Top risks [1,2]		Key message	Observed Impacts	Projected Impacts towards 2050 (for a range of scenarios between 2°C and Business-as-Usual)[3]	Examples of Impacted Sectors	Shade of Risk
Extreme weather events	Landslides	Mountain regions are especially sensitive to landslides but trend is unclear	Some increases seen, but often insignificant (see boxes below)	Across all scenarios: Inconsistent changes in the South. Likely increase in intensity and frequency in the North[4], especially for winter (high confidence for North, low confidence for South)	Transport, energy, tourism, infrastructure	
	Extreme precipitation[5]	High variability expected in precipitation, greater intensity in North. Precipitation could become more extreme in Mediterranean when it does occur after long dry spells (see also drought)[6]	Increases seen in some parts, especially for winter. Often insignificant and inconsistent results due to natural climate variability, except for Central Europe where severe summer flooding has been seen[7] (medium confidence for North, low confidence for South)		Infrastructure in high density urban areas	Northern and Central Europe[8] Southern Europe
Flooding		Flooding from precipitation patterns and snow melt is observed and expected to increase	Observed increase (but some uncertainty as to attribution to climate change). See Observed Example in Section 3.	Increase and decrease regionally, decrease especially in South	Infrastructure (high density areas and along rivers), Energy (reduced hydropower generation in South, increased in North), Agriculture	

Drought[9] 	Reduced water availability in the South	Regional variance, but tilted toward dryness trends. In South overall increase in dryness observed, especially in Mediterranean (medium confidence)	Across all scenarios: No major changes in the North. Consistent increase in dryness in South. Central Europe will also see more dryness and short-term droughts (medium confidence)	Agriculture (combined with ground water sinking from irrigation)	Northern Europe Southern Europe
Sea level rise[10] 	Sea level rise a concern low-lying coastal areas, especially in combination with extreme events such as hurricanes and spring floods	Current global observed change 3.2 mm/year, but significant regional variations (due to ocean circulation patterns and some land regions still rising since last Ice Age)	+22 cm (16 to 32 cm) sea level rise globally in 2050 compared to 1986-2005 almost regardless of emission scenario (medium confidence). Newer literature indicate that this threshold might be crossed a decade earlier. Northern Atlantic ocean to raise up to 30% more.	Infrastructure in coastal regions, nuclear energy	Coastal areas
Heat stress[11] 	Heat stress observed especially in South and expected to increase with high likelihood	Consistent increase in heat wave duration and intensity, but no significant trend in North (medium confidence for North, high confidence for South). Likely increase in hot days in most regions, especially in Iberian peninsula and southern France (high to medium confidence)	Across all scenarios: Likely more frequent, longer, and more intense heat waves, especially in South. Smallest change seen for Scandinavia (high confidence). Very likely increase in hot days, largest trend for South (high confidence)[12]	Impacts on health, labour productivity, agriculture (crop production), wildfires in South	Northern Europe Southern Europe

Wind 	No clear trend for wind patterns (beyond those associated with extreme events included above)	No clear trend (low confidence)	Across all scenarios: Uncertain. For North wind may increase in winter and decrease in summer. In South, a general decrease seems likely (low confidence)	Energy (change in wind energy production is uncertain, seasonal variation expected, reductions most likely in South)	
Less snow 	Combined impacts of precipitation and temperature are of concern in the Alps	Average snow cover extent in Northern Hemisphere reduced by 2.2% per decade in period 1979-2012 (very high confidence)	Across all scenarios: Likely shorter snow seasons, as well as less snow in most regions. Increased snow depth at high latitudes and altitudes	Tourism (reduced ski season in the Alps)	Alps

Legend:

Immediate attention required: impacts are already observed with a significant probability to increase

Some attention is required: impacts are expected in the next few years

Caution: impacts could manifest towards mid-century

[1] Kovats, R. S., et al. (2014). Europe. In V. R. Barros, et al. (Eds.), Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (pp. 1267-1326). Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.
[2] Hewitson, B. C., et al. (2014). Regional context. In V. R. Barros, et al. (Eds.), Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part B: Regional Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (pp. 1133-1197). Cambridge, United Kingdom and New York, NY, USA: Cambridge University Press.
[3] Based primarily on RCP2.6 and RCP8.5 results for 2046-2065
[4] Klima i Norge 2100.
[5] Definition of extreme precipitation used here is frequency of 'very wet days,' defined here as the 90th percentile of daily precipitation on wet days
[6] Sillmann, J., et al. (2013). Climate extremes indices in the CMIP5 multi-model ensemble. Part 2: Future climate projections. J. Geophys. Res. Atmos., 118, 2473-2493, doi: 10.1002/jgrd.50188.
[7] Volosciuk, C. et al. Rising Mediterranean Sea Surface Temperatures Amplify Extreme Summer Precipitation in Central Europe. Sci. Rep. 6, 32450; doi: 10.1038/srep32450 (2016).
[8] Central Europe includes France
[9] C.F. Schleussner et al. Differential climate impact for policy-relevant limits to global warming: the case of 1.5 and 2C. Earth System Dynamics, 7, 327-351, 2016.
[10] Jevrejeva et al. (2016): Coastal sea level rise with warming above 2 C. S. AND Brown et al. (2012) Sea-Level Rise Impacts and Responses: A Global Perspective, Volume 1000 of the series Coastal Research Library pp 117-149. AND A. B. A. Slangen et al. Projecting twenty-first century regional sea-level changes. Climatic change, May 2014, Volume 124, Issue 1, pp 317–332
[11] Extreme heat events definition used is frequency of 'warm days,' defined here as the 90th percentile daily maximum temperature
[12] Based on projections for 2071-2100