2018 MOISST Workshop

Q1 Please indicate your level of agreement with the following statements about the 2018 MOISST Workshop. For each statement, fill in the circle response in the appropriate column. As a result of my participation in the workshop..

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)	Agree (6)	Strongly agree (7)
I gained knowledge and skills to improve my research. (1)	.053	0	.053	.421	.474	0	0
I had the opportunity to network with researchers from a variety of disciplines. (2)	.053	0	0	.263	.684	0	0
I had the opportunity to network with people from other institutions. (3)	.053	0	0	.105	.842	0	0
l established professional contacts with researchers in the field. (4)	.053	0	0	.474	.474	0	0

Q2 Please respond to the following questions. For each question, mark the appropriate column.

	Yes (1)	No (2)	l don't know (3)
Would you attend a similar workshop (if it covers different topics)? (1)	.737	0	.263
Would you recommend participation in a similar workshop to a colleague? (2)	.895	.105	0

Q3 From what you have learned or discussed so far in this workshop, what ideas or suggestions do you have in establishing an official "framework" for the National Soil Moisture Network?

- That a plan needs to be made for some form of sustainment funding, because the website maintenance, computing storage space, and an outreach ability to help researchers learn/adopt/use the "framework" determined. This can't, effectively, be something someone does on the side.
- Deadlines of deliverables and responsible leadership
- There should be a division of groups to work on different aspects of the soil moisture products. This can then come together to create a suite of "final" products
- 1) Needs to be overseen by dedicated group within NOAA/USDA. 2) In addition to ingesting soil moisture data, it must also include appropriate metadata and estimate of uncertainty. 3) Also needs steady source of funding
- Commitment of funding needed from major agencies of interest: NASA, NOAA, DOI,USDA, USGS, DOE. Establishment of database I recommend ORNL
- Standardize data formats and QA/QC; document this info. Make data more visible/accessible to community not formally a part of MOISST
- I suggest the first step to establish a framework is to agree on soil moisture standards that can be used to "normalize" the data to a common language or convention. These standards should include consultation with the data providers and the data user.
- The 'committee' framework (thinking of this as a network of people) seems very effective.
- 1) Data collection and standardization. 2) Value added product development spatially continuous soil moisture estimates. A) V.W.C. output for weather, hydrology, as models.
 B) Standardized output for climate monitoring. 3) Establish a network of users to contract needs and requirements.

- 1) Data assimilation framework is essential. 2) Early involvement by users is critical. 3) Standardization and calibration/validation of in-situ measurements are imperative.
- 1) Secure funding and construct oversight structure. 2) Establish standards; utilize existing as reference. 3) Reach out to users.
- To get an email list of people who want to participate in NSMN.
- Elect/Select a small writing team to write up an organizational document to guide the NSMN structure and function for the next 2 3 years.
- As a first step, I agree that NOAA/USDA share the leadership, but with partners from other groups. In terms of "home", logically drought.gov is a key opportunity but an NGO (like NDMC) is not out of the question.

Q4 Please describe two aspects of the overall workshop that you found most beneficial.

- Great variety of presentation and well organized
- 1) The time to interact and discuss science/research/topics following presentations. This time is slightly different as this workshop increases in size however it is still very beneficial.
 2) Extended Q & A time
- Networking and research
- Networking and see what others are doing with S.M. data
- Interactions during lunch/breaks and Feedback/brainstorming w/ other scientists during poster session
- Long breaks and friendly atmosphere
- I really enjoyed learning about the vast avenues of research, and I was fascinated by the diversity of groups that perform in-site and remote soil moisture research.
- Shorter talks with more questions/discussion and good grouping of topics.
- Interaction with other / feedback on research ideas and tour of soils lab
- Efforts to improve products at the state and national levels
- See what is being done in field and meeting other researchers
- 1) Presentations & discussions on Day 3 (NSMN vision and current test applications). 2) The opportunity to network with researchers on the use and application of SM products
- 1) Locations that are easy to travel to and offer affordable facilities are preferred.
- Largely this was a networking workshop for me and there was plenty of time for that which I appreciated. Longer format talks were much appreciated.
- 1) Presentations and discussions about soil moisture networks. 2) Presentation and discussions about value added compilations at in situ, model, and remotely sensed soil moisture products.
- 1) Low cost, especially considering benefit. 2) Primary benefit is networking with others, especially for graduate students.
- On-site lunches for networking and carefully curated short talks in a variety of disciplines.

- 1) A combination of remote sensing, soil, agronomy, and climate people. 2) Poster sessions help me get to know more people in details. 3) Thanks for the lunch and drinks provided.
- High quality presentations on soil moisture monitoring and applications and interactions during the breaks and lunches.
- The day dedicated to the NSMN and Frank discussion on challenges of including other partners (need for data vs need for funding).

Q5 Please share suggestions that may improve future workshops. This may include location,

timing, length, and general elements related to future agenda setting.

- Needed as session (an hour or so) on next steps, collaborative research, needs shared data, needs etc. More than just two days of project research
- The posters do not seem to be getting as much interaction. Maybe have a dedicated (even if short) time for it.
- 1) Keep it in Lincoln. 2) Cover best practices for siting and sensor installation. 3) Include more mesonets
- Reiterate to speakers that they should reserve a good amount of their time slot for discussion.
- Shorter talks and coordinated discussing times
- I think more talks on efforts on soil moisture research towards extension and outreach. This could help shape how the NSMN should operate in the future.
- 1) location: have it at my lab! 2) I think the length is appropriate for the topic. 3) More timing info to participants is needed.
- 1) Agenda changed after I had made travel arrangements and thus I was rash to attend the Thursday afternoon session. The schedule needs to be set in advance and then adhere to otherwise, great meeting! 2) Timing, length, location sufficient. 3) 2 hour break wed. too long; make shorter and move that later in day to break up the session.
- Length 2 days; 1) Greater focus on sensor comparisons for instance, we actually heard nothing about the MOISST test bed measurements. 2) Nationalizing soil moisture database
- 1) Locations that are easy to travel to and offer affordable facilities are preferred. 2)
 Future meetings may require more breakout and report back sessions on NSMN work and accomplishments.
- I suggest renaming the conference to reflect its goal of a NSMN (this relates to the 'confusion' comment at the end of the plenary.
- The talks covering users who would benefit from a NSMN product suite were pretty uneven some of the posters would have been better as presentations. Narrow users would be best in group or panel discussions. However, we do need to engage broadly to receive user needs and requirements.
- Selfishly, I love the location of the meetings in a smallish Midwestern university town to keep costs low. Time of year is as good as any, early summer makes it easier for me. 3-day length is good.
- 1-2 days of talks, 1 day discussion max. More vendor talks may be useful.

- It will be great to provide access to the previous/present documents/standards/manuals/data downloading links as well as publications and newspaper articles. This can help us to promote our community. I will be happy to host the 2019 or 2020 (most likely) MOISST workshop at University of Wisconsin – Madison. My email is jhuang426@wisc.edu. I plan to install some soil moisture sensors in Wisconsin and apply for some seed grants to provide support to graduate students to travel to Wisconsin – Madison. This can take some time. Therefore, it will be better for me to host it in 2020. However, I will keep in contact with Tyson, Trenton, and other people in the executive committee and let you know if I have got any further support from my university.
- Keep tight focus on soil moisture monitoring and applications; avoid mission creep.
 Trenton and team have done an amazing job with this. The move from Stillwater to Lincoln was a win. (Stillwater was great too!). Carefully choosing future locations and leaders will be key to success.
- I don't think anything did not go well. The things that went exceptionally well include the agenda breakdown (in-situ, sat, research included, day for NSMN, etc.), the length (3 days), and the venue. For future meetings, this should be the template.