In Attendance: 25 participants
Juli Trtanj (NOAA), Helena Chapman (NASA HQ/BAH), Sophia Liu (USGS), Elizabeth Joyner (NASA), Leslie Friedlander (EPA), Lexis Wedell (USGCRP), Sushel Unninayar (NASA Goddard & KBR/Morgan State Univ.), Steve Ambrose (SAIC), Bob Chen (CIESIN/Columbia Climate School, Columbia Univ.; NASA SEDAC), Cascade Tuholske (CIESIN/Columbia Climate School, Columbia Univ.), Tabassum Insaf (NY Department of Health), Steve Ambrose (SAIC), Jesse Bell (Univ. of Nebraska Medical Center), Mike Wimberly (Univ. of Oklahoma), Josh Colston (Univ. of Virginia), Shannon Vattikuti (Mississippi State Univ.), Douglas Rao (North Carolina State U./NCICS/CISESS), Carolina Pereira Marghidan (Univ. of Twente, Netherlands), Olayinka Osuolale (Elizade Univ, Nigeria), Jorge Cabrera (SICA), Joy Shumake-Guillemot (WMO), Niall Robertson (UK Health Security Agency), Adrian Guzman (Mexican Space Agency), Nale Mudau (SANSA), Luis Fernando Cháves (Instituto Conmemorativo Gorgas de Estudios de la Salud, Costa Rica).

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

Juli Trtanj (NOAA) opened the telecon by welcoming all participants. First, she mentioned that the Belmont Forum Climate, Environment, and Health Round 2 will host a hybrid Africa Scoping workshop at the Sustainability, Research, and Innovation Congress in Pretoria, South Africa on June 24, 2022. Second, she mentioned that GEO Week 2022 will be held from October 31 to November 4, 2022 in Accra, Ghana. She said that they plan to reconnect with the AfriGEO team to request how CoP members can support their side events.

Nale Mudau (SANSA) said that any health issues, ranging from endemic to epidemic challenges, would be of interest to the AfriGEO community. She said that they are excited to continue the discussion about how CoP and AfriGEO members can collaborate on plans for the GEO Week 2022.

Juli Trtanj (NOAA) mentioned that the National Integrated Heat Health Information System (NIHHIS) National Meeting was held from April 26-28, 2022. Then, she also commented that NOAA and communities will be launching the urban heat island campaigns in 14 US cities and counties as well as two international cities (NOAA and communities to map heat inequities in 14 U.S. cities and counties). Next, she said that the US legislative bill that authorizes NIHHIS (modified from the original interagency bill) will be highlighted in US Congress on June 22, 2022.

Helena Chapman (NASA HQ/BAH) shared the upcoming ARSET trainings for Summer 2022: 1) Humanitarian Applications Using NASA Earth Observations (June 14-23, 2022); 2) Monitoring Aquatic Vegetation with Remote Sensing (Monitoreo de la Vegetación Acuática con Teledetección) (July 12-19, 2022); and 3) Satellite Remote Sensing for Measuring Urban Heat Islands and Constructing Heat Vulnerability Indices (August 2-11, 2022). Then, she also reminded CoP members that recordings are posted for the NASA HAQAST Texas Meeting. Next, she said that the 2022 GEO SDG Award Program is accepting nominations until July 1, 2022, and that AmeriGEO Week 2022 will be held from August 15-19, 2022. Finally, as the American Geophysical Union (AGU) opened the call for abstracts (Deadline: August 3, 2022), she requested that CoP members share any co-convened sessions for the Fall Meeting for dissemination. CoP members confirmed four upcoming sessions:
Section: Geohealth

- **GH004**: Decision Support Applications for Public Health Surveillance using NASA Earth Observations (Co-Conveners: Jenny Bratburd, Helena Chapman, Laura Judd)
- **GH007**: Global Hotspots related to Environmental Change and Health Impacts (Co-Conveners: Ramesh Singh, Tatiana Loboda, Michael Wimberly, Azar Mohammad Abadi)

Section: Global Environmental Change

- **GC035**: Earth Science for Advancing National Implementation of the Sustainable Development Goals (Co-Conveners: Sushel Unninayar, Argyo Kavvada, Danielle Wood, Jared Entin)
- **GC052**: Integrating Earth Observations and Socioeconomic Data for a Sustainable Human Planet: Challenges, Opportunities and Priorities (Co-Conveners: Cascade Tuholske, Andrea Gaughan, Andrew Kruczkiewicz)

**Juli Trtanj (NOAA)** opened up the telecon for CoP members to discuss heat and health topics. She highlighted that the NIH/NIHIS National Meeting had a focused discussion on heat indicators, noting that there is a plan to develop a scoping workshop on heat indicators in the US. She commented that we can gain insight from other global initiatives on heat-health topics.

**Joy Shumake-Guillemot (WMO)** mentioned that they are currently preparing the ten-year WMO/WHO Implementation Plan with technical activities, and they would like to request CoP input when the draft is ready for external review (early Fall 2022). She believes that the GEO Health CoP represents an essential community of practice for such networks, and that they would like to align upcoming priorities and activities with feedback and expertise from CoP members.

**Juli Trtanj (NOAA)** said that one focus is developing global prediction capabilities through appropriate tools and products, which can turn technical pieces to more actionable products for decision makers. She wondered how they could collaborate jointly with GHHIN and other agencies. **Cascade Tuholske (CIESIN/Columbia Climate School, Columbia Univ.)** said that they have been working through the GEO Microsoft Program with experts on global flooding. He said that over the next year, they will be using datasets to build the forecasting tool, and they will request feedback from CoP members.

**Joy Shumake-Guillemot (WMO)** said that it is important to know which initiatives are ongoing or partnered for other applications. She commented that additional brainstorming to identify timely and tangible ideas, define the final goal, and set the timeline. She commented that there are many global activities, resources, datasets, and data dashboards, so they must capitalize on the existing momentum. **Helena Chapman (NASA HQ/BAH)** mentioned that the May 2022 issue of the American Journal of Public Health just released a special section on data dashboards.

**Juli Trtanj (NOAA)** mentioned that their team is turning the seasonal forecasts from NOAA into a more actionable tool in the HHS Office of Climate Change and Health Equity’s Heat Forecast Bulletin (Climate and Health Outlook: Extreme Heat, June 2022). She commented that seasonal outlooks across countries would be ideal, especially for countries without the technical capacity. She agreed with **Cascade Tuholske (CIESIN/Columbia Climate School, Columbia Univ.)** that seasonal outlooks are more difficult and less accurate. **Juli Trtanj (NOAA)** said that they can share an actionable goal at the Heat Small Work Group telecon, and identify individuals working on the topic and geographic region.
Joy Shumake-Guillemot (WMO) mentioned that landscape analysis can help map out the various resources and pieces of specific challenges around common objectives. She raised two questions: How exactly are they scaling heat warning systems? How can we link these datasets and analytical programs? She commented that by conducting some mapping, it may be useful to define the optimal path to find a solution.

Juli Trtanj (NOAA) commented that there were three major topics presented at NIHHIS: 1) maternal and child health; 2) mental health; and 3) drought and heat. First, she mentioned that the National Integrated Drought Information System is a multi-agency partnership is a sister of NIHHIS. Second, she said that some groups (like USAID) have been working in maternal and child health, even developing a small webinar series to communicate risk or developing products for protecting pregnant mothers. She noted that they would like to expand their work on maternal and child health and wondered which tools could be adapted for addressing maternal and child health.

Cascade Tuholske (CIESIN/Columbia Climate School, Columbia Univ.) said that their NASA-funded research project (A Remote Sensing Analysis of Heat Stress, LCLUC, and Women’s Health in Sub-Saharan Africa) focuses on health, fertility, and heat waves from historical perspectives across sub-Saharan Africa. He said that they are working with Nigerian researchers to raise awareness about heat waves, identify inflection points when policies have been implemented, and examine the impact of these implemented policies. Douglas Rao (North Carolina State Univ./NCICS/CISESS) mentioned that Jen Runkle from our institute is studying the heat and green space impact for maternity health in South Carolina. Tabassum Insaf (NY Department of Health) commented that New York State is looking into connections between heat and mental health, using concurrent hospitalizations for heat stress and mental health related illness. She said that they are also working on policy with the Office of Mental Health, in order to improve public health messaging. Helena Chapman (NASA HQ/BAH) shared the NASA web feature (NASA Helps New Yorkers Cope with Summer Swelter) on one recent NASA-funded project by Tabassum Insaf (NY Department of Health) and team.

Cascade Tuholske (CIESIN/Columbia Climate School, Columbia Univ.) commented that the Heat Small Work Group is challenged without a dedicated budget to propose deliverables. Juli Trtanj (NOAA) wondered about the timeline to reach an actionable product, if funding capacity was available for a specific scientific problem. Cascade Tuholske (CIESIN/Columbia Climate School, Columbia Univ.) said that funding would help establish manageable deliverables (e.g. landscape analysis), and the strategic plan could be developed to triangulate expertise. Juli Trtanj (NOAA) wondered about indicators for forecast analyses related to maternal and child health, and commented that the Heat Small Work Group could connect with Elizabeth Pleuss (USAID) and Joy Shumake-Guillemot (WMO) for further brainstorming.

Helena Chapman (NASA HQ/BAH) mentioned that two talks during the AfriGEO Special Webinar (March and April 2022) focused on maternal and child health: The HE2AT Center Project on Data Science and Heat Exposure in Africa and Modeling and Communicating Travel Risk to Pregnant Women: Using Satellite Derived Precipitation Data to Assess and Improve Access to Maternal Care.
Juli Trtanj (NOAA) said that climate change touches on heat, drought, and food systems. Jesse Bell (Univ. of Nebraska Medical Center) commented that a recent heat wave was detrimental to cattle in Kansas (NPR: Days of intense heat have killed thousands of cattle in Kansas). He suggested that they look at the agriculture sector to better understand the impacts of climate change, especially heat- and drought-related events (e.g. What drought events are triggering heat-related mortality?). He mentioned that their current NASA-funded project is exploring heat as one factor within drought that has been established for heat outcomes that needs further exploration. Juli Trtanj (NOAA) mentioned that their work should also touch on animal health. Jesse Bell (Univ. of Nebraska Medical Center) shared that his team continues to talk with farm organizations in Nebraska, noting that they are interested in engaging on these climate topics.

Steve Ambrose (SAIC) mentioned that here is an SAIC Fireside Chat, Contributions of Geospatial Science and Technology to Climate Change, with Lorraine Tighe (Esri) on June 22, 2022. He also shared his interest in collaborating on projects linking climate and health, especially regarding the NIH solicitation (RFA-ES-22-003).

Juli Trtanj (NOAA) provided a summary of the telecon, focusing on four main areas: 1) describing the pathways and indicators of success in monitoring impact; 2) identifying next steps with EO and maternal and child health with organizations (e.g. USAID, SAMSA, NIHHIS, GHHIN); 3) analyzing how landscape analysis can guide forecasting; and 4) exploring next steps with the drought and heat topics with the Heat and Food Security and Safety Small Work Groups.

Juli Trtanj (NOAA) thanked CoP members for their continued contributions to the field and engagement in the group discussion. They agreed that these teleconferences provide an opportunity to share information, connect researchers, and leverage resources that can amplify current activities using Earth observations for public health applications.

Juli Trtanj (NOAA) and Helena Chapman (NASA HQ/BAH) closed the teleconference and mentioned that the next community teleconference will be scheduled for Tuesday, June 21, 2022 at 11:00AM EDT (GMT-4). This telecon will offer updates on the Arbovirus Mapping and Prediction (ArboMAP) to Forecast Mosquito-Borne Disease Outbreaks as well as the Rensselaer Polytechnic Institute-NASA Student Engagement collaboration.

Adjourned: 12:10PM EDT (GMT-4)