

The search for the true crustal deformations in Fennoscandia from BIFROST

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We present our latest 3D velocity field of the Fennoscandian Glacial Isostatic Adjustment (GIA) process, and compare these with the latest model of GIA in Fennoscandia derived within BIFROST. We will discuss agreement and differences in results derived from the two software packages used for analyzing GPS-observations, GIPSY/OASIS and GAMIT/GLOBK. We also discuss issues regarding reference frames, which are especially important while searching for true vertical velocities. We have also started a re-processing of all our observations which started in 1993. Some first results will be presented from this. Of importance for the future is stability in our observation systems. The satellite segment is out of our control, but the “ground segment” needs consideration when our stations needs to be modernized in order to be able to take advantage of the modernization of existing and addition of new satellite systems. This is a critical issue not only for BIFROST but also for IGS, and we would like to share some thoughts also on this matter.