



PTV | GROUP

A wide-angle photograph of a city skyline at sunset. The sun is low on the horizon, casting a golden glow over the buildings and the sky. The foreground shows a multi-lane highway with light trails from traffic, suggesting a long exposure. The buildings are a mix of modern glass skyscrapers and older, more traditional structures.

Explore PTV Flows Your Real-Time Solution for Intelligent Mobility

Agenda

1. Why PTV Flows
2. Product info
3. Demo
4. Additional details
5. Use cases and benefits
6. Q&A

01



WHY PTV FLOWS

Challenges

Cost and effectiveness of traditional traffic monitoring systems

Hardware investments

Resourcing for manual traffic monitoring



FCD solutions

Floating Car Data (FCD) offers a cheap and efficient way to monitor traffic

Do not require hardware (cameras, sensors ...)

However

HW infrastructure is often still needed (for software installation)

Limitations in integrating other data and specific KPIs

Difficulty in map matching

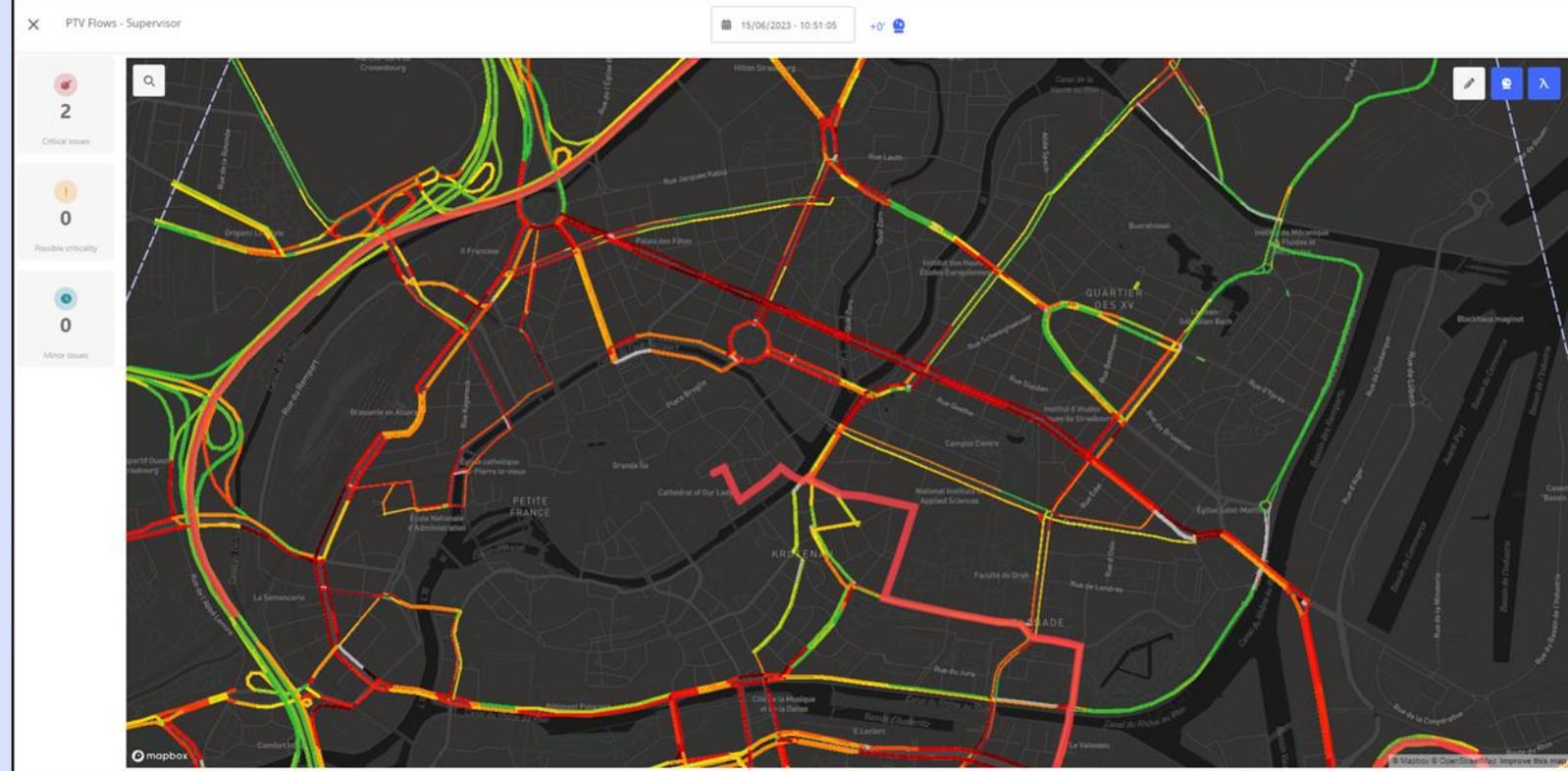


02

PRODUCT INFO &
STRUCTURE

PTV FLOWS

- The system helps to proactively manage traffic, reduce delays, improve safety, and increase the efficiency of the transport system.
- Cost-effective, and hassle-free cloud-based solution for real-time traffic management. Available in **84 countries**



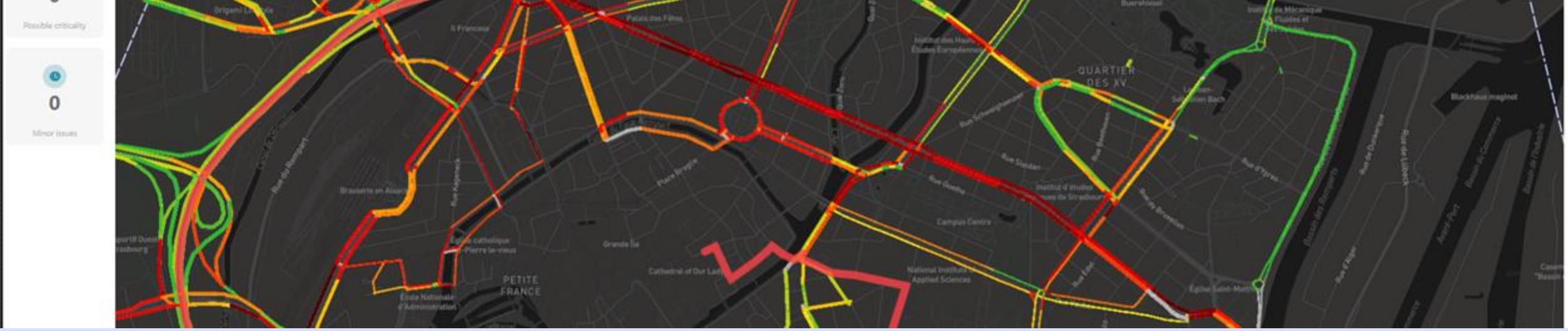
Continuous monitoring of current and future traffic conditions



Easily collaborate and share alerts, information, traffic incidents



Analysis, inspection and extraction of historical data

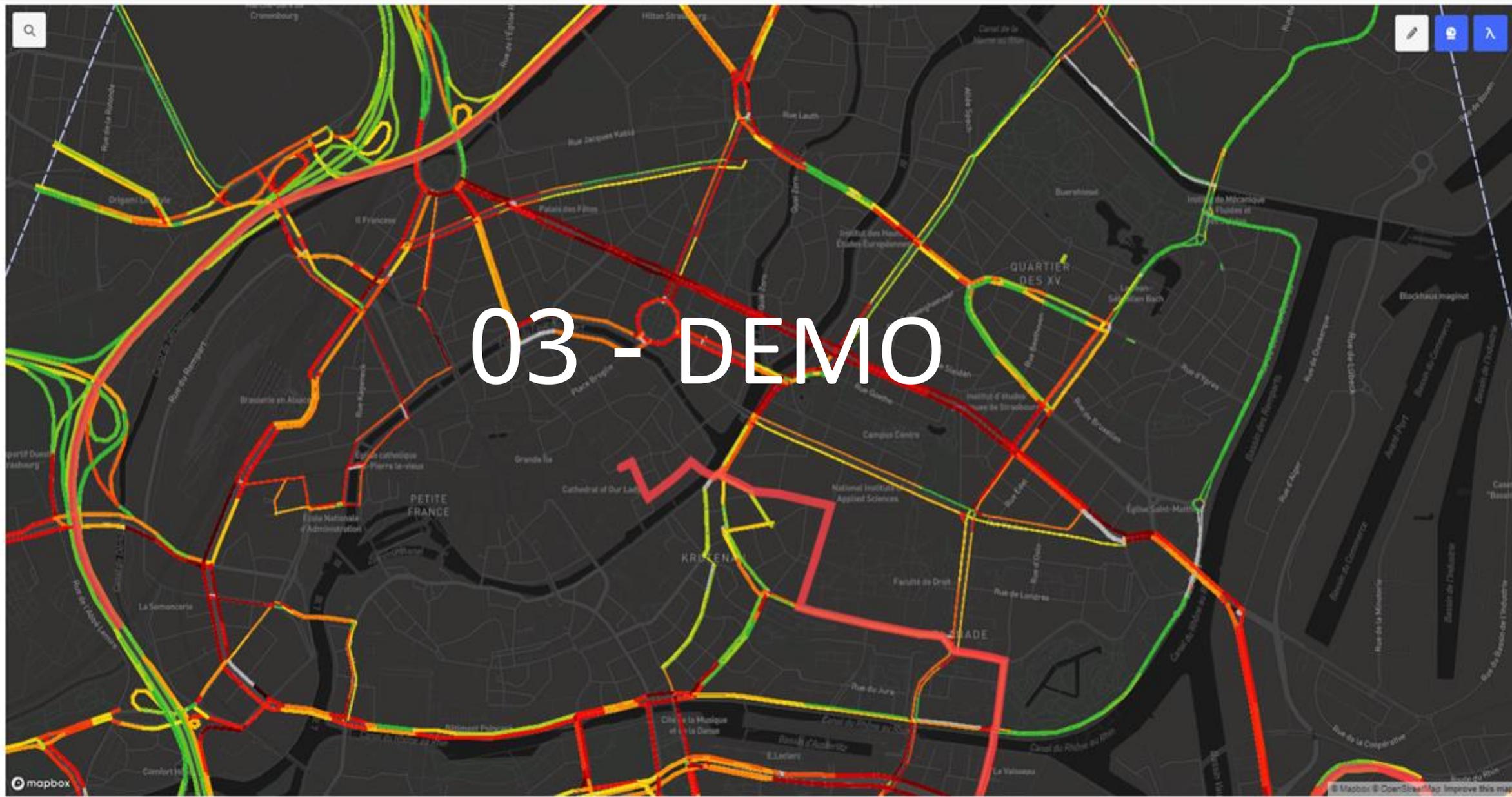


FEATURES

- Offered as a subscription service
- Accessible via Web GUI and API services
- Cloud first, no IT costs
- Automatic activation and network update
- Native integration of standard data (FCD and maps)
- Self-learning traffic forecasting
- Definition of KPIs and personalized alerts on corridors
- Automated alert sharing by email*
- Probe density*
- Historical analysis*

* to be released in the coming months

-  2
Critical issues
-  0
Possible criticality
-  0
Minor issues



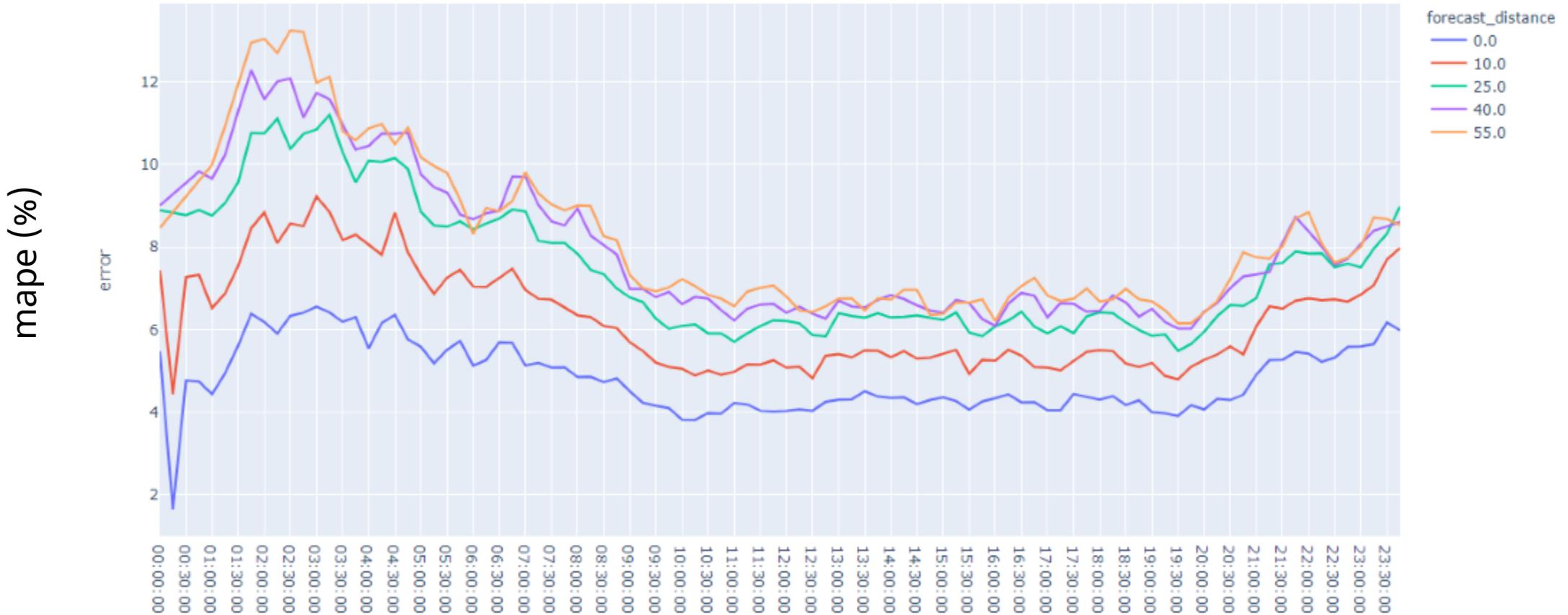
03 - DEMO

04



ADDITIONAL
DETAILS

FORECAST QUALITY



Mean Absolute Percentage Error : $MAPE = (|forecast - measure|) / measure$

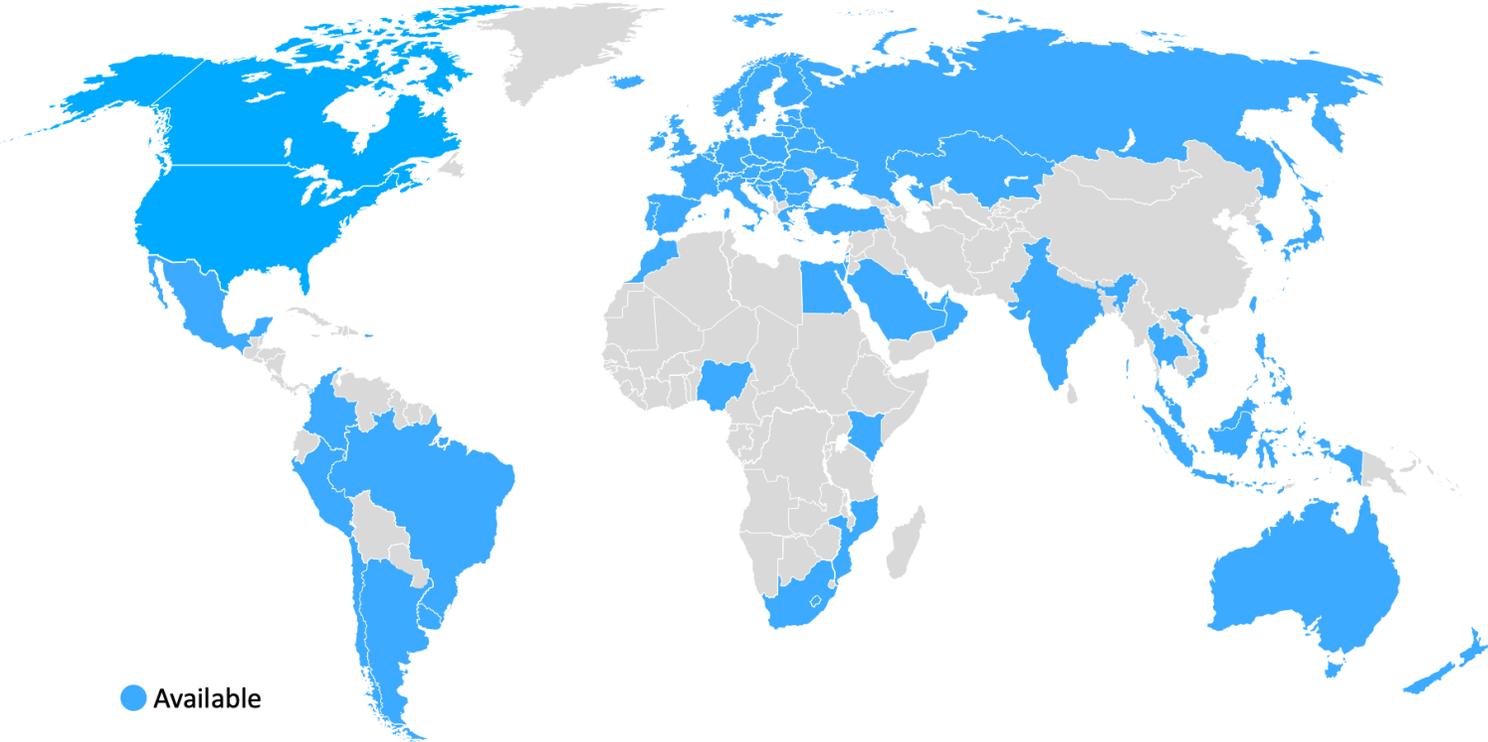
TECHNICAL DETAILS

- Client requirements
 - Use the latest version of Google Chrome .
 - Network bandwidth: recommended connection speed 20 Mbps or more.
 - Screen resolution: 1600 x 900 (high color quality) or higher.
 - Processor: recommended Intel Core i5 or newer with 8GB RAM
 - Graphics card: needs to support WebGL.
- Network update
 - Every year, on client request
- API output location reference:
 - OpenLR
 - Internal map ids

MARKET COVERAGE



coverage in light blue



● Available

PRICE TIERS



Price Plans	Free (3 months)	Small Corridor	Medium Town	Large City / Regional Roads	Extra Large Region / National Roads	Custom
Km included	5	400	1.000	5.000	10.000	> 10.000
Users included	3	5	5	5	5	ASK PTV
KPIs included	3	10	10	10	10	
Forecast Element included	6	6	6	6	6	
API Key included	0	0	0	0	0	

- Additional kilometres, users, KPIs, forecast elements and API Keys available on demand
- For quotations, please refer to the local PTV subsidiary

05

USE CASES AND
BENEFITS

SOME EXAMPLES OF USE CASES



Motorway network

- Network performance Indicators for the road authority
- Predictive alerts of queues for possible traffic rerouting
- Activation of reserved lanes based on predicted travel times



TMC

- Comprehensive traffic monitoring and forecast for the whole network
- Traffic management with automatic alerts for 3rd part system (e.g. VMS);
- Timely notification of problems to stakeholders (e.g. urban police)



Construction site monitoring

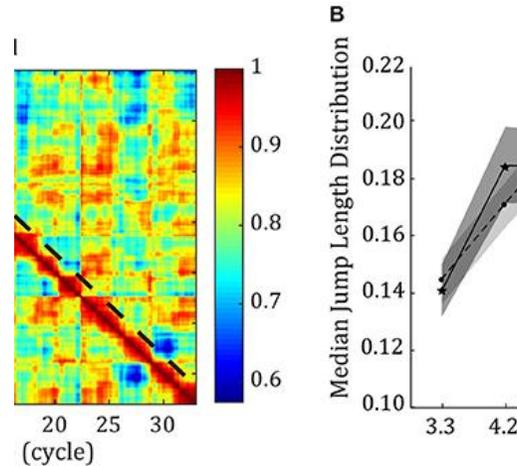
- Real-time impact assessment of construction sites (through kpi)
- Queue monitoring around the construction site

SOME EXAMPLES OF USE CASES



Pre/post studies

- Activate PTV Flows and monitor variations of KPIS before and after any intervention/roadwork/signal timings/etc
- Currently it requires the client to download data but we will add historical analysis features soon



FCD tenders

- FCD data delivery on maps for a specific area by API
- It requires evaluation of requested output that must be standard or will require a system integrator (or PTV services)
- Speed Estimation and forecast is always included



Event/Transportation hubs

- Congresses, Fairs, sport events, airports and other hubs need to monitor and inform people about reachability (to/from)

BENEFITS



Bundle: Software + Data

All necessary maps and data are included in the package and automatically updated



Cost-effective

You only pay for what you need; no expensive hardware or infrastructure necessary



No need for manual monitoring

PTV Flows runs in the background and automatically informs the operator about current or upcoming incidents



Take timely actions

Leverage machine learning technology and self-learning forecasts to proactively manage traffic



Full support for API and automation workflows

KPIs and link-based results are available through a REST based API



No installation necessary

PTV Flows is cloud-based, self-updating and easily scalable

Questions

?