

# Stories left behind in the ashes

An analysis of events involving burnt remains of victims in the Myanmar conflict from March 2022 to September 2023

REPORT BY MYANMAR WITNESS, 19 December 2023

**Warning: Graphic.** This report contains graphic imagery and links to graphic imagery shared online. While efforts have been made to blur details, the report contains information which some readers may find distressing.

## Key Event Details

### Date/Time of Incidents:

- 146 separate events between March 2022 and September 2023

### ● Alleged Perpetrator(s) and/or Involvement:

- Myanmar Military (SAC)
- People's Defence Force (PDF)

### ● Summary of Investigation:

- Myanmar Witness has identified, documented, and, where possible, verified local media reports and User-Generated Content (UGC) related to the burning of bodies between March 2022 and September 2023. This includes bodies burnt post-mortem, people allegedly burnt alive, and people who died as a result of arson, or munition and airstrikes.
- 146 separate events have been catalogued. Although many events were unverifiable, 80 events had unique imagery of the victims.
- The majority of reported events were in the Sagaing Region. This area is a conflict hotspot, as seen by other Myanmar Witness reporting.
- There has been a decrease in reporting of events involving the burning of bodies over time. The exact reason for this remains unknown.
- 35 cases (24%) mentioned female victims, including reports of Sexual and Gender-Based Violence (SGBV), deaths and other potential violations of international law.
- Myanmar Witness believes the burning of bodies, pre or post mortem, could represent a violation of international law and recommends international legal bodies investigate this further.

## Executive Summary

Before and since the start of the February 2021 coup, many violent events have occurred in Myanmar, including burnt villages (as reported by the [Ocelli Project](#) and within [Myanmar Witness reports](#)), beheadings, and abundant airstrikes. Through the collection and analysis of user-generated content (UGC), Myanmar Witness has investigated, verified, and reported on potential human rights violations associated with the conflict across Myanmar. By doing so, Myanmar Witness identified several claims related to the burning of victims, alive or deceased, intentionally or indirectly.

Myanmar Witness has investigated events between March 2022 and September 2023 involving burnt bodies. 146 separate events were identified which included burnt bodies. Unique imagery of the victims was available for 80 of these events. Of the 444 victims identified, 150 victims were visible within UGC. The events were categorised as:

- Burnt alive
- Burnt indirectly
- Burnt after death

A number of events did not fall into these three categories, which were marked as “other” (such as Sexual and Gender Based Violence (SGBV) and one with imagery of a relatively standard cremation), and events with limited information were marked as “unclear”. Of the 146 events, 104 occurred in Sagaing, a region that has been a hotspot during the conflict. Magway State was the second most common location, with 21 cases. Additionally, 35 events specifically mentioned a female victim.

Four case studies have been further investigated to show the different nature and intensity of the events. This includes: piles of bodies, child casualties, and victims with significant wounds. This investigation has revealed the mutilation of bodies, disrespect for the dead and the infliction of untold suffering on the civilian population; activity which could violate multiple international laws.

According to various reports, the SAC were allegedly involved in many of these cases. Myanmar Witness cannot yet verify this but will continue to monitor any developments in order to assess responsibility.

## Background and Context

While cremation and accidents involving fire do occur, fire can also be used strategically and horrifically in warfare. Myanmar is no exception. Examples of these events include the religious cremation of residents, common housefires, but regrettably also the victims of warfare, burnt in arson attacks, burnt post-mortem, or burnt alive. The impact can be deadly; for example, it can take lives, trigger forced displacement, or have coercive effects on population groups.

While international law and norms stipulate the need to avoid superfluous injury, unnecessary suffering, harm to, or the targeting of, civilians (e.g. Geneva Convention, Additional Protocol II, Article 13(2), ICRC Handbook, Rule 70), the conflict in Myanmar has seen many potential violations of these rules. Additionally, customary law outlines a shared belief that spreading terror among a civilian population is unacceptable (ICRC Handbook, Rule 2), and binding international agreements provide further protection for civilians.

The burning of bodies, pre or post-mortem, could also constitute a violation of international law. Mutilation is prohibited in many international laws (e.g.: Lieber Code, Article 56; Geneva Conventions, common Article 3; Third Geneva Convention, Article 13; Fourth Geneva Convention, Article 32; Additional Protocol I, Article 75(2); Additional Protocol II, Article 4(2); and ICC Statute, Article 8(2)(b)(x) and (e)(xi)). Additionally, parties to the conflict must take all measures to respect the dead (Geneva Convention IV, Article 16; Geneva Convention, Additional Protocol I, Article 34(1); Geneva Convention, Additional Protocol II, Article 4) and personal dignity must also be protected (ICC Statute, Article 8(2)(b)(xxi) and (c)(ii)).

Since the coup started on 1 February 2021, protests have been common and civil disobedience organisations were formed. The Myanmar military has violently suppressed political opposition and has acted with violence against civilian communities. Over time, this conflict has spread and evolved throughout Myanmar, often even near the borders. In many cases, in areas where control is not a given, the tactic of using fire as a weapon has been used — likely as part of both the Myanmar military’s offensive against PDF groups and as an attempt to subjugate the civilian populations through terror and scorched earth methods. These events have not been solely witnessed since the coup but were used before the coup during the [Rohingya genocide in Rakhine state](#). The scorched earth tactics were also utilised before these events in Myanmar, such as the [2011 Kachin conflicts](#).

Myanmar Witness has been identifying and verifying information regarding the use of fire, such as with Myanmar Witness Reports: [Myanmar on Fire](#) and [Civilian Infrastructure and Food Supplies Destroyed in Myanmar Military Arson Attacks](#). Further reporting has been conducted specifically on the burning of bodies in singular events, like the [Mon Taing Pin Massacre](#) and the burnt vehicle events in [Moso](#). As ongoing conflict monitoring revealed continued reports of human remains found at sites of fires, an investigation was set up to determine if any events could be verified.

For clarity, this report excludes cases of common housefires, religious cremations and other nearby subjects. This paper reviews events allegedly involved with the burning of any human

or human remains in Myanmar, a consistent feature of the conflict. This report seeks to provide insight into this phenomenon by assessing data and specific case studies.

## Methodology

Myanmar Witness follows a methodology of digital preservation and rigorous, replicable analysis. Digital evidence is collected and archived in a secure database and preserved with hashing to confirm authenticity and prevent tampering.



Myanmar Witness applies a four-tier classification system to describe the extent to which footage has been independently verified by Myanmar Witness. This is as follows:

- **Fully verified:** Footage independently geolocated and chronolocated by Myanmar Witness.
- **Verified:** Footage has been geolocated by Myanmar Witness. Other sources concur on the time and date of the footage, with no evidence following to suggest that the footage was taken earlier or later. However, it has not been possible for Myanmar Witness to independently chrono-locate the footage.
- **Unverified / Under investigation:** Myanmar Witness has not been able to geolocate or chronocate footage at the present time.
- **Inauthentic:** The geolocation and chronolocation process has shown the location or timing of the footage to be inaccurate.

For the avoidance of doubt, this verification system only refers to Myanmar Witness' ability to independently geolocate or chronocate footage. Incidents marked as unverified may still be substantiated by multiple eyewitness reports. Sources are cross-referenced in this report to indicate where this is the case.

This report contains images showing how footage has been geolocated. Coloured boxes show how landmarks or distinguishing details correspond to each piece of footage or data.

Geolocation is conducted using various open-source online tools, such as Google Earth, to match satellite imagery with visual features identified in the footage or images. Geolocations are cross-checked and peer-reviewed before they are credited as verified.

Chronolocation is typically conducted by analysing UGC timestamps to determine hard-end limits for the possible time frame. This is followed with contextual analysis, for example, comparing against known indicators such as events or clocks visible, weather, and shadows. Shadow angle is determined after geolocation, and its orientation is used to determine the position of the sun and, thus, time. Chronolocation is included as specifically as possible

without incorrectly attributing time to account for limitations with some of these methods. Sentinel satellite imagery was also used to determine a timeframe of chronolocation.

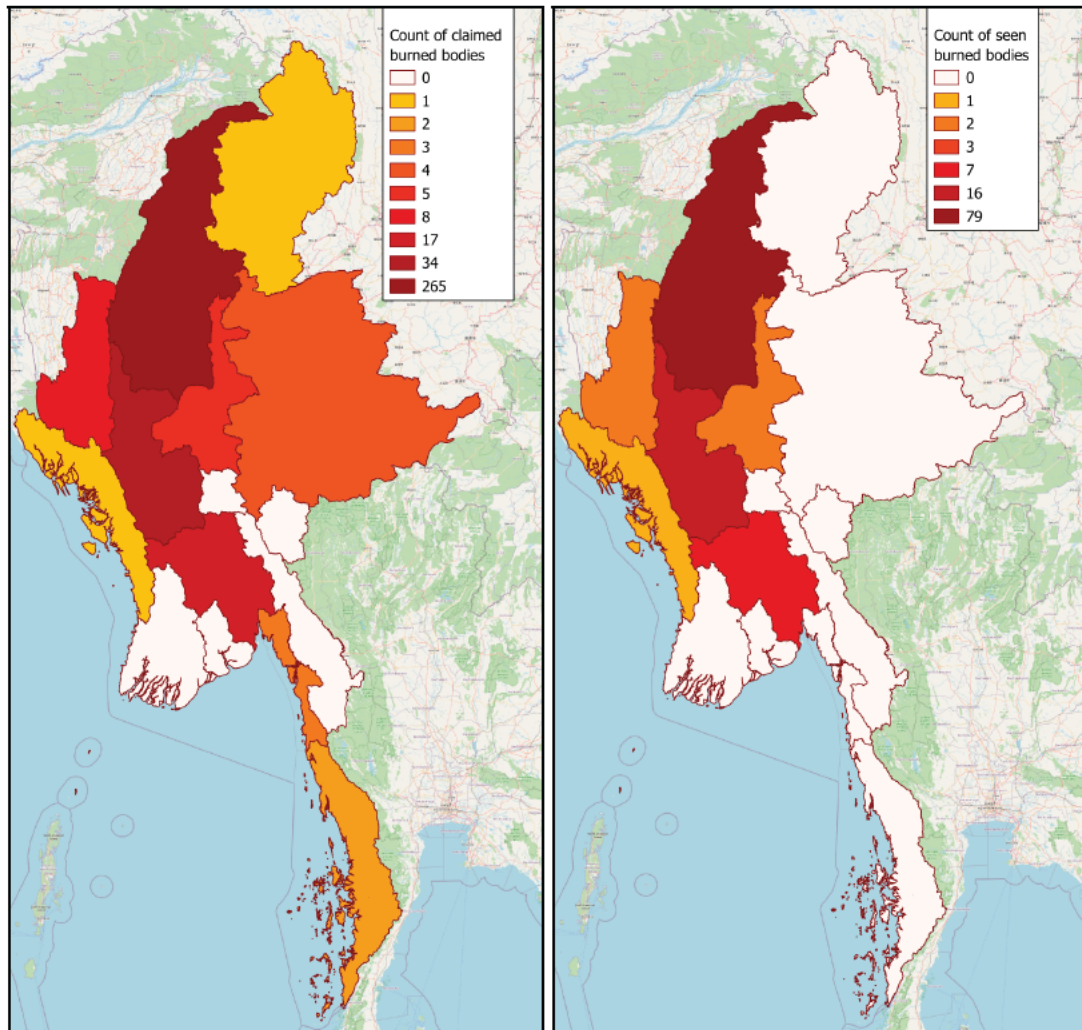
If dealing with unverified information, such as witness testimony or third-party reporting, Myanmar Witness has made known that these inclusions are claims and that Myanmar Witness has not independently verified them. In order to uphold ethical standards, Myanmar Witness has obscured identifying information about the individuals involved, censored private information and images where appropriate, removed links to private individual accounts, and archived said information securely. Where appropriate, Myanmar Witness has also blurred or excluded graphic imagery.

To read the investigation-specific methodology and limitations for this investigation, see Appendix I.

## Trend analysis

To provide an insight into the events investigated, Myanmar Witness has analysed the data by location, event type, gender, time and trend outliers. The data featured below encompasses 146 events with 444 claimed victims, 160 of which were photographed.

## Spatial Analysis



Map 1 & 2: (left) Total count of claimed burnt victims in the 146 events,  
(right) Total count of visualised burnt victims in the 146 events

In the two heat maps above, the majority of victims were located in Sagaing and Magway, (for more information see the [event counts](#) in the appendix). The collected data bears similarity with the general distribution of conflict related events as seen in Myanmar Witnesses databases and reporting, with Sagaing having the largest set of data points. While in line with other reporting, the percentage of events including burnt bodies is particularly high in Sagaing: 73% of all identified cases for the visualised victims' set and 77% for the claimed victims' set were located in Sagaing.

Possible reasons for this skew towards Sagaing could include:

1. An attempt to regain control through a fear campaign.
2. The brutality of specific armed forces operating in the area.
3. Escalating violence due to the impact of previous violent attacks.

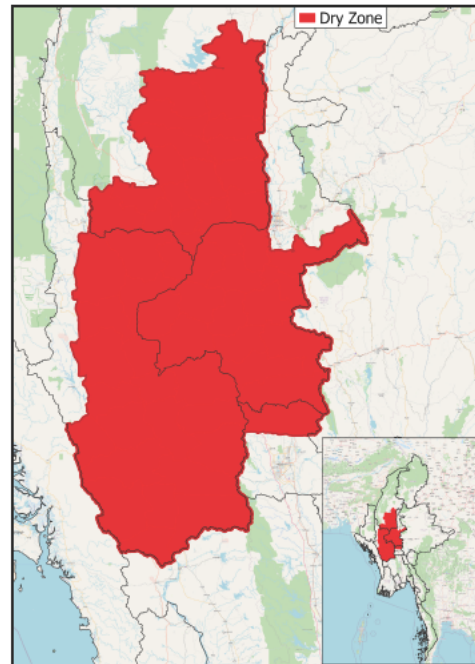
## Event Type Analysis

The circumstances surrounding the burnt body incidents fell into several categories. As shown in figure 1, 55 cases were defined as unclear or unknown. Generally, the circumstances leading to the victims' deaths are not fully understood. Investigators can only describe the event using contextual clues or by relying upon witnesses.

38 incidents reportedly involved victims that were burnt alive. While this may be the result of the selected keywords, as mentioned in the methodology, it's likely that some of these cases did involve victims being burnt alive.

29 incidents reportedly involved the burning of bodies "post death". This is interesting as although one could claim it as "respectfully cremating the bodies", the burning of bodies prevents relatives from saying a final farewell to their loved ones. This identifier is further explained in the [Discussion](#) section on page 14.

The case studies (described below) further explore the circumstances surrounding specific incidents.



Map 3: location of the dry zone in Myanmar

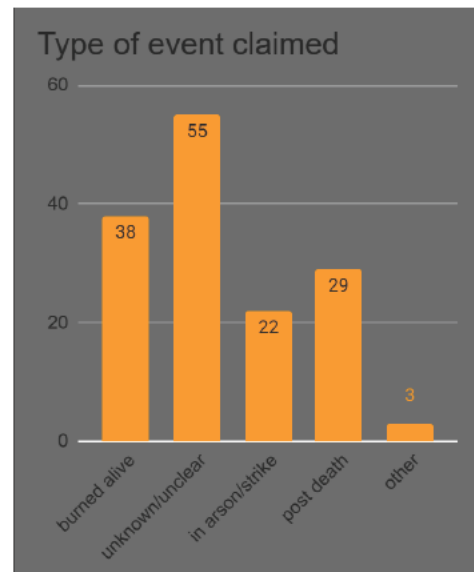


Figure 1: Amount of victims per type

## Gender Analysis

Gender issues were reviewed and analysed in this investigation (Figure 2). Of the events identified, 25.2% (37 events) included a gender tag due to the mention of a female victim, SGBV or other gender related factors (as listed in the methodology). Closer examination of gender tags compared with event types did not lead to any notable conclusions. For example, Myanmar Witness cannot confirm that “female death” claims were more apparent in “burnt alive” cases.

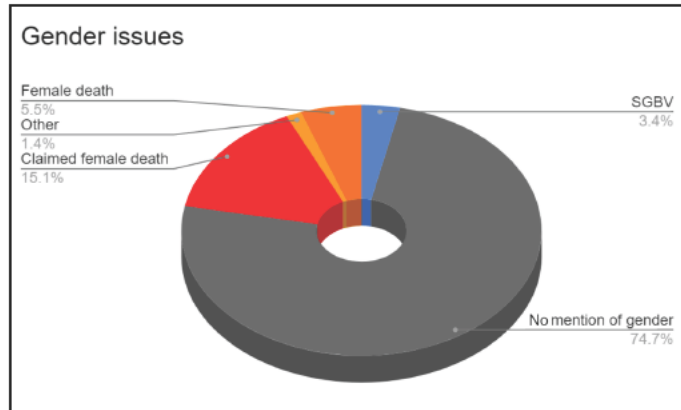


Figure 2: Percentage of events with gender issues

Of the five reported cases of SGBV analysed by Myanmar Witness, four involved claims that the victims were raped and burnt alive, or that victims were raped, then killed, and their bodies were subsequently burnt. In the fifth case, the victims were beaten under the threat of being set on fire (due to privacy concerns, sources are only available by request).

## Chronological Analysis

To determine the occurrence of these incidents over time, three parameters were investigated:

- The total events
- The number of seen victims
- The number of claimed victims

Figures 3 and 4 show the number of events and victims per month, plotted over time. A trendline was added to indicate the computed average change in frequency.

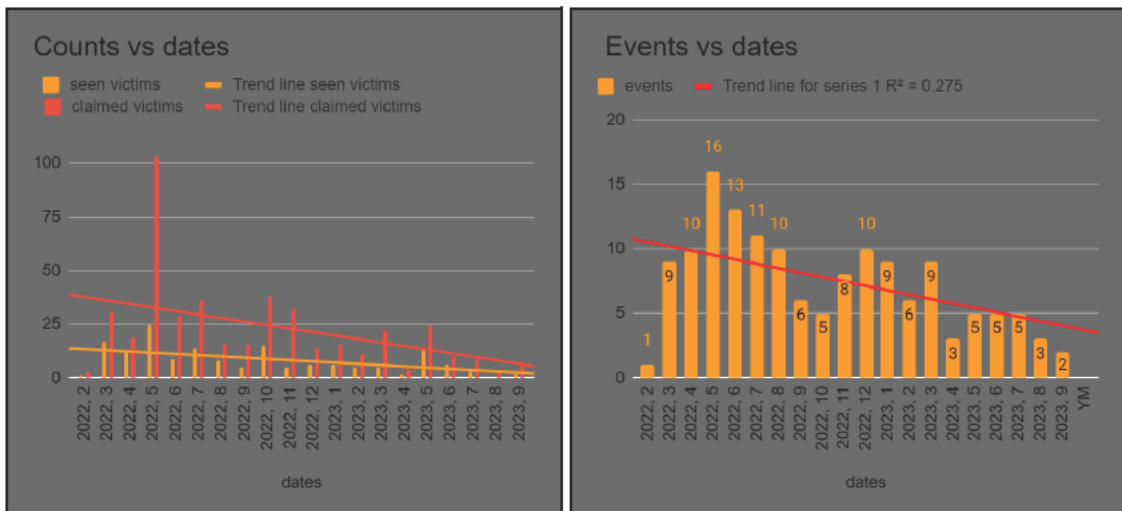


Figure 3 & 4: (left) Count of seen and claimed victims per month (right) Count of events per month



|                          | events | seen victims | claimed victims | intensity seen | intensity claimed |
|--------------------------|--------|--------------|-----------------|----------------|-------------------|
| 1st half (until nov 22') | 8.90   | 11.00        | 32.50           | 1.28           | 3.64              |
| 2nd half (until sep 23') | 5.80   | 4.80         | 12.00           | 0.84           | 2.06              |
| % decrease               | 34.83% | 56.36%       | 63.08%          | 34.33%         | 43.40%            |

Figure 5: Count of events per half of the data collection

Figure 5 (above), appears to show a decrease in both the number of victims and the number of events. There are many reasons why this could have happened, including a genuine reduction in the burning of bodies, the removal of content by social media platforms, or a decrease in reporting of burnt body cases. The latter could be the result of overexposure, desensitisation, or an increase in privacy standards. Interestingly, the intensity of events (number of victims per event) has also decreased. The intensity graph can be found in Appendix IV.

### Outliers and other notable data points

Myanmar Witness investigated the outlier events identified during this study to determine whether specific incidents were skewing the dataset disproportionately. The number of victims evident within UGC was compared with the associated claims of the number of casualties. For example, in 'Event 32', which took place in May 2022, only a single victim was seen in the UGC, while claims stated that there were 40 victims in total. If this case is omitted, the trend line seen in Figure 6 would provide a higher confidence level. Other resulting graphs can be found in Appendix IV.

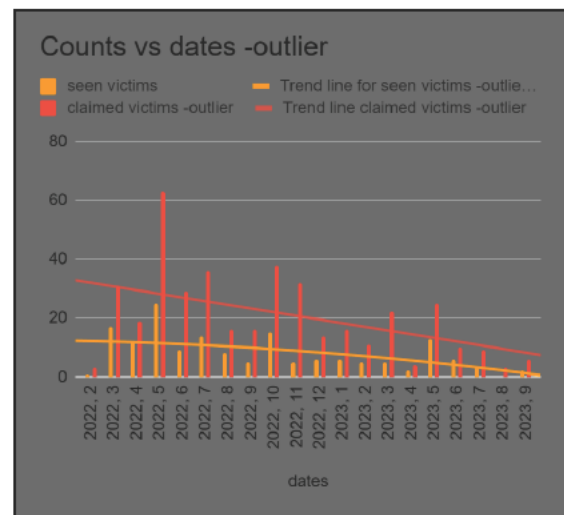


Figure 6: Count of events per month, minus the outlier (Event 32)

Finally, 86% of the cases were alleged to have occurred with Myanmar Military or Pyu Saw Htee troop involvement, with another 10% not mentioning an alleged actor. There was no available imagery to support these claims. However, Myanmar Witness noticed that civilians did not appear to be threatened by the presence of PDF forces (e.g. event 127).

## Case studies (Graphic)

Myanmar Witness has selected four events to demonstrate the different types of incidents identified during this investigation. Each event was chosen because of its clear visuals, which aided the verification process. Where possible the images were geolocated. A more complete description of these geolocations is available in [Appendix V](#). The uncensored images can be found in the respective links or upon request.

### Case study 1

8 victims reportedly burnt in Tabayin, Sagaing, on 4 March 2022

Eight young people were [reportedly](#) killed and burnt on 4 March 2022 (Event 4 in the dataset). Sources claim that nine men and one woman were involved in the incident. Analysis of UGC shows four dead bodies (in imagery alike figure 7) that have been severely burnt. The damage includes charring on most of the body, burnt layers of skin, and missing parts of soft tissue.

As the intensity of the damage done to each person differs, (i.e. some of the victims were partially burnt while others were unrecognisable) it is unlikely that the victims burn damage was caused by a flammable object. Similarly, it also appears that the fire wasn't directly from the bikes, but from an accelerant like petrol. Whilst an incidental fire is still a possibility, it is unlikely for a number of reasons, including that the bodies are situated in between burnt motorbikes, a number of victims appear to have been burnt together, and there are no visible marks from dragging/movement near the victims. These factors suggest that the burning was committed out of a malicious nature.

One of the sources stated that after the bodies were burnt, some were shot again. Using purely the UGC, this claim cannot be verified, nor ruled out entirely.



*Figure 7: A blurred image from the events in Tabayin township (event 4)*

## Geolocation

While the following location has many features that match satellite footage, this location was unable to be geolocated as per Myanmar Witness standards for verification. That said, the possible coordinates for this location are 22.576856, 95.280002, which corresponds to Tabayin township, where the events allegedly took place.



Figure 8: An unverified geolocation of event 4 (22.576856, 95.280002)

## Case study 2:

An alleged child victim burnt in Pale Township, Sagaing Region on 15 August 2022

A facebook account [claimed](#) (warning: graphic link) that there were seven victims of an incident (event 67 in the database), one of whom was seven-years-old. Only one body can be seen in the post. The image showed charring and missing soft tissue on the body. The flames appear to have burnt hotter or for longer than in case study 1, as indicated by the victim's exposed bones. The victim may have been a child, as the body seems relatively small compared to its surrounding environment. However, a lack of reference objects limits the ability to reliably confirm whether this is a child.



Figure 9: A blurred image from the events in Pale Township (event 67)

## Geolocation

Multiple geolocated pieces of footage situated these events in Pale Township (coordinates of 22.072981, 94.789303). The geolocation was verified by visualising the buildings' outline and the placement of foliage, as shown in figure 10.

It was not possible to chronolocate the footage, as clouds obscured all relevant satellite footage in the month of August 2022. Despite this, some of the later imagery still showed damage in the form of discoloration, as can be seen in figure 11.



Figure 10: A verified geolocation of event 67 (22.576856, 95.280002)



Figure 11: sentinel imagery showing some of the discoloration in the geolocated area.

### Case study 3:

17 victims reportedly burnt in Htantabin Township, Bago on 10 May 2023

Claims that circulated on Facebook (event 127) mentioned that 17 victims were set on fire, including seven children (source redacted due to graphic nature, available on request). Myanmar Witness counted seven burnt bodies in the associated imagery. One source (redacted due to privacy concerns) also claimed that victims were burnt alive.

In Figure X, the victims lower legs are intact. This could mean that the victims were stacked on top of each other before they were set on fire. Other victims appear to have been burnt in a different manner and location, as damage to these bodies is markedly different. Allegedly, the incident was a retaliation to nearby losses by the Myanmar Military, but this cannot be verified.

In the provided UGC, it appears that ethnic armed forces were allowed to gather the victims. This adds weight to the claims that the PDF were not behind the incident.

#### Geolocation

Using geospatial markers, the images of the victims were geolocated to Nyaung Pin Thar village (ညောင်ပင်သာ 18.601225, 96.597948). Unfortunately, chronolocation was not possible, as the fire was not visible on FIRMS or Sentinel satellite imagery.



Figure 12: A blurred image from the events in Htantabin township (event 127)



Figure 13: A verified geolocation of event 127 (18.601225, 96.597948)

## Case Study 4:

### 2 burnt bodies in Toke Gyi, Sagaing on 17 September 23

Images posted online showed two entirely burnt bodies, while a third features black, scorched marks on the face and body, including notable marks on the ankles (event 146 in the database; source redacted due to graphic nature of imagery, available on request). The wholly burnt victims share similarities to the first two cases mentioned (events 4 and 67). The victims died after the Myanmar Military allegedly set fire to the area, [following clashes](#) along the river between SAC boats and Kachin Independence Army.

### Geolocation

The post featured a drone video of the town while it was on fire, which Myanmar Witness converted into a panorama image of the skyline. The ground proved difficult to verify, due to floods from the nearby Irrawaddy River; however, Myanmar Witness believes it took place in Toke Gyi village (တုင်ကြီး) (24.302536, 96.453083). Related imagery can be found in the Appendix.



Figure 14: A blurred image from the events in Tokgyi township (event 146)

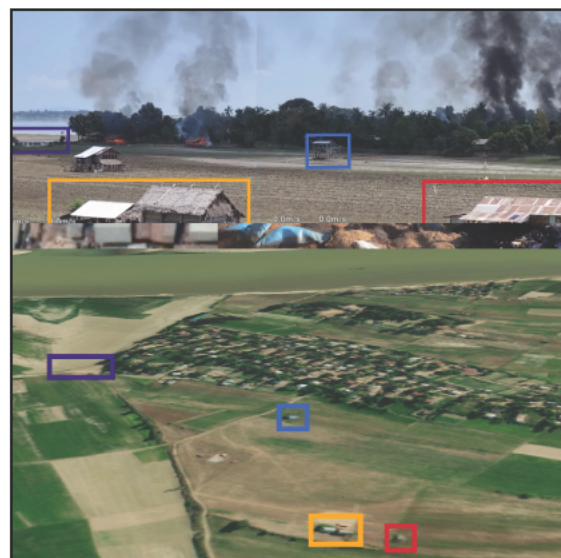


Figure 15: A verified geolocation of event 147 (24.301428, 96.456854)

## Conclusions

This report has highlighted a significant number of events involving the burning of bodies during the conflict in Myanmar. The use of fire on human bodies, both directly and indirectly, could amount to violations of international law.

This research has sought to shine light on this type of human rights interference, showing its rate of occurrence. Although the frequency of events reported has gone down over the timeframe of interest, Myanmar Witness cannot confirm whether this is due to a decrease in events or a decrease in reporting. A notable amount (25%) of the events appeared gendered in nature, and the locations where these events occur most frequently. The case studies reveal the intensity of the events, with children reportedly among the dead, imagery of piles of victims, and multiple claims of people being burnt alive, be it indirectly (e.g. as a result of air/artillery strikes) or directly.

By far, the majority of the events occurred in Sagaing state (73% of the cases with victims were visible in UGC). Sagaing is part of the Dry Zone, an area of known resistance that Myanmar Witness has widely reported on as it represents the violent epicentre of the conflict. As such, the dry zone appears to be the main location of these crimes based on this investigation. Most of the events (86%) of the cases claimed SAC or Pyu Saw Htee as the executive actor.

The exact reason for these occurrences is still unverified, but a likely option is that the burning of bodies is used to spread fear or terror among the population, not only through the brutality of the acts, but also by preventing families from saying goodbye or giving their loved ones a proper burial.

## Future Monitoring

Myanmar Witness will continue to monitor, identify, verify, analyse and report on the events involving the burning of victims of any party, with a particular focus on how they are performed. Myanmar Witness seeks to shed light on atrocities and determine attribution so that the responsible parties are held to account.

## Appendix I - Full methodology and limitations

### Data Collection and Methodology

Before online data collection began, the Myanmar Witness' central database was checked for relevant cases. This accounted for 67 out of 203 entries and 51 of the 147 events. These were filtered out using the appointed tags and by keywords (as stated later in this section) found in the post texts.

For this investigation's primary data collection portion, Myanmar Witness used [whopostedwhat.com](https://whopostedwhat.com) to conduct manual searches across Facebook for content, utilising relevant keywords in Burmese, broken down by month (between March 2022 and September 2023). Keywords and phrases used for this investigation included:

| English Keywords                      | Burmese Keywords                          |
|---------------------------------------|---|
| Burnt alive                           | အရှင်လတ်လတ်မီးရှို့ & အရှင်လတ်လတ်မီးရှို့ |
| Burnt dead, burnt corpse              | အလောင်းကိုမီးရှို့                        |
| Burnt killed, burnt (and) set on fire | မီးရှို့သတ်ဖြတ်                           |

A secondary smaller collection has been performed on X (formerly Twitter). For this, custom URLs were used via the advanced search tool format. These included a combination of hashtags and keywords. These were also broken down by month. Keywords were utilised in combination with the hashtags: #myanmar & #whatshappeninginmyanmar. The keywords were:

| English Keywords     | Burmese Keywords    |
|----------------------|---------------------|
| burnt body or bodies | မီးရှို့            |
| burnt                | အရှင်လတ်လတ်မီးရှို့ |



Once collected, the data was logged into Myanmar Witness' central database, with its investigation identifier and other properties, including but not limited to:

- Verification status
- (Claimed) location
- (Claimed) date
- Any gender issues
  - Mention of female victim
  - Mention of SGBV
  - Mention of LGBTQI+
- (Claimed) actor
- Text in post
- Violence rating

Specifically within most claimed events, women and children are mentioned separately, adding ease to analysis for these topics on gender and/or child based violence. While these provide a good baseline for most investigations, trend analysis for this investigation needed some specific extra properties. Thus, after the data collection phase, these entries were extracted into a separate database and more identifiers were manually added:

1. **Unique Event number:** This is required to get rid of duplicate information. Generally, this was done by looking at a mismatched date and location, and then the text was checked.
2. **Type of event:** these are described in the right info box.
3. **Seen and Claimed victims:** In order to have different layers of confidence/verification during the analysis of the events.

These are later sections used for the analysis and to draw out conclusions.

## Limitations

The information obtained by Myanmar Witness comes from an area of ongoing conflict, so it is assumed that there is a selection bias. This is due to factors including fear of repercussions for uploading, unavailability of information from official sources and availability, or lack thereof, the internet — which has also restricted the amount of media available to be verified by Myanmar Witness. Myanmar Witness strives to eliminate as much of this bias as possible by using both focused and broad search terms in multiple languages across open sources as well as identifying media from multiple sources, such as pro and anti-regime news and social media.

### **Incident Types**

**post-death:** People determined burnt after they were killed. An identifier like "killed and burnt" would put the event in this type.

**burnt alive:** The direct use of fire against civilians, resulting in death. Identifiers like "burnt alive", "killed by fire", "locked in", and "burnt the house", also would count towards this type.

**in arson/strike:** The indirect usage of fire against civilians. An ID like "burnt in their home" or "could not escape" would go into this type.

**unknown/unclear:** This type is for when there are no statements on how the victim was burnt or if the given information clashes.

**Other:** does not fall in the above types but is still notable enough to fit the scope of the investigation

There were also several limitations specific to this investigation:

- Data collection was conducted from late August until early October 2023. This timeframe could lead to collection bias, as the content may have been removed prior to the commencement of data collection. And inversely, Some of the content from September might not have been uploaded yet.
  - Data was collected only from Facebook and X (formerly Twitter), meaning that content shared on other social media platforms may have been missed.
  - Data often comes from claims and unverified sources or locations. For mapping purposes, all locations (claimed or verified) are set to the centre of the townships in which it occurred.
  - The main identifier is unique imagery of burnt bodies. This is hard to verify.
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## Appendix II - Imagery index

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### Data analysis

- Figure 1: Amount of victims per type
- Figure 2: Percentage of events with gender issues
- Figure 3: Count of seen and claimed victims per month
- Figure 4: Count of events per month
- Figure 5: Count of events per half of the data collection
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### Case studies

- Figure 7: A blurred image from the events in Tabayin township (event 4)
- Figure 8: An unverified geolocation of event 4 (22.576856, 95.280002)
- Figure 9: A blurred image from the events in Pale township (event 67)
- Figure 10: A verified geolocation of event 67 (22.576856, 95.280002)
- Figure 11: Sentinel imagery showing some of the discoloration in the geolocated area.
- Figure 12: A blurred image from the events in Htantabin township (event 127)
- Figure 13: A verified geolocation of event 127 (18.601225, 96.597948)
- Figure 14: A blurred image from the events in Tokgyi township (event 146)
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- Map 1: Total count of claimed burnt victims in the 146 events
  - Map 2: Total count of visible burnt victims in the 146 events
  - Map 3: Location of the dry zone in Myanmar
  - Map 3: Data-points in the dry zone area
- 

## Appendix III - Abbreviations

|       |   |
|-------|---|
| FIRMS | Fire Information for Resource Management System |
| PDF   | People Defence Force                            |
| SAC   | State Administration Council                    |
| SGBV  | Sexual and Gender Based Violence                |



## Appendix IV - Sources in order of appearance

[Ocelli project](#)

[IHL Customary law](#)

[ICRC Customary laws](#)

[Rohingya genocide in Rakhine state](#)

[2011 Kachin conflicts](#)

[mon taing pin massacre report](#)

[Moso report](#)

[Myanmar on fire report](#)

[Myanmar military arson attacks report](#)

[whopostedwhat.com](#)

[Event 4 link](#)

[Event 67 link](#)

[Event 127 link](#)

[Event 146 link](#)

[Context on 146](#)

[Arson report](#)

[Airstrikes report](#)

[Beheadings report](#)

[Population census](#)

[World Religion and Spirituality Project article](#)

[Buddhist teachings](#)

[Buddhists and cremation](#)

[geolocation link 1](#)

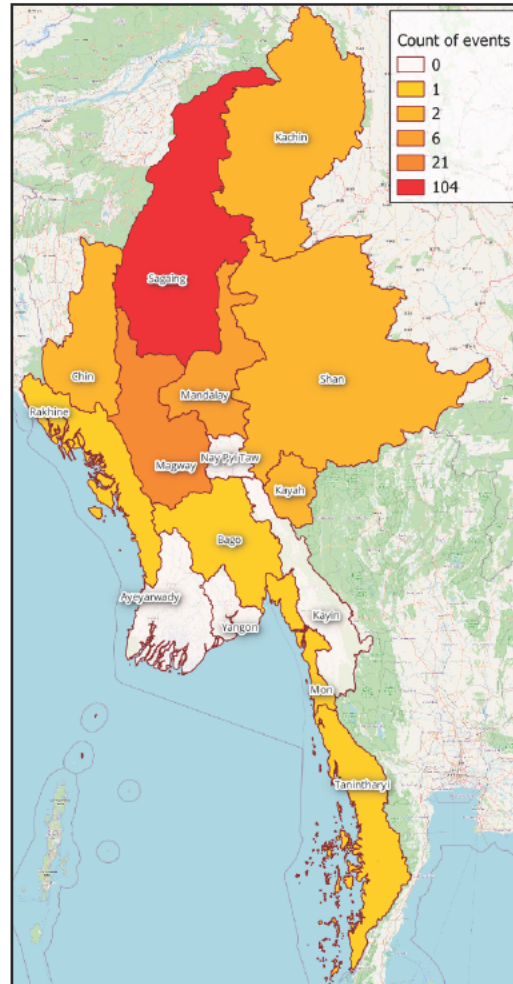
[geolocation link 2](#)

[geolocation link 3](#)

[geolocation link 4](#)

## Appendix V - Additional graphs and tables

### Events per state

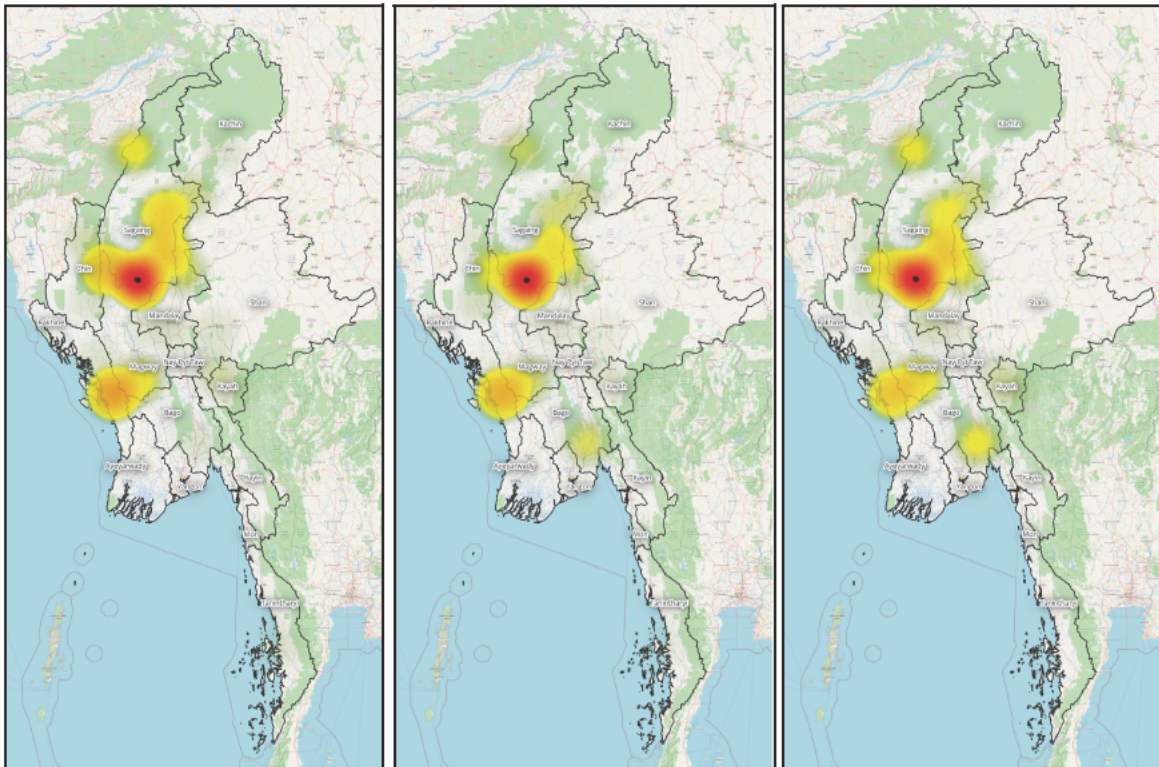


Map of events per state.

| geospatial      | seen | claimed | events | event% |
|-----------------|------|---------|--------|--------|
| 18 months       |      |         |        |        |
| count per state |      |         |        |        |
| Ayeyarwady      | 0    | 0       | 0      | 0.00%  |
| Bago            | 7    | 17      | 1      | 0.70%  |
| Chin            | 2    | 8       | 2      | 1.40%  |
| Kachin          | 0    | 1       | 2      | 1.40%  |
| Kayah           | 0    | 0       | 2      | 1.40%  |
| Keyin           | 0    | 0       | 0      | 0.00%  |
| Magway          | 16   | 34      | 21     | 14.69% |
| Mandalay        | 3    | 5       | 6      | 4.20%  |
| Mon             | 0    | 3       | 1      | 0.70%  |
| Naypyidaw       | 0    | 0       | 0      | 0.00%  |
| Rakhine         | 1    | 1       | 1      | 0.70%  |
| Sagaing         | 81   | 260     | 104    | 72.73% |
| Shan            | 0    | 4       | 2      | 1.40%  |
| Tanintharyi     | 0    | 2       | 1      | 0.70%  |
| Yangon          | 0    | 0       | 0      | 0.00%  |

Table of events per state.

Heatmap of events/seen victims/claimed victims & notable zones.

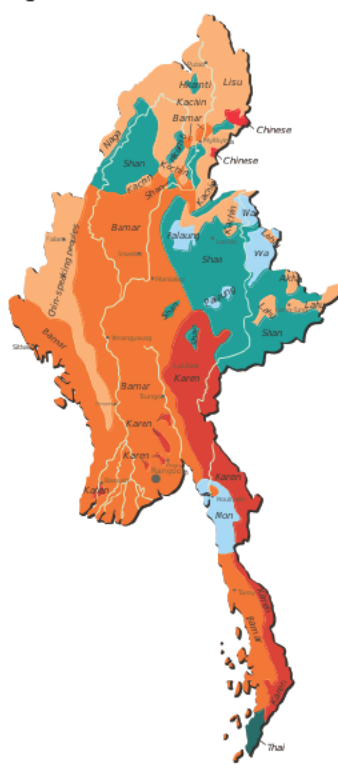


Events



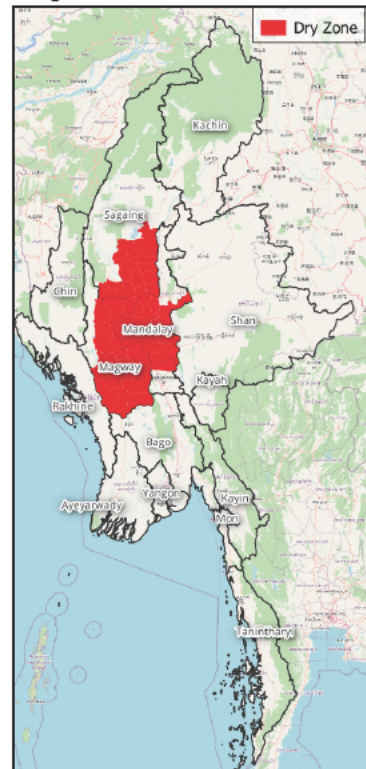
Mimu Dry zone, 2018 (1)

Weighted claimed victims



Ethnolinguistic groups, 1972(1,2)

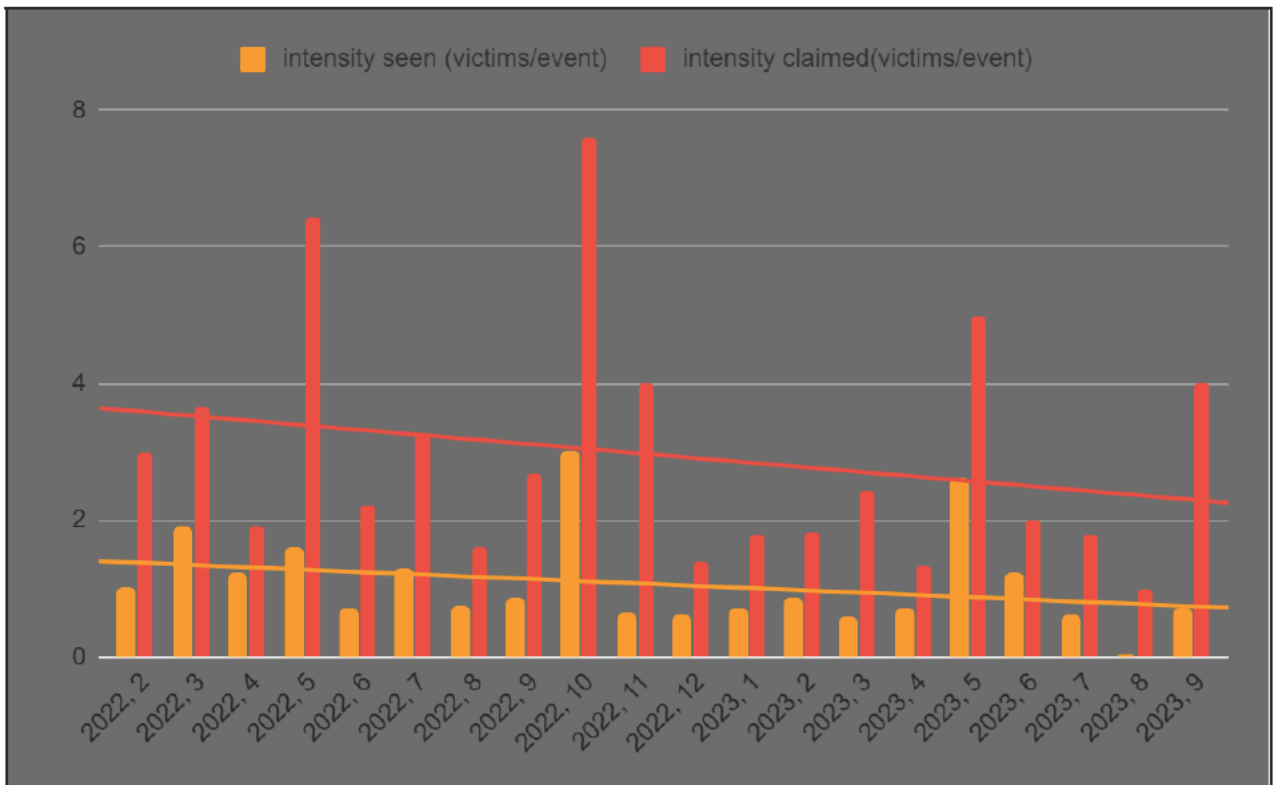
Weighted seen victims



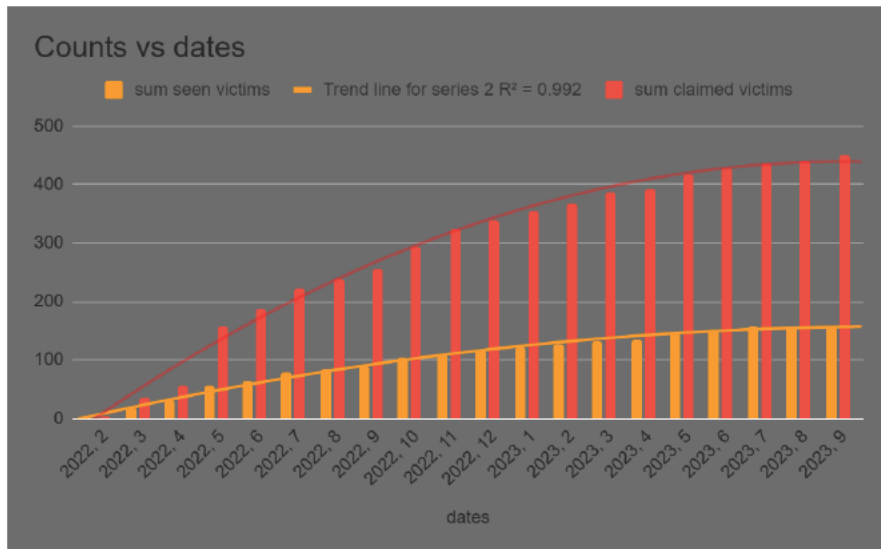
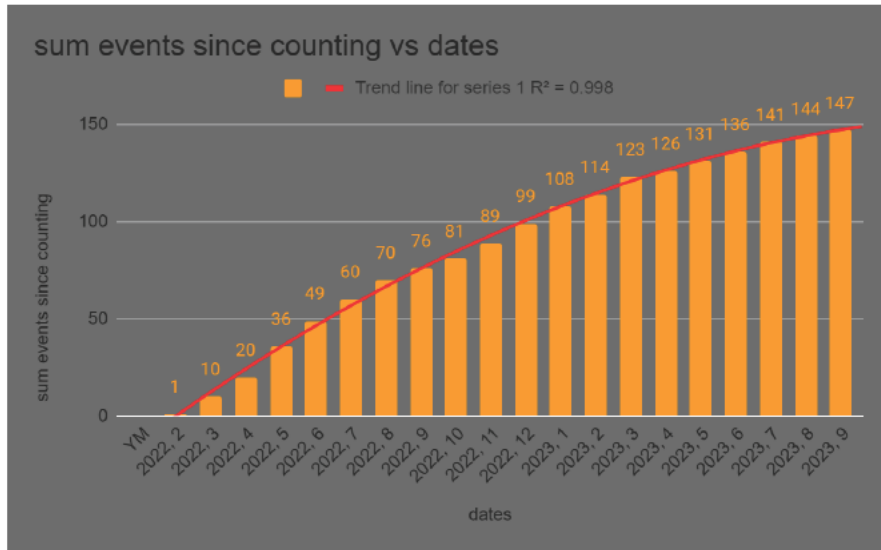
Myanmar Witness MIMU dry zone map

Count & Intensity of events.

|                           | events | seen victims | claimed victims | intensity seen | intensity claimed |
|---------------------------|--------|--------------|-----------------|----------------|-------------------|
| 1st half (until nov 22')  | 8.90   | 11.00        | 32.50           | 1.28           | 3.64              |
| 2nd half (until sept 23') | 5.80   | 4.80         | 12.60           | 0.84           | 2.26              |
| % decrease                | 34.83% | 56.36%       | 61.23%          | 34.33%         | 37.90%            |

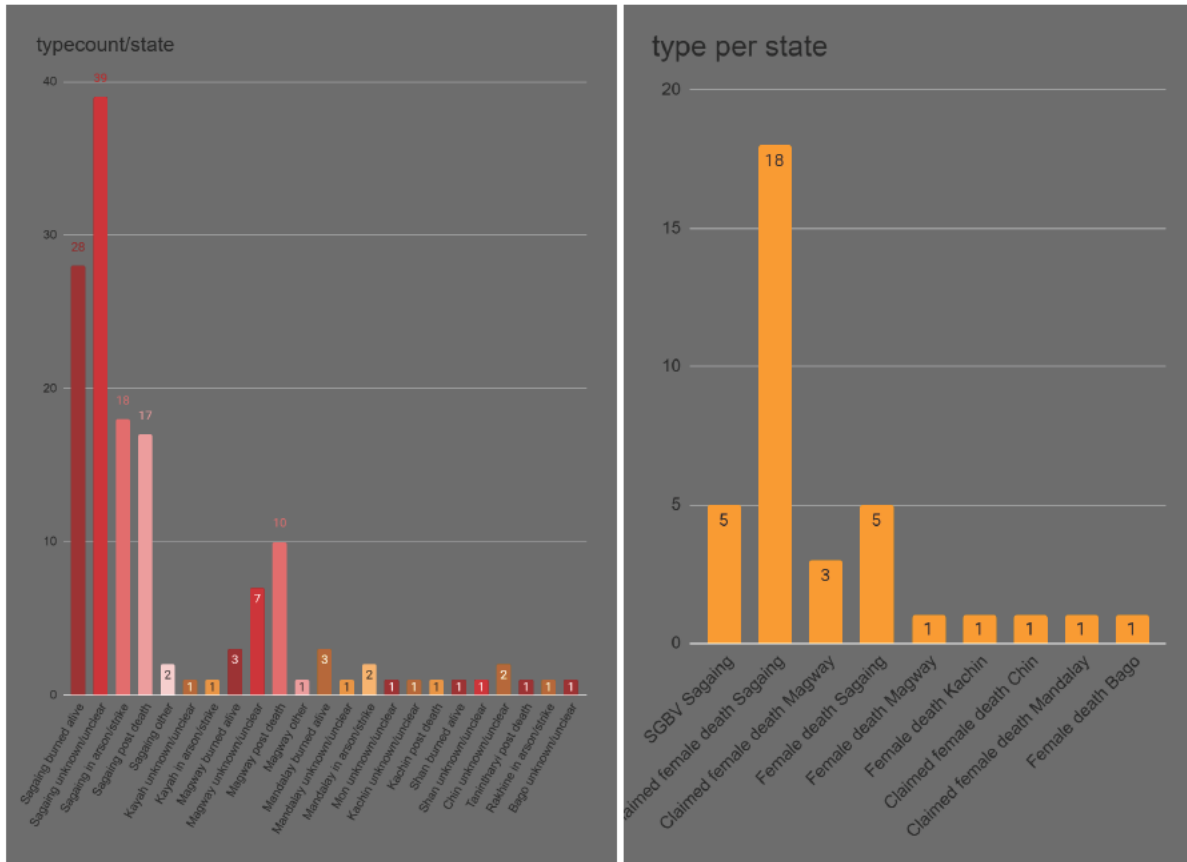


### Monthly sum of events/seen victims/claimed victims





### Typecount/gender issue count per state

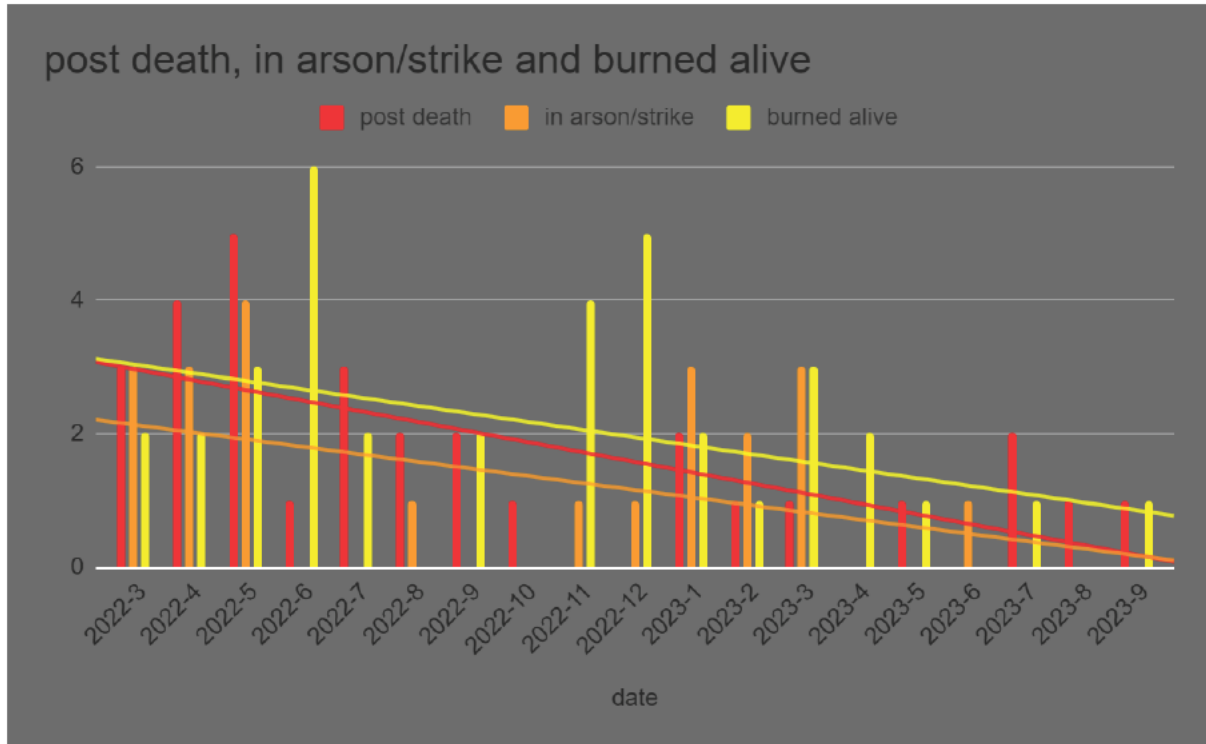


These graphs have been omitted due to the large majority of the events occurring in sagaing.

| state/type       | burnt alive | arson/strike | post death | unknown/un clear | other |
|------------------|-------------|--------------|------------|------------------|-------|
| <b>Sagaing</b>   | 28          | 18           | 17         | 39               | 2     |
| <b>sagaing%</b>  | 26.92%      | 17.31%       | 16.35%     | 37.50%           | 1.92% |
| <b>Magway</b>    | 3           | 0            | 10         | 7                | 1     |
| <b>Magway%</b>   | 14.29%      | 0.00%        | 47.62%     | 33.33%           | 4.76% |
| <b>Mandalay</b>  | 3           | 2            | 0          | 1                | 0     |
| <b>Mandalay%</b> | 50.00%      | 33.33%       | 0.00%      | 16.67%           | 0.00% |

There were too few events in most states to get a proper conclusion out of this type of analysis, any other state had less than the 6 in mandalay.

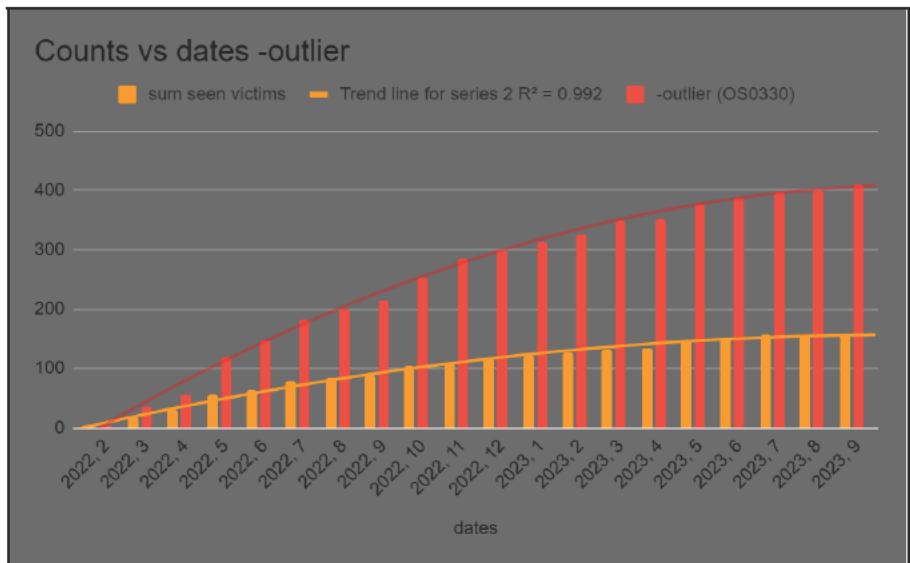
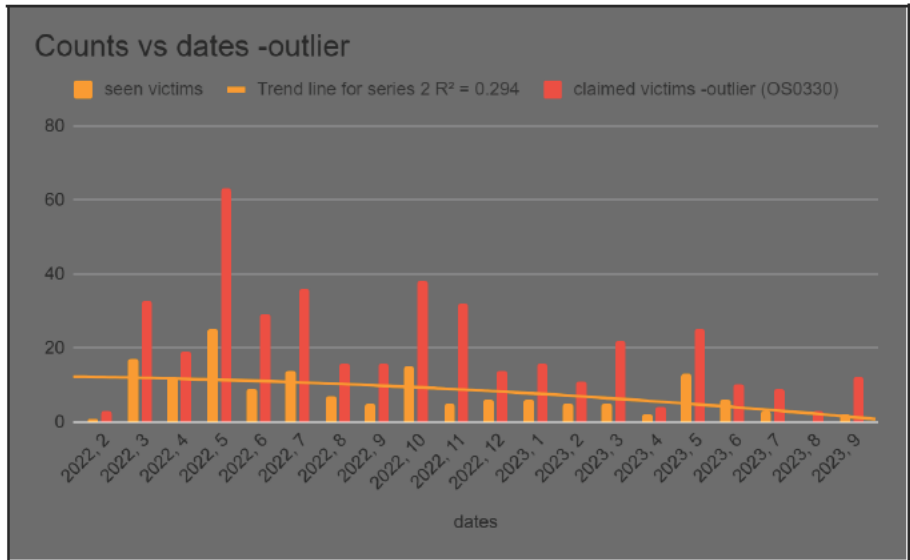
### Type count per month



Similar to the normal count per month, these are all in a similar regression.

### Outlier graphs

Event 32 is omitted in these graphs, due to it being an outlier. With 40 claimed victims and 0 clearly shown, it gives a large skew.



## Appendix V - Geolocation additions

### Event 4

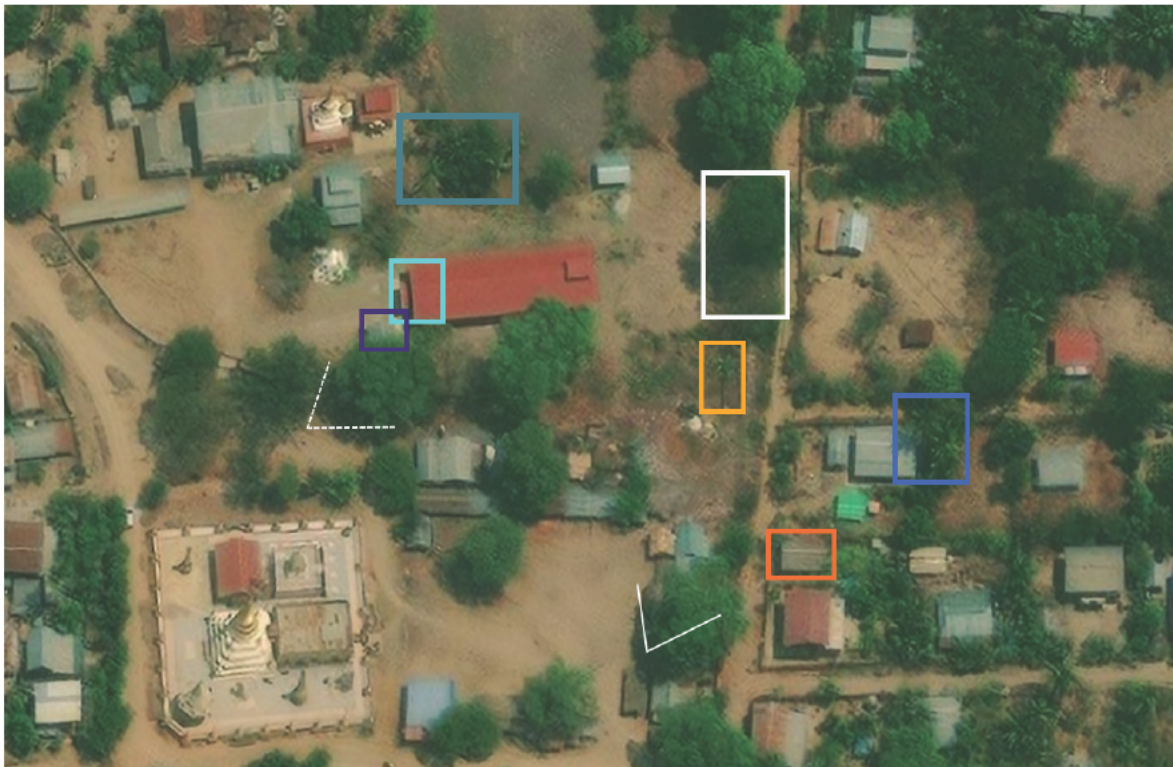


Possible Geolocation - 22.576856, 95.280002 (red box)

Claimed Date - 04 March 2022 (Not on FIRMS)

Link - <https://www.facebook.com/khitthitnews/posts/...>

Event 67



A large number of features can be seen to match satellite footage.



In the above sentinel imagery, a slight discoloration can be seen on the area where the Right image was alleged to be. This adds to the likelihood of the event having occurred in this area.

Coordinates - 22.072981, 94.789303

Claimed date - 11 Aug to 14 Aug 2022 (Not on FIRMS)

Link - <https://www.facebook.com/myanmarnownews/posts/...>  
<https://www.facebook.com/myaelattathan/posts/...>

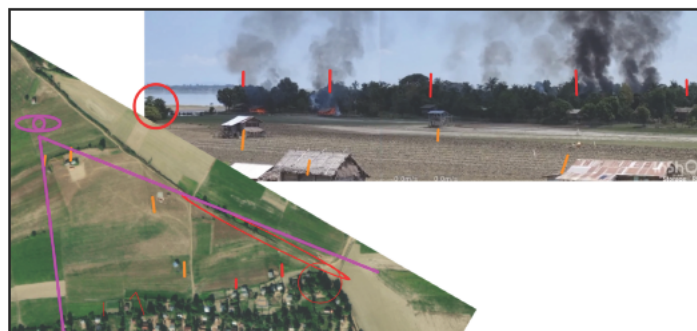
Event 127



Coordinates - 18.601225, 96.597948 (red box)

Claimed date - 10 May 2023 (not on FIRMS). Source redacted due to privacy concerns, available on request.

## Event 147



Coordinates - 24.301830, 96.456606

Claimed date - 17 Sep, 2023 (Firms)

Link [warning]graphic] <https://t.me/htookhantzaw5/13440>