Minutes of WInSAR EC meeting 20 November 2017, 10:00-11:00 Mountain Standard Time (Denver, GMT-07:00)

On call: Gareth Funning (Chair), Franz Meyer (Vice Chair), Zhong Lu (Ex-officio), Eric Hetland (Secretary), Chris Crosby (UNAVCO), Scott Baker (UNAVCO), Kristy Tiampo, Piyush Agram

0): Colocating L-band transponders and GNSS receivers

Craig Johnson is seeking to develop low-cost, L-band phase-stable transponders to be collocated with UNAVCO GNSS receivers. C. Johnson is working with the Univ. Michigan to develop the instrumentation. The main outstanding issue is with collocating transponders and receivers, and whether the transponders will interfere with the GNSS receivers. The transponders would only be active when SAR satellites over-passe the receiver locations. UNAVCO can do testing, and have facilities to test the interference. S. Baker and C. Crosby will follow up.

G. Funning joined the telecon at 10:10MST.

1) WInSAR Business Meeting at Fall AGU Meeting

Venue and time of the business meeting is set:

Wednesday, December 13
12:30pm - 1:30pm
Hilton New Orleans Riverside - Quarterdeck Ballroom
2 Poydra Street

The business meeting will follow the pattern of the business meetings in previous years, composed around short updates from relevant agencies and software developers. Gareth sent out first batch of invites, including: Gerald Bawden (NASA), David Sandell (UCSD/SIO), Alaska Satellite Facility. Piyush Agram will not attend AGU, and thus will not be available to give an update on GIaNT. Sue Owen will not attend, and thus will not be available to give an update or ARIA.

EC brainstormed other issues that would be of interest to the WInSAR community: David Bekaert, David.Bekaert@jpl.nasa.gov could give an ARIA update in her stead. David could also talk about the TRAIN software package for atmospheric correction and STaMPS. An update from SAOCOM InSAR mission would be nice, but it is unlikely that

representatives from CONAR will attend the AGU Fall Meeting. An update on STaMPS would be good, either from D. Bekaert or other. An update from ESA, including the sentinel mission and snap software tools would be of wide interest, and Nuno Miranda (nuno.miranda@esa.int) should be invited. Updates on the RADARSAT constellation, with expected launch next year it would be timely for a CSA representative to give a presentation on the anticipated data access policy. JAXA will release scan-sar data for Asia, perhaps including ALOS-2, and an update would be useful - send email to the ALOS PI symposium coordinator to find specific contact. F. Meyer recently saw a update on ALOS-2 and announcements of ALOS-4 at the CEOS SAR Cal/Val meeting by Takeshi Motooka (motooka.takeshi@jaxa.jp) and might be a good contact. Yunling Lou (yunling.lou@jpl.nasa.gov) or Scott Hensley should also be contacted regarding updates at the Business Meeting.

G. Funning will continue making invites.

Keeping the Business Meeting to schedule is key, given the large number of updates from different speakers and the rather busy schedule at AGU. In past meetings, Z. Lu had aggregated slides from all presenters, getting all presentations in a common computer and avoiding time delays from swapping laptops. Aggregating the slides also facilitates getting those slides posted to the WInSAR web-site. The EC agreed to continue this practice.

A general failing of WInSAR Business Meetings is that there is not sufficient time for to solicit community feedback and/or questions. Given the packed schedule, it does not seem possible to set aside time for all to speak, and most people are rushing off to the afternoon sessions anyway. At this year's Business Meeting we will provide feedback questionnaires, which people can fill out as meeting progresses, and turn in before leaving the luncheon. We will keep the questionnaires short (one page), asking open ended questions, for instance:
. What is future of InSAR/WInSAR?
. What trainings should WInSAR provide.
. What services can WinSAR do that is not doing now?
We could also do an online survey, allowing those in the WInSAR community that do not attend the Business Meeting to provide their input.

G. Funning will do first pass on questionnaire.

Secretary (E. Hetland) will not attend the at AGU meeting, and thus we need another volunteer from the EC to take notes of of the business meeting. S. Baker will look into

the feasibility of using Webex to broadcast the Business Meeting, potentially record the meeting. If this is possible, E. Hetland can compile notes from the recording.

2) WInSAR sponsored InSAR course at the UNAVCO Science Workshop in March

WInSAR wants to organize a short-course at the UNAVCO science meeting in March. There is the potential to hold workshops at the start of the UNAVCO meeting and another one at the end of the meeting. The earlier short-course could focus on technical processing, while the short-course at the end of the meeting could focus on interpretation of InSAR products, and digestion of those products into geophysical models, at the end of the UNAVCO science meeting. Discussion now is on what can be achieved within the time-frame of the short-courses. Propose to center a day-long short-course starting with InSAR products from UNAVCO archive data and develop time-series from these interferograms, perhaps using Jupyter notebooks to interface with Python. Such a short-course centered on analysis and higher-order analysis would potentially appeal to a broader user-base that a short-course on processing of interferograms from SAR images. P. Agram agreed to help with curriculum, but might not be at the UNAVCO science meeting to be a co-instructor of the short-course. G. Funning will be at the UNAVCO science meeting and agree to help run the short-course. M. Shirzaei (ASU) will be at UNAVCO and could be recruited to be a co-instructor. Need to contact contact Donna for funding and scheduling - G. Funning will facilitate that.

Action item: The EC will start a shared Google Document to brainstorm curriculum, instructors, and potential target participants.

To supplement the application and higher-level analysis focus of a short-course held in conjunction with the UNAVCO science meeting in March, WInSAR could continue to sponsor a short-course in Summer 2018. The Summer short-course could to cover more of the basics of InSAR processing to appeal to users interested in more lower-level processing. The Summer workshop could also draw participants from the short-course at the UNAVCO science workshop meeting who wish to learn more basic information on InSAR processing that covered in that short-course.

As discussed in the last WInSAR EC telcon, there is a broad need to for short-courses centered around working with data processed by automated systems. The future of InSAR is that agencies are moving to relatively automated processing chains, which opens up the potential user base of InSAR products. Short-courses focussed on higher order processing steps can facilitate training scientist to use those automated InSAR

products, with the ultimate aim to get InSAR products into the hands of the largest number of scientists. In addition to the short-course at the UNAVCO science meeting, WInSAR should be developing short-courses attached to other meeting (e.g., SSA, GSA), where potential users will be, while the more technical InSAR users will likely be at the UNACO science meeting or will attend the more technical WInSAR summer workshops. UNAVCO has had success with organizing short-course on structure from motion and LIDAR that appeal to a broad user base, and indeed the community of scientists that use those products has rapidly increased in the past several years. WInSAR would like to similarly increase the user base of InSAR products.

InSAR short-courses focussed on a broader user-base should emphasize use of higher-order packages, such as for atmospheric corrections, time-series (e.g., GIAnT), and integration of data products that come out of automated processing. R. Lohman (Cornell) has run a workshop in SAR literacy in conjunction with the ASF, and there is an opportunity for WInSAR to be represented in those workshops.

General consensus of the WInSAR EC is that there is still need for a short-course in the Summer, with the primary aim of graduate student training in lower-order InSAR processing (i.e., starting from SCL products). On the other hand, short-courses held in conjunction with scientific meetings would potentially have a larger draw than just technical grad students working on InSAR.

We need to identify a contact person for a technical InSAR short-course in Summer 2018. The contact person should orchestrating the curriculum and take lead on organizing the short-course in conjunction with the UNAVCO staff. May through September is a high priority review process for NISAR, and we should ensure that a WInSAR short-course does not conflict with that process. P. Agram agreed to be the coordinator for a Summer 2018 short-course, and will start the conversation to coordinate with JPL as to what are good time-frames that do not conflict with NISAR activities. P. Agram will also work on schedule with UNAVCO, compile a list of potential instructors, and organize a curriculum. We discussed moving the Summer 2018 short-course from Boulder, CO, although it was decided that a short-course at the UNAVCO facility in Boulder was cheaper. It was also note that Denver is a relatively easy airport to reach for most of US participants, and the connection from the Denver airport to Boulder is relatively easy. and easy to get to. S. Baker and G. Funning will assist.

Meeting convened 10MST. Minutes by E. Hetland (WInSAR Secretary).