

GEO Health Community of Practice (CoP)
Telecon: Focus on COVID-19 Transmission
October 13, 2020

In Attendance: 34 participants

Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Sue Estes (U. of Alabama in Huntsville), Trisha Castranio (NIEHS), Pavel Sil (NIEHS), Ana Prados (NASA Goddard), Cynthia Hall (NASA Earth Science Data Systems), Dorian Janney (NASA Goddard; GPM mission), Assaf Anyamba (USRA/NASA Goddard), Helen Amos (NASA Goddard/SSAI), Sushel Unninayar (NASA Goddard/GESTAR/MSU), Corey Hummel (HQ USAF, Directorate of Air Force Weather), Ray Kiess (USAF, 14th Weather Squadron), Bob Chen (CIESIN/Columbia U.; NASA SEDAC), Bryan Richards (USGS National Wildlife Health Center), Allan Auclair (USDA), Nathan Pavlovic (Sonoma Technology), Ben Zaitchik (Johns Hopkins U.), Josh Colston (U. of Virginia), Susan Anenberg (George Washington U.), Antar Jutla (U. of Florida), Aaron Naeger (U. of Alabama in Huntsville), Augustin Vintzileos (U. of Maryland-ESSIC, College Park), Olayinka Osulale (Elizade U., Nigeria), Niloofar Ganjian (Health Finance Institute), Ramesh Krishnamurthy (WHO), Steven Ramage (GEO Secretariat), Adrián Guzmán (Mexican Space Agency), Didier Davignon (Environment and Climate Change Canada, Meteorological Service of Canada), Melissa MacDonald (Environment and Climate Change, Canada), Stéphanie Brazeau (Public Health Agency of Canada), Kawa Shinbun, Matthew Romm, Rosemary.

Summary Notes:

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

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

Helena Chapman (NASA HQ/BAH) mentioned that they would share more details about the upcoming [GEO Virtual Symposium](#) from November 2-6, 2020, when more information was provided by the GEO Secretariat. She stated that the meeting agenda will include GEO discussions between principal leaders and ministers, scientific and technical sessions, and virtual booths. Then, she shared that the NASA Applied Remote Sensing Training (ARSET) will be offering an advanced webinar, [MODIS to VIIRS Transition for Air Quality Applications](#), on October 22, 2020 (9-10:30AM EDT/GMT-4 or 4-5:30PM EDT/GMT-4). Next, she encouraged CoP members to share information about their planned attendance at upcoming conferences, such as the American Public Health Association Annual Conference (October 24-28, 2020) and American Geophysical Union (December 7-11, 2020). She stated that their NASA Health and Air Quality Applications team will be presenting a poster presentation, *Integrating Satellite Data to Strengthen One Health Surveillance of Emerging Infectious Diseases*, at the American Public Health Association's [Veterinary Public Health Special Primary Interest Group poster session](#) on Sunday, October 25, 2020. Finally, they appreciated the invitations to provide brief EO4HEALTH presentations at the [4th Space Conference of Paraguay](#) and the Space Health Symposium (Australia) last week. She mentioned that since World Space Week 2020 has finalized, they look forward to brief updates by the Paraguay Space Agency (Alejandro Román),

Mexican Space Agency (Adrián Guzmán), and [Space Health Symposium](#) (Australia) (Rowena Christiansen, U. of Melbourne Medical School, Australia).

Juli Trtanj (NOAA) mentioned that they 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. She encouraged all CoP members to review the [Small Work Group webpage](#) to learn more about the activities and contact Helena Chapman (helena.chapman@nasa.gov) with their preferred group. She said that they plan to analyze the Small Work Group objectives, alignment with the GEO Work Programme, and opportunities with potential links to other networks. Next, she said that her NOAA team had a meeting with the Climate Partnership group, where they discussed collaborations with Canada on heat topics. They had a follow-up call with the Environment and Climate Change Canada to identify heat management needs across borders. **Didier Davignon (Environment and Climate Change Canada, Meteorological Service of Canada)** and **Melissa MacDonald (Environment and Climate Change, Canada)** said that they were unaware of this collaboration, but that they would love to be involved in this outstanding endeavor.

Juli Trtanj (NOAA) mentioned that her CDC colleagues working with harmful algal blooms (HABs) were interested to know if there was a US database for HAB incidence. She mentioned that they have significant NOAA resources related to HAB forecasts, but no US database. **Sushel Unninayar (NASA Goddard/GESTAR/MSU)** said that there may be data within sectors (including inside estuaries) working on topics related to the Chesapeake Bay, but was unsure about historical data. **Didier Davignon (Environment and Climate Change Canada, Meteorological Service of Canada)** mentioned that he is aware of some monitoring stations in the Great Lake region over the past few years.

Juli Trtanj (NOAA) requested agency updates from CoP members.

Steven Ramage (GEO Secretariat) mentioned the GEO Secretariat had submitted a decision paper to take on a fourth engagement priority related to urban resilience. This topic is directly related to health and urbanization topics. Next, he shared that there are four operational new [GEO working groups](#) – Capacity Development Working Group, Climate Change Working Group, Disaster Risk Reduction Working Group, and Data Working Group. Then, he stated that GEO Week 2020 will be held in November 2020, and with the virtual platform, it has provided an opportunity for other countries to present their work on Earth observations related to tasks of the GEO Work Programme. Finally, he mentioned that GEO Planning Board members plan to meet with each GEO initiative (e.g. 2-hour telecon), discuss the impacts of COVID-19 on activities, and present approaches for upcoming goals and projects over the next few years.

Juli Trtanj (NOAA) mentioned that the engagement priorities could have an intersection with health. **Steven Ramage (GEO Secretariat)** said that as they approach the GEO Plenary Week 2021 in South Africa, they would like to coordinate webinars, especially for EO4HEALTH in March or April 2021. In particular, he said that there is significant interest for climate action related to human health. He mentioned that it may be beneficial to coordinate a few meetings to connect GEO work groups on climate and human health. He recommended that EO4HEALTH prepare a brief summary (400-500 words) that can be disseminated to other Work Groups.

Steven Ramage (GEO Secretariat) shared the resource about the [EO4DG session](#) on the EO Toolkit for SDG11 and New Urban Agenda. He said that he will be moderating a session at the [Fourth Dialogue: On Using Data](#) on October 14, 2020, as part of the collaboration with UN Statistics Division, Swiss Government, Wellcome Trust, Nvidia, and SANSA. **Juli Trtanj (NOAA)** agreed that these focused discussions can help connect global networks. **Steven Ramage (GEO Secretariat)** mentioned that Dave Borges (NASA Langley) would be the ideal contact since he is leading the Sub-group 1 in the GEO Disaster Risk Reduction Working Group (DRR-WG) across the GEO Work Programme.

Ben Zaitchik (Johns Hopkins U.) shared that they are working on the special issue of the *One Health* journal by El Sevier. Then, as part of the WMO COVID-19 Task Force team, he said that he is co-leading efforts to develop a first report that examines the environmental drivers – including the critical conditions and data analysis – to be released in December 2020. This Task Force will be charged with providing updates every six months for a total of 18 months post-symposium. He hopes that this information will be actionable for the wider community. **Didier Davignon (Environment and Climate Change Canada; Meteorological Service of Canada)** asked if WMO members were invited to join this task work. **Juli Trtanj (NOAA)** mentioned that the WMO Task Team was comprised of nominations from global Met Services, but that she was unsure about the WMO selection process.

Ramesh Krishnamurthy (WHO) shared that they are starting a project related to usable Earth observation data for estimating air pollution and SDG3 for countries. As they aim to develop the proper methodology, he stated that he would like to reach out to CoP members and request guidance on the best approach to access Earth observation data. **Juli Trtanj (NOAA)** mentioned that they welcome his updates at future CoP meetings. She asked about the specific air quality question and if it was linked to understanding differences in air quality impacts on human health during the COVID-19 pandemic. **Ramesh Krishnamurthy (WHO)** said that their team has not yet defined the specific question or variables to quantify, but that they plan to coordinate discussions with public health experts. **Juli Trtanj (NOAA)** offered the [NASA/ESA/JAXA Earth Observing Dashboard](#) as a possible resource for this project.

Bob Chen (CIRESIN/Columbia U.; NASA SEDAC) mentioned that the [UN World Data Forum](#) will be held from October 19-21, 2020. He described two sessions of interest for CoP members: *TA4.01: The Time for Data during COVID-19* (Monday, October 19, 2020 at 7AM EDT/GMT-4) and *TA2.05: Use of Geospatial Data to Support COVID-19 Response* (Tuesday, October 20, 2020 at 11:30AM EDT/GMT-4).

Stéphanie Brazeau (Public Health Agency of Canada) said that they have had significant interest with Earth observation data related to modeling using mobile devices – such as proximity to how people travel, when people seek health care services, land cover and urbanization. Her team aims to seek any follow-up public health measures to help with decision-making. **Juli Trtanj (NOAA)** asked if the final product will be a smartphone app. **Stéphanie Brazeau (Public Health Agency of Canada)** confirmed that they plan to develop a data dashboard, as they are not looking to aggregate individual data at this time.

Juli Trtanj (NOAA) mentioned that there are potential collaborations on heat-related topics with the Americas Climate Services partnership (US-Canada-Mexico), especially to explore the real-time impacts and establish a management plan for heat forecast and long-term heat risk. **Stéphanie Brazeau (Public Health Agency of Canada)** said that she would be interested to learn more about these potential collaborations.

Trisha Castranio (NIEHS) shared the [Climate Change and Its Impacts on Children and Youth](#) webinar on October 21, 2020 (1-2PM EDT/GMT-4) as part of the Climate Environment and Health Seminar Series. **Steve Ramage (GEO Secretariat)** mentioned that this seminar series is closely linked to some of the GEO Work Programme activities related to climate and disaster. **Trisha Castranio (NIEHS)** said that Aubrey Miller (NIEHS) works on disasters, and she would be happy to connect these discussion points with them. She said that since they are starting a new fiscal year, they are working on new strategic plans and would appreciate feedback from this group. She emphasized that NIEHS [Global Environmental Health](#) remains interested to connect Earth observations for health.

Adrián Guzmán (Mexican Space Agency) shared that they had a series of presentations for World Space Week 2020, and he plans to share updates at the next CoP telecon.

Ana Prados (NASA Goddard) shared that she will be offering an advanced webinar, [MODIS to VIIRS Transition for Air Quality Applications](#), on October 22, 2020 (9-10:30AM EDT/GMT-4 or 4-5:30PM EDT/GMT-4). She stressed that the webinar highlights the utility that the Visible Infrared Imaging Radiometer Suite (VIIRS) instrument can offer, complementary or alone to Moderate Resolution Imaging Spectroradiometer (MODIS) data. She said that the webinar will guide attendees through the details on how to access and use data through the practical exercises. Then, she mentioned that the NASA ARSET team has collaborated with the Global Heat Health Information Network (GHHIN) to develop a virtual training, [Satellite Remote Sensing for Urban Heat Islands](#), 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. She stated that speakers will describe the integration of satellite data and in-situ data for validation.

Trisha Castranio (NIEHS) shared a message, on behalf of **John Balbus (NIEHS)**, that US/Canadian colleagues have worked with the World Health Organization to develop a new, more detailed guidance on [Climate Resilient and Environmentally Sustainable Health Care Facilities](#). She said that this document is very timely and important for our public health and environmental health security concerns. Then, she also mentioned that **John Balbus (NIEHS)** has two presentations at the American Public Health Association virtual meeting. He will present, [Developing a System of Health Indicators for Climate Change](#), on the *Climate Changes Health: A Public Health Roundtable*, on Tuesday, October 27, 2020. He will also moderate the session, [Science to Support Decision-Making and Policies: Data, Capacity, Research, and Reporting](#), of the Environment section on Wednesday, October 28, 2020.

Juli Trtanj (NOAA) and **Helena Chapman (NASA HQ/BAH)** 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. In upcoming telecons, they plan to continue the COVID-19 discussions, but also discuss the workstream plans, starting with heat and then water quality.

Juli Trtanj (NOAA) closed the telecon and mentioned that the [next telecon](#) would be scheduled for Tuesday, October 27th at 8:30AM EDT (GMT-4). The agenda will include brief presentations from the Paraguayan and Mexican Space Agencies on their World Space Week activities!

Adjourned: 9:50 AM EDT (GMT-4)