

10 December 2025

Version 1.1



Satellite-based Damage Assessment

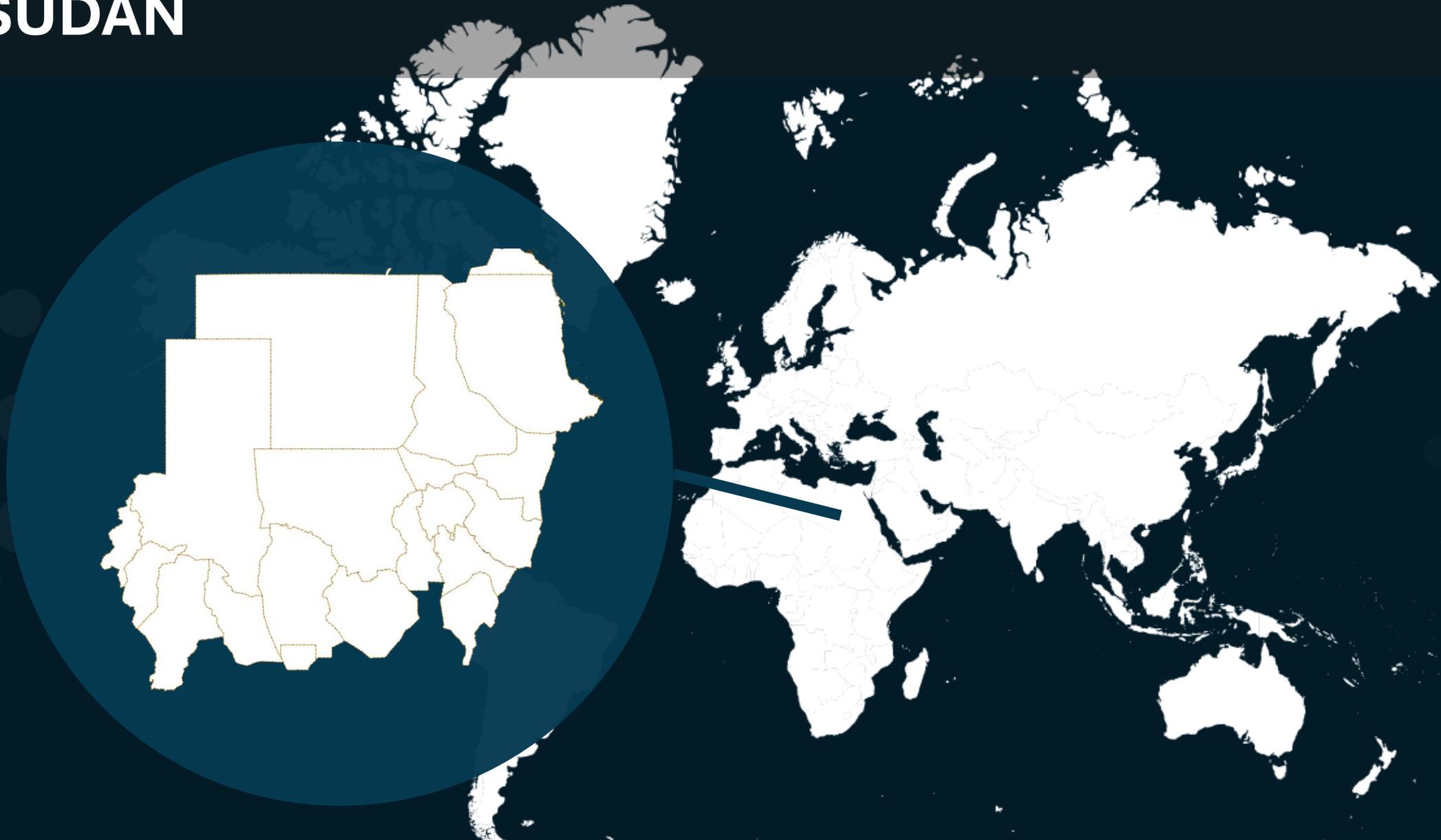
Sectoral Analysis: Cultural Heritage

Sudan

CE20231504SDN



SUDAN



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The United Nations Satellite Centre (UNOSAT) is not responsible for the misuse or misrepresentation of any maps throughout this report.

Sudan: Overview



This report establishes a dedicated satellite-based monitoring initiative to assess and document damage to Sudan's heritage.

UNOSAT has undertaken several ad-hoc requests to conduct damage assessments across Sudan, particularly in Khartoum and the Darfur region; and responded to activations of the Emergency Mapping Service following flooding in Darfur in August and September 2024 (Charter Activations [906](#) and [917](#)). Building on UNOSAT's previous ad hoc damage assessments, the emergency mapping in Darfur, and in support of the National Corporation for Antiquities and Museums (NCAM), this UNOSAT report has worked to map and analyse several at-risk sites across the country.

Since April 2023, the conflict in Sudan has placed the country's cultural and archaeological heritage under severe threat. Many sites and collections face damage, looting, or neglect amid ongoing insecurity and limited access. Satellite imagery and geospatial technologies play a vital role in helping monitor and document these at-risk areas, providing essential information where ground assessments are not possible.

The report leverages satellite-imagery, including the review of archival imagery from 2023 to November 2025, to build a comprehensive record of the conflict's impact and extent on heritage assets. Necessarily, this involves also acknowledging observed damage from the flood events that took place during the same time frame. The satellite imagery analyses included in this report can serve to provide an independent line of evidence that may support future accountability processes and serve as a vital source of information for heritage professionals working to protect and preserve Sudan's cultural legacy.

Please note this report and current assessment focuses on a targeted number of sites, both cultural landscapes and built heritage, across Sudan and does not cover all heritage sites within the country. Further analysis is required of additional cultural heritage sites across Sudan that were beyond the scope of the present report.

UNESCO DEFINITION OF CULTURAL HERITAGE

Cultural heritage includes artefacts, monuments, a group of buildings and sites, museums that have a diversity of values including symbolic, historic, artistic, aesthetic, ethnological or anthropological, scientific and social significance.

CATEGORIES OF CULTURAL HERITAGE



BUILT HERITAGE:

Built heritage typically refers to artificially fabricated structures, buildings, monuments, and other architecture that has cultural, historical, architectural, artistic, or engineering significance.



CULTURAL LANDSCAPE:

A cultural landscape is defined as a geographic area, including cultural resources that may be associated with a historic event, activity, or person; or otherwise exhibit cultural values that may be either above or below ground (e.g., ruins, archaeological layers)

DEFINITIONS – Damage Levels for Built Heritage

DAMAGE LEVELS – BUILT HERITAGE



NO VISIBLE DAMAGE – Assessed cultural heritage site structures do not appear damaged.



No visible debris.



POSSIBLE DAMAGE – Assessed cultural heritage site structures do not appear damaged, but debris is visible around the assessed site.



Visible debris around the built heritage.



MODERATE DAMAGE – Limited damage observed relating to key elements of the cultural heritage site (5-40 per cent of structure damaged).



Holes in the roof or small sections of the building heritage are missing.



SEVERE DAMAGE – A significant part of the visible key elements of the cultural heritage site has collapsed or is partially damaged (40-80 per cent of structure damaged).



Part of the built heritage has collapsed and debris may be visible.



DESTROYED – All or most of the visible key elements of the assessed cultural heritage site have collapsed (80-100 per cent of structure destroyed).



The built heritage has collapsed and there may be substantial debris. In some cases, the built heritage may be no longer visible.

DEFINITIONS – Damage Levels for Cultural Landscapes

DAMAGE LEVELS – CULTURAL LANDSCAPE



NO VISIBLE DAMAGE – Assessed cultural heritage site structures do not appear damaged.



POSSIBLE DAMAGE – Assessed cultural heritage site structures do not appear damaged, but debris is visible around the assessed site.



MODERATE DAMAGE – Limited damage observed relating to key elements of the cultural heritage site (5-40 per cent of structure damaged).



SEVERE DAMAGE – A significant part of the visible key elements of the cultural heritage site has collapsed or is partially damaged (40-80 per cent of structure damaged).



DESTROYED – All or most of the visible key elements of the assessed cultural heritage site have collapsed (80-100 per cent of structure destroyed).

WHAT DO YOU SEE ON IMAGERY?



The cultural landscape appears to remain undisturbed.



Any change that may be near the site and may affect it or within the site.



It can be a physical destruction, environmental degradation, neglect, erosion of cultural practices, conflicts, and climate change impacts.

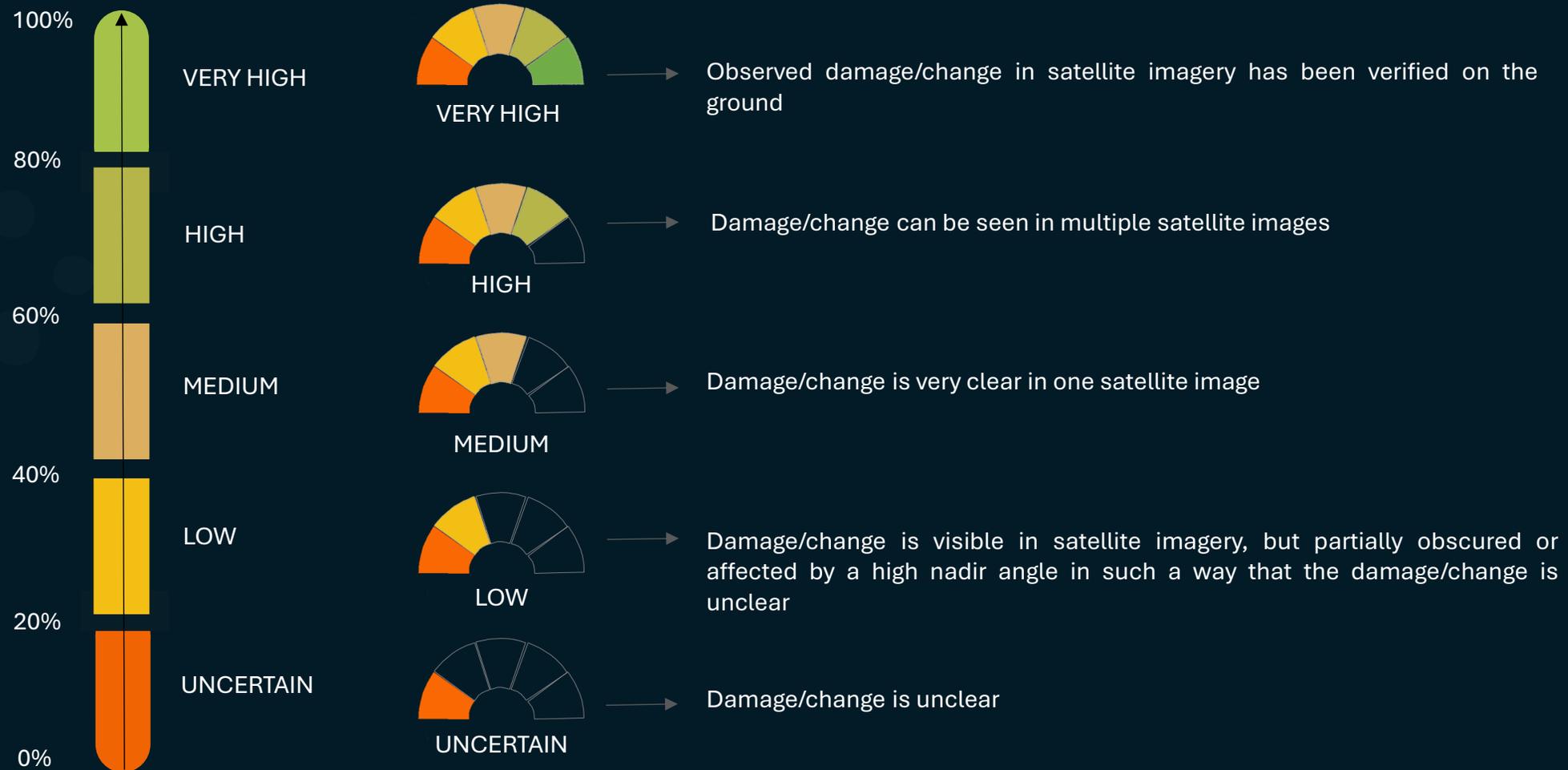


The damage is very visible on the site and can be translated into aggressive excavation, the presence of several piles of sand, etc...



Collapse or broken assets inside the site. The perception of the landscape is totally altered.

DEFINITIONS – Satellite damage assessment confidence levels



DISCLAIMER - Satellite Imagery

About very-high resolution satellite imagery

Very high-resolution (VHR) satellite imagery refers to commercial satellite images that can capture features on the ground at a scale of less than one meter, throughout this report usually 30-50cm imagery is used. This level of detail makes it possible to identify buildings, roads and infrastructure and with a high degree of precision.

VHR imagery is captured by a limited number of commercial satellites that task their sensors over specific locations. Availability depends on satellite revisit schedules, weather conditions, cloud cover and global demand for imagery tasking. As a result, the most recent or highest-quality images are not always available for every location at all times. UNOSAT often combines multiple sources and dates to ensure accurate assessments.

Please also note that several sites analysed in this report, especially some of the buildings such as museums, have ground reports of looting and building damage to facades, internal walls and windows. Due to their top-down view, satellite-derived assessments are limited in their ability to reliably detect damage that occurs on the sides of buildings such as broken windows or damaged doors. Moreover, often destruction to the interior of a structure is not visible, unless significant damage has also taken place to the roof. Even very high-resolution imagery cannot always identify small-scale or fine-grained damage to cultural heritage sites, nor is it possible to detect the looting of movable objects. In some cases, even moderate structural damage to walls or roofs may not be discernible due to the angle of the image, shadowing, or tree cover.

Additionally, reports of military activity at certain sites, including the presence of landmines and other unexploded ordnance, fall outside the detection capability of this methodology. As a result, in some instances the level of damage observed through the satellite-derived assessment may underestimate conditions on the ground.

For these reasons, any statement indicating 'no visible damage' reflects only what can be seen through satellite imagery at the time of analysis and image capturing. Ground-based verification remains essential for a comprehensive damage assessment.

UNOSAT uses the highest-resolution commercial satellite imagery available to support these assessments. Where possible, analysis is conducted using 30cm imagery, which provides the greatest level of detail currently accessible for civilian use. However, some areas can only be covered using 40-50cm resolution imagery, depending on satellite archive availability and access.

DISCLAIMER – Satellite Imagery

Satellite Imagery Off-Nadir Angle

This report shows a satellite-derived damage assessment over several heritage sites across Sudan. Throughout this report different types of satellite imagery has been used, sometimes showing before and after comparisons.

Satellite imagery can be taken at many angles (off-nadir angle). The orthorectification process for placing satellite imagery in geographic space always contains some error. This can result in minor ‘shifts’ between images of a few metres. Sometimes site boundary polygons drawn in one satellite image may not appear perfectly around a property in another image.

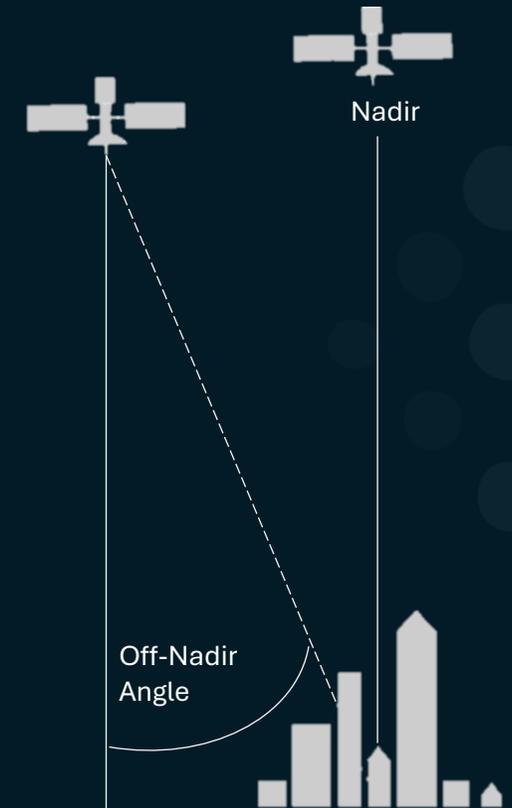
Site Locations

Property locations and extents have been digitised by UNOSAT, provided by partners and obtained from open-source data, such as OpenStreetMap, WikiMapia and GoogleMaps. When using open-source data to obtain locations, UNOSAT uses a multi-step verification process to ensure locations and boundaries are as accurate as possible. This verification process is a preliminary form of analysis that has not yet been validated in the field. Site analysis areas are indicated throughout this report on maps as white boundaries.

Map Disclaimers

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The United Nations Satellite Centre (UNOSAT) is not responsible for the misuse or misrepresentation of any maps throughout this report. This report contains a preliminary analysis and has not yet been validated in the field. Please send ground feedback to United Nations Satellite Centre (UNOSAT).



DISCLAIMER – Image Licensing

Image Licensing

Throughout this report very-high resolution satellite imagery has been used from several sources. UNOSAT has access to very high-resolution commercial satellite imagery from multiple providers, including access through in-kind contributions from Member States. Due to licensing and sharing restrictions, some of the imagery used in the analysis cannot be displayed in this report.

As a result, the satellite imagery visuals shown throughout the report may use alternative or older imagery, while the analytical results are based on the most recent data available to UNOSAT. UNOSAT supplements these datasets with open-source imagery and procured imagery when possible. However, availability is subject to financial constraints and licensing agreements. For transparency, the date of the satellite image used for each analysis is always indicated in the assessment, even if the background image shown originates from a different date.



Analysed Sites

Using available very-high resolution satellite imagery, UNOSAT has undertaken a comprehensive damage assessment of over 50 sites across Sudan.

These sites have been divided into the following four sections, which make up this report.

1. UNESCO World Heritage Sites
2. UNESCO Tentative List Sites
3. Built Cultural Heritage within 5 cities
 - Khartoum
 - El Fasher
 - El Obeid
 - Nyala
 - El Geneina
4. Archaeological sites across North Darfur



Further analysis is required of additional cultural heritage sites across Sudan that were beyond the scope of the present report.

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1. UNESCO World Heritage Sites

- The Archaeological Sites of the Island of Meroë
- The Gebel Barkal and the Sites of the Napatan Region

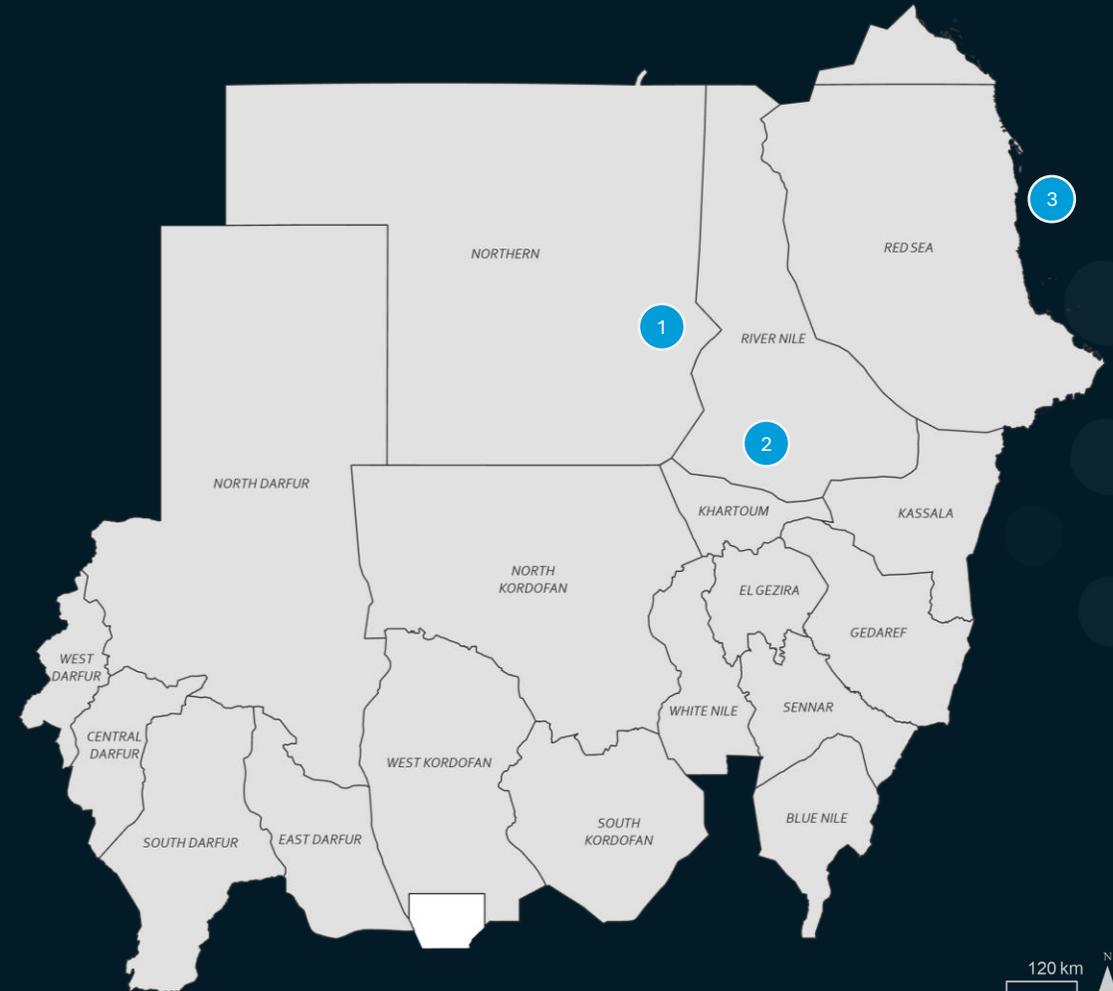


Sudan: UNESCO World Heritage Sites

Sudan is home to three UNESCO World Heritage Sites that reflect its rich and diverse cultural history.

1. The Archaeological Sites of the Island of Meroë, located along the Nile in northern Sudan, showcase the remains of the Kingdom of Kush, including royal pyramids and temples that highlight the country's ancient Nubian civilization.
2. The Gebel Barkal and the Sites of the Napatan Region encompass temples, tombs, and palaces that illustrate the fusion of Pharaonic and indigenous African cultures.
3. The Sanganeb Marine National Park and Dungonab Bay–Mukkawar Island Marine National Park represent unique natural heritage, preserving Sudan's Red Sea coral ecosystems and marine biodiversity ([UNESCO, 2025](#)).

This report will include analysis on two World Heritage Sites, as they are cultural heritage sites located in areas affected by the ongoing conflict.



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Archaeological Sites of the Island of Meroë

About



The Island of Meroë is the heartland of the Kingdom of Kush, a major power in the ancient world from the 8th century BCE to the 4th century CE. The property consists of three separate site components, Meroë, the capital, which includes the town and cemetery site, and Musawwarat es-Sufra and Naqa, two associated settlements and religious centres. The Meroë cemetery, Musawwarat es-Sufra, and Naqa are located in a semi-desert, set against reddish-brown hills and contrasting with the green bushes that cover them, whilst the Meroë town site is part of a riverine landscape.

These three sites comprise the best-preserved relics of the Kingdom of Kush, encompassing a wide range of architectural forms, including pyramids, temples, palaces, and industrial areas that shaped the political, religious, social, artistic and technological scene of the Middle and Northern Nile Valley for more than 1000 years (8th century BC-4th century AD). These architectural structures, the applied iconography and evidence of production and trade, including ceramics and iron-works, testify to the wealth and power of the Kushite State. The water reservoirs in addition contribute to the understanding of the paleoclimate and hydrological regime in the area in the later centuries BCE and the first few centuries CE ([UNESCO, 2025](#)).



Ron Van Oers. © UNESCO



Ron Van Oers. © UNESCO

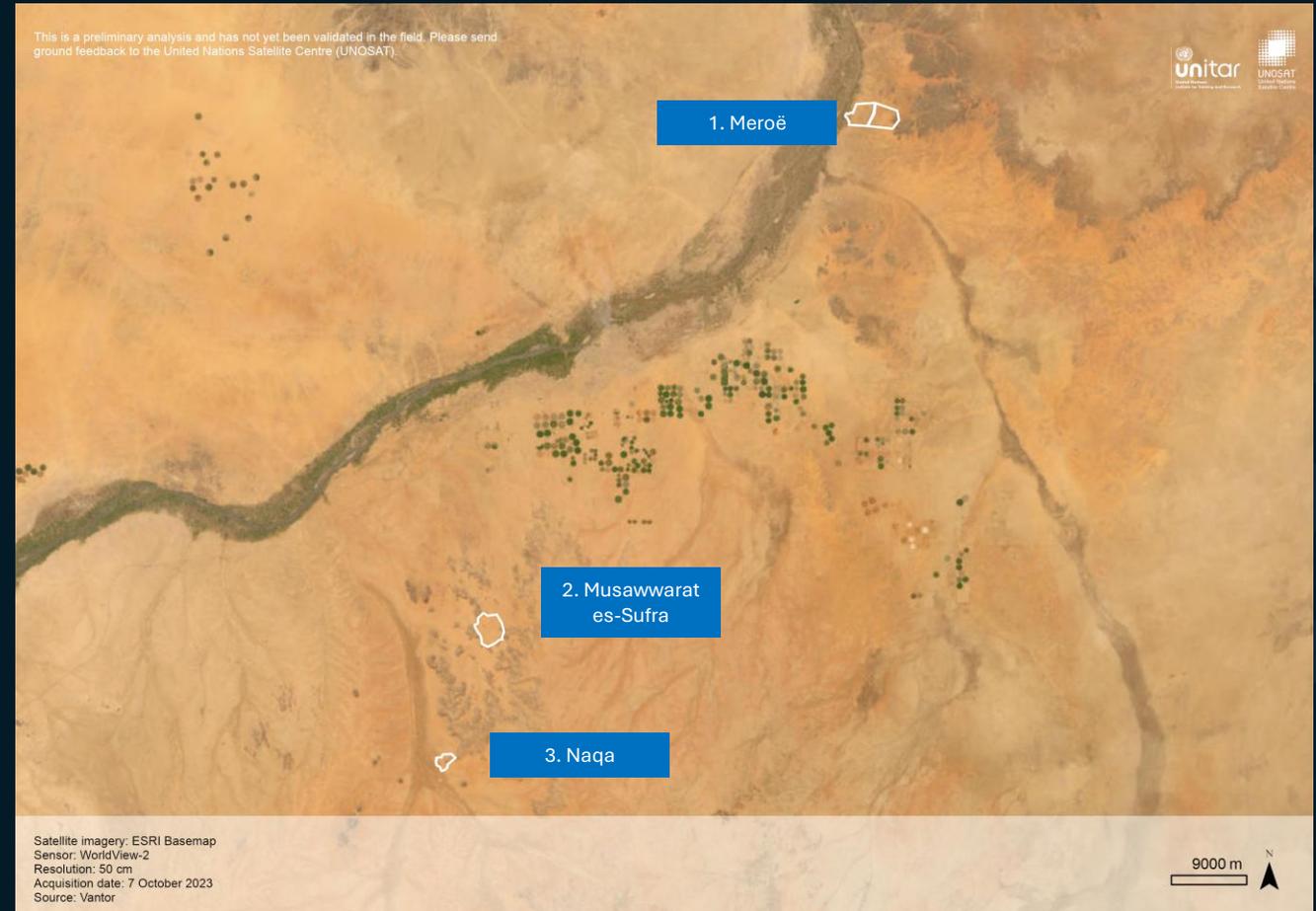
Archaeological Sites of the Island of Meroë

Overview

The Archaeological Sites of the Island of Meroë, including all three components, are under growing threat amid the ongoing conflict in Sudan. While there is no confirmed large-scale physical destruction, shown in satellite imagery or online reports, UNESCO report a range of indirect and emerging risks ([UNESCO, 2024](#)).

Military activity been present in the area, especially around Musawwarat es-Sufra and Naqa, with reports of fighting between groups in the vicinity, possibly leading to site vandalism, destruction, looting and theft ([Dabanga Sudan, 2024](#)).

Massive displacement has also led to uncontrolled visitation at Meroë, including reports of people climbing on pyramids, graffiti and construction within its buffer zone, threatening both its monuments and fragile archaeology. Natural processes such as heavy rainfall, wind-blown sand, increased vegetation and degradation of protective earthworks are also accelerating erosion and structural damage. Conservation efforts have largely stalled: scientific missions have been suspended, and unfinished excavations and restorations remain vulnerable ([UNESCO, 2025](#)).



Three components of the Archaeological Sites of the Island of Meroë World Heritage Site.

1. Meroë - Archaeological Sites of the Island of Meroë

Shendi, River Nile, Sudan

12 APRIL 2024



MODERATE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a GeoEye-1 satellite on the 12 April 2024.

Within the analysed area, 270 changes were detected:

- 45 no visible damage

Several area marked no visible damage was due to changes in settlement and fencing structures, mainly due to decay.

- 62 possible damage

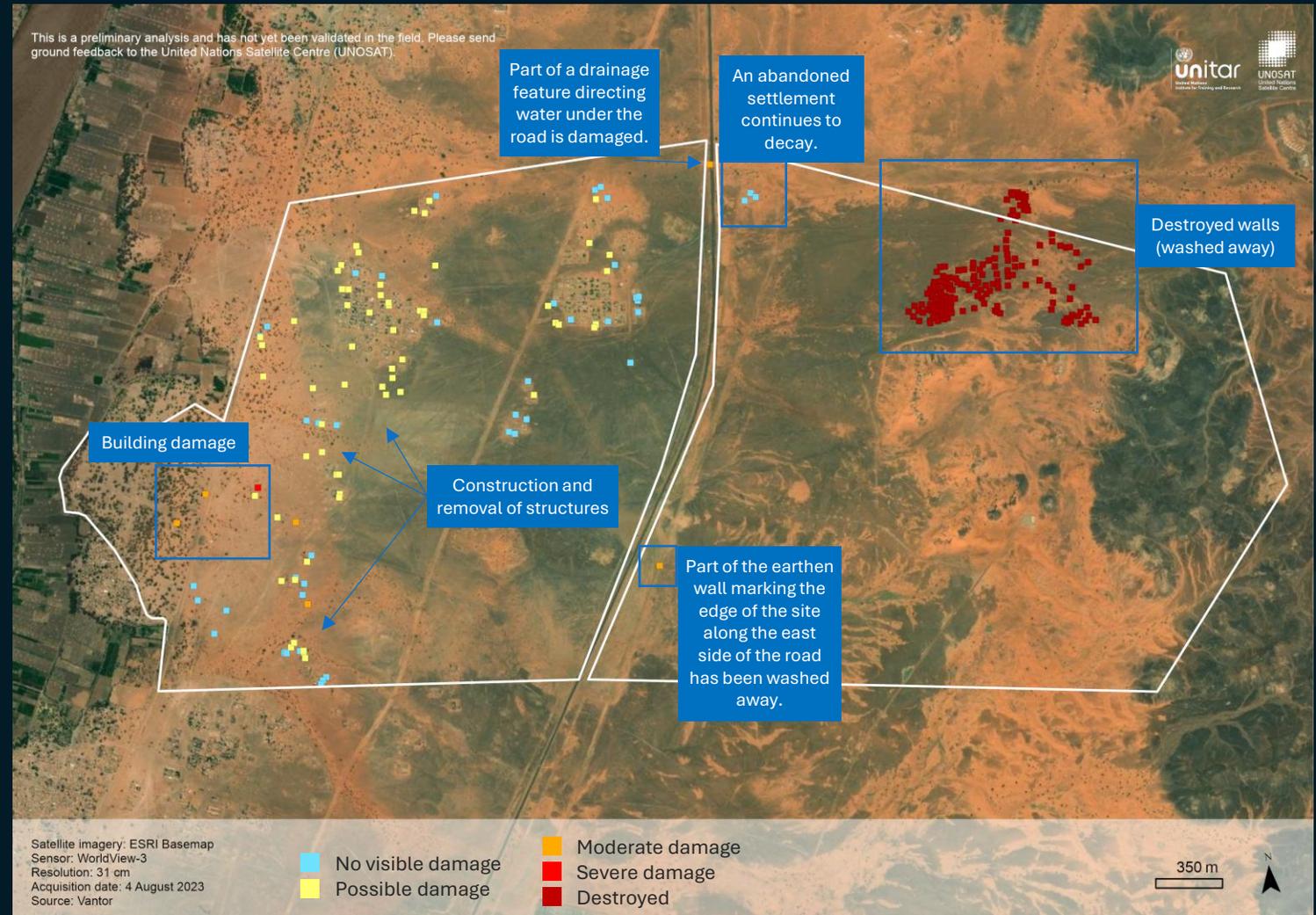
Several possible damage areas were marked due to construction, renovation and removal of structures, with modern settlements located on the site.

- 6 moderate damage and 1 severe damage

In a few instances, some modern buildings on the site appear to have been damaged, e.g. a hole in the roof, partial structural collapse and debris visible.

- 157 destroyed

A series of walls to control water flow across a wadi basin have been washed away, resulting in several markings of destroyed features on the site.



1. Meroë - Archaeological Sites of the Island of Meroë

Shendi, River Nile, Sudan

31 MAY 2025



MODERATE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-1 satellite on the 31 May 2025.

Within the analysed area, 438 changes were detected, an increase of 168 changes since the previous assessment.

- 105 no visible damage

Several areas marked no visible damage were due to changes in settlement and fencing structures, mainly due to decay. In addition, several soil mounds and large earth mounds have been observed, indicative of further possible damage.

- 168 possible damage

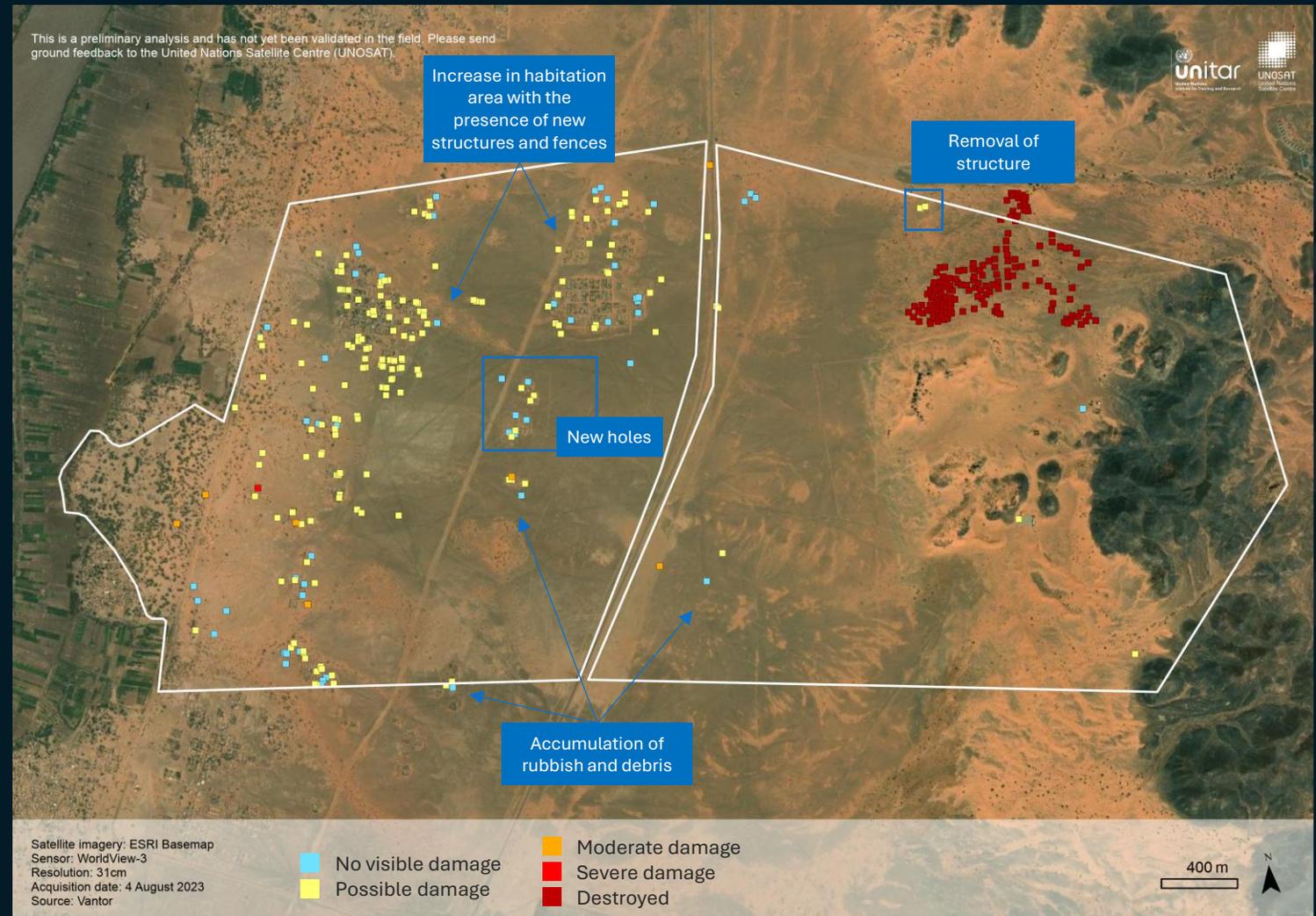
Large increase in possible damage locations, due to an increase in habitation areas, with several new structures appearing since the previous assessment. In addition, there has also been removal or decay of existing structures, such activities may disturb or impact any shallow archaeological layers. There was also several locations where vehicle marks are present, leading to/ from the small habitation areas.

- 7 moderate damage and 1 severe damage

Only one additional moderately damaged feature, due to structure damage since last assessment.

- 157 destroyed

No increase in destroyed features since last assessment.



2. Musawwarat es-Sufra - Archaeological Sites of the Island of Meroë

Shendi, River Nile, Sudan

7 OCTOBER 2023



POSSIBLE
DAMAGE



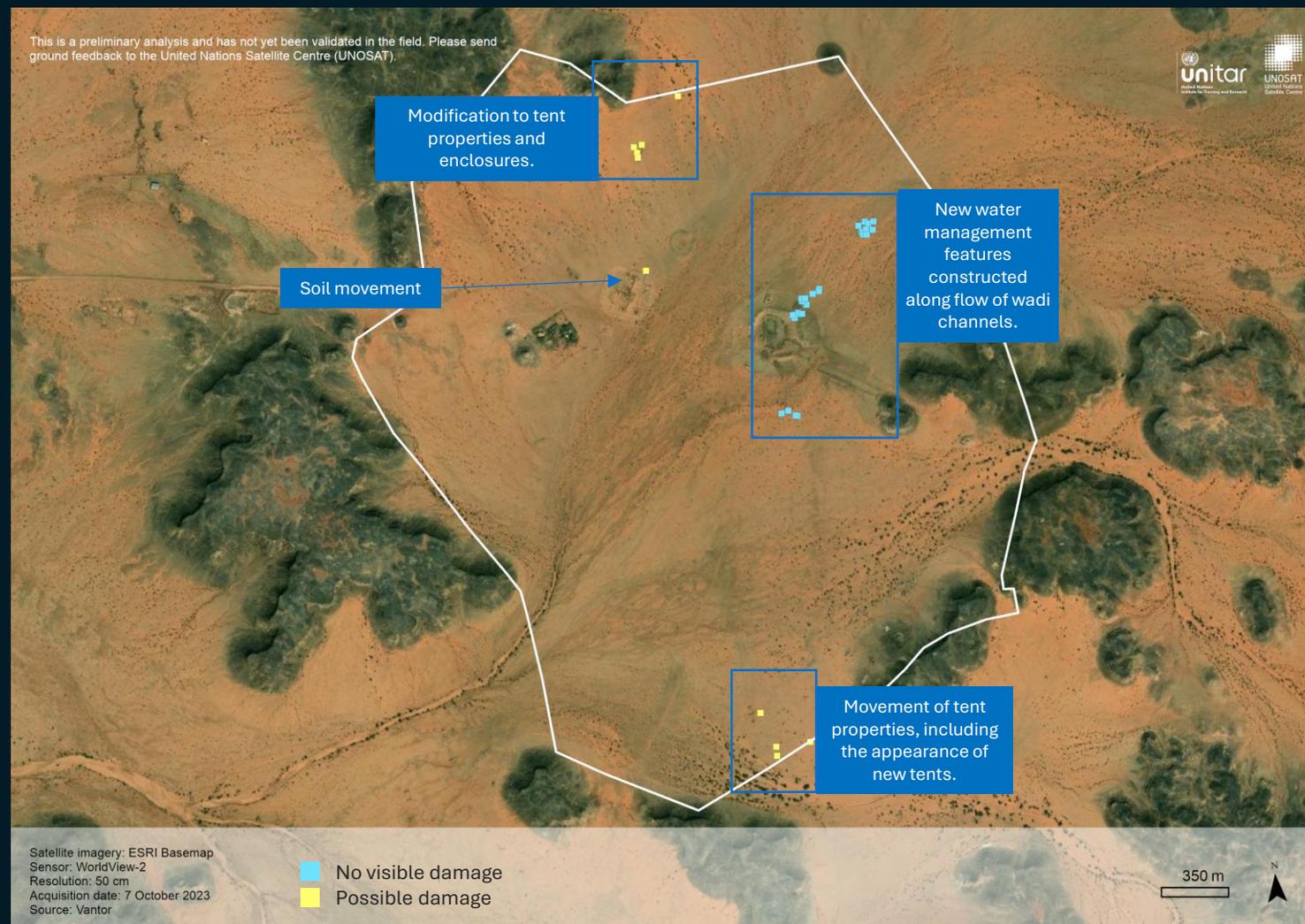
This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 7 October 2023.

Within the analysed area, 35 locations showed changes with 25 locations of no visible damage and 10 locations with possible damage.

Several areas with changes observed as no visible damage were identified due to new water management features constructed along the flow of wadi channels.

Possible damage locations were due to the movements and modification of structures, tents and enclosures. As well as one location where soil movement could indicate possible damage.

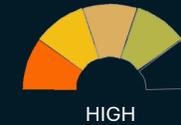
These activities may disturb or impact any shallow archaeological layers.



2. Musawwarat es-Sufra - Archaeological Sites of the Island of Meroë

Shendi, River Nile, Sudan

25 JUNE 2025



MODERATE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 25 June 2025. Within the analysed area, 66 locations showed changes, an increase of 31 locations since the last assessment.

- 25 no visible damage
- 37 possible damage

The increase of possible damage locations include possible damage to the main buildings/ museum on site; as well as new construction of habitation areas. Such activities may disturb or impact any shallow archaeological layers.

- 4 moderate damage

New areas with moderate damage are due to military activity detected within the site boundary with large earth movements present on the western side of the site – including what looks to be a large berm, possibly acting as a roadblock. This berm was first spotted on imagery captured on the 26 September 2024, which also shows possible military vehicles operating around the roadblock, the vehicles have moved by late 2024.

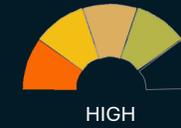
The observed military activity is in line with online reports, suggesting that fighting could have been happening within this area ([Dabanga Sudan, 2024](#))



3. Naqa - Archaeological Sites of the Island of Meroë

Shendi, River Nile, Sudan

7 October 2023



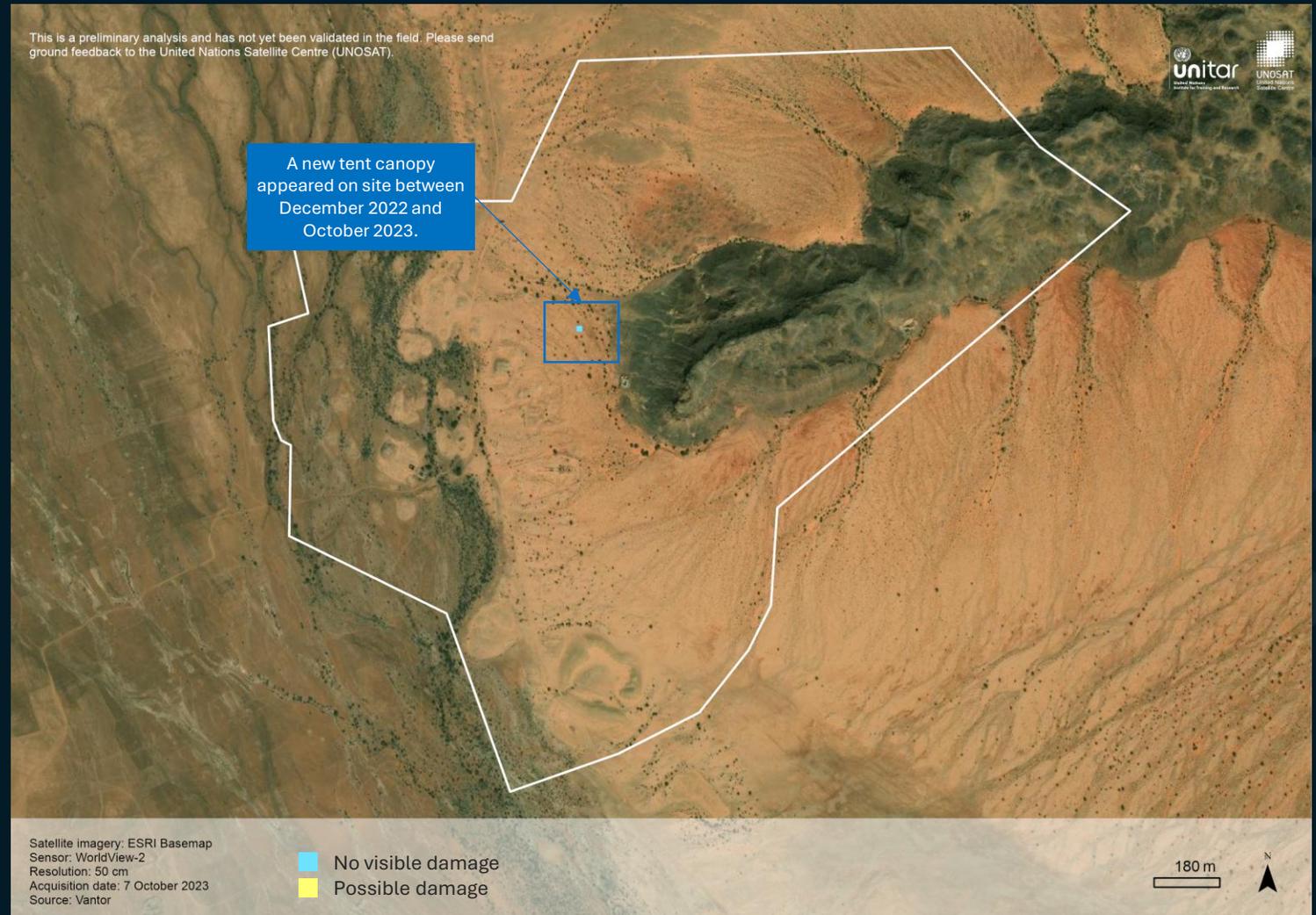
NO VISIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 7 October 2023.

Within the analysed area, one location showed changes of no visible damage. This was due to a new tent canopy appearing on the site between December 2022 and October 2023.

No other change or damage was visible on the site.



3. Naqa - Archaeological Sites of the Island of Meroë

Shendi, River Nile, Sudan

15 NOVEMBER 2024



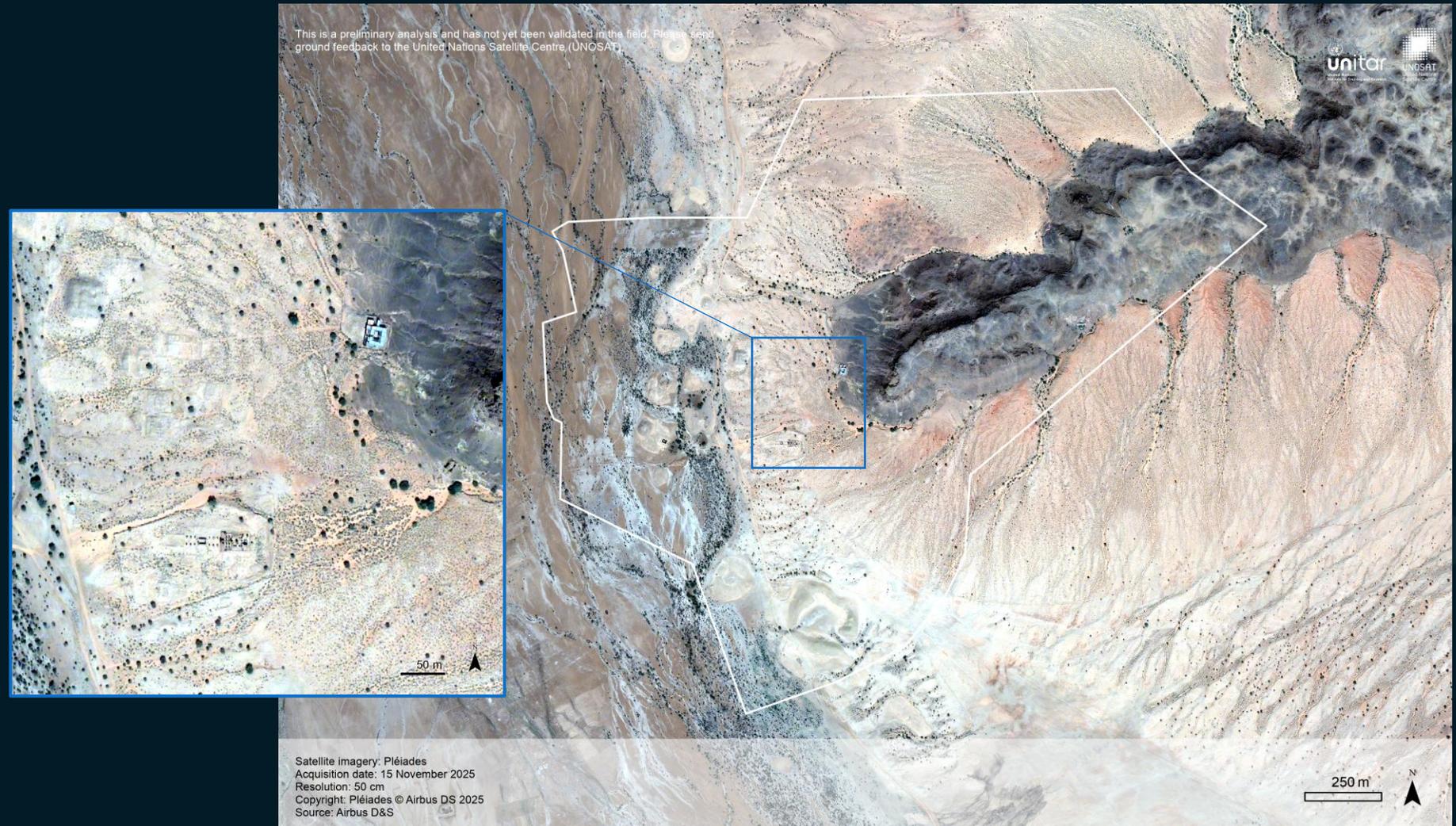
NO VISIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a Pléiades satellite on the 15 November 2024.

Within the analysed area, no visible damage has been detected and no direct evidence of military presence was detected on the site.

Possible indirect evidence of military activity was observed approx. 2-3km south of Naqa. This was present in the form of earth movements and heavy vehicle tracks. The markings first appeared on imagery from October 2023 and have expanded by November 2024.



Gebel Barkal and the Sites of the Napatan Region

About



Gebel Barkal and the Sites of the Napatan Region comprise **five** archaeological sites on both sides of the Nile in an arid area considered part of Nubia. Together they cover an area more than 60 km long. The five sites (Gebel Barkal, Kurru, Nuri, Sanam and Zuma) represent the Napatan (900 - 270 BC) and Meroitic (270 BC - 350 AD) cultures of the second kingdom of Kush. They include tombs, with and without pyramids, temples, burial mounds and chambers, living complexes and palaces. They exhibit an architectural tradition that shaped the political, religious, social and artistic scene of the Middle and Northern Nile Valley for more than 2000 years (1500 BC- 6th Century AD).

These five archaeological sites, stretching over more than 60 km in the Nile valley, are testimony to the Napatan (900 to 270 BC) and Meroitic (270 BC to 350 AD) cultures, of the second kingdom of Kush. Tombs, with and without pyramids, temples, living complexes and palaces, are to be found on the site. Since Antiquity, the hill of Gebel Barkal has been strongly associated with religious traditions and folklore. The largest temples are still considered by the local people as sacred places ([UNESCO, 2025](#)).



Maria Gropa. © UNESCO



Jean-Jacques Gelbart. © Editions Gelbart

Gebel Barkal and the Sites of the Napatan Region

Overview

The five components of Gebel Barkal and the Sites of the Napatan Region have not been directly affected by the ongoing conflict in Sudan; satellite imagery and online reports show.

However, on some sites the condition is deteriorating due to a combination of environmental pressures and the wider humanitarian crisis. Limited resources and access for conservation, compounded by a second severe rainy season in 2024, have hindered maintenance efforts. Large-scale population displacement in the surrounding area has increased pressure on the site through expanded agricultural activity and uncontrolled access ([UNESCO, 2025](#)).

Current threats include indirect impacts from the conflict, inadequate security and a heightened risk of looting and illicit trafficking. Pre-existing deterioration from natural processes, such as erosion, continues to worsen in the absence of effective site management and monitoring.

While Gebel Barkal remains geographically distant from active fighting, it continues to face significant risks from neglect, insufficient oversight and uncontrolled visitor behaviour, all of which further undermine the long-term preservation ([UNESCO, 2024](#)).



Five components of the Gebel Barkal World Heritage Site.

1. Gebel Barkal - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

12 JULY 2024



POSSIBLE
DAMAGE

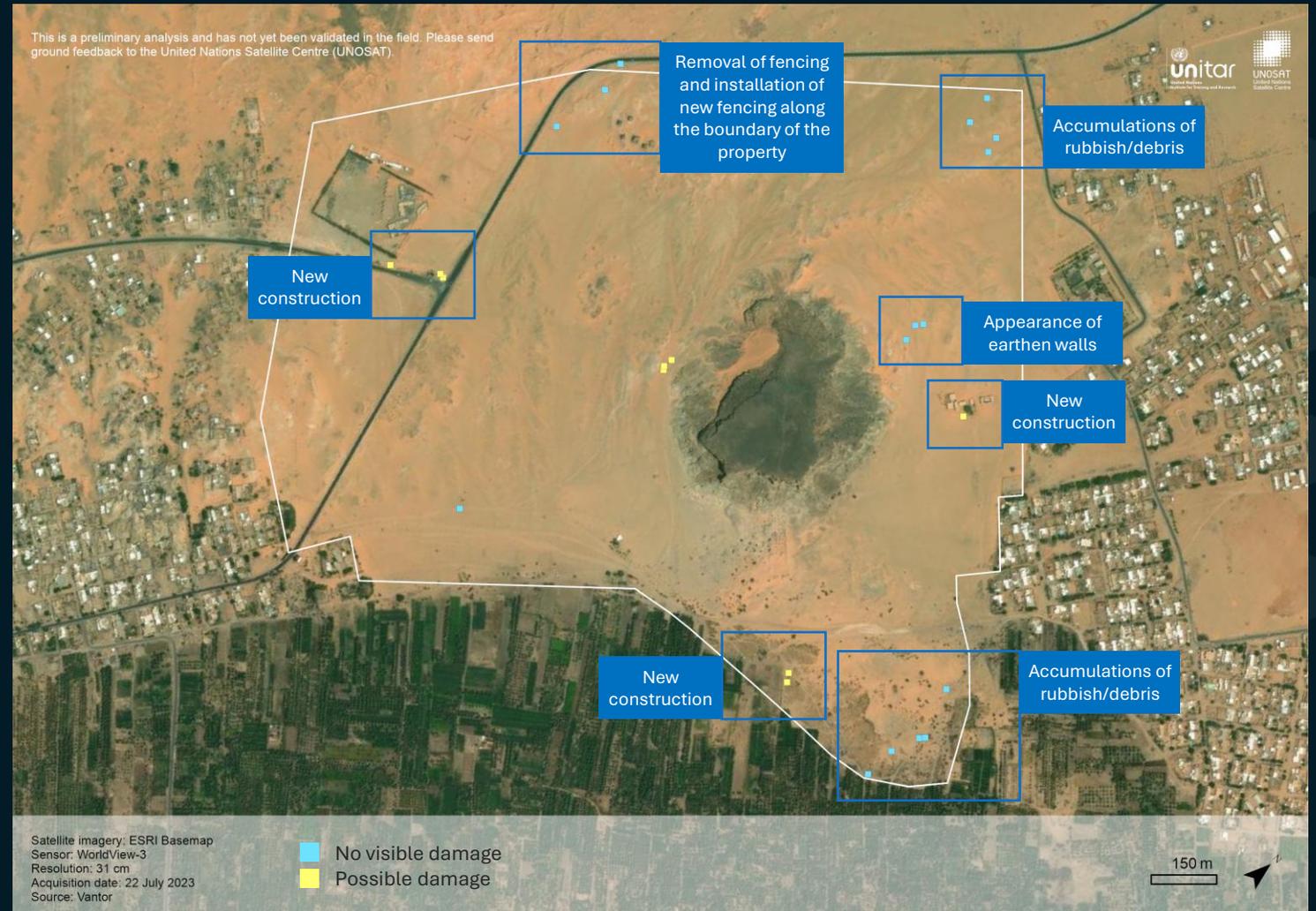


This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 12 July 2024.

Within the analysed area, 19 locations showed changes with no visible damage, while 9 locations exhibited indications of possible damage.

Several areas with no visible damage displayed accumulations of rubbish or debris. Additionally, the site fence has been removed and new fencing along the property boundary looks to be installed.

Instances of possible damage were identified where new structures or fences had been constructed on the site, as such activities may disturb or impact any shallow archaeological layers.



1. Gebel Barkal - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

3 MARCH 2025



POSSIBLE
DAMAGE



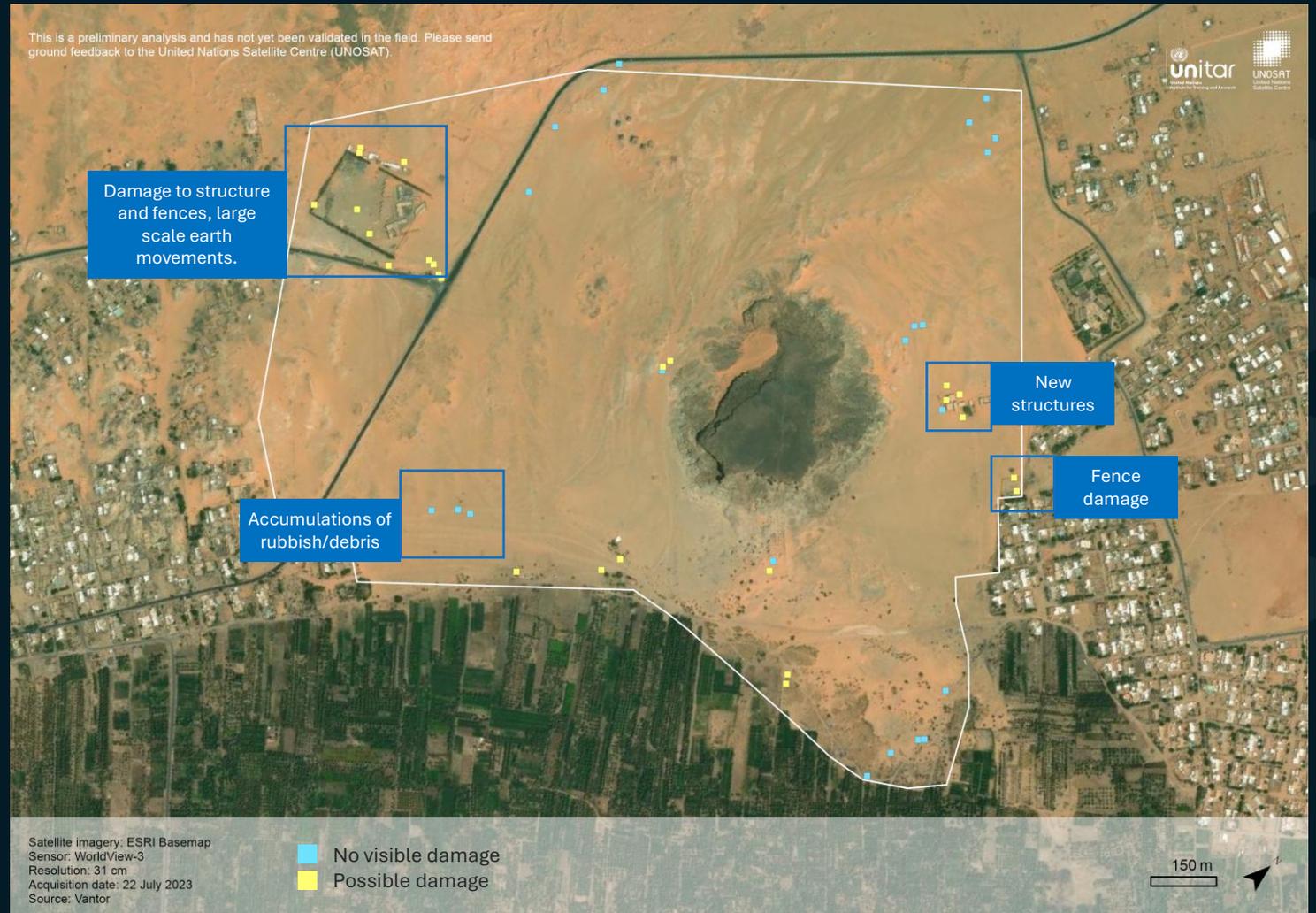
This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 3 March 2025.

Since the last assessment, there has been an increase in possible damage locations, with 22 no visible damage and 25 possible damage points.

Several areas with no visible damage displayed accumulations of rubbish or debris, in both the same and different locations to the previous assessment.

Instances of possible damage were identified where new structures or fences had been constructed or removed/damaged on the site, as such activities may disturb or impact any shallow archaeological layers.

There were several instances of possible damage to fences, as well as observed earth movement within the site.



2. Nuri - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

12 JULY 2024



NO VISIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 12 July 2024.

Within the analysed area there was no visible damage observed.



2. Nuri - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

3 MARCH 2025



POSSIBLE DAMAGE

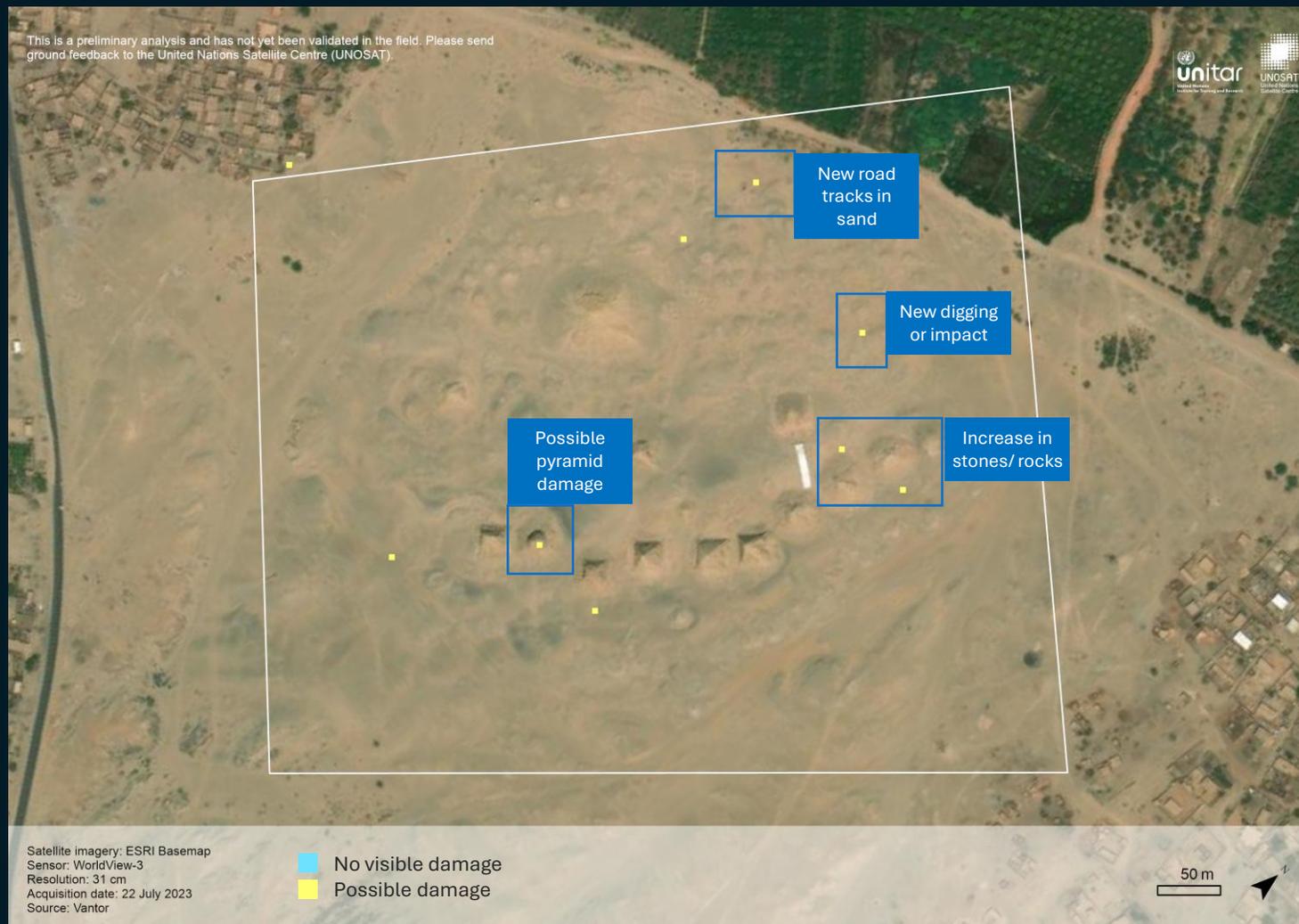


This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 3 March 2025.

A previous assessment was undertaken on this site in 2024, using a very-high resolution satellite image captured on the 12 July 2024. There was no visible damage observed.

Between 12 July 2024 and 3 March 2025, within the analysed area 9 instances of damage were observed. This includes new road tracks in the sand, possible impact, increase in stones/ rocks and possible pyramid damage.

The possible damage to a pyramid detected, as marked on the map, may be due to erosion or weather-related events.



3. Sanam - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

12 JULY 2024



POSSIBLE DAMAGE

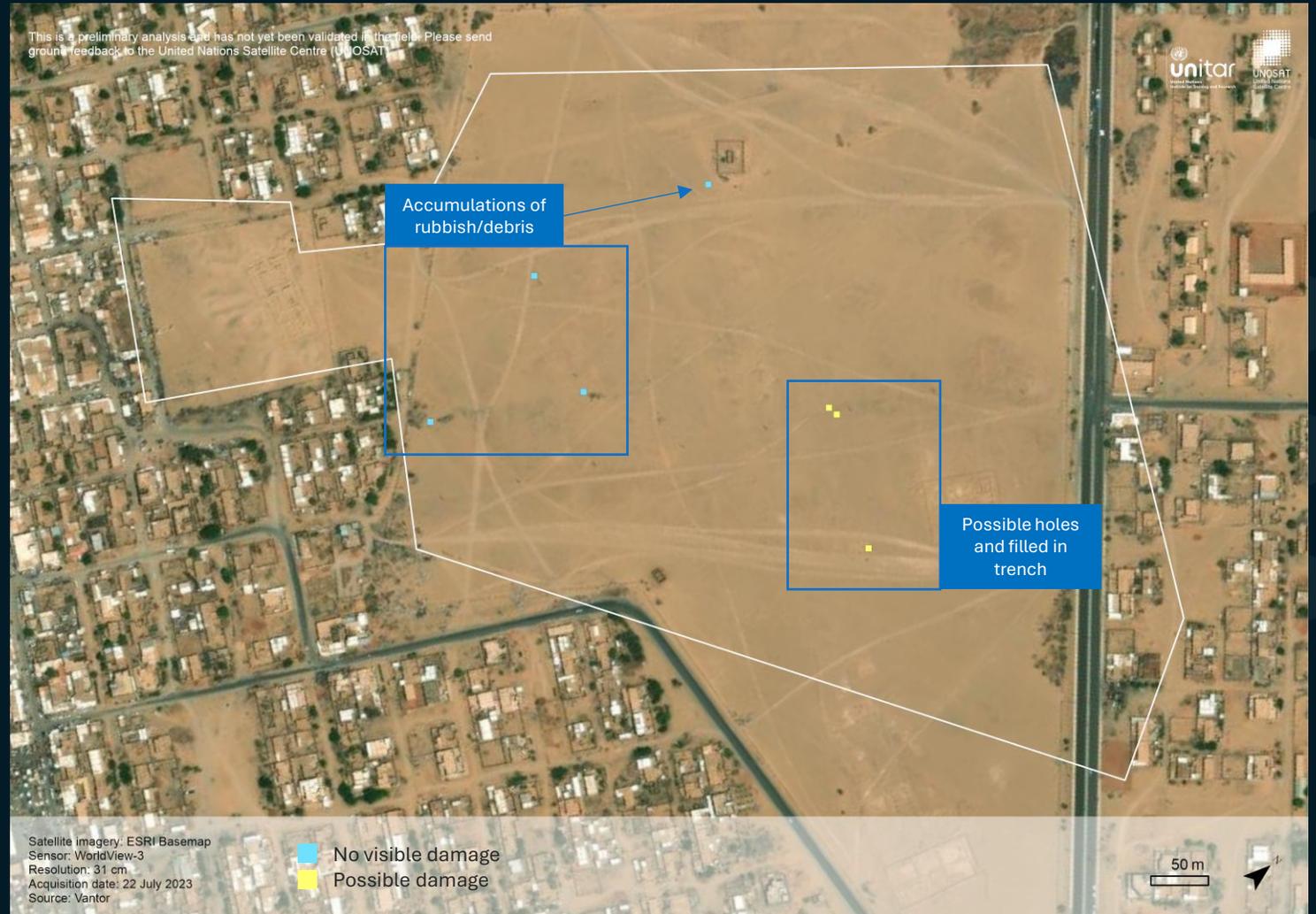


This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 12 July 2024.

Within the analysed area, 4 locations showed changes with no visible damage, while 3 locations exhibited indications of possible damage.

Several areas with no visible damage displayed accumulations of rubbish or debris.

Instances of possible damage were identified with possible holes and a filled in trench observed in the earth, as such activities may disturb or impact archaeological layers.



3. Sanam - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

3 MARCH 2025



POSSIBLE DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 3 March 2025.

Since the last assessment, there has been an increase in damage locations, with 18 no visible damage and 7 possible damage points.

Several areas with no visible damage displayed accumulations of rubbish or debris, both in the same and different locations to the previous assessment.

Instances of possible damage were identified with earth movements, including an increase of new possible holes, as such activities may disturb or impact any shallow archaeological layers.



4. El-Kurru- Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

12 JULY 2024



NO VISIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 12 July 2024.

Within the analysed area there was no visible damage observed.



4. El-Kurru- Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

3 MARCH 2025



POSSIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 3 March 2025.

Since the last assessment, there has been an increase of one possible damage point.

Instances of possible damage were identified as new fence construction, as such activities may disturb or impact any shallow archaeological layers.



5. Zuma - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

12 JULY 2024



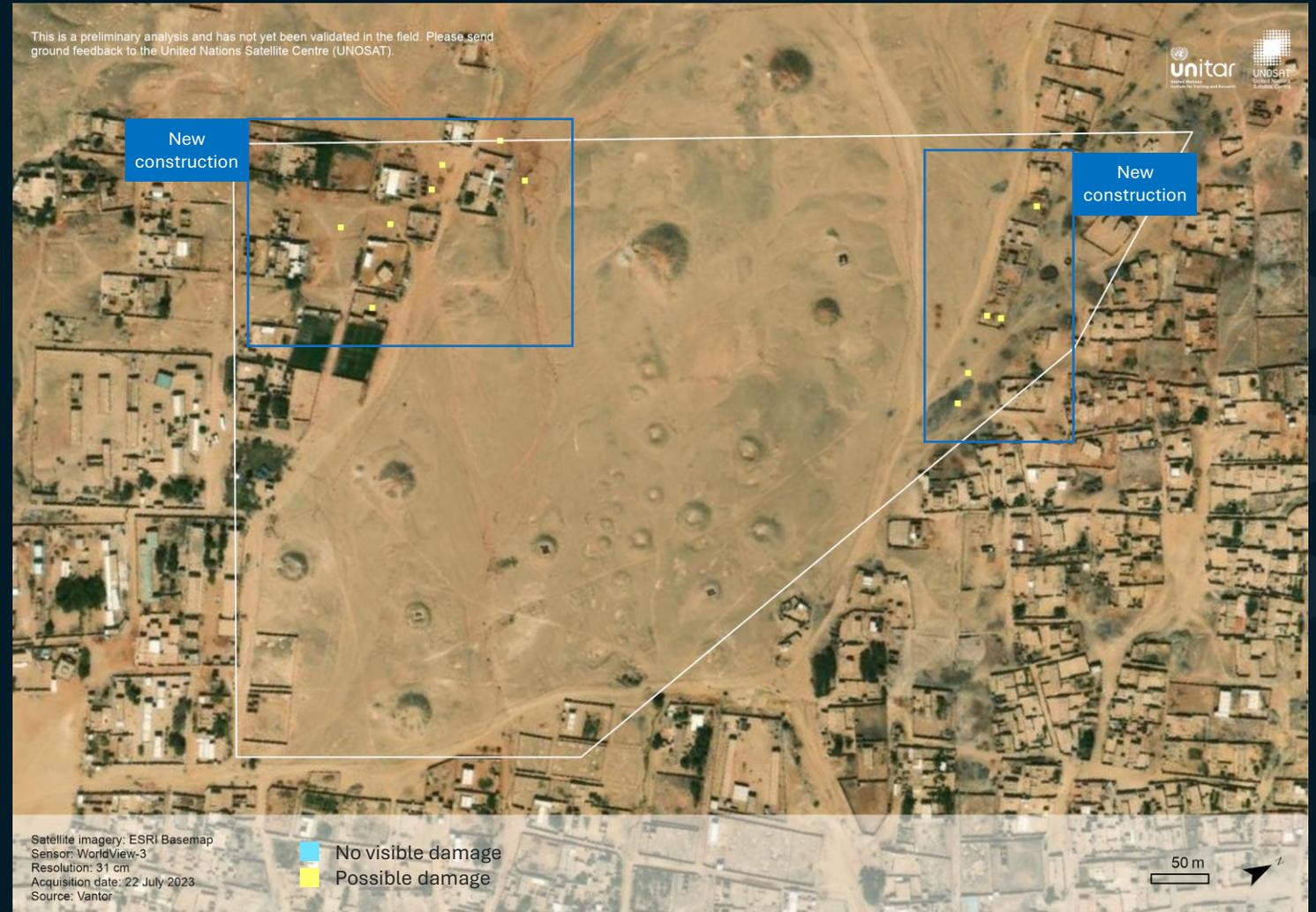
POSSIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 12 July 2024.

Within the analysed area, 12 locations exhibited indications of possible damage.

Instances of possible damage were identified where new structures or fences had been constructed on the site, as such activities may disturb or impact any shallow archaeological layers.



5. Zuma - Gebel Barkal and the Sites of the Napatan Region

Merawi, Northern, Sudan

3 MARCH 2025



POSSIBLE DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-3 satellite on the 3 March 2025.

Since the last assessment, there has been an increase in damage locations, with 3 no visible damage and 22 possible damage points.

Several areas with no visible damage displayed accumulations of rubbish or debris, in several locations throughout the site.

Instances of possible damage were identified where new structures or fences had been constructed on the site, as such activities may disturb or impact any shallow archaeological layers.



2. Tentative List

- The Monuments of the Kingdom of Kerma and Dokki Geil



Sudan: UNESCO Tentative List Sites

As of 2022, Sudan has 15 site submissions located on the UNESCO Tentative List. These cover sites of both cultural and natural landscapes ([UNESCO, 2022](#)).

1. Suakin
2. **Kerma**
3. Old Dongola
4. Wadi Howar National Park
5. Dinder National Park
6. Jebel Al Dair National Park
7. Al Hassania National Park
8. Al Radom National Park
9. Jebel Marra / Deriba Caldera
10. **The Monuments of the Kingdom of Kerma and Dokki Geil** (overlaps site 2)
11. Sai Island
12. The Temple of Soleb
13. Banganarti
14. Al Khandaq Village
15. Wadi Hower National Park – Gala Abou Ahmed (mixed) (same location as site 4)

This report will include analysis on only one Tentative List Site: The Monuments of the Kingdom of Kerma and Dokki Geil.



The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations. Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

The Monuments of the Kingdom of Kerma and Dokki Geil

Overview

The Monuments of the Kingdom of Kerma and Dokki Gel represent some of the earliest and most significant archaeological remains in Sudan, reflecting the political and cultural foundations of the ancient Kerma civilisation (2500–1500 BCE).

The site of Kerma includes a large urban centre, cemeteries, and monumental structures such as the Deffufa, which highlight advanced architectural traditions and long-distance connections along the Nile.

Nearby, Dokki Gel preserves evidence of later Kerma-period fortifications and administrative buildings, offering key insights into the region's strategic importance and interactions with Egypt. Together, these sites form an essential record of the early Nubian state, its social complexity, and its role in the development of ancient Sudanese heritage (UNESCO, 2025).



Two components of the Monuments of the Kingdom of Kerma and Dokki Gel Tentative List site.

1. Dokki Geil - The Monuments of the Kingdom of Kerma and Dokki Geil

Merawi, Northern, Sudan

13 NOVEMBER 2025



NO VISIBLE
DAMAGE



This map illustrates the results of a damage assessment conducted using a very-high resolution image captured by a WorldView-3 satellite on the 13 November 2025.

Within the analysed area there was no visible damage observed to the site and no military activity observed within the direct vicinity of the site.



2. Kerma - The Monuments of the Kingdom of Kerma and Dokki Geil

Merawi, Northern, Sudan

13 NOVEMBER 2025



NO VISIBLE
DAMAGE



This page illustrates the results of a damage assessment conducted using a very-high resolution image captured by a WorldView-3 satellite on the 13 November 2025.

Within the analysed area there was no visible damage observed to the site and no military activity observed within the direct vicinity of the site.



3. Built Cultural Heritage

1. Khartoum
2. El Fasher
3. El Obeid
4. Nyala
5. El Geneina



Cultural Heritage Sites

Overview

This section of the report provides a satellite-derived assessment of select built heritage sites within Khartoum, El Fasher, El Obeid, Nyala and El Geneina. It focuses on a limited number of key institutions located in areas identified as highly vulnerable during the ongoing conflict.

The analysis does not represent a comprehensive survey of all built cultural heritage assets within these cities. Many historic buildings, archives, community museums and intangible heritage locations fall outside the scope of this initial review.

Further research, field verification and strengthened collaboration with local actors, heritage professionals and communities will be essential to expand this assessment, improve coverage and support more effective protection of Sudan's cultural heritage during and after the crisis.



The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

1. Khartoum Overview

Khartoum, the capital of Sudan is located at the confluence of the Blue and White Nile. The city has a rich history and hosts several national institutions, which safeguard collections representing ancient Nubian civilizations, Islamic heritage and modern Sudanese history.

Following the outbreak of conflict in April 2023, Khartoum came under prolonged siege as hostilities escalated across the capital. In late 2024, the Sudanese Armed Forces initiated a counteroffensive and, by March 2025, had regained control of several strategic locations, including the presidential palace. The protracted urban fighting resulted in severe humanitarian consequences, marked by substantial civilian casualties and large-scale displacement ([BBC News, 2025](#)).

The ongoing conflict has led to widespread building damage through direct targeting, intense crossfire and the widespread use of explosive weapons in urban environments. Key infrastructure, including many cultural sites, have been heavily targeted and damaged. While other sites, including commercial and residential buildings, have been levelled, burned or looted.

According to reports, the ongoing conflict has affected several cultural facilities, including damage and looting at the Sudan National Museum after its takeover in 2023 ([Policy Center for the New South, 2025](#)).

This analysis does not represent a comprehensive assessment of all built cultural heritage sites within Khartoum. Many historic buildings, archives, community museums and intangible heritage locations fall outside the scope of this initial review. This analysis aims to provide an insight into a select range of heritage sites only, adding ground photos and information where possible.

Previous assessments: UNOSAT has undertaken assessment over Khartoum, these include:

In August 2024, the UNOSAT Emergency Mapping Service was activated for flooding over Sudan (FL20240826SDN, Charter Activation [906](#)). Through this service several assessments were produced, including a satellite detected water extent over Khartoum ([UNOSAT map product and Data](#)).

The UNOSAT Emergency Mapping Service was also activated in December 2024 for another flooding event over Khartoum (FL20241224SDN) and a satellite detected water extent was produced over Khartoum ([UNOSAT map product and data](#)).

This report includes the follow sites analysed for Khartoum, See locations of sites on the next page (map).

	Site Name	Analysis Date	Status
1.1	Sudan National Museum	12 November 2025	Moderate damage
1.2	Ethnographic Museum	12 November 2025	Severe damage
1.3	Khartoum Grand Mosque	12 November 2025	Possible damage
1.4	Khartoum Republican Palace (Presidential Palace)	12 November 2025	Moderate damage
1.5	Khartoum Republican Museum	12 November 2025	Moderate damage
1.6	Republican Palace Mosque	12 November 2025	No visible damage
1.7	Al-Shaheed Mosque	12 November 2025	Moderate damage
1.8	St Matthew's Cathedral	12 November 2025	Moderate damage
1.9	Greek Orthodox Church of the Annunciation	12 November 2025	Moderate damage
1.10	Khartoum Military Museum	12 November 2025	Moderate damage
1.11	University of Khartoum – Library	12 November 2025	Moderate damage

1. Khartoum Overview – Site Locations

Many of the sites analysed in Khartoum are located around Nile Street, in Khartoum's Old Downtown area.

Nile Street stands as one of Khartoum's most significant cultural and historical corridors, running along the Blue Nile and lined with some of Sudan's most important heritage institutions. The avenue hosts landmark buildings such as the Presidential Palace, the University of Khartoum campus, and several early twentieth-century administrative structures that reflect British colonial architectural influence blended with local design traditions. Its museums, libraries and cultural centres have long served as gathering points for scholars, artists and civil society, sustaining a vibrant intellectual and cultural life ([Sudan Memory, 2022](#)).

Beyond buildings, the street's riverside promenade with its shaded gardens and cafés have historically offered a public space where Khartoum's cultural, social and civic life intersect making Nile Street not only a gallery of monuments but a living heritage zone ([Sudan Daily, 2025](#)).

A comprehensive damage assessment of these 11 sites is compiled on the following report pages, including ground photos obtained from open-sources, where possible.



1.1 Sudan National Museum

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



MODERATE
DAMAGE



The Sudan National Museum was Sudan's main repository of ancient and historical artefacts, covering a broad chronology, from Stone Age tools to relics of Nubian, Meroitic, Christian and Islamic eras ([Modern Sudan, n.d.](#)). After the conflict erupted in April 2023, the museum was taken over by the paramilitary on 2 June, during which time large-scale looting reportedly occurred ([The Guardian, 2024](#)).

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows damage to several museum buildings; debris is present outside the main museum building. Several buildings surrounding the museum have also been damaged or destroyed.

In addition, the museum grounds, such as gardens and trees look to have sustained damage.



1.1 Sudan National Museum – Ground Images, 1

Khartoum, Khartoum, Sudan

Ground photos help to identify and verify damage that has been identified through satellite imagery.

Photos taken by NCAM show damage from both outside and inside the Museum. Where possible UNOSAT has marked the likely locations of the photos on the satellite image.



Sudanese National Corporation for Antiquities (NCAM), 2025



Sudanese National Corporation for Antiquities (NCAM), 2025



Sudanese National Corporation for Antiquities (NCAM), 2025

1.1 Sudan National Museum – Ground Images, 2

Khartoum, Khartoum, Sudan

Ground photos help to identify and verify damage that has been identified through satellite imagery.

Photos taken by NCAM show damage from both outside and inside the Museum. Where possible UNOSAT has marked the likely locations of the photos on the satellite image.

D – Entrance of the museum



Sudanese National Corporation for Antiquities, via The Guardian, 2025



Damaged sculptures and artifacts



Sudanese National Corporation for Antiquities (NCAM), 2025

Internal damage to the museum



Sudanese National Corporation for Antiquities (NCAM), 2025

1.2 Ethnographic Museum

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



SEVERE
DAMAGE



The Ethnographic Museum formed part of Khartoum’s network of institutions preserving Sudan’s cultural diversity, documenting traditional customs, material culture and more recent historical developments ([Embassy of Sudan in the Netherlands, n.d.](#)).

A field report states that parts of the building were reportedly destroyed, with some exhibition halls and administrative offices burned or demolished ([Heritage for Peace, 2024](#)).

Its proximity to other damaged heritage sites suggests it may have been affected by widespread violence and looting across central Khartoum.

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows moderate damage to the museums roof and structure. In addition, the museums entrance and gardens also look to be damaged.



This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to the United Nations Satellite Centre (UNOSAT).

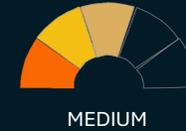
Satellite imagery: ESRI World Imagery
Sensor: WorldView-2
Resolution: 31cm
Acquisition date: 8 June 2022
Source: Vantor

Satellite imagery: ESRI Basemap
Sensor: WorldView-2
Resolution: 50cm
Acquisition date: 5 February 2025
Source: Vantor

1.3 Khartoum Grand Mosque

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



POSSIBLE
DAMAGE

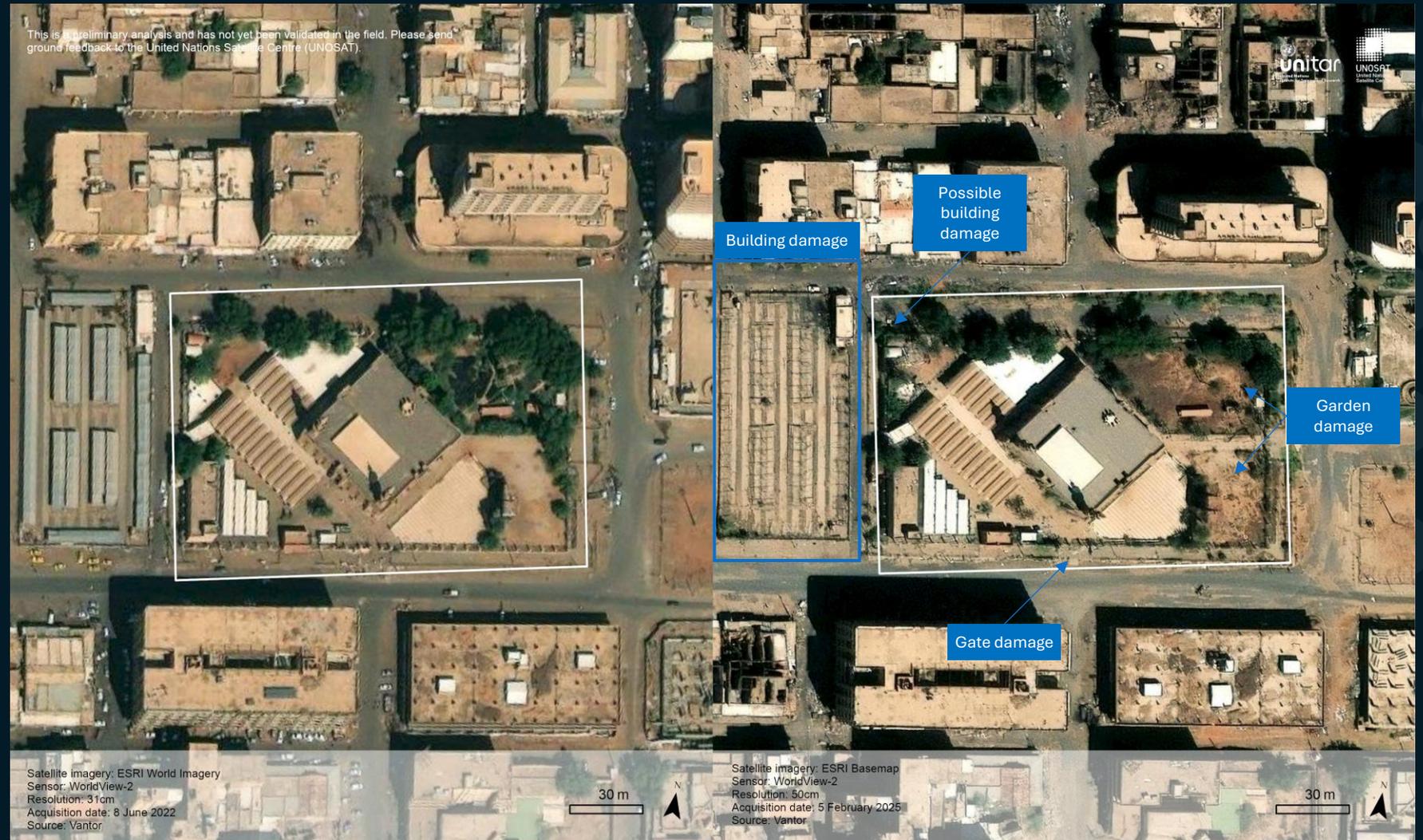


The Grand Mosque in Khartoum is a key religious and historic building, built during the Turkish rule in Turkish-Islamic style. It can accommodate up to 10,000 people for prayers and hosts an institute for the training of Islamic scholars ([Sudan Memory, 2022](#)).

Online reports show no reliable open-source reporting of confirmed damage or looting of the Grand Mosque. However, the widespread destruction across Khartoum makes this site vulnerable.

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows possible damage to the Khartoum Grand Mosque.

Possible damage has occurred to some of the smaller buildings and the gardens on the mosque site. The front gate also looks to be damaged. Additionally, a large building directly to the west of the mosque has sustained damage.



1.4 Khartoum Republican Palace (Presidential Palace)

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



MODERATE
DAMAGE



The Republican Palace originally built in the 19th century under colonial-era administrations, reflects English Palladian architecture style. It was the historic seat of Sudan's presidency, until the newer palace was built and inaugurated in 2015 ([Embassy of Sudan in the Netherlands, n.d.](#)).

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 5 February 2025. It shows moderate damage to the Khartoum Republican Palace, with several locations where the roof has collapsed and been damaged. The gardens surrounding the building also look possibly damaged, with

Possible damage has occurred to some of the smaller buildings and the gardens on the mosque site. The front gate also looks to be damaged. Additionally, a large building directly to the west of the mosque has sustained damage.



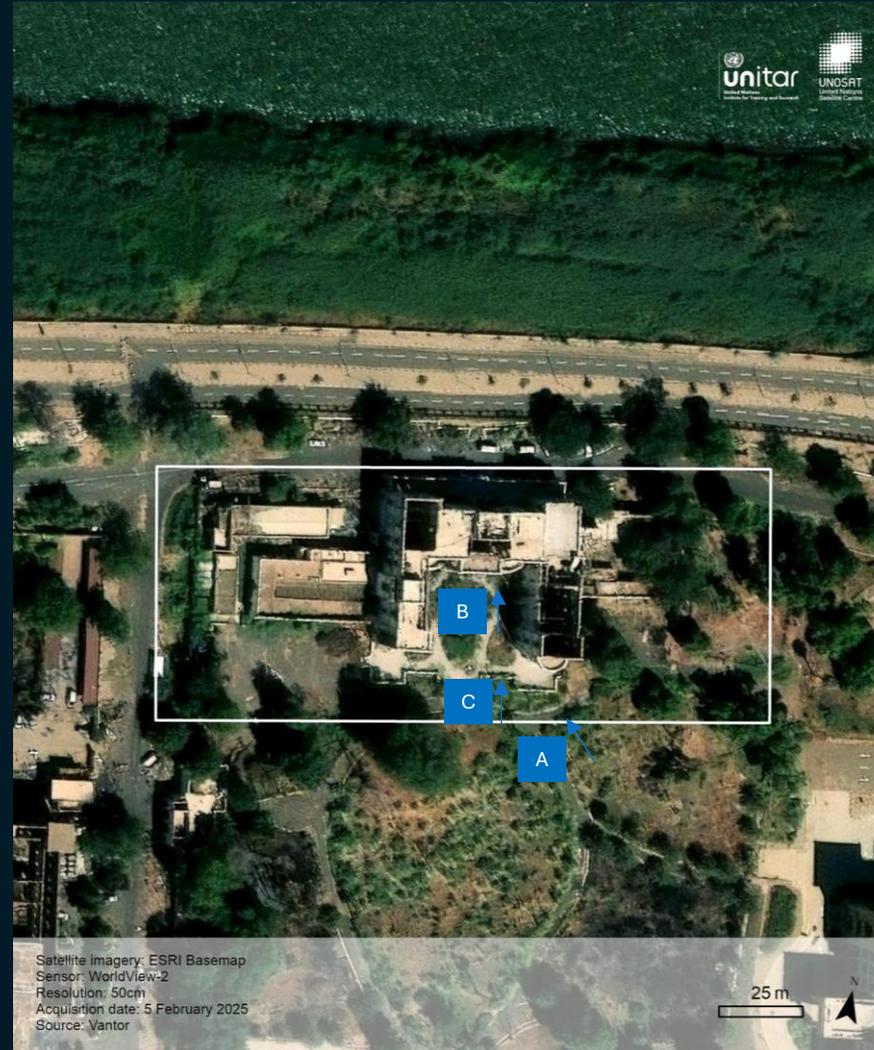
1.4 Khartoum Republican Palace (Presidential Palace)

– Ground Photos

Khartoum, Khartoum, Sudan

Ground photos help to identify and verify damage that has been identified through satellite imagery.

Photos taken by several sources show damage to the front of the palace, on several facades and windows/ arches. In addition, the palace gardens and courtyard is also damaged. Where possible, UNOSAT has marked the likely locations of the photos on the satellite image.



1.5 Khartoum Republican Museum

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



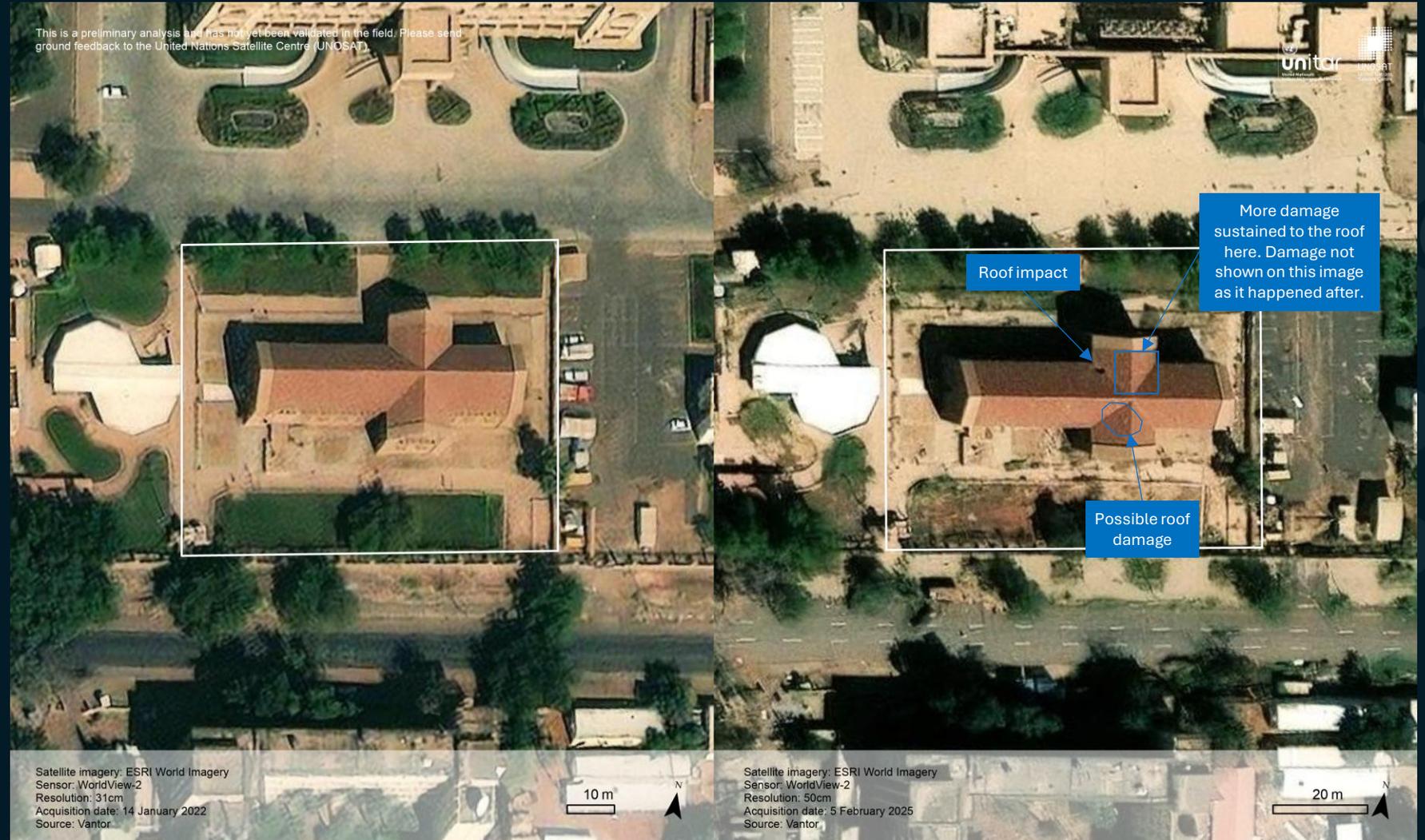
MODERATE
DAMAGE



The Republican Palace Museum in Khartoum is located behind the presidential palace and contains historical exhibits dating back to Turco-Egyptian Sudan. The museum is part of the Republican Palace complex, the seat of government in Sudan during successive periods of modern Sudan's history. The museum was originally an Anglican church, built in 1912, it was closed in 1971 and repurposed and opened to the public as a museum in late 1999 ([Auto Museums](#)).

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite the 12 November 2025. It shows moderate damage the Khartoum Republican Museum. The first damage to the roof occurred in early 2024, with small parts of roof damage.

In March 2025, further damage was sustained to the roof.



1.6 Republican Palace Mosque

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



NO VISIBLE
DAMAGE



The Republican / Presidential Palace Mosque is part of the Republican Palace Complex.

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows no visible damage to the mosque.



Satellite imagery: ESRI World Imagery
Sensor: WorldView-2
Resolution: 31cm
Acquisition date: 8 June 2022
Source: Vantor

Satellite imagery: ESRI World Imagery
Sensor: WorldView-2
Resolution: 50cm
Acquisition date: 5 February 2025
Source: Vantor

1.7 Al-Shaheed Mosque

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



MODERATE
DAMAGE



Al-Shaheed (The Martyr) Mosque was established in the 1990s during the rule of Omar al-Bashir's Islamist government ([Granta, 2023](#)).

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows moderate damage the mosque, with damage to the roof in several parts. One side of the roof has holes, while the other looks to have collapsed. Debris is also present surrounding the mosque.

The mosque dome is still intact; but debris is visible, which could indicate possible damage.

In addition, the gardens and trees surrounding the mosque have been damaged and burnt. A monument, visible in earlier imagery has been destroyed.

The two large minarets outside the mosque still look to be standing.



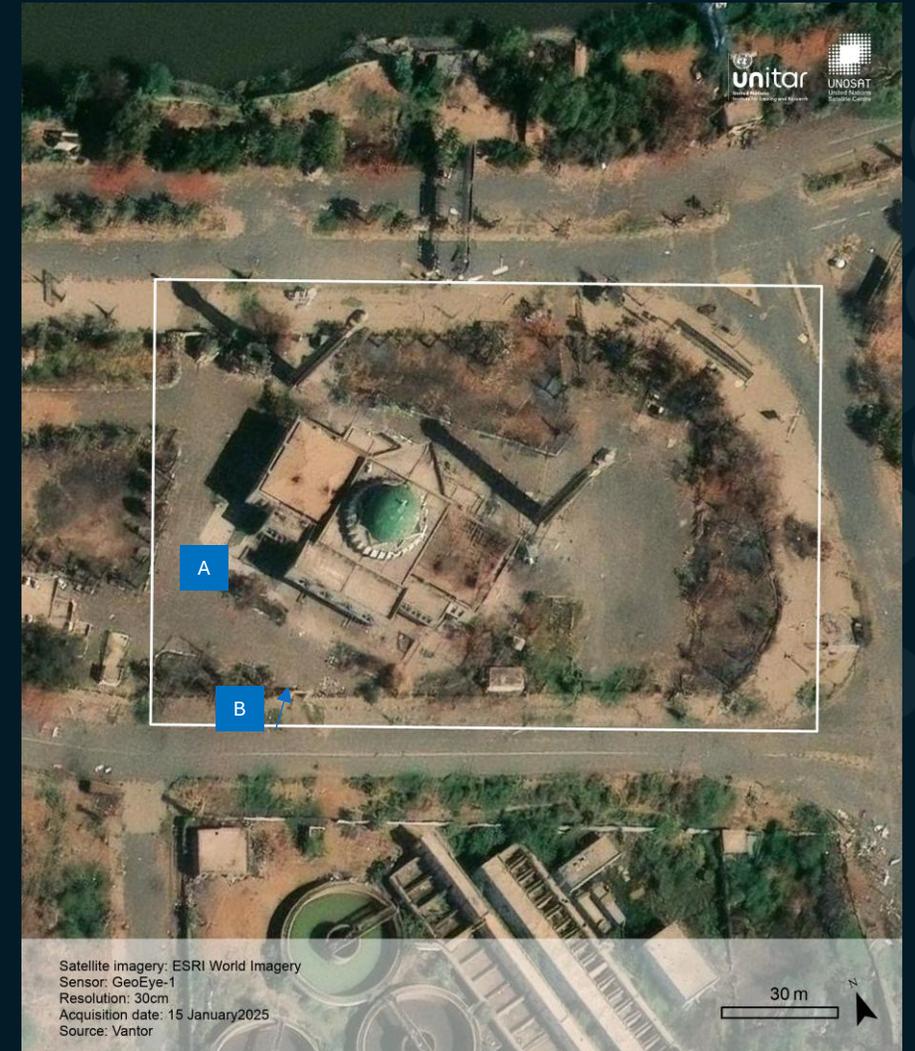
1.7 Al-Shaheed Mosque – Ground Photos

Khartoum, Khartoum, Sudan

Ground photos help to identify and verify damage that has been identified through satellite imagery.

Photos obtained online show damage to the mosque's façade and minaret from several sides.

Social media posts from the [Sudan News Agency](#), in August 2025, state that the Governor of Khartoum has announced that they will start rehabilitation on the mosque.



1.8 St Matthew's Cathedral, Khartoum

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025

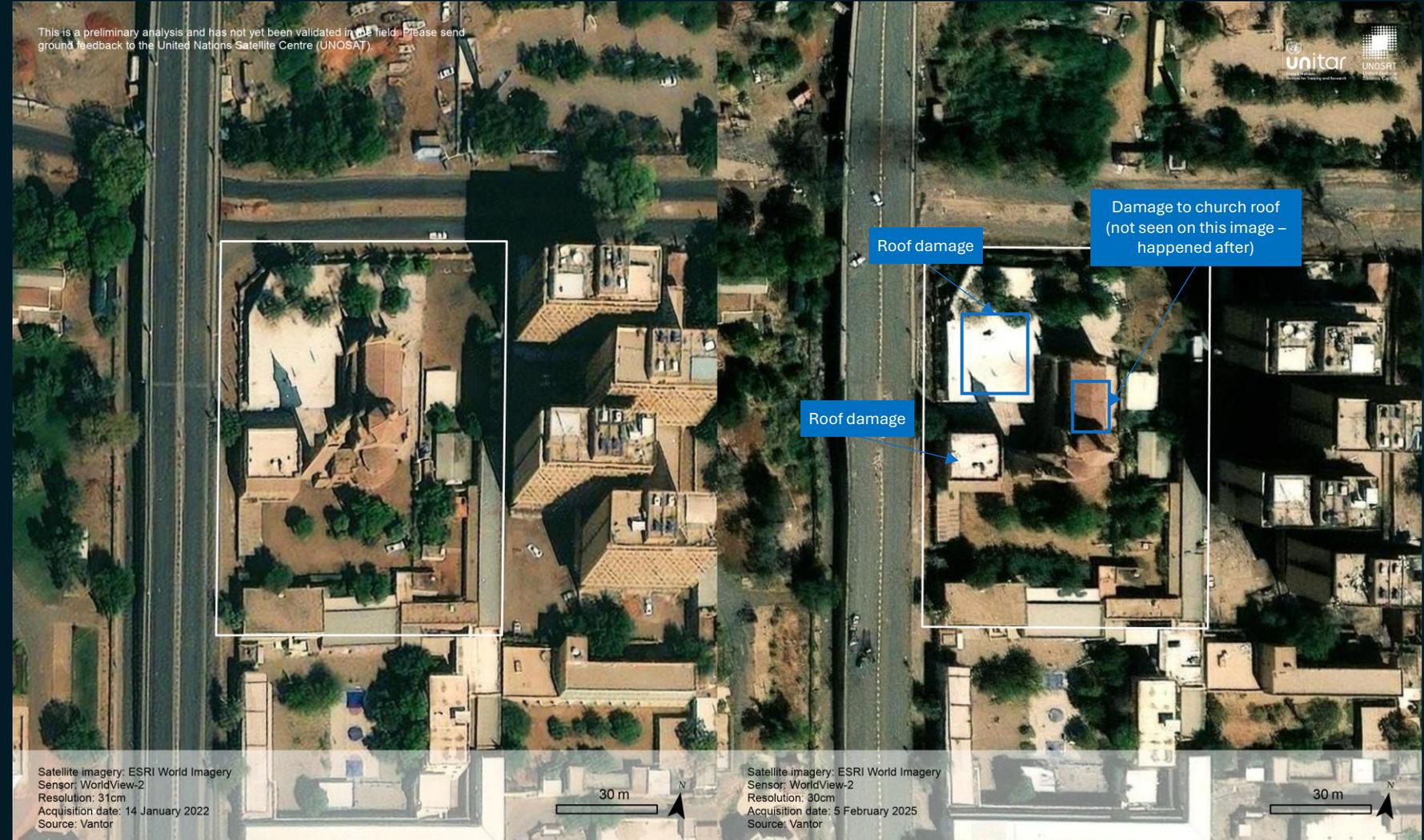


MODERATE
DAMAGE



St. Matthew's Cathedral is a prominent Catholic, located on the banks of the Blue Nile. Completed in 1908, it serves as the seat of the Archdiocese of Khartoum and was built in the neo-Romanesque style to replace an earlier church destroyed by the Mahdists. It is a historic landmark and a significant religious centre in the city ([Sudan Memory, 2022](#)).

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows moderate damage to St Matthew's Cathedral, with roof damage in several locations. Including on the main cathedral area.



Satellite imagery: ESRI World Imagery
Sensor: WorldView-2
Resolution: 31cm
Acquisition date: 14 January 2022
Source: Vantor

Satellite imagery: ESRI World Imagery
Sensor: WorldView-2
Resolution: 30cm
Acquisition date: 5 February 2025
Source: Vantor

1.9 Greek Orthodox Church of the Annunciation

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



MODERATE
DAMAGE



The Greek Orthodox Church of the Annunciation is a historic religious building, part of the Greek Orthodox Patriarchate of Alexandria ([Orthodox World, n.d.](#)). It was founded by Sudanese Greeks and has an adjoining school, community buildings and the building of the defunct Greek Embassy ([Greek Reporter, 2023](#)).

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025.

It shows moderate damage to the church, with façade damage and roof damage in several locations. The garden in the complex has also been damaged and debris is present beside the church.



1.10 Khartoum Military Museum

Khartoum North, Khartoum, Sudan

12 NOVEMBER 2025

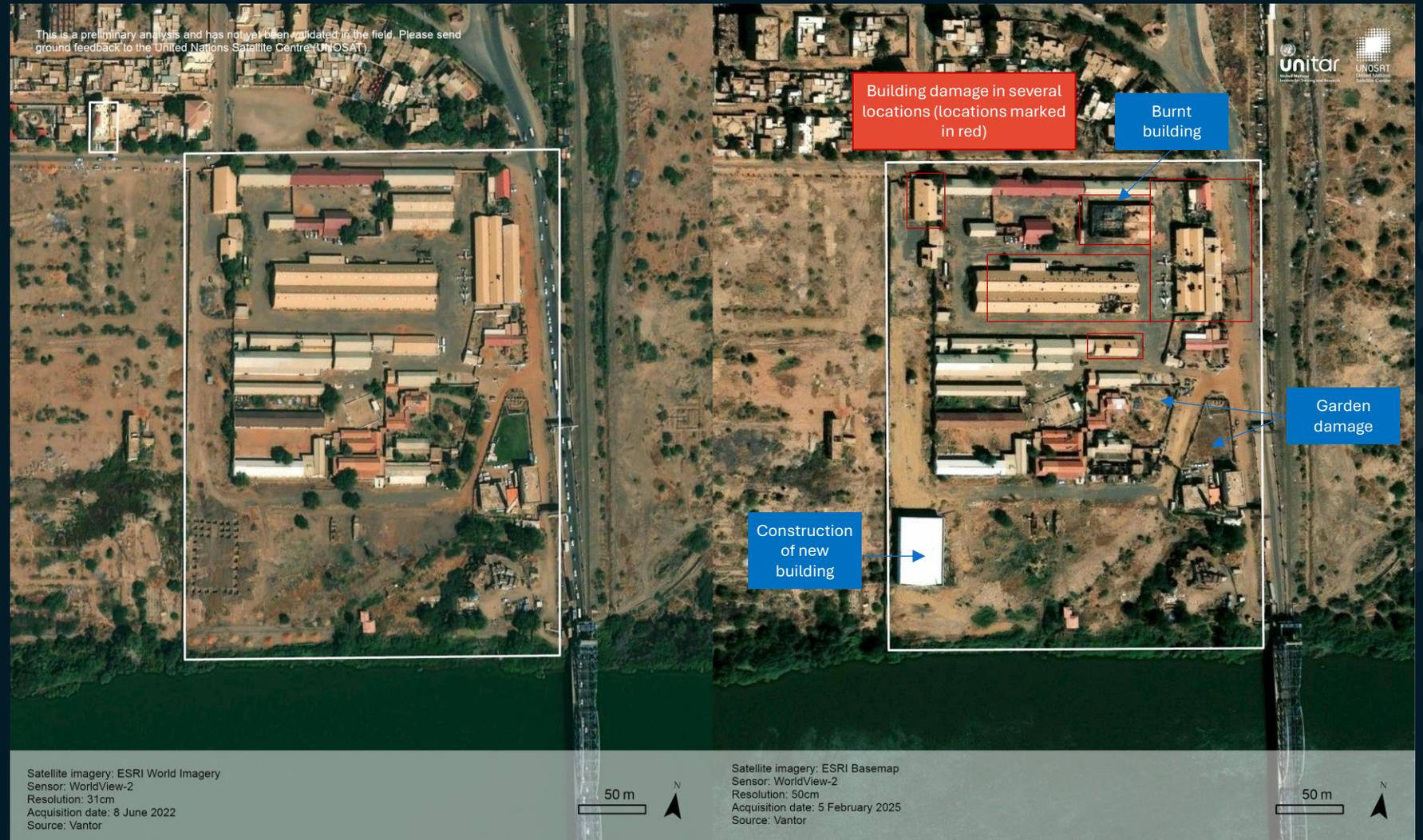


MODERATE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows moderate damage to the Khartoum Military Museum, with several museum buildings sustaining moderate damage.

The garden has also been damaged, with the removal of trees and vegetation.



1.11 University of Khartoum – Library

Khartoum, Khartoum, Sudan

12 NOVEMBER 2025



MODERATE
DAMAGE



The University of Khartoum is Sudan's oldest and largest public university, established in 1956 from the Gordon Memorial College founded in 1902. Its main library is one of the most prestigious in Africa and the Middle East, with a vast collection of historical manuscripts, books, and documents dating back centuries ([Sudan Memory, 2022](#)).

This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 12 November 2025. It shows moderate damage to the University of Khartoum and specifically the library (white box) has sustained damage to the building roof and façade.

Several buildings on the campus have been damaged, with roof damage detected in several locations. Additionally, the gardens and grounds of the university have been damaged and destroyed in some parts.



2. El Fasher Overview

El Fasher is the capital of the North Darfur region in western Sudan. Historically the city developed around the court of the Darfur sultanate in the late 18th century and grew over centuries into an administrative centre. Until recently El Fasher was also a hub for many internally displaced people, due to earlier waves of conflict and displacement in Darfur ([Britannica, 2025](#)).

When the conflict in Sudan erupted in April 2023, it eventually spread to western Sudan and Darfur, bringing El Fasher under siege in May 2024. The besieging force cut off supply lines, blocked humanitarian aid and prevented civilians from leaving or receiving help. After more than 18 months under siege, the city fell in October 2025. Repeated assaults, bombardments and blockage led to widespread suffering and large sections of the city were damaged or destroyed, including historic buildings and cultural heritage sites that hold significance for the region's identity and memory ([BBC News, 2025](#)).

El Fasher has become largely inaccessible to humanitarian organisations, journalists and independent observers due to ongoing insecurity, road blockages and restrictions on movement. Traditional field assessments are extremely limited, making it difficult to verify conditions on the ground and evaluate damage. In this context, very-high resolution satellite imagery allows for remote assessments of buildings, specifically cultural heritage sites which may not be accessible from the ground.

This report includes the follow sites analysed for El Fasher:

	Site Name	Analysis Date	Status
2.1	Sultan Ali Dinar Palace Museum	28 October 2025	Moderate damage
2.2	El Fasher Grand Mosque	28 October 2025	Possible damage

Previous assessments:

UNOSAT has undertaken assessment over El Fasher, these include:

In August 2024, as part of the ongoing complex emergency situation in Sudan, UNOSAT undertook a comprehensive damage assessment over El Fasher (CE20230415SDN). This was investigated due to a significant occurrence of fire detections within the city ([UNOSAT map product and data](#)).

In August 2024, the UNOSAT Emergency Mapping Service was activated for flooding over Sudan (FL20240826SDN, Charter Activation [906](#)). Through this service several assessments were produced, including a satellite detected water extent over El Fasher ([UNOSAT map product and Data](#)).

2.1 Sultan Ali Dinar Palace Museum

El Fasher, North Darfur, Sudan

28 OCTOBER 2025



MODERATE
DAMAGE



The Sultan Ali Dinar Palace Museum preserves the legacy of the last Sultan of Darfur through displays of royal artifacts, documents and material culture.

In 2024 no visible damage was detected to the site due to flooding using a very-high resolution image captured by a WorldView-2 satellite on the 25 September 2024 (left image, Charter Activation [917](#)).

However, in 2025 the museum reportedly suffered serious damage from indiscriminate shelling, including destruction of parts of the building and loss of furniture and contents ([The Art Newspaper, 2025](#)), ([Blue Shield International, 2025](#)).

The right image illustrates damage observed from a very-high resolution image captured by a Pléiades Neo satellite on the 28 October 2025. It shows moderate damage to the museum. Based on analysis of several satellite images the first damage occurred to the museum around the 18 December 2024, when the main museum building roof was damaged and collapsed.

Further damage was sustained in mid 2025 to other parts of the museum, including the garden area and south building which has visible debris surrounding it.



2.1 Sultan Ali Dinar Palace Museum – Ground Photos

El Fasher, North Darfur, Sudan

28 OCTOBER 2025



MODERATE
DAMAGE



Ground photos help to verify damage that has been identified through satellite imagery.

Photos taken by Salaheldin Mohamed Ahmed/NCAM show damage from both outside and inside the Museum. Where possible UNOSAT has marked the likely locations of the photos on the satellite image.



Salaheldin Mohamed
Ahmed/NCAM, 2025



Salaheldin Mohamed
Ahmed/NCAM, 2025



Salaheldin Mohamed
Ahmed/NCAM, 2025

2.2 El Fasher Grand Mosque

El Fasher, North Darfur, Sudan

28 OCTOBER 2025



POSSIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a Pléiades Neo satellite on the 28 October 2025 (right).

It shows possible damage to the mosque. Several buildings in the mosque complex have sustained damage, with moderate damage to several buildings on the southern side and roof damage to buildings on the west.

There is no visible damage to the main mosque building, however possible damage may have occurred to the building façade due to impact from surrounding damage. The mosque's two minarets look to be still standing and intact.

Additionally, this site had no visible damage due to the flooding in 2024 using a very-high resolution image captured by a WorldView-2 satellite on the 25 September 2024 (left, Charter Activation [917](#)).



Satellite Data: WorldView-2
Imagery Date: 25 September 2024
Resolution: 50 cm
Copyright: © (2024) DigitalGlobe, Inc., Longmont CO USA 80503. DigitalGlobe and the DigitalGlobe logos are trademarks of DigitalGlobe, Inc. The use and/or dissemination of this data and/or of any product in any way derived there from are restricted. Unauthorized use and/or dissemination is prohibited

Satellite imagery: Pléiades Neo
Acquisition date: 28 October 2025
Resolution: 30 cm
Copyright: Pléiades Neo © Airbus DS 2025
Source: Airbus D&S

3. El Obeid Overview



El Obeid, capital of North Kordofan, is historically a key commercial hub and gateway between central and western Sudan. The city is home to institutions such as the Sheikan Museum, which documents regional history and cultural traditions ([UNICEF, n.d.](#)).

Reports from the current conflict indicate that El Obeid has witnessed episodes of fighting, including attacks on public facilities and damage to religious and cultural buildings. These events highlight the importance of safeguarding heritage assets that play a central role in community identity and historical continuity.

This report includes the follow sites analysed for El Obeid:

	Site Name	Analysis Date	Status
3.1	Sheikan Museum	16 October 2025	Moderate Damage
3.2	El Obeid Great Mosque	16 October 2025	No visible damage
3.3	Cathedral of Our Lady Queen of Africa	16 October 2025	No visible damage

3.1 Sheikan Museum

El-Obeid, North Kordofan, Sudan

16 OCTOBER 2025



MODERATE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a Pléiades Neo satellite on the 16 October 2025 (right).

It shows moderate damage to the Sheikan Museum. Analysing several satellite images, the first damage to the site occurred in two different roof parts around November 2024. These are highlighted in orange boxes.

The second period of damage was observed between August and September 2025 and resulted in a large impact to one of the museum buildings. This is highlighted in a red box.

In addition, military activity in the form of earth movements and earth berms, leading to possible check points or roadblocks outside the museum.

This site had no visible damage due to flooding in 2024 using a very-high resolution image captured by a WorldView-2 satellite on the 20 September 2024 (left, Charter Activation [917](#)).



3.2 El Obeid Great Mosque

El-Obeid, North Kordofan, Sudan

16 OCTOBER 2025



NO VISIBLE DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a Pléiades Neo satellite on the 16 October 2025 (right).

No visible damage looks to appear on the main mosque building and the mosque's two minarets look to be still standing and intact.

This site also had no visible damage due to the flooding in 2024 using a very-high resolution image captured by a WorldView-2 satellite on the 20 September 2024 (left, Charter Activation 917).

Since September 2024, new solar panels have been installed on the mosque's roof and additional solar panels have been added to the building beside.



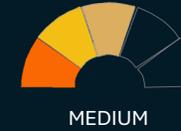
Satellite Data: WorldView-2
Imagery Date: 20 September 2024
Resolution: 50 cm
Copyright: © (2024) DigitalGlobe, Inc., Longmont CO USA 80503. DigitalGlobe and the DigitalGlobe logos are trademarks of DigitalGlobe, Inc. The use and/or dissemination of this data and/or of any product in any way derived there from are restricted. Unauthorized use and/or dissemination is prohibited

Satellite imagery: Pléiades Neo
Acquisition date: 16 October 2025
Resolution: 30 cm
Copyright: Pléiades Neo © Airbus DS 2025
Source: Airbus D&S

3.3 Cathedral of Our Lady Queen of Africa

El-Obeid, North Kordofan, Sudan

16 OCTOBER 2025



NO VISIBLE
DAMAGE



The Our Lady Queen of Africa Cathedral is a Roman Catholic cathedral in El-Obeid, Sudan, serving as the seat of the Diocese of El-Obeid. Originally constructed in 1871 and completed in 1948, the cathedral follows the Latin Rite.

It has been reported that on 27 April 2023, the Cathedral experienced damages due to clashes within close proximity. Damages reported included bullets hitting in front of the main gate and damaged glass on the Cathedral ([Agenzia Fides, 2023](#)).

This site had no visible damage due to flooding in 2024 using a very-high resolution image captured by a WorldView-2 satellite on the 20 September 2024 (left, Charter Activation [917](#)).

Through satellite-derived analysis, from a very-high resolution image captured by a Pléiades Neo satellite on the 16 October 2025 (right), shows no visible damage. Damage to gates/ walls and broken glass are very difficult to see on satellite imagery.



4. Nyala Overview



Nyala, the administrative centre of South Darfur, serves as an important cultural and economic hub with a diverse population and long-standing regional trade networks. The city’s cultural institutions, including local museums and community archives, provide insight into the area’s multi-ethnic heritage.

Since 2023, Nyala has been affected by conflict-related insecurity, including airstrikes, looting and damage to civilian infrastructure ([HRW, 2023](#)). Such conditions place cultural sites at heightened risk, reinforcing the need for collaborative approaches to monitoring and protecting heritage resources in conflict-affected environments.

This report includes the follow sites analysed for Nyala:

	Site Name	Analysis Date	Status
4.1	Nyala Museum/ South Darfur Museum	6 November 2025	Moderate damage
4.2	Nyala Old Mosque	6 November 2025	Possible damage

4.1 Nyala Museum/ South Darfur Museum

Nyala, South Darfur, Sudan



MODERATE
DAMAGE

Nyala Museum historically preserved and exhibited artefacts, cultural objects and historical materials reflecting the heritage of Darfur. In mid 2023, reports of damage to parts of the museum roof, have left the interior vulnerable to rain and weather events (VOA, 2023).

In late 2024, looting was reported at Nyala Museum, with reports confirming that the museum has been looted of all its possession, including furniture and display cabinets (Sudan Media Forum, 2025). Other reports say the museum has been converted into a military base (Policy Centre for the New South, 2025).

A very-high resolution image captured by a WorldView-2 satellite on the 8 September 2024 shows possible flood damage to the museum and flood water in the vicinity (left, Charter Activation 917).

A later assessment observed from a very-high resolution image captured by a WorldView-2 satellite on the 6 November 2025, shows moderate damage to the museum. A large circular structure of roofing areas has been removed. In addition, other museum buildings have experienced damage. The museum courtyard has been damaged and vegetation and trees surrounding the museum have been destroyed.



4.2 Nyala Old Mosque

Nyala, South Darfur, Sudan

6 NOVEMBER 2025



POSSIBLE
DAMAGE

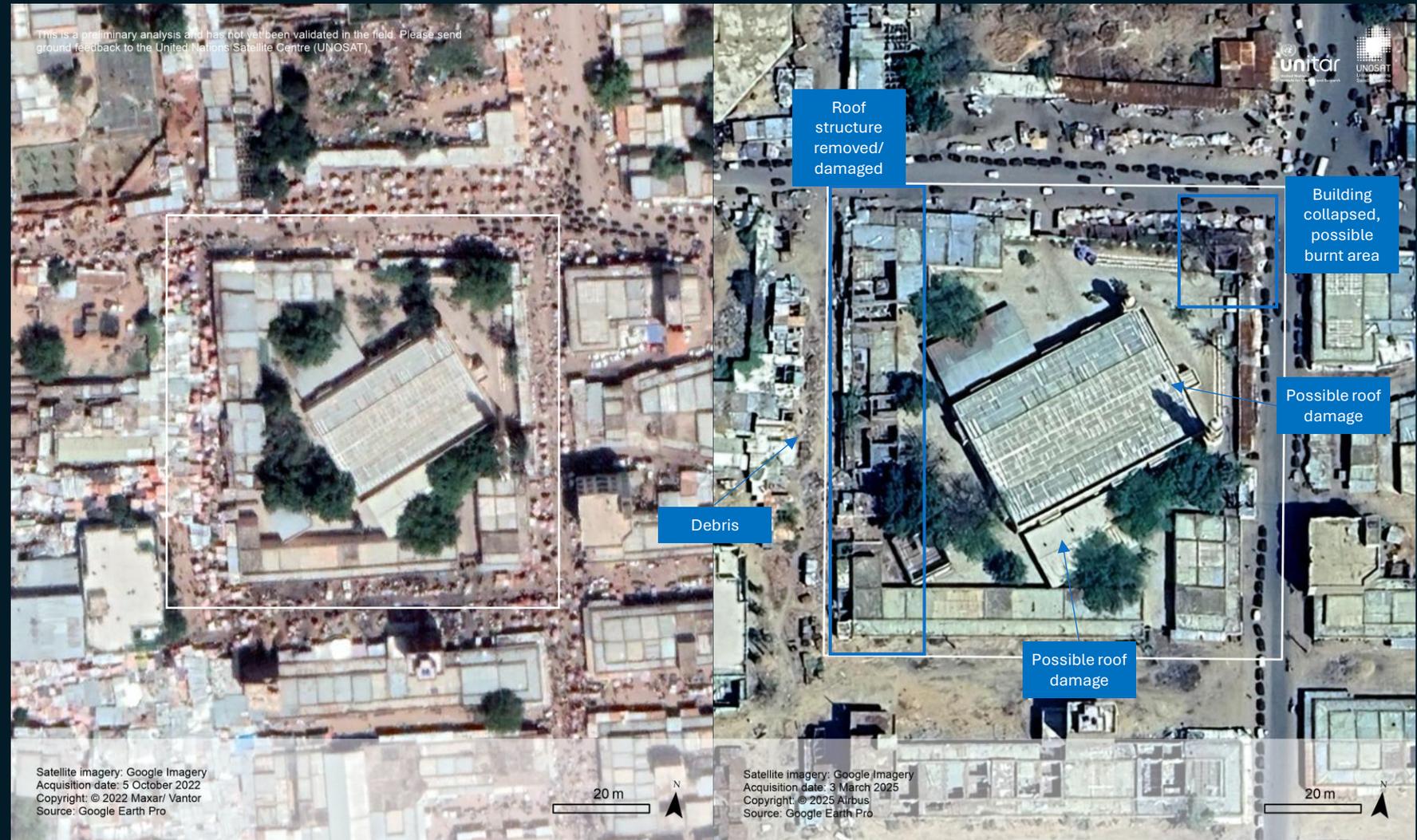


This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 6 November 2025. It shows possible damage to the mosque site.

The main building of the mosque looks to have possible small roof damage, the mosque minaret looks undamaged.

The surrounding buildings and courtyard of the mosque have experienced damage, with several buildings/ structures collapsed, with debris visible. An area on the Northern side also looks to be damaged and possibly burnt.

In addition, some of the vegetation and trees on the complex have been damaged.



5. El Geneina Overview



El Geneina, the administrative centre of West Darfur, has long served as a cultural crossroads, shaped by diverse communities, historic trade routes and deeply rooted social traditions. The city’s cultural landscape, including community archives, historic neighbourhoods and local heritage practices, reflects the region’s multi-layered identity ([UNAMID, 2014](#)).

Since 2023, El Geneina has faced severe conflict-related insecurity, including large-scale displacement, destruction of civilian infrastructure and extensive damage to residential areas and public facilities ([OHCHR, 2023](#)).

Previous assessments

UNOSAT has undertaken assessment over El Geneina, these include:

In August and September 2024, the UNOSAT Emergency Mapping Service was activated for flooding over Sudan (FL20240826SDN, Charter Activations [906](#) and [917](#)). Through this service several assessments were produced, including a satellite detected water extent over El Geneina ([UNOSAT map product and Data](#)).

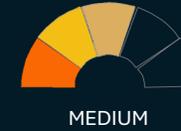
This report includes the follow sites analysed for El Geneina:

	Site Name	Analysis Date	Status
5.1	Sultan Bahruddin Museum	31 October 2025	Possible damage
5.2	El Geneina Central Mosque	31 October 2025	Possible damage

5.1 Sultan Bahruddin Museum

El Geneina, West Darfur, Sudan

31 OCTOBER 2025



POSSIBLE
DAMAGE



The Sultan Bahruddin Museum is one of the few major heritage institutions in El Geneina, dedicated to preserving local history and cultural heritage of West Darfur. It held collections reflecting the region's diverse ethnic and social past.

Reports note that the Sultan Bahruddin Museum has suffered damage to both a portion of its collections and its historically significant building due to recent bombings in the area ([MENA Solidarity Network, 2023](#)).

A very-high resolution image captured by a Pléiades satellite on the 25 September 2024 shows no visible flood damage (Charter Activation [917](#)).

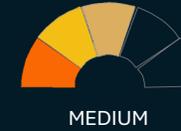
This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 31 October 2025. It shows possible damage to a roof of one of the museum buildings. Additionally, the large residential area surrounding the museum (on the Eastern side) has been destroyed, with several buildings missing roofs and looking to be burned.



5.2 El Geneina Central Mosque

El Geneina, West Darfur, Sudan

31 OCTOBER 2025



POSSIBLE
DAMAGE



This page illustrates damage observed from a very-high resolution image captured by a WorldView-2 satellite on the 31 October 2025. It shows possible damage to the El Geneina Central Mosque.

There is possible roof damage to the mosque and the buildings surrounding the mosque to the west look to have sustained roof damage in several locations.



4. Archaeological sites/ Cultural Landscapes in North Darfur

- Shoba
- Ayn Farra
- Uri
- Jebel
- Malha



The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations.
Final boundary between the Republic of Sudan and the Republic of South Sudan has not yet been determined. Final status of the Abyei area is not yet determined.

Archaeological Sites – North Darfur

Overview

North Darfur contains a diverse range of archaeological sites that reflect the region’s long and complex history, including former sultanate centres, fortified settlements, palaces, mosques and rock-art landscapes. Many of these sites, hold significant cultural value and offer important insights into the past societies in Darfur.

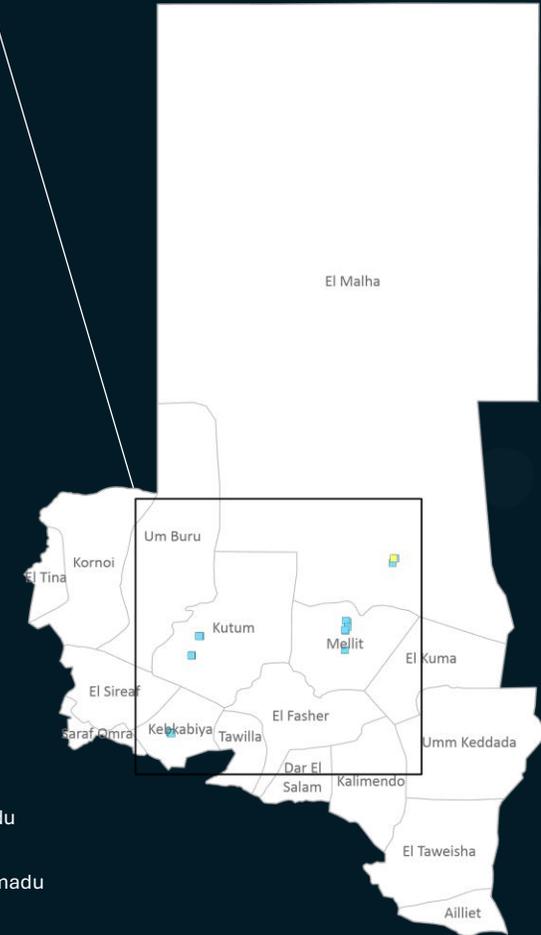
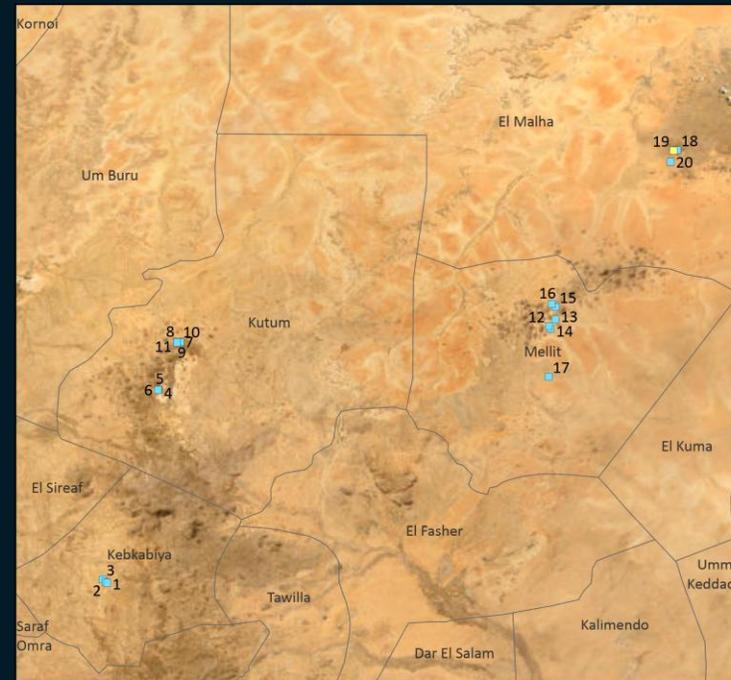
Due to the ongoing conflict in Sudan, the remote locations and limited documentation make these sites particularly vulnerable in times of instability.

To understand damage and changes that have occurred on this site, this report includes a very-high resolution satellite-imagery damage assessment of 20 sites within the Darfur Region.

The summary of these sites is shown on the map, including numbers of the sites which is referenced throughout this report.

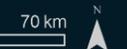
Note, a previous assessment was undertaken over these sites during the UNOSAT Emergency Mapping Service flood activation in September 2024 (FL20240924SDN, [Charter Activation 917](#)).

Overview of sites in North Darfur



- | | |
|----------------------------------|---|
| 1 Shoba Palace | 11 Uri, Meiram's House |
| 2 Shoba Lower Palace | 12 Jebel Bonq Bunq - Musical Rocks |
| 3 Shoba Mosque | 13 Jebel Abri - Rock Art |
| 4 Ayn Farrah Mosque | 14 Jebel Souqoro - Palace of Nyamadu |
| 5 Ayn Farrah, Palace | 15 Mao Houses |
| Ayn Farrah, Lower Houses (Sultan | Jebel Merbo - Cave of Sultan Nyamadu |
| 6 Mother's House) | 16 (King Nando) - Rock Art |
| 7 Uri Mosque | 17 Sultan Idris Cave |
| 8 Uri, Upper Palace | 18 Jebel Meidob City |
| 9 Uri, Lower Palace | 19 Malha - Lake and Salt works |
| 10 Uri, Dali House | 20 Malha Khairganqa Prison of Ali Dinar |

■ No visible damage
■ Possible damage



1 – 3: Shoba – Palace of Sultan Mohammed Teirab

Kebkabiya, North Darfur, Sudan

The Shoba Palace, built in the Shoba area, is associated with Sultan Mohammed Teirab (r. ~1752–1785) of the Fur Sultanate. The site comprises of three locations 1) Shoba Mosque, 2) Shoba Lower Palace and 3) Shoba Palace (see overview map for locations).

Architecturally, the palace is a square structure built on a rocky outcrop and surrounded by three concentric stone defensive walls with three entrance gates. The Shoba Mosque nearby, attributed to Sultan Mohammed Teirab, suggests the site was not purely residential, but also a religious and political centre. The defensive walls and robust construction suggest that Shoba was not just a ceremonial palace, but a locus of political power and stability. According to Ahmed Ali (2019) these royal buildings 'show us the political stability and economic prosperity of the sultanate.'

Given its architectural complexity and its links to an important Fur Sultan, Shoba Palace is highly significant for understanding Darfur's pre-colonial political history.

No publicly available reports or information has confirmed or mentioned any damage, looting or destruction to the three Shoba sites.

These sites were also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation 917), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.



1. Shoba Mosque – Palace of Sultan Mohammed Teirab

Kebkabiya, North Darfur, Sudan

6 OCTOBER 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 6 October 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



2. Shoba Lower Palace – Palace of Sultan Mohammed Teirab

Kebkabiya, North Darfur, Sudan

6 OCTOBER 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 6 October 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



3. Shoba Palace – Palace of Sultan Mohammed Teirab

Kebkabiya, North Darfur, Sudan

6 OCTOBER 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 6 October 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



Ayn Farrah

Kutum, North Darfur, Sudan

Ayn Farrah, is historically important as a former seat of power under the last Tunjur rulers. Sources describe it as a fortified settlement on a spring-fed ridge, combining natural and constructed defences. It features massive stone-and-brick fortifications, terraces and residential structures that testify to its role as a political centre. According to archaeological surveys, the site includes important compounds, broadly comprising a palace complex (Ayn Farrah Palace), mosque and residential quarts (Sultan Mother's House/ Lower House) ([Sudan Archaeological Research Society, 2011](#)).

No publicly available reports or information has confirmed or mentioned any damage, looting or destruction to the three Ayn Farrah sites.

These sites were also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.



Overview of sites within Ayn Farrah.

4. Ayn Farrah Mosque

Kutum, North Darfur, Sudan

11 JULY 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a GeoEye-1 satellite on the 11 July 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



5. Ayn Farrah Palace

Kutum, North Darfur, Sudan

11 JULY 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a GeoEye-1 satellite on the 11 July 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



6. Ayn Farrah Lower House

Kutum, North Darfur, Sudan

11 JULY 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a GeoEye-1 satellite on the 11 July 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



Uri

Kutum, North Darfur, Sudan

Uri is an important archaeological settlement in the Darfur region with a long and multi-layered history that stretches from pre-Islamic times into the Islamic sultanates. The site is known locally as a “great stone city,” and surveys conducted by the Sudan Archaeological Research Society describe extensive remains built in the characteristic Tora-style stone masonry found at several of Darfur’s earliest monumental sites.

Uri contains a mixture of large stone enclosures, terraced slopes, elite residential compounds and public buildings, including a square mosque identifiable by its mihrāb. These remains reflect a settlement of considerable sophistication and suggest that Uri likely served as an important regional or royal centre during successive periods of Darfur’s history.

The site illustrates the deep cultural heritage of the region and highlights the architectural traditions that pre-date, and were later integrated into, the Islamic era in western Sudan ([The Sudan Archaeological Research Society, 2011](#)).

No publicly available reports or information has confirmed or mentioned any damage, looting or destruction to any of the Uri sites.

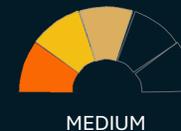
These sites were also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.



7. Uri Mosque

Kutum, North Darfur, Sudan

25 SEPTEMBER 2024



NO VISIBLE
DAMAGE



This site was analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

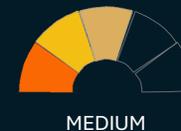
This analysis indicated no visible damage was detected on the site.



8. Uri Upper Palace

Kutum, North Darfur, Sudan

25 SEPTEMBER 2024



NO VISIBLE
DAMAGE



This site was analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

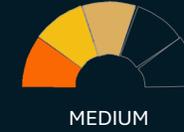
This analysis indicated no visible damage was detected on the site.



9. Uri Lower Palace

Kutum, North Darfur, Sudan

25 SEPTEMBER 2024



NO VISIBLE
DAMAGE



This site was analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

The analysis indicated no visible damage was detected on the site.



10. Uri Dali House

Kutum, North Darfur, Sudan

25 SEPTEMBER 2024



NO VISIBLE
DAMAGE



UNOSAT

This site was analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

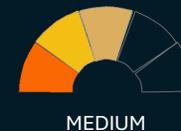
The analysis indicated no visible damage was detected on the site.



11. Meiram's House - Uri

Kutum, North Darfur, Sudan

25 SEPTEMBER 2024



NO VISIBLE
DAMAGE



UNOSAT

This site was analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

The analysis indicated no visible damage was detected on the site.



Other Archaeological Sites

Mellit, North Darfur, Sudan

This map shows a reference summary map of the locations of other archaeological sites within Mellit, in North Darfur.

The satellite-derived assessments for each site is on the following pages. Each site is numbered to easily identify each site and their location.

These sites were also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.



12. Jebel Bonq Bunq - Musical Rocks

Mellit, North Darfur, Sudan

1 JUNE 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 1 June 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



13. Jebel Abri - Rock Art

Mellit, North Darfur, Sudan

1 JUNE 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 1 June 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



14. Jebel Souqoro - Palace of Nyamadu

Mellit, North Darfur, Sudan

1 JUNE 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 1 June 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



15. Mao Houses

Mellit, North Darfur, Sudan

1 JUNE 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 1 June 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



16. Jebel Merbo - Cave of Sultan Nyamadu (King Nando) - Rock Art

Mellit, North Darfur, Sudan

1 JUNE 2025



NO VISIBLE
DAMAGE



Analysis of Jebel Merbo - Cave of Sultan Nyamadu (King Nando) included the main site and six additional cultural sites in the immediate vicinity.

This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 1 June 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site or the surrounding areas.



17. Sultan Idris Cave

Mellit, North Darfur, Sudan

1 JUNE 2025



NO VISIBLE
DAMAGE



UNOSAT

This page describes damage observed from a very-high resolution satellite image captured by a WorldView-3 satellite on the 1 June 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



El Malha

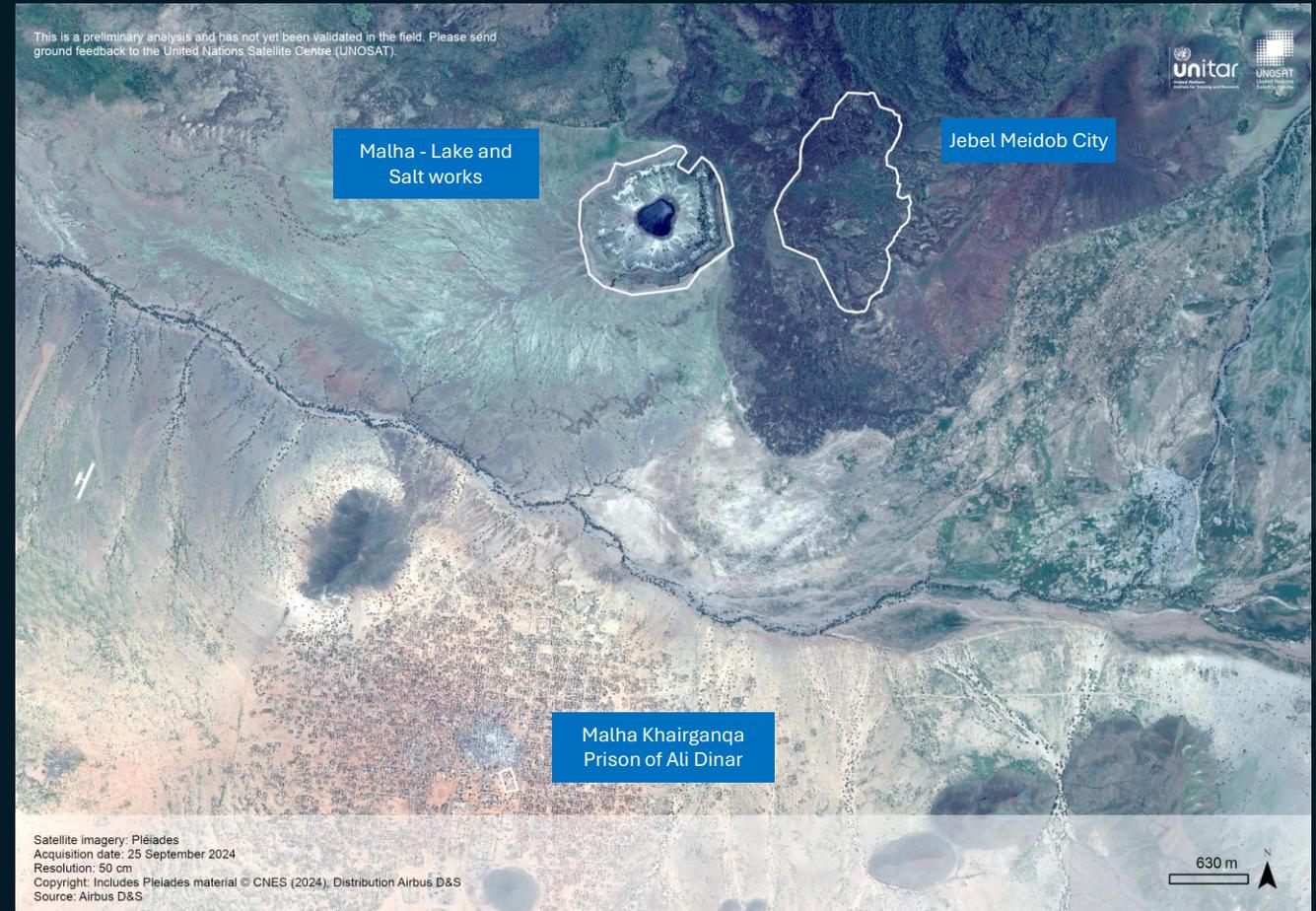
El Malha, North Darfur, Sudan

The Meidob volcanic field in western Sudan is a large, mainly Holocene volcanic province that spans thousands of square kilometers and contains nearly 700 volcanic vents of various types.

The geology of the field includes broad basaltic lava flows, scoria cones, lava domes, pyroclastic deposits, maars and tuff rings. One of its most distinctive features is the Malha Crater, a maar crater that contains a lake (the Malha Crater Lake or Lake and Salt works).

Over time the field has experienced repeated eruptions from ~6.8 million years ago up until as recently as around $4,900 \pm 520$ years ago. The volcanic landscape sits atop the uplifted basement of the so-called Darfur dome. The combination of volcanic activity, local topography and desert-margin climate has shaped a harsh but geologically rich area that plays a role in human settlement, groundwater, and local cultural memory ([Smithsonian Institute, 2025](#)).

These sites were also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.



Overview of sites El Malha.

18. Jebel Meidob City

El Malha, North Darfur, Sudan

3 NOVEMBER 2025



NO VISIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-2 satellite on the 3 November 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage has been detected on the site.



19. Malha - Lake and Salt works

El Malha, North Darfur, Sudan

3 NOVEMBER 2025



POSSIBLE
DAMAGE



This page describes damage observed from a very-high resolution satellite image captured by a WorldView-2 satellite on the 3 November 2025.

Analysis shows possible damage around the lake shore, due to possible new construction and removal of structures.

Other points of no visible damage indicate the accumulation of rubbish / debris on the lake shore.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024 and no visible damage was present.



20. Malha Khairganqa Prison of Ali Dinar

El Malha, North Darfur, Sudan

3 NOVEMBER 2025



NO VISIBLE
DAMAGE

UNOSAT

This page describes damage observed from a very-high resolution satellite image captured by a WorldView-2 satellite on the 3 November 2025.

This site was also analysed under the UNOSAT Emergency Mapping Service in September 2024 (FL20240826SDN, Charter Activation [917](#)), using a very-high resolution image captured by a Pléiades satellite on the 25 September 2024.

During both assessments no visible damage was detected on the site.

However, the town of El Malha (where the prison is situated) has sustained large scale damage to several buildings within the vicinity of the Malha Khairganqa Prison. In addition, military activity and presence can be seen within the town. Including a large earth berm surrounding the town.

Reports describe fighting and clashes within the town in early 2025, with reports that the RSF had seized control of El Malha on 20 March 2025 ([Sudan Tribune, 2025](#)). These reports and observations seen on satellite imagery put the site at a high concern.

Even though satellite imagery reports no visible damage at the site; interior damage, theft or looting cannot be detected through satellite imagery analysis.



Key Findings

The analysis presented in this report draws on available very high-resolution satellite imagery, as well as previously conducted damage assessments, to conduct a comprehensive assessment of damage to heritage sites across Sudan. The sites reviewed include both cultural landscapes such as archaeological areas and built cultural heritage including museums, religious structures, and libraries.

The two UNESCO World Heritage Sites (Archaeological Sites of the Island of Meroë and The Gebel Barkal and the Sites of the Napatan Region) and the Tentative List site (Monuments of the Kingdom of Kerma and Dokki Gel) analysed did not appear to sustain large-scale damage directly attributable to the conflict. However, some locations show signs of increased habitation and an accumulation of waste and debris which may pose indirect risks to the preservation of these sites, and many walls associated with water management at the site of Meroë appear to have been washed away. Furthermore, ongoing research and archaeological activities have been suspended due to the current situation.

The assessment of built cultural heritage within the five analysed cities revealed consistent patterns of moderate damage. Notably, the five museum sites (Sudan National Museum in Khartoum, Sultan Ali Dinar Palace Museum in El Fasher, Sheikan Museum in El Obeid, Nyala/ South Darfur Museum in Nyala and Sultan Bahruddin Museum in El Geneina) all show indications of possible or moderate impact.

This report provides a satellite-derived assessment which carries inherent limitations. Several issues frequently highlighted in field reports, including looting, internal structural damage and disturbances inside museum buildings, cannot be detected through satellite imagery. Additionally, reports of military activity at certain sites, including the presence of landmines and other unexploded ordnance, fall outside the detection capability of this methodology. As a result, in some instances the level of damage observed through the satellite-derived assessment may underestimate conditions on the ground.

This assessment represents an initial baseline analysis and underscores the importance of continued monitoring of heritage across Sudan. The conflict in Sudan is still ongoing and updated satellite-derived assessments are vital in helping maintain an impartial record of impacts and damage on heritage. In addition, these assessments help support partners and stakeholders by providing timely and accurate information on evolving conditions.

IMAGE COPYRIGHTS (Page 1)

Satellite Images:

ESRI BaseMap, ESRI WayBack World Imagery
Google Earth Imagery

Satellite Data: WorldView-2
Imagery Date: 8 September 2024
Resolution: 50 cm
Copyright: © (2024) DigitalGlobe, Inc., Longmont CO USA 80503.
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Satellite Imagery: WorldView-3
Imagery Date: 20 October 2022, 5 December 2022, 8, 15 & 26
February 2023, 7, 12 & 19 July 2024, 30 September 2024, 3 & 11
March 2025, 11 April 2025, 1 & 25 June 2025, 11 July 2025, 10, 20 &
22 September 2025, 6 October 2025, 1 & 13 November 2025
Resolution: 30 cm
Copyright: © Vantor/ Maxar 2022, 2023, 2024, 2025

Satellite Imagery: WorldView-2
Imagery Date: 1 January 2021, 7 June 2022, 22 November 2022, 2
December 2022, 13 August 2023, 7 October 2023, 3 & 28 April 2024,
28 June 2024, 4, 21 & 24 July 2024, 8, 20 & 26 September 2024, 26
October 2024, 26 November 2024, 12 September 2025, 11 & 31
October 2025, 3, 6 & 11 November 2025
Resolution: 50 cm
Copyright: © Vantor/ Maxar 2022, 2023, 2022, 2024, 2025

Satellite Imagery: WorldView-1
Imagery Date: 31 May 2025
Resolution: 50 cm
Copyright: © Vantor/ Maxar 2025

Satellite Imagery: GeoEye-1
Imagery Date: 11 & 15 November 2020, 1 January 2021, 29 September
2022, 11 March 2024, 12 April 2024
Resolution: 50 cm
Copyright: © Vantor/ Maxar 2020, 2021, 2022, 2024

IMAGE COPYRIGHTS (Page 2)

Satellite Images:

Satellite imagery: Pléiades

Acquisition date: 25 September 2024

Resolution: 50 cm

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Satellite imagery: Pléiades

Acquisition date: 15 November 2024

Resolution: 50 cm

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Acquisition date: 16 October 2025, 28 October 2025

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World Heritage and Tentative List Site boundaries: UNESCO

Other site boundaries: UNOSAT

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