Dear unknown reviewer,

Your calculation you have performed is on the same level as of Sir Harold Jeffreys (incidentally the greatest opponent of continental drift) he knew nothing in twenties of $20^{th}$ century about subduction zones, mid-ocean ridges and GPS measurement from the beginning of $21^{st}$ century. Thank you for your example with fairly good vacuum of 1.0 Pa. I give you another example: Weight of 5 kg placed on table is in rest. But placing the needle beneath the 5kg weight perpendicularly to the table, the 5kg weight perforates the table.

Now I present some corrections: The fortnight change is meant ½ of synodic Moon's period, i.e. 14.76 days. During the sidereal Moon's period the Earth exerts 2 decelerations and 2 accelerations. For this reason I consider only the time 6.836 days. My calculated speed is $11.83 \times 10^{-7}$ m/s a little less than yours $7 \times 10^{-6}$ m/s. To calculate forces acting on plates I calculated torques acting on them. The torque of tidal force acting on the Earth's flattening is the most evident and in presented simple form easily calculated. If such force deviates the Earth's axis of rotation, it undoubtedly can move the plate. Such torque acting on the Indian plate pushes the plate northward (Fig.2.1) acting on oceanic lithosphere in front of the Indian Peninsula, after collision of Indian Peninsula with Laurasia (Fig. 2.5a) it acts on the oceanic lithosphere behind pushing it to the Indonesian subduction zone.

To calculate forces acting on westward moving plates is more difficult. We know that the tidal friction has the torque $10^{16}$ N m. Perhaps it can also to move plate if it is able to decelerate the Earth's speed of rotation. My calculation of the westward drift torque is $10^{14}$ N m, it seems to be insufficient. However there is the alternating torque acting on the whole mantle. The torque is $10^{21}$ N m. This alternating torque acting on plastic mantle can influence the movement of plates, to open the mid-ocean ridges, considering ratcheting mechanism of ascending magma solidification and to break the subducting oceanic lithosphere. Remember: Forces acting on plates act always in a very small area. For this reason the western China is the only site where the Earth's rotation variations can be detected by tilt meters or on the fault shift (Fig. 2.11). It is the place where the westward moving Eurasian plate collides with the northward moving Indian plate in a relatively small area of collision and the measured pressure is in range $10^4 - 10^5$ Pa (Wang et al. 2000) of forces LOD variations (Fig. 2.11). In mid-ocean ridges as well the force acts only in narrow band between two fractures perpendicularly intersecting the ridge and only in time of magma ascent. The ridge push and the slab pull are important concomitant forces. Similarly with the earthquake 27. Feb. 2010, Chile M 8.8, the decelerating force did not push the whole continent westward but only the narrow band from Concepcion to Buenos Aires (Fig. 6). The dropping down by gravity of the Pacific plate released the space in front of Honshu and during the earthquake Honshu March 11, 2011 M 9.1 the central part of Honshu was drifted to the east by the mantle rolling beneath the Eurasian plate (Fig. 5b).

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