



AGID

Agenzia per l'Italia Digitale

FormezPA

FORMAZIONE AGID – FORMEZ SULLA TRANSIZIONE DIGITALE DELLA PA

**Progetto Informazione e formazione per la transizione digitale della PA
nell'ambito del progetto «Italia Login – la casa del cittadino»**

(A valere sul PON Governance e Capacità Istituzionale 2014-2020)

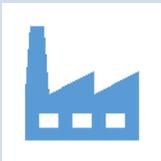
Dati aperti dalla teoria alla pratica: dati che creano valore

Progetto europeo DYDAS, la piattaforma digitale
collaborativa per l'analisi dei dati dinamici

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The DYDAS project involves the creation of a platform capable of handling large volumes of dynamic data, enabling the public sector and industry to benefit from large-scale data analysis.



DYDAS promotes the **sharing and re-use of public and private data in a secure environment** and through innovative monetization mechanisms.



The platform acts as an e-marketplace for data access, and is equipped with HPC-enabled services based on Big Data technologies, machine learning, AI and advanced services.

What are we talking about?



Dynamic Data Analytics Services

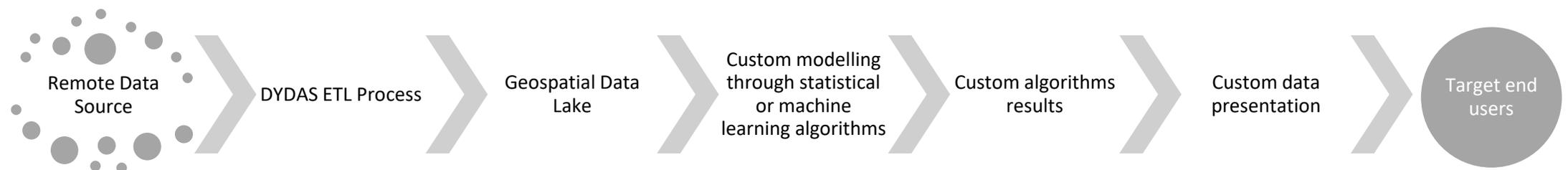


Co-financed by the Connecting Europe Facility of the European Union

Data flow management

DYDAS gathers up data from various sources into the datalake, ready for processing. Data can be analyzed by end users through custom data modelling and then view results on advanced data analytics dashboards configurable on the platform or through standard OGC APIs with any compatible tool.

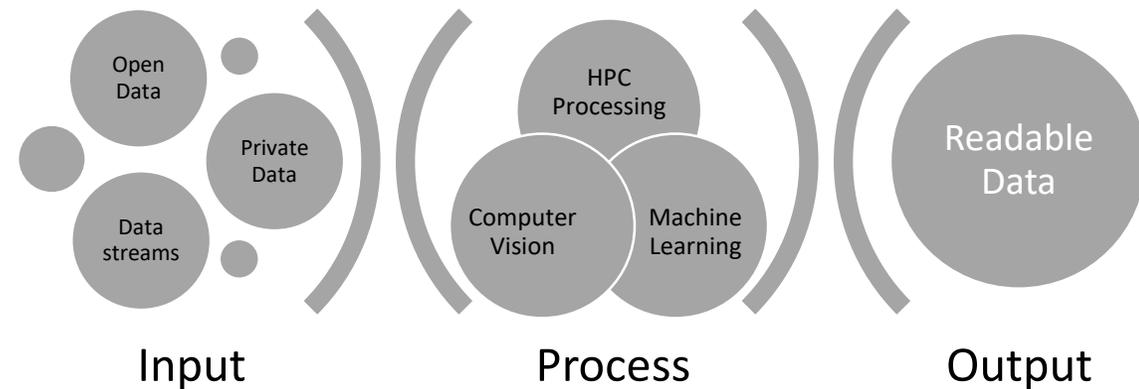
FIWARE Context Broker NGSI-LD is supported for standardized continuous data streaming



Data processing

A key factor in data analysis is the expertise to interpret and scattered data into useful information and knowledge that can benefit community and business.

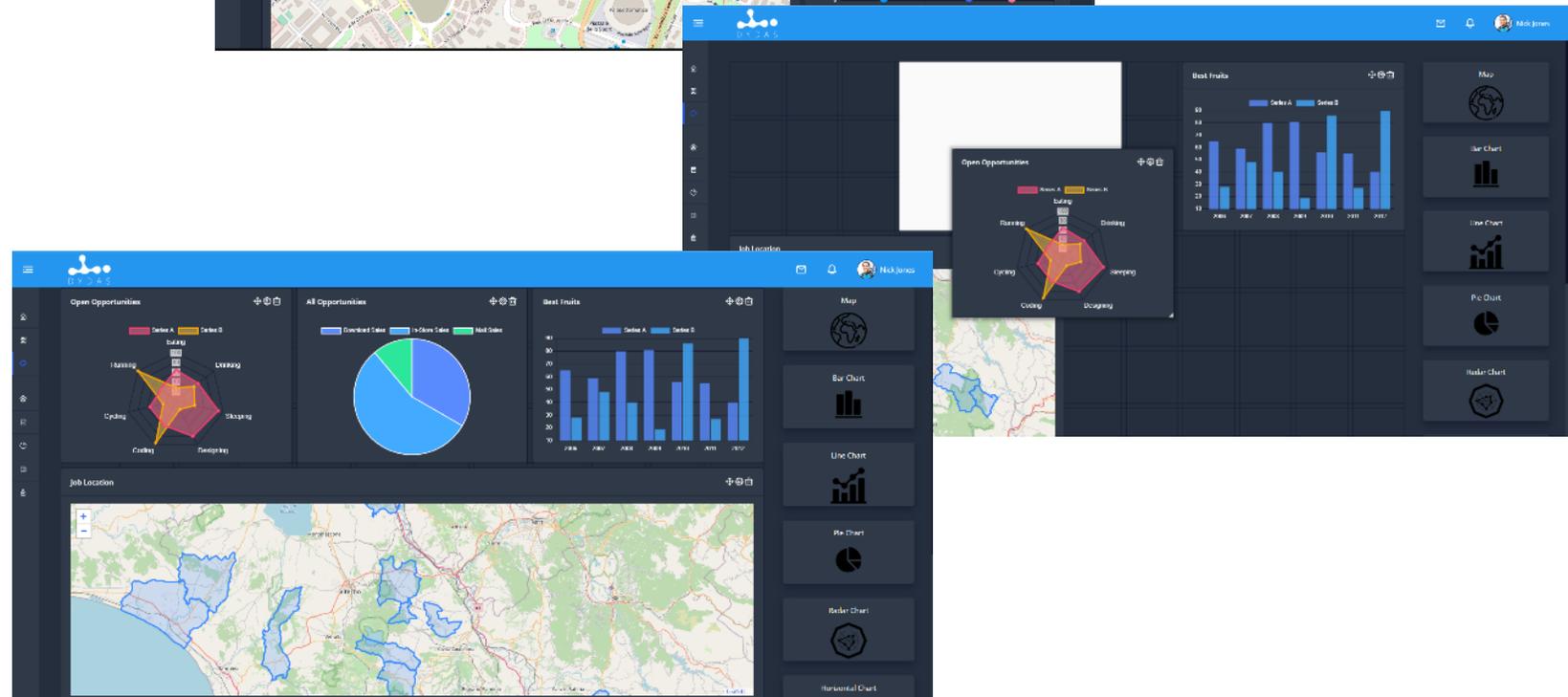
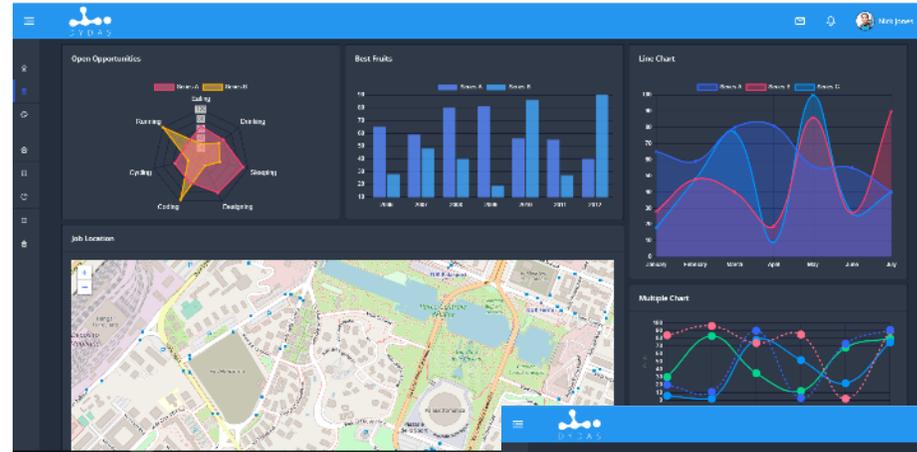
The platform allows to interact with the data gathered into the datalake, both open data and private datasets, and develop custom models to obtain readable and ready to use data. Resulting data can be shared or monetized, and presented through customizable dashboards as a service to clients or community.



Data Presentation

DYDAS platform offers customizable dashboards, that can be set by both expert and non expert users, to enable different points of view for data analysis.

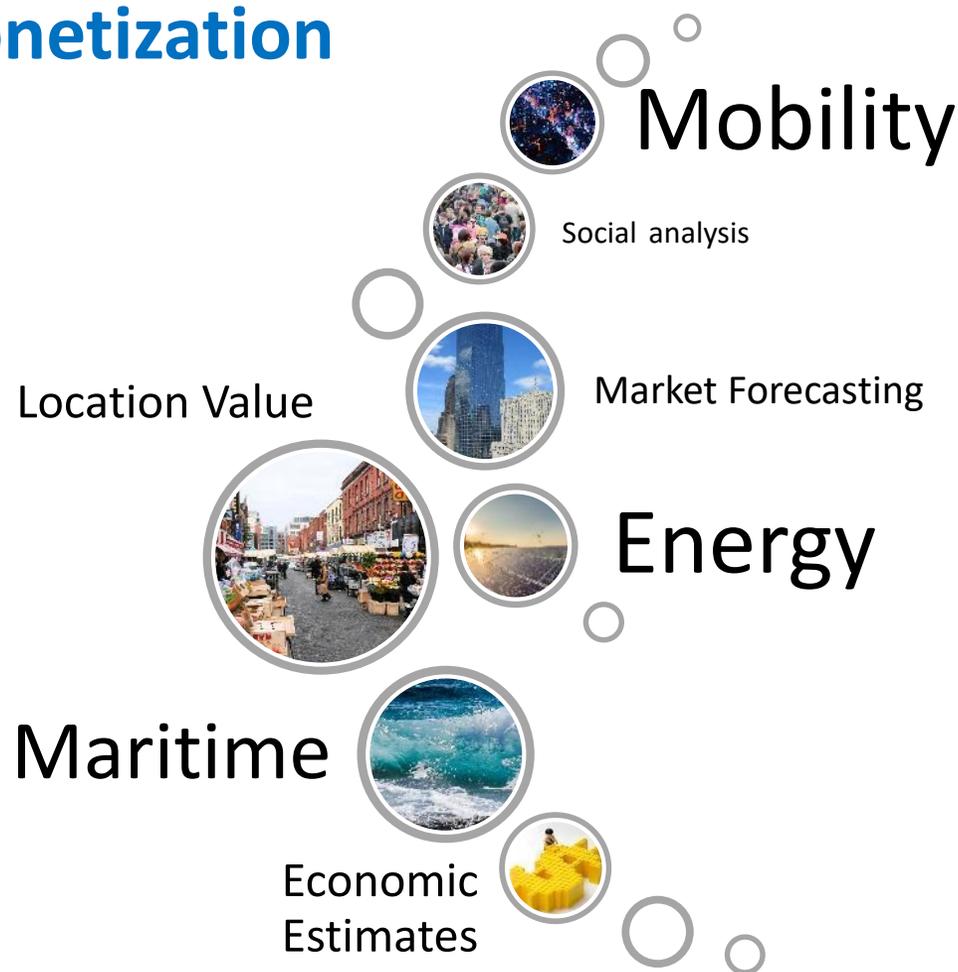
Data can be analyzed through interactive maps, standard multidimensional graphs and intuitive instruments.



Data as an asset – Data Monetization

Users can share their results with others, use results in their work or monetize the results by supplying paid services through the marketplace.

Expertise and knowledge applied on data can produce innovative results that can benefit both the community and the owner of the models or data.

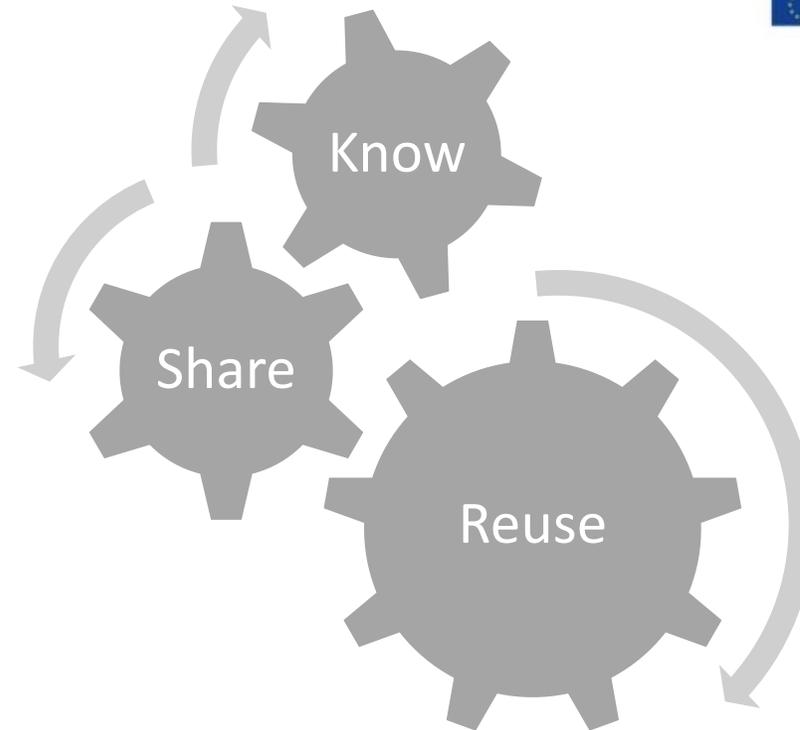


The role of Open Data

Open Data are, by definition, **accessible**, **reusable** and **universal** data.

Data can be used to share knowledge and information to benefit the community.

Public Administrations and private sector can use data to gain support on business and strategy decisions.

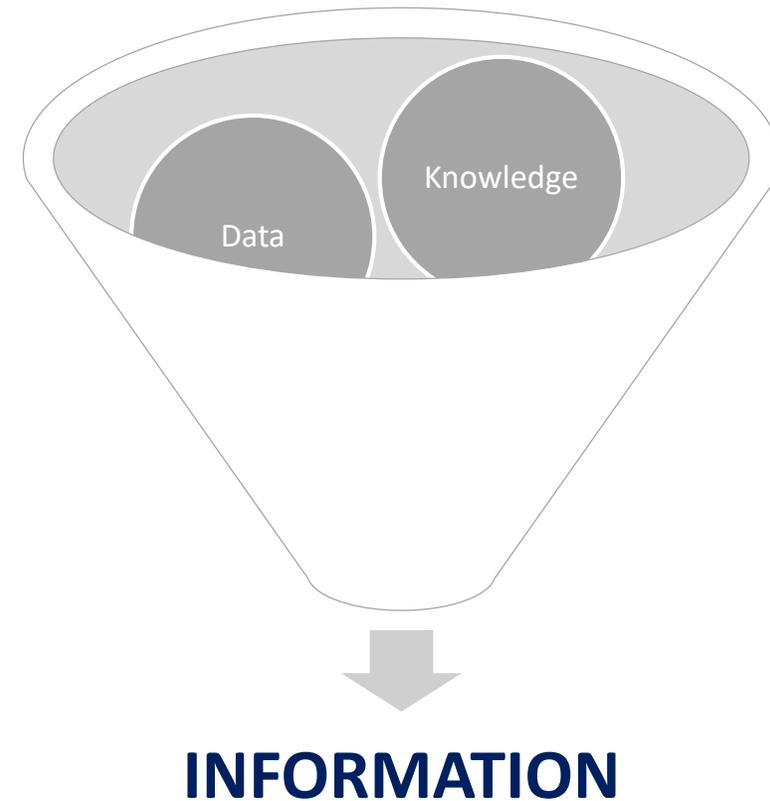


The role of community

The end users can use data to perform analysis, create new datasets, interpolate various data and succeed in getting innovative results.

The resulting datasets can be used both for personal or professional benefit, be shared with the community or be monetized.

The community can create new data driven and data-oriented services to improve quality of life for citizens.

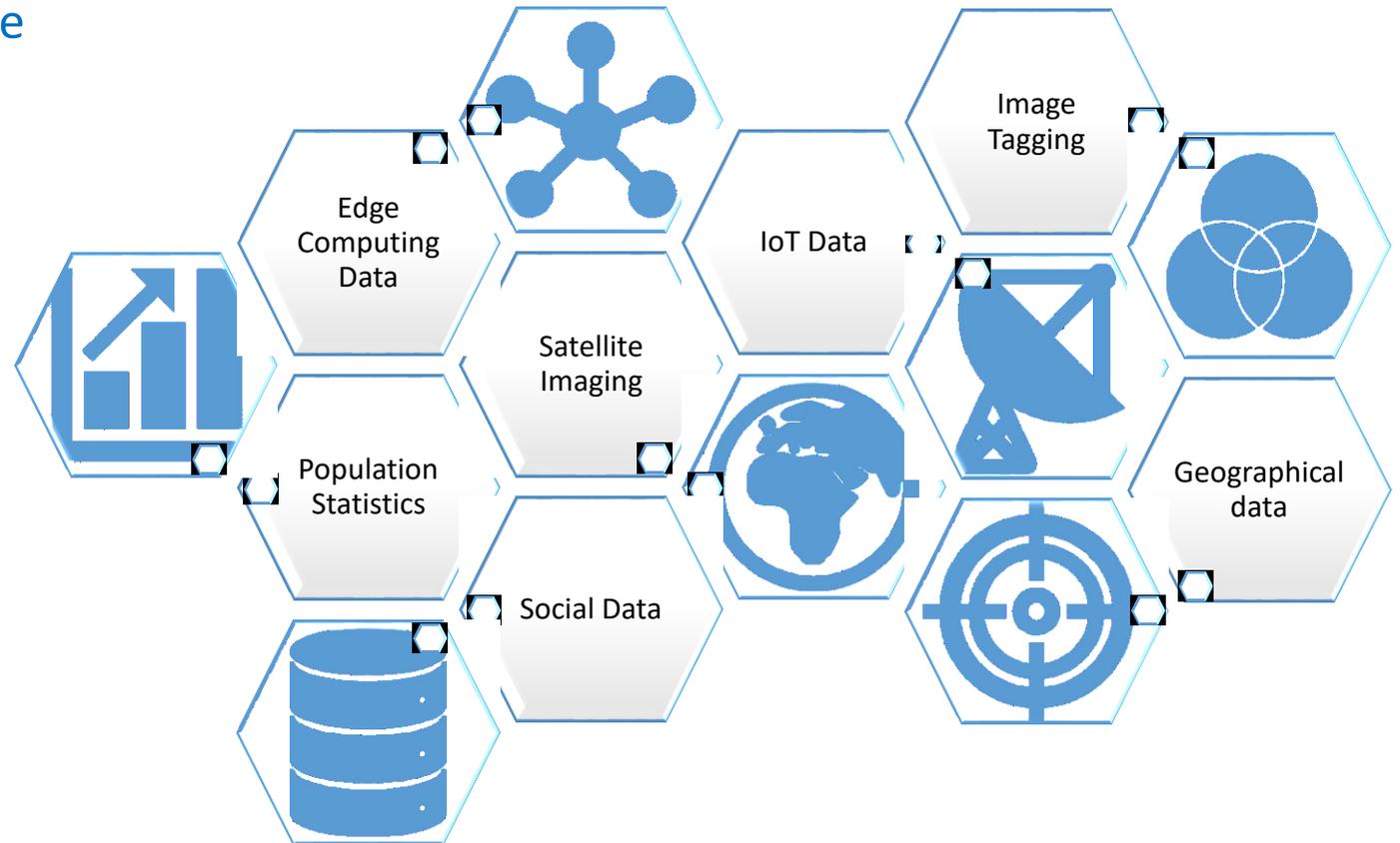


National Data Portal & European Data Portal

Data sharing is a powerful tool to increase opportunities, knowledge and transparency.

Public data, accessible in a standardized matter can create new services, enable new industries and help a better government of the territory

Metadata standards are essential in improving quality of data available.



Use Case: Le sfide per la gestione efficiente del verde urbano

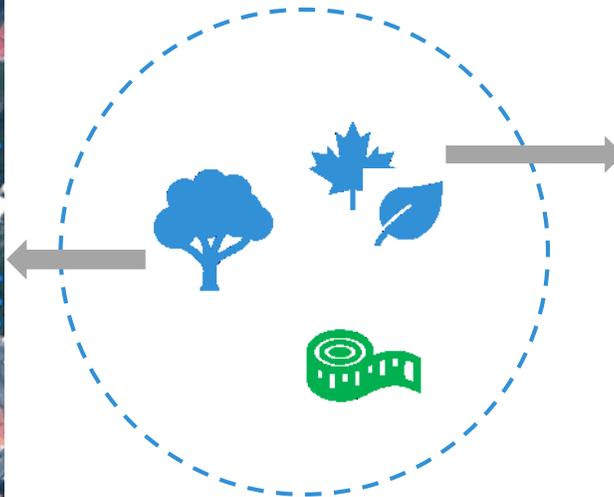


- *Pianificazione del verde urbano*
- *Monitoraggio e gestione del verde urbano*
- *Le isole di calore*
- *L'inquinamento atmosferico*
- *Servizi ecosistemici*

- Progetto HUGS per R&D con Agenzia Spaziale Europea:
 - Utilizzo del telerilevamento satellitare e di altre informazioni geo-spaziali per servizi innovative basati su Intelligenza Artificiale
- Diverse città coinvolte: Milano, Roma, Firenze, Bergamo, Prato, Pescara, San Benedetto del Tronto, Fano
- Uso di diverse tecniche di Intelligenza Artificiale

La mappatura del verde urbano

PRESENZA/POSIZIONE



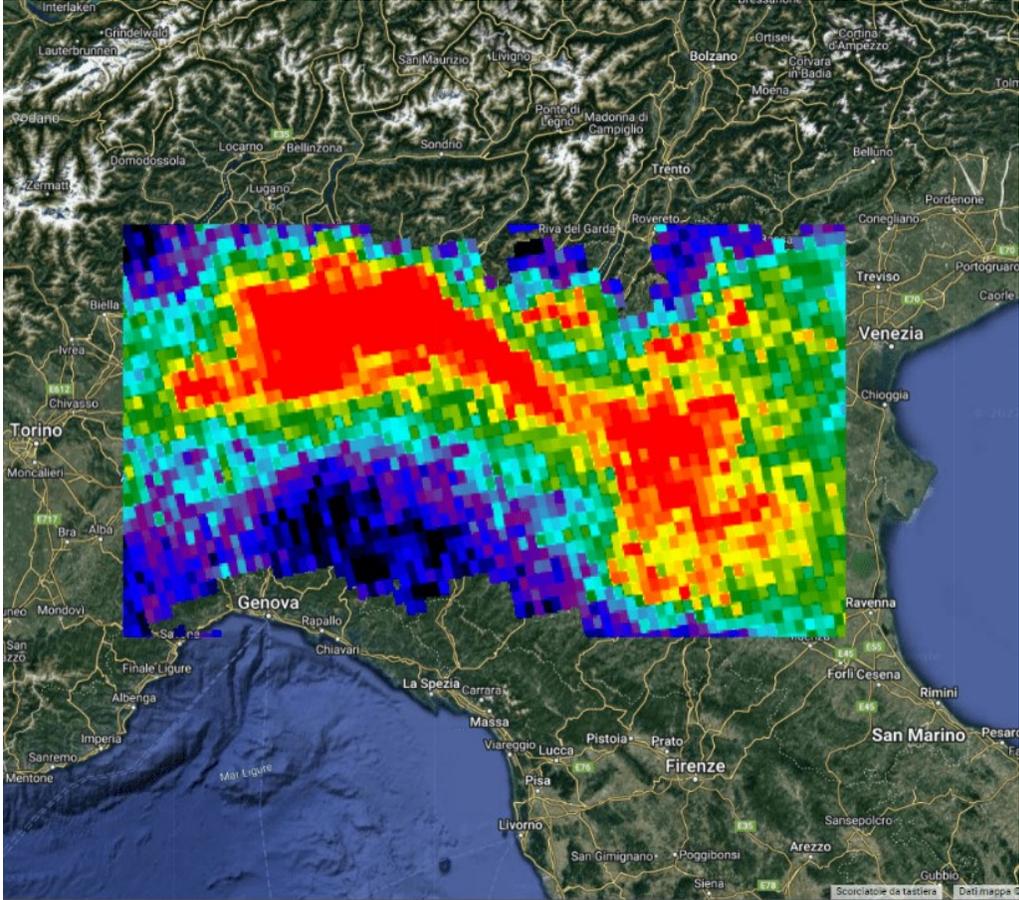
GENERE-SPECIE



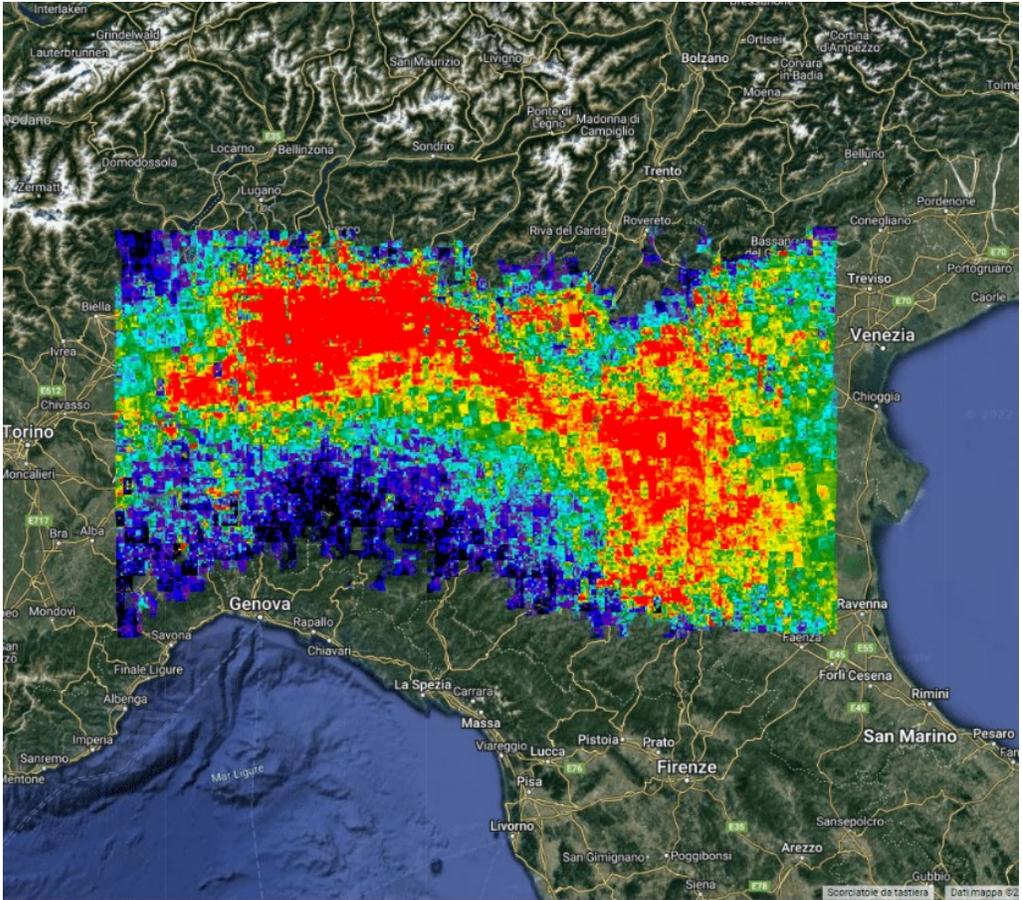
Inquinamento atmosferico

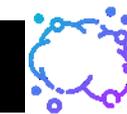


DATO ORIGINALE

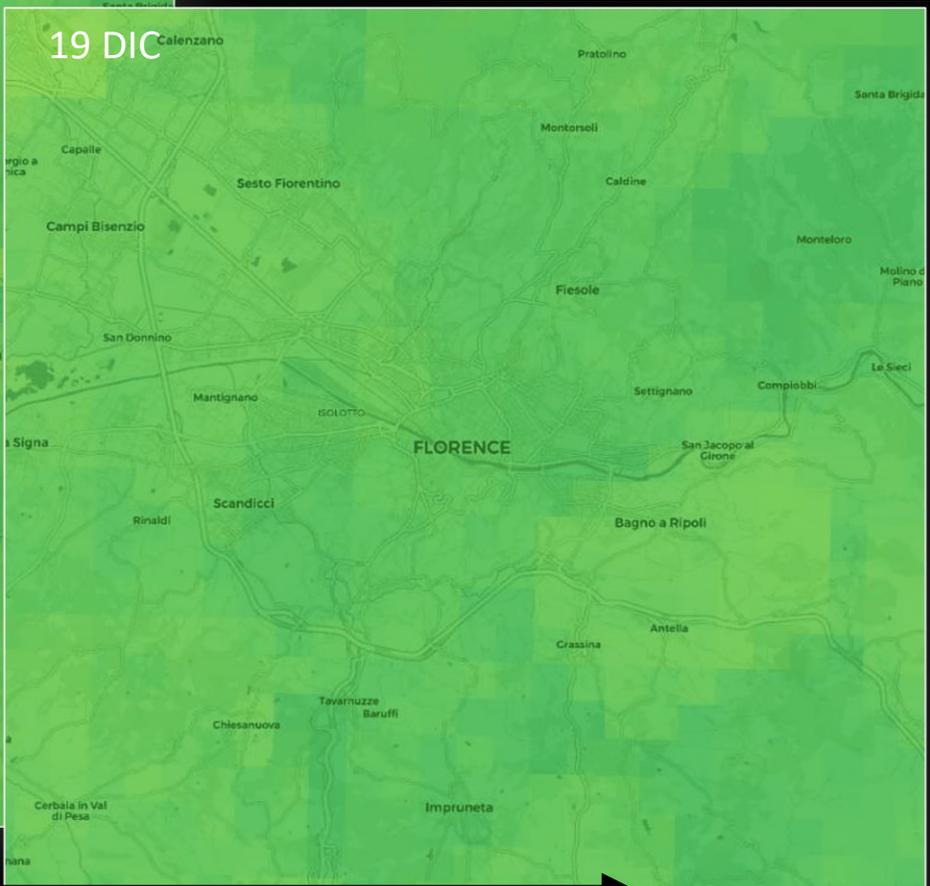
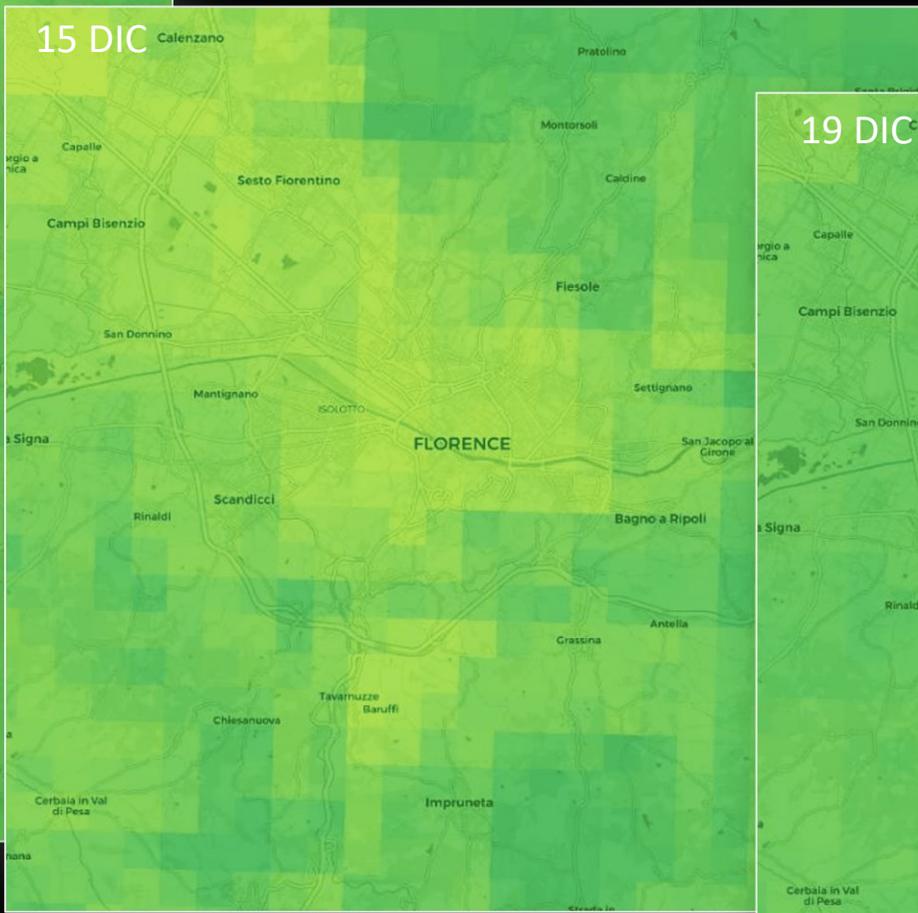
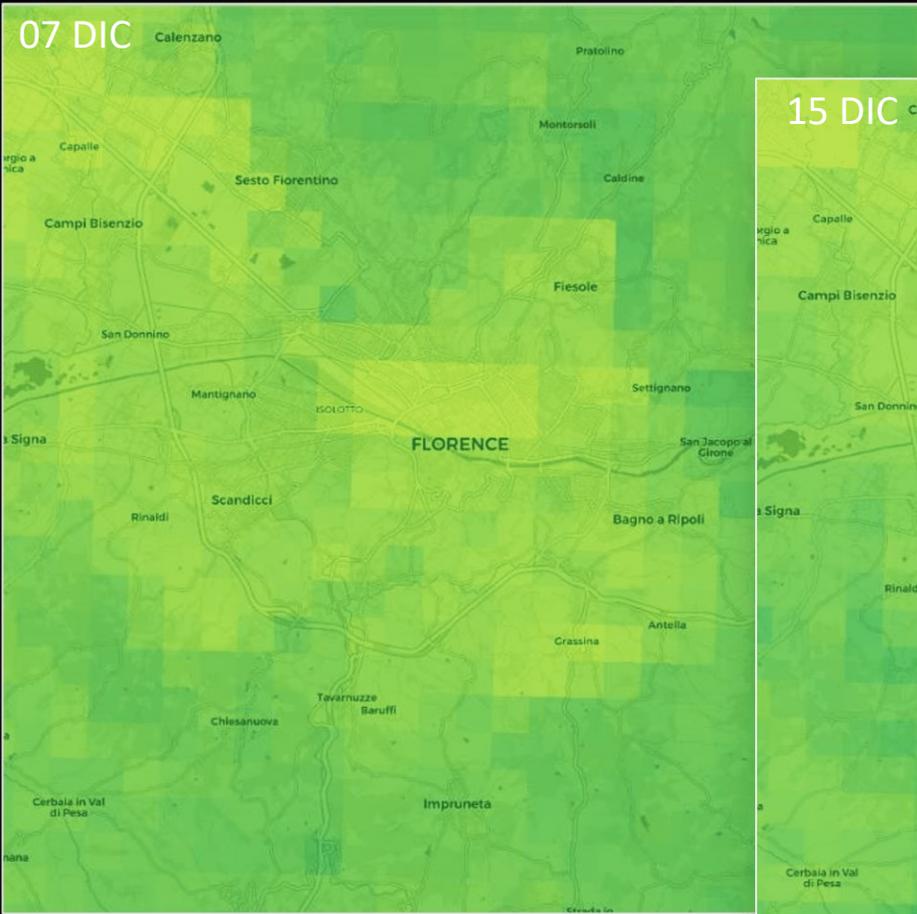


HUGS SUPER-RISOLUZIONE

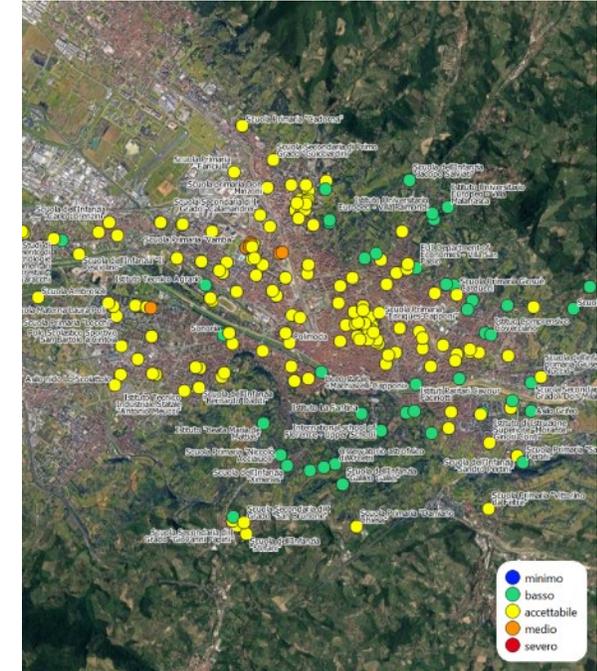
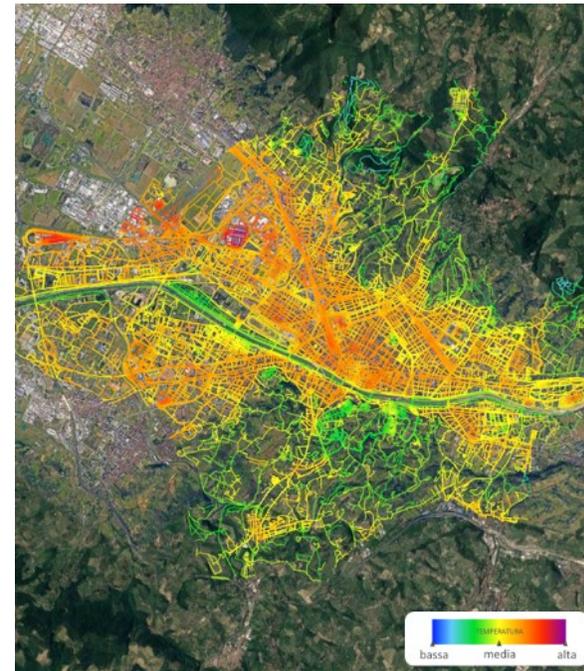
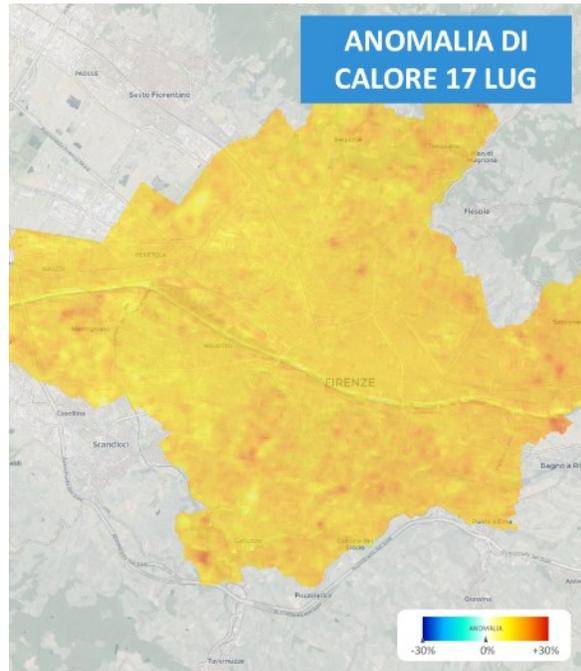
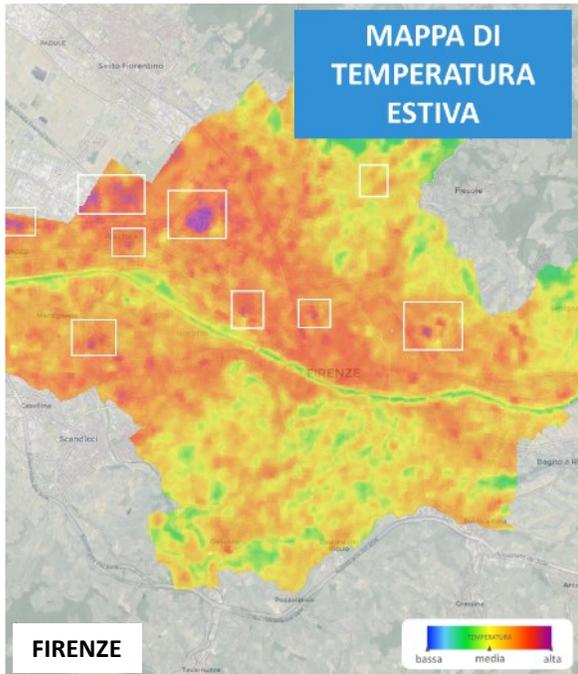




NO²



Temperatura superficiale

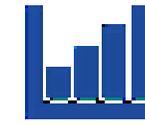


Scale-up dei servizi con DYDAS/HPC

- Centinaia e migliaia di nodi di processing per scale-up a livello nazionale ed europeo
- Capacità di gestire e armonizzare data set molto diversi come contenuti e formati
- Uso collaborativo delle risorse tra industria e Università
- Accesso veloce a dati e prodotti per visualizzazione e ottimizzazione dei risultati



Satellite data



Statistics



IoT data



Digital maps



Image tagging



Edge computing data

Progetto europeo DYDAS, la piattaforma digitale collaborativa per l'analisi dei dati dinamici

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