

Mrk501 2008 MW cross-correlation

Diego Tescaro <diegot@ifae.es>
David Paneque <paneque@slac.stanford.edu>

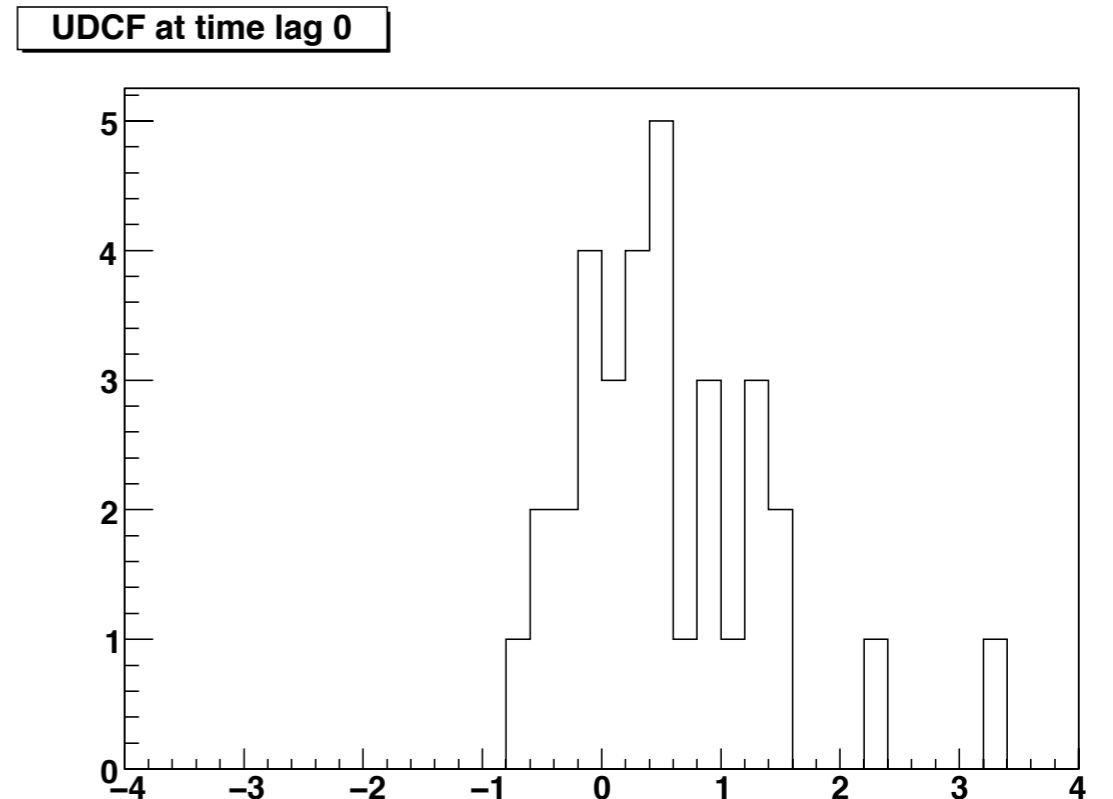
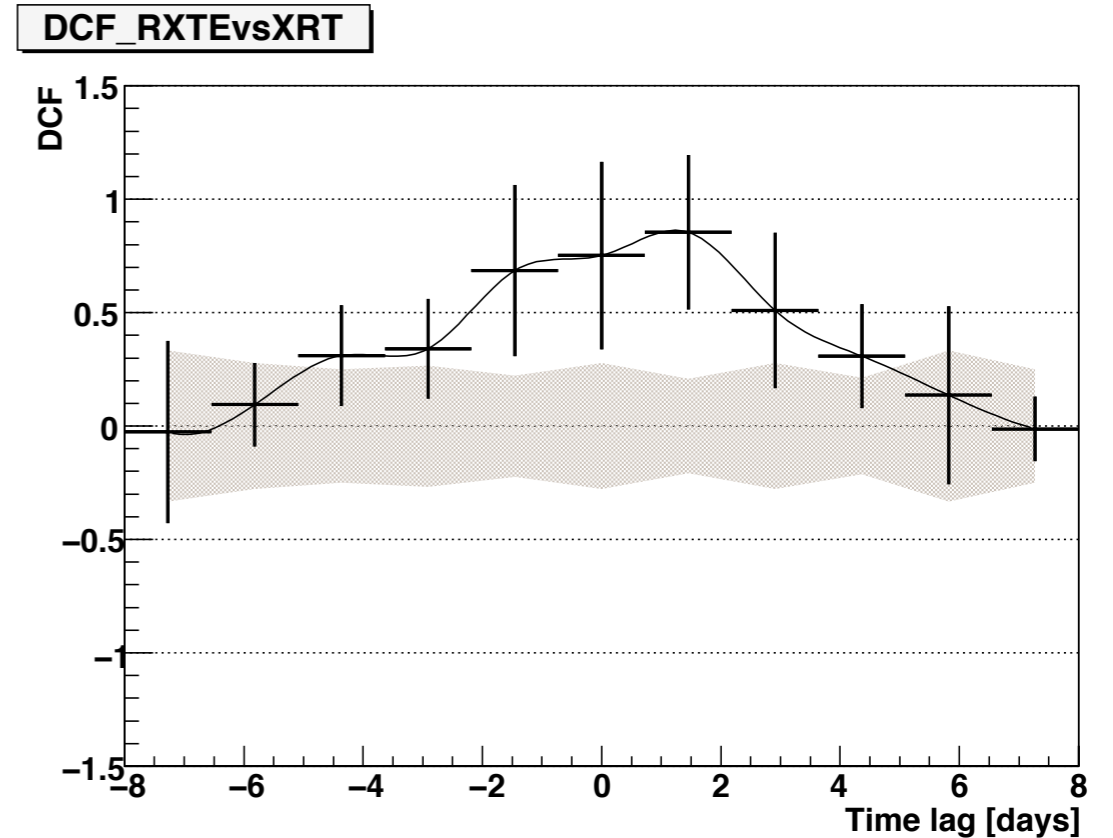
EVO meeting - May 8th 2009

DCF plot

Recepy:
Edelson & Krolik, 1988

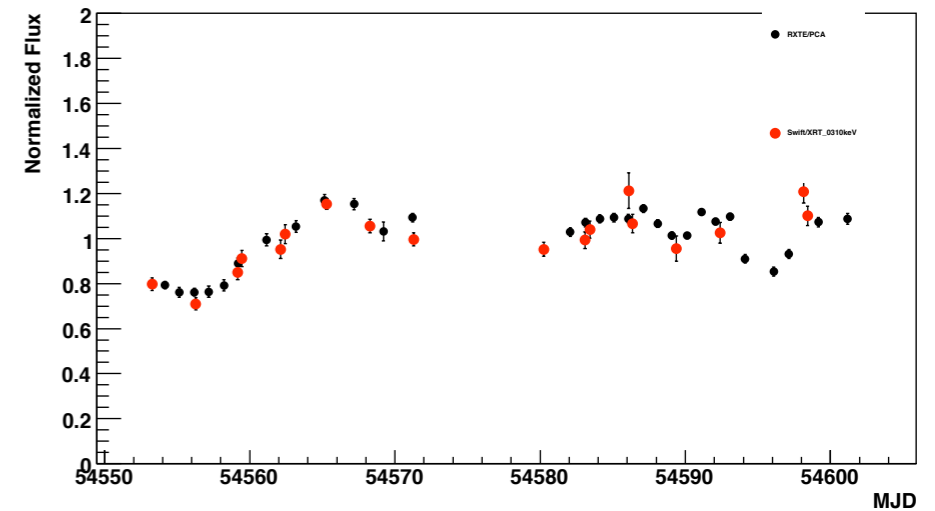
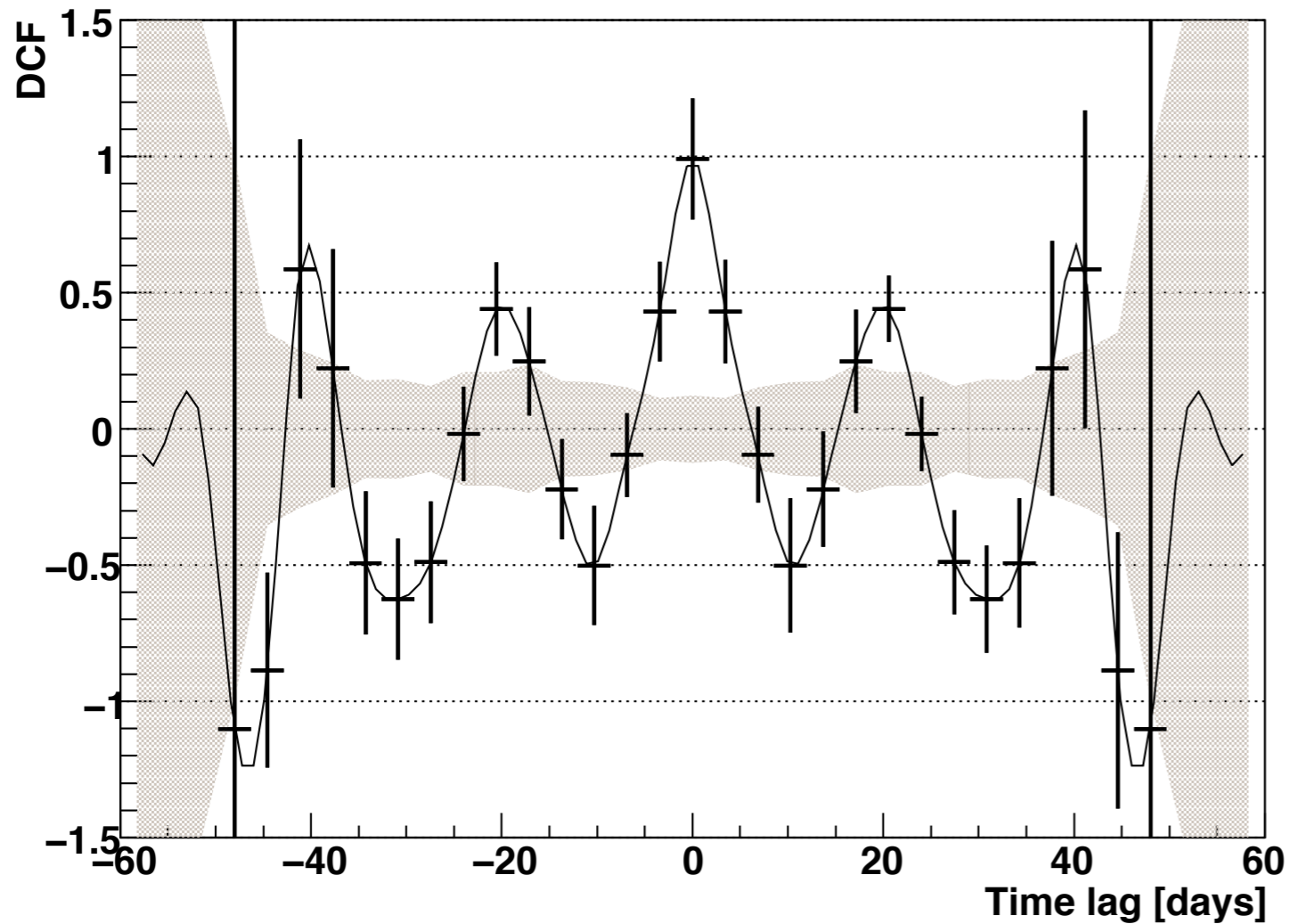
Gray band:
expected DCF fluctuation from
uncorrelated time series

Error bars:
spread of the distribution
of the UDCF(t)s,
corrected by the number of
correlated entries



auto-correlation

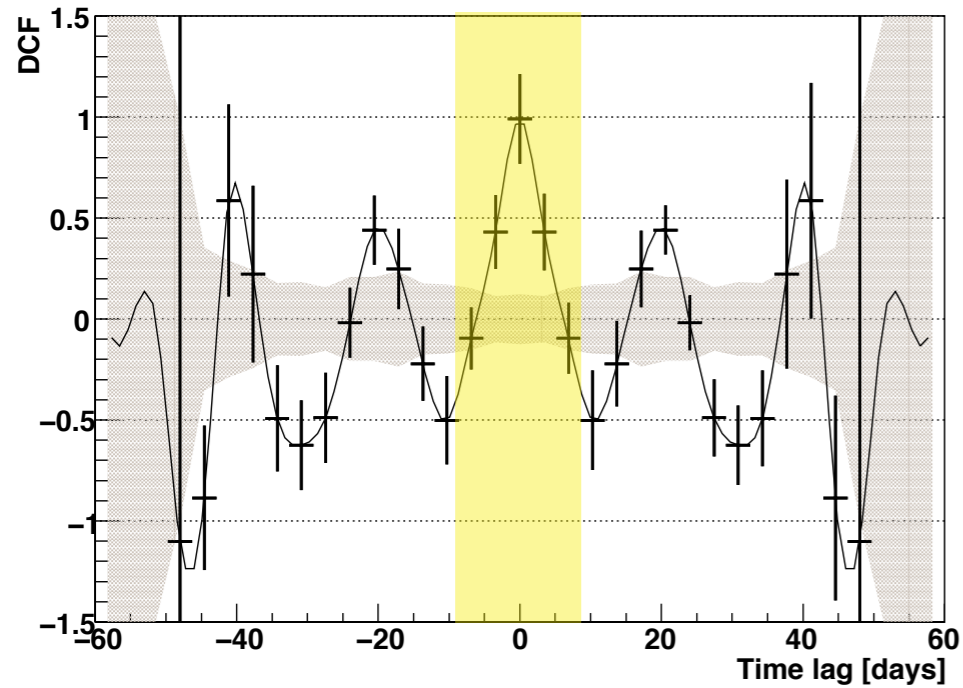
DCF_RXTEvsRXTE



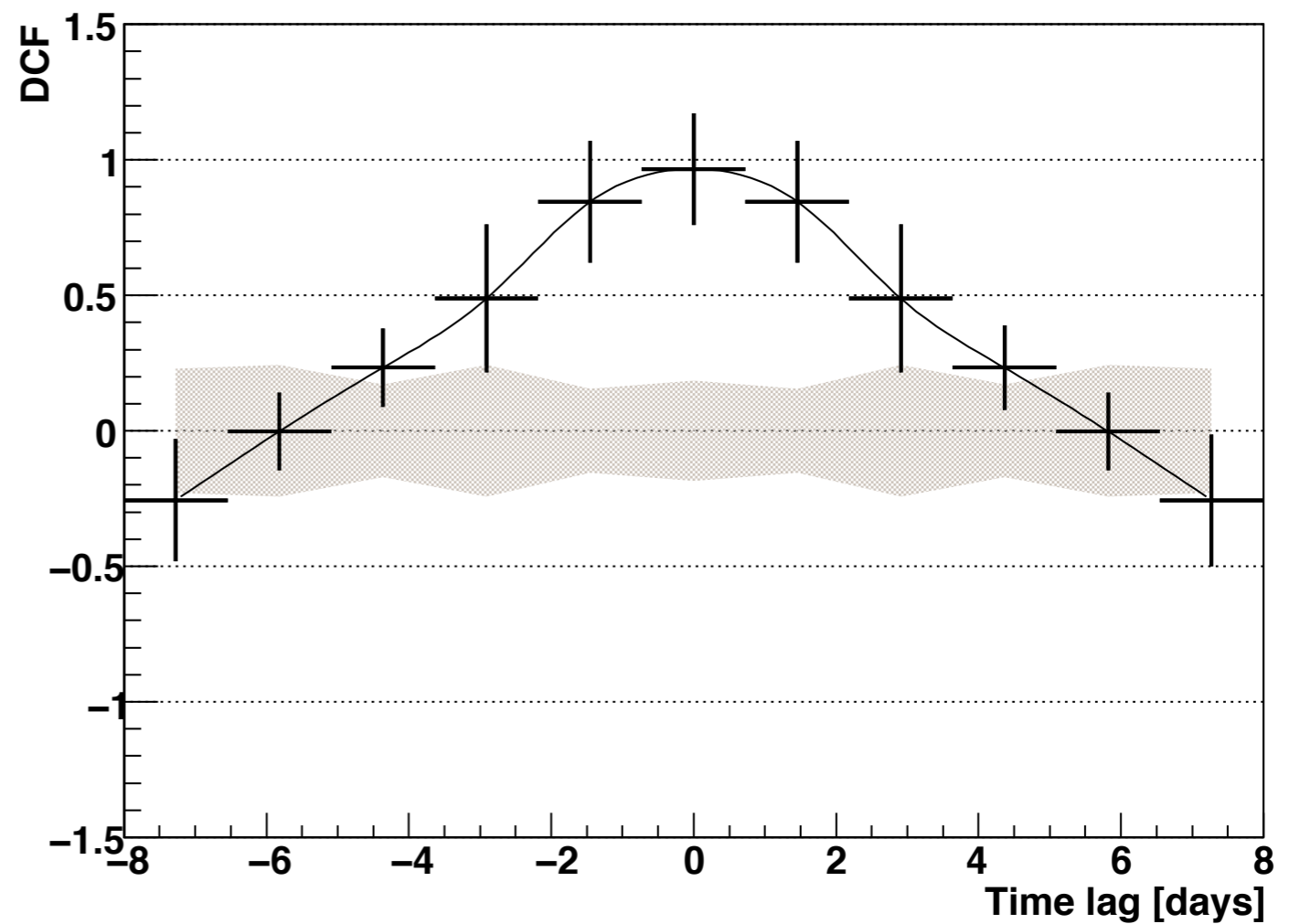
large time lags: auto-correlation effects

auto-correlation

DCF_RXTEvsRXTE



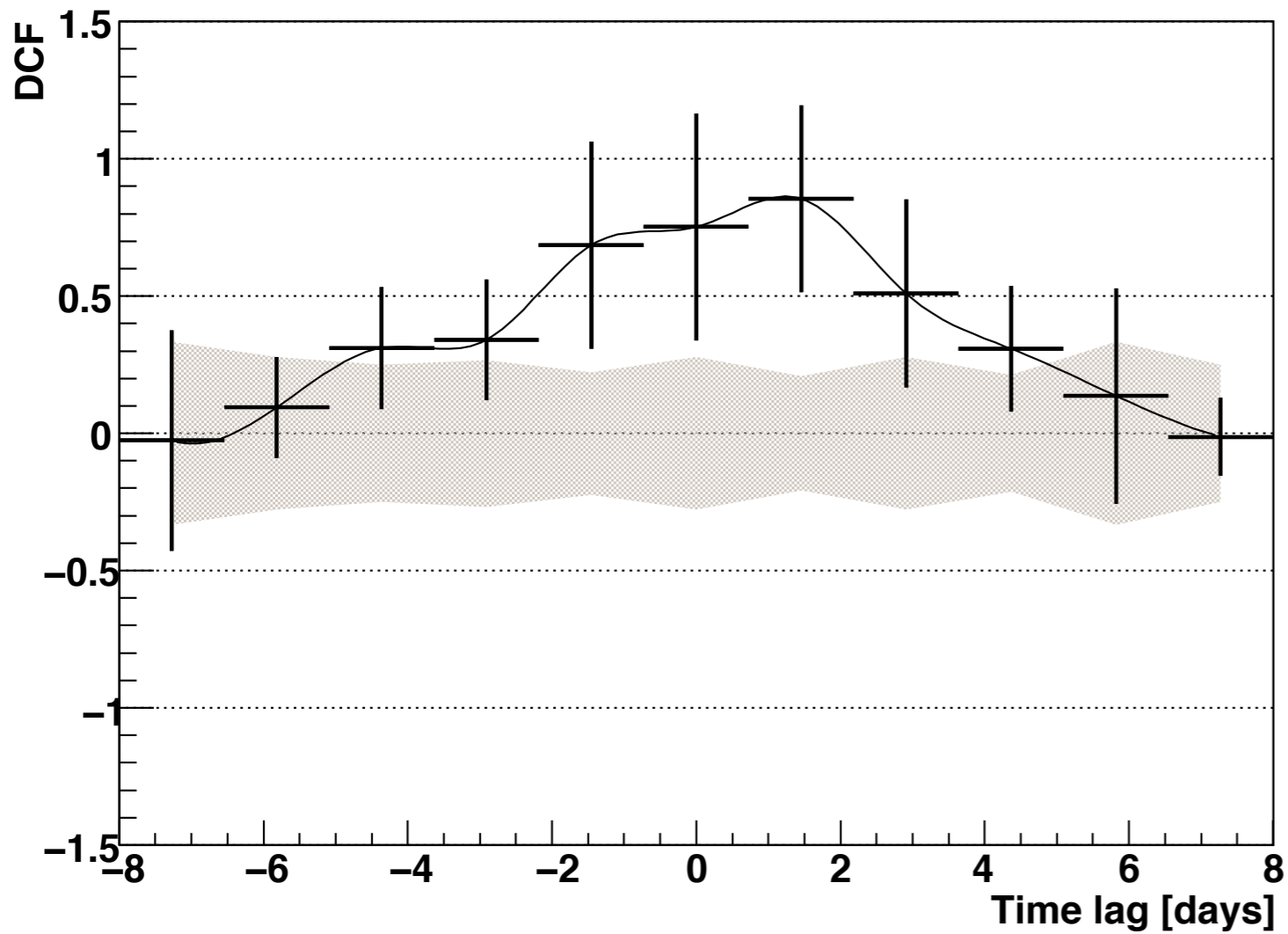
DCF_RXTEvsRXTE



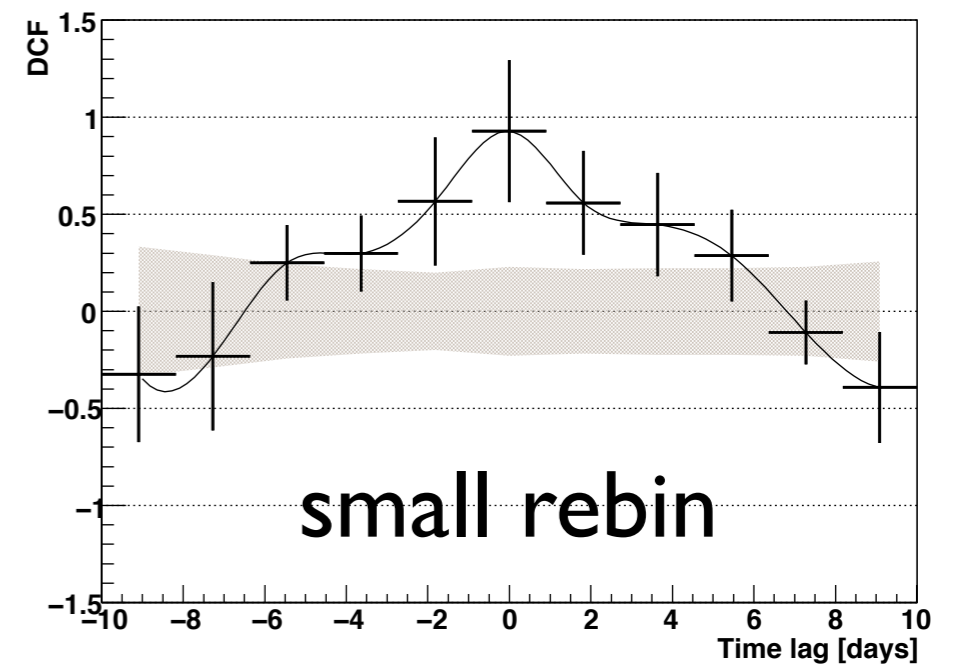
time lags within +/- 8 days

X-ray: RXTE vs XRT

DCF_RXTEvsXRT

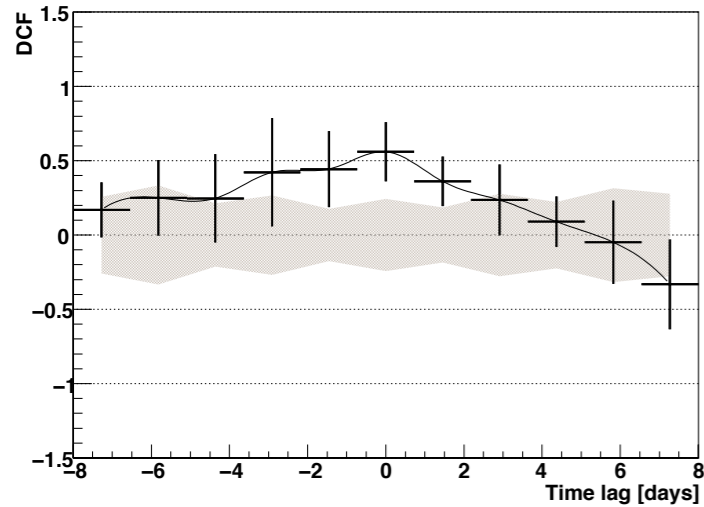


DCF_RXTEvsXRT

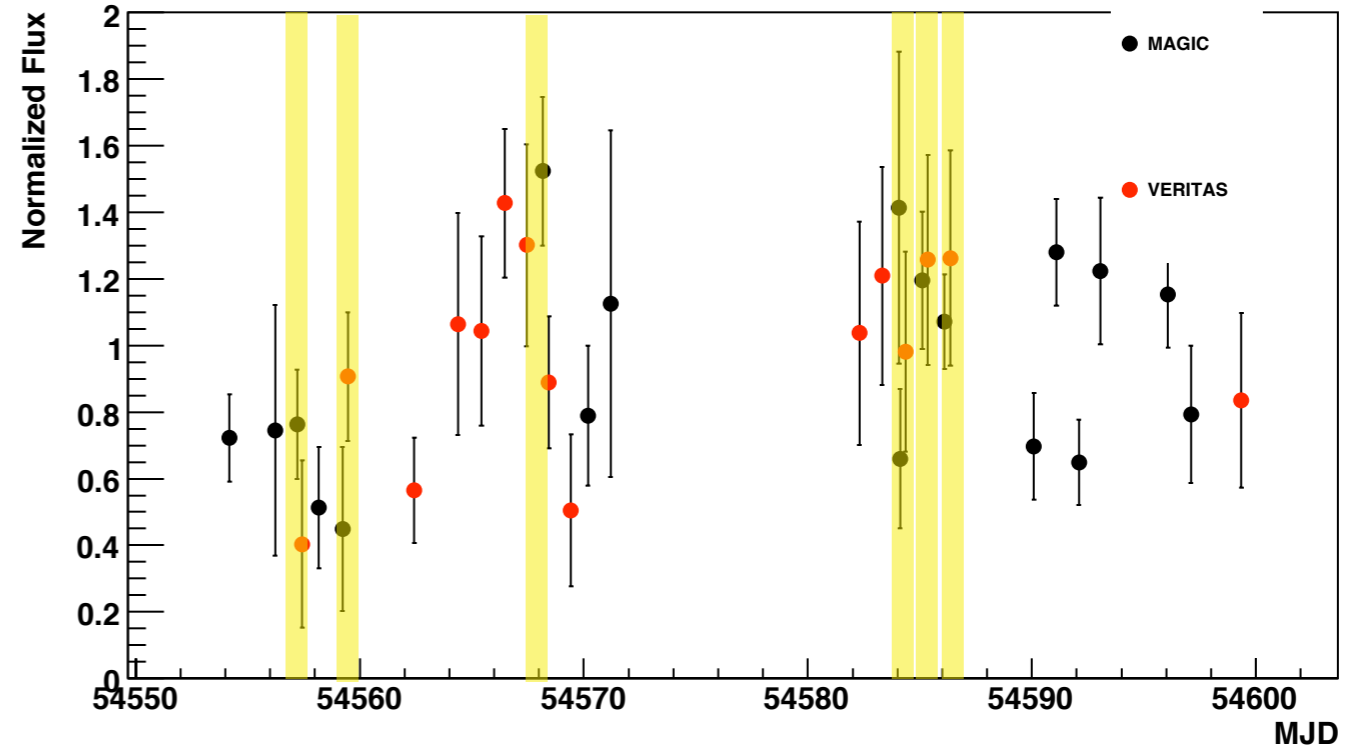
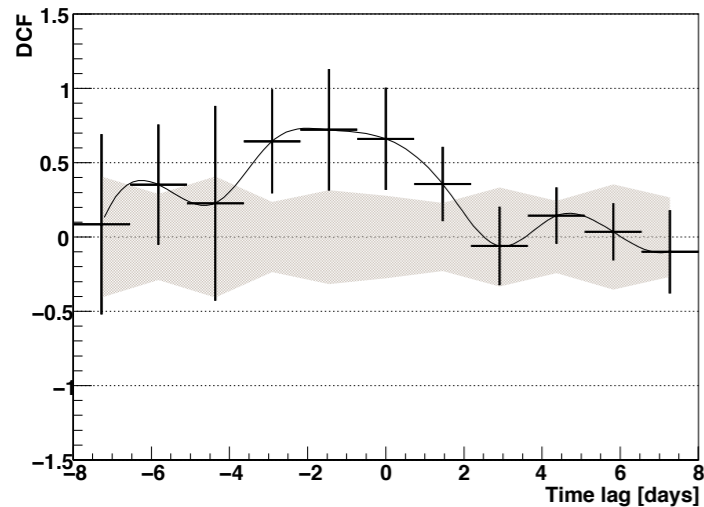


VHE combined

DCF_RXTEvsMAGIC



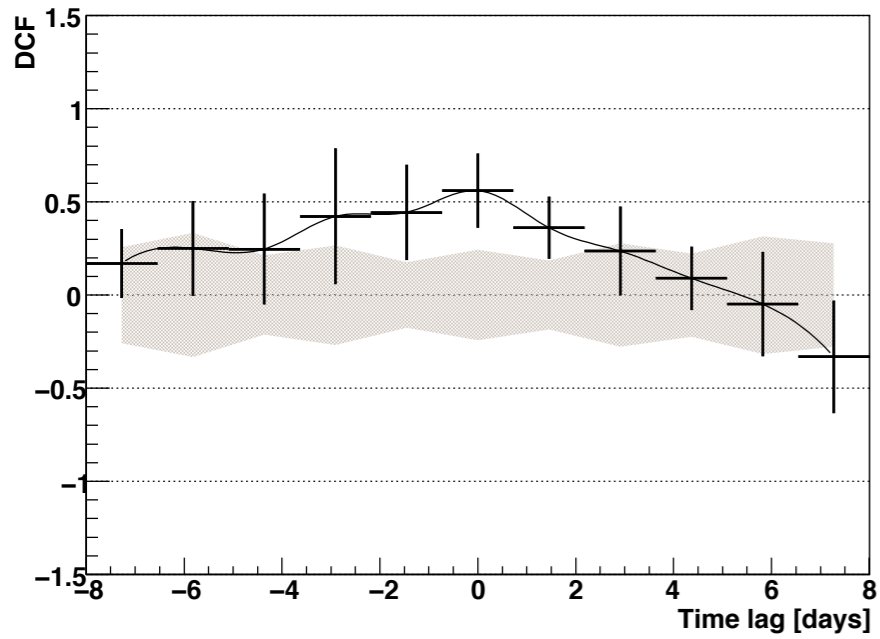
DCF_RXTEvsVERITAS



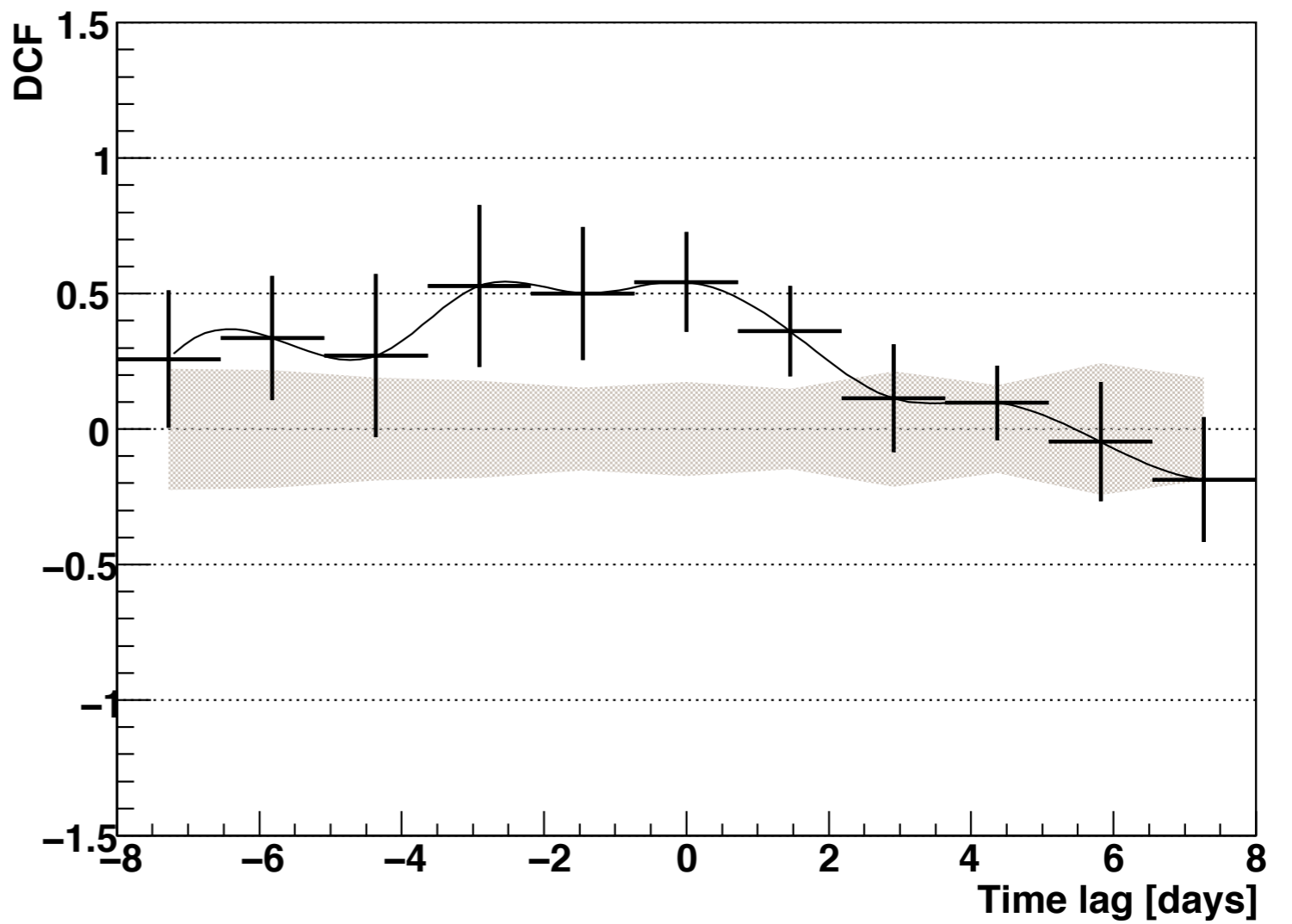
- Combined light-curve: ideally same absolute flux;
- MAGIC and VERITAS normalized flux rescaled using simultaneous data (within 1-day, 7 points);
- The rescaling is anyway by $\sim 4\%$, small effect;

VHE combined

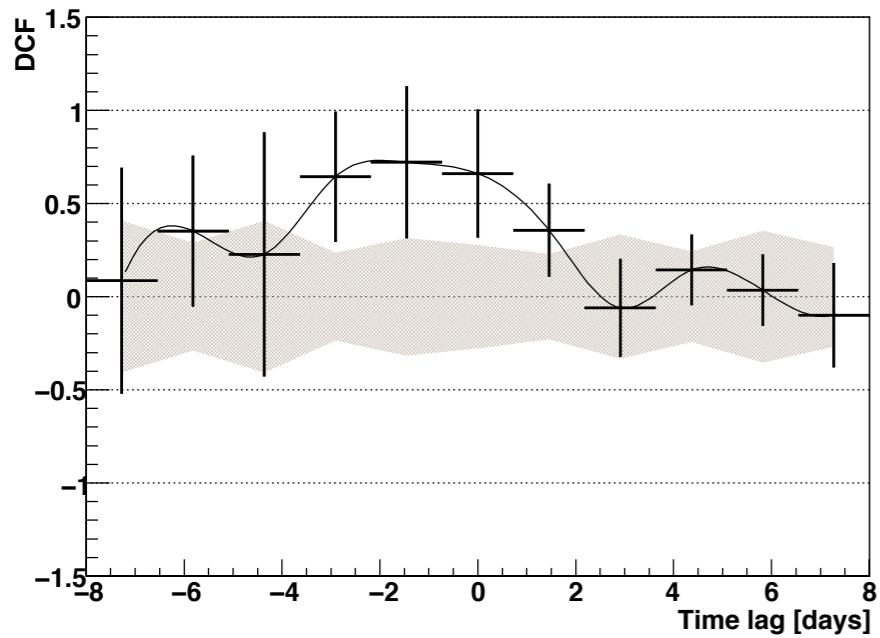
DCF_RXTEvsMAGIC



DCF_RXTEvsVHE

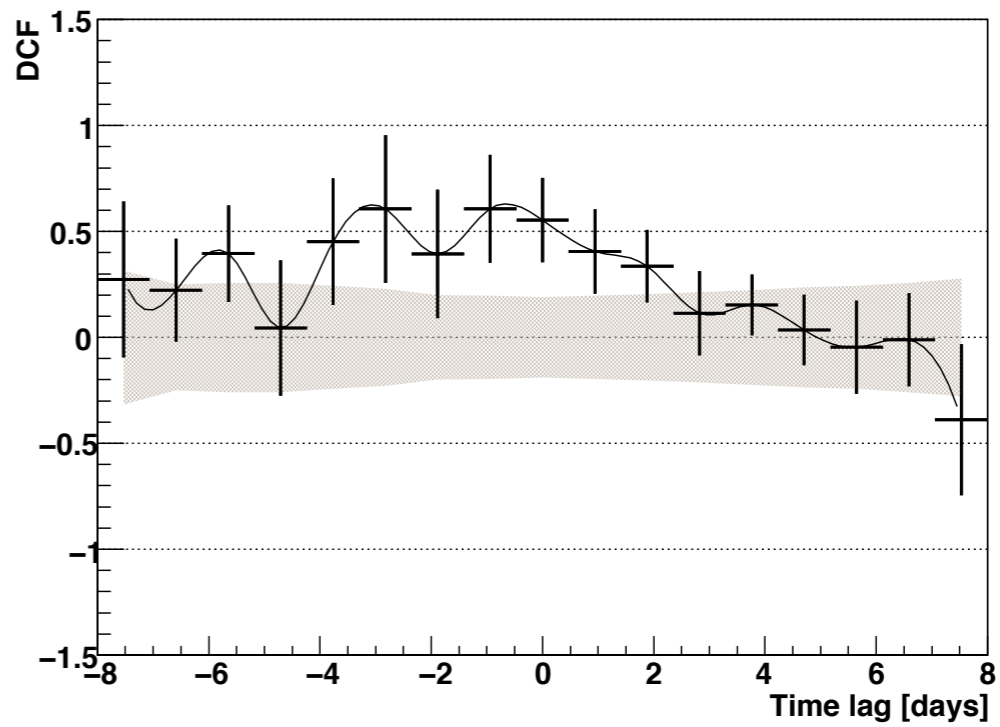


DCF_RXTEvsVERITAS

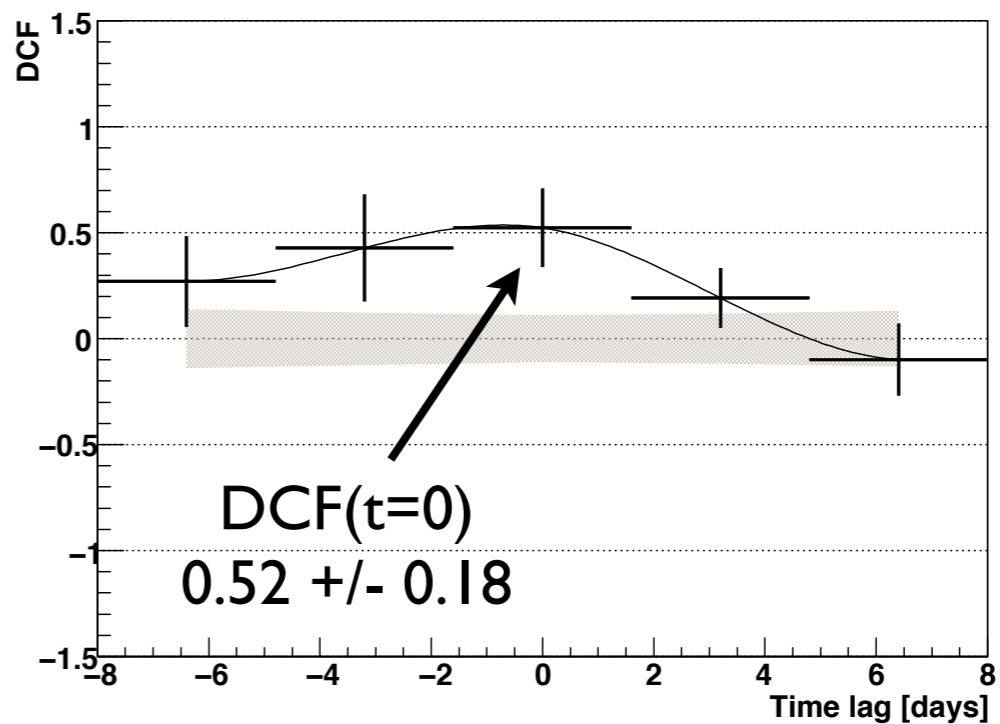


fine/coarse binning

DCF_RXTEvsVHE



DCF_RXTEvsVHE



DCF_RXTEvsVHE

