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Emergency  
Management

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# EFAS notifications

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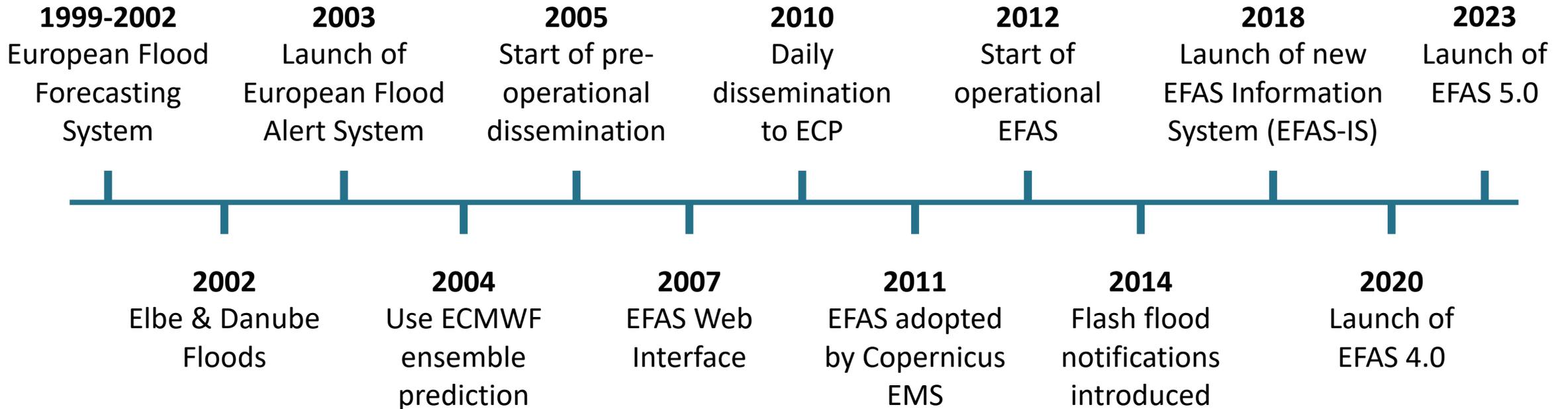
CEMS-Flood Analytics and Dissemination Center



# What is EFAS?

## European Flood Awareness System (EFAS)

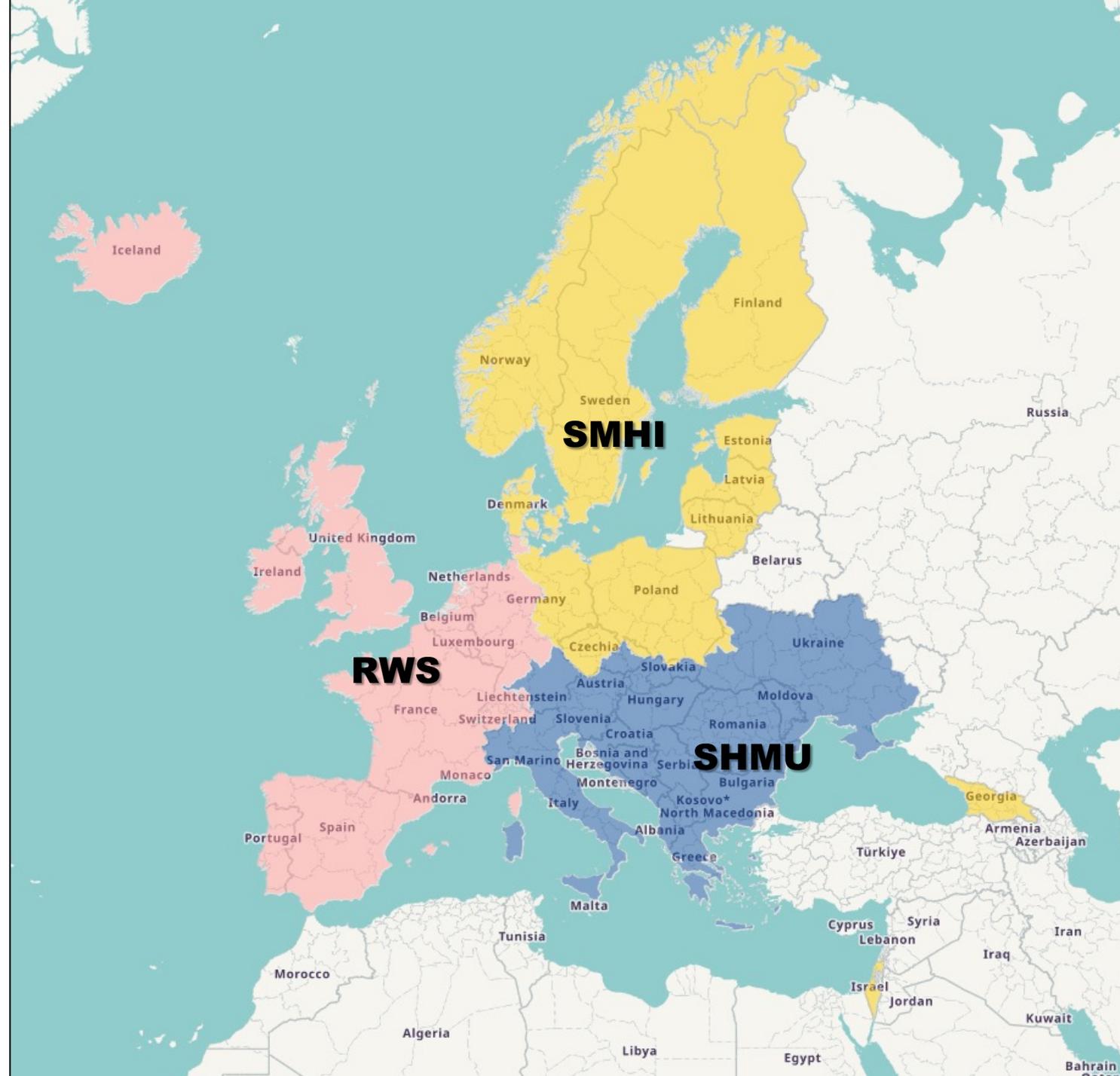
- The first operational European system for **monitoring** and **forecasting** floods
- The first operational European flood early **warning** system





# EFAS partner region

- » EFAS Partnership is free and available for both EU & non-EU countries
- » Authorities with a legal obligation to provide flood forecasting services or that have a national role in flood risk management
- » Currently over 80 full partners and 65 third party partners



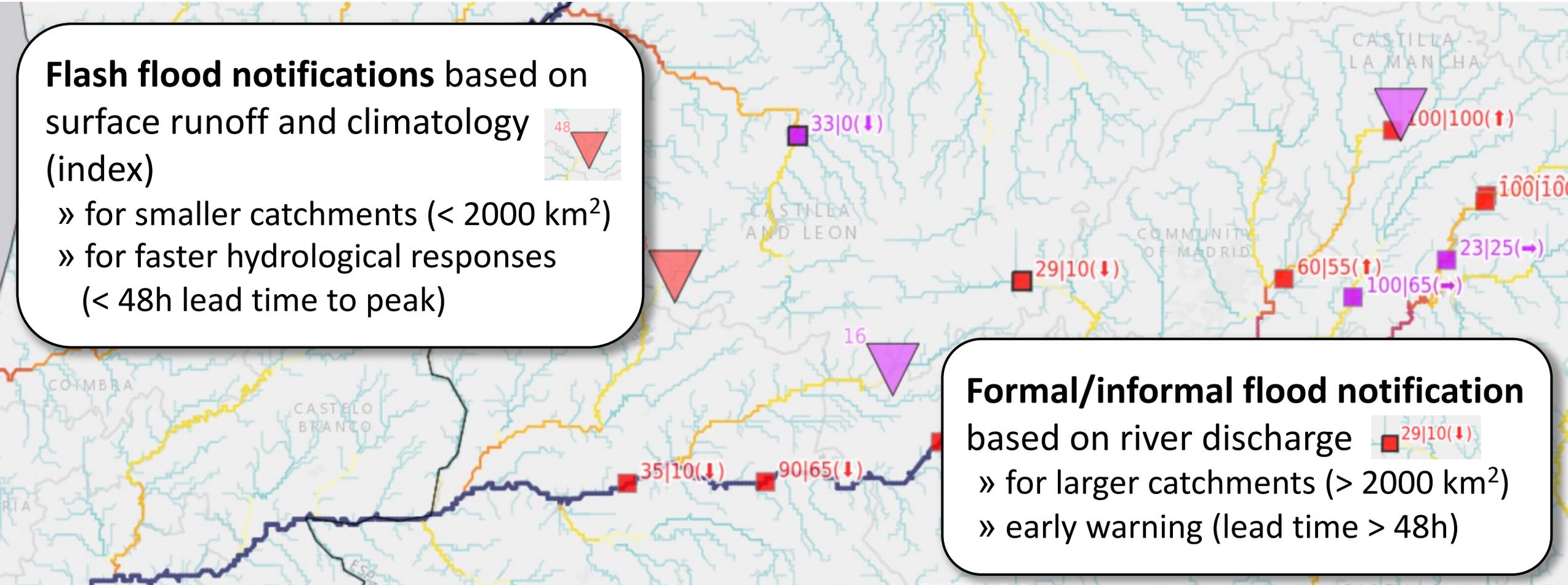


# Two types of notifications within EFAS

**Flash flood notifications** based on surface runoff and climatology (index)



- » for smaller catchments (< 2000 km<sup>2</sup>)
- » for faster hydrological responses (< 48h lead time to peak)



**Formal/informal flood notification**

based on river discharge

- » for larger catchments (> 2000 km<sup>2</sup>)
- » early warning (lead time > 48h)



# When do we notify within EFAS?



**EFAS Formal Flood Notification**

**Criteria:**

- Catchment Area  $\geq 2,000 \text{ km}^2$
- Event **lead-time**  $\geq 48\text{h}$
- Forecasts persistently **exceed 5-year** return period
- Probability of exceeding 5-year return period  $\geq 30\%$



**EFAS Informal Flood Notification**

**Criteria:**

- Catchment Area  $\geq 1,000 \text{ km}^2$  (and  $< 2,000 \text{ km}^2$ )
- If any criteria for formal notification is not met
- Any other doubt



**EFAS Flash Flood Notification**

**Criteria:**

- Catchment Area  $< 2,000 \text{ km}^2$
- Event **lead-time**  $\leq 48\text{h}$
- Probability of exceeding 5-year return period  $\geq 30\%$



# Information sent to partners (formal/informal)



ons 2024-03-27 12:00

Copernicus EMS - European Flood Awareness System <efas@ecmwf.int>

**EFAS Flood Notification for Spain - River: Jarama - Type: Formal\***

ricardo.deus@ipma.pt; nuno.lopes@ipma.pt; vanda.cabrinha@ipma.pt; fpastor@miteco.es; rbg@chduero.es; aforos@chduero.es; joseantonio.hind  
aalvarez@procivil.mir.es; gyan  
nuno.moreira@ipma.pt; ilda.n  
javier.ferrer@chj.es; gregorio.c

Sent to up- and downstream partners in the same basin!

Kopia JRC-EMS-efas@ec.europa.eu; efas@rws.nl; **EFASofficeronduty**; efas@shmu.sk; jrc-ercc-emergencies@NOMAIL.ec.europa.eu; ECHO-ERCC@ec.europa.eu; comp@efas.eu; moz@ecmwf.int; efas@deltares.nl; christel.prudhomme@ecmwf.int; fn-jira

*i* Om meddelandet inte visas som det ska kan du klicka här för att visa det i en webbläsare.

## EFAS Formal Flood Notification\*

Country(ies): **Spain**

River(s): **Jarama (Tejo)**

Predicted start of event: **Friday, 29th of March 2024 - 00:00**

Earliest predicted peak: **Monday, 1st of April 2024 - 00:00**

Probability to exceed a 5-year return period threshold: **70 %**

Probability to exceed a 20-year return period threshold: **15 %**

Forecast date: **2024-03-27 00 UTC**

Comment: -

Partner receives information on area, timing and magnitude.

After first notification, the partners shall follow the development on their own.

**This is the only notification you will receive for this event!** Please follow the evolution of the event on [EFAS](#).



# Information sent to partners (flash flood)



fre 2024-03-29 07:18

Copernicus EMS - European Flood Awareness System <efas@ecmwf.int>

EFAS Flash Flood Notification for Spain - Salamanca Region

Till fpastor@miteco.es; joseantonio.hinojal@chtajo.es; cccsaih@chtajo.es; gyanez@procivil.mir.es; cenem@procivil.mir.es; rosamaria.torres@correo.gob.es; airi@proteccioncivil.es; alicia.carreras@chtajo.es; bfondevila@miteco.es; dsanpe6@mde.es; osancab@fn.mde.es; ume\_cidi@oc.mde.es; jmatlae@et.mde.es

Kopia JRC-EMS-efas@ec.europa.eu; efas@rws.nl; EFASofficeronduty; efas@shmu.sk; comp@efas.eu; moz@ecmwf.int; efas@deltares.nl; christel.prudhomme@ecmwf.int; ffn-jira

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Sent only to partners in the same administrative region!

## EFAS Flash Flood Notification\*

### NOTIFICATION DETAILS:

Country(ies): **Spain**

Administration Region(s): **Salamanca**

Likely start of event: **Friday, 29th of March 2024 - 00:00**

Probability to exceed a 5-year flash flood return period threshold: **48 %**

Probability to exceed a 20-year flash flood return period threshold: **1 %**

Partner receives information on area, timing and magnitude.

### ADDITIONAL INFORMATION:

Forecast date: 2024-03-28 12 UTC

Affected area susceptible to landslides: Very High: 10 km<sup>2</sup>, High: 18 km<sup>2</sup>, Moderate: 22 km<sup>2</sup>

Forecaster Comments: -

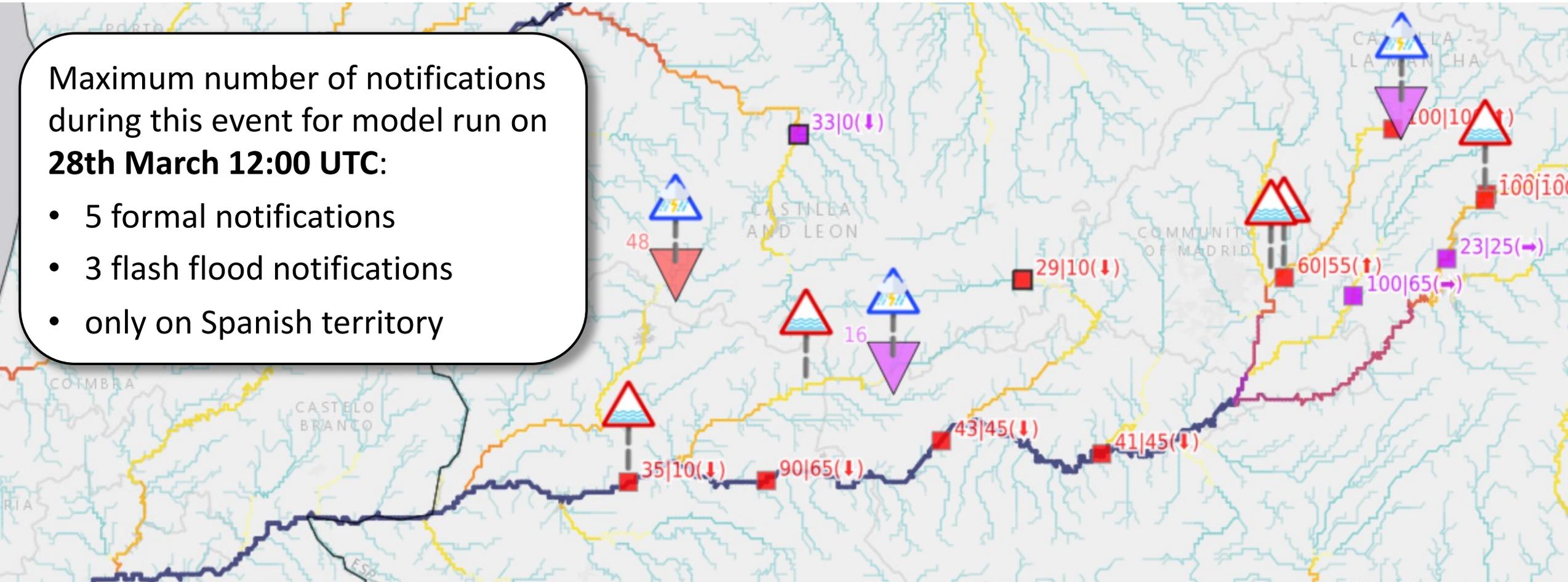
After first notification, the partners shall follow the development on their own.



# Maximum number of notifications during event

Maximum number of notifications during this event for model run on **28th March 12:00 UTC:**

- 5 formal notifications
- 3 flash flood notifications
- only on Spanish territory





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# Thank you

**EFAS Map Viewer:**

[https://european-flood.emergency.copernicus.eu/efas\\_frontend/#/home](https://european-flood.emergency.copernicus.eu/efas_frontend/#/home)



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