

Join us Now!

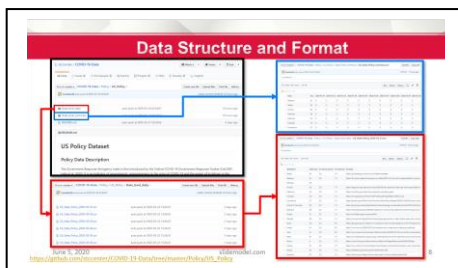
2020 June IAB Meeting is Coming

[Read More](#)

Mr. Dexuan Sha gave an introduction of policy dataset collected for COVID-19 epidemic, including the data acquisition, data collation, quantification methodology, and data structure of the epidemic prevention and control policies product of various countries around the world. The quantification method of the indicators of the prevention and control policy data of overseas territories was introduced in detail. At the same time, Dexuan Sha provided general baseline ideas how to use the data by subsequent visual analytics.

The Oxford University New Crown Outbreak Government Response Tracking System (OxCGRS) tracks government interventions, such as school suspensions, workplace closures, public event cancellations, and public transportation closures. The standardized epidemic prevention and control policies data could be used for comparison with global policies. The severity of the response could help policy makers and researchers to better understand the impact of interventions in different countries (Supported by NSF I/UCRC COVID-19 Rapid Response Project).

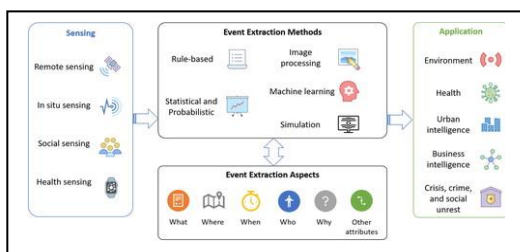
- [illegible]



The sudden outbreak of the Coronavirus disease (COVID-19) swept across the world in early 2020, triggering the lockdowns of several billion people across many countries, including China, Spain, India, the U.K., Italy, France, Germany, and most states of the U.S. The transmission of the virus accelerated rapidly with the most confirmed cases in the U.S., and New York City became an epicenter of the pandemic by the end of March. In response to this national and global emergency, the NSF Spatiotemporal Innovation Center brought together a taskforce of international researchers and assembled implemented strategies to rapidly respond to this crisis, for supporting research, saving lives, and protecting the health of global citizens. This perspective paper presents our collective view on the global health emergency and our effort in collecting, analyzing, and sharing relevant data on global policy and government responses, geospatial indicators of the outbreak and evolving forecasts; in developing research capabilities and mitigation measures with global scientists, promoting collaborative research on outbreak dynamics, and reflecting on the dynamic responses from human societies. (Supported by NSF I/UCRC COVID-19 Rapid Response Project and International Task Forces; <https://covid-19.stcenter.net/>)

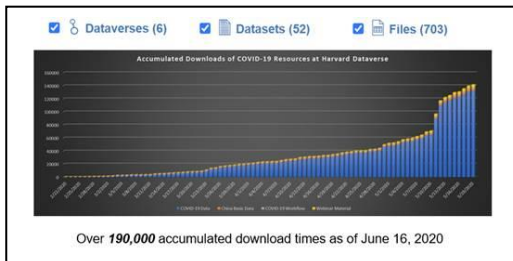
Spatiotemporal Event Detection: A Review

KEYWORDS: GeoAI, geography and geoscience, human dynamics, digital earth, computational challenges, cloud computing, internet of things

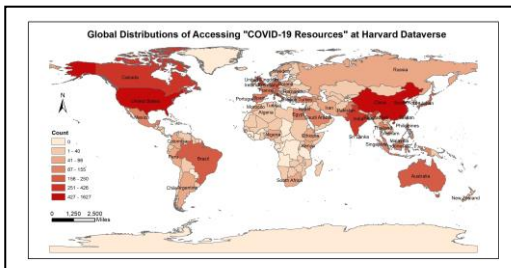
[Read More](#)

Building a Spatiotemporal Platform for Rapid Response to COVID-19

Building a Spatiotemporal Platform for Rapid Response to COVID-19 In response to the COVID-19 pandemic, the NSF Spatiotemporal Innovation Center brought together taskforces of international researchers. The project integrates near real-time data collection, high performance computing resources, analytic tools and workflows, and spatiotemporal expert knowledge into one platform in support of rapid response to the challenges of COVID-19. It builds on research from interdisciplinary teams, enables rapid spatiotemporal analysis for pandemic mitigation, such as revealing disease transmission patterns, modeling social and economic impacts, identifying vulnerabilities, evaluating the effectiveness of policies, assessing health facility capacity, and predicting public sentiment from social media. The platform provides essential resources needed for COVID-19 research through a single gateway, allowing global researchers to jump-start their research, collaborate across disciplines, and in turn share their data, analytical workflows and research findings through the platform for others to replicate and expand on, thus quickly produce results for decision support and workforce development. Visit the [Spatiotemporal Rapid Response Gateway](#). Read [a recent news release](#) containing direct links to data content (Supported by NSF I/UCRC COVID-19 Rapid Response Project and Spatiotemporal I/UCRC IAB).



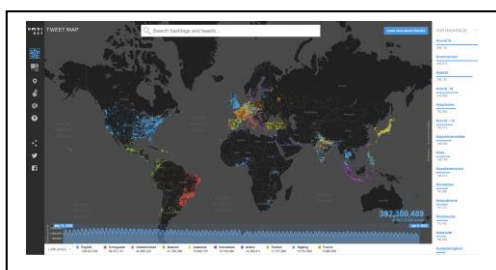
Over 190,000 accumulated download times
as of June 16, 2020



Geospatial Data Science Tools now on Harvard's High Performance Computing Infrastructure

In collaboration with OmniSci Technologies and the NSF Spatiotemporal Innovation Center, and in close coordination with Harvard Research Computing (FASRC), the CGA has deployed OmniSci Immerse and PostGIS on Harvard's large computation cluster, (the CGA served as an incubator for OmniSci in 2012-2013). It is now possible for researchers across Harvard to access these geospatial data tools flexibly and at low or no cost. The first dataset to be hosted by CGA on the cluster is the Geotweet Archive. The CGA has been harvesting and archiving geo-located tweets since 2012, and this dataset has been recently merged with other tweet archives through a collaboration with the University of Salzburg. The resulting multi-billion record dataset is now within easy reach of a wide variety of data science tools.

A presentation on this work given at OmniSci's Virtual Summit by Ben Lewis and Devika Kakkar of CGA, and Raminder Singh of Harvard Research Computing, is here [Read More](#).



Instant visualization of hundreds of millions of
tweets in real time, from the global level all the
way down to your neighborhood.