

Abstract Submitted
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Combined Current Measurements and Lightning Mapping Array Observations of Rocket-Triggered Lightning at Langmuir Lab JACOB TRUEBLOOD, New Mexico Tech — Over the 2011 storm season at Langmuir Lab, several rocket-triggered lightning flashes were observed by Langmuir's Lightning Mapping Array (LMA) and by current viewing resistors (CVR). The LMA data allows us to calculate the velocity of the positive leaders from the flashes. The CVR is attached to the wire that is towed behind the rocket allowing us to measure the current at the base of the lightning flash. We are able to compare the current measurements and velocity calculations from the LMA data to provide insights into stages of a triggered flash. We discuss one flash from August 11 as a case study, where we found positive leader velocities to range from 1.4 to 2.4×10^4 m s⁻¹. The faster speeds were found during the initial continuous current (ICC).

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