

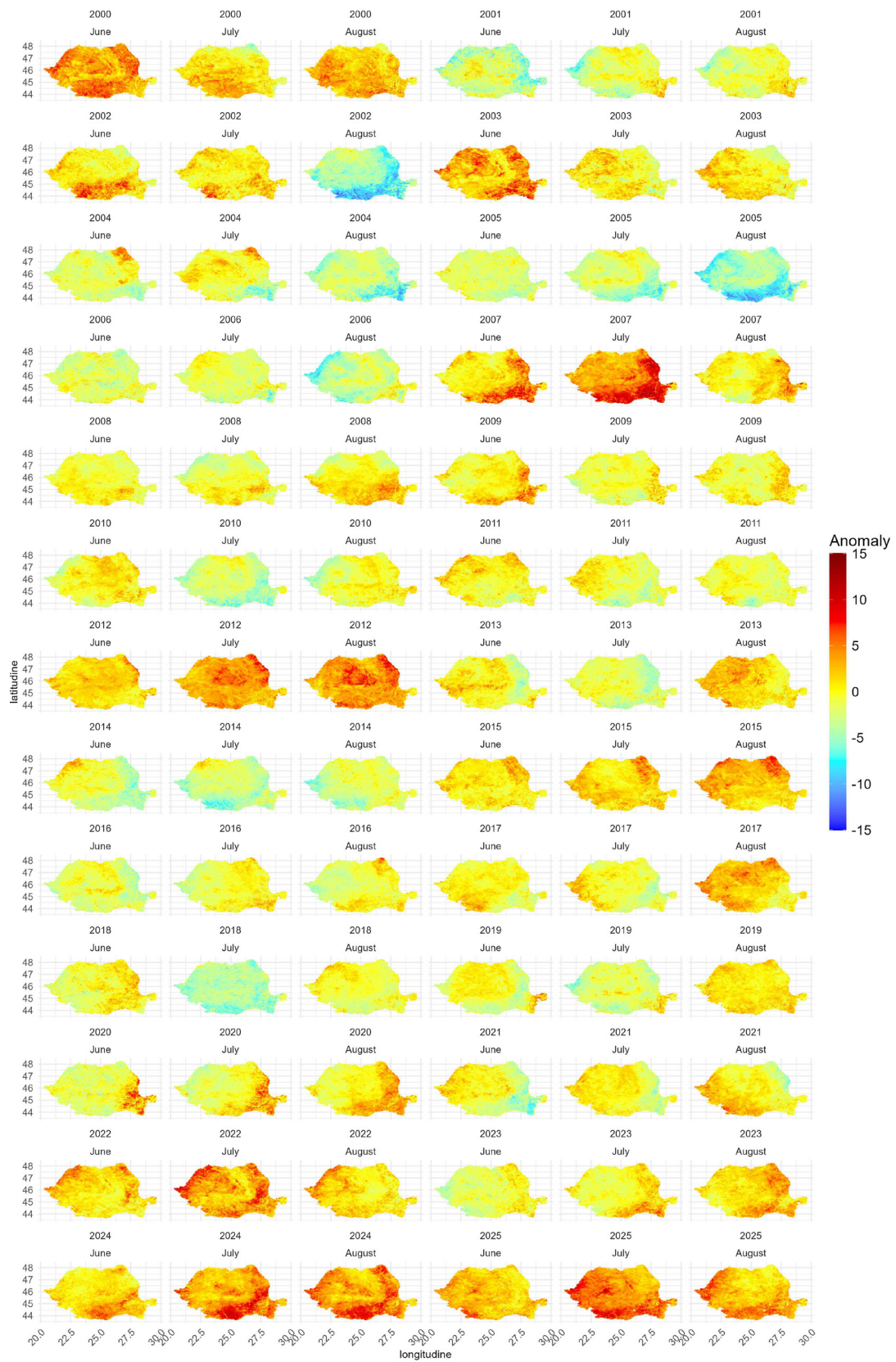


Figure S1. The spatial distribution of monthly LST anomalies in Romania (2000–2025)

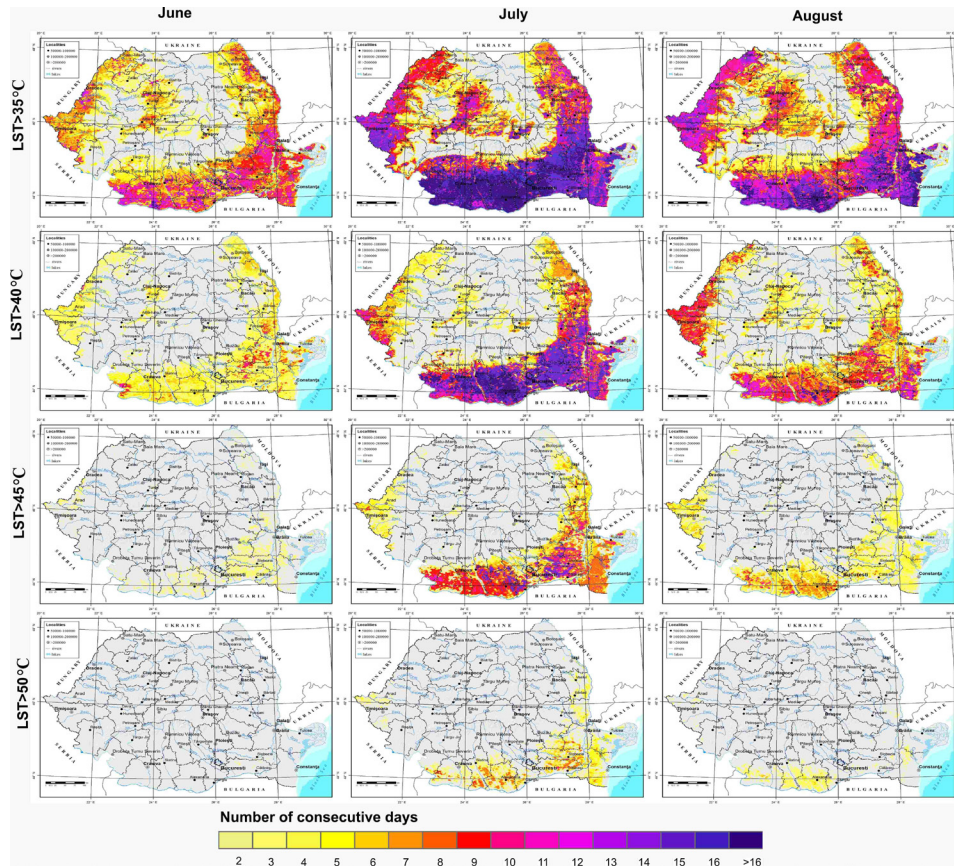


Figure S2 . Number of Consecutive Days by Month and LST Threshold

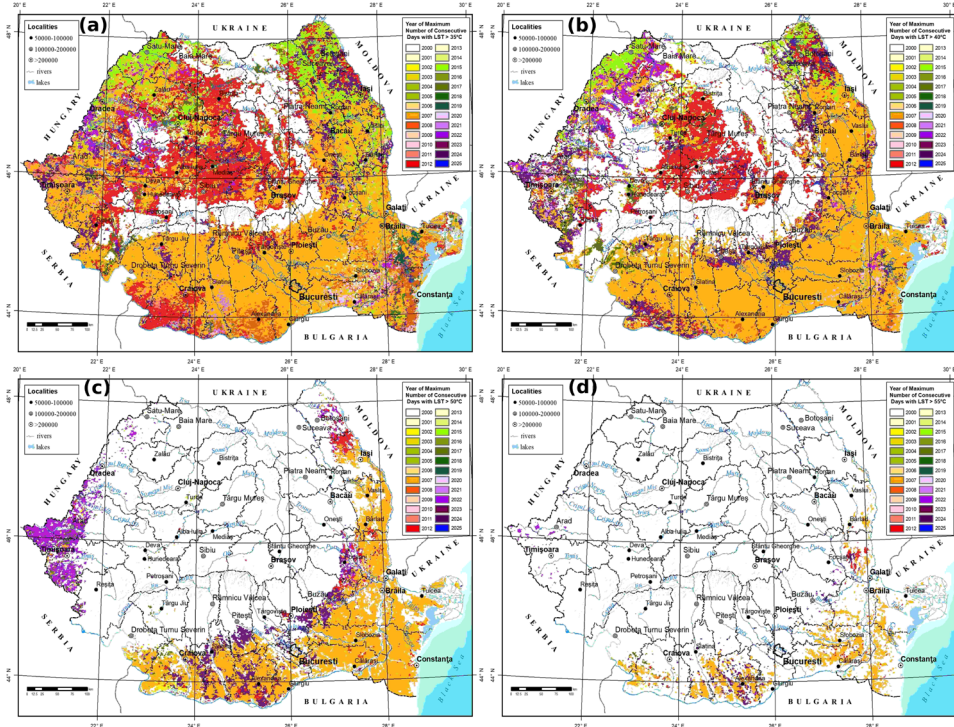


Figure S3. Year of the maximum number of consecutive days with (a) maximum LST > 35°C; (b) LST > 40°C; (c) LST > 50°C; (d) LST > 55°C

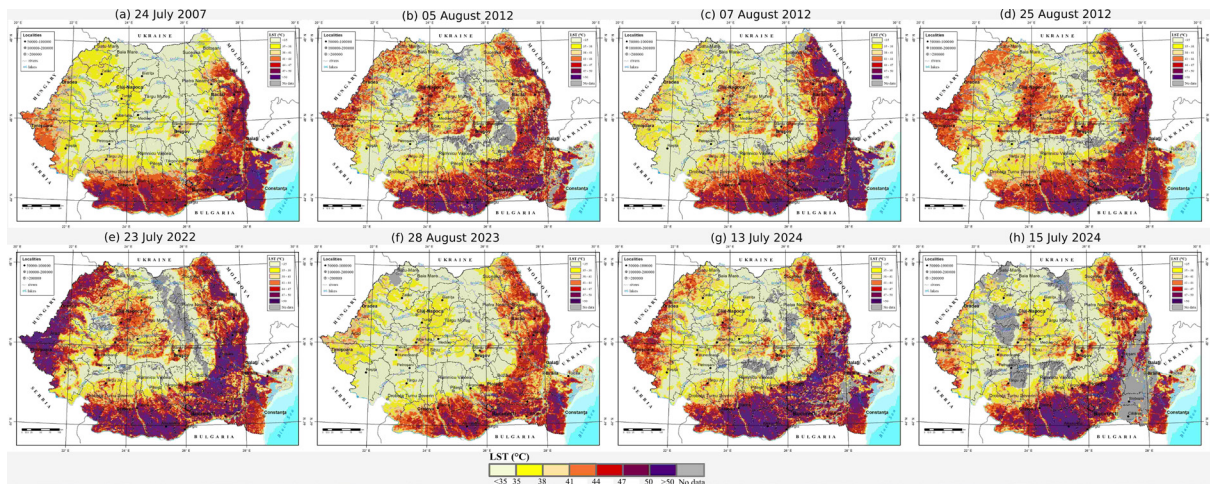


Figure S4. Representative examples of extreme land surface temperature (LST) during major heatwave events in Romania (2000–2025), 10:30–12:10 UTC

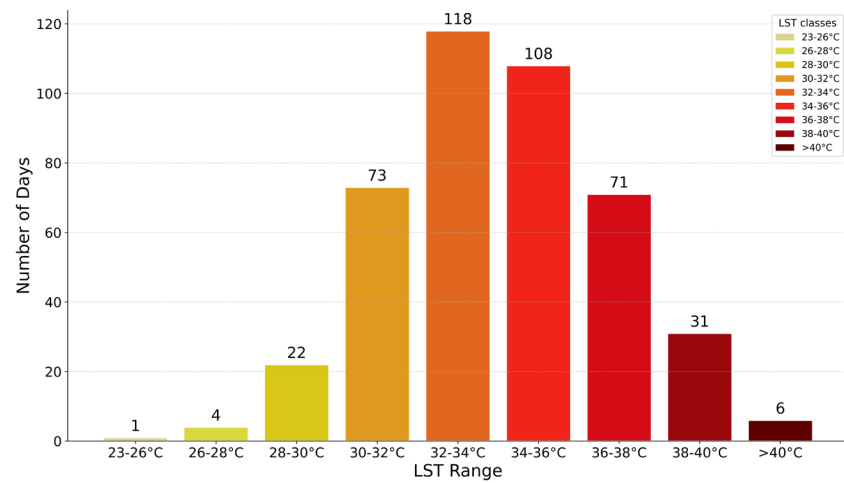


Figure S5. Number of Heatwave Days by LST Range

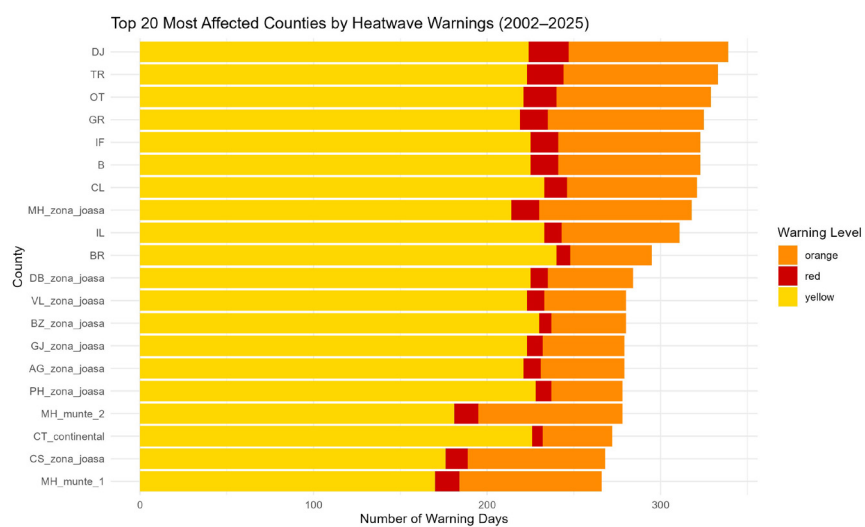


Figure S6. Top 20 most affected counties by heatwaves warnings (2006–2025)

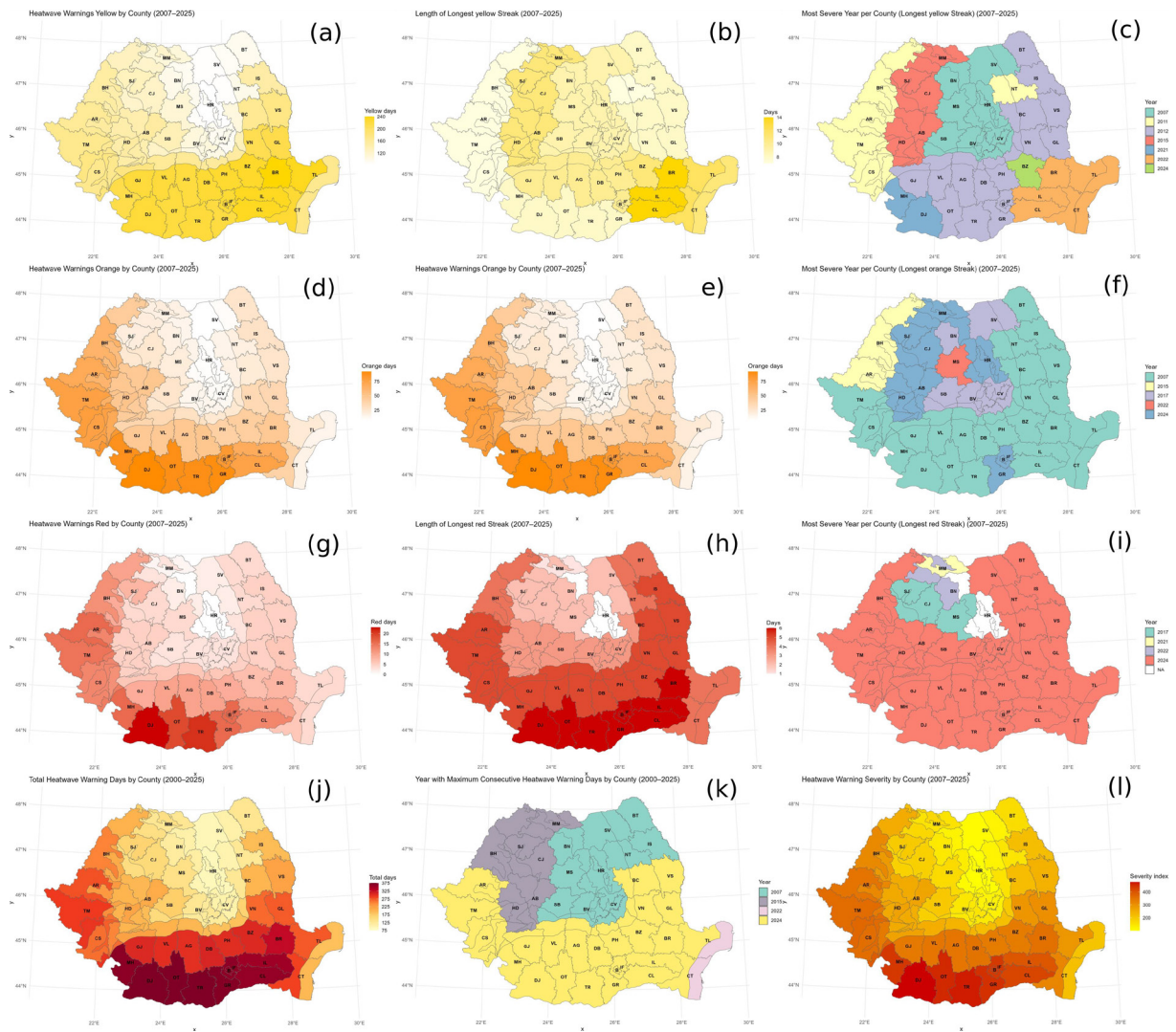


Figure S7. Spatial patterns of heatwave warnings in Romania (2000–2025): frequency, persistence, temporal occurrence, and cumulative severity

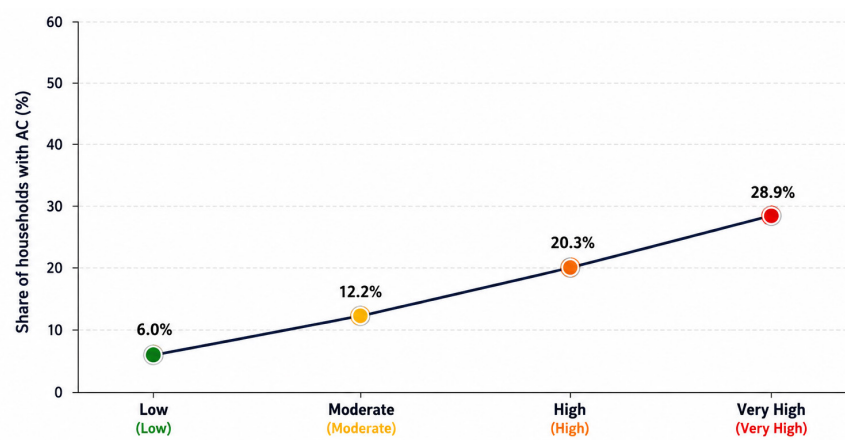


Figure S8. Air Conditioner Ownership vs. Heat Vulnerability Index (HVI) across Romania

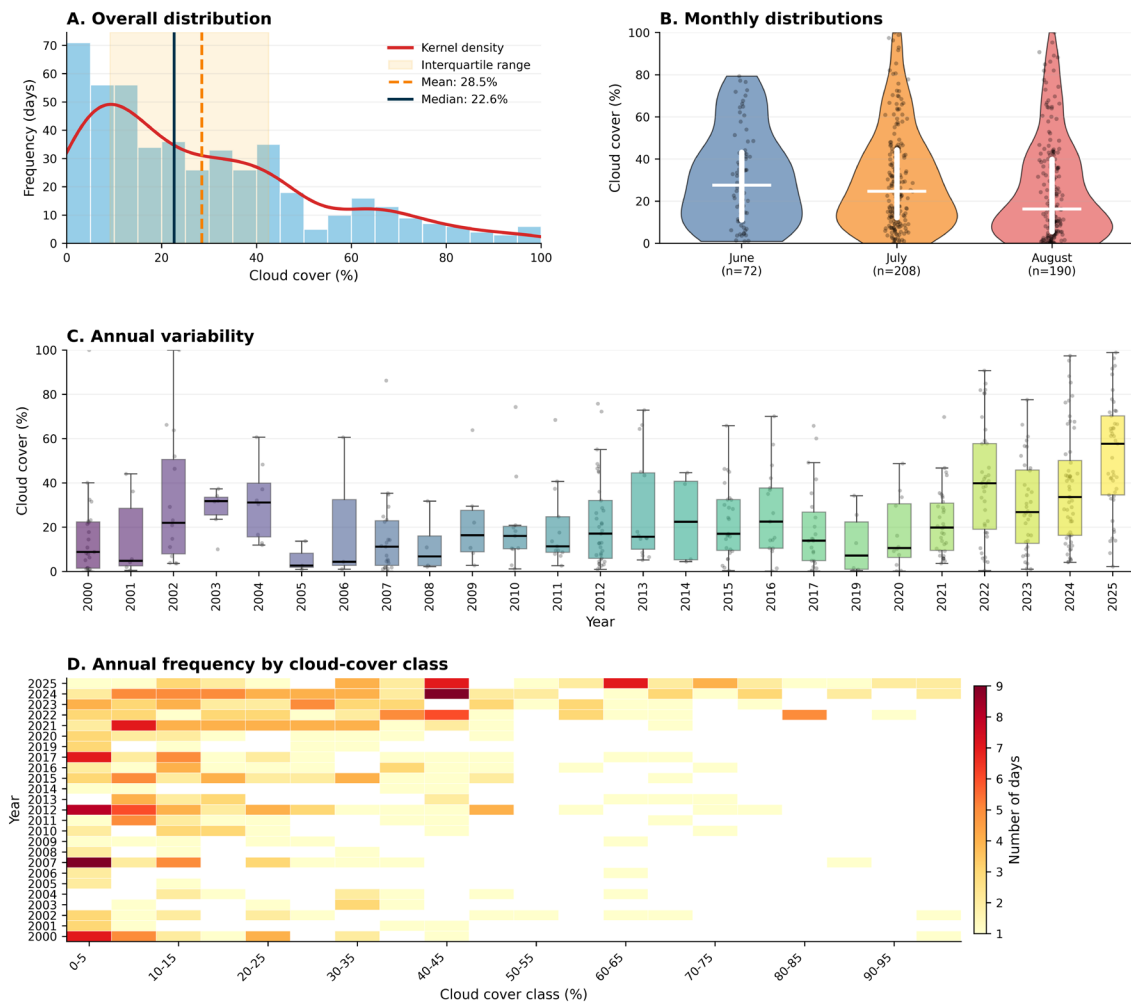


Figure S9. Cloud cover during heatwaves in Romania (2000-2025)