



Flood loss assessment in near real-time considering historical claims and geo-clustering method

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Flood-related disasters accounts for 56% of the NatCat losses in France for a total of 526 million euros per year during the 1982-2017 period. In addition, increasing risk accumulation in flood-prone areas and potential future effects of global climate change suggest that future hydrological extremes represent a fundamental challenge for the insurance industry. As one of the world leading insurance group, a major focus of AXA is to assess as soon as possible losses in risky areas affected by a disaster event – especially floods.

One of the key question exposed here is: considering the geographical specificities of flood risk, how to assess in near real-time flood-related losses in risk accumulation areas?

Our GIS-based methodology consists of exploring the hydrogeomorphological signature of our historical flood-related claims geodatabase in order to cluster our insurance policy portfolio in term of exposure and vulnerability. This analysis of loss data, archived from more than 35 past flood events, help us to assess potential losses within risk accumulation areas, in near real-time following a flood disaster.