

# Citizen Science and High Impact Weather: Bridging Gaps in the Warning Value Chain

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What did we learn?

## Value of citizen science in bridging communication gaps

- Citizens not only as end points, but facilitators of communication
- Public is not homogenous - diverse groups may respond to warnings differently. Consider inclusion of under-represented communities

## Enriching warnings with citizen science data

- Recognising the power of the crowd
- Opportunities for social sensing as an area extending from citizen science.
- Intangible and social benefits - increase awareness, understanding, and resilience.

## Citizen science has challenges and limitations

- Data quality issues from observations
- Personal interest and engagement can decline
- Personal biases regarding research objective
- Cost of rolling out, conducting, analysing projects

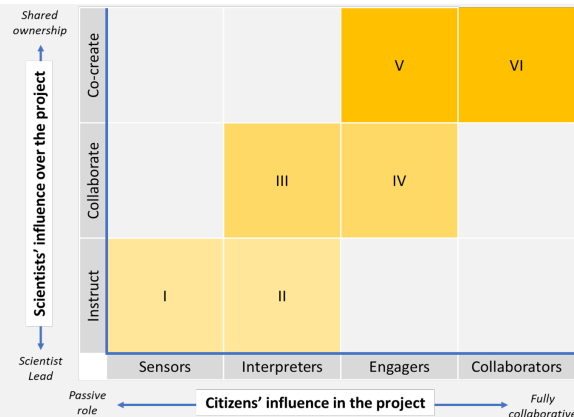
## What did we do?

- We conducted two online workshops to explore **the potential role of citizen science in the warning value chain for high impact weather** with subject matter experts.
- The workshop was an exploration of the intersection of warning value chain and citizen science.

Limitation: study is exploratory and only considers the voices of experts

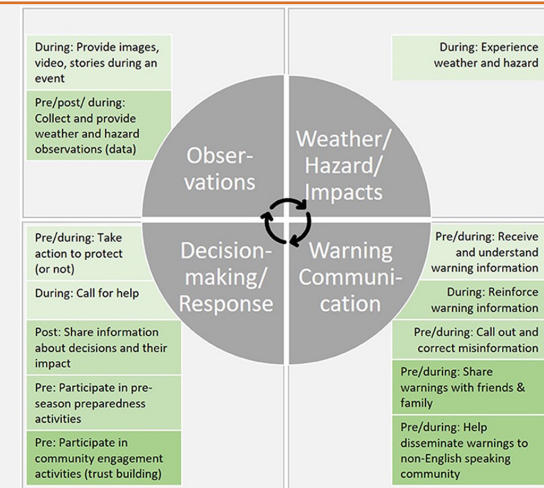
## What is citizen science?

Scientific discovery done, at least, in part, by individuals who wouldn't self-identify as professional scientists or researchers.



## Finding I - Citizen involvement

- Citizens' involvement can happen at any time, either pre, during, or post high impact weather events.
- Citizens' involvement can range from a personal level (e.g., experiencing an event) to community interaction (e.g., sharing warnings with friends)

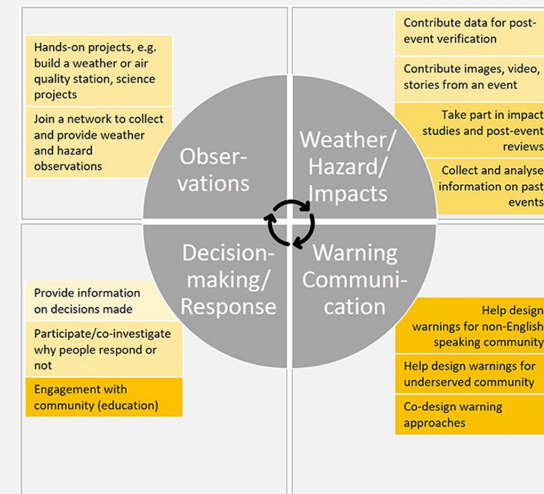


### Citizen involvements in events

Community Self

## Finding II - Citizen science contributions

- Citizen science (research) can contribute to the different parts of the warning value chain and enhance the value chain for warnings
- Contributions range from passive (e.g., sending images from an event) to more active roles (e.g., co-designing warning approaches).



Active Passive  
Participation in citizen science



WORLD METEOROLOGICAL ORGANIZATION



WORLD WEATHER RESEARCH PROGRAMME



The Value Chain Project  
by HIWeather and SERA WG



HIWeather

