

2 & 4 slides are used to present with animation

5&6 contain gif (require presentation mode)

8&9 is static status(2)

11&12 is static status(4)

The impact of COVID-19 on the World

Estimated
-12.8%
GDP growth
rate
by OBR^[5]

286,000+
confirmed
cases &
40,000+
Deaths
by WHO^[6]

Intensive
needs of PPE,
ventilators,
critical care
beds, and
medical staff
by NHS^[8]

Estimated
1.35 million+
unemployment
by ONS^[7]



[5] "Global Economic Prospects: Outlook for Growth in 2020, 22 May 2020, www.imf.org/en/Publications/Global-Economic-Prospect - economic-prospects.

[6] WHO Coronavirus Disease (COVID-19) Dashboard, World Health Organization, 16 June 2020, covid19.who.int/.

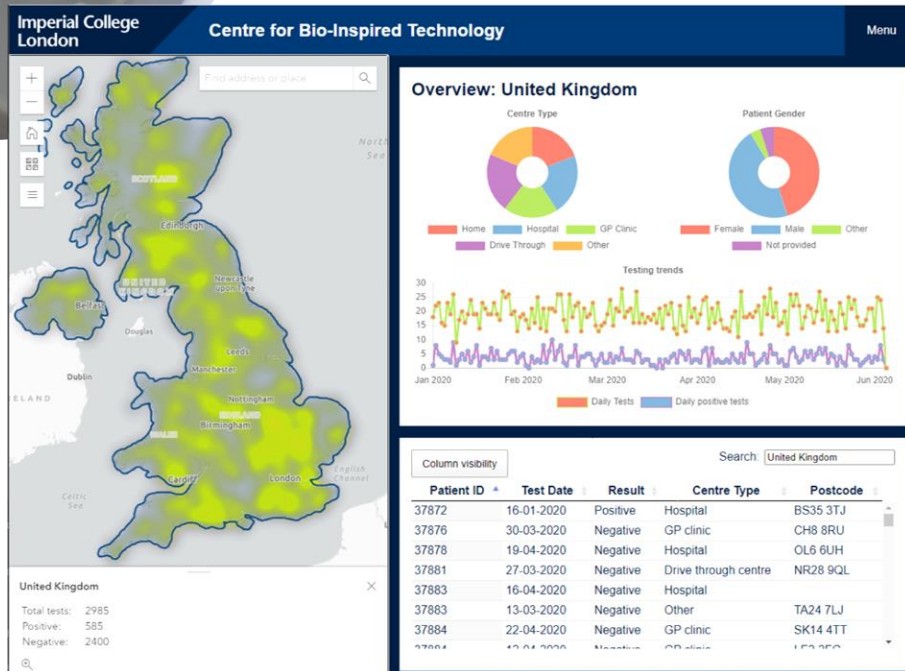
[7] Freedom, Bessie, Gordon, and the Effects of COVID-19 on the UK Labour Market Statistics Office, 16 May 2020, www.ons.gov.uk/news/wcms.743036/lang--en/index.htm.

[4] "COVID-19 Economic Impact Could Reach \$8.8 Trillion Globally - New ADB Report," Asian Development Bank, 15 May 2020, www.adb.org/news/covid-19-economic-impact-could-reach-8-8-trillion-globally-new-adb-report.

[8] Hatherley, Sarah, et al. "Coronavirus: NHS Activity and Capacity." *IN BRIEF*, 14 May 2020, [seneddresearch.blog/2020/05/14/coronavirus-nhs-activity-and-capacity](https://www.seneddresearch.blog/2020/05/14/coronavirus-nhs-activity-and-capacity)

COVID-19 Tracking

— Data visualisation platform



1. Visualise data on a country-wide basis all the way down to a single postcode

The platform allows for accurate visualisation of diagnostics at global, national, and regional scales.

UK->England->London->Westminster
->Knightsbridge and Belgravia->SW7 2AZ



2. Detailed individual case analysis

Detailed case analysis is made possible through a patient specific view available to clinicians.

PCR graph + clinician comment



3. Data analysis & Rel-time data updating

Intuitive and easy to use visualisation interface helps to analyse data and identify trend.

Regularly updated with latest data from NHS and Office for National Statistics when it becomes available.



4. User-friendly uploading and administrator interfaces

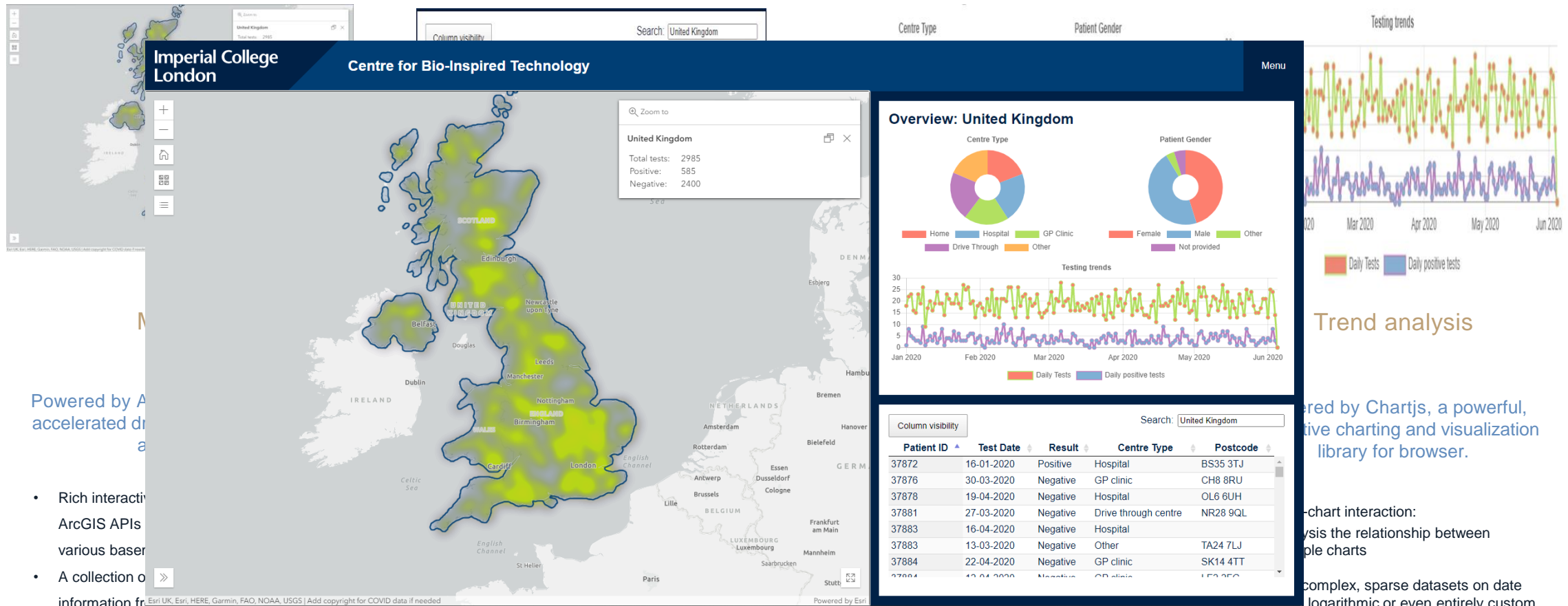
A streamlined interface allows clinicians to review and verify data before it gets added to the database.

Easy and painless management by only dragging and dropping data files.

No technical knowledge required.

Completely cost free

The Dashboard



Powered by ArcGIS APIs
accelerated data

- Rich interactive map
- ArcGIS APIs
- various base maps
- A collection of data
- information from various sources
- Data-driven styling with both heat and dot data layers available.
- Convert your addresses and place names into coordinates and put them on a map.

- Linked to individual analysis with authority required
- Resize table dynamically with the page.

- Great rendering performance across all modern browsers



Trend analysis

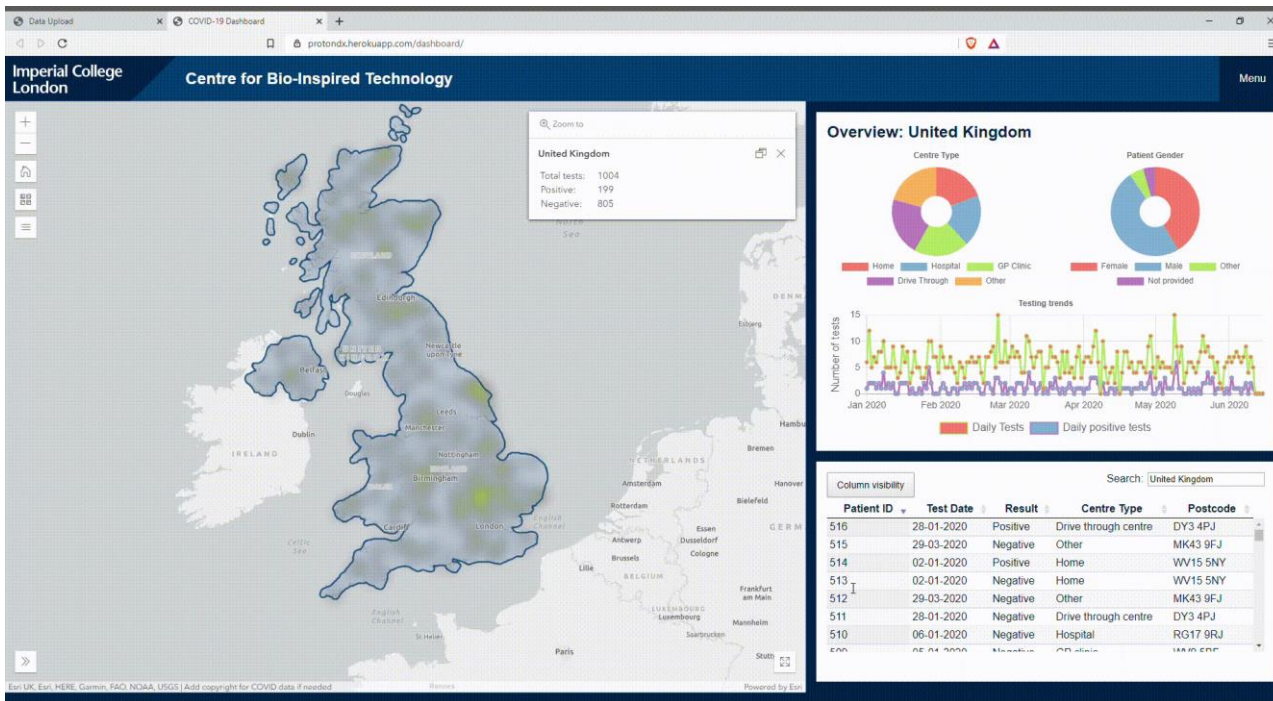
Powered by Chart.js, a powerful, interactive charting and visualization library for browser.

Chart interaction:
analysis the relationship between multiple charts

Complex, sparse datasets on date scales, logarithmic or even entirely custom scales with ease.

- Redraws charts on window resize for perfect scale granularity.

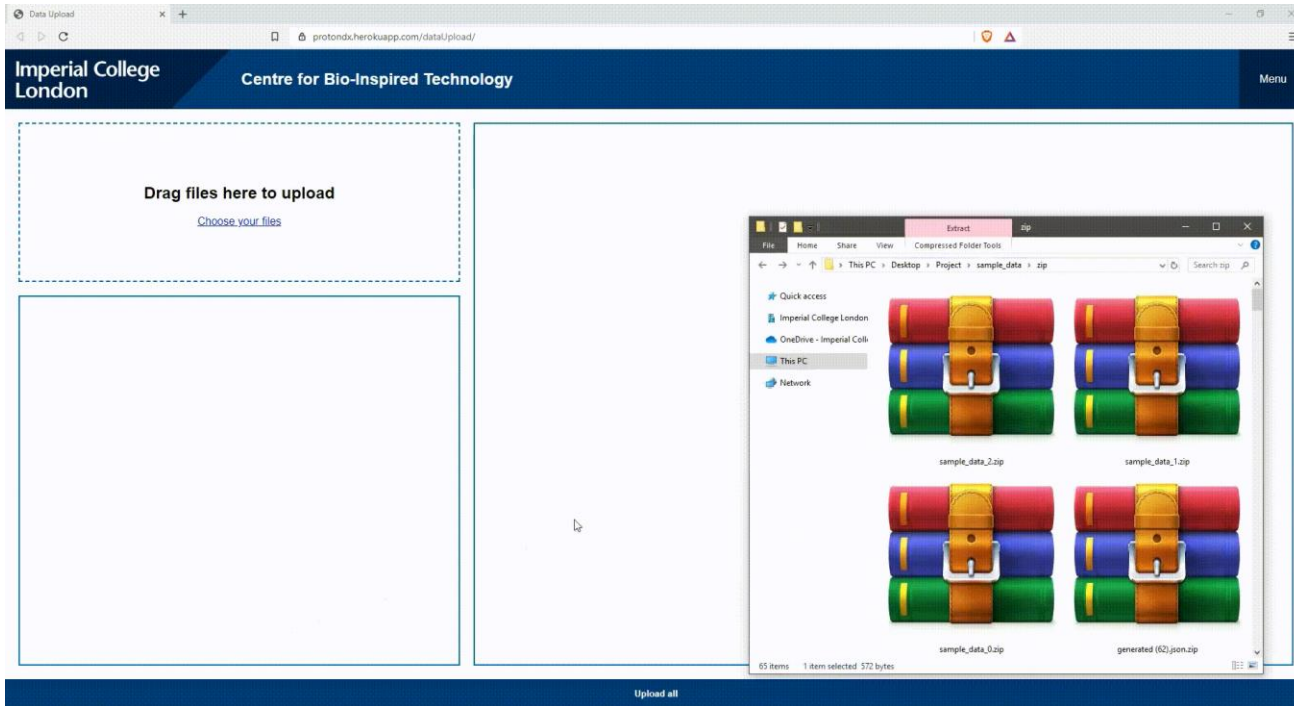
Individual analysis interface



A pop-up window: Easily accessible to other cases' analysis

- PCR graphs: allowing clinicians to visualise the data when predicting how likely it is to be a positive case.
- Diagnostic comments: exclusive comments that help anyone who is interested in clearly understand the specific situation of each patient.
- Testing history/Tracking history: Better understand a range of activities and the morbidity process of each patient.
- Information overview: Intuitively present all important information.
- Secure privacy protection: All patients are labeled with their unique patient ID. Only visible for for clinicians/doctors with access authority required.
- Continue...

The uploading interface



User-friendly admin and uploading interface: quick and convenient uploading

- Drag and drop ZIP archives containing experiment data
- Files are extracted and displayed in a form where information can be reviewed or amended.
- The updated data is uploaded and ready to be displayed. The original data is preserved, and user credentials are logged for reference.
- **Continue...**

Static pages

The impact of COVID-19 on the world

-5.2%
Global
economy
By World
Bank^[1]

6.93 Million+
confirmed
cases &
400,000+
Deaths
by WHO^[2]

Estimated
\$8.8 Trillion+
economic loss
by ADB^[4]

Estimated
195 million+
unemployment
by ILO^[3]



[1] "Global Economic Prospects." *World Bank*, 9 June 2020, www.worldbank.org/en/publication/global-economic-prospects.

[2] WHO Coronavirus Disease (COVID-19) Dashboard. *World Health Organization*, World Health Organization, 8 June 2020, covid19.who.int/.

[3] "As Job Losses Escalate, Nearly Half of Global Workforce at Risk of Losing Livelihoods." *ILO*, 29 Apr. 2020, www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_743036/lang--en/index.htm.

[4] "COVID-19 Economic Impact Could Reach \$8.8 Trillion Globally - New ADB Report." *Asian Development Bank*, 15 May 2020, www.adb.org/news/covid-19-economic-impact-could-reach-8-8-trillion-globally-new-adb-report.

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[5] "Coronavirus Analysis." *Office for Budget Responsibility*, 22 May 2020, obr.uk/coronavirus-analysis/.

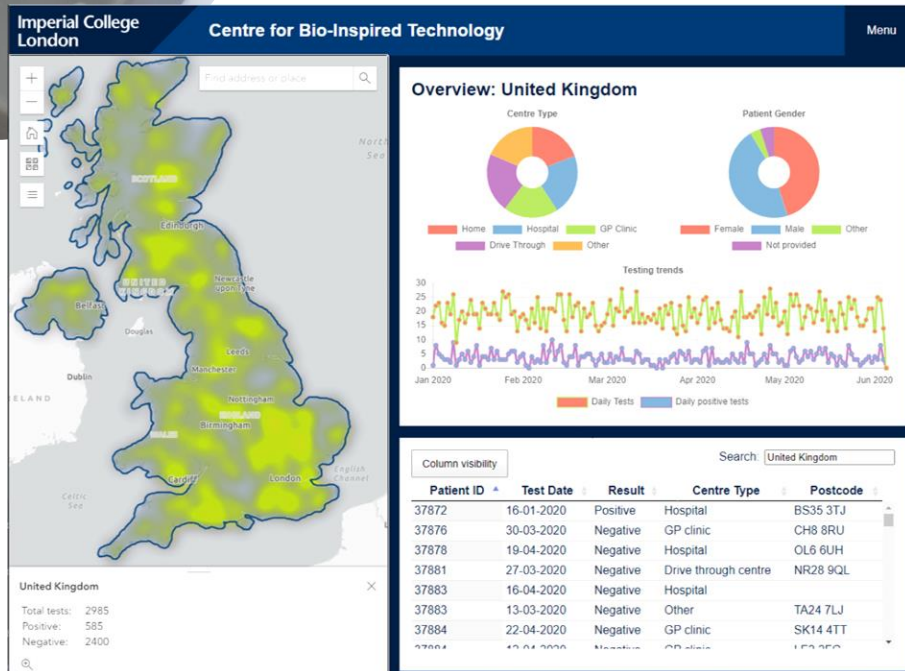
[6] WHO Coronavirus Disease (COVID-19) Dashboard. World Health Organization, 8 June 2020, covid19.who.int/.

[7] Freeman, David. "Coronavirus and the Effects on UK Labour Market Statistics." *Office for National Statistics*, Office for National Statistics, 5 May 2020, www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/coronavirusandtheeffectsonuklabourmarketstatistics/2020-05-06.

[8] Hatherley, Sarah, et al. "Coronavirus: NHS Activity and Capacity." *IN BRIEF*, 14 May 2020, senedresearch.blog/2020/05/14/coronavirus-nhs-activity-and-capacity.

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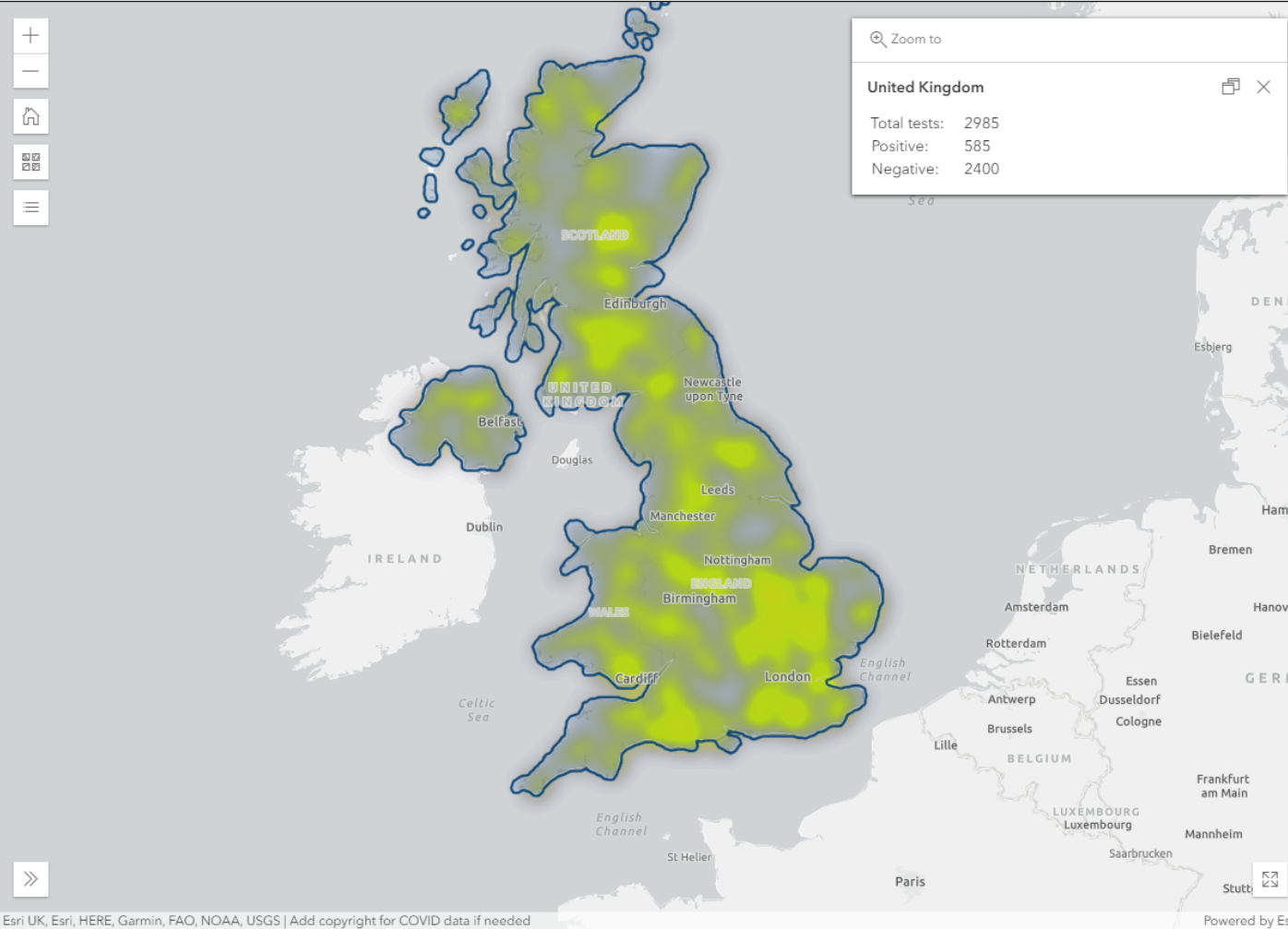
3, Data analysis & Rel-time data updating

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Regularly updated with latest data from NHS and Office for National Statistics when it becomes available.

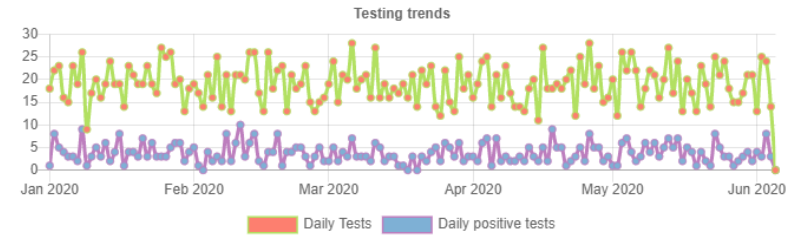
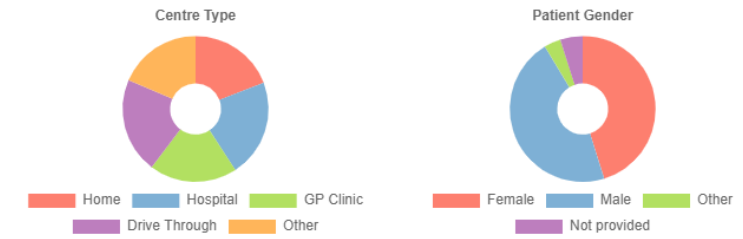


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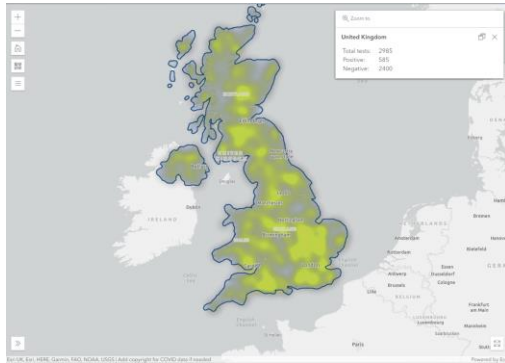
Overview: United Kingdom



Column visibility Search: United Kingdom

Patient ID	Test Date	Result	Centre Type	Postcode
37872	16-01-2020	Positive	Hospital	BS35 3TJ
37876	30-03-2020	Negative	GP clinic	CH8 8RU
37878	19-04-2020	Negative	Hospital	OL6 6UH
37881	27-03-2020	Negative	Drive through centre	NR28 9QL
37883	16-04-2020	Negative	Hospital	
37883	13-03-2020	Negative	Other	TA24 7LJ
37884	22-04-2020	Negative	GP clinic	SK14 4TT
37884	12-04-2020	Negative	GP clinic	LE3 9FC

The Dashboard



Map

Powered by ArcGIS with fast GPU accelerated drawing and client-side analytics.

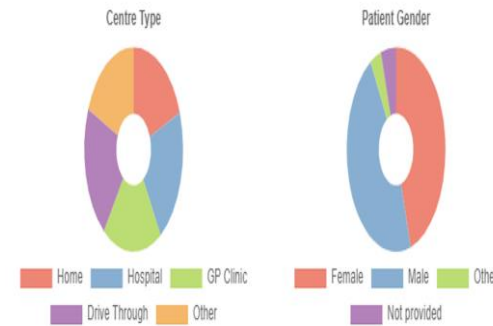
- Rich interactive data visualizations with ArcGIS APIs and SDKs in 2D with various basemaps.
- A collection of global geographic information from Esri
- Data-driven styling with both heat and dot data layers available.
- Convert your addresses and place names into coordinates and put them on a map.

Patient ID	Test Date	Result	Centre Type	Postcode
37872	16-01-2020	Positive	Hospital	BS35 3TJ
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37883	13-03-2020	Negative	Other	TA24 7LJ
37884	22-04-2020	Negative	GP clinic	SK14 4TT
37884	12-04-2020	Negative	GP clinic	LE9 2FC

Table

Powered by DataTables, a plug-in for the jQuery JavaScript library. A highly flexible tool adds advanced features to any HTML table

- Interactive table with search and sorting
- User chooses what columns to show and what to sort by.
- Linked to individual analysis with authority required
- Resize table dynamically with the page.



Composition analysis

Powered by Chartjs, a powerful, interactive charting and visualization library for browser.

- Interactive graphs.
- Plotted using data collected directly from the map on client side.
- User can show or hide data
- Great rendering performance across all modern browsers



Trend analysis

Powered by Chartjs, a powerful, interactive charting and visualization library for browser.

- Multi-chart interaction:
- Analysis the relationship between multiple charts
- Plot complex, sparse datasets on date time, logarithmic or even entirely custom scales with ease.
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