GEO Health Community of Practice (CoP)
Community Telecon
November 8, 2022

In Attendance: 15 participants
Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Dorian Janney (NASA Goddard), Helen Amos (NASA Goddard), Bob Chen (CIESIN/Columbia Univ.; NASA SEDAC), Kristina Kintziger (Univ. of Nebraska Medical Center), Assaf Anyamba (Oak Ridge National Laboratory), Steve Moran (Breezometer), Josh Colston (Univ. of Virginia), Cascade Tuholske (Montana State Univ.), Mark Seielstad (Univ. of California, San Francisco), Olayinka Osuolale (Elizade Univ., Nigeria), Didier Davignon (Environment and Climate Change Canada), David Rodriguez (SICA, Executive Secretariat of the Council of Ministers of Health of Central America and the Dominican Republic, SE-COMISCA), Gabriela Garay (SCGG Honduras).

Summary Notes:
*Prepared by Helena Chapman (NASA HQ/BAH)*

Juli Trtanj (NOAA) opened the telecon by welcoming all participants.

Helena Chapman (NASA HQ/BAH) mentioned that the GEO Week 2022 was held from October 31-November 4, 2022 in Accra, Ghana. She shared that the EO4Health team supported three sessions during GEO Week 2022: 1) *Earth Observation and Health: Early Warning Systems and beyond!* side event at GEO Week on November 1; and 2) *Resilient and Sustainable Communities* session (Antar Jutla, Univ. of Florida) with cholera forecasts and *Sustainable Urban Development* session (Emma Knowland, NASA Goddard; Vivek Shandas and Joey Williams, CAPA Strategies) with air quality applications in Senegal and heat mapping in Freetown at the AfriGEO Symposium on October 31.

Didier Davignon (Environment and Climate Change Canada) asked if there were any references related to the dengue mosquito prediction programs presented at the GEO Week 2022 side event.

Helena Chapman (NASA HQ/BAH) mentioned that the GEO Week 2022 side event showcased three vector-borne disease projects: Dengue forecasting MOdel Satellite-based System (D-MOSS), Early Warning System for Mosquito Borne Diseases (EYWA), and FARSEER. She commented that the first two projects were previously presented at CoP telecons. The FARSEER project, led by Frederic Bartumeus (Center for Advanced Studies of Blanes), uses citizen science applications in this early warning system for disease vectors. This project was one finalist for the European Innovation Council’s (EIC) Horizon Prize on Early Warning for Epidemics (*Observations from space help scientists get one step ahead of the tiny but deadly mosquito*).

Dorian Janney (NASA Goddard) shared an update on the Food Security and Safety Work Group. She mentioned that the work group met on November 7 to discuss the impact of the war on Ukraine on food security and safety topics and generate a list of stakeholders, data gaps, and approaches where EO are currently being used. She shared information about the World Bank webinar, *New Capabilities for Rapid Assessment of Food Security: Satellite Imagery to Measure the Effect of War on Agriculture in Ukraine*, on November 10. She commented that NASA HARVEST has sustainable funding for using EO data in food security and safety topics. Juli Trtanj (NOAA) said that it is also important to look for health practitioners to engage on the topics of using EO data for seasonal forecasts. Helena Chapman (NASA HQ/BAH) encouraged CoP members to join one of the CoP Small Work Groups, including the Food Security and Safety Work Group.
**Juli Trtanj (NOAA)** shared information about the WMO Commission for Weather, Climate, Water and Related Environmental Services & Applications (Services Commission, SERCOM). She commented that the GEO Secretariat would like to work with CoP members to develop a sustainable initiative (with funding) that can contribute to the wider community, specifically with heat-health. She said that CoP members are working on heat modeling and mapping, including basic mapping levels with NIHHIS, so she wondered about next steps to develop seasonal forecasts or long-term outlooks on heat. Then, she commented that the GEO Secretariat has hired an employee to work on urban issues, which in combination with the GHHIN network, could help advance efforts to collaborate with WHO and develop seasonal outlooks and adaptation plans. Finally, she stated that the youth engagement is important for GEO ([GEO Youth Blog Post](#)), so they may consider developing local or global challenges on heat-health risks to find solutions (e.g. What should a heat resilient city or town look like?).

**Juli Trtanj (NOAA)** mentioned that the GEO Secretariat’s virtual coordination workshop on EO for heat-health was held in October 2022. She said that Bob Chen (CIESIN/Columbia Univ.; NASA SEDAC) shared information about human population and migration data can build on the heat-health issue. Bob Chen (CIESIN/Columbia Univ.; NASA SEDAC) shared NASA links to the Science-enabling Technology and Earth Information Center. Cascade Tuholske (Montana State Univ.) raised two important questions for seeking funding: 1) What information is helpful for the medical community for the immediate preparedness and response? and 2) Using FUSENET for food security, how do hot humid heat waves impact agriculture and migration?

**Juli Trtanj (NOAA)** mentioned that we have contacts with Dennis Odoi Laryea (Ghana Health Service) and GHHIN (supported by WHO and Africa CDC). She said that they should seek contacts at Clim-Health Africa. Helena Chapman (NASA HQ/BAH) mentioned the CDC supports Field Epidemiology Training Program (FETP) across 80 countries, which may serve as on-the-ground health practitioners. Bob Chen (CIESIN/Columbia Univ.; NASA SEDAC) mentioned that the International Federation of Red Cross and Red Crescent Societies (IFRC) initiatives are led by the International Research Institute for Climate and Society, as a cooperative agreement between the NOAA Climate Program Office and Columbia University. Cascade Tuholske (Montana State Univ.) shared information about the National Center for Ecological Analysis and Synthesis (Morpho Informational Webinar) with the call for proposals due in January/February 2023. Juli Trtanj (NOAA) mentioned that they plan to coordinate a tag-up with AfriGEO as well as a CoP/O Special Webinar in 2023.

**Juli Trtanj (NOAA)** said that not all Met Services have a health focus to date. She said that heat-health topics were raised at the WHO/WMO Joint Workplan and Integrated Health Services meeting, and that her team presented an implementation plan (which was adopted) at the Executive Council. She noted that heat wave naming was not supported by WMO or Met Services, since it confuses public messaging and distracts from ongoing research. She said that the accountability from private entities for forecasting can also undermine Met Services’ capabilities and messaging. Cascade Tuholske (Montana State Univ.) said that the California Department of Insurance released a recent press release ([First-in-nation legislation for early warning and ranking of extreme heat waves introduced in California Assembly](#)).
Kristina Kintziger (Univ. of Nebraska Medical Center) and Didier Davignon (Environment and Climate Change Canada) commented that they will be attending the American Meteorological Society Annual Meeting in January 2023. Juli Trtanj (NOAA) and Helena Chapman (NASA HQ/BAH) mentioned that they may be able to coordinate a CoP tag-up while at the meeting. Bob Chen (CIESIN/Columbia Univ.; NASA SEDAC) commented that his team may have some meeting space (table with 25-40 seats) at one of the AGU hotels on the afternoon of December 14, which may be helpful for an in-person CoP meeting.

Bob Chen (CIESIN/Columbia Univ.; NASA SEDAC) shared the recent the 2022 Report of the Lancet Countdown on Health and Climate Change with Health at the Mercy of Fossil Fuels, Towards a Climate Resilient Future for Europe, and Leveraging Climate Actions for Healthy Ageing. Didier Davignon (Environment and Climate Change Canada) said that he will soon share a recent report about a small EO for Health workshop with the Canadian Space Agency.

Juli Trtanj (NOAA) thanked CoP members for their continued contributions to the field and engagement in the group discussion. They agreed that this teleconference had provided an opportunity to share information, connect researchers, and leverage resources that can amplify current activities using Earth observations for public health applications.

Juli Trtanj (NOAA) closed the teleconference and mentioned that the next community teleconference will be scheduled for Tuesday, November 22, 2022 at 8:30AM EST (GMT-5). During the next teleconference, Thilanka Munasinghe (Rensselaer Polytechnic Institute) and Assaf Anyamba (Oak Ridge National Laboratory) will offer an update on the Rensselaer Polytechnic Institute-NASA Student Engagement collaboration. Then, Ajeet Parmar (Rensselaer Polytechnic Institute) will present the findings of his class project entitled, 2021 Monthly Rice Production in Chinese Coastal Provinces. This telecon will offer recommendations to enhance student engagement on projects that integrate Earth observations in public health applications.

Adjourned: 12:00PM EST (GMT-5)