Spatial relation of X-rays and decimetric spikes

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Background

- Radio and X-ray emission are both signatures of accelerated particles
- In traditional acceleration models expect close relation between two emission types
- Strong temporal association rate has been found between millisecond decimetric spikes and hard X-rays.
- What about the spatial relation?

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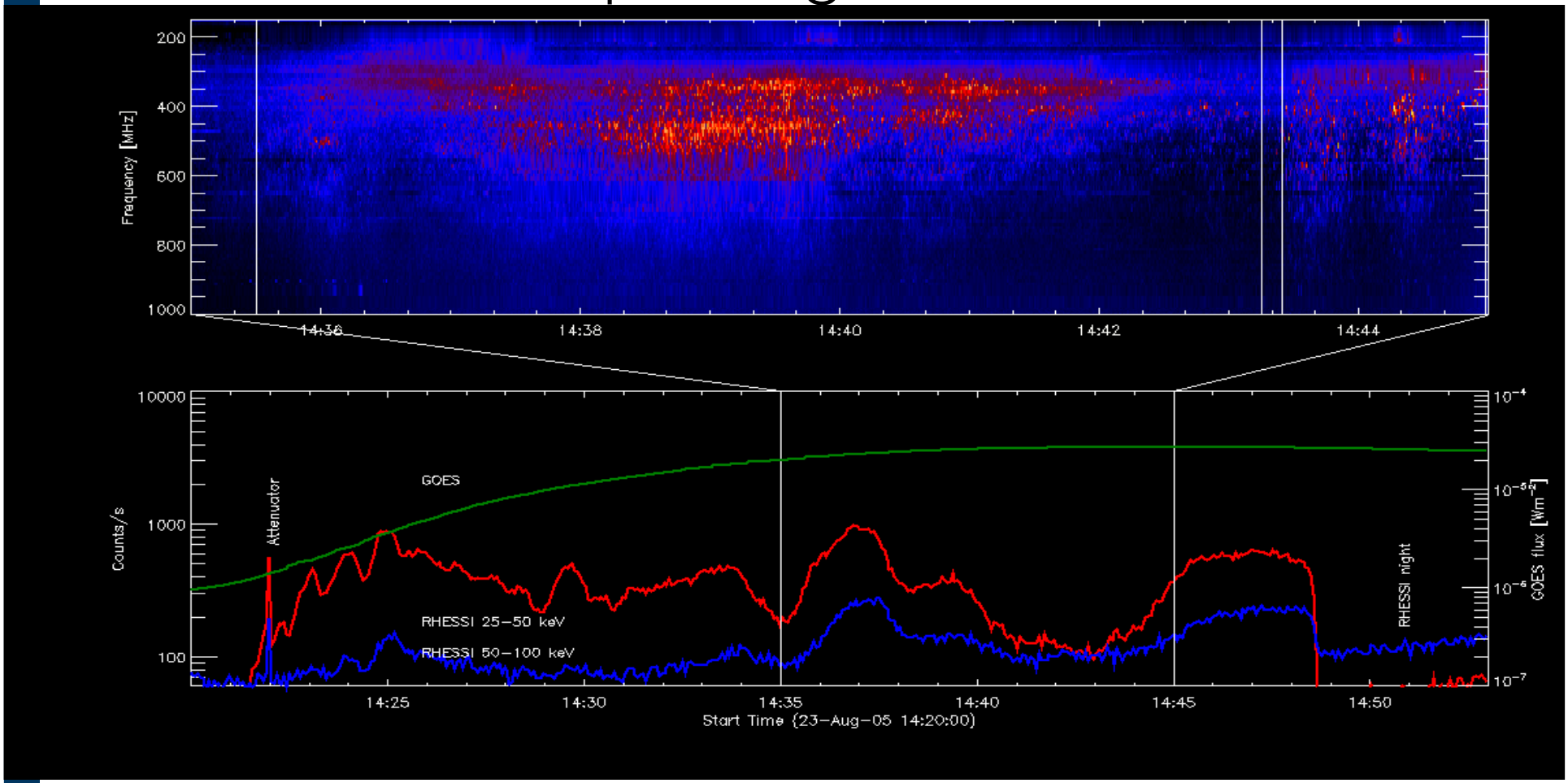
Observations

Phoenix II Spectrogram



RHESSI lightcurve

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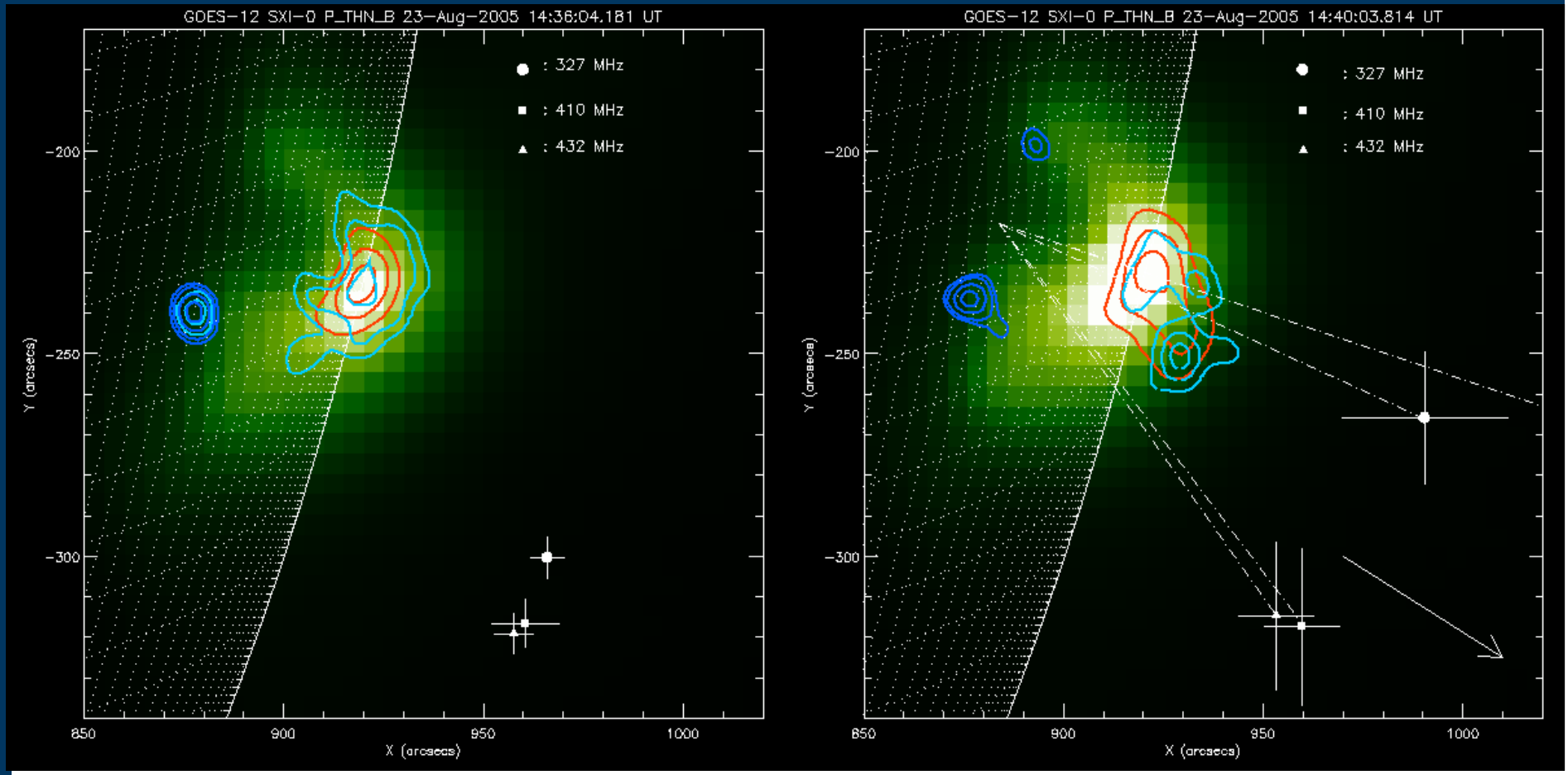
Observations

- Two time intervals of extended spike activity during a solar flare
- Not clearly correlated in time with the X-ray lightcurve
- Use Nancay 327, 410.5, 432 MHz to find position of radio sources
- RHESSI imaging to find position of HXR emission

Spatial relation



RHESSI 6-12 keV
RHESSI 18-22 keV
RHESSI 25-50 keV