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**Title:** Abiotic and Biotic Phenological Change in the Alaskan Arctic.

**Abstract:**

Large changes to the biotic and abiotic phenology are occurring in the Arctic as a result of climate change, however, this is not occurring uniformly across the Arctic. At Toolik Field Station on the North Slope of Alaska annual average temperatures over the past 20 years have been relatively stable which can lead to some misleading conclusions about how the Arctic is changing. In this paper, we examine the phenological changes in both abiotic (meteorological and cryosphere) and biotic (plants and animals) environments at Toolik Field Station to provide a broader assessment of the impact of climate change on our study region. Data ranges in resolution from daily, weekly, monthly and seasonally collected data. Data was collected throughout the year through on the ground observations and with autonomous equipment. The year-to-year variation seen to impact the abiotic and biotic phenology at Toolik may not seem great, however, we are seeing changes in the region through an increase in storms and changes to the precipitation regime due in part to changes in the atmospheric circulation and sea ice coverage in the Arctic Ocean.