

Abstract Submitted
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Lightning Trends and ELVES Near the Pierre Auger Observatory

CODY DOYLE, DAVID GRISHAM, LAWRENCE WIENCKE, Colorado School of Mines — Emissions of Light and Very low frequency perturbations due to Electromagnetic pulse Sources (ELVES), are transient luminous events that occur above some lightning storms. The fluorescence detectors at the Pierre Auger Observatory are well suited to detecting and characterizing this radiation. Data from the Lightning Imaging Sensor and World Wide Lightning Location Network were examined for temporal and spacial correlation to these events in an attempt to learn more about the characteristics of lightning that cause ELVES. While searching for causal events, many seasonal and geographic patterns in South American storm systems were uncovered.

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