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Recent Advances at the Dynamic Compression Sector

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The Dynamic Compression Sector (DCS) at the Advanced Photon Source (APS), Argonne National Laboratory – a first-of-its-kind user facility – achieved full user operations in all four experimental end stations in 2018. With a diverse set of dynamic compression drivers linked to 80ps, bright, hard x-ray pulses from a synchrotron, the DCS user community has made significant and broad advances in addressing long-standing questions in dynamic compression science. An overview of the DCS capabilities and operations – including the process for user experiments – will be presented along with representative results obtained to date. Work supported by DOE/NNSA.