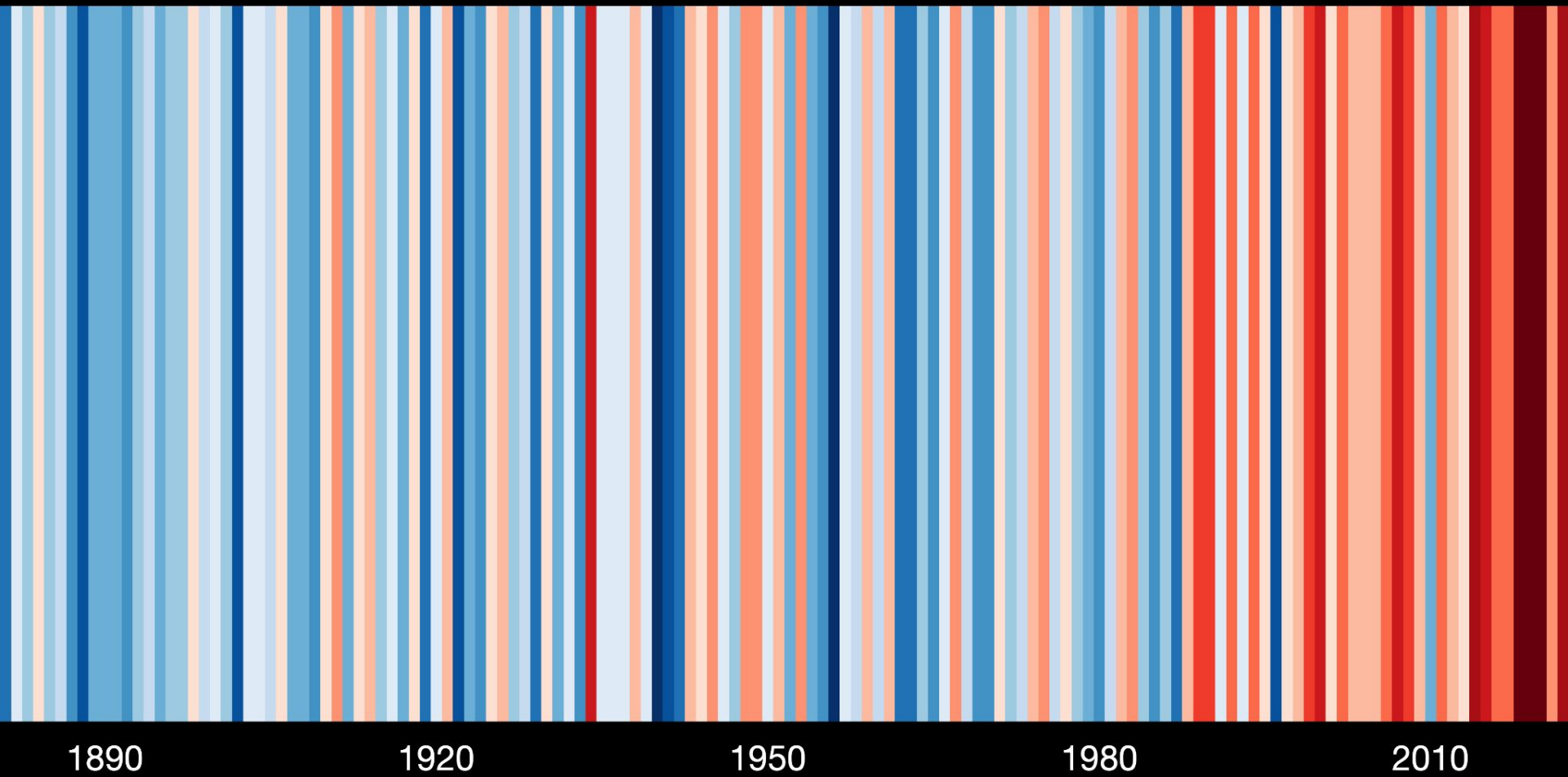




# **Deforestation in Brandenburg - Effects of Climate change and wildfires on forests in Brandenburg**

# Temperature change in Brandenburg/Berlin since 1881



## drought index brandenburg 2010 to 2023

Scale:

$\geq 2.0$  extremely too moist

1.5 to 2.0 clearly too moist

1.0 to 1.5 moderately too moist

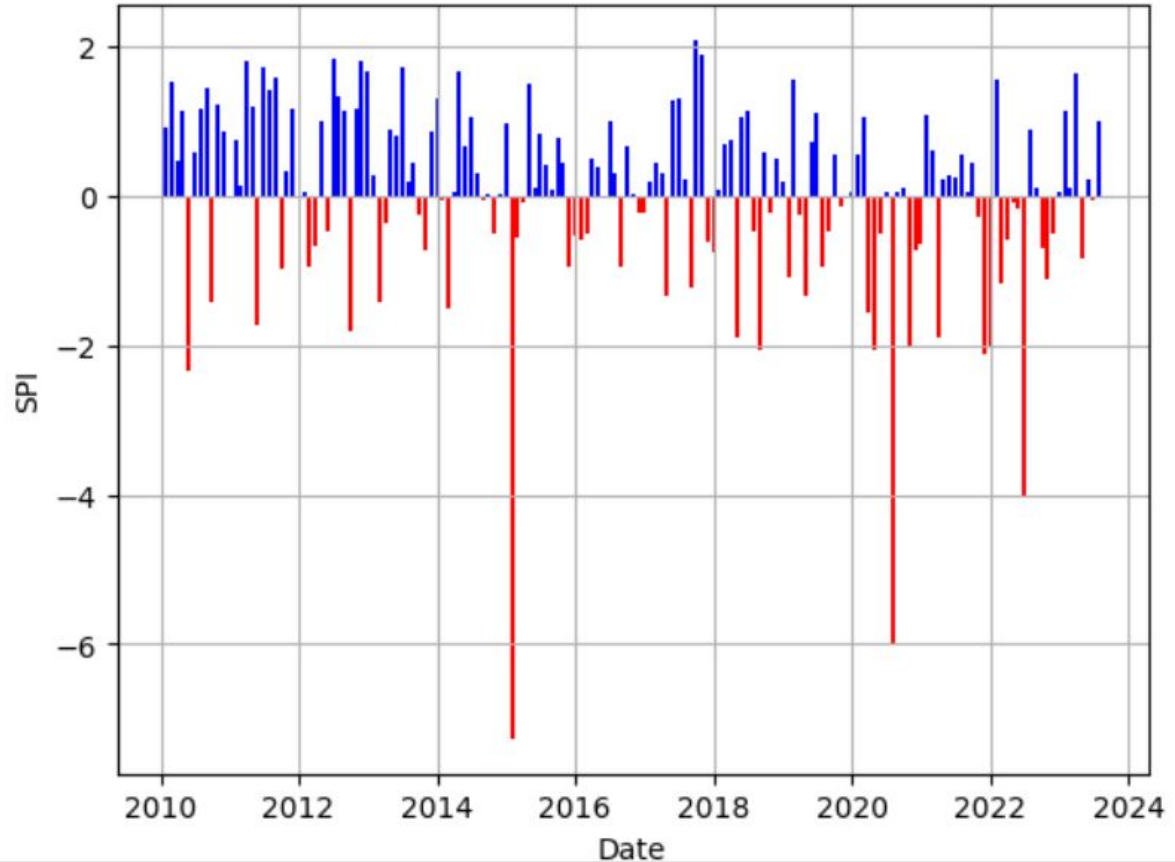
0.0 to 1.0 almost normal  
(slightly too moist)

-1.0 to 0.0 almost normal (sligh  
drought)

-1.5 to -1.0 moderate drought

-2.0 to -1.5 severe drought

$2.3 \leq -2.0$  extreme drought

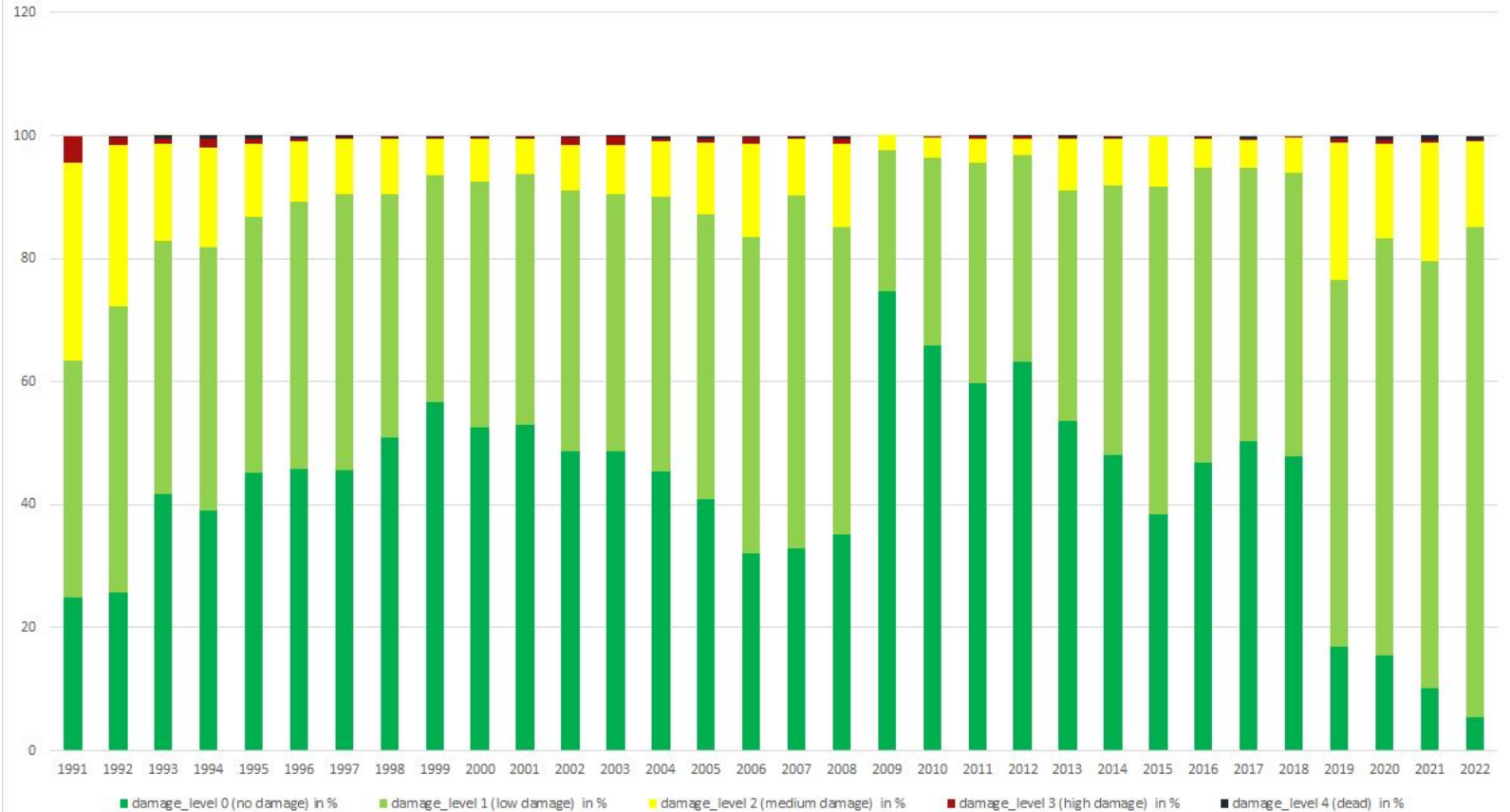


Data source: DWD (Deutscher Wetter Dienst)

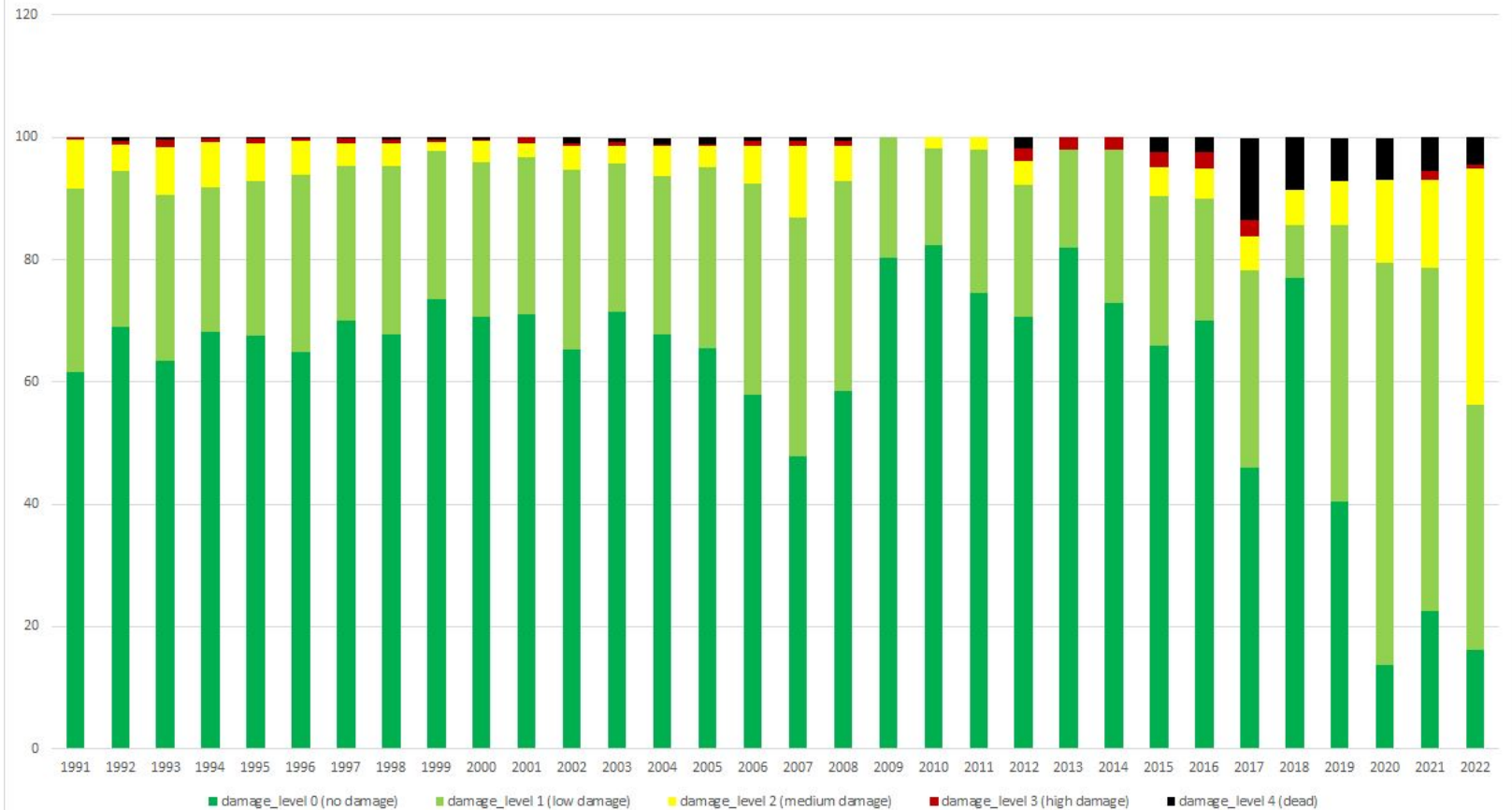
## Pest insects

- drought causes massive heat stress symptoms on trees which weakens them and makes it easier for pest insects to infest the trees
- additionally: mild winters promote the faster and higher reproduction of these insects
-

# PINES DAMAGE LEVELS BRANDENBURG TIMELINE



OTHER CONIFEROUS TREES DAMAGE LEVELS BRANDENBURG TIMELINE



Source: Thünen-Institut

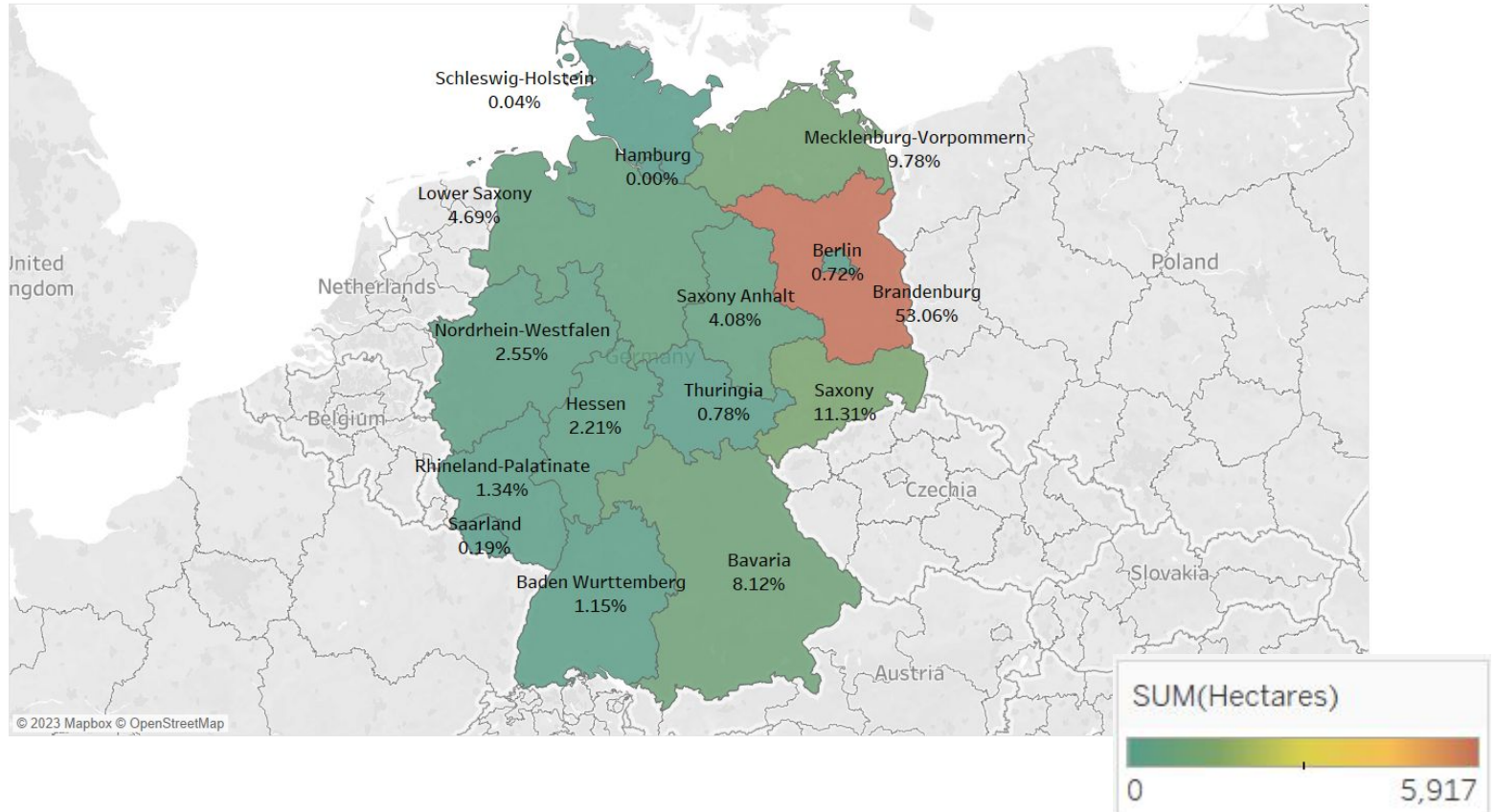
## DAMAGE LEVEL FORESTS BRANDENBURG 2022

■ no damage (0) in %    ■ warning\_level (1) in %    ■ severely\_damaged (2-4) in %



Source: Thünen-Institut

## Burned hectares from 2010 to 2022 in Germany





## Wildfire Map Brandenburg districts

Show traffic light tool and explain ML Model

# Proposal

- Explore the future effect of climate change in Brandenburg
- A traffic light tool that helps alert on wildfires in Brandenburg



# Thank you

Mirella & Sofía