Digital Total - Computing & Data Science an der Universität Hamburg und in der Wissenschaftsmetropole Hamburg



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Climate Data Operators - CDO

The Climate Data Operators (CDO) software is a collection of many operators for processing of climate and weather model data. It includes simple statistical and arithmetic, data selection, interpolation functions and many other.

The extremely large amount of data produced by high-resolution climate simulations make such problems essentially I/O bound. CDO is optimised to cope with this.

Computationally intensive operators are OpenMP parallelised and prepared to use GPUs if necessary. Many operators can be combined arbitrarily by operator chaining, providing another parallel layer. This is realised using POSIX threads.

Due to its ease of use, reliability, constant evolution and high efficiency, CDO has become a very popular tool in the climate community over the last 20 years.

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Keywords

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