

ClimEx – Final Symposium – 7 May 2019 Parallel Workshops	
Session C	Extreme events and water resources management
Key Questions	<ul style="list-style-type: none"> • How does/can water resources management deal with the ClimEx findings? • Which concerns are remaining? How are uncertainties being interpreted? • Can we draw immediate conclusions towards adapting to increasing extreme events (intensity, frequency)? • Which research questions do we need to prioritize? Where is immediate action needed? • Which project synergies are needed/useful? Which disciplines should be integrated?
Key Findings	<ul style="list-style-type: none"> • Main findings: <ul style="list-style-type: none"> ○ Improved knowledge on flood genesis, intensity and frequency ○ Identification of hot-spots useful for planning and adaptation processes ○ Drought as a topic of major concern • Implications: <ul style="list-style-type: none"> ○ provide a continuous communication process as a prerequisite to increased awareness and preparedness ○ triggers adaptation needs <ul style="list-style-type: none"> ▪ measures re-considered and re-evaluated ○ socioeconomic analyses of extreme events (floods, droughts) ○ especially for droughts, an interdisciplinary approach is required to develop integrated adaptation (integrated water management): <ul style="list-style-type: none"> ▪ soil moisture with implications for agriculture, forestry and floods ▪ groundwater scarcity (conflicting uses, e.g. drinking water, irrigation, industrial purposes) ▪ local case studies to support local awareness and decision making ▪ water quality and ecology • Research needs: <ul style="list-style-type: none"> ○ Process science <ul style="list-style-type: none"> ▪ Improved knowledge on drought genesis, intensity and frequency ▪ Higher resolution modeling → convection permitting modeling to resolve high impact events (flash floods, hail, storm gusts...)

	<ul style="list-style-type: none">○ Attribution Science○ Impact and Adaptation Science:<ul style="list-style-type: none">▪ Flood and drought management▪ Risk analysis and Socioeconomic Impact▪ Resilient urban planning (heat waves, sewage systems, ...)● Additional statements<ul style="list-style-type: none">○ Communication is essential, but we need to go beyond → participatory approaches must be implemented (scientists, stakeholders, municipalities, etc.)○ Frequency of very long heat waves can be of great relevance○ More user tailored values (sometimes scientific interpretations are difficult to digest).
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