Unit 2 GeoMation: Death Valley

Sierra Nevada Mountains, big, beautiful mountain range sitting way the heck up there. Got gimongous trees growing on top of it, and so you're going to tell that this is a slice that I am showing you through the mountain range, and then bang, down into Death Valley, way down, deep, hot, starkly, gloriously beautiful place. Place you desperately do not wish to be in the summer without your water bottle. But then there's another range, and another valley, and another range, all the way across Nevada, many more than shown here. And eventually, up in the Wasatch in Utah, end up where you'll find all these skiers standing around. That's Snowbird, so here's a skier so you can remember that this is Snowbird.

And so this is a picture of the west. If, however, you could see underground, what you would find is that there's a break along the front of the mountains. And that break continues on down. And all of these things have breaks sitting underneath them, running down underground. They're earthquake faults.

Furthermore, what you would find is that there has been motion, that the mountains have been raised and the valleys have been dropped, the mountains raised and the valleys dropped all the way across here. And for this to be happening, there has to be space made for the valleys to drop into. And so, in fact, the west is getting wider, and that creates the space into which the valleys drop and the mountains raise.

If you were able to find a particular layer of rock that you cared about, you might find it up here, and then you would find it way down below somewhere. And then you'd find it up, and then you'd find it down below, and so on on across. And so it's a fascinating thing that the west is getting wider. You can measure this with GPS. It's actually there. It's shown in the geology, and there's a big story here.

In addition, one thing that one finds in the west is that there are volcanoes, as well. And those volcanoes tend to come-- that blue line-- it really should be a red line there-- the volcanoes come up, and they often leak up along the cracks, and spout up along the sides like this. And you get pretty little volcanoes growing. And that's part of the important story of how the west works, as well.