



Midwest Mesonets for Climate Monitoring and Assessment Workshop

The Hyatt Place, Champaign, IL
September 28-29, 2015

Objective: To collaborate on ways to have a consortium of local and regional observational data networks that provide sustained, organized, and reliable high-resolution observational data for the long-term monitoring and assessment of surface climate conditions. “Harmonization”

Goals:

- Identify observational network protocols that could be affordably managed and implemented
- Leverage shared experiences from other sustained, long-term local and regional networks to identify future actions and priorities towards the development of a Midwestern Mesonet Consortium
- Identify product deliverables that would elevate the value of local and regional mesonets when integrated as a consortium
- Identify a business plan that would help support a consortium through funding of individual mesonet efforts

MONDAY, SEPTEMBER 28, 2015			
Session 1: Midwest Mesonet Technical Considerations			
Time	Presenter / Facilitator	Topic	Key Questions
1:00-1:15 PM	<p>Beth Hall <i>Director, MRCC</i></p> <p>Stu Foster <i>Kentucky State Climatologist; Kentucky Mesonet, Western Kentucky University</i></p>	Introduction; Why we have gathered; Workshop Objective and Goals	<ul style="list-style-type: none"> ● Why are we here?
1:15-1:35 PM	<p>Jeff Andresen <i>Michigan State Climatologist, Michigan Mesonet, Michigan State University</i></p>	Highlights of ASABE and AASC Measurement, Instrumentation, and Data Standards	<ul style="list-style-type: none"> ● What technical standards and protocols have already been researched and published?
1:35-1:50 PM	<p>Chris Fiebrich <i>Oklahoma Mesonet, Oklahoma University</i></p>	<p>Technical lessons learned: Oklahoma Mesonet</p> <p>Getting OK Mesonet into ACIS, precipitation and winter-freeze issues. Mesonet site becoming Co-op? Benefits? Drawbacks?</p>	<ul style="list-style-type: none"> ● What are some technical lessons learned from other mesonets? Choosing instruments, siting challenges, standardizing data to blend with other data networks, QA/QC of data. ● What are some problems/issued faced with putting data into a more regionally accessible resource/database?

Hotel Wifi password: “fall”

1:50-2:05 PM	Nathan Edwards <i>South Dakota Mesonet, South Dakota State University.</i>	Technical lessons learned: SD Mesonet?	<ul style="list-style-type: none"> ● What are some technical lessons learned from other mesonets?
2:05-2:40 PM	ALL	<p>Discussion on priorities, short-term and long-term investments of instrumentation standards and protocols</p> <p>Motivation to build some stronger conviction toward partnering with other networks if standards and protocols are considered..</p>	<ul style="list-style-type: none"> ● Should the various mesonets seek to conform? Why or why not? ● At what rate should technical standards be implemented? ● What are the costs (monetary, scientific, promotional value) to standardizing? ● What are some frustrations and things we like about the various instruments/sensors? Precipitation, wind, solar, temperature? (if we make some standardizing standards, how does this impact / help our headaches, happiness?). Calibration issues? Radiation shields?
2:40-2:55 PM	BREAK		
2:55-3:15 PM	<p>Pat Guinan <i>Extension Missouri State Climatologist; Missouri Mesonet, University of Missouri</i></p> <p>John Travlos <i>Missouri Mesonet, University of Missouri</i></p>	Data delivery and accessibility - a Missouri Mesonet perspective	<ul style="list-style-type: none"> ● Is there value to standardizing data delivery and accessibility of mesonet data? ● How is QA/QC being addressed across mesonet? (will throw up a teaser about this for future discussion)
3:15-3:50 PM	Leslie Stoecker <i>Climatologist; Applications Developer, MRCC</i>	ACIS overview and mapping interface Hourly Database plans for privacy	<ul style="list-style-type: none"> ● How can ACIS work to advance product development and delivery across larger spatial scales? ● How can a consortium database preserve privacy while promoting mesonet data value?
3:50-4:10 PM	Paul Heppner <i>National Mesonet, Global Science and Technology, Inc.</i>	National Mesonet - What is it and how can it help local/state mesonets?	<ul style="list-style-type: none"> ● Who shares their data regularly state/federal organizations (e.g., NWS, DNR, Corps). Do people have formal relationships with any groups? ● Any idea how this has impacted marketing/promotion of mesonets? ● Who is a regular user of National Mesonet and MADIS? How are mesonets being used or considered compared to other networks on MADIS/National Mesonet?
4:10-4:45 PM	ALL	<p>Discussion on data delivery and accessibility for regional product development</p> <p>QA/QC Challenges</p>	<ul style="list-style-type: none"> ● Is Intellectual Property an issue with product development? If so, at what point? ● Who shares their data regularly state/federal organizations (e.g., NWS, DNR, Corps). Do people have formal relationships with any

Hotel Wifi password: "fall"

			<ul style="list-style-type: none"> groups? ● What are we all doing when it comes to QA/QC with our mesonets? ● Are standards needed for coding and documentation of prototype products?
4:45 PM	Adjourn for the day		
TUESDAY, SEPTEMBER 29, 2015			
Session 2: Midwest Mesonet Business Plan Considerations			
Time	Presenter / Facilitator	Topic	Key Questions
8:30-9:45 AM	ALL	Sustaining a mesonet: challenges, costs, risks	<ul style="list-style-type: none"> ● What resources are requested in the startup phase of a mesonet? What are some lessons learned in the process? ● What source of funding do you rely upon to cover operating and maintenance costs? ● What is the value each station provides and to whom? ● How are mesonets currently being marketed? ● Who should invest in sustaining an observation network and why?
9:45-10:00 AM	BREAK		
10:00-11:00 AM	Stu Foster <i>Kentucky State Climatologist; Kentucky Mesonet, Western Kentucky University</i>	Building a business model to unlock the value of a mesonet	<ul style="list-style-type: none"> ● What is the value proposition for a mesonet? ● What are the building blocks of a business model? ● What are some frameworks for structuring a mesonet as a viable business?
11:00-11:45 AM	ALL	Consideration of a regional approach to mesonet marketing and promotion	<ul style="list-style-type: none"> ● What are the benefits and drawbacks to developing a regional, multi-mesonet consortium from a (1) scientific / technical, and a (2) business perspective? ● What is the next step in developing a regional, multi-mesonet consortium in the Midwest?
11:45 AM	Adjourn Workop		

ASABE Measurement Standards: <https://elibrary.asabe.org/azdez.asp?JID=2&AID=45472&CID=s2000&T=2>
AASC Instrumentation and Data Standards:
<https://www.stateclimate.org/sites/default/files/upload/pdf/state-climatologist/00000029.pdf>

Hotel Wifi password: "fall"