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Session: Geospatial impact of COVID-19,
Chair: Prof. Markus Schaffert

Importance and Challenges of Location Intelligence in Corona Pandemic

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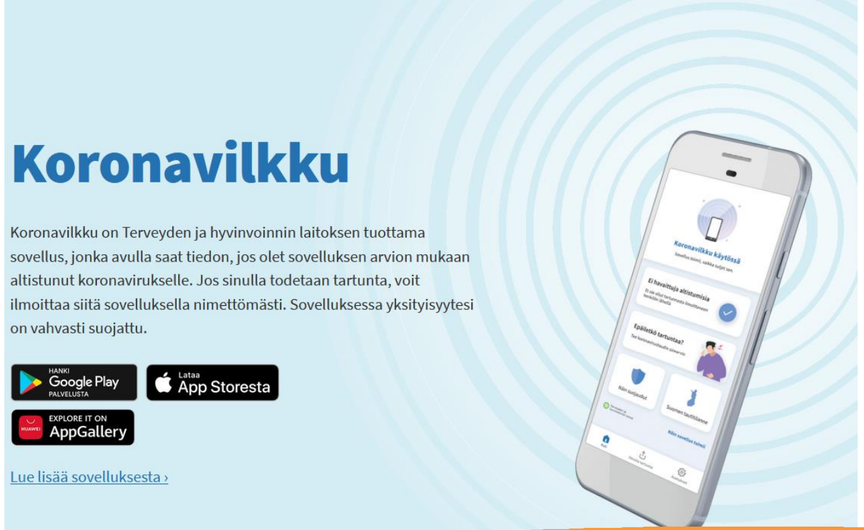
BACKGROUND

- WHO announced on the 11th of March 2020 that COVID-19 can be characterized as a pandemic.
  -> resulted in massive migration to remote working
  -> restrictions on movement -> stores and restaurants had to adapt rapidly to new ways of making sales
  -> authorities ja citizens needed up-to-date, reliable and easily understandable information

- Location intelligence has played a crucial role during the pandemic



Rapid development of location enabled food and meal delivery platforms and services to connect restaurants and grocery stores with customers and couriers

Digital information about customers' behaviors and movements to analyze changes

- **Mobile operator Telia's Crowd Insights (mobile customers' anonymized and aggregated location data**

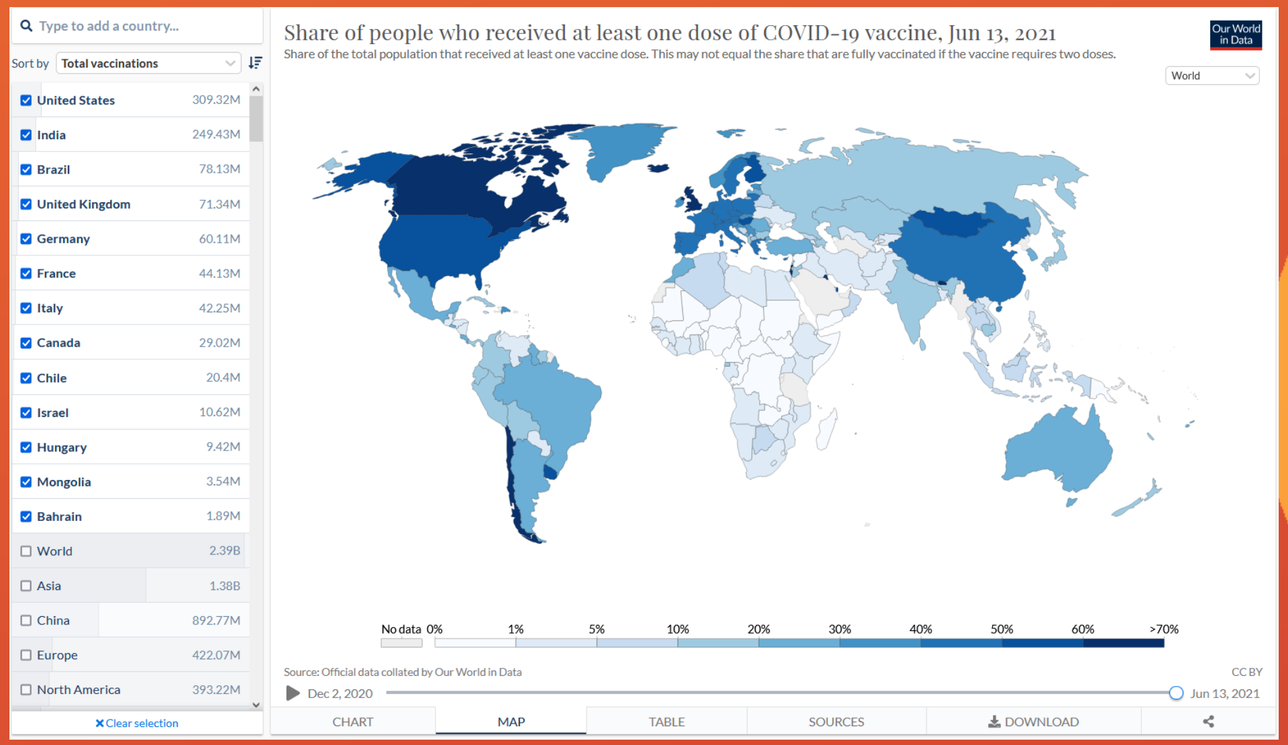
High quality location information, efficient data flows and location analytics for route optimization and asset management have been critical

Rapid changes to meal and food delivery

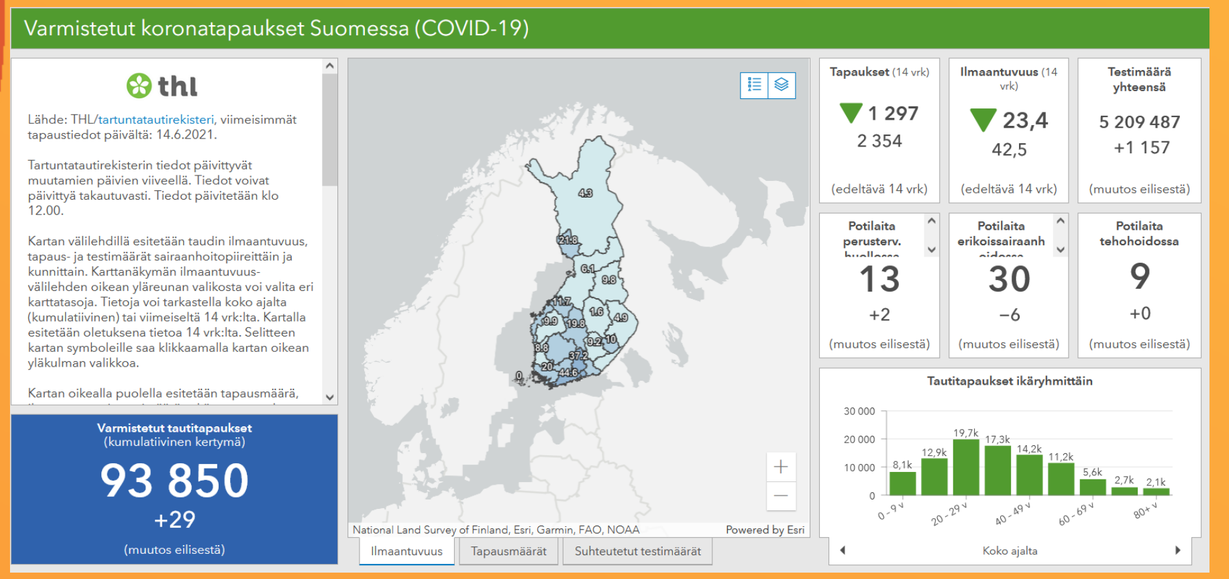
GeoForum Finland setup a national Corona GIS group in March 2020

The biggest cities in Finland connected their location platform’s wide capabilities to other processes and essential data to support the top management in fast decision making

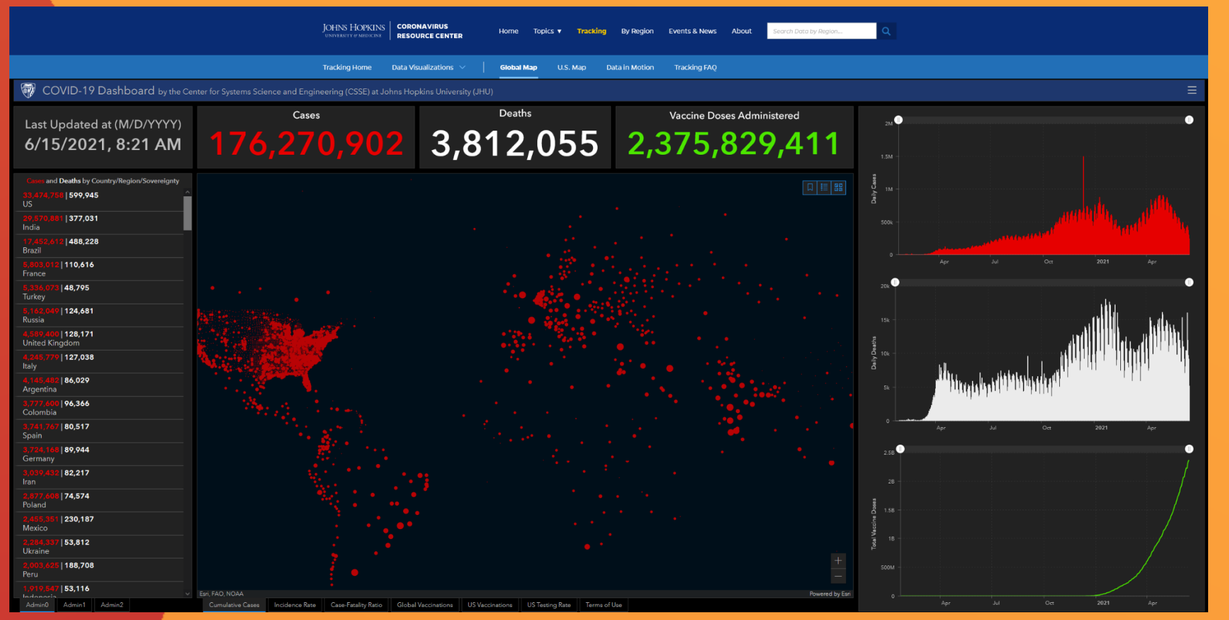
GIS professionals started new ways to collaborate



https://ourworldindata.org/covid-vaccinations

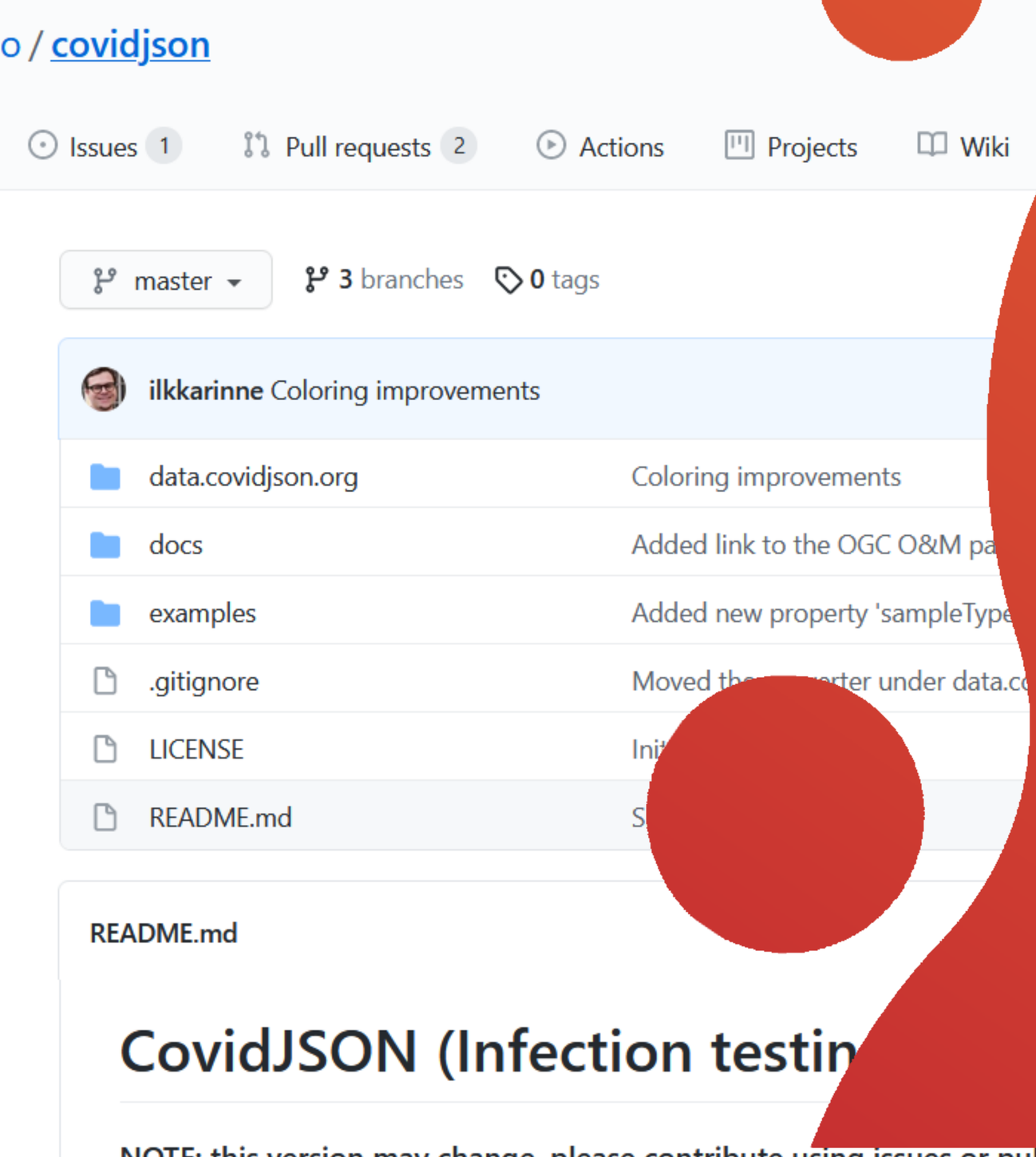


Finnish Corona map by THL



https://coronavirus.jhu.edu/map.html

Covid-19 situation pictures and vaccination maps for decision makers and citizens



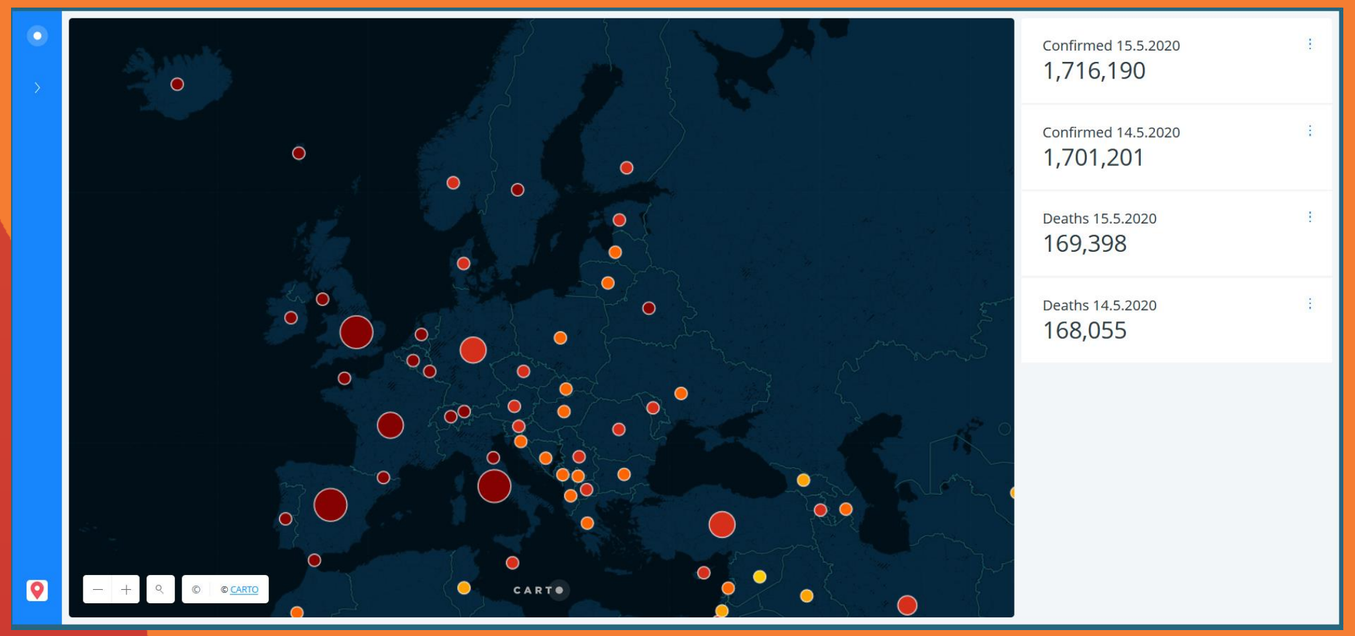
The power of standards

- **Spatineo's contribution to the Corona GIS group Finland: CovidJSON, data model for infection data *(based on GeoJSON standard)* https://covidjson.org/ and https://data.covidjson.org/**
- **Data models for two primary epidemic related use cases: Individual test cases and Regional infection statistics.**

Tapio’s proof-of-concept

- Established Covid-19 worldwide situation map without coding
  - CARTO’s location platform in the cloud
  - Daily download of Covid-19 content from Johns Hopkins site
  - Other data: demographics, acreages, country flags etc.
  - Would have liked to use data APIs especially OGC’s Observation and measurements standard for JSON encoding but final releases will be published by the end of 2021

- Data quality and quality checks are needed
- Metadata would have helped a lot
- http://covid19.tapiosiltala.com/



http://covid19.tapiosiltala.com/

MORE INFORMATION

WWW.SPATINEO.COM

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