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Department of Atmospheric Sciences Seminar Announcement

Department of Atmospheric Sciences, S.O.E.S.T., University of Hawai'i at Mānoa
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The Impact of Remote Forcing on Arctic Sea Ice Variability

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Date: Wednesday, April 15, 2015
Refreshments: 3:00pm – 3:30pm at MSB Lanai
Free Cookies, Coffee & Tea Provided
Seminar Time: 3:30pm
Location: Marine Sciences Building, MSB 100

Abstract:

The persistent decline in annual Arctic sea ice extent since the late 20th century has been well documented, but its year-to-year prediction and governing processes are not fully resolved. Accurate interannual sea ice predictions could aid in arctic navigation, mineral exploration, environmental restrictions, and resource planning for local communities. Recent studies have focused on sea ice in different regions of the Arctic and its impact on mid-latitude weather and climate. Anomalous Arctic sea ice during the spring months could alter rainfall patterns associated with the East Asian Summer monsoon through circulation changes. Additionally, sea ice patterns during the fall months could impact central Asia temperatures in the following winter. Given the global influences of sea ice variability and our low success predicting interannual ice patterns, it is therefore important to understand the processes that govern year-to-year sea ice variability. Recent studies show variability as far as the tropics could have an impact on Arctic circulations on different time scales. This led to a motivation to examine 1) what are the modes of year-to-year sea ice variability, 2) what modes of sea ice variability exist on shorter and longer time scales and 3) what controls these modes.