

## ***Interactive comment on “Enabling BOINC in Infrastructure as a Service Cloud Systems” by Diego Montes et al.***

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The paper presents the implementation of a novel method for running ensemble climate simulations in the cloud. In particular, a connection of climateprediction.net project (CPDN) to Amazon Web Services (AWS) using the BOINC interface already in use and modifying it to use AWS. The paper is well structured and describes the scientific objectives and the implementation of the solution, and how to reproduce the results. More details about the benefits of using the cloud, apart from what is already known, would be expected, and also about how this solutions complements other computational solutions.

In particular, in my opinion it would be interesting to present more details about:

How the use of AWS compares against using other computational resources avail-

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able (grid computing, supercomputers, clusters, domestic resources,...), in different aspects, including but not limited to the costs. For example the total time to get a full ensemble simulation including the pre and post-processing.

Compare the use of commercial cloud providers to other scientific cloud providers like EGI FedCloud

Could this approach be useful not only for Ensemble Predictions?

Include more details about the costs of moving and archiving the data. If every simulation generates 656 GB of data what is the costs of running many (ensemble) simulations? Include numbers

The paper includes enough good references (over 20)

Finally, no major typing errors were found in the document

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Interactive comment on Geosci. Model Dev. Discuss., doi:10.5194/gmd-2016-193, 2016.