Insights on the use of WRF in Cloud Systems

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The use of very large ensembles of simulations for climate and meteorological research has proven to be very useful. However, the computational needs for such approach are prohibitive and not always not available for researchers.

Based on previous successful experiences with with distributed computing and citizen science approaches using using BOINC (Berkeley Open Infrastructure for Network Computing) and Cloud Computing environment, here we present our preliminary work and results around moving WRF (one of the most used meteorological models) to a heterogeneous, mixed and highly abstracted (including the usage of containers) Cloud environment which simplifies the access and management of computational resources.