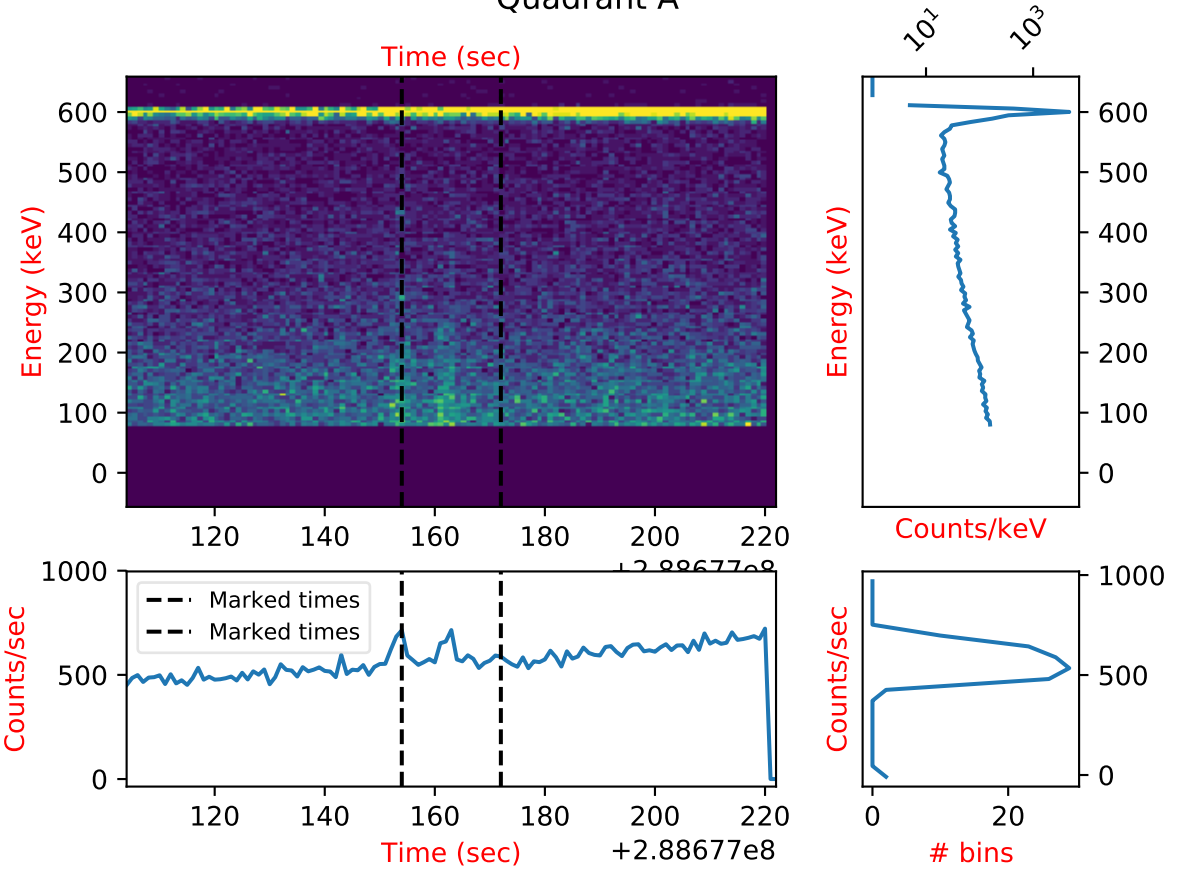
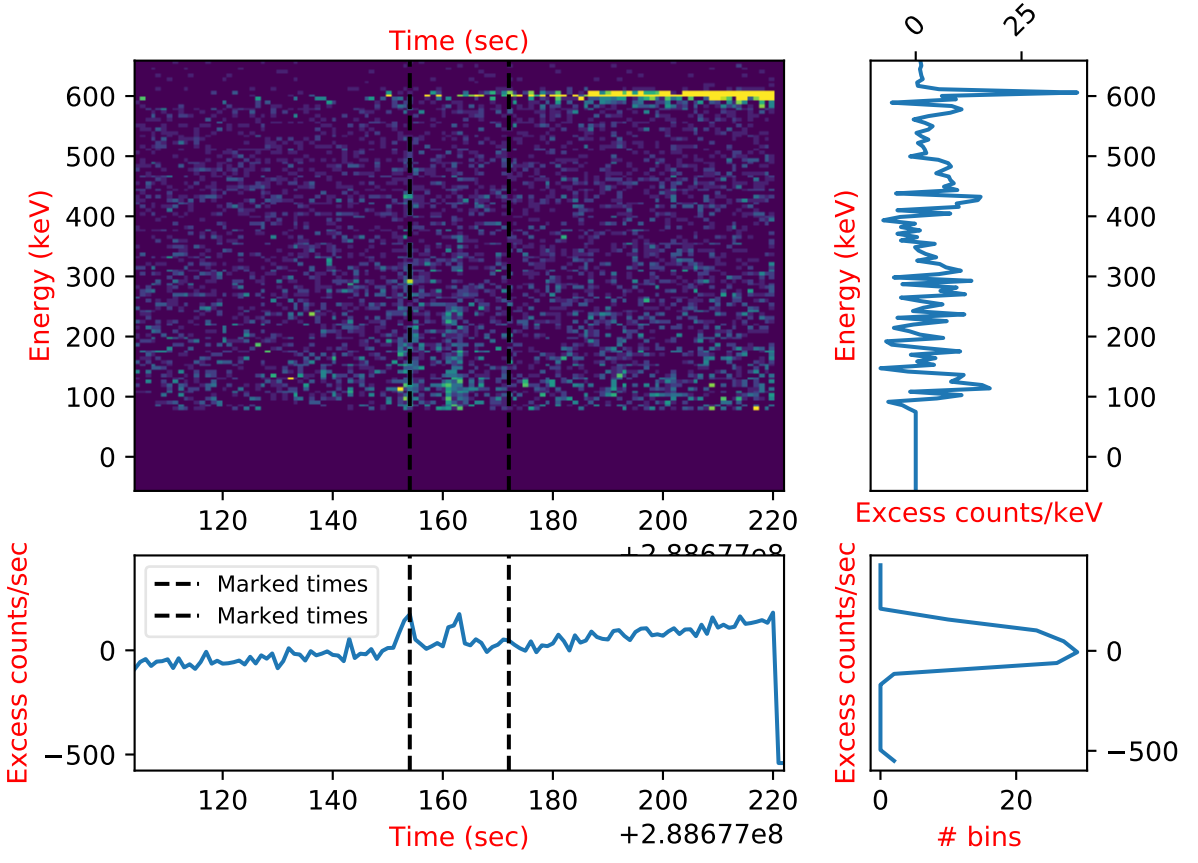
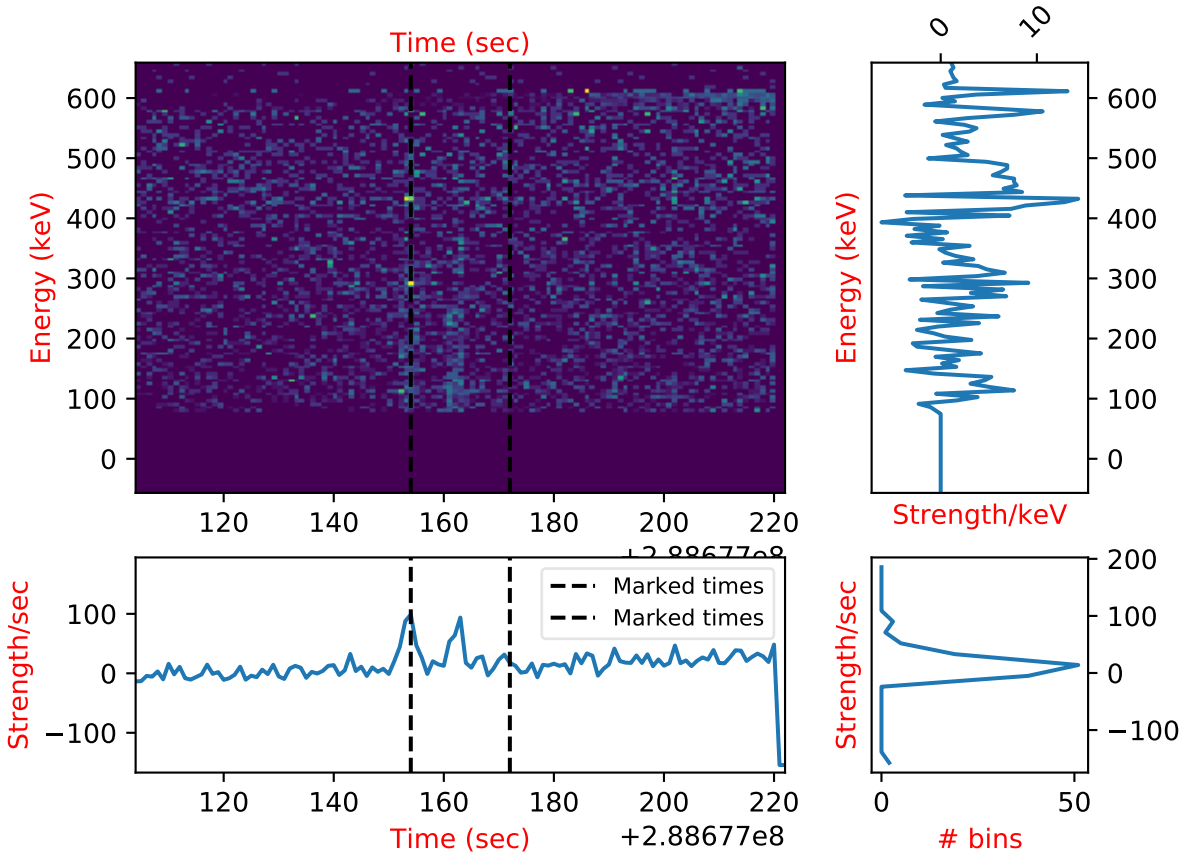
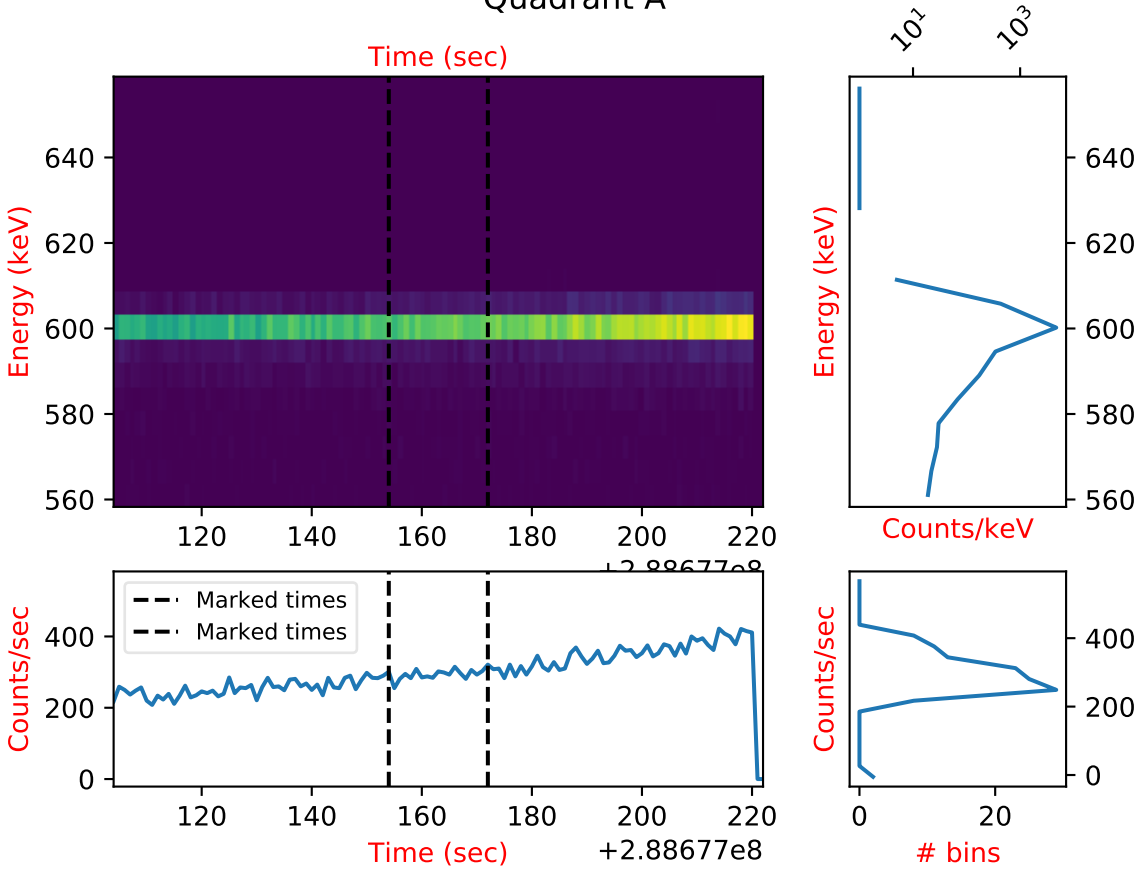
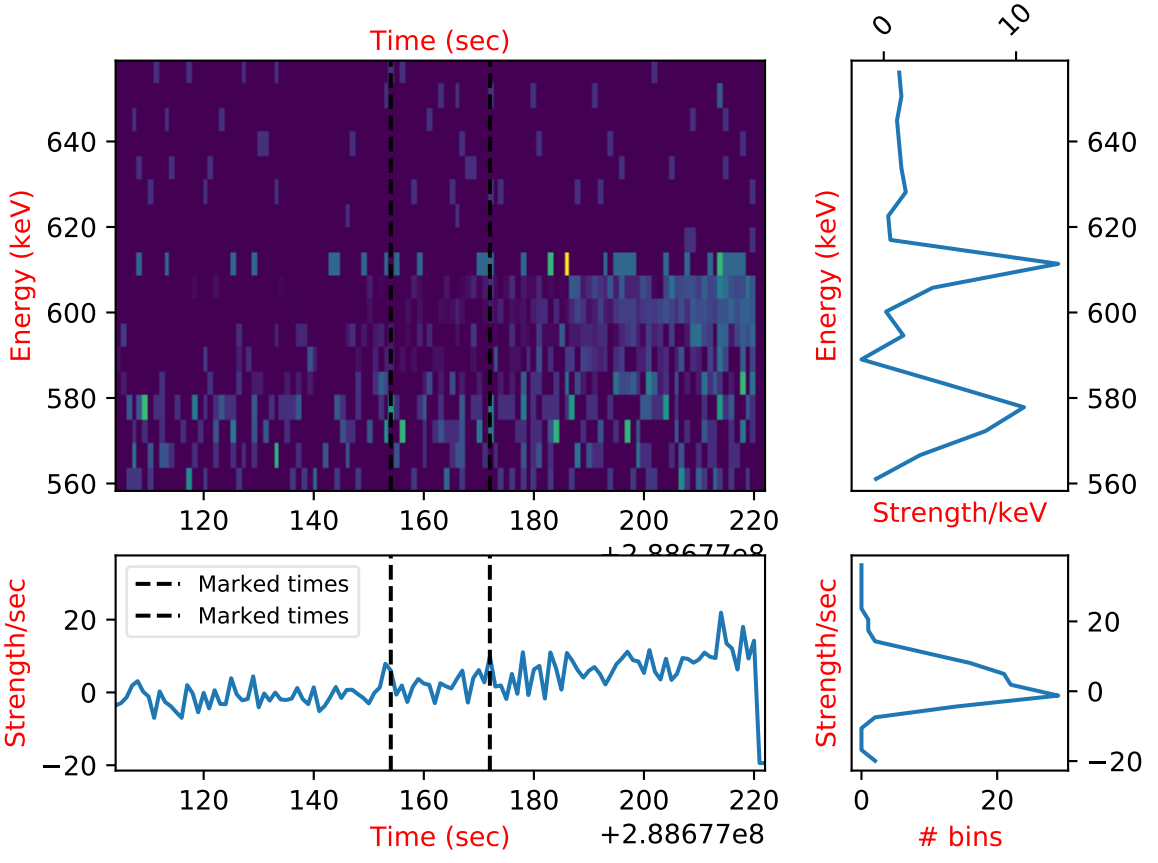
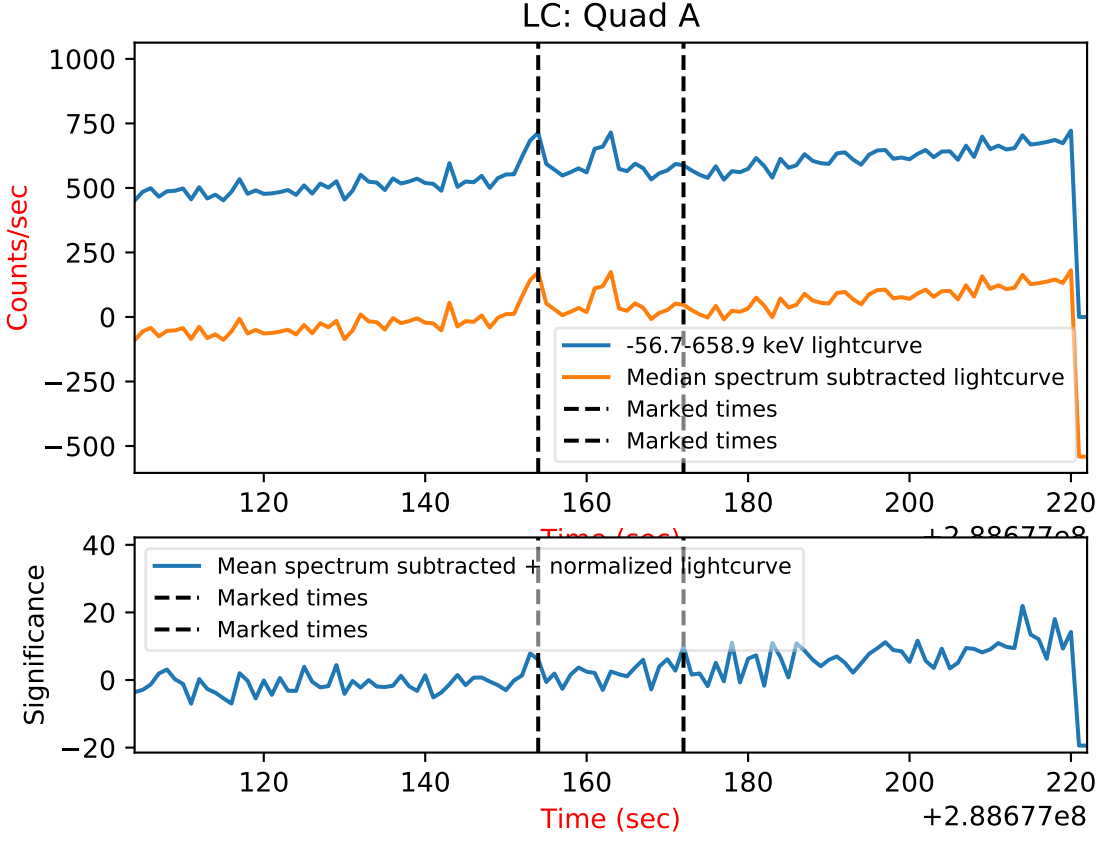

Quadrant A
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
10^1
10^3
Energy (keV)
Counts/keV
Marked times
Marked times
Counts/sec
1000
500
0
Time (sec)
+2.88677e8
Counts/sec
bins
20

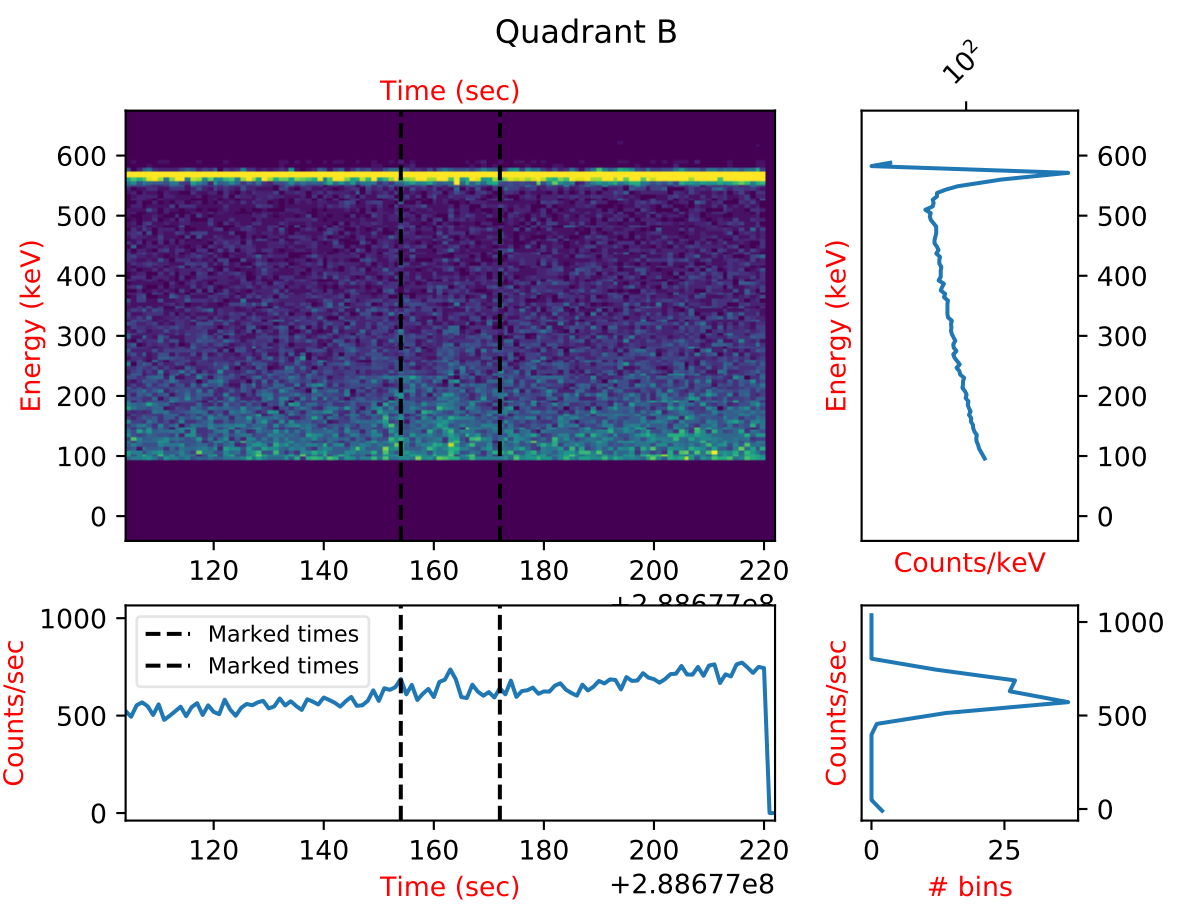

Quadrant A
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
+2.88677e8
0
25
Excess counts/keV
Excess counts/sec
Marked times
Marked times
0
−500
Time (sec)
+2.88677e8
bins
20

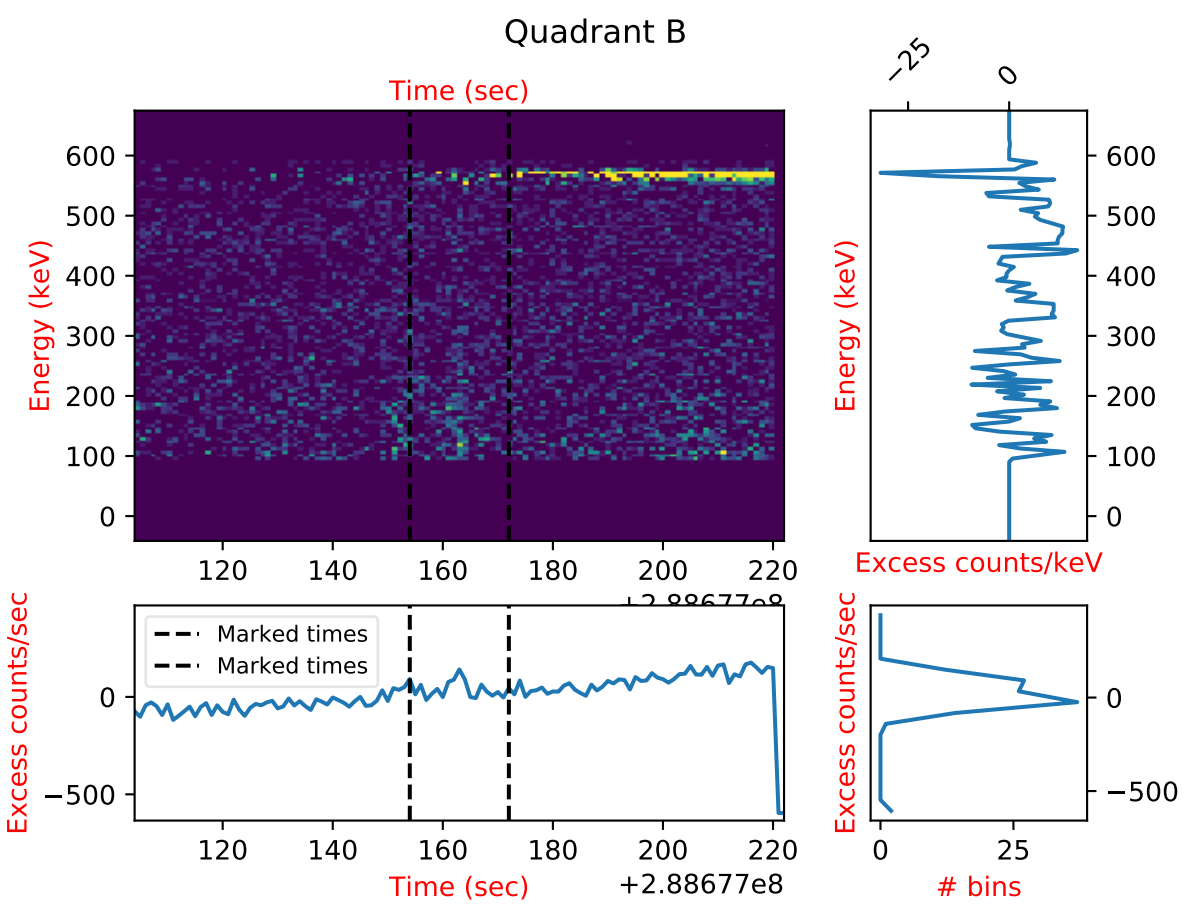

Quadrant A
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
+2.88677e8
0
10
Strength/keV
Strength/sec
Marked times
Marked times
100
0
−100
Time (sec)
+2.88677e8
50
bins

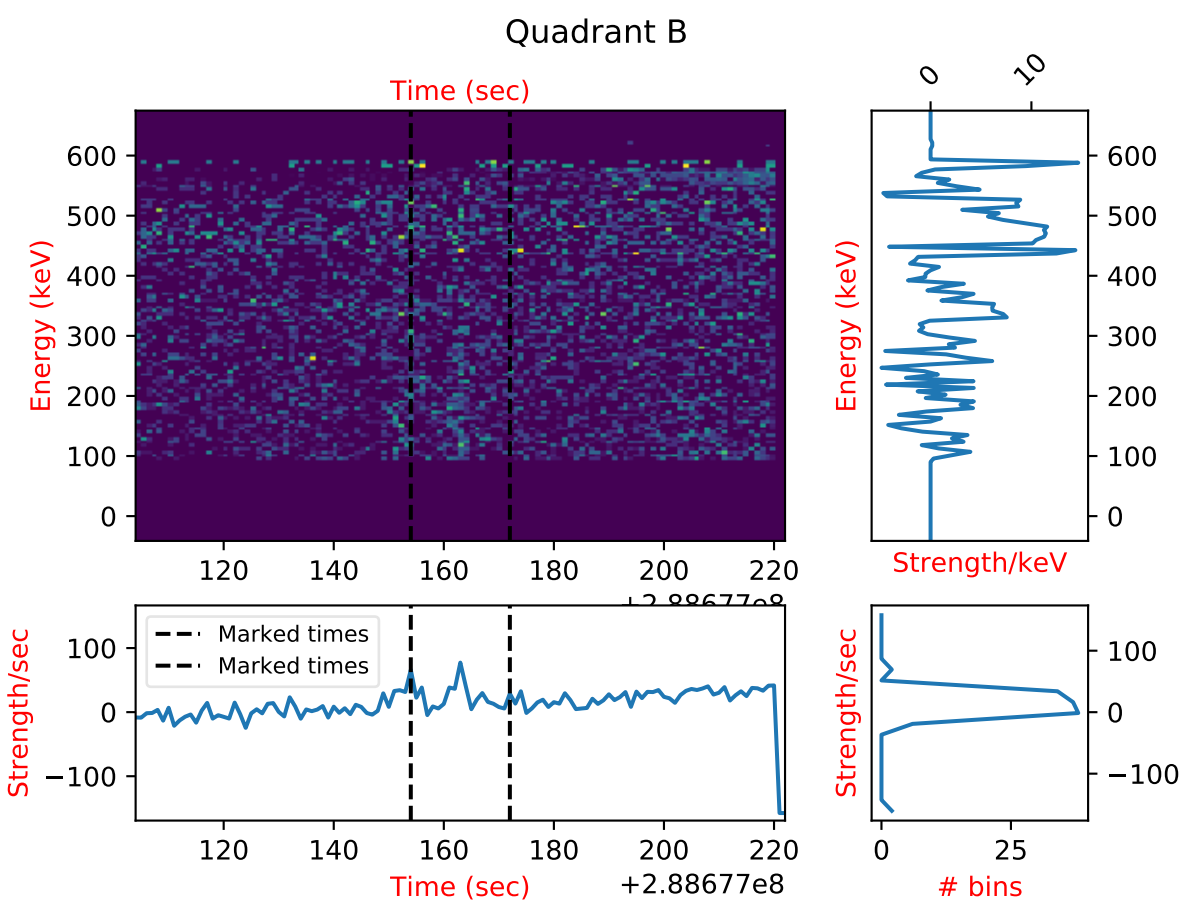

Quadrant A
Time (sec)
Energy (keV)
640
620
600
580
560
120
140
160
180
200
220
+2.88677e8
10^1
10^3
Counts/keV
Marked times
Marked times
Counts/sec
400
200
0
Time (sec)
+2.88677e8
bins
20

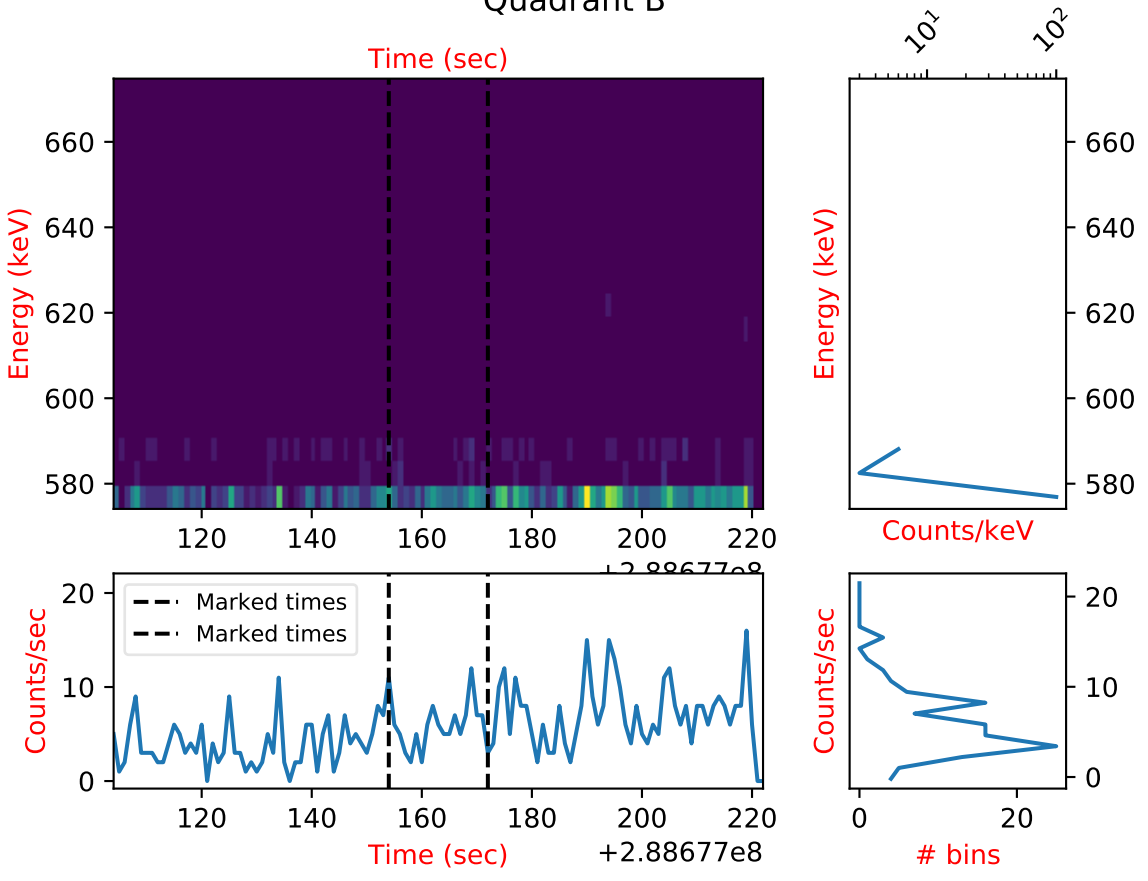

Quadrant A
Time (sec)
Energy (keV)
640
620
600
580
560
120
140
160
180
200
220
+2.88677e8
0
10
Strength/keV
Marked times
Marked times
Strength/sec
20
0
−20
Time (sec)
+2.88677e8
bins

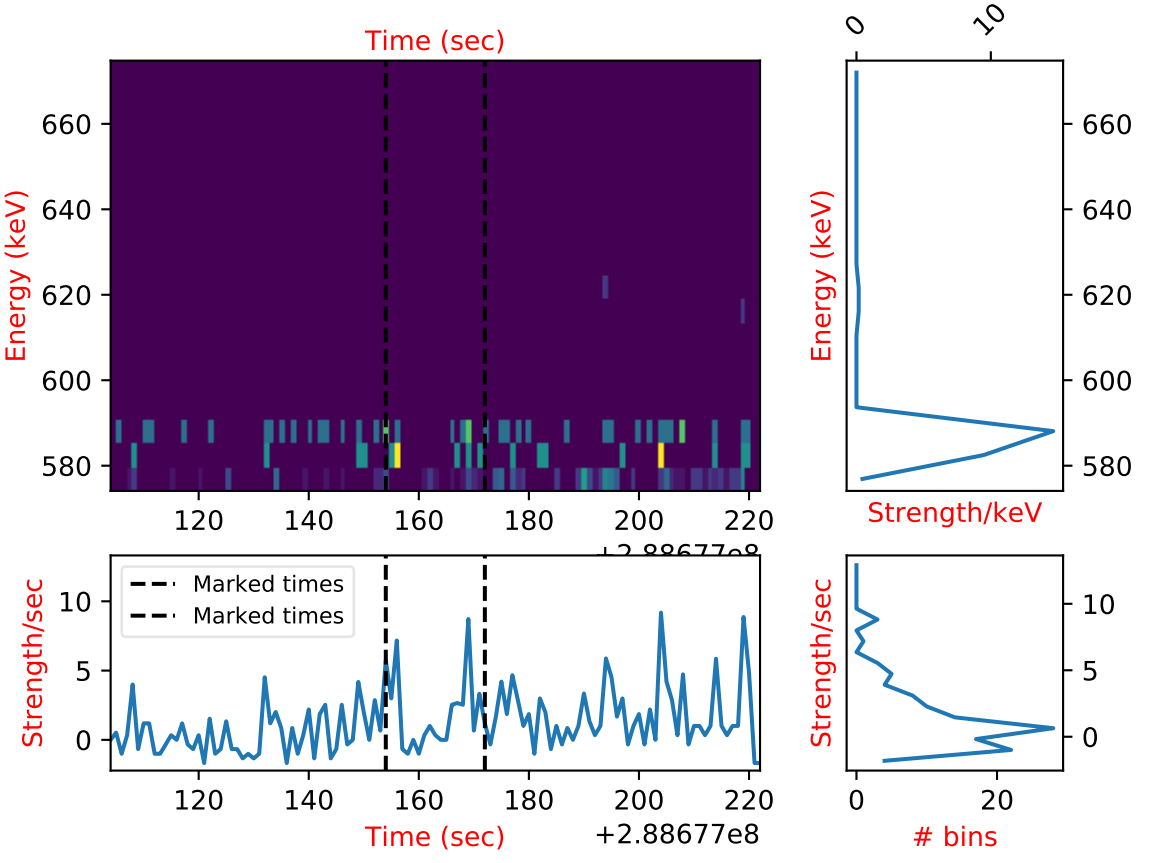

LC: Quad A
Counts/sec
1000
750
500
250
0
−250
−500
120
140
160
180
200
220
-56.7-658.9 keV lightcurve
Median spectrum subtracted lightcurve
Marked times
Marked times
Significance
40
20
0
−20
Mean spectrum subtracted + normalized lightcurve
Marked times
Marked times
Time (sec)
+2.88677e8

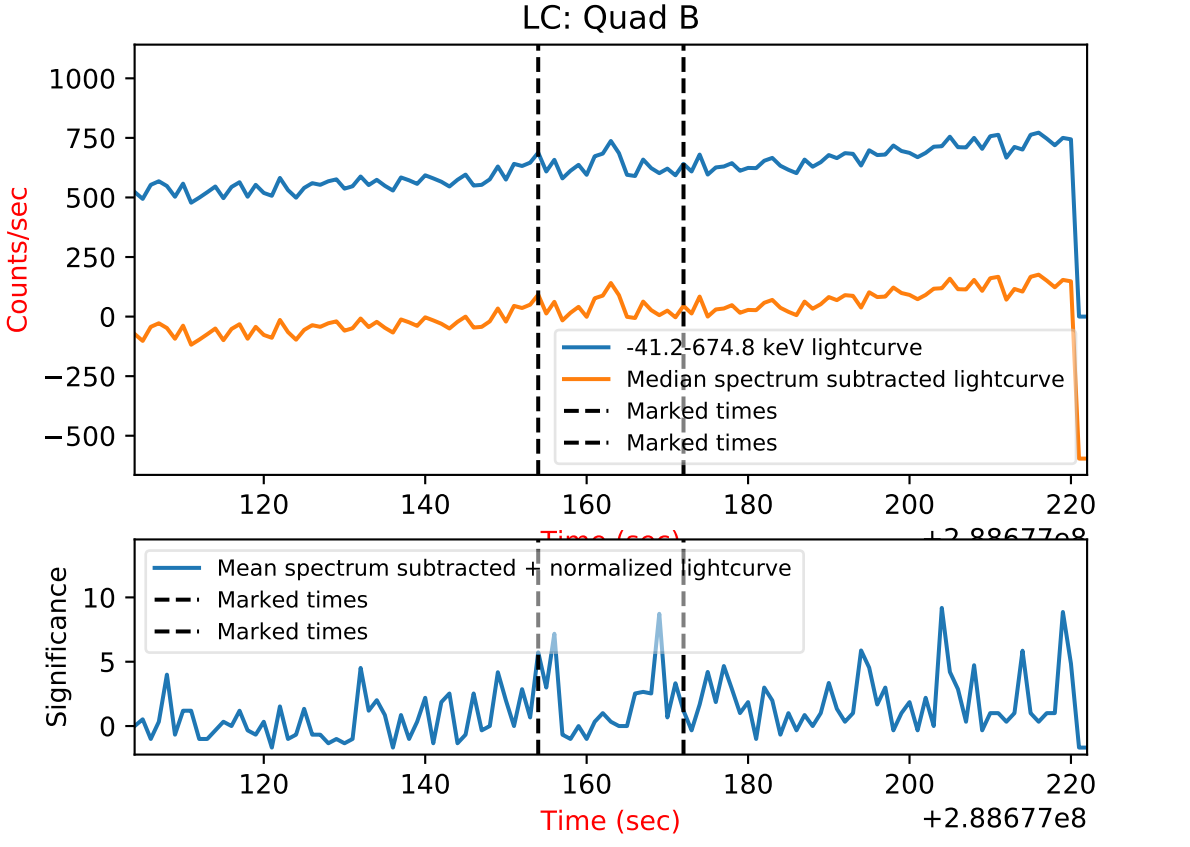

Quadrant B
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
10^2
Counts/keV
Marked times
Marked times
Counts/sec
1000
500
0
+2.88677e8
25
bins

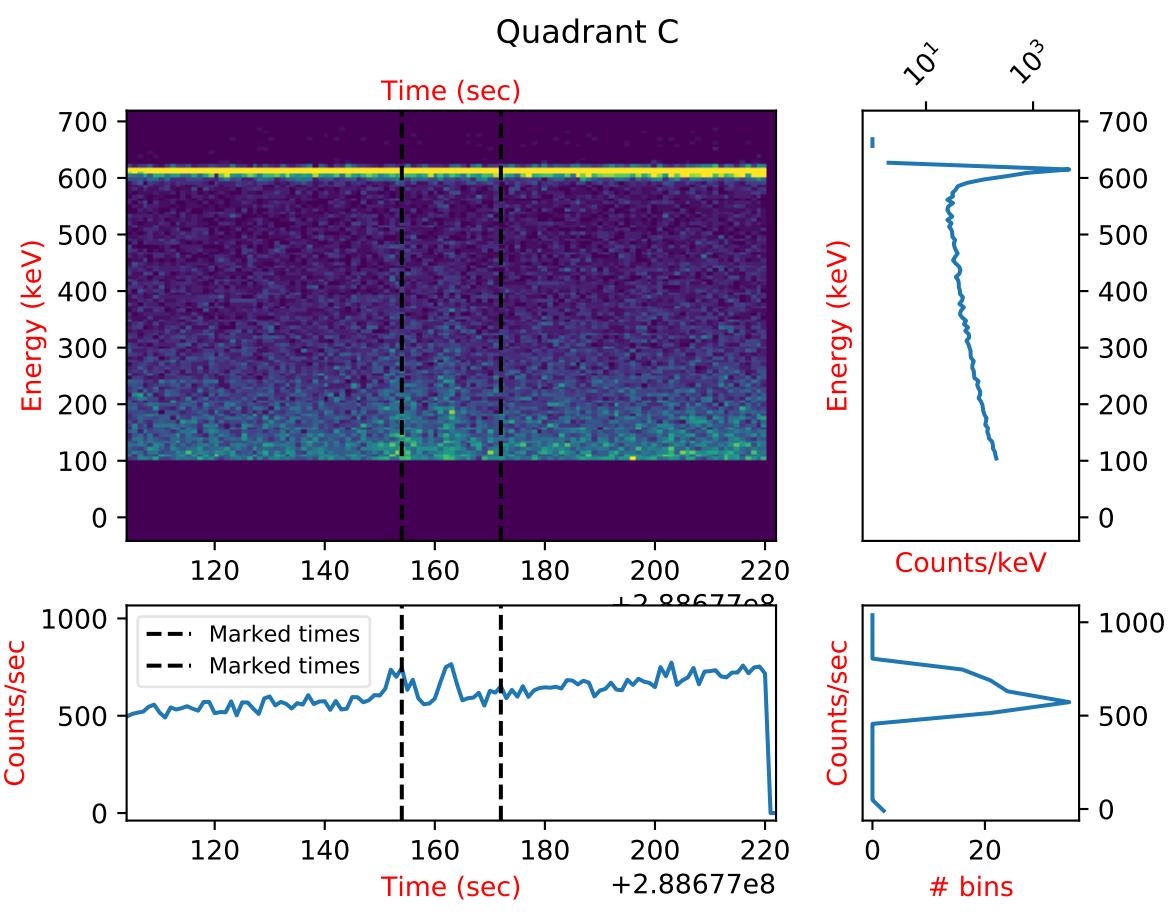

Quadrant B
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
−25
0
Excess counts/keV
Excess counts/sec
Marked times
Marked times
−500
+2.88677e8
bins
25

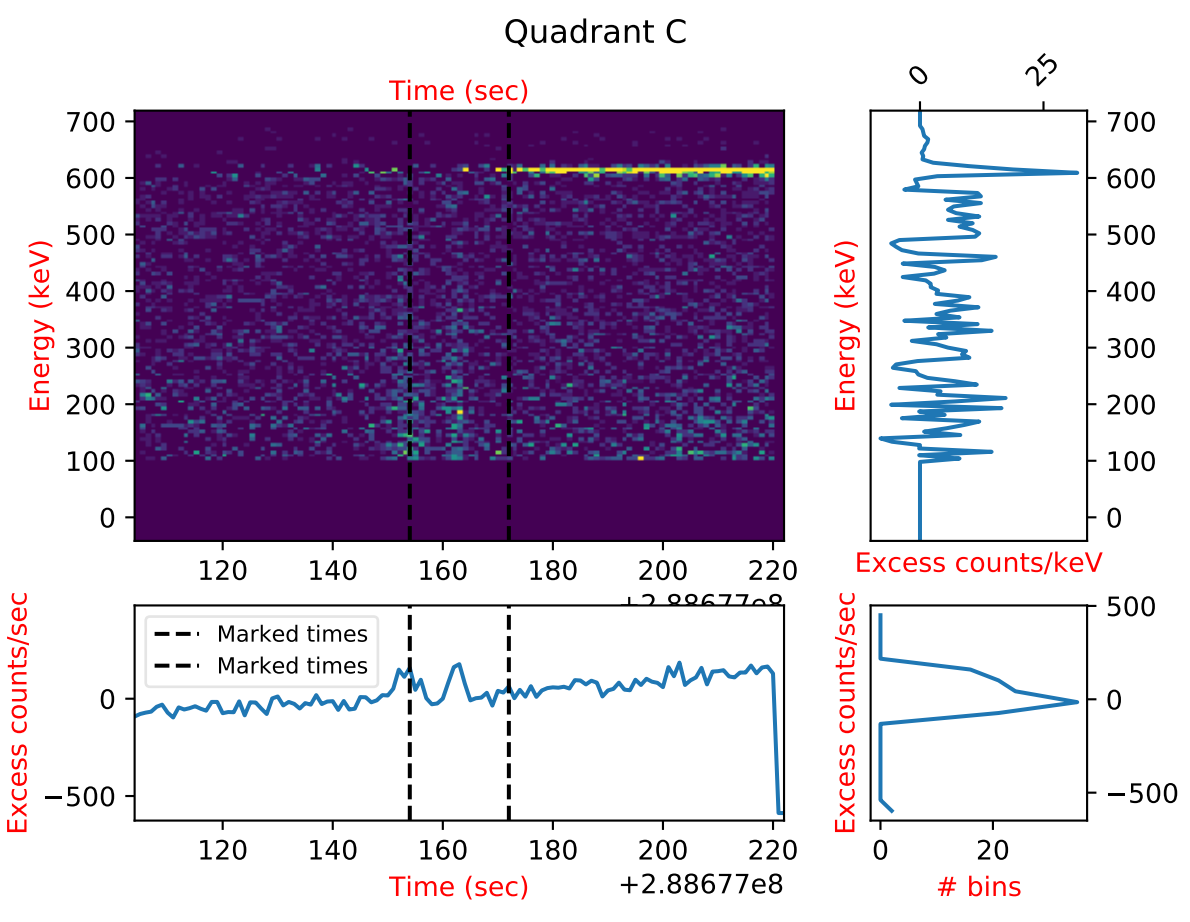

Quadrant B
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
+2.88677e8
0
10
Strength/keV
Strength/sec
Marked times
Marked times
100
0
−100
Time (sec)
+2.88677e8
25
bins

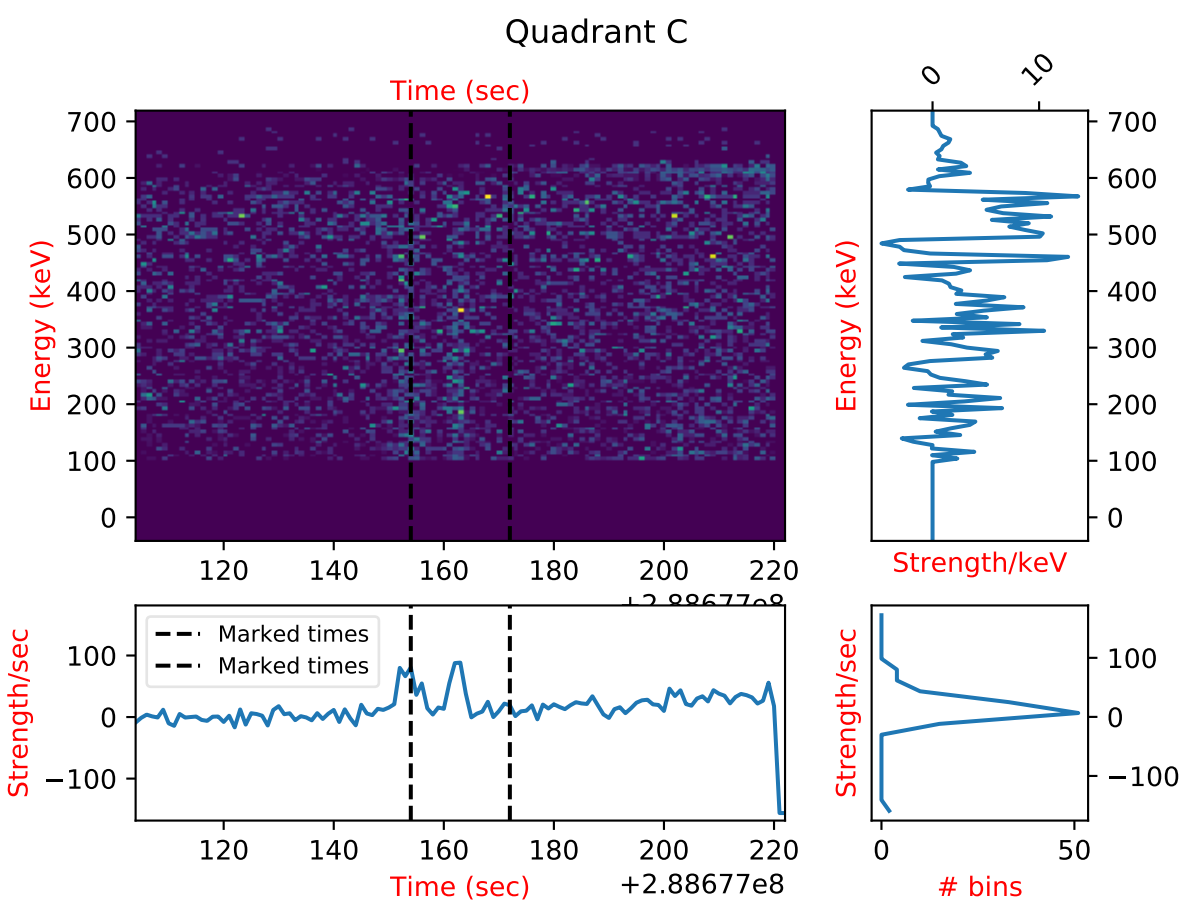

Quadrant B
Time (sec)
Energy (keV)
660
640
620
600
580
120
140
160
180
200
220
10^1
10^2
Counts/keV
Counts/sec
20
10
0
Marked times
Marked times
+2.88677e8
bins

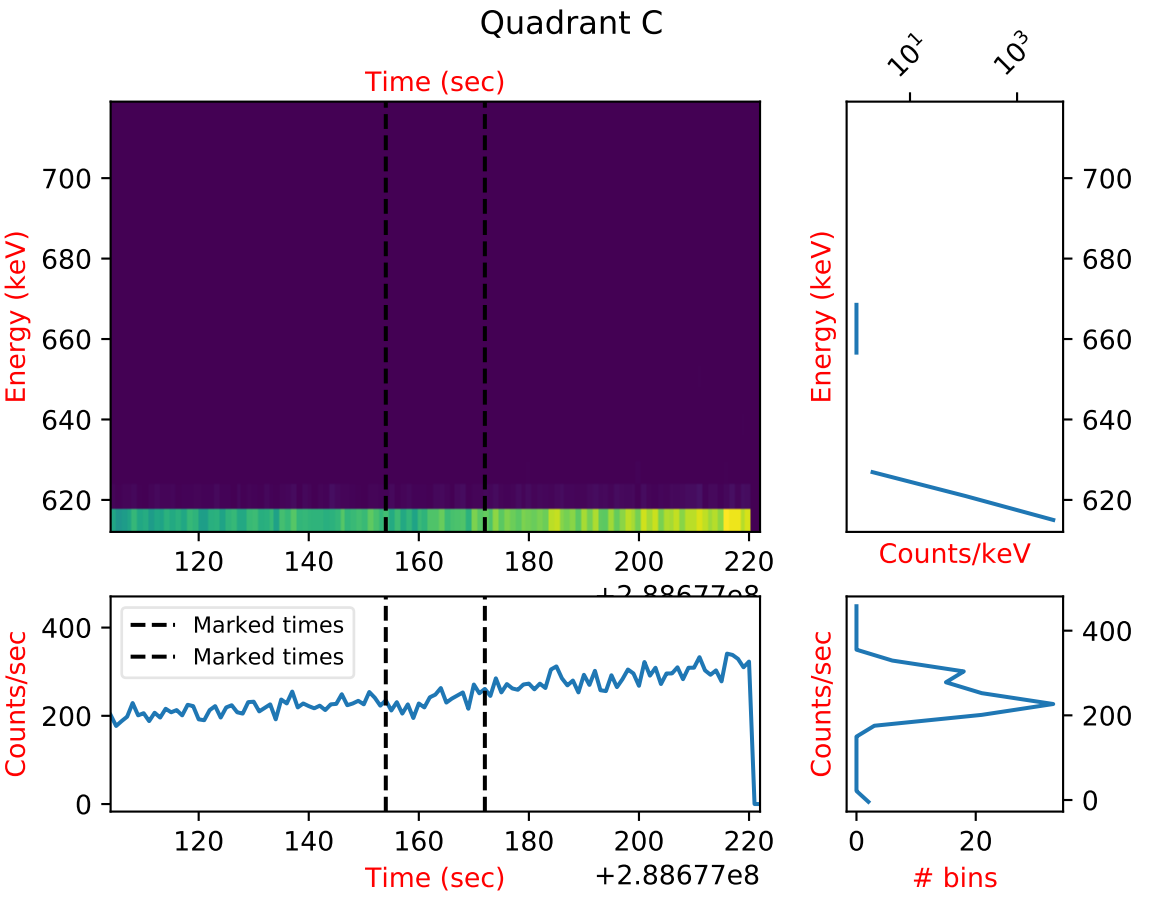

Quadrant B
Time (sec)
Energy (keV)
660
640
620
600
580
120
140
160
180
200
220
+2.88677e8
0
10
Strength/keV
Strength/sec
Marked times
Marked times
10
5
0
Time (sec)
+2.88677e8
20
bins

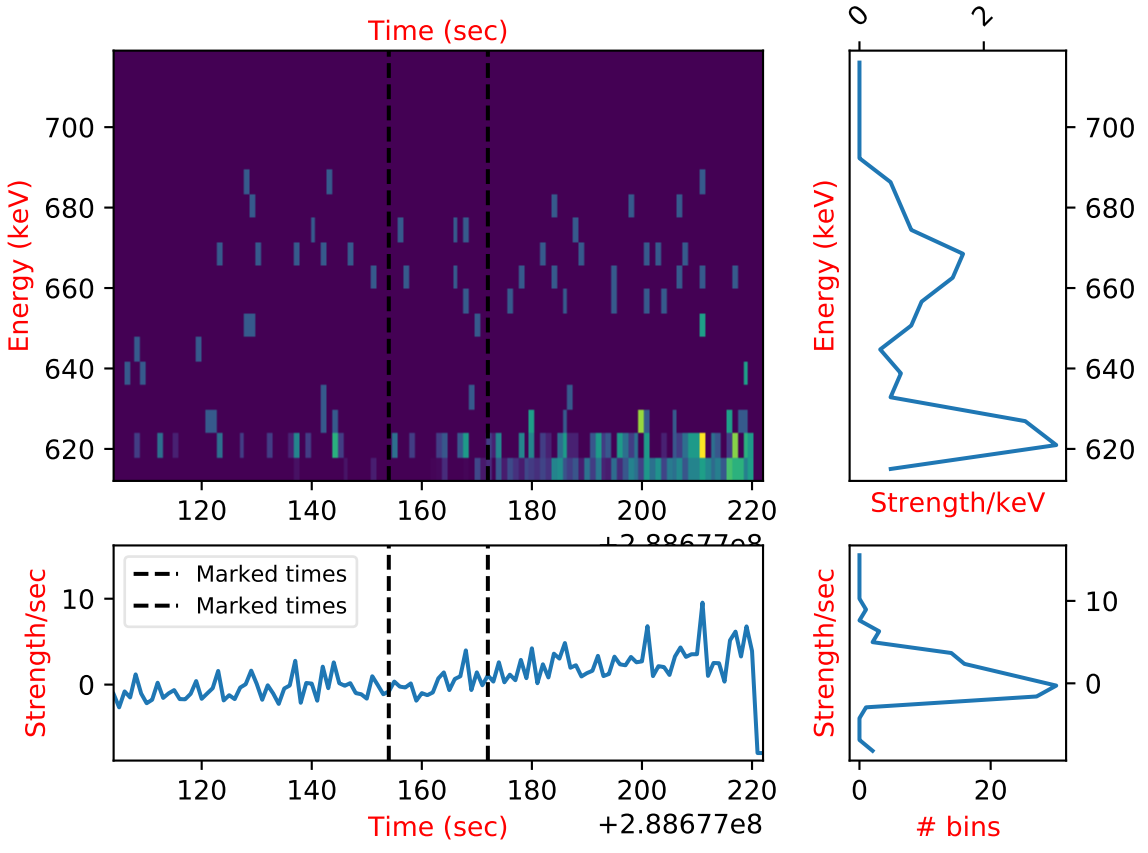

LC: Quad B
Counts/sec
1000
750
500
250
0
−250
−500
-41.2-674.8 keV lightcurve
Median spectrum subtracted lightcurve
Marked times
Marked times
120
140
160
180
200
220
Mean spectrum subtracted + normalized lightcurve
Marked times
Marked times
Significance
10
5
0
Time (sec)
+2.88677e8

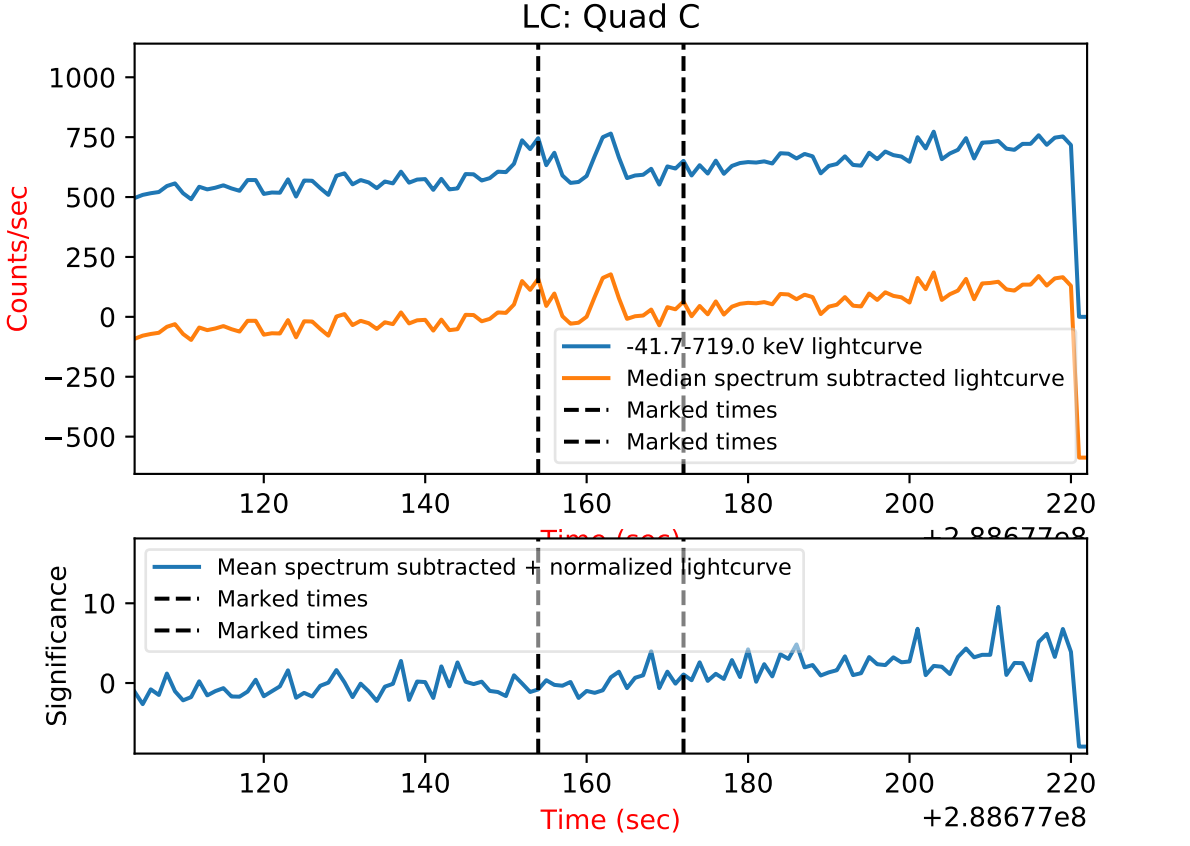

Quadrant C
Time (sec)
Energy (keV)
700
600
500
400
300
200
100
0
120
140
160
180
200
220
10^1
10^3
Counts/keV
Counts/sec
1000
500
Marked times
Marked times
+2.88677e8
bins
20

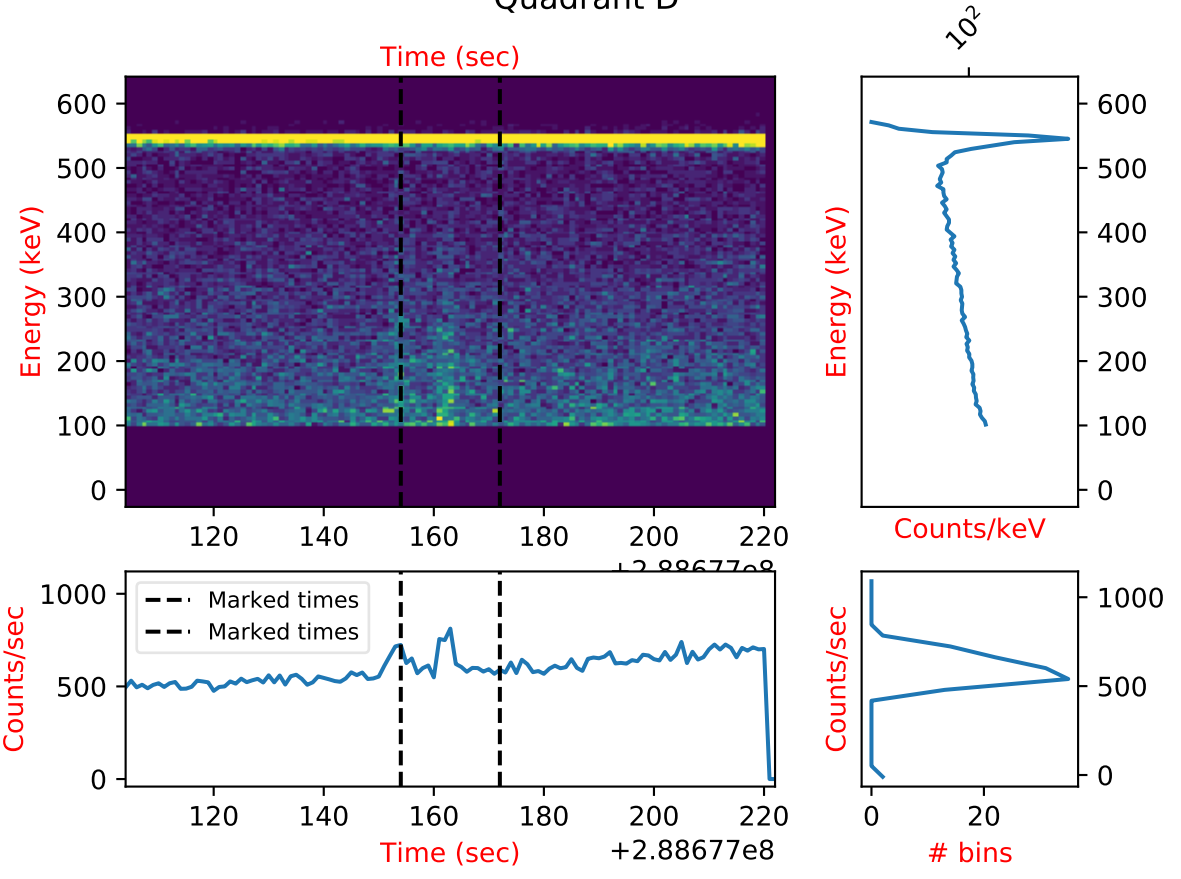

Quadrant C
Time (sec)
Energy (keV)
700
600
500
400
300
200
100
0
120
140
160
180
200
220
0
25
Excess counts/keV
Excess counts/sec
Marked times
Marked times
−500
+2.88677e8
bins

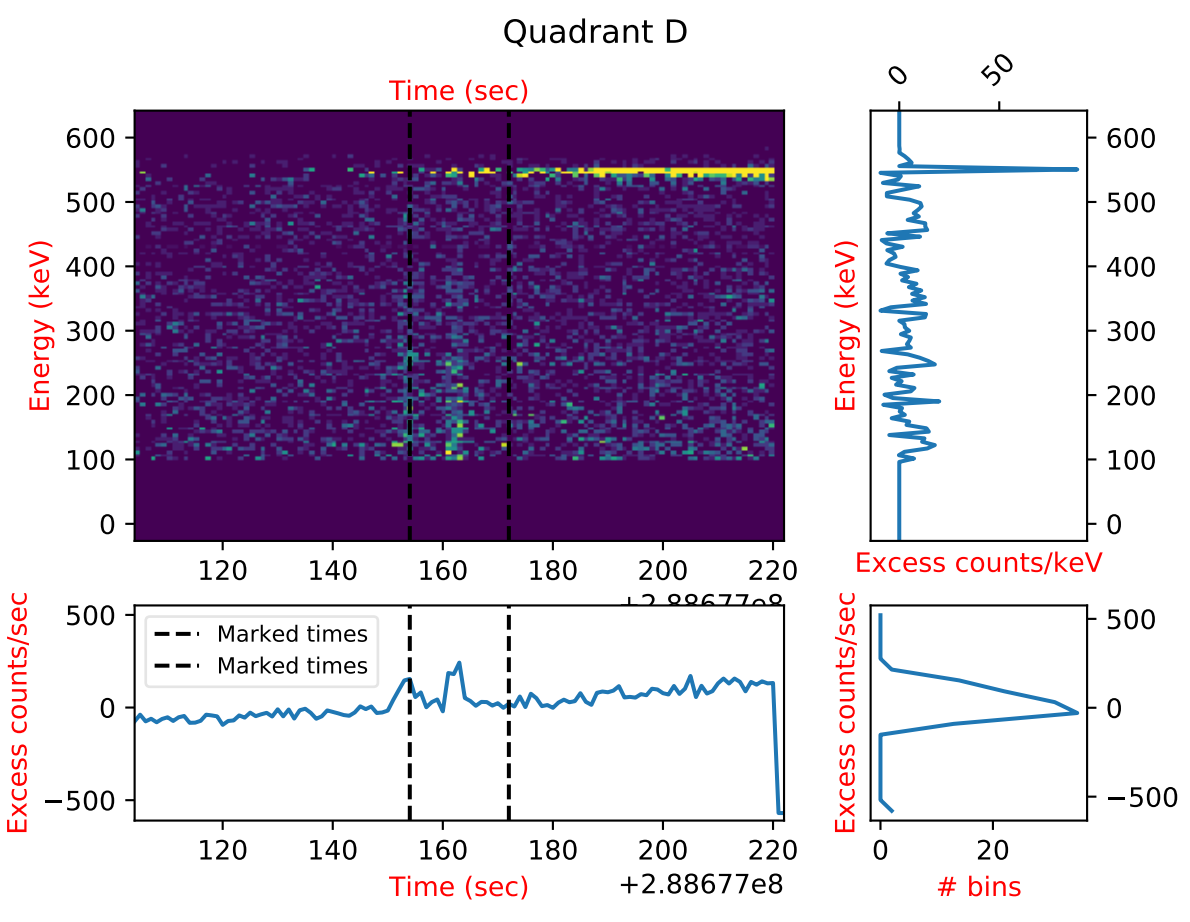

Quadrant C
Time (sec)
Energy (keV)
700
600
500
400
300
200
100
0
120
140
160
180
200
220
+2.88677e8
0
10
Strength/keV
Strength/sec
Marked times
Marked times
100
0
−100
Time (sec)
+2.88677e8
bins
50

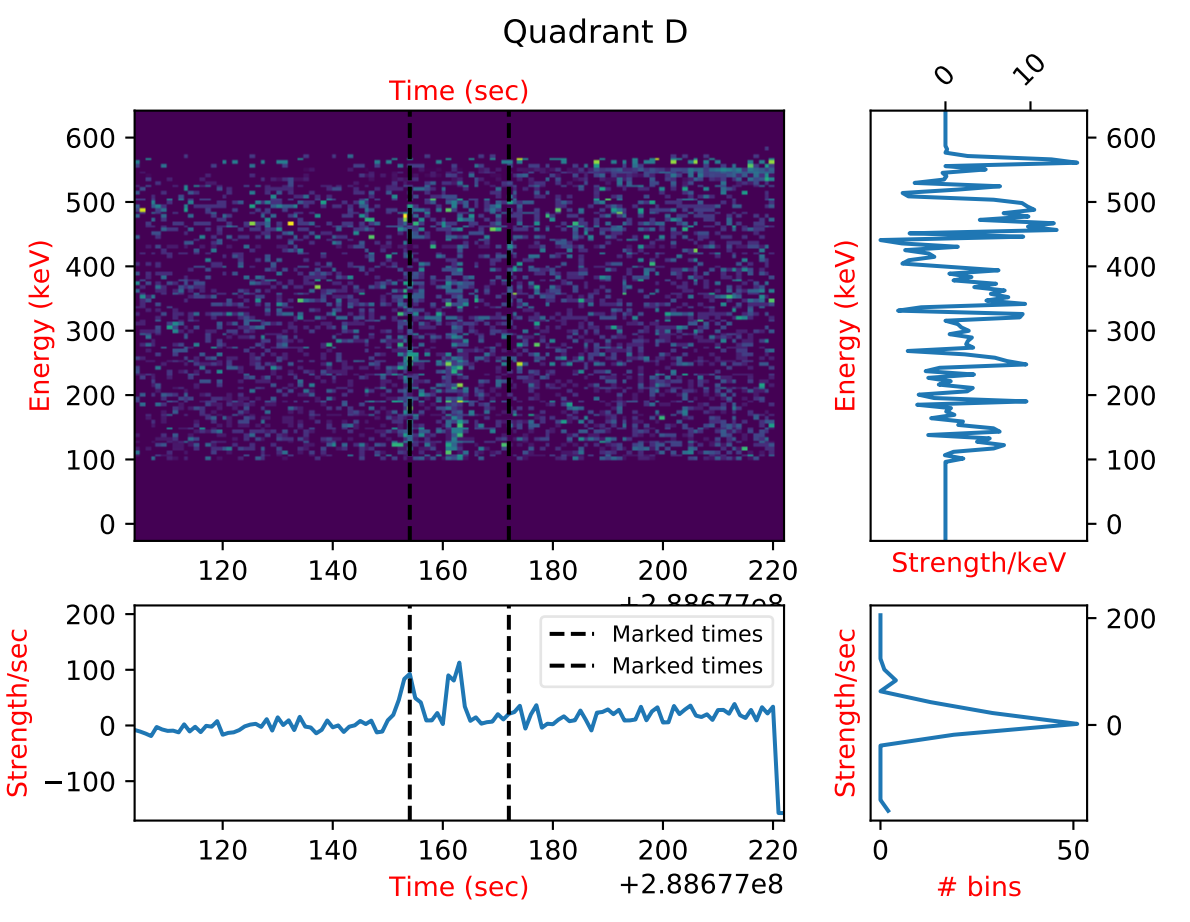

Quadrant C
Time (sec)
Energy (keV)
700
680
660
640
620
120
140
160
180
200
220
+2.88677e8
10^1
10^3
Counts/keV
Marked times
Marked times
Counts/sec
400
200
0
Time (sec)
+2.88677e8
bins
20

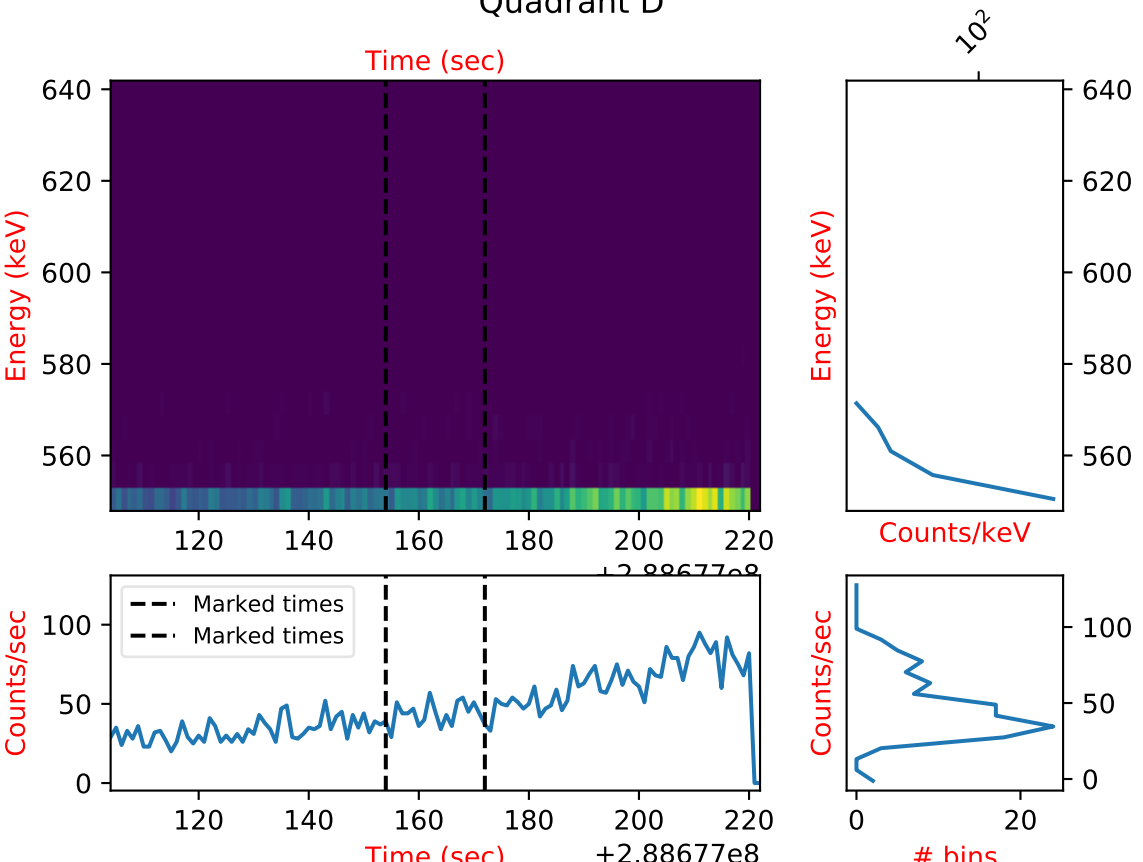

Quadrant C
Time (sec)
Energy (keV)
700
680
660
640
620
120
140
160
180
200
220
+2.88677e8
0
2
Strength/keV
Marked times
Marked times
Strength/sec
10
0
Time (sec)
+2.88677e8
bins
20

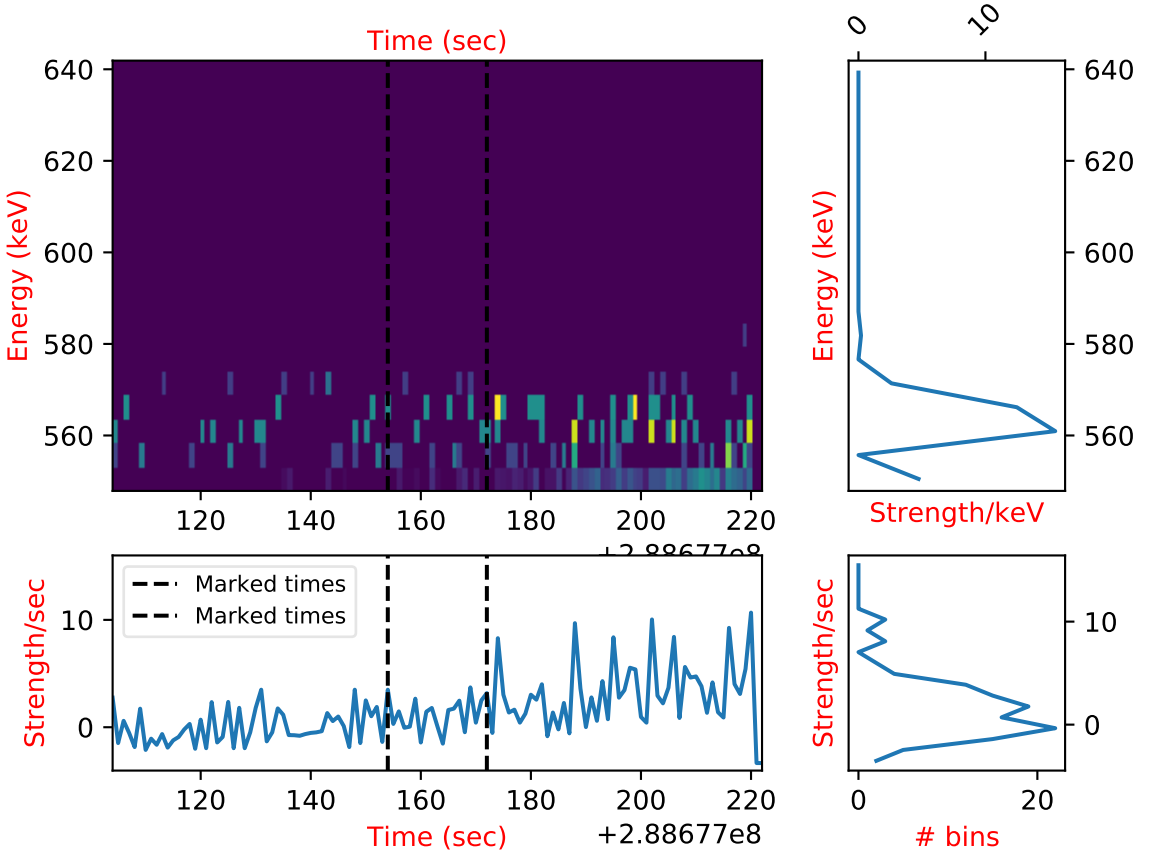

LC: Quad C
Counts/sec
1000
750
500
250
0
−250
−500
-41.7-719.0 keV lightcurve
Median spectrum subtracted lightcurve
Marked times
Marked times
120
140
160
180
200
220
Mean spectrum subtracted + normalized lightcurve
Marked times
Marked times
Significance
10
0
Time (sec)
+2.88677e8

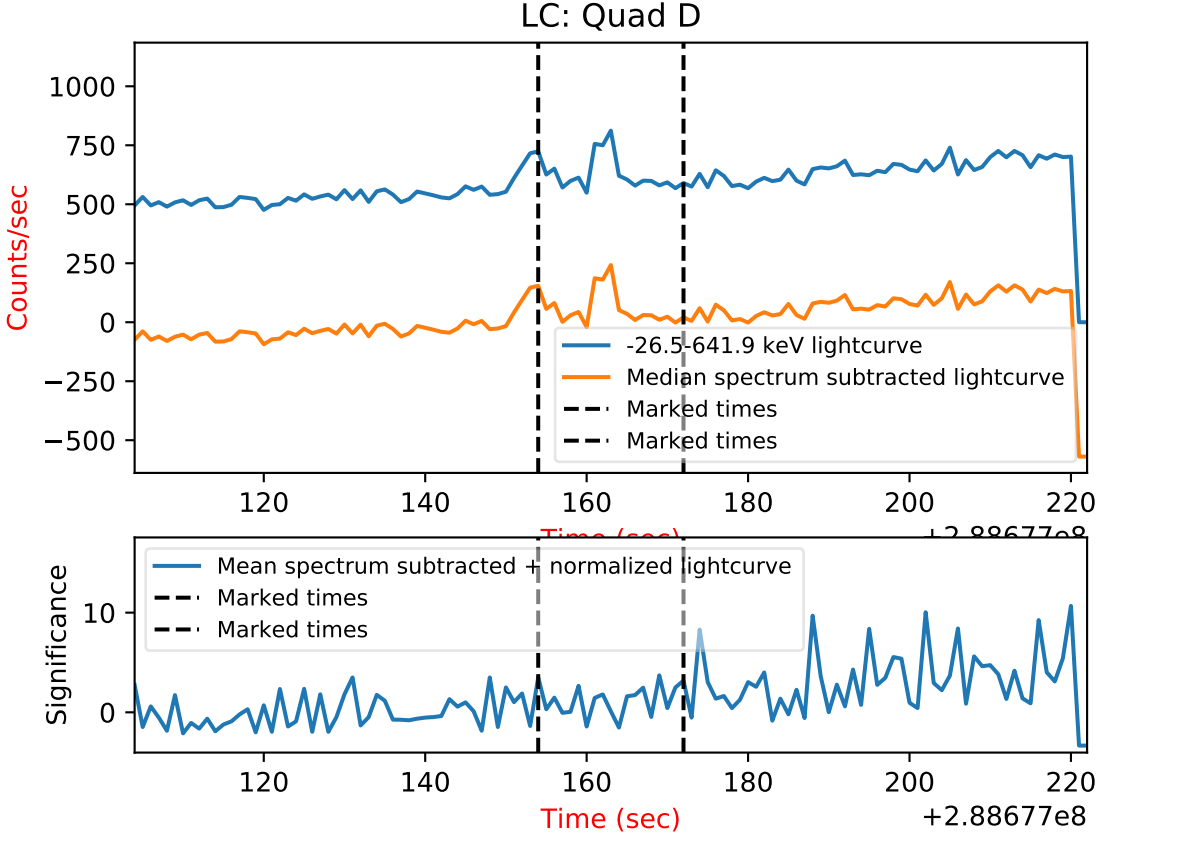

Quadrant D
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
10^2
Counts/keV
Marked times
Marked times
Counts/sec
1000
500
0
+2.88677e8
bins
20

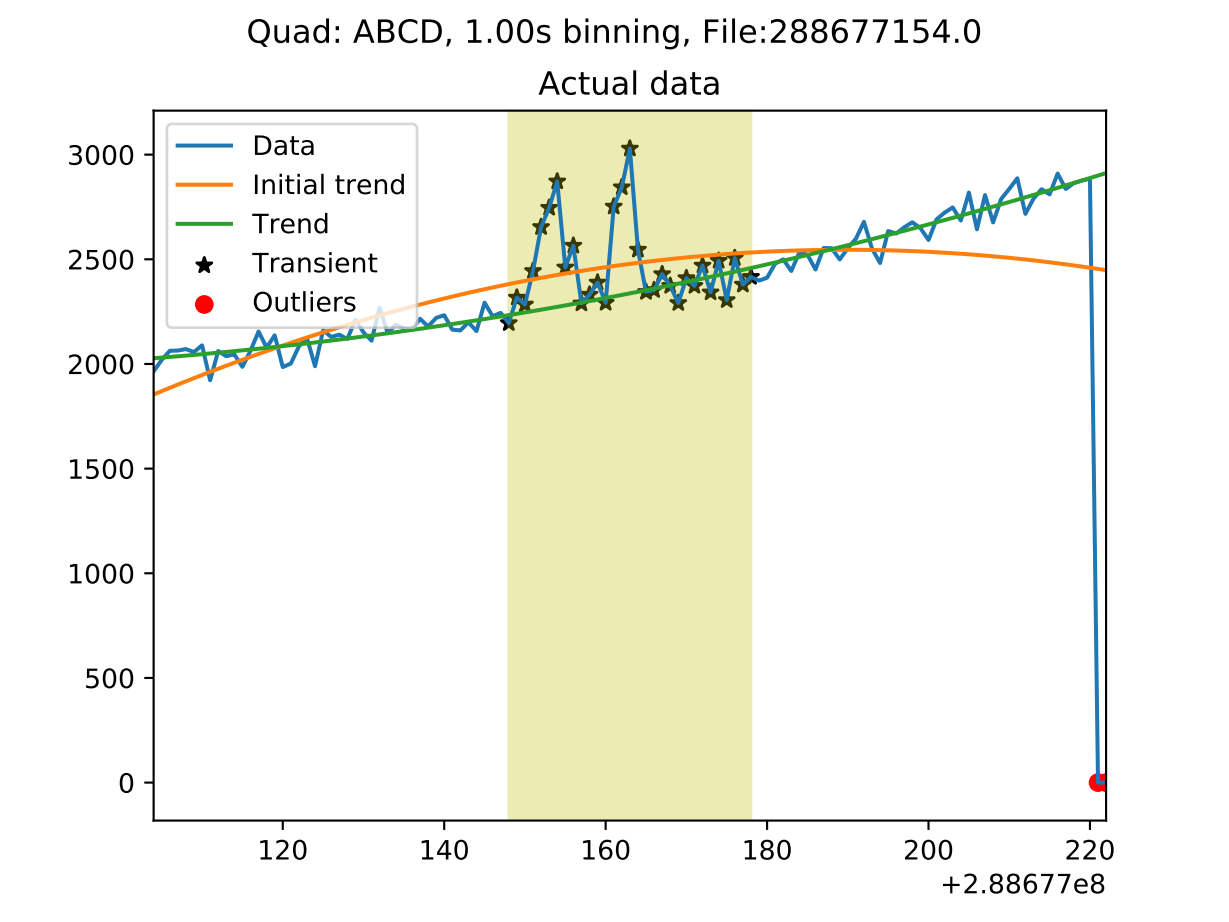

Quadrant D
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
+2.88677e8
0
50
Excess counts/keV
Excess counts/sec
500
0
−500
Marked times
Marked times
Time (sec)
+2.88677e8
20
bins

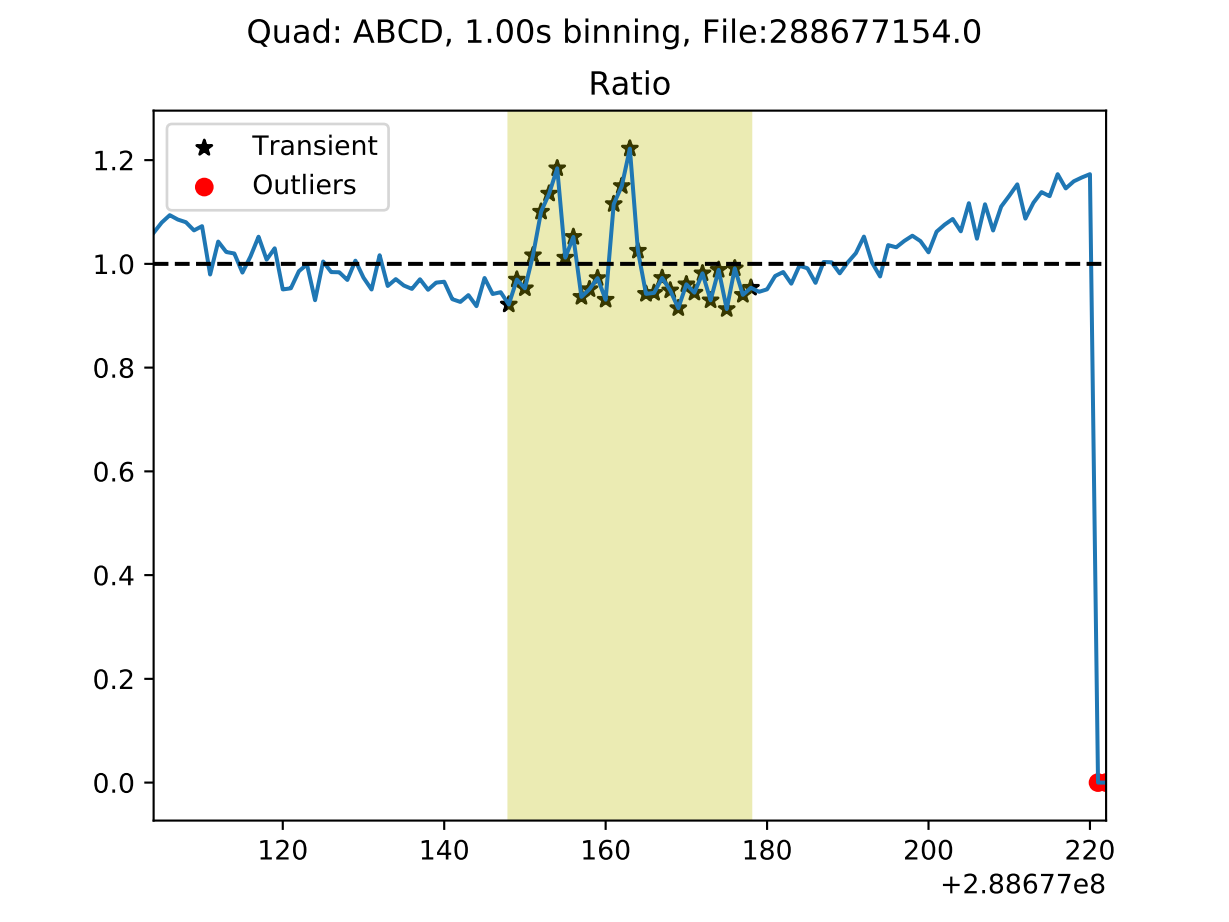

Quadrant D
Time (sec)
Energy (keV)
600
500
400
300
200
100
0
120
140
160
180
200
220
+2.88677e8
0
10
Strength/keV
Strength/sec
200
100
0
−100
Marked times
Marked times
Time (sec)
+2.88677e8
50
bins

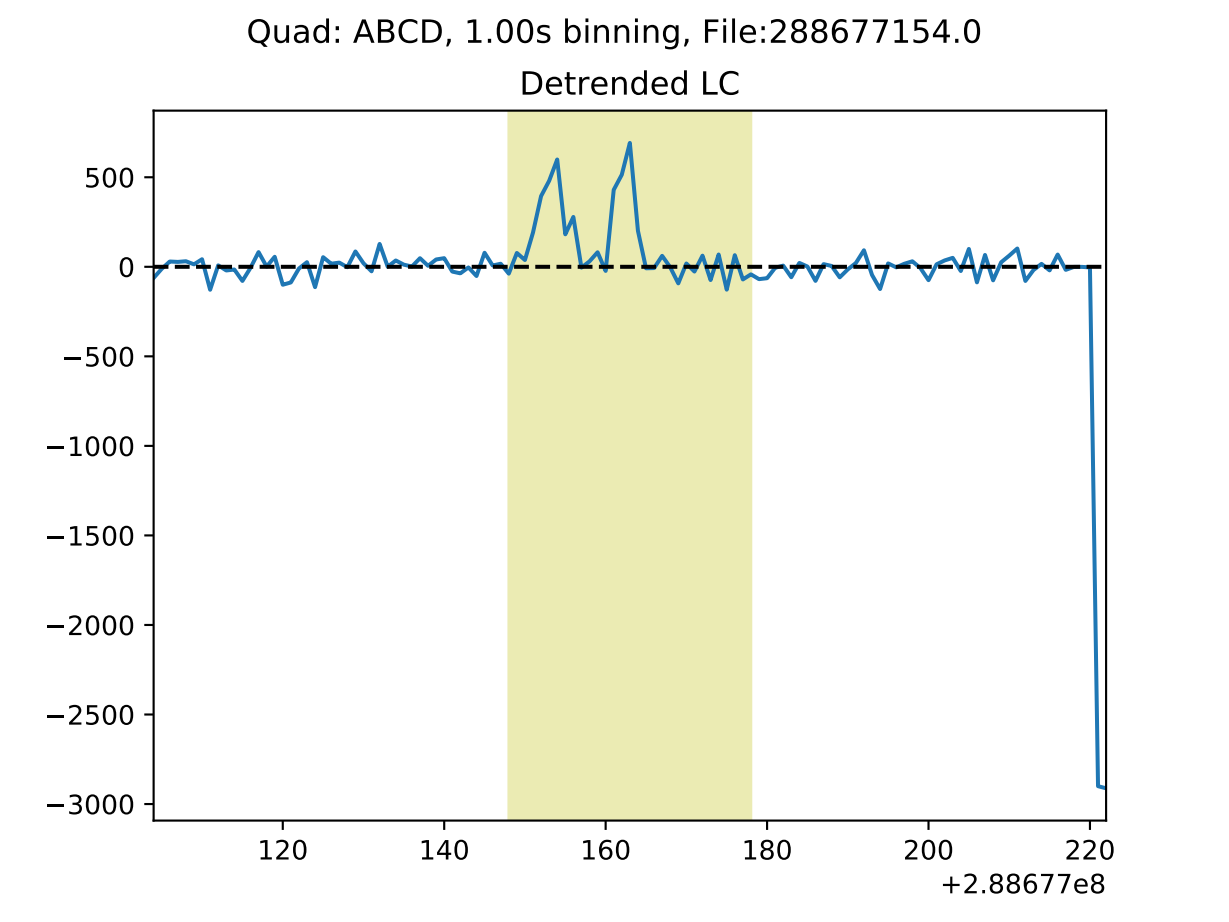

Quadrant D
Time (sec)
Energy (keV)
640
620
600
580
560
120
140
160
180
200
220
10^2
Counts/keV
Marked times
Marked times
Counts/sec
100
50
0
+2.88677e8
bins
20

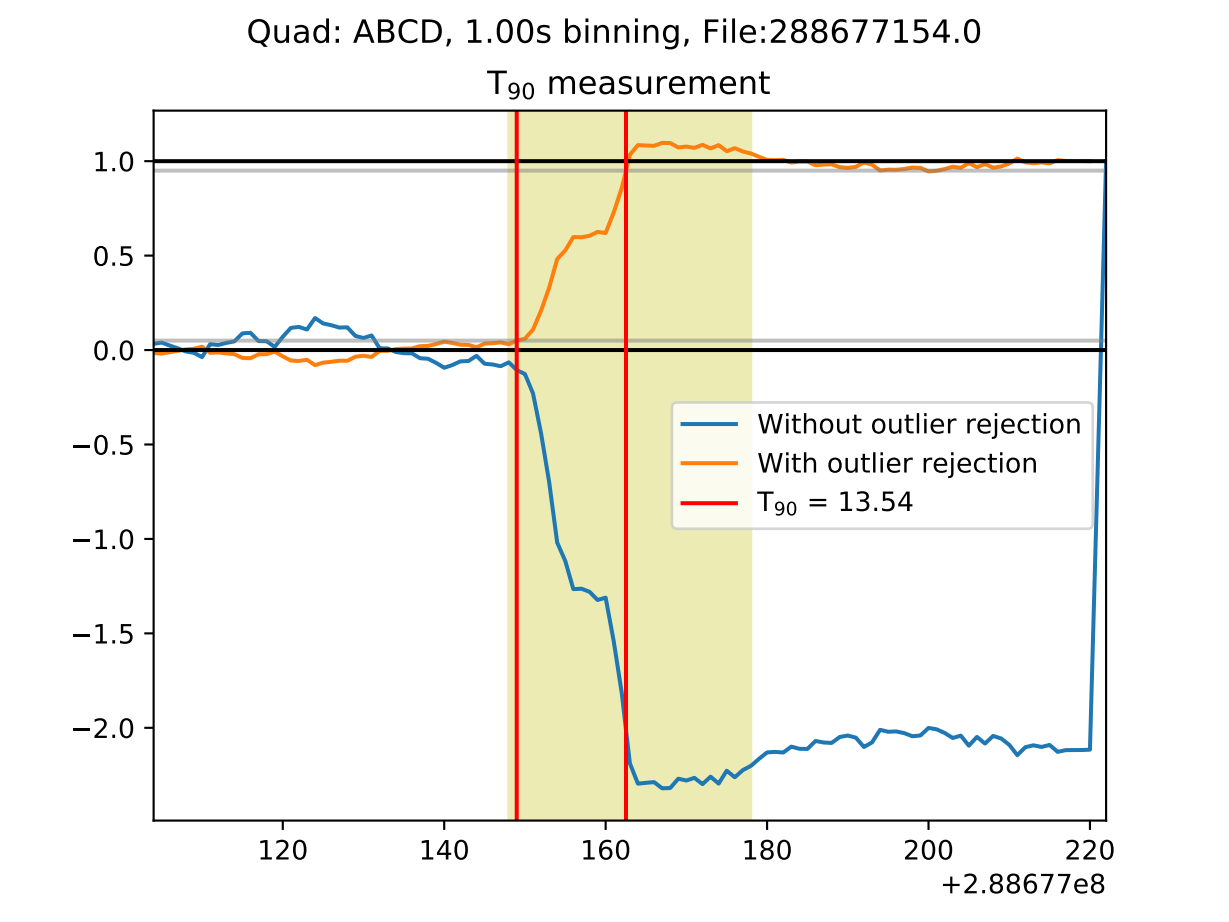

Quadrant D
Time (sec)
Energy (keV)
640
620
600
580
560
120
140
160
180
200
220
+2.88677e8
0
10
Strength/keV
Marked times
Marked times
Strength/sec
10
0
Time (sec)
+2.88677e8
bins
20

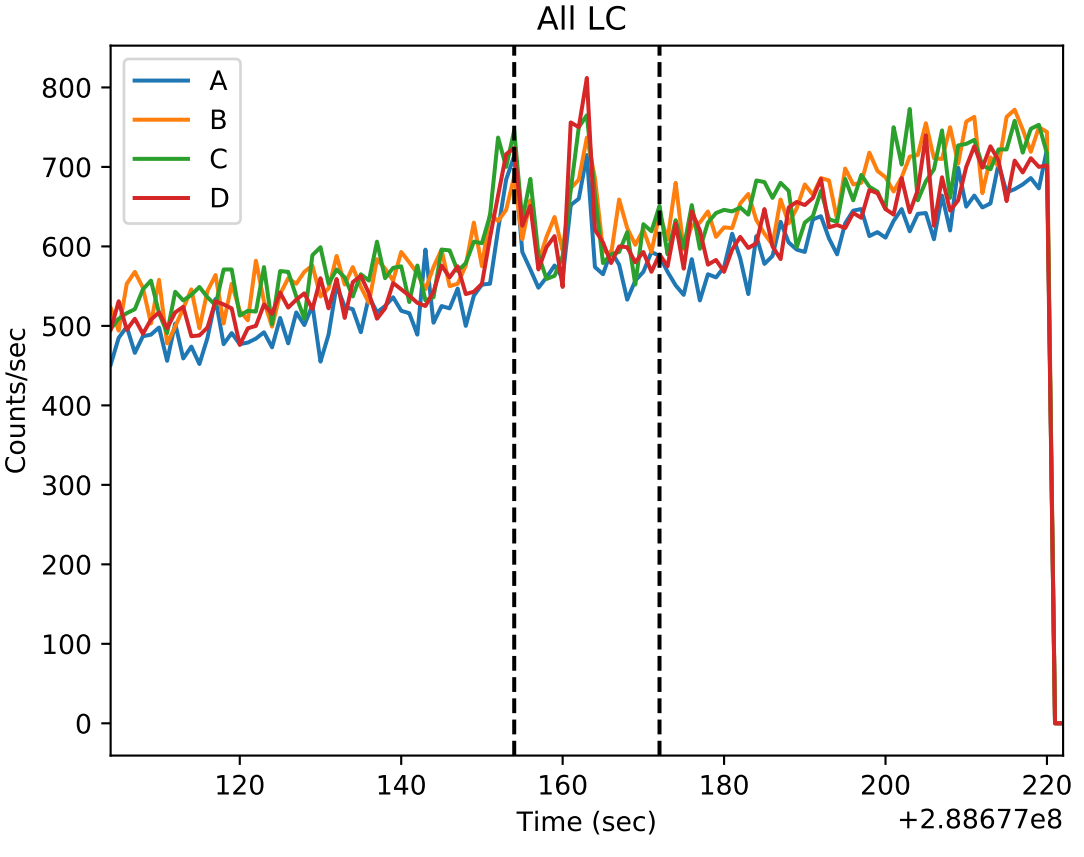

LC: Quad D
Counts/sec
1000
750
500
250
0
−250
−500
-26.5-641.9 keV lightcurve
Median spectrum subtracted lightcurve
Marked times
Marked times
120
140
160
180
200
220
Mean spectrum subtracted + normalized lightcurve
Marked times
Marked times
Significance
10
0
Time (sec)
+2.88677e8


Quad: ABCD, 1.00s binning, File:288677154.0
Actual data
Data
Initial trend
Trend
Transient
Outliers
3000
2500
2000
1500
1000
500
0
120
140
160
180
200
220
+2.88677e8


Quad: ABCD, 1.00s binning, File:288677154.0
Ratio
Transient
Outliers
1.2
1.0
0.8
0.6
0.4
0.2
0.0
120
140
160
180
200
220
+2.88677e8


Quad: ABCD, 1.00s binning, File:288677154.0
Detrended LC
500
0
−500
−1000
−1500
−2000
−2500
−3000
120
140
160
180
200
220
+2.88677e8


Quad: ABCD, 1.00s binning, File:288677154.0
T90 measurement
1.0
0.5
0.0
−0.5
−1.0
−1.5
−2.0
120
140
160
180
200
220
+2.88677e8
Without outlier rejection
With outlier rejection
T90 = 13.54


All LC
A
B
C
D
800
700
600
500
400
300
200
100
0
Counts/sec
120
140
160
180
200
220
Time (sec)
+2.88677e8