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RSF SYSTEMATIC MASS KILLINGS AND BODY
DISPOSAL IN EL-FASHER, NORTH DARFUR
26 OCTOBER – 28 NOVEMBER 2025

Yale SCHOOL OF PUBLIC HEALTH
Humanitarian Research Lab

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Cover satellite image collected 27 October 2025, Daraja Oula, El-Fasher, Darfur. © Airbus DS 2025. Red ground discoloration and activity consistent with door-to-door mass killing by RSF.

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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1. EXECUTIVE SUMMARY

1A. INTRODUCTION

The Yale School of Public Health's Humanitarian Research Lab (HRL) assesses to high confidence that Rapid Support Forces (RSF) engaged in widespread and systematic mass killing in El-Fasher, North Darfur upon gaining total control of the city and surrounding area on 26 October 2025. RSF's mass killing campaign targeted civilians attempting to flee the city and those seeking refuge in the Daraja Oula neighborhood. RSF subsequently engaged in a systematic multi-week campaign to destroy evidence of its mass killings through burial, burning, and removal of human remains on a mass scale. This pattern of body disposal and destruction is ongoing.

Yale HRL identifies clusters of objects consistent with human remains (hereafter "clusters") throughout and surrounding El-Fasher, North Darfur to the earthen walls (hereafter "berms") after RSF took total control of El-Fasher on 26 October 2025.

1B. KEY FINDINGS

Yale HRL has identified at least 150 clusters first visible in satellite imagery collected between 26 October 2025 and 1 November 2025. These clusters were monitored using satellite imagery through 28 November 2025. Yale HRL identifies:

- **Changes in the size of clusters occurred at 108 of 150 clusters (72%), including 57 no longer visible (38% of all identified clusters) by 28 November 2025.**
- **38 instances of reddish discoloration consistent with blood or other bodily fluids, of which 33 instances are directly associated with clusters.** Four of the five instances of reddish discoloration (without objects consistent with human remains) are located in Daraja Oula, where activity consistent with widespread mass killings was visible in satellite imagery. The remaining instance of reddish discoloration (without correlating objects) is located at a SAF defensive berm near multiple other objects consistent with human remains.
- **RSF-consistent vehicle activity is observed near at least 31 clusters,** including the presence of RSF-consistent vehicles (ranging from technicals to transport or cargo vehicles) and newly visible tracking.

- **At least 20 instances of burning objects and 8 instances of disturbed earth are visible by at least 28 November 2025.** Yale HRL does not identify activity consistent with civilian burial practices between 26 October to 28 November 2025.

The distribution and timing of the clusters across this study area illustrate four primary patterns:

1. **RSF killing people as they flee:** 83 clusters outside El-Fasher appear consistent with RSF killing people as they flee.
2. **Mass killings including door-to-door killings and execution-style killings in areas where civilians were taking refuge:** 52 clusters documented across Daraja Oula neighborhood, the last known major civilian refuge. This pattern of body disposal corroborates a systematic pattern of RSF conducting door-to-door killings.
3. **Mass killings at sites potentially affiliated with detention/filtration;** and
4. **Mass killings at military installations.**

1C. CRITERIA FOR INCLUSION

Yale HRL conducted this analysis through a systematic review of satellite imagery collected on or after 26 October 2025 through 1 November 2025. Analysts then monitored all identified clusters through 28 November 2025 for changes to the appearance of and activity near the clusters (criteria presented in detail in the Methodology section).

1D. ALTERNATIVE HYPOTHESES

Yale HRL has reached the high confidence conclusion that RSF conducted widespread and systematic mass killings of people who were trapped inside the city and attempted to flee El-Fasher after RSF captured the city on 26 October 2025. This conclusion is based on the totality of both individual high-confidence assessments of each cluster visible in very high resolution satellite imagery and the overall phenomena, distribution, and appearance of these clusters consistent with human remains. Analysts attempted to explain the individual phenomena in each case and the overall aggregated phenomena through multiple alternative hypotheses; none individually or in aggregate could explain these phenomena to a high confidence standard other than the conclusion reached by this report.

2. METHODOLOGY

BACKGROUND

This report presents an analysis of satellite imagery identifying clusters of objects consistent with human remains inside the city of El-Fasher and the area enclosed by the RSF-built earthen wall (hereafter berm) after RSF captured El-Fasher on 26 October 2025. This report provides a comprehensive synthesis of activity that Yale HRL has identified in previous rapid reporting¹ based on the fusion analysis of satellite imagery and open source data.

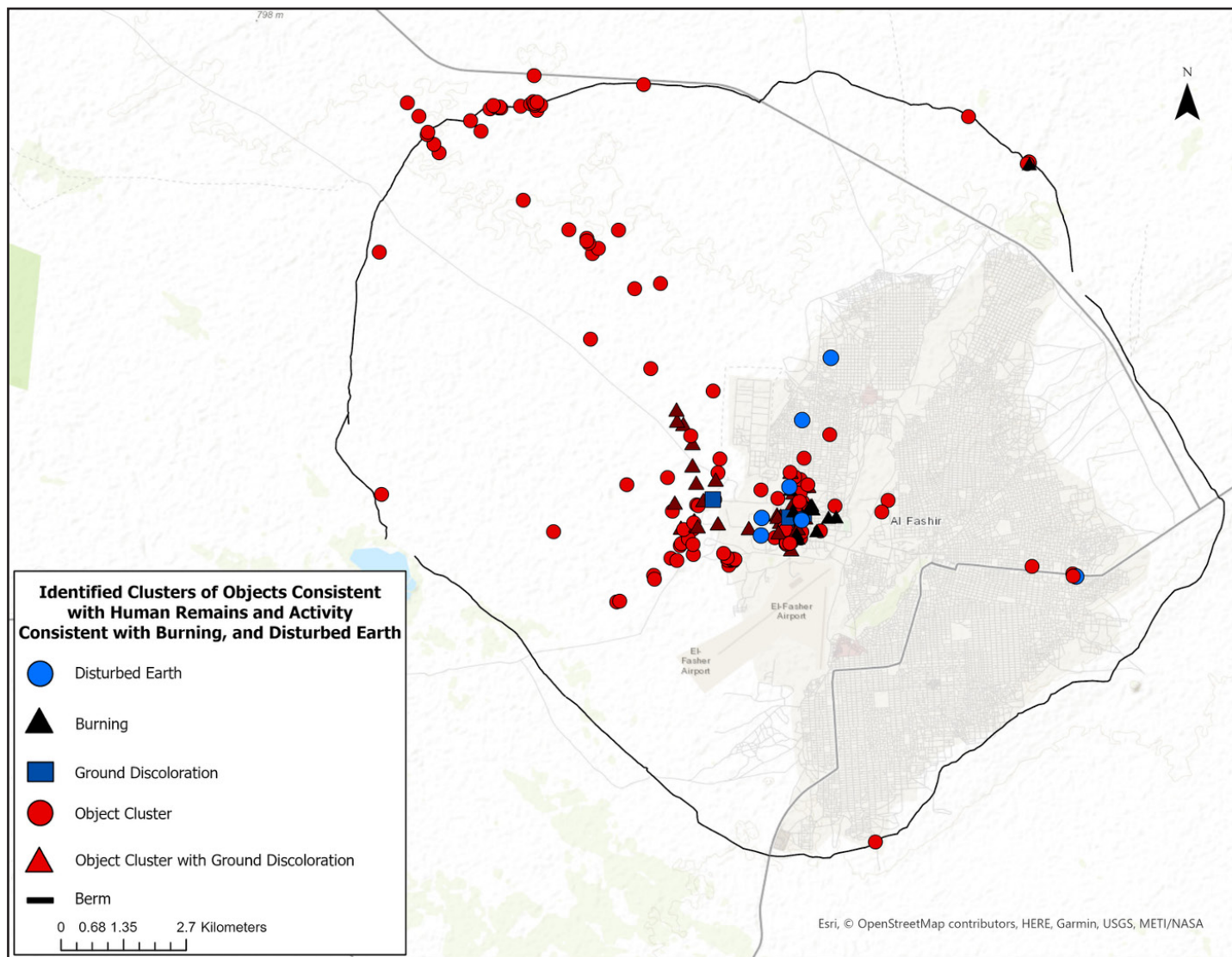
Yale HRL produced this report through the cross-corroboration of open source data, including social media, local news reporting, multimedia, and other reports, and remote sensing data, including satellite imagery and thermal sensor data. Researchers analyzed open source data across social media, news 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 rely 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.

AREA OF INTEREST (AOI)

The area of interest (AOI) for this report includes an approximately 700 square kilometer area of the city of El-Fasher enclosed by the berm and surrounding

Figure 1. All activity observed within Area of Interest, 27 October - 28 November 2025, Greater El-Fasher, Darfur



areas including approximately 725 meters beyond the berm that RSF built around the city. Analysts reviewed activity within the satellite imagery footprints from Airbus and Vantor to define the AOI of this assessment. A map of the AOI is presented (see Fig. 1).

PHASES OF ANALYSIS

This study consists of two phases: First, clusters of objects consistent with human remains were identified from 26 October through 1 November 2025. Second, changes to the clusters were observed through 28 November 2025. Activity in and around the clusters may include increases or decreases in size, removal of the cluster of objects in entirety, burning of the clusters of objects, burial of objects, and changes in ground discoloration.

Analysts conducted a comprehensive assessment of very high resolution satellite imagery across the defined AOI, including El-Fasher and the berm that RSF built encircling the city, to assess and monitor potential mass killings over a six-day period from 27 October – 1 November 2025. RSF captured El-Fasher on 26 October 2025 and therefore the satellite imagery collected on 27 October 2025 shows the first day that the city was

fully under RSF control. This time period was chosen due to temporal alignment of credible reports of mass killings occurring in El-Fasher and to ensure that there was sufficient available satellite imagery covering the entirety of the AOI.

To understand when the objects appeared in satellite imagery, analysts looked for the most recent image before the observation appeared, also known as the baseline image. Many areas of the AOI were regularly collected in satellite imagery so that the baseline, or “before” image, was taken on the 26 or 27 October 2025; however there were some areas, particularly near the berm, where the most recent baseline, or “before” imagery, was collected on 15 October 2025 (and one instance where the only available baseline imagery was 27 September 2025). Analysts used a set of criteria, outlined below, to assess that new objects were consistent with human remains.

Once clusters were identified, analysts continued to monitor the clusters in available VHR satellite imagery through 28 November 2025. During that time period, analysts monitored the extent clusters for any fluctuations in the volume of objects including when they were no longer present and identified relevant

Figure 2. Criteria for Cluster Inclusion

CRITERIA	INCLUSION DESCRIPTION
Size / Dimension	Size of objects consistent with human remains, between 0.72-2.8 meters. Some objects were tightly comingled, making it impossible to measure using remote sensing tools alone.
Ground Discoloration	Abnormal reddish ground discoloration that was not visible prior to 26 October 2025. Reddish discoloration may appear alone or co-located near a cluster of objects. The distinct reddish hue had not been observed in El-Fasher prior to RSF’s full takeover and is not consistent in color with vegetation, bare earth, or any other types of soil. Using multispectral analysis (i.e., near-infrared and red bands), the ground discoloration did not appear consistent with vegetation in false color. The reddish ground discoloration changed to a brown hue after the date of first observation, consistent with blood oxidation.
Changes to Cluster	After the identification of clusters of objects consistent with human remains, there were observable changes to a subset of clusters, such as an increase or decrease in size or complete removal of clusters. A comparison of identified clusters with known debris was performed to confirm differentiation between each group.
Orientation and Disposition	Individual objects were observed in C- and J-shapes. These formations may be consistent with human remains bent at the knees and/or hips.
Timing	Objects and discoloration are not visible in prior imagery before 26 October 2025 at this location and appear during the same period as credible reporting of mass killings.
Novel and Persistent Phenomena	Newly observed clusters and ground discoloration that have never been seen in El-Fasher to date. The observations noted in this report have been seen in locations with reported mass killings in Sudan such as El-Geneina in June 2023 and Gezira State in January 2025.
Open Source Corroboration	Open source corroboration of the identification of objects consistent with human remains using social media posts from RSF and credible reporting on social media and in the news media.
Vehicle Activity	Substantial vehicle activity in the same location as the identified objects and clusters. The vehicle activity temporally aligns with credible reporting of mass killings allegedly perpetrated by RSF. The vehicles present at the time of the alleged killings appear consistent in shape and color with RSF-associated vehicles.

Daraja Oula, El-Fasher

Ground discoloration observed 27 October 2025, true color RGB versus false color visualization

Analysis of satellite imagery collected on 27 October over the Daraja Oula neighborhood of El-Fasher, two reddish ground discolorations are visible in the true color RGB visualization that are not seen in prior satellite imagery.

When the image is visualized in false color, the ground discoloration turns to a duller brown color. The dull, brown color is expected if the ground discoloration is a true red color. Vegetation appears as red in false color and is not indicative of ground discoloration.



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Figure 3. Ground discoloration: True color RGB vs. false color visualization

nearby activity, including specifically vehicle activity, burning, or earth disturbances, detailed below.

IDENTIFICATION OF OBJECT CLUSTERS CONSISTENT WITH HUMAN REMAINS

Analysts identified 150 clusters determined to be consistent with human remains, which were identified as such based on the criteria outlined. Not all clusters had to meet all the listed criteria to be included in the assessment.

NOVEL AND PERSISTENT PHENOMENA

Prior to 26 October 2025, observations consistent with mass killings—including objects consistent with the shape and size of human remains and reddish ground discoloration—had not been documented in El-Fasher at a large scale. The observations Yale HRL documented from 26 October-28 November 2025 in El-Fasher are similar to observations at other locations in Sudan with credible reports of mass killings, including the Yale HRL confirmed mass killings in El-Geneina in June 2023² and Gezira State in January 2025,³ and the Kadugli massacre of 2011 documented by civilian analysts at the Harvard Humanitarian Initiative's Satellite Sentinel Project.⁴

The clusters and ground discoloration temporally align with photo and video evidence from RSF-associated social media accounts as well as credible reporting of mass killings from social and popular media reporting.

DISCOLORATION

There were at least 38 total instances of reddish ground discoloration—with the majority of the observations being under or immediately nearby a cluster of objects consistent with human remains—likely due to seepage of blood. All observations were not present in imagery collected prior to 26 October 2025 and primarily appeared in available imagery between 27 October-28 October 2025.

Analysts used a set of criteria and analysis to reach the conclusion that reddish ground discoloration was likely consistent with blood. All observations were newly observed after RSF captured El-Fasher on 26 October 2025 with no observable texture and a reddish color that is not commonly observed in El-Fasher. To rule out the possibility of vegetation or other forms of anomalies, analysts used available multispectral imagery to analyze the location with a false color composite, which uses non-visible and visible spectral bands. False color composites use near-infrared, red, and green assigned to the red, green, and blue bands of a certain image and assist in understanding vegetation patterns, ground disturbances, and soil anomalies.

After the ground discolorations were identified, analysts monitored changes in size and color to further confirm that the reddish ground discoloration was likely consistent with blood. One key observation

Daraja Oula, El-Fasher

New debris observed between 27-28 October 2025

Analysis of satellite imagery collected between 27 and 28 October 2025 shows the presence of new debris piles consistent with looting in the Daraja Oula neighborhood in El-Fasher. The appearance of these debris piles are inconsistent with other object clusters identified in and around the city of El-Fasher



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Figure 4. Example of debris, Daraja Oula, El-Fasher

was the change in color from a bright reddish ground discoloration to a brown color which is consistent with oxidation of blood. To rule out differences in the shade of the reddish ground discoloration caused by differences in presentation of the depth of red coloring across image providers, analysts compared static objects with reddish coloring (e.g., red roofs) across multiple VHR image providers and found the reddish ground discoloration was novel and consistent across imagery, regardless of image provider.

MONITORING CLUSTERS OF OBJECTS CONSISTENT WITH HUMAN REMAINS

Analysts then monitored and documented activity around and potential changes to clusters throughout a four-week period ending on 28 November 2025, marking just over one month of RSF's complete control of El-Fasher. Analysts monitored the body clusters for the following potential changes visible in satellite imagery:

- **Changes to the volume or number of objects in body clusters**, including: increase, decrease, or no longer visible. In many instances, there were multiple fluctuations in the volume of individual clusters consistent with bodies. (Please note that the size changes documented refer to changes in the total cluster rather than changing size of individual objects themselves).
- **Presence of vehicles or indications of vehicle activity**, including: New presence of vehicles,

including RSF-consistent technicals, cargo, and other transport trucks along with newly present vehicle tracking is visible during the period. However, it is important to note that changes in tracking may not be as prominent in satellite imagery in urban areas.

- **Ground discoloration** observed near and under clusters and changes to potential ground discoloration such as fading to brown or disappearing over time.
- **Burning of objects consistent with human remains** include burning of clusters at locations where clusters of objects were identified. This activity was not identified before RSF captured El-Fasher on 26 October 2025.
- **Burial of objects consistent with human remains** at or in close proximity to locations where clusters were identified. Newly observed and established round disturbances were present and coincided with decreases or entire removal of clusters. In many cases, analysts observed objects consistent with human remains appear within the ground disturbances in one image, then appear to be covered in soil in a subsequent image.
- **Location or proximity to key sites**, including known neighborhoods, roads, or other locations. These locations developed into the following categorization:
 - Daraja Oula neighborhood with proximity to the

Saudi Hospital;

- Proximity to berms and berm crossing points outside El-Fasher including:
 - SAF defensive berms,
 - RSF's berms walling in El-Fasher, and
 - Control points through RSF's berm;
- Former Children's Hospital; and
- Proximity to military installations, including: 157th Artillery Division, 271st Air Defense Brigade, and the 1019th Air Defense Battalion.

DEBRIS

Yale HRL has identified the presence of objects that may be consistent with debris or looting. While this activity consistent with loot or debris may at times have some visual similarities to the clusters of objects consistent with human remains. However, these examples illustrate the objects and activity consistent with looting and debris is distinct from the objects consistent with human remains, including scattering of objects consistent with looting or debris as opposed to comingled clusters of objects. Additionally, looting or debris often have objects with clear corners or straight edges that are not observed in the case of clusters.⁵

LIMITATIONS

There are significant limitations to this study. First, the information environment in Sudan does not have the breadth of data available in other locations. Second, the tools and techniques present significant challenges to identifying activities such as extrajudicial detention, conflict-related sexual violence (CRSV), and conflict-related casualties, particularly in environments with limited data. Third, satellite imagery analysis is limited by imagery availability 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 inform the analysis. Image resolution can also limit the analyst's ability to perceive the full extent of damage present. Finally, due to these limitations, this analysis does not include all people who lost their lives during this time period in El-Fasher. Nonetheless, this report presents evidence of clusters of human remains, consistent with mass killings.

3. DETAILED FINDINGS

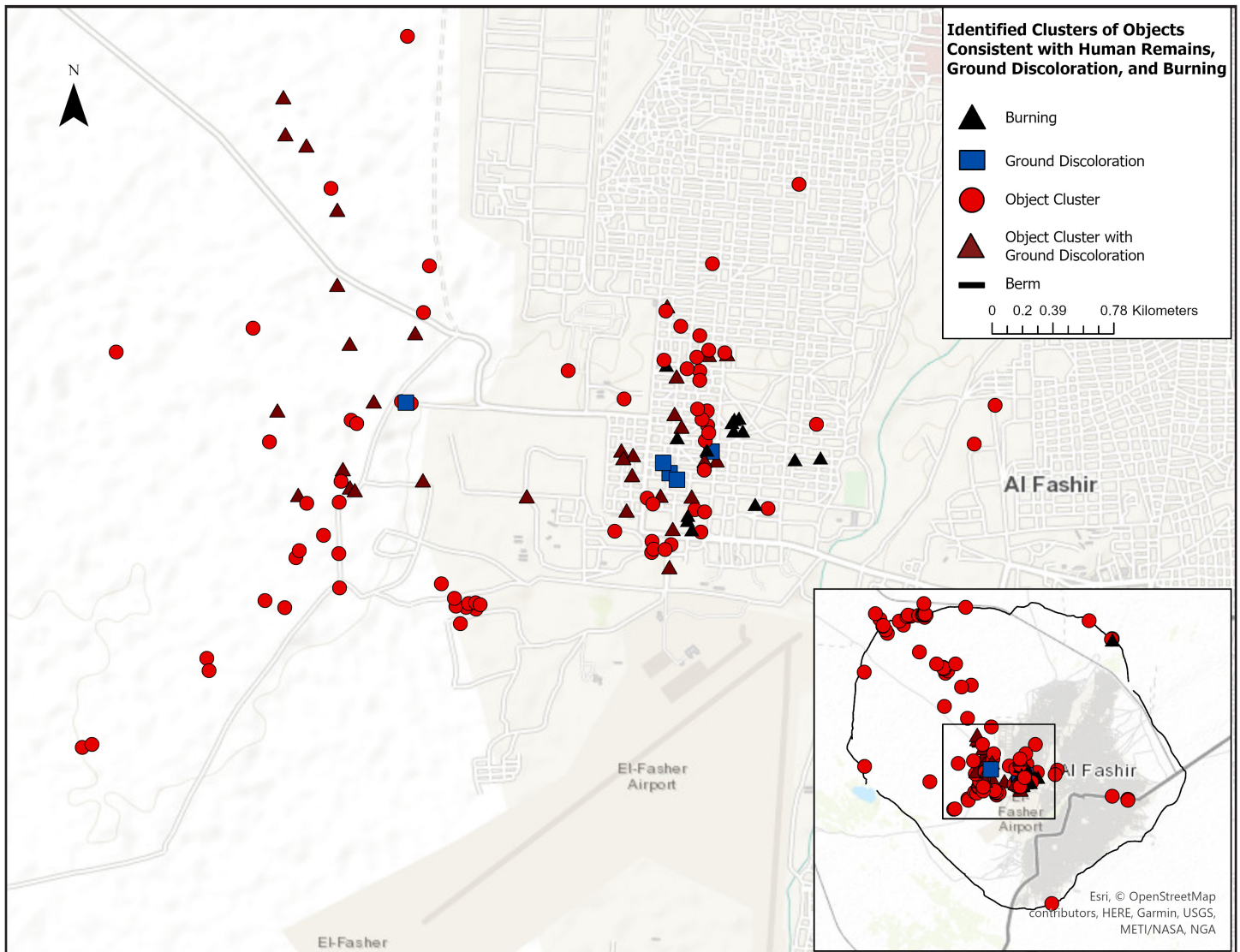


Figure 5. Clusters of objects consistent with human remains identified in Daraja Oula and outlying area, El-Fasher, first visible in satellite imagery between 27 October and 28 November 2025

This analysis includes a comprehensive assessment of nearly 180 observations across the following categories:

- 150 clusters of objects consistent with human remains, including 33 with reddish ground discolorations consistent with blood or bodily fluids;
- An additional 5 reddish ground discolorations consistent with blood or other bodily fluids (not including those at clusters);
- 20 instances of burned objects; and
- 8 instances of disturbed earth.

3A. IDENTIFYING CLUSTERS OF OBJECTS CONSISTENT WITH HUMAN REMAINS

Yale HRL has identified at least 150 clusters visible in satellite imagery between 26 October and 1 November 2025 in the area of interest around El-Fasher, North Darfur. These clusters are located in two primary settings: 67 clusters were identified inside the city of El-Fasher and 83 clusters were identified outside the city of El-Fasher.

INSIDE EL-FASHER CITY

These clusters were first visible in satellite imagery collected on 27 October 2025.

Daraja Oula Neighborhood

At least 52 of these clusters are located in the Daraja Oula neighborhood, the last known largescale civilian refuge in El-Fasher prior to RSF's total capture of the city. These clusters are located across the entirety of Daraja Oula; in the days that they are first visible, there is vehicle activity consistent with door-to-door mass killings.⁶ Forty-one (41) of these clusters were first visible in satellite imagery collected between 27 October and 1 November 2025. This distribution of clusters across space and time is consistent with RSF conducting door-to-door mass killings throughout the neighborhood.⁷

Near Military Installations

There are approximately 12 clusters located near former Sudan Armed Forces (SAF) and Joint Forces' military installations in El-Fasher, most which were in west and northwest El-Fasher. These include: 1 cluster near the 1019th Air Defense Battalion, 1 cluster near the 271st Air Defense Brigade,⁸ and 10 near the 157th Artillery Division.

Key Sites and Possible Detention Centers

There are clusters inside the city that appear near locations previously identified as possible detention facilities or as sites of reported mass killings.⁹

Clusters at reported detention facilities include:

- Five (5) clusters at the El-Fasher University (in Daraja Oula) newly visible between 27 and 28 October 2025¹⁰
- Two (2) clusters at the former Children's Hospital in eastern El-Fasher, a site under RSF control for over a year and a location to which people were reportedly separated out during the first days of RSF's mass killings.¹¹
- There is another cluster in eastern El-Fasher 830 meters from the former Children's Hospital. There is an additional cluster south of El-Fasher near where the B-26 road exits El-Fasher to the south toward Zamzam.
- There are four clusters at the Saudi Hospital newly visible between 27 and 28 October 2025. Multiple sources reported mass killings at this site.¹²

BEYOND EL-FASHER CITY

There are 83 clusters located outside the city of El-Fasher itself in areas that have served as urban farms. These clusters are located across critical areas:

- 56 clusters along informal roads outside El-Fasher and defensive berms west of Daraja Oula outside the city itself;
- 21 clusters along the RSF berm walling in El-Fasher, including around RSF-created berm control points;

- Only 6 of these clusters are visible in satellite imagery beyond the RSF's berm.

These clusters are predominantly first visible in satellite imagery on 27 and 28 October and 1 November 2025. It is critical to note that there is less satellite imagery of areas in the furthest areas outside El-Fasher; in some instances these objects first appear in available very high resolution satellite imagery between 15 October – 1 November 2025. While this wider period means that these clusters may have first appeared at any point throughout this time, the areas northwest of El-Fasher not visible between 16 – 31 October 2025 were continuously under RSF control during that period.

The 56 clusters located near roads and SAF defensive berms west of El-Fasher are still within the berm that RSF finalized to wall-in the city and surrounding areas of El-Fasher. The geospatial distribution of the clusters outside the urbanized areas of El-Fasher shows clustering of objects along unnamed roads running parallel to El-Fasher. The majority of these clusters are distributed in a pattern roughly parallel and curving to the west of both Daraja Oula and the Airport and then extending toward the northwest edge of the berm, where there were two berm crossing points: one in an area near Garni, North Darfur, and a second near the El-Fasher-to-Kutum road.

There are 21 clusters located along the berm that RSF created to wall-in El-Fasher, and only 6 are located outside RSF's berm.

The distribution of clusters appears consistent with people fleeing toward possible escape routes out of the city, most toward the northwest berm crossing. The individual clusters may demonstrate instances where RSF rounded up, detained, and executed groups of people consistent with its documented behavior in this area during this period. Media and reporting from people who fled and arrived in Tawilah, and photos and videos circulating allegedly taken by RSF themselves demonstrates that RSF rounded up people trying to flee for mass executions. In multiple instances, unarmed males in plain clothes appear in groups that are subsequently executed by the RSF.¹³

ABSENCE OF COMBAT AND CIVILIAN PATTERN OF LIFE

The proportion of individuals killed who were non-combatants or combatants fleeing is not yet known based on available data. The temporal and spatial distribution of the apparent clusters shows large numbers of individuals fleeing and being trapped. While determination of the hors de combat status of each person killed cannot be achieved through very high resolution satellite imagery alone, the general spatial pattern of killing can be derived from remote sensing data and can be determined as inconsistent with legitimate combat. This determination can be made for

the following reasons:

1. The overwhelming forensic evidence is not consistent with the killing of armed actors in legitimate combat.
2. There is an identified incident of armed actors attempting to escape who were shot at point-blank range with no quarter given in RSF's own videos, a violation of international humanitarian law.
3. The totality of available data in no way indicates combat between armed actors given the presence of vehicles surrounding clusters in many cases.
4. The weeks following RSF takeover do not show evidence consistent with combat.
5. Pattern of civilian life in El-Fasher seems to have all but ended following RSF's total control of El-Fasher. The end of civilian pattern of life is evidenced by abnormal vegetation growth in markets, no visible civilian activity at water points, absence of crowds of people in the street, and no evidence of civilian transport including donkey carts and non-RSF-consistent vehicles.¹⁴

As previously noted, individual burials consistent with civilian activity appear to stop as of 27 October 2025.

3B. MONITORING CLUSTERS OF OBJECTS CONSISTENT WITH HUMAN REMAINS

Yale HRL has identified four major phenomena through 28 November 2025 visible in satellite imagery after RSF's widespread and systematic mass killings in El-Fasher:

1. Changes in the size of at least 108 clusters, including 57 (38%) clusters no longer present;
2. 20 locations where burning of objects has been identified; and
3. 8 instances of earth disturbances not consistent with civilian burial activity.

CHANGES TO SIZE OF CLUSTERS, INCLUDING CLUSTERS NO LONGER PRESENT

Yale HRL identifies changes in the size of clusters visible in satellite imagery through 28 November 2025, including clusters that were no longer present by the end of the study period, in at least 108 of 150 identified clusters. This includes:

- 57 clusters no longer present
- 37 clusters that increased at some point during the time period (non-exclusive, may have also

decreased or no longer be present)

- 48 decreased at some point (non-exclusive, and may have increased or no longer be present)
- 42 clusters that did not visibly change in size in satellite imagery as of 28 November 2025.

It is important to note that the "decrease" was measured for clusters that decreased in volume or size but remained present. Multiple clusters fluctuated in size multiple times. The only exclusive category is the 42 clusters that did not experience change during the time period.

These fluctuations, including clusters no longer present, further corroborate the overall finding that RSF conducted widespread and systematic mass killings and subsequent body disposal operations. The cluster of objects that are no longer present may corroborate RSF conducting clean-up operations.

The geographic distribution of clusters that are no longer present are primarily located in three areas:

1. Near RSF's berm to the northwest and toward El-Fasher, representing 21 of the 57 total clusters that are no longer visible;
2. Inside Daraja Oula, representing 32 of the 57 total clusters that are no longer visible; and
3. All three clusters identified in eastern El-Fasher and the single cluster of objects identified in southern El-Fasher are no longer present.

Fourteen of the 57 clusters that are no longer present had some indication of vehicle activity near the location, including new tracking and RSF-consistent vehicles, ranging from technicals to cargo vehicles present.

This activity is consistent with RSF conducting body disposal operations following mass killings.

BURNING

Yale HRL identifies activity consistent with the burning of objects visible in satellite imagery. This has occurred at 20 locations across the area of interest.¹⁵ The activity consistent with burning is visible in Daraja Oula in all but one instance. The one instance of burning objects outside Daraja Oula is located at the berm control point at Mellit Gate.¹⁶

Much of the burn activity was identified after the objects were burned, and objects are rarely visible in satellite imagery at the position and in similar disposition to the burned objects. Objects have been visible in satellite imagery prior to burning at two locations: (1) Saudi Hospital, where there have been repeated burning of white oblong objects,¹⁷ and (2) the RSF-controlled berm crossing at Mellit Gate north of

Al-Saudi Hospital, El-Fasher

Evidence of burning and new presence of white objects between 01, 06, 13 & 17 November 2025

Analysis of satellite imagery collected on 01 November 2025 shows the presence of white objects in a hole dug on the southern side of the Al-Saudi Hospital. These white objects appear to be burning in imagery collected on 06 November 2025, and a new patch of charring appears on the western side of the hospital.

Imagery collected on 13 November 2025 shows charring where the burning previously took place as well as new white objects on the western side of the hospital. Further analysis of imagery collected on 17 November 2025 shows an increase in charring on the western side of the hospital and new white objects appear in the hole dug on the southern side.



Figure 6. Evidence of burning and new presence of white objects between 01 - 17 November 2025, Al-Saudi Hospital, El-Fasher

El-Fasher, where a cluster of objects consistent with human remains is then burned.¹⁸

Yale HRL cannot dispositively identify what objects are being burned in every case or across the totality of locations. However, there are multiple factors about the timing, location, appearance, and dimensions of these burned object groups that may be relevant to the mass killings and their aftermath. These factors include:

- **Timing:** this phenomena of burning large objects, including some locations which are repeatedly used, was not identified prior to RSF's total capture of the area.
- **Location:** this phenomena occurs in Daraja Oula, the last known largescale civilian refuge in El-Fasher, and near the berm crossing at Mellit Gate. Yale HRL has identified widespread and systematic mass killings in Daraja Oula, and clusters at the berm crossing at Mellit Gate;¹⁹
- **Appearance:** the burned objects appear to be mix of mix of white and black colors consistent with charred objects of similar size in an area with ground scarring;
- **Dimensions:** When objects are visible, they have dimensions consistent with human remains, including covered objects (see Saudi Hospital). The dimensions of the objects, when clustered together, are not readily discernible. The dimensions of the objects, when present individually, are consistent with the dimensions of human remains.

EARTH DISTURBANCES

Yale HRL identifies 8 earth disturbances that may be consistent with body disposal visible in satellite imagery in El-Fasher between 26 October – 28 November 2025. The earth disturbances identified in satellite imagery are all located in the city of El-Fasher:

- 6 of the 8 identified earth disturbances are located in Daraja Oula;²⁰
- 1 of the 8 identified earth disturbances is located in Abu Shouk IDP camp;¹
- 1 of the 8 identified earth disturbances are located in eastern El-Fasher outside the former Children's Hospital.²¹

These earth disturbances are located near where mass killings were identified through satellite imagery analysis and open source reporting, including: the former Children's Hospital and El-Fasher University dormitories.

The overwhelming majority (7 of 8) of the earth disturbances identified in this report contain no visible individuated mounds. One earth disturbance located in Daraja Oula near El-Fasher University includes some visible individuated mounds; however, their dimensions

1. There is one instance, a compound in Abu Shouk IDP Camp where the burial of objects was first observed in satellite imagery prior to RSF's complete capture of El-Fasher, but which occurred while RSF had control of Abu Shouk and the area where the burning objects occurred.

are larger than individuated mounds previously observed in El-Fasher.²²

It is critical to note that these earth disturbances are occurring during a time where there is a lack of activity consistent with typical civilian or Islamic burial practices. Yale HRL does not identify the creation of individuated burial mounds visible in satellite imagery, particularly in pre-existing cemeteries in civilian areas. This is a significant contrast to activity that occurred prior to RSF's complete control of El-Fasher: for example, there is no visible burial activity at a newly created cemetery in Daraja Oula after 26 October although an increase of 60 burial mounds was identified in satellite imagery between 18 September – 10 October 2025, and there was an increase in approximately 190 burial mounds in Al-Rahma Cemetery in Abu Shouk between 3 August 2025 and 10 September 2025 and no increase at that location after 28 October 2025.²³

Yale HRL does not determine to a high confidence standard that all earth disturbances described in this report are mass graves. However, objects consistent with the dimensions of human remains are visible and then covered at the large earth disturbance near the former Children's Hospital, which was reportedly used as a detention site.

LACK OF CIVILIAN PATTERN OF LIFE

Yale HRL does not identify activity consistent with largescale civilian presence and pattern of life throughout El-Fasher since RSF captured the city. There is no visible civilian market activity in El-Fasher throughout this time period and many markets have abnormal vegetation growth.²⁴ Yale HRL does not identify activity consistent with individuated burial activity in cemeteries in civilian areas, which occurred regularly throughout El-Fasher before they were under RSF control. There is no significant animal-drawn cart activity. Finally, HRL does not identify activity consistent with mass civilian displacement. There are indications of likely displacement from El-Fasher to Garni,²⁵ North Darfur; however, the scale of this displacement activity is not comparable to the scale of previous mass displacement from the El-Fasher areas, including displacement after RSF captured Zamzam Internally Displaced Persons (IDP) Camp in April 2025.²⁶

4. CONCLUSION

The United Nations (UN) has stated that 260,000 people remained of El-Fasher as of August 2025.²⁷ The International Organization for Migration (IOM)'s Displacement Tracking Matrix (DTM) later presented figures that as of late November approximately 106,000 people had been displaced in El-Fasher since 26 October and the surrounding locality, the majority of whom, in earlier reporting, were in northern and western villages inside the El-Fasher locality.²⁸ Sudan Tribune has claimed that 50,000 people have been detained during the first two weeks of RSF's control of El-Fasher.²⁹ Former Darfur Regional Governor, Mini Minawi, said RSF killed 27,000 people in El-Fasher.³⁰ There are variable unconfirmed numbers of the total number of survivors in El-Fasher that have circulated ranging between 70,000 – 100,000 people.³¹

Variable calculations can be made based on these numbers, but no definitive number of survivors can be determined without independent experts with access to El-Fasher — including ICC forensic teams.

HRL assesses that during this time of restricted access, RSF has systematically killed and disposed of a number of objects consistent with human remains likely in the tens of thousands. The evidence presented in this report cannot be used to estimate the number of people who have died, but it can be used to demonstrate that largescale and systematic mass killing and body disposal has occurred and is occurring on a scale that has not ever been seen before in very high resolution commercial satellite imagery analyzed by civilians.

The international community, including the UN Security Council, must immediately secure access to El-Fasher to provide humanitarian assistance to survivors and to collect whatever evidence of the killing still remains. Time is of the essence for both those still living and for the evidence left by those who have died.

APPENDIX I: OBJECT CLUSTER IDENTIFICATIONS

Event ID	Event	Location	Lat	Lon	Date Before	Date After	Description of Objects Present	Object Measurements
ELF_0135	Object cluster	1019th Air Defense Battalion	13.63648	25.34687	10/26/2025	10/27/2025	Cluster of objects in the SAF 1019th Air Defense Battalion. Cluster increases in size in imagery collected on 27 October 2025. Decreases in size in imagery collected on 01 November 2025.	1m-1.2m
ELF_0012	Object cluster, ground discoloration	Daraja Oula	13.63131	25.31992	10/26/2025	10/28/2025	Cluster of objects near the SAF 157th Artillery Division accompanied by reddish ground discoloration. Cluster decreases in size in imagery collected on 22 November 2025.	1.3m-1.5m
ELF_0014	Object cluster	SAF defensive berm	13.63222	25.31395	10/25/2025	10/28/2025	Cluster of objects accompanied by reddish discoloration near SAF 157th Artillery Division.	1.5m-1.7m
ELF_0028	Object cluster	157th Artillery Division	13.62476	25.31701	10/26/2025	10/28/2025	Homogenous cluster of objects in the SAF 157th Artillery Division. Cluster decreases in size in imagery collected on 22 November 2025.	Cannot measure.
ELF_0155	Object cluster	SAF defensive berm	13.63092	25.30913	10/26/2025	10/27/2025	Cluster of objects just outside the SAF 157th Artillery Division base.	1.7m
ELF_0159	Debris	157th Artillery Division	13.61812	25.31685	10/26/2025	10/27/2025	Pile of likely debris in the SAF 157th Artillery Division Base	0.9m-1.4m
ELF_0160	Debris	157th Artillery Division	13.62391	25.31705	10/26/2025	10/27/2025	Cluster of debris in the SAF 157th Artillery Division Base. Cluster increases in size in imagery collected on 28 October 2025 and decreases in size in imagery collected on 17 November 2025.	Cannot measure
ELF_0161	Object cluster	157th Artillery Division	13.62392	25.3161	10/26/2025	10/27/2025	Cluster of objects in the SAF 157th Artillery Division Base.	0.9m-1.3m
ELF_0163	Object cluster	157th Artillery Division	13.62485	25.31644	10/26/2025	10/27/2025	Cluster of objects in the SAF 157th Artillery Division Base.	1m-1.5m
ELF_0164	Object cluster	157th Artillery Division	13.62493	25.31586	10/26/2025	10/27/2025	Cluster of objects in the SAF 157th Artillery Division Base. Grows and ground discoloration increases in imagery collected on 28 October 2025. Cluster decreases in size in imagery collected on 27 November 2025.	1m-1.75m
ELF_0165	Object cluster	157th Artillery Division	13.62507	25.31657	10/26/2025	10/27/2025	Cluster of objects in the SAF 157th Artillery Division Base. Cluster decreases in imagery collected on 22 November 2025.	1m
ELF_0166	Object cluster	157th Artillery Division	13.62512	25.31698	10/26/2025	10/27/2025	Cluster of objects in the SAF 157th Artillery Division Base.	1m-1.8m
ELF_0167	Object cluster	157th Artillery Division	13.62501	25.31725	10/26/2025	10/27/2025	Cluster of objects in the SAF 157th Artillery Division Base. Cluster increases in size in imagery collected on 28 October 2025 and decreases in size in imagery collected on 01 November 2025.	Cannot measure
ELF_0169	Object cluster	157th Artillery Division	13.62538	25.31576	10/26/2025	10/27/2025	Cluster of objects in 157th artillery division. Cluster decreases in imagery collected on 01 November 2025.	Cannot measure.
ELF_0185	Object cluster	157th Artillery Division	13.62622	25.31501	10/15/2025	10/28/2025	Cluster of objects in/near 157th Artillery Division base.	1m-2m
ELF_0214	Debris	157th Artillery Division	13.62372	25.31684	10/26/2025	10/28/2025	Cluster of likely debris in the SAF 157th Artillery Division Base	Cannot measure
ELF_0134	Object cluster	271st Air Defense Brigade	13.63426	25.34565	10/27/2025	10/28/2025	Thermal scarring and burnt objects measuring between 1m-2m in length.	1m-2m
ELF_0001	Object cluster	Daraja Oula	13.63368	25.32603	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula with ground discoloration.	Cannot measure
ELF_0003	Object cluster	Daraja Oula	13.64921	25.33559	10/27/2025	10/28/2025	Homogenous cluster of objects in Daraja Oula.	Cannot measure
ELF_0004	Object cluster, ground discoloration	Daraja Oula	13.63394	25.32536	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula with ground discoloration.	Cannot measure.
ELF_0005	Object cluster, ground discoloration	Daraja Oula	13.63252	25.32598	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula with ground discoloration surrounded by technical vehicles.	Cannot measure
ELF_0006	Object cluster, ground discoloration	Daraja Oula	13.62722	25.32813	10/26/2025	10/28/2025	Cluster of objects in Daraja Oula with ground discoloration. Cluster decreases in size in imagery collected on 22 November 2025.	1.3m-2m
ELF_0007	Ground discoloration	Daraja Oula	13.63258	25.32814	10/26/2025	10/27/2025	Reddish ground discoloration in Daraja Oula.	5m
ELF_0008	Ground discoloration	Daraja Oula	13.6322	25.32857	10/26/2025	10/27/2025	Reddish ground discoloration in Daraja Oula.	3m
ELF_0009	Object cluster, ground discoloration	Daraja Oula	13.63337	25.33085	10/27/2025	10/28/2025	Cluster of objects accompanied by reddish discoloration in Daraja Oula.	Cannot measure
ELF_0010	Object cluster	Daraja Oula	13.63616	25.3303	10/27/2025	10/28/2025	Cluster of objects in Daraja Oula.	1.1m-1.6m
ELF_0013	Object cluster, ground discoloration	Daraja Oula	13.63605	25.32842	10/27/2025	10/28/2025	Cluster of dark objects possibly accompanied by ground discoloration in Daraja Oula.	1.3m-1.6m
ELF_0017	Object cluster, ground discoloration	Daraja Oula	13.62942	25.32832	10/27/2025	10/28/2025	Cluster of objects accompanied by reddish ground discoloration near Saudi Hospital.	1.1m-1.3m
ELF_0019	Object cluster, ground discoloration	Daraja Oula	13.63531	25.32883	10/27/2025	10/28/2025	Cluster of objects accompanied by red ground discoloration in Daraja Oula. Cluster is no longer visible in imagery collected on 22 November 2025.	1.1m-1.5m
ELF_0020	Object cluster, ground discoloration	Daraja Oula	13.6382	25.32854	10/27/2025	10/28/2025	Clusters of objects accompanied by reddish discoloration in Daraja Oula. Cluster no longer visible in imagery collected on 22 November 2025.	Cannot measure
ELF_0021	Object cluster, ground discoloration	Daraja Oula	13.63944	25.33039	10/27/2025	10/28/2025	Clusters of objects accompanied by red ground discoloration in Daraja Oula. Vehicles surround objects and discoloration	1.2m-1.6m
ELF_0022	Object cluster, ground discoloration	Daraja Oula	13.63948	25.33145	10/27/2025	10/28/2025	Cluster of objects accompanied by red discoloration in Daraja Oula.	Cannot measure
ELF_0030	Object cluster	Daraja Oula	13.63533	25.33034	10/28/2025	10/30/2025	Clusters of light/dark colored objects approx. (2m--MGP zoom is limited), not previously seen in imagery before 30 oct	2m
ELF_0031	Object cluster	Daraja Oula	13.63567	25.33001	10/28/2025	10/30/2025	Clusters of light/dark colored objects approx. (1.7m--MGP zoom is limited), not previously seen in imagery before 30 oct. Objects are near a hole that was present in historical imagery	1.7m
ELF_0032	Object cluster, ground discoloration	Daraja Oula	13.6335	25.32548	10/26/2025	10/27/2025	Cluster of objects accompanied by reddish discoloration. Cluster increases in size in imagery collected on 28 October 2025, decreases in size in imagery collected on 01 November 2025, and is no longer visible in imagery collected on 06 November 2025	1.4m-1.6m
ELF_0110	Object cluster	Daraja Oula	13.62924	25.32498	10/26/2025	10/27/2025	Cluster of objects at El-Fasher University surrounded by new tire tracking. No longer visible in imagery collected on 22 November 2025.	0.9-1.6m
ELF_0111	Object cluster	Daraja Oula	13.62865	25.32713	10/26/2025	10/28/2025	Cluster of objects at El-Fasher university where an alleged massacre took place. Cluster decreases in size in imagery collected on 17 November 2025.	1.2-1.8m
ELF_0112	Object cluster	Daraja Oula	13.62801	25.32711	10/26/2025	10/27/2025	Cluster of objects at El-Fasher university where an alleged massacre took place.	1.2-1.8m
ELF_0113	Object cluster	Daraja Oula	13.62821	25.32723	10/26/2025	10/27/2025	Cluster of objects at El-Fasher university where an alleged massacre took place. Cluster decreases in size in imagery collected on 17 November 2025.	1.2-1.8m
ELF_0114	Object cluster	Daraja Oula	13.62847	25.32824	10/26/2025	10/27/2025	Cluster of objects across the street from El-Fasher University. Cluster is no longer visible in imagery collected on 22 November 2025.	1.2-1.8m
ELF_0115	Object cluster, ground discoloration	Daraja Oula	13.63134	25.32762	10/26/2025	10/27/2025	Cluster of objects and ground discoloration within a compound in Daraja Oula. Cluster increases and ground discoloration grows in imagery collected on 28 October 2025. Multiple vehicles appears in imagery collected on 30 October 2025. Cluster no longer visible in imagery collected on 22 November 2025.	1.2-2m
ELF_0116	Object cluster	Daraja Oula	13.63114	25.32685	10/26/2025	10/28/2025	Cluster of objects within a compound in Daraja Oula. Objects are no longer visible in imagery collected on 01 November 2025.	1.6m
ELF_0120	Object cluster	Daraja Oula	13.6308	25.32717	10/26/2025	10/27/2025	Cluster of objects within a compound in Daraja Oula. Cluster increases in size on 28 October 2025.	1.2m-1.8m
ELF_0124	Object cluster	Daraja Oula	13.63049	25.3296	10/26/2025	10/28/2025	Cluster of objects within the Saudi Hospital compound. Cluster disappears in imagery collected on 09 November 2025	1.1m-1.9m
ELF_0125	Object cluster	Daraja Oula	13.62919	25.32994	10/26/2025	10/28/2025	Cluster of objects within the Saudi Hospital compound. Cluster disappears in imagery collected on 09 November 2025	1.1m-1.9m
ELF_0126	Object cluster	Daraja Oula	13.63036	25.33015	10/26/2025	10/28/2025	Cluster of objects within the Saudi Hospital compound. Cluster disappears in imagery collected on 09 November 2025	1.1m-1.9m
ELF_0128	Ground discoloration	Daraja Oula	13.63317	25.32777	10/26/2025	10/27/2025	Reddish ground discoloration in Daraja Oula.	2.6m
ELF_0129	Object cluster, ground discoloration	Daraja Oula	13.63129	25.32941	10/26/2025	10/27/2025	Cluster of objects with reddish ground discoloration in Daraja Oula. Vehicle is over object cluster with ground discoloration in 27 October imagery and is more visible in 28 October imagery. Another vehicle appears at the cluster in imagery collected on 30 October 2025 and the cluster is no longer visible in imagery collected on 09 November 2025.	1.38m
ELF_0130	Object cluster, ground discoloration	Daraja Oula	13.63049	25.32566	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula.	1m-1.8m

ELF_0133	Object cluster	Daraja Oula	13.6354	25.33659	10/26/2025	10/30/2025	Cluster of objects in Daraja Oula and decreases in size in imagery collected on 01 November 2025 and no longer visible in imagery collected on 17 November 2025	1m-2m
ELF_0141	Debris	Daraja Oula	13.6342	25.33367	10/26/2025	10/28/2025	Cluster of debris in Daraja Oula. No longer visible in imagery collected on 17 November 2025.	0.8m-1.6m
ELF_0143	Object cluster	Daraja Oula	13.63846	25.32988	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula. Cluster increases in size in imagery collected on 28 October 2025.	1.2-2m
ELF_0144	Object cluster	Daraja Oula	13.63859	25.32914	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula. Cluster no longer visible in imagery collected on 22 November 2025.	Cannot measure
ELF_0145	Object cluster	Daraja Oula	13.63926	25.32971	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula. Cluster increases in size in imagery collected on 28 October 2025 and is no longer visible in imagery collected on 22 November 2025.	0.8m-2m
ELF_0146	Object cluster	Daraja Oula	13.63967	25.3304	10/26/2025	10/28/2025	Cluster of objects within a civilian compound in Daraja Oula. Cluster of objects is no longer visible in imagery collected on 06 November 2025.	1.3m
ELF_0147	Object cluster	Daraja Oula	13.63791	25.32987	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula. Cluster increases in size in imagery collected on 28 October 2025. Cluster is no longer visible in imagery collected on 20 November 2025.	0.8m-1.4m
ELF_0148	Object cluster	Daraja Oula	13.6405	25.32988	10/15/2025	10/27/2025	Cluster of objects in Daraja Oula where vehicles or containers used to be present. Cluster increases in imagery collected on 28 October 2025.	0.9m-1.6m
ELF_0149	Object cluster	Daraja Oula	13.64104	25.32878	10/15/2025	10/27/2025	Cluster of objects in a compound in Daraja Oula. Cluster increases in imagery collected on 28 October 2025.	Cannot measure
ELF_0150	Object cluster	Daraja Oula	13.63952	25.33131	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula. Cluster increases in size in imagery collected on 28 October 2025 and decreases in imagery collected on 17 November 2025. Vehicle appears on 09 November 2025.	1m-1.9m
ELF_0152	Object cluster	Daraja Oula	13.64464	25.33061	10/15/2025	10/28/2025	Cluster of objects in Daraja Oula. Cluster no longer visible in imagery collected on 01 November 2025.	
ELF_0168	Object cluster	Daraja Oula	13.63847	25.3223	10/26/2025	10/28/2025	Cluster of objects in Daraja Oula. Cluster decreases in size in imagery collected on 01 November 2025. Cluster is no longer visible in imagery collected on 28 November 2025.	1.4m-1.9m
ELF_0172	Object cluster	Daraja Oula	13.63391	25.33037	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula. Cluster grows and ground discoloration increases in imagery collected on 28 October 2025 with light technical vehicle nearby. Cluster decreases in imagery collected on 30 October 2025 and is no longer visible in imagery collected on 28 November 2025.	1.5m-1.9m
ELF_0173	Ground discoloration	Daraja Oula	13.63382	25.33056	10/27/2025	10/28/2025	Reddish ground discoloration within a civilian compound in Daraja Oula. No longer visible in imagery collected on 06 November 2025.	2m
ELF_0175	Object cluster, ground discoloration	Daraja Oula	13.63335	25.33015	10/26/2025	10/28/2025	Cluster of objects and ground discoloration near a cargo truck. Cluster no longer visible in imagery collected on 01 November 2025.	1.4m
ELF_0176	Object cluster	Daraja Oula	13.63446	25.33021	10/26/2025	10/27/2025	Cluster of objects near the new cemetery in Daraja Oula. Decreases in size in imagery collected on 01 November 2025 and is no longer visible in imagery collected on 22 November 2025.	1.2m-1.5m
ELF_0177	Object cluster	Daraja Oula	13.6349	25.33038	10/26/2025	10/27/2025	Cluster of objects within a compound in Daraja Oula. This area has experienced traffic of numerous cargo and other transport trucks since 27 October 2025. Cluster increases in imagery collected on 28 October 2025 and is no longer visible in imagery collected on 17 November 2025.	Cannot measure.
ELF_0179	Debris	Daraja Oula	13.63537	25.32806	10/27/2025	10/28/2025	Potential cluster of debris outside buildings in Daraja Oula. Cluster decreases in size in imagery collected on 30 October and 01 November 2025.	1m
ELF_0180	Object cluster	Daraja Oula	13.63686	25.32553	10/26/2025	10/27/2025	Cluster of objects in Daraja Oula. Vehicle appears on 01 November 2025 next to cluster and remains in imagery collected on 22 November 2025.	1m-1.9m
ELF_0181	Object cluster	SAF defensive berm	13.6366	25.31328	10/27/2025	10/28/2025	Cluster of objects in Daraja Oula. Imagery collected on 27 October 2025 shows a light technical vehicle in the spot where the cluster appears in imagery collected on 28 October 2025.	Cannot measure
ELF_0183	Object cluster	Daraja Oula	13.63627	25.32975	10/27/2025	10/28/2025	Object cluster in Daraja Oula. Cluster no longer visible in imagery collected on 30 October 2025.	1.5m
ELF_0215	Burning	Daraja Oula	13.62938	25.32942	11/1/2025	11/6/2025	Active burning of objects in Daraja Oula at Saudi Hospital. Light colored, oblong objects have been continually place in location since 30 October 2025.	NA
ELF_0216	Burning	Daraja Oula	13.63021	25.32919	11/1/2025	11/6/2025	Thermal scarring in Daraja Oula at Saudi Hospital. Burnt objects are visible in the center of the pit in imagery collected on 06 November 2025. This location is 100m away from the active burning pit.	NA
ELF_0217	Burning	Daraja Oula	13.62993	25.32917	11/9/2025	11/13/2025	Thermal scarring in Daraja Oula at Saudi Hospital. Cluster of light colored objects appear in imagery collected on 09 November 2025. Burnt objects are visible in the center of the pit in imagery collected on 13 November 2025 where the prior cluster of objects was identified. This location is 100m away from the active burning pit.	NA
ELF_0218	Burning	Daraja Oula	13.63469	25.32858	11/9/2025	11/13/2025	Thermal scarring in Daraja Oula and burnt objects	NA
ELF_0219	Burning	Daraja Oula	13.63397	25.33029	11/9/2025	11/13/2025	Thermal scarring in Daraja Oula and burnt objects	NA
ELF_0220	Burning	Daraja Oula	13.63506	25.33235	11/9/2025	11/17/2025	Active burning of objects in Daraja Oula and burnt objects. Smoke plume is visible in imagery collected on 13 November 2025 and a pile of burnt objects is visible in imagery collected on 17 November 2025.	NA
ELF_0221	Burning	Daraja Oula	13.63507	25.33183	11/13/2025	11/17/2025	Thermal scarring in Daraja Oula and burnt objects.	NA
ELF_0222	Burning	Daraja Oula	13.63574	25.33186	11/13/2025	11/22/2025	Thermal scarring in Daraja Oula and burnt objects.	NA
ELF_0223	Burning	Daraja Oula	13.63556	25.33173	11/17/2025	11/22/2025	Thermal scarring in Daraja Oula and burnt objects where light colored, oblong objects were previously present in imagery collected on 17 November 2025.	NA
ELF_0224	Burning	Daraja Oula	13.63581	25.33213	11/17/2025	11/22/2025	Thermal scarring in Daraja Oula and burnt objects where light colored, oblong objects were previously present in imagery collected on 17 November 2025.	NA
ELF_0225	Burning	Daraja Oula	13.63886	25.32796	11/6/2025	11/22/2025	Thermal scarring in Daraja Oula and burnt objects where light colored, oblong objects were previously present in imagery collected on 09 and 17 November 2025.	NA
ELF_0226	Burning	Daraja Oula	13.63342	25.33535	11/6/2025	11/13/2025	Thermal scarring in Daraja Oula and burnt objects.	NA
ELF_0228	Burning	Daraja Oula	13.63352	25.33682	11/6/2025	11/13/2025	Thermal scarring in Daraja Oula and burnt objects.	NA
ELF_0231	Disturbed earth	Daraja Oula	13.63283	25.33006	10/30/2025	11/1/2025	Disturbed earth appearing in imagery collected on 01 November 2025 in Daraja Oula in close proximity to a cluster of white oblong objects.	NA
ELF_0232	Disturbed earth	Daraja Oula	13.63305	25.32244	10/26/2025	11/1/2025	Disturbed earth appearing in imagery collected on 01 November 2025 at the University of El-Fasher in Daraja Oula with a potential flatbed truck present nearby. It was reported that people were being detained within the University grounds.	NA
ELF_0233	Disturbed earth	Daraja Oula	13.62965	25.32231	10/26/2025	11/9/2025	Disturbed earth appearing in imagery collected on 01 November 2025 an increasing in size in imagery collected on 06 an 09 November 2025 at the University of El-Fasher in Daraja Oula. It was reported that people were being detained within the University grounds.	NA
ELF_0234	Debris	Daraja Oula	13.63091	25.32784	10/27/2025	10/28/2025	Cluster of likely debris in Daraja Oula.	0.6m
ELF_0235	Object cluster	Daraja Oula	13.63055	25.3338	10/27/2025	10/28/2025	Cluster of objects at the Sudanese Red Crescent Society in Daraja Oula. Cluster no longer visible in imagery collected on 01 November 2025.	1.3m-2m
ELF_0236	Object cluster	Daraja Oula	13.63908	25.32781	10/26/2025	11/1/2025	Cluster of objects in a potential bomb shelter in Daraja Oula. The cluster is no longer visible in imagery collected on 02 November 2025	0.75m-1.25m
ELF_0237	Burning	Daraja Oula	13.63469	25.32858	11/9/2025	11/13/2025	Thermal scarring in Daraja Oula and burnt objects visible in imagery collected on 13 November 2025 that was not visible in prior imagery collected on 09 November 2025.	NA
ELF_0238	Burning	Daraja Oula	13.63085	25.33306	11/1/2025	11/17/2025	Thermal scarring outside the Sudanese Red Crescent Society compound in Daraja Oula and burnt objects visible in imagery collected on 13 November 2025 that was not visible in prior imagery collected on 01 November 2025. Thermal scarring increases in size and a new presence of at least 11 transport vehicles in imagery collected on 17 November 2025.	NA
ELF_0036	Object cluster	Eastern El-Fasher	13.62366	25.37477	10/28/2025	10/30/2025	new cluster of objects observed on the Eastern side of El-Fasher. these objects are not present in prior imagery and appear on 30 October 2025.	Cannot measure.

ELF_0138	Object cluster	Former Childrens Hospital	13.62225	25.38262	10/26/2025	10/27/2025	Cluster of objects just north of the former children's hospital. Increases in size on 28 October 2025 and is no longer visible in imagery collected on 01 November 2025. Area is then surrounded by thermal scarring.	Cannot measure
ELF_0230	Disturbed earth	Former Childrens Hospital	13.62175	25.38329	10/26/2025	11/3/2025	Disturbed earth appearing in imagery collected on 01 November 2025 just east of the former children's hospital where it was reported that people were being detained at the location. Imagery collected on 02 November 2025 shows the presence of a new trench and is subsequently filled in in imagery collected on 03 November 2025.	NA
ELF_0066	Object cluster	Mellit Gate	13.70192	25.37424	10/25/2025	11/1/2025	Homogenous cluster of objects within a trench at the RSF Mellit gate checkpoint. Cluster burned in imagery collected on 06 November 2025.	Cannot measure.
ELF_0067	Object cluster	Mellit Gate	13.70214	25.37419	10/25/2025	11/1/2025	Homogenous cluster of objects within a trench at the RSF Mellit gate checkpoint. Decreases in size in imagery collected on 22 November 2025.	Cannot measure.
ELF_0068	Object cluster	Mellit Gate	13.70173	25.37384	10/25/2025	11/1/2025	Homogenous cluster of objects within a trench at the RSF Mellit gate checkpoint.	Cannot measure.
ELF_0227	Burning	Mellit Gate	13.70198	25.37424	11/1/2025	11/13/2025	Thermal scarring at Mellit gate and burnt objects. Light colored, oblong objects within the berm of the Mellit gate check point visible in imagery collected on 01 November 2025 are actively burning in imagery collected on 06 November 2025. Burnt objects are then visible in imagery collected on 13 November 2025.	NA
ELF_0207	Object cluster	Outside RSF berm	13.71097	25.25604	10/15/2025	10/30/2025	Cluster of objects outside RSF berm alongside vehicle tracking. Proximity to mass detention geolocated by [CIR/Bellingcat]. Seemingly increases in size in imagery collected on 13 November 2025.	0.9m-1.9m
ELF_0208	Object cluster	Outside RSF berm	13.71358	25.25385	10/15/2025	10/30/2025	Cluster of objects outside RSF berm alongside vehicle tracking. Proximity to mass detention geolocated by CIR. Seemingly no longer visible in imagery collected on 22 November 2025	1.2m-1.5m
ELF_0011	Object cluster	Outside SAF defensive berm	13.64348	25.30902	10/26/2025	10/28/2025	Homogenous cluster of objects with ground discoloration outside the SAF defensive berm.	Cannot measure.
ELF_0023	Object cluster	Outside SAF defensive berm	13.64009	25.30974	10/25/2025	10/28/2025	Clusters of objects accompanied by reddish discoloration outside the SAF defensive berm.	1.4m-1.8m
ELF_0024	Object cluster	Outside SAF defensive berm	13.6478	25.30902	10/25/2025	10/28/2025	Clusters of objects accompanied by reddish discoloration outside the SAF defensive berm.	1.3m-2m
ELF_0025	Object cluster	Outside SAF defensive berm	13.6515	25.30725	10/25/2025	10/28/2025	Clusters of objects accompanied near reddish ground discoloration outside the SAF defensive berm.	1.3m-2m
ELF_0026	Object cluster	Outside SAF defensive berm	13.65215	25.30604	10/25/2025	10/28/2025	Clusters of white colored objects accompanied by reddish discoloration	1.3m-2m
ELF_0027	Object cluster	Outside SAF defensive berm	13.65427	25.30592	10/25/2025	10/28/2025	Clusters of white colored objects accompanied by reddish discoloration	1.3m-2m
ELF_0033	Object cluster, ground discoloration	Outside SAF defensive berm	13.63287	25.30935	10/26/2025	10/27/2025	Cluster objects accompanied by reddish discoloration near a building found immediately to the west of the SAF defensive berm.	Cannot measure.
ELF_0049	Object cluster	Outside SAF defensive berm	13.70807	25.26807	10/15/2025	11/1/2025	Cluster of objects along vehicle tracking outside the SAF defensive berm near the northern part of the RSF berm. Cluster no longer visible in imagery collected on 17 November 2025.	1.5m-2m
ELF_0070	Object cluster	Outside SAF defensive berm	13.66774	25.28928	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Decreases in size in imagery collected on 17 November 2025.	Cannot measure
ELF_0071	Object cluster	Outside SAF defensive berm	13.6304	25.28212	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. No longer visible on imagery collected on 17 November 2025.	Cannot measure
ELF_0072	Object cluster	Outside SAF defensive berm	13.62192	25.30152	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Two vehicles visible in imagery on collected on 27 October 2025 within 25 meters from the cluster. Cluster decreases in size in imagery collected on 17 November 2025.	Cannot measure
ELF_0073	Object cluster	Outside SAF defensive berm	13.62121	25.30166	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm.	Cannot measure
ELF_0074	Object cluster	Outside SAF defensive berm	13.62525	25.30487	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Decreases in size in imagery collected on 22 November 2025.	1.2-1.7m
ELF_0075	Object cluster	Outside SAF defensive berm	13.62483	25.306	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster increases in size in imagery collected on 28 October 2025.	Cannot measure
ELF_0077	Object cluster	Outside SAF defensive berm	13.62771	25.30664	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster decreases in imagery collected on 22 November 2025.	Cannot measure
ELF_0078	Object cluster	Outside SAF defensive berm	13.62811	25.30685	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster decreases in imagery collected on 17 November 2025	Cannot measure
ELF_0081	Object cluster	Outside SAF defensive berm	13.62899	25.30823	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm.	Cannot measure
ELF_0082	Object cluster	Outside SAF defensive berm	13.63138	25.30678	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster decreases in size in imagery collected on 28 October 2025. No longer visible in imagery collected on 06 November 2025.	Cannot measure
ELF_0083	Object cluster	Outside SAF defensive berm	13.63084	25.30728	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster increases in size in imagery collected on 28 October 2025.	0.9-1.3m
ELF_0085	Object cluster	Outside SAF defensive berm	13.63181	25.30975	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm in close proximity to other object clusters.	Cannot measure
ELF_0086	Object cluster	Outside SAF defensive berm	13.63211	25.30924	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm in close proximity to other object clusters.	Cannot measure
ELF_0089	Object cluster	Outside SAF defensive berm	13.63438	25.30513	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster grows in size in imagery collected on 28 October 2025.	1.2-1.9m
ELF_0090	Object cluster	Outside SAF defensive berm	13.63624	25.30558	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster decreases in size and ground discoloration increases in imagery collected on 28 October 2025.	0.8-1.6m
ELF_0091	Object cluster	Outside SAF defensive berm	13.63563	25.30981	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Increases in size in imagery collected on 28 October 2025 and decrease in imagery collected on 17 November 2025.	1-2m
ELF_0092	Object cluster	Outside SAF defensive berm	13.63544	25.31015	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster grows in size in imagery collected on 28 October 2025. Decreases in size in imagery collected on 22 November 2025.	Cannot measure
ELF_0095	Object cluster	Outside SAF defensive berm	13.64182	25.31398	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm.	0.9-2.1
ELF_0097	Object cluster	Outside SAF defensive berm	13.64451	25.31433	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm just west of the former UNAMID compound.	Cannot measure
ELF_0098	Object cluster	Outside SAF defensive berm	13.65771	25.31305	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm west of the former UNAMID compound.	1.3m-2m
ELF_0100	Object cluster	Outside SAF defensive berm	13.64092	25.30419	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm.	Cannot measure
ELF_0101	Object cluster	Outside SAF defensive berm	13.63955	25.29632	10/25/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster grows in size in imagery collected on 28 October 2025.	0.8-1.5m
ELF_0106	Object cluster	Outside SAF defensive berm	13.64897	25.30867	10/25/2025	10/28/2025	Cluster of objects outside the SAF defensive berm. Cluster decreases in size in imagery collected on 01 November 2025.	0.8-1.9m
ELF_0108	Object cluster	Outside SAF defensive berm	13.662	25.30093	10/15/2025	10/27/2025	Cluster of objects outside the SAF defensive berm. Cluster decreases in size in imagery collected on 01 and 09 November 2025.	1-2.8m
ELF_0158	Object cluster	Outside SAF defensive berm	13.6168	25.29436	10/26/2025	10/28/2025	Homogenous cluster of objects outside SAF defensive berm along several new vehicle tracking and close proximity to another object cluster (ELF_0184).	1.35m
ELF_0184	Object cluster	Outside SAF defensive berm	13.61697	25.29492	10/15/2025	10/27/2025	Cluster of objects outside SAF defensive berm near significant amount of new vehicle tracking.	Cannot measure
ELF_0186	Object cluster	Outside SAF defensive berm	13.67852	25.30282	10/15/2025	10/30/2025	Homogenous cluster of objects outside SAF defensive berm along vehicle tracking. Cluster grows in size in imagery collected on 01 and 09 November 2025.	Cannot measure
ELF_0187	Object cluster	Outside SAF defensive berm	13.67753	25.29781	10/15/2025	10/30/2025	Cluster of objects outside SAF defensive berm near vehicle tracking dispersed around a 25m radius. Additional objects appear on 06 November 2025.	Cannot measure
ELF_0189	Object cluster	Outside SAF defensive berm	13.68433	25.28963	10/15/2025	10/30/2025	Homogenous cluster of objects outside SAF defensive berm along vehicle tracking and surrounded by vehicles.	Cannot measure
ELF_0190	Object cluster	Outside SAF defensive berm	13.68535	25.29084	10/15/2025	10/30/2025	Cluster of objects outside SAF defensive berm along vehicle tracking. Cluster changes orientation in imagery collected on 06 and 09 November 2025. In imagery collected on 13 November 2025, only two light colored objects are visible and are now surrounded by thermal scarring.	0.8m-1.2m
ELF_0193	Object cluster	Outside SAF defensive berm	13.68635	25.28893	10/30/2025	11/1/2025	Homogenous cluster of objects outside SAF defensive berm along vehicle tracking and surrounded by vehicles. Cluster is no longer visible in imagery collected on 06 November 2025.	2m-2.5m

ELF_0194	Object cluster	Outside SAF defensive berm	13.68726	25.28855	10/30/2025	11/1/2025	Cluster of objects outside SAF defensive berm along vehicle tracking. Objects consistent with people standing are visible in imagery collected on 30 October and 01 November 2025	Cannot measure
ELF_0195	Object cluster	Outside SAF defensive berm	13.68681	25.28858	10/20/2025	10/30/2025	Cluster of objects outside SAF defensive berm along vehicle tracking. Difficult to assess presence after 30 October due to resolution and shadow.	Cannot measure
ELF_0196	Object cluster	Outside SAF defensive berm	13.6889	25.29472	10/30/2025	11/1/2025	Cluster of objects outside SAF defensive berm along vehicle tracking. No longer visible in imagery collected on 17 November 2025	1m-2m
ELF_0197	Object cluster	Outside SAF defensive berm	13.68896	25.28511	10/20/2025	10/30/2025	Cluster of objects outside SAF defensive berm along vehicle tracking. Decreases in size in imagery collected on 17 November 2025	0.8m-1.9m
ELF_0198	Object cluster	Outside SAF defensive berm	13.69466	25.27628	10/20/2025	10/30/2025	Cluster of objects outside SAF defensive berm along vehicle tracking. Increases in size in imagery collected on 06 November 2025 and no longer visible in imagery collected on 22 November 2025	1m-1.86m
ELF_0199	Object cluster	Outside SAF defensive berm	13.70387	25.25996	10/15/2025	10/30/2025	Homogenous and scattered clusters of objects outside SAF defensive berm along vehicle tracking.	1m-2m
ELF_0201	Object cluster	Outside SAF defensive berm	13.70549	25.25895	10/15/2025	10/30/2025	Cluster of objects outside SAF defensive berm. Cluster starts decreasing in size in imagery collected on 06 November 2025 and is no longer visible in imagery collected on 22 November 2025.	1m-2m
ELF_0044	Object cluster	RSF Berm	13.63762	25.24886	10/21/2025	10/27/2025	Cluster of objects near vehicle tracking along the southwestern portion of the RSF berm.	1m-2m
ELF_0046	Object cluster	RSF Berm	13.68462	25.24837	9/27/2025	11/1/2025	Homogenous cluster of objects outside the SAF defensive berm near vehicle tracking.	Cannot measure.
ELF_0048	Object cluster	RSF Berm	13.71007	25.26606	10/15/2025	11/1/2025	Homogenous cluster of objects near vehicle tracking along the northern part of the RSF berm.	Cannot measure.
ELF_0050	Object cluster	RSF Berm	13.71238	25.26985	10/15/2025	11/1/2025	Cluster of objects along the northern part of the RSF berm near vehicle tracking. No longer visible in imagery collected on 17 November 2025.	Cannot measure.
ELF_0051	Object cluster	RSF Berm	13.71265	25.27105	10/15/2025	11/1/2025	Homogenous cluster of objects along the northern part of the RSF berm. No longer visible in imagery collected on 17 November 2025.	Cannot measure.
ELF_0052	Object cluster	RSF Berm	13.71254	25.27158	10/15/2025	11/1/2025	Homogenous cluster of objects along the northern part of the RSF berm.	Cannot measure.
ELF_0053	Object cluster	RSF Berm	13.71251	25.27191	10/15/2025	11/1/2025	Homogenous cluster of objects along the northern part of the RSF berm.	Cannot measure.
ELF_0054	Object cluster	RSF Berm	13.71274	25.27166	10/15/2025	11/1/2025	Cluster of objects along the northern part of the RSF berm near vehicle tracking. Decreases in size in imagery collected on 17 November 2025.	Cannot measure.
ELF_0055	Object cluster	RSF Berm	13.71304	25.27044	10/15/2025	11/1/2025	Cluster of objects along the northern part of the RSF berm near vehicle tracking. No longer visible in imagery collected on 22 November 2025.	1.3m-2m
ELF_0056	Object cluster	RSF Berm	13.71291	25.27573	10/15/2025	11/1/2025	Homogenous clusters of objects along the northern part of the RSF berm. Decreases in size in imagery collected on 17 November 2025.	Cannot measure.
ELF_0057	Object cluster	RSF Berm	13.71208	25.2789	10/15/2025	11/1/2025	Homogenous clusters of objects south of the destroyed vehicle convoy along the northern part of the RSF berm. No longer visible in imagery collected on 17 November 2025.	Cannot measure.
ELF_0058	Object cluster	RSF Berm	13.71333	25.27774	10/15/2025	11/1/2025	Cluster of objects near the destroyed vehicle convoy along the northern part of the RSF berm. Cluster no longer visible in imagery collected on 17 November 2025.	1.1m-3m
ELF_0060	Object cluster	RSF Berm	13.71375	25.27824	10/15/2025	11/1/2025	Cluster of objects near the destroyed vehicle convoy along the northern part of the RSF berm. No longer visible in imagery collected on 17 November 2025.	2m-3m
ELF_0061	Object cluster	RSF Berm	13.71311	25.27965	10/15/2025	11/1/2025	Homogenous clusters of objects near the destroyed vehicle convoy along the northern part of the RSF berm. No longer visible in imagery collected on 22 November 2025.	Cannot measure.
ELF_0063	Object cluster	RSF Berm	13.71312	25.27853	10/15/2025	11/1/2025	Homogenous clusters of objects along the northern part of the berm containing the destroyed vehicle convoy. Several homogenous clusters of objects that have been confirmed to be bodies through geolocation of social media footage. Clusters significantly decrease in imagery collected on 17 November 2025.	Cannot measure.
ELF_0064	Object cluster	RSF Berm	13.71713	25.29956	10/25/2025	11/1/2025	Homogenous cluster of objects along the northern part of the RSF berm.	1m-2.5m
ELF_0065	Object cluster	RSF Berm	13.71086	25.36243	10/25/2025	11/1/2025	Homogenous cluster of objects along the northern part of the RSF berm. Cluster no longer visible in imagery collected on 13 November 2025	Cannot measure.
ELF_0069	Object cluster	RSF Berm	13.57023	25.34442	10/30/2025	11/1/2025	Cluster of objects along southern end of RSF berm flanked by multiple vehicles. No longer visible in imagery collected on 06 November 2025.	Cannot measure
ELF_0229	Object cluster	RSF Berm	13.7134	25.27847	10/15/2025	10/31/2025	Cluster of objects confirmed to be bodies through geolocation by Bellingcat appearing between 26-31 October 2025. Cluster is then no longer visible in imagery collected on 04 November 2025.	Cannot measure.
ELF_0202	Object cluster	RSF berm checkpoint	13.70741	25.25769	10/15/2025	10/30/2025	Cluster of objects along the checkpoint near the RSF berm. Cluster increases in size in imagery collected on 06 November 2025 and decreases in imagery collected on 22 November 2025	0.9m-1.6m
ELF_0204	Object cluster	RSF berm checkpoint	13.70786	25.25783	10/15/2025	11/1/2025	Cluster of objects within the trenches of the checkpoint along the RSF berm. Objects are no longer visible in imagery collected on 22 November 2025	0.72m-1.5m
ELF_0034	Object cluster, ground discoloration	SAF defensive berm	13.63165	25.31003	10/25/2025	10/27/2025	Cluster of objects accompanied by reddish discoloration along the defensive berm. Cluster increases in size in imagery collected on 28 October 2025.	Cannot measure.
ELF_0076	Object cluster	SAF defensive berm	13.62598	25.30916	10/25/2025	10/27/2025	Cluster of objects along the SAF defensive berm. Cluster increases in imagery collected on 28 October 2025.	0.9-1.7m
ELF_0080	Object cluster	SAF defensive berm	13.62794	25.30912	10/25/2025	10/28/2025	Cluster of objects along the SAF defensive berm.	Cannot measure
ELF_0093	Object cluster, ground discoloration	SAF defensive berm	13.63676	25.31112	10/25/2025	10/27/2025	Cluster of objects and ground discoloration along the SAF defensive berm. Cluster increases and ground discoloration grows in imagery collected on 28 October 2025. Cluster decreases in size in imagery collected on 06 November 2025.	1-1.75
ELF_0094	Object cluster, ground discoloration	SAF defensive berm	13.6407	25.31351	10/25/2025	10/27/2025	Cluster of objects and ground discoloration along the SAF defensive berm.	Cannot measure
ELF_0154	Object cluster	SAF defensive berm	13.6367	25.31271	10/26/2025	10/27/2025	Cluster of objects near the SAF defensive berm and increases in imagery collected on 28 October 2025.	0.9m-1.6m
ELF_0182	Ground discoloration	SAF defensive berm	13.63664	25.31297	10/15/2025	10/27/2025	Reddish ground discoloration near the SAF defensive berm.	5m
ELF_0239	Object cluster	Former Children's Hospital	13.62182	25.38272	10/26/2025	10/28/2025	Dark objects lined up on 27 October, new presence of light colored objects clustered to the east of hospital grounds and dark objects observed cluster together to the north of the grounds on 28 Oct. Objects appear to be removed between 01-06 November	Cannot measure
ELF_0240	Object cluster	El-Fasher University	13.62818	25.32787	10/26/2025	10/28/2025	New presence of objects accompanied by reddish ground discoloration in imagery collected on 10/28/2025. Coincides with reports that civilians were killed <i>en masse</i>	1.2-1.8
ELF_0241	Object cluster	Daraja Oula	13.64224	25.328	10/26/2025	10/27/2025	New presence of Object cluster observed on 10/27/2025 accompanied by a reddish ground discoloration	1-2m
ELF_0242	Object cluster	Daraja Oula	13.64191	25.32792	10/27/2025	10/28/2025	New presence of objects approximately measuring 1-2 meters on 10/28/2025. These objects are no longer visible in imagery collected between 10/31/2025	1-2m
ELF_0243	Object cluster	Daraja Oula	13.63276	25.33014	10/30/2025	11/1/2025	New presence of white oblong objects approximately measuring 1.38-1.8m	1.38-1.8m
ELF_0244	Ground Disturbance	Daraja Oula	13.63267	25.33016	10/30/2025	11/1/2025	New presence of overturned earth disturbance located 5m south of a mosque and approximately measured 5m in length	5m
ELF_0245	Object cluster	RSF Berm Checkpoint, near Garmi Gate	13.71373	25.27894	10/15/2025	10/31/2025	New presence of objects observed on 31 October 2025> Objects confirmed to be bodies and geolocated from a report from Bellingcat	cannot measure
ELF_0246	Object cluster	Kutum-El Fasher Road	13.71884	25.27835	11/3/2025	11/4/2025	Presence of light colored objects approximately measuring 1.1-1.6m	1.1-1.6
ELF_0247	Ground Disturbance	Abu Shouk	13.66414	25.33579	10/15/2025	11/13/2025	Newly dug hole visible on 10/25/2025 that was used for repeated burial of objects consistent with human bodies.	8x3m
ELF_0248	Ground Disturbance	Daraja Oula	13.63908	25.32779	10/26/2025	11/13/2025	Ground disturbance used for body disposal. Ground disturbance from likely bombardment in May 2025. objects appear and disappear in the ground disturbance	NA
ELF_0249	Ground Disturbance	Daraja Oula	13.65206	25.33028	10/25/2025	11/1/2025	New ground disturbance at Al Rahma Cemetery observed on 11/1/2025. New grave mounds are visible	NA
TOTAL								

APPENDIX II: SATELLITE IMAGERY ANALYSIS

Northern Berm, El-Fasher | 31 October 2025

Analysis of satellite imagery collected on 31 October 2025 and geolocation of videos showing RSF fighters next to body piles and executing detainees provides confirmation of both the presence of body piles and their appearance in very-high resolution satellite imagery. These body piles are consistent with clusters of objects visible in satellite imagery in and around El-Fasher starting 27 October 2025.



Satellite imagery collected on 31 October 2025 shows the presence of a large object cluster at the location of a video showing RSF soldiers executing a detained male, providing confirmation of the size and orientation of mass body piles when visible in satellite imagery. This object cluster is consistent with other newly visible object clusters present in and around El-Fasher post-RSF takeover of the city.

31 October 2025 © 2025 Vantor

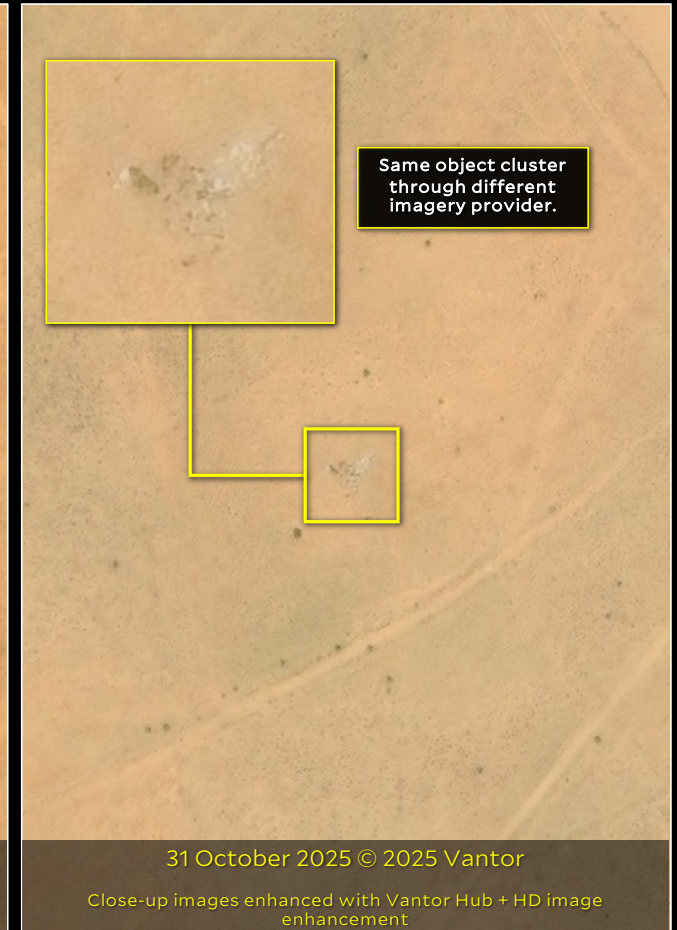
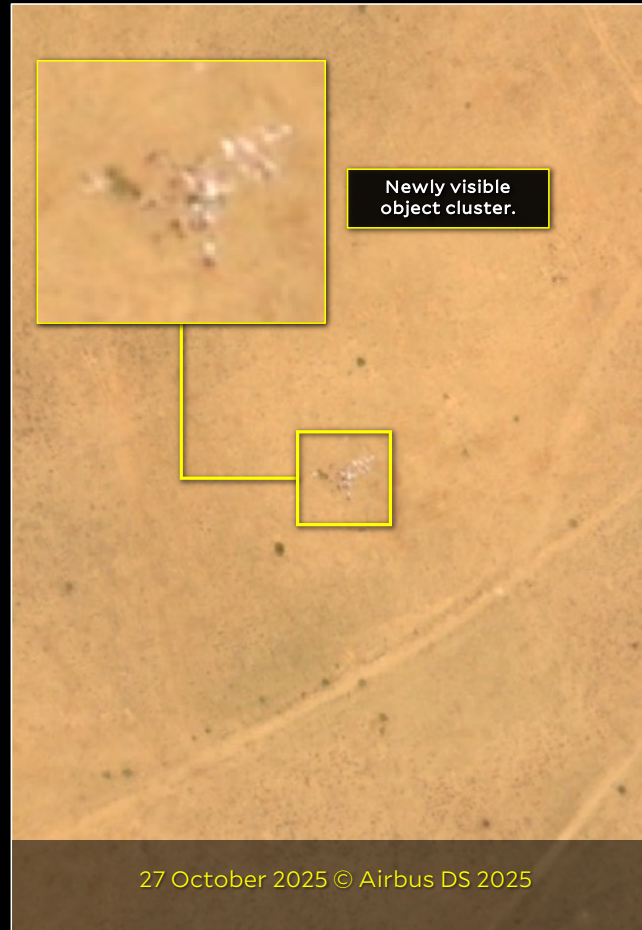
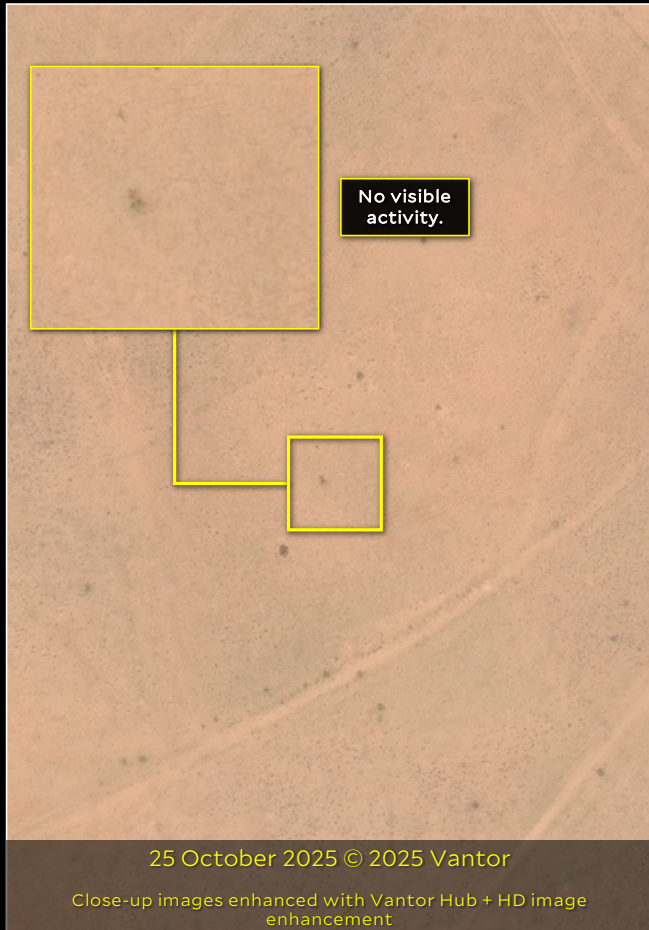


Satellite imagery collected on 31 October 2025 shows the presence of an object cluster at the location of a video showing RSF soldiers executing a group of 10 detained males, providing confirmation of the size and orientation of mass body piles when visible in satellite imagery. This object cluster is consistent with other newly visible object clusters present in and around El-Fasher post-RSF takeover of the city. Prior geolocation of this location was conducted by Bellingcat.

Northwestern El-Fasher

New object clusters observed
between 25, 27, & 31 October 2025

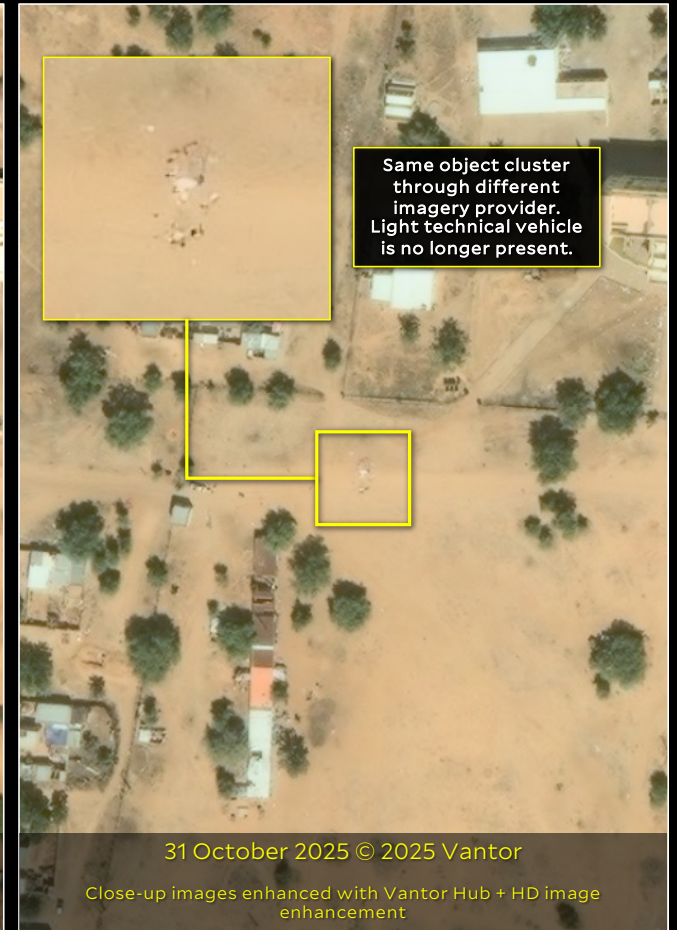
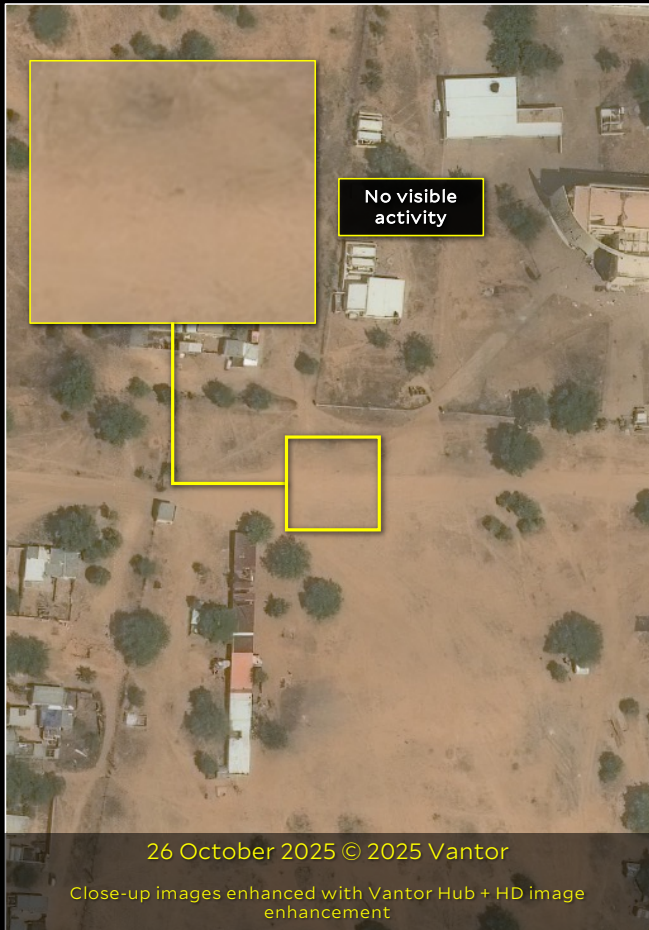
Analysis of satellite imagery collected initially between 25 and 27 October 2025 over northwestern El-Fasher, 450 meters west of the former UNAMID compound, shows the presence of a new object cluster. Further analysis of satellite imagery collected on 31 October 2025 shows this object cluster to be consistent with similar object clusters confirmed to be body piles at the destroyed vehicle convoy along the northern part of the RSF berm.



University of El-Fasher

New object clusters and vehicle activity observe between 26, 27, & 31 October 2025

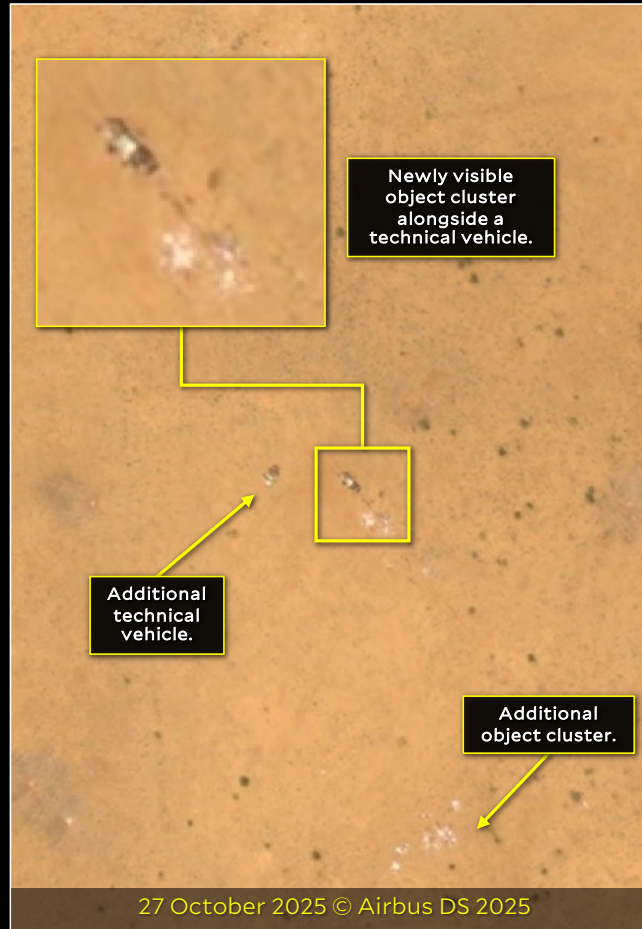
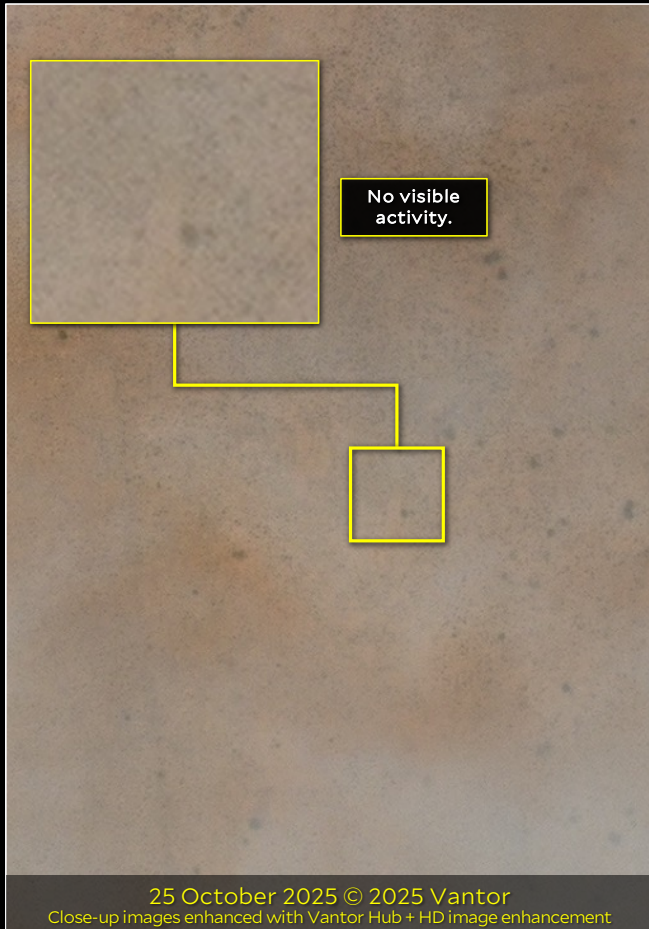
Analysis of satellite imagery collected initially between 26 and 27 October 2025 over the University of El-Fasher shows the presence of a new technical vehicle surrounded by an object cluster. Further analysis of satellite imagery collected on 31 October 2025 shows this object cluster to be consistent with similar object clusters confirmed to be body piles at the destroyed vehicle convoy along the northern part of the RSF berm.



Western El-Fasher

New object clusters and vehicle activity observed between 25, 27, & 31 October 2025

Analysis of satellite imagery collected initially between 25 and 27 October 2025 over western El-Fasher, approximately 1.5 kilometers west of the SAF 157th Artillery Division, shows the new presence of two technical vehicles near an object cluster. Further analysis of satellite imagery collected on 31 October 2025 shows this object cluster to be consistent with similar object clusters confirmed to be body piles at the destroyed vehicle convoy along the northern part of the RSF berm.



Western El-Fasher

New object clusters and vehicle activity observed between 27, 28, & 31 October 2025

Analysis of satellite imagery collected on 27 October 2025 over western El-Fasher shows the presence of a technical vehicle near a patch of ground discoloration. Satellite imagery collected the next day on 28 October 2025 shows the technical vehicle no longer present and a newly visible object cluster where the technical vehicle had been. There is also a new pile of debris consistent with looting 20 meters south of the newly visible object cluster. Further analysis of satellite imagery collected on 31 October 2025 shows this object cluster to be consistent with similar object clusters confirmed to be body piles at the destroyed vehicle convoy along the northern part of the RSF berm.

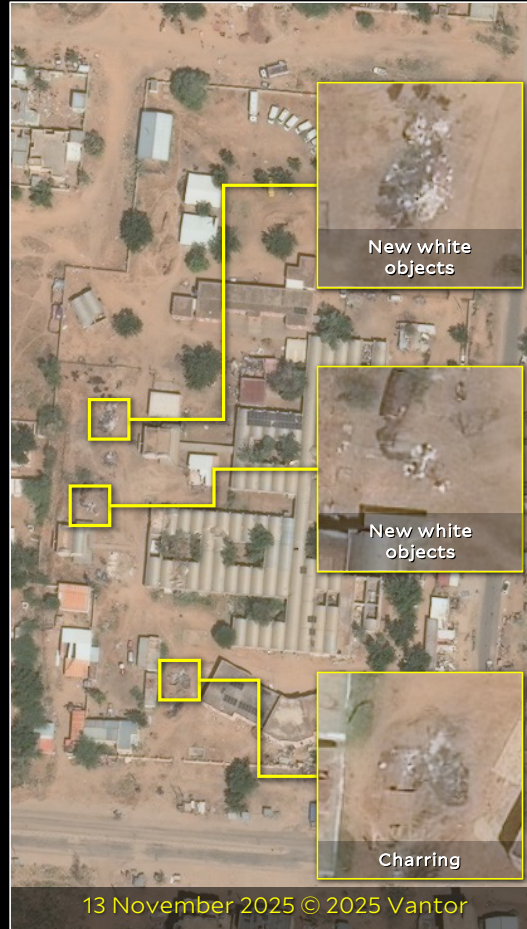
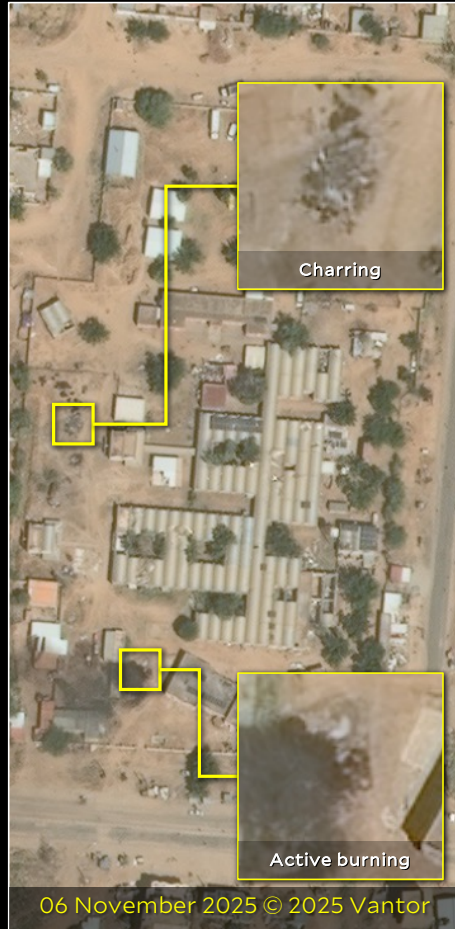


Al-Saudi Hospital, El-Fasher

Evidence of burning and new presence of white objects between 01, 06, 13 & 17 November 2025

Analysis of satellite imagery collected on 01 November 2025 shows the presence of white objects in a hole dug on the southern side of the Al-Saudi Hospital. These white objects appear to be burning in imagery collected on 06 November 2025, and a new patch of charring appears on the western side of the hospital.

Imagery collected on 13 November 2025 shows charring where the burning previously took place as well as new white objects on the western side of the hospital. Further analysis of imagery collected on 17 November 2025 shows an increase in charring on the western side of the hospital and new white objects appear in the hole dug on the southern side.



Daraja Oula, El-Fasher

Active burning and new presence of white objects between 12, 13 & 17 November 2025

Analysis of satellite imagery collected initially between 09 and 13 November 2025 over the Daraja Oula neighborhood of El-Fasher shows the new presence of an actively burn on 13 November that was not present in 12 November imagery.

Imagery collected on 17 November 2025 shows the charred, ashen remnants of the burnt cluster. Newly present at this location on 17 November are two more ground disturbances or ground scars displaying signatures consistent with that of the charred objects of the burned cluster. Two clusters of white objects are newly present at this location on 17 November 2025.

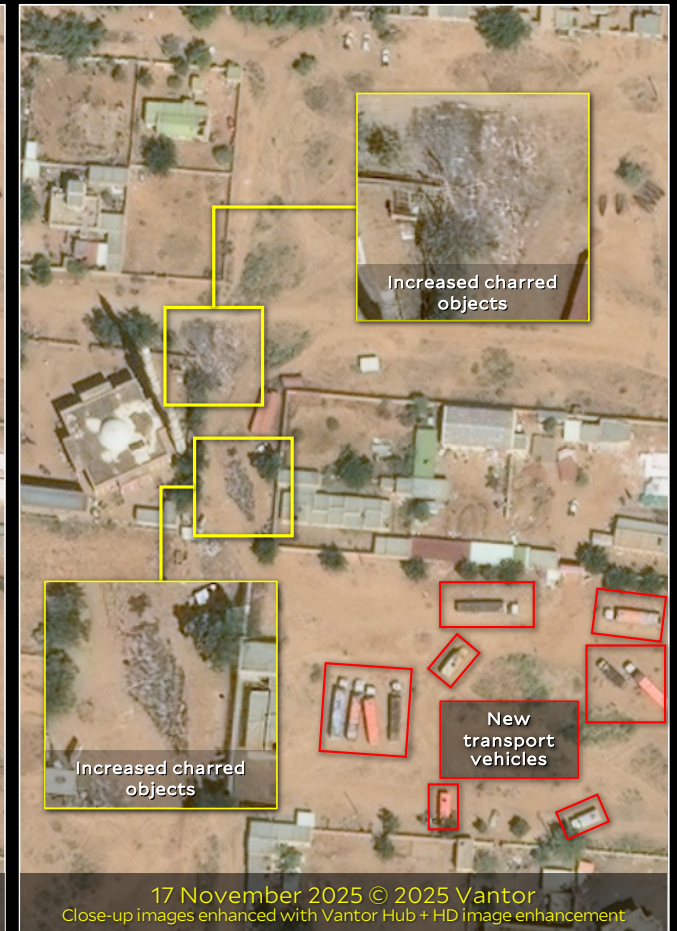
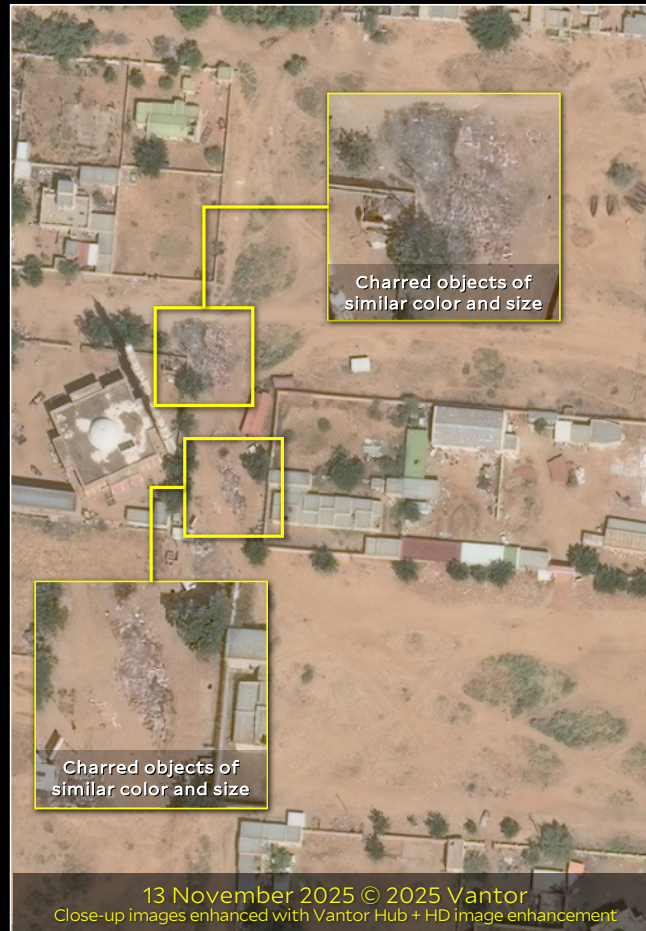
Close-up images enhanced with Vantor Hub + HD image enhancement.



**Sudanese Red Crescent Society,
El-Fasher**
Evidence of burning and vehicle activity
between 01, 13, & 17 November 2025

Analysis of satellite imagery collected on 13 November 2025 shows the presence of two clusters of charred objects of similar size and color outside the Sudanese Red Crescent Society compound.

Imagery collected on 17 November 2025 shows an increase in these charred objects of similar size and color, suggested continued burning at this site. New transport vehicles are visible south of the compound.



Change in activity: Clusters no longer visible, ground discoloration, burning.
araja Oula neighborhood, 27 October through 28 November 2025

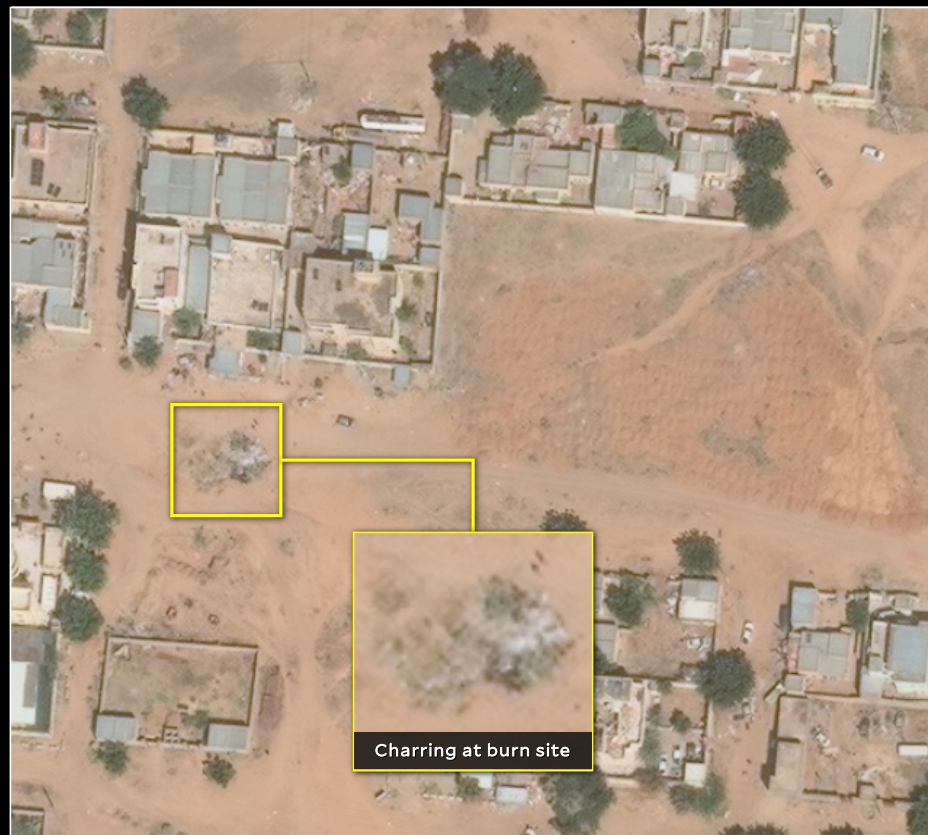
Daraja Oula Cemetery, El-Fasher

Evidence of burning between 06 & 13
November 2025

Analysis of satellite imagery collected on 13 November 2025 shows the presence of charring at a burn site near a cemetery in the Daraja Oula neighborhood previously identified by Yale HRL.



06 November 2025 © 2025 Vantor



13 November 2025 © 2025 Vantor

Change in activity: Clusters no longer visible, ground discoloration, burning.
Daraja Oula neighborhood, 27 October through 28 November 2025

Daraja Oula Cemetery, El-Fasher

No new burial activity between 26 October & 28 November 2025

Analysis of satellite imagery collected on between 26 October-28 November 2025 shows no new burial activity at a cemetery in the Daraja Oula neighborhood previously identified by Yale HRL. Prior to RSF's complete takeover of El-Fasher on 26 October 2025, HRL analysts observed approximately 90 new burial mounds between 18 September and 10 October 2025 at this cemetery.



26 October 2025 © 2025 Vantor



28 November 2025 © 2025 Vantor

Al-Rahma Cemetery, El-Fasher

No new burial activity between 26 October & 28 November 2025

Analysis of satellite imagery collected between 26 October-28 November 2025 shows no new burial activity at Al-Rahma cemetery in Abu Shouk IDP camp. Prior to RSF's total control of El-Fasher on 26 October 2025, HRL analysts observed an increase of approximately 190 new burial mounds between 03 August and 10 September 2025 at this cemetery.



01 November 2025 © 2025 Vantor



28 November 2025 © 2025 Vantor

Daraja Oula, El-Fasher

New debris observed between
27-28 October 2025

Analysis of satellite imagery collected between 27 and 28 October 2025 shows the presence of new debris piles consistent with looting in the Daraja Oula neighborhood in El-Fasher. The appearance of these debris piles are inconsistent with other object clusters identified in and around the city of El-Fasher.



27 October 2025 © Airbus DS 2025



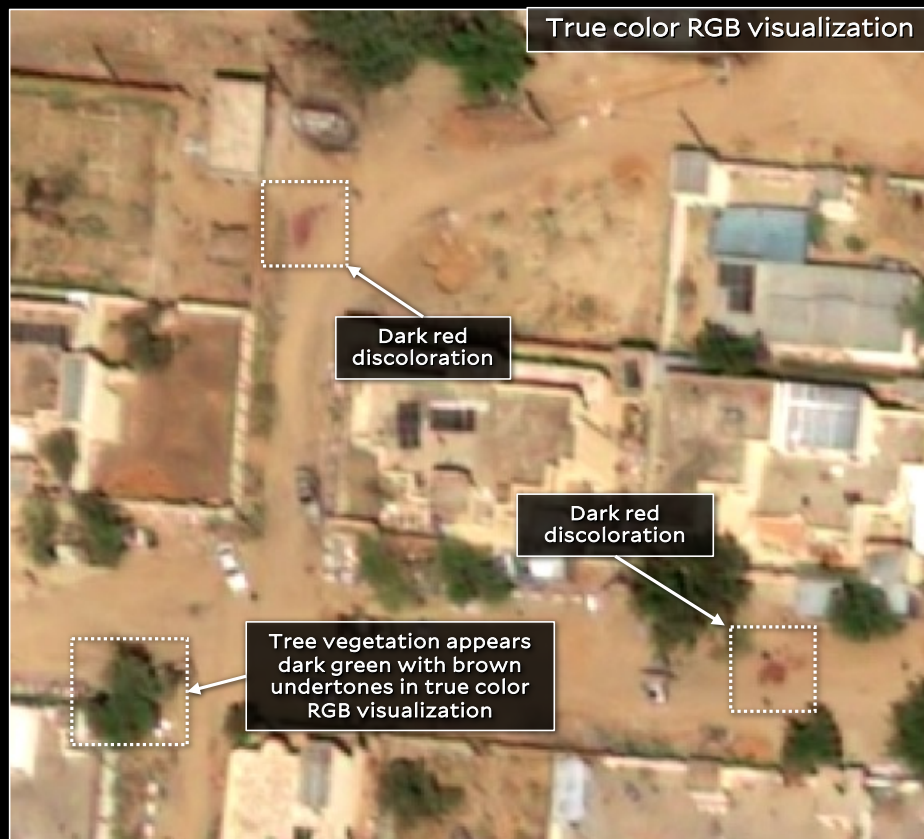
28 October 2025 © Airbus DS 2025

Daraja Oula, El-Fasher

Ground discoloration observed 27 October 2025, true color RGB versus false color visualization

Analysis of satellite imagery collected on 27 October over the Daraja Oula neighborhood of El-Fasher, two reddish ground discolorations are visible in the true color RGB visualization that are not seen in prior satellite imagery.

When the image is visualized in false color, the ground discoloration turns to a duller brown color. The dull, brown color is expected if the ground discoloration is a true red color. Vegetation appears as red in false color and is not indicative of ground discoloration.



27 October 2025 © Airbus DS 2025



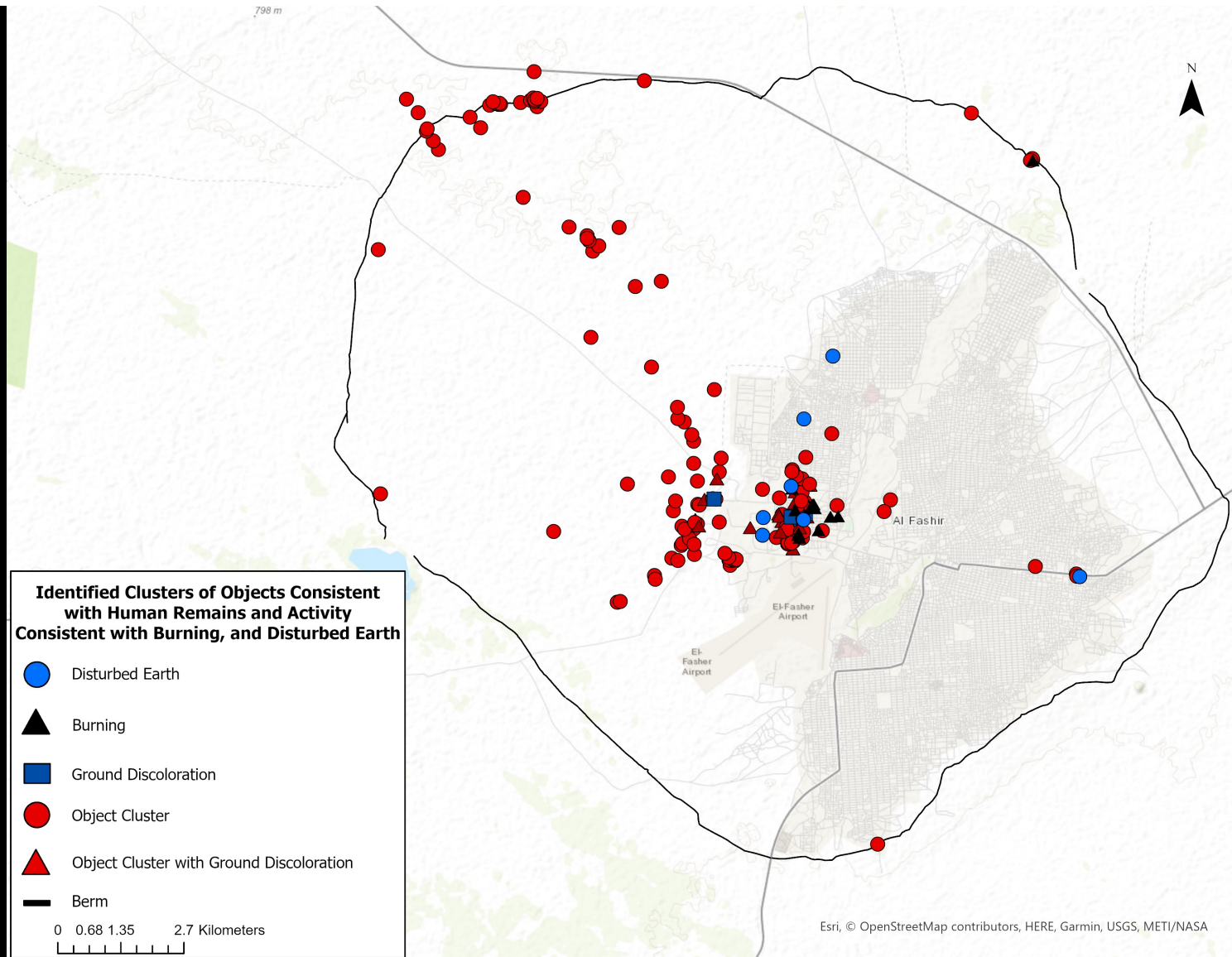
27 October 2025 © Airbus DS 2025

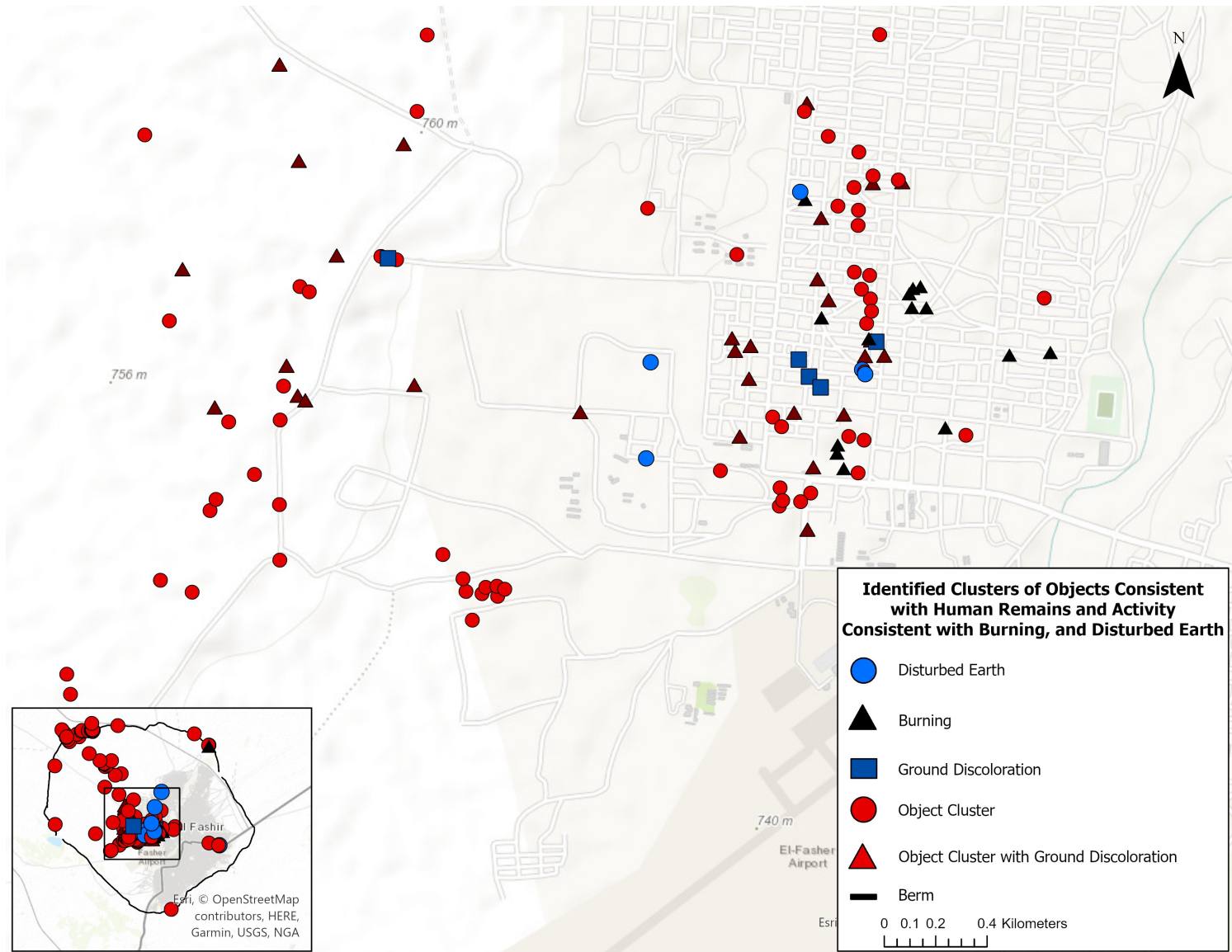
APPENDIX III: MAPS

El-Fasher | 27 September – 28 November 2025

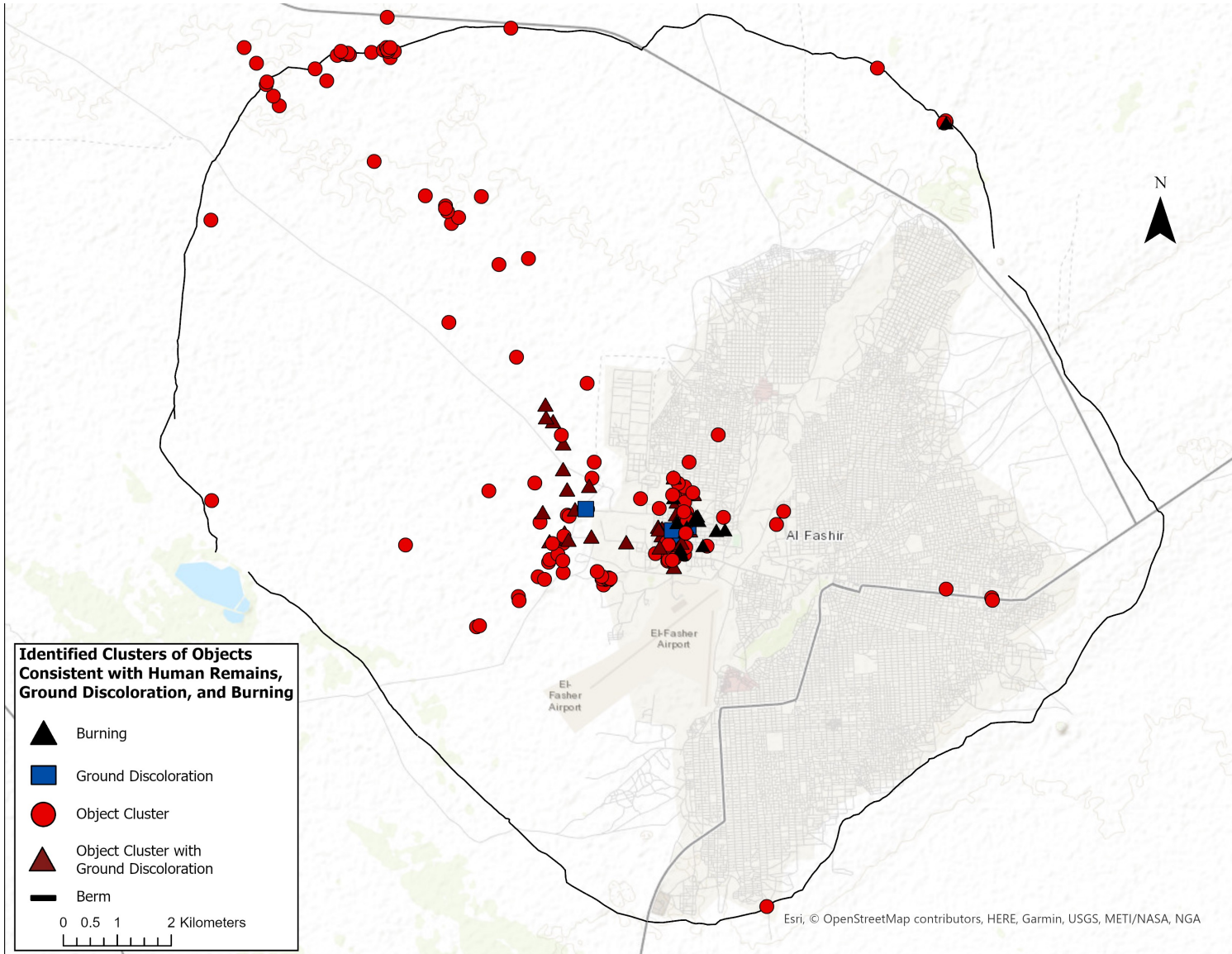
Satellite images collected between 27 September – 28 November 2025 show the new presence of at least:

- 8 instances of disturbed earth;
- 20 instances of burning;
- 5 instances of ground discoloration;
- 117 instances of object clusters; and
- 33 instances of object clusters with ground discoloration.

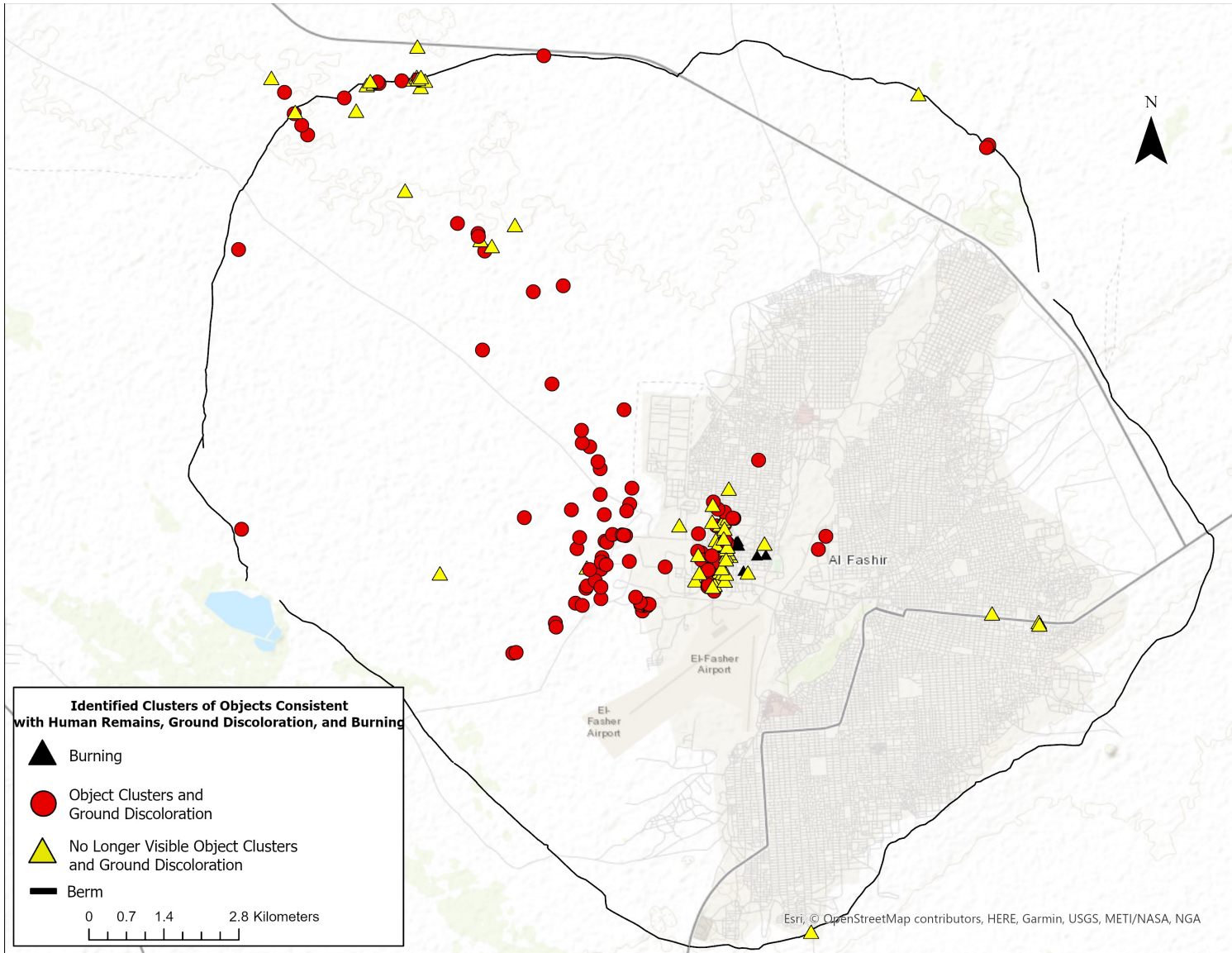




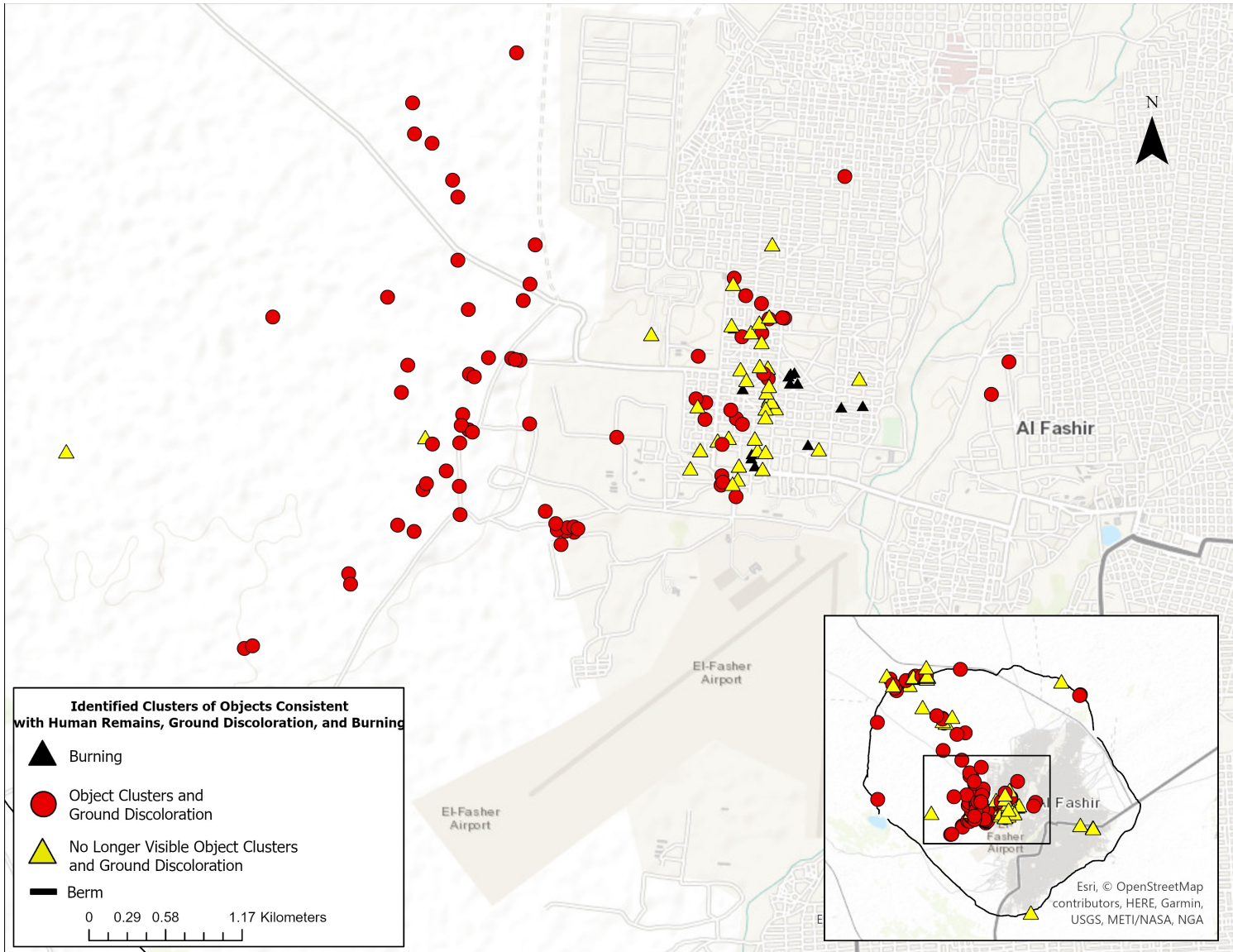
Phenomena newly identified in Daraja Oula neighborhood and outer area, 27 October - 28 November 2025



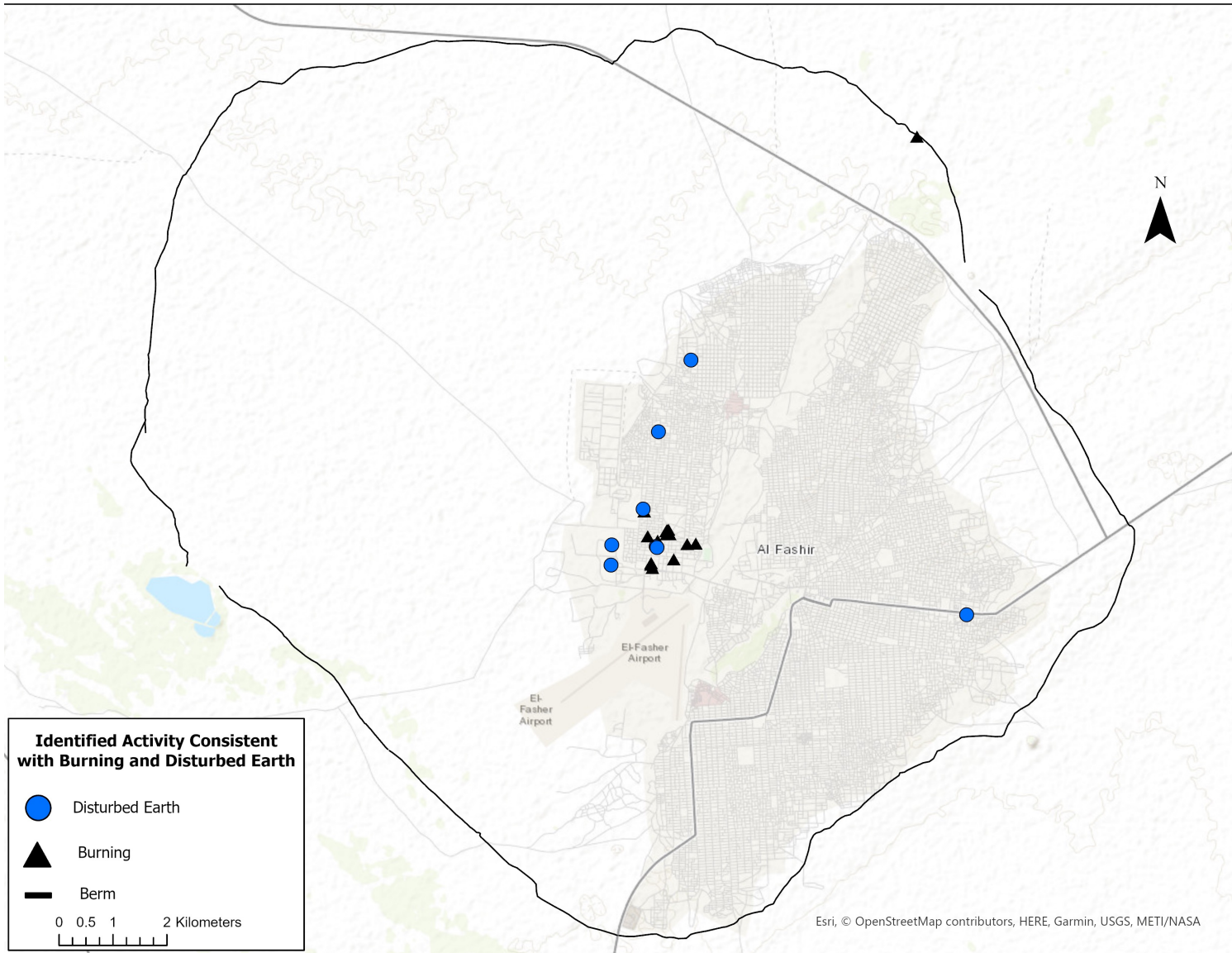
Events first visible in satellite imagery between 27 October and 28 November 2025, Greater EI-Fasher AOI



Change in activity: Clusters no longer visible, ground discoloration. Greater El-Fasher, 27 October through 28 November 2025



Change in activity: Clusters no longer visible, ground discoloration, burning.
 Daraja Oula neighborhood, 27 October through 28 November 2025



Events consistent with disturbed earth, newly visible between 27 October and 28 November 2025.

ENDNOTES

1. This systematic assessment builds on previous rapid reporting conducted by Yale HRL, including:

Raymond, Nathaniel A., Caitlin Howarth, et al. "HUMAN SECURITY EMERGENCY EI-Fasher Falls to RSF: Evidence of Mass Killing," 27 October 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/876b4afc-e1da-495b-ac32-b5098699a371>, archived at <https://perma.cc/STN9-R74Y>

Raymond, Nathaniel A., Howarth, Caitlin et al. "HUMAN SECURITY EMERGENCY Day Two of RSF Control: Mass Killings Continue in EI-Fasher." 28 October 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/b9c14991-6b22-492e-9e16-f903d25d9b49>, archived at <https://perma.cc/3GQT-EV56>;

Raymond, Nathaniel A. and Caitlin Howarth et al. "Atrocity Alert: RSF Mass Killings Persist in EI-Fasher." 31 October 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/bc5a6e36-8da3-452a-8ad9-18eac96ec064>, archived at <https://perma.cc/XR8P-DTBK>

Raymond, Nathaniel A. and Caitlin Howarth et al. "ATROCITY ALERT Body Disposal and Mass Killing in RSF-Controlled EI-Fasher," 04 November 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/8163d430-7a33-458e-be60-f0022a6c31d2>, archived at <https://perma.cc/H383-YZHK>

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Andersen, Daniel, Caitlin Howarth, Olivia Mooney, and Nathaniel A. Raymond et al. "ATROCITY ALERT: Empty Markets, Ongoing Body Disposal in EI-Fasher." 21 November 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/24ec5a80-6cd6-4145-addf-4ec88149a388>, archived at <https://perma.cc/B3QB-QZJT>

2. Howarth, Caitlin N., Kaveh Khoshnood, Andrew Marx, Nathaniel A. Raymond, et al. "SITUATIONAL AWARENESS REPORT, Report 003", 22 June 2023, Sudan Conflict Observatory: Washington, DC. <https://files-profile.medicine.yale.edu/documents/d0f93b8d-f17d-410f-beed-2c34be65ddd4>, archived at <https://perma.cc/KS3B-QKU5>.

3. Goodwin, Allegra, Sarah Dean, Aziz Alnour, Monica C. Camacho, Sabrina Slipchenko, Tessa Pang, Klaas van Dijken et al. "Bodies in the canals" *CNN*, 16 December 2025. <https://www.cnn.com/interactive/2025/12/africa/sudan-army-saf-ethnic-killings-canals-intl-invs-vis/>, archived at <https://perma.cc/6R49-4BVK> .

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6. Yale HRL first reported on this activity consistent with RSF conducting systematic mass killings in these neighborhoods in the following reporting:

Raymond, Nathaniel A., Caitlin Howarth, et al. "HUMAN SECURITY EMERGENCY EI-Fasher Falls to RSF: Evidence of Mass Killing," 27 October 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven, <https://files-profile.medicine.yale.edu/documents/876b4afc-e1da-495b-ac32-b5098699a371>, archived at <https://perma.cc/STN9-R74Y>;

Raymond, Nathaniel A., Howarth, Caitlin et al. "HUMAN SECURITY EMERGENCY Day Two of RSF Control: Mass Killings Continue in EI-Fasher." 28 October 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/b9c14991-6b22-492e-9e16-f903d25d9b49>, archived at <https://perma.cc/3GQT-EV56>

Raymond, Nathaniel A. and Caitlin Howarth et al. "Atrocity Alert: RSF Mass Killings Persist in EI-Fasher." 31 October 2025.

Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/bc5a6e36-8da3-452a-8ad9-18eac96ec064>, archived at <https://perma.cc/XR8P-DTBK>.

7. Eltahir, Nafisa, "Men shot by the hundreds, disappeared after Sudanese city falls to paramilitaries, witnesses say." *Reuters*, 31 October 2025. Available at <https://www.reuters.com/world/africa/men-shot-by-hundreds-disappeared-aftersudanese-city-falls-paramilitaries-2025-10-31/> archived at <https://perma.cc/5TDA2XKF>;
8. First reported in Raymond, Nathaniel A. and Caitlin Howarth et al. "Atrocity Alert: RSF Mass Killings Persist in El-Fasher." 31 October 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/bc5a6e36-8da3-452a-8ad9-18eac96ec064>, archived at <https://perma.cc/XR8P-DTBK>
9. Sudan Tribune. "نوي بربت نادوس - ثتجال قرحتو رشافلالي في ني ندمال فالآ زجتحت «عيرسلا معدلا»: دوهش" *Sudan Tribune*. 9 November 2025. <https://sudantribune.net/article/306950>, archived at <https://perma.cc/339C-53DT>;
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- HRL_MMC_145, redacted for human security concerns;
10. Sudan Tribune, "نوي بربت نادوس - ثتجال قرحتو رشافلالي في ني ندمال فالآ زجتحت «عيرسلا معدلا»: دوهش" *Sudan Tribune*, 9 November 2025. <https://sudantribune.net/article/306950>, archived at <https://perma.cc/339C-53DT>
11. Yale HRL previously reported on mass killings at the former Children's Hospital in the following reports:
Raymond, Nathaniel A., Howarth, Caitlin et al. "HUMAN SECURITY EMERGENCY Day Two of RSF Control: Mass Killings Continue in El-Fasher." 28 October 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/b9c14991-6b22-492e-9e16-f903d25d9b49>, archived at <https://perma.cc/3GQT-EV56>;
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- Raymond, Nathaniel A. and Caitlin Howarth et al. "ATROCITY ALERT RSF Closed Berm Exit and Ongoing Body Disposal Operations in El-Fasher." 6 November 2025. Humanitarian Research Lab at Yale School of Public Health: New Haven. <https://files-profile.medicine.yale.edu/documents/7db4031a-066c-4833-87c9-eea3897219b2>, archived at <https://perma.cc/3YGW-T4XB>.
12. El-Fasher Committees Resistance of Coordination. "السنعودي الامستشفي داخل والمصايبىن الجرحى كل" Facebook. 28 October 2025. <https://www.facebook.com/share/1BgBTGHy2e/> archived at <https://archive.ph/myWDM>;
- "ي نادوسلا شىجالى جرح جلاعات اهنا لوقت عيرسلا معدلا تاوق: رشافلالي فشتسم تاهوى دى ل ع" *Arabiya Al 31*, Facebook 30 October 2025. <https://www.facebook.com/AlArabiya/videos/%D8%B1%D8%AF%D8%A7%D9%8B-%D8%B9%D9%84%D9%89-%D9%81%D9%8A%D8%AF%D9%8A%D9%88%D9%87%D8%A7%D8%AA-%D9%85%D8%B3%D8%AA%D8%B4%D9%81%D9%89-%D8%A7%D9%84%D9%81%D8%A7%D8%B4%D8%B1-%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%D9%82%D9%88%D9%84-%D8%A5%D9%86%D9%87%D8%A7-%D8%AA%D8%B9%D8%A7%D9%84%D8%AC-%D8%AC%D8%B1%D8%AD%D9%89-%D8%A7%D9%84%D8%AC%D9%8A%D8%B4-%D8%A7%D9%84%D8%B3/2053725785460303/>, archived at <https://perma.cc/5KMS-VJZF>;
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13. Widespread Reporting Including:

Eltahir, Nafisa, "Men shot by the hundreds, disappeared after Sudanese city falls to paramilitaries, witnesses say." *Reuters*, 31 October 2025. Available at <https://www.reuters.com/world/africa/men-shot-by-hundreds-disappeared-aftersudanese-city-falls-paramilitaries-2025-10-31/> archived at <https://perma.cc/5TDA2XKF>;

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Elbagir, Yousra. "Thousands targeted in 'killing fields' around Sudanese city in paramilitary group's hands." *Sky News*. 4 November 2025. <https://news.sky.com/story/tens-of-thousands-missing-in-killing-fields-around-city-in-hands-of-sudans-paramilitary-group-13463324>,

Bellingcat (@bellingcat) "Bellingcat has geolocated footage of a mass killing..." X, formerly known as Twitter, 31 October 2025. <https://x.com/bellingcat/status/1984287019678515289>, archived at <https://perma.cc/6FSJ-6QKV>

Amin, Mohanmed and Oscar Rickett. "Rape, ransom and execution: The road out of Sudan's el-Fasher." *Middle East Eye*, 5 November 2025. <https://www.middleeasteye.net/news/rape-ransom-and-execution-road-out-sudans-el-fasher>, archived at <https://perma.cc/23X8-ZBMH>

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