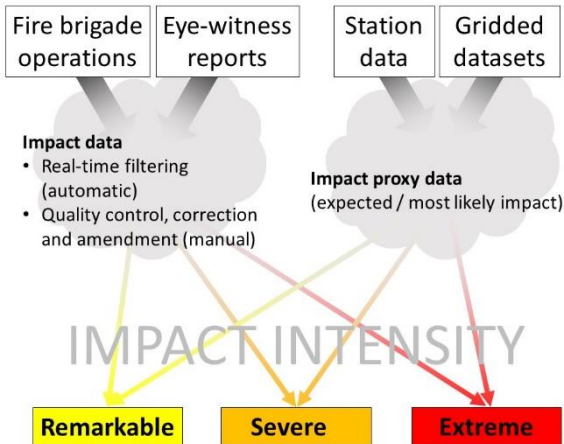


Pistotnik et al.: Verification of impact-based weather warnings using real-time fire brigade and eye-witness data

1. Motivation

Objective verification of impact-based warnings

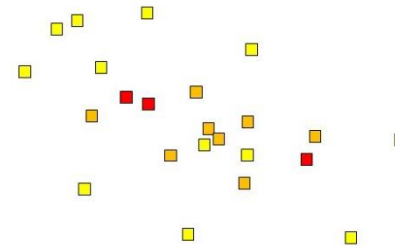


2. Impact intensity

Five warning parameters



- Damage criteria (qualitative)
- Meteorological thresholds used as proxies (quantitative)



4. Definition of warning colors

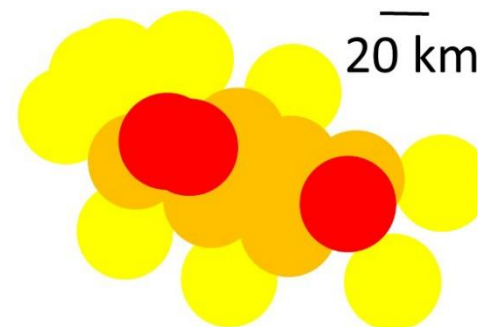
Based on impact intensity and coverage

Coverage	Widespread (30-100%)	Yellow	Orange	Red
	Regional (10-30%)	Green	Yellow	Orange
	Local (3-10%)	Green	Green	Yellow
		Remarkable	Severe	Extreme
		Impact		

modified from
(WMO, 2015)

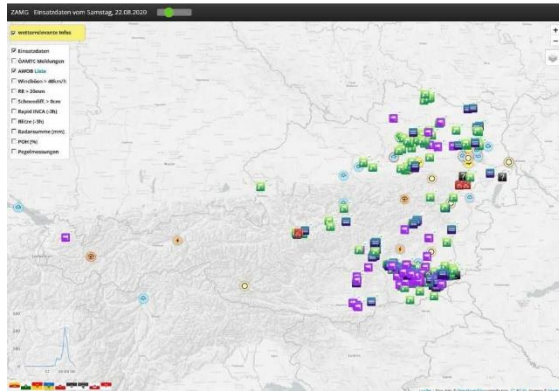
3. Impact coverage

Envelope of 20 km “radii of influence”

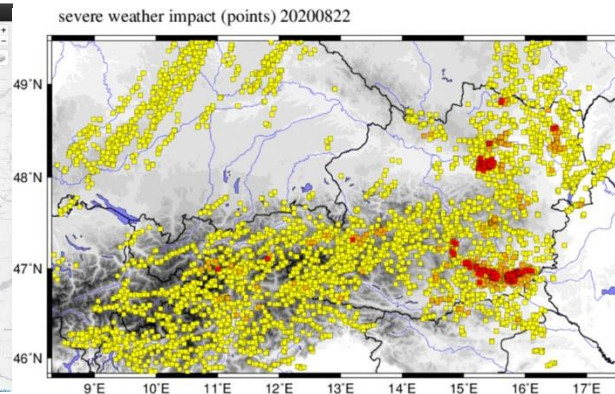


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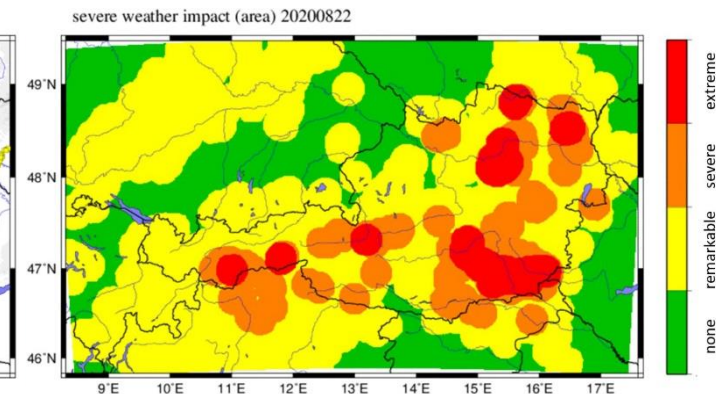
5. Showcase: 22 Aug 2020 thunderstorms



Raw data after filtering



Impact points
after quality control



Impact areas
(envelope of 20 km radii)

6. Further plans and goals

- Individual and bulk verification of severe weather warnings
- Enhanced communication to action forces and general public
- Calibration of warnings, related forecaster training
- Synchronization with other EU countries within METEOALARM

Your experiences and ideas? => georg.pistotnik@zamg.ac.at