

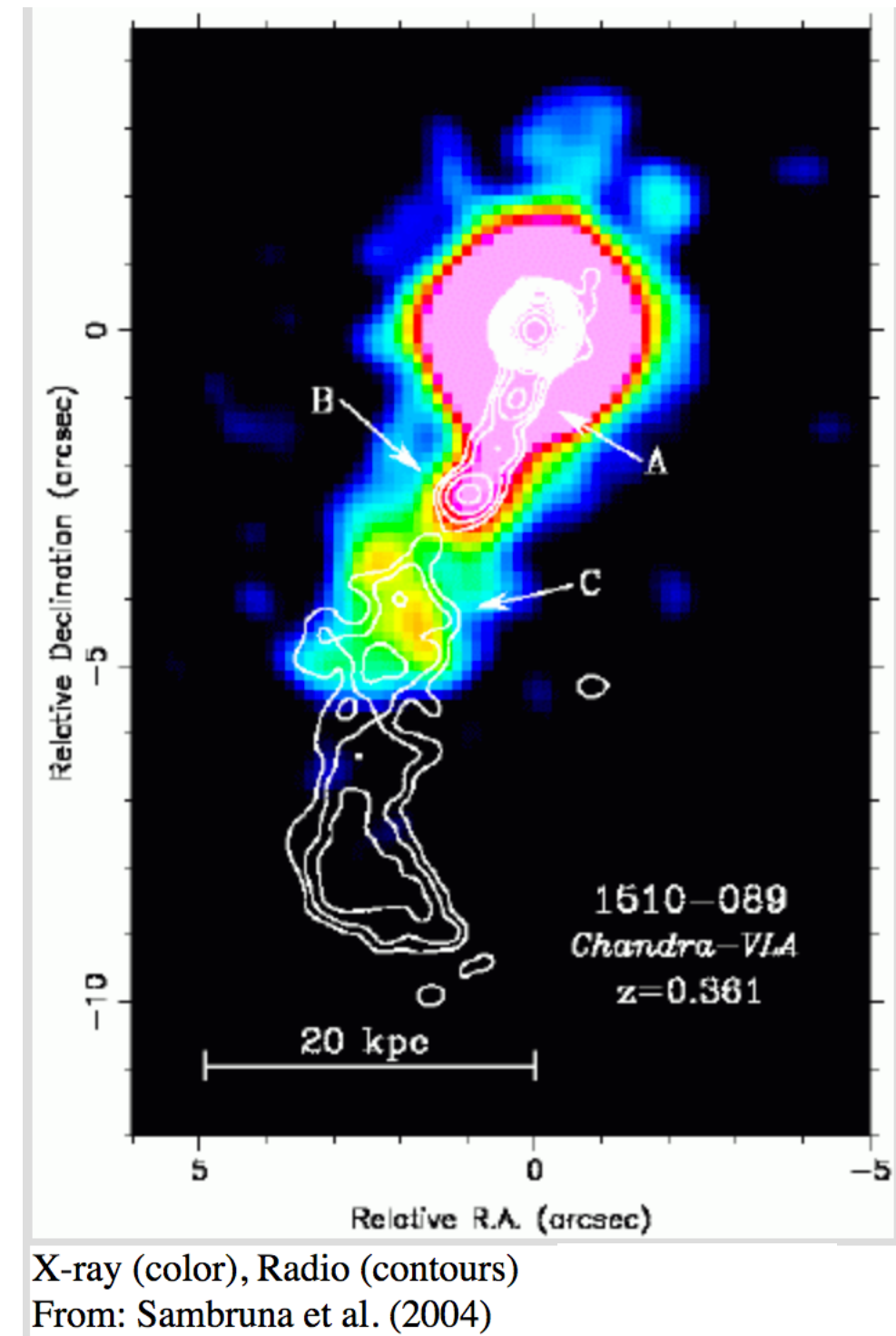
PKS 1510-089

FSRQ

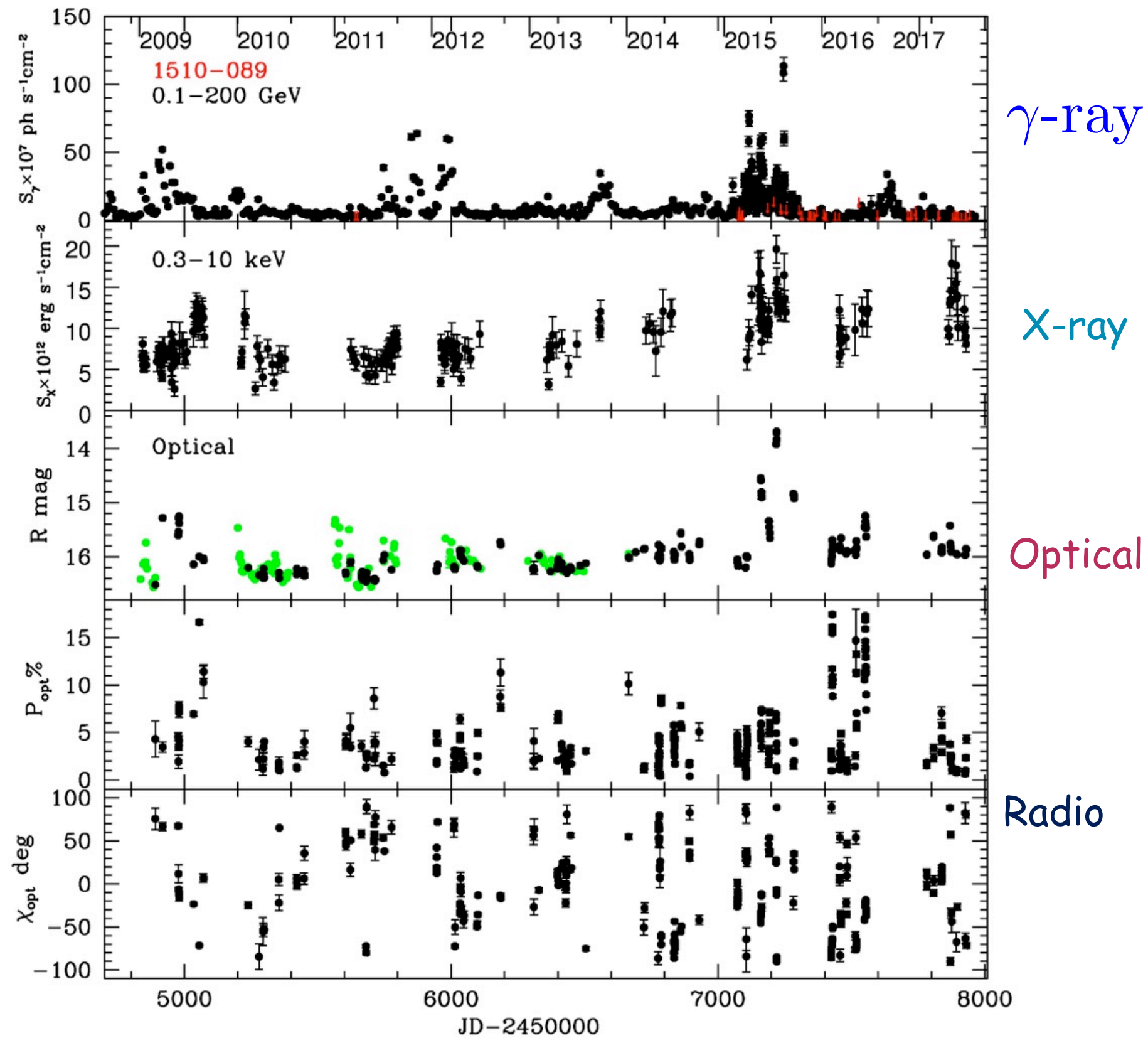
$z=0.361$

$N_{\text{H}}(\text{Gal})=6.99\text{e}20 \text{ cm}^{-2}$
(Kalberla et al. 2005)

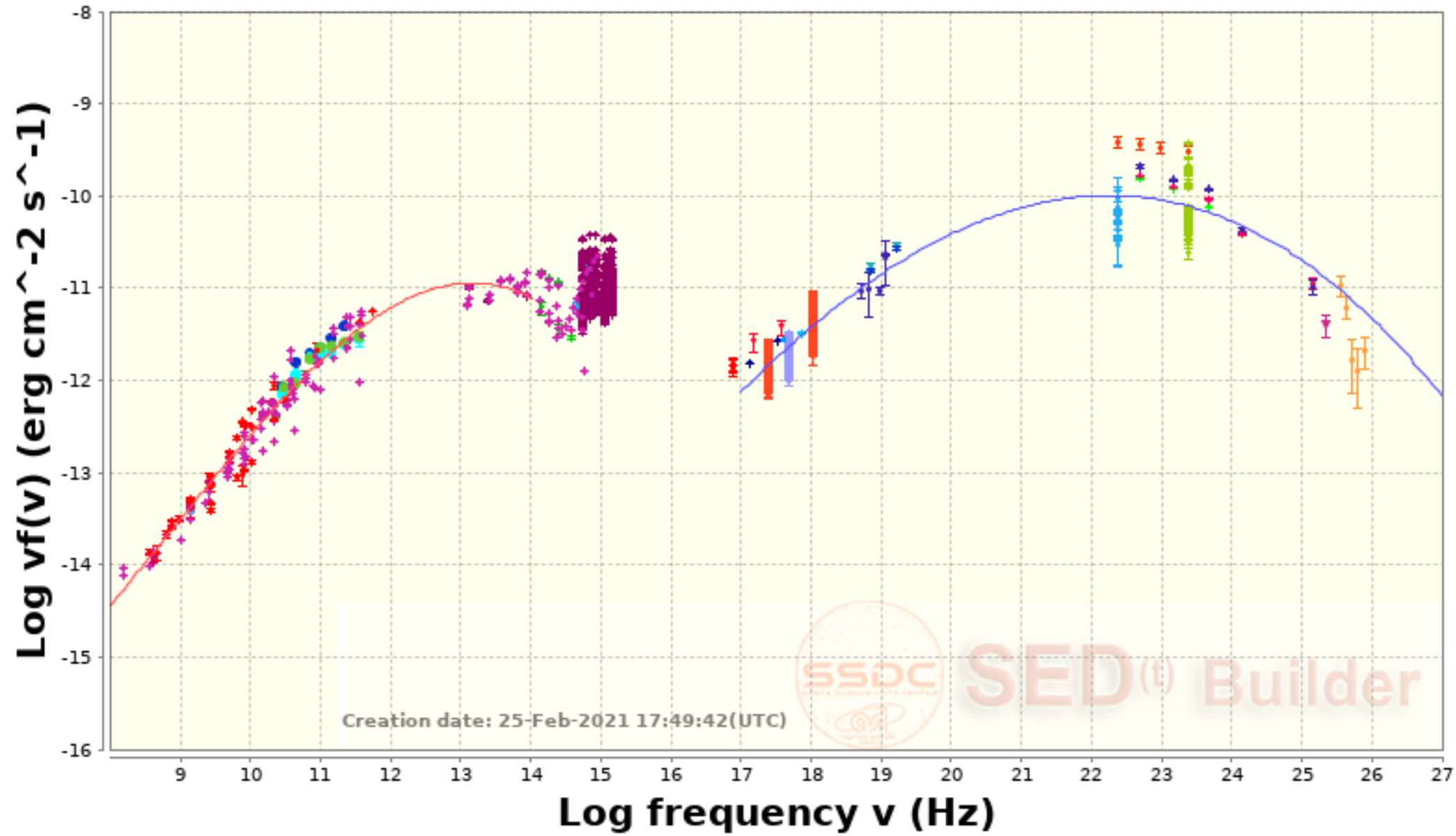
Apparent velocity: $1263 \pm 27 \mu\text{as/y}$; $28.00 c$
(Lister et al. 2013, AJ, 146, 120)



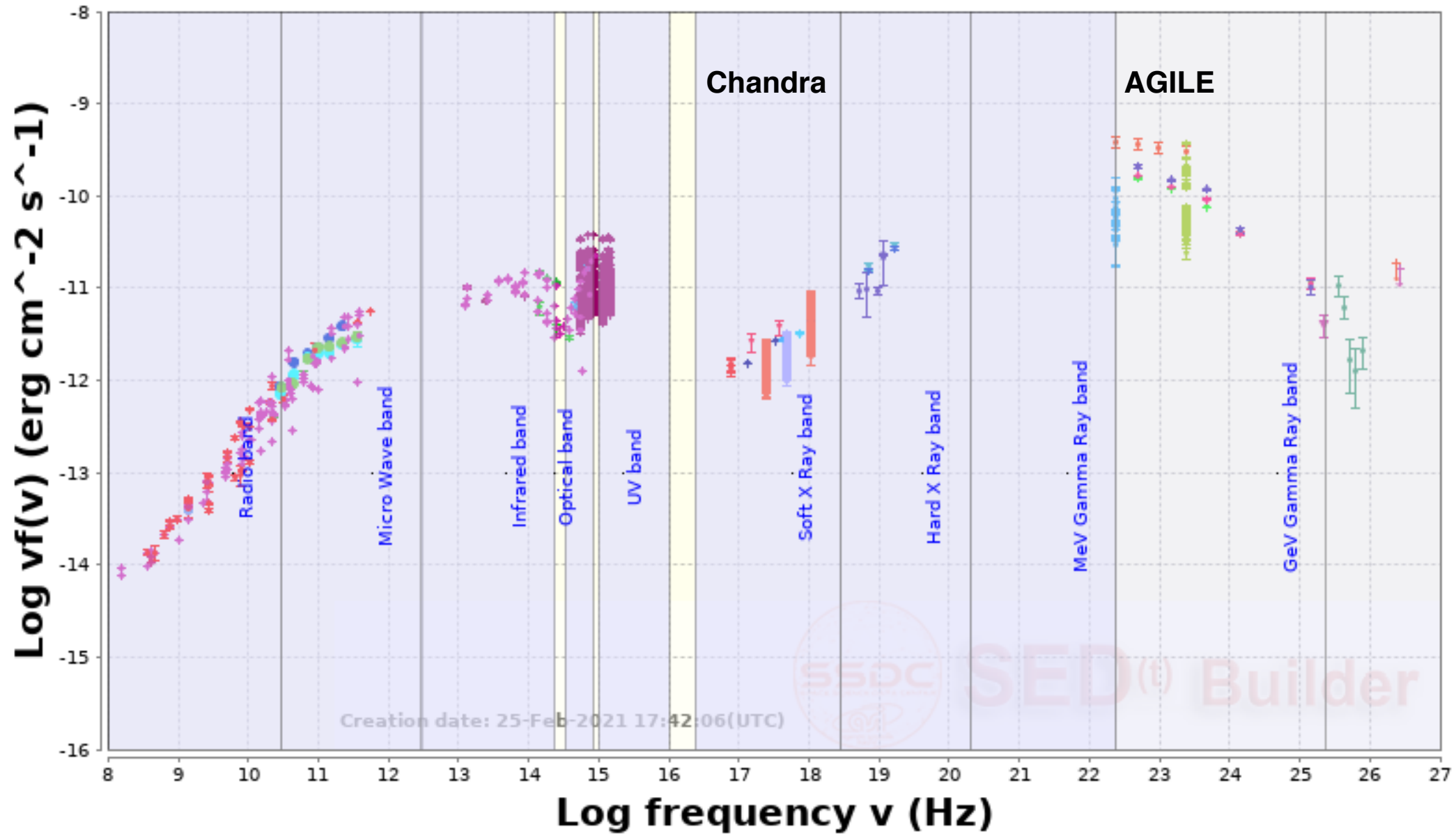
Extremely variable source



PKS1510089 Ra=228.21033 deg Dec=-9.10008 deg (NH=6.9E20 cm⁻²)



PKS1510-089 Ra=228.21033 deg Dec=-9.10008 deg (NH=6.9E20 cm⁻²)



Spectral and Imaging Analysis

- Chandra: Superposition X-ray and Radio images (DS9) to individuate the entire jet and knots B, C to be analyzed;
- Chandra: extraction of the spectrum of the jet and production of rmf and arf files (CIAO). Analysis with XSPEC. Definition of the best model: parameter uncertainties, confidence (68%, 90% and 99%) contour plots, flux and luminosity;
- Chandra: extraction of the spectra of knots B, C and production of rmf and arf files (CIAO). Analysis with XSPEC (see above);
- Chandra: Nucleus - extraction of the spectrum using a circle and spectral analysis;

Optional:

- Optional: Spectral analysis (spectral slope and flux); time variability of the gamma-ray counterpart of PKS1510-089; TS map;