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**Thermal SNRs WG Meeting**  
**at the IACHEC Meeting**

***Wednesday May 22 8:30 JST: Tuesday May 21 23:30 UTC***



## Agenda

- 1. New E0102 results (Konrad pn, Jelle RGS)*
- 2. N132D Model Development (Eric Suzaku, Paul ACIS, Konrad pn, Martin RGS)*
- 3. Cas A model (Andy)*
- 4. Organization for the Coming Year*



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**1 E0102.2-7219 Results**

- **Konrad has new pn results**
- **Jelle says that the RGS effective area is different. Should we re-analyze the RGS data of E0102 and derive new line normalizations ?**
- **any new ASTROSAT results ?**



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## **N132D Model Development**

- current version is 2.11, N132D\_E0310\_v2.11\_20180406.mdl
- available at “<https://wikis.mit.edu/confluence/display/iachec/Current+N132D+model>”
  - uses AtomDB v3.0.9
  - uses the “nlapec” model in XSPEC instead of the “No\_Line” data files
  - removes the power-law component for background, each instrument decides best how to handle the instrument specific background
  - many thanks to Martin Stuhlinger and Andy Pollock for model development

## **Logistical Issues**

- use latest XSPEC v12.10.1, latest patched version of 12.10.1f
- the default APEC in XSPEC v12.10.1 is v3.0.9



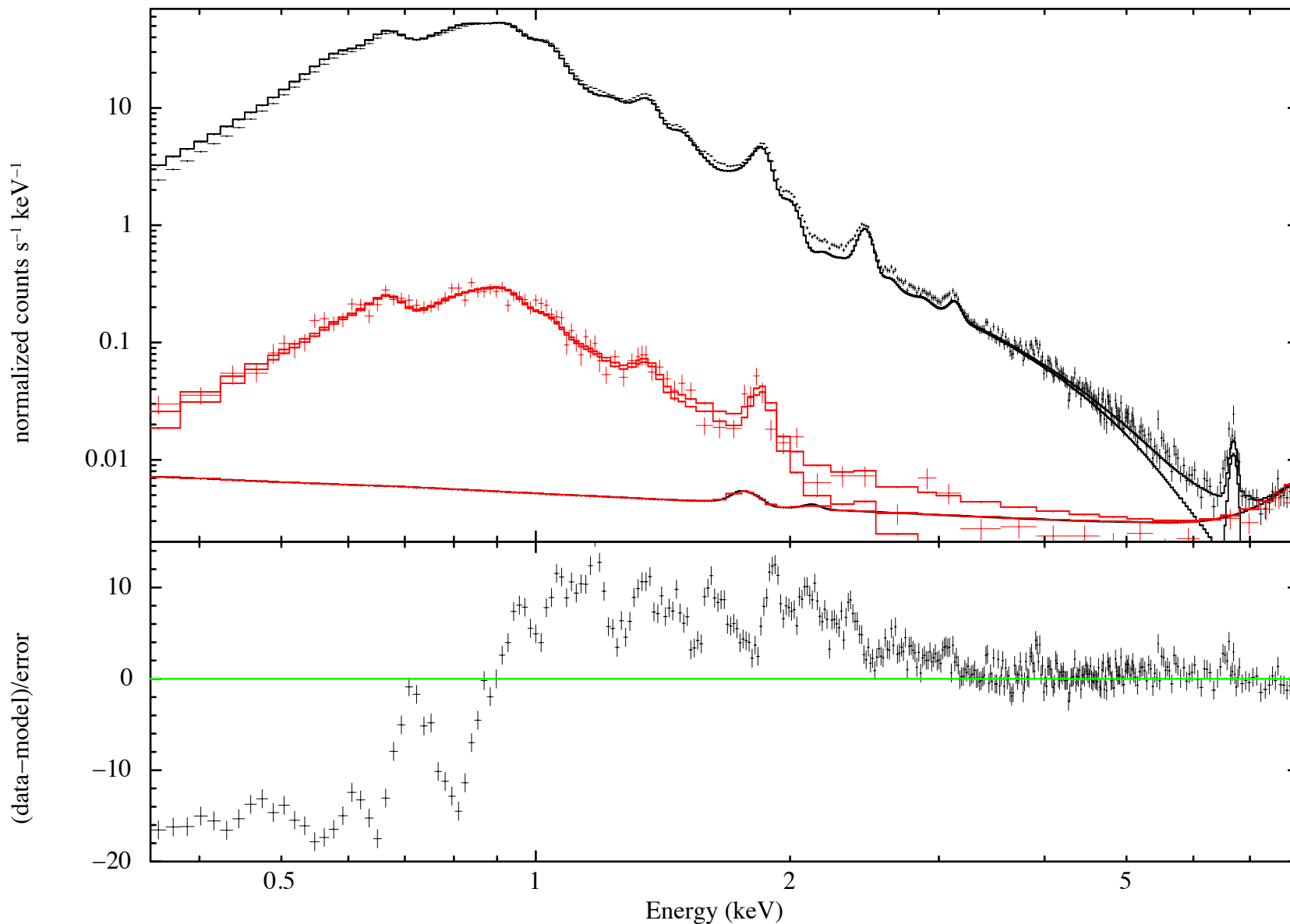
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***N132D Results***

- **Konrad has new pn results**
- **Eric has new Suzaku results**
- **Paul has new ACIS results**
- **Martin has new RGS results**



OBSIDs 5532,7259,7266 (2006), fit 0.35–8.0 keV, CStat=14421, DOF=1050  
detback cons=213.2, skyback cons=92.1, source cons=1.01



**N132D: ACIS**  
**2006**  
**observation:**  
**significant**  
**pileup**  
**Fit with v2.11 of**  
**the model, only**  
**allow the global**  
**norms to vary**

**0.35-8.0 keV**

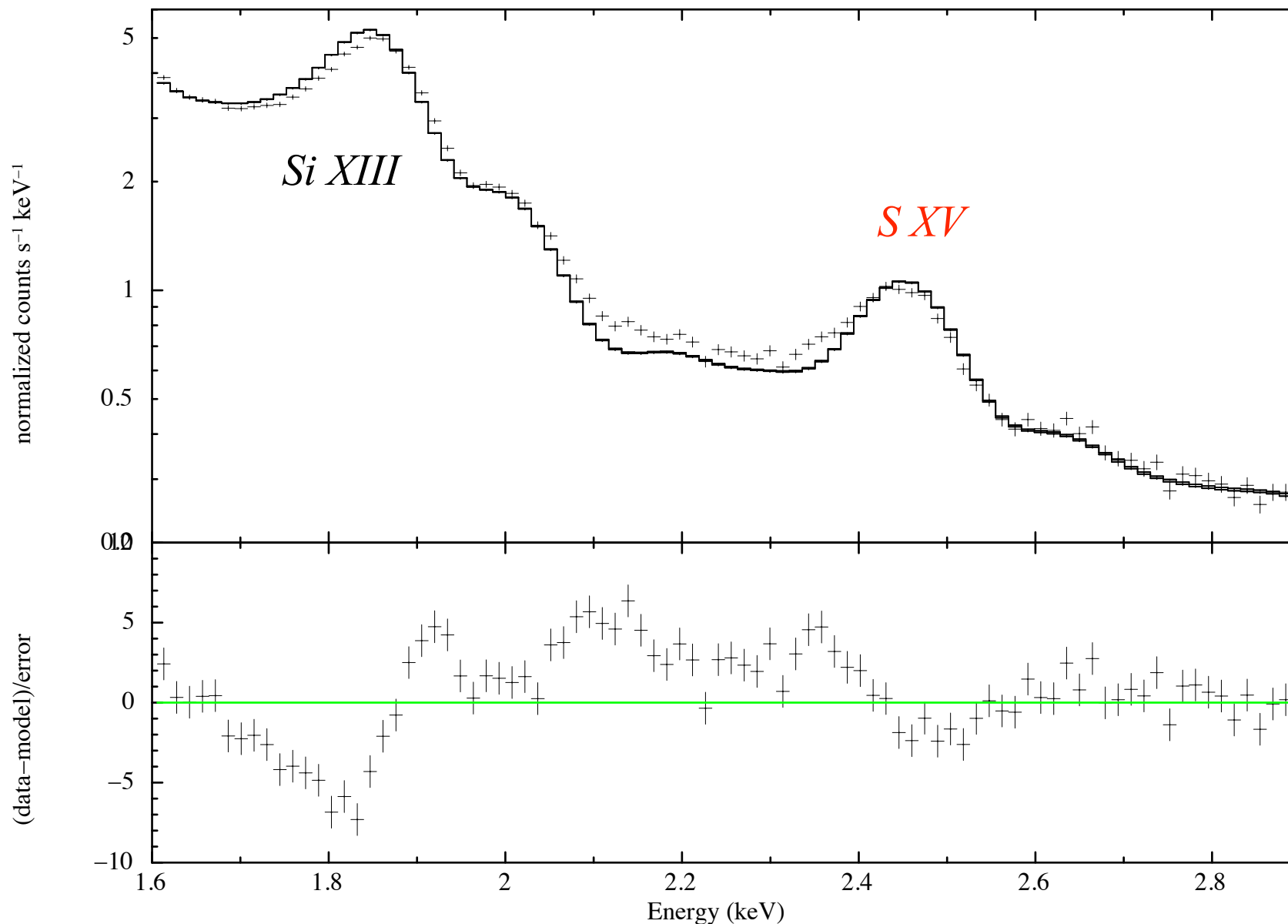


OBSIDs 5532,7259,7266 (2006), fit 1.6–2.9 keV, CStat=845, DOF=176  
detback cons=256.8, skyback cons=73.1, source cons=1.15

**N132D: ACIS**  
**2006**

**observation:**  
**significant**  
**pileup**

**Fit with v2.11 of**  
**the model, only**  
**allow the global**  
**norms to vary**



**1.6-2.9 keV**



*Si XIII*

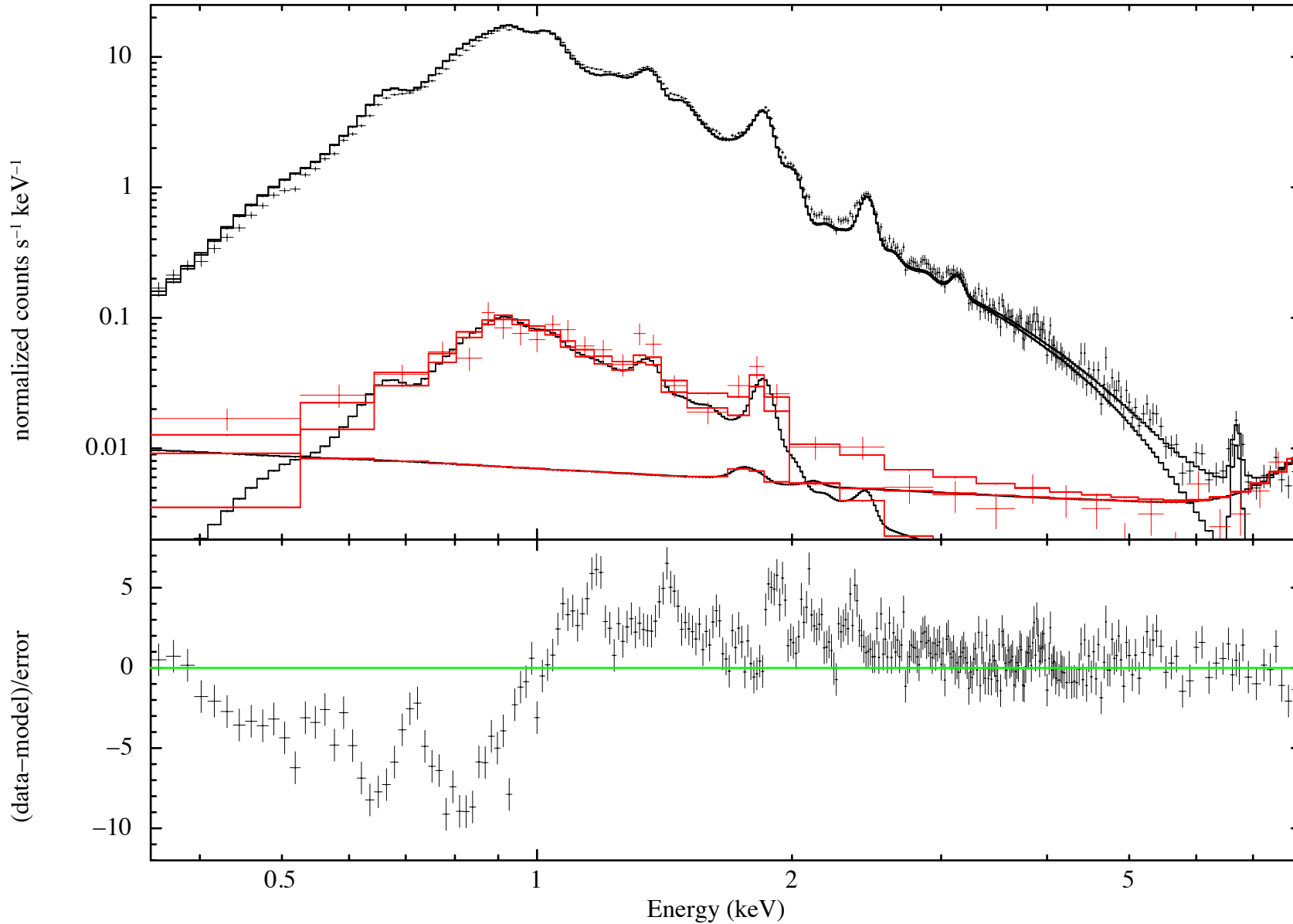
**Chandra X-ray Observatory** *S XV*

*Ar XVII*

*CXC*

OBSIDs 21362 (2019), fit 0.35–8.0 keV, CStat=3220, DOF=1050  
detback cons=287.9, skyback cons=97.2, source cons=0.99

**N132D: ACIS**  
**2019**  
**observation:**  
**less pileup**  
**Fit with v2.11 of**  
**the model, only**  
**allow the global**  
**norms to vary**

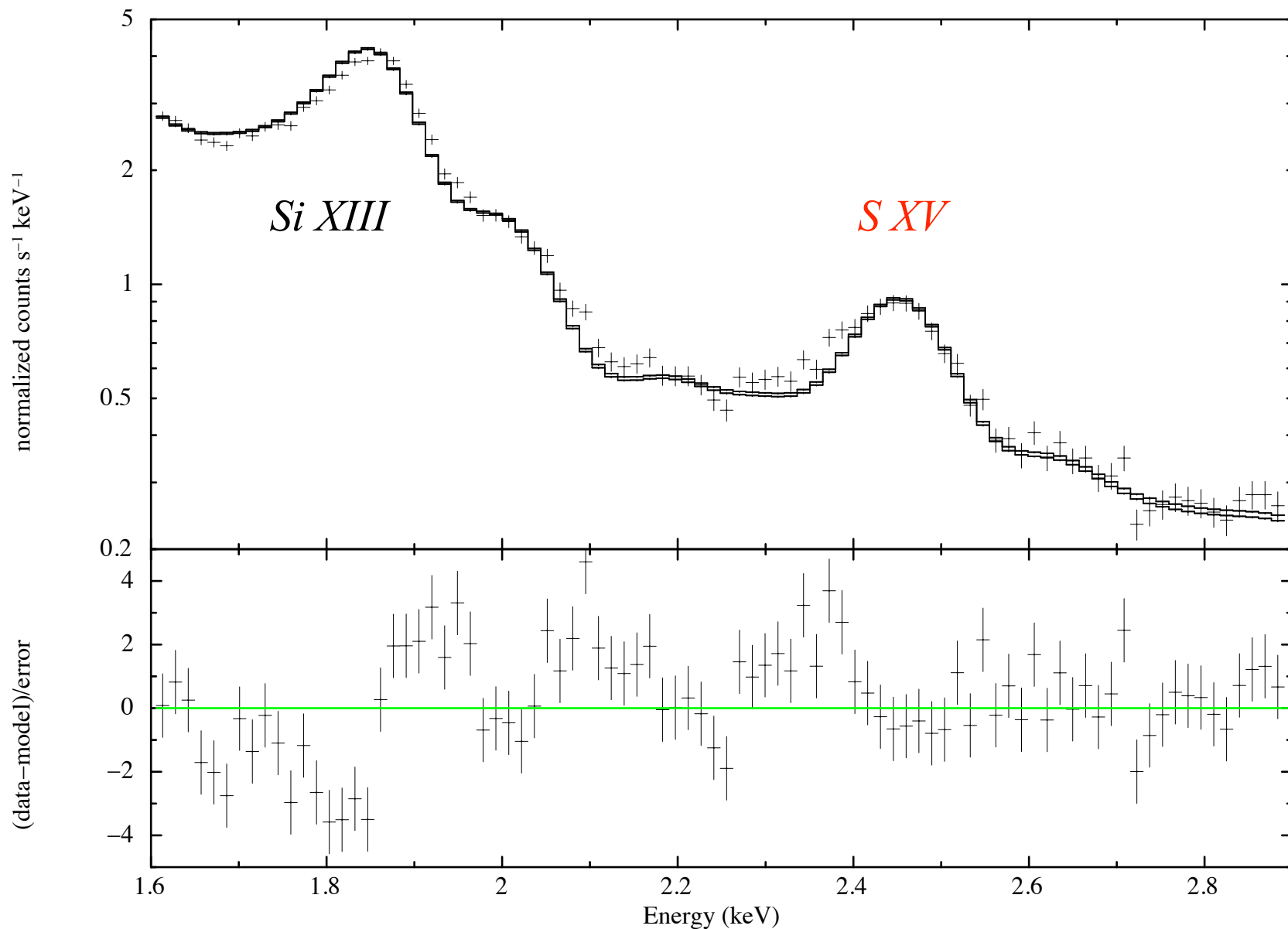


**0.35-8.0 keV**





OBSIDs 21362 (2019), fit 1.6–2.9 keV, CStat=344, DOF=176  
detback cons=389.1, skyback cons=88.7, source cons=1.07



**N132D: ACIS**  
**2019**  
**observation:**  
**less pileup**  
**Fit with v2.11 of**  
**the model, only**  
**allow the global**  
**norms to vary**

**1.6-2.9 keV**



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***Organization for the Coming Year***

- **Matteo wants the E0102 data sets that went into the 2017 paper. Can you provide them ?**
- **We have made little progress on the N132D model. We need someone to take responsibility for the RGS data**
- **We need to meet regularly. Can we meet once a month by WebEx or zoom ?**