Departamento Académico de Estadística
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Seminario Aleatorio

Sesión 273

Evaluating the Impact of Climate Change on Dynamics of House Insurance Claims

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Resumen

The adverse effects of climate change bring increasingly more alterations to all aspects of human life and welfare. One of the sectors that is particularly affected by changing climate is the insurance sector. Indeed, the year 2013 brought a record number of claims and substantial losses due to weather related damages. For instance, in USA and Canada alone the extreme weather events cost the insurance industry more than 3 billion dollars. The objective of this talk is to provide statistical data-driven insight on the (non)linear relationship between weather-related house insurance claims and atmospheric variables and to predict future claim dynamics accounting for changes in extreme precipitation. In this talk, we propose to employ a flexible Generalized Autoregressive Moving Average (GARMA) model for count time series of claims, develop a new method to compare tails of the observed and projected extreme precipitation and evaluate the impact of climate change on number of house insurance claims in the GARMA framework. We illustrate our approach by studying insurance claim dynamics in North America. This is a joint work with Slava Lyubchich.

Viernes 13 de marzo 2015, 13:00 hrs.
Salón: B-4, Plantel Río Hondo

El Seminario Aleatorio está destinado tanto a profesores como a estudiantes, por lo que el Departamento de Estadística agradece a los profesores que colaboren invitando a sus alumnos a estas sesiones.

En la red: http://estadistica.itam.mx/es/51/contenido/seminario-aleatorio-de-estadistica