Ji-Woo Lee
Supported Projects: PCMDI, ESGF, CASC postdoc

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

Quarter Accomplishments:
- **PMP**
  - Implemented climate variability modes diagnostics to PMP and developed new analysis approach for climate variability modes using projection of observation, named Common Basis Function (CBF) approach
  - Analyzed 5 modes of variability obtained from 180 CMIP5 simulations (all available models and ensemble members) and advanced analysis result
  - Research outcome was submitted as journal article at Climate Dynamics
  - Research outcome was also presented at the "5th WGNE workshop on systematic errors in weather and climate models", "Metrics and diagnostics" session in Montreal, Canada (June 19-23)
  - Implement PMPParser into pre-developed ENSO metrics (continue)

- **CDAT**
  - Converted CDAT examples to Jupyter Notebook

- **ESGF**
  - Research proposal was presented at the ESGF proposal review meeting at DC
  - Plan for server-side implementation of metrics was advertised at a research community meeting, Montreal, Canada
  - Developed Big-Data analysis plot for climate model genealogy
  - Contributed to Machine Learning task

- **Publication**
  - **Lee, J.-W.,** K. Sperber, P. Gleckler, C. Bonfils, and K. Taylor, 2017: Quantifying the Agreement Between Observed and Simulated Extratropical Modes of Interannual Variability. *Climate Dynamics* (submitted, in review)

Next Quarter's Roadmap
- Release PMP version incorporated with variability diagnostics
- Discover further research topics regarding PMP work; Power spectrum
- Advance UV-CDAT scientific examples (continue) with Jupyter Notebook

Resources Required to Achieve Goals
- Nothing special at this moment