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

Quarterly Report for January 1, 2017 – March 31, 2016

Quarter Accomplishments:
- **PMP**
    - Implemented climate variability modes diagnostics to PMP and developed new EOF analysis approach for climate variability modes using projection of observation (continued)
    - Analyzed 5 modes of variability obtained from 180 CMIP5 simulations (all available models and ensemble members) and advanced analysis result (continued)
    - Developed the manuscript for submitting as journal paper (80% done)
    - Abstract submitted to the "5th WGNE workshop on systematic errors in weather and climate models", "Metrics and diagnostics" session was accepted for giving an oral presentation
- **CDAT**
    - Developing CDAT scientific examples and advanced them for their easy usage (e.g., time evolution of zonal mean) and converting existing examples to Jupyter Notebook
- **Proposal**
    - LDRD-ER: Co-I for proposal titled "Massive Scale Deep Learning for Predicting Extreme Climate Events"
    - LDRD-LW: Co-I for proposal titled "Bayesian estimation of drought projections in multi-model simulations of climate change"
- **Publication**
    - Lee, D., S.-K. Min, J. Jin, **J.-W. Lee**, D.-H. Cha, M.-S. Suh, J.-B. Ahn, S.-Y. Hong, H.-S. Kang and M. Joh, 2017: Mechanisms for future changes in extreme precipitation over Northeast Asia and Korea: A multi-RCM study. *Climate Dynamics*. doi: 10.1007/s00382-017-3566-4

Next Quarter's Roadmap
- Merge variability diagnostics to PMP official version
- Discover further research topics regarding PMP work
- Submit a paper regarding PMP work (leading)
- Advance UV-CDAT scientific examples (continue)
- Prepare presentations in upcoming WGNE conferences

Resources Required to Achieve Goals
- Nothing special for now