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The correction for polar motion in gravimetry and in 3-D positioning

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In the correction for polar motion, terrestrial gravimetry and 3-D positioning follow different conventions. The 3-D positions are corrected to refer to the "mean pole" (IERS Conventions 2010) or to the "secular pole" (IERS update working version since 2018). In any case, the pole reference evolves in time and describes the track of secular or low-frequency polar wander. However, in terrestrial gravimetry the gravity values are corrected to refer to the IERS Reference Pole, a fixed quantity. This may lead to discrepancies when for instance gravity change rates from absolute gravity measurements are compared with vertical velocities from GNSS. I discuss the size and geographical distribution of the possible discrepancies.