

**GEO Health Community of Practice (CoP)**  
**Telecon: Focus on COVID-19 Transmission**  
September 29, 2020

**In Attendance:** 14 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Trisha Castranio (NIEHS), Anna Borovikov (NASA GMAO/SSAI), Ana Prados (NASA Goddard), Sean McCartney (NASA ARSET), Cynthia Hall (NASA Earth Science Data Systems), Assaf Anyamba (USRA/NASA Goddard), Sushel Unninarayan (NASA Goddard/GESTAR/MSU), Ray Kiess (USAF, 14<sup>th</sup> Weather Squadron), Bob Chen (CIESIN/Columbia U.; NASA SEDAC), Rowena Christiansen (U. of Melbourne Medical School, Australia), Leslie Friedlander.

**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 [Clean Air For All: 50 Years of the Clean Air Act Virtual Symposium](#) will be held on Tuesday, September 29, 2020 from 12-5PM EDT (GMT-4). He mentioned that he and Susan Anenberg (George Washington U.) would be panelists in the *Clean Air and Climate Change in the 21st Century* panel. Next, he mentioned that the US Environmental Protection Agency will hold the [SARS CoV-2 in Wastewater Monitoring: Linking Research and Application to Meet Immediate Needs](#) webinar on Wednesday, September 30, 2020 from 2-3PM EDT (GMT-4). Then, he mentioned that the National Academies' Exchange Program will hold [The COVID-19 Dashboard: Deciphering the Data, Visualizing the Virus](#) webinar on Wednesday, September 30, 2020 from 4-5PM EDT (GMT-4). Finally, he shared that the [Space Apps Challenge 2020](#) will be held from October 2-4, 2020.

**Rowena Christiansen (U. of Melbourne Medical School, Australia)** shared that the Ad Astra Vita's [Space Health Symposium](#) will be held from October 5-6, 2020, with the first three daily sessions scheduled in the late afternoon or evening for EDT (GMT-4) time zones. She thanked CoP members who have registered for the event as attendees or presenters and encouraged all CoP members to register. She confirmed that 200 people have registered for the event to date.

**John Haynes (NASA HQ)** mentioned that he would share more details about the upcoming [GEO Virtual Symposium](#) from November 2-6, 2020, when more information was provided by the GEO Secretariat. He stated that the meeting agenda will include GEO discussions between principal leaders and ministers, scientific and technical sessions, and virtual booths. Then, he 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. Attendees can register for one of two session offerings from 9-10:30AM EDT (GMT-4) or 4-5:30PM EDT (GMT-4). Finally, 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 (December 7-11, 2020).

**Juli Trtanj (NOAA)** mentioned that the WMO COVID-19 Task Force has been discussing how to synthesize the workshop outcomes on environmental drivers and provide global guidance on data, products, and forecast information. She said that they are discussing plans to develop a future symposium with a One Health theme, which can incorporate biodiversity and animal-human interactions into the wider discussion.

**Helena Chapman (NASA HQ/BAH)** reminded CoP members that the [GEO Americas Caucus](#) recently confirmed that health would serve as the fifth focus area, following biodiversity and ecosystem sustainability, disaster resilience, food security and sustainable agriculture, and water resources management. She mentioned that [AmeriGEO Week 2020](#) was held virtually from September 7-8, 2020, and she provided the Earth Observations for Health (EO4HEALTH) update at the Americas Caucus on September 9, 2020. In this brief update, she described the small work groups, research projects, and COVID-19 teleconferences, and highlighted that the EO4HEALTH and CoP aim to increase participation across regions and encourage cross-cutting disciplines. Second, she mentioned that they were requested to provide an EO4HEALTH update at the next US GEO Americas Caucus. Third, she mentioned that **John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** presented overview presentations of NASA, NOAA, and EO4HEALTH at the Environmental Sub-Group of the One Health Federal Interagency Meeting, to highlight the utility of Earth observations for public health applications. Finally, she mentioned that she will be presenting an overview presentation on EO4HEALTH (in Spanish) for the [4th Space Conference of Paraguay](#), which will be held from October 4-10, 2020.

**Juli Trtanj (NOAA)** mentioned that one question raised in the previous meetings was the current or potential engagement with the military and Department of Defense teams. She asked CoP members if they were collaborating with the military services in their countries.

**Bob Chen (CIESIN/Columbia U.; NASA SEDAC)** shared that they have interacted with the Army Corps, especially on how to conduct environment security analyses, where they extract data from environmental and socioeconomic data sources and develop analytical tools. He described the [Data Analytics and Tools for Ecoscurity](#) (DANTE) project as an open source software tools that can facilitate interdisciplinary analyses of an array of environmental, demographic, economic, and health variables. Then, he mentioned that they plan to collaborate with the GEO Human Planet Initiative and run the challenge, [Planet, with People](#), for the upcoming Space Apps Challenge from October 2-4, 2020. He said that this specific challenge brings in population data and related resources using remote sensing to detect buildings. Finally, he shared that the [Global Urban Population Exposure to Extreme Heat](#) webinar (Speaker: Cascade Tuholske) will be held on Tuesday, September 29, 2020 at 1PM EDT (GMT-4).

**John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** requested agency updates from CoP members.

**Trisha Castranio (NIEHS)** shared the NIEHS Global Environmental Health Program's Climate Environment & Health webinar, [Ensuring Equitable Response to Climate-Related Disasters during the COVID-19 Pandemic](#), which will be held on Tuesday, September 29, 2020 from 11AM-12:30PM EDT (GMT-4). She said that this webinar aims to explore how climate change, COVID-19, and racial injustice interact to increase health risks for disadvantaged populations, and what can be done to address those disparities. Then, she mentioned that the US GEO is currently working on the framework, especially how to expand activities to agencies who are unaware of the utility of Earth observations. She mentioned that this may be an opportunity for GEO Health CoP members to present a brief overview at an upcoming teleconference.

**Juli Trtanj (NOAA)** shared that since the Global Heat Health Information Network (GHHIN) Master Classes were successful, the team plans to develop future discussions on heat vulnerability mapping in urban environments, including the intersection with infectious diseases. She stated that heat vulnerability mapping and links with infectious diseases can be a future topic for the CoP work plan discussions. Then, she mentioned that GHHIN is planning more open forums on heat in October 2020. Finally, she mentioned that the Heat Urban Island Campaign had successfully occurred across 13 US cities, modified for COVID-19 requirements.

**Juli Trtanj (NOAA)** mentioned that the telecons may proceed to biweekly meetings of 1-hour, with a 15-minute update, 30-minute presentation and discussion on the thematic area, and 15-minute discussion on COVID-19 research applications. **John Haynes (NASA HQ)** agreed and emphasized that the presentations are open to all GEO Health CoP members. He said that with a renewed focus on health in AmeriGEO, we can request a presentation by AmeriGEO leadership.

**Ana Prados (NASA Goddard)** mentioned that the NASA ARSET team will be collaborating with GHHIN to develop a virtual training on the *Urban Heat Island*, tentative for December 2020. Then, she shared that she will be offering an advanced webinar, [MODIS to VIIRS Transition for Air Quality Applications](#), on October 22, 2020. 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.

**Bob Chen (CIRESIN/Columbia U.; NASA SEDAC)** mentioned that the Space Apps COVID-19 Challenge was held in May 30-31, 2020. Since the Space Apps Challenge occurs annually, he mentioned that CoP members could become more involved and develop a future challenge. **John Haynes (NASA HQ)** shared the [COVID-19 Space Apps Challenge Winners](#). **Juli Trtanj (NOAA)** mentioned that she plans to reconnect with Shobhana Gupta (NASA) to discuss the Space Apps Challenges.

**Juli Trtanj (NOAA)** said that one of the Small Working Groups focuses on air quality, but the CoP meetings have not yet coordinated a 'deep dive' on wildfires, smoke, and impact on human health. She mentioned that the discussion on wildfires is important to explore changes in ecological systems and animal health, recognizing the One Health concept. **Rowena Christiansen (U. of Melbourne Medical School, Australia)** agreed that the One Health approach is timely and appropriate. **Sushel Unninayar (NASA Goddard/GESTAR/MSU)** stated that Earth observation data are important to monitor from space the environmental

precursors for fire occurrence and impacts. **John Haynes (NASA HQ)** mentioned that many agencies – such as NASA, NOAA, and US Forest Service – have been discussing opportunities to use Earth observation data and technology to detect smoke plumes and impacts on human health. He recognized that it may be difficult to seek panelists since their work is consumed with the current wildlife relief efforts. He shared that one of the NASA HAQAST Final Showcase panels, [Keeping You Safe: HAQAST's Cutting-Edge Tools for Smoke and Fire](#), was presented by members of HAQAST, US Forest Service, and the National Park Service in July 2020.

**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, October 13<sup>th</sup> at 8:30AM EDT (GMT-4).

Adjourned: 9:35 AM EDT (GMT-4)