

2021 EOL-MMM Joint Seminar (Virtual)

ARCTIC CYCLONES AND THE INFLUENCE ON SHORT-TERM SEA ICE CHANGE AND MOISTURE TRANSPORT

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TIME: 3:30 - 4:30 pm MDT

WEBCAST: operations.ucar.edu/live-eol

QUESTIONS: Participants may ask questions during the seminar via Slido

ABSTRACT

Declining Arctic sea ice thickness and extent over the past several decades has resulted in extensive regions of thin ice vulnerable to melting. We use the ERA-5 reanalysis along with a fully coupled atmosphere-ocean-ice model (Navy ESPC) to explore the role of Arctic cyclones in summertime sea-ice change. Cyclone influence on short-term changes in sea ice vary markedly between early and late summer. Cyclones account for over 70% of the annual poleward moisture transport into the Arctic. We utilize the coupled Navy ESPC to examine the key processes that led to sea ice loss during an intense cyclone.

EOL Seminar Series Coordinator: Jacquie Witte: jwitte@ucar.edu

This webcast will be recorded and uploaded to the
[NCAR Earth Observing Laboratory YouTube Channel](#)

For more information, contact Melissa Ward: mward@ucar.edu