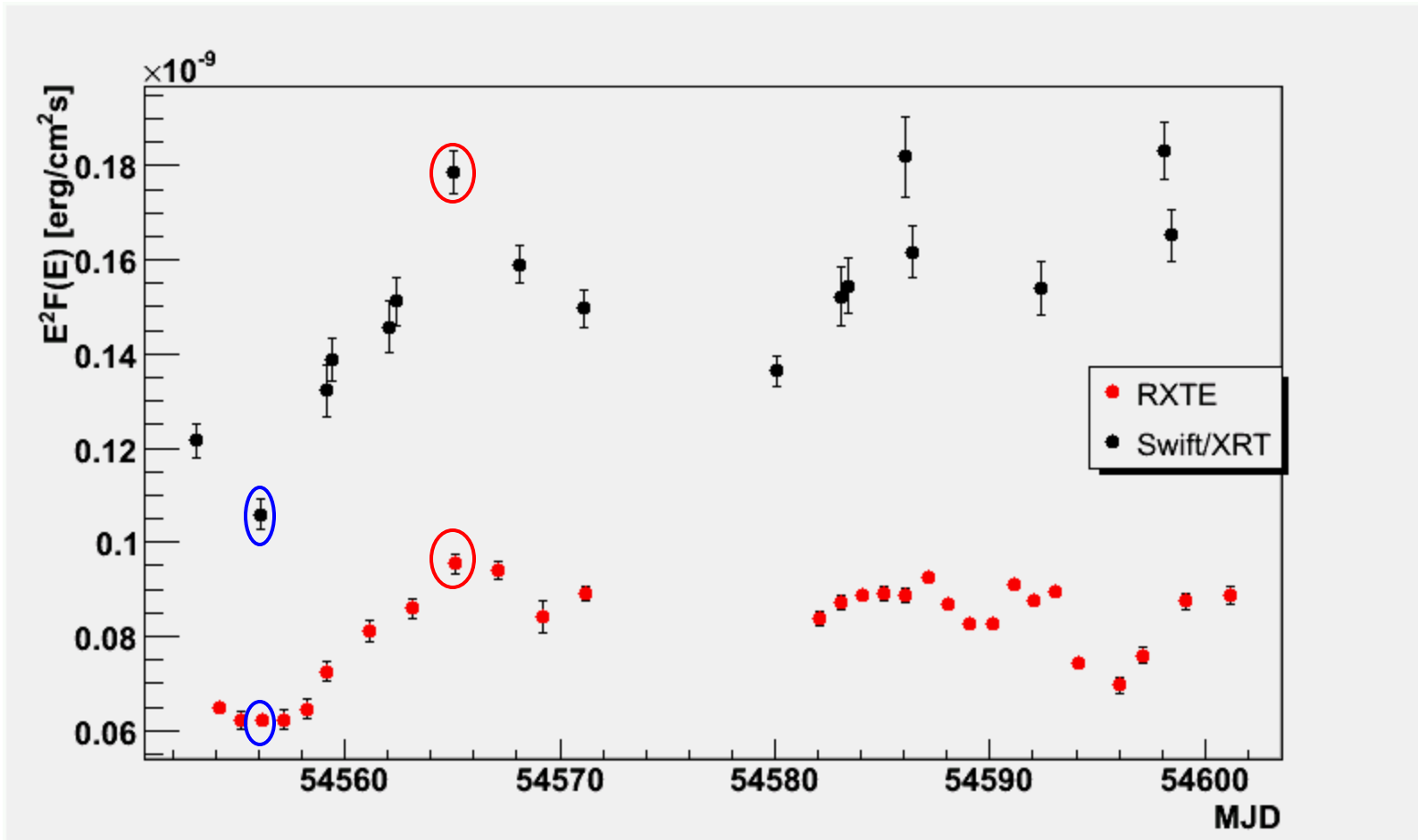


SED

Mkn 501 MW Campaign 2008

Konstancja Satalecka & Fabrizio Tavecchio

Periods selection based on X-ray data

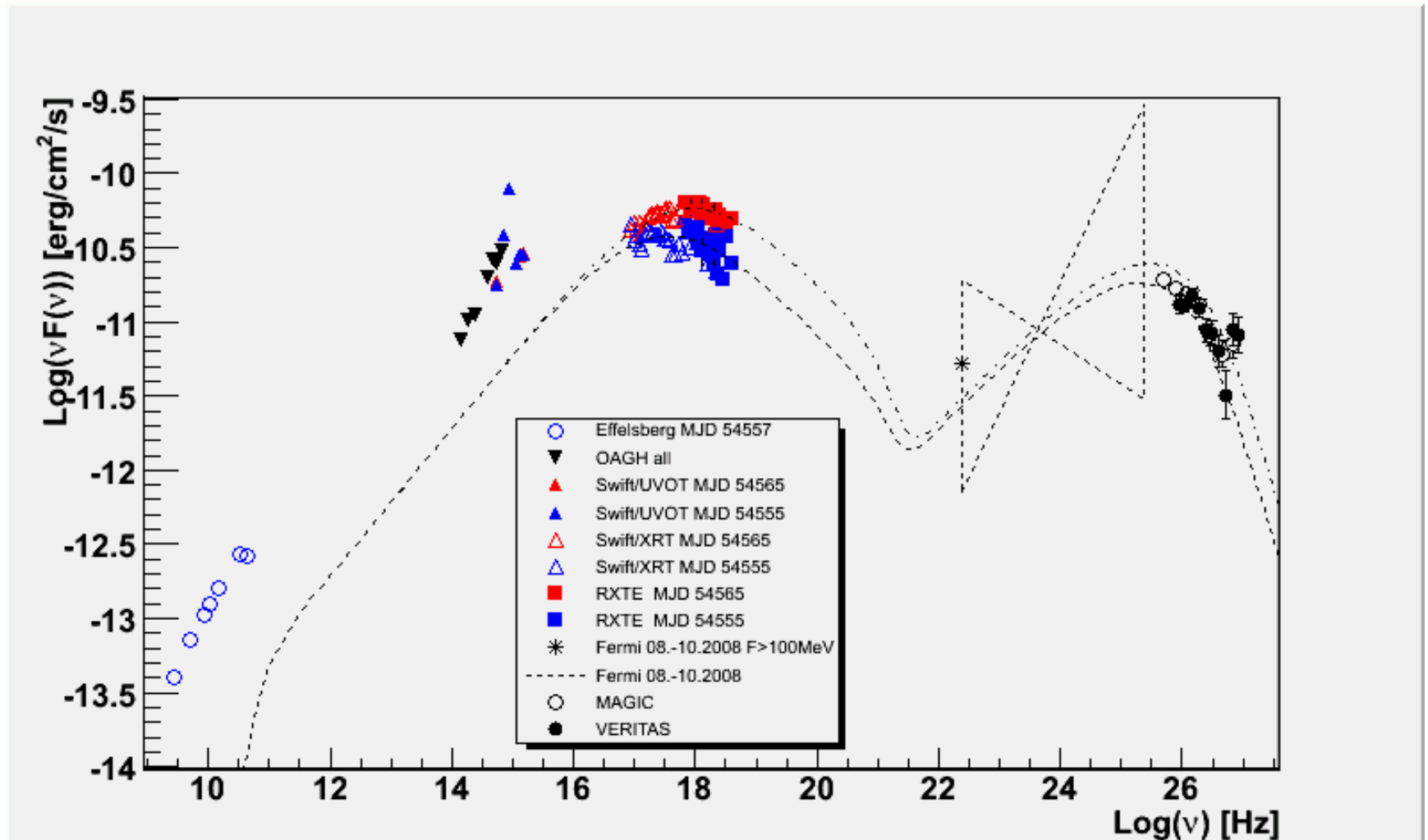


○ RXTE low state, XRT low state: **MJD 54556**

○ RXTE and XRT highest state: **MJD 54565**

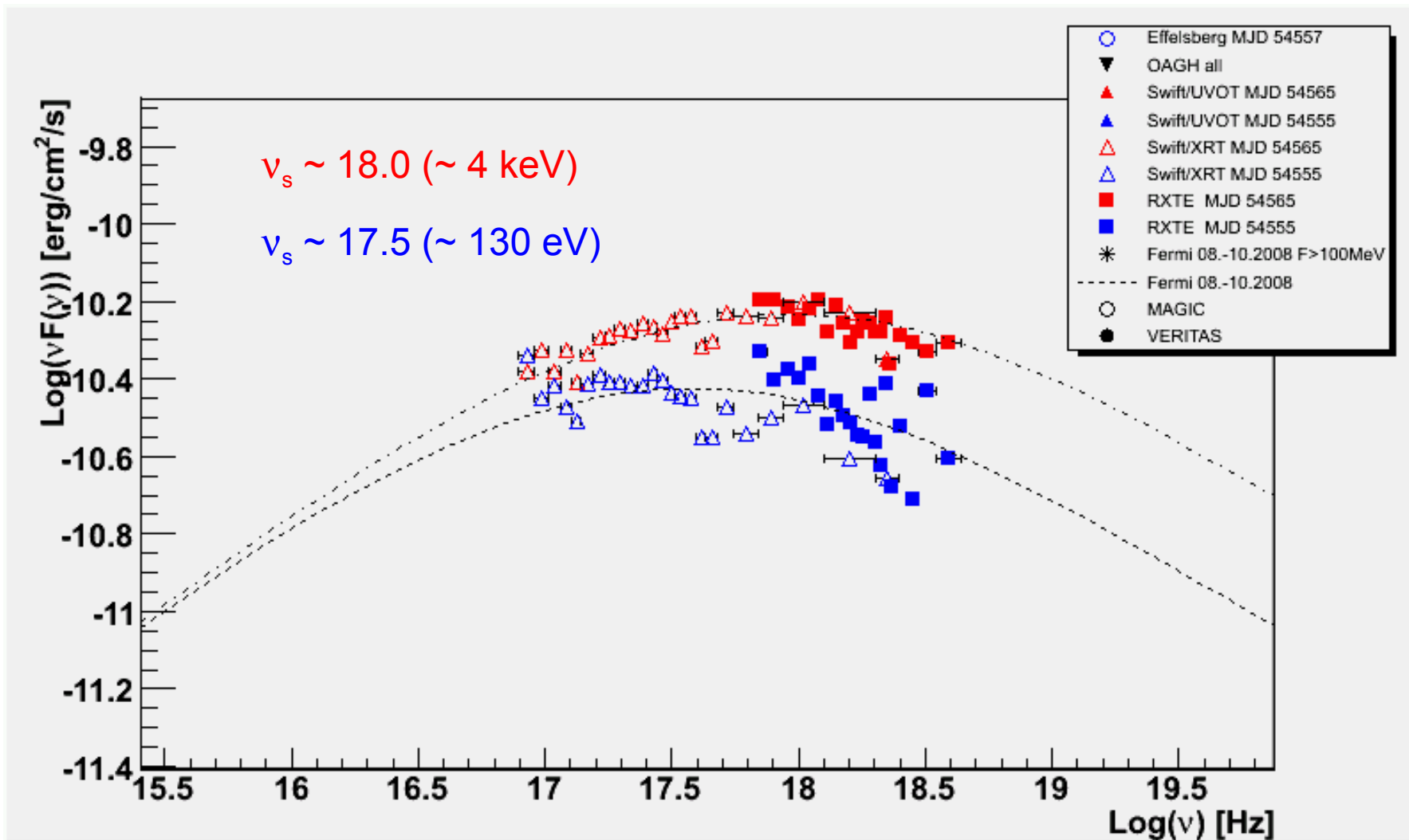
Other wavelengths: no significant variations, TeV spectral index constant

SED

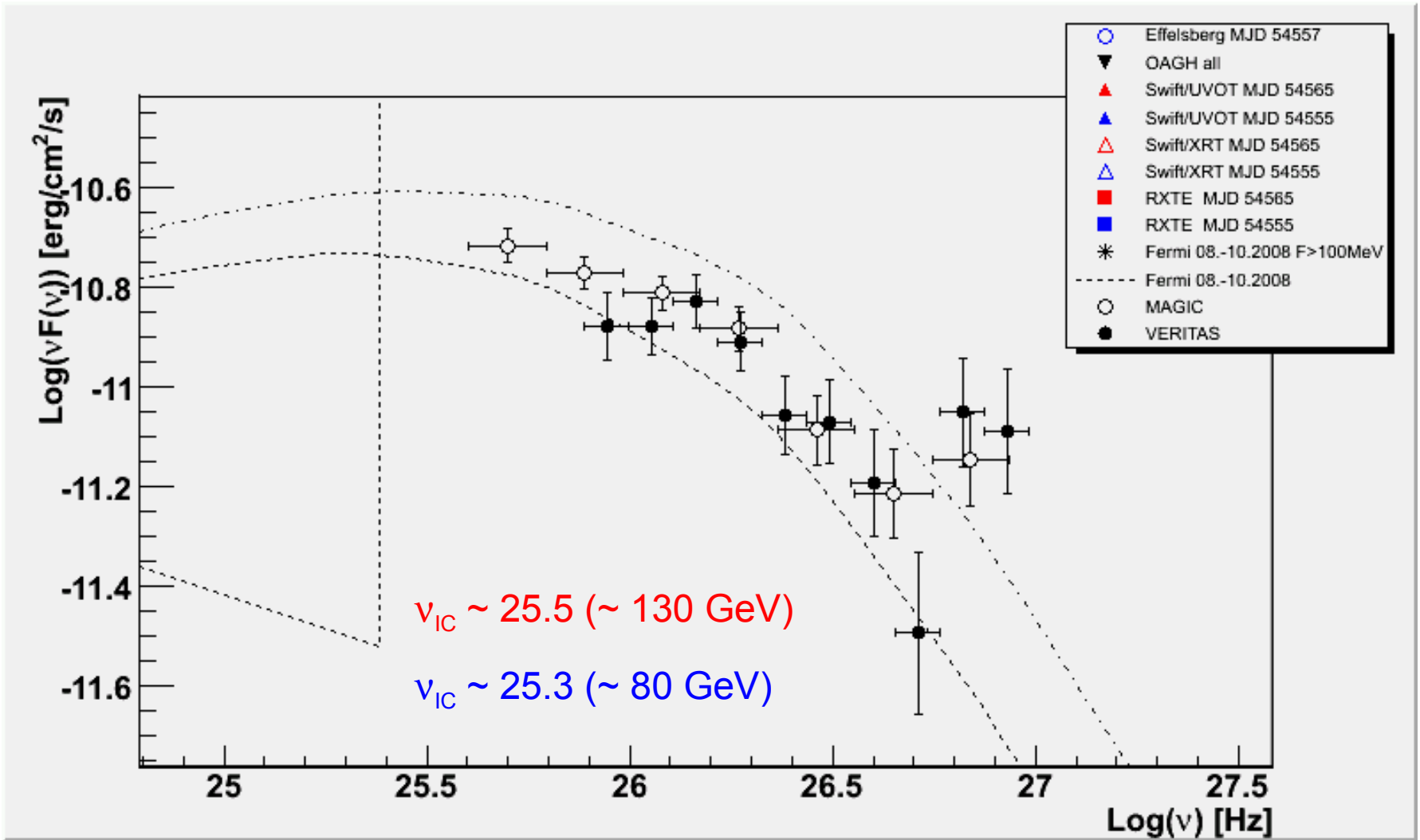


Model: leptonic, 1 zone, SSC (Tavecchio et al. 1998, ApJ, 509, 608)

SED – zoom into Synchrotron Peak



SED – zoom into IC Peak



Spectra are **NOT** EBL corrected yet!

Model parameters

	High state	Low state
γ_{break}	2.8×10^5	1.8×10^5
n_1	2.0	2.0
n_2	3.8	3.8
B [G]	0.19	0.19
K [cm ⁻³]	1.8×10^4	1.8×10^4
R [cm]	3×10^{15}	3×10^{15}
δ	12	12

Summary

- periods selected based on X-ray data
- other wavelengths – constant flux, no dramatic spectral changes
- leptonic 1 zone SSC model describes the data well
- transition from low to high X-ray state can be well explained by the change of γ_{break}
- TeV spectra need EBL correction