

Financial impacts of climate change: How to better prepare the financial services industry

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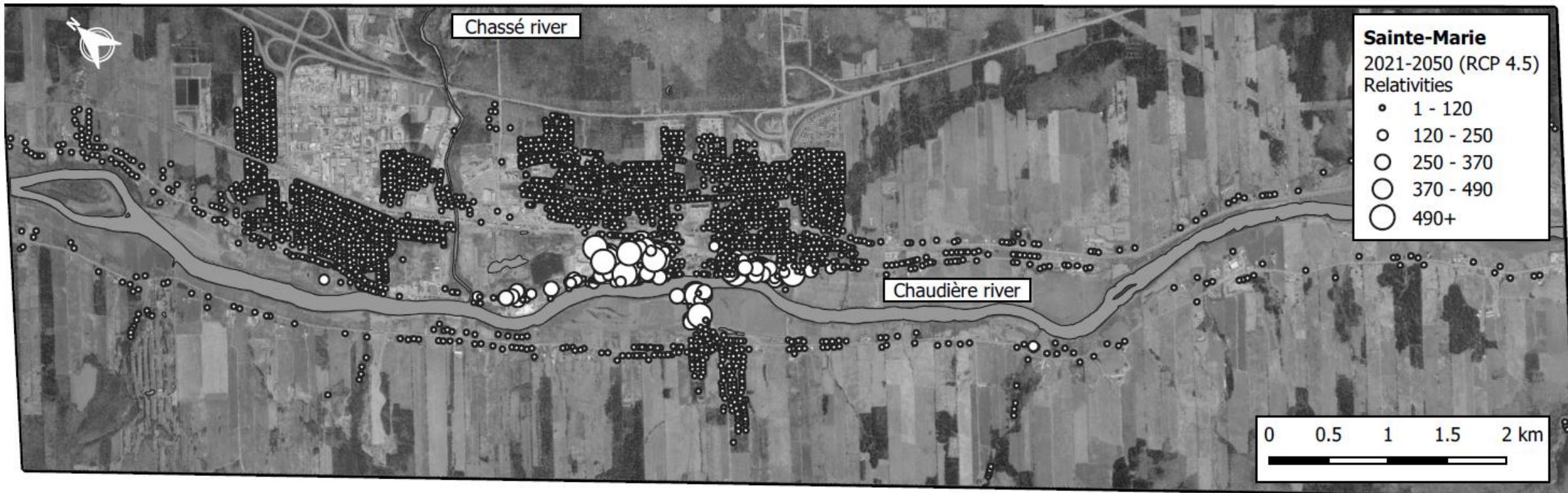
Global Risk Institute | Climate Change and Mortgage Risk and Insurance

June 14, 2022



What do I do ?

Financial impacts of climate extremes and climate change



Insurability of homeowners under RCP 4.5 in Sainte-Marie, QC over 2021-2050 (flooding)

Partnership with Ouranos

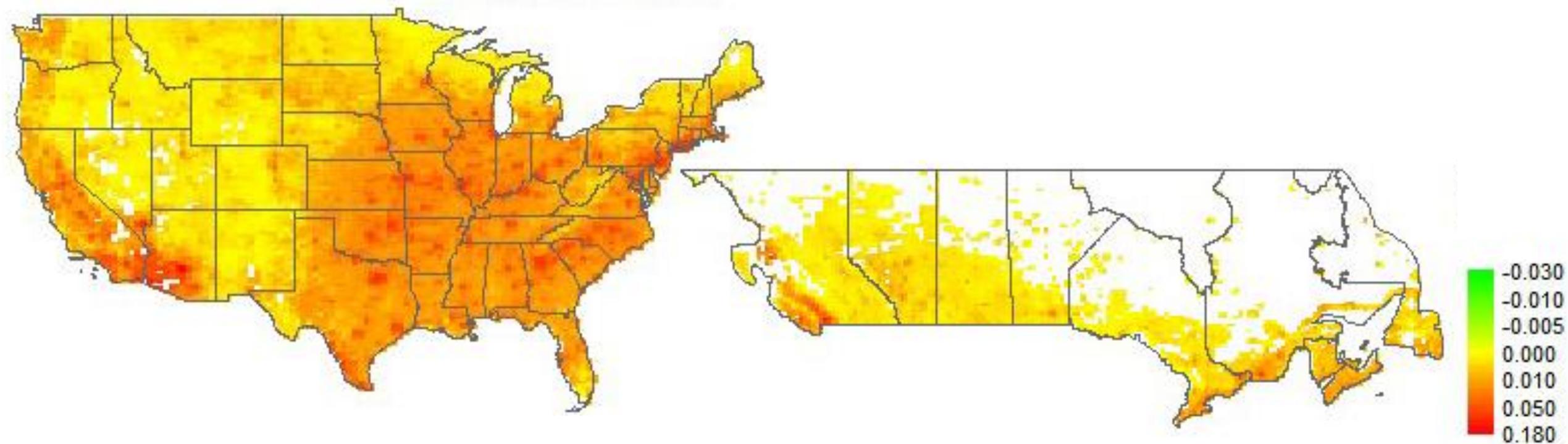
Credits: M. Boudreault, P. Grenier, J.-M. Potvin, M. Pigeon, R. Turcotte (2020), Pricing Flood Insurance with a Hierarchical Physics-Based Model, North American Actuarial Journal

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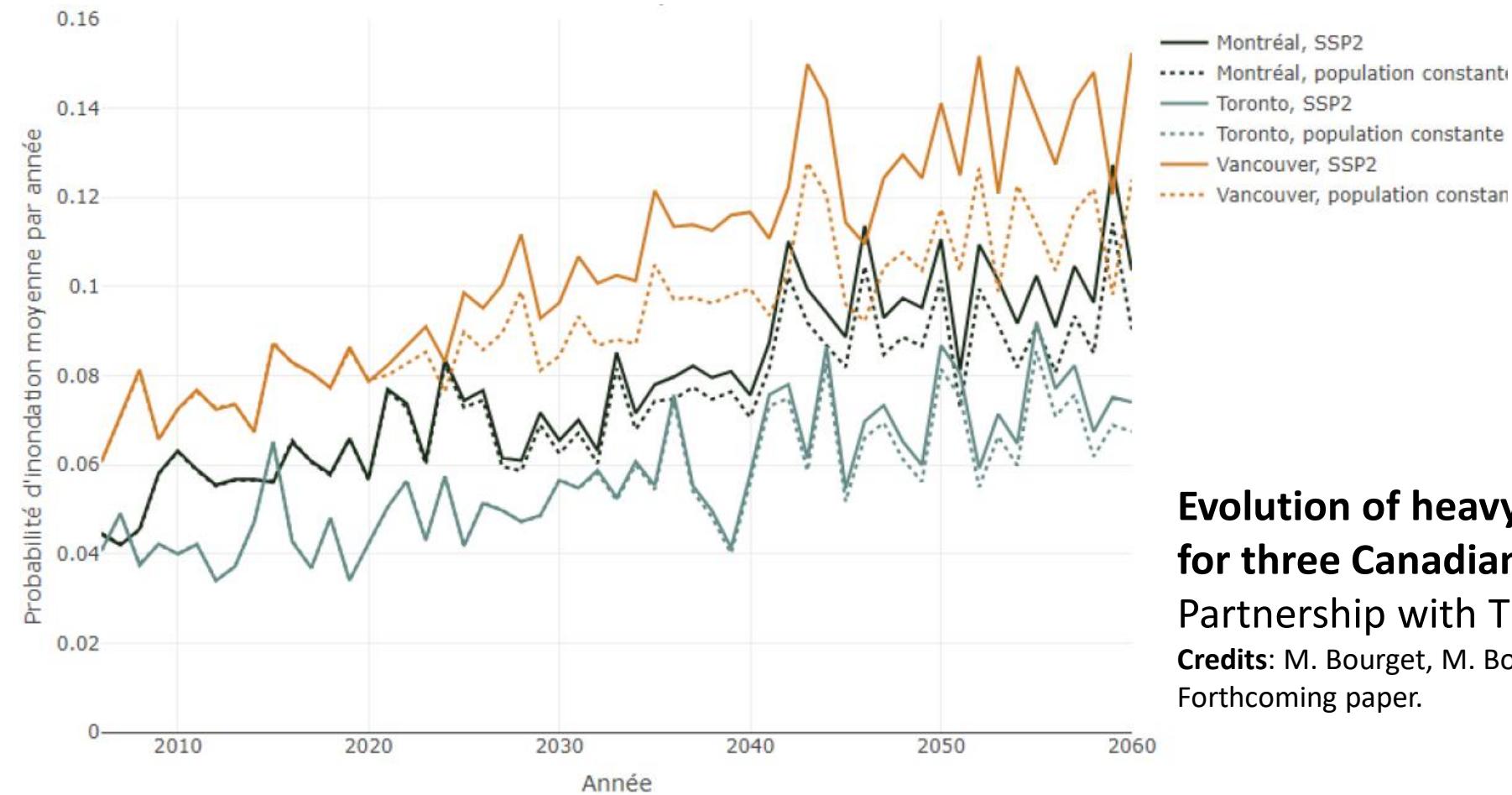
Evolution of heavy-rain induced flooding: difference between 2056-2060 and 2006-2010 under RCP 8.5

Partnership with The Co-operators

Credits: M. Bourget, M. Boudreault, D. Carozza, J. Boudreault, S. Raymond. Forthcoming paper.

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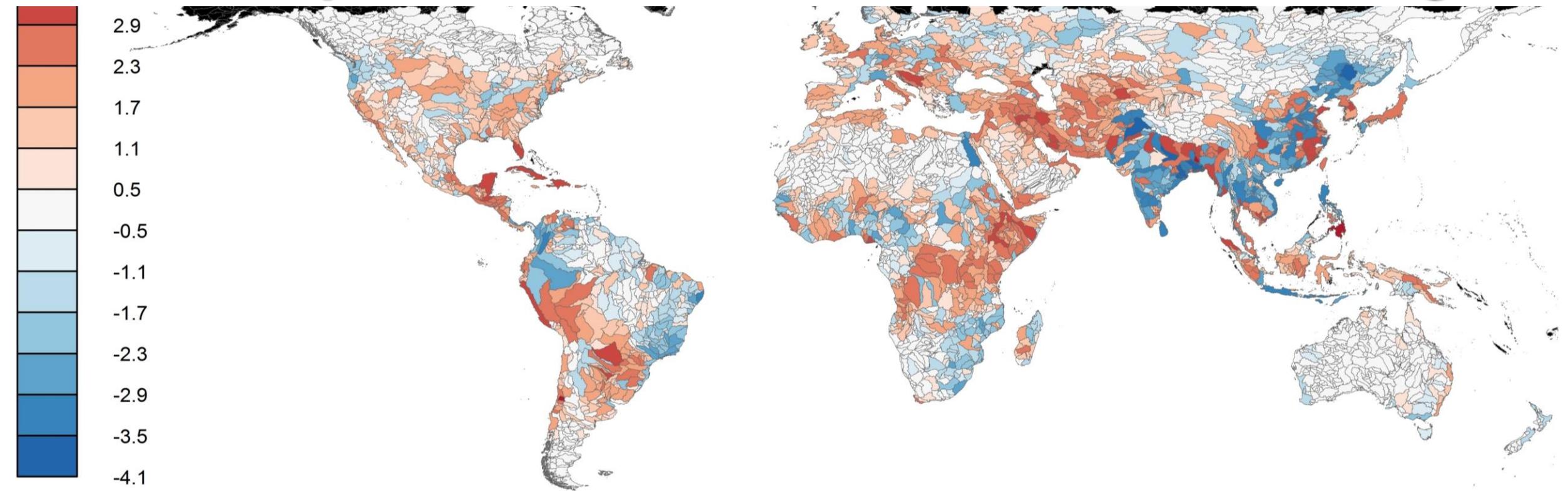
**Evolution of heavy-rain induced flood probabilities
for three Canadian cities under RCP 8.5**

Partnership with The Co-operators

Credits: M. Bourget, M. Boudreault, D. Carozza, J. Boudreault, S. Raymond.
Forthcoming paper.

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Expected additional number of people displaced (log10) due to flooding during El Niño

Partnership with AXA XL (formerly XL Catlin)

Credits: M. Boudreault, D. Carozza, L. Del Rio Amador, Forthcoming paper.