

Assessing the Global Divide

Repository access from the global north and south,
before and after COVID

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Section 1

Background

About the Repository Analytics and Metrics Portal (RAMP)

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Background

Trends

- Aggregate search engine performance metrics
 - Google search properties
 - Consistent reporting across repositories and platforms
 - Longitudinal data (since 2017 for some IR)
 - No-cost, online dashboards for participating repositories
- Open datasets
 - Subset of 35 IR, Jan 1 - May 31, 2019
 - All participating IR (with consent), 2017 - 2021
 - Complete documentation is available.

Objectives

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Invite discussion about future research and the future of RAMP.

- Previous analysis of the Jan - May 2019 subset (Spring 2020: Pre-COVID!)
 - Access of IR content is unevenly distributed across IR and items
 - Users from the global south are far more likely to use mobile devices
 - Weak but significant correlation between population and access of IR content
- Redo previous analysis with more data
 - **Identify** COVID impact, if any, on access of IR content
 - Surface trends in RAMP data and identify external data source of research interest
 - Define research questions and invite further analysis and participation

About the present sample

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- Three years of data for 45 repositories
 - Repositories not in RAMP before January 1, 2019 excluded
 - Date range January 1, 2019 - December 31, 2021
- Limitations
 - Cannot assess or compare with longer term trends
 - Sample is not representative
 - Global regions
 - Languages
 - Google Search Console API is the sole data source

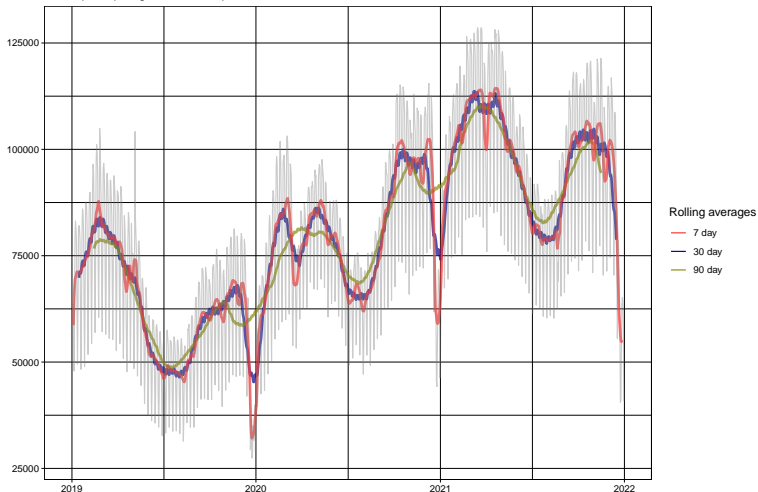
Section 2

Trends

General seasonal trend (2019-2021)

Daily totals with 7 day, 30 day, and 90 day moving averages.

Total clicks per day (2019–2021)
RAMP participating institutional repositories



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COVID disruption of seasonal trend (2020)

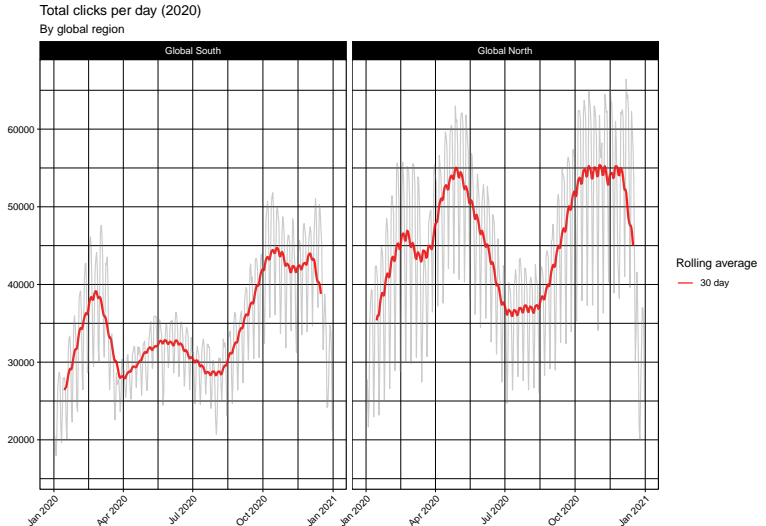
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Daily totals with 30-day moving average.

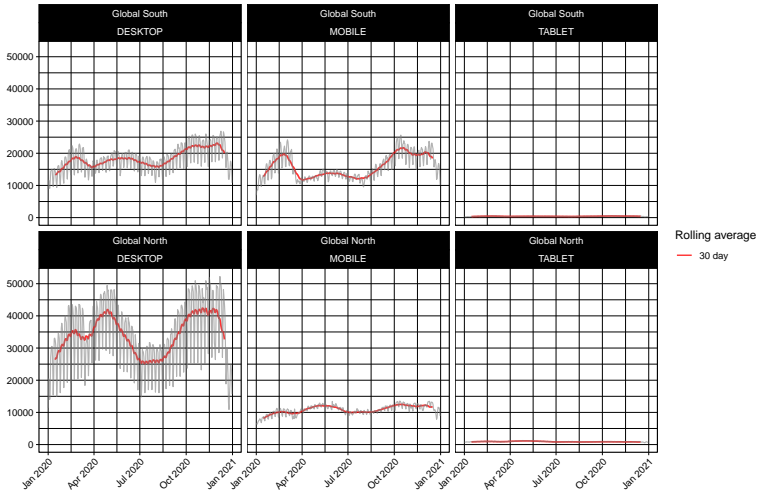


COVID 2020 disruption by device

Daily totals with 30-day moving average.

Total clicks per day (2020)

By global region and device



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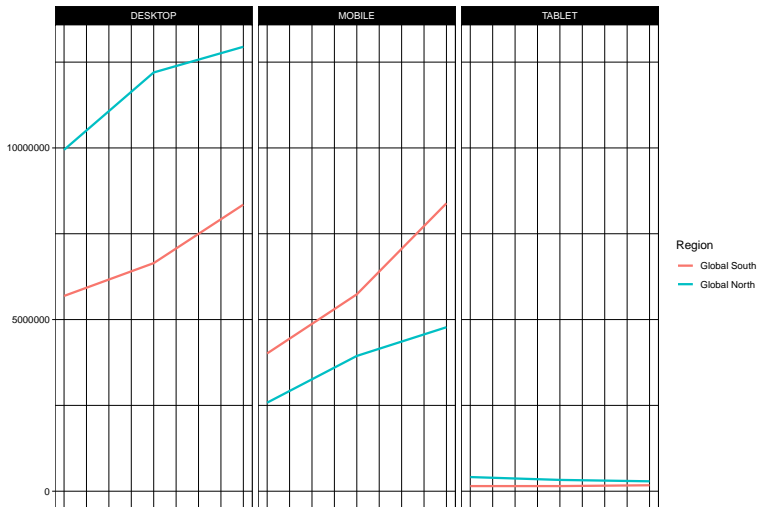
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Overall clicks by device

Clicks by device (2019–2021)



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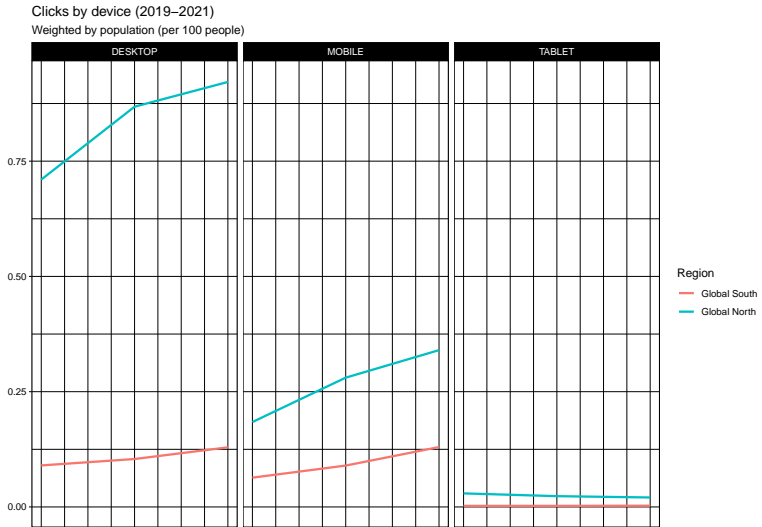
Clicks by device, weighted by population (World Bank)

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Aggregated click data

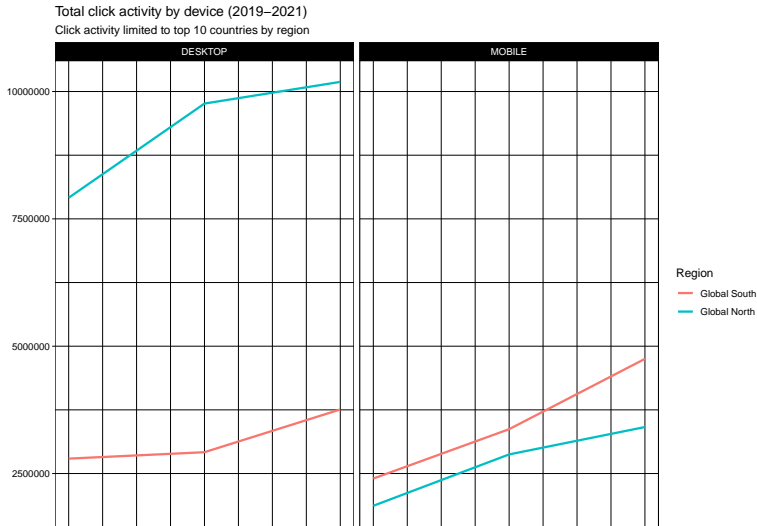
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From the top 10 countries by raw click counts.

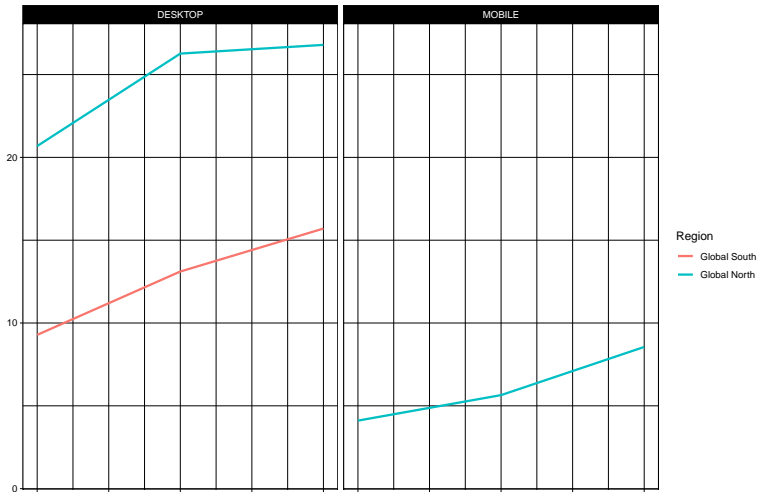


Aggregated weighted click data

From the top 10 countries by clicks, weighted by population.

Population-weighted click activity by device (2019–2021)

Click activity limited to top 10 countries by region



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Code and documentation

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- Supplemental data and code for generating this PDF presentation are available on GitHub:
 - https://github.com/jonathanwheeler01/open_repositories_2023_wheeler_pham
- Documentation and scripts for downloading and aggregating raw RAMP data are included.

Data Sources (other than RAMP data)

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- International Organization for Standardization. (2020), “ISO 3166 Country Codes”, ISO, Nongovernmental organization, available at:
<https://www.iso.org/iso-3166-countrycodes.html> (accessed 12 April 2020).
- Meta contributors. (2020), “List of countries by regional classification”, Wikimedia Meta-Wiki, Meta, discussion about Wikimedia projects, 1 April, available at:
https://meta.wikimedia.org/w/index.php?title=List_of_countries_by_regional_classification&oldid=19943813 (accessed 12 April 2020).
- World Bank. (2023), “Population, total,” The World Bank Group,
<https://data.worldbank.org/indicator/SP.POP.TOTL>.

Contact information

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- For inquiries about RAMP data, research, or to participate in RAMP please see
 - <https://rampanalytics.org/>
 - Or contact us at <mailto:ramp.msu@gmail.com>