

SPECIAL REPORT:

RSF Ground Assault on Zamzam IDP Camp

13 February 2025

Yale SCHOOL OF PUBLIC HEALTH
Humanitarian Research Lab

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I. Key Findings

The Yale School of Public Health's Humanitarian Research Lab (HRL) confirms significant damage from Rapid Support Forces (RSF) arson attacks and incursions into Zamzam Internally Displaced Persons (IDP) Camp and nearby communities Saloma and Ammar Gedid. Yale HRL assesses that RSF razed over half of the main (eastern) market in Zamzam IDP Camp between 9 and 13 February 2025. Further arson attacks and damage to structures are primarily concentrated in the eastern parts of Zamzam IDP camp, including razed structures near the B26 and A43 roads at the camp's main northeastern entry; Yale HRL geolocated video footage of RSF forces along the B26 near the northeastern entry point from 11 and 12 February 2025.¹ The pattern of thermal scarring across Zamzam IDP Camp is consistent with intentional razing in a ground attack.

RSF's ground incursion into the east side of Zamzam was preceded by RSF's arson attacks on Saloma and Ammar Gedid, two communities approximately 300-500m northwest of Zamzam on 7 February 2025. Yale HRL identifies thermal scarring consistent with intentional razing to structures in at least eleven additional communities approximately 3-25 km from Zamzam between 4 and 13 February 2025. Yale HRL also identifies munition impacts on the western side of Zamzam IDP Camp and near Umm Gameira, 2.5 km northeast of Zamzam IDP Camp, and near Thabit, approximately 25 km southwest of Zamzam IDP Camp. It is unknown at this time whether these munition impacts were caused by RSF or SAF-aligned forces.

RSF has conducted ground attacks on and near Zamzam from both the west and east in less than a week and highly likely has surrounded the IDP camp. RSF's ground invasions have targeted critical civilian infrastructure for internally displaced people, both those who have lived in Zamzam for decades since surviving the 2003-5 Darfur Genocide and civilians who fled RSF's attacks only days ago. RSF's invasion of Zamzam represents the final battle for both the symbolic and actual completion of the genocide started by the Janjaweed, from which the RSF is derived, in the early 2000s.

Zamzam IDP camp has been in famine conditions since June 2024.² This large-scale attack on the main market in Zamzam is near certain to increase famine-related deaths across Zamzam.

RSF Ground Invasion on Zamzam IDP Camp, 11 and 12 February 2025

On 11 and 12 February 2025, RSF reportedly attacked the eastern side of Zamzam with heavy weapons and artillery shelling in addition to small arms.³ RSF reportedly looted and set fire to Zamzam's main (eastern) market during these attacks; active fire, smoke plumes, and thermal scarring are visible at the market in video footage from 11 and 12 February 2025.⁴ Popular resistance forces within Zamzam and Joint Forces from El-Fasher purportedly repelled the assault on both days, and Sudan Armed Forces (SAF) conducted airstrikes on RSF vehicles from Zamzam on 11 February 2025.⁵

Of the main market's estimated 700 square meter area, approximately half (350 square meters) was destroyed. VIIRS fire detection registered thermal activity at these locations on 11, 12 and 13 February 2024. The pattern of thermal scarring at all locations in Zamzam is consistent with intentional razing as part of a ground attack. A munition impact on the western side of the camp is also newly visible in satellite imagery between 3-13 February 2025.

Medicins San Frontieres (MSF) reported that its Zamzam field hospital received seven patients dead on arrival on 11 February, in addition to 40 injured patients on 11-12 February.⁶ The North Darfur Ministry of Health reported that more than 10 people were killed and over 75 severely injured in RSF attacks on Zamzam.⁷ MSF reported that its Zamzam field hospital is not equipped for surgery and transferring critical patients to Saudi Hospital in El-Fasher is impossible due to clashes on the B-26 road between El-Fasher and Zamzam IDP Camp.⁸ *Sudan Tribune* reported that thousands of people were displaced from Zamzam to El-Fasher due to the clashes.⁹ Yale HRL cannot currently confirm the size and location of displaced populations. It is likely that the casualties, including fatalities, are significantly higher than what is reported. The lack of onsite trauma care in Zamzam combined with inability to reach Saudi Hospital means that further attacks will likely result in higher fatality rates due to lack of access to emergency medical care.

Arson Attacks on 13 Communities Near El-Fasher and Zamzam IDP Camp

Yale HRL identifies thermal scarring consistent with intentional razing to structures in at least thirteen communities between 4 and 13 February 2025. Among these communities, Saloma and Ammar Gedid are less than 300 meters northwest of Zamzam IDP Camp, and Turendi is 3 kilometers southwest of Zamzam. The remaining eight communities are west of El-Fasher, near the Golo Reservoir, or along the A-5 road to Tawilah. These 13 razing incidents add to the 23 prior razing events in the same area reported by Yale HRL on 5 February 2025. These arson attacks preceding recent RSF incursions into Zamzam cause civilian displacement as well as effectively prevent people inside Zamzam from being able to flee to potential safe havens in the surrounding area.

Saloma and Ammar Gedid: Analysis of satellite imagery between 7 and 10 February 2025 shows thermal scarring and damage to structures consistent with intentional razing in Saloma, less than 300 meters northwest of Zamzam. Thermal scarring and smoke was also observed in satellite imagery between 4-9 February 2025 at Ammar Gedid, which is also less than 300 meters northwest of Zamzam. Local news organizations reported that RSF conducted an arson attack on Saloma and surrounding communities on 7 February 2025, resulting in the death of at least six people.¹⁰ Saloma reportedly hosts thousands of people displaced from conflict in El-Fasher and Zamzam, and the International Organization for Migration (IOM) reported that approximately 8,000 households were displaced from Saloma and the surrounding area on 7-8 February 2025.¹¹

Turendi: Yale HRL assesses an intentional arson attack on Turendi, a community 3 km southeast of Zamzam through satellite imagery between 9 and 13 February 2025. VIIRS fire detection data registered thermal activity at this location on 12 and 13 February 2025. An RSF attack on Turendi on 12 February reportedly resulted in the death and detention of civilians, as well as looting of property and livestock.¹²

Table 1. Arson Attacks on Communities near El-Fasher and Zamzam IDP Camp, 4-13 February 2025

| Name | Locality | VIIRS Detection Dates* | Visible Thermal Scarring in Satellite Imagery |
|----------------------------------|---------------|--|---|
| Shagara Humaida | El-Fasher | 31 Jan 2025; 02, 05, 08, and 09 Feb 2025 | 4-9 Feb 2025 |
| Kheir Khanaqa | El-Fasher | 03, 05 Feb 2025 | 4-9 Feb 2025 |
| Umm Hegalig | El-Fasher | 03, 05 Feb 2025 | 4-9 Feb 2025 |
| Saloma | El-Fasher | No VIIRS | 7-9 Feb 2025 |
| Ammar Gedid | El-Fasher | No VIIRS | 4-9 Feb 2025 |
| Fara Shalakh | El-Fasher | 05, 07 Feb 2025 | 4-9 Feb 2025 |
| Tomana | El-Fasher | No VIIRS | 4-9 Feb 2025 |
| Alsen | El-Fasher | 07 Feb 2025 | 30 Jan to 9 Feb 2025 |
| Muqrin | El-Fasher | 03, 06, 07 Feb 2025 | 4-9 Feb 2025 |
| Bederi | El-Fasher | 07 Feb 2025 | 4-9 Feb 2025 |
| Turendi | El Fasher | 12, 13 Feb 2025 | 9-13 Feb 2025 |
| Tawilah Community 7 | Tawilah | No VIIRS | 4-9 Feb 2025 |
| Dar As Salaam Community 7 | Dar As Salaam | No VIIRS | 4-9 Feb 2025 |

*When available, Visible Infrared Imaging Radiometer Suite (VIIRS) thermal anomaly data can narrow down the period when communities were attacked.

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 HRL_MMC_081 and HRL_MMC_082 have been redacted for security reasons.

² Integrated Food Security Phase Classification (IPC), "Famine in Sudan: IPC Famine Review Committee Confirms Famine Conditions in Parts of North Darfur - Sudan," ReliefWeb, August 1, 2024, <https://www.ipcinfo.org/ipcinfo-website/countries-in-focus-archive/issue-107/en/>, archived at <https://perma.cc/88W2-M5AS>.

³ Sudan Tribune, "RSF Assault on Zamzam Camp in Darfur Forces Thousands to Flee," February 11, 2025, <https://sudantribune.com/article297226/>, archived at <https://perma.cc/3M4K-NFFE>; Dabanga Radio, "الجيش يعلن صد هجوم شنه الدعم السريع," February 11, 2025, <https://www.dabangasudan.org/ar/all-news/article/%d8%a7%d9%84%d8%ac%d9%8a%d8%b4-%d9%8a%d8%b9%d9%84%d9%86-%d8%b5%d8%af-%d9%87%d8%ac%d9%88%d9%85-%d8%b4%d9%86%d9%87-%d8%a7%d9%84%d8%af%d8%b9%d9%85-%d8%a7%d9%84%d8%b3%d8%b1%d9%8a%d8%b9-%d8%b9%d9%84%d9%89>, archived at <https://perma.cc/A8LT-VJEV>; Darfur 24, "قتلى و30 جريحا وسط المدنيين جراء اشتباكات بمخيم زمزم, 5," February 11, 2025, <https://www.darfur24.com/2025/02/11/5-اشتباكات-وسط-المدنيين-جاء-بمخيم-زمزم-5>, archived at <https://perma.cc/UA3T-R7LV>; Darfur 24, "أوضاع إنسانية متدهورة للنازحين," February 12, 2025, <https://www.darfur24.com/2025/02/12-أوضاع-إنسانية-متدهورة-للنازحين-بمخيم-زمزم>, archived at <https://perma.cc/UZ6S-99FF>; Dabanga Radio, "قوات الدعم السريع تجدد هجوما على 'زمزم' بالفاشر.. ومقتل 8 أشخاص," February 12, 2025,

<https://www.dabangasudan.org/ar/all-news/article/%d9%82%d9%88%d8%a7%d8%aa-%d8%a7%d9%84%d8%af%d8%b9%d9%85-%d8%a7%d9%84%d8%b3%d8%b1%d9%8a%d8%b9-%d8%aa%d8%ac%d8%af%d8%af-%d9%87%d8%ac%d9%88%d9%85%d9%87%d8%a7-%d8%b9%d9%84%d9%89-%d8%b2%d9%85%d8%b2%d9%85>, archived at <https://perma.cc/WQP8-N6RX>.

⁴ @SudanTribune_EN on X (formerly known as Twitter), “The Rapid Support Forces (RSF) Launched a Violent Attack on the Zamzam Camp in North Darfur on Tuesday, Committing Widespread Abuses against Displaced People and Forcing Thousands to Flee towards the City of El Fasher,” X (formerly known as Twitter), February 11, 2025, https://x.com/SudanTribune_EN/status/1889424372022341722, archived at <https://perma.cc/EY5E-EGG2>; @SudanTribune_EN on X (formerly known as Twitter), “The Rapid Support Forces (RSF) Renewed Its Attack on the Zamzam Camp for Displaced Persons in North Darfur State on Wednesday, as the Governor of the Darfur Region, Minni Arko Minawi, Called on Those Able to Bear Arms to Defend the Displaced,” X (formerly known as Twitter), February 12, 2025,

https://x.com/SudanTribune_EN/status/1889778138428612921, archived at <https://perma.cc/4NP7-NJ7K>; @Sudan_tweet on X (formerly known as Twitter), “آثار الدمار الكبير على معسكر زمزم للنازحين في ولاية شمال دارفور، عقب محاولات اقتحامه بواسطة المليشيا الداعم السريع الإرهابية The effects of the great destruction on the Zamzam camp for the displaced in Darfur, following attempts to storm it by the terrorist,” Twitter, February 12, 2025, https://x.com/Sudan_tweet/status/1889670126179405967,

archived at <https://perma.cc/SJ73-5P9X>; @ThomasVLinge on X (formerly known as Twitter), “#Sudan sp: Horrible Footage from the Zamzam Camp for the Internally Displaced in the City of #ElFasher, Where Relentless Shelling by the #RSF Had Caused Part of the Camp to Catch Fire. Thousands of Families Are Forced to Abandon What Little They Have and Be Displaced Once Again,” X (formerly known as Twitter), February 12, 2025, <https://x.com/ThomasVLinge/status/1889673016075751861>, archived at <https://perma.cc/6AGX-V7ZW>; Sudan Tribune, “RSF Assault on Zamzam Camp in Darfur Forces Thousands to Flee,” February 11, 2025, <https://sudantribune.com/article297226/>, archived at <https://perma.cc/3M4K-NFFE>.

⁵ @قيادة الفرقة السادسة مشاه الفاشر. “سلاح الطيران ومدفعية الفرقة السادسة مشاه الفاشر يدحران قوة من المليشيا شنت هجوما على معسكر زمزم,” February 11, 2025, https://www.facebook.com/permalink.php/?story_fbid=467771279739982&id=100095213415691, archived at <https://ghostarchive.org/archive/adEuJ>; Dabanga Radio, “قوات

الدعم السريع تجدد هجومها على زمزم بالفاشر.. ومقتل 8 أشخاص,” February 12, 2025, <https://www.dabangasudan.org/ar/all-news/article/%d9%82%d9%88%d8%a7%d8%aa-%d8%a7%d9%84%d8%af%d8%b9%d9%85-%d8%a7%d9%84%d8%b3%d8%b1%d9%8a%d8%b9-%d8%aa%d8%ac%d8%af%d8%af-%d9%87%d8%ac%d9%88%d9%85%d9%87%d8%a7-%d8%b9%d9%84%d9%89-%d8%b2%d9%85%d8%b2%d9%85>, archived at <https://perma.cc/WQP8-N6RX>.

⁶ @MSF_Sudan on X (formerly known as Twitter), “Today the MSF Hospital in #Zamzam Received 17 Patients, Yesterday When the RSF Offensive First Reached the Camp We Received 23 Patients, Seven Additional People Were Dead on Arrival,”

Twitter, February 12, 2025, https://x.com/MSF_Sudan/status/1889731584145682919, archived at <https://perma.cc/L4C7-KLRK>.

⁷ @JamesCopnall on X (formerly known as Twitter), “Director General of the N. Darfur Health Ministry, Ibrahim Abdullah Khater: More than 10 People Were Killed + 75 Severely Injured in the Attack on Zamzam, but the Real Number Is Far Higher,” Twitter, February 13, 2025, <https://x.com/JamesCopnall/status/1889927045695815873>, archived at <https://perma.cc/4PNL-WJJJ>.

⁸ @MSF_Sudan on X (formerly known as Twitter), “Our Field Hospital in Zamzam Is Not Equipped to Deal with Trauma Injuries Requiring Surgery,” Twitter, February 11, 2025, https://x.com/MSF_Sudan/status/1889350537469964759, archived at <https://perma.cc/6FTU-4NXL>; Sudan Tribune, “RSF Assault on Zamzam Camp in Darfur Forces Thousands to Flee,” February 11, 2025, <https://sudantribune.com/article297226/>, archived at <https://perma.cc/3M4K-NFFE>.

⁹ Sudan Tribune, “هجوم لليوم الثاني على معسكر «زمزم» ومناوي يدعو للدفاع عن النازحين,” February 12, 2025, <https://sudantribune.net/article297261/>, archived at <https://perma.cc/F2MW-UFZP>; Sudan Tribune, “RSF Assault on Zamzam Camp in Darfur Forces Thousands to Flee,” February 11, 2025, <https://sudantribune.com/article297226/>, archived at <https://perma.cc/3M4K-NFFE>.

¹⁰ Sudan War Monitor, “قتلى وجرحى واسرى من المدنيين اثر هجوم قوات الدعم السريع على قرية سلومة ريفي الفاشر ولاية شمال دارفور,” February 8, 2025, <https://sudanwarmonitor.com/p/924>, archived at <https://perma.cc/HKR5-WWF2>; Sudan Tribune, “مقتل ثلاثة أشخاص ونزوح جماعي إثر هجوم على بلدة بشمال دارفور,” February 8, 2025, <https://sudantribune.net/article297080/>, archived at <https://perma.cc/4CG5-BHTE>; Darfur 24, “قتلى وجرحى في هجوم للدعم السريع,” February 8, 2025, <https://www.darfur24.com/2025/02/08/-قتلى-وجرحى-في-هجوم-للدعم-السريع-على-بلدة-بشمال-دارفور/>, archived at <https://perma.cc/K37U-6NZU>; HRL MMC_078 and HRL MMC_080 have been withheld for security reasons

¹¹ Sudan Tribune, “مقتل ثلاثة أشخاص ونزوح جماعي إثر هجوم على بلدة بشمال دارفور,” February 8, 2025, <https://sudantribune.net/article297080/>, archived at <https://perma.cc/4CG5-BHTE>; International Organization for Migration (IOM), “DTM Sudan Flash Alert: Al Fasher (Saloma Village), North Darfur (Update 005),” Displacement Tracking Matrix | DTM Sudan, Accessed February 13, 2025, <https://mailchi.mp/iom/dtm-sudan-flash-alert-al-fasher-saloma-village-north-darfur-update-005>, archived at <https://perma.cc/GV7G-7T22>.

¹² @MUAMMAR_SUD on X (formerly known as Twitter), “بسم الله الرحمن الرحيم ولاية شمال دارفور بيان، مهم من حكومة ولاية شمال دارفور حول أحداث معسكر زمزم للنازحين. تعرض معسكر زمزم للنازحين في الفاشر إلى هجمات وحشية من مليشيا الـ”دقو الإرهابية على مدى يومين على التوالي قامت من خلالها بقتل المواطنين العزل وحرق.” Twitter, February 12, 2025, https://x.com/MUAMMAR_SUD/status/1889771510073626659, archived at <https://perma.cc/5YBZ-Y6BP>.

Main Market, Zamzam IDP Camp

THERMAL SCARRING AND STRUCTURE DAMAGE OBSERVED BETWEEN 03-13 FEBRUARY 2025

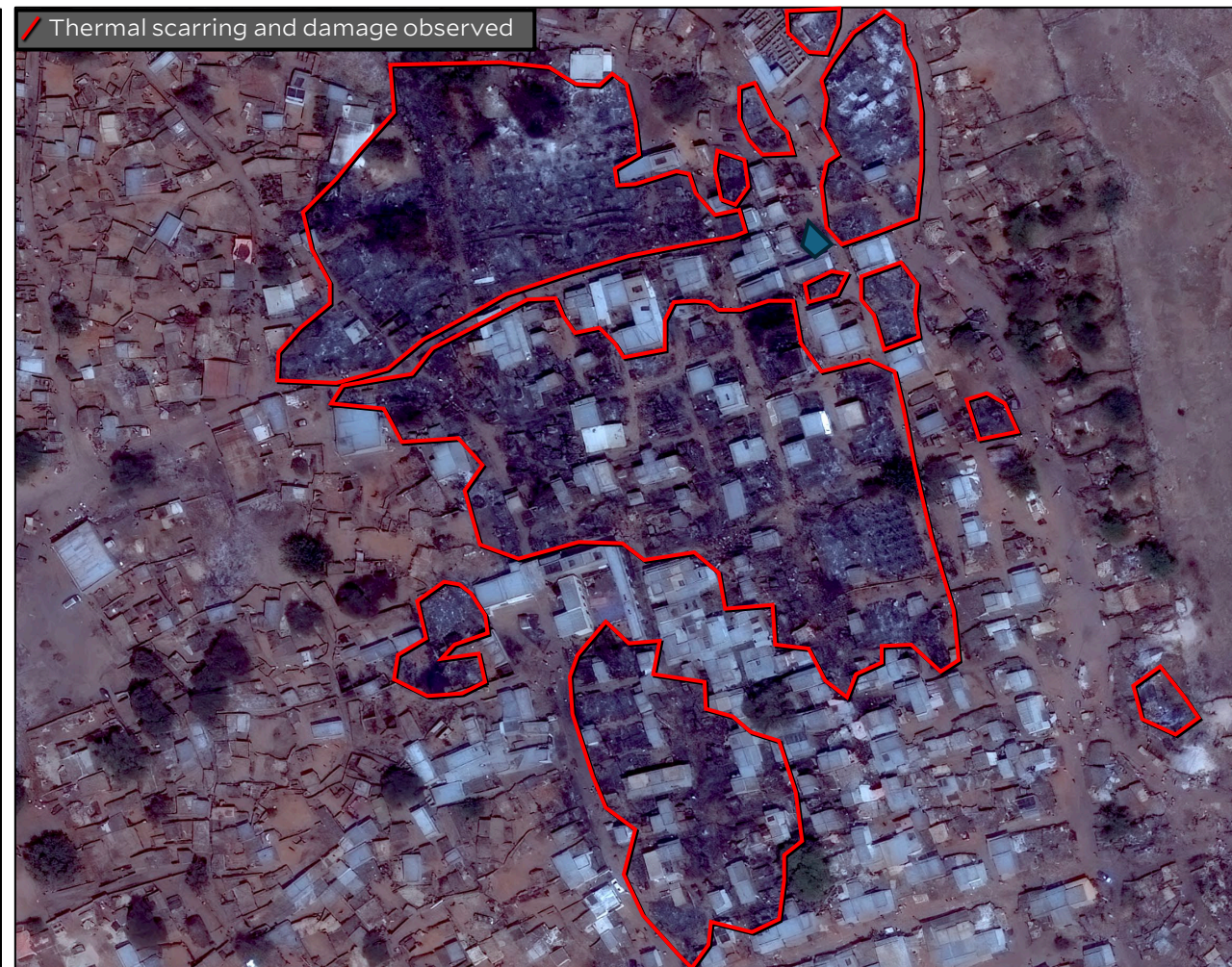
Analysis of satellite imagery collected between 03 and 13 February 2025 of the Zamzam IDP camp shows thermal scarring and damage to structures in the central market area.

Based on low-resolution Sentinel imagery, the timeframe of burning can be narrowed to 09 to 13 February 2025.

VIIRS fire detection registered thermal activity at this location on 11, 12, and 13 February 2025.



03 February 2025 © 2025 Maxar Technologies
Image enhanced with MGP Pro HD image enhancement



13 February 2025 © 2025 Maxar Technologies
Image enhanced with MGP Pro HD image enhancement

Main Market, Zamzam IDP Camp

THERMAL SCARRING AND DAMAGE TO STRUCTURES
OBSERVED BETWEEN 03-13 FEBRUARY 2025

Analysis of satellite imagery collected between 03 and 13 February 2025 of the Zamzam IDP camp shows thermal scarring and damage to structures of the Zamzam market area set alongside the B26 road at the main northern access to the camp.

Based on low-resolution Sentinel imagery, the timeframe of burning can be narrowed between 09 and 13 February 2025.

VIIRS fire detection registered thermal activity at this location on 11, 12, and 13 February 2025.



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13 February 2025 © 2025 Maxar Technologies
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Zamzam IDP Camp

RSF Force Presence, Zamzam IDP Camp, 11 February 2025

Video footage of RSF forces was taken on 11 February 2025 along the B26 Road in Zamzam IDP Camp.

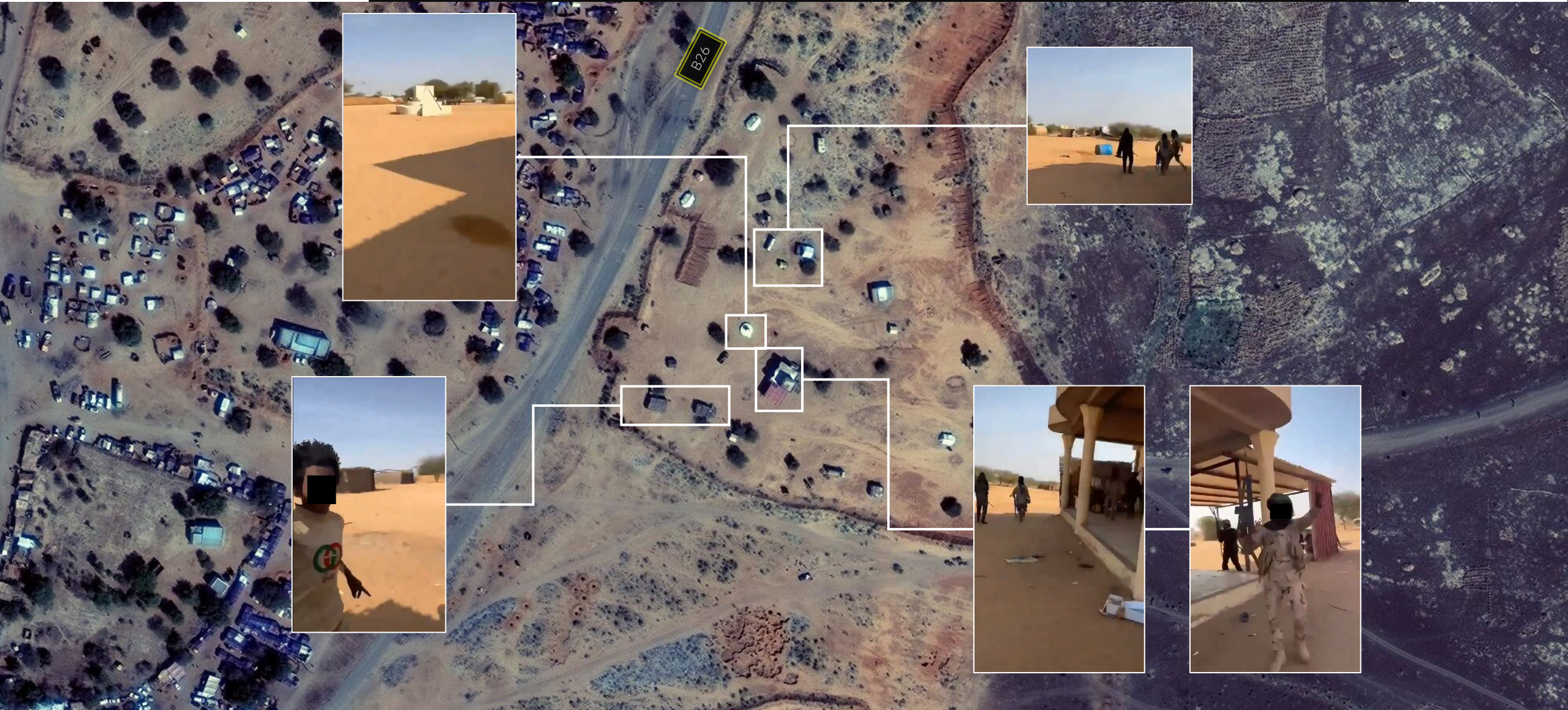


B26

A43

RSF Force Presence, Zamzam IDP Camp, 12 February 2025

Video footage of RSF forces was taken on 12 February 2025 along the B26 Road in Zamzam IDP Camp.



Zamzam IDP Camp

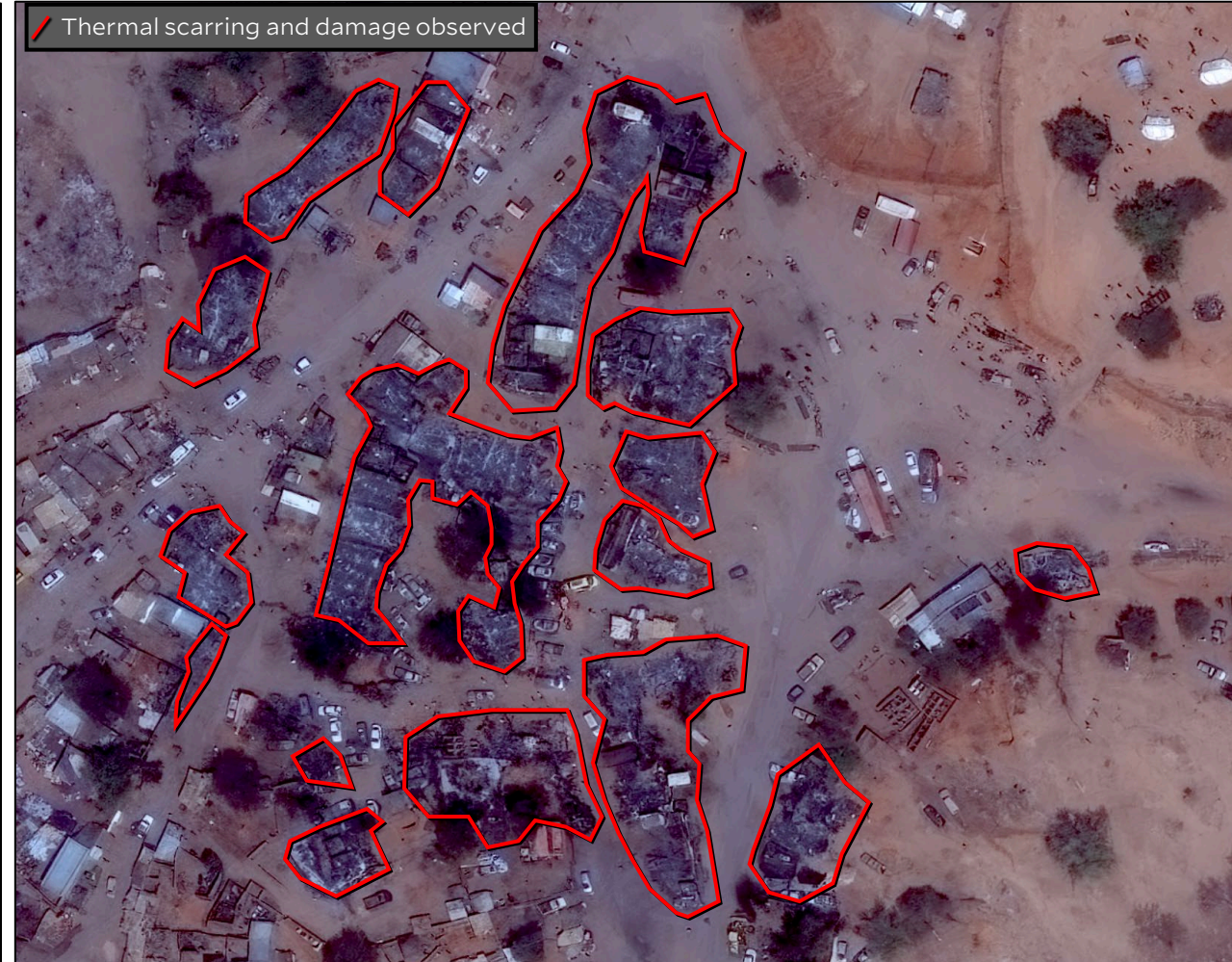
THERMAL SCARRING AND DAMAGE TO STRUCTURES OBSERVED BETWEEN 03-13 FEBRUARY 2025

Analysis of satellite imagery collected between 03 and 13 February 2025 of the Zamzam IDP camp shows thermal scarring and damage to structures set between, and alongside, the B26 and A43 roads at the main northern access to the camp.

Based on low-resolution Sentinel imagery, the timeframe of burning can be narrowed between 09 and 13 February 2025.



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Image enhanced with MGP Pro HD image enhancement



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Zamzam IDP Camp

THERMAL SCARRING AND DAMAGE TO STRUCTURES OBSERVED BETWEEN 03-13 FEBRUARY 2025

Analysis of satellite imagery collected between 03 and 13 February 2025 of the Zamzam IDP camp shows thermal scarring and damage to structures at a compound in Zamzam IDP Camp.

Based on low-resolution Sentinel imagery, the timeframe of burning can be narrowed between 09 and 13 February 2025.

VIIRS fire detection registered thermal activity at this location on 11, 12, and 13 February 2025.



03 February 2025 © 2025 Maxar Technologies
Image enhanced with MGP Pro HD image enhancement

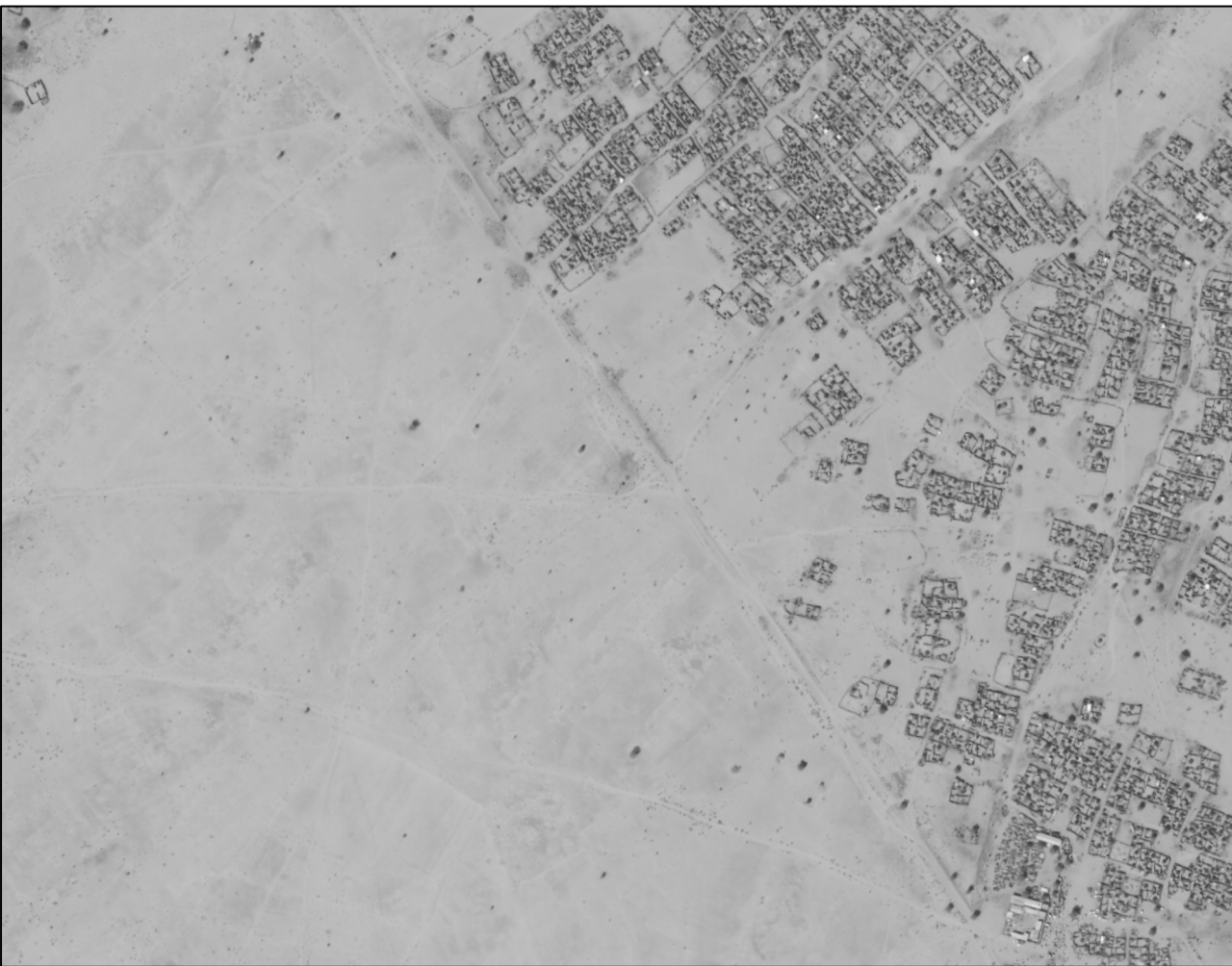


13 February 2025 © 2025 Maxar Technologies
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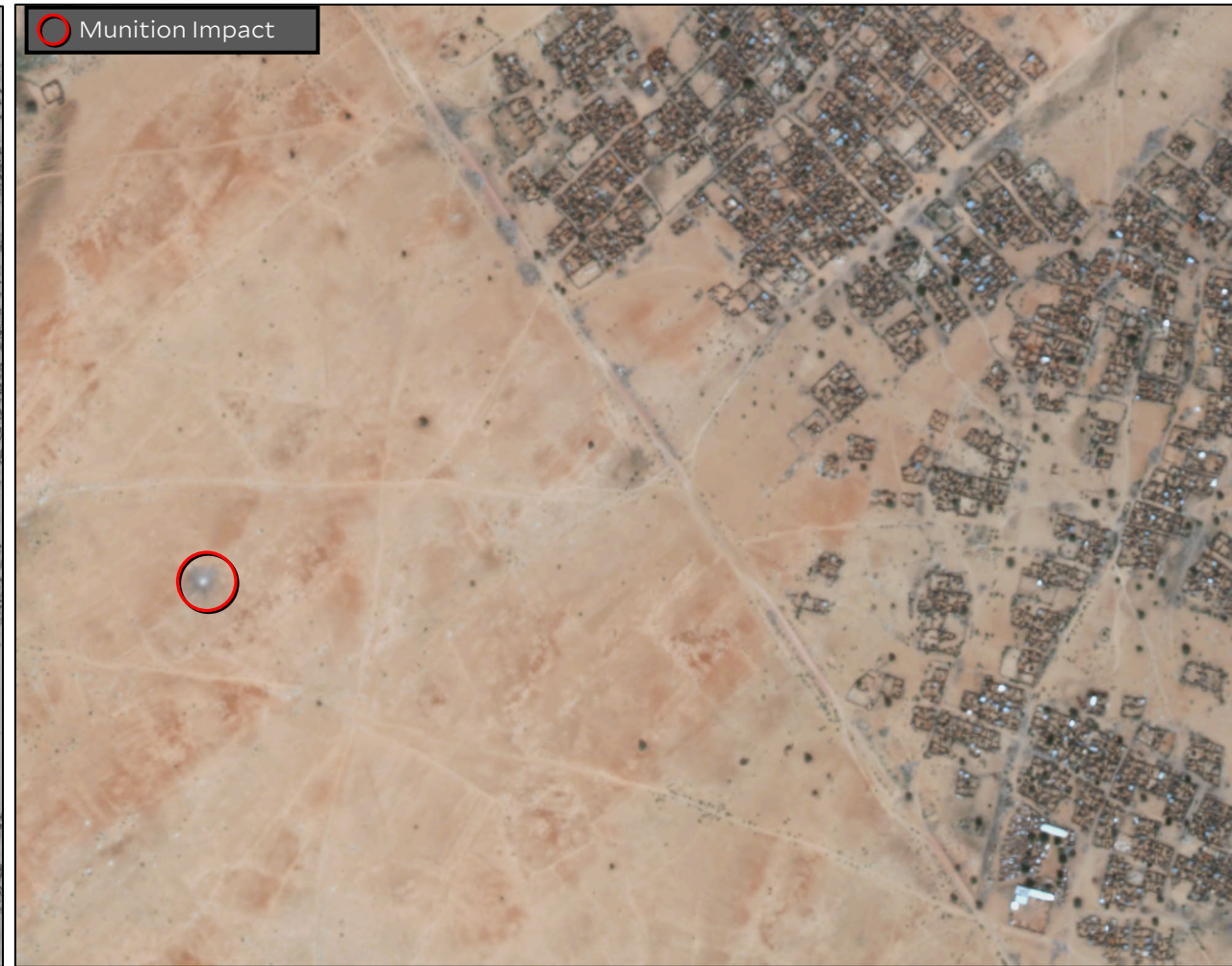
Zamzam IDP Camp

MUNITION IMPACT OBSERVED BETWEEN 03-13
FEBRUARY 2025

Analysis of satellite imagery collected between 03 and 13
February 2025 shows a munition impact on the west side of
the camp.



03 February 2025 © 2025 Maxar Technologies



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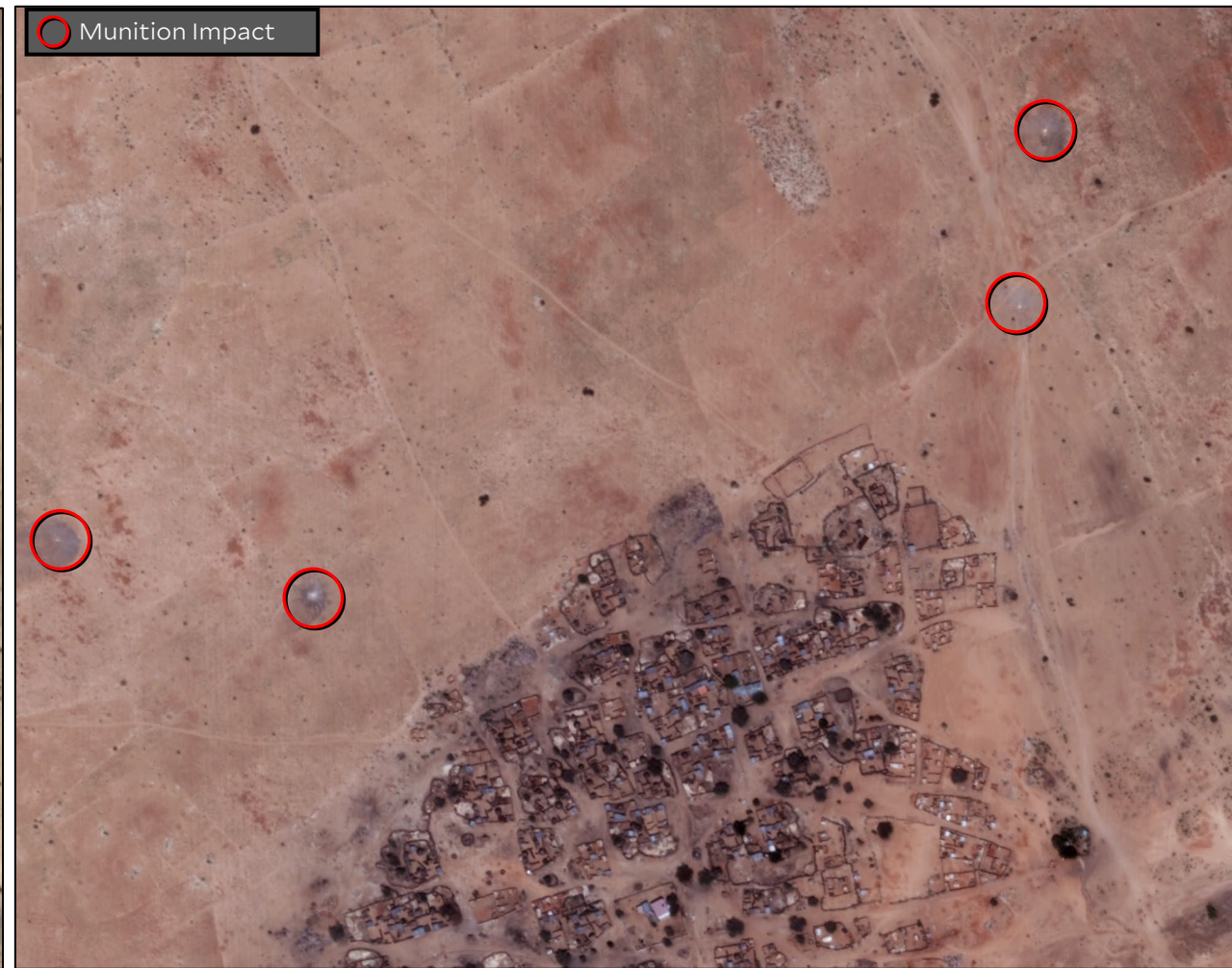
Umm Gameira

MUNITION IMPACTS OBSERVED BETWEEN 07-13
FEBRUARY 2025

Analysis of satellite imagery collected between 07 and 13 February 2025 of the village of Umm Gameira, located along the A5 road approximately 2.5 km northeast of Zamzam, shows at least four munition impacts on the north side of the village.



07 February 2025 © 2025 Maxar Technologies



13 February 2025 © 2025 Maxar Technologies

Thabit

Munition impacts and thermal scarring, 13 February 2025

Munition impacts at Thabit and thermal scarring at "Tawilah Community 7" between 25 January and 13 February 2025.



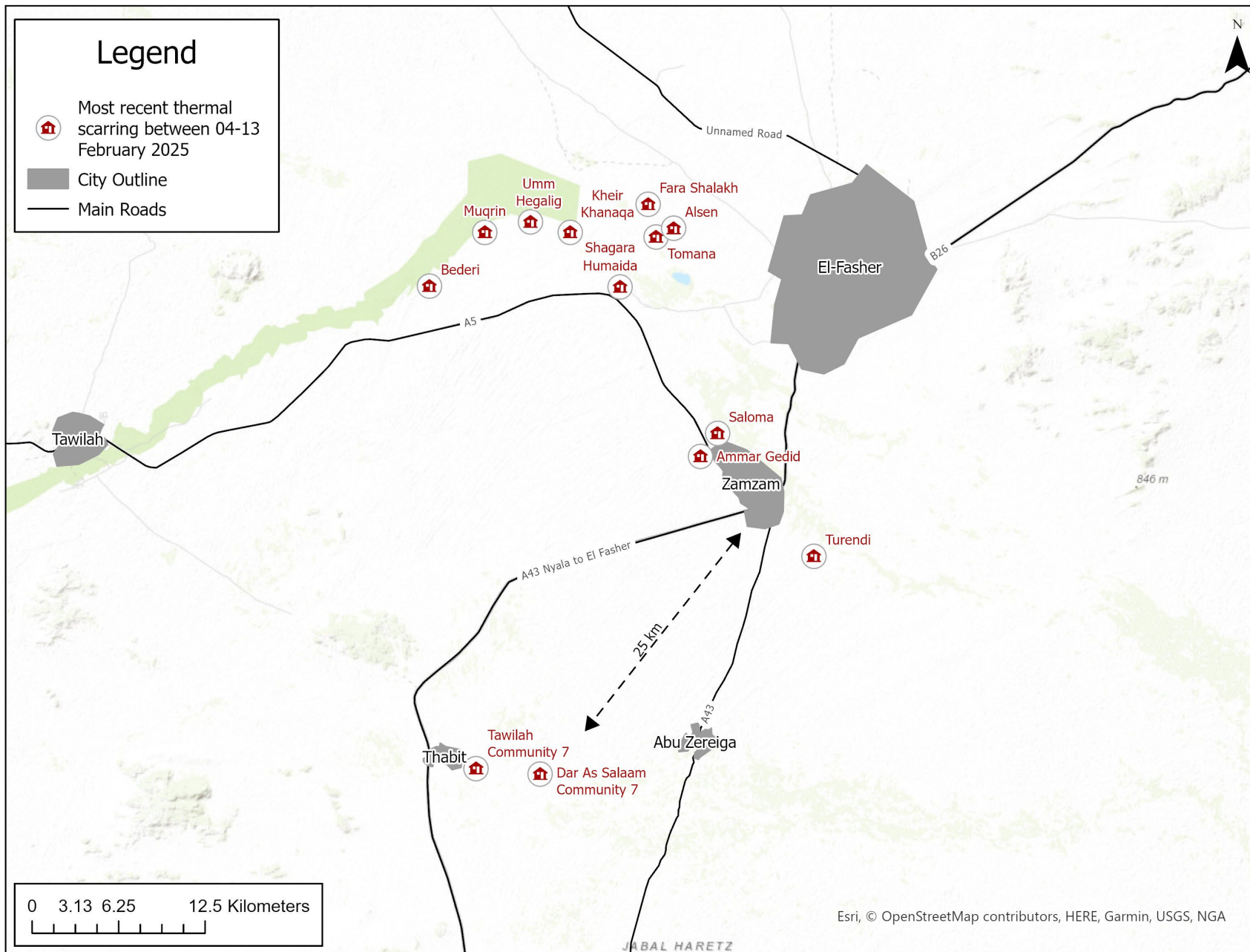
Two munition impacts

Thabit

Thermal scarring

Tawilah Community 7

Confirmed Thermal Scarring at Communities in El-Fasher, Dar As Salaam and Tawilah Locality between 04 and 13 February 2025



Turendi

THERMAL SCARRING AND DAMAGE TO STRUCTURES OBSERVED BETWEEN 14 JANUARY-13 FEBRUARY 2025

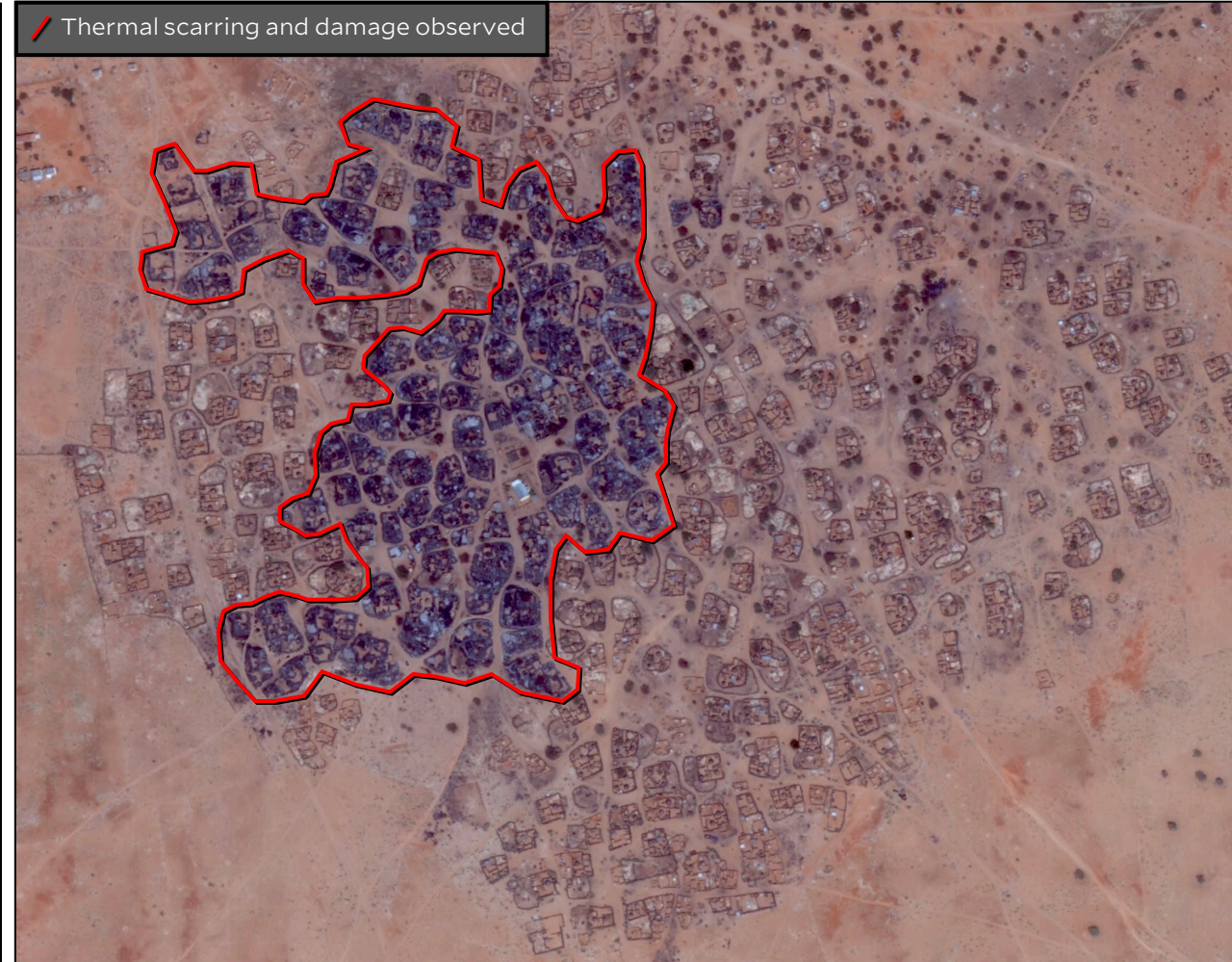
Analysis of satellite imagery collected between 14 January and 13 February 2025 of the village of Turendi, located 3 km southeast of Zamzam, shows thermal scarring and damage to structures within the village.

Based on low resolution Sentinel imagery, the timeframe of burning can be narrowed to 09 to 13 February 2025.

VIIRS fire detection registered thermal activity at this location on 12 and 13 February 2024.



14 January 2025 © 2025 Maxar Technologies
Image enhanced with MGP Pro HD image enhancement



13 February 2025 © 2025 Maxar Technologies
Image enhanced with MGP Pro HD image enhancement

Turendi

THERMAL SCARRING AND DAMAGE TO STRUCTURES OBSERVED BETWEEN 14 JANUARY-13 FEBRUARY 2025

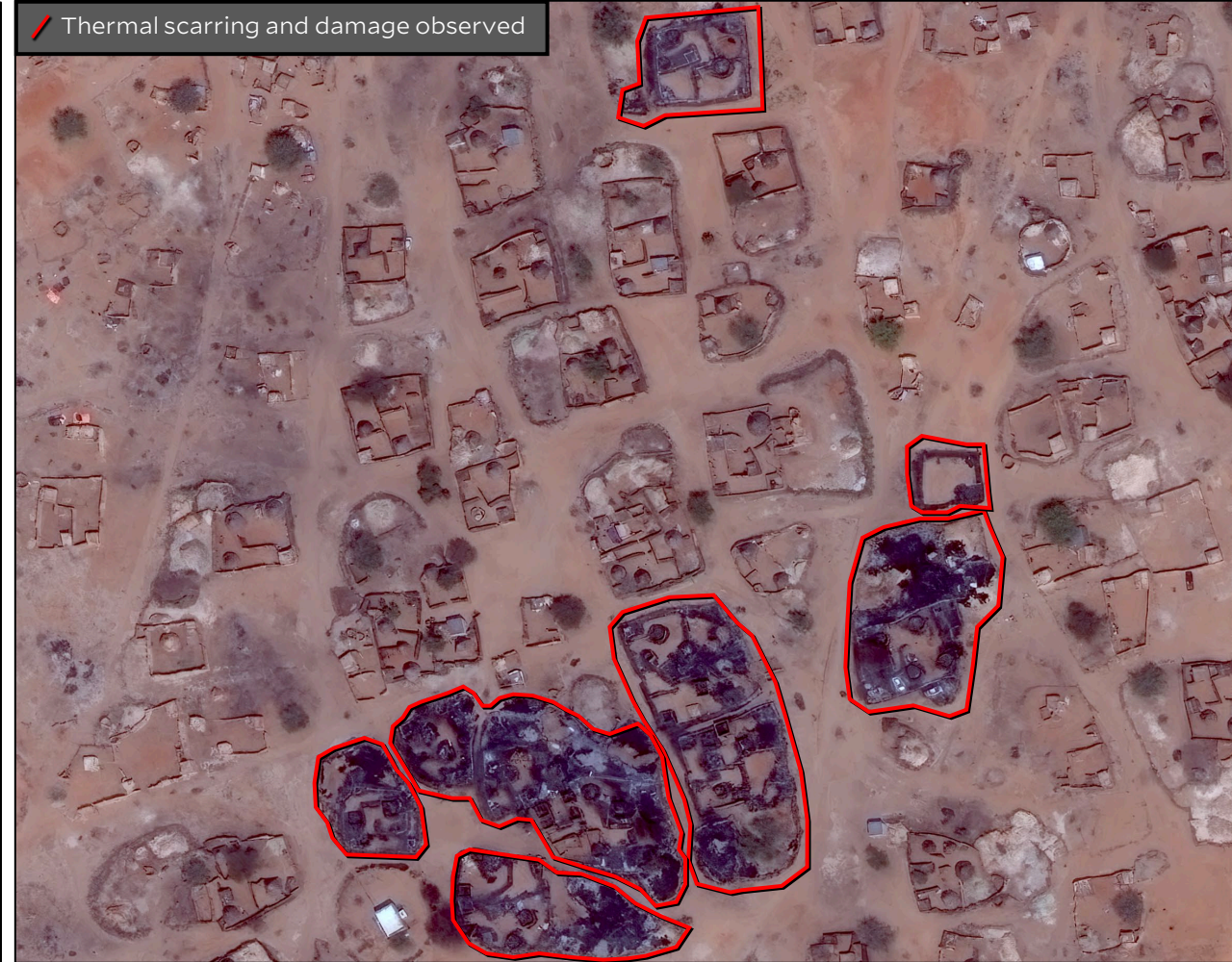


03 February 2025 © 2025 Maxar Technologies
Image enhanced with MGP Pro HD image enhancement

Analysis of satellite imagery collected between 14 January and 13 February 2025 of the village of Turendi, located 3 km southeast of Zamzam, shows thermal scarring and damage to structures within the northeastern sector of the village.

Based on low resolution Sentinel imagery, the timeframe of burning can be narrowed to 09 to 13 February 2025.

VIIRS fire detection registered thermal activity at this location on 12 and 13 February 2024.



13 February 2025 © 2025 Maxar Technologies
Image enhanced with MGP Pro HD image enhancement

Saloma, El Fasher

THERMAL SCARRING OBSERVED BETWEEN 07 AND 10 FEBRUARY 2025

According to analysis of satellite imagery, thermal scarring was observed at Saloma between 07 and 10 February 2025. Based on low resolution Sentinel imagery, the timeframe of burning can be narrowed to 07 to 09 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional razing attack targeting structures.



07 February 2025 © 2025 Maxar, USG-Plus



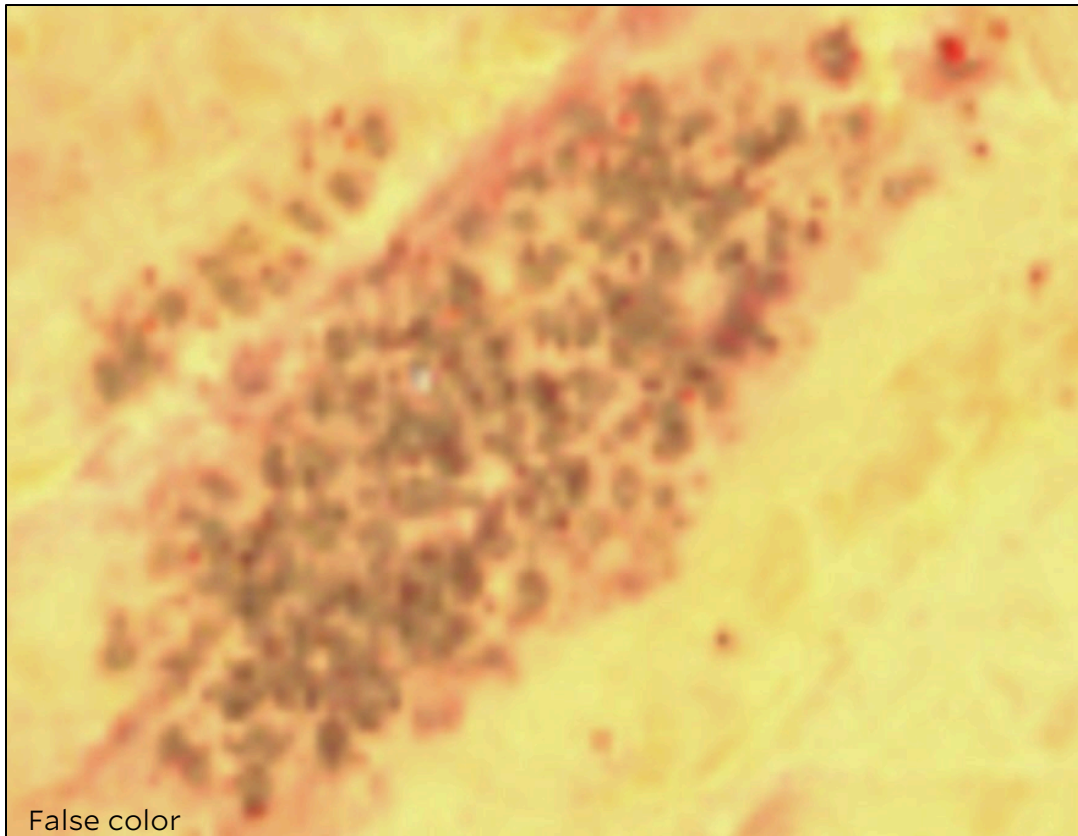
10 February 2025 © 2025 Maxar, USG-Plus

Ammar Gedid, El-Fasher

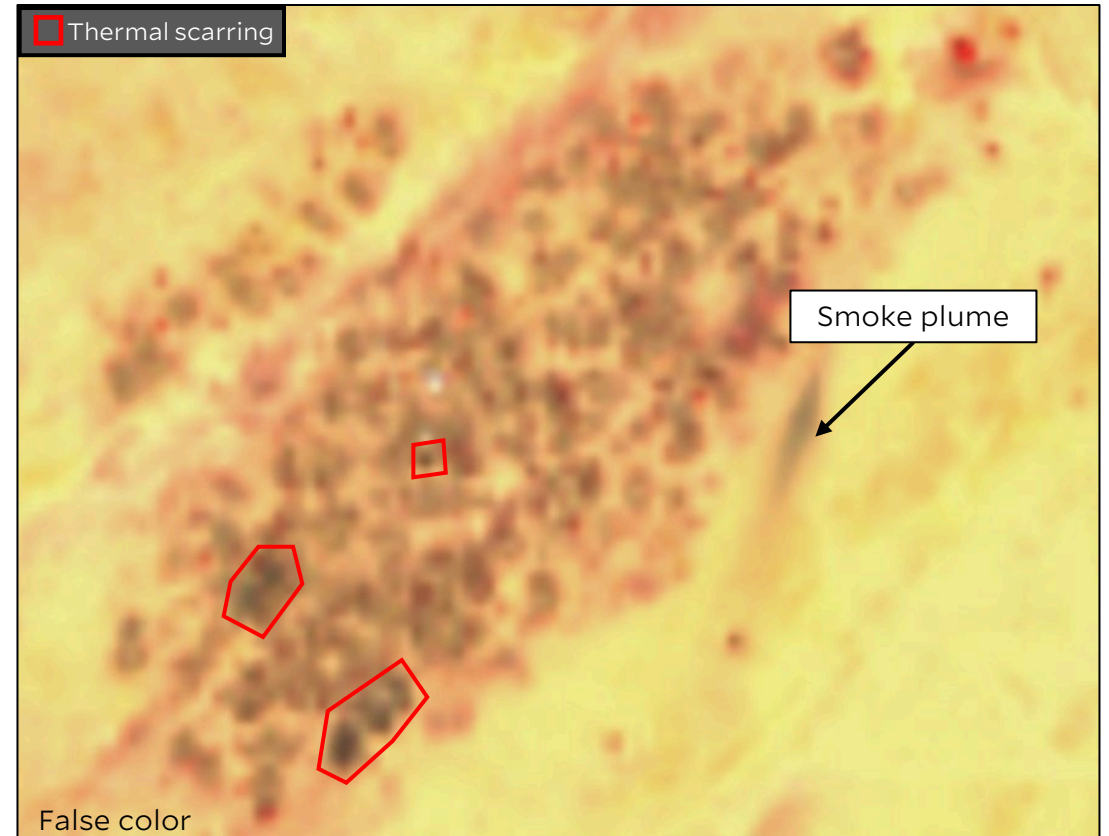
THERMAL SCARRING OBSERVED BETWEEN 04 AND 09 FEBRUARY 2025

According to analysis of satellite imagery, thermal scarring and a smoke plume was observed at Ammar Gedid between 04 and 09 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional razing attack targeting structures.



04 February 2025 © 2025 Copernicus Sentinel



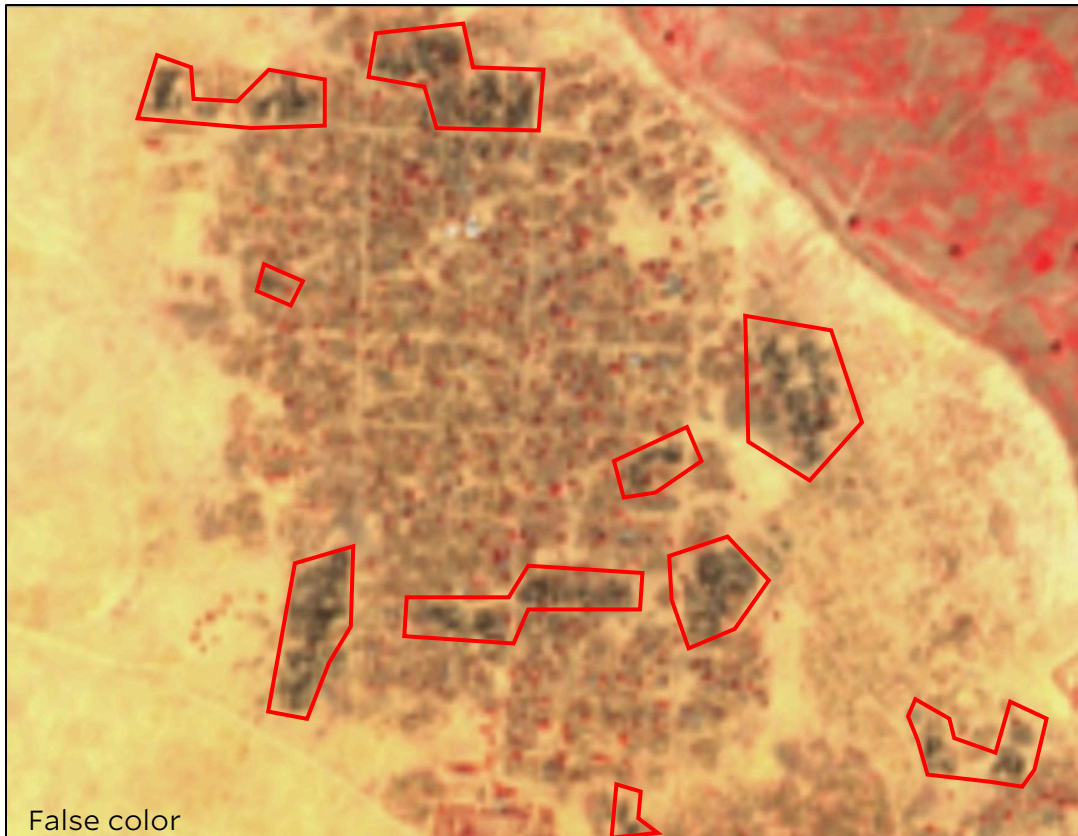
09 February 2025 © 2025 Copernicus Sentinel

Shagara Humaida, El-Fasher

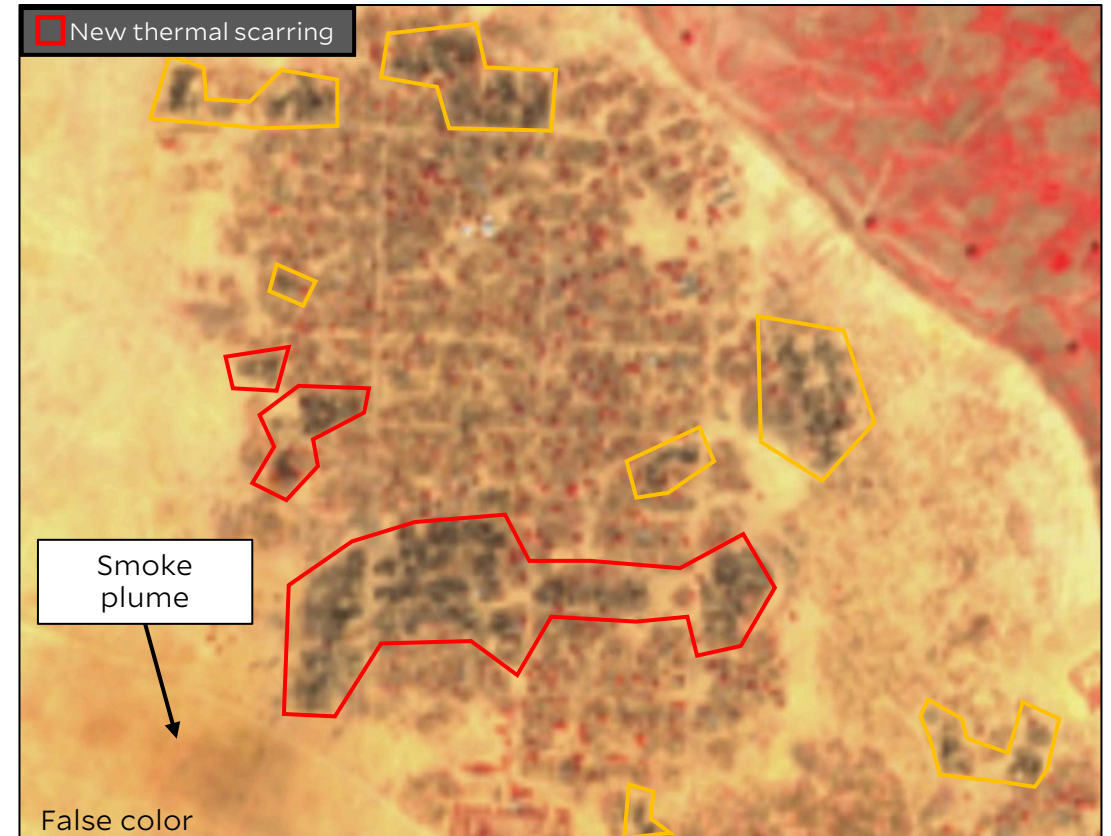
THERMAL SCARRING OBSERVED BETWEEN 04 AND 09 FEBRUARY 2025

According to analysis of satellite imagery, additional thermal scarring was observed at Shagara Humaida between 04 and 09 February 2025. Fire event detections (VIIRS) occurred on 05, 08 and 09 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional razing attack targeting structures.



04 February 2025 © 2025 Copernicus Sentinel



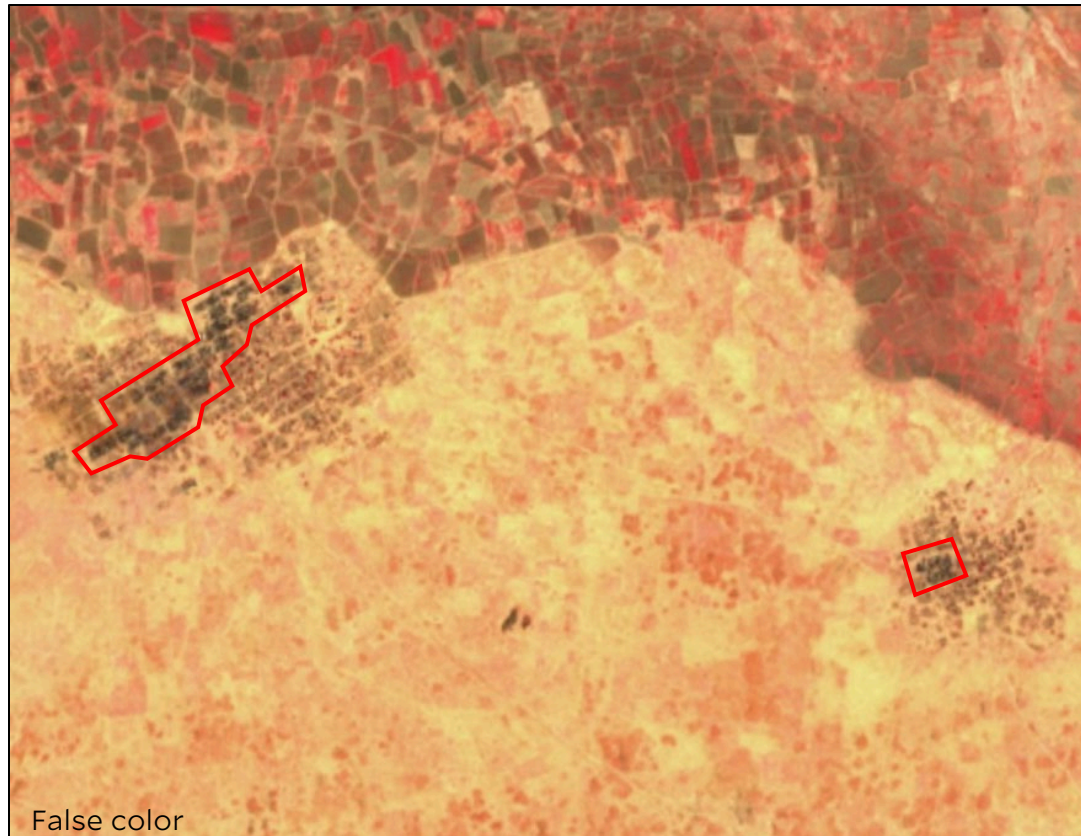
09 February 2025 © 2025 Copernicus Sentinel

Kheir Khanaqa & Umm Hegalig, El-Fasher

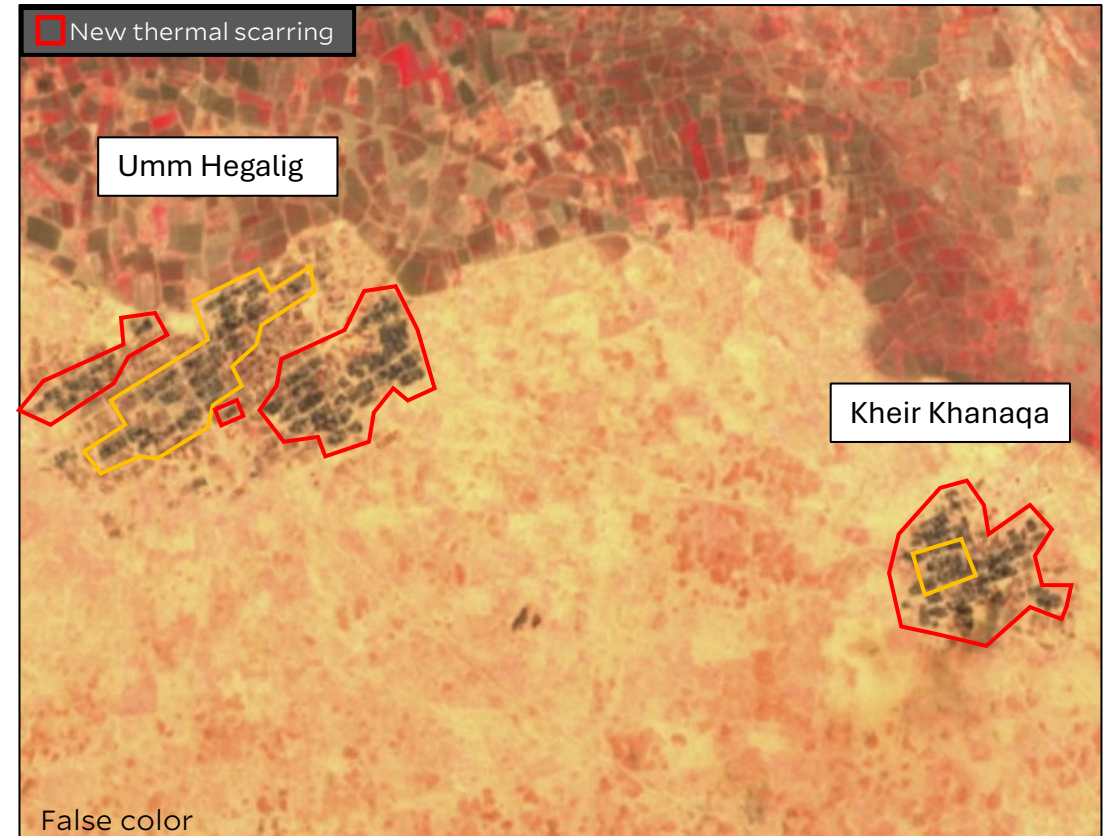
THERMAL SCARRING OBSERVED BETWEEN 04 AND 09 FEBRUARY 2025

According to analysis of satellite imagery, additional thermal scarring was observed at Kheir Khanaqa and Umm Hegalig between 04 and 09 February 2025. Fire event detections (VIIRS) occurred on 05 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional attack targeting structures.



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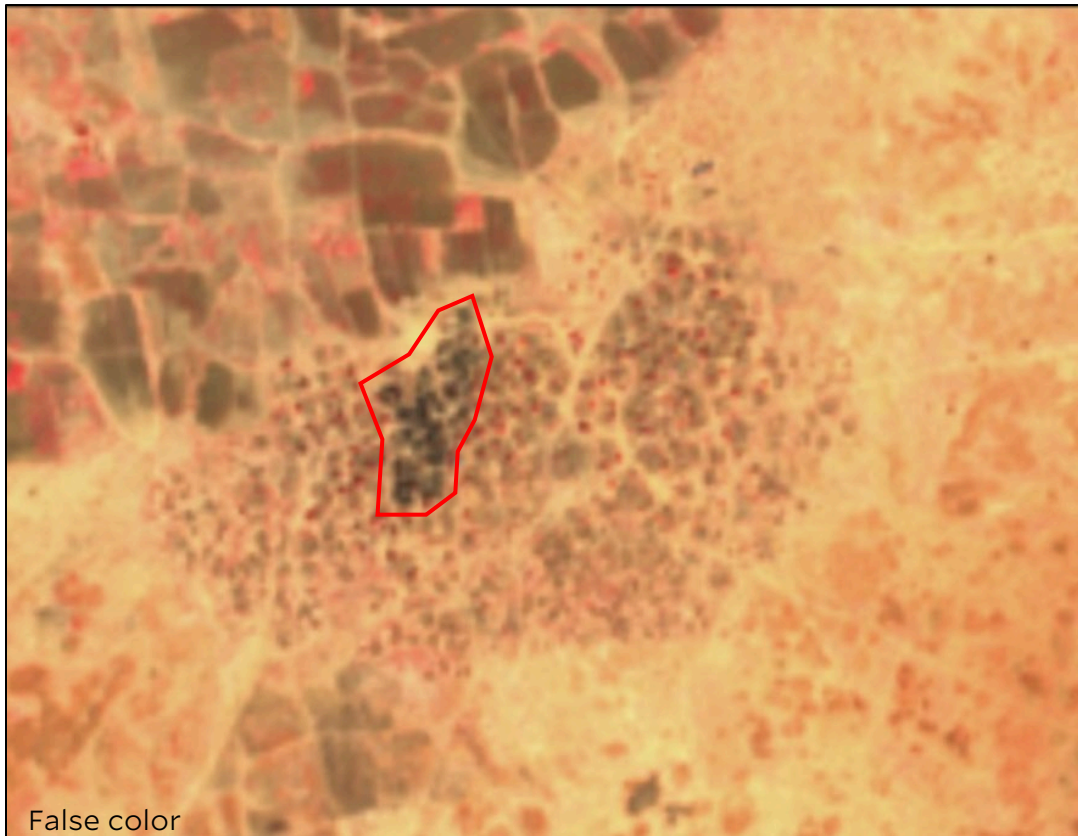
09 February 2025 © 2025 Copernicus Sentinel

Muqrin, El-Fasher

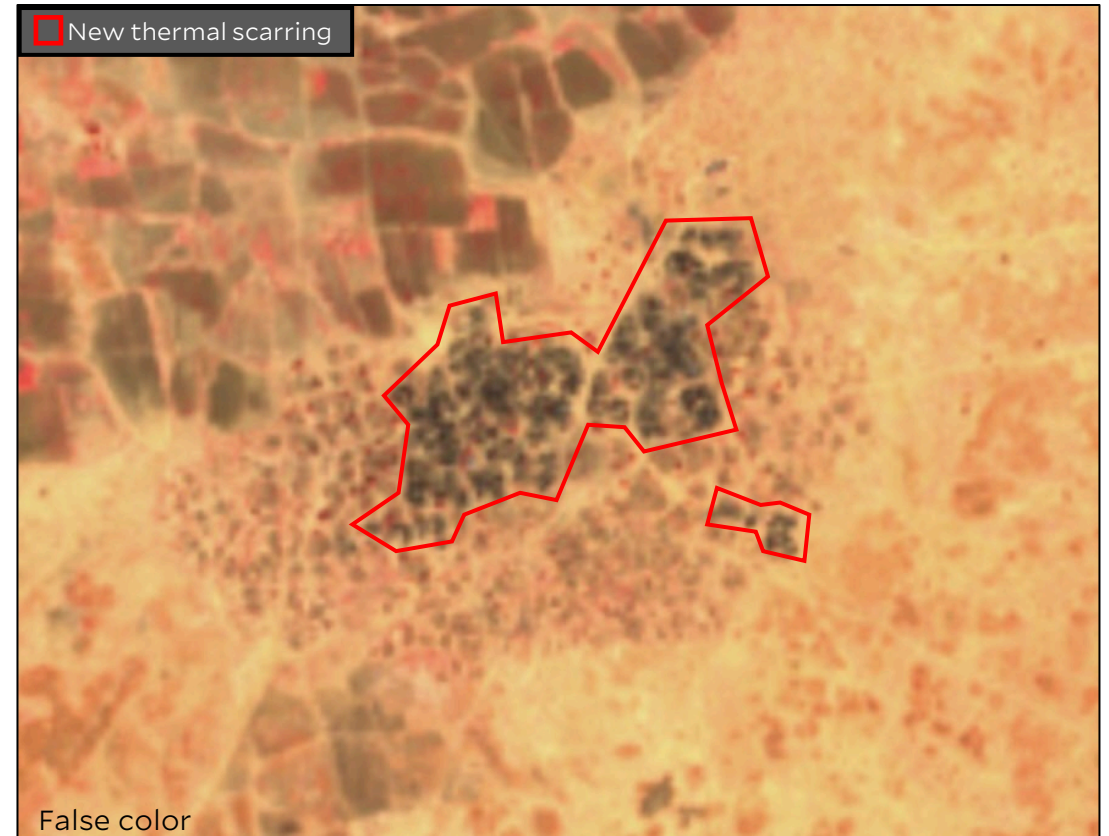
THERMAL SCARRING OBSERVED BETWEEN 04 AND 09 FEBRUARY 2025

According to analysis of satellite imagery, additional thermal scarring was observed at Muqrin between 04 and 09 February 2025. Fire event detections (VIIRS) occurred on 06 and 07 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional attack targeting structures.



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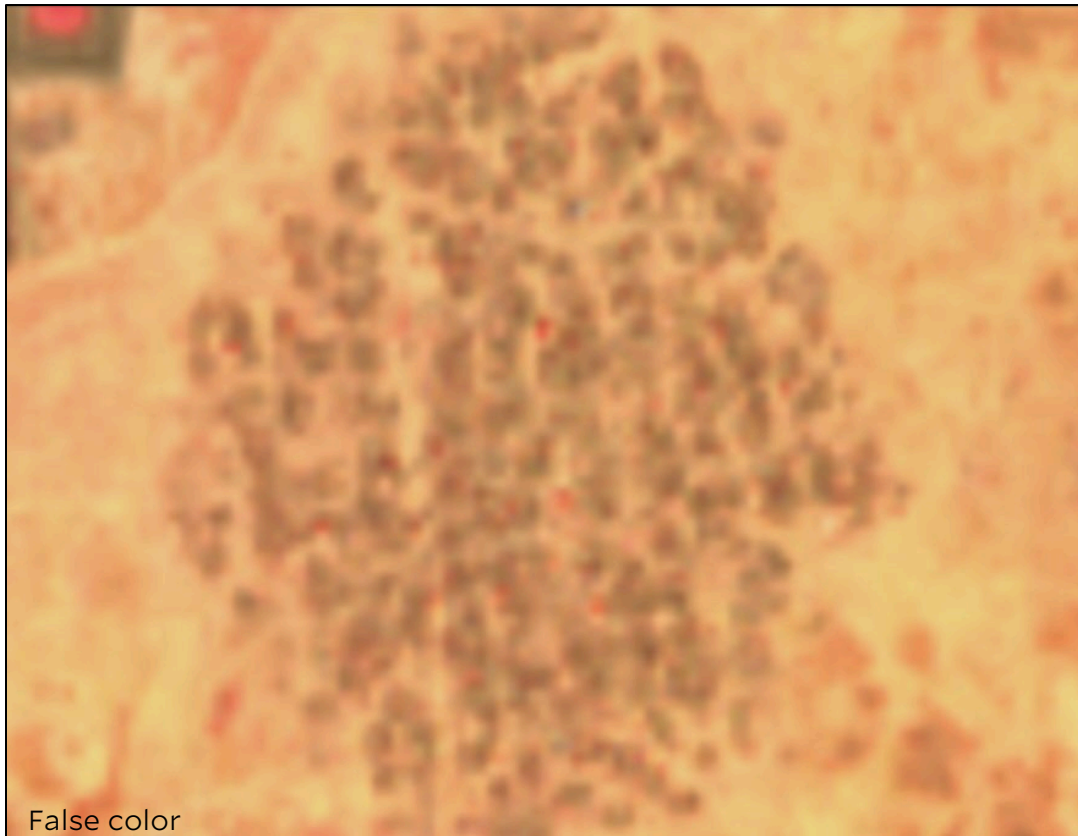
09 February 2025 © 2025 Copernicus Sentinel

Bederi, El-Fasher

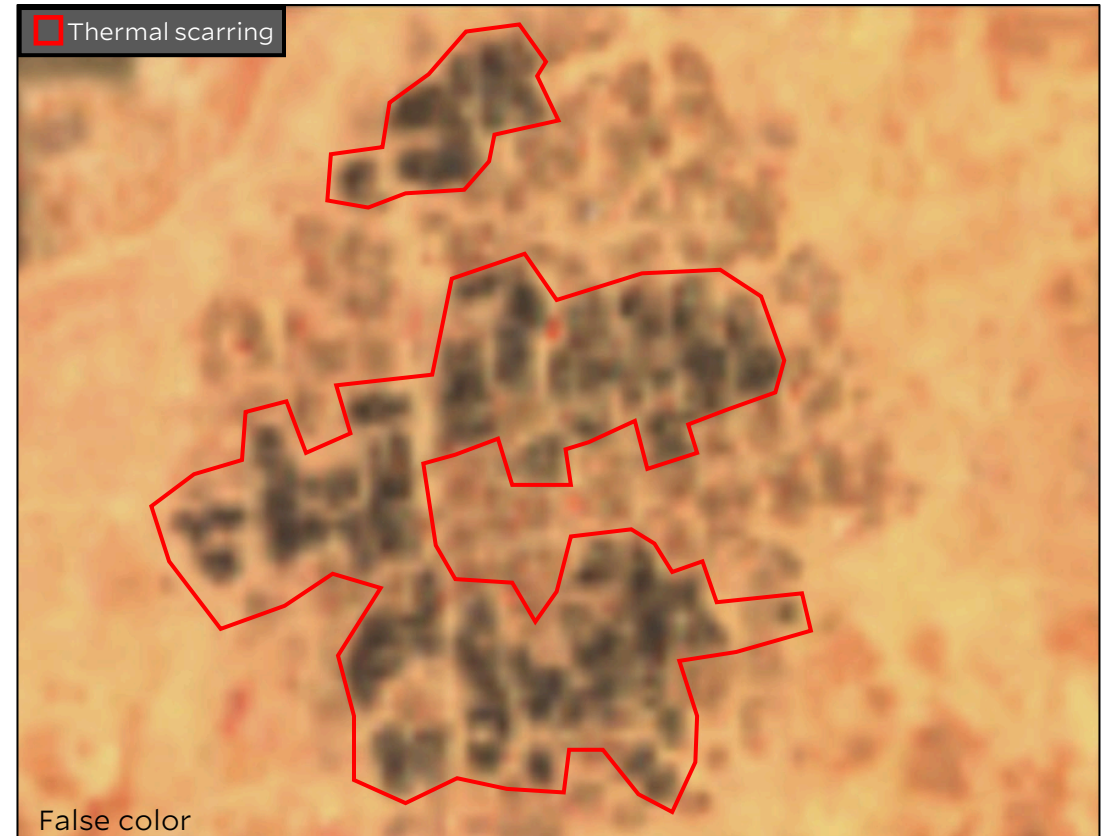
THERMAL SCARRING OBSERVED BETWEEN 04 AND 09 FEBRUARY 2025

According to analysis of satellite imagery, thermal scarring was observed at Bederi between 04 and 09 February 2025. Fire event detections (VIIRS) occurred on 07 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional attack targeting structures.



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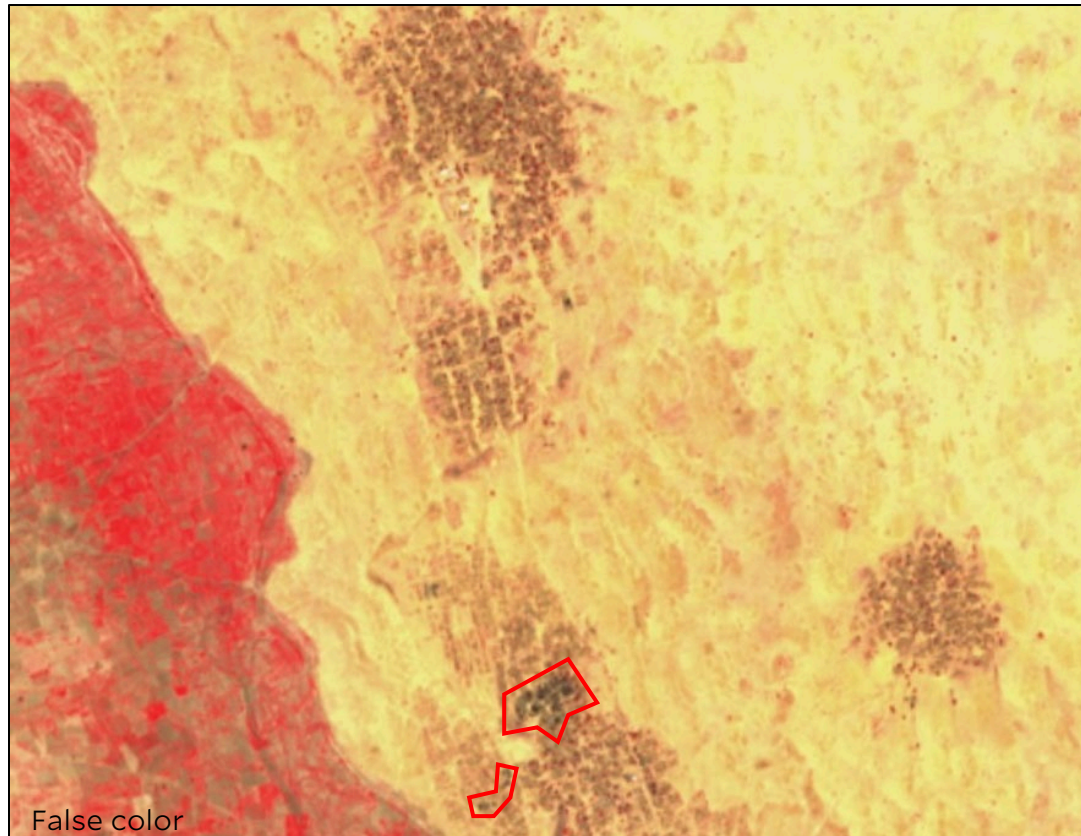
09 February 2025 © 2025 Copernicus Sentinel

Fara Shalakh, Tomana & Alsen, El-Fasher

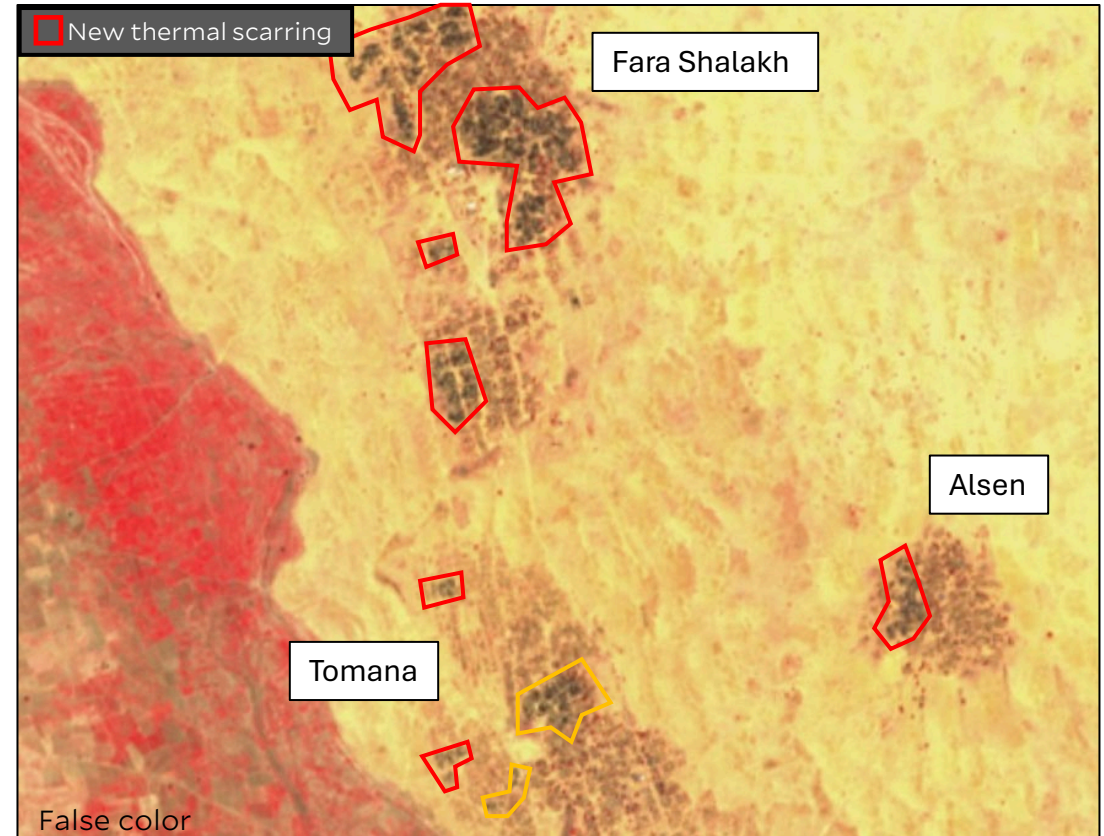
THERMAL SCARRING OBSERVED BETWEEN 04 AND 09 FEBRUARY 2025

According to analysis of satellite imagery, thermal scarring was observed at Fara Shalakh, Tomana and Alsen between 04 and 09 February 2025. Previous thermal scarring was observed at Tomana between 25 and 30 January 2025. Fire event detections (VIIRS) occurred on 05 and 07 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional attack targeting structures.



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Tawilah Community 7

THERMAL SCARRING OBSERVED BETWEEN 25 JANUARY AND 13 FEBRUARY 2025

According to analysis of satellite imagery, thermal scarring was observed at "Tawilah Community 7" between 25 January and 13 February 2025. Based on low resolution Sentinel imagery, the timeframe of burning can be narrowed to 04 to 09 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional attack targeting structures.



25 January 2025 © 2025 Maxar, USG-Plus



13.30637109, 25.11538496

13 February 2025 © 2025 Maxar, USG-Plus

Dar As Salam Community 7

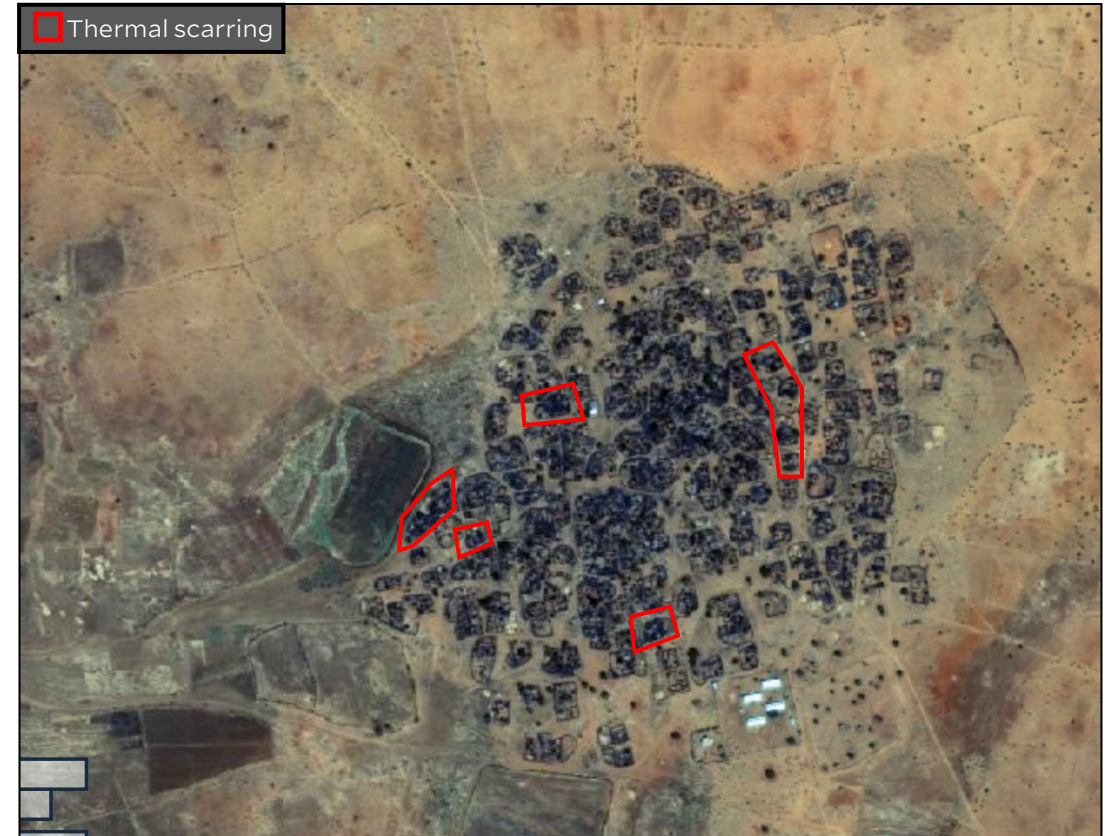
THERMAL SCARRING OBSERVED BETWEEN 25 JANUARY AND 13 FEBRUARY 2025

According to analysis of satellite imagery, additional thermal scarring was observed at "Dar As Salam Community 7", between 25 January and 13 February 2025. Based on low resolution Sentinel imagery, the timeframe of burning can be narrowed to 04 to 09 February 2025.

The unaffected ground between burned structures and lack of thermal scarring on the ground outside individual community areas is highly consistent with intentional attack targeting structures.



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13.3027219, 25.1570071

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