

GEO Health Community of Practice (CoP)
Telecon: Focus on COVID-19 Transmission
October 27, 2020

In Attendance: 30 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Sue Estes (NASA/U. of Alabama in Huntsville), John Balbus (NIEHS), David Green (NASA HQ), Cynthia Hall (NASA Earth Science Data Systems), Dorian Janney (NASA Goddard/GPM mission), Helen Amos (NASA Goddard/SSAI), Anna Borovikov (NASA/GMAO), Sushel Unninaray (NASA Goddard/GESTAR/MSU), Ray Kiess (USAF, 14th Weather Squadron), Bob Chen (CIESIN/Columbia U.; NASA SEDAC), Nathan Pavlovic (Sonoma Technology), Ben Zaitchik (Johns Hopkins U.), Josh Colston (U. of Virginia), Ali Akanda (U. of Rhode Island), James Kubicki (U. of Texas at El Paso), Olayinka Osuolale (Elizade U., Nigeria), Florian Franziskakis (GEO Secretariat), Yana Gevorgyan (GEO), Juan Castillo (PAHO), Adrián Guzmán (Mexican Space Agency), Alejandro Roman Molinas (Paraguayan Space Agency), Didier Davignon (Environment and Climate Change Canada, Meteorological Service of Canada), Melissa MacDonald (Environment and Climate Change Canada), Celine Audette (Environment and Climate Change Canada), Jorge Del Rio Vera (UNOOSA), Susanna Ehlers (Inter-American Institute for Global Change Research), Mona (International Space Program).

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](#) will be held from November 2-6, 2020. The meeting agenda will include GEO discussions between principal leaders and ministers, scientific and technical sessions, and virtual booths. Then, he 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 Fall Meeting (December 1-17, 2020). He stated that their NASA Health and Air Quality Applications team presented 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](#).

Florian Franziskakis (In-Situ Data Management Specialist, GEO Secretariat) shared information about the [open call](#) for sharing in situ data with the World Environment Situation Room (WESR), a future United Nations Environment Programme (UNEP) online data and knowledge platform. He said that it will enable users to visualize, interrogate, access, link and download data, information, and knowledge products regarding the world environment situation in near real-time. In particular, he wanted to inquire if CoP members have near real-time in situ data like air quality stations.

Jorge Del Rio Vera (UNOOSA) shared an update that at the past Committee on Earth Observation Satellites (CEOS) meeting, several dashboards were presented, including the [NASA/ESA/JAXA Earth Observing Dashboard](#). He also mentioned that Astrid-Christina Koch (European Commission) had discussed daily air quality data. Hence, he wondered if GEO had initiated communications with other satellite communities – like CEOS or the European Commission – and if so, how those conversations have facilitated collaborations. **Florian Franziskakis (In-Situ Data Management Specialist, GEO Secretariat)** mentioned that although they have considered these networks, the current agenda was more aligned on the GEO community to bring data focused on biodiversity, oceans, water quality, and health – including tropical diseases related to the effects of climate change.

David Green (NASA HQ) asked if they had reviewed opportunities to connect with [NASA Land, Atmosphere Near real-time Capability for EOS \(LANCE\)](#) for near real-time data and imagery. **Florian Franziskakis (In-Situ Data Management Specialist, GEO Secretariat)** said that he appreciated the link and would review the website and follow-up.

Ali Akanda (U. of Rhode Island) asked how academic research faculty can contribute or become involved in this initiative. **Didier Davignon (Environment and Climate Change Canada)** said that they would also be interested to learn more about the data management capacity. **Florian Franziskakis (In-Situ Data Management Specialist, GEO Secretariat)** said that he would be happy to connect (ffranziskakis@geosec.org).

John Haynes (NASA HQ) mentioned that the [Global Health Security Agenda \(GHSA\) Ministerial Meeting 2020](#) was hosted by the Kingdom of Thailand. In one GHSA Ministerial Side Meeting, there was a One Health educational panel and One Health in government panel, with over 65 participants. He mentioned that he participated alongside CDC and USDA colleagues to discuss the integration of One Health into policy at government levels. In his panel, he described the use of Earth observations for public health research activities as well as the GEO Health CoP activities and COVID-19 teleconferences.

Ben Zaitchik (Johns Hopkins U.) reminded CoP members that the early bird registration deadline for the American Geophysical Union Virtual Fall Meeting 2020 is October 30, 2020. He said that this meeting has been coordinated to spread across time zones to accommodate global participation. He mentioned that many events are pre-recorded, and there are significant discounts for attendees from low- and middle-income countries. **Ali Akanda (U. of Rhode Island)** mentioned that he would encourage our international partners and incoming graduate students to register for this conference.

Helena Chapman (NASA HQ/BAH) mentioned that she was invited to speak about the use of Earth observations to enhance public health surveillance at two academic conference series at the [Instituto de Medicina Molecular João Lobo Antunes](#) (Lisbon, Portugal) and the Universidad Católica del Cibao (La Vega, Dominican Republic).

Juli Trtanj (NOAA) described the [Belmont Forum](#) and opportunities for potential funding with the Collaborative Research Action on Climate, Environment and Health call. Then, she mentioned that as the Heat Urban Island Campaign had successfully occurred across 13 US cities, they planned to connect with these cities and inquire about how they are using this information.

John Balbus (NIEHS) mentioned that he had one APHA presentation, [Developing a System of Health Indicators for Climate Change](#) on the *Climate Changes Health: A Public Health Roundtable*, and moderated the session, [Science to Support Decision-Making and Policies: Data, Capacity, Research, and Reporting](#), of the Environment section. He also shared that NIEHS just completed a six-seminar series (including Global Environmental Health Day) on climate and environmental health seminars, which are now available on the [CEHSS Series](#) YouTube channel.

Alejandro Roman Molinas (Paraguayan Space Agency) presented an overview of the 4th **Space Conference of Paraguay**, which aligned with the World Space Week 2020 activities. Using the theme, *Benefits of Space Science and Technologies*, he said that this Forum of Applications of Earth Observations had collaborations with UNDRR and NASA Disasters, with more than 100 panelists. [Sessions](#) included EO1 (Land Management), EO2 (Investigation and Capacity Building), EO4 (Data Access Platforms), EO5 (Health), and EO6 (Ecosystems and Biodiversity). Next, he described that although Paraguay has low reported COVID-19 cases, they have other health challenges (e.g. vector-borne diseases) and are working closely with the Paraguay Ministry of Health to develop their dengue dashboard as a tool for future public health measures. Then, he mentioned that the first Paraguay satellite (GuaraniSat-1), with support from JAXA, UNOOSA and Paraguay Scientific Society, is scheduled for launch in early 2021. He said that one of the missions is to focus on Chagas disease, where satellite data can improve their mapping of the vector presence in field applications and aid in mitigation efforts.

Dorian Janney (NASA Goddard/GPM mission) said that she serves as the lead for GLOBE Mission Mosquito team, where they teach ways to gather and use satellite data. She requested more information about the dashboard and how they could connect their networks. **Alejandro Roman Molinas (Paraguayan Space Agency)** stated that the president of the Paraguay Scientific Society serves as the GLOBE contact. Since they plan to have the final dashboard version in the next few weeks, they would be interested to collaborate with GLOBE and other health initiatives.

Juli Trtanj (NOAA) shared her enthusiasm for these current initiatives. She mentioned that NOAA and Belmont Forum partners are funding research that focuses on environmental suitability for in situ and satellite mapping related to dengue. She wondered if the satellite aims to incorporate in situ data mapping in terms of prediction modeling. **Alejandro Roman Molinas (Paraguayan Space Agency)** mentioned that although it is not aimed as a prediction model, they are working with CONAI (who had developed a prediction model in Argentina) to test field applications in Paraguay.

Adrian Guzmán González (Mexican Space Agency) presented an overview of numerous research applications that were presented at the 6th Mexican Congress for Space Medicine 2020 from October 8-9, 2020. He also shared some health research activities at the International Academy of Social Sciences and Health (AICSS) and other academic institutions. He also discussed some upcoming plans of the Mexican Aerospace Fair (FAMEX) 2021. Finally, he mentioned that some scientists are working on geolocation and epidemiology of COVID-19, including vaccine development.

Sushel Unninayar (NASA Goddard/GESTAR/MSU) asked if the international collaborations related to vaccine development for SARS-CoV-2 were viewed as competitive or collaborative. **Adrian Guzmán González (Mexican Space Agency)** mentioned that these initiatives have been quite collaborative, especially in terms of proposed plans for vaccine distribution and pricing. **David Green (NASA HQ)** mentioned that Ricardo Quiroga (ricardo.quirogavanegas@nasa.gov) is the NASA contact for the AmeriGEO region.

Helena Chapman (NASA HQ/BAH) mentioned that the NASA ARSET team has collaborated with the Global Heat Health Information Network (GHHIN) to develop the [Satellite Remote Sensing for Urban Heat Islands](#) three-part webinar, which 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. Next, she shared one publication, [Using NASA's Earth Observations to Predict, Monitor, and Respond to Vector-borne and Water-related Disease](#), by **Dorian Janney (NASA Goddard/GPM mission)**, in the October 2020 issue of the *One Health Newsletter*. Then, she reminded CoP members that November 3rd is the annual celebration of [One Health Day](#), supported by the One Health Initiative, One Health Commission, and One Health Platform. She said that you can [register](#) your events to be included on a global activity map by the One Health Commission. Finally, she also mentioned that the [One Health Academy](#) coordinates a monthly seminar series, where Dr Jessica Petrillo will present the webinar, [A Guided Exploration of COVID-19 and One Health](#), on Tuesday, October 27, 2020 from 7-8PM EDT/GMT-4.

John Haynes (NASA HQ) said that they would be providing a brief overview and update on the GEO Health CoP and EO4HEALTH for the GEO Program Board on Thursday, October 29, 2020.

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.

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, November 10th at 8:30AM EST (GMT-5).

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