COVID-19 DATA in HARVARD DATAVERSE

NIH Webinar on Sharing, Discovering, and Citing COVID-19 Data and Code in Generalist Repositories

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Picture of Barcelona public health professionals by Samuel Aranda for The New York Times

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HARVARD
Dataverse

- Dataverse is an open-source software with a growing, active community
- Harvard Dataverse is one of the 56 Dataverse repositories world-wide
- Open to all research domains
- Researchers can deposit for free
- New data curation services (fee-based)

3,754 dataverses in Harvard Dataverse (collections of datasets)

96K searchable datasets

35K deposited datasets

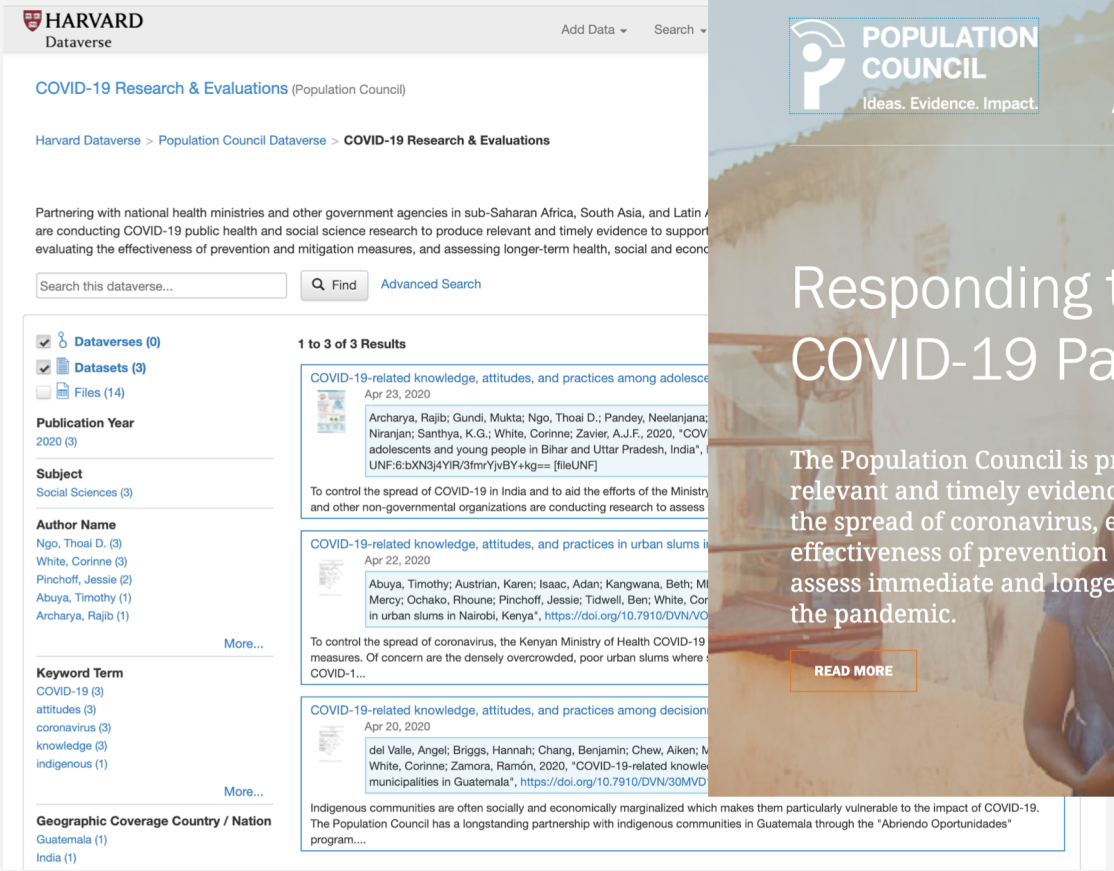
437K files

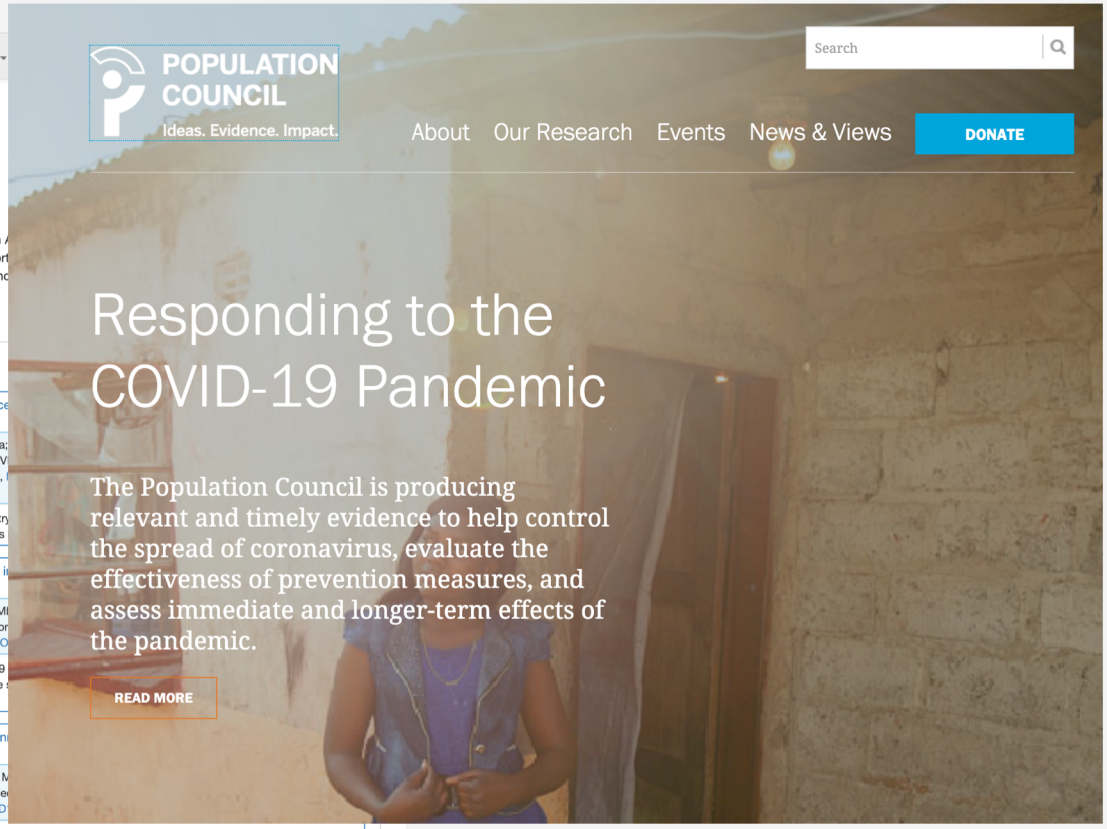
13M downloads

COVID-19 Datasets in Harvard Dataverse

- 50 COVID-19 datasets with 2,043 data files deposited since February 7
- Total of 48,471 downloads by April 23
- Include datasets on: COVID-19 statistics, social science studies to evaluate the effectiveness of government measures, survey data, Twitter data, gubernatorial responses, replication data for preprints

Example of COVID-19 datasets in Harvard Dataverse





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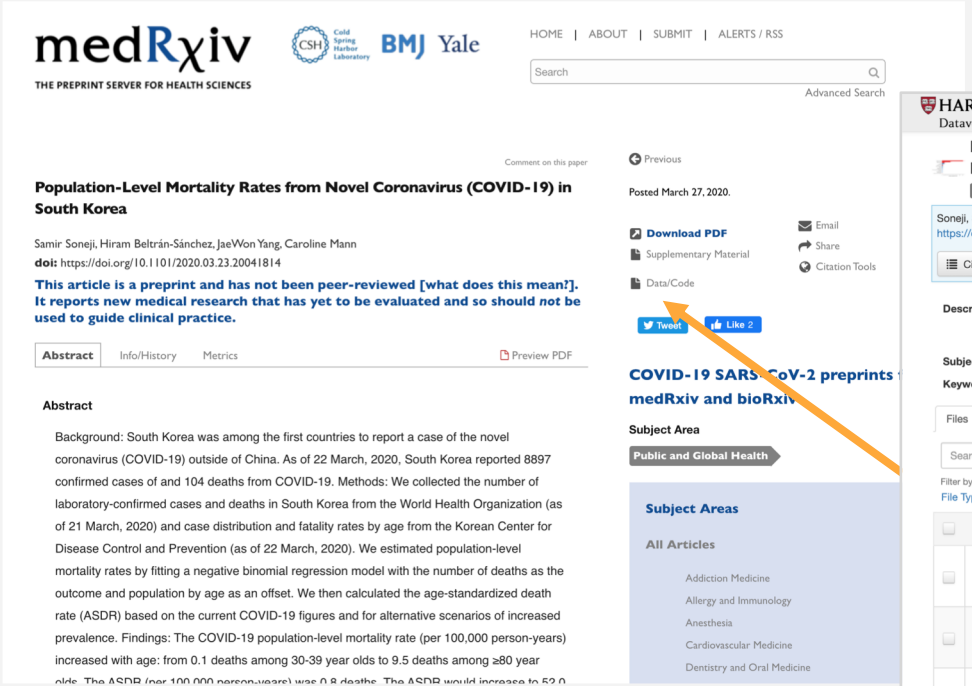
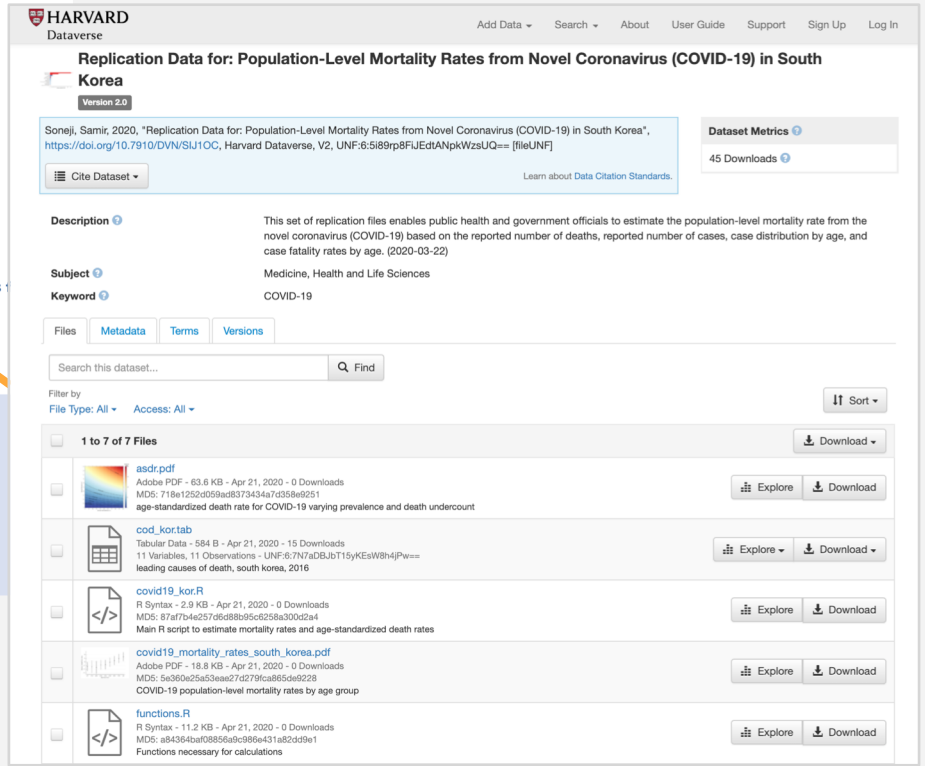
Example of COVID-19 replication data

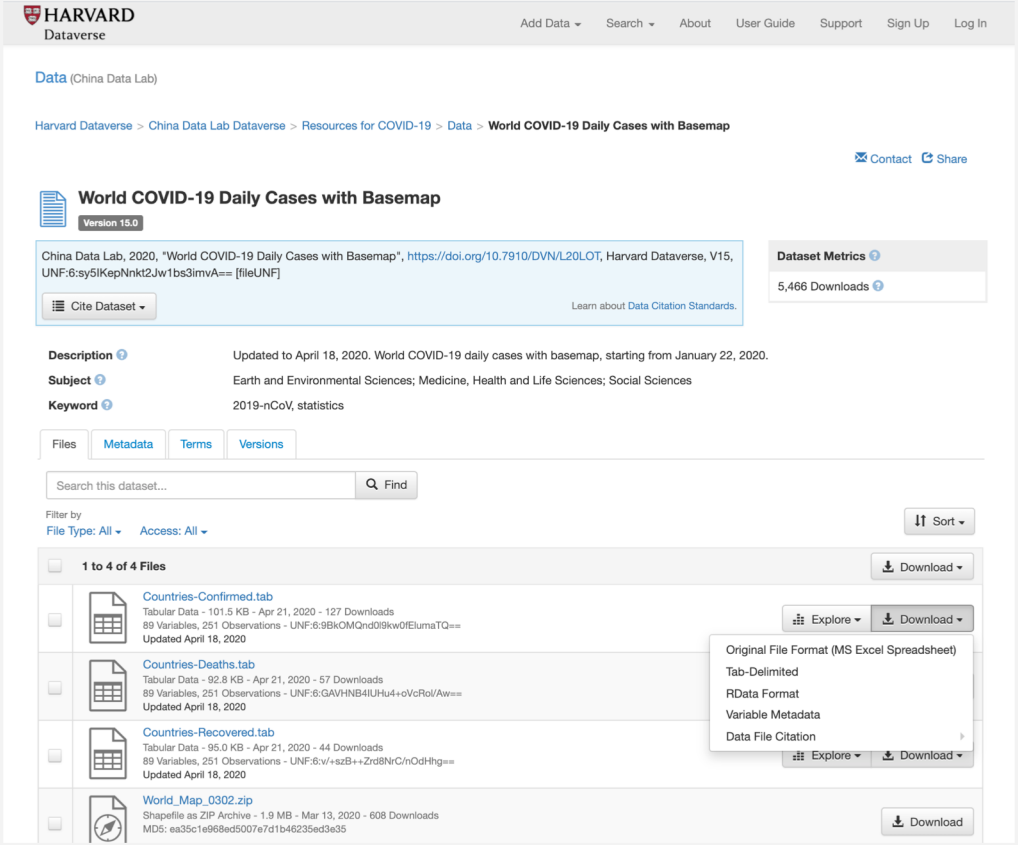


Preprint

Replication Data + Code



Most popular dataset in Harvard Dataverse in 2020



Published on February 20

5,466 Downloads

8,293 Page Views

From China Data Lab

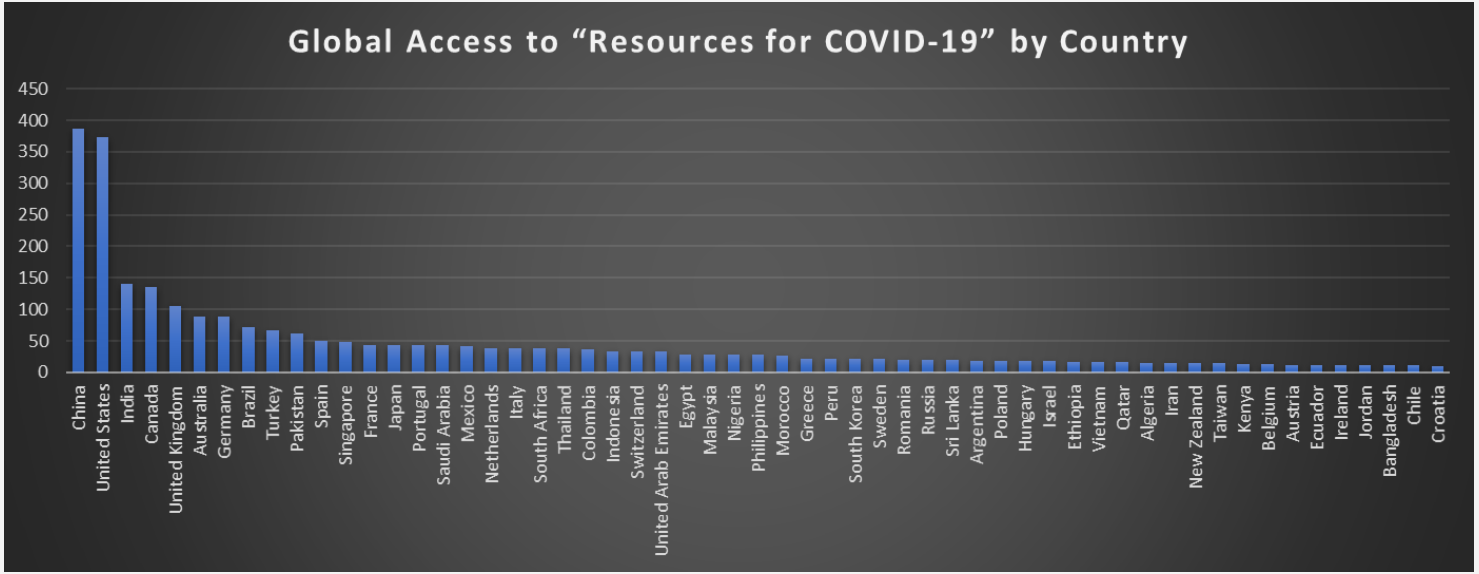
Resources for Novel Coronavirus Global Research

- Part of a larger NSF IUCRC “Spatial Data Lab” project
- Focuses on COVID-19 data and analytical tools (GIS, Statistics)
- Enables access to cloud computing resources
- Facilitates creating, sharing analytical workflows
- All datasets published in Harvard Dataverse
- Datasets include: China census, socio-economic data, China, US, and Global daily COVID-19 data, health facilities, policies and regulations, climate, population mobilities.
- Datasets updated weekly

Credit to Wendy Guan, Tao Hu (IQSS, CGA, Harvard University)

Resources for Novel Coronavirus Global Research

- “Resource for COVID-19” dataverse has had more than 30,000 downloads
- Over 130 countries have accessed the datasets



Credit to Wendy Guan, Tao Hu (IQSS, CGA, Harvard University)

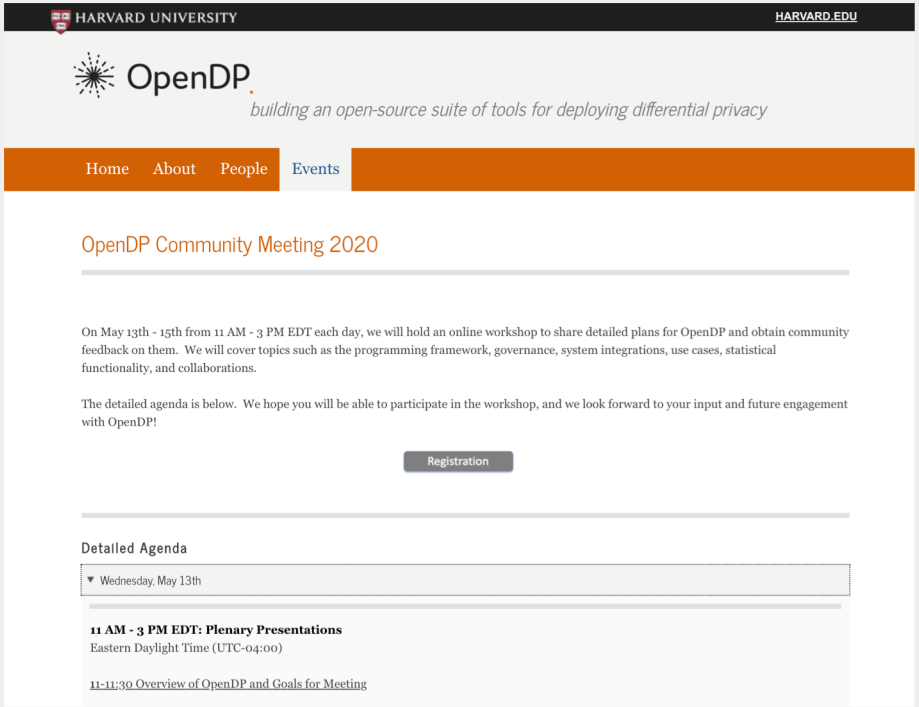
Making European Union COVID-19 Datasets FAIR

- In the European Union coronavirus datasets mostly not shared as FAIR data
- Some countries (Italy, Austria) publish their data on GitHub, without persistent identifiers
- Most countries share the official statistics as PDFs, sometimes with incorrect or missing data points
- In Spain and the Netherlands all data collected and processed by volunteers and shared on GitHub
- It's a big challenge to force official institutions to translate all their variables from the national language to English and use the same codebook for all countries to make data interoperable
- Slava Tykhonov from DANS-KNAW created an European COVID-19 data hub and archive with FAIR datasets in the Harvard Dataverse, updated daily: https://dataverse.harvard.edu/dataverse/covid-19-eu

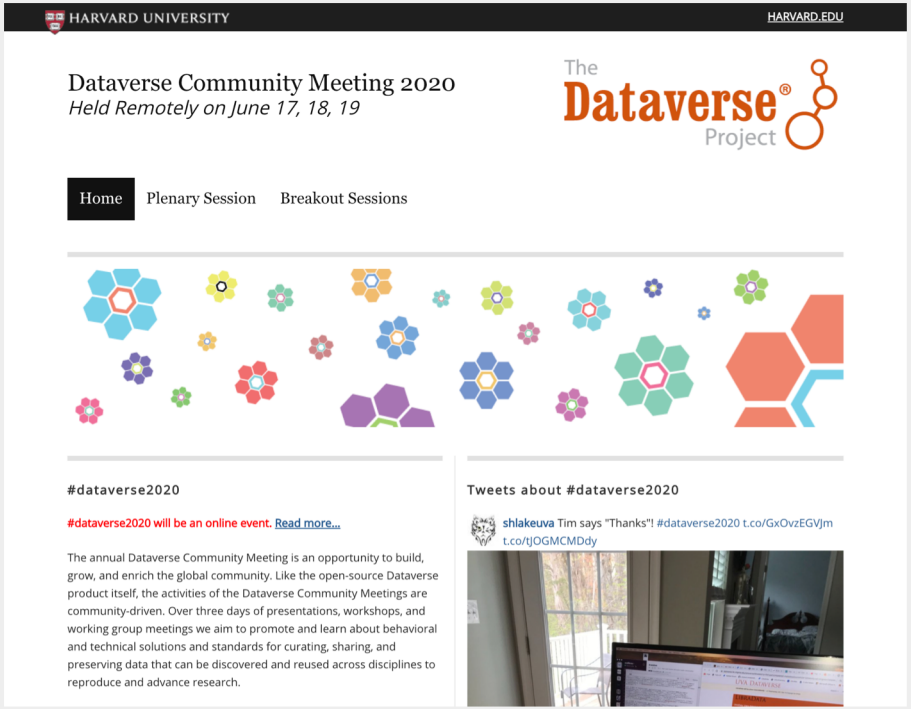
Another interesting initiative that started collecting and processing coronavirus data through Harvard Dataverse is CoronaWhy, a global distributed organization, mobilizing volunteers and community partners to address the current challenge through data science, AI, and knowledge sharing.

Thanks and Upcoming Events

OpenDP Community Meeting, May 13-15, 2020:
Session on Differential Privacy to Explore and Analyze COVID-19 sensitive data



Dataverse Community Meeting, June 17-19, 2020:
Session on Global COVID-19 Data Sharing



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