CONVERTING AND ENRICHING GEO-ANNOTATED EVENT DATA:
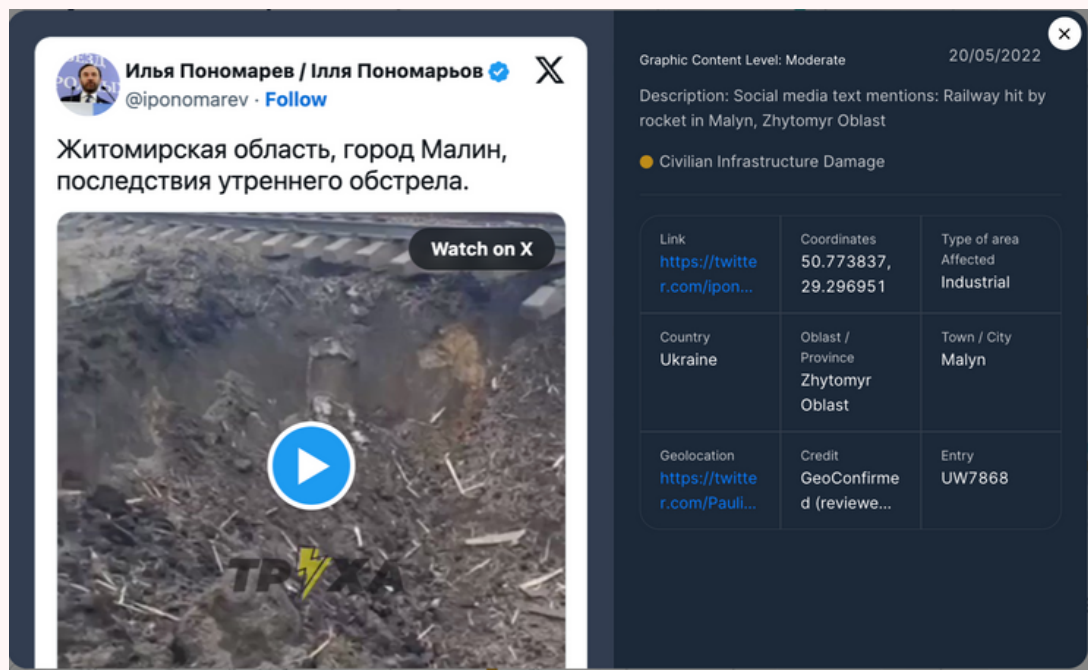## Integrating Information for Ukraine Resilience

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Linked 4 Resilience

VU VRIJE UNIVERSITEIT AMSTERDAM

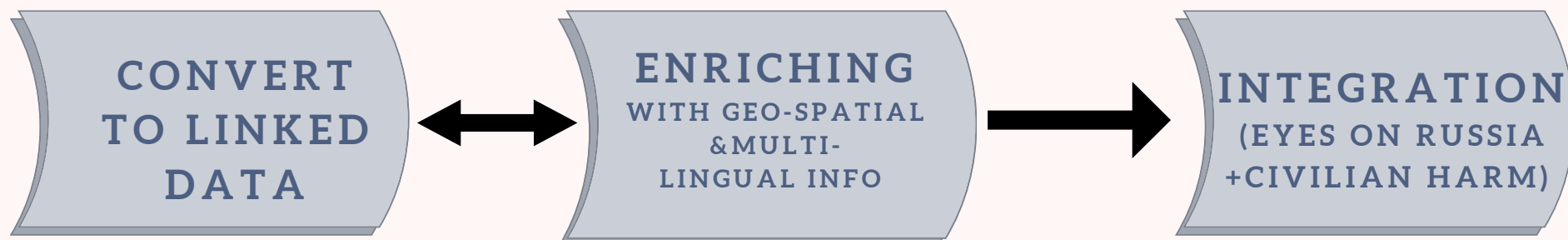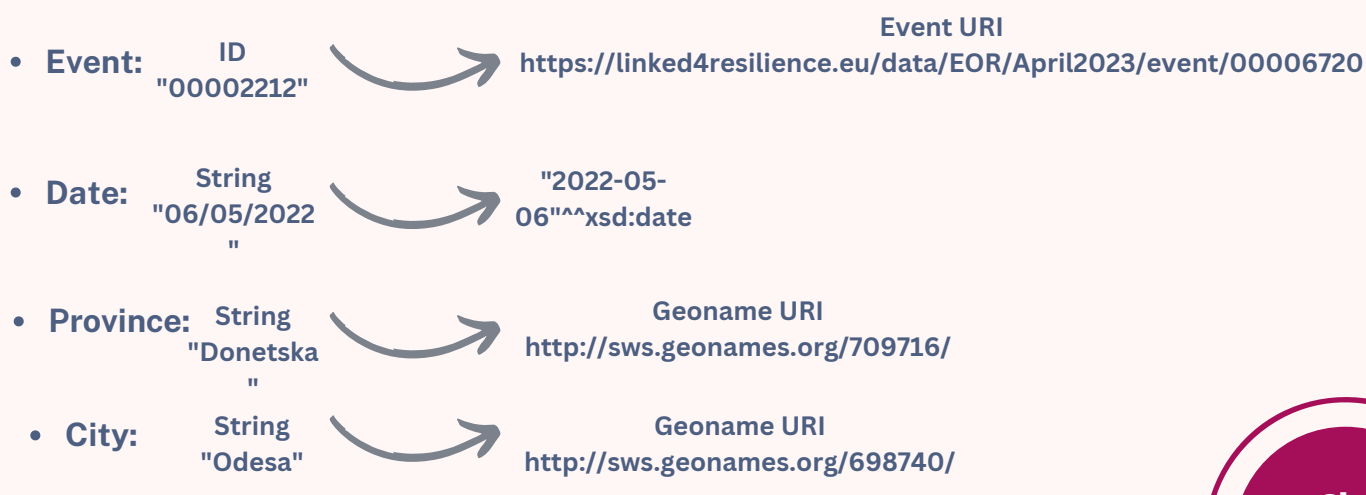Eyes On Russia (https://eyesonrussia.org/)

INTRODUCTION

Our project uses Linked Data to unify and enrich geo-annotated event datasets, aiding in integrating critical information sources and fostering effective resilience projects in Ukraine and other war-related cases. It aims to tackle challenges brought by the Russian-Ukrainian conflict and leverage data transformation for positive societal impact.
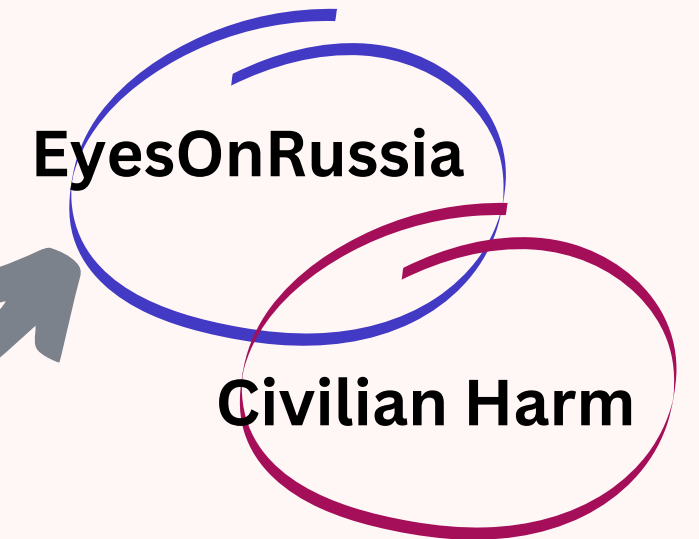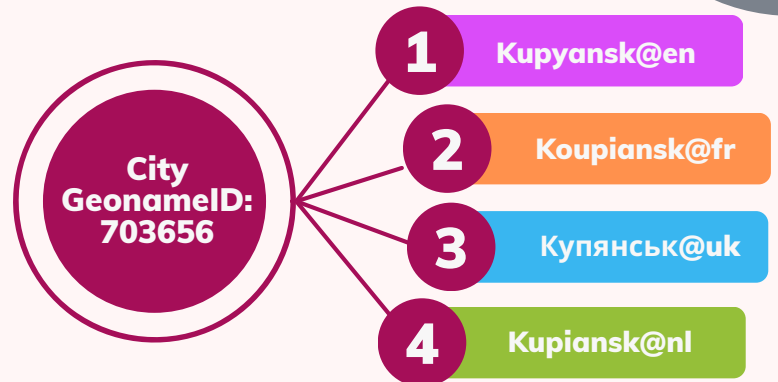
CONVERT TO LINKED DATA ↔ **ENRICHING WITH GEO-SPATIAL &MULTI-LINGUAL INFO** → **INTEGRATION (EYES ON RUSSIA +CIVILIAN HARM)**

Convert JSON Files To RDF

- **Event:** ID "00002212" → Event URI https://linked4resilience.eu/data/EOR/April2023/event/00006720
- **Date:** String "06/05/2022" → "2022-05-06"^^xsd:date
- **Province:** String "Donetska" → Geoname URI http://sws.geonames.org/709716/
- **City:** String "Odesa" → Geoname URI http://sws.geonames.org/698740/

Enrich using linked data

City GeonameID: 703656
1 Kupyansk@en
2 Koupiansk@fr
3 Купянськ@uk
4 Kupiansk@nl

Integrate

EyesOnRussia

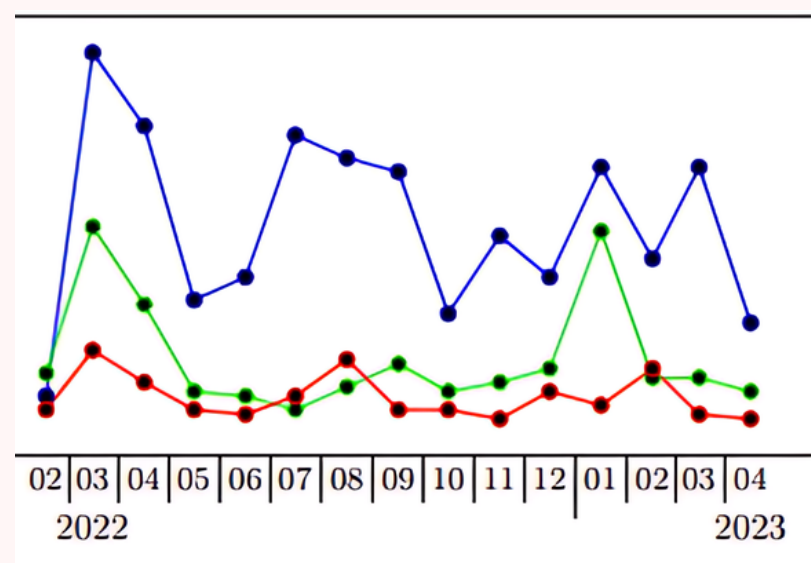**Civilian Harm**

A total of 10K events

USE CASES

Timelapse of damaging events about schools and hospitals. illustrates dates and their corresponding number of events about schools, universities, and hospitals between August 1st, 2022 and April 30th , 2023.
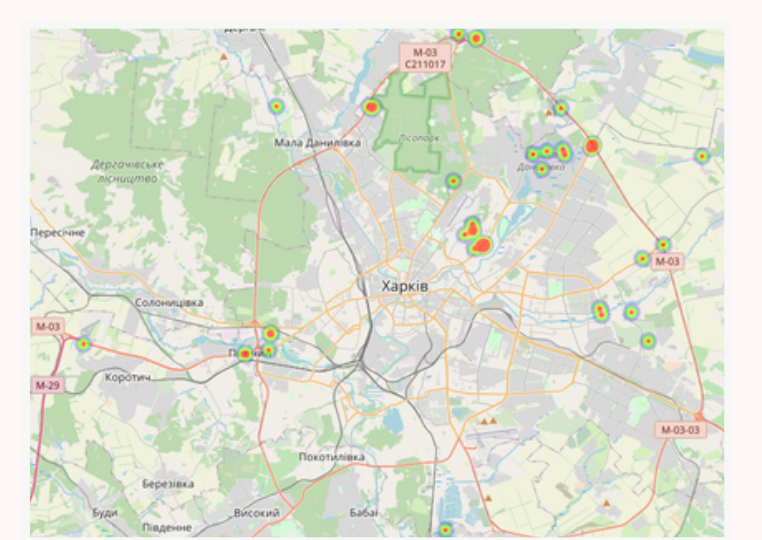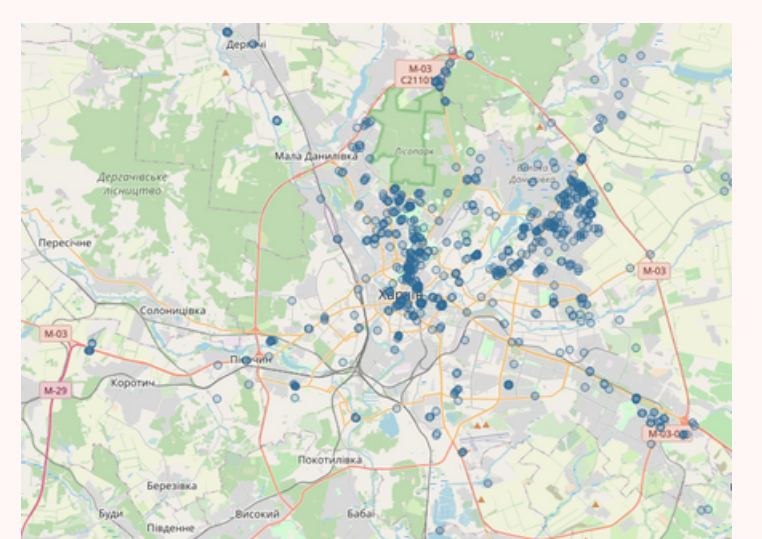

Monthly record of attacks and children's deaths between April 2022 and December 2022.
1)The monthly number of attacks,
2) the monthly count of children who lost their lives.
3) the severity by depicting the ratio of children's deaths to attacks
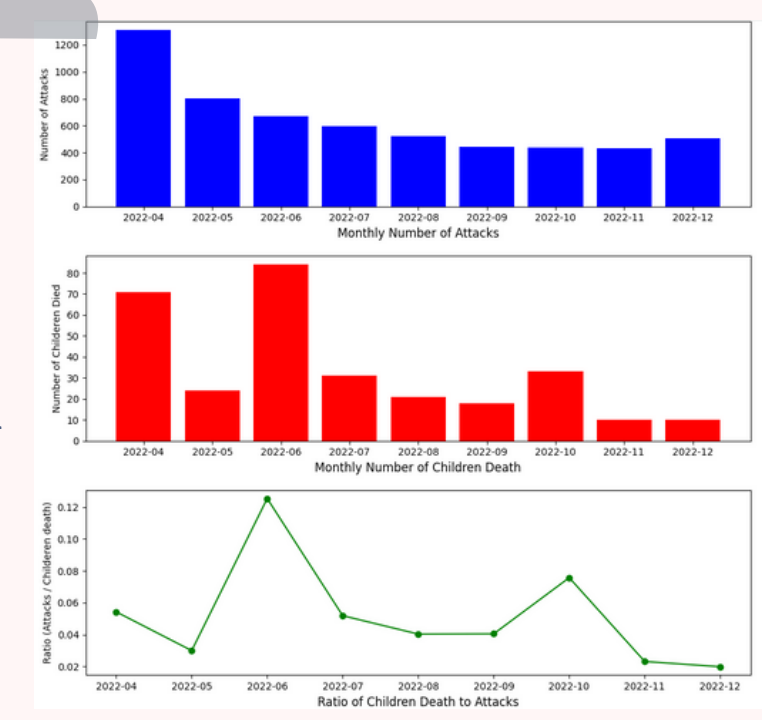
Events visualization. As a demonstration of the use of our integrated dataset, presents the result of a SPARQL query that retrieves events in Kherson in the integrated datasets between October 1st 2022 and February 28th , 2023
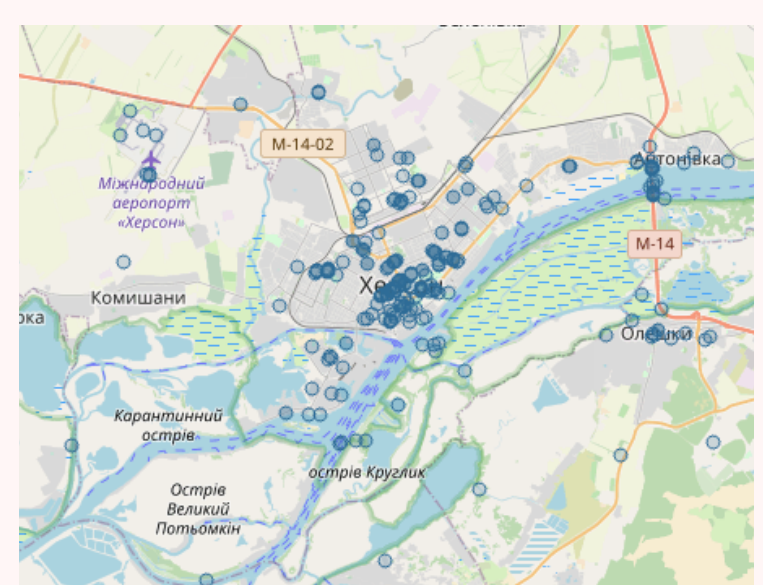
A map representation in Figure A of retrieved events in Kharkiv from integrated datasets. A heatmap in Figure B illustrates the location of damaging events in Kharkiv where there are no shelters within 1km distance. Based on the retrieved shelter data, the authors suggest building shelters to cover these areas.

Linked 4 Resilience

Website: https://linked4resilience.eu/

https://github.com/LinkedData4Resilience/linked-data