

GEO Health Community of Practice (CoP)
Telecon: Focus on COVID-19 Transmission
November 10, 2020

In Attendance: 27 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), John Balbus (NIEHS), Cynthia Hall (NASA Earth Science Data Systems), Dorian Janney (NASA Goddard/GPM mission), Helen Amos (NASA Goddard/SSAI), Anna Borovikov (NASA/GMAO), Assaf Anyamba (NASA Goddard), Sushel Unninayar (NASA Goddard/GESTAR/MSU), Ray Kiess (USAF, 14th Weather Squadron), Bob Chen (CIESIN/Columbia U.; NASA SEDAC), Mona Nasser (University of Plymouth, UK), Ado Muhammad (Ahmadu Bello U., Nigeria), Olayinka Osuolale (Elizade U., Nigeria), Shannon Vattikuti (Mississippi State U.), Fazlay Faruque (U. of Mississippi), Mike Gremillion (U. of Alabama Water Institute), Ben Zaitchik (Johns Hopkins U.), Josh Colston (U. of Virginia), Moiz Usmani (U. of Florida), Ali Akanda (U. of Rhode Island), Rifat Hossain (WHO), Juan Castillo (PAHO), Andreas Skouloudis (iSteep.org), Melissa MacDonald (Environment and Climate Change Canada), Susanna Ehlers (Inter-American Institute for Global Change Research).

Summary Notes:

**Prepared by Helena Chapman (NASA HQ/BAH)*

John Haynes (NASA HQ) and **Juli Trtanj (NOAA)** opened the telecon by welcoming all participants. They invited GEO members to provide brief updates on upcoming conferences and related activities.

John Haynes (NASA HQ) mentioned that the [GEO Virtual Symposium](#) was held from November 2-6, 2020, where the agenda included GEO discussions between principal leaders and ministers, scientific and technical sessions, awards, and virtual booths. He congratulated D-MOSS colleagues (**Gina Tsarouchi and Darren Lumbroso, HR Wallingford**) for their [GEO Non-for-Profit Award](#) and **Nancy Searby (NASA HQ)** for her [GEO Individual Excellence Award](#). He also mentioned that **Yana Gevorgyan (NOAA)** was selected as [GEO Secretariat Director](#), effective July 1, 2021, and highlighted that she has been a tremendous champion for GEO initiatives, including supporting the adoption of health as a cross-cutting theme in AmeriGEO Week 2019. Next, he shared that they provided a brief update on the GEO Health CoP and EO4HEALTH for the GEO Program Board on Thursday, October 29, 2020, which was positively received. The GEO Program Board shared their congratulations to all CoP members for their active participation over the past couple years. Finally, he mentioned that there are two upcoming events: 1) [New Space Korea 2020 Conference](#) (November 12-13, 2020), where he and Juli Trtanj (NOAA) will provide an overview of the GEO Health CoP and EO4HEALTH in regards to the COVID-19 pandemic; and 2) American Geophysical Union Fall Meeting 2020 (December 1-17, 2020), where many CoP members will be presenting oral and poster presentations. He stated that we are currently organizing the agenda for the GEO Health CoP meeting as an AGU2020 side event.

John Haynes (NASA HQ) and **Juli Trtanj (NOAA)** both shared the sad news of the passing of our friend and colleague, Lisa Conti, following a valiant battle against ovarian cancer. They shared her brief [biography](#) that describes some of her significant contributions to the national and international One Health movement.

Juli Trtanj (NOAA) mentioned that one of the topics discussed was using the workstreams to impact a larger goal related to using Earth observations for infectious disease predictions. Since the CoP has strengthened a global network that has leveraged expertise in using Earth observations for health decision-making – especially through the four EO4HEALTH projects – she highlighted that aligning the work streams can serve to achieving future goals. Then, she said that the Weather Service is currently updating the heat strategy, where they will coordinate internal and partner meetings to discuss input and how to develop their heat strategy for the next 5-10 years.

Helena Chapman (NASA HQ/BAH) reminded CoP members that November 3rd was the annual celebration of [One Health Day](#), supported by the One Health Initiative, One Health Commission, and One Health Platform. She said that CoP members could [register](#) their events to be included on a global activity map by the One Health Commission. She shared the NASA web feature, [NASA's Earth Applied Sciences Program Participates in One Health Day 2020](#). Next, she reminded CoP members that the NASA ARSET team has developed three new trainings: 1) [Satellite Remote Sensing for Urban Heat Islands](#) (3 sessions) will be held on November 10 (Part 1: *Land Surface Temperature-Based Urban Heat Island Mapping*), 17 (Part 2: *Integrating In-Situ Observations with Satellite Imagery*), and 24 (Part 3: *Mitigating UHI via Long-Term Urban Climate Monitoring*), from 10-11:30AM EST/GMT-5 or 4-5:30PM EST/GMT-5; 2) [Remote Sensing for Mangroves and UN SDGs](#) (2 sessions) on Thursday, November 12, 2020 and Thursday, November 19, 2020 (10-11:30AM EST/GMT-5 or 3-4:30PM EST/GMT-5); and 3) [Introduction to NASA's "Black Marble" Night Lights Data](#) on Thursday, December 3, 2020 from 9-11AM EST/GMT-5. To learn more about ARSET, she requested that CoP members visit the [ARSET Online Resource Guide](#) that outlines ARSET resources for general learning and more specific applications. She also shared the NASA Health and Air Quality Applications Newsletter for [July-September 2020](#). Finally, she said that there were several upcoming webinars – One Health Social Sciences Initiative, One Health Academy, International Society of Environmental Epidemiology, American Geophysical Union – that were previously shared on the GEO Health CoP listserv.

John Balbus (NIEHS) mentioned that NIEHS will be hosting a series of activities related to geospatial data, infrastructure, and environmental health research and decisions (April 2021), and that they plan to sponsor another workshop about integrating remote sensing data with personal sensors. Then, he mentioned that they will soon launch the call for applications for a short-term sabbatical for a data scholar to work with geospatial data at NIEHS. Finally, he said that they will develop a webinar as part of the Prince Mahidol Award on Monday, December 14, 2020 at 7AM EST (GMT-5). He said that the first half of the meeting will describe WHO/WMO efforts with early warning systems, and the second half of the meeting will incorporate environmental health issues related to concurrent disasters (e.g. COVID-19 and climate-related disasters).

John Haynes (NASA) mentioned that there will be a time of transition, including the departure of the USGCRP director and US presidential elections. He said that President-elect Joe Biden has named a new COVID-19 Transition Advisory Board with 13 health experts, including three Co-Chairs (Davis Kessler, former FDA Commissioner; Vivek Murthy, former US Surgeon General; Marcella Nunez-Smith, associate professor at Yale U.). He also highlighted that Rebecca Katz (Georgetown U.), who has been active in the CoP, will be serving as an advisor to this COVID-19 Transition Advisory Board.

Ben Zaitchik (Johns Hopkins U.) encouraged all CoP members to register for the upcoming American Geophysical Union Virtual Fall Meeting 2020 and noted the reduced registration rates for attendees from low- and middle-income countries. He said that he would share the final agenda of GeoHealth sessions via the CoP listserv in the upcoming weeks. He also mentioned that abstracts for [late-breaking sessions](#) on COVID-19 topics will be due later this week. He said that this meeting has been coordinated to spread across time zones to accommodate global participation. Second, he mentioned that his team has harmonized the COVID-19 hydrometeorological data on [GitHub](#) as part of NASA-funded research. He requested feedback from CoP members on the dataset, and he highlighted said that it has been challenging to work across communities and harmonize datasets with appropriate data cleaning and resolution.

Ali Akanda (U. of Rhode Island) shared a new EPA research grant, [Viral Pathogen and Surrogate Approaches for Assessing Treatment Performance in Water Reuse](#).

Josh Colston (U. of Virginia) mentioned that he will be co-chairing the *Global Health: Planetary Health and Malaria* session at the American Society of Tropical Medicine and Hygiene Annual Meeting next week. He said that this session will include an oral presentation from their research team (PI: Ben Zaitchik, Johns Hopkins U.) on Earth observation data and enteric infections.

Rifat Hossain (WHO) mentioned that they are exploring a series of research projects related to climate migration and aim to create academic research partnerships with universities. He said that they aim to first define climate migration and related elements. **Juli Trtanj (NOAA)** asked about the specific datasets that they plan to use for this project. **Rifat Hossain (WHO)** said that they are still defining the research area, and then will be able to identify the appropriate datasets for these projects. **Juli Trtanj (NOAA)** stated that they would be happy to coordinate a 30-minute telecon as a general CoP and WHO update.

Helen Amos (NASA Goddard) shared a new publication, [Multi-hazard Climate Risk Projections for the United States](#) (by Binita and colleagues, 2020).

Juli Trtanj (NOAA) thanked all Small Work Group leads for their leadership over the past 18 months and willingness to continue in this leadership role for the upcoming year. She said that they plan to discuss the upcoming plans for the [Small Work Groups](#) at an upcoming meeting, noting that they will focus on Small Work Groups 1-5, and the Small Work Groups 6-7 will serve as cross-cutting themes. She stated that the objective of the Small Work Groups is to integrate the current activities of the CoP members, describe the value of integrated information systems in these applications, identify critical needs and tangible steps to meet these needs, and seek potential financial and data resources to meet overall objectives.

John Balbus (NIEHS) mentioned that WHO just released the [WHO Guidance for Climate Resilient and Environmentally Sustainable Health Care Facilities](#). He also mentioned the topic of strengthening health care infrastructure is of interest to PAHO and the National Academies of Sciences, Engineering, and Medicine. He stated that an upcoming NASEM Grand Challenge Initiative (e.g. [Climate Change and Human Health](#)) will include an element of resilient health care systems. He welcomed all CoP members to join this Small Work Group.

Juli Trtanj (NOAA) suggested the opportunity for Small Work Group leads to meet and discuss a collaborative approach to leverage synergies across work streams. **Ben Zaitchik (Johns Hopkins U.)** agreed that a collective meeting can help define appropriate steps to connect synergies across work streams. He stated that the absence of resources can offer opportunities to seek next steps. He mentioned that the Small Work Group on Heat has facilitated connections with the Global Heat Health Information Network GHHIN, especially with support from Juli Trtanj (NOAA) and Joy Shumake-Guillemoto (WMO). **Dorian Janney (NASA Goddard/GPM mission)** agreed and emphasized the valuable resource to meet with other CoP members and identify the best approach to continue advancing the work stream. **Juli Trtanj (NOAA)** agreed that they plan to coordinate a 60-minute meeting with the Small Work Group leads to discuss these next steps before the AGU Fall Meeting 2020, and then the Small Work Group leads can coordinate brief dialogues with the respective CoP members. **Helena Chapman (NASA HQ/BAH)** stated that she will prepare a Doodle Poll to schedule the best available meeting time.

Juli Trtanj (NOAA) mentioned that they would plan to have “deep dive” discussions on the Small Work Group topics, starting with heat and followed by air quality and vector-borne and water-related diseases.

John Haynes (NASA HQ) and **Juli Trtanj (NOAA)** thanked CoP members for their continued contributions to the field and engagement in the group discussion. They agreed that this telecon had provided an opportunity to share information, connect researchers, and leverage resources that can amplify current activities related to the COVID-19 response.

John Haynes (NASA HQ) and **Juli Trtanj (NOAA)** closed the telecon and mentioned that the next telecon would be scheduled for Tuesday, December 1st at 8:30AM EST (GMT-5).

Adjourned: 9:50 AM EST (GMT-5)