Jim McEnerney Supported Projects: ACME

Quarterly Report for April 1, 2017 - June 30, 2017

Quarter Accomplishments:

- Made progress to parallelize ACME diagnostics with the CDP framework before it was closed down.
- To support Uncertainty Quantification efforts I completed the integration of mars and pymars into genutil. These packages generate response surfaces that are important for the interpolation of model data. Now available in genutil are functioning versions for each package that generate the same output (one in fortran and the other in python) and unit tests for each that use python unittest. Note only continuous variable tests are implemented; categorical variables and mixed variables need to be done. There are also elementary examples for a new user as well as packages to support their use including tools for manipulating mars output, tools for sampling and response surface utilities (all written in python).
- I prepared and spoke on Uncertainty Quantification and an application at the ESGF meeting.

Next Quarter's Roadmap

• Find another position.

Resources Required to Achieve Goals

None.