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FACT - Results from more than 8 Years of Monitoring

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Operational since October 2011, the First G-APD Cherenkov Telescope (FACT) has been monitoring TeV-blazars. An unbiased observing strategy, robotic operation and the usage of solid state photo sensors (SiPM, aka G-APDs) increase the instrument's duty cycle and minimize observational gaps, making FACT an ideal instrument for long-term monitoring. In more than eight years, an unprecedented data sample of more than 14700 hours of physics data has been collected.

Results of an automatic quick-look analysis are published with low latency on an open-access website. Based on this, close to 150 alerts including 12 astronomer's telegrams have been issued in six years, triggering a variety of multi-wavelength studies including target-of-opportunity observations with X-ray satellites.

Results for various triggered multi-wavelength studies, e.g. Mrk 501 in 2014, 1ES 2344+51.4 in 2016 and Mrk 421 in 2019, are presented together with long-term studies, like e.g. a multi-wavelength study of 5.5 years of observations of Mrk 421 and studies on the variability characteristics of blazars including periodicity studies.

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