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video]

How extreme precipitation influence vegetation greenness in the center region of Cameroon between 2001 and 2020?

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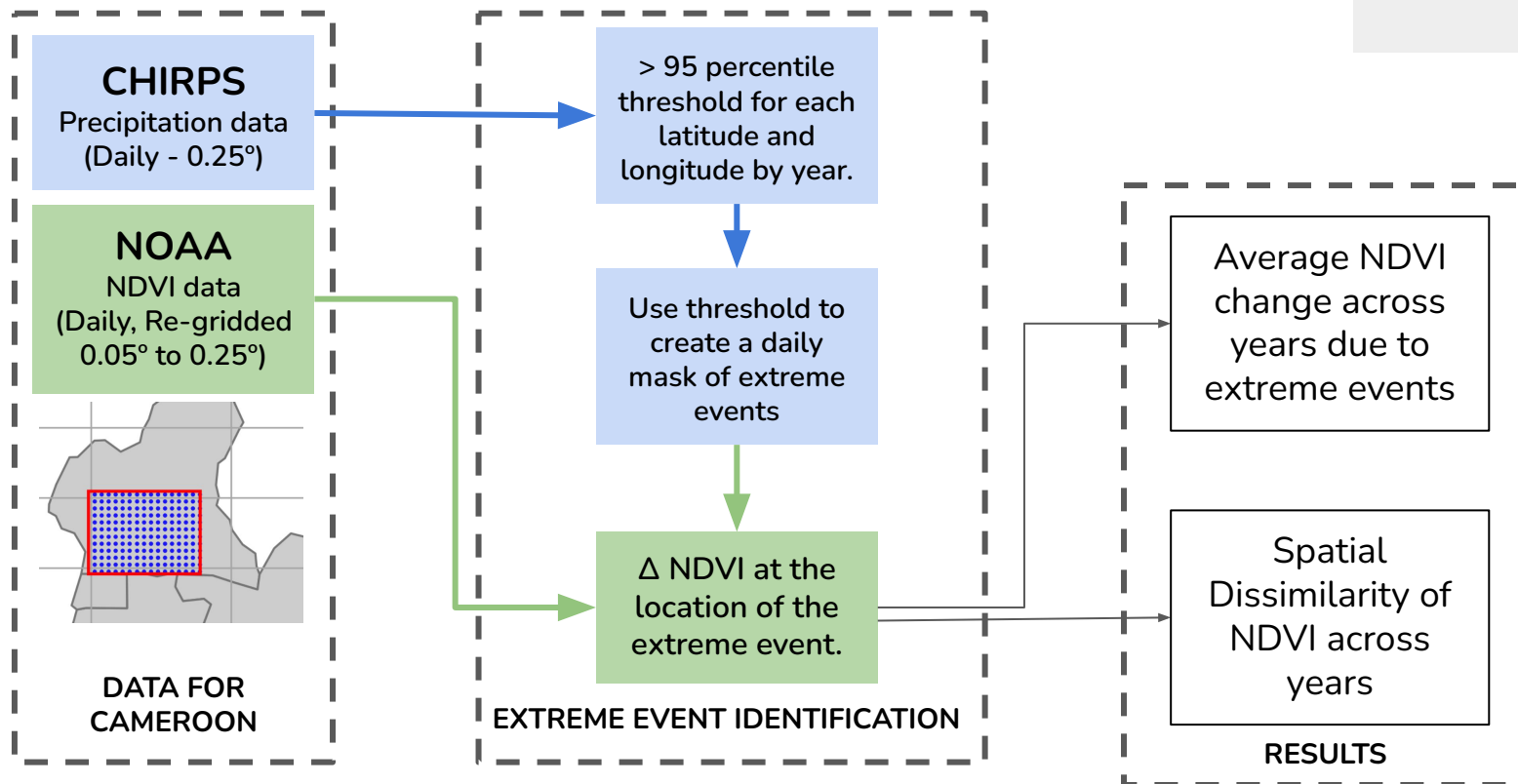


- Hypothesis
- Analysis Pipeline
- Results
- Main Takeaways

# Hypothesis

- Extreme precipitation events will impact the vegetation variability.
- Use Case: Central region of Cameroon
- Period: 2001-2020

# Analysis Pipeline



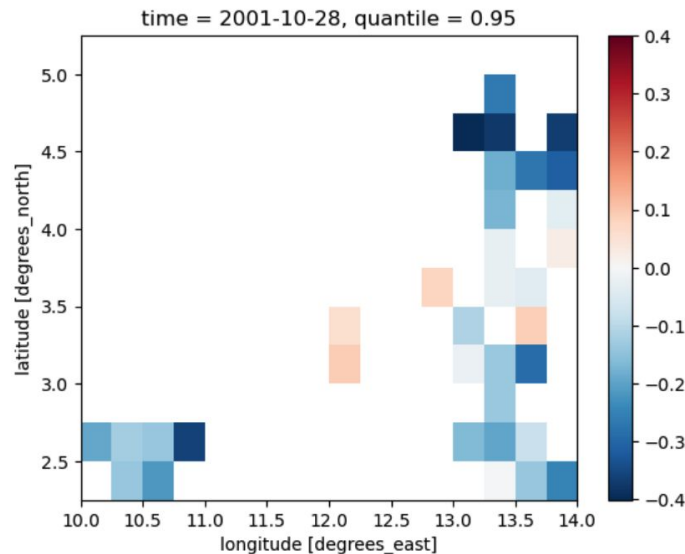
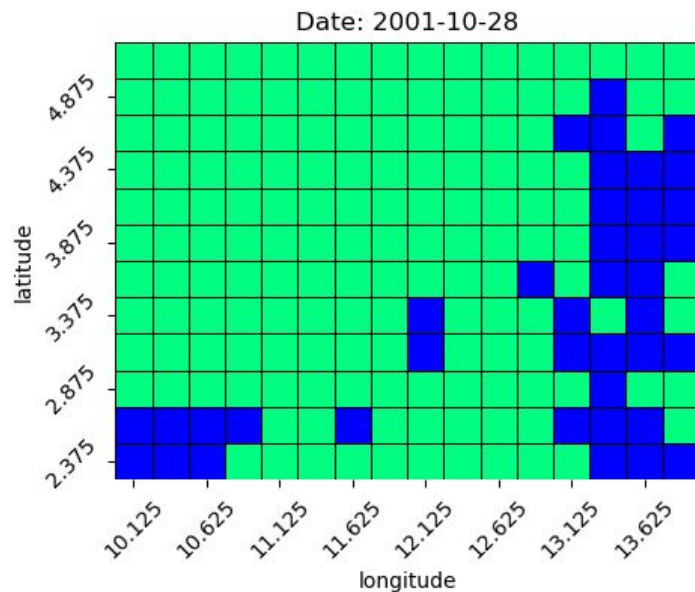
# Extreme event identification

> 95 percentile  
threshold for each  
latitude and  
longitude by year.



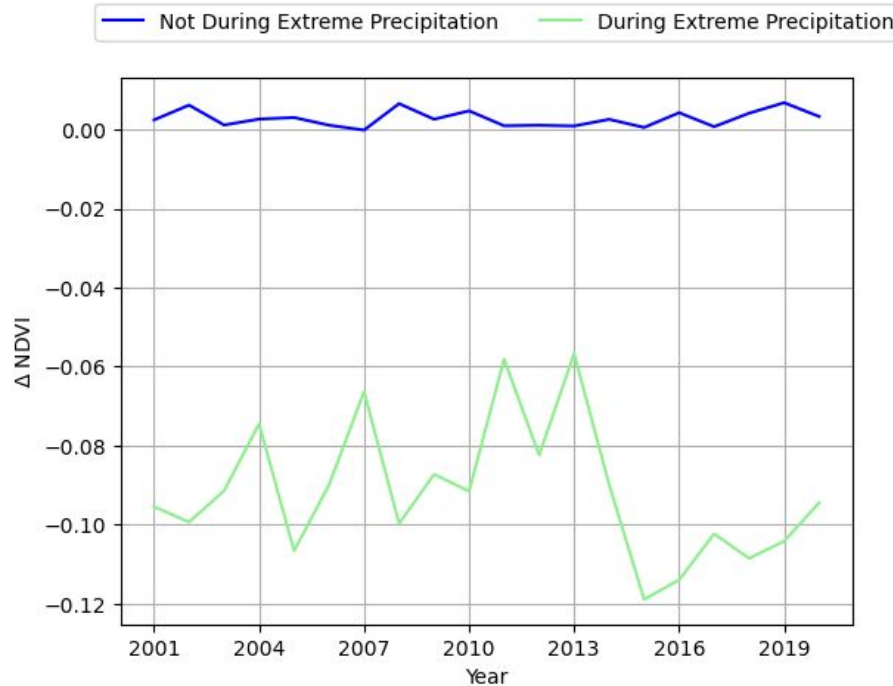
Use threshold to  
create a daily mask  
of extreme events

$\Delta$  NDVI at the location of the  
extreme event.  
 $NDVI_t - NDVI_{t-1}$

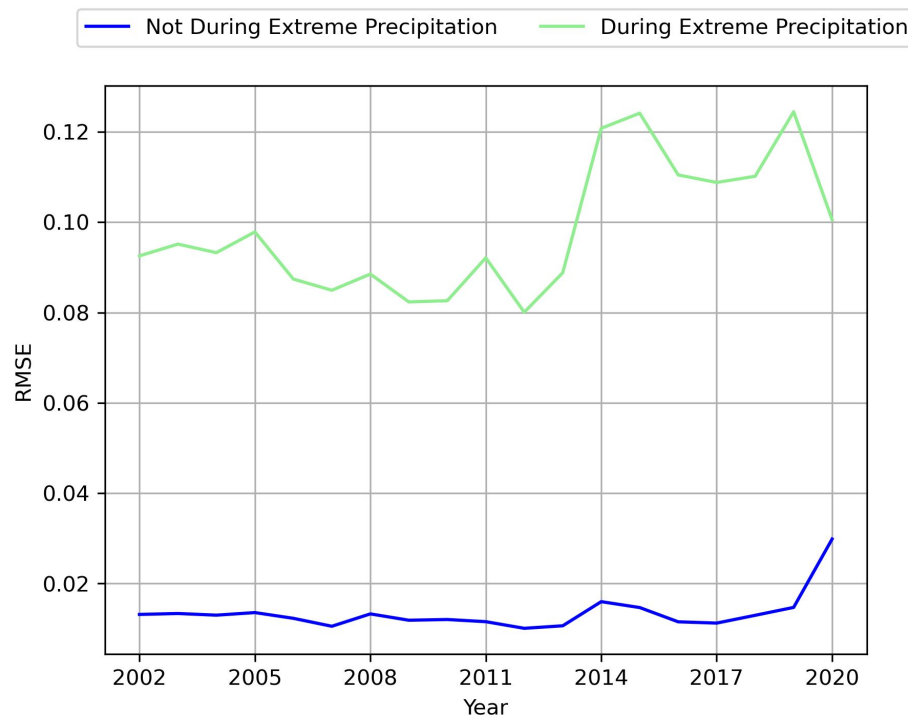


# Average NDVI change during extreme precipitation events and otherwise

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# Spatial dissimilarity of NDVI across years



# Main Takeaways

$\Delta$  NDVI for extreme precipitation areas  
is significantly different from  
non-extreme precipitation areas

NDVI change is consistently negative in  
areas of extreme precipitation, and  
positive otherwise.

Non extreme precipitation areas have  
similar spatial structure across  
consecutive years.

## Credits:

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ESPRESSIVO

# Thanks!

**Special mentions to Cassidy, Raphael and Laura !!**