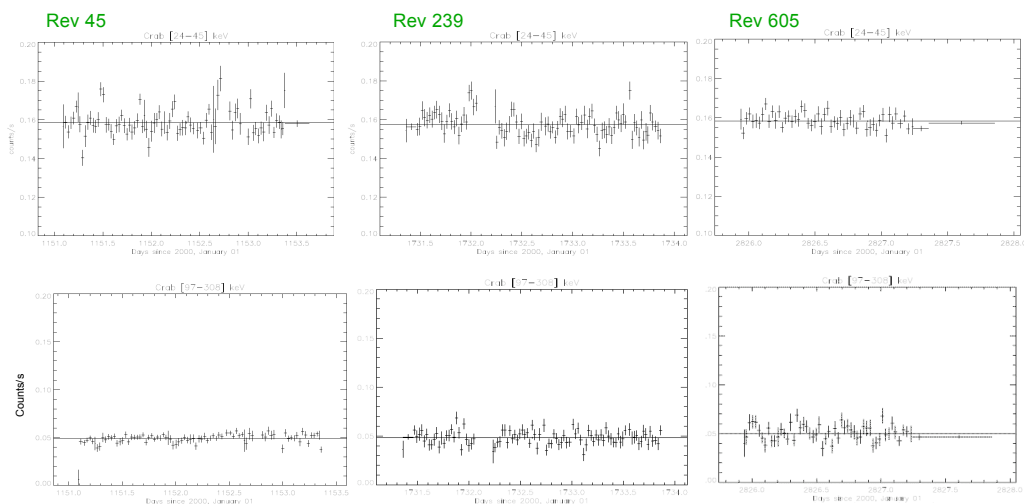


# SPI CALIBRATION WITH CRAB OBSERVATION

## CRAB FLUX by SCW



**STABILITY OF EFFICIENCY SINCE THE  
BEGINNING OF THE MISSION**

**SPECTRUM FOR THE 5X5  
DITHERING PATTERN**

~ 81 ks

**FIT RESULTS:  
BROKEN POWER LAW**

Without systematics

$$\alpha_1 = 2.08 \pm 0.02$$

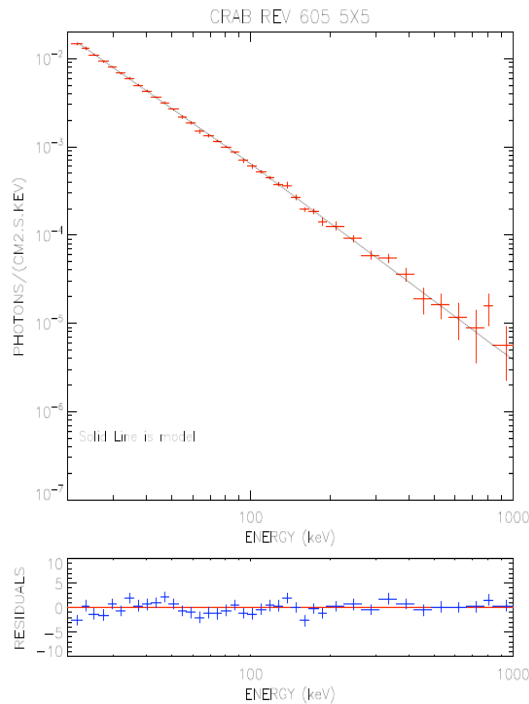
E<sub>b</sub> fixed to 100 keV

$$\alpha_2 = 2.23 \pm 0.05$$

FLUX @ 100 keV :

6.23 10<sup>-4</sup> ph/ cm<sup>2</sup> s

**COMPATIBLE WITH PREVIOUS  
SPI RESULTS**



## NEXT OBSERVATIONS

**SURVEY OF THE STABILITY OF THE INSTRUMENT AT  
HIGH ENERGY AFTER 5 YEARS IN ORBIT  
POSSIBLE ONLY WITH THE CRAB  
WITH A 5X5 DITHERING PATTERN**

**With 100 ks (Rev 605)**

Flux @ 500 keV	known within	~ 30%
Flux @ 1 MeV	-	~ 50%
Flux @ 1.5 MeV	-	~ 80%

500 ks of observation would reduce these values by ~ 2.2  
1 Ms of observation - by ~ 3.2