

DATE: May 29. 2020

TIME: 2:00-3:00pm CST

LOCATION: via Zoom (link provided in email)

The University of Texas at San Antonio™



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PRESENTS:

Dr. Marilyn Raphael, Professor in the Department of Geography at the University of California, Los Angeles. Dr. Raphael is also a collaborating CAMEE PI.

Title: Antarctic Sea Ice Variability and Linkages with the Atmospheric Circulation

Abstract:

Antarctic sea ice variability is strongly regional - five distinct regions of variability have been defined. While exhibiting similar annual cycles, these regions vary in their times of advance and retreat as well as in overall sea ice extent. Antarctic sea ice trends are also strongly regional with positive trends occurring, for example, in the Ross Sea and negative trends in the Bellingshausen-Amundsen Seas. Some of the intrinsic spatial variability in the sea ice is probably due to the effect of the geography of Antarctica and the influence of the ocean. Some is due to the influence of the largescale atmospheric circulation – the Southern Hemisphere Annular Mode, Zonal Wave Three and the Amundsen Sea Low. In this presentation I discuss how these components of the atmospheric circulation exert their influence on different regions of sea ice and how the sea ice might be expected to change as the atmospheric circulation changes. I also discuss the role that these atmospheric circulation mechanisms played in initiating and supporting the recent anomalous decrease in Antarctic sea ice.

More details of Dr. Raphael's Research: https://geog.ucla.edu/person/marilyn-raphael/



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