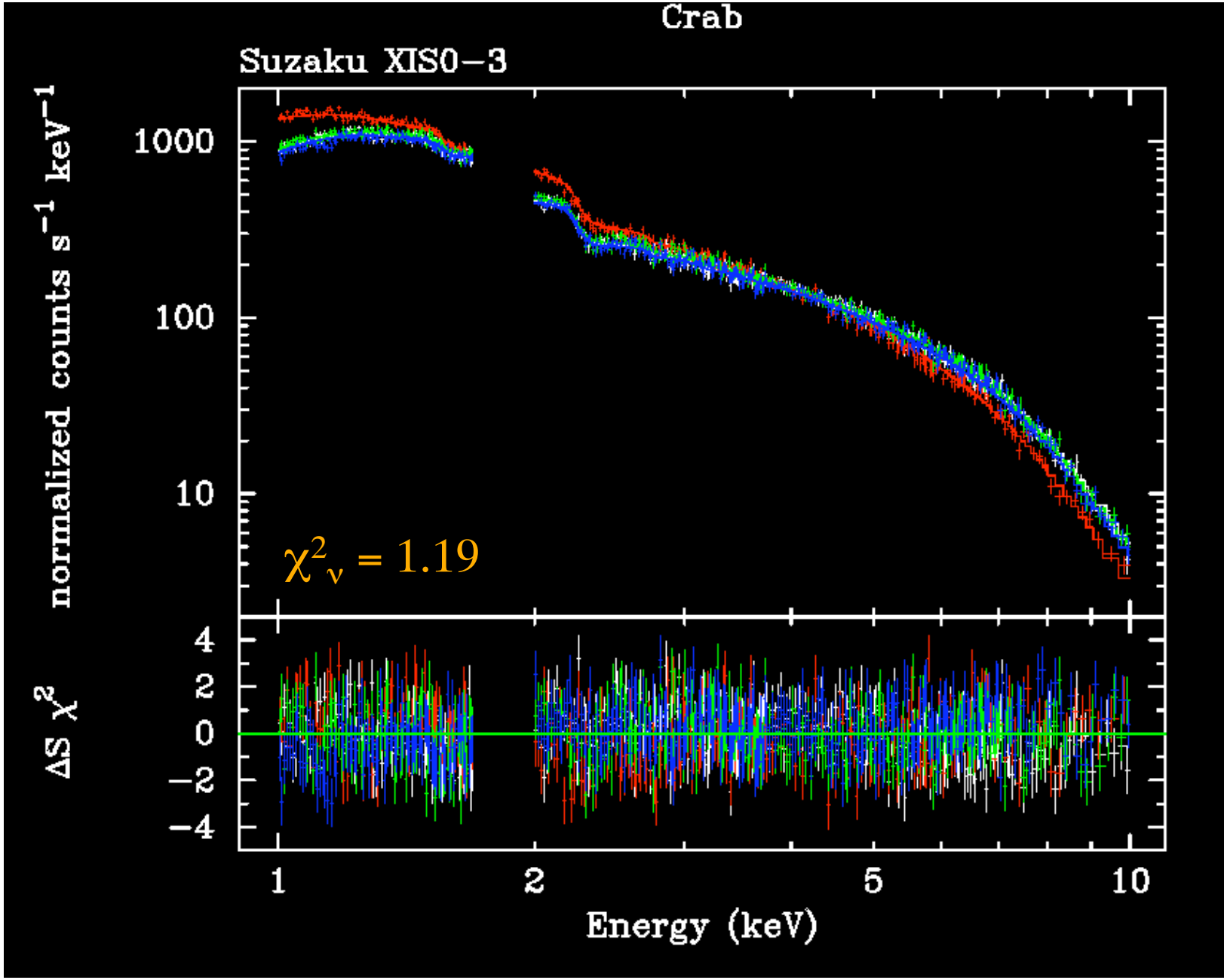
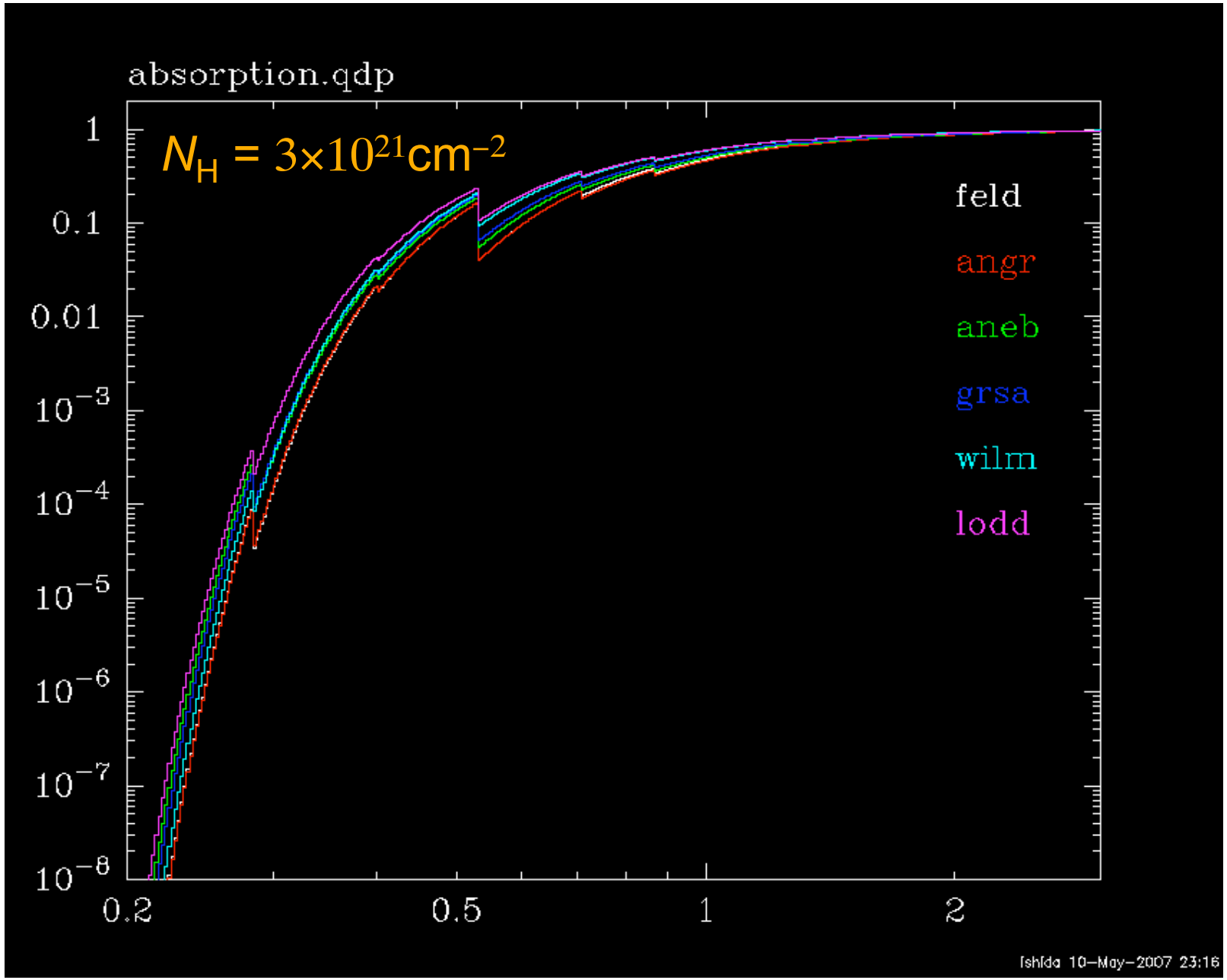
Fit phabs*pegpwrlw to Suzaku XIS0-3 with bcmc/wilm



Dependence of the parameters on Abundance Table

Satellite	Det	xsect	Abun	E-band for fit	N_H $10^{21}cm^2$	ph. Index	Norm $10^{-8}erg/cm^2/s$	$\chi 2v$	Flux ($10^{-8}erg/cm^2/s$) 0.5–2	2–10	20–50	50–100
Suzaku	XIS	bcmc	wilm	1.0-10.0	4.61±0.10	2.070±0.008	2.239±0.012	1.19	–	2.170	–	–
			angr	1.0-10.0	3.19±0.07	2.077±0.008	2.244±0.012	1.19	–	2.169	–	–

Photoelectric absorption with different abundance tables



Fit to Crab

- We have to define column densities of each element rather than using one particular abundance table.
- RGS can determine column densities of (C,) N, O, Ne, Fe(L-edge).
- Use “angr” at the moment as the abundance table to keep consistency with historical value of N_H, and fill the table, and eventually adopt RGS values.
- Use “bcmc”
- Model: phabs * pegpwrlw
- Fill the table…

Satellite	Det	xsect	Abun	E-band for fit	N_H $10^{21}cm^2$	ph. Index	Norm (2-10) $10^{-8}erg/cm^2/s$	$\chi 2\nu$	Observed Flux ($10^{-8}erg/cm^2/s$)			
									0.5–2	2–10	20–50	50–100
Suzaku	XIS	bcmc	wilm	1.0-10.0	4.61±0.10	2.070±0.008	2.239±0.012	1.19	–	2.170	–	–
			angr	1.0-10.0	3.19±0.07	2.077±0.008	2.244±0.012	1.19	–	2.169	–	–
	PIN		angr	12.0-70.0	3.19 (fixed)	2.110±0.007	2.267±0.023	1.03	–	–	1.039	–
RXTE	HEXTE	bcmc	angr	20-240	3.19 (fixed)	2.087±0.008	1.929±0.027	0.99	–	–	0.928	0.657
XMM	pn	bcmc	angr	1.0-10.0	$2.41^{+0.03}_{-0.07}$	$2.107^{+0.004}_{-0.009}$	$1.876^{+0.003}_{-0.006}$	1.31	–	1.827	–	–
INTEGRA	SPI	bcmc	angr	22-100	3.19 (fixed)	2.123±0.014	±	0.7	–	–	1.04	0.73
RXTE	PCA			3-50	3.19 (fixed)	2.114	2.4018	2.63	–	2.320	1.09	–
Swift	BAT	bcmc	angr	30-100	3.19 (fixed)	2.10±0.06	1.74±0.25	0.82	–	–	0.82	0.57

- We are going to do the same thing to G21.5-0.9, 3C58 and PSR1509+58…