

EGU PICO SCRIPT: [Session EOS1.10](#)

Written using only the 10000 most used words ([The Up-Goer Five Text Editor](#))

So, Imagine rain falling in a different place - I am Vikki Thompson, thank you to Rikke Stoffels for making the pictures for our talk, and Erich Fischer for making new worlds for us to study.

A few years ago, in a place quite close to here, a lot of rain fell from the sky. This hurt people and caused problems to their houses. People were not ready.

But the rain could have fallen in a different place - maybe a bigger city - or fallen for longer, or fallen over a bigger area. We need to think about what could have happened, what could happen in a few years. We need to imagine such things in case they do happen, so we know what we need to be ready for. How can we do this?

We use computers to make new worlds to try out different possible ways the rain could have fell. You can think of them as several different story lines, situations that could have happened, or maybe are yet to come. For each new world, we make the air in the sky move the same way it did in the days before the rain fell, but we let the computer make very small changes at the start. Then, we let each world move forward in time to see how the heavy rain falls in this new word and if it is like the rain that fell a few years ago.

I can show you story lines where the rain lasts longer, where it rains over a different city, or where it rains over a bigger area. But, although we have many story lines, not many of the new situations are much worse than the rain that did fall. We find some of the situations have no rain at all. It is fun to try to understand why the story lines are a little bit different, and it helps us understand what could happen to help us be more ready.