How NOAA Jump-Started the 2017 Satellite Conference to Engage the Audience

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1. INTRODUCTION

The National Environmental Satellite. Data. and Information Service (NESDIS), is working to improve communication at their bi-annual National Oceanic and Atmospheric Administration (NOAA) Satellite Conference and challenging conventional approaches to meetings. NESDIS continually seeks to engage their partners and stakeholders in their mission, which is to provide secure and timely access to global environmental data and information from satellites and other sources to promote and protect the United States' security, environment, economy, and quality of life. NESDIS stakeholders are diverse individuals that come from the public, private, and academic sectors both in the United States and internationally. NESDIS' outreach efforts are broad and ongoing. The effect of changes implemented for their major 2017 user meeting, the NOAA Satellite Conference, to increase interaction with and amongst the stakeholders are explained here.

2. THE NOAA SATELLITE CONFERENCE

The NOAA Satellite Conference (NSC) is held every two years as a way to communicate important NESDIS initiatives and progress on the United States' environmental satellite missions. When successful, the NSC promotes interaction between user communities and satellite-based product developers, ensures user readiness of the next generation of satellite data, enhances effective communication among stakeholders, and identifies high priority research needs and issues for satellite information. In 2015, the NSC was held in the Washington, D.C., area. It was a worthwhile but traditional format conference that included oral presentations from dignitaries and senior leaders as well as a robust poster session to showcase the work of scientists. However, in 2017, the conference was structured differently. NESDIS maintained the objective of the conference, to reach their users, and maintained the agenda elements that worked well, but changed the overall focus of the meeting agenda from delivering information to fostering interaction.

NESDIS implemented three major changes to the 2017 NSC:

- First, the conference was held at one of the NESDIS cooperative institutes, the City College of New York in New York City. This brought attendees closer to students studying in the fields of meteorology, engineering, and remote sensing who could share their talent and perspectives at the conference. Engaging students, the future of the NESDIS workforce, became a cornerstone of the conference.
- 2. The second change was to the agenda of the conference itself. While continuing with traditional oral presentations from technical experts and eminent speakers in the earth science community, NESDIS also built breakout sessions into the agenda and increased interactive training opportunities. The revised conference agenda also added town hall meetings, panel discussions, lunchtime talks, and networking events. Some speakers were invited who excelled in their communication skills: for example, one highlight was a lunchtime talk and "question and answer" (Q&A) session with renowned television broadcaster Al Roker. In addition, NESDIS held a user-response forum instead of a sequence of technical presentations to receive more feedback from the audience.
- 3. The third evolutionary change introduced was interactive technology. It was important to have an engaging real-time polling mechanism. This technology also transformed Q&A sessions.

3. INTERACTIVE TECHNOLOGIES

Part of pairing the meeting to a message was converting information to interaction. Sli.do is the online platform that was used during the 2017 NSC to engage the audience directly. A committee of NOAA employees and affiliates chose Sli.do after searching for options that could provide an easy user experience. There are other similar options on the market that provide comparable features and benefits. This was the first attempt to use Sli.do or a similar product at the NSC and the experiences were positive. There were hundreds of attendees at the 2017 NSC. Sli.do became a platform to collect the diverse feedback and opinions of the audience.

On the first day of the conference, there were 387 attendees, with slightly less on subsequent days. There were 277 active users monitoring the online

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platform throughout the 3.5-day conference. This was approximately 72% of the attendees. The audience used Sli.do to respond to multiple choice and short answer poll questions posed during panel discussions and town hall meetings, and ask questions of panelists and town hall leaders at appropriate times throughout the conference. The attendees submitted 193 questions and participated in 24 polls, though the number of participants in each poll varied. Based on this. NESDIS anticipates further integration of technology into NSC and perhaps other NOAA meetings in the future as attendees become more comfortable with online communication. Sli.do made it easy for NOAA to keep the audience engaged and obtain real-time feedback that could guide the discussion of panelists. This allowed moderators of NSC panel discussions and town hall meetings to focus on high-interest questions, and answer other questions after the conference if necessary.

Sli.do does not require the use of an account or store personal data. Attendees could opt to volunteer their name as part of asking questions or replying, but that was optional. One of the features of Sli.do that was particularly useful enabled participants to select questions from other audience members that were also of interest to them. Attendees could also integrate Sli.do with their Twitter feed, but this was only an option for some, as there are less Twitter users than smartphone users.

While organizers expected that participants would provide a name for follow-up if necessary, participants had the option to ask questions anonymously. In practice, most participants opted to continue to remain anonymous. There were some positive and negative consequences of this. A benefit was that some tough questions were asked that could not be attributable to an individual. On the other hand, too much anonymous traffic through online platform could have detracted from the flow and energy of the activities in the conference room.

In the end, a balance of the audience engaging via Sli.do and asking questions directly was preferable. The ability to ask questions online was a "normalizer", particularly for students and early career professionals in the audience. Some people are more comfortable asking questions in front of a large audience, and this, in the past, led to multiple questions from the same participants throughout the course of the conference. Written submission required participants to think about *how* to ask their question. There were less "rambling" questions with preceding background information.

Participants were allowed to pose questions directly over microphones if a question was particularly long, technical, or specific, or a participant was unable to access Sli.do. Some audience members did so to circumvent the lower priority of their questions though. In the future, creative solutions to keep people engaged throughout the conference will be necessary without funnelling every interaction through an electronic device, but generational preferences may lead to less direct person-to-person interactions in these kinds of forums with time.

4. SUMMARY

The NSC in 2017 was titled "A New Era of NOAA's Environmental Satellites" because the program was built around the recent launch of the first satellite in the Geostationary Operational Environmental R-Series (GOES-R) and, at that time, the upcoming launch of first satellite in the Joint Polar Satellite System (JPSS-1). There was a great deal of excitement and attendees asked numerous questions. The program committee set an interactive agenda that allowed NOAA to make connections that will strengthen future endeavors. In the end, NESDIS was successful at beginning the new era by focusing on interaction with the users and by increasing opportunities to listen more through embracing new technologies.

5. RELATED INFORMATION

NOAA Satellite Conference 2017 web page: http://www.nsc2017.org/

NOAA Satellite Conferences main web page: http://www.satelliteconferences.noaa.gov/

Sli.do web site: http://www.slido.com/

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