

## ***Interactive comment on “Horizontal versus vertical plate motions” by M. Cuffaro et al.***

**B. Steinberger (Referee)**

bernhard.steinberger@ngu.no

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What I meant (and this opinion is shared by the other reviewer Oliver Heidbach) is that the paper does not reach the standard of a scientific paper. Just because it isn't wrong doesn't mean it is worth publishing. The questions asked in this paper are important but they have asked by others before, and this paper doesn't contribute in answering them. Vertical motion has to be done against gravity, and horizontal doesn't. If the plate is uplifted or dragged down, potential energy is created, and a force balance (between the internal "driving" forces, and the "restoring" forces, due to the deformed surface) is obtained, preventing further vertical motion, as long as the forces don't change. Horizontal motion, though, will go on. Therefore, I don't follow how the fact that horizontal motions are much smaller than vertical ones would tell you anything about plate driving forces, and how it could help answering the questions addressed. I will be available for further discussion after August 8.

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Interactive comment on eEarth Discuss., 1, 63, 2006.

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1, S28–S29, 2006

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