Dear Colleagues:

This email is of primary interest to the IVS Analysis Centers.

As you know, it is time for another realization of the Terrestrial Reference Frame. Zuheir Altamimi will be combining solutions from all the space geodetic techiniques to arrive at ITRF2013. I am attaching his call for participation which gives more detail. The IVS will be submitting a combined solution. This work will be done by the IVS Combination Center.

Some quick questions:

1. Does your Institution plan on submitting a solution?

2. If so, who is the responsible person?

3. What software package will you be using?

Now some comments.

1. IERS2010 standards. The analysis software packages used to prepare the individual solutions should conform to the IERS2010 standards. The version of Calc/Solve in public use does not conform to these standards. As mentioned in a separate email Goddard will release a version of Calc/Solve that does adhere to IERS2010 by December 31, 2013, and perhaps sooner.

2. Submission of solutions. The solutions will be daily Sinex files. In the previous generations of the ITRF we have used one of two approaches. The ACs send their solutions directly to the Combination Center (this happened in ITRF2008) or the ACs send their solutions to the IVS (2003). This go round I would like the ACs to submit their solutions the IVS. We will archive and make the individual solutions publicly available. The procedure will be similar to the procedure used to submit other information to the IVS Data Centers. We have been working out the details and I will have more information on this next week.

3. Handling of Atmosphere Pressure loading. Unlike normal VLBI analysis, the VLBI solutions should NOT apply pressure loading at the observation level. The reason for doing so is that none of the other techniques will be doing so, and it would make Zuheir's work more difficult to combine VLBI with the other techniques. Instead Zuheir will apply the pressure loading correction a posteriori.

I recognize that from a purist point of view, this is wrong. Pressure Loading (and other kinds of loading, such as hydrology loading) significantly impact the station position, and has been used in routine VLBI data analysis for around 20 years. The VLBI estimates produced without applying Pressure Loading at the observation level are not as good as solutions done where Pressure Loading is applied. However for Zuheir's purposes these deficiencies are OK.

4. Timeframe for submission. Zuheir would like the combined solutions from the individual techniques by February 10, 2014. I have already informed him that, because of the time frame of the Calc/Solve release, this may be delayed. However I would like the various Analysis Centers to produce their results

as soon as possible. It may happen that we need to iterate a couple of times before we get things correct.

5. Detailed checklist for VLBI. I have prepared a detailed checklist for the VLBI solutions. Unfortunately this is on a work computer that is inaccessible to me at the current time. I will send this in a separate email tomorrow.

VLBI is a very important contributor to the ITRF. I look forward to hearing about your plans for participation in this effort.

Regards--

John Gipson

IVS Analysis Coordinator