Preferred citation style

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Tracking the pandemic in Switzerland: Transport impacts

KW Axhausen

IVT
ETH
Zürich

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Institut für Verkehrsplanung und Transportsysteme
Institute for Transport Planning and Systems

Eidgenössische Technische Hochschule Zürich
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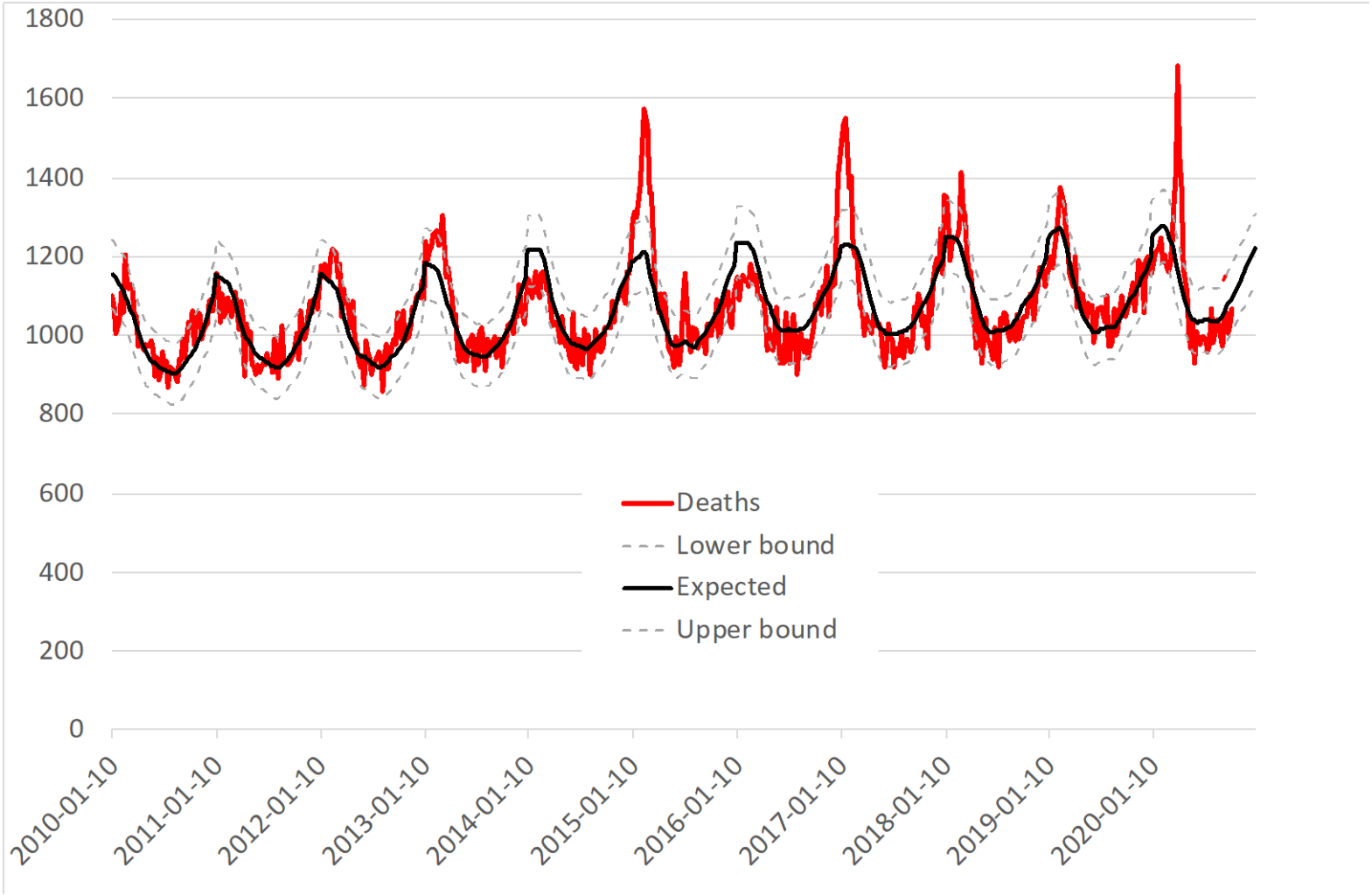
Excess death in Switzerland since 2010



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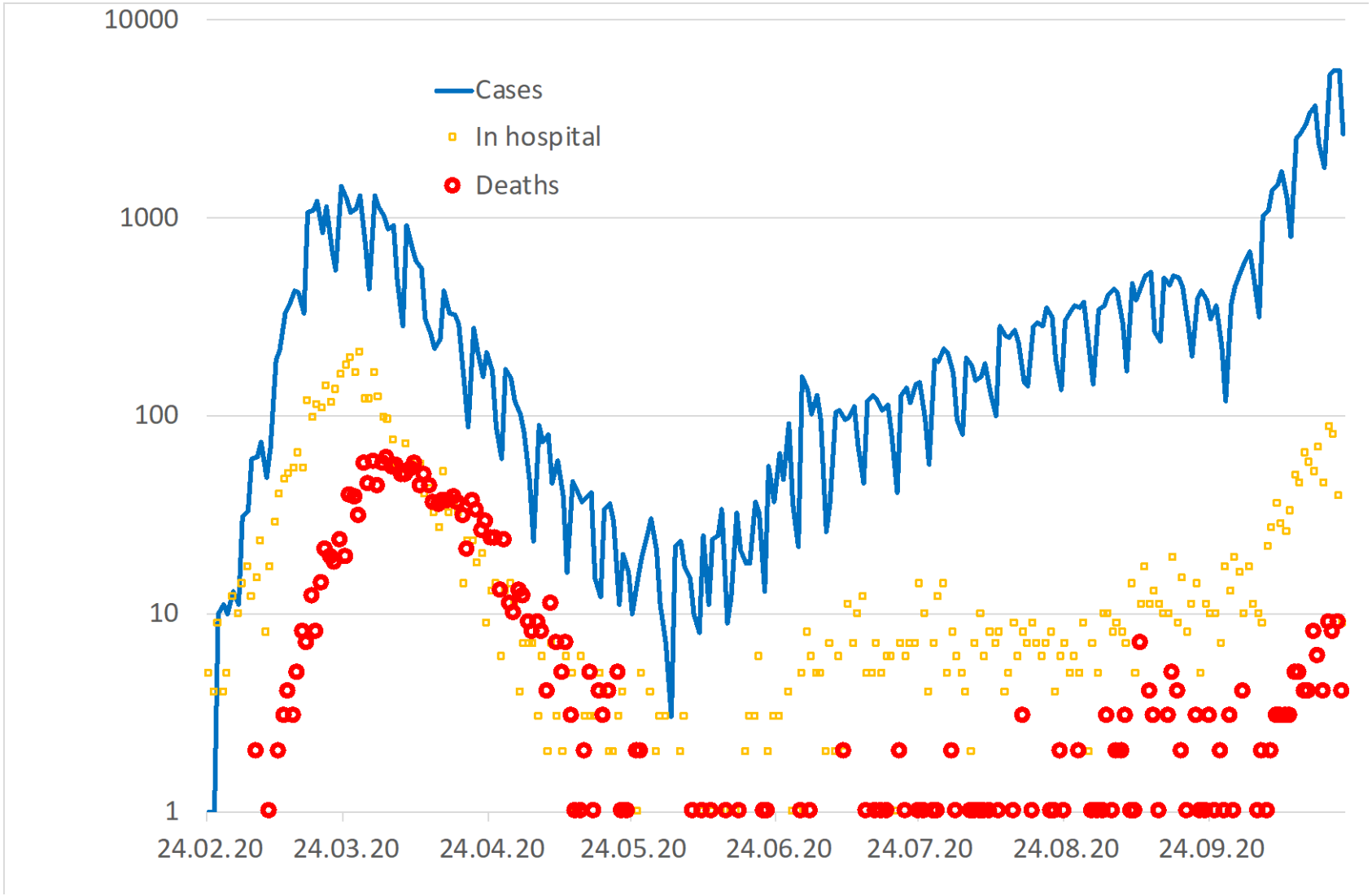
Number of COVID19 cases in Switzerland



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MOBIS COVID Sample

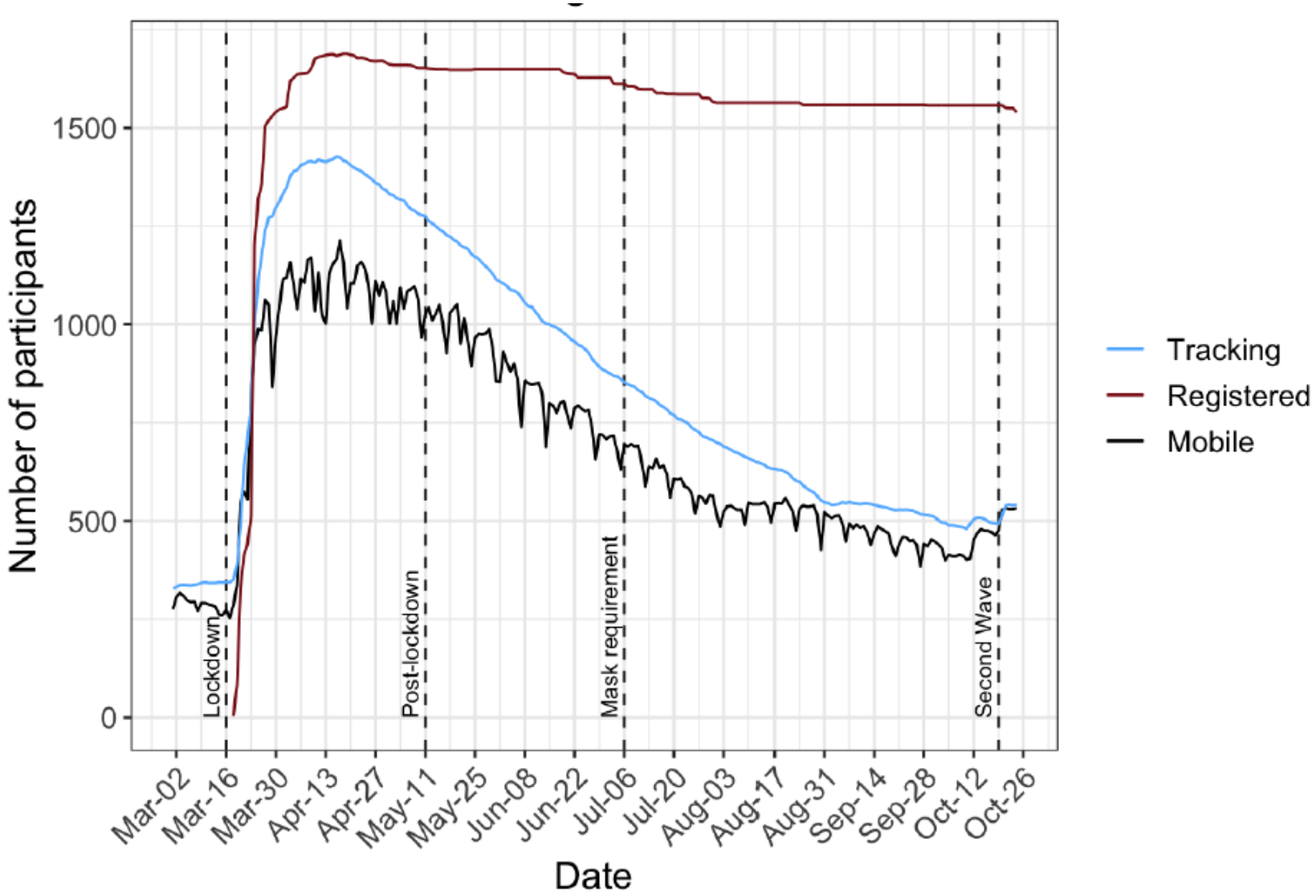
MOBIS COVID Sample

- Earlier virtual mobility pricing study of car and transit users
- French and German speaking Switzerland

- 1100+ started out of 3700 original ones
- No incentives for COVID19 phase

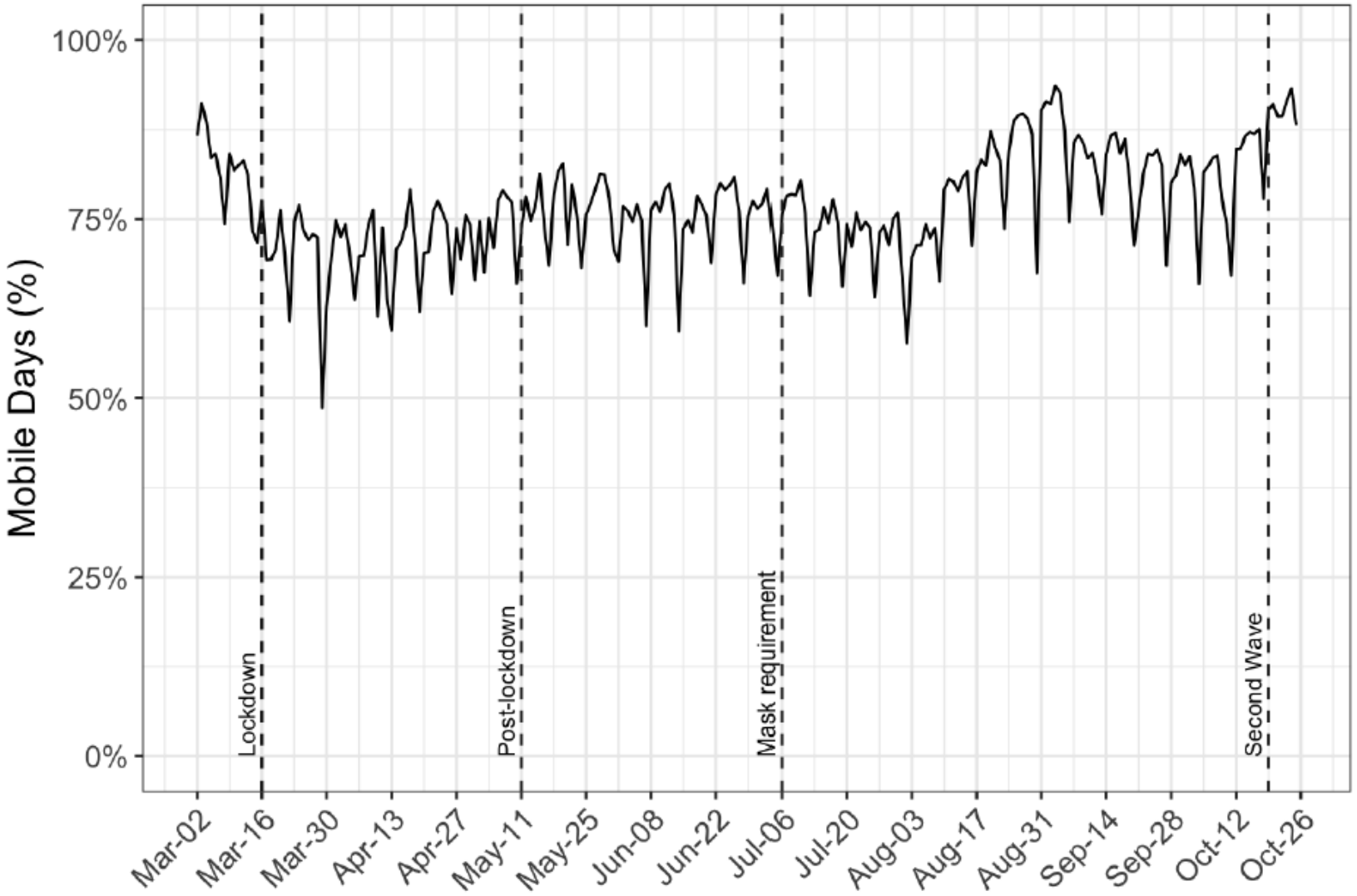
- Catch-a-day app (motion-tag, Berlin)

MOBIS COVID sample evolution



MOBIS COVID trajectory of out-of-home activities

Mobile persons per day



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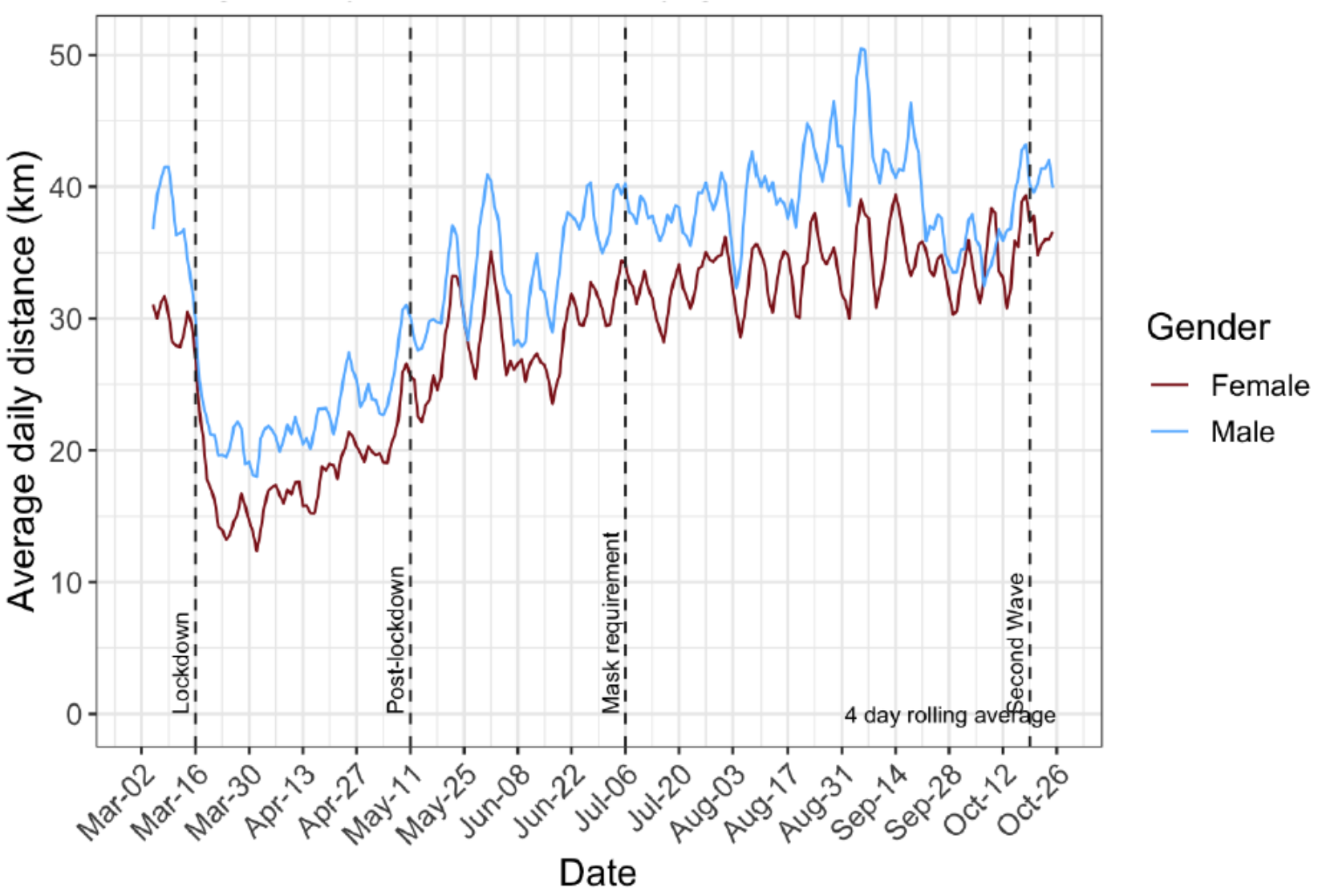
MOBIS COVID PKm, trips and activity space trajectory

PKm by gender



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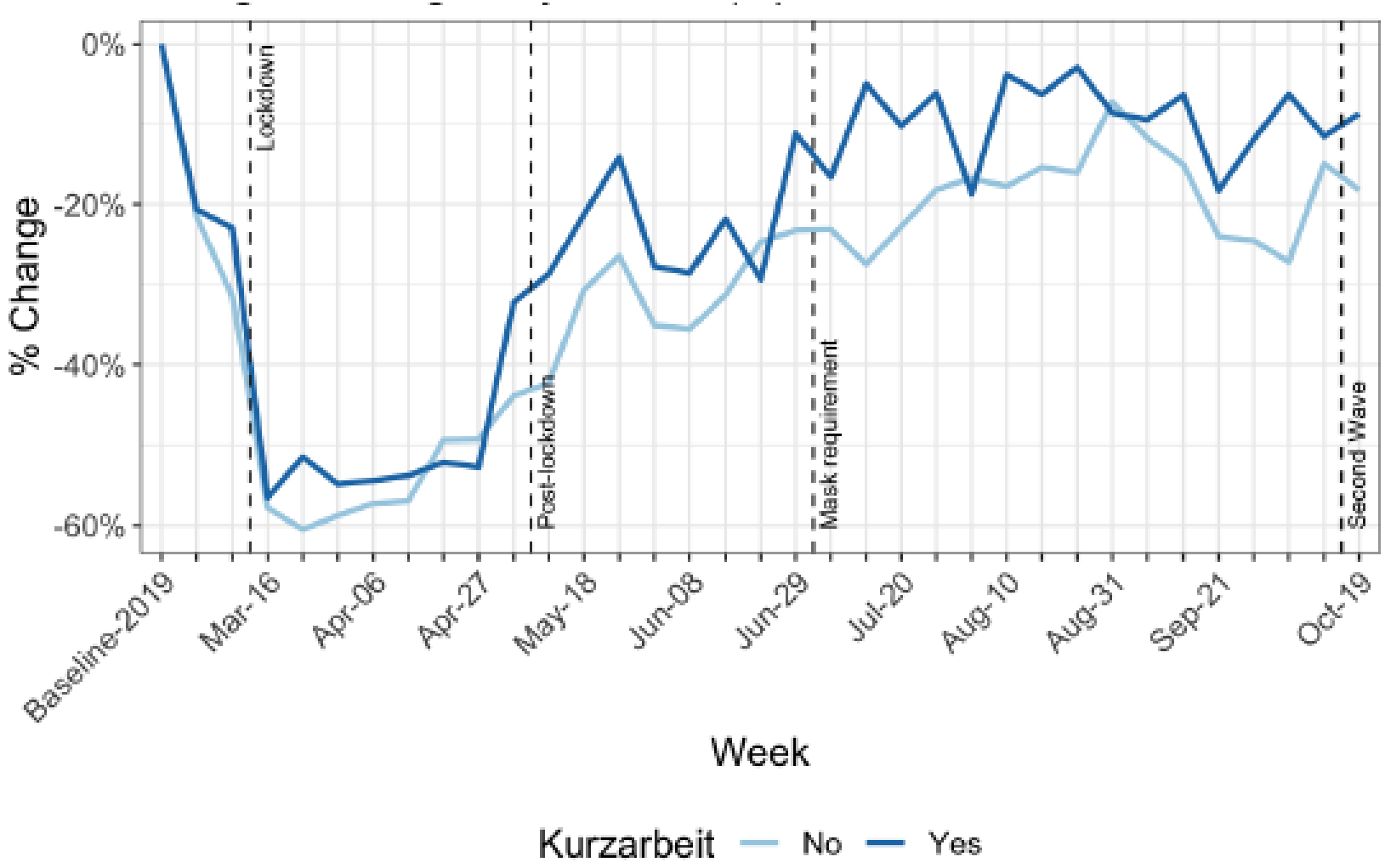
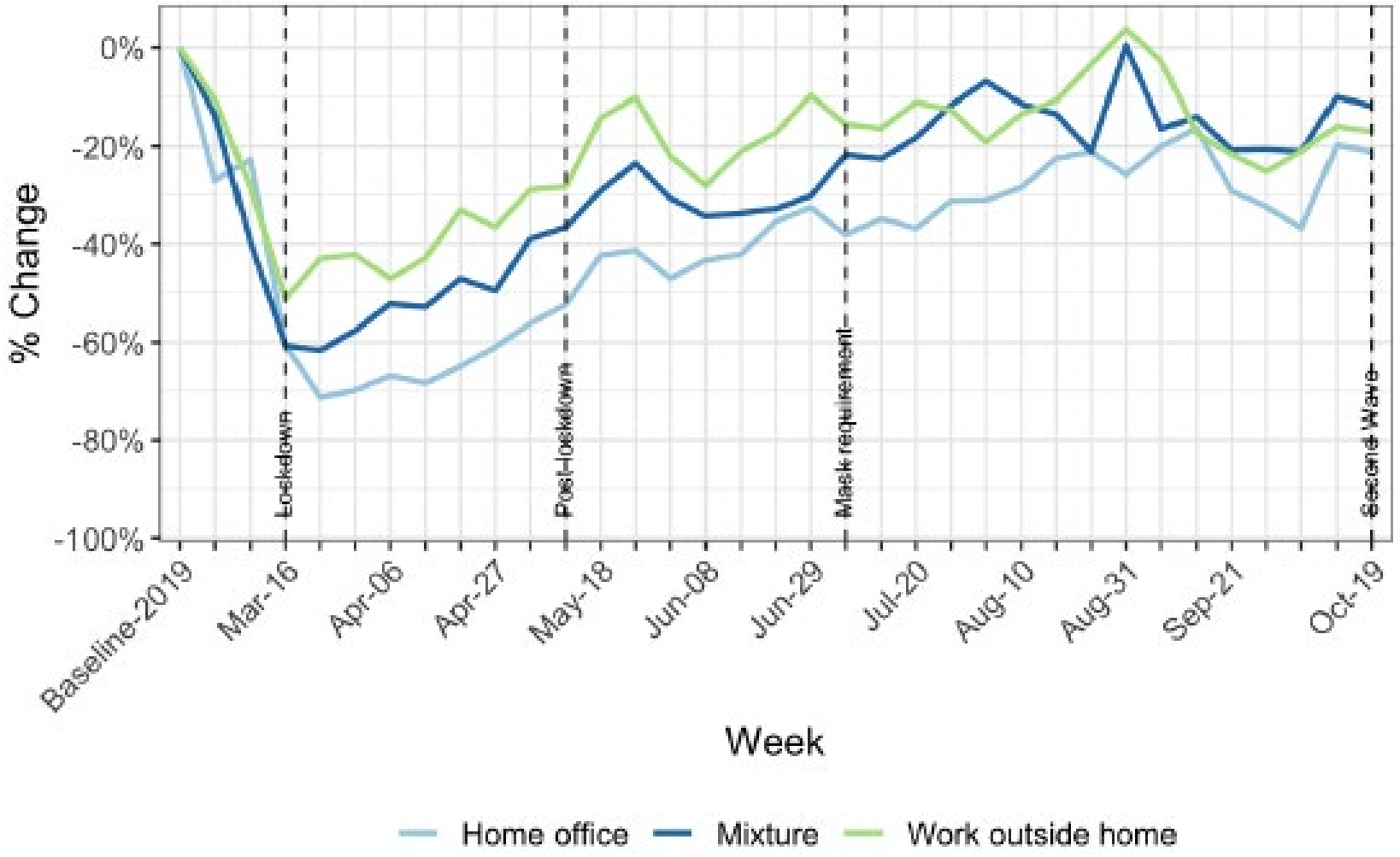
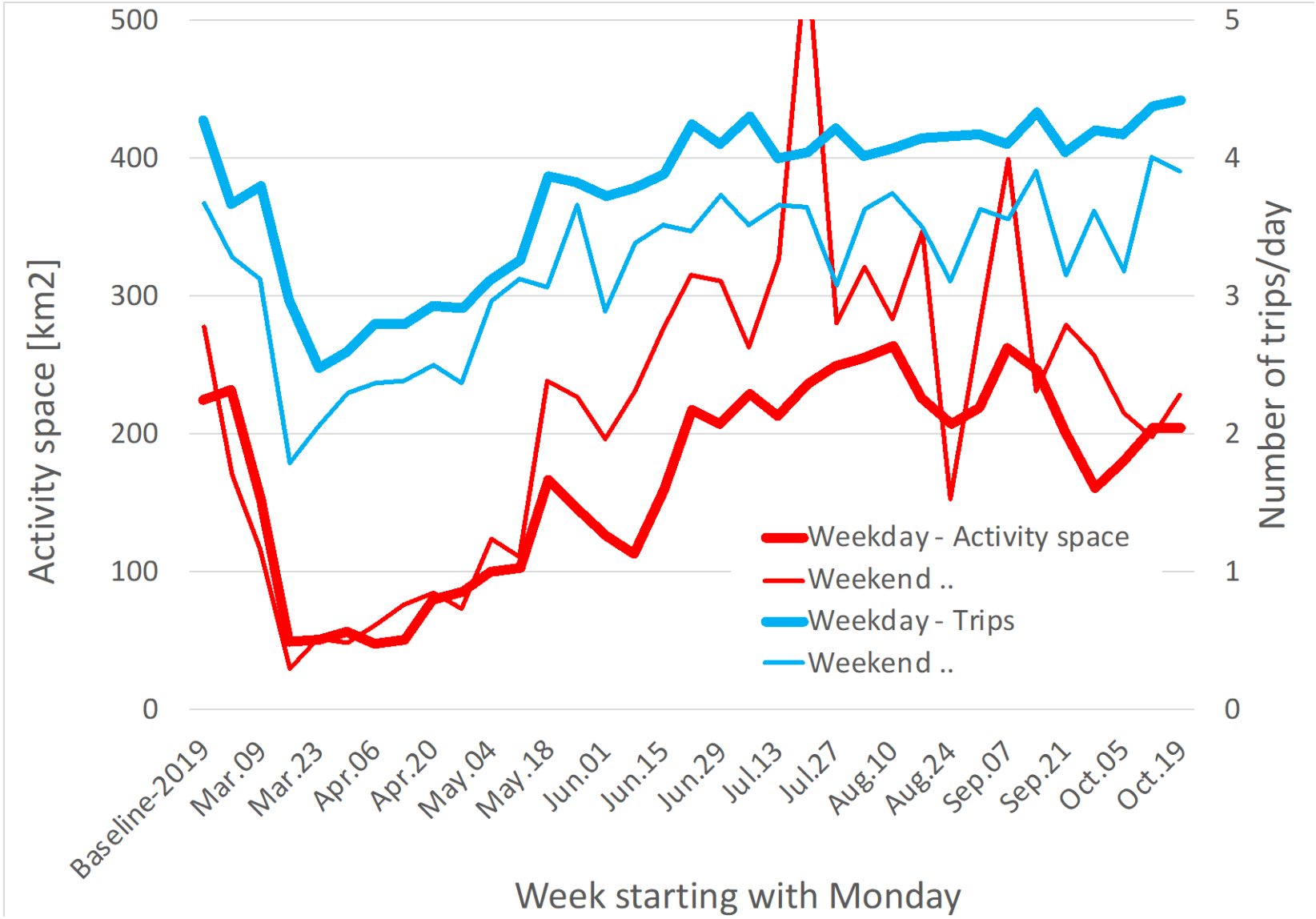
Δ% of PKm by work arrangement: “Kurzarbeit”



Δ% of PKm by work arrangement: “WFH”



Δ% of trips and activity spaces



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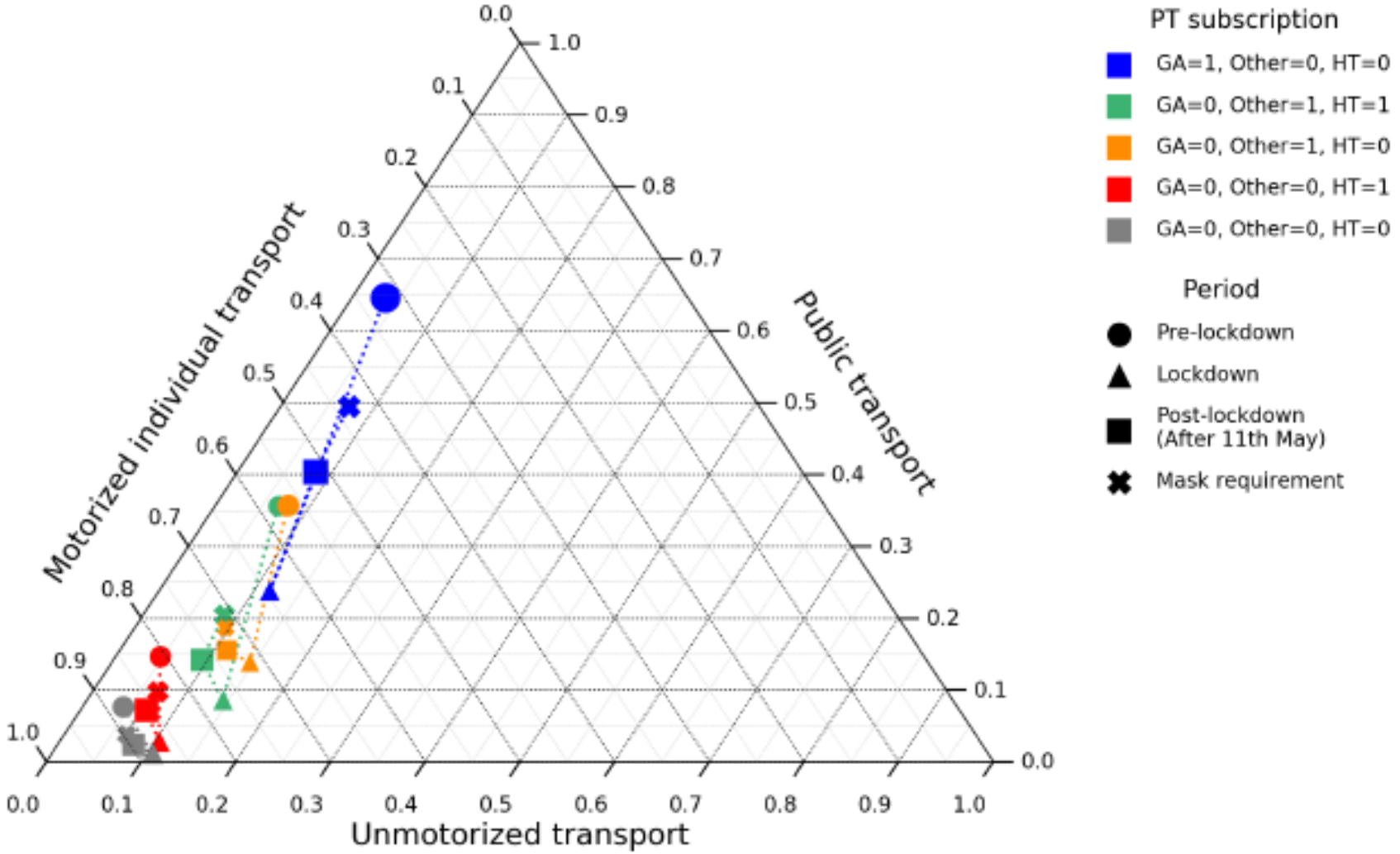
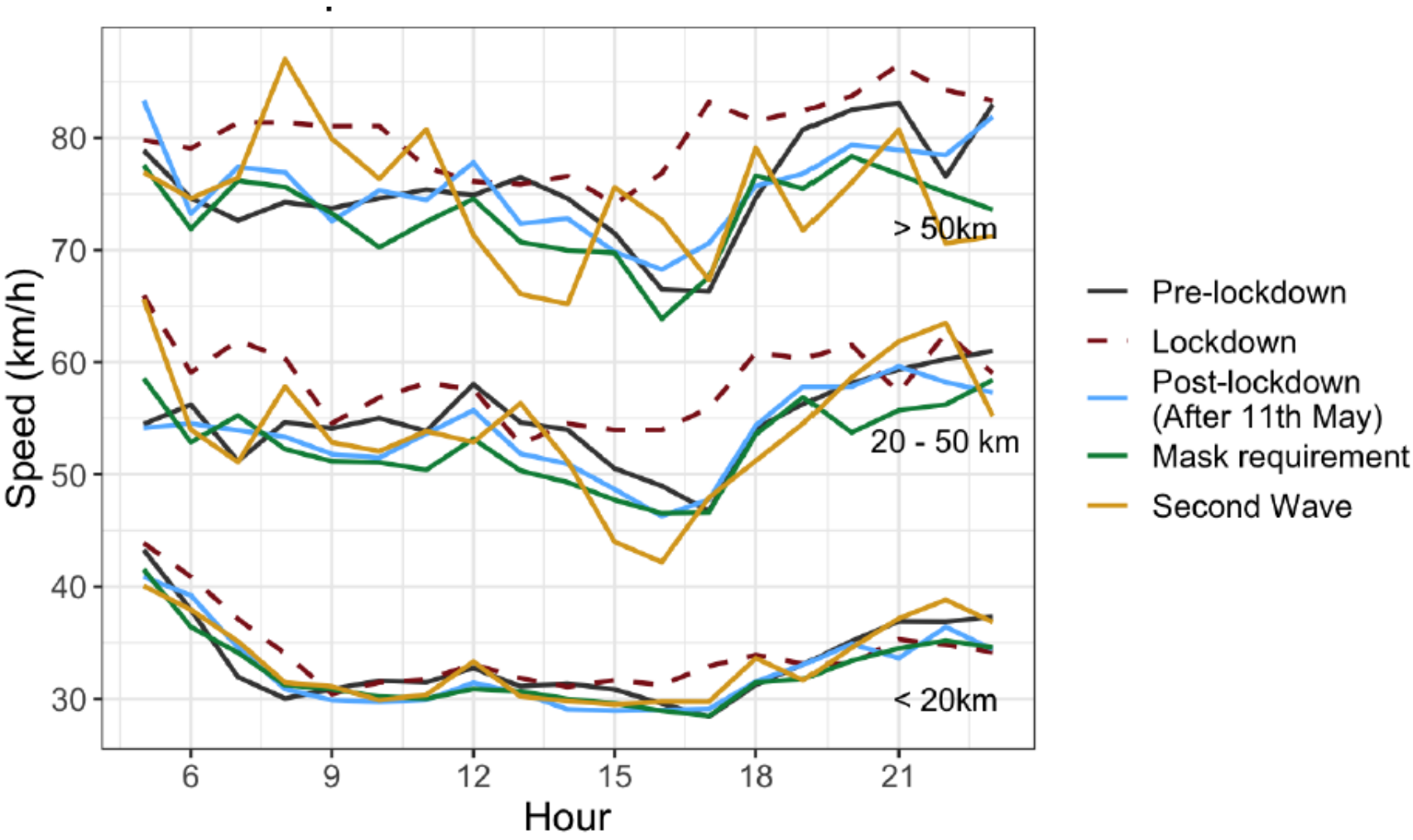
MOBIS COVID mode usage trajectory

PKm before, ….: Weekdays by mode



MOBIS COVID problems in the fall?

COVID19 impacts: Door to door speeds



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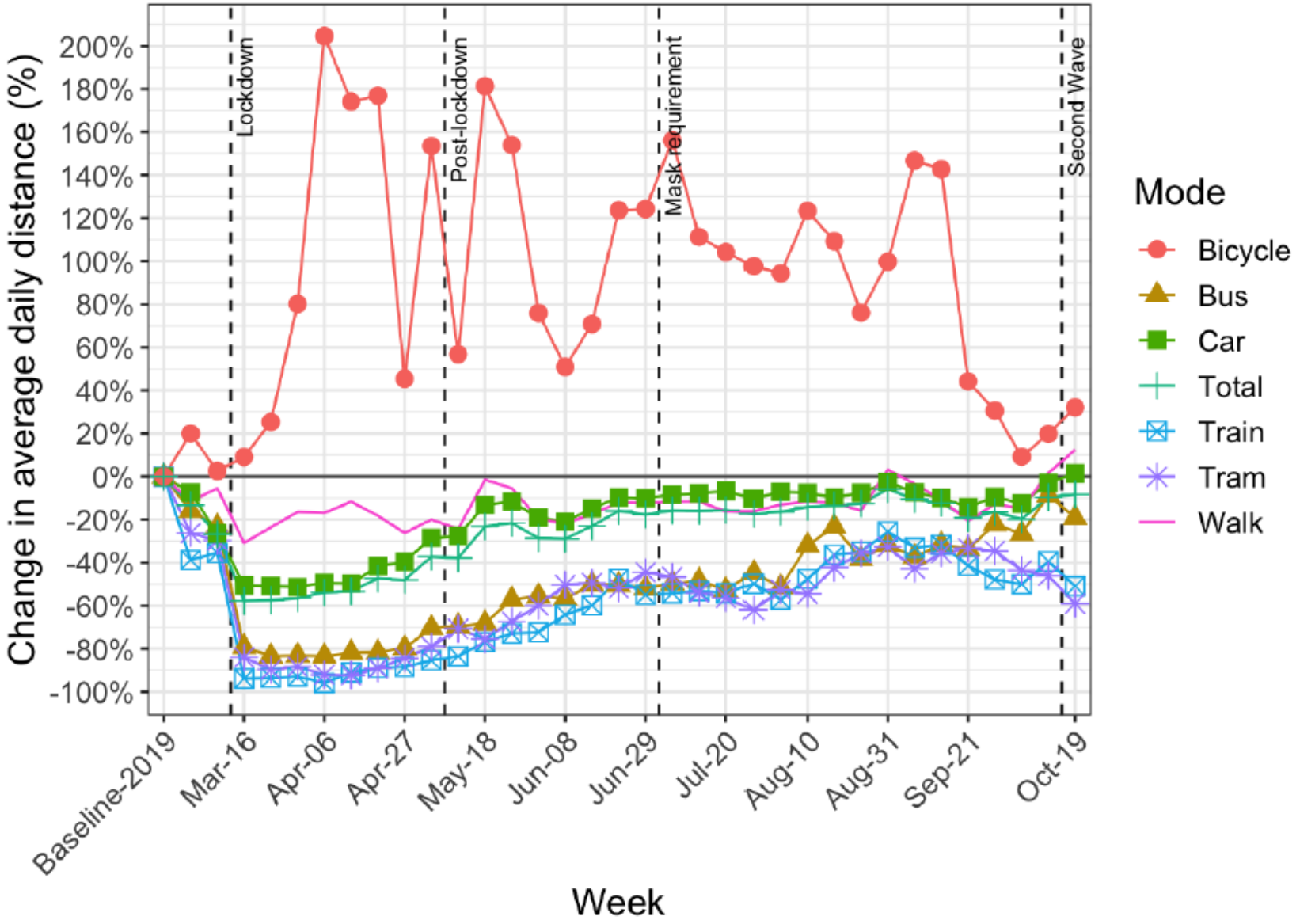
COVID19 impacts: Supressed demand in PKm



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Dilemma of transport policy with the pandemic

Dilemma of transport policy

Accessibility ~ Productivity ~ Social welfare

Car accessibility ~ Car ownership ~ 1/Committment to transit use

Accessibility ~ VMT ~ CO_2 emission for current fleet technology

Accessibility ~ Sprawl ~ VM**T**

Challenge of COVID19 for spatial policy making

Pandemic threat ~ Sprawl ~ VMT

Pandemic threat ~ WFH ~ VMT without control (reorganisation of time)

Pandemic threat ~ WFH ~ 1/productivity without household reallocation of tasks

Sprawl and WFH ~ 1/commitment to transit use ~ congestion

Sprawl ~ 1/spatial equity

New equilibrium ?

- Share of work from ”home” – end of the office ?
  - Cost allocation for the work place (*free lancing/putting out/ generalised gig economy*)
  - Resilience of such an economy (health care, retirement)

- Use of large pooled vehicles (bus, tram, train)
- Redistribution of road space (pedestrians, cyclists, cars, big vehicles)
- Desired/enforced speed levels
  - Crowding pricing for all vehicle sizes/services
  - Parking pricing
- Crowding control in the city
- Pricing of technical services on green field sites

Questions ?

ivtmobis.ethz.ch/mobis/covid19/

www.ivt.ethz.ch

Appendix