

Building extreme weather resiliency through improved weather and climate prediction and emergency response strategies

Sarah Lu , Wei-Chyung Wang, and the US-Taiwan PIRE team

**Atmospheric Sciences Research Center, State University of New York at Albany, 251 Fuller Rd, Albany NY
12203, USA**

Abstract

Extreme weather resiliency demands improved weather and climate prediction and response strategies to strengthen the protection of life and property. A US-Taiwan Partnerships for International Research and Education (PIRE) project (with the title “Building extreme weather resiliency through improved weather and climate prediction and emergency response strategies”) was recently selected by NSF (for US) and MOST (for Taiwan). The US-Taiwan PIRE seeks to address the challenges associated with extreme weather resiliency with a particular focus on reducing the impacts/risks of extreme precipitation. The overarching objectives include: (1) quantification and characterization of past and future climate influence on weather extremes, (2) numerical weather prediction research in probabilistic prediction of weather extremes, and (3) research on decision support and response in emergency management of weather extremes. This presentation will provide an overview of the US-Taiwan PIRE project and present a project status update.