

Interactive comment on "Compact Modeling Framework v3.0 for high-resolution global ocean-ice-atmosphere models" by Vladimir V. Kalmykov et al.

Vladimir V. Kalmykov et al.

maksim.kaurkin@phystech.edu

Received and published: 26 June 2018

The comment was uploaded in the form of a supplement: https://www.geosci-model-dev-discuss.net/gmd-2017-294/gmd-2017-294-AC2supplement.pdf

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2017-294, 2018.



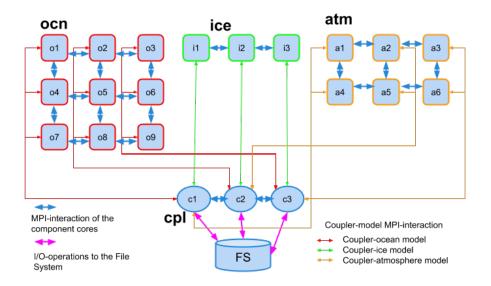


Fig. 1. Figure 1. Architecture of the coupled model in the CMF2.0. In this example there are three components (ocean, atmosphere, ice) connected by the 3-core coupler.

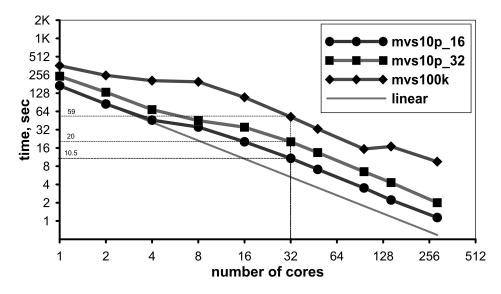


Fig. 2. Figure 2. Walltime required for the 10-day ocean-atmosphere model run with disabled physics vs. number of coupler cores on MVS supercomputers (Test I for CMF2.0).



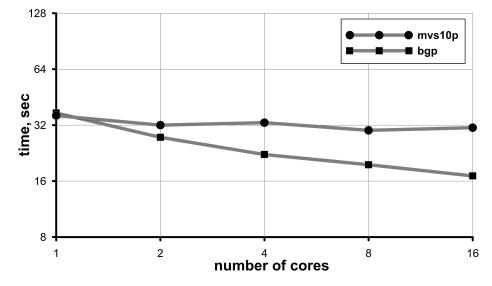


Fig. 3. Figure 5. Walltime of parallel writing of a model array of 4096 \times 2048 \times 50 size by different numbers of CMF2.0 coupler cores on MVS10P and BlueGene/P supercomputers.

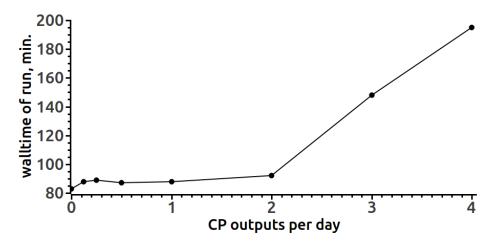


Fig. 4. Figure 7. Walltime of 8-day run of INMIO World ocean model with 0.1 degrees resolution vs. frequency of saving solution control points.



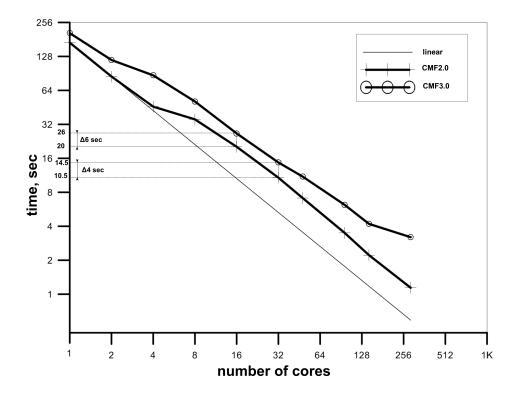


Fig. 5. Figure 8. Walltime required for the 10-day ocean-atmosphere model run with disabled physics vs. number of coupler cores on the MVS10p supercomputer (Test I for CMF2.0 and CMF3.0).