

NOTE DALLA COP 28

DI CHRISTINE A. SHIELDS

This year's United Nations Climate Change Conference meeting (COP28), was held in Dubai, UAE, a country known for its ties to the oil and gas industry. Going into the meeting, I was cautiously optimistic that having a record number of energy executives at the table would prove to be a bonus, rather than a bane, in moving the conversation forward regarding the phase-out of fossil fuels for the world's energy supplies. Although the call for a complete phase-out of fossil fuels was not agreed upon, and a disappointment, there is reason for hope, and excitement, because we are still moving forward as a global community to address climate change and its impacts. As a "RINGO" (Research and Independent Non-Governmental Organization) observer, I listened to a variety of negotiations including the Global Stocktake, Research and Systematic Observations (RSO), and Gender and Climate Change. The recognition that women tend to bear the brunt of burden imposed by climate change impacts was a first and a welcome introduction to COP. I was also happy to see the first pledges for the Loss and Damage fund (established at COP27) begin to populate. Another impression was that more scientists are needed for the COP process. RINGO observers accounted for only 15% of the COP28 participants, and with important topics where science is key, I found this representation to be too small. For example, to operationalize any Loss and Damage fund, a consistent, scientifically sound, and equitable process needs to be put in place. Myself and colleagues at NSF NCAR helped organize a side event with TERI (The Energy and Resources Institute) in India, where we discussed the science needed to operationalize this fund. Later, in the RSO negotiations, content from our side event was used to establish climate attribution language in this document. The purpose of side events is to help aid negotiations, and in this case, they did. However, with so few scientists at COP, one has to wonder if the science is being fully represented in the negotiations. Another aspect of my COP experience was to attend and participate in various events and gatherings at different "Pavilions", i.e. activity hubs spanning specific COP-related themes, as well as hubs sponsored by specific countries. Our NSF NCAR team served on panels at the Ocean Pavilion hosted by the American Geophysical Union (AGU), as well as events at the Resilience Hub hosted by the International Coalition for Sustainable Infrastructure (ICSI). Sitting on these panels, we spoke on the need for open science, the importance for community involvement in our science, and the absolute necessity of including equitable and just solutions to achieve socio-ecological resilience. Overall, I left COP28 feeling incredibly excited and energized to continue to push for science-based solutions to the challenges

we face, and hopeful that our global community is truly motivated to cooperate and work together to achieve our global goals.

Brief Bio:

Christine A. Shields (shields@ucar.edu) is a Project Scientist at the National Center for Atmospheric Research (NSF NCAR) with expertise in applying Earth System Models to Earth's past, present and future climates. Christine focuses on Earth's hydrological cycle in the context of climate change, with particular emphasis on atmospheric rivers (ARs), monsoons, cyclones, and extreme events, which sit at the intersection between weather and climate. She studies how weather systems connect regions around the globe, including polar climate. Christine is also an American Geophysical Union (AGU) Voices for Science alumni, a current AGU Local Partner, and is keenly interested in building sustainable and actionable climate change policy.