

Temperature and precipitation cumulated  
probability density functions in ENSEMBLES  
regional scenarios

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# Chapter 1

## Description of the method

See document on probability density function for a definition of  $pdf(p, T)$ .  
The cumulated probability density simply reads:

$$cdf(p, T) = \sum_{p' < p \ T' < T} pdf(p', T') \Delta p' \Delta T'$$

where  $\Delta p'$  and  $\Delta T'$  are the width of each bin.



## Chapter 2

# Results

### 2.1 Organization of the figures

Figures 2.1 to 2.32 show the bivariate cumulated density (multiplied by 100). There is one capital with four seasons per page.

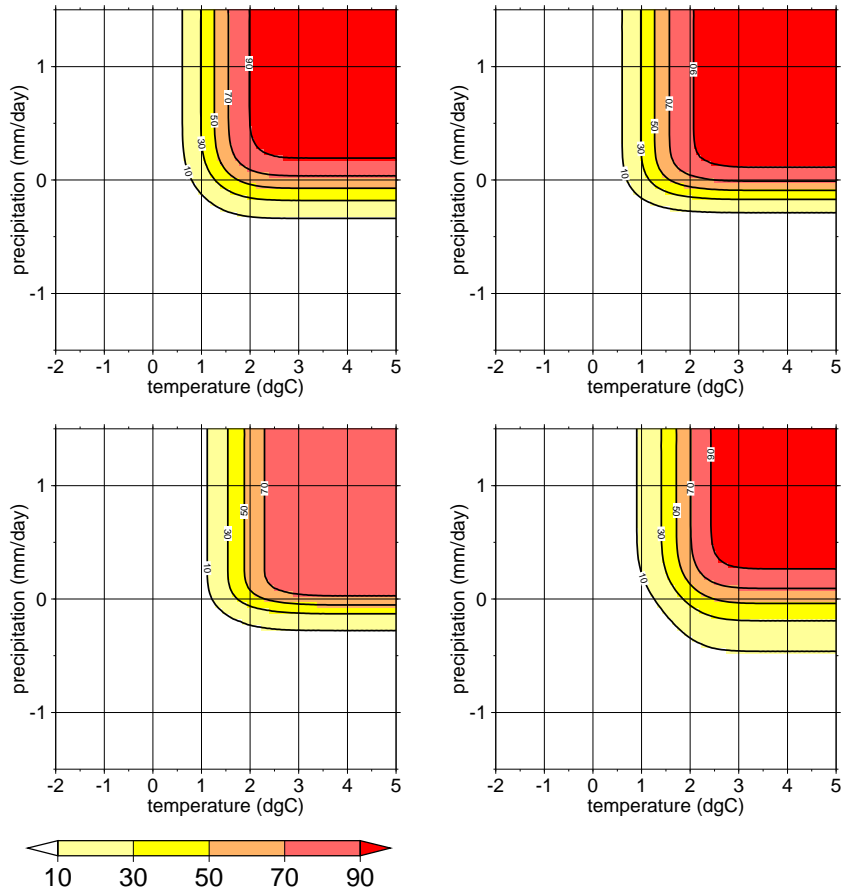


Figure 2.1: Bivariate cumulated probability density function for temperature and precipitation response in Athens for DJF (top left), MAM (top right), JJA (bottom left) and SON (bottom right). Contours are 10, 30, 50, 70 and 90 %.



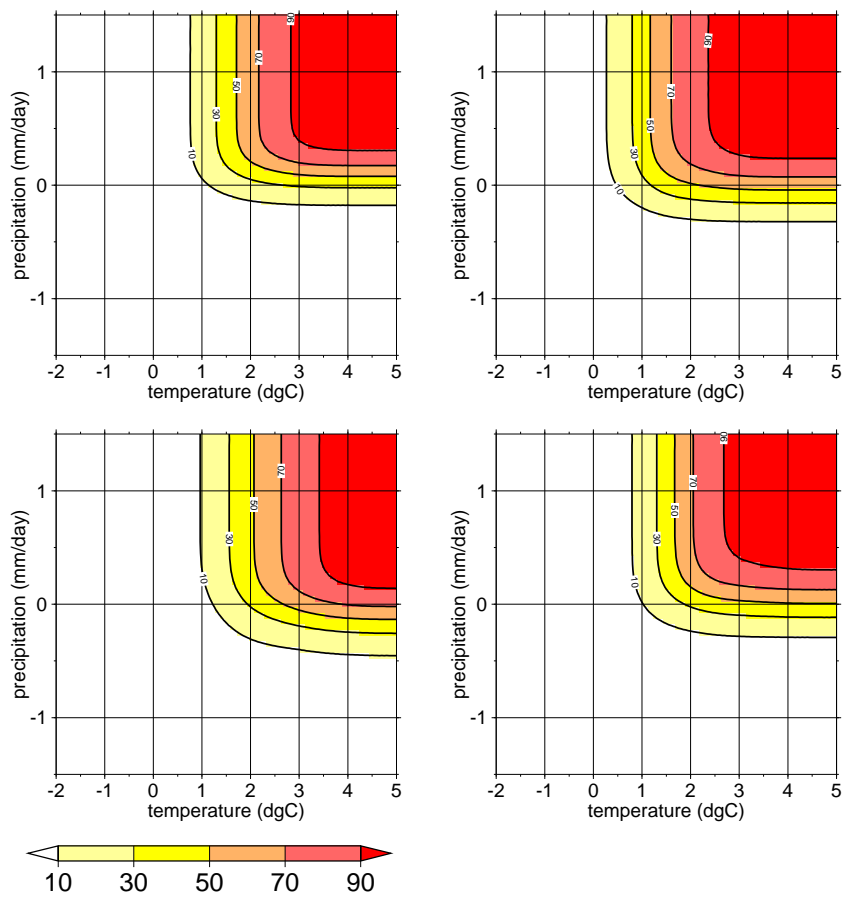


Figure 2.2: As Figure 2.1 for Belgrade.

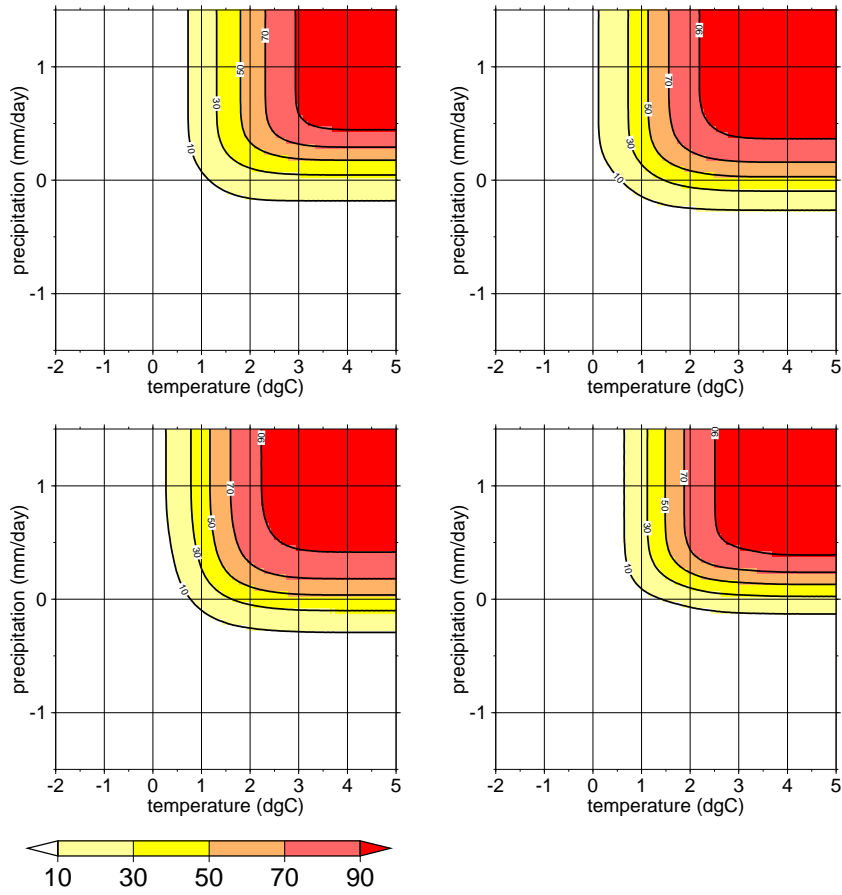


Figure 2.3: As Figure 2.1 for Berlin.

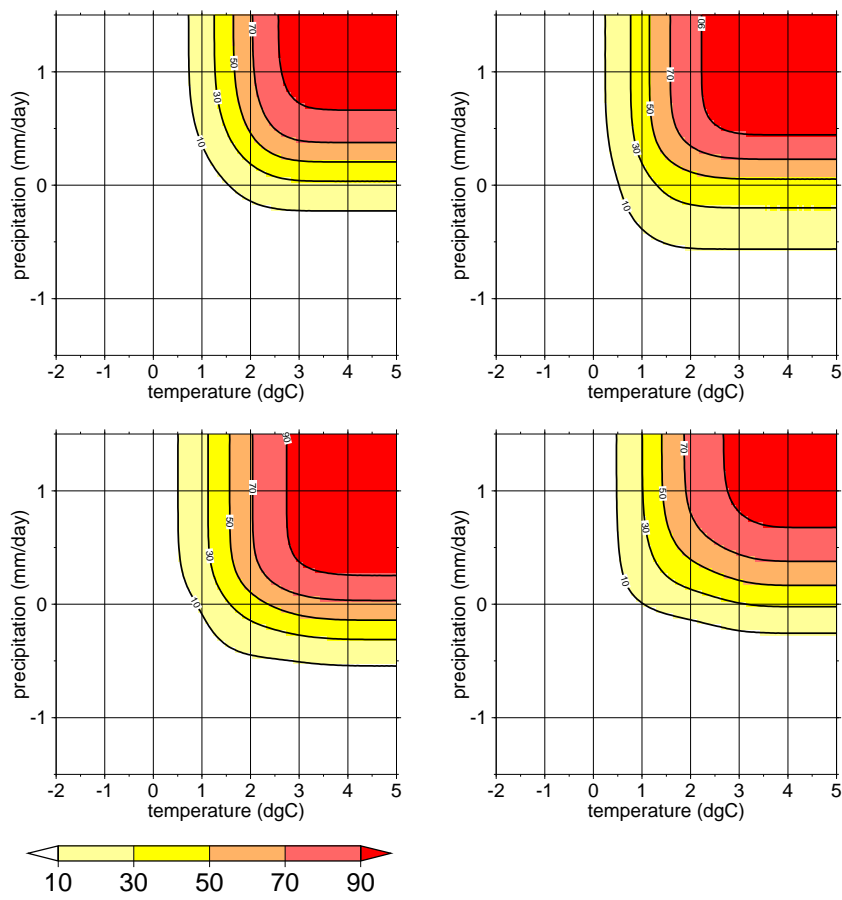


Figure 2.4: As Figure 2.1 for Bern.

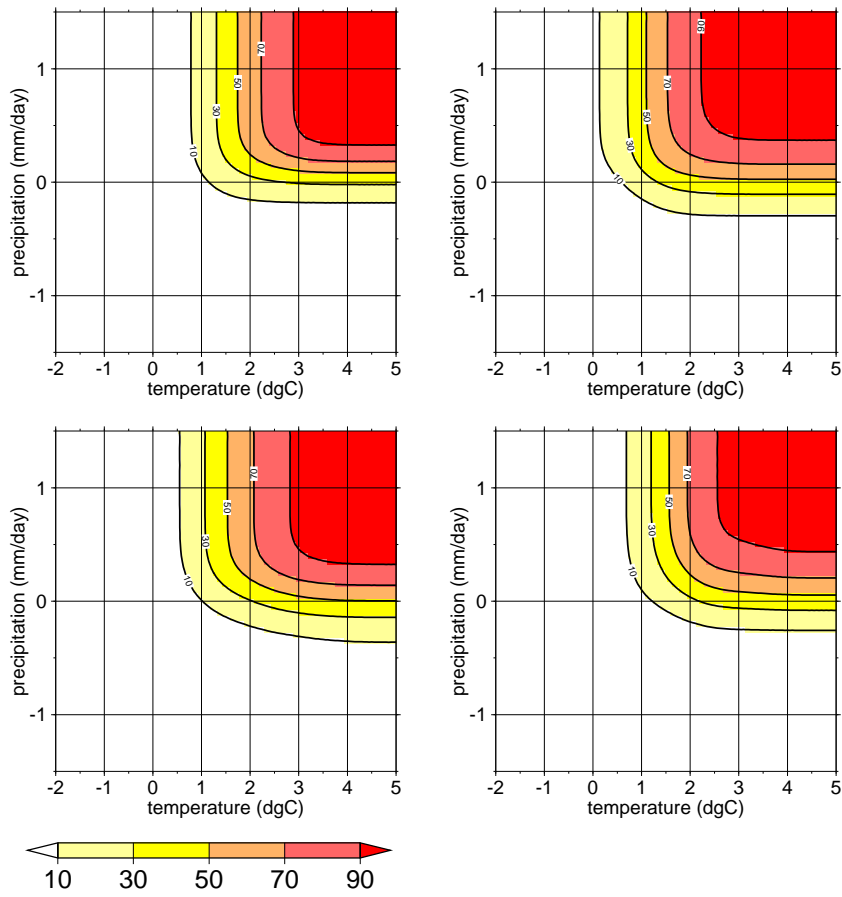


Figure 2.5: As Figure 2.1 for Bratislava.

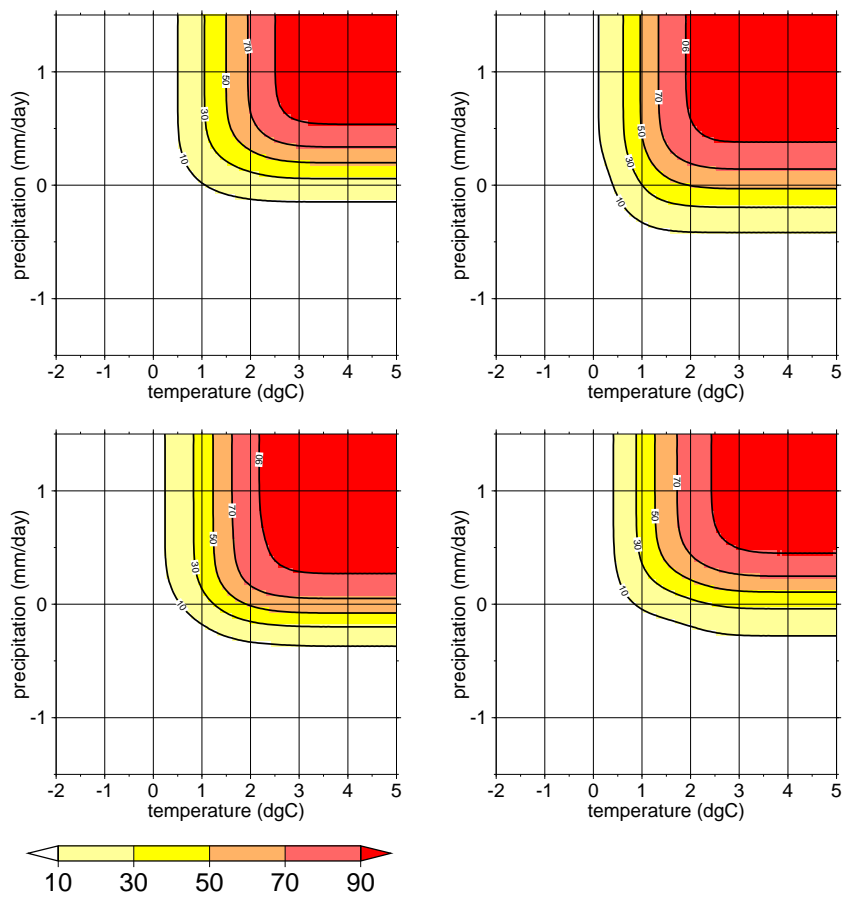


Figure 2.6: As Figure 2.1 for Brussels.

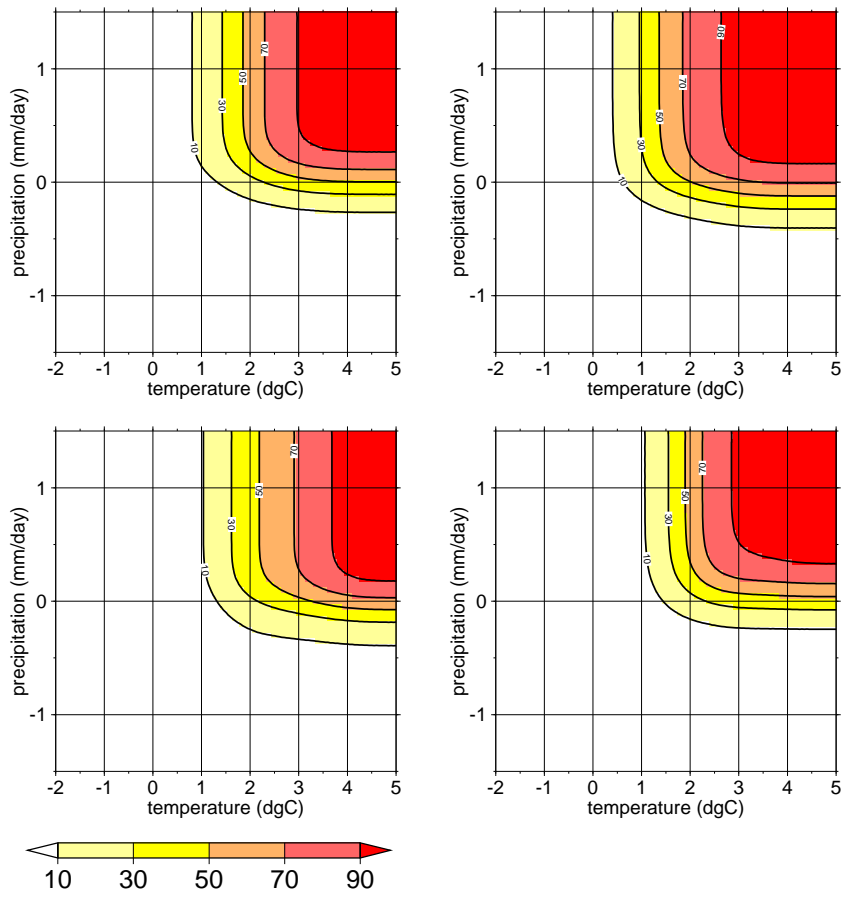


Figure 2.7: As Figure 2.1 for Bucharest.

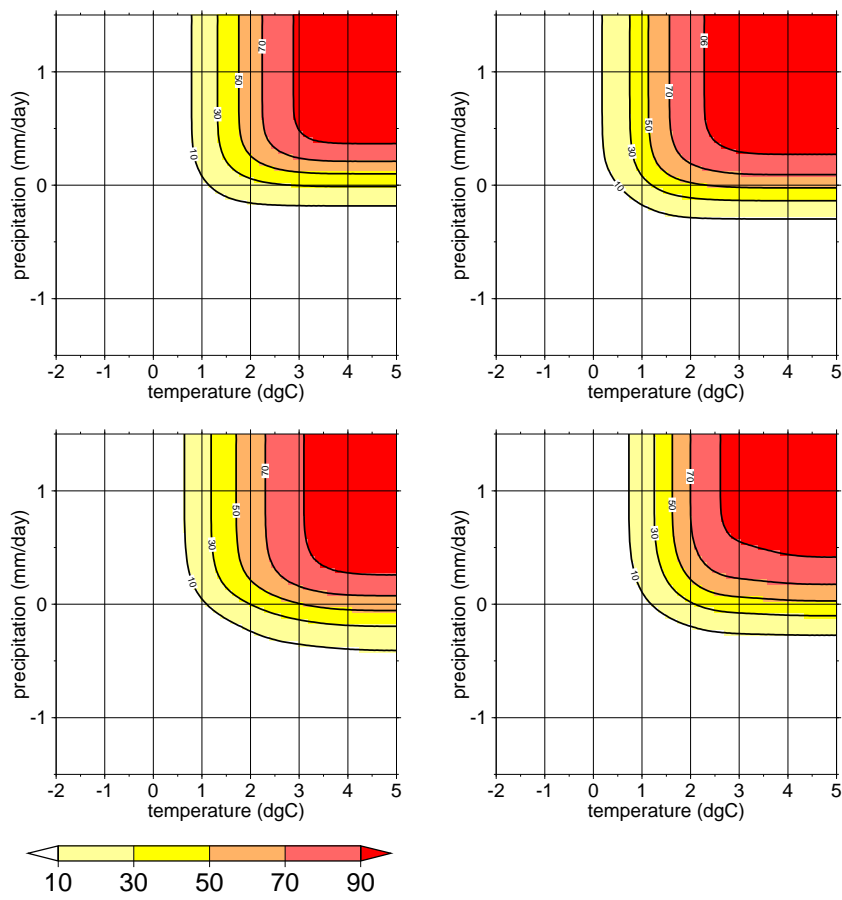


Figure 2.8: As Figure 2.1 for Budapest.

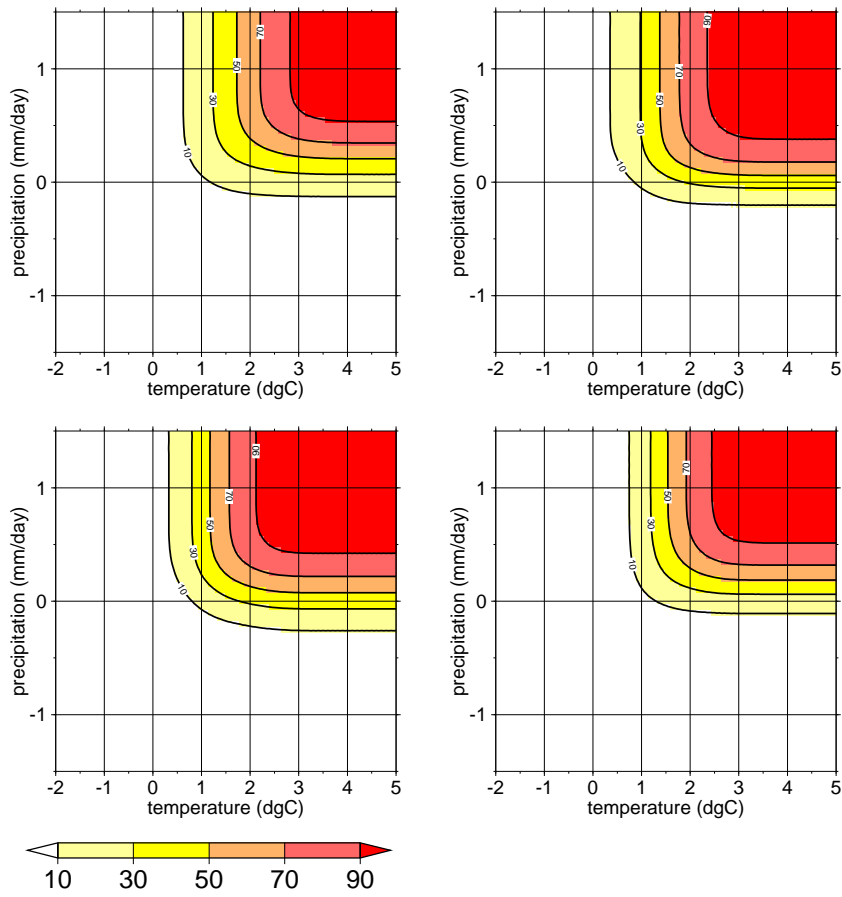


Figure 2.9: As Figure 2.1 for Copenhagen.



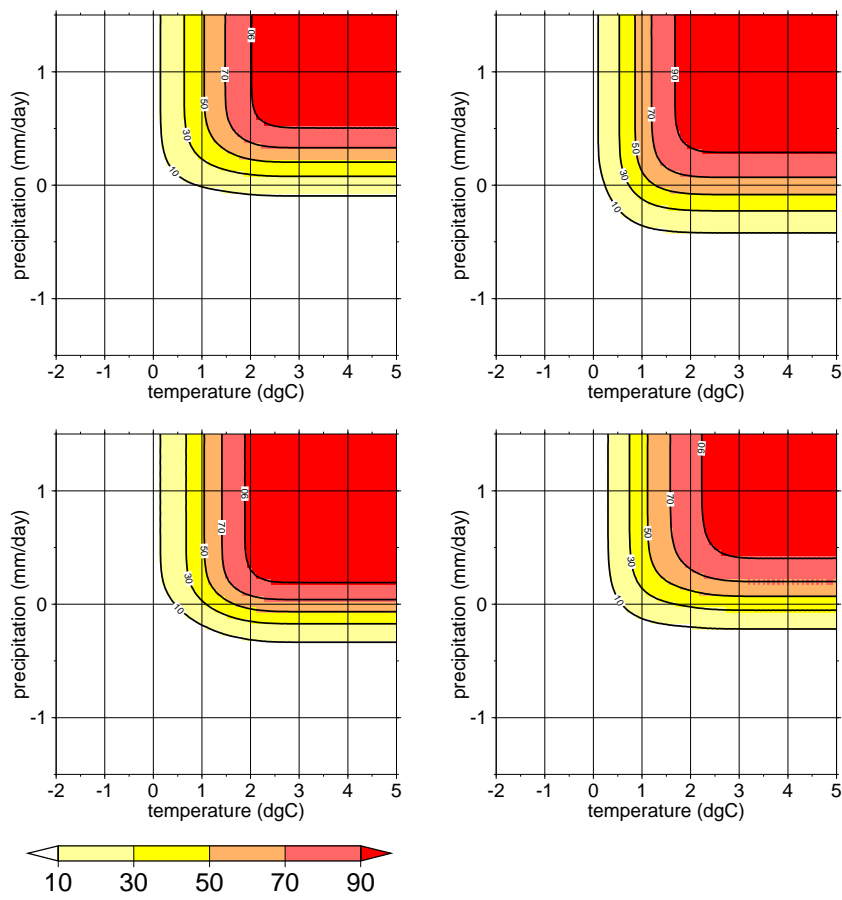


Figure 2.10: As Figure 2.1 for Dublin.

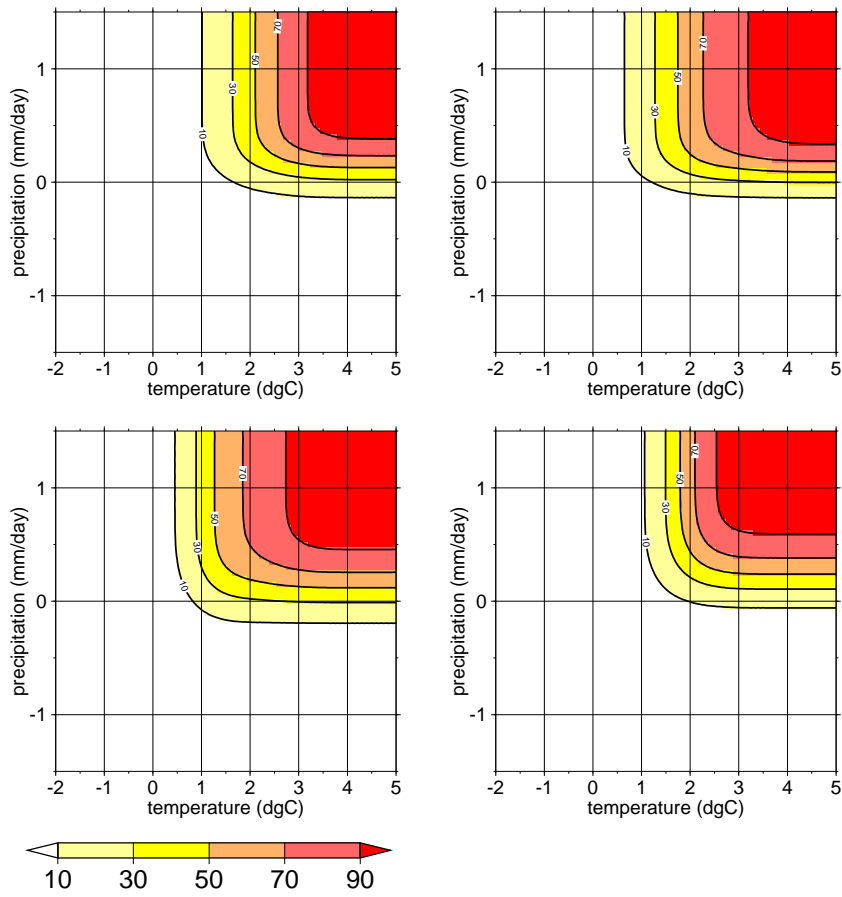


Figure 2.11: As Figure 2.1 for Helsinki.

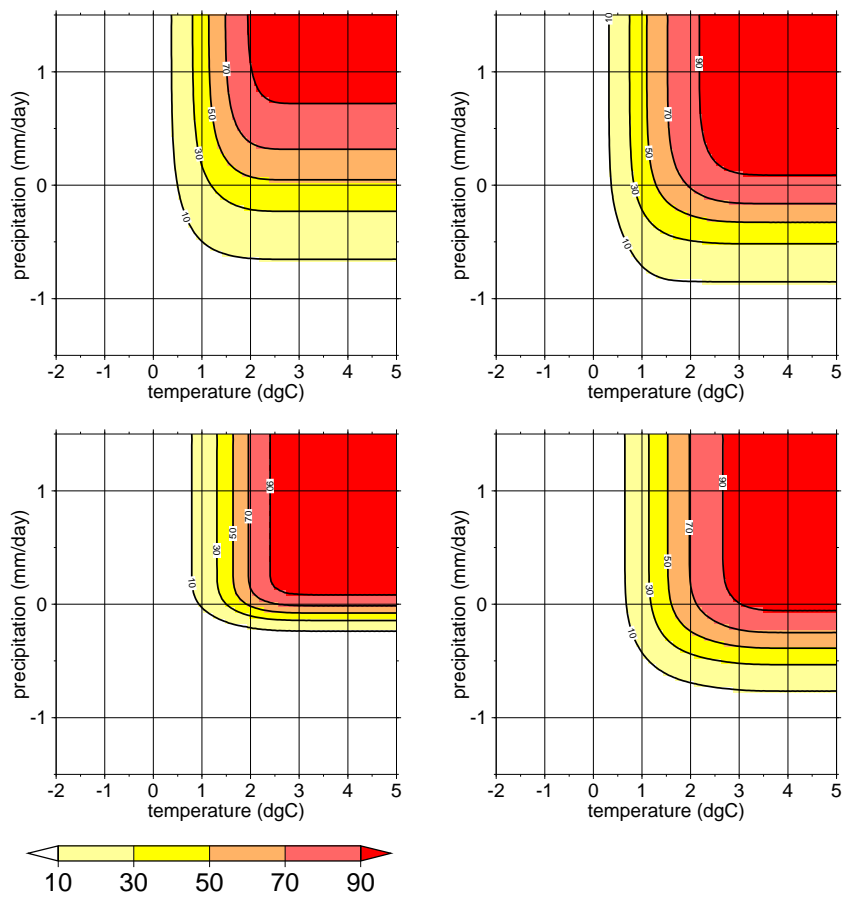


Figure 2.12: As Figure 2.1 for Lisbon.

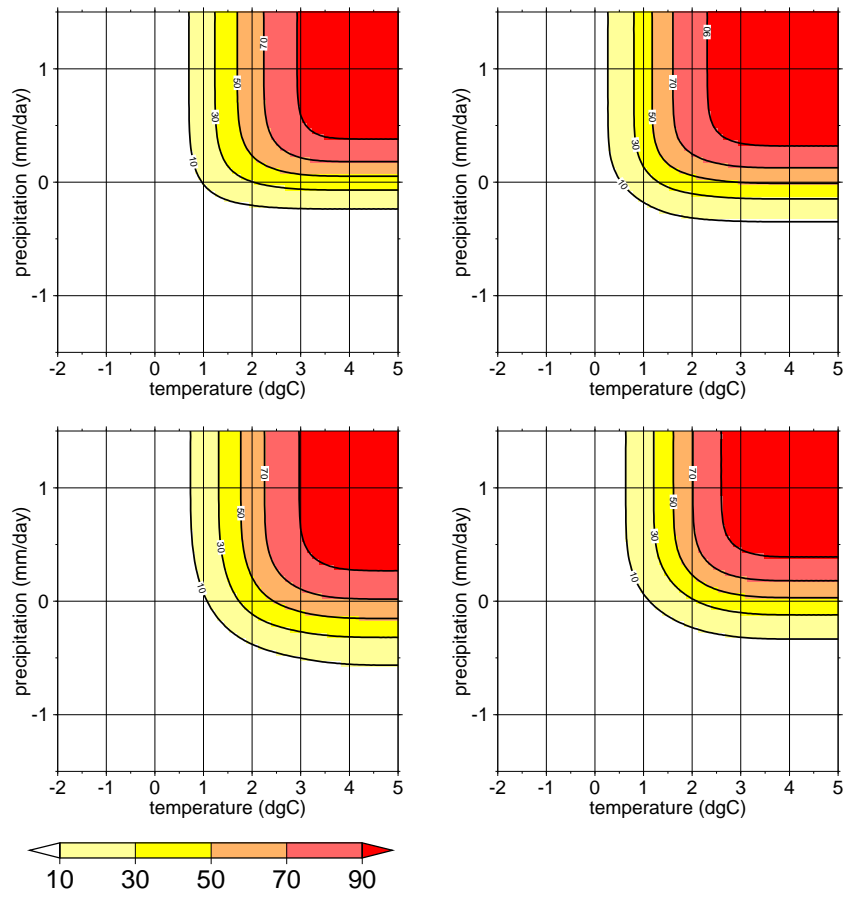


Figure 2.13: As Figure 2.1 for Ljubljana.

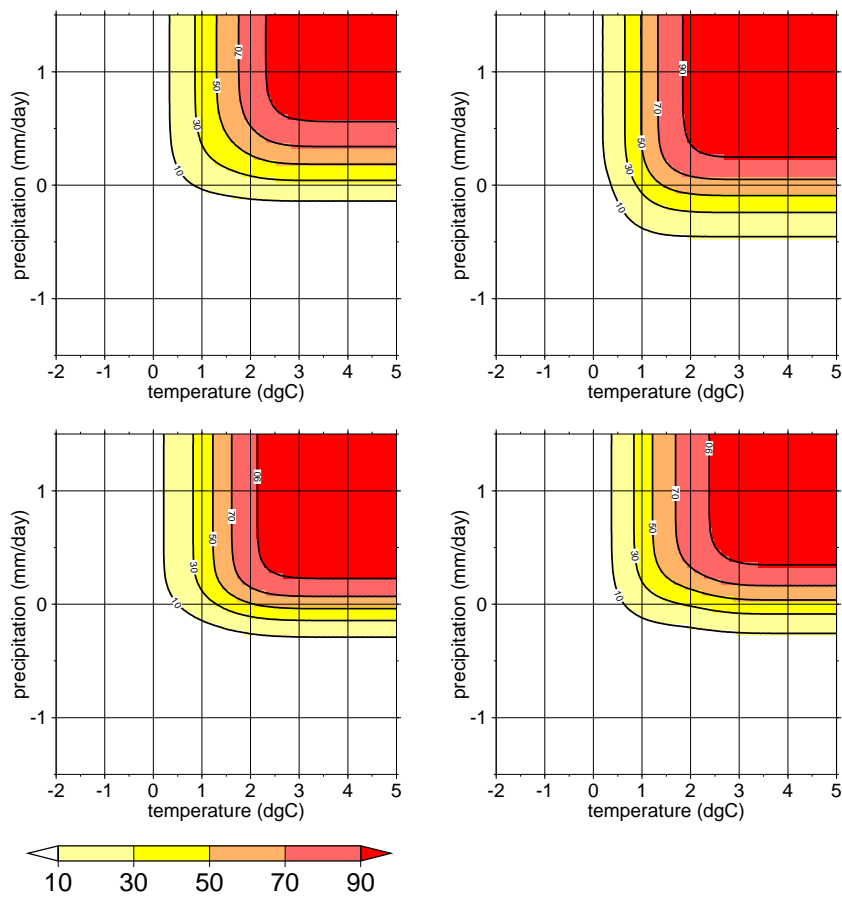


Figure 2.14: As Figure 2.1 for London.

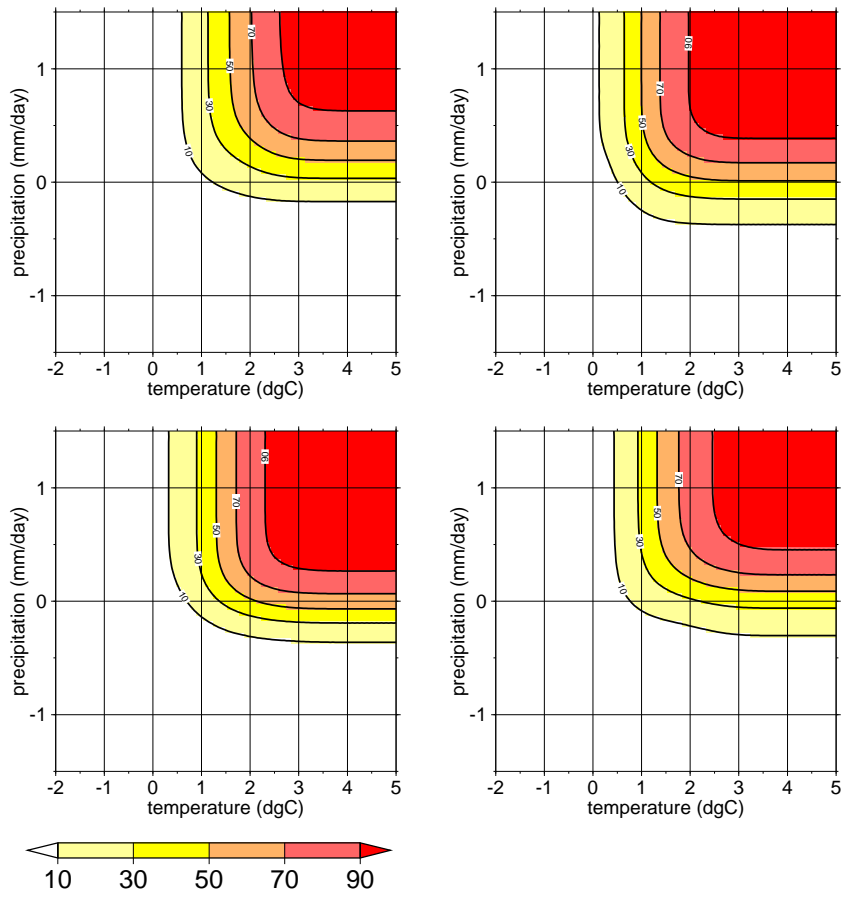


Figure 2.15: As Figure 2.1 for Luxembourg.

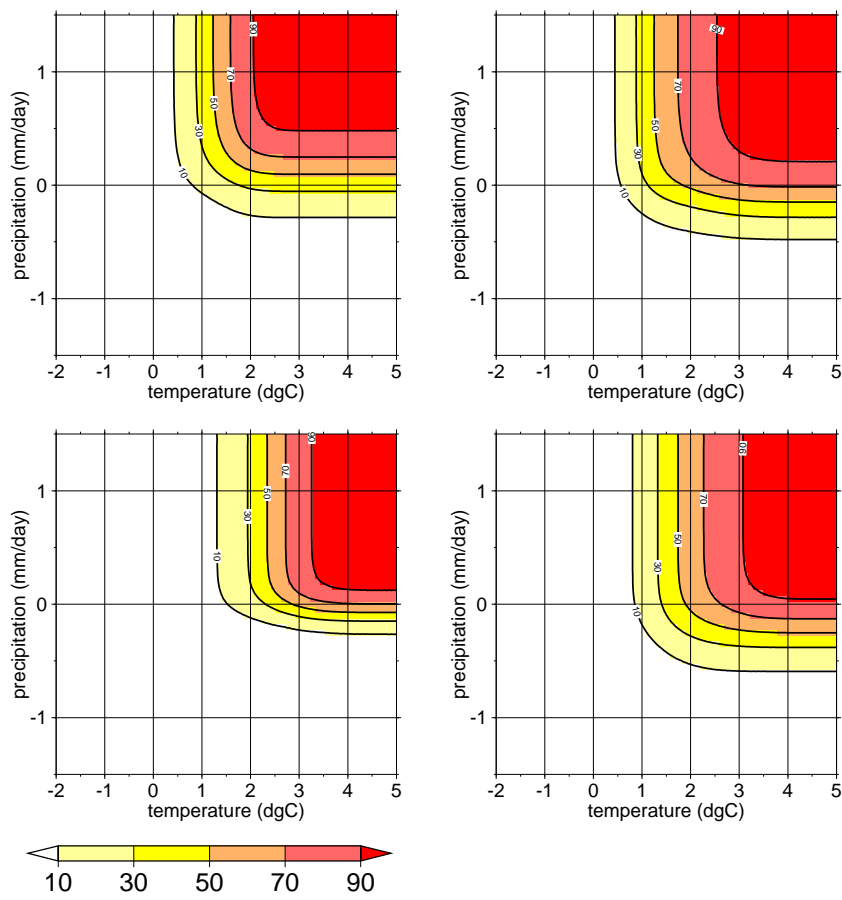


Figure 2.16: As Figure 2.1 for Madrid.

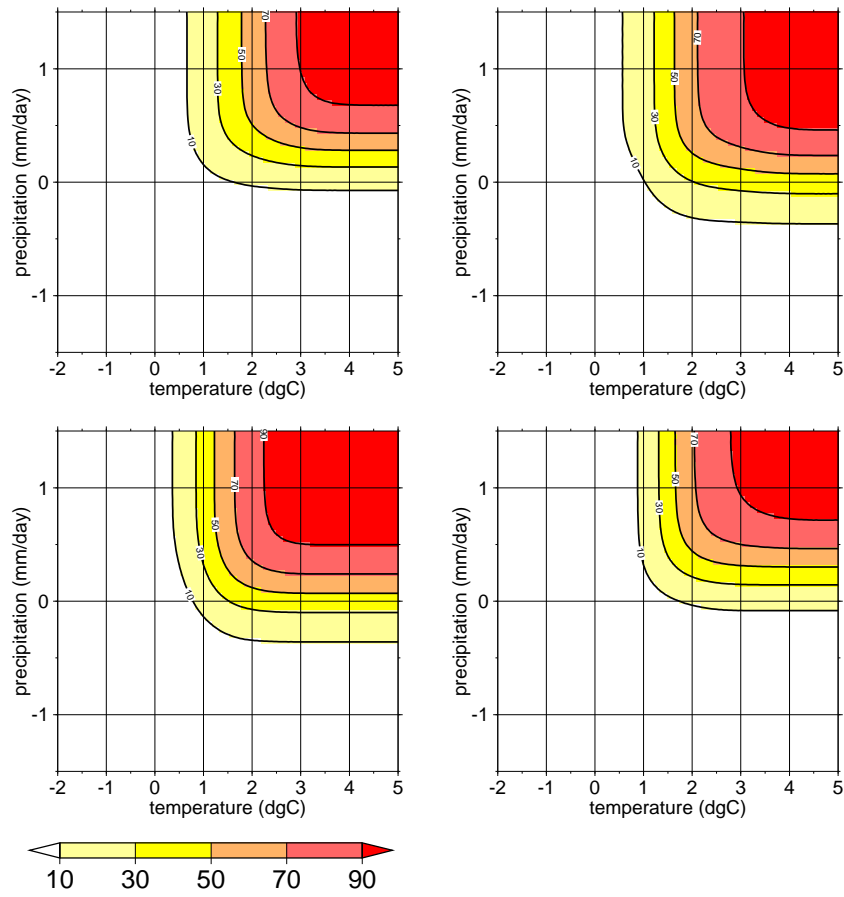


Figure 2.17: As Figure 2.1 for Oslo.



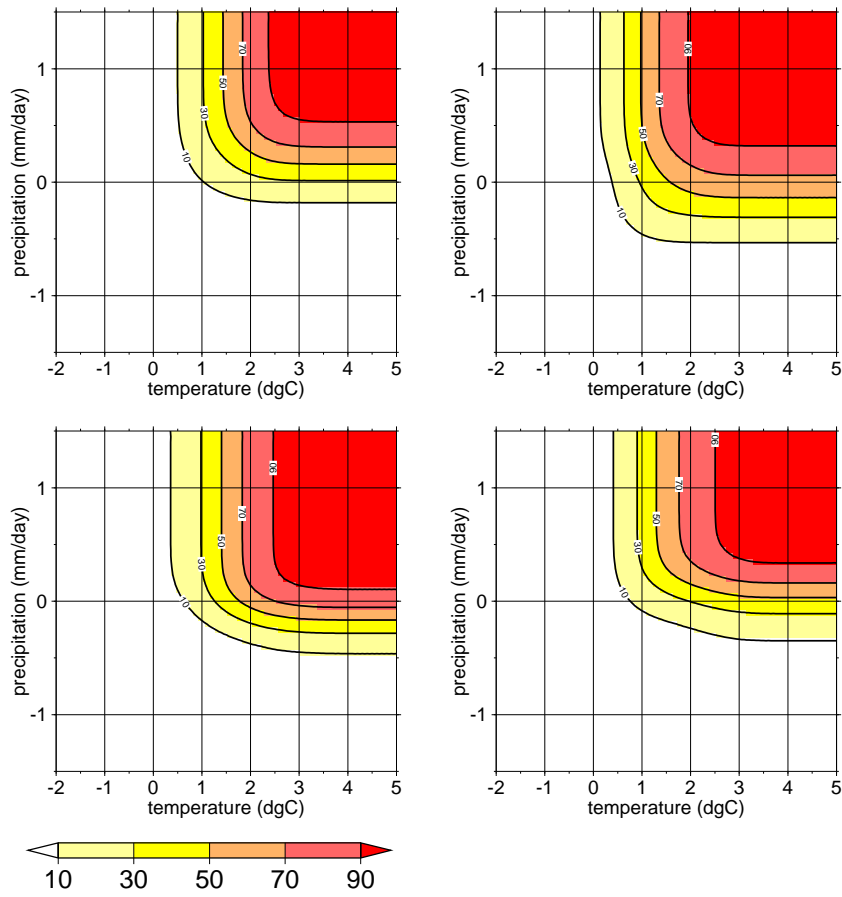


Figure 2.18: As Figure 2.1 for Paris.

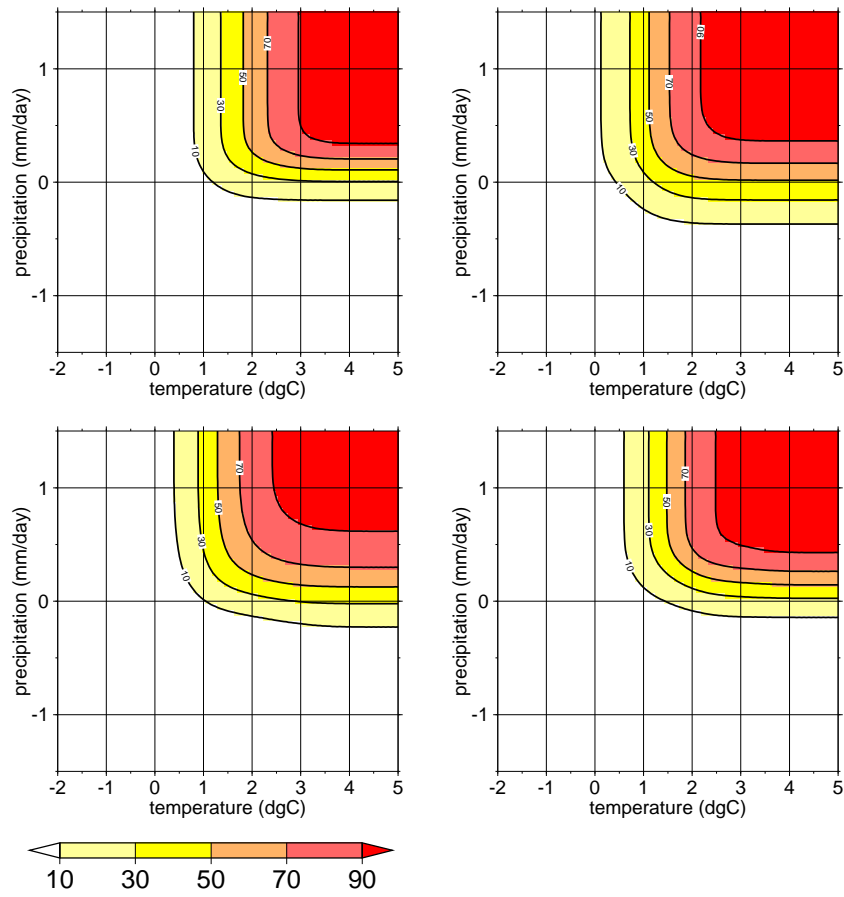


Figure 2.19: As Figure 2.1 for Prague.

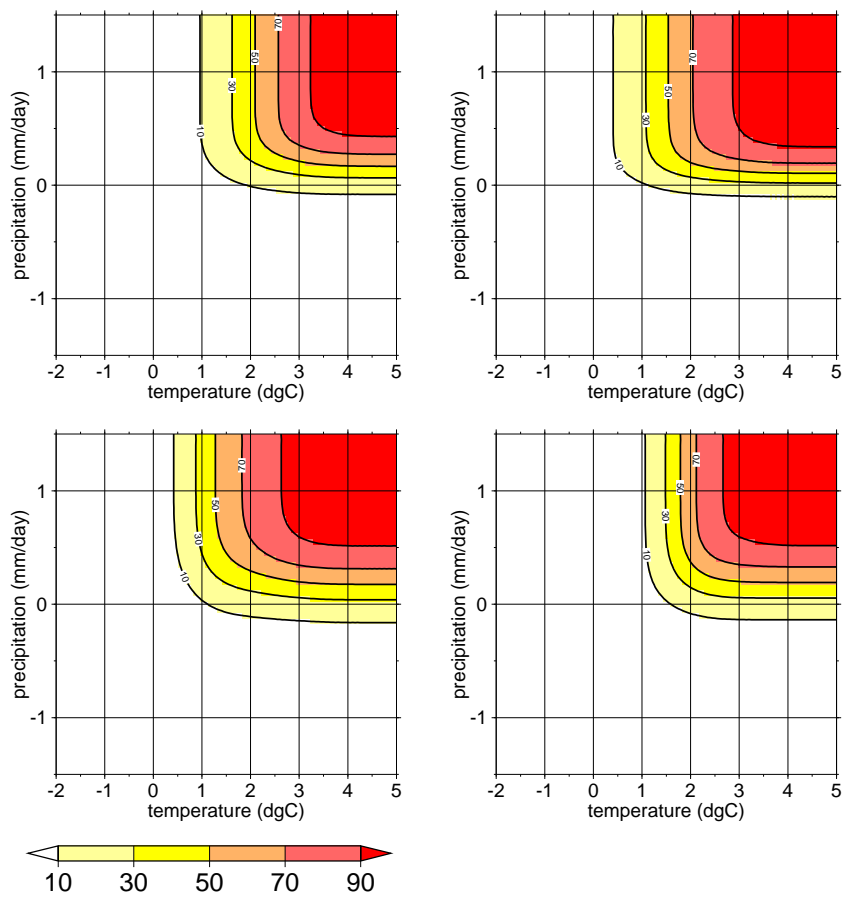


Figure 2.20: As Figure 2.1 for Riga.

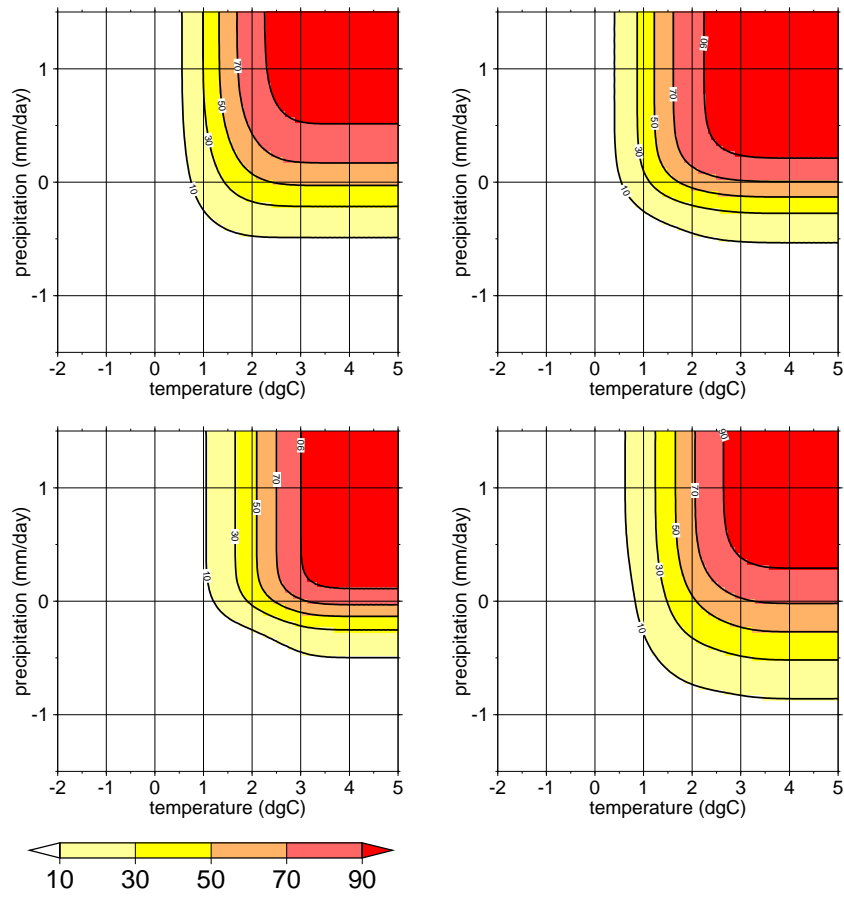


Figure 2.21: As Figure 2.1 for Rome.

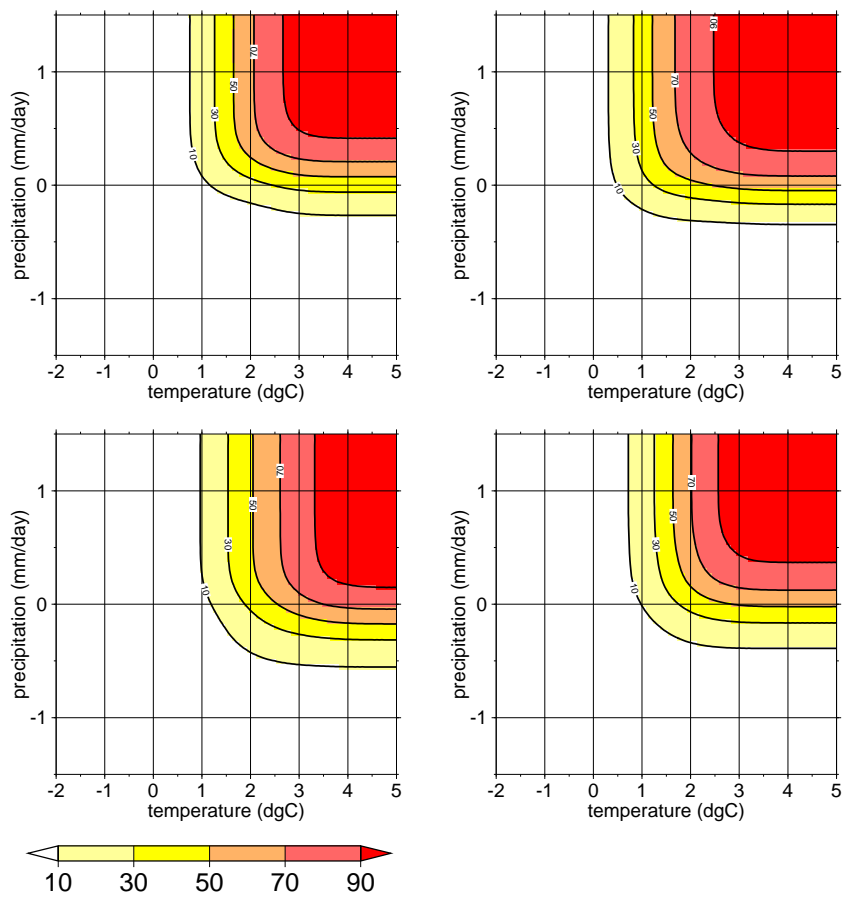


Figure 2.22: As Figure 2.1 for Sarajevo.

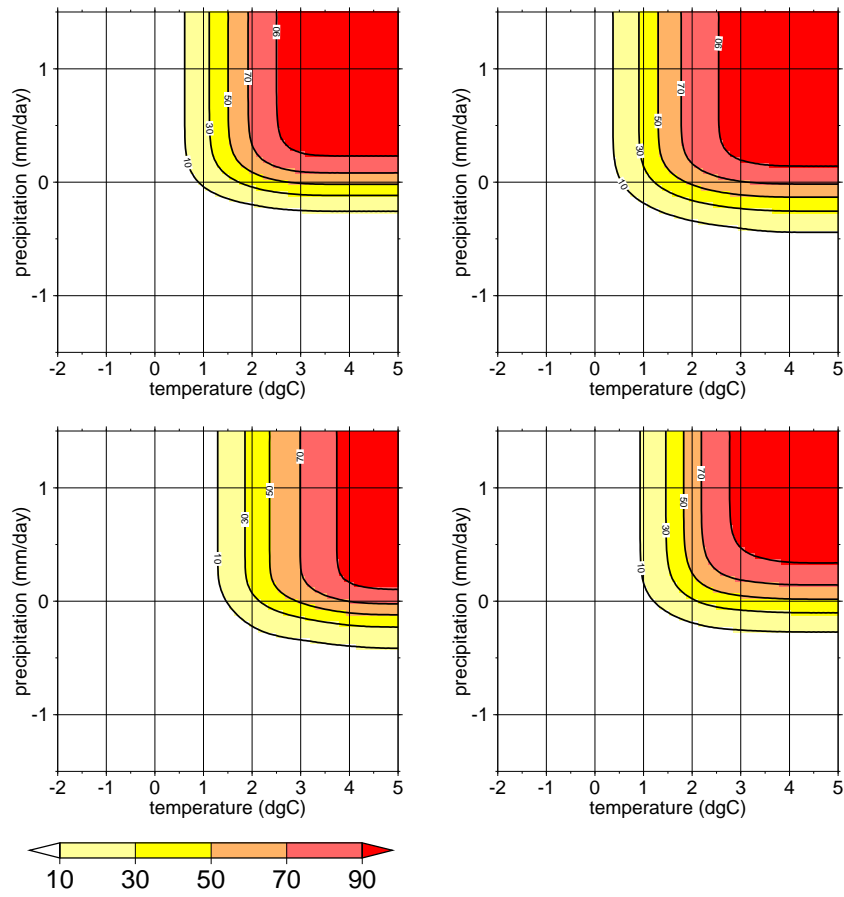


Figure 2.23: As Figure 2.1 for Skopje.

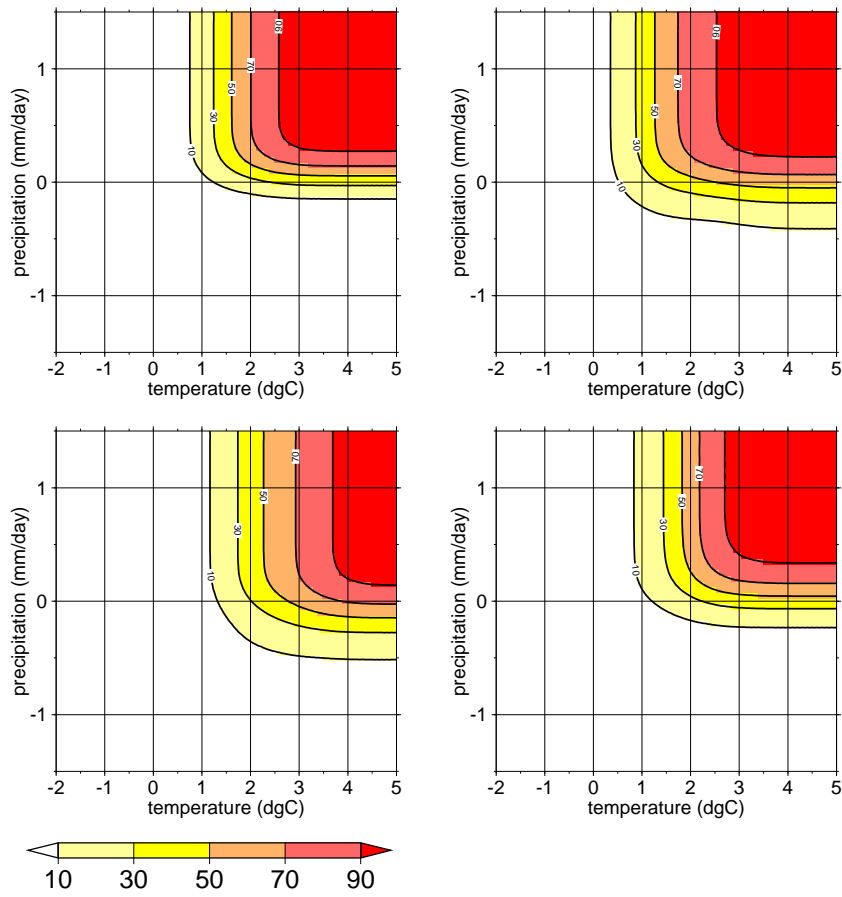


Figure 2.24: As Figure 2.1 for Sofia.

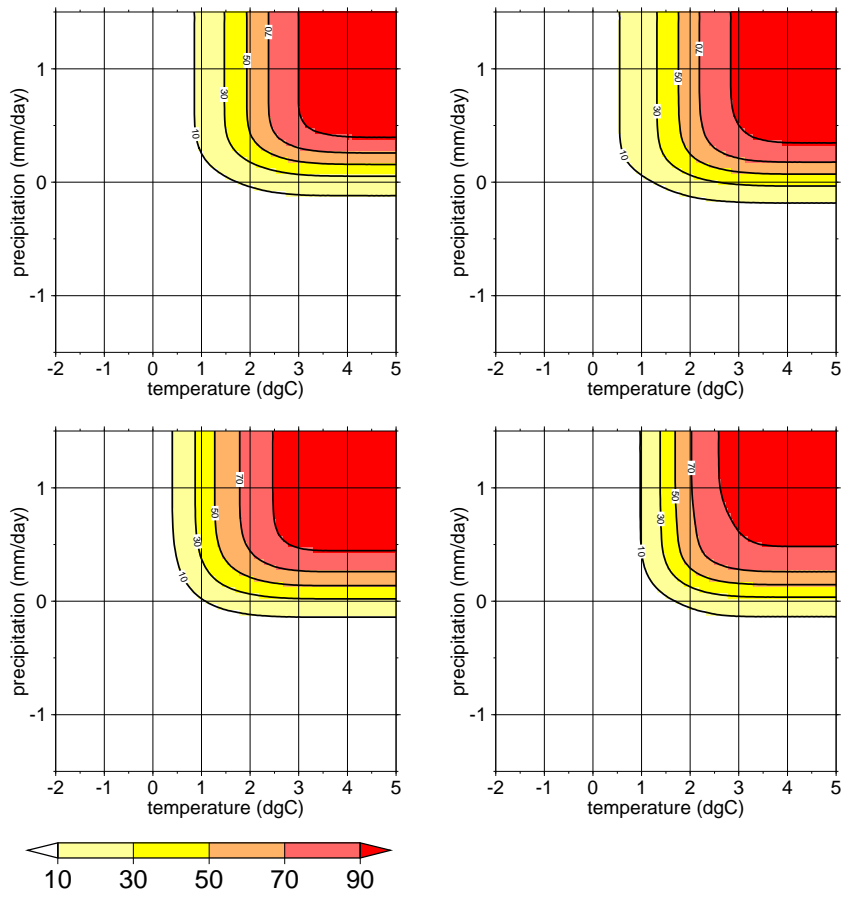


Figure 2.25: As Figure 2.1 for Stockholm.



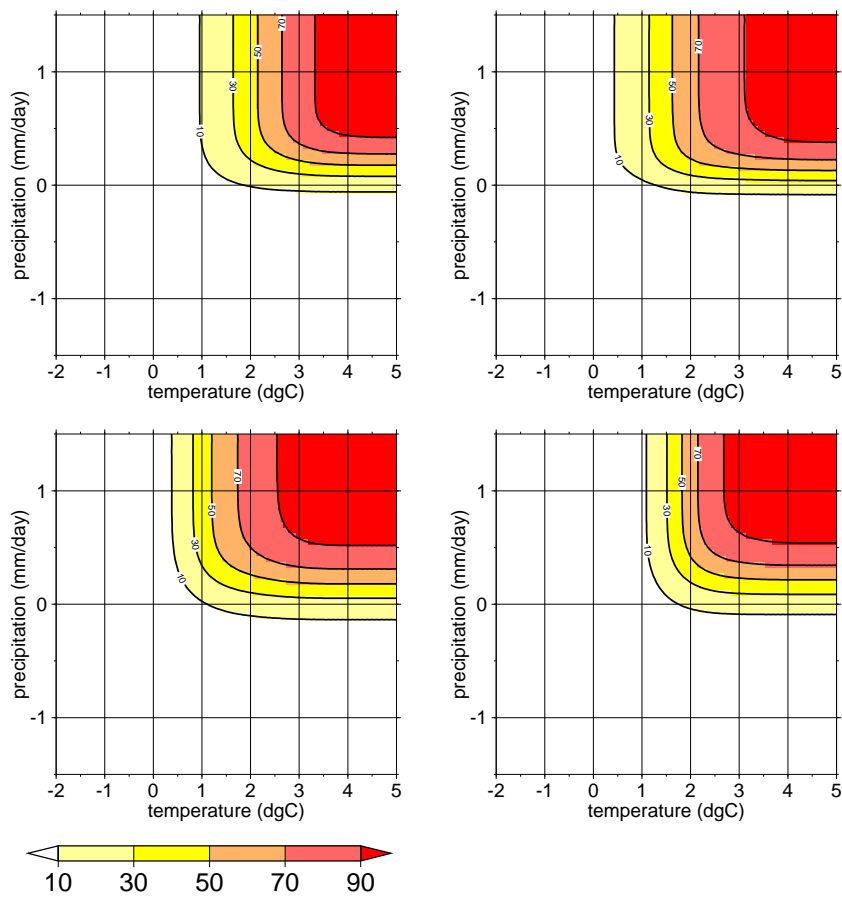


Figure 2.26: As Figure 2.1 for Tallinn.

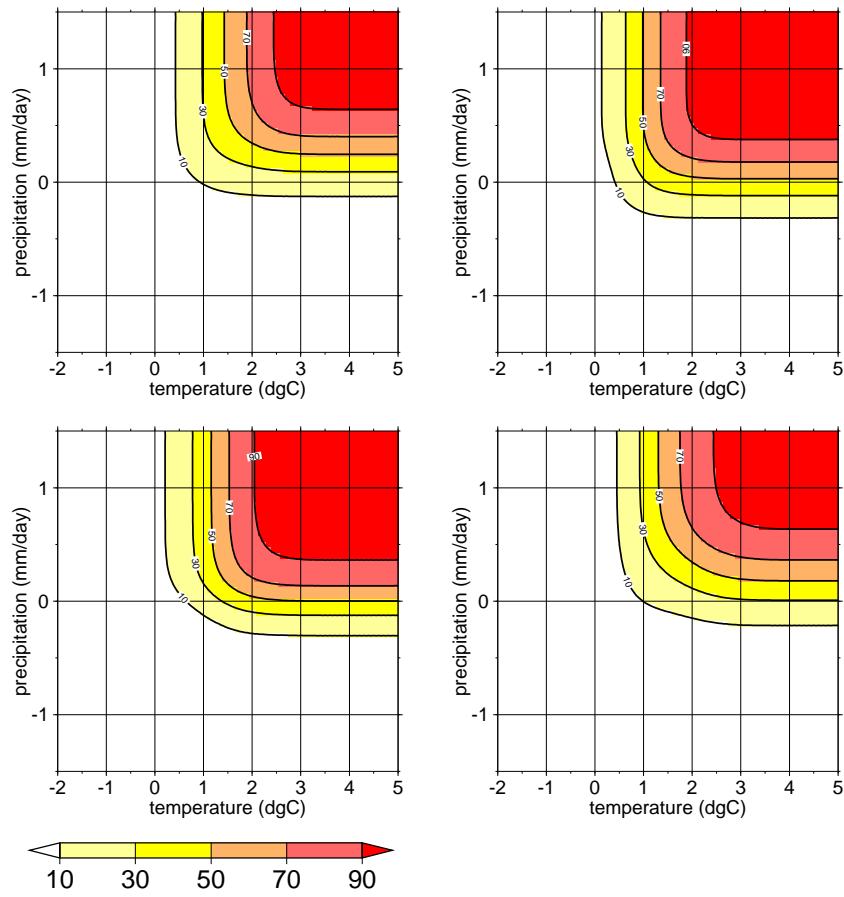


Figure 2.27: As Figure 2.1 for The Hague.

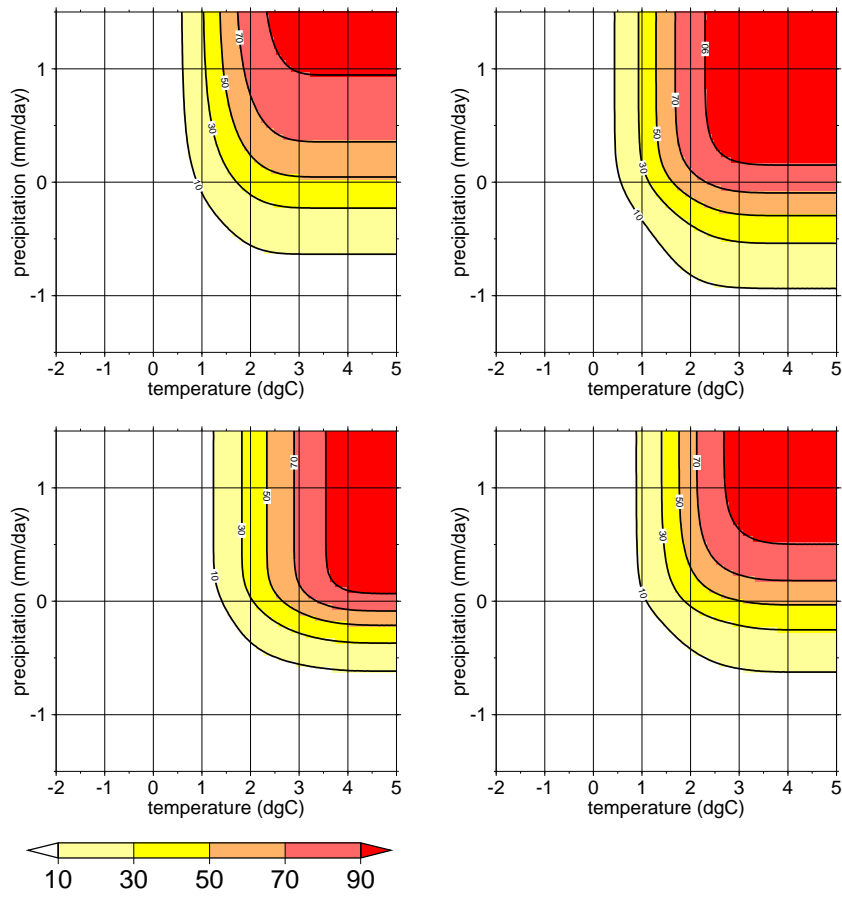


Figure 2.28: As Figure 2.1 for Tirana.

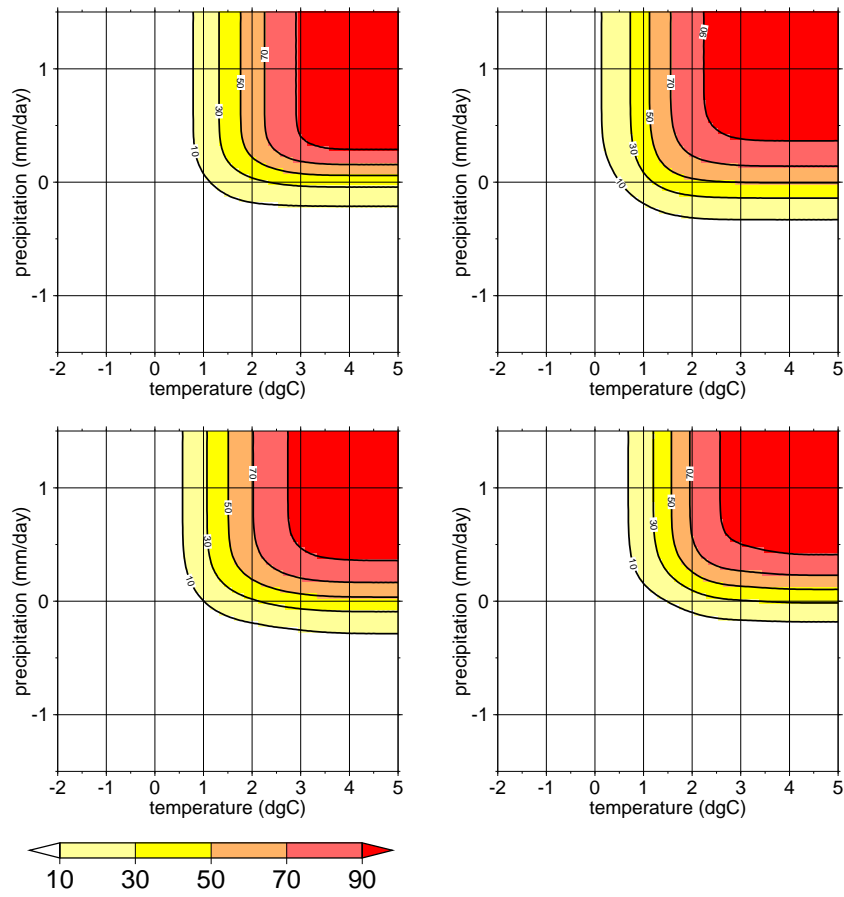


Figure 2.29: As Figure 2.1 for Vienna.

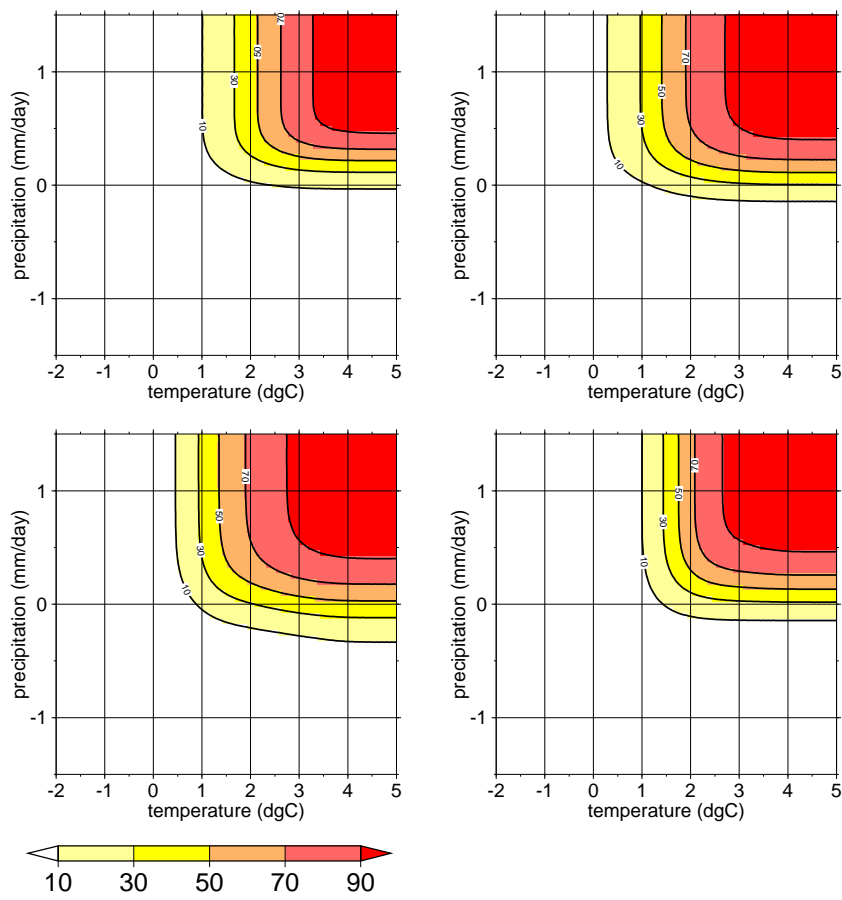


Figure 2.30: As Figure 2.1 for Vilnius.

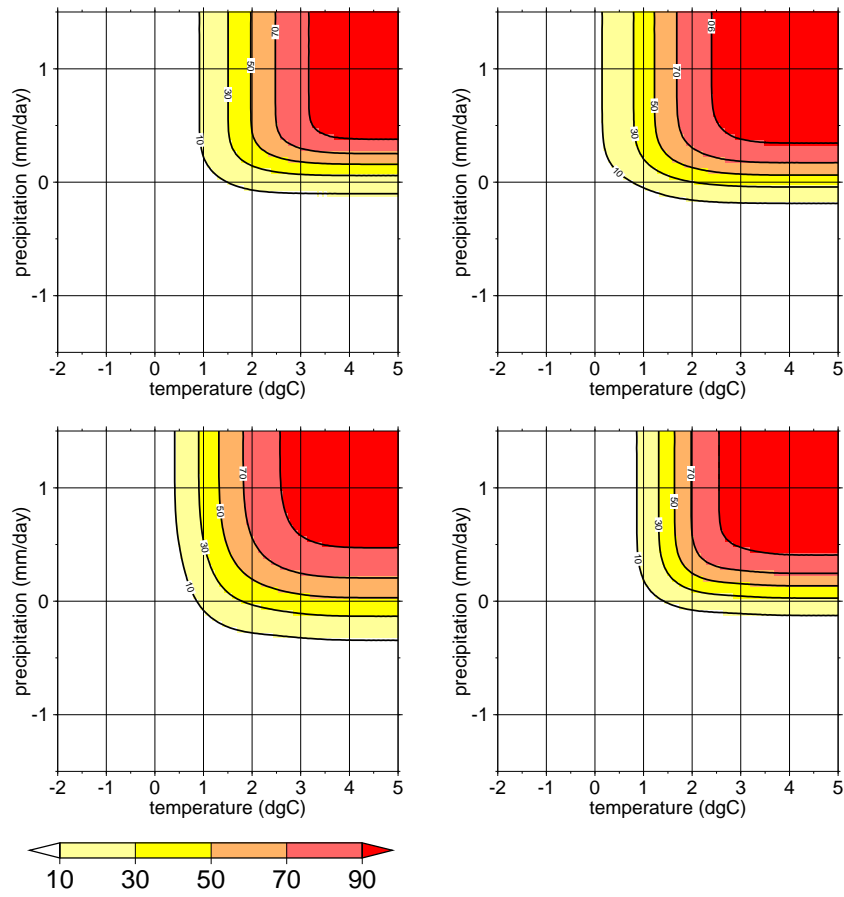


Figure 2.31: As Figure 2.1 for Warsaw.

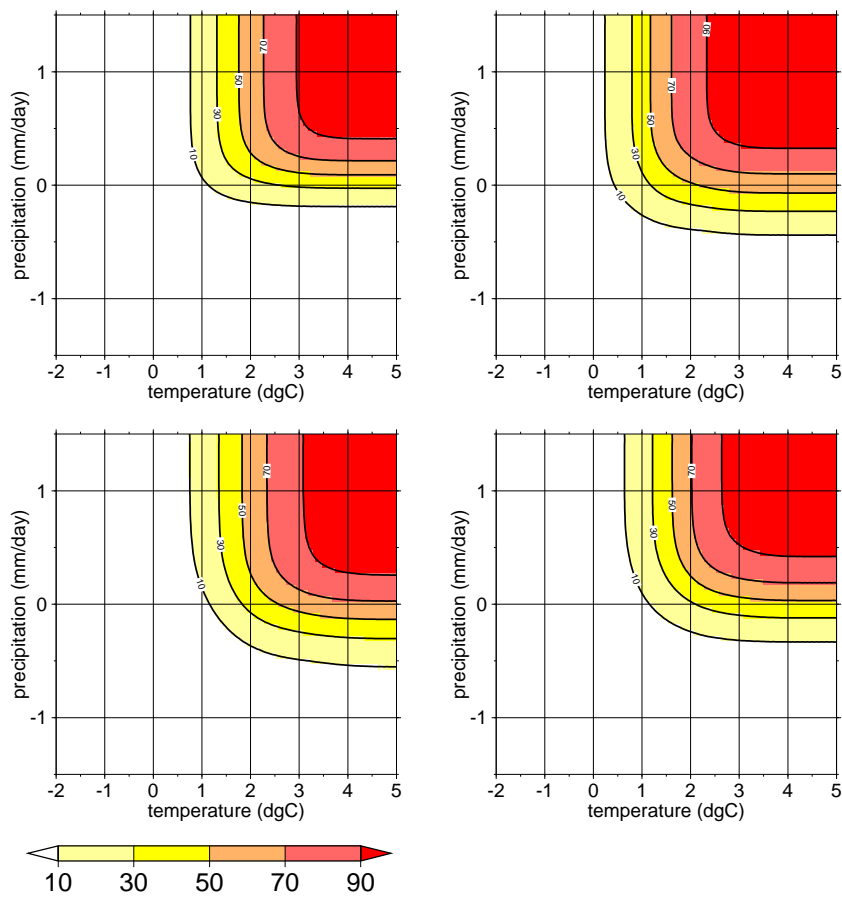


Figure 2.32: As Figure 2.1 for Zagreb.





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