**Finding Patterns in Natural Disaster Data**

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Every year there are more disasters happening all around the world causing massive amounts of damage that takes lives and costs people large amounts of money. Wouldn’t it be nice to be able to predict when these events were going to occur and with high accuracy so that people in the area can evacuate.

Predicting events such as an earthquake is theoretically impossible because an earthquake occurs instantly and without warning. Predicting events such as a hurricane is a little easier to accomplish due to the fact we can monitor weather patterns and watch hurricanes form using satellite images. This is why earthquakes cause so much damage, since there is no physical warning of when they occur, people don’t have time to prepare. Earthquake data can be put to use in order to attempt to predict when the next earthquake will occur by analyzing the patterns that show up within the data. The data sets are large and the algorithms for finding patterns within the data are computationally expensive which is why parallel computing can be used in order to expedite the process which will allow for instantaneous and accurate predictions.

Figure 1 shows a map of all of the earthquakes in the past month. The size of the circle represents the magnitude of the earthquake.