

Mrk501 2008 MW cross-correlation

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Cross-Correlation

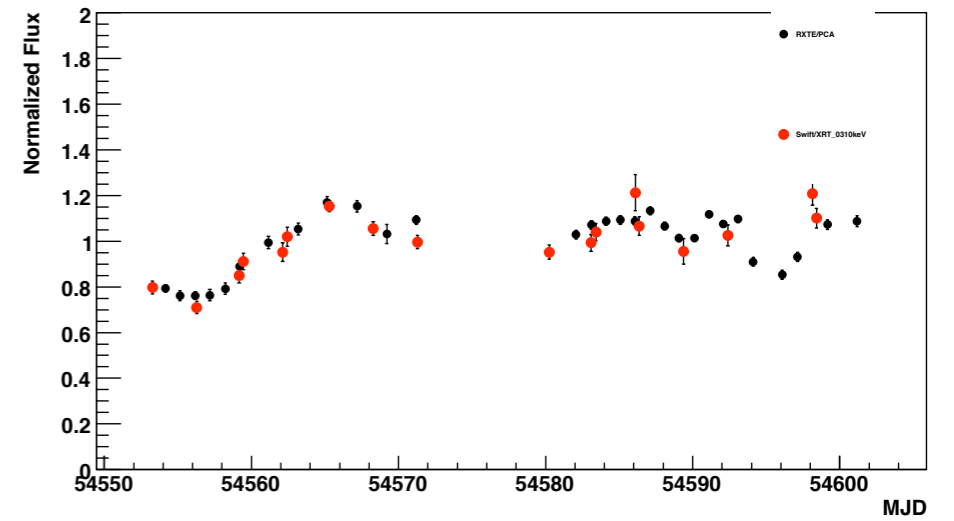
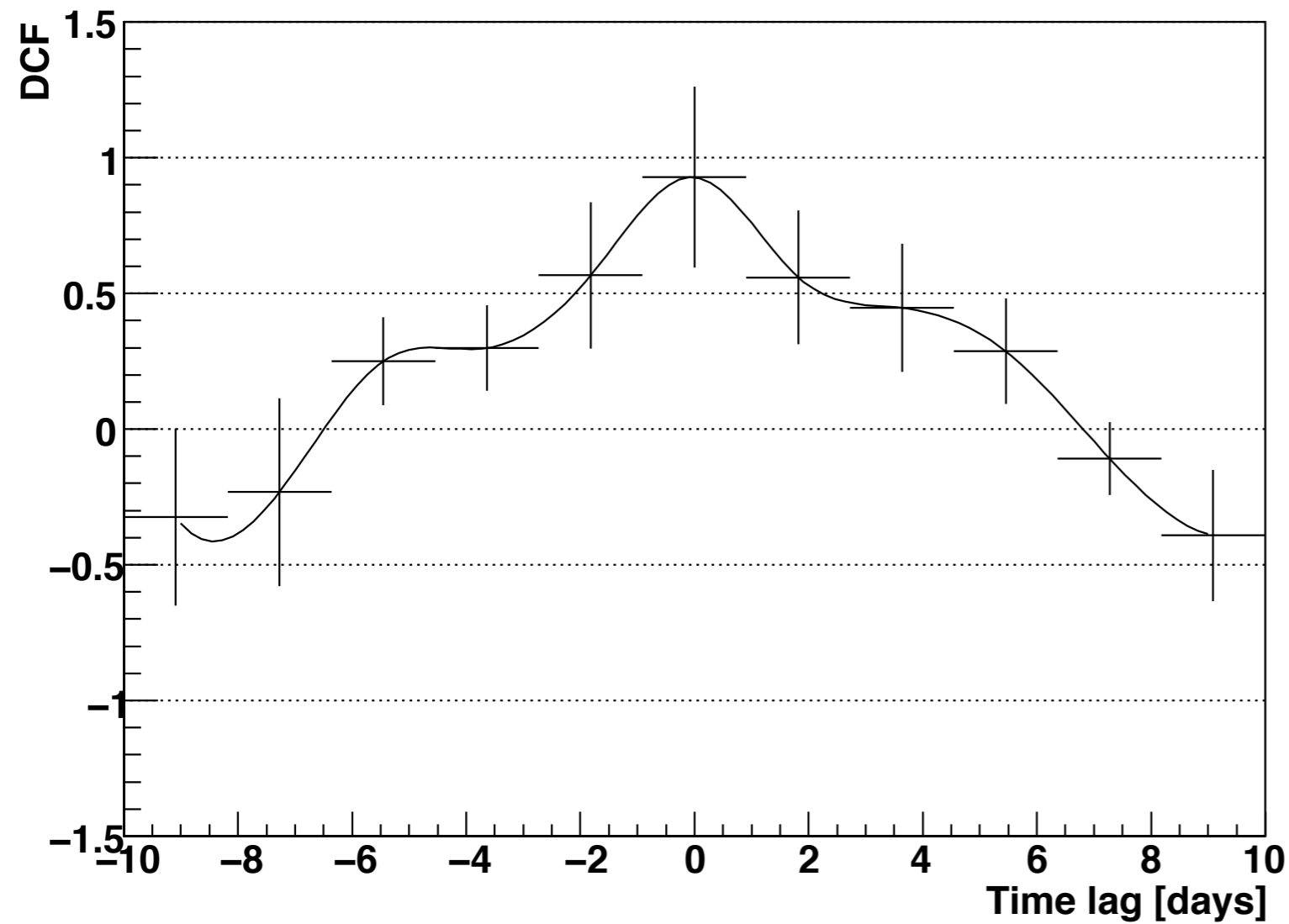
Discrete Correlation Function (DCF)

Edelson & Krolik, ApJ, 333, 646-659, 1988

Time lags: -10 +10 days / 2 days bins

RXTE - XRT

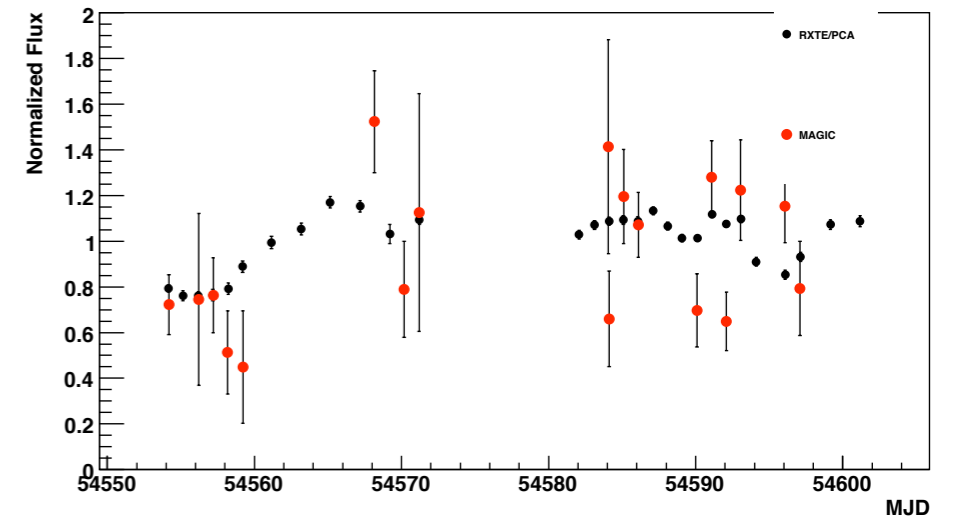
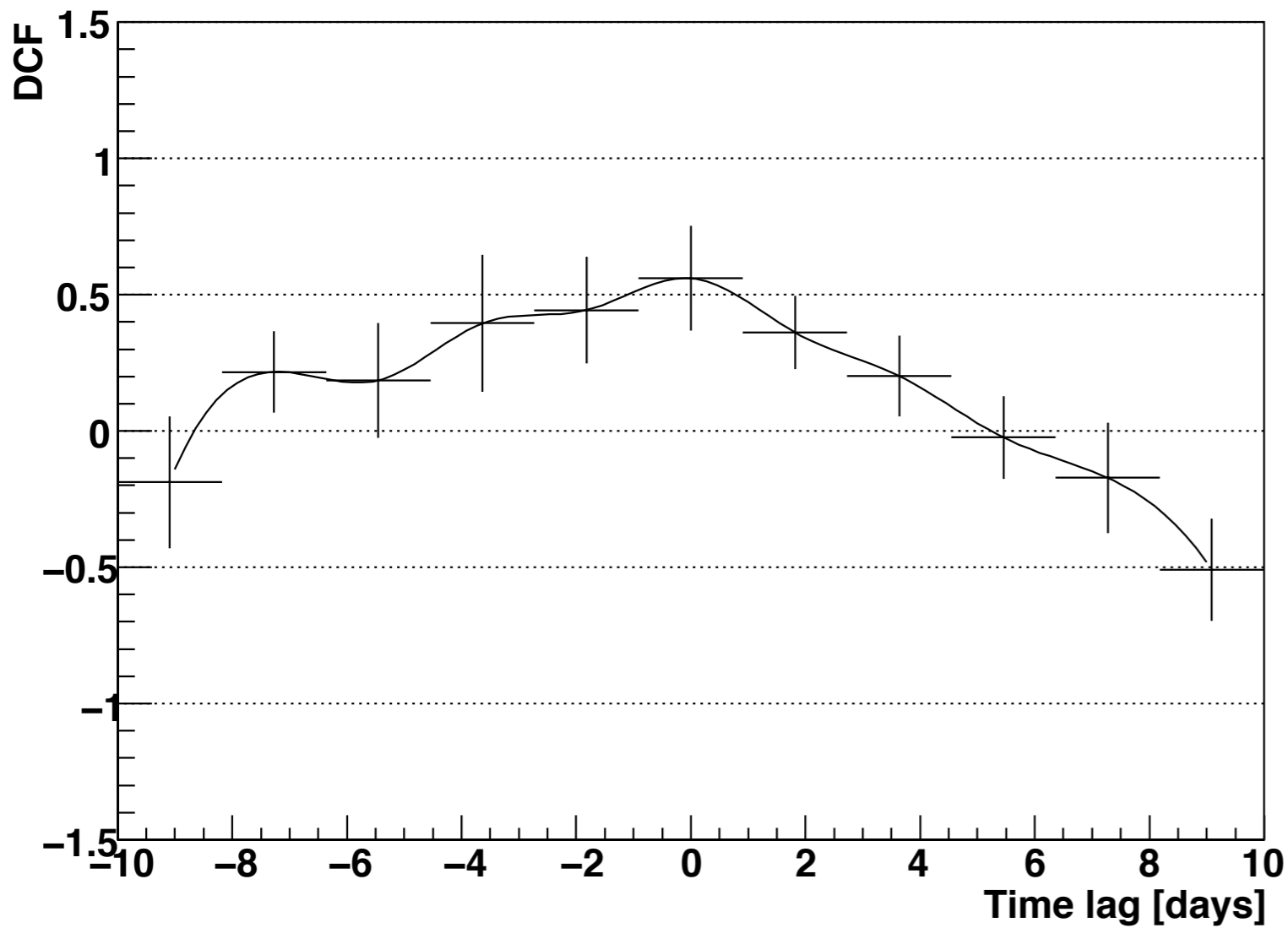
DCF



Nicely correlated
at time lag 0
(as expected)

RXTE - MAGIC

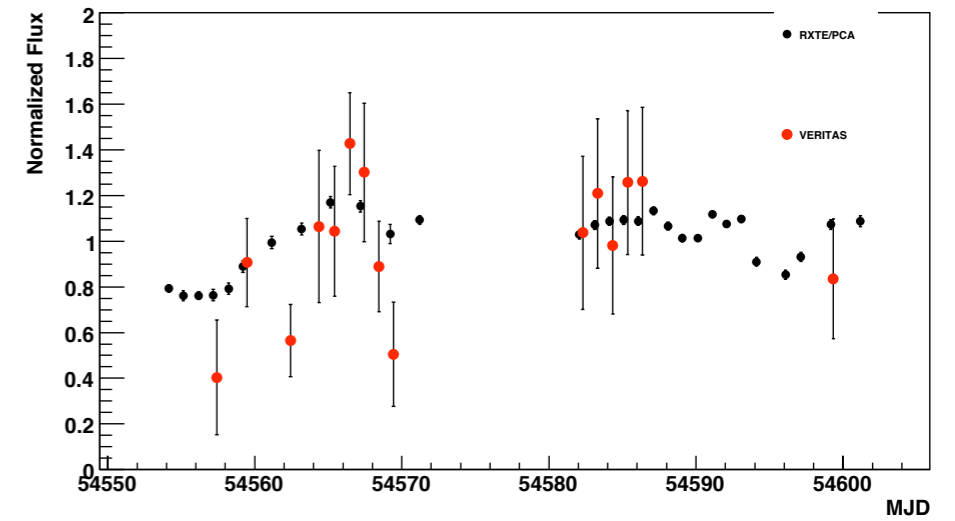
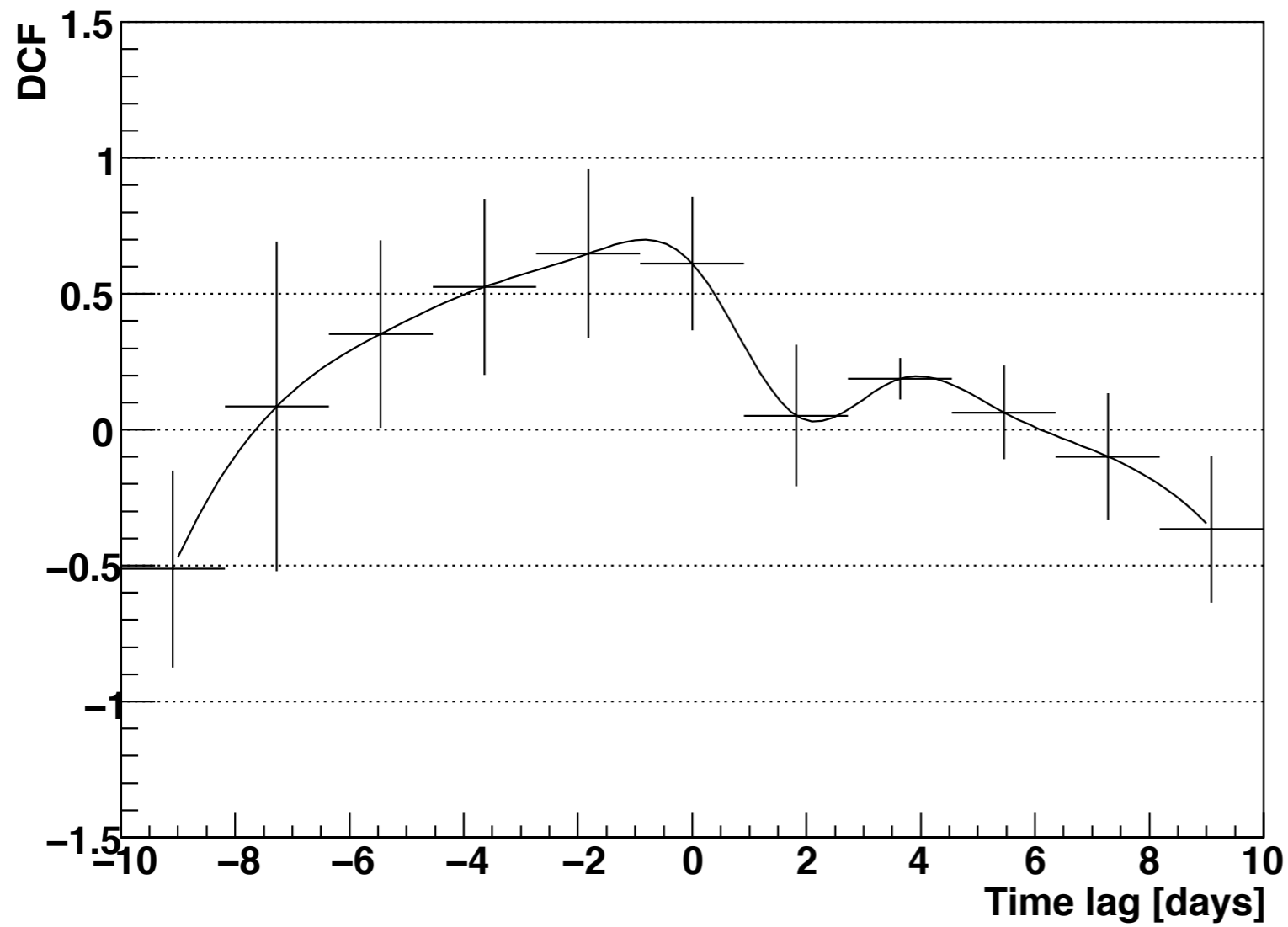
DCF



Hint of correlation
at lag 0
(peaked distribution)

RXTE - VERITAS

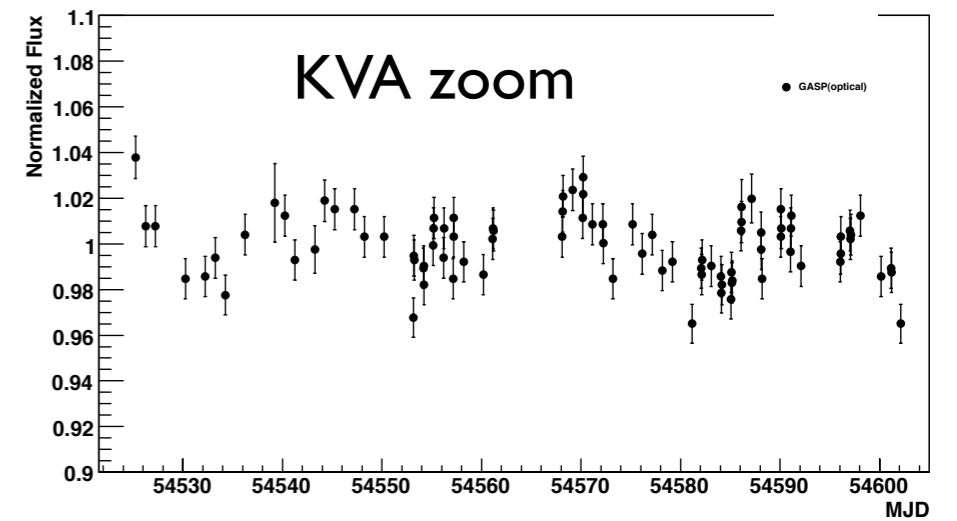
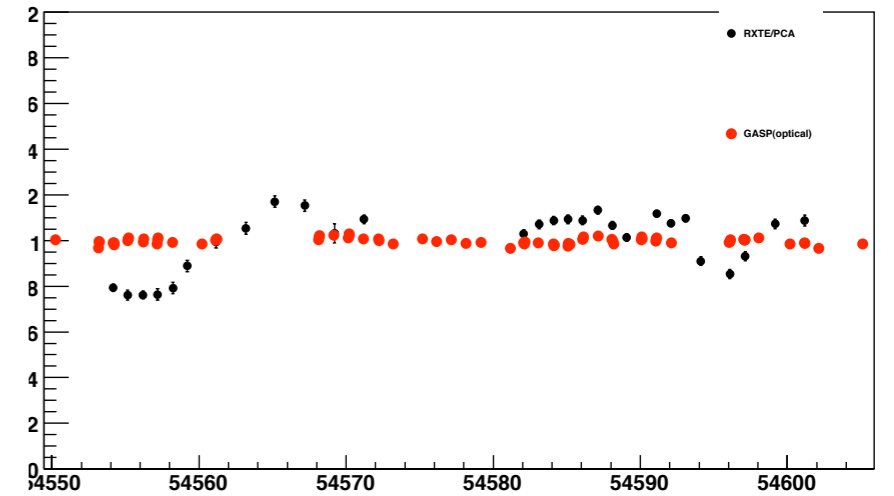
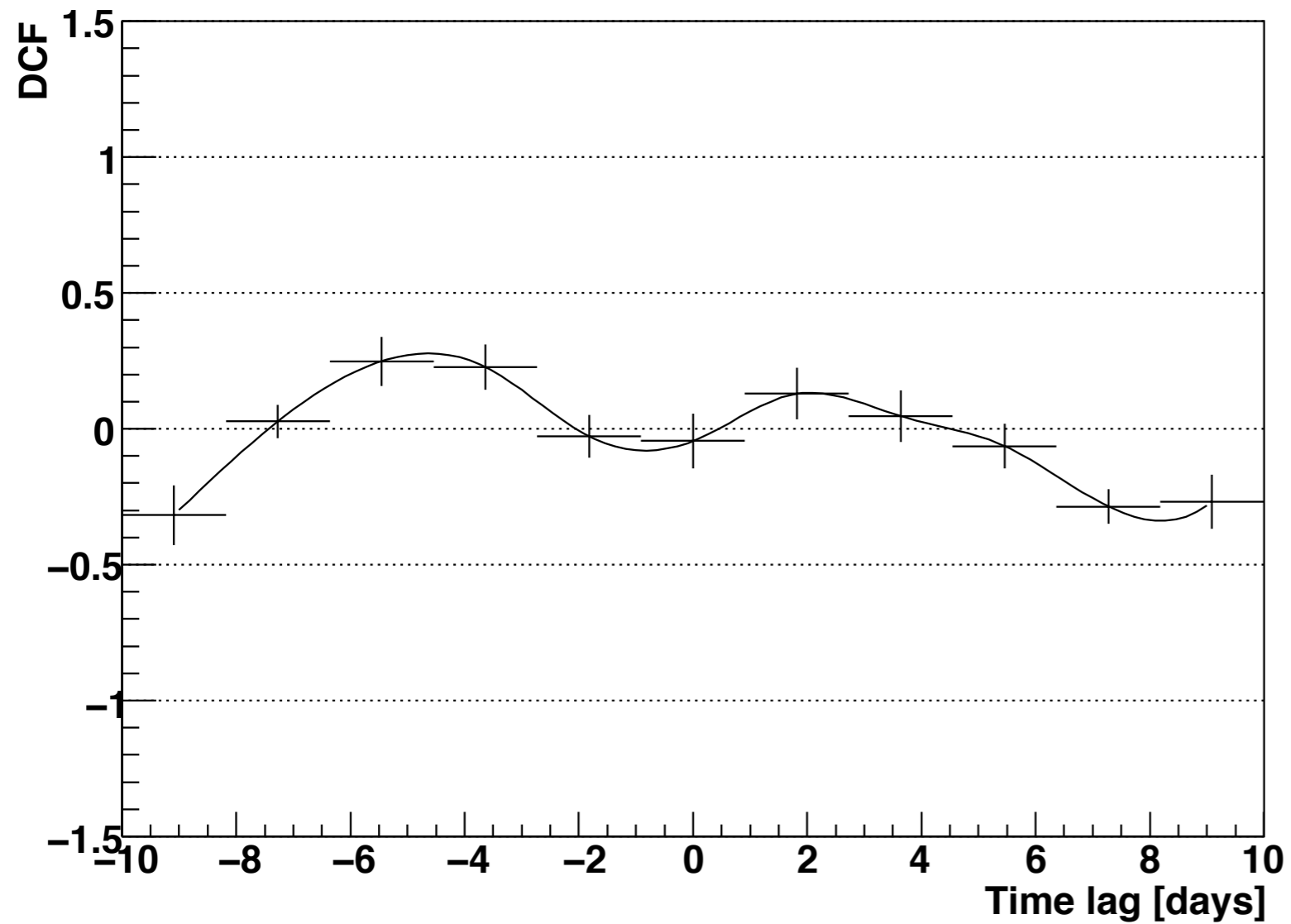
DCF



Agreement of
X-ray vs VHE results

RXTE - KVA

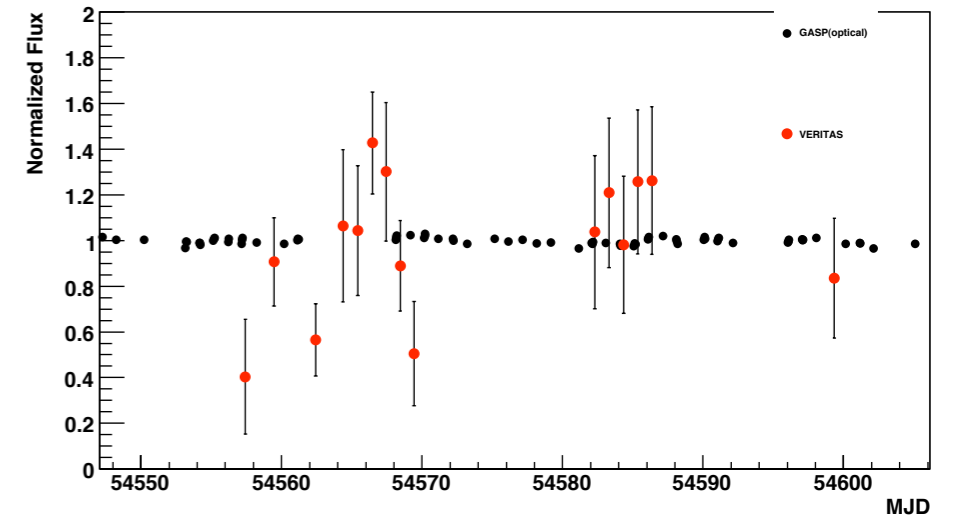
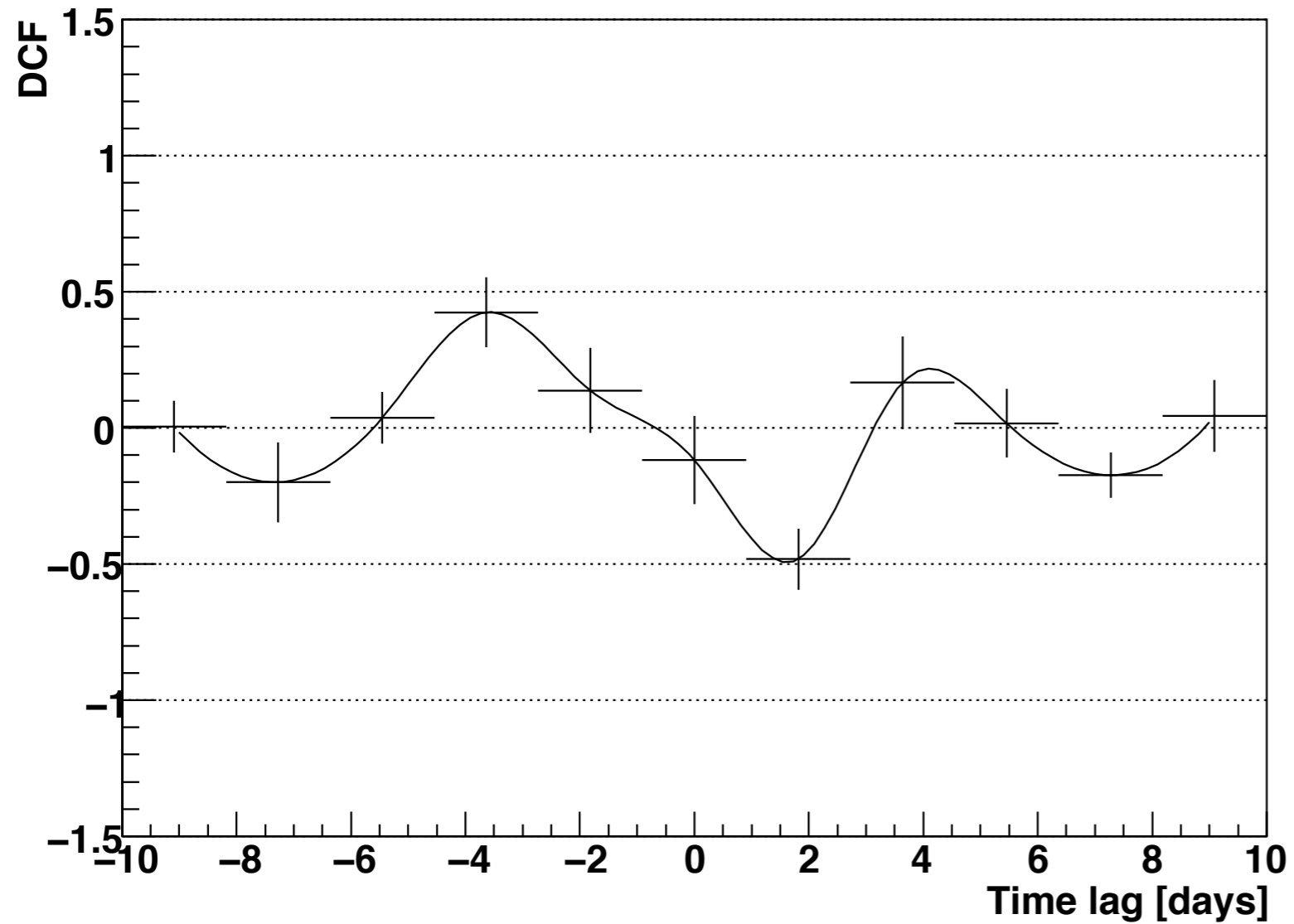
DCF



No correlation?

VERITAS - KVA

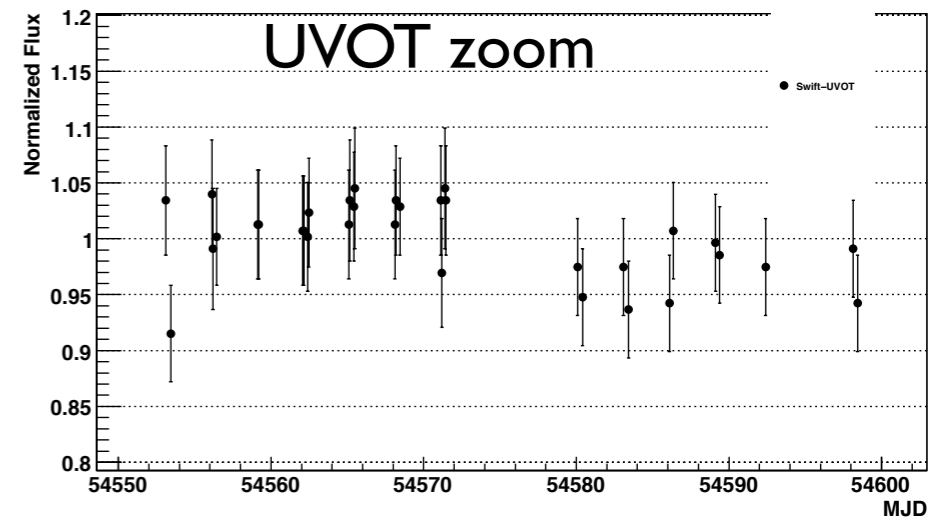
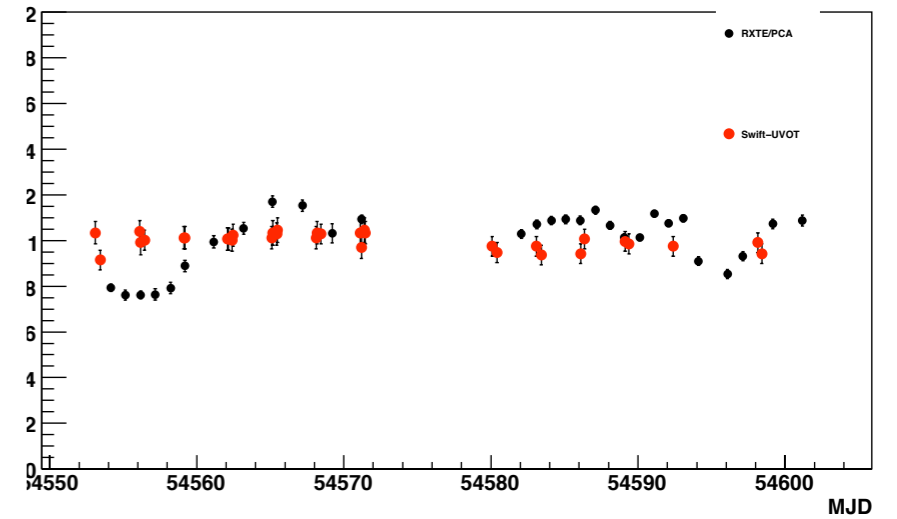
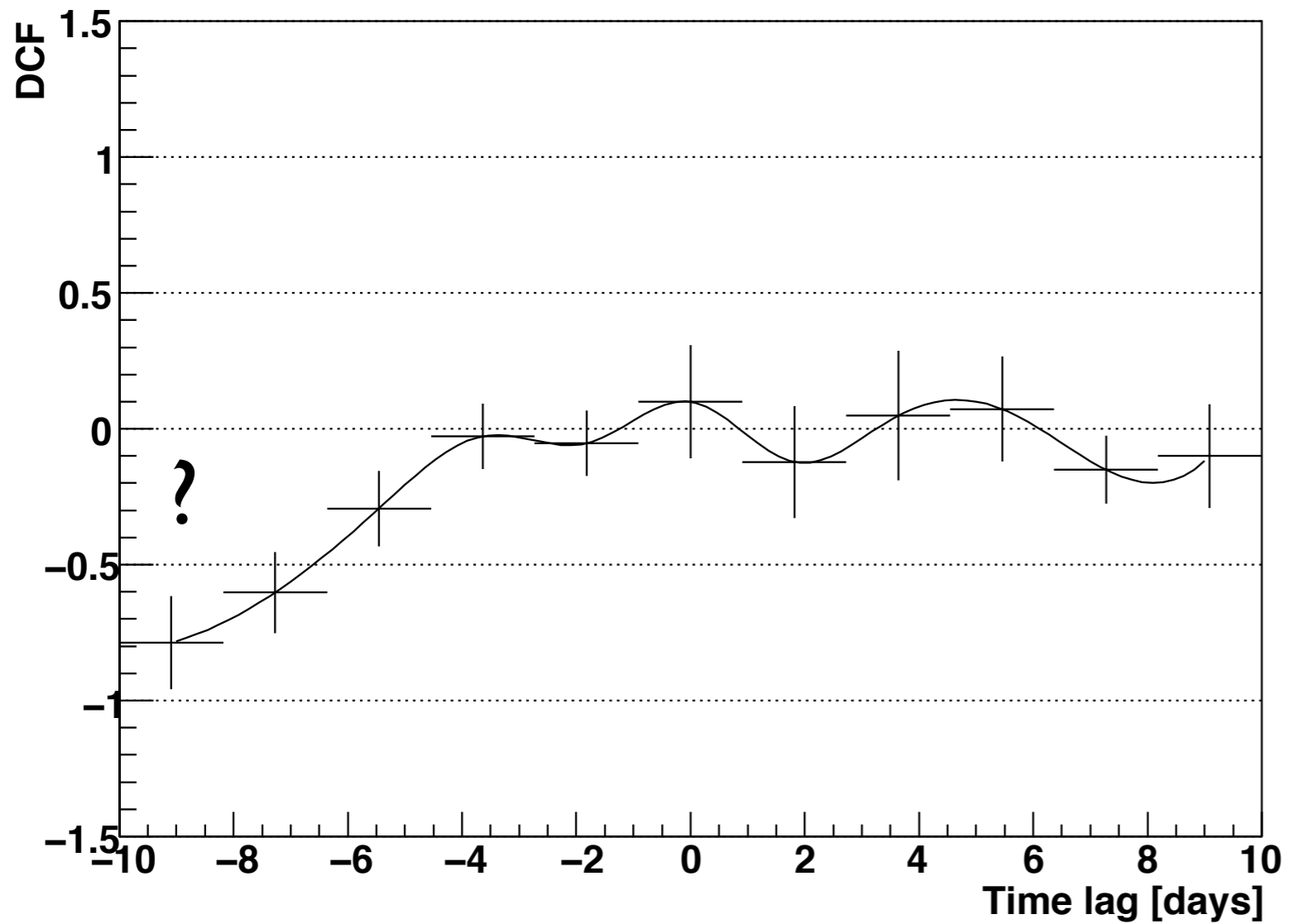
DCF



No correlation?

RXTE - UVOT

DCF



No correlation

Summary

- Preliminary cross-correlation results
- XRT and RXTE nicely correlated as expected
- Hint of correlation at time lag ~ 0 within X-ray and VHE
- Correlation of optical frequencies to be understood