Early Smoothness and Expansion/Contraction of the Earth

Jeffrey J. Wolynski Jeffrey.wolynski@yahoo.com July 18, 2017 Cape Canaveral, FL 32920

Abstract: In Earth's earlier history when it had an extremely thick atmosphere, on par with atmospheres thicker than Jupiter's, the central core was very, very pressurized and essentially liquid. This means it was extremely comparatively smooth to Earth as it currently is with mountains and ocean trenches. A short explanation for how the transition to its varying surface from being at an initial smooth state is provided.

Smoothness is defined by how little the surface changes in topography. The surface topography of Earth while having a very thick, highly pressurized atmosphere crushing it from all sides evenly (it is spherical) therefore would be extremely smooth. An estimate of the smoothness of the topography I would guess to be about at a max 1000 feet. So 500 feet for the highest mountain, and 500 feet for the lowest trench. This is not including the differences between pole circumference and equator circumference of the core. As the thick atmosphere, and all the water evaporates away over many tens of millions of years, the core begins pushing outwards due to thermal expansion, it is still very, very hot. It still remains smooth as this process is occurring and the crust begins cooling and forming rocks/minerals in accordance to what elements are present at those locations. As the rocks and minerals form underneath the thick ocean world, they form the beginning crust. As the crust is in formation the whole newly forming lithosphere begins contracting again, as a large portion of the heat was allowed to escape. The body will then begin contracting and the lithosphere will begin thickening considerably. This is where the smoothness of the interior core (where the solid surface is located) will begin to become more rough. Since the whole body of the lithosphere is contracting, and the locations of all the elements that have been forming into minerals and rocks varies, then mountain ranges and ocean trenches should form probably near each other. Think about what happens when you ben a piece of paper. The high bends will accompany the lower bends. This would only happen where the conditions are favorable. In some places the bending just goes on and on without an appearance of ocean trench formation simply because all of the bending happens on land, due to a large portion of specific minerals having formed in one spot. This is what happened to the Himalayas. The entire Earth is therefore rough, because it is contracting again from an initial expansion phase due to the thick atmosphere being lifted in earlier stages (Grey dwarfocean world stages) of star evolution. You can see the material that was slide over the top, the blue area was slide over the orange. This is due to the entire Earth's lithosphere contracting at the same time.

