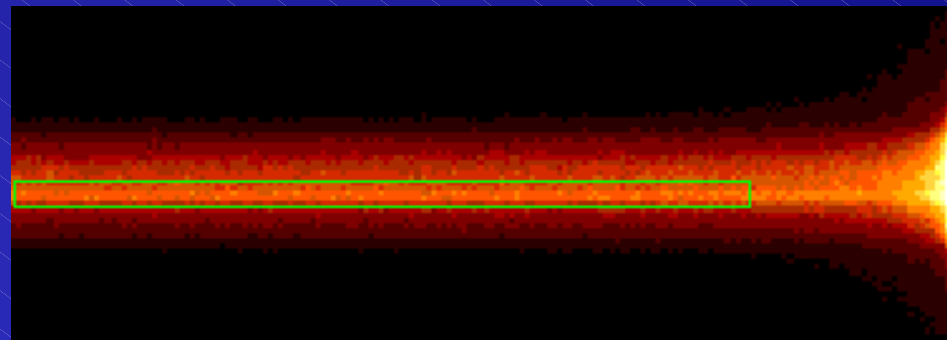
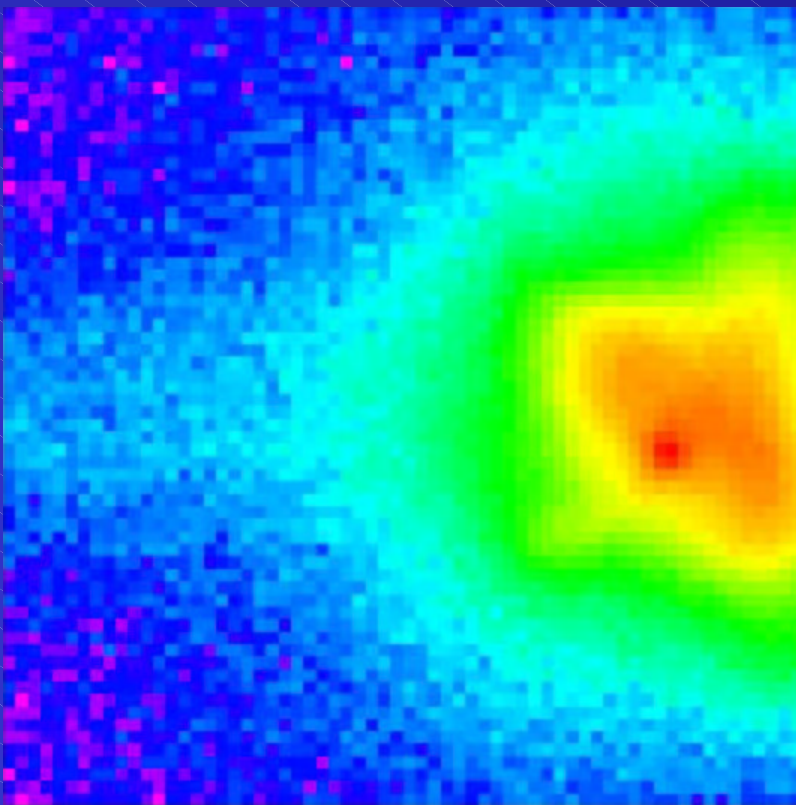
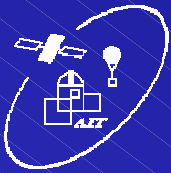




preliminary results of a pulse resolved spectroscopy of the Crab





preliminary results of a pulse resolved spectroscopy of the Crab

- data reduction
- period & pulse profile
- nebula spectra und N_{H} -
approximation
- spectra of different pulse regions





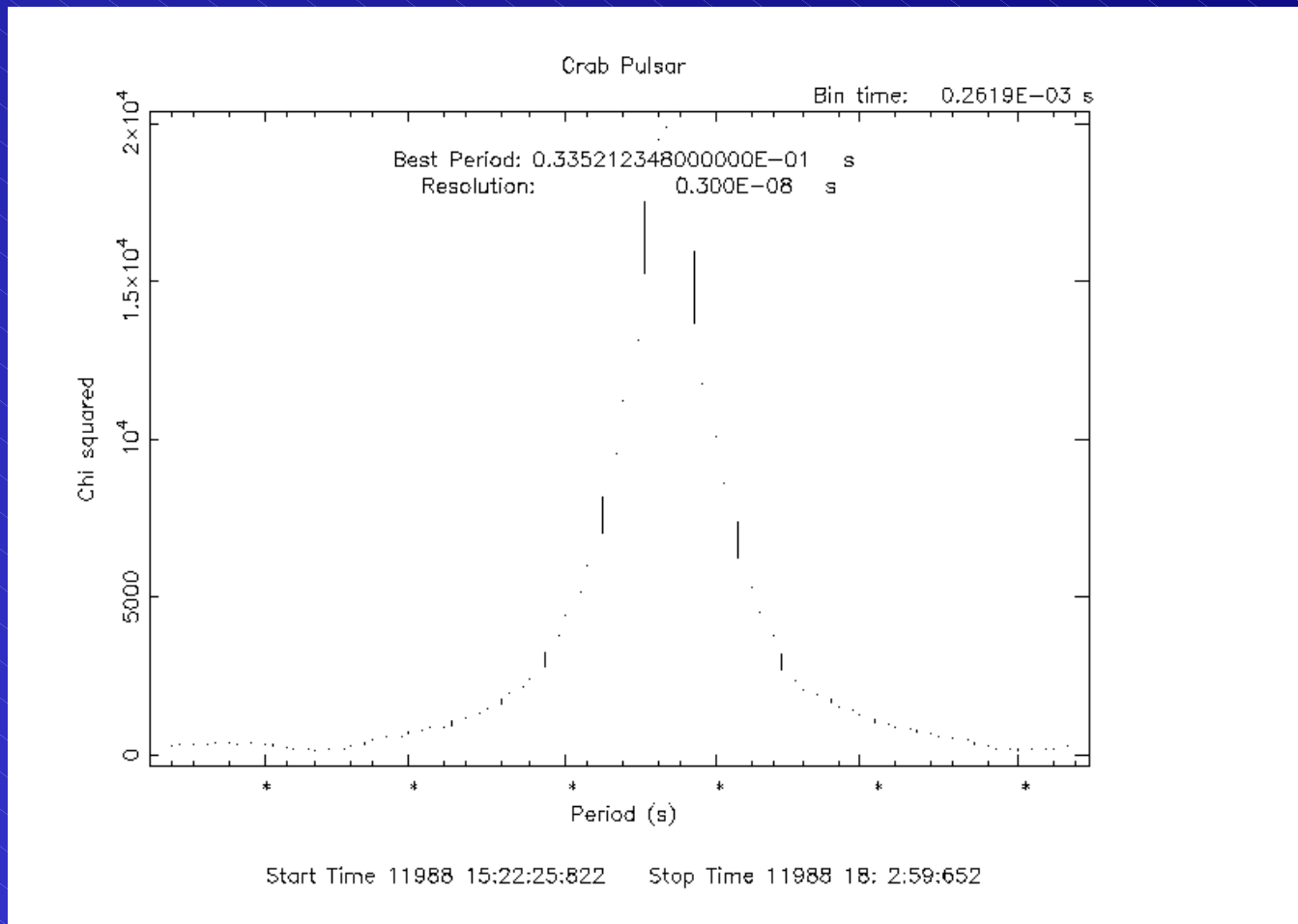
data reduction

- EPIC-pn Burst Mode
- Obs: 0135730701 Rev 234
10 ks
- single events only
- MPE SAS ~ SAS 5.2
 - newest gain/cti correction
 - problems with relative timing



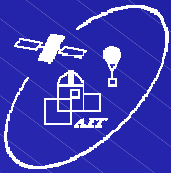


period



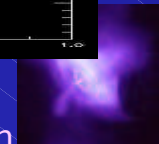
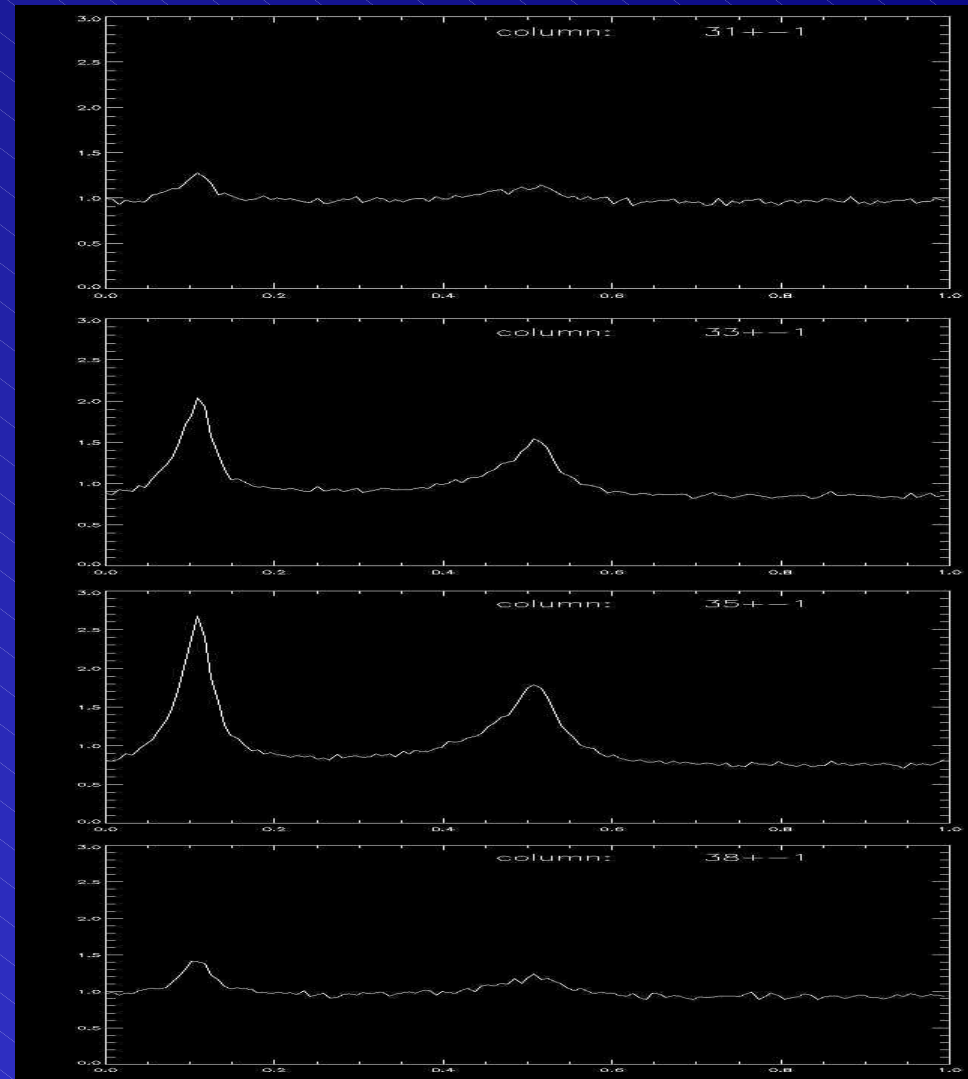
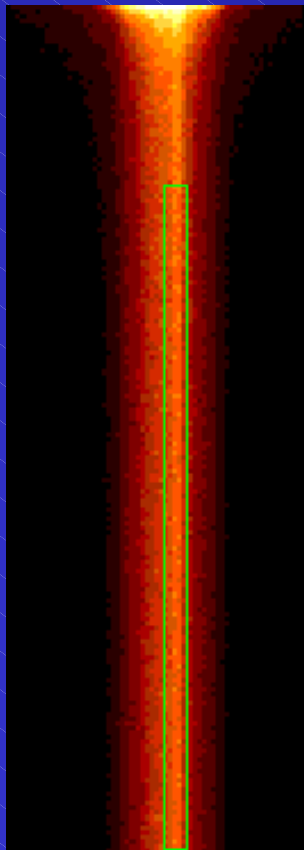
best period: 0.335212348

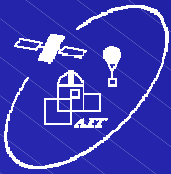




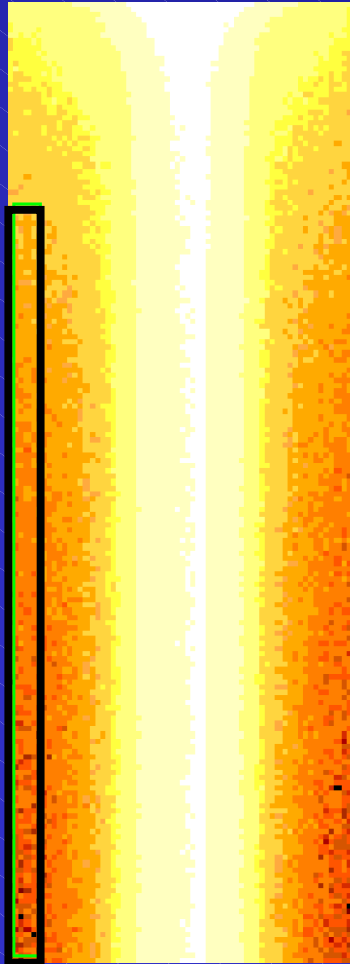
localization of pulsar

- running window in x direction and folding shows: pulsar is located in row 36 ± 2.5

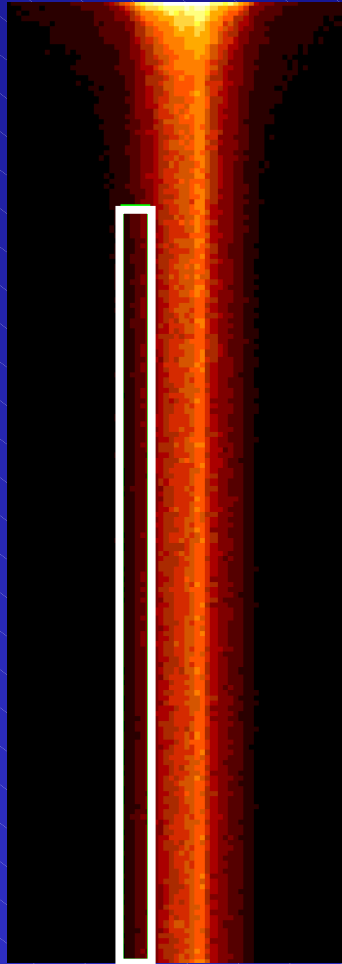




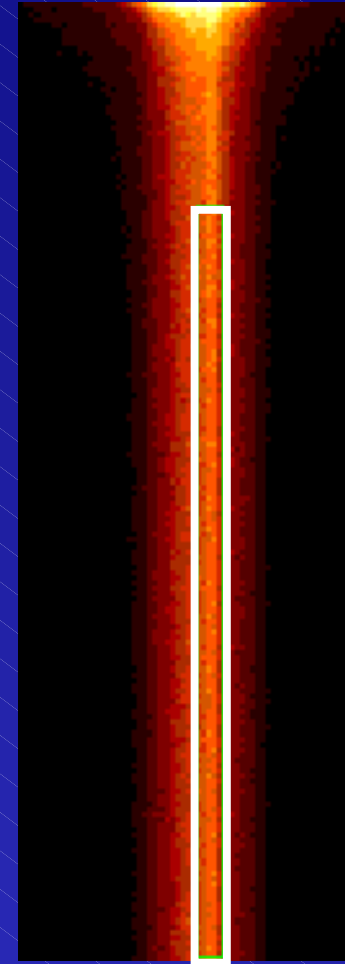
extraction regions



BG



nebula

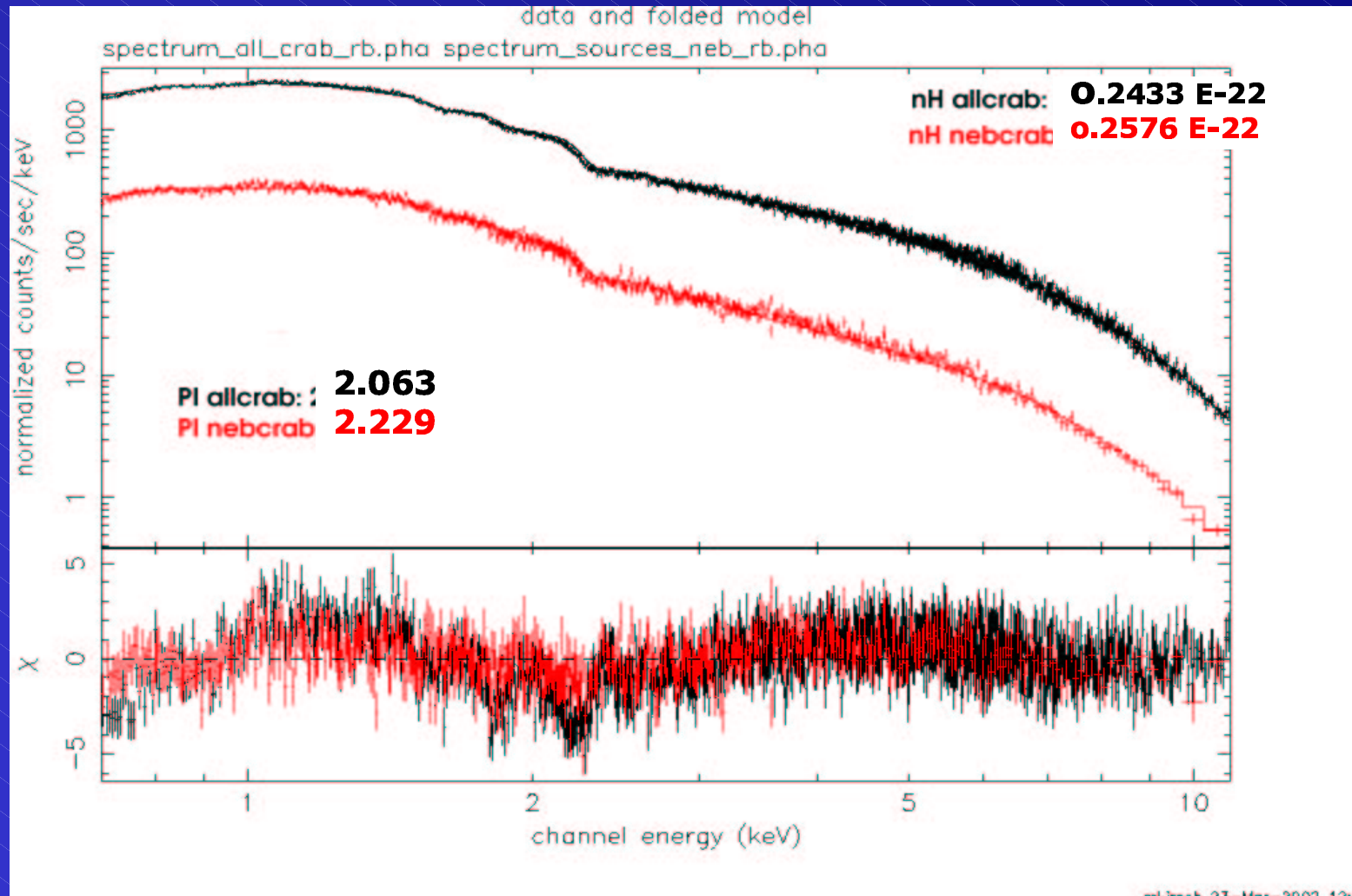


pulsar



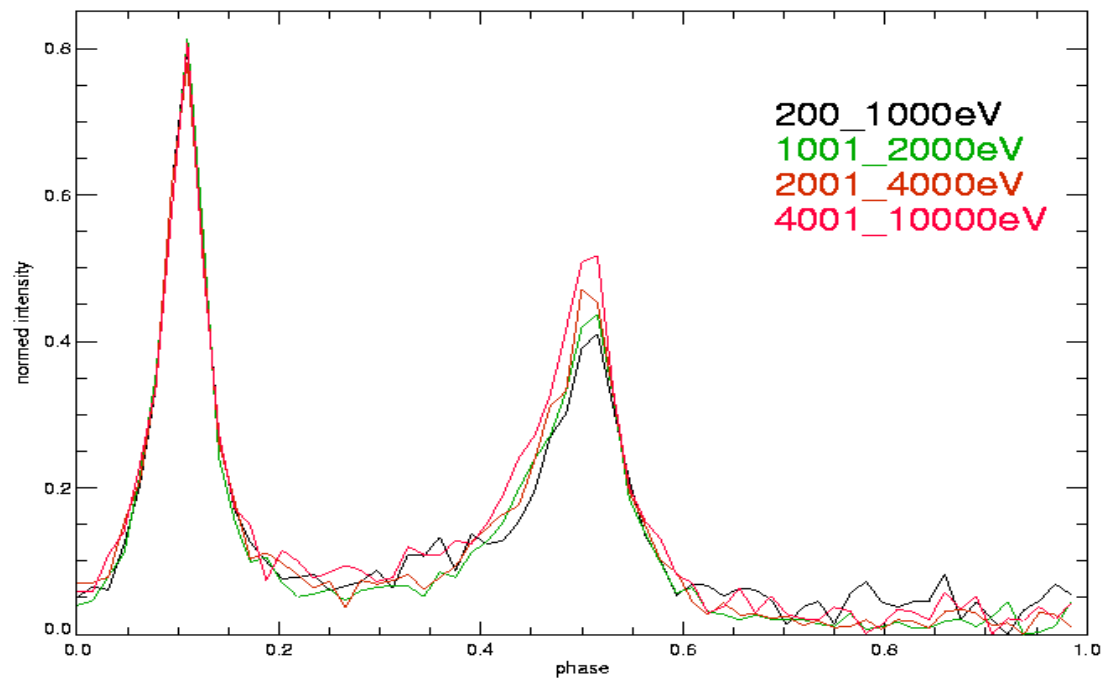


nebula spectra and N_{H} -approximation



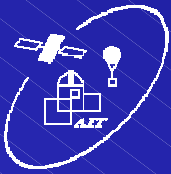


folded light curves for different energies

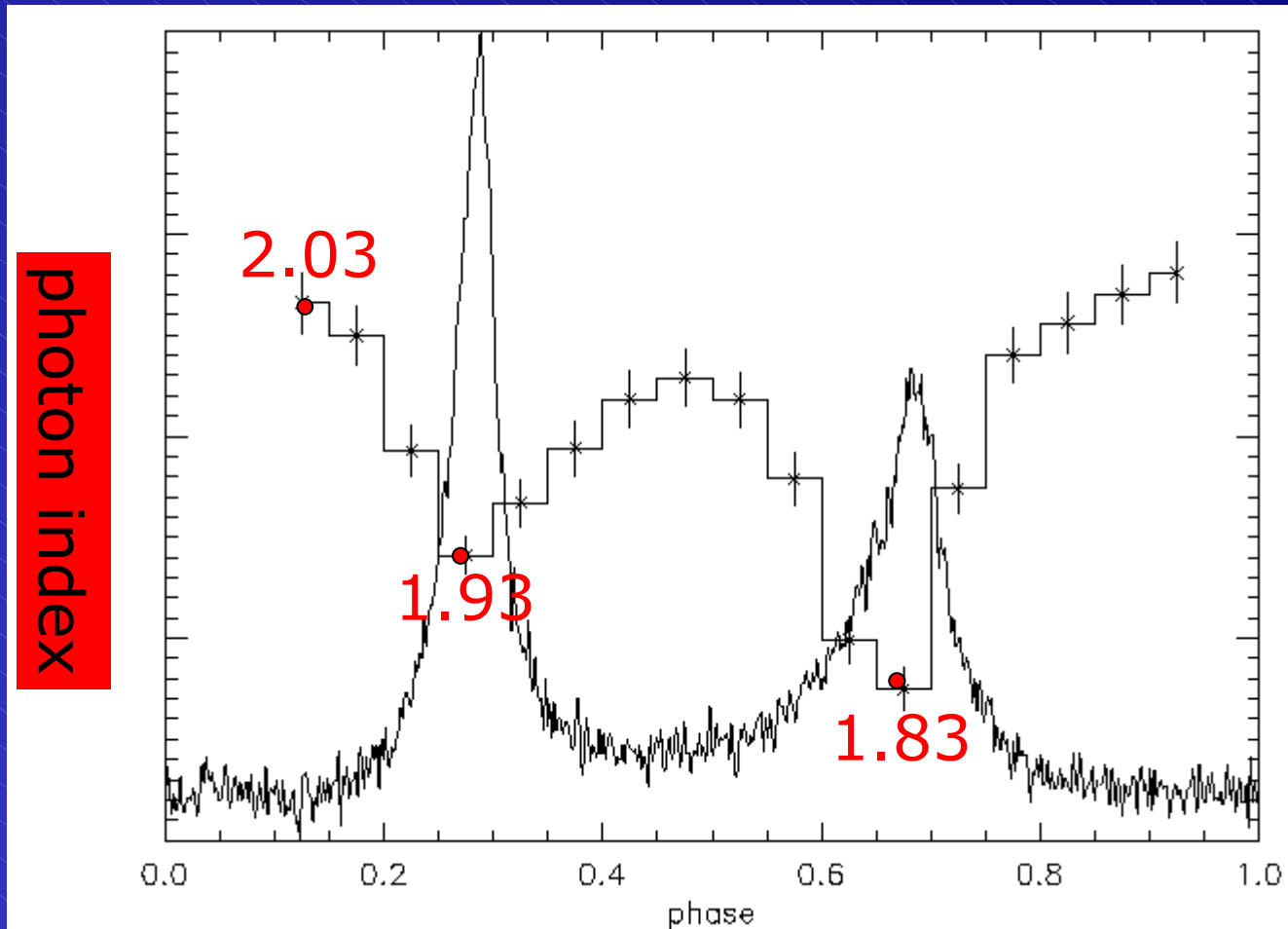


2nd pulse is harder



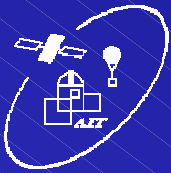


pulse resolved spectroscopy



spectrum harder in peak region





results

- period determination currently wrong due to bug in barycen
solved last week
- photon index is significantly harder in peak regions ???

