

Leif Darnall
Anchorage, AK

In 2014, 364 wildfires destroyed acres of natural habitat in Alaska. Native plants and animals were impacted. The fires increased pollution causing people to remain indoors. And if that was not enough, the fires added to climate change, a problem that is probably more noticeable in arctic areas of the world. Wildfire modeling is a computational science that looks at better ways to understand how a wildfire develops and the ecological impacts.

An exciting computerized visualization tool used to deal with forest fires is the SimTable, developed by a software company with the same name. The tool is a sand-like simulation table designed to simulate forest fires. This machine can make predictions about where a fire could be going or is going to.

The SimTable is a three-dimensional visualization tool. It consists of a table or board filled with sand that can be manipulated to pattern the local terrain. The tool projects Google Earth onto the sand to give exact geographical information. Then the user can change wind speeds and direction, temperatures, and vegetation types to simulate possible outcomes if weather patterns change. The user can also place fire boundaries in the sand and test whether the boundaries would likely be successful.

A variety of state and federal wildfire prevention entities already use the SimTable. The software is used to create emergency plans and develop ecological data. To understand how the tool really works, watch YouTube demonstrations on-line. I encourage any one to take a look at what SimTable has to offer. It's a real life video game that uses a little sand and a cool laser pointer.