

**Supplementary materials**

	France		Austria		Denmark		France	
	Strasbourg		Vienna		Odense		Nice	
	a	b	a	b	a	b	a	b
Linear regression parameters	-246	135	-244	124	-245	135	-321	151

**Table S1: Linear regression models used to calculate impervious surface fractions based on SAVI (from Kaspersen et al., 2015).**

	France		Austria		Denmark		France	
	Strasbourg		Vienna		Odense		Nice	
Sensor	TM	OLI	TM	OLI	TM	OLI	TM	OLI
Path/Row	196/26	196/26	189/27	189/27	195/21	195/21	194/30	194/30
	196/26	196/26	190/26	190/26	195/21	195/21	194/30	194/30
	195/26	*196/26	190/26	190/26	195/21	195/21	194/30	195/30
			190/26	190/27		195/22		
			190/26					
Date (mm/yyyy)	08/1984	07/2014	06/1984	07/2013	08/1984	05/2013	06/1984	07/2015
	07/1985	08/2015	08/1984	06/2013	06/1986	06/2013	08/1984	08/2015
	08/1986	*08/2015	05/1986	08/2013	08/1986	07/2013		08/2015
			06/1986	08/2013		07/2013		
			08/1986					

**Table S2: Landsat imagery used for urban development analysis. TM = Landsat TM imagery, OLI = Landsat OLI imagery. \* Both images for 196/26 from August 2015 are used.**

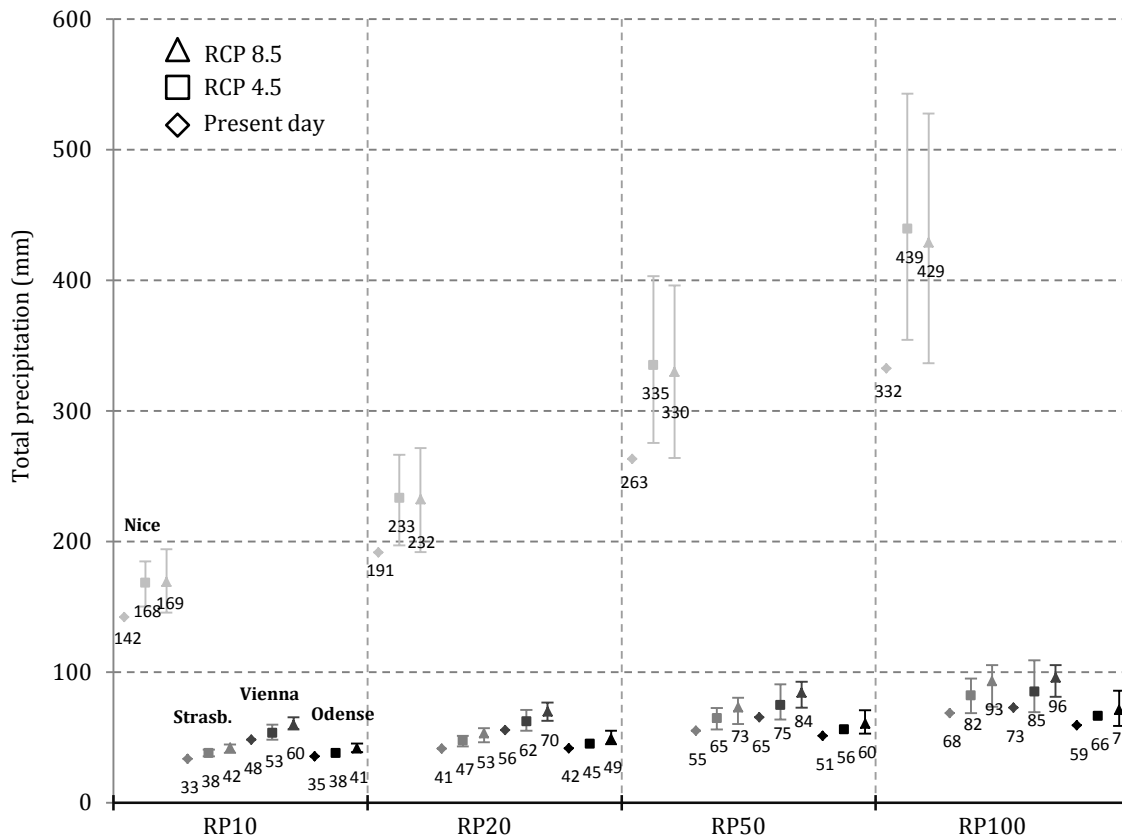


Figure S1: Total precipitation during the individual design events for the four cities. Precipitation duration is four hours. Values in the chart show estimated average precipitation. Error bars for the RCP 4.5 and RCP 8.5 represent low/high climate factors (CFs) respectively (low CF = 10th percentile, high CF = 90th percentile).