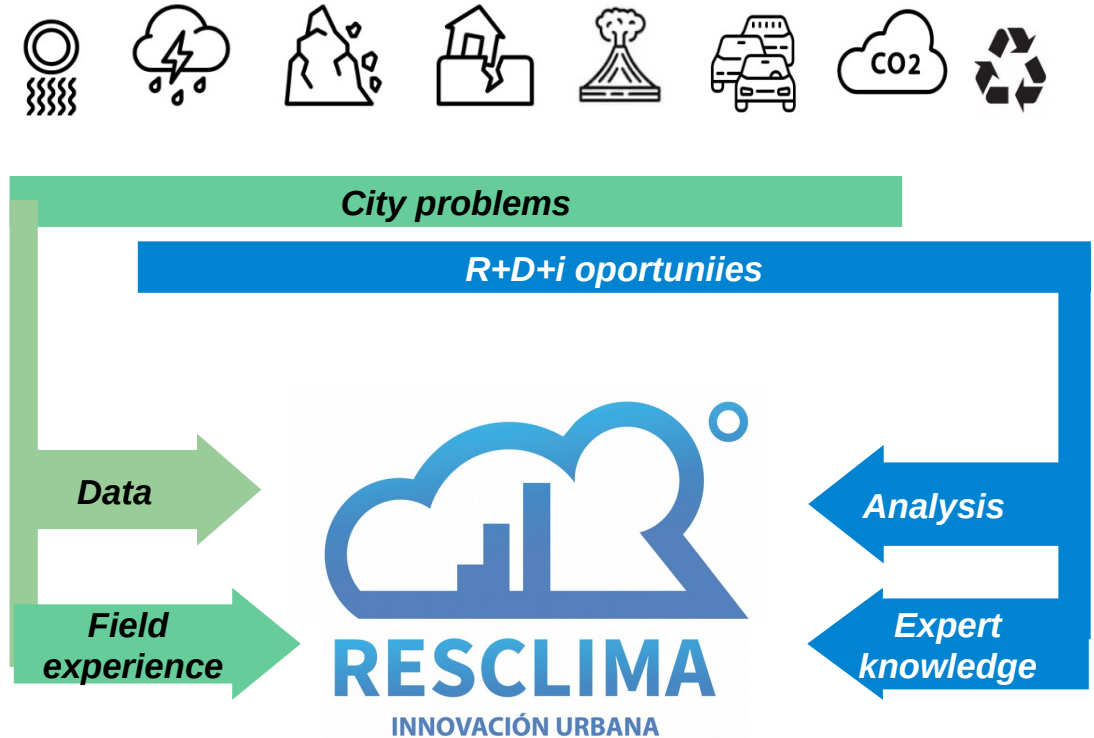


Designing the RESCLIMA platform to improve urban climate resilience: Case of Duran, Ecuador.

O. Bayona, E. Cruz , Á. López , H. Roa , M. Guaranda , F. Dominguez, D. Ochoa

RESCLIMA Project

- ESPOL led initiative for collaborative work on climate resilience for medium-size cities.
- **Goal:** Propose strategies for city resilience policies based on data
- 4 Main areas
 - Health
 - Floodings
 - Landslides
 - Heat Islands
- Funded by Duran City administration.



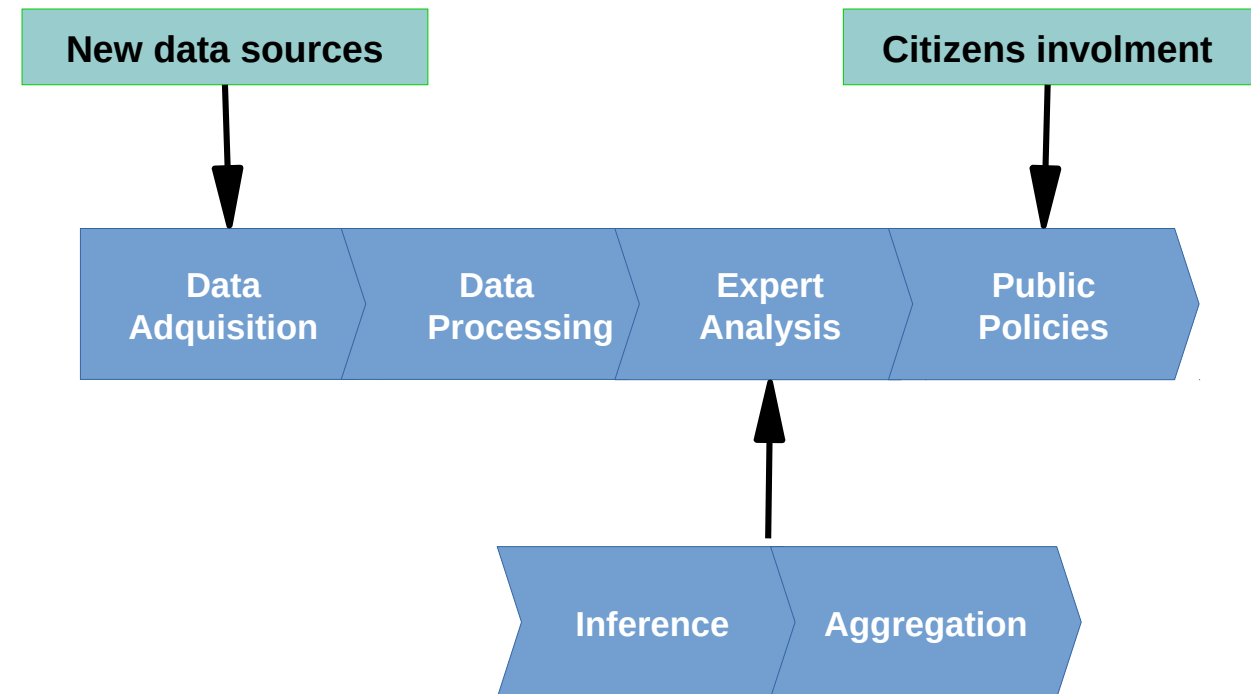
Data flow problem



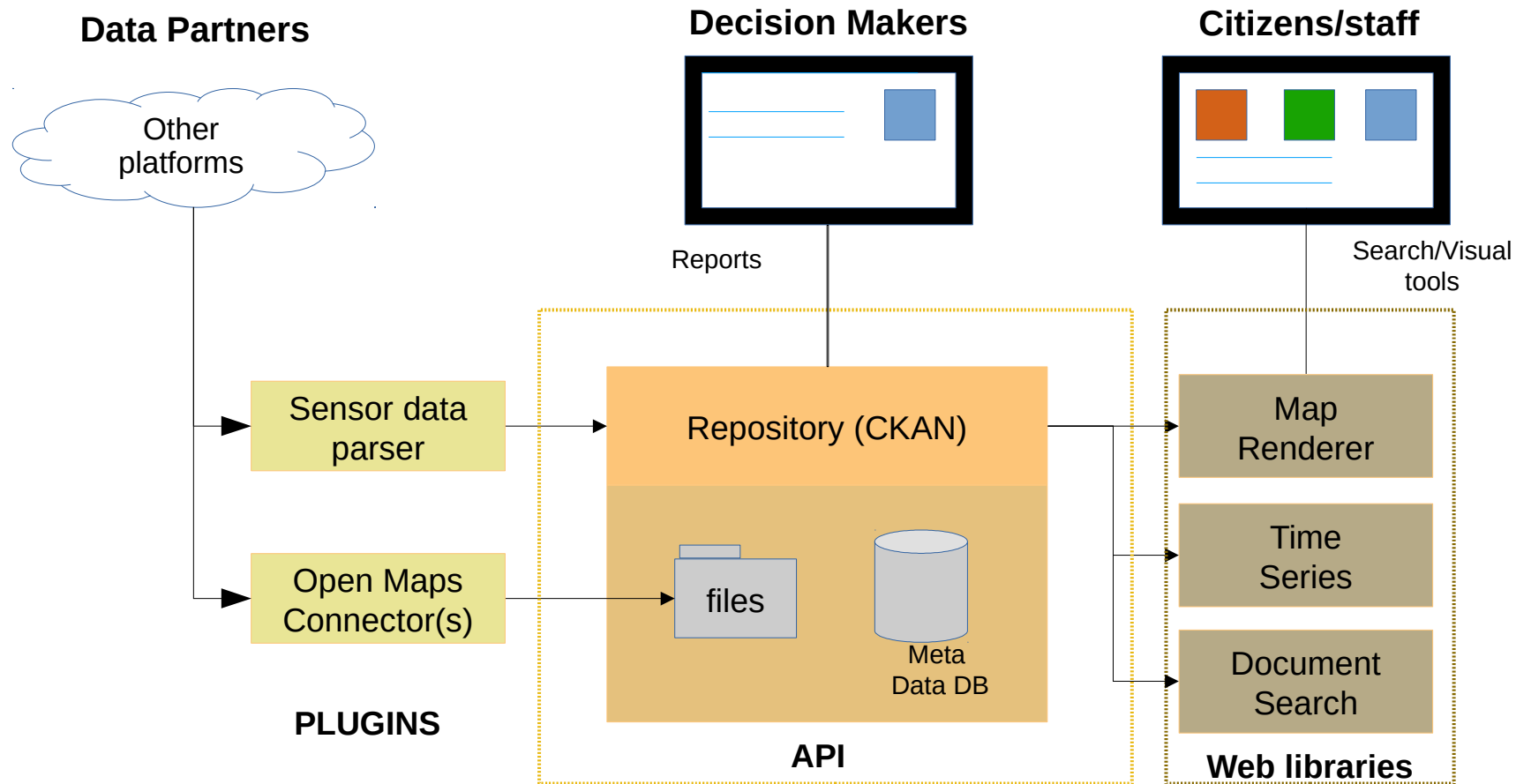
Open data policies are barely met and/or poorly implemented.
 Ever-changing staff and limited IT infrastructure.
 Few experts in the local government staff.
 External consultants provide a reports but not the data.

IDEA

- Make data access, search and reporting simple.
- Provide quick data access to academic experts.
- Build/Add data analysis services on demand.
- **Tool for building technical capabilities in local governments**



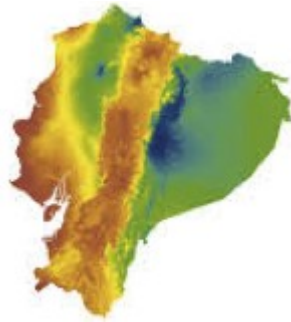
Software architecture



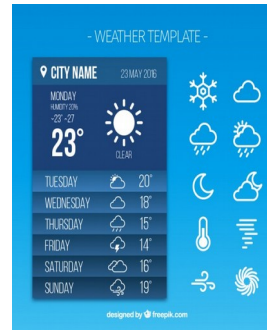
Data Sources



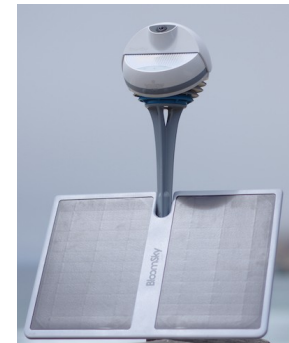
Maps (shp)



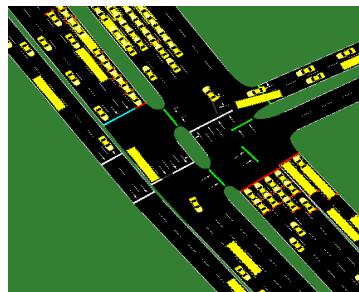
Images (tiff)



Weather
(Webcrawling)



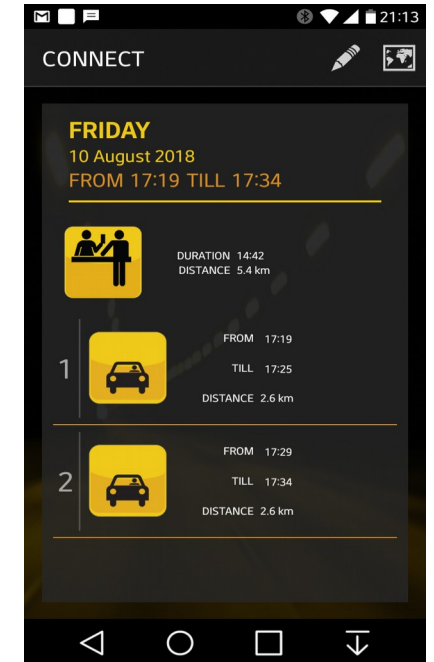
Low-cost
Sensor network
(webservice)



Simulated data
(Extension)

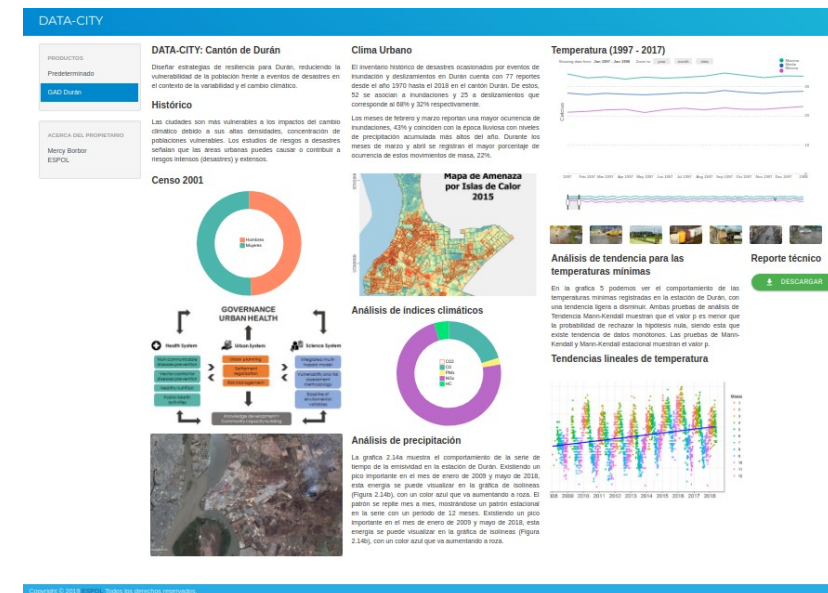
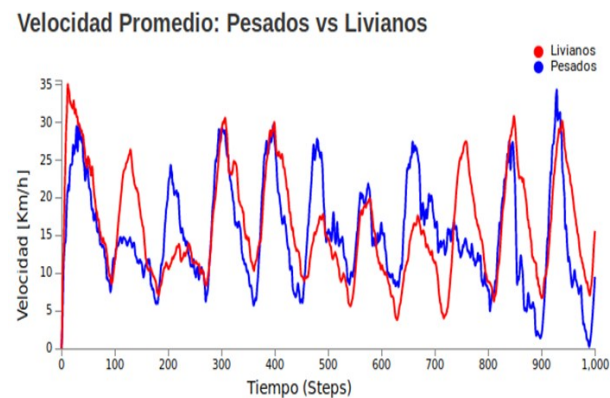
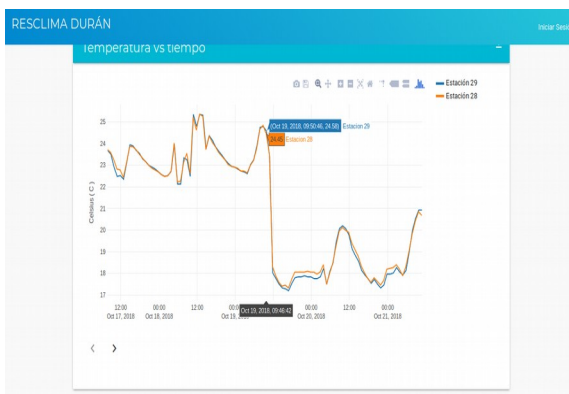
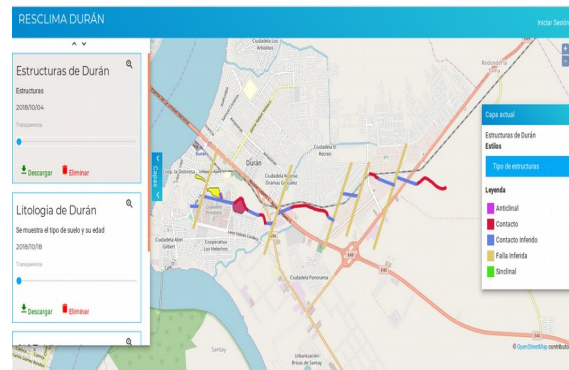


Low-cost
Sensor network
(bluetooth)



Crowdsourcing
(Connect Duran
edition)

Results



DATA PRODUCT

Processed data

New opportunities



TMaaS
Traffic Management as a Service



INÉDITA
PROGRAMA NACIONAL DE FINANCIAMIENTO
PARA INVESTIGACIÓN

Conclusions

- A modular web-oriented platform is a cost-effective tool for Academia-Government collaboration.
- Access to data can foster innovation and new business opportunities.
- Tech and knowledge transfer to local staff is key to strengthen collaboration.

Questions?