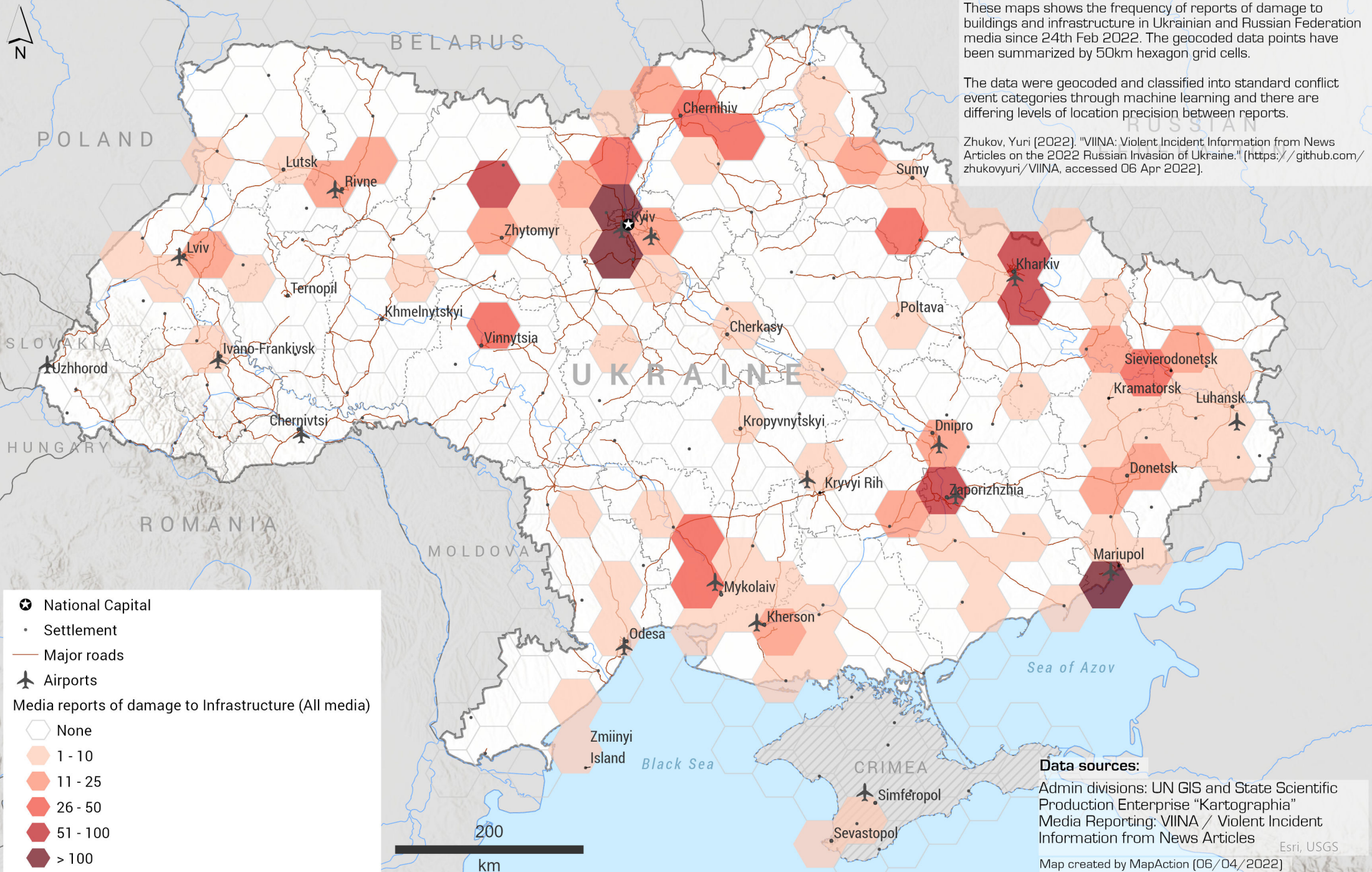


These maps shows the frequency of reports of damage to buildings and infrastructure in Ukrainian and Russian Federation media since 24th Feb 2022. The geocoded data points have been summarized by 50km hexagon grid cells.

The data were geocoded and classified into standard conflict event categories through machine learning and there are differing levels of location precision between reports.

Zhukov, Yuri (2022). "VIINA: Violent Incident Information from News Articles on the 2022 Russian Invasion of Ukraine." (<https://github.com/zhukovyuri/VIINA>, accessed 06 Apr 2022).



- National Capital
- Settlement
- Major roads
- Airports

Media reports of damage to Infrastructure (All media)

- None
- 1 - 10
- 11 - 25
- 26 - 50
- 51 - 100
- > 100

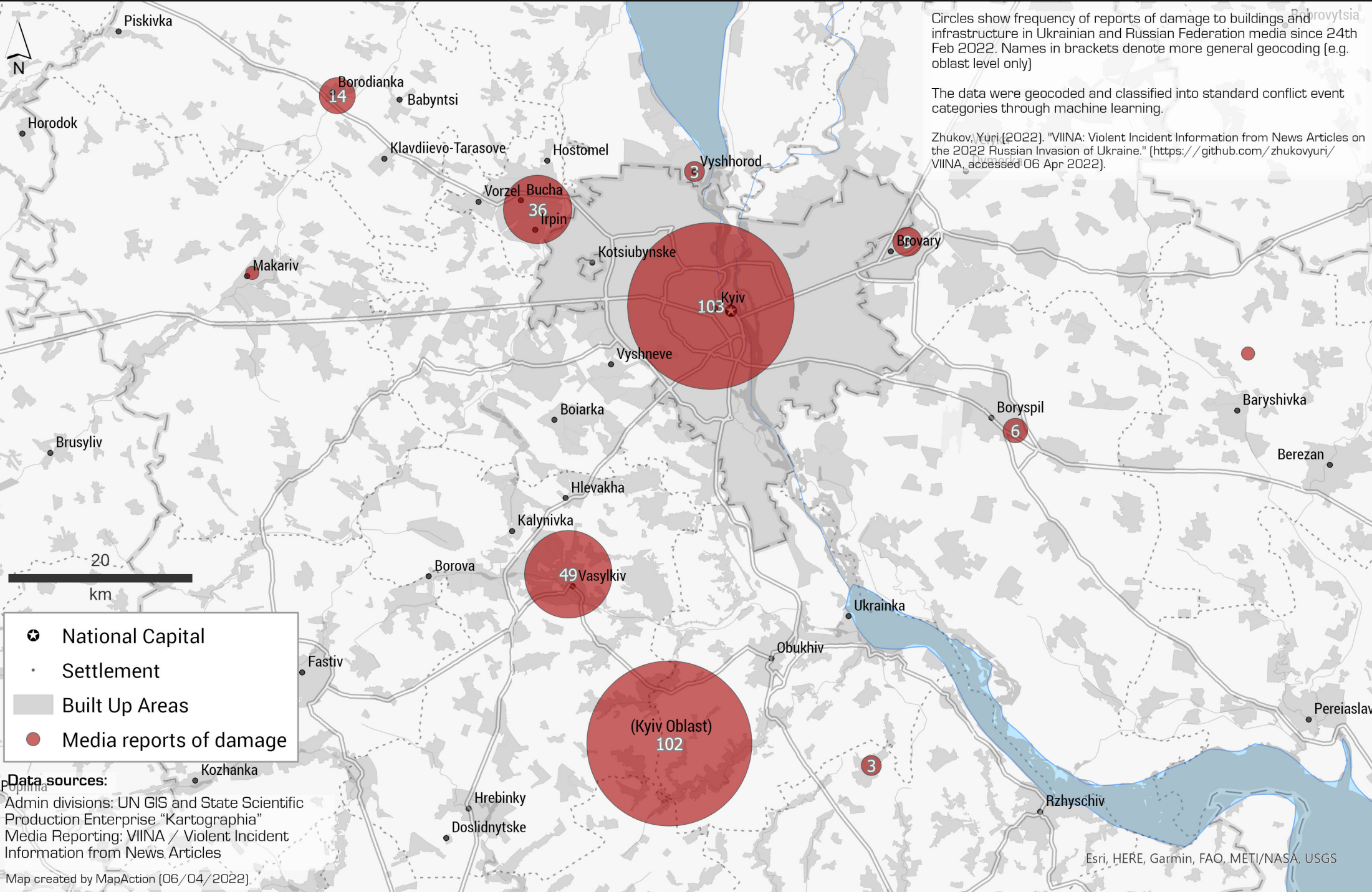
200 km

Data sources:

Admin divisions: UN GIS and State Scientific Production Enterprise "Kartographia"
 Media Reporting: VIINA / Violent Incident Information from News Articles

Esri, USGS

Map created by MapAction [06/04/2022]

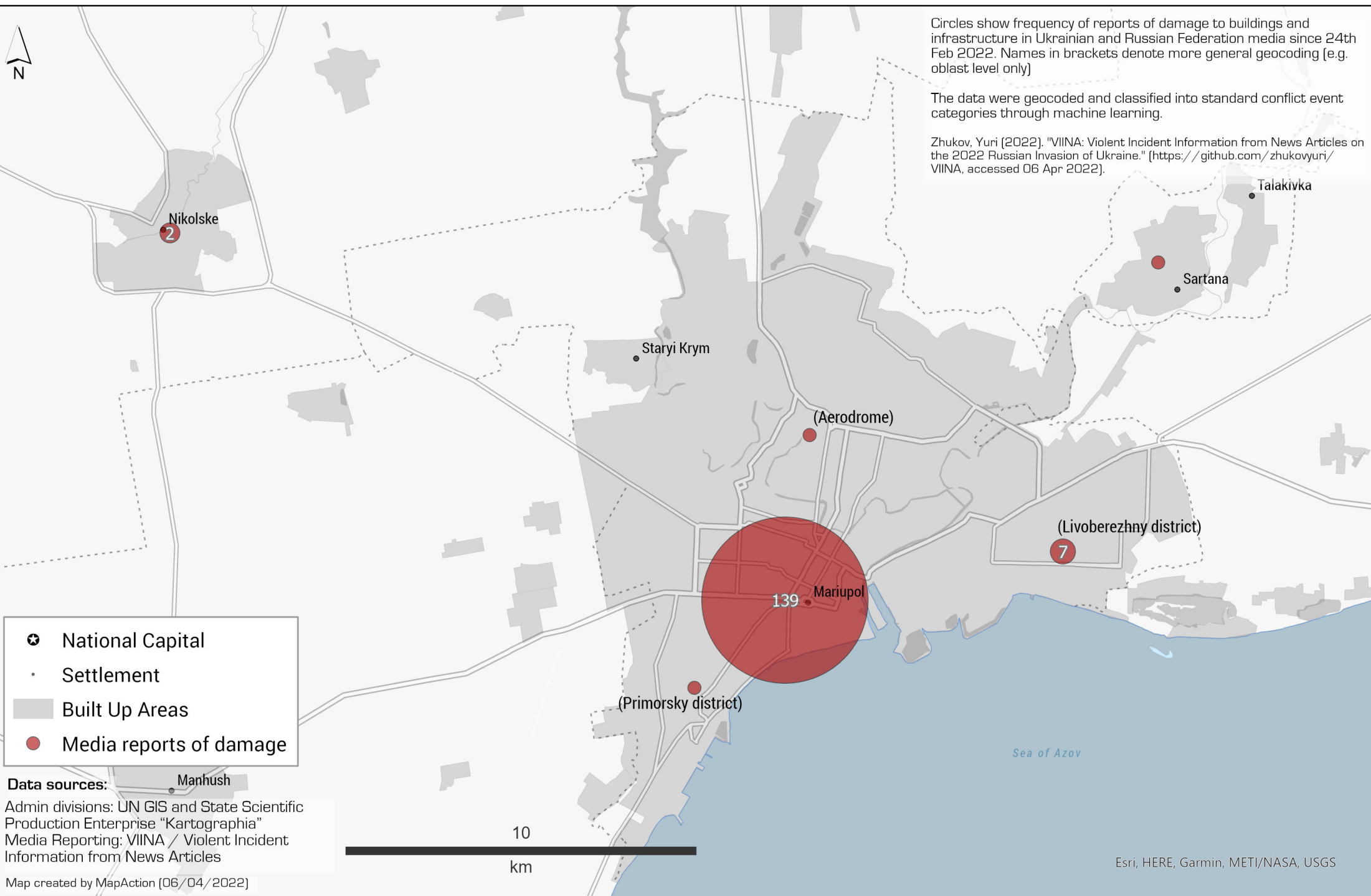




Circles show frequency of reports of damage to buildings and infrastructure in Ukrainian and Russian Federation media since 24th Feb 2022. Names in brackets denote more general geocoding (e.g. oblast level only)

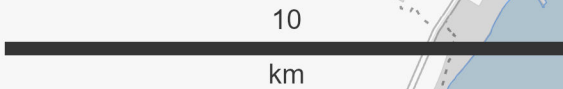
The data were geocoded and classified into standard conflict event categories through machine learning.

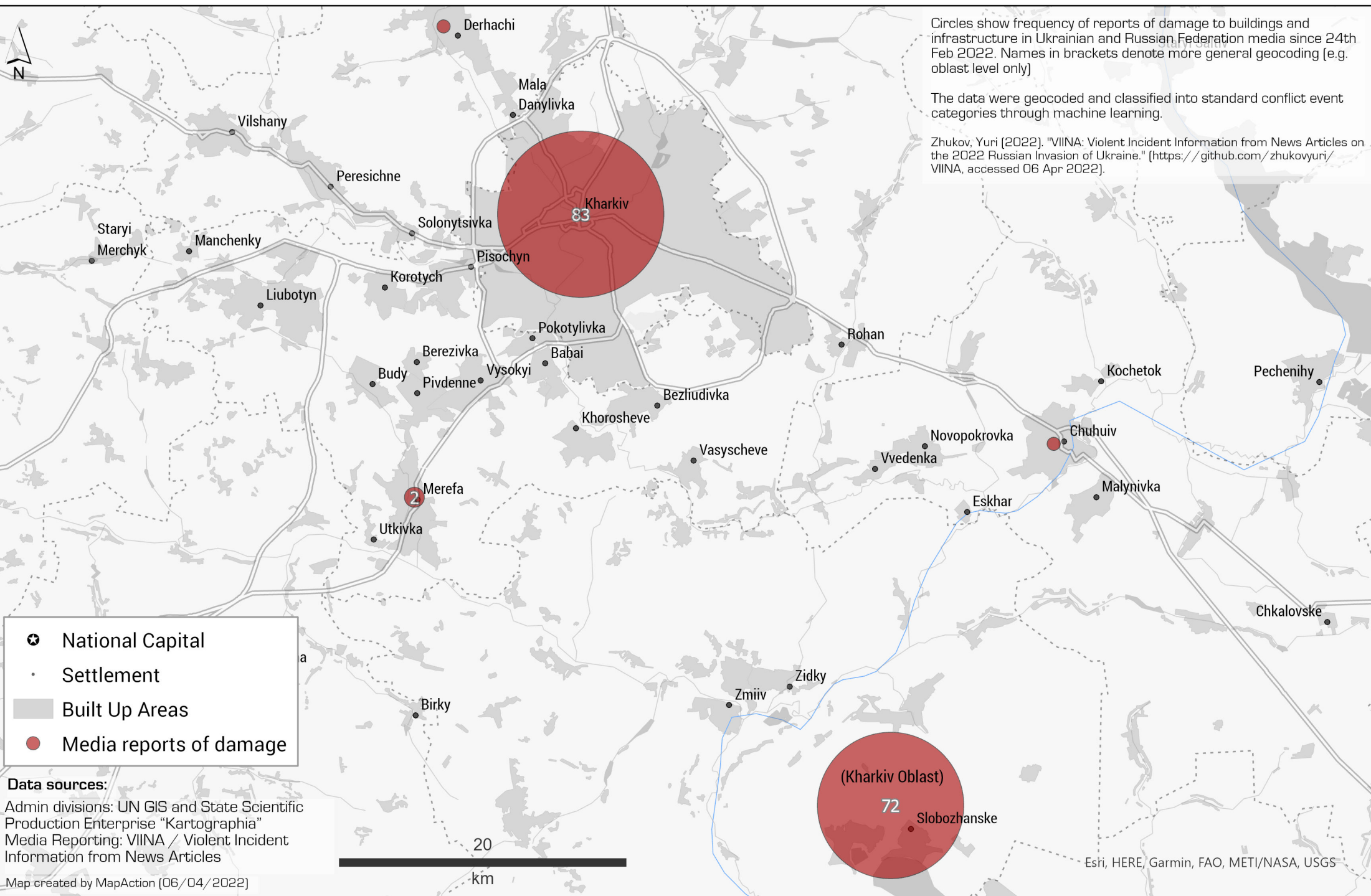
Zhukov, Yuri (2022). "VIINA: Violent Incident Information from News Articles on the 2022 Russian Invasion of Ukraine." (<https://github.com/zhukovyuri/VIINA>, accessed 06 Apr 2022).

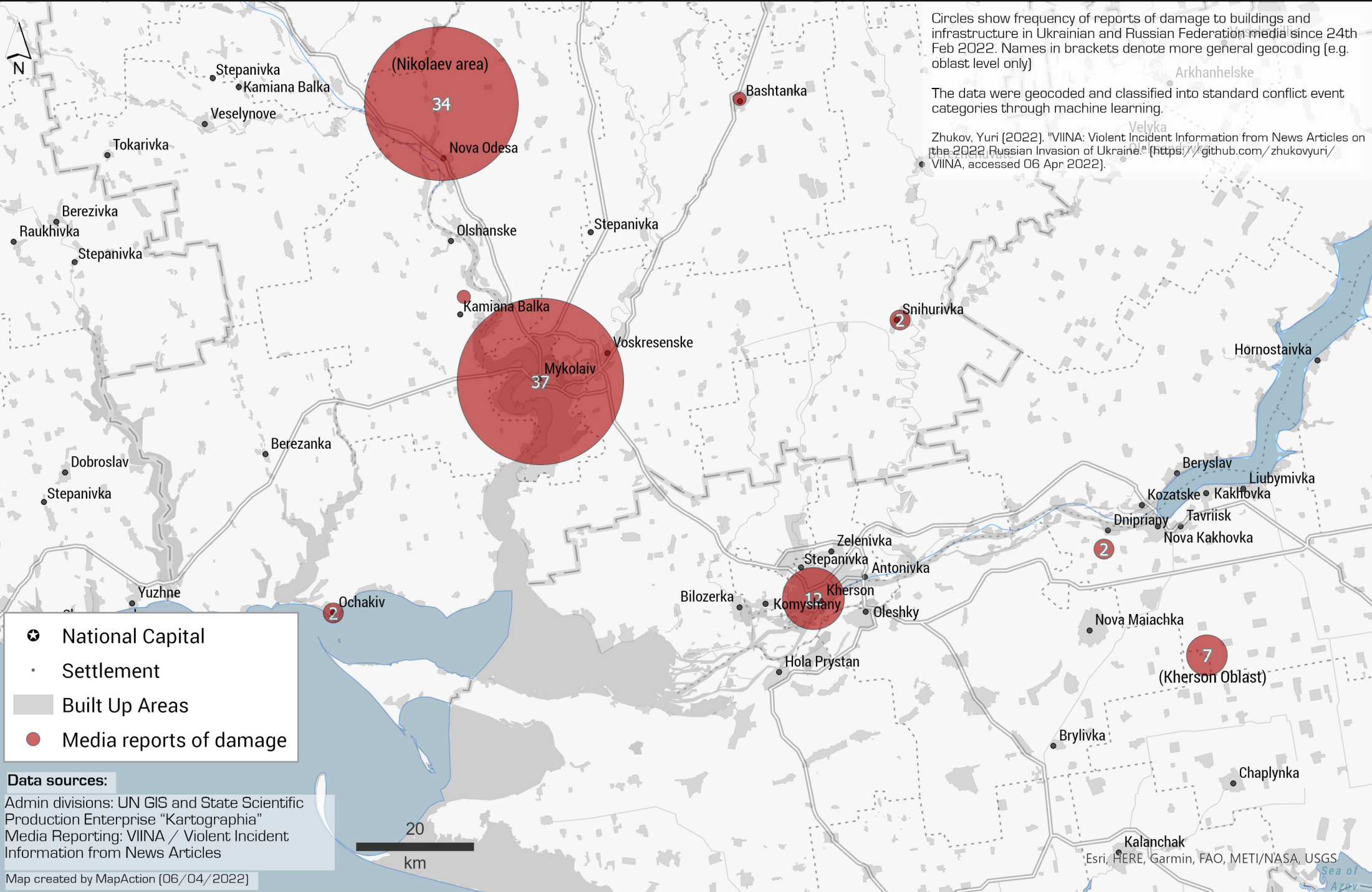


-  National Capital
-  Settlement
-  Built Up Areas
-  Media reports of damage

Data sources:
 Admin divisions: UN GIS and State Scientific Production Enterprise "Kartographia"
 Media Reporting: VIINA / Violent Incident Information from News Articles



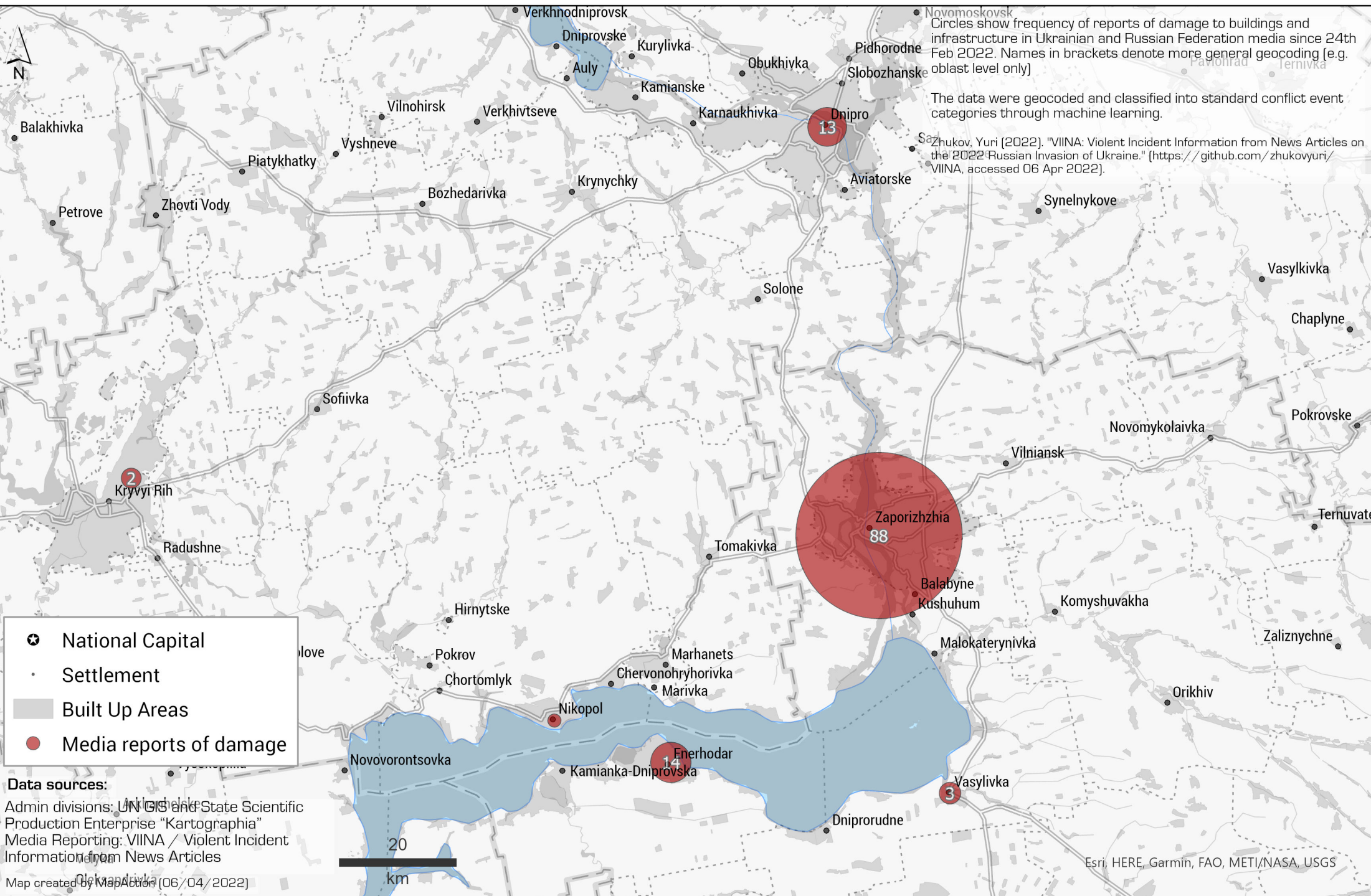




Circles show frequency of reports of damage to buildings and infrastructure in Ukrainian and Russian Federation media since 24th Feb 2022. Names in brackets denote more general geocoding [e.g. oblast level only]

The data were geocoded and classified into standard conflict event categories through machine learning.

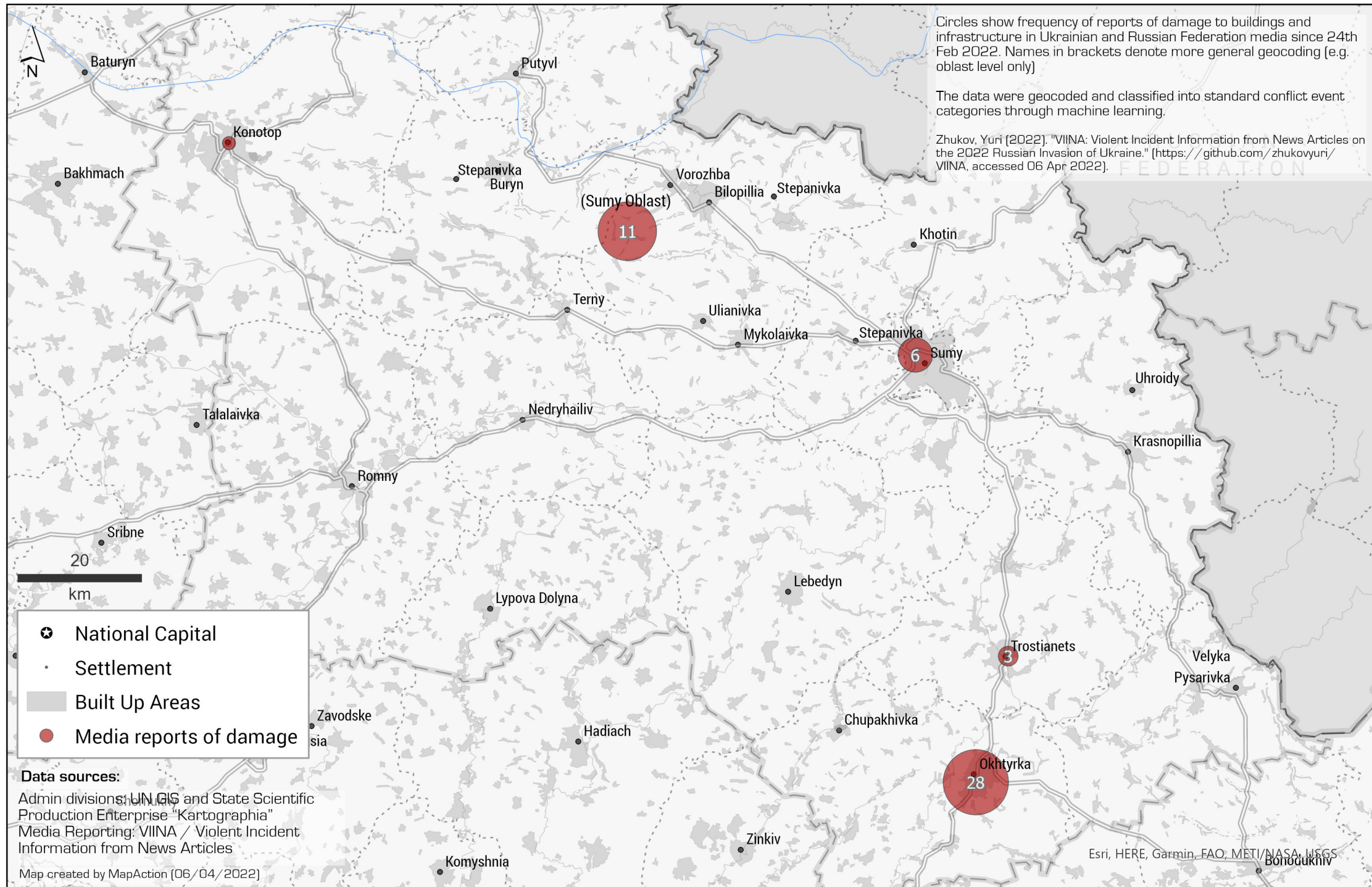
Zhukov, Yuri (2022). "VIINA: Violent Incident Information from News Articles on the 2022 Russian Invasion of Ukraine." (<https://github.com/zhukovyuri/VIINA>, accessed 06 Apr 2022).



Circles show frequency of reports of damage to buildings and infrastructure in Ukrainian and Russian Federation media since 24th Feb 2022. Names in brackets denote more general geocoding [e.g. oblast level only]

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- National Capital
- Settlement
- Built Up Areas
- Media reports of damage

Data sources:
 Admin divisions: UN GIS and State Scientific Production Enterprise "Kartographia"
 Media Reporting: VIINA / Violent Incident Information from News Articles
 Map created by MapAction (06/04/2022)

Media Data Sources:

VIINA draws on news reports from the following Ukrainian and Russian news providers:

24 Канал: Ukrainian 24 hour news network
Forbes Ukraine: Ukrainian edition of Forbes magazine
Інтерфакс-Україна: Ukrainian affiliate of Russia's Interfax news wire service
Комсомольская Правда: Russian newspaper
ЛІГА.net: Ukrainian internet news service
Мілітарний: Ukrainian defense news portal
Медиазона: Russian news portal
НВ: Ukrainian magazine and internet news portal
Независимая Газета: Russian newspaper
НТВ: Russian television news
Українська правда: Ukrainian newspaper
РИА Новости: Russian news wire service
УНІАН: Ukrainian news wire service

Using an automated web scraping routine (which runs every 6 hours), VIINA extracts the text of news reports published by each source and their associated metadata (publication time and date, web urls). Using natural language processing, the system extracts and geocodes location names mentioned in each news item. A recurrent neural network then classifies each event report into several pre-defined categories.

For more information about the VIINA project visit: <https://github.com/zhukovyuri/VIINA>