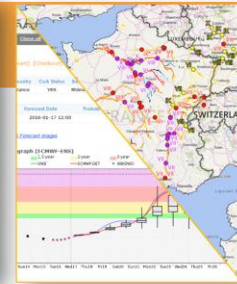# The Cartography game

Monitoring & ongoing situation

Flash flood forecast

Riverine flood forecast (hazard)

Riverine flood forecast (impact)

Sub-seasonal to seasonal outlooks

Emergency Management

1. *Does your country/region have an operational flood early warning service?*
2. *Which organisation is responsible for operating the service?*
3. *What is your role in the early warning service (i.e. data exchange, service communication, response coordination)?*
4. *How are you running the operational service?*
5. *What component are you missing?*

Does your country/region have an operational flood early warning service?

How are you running the operational service?

What component are you missing?

What are your future developments?

padlet

EFAS products at a glance

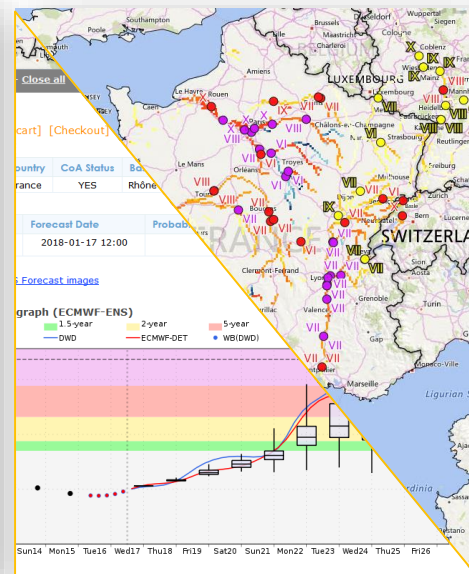*Hour* *Day* *Week* *Month* *Season* *Year* *Century*

Monitoring & ongoing situation

Flash flood forecast

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Emergency Management

Hour   Day   Week   Month   Season   Year   Century

Understand the added-value of EFAS service and products for the different partners

1. Does your country/region have an operational flood early warning service?
2. Which organisation is responsible for operating the service?
3. What is your role in the early warning service (i.e. data exchange, service communication, response coordination)?

4. How are you running the operational service?
Based on monitoring and/or forecasting?
Which NWP systems are you using?
Deterministic and/or probabilistic forecasting?

5. What component are you missing?
- *Probabilistic forecasting*
- *Flash flood forecasting*
- *Extended time horizons*
- *Impact assessment (flood mapping)*
- *Monitoring based on satellite data*
- *Social media activity analysis*

Expected outcomes
For EFAS partners:
Exchange with other partners on methods being used in short-term and long-term decision-making.

For EFAS DISS:
Have a better understanding of how the service contributes to regional decision-making.

4

Emergency Management

In-person participation

Be honest responding, this is not a competition ☺

1. Get a set of sticky-notes
2. In each note, write your's and your organization's name
3. Answer the corresponding questions

Remote participation

Be honest responding, this is not a competition ☺

1. Access Padlet (https://padlet.com/iliaspechlivanidis/lbb0fvidirmhq78c)
2. Create a note, give it a color, and write your's and your organization's name
3. Answer the corresponding questions

1. Does your country/region have an operational flood early warning service?

2. Which organisation is responsible for operating the service?

3. What is your role in the early warning service (i.e. data exchange, service communication, response coordination)?

4. How are you running the operational service?
- *Based on monitoring and/or forecasting?*
- *Which NWP systems are you using?*
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- *Probabilistic forecasting*
- *Flash flood forecasting*
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- *Impact assessment (flood mapping)*
- *Monitoring based on satellite data*
- *Social media activity analysis*

6. What are your future (next 5 yrs) developments?

Emergency Management

1. Does your country/region have an operational flood early warning service?
- Yes
2. Which organisation is responsible for operating the service? How close is your collaboration in terms of data exchange, service communication?
– SMHI (EFAS partner)
3. What is your role in the early warning service?
- We control national data and EWS. We communicate results to other organisations too.

Ilias Pechlivanidis (SMHI)
4. How are you running the operational service?
• **Based on monitoring and/or forecasting?**
- Both based on ongoing and forecasted floods
• **Which NWP systems are you using?**
- Harmonie-Arome & ECMFWF Det. for deterministic; ECMWF EPS prob.
• **Deterministic and/or probabilistic forecasting?**
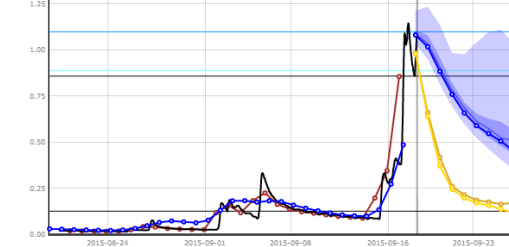**- Meteo is probabilistic. Hydro is deterministic (S-HYPE)**

Ilias Pechlivanidis (SMHI)

5. What component are you missing?
- Flash flood forecasting

- Extended time horizons (sub-seasonal and seasonal)

- Monitoring based on satellite data

- Social media activity analysis

Seasonal streamflow forecasting using past climatology to drive the S-HYPE model
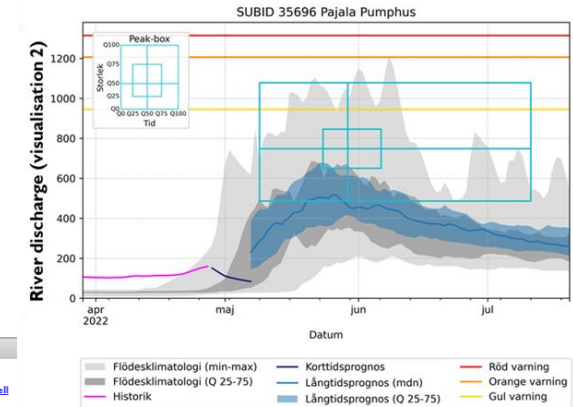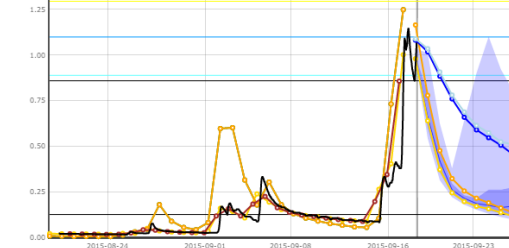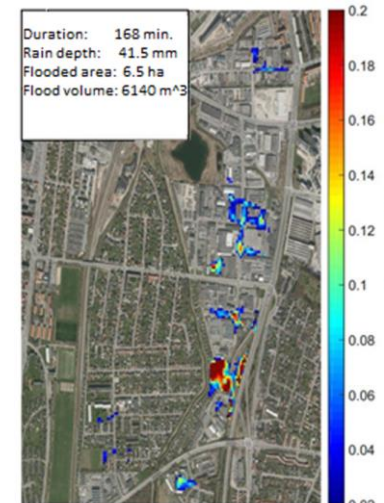

Probabilistic forecasting considering uncertainty in meteorology (ensembles)

Extended use of improved flood risk mapping for impact-based forecasting, by coupling hydrological and hydraulic models at high resolutions in space and time.

Discussion on future plans

Emergency Management

1. Does your country/region have an operational flood early warning service?
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2. Which organisation is responsible for operating the service? How close is your collaboration in terms of data exchange, service communication?
– SMHI (EFAS partner)
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- Meteo is probabilistic. Hydro is deterministic (S-HYPE)

Ilias Pechlivanidis (SMHI)

5. What component are you missing?
- Flash flood forecasting

- Extended time horizons (sub-seasonal and seasonal)

- Monitoring based on satellite data

- Social media activity analysis

Ilias Pechlivanidis (SMHI)

6. What are your future (next 5 yrs) developments?
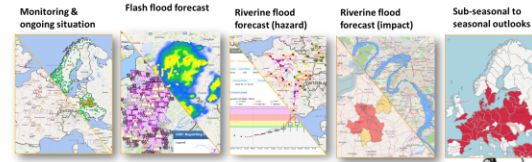- Flash flood forecasting using 1 hour resolution at the national scale

- Seasonal streamflow forecasting service for the entire country

SMHI

Time for hands-on

Understand the added-value of EFAS service and products for the different partners

Monitoring & ongoing situation | Flash flood forecast | Riverine flood forecast (hazard) | Riverine flood forecast (impact) | Sub-seasonal to seasonal outlooks

1. Does your country/region have an operational flood early warning service?
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Padlet link:
(https://padlet.com/iliaspec
hlivanidis/lbb0fvidirmhq78c)