Lobelia – Earth observation to address the climate emergency

User Consultation Platform – Environmental Session

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Earth observation to address the climate emergency.
Cities & health

Agri-food

Land ecosystems

Ocean ecosystems

Physical Climate risks
A dashboard to easily quantify climate risks at asset level
Lobelia’s climate services are used for:

- Climate risks disclosures
- In-depth analysis of climate risks
- Climate adaptation strategies
- Present-time monitoring
Our clients

- Insurance
- Infrastructure
- Corporate
- Institutions
- Cities
Merging satellite and climate data

SMOS/SMAP ➤
Sentinel 1 – SAR ➤
Sentinel 2 ➤
CHIRPS, CHRTS (obs. ref.) ➤

[ Sentinel 6 – under research ] ➤

CMIP6 ➤
CORDEX ➤
ERA5 ➤
EOBS (observational reference) ➤
What is needed from EU Earth Observation data to support climate services
Soil moisture with L-band radiometer

SMOS sensitivity helps us monitor soil moisture and inform droughts, floods and heatwaves.

SMOS is beyond its life cycle and Sentinel 1 does not provide the same quality in semi-arid areas.

Need for L-band radiometers
High resolution surface Temperature

High temporal and spatial resolution is key for:

• Drought monitoring
• Process SMOS data
• Bias adjust climate data
A Service Level Agreement (SLA)

Land, ocean and climate data have SLAs.

Space data need similar SLAs.

Operational services for clients can’t fail. We need reliability in the delivery of images and the expected release dates.
Data quotas can kill some commercial opportunities.

The download of large volumes of data without quotas should be possible.

Serving geospatial big data is not easy and requires work on the alignment of data access technology.
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Transparency on delivery

If there is an error, all users need to know it as soon as possible.

Operational services require all related information, including possible errors.

This is key to avoid penalties for breaching our SLAs with final clients.
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