

# Overcoming Storage Issues of Earth-System Data with Intelligent Storage Systems

*Thursday, 27 September 2018 14:45 (30 minutes)*

This talk describes issues in the state-of-the-art data management; then the Earth-System Data Middleware (ESD) is introduced that sits underneath of NetCDF4/HDF5. While this is considered to be an intermediate step, integrated solutions that cover workflows consisting of storage and compute and enable a transparent and concurrent usage of the storage technology of the complex future storage landscape is necessary.

A proposed approach is the definition and development of next generation APIs that supersede the outdated POSIX and MPI-IO interfaces. This would ultimately enable (I/O) performance portability and less tuning of low-level features.

However, active involvement of the earth-system community is necessary to drive such efforts.

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