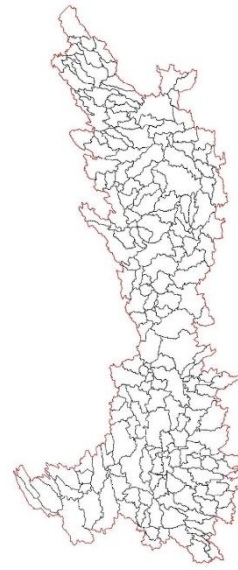


Clustering analysis for the hydro-geomorphometric characterization of the George River watershed (Nunavik, Canada)

Method

Watershed segmentation into 218 subwatersheds

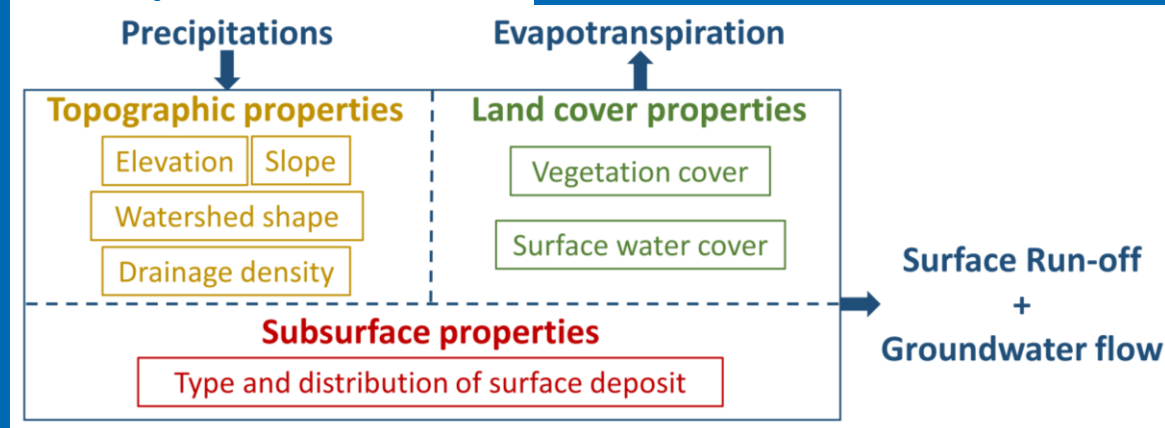


Topographic, Land cover and Subsurface metrics extraction for each subwatershed



Fuzzy C-Means Clustering

Conceptual Framework :



Preliminary clustering results, computed with topographic, land cover and subsurface metrics, present an optimal number of 2 distinct subwatershed classes.

Type 1 : high elevation variability, steep slopes, less vegetation cover, less surface water cover and less surface deposit with high potential ice content

Type 2 : low elevation variability, gentle slopes, more vegetation cover, more surface water cover and more surface deposit with high potential ice content

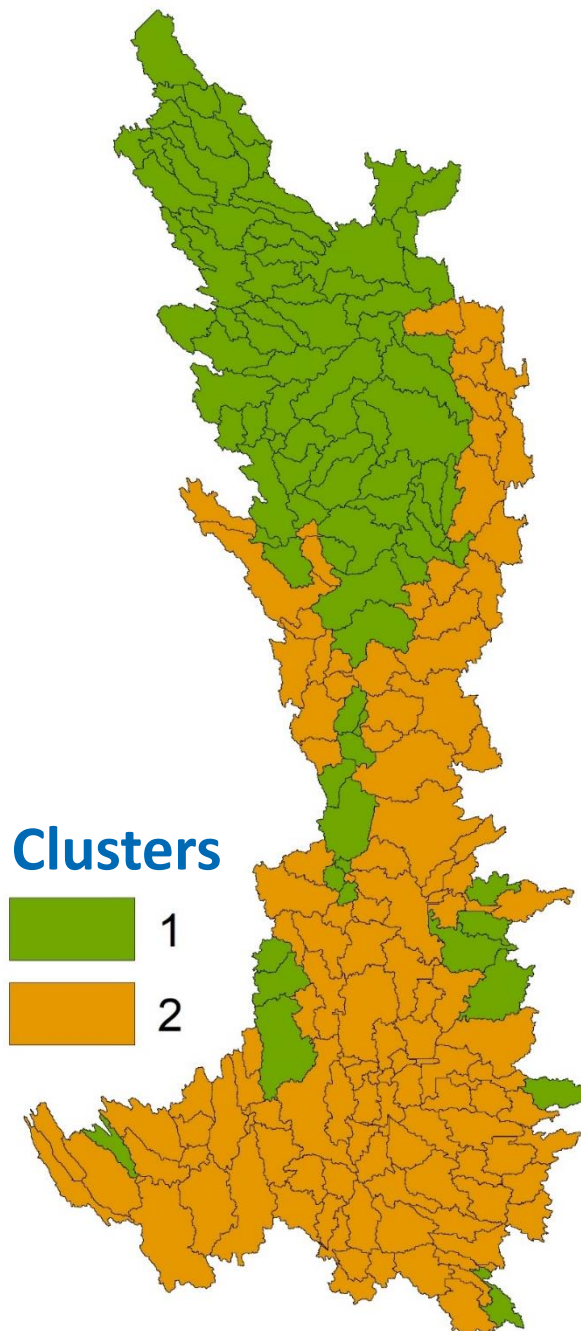
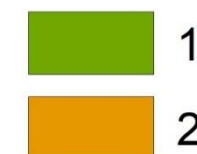
Authors : Eliot Sicaud, Jan Franssen, Jean-Pierre Dedieu and Daniel Fortier

Université de Montréal

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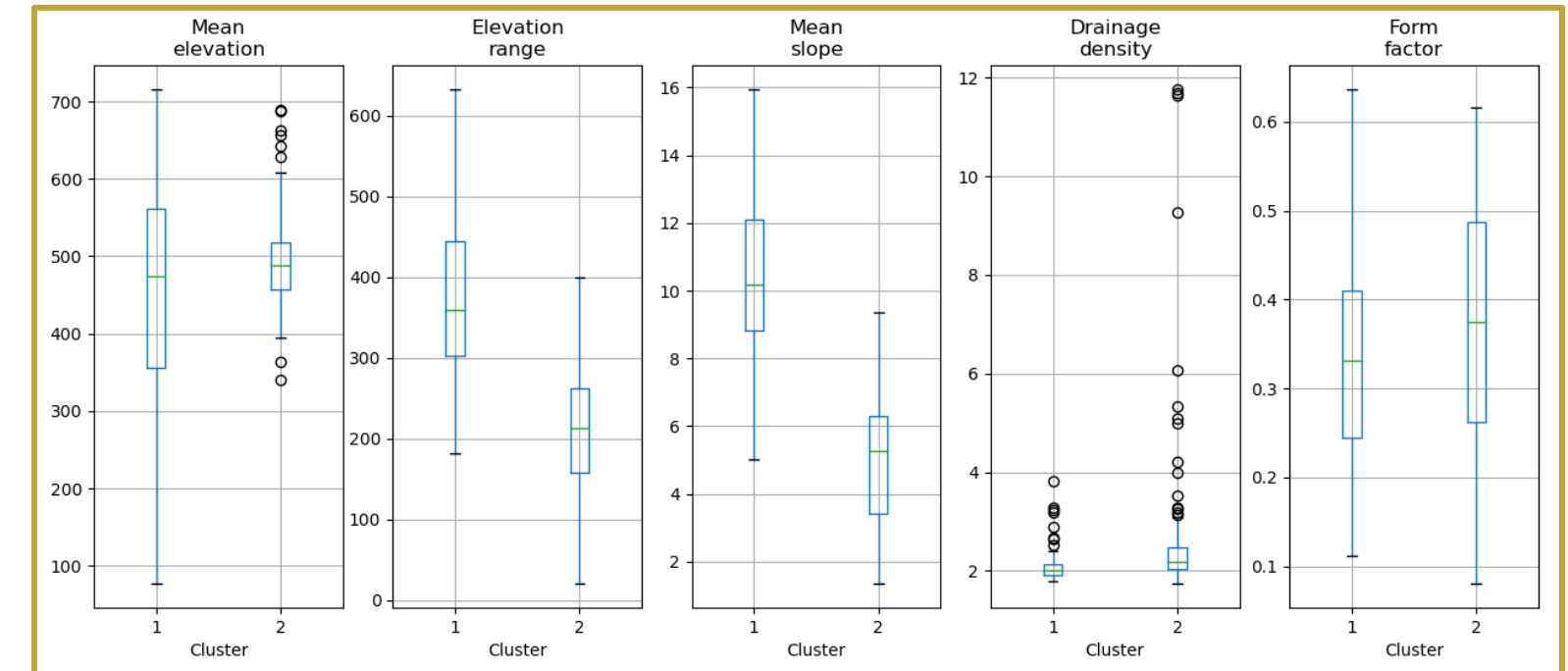


Clusters

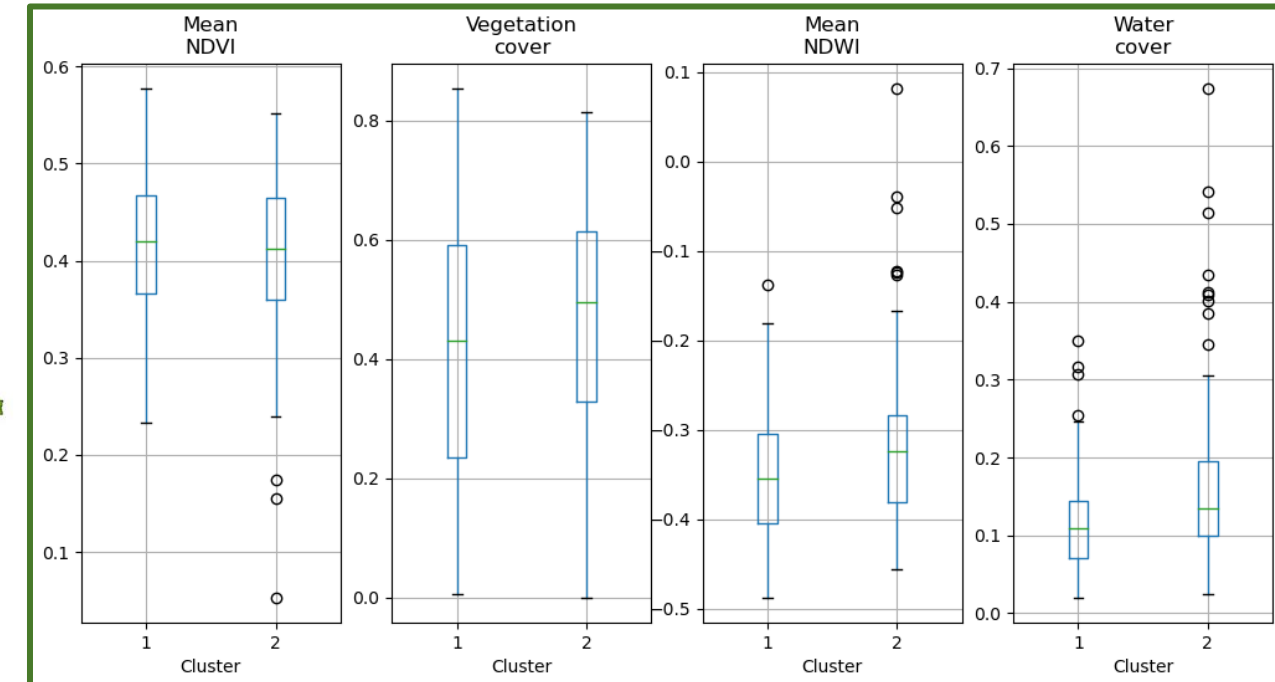


Last Results

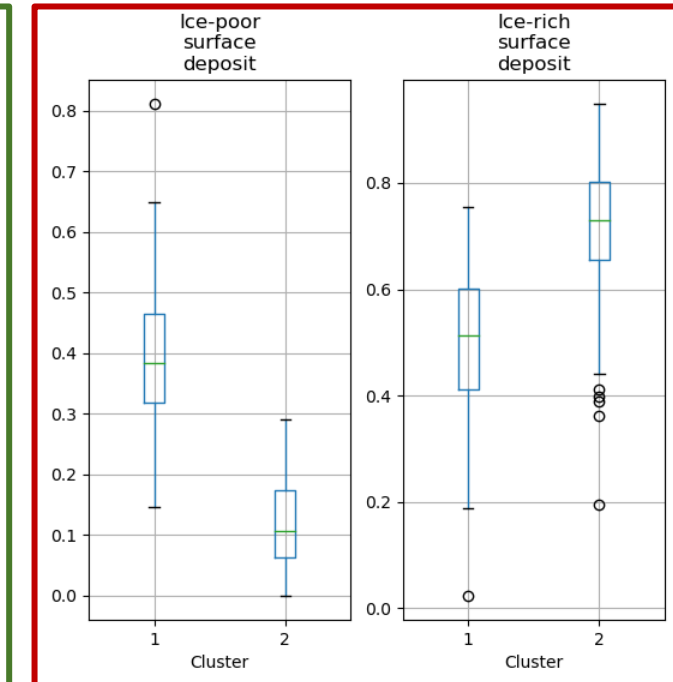
Topographic metrics



Land cover metrics



Subsurface metrics



Contact : eliot.sicaud@umontreal.ca

