

MMM SEMINAR SERIES



This seminar will include 2 speakers/presentations:

1) The Influence of North Pacific Large-Scale Variability on Recurring EPAC Tropical Cyclones

Alex Mitchell, SUNY, Albany

Enhancing our understanding of the atmospheric dynamics governing the recurvature of tropical cyclones (TCs) in the eastern North Pacific (EPAC) is crucial for improving track forecasting accuracy and mitigating potential impacts along the Western North American coastline. This study investigates the linkages between Rossby wave breaking (RWB), large-scale flow patterns, and the recurvature of EPAC TCs, with a specific focus on unraveling the underlying dynamic processes across the North Pacific (NPAC) that drive EPAC TC recurvature. By investigating these relationships, we aim to acquire valuable insights into the dynamical mechanisms responsible for EPAC TC recurvature, contributing to enhanced forecasting capabilities and improved hazard mitigation strategies...[Link to full abstract](#).

2) Composite Analysis of Amplified Northern Hemisphere Persistent Flow Regimes

Tyler C. Leicht, SUNY, Albany

Weather regimes have been widely studied to identify recurrent weather patterns in specific regions, or less frequently, across the entire Northern Hemisphere (NH). Previous case study analysis by the presenters has found that persistent ridges across the eastern North Pacific Ocean and western North America can be linked to amplified flow patterns across the entire NH. Amplified persistent flow regimes (PFRs) across the NH can last for 1–5 weeks, with major impacts to precipitation and temperature anomalies on subseasonal-to-seasonal (S2S) timescales. However, additional research is still needed to document the impact of synoptic-scale weather patterns on the formation of these long-duration PFRs. A better understanding of how a broader range of dynamical features can impact amplified, persistent upper-level flow patterns will hopefully expand our ability to generate forecasts on the S2S time scales. The goal of this presentation is to more clearly identify these NH PFRs, and understand the dynamical and thermodynamical drivers that lead to NH PFRs.

...[Link to full abstract](#).

Thursday, 10 August 2023, 2:00pm

Refreshments 1:45pm

NCAR-Foothills Laboratory, 3450 Mitchell Lane
FL2/1022, Large Auditorium

Seminars will also be live webcast

<https://operations.ucar.edu/live-mmm>

Participants may ask questions during the seminar via Slido.