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Impact of outdoor lighting on safety perception

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- outdoor lighting affects preferences towards cycling/walking
- single-bicycle crashes are more likely to occur in the dark and twilight
 - cyclists/pedestrians are dissatisfied with the current situation of street lightning



LINKOPING



LUND



LINKÖPING



LUND



TRAJECTORY DATA:

LINKOPING

	Day	Night
Pedestrians	18	20
Cyclists	17	18

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	Day	Night
Pedestrians	19	24
Cyclists	10	20



Linköping_Merch

Project Data Record Display Help

Detections

ID 10

Time 2020-03-02 19:00:53

Status not checked

Type not known

Comment 57

Media Video

13 of 30

show graphs

00032 x1

Trajectories

Trajectory 1

Type pedestrian

Length, m 0.50

Width, m 0.50

Height, m 1.80

Weight, kg 80

Key 1 Key 2

User-defined fields

demo text demo number

demo yes/no

demo list

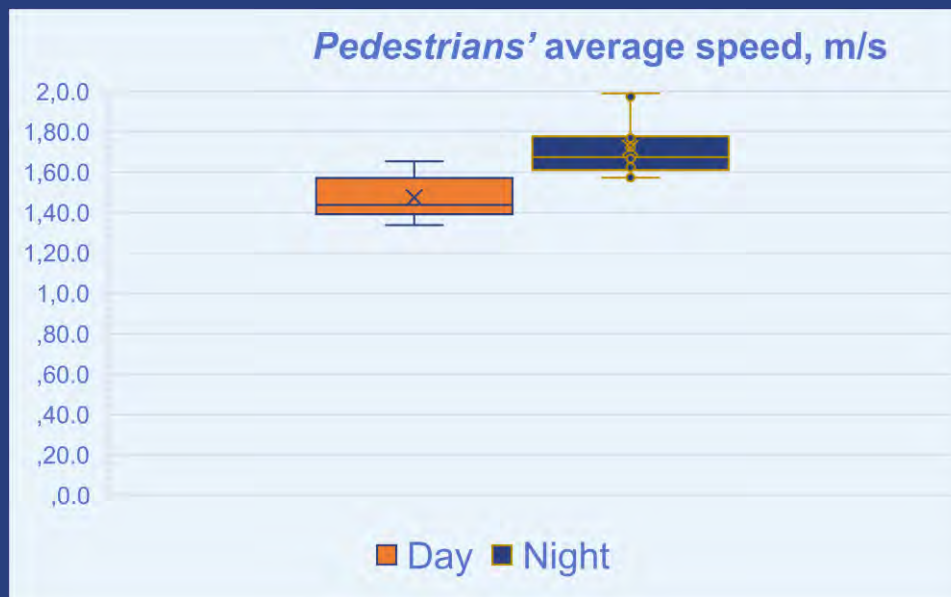
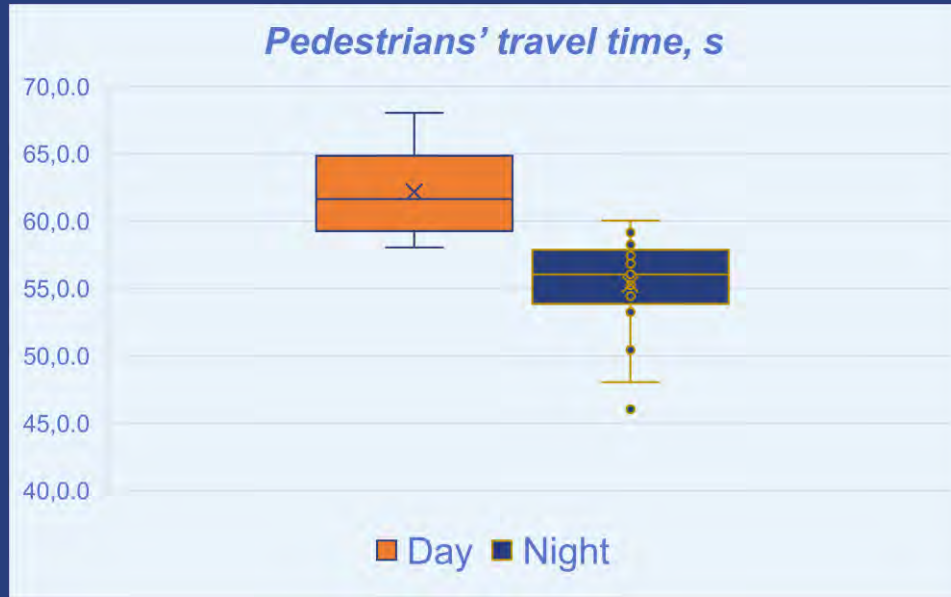
0:00:02 0:01:42

X: -73.2 m Y: -13.1 m Z: -0.6 m IX: 1 pxI Y: 124 pxI II pixel = 0.19 m

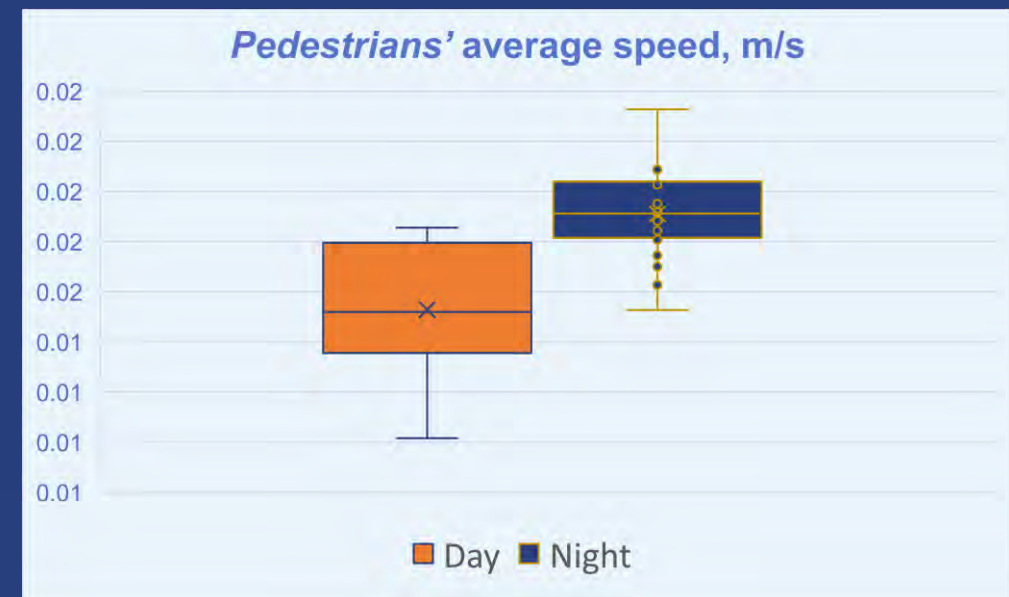
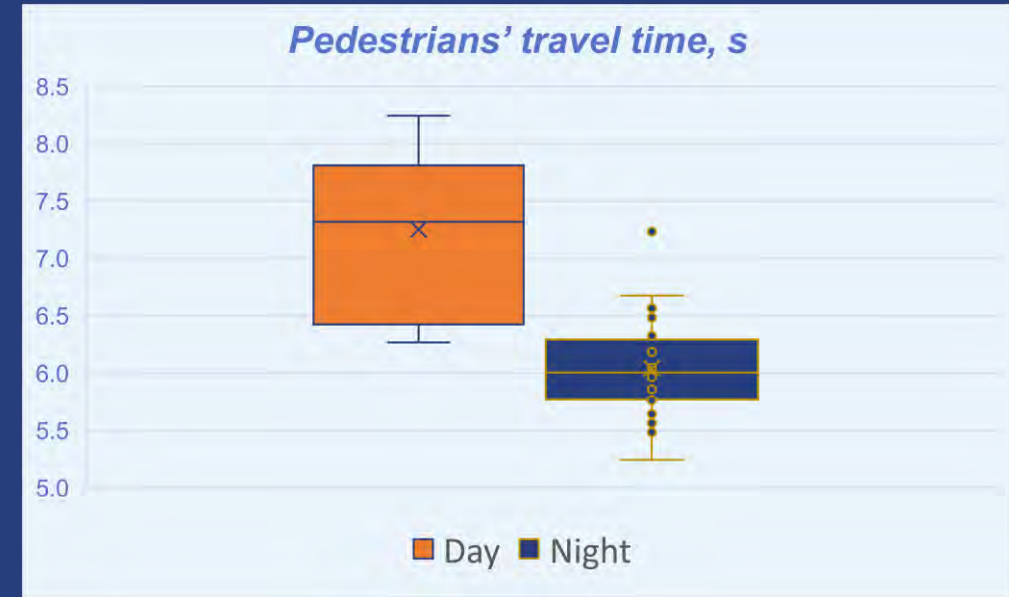
RESULTS:

pedestrians

Linköping



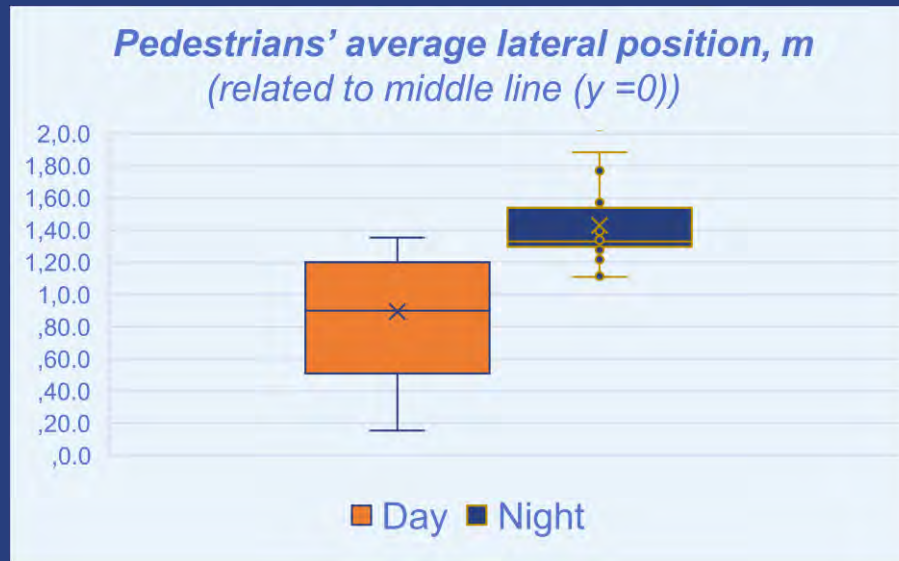
Lund



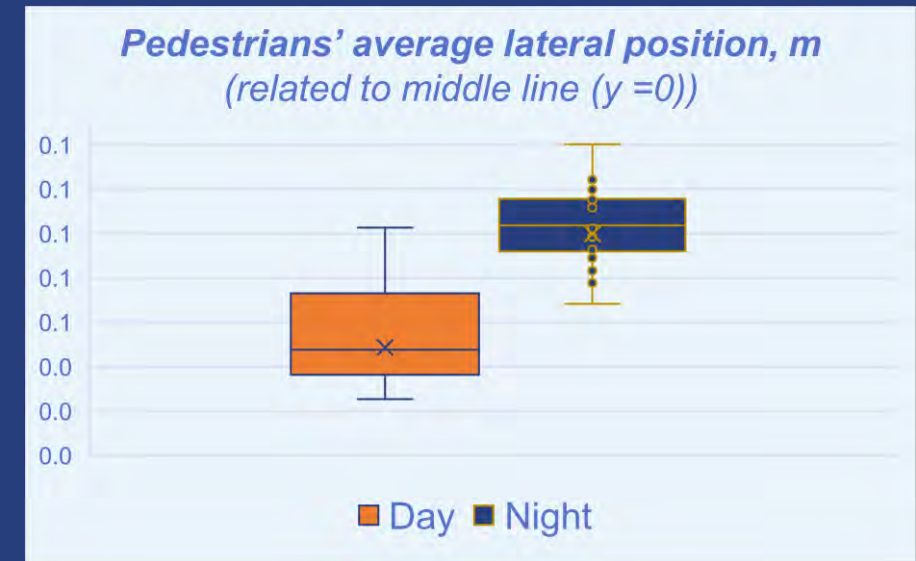
RESULTS:

pedestrians

Linköping



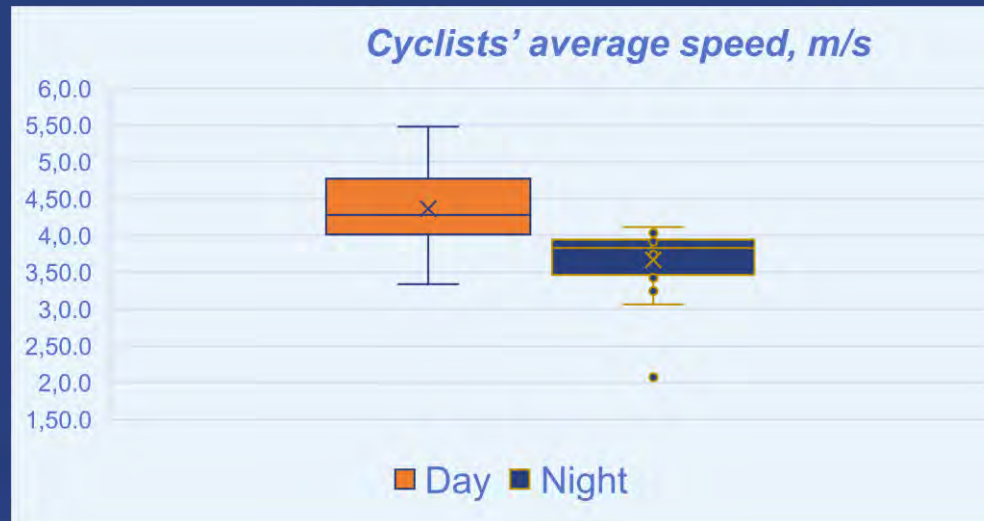
Lund



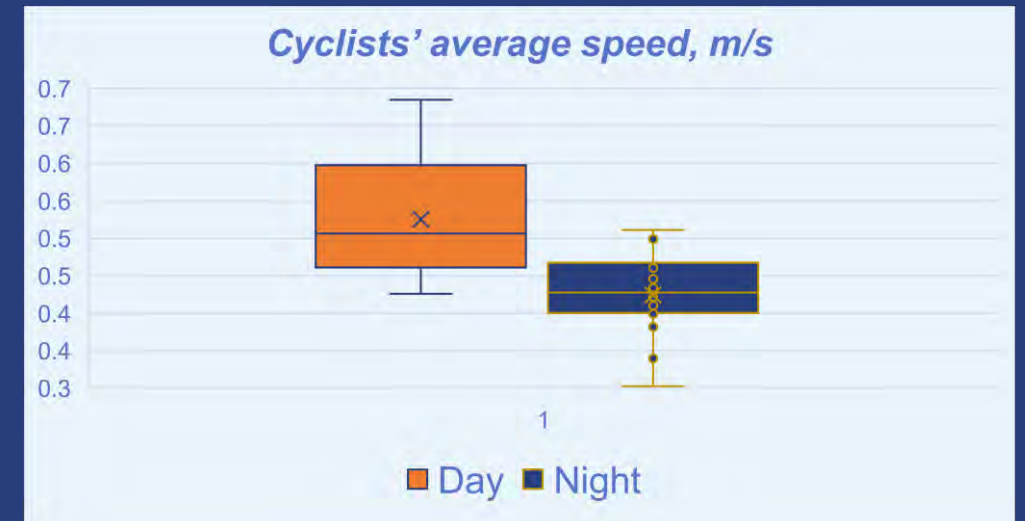
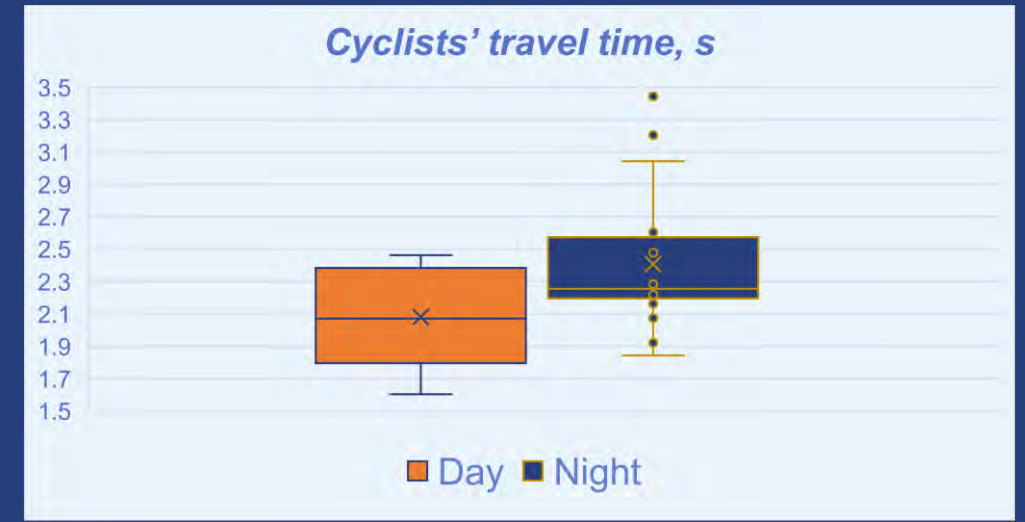
RESULTS:

cyclists

Linköping



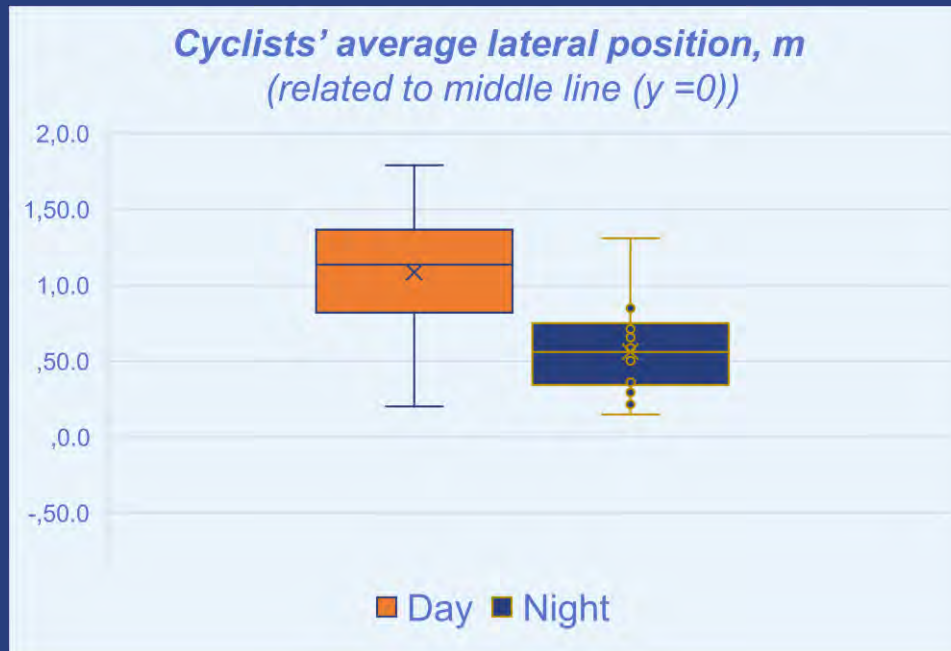
Lund



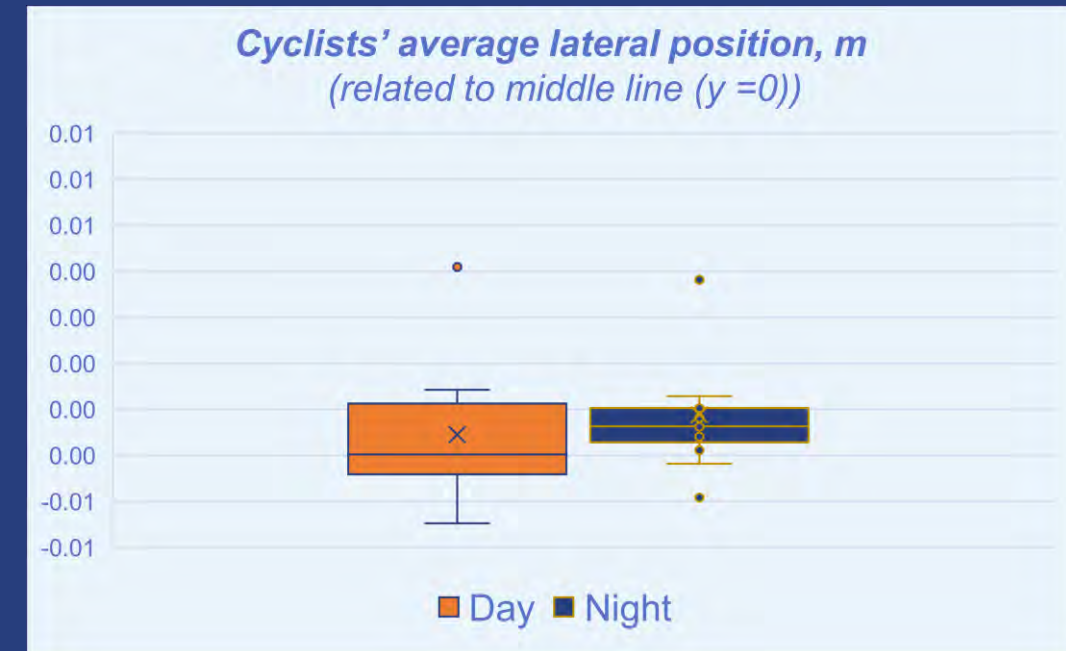
RESULTS:

cyclists

Linköping



Lund



CONCLUSIONS:

- Pedestrians walking slower during day time
- Cyclists moves faster during day time
- Pedestrians moving further from middle line of the path during dark hours
- Cyclist place themselves on lighted spots at night



FUTURE WORKS:

- compare experiment data to uninterrupted traffic data
- combine questionnaire responses with an analysis of actual movement in the environment
- compare before/after data

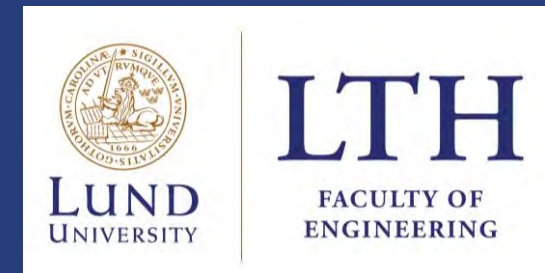


Thanks for your attention!

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