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Reanalysis Stories

Stefan Brönnimann
Peter Stucki
Maraela Zamuriana

Marcelo Zamuriano

and students of the Institute of Geography and Oeschger Centre for Climate Change Research, University of Bern

Bern, 15 June 1910





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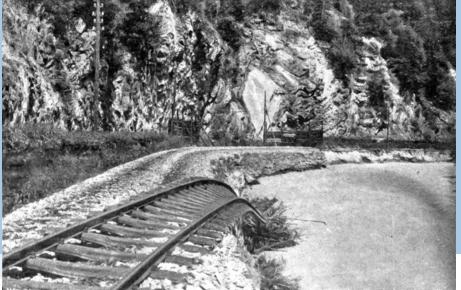
Switzerland, 15 June 1910











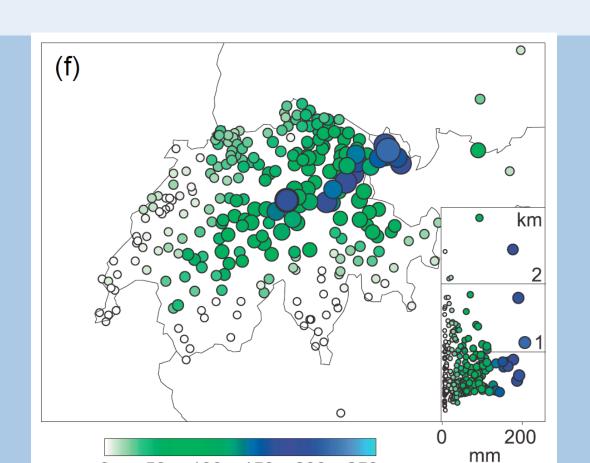
Precipitation observations

50

100

150

200





Stucki et al. 2012

http://earth.fdn-dev.iwi.unibe.ch/#1910/06/15/0000Z/wind/surface/level/overlay=temp/orthographic=0.00,0.00,512

December 15, 2017

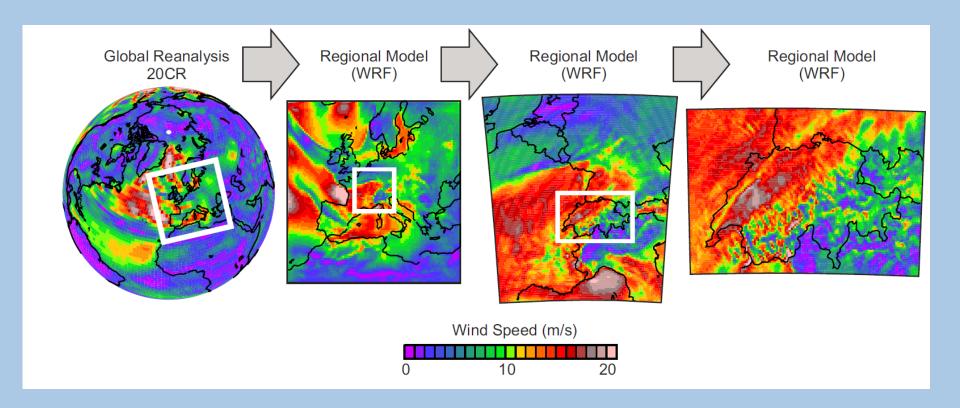
250 mm



Dynamical Downscaling Using WRF

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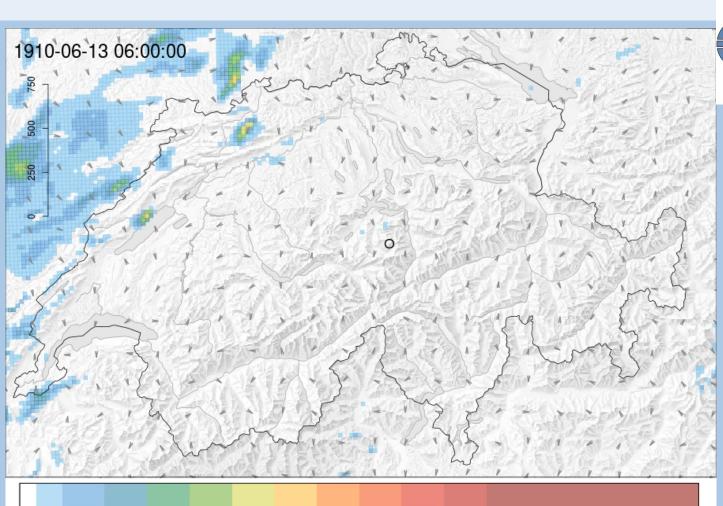
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Silke Dierer, Peter Stucki, Marcelo Zamuriano, Yuri Brugnara

December 15, 2017

Dynamical Downscaling of 1910 event





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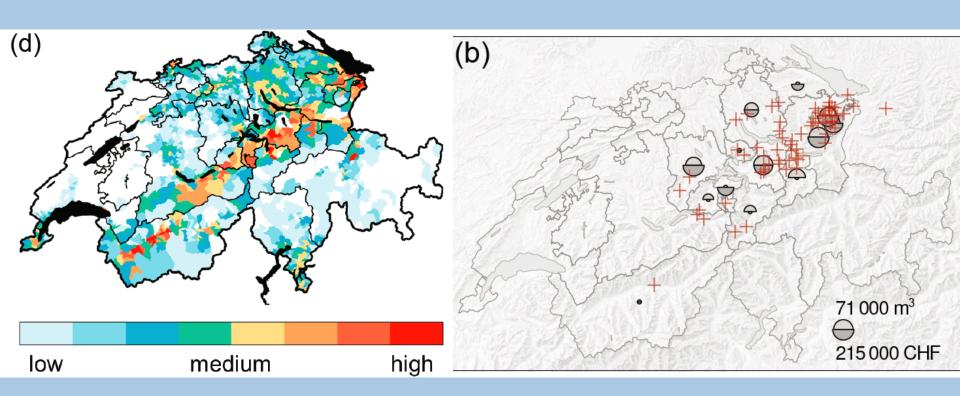


December 15, 2017

Impact Modeling: Windstorm 1925



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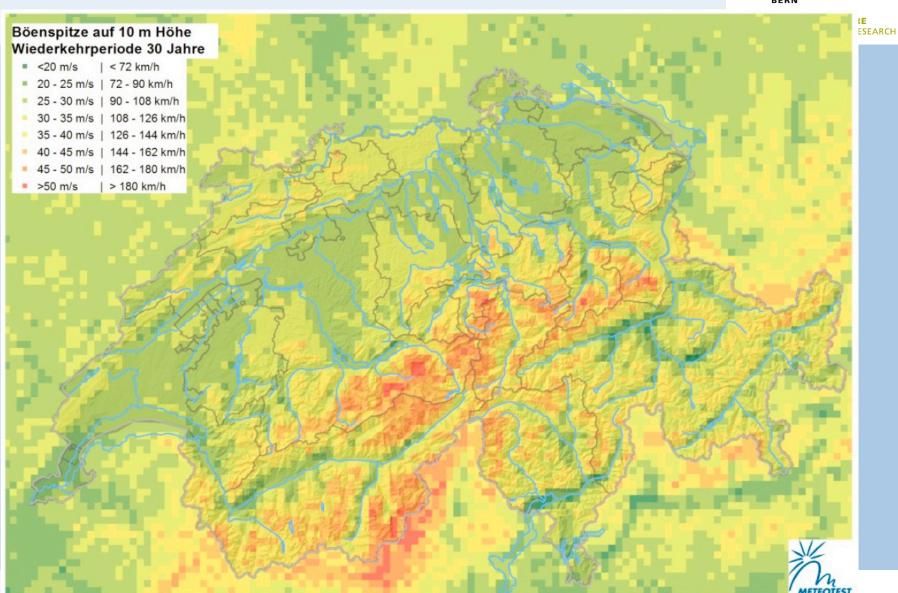
Stucki et al. 2015

December 15, 2017

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Swiss Storm Risk Map

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Book published today

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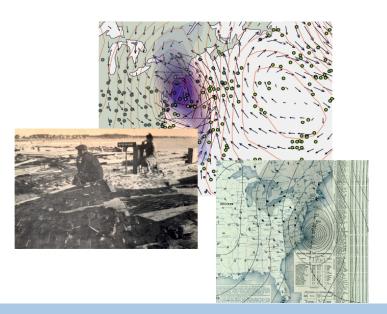


GEOGRAPHICA BERNENSIA

G 92

Historical Weather Extremes in Reanalyses

Stefan Brönnimann (Editor)



http://www.geography.unibe.ch/dienstleistungen/geographica_bernensia/online/gb2017g92/index_ger.html

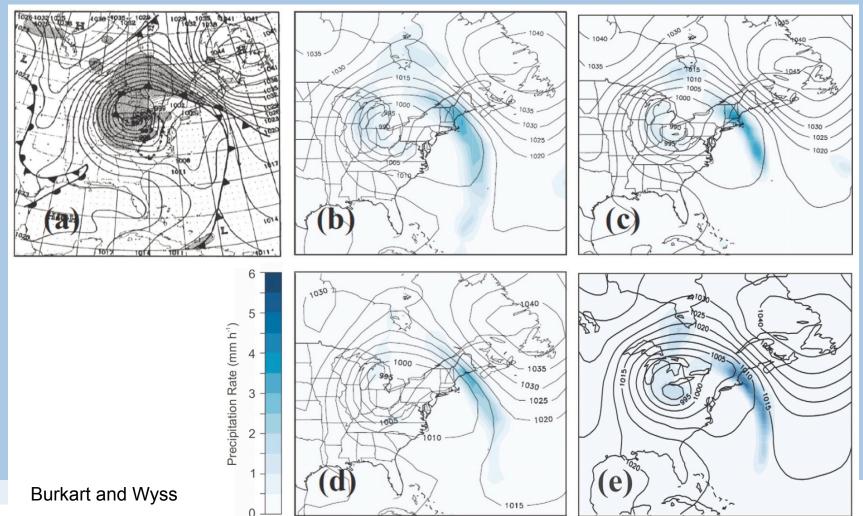
December 15, 2017



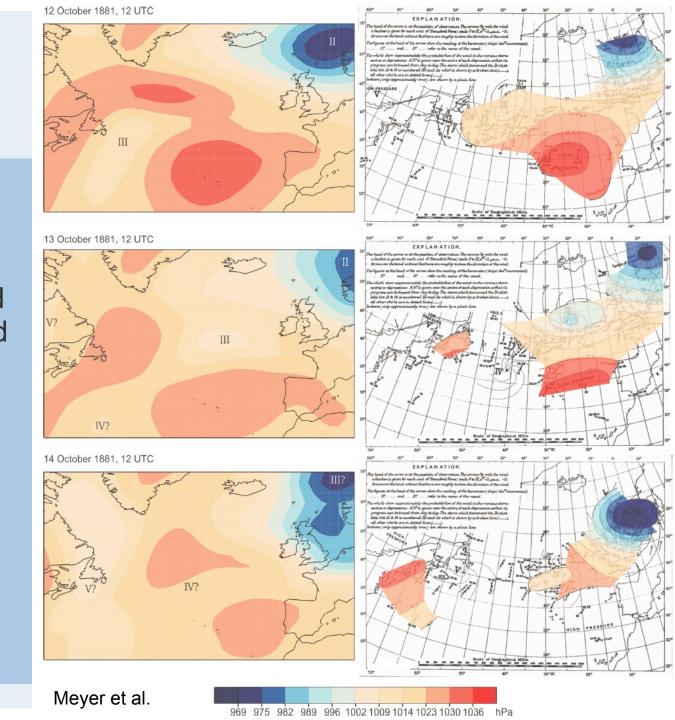
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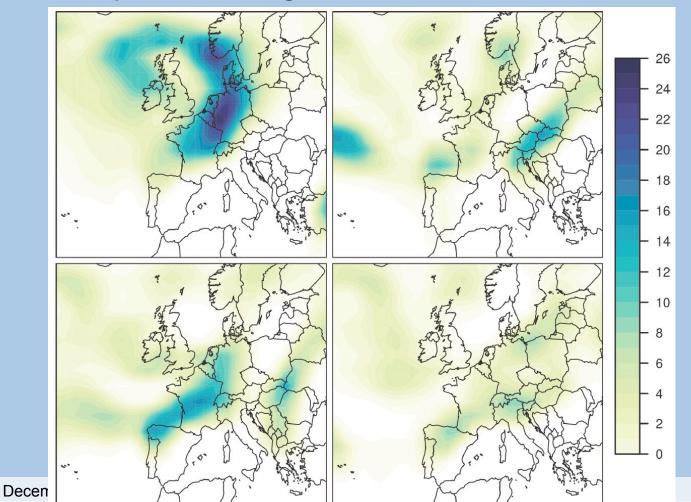
> Comparison of 4 reanalyses for the «Great Appalachian Storm» 1950



- » «Great Gale» of 1881
- Sequence of reanalysis and hand-analysed maps



> Precipitation during a severe storm 1876





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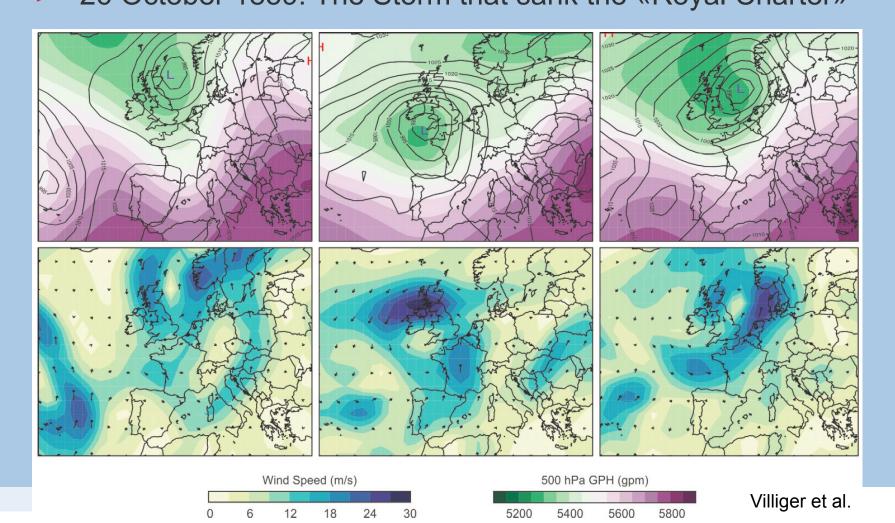




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26 October 1859: The Storm that sank the «Royal Charter»



Reanalyis of the «Year without a Summer» of 1816





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Diaries

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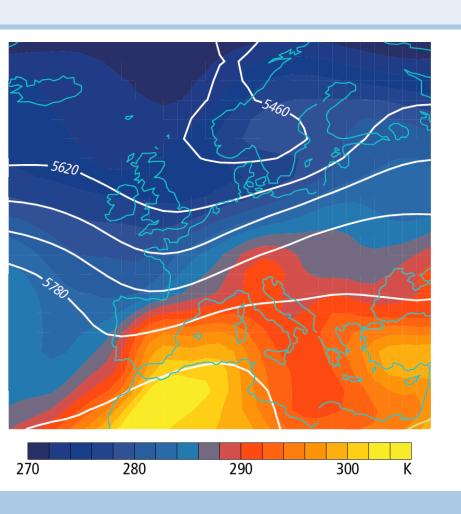


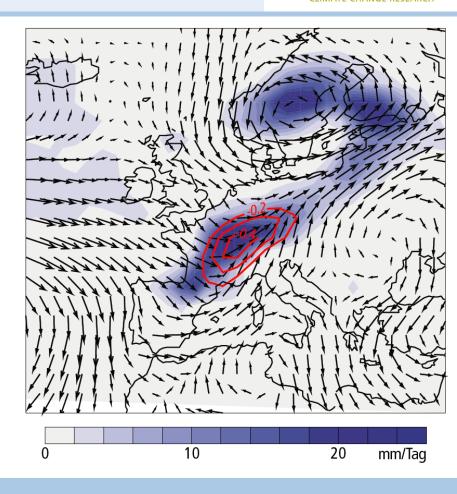


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Avalanches during the First World War



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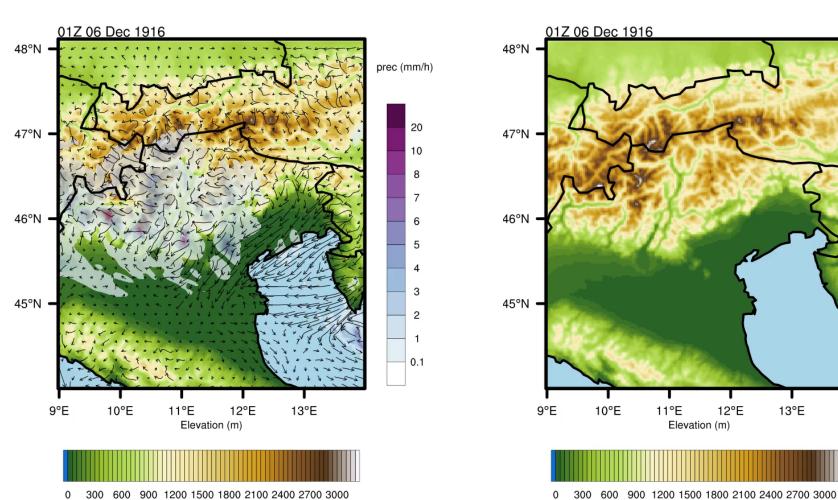
December 15, 2017 17

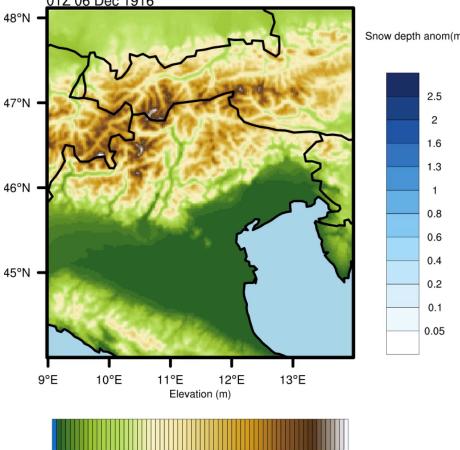




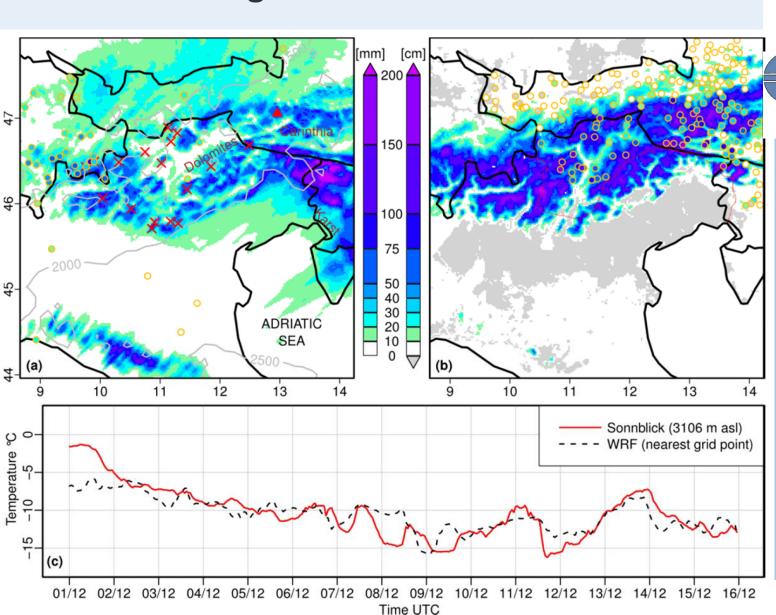
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Downscaling





Downscaling for 13 December 1916



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Yuri Brugnara Marcelo Zamuriano Jonas Schild