

URBAN MOBILITY – JUST STREET



JUST STREETS

MOBILITY JUSTICE FOR ALL:
FRAMING SAFER, HEALTHIER
AND HAPPIER STREETS.

LABORATORY OF TRAFFIC AND TRAFFIC SAFETY

The contribution of the traffic and road safety laboratory team to urban mobility

Any attempt to develop/implement urban mobility requires a technical component as advanced as possible.

Why? Because any initiative to develop urban mobility must be argued through data obtained based on the most accurate measurements.

From this point of view, the Just Street project in which we are partners meant interesting challenges.

Why? Because we thought of a new dimension of traffic data collection. Thus, from street monitoring, with continuous data acquisition equipment, we moved to monitoring pedestrian traffic and traffic on bicycle lanes too on the same conditions.

Complete collection of traffic data in intersections: vehicles, bicycles and pedestrians.



MIOVISION video data collection with post processing software.

As a measure to protect the equipment, the video system transfers data to a database developed by the MIOVISION company and, in return, performs data processing to obtain traffic parameters. But the additional costs of purchasing data processing equipment are:

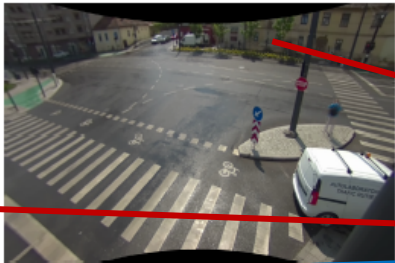
Video image processing for traffic count in intersection with ARGOS

Traffic Evaluation

06/04/2025 10:35:00 CEST - 06/04/2025 11:36:02 CEST (midnight - 11:59 p.m.)
Wed
Bicycle, Bus, Car, Car with trailer, Motorbike, Semi trailer truck, Transporter with window, Transporter without window, Truck, Truck with trailer, Pedestrian

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MEASURING SITE CALEA MĂNĂȘTUR CU OTETULUI



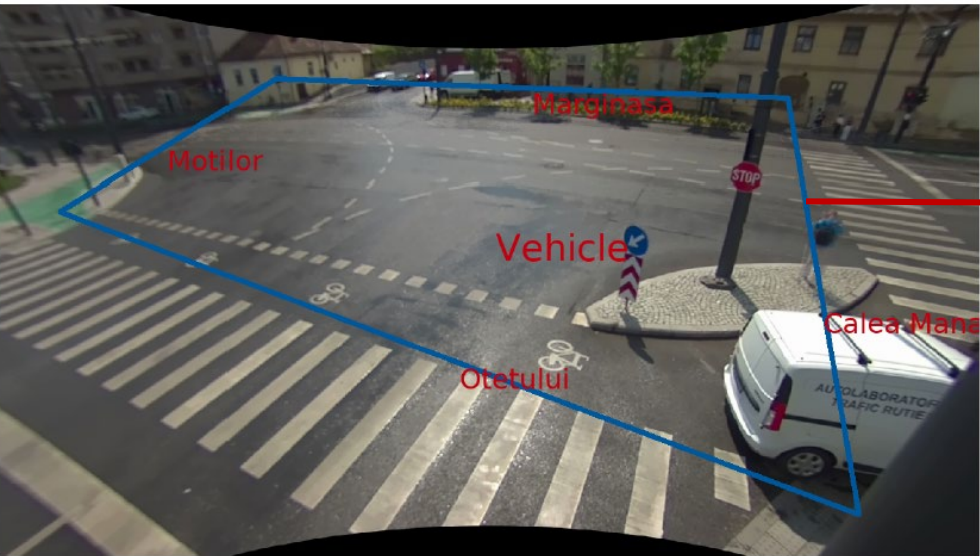
Coordinates: 46.763066226340236,

ARGOS, is a video system that processes video recordings to provide a wide range of macroscopic traffic parameters. It entered the market last year and is developed by the company Data Collect.

Conversion of the video image into latitude and longitude coordinates.

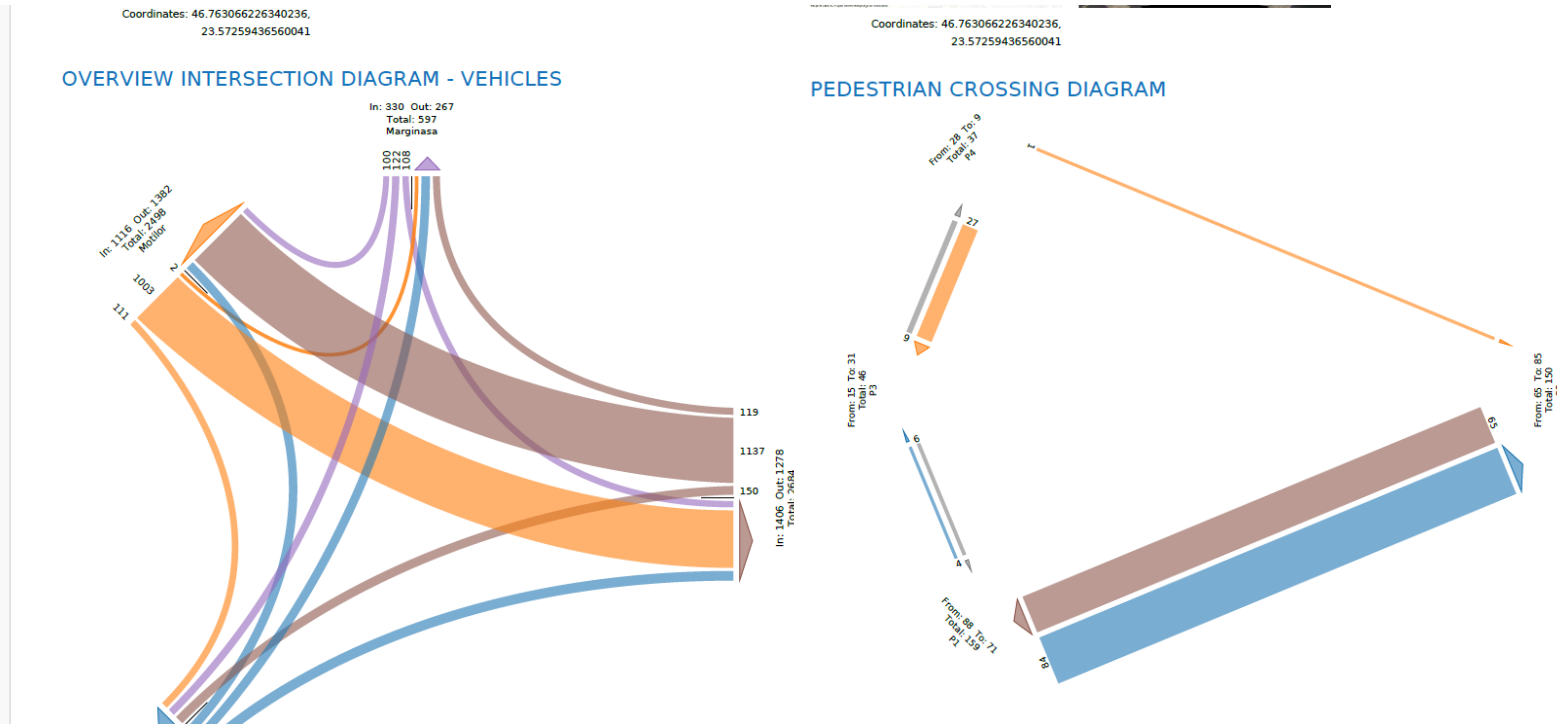
Marking the area in the image saved by the Handheld PC where the initial settings are made.

VEHICLE POLYGON



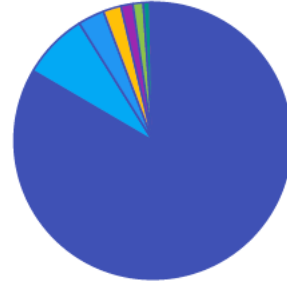
The deliverables of the video system are very precisely detailed, and offer all the necessary macroscopic parameters for traffic characterization, as follows:

- vehicles detailed by class;
- movement of pedestrians on marked fields (crossings for pedestrians);
- the presence of bicycles distinct from motorcycles;
- provides detailed data on travel directions as well as global data for the monitored intersection.



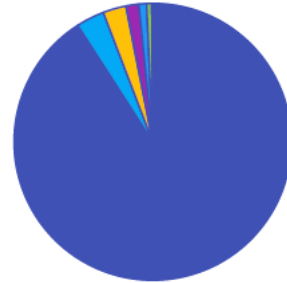
Coordinates: 46.763066226340236,
23.57259436560041

PIE CHART CALEA MANASTUR



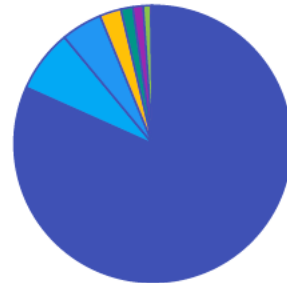
- Car - 83.6 % (1176)
- Transporter without window - 7.7 % (108)
- Bus - 3.1 % (43)
- Motorbike - 2.1 % (29)
- Transporter with window - 1.4 % (19)
- Truck - 1.2 % (17)
- Bicycle - 0.8 % (11)
- Car with trailer - 0.2 % (3)
- Semi trailer truck - 0.0 % (0)
- Truck with trailer - 0.0 % (0)
- Other - -0.1 %

PIE CHART MARGINASA



- Car - 90.9 % (300)
- Transporter without window - 3.3 % (11)
- Motorbike - 2.7 % (9)
- Transporter with window - 1.5 % (5)
- Bus - 0.9 % (3)
- Truck - 0.6 % (2)
- Bicycle - 0.0 % (0)
- Car with trailer - 0.0 % (0)
- Semi trailer truck - 0.0 % (0)
- Truck with trailer - 0.0 % (0)
- Other - 0.1 %

PIE CHART MOTILOR

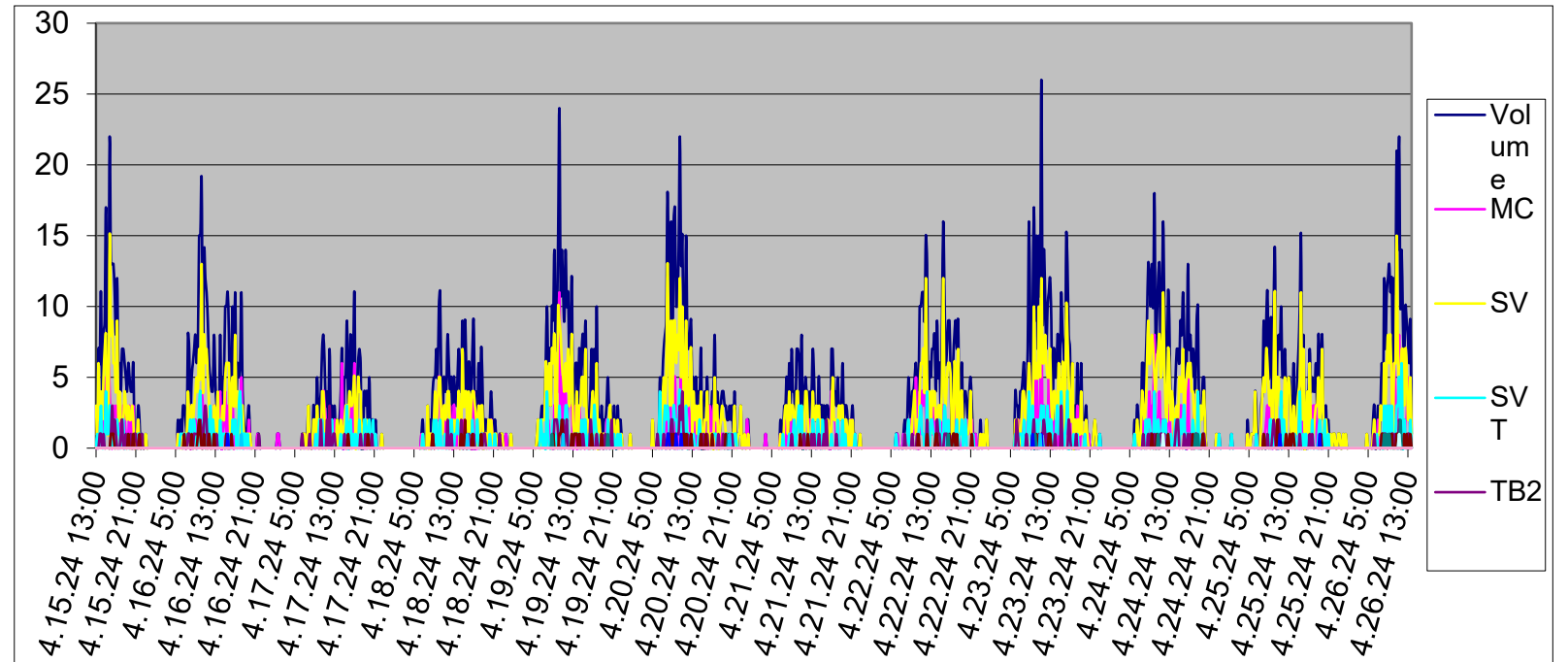


- Car - 81.7 % (912)
- Transporter without window - 7.3 % (82)
- Bus - 4.8 % (54)
- Motorbike - 2.5 % (28)
- Bicycle - 1.4 % (16)
- Transporter with window - 1.2 % (13)
- Truck - 0.9 % (10)
- Car with trailer - 0.1 % (1)
- Semi trailer truck - 0.0 % (0)
- Truck with trailer - 0.0 % (0)
- Other - 0.1 %

Increase the traffic safety by speed measurements DSD traffic radar



Pedestrian count with SDR data collect equipment



The ECO VISION equipment is developed for long-term pedestrian travel counting. The collected data are sent directly to the ECO VISION platform where they are stored. Access to the platform is conditional and allows viewing the recorded data in real time





- Home
- Analysis
- Dashboards**
- Report
- Manage
- Administration

Dashboard

↓ ↑ ↗
No Counter

d09

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ZLT24121552

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No Counter

pietonal Cugir

↓ ↑ ↗
DGP24123840

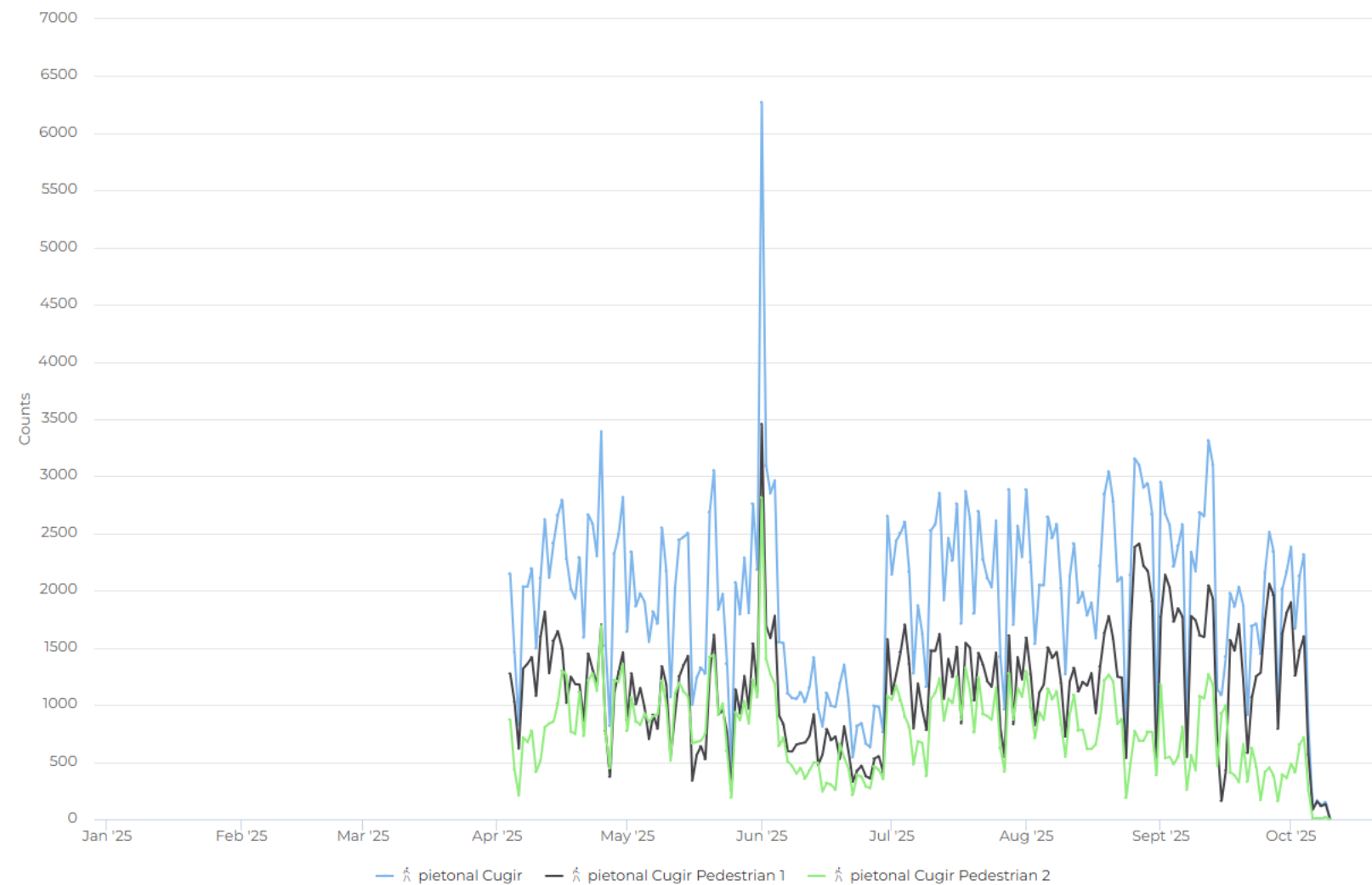
pietoni Cugir 2

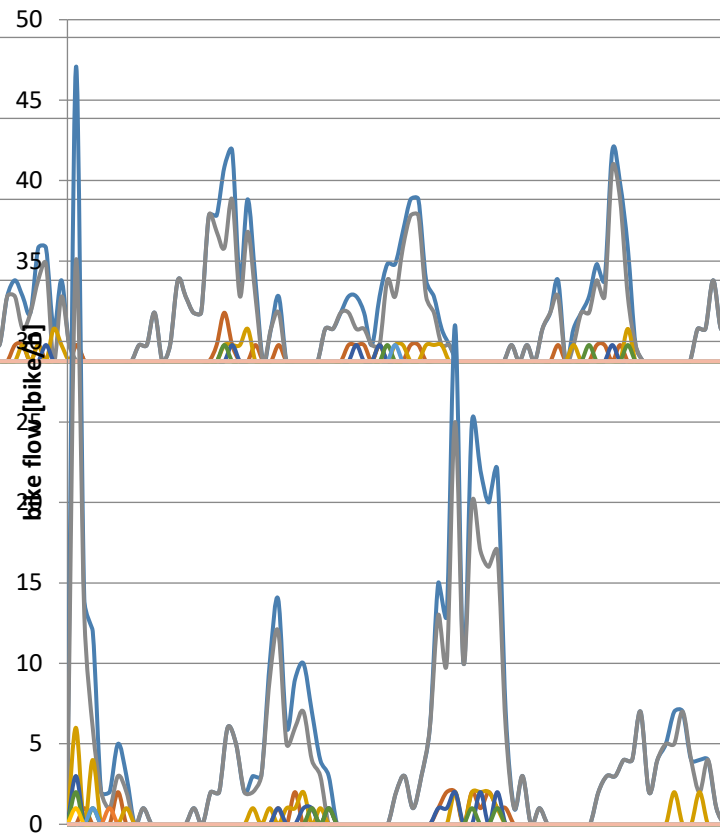
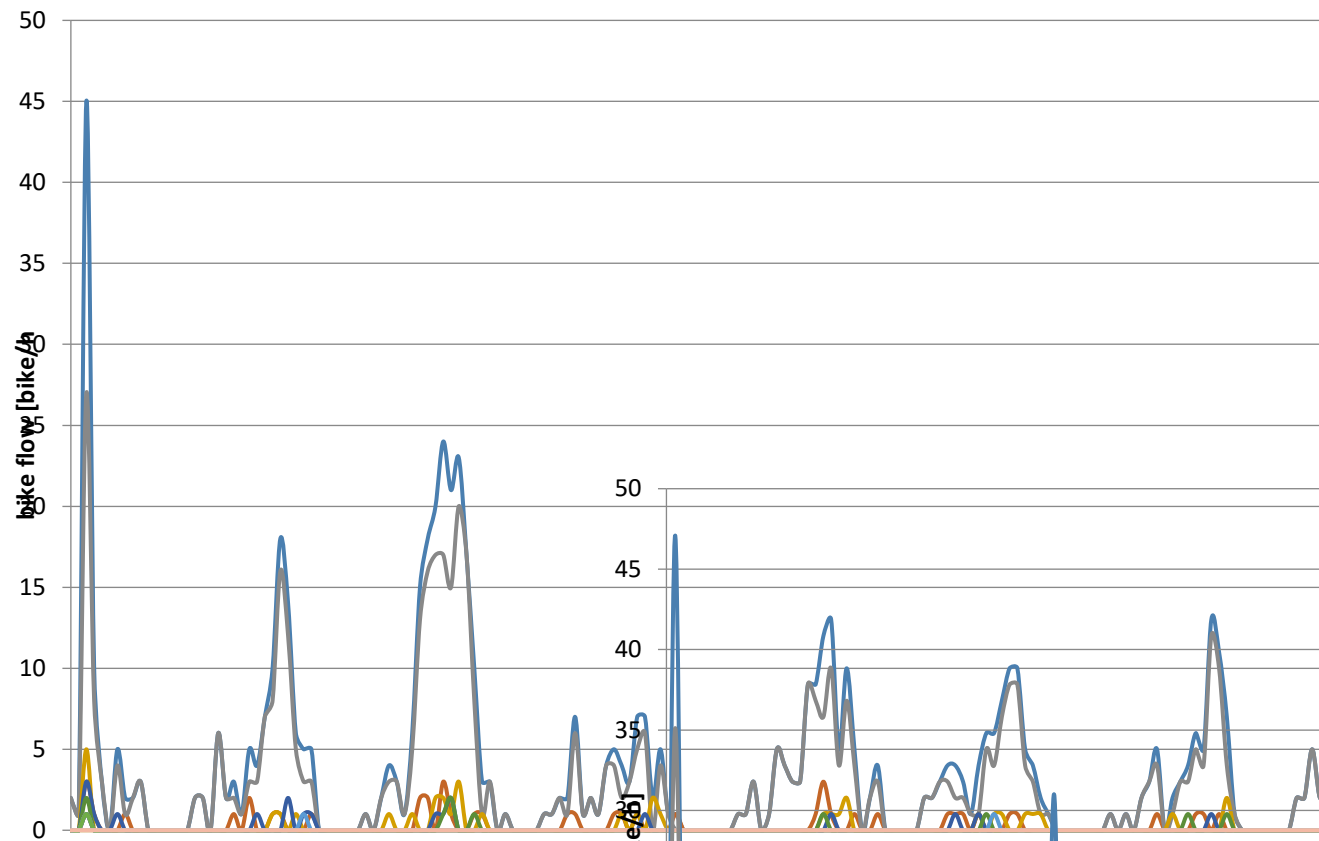
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Daily traffic

Current Year

pietonal Cugir Total IN OUT

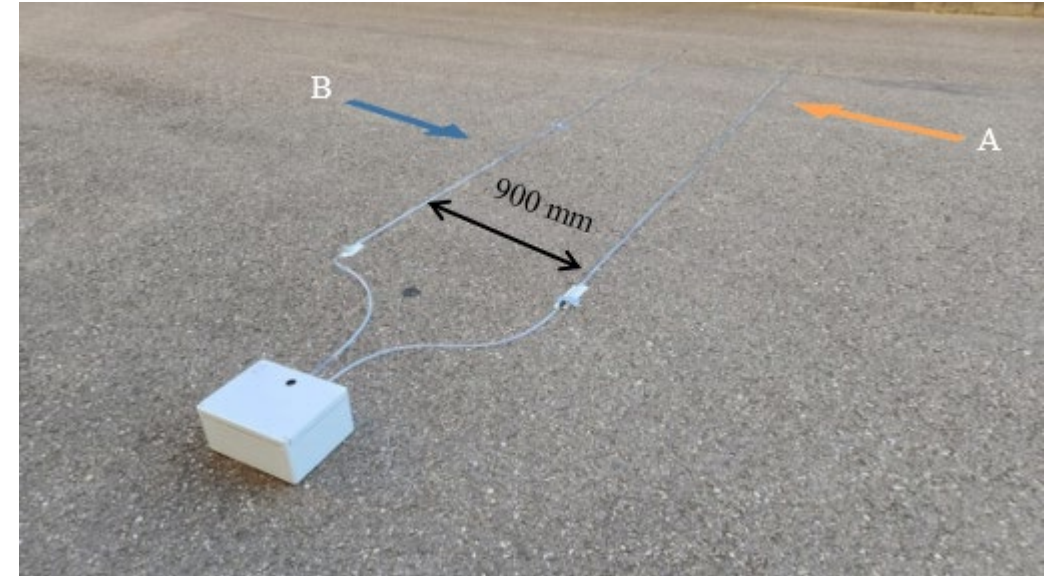




— TB2
— TB3
— T4

— Volume
— MC
— SV
— SVT
— TB2
— TB3
— T4

SDR radar pneumatic tube comparison tests

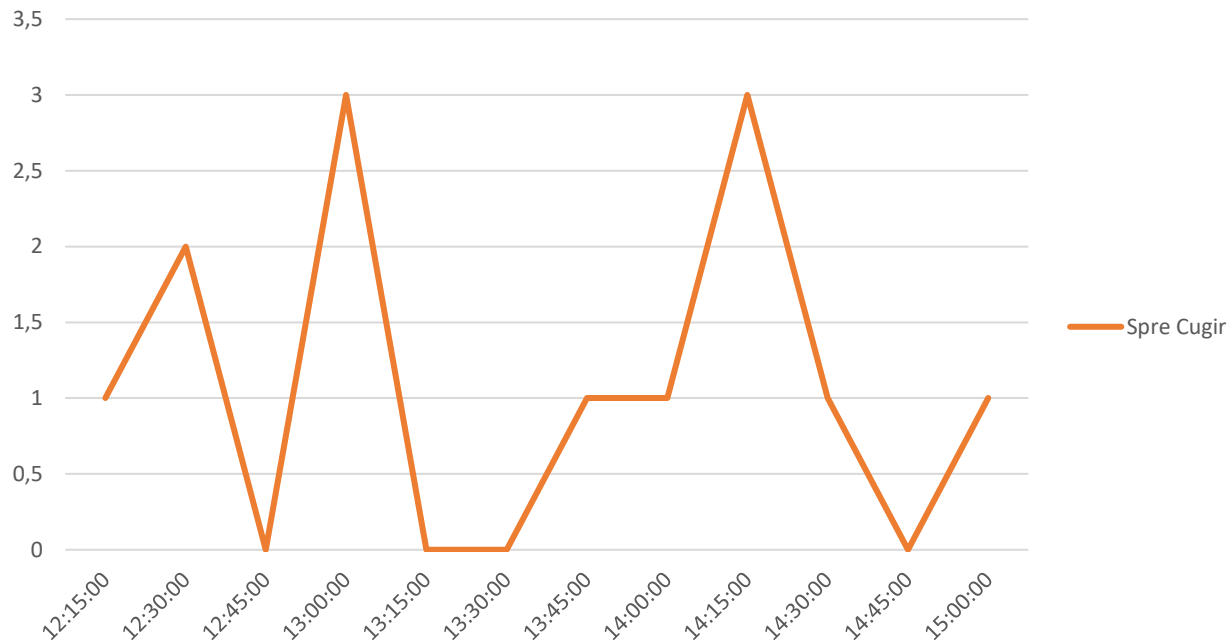


The detection equipment was tested on the bicycle path in Cugir. During the experiment, the distance between the two pneumatic tubes was 900 mm.

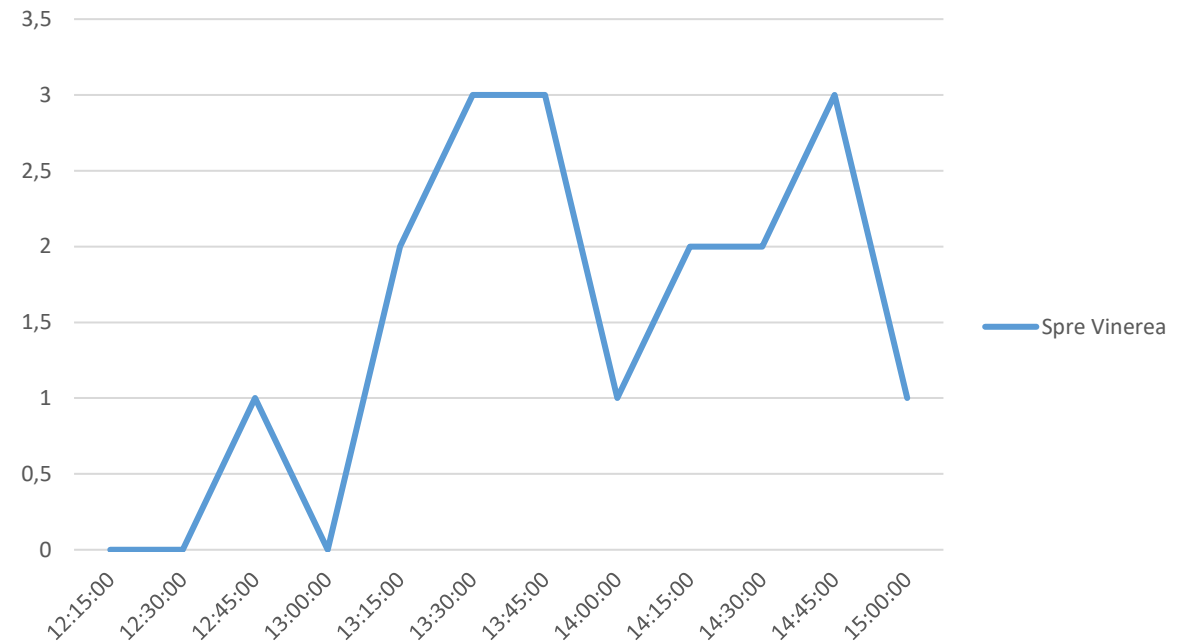
Experimental results

- The detection equipment works correctly and differentiates between the two directions of cyclists' travel.
- The measured flow towards Vinerea is higher and more constant than that towards Cugir, indicating a more intense flow of bicycles in this direction between 12:00 and 15:00.

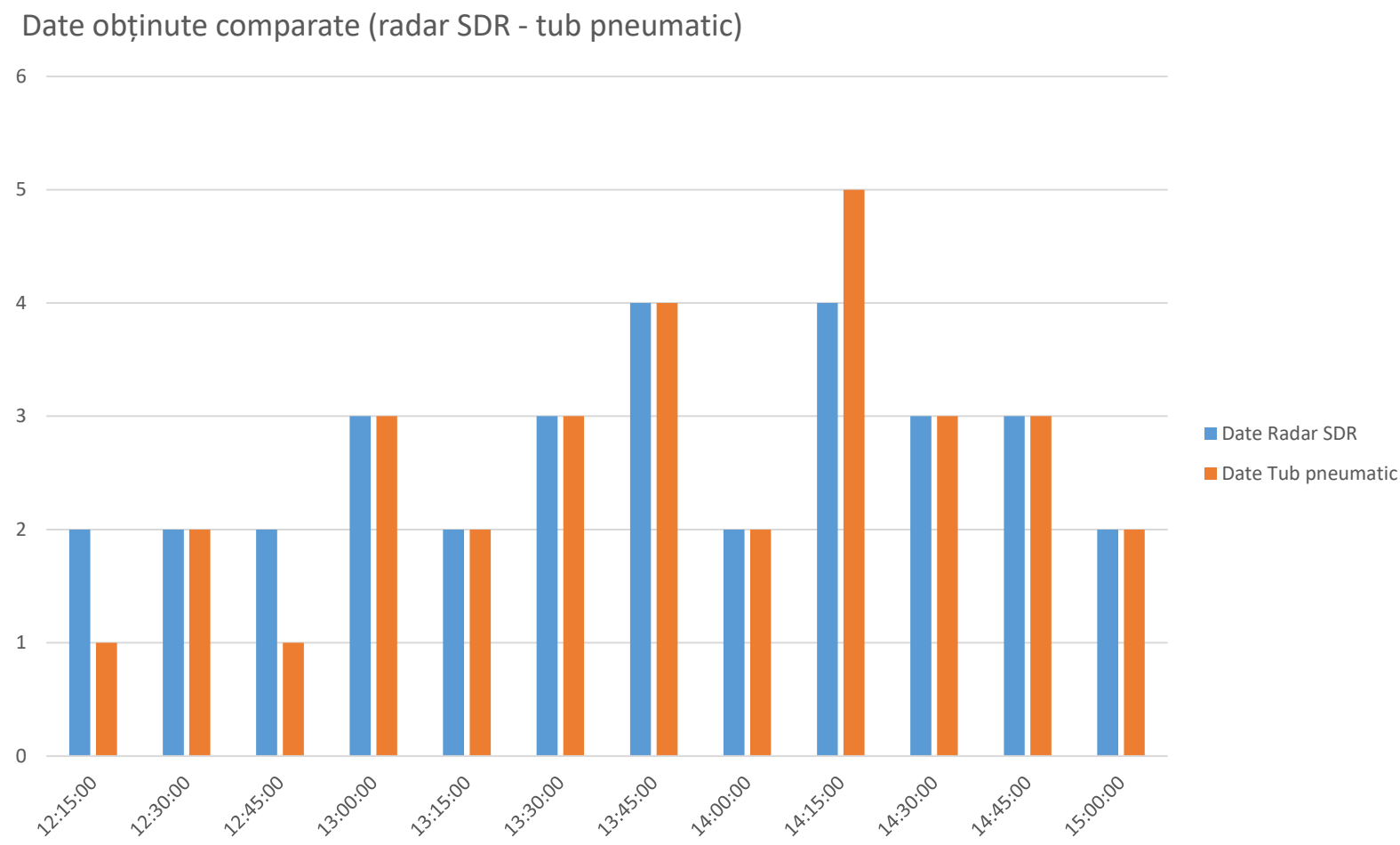
Pneumatic tube equipment flow



Pneumatic tube equipment flow



Presentation of the results comparing pneumatic tube versus SDR



The values recorded by Radar and pneumatic tube regarding bicycle flow are generally close, with small differences in certain ranges.

Considering the originality of the designed equipment, we intend to request the State Office for Inventions for model approval.