

The National Academies of
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**Mapping Science Committee and Geographical Sciences Committee
Joint Fall 2021 Meeting on Accelerating the Analysis of Geographic Change**

Virtual Meeting
Wednesday, December 8
12 pm – 5 pm ET

12:00 pm **Welcome and Overview**

Pat McDowell and Harvey Miller
Chairs of GSC and MSC, respectively

12:15 pm **Reducing the latency of analysis ready data** *(two 20 min presentations, 20 min discussion, Q&A)*

The world changes quickly, but our understanding and actions are often much slower. A major bottleneck is the slow workflow from data to decisions. In this session, we will hear about geospatial data platforms that attempt to accelerate that workflow, especially for collaborative research and decision-making.

Rob Emanuele, *Microsoft AI for Earth*
Matt Hancher, *Google Earth Engine*
Moderator: Kristen Kurland, *MSC Member*

1:15 pm **BREAK**

1:30 pm **Data interoperability** *(two 20 min presentations, 20 min discussion, Q&A)*

Scientific research and policy decisions can not be siloed: the world is too complex. A crucial challenge to convergent science and evidence-based policy is integrating heterogeneous geospatial and other data with different themes, formats, accuracy, resolution, confidentiality, completeness, consistency, timeliness and validity. This session will discuss challenges to making diverse data play well together and opportunities for new digital platforms to facilitate collaboration.

Julia Stewart Lowndes and Erin Robinson, *Openscapes*
Nadine Alameh, *Open Geospatial Consortium*
Moderator: Marguerite Madden, *MSC Member*

2:30 pm **BREAK**

2:45 pm **Data authoritativeness** *(20 min presentation, 10 min discussion, Q&A)*

Legal and policy decisions have strict standards for validity, reliability, representativeness, traceability and accountability. Novel sources of found and incidental geospatial data created for other purposes can meet needs for quick capture and analysis, but how do we base consequential and legally-binding decisions on these potentially valuable data? In this session, we will hear from an authority on federal use of geospatial data.

Kim Valentine, *NOAA*
Moderator: Budhu Bhaduri, *GSC Member*

3:15 pm **BREAK**

3:30 pm **Analyzing human displacement and movement due to disruptions and shocks** (*Panel: 5 minute opening remarks and 30 minute open discussion, Q&A*)

By choice or necessity, humans quickly respond to disruptions and shocks such as extreme weather, wildfires, extreme heat, pandemics, social disturbance, political upheaval and warfare through relocation and changes in movement patterns. Life-altering decisions must be made in response to these displacements. In this session, we will hear from a panel of threepanel three scientific authorities on this crucial challenge and the emerging geospatial data and tools that can describe and inform these events.

Jamon Van Den Hoek, *Oregon State University*
Matthew Hauer, *Florida State University*
Christa Brelsford, *Oak Ridge National Laboratory*
Moderator: Janelle Knox-Hayes, *GSC Member*

4:15 pm **Summary and looking forward**

Hendrik Hamann, *MSC Member*

5:00 pm **Adjourn**