

Soil Systems and Critical Zone Processes Technical Committee

December 15, 2014

Minutes

Called to order at 6:45 AM

Attending: Jennifer King, Enriquetta Barrera, Sonia Seneviratne, Dani Or, Harry Verecken, Yakov Pachepsky, Binayak Mohanty, Marc Kramer, Ester Sztein, Nancy Cavallaro, Dan Richter, E.F. Wood

Dani Or (co-chair, Hydrology) called the meeting to order at 6:45 and mentioned that we still need a graduate student rep to the committee. Kate Lajtha (co-chair, Biogeosciences) said she would send out a notice for suggestions. Every year about 1/3 of members should rotate off the committee, but natural attrition seems to have taken care of this.

Harry Verecken was introduced as the incoming co-chair replacing Dani Or, representing Hydrology.

Sonia Seneviratne discussed the Global Energy and Water Cycle Exchanges Project (GEWEX, http://www.gewex.org/gewex_overview.html). GEWEX is the core project in the World Climate Research Programme (WCRP) concerned with studying the dynamics and thermodynamics of the atmosphere, its interactions with the Earth's surface, and the effects on the global energy and water cycle. There is a need to include the soil community in these efforts, and there was considerable discussion on how to engage the soil community.

Harry Verecken discussed the international soil modeling consortium (<https://www.soil-modeling.org/>). The goal of this consortium is to bring together modelers and experimental soil scientists at the forefront of new technologies and approaches to characterize soils, and to work as a communication platform. The web site is also to serve as a repository of different soil models. They are working on a white paper ('Challenges and perspectives in modelling soil processes') with a large number of authors, with a goal of reaching out to the climate community. This paper can be downloaded from the web site.

Enriquetta Barrera discussed the US Critical Zone Observatory (CZO, <http://criticalzone.org/national/>). There are currently 10 US sites funded by NSF. The increase from six to ten observatories necessitated the formalization of a CZO National Office (CZONO). Goals of a national office are to enhance communication among CZO researchers and students, promote common measurements and data protocols, provide a single point of contact for the program, develop new educational and outreach initiatives, and develop new educational and outreach initiatives. They too have a white paper on common measurements and protocols. CZO scientists are increasingly working internationally; China has established 6 CZO sites. The European CZOs have a more pragmatic issues focus than the US site

network. The US group would like to interact more broadly with ecologists. Marc Kramer discussed the MOUs that have been signed with ESA and AGU, and the CZO presence at the 2015 ESA meeting. There are plans to work towards the ability to fund and encourage international collaboration.

Dani Or pointed out that there are many groups and networks that use hydrology/soil data and models and measurements, but they are going in different directions and often do not communicate. These groups need coordination so that groups can ask for and find expertise and input when establishing standard methods. Enriquetta stated that CZEN.org was established to be an international platform.

Mike Young related GSA's creation of an interest group on soils and sent around their paper to this effect.

Kate Lajtha reported on the status of the Global Soils SWIRL. There was little presence for this SWIRL during year1, but SWIRLS are announced on AGU's schedule this year. However, when papers are scheduled at AGU, there is no consideration for the scheduling of SWIRL themes and there are questions about the added value of SWIRL sessions. Lajtha will work with the new AGU Fall Meeting Chair to increase the presence and usefulness of the SWIRLS.

Meeting was adjourned at 7:45 AM.