

Economic evaluation of climate change impacts: Extreme weather events

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Abstract

Extreme weather events such as floods, storm surges, hurricanes, snowstorms, thunderstorms, tornados, droughts, heat/ cold waves and others are among the most pronounced impacts of climate change. It is a commonly accepted knowledge that frequency of extreme weather events is increasing due to climate change which causes an increasing monetary damage to economic systems. In this study, extreme weather events are classified and their major attributes are discussed. Accordingly various statistical techniques to derive relationships between those events and their attributes are reviewed. As well, various methodologies to estimate economic impact from extreme weather events are analyzed in terms of their strengths and weaknesses. Main goal of this study is to design a model that connects economic monetary loss from extreme weather events due to climate change to its attributes in order to be able to predict future losses and to find the threshold for investments in mitigation and adaptation measures.

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Biography

Yuri Yevdokimov is a Professor at the University of New Brunswick, Fredericton, Canada. He has completed his degrees in Economics and Engineering. He holds a joint appointment in the Departments of Economics and Civil Engineering. His research interests lie in the field of sustainable development and climate change impacts particularly sustainable transportation and climate change impacts on regional economy. His work has been published in academic journals and conference proceedings. He has more than 20 publications,

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