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Measurement of Lightning Generated X-Rays EMILY BELL, ZACH MONTI, NICK OLSON, BRITTANY SHANNON, ADAM KELLER, CHRISTOPHER FASANO, Monmouth College — Lightning is a dramatic process that demands study and explanation. The mechanisms that cause lightning and the mechanisms by which lightning proceeds are complex and still areas of active study. In particular, understanding how lightning generates X-rays provides an interesting avenue of investigation. We report on our effort to build a prototype detector package to measure the energy spectrum of X-Rays produced by natural lightning while recording electric field strength and meteorological data. Knowing and understanding this energy spectrum along with electric field strength and meteorological data will play an important role in understanding the process by which lightning is produced and proceeds and it will allow testing of a variety of models that have been suggested for producing lightning and for producing X-rays.

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