

Special Report: Final Assault on El-Fasher

26 January 2025

Yale SCHOOL OF PUBLIC HEALTH
Humanitarian Research Lab

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The Faculty Director of the Humanitarian Research Lab (HRL) at the Yale School of Public Health is Dr. Kaveh Khoshnood. The analysis and production of this report was overseen by HRL Executive Director Nathaniel Raymond and Caitlin Howarth. Analysis and report production was conducted by the Humanitarian Research Lab's Conflict Analytics team.

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I. Key Findings

The Yale School of Public Health's Humanitarian Research Lab (HRL) assesses that between 21 and 25 January 2025 Rapid Support Forces (RSF) have launched their largest attack to date on Sudanese Armed Forces (SAF) and their aligned forces in El-Fasher. RSF is encircling the city from both east and west. This is the first time RSF has been seen to the west in large numbers since the start of its siege of El-Fasher in May 2024. Yale HRL assesses that RSF forces now control the Shala neighborhood in southwest El-Fasher. The Shala neighborhood is less than 1 km from the SAF 6th Infantry Division Base and is 2.5 km from the access point via the B-26 road to Zamzam IDP Camp. RSF now threatens the exit route for civilians and others out of El Fasher.

Unprecedented Combat Engagement West of El-Fasher

There has been an unprecedented combat engagement west of El-Fasher between 21 and 25 January 2025, where RSF launched its first large-scale attack from the west side of the city.¹ This area contains at least 300 munition impacts – at least double the amount of such ground scarring due to artillery and airstrikes seen in a single combat episode since fighting began in El-Fasher. These impacts can be attributed to both ground artillery and aerial bombardment and are likely a combination of both RSF- and SAF-aligned munitions. In a 16 January 2025 report, Yale HRL identified three UAVs consistent with the FH-95 located at RSF-controlled Nyala airport.² On 25 January 2025, the Saudi Hospital in El-Fasher was reportedly attacked by a drone, resulting in at least 70 fatalities;³ Yale HRL is unable to verify the source and type of munition at this time, but continues to investigate.

At Least 100 RSF Vehicles Visible in and around El-Fasher

Yale HRL has identified over 100 vehicles consistent with those used by the RSF in the areas in and around El-Fasher. Yale HRL has credible reason to believe that the actual number of RSF vehicles in and around El-Fasher is significantly higher. A large vehicle group is moving from the east toward and into El-Fasher; a smaller but significant group is moving into the city from the west. Yale HRL will continue to monitor and update RSF vehicle counts and apparent direction of travel as a whole. This further corroborates RSF's use of multidirectional encirclement tactics on El-Fasher and largescale presence throughout the area.

6th Division Base under Artillery and Air Attack

Yale HRL assesses that the SAF 6th Infantry Division Airfield and Base is on fire. The SAF 6th Division, the base of operations for SAF and Joint Forces, has sustained significant damage. There are 32 munition impacts at SAF 6th Division's Artillery Corps within the base; multiple swaths of the airfield are burned and structures are damaged. The Central Library at El-Fasher University, immediately north of the airfield, has been bombarded between 21 and 25 January 2025.

Exit Route between El-Fasher and Zamzam IDP Camp Threatened by RSF Control

RSF's control of Shala neighborhood, including the Shala prison in southwest El-Fasher, threatens the exit route from El Fasher.⁴ Shala neighborhood is located less than 1 km south of the airfield and 2.5 km to the entrance to the B-26 road south to Zamzam.

II. Methodology & Limitations

Yale HRL utilizes data fusion methodologies of open source and remote sensing data analysis. Yale HRL produced this report through the cross-corroboration of open source data, including social media, local news reporting, multimedia, and other reports, and remote sensing data, including satellite imagery and thermal sensor data. Researchers analyzed open source data across social media, news reports, and other publicly available sources to identify, chrono- and geolocate, and verify incidents. Analysts assess the credibility and reliability of open source data based on a source's level of detail, past credibility, and the corroboration of other independent sources. Remote sensing and satellite imagery analysis relies on multi-temporal change detection, which involves the comparison of two or more satellite images of the same area captured at different times to detect differences in coloration, visual properties, and presence, absence, or positional change of objects across the images.

Place names were identified using UN P-codes obtained via the United Nations Humanitarian Data Exchange (HDX) and International Organization for Migration (IOM)'s Displacement Tracking Matrix (DTM) Sudan. This baseline was then verified and informed through open source analysis by Yale HRL's analysts with relevant cultural and linguistic skills.

Limitations

There are significant limitations to the data fusion methodology. The information environment in Sudan does not have the breadth of data available in other locations and there is likely a significant reporting bias for those who provide open source reporting. The tools and techniques present significant challenges to assess activities such as extrajudicial detention, conflict-related sexual violence (CRSV), and conflict-related casualties, particularly in environments with limited data. Satellite imagery analysis is limited by available imagery over time and space. Available nadir angles of satellite imagery can produce challenges to assess structural damage, until multiple angles and ground-level photographic and video materials emerge to help inform the analysis. Image resolution level can also limit the analyst's ability to perceive the full extent of damage present.

¹ “Escalation in El Fasher: Rapid Support Forces (RSF) Launch Intense Attacks” *Darfur Network for Human Rights*, 24 January 2025. “<https://dnhr.org/2025/01/24/rapid-support-forces-attack-el-fasher-north-darfur/>, archived at <https://perma.cc/T67V-ANBF>; @Jsamfdarfur, “القوة المشتركة لحركات الكفاح المسلح بيان عسكري”, *formerly known as Twitter*, 24 January 2025. <https://x.com/Jsamfdarfur/status/1882780250750279775>, archived at <https://perma.cc/RU2D-XN6X>; HRL_MMC_071; Darfur24, “اندلاع مواجهات شرسة في الفاشر الان في ”جميع محاورها“ *Sudan Akbhar* 24 January 2025. <https://www.sudanakbhar.com/1615029>, archived at <https://perma.cc/QF3G-RPSC>

² Caitlin N. Howarth, Kaveh Khoshnood, Nathaniel A. Raymond et al.” SPECIAL REPORT: Advanced UAVs Identified at RSF-Controlled Nyala Airport.” Humanitarian Research Lab at Yale School of Public Health: New Haven, <https://files-profile.medicine.yale.edu/documents/73142835-15d7-4b8e-9c18-53bcecf5a184>

³ Darfur24 “قتلى وجرحى في معارك الفاشر وسط تردي الأوضاع الإنسانية”. *Darfur24*. 25 January 2025. <https://www.darfur24.com/2025/01/25/%d9%82%d8%aa%d9%84%d9%89-%d9%88%d8%ac%d8%b1%d8%ad%d9%89-%d9%81%d9%8a-%d9%85%d8%b9%d8%a7%d8%b1%d9%83-%d8%a7%d9%84%d9%81%d8%a7%d8%b4%d8%b1-%d9%88%d8%b3%d8%b7-%d8%aa%d8%b1%d8%af%d9%8a-%d8%a3%d9%88%d8%b6/>, archived at <https://perma.cc/6E5F-4W3W>; “Dozens killed in RSF drone strike on hospital in North Darfur” *Sudan Tribune*, 25 January 2025. <https://sudantribune.com/article296488/>, archived at <https://perma.cc/MBQ2-4BF2>

⁴ HRL_MMC_068, HRL_MMC_069, HRL_MMC_070

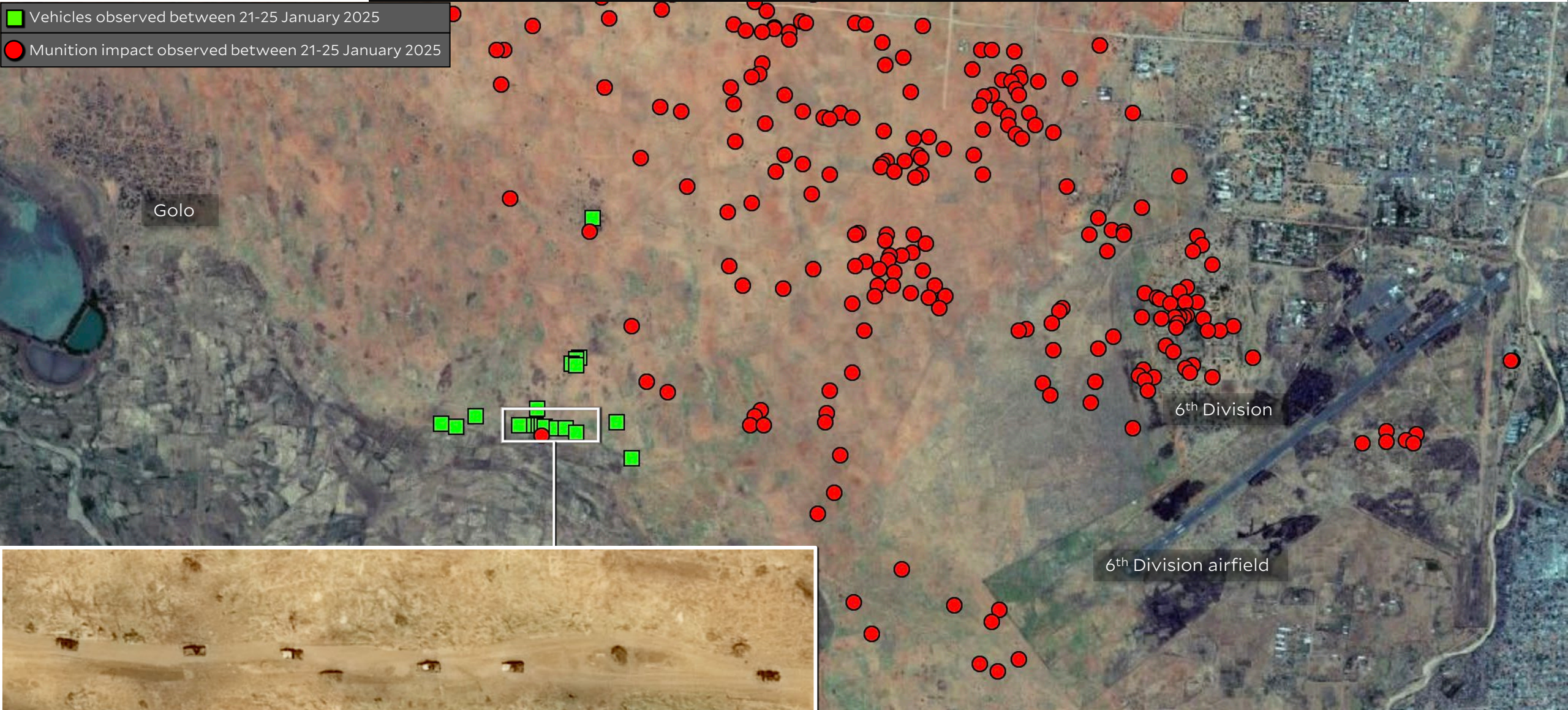
Western El-Fasher, 25 January 2025

Imagery collected over El-Fasher from 25 January 2025 shows the new presence of approximately 300 munition impacts comprised of both artillery shelling and aerial strikes observed between the village of Golo and the SAF 6th Division and airbase in western El-Fasher.

Also observed in this area are approximately 25 likely RSF light vehicles.



- Vehicles observed between 21-25 January 2025
- Munition impact observed between 21-25 January 2025



SAF 6th Division, El-Fasher

MUNITION IMPACTS OBSERVED BETWEEN 21 AND 25 JANUARY 2025

Analysis of satellite imagery collected between 21 and 25 January shows at least 32 munition impacts inside SAF 6th Division.



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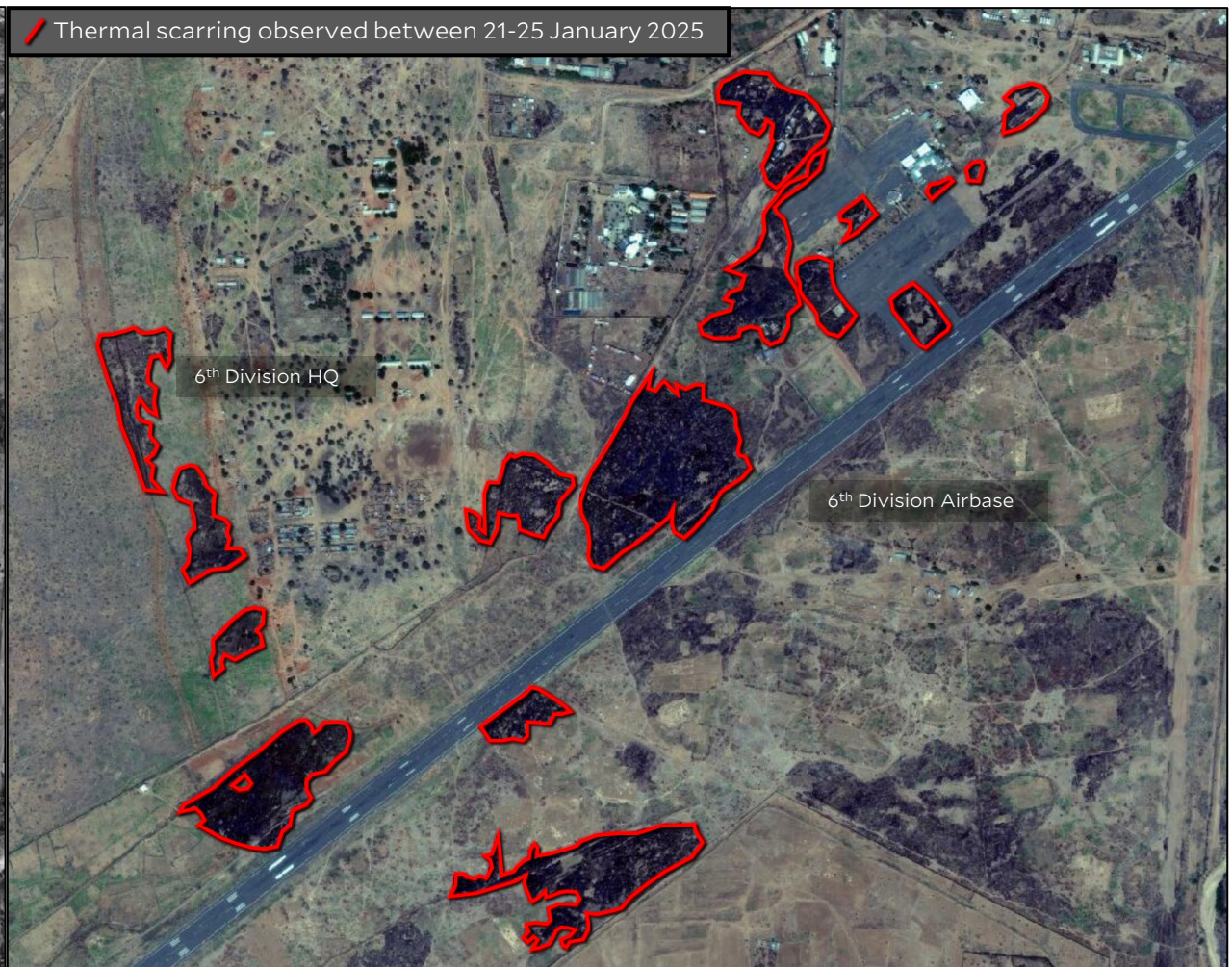
SAF 6th Division HQ & Airbase, El-Fasher

THERMAL SCARRING OBSERVED BETWEEN 21 AND 25 JANUARY 2025

Analysis of satellite imagery collected between 21 and 25 January shows thermal scarring on the grounds of the SAF 6th Division and airbase in El-Fasher.



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SAF 6th Division Airbase

CONFLICT-RELATED DAMAGE AND THERMAL SCARRING BETWEEN 21 AND 25 JANUARY 2025

Analysis of satellite imagery collected between 21 and 25 January 2025 shows thermal scarring and damage from likely shelling to structures at the SAF 6th Division Airbase in El-Fasher.



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Central Library, University of El-Fasher

CONFLICT-RELATED DAMAGE OBSERVED BETWEEN 21 AND 25 JANUARY 2025

Analysis of satellite imagery collected between 21 and 25 January 2025 shows likely shelling to the roof of the Central Library at the University of El-Fasher.



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Shala Prison, El-Fasher

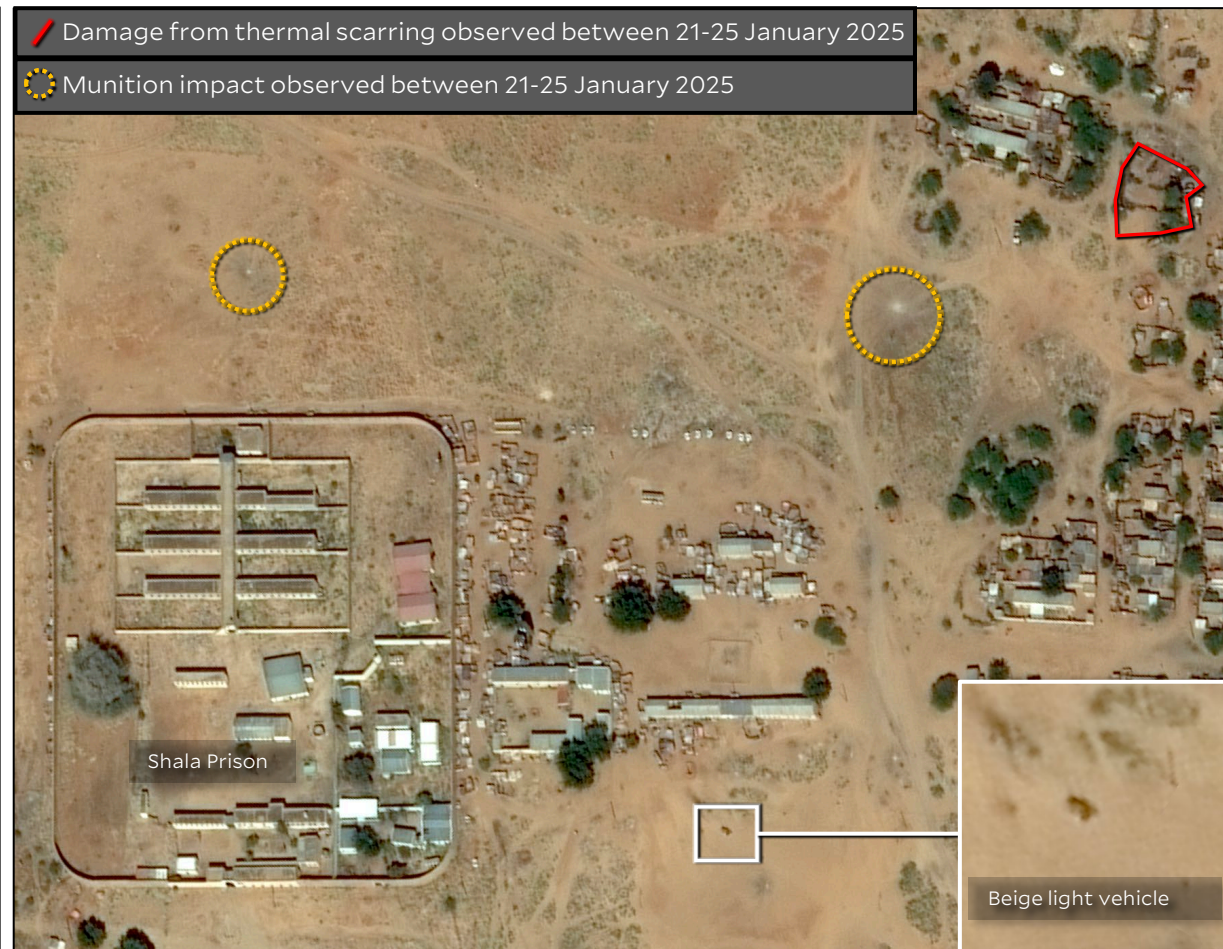
MUNITION IMPACTS AND CONFLICT-RELATED DAMAGE OBSERVED BETWEEN 21 AND 25 JANUARY 2025

Analysis of satellite imagery collected between 21 and 25 January shows munition impacts and damage to structures from thermal scarring outside of Shala Prison.

Also observed is the new presence of a beige light vehicle consistent with those used by RSF.



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