WInSAR Executive Committee telecon, September 19, 2016

On the call:

Zhong Lu (Chair) Franz Meyer (Vice-chair) Gareth Funning (Secretary, note-taker) Christelle Wauthier Ingrid Johanson Scott Baker

Meeting called to order at 2 pm, PDT

1) Previous business: summer training courses

By all accounts, this summer's Unavco-supported InSAR training courses went well. The Scripps GMTSAR course had dial-in capabilities for the first time, as did the ISCE course at Unavco, providing an opportunity for 10 more researchers in each case who were interested in attending, but did not register in time. Both courses filled quickly.

The dial-in process worked well overall; we still could have accommodated more participants through the WebEx system. There were a few kinks with the combined in-person/online presentation that could probably be avoided in future – e.g. presenters walking away from the microphone, or not repeating questions from people in the room for the benefit of the online participants.

It was suggested that some of these issues might disappear if the whole workshop was online, since everyone (presenters, questioners, observers) would be sitting in front of their computers. It certainly is a way of broadening the reach of our training activities. Franz is contemplating doing something similar with his classes at UAF.

The hardest part with the remote participation was the labs. Franz will be involved in a cloud-based training course through NASA in the near future (in a few weeks), using Amazon services, and this will be a good test and possibly a good model for the future. Franz will share the outcomes with WInSAR.

However, the committee still feel that there is value in still holding in-person workshops, given the pedagogical benefits of group learning, of cohort-building and of meeting the experts in the field. And also, the installation help – many people complimented how easy it was to install the software at the ISCE class!

One thing that could be improved with the current set-up was coordination between the announcements of the classes. There was high demand, and since the two were not announced together, perhaps people might just be signing up for the first class available, rather than waiting for a more appropriate class.

2) The upcoming WInSAR EC election

Zhong has been twisting arms to get people to stand for election. There is a nominating committee (including Matt Prichard, Megan Miller, Eric Fielding, Zhong Lu). The nominations will be finalized in a few days. The nominating committee has targeted people who have served on the EC for Chair and Vice-Chair; there will also be elections for Secretary and At-Large members.

Zhong is happy that there is a broad pool of people willing to run! People will be asked to submit candidate statements in the next few weeks.

3) WInSAR annual luncheon at AGU

Zhong shared his proposed agenda for the WInSAR Annual Business Meeting/Luncheon at AGU 2016:

- 1. Introduction and welcome: WInSAR activities in 2016 Chair and Executive Committee (10 minutes)
- 2. Updates on WInSAR from UNAVCO Chris Crosby, Scott Baker (10 minutes)
- 3. Updates from sponsor agencies: NASA/NSF/USGS Craig Dobson/Ben Phillips/Gerald Bawden, and others (10 minutes)
- 4. Discussion on new opportunities for WInSAR; community input (15 minutes).
- 5. Announcement of new WInSAR EC election results
- 6. Feature Presentation on NISAR:
 - Paul Rosen (30 minutes)

Last year the EC tried very hard to keep the meeting running on time – an effort appreciated by attendees. But it was hard to fit all of the news and presentations into the time available. In order to improve the information transfer at AGU this year, we are going to have WInSAR-sponsored sessions in which recent developments can be communicated; hopefully the posters will be on Wednesday morning, right before the lunch. There will also be a dedicated NISAR session, in which the NISAR mission, plus ISCE and some of the community software will be covered.

Since NISAR has passed into phase C(?), the furthest a NASA InSAR satellite mission has made it since SEASAT, we would like to have Paul Rosen speak at the Business Meeting to give an overview of the mission and its capabilities (and hopefully have 5-10 minutes for community input).

It was also suggested that a review of the special topic session outcomes that came out of the Unavco Science Workshop in March might be valuable, since there might be more of the InSAR community present at AGU?

4) Other items for discussion

• The recent TanDEM-X DEM call

We recently received a notification of a proposal call for acquisitions of TANDEM-X data. Each PI could request up to (we think) 100,000 km², which would be enough for about 3 x 3 degree areas. Should WInSAR take a role in coordinating this effort? Perhaps we could provide a map, and get potential PIs to submit the bounding boxes of their areas of interest, in an attempt to avoid duplication of effort and coverage. (Scott suggested that this could be acheived without too much effort.) We have a precedent in our response to the ALOS-2 call, where we successfully coordinated distinct coverages for multiple groups.

Questions were raised about whether DLR would be unhappy if we organized in this way? It seems that there would be little appeal on either side to a whole series of near-identical proposals! It seems likely that co-PIs would get access to the DEMs once acquired and processed, as for the TerraSAR-X PI proposal data managed through WInSAR, and possibly that co-PIs could be added after the event. Zhong and Franz will call their contact at DLR to clarify whether they will be happy for some degree of coordination between WInSAR PIs.

The deadline for PI proposals is December 1st.

• The upcoming TanDEM-X/TerraSAR-X meeting

Franz is going to attend the meeting. We don't have an official WInSAR presentation, but he has volunteered to include a couple of WInSAR-themed slides in his presentation, if we can source some as a group. [We could ask Falk Amelung? Mike Poland?]

• Should we coordinate a letter to ESA that asks for better Sentinel-1 coverage over the east coast of the U.S.?

ASF have looked at Sentinel-1 data heatmaps, and it seems that Europe is covered very well, the west coast of the US is covered well, but the east coast of the US has limited coverage.

Two years ago we had a user community that was well served by the current heatmap. ASF have found their user group has expanded by 10 times since then! Many of those people are interested in studying the US east coast. It would be good if ESA could increase their coverage there, even if it was only episodic (e.g. a period of increased coverage, acquisitions on every pass, so that we could learn more about the coherence behavior, etc). It's at least worth studying what repeat periods are feasible for coherence, so that we know how we can use data in the region to see what we might be able to see.

Sentinel-1 IW SLC coverage (Oct2014 to Aug2016)



Should we submit a letter to ESA about this possibility? A community letter would have much more impact than from ASF or other agencies. WinSAR is seen as the InSAR-focused community voice in the US.

Pierre Potin is the probable point of contact at ESA. Franz will set up a Google Drive document, share it with the EC and interested others (Cornell, Miami, Penn State?) and take a lead. The FRINGE meeting in Helsinki in June would probably be a good time to follow up with the ESA people.

• Update on ASF Sentinel-1 archiving activities

Archiving/mirroring of Sentinel-1 data is fully operational at ASF. The ASF archive is almost identical to the ESA archive, with the difference that ESA does not delete the original scenes for images that are reprocessed, but ASF does.

• RADARSAT-2 data access

Christelle mentioned that she had heard mention of an educational call for graduate students to get data (open to non-Canadians). Does anybody know about it? (We do not.) Franz mentioned that ASF have been pushing for more access to Radarsat-2 data, and lobbying for NASA to negotiate with MDA, but those negotiations have not gone very far yet.

• Future directions for WInSAR: cultivating "non-superusers"

Matt Pritchard describes the established InSAR community as "superusers" – experienced InSAR practitioners who conduct their own processing and analysis, and consume data in volume. (Most of the EC members probably qualify for that category.) In recent years, availability of free data has greatly expanded, and we have already seen a similar expansion of the user base, and these are mostly non-traditional users, who may not be so comfortable with processing their own data. How to bring these people into the WInSAR community?

Could an automated processing such as ARIA system serve these "non-superusers" with data that they don't have to process themselves? It is a great opportunity. After all, if we have a NISAR launch costing \$1bn, and we don't have massive growth of the user community, then we have failed!

ARIA, along with the UNAVCO interferogram archive, with its doi-referenced data, are great steps in the right direction. In the past it had been very difficult to convince InSAR specialists to use archived interferograms, since everyone thought theirs were the only ones worth using! There is a level of trust being developed in ARIA that may be the start of a new way of using interferogram data.

It will not be without issues, of course. In Hawaii, they are test users of the ARIA system. The cloud computing facilities necessary are expensive! That might be a sticking point – while we want to guarantee access, we also need to make sure they are not used frivolously. Another issue is how we can store all these products. Can UNAVCO and/or ASF handle all that data volume? Can we lobby or provide ARIA with support?

Franz pointed out that once data is in the cloud, the cheapest thing you can do is leave it there! There are ongoing studies of these potential impacts as part of the NISAR mission preparation process. Watch this space!

• Future directions for WInSAR: advocacy

The HDF5 data format that Scott put together maybe has not been disseminated very widely, maybe we could advocate more strongly for it as a community and communicate it with other groups? Similarly, we could help to promote the UNAVCO interferogram database. Maybe these should both be presented to the community at the WInSAR business meeting!

Franz gave a WINSAR/ASF presentation in Germany recently. And the Europeans were blown away by his description of WINSAR's collective action and data sharing/openness – they were asking, "Why don't we do things like that? Why don't we rally for open data access?!" He had forgotten how revolutionary WINSAR was, and is, at promoting open data access, and we shouldn't forget it – and we should keep advocating!

5) Closing remarks

There will probably be one more telecon before AGU.

Meeting adjourned at 3.15 PDT