

**GEO Health Community of Practice (CoP)**  
**Telecon: Wildfires related to COVID-19 Activities**  
May 26, 2020

**In Attendance:** 31 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), John Balbus (NIH/NIEHS), David Green (NASA HQ), Anna Borovikov (NASA GMAO/SSAI), Sean McCartney (NASA Goddard), Dorian Janney (NASA Goddard/GPM), Sushel Unninayar (NASA Goddard/GESTAR/MSU), Bob Chen (SEDAC/Columbia University), Alex Long (Wilson Center), Ray Kiess (USAF, 14th Weather Squadron), Bill Frey (USAF, 14th Weather Squadron), Bryan Richards (USGS National Wildlife Health Center), Ben Zaitchik (Johns Hopkins U.), Karin Ardon-Dryer (Texas Tech U.), Ali Akanda (U. of Rhode Island), Augustin Vintzileos (U. of Maryland), Joy Shumake-Guillemot (WHO/WMO), Jorge Del Rio Vera (UN Office for Outer Space Affairs), Jan Ramboer (European Commission), Ian Coady (UK Department for International Development), Didier Davignon (Meteorological Service of Canada), Mireille Bedirian (Canadian Space Agency), Celine Audette (Environment and Climate Change Canada), Serge Olivier Kotchi (Public Health Agency of Canada), Naledzani Mudau (South African National Space Agency), Peter Franklin (Western Australian Department of Health), Grace Yun (Western Australian Department of Health), Alex Xiao (Western Australian Department of Health), Paula Fievez (FrontierSI Health Department).

**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 Interagency COVID-19 Meeting, moderated by NASA, would be held after the GEO Health CoP meeting, at 11AM EDT (GMT-4), and provided the WebEx connection details. Then, he shared three specific updates about upcoming resources and trainings. First, he stated that NASA, ESA, and JAXA are co-developing a data dashboard (“one-stop-shop” for end-user) – including air quality, environmental, and socioeconomic data in relation to the lockdown restrictions – which will be released on June 5, 2020. He reminded everyone that they have have partnered to collaborate on the [Space Apps COVID-19 Challenge 2020](#) (Theme: *Using Earth Observations to Learn about COVID-19*), which will be held from May 30-31, 2020. Second, he mentioned that the GEO Secretariat has invited the GEO Health CoP to present a 90-minute session, *GEO Health Community Response to the COVID-19 Pandemic*, which will be held on June 15, 2020 from 7:30-9:00AM EDT (GMT-4) at the upcoming [GEO Virtual Symposium 2020](#) (June 15-19, 2020). Finally, he mentioned that the upcoming [NASA ARSET](#) introductory training, *An Inside Look at how NASA Measures Air Pollution*, scheduled for May 26 and 28, 2020. This webinar will be held in [English](#) (10AM-11:30AM EDT/GMT-4) and [Spanish](#) (2-3:30PM EDT/GMT-4). Attendees will be able to list the pollutants that can be observed by NASA satellites, download imagery for NO<sub>2</sub> and aerosols and particles, and describe capabilities and limitations of NASA NO<sub>2</sub> and aerosol measurements.

**Joy Shumake-Guillemot (WHO/WMO)** mentioned that the Global Heat Health Information Network launched an information series today on how to manage extreme heat during the pandemic. CoP members can visit the [Heat and COVID-19 Information Series](#) and learn more about risk management for vulnerable populations, health workers, and city planners.

**Bob Chen (SEDAC/Columbia University)** stated that they have been working on adding more features to strengthen links between COVID-19 incidence data, COVID-19 dashboard by Johns Hopkins University, and other related data sources. He shared the [current version](#) and the [new \\*test\\* version](#) and requested feedback from CoP members.

**John Balbus (NIEHS)** mentioned that there are several pending NIH projects to date, and he would share new funding opportunities as they arise.

**Juli Trtanj (NOAA)** stated that NOAA researchers have been working with several modeling groups (e.g. CDC, NIH, MIDAS) to prepare the [Environmental Datasets for Infectious Disease Modeling](#), as a resource designed for researchers and decision-makers. She also mentioned that the next GEO Health CoP telecon, scheduled for June 2, 2020 (8:30-10AM EDT/GMT-4), would include a deep dive on One Health and zoonotic disease topics related to COVID-19 transmission. She requested that CoP members encourage their colleagues to participate in this upcoming telecon.

**Peter Franklin (Western Australian Department of Health)** described the benefit of using Earth observation data for informing health strategies related to fire-induced air pollution. The research team used Earth observation data to develop an exposure model for wildfire smoke related PM<sub>2.5</sub> in western Australia. He presented results on the direct correlation to health impacts (e.g. increased ED visits and hospitalizations for all-cause, respiratory, and cardiovascular conditions; 3-10% increase in asthma ED presentations; 2-18% increase in asthma hospitalizations; 2-7% increase in general cardiovascular ED presentations) resulting from the prescribed burns in western Australia. As future work, they plan to develop fine-resolution prediction models of smoke trajectory, including early warning systems and manual tracings of plumes. Then, he introduced his colleagues **Grace Yun (Western Australian Department of Health)**, **Ale Xiao (Western Australian Department of Health)**, and **Paula Fievez (FrontierSI Health Department)**.

**Juli Trtanj (NOAA)** asked about how the team plans to proceed with developing the early warning system for smoke plumes as well as connections with experts from the Meteorology Department. **Peter Franklin (Western Australian Department of Health)** mentioned that they have ongoing work with the Bureau of Meteorology and other federal agencies to develop more sophisticated models. He added that the Australian population is against the smoke plumes, but not the prescribed burns. **Alex Xiao (Western Australian Department of Health)** said that they are currently working with the Bureau of Meteorology to develop a more sophisticated air quality transport model in western Australia. He believed that this model would allow them to examine the movement of smoke plumes and hence identify affected populations quicker than previous projects.

**Juli Trtanj (NOAA)** stated that the CoP group discussions had not reached wildfires or prescribed burns yet. She mentioned that there is significant interest to seek further guidance on wildfire management in the context of COVID-19 transmission in the USA. **Peter Franklin (Western Australian Department of Health)** stated that guidance was circulated in eastern Australia due to the prolonged fires over the past summer. He mentioned that they provided recommendations on how long people should stay inside and time for exercise, including potential long-term impacts of wildfire smoke exposure. He agreed that this was an important issue and hoped to learn more from other CoP members working on these issues.

**Didier Davignon (Meteorological Service of Canada)** shared the [paper](#) (*Evaluation of a spatially resolved forest fire smoke model for population-based epidemiologic exposure assessment* by Yao et al., 2014). **Celine Audette (Environment and Climate Change Canada)** mentioned that the British Columbia Centre for Disease Control has developed and published an [informative webpage](#) regarding wildfire smoke and COVID-19 transmission.

**Helena Chapman (NASA HQ/BAH)** thanked **Peter Franklin (Western Australian Department of Health)** for his insightful presentations to the group. **John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** invited GEO members to provide any updates on their COVID-19 activities.

**Ben Zaitchik (Johns Hopkins University)** mentioned the ongoing coordination of the WMO/WHO Workshop on environmental drivers related to COVID-19 transmission. He thanked **Joy Shumake-Guillemot (WHO/WMO)** for her supportive role in this coordination. To accommodate all time zones, this event was planned for 3-hour sessions over a period of three or four days in early August 2020. He stated that they plan to finalize logistics with the American Geophysical Union on the virtual platform. As they have also formed a scientific committee to coordinate agenda, he said that interested CoP members can contact him to become more involved in this upcoming event.

**David Green (NASA HQ)** mentioned that they have continued to coordinate the Interagency COVID-19 Meetings each week. He said that today's discussion would focus on compounded disasters (e.g. wildfires, hurricane season, seasonality issues), especially considering the potential for a second COVID-19 wave combined with influenza and hurricane seasons. He stated that part of the discussion would include whether they should develop hybrid models and forecasts.

**Ali Akanda (U. of Rhode Island)** asked if there is any update for the [NASA's Rapid Response and Novel Research in Earth Science solicitation](#) related to COVID-19 efforts. **John Haynes (NASA HQ)** commented that the NASA Rapid Response call on COVID-19 is still open, and interested researchers should communicate with Laura Lorenzoni ([laura.lorenzoni@nasa.gov](mailto:laura.lorenzoni@nasa.gov)) before submitting their proposal. He provided a [NASA web feature](#) that described the four recently funded research projects on COVID-19 impacts.

**John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** thanked all GEO Health CoP members for their outstanding presentations, 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. They also requested that GEO Health CoP members share the CoP telecon schedule with their colleagues from Central/South America and Asia-Pacific regions.

**John Haynes (NASA HQ)** and **Juli Trtanj (NOAA)** closed the telecon and mentioned that the next telecon would be scheduled for Tuesday, June 2<sup>nd</sup> at 8:30AM EDT (GMT-4). The focus area would be related to zoonotic diseases, One Health, and COVID-19 transmission.

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