Benchmarks

Ensuring that real applications perform well on NCAR computing platforms is critical for getting the best value out of complex and costly highperformance computing and storage resources. Climate and weather applications are large, often with millions of lines of code, and are generally difficult to configure in a way that permits ease of use for things such as system deployments, upgrades, and procurements.

NCAR has developed a suite of application kernels, micro-benchmarks, and full applications with moderate input cases that can be used as proxies for the full applications and still provide meaningful information and insights into system performance. A few of these are well-known benchmarks that are commonly used in HPC for characterizing system performance.

NCAR's benchmarking application packages include source files, build scripts, and input data sets required to compile and run the applications. In cases where the benchmarks depend on applications and libraries that are not part of the package distributions, version number and download details are provided in the README files.

Releases

2019/2020 Release

2015 Release