In Attendance: 23 participants
John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Kim McMahon (NOAA NWS), Ajay Gupta (HSR.health), Ram (HSR.health), Rich Frazier (USGS), Bob Chen (CIESIN/Columbia Univ.; NASA SEDAC; GEO Human Planet Initiative), Di Yang (Univ. of Wyoming), Jenny Bratburd (Univ. of Wisconsin-Madison), Ben Zaitchik (Johns Hopkins Univ.), Douglas Rao (NC Institute for Climate Studies), Vijendra (Office of National Statistics, UK), Paschalis Tziastas (European Commission), Didier Davignon (Environment and Climate Change Canada), Mercy Borbor Córdova (Ecuador), Carlos Barboza (Ministry of Public Health, Uruguay), Reyna Durón (UNITEC, Honduras), Jose Portillo (Honduras), Dariana Avila (Organization of Women in Science for the Developing World, Honduras Chapter), Chen Xu, Elizabeth Doran, Dheeresh Kumar.

Summary Notes:
*Prepared by Helena Chapman (NASA HQ/BAH)

John Haynes (NASA HQ) and Juli Trtanj (NOAA) opened the community telecon by welcoming all participants.

John Haynes (NASA HQ) mentioned that the NASA Health and Air Quality team supported the Using NASA Satellite Data to Complement Vector Control Practices Symposium at the American Mosquito Control Association annual meeting in Reno, NV on March 1. He said that they also presented a NASA Health and Air Quality webinar for 80 students and faculty at the University of Nevada in Reno on February 28. Next, he commented that they will be supporting the NASA Health and Air Quality Annual Program Review in Asheville, NC on March 29-30. Then, he enthusiastically shared that the Tropospheric Emissions: Monitoring of Pollution (TEMPO) launch is scheduled for early April 2023. He stated that this will be NASA’s first Earth Venture instrument mission, joining GEMS (South Korea, launched in February 2020) and Sentinel-4 (ESA, upcoming launch for 2023), which will examine air pollution hour-by-hour across large chunk of northern hemisphere.

Helena Chapman (NASA HQ/BAH) shared a few upcoming events: 1) ARSET Trainings, including the Fundamentals of Machine Learning for Earth Science in English and Spanish (April 20-May 4); 2) HAQAST Missouri Meeting from April 18-19; and 3) GEO Symposium from June 13-14. She also mentioned that the CoP will support a One Health session at the AmeriGEO Week 2023, which is planned in San José, Costa Rica, from August 7-11. She said that the CoP co-chairs serve on the planning committee, and that they will share more information as planning continues. Reyna Durón (UNITEC, Honduras) mentioned that they will spread information about AmeriGEO Week 2023 with the Honduran community.

Juli Trtanj (NOAA) reminded CoP members that the UN Secretary General announced at the COP27 (November 2022) that everyone should be covered by an early warning system within the next five years (UN: COP27: $3.1 billion plan to achieve early warning systems for all by 2027). Then, she mentioned that the Heat Forum was held in late February, and that there are numerous activities in heat-health topics. She said that project presentations described ongoing work to develop heat early warning systems in Indonesia, Colombia, Ecuador, and Tanzania, and Africa as a continent. She also mentioned that NOAA will be funding projects to study early warning systems in Africa, with specific countries to be determined.
**Martyn Clark (GEO Secretariat)** said that he has been leading the Heat Incubator efforts of the WMO, WHO, and GEO, which are related to early warning systems, but incorporate a more holistic view of heat and health. He said that the UN Secretary General requests support on how to better understand early warning systems – including heat – and it offers a great opportunity to support this global initiative. He shared a list of countries that are of particular interest due to their geographic vulnerability: Asia and Pacific Region (Bangladesh, Maldives, Nepal, Lao / People’s Democratic Republic, Cambodia, Kiribati, Samoa, Solomon Islands, Fiji, Tonga), Africa Region (Djibouti, Somalia, Sudan, Chad, Comoros, Ethiopia, Liberia, Madagascar, Mauritius, Mozambique, Niger, South Sudan, Uganda), Latin America and Caribbean (Guyana, Haiti, Barbados, Antigua Barbuda, Guatemala, Ecuador), and Central Asia (Tajikistan).

**Vijendra (Office of National Statistics, UK)** said that his team is currently developing a strategic framework to add climate on human health, as part of a Wellcome Trust funded project. He mentioned that there is upcoming funding (time-sensitive deadline) to develop partnerships between the Office of National Statistics and two African countries.

**Ben Zaitchik (Johns Hopkins Univ.)** shared an update that the next Heat Small Work Group meeting will be held on April 19 at 11:00AM ET (GMT-4), and it will focus on Peter Kalmus (Jet Propulsion Laboratory)’s work on extreme heat mapping and projections.

**Juli Trtanj (NOAA)** shared the recent NOAA web feature, [NOAA, communities to map heat inequities in 14 states, 1 international city](https://www.noaa.gov), noting the seventh year of this NOAA Urban Heat Island mapping campaign. She also highlighted that the call for the Belmont Forum’s Latest Collaborative Research Action on [Climate, Environment, and Health II](https://belmontforum.org) will open on April 15.

**Ajay K. Gupta (HSR.health)** said that the migration (or expansion) of insect habitats driven by environmental changes will be key for global scientists to address in ongoing research applications. **Ram (HSR.health)** stated that through the Open Geospatial Consortium, they have been building early warning and response capabilities, although not specifically using heat as a metric. **Kim McMahon (NOAA NWS)** wondered about any consideration on incorporating human activity changes, such as expansion of cities and urban sprawl, when thinking about climate change.

**Rena Durón (UNITEC, Honduras)** commented that they need to integrate the use of Earth observations into the schools of medicine. **Ajay K. Gupta (HSR.health)** suggested links to the American Association of Medical Colleges. **Juli Trtanj (NOAA)** agreed and wondered if we could find a conference for continued engagement with the schools of health sciences. **Helena Chapman (NASA HQ/BAH)** requested that Reyna Durón (UNITEC, Honduras) keep us informed if there are any opportunities to coordinate webinars with Honduran schools of health science. **Reyna Durón (UNITEC, Honduras)** thanked Helena Chapman (NASA HQ/BAH) and Ricardo Quiroga (NASA Disasters) for presenting at some conferences in Honduras, and she said that she would keep us informed of new opportunities. She commented that their team submitted a grant proposal to help with some pilot projects, and they are working on forming a new network of Central America researchers across several universities.
Didier Davignon (Environment and Climate Change Canada) asked Ajay K. Gupta (HSR.health) about the predictive capacity for developing and testing these models. Ajay K. Gupta (HSR.health) said that their team (HSR.health) is developing models predicting future health conditions (disease emergence, spread, severity) based on the impact of social and environmental factors on health outcomes.

John Haynes (NASA HQ) shared the recent NASA web feature, Brighter Neighborhoods Harm Human Health, and he mentioned that National Public Health Week will be held from April 3-10. Helena Chapman (NASA HQ/BAH) commented that the World Health Day will be held on April 7, and it coincides with the WHO’s 75th anniversary.

Carlos Barboza (Ministry of Health, Uruguay) suggested that it would be interesting to have a database of research projects, where you can explore the data and geographical coordinates as well as analyze strengthens and limitations. He also commented on the need to closely examine these environmental health issues using geospatial data, but he noted the challenges with limited high-resolution data and scaling these applications. He wondered about the possibility of generating data observatories per region and uniting political and institutional will with technical capabilities. He also mentioned that they could establish an approach between the observatory and capacity building to generate sustainability.

Reyna Durón (UNITEC Honduras) expressed interest and said that these training courses would be very important to recruit students and researchers for these data observatories. She welcomed José Portillo and Dariana Avila to the CoP. Dariana Avila (Organization of Women in Science for the Developing World, Honduras Chapter) said that she is completing her doctoral research in water and environmental management with remote sensing and weather forecasting in Honduras.

Ajay K. Gupta (HSR.health) agreed that capacity building globally is an imperative. He believed that capacity building needs to be as specific and precise as possible, with respect to the content to maximize the impact of such efforts. He said that they have posted a demo (AmeriGEO DataHub) for leveraging Earth observation data for resourcing medical facilities in real-time due to co-incident pandemic and natural disaster (like flood). He said that it is currently in the prototype stage, with the underlying algorithms validated through wide use, with plans for further implementation.

John Haynes (NASA HQ), Juli Trtanj (NOAA), and Helena Chapman (NASA HQ/BAH) thanked CoP members for their continued contributions to the field and engagement in this group discussion. They agreed that this teleconference had provided an opportunity to share information, connect researchers, and leverage resources that can amplify current activities using Earth observations for public health applications.

John Haynes (NASA HQ) and Juli Trtanj (NOAA) closed the teleconference and mentioned that the next community telecon will be scheduled for May 2 from 8:30-10:00AM EDT (GMT-4).

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