Interpretation

- About 70% of the gravity increase shown in Fig. 1 can be explained by the Newtonian effect of ice loss during the observation period.
- The remaining trend visible in Figs. 5 and 6 is only weakly significant.
- Barletta et al. (2006) estimated the rebound effect due to glacier shrinkage (Fig. 7). Based on this estimate, a gravity decrease of about $-15$ to $-20$ nm/s² is expected including local effects as modeled by Mémin et al. (2009).
- The rebound effect cannot be detected by the corrected observations. Provided its estimate is true, it is masked by still unexplained processes like local hydrology, erosion, denudation etc.
- Snow cover results to an average offset of 64 nms⁻² of the spring w.r.t. the autumn observations.

References: