Situation Report: Fighting Continues in El-Fasher

31 January 2025

Yale SCHOOL OF PUBLIC HEALTH
Humanitarian Research Lab

This report was independently produced by the Yale School of Public Health's Humanitarian Research Lab with the support of the Avaaz Foundation. Learn more at https://medicine.yale.edu/lab/khoshnood/ and https://avaaz.org.

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.

Citation | Caitlin N. Howarth, Kaveh Khoshnood, Nathaniel A. Raymond et al. "Situation report: Fighting continues in El-Fasher." 31 January 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven.

I. Key Findings

The Yale School of Public Health's Humanitarian Research Lab (HRL) corroborates further conflict-related damage in El-Fasher between 26 and 30 January 2025, including at the Sudan Armed Forces (SAF) 6th Infantry Division airfield, near the Grand Market (Souq), and along the B-26 running south out of El-Fasher. Yale HRL also identifies evidence of significant burial activity at SAF 6th Division Airbase and in northern El-Fasher, as well as an increase in temporary structures near Zamzam. SAF is incurring conflict-related damage and casualties. Civilians are increasingly trapped in areas around El-Fasher.

Damage and SAF-Aligned Force Depletion at SAF 6th Division Airfield

Yale HRL corroborates ongoing attacks at the SAF airfield, including the destruction of a structure situated within a berm. This structure could have served as storage facility, including for ammunition, or as some form of command center.

Yale HRL assesses significant continued force depletion of SAF-aligned forces in the El-Fasher area. Analysis of satellite imagery collected between 12 December 2024 and 30 January 2025 also shows an increase in burial activity at the southwest area of the 6th Infantry Division airfield in El-Fasher.

Damage in Central El-Fasher

Through analysis of satellite imagery between 26 and 30 January 2025, Yale HRL has identified conflict-related damage and munition impacts on strategic locations that will likely limit civilians' ability to safely flee El-Fasher. This conflict-related damage includes thermal scarring as well as bombardment of residential structures. There is a cluster of approximately 13 munition impacts in the center of the city along the B-26 running south out of El-Fasher, including around the Grand Market (Souq). These findings are consistent with news media reports of RSF artillery and ground attacks, along with SAF airstrikes in El-Fasher during this time period.[1]

Civilians Likely Trapped near Zamzam IDP Camp

Yale HRL has identified temporary structures consistent with IDPs in the areas near Zamzam IDP camp. This increase in temporary structures is consistent with reports of people fleeing from the Golo Reservoir and Shagara area to the Zamzam area following RSF attacks.[2] The presence of additional IDPs in the Zamzam area and the fighting and forces west of El-Fasher indicates that civilians may not be able to safely flee the El-Fasher and Zamzam areas, including to Tawilah.[3] Famine has been ongoing in Zamzam IDP camp since June 2024.[4]

Construction at Nyala Airbase

Yale HRL identifies the construction of two new structures at the edge of the Nyala Airport's apron since 14 January 2025, resulting in a total of three nearly identical structures. These structures are approximately 18-20 meters wide and may serve as a vehicle storage facility such as a hangar. The UAVs in Nyala have an approximate 12 meter wingspan.[5]

II. Methodology

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] Darfur24, "مقتل حرس والي شمال دارفور في هجوم "الدعم السريع" على الفاشر," January 30, 2025, https://www.darfur24.com/2025/01/30/%D9%85%D9%82%D8%AA%D9%84-%D8%AD%D8%B1%D8%B3-%D9%88%D8%A7%D9%84%D9%8A-%D8%B4%D9%85%D8%A7%D9%84-%D8%AF%D8%A7%D8%B1%D9%81%D9%88%D8%B1-%D9%81%D9%8A-%D9%87%D8%AC%D9%88%D9%85-%D8%A7%D9%84%D8%AF%D8%B9/, archived at https://perma.cc/L8SX-RHBL; Radio Dabanga, "صد هجوم جديد على الفاشر، و ارتفاع عدد ضحايا معسكر أبو شوك إلى 11 قتيلا" January 30, 2025, https://www.dabangasudan.org/ar/all-news/article/%d8%b5%d8%af-%d9%87%d8%ac%d9%88%d9%85-%d8%ac%d8%af%d9%8a%d8%af-%d8%b9%d9%84%d9%89-%d8%a7%d9%84%d9%81%d8%a7%d8%b4%d8%b1%d8%8c-%d9%88-%d8%a7%d8%b1%d8%aa%d9%81%d8%a7%d8%b9-%d8%b9%d8%af%d8%af-%d8%b6%d8%ad, archived at https://perma.cc/9WKS-W3NH

[2] HRL_MMC_072

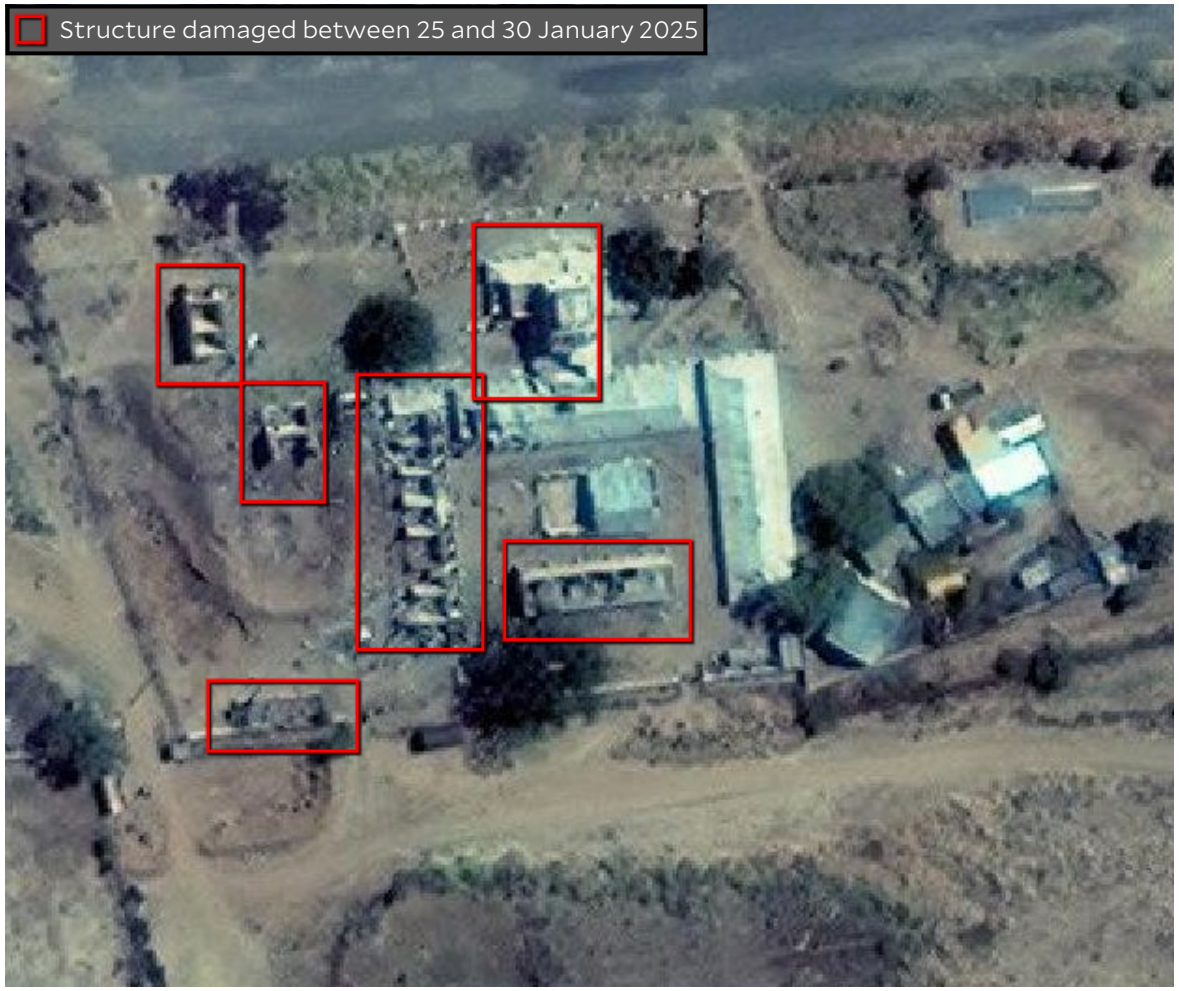
[3] HRL_MMC_072; Caitlin N. Howarth, Kaveh Khoshnood, Nathaniel A. Raymond et al. “Special Report: Final Assault on El-Fasher” 26 January 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven.
[4] Famine Early Warning Systems Network (FEWS NET), “Famine (IPC Phase 5) confirmed in part of Al Fasher, North Darfur,” August 1, 2024, https://fews.net/eastafrica/sudan/alert/august-2024, archived at https://perma.cc/EB3A-GRXE. Lena Masri et al., ” An elaborate global system exists to prevent famine. It’s failing,” Reuters, December 4, 2024, https://www.reuters.com/investigates/special-report/famine-response-overview/, archived at https://archive.ph/Jgso6
[5] 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.

El-Fasher

DAMAGED BUILDINGS OBSERVED BETWEEN 25 AND 30 JANUARY 2025

Analysis of satellite imagery collected between 25 and 30 January 2025, revealed at least six structures that were severely damaged at the 6th Infantry Division Airfield in El-Fasher.

25 January 2025 © 2025 Maxar, USG Plus

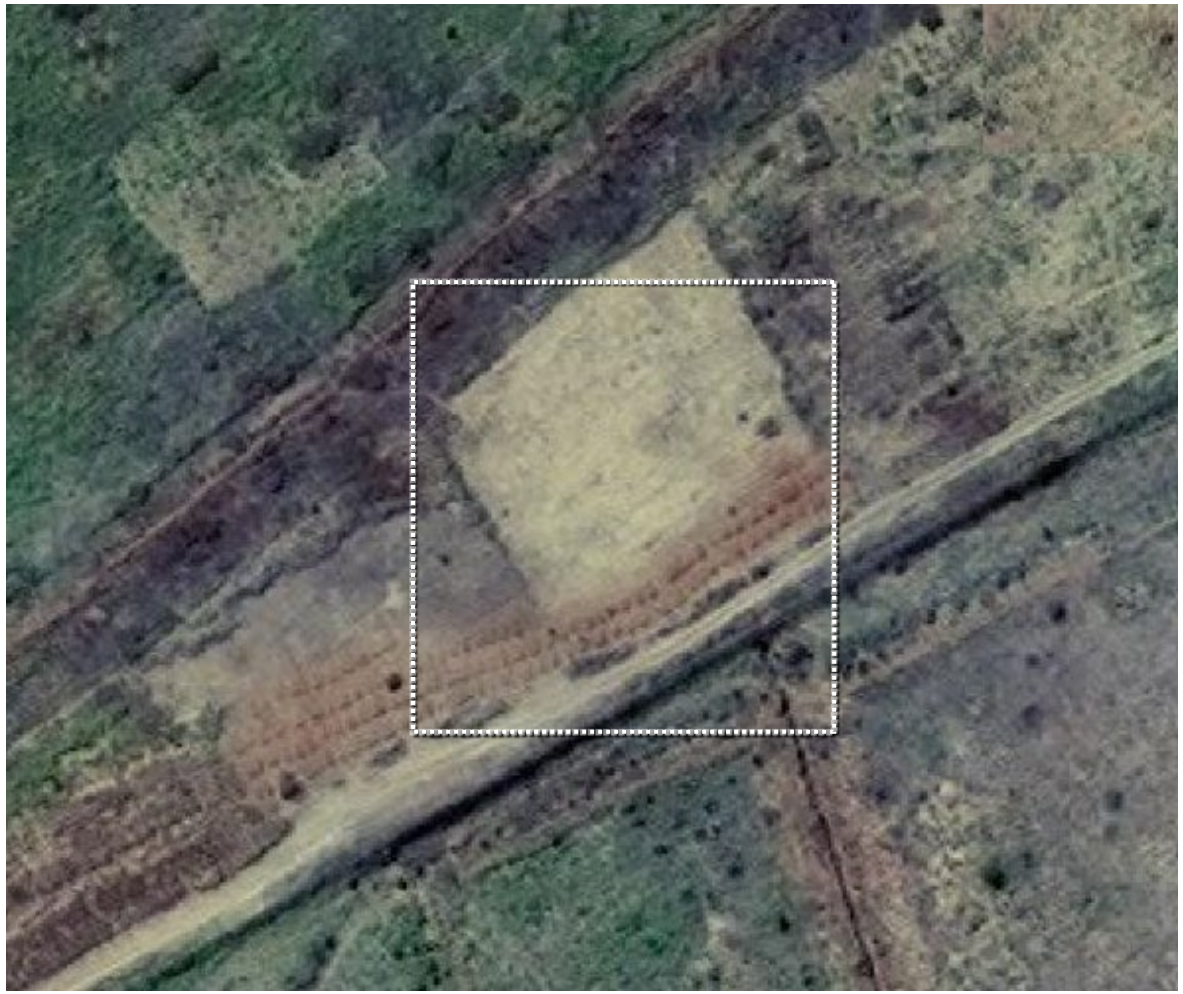


30 January 2025 © 2025 Maxar, USG Plus

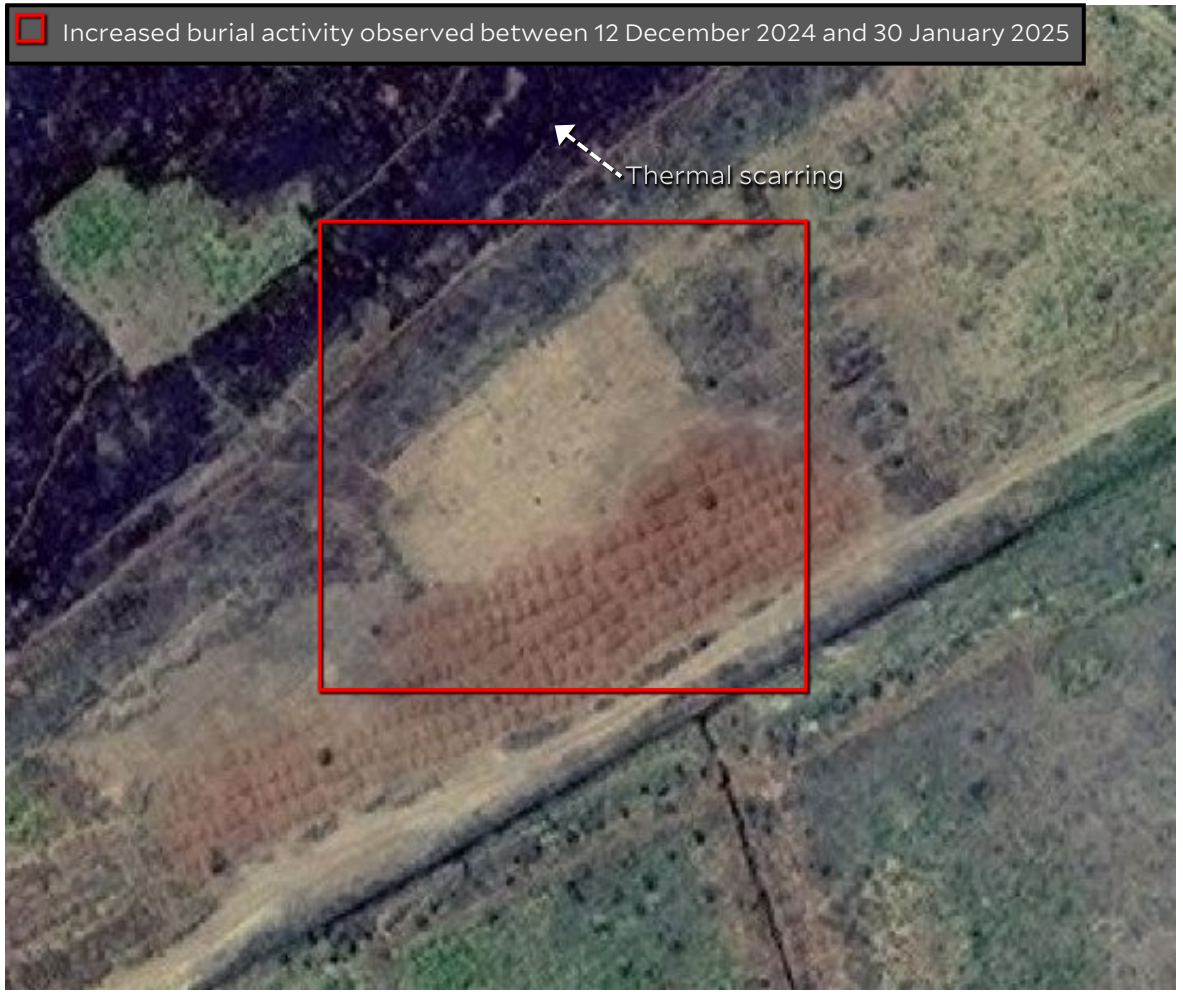
El-Fasher

BURIAL ACTIVITY OBSERVED AT 6TH INFANTRY DIVISION AIRFIELD BETWEEN 12 DECEMBER 2024 AND 30 JANUARY 2025

Analysis of satellite imagery collected between 12 December 2024 and 30 January 2025 shows burial activity at the southwest area of the SAF 6th Infantry Division Airfield in El-Fasher. This activity likely indicates continued force depletion of SAF-aligned forces in the El-Fasher area. Thermal scarring was also observed at the airfield during this time period.



12 December 2024 © 2024 Maxar, USG Plus

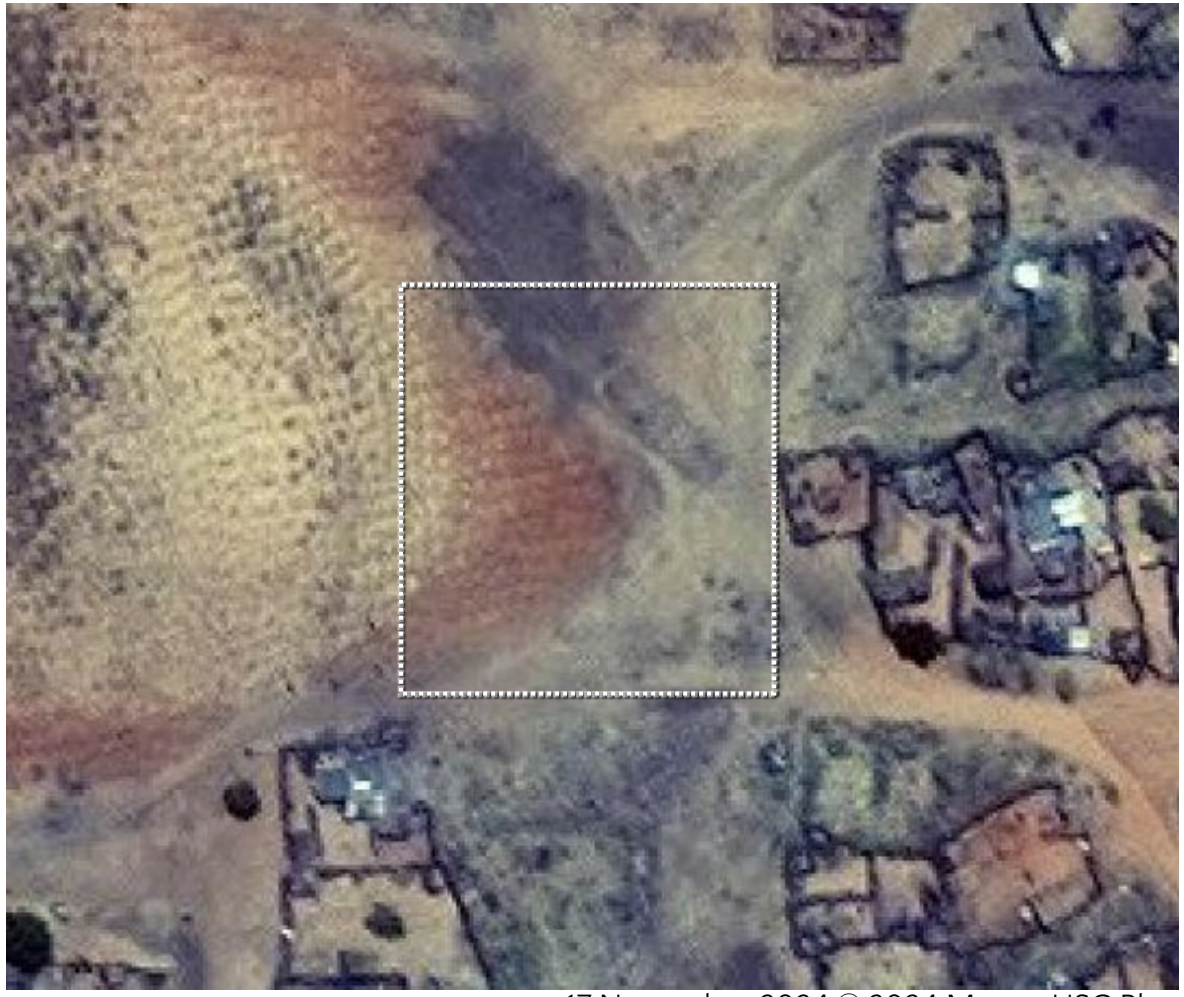


30 January 2025 © 2025 Maxar, USG Plus

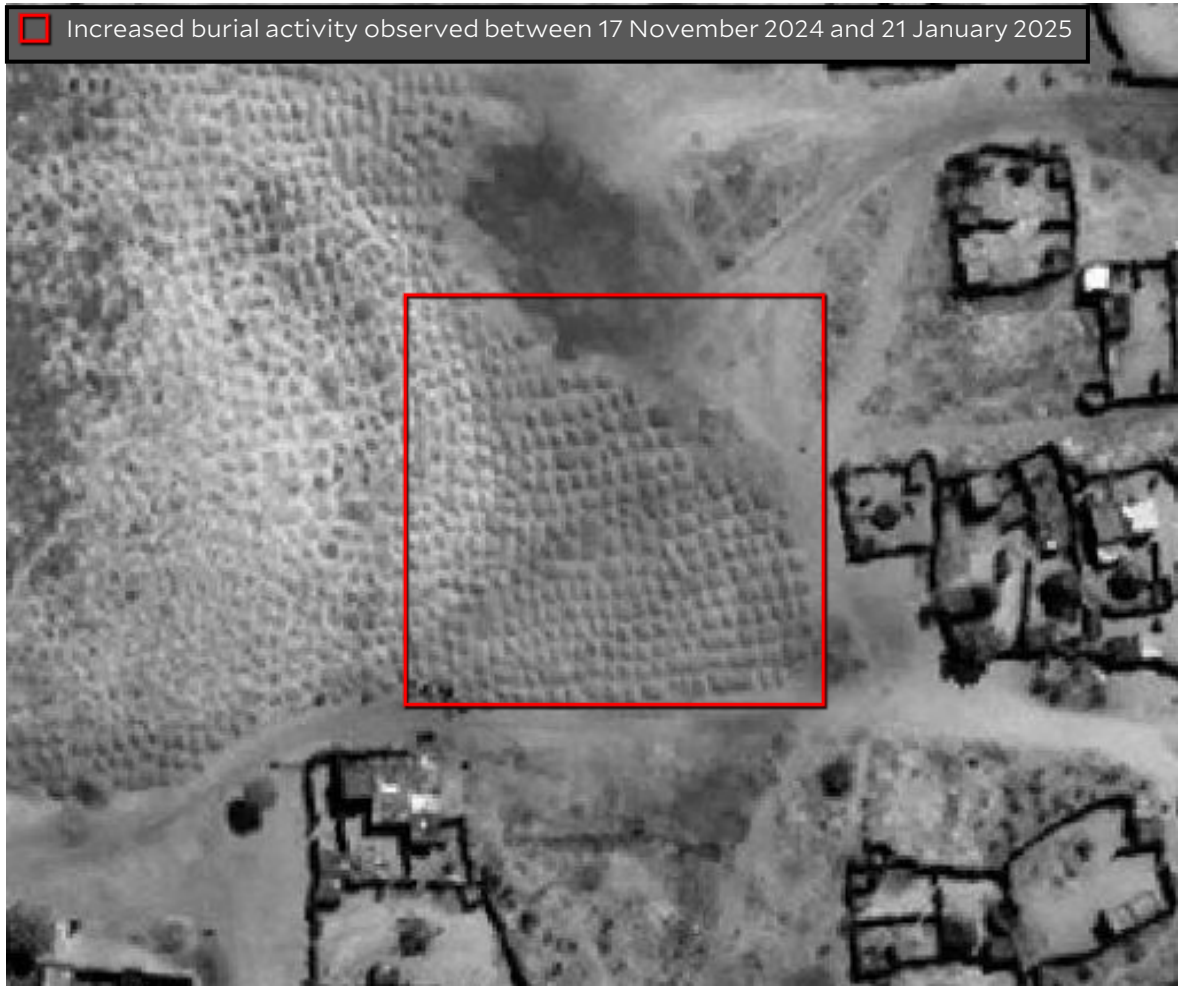
El-Fasher

BURIAL ACTIVITY OBSERVED IN NORTHERN EL-FASHER BETWEEN 17 NOVEMBER 2024 AND 21 JANUARY 2025

Analysis of satellite imagery collected between 17 November 2024 and 21 January 2025 shows burial activity in northern El Fasher.



17 November 2024 © 2024 Maxar, USG Plus

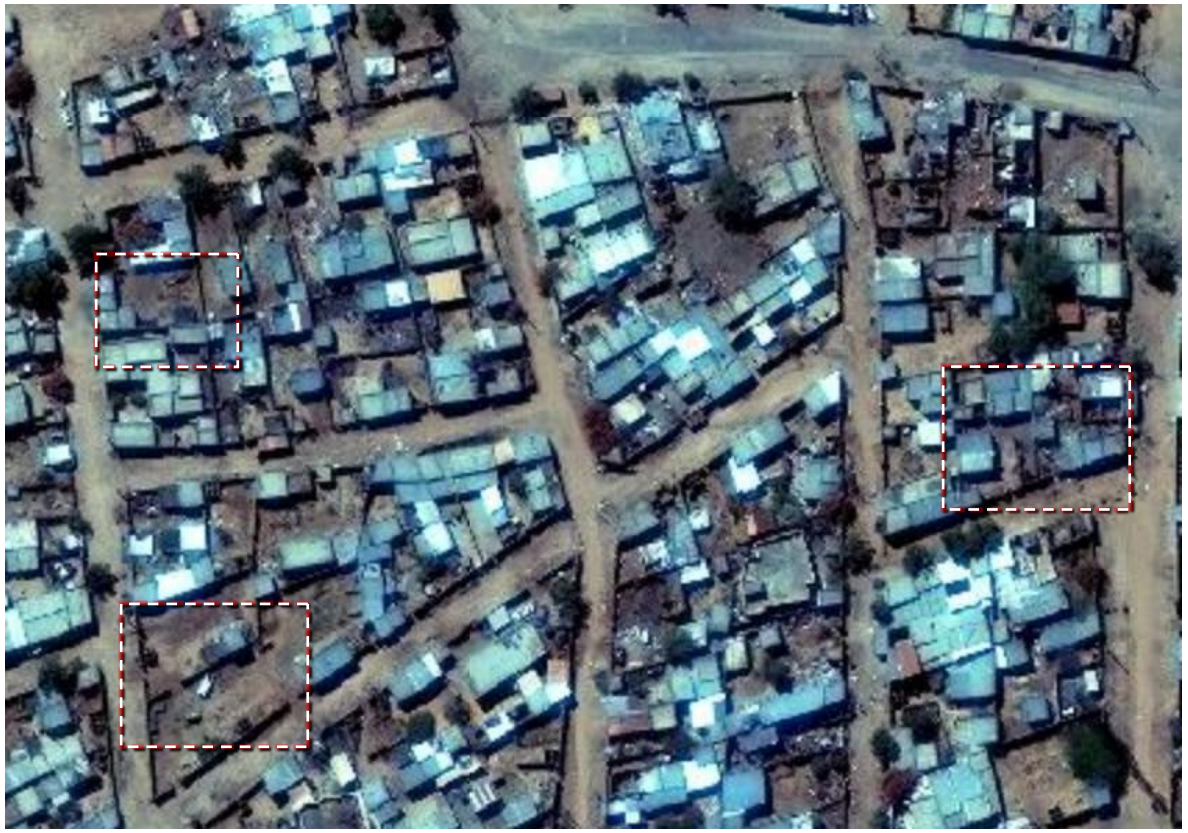


21 January 2025 © 2025 Maxar, USG Plus

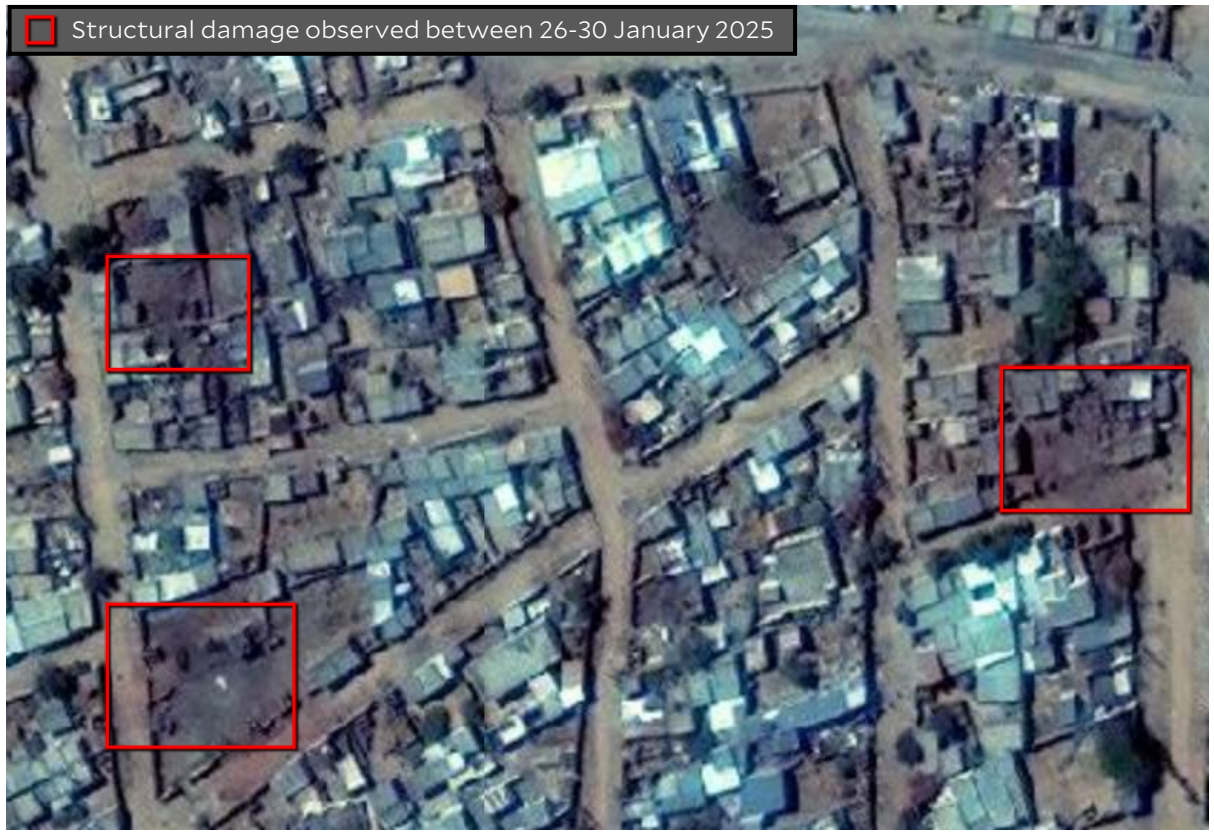
El-Fasher

CONFLICT-RELATED DAMAGE OBSERVED BETWEEN 26-30 JANUARY 2025

Analysis of satellite imagery collected between 26 and 30 January 2025 shows damage to residential structures in central El-Fasher. This damage is consistent with artillery or aerial bombardment.



26 January 2025 © 2025 Maxar, USG Plus

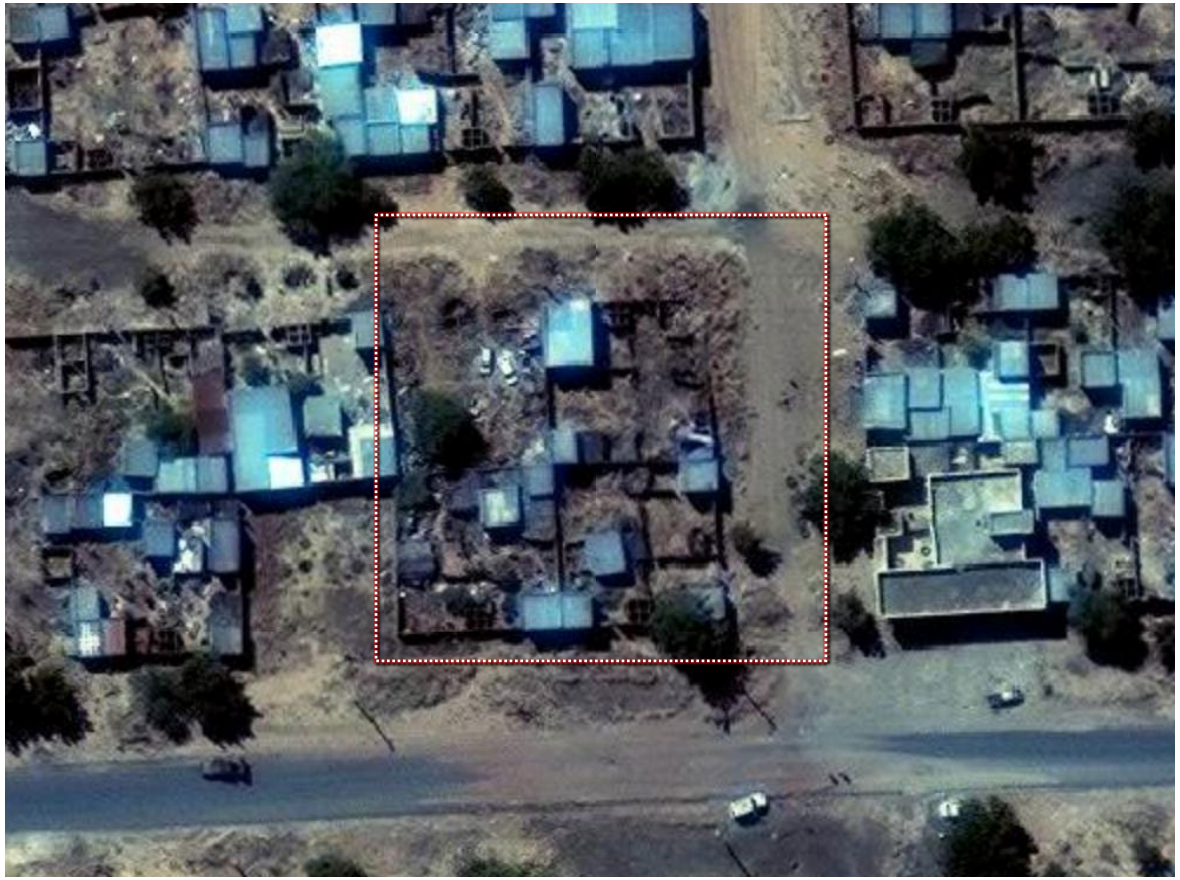


30 January 2025 © 2025 Maxar, USG Plus

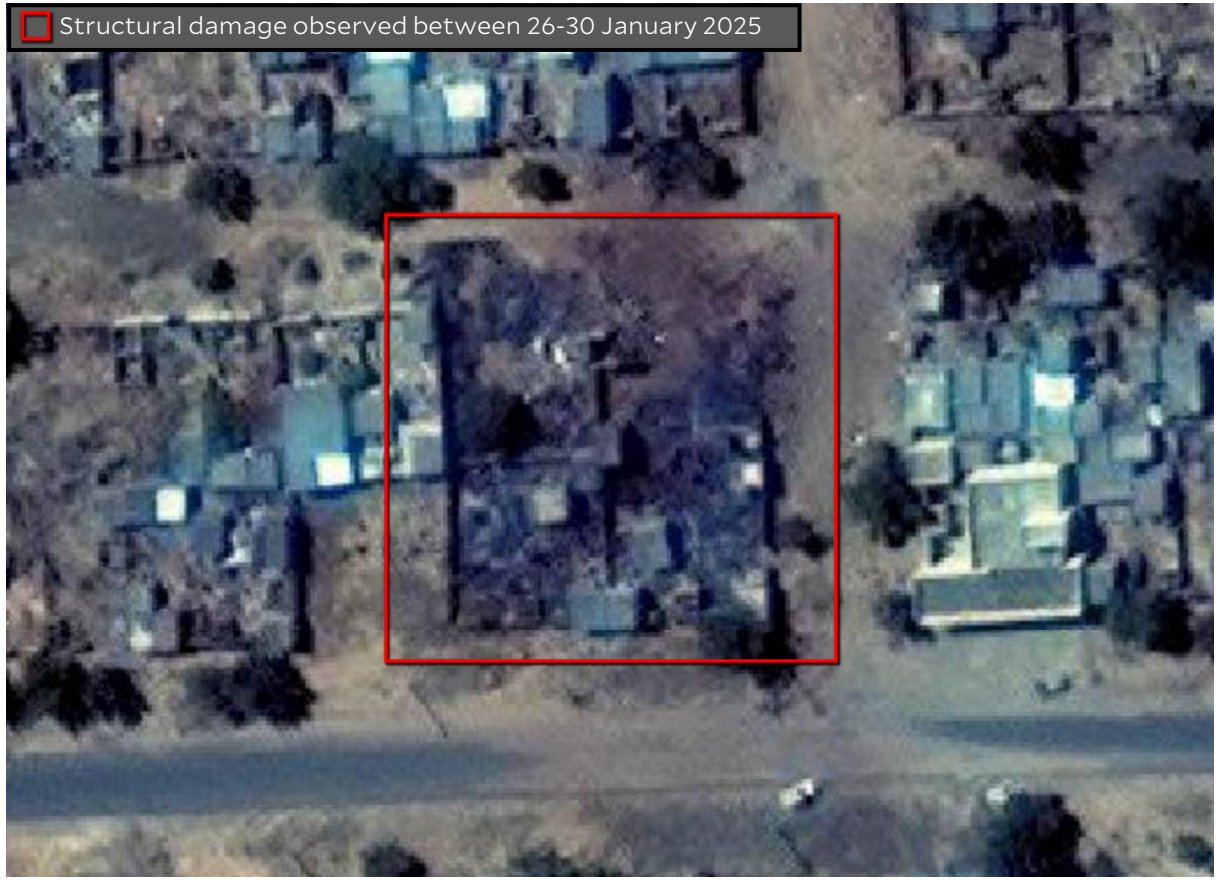
El-Fasher

THERMAL SCARRING OF STRUCTURES OBSERVED BETWEEN 26-30 JANUARY 2025

Analysis of satellite imagery collected between 26 and 30 January 2025 shows thermal scarring of structures at east El-Fasher.



26 January 2025 © 2025 Maxar, USG Plus

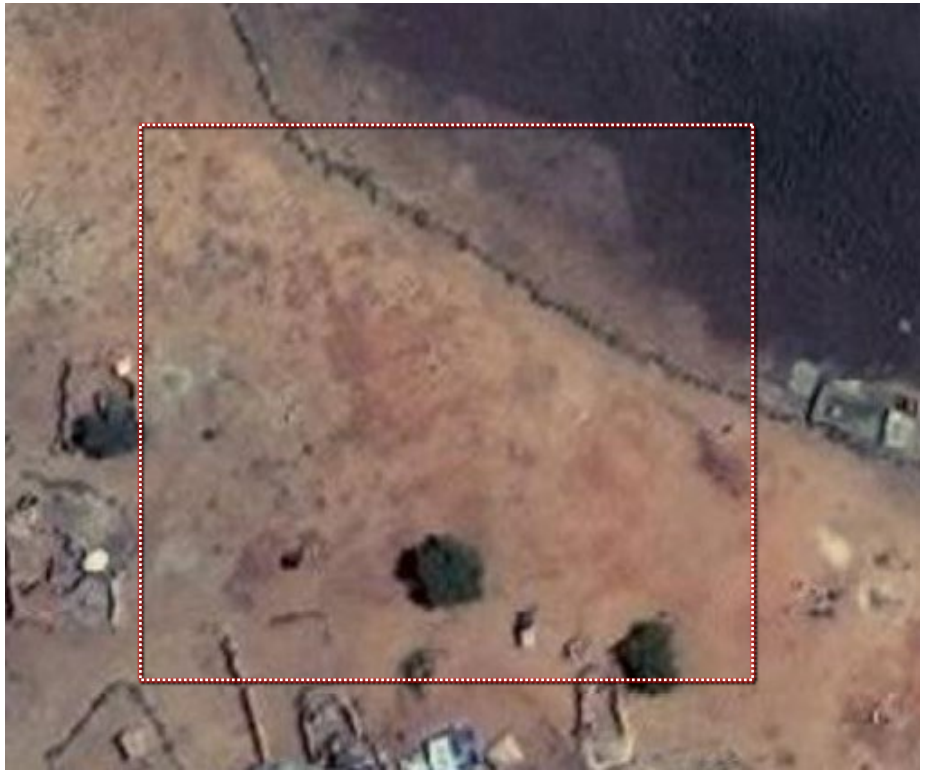


30 January 2025 © 2025 Maxar, USG Plus

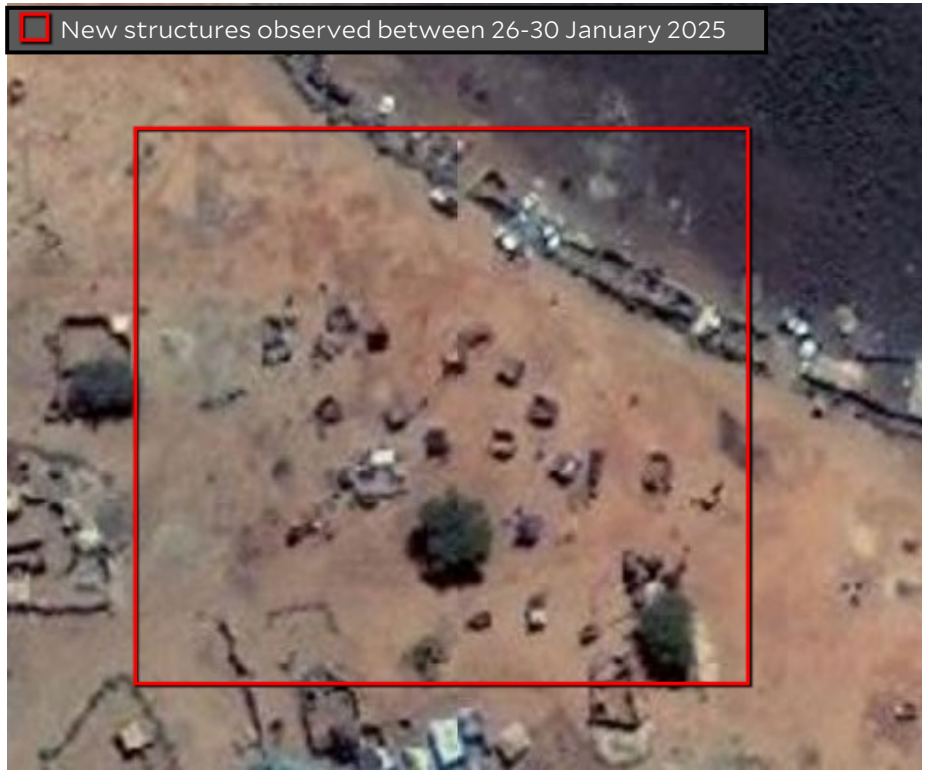
Zamzam Area

NEW STRUCTURES OBSERVED BETWEEN 26-30 JANUARY 2025

Analysis of satellite imagery collected between 26-30 January 2025 shows new temporary structures near Zamzam IDP Camp. These temporary structures may indicate the recent arrival of displaced people.



26 January 2025 © 2025 Maxar, USG Plus

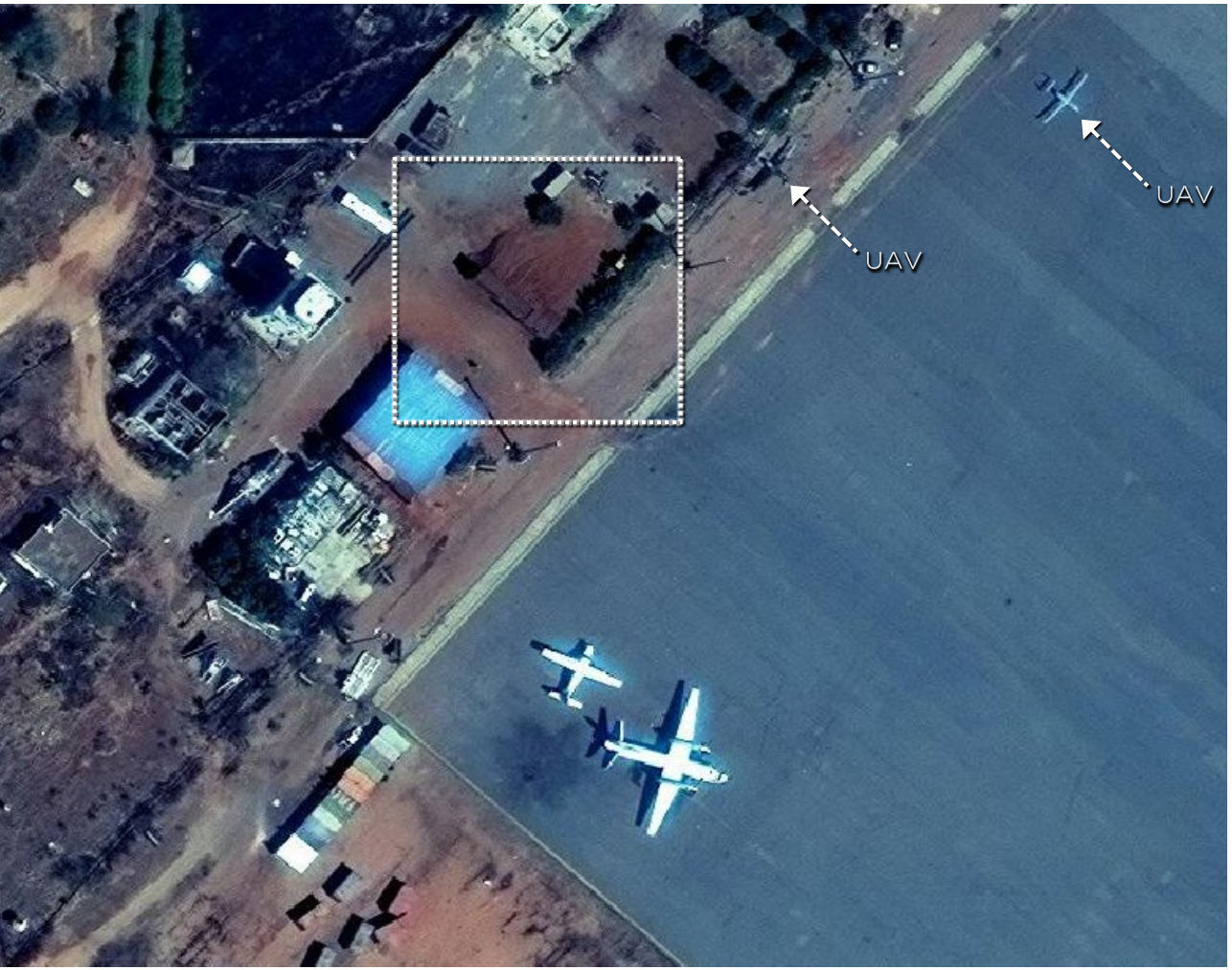


30 January 2025 © 2025 Maxar, USG Plus

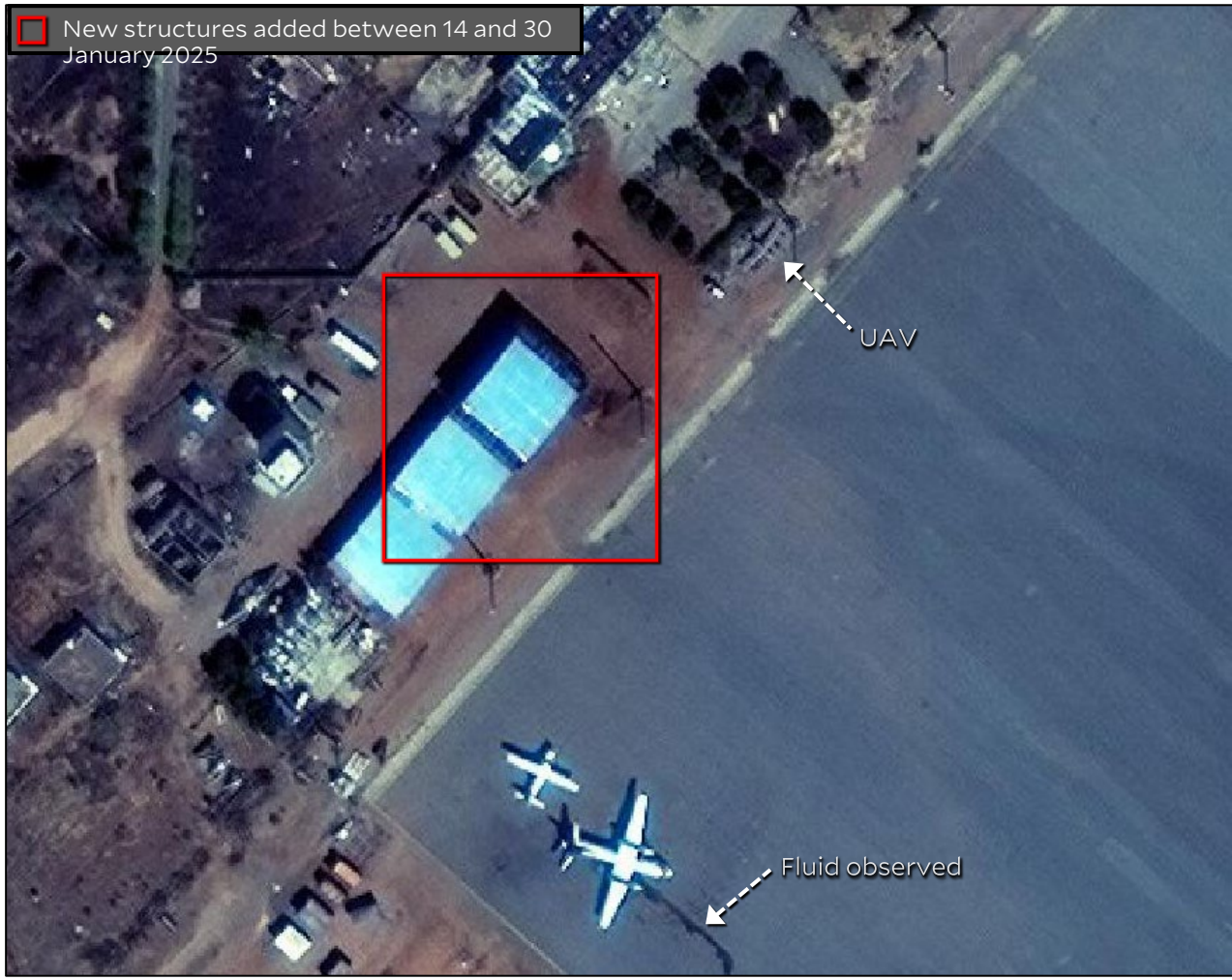
Nyala Airport

NEW STRUCTURES OBSERVED AT NYALA AIRFIELD

Analysis of satellite imagery collected between 14 and 30 January 2025 shows additional structures likely associated with recent unmanned aerial vehicle (UAV) activity observed at the airfield. The dimensions of these new structures indicate that they may provide covered storage for UAV platforms situated at this airfield.



14 January 2025 © 2025 Maxar, USG Plus



30 January 2025 © 2025 Maxar, USG Plus

Yale SCHOOL OF PUBLIC HEALTH

Humanitarian Research Lab

https://medicine.yale.edu/lab/khoshnood/