

## **SESSION: (A5) Land initialization and processes**

**(A5-02)**

### **The role of the midlatitude ocean in sub-seasonal prediction**

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Intrinsic oceanic variability exhibits longer time scales and smaller spatial scales than atmospheric variability. This is due, in part, to the larger heat capacity of the ocean and, in the middle latitudes, to the smaller Rossby radius of deformation. Due to the slowly evolving nature of the ocean, the oceanic state is usually assumed to be invariant for the purposes of weather prediction. However, on subseasonal timescales, the oceanic state does evolve, especially on the fine scales associated with oceanic fronts and mesoscale eddies. This talk will survey recent studies that have focused on the influence of the midlatitude on oceanic variability on atmospheric storm tracks. This interaction has potential implications for subseasonal forecast skill. Dry dynamics is unlikely to be responsible for this interaction, due to the mismatch in the Rossby radius of deformation between the atmosphere and the ocean. This suggests a role for moist dynamics in this interaction.