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## Comparison of the temporal variability of summer temperatures, rainfall and streamflows in southern Quebec during the 1950-2010 period

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We have analyzed the summer daily temperatures (maximum, minimum and mean), rainfalls and streamflows (from June to September) measured at 25 stations distributed regularly throughout southern Quebec (Canada) during the 1950-2010 period by means of the Mann-Kendall, Spearman's Rank Correlation Coefficient and Lombard methods. 60% of the stations analyzed are characterized by a significant increase in the daily minimum temperature. This proportion falls to 52% for the daily mean temperatures and 30% for the daily maximum temperatures. The Lombard method revealed that this increase mainly occurred during the 1990s. At most stations, this increase is gradual. However, this temperature rise had very little effect on rainfalls (increase of less than 20%) and streamflows (increase of less than 15%).

### Biography

Anthony Pothier-Champagne is currently a Master's level student in Environmental Sciences at the University of Quebec at Trois-Rivières. He is working on The Niño/La Niña impact on hydro-climatic variables of Québec (Canada). He has already presented a communication at an international conference. Vincent Maloney-Dumont is in its first year of Masters in Environmental Sciences at the University of Quebec at Trois-Rivières. He works on the temporal variability of hydro-climatic variables in the southern Quebec. Ali Assani has completed his PhD at the age of 35 years from Liège University (Belgium) and Postdoctoral studies from Montreal University (Canada). He has published more than 50 papers in reputed journals.

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