



Co-funded by
the European Union

Feedback Session

12:00 – 13:00

Session Agenda

1. Feedback from hands-on analysis
2. Agree configuration of EDERA products
3. Work during 15-month demonstration phase
 - a) Setting up notification service
 - b) Providing feedback

Feedback from Hands-on Session

- Which products did you find useful?

Whiteboard exercise...

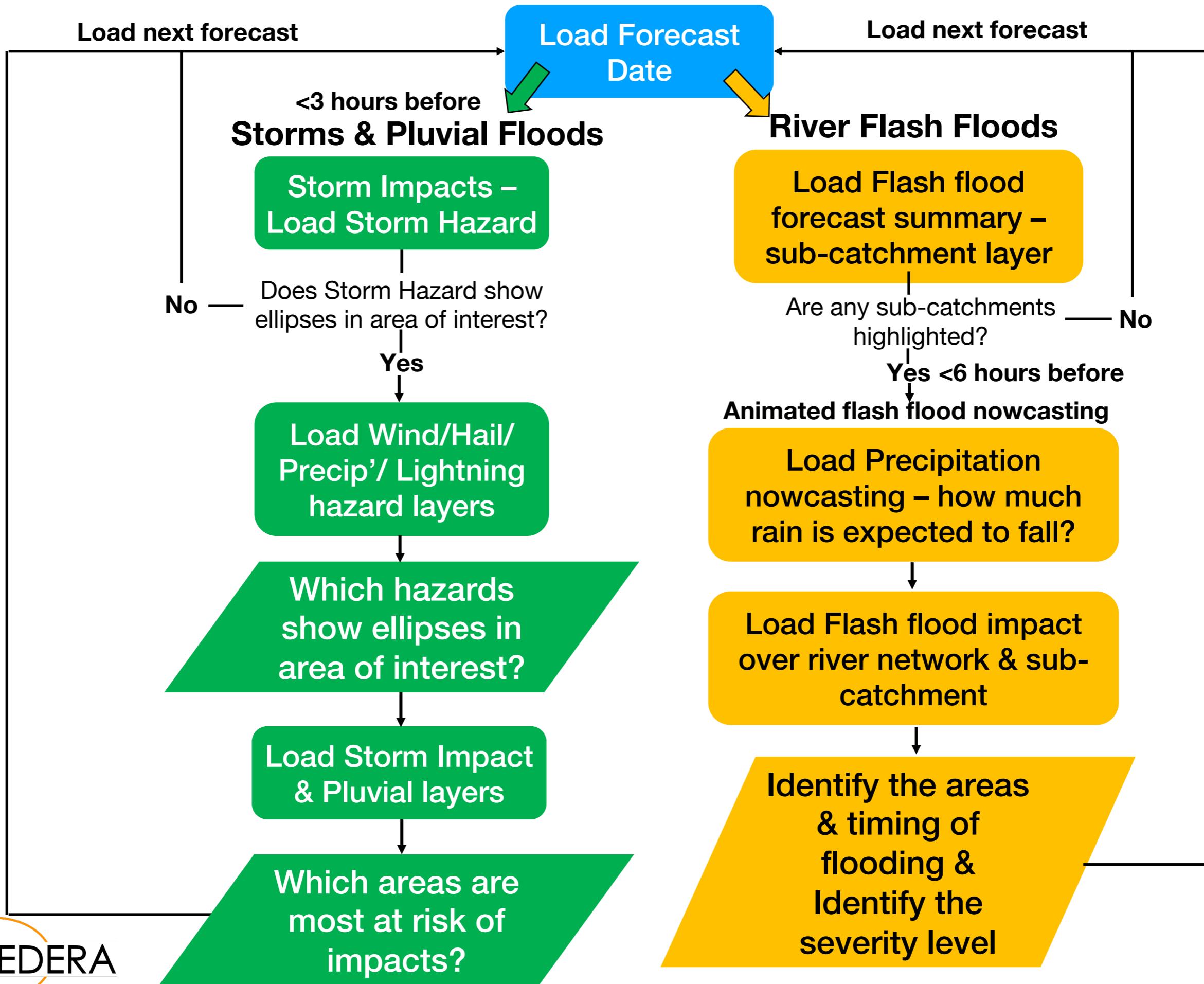
Useful <div style="display: flex; justify-content: space-around;">Product 1Product 3</div>	Somewhat Useful
Not useful <div style="display: flex; justify-content: space-around;">Product 4Product 2</div>	Not used

EDERA Product Configuration

- What products are you most likely to use during the 15-month demonstration phase?
- How could these products be improved?
 - e.g. visualisation – spatial / temporal aggregation

Guidance to Analysts - Checklist

What guidance can be given to analysts on how to analyse the products on the web viewer? – Checklist?



Stakeholder Participation during 15-month demonstration phase

Demonstration Phase

Duration: Now – Oct 2024

During this time, we would like EDERA stakeholders to:

- Routinely check the realtime EDERA forecasts
 - **Notification service** can help tell you when to look at the platform
 - Or look after an event to see what EDERA would have shown
- Provide feedback to FMI/ ECMWF/ UPC about the products:
 - Accuracy, usefulness, lead time

How can we encourage your analysts to routinely check the EDERA forecasts?

Viewing the Forecasts

How would your analysts prefer to view the EDERA forecasts?

1. Using the EDERA web viewer

2. Using web services to visualise forecasts in their own platform – not really possible for now

When to Check Forecasts - EDERA Notification Service - Emails

During 15-month demonstration we can send notifications based on the EDERA flash flood catchment summary forecast product

EFAS Flash Flood Notification*

NOTIFICATION DETAILS:

- Country(ies): **United Kingdom**
- Administration Region(s): **Bridgend and Neath Port Talbot, Derby**
- Likely start of event: **Friday, 13th of October 2023 - 06:00**
- Probability to exceed a 5-year flash flood return period threshold: **37 %**
- Probability to exceed a 20-year flash flood return period threshold: **17 %**

ADDITIONAL INFORMATION:

- Forecast date: **2023-10-12 00 UTC**
- Affected area susceptible to landslides: **Very High: 15 km², High: 15 km², Moderate: 60 km²**
- Forecaster Comments: -

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

More information about the EFAS flash flood notifications is available on the [EFAS wiki](#)

These will be similar to EFAS Flash Flood Notifications

When to Check Forecasts - EDERA Notification Service – Web Viewer

EDERA Platform

Flash flood forecast summary (0-120h)

Official warnings (1)

Official warnings

Meteorological layers (1)

Seamless precipitation accumulation

Flash flood impact layers (1)

Flash flood impact over sub-catchment

Storm Impact

Animated flash flood nowcasting

Flash flood past 24-h summary

Static layers

Exposure (1)

Exposure

Flood hazard and risk maps (3)

Flood Area (T1000)

Flood Area (T050)

Flood Area (T010)

Filter (ex: Levante almeriense)

Official warnings

Red warnings 21

Helsinki
Product: Urban Flood
Type: Flood
Start: 2023-08-31 00:45
End: 2023-08-31 02:00

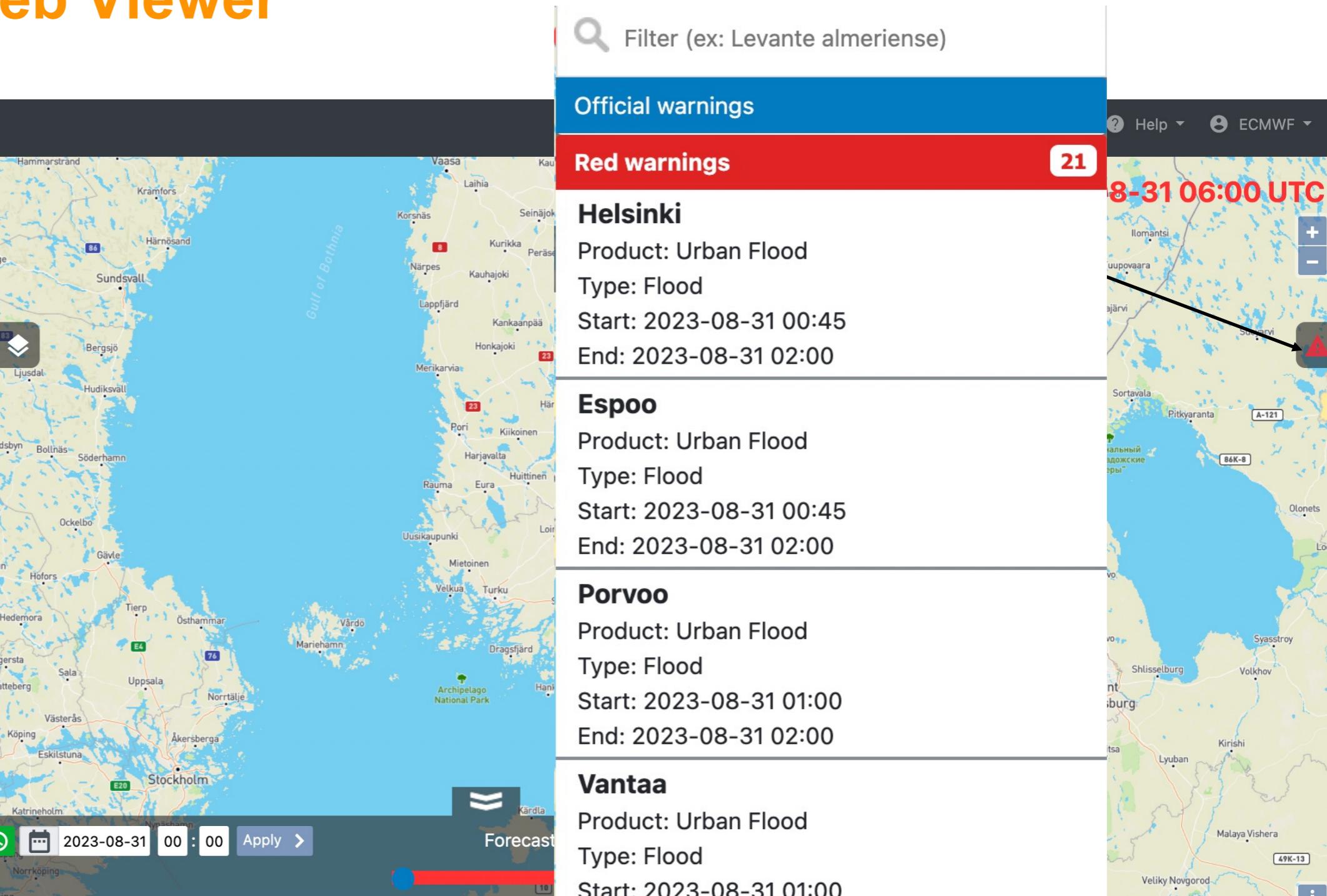
Espoo
Product: Urban Flood
Type: Flood
Start: 2023-08-31 00:45
End: 2023-08-31 02:00

Porvoo
Product: Urban Flood
Type: Flood
Start: 2023-08-31 01:00
End: 2023-08-31 02:00

Vantaa
Product: Urban Flood
Type: Flood
Start: 2023-08-31 01:00
End: 2023-08-31 02:15

Lappeenranta
Product: Urban Flood
Type: Flood
Start: 2023-08-31 01:15

8-31 06:00 UTC

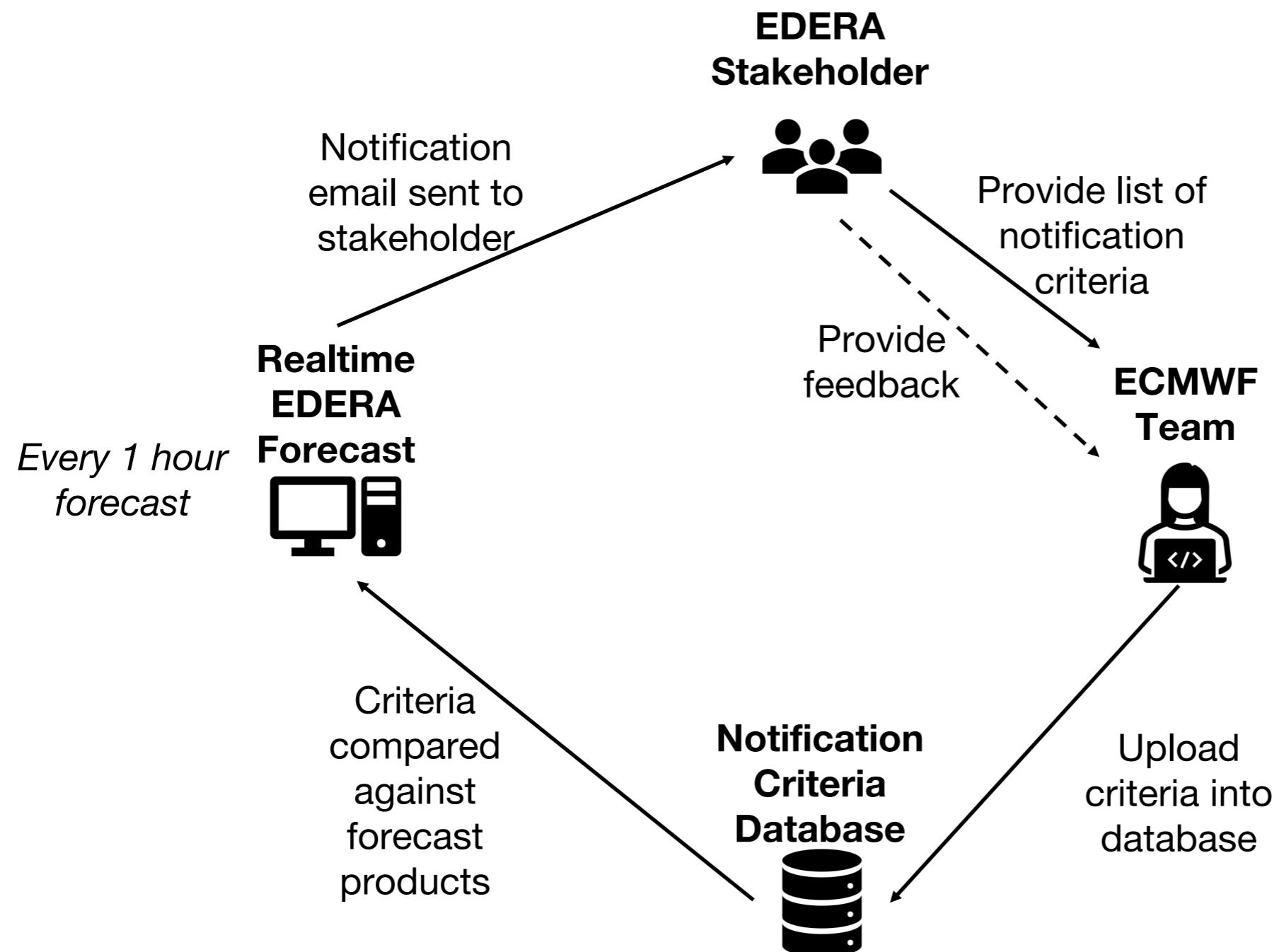


EDERA



Co-funded by
the European Union

EDERA Notification Service



EDERA Notification Service - Criteria

You can provide us (by email) with criteria for sending notifications:

Mandatory criteria

- *Area of interest* – specific regions/rivers, or provide a shapefile
- *Lead time of interest*
 - e.g. 0-24 hours

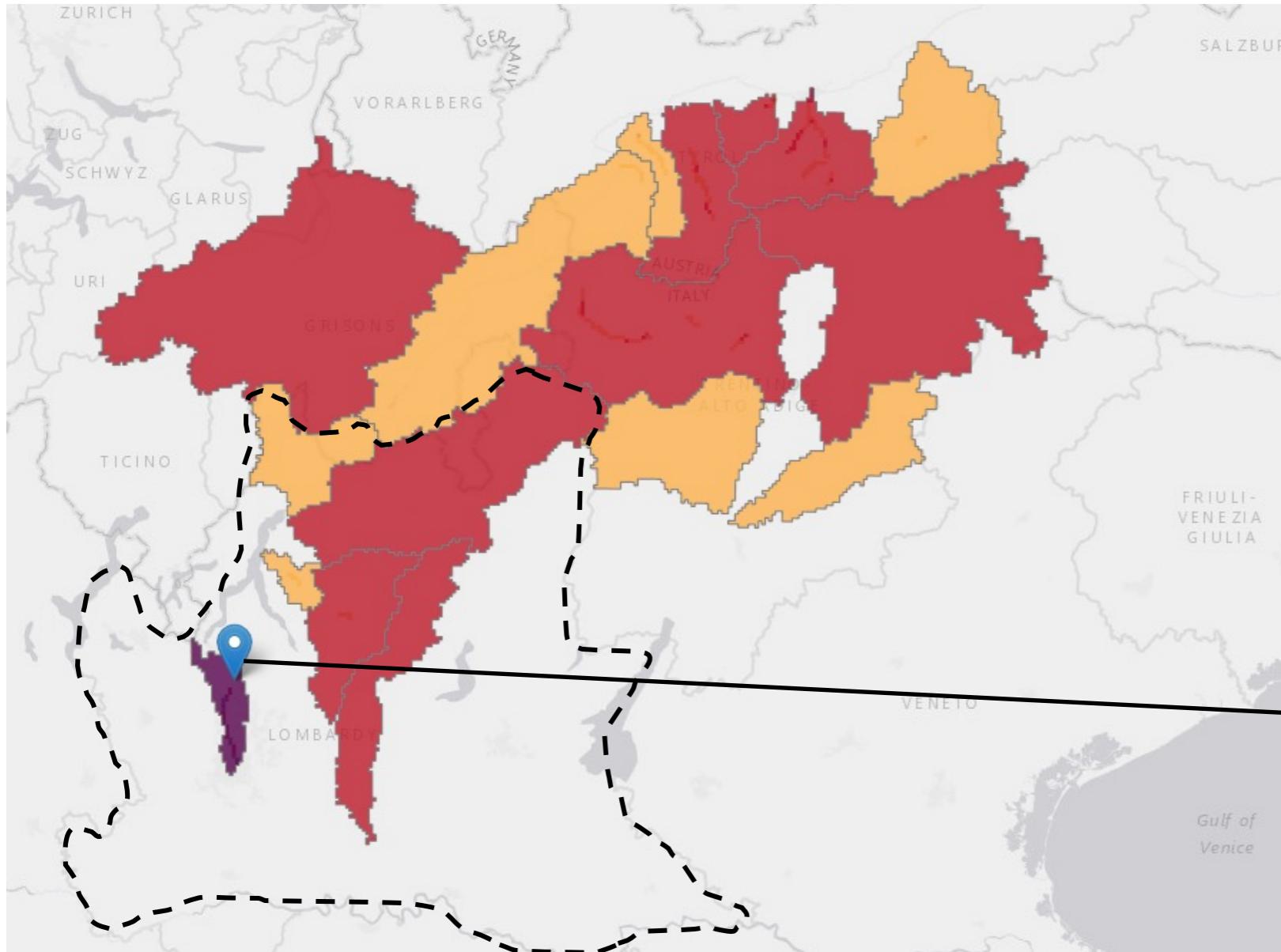
Optional:
Choose 1 or
more of
these

- *Exceedance probability*
 - $x\%$ probability of exceeding 2 year return period
- *Impact category*
 - Only send notifications for red/purple catchments
- *Population affected*
 - y number of people potentially affected in your area of interest

Send criteria to: edera@lists.ecmwf.int

EDERA Notification Service - Example

Notifications generated from Catchment Summary layers



Criteria:

- *Area of interest* – dashed line
- *Lead time* – 0-6 hours
- *2 year exceedance probability*: 60%

Catchment 1
Lead time = **2 hours**
Exceedance probability = **90%**

= send notification
email

EDERA Notification Service - Example

If one or more catchments within your area of interest meet your criteria, you will receive an email notification...

Notification Details

- Country(ies): **Finland**
- Administration Region(s): **Kymenlaakso**
- River(s): **Kymijoki**
- Likely peak of event: **Friday 13th October 2023 – 06:00 UTC**
- Probability to exceed a 2-year return period threshold: **90%**

Impact Information

- Total population potentially affected: **10000**
- Maximum impact category: **Severe**

Additional Information:

- Forecast date: **2023-10-13 00 UTC**

This is the only notification you will receive for this event! Please follow the event on the EDERA platform

What other information could be added to the notification email?

EDERA Notification Service – Discussion Points

What extra information could be added to the emails?

e.g. adding impact matrix?

Notification Details

- Country(ies): **Finland**
- Administration Region(s): **Kymenlaakso**
- River(s): **Kymijoki**
- Likely peak of event: **Friday 13th October 2023 – 06:00 UTC**
- Probability to exceed a 2-year return period threshold: **90%**

Impact Information

- Total population potentially affected: **10000**
- Maximum impact category: **Severe**

Additional Information:

- Forecast date: **2023-10-13 00 UTC**

	Low Exposure	Medium Exposure	High Exposure
High Likelihood			✓
Medium Likelihood			
Low Likelihood			

EDERA Notification Service – Other Aspects

- What if multiple catchments within your area of interest meet your notification criteria? – summarise into single email?

Notification Details

- Country(ies): **Finland**
- Administration Region(s): **Kymenlaakso**
- River(s): **Kymijoki**
- Likely peak of event: **Friday 13th October 2023 – 06:00 UTC**
- Probability to exceed a 2-year return period threshold: **90%**

List all regions / rivers – order by severity, colour code by severity?

Earliest peak?

Maximum exceedance probability?

Impact Information

- Total population potentially affected: **10000**
- Maximum impact category: **Severe**

Total population?

Maximum category?

Additional Information:

- Forecast date: **2023-10-13 00 UTC**

This is the only notification you will receive for this event! Please follow the event on the EDERA platform

EDERA Notification Service – Other Aspects

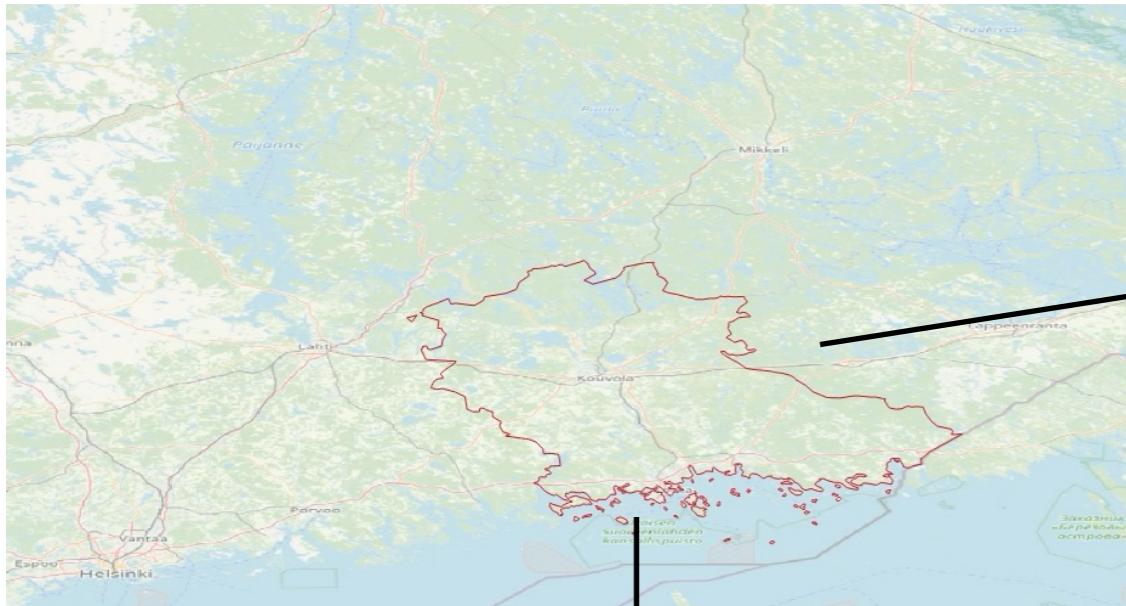
How often do you wish to receive notifications?

- New forecasts produced every hour
 - But this could result in sending loads of notifications
- Limit number sent per day
 - For example, 1 email per day?

EDERA Notification Service - Criteria

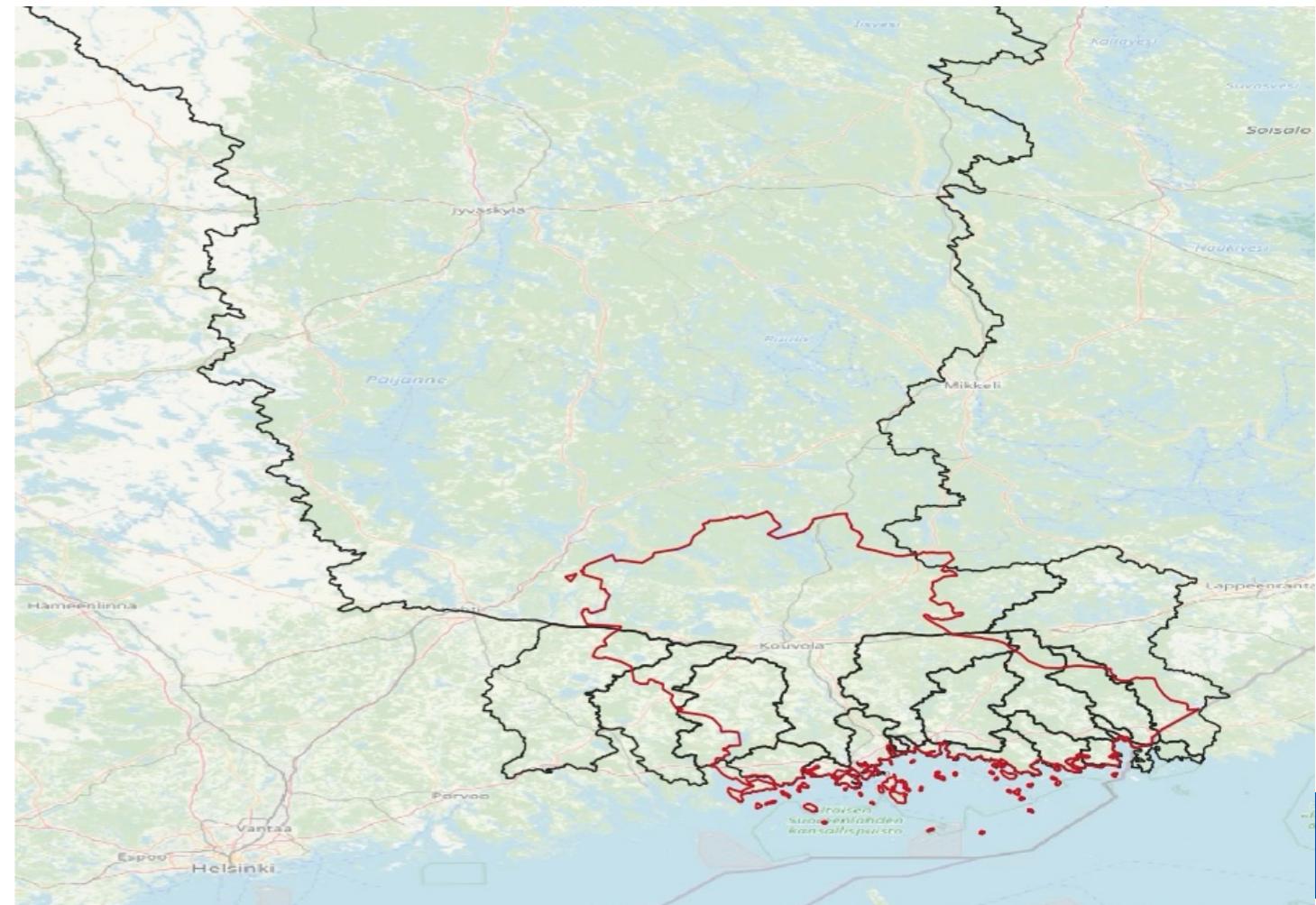
Defining Area of Interest – example of Kymenlaakso

Stakeholder provides their area of interest



Option 1: Do you only want notifications within this area?

Option 2: Receive notifications for flooding in any river catchment which intersects your region?



EDERA Notification Service – Next Steps

- Each stakeholder to decide on their criteria for receiving notifications
- Send these criteria to: **edera@lists.ecmwf.int**
 - Email address(es) of people to receive notifications
 - Area of interest
 - Lead time of interest
 - Optional: One or more of:
 - Exceedance probability of the 2-year return period threshold
 - Impact category
 - Total population affected

Stakeholder Feedback

Providing Feedback During Demonstration Phase

At the bottom of each notification email, will be a link to provide feedback via a form (based on EFAS feedback form)

Notification Details

- Country(ies): **Finland**
- Administration Region(s): **Kymenlaakso**
- River(s): **Kymijoki**
- Likely peak of event: **Friday 13th October 2023 – 06:00 UTC**
- Probability to exceed a 2-year return period threshold: **90%**

Impact Information

- Total population potentially affected: **10000**
- Maximum impact category: **Severe**

Additional Information:

- Forecast date: **2023-10-13 00 UTC**

This is the only notification you will receive for this event! Please follow the event on the EDERA platform

Please provide feedback about this notification using the link below:

Feedback Form

Notification Feedback Form

EDERA Notification Feedback Form - mockup

This form aims to collect feedback on the EDERA notification you received for an event.

calum.baugh55@gmail.com [Switch accounts](#) 

* Indicates required question

Email *

test@test.com

What organisation are you from? *

Your answer

What was the date you received the notification? *

Date

02/11/2023 

Are you providing feedback to an EDERA notification you received? (select No to report a missed event) *

Yes

No

[Next](#)

Page 1 of 4

[Clear form](#)

EDERA Notification Feedback

This section aims to collect feedback on events identified by an EDERA Notification.

What was the location of the event? *

Your answer

Did the location of the event match the area identified in the EDERA Notification? *

- Yes - location of event was an exact match
- Yes - location of event was not an exact match but surrounding area(s) were affected
- No - location of event was incorrect

When was the observed peak of this event? (include Date, Time, and Timezone) *

Your answer

How accurate was the EDERA Notification in forecasting the event peak? *

Choose

 This is a required question

What was the observed flood impact severity for this event? *

Choose

What were the reported impacts of this event? *

Your answer

Other comments? *

When to Provide Feedback

- As soon as possible after the event –
 - If you received a notification - complete the form (link at bottom of email)
- Missed events: If no notification received there is a separate form

How can we stay in regular contact with you to receive your feedback?

- What format?
 - Email reminder to provide feedback
 - Online catch up meetings

What will Feedback be Used for?

- Revise notification criteria
 - e.g. if you receive too many notifications, we can increase the probability threshold
- Revise the product design
- Evaluate the accuracy of the forecast products
 - Hits, misses, false alarms

Conclusions

With your continued feedback throughout the demonstration phase, the products/notifications can be iterated to make them as useful as possible to your analysts

Any Questions?

edera@lists.ecmwf.int