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Generalized Parton Distributions with Timelike Compton Scattering CAMILLE ZINDY, MARIE BOER, Virginia Tech — Hard exclusive processes such as photoproduction or electroproduction of photon or meson off the nucleon provide access to the Generalized Parton Distributions (GPDs). These functions contain the correlation between the longitudinal momentum fraction and the transverse spatial densities of quarks and gluons in the nucleon. Timelike Compton Scattering (TCS) corresponds to the reaction $\gamma P \rightarrow \gamma^* P' \rightarrow e^+ e^- P'$, where the virtual photon is scattered off a quark. Comparison of GPDs extracted from TCS and DVCS, its spacelike equivalent, is very important as it will allow for studying GPD's universality. We performed data analysis based on TCS simulations to develop future experiments at JLab. We will present the results of our studies.

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