EDERA
Early warning Demonstration of pan-European rainfall-induced impact forecasts

European Union
Civil Protection and
Humanitarian Aid

Evaluation of EDERA products in Andalusia (Spain)

Centre de Recerca Aplicada en Hidrometeorologia
UNIVERSITAT POLITÈCNICA DE CATALUNYA

ECMWF

ILMATIETEEN LAITOS
METEOROLOGISKA INSTITUTET
FINNISH METEOROLOGICAL INSTITUTE

Junta de Andalucía

GOBIERNO DE ESPAÑA
MINISTERIO DEL INTERIOR
DIRECCIÓN GENERAL DE PROTECCIÓN CIVIL Y EMERGENCIAS

Current systems for real-time forecasting in ES

Antonio Santiago (AMAYA)

Junta de Andalucía

Desires for EDERA:

- Tool to deal with adverse weather in general.

- Integrate enhanced information for storms and floods.

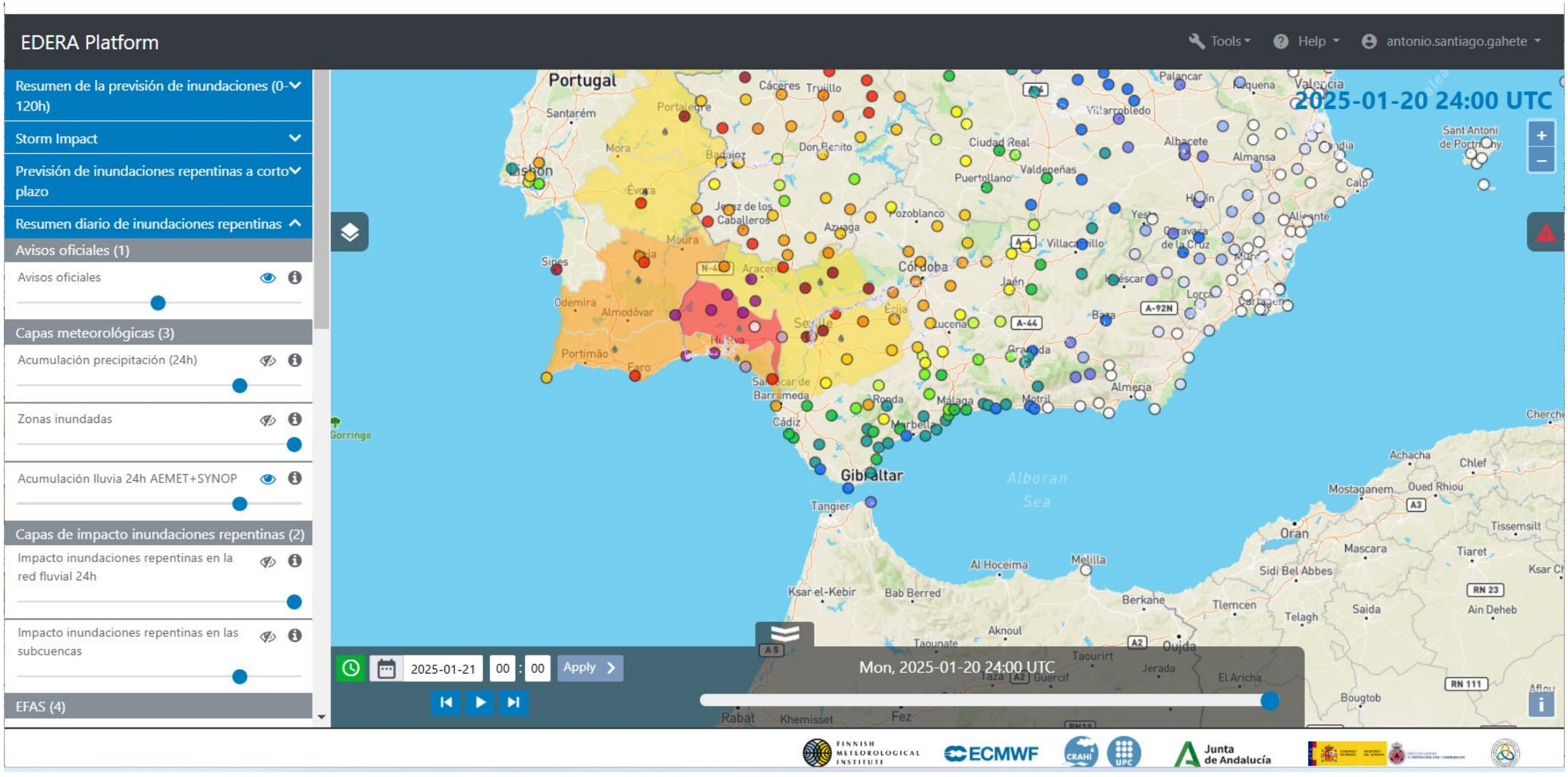
- Improve methods and impacts forecasting.

- Testing products during demonstration period in daily life decissions.

THANKS

Tool to deal with adverse weather

- From the perspective of regional civil protection of Andalusia (close collaboration)



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Tool to deal with adverse weather

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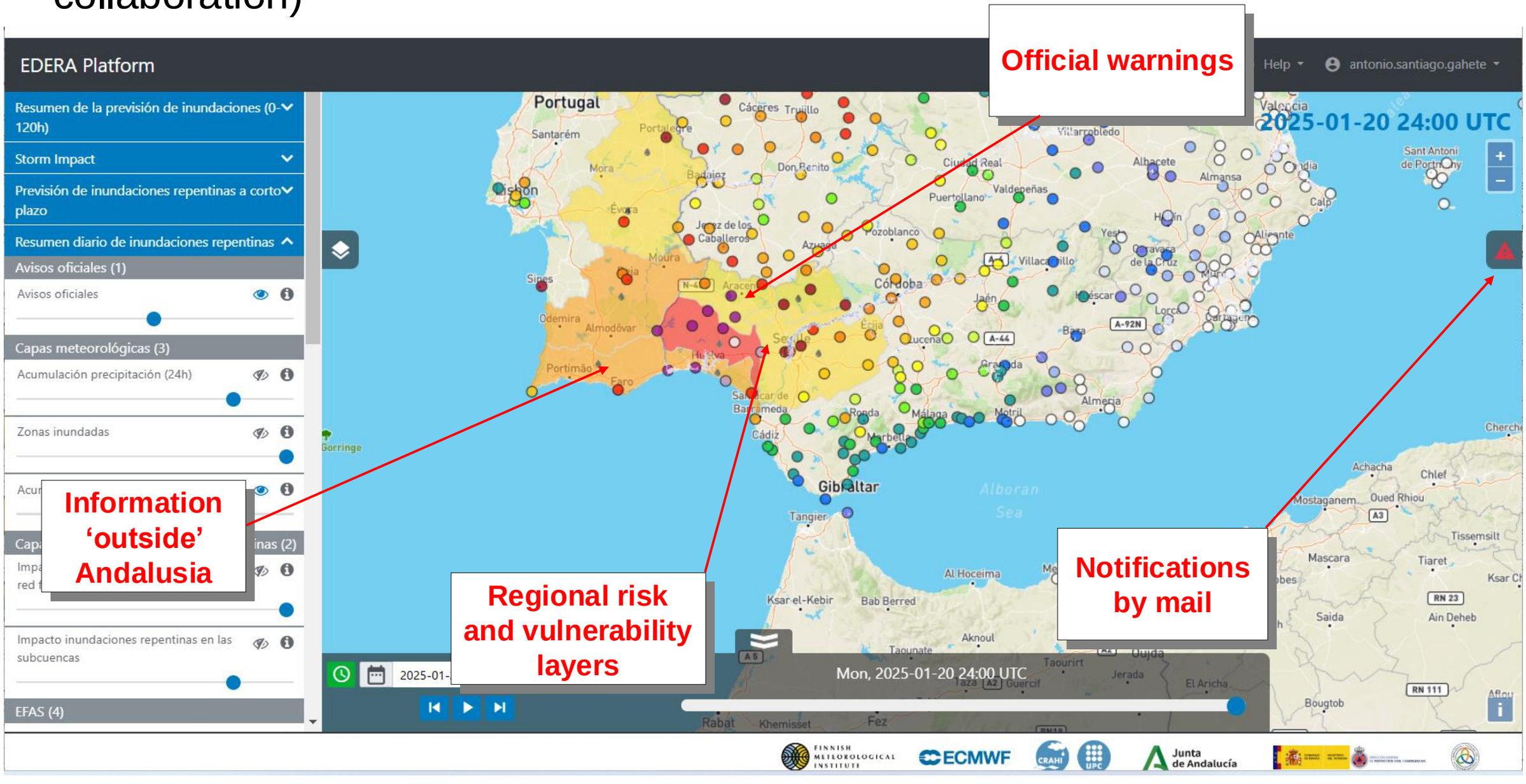

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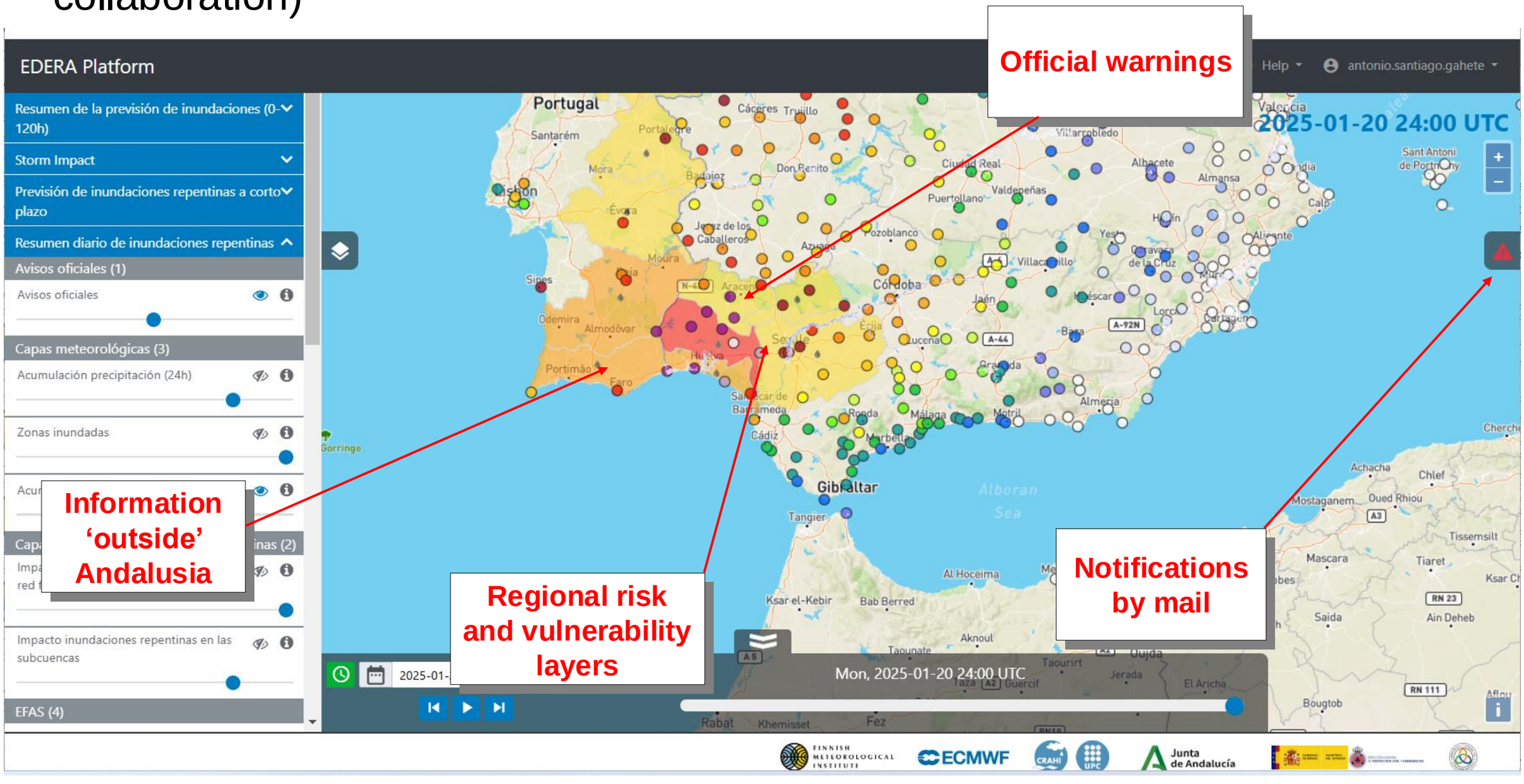

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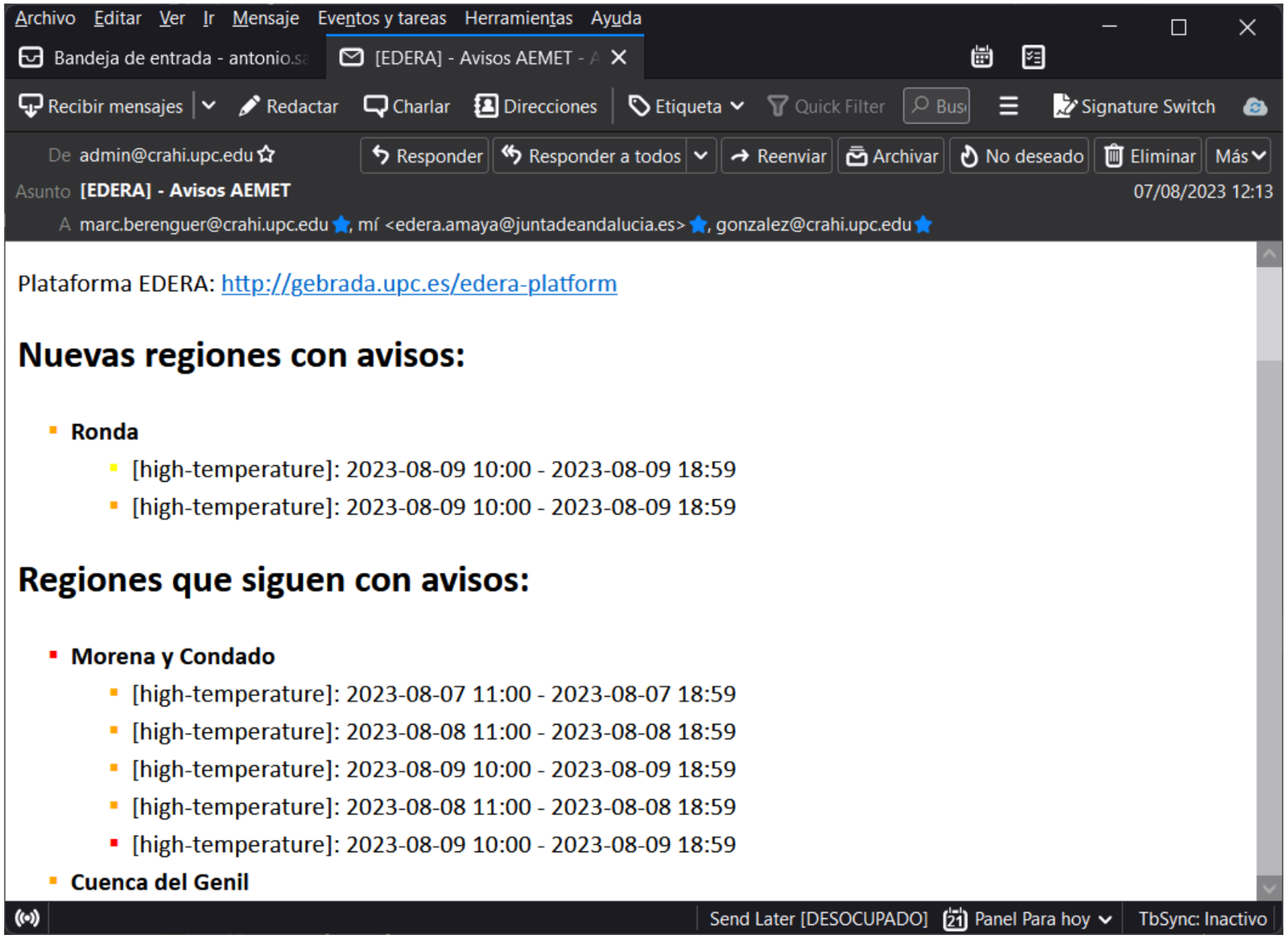
Tool to deal with adverse weather

- From the perspective of regional civil protection of Andalusia (close collaboration)

...but also as an internal way to manage occupational risks for our own staff.



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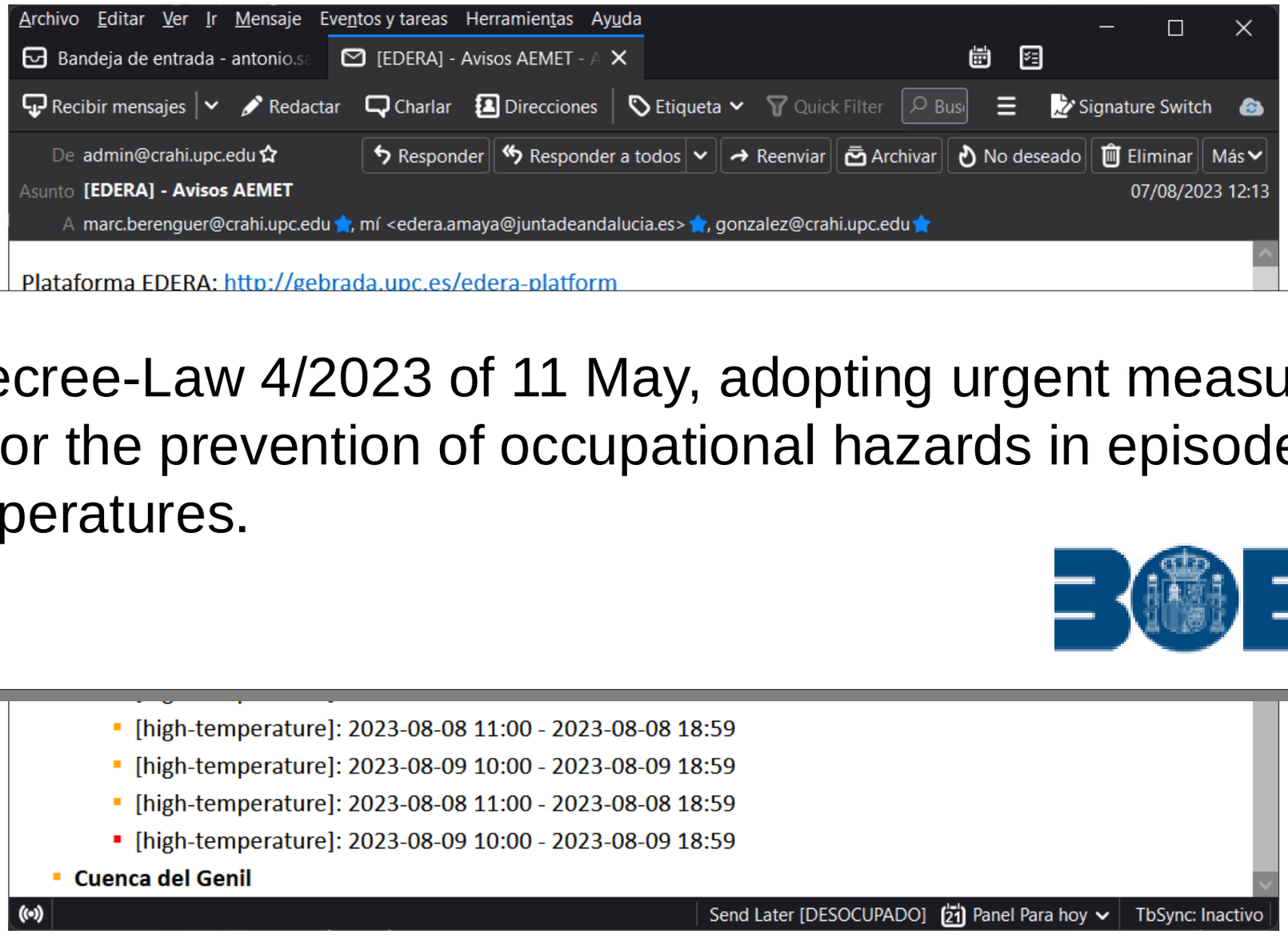

Royal Decree-Law 4/2023 of 11 May, adopting urgent measures ..... and for the prevention of occupational hazards in episodes of high temperatures.

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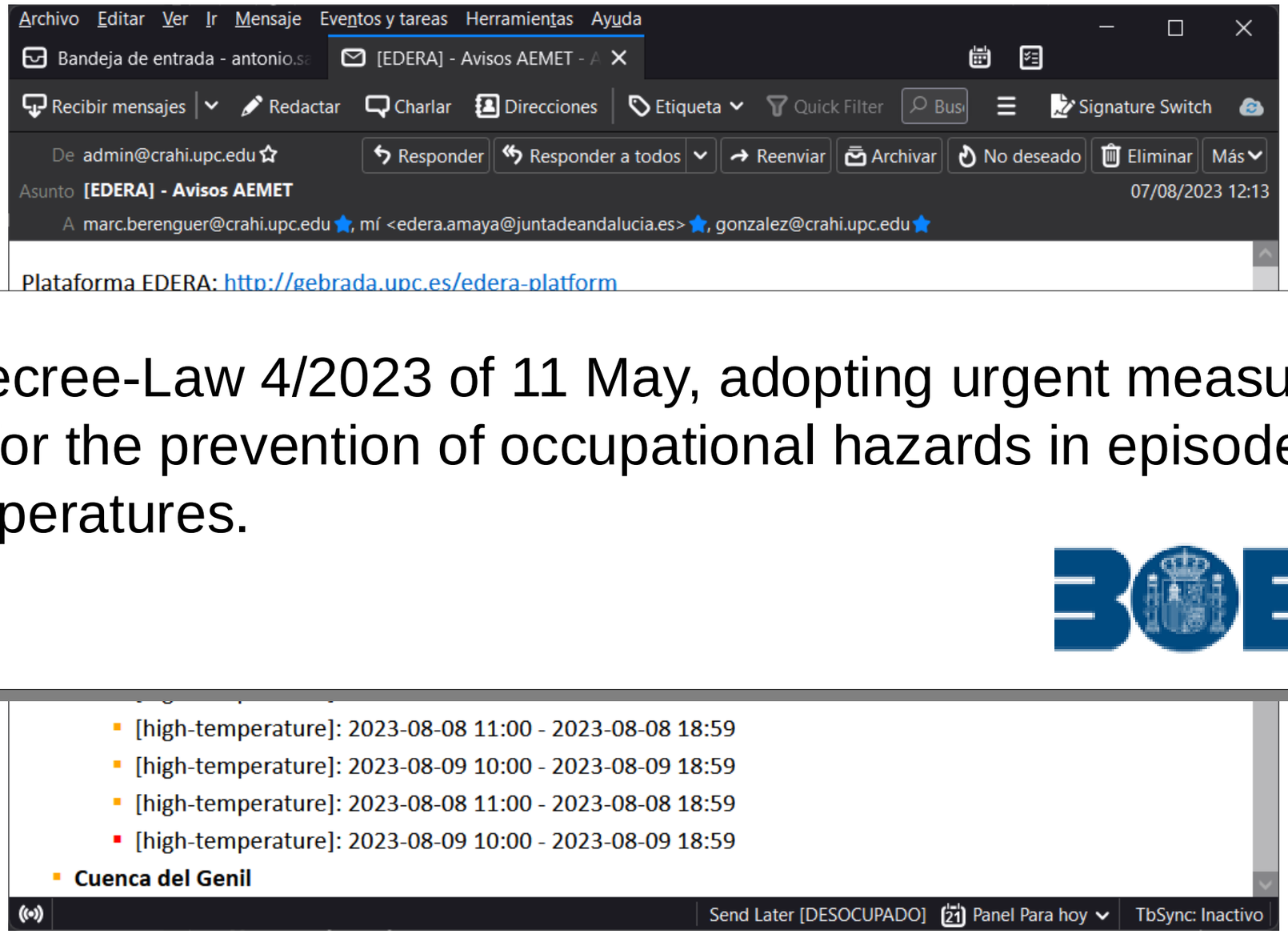

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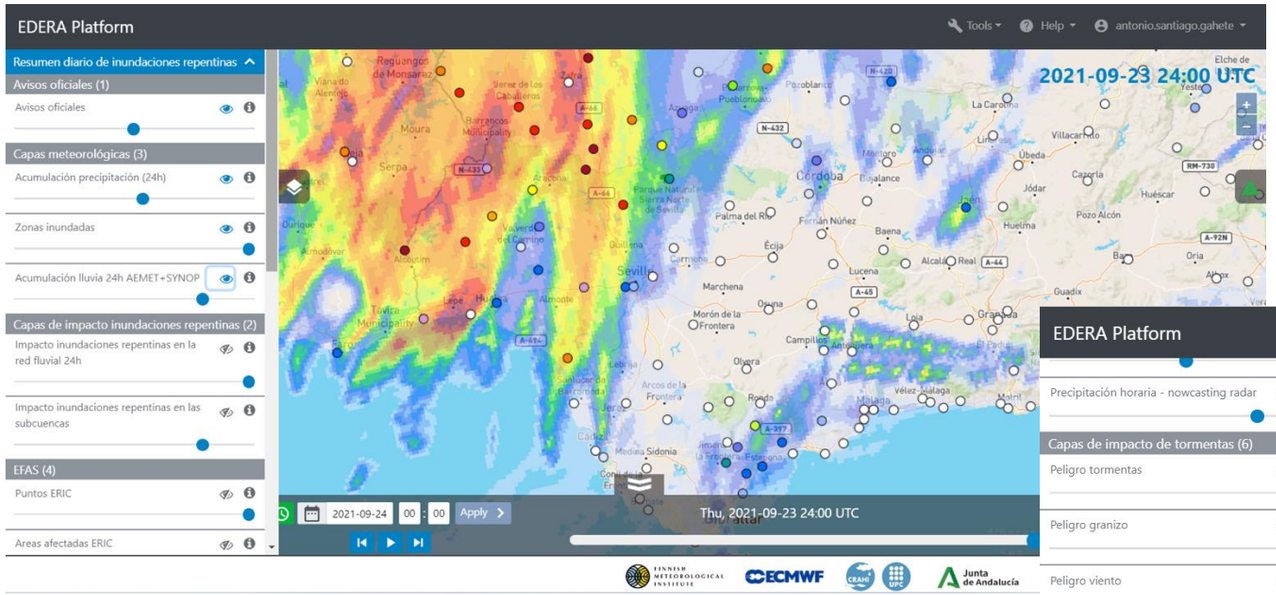
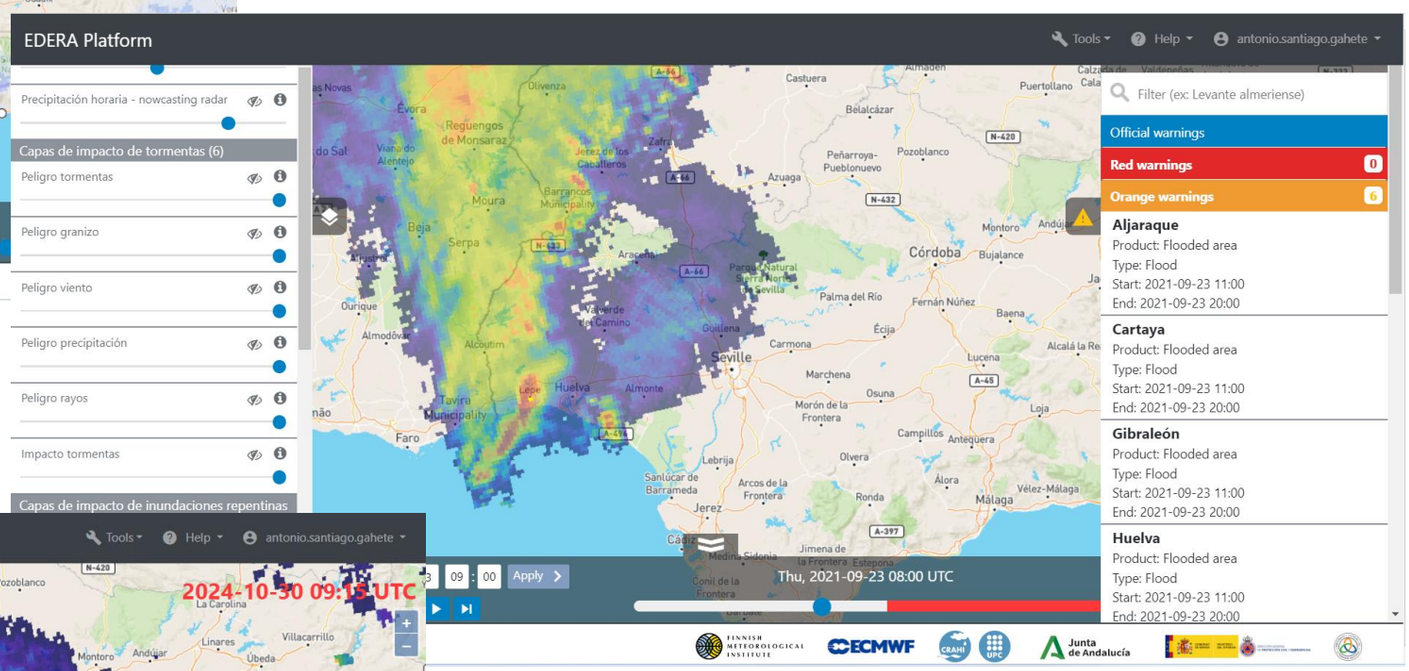
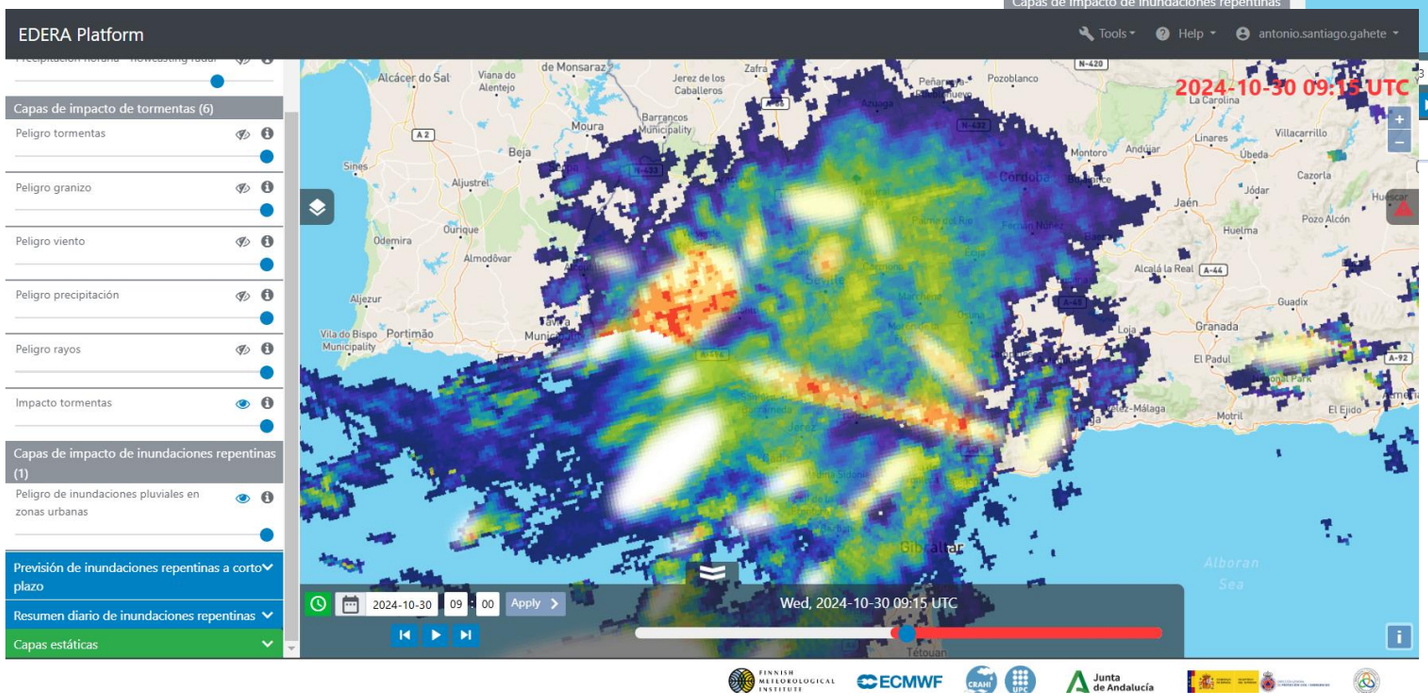
Integrate enhanced information for storms and floods







In AMAYA & Regional Civil Protection

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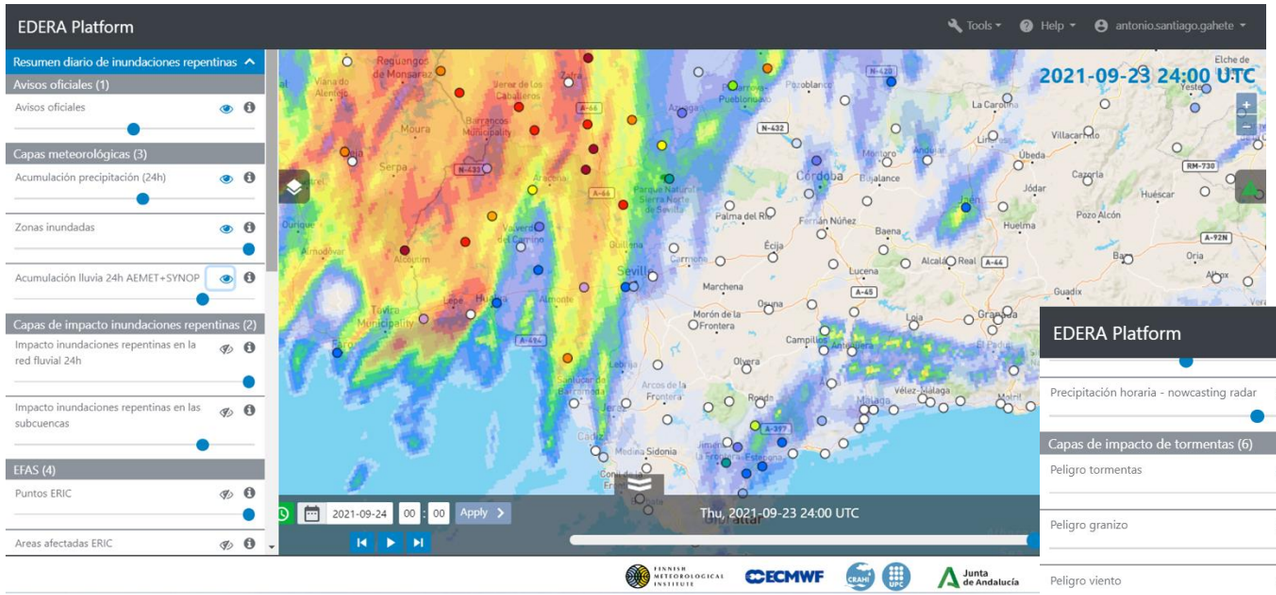

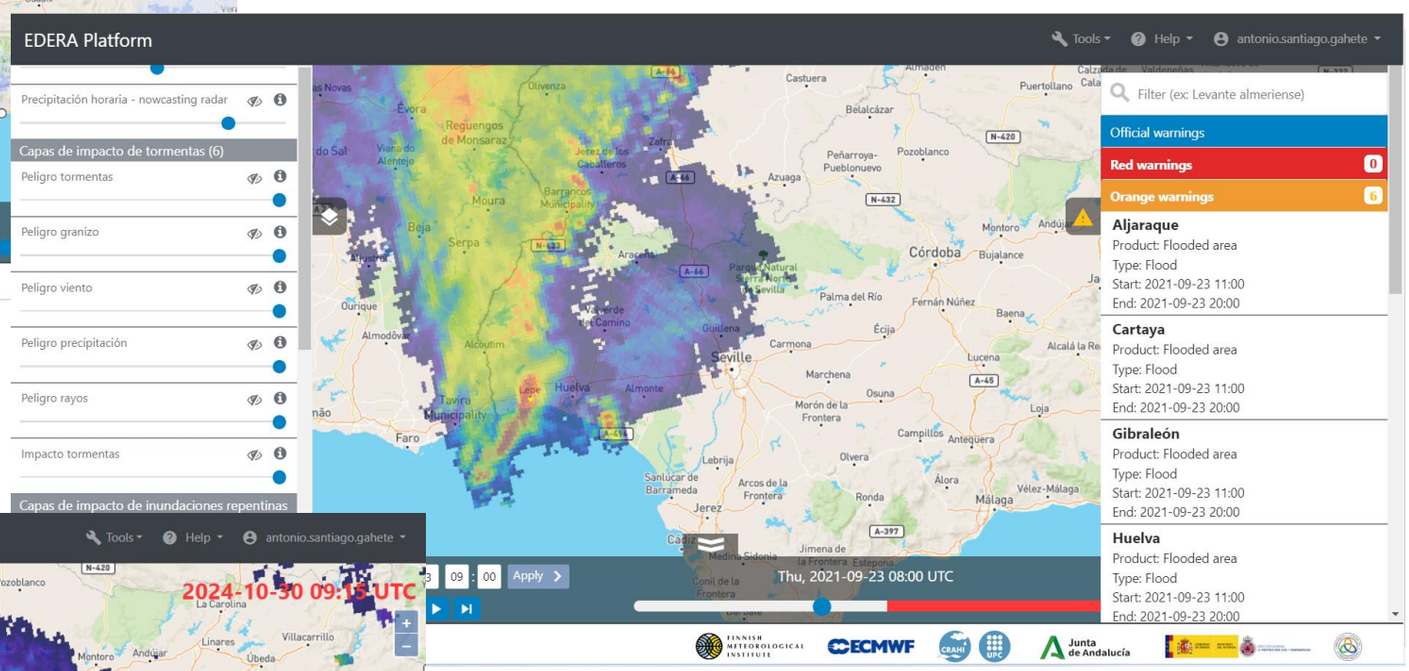

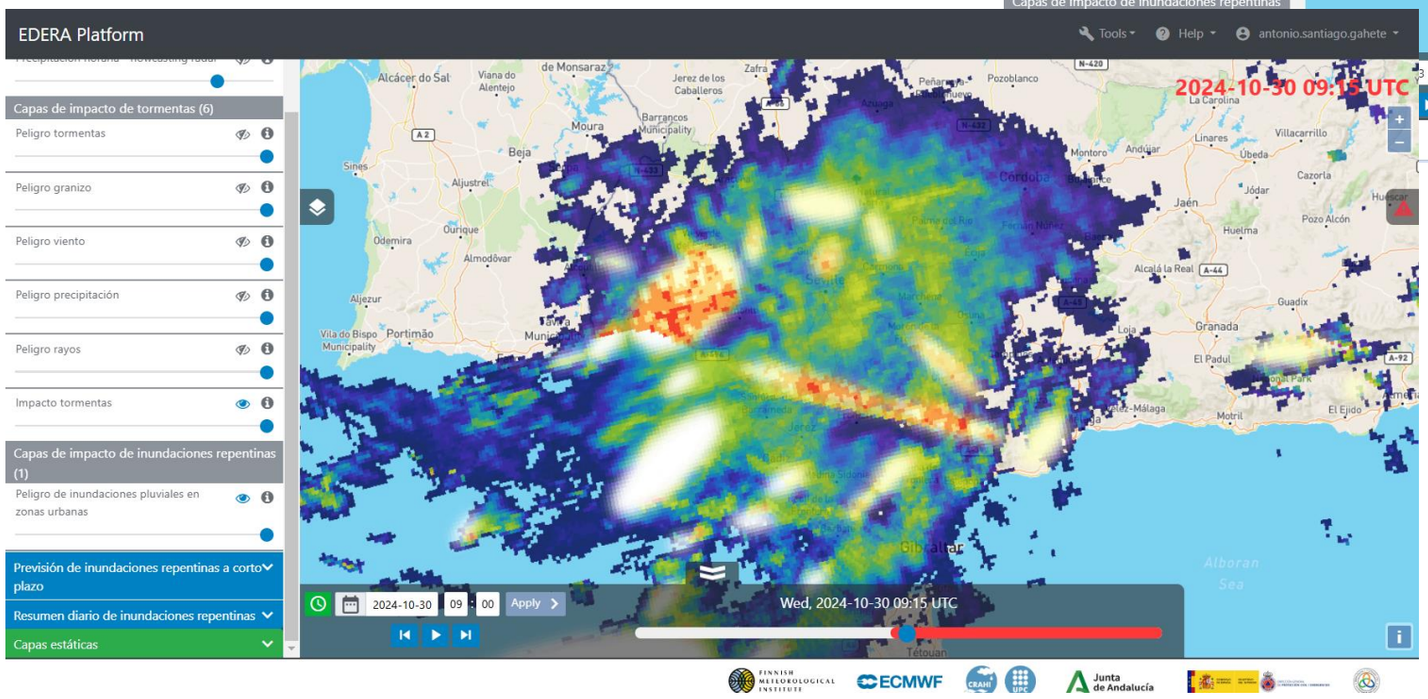

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Contribute to the improvement of methods and forecasting of rainfall and flood impacts.

- Work with the project's core group of scientists to provide an end-user perspective

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Testing products in demonstration period

- For a long time we could only analyse past events (close to the border with Portugal).

September 2021 – Huelva
March 2022 – Huelva
December 2022 – Huelva

-But finally the rain came and we were able to review the operation in real time and take advantage of the organisation that had been put in place.

October 2023 – Huelva
March 2024 – Sevilla
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CONCLUSIONS

- Very positive collaboration scientists & end users.

- Key EDERA products (for me):
Seamless accumulated precipitation
FF impact over sub-cathments
FF impact over the river network
Storm impact layers
Pluvial flood hazard over urban areas
Precipitation accumulation (24h)

-Still to improve (from end-user perspective):

PROJECT
Checking the usability at local level and small events
Filtering the ‘noise’ coming from the radar data in some areas
Improve real time data availability

INTERNAL
Integration with legacy systems
Internal use through ‘written and stamped’ procedures

INLINE !!!

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