THE SOUTHEAST ASIA MILITANT ATLAS

Code Book

S. RAJARATNAM SCHOOL OF INTERNATIONAL STUDIES

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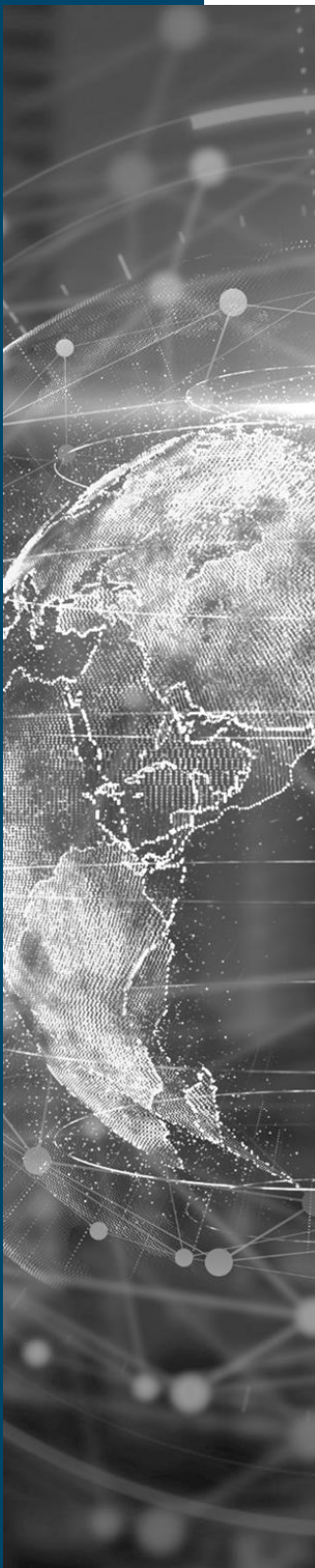# Table of Contents

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SYNOPSIS

> *SEA Militant Atlas offers a data-driven approach for the analysis of an ever-evolving terrorist landscape in Southeast Asia.*

SEA Militant Atlas—the Southeast Asia Militant Atlas—is an advanced mapping initiative by the International Centre for Political Violence and Terrorism Research (ICPVTR) at the S. Rajaratnam School of International Relations (RSIS).

In this project, a repository of information on past and present militant activity in Southeast Asia is created and these incidents are systematically mapped on our atlas.

SEA Militant Atlas is an advanced mapping platform which is designed for analysts and practitioners to examine existing militant trends and study emerging terrorist threats in the region. Using geospatial analytics, users of SEA Militant Atlas are able to easily identify operational hotspots and identify enforcement weaknesses by applying filters on regional clusters and militant organisations on the atlas.

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INTRODUCTION

The Southeast Asia Militant Atlas (SEA Militant Atlas) was crafted by the researchers from the ICPVTR, a specialist centre of (RSIS).

SEA Militant Atlas serves as a repository to map militant activity in Southeast Asia from 2014 onwards. This atlas is an innovative, data-driven online creation which provides researchers, practitioners, and analysts with the necessary tools to conduct critical analyses and threat assessments on terrorism and political activity in the Southeast Asian landscape.

This code book, in its subsequent sections, details key information on the methodology for data collection, an explication on the coding scheme, and an explanation of how the collected data was coded into the database.

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DATA COLLECTION
METHODOLOGY

The data for the SEA Militant Atlas project was collected on opensource platforms—specifically, by entering specific keyword phrases in the Google News search engine. Initially, this project only documented information on militant activity which began onwards of 2014 only because this project focused mainly on mapping IS-related militant activity in the Malay Archipelago. To wit, 2014 was the year in which Abu Bakr al-Baghdadi declared the IS as a *Caliphate*, and himself as its *Caliph*.

However, SEA Militant Atlas has expanded its scope significantly to track other non-Islamist groups which also operate of the nations which fall within the Malay Archipelago. This is an ambitious endeavour which ICPVTR is committed to in ensuring that all militant activity in Southeast Asia are mapped on SEA Militant Atlas.

Methodologically, there are three key components to the keyword search which are explicated using IS in Southeast Asia as an example, as follows:

First, keyword searches must account for the many variations in naming conventions for the respective militant organisations. We used the Boolean "OR" operator to achieve that. For example, searches for the Islamic State would be as follows.

("Islamic State" *OR* "ISIS" *OR* "ISIL")

Second, keyword searches must be targeted to include relevant Southeast Asian nations. For example, searches at the Malay Archipelago would be conducted as shown below.

("Philippines" *OR* "Indonesia" *OR* "Malaysia" *OR* "Singapore" *OR* "Brunei")

Third, keyword searches must account for activities that can be tagged to a location.

("Gunfight" *OR* "IED" *OR* "Jailbreak" *OR* "Stab*" *OR* "Slash*" *OR* "Arson" *OR* "Kidnap" *OR* "Hijack" *OR* "Arrest" *OR* "Surrender")
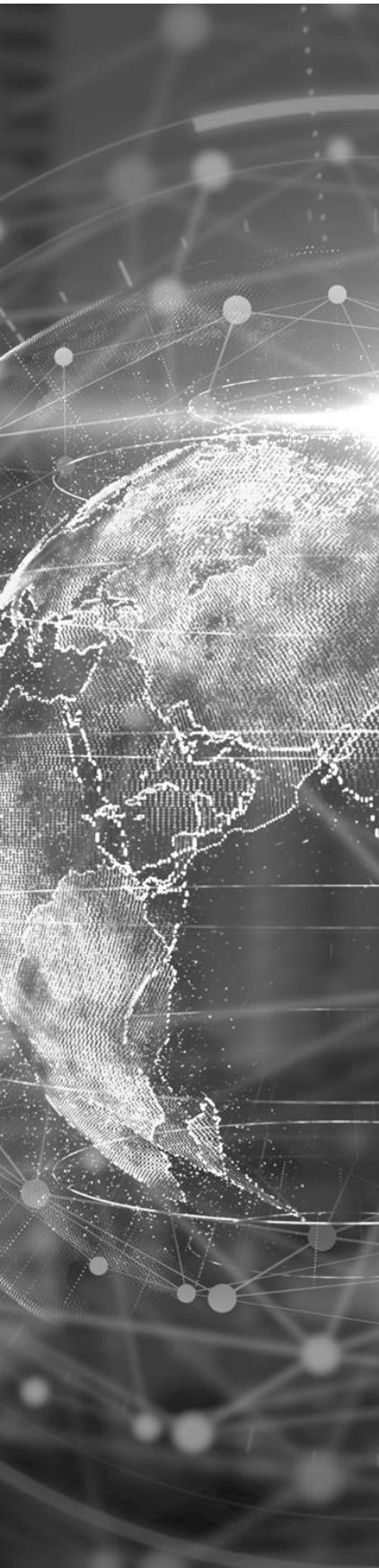
Taken together, one of the keyword search phrase for this project is as shown below.

("Islamic State" *OR* "ISIS" *OR* "ISIL") *AND* ("Philippines" *OR* "Indonesia" *OR* "Malaysia" *OR* "Singapore" *OR* "Brunei") *AND* ("Gunfight" *OR* "IED" *OR* "Jailbreak" *OR* "Stab*" *OR* "Slash*" *OR* "Arson" *OR* "Kidnap" *OR* "Hijack" *OR* "Arrest" *OR* "Surrender")

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CODING SCHEME

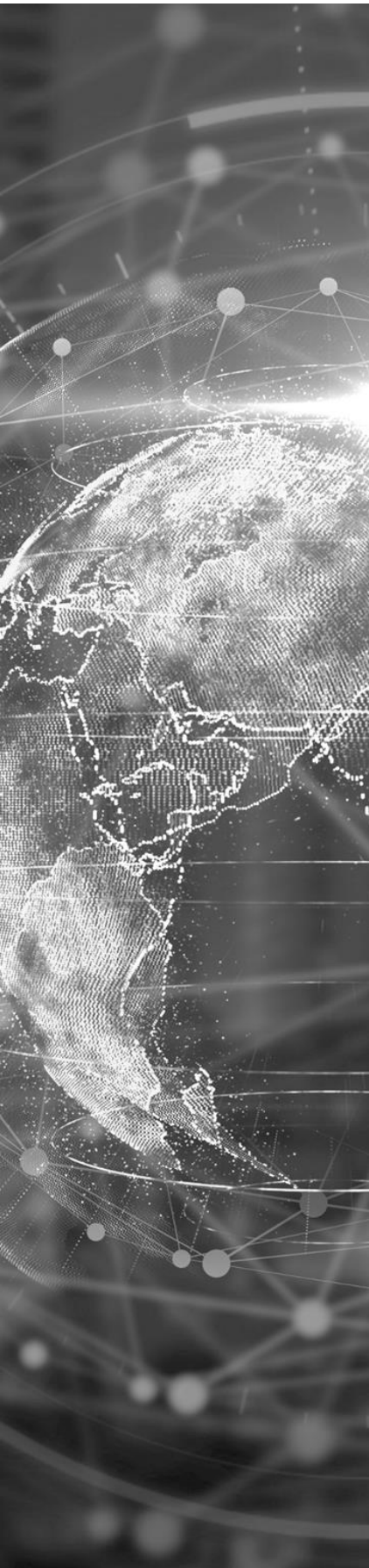| VARIABLE	CODING NOTES
DATE	The start date of the recorded incident.
MONTH	The month, in numerical form, when the recorded incident took place.
YEAR	The year when the recorded incident took place.
LOCATION	The detailed description of the location of Activity based on information from the article.
LAT	The latitudinal coordinate of the Location where the recorded incident took place. This variable is retrieved from Google Maps based on all available information on the Location from the article. Note: Incidents occurring at multiple locations concurrently are coded as separate entries in the data spreadsheet.
LON	The longitudinal coordinate of the Location where the recorded incident took place.
GROUP	The name of the militant group involved in this incident. This is the current list of the militant groups mapped onto SEAMA[1]: 1. Ansar Khilafa Philippines (AKP) 2. Bangsamoro Islamic Freedom Fighters (BIFF) 3. IS Basilan 4. IS Sulu 5. Jamaah Ansharut Daulah (JAD) 6. Jemaah Islamiyah (JI) 7. Maute Group 8. Mujahideen Indonesia Timur (MIT) 9. Lone Wolf/Loose Network 10. Others (Others refers to groups that are identified by the authorities are but not on this list. This option is created due to the miniscule number of cases reported for the groups in this category.) Note: Incidents involving more than one militant group concurrently are coded as separate entries in the data spreadsheet. [1] This list will expand to include other militant organisations.

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CODING SCHEME

VARIABLE	CODING NOTES
DETAILS	If GROUP was coded as "Others", this section will indicate the specific group or network the perpetrator is part of.
ACTIVITY	This variable categorises the type of activities involved in the recorded incidents, as indicated in this list: 1. Gunfight 2. Improvised Explosive Device (IED) 3. Bladed Weapon 4. Vehicle-borne Attacks 5. Suicide Bombing 6. Kidnap 7. Unconventional Weapons 8. Non-Combat Operations 9. Surrender Note: Incidents involving more than one activity concurrently are coded as separate entries—with the exception of the simultaneous occurrence of gunfights along with the use of IEDs. In the instance where gunfights occur concurrently with the use of IEDs, the activity is coded as a single Gunfight entry.
DESCRIPTION	Any additional information regarding the ACTIVITY in their respective entries (e.g. Recruitment, Travel, etc.)

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CODING SCHEME

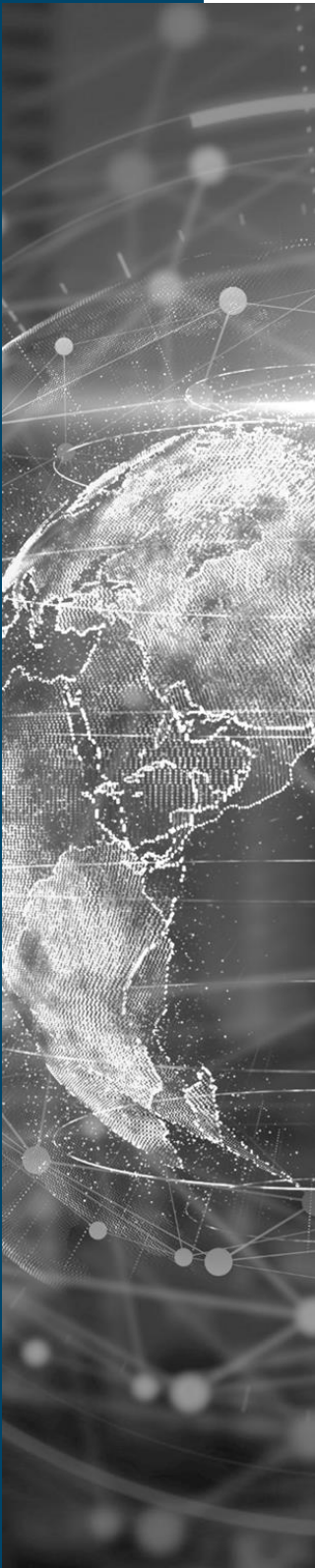| VARIABLE	CODING NOTES
OUTCOME	The respective outcome of each recorded activity is coded under one of these four categories: 1. Successful The outcome of incidents which result in the successful realisation of its respective activities are coded under this category. Note: Incidents where its militants were arrested and/or killed *after* successfully completing an activity are also as Successful. 2. Arrested The outcome of incidents which result in the arrest of its militants *prior* to the successful realisation of the activity are coded under this category. Note: All financing and procurement activities are coded as Arrested because their discovery is contingent on an arrest; as such, the LOCATION, LAT, and LON variables are based on the where the arrest occurred. 3. Killed The outcome of incidents which result in the death of its militants *prior* to the successful realisation of the activity are coded under this category. 4. Failed The outcome of incidents which did not result in the successful realisation of its respective activities, arrest of militants, and/or the killing of militants are coded in this category Note: Incidents involving prematurely detonated IEDs which engender its perpetrators' injury and/or death are coded as Failed.
MILITANT	The number of militants involved in the activity. When the information for this variable was not readily available, an approximation based on the damage caused and the group's previous mobilisation was used as a proxy.
SOURCE	The URL of the article where the information was retrieved.

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CODING SCHEME

There are many publicly reported incidents which included ambiguous details. These unclear news reports were often from newspapers which were published in Indonesia, Malaysia, and Singapore. Information from these articles were often delayed and were a mere aggregate of the complete number of actual incidents. Such reports also occasionally excluded the specific date, time, and location details of the incidents.

In such aggregated reports, separate entries for different locations were created based on the same source. If the specific location of incident was not indicated, the analyst provided an estimate of the location of the incident by drawing inferences from the specific geographic features which were mentioned in the report. However, if only the name of the city where the incident has taken place was indicated in the report, the analyst identified the latitudes and longitudes of the location by taking the coordinates of where they estimated the centre of city to be on Google Maps.

Additionally, in cases where the time and duration of the incident appeared unclear, the data was coded with an estimate of the militants' arrest date and/or date of attempted attack—and not the date of their court hearing(s). If only the month of arrest was indicated in the article, the date of arrest was coded to be Day 15 of the respective month.

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DATA ANALYSIS
METHODOLOGY

After compiling the data onto an Excel spreadsheet, the data will then be imported into 'R' and saved as the SEA_MILITANT variable. 'R' is an opensource free-to-use statistics and data visualisation software. The libraries that are used to analyse the geospatial trends include:
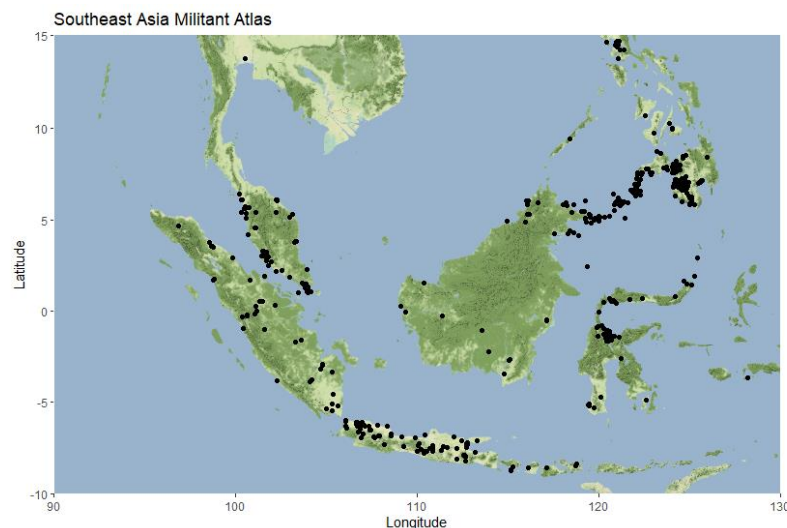
1.   library(ggplot2)
2.   library(tidyverse)
3.   library(ggmaps)
4.   library(gganimate)

Firstly, a map of the Malay Archipelago would be retrieved from the internet. Since Google Maps service are now pay-to-use, the Stamen Map is used as an alternative. Longitude between 90 and 130, and Latitude between -10 and 15.

```
Southeast_Asia_Map <- ggmap(get_stamenmap(bbox = c(left = 90, top = 15,
right = 130, bottom = -10),  zoom = 7,  maptype = c("terrain-background"))
```

We will apply the "geom_point()" function to plot all data points on the map. A map with all 695 incidents (at this point in time) will be generated (shown below).

```
 Southeast_Asia_Map + geom_point(data = SEA_MILITANT, aes(x = Lon, y = Lat), col = "Black")
+ labs(title = "IS-Affiliated Incidents in the Malay Archipelago")
```
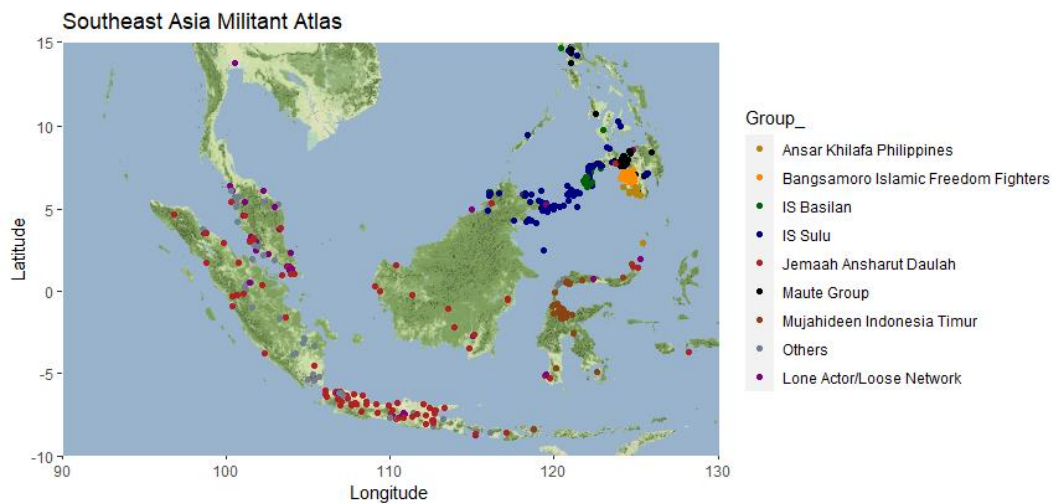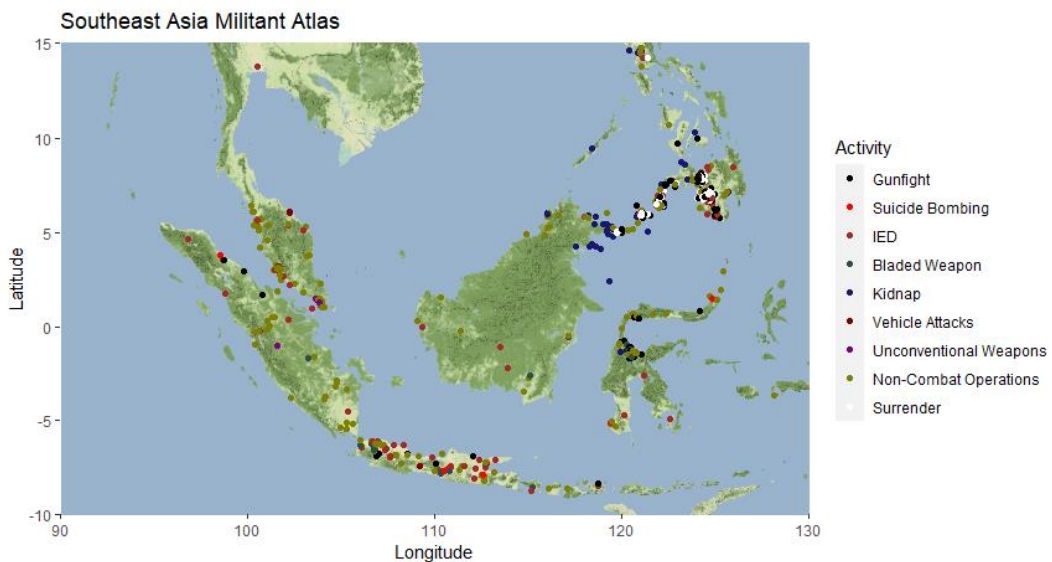
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DATA ANALYSIS

METHODOLOGY

At this point, several layers of analysis could be conducted. Firstly, we are able to colour-code the plot based on predefined variables such as group or types of attack. The codes required for this are as follows:

Southeast_Asia_Map + geom_point(data = SEA_MILITANT, aes(x = Lon, y = Lat, color = Group)) + labs(title = "Southeast Asia Militant Atlas")

The profile of incidents is as shown:

Southeast_Asia_Map + geom_point(data = SEA_MILITANT, aes(x = Lon, y = Lat, color = Activity)) + labs(title = "Southeast Asia Militant Atlas")
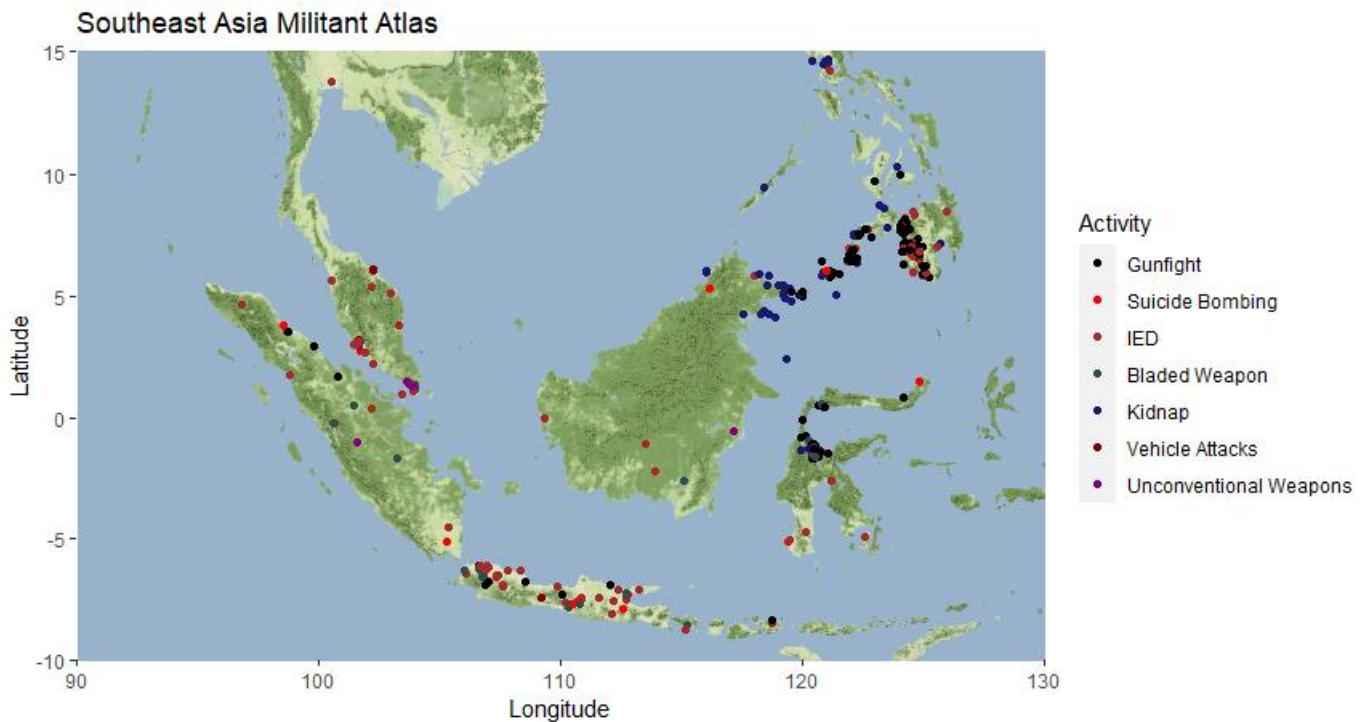
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DATA ANALYSIS
METHODOLOGY

The analytical tool is also able to apply filters onto the plot. The follow codes demonstrate how filter could be applied to remove non-combat operations from the map.

```
Southeast_Asia_Map + geom_point(data = SEA_MILITANT
[(SEA_MILITANT$Activity!="Surrender" & SEA_MILITANT$Activity!="Non-
Combat Operations"),] , aes(x = Lon, y = Lat, color = Activity)) + labs(title =
"Southeast Asia Militant Atlas")
```
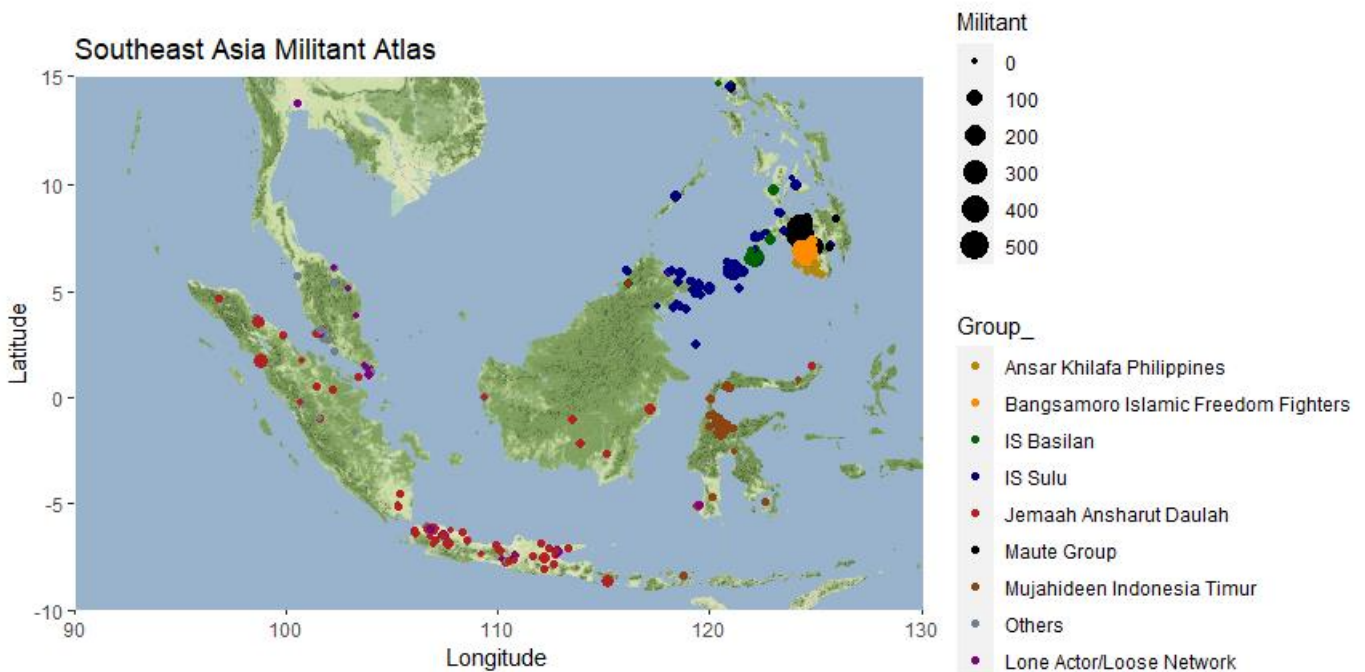
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DATA ANALYSIS

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Size of the points could also be adjusted based on the number of militants mobilised. This would provide analysts with the representativeness of the threat. The following codes demonstrates how this can be achieved.

```
Southeast_Asia_Map + geom_point(data = SEA_MILITANT
[(SEA_MILITANT$Activity!="Surrender" & SEA_MILITANT$Activity!="Non-
Combat Operations"),] , aes(x = Lon, y = Lat, color = Group, size = Militant)) +
labs(title = "Southeast Asia Militant Atlas")
```
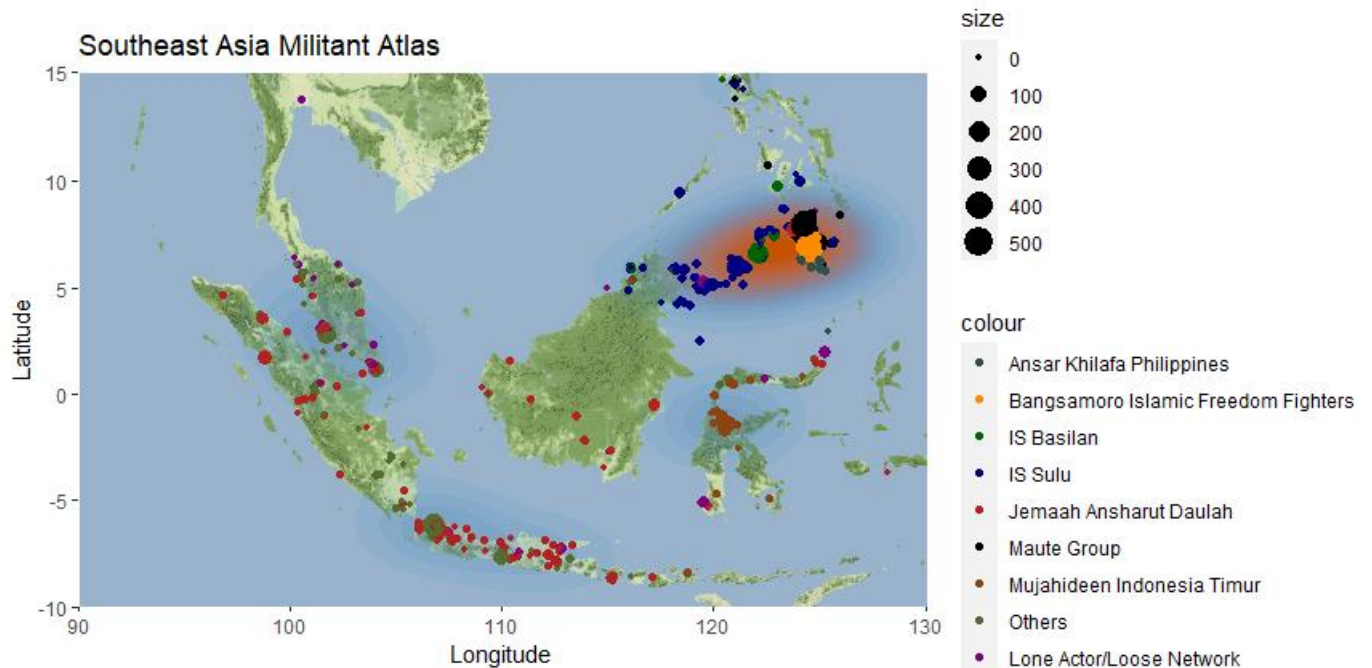

Southeast Asia Militant Atlas

Militant
- 0
- 100
- 200
- 300
- 400
- 500

Group_
- Ansar Khilafa Philippines
- Bangsamoro Islamic Freedom Fighters
- IS Basilan
- IS Sulu
- Jemaah Ansharut Daulah
- Maute Group
- Mujahideen Indonesia Timur
- Others
- Lone Actor/Loose Network

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DATA ANALYSIS
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After which, statistical density maps could be applied to identify attack hotspots.

Southeast_Asia_Map + stat_density_2d(data = IS_Presence[IS_Presence$Activity!="Non-Combat Operations",], aes(x = Lon, y = Lat, fill = ..level..), geom = "polygon") + scale_fill_gradient(low = "Light Green", high = "Dark Red") +geom_point(data = IS_Presence [IS_Presence$Activity!="Non-Combat Operations",] , aes(x = Lon, y = Lat, color = Activity)) + labs(title = "IS-Affiliated Incidents in the Malay Archipelago")

About the S. Rajaratnam School of International Studies

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SEA Militant Atlas CONTRIBUTORS

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For more details on SEA Militant Atlas project, please contact us at admin@sea-militant-atlas.org