

JOINT SEMINAR BETWEEN DEPARTMENT OF STATISTICS &
INSTITUTE OF EARTH, OCEAN, AND ATMOSPHERIC SCIENCES**Dorit Hammerling**Applied Mathematics and Statistics
Colorado School of Mines*Compressing climate data: challenges and opportunities***March 6, 2019****3:20 – 4:20pm**

Light refreshments will be served

**110 Frelinghuysen Road
Hill Center, Room 552**

Abstract: “With increasing computational power and concurrent growth in resolution, data storage has become a crucial bottleneck for numerical modeling, in particular for global climate models. Lossy compression is a viable option to preserve information, while reducing storage requirements, but requires careful evaluation to ensure the scientific integrity of the data. The field of statistics plays a key role in developing such quality assurance tools for spatio-temporal climate data as well as potentially contributing to the development of compression algorithms themselves. I will provide a summary of the work done at the National Center for Atmospheric Research (NCAR) and highlight areas of future development and potential collaborations.”

Bio: Prof. Hammerling obtained a M.A. and NASA-funded PhD (2012) from the University of Michigan in Statistics and Engineering, followed by a post-doctoral fellowship at the Statistical Applied Mathematical Sciences Institute in the program for Statistical Inference for massive data. She then joined the National Center for Atmospheric Research, where she led the statistics group within the Institute for Mathematics Applied to the Geosciences and worked in the Machine Learning division before becoming an Associate Professor in the Department of Applied Mathematics and Statistics at the Colorado School of Mines in January 2019. Prof. Hammerling received the Early Investigator Award from the American Statistical Association, Section on Statistics and the Environment, in 2018.

