



ATS/CIRA Colloquium

Tiffany Shaw

Visiting ATS from the University of Chicago

**Understanding storm track shifts
across a range of timescales**

Hosted by Thomas Birner

Friday, April 28, 2017

ATS room 101

Discussion will begin at 11:15 a.m.

Refreshments will be served at 10:45 a.m. in the weather lab

Storm tracks are regions where extratropical cyclones occur most frequently, they control weather and climate in the extratropics. Storm tracks shift latitudinally in response to energetic perturbations across a range of timescales. On seasonal timescales, the Northern Hemisphere storm track shifts poleward between winter and summer and equatorward between summer and winter. On interannual timescales, the storm tracks shift equatorward in response to El Nino minus La Nina conditions. On centennial timescales, climate models project the storm tracks will shift poleward in response to increased CO₂ concentration. Here we present an energetic framework that connects energetic perturbations to storm track position and use it to understand storm track shifts across a range of timescales.

Link to colloquium videos and announcement page: <http://www.atmos.colostate.edu/dept/colloquia.php>