

2018 Air-Sea Interaction Committee Meeting Summary

The 21st AMS Conference on Air-Sea Interaction was held jointly with the 23rd AMS Symposium on Boundary Layers and Turbulence in Oklahoma City, OK, on June 11-15, 2018. The joint meeting recognized the similar research interests and challenges in both the air-sea interaction and boundary layer meteorology communities, and aimed at bringing these groups together so that each could leverage recent findings, techniques, etc. from the other. The ASI organizing committee consisted of Henry Potter, chair, Heather Holbach, J. Brent Roberts, and Young-Oh Kwon. Gillian Peguero and Meghan Summers provided much guidance and acted as AMS meeting coordinators.

Throughout the weeklong joint meeting, two rooms in the Oklahoma City Convention Center were dedicated to BLT session tracks while one was for ASI. In total, the conference on ASI accepted 56 abstracts (4 were withdrawn before the meeting), and these were split between 2 poster sessions, 7 oral sessions, 3 joint sessions with BLT, and 3 joint plenary sessions. Session topics included sea surface processes, air-sea flux measurements, two special sessions on the CASPER field campaign, air-sea interaction in high winds, and air-sea interaction coupled to climate variability and change. The joint sessions with BLT focused on the coastal environment, renewable energy, and gas exchange.

The joint plenary sessions included talks from Peter Sullivan, senior scientist at the National Center for Atmospheric Research (“Process coupling across scales in the marine boundary layers: Recent results from large-eddy simulations”) and James Edson, scientist at Woods Hole Oceanographic Institute (“Advances in the measurement of air-sea fluxes for marine boundary layer research”).

During the week, notable events included the following: (1) a tour of the National Weather Center at the University of Oklahoma, including a reception (the fee for this tour was \$50, but leftover money from the student travel fund allowed full payment for all student attendees from ASI); (2) a women’s dinner hosted by organizer Heather Holbach, which provided an informal gathering to meet; and (3) a conference banquet held on the 50th floor of the Devon Energy Center in downtown Oklahoma City.

To continue ASI’s commitment to supporting students, and following previous ASI conferences, a student competition was organized by Heather Holbach. 10 student oral presentations and 4 poster presentations were entered (one poster was a no-show, and another was presented by the advisor instead of the student). The winner of the poster presentation was Kyle Ahern, presenting “Air-sea interactions and boundary layer processes in the hurricane inner-core during intensity change”. The oral presentation winners were, from first to third place, Hyungwon (John) Park (“An Eulerian-Lagrangian model to simulate sea spray transport in the marine atmospheric boundary layer”), Tianze Peng (“Feedback of sea-spray on air-sea heat fluxes and the influence of droplet lifetime”), and Xuanyu Chen (“Sea-state dependent drag coefficient in shallow waters under tropical cyclones”). Cash prizes were awarded to the winners.

A meeting of the AMS Air-Sea Interaction Committee was held, although only 4 members were present (David Richter, Henry Potter, Heather Holbach, and Qing Wang). The topic of conference attendance was discussed, and a consensus was formed that the next meeting be held at the AMS Annual Meeting, with the suggestion of hosting joint sessions with Climate Variability and Change. The options discussed for future meetings were January 2020 (Boston, MA and during the centennial of AMS) or January 2021 (New Orleans). The latter has the benefit of not conflicting with the Ocean Sciences Meeting in 2020. These topics will be discussed with the full committee.

Finally, in recognition of her long-standing support of the air-sea interaction community, the AMS ASI committee awarded Magdalena Anguelova of the Naval Research Laboratory the STAC Award for Outstanding Service, with the byline “For her tireless and enthusiastic commitment to serving and advancing the ASI community”. A certificate was presented at the conference banquet, and was successfully maintained as a surprise.

Program Committee

Henry Potter, Conference lead organizer

Heather Holbach, J. Brent Roberts, Young-Oh Kwon, Conference co-chairs

AMS Committee on Air-Sea Interaction

David Richter (Chair), Henry Potter (vice-chair), Grant Deane, Heather Holbach, Thomas Kilpatrick, Young-Oh Kwon, Larry O’Neill, J. Brent Roberts, Lynn Russell, Qing Wang, Christopher Zappa, Samantha Wills (student representative)