

variation of earth surface temperature Vs thickness of the crust

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Hi,

I've got just the kind of questions that people with no knowledge in geophysics would have after watching any documentary on global warming. The point is, the documentary raises the questions but rarely answers them.

I've read recently that scientists thought that a change in the thickness of the polar caps could modify the shape of the earth enough so as to trigger earthquakes, and related tsunamis. I think they call this process the post-glacial rebound.

google -> <http://www.geo.ucalgary.ca/~wu/TTPEarthquake.pdf>

Now, could there be a relation between the thickness of the earth crust, and the earth surface temperature ? That is : could an increase of the earth surface temperature be a cause or a consequence of a variation of the thickness of the earth crust ?

For the time being, I believe the earth crust is thicker where there is land (a continent), and thinner where there is an ocean (and maybe there is an ocean where it is thinner, and not the other way round, I couldn't find an explanation re. this)

BTW : is the crust measurably thicker at the poles ? And is it thinner around the equator ?

Then, I'm not sure what relation there would be between earthquakes and the crust thickness. The thickest does not mean the more or the less earthquakes, either, I believe. The thickest could mean the heavier, with the higher ability to build up forces that would be released in an earthquake, whereas the thinner could mean more fragile, but maybe more able to release continuously the stresses.

Would anybody know of links giving hints about that ?

Thanks

Elmer

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