

## **Ji-Woo Lee**

**Supported Projects: ESGF (25%), PCMDI (50%), other (CASC postdoc, 25%)**

### **Quarterly Report for January 1, 2016 – March 31, 2016**

#### **Quarter Accomplishments:**

- I learned usage of Python, UV-CDAT, ESGF, and GitHub [February to March 2016].
- I analyzed function and architecture of NCAR's Climate Variability Diagnostics Package (CVDP) to implement those functions into PCMDI's Metrics Package (PMP). For starting, I reproduced NCAR's results using ESGF stored CMIP5 output [March 2016].
- I produced scientific examples of UV-CDAT using CFS model simulation (in GRIB format) and CMIP5 output (in NetCDF format) [March 2016].
- I contributed preparing pre-proposal for DOE Climate model Evaluation and Data Analysis at High Resolution (CEDAHR) project led by UCLA, which was encouraged to submit a full proposal [March 2016].
- I contributed preparing full-proposal for LDRD Lab-Wide (LR). The proposed project is about drought diagnostics using CMIP5 archives [March 2016].
- I prepared draft figures for climate variability research paper as continuum of research from previous work [February 2016].

#### **Next Quarter's Roadmap**

- I will improve UV-CDAT's scientific examples and will document them for web gallery [April to June 2016].
- I will convert several algorithms in NCAR's CVDP to Python code to examine potential to merge with PMP. As a start, climate index calculation part will be converted [April 2016], and variance mode diagnosis part will follow [May 2016]. I will contribute to PMP paper as well [May to June 2016].
- I will contribute to prepare full-proposal for DOE CEDAHR project [April 2016].
- I will contribute to prepare presentation for LDRD-LR when submitted proposal is selected [April 2016].
- I will prepare manuscript for a journal paper as continuum of research at previous work [May to June 2016].

#### **Resources Required to Achieve Goals**

- None for now.