

# Ideas for my Master Thesis

Gregor Steiner

03/02/2022

## Idea

Exploit the 2021 heatwave on the North American west coast

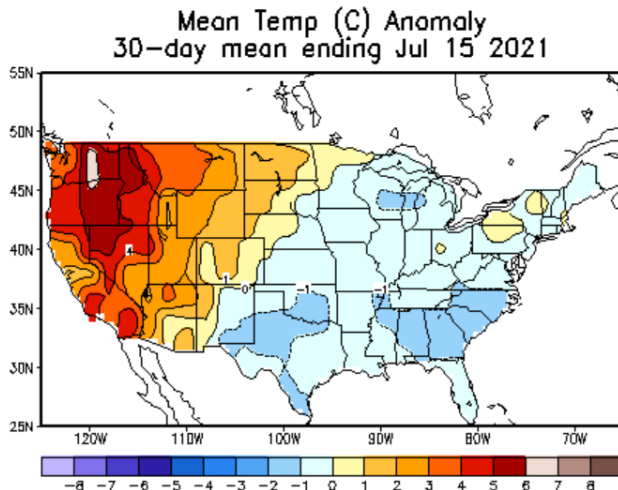


Figure 1: Temperature Anomalies in June/July 2021

## Sick leave data:

- ▶ Current Population Survey (CPS):
  - ▶ Available monthly (refers to the week including the 12th of that month)
  - ▶ Includes state and county information, but county is often missing

## Commuting data:

- ▶ American Community Survey (ACS): Yearly survey about commuting habits
- ▶ Longitudinal Employer-Household Dynamics (LEHD): Only yearly as well
- ▶ Maybe fuel consumption could be an alternative? That is available monthly from the EIA, but only for PADD regions

## Crime Data:

- ▶ Data of all recorded incidents ( $> 5$  Mill.) in a given year is available [here](#) or [here](#):
  - ▶ Includes the exact date
  - ▶ Includes state and county numbers
  - ▶ But 2021 is not yet available.

## Crime Identification



Figure 2: Causal effect of heat on crimes with some confounders X

# Sick Leaves Identification

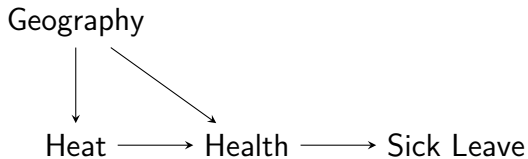


Figure 3: Causal effect of heat on sick leaves