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TLE observations in central Europe from Hungary

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A camera system was set up in Sopron, Hungary in 2007 to observe transient luminous events (TLEs) above Central Europe. Over 100 phenomena were captured during July and August of the same year including sprites, sprite halos and a jet which all occurred above active thunderstorms within 500-600 km range from the observation site. Thunderstorms in the area were followed with the help of quasi real time lightning location data provided by the LINET lightning detection network which operates in the LF-VLF range. Supplementing the optical observations horizontal magnetic components and vertical electric component of the atmospheric electromagnetic field were recorded in the 5-30 Hz band inside the Schumann resonance (SR) frequency range. Intense SR transients could be associated with most of the TLE producing lightning flashes. Primary results from comparison of TLE producing and non TLE producing lightning flashes will be presented along with statistics on peak currents and TLE-lightning delay times. The optical observation system is getting upgraded in 2008 to be remotely controllable and the observations are continued. We hope to be able to show some of the results from this year as well.