

# SUDAN CONFLICT OBSERVATORY

SITUATIONAL AWARENESS REPORT

REPORT 004 | 29 JUNE 2023

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This report was produced as part of the Sudan Conflict Observatory with the support of the Bureau of Conflict and Stabilization Operations, United States Department of State. This report does not represent the views of the United States Government. Learn more at [Sudan.ConflictObservatory.org](https://sudan.conflictobservatory.org).

The Faculty Director of the Humanitarian Research Lab (HRL) at Yale is Dr. Kaveh Khoshnood. Report production was overseen by Nathaniel Raymond, HRL Executive Director, and managed by Caitlin Howarth, HRL Conflict Observatory Director. Analysis was conducted by the Humanitarian Research Lab.

Dr. Andrew Marx is CEO and chief scientist at PlanetScape Ai.

CITATION | Howarth, Caitlin N., Kaveh Khoshnood, Andrew Marx, Nathaniel A. Raymond, et al. "Widespread Human Security & Humanitarian Conflict Impacts." Report 004 29 June 2023, Sudan Conflict Observatory: Washington, DC. Available at <https://sudan.conflictobservatory.org>.

# METHODOLOGY



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## **Mobility Data**

Gravy Analytics (gravyanalytics.com) is a commercial company providing hundreds of companies aggregate location information products. All data is commercially available and maintains the highest privacy standards including containing no personal identification information, collected only from users who opt-in to sharing their data and meeting all legal and privacy guidelines including the EU's General Data Protection Regulation (GDPR).

## **Satellite imagery**

© Planet Labs 2023

© Maxar via Google Maps

This report was produced by PlanetScape Ai. All research and analysis was conducted by PlanetScape Ai.

To contact PlanetScape Ai, email [info@planetscapeai.com](mailto:info@planetscapeai.com).

# METHODOLOGY

Yale SCHOOL OF PUBLIC HEALTH  
*Humanitarian Research Lab*

Data fusion methodologies combine remote sensing analysis with open-source data to assess and geolocate events. When necessary, sources are redacted for protection purposes; a redacted source list is available to authorized users.

## **Terms**

- NASA FIRMS | NASA Fire Information for Resource Management System
- Reported | Based on credible, verified media reporting

# KEY FINDINGS

- Analysis of imagery captured over Murnei, West Darfur, indicates at least 2km<sup>2</sup> to have been affected by fire between 27 and 28 June 2023. This represents approximately 20% of the town.  
Compared to El-Geneina, where damage at half of this scale occurred over two months, the equivalent of 280 football pitches of fire damage took place in Murnei over the course of two days.
- 398 buildings have been damaged or destroyed to date in Khartoum State and destruction in NW and South Khartoum has increased.
- Major corridors in Darfur have seen a significant decrease (-65%) in mobility since the outbreak of conflict.
- Mobility during 12-25 June 2023 on specific corridors in Darfur changed drastically compared to their pre-conflict average:
  - The route between El Fasher and An Nuhud has decreased -78%
  - The route between An Nuhud and El Obeid has increased 75%
- Migration out of Khartoum persists with a 51% reduction in estimated population since the start of conflict.

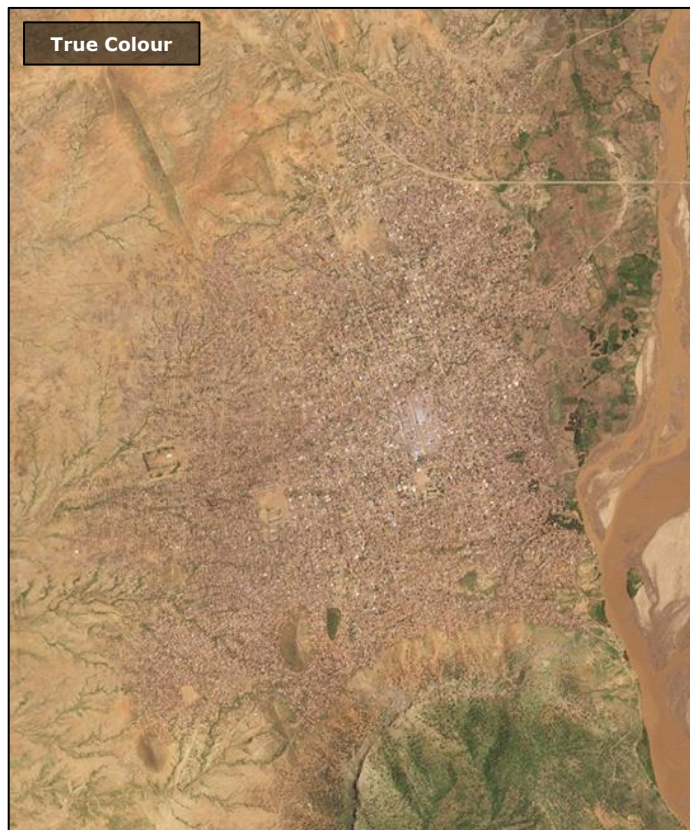
# Attack on Murnei, West Darfur

AT LEAST 2 SQUARE KILOMETERS OF LAND HAS BEEN DAMAGED BY FIRE

Widespread fire damage is observed to have taken place in Murnei, West Darfur based on imagery captured 28 June 2023. This damage is highly likely to have occurred on 27 June 2023, based on the recording of forty-seven (47) thermal anomalies in this area by NASA FIRMS. This is assessed to have highly likely been an attack on the town.

Analysis of false-color imagery indicates at least two (2) square kilometers to have been highly likely affected by fire. This represents approximately 20% of the town. Compared to El-Geneina, where damage at half of this scale occurred over two months, the equivalent of 280 football pitches of fire damage took place in Murnei over the course of two days.

Historical reports indicate a pattern of attacks in Murnei. These attacks include looting, burning and SGBV dating back to 2003. Local media outlets reported that the Janjaweed attacked civilians and IDP camps in Murnei in November of 2021, destroying and razing IDP shelters. Media news outlet report armed robberies on Murnei to El-Geneina Road on 25 April 2023.



26 June 2023 | © 2023 Planet Labs PBC.



28 June 2023 | © 2023 Planet Labs PBC.

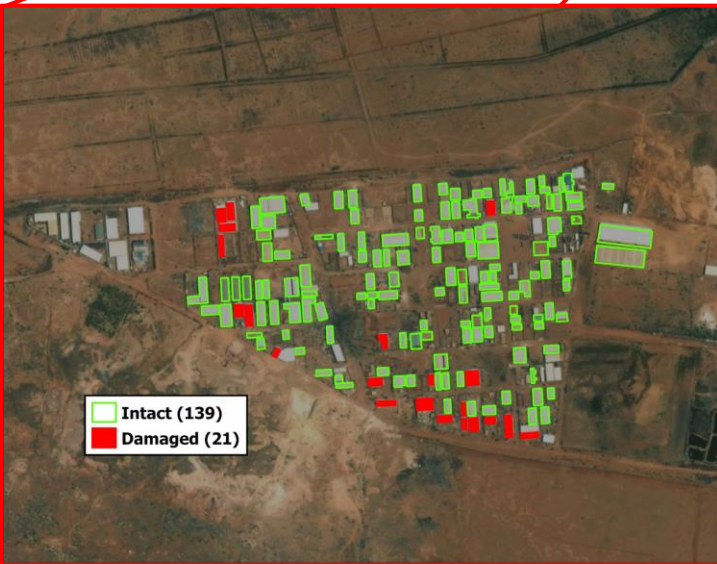


28 June 2023 | © 2023 Copernicus  
Contains modified Copernicus Sentinel data [2023],  
processed by Sentinel Hub

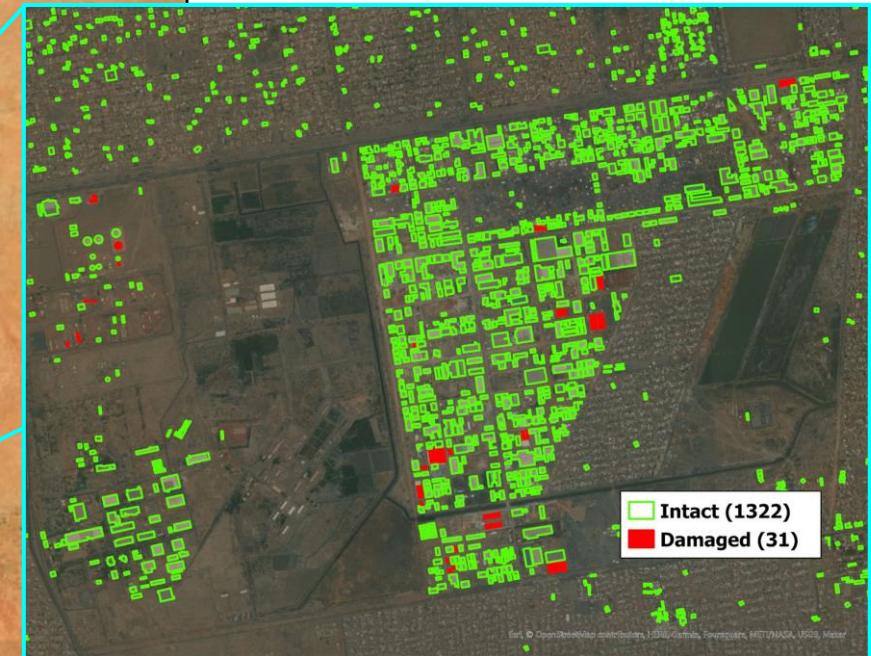
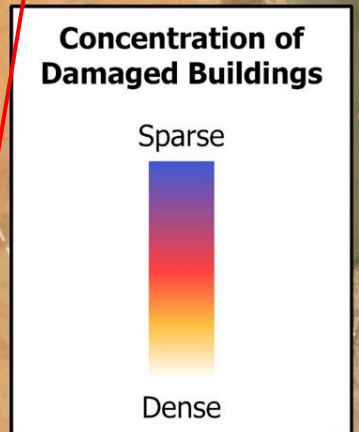
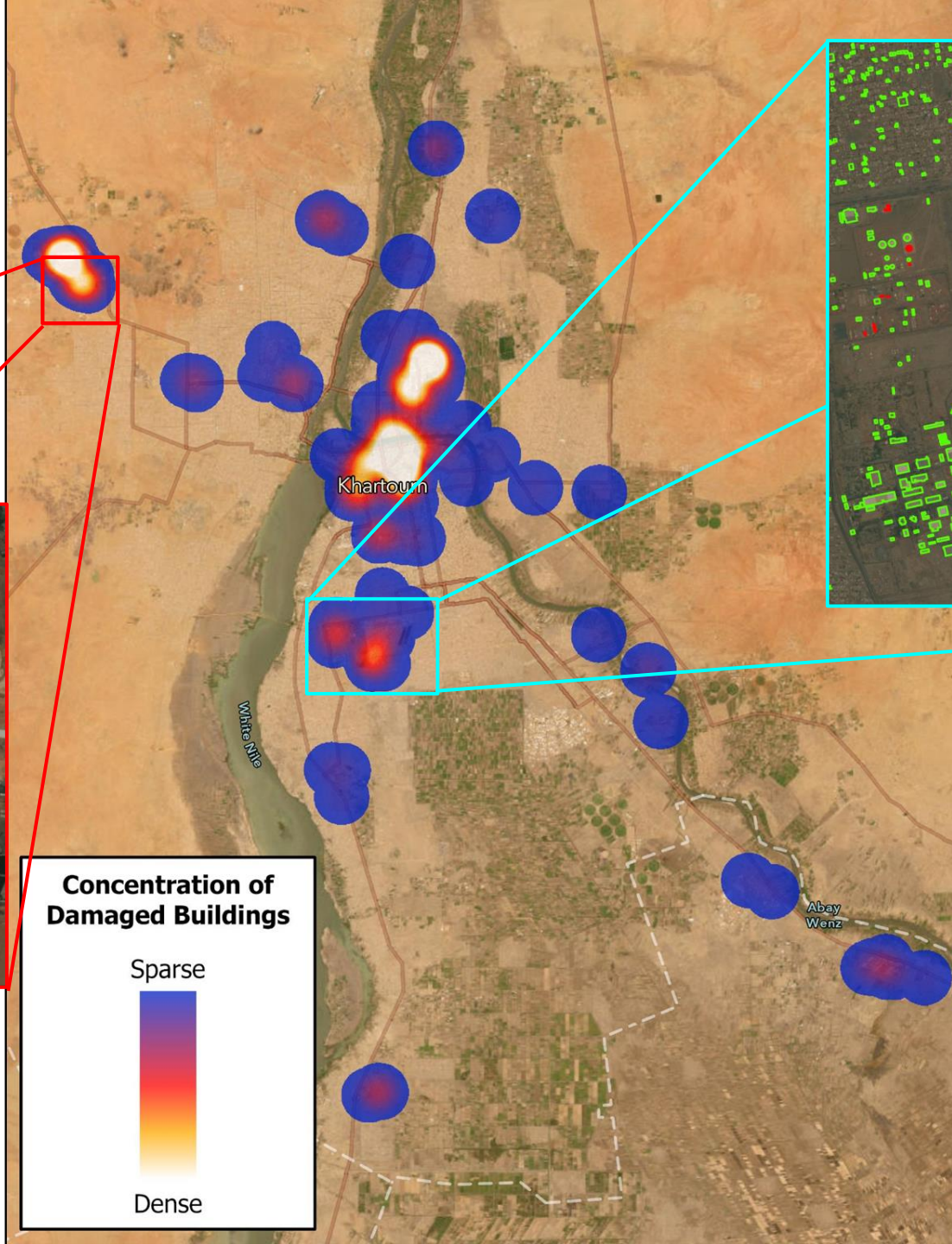
# Khartoum

## BUILDING DAMAGE UPDATE

398 buildings have been destroyed since the start of the conflict, 31 have been destroyed since 21 June 2023. The two detail areas are where the largest concentrations of recent damage have occurred.



18 of the 21 damaged buildings in this area were damaged after 21 June 2023.

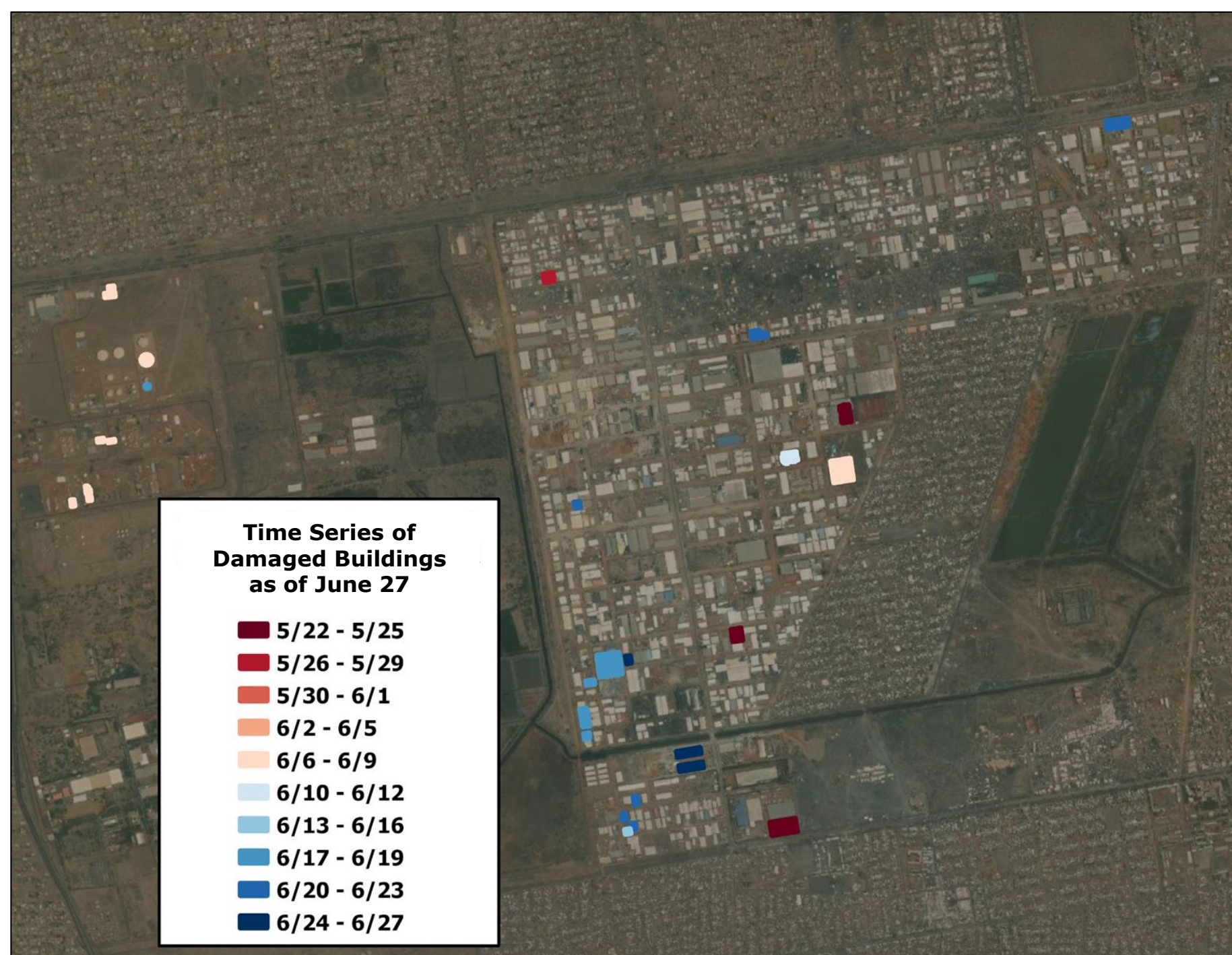


9 of the 31 buildings in this area have been destroyed since 21 June 2023 in Sudan.

# Southern Khartoum

## BUILDING DAMAGE UPDATE

- Destruction in Southern Khartoum has increased with 15 large buildings destroyed over the past 10 days.
- No additional buildings in the area were detected as destroyed as of 28 June 2023.

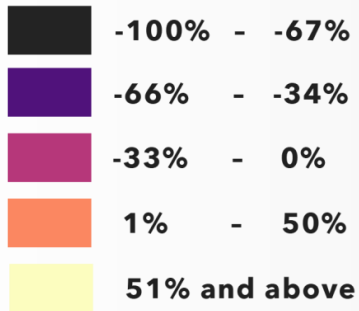




# Change in Mobility Corridors

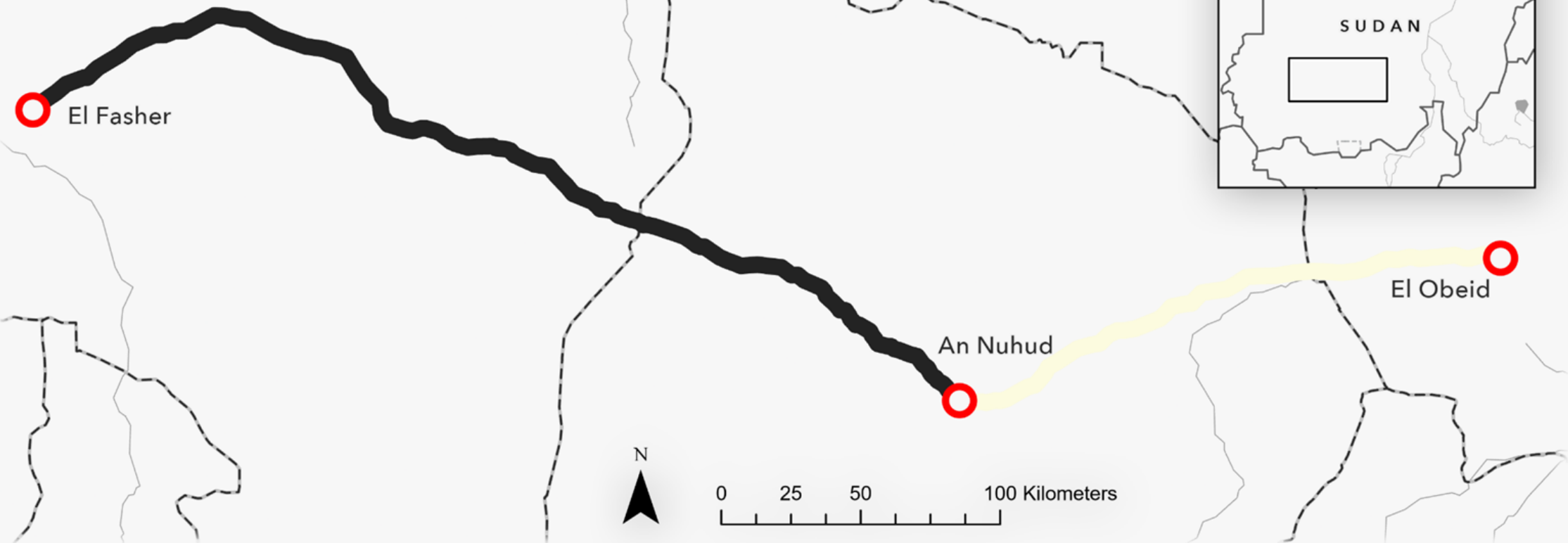
12-25 JUNE VS. PRE-CONFLICT

- Mobility has increased slightly across most of the country during the reporting period, especially along routes connecting Khartoum to Port Sudan and Kassala in eastern Sudan.
- Small increases in mobility in Darfur cities were also observed during this reporting period from earlier this month, but an average decrease of 65% across five mobility corridors in Darfur since the outbreak of conflict remains.
- The low mobility around Darfur capitals, especially El-Geneina, likely represent regional restrictions to movement increasing the risk of mass atrocities in the region.

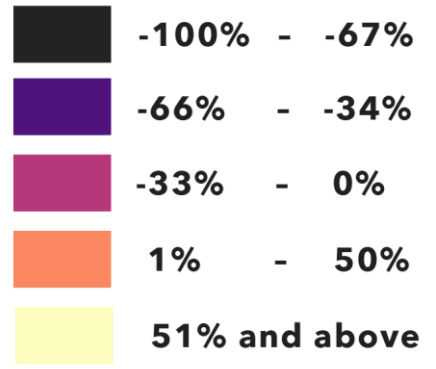


# Change in Mobility Corridors

12-25 JUNE VS. PRE-CONFLICT

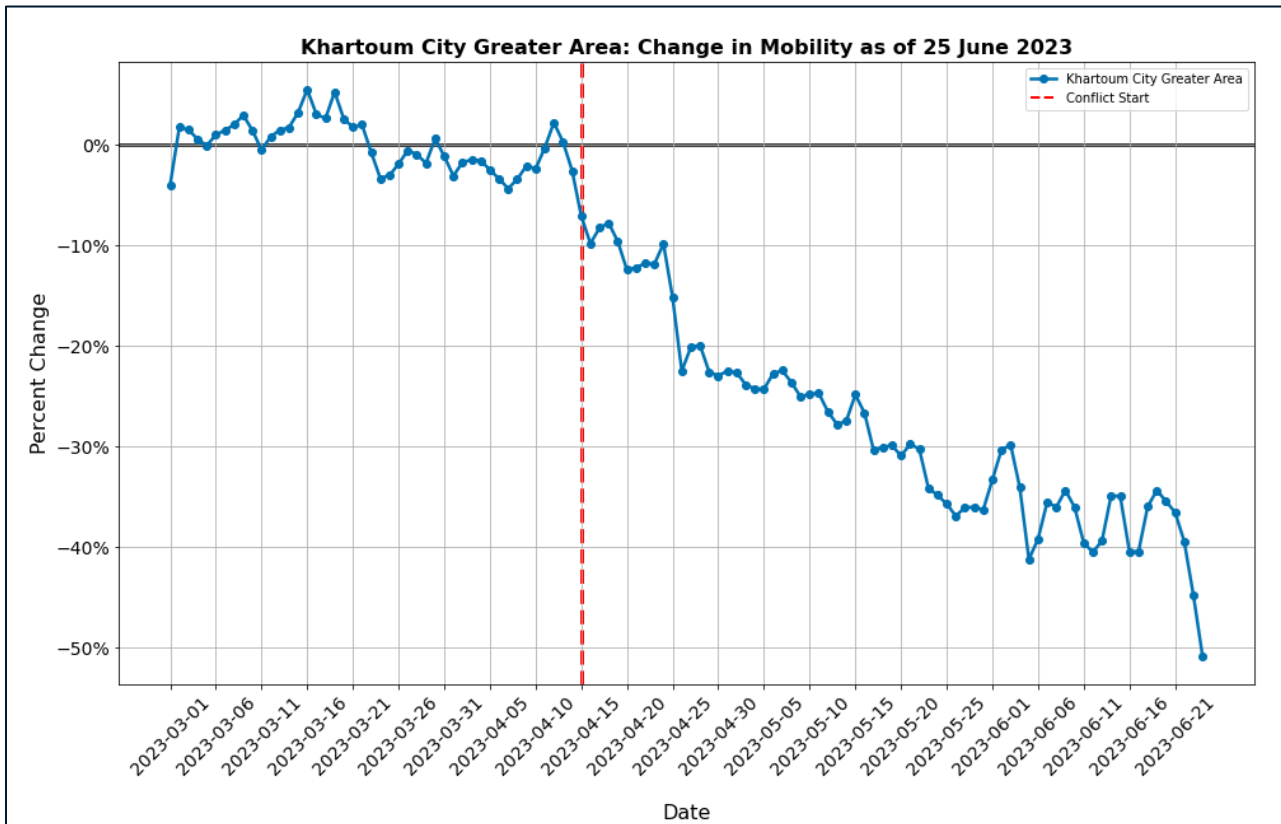


- Travel between An Nuhud and El Obeid has increased 75% during this reporting period, while travel between El Fasher and An Nuhud has decreased -78% from its pre-conflict average.
- Changes in mobility corridors likely reflect restrictions to regional travel as well as civilians fleeing conflict where able.

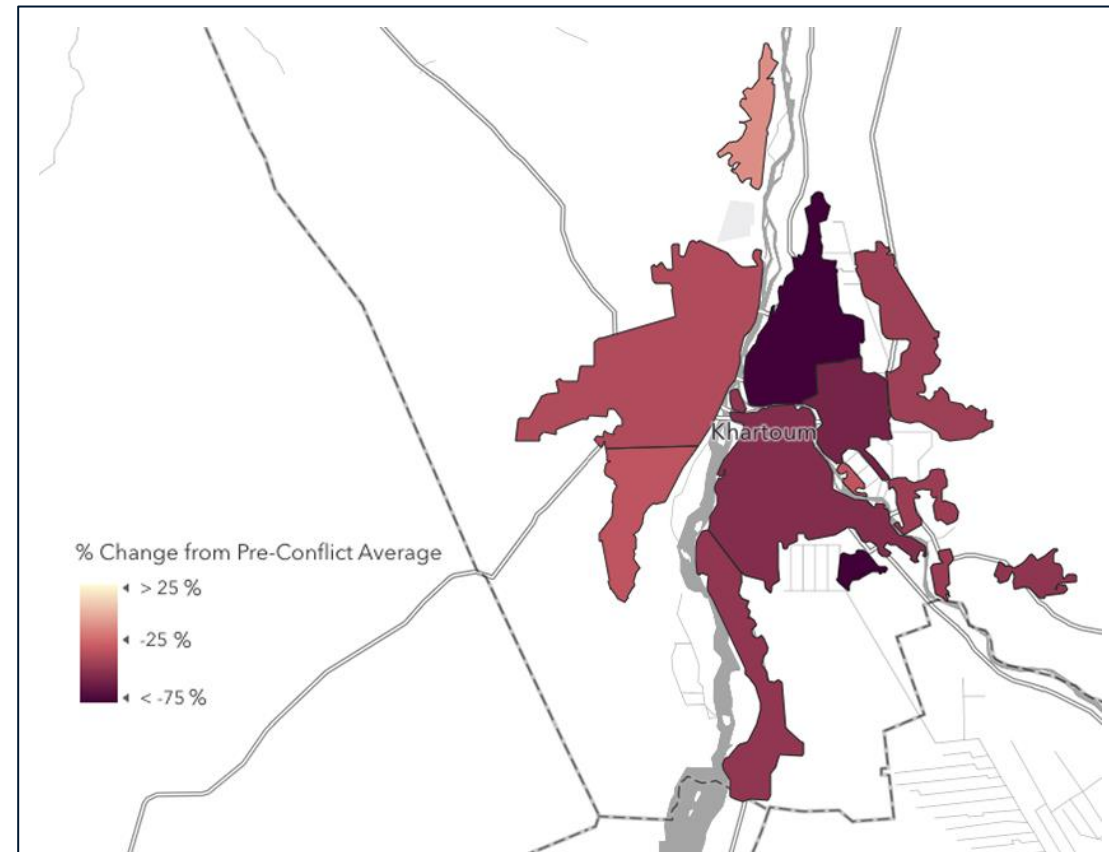


# Khartoum

## DECREASE IN MOBILITY



The Khartoum City greater area continues to see a slow decline in its estimated population with a 51% decrease in mobility on 25 June from its pre-conflict average (shown above)



Data collected daily within Khartoum City greater area highlights sub-areas of the city with higher or lower levels of mobility

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