

GEO Health Community of Practice (CoP)
Telecon: Focus on COVID-19 Transmission
September 15, 2020

In Attendance: 20 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Sue Estes (NASA/UAH), Trisha Castranio (NIEHS), Amanda Quintana (USGCRP), Laura Mulvey (NASA HQ), Anna Borovikov (NASA GMAO/SSAI), Cynthia Hall (NASA Earth Science Data Systems), Dorian Janney (NASA Goddard), Michael Garay (JPL/California Institute of Technology), Jonathan O'Brien (NASA ARSET), Assaf Anyamba (USRA/NASA Goddard), Ray Kiess (USAF, 14th Weather Squadron), Bob Chen (CIESIN/Columbia U.; NASA SEDAC), Nathan Pavlovic (Sonoma Technology), Susanna Ehlers (Inter-American Institute for Global Change Research), Rowena Christiansen (U. of Melbourne Medical School, Australia), Aaron Naeger (U. of Alabama in Huntsville), Matthew Romm (Mount Sinai Health System).

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 he would share more details about the upcoming GEO Virtual Symposium in 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 possibly virtual booths. Next, he wanted to thank all presenters and attendees at the [International Society for Environmental Epidemiology \(SEE\) Virtual Meeting 2020](#), which was held from August 24-27, 2020. At this event, he was a panelist as part of the CDC panel symposium on health effects of wildfire smoke, and **Helena Chapman (NASA HQ/BAH)** gave an e-poster presentation on how satellite data can be used to examine emerging One Health threats. Then, he shared exciting news 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. He mentioned that [AmeriGEO Week 2020](#) was held virtually from September 7-8, 2020.

Juli Trtanj (NOAA) mentioned that the *ISPRES-19 Earth Observations for Securing the Environment and Building Safe Societies* annual conference is tentatively scheduled for October 18-22, 2021, in Hanoi, Vietnam. She said that the conference theme will focus on how to use satellite imagery for public health research applications and initiatives. Then, she shared that the Global Heat Health Information Network (GHHIN) Master Classes were successful, and 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. Finally, she announced that there is a new partnership called the [Extreme Heat Resilience Alliance](#), and that GHHIN plans to moderate a discussion with this initiative to potentially align objectives.

John Haynes (NASA HQ) 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 9:00-10:30AM EDT (GMT-4) or 4:00-5:30PM EDT (GMT-4). Also, 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).

Helena Chapman (NASA HQ/BAH) reminded CoP members to provide brief testimonials (e.g. paragraph) via email (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. She mentioned that we would like to showcase these success stories during this global challenge to the GEO Secretariat.

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.

Helena Chapman (NASA HQ/BAH) provided an overview of [AmeriGEO Week 2020](#), which was held from September 7-8, 2020. The theme of the symposium was *Bridging the Divide: Better Together: Geospatial Information for Decision Making in the Americas*. She stated that the symposium aimed to bring communities together to identify synergies and paths toward collaboration among regional efforts related to Earth observations, geographic, and statistical information. She shared that the meeting emphasized that data integration is the first step toward transforming data into meaningful and valuable information for decision-making and forming collaborative efforts. She said that the symposium sessions provided an opportunity to identify challenges and share utilized approaches to enhance communication, strengthen capacity building, identify knowledge gaps for end-user communities, and explore potential collaborations with the AmeriGEO community. Then, she mentioned that she presented the Earth Observations for Health (EO4HEALTH) update at the Americas Caucus on September 9, 2020. She provided an overview of the EO4HEALTH, including 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. **Trisha Castranio (NIEHS)** mentioned that the virtual platform (with Spanish-English translations) for the AmeriGEO Week 2020 was extremely helpful. She shared that all panelists provided insight on their national activities and aimed to form collaborations with the AmeriGEO community.

Juli Trtanj (NOAA) mentioned that as we transition from COVID-19 discussions to small group discussions for the work plan, she wondered how we can incorporate regional speakers for further CoP engagement. **John Haynes (NASA)** stated that since there are several EO4HEALTH projects focused on the AmeriGEO and AfriGEO regions, he said that we could invite AmeriGEO representatives (e.g. Angelica Gutierrez, NOAA; Betzy Hernandez, NASA) to present at a future CoP teleconference.

John Haynes (NASA HQ) provided an overview of the [Outcome Statement](#), which was prepared by the World Meteorological Organization and Symposium's Scientific Committee of the [Climatological, Meteorological, and Environmental Factors in the COVID-19 Pandemic](#). He said that this outcome statement highlighted open data sharing, the One Health concept, need for further research applications, and strategies to improve scientific communication. **Helena Chapman (NASA HQ/BAH)** mentioned that CoP members could view the [i-posters](#) from this event.

Juli Trtanj (NOAA) mentioned that as scientists, we must be clear in our scientific communication with the public. She stated that although numerous pre-prints have been disseminated, she believed that decision-makers were willing to use experimental projects, but that they needed more information about seasonal risk. She stressed that environmental data have immense value, but that we do not have enough data to make definitive conclusions about the impact of seasonality on COVID-19 spread. Then, she shared that the WMO COVID-19 Task Force has discussed future plans to develop a future symposium with a One Health theme, which can incorporate biodiversity and animal-human interactions into the wider discussion.

John Haynes (NASA HQ) mentioned that NASA has been funding rapid response projects related to the environmental impacts from COVID-19 mitigation policies and impacts of the environment on COVID-19 spread ([NASA Funds Eight New Projects Exploring Connections Between the Environment and COVID-19](#)). He highlighted the research of Pablo Méndez-Lázaro (U. of Puerto Rico Medical Sciences Campus) focusing on the impact of Saharan dust and disease severity of COVID-19 in Puerto Rico (Caribbean region). **Juli Trtanj (NOAA)** suggested that we coordinate a CoP teleconference that can provide an overview of currently funded projects. She said that funded investigators could attend a future CoP teleconference and discuss their research. **Susanna Ehlers (Inter-American Institute for Global Change Research)** said that she would follow-up on upcoming funding opportunities from the Inter-American Institute for Global Change Research.

John Haynes (NASA HQ) 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 (11:00AM-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.

Bob Chen (CIESIN/Columbia U.; NASA SEDAC) shared the Version 3 of the [SEDAC COVID-19 Viewer](#), which provides scale-dependent, seven-day moving averages for COVID-19 cases and deaths. He mentioned that they continue to make small enhancements to improve its ability to monitor COVID-19 cases in relation to the population. He welcomed all feedback from CoP members! He stated that their team demographer could present at a future CoP teleconference on this tool. He highlighted the need to identify the data needs of epidemiologists and modelers to enhance utility and use of these datasets.

Aaron Naeger (U. of Alabama in Huntsville) shared his new publications, [Impact of COVID-19 Containment Measures on Air Pollution in California](#), in the *Aerosols and Air Quality Research* journal. He said that his research examined high spatial temporal traffic data (California Department of Transportation), OMI and TROPOMI data, and weather data, to evaluate air quality impacts of COVID-19 at various stages of lockdown measures. He concluded that high-resolution TROPOMI data were able to capture NO₂ reductions in smaller cities, which coarser-resolution OMI data could not. Then, he mentioned that there was a [past funding opportunity](#) with NOAA's Climate Program Grants, and that it may be helpful to share potential funding with the CoP members. **Juli Trtanj (NOAA)** agreed that we could learn more about smaller funding opportunities such as National Science Foundation's rapid grants.

John Haynes (NASA HQ) said that future presenters on CoP teleconferences can include AmeriGEO leaders, representatives from funding agencies, and currently funded researchers. **Juli Trtanj (NOAA)** mentioned that it would be great to invite representatives from the Inter-American Institute for Global Change Research and the Pan American Health Organization to join the discussion, and then coordinate future discussions with currently funded researchers. She stated that these steps can encourage continued work for the CoP small work groups. She encouraged all CoP members to share their interests, specific elements that they should be exploring in the community, and other approaches to organize the CoP telecons.

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, September 29th at 8:30AM EDT (GMT-4).

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