











AURA-EE and satellite data

What regional agencies can bring to the EO field

Matthieu Denoux

ESA UNCLASSIFIED - For ESA Official Use Only

About Auvergne-Rhône-Alpes region



7.6 million inhabitants:

- 12% of French population
- 78% of population living in urban area
- 4 metropolitan areas > 200 000
- 1/3 population is less than 25Y
- 4 100 municipalities

230 billion €: 12% French GDP

• Tourism (172 ski resorts) and Industry

Energy and Environment

- 67% of mountain (or high) areas
- 9 Nature regional parks
- 40% of territory covered by forests
- Exporting energy, 23% RES



► THE EUROPEAN SPACE AGENCY

About the agency AURA-EE

٠



A non profit organization

900 80 members : Region, partners public authorities, energy companies, NGOs.. 5 **Fields of expertise:** on-going Sustainable energies EU projects Climate mitigation and (M M adaptation (NBS) years Sustainable development Waste management **Environment protection** 3,4 employees M€ annual turn over www.en.auvergnerhonealpes-ee.fr

AURA-EE European activities



RENE



- Founding member of FEDARENE network of regional energy agencies
 - Participated in more than 80 European cooperation projects (Interreg Europe, LIFE, Horizon 2020 & Europe...)
 - Supporting the Covenant of Mayors for Energy and Climate initiative
 - Co-leader of the EUSALP (Alpine Macro regional strategy) AG9 on sustainable energy
- More than 500 partners across Europe in 28 Member States

💻 🔜 📕 🔚 🧮 🕂 📕 🔚 🔚 🔚 📕 📕 📲 🔚 🔤 🚱 🔽 🚺 🗮 🗮 ன Agency

AURA-EE Regional activities



Main goal: To promote, inform and support sustainable development regional and local policies and projects

Providing 3 main types of services to territories in transition:



→ THE EUROPEAN SPACE AGENCY

Observatory activity: providing the right data



ORCAE

Observatoire régional climat air énergie Auvergne-Rhône-Alpes

Observatoire régional climat air énergie Auvergne-Rhône-Alpes

Regional key figures

- Climate, air and energy profiles and raw data for all regions in the region
- Climate indicators by « département »

But yet, very few satellite data

Co-hosted with Atmo, Météo France, Cerema

들 🚍 🚺 🚺 🧫 🏪 🧫 🚺 🛌 🚺 💥 🚼 🖬 📟 🔤 🏣 🙌 🔹 The European space agency

Going further data: digital services suited for territories



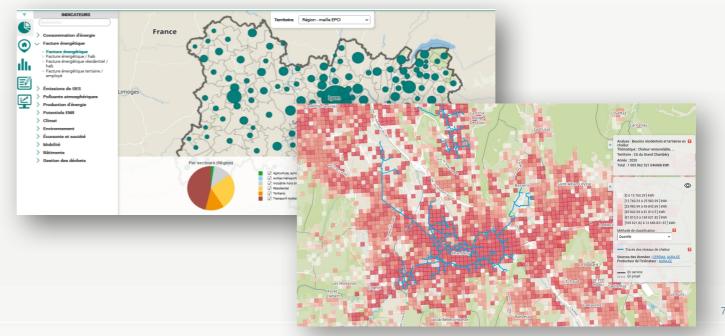
TerriSTORY

TerriSTOF

Outil partenarial d'aide au pilotage de la transition des territoires

> A partnership tool to help manage the **transition of territories**, co-constructed with territories

- Multi-thematic indicators at different territorial levels
- Transition trajectories
- Simulation of environmental and socio-economic impacts
 - Development of territorial strategies
 - ➡ Dashboards to manage regional transition



💳 🔜 📕 🚍 💳 🖶 📕 🔚 🔚 🔚 🔲 📕 🔚 🔚 🔤 🛶 🔯 🛌 📲 🗮 🔤 🖬 👘 🚱 🖛

Our needs / ideas regarding EO



- How we usually proceed:
 - Promoting open-source / open-data as much as possible
 - Involving territories as soon as possible in the design process

- Thematic issues:
 - Surveying **existing PV** panel and describing potential
 - **Identifying natural risks** for a whole territory
 - Building up indicators on climate adaptation that could help define a trajectory for a territory

💳 📰 🛃 🚍 💳 🕂 📘 🔚 🚍 🔲 🚺 📰 🏪 🧮 🔤 😡 🔯 🖕 🚺 🚼 🚍 📾 🐼

Our concerns regarding EO



- Resources consuming:
 - Human / skills
 - Money consuming
 - Few money available at a single city level → groups of cities?
 - \rightarrow need for "**business model**" for the tools developped (consortium of actors designing / piloting the tool)

- Sustainability:
 - How to ensure that the tools and datasets will survive the end of a project
 - How to make sure they can be updated easily
 - How to ensure they are used / fully grasped by the local authorities













Thank you!

Visit us on https://en.auvergnerhonealpes-ee.fr/

Matthieu Denoux, matthieu.denoux@auvergnerhonealpes-ee.fr

ESA UNCLASSIFIED - For ESA Official Use Only

###