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Mapping mobile service usage diversity in cities

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► **To cite this version:**

Maxime Lenormand. Mapping mobile service usage diversity in cities. NetMob 2023, Oct 2023, Madrid, Spain. hal-04231514

HAL Id: hal-04231514

<https://hal.inrae.fr/hal-04231514v1>

Submitted on 6 Oct 2023

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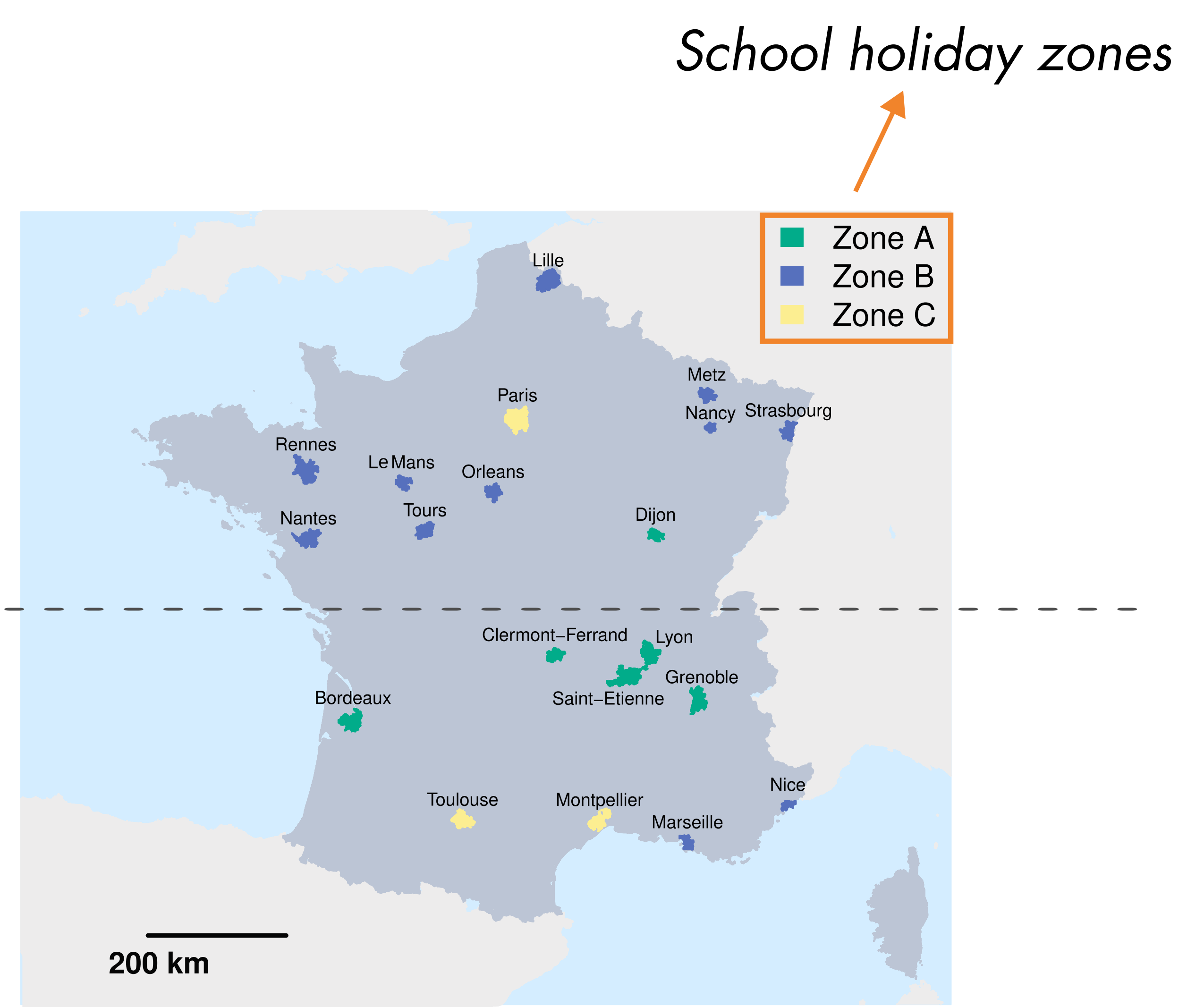
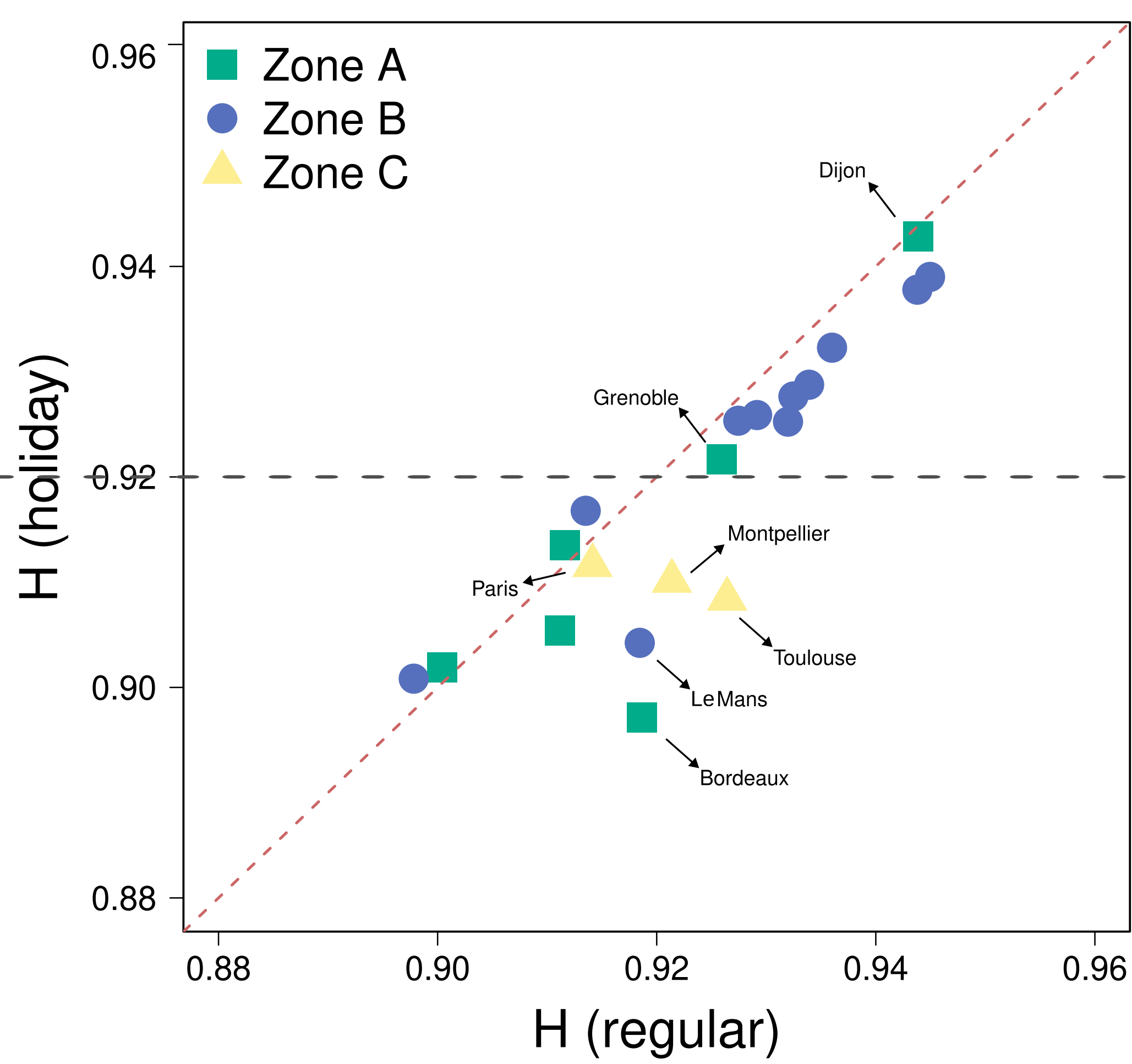
Mapping mobile service usage diversity in cities

Mesuring diversity...

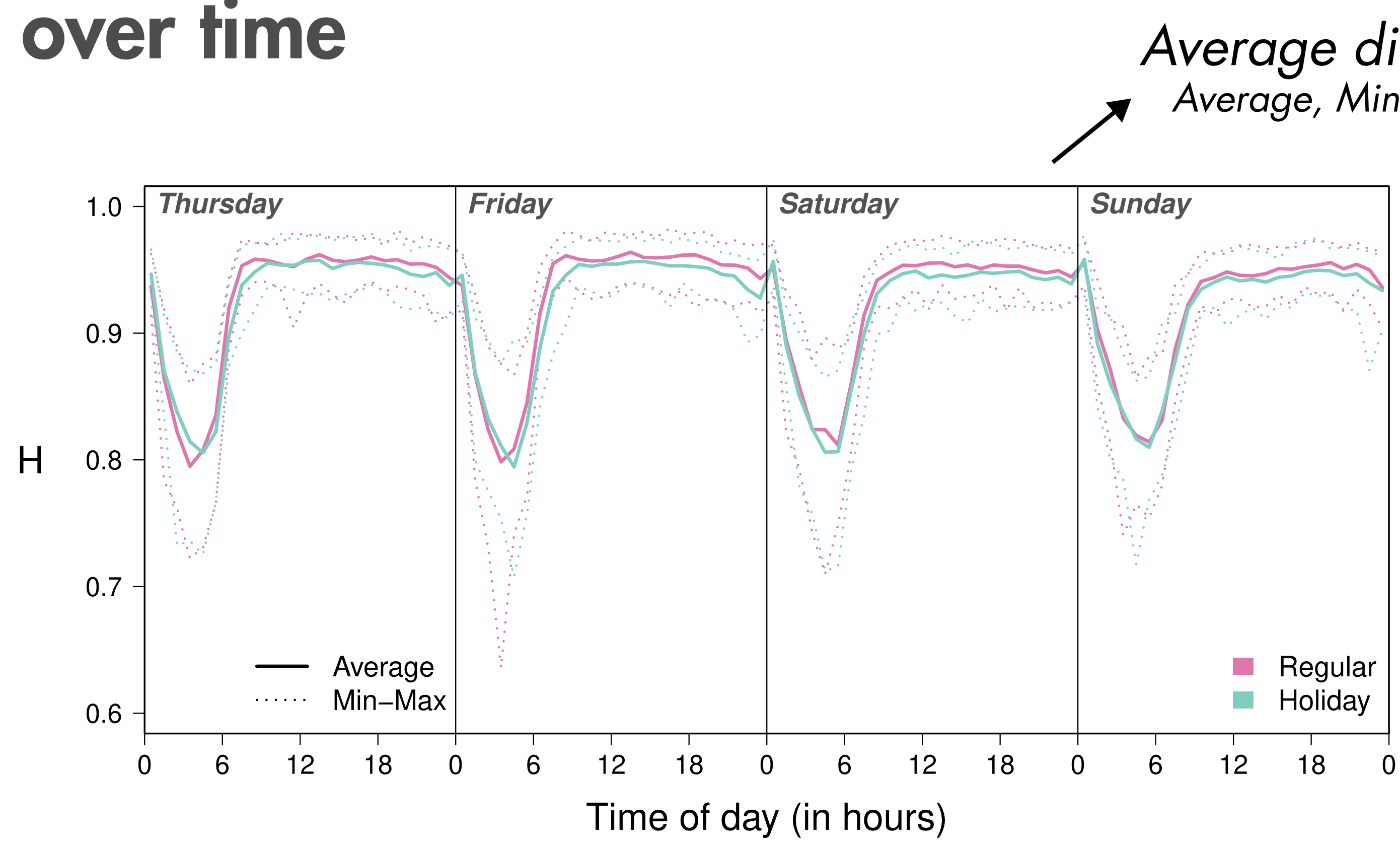
$$H_{g,h}^c = -\frac{1}{\ln(S)} \sum_{s=1}^S \tilde{T}_{s,g,h}^c \ln(\tilde{T}_{s,g,h}^c)$$

City: c
 Cell: g
 Hour: h
 6 social network services: S
 Mobile service: s
 Normalized traffic volume: $\tilde{T}_{s,g,h}^c$

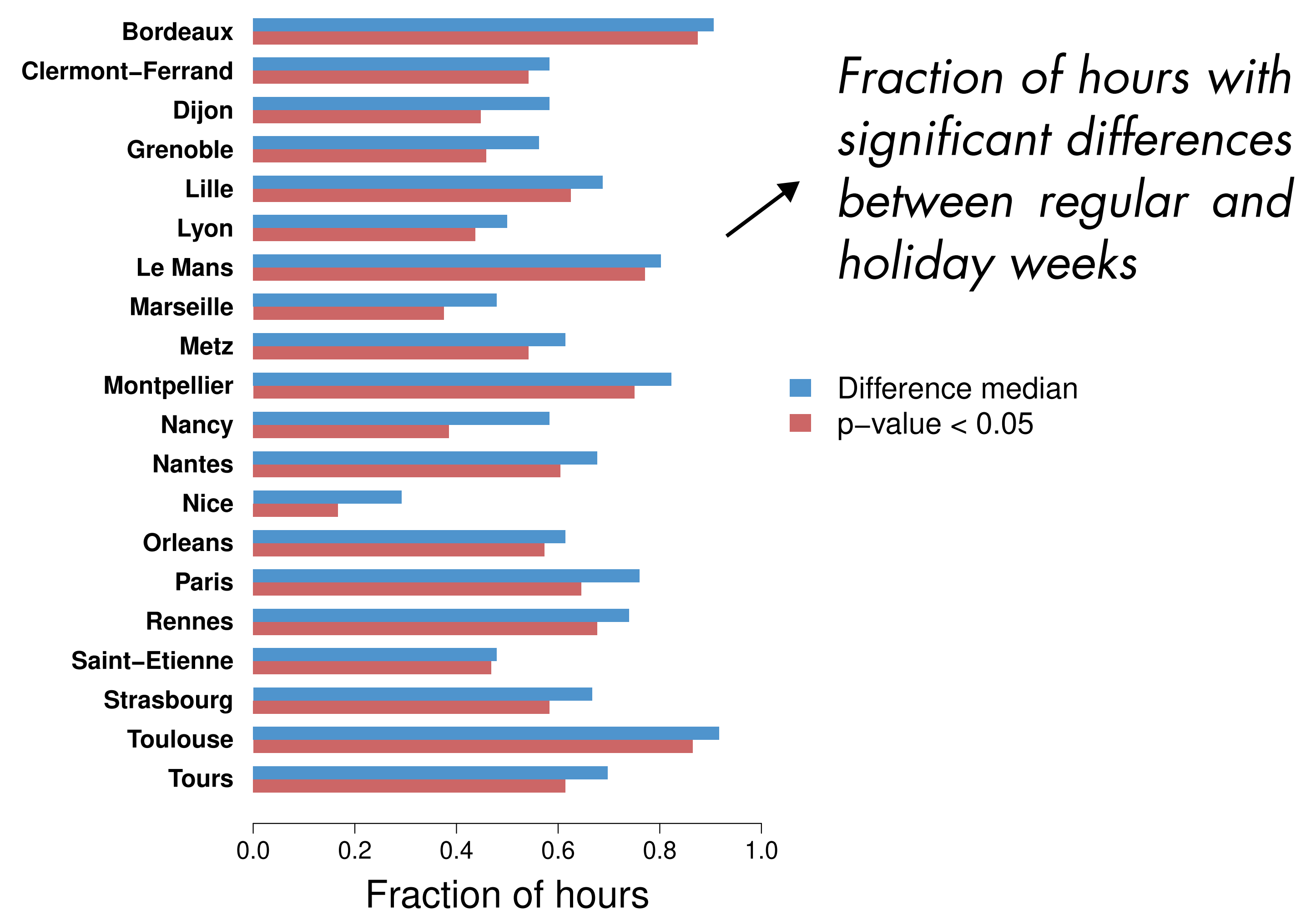
... by city and week type (holiday and regular)



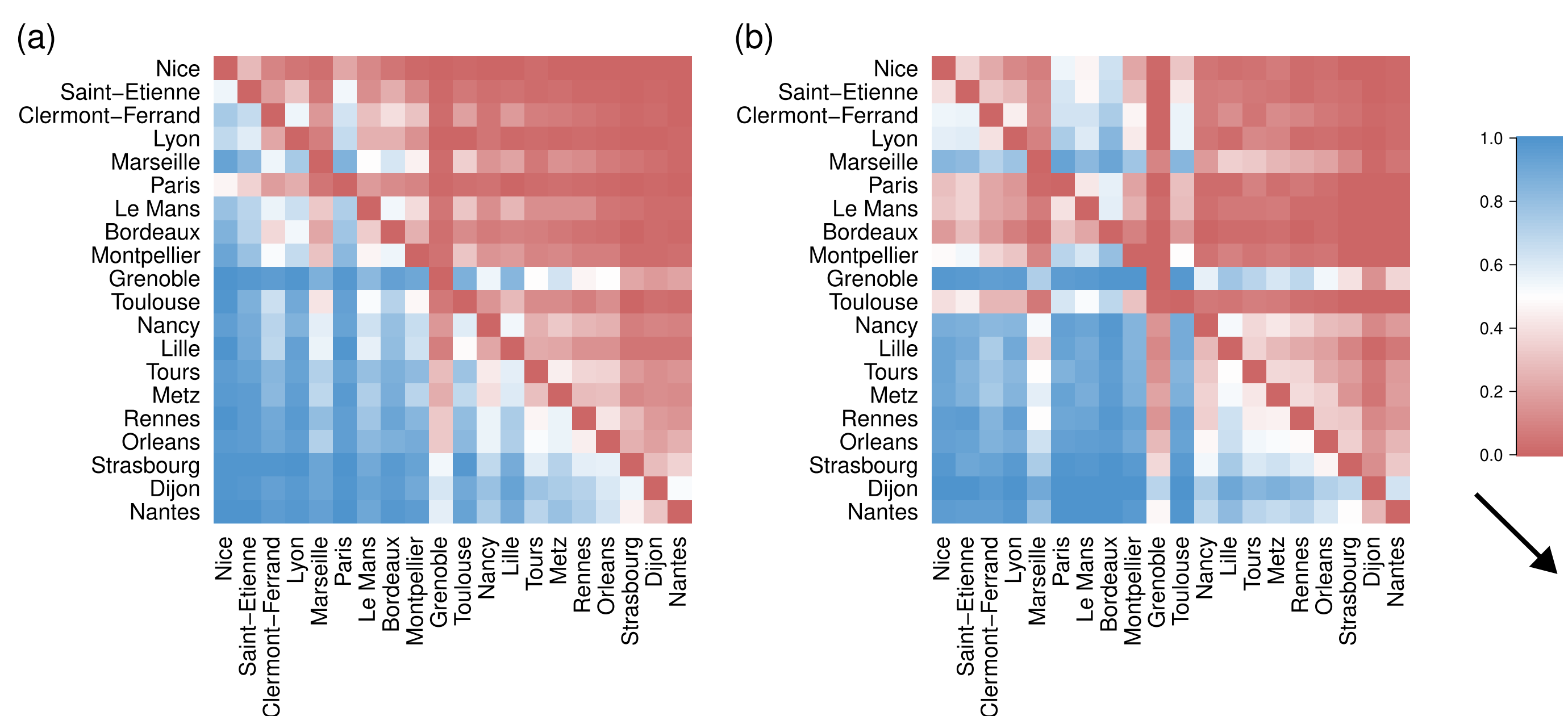
... over time



Average diversity per cell
Average, Min and Max per city



Fraction of hours with significant differences between regular and holiday weeks



Fraction of hours with significant differences between cities
(a) Regular (b) Holiday

