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

June 30, 2020

In Attendance: 42 participants

Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Sue Estes (U. of Alabama in Huntsville), John Balbus (NIEHS), Ann Liu (NIEHS), Trisha Castranio (NIEHS), Amanda Quintana (USGCRP), Krista Hoevemeyer (USGCRP), Lillian Cooke (NASA HQ), Jonathan O'Brien (NASA ARSET), Anna Borovikov (NASA GMAO/SSAI), Cynthia Hall (NASA Earth Science Data Systems), Betzy Hernandez (NASA/U. of Alabama in Huntsville), Stephanie Schollaert Uz (NASA Goddard), Dorian Janney (NASA Goddard/GPM), Helen Amos (NASA Goddard/SSAI), Assaf Anyamba (USRA/NASA Goddard), Sushel Unninayar (NASA Goddard/GESTAR/MSU), Ray Kiess (USAF, 14th Weather Squadron), Bill Frey (USAF, 14th Weather Squadron), Bryan Richards (USGS National Wildlife Health Center), Lisa Conti (Florida Department of Agriculture), Emma Flaherty (Risk Informed Early Action Partnership, REAP), Ben Zaitchik (Johns Hopkins U.), Moiz Usmani (U. of Florida), Josh Colston (U. of Virginia), Ali Akanda (U. of Rhode Island), Shannon Vattikuti (Mississippi State U.), Rowena Christiansen (U. of Melbourne Medical School, Australia), Ana Isabel Ribeiro (Institute of Public Health, U. of Porto, Portugal), Jorge Del Rio Vera (UNOOSA), Ado Muhammad (ACCREC; CHESRAD Nigeria), Didier Davignon (Meteorological Service of Canada), Serge Olivier Kotchi (Public Health Agency of Canada), Mark Urban (RedCLARA), Luis Cadenas (RedCLARA), Adrián Guzmán González (Mexican Space Agency), Eduardo Velez, Mercy Borbor (Escuela Superior Politecnica del Litoral, Ecuador), David Rodriguez (Council of Health Ministers in Central America, COMISCA/SICA, El Salvador), Claudia Herrera (Coordination Center for the Prevention of Natural Disasters in Central America, CEPREDENAC), Tania Altamirano.

Summary Notes:

*Prepared by Helena Chapman (NASA HQ/BAH)

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

Juli Trtanj (NOAA) shared an update that the WMO/WHO Climatological, Meteorological and Environmental Factors in the COVID-19 Pandemic: An International Virtual Symposium on Drivers, Predictability and Actionable Information is scheduled for August 4-6, 2020. She mentioned that the Scientific Committee included several CoP members – Ben Zaitchik (Johns Hopkins U.), Juli Trtanj (NOAA), Joy Shumake-Guillemot (WMO/WHO), and Neville Sweijd (COVID-19 Environmental Reference Group, South Africa). She encouraged all CoP member to submit abstracts by July 10, 2020. Then, she mentioned that the Global Heat Health Information Network (GHHIN) will be offering the Heat Health Masterclass Series 2020 in June and July 2020. The remaining two virtual classes will be held from 11:00-12:30PM EDT (GMT-4) on June 30 (Economic Valuation of Heat-health Impacts and Interventions) and July 21 (Developing an Effective Heat Health Action Plan (HHAP) for your city). Finally, she stated that the 2nd Global Forum on Heat and Health (Theme: Heat-healthy Cities and Workplaces) will hold

virtual dialogues with facilitated panel discussions and Q&A for audience engagement on July 28 (*Heat in the City*) and July 29 (*Heat in the Workplace*).

Didier Davignon (Meteorological Service of Canada) asked about the proposed discussion group (by Neville Sweijd) on environmental determinants and if the WMO/WHO Workshop was an outcome of this outreach effort. **Juli Trtanj** (NOAA) confirmed that the WMO/WHO Workshop was a result of this discussion group (including Neville Sweijd's efforts). She encouraged all CoP members to attend and participate in this workshop. She also suggested that we revisit environmental determinants as a subgroup or a portion of each CoP meeting.

Helena Chapman (NASA HQ/BAH) shared the two recent web features on the NASA, ESA and JAXA COVID-19 Earth Observation Dashboard on the NASA (<u>NASA</u>, <u>Partner Space Agencies Amass Global View of COVID-19 Impacts</u>) and ESA (<u>Space Agencies Join Forces to Produce Global View of COVID-19 Impacts</u>) webpages.

Juli Trtanj (NOAA) encouraged CoP members to prepare abstracts for upcoming sessions at the American Geophysical Society Fall Meeting 2020 (deadline: July 29, 2020) and American Meteorological Society Annual Meeting 2021 (deadline: August 3, 2020). Sushel Unninayar (NASA Goddard/GESTAR/MSU) shared the upcoming session, Earth observations and environmental modeling applications for understanding, quantifying and predicting the seasonality (or not) and propagation of COVID-19, at the American Geophysical Union Fall Meeting 2020.

Trisha Castranio (NIEHS) shared the upcoming <u>Global Environmental Health Day</u> on July 1, 2020, as a virtual event showcasing four seminars on impacts of climate change on human health. During this event, she mentioned that they plan to launch the <u>Climate Change and Human Health literature portal</u>.

Rowena Christiansen (University of Melbourne, Australia) provided an overview of the how temperature, humidity, latitude, and seasonality have impacted COVID-19 transmission in Australia. She referenced the *JAMA Network Open* paper (<u>Temperature, humidity, and latitude analysis to estimate potential spread and seasonality of COVID-19</u> by Sajadi et al, 2020) to encourage further research applications in the southern hemisphere.

Juli Trtanj (NOAA) asked if seasonality with influenza had changed and can mimic trends in COVID-19 transmission. Sushel Unninayar (NASA Goddard/GESTAR/MSU) added that he was curious about the variation in trends of influenza cases alongside COVID-19 transmission over the past few months. Rowena Christiansen (University of Melbourne, Australia) stated that in Victoria, statistics reported a 50% decrease in influenza cases during the current COVID-19 pandemic, when compared to the same time in previous years. She mentioned that the lockdown measures have changed social interactions and personal hygiene practices, so it will be interesting to tease out these confounders.

Mark Urban (RedCLARA) provided an overview on RedCLARA, which is a federation of national research networks through the continent with a mission to strengthen development of science, education, culture, and innovation using advanced networks. He mentioned that they have established partner collaborations to publish and reference scientific data as well as offer four thematic working groups (e.g. education in digital age, climate change, high performance computing and operations, health) for continued networking.

David Rodriguez (Council of Health Ministers in Central America, COMISCA/SICA, El Salvador) mentioned that they have a network of field epidemiologists and would be interested in collaborating with RedCLARA. Juli Trtanj (NOAA) stated that they have collaborated with Inter-American Institute for Global Change Research on the Belmont Forum. She mentioned that they had focused on capacity-building activities and could connect with other CoP members.

Mark Urban (RedCLARA) mentioned that his team looks forward to connecting with these agencies.

Claudia Herrera (Coordination Center for the Prevention of Natural Disasters in Central America, CEPREDENAC) provided an overview of the COVID-19 Coordination and Information Platform for CEPREDENAC. She stated that this platform serves as a strategic tool for informed decision-making, allows strengthening response and resilience capacity for the most vulnerable populations, and provides insight for Central American Integration System (Sistema de la Integración Centroamericana, SICA) Member States to develop contingency plans for the COVID-19 pandemic. She mentioned that some special needs include NASA products (e.g. population, troposphere changes) and Earth observations (e.g. volcanos, earthquakes, forest fires).

Juli Trtanj (NOAA) asked if they used any seasonal or weather prediction in this COVID-19 dashboard. Claudia Herrera (CEPREDENAC) mentioned that they used data from the NASA SERVIR dashboard, Central American Climate Outlook Forum (linked to the Regional Committee on Hydraulic Resources, CRRH-SICA), and other NASA data like ocean surface temperature and soil moisture. Juli Trtanj (NOAA) mentioned that this initiative is an excellent testimony to highlight for the GEO Secretariat.

Jorge Del Rio Vera (UNOOSA) shared that the <u>Space2030 Agenda</u>, which is being reviewed by Committee on the Peaceful Uses of Outer Space (COPUOS) Member States, will consider aspects for Earth observations and health. He stated that <u>upcoming COPUOS meetings</u> were rescheduled, including the COPUOS Legal Subcommittee (59th session) on September 7, 2020, and the COPUOS (63rd session) from September 8-10, 2020.

Emma Flaherty (Risk Informed Early Action Partnership, REAP) shared information about the <u>Citizens' Climate Jury: How to make 1 billion people safer from disasters?</u> event on July 1, 2020 (11AM-12:30PM EDT/GMT-4), as part of the London Climate Action Week.

Juli Trtanj (NOAA) asked CoP members about potential topics for 'deep dive' discussions at upcoming teleconferences. Due to the upcoming WMO/WHO Workshop, she suggested a follow-up 'deep dive' on environmental determinants related to COVID-19 transmission. Sushel Unninayar suggested a discussion on the collateral impacts of COVID-19 on air pollution, vector-borne diseases, and seasonal influenza. Ben Zaitchik (Johns Hopkins U.) suggested a discussion on the impacts of non-environmental covariables like behavior, mobility, and virtual practices. Helena Chapman (NASA HQ/BAH) suggested a discussion on the impacts of COVID-19 transmission on health care service delivery for concurrent health priorities like tuberculosis, HIV/AIDS, and malaria.

Juli Trtanj (NOAA) and **Ben Zaitchik (Johns Hopkins U.)** mentioned that depending on the general interest, this WMO/WHO Workshop may launch a follow-up event (e.g. workshop, conference).

Juli Trtanj (**NOAA**) reminded CoP members to provide brief testimonials (e.g. paragraph) to Helena Chapman (helena.chapman@nasa.gov) about how the GEO Health CoP helped them network, communicate, leverage resources, and advance their research, especially during the COVID-19 pandemic. **Helena Chapman** (**NASA HQ/BAH**) mentioned that we would like to showcase these success stories during this global challenge to the GEO Secretariat.

Juli Trtanj (NOAA) and Helena Chapman (NASA HQ/BAH) thanked all presenters for their outstanding presentation, 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. They also requested that GEO Health CoP members share the CoP telecon schedule with their colleagues.

Juli Trtanj (NOAA) closed the telecon and mentioned that the next telecon would be scheduled for Tuesday, July 7th at 8:30AM EDT (GMT-4). The focus area would be a follow-up on the topic of environmental determinants related to COVID-19 transmission.

Adjourned: 10:00 AM EDT (GMT-4)