Action plan for introduction of IGS08/ITRF2008 reference frame and igs08.atx antenna calibrations in the EPN

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Background Starting GPS week 1632 (April 17, 2011) the IGS will switch to the usage of a new antenna calibration set (igs08.atx) and reference frame (IGS08), (see IGS Mails 6354, 6355, 6356).

This document deals with the implementation of these changes within the EPN.

A. Coordination with the analysis centers

A.1) March 2011

H. Habrich: Determine set of EPN reference stations to be used for tying EPN weekly solution to IGS08. Consisting of IGS08 stations in EPN (careful with stations with individual calibrations) complemented with non-IGS EPN stations not affected by antenna calibration switch

A.2) March 2011

H. Habrich: Contact CODE about availability of auxiliary files consistent with IGS08 available from CODE. Announce date of switch to new antenna calibration set (igs08.atx) and reference frame (IGS08) to EPN LAC + distribute info on auxiliary files available from CODE.

A.3) March 2011

A. Kenyeres: Distribute EUREF mail concerning future updates of EPN cumulative solution

A.4) Upon release of igs08.atx including GLONASS calibrations

C. Bruyninx: Compile epn08.atx file (merge of igs08.atx file and EPN indiv. calib. File) and make it available through EPN CB, announce availability to EPN LAC

A.5) April 2011 (GPS week 1632)

H. Habrich: Generation of EPN combined solution tied to IGS08 reference frame

B. Generation of coordinates of Class A EPN stations that are to be used for densifications of the ETRS89 consistent with igs08.atx calibrations

B.1) Mid of March 2011

C. Voelksen: Remind EPN LAC about deadline of March 31, 2011 for submission of re-processed EPN solutions. Submissions need to be effectively closed on March 31 in order to go ahead with the generation of the REPRO1 products.

B.2) April 2011

H. Habrich: generation of weekly combined REPRO1 EPN solutions based on B.1 output. Other combinations (daily, troposphere can also be done, but are less urgent) in order to start generation of Cumulative REPRO1 solutions

B.3) April 2011

C. Bruyninx + EUREF TWG: Update Guidelines for EUREF densifications to reflect transition period between introduction of IGS08 reference frame (and igs08.atx) and availability of EPN cumulative solution (and Class A stations) consistent with IGS08 reference frame (and igs08.atx).

B.4) May 2011

A. Kenyeres: Generation of REPRO1 cumulative solution (consistent with igs05.atx calibrations) and tied to ITRF2008 (also consistent with igs05.atx) based on B.3 output, provision to EPN Coordination Group.

B.5) May, 2011

Results of B.1), B.2) and B.4) ready for presentation at EUREF symposium? At least an abstract should be uploaded meeting the deadline to act as a placeholder.

B.6) June 2011

C. Bruyninx: Determination of station position offsets due to change from igs05.atx to igs08.atx receiver antenna calibrations, provision to EPN Coordination Group

B.7) July 2011

A. Kenyeres: Application of results from B.6) to REPRO1 cumulative solution.

B.8) August 2011

All: Investigation of differences wrt IGS008, necessity to perform Helmert with IGS08, etc... Discussion of B.7) results and preparation of proposal for TWG to be approved at fall TWG meeting.

B.9) September 2011

C. Bruyninx + EUREF TWG: Update Guidelines for EUREF densifications to reflect usage of IGS08 reference frame (and igs08.atx antenna calibrations), to be approved at fall TWG meeting

B.10) Fall 2011

All: Proposal presented at TWG fall meeting to be approved.