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Analysis of Precursor Properties of mixed Al/Alumel Cylindrical Wire Arrays* A. STAFFORD, A.S. SAFRONOVA, V.L. KANTSYREV, A.A. ESAULOV, M.E. WELLER, I. SHRESTHA, G.C. OSBORNE, V.V. SHLYAPTSEVA, S.F. KEIM, University of Nevada, Reno, C.A. COVERDALE, Sandia National Laboratories, Albuquerque, NM 87185, USA, A.S. CHUVATIN, Ecole Polytechnique, 91128 Palaiseau, France — Previous studies of mid-Z (Cu and Ni) cylindrical wire arrays (CWAs) on Zebra have found precursors with high electron temperatures of >300 eV. However, past experiments with Al CWAs did not find the same high temperature precursors. New precursor experiments using mixed Al/Alumel (Ni 95%, Si 2%, and Al 2%) cylindrical wire arrays have been performed to understand how the properties of L-shell Ni precursor will change and whether Al precursor will be observed. Time gated spectra and pinholes are used to determine precursor plasma conditions for comparison with previous Alumel precursor experiments. A full diagnostic set which included more than ten different beam-lines was implemented. Future work in this direction is discussed.

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