

Minutes of WInSAR EC meeting 21 November 2018, 11:00-12:00 Mountain Standard Time (Denver, GMT-07:00)

On Call: Gareth Funning (Chair), Chris Crosby (UNAVCO), Kristy Tiampo, Eric Hetland (Secretary)

## 1) WInSAR Business Meeting at Fall AGU Meeting

Venue and time of the business meeting is set:

Wednesday, December 12

12:30pm - 1:30pm

Marriott Metro City Center. Room TBD

At last year's WInSAR business meeting there were 11 updates plus a brief WInSAR introduction, which felt a bit rushed. There was also insufficient time for participants to fill in the feedback sheet that was distributed, and there was a lack of time at the end to collect oral feedback. The EC feels that this year's meeting should include 10 minutes of time at the end of the business meeting to have open discussion and provide a time for participants to give general feedback on WInSAR. Five minutes for each update (e.g., software, data portals, agencies, satellite/data policy updates) seems like it generally works, although most presenters run-over. In a desire to avoid cutting off updates in case they run over the allotted 5 minute time, to allow for 10 minutes of open discussion, and to schedule in time to announce the results of the election, the EC agreed that we should limit the number of updates relative to previous years. Mission updates and updates from funding agencies are useful and should be scheduled. There are fewer updates from UNAVCO this year, but it would be useful to update participants on the the size of WInSAR membership. Time can be scavenged by cutting some of the software updates at the end of the meeting. We should schedule an updates from ASF and Supersites. It was discussed whether we needed a specific update on ARIA, as most know of ARIA and that there is overlap with NISAR updates, the EC felt that an ARIA update could be cut this year in interest of time. We request that the NASA update (from Gerald Bawden or Ben Phillips) includes access to SAOCOM data. A specific update on SAOCOM from a CONAE representative will likely require more time than the 5 minutes allotted for updates, and it was agreed that including data issues in the NASA update was sufficient this year. Other updates that we should schedule include DLR, COSMO-SkYmed, ESA Sentinel, JAXA ALOS-2 and ALOS-4, UAVSAR, and NISAR mission. If any needed updates were missed, contact Gareth offline.

## 2) InSAR session at Fall AGU Meeting

There will be an InSAR and Cloud computing session at the AGU meeting. Oral session is Wednesday AM and posters are Thursday PM. Should point out InSAR relevant sessions when

a reminder of the Business Meeting is sent out. It is a bit of a walk to the WInSAR meeting, which might have an impact on participants getting to the WInSAR business meeting by the scheduled start. Shortening the the number updates at the business meeting will help to alleviate time issues if the meeting starts late.

### 3) Update on WInSAR sponsored workshops and trainings

A meeting was held in Denver during October - Gareth Funning and Franz Meyer attended, as did Rowena Lohman. The meeting was well attended by NASA personnel and some European InSAR scientists. The meeting addressed InSAR education, sharing experience with running in-person and online courses, with a goal to establish some best practices with regard to InSAR education. It is anticipated that a white paper will be generated based on the meeting. The main objective of InSAR education is to build the user base (both of high- and low-level data), in order to foster a larger US community support for InSAR missions. It was also discussed whether to develop an InSAR focussed meeting in the US, analogous to FRINGE, and might possible couple with future NISAR science workshops.

#### 3a) InSAR workshop at GSA annual meeting

The WinSAR sponsored workshop at the GSA meeting this Fall was a learning process and not as successful as it was hoped to have been. There were no in person participants, despite the 15 that signed up for the workshop as in-person attendees. About 15 people participated online. We identified that we made some errors in how we managed the workshop at GSA. Namely, that no registration fee for attendance and the workshop was not run through the GSA. It was felt that a registration fee would provide some incentive to registrants to only register for the meeting if they planned to actually attend. Future workshops should also require a more indepth registration process, similar to the ISCE processing workshop. Aside from the application allowing identification of non-committed registrants, the act of submitting an application also provides further incentive for participants to not cancel. The decision to run the workshop outside of the GSA was done for financial reasons, as the GSA specific fees and requirements on space and catering were avoided. Staying outside the umbrella of GSA also allowed participants to attend the workshop without having to register for the GSA.

. ~15 people participated online. Seemed a bit of a wasted trip. Many cancellations (15 signed up for in-person, but did not attend). Perhaps some tactical errors in how the registration process - suggest to charge a registration fee so there is buy-in. No application process, as in the ISCE processing short course, can be used to filter out less invested applicants. Did not run the workshop through GSA, to avoid the fees to GSA and require that registered participants to attend GSA. However, we realize that this latter point is moot, and that if a registrant is already attending the GSA, it is more guaranteed that they will actually participate in the workshop. UNAVCO has had success at running short workshops through the GSA, and those workshops have all been full with participants motivated to attend. Holding future WInSAR sponsored workshops through GSA adds additional advertising to meeting attendees. GSA meetings tends

to draw of students and scientists from the region in which the meeting is held, as well as scientists from regional agencies. Additional GSA attracts a broad range of science that is not represented at the UNAVCO workshops, and some of those scientists might be interested in training to use InSAR data. Finally, the wording on the advertisement for the GSA workshop roughly followed from that for the WInSAR sponsored workshop at the UNAVCO science meeting in 2018 (which was a success!). However, the participants at the UNAVCO science meeting are perhaps already somewhat geodesy adept, and a more technical ad might be appropriate, while a workshop targeting GSA attendees might require more general wording. The EC strongly supports running another InSAR workshop at GSA in 2019, but running the workshop through the GSA meeting planning apparatus, requiring an application for attendance and/or an application fee, and revisiting the wording of the workshop advertisement to ensure that it is at the most appropriate level for the target audience.

### 3b) InSAR short course at the CIG workshop in Golden, CO

The Short-Term Crustal Dynamics working group of the Computational Infrastructure in Geodynamics (CIG) is running a workshop on crustal deformation modeling 10-14 June 2019: <https://geodynamics.org/cig/events/calendar/2019-crustal-deformation-modeling-workshop/> These workshops run approximately biennially for the past two decades, and focus on computational methods for modeling crustal deformation. The workshops are a mix of tutorials on meshing software and finite element codes (primarily PyLith), 45-60 minute science talks, and general science discussion. The meetings are typically filled, with an even mix of scientists at various career stages, from first year graduate students to senior scientists/faculty. While the focus of the meeting has been on simulation tools, past participants have always expressed desire for more training in how to acquire geodetic data and ingest those data as constraints in their simulations. Given the proliferation of InSAR data products available on data portals, it might be a good year for WInSAR to sponsor a short tutorial on InSAR data at the CIG workshop, especially since it is so close to UNAVCO. Eric Hetland is on the planning committee of the CIG meeting, and planning of the agenda is scheduled to start in January 2019. He will reach out to the new WInSAR EC early 2019.

### 3c)

The WInSAR/UNAVCO sponsored ISCE/GIANT training is targeted Summer 2019. Last year the training was scheduled the previous Fall, in order to mesh with the schedules with NASA-based instructors. Summer 2017 we did not run training as we could not find a good time. Need to reach out to David Sandwell about when GMTSAR workshop is scheduled. The 2018 training was run entirely via online Jupyter notebooks, in order to minimize time sinks dealing with cross platform software issues. Using the Jupyter notebooks went well, except for some computational bottlenecks of using a common server. The use of the notebooks on a common server allowed the training to focus entirely on software use, but did leave many of the participants with challenges when they then needed to install the software on computers at their home institutions, and port the workshop notebooks to those installs (environment settings, etc).

Future workshops need to add in some time on how to run code on their own machines, outside of Jupyter. Need to discuss with Jaime and Chris on when UNAVCO is available for short courses. Gareth will contact Piyush Agram and Paul Rosen regarding the schedule. Need to have EC members involved in running the workshop.

### 3d) WInSAR sponsored workshops at other scientific meetings

In the spirit of continuing to expand the user base of InSAR data products, it was suggested that an InSAR workshop coupled with the SSA annual meeting might be a worthy avenue to explore. The SSA meeting has a heavy earthquake focus, and there is a natural fit with InSAR data products in that science. It might be useful to get a better feeling for whether SSA attendees that would benefit from InSAR data products are already using them, or if they are already getting training for their students at the UNAVCO science workshops or other InSAR trainings. Since it is recommended to re-run a workshop at GSA, in addition to the normal summer ISCE workshop and possibly at the CIG short-term crustal deformation workshop, it was agreed that possible workshops at SSA annual meetings should not be considered until the 2020 meeting.

We discussed holding additional workshops in conjunction with other science meetings, for instance volcanology or glaciology. There is a fairly good representation from both volcanology and glaciology in UNAVCO, and at present it is not entirely clear if there is a need to expand our training footprint in these directions. The current EC unanimously urged the future WInSAR EC to consider whether there is a need for increasing training in use of InSAR data products in these and other communities.

### 3f)

It is unanimously felt that we need to build a larger instructor base for WInSAR sponsored trainings. As WInSAR focusses on a larger portfolio of training, via short-course and workshops, from training in InSAR processing and time-series processing, to training in use of high-level InSAR data products (including data discovery and acquisition, and use of those data), it is becoming increasingly hard to rely on a select few instructors. Short courses on ISCE/GIAnt are dominated by NASA, which has been quite successful. However, it is important to build a larger pool of possible instructors, so that we do not over-tax a few individuals and make it easier to schedule workshops, as well as to diversify the level of instructors, from those on the theory/software side to data users. This point has been discussed continually over the past two years, and while some improvements have been made, the outgoing EC strongly suggests that the new EC continue to build a pool of instructors who are able to leave WinSAR related short course and workshops, including in a stronger representation by EC members.

Meeting convened at 9:51AM MST.