

Some issues/observations:

- Last ftp from CDDIS (09/11/30).
- Contributions included:

AC	Data span	Comments
	yyyy to yyyy    www - www	
cod	1994 – 2007    0730 – 1459	Excluded ERPs
emr	1995 – 2007    0782 – 1459	All parameters included,
esa	1995 – 2007    0782 – 1459	All parameters included,
gfz	1994 – 2007    0730 – 1459	Excluded apparent geocenter,
gtz	1998 – 2007    0939 – 1459	Excluded apparent geocenter,
jpl	1996 – 2007    0835 – 1459	All parameters included,
mit	1998 – 2007    0938 – 1459	All parameters included,
ngs	1995 – 2007    0780 – 1459	All parameters included,
pdr	1994 – 2007    0730 – 1459	Excluded ERPs,
sio	1994 – 2007    0730 – 1459	Excluded pole rate,
ulr	1996 – 2007    0834 – 1459	Excluded apparent geocenter (no ERPs),
ncl	2000 – 2007    1042 – 1459	GNAAC (for comparison only).

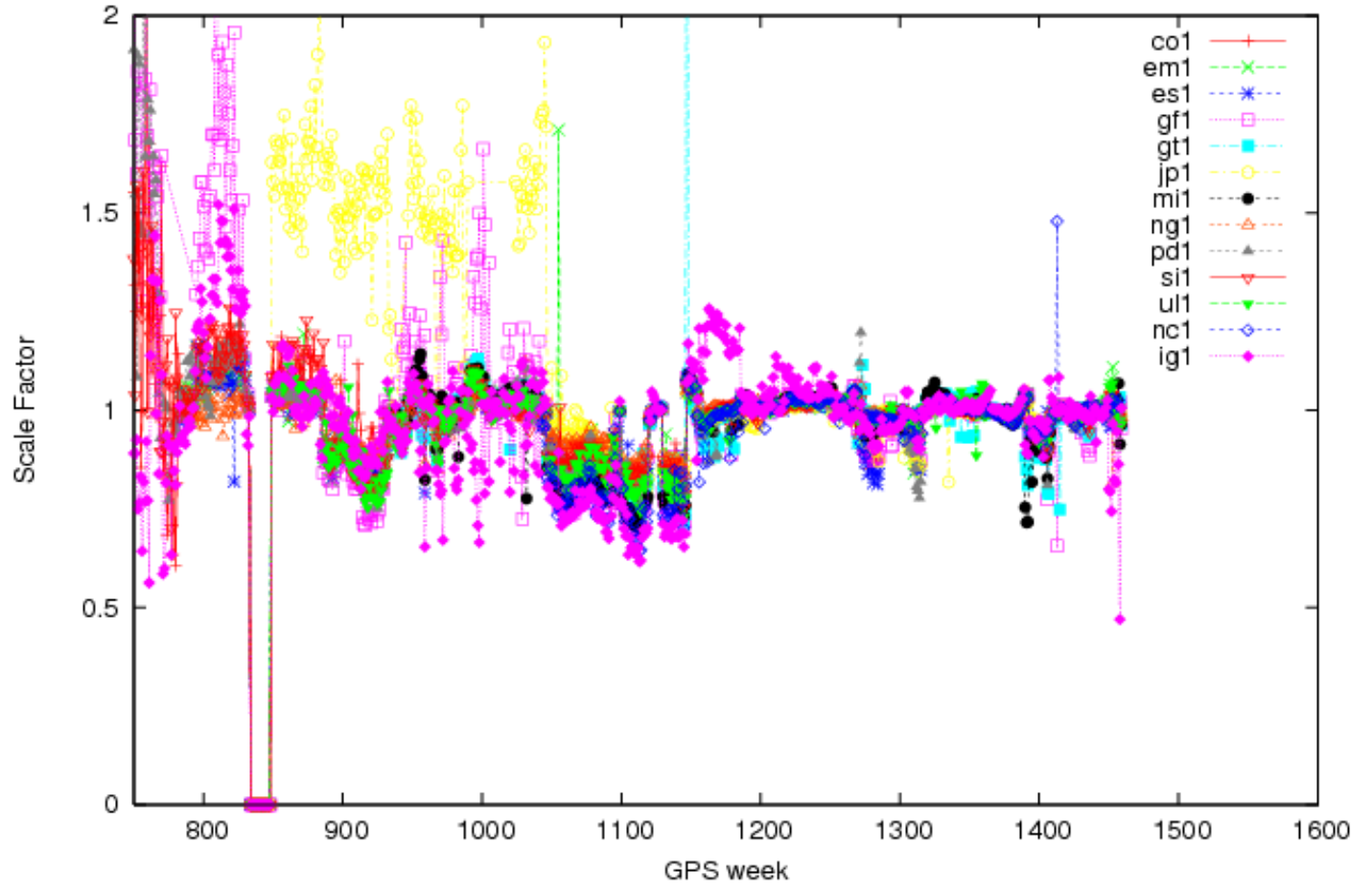
- There are over 900 stations that were contributed. Some were contributed for only a few weeks some for the entire data span.
- The distribution is still uneven, but, some “minimum” coverage exists on all continents.
- The number of stations in the network has increased most rapidly (sometimes up to 1 per week) between 1994 and 2002. Between 2002 and 2006 the increase has been more moderate at about one station per month.
- 4 contributions for 1994 (cod, gfz, pdr, sio)
- Before 1995/07/09 (Wk 0809) the number of reference frame stations drops below 20; and before 1994/1016 (Wk 0771) their number drops below 10. For those older weeks, augmenting IGS05 with some stations from the reprocessed cumulative solution is considered. The number of stations in the weekly combinations for those weeks varies between 40 and 100. So by adding some of those stations, the improvement can be significant as long as no distortion is introduced.
- About 70% of the station coordinates originally rejected in the weekly combination have been resolved. Discontinuities have been added as needed. Of those remaining outliers, a significant number of them are from stations in temperate and arctic climate and during the winter season. For many of those, snow can reasonably be assumed to be responsible.
- A few isolated AC solutions (~25) are currently excluded mainly due to numerical issues.
- Two ps files generated from the summary reports have been attached with this document. The first one is the “Aposteriori Scale Factor” (5-1\_\_sf.ps). It

can be viewed as a metric of the progress to date. It shows that for the most part, post-2000 (Wk 1043 -1459) solutions are nearly completed except for a few isolated weeks. Pre-2000 (wks 0730 – 1042) are in various stages of completion. The second plot shows the “Height weekly Standard Deviation w.r.t. weekly combination” (5-2-2\_UWSt.ps). There are 3 points I want to draw your attention to: 1) the agreement with the nc1 independent combination of the ACs is generally at the 1.5 – 2.0 mm which suggest that the “processing” noise to be approximately at that level. The two combinations not including exactly the same solutions, e.g. jp1 solutions were not available when the nc1 combination was done; while others solutions were resubmitted. 2) The internal consistencies between the ACs are generally within a 2-5 mm band. When compared to the early official SINEX products (e.g. year 1999) the noise level is reduced by a factor of about 2, so is the spread between the ACs. 3) The consistency with IGS05 (referred to in the graph as “ITR”) which is not as good as the ACs internal consistency is partly due to the following reasons: - IGS05 was generated using the original official products (inconsistent models, relative antenna phase center ...) and it doesn't include short term fluctuations. Note that these plots show “work in progress” as of today. So they are not final. Complete graphs derived from the latest reprocessed summary reports can be found at:

- [ftp://macs.geod.nrcan.gc.ca/pub/requests/sinex/sum\\_r](ftp://macs.geod.nrcan.gc.ca/pub/requests/sinex/sum_r)
- The expected completion of the combination of the SINEX solutions for the reprocessing is early 2010.

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2009/12/10

Aposteriori Scale Factor



Height Weekly Standard Deviation w.r.t. Weekly Combination

