

COLLOQUIUM BY YANG GAO

THE CLIMATE IMPACT ON EXTREME WEATHER EVENTS, AIR QUALITY AND PUBLIC HEALTH

TIME: 11:00-12:00AM, FRIDAY 29 JULY 2016

VENUE: AB 1079

The climate impact on extreme weather events, air quality and public health

Speaker: Yang Gao, Research Associate, Atmospheric Sciences and Global Change Division, Pacific Northwest National Laboratory

ABSTRACT:

Under climate warming, it is recognized that the extreme weather events have become more severe and frequent. In this talk, I will first overview the recent changes in extreme weather events, such as drought, flood, heat waves and cold air outbreaks. Next I will talk about the mechanisms modulating these extreme weather events, which is crucial for effectively investigating the impact, adaptation and vulnerability of climate change. The extreme weather events such as heat waves may strongly affect air quality such as ozone. Together, the extreme weather events and air quality can further affect public health. Thus, at the end, I will talk about the linkage between the extreme weather events, air quality and human health.

BIO:

Dr. Yang Gao is a Postdoctoral Research Associate at Pacific Northwest National Laboratory, USA. He is a member of the Sigma Xi Scientific Research Society and American Geophysical Union. Dr. Gao received his PhD in Civil Engineering from the University of Tennessee in 2012, where he developed dynamical downscaling techniques to link global models and regional models. This study showed that regional high resolution modeling produced significant improvement over global models in predicting extreme weather events. Dr. Gao has been recently working on using global climate models to improve understanding of climate change impacts on extreme events. He has extensive experience in the extreme weather events, high resolution climate simulations, climate impact on air quality and public health.