Title:

Authors:

Abstract

1. Introduction
2. Data

In this second paper, we continue to make use of those datasets utilised in the first in this series. We continue to use national EQC property and claim information, kindly shared by QV. This includes information on claim dates (event, claim lodging, claim decisions), payments, and type of claim (land, property, contents). We also use estimated slope information per property, and distance to coasts or water bodies, calculated by our team member (Pastor-Paz) from LINZ geographical and hydrological data. From Statistics New Zealand we make use of national mesh-block boundary data (specifically the 2016 boundaries) *and meshblock-level national Census data*. *This is also the source of our “region” variable*. Further information is detailed in our first publication in this series, *Public insurance and climate change (part one): The EQC and weather events claims.*

In this paper we introduce two new datasets. The first is daily precipitation (rain) observational data collected from NIWA. This data, available across a ~XXXkm grid across the country, which measures XXX. The second new dataset is monthly “average night-time light” satellite data, collected from NASA’s public repository. These datasets were geo-processed such that for each property in the country, we can access the average night-time light, or precipitation, time-series data for that property. We use simply the nearest lat-long grid point in either the netcdf of rain, or the time series TIFs of night light.

Due to these additional variables, we restrict our dataset to only those claims and events after February 2012, as this is the earliest average night-time light TIF available for our region of the world.

The summary statistics for our final dataset are as follows in Table 1.

1. Methodology
2. Results and Discussion
3. Conclusion