



## Scientific relevance of Swiss property insurance data on flood risks and losses

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The databases of Swiss flood insurance companies build a valuable but to date rarely used source of information for flood risk research. Detailed insights into the Swiss flood insurance system are crucial to evaluate the potential of the different databases for scientific analysis.

Even though the flood insurance system modalities are mainly regulated on cantonal level there are some common principles that apply throughout Switzerland. First of all coverage against floods (and other particular natural hazards) is an integral part of every fire insurance policy for buildings or contents in Switzerland. This coupling of insurance as well as the statutory obligation to insure buildings in most of the cantons and movables in some of the cantons lead to a very high penetration. Second, in case of damage, the reinstatement costs (value as new) are compensated and third there are no (or little) deductible and co-pay. Thus the different datasets of the flood insurance companies would allow a very comprehensive data analysis.

Moreover, insurance companies not only store electronically data about losses (typically date, amount of claims payment, cause of damage, identity of the insured object or policyholder) but also about insured objects. For insured objects the (insured) value and the details on the policy and its holder are the main feature to record. On buildings the insurance companies usually computerize additional information such as location, volume, year of construction or purpose of use. For the 19 (of total 26) cantons with a cantonal monopoly insurer the data of these insurance establishments have the additional value to represent (almost) the entire building stock of the respective canton.

However, scientists face a wide range of the opportunities and challenges when using insurance data for flood research. The origin of flood insurance data implies that they are not generated for research but for business management. The presentation will highlighted pro and cons as well as challenges of different aspects such as data compilation and geocoding, spatial and temporal coverage of data, data generation regarding the purpose of efficient and correct management of policies and claims, data protection regulations, differences in the use of technical key terms between risk research and insurance business to answer the questions how relevant and useful are the flood insurance data for flood risk analysis. An outlook will be provided how to encourage the (data) exchange between flood risk business and research.