

A small green seedling with two leaves is growing out of a crack in the ground. The ground is dry and cracked, with large, irregular polygonal shapes of parched soil. The background is a blurred continuation of this cracked earth. The entire scene is framed by a thin white border.

# **Small Changes in Climate, Big Changes in the World**

By Prattasha, Bel, Kaitlyn, and Leonardo



- **At least 60% of the 11 million people living in South Sudan have been impacted**
- **800,000 livestock have died**
- **2.3 million South Sudanese refugees have sought shelter in neighboring countries**



# Literature review

- **A 2007 IPCC report gave a list of places that are most vulnerable to the effects of climate change - South Asia, the Middle East, and Sub-Saharan Africa**
- **Since 1948, around 2/3 of all UN peacekeeping operations have been in the above regions (Mathew, 2014)**
- **Although climate change itself is not the cause for civil conflict, the effects of climate change can make it more likely (Buhaug, 2016)**
- **In Africa, literature shows that warmer years leading to significant increases in the likelihood of war**
- **Historical response to temperature suggests a 54% increase in armed conflict incidence by 2030 (Burke, 2009)**





A small green seedling with two leaves is growing out of a crack in dry, cracked earth. The background shows more of the cracked earth, suggesting a harsh, arid environment.

# Literature review

- **Patterns of migration can change in an area dependent on natural resources if the supply of those resources change.**
- **A reduction of natural resources caused by climate change will threaten the livelihoods dependent on these resources and cause a large amount of displacement - This displacement may lead to unemployment and conflict.**
- **In Turkana, Kenya, many nomadic pastoralists have turned to fishing as pasture lands have dwindled due to recurring droughts, leading to deadly conflicts between rival Kenyan tribes with Ethiopian fishermen on the other side of the lake.**



# Climate data

## **IMF Climate Change Dashboard**

- Last Updated October 2022
- Frequency and date of natural disaster

## **Our World in Data Platform**

- Natural Disasters Dataset
- Variable used - Total number of people getting affected by natural disasters per 100,000 people (scaled to percentage)





# Conflict data

**UCDP/PRIO Armed Conflict Dataset version 22.1, which covers armed conflicts from 1946-2021**

- This dataset defines conflict as "a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in a calendar year."
- The conflicts we focused on are civil conflicts, with or without outside state intervention. -
- The countries we focus on include South Sudan, Algeria, Cameroon, and Ethiopia
- Resistance Groups:

**South Sudan: Sudan People's Liberation Movement-in-Opposition (2014-2021) (SPLM-IO)**

**National Salvation Front (2019-2021) (NAS)**

**Algeria: Al-Qaeda (2004-2020) (AQIM)**

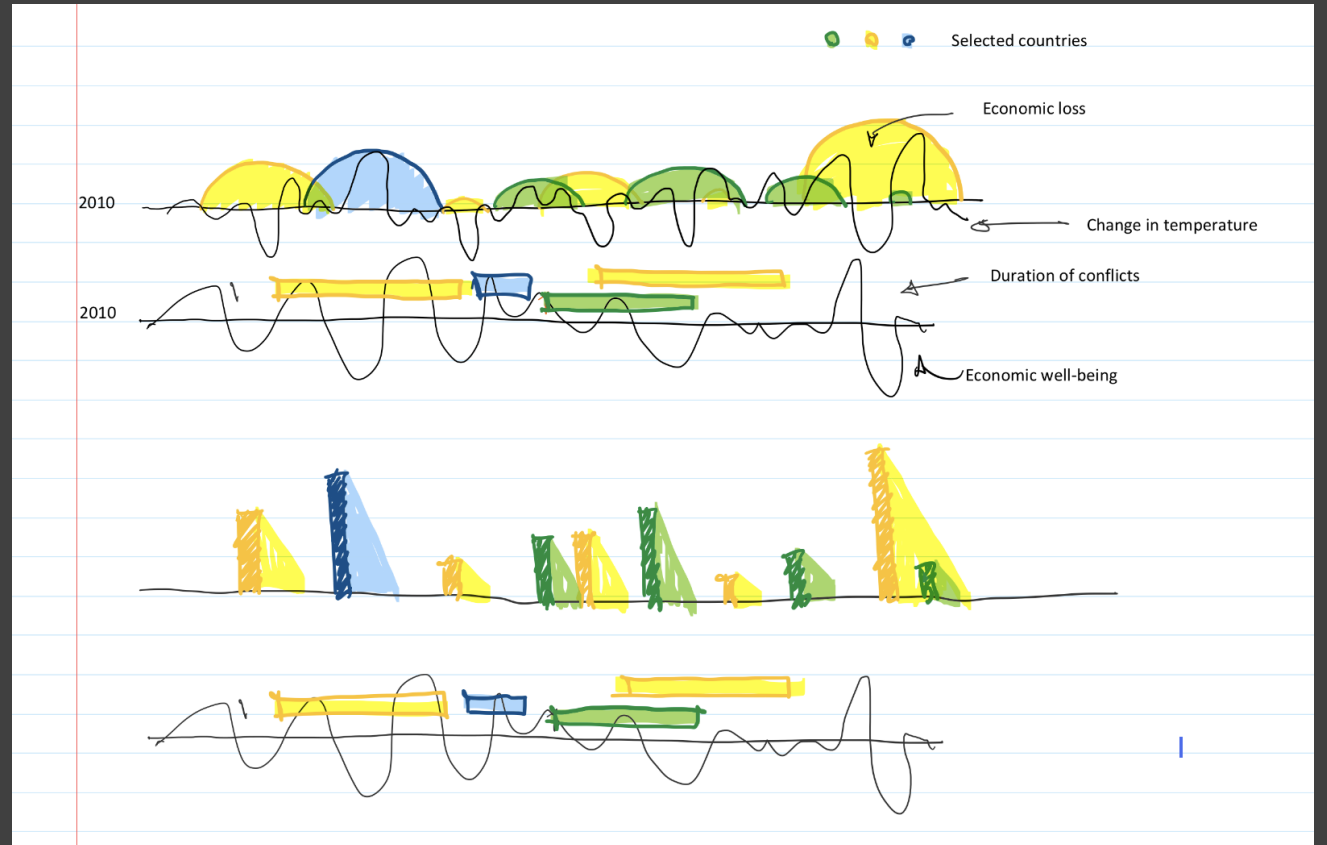
**Ethiopia: Oromo Liberation Front (1977-2016) (OLF)**

**Oromo Liberation Army (2019-2021) (OLA)**

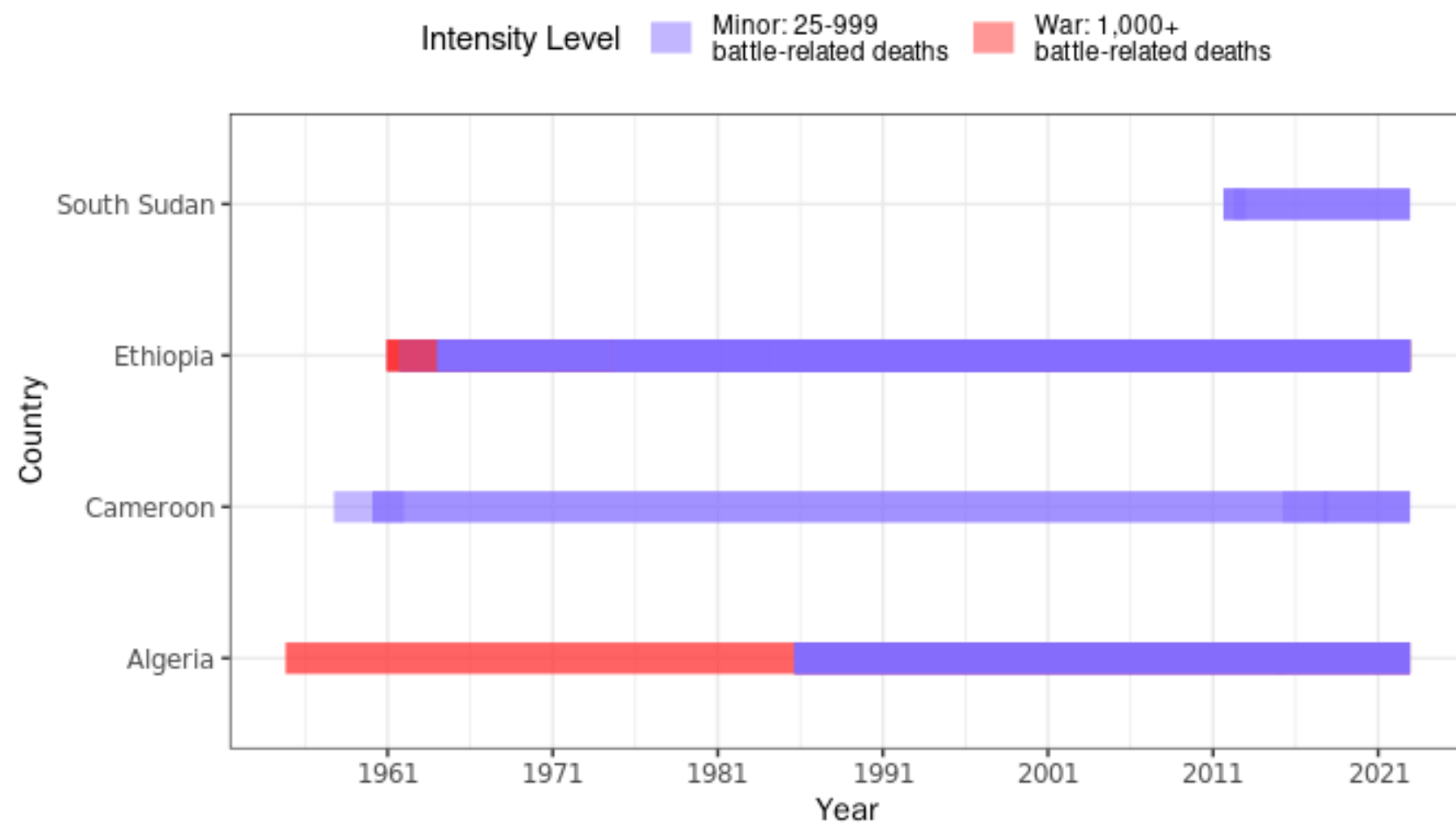
**Cameroon : Ambazonia Insurgents (2017-2021)**

- The date ranges for these conflicts are from 1977-2021., although some conflicts are still ongoing.

# METHODS

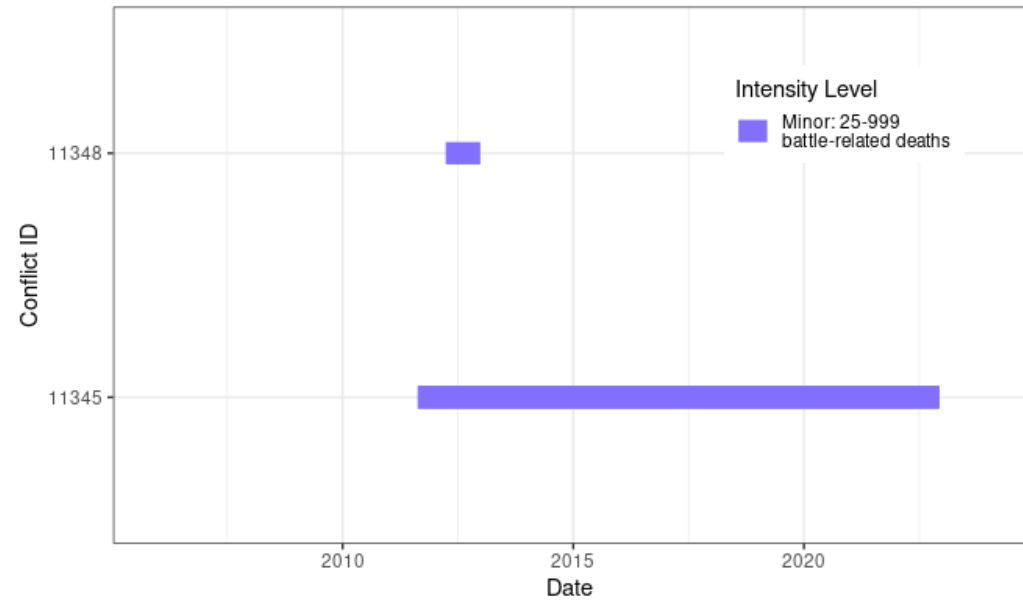


## Duration of conflicts and their intensity

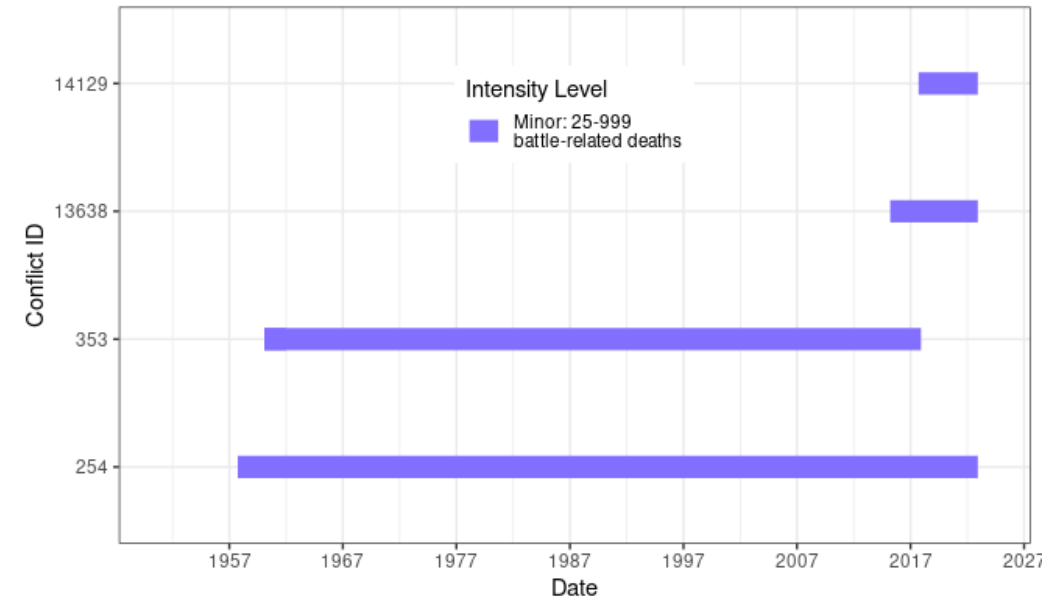




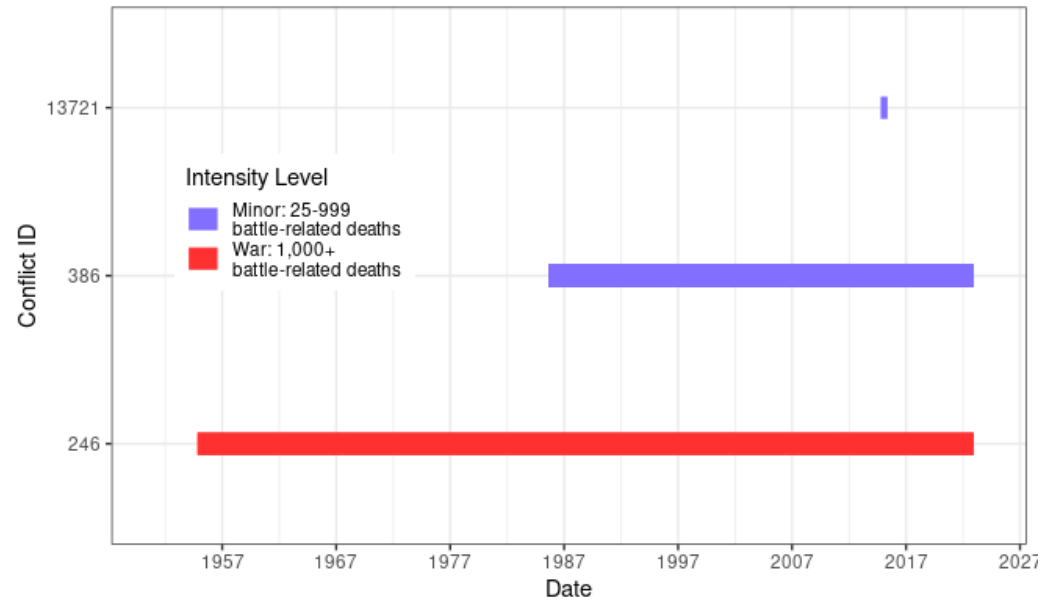
Conflict in South Sudan



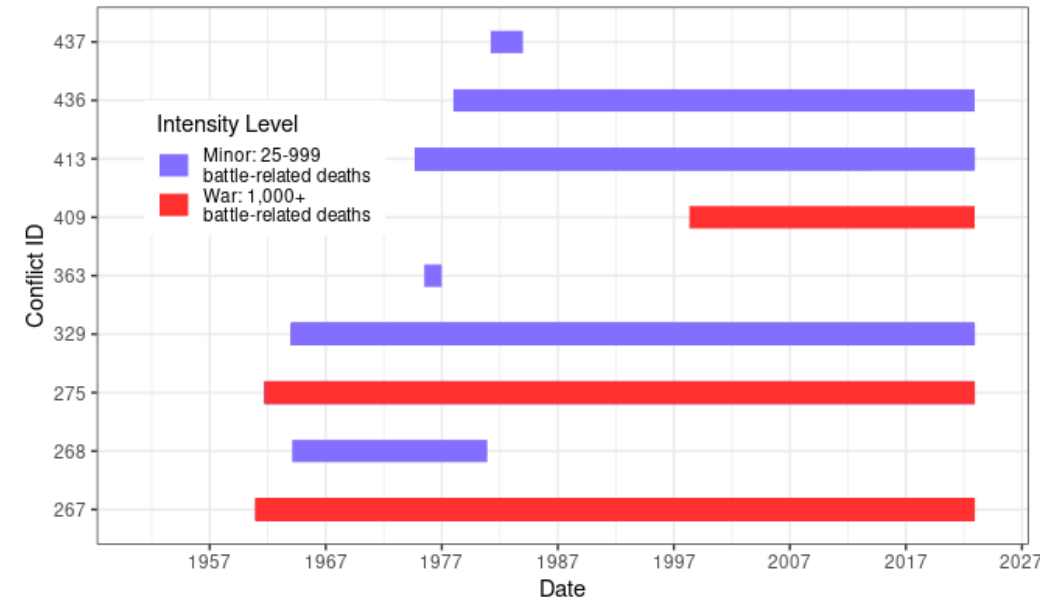
Conflict in Cameroon



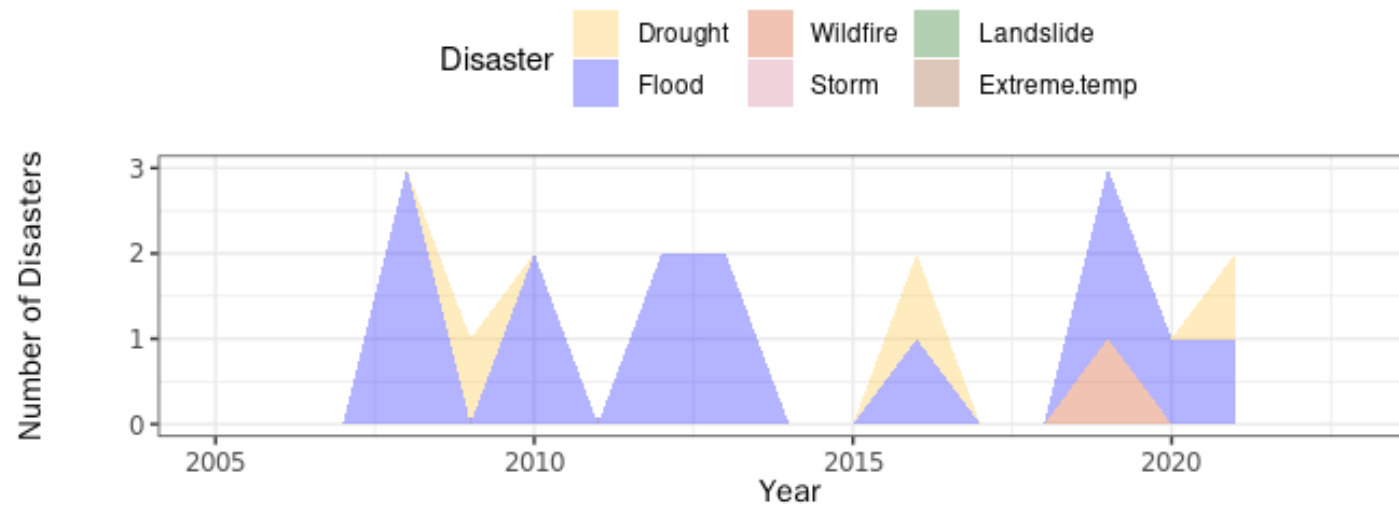
Conflict in Algeria



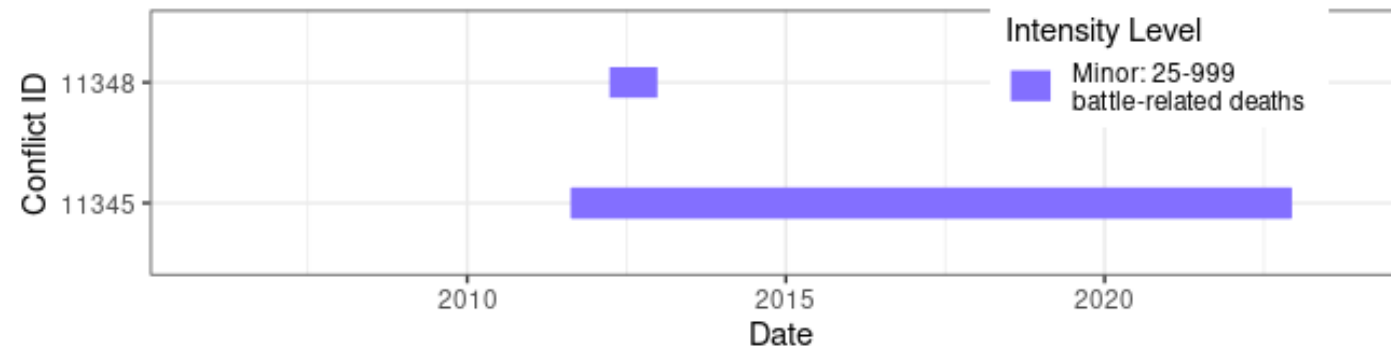
Conflict in Ethiopia



## Number of Natural Disasters in South Sudan

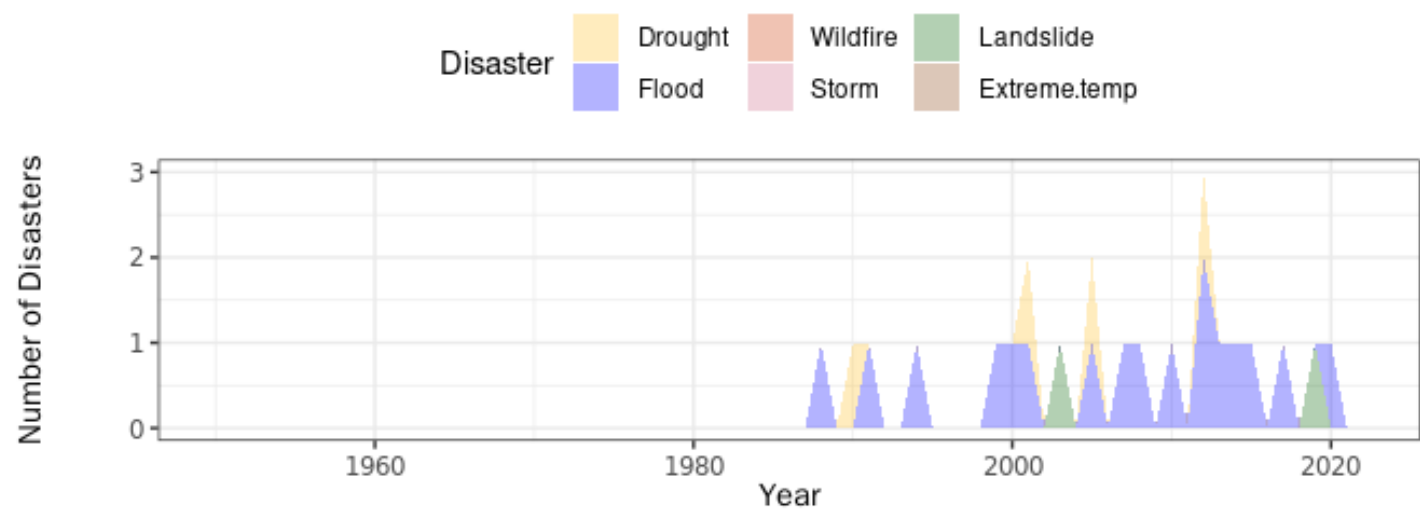


## Conflict in South Sudan

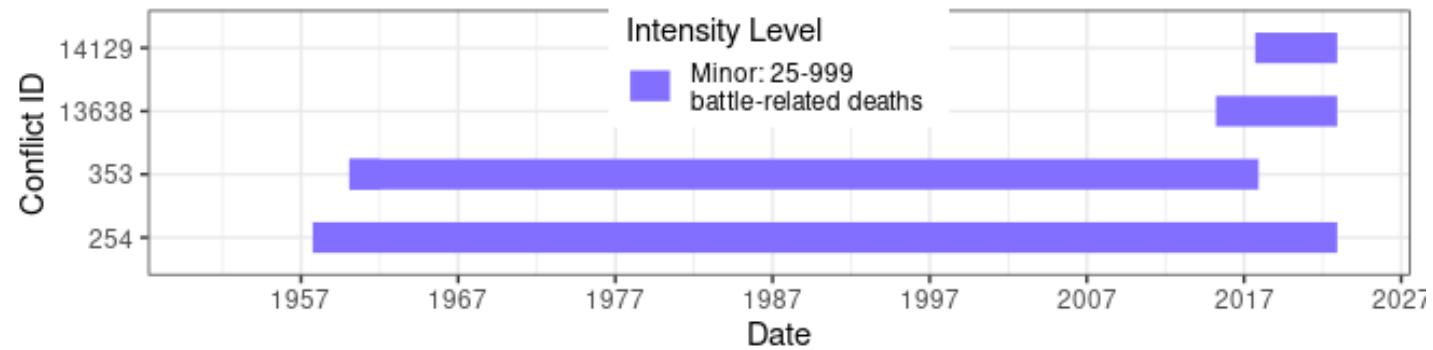




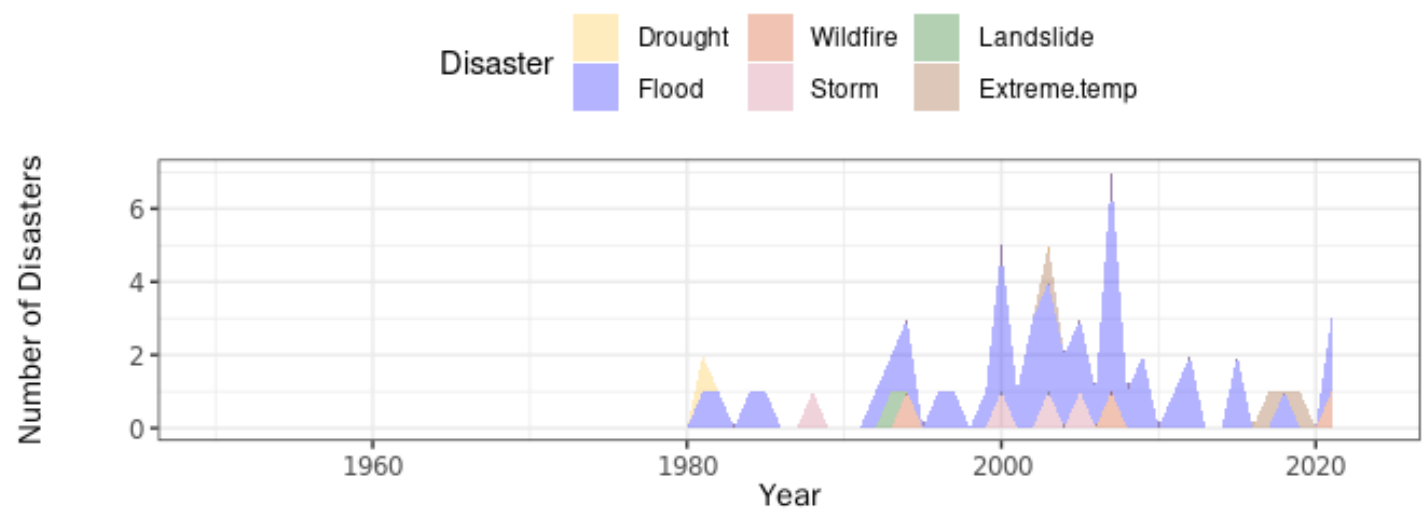
## Number of Natural Disasters in Cameroon



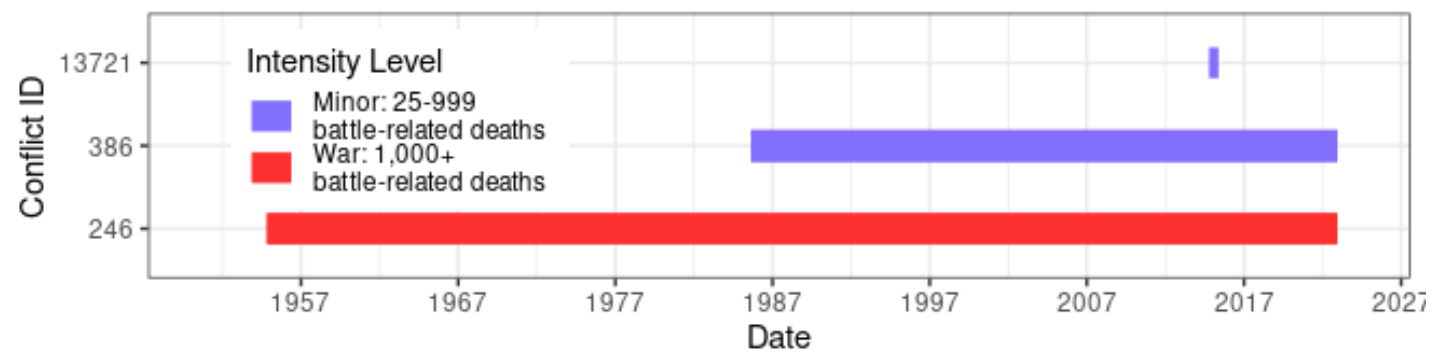
## Conflict in Cameroon



## Number of Natural Disasters in Algeria

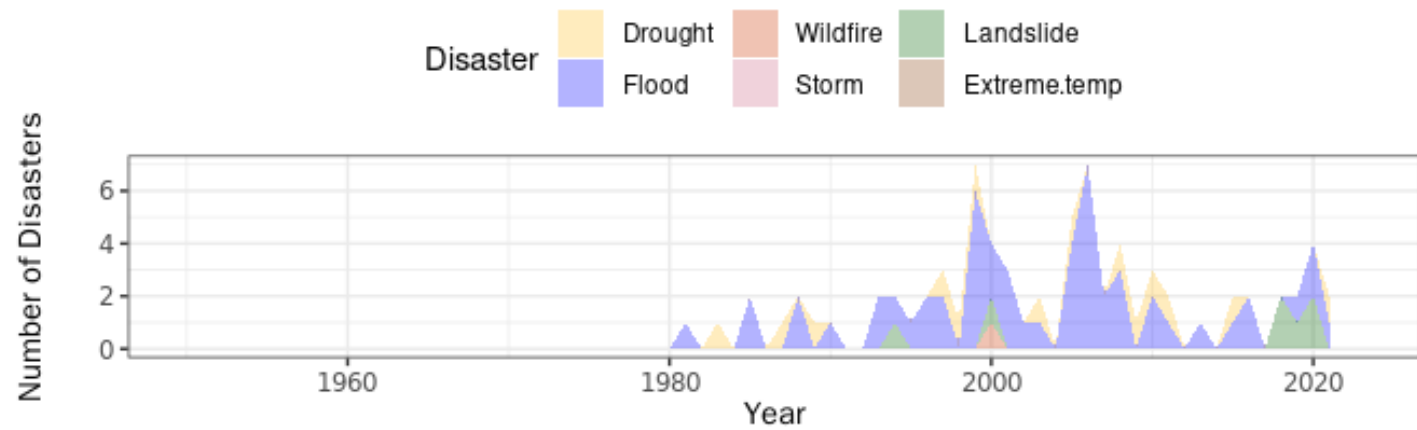


## Conflict in Algeria

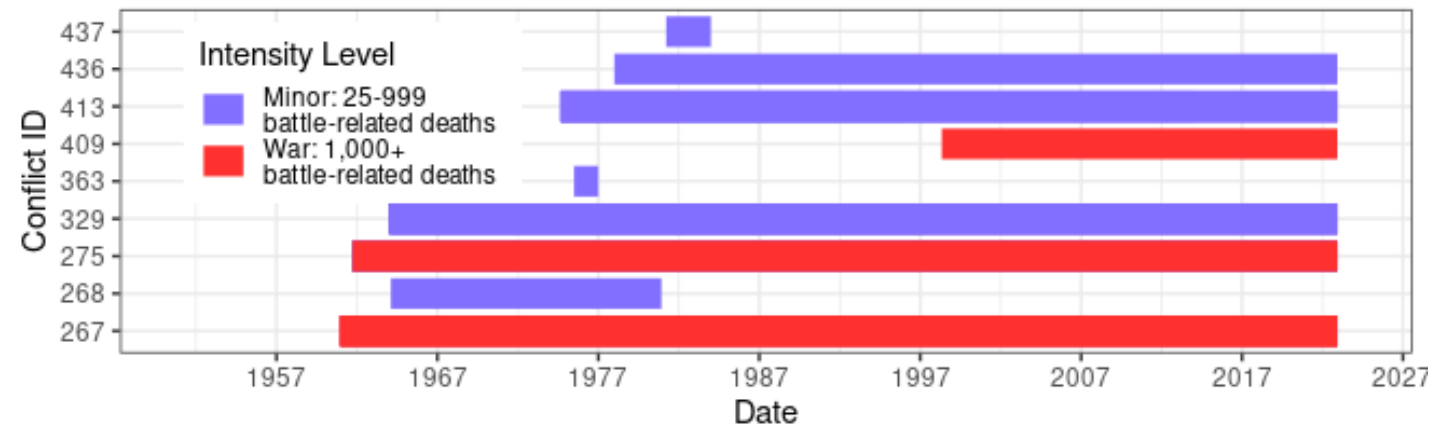


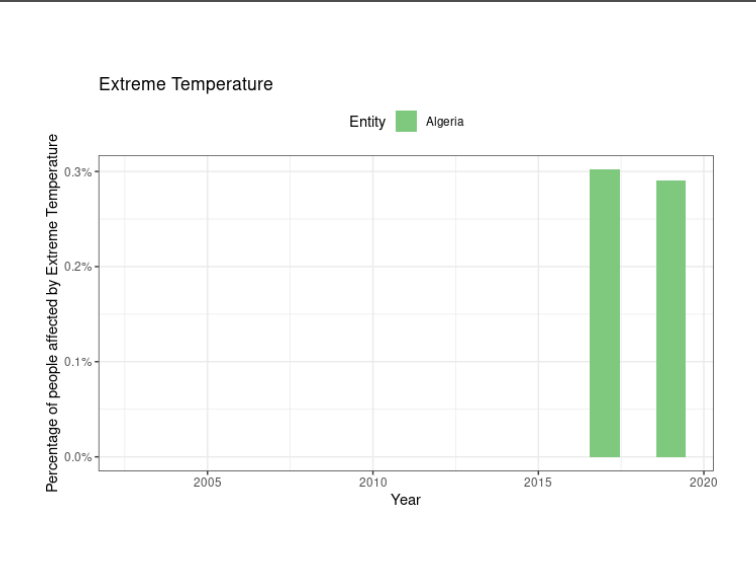
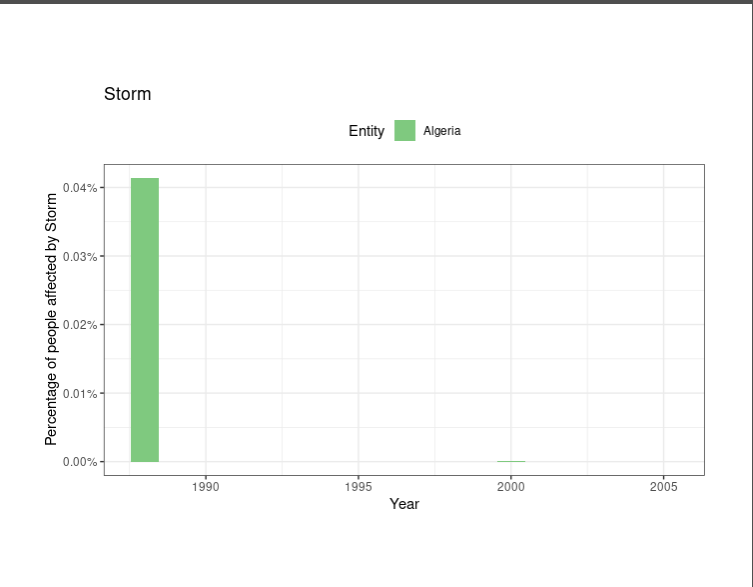
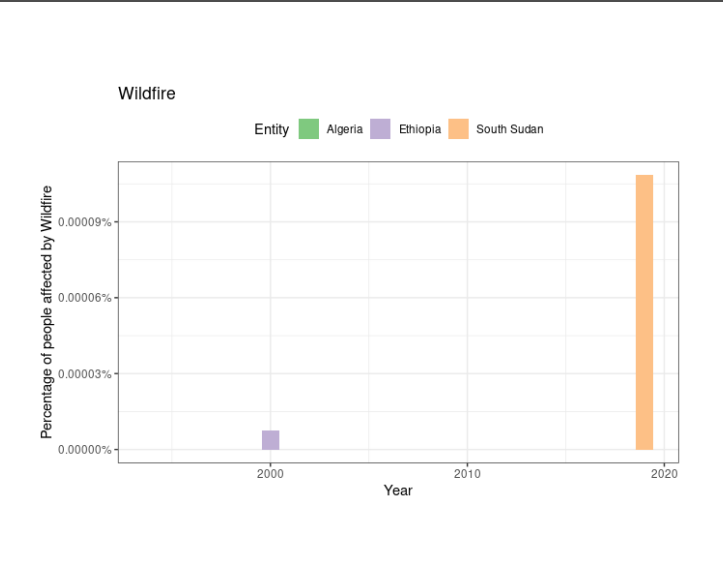
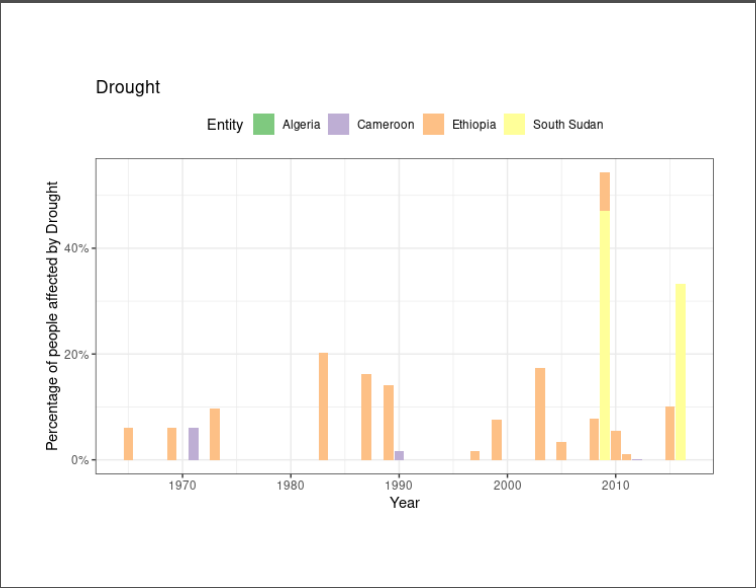
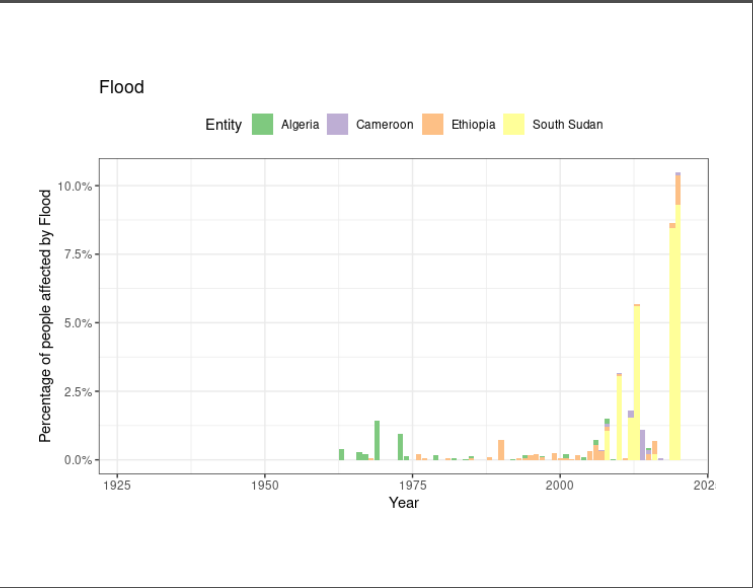
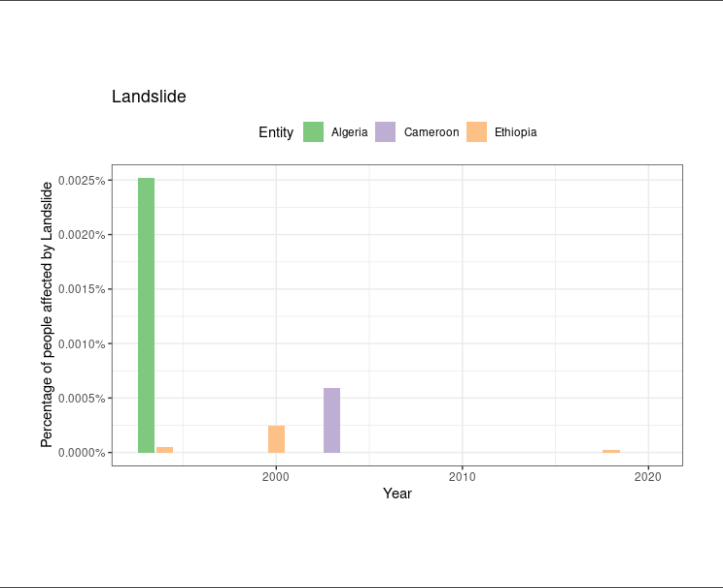


## Number of Natural Disasters in Ethiopia



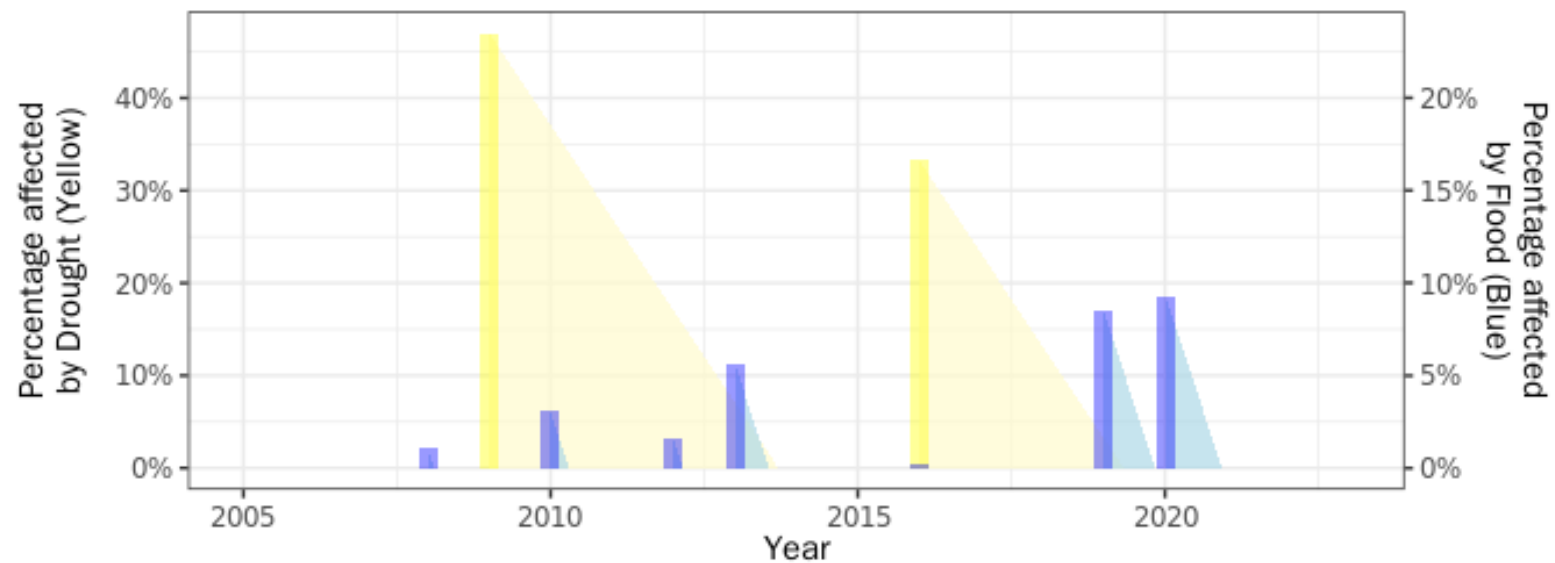
## Conflict in Ethiopia



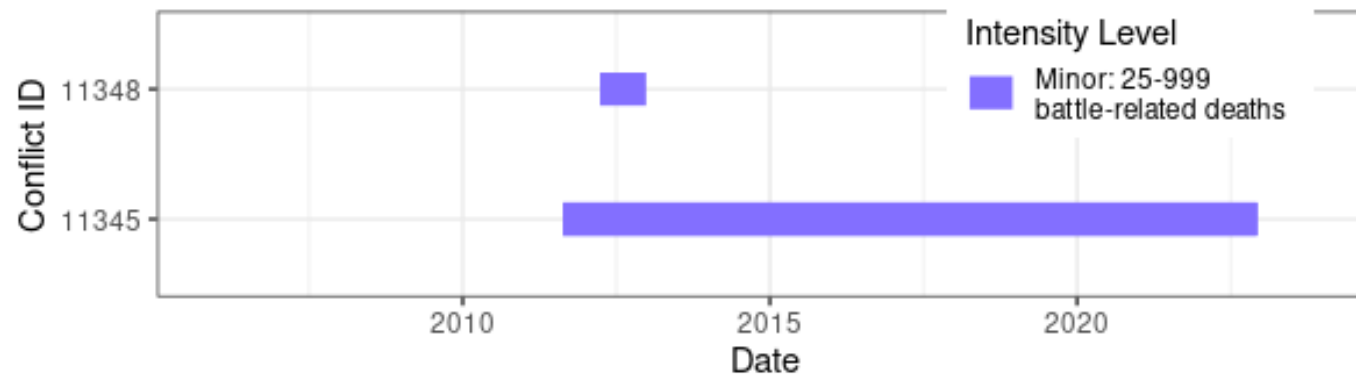




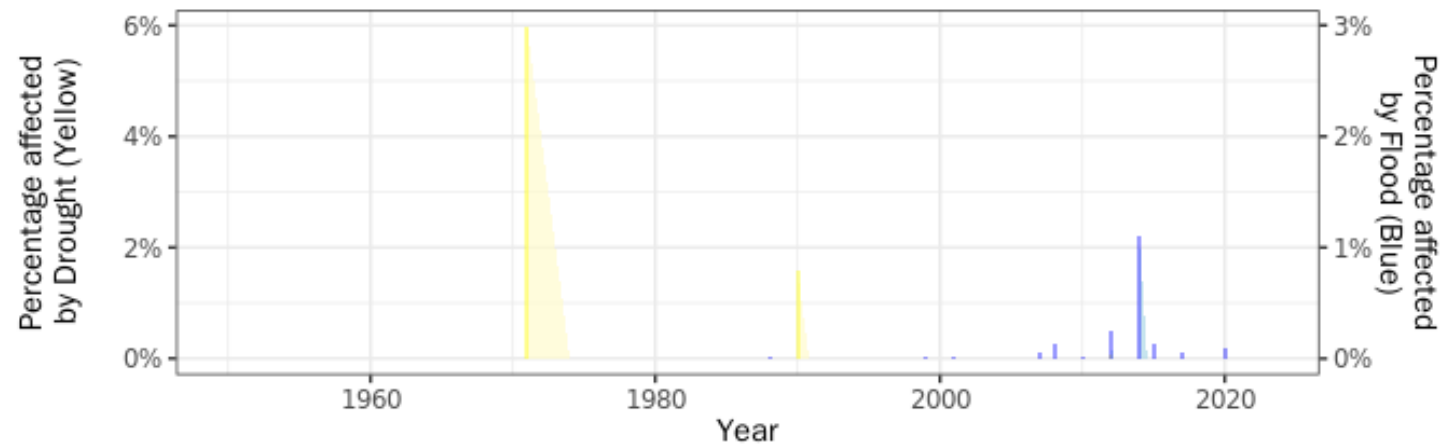
## Economical impact from Natural Disasters in South Sudan



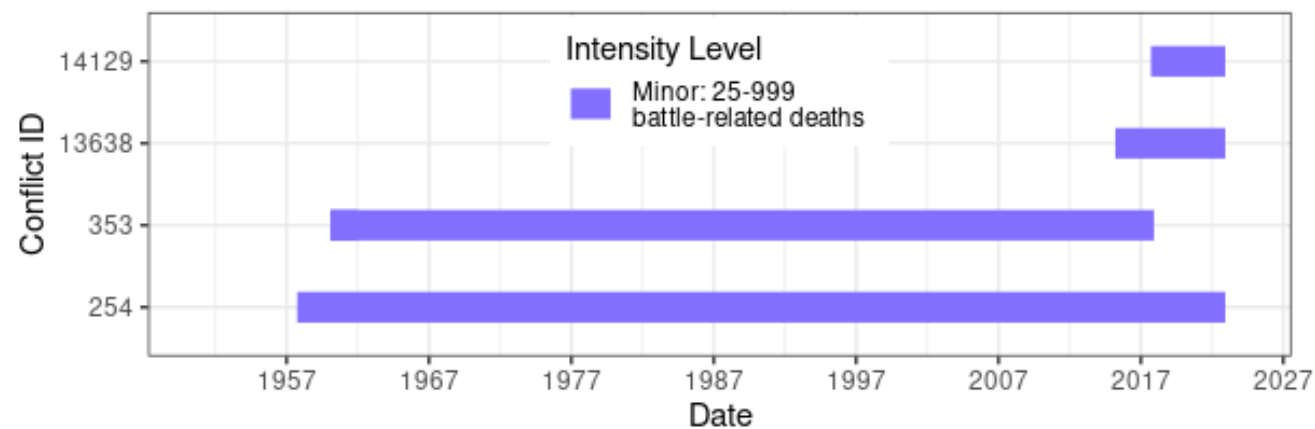
## Conflict in South Sudan



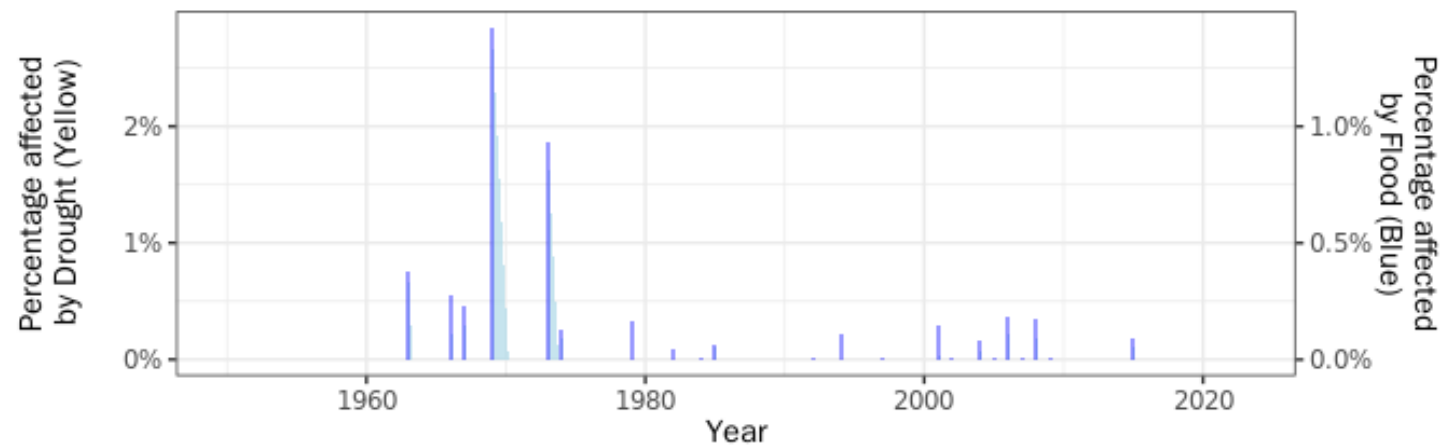
## Economical impact from Natural Disasters in Cameroon



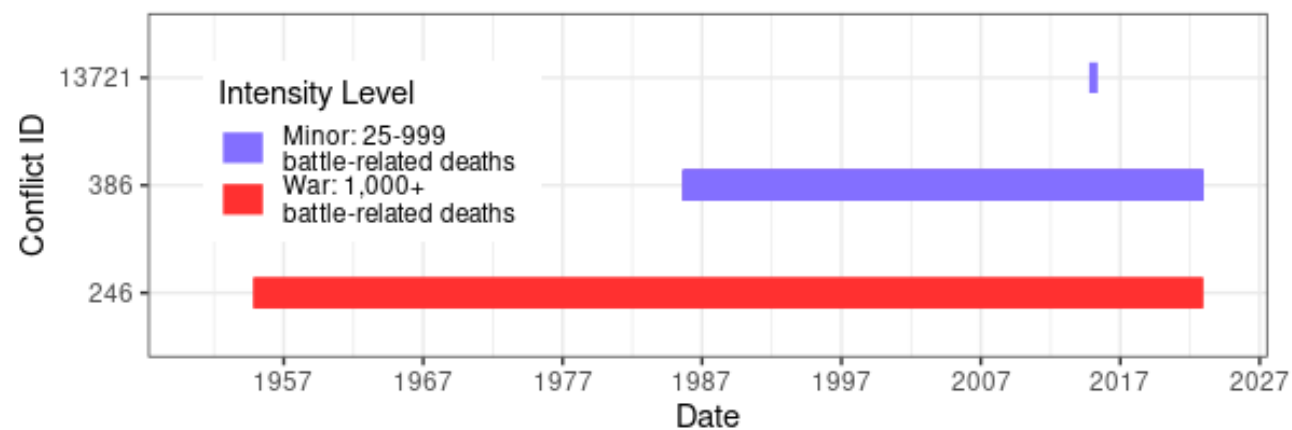
## Conflict in Cameroon



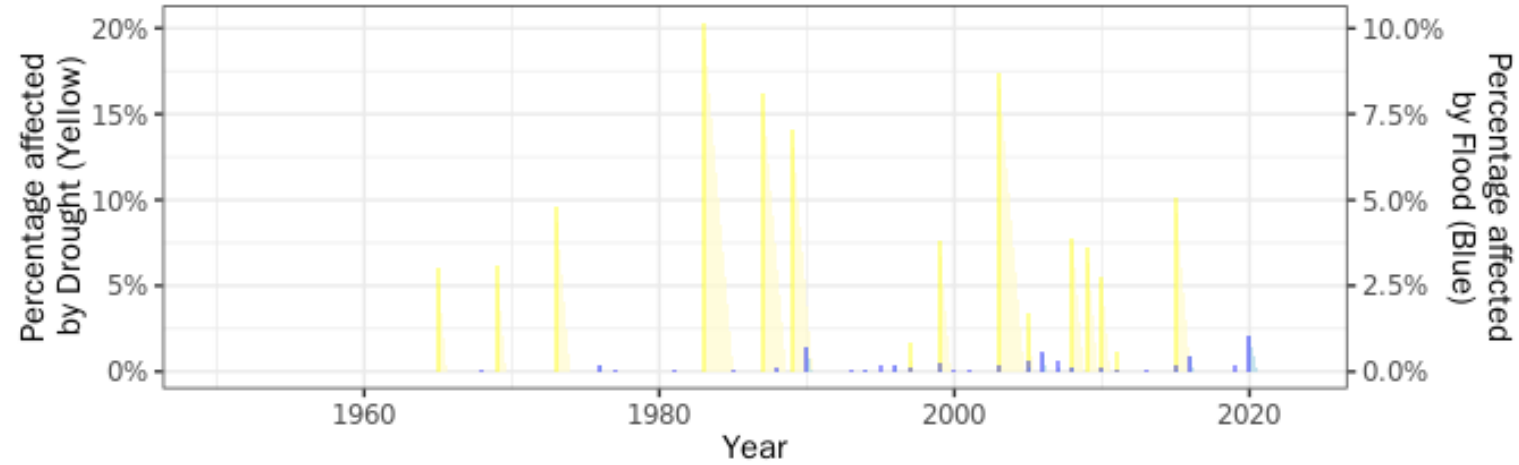
## Economical impact from Natural Disasters in Algeria



## Conflict in Algeria



## Economical impact from Natural Disasters in Ethiopia



## Conflict in Ethiopia

