

Abstract Submitted
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Plasma Expansion and Imaging in WIRX M. MCMILLAN, C. ADAMS, D. BLASING, D. CRAIG, Wheaton College, Wheaton, IL USA — We examine the expansion and evolution in space and time of a plasma arcade in the Wheaton Impulsive Reconnection Experiment (WIRX). In our investigations of the expansion we find a long lived ‘tail’ feature emanating from the arcade. We attempt to explain this phenomenon with a computer model of magnetic field lines near the arcade, and find that the tail does not align with the field lines in the model. We also find other fast time scale events, which seem to influence the intensity of the tail. These other events may be related to magnetic reconnection. Photodiode cameras are nearly complete which will allow continuous light intensity measurements to further study the expansion and evolution of the arcade. Work supported by U.S.D.O.E. grant DE-FG02-08ER55002.

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