Spatial and Temporal Analysis on Hudson Bay Region's Fog

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Most of the communities around Hudson Bay are isolated. They have scheduled flights but lack year-round road access, thus relying heavily on aircraft for passenger and goods transportation. Fog is a risk for aviation as it prevents aircraft from landing and forcing airport closure for hours or even days. We examined spatial and temporal variation of fog in the region. Total number of fog hours and ice fog hours appeared to be heavily dependent on the previous year. On annual scale, western Hudson Bay locations showed significant decline in both fog and ice fog. On the other hand, Eastern Hudson Bay locations showed a significant decline in either fog or ice fog. Seasonal analysis showed that the decline was mainly driven in one or two seasons and not for the entire year.