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## Tools for Reusing Earth Science Software

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Software reuse offers potential opportunities and benefits for Earth science. Tools currently under development can contribute to various aspects of existing efforts and to the new Earth science Decadal Survey missions including SMAP, and ICESAT-2 amongst others. The Reuse Enablement System, developed by the NASA Earth Science Data Systems (ESDS) Software Reuse Working Group (SRWG) is currently being piloted and can be used as a catalog to register reusable software and utilities. These assets are contributed by new missions and from previous missions for reuse in future missions and projects. The Reuse Readiness Levels (RRLs), also produced by the SRWG and recently released in a citeable, versioned 1.0 document, offer capabilities to measure the potential reusability of software assets and to determine areas where the assets should be improved for reuse. The combination of the RES and the RRLs form an effective toolkit for cataloging and assessing assets for reuse in the NASA Earth Science Enterprise.