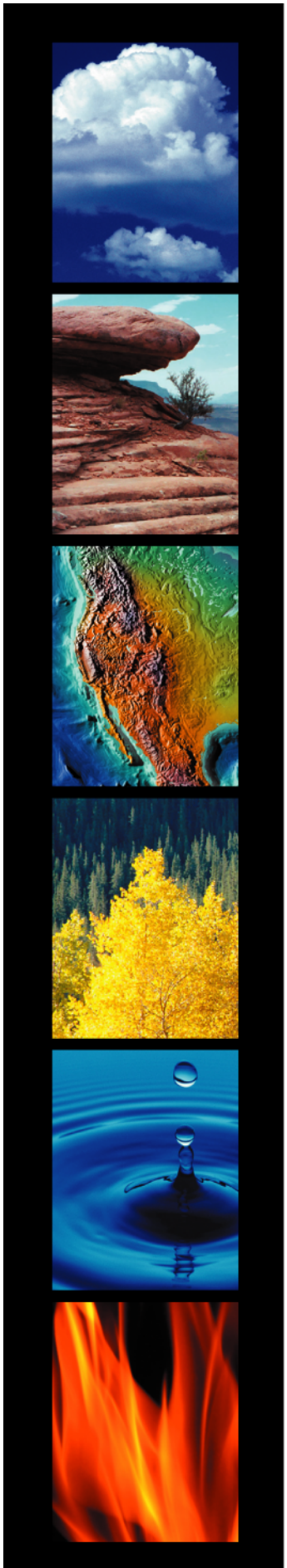

Co-sponsored by
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Frontiers in Geoscience Colloquium

Monday, March 13, 2017
3:00pm – 4:00pm
Physics Auditorium (TA-3, Bldg 215)

Climate Change, Snowpack, and Water Resources in New Mexico

Professor David Gutzler

University of New Mexico

For the past 40 years temperature across the Southwest has been rising at a rate of nearly 0.5 degree C/decade. Climate model projections based on greenhouse gas increases suggest that a warming trend of this magnitude is likely to continue through the 21st Century, although uncertainties in projections of temperature and precipitation change remain frustratingly large. Among the most pronounced effects of warming climate in the American Southwest is a profound decrease in snowpack. Snowmelt runoff is the major source of surface water to the agricultural sector and (increasingly) to municipalities across the Southwest, and sustains water-stressed ecosystems, so declining snowpack has major implications for water resource management in our region. In this presentation I'll review observed and projected changes in snowpack and streamflow, emphasizing the upper Rio Grande, and place recent and projected changes into context with the very large natural variability in this hydrologic system.

Host: Matthew Hecht, CCS-2, 7-5798