In Attendance: 43 participants

John Haynes (NASA HQ), Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Laura Judd (NASA Langley), Trisha Castranio (NIEHS/NIH), Sophia Liu (USGS/FGDC GeoPathways), Travis Hyams (NIH All of Us), Amit Mistry (NIH), Sheila Fleischhacker (USDA National Institute of Food and Agriculture), Isabel Walls (USDA), Sam Malloy (MITRE), Cynthia Hall (NASA HQ), Michael Garay (Jet Propulsion Laboratory, California Institute of Technology), Danielle Nagele (National Weather Service), Ana Prados (Battelle Memorial Institute), Ann Stapleton (USDA NIFA), Assaf Anyamba (USRA/NASA Goddard), Sushel Unninayar, Mustafa Sikder (Institute for Health Metrics and Evaluation), Cascade Tuholske (CIESIN/Columbia Univ.), Ben Zaitchik (Johns Hopkins Univ.), Josh Colston (Univ. of Virginia School of Medicine), Falguni Patadia (Univ. of Alabama in Huntsville), Antar Jutla (Univ. of Florida), Moiz Usmani (Univ. of Florida), John Malone (Louisiana State Univ.), Shannon Vattikutti (Mississippi State Univ.), Fazlay Faruque (Univ. of Mississippi), Christine Moe (Emory Univ.’s Center for Global Safe Water, Sanitation and Hygiene), Yuke Wang (Emory Univ.’s Center for Global Safe Water, Sanitation and Hygiene), Douglas Rao (NC Institute for Climate Studies), Carolina Pereira Marghian (Univ. of Twente), Olayinka Osuolale (Elizade Univ.), Juan Castillo (PAHO), Joe Ortiz (PAHO), Niall Robertson (UK Health security Agency), Didier Davignon (ECCC Meteorological Service of Canada), Melissa MacDonald (ECCC Meteorological Service of Canada), Andreas Skouloudis (iSteep.org), Luis Chaves (Instituto Gorgas Panama), Mercy Borbor (Escuela Superior Politécnica del Litoral, Ecuador), Sam Packard, Nathan.

Summary Notes:

*Prepared by Helena Chapman (NASA HQ/BAH)*

Juli Trtanj (NOAA) opened the telecon by welcoming all participants. First, she said that for any CoP members who are providing information to Ukraine in an official or informal support for the global community to let CoP know how can support these efforts. Next, she reminded CoP members to submit their project descriptions (by March 18, 2022) for the CoP Special Edition: AfriGEO on March 29, 2022. Then, she said that the National Integrated Heat Health Information System (NIHHIS) National Meeting will be held on April 26-28, 2022. She highlighted that the meeting will cover different topic areas surrounding heat and health, with thematic areas: Defining the Problem (day 1), Building Equitable Community Resilience (day 2), and Building Equitable Human Resilience (day 3).

Helena Chapman (NASA HQ/BAH) reminded CoP members that the NASA ARSET entitled, Using the UN Biodiversity Lab to Monitor the Pulse of the Planet, would be held from April 14 to May 4, 2022. Then, she shared that she promoted the GEO Health CoP as a panelist on the One Health Commission’s One Health Social Sciences Initiative Webinar entitled, “Social Sciences Meet One Health Professional Networks and Communities of Practice at the Crossroads of Health, the Environment, and Society”.

John Haynes (NASA HQ) said that they contributed to the GEO Secretariat’s request to investigate data use and engagement through a data analysis survey. During this teleconference, he mentioned that the D-MOSS team offered insight and specific examples of their data uses and needs. Then, he shared that the GEO Programme Board and the GEO Secretariat invite proposals for new GEO Work Programme (GWP) Pilot Initiatives as part of the development of the 2023-2025 GWP. He said that these Pilot Initiatives represent early-stage initiatives that aim to develop open, re-usable solutions for
applying Earth observations to address demonstrated needs on a regional or global scale. He commented that they must include contributions from at least two GEO Members or Participating Organizations and must be open to participation by any GEO Member, Participating Organization, or GEO Associate.

Juli Trtanj (NOAA) invited Juan Castillo (PAHO) to introduce José Ortíz (PAHO), who will be working on air quality monitoring in the Americas. Juan Castillo (PAHO) also mentioned that Marcelo Korc (PAHO) has now transitioned to new position as the PAHO representative in Paraguay.

Helena Chapman (NASA HQ/BAH) thanked the Small Work Group leads for their outstanding leadership to leverage CoP expertise across their activities. She mentioned that this teleconference would offer an in-depth discussion about upcoming priorities and workstream activities of the three Small Work Groups: Heat (Ben Zaitchik, Cascade Tuholske), Health Care Infrastructure (John Balbus, Andreas Skouloudis), and Infectious Diseases (Antar Jutla).

Ben Zaitchik (Johns Hopkins Univ.) and Cascade Tuholske (CIESIN/Columbia Univ.) provided an overview of the Heat Small Work Group. They shared three examples of ongoing research applications – City Heat Equity Adaptation Tool (City-HEAT), Extreme Temperature and Alerting Programs in Northern Canada, and New High-resolution Extreme Heat Data (1983-2016) to SEDAC. They stated that they coordinate bimonthly teleconferences to learn through informal research discussions focusing on the stakeholder perspective and provide insight into emerging research and new datasets. They believed that this group offers a valuable forum for heat-health researchers to exchange best practices and learn and develop new EO-based tools. They shared the article, *Earth Observations of Extreme Heat Events: Leveraging Current Capabilities to Enhance Heat Research and Action*, published in *Environmental Research Letters*. They commented that they would like to explore how to bring ideas to funding organizations in the public and private sector in efforts to expand end-user communities to use EO to address societal challenges. Looking ahead, they stated that they would like to increase connections to GHHIN/NIHHIS, expand outreach to heat impacts communities (CDC, WHO, relevant professional societies), and seek connections with groups who are developing heat mapping and monitoring capabilities (Google, First Street Foundation). They recommended that next steps include exchanging CoP experiences on telcons to foster sustainable actions that advance the CoP workstream, expanding membership beyond North American and Europe, contributing to communication materials (e.g. heat bulletins, fact sheets, white papers, conferences), and collaborating on EO research applications and products.

Sophia Liu (USGS) asked if group members are connected to the HHS Office of the Assistant Secretary for Health in the Office of Climate Change and Health Equity. Ben Zaitchik (Johns Hopkins University) confirmed that they are connected to this office, and that they would like to follow-up on specific contributions of the Heat Work Group. Juli Trtanj (NOAA) agreed that there are Heat Work Group activities that could contribute to making a prototype. Ana Prados (Batelle Memorial Institute) said that she can help with Spanish translation for any public documents.

Cascade Tuholske (CIESIN/Columbia Univ.) said that the Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS) has a seasonal 14-day forecast with precipitation with FuseNet, where temperature is built out (no bandwidth). He said that they could provide an estimate (e.g. 30 days of extreme temperature) for a given country with expected confidence. Mercy Borbor (Escuela Superior Politécnica del Litoral, Ecuador) said that their team would be interested in urban heat data for Ecuador (country) and South America (region). She expressed that they have noted gaps with methodology and are currently working with different groups to build capacity. She hoped to join
the Heat Small Work Group to learn feasible tools and conduct rapid urban heat analysis for Ecuador. Sophia Liu (USGS) shared information from the US State Department’s Secondary Cities Initiative, including the Ecuador data page.

Shannon Vattikuti (Mississippi State Univ.) asked if the lack of heat and health data represents a regional data gap or more specifically lack of data sharing and tools needed for data collection. Mercy Borbor (Escuela Superior Politécnica del Litoral, Ecuador) mentioned that they aim to better integrate data sources (e.g. health and urban heat data), noting that temperature data are widely available, but that health data are limited. She commented that there is a gap of available health data, and that they are seeking opportunities to enhance data sharing. Didier Davignon (ECCC, Canada) shared the recent UNEP report on the Rising Threat of Extraordinary Fires.

Andreas Skouloudis (iSteep.org) provided an overview of the Health Care Infrastructure Small Work Group. He shared information about fluctuations in COVID-19 short-term mortality in Italy and the United States from 2020-2021, collected from the Human Mortality Database webpage. He said that they plan to examine COVID-19 cases in UK health care facilities and expand to look for AfriGEO region. He shared the funding opportunity, Methods for Assessing Health-related Costs of Environmental Stressors (HORIZON-HLTH-2022-ENVHLTH-04-01), as EU-funded work (e.g. US participants can apply), with the aim of developing an operational team for health care resilience. He said that their meetings have been driven by funding solicitations, but that they plan to coordinate upcoming meetings to contribute to the CoP workstream.

Juli Trtanj (NOAA) mentioned that with cascading failures on heat and health care facilities, including flooding and power failures, there may be potential collaborations with the Heat Small Work Group on global risk prediction of heat risk (and hence health care infrastructure resilience). Andreas Skouloudis (iSteep.org) agreed that they would like to connect with the Heat Small Work group and identify ways to bridge the topic of health care facilities and extreme heat events.

Antar Jutla (Univ. of Florida) provided an overview of the Infectious Diseases Small Work Group. He highlighted that they are preparing a collaborative position paper and developing a dashboard that incorporates disease and geophysical parameter data from the scientific literature, which he hoped would help bridge networks and foster collaborations. He said that they are currently at the collaborator-stakeholder stage and are exploring the possibility of private partnerships. He noted that a one-year post-doctoral position could be beneficial for the tasks related to the dashboard and position paper.

Shannon Vattikuti (Mississippi State Univ.) agreed that including geophysical and geosciences parameters is a great idea, especially regarding climate change related to degradation of land use and land cover. Juli Trtanj (NOAA) mentioned that it may be important to distinguish between the roles of stakeholders and end users.

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 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. They mentioned that they will plan the deep dive on 4-minute flash talks with ongoing projects in the AfriGEO region for Tuesday, March 29, 2022.
John Haynes (NASA HQ) closed the teleconference and mentioned that the next community teleconference, which will highlight the Small Work Group plans and activities, will be scheduled for Tuesday, March 15, 2022 at 8:30AM EDT (GMT-4).

Adjourned: 10:05AM EST (GMT-5)