geo-phy-what?!

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Geophysics? Geo ... physics.

Geo? That has something to do with the earth. What about physics? What is that? It's all we know about what our world is built of. In physics, we looks at the world as if it were a huge house made of blocks. We try to find out what sizes and colours the blocks of the house have, how they are attached to each other and why the house does not collapse. In other words, physicists have discovered that all solid materials, all liquids, all gases consist of many super-small particles, which we call atoms. They look at the properties of these atoms and at how they work together to form the world we know: the sea, the air we breathe, ourselves, the stars, the earth, your computer, your house: there is physics in everything

But what is geophysics then?
-street interview here-

A geophysicist studies the properties of our earth and makes them usefull for all of us. Did you know, for example, that the earth is actually a giant magnet? Who knows, there might be an enormous fridge in the room, on which the earth sticks with some scribbled papers underneath.

And the earth is not only a magnet, but also a stove. The core of the earth is so warm, that all the stones become liquid, a kind of mega-hot sphere of molten chocolate. You'd think, after millions of years, that chocolate has cooled down, right? It does cool down, otherwise we wouldn't be able to stand here, but deep down the earth keeps burning heat.

What is completely crazy is that the ground can also behave a bit like a battery. If you put electricity on it, it will charge itself! Unfortunately, this charge usually fades out very quickly, so charging our phone with it will not work. Yeah, okay, I can see you all thinking, but what's the use of that?

That it is useful, is sure, because thousands of years ago, the Chinese already used the magnet-earth to find their way around. Mm, the emperor's used a special stone that also behaves like a magnet and thus is attracted to the top of the earth, to guide his army through the fog to the enemy. The same Chinese also made a device to measure earth-quakes. It looked like a large pot with dragonheads and frogs around it. When there was an earthquake, the pot felt it and the dragon spit out a ball that was eaten by a frog. So they not only knew that there had been an earthquake, but also in which direction of the kingdom they had to come to the rescue and they did not have to wait for a messenger who was on horseback for days.

We can also use the heat produced by the earth to heat our homes. That energy source is much less polluting than burning wood or coal and is just ready to go under our feet. In Reykjavic, Iceland, that's no longer a future music for example... Or recently, there was a search for a painting (the Just Judges, by van Eyck) that was stolen a long time ago in Ghent, Belgium, with a device that sends a signal into the earth and then measures how quickly the signal comes back, a radar. If there is suddenly an underground cavity with a painting hidden in it, we should see it with this device. Unfortunately, the researchers still haven't gotten hold of the painting, but that has more to do with detective work than with geophysics!

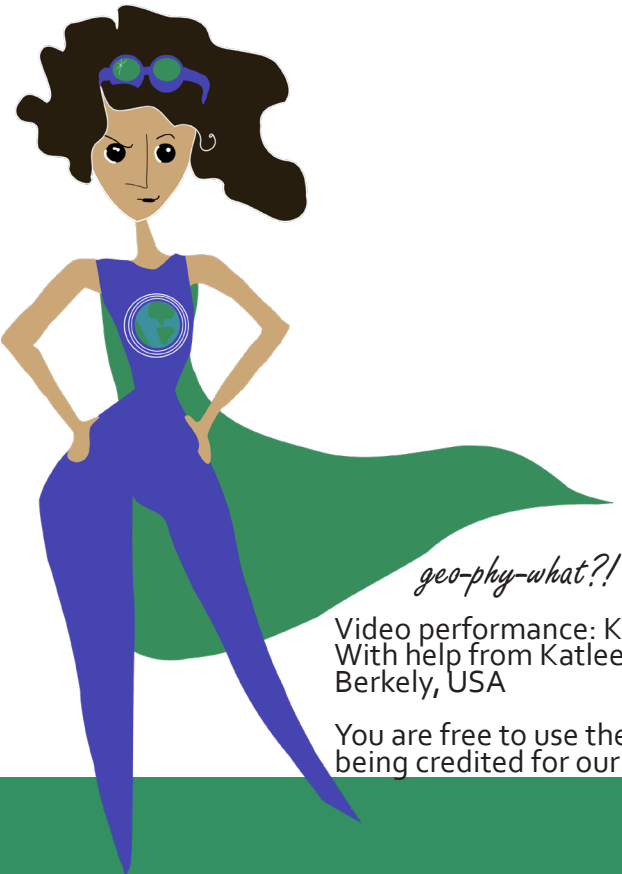
To make a long story short:

Geophysics studies the properties of our planet Earth.

The earth has many cool properties, such as magnetism, conductivity of current and an extremely warm core and a cooling crust around it.

This is not only cool, but also very useful. We can use these properties to find things in the earth, to show us the way or to heat our houses and many other things.

So be sure to come back to geo-fy-wa?! later to learn more about geo-physics!



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