

### Why research on extremes matters

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### Our climate responsibilities

- Agency subordinate to the Ministry of Climate and Environment
- National inventories
- Mitigation
- Adaptation
- IPCC focal point
- IPCC SREX report (2012)



The IPCC Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation





#### When are extremes a risk?



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# Climate in Norway 2100 – warmer and wetter

- Increased precipitation
- More extreme precipitation
- More frequent and larger rain floods
- Sea level rise
- Knowledge gaps related to extremes



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# Planning for storm surges with elevated mean sea level

- Regulation under Plan and Building Act
- Required return periods for various safety classes
- Low confidence in regional storm surge projections
- Current storm surge return heights combined with future mean sea level



Foto: Jostein Berggraf



### Planning for short-term precipitation

- Recommended return periods
- Green paper on legal framework in December
- IDF curves used in designing drainage works
- How to adjust IDF curves for climate change?



Source: Norwegian Climate Services Center



### Accurate warnings reduce risks



Photo: Tor Erik H. Mathiesen

- NN
- 42 million Euros



Photo: Håkon Storheim

- Petra
- 12.5 million Euros





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