Seasonal patterns and consistency of extreme precipitation trends in Europe, December 1950 – February 2008

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Supplement. Complimentary data.

The updated series (1951-2015) of temporal changes in the frequency of upward and downward significant short-term trends in precipitation indices calculated on the base of 126-128 stations (depending on season)

The updated series showed that: In spring during the updated 30-year periods (between 1979 and 2015) the percentage of stations with significant UTr in the 95pNoD and 95pT was diminishing. The increasing trends in 95pNoD were rarer than in 95pT which resulted in the increased fraction of stations with significant UTr in 95pINT. In summer the frequency of UTr reach its maximum between 1981 and 2012 but it was subsequently diminishing. Slight increase in the frequency of DTr led to the near fraction of stations with the opposite trends. In autumn in the updated 30-year periods increase in the frequency of UTr and DTr evidences an increase in the spatial variability of trend directions within the continent. No changes however were found in the frequency of UTr in 95pINT. In winter slight decrease was found in the frequency of UTr and minor but opposite changes in the fraction of DTr in 95pNoD and 95pT which resulted in the increase in fraction of stations with DTr in 95pINT (Fig. 9).
Fig. S1. Percentage of stations with significant seasonal trends in extreme precipitation indices for moving 30-year periods within the period Dec 1951 – Dec 2015
95pNoD – number of days with extreme precipitation, 95pT – extreme precipitation totals, 95pINT – extreme precipitation intensity
Fig. S2 Average magnitude of coherent trends in extreme precipitation indices in spring and summer 
95pNoD – number of days with extreme precipitation, 95pT – extreme precipitation totals, 95pINT – 
Average trend magnitude is expressed as a percentage of average index value in the period 1961-1990
Fig. S3 Average magnitude of coherent trends in extreme precipitation indices in autumn and winter
95pNoD – number of days with extreme precipitation, 95pT – extreme precipitation totals, 95pINT – extreme precipitation intensity, * arithmetical average from 30-year trend magnitudes within Dec 1951 – Feb 2008. Average trend magnitude is expressed as a percentage of average index value in the period 1961-1990