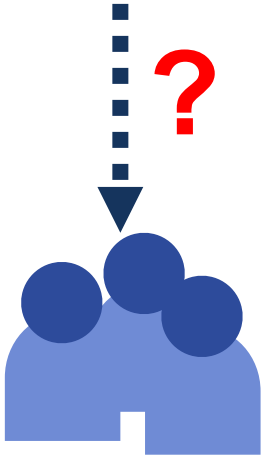
The Natural Hazards Portal for Germany — Updates and Developments



by the NGP Team at Deutscher Wetterdienst (DWD)
presented by Hella Riede

Ahrtal Flooding 14/15 July 2021

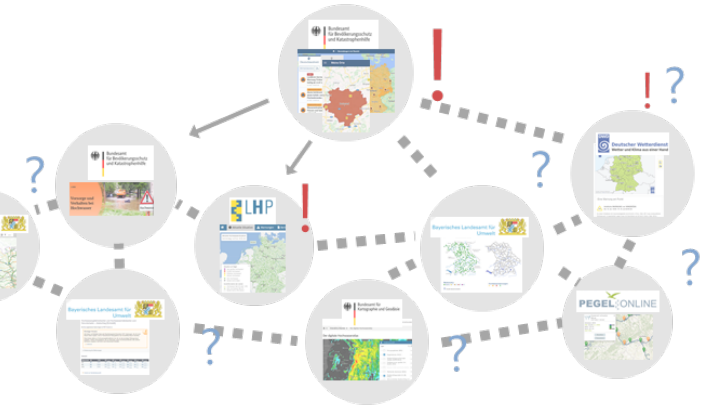
Information



Quelle: https://reportage.wdr.de/chronik-ahrtal-hochwasser-katastrophe



Philosophy



Various

- Platforms
- Administrative levels
- Warning and hazard scales

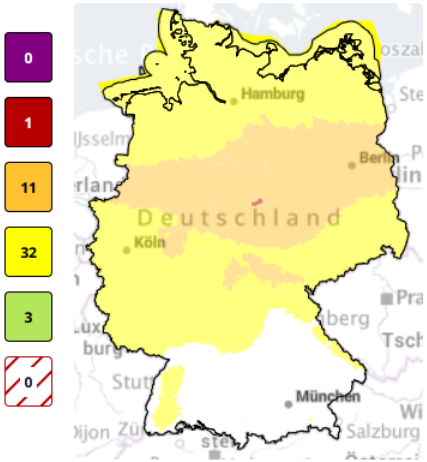
A single accessible platform about natural hazards in Germany, for public information and preparedness.



Welcome to the Natural Hazards Portal for Germany

The Natural Hazards Portal provides information about natural hazards in Germany. It includes current warnings, location-specific hazard and risk information as well as practical hints on prevention and recommended actions.

Current Warnings



Hazards & Risks



Prevention & Action



About this portal



Welcome to the Natural Hazards Portal for Germany

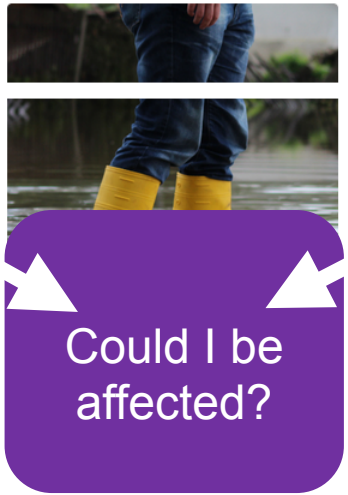
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Current Warnings



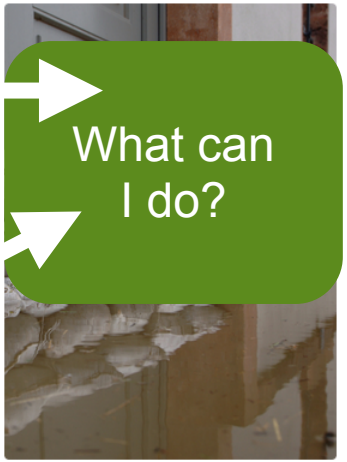
What's happening?

Hazards & Risks



Could I be affected?

Prevention & Action



What can I do?

About this portal



Update

NGP Naturgefahrenportal

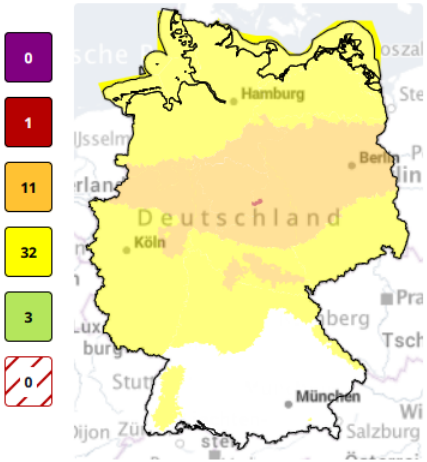
Current Warnings | Hazards & Risks | Prevention & Action | About this portal | English

Logo

Welcome to the Natural Hazards Portal for Germany

The Natural Hazards Portal provides information about natural hazards in Germany. It includes current warnings, location-specific hazard and risk information as well as practical hints on prevention and recommended actions.

Current Warnings



Hazards & Risks



Prevention & Action



About this portal



NGP

When weather becomes a hazard.

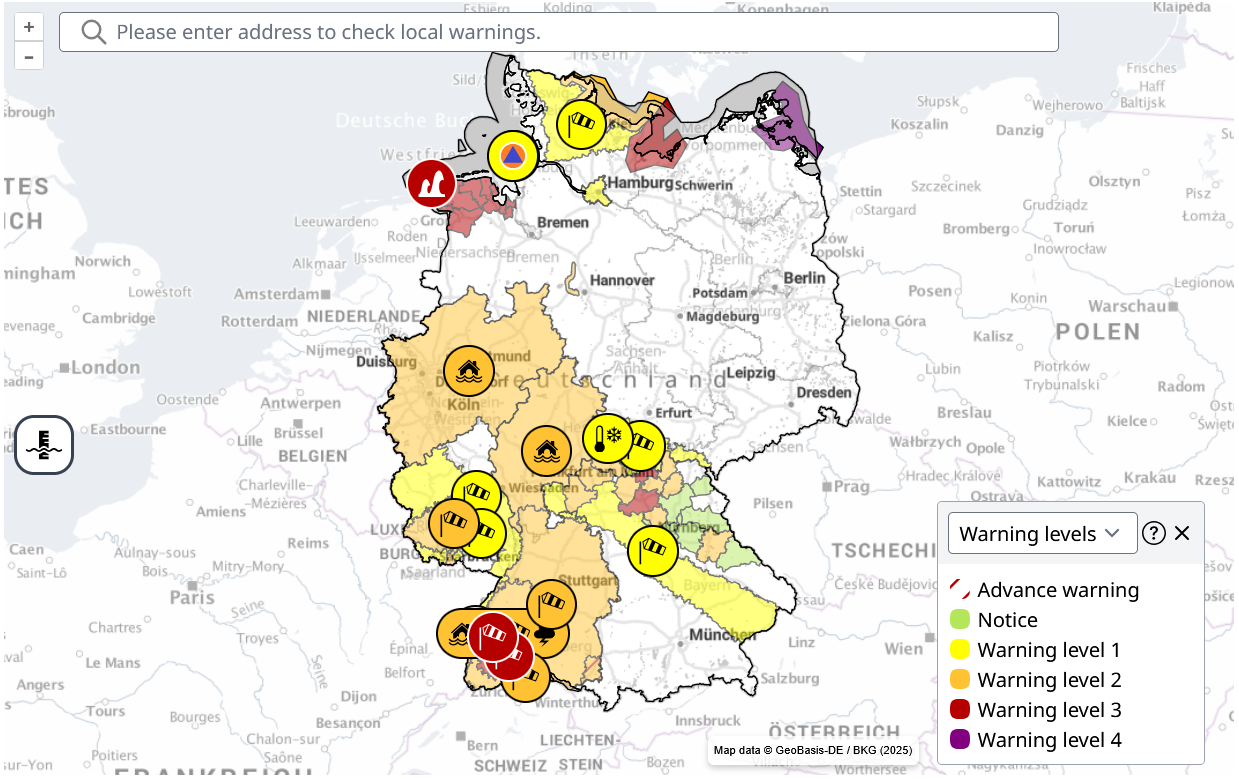
Natural Hazards Portal – informed before it happens.



Natural Hazards Portal (NGP)

All warnings

Please enter address to check local warnings.



For Germany there are 39 warnings:

- Warning: Storm surge level 4 of 4
- Warning: Storm surge level 3 of 4
- Warning: Storm surge level 3 of 4
- Advance warning: Icy surfaces
- Warning: Flooding level 3 of 4
- Warning: Flooding level 3 of 4
- Warning: Wind gusts level 3 of 4
- Warning: Storm surge level 2 of 4
- Warning: Flooding level 2 of 4

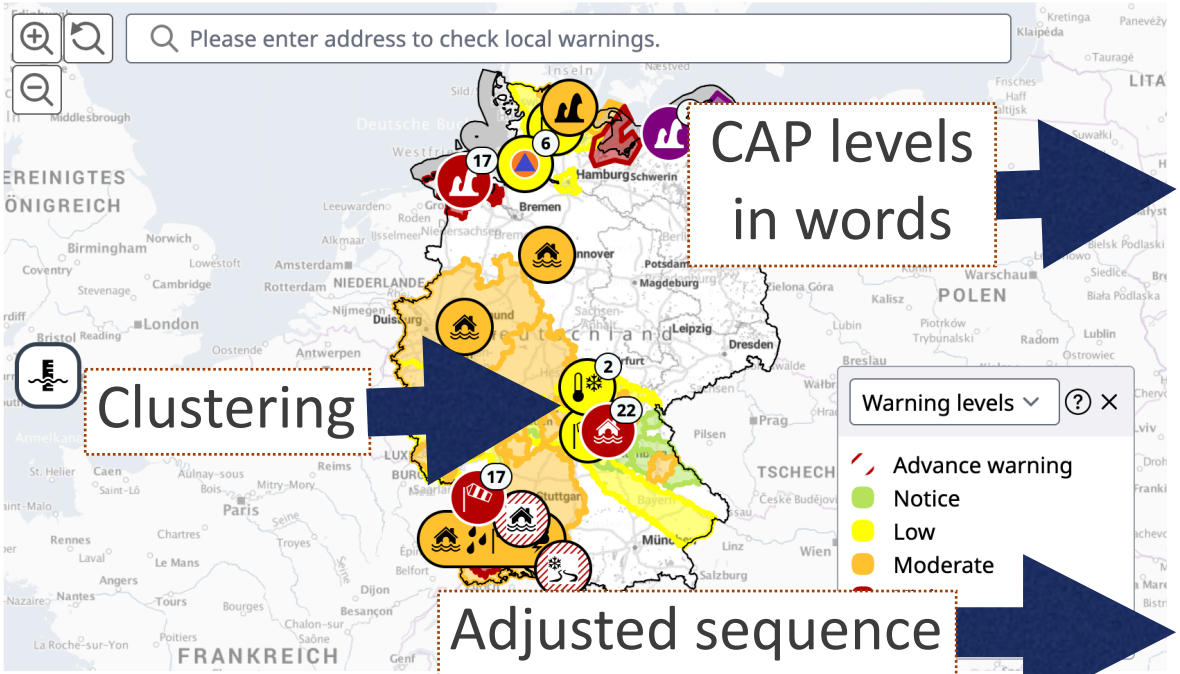
Update

NGP Naturgefahrenportal

Current Warnings | Hazards & Risks | Prevention & Action | About this portal | English

All warnings

Please enter address to check local warnings.



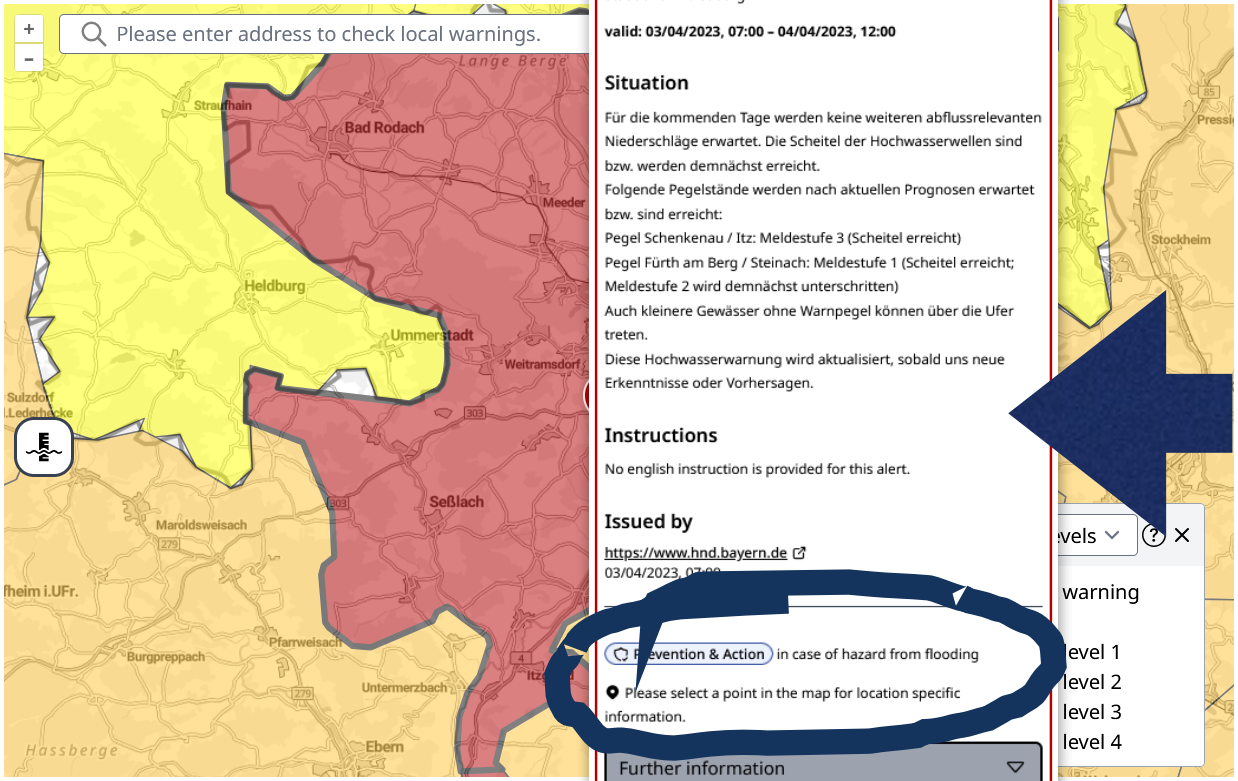
For Germany there are 39 warnings :

- Extreme warning level: Storm surge
- High warning level: Storm surge
- High warning level: Storm surge
- High warning level: Flooding
- High warning level: Flooding
- High warning level: Wind gusts
- Advance warning: Flooding

Deutscher Wetterdienst

All warnings

Please enter address to check local warnings.



Warning: Flooding level 3 of 4

Hochwasserwarnung vor Überschwemmungsgefahr für bebaute Gebiete

affected area:
Stadt und Lkr. Coburg

valid: 03/04/2023, 07:00 – 04/04/2023, 12:00

Situation

Für die kommenden Tage werden keine weiteren abflussrelevanten Niederschläge erwartet. Die Scheitel der Hochwasserwellen sind bzw. werden demnächst erreicht.
Folgende Pegelstände werden nach aktuellen Prognosen erwartet bzw. sind erreicht:
Pegel Schenkenau / Itz: Meldestufe 3 (Scheitel erreicht)
Pegel Fürth am Berg / Steinach: Meldestufe 1 (Scheitel erreicht; Meldestufe 2 wird demnächst unterschritten)
Auch kleinere Gewässer ohne Warnpegel können über die Ufer treten.
Diese Hochwasserwarnung wird aktualisiert, sobald uns neue Erkenntnisse oder Vorhersagen.

Instructions

No english instruction is provided for this alert.

Issued by

https://www.hnd.bayern.de
03/04/2023, 07:00

...evention & Action in case of hazard from flooding

Please select a point in the map for location specific information.

Further information

...evels

...warning

...level 1
...level 2
...level 3
...level 4

For Germany there are 39 warnings:

Warning: Storm surge level 4 of 4

Warning: Storm surge level 3 of 4

Warning: Storm surge level 3 of 4

Advance warning: Icy surfaces

Warning: Flooding level 3 of 4

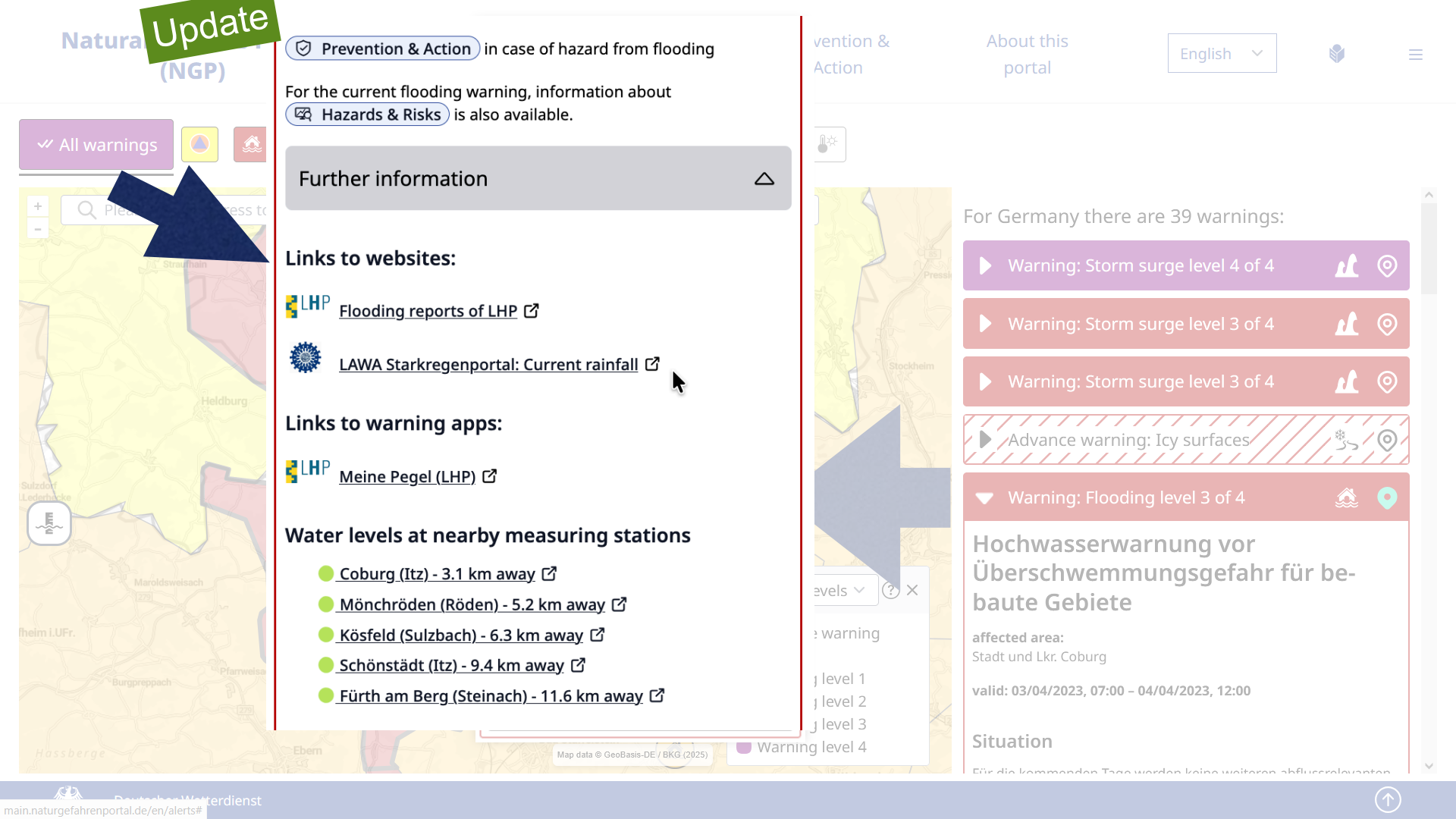
Hochwasserwarnung vor Überschwemmungsgefahr für bebaute Gebiete

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Stadt und Lkr. Coburg

valid: 03/04/2023, 07:00 – 04/04/2023, 12:00

Situation

Für die kommenden Tage werden keine weiteren abflussrelevante...

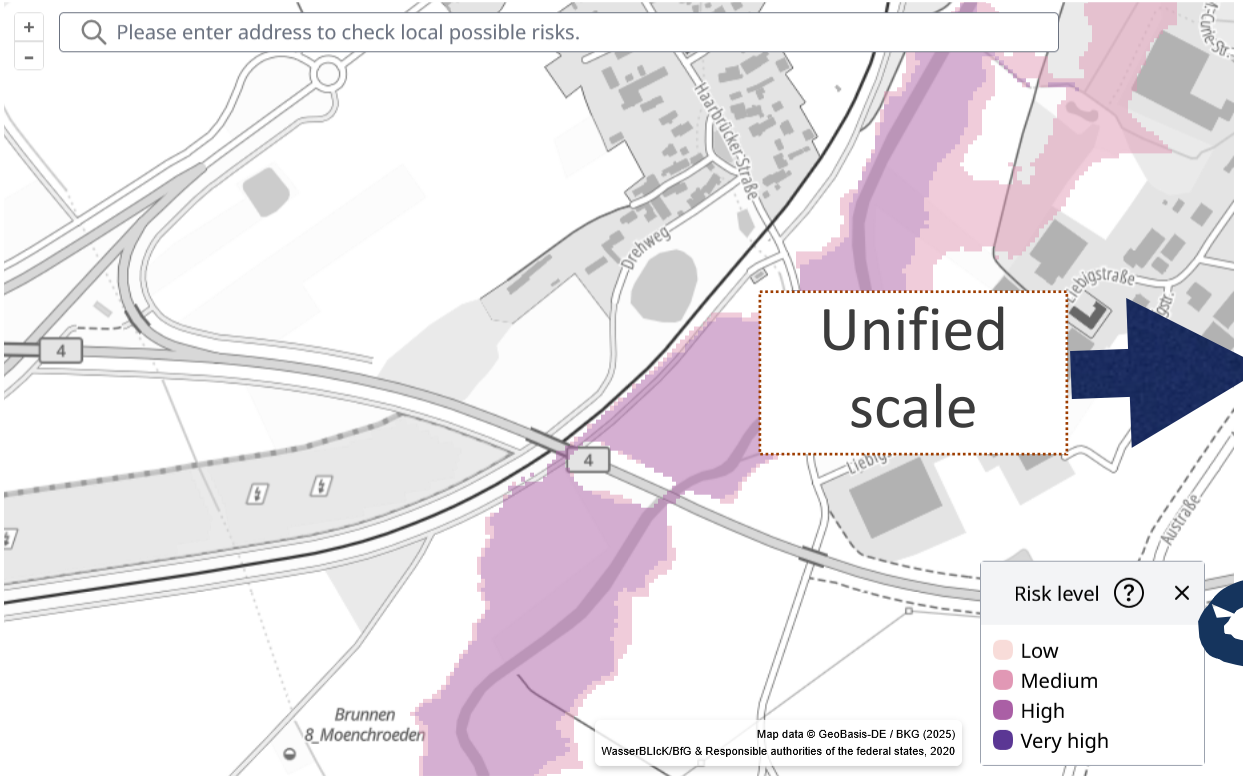

Update
Prevention & Action in case of hazard from flooding
For the current flooding warning, information about
Hazards & Risks is also available.
Further information
Links to websites:
Flooding reports of LHP
LAWA Starkregenportal: Current rainfall
Links to warning apps:
Meine Pegel (LHP)
Water levels at nearby measuring stations
Coburg (Itz) - 3.1 km away
Mönchröden (Röden) - 5.2 km away
Kösfeld (Sulzbach) - 6.3 km away
Schönstädt (Itz) - 9.4 km away
Fürth am Berg (Steinach) - 11.6 km away
(NGP)
vention & Action
About this portal
English
All warnings
For Germany there are 39 warnings:
Warning: Storm surge level 4 of 4
Warning: Storm surge level 3 of 4
Warning: Storm surge level 3 of 4
Advance warning: Icy surfaces
Warning: Flooding level 3 of 4
Hochwasserwarnung vor Überschwemmungsgefahr für bebaute Gebiete
affected area:
Stadt und Lkr. Coburg
valid: 03/04/2023, 07:00 – 04/04/2023, 12:00
Situation
Map data © GeoBasis-DE / BKG (2025)
level 1
level 2
level 3
Warning level 4
Deutscher Wetterdienst
main.naturgefahrenportal.de/en/alerts#

NGP

Am I at risk?

Natural Hazards Portal – Our knowledge. Your prevention.





Unified scale

There are **warnings of level 3** in place for the selected location.

Selected natural hazard: **Flooding**

Remove location filter | What is shown on the map?

Hazards & Risks for selected point in map

Flooding: Medium

Low | Medium | High | Very high

You can find further information on the following pages:

UmweltAtlas überschwemmungsgefährdete Gebiete Bayern

stalt für Gewässerkunde

Prevention & Action in of hazard from flooding

Update

NGP
Naturgefahrenportal

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Please enter address to check local warnings.

There are **warnings of level low** in place for the selected location.

Selected natural hazard: **Rain**

Remove location filter | What is shown on the map?

Reset Zoom

Hazards & Risks for selected point in map

Rain: Medium

Low | Medium | High | Very high

You can find further information on the following pages:

- Starkregen Thüringen
- BKG Hinweiskarte Starkregengefahren
- LAWA-Starkregenportal
- Prevention & Action in case of hazard from rain

More regional portals linked for water hazards

azard

Low
Medium
High
Very high

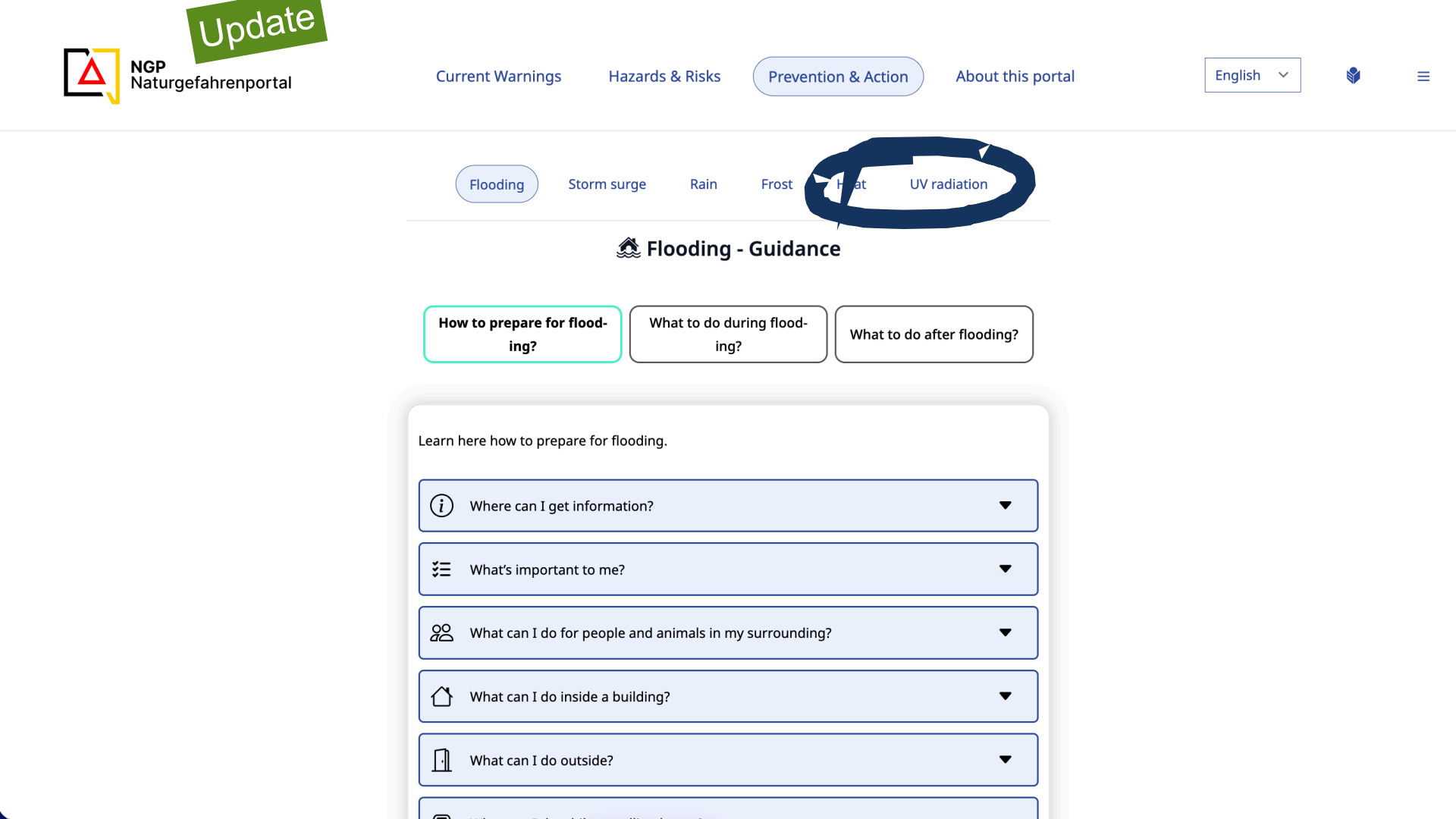
Fulda
Meiningen
Suhl
Ilmenau
Rudolstadt
Saalfeld/Saale
Zwickau
Plauen
Hof
Coburg
Schweinfurt
Würzburg
Kulmbach
Sokolo

Flooding - Guidance

How to prepare for flooding? | What to do during flooding? | What to do after flooding?

Learn here how to prepare for flooding.

- Where can I get information?
- Personal precautions
- Precautions for the people and animals around you
- Indoors
- Outdoors


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Hazards & Risks
Prevention & Action
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Storm surge
Rain
Frost
Heat
UV radiation
Flooding - Guidance
How to prepare for flood-ing?
What to do during flood-ing?
What to do after flooding?
Learn here how to prepare for flooding.
Where can I get information?
What's important to me?
What can I do for people and animals in my surrounding?
What can I do inside a building?
What can I do outside?

Philosophy Recap

Current Warnings

- Advance warning
- Notice
- Low
- Moderate
- High
- Extreme

Hazards & Risks

- Low
- Medium
- High
- Very high

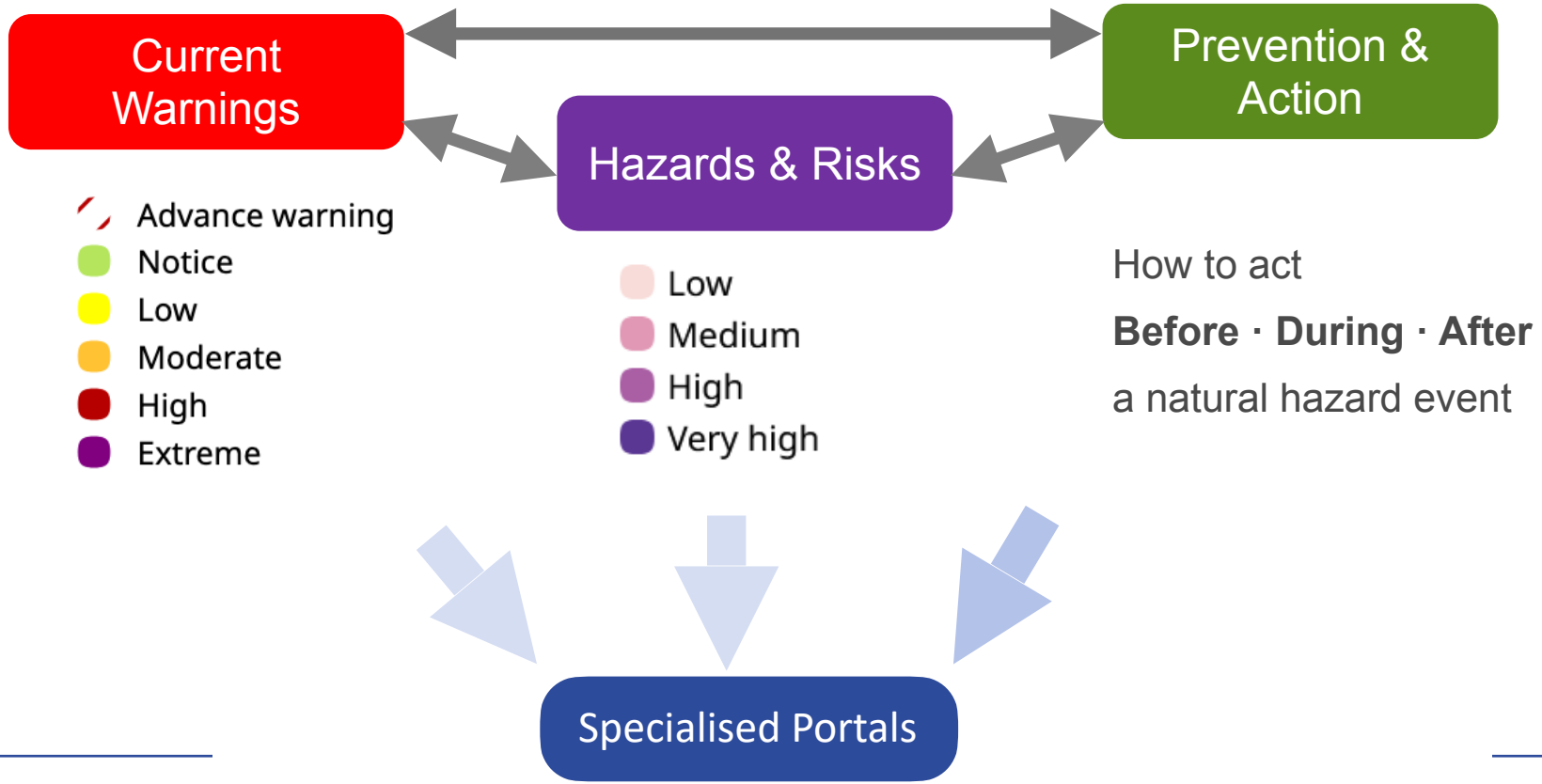
Prevention & Action

How to act

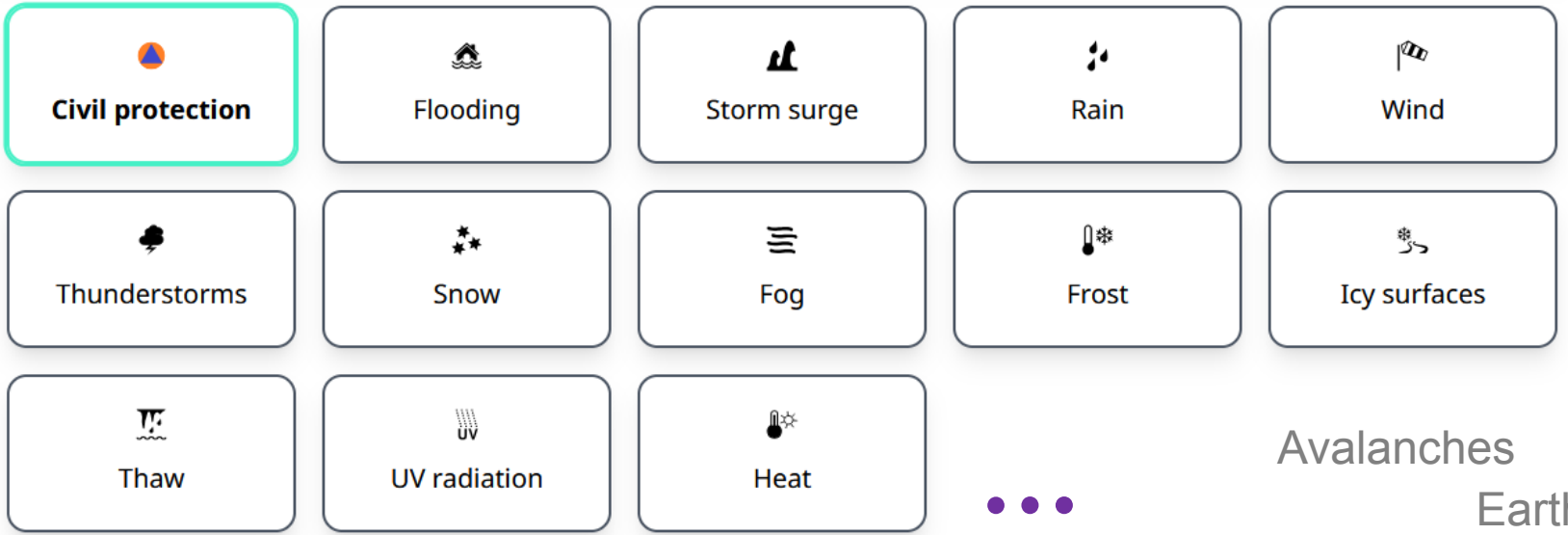
Before · During · After

a natural hazard event

Philosophy Recap



Hazard categories

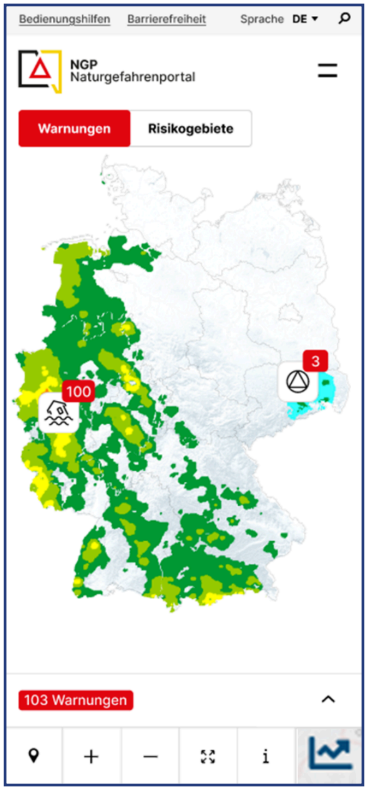


Avalanches

Earthquakes

Forest fire hazard index

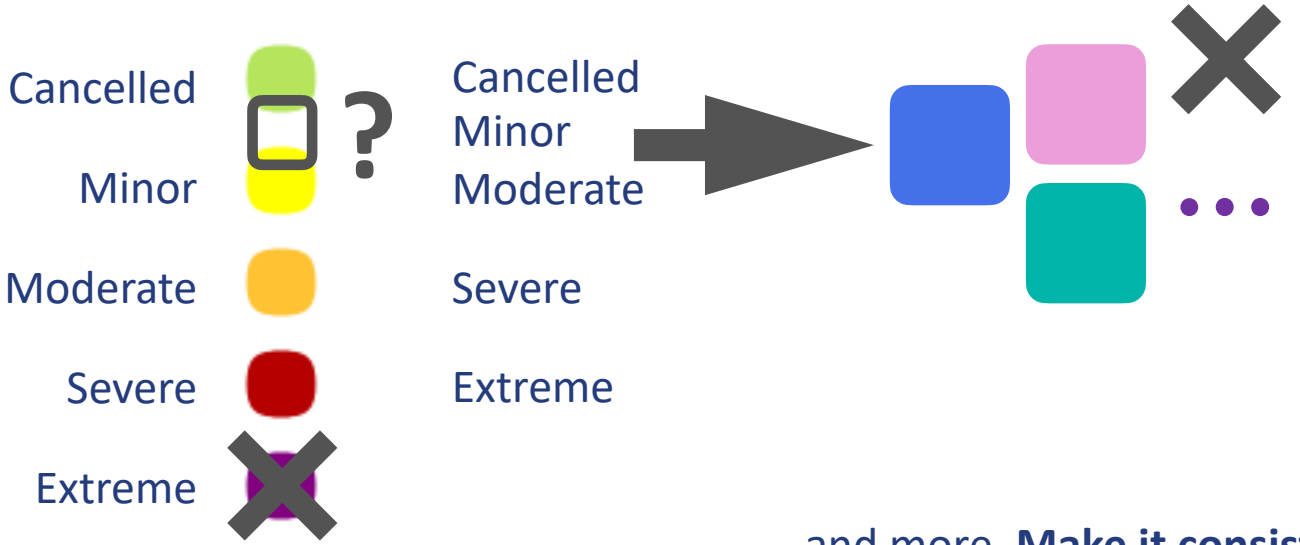
The future of NGP



- Sleeker, more minimalistic **design**
- Better **usability** and user experience on **mobile** devices
- Public portal for the new **DWD warnings** > EMS2026-672
- More **customised** information for social institutions and vulnerable groups: e.g., hospitals, nursery homes, elderly people at home, schools, children!

The future of NGP

Harmonize between German institutions in natural hazards communication:
Color codes + 'How to put 3 warning levels in 4 CAP levels'



... and more. **Make it consistent, correct, and easy!**

Thank you! Questions?

ES1.4 “Tech Session“
on data, code, and delivery
14:30 this room

ngp.team@dwd.de

Portal

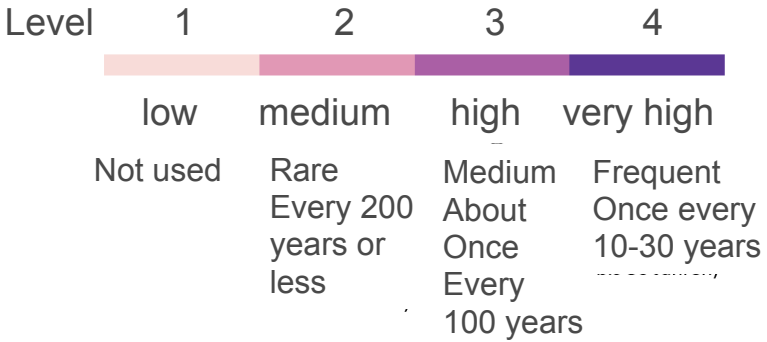
Paper

Made possible by Christoph Brendel, Bodo Erhardt, Mario Hafer, Michael Haller, Imke Hüser, Christian Koziar, Katharina Lengfeld, Dinah Kristin Rode, Armin Rauthe-Schöch, Björn Reetz, Hella Riede, Ewelina Walawender, a lot of support, and many collaborating institutions!

Scaling down on scales

- **Warnings:** 4 levels of “severity” as defined in CAP standard
- **Hazards & Risks**: some unified scales had to be developed

Example: Flood



Example: Rain

max. flow velocity

max. flood depth

	0 – 0,2 m/s	>0,2 – 0,5 m/s	>0,5 – 2 m/s	>2,0 m/s
0 - 5 cm	1	1	1	1
>5 - 10 cm	2	2	3	4
>10 - 50 cm	3	3	4	4
>50 - 100 cm	3	4	4	4
> 100 cm	4	4	4	4