00056362.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 36.51 %
Flux (4359.5)/Airmass
80
60
40
20
0
-20
-40
0
50
100
150
200
250
300
Fiber number
0
100
200
300
400
Focal Distance [mm]
1.065
1.070
1.075
1.080
1.085
1.090
Airmass

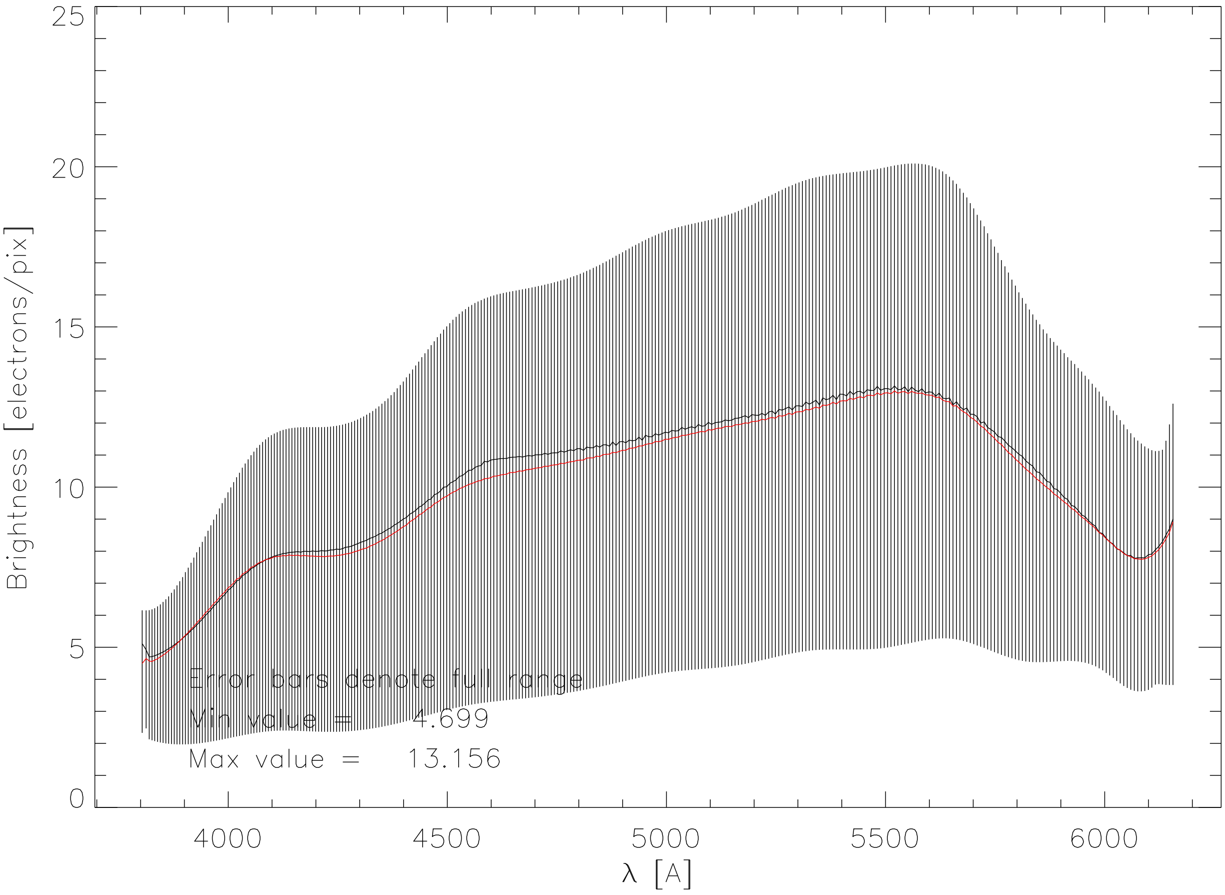

PLATE=3021 MJD=54780 sdR-b2-00056362.fit Skyline Flux at 5578.9
RED = sky fiber
Dispersion = 21.46 %
Flux (5578.9)/Airmass
400
300
200
100
0
−100
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
400
300
200
100
0
−100
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
400
300
200
100
0
−100
1.065
1.070
1.075
1.080
1.085
1.090
Airmass


PLATE=3021 MJD=54780 Fiber−Flats for sdR−b2−00056360.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.649
Max value = 1.264
Fiber−Flat
1.5
1.0
0.5
0.0
4000
4500
5000
5500
6000
λ [A]
Thu Mar 11 01:18:13 2010

PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b2-00056363.f

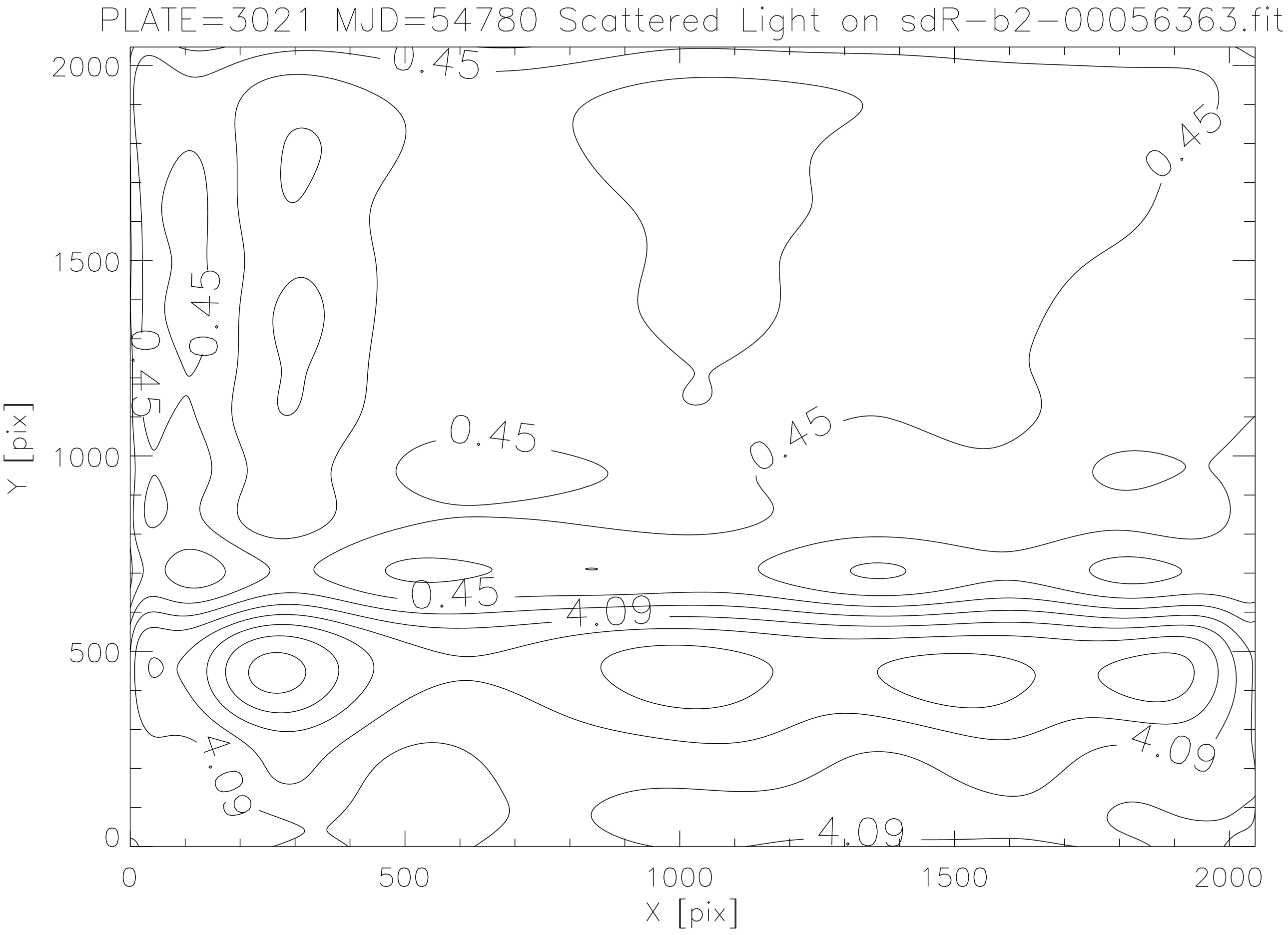


PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-b2-00056363.f

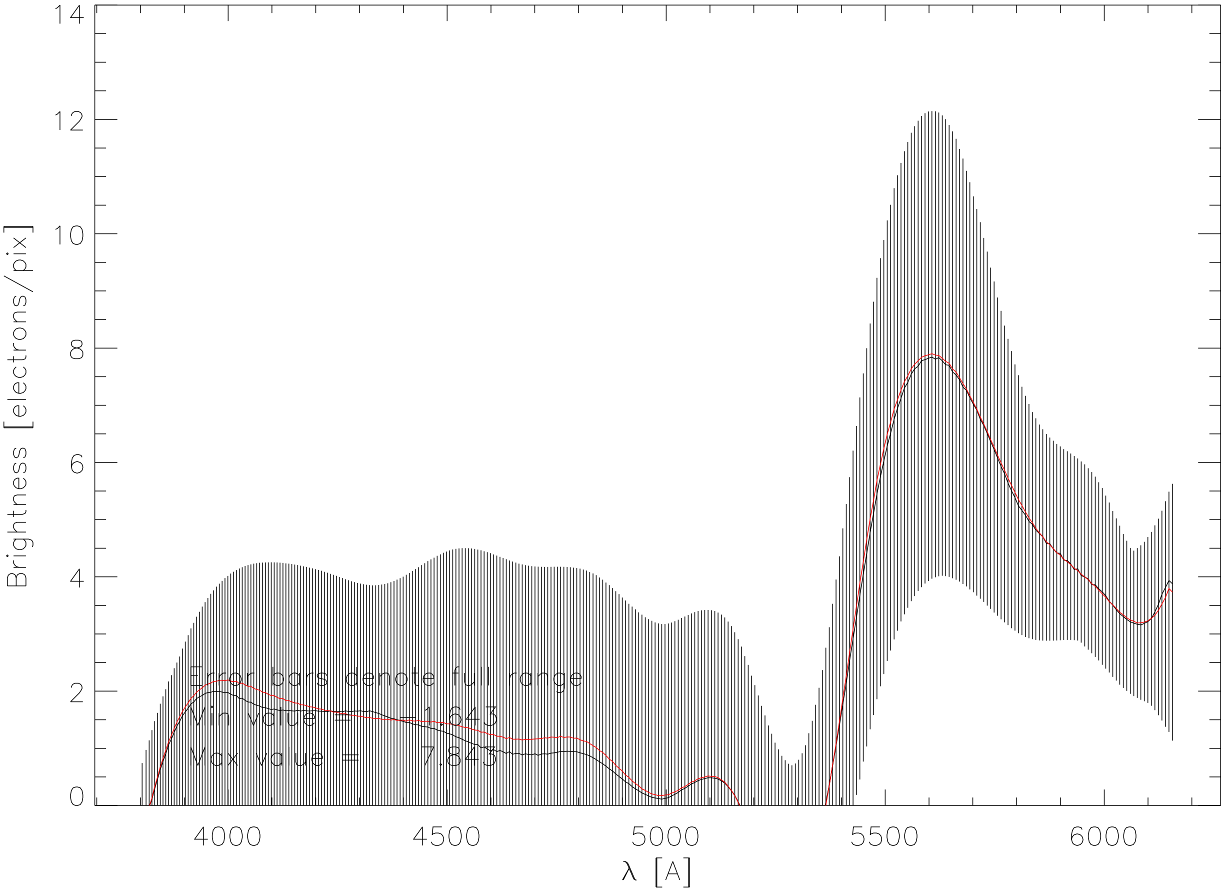


Error bars denote full range
Min value = 4.699
Max value = 13.156

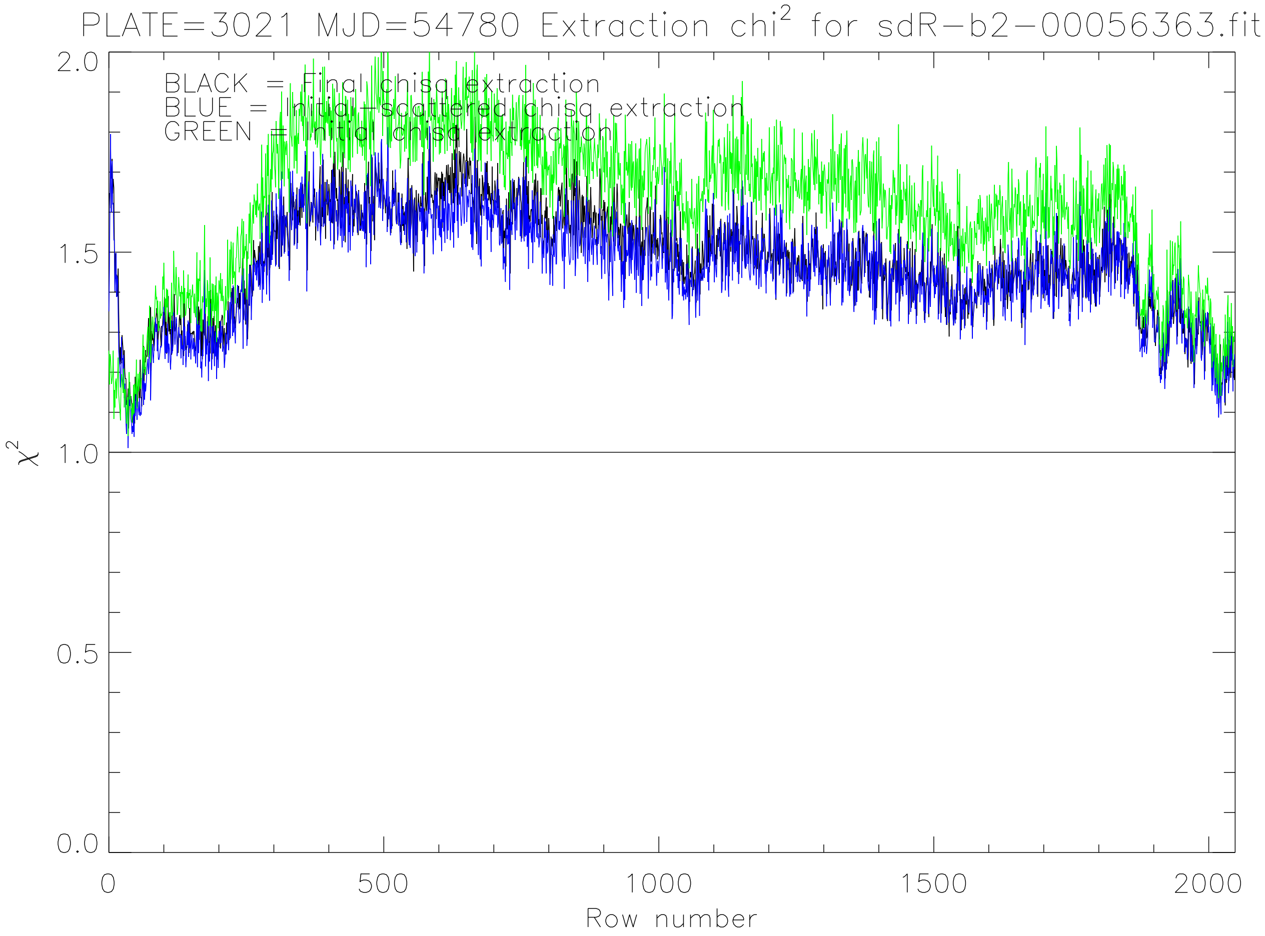
Thu Mar 11 01:18:50 2010

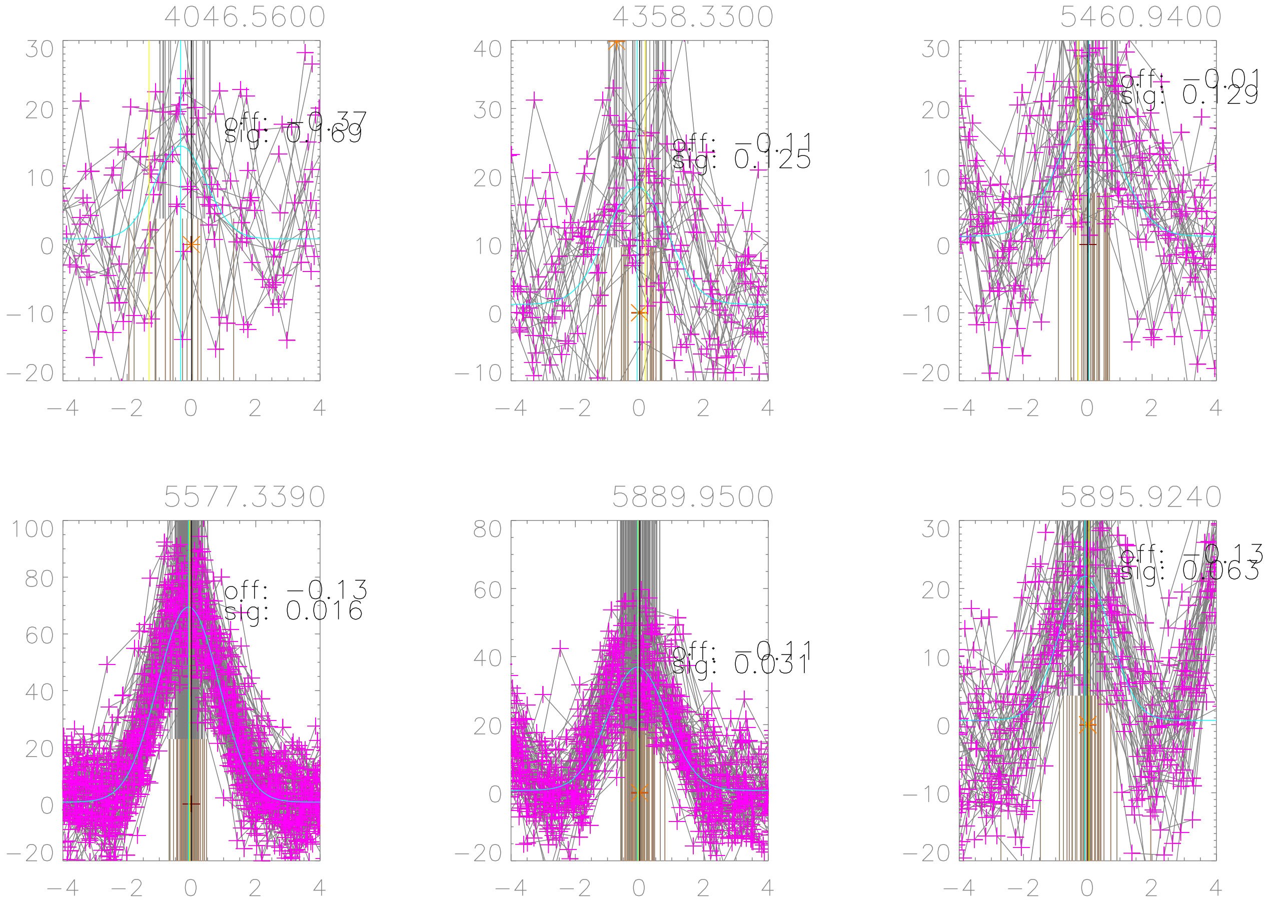

PLATE=3021 MJD=54780 Scattered Light on sdR-b2-00056363.fit
0.45
4.09
0
500
1000
1500
2000
X [pix]
Y [pix]

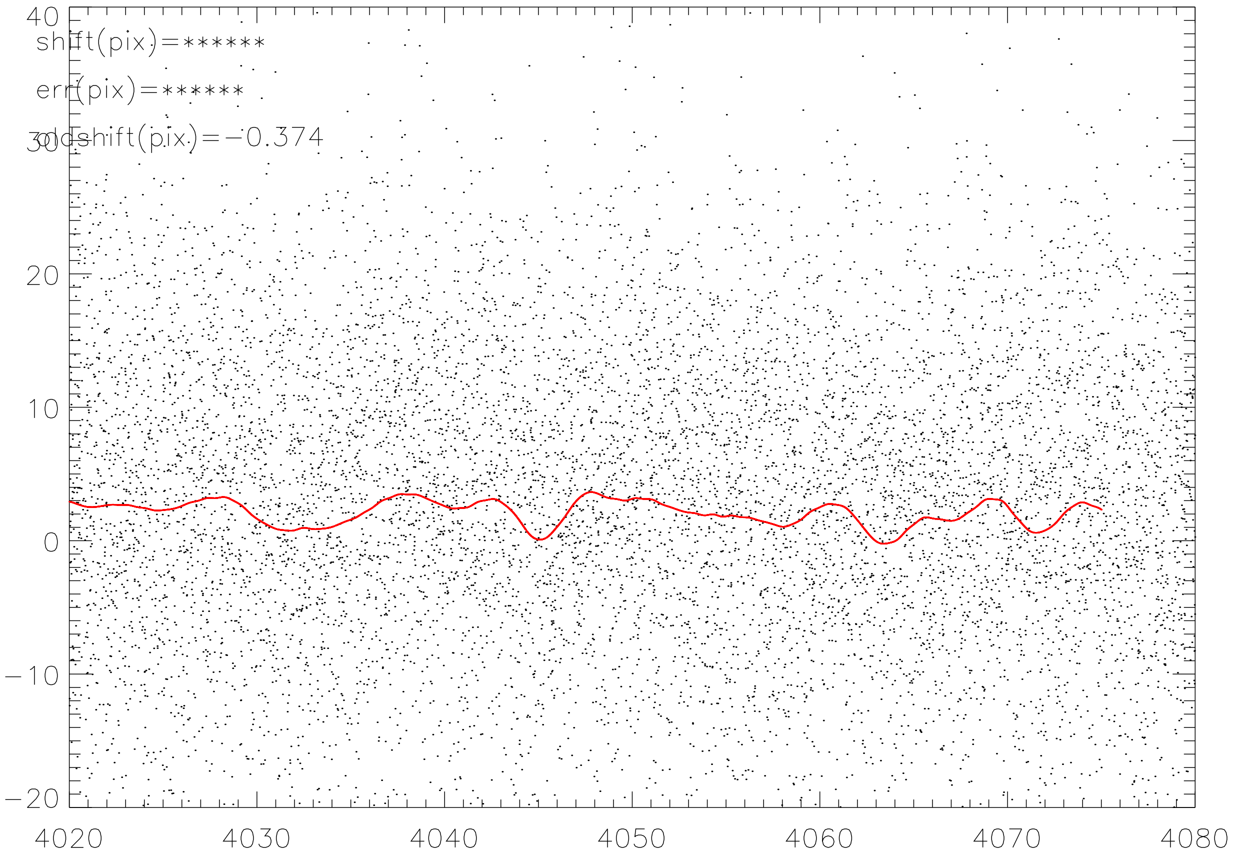
PLATE=3021 MJD=54780 Scattered Light on sdR-b2-00056363.fit

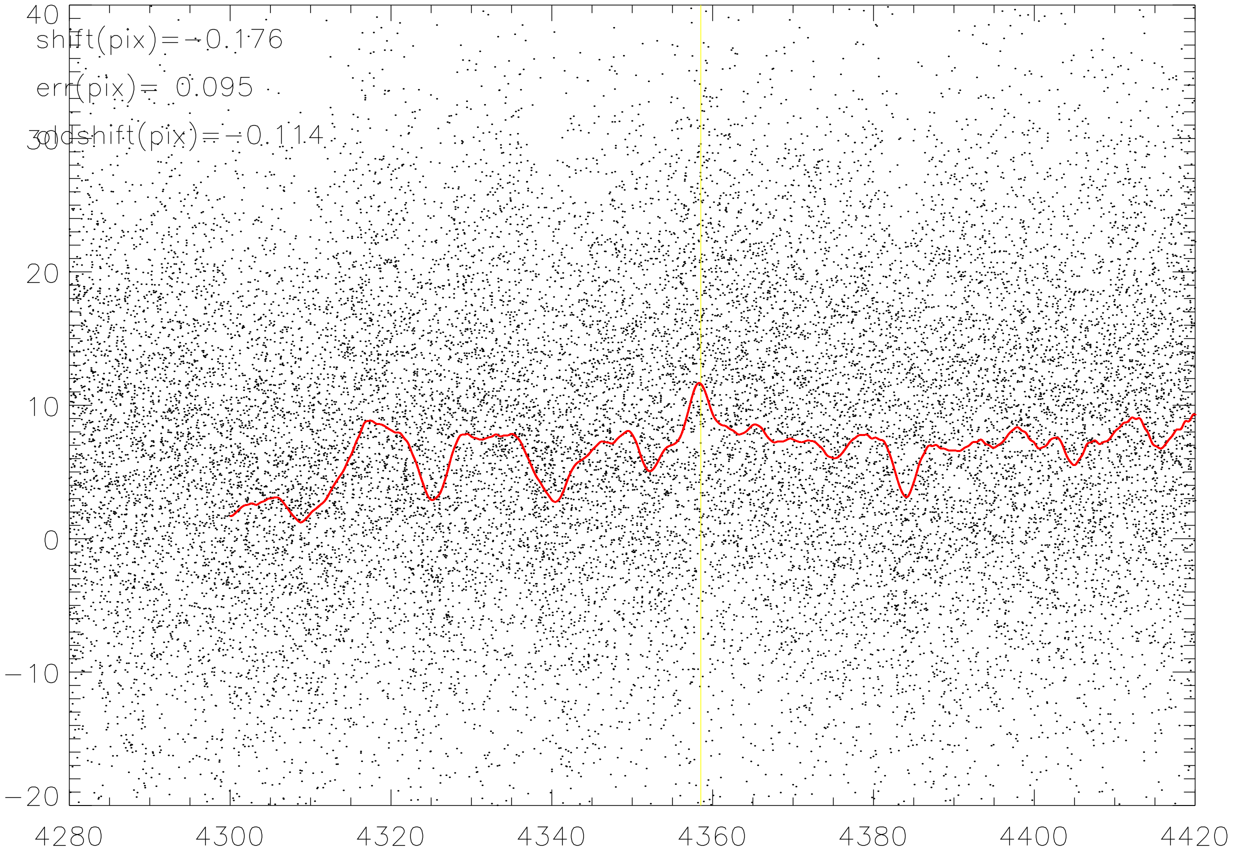


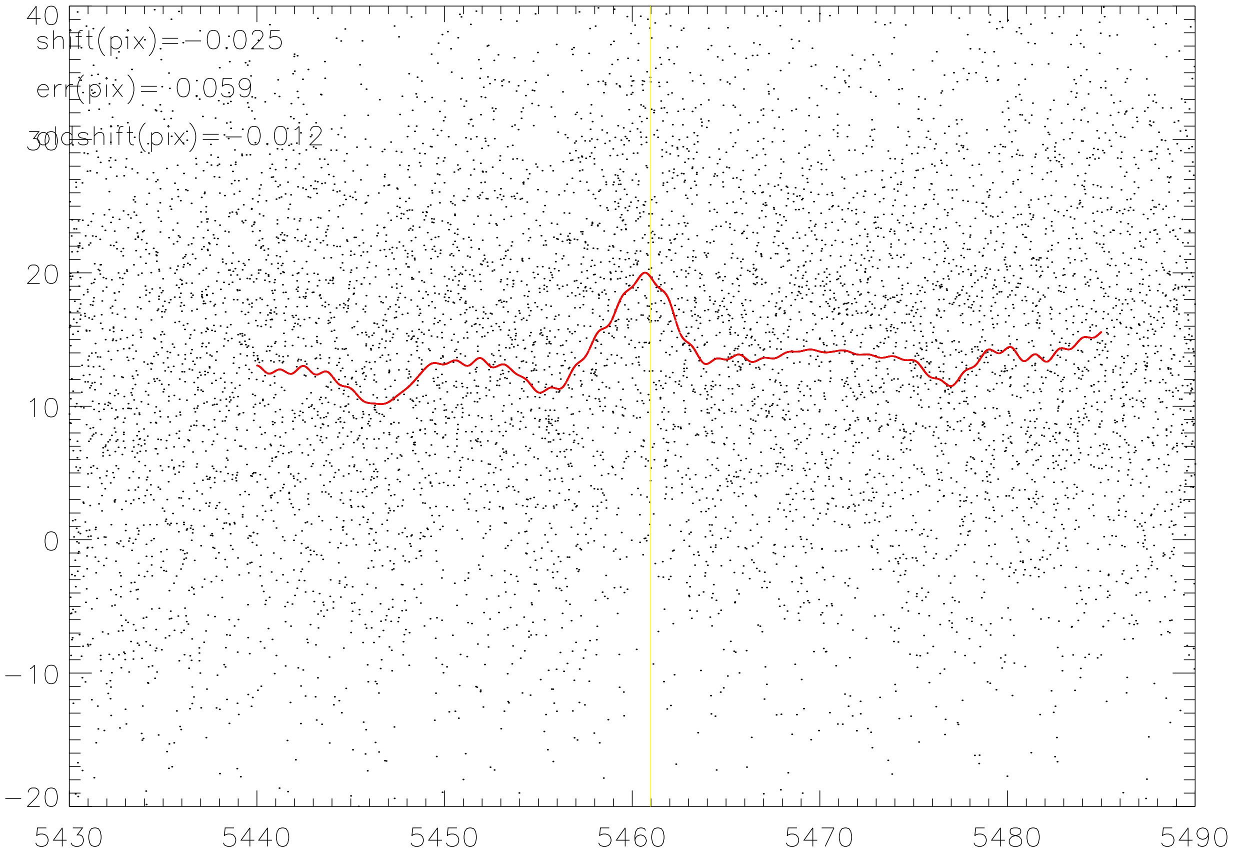
Thu Mar 11 01:22:01 2010

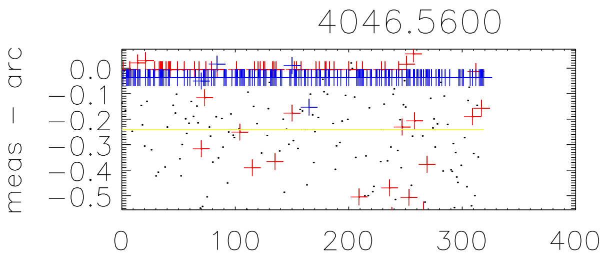

PLATE=3021 MJD=54780 Extraction chi^2 for sdR-b2-00056363.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
2.0
1.5
1.0
0.5
0.0
0
500
1000
1500
2000
Row number

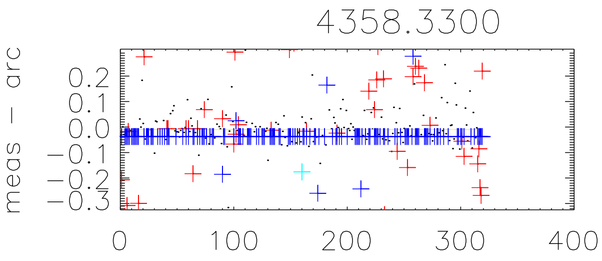

4046.5600
off: −0.37
sig: 0.189
4358.3300
off: −0.11
sig: 0.125
5460.9400
off: −0.01
sig: 0.129
5577.3390
off: −0.13
sig: 0.016
5889.9500
off: −0.11
sig: 0.031
5895.9240
off: −0.13
sig: 0.063
−4
−2
0
2
4
30
20
10
0
−10
−20
40
100
80
60

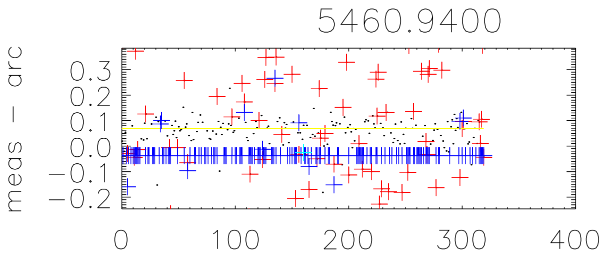

shift(pix)=******
err(pix)=******
oldshift(pix)=−0.374
40
30
20
10
0
−10
−20
4020
4030
4040
4050
4060
4070
4080

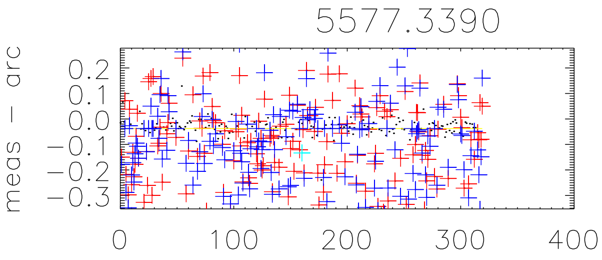

shift(pix)= -0.176
err(pix)= 0.095
oldshift(pix)= -0.114
40
30
20
10
0
−10
−20
4280
4300
4320
4340
4360
4380
4400
4420

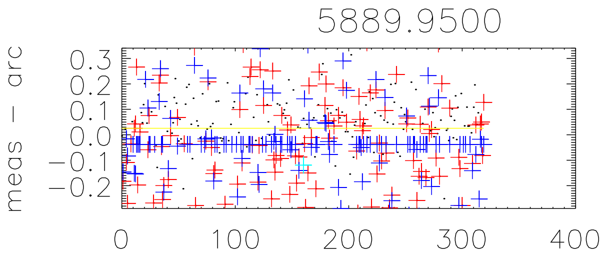

shift(pix)=−0.025
err(pix)= 0.059
oldshift(pix)=−0.012
40
30
20
10
0
−10
−20
5430
5440
5450
5460
5470
5480
5490

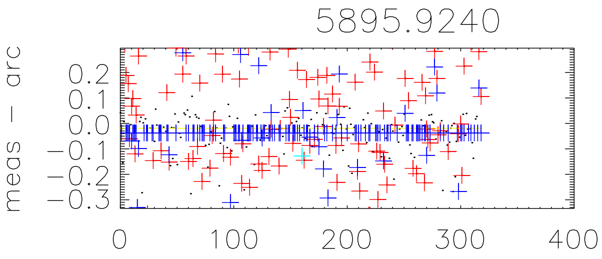

4046.5600

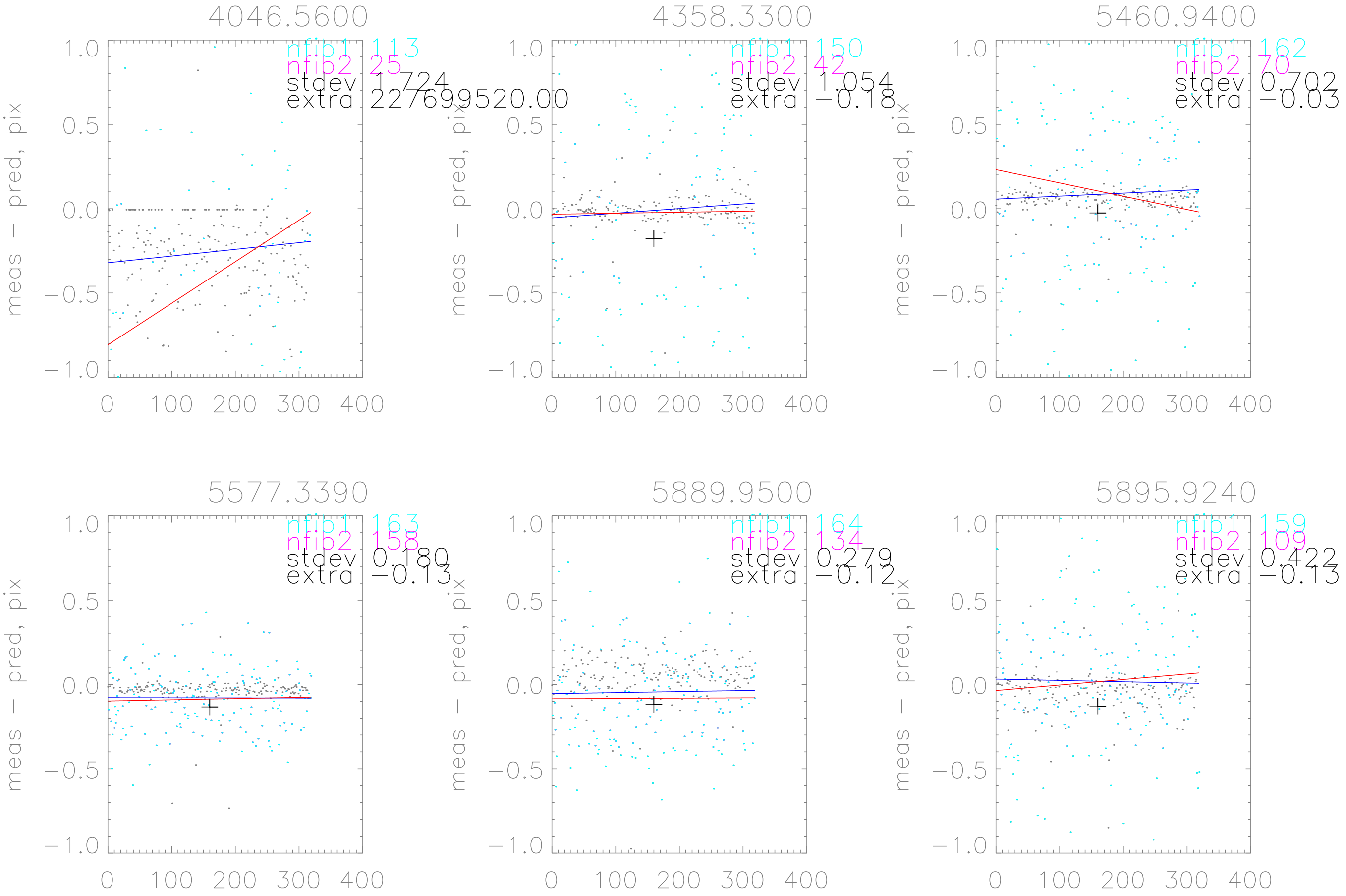

4358.3300

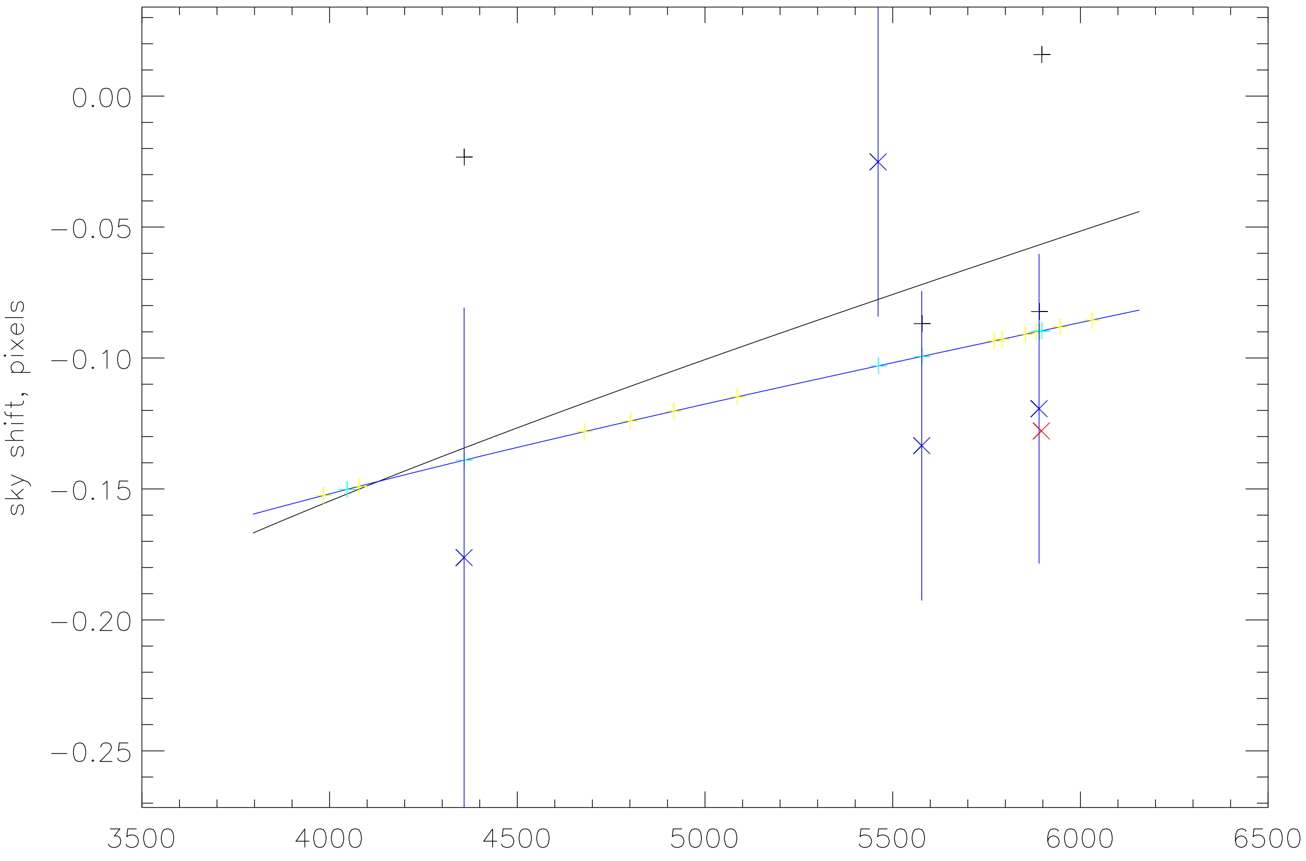

5460.9400

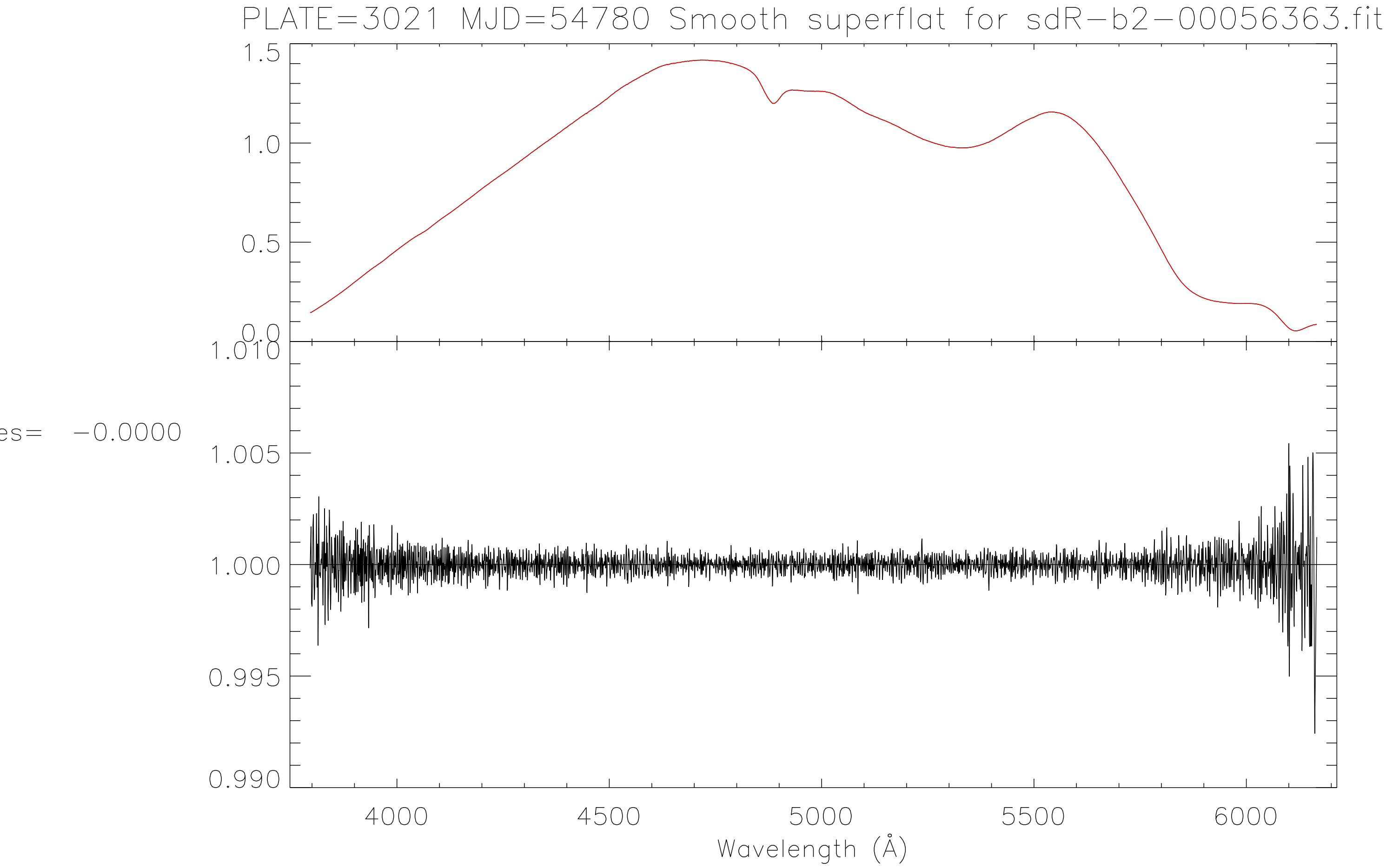

5577.3390

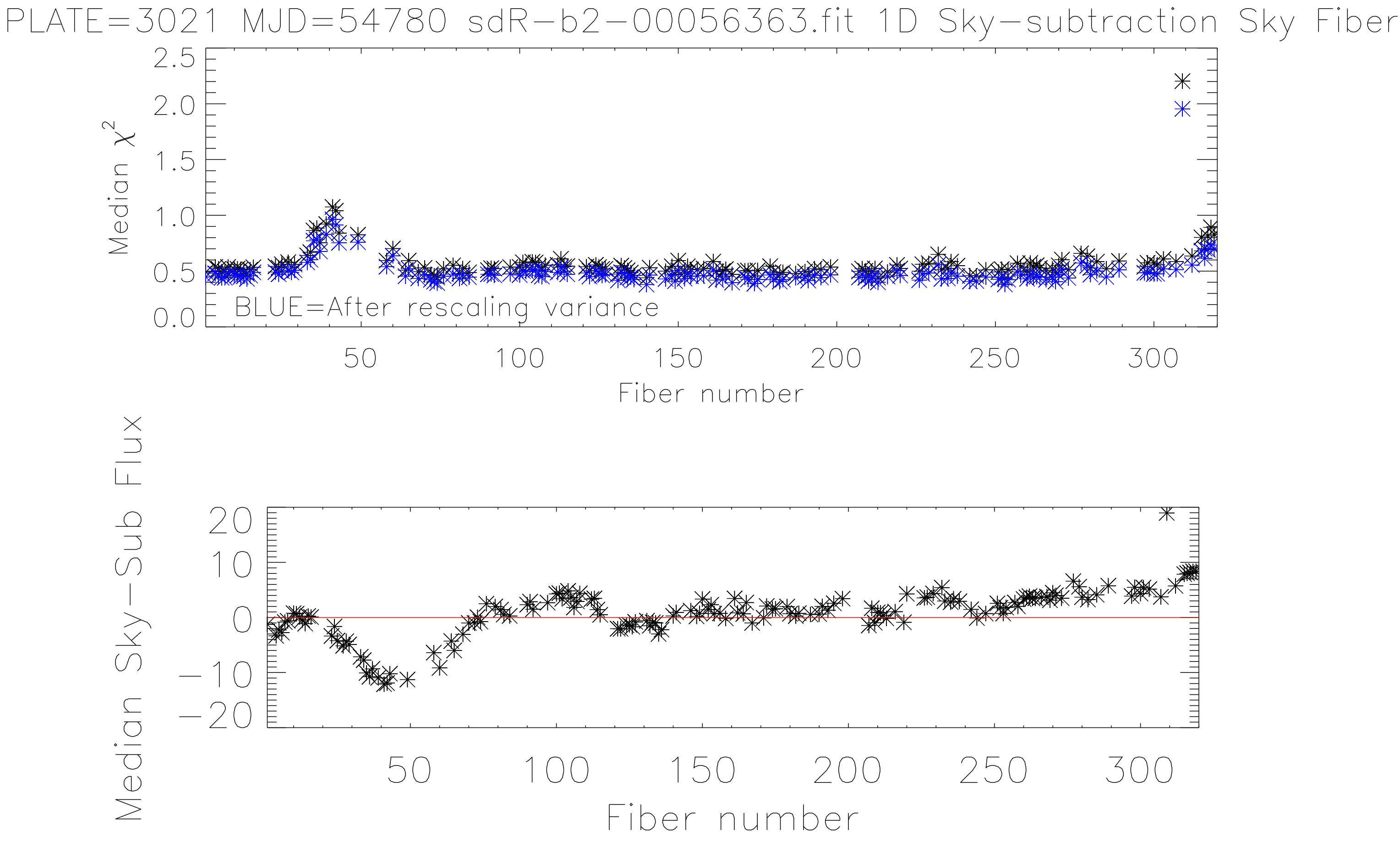

5889.9500

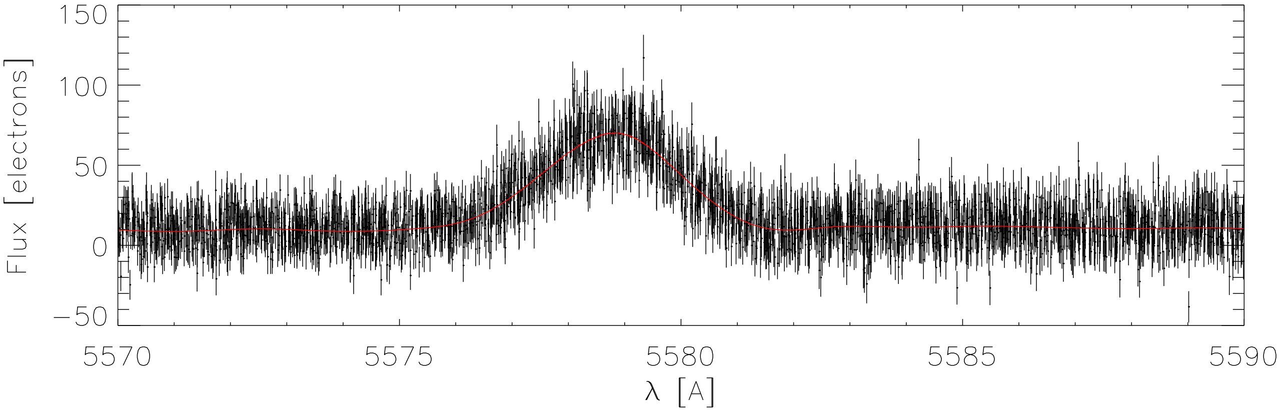

5895.9240

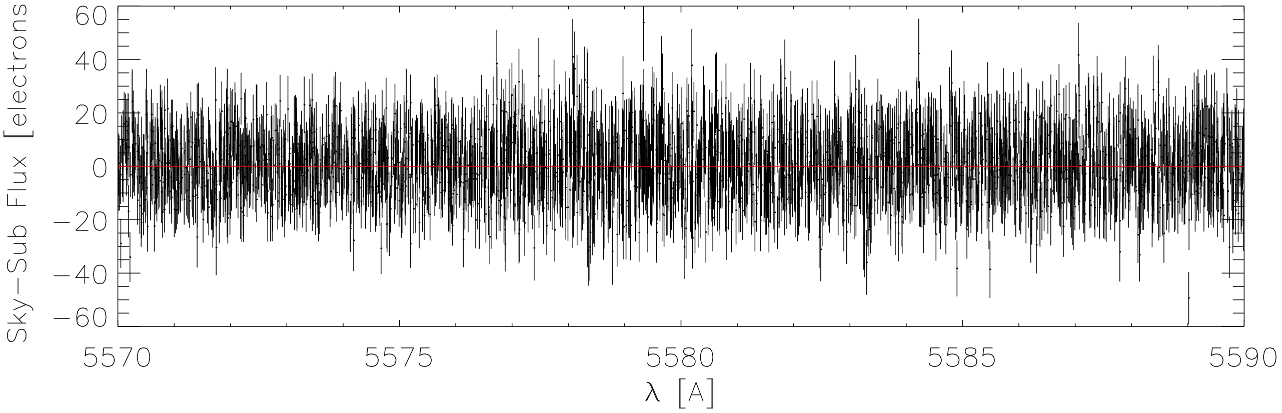

4046.5600
nfib1 113
nfib2 25
stdev 1.724
extra 227699520.00
4358.3300
nfib1 150
nfib2 42
stdev 1.054
extra −0.18
5460.9400
nfib1 162
nfib2 70
stdev 0.702
extra −0.03
5577.3390
nfib1 163
nfib2 158
stdev 0.180
extra −0.13
5889.9500
nfib1 164
nfib2 134
stdev 0.279
extra −0.12
5895.9240
nfib1 159
nfib2 109
stdev 0.422
extra −0.13
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

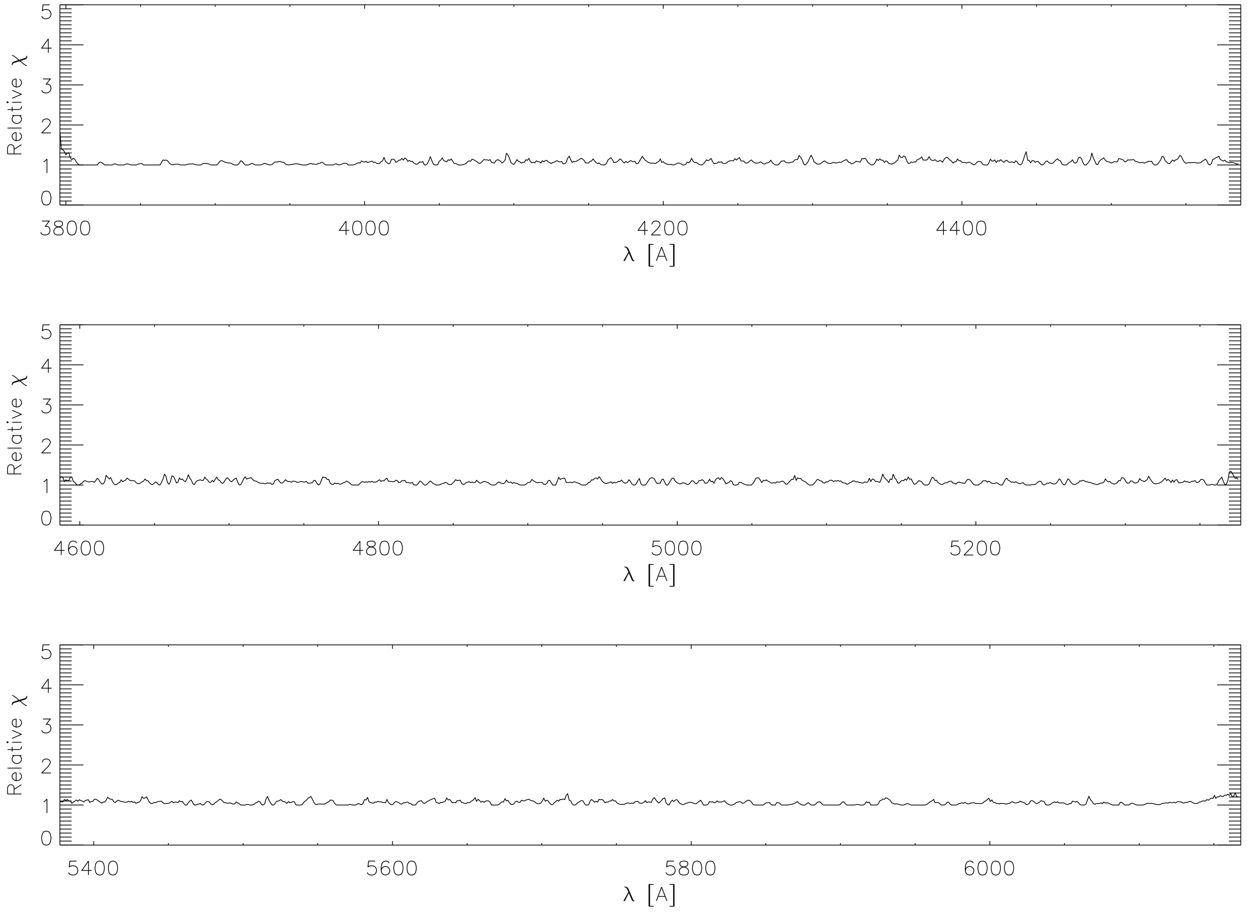

sky shift, pixels
0.00
−0.05
−0.10
−0.15
−0.20
−0.25
3500
4000
4500
5000
5500
6000
6500


PLATE=3021 MJD=54780 Smooth superflat for sdR-b2-00056363.fit
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
es= −0.0000
4000
4500
5000
5500
6000
Wavelength (Å)


PLATE=3021 MJD=54780 sdR-b2-00056363.fit 1D Sky-subtraction Sky Fiber
Median χ^2
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
20
10
0
-10
-20
50
100
150
200
250
300
Fiber number

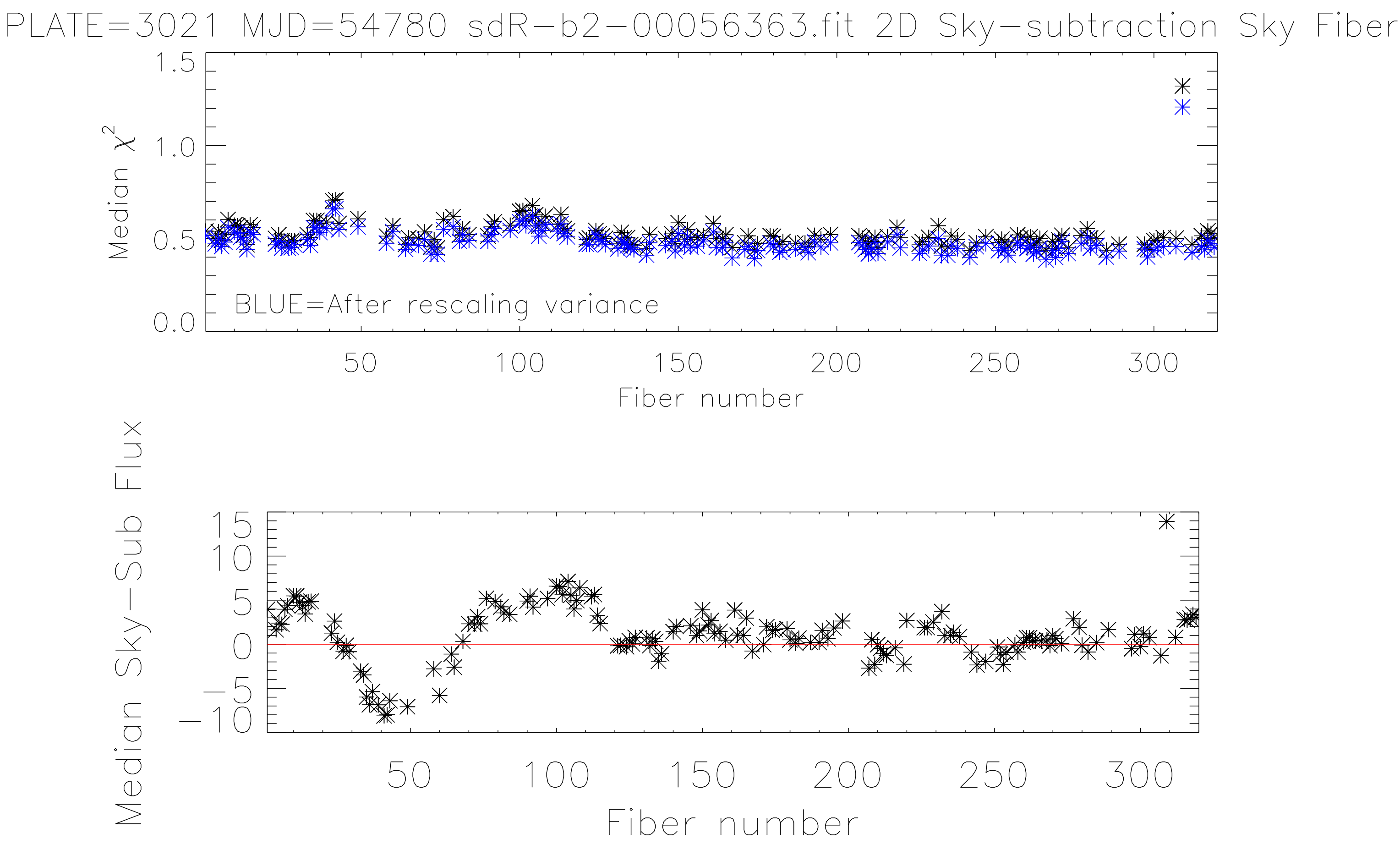

PLATE=3021 MJD=54780 sdR-b2-00056363.fit 1D Sky-subtraction Sky Fibers


PLATE=3021 MJD=54780 sdR-b2-00056363.fit 1D Sky-subtraction Sky-subtracted Sky F



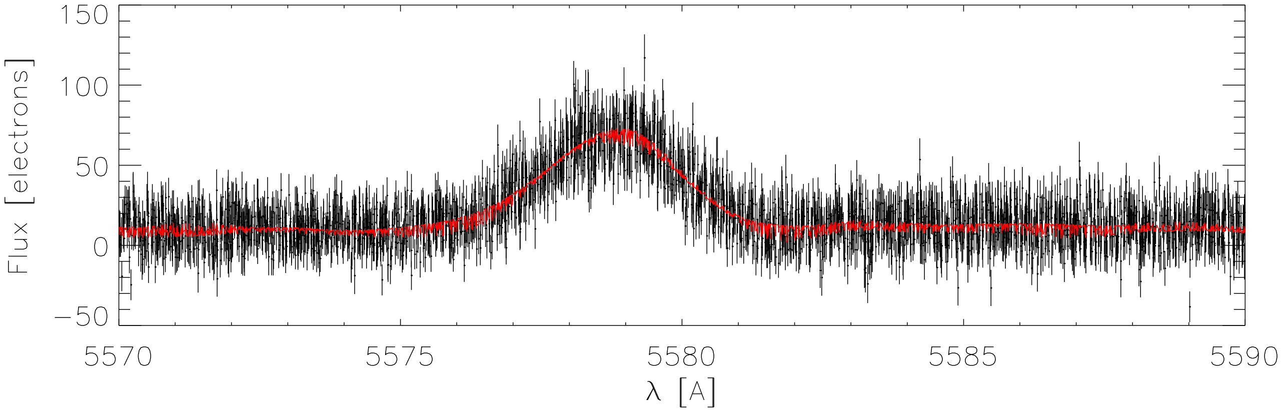
Number of sky fibers = 158

PLATE=3021 MJD=54780 sdR-b2-00056363.fit 1D Sky-subtraction Rescaled Errors

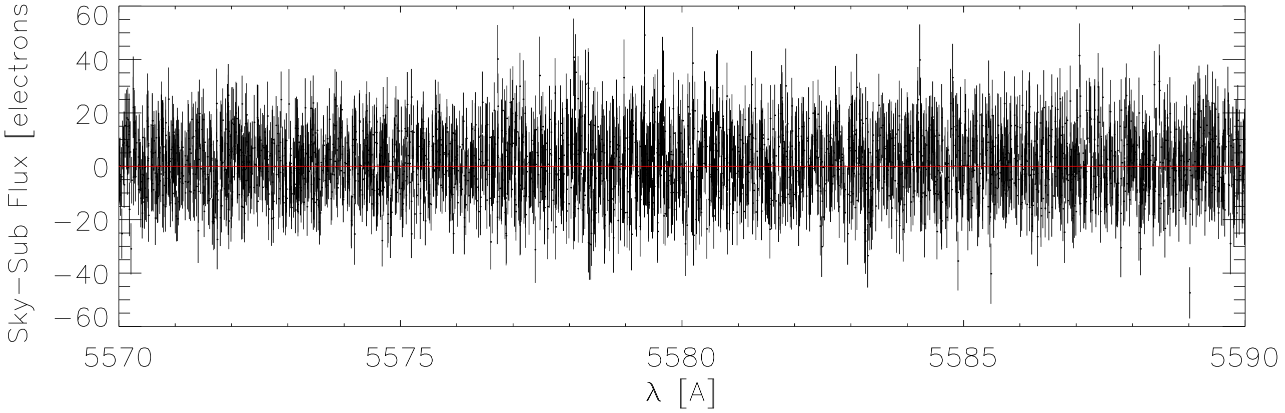


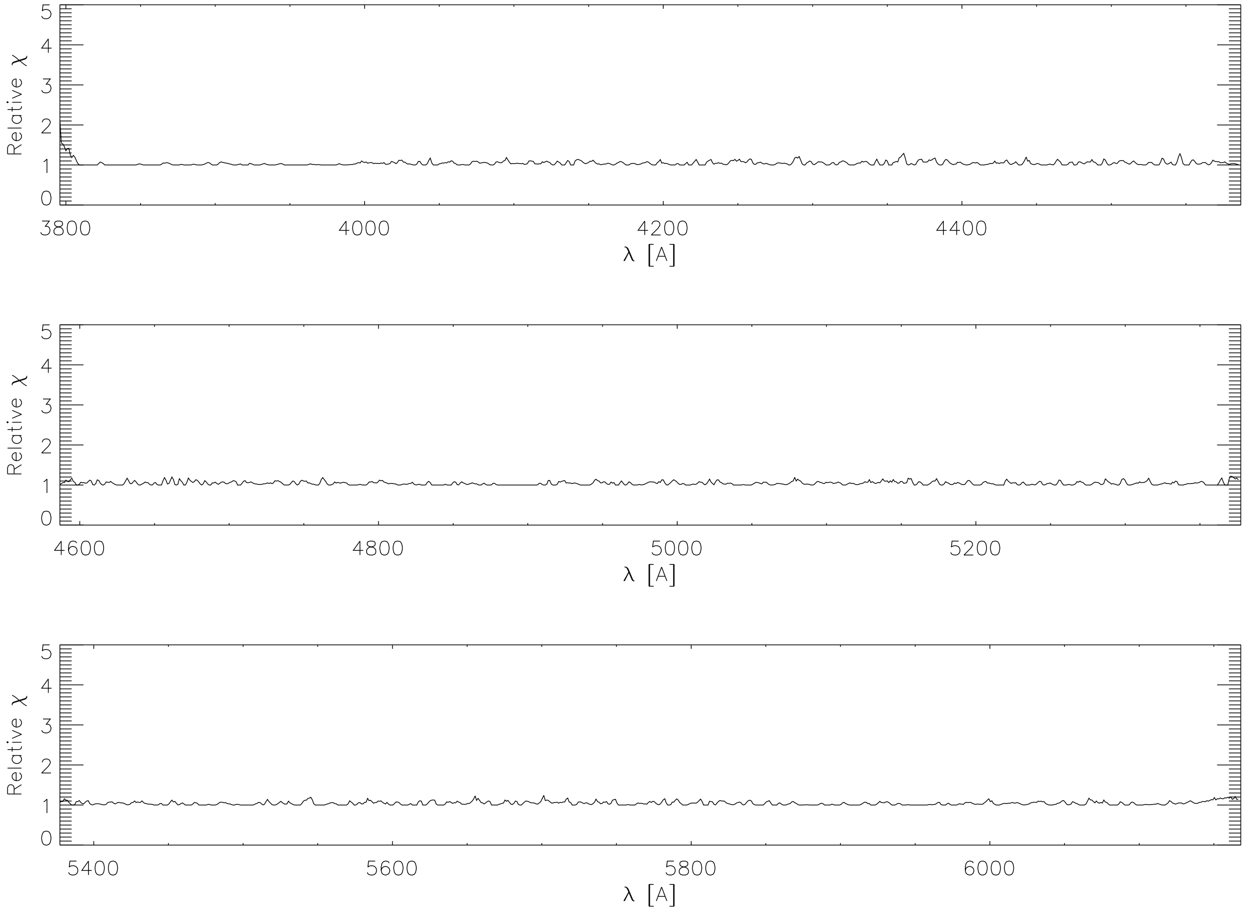
PLATE=3021 MJD=54780 sdR-b2-00056363.fit 2D Sky-subtraction Sky Fiber

PLATE=3021 MJD=54780 sdR-b2-00056363.fit 2D Sky-subtraction Sky Fibers



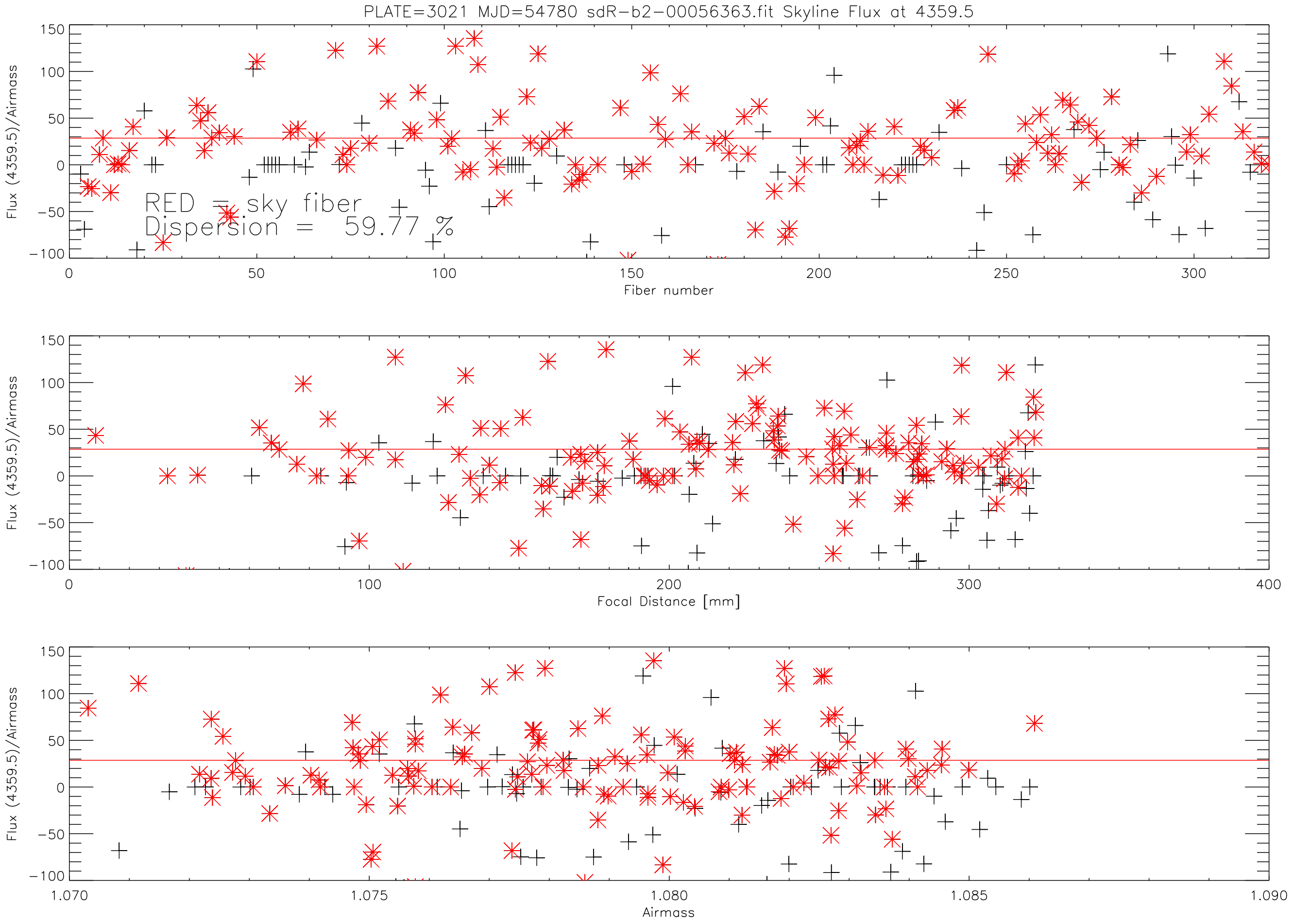
PLATE=3021 MJD=54780 sdR-b2-00056363.fit 2D Sky-subtraction Sky-subtracted Sky F

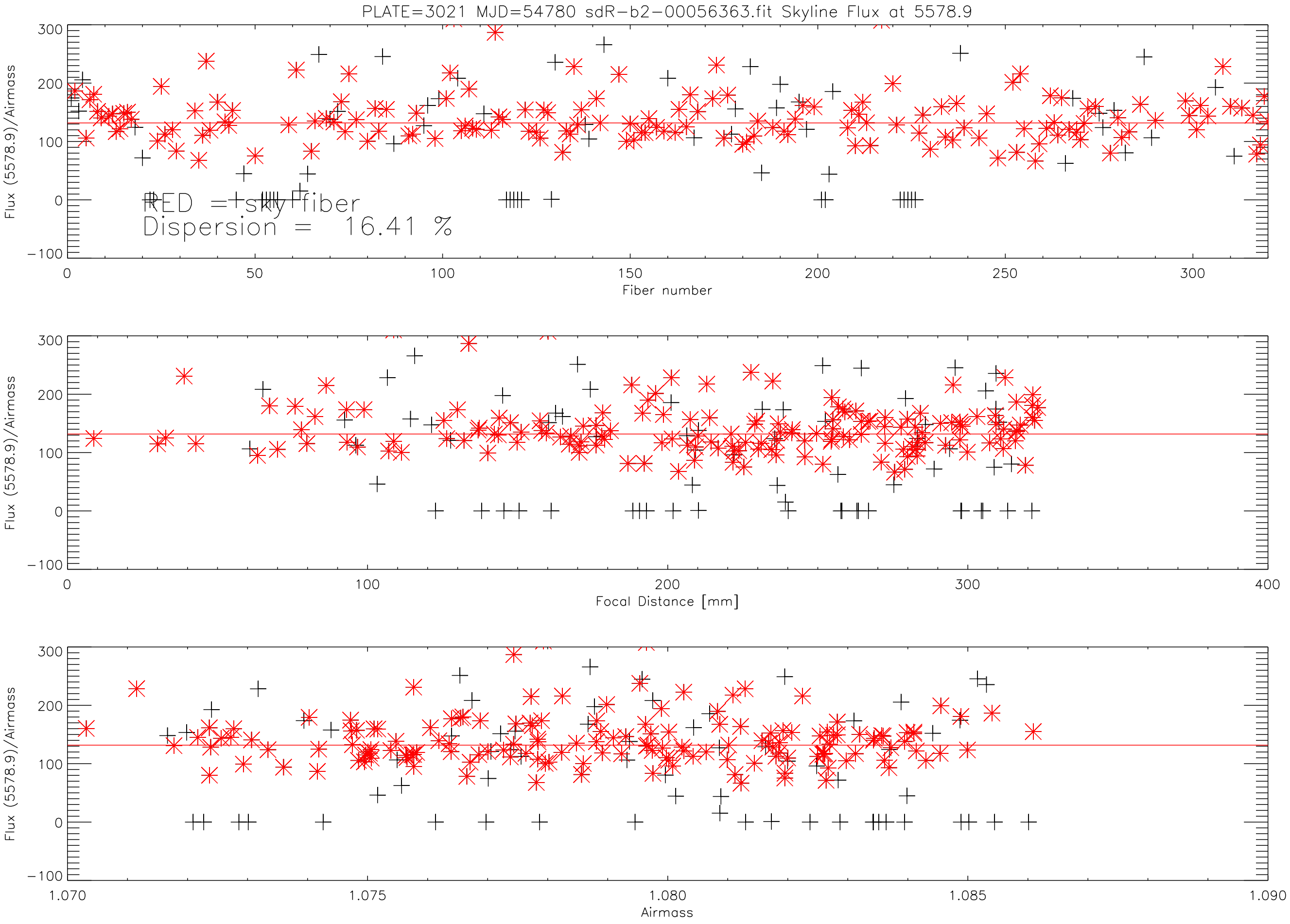


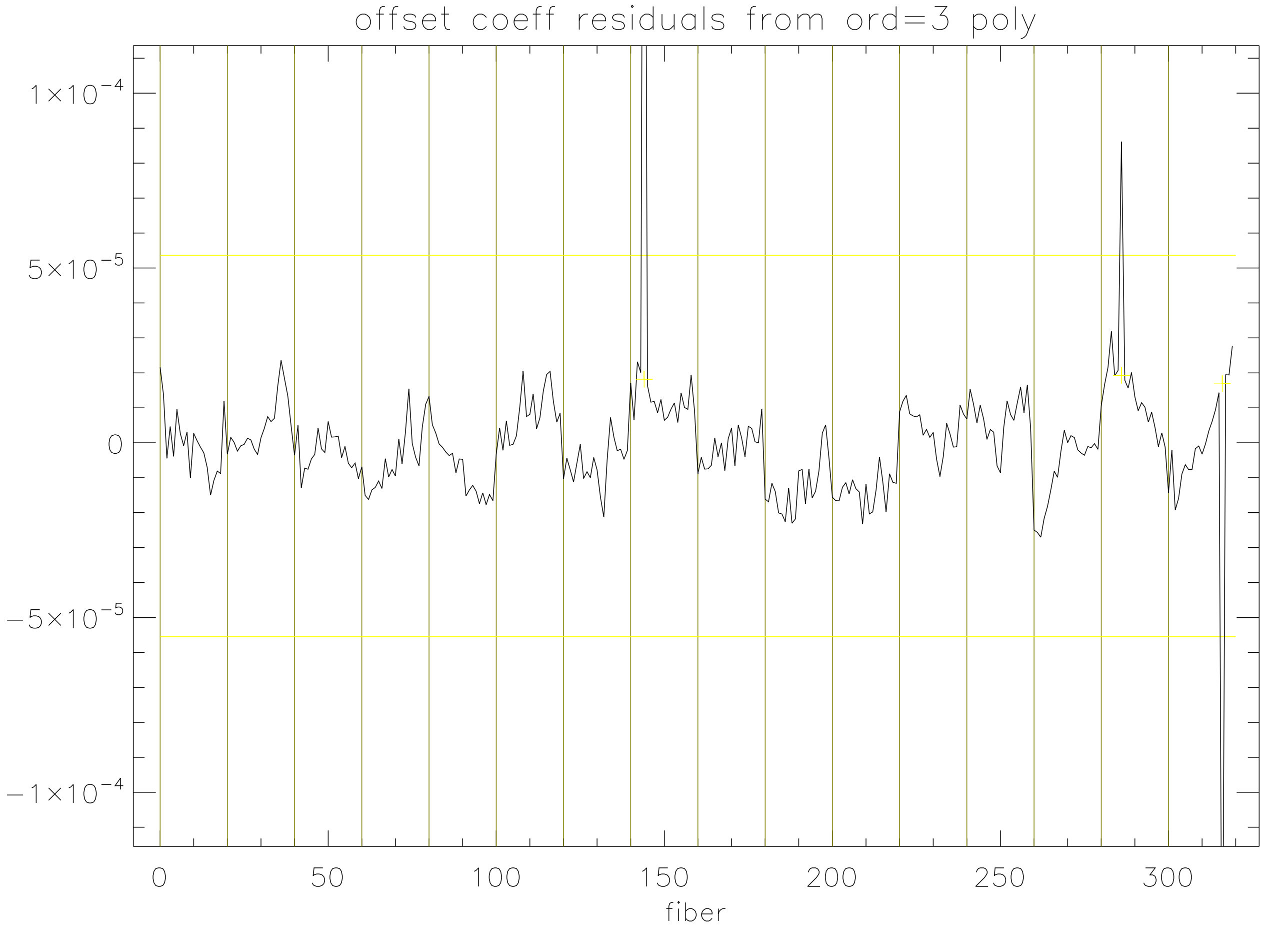


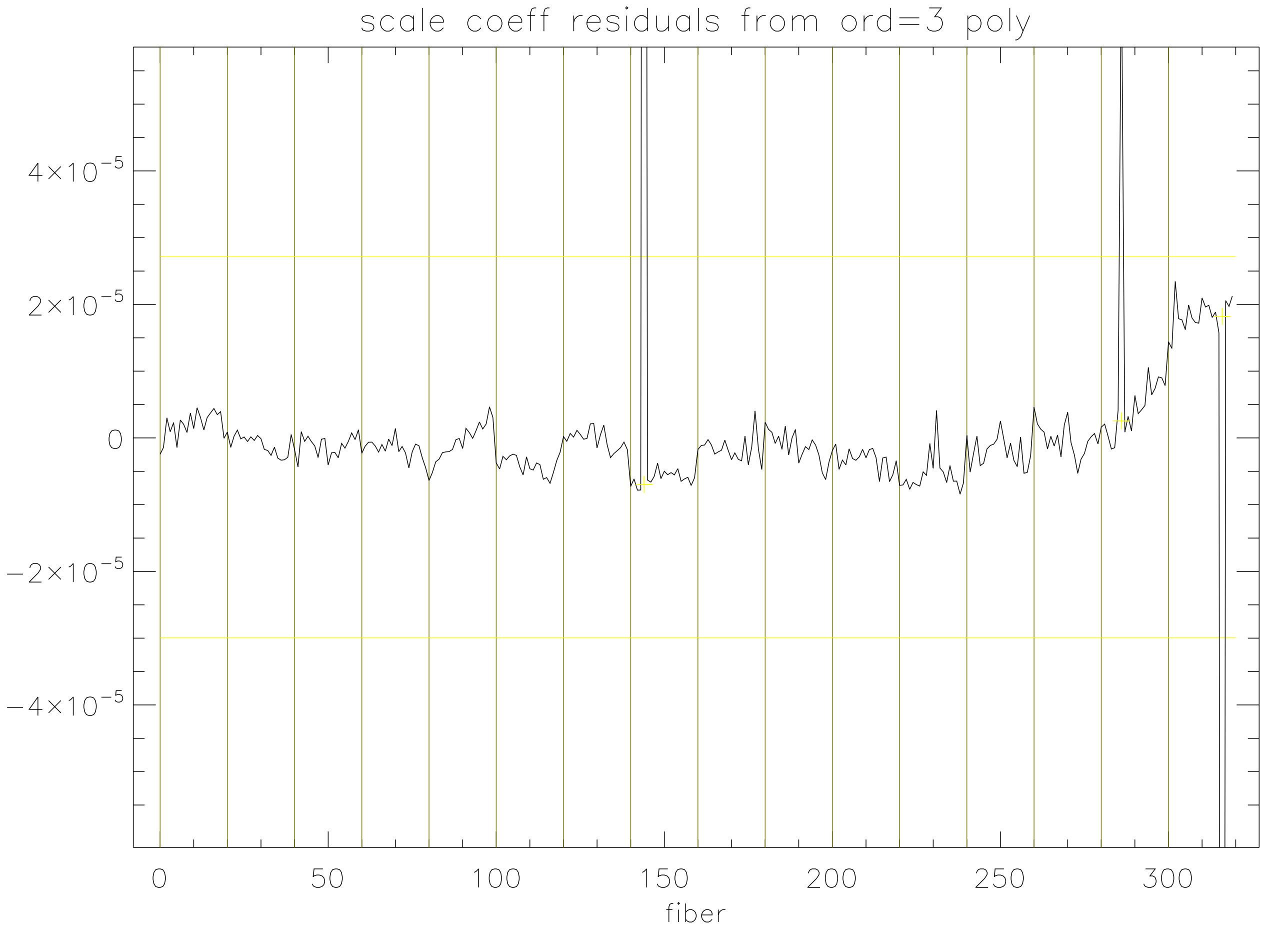
Number of sky fibers = 158

PLATE=3021 MJD=54780 sdR-b2-00056363.fit 2D Sky-subtraction Rescaled Errors

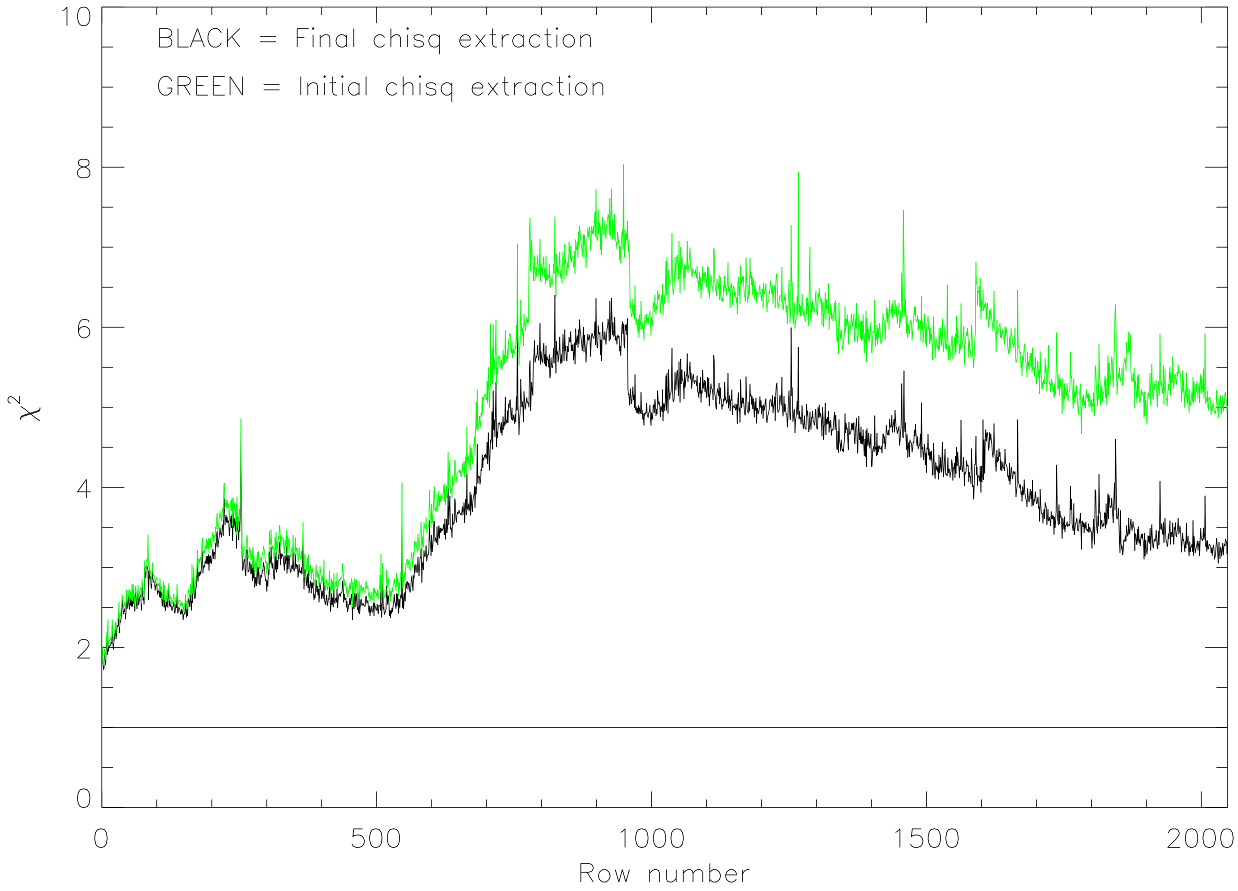

PLATE=3021 MJD=54780 sdR-b2-00056363.fit Skyline Flux at 4359.5
RED = sky fiber
Dispersion = 59.77 %
Flux (4359.5)/Airmass
150
100
50
0
-50
-100
Fiber number
0
50
100
150
200
250
300
Focal Distance [mm]
0
100
200
300
400
Airmass
1.070
1.075
1.080
1.085
1.090

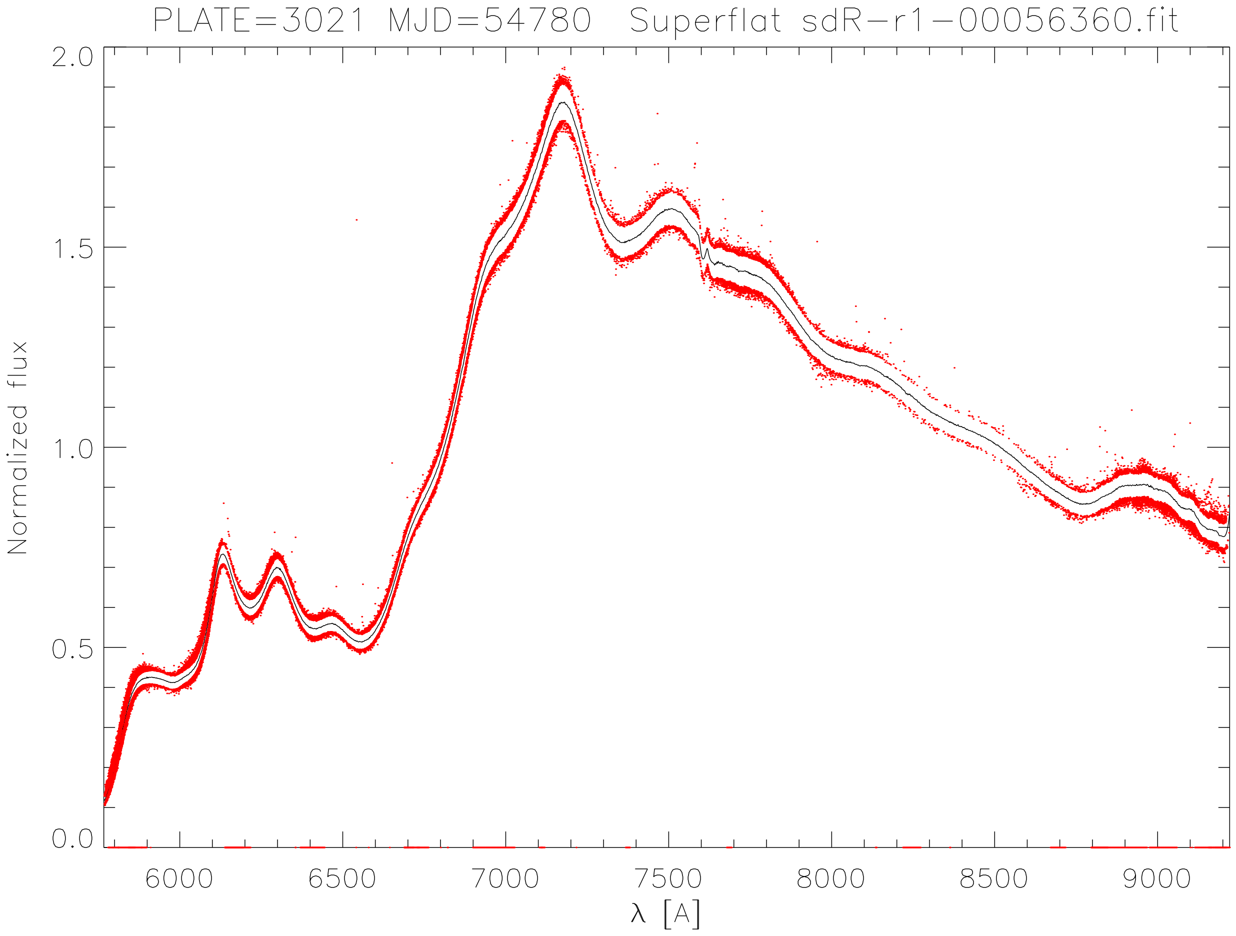

PLATE=3021 MJD=54780 sdR-b2-00056363.fit Skyline Flux at 5578.9
Flux (5578.9)/Airmass
300
200
100
0
-100
RED = sky fiber
Dispersion = 16.41 %
0
50
100
150
200
250
300
Fiber number
Flux (5578.9)/Airmass
300
200
100
0
-100
0
100
200
300
400
Focal Distance [mm]
Flux (5578.9)/Airmass
300
200
100
0
-100
1.070
1.075
1.080
1.085
1.090
Airmass

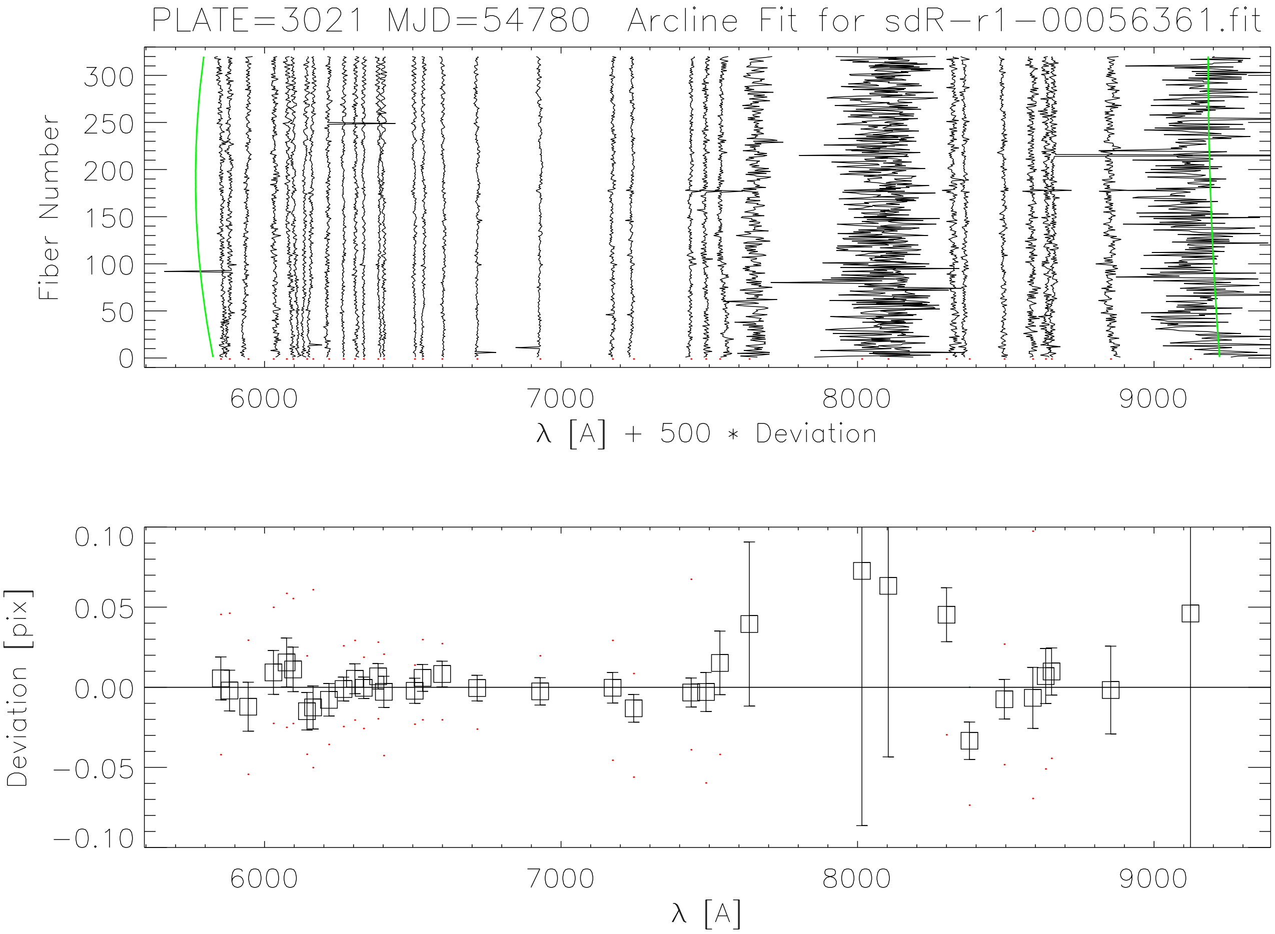

offset coeff residuals from ord=3 poly
1×10⁻⁴
5×10⁻⁵
0
−5×10⁻⁵
−1×10⁻⁴
0
50
100
150
200
250
300
fiber


scale coeff residuals from ord=3 poly
4×10⁻⁵
2×10⁻⁵
0
−2×10⁻⁵
−4×10⁻⁵
0
50
100
150
200
250
300
fiber

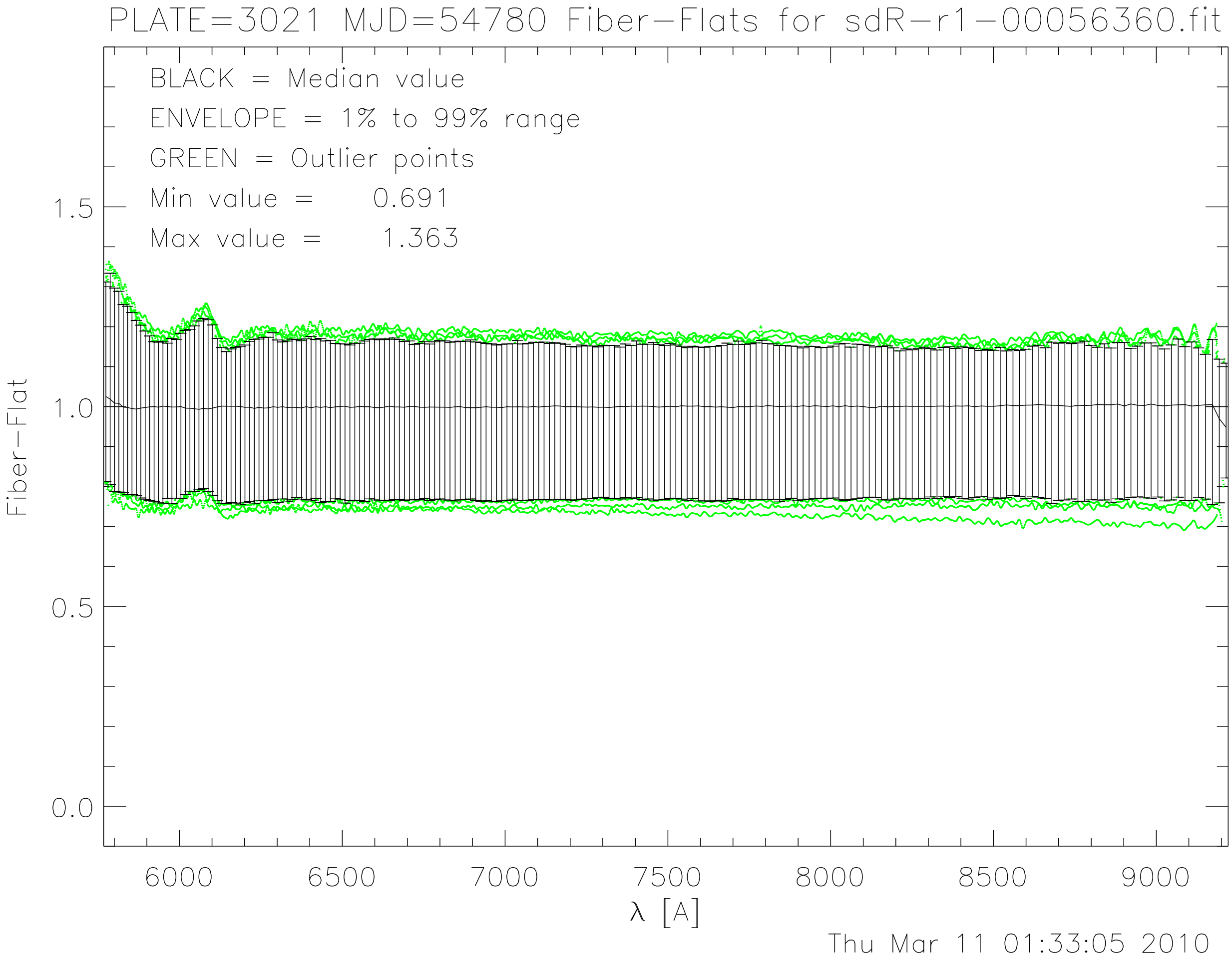
PLATE=3021 MJD=54780 flat extraction χ^2 for sdR-r1-00056360.fit

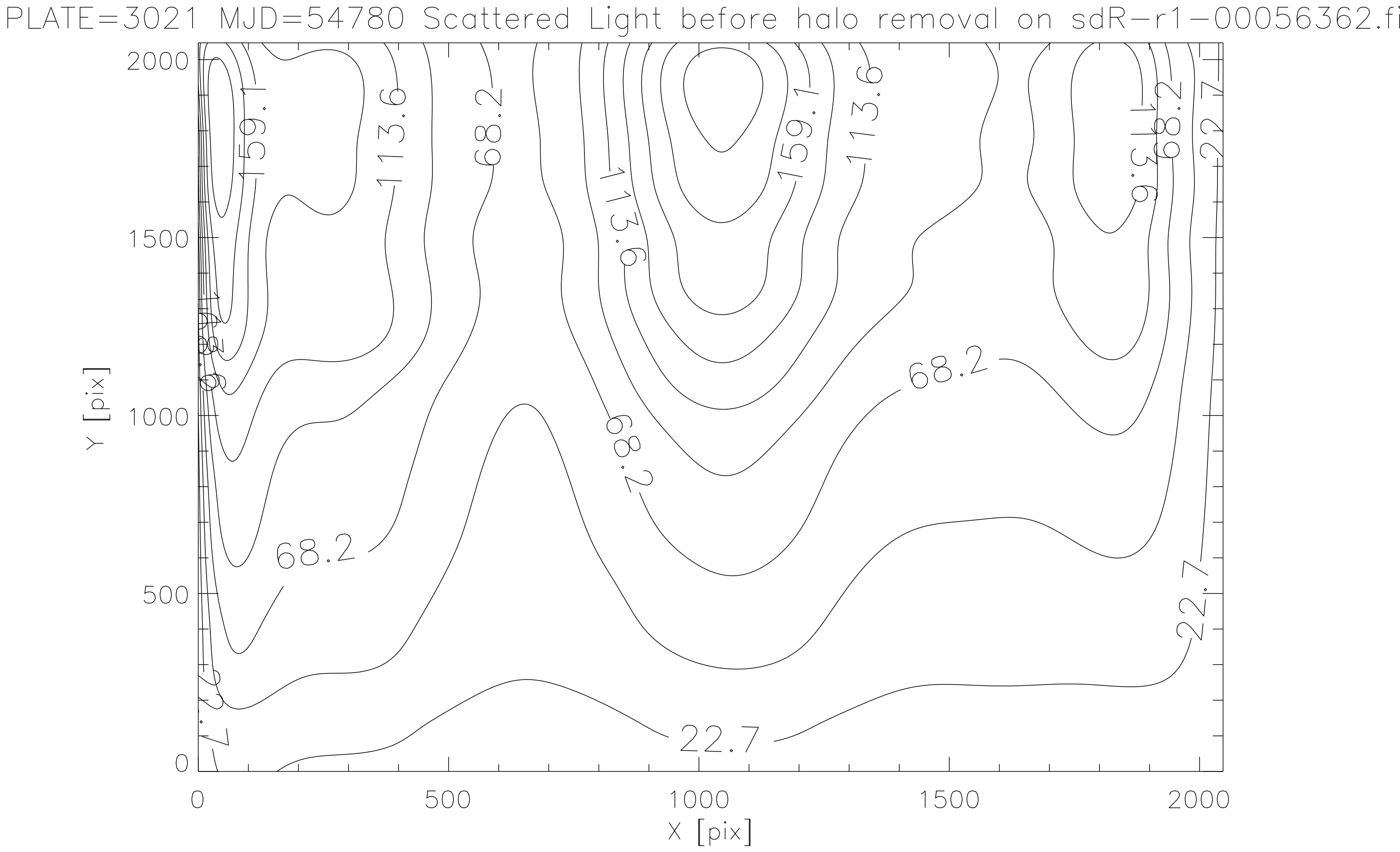


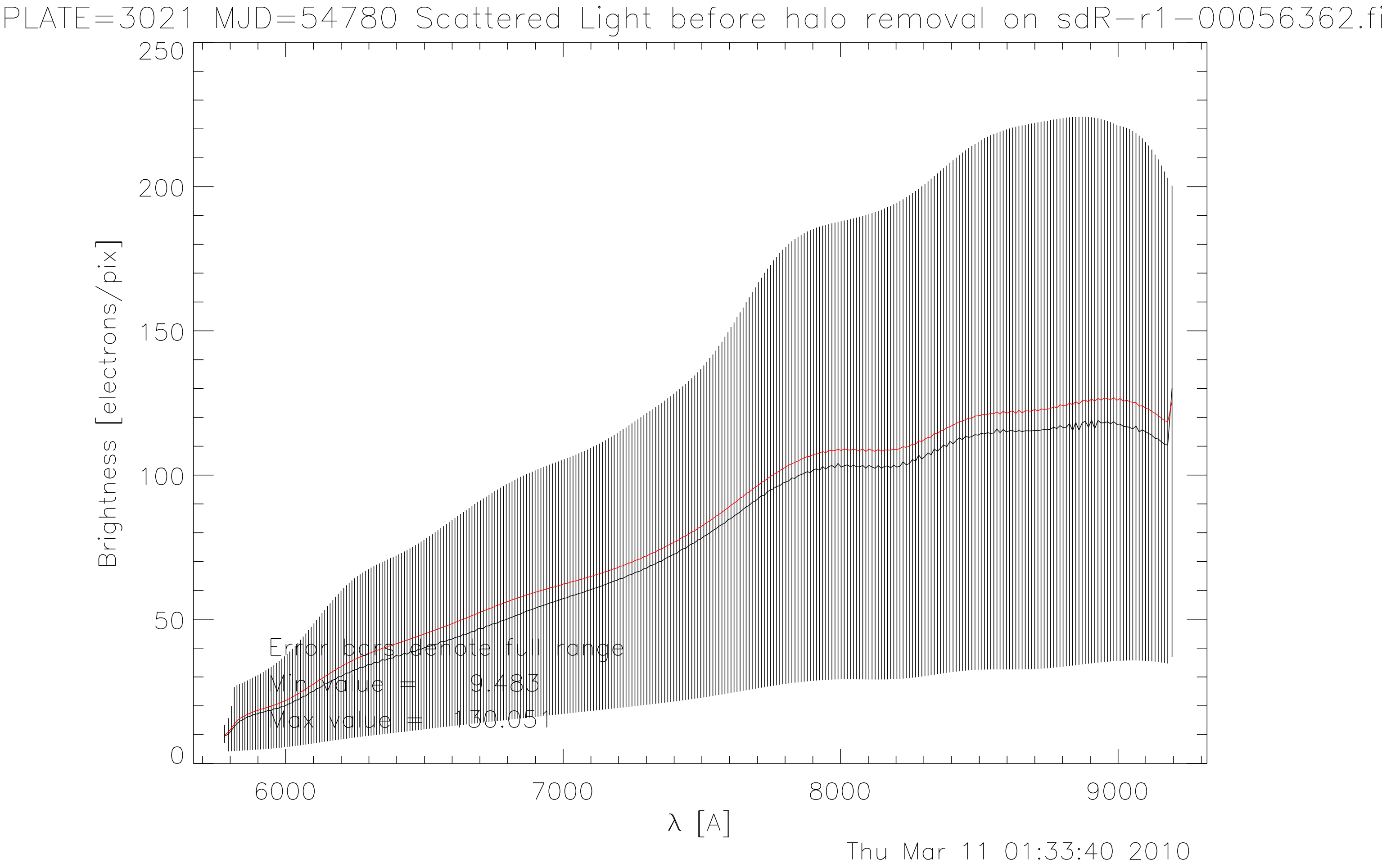

PLATE=3021 MJD=54780 Superflat sdR-r1-00056360.fit
Normalized flux
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000
λ [A]

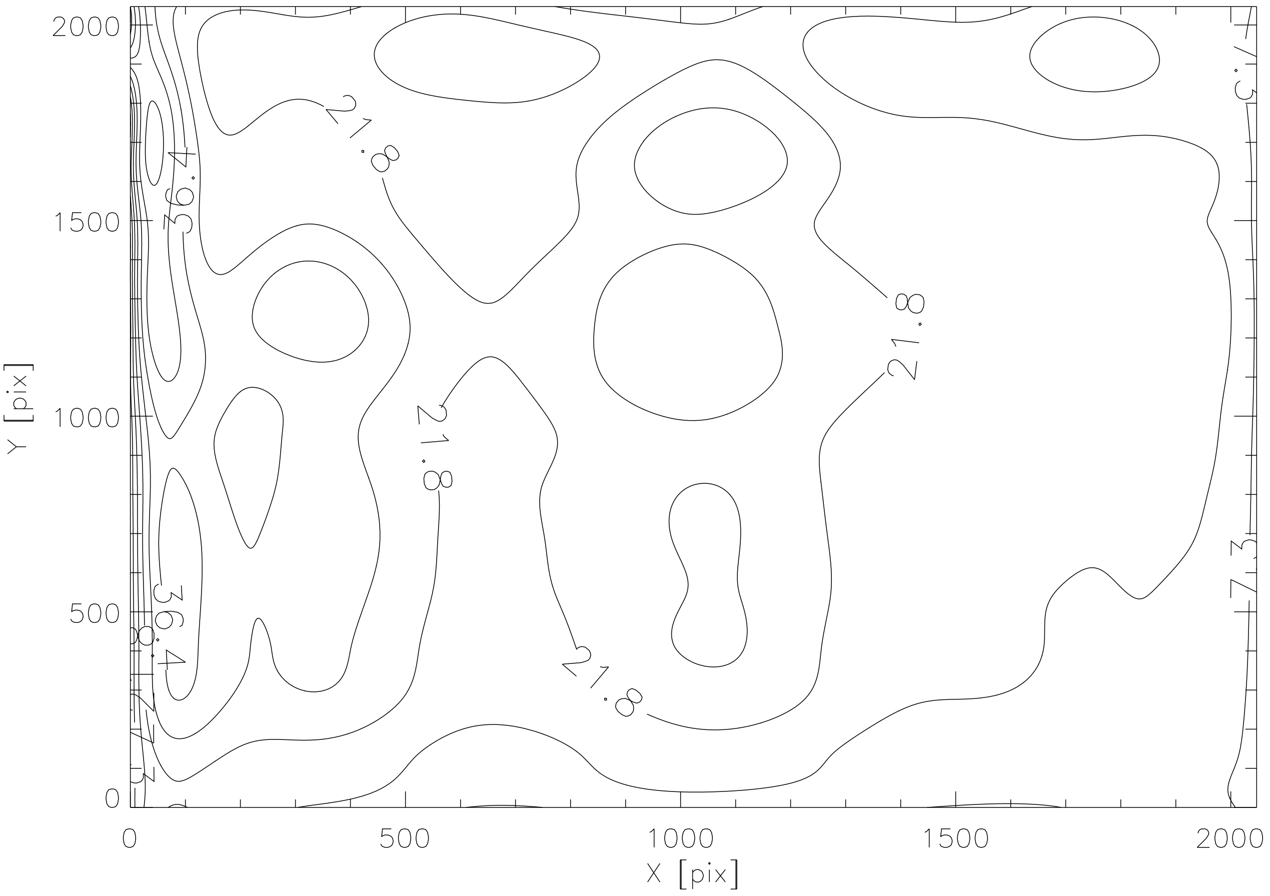


Thu Mar 11 01:32:55 2010

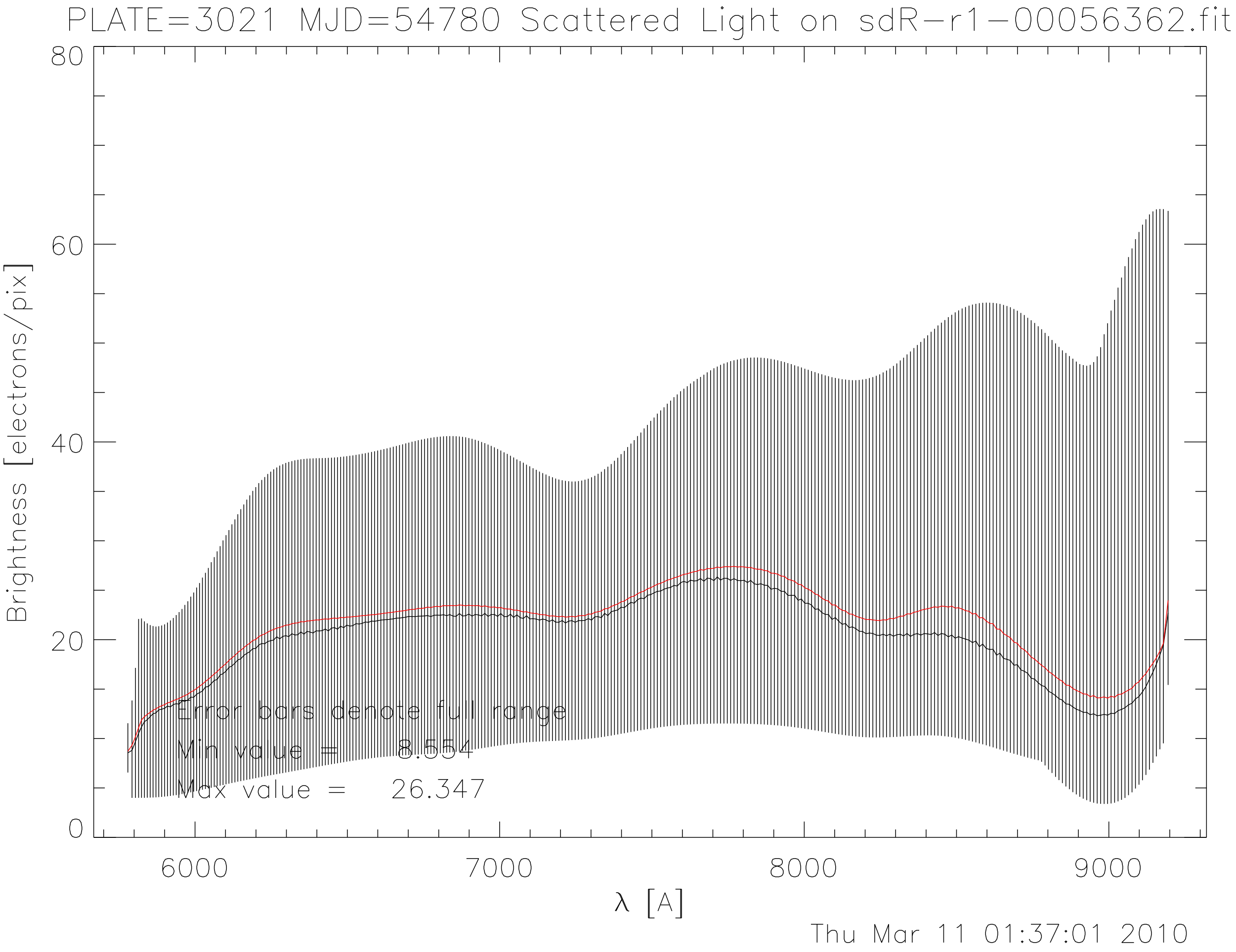

PLATE=3021 MJD=54780 Fiber−Flats for sdR−r1−00056360.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.691
Max value = 1.363
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Mar 11 01:33:05 2010

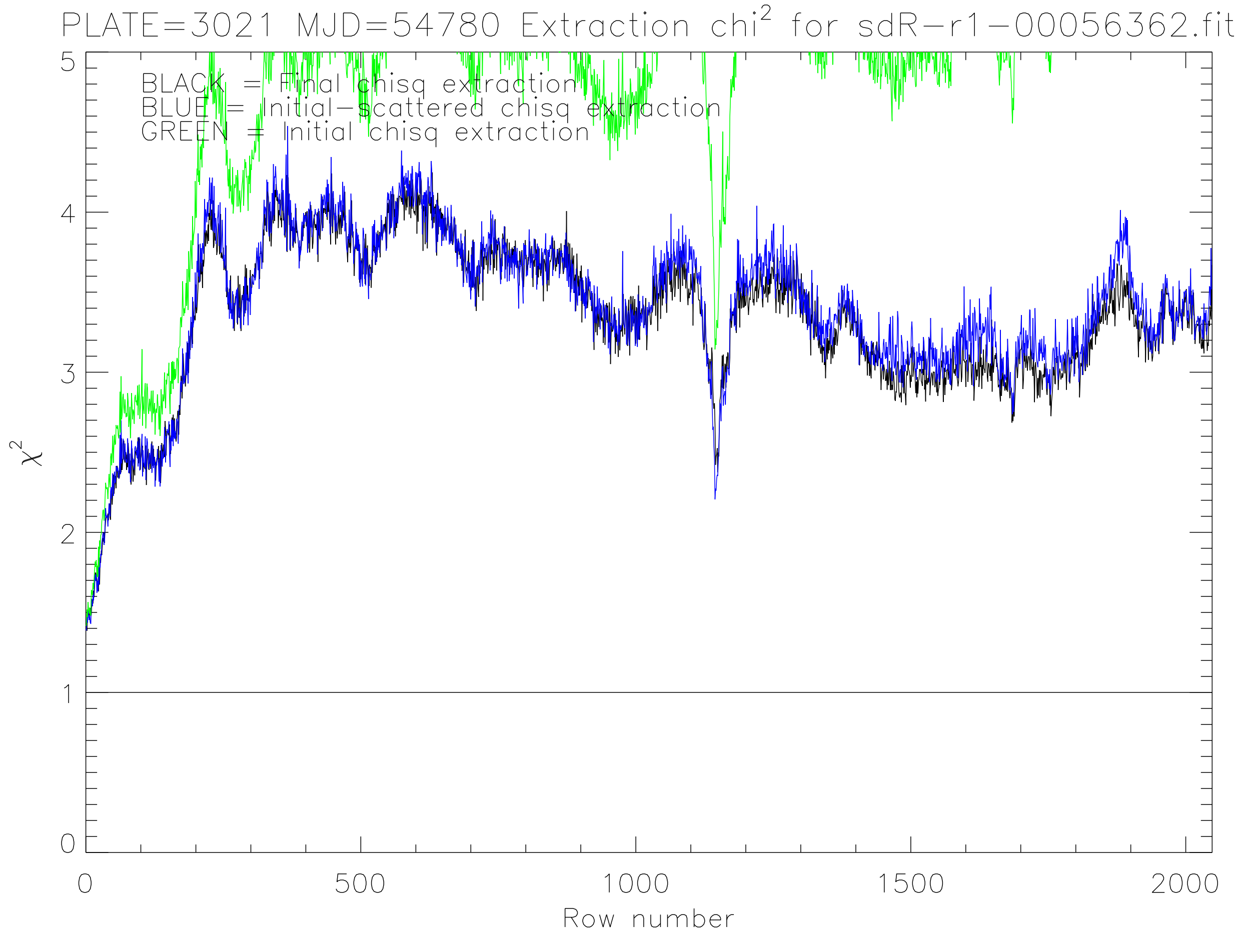

PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-r1-00056362.fi

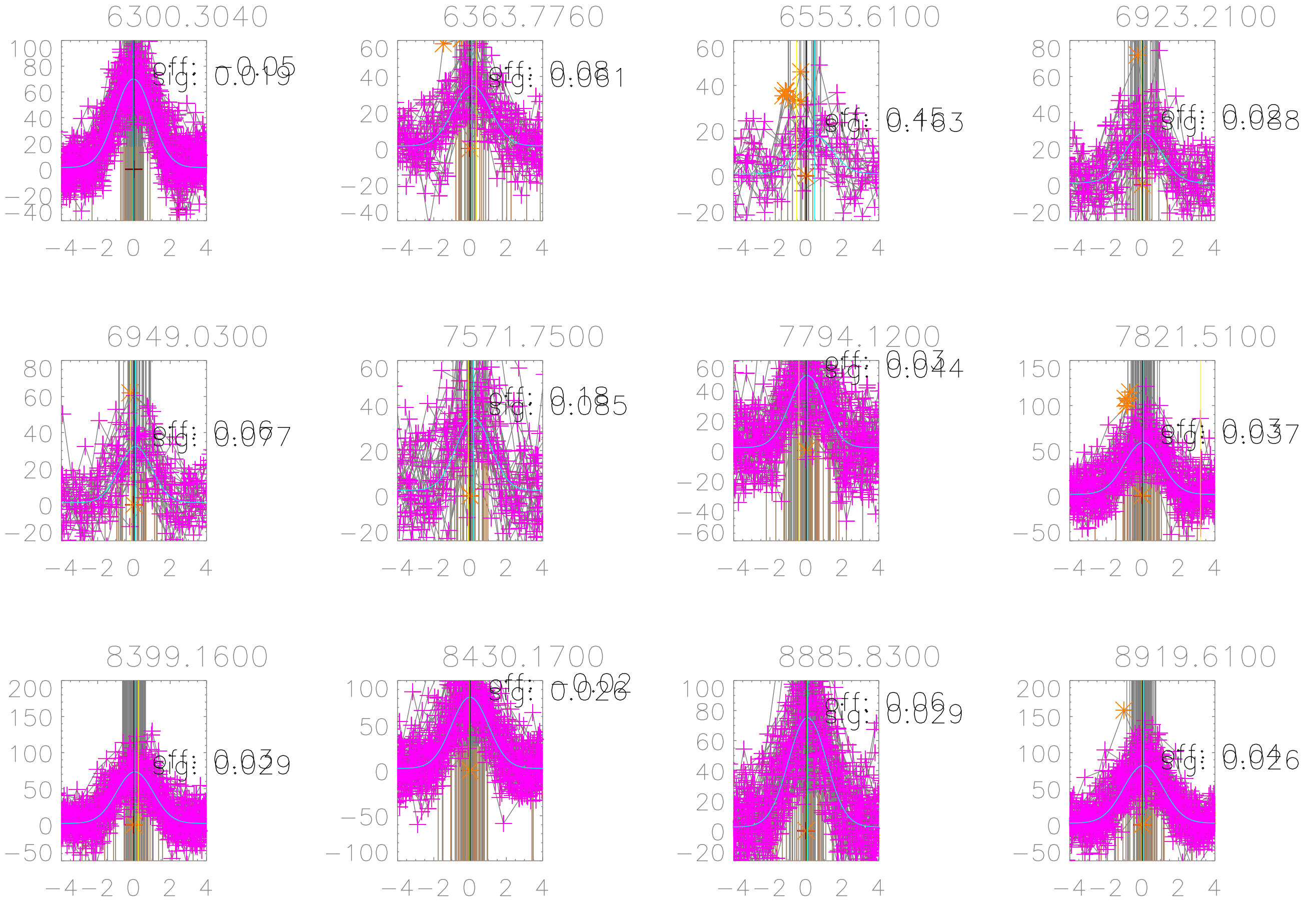

PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-r1-00056362.fi
Brightness [electrons/pix]
250
200
150
100
50
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 9.483
Max value = 130.051
Thu Mar 11 01:33:40 2010

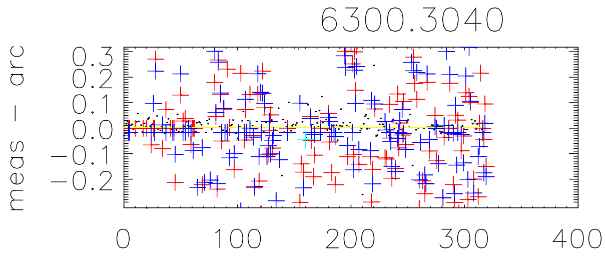


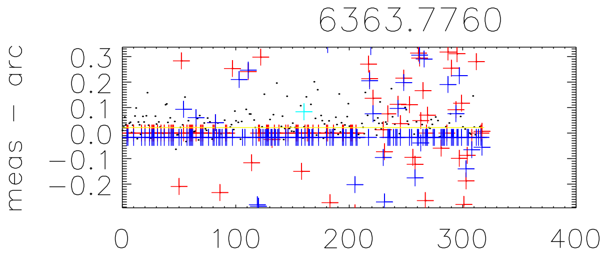
PLATE=3021 MJD=54780 Scattered Light on sdR-r1-00056362.fit

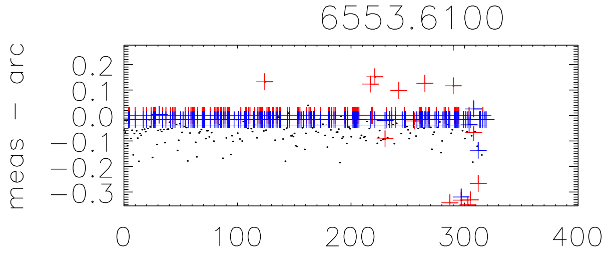

PLATE=3021 MJD=54780 Scattered Light on sdR-r1-00056362.fit
Brightness [electrons/pix]
0
20
40
60
80
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 8.554
Max value = 26.347
Thu Mar 11 01:37:01 2010

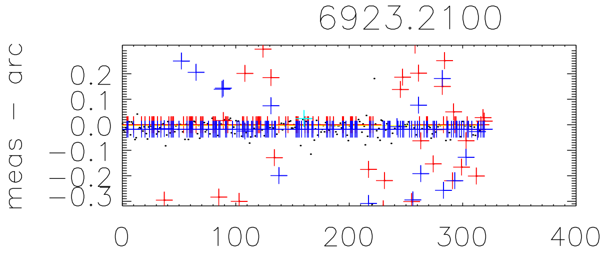

PLATE=3021 MJD=54780 Extraction chi^2 for sdR-r1-00056362.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
0
500
1000
1500
2000
Row number

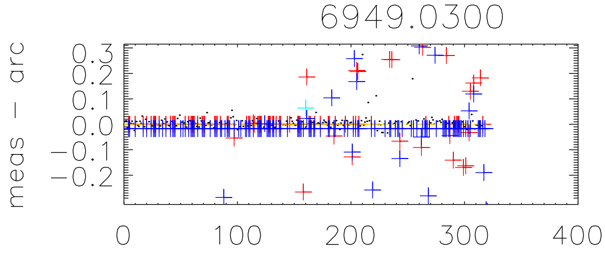

6300.3040
eff: −0.05
sig: 0.019
6363.7760
eff: 0.08
sig: 0.061
6553.6100
eff: 0.45
sig: 0.163
6923.2100
eff: 0.02
sig: 0.088
6949.0300
eff: 0.06
sig: 0.077
7571.7500
eff: 0.18
sig: 0.085
7794.1200
eff: 0.03
sig: 0.044
7821.5100
eff: 0.03
sig: 0.037
8399.1600
eff: 0.03
sig: 0.029
8430.1700
eff: −0.02
sig: 0.026
8885.8300
eff: 0.06
sig: 0.029
8919.6100
eff: 0.04
sig: 0.026
−4 −2 0 2 4

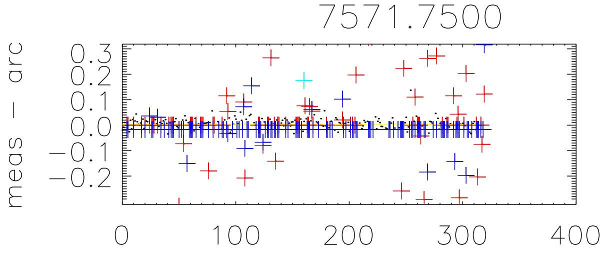

6300.3040
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


6363.7760
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

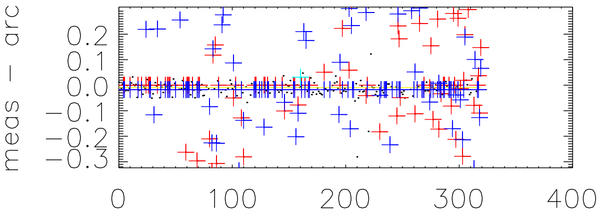

6553.6100
meas – arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400


6923.2100
meas – arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

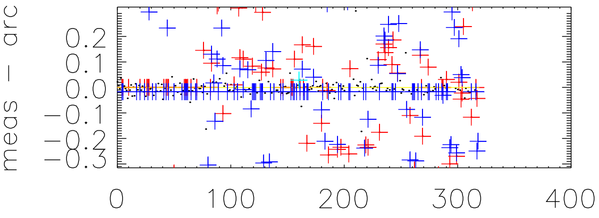

6949.0300
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400


7571.7500
meas – arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

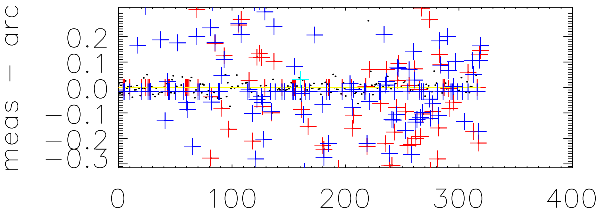
7794.1200



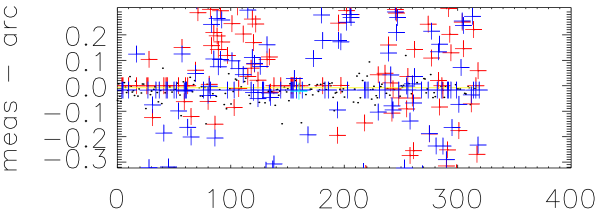
7821.5100



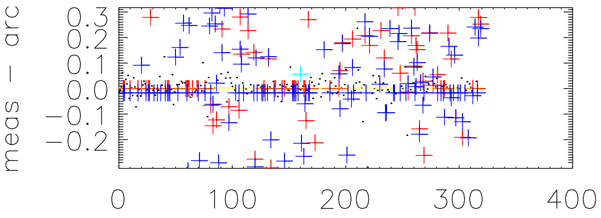
8399.1600



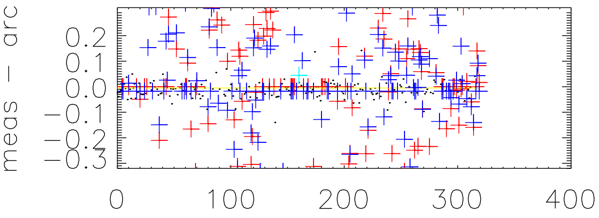
8430.1700

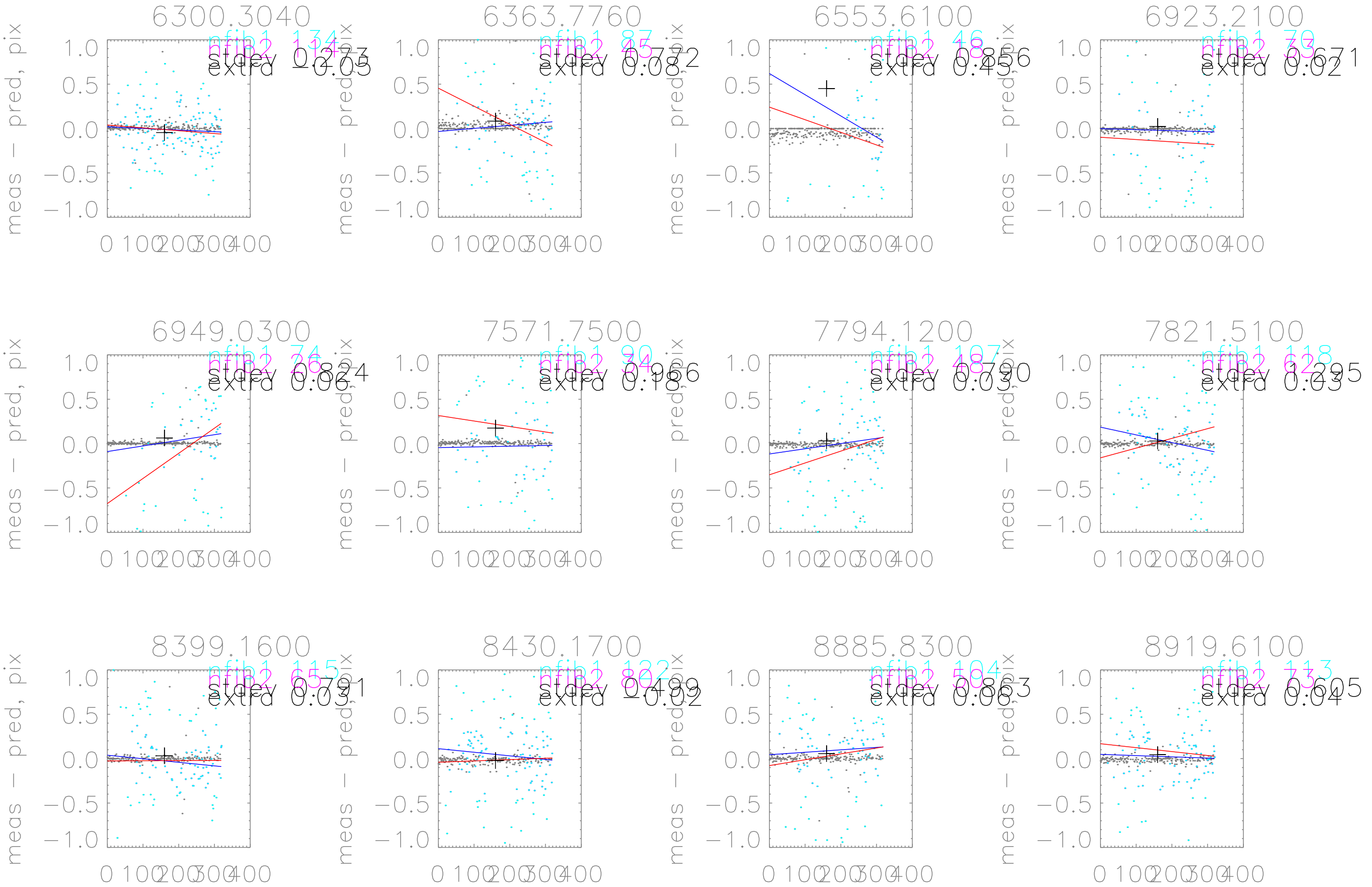


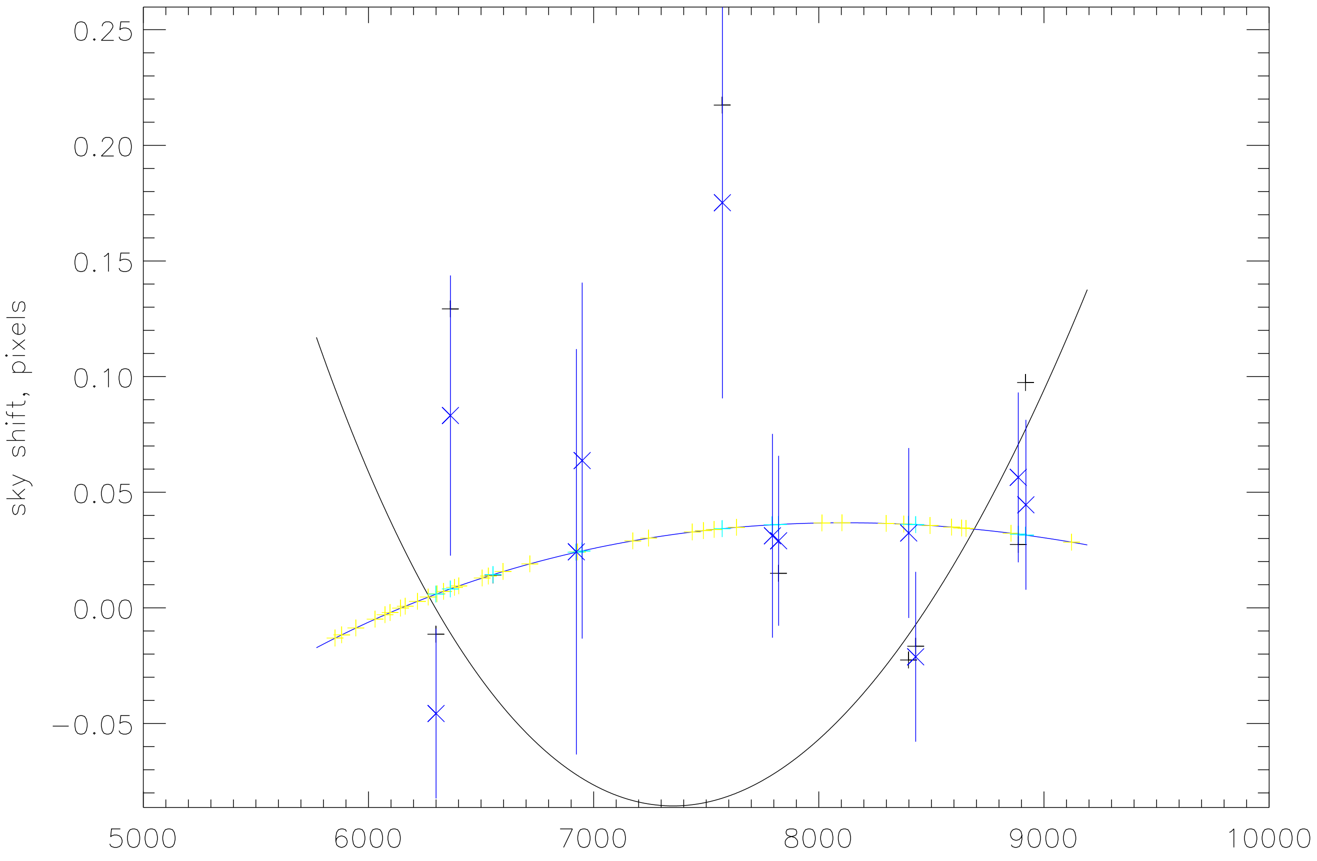
8885.8300

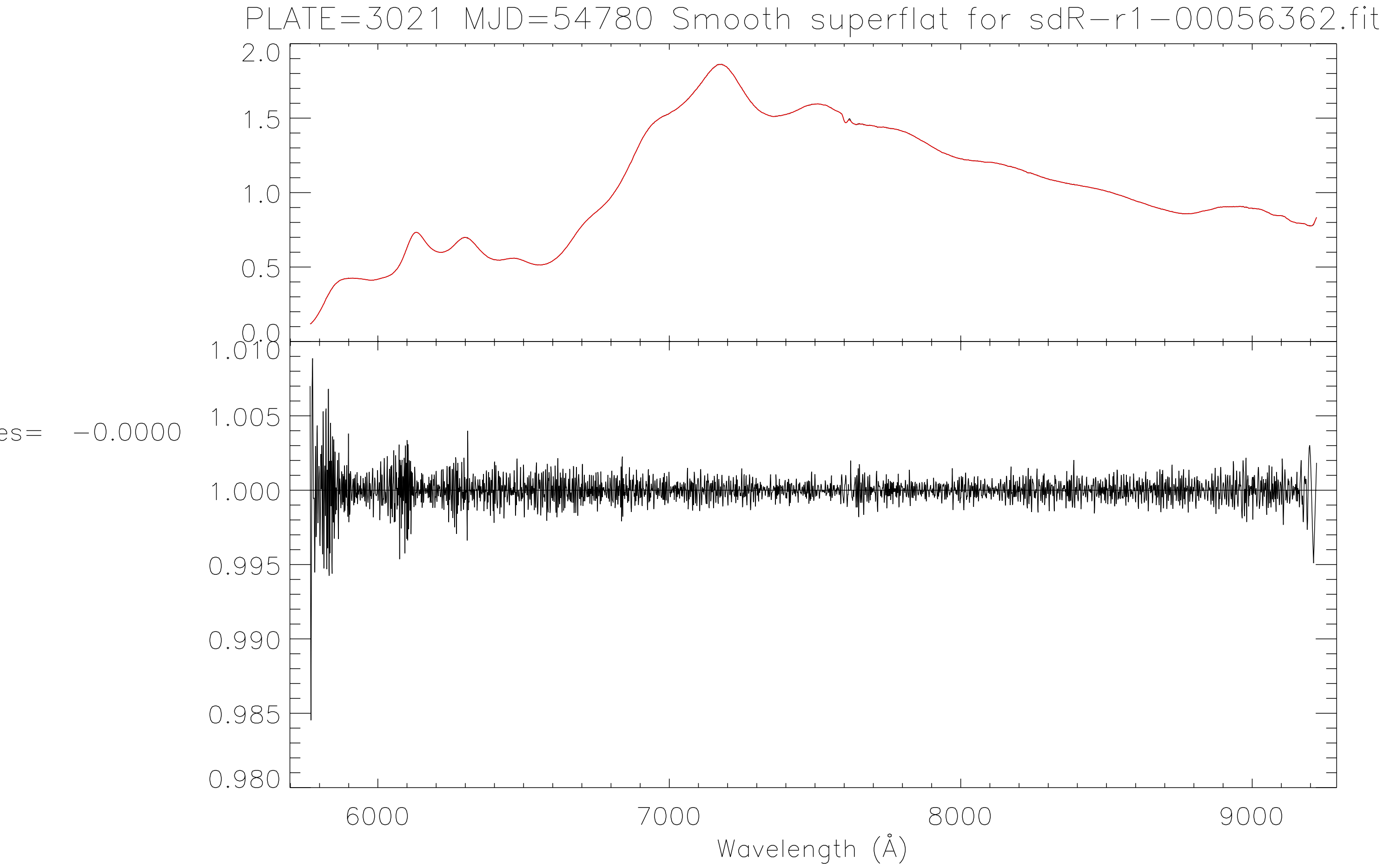


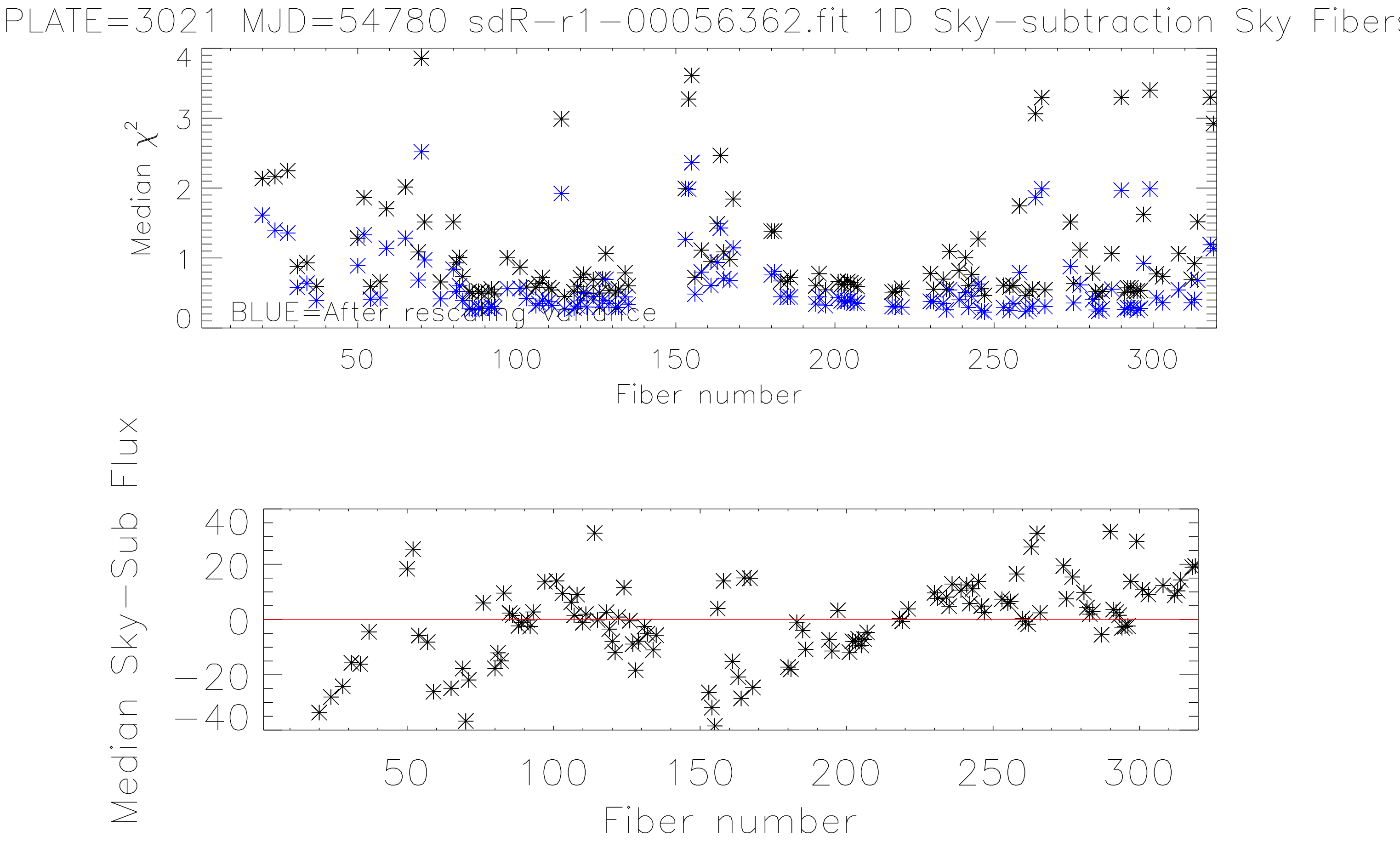
8919.6100



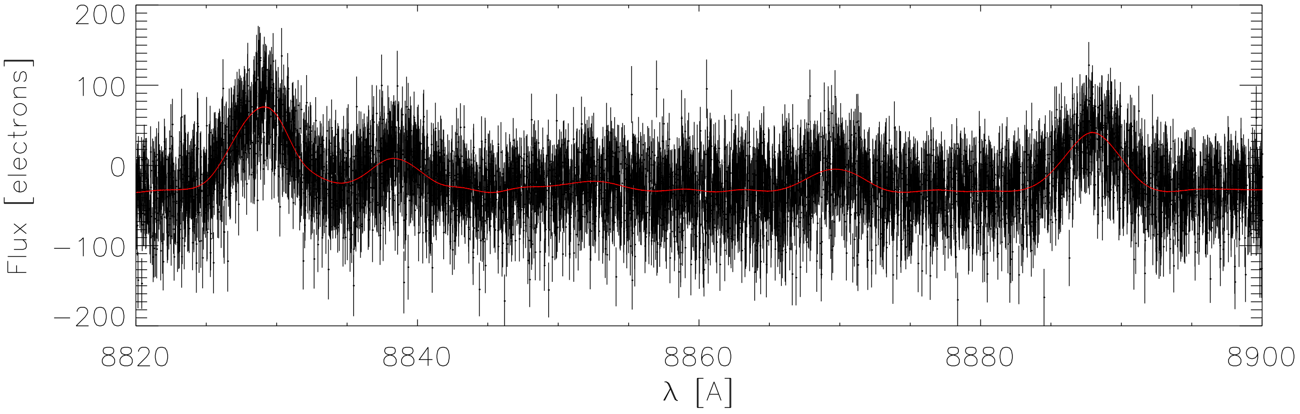

6300.3040
nfib1 134
nfib2 114
stdev 0.273
extrd −0.05
6363.7760
nfib1 87
nfib2 45
stdev 0.772
extrd 0.08
6553.6100
nfib1 46
nfib2 18
stdev 0.856
extrd 0.45
6923.2100
nfib1 70
nfib2 33
stdev 0.671
extrd 0.02
6949.0300
nfib1 74
nfib2 26
stdev 0.824
extrd 0.06
7571.7500
nfib1 90
nfib2 34
stdev 0.966
extrd 0.18
7794.1200
nfib1 107
nfib2 48
stdev 0.730
extrd 0.03
7821.5100
nfib1 118
nfib2 62
stdev 1.295
extrd 0.03
8399.1600
nfib1 115
nfib2 65
stdev 0.791
extrd 0.03
8430.1700
nfib1 122
nfib2 80
stdev 0.499
extrd −0.02
8885.8300
nfib1 104
nfib2 50
stdev 0.863
extrd 0.06
8919.6100
nfib1 113
nfib2 73
stdev 0.605
extrd 0.04
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400


sky shift, pixels
0.25
0.20
0.15
0.10
0.05
0.00
−0.05
5000
6000
7000
8000
9000
10000

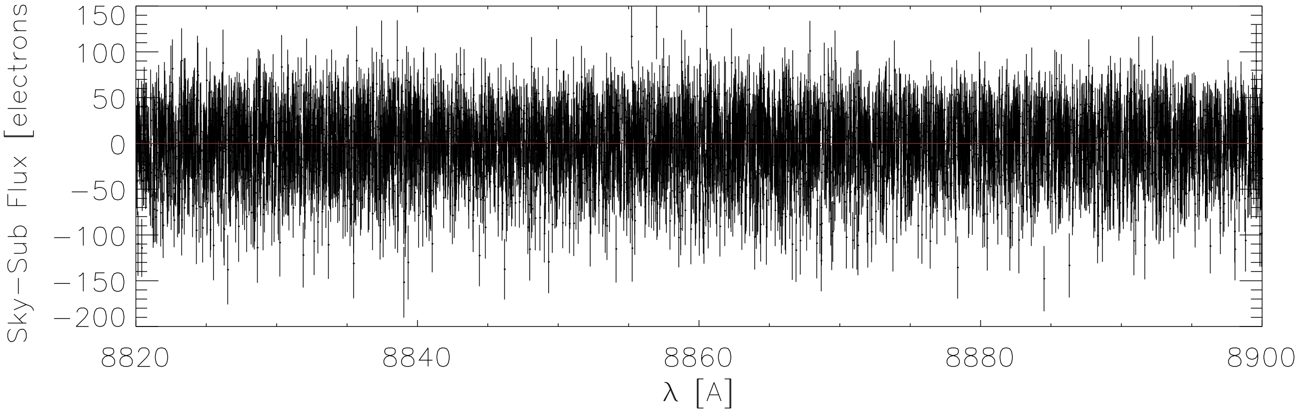

PLATE=3021 MJD=54780 Smooth superflat for sdR-r1-00056362.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es=
−0.0000
6000
7000
8000
9000
Wavelength (Å)

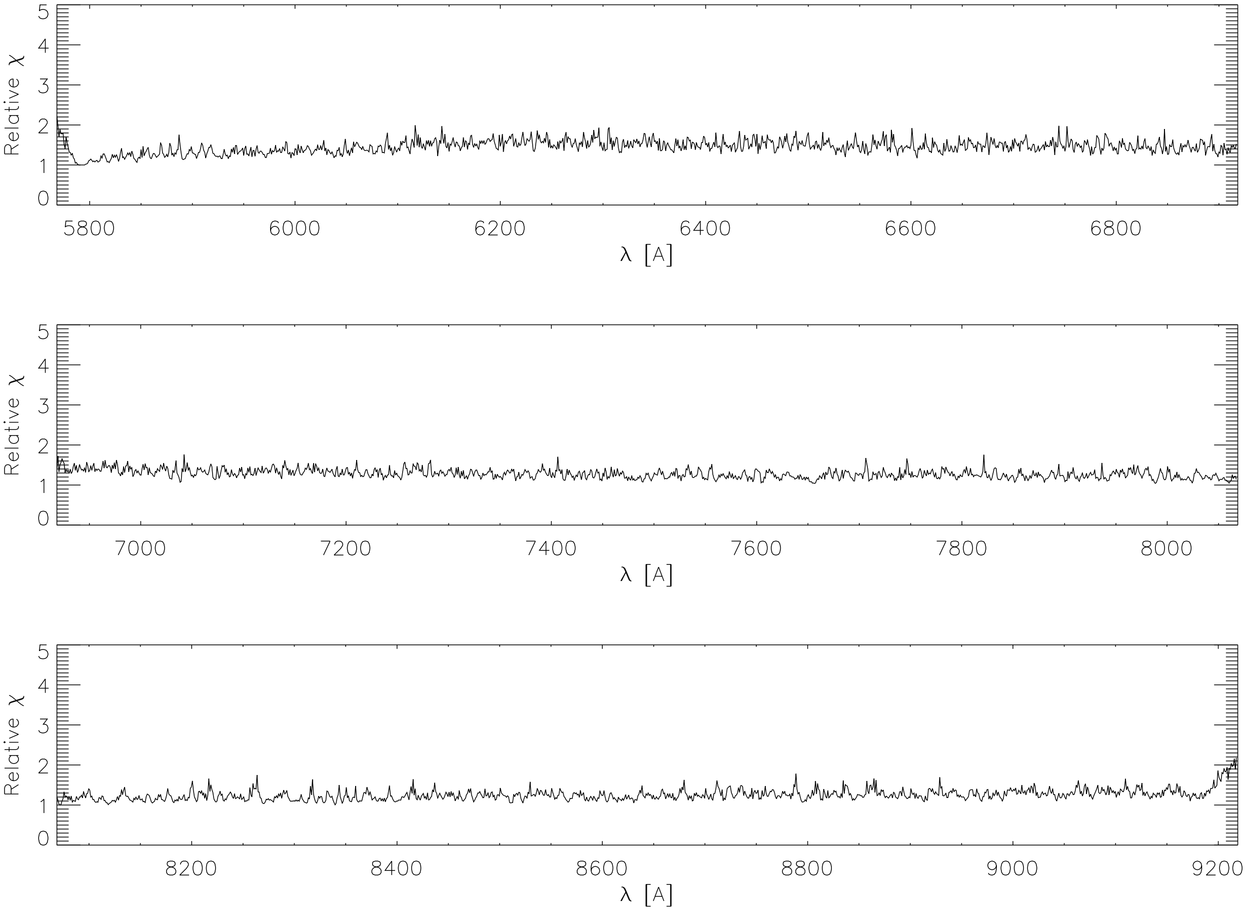

PLATE=3021 MJD=54780 sdR-r1-00056362.fit 1D Sky-subtraction Sky Fiber
Median χ^2
4
3
2
1
0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

PLATE=3021 MJD=54780 sdR-r1-00056362.fit 1D Sky-subtraction Sky Fibers



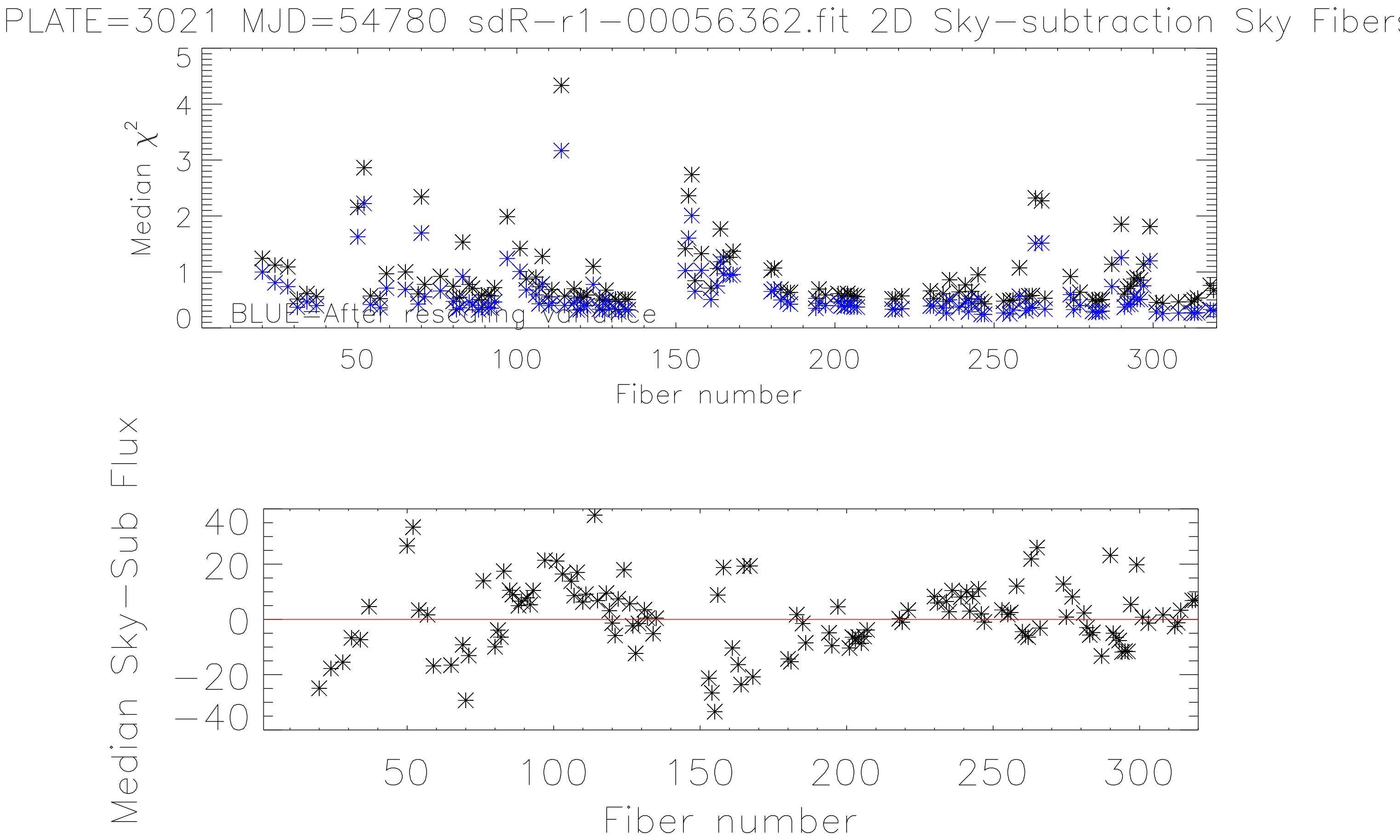
PLATE=3021 MJD=54780 sdR-r1-00056362.fit 1D Sky-subtraction Sky-subtracted Sky F



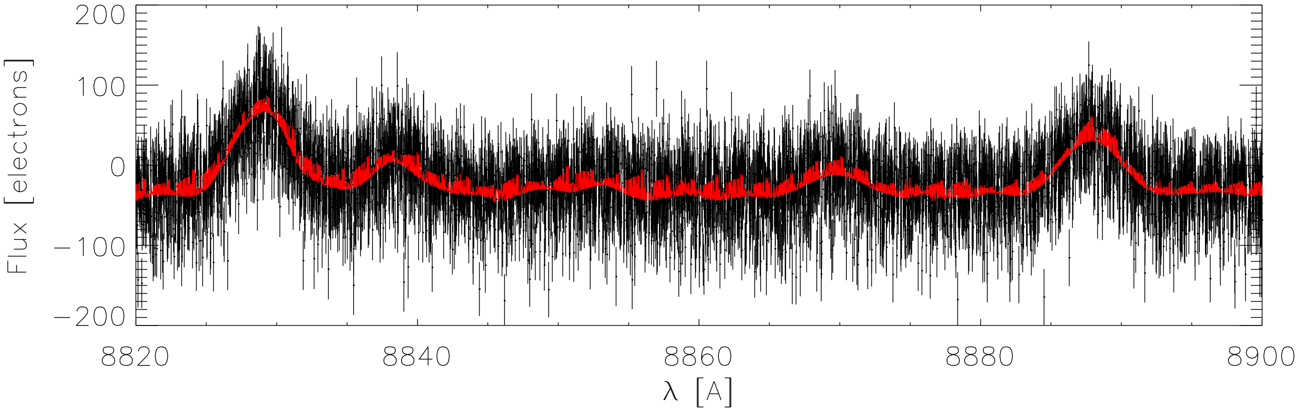


Number of sky fibers = 127

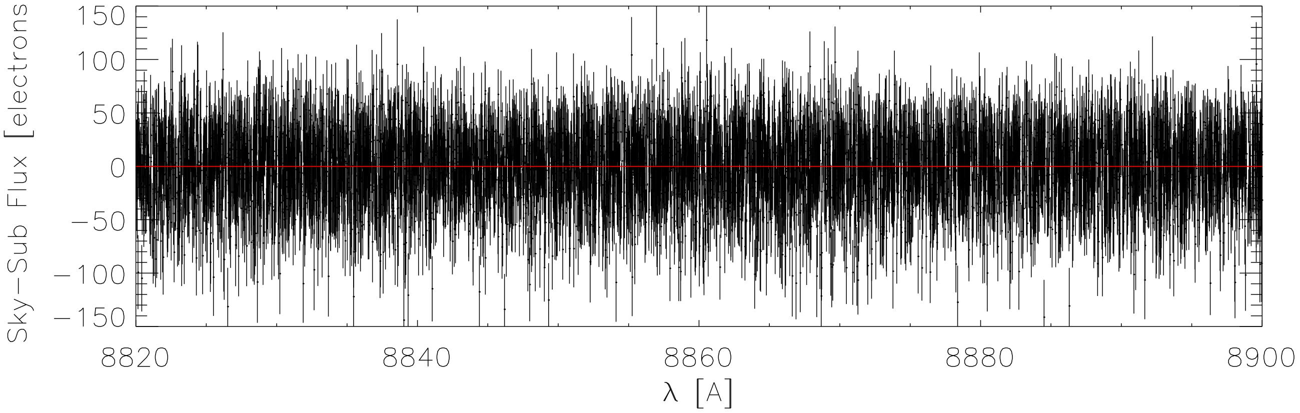
PLATE=3021 MJD=54780 sdR-r1-00056362.fit 1D Sky-subtraction Rescaled Errors


PLATE=3021 MJD=54780 sdR-r1-00056362.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0
1
2
3
4
5
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
−40
−20
0
20
40
50
100
150
200
250
300
Fiber number

PLATE=3021 MJD=54780 sdR-r1-00056362.fit 2D Sky-subtraction Sky Fibers

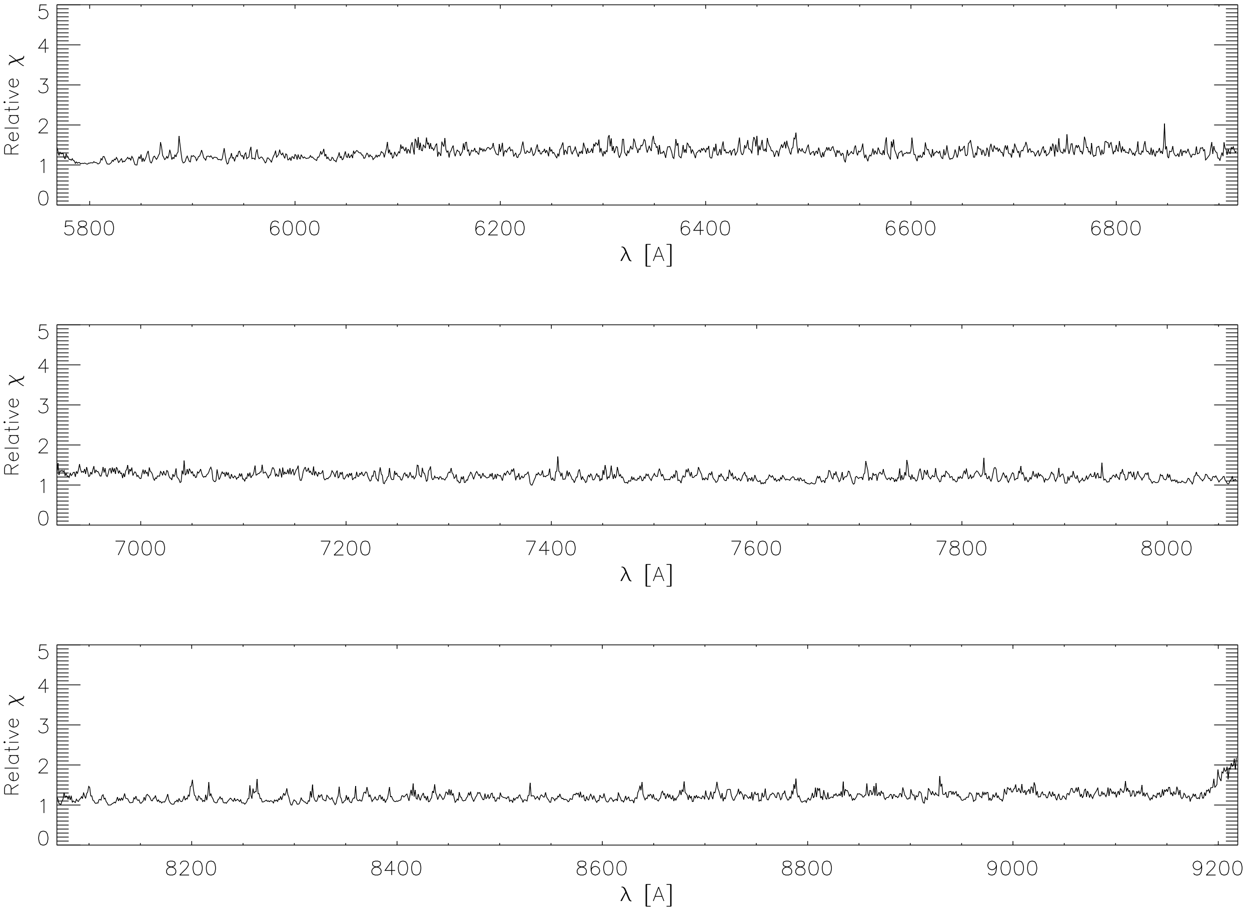


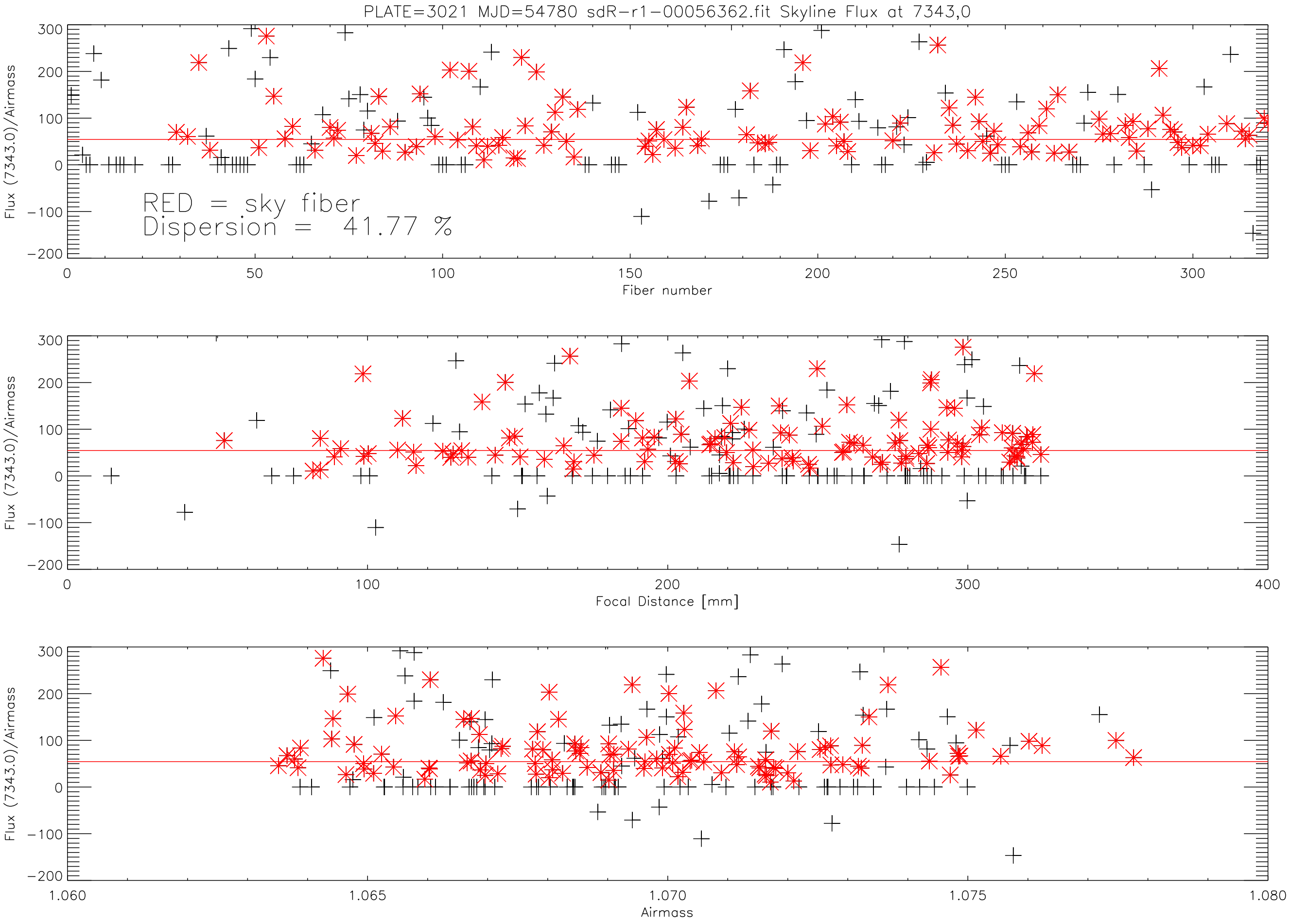
PLATE=3021 MJD=54780 sdR-r1-00056362.fit 2D Sky-subtraction Sky-subtracted Sky F

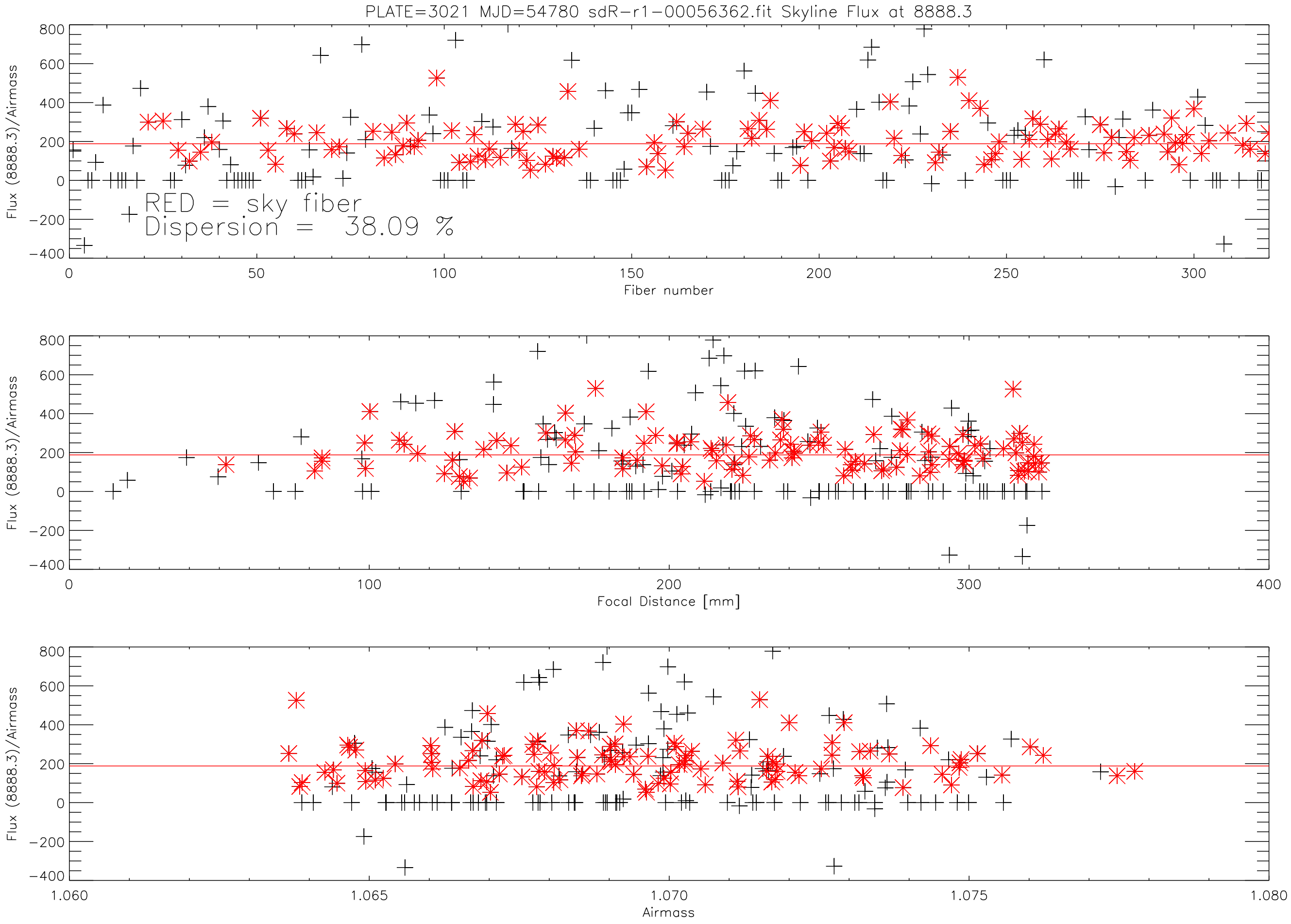


Number of sky fibers = 127

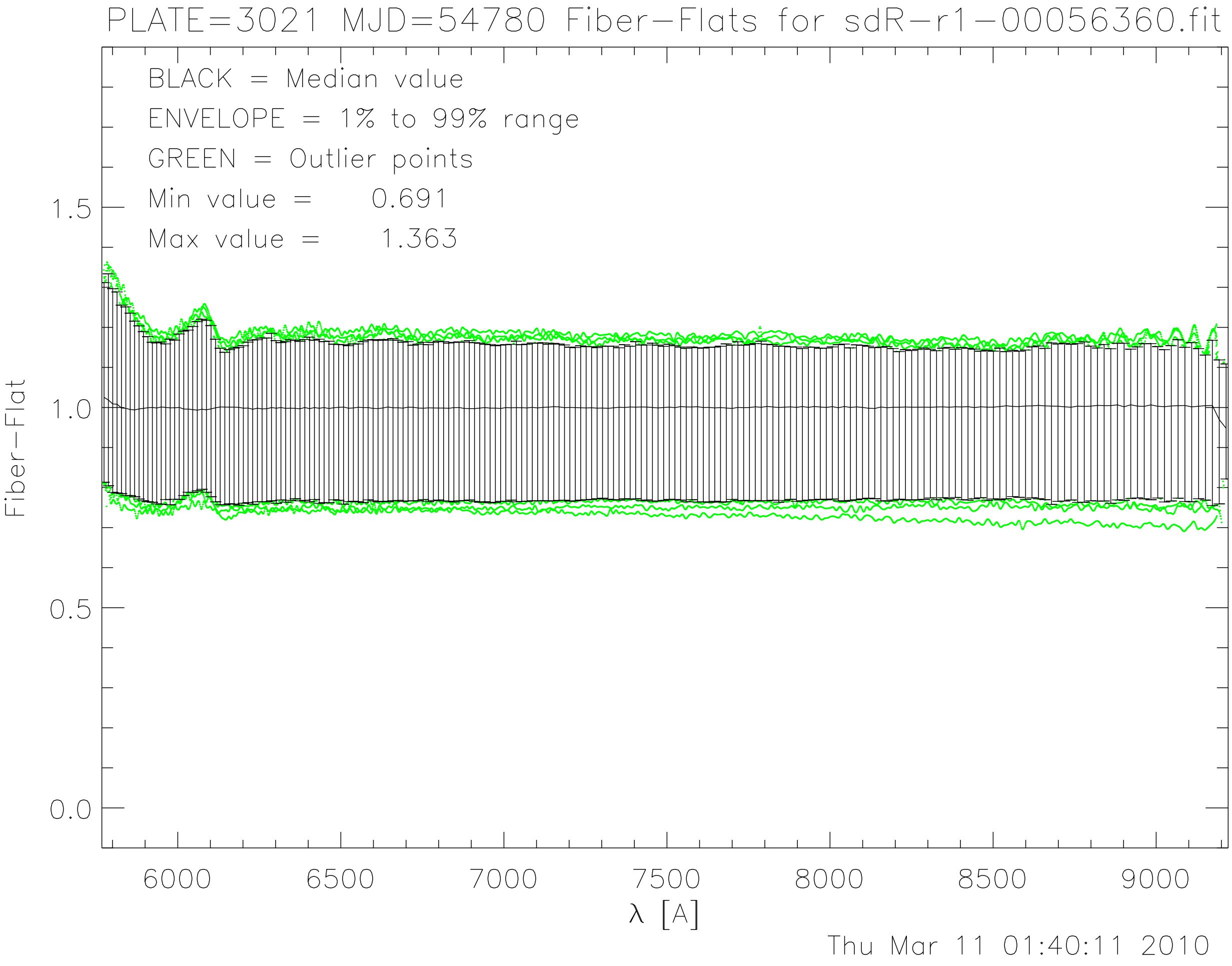
PLATE=3021 MJD=54780 sdR-r1-00056362.fit 2D Sky-subtraction Rescaled Errors



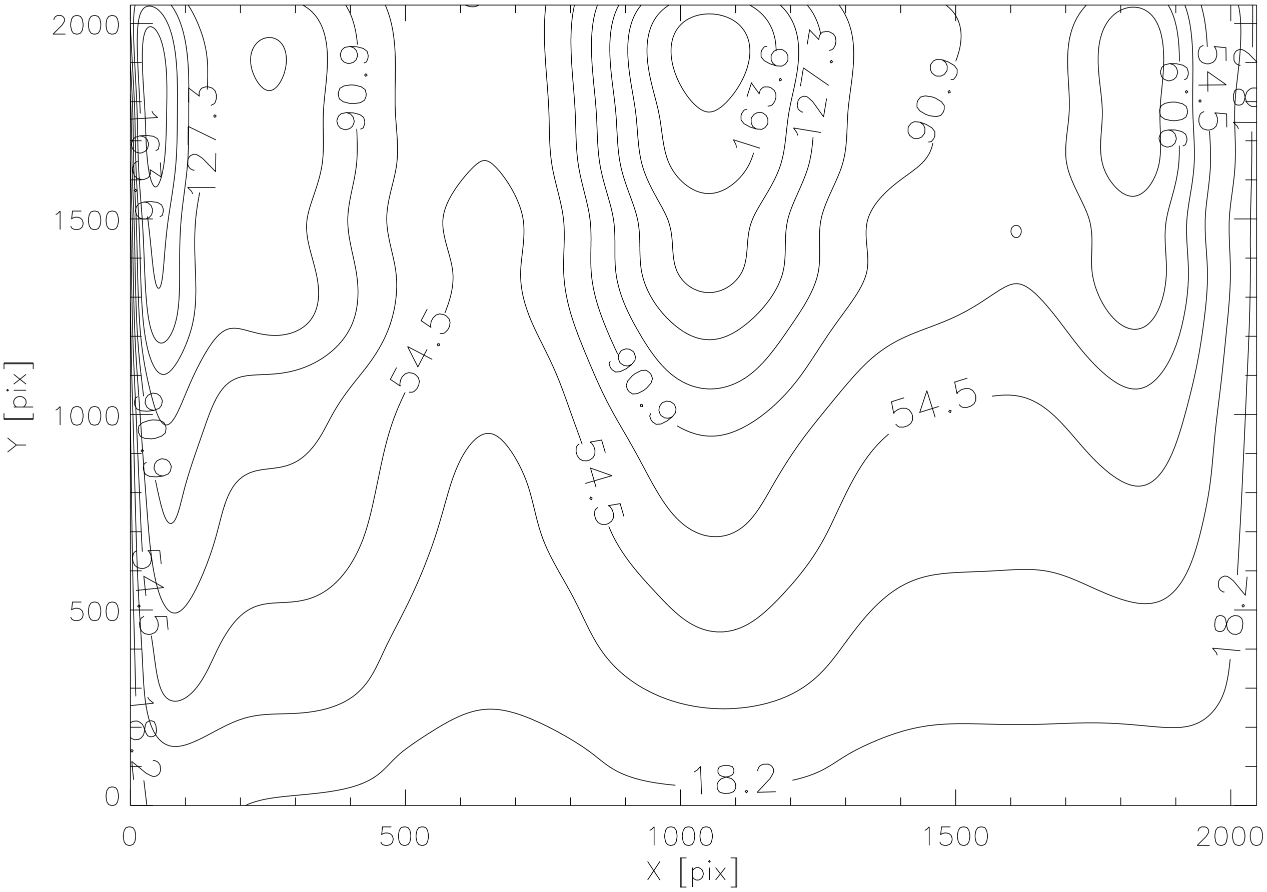

PLATE=3021 MJD=54780 sdR-r1-00056362.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 41.77 %
Flux (7343.0)/Airmass
300
200
100
0
−100
−200
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.060
1.065
1.070
1.075
1.080
Airmass

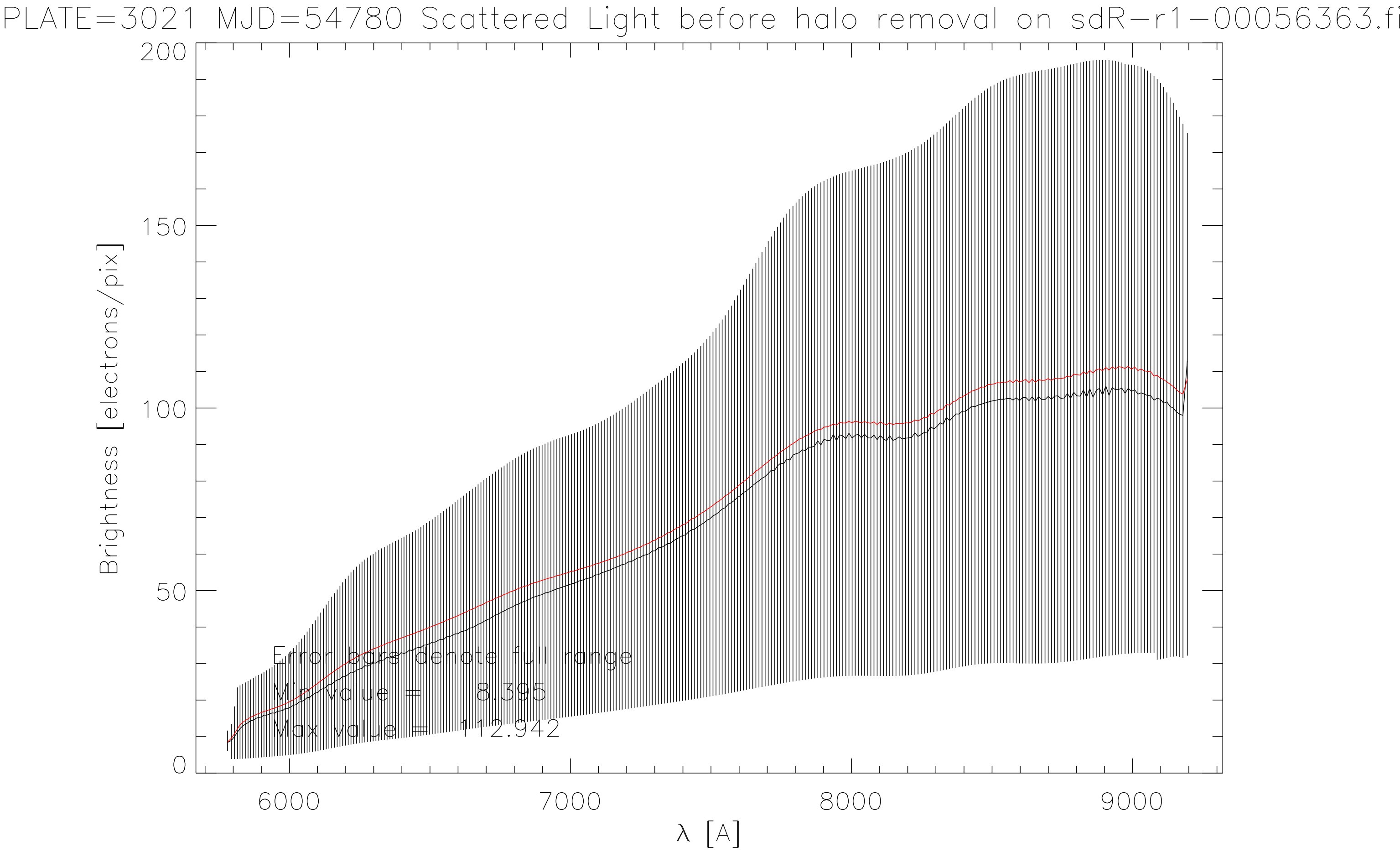


PLATE=3021 MJD=54780 sdR−r1−00056362.fit Skyline Flux at 8888.3

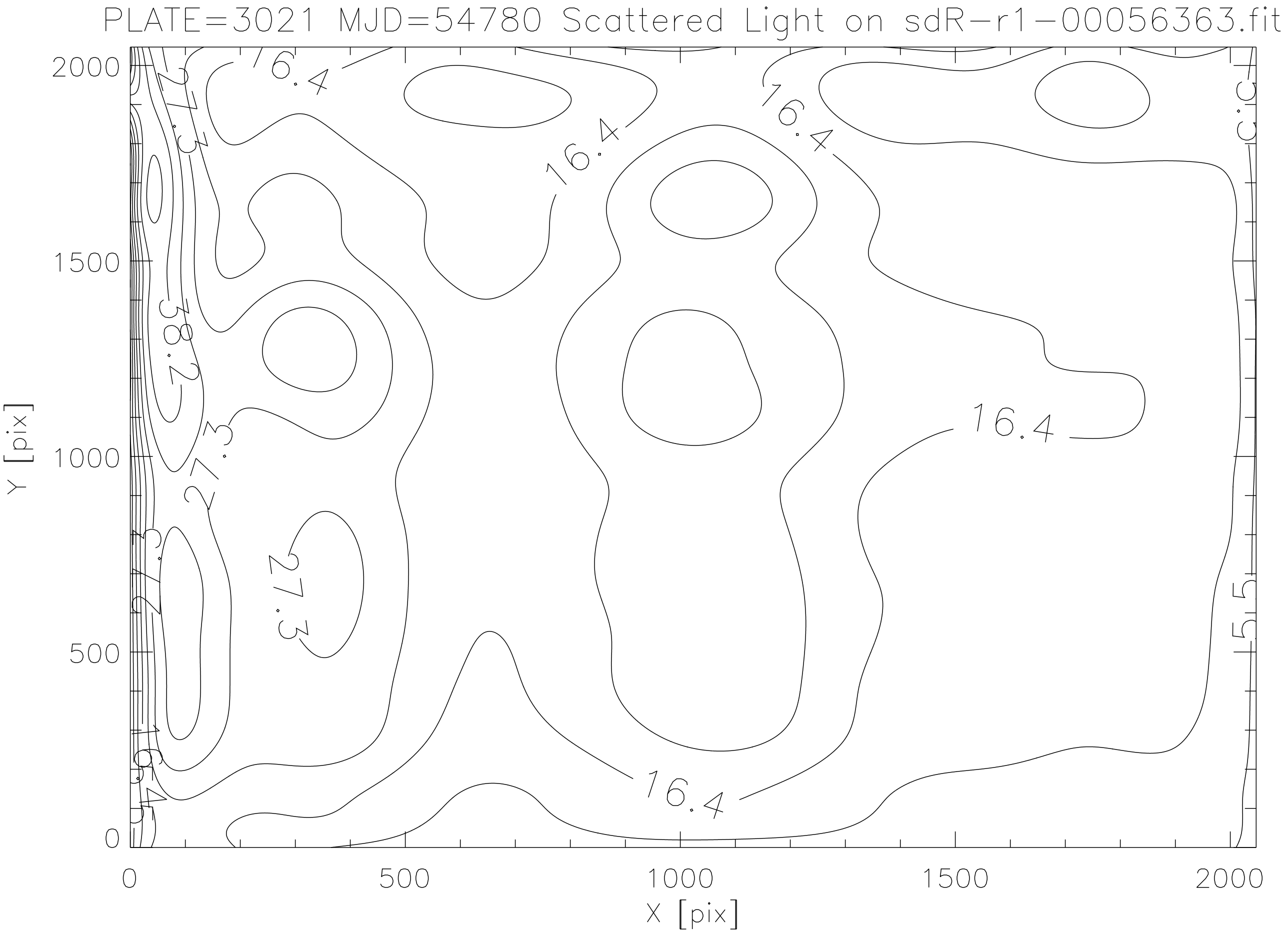

PLATE=3021 MJD=54780 Fiber−Flats for sdR−r1−00056360.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.691
Max value = 1.363
Fiber−Flat
1.5
1.0
0.5
0.0
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Mar 11 01:40:11 2010

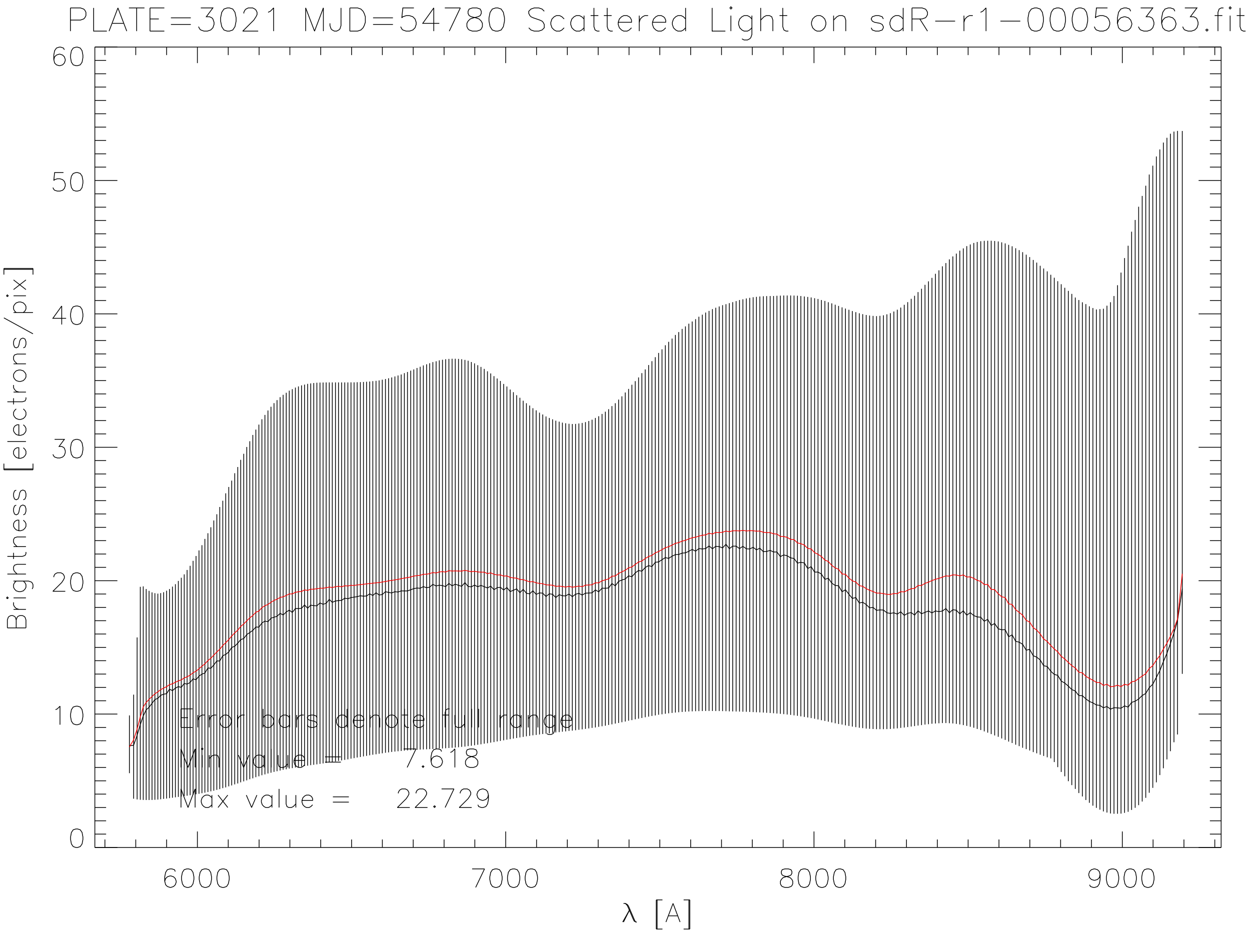
PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-r1-00056363.fi



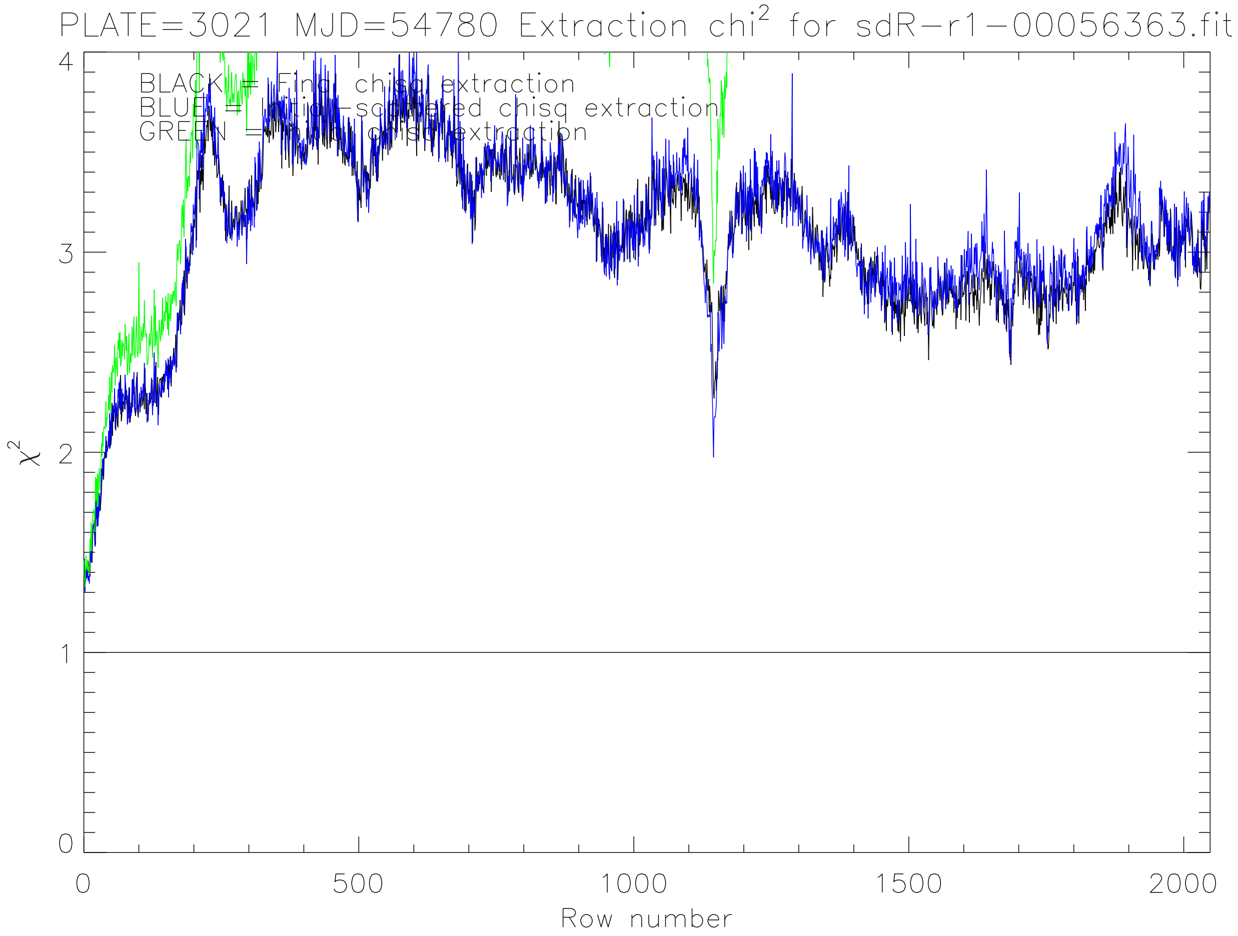


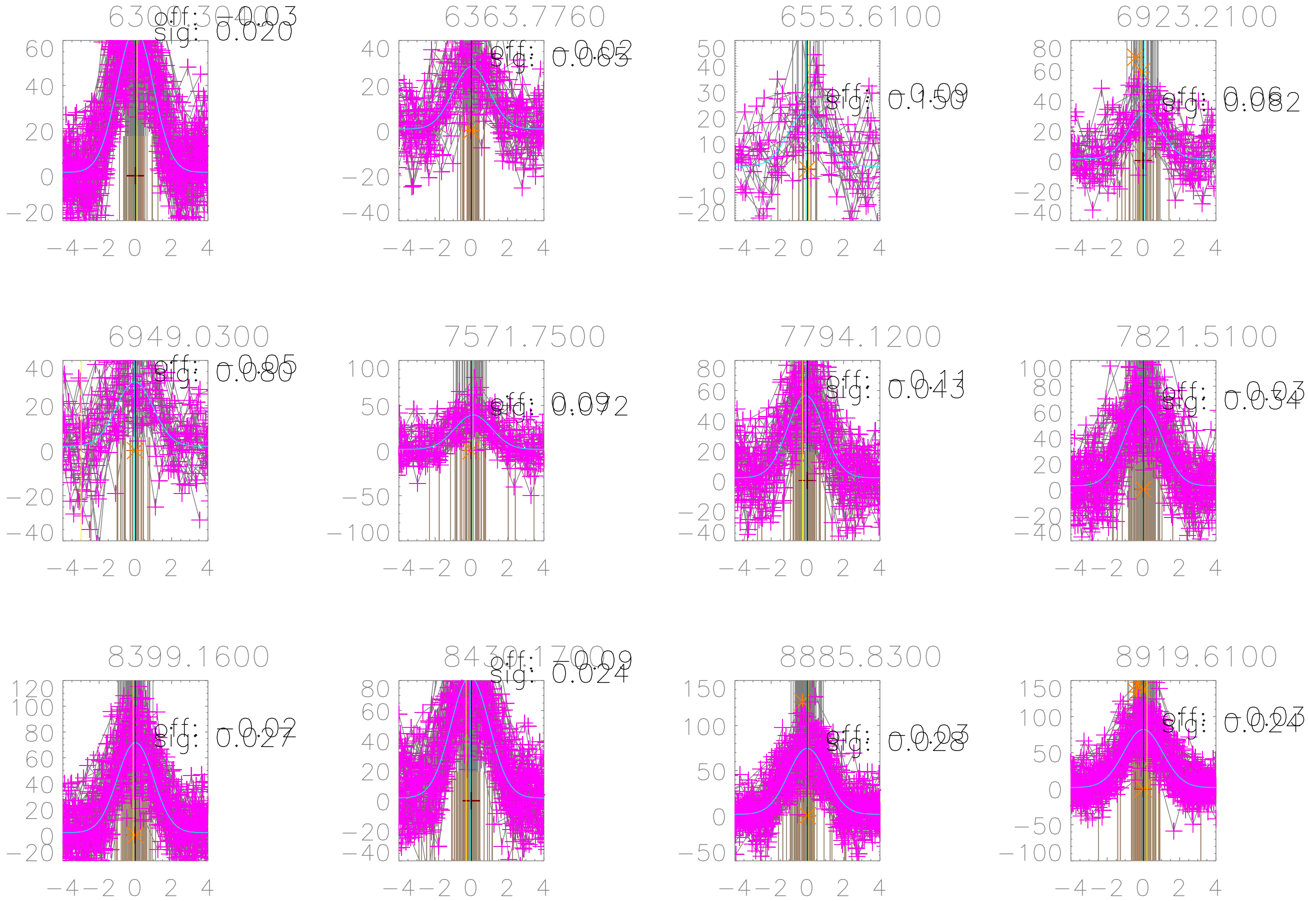
Thu Mar 11 01:40:44 2010

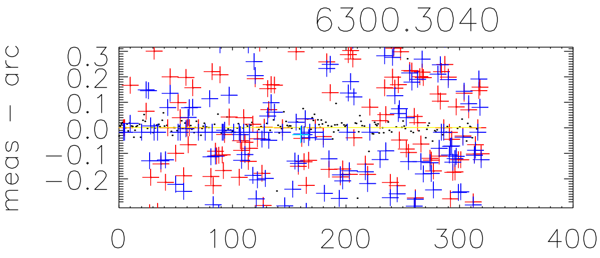

PLATE=3021 MJD=54780 Scattered Light on sdR-r1-00056363.fit

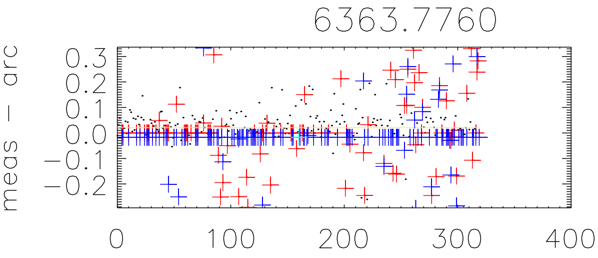


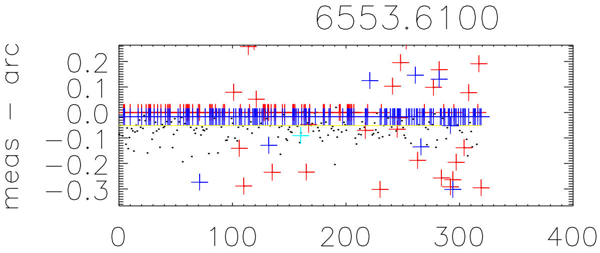
Thu Mar 11 01:44:04 2010

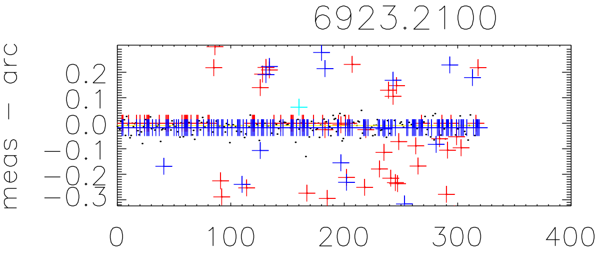

PLATE=3021 MJD=54780 Extraction chi^2 for sdR-r1-00056363.fit

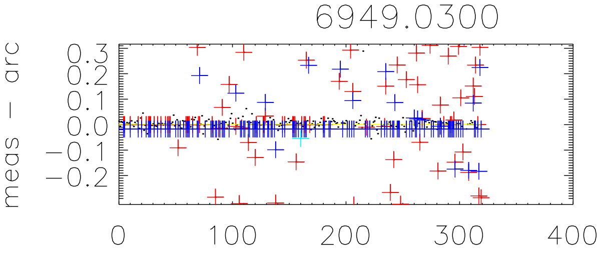

6300.3040
off: −0.03
sig: 0.020
6363.7760
off: −0.02
sig: 0.063
6553.6100
off: −0.09
sig: 0.150
6923.2100
off: 0.06
sig: 0.082
6949.0300
off: −0.05
sig: 0.080
7571.7500
off: 0.09
sig: 0.072
7794.1200
off: −0.11
sig: 0.043
7821.5100
off: −0.03
sig: 0.034
8399.1600
off: −0.02
sig: 0.027
8430.1700
off: −0.09
sig: 0.024
8885.8300
off: −0.03
sig: 0.028
8919.6100
off: −0.03
sig: 0.024
−4 −2 0 2 4

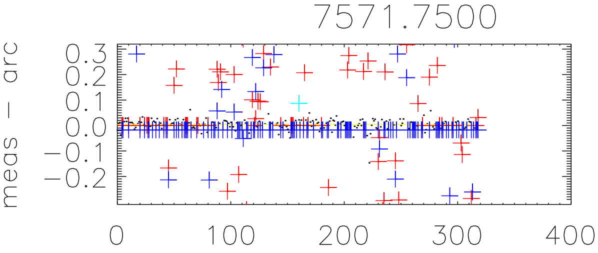

6300.3040
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

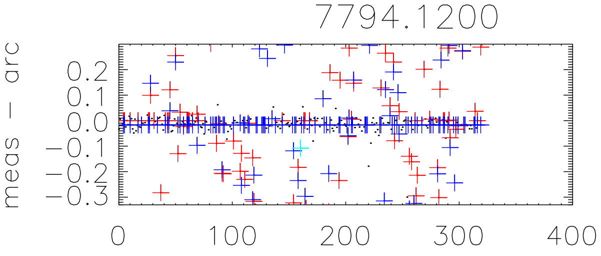

6363.7760
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

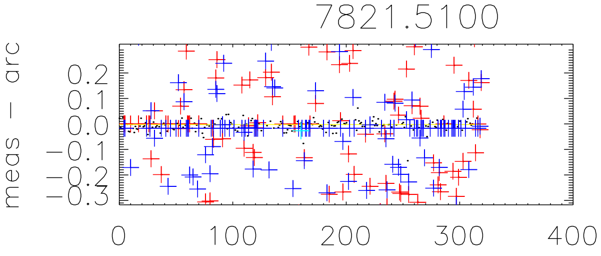

6553.6100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

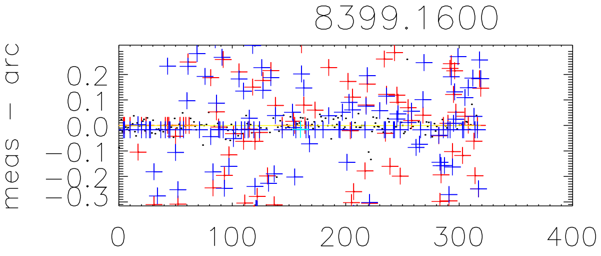

6923.2100
meas − arc
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

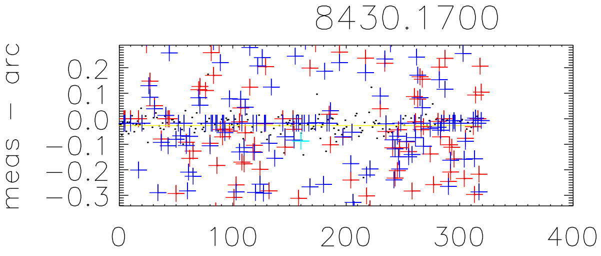

6949.0300
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

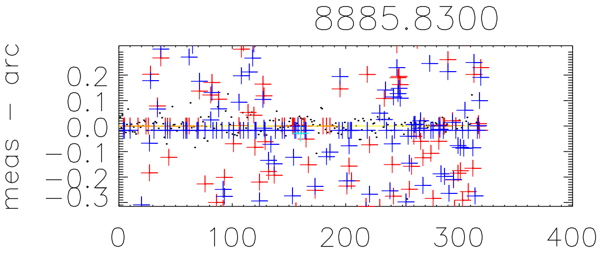

7571.7500
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
0
100
200
300
400

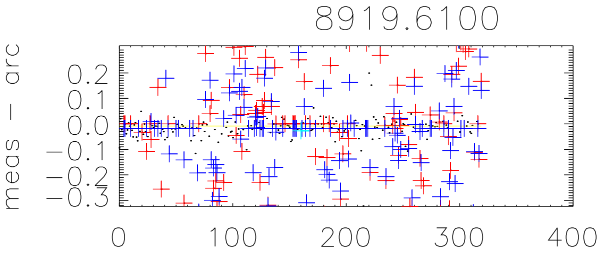

7794.1200

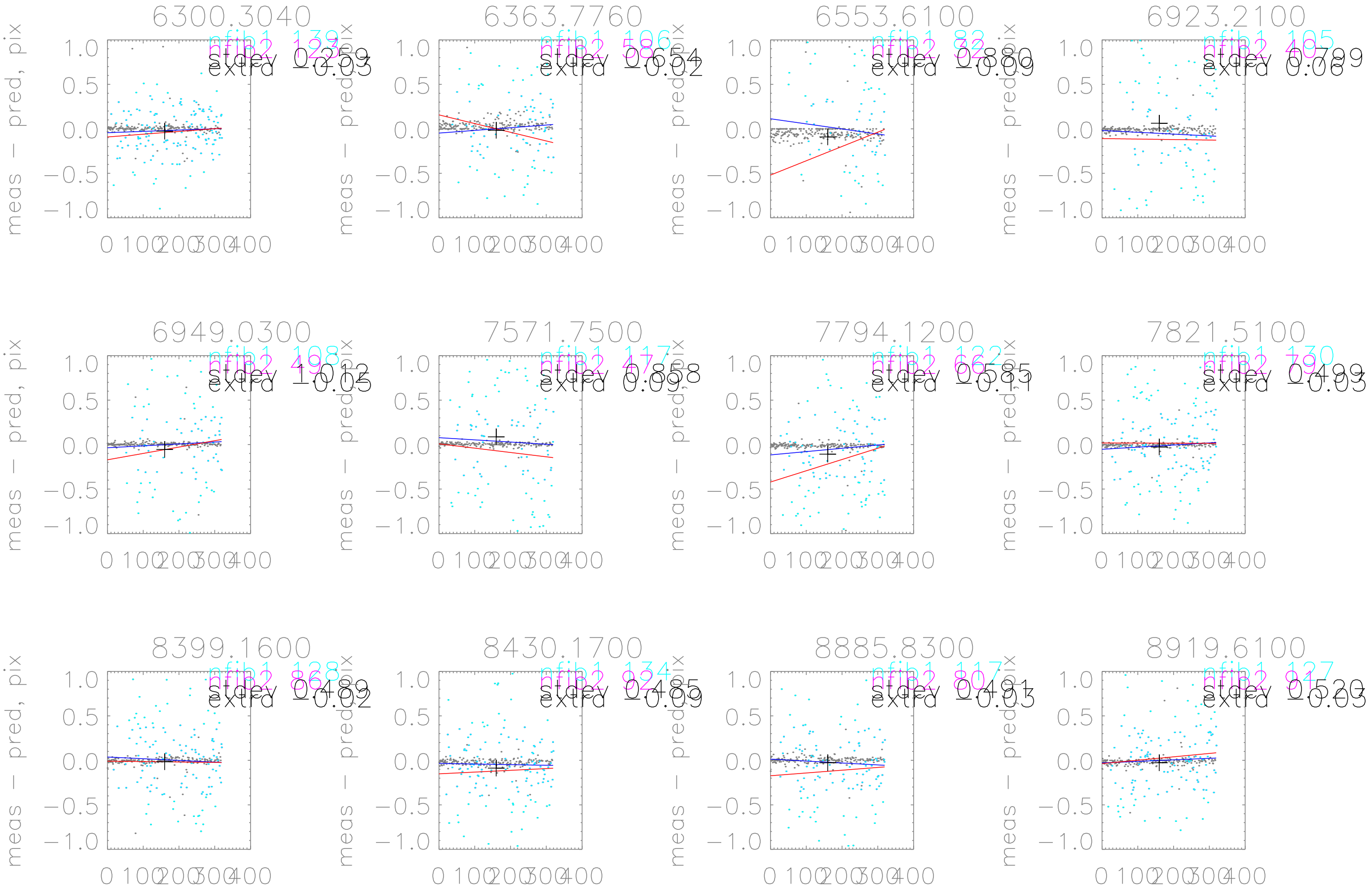

7821.5100

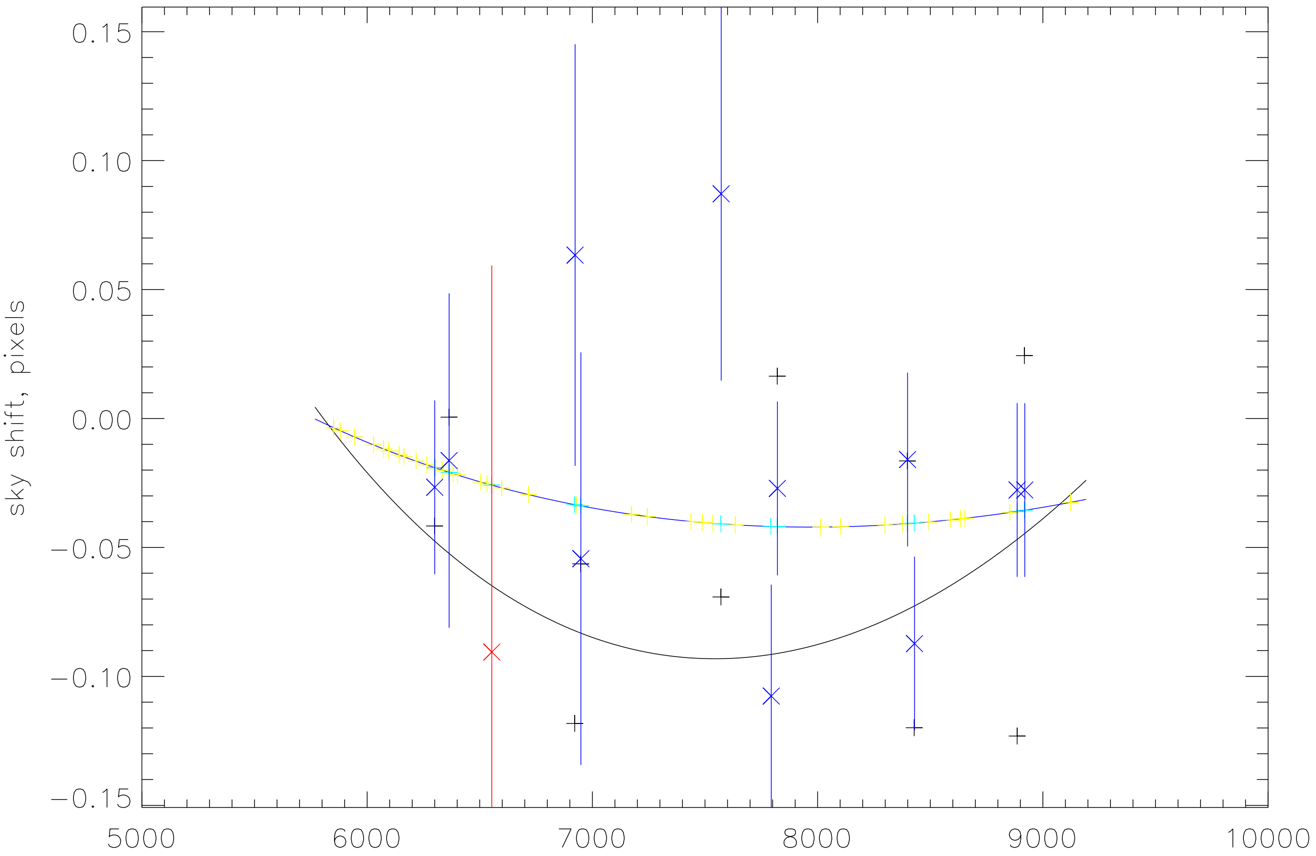

8399.1600

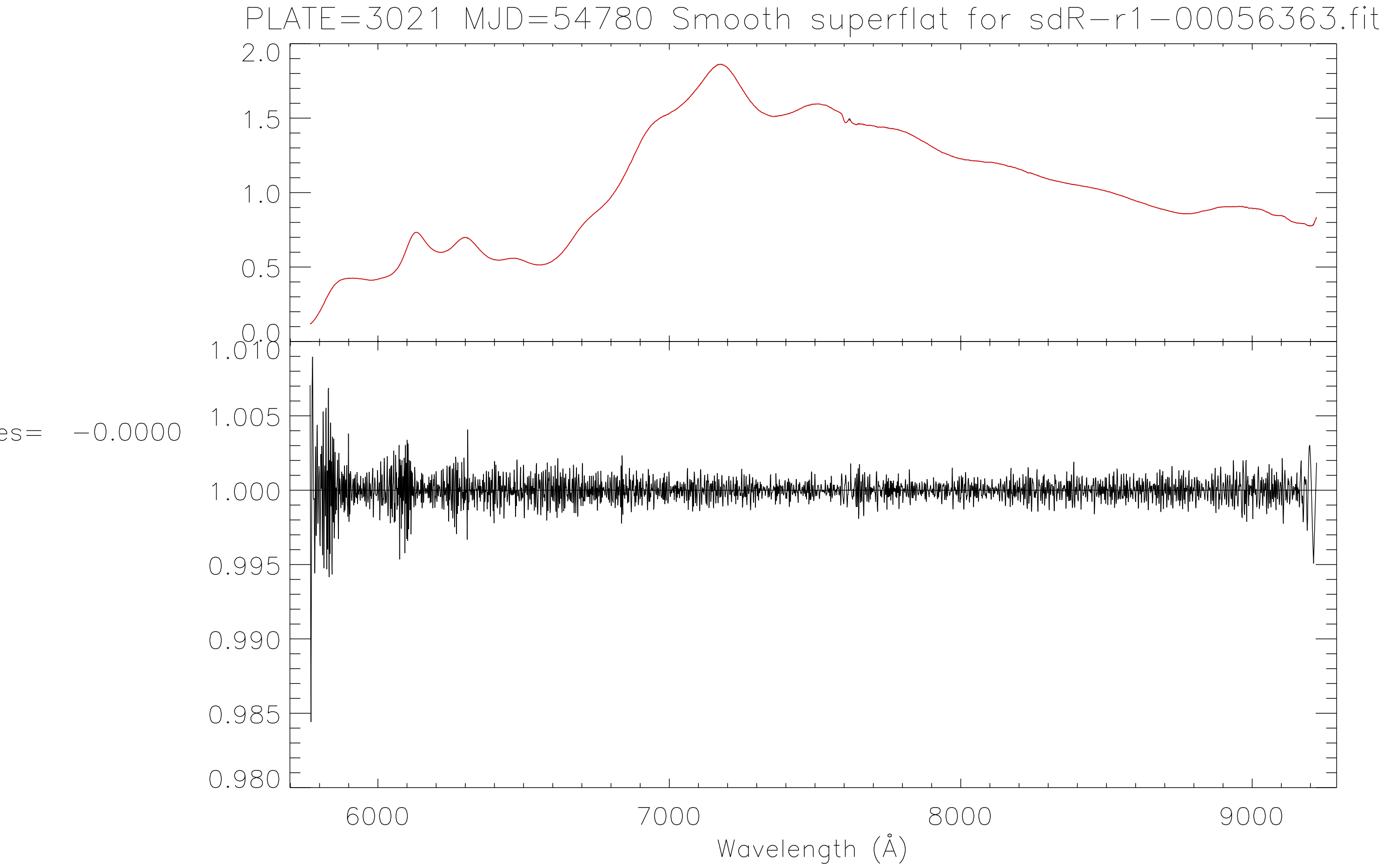

8430.1700

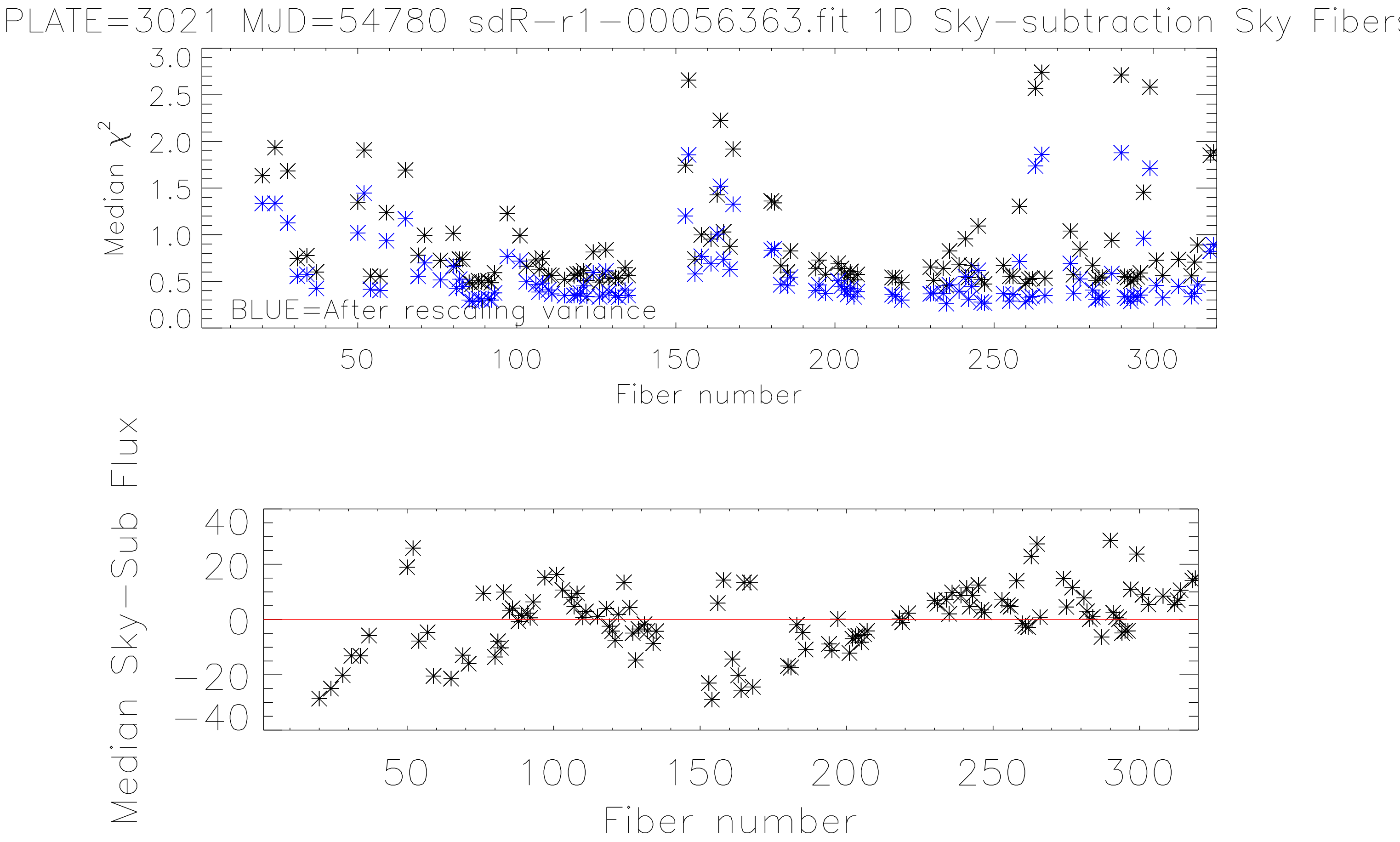

8885.8300


8919.6100

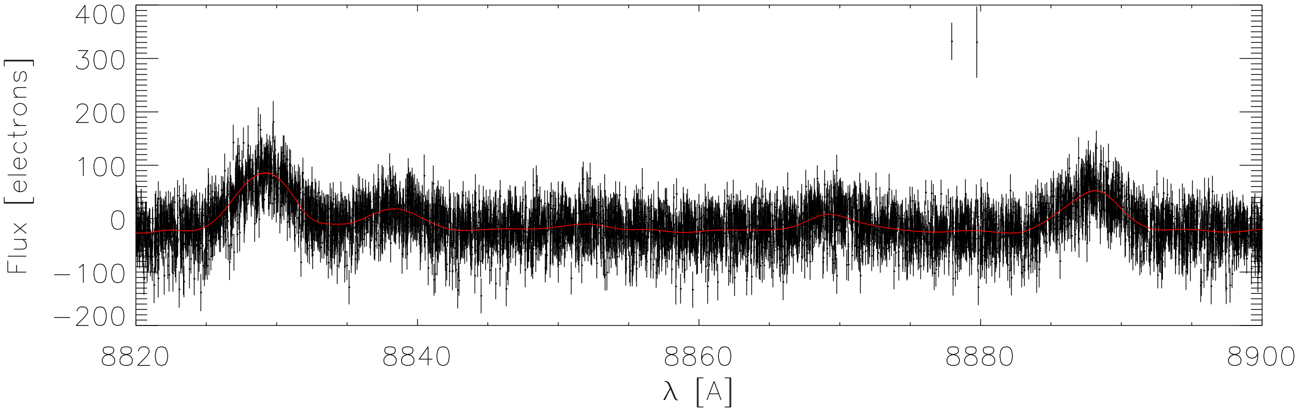

6300.3040
nfib1 139
nfib2 123
stdev 0.259
extrd −0.03
6363.7760
nfib1 106
nfib2 58
stdev 0.654
extrd −0.02
6553.6100
nfib1 82
nfib2 32
stdev 0.880
extrd −0.09
6923.2100
nfib1 105
nfib2 40
stdev 0.799
extrd 0.06
6949.0300
nfib1 108
nfib2 49
stdev 1.012
extrd −0.05
7571.7500
nfib1 117
nfib2 47
stdev 0.858
extrd 0.09
7794.1200
nfib1 122
nfib2 66
stdev 0.585
extrd −0.11
7821.5100
nfib1 130
nfib2 79
stdev 0.499
extrd −0.03
8399.1600
nfib1 128
nfib2 86
stdev 0.489
extrd −0.02
8430.1700
nfib1 134
nfib2 92
stdev 0.485
extrd −0.09
8885.8300
nfib1 117
nfib2 80
stdev 0.491
extrd −0.03
8919.6100
nfib1 127
nfib2 91
stdev 0.520
extrd −0.03
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0 100 200 300 400


sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
−0.15
5000
6000
7000
8000
9000
10000

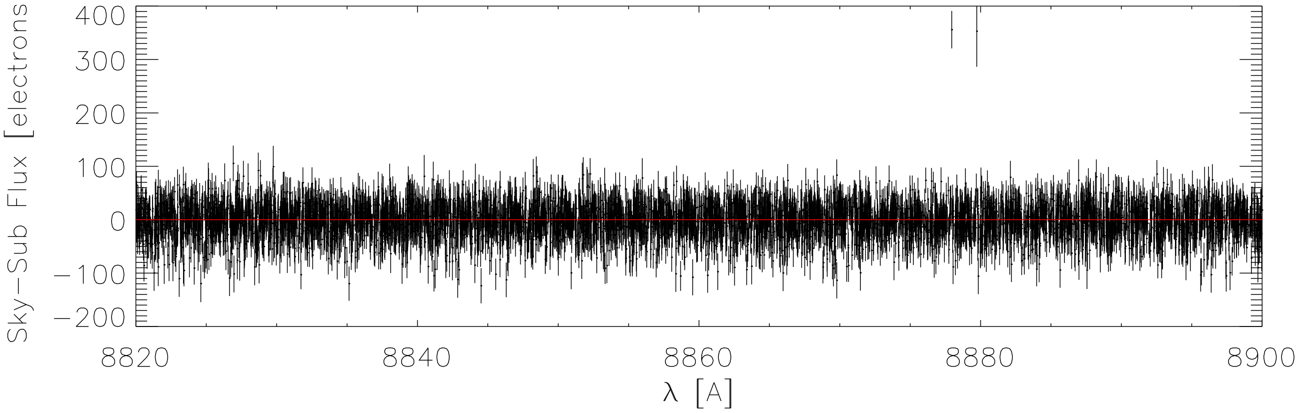

PLATE=3021 MJD=54780 Smooth superflat for sdR−r1−00056363.fit
2.0
1.5
1.0
0.5
0.0
1.010
1.005
1.000
0.995
0.990
0.985
0.980
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)


PLATE=3021 MJD=54780 sdR-r1-00056363.fit 1D Sky-subtraction Sky Fibers
Median χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

PLATE=3021 MJD=54780 sdR-r1-00056363.fit 1D Sky-subtraction Sky Fibers

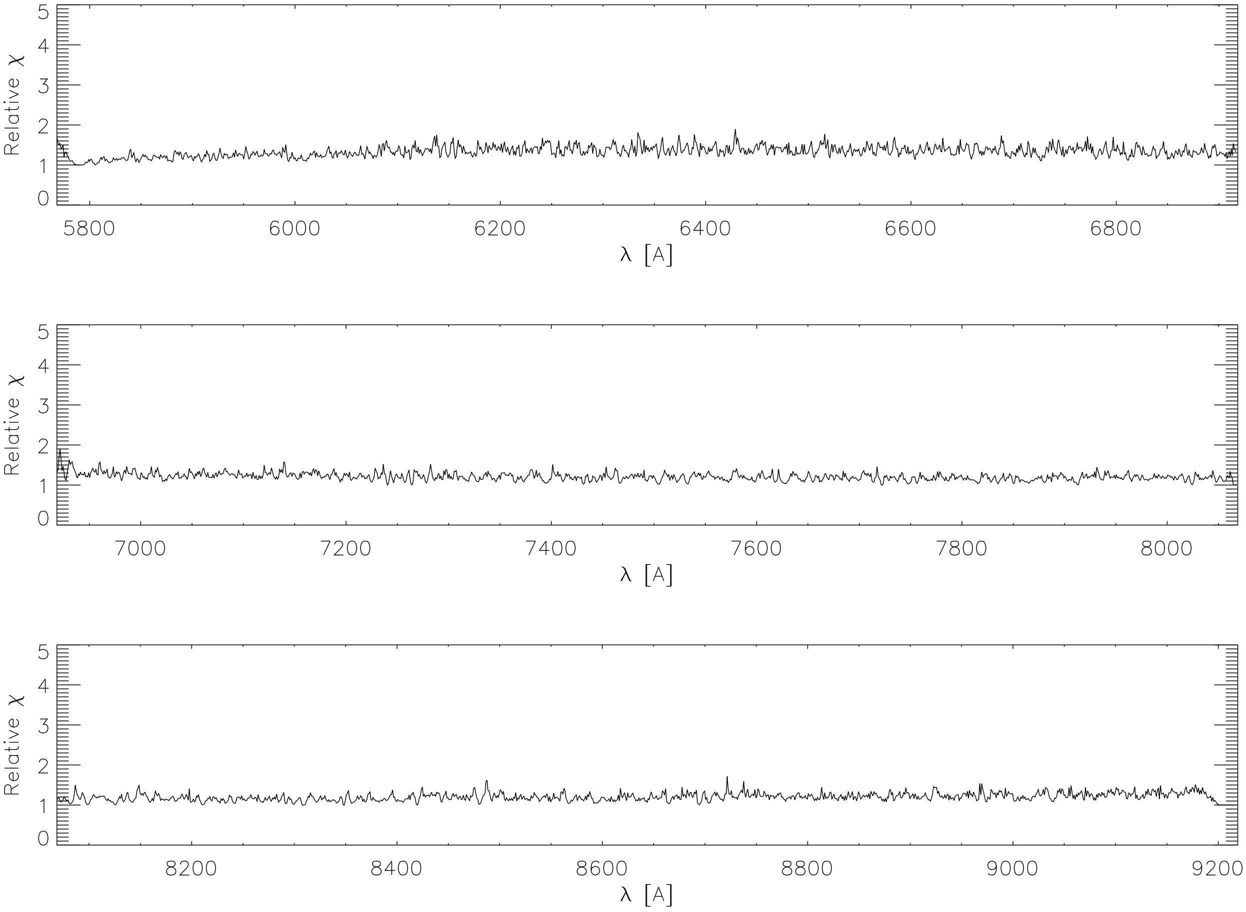


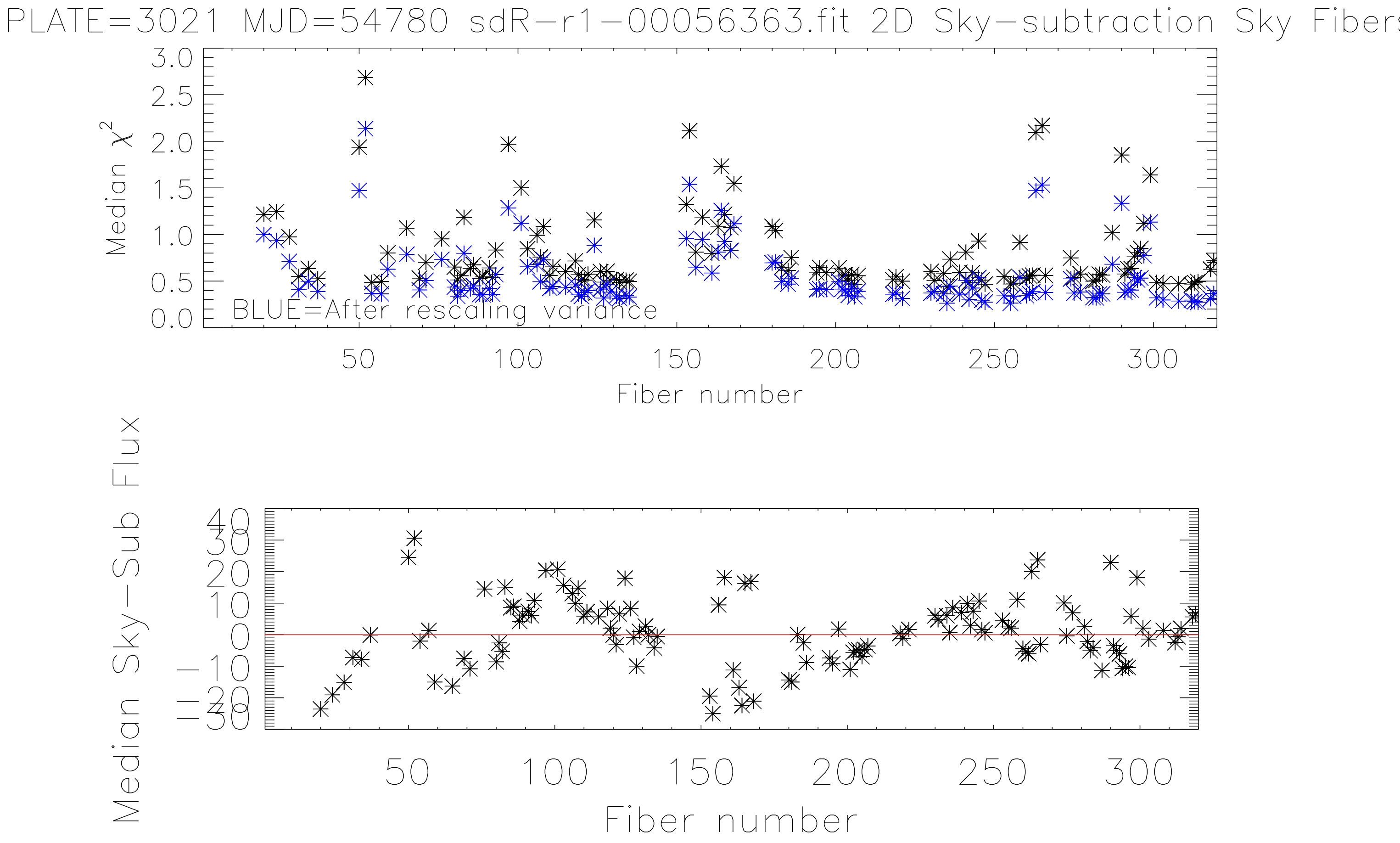
PLATE=3021 MJD=54780 sdR-r1-00056363.fit 1D Sky-subtraction Sky-subtracted Sky F



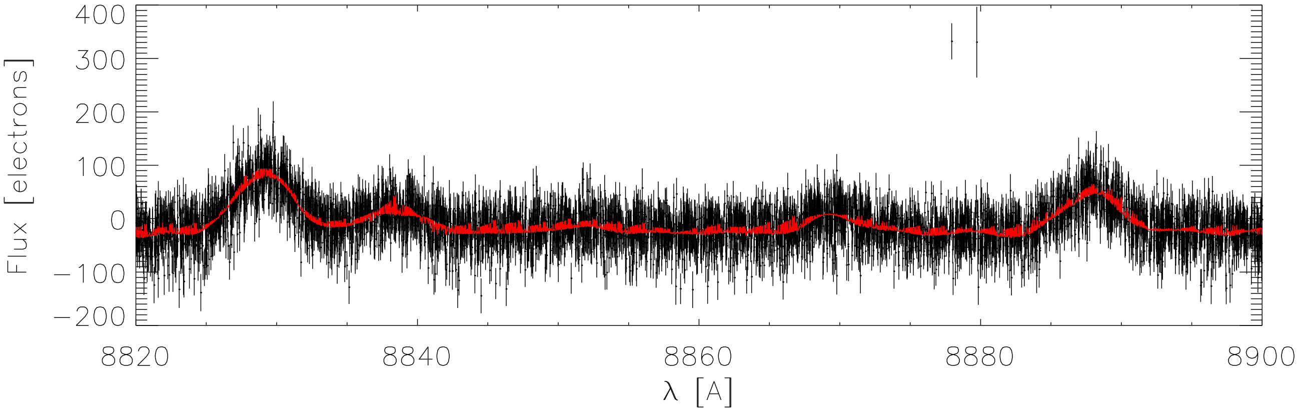
Number of sky fibers = 124

PLATE=3021 MJD=54780 sdR-r1-00056363.fit 1D Sky-subtraction Rescaled Errors

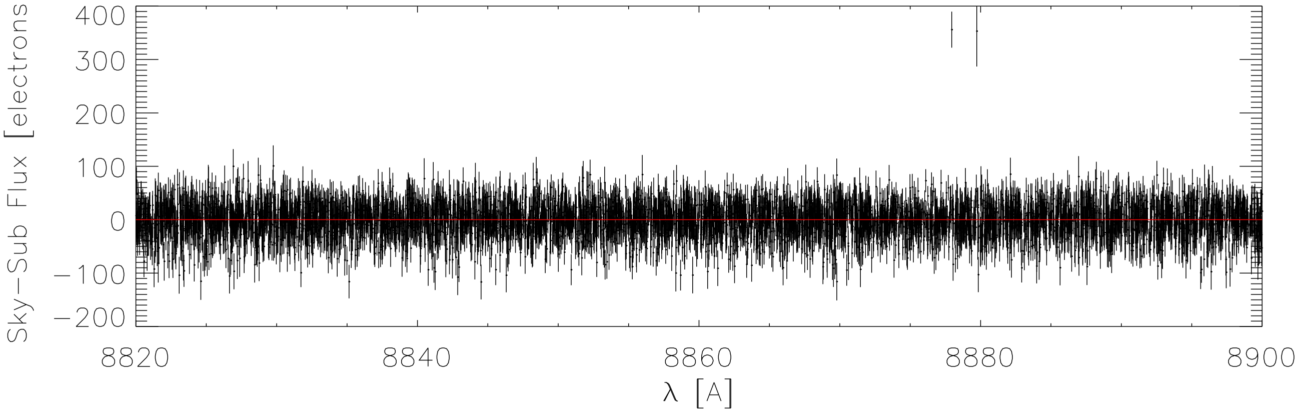



PLATE=3021 MJD=54780 sdR-r1-00056363.fit 2D Sky-subtraction Sky Fibers
Median χ^2
3.0
2.5
2.0
1.5
1.0
0.5
0.0
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
30
20
10
0
−10
−20
−30
50
100
150
200
250
300
Fiber number

PLATE=3021 MJD=54780 sdR-r1-00056363.fit 2D Sky-subtraction Sky Fibers

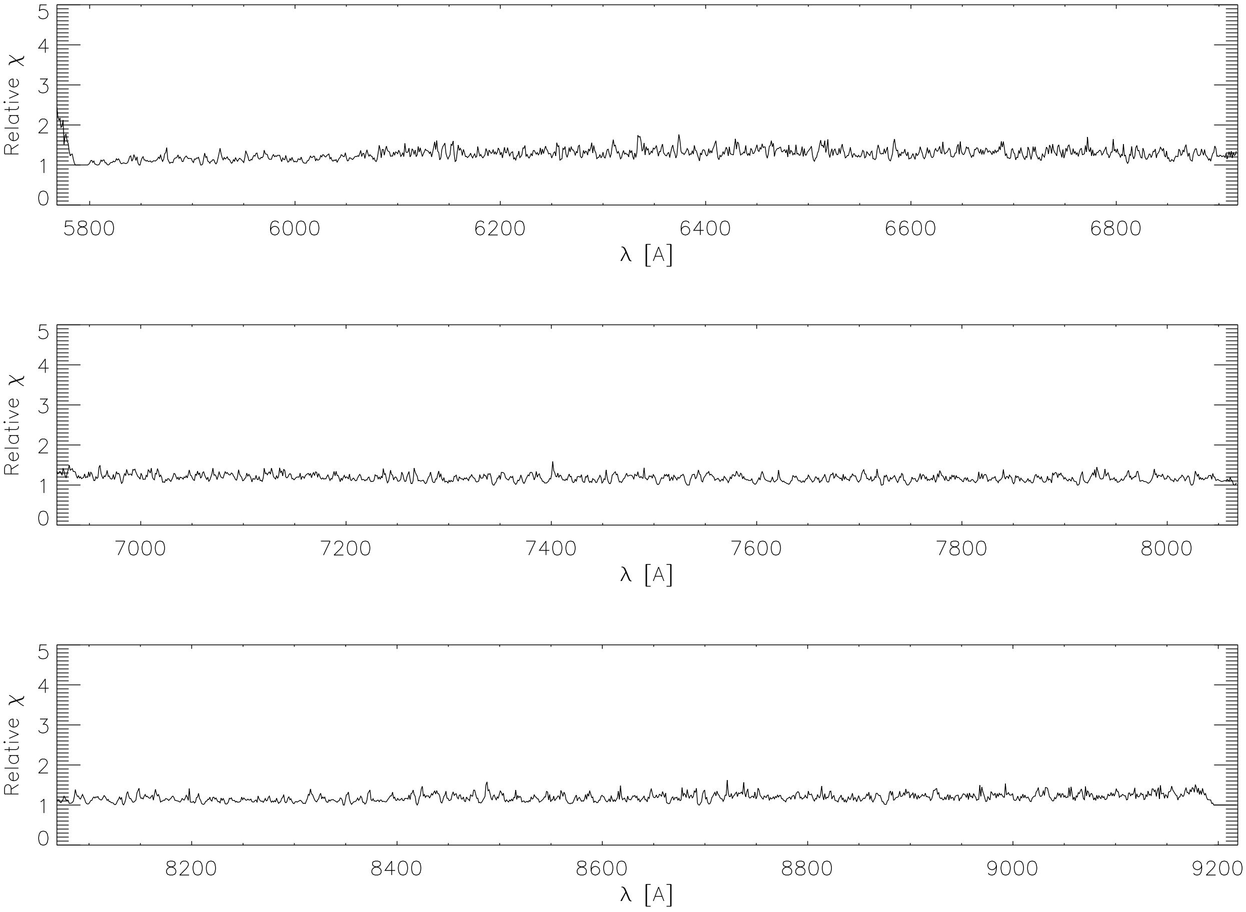


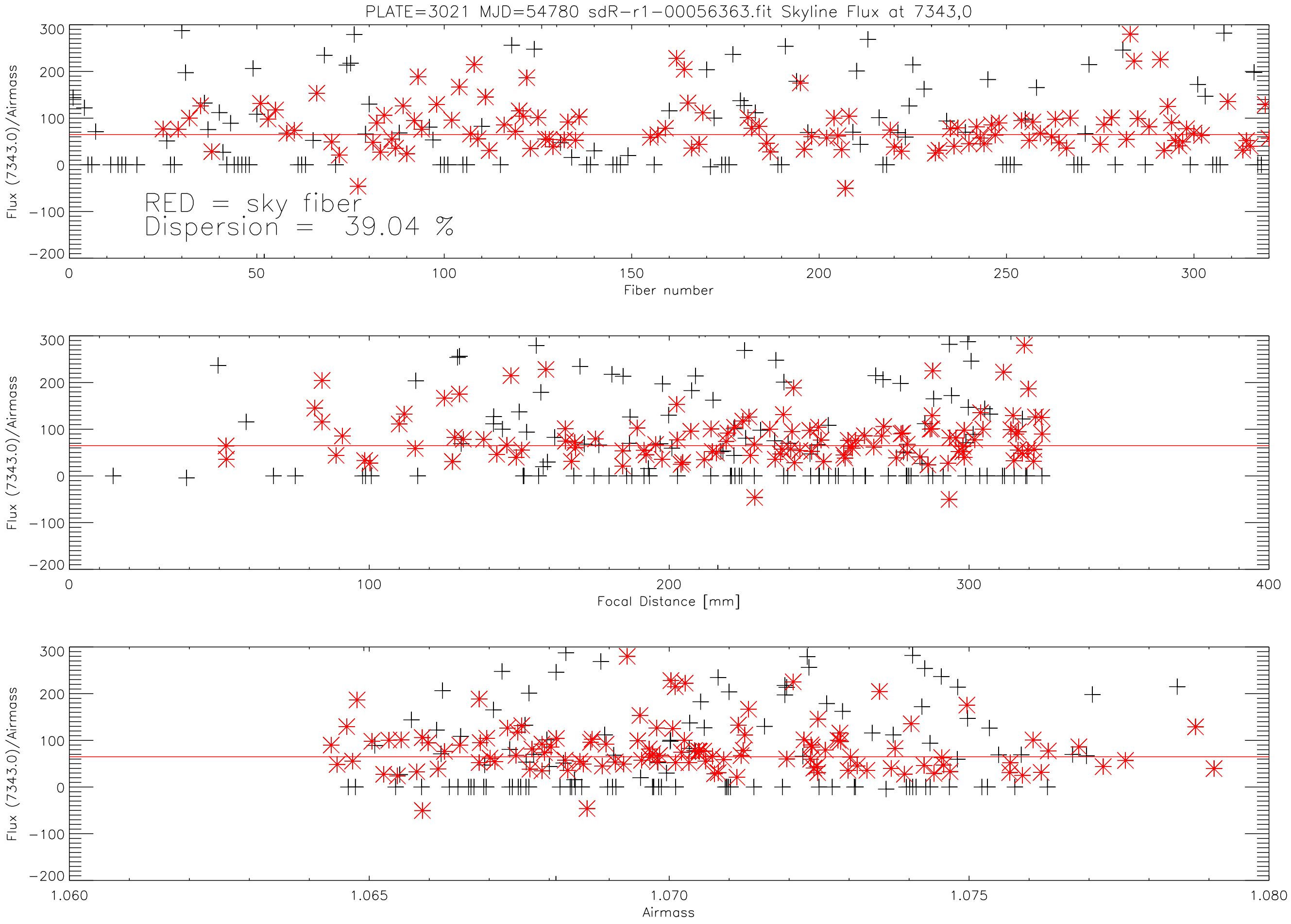
PLATE=3021 MJD=54780 sdR-r1-00056363.fit 2D Sky-subtraction Sky-subtracted Sky F

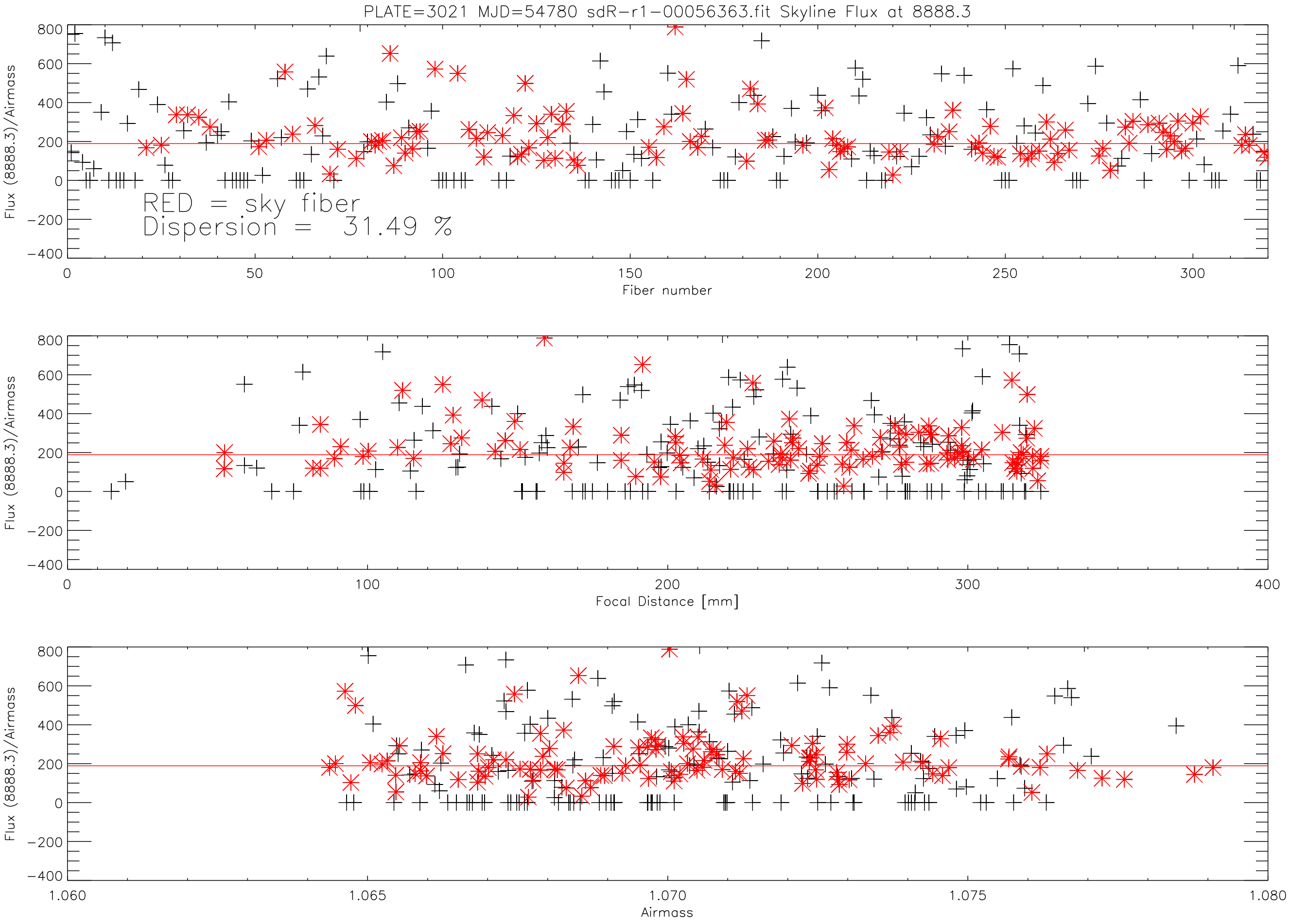


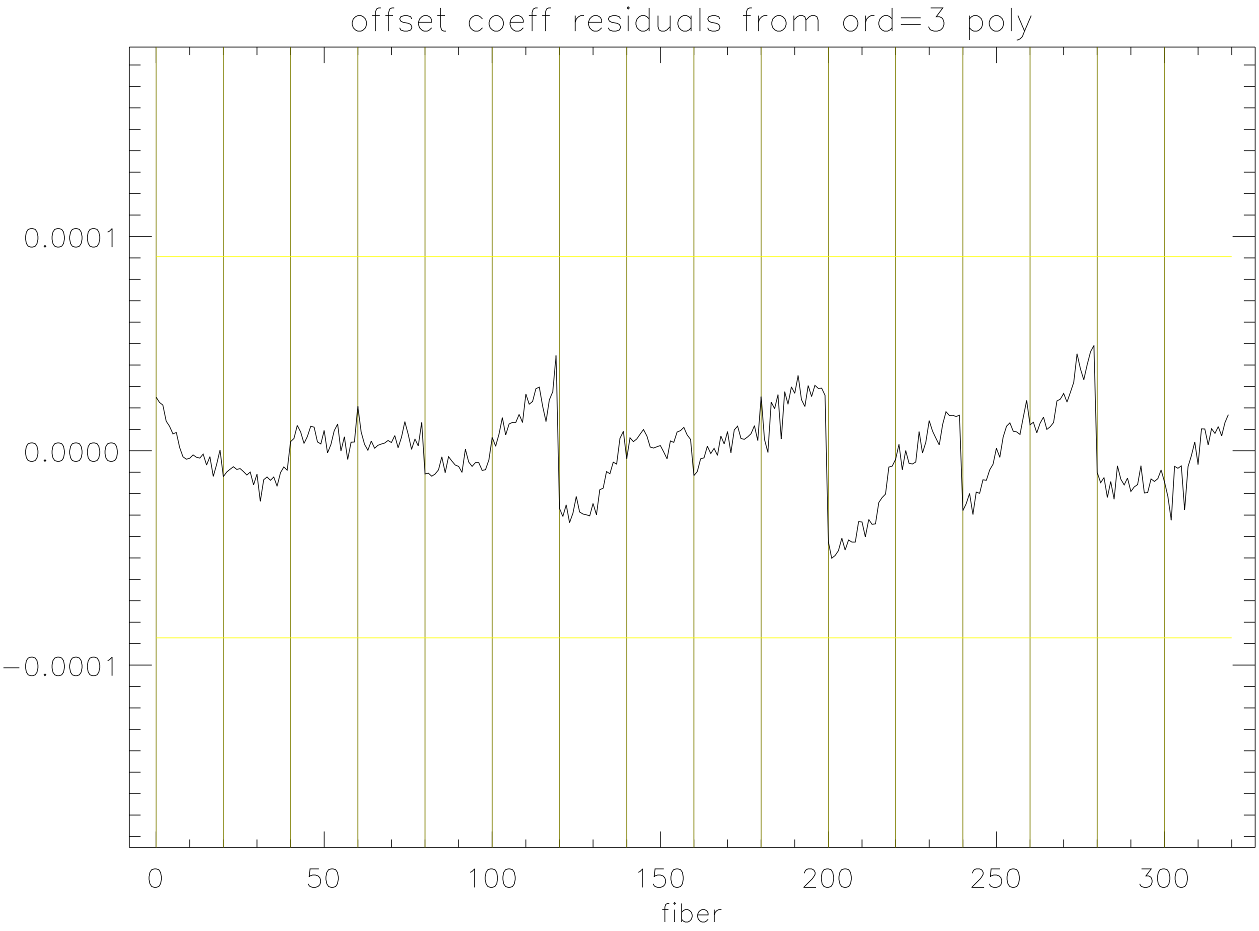
Number of sky fibers = 124

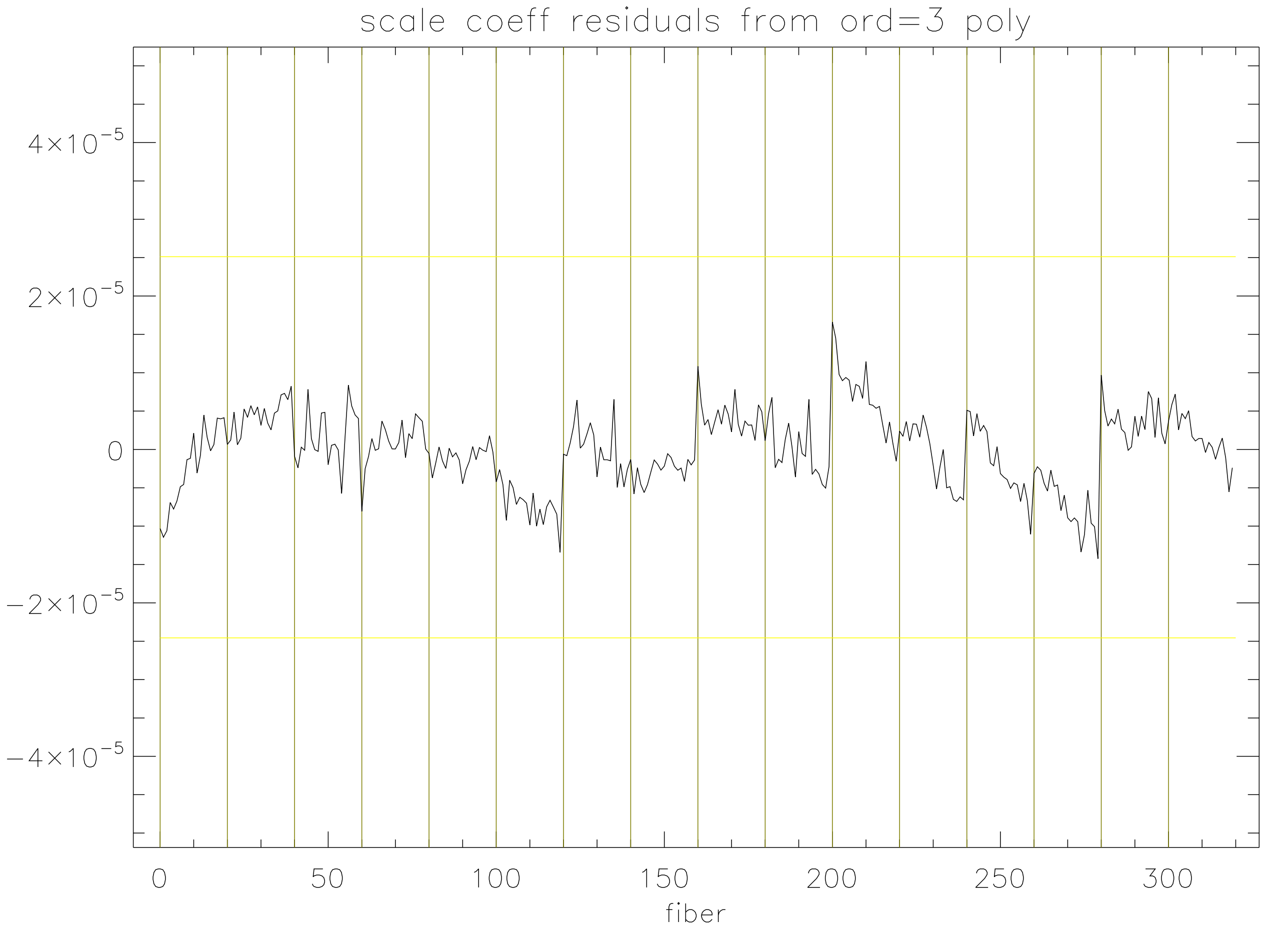
PLATE=3021 MJD=54780 sdR-r1-00056363.fit 2D Sky-subtraction Rescaled Errors

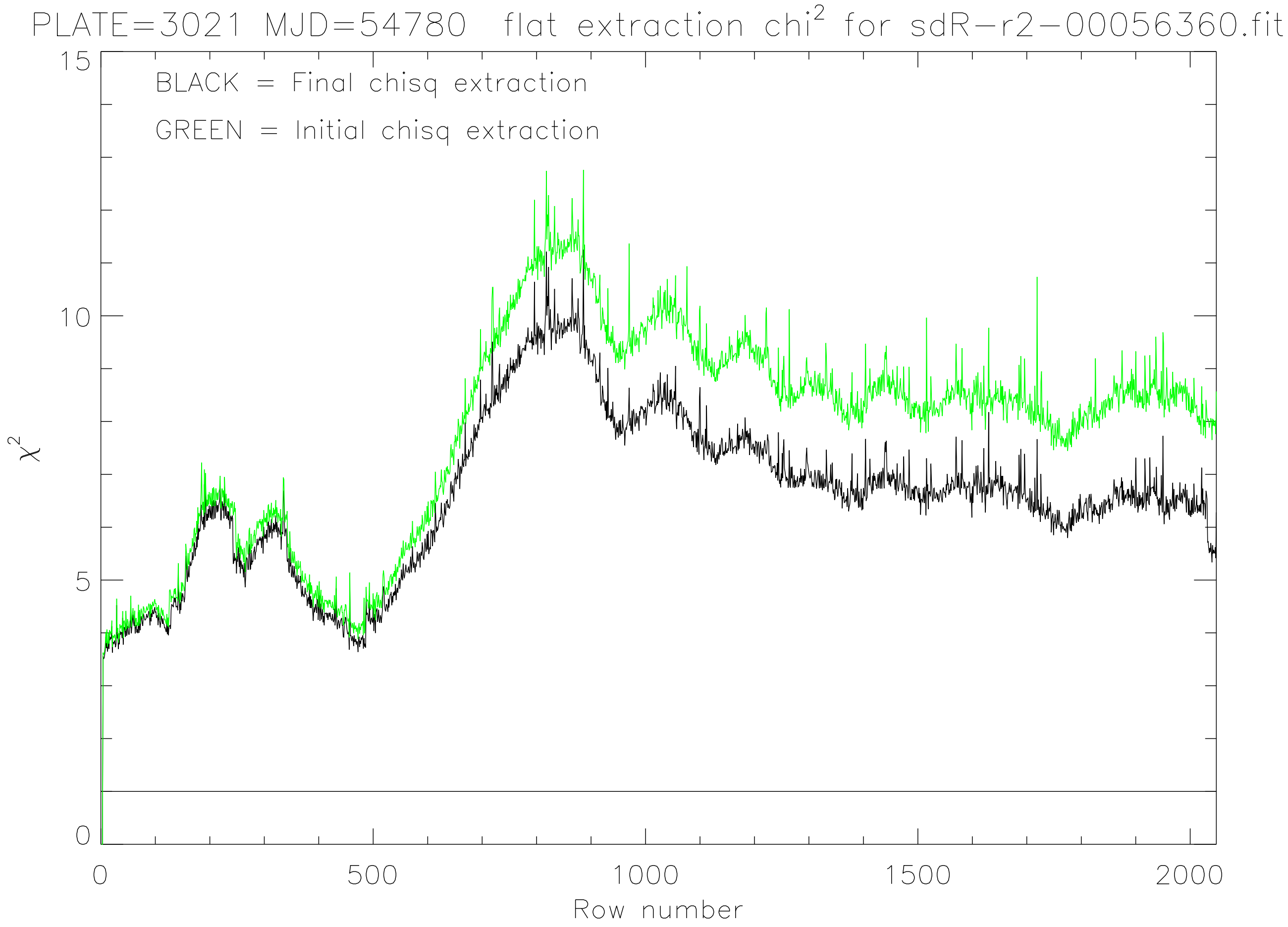


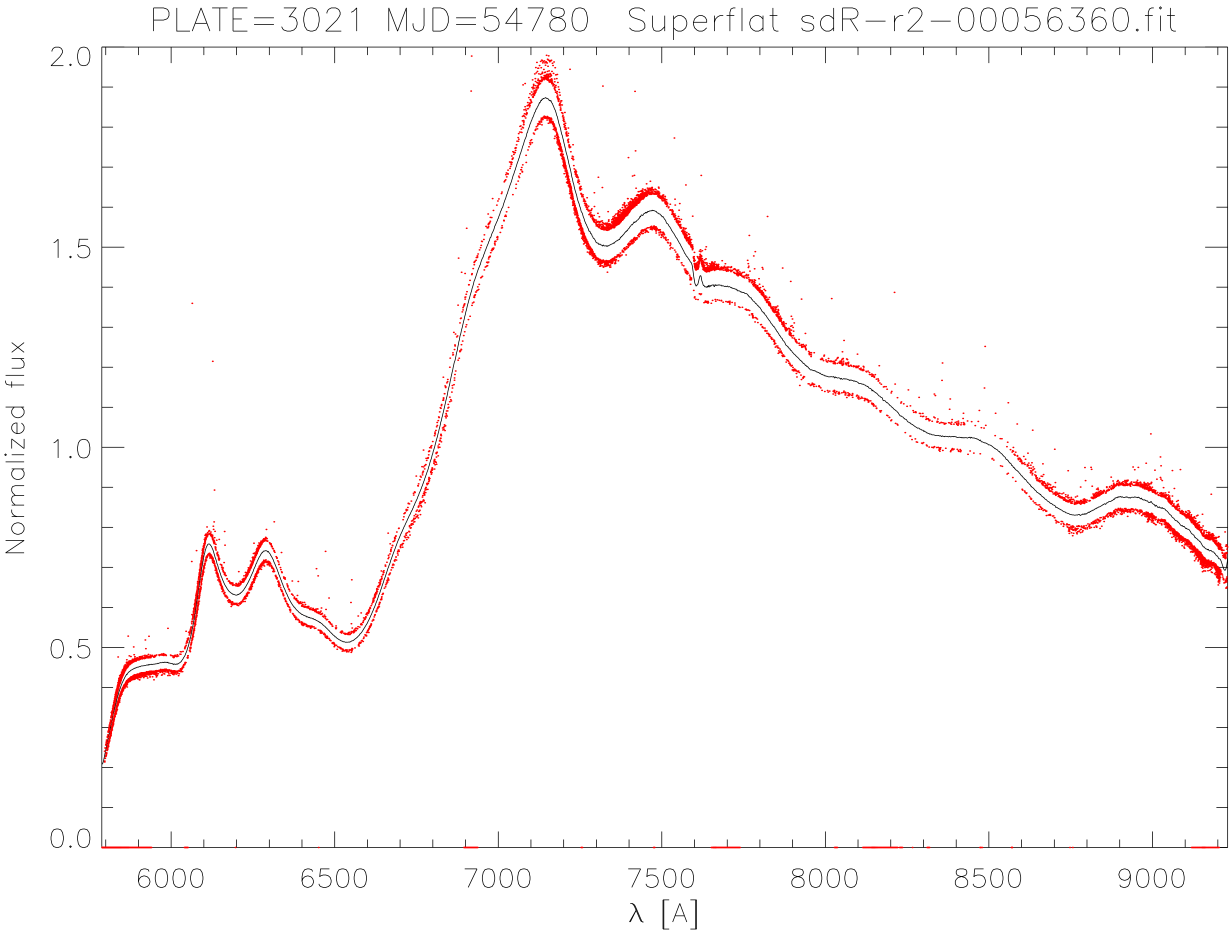

PLATE=3021 MJD=54780 sdR-r1-00056363.fit Skyline Flux at 7343,0
RED = sky fiber
Dispersion = 39.04 %
Flux (7343.0)/Airmass
300
200
100
0
-100
-200
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
1.060
1.065
1.070
1.075
1.080
Airmass


PLATE=3021 MJD=54780 sdR-r1-00056363.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
800
600
400
200
0
-200
-400
RED = sky fiber
Dispersion = 31.49 %
0
50
100
150
200
250
300
Fiber number
Flux (8888.3)/Airmass
800
600
400
200
0
-200
-400
0
100
200
300
400
Focal Distance [mm]
Flux (8888.3)/Airmass
800
600
400
200
0
-200
-400
1.060
1.065
1.070
1.075
1.080
Airmass

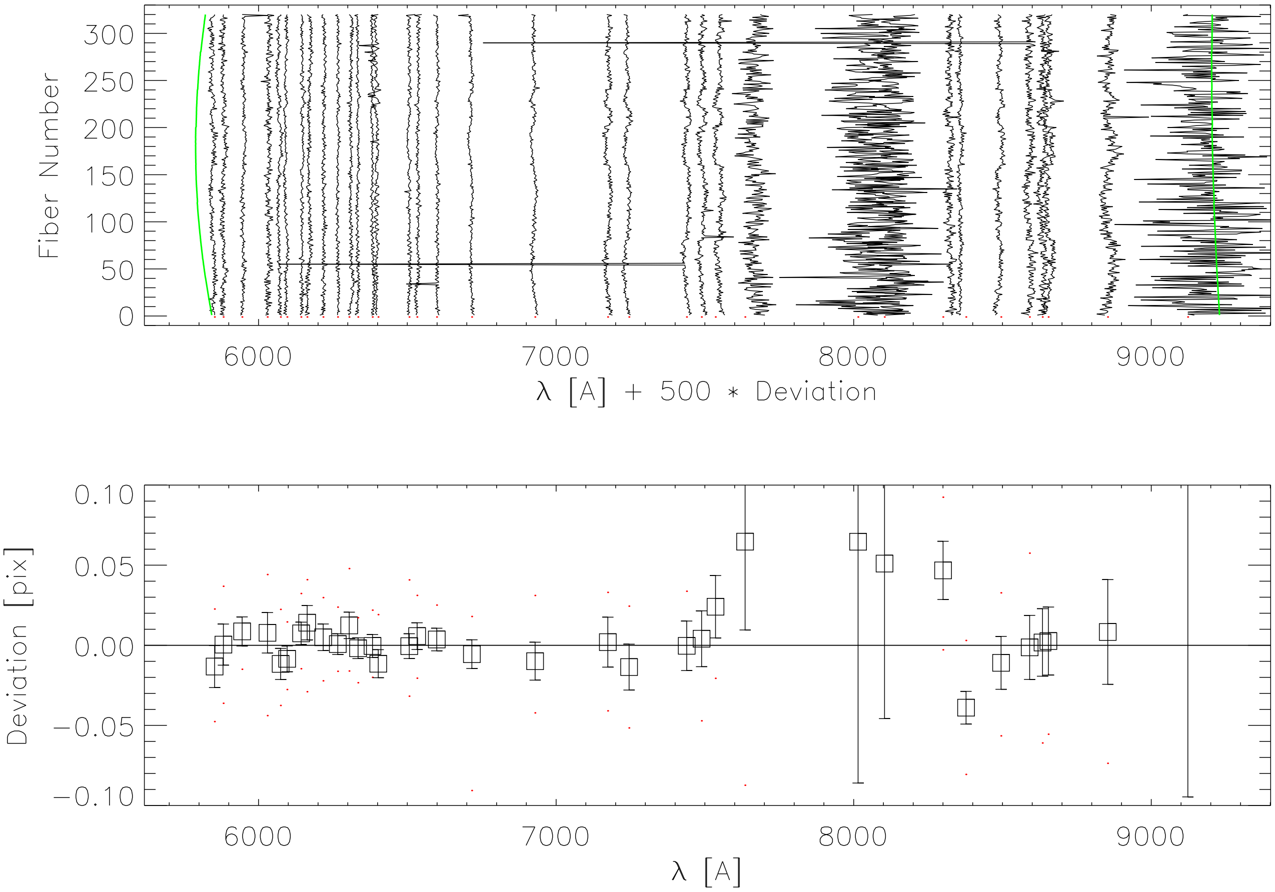

offset coeff residuals from ord=3 poly
0.0001
0.0000
−0.0001
0
50
100
150
200
250
300
fiber


scale coeff residuals from ord=3 poly
4×10^{-5}
2×10^{-5}
0
−2×10^{-5}
−4×10^{-5}
0
50
100
150
200
250
300
fiber


PLATE=3021 MJD=54780 flat extraction chi^2 for sdR-r2-00056360.fit
BLACK = Final chisq extraction
GREEN = Initial chisq extraction
χ^2
0
5
10
15
0
500
1000
1500
2000
Row number

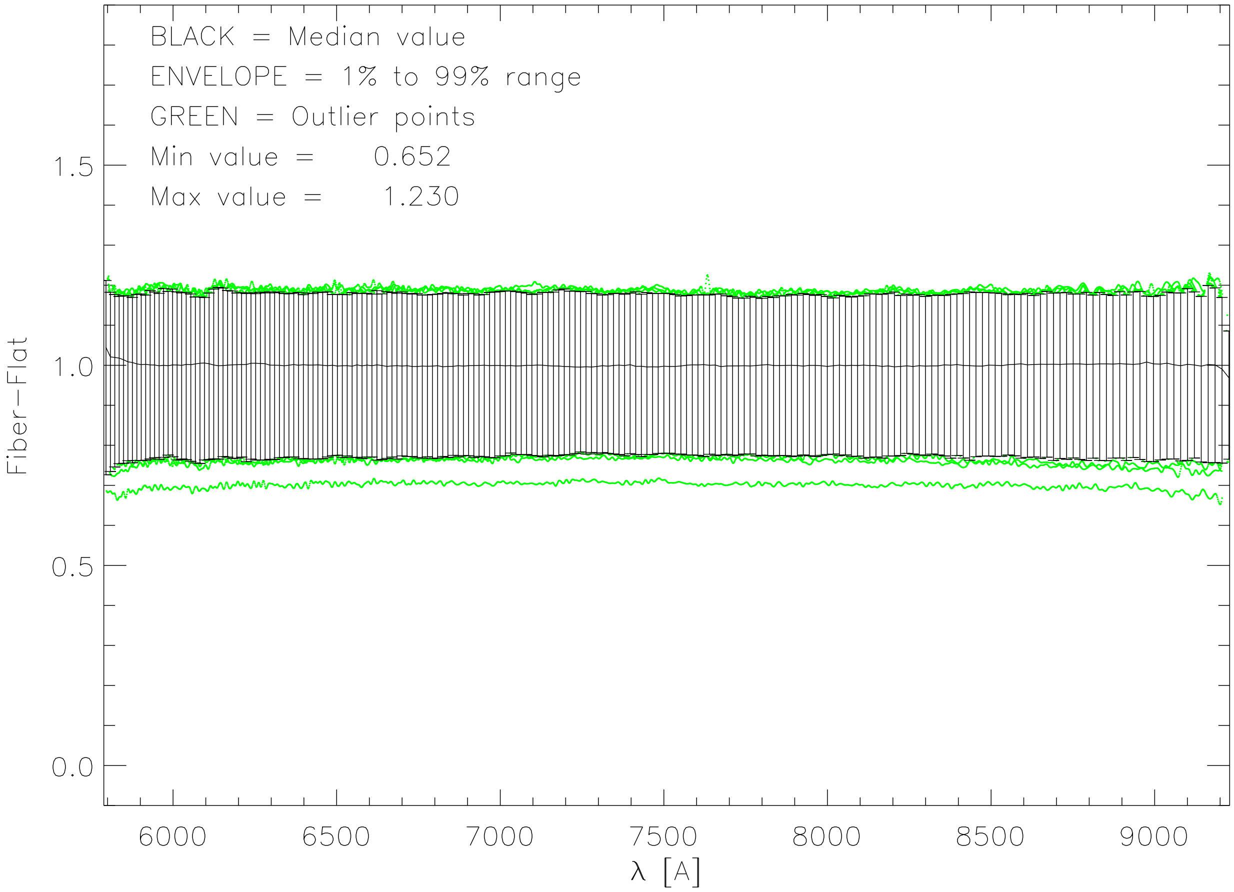

PLATE=3021 MJD=54780 Superflat sdR-r2-00056360.fit
Normalized flux
λ [A]
0.0
0.5
1.0
1.5
2.0
6000
6500
7000
7500
8000
8500
9000

PLATE=3021 MJD=54780 Arcline Fit for sdR-r2-00056361.fit



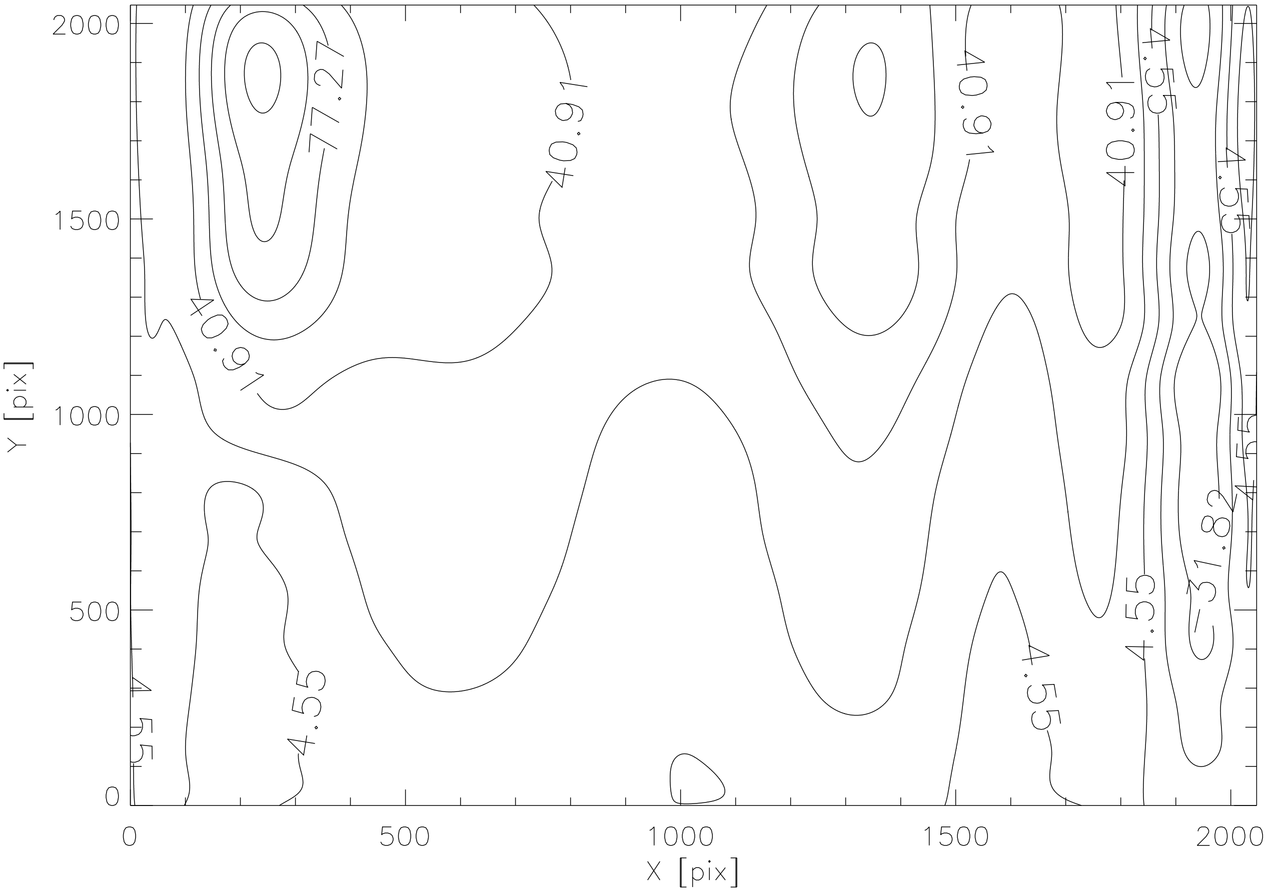
Thu Mar 11 01:53:57 2010

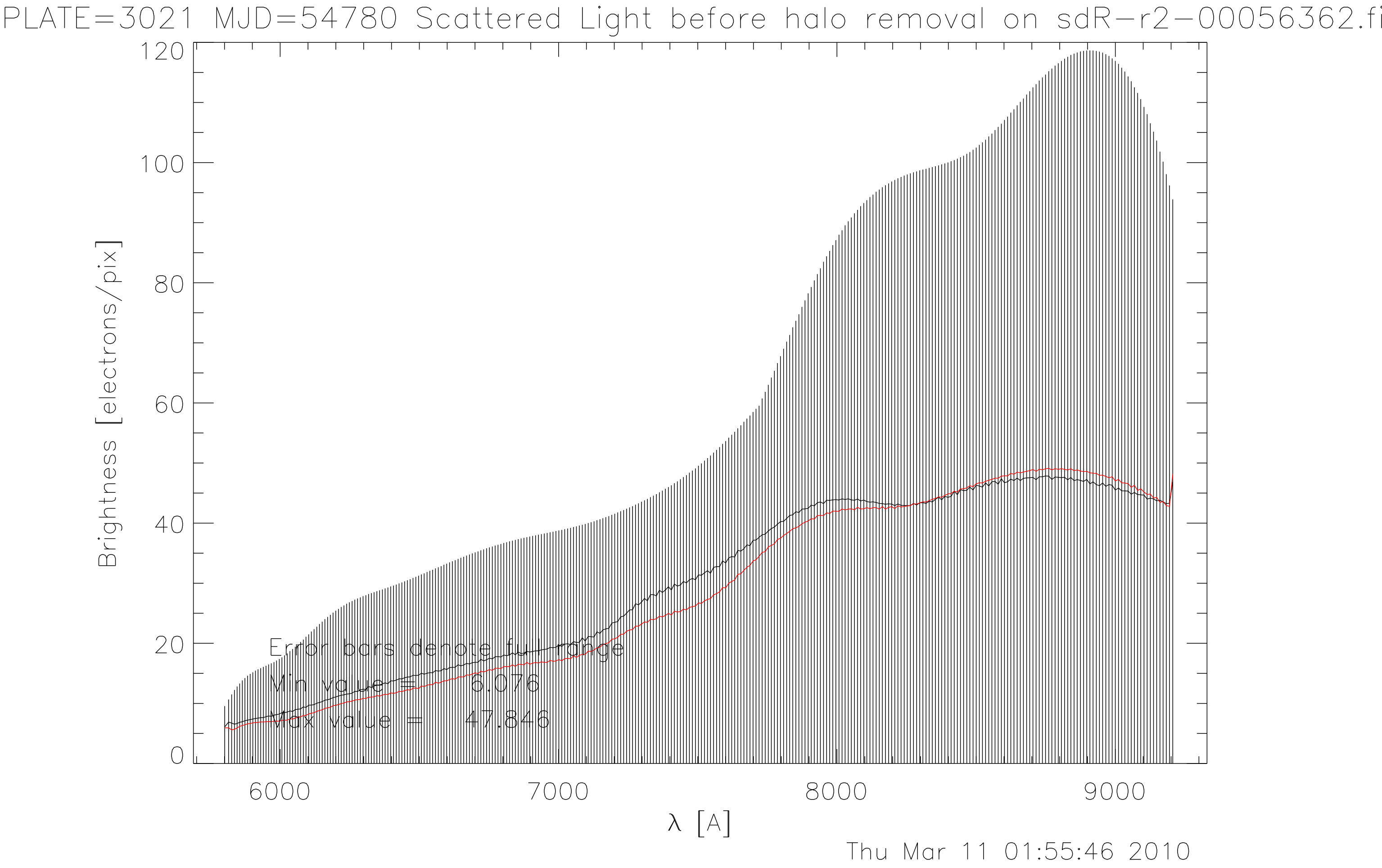
PLATE=3021 MJD=54780 Fiber−Flats for sdR−r2−00056360.fit



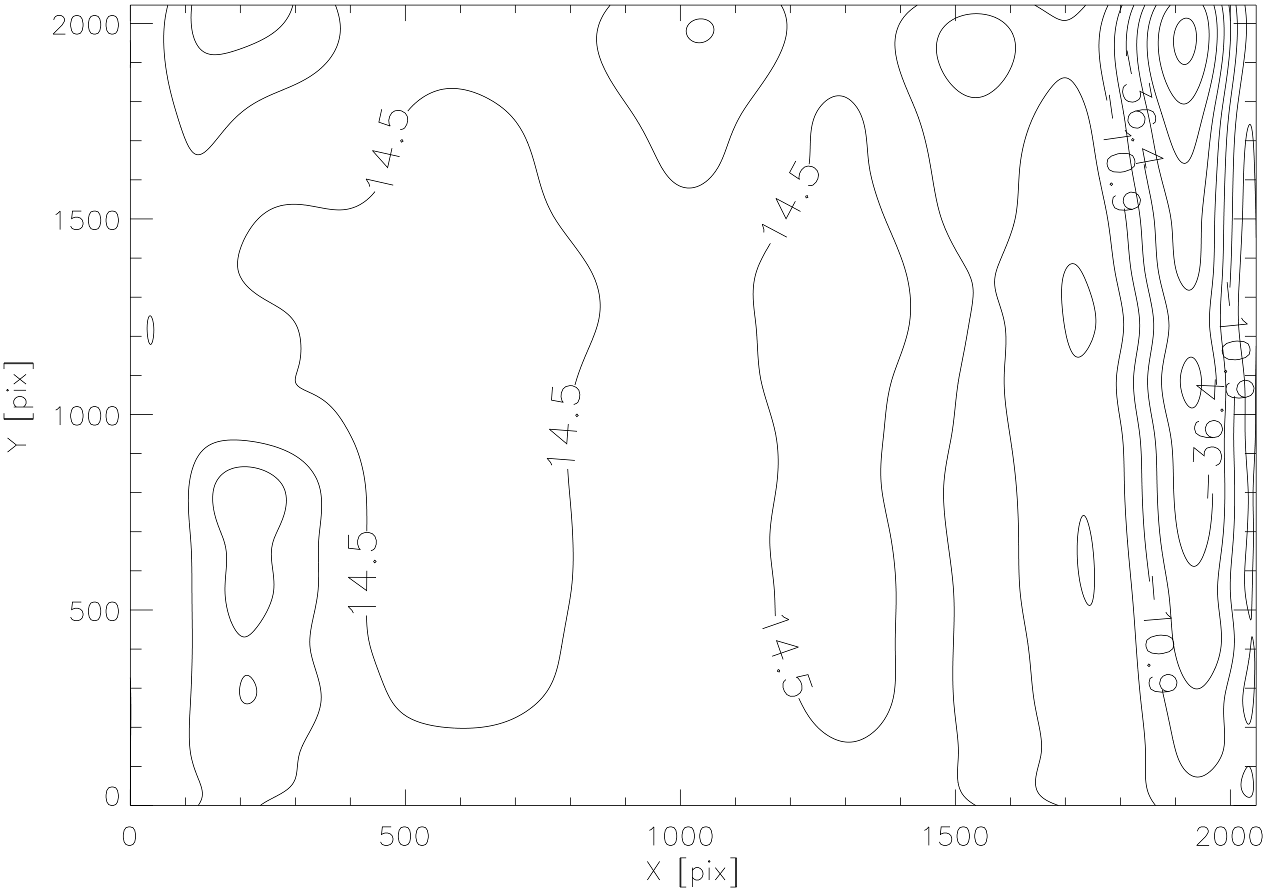
Thu Mar 11 01:54:07 2010

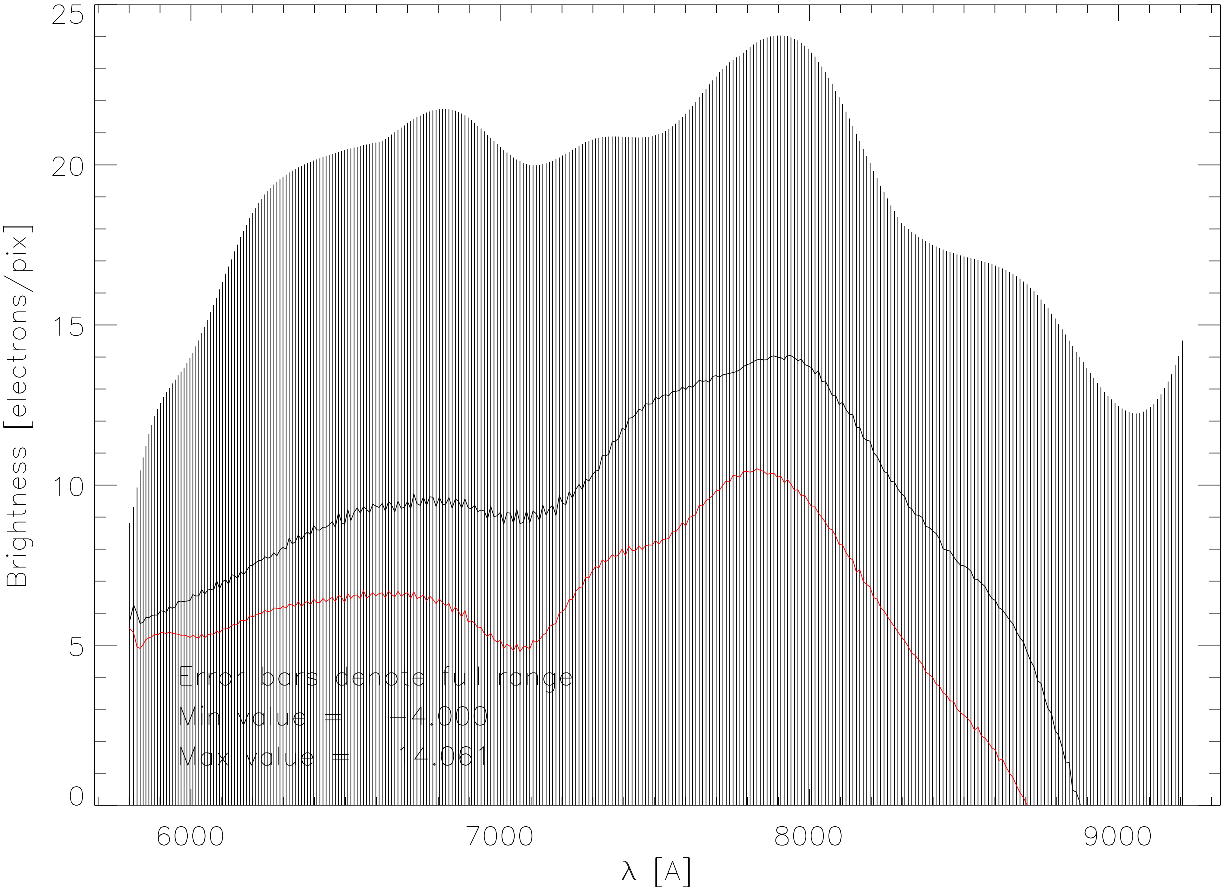
PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-r2-00056362.fi




PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-r2-00056362.fi
Brightness [electrons/pix]
λ [A]
0
20
40
60
80
100
120
6000
7000
8000
9000
Error bars denote full range
Min value = 6.076
Max value = 47.846
Thu Mar 11 01:55:46 2010

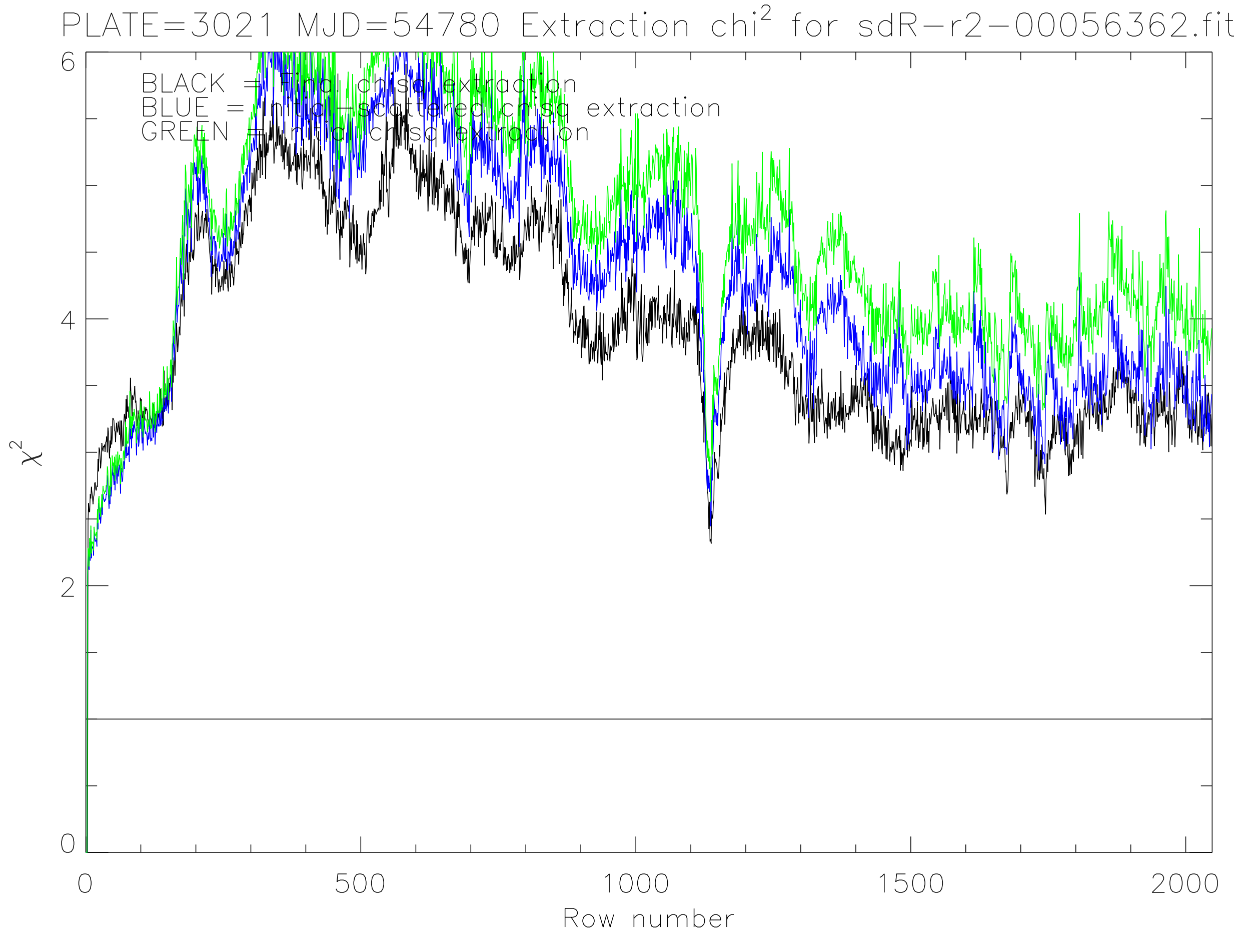
PLATE=3021 MJD=54780 Scattered Light on sdR-r2-00056362.fit

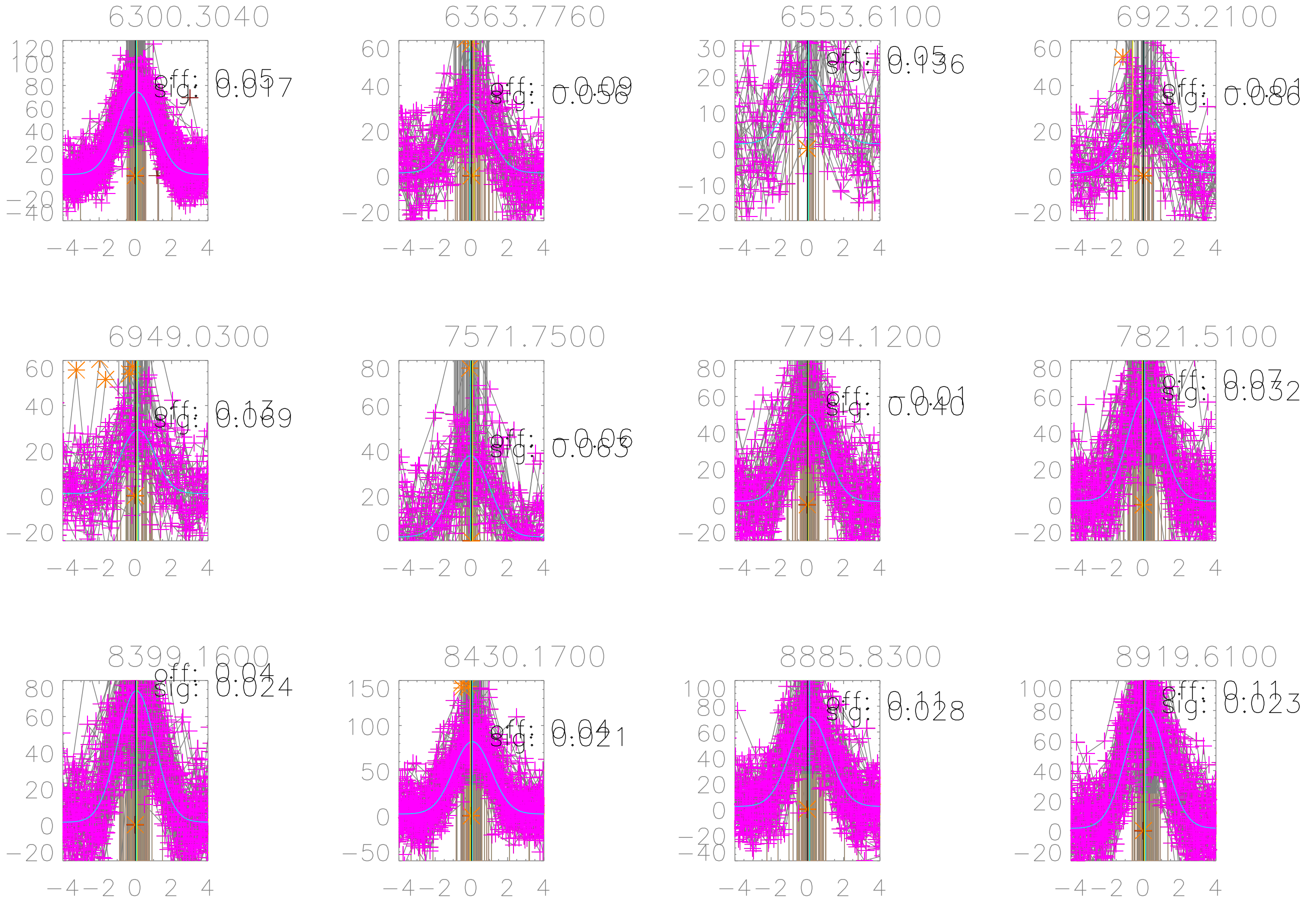




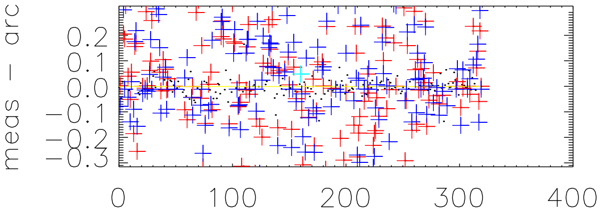
PLATE=3021 MJD=54780 Scattered Light on sdR-r2-00056362.fit

Thu Mar 11 02:00:00 2010

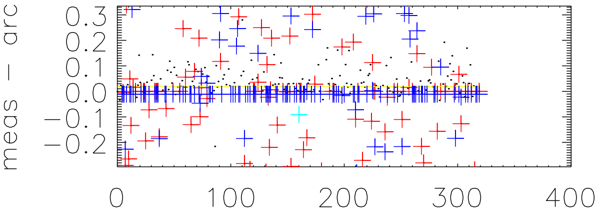

PLATE=3021 MJD=54780 Extraction chi^2 for sdR-r2-00056362.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
2
4
6
0
500
1000
1500
2000
Row number


6300.3040
off: 0.05
sig: 0.017
120
100
80
60
40
20
0
−20
−40
−4
−2
0
2
4
6363.7760
off: −0.09
sig: 0.056
60
40
20
0
−20
6553.6100
off: 0.05
sig: 0.136
30
20
10
0
−10
−20
6923.2100
off: −0.01
sig: 0.086
60
40
20
0
−20
6949.0300
off: 0.13
sig: 0.069
60
40
20
0
−20
7571.7500
off: −0.06
sig: 0.063
80
60
40
20
0
7794.1200
off: −0.01
sig: 0.040
80
60
40
20
0
−20
7821.5100
off: 0.07
sig: 0.032
80
60
40
20
0
−20
8399.1600
off: 0.04
sig: 0.024
80
60
40
20
0
−20
8430.1700
off: 0.04
sig: 0.021
150
100
50
0
−50
8885.8300
off: 0.11
sig: 0.028
100
80
60
40
20
0
−20
−40
8919.6100
off: 0.11
sig: 0.023
100
80
60
40
20
0
−20

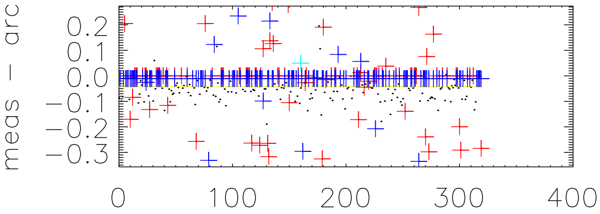
6300.3040



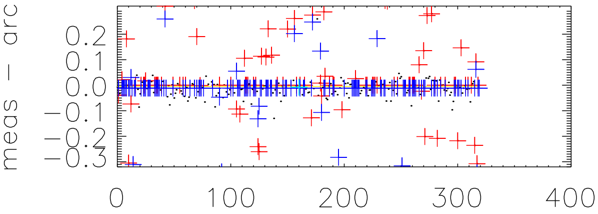
6363.7760



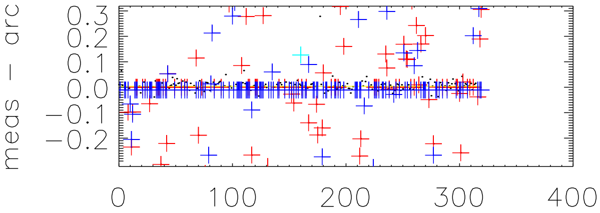
6553.6100



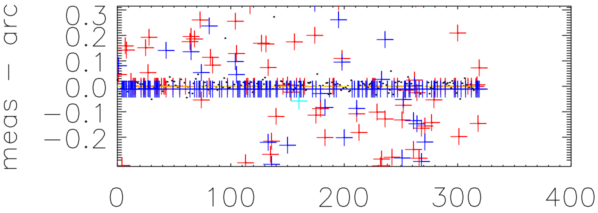
6923.2100

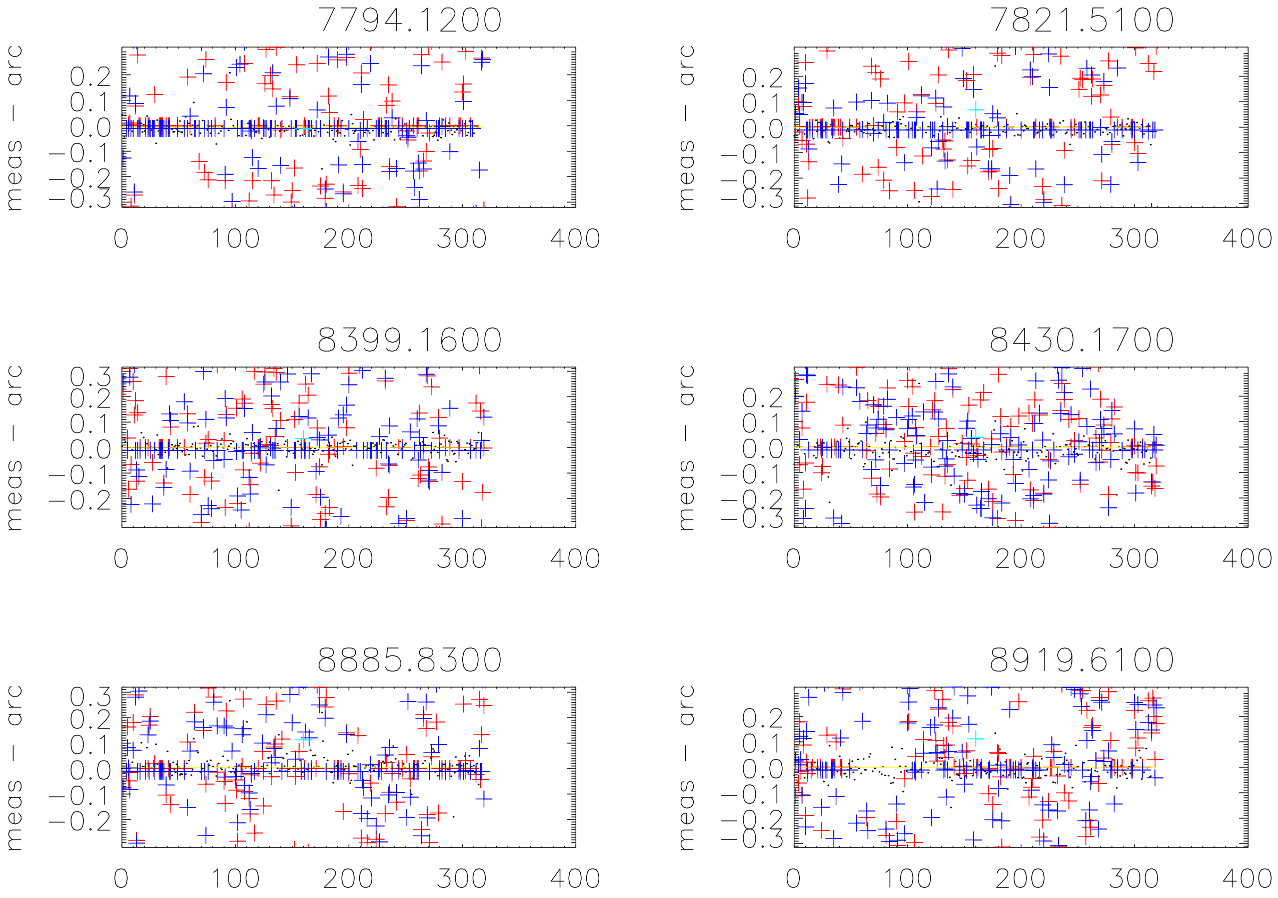


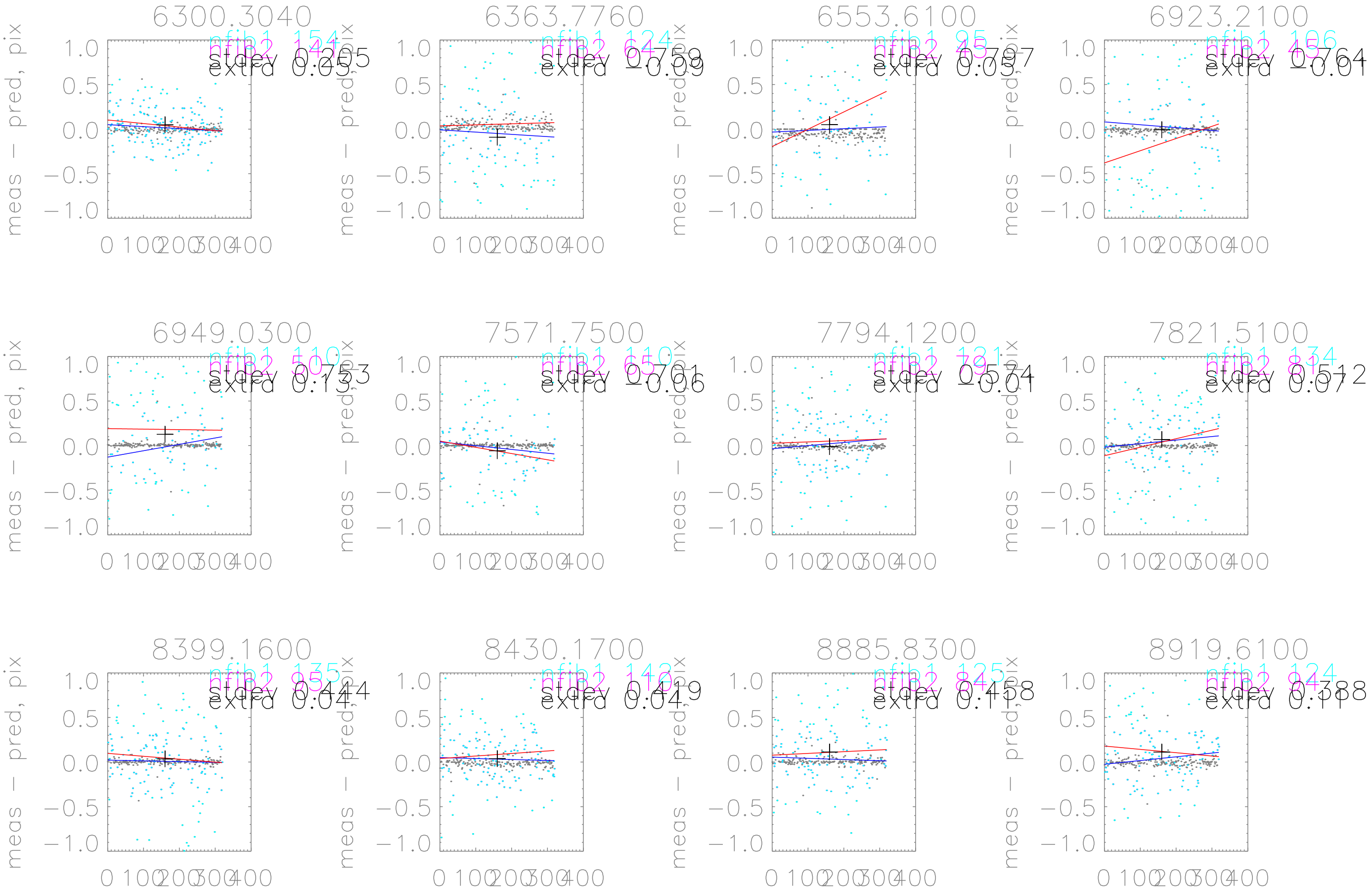
6949.0300

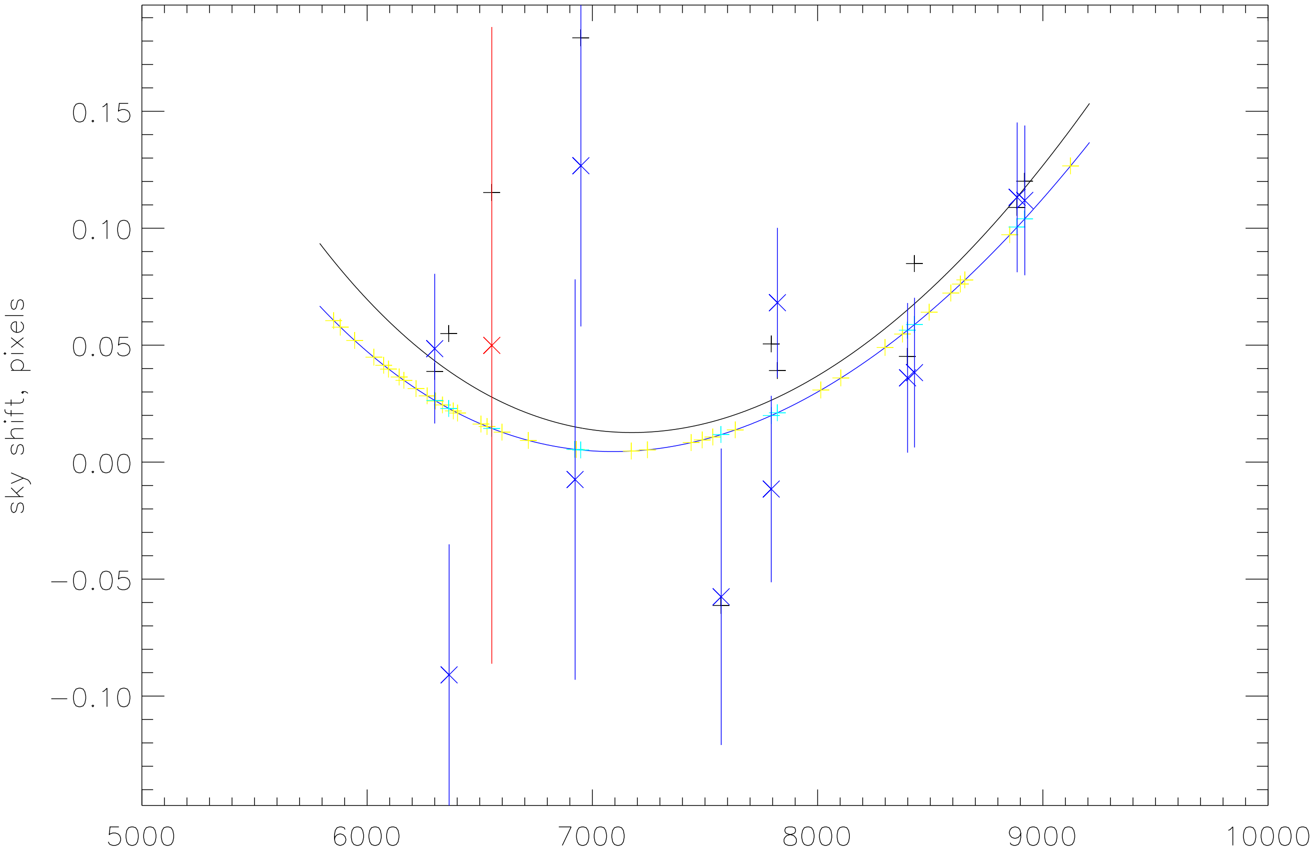


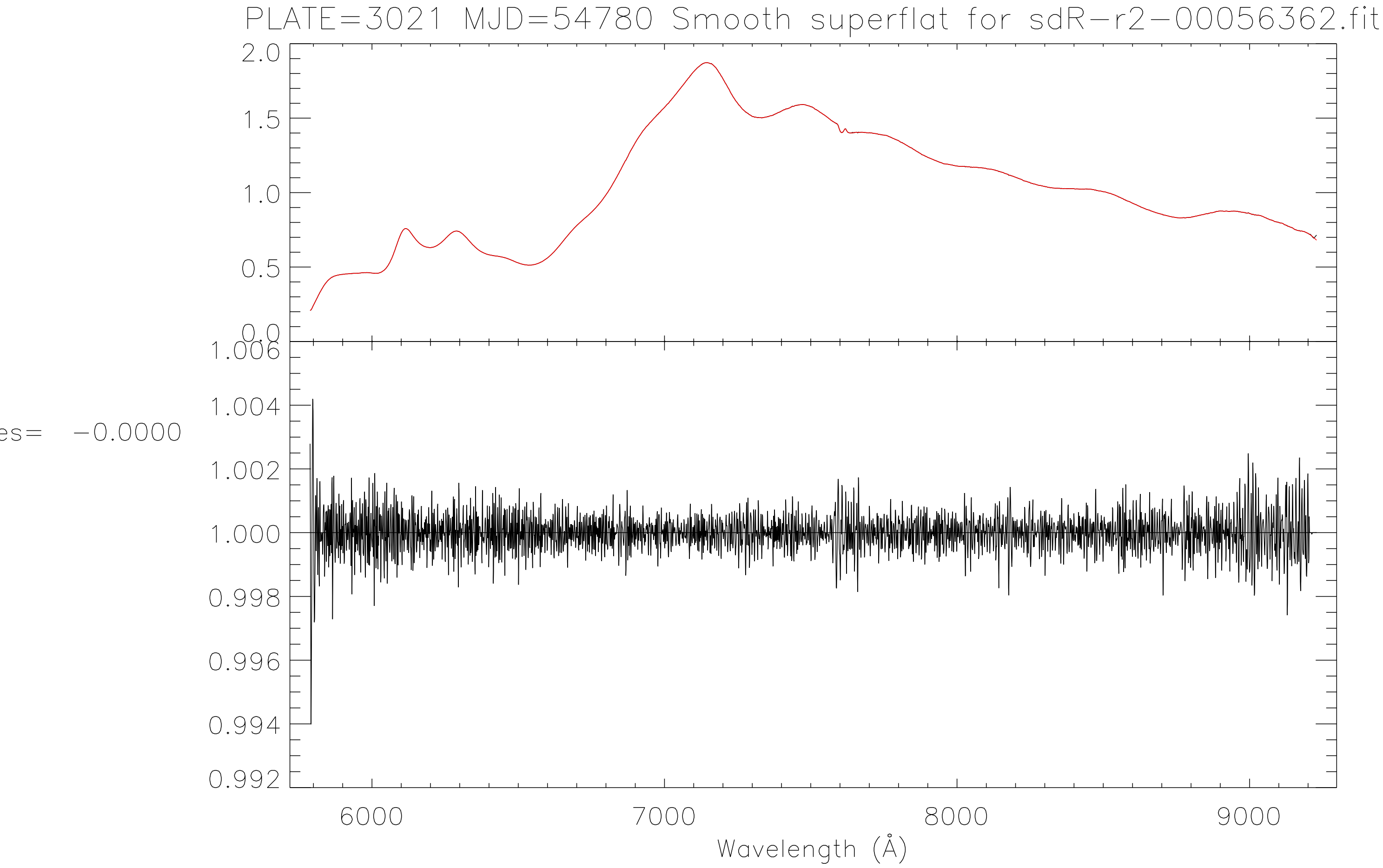
7571.7500



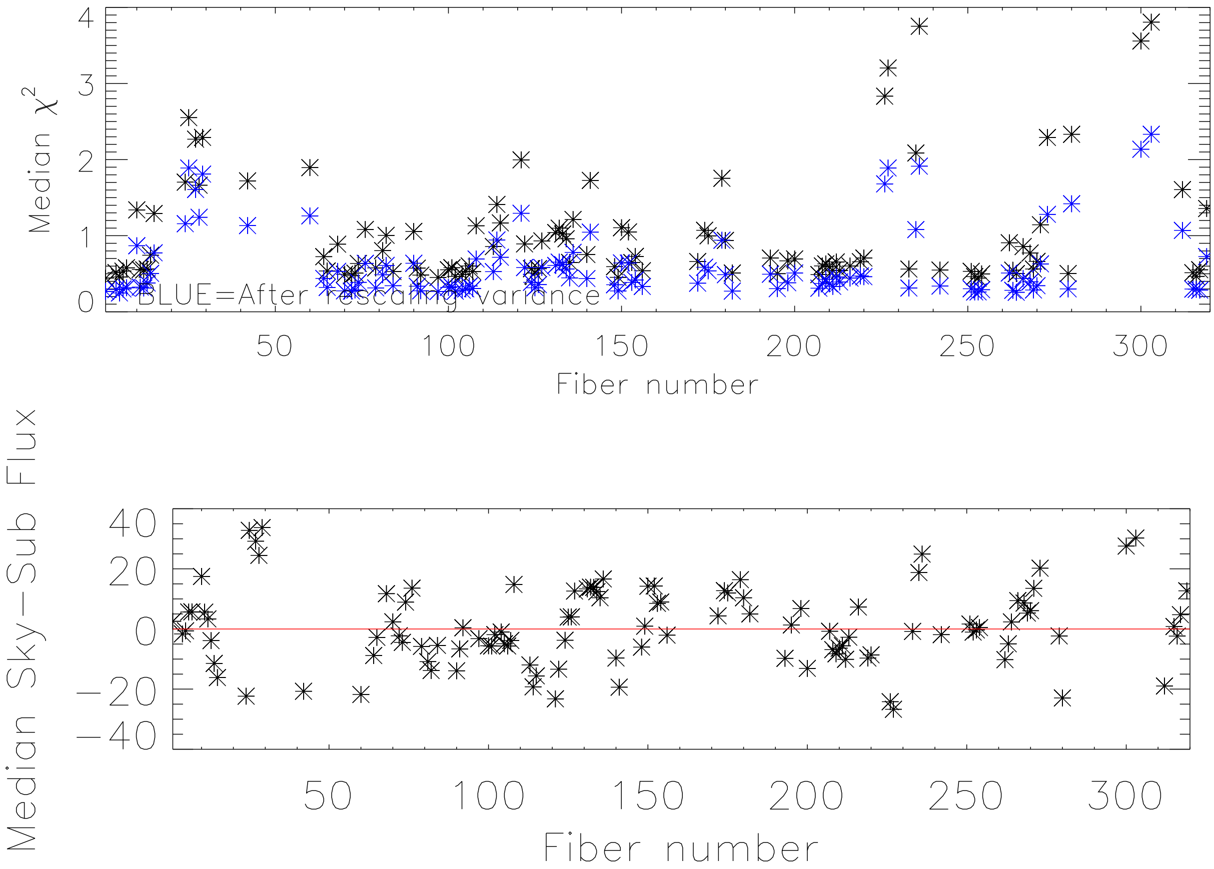

7794.1200
7821.5100
8399.1600
8430.1700
8885.8300
8919.6100
meas − arc
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
0
100
200
300
400

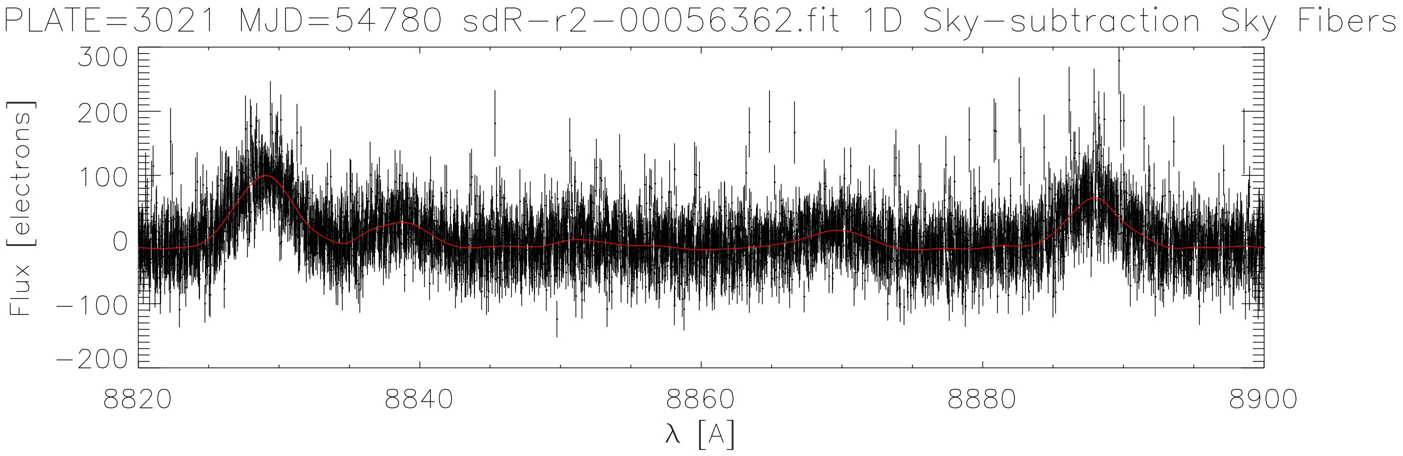

6300.3040
nfib1 154
nfib2 141
stdev 0.255
extrd 0.05
6363.7760
nfib1 124
nfib2 64
stdev 0.759
extrd −0.09
6553.6100
nfib1 95
nfib2 45
stdev 0.797
extrd 0.05
6923.2100
nfib1 106
nfib2 45
stdev 0.764
extrd −0.01
6949.0300
nfib1 110
nfib2 50
stdev 0.753
extrd 0.13
7571.7500
nfib1 110
nfib2 65
stdev 0.701
extrd −0.06
7794.1200
nfib1 131
nfib2 79
stdev 0.574
extrd −0.01
7821.5100
nfib1 134
nfib2 81
stdev 0.512
extrd 0.07
8399.1600
nfib1 135
nfib2 95
stdev 0.444
extrd 0.04
8430.1700
nfib1 142
nfib2 110
stdev 0.419
extrd 0.04
8885.8300
nfib1 125
nfib2 84
stdev 0.458
extrd 0.11
8919.6100
nfib1 124
nfib2 94
stdev 0.388
extrd 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

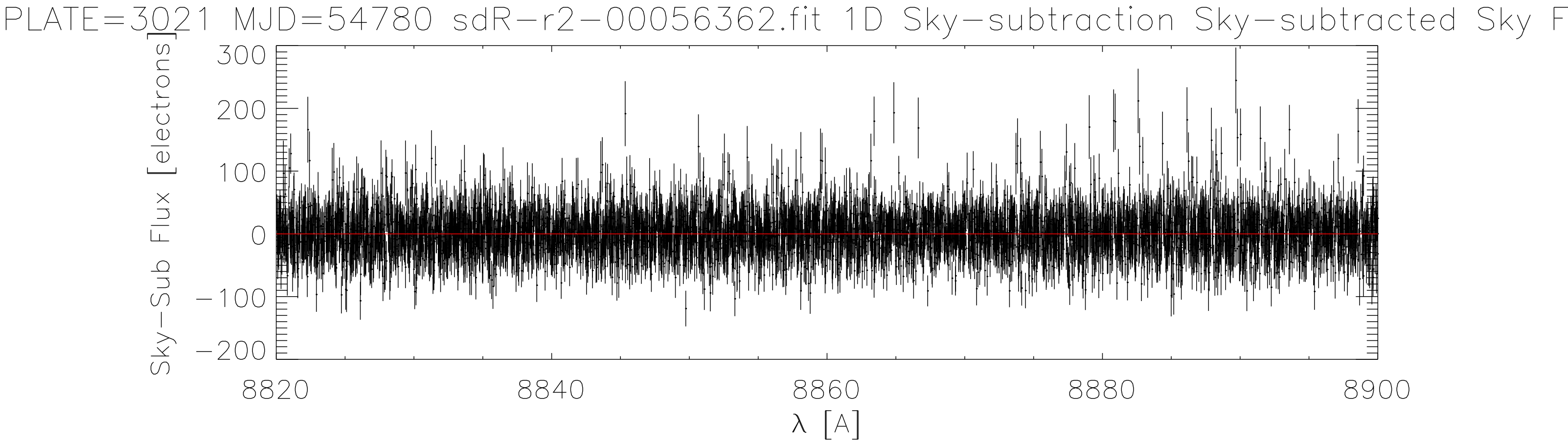

sky shift, pixels
0.15
0.10
0.05
0.00
−0.05
−0.10
5000
6000
7000
8000
9000
10000


PLATE=3021 MJD=54780 Smooth superflat for sdR-r2-00056362.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
0.992
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

PLATE=3021 MJD=54780 sdR-r2-00056362.fit 1D Sky-subtraction Sky Fibers

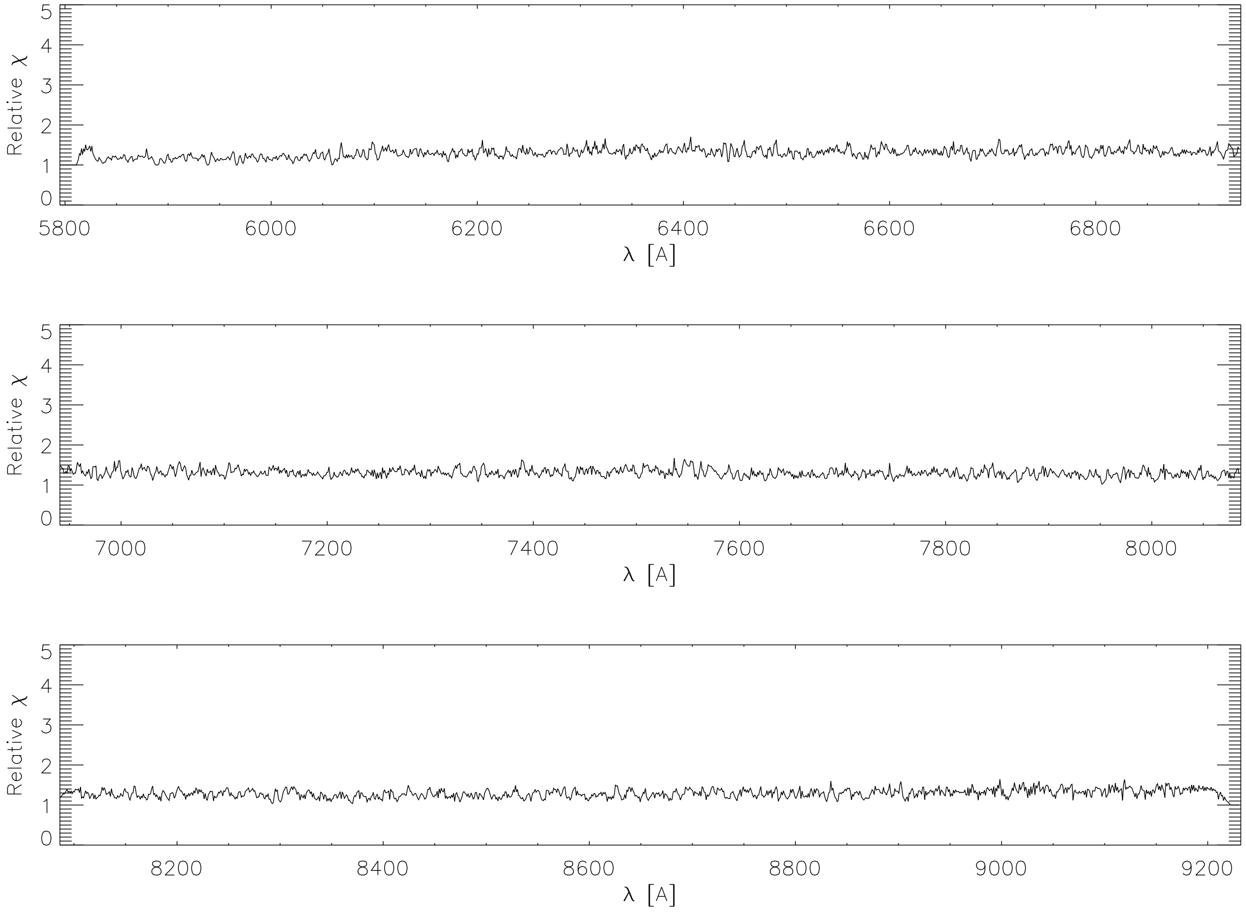


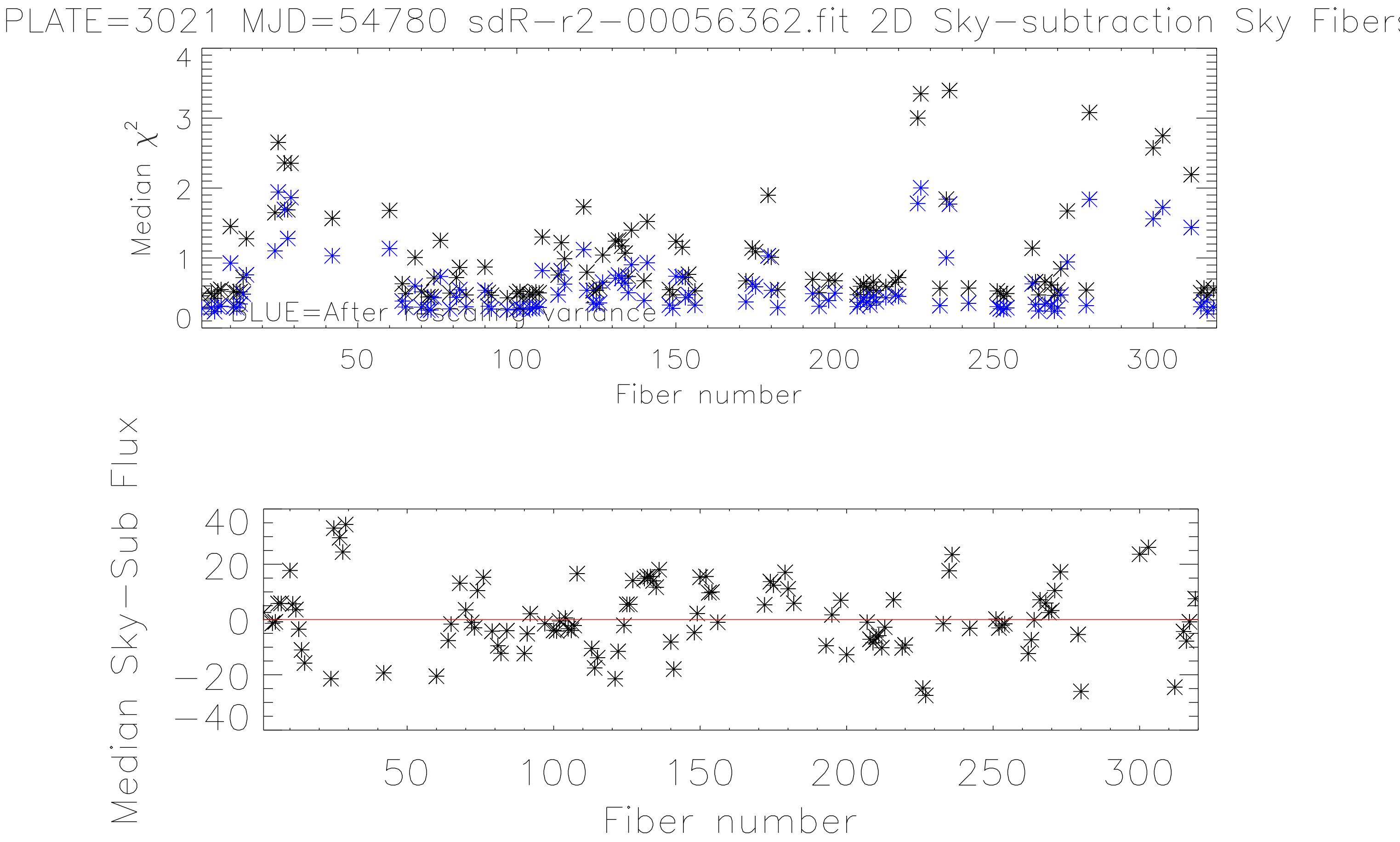

PLATE=3021 MJD=54780 sdR-r2-00056362.fit 1D Sky−subtraction Sky Fibers
Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]


PLATE=3021 MJD=54780 sdR-r2-00056362.fit 1D Sky−subtraction Sky−subtracted Sky F
Sky−Sub Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

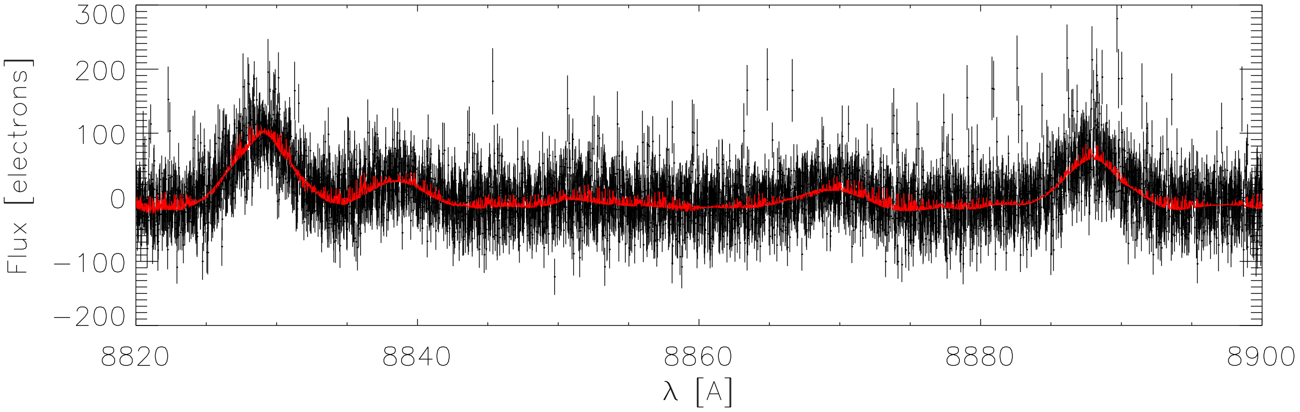
Number of sky fibers = 114

PLATE=3021 MJD=54780 sdR-r2-00056362.fit 1D Sky-subtraction Rescaled Errors

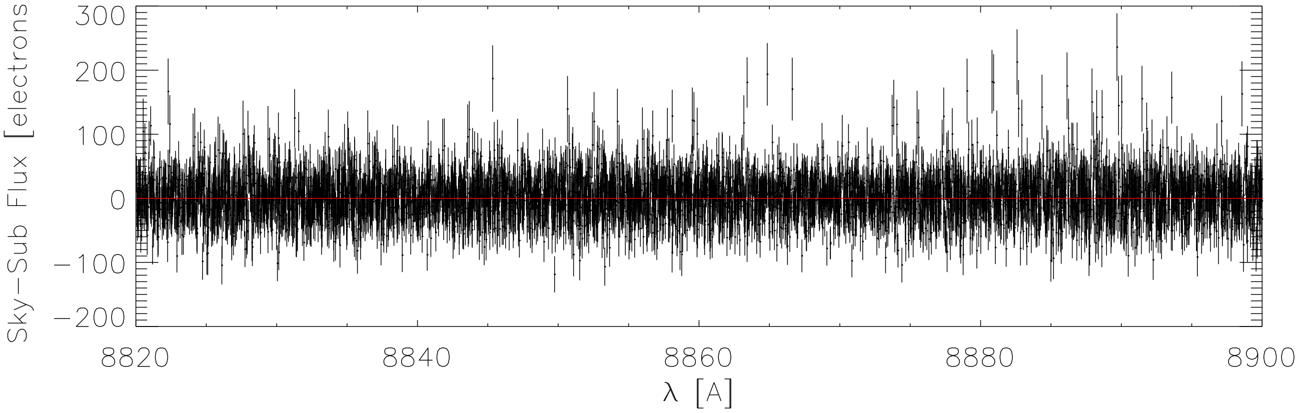


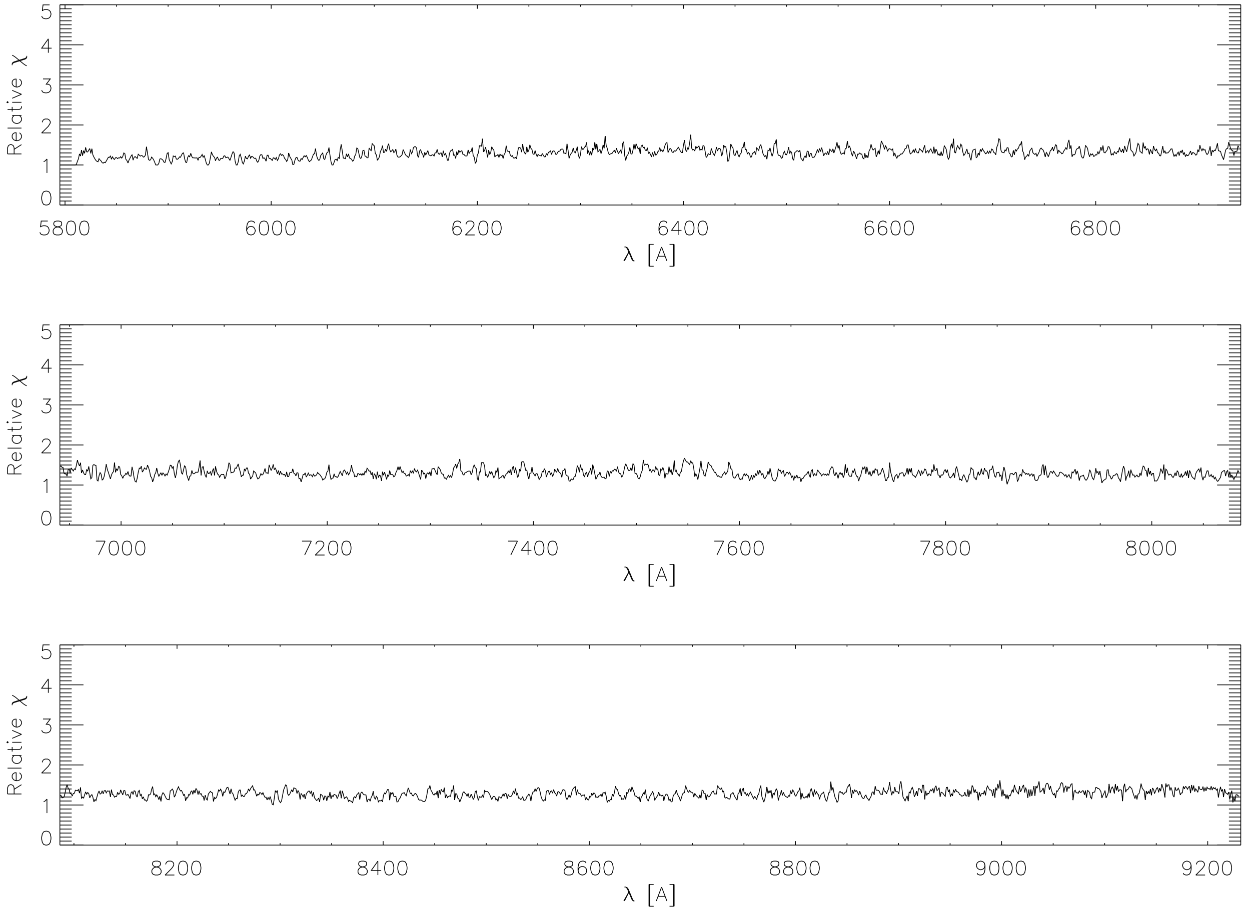

PLATE=3021 MJD=54780 sdR-r2-00056362.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0
1
2
3
4
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
40
20
0
−20
−40
50
100
150
200
250
300
Fiber number

PLATE=3021 MJD=54780 sdR-r2-00056362.fit 2D Sky-subtraction Sky Fibers



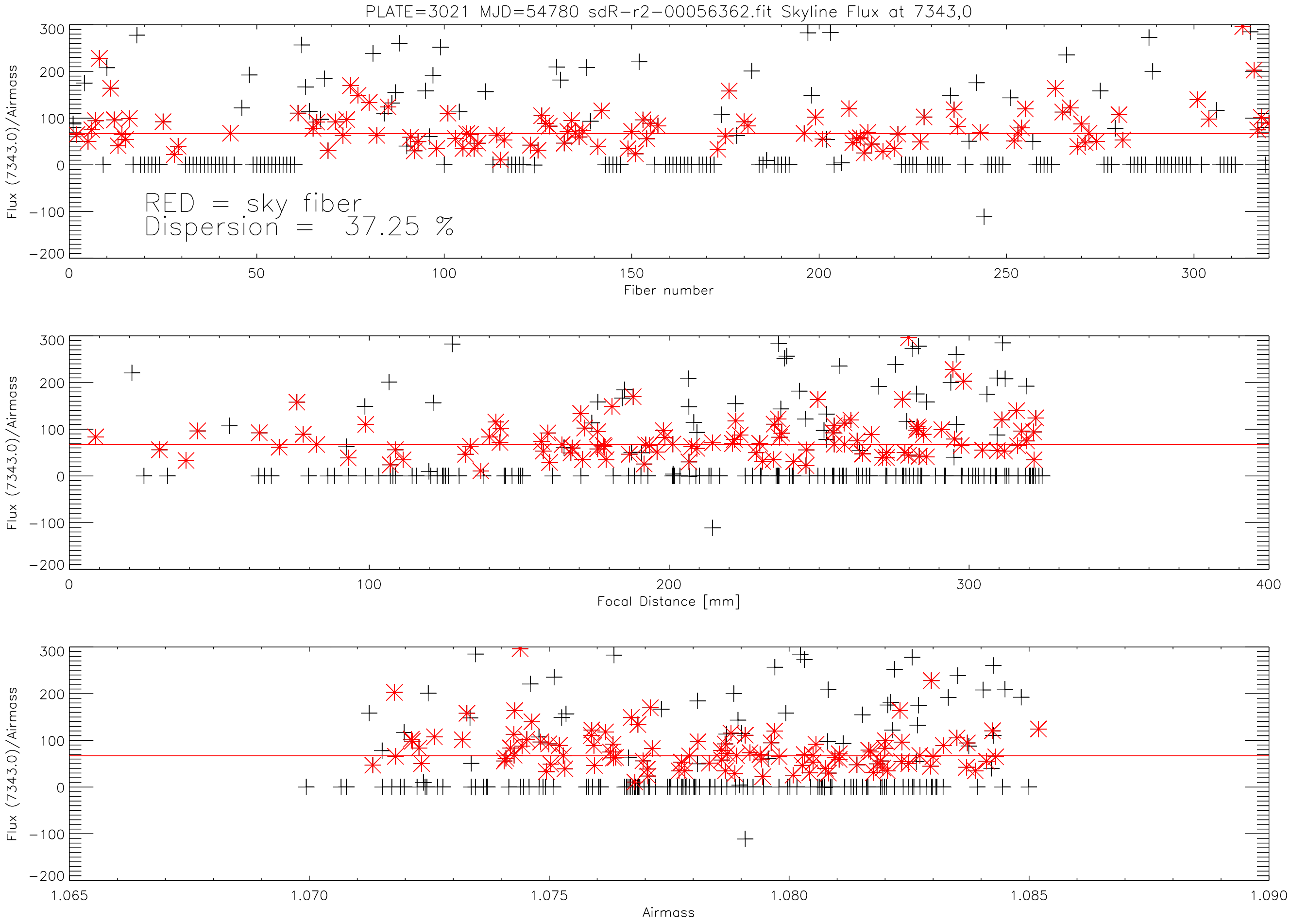
PLATE=3021 MJD=54780 sdR-r2-00056362.fit 2D Sky-subtraction Sky-subtracted Sky F

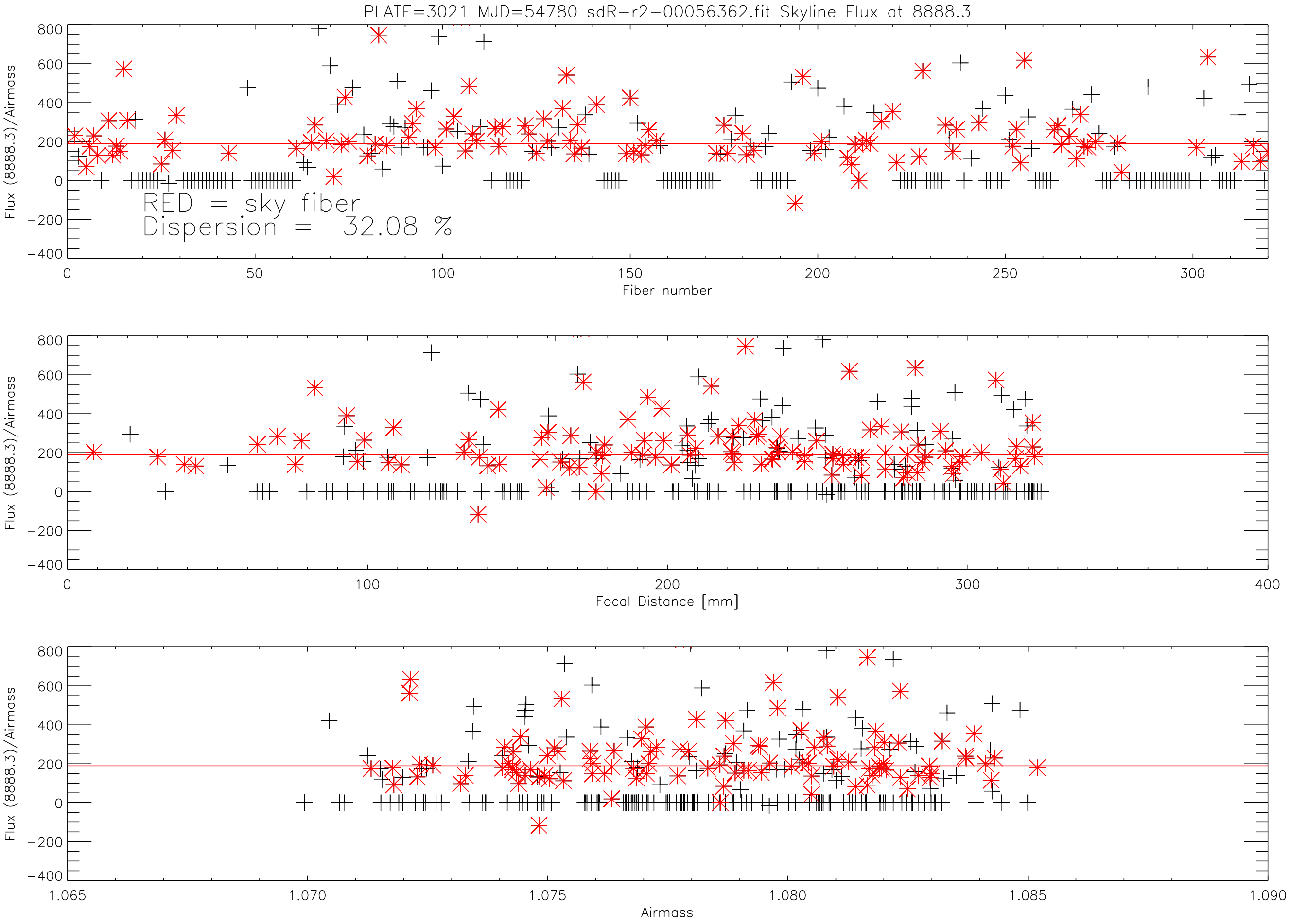


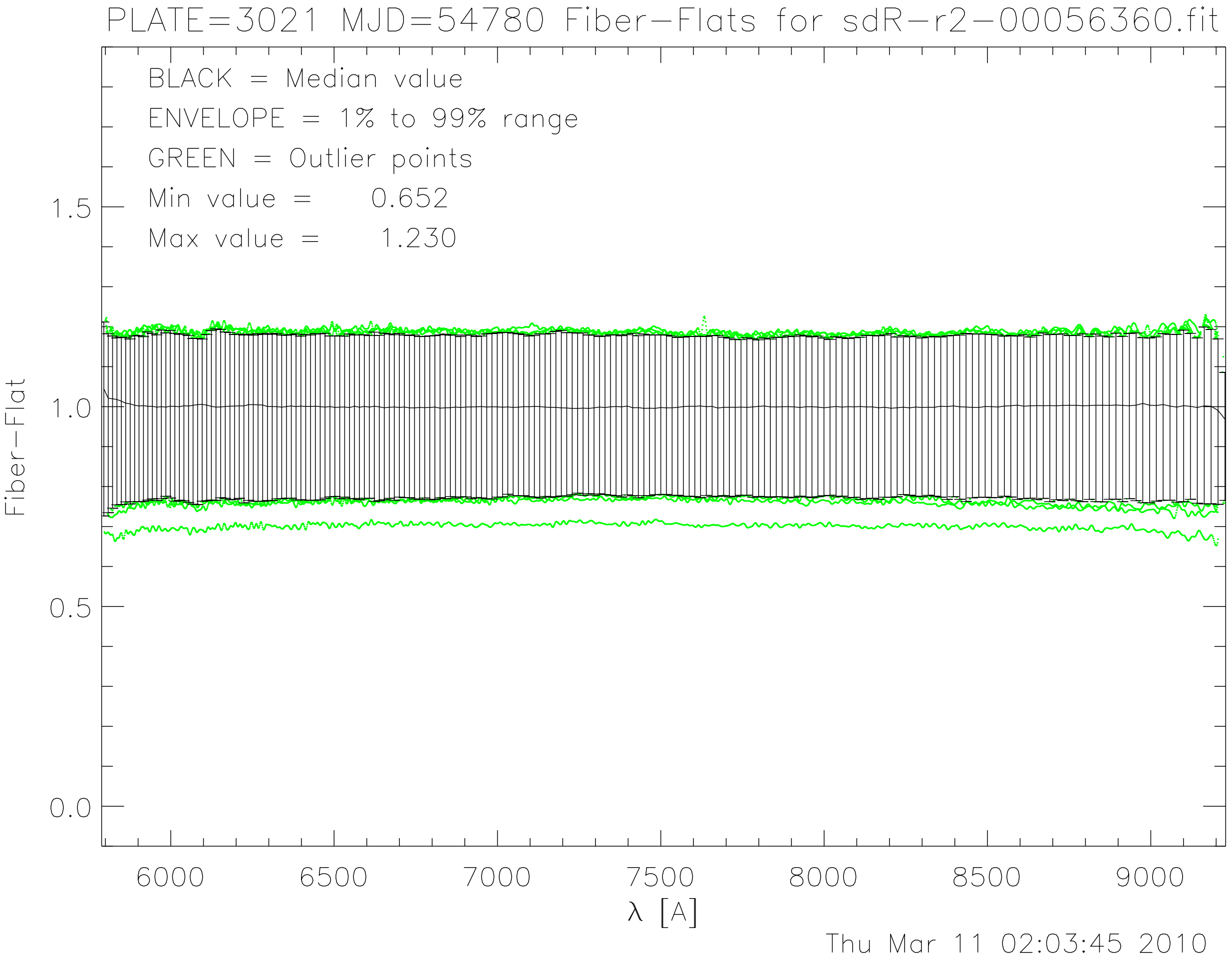


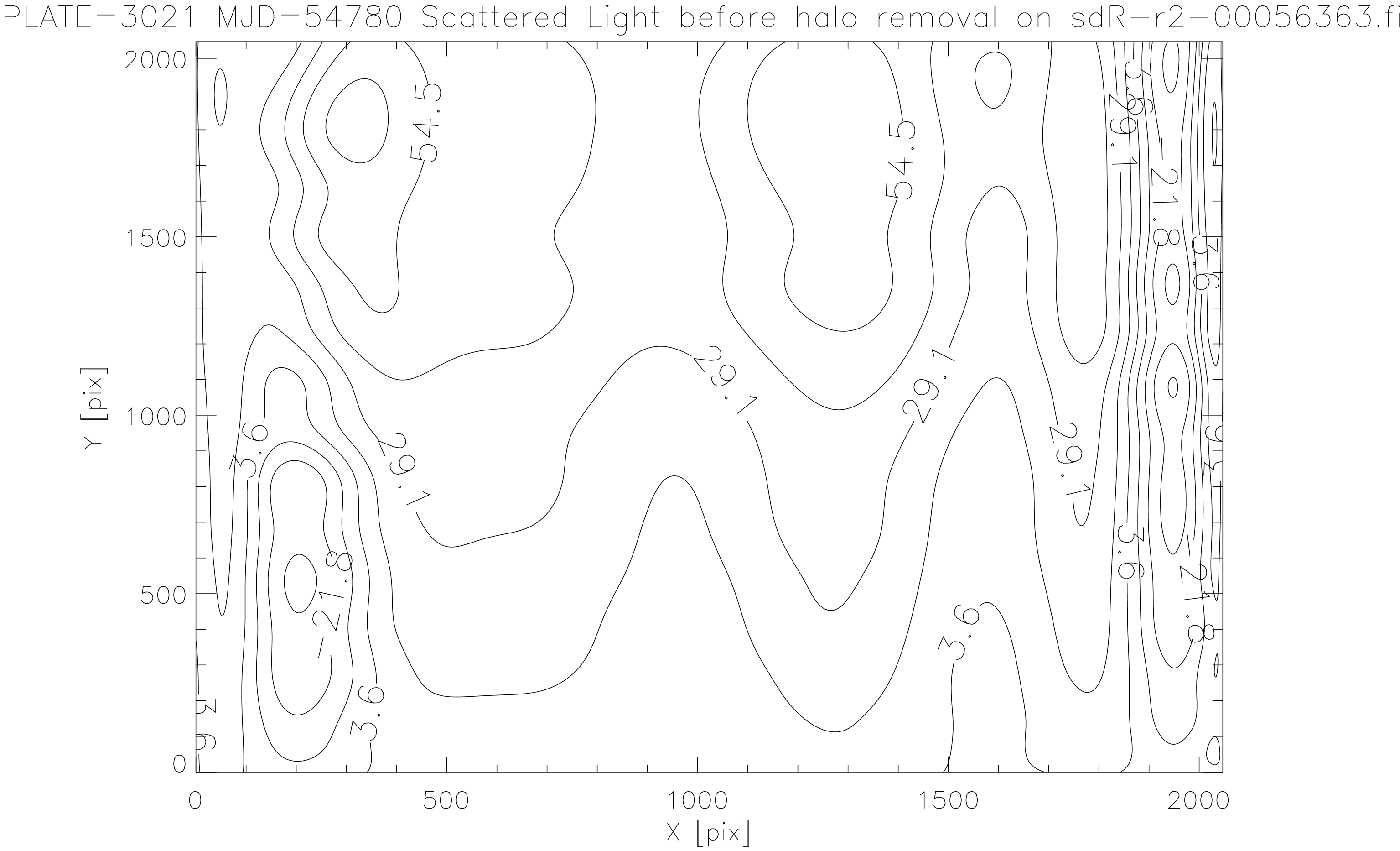
Number of sky fibers = 114

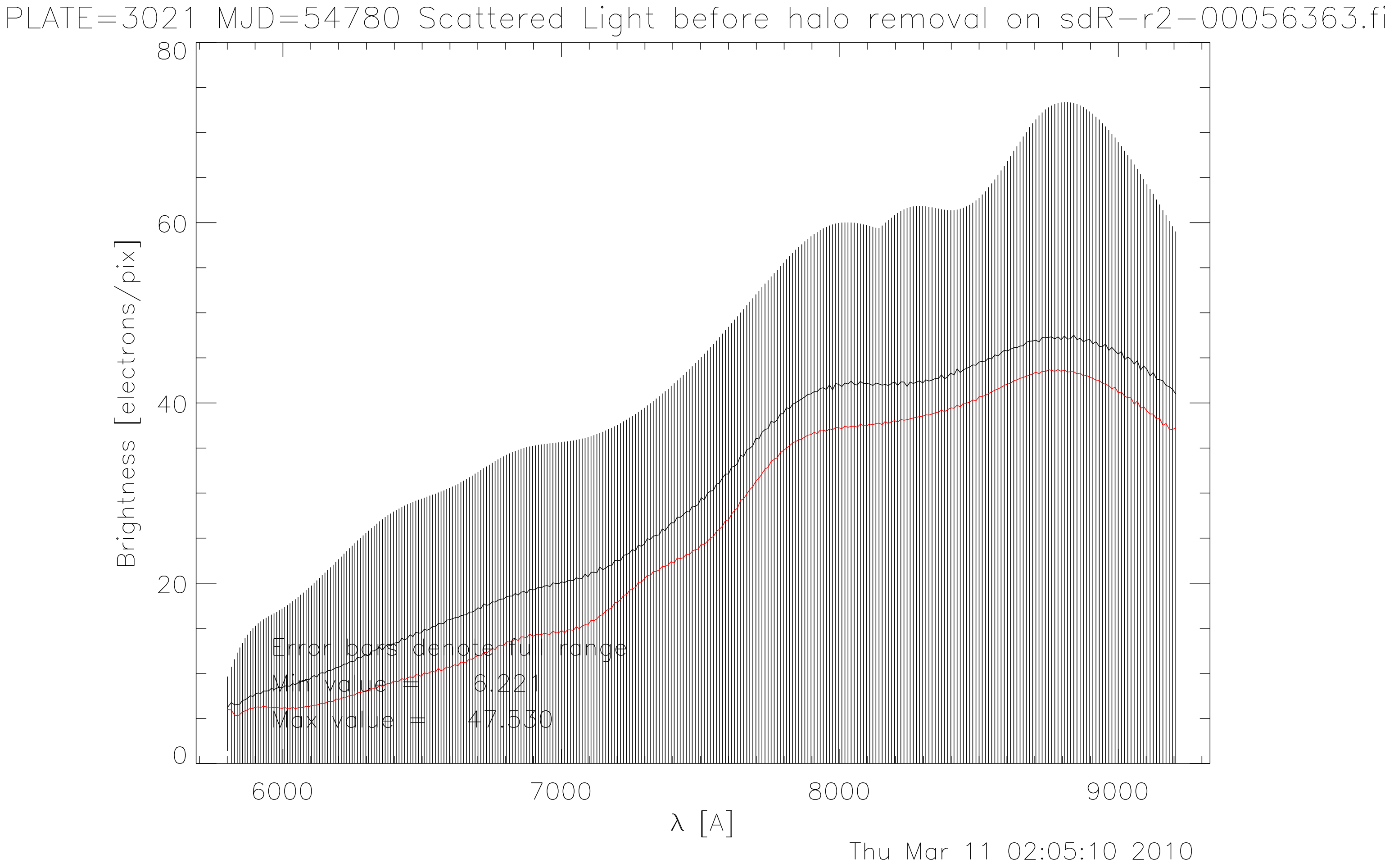
PLATE=3021 MJD=54780 sdR-r2-00056362.fit 2D Sky-subtraction Rescaled Errors

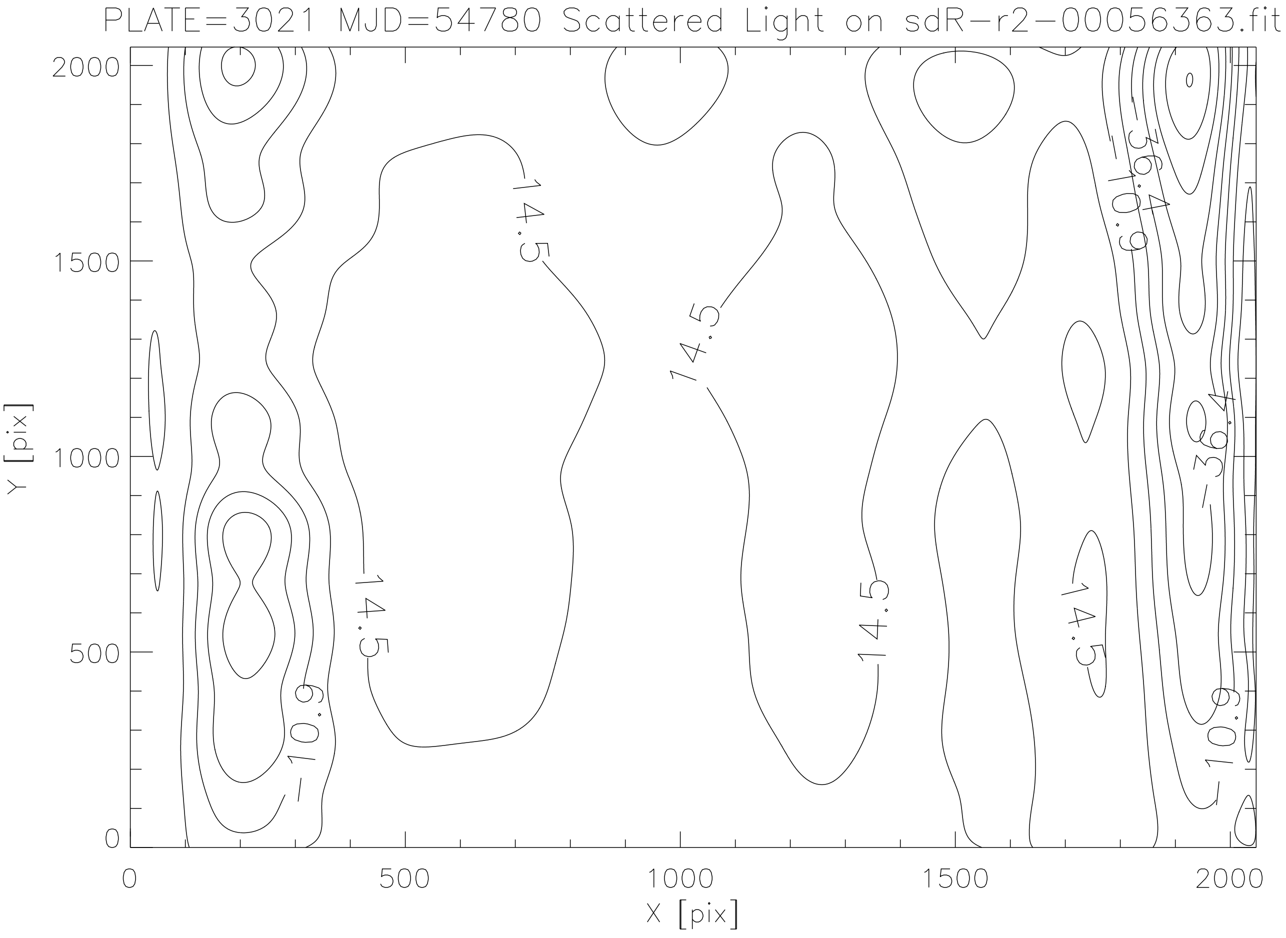

PLATE=3021 MJD=54780 sdR-r2-00056362.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
300
200
100
0
−100
−200
RED = sky fiber
Dispersion = 37.25 %
0
50
100
150
200
250
300
Fiber number
Flux (7343.0)/Airmass
300
200
100
0
−100
−200
0
100
200
300
400
Focal Distance [mm]
Flux (7343.0)/Airmass
300
200
100
0
−100
−200
1.065
1.070
1.075
1.080
1.085
1.090
Airmass


PLATE=3021 MJD=54780 sdR−r2−00056362.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
800
600
400
200
0
−200
−400
RED = sky fiber
Dispersion = 32.08 %
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
1.065
1.070
1.075
1.080
1.085
1.090
Airmass

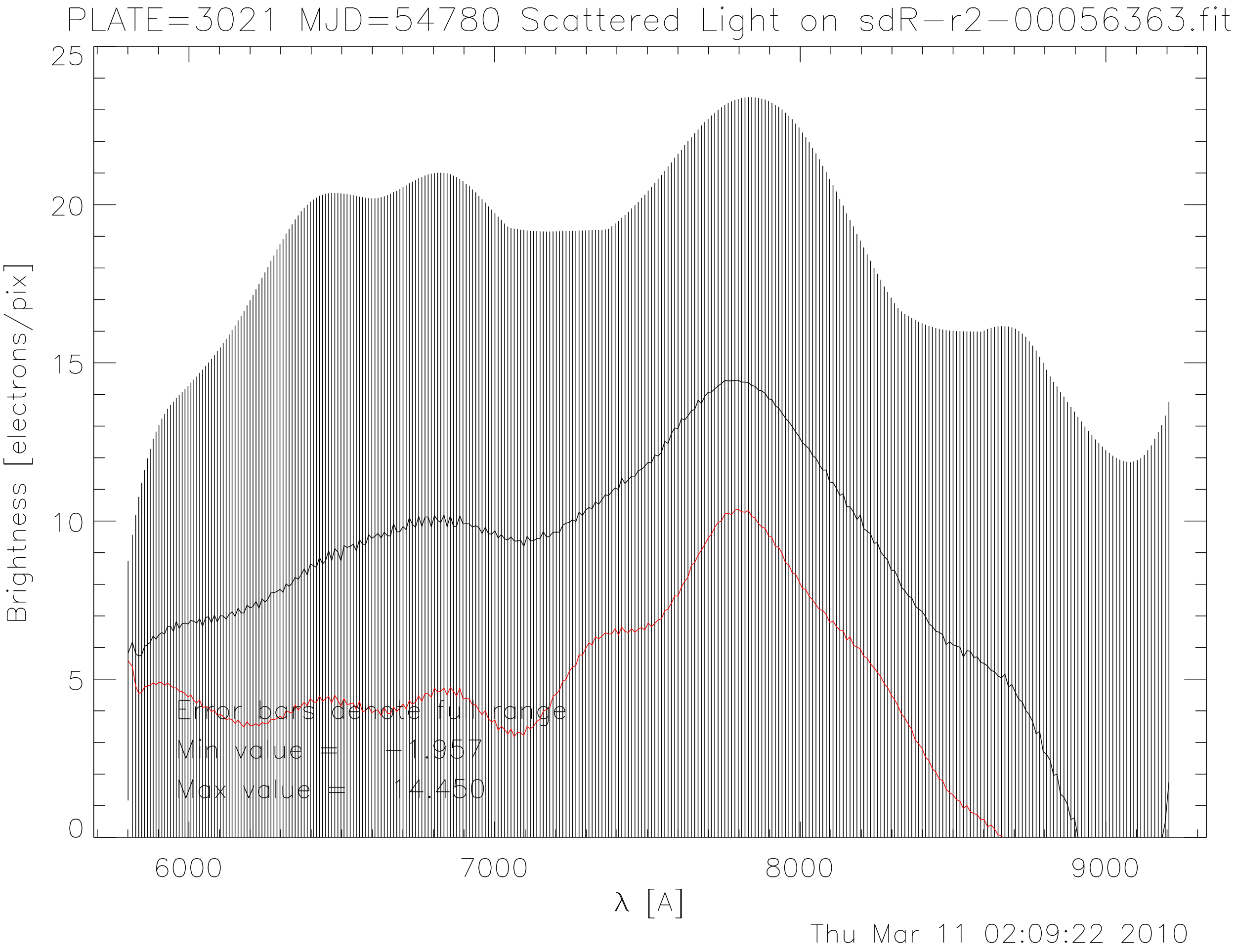

PLATE=3021 MJD=54780 Fiber−Flats for sdR−r2−00056360.fit
BLACK = Median value
ENVELOPE = 1% to 99% range
GREEN = Outlier points
Min value = 0.652
Max value = 1.230
Fiber−Flat
0.0
0.5
1.0
1.5
6000
6500
7000
7500
8000
8500
9000
λ [A]
Thu Mar 11 02:03:45 2010

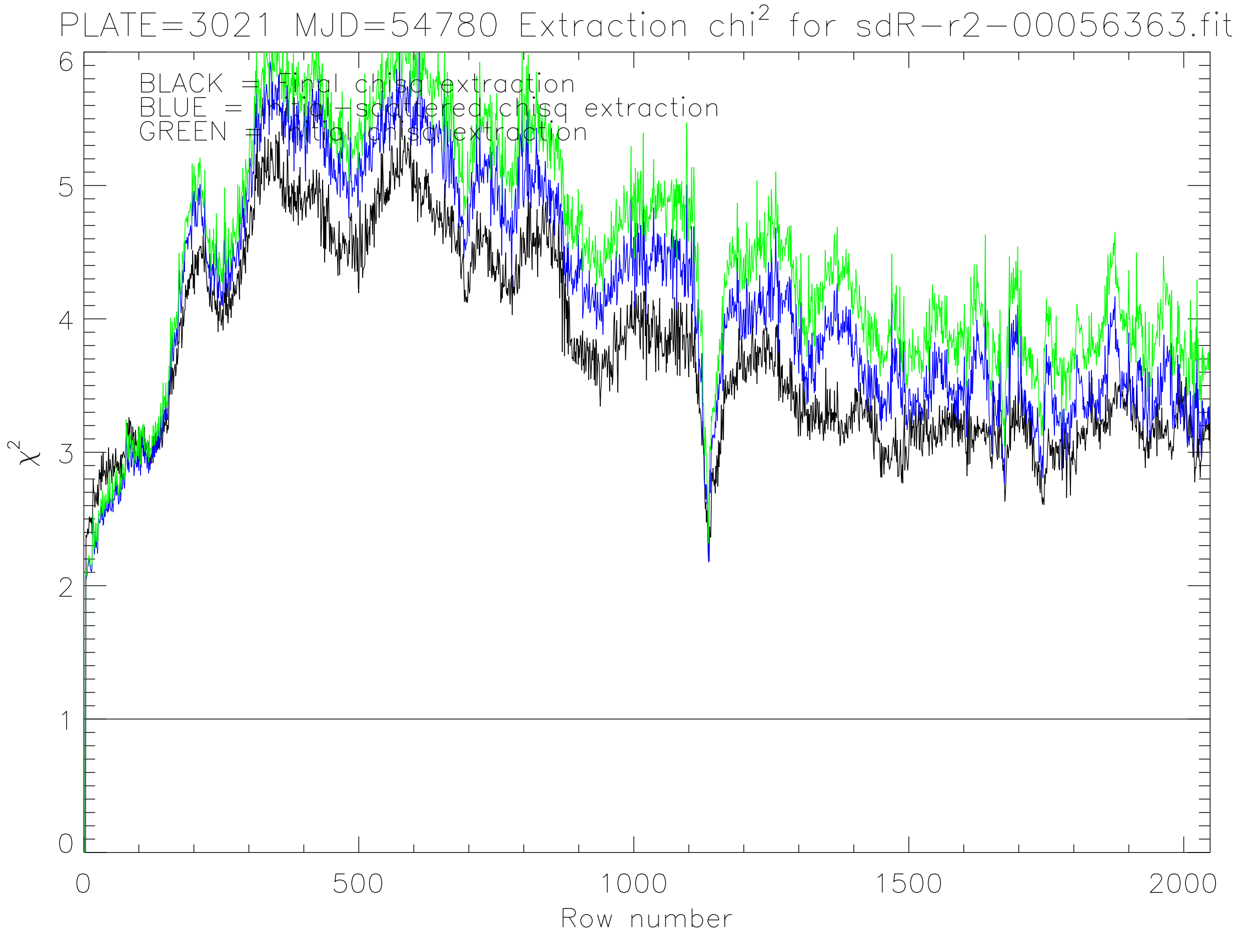

PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-r2-00056363.fi
Y [pix]
X [pix]
0
500
1000
1500
2000
0
500
1000
1500
2000
54.5
54.5
29.1
29.1
29.1
29.1
29.1
29.1
3.6
3.6
3.6
3.6
3.6
3.6
3.6
-21.8
-21.8
-21.8
-21.8

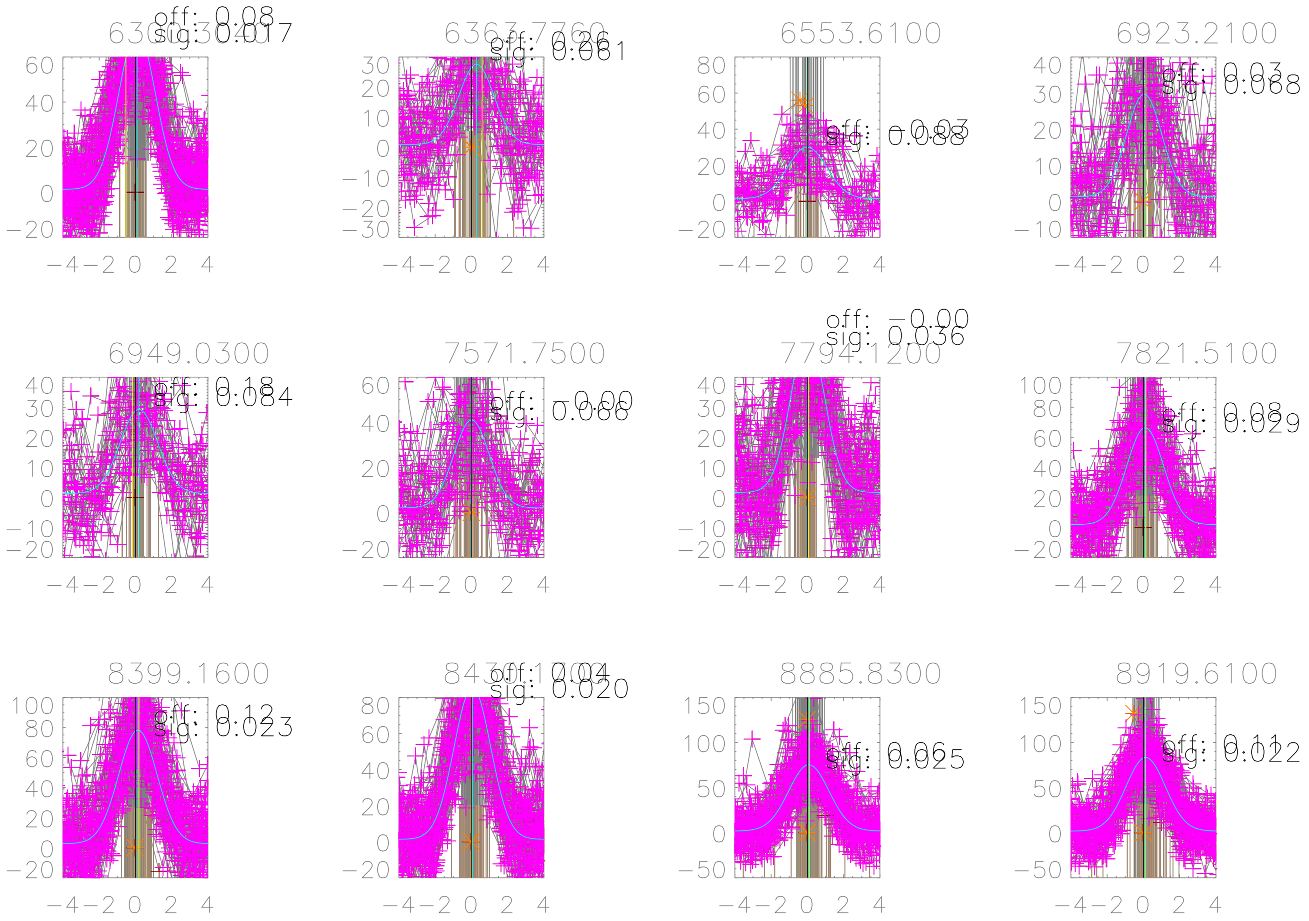

PLATE=3021 MJD=54780 Scattered Light before halo removal on sdR-r2-00056363.fi
Brightness [electrons/pix]
0
20
40
60
80
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = 6.221
Max value = 47.530
Thu Mar 11 02:05:10 2010



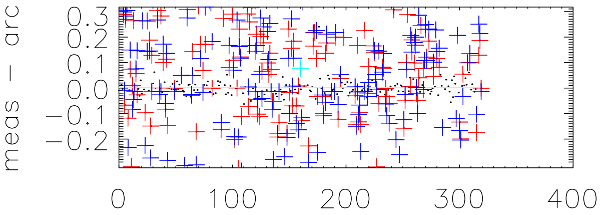
PLATE=3021 MJD=54780 Scattered Light on sdR-r2-00056363.fit


PLATE=3021 MJD=54780 Scattered Light on sdR-r2-00056363.fit
Brightness [electrons/pix]
25
20
15
10
5
0
6000
7000
8000
9000
λ [A]
Error bars denote full range
Min value = -1.957
Max value = 14.450
Thu Mar 11 02:09:22 2010

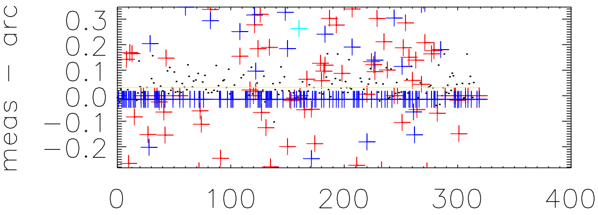

PLATE=3021 MJD=54780 Extraction chi^2 for sdR-r2-00056363.fit
BLACK = Final chisq extraction
BLUE = Initial-scattered chisq extraction
GREEN = Initial chisq extraction
χ^2
0
1
2
3
4
5
6
0
500
1000
1500
2000
Row number


off: 0.08
sig: 0.017
6363.7760
off: 0.26
sig: 0.061
6553.6100
off: −0.03
sig: 0.088
6923.2100
off: 0.03
sig: 0.068
6949.0300
off: 0.18
sig: 0.084
7571.7500
off: −0.00
sig: 0.066
7794.1200
off: −0.00
sig: 0.036
7821.5100
off: 0.08
sig: 0.029
8399.1600
off: 0.12
sig: 0.023
off: 0.04
sig: 0.020
8885.8300
off: 0.06
sig: 0.025
8919.6100
off: 0.11
sig: 0.022
−4 −2 0 2 4

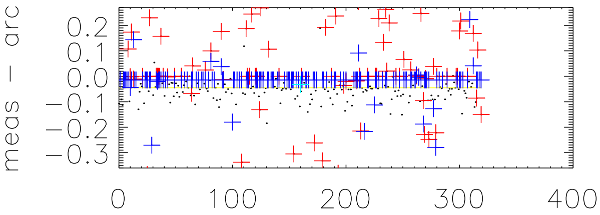
6300.3040



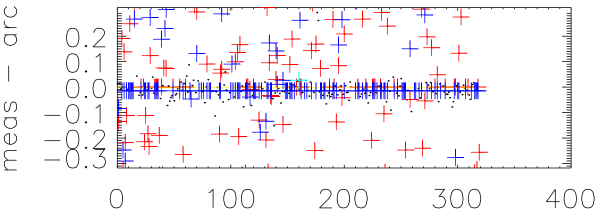
6363.7760



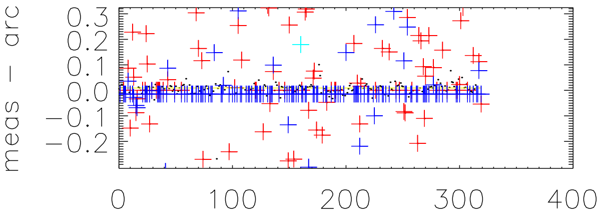
6553.6100



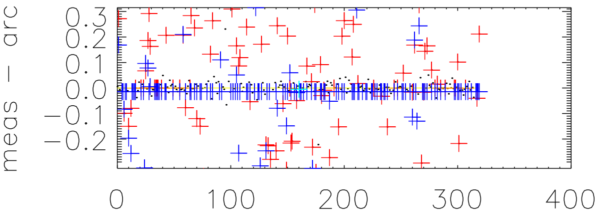
6923.2100



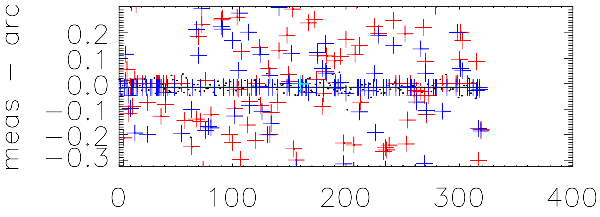
6949.0300



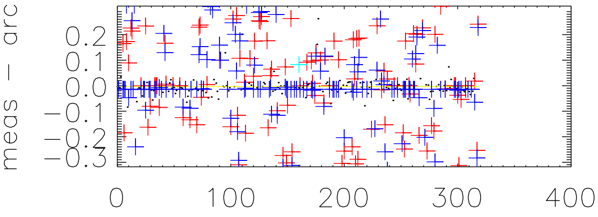
7571.7500



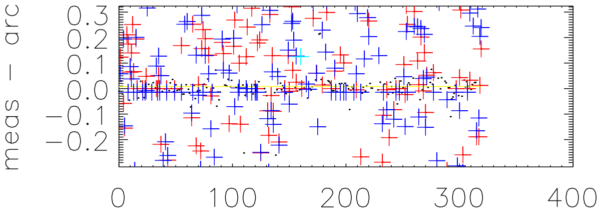
7794.1200



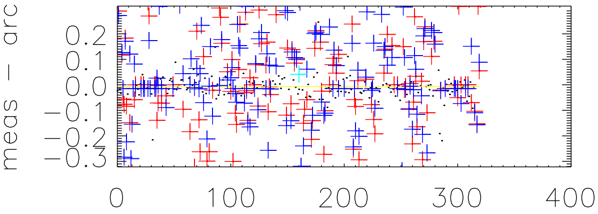
7821.5100



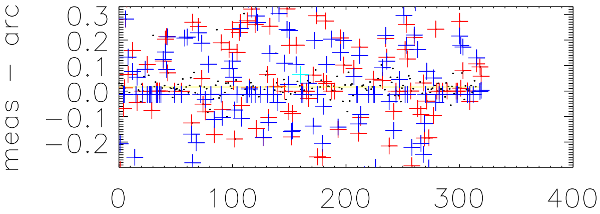
8399.1600



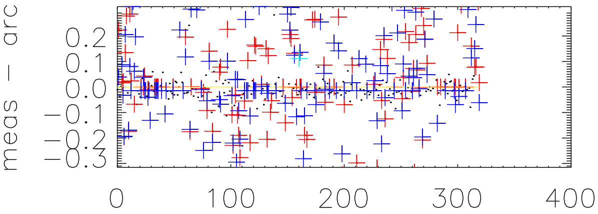
8430.1700

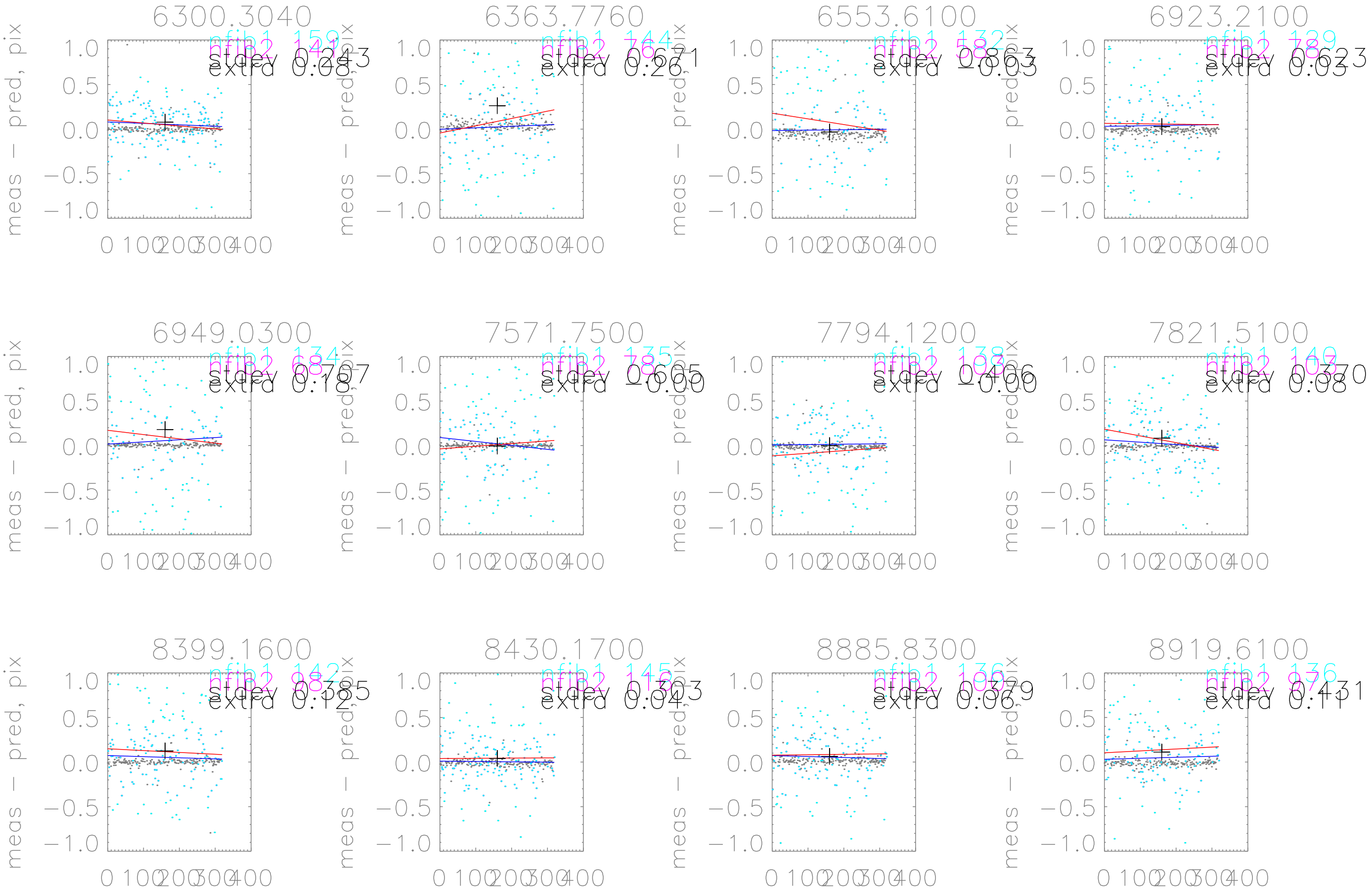


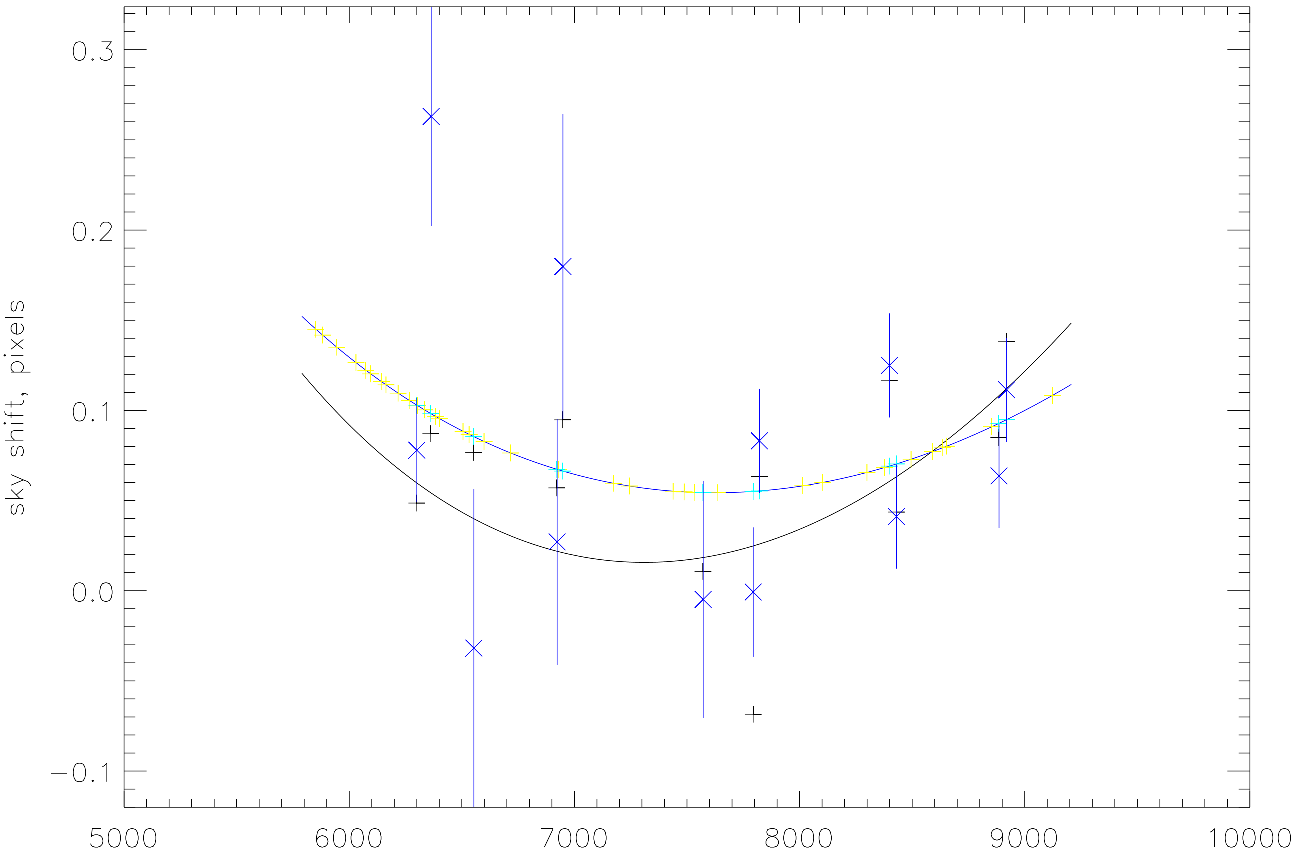
8885.8300



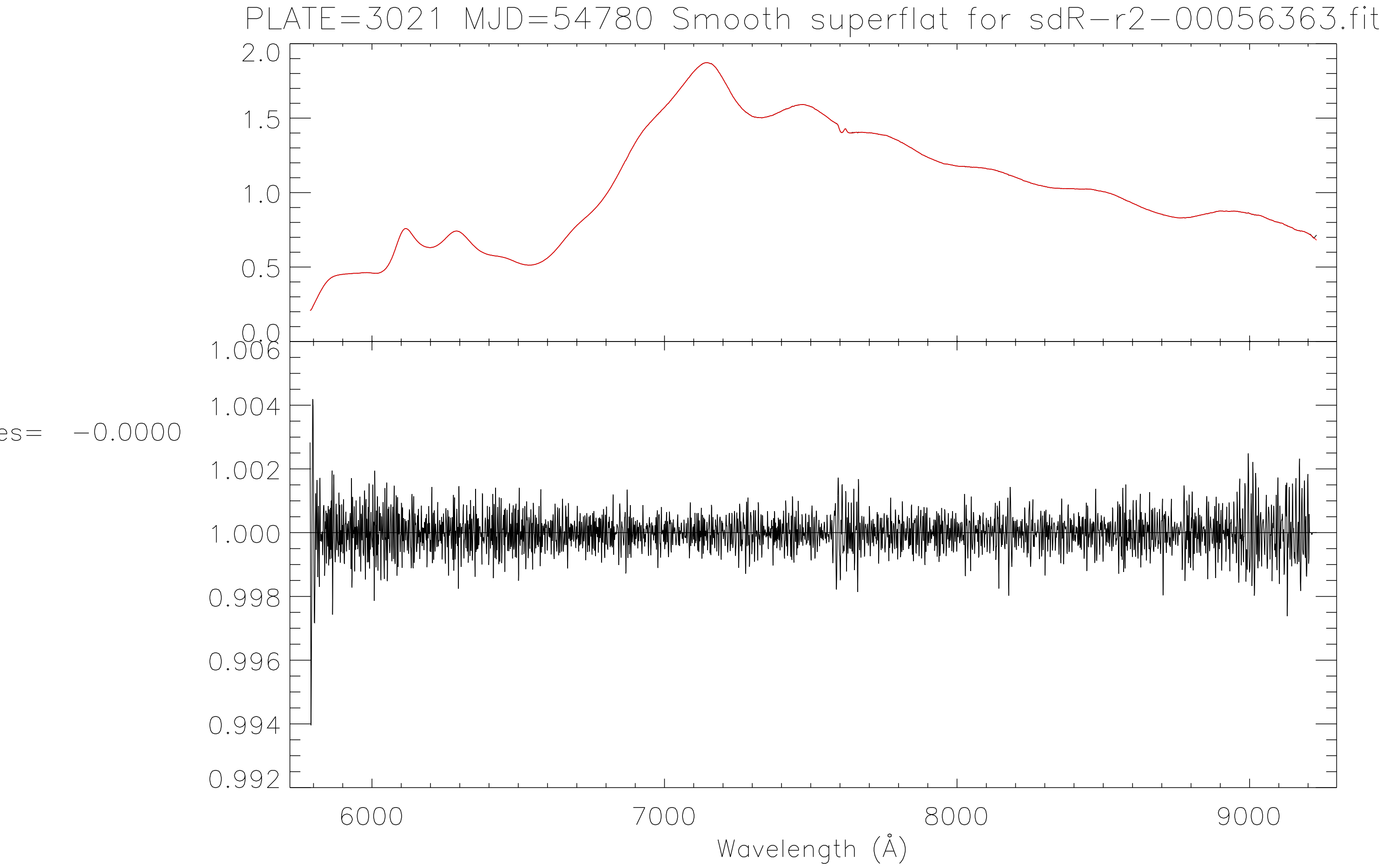
8919.6100

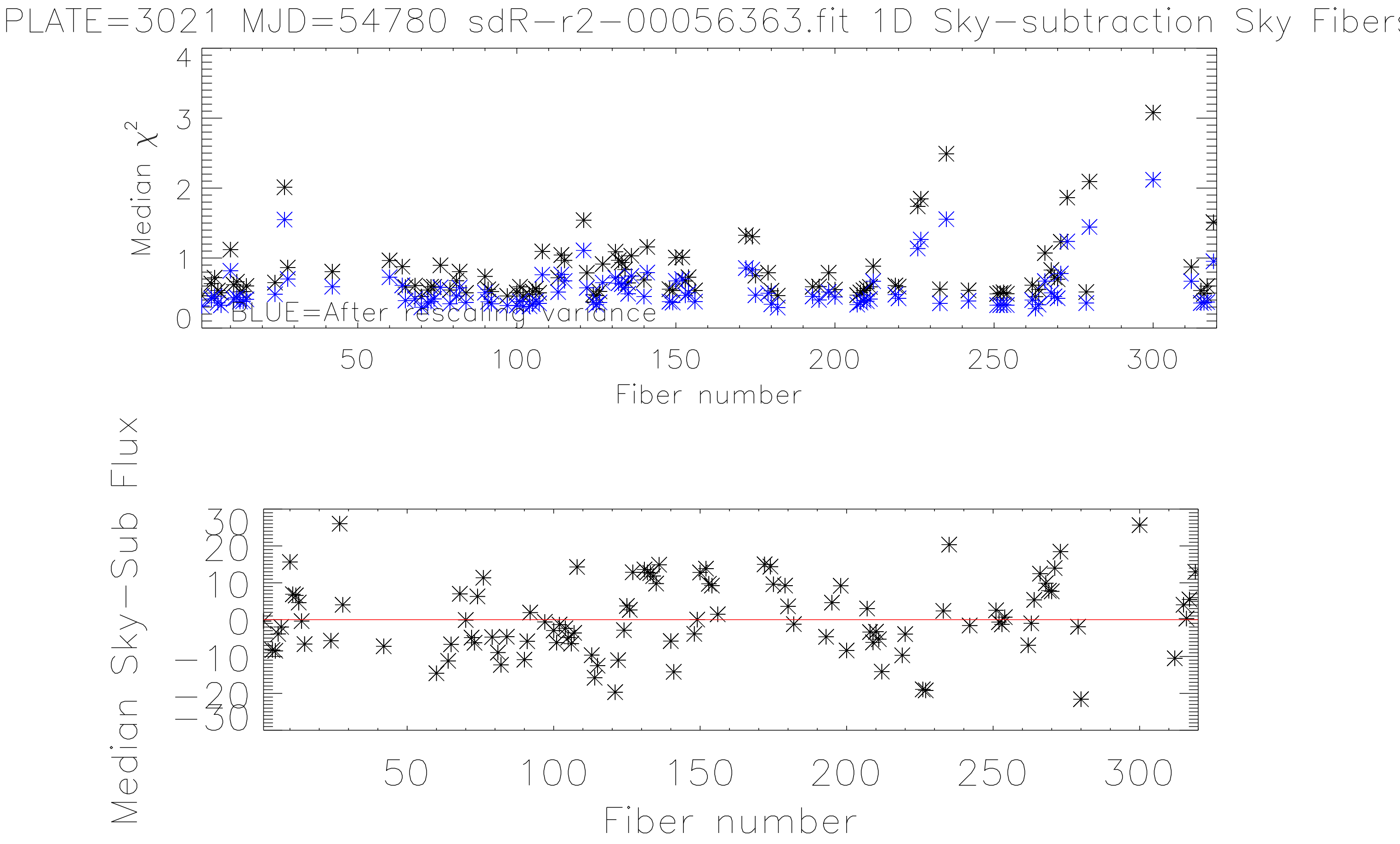


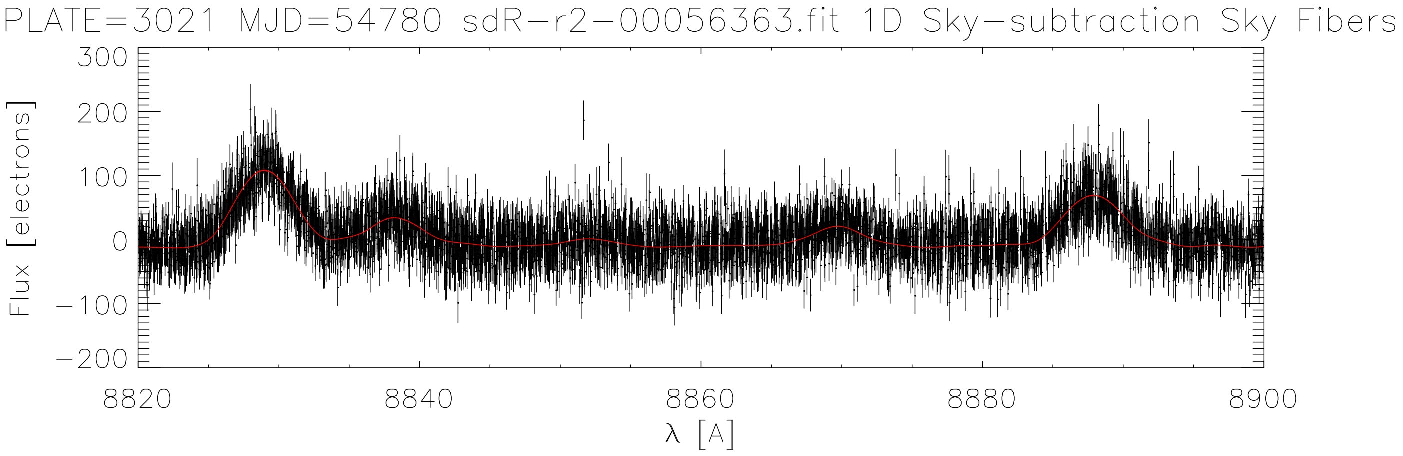

6300.3040
nfib1 159
nfib2 141
stdev 0.243
extrd 0.08
6363.7760
nfib1 144
nfib2 76
stdev 0.671
extrd 0.26
6553.6100
nfib1 132
nfib2 58
stdev 0.863
extrd −0.03
6923.2100
nfib1 139
nfib2 78
stdev 0.623
extrd 0.03
6949.0300
nfib1 134
nfib2 68
stdev 0.787
extrd 0.18
7571.7500
nfib1 135
nfib2 78
stdev 0.605
extrd −0.00
7794.1200
nfib1 138
nfib2 104
stdev 0.406
extrd −0.00
7821.5100
nfib1 149
nfib2 103
stdev 0.370
extrd 0.08
8399.1600
nfib1 142
nfib2 98
stdev 0.385
extrd 0.12
8430.1700
nfib1 145
nfib2 116
stdev 0.303
extrd 0.04
8885.8300
nfib1 136
nfib2 102
stdev 0.379
extrd 0.06
8919.6100
nfib1 136
nfib2 97
stdev 0.431
extrd 0.11
meas − pred, pix
1.0
0.5
0.0
−0.5
−1.0
0
100
200
300
400

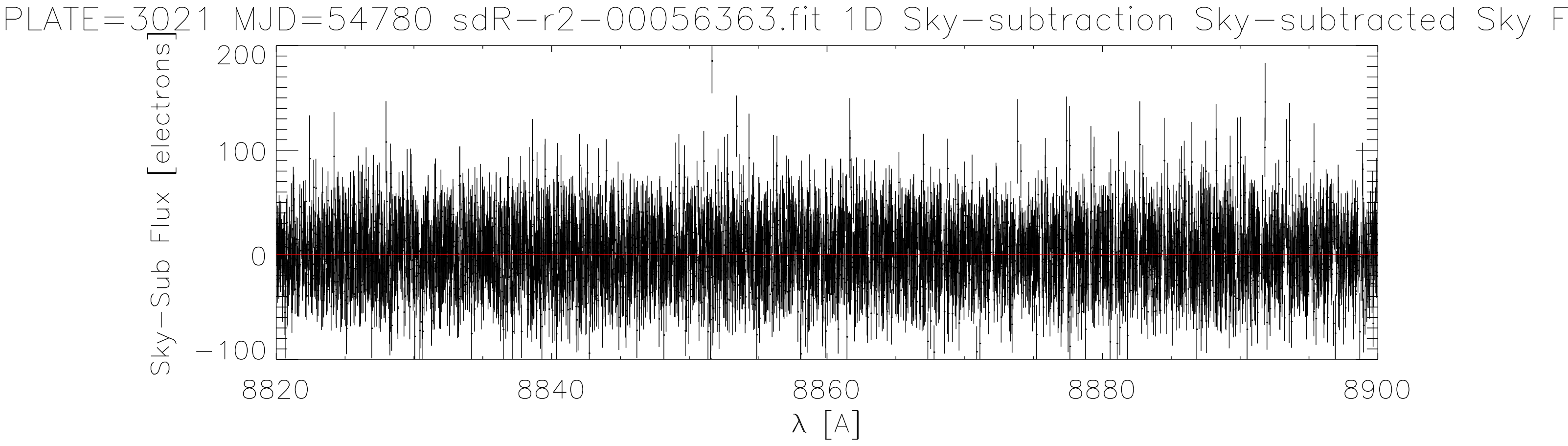


sky shift, pixels
0.3
0.2
0.1
0.0
−0.1
5000
6000
7000
8000
9000
10000


PLATE=3021 MJD=54780 Smooth superflat for sdR-r2-00056363.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
0.992
es= −0.0000
6000
7000
8000
9000
Wavelength (Å)

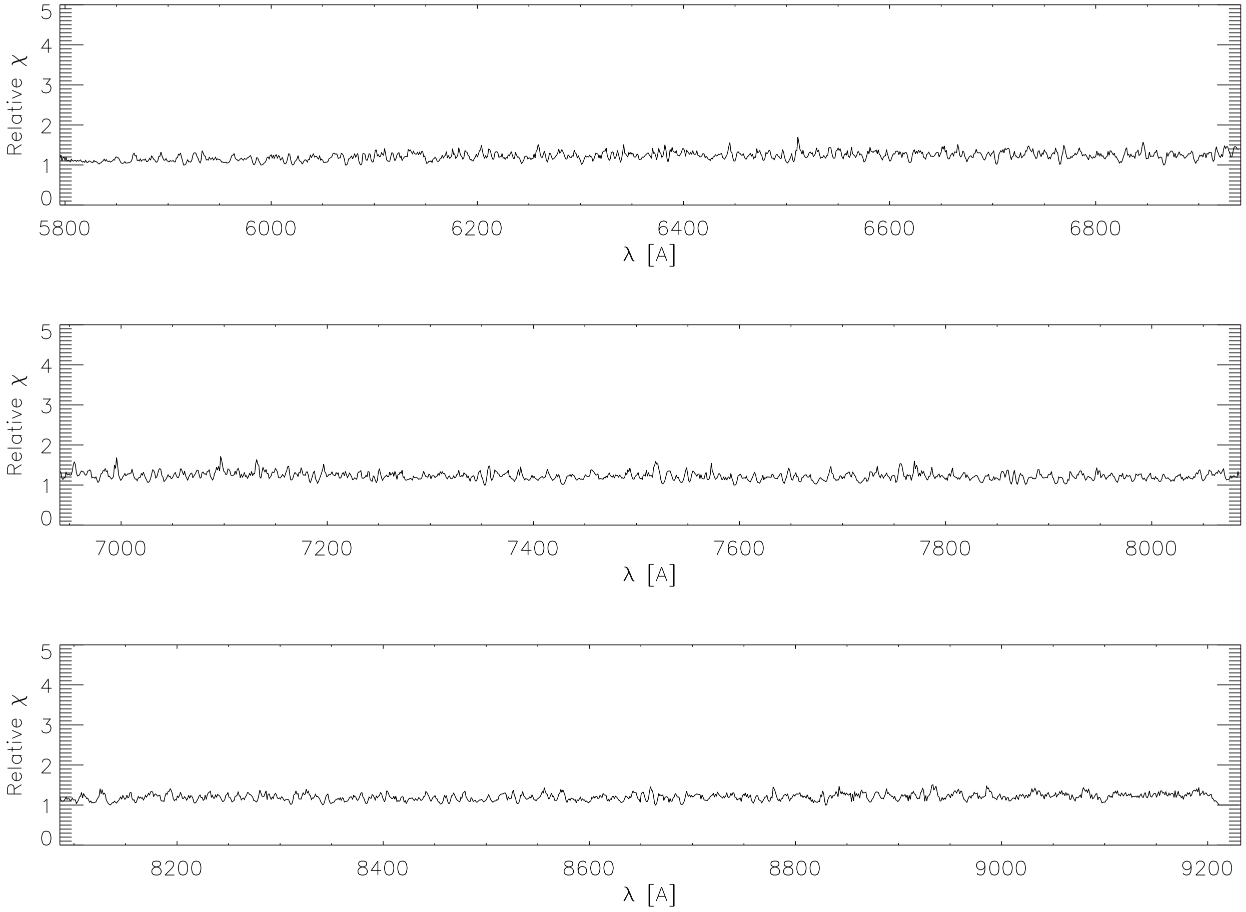

PLATE=3021 MJD=54780 sdR-r2-00056363.fit 1D Sky-subtraction Sky Fibers
Median χ^2
0
1
2
3
4
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
−10
−20
−30
50
100
150
200
250
300
Fiber number

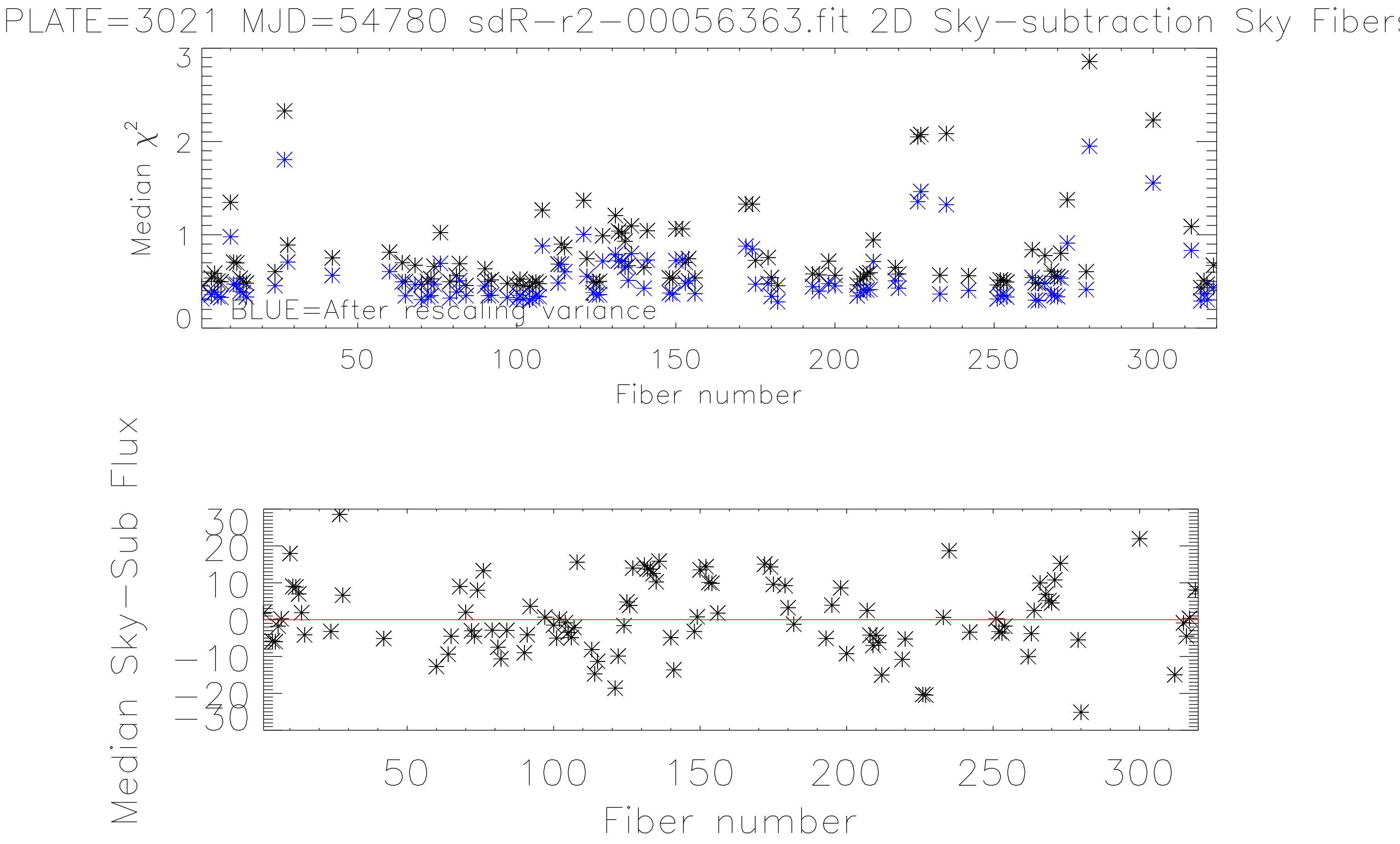

PLATE=3021 MJD=54780 sdR-r2-00056363.fit 1D Sky-subtraction Sky Fibers
Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]

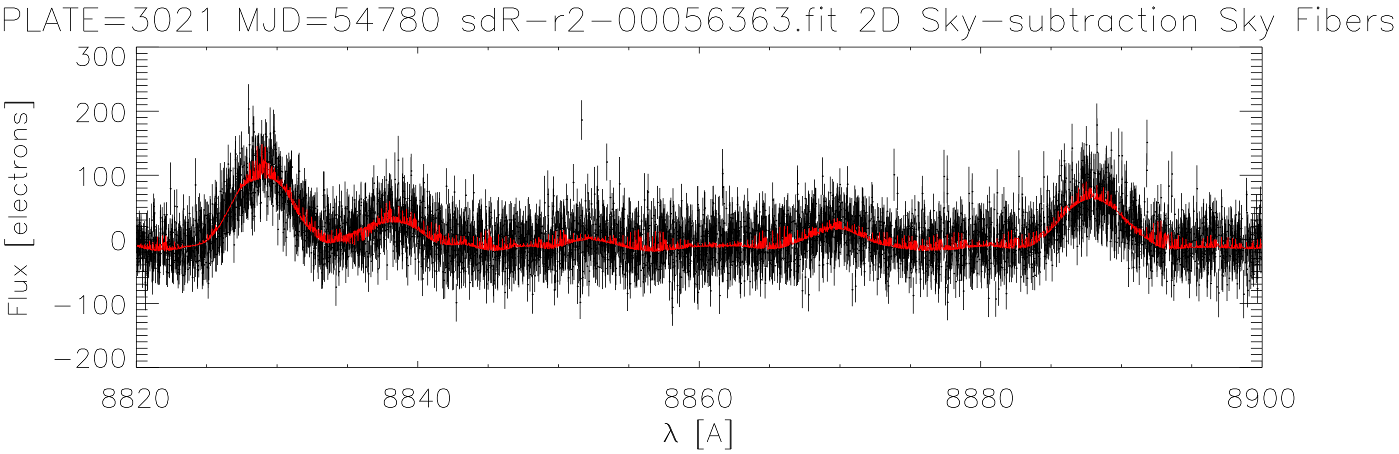

PLATE=3021 MJD=54780 sdR-r2-00056363.fit 1D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
8820
8840
8860
8880
8900
λ [A]

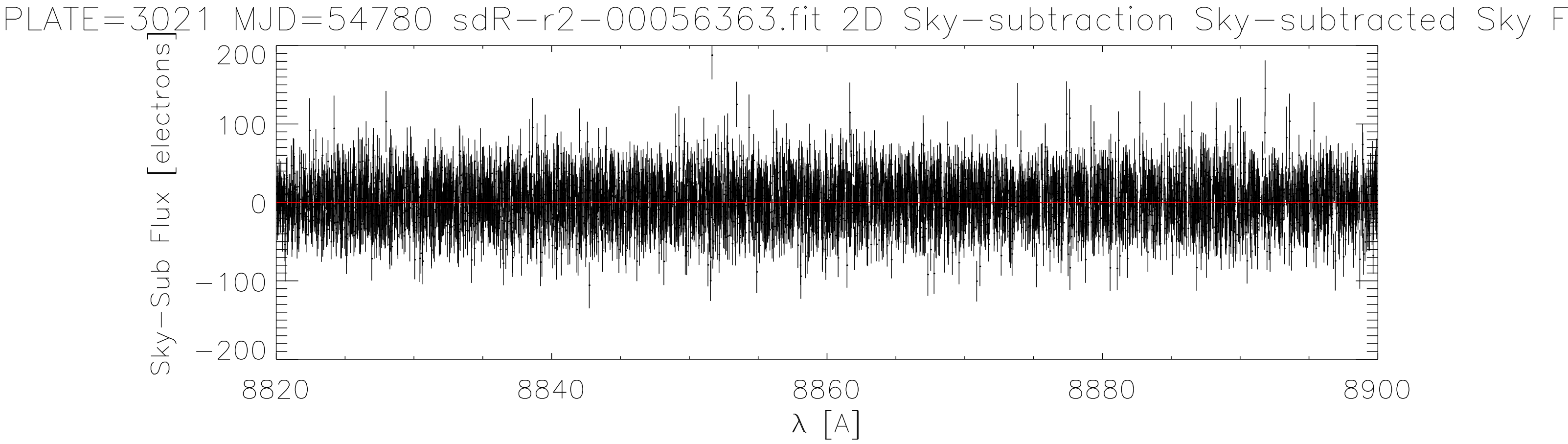
Number of sky fibers = 108

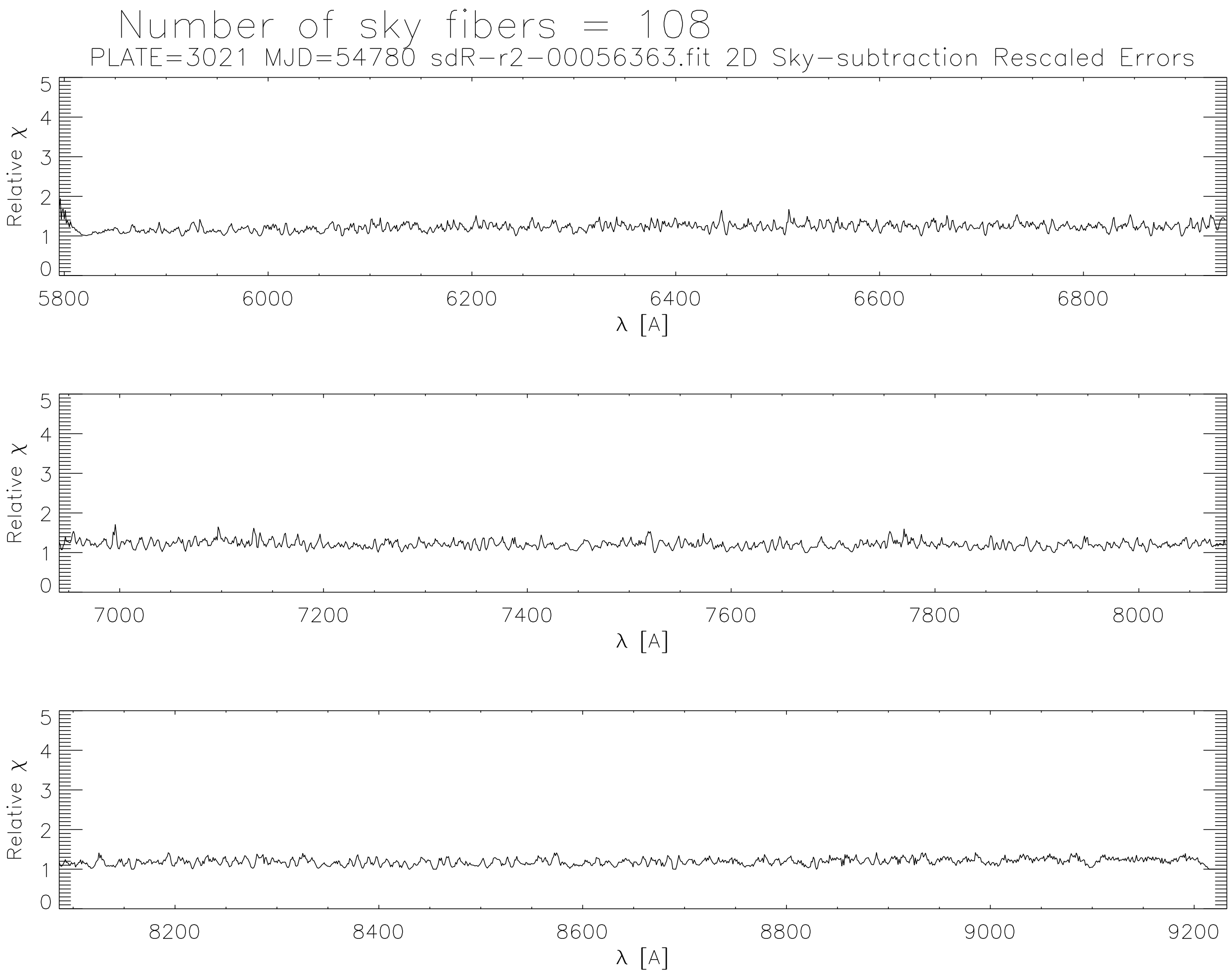
PLATE=3021 MJD=54780 sdR-r2-00056363.fit 1D Sky-subtraction Rescaled Errors

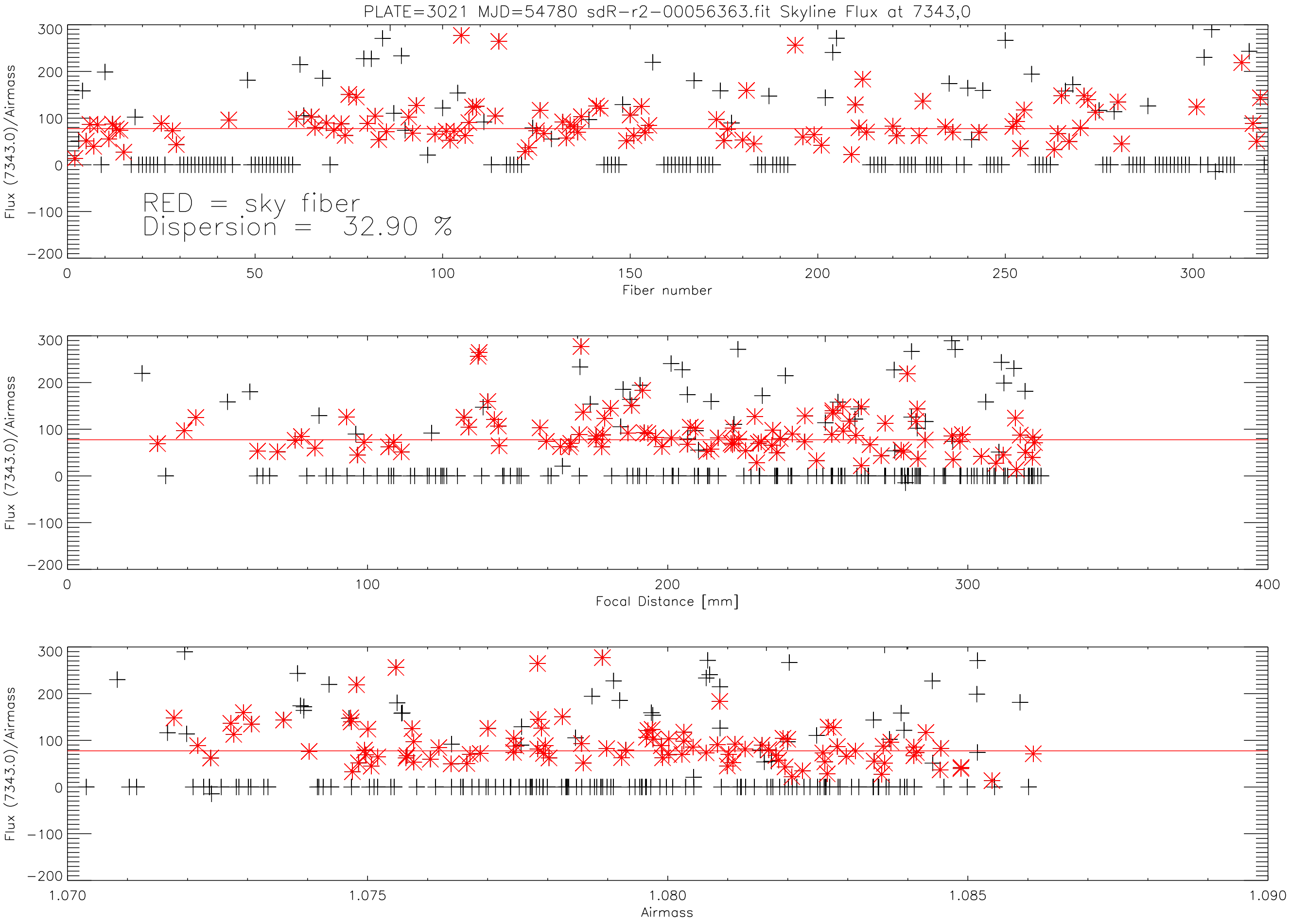


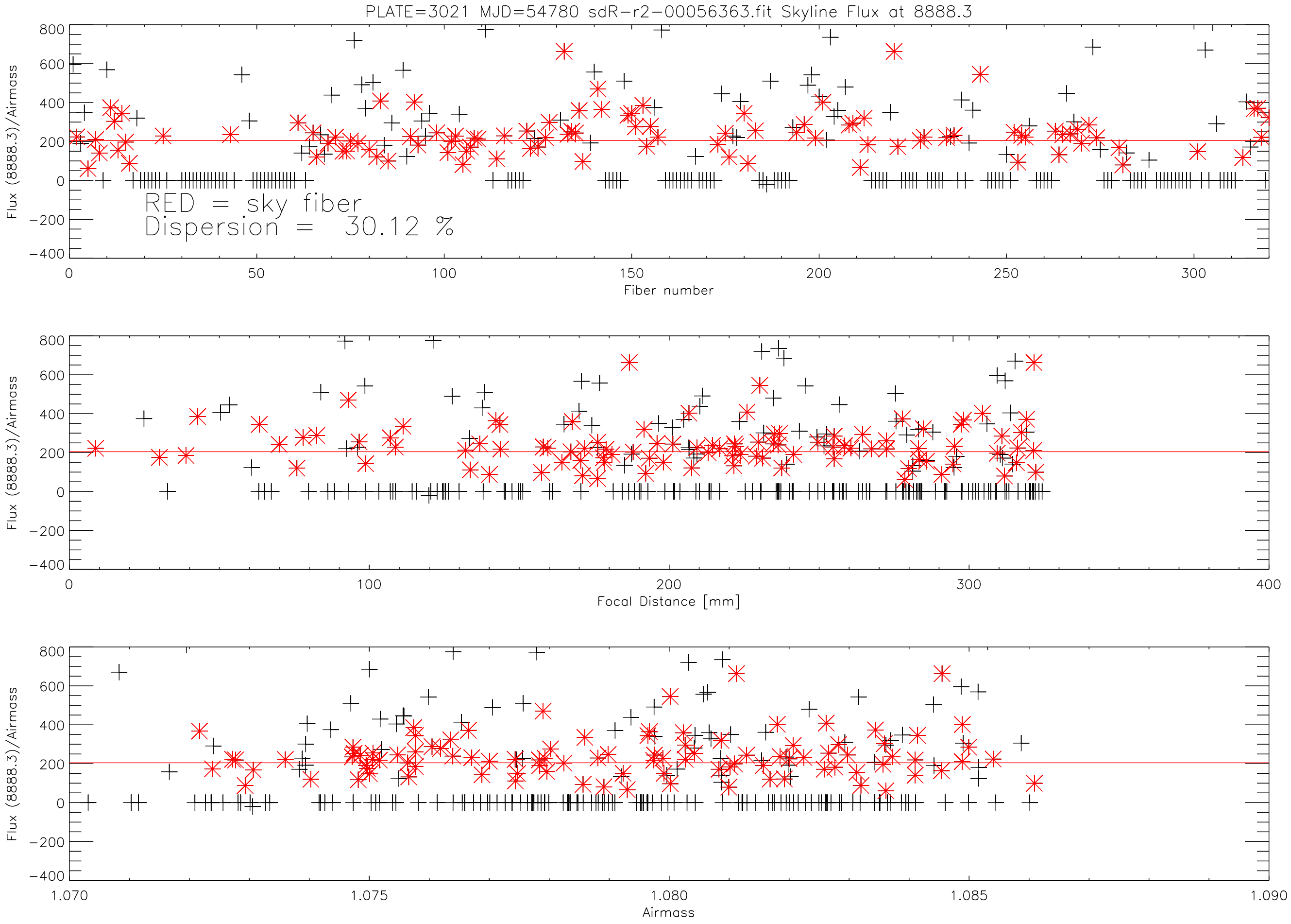

PLATE=3021 MJD=54780 sdR-r2-00056363.fit 2D Sky-subtraction Sky Fibers
Median χ^2
0
1
2
3
BLUE=After rescaling variance
50
100
150
200
250
300
Fiber number
Median Sky-Sub Flux
30
20
10
0
-10
-20
-30
50
100
150
200
250
300
Fiber number


PLATE=3021 MJD=54780 sdR-r2-00056363.fit 2D Sky-subtraction Sky Fibers
Flux [electrons]
300
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]


PLATE=3021 MJD=54780 sdR-r2-00056363.fit 2D Sky-subtraction Sky-subtracted Sky F
Sky-Sub Flux [electrons]
200
100
0
−100
−200
8820
8840
8860
8880
8900
λ [A]


Number of sky fibers = 108
PLATE=3021 MJD=54780 sdR-r2-00056363.fit 2D Sky-subtraction Rescaled Errors
Relative χ
0
1
2
3
4
5
5800
6000
6200
6400
6600
6800
λ [A]
7000
7200
7400
7600
7800
8000
8200
8400
8600
8800
9000
9200


PLATE=3021 MJD=54780 sdR-r2-00056363.fit Skyline Flux at 7343,0
Flux (7343.0)/Airmass
300
200
100
0
−100
−200
RED = sky fiber
Dispersion = 32.90 %
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
1.070
1.075
1.080
1.085
1.090
Airmass


PLATE=3021 MJD=54780 sdR−r2−00056363.fit Skyline Flux at 8888.3
Flux (8888.3)/Airmass
800
600
400
200
0
−200
−400
RED = sky fiber
Dispersion = 30.12 %
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
1.070
1.075
1.080
1.085
1.090
Airmass