



## **Correlation between forest fires in the province of British Columbia, Canada and the Pacific Ocean sea surface temperature**

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We evaluated correlations between forest fires in the province of British Columbia, Canada and the sea surface temperature in the Pacific Ocean. British Columbia has a long coastal line and faces the Pacific Ocean westward. As the forest fires in the province would be teleconnected with climate variability in the Pacific Ocean, strong correlations between the forest fires and the sea surface temperature changes in the ocean were expected. The fire frequency and area burned of lightning-caused and of human-caused fires were analyzed separately to determine correlations by category and by cause. Significant correlations ( $p < 0.05$ ) were found in vast areas in the Pacific for all four predictands. The percentage of the ocean's area with significant correlations for the four predictands ranged from 7.5% to 27% at its peaks for various times prior to the fire season. These results suggest the potential for predicting the severity of fire seasons within the province.