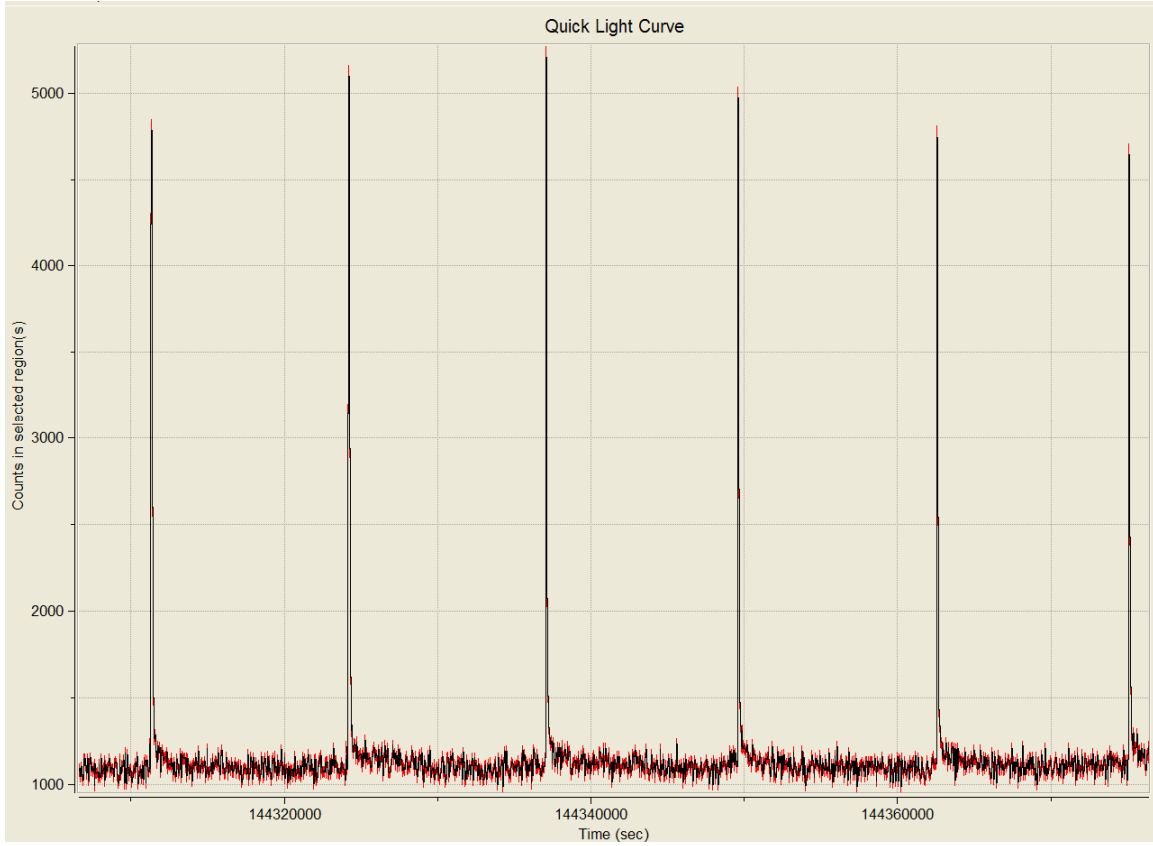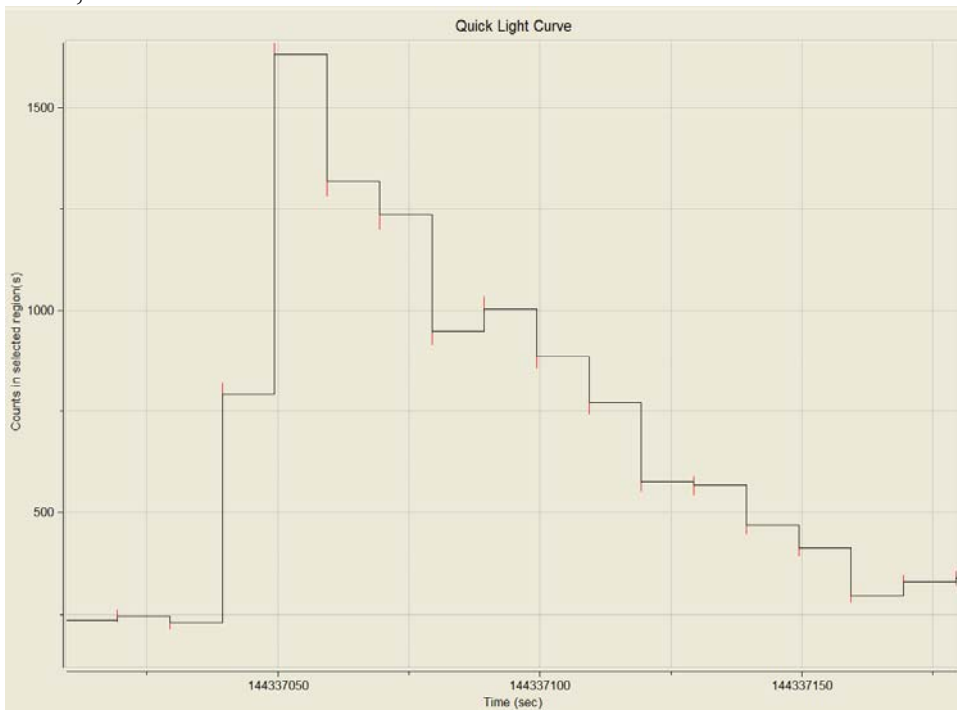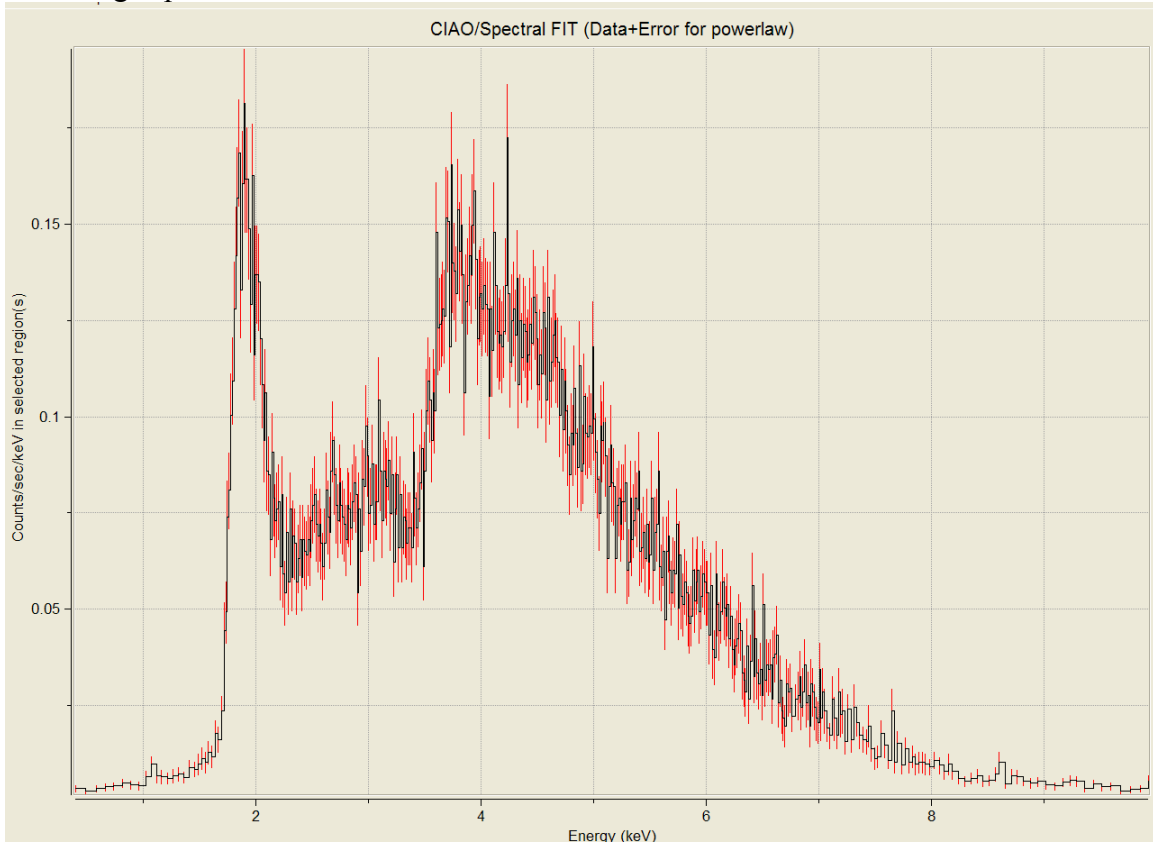# Burster GS 1826-238

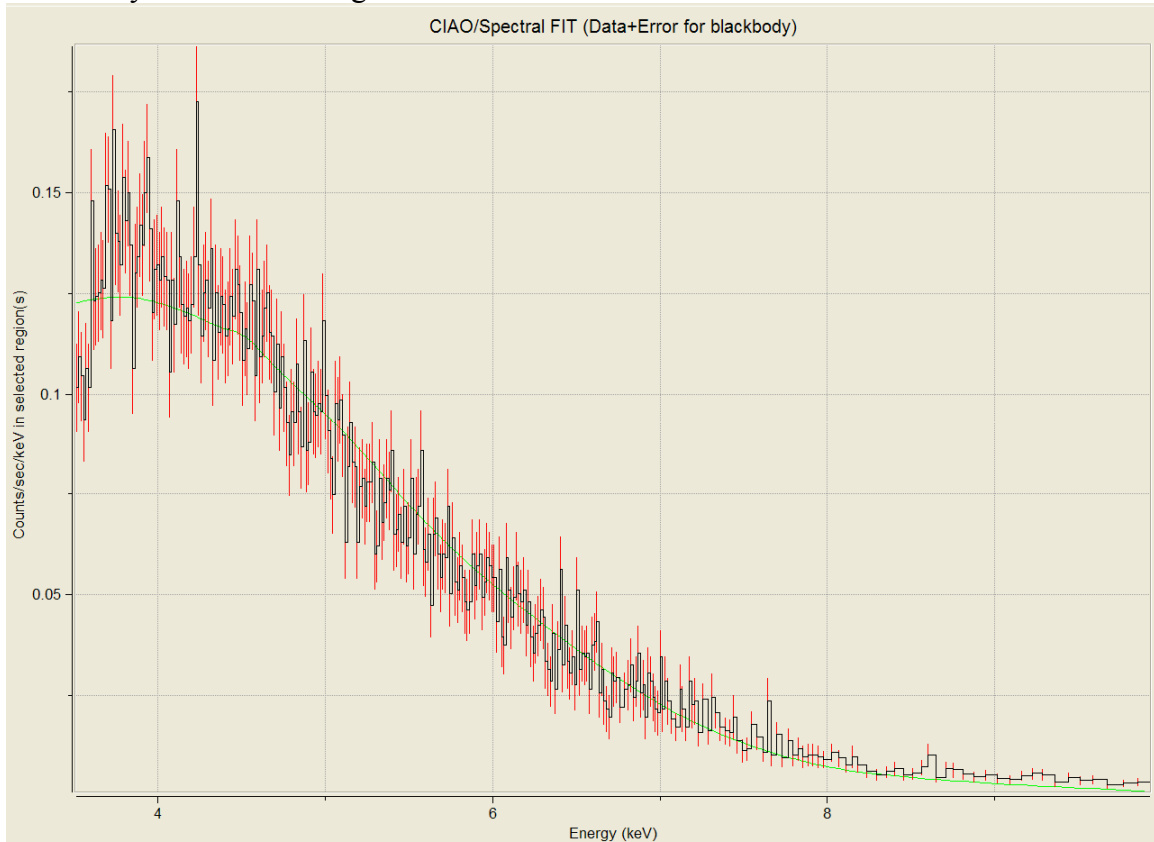## Full observation, 50s bins

Burst, 10s bins

time=144311300:144311400,144324175:144324275,144337025:144337125,144349550:144349650,144362540:144362640,144375050:144375150 (high states)

Full image spectrum:

Blackbody fit to entire image

CIAO/Spectral FIT (Data+Error for blackbody)

****************** SHERPA FIT RESULTS ********************

Input File: ./2739.fits_1024@4096_1024@4096_1
Model: blackbody
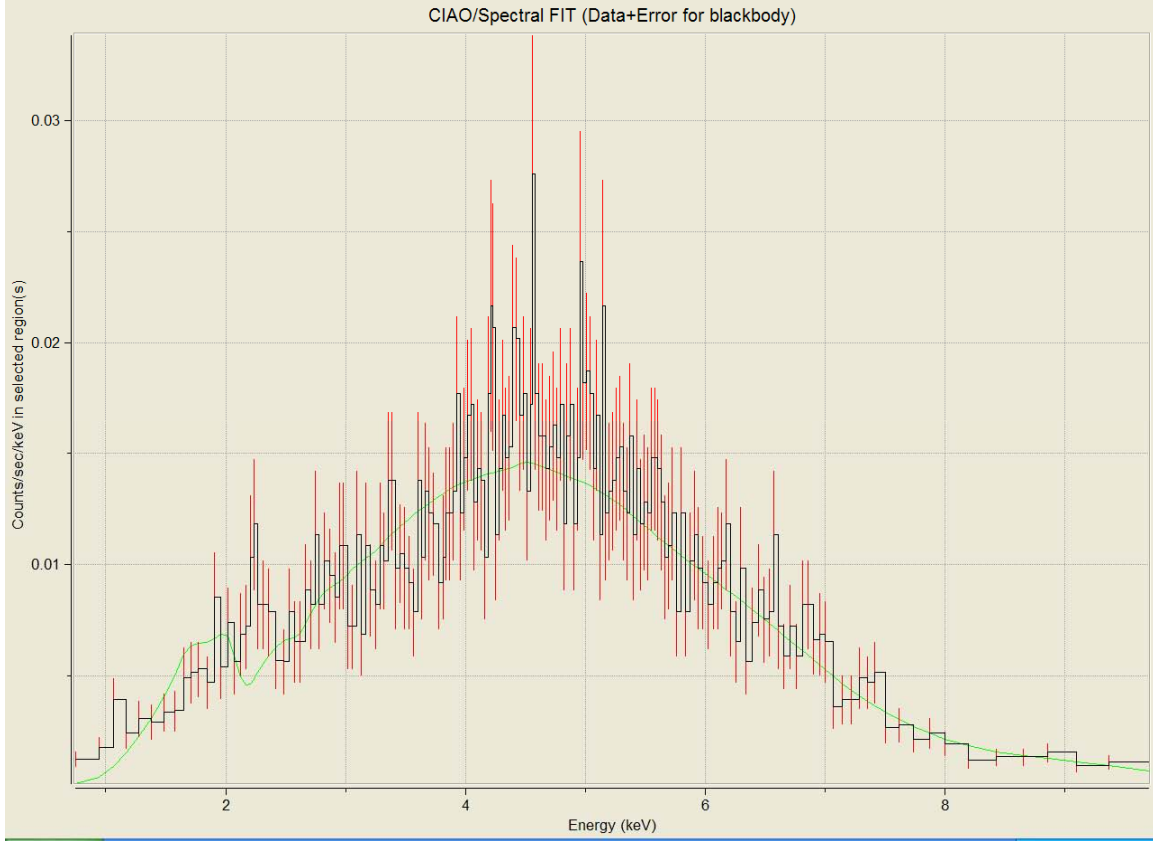Energy: :3.5,10:
Region:
circle(4084,4088,619.63077)

Temperature = 2.38969 keV

Fit performed using absorbtion model multiplied by selected model.
The first two lines below indicate the predicted flux we receive at Chandra
(i.e. what came through the absorbing dust).
The second two lines below indicate the predicted flux from selected model
if there was no absorbing dust in the way.
If the model choice is valid, this flux can be used to predict the intrinsic
luminosity of the object.

Flux for source dataset 1: 2.07454e-11 ergs/cm2/s**
Flux for source dataset 1: 0.00247748 photons/cm**2/s
Flux for source dataset 1: 2.07454e-11 ergs/cm**2/s
Flux for source dataset 1: 0.00247748 photons/cm**2/s

Statistic value   = 390.51
Probability [Q-value] = 0.000664927
Reduced statistic   = 1.28036

Blackbody fit to zeroth order circular region:

***************** SHERPA FIT RESULTS *********************

Input File: ./2739.fits_1024@4096_1024@4096_1
Model: blackbody
Energy: :.3,10:
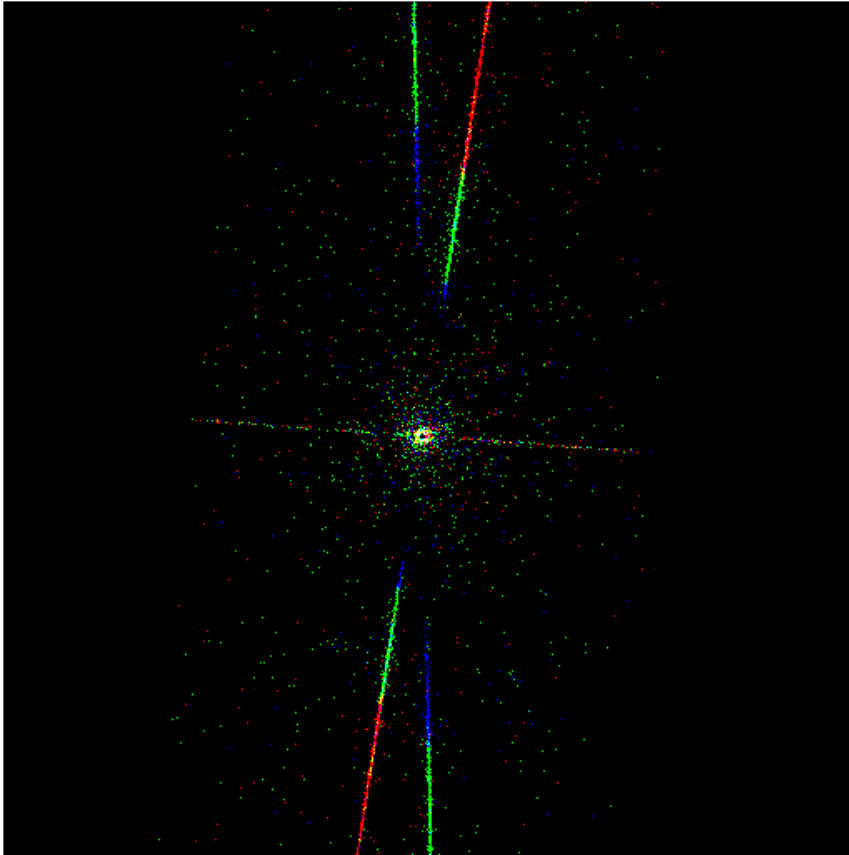Region:
circle(4086,4088,130.39919)

Temperature = 9.15815 keV

Fit performed using absorbtion model multiplied by selected model.
The first two lines below indicate the predicted flux we receive at Chandra
(i.e. what came through the absorbing dust).
The second two lines below indicate the predicted flux from selected model
if there was no absorbing dust in the way.
If the model choice is valid, this flux can be used to predict the intrinsic
luminosity of the object.

Flux for source dataset 1: 5.25976e-12 ergs/cm**2/s
Flux for source dataset 1: 0.000454757 photons/cm**2/s
Flux for source dataset 1: 5.44328e-12 ergs/cm**2/s
Flux for source dataset 1: 0.000491568 photons/cm**2/s
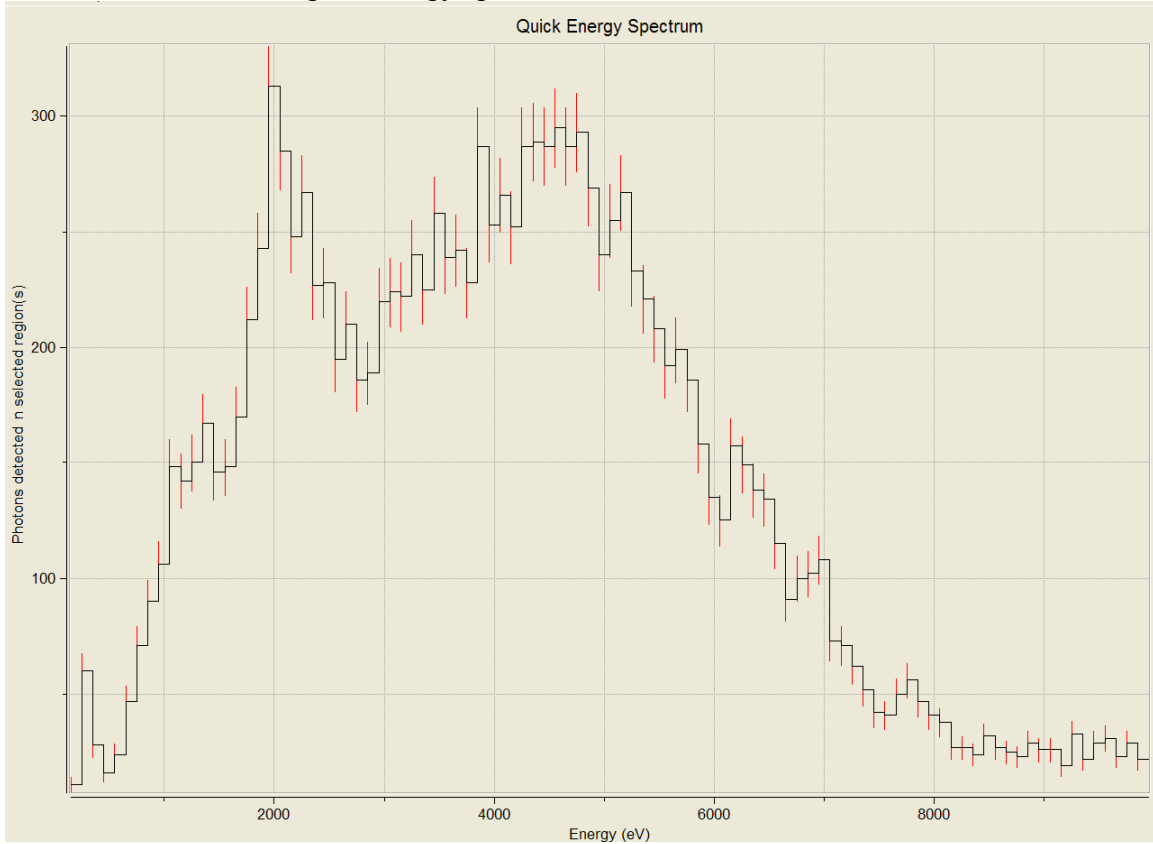
 Statistic value   = 161.222
 Probability [Q-value] = 0.729769
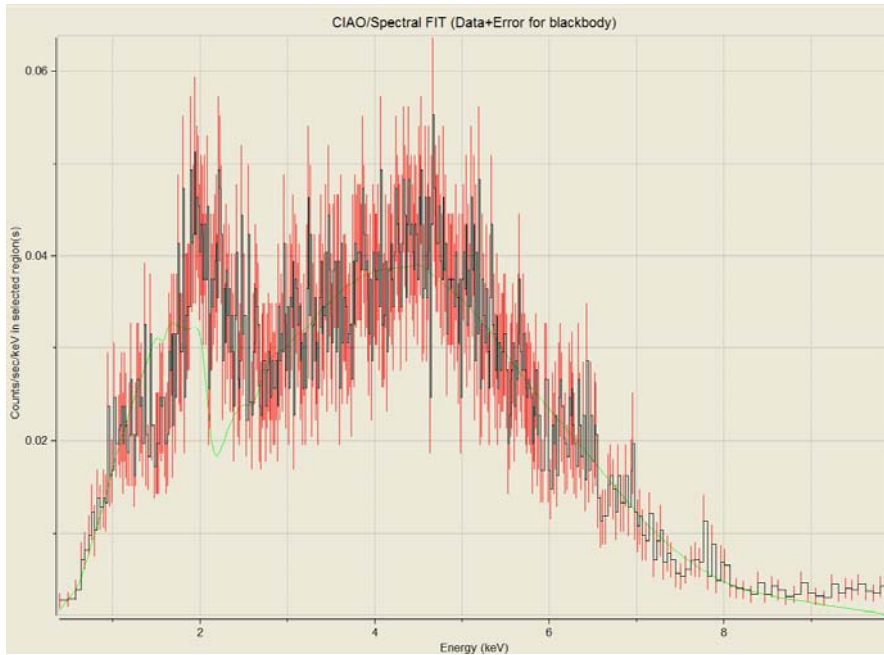 **Reduced statistic   = 0.931918**

3-color image at high state:

time = 144325000:144335000 (low state)

Zeroth order circular region energy spectrum

Fit to blackbody:

***************** SHERPA FIT RESULTS ********************

Input File: ./2739.fits_1024@4096_1024@4096_1
Model: blackbody
Energy: :0.3,10:
Region:
circle(4088,4090,130.399)

Temperature = 5.65048 keV

Fit performed using absorbtion model multiplied by selected model.
The first two lines below indicate the predicted flux we receive at Chandra
(i.e. what came through the absorbing dust).
The second two lines below indicate the predicted flux from selected model
if there was no absorbing dust in the way.
If the model choice is valid, this flux can be used to predict the intrinsic
luminosity of the object.

Flux for source dataset 1: 1.18303e-11 ergs/cm**2/s
Flux for source dataset 1: 0.00110869 photons/cm**2/s
Flux for source dataset 1: 1.1878e-11 ergs/cm**2/s
Flux for source dataset 1: 0.0011249 photons/cm**2/s

 Statistic value   = 529.21
 Probability [Q-value] = 0.000748099
 Reduced statistic   = 1.23072

3-color low state:
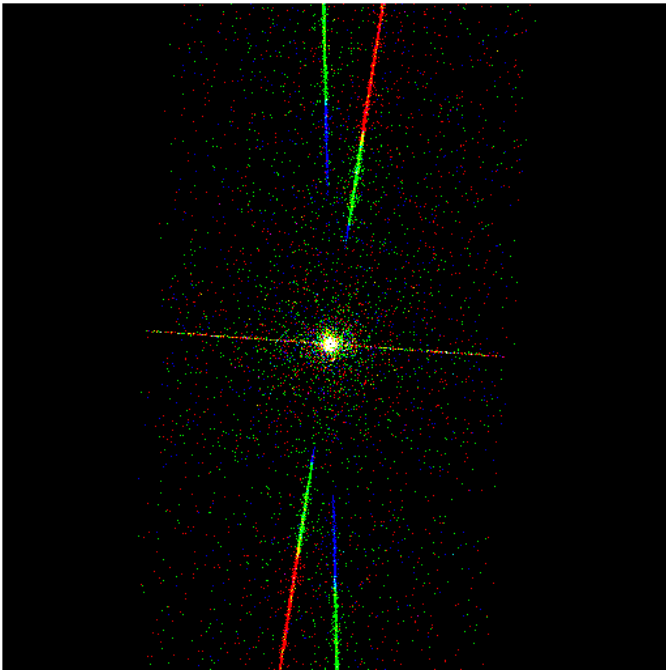
Burster GS 1826-238			R: .3 to 3.5 keV		
144311300	144311400		G: 3.5 to 6 keV		
144324175	144324275		B: 6 to 10 keV		
144337025	144337125				
144349550	144349650				
144362540	144362640				
144375050	144375150				
	R	**G**	**B**	**Total**	**Cts/s**
High	1217	2411	938	4667	7.778333
	0.260767088	0.516606	0.200986		
144325000	144335000				
Low	5644	6072	2284	15314	1.5314
	0.368551652	0.3965	0.149145		

Chandra Astrophysics Institute
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