

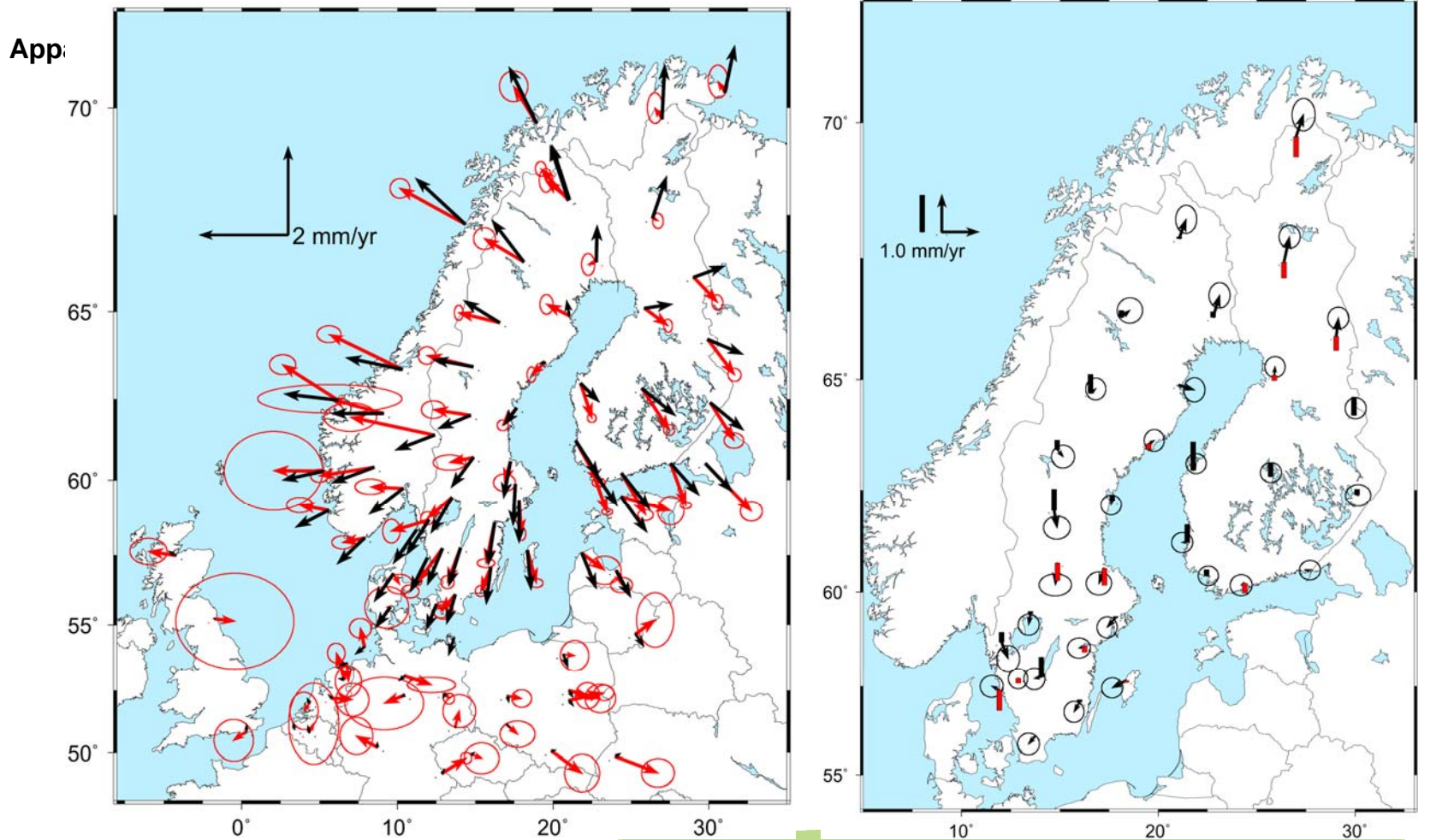
On stability in GPS position time series and its impact on velocity estimation

Martin Lidberg

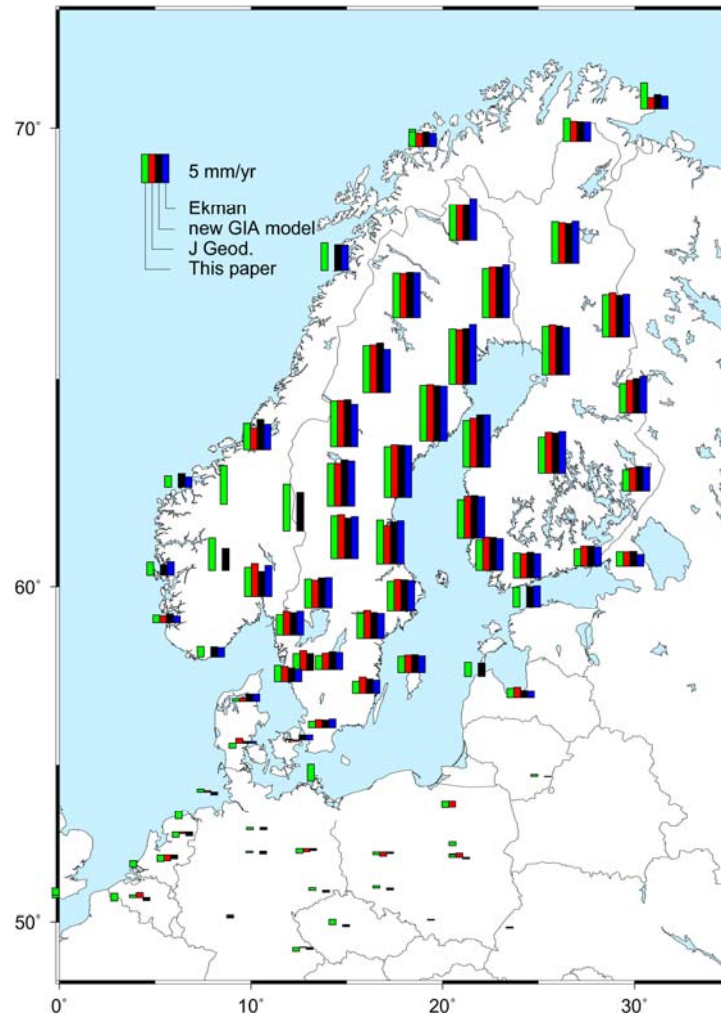
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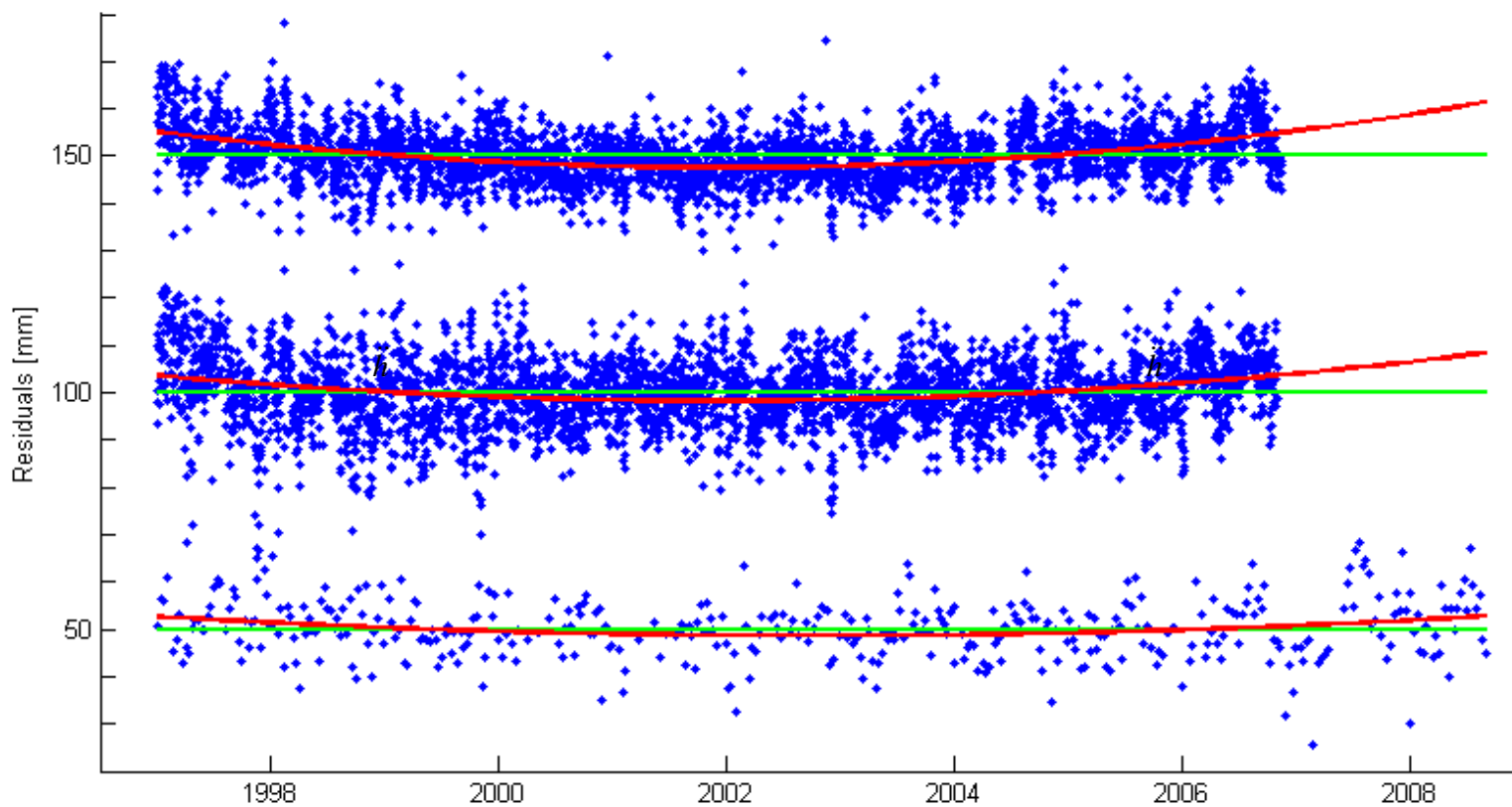
GPS velocities and GIA model (120p55)



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	σ_0 - standard error of single sample according to white noise model (mm)	The second order term, \ddot{h} (mm/yr ²)	Standard error in \ddot{h} using white noise model. (mm/ yr ²)
VIL0 a, top	5.4	0.31	0.013
VIL0 b, middle	7.3	0.22	0.017
VIL0 c, bottom	6.2	0.12	0.031

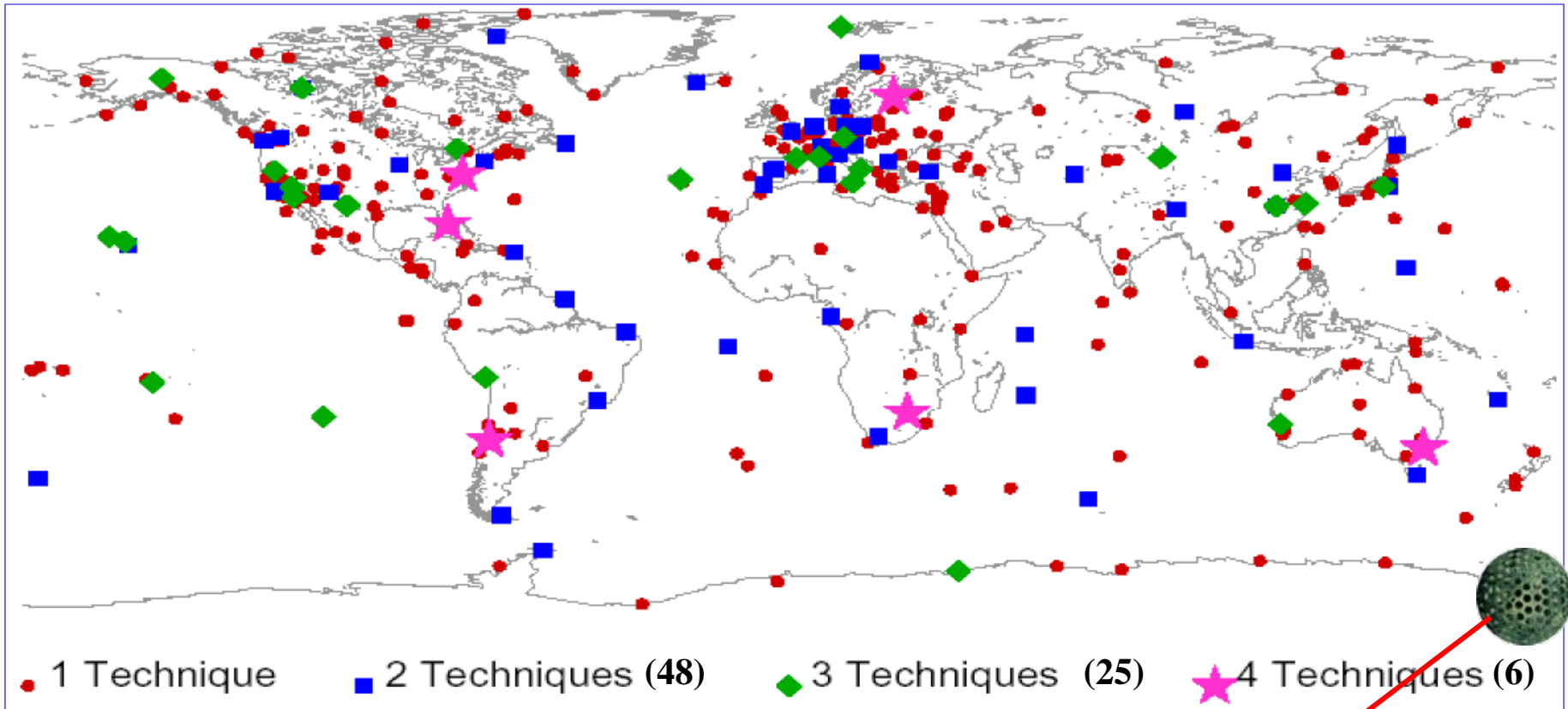


So, what is going on regarding velocities from GNSS?

- Re-processing of IGS (almost completed)
- ITRF2008 (scheduled for late summer 2009)
- Re-processing of EPN (starts fall 2009)
- Re-processing of BIFROST (start now). First GIPSY processing, but hopefully also a GAMIT solution
- Activity within IAG on “regional dense velocity field”
- COST ES0701 “Improved constraints on GIA models” will also include a GPS velocity solution.



Primary ITRF2005 Sites and Collocated Techniques



⇒
VLBI
sites
←



SLR/LLR
laser ⇒
GPS
station



DORIS
←