

Abstract Submitted
for the DPP16 Meeting of
The American Physical Society

An automated process for generating archival data files from MATLAB figures¹ G.M. WALLACE², M. GREENWALD, J. STILLERMAN, MIT PSFC — A new directive from the White House Office of Science and Technology Policy requires that all publications supported by federal funding agencies (*e.g.* Department of Energy Office of Science, National Science Foundation) include machine-readable datasets for figures and tables³. An automated script was developed at the PSFC to make this process easier for authors using the MATLAB plotting environment to create figures. All relevant data (x, y, z, errorbars) and metadata (line style, color, symbol shape, labels) are contained within the MATLAB .fig file created when saving a figure. The *export_fig* script extracts data and metadata from a .fig file and exports it into an HDF5 data file with no additional user input required. Support is included for a number of plot types including 2-D and 3-D line, contour, and surface plots, quiver plots, bar graphs, and histograms.

¹This work supported by US Department of Energy cooperative agreement DE-FC02-99ER54512 using the Alcator C-Mod tokamak, a DOE Office of Science user facility.

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³J.P. Holdren. MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES. “Increasing Access to the Results of Federally Funded Scientific Research.” <https://www.whitehouse.gov/sites/default/files/microsites/ostp/ostp-public-access-memo-2013.pdf>

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Date submitted: 13 Jul 2016

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