



Supplement of

The European 2015 drought from a climatological perspective

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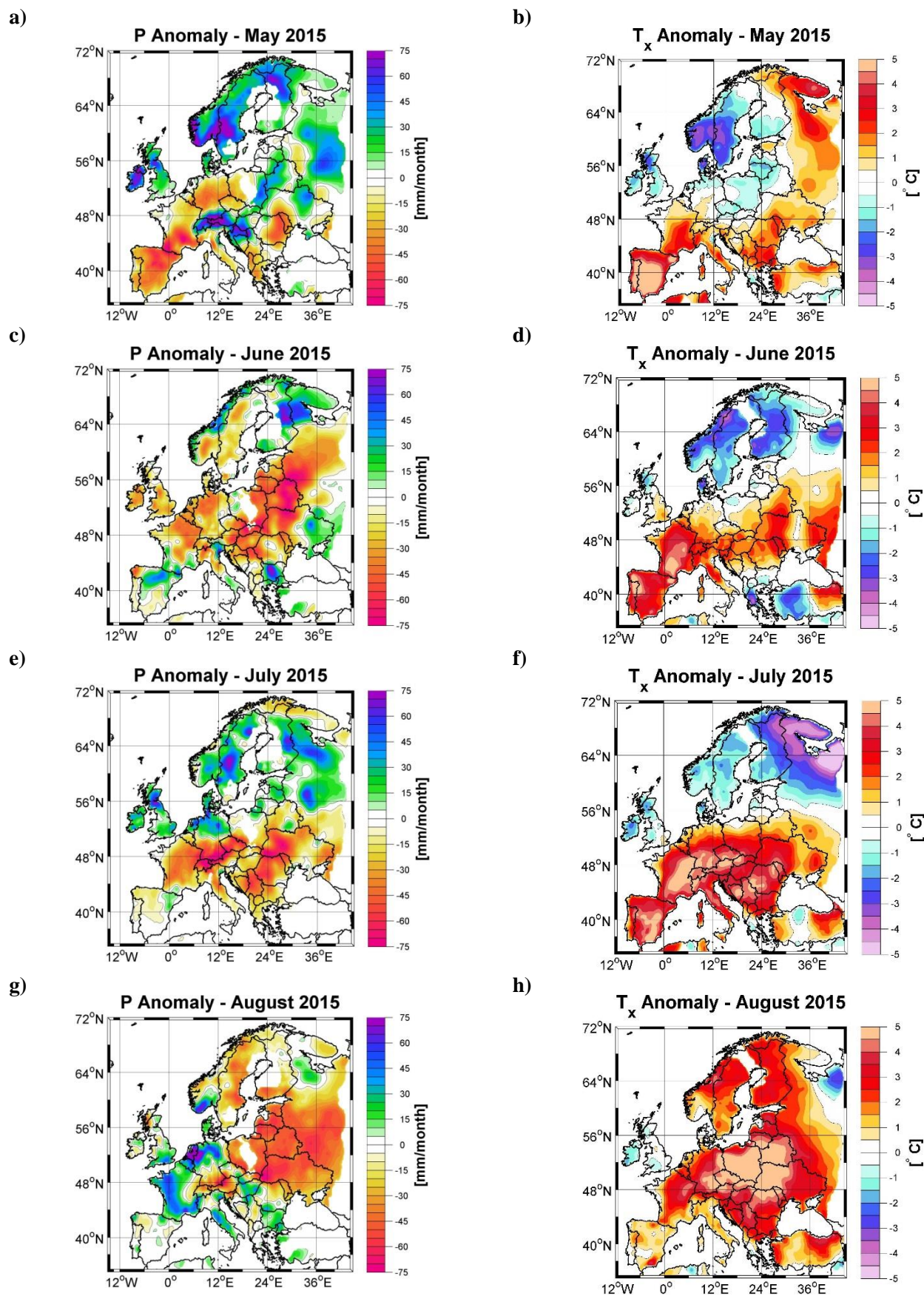


Figure S1. Monthly P anomalies (left column) and T_x anomalies (right column): a) and b) May 2015; c) and d) June 2015; e) and f) July 2015 and g) and h) August 2015. The anomalies are computed relative to the period 1971 – 2000.

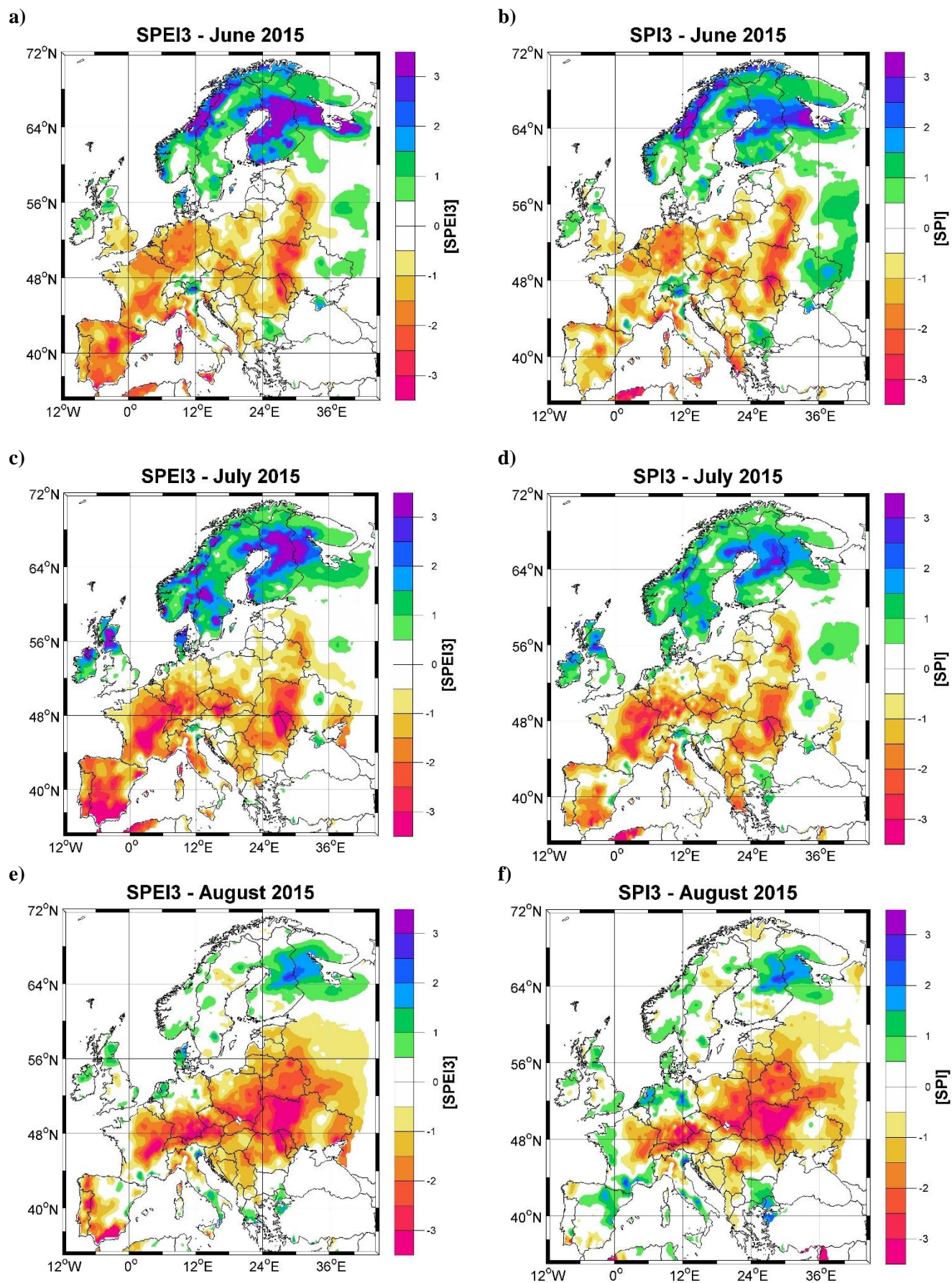


Figure S2. a) SPEI3 for June 2015; b) SPI3 for June 2015; c) as in a) but for July 2015; d) as in b) but for July 2015; e) as in a) but for August 2015 and f) as in b) but for August 2015. Reference period 1971-2000.

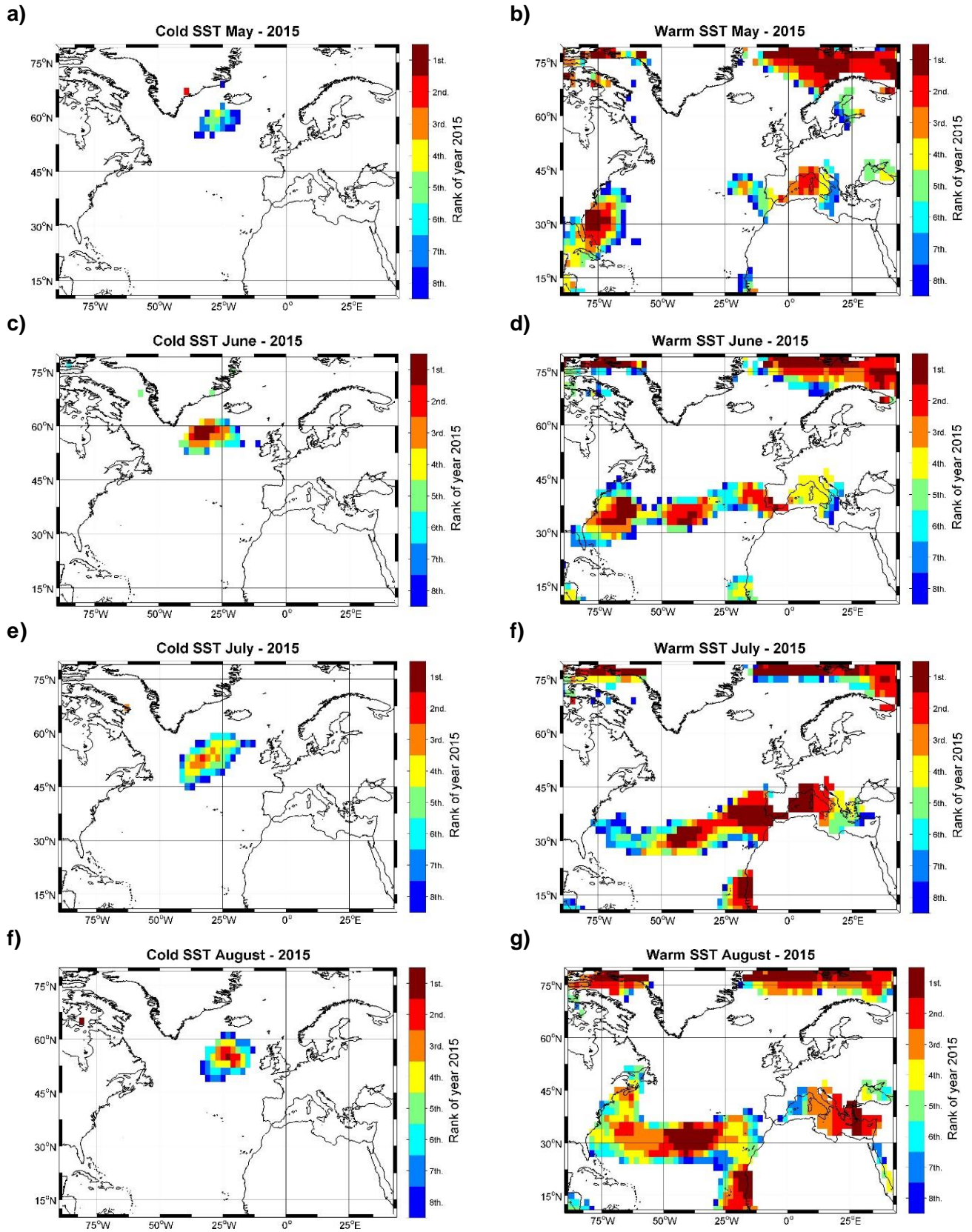


Figure S3. Top eight ranking of 2015 monthly cold SSTs (left column) and 2015 monthly warm SSTs (right column): a) May cold SST; b) May warm SST; c) June cold SST; d) June warm SST; e) July cold SST; f) July warm SST; g) August cold SST and h) August warm SST. 1 means the coldest (left column) and warmest (rights column) month since 1950, 2 signifies the second driest, and all ranks greater than 8 are shown in white. Analyzed period: 1854 – 2015.

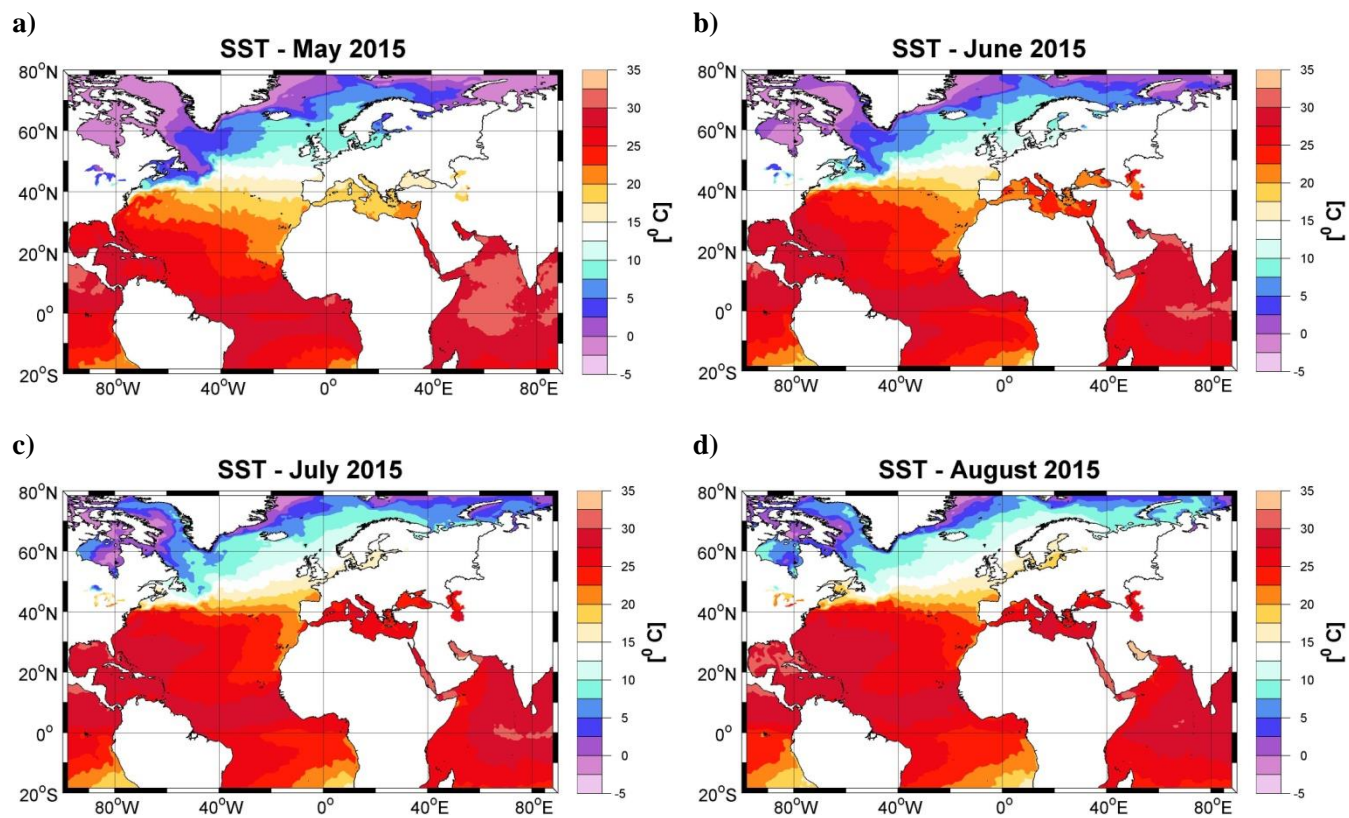


Figure S4. a) May 2015 mean SST; b) as in a) but for June 2015; c) in a) but for July 2015 and d) as in a) but for August 2015.

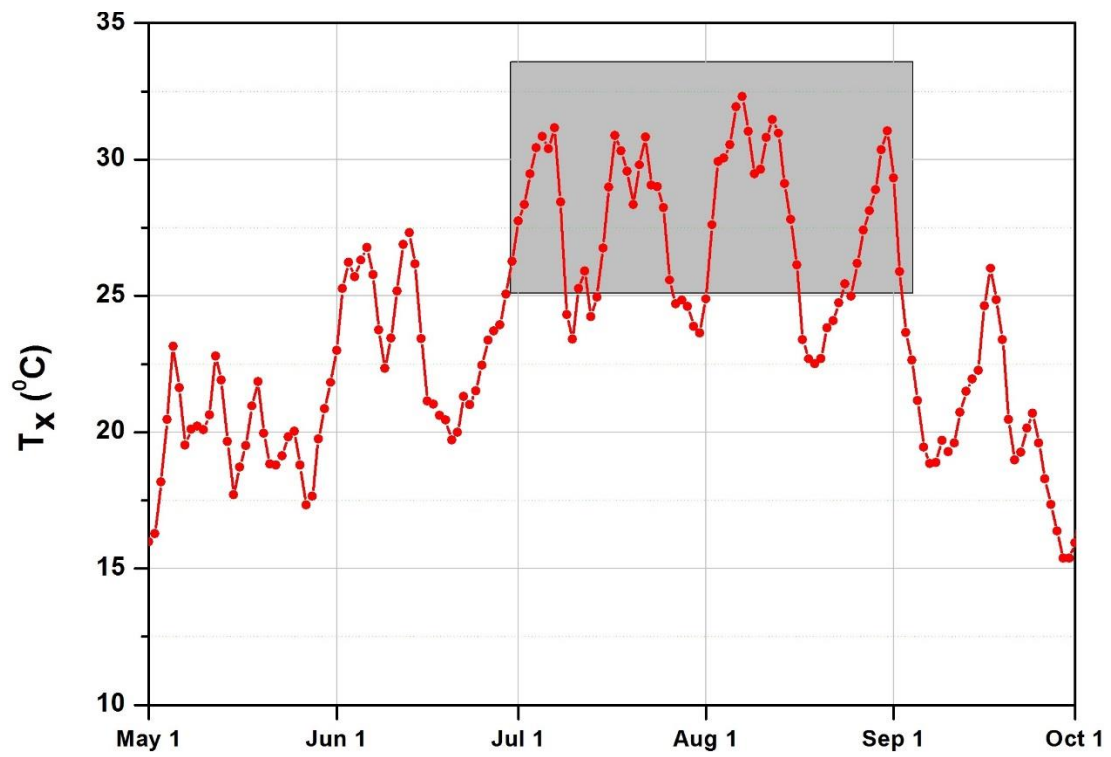


Figure S5. Daily evolution of T_x over the period 1st of May 2015 – 30 September 2015 averaged over the region: $0 - 30^{\circ}\text{E}$, $40 - 55^{\circ}\text{N}$. The grey box indicates periods when $T_x > 25^{\circ}\text{C}$.

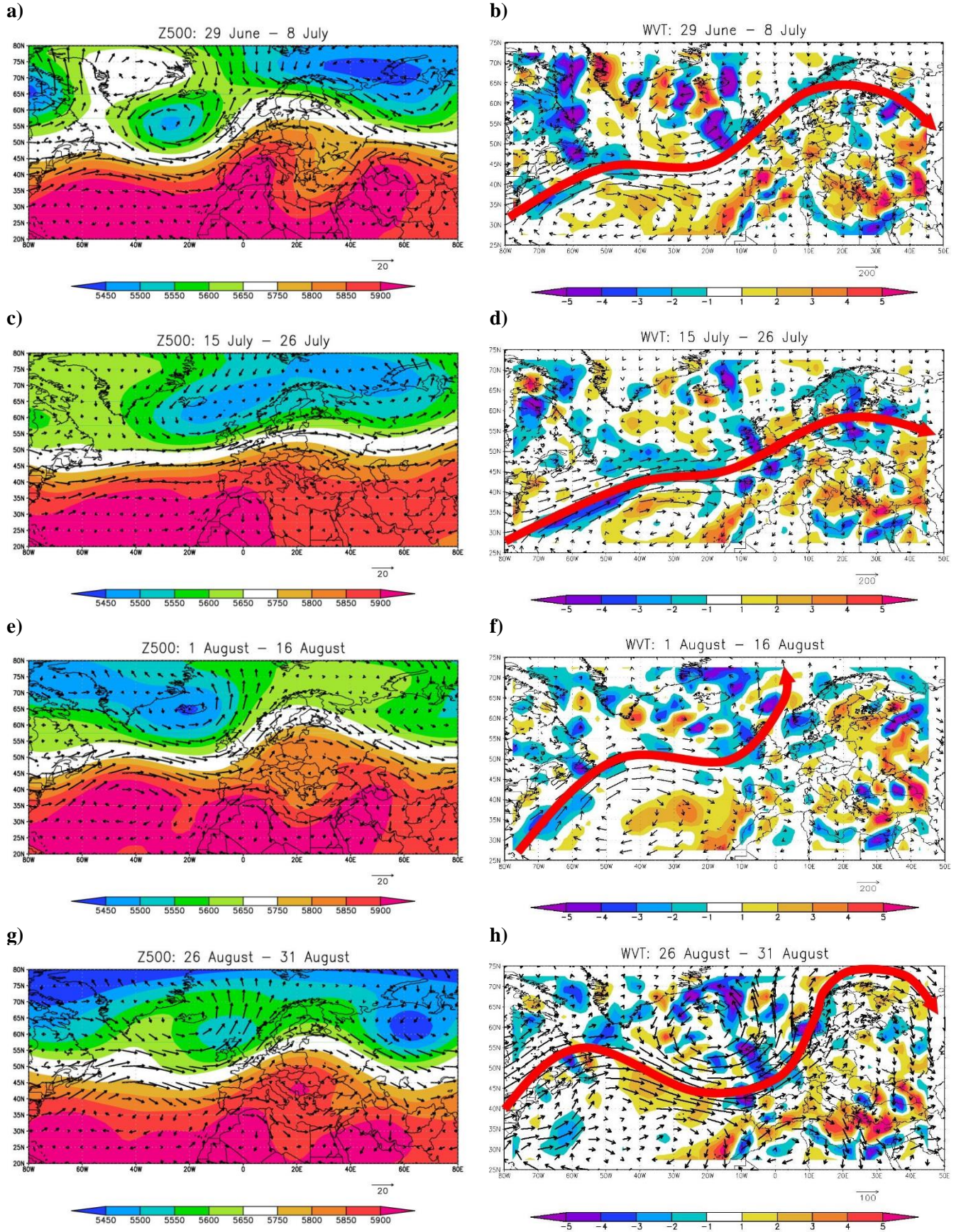


Figure S6. Mean daily Z500 (left column) and WVT (right column) averaged over: a) and b) 29 June – 8 July; c) and d) 15 July – 26 July; e) and f) 1 August – 16 August and g) and h) 26 August – 31 August. Units: Z500 (mb) and WVT (kg m/s).

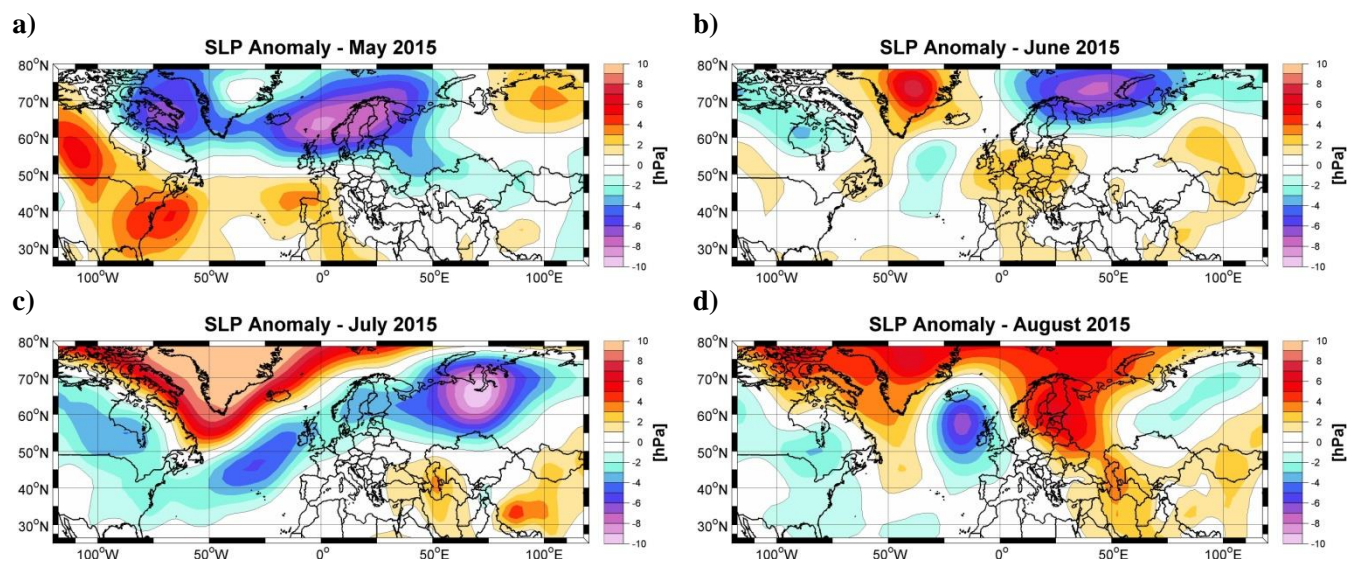


Figure S7. a) SLP anomalies for May 2015; b) an is a) but for June 2015; c) as in a) but for July 2015; d) as in a) but for August 2015. The anomalies are computed relative to the period 1971 – 2000.

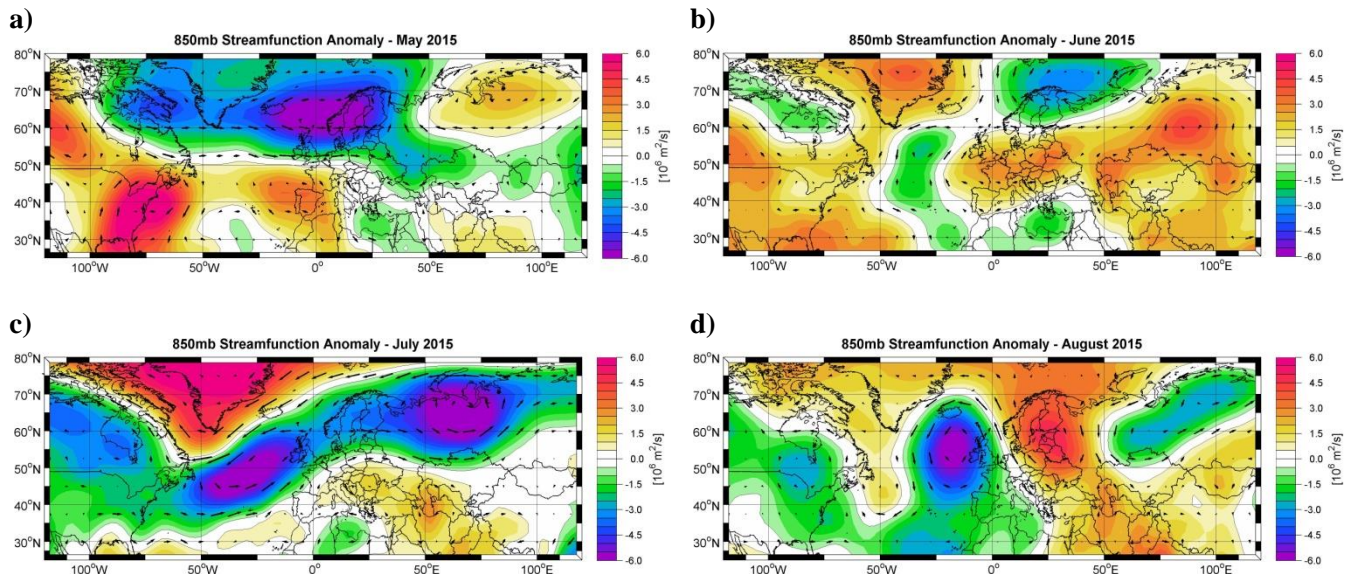


Figure S8. a) 850-hPa streamfunction anomalies for May 2015; b) as in a) but for June 2015; c) as in a) but for July 2015; d) as in a) but for August 2015. The anomalies are computed relative to the period 1971 – 2000.

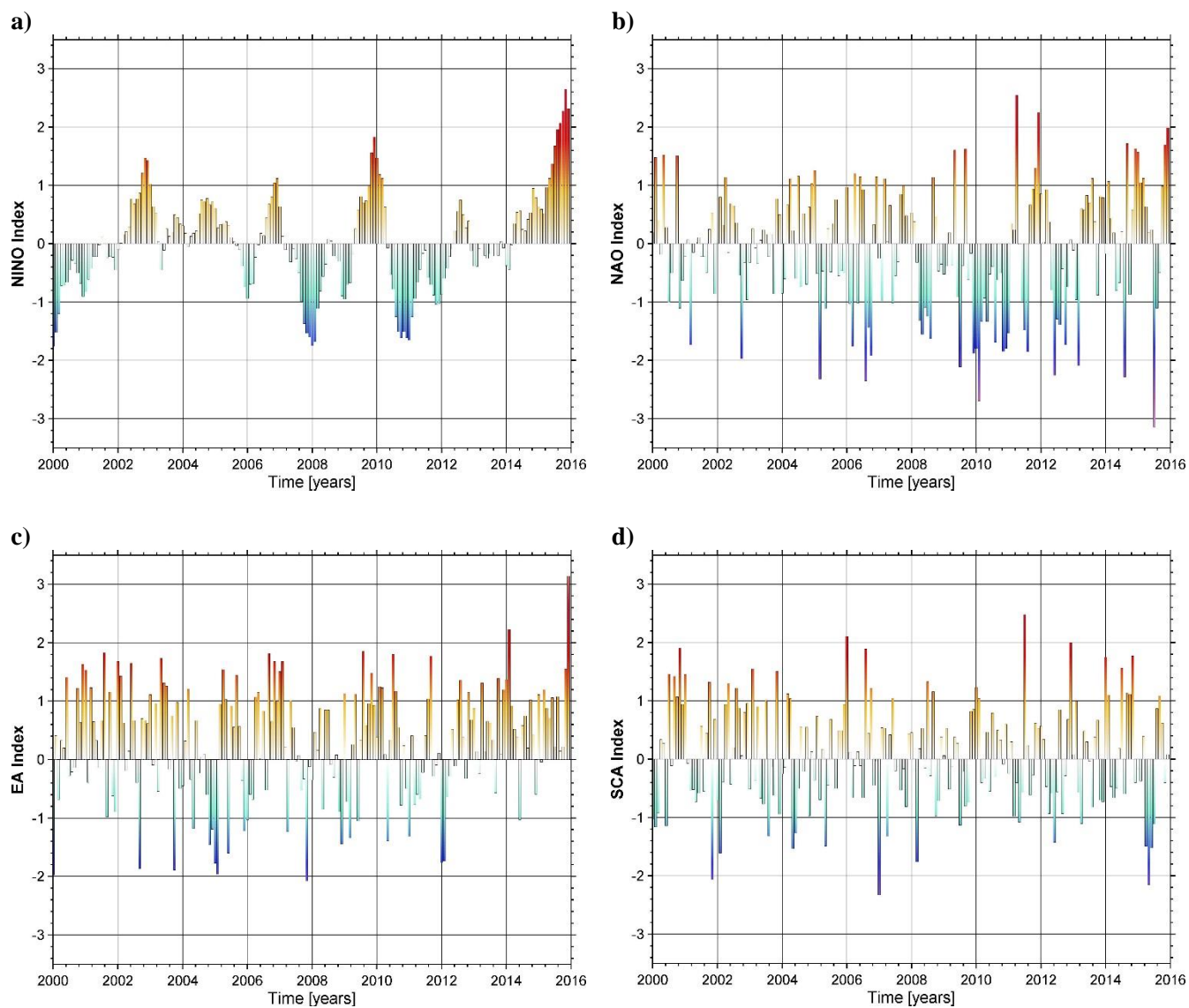


Figure S9. Monthly evolution of the teleconnection indices over the period 2006 - 2016: a) Niño 3.4 index; b) NAO index; c) EA index and d) SCA index.

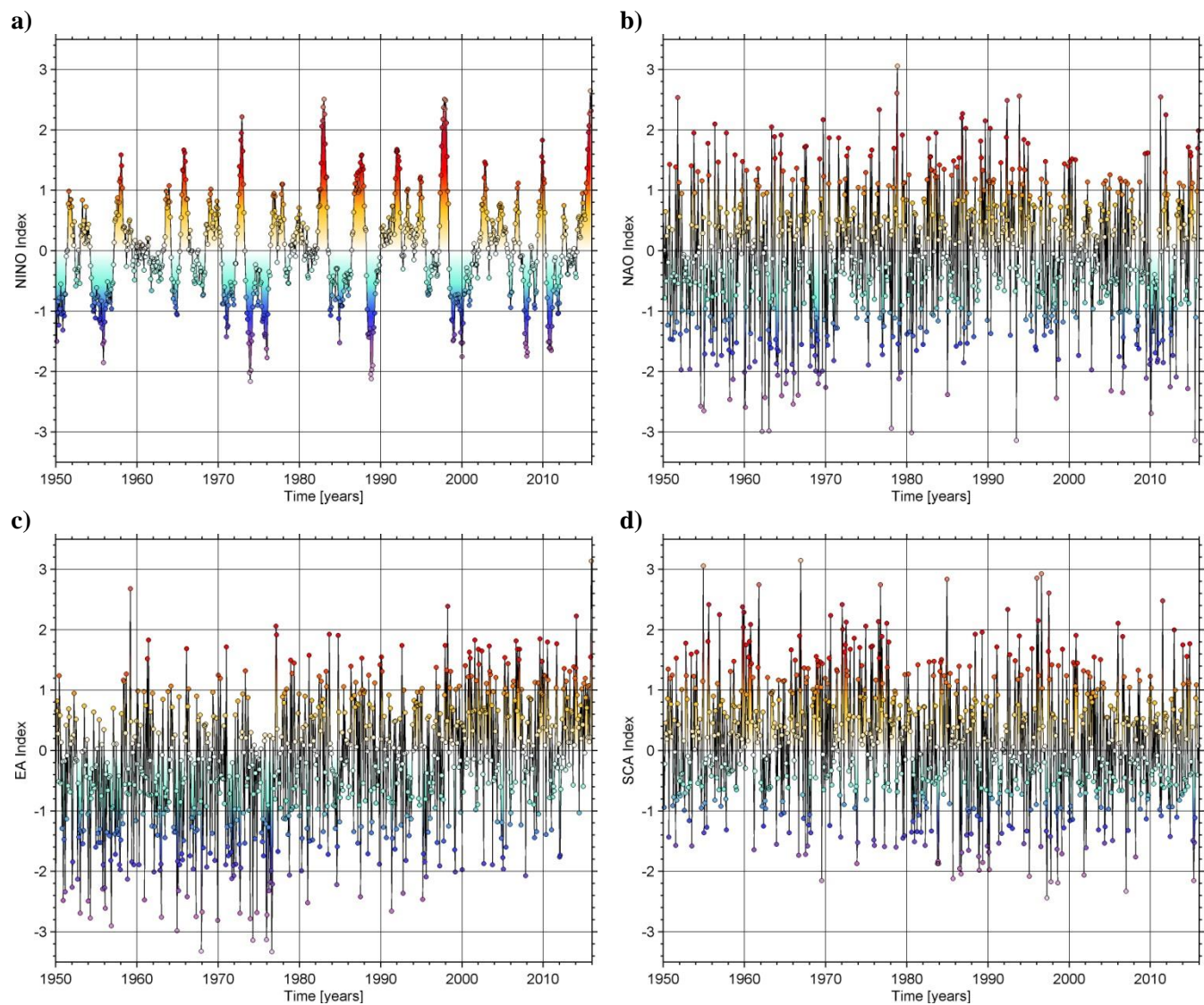


Figure S10. As in Figure 8, but for the period 1950 – 2015.

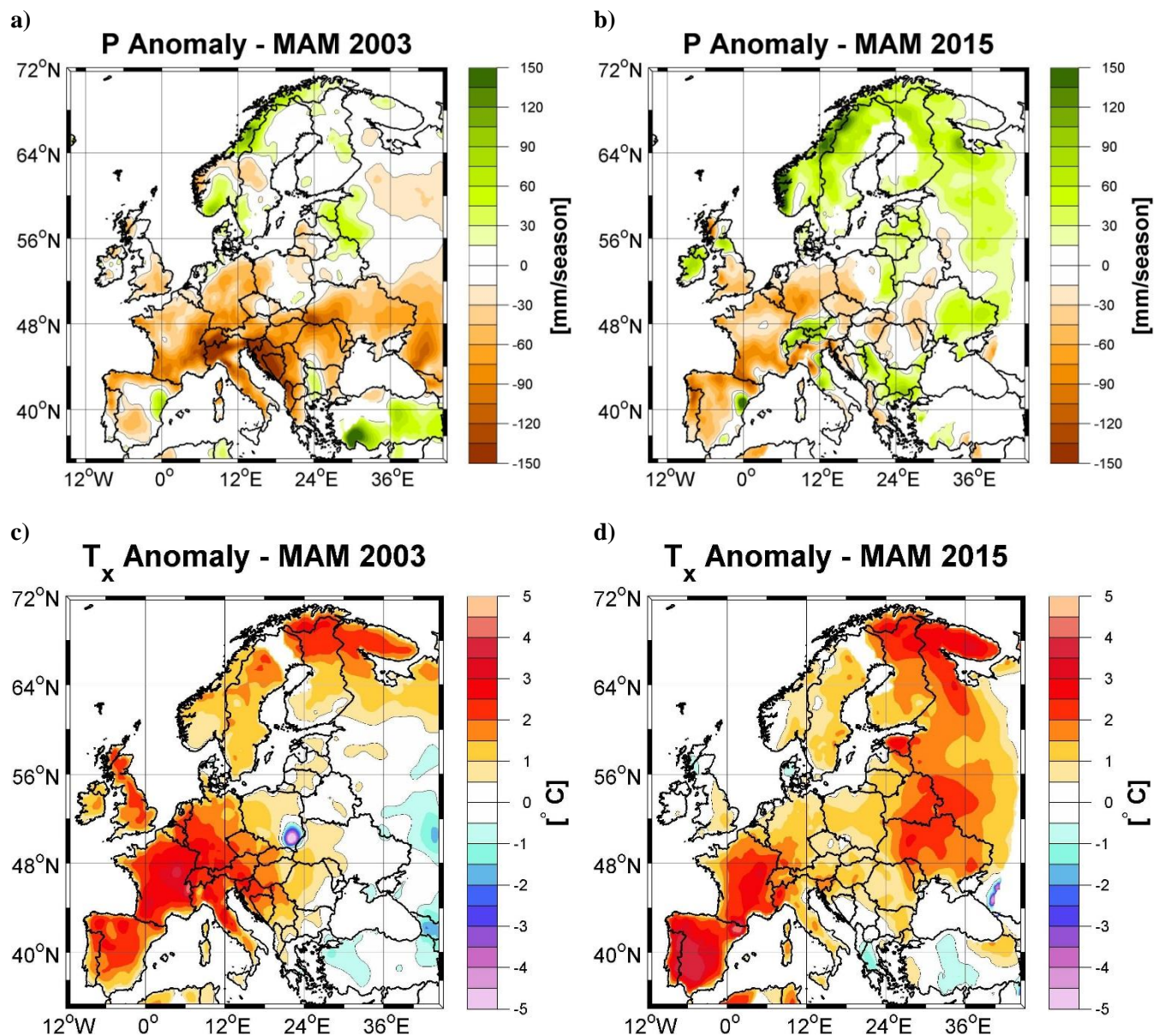


Figure S11. a) Spring (MAM) 2003 P anomalies; b) as in a) but for spring 2015; c) Spring 2003 T_x anomalies; d) as in c) but for spring 2015. The anomalies are computed relative to the period 1971 – 2000.

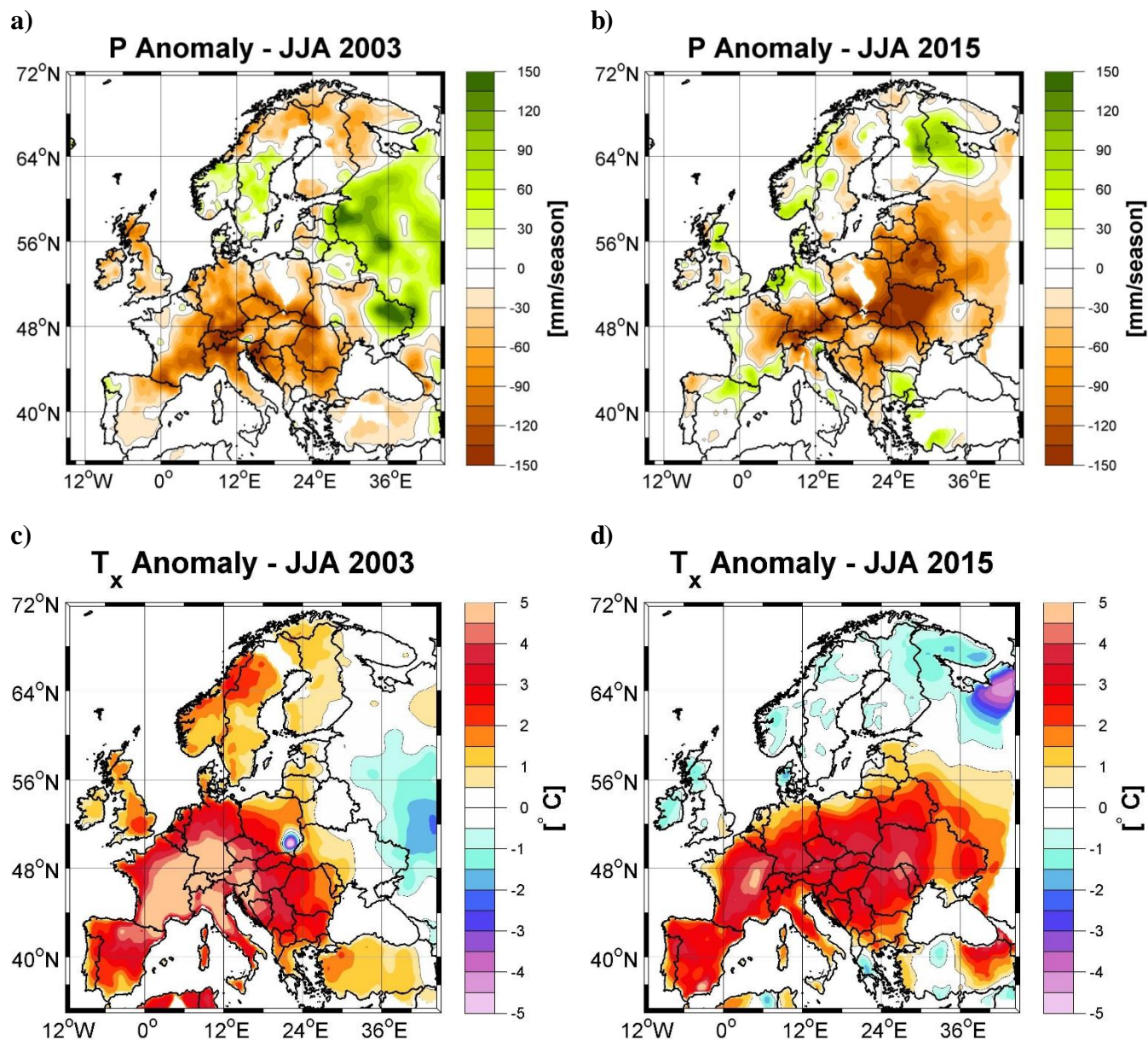


Figure S12. a) Summer (JJA) 2003 P anomalies; b) as in a) but for summer 2015; c) Summer 2003 T_x anomalies; d) as in c) but for summer 2015. The anomalies are computed relative to the period 1971 – 2000.

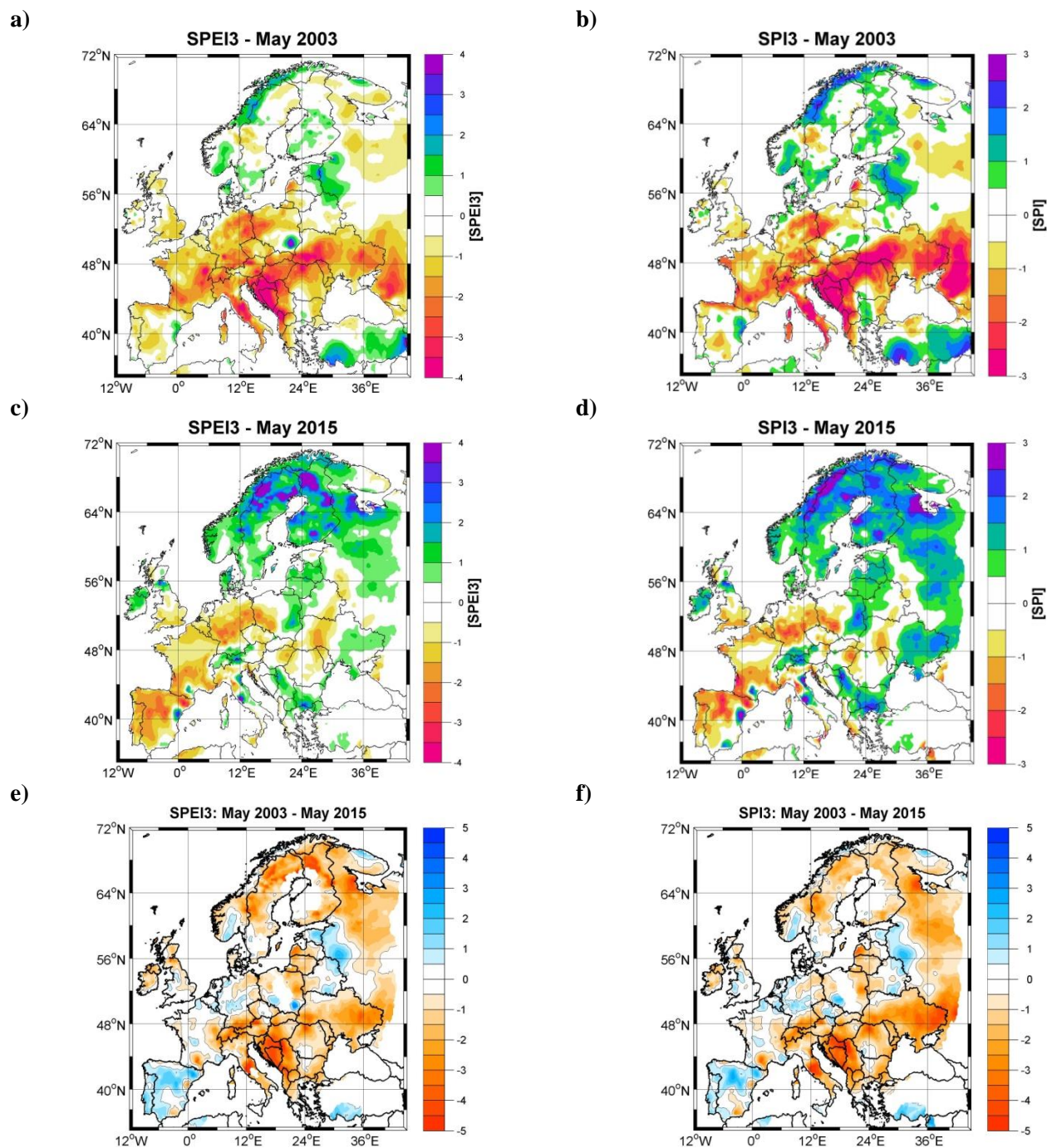


Figure S13. a) May SPEI3 2003; b) as in a) but for May 2015; c) May 2003 SPI3; d) as in c) but for May 2015; e) The difference between May 2003 SPEI3 and May 2015 SPEI3; f) as in e) but for SPI3.

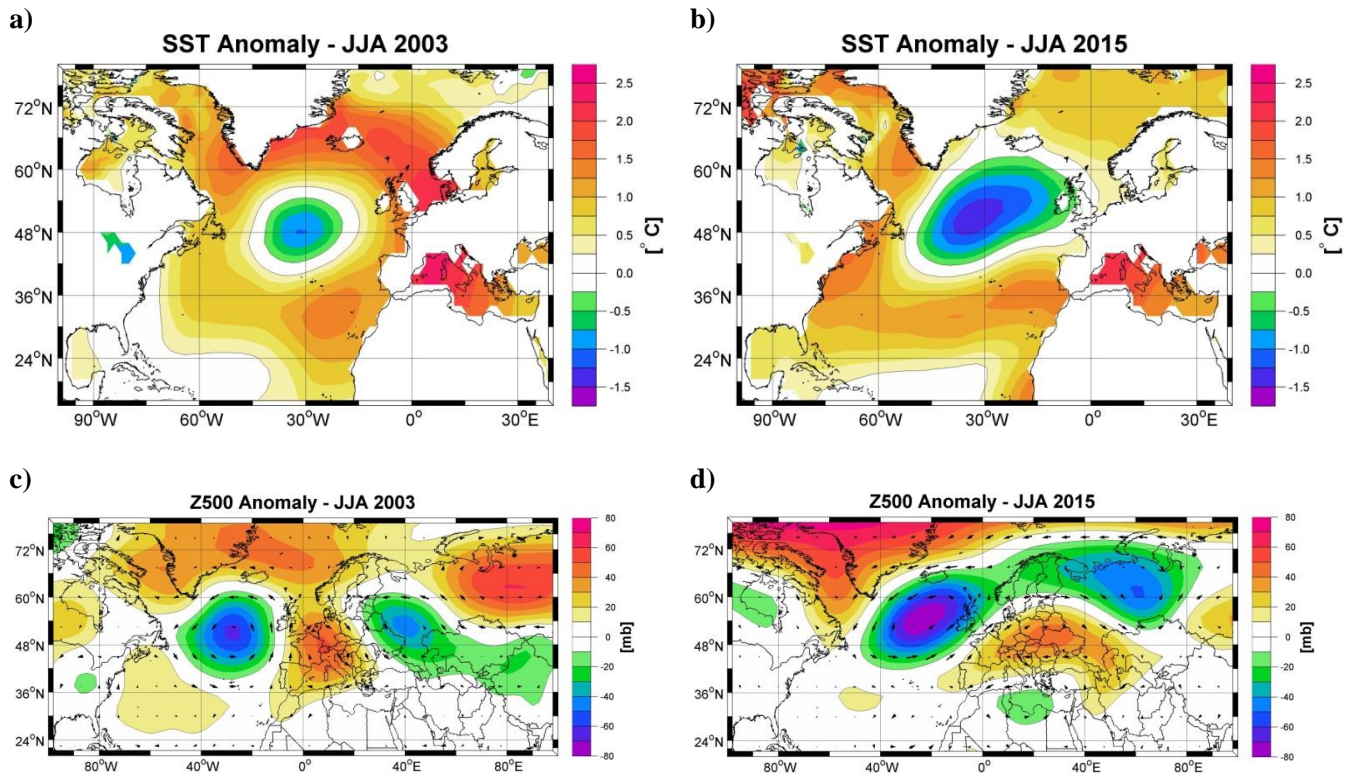


Figure S14. a) Summer 2003 SST anomalies; b) as in a) but for summer 2015; c) Summer 2003 Z500 anomalies and d) as in c) but for summer 2015. The anomalies are computed relative to the period 1971 – 2000.

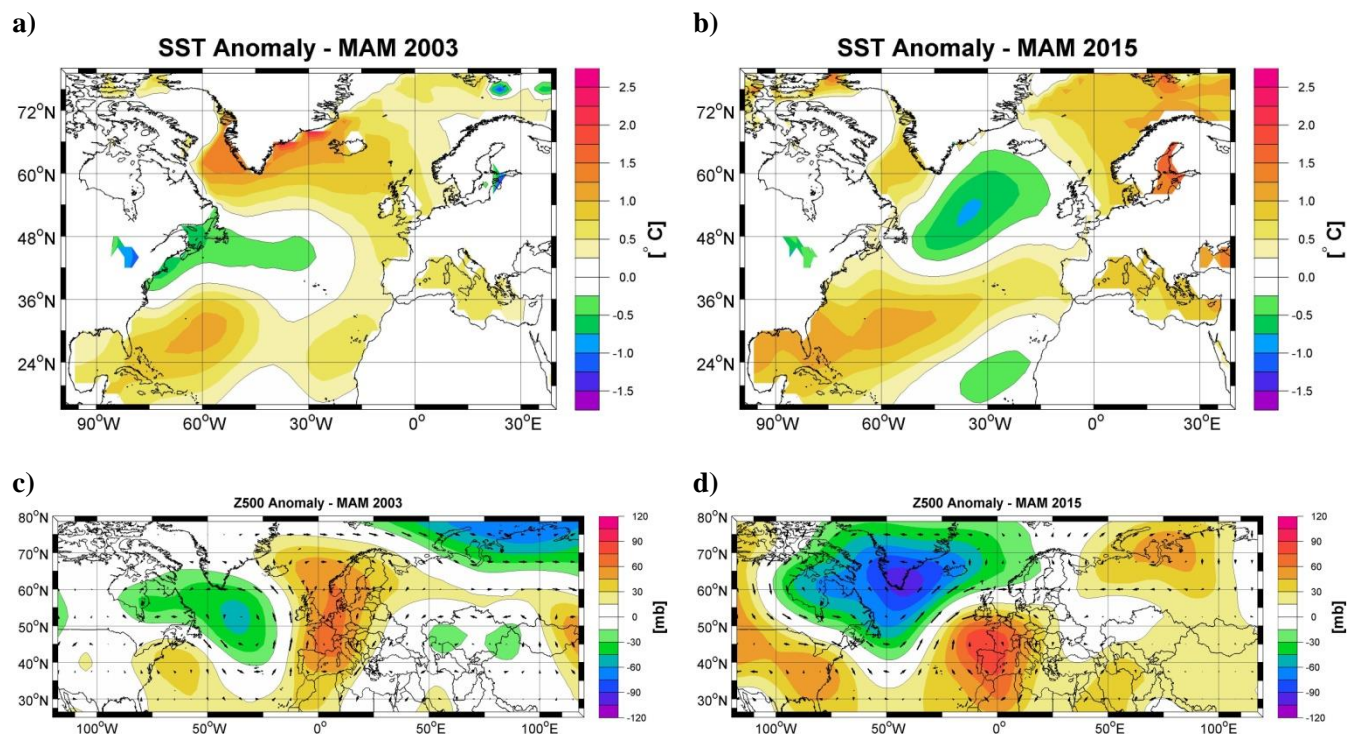


Figure S15. a) Spring 2003 SST anomalies; b) as in a) but for spring 2015; c) Spring 2003 Z500 anomalies; d) as in c) but for spring 2015. The anomalies are computed relative to the period 1971 – 2000.

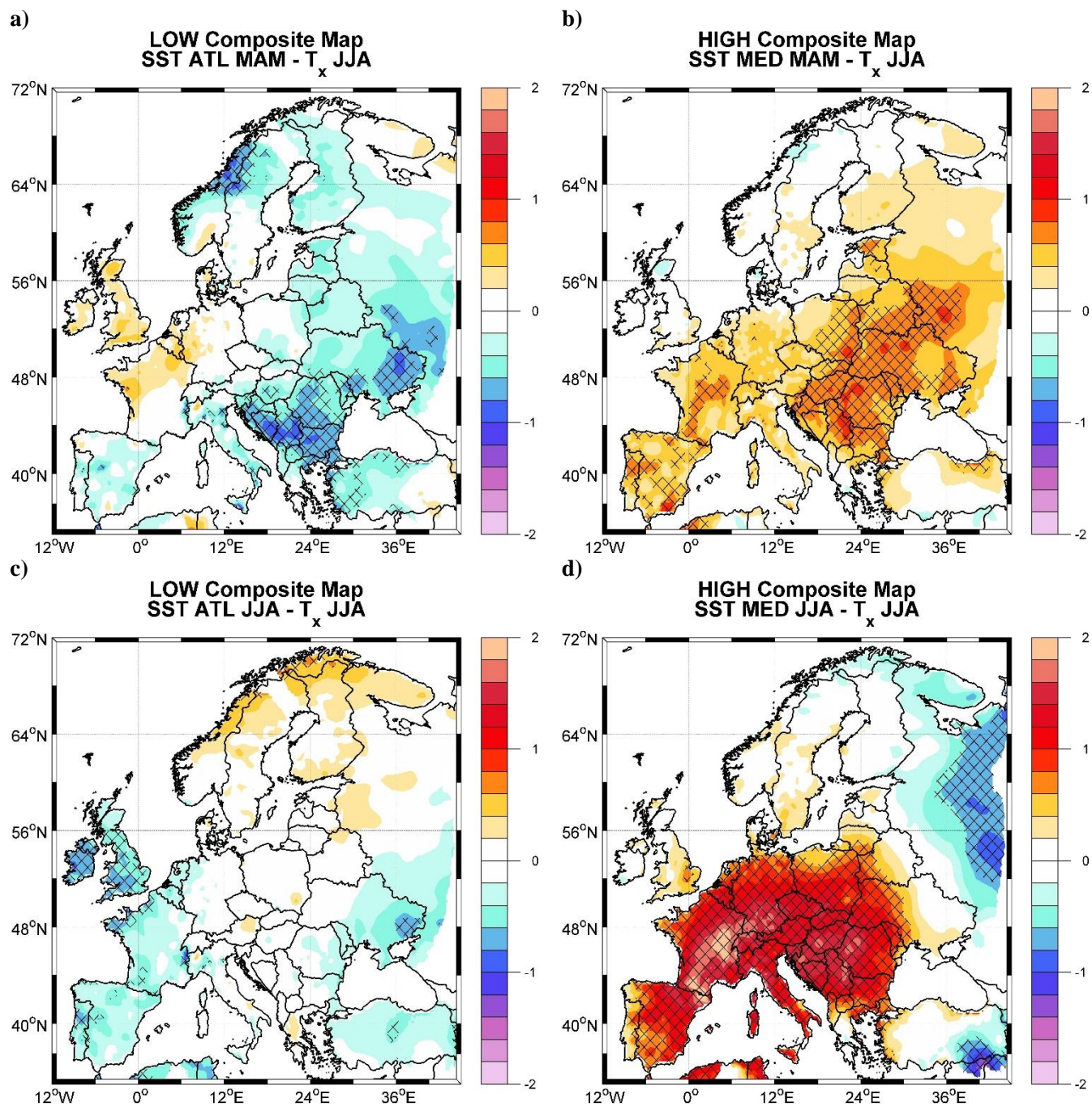


Figure S16. As in Figure 15, but for JJA T_x field. Analyzed period: 1950 – 2015.