

Evolution of nonstationary hydrological drought characteristics in the UK under warming

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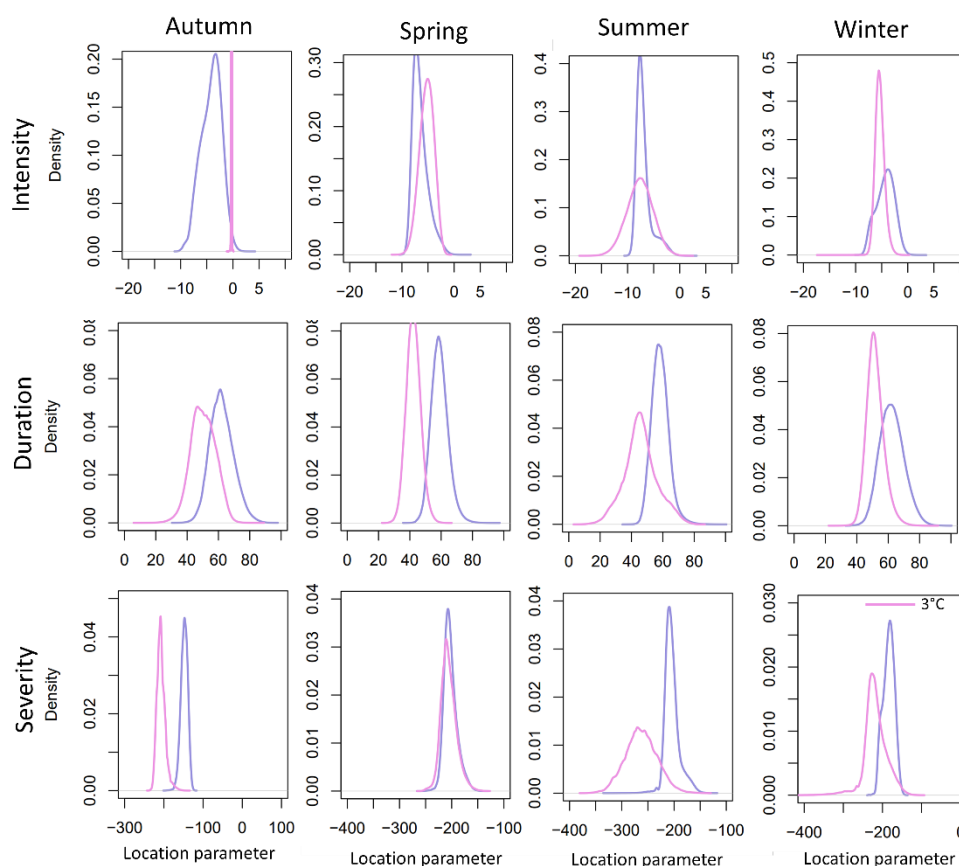


Figure S1. Posterior distribution of parameters for different drought characteristics for a sample (Dee in Scotland, NRFA ID: 67018) catchment in reference period and at 3°C warming level.

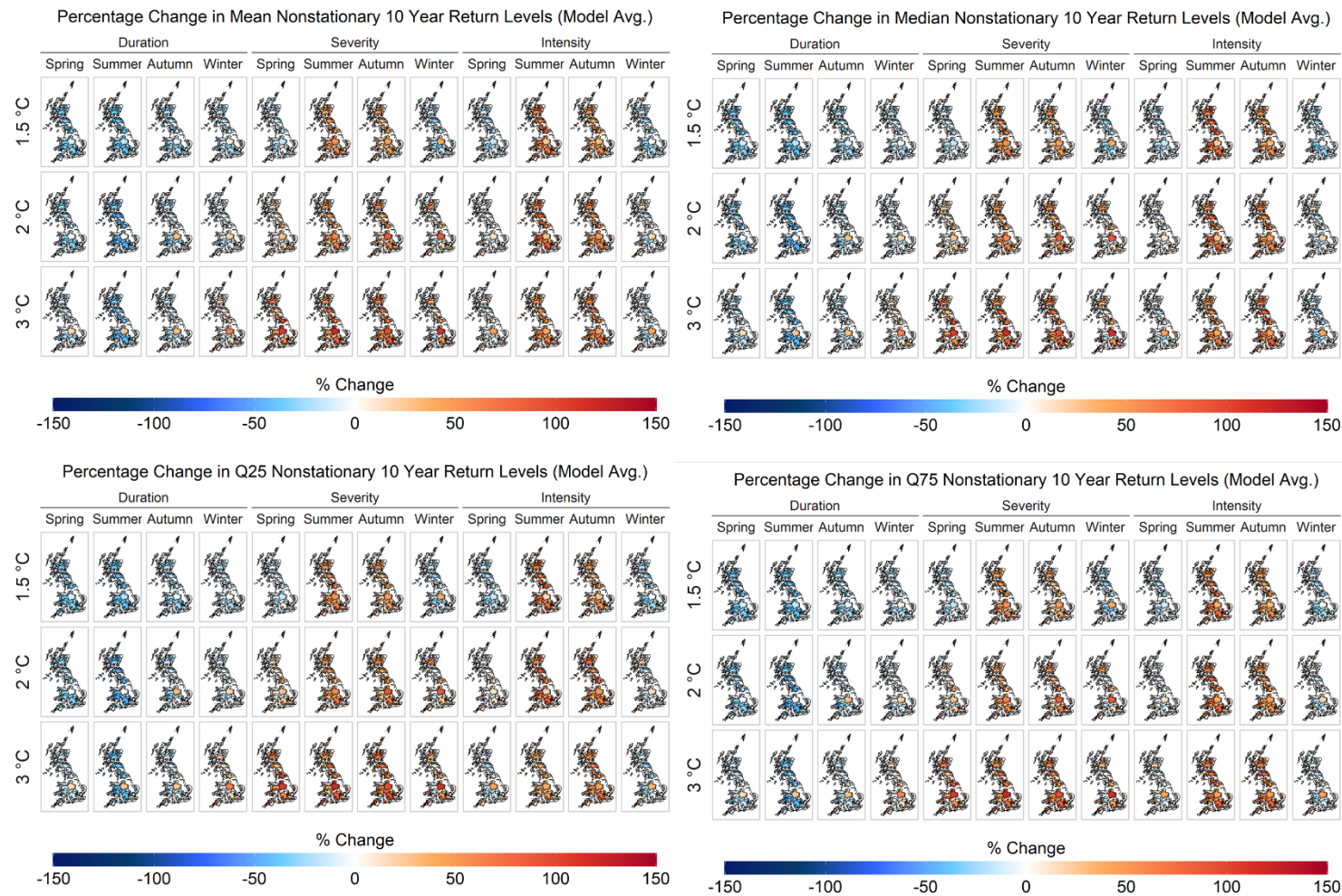


Figure S2a. Percentage change in mean, median, Q25 and Q75 nonstationary return levels for 10-year return period across different warming levels, seasons and characteristics.

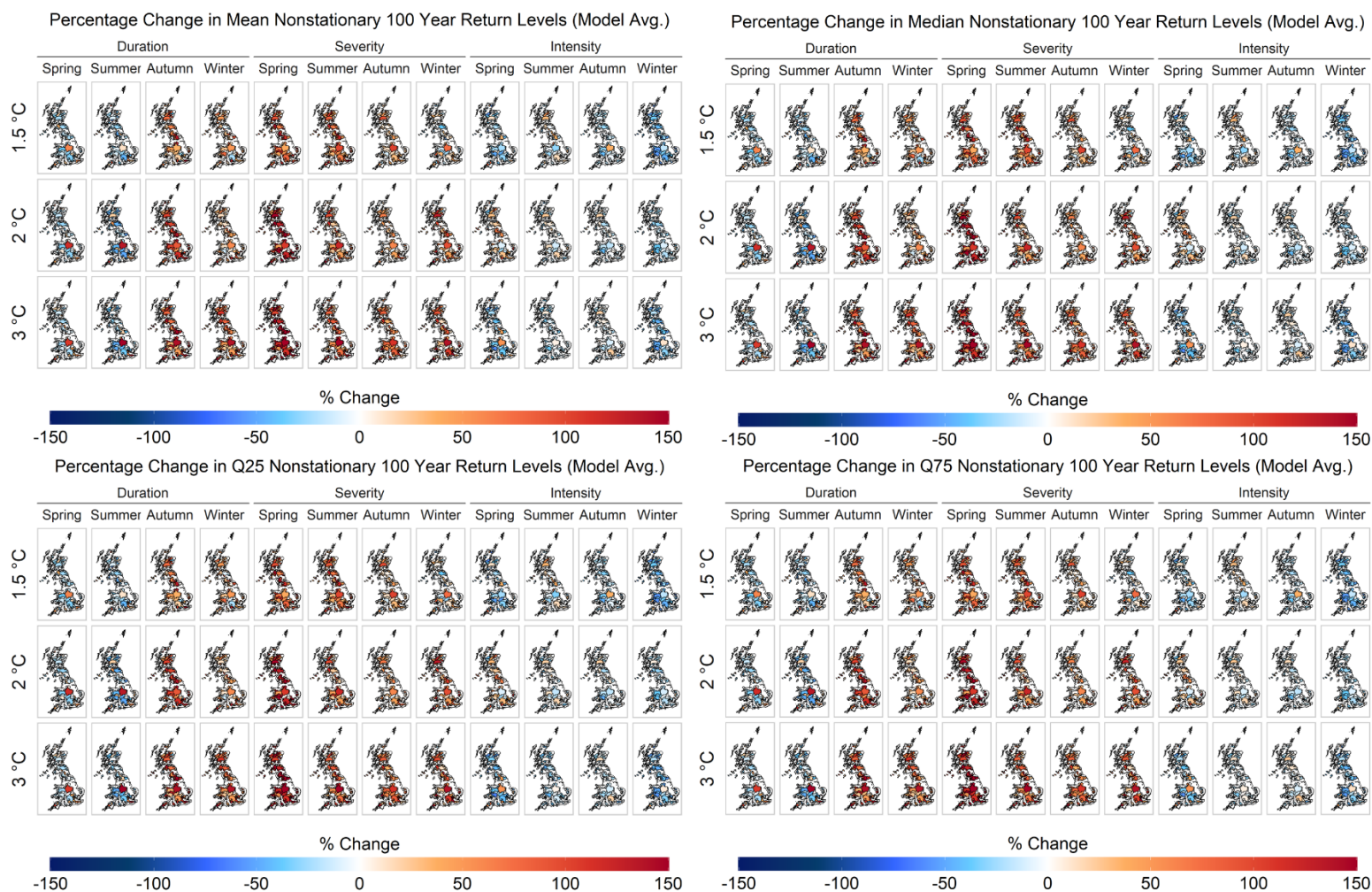


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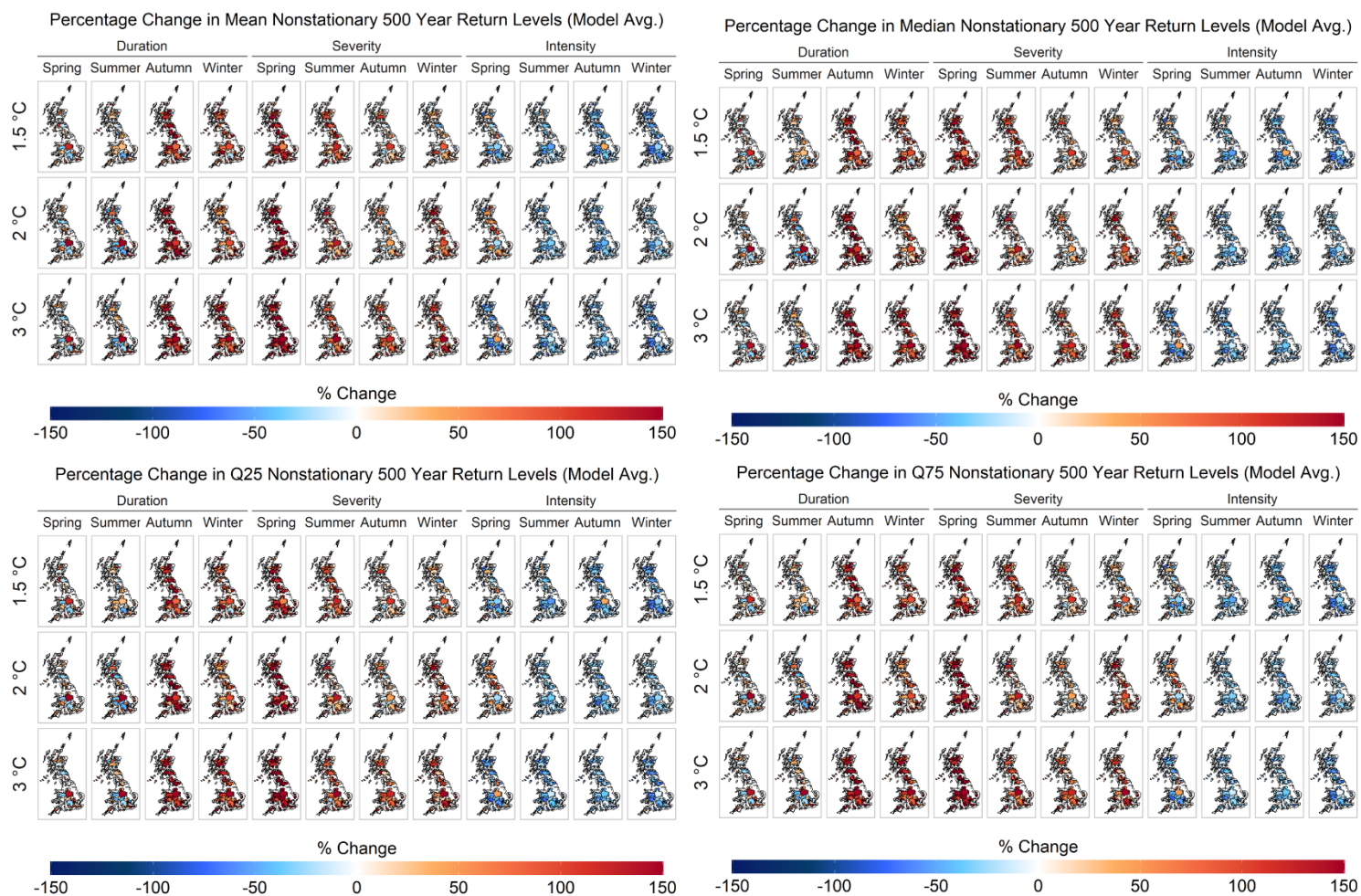


Figure S2c. Percentage change in mean, median, Q25 and Q75 nonstationary return levels for 500-year return period across different warming levels, seasons and characteristics.

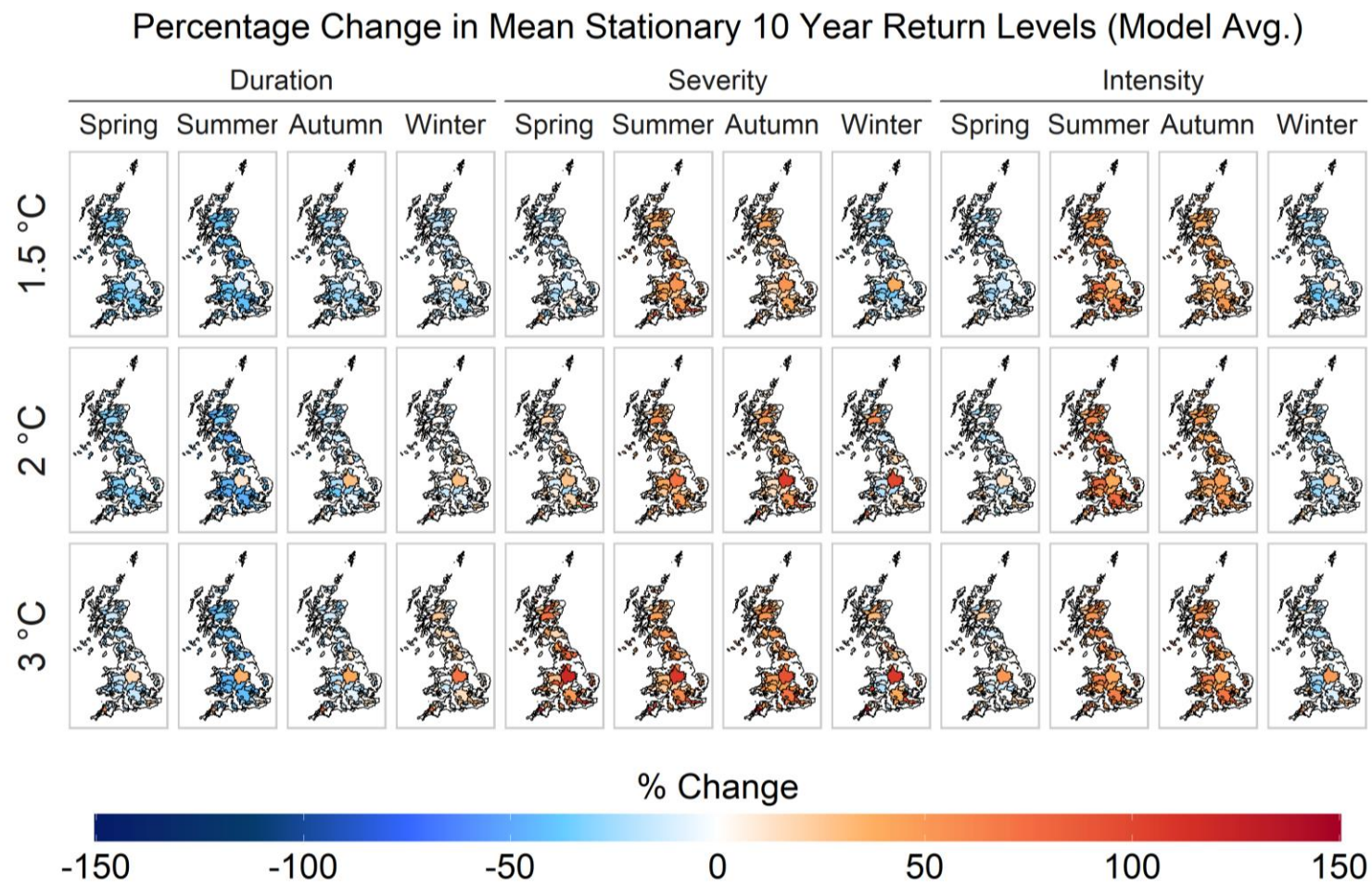


Figure S3a. Percentage change in mean stationary return levels for 10-year return period across different warming levels, seasons and characteristics.

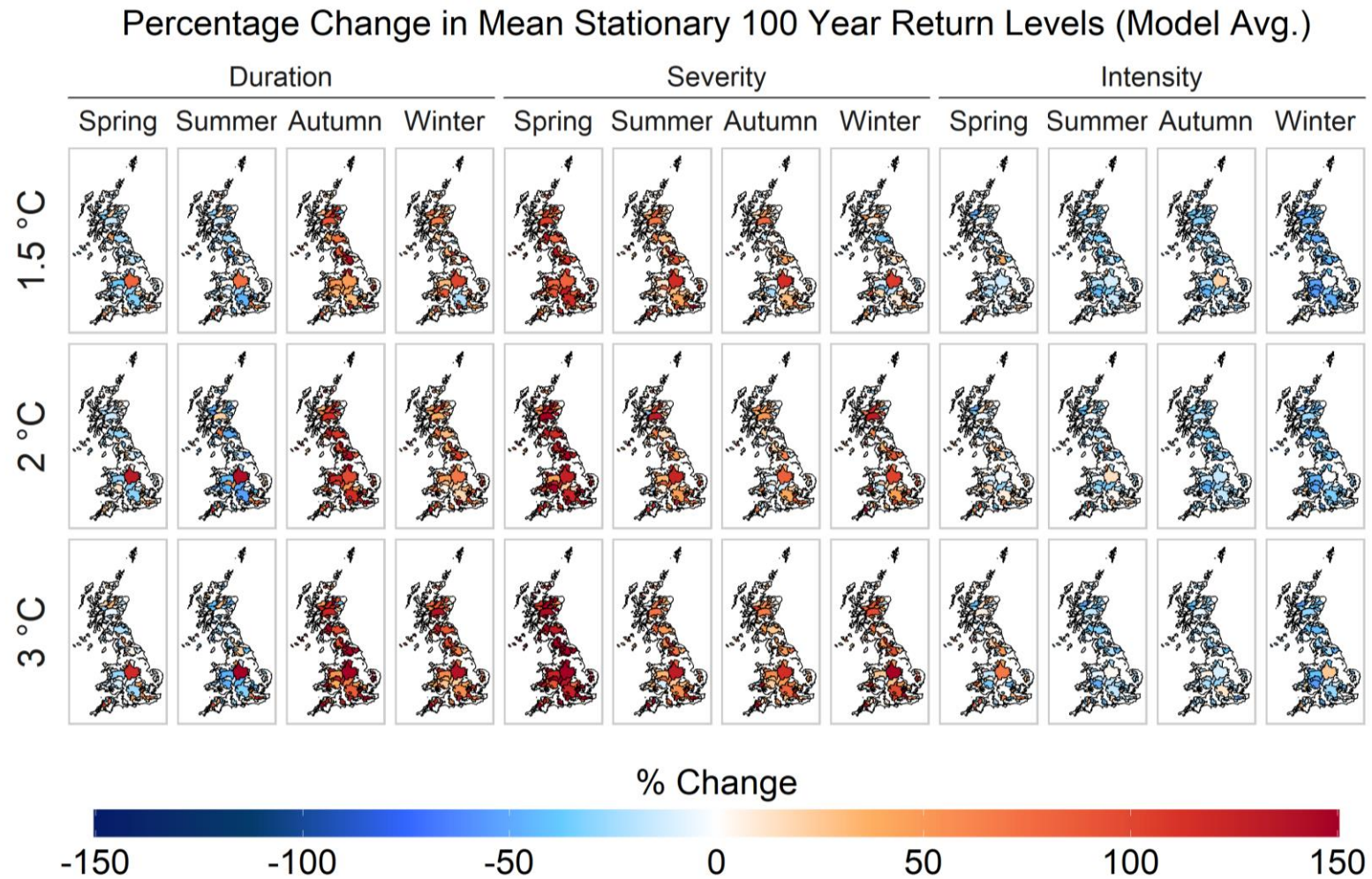


Figure S3b. Percentage change in mean stationary return levels for 100-year return period across different warming levels, seasons and characteristics.

Percentage Change in Mean Stationary 500 Year Return Levels (Model Avg.)

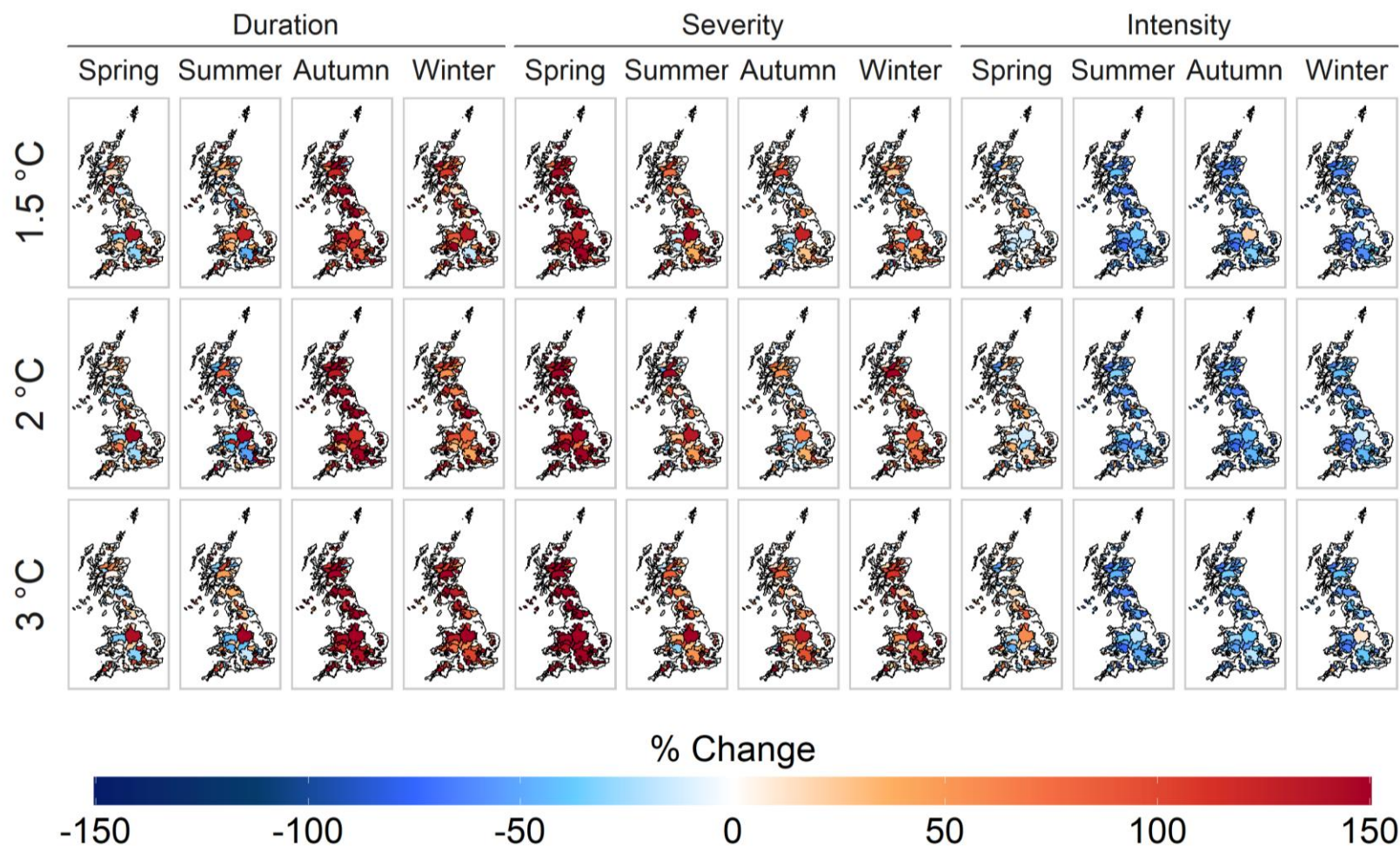


Figure S3c. Percentage change in mean stationary return levels for 500-year return period across different warming levels, seasons and characteristics

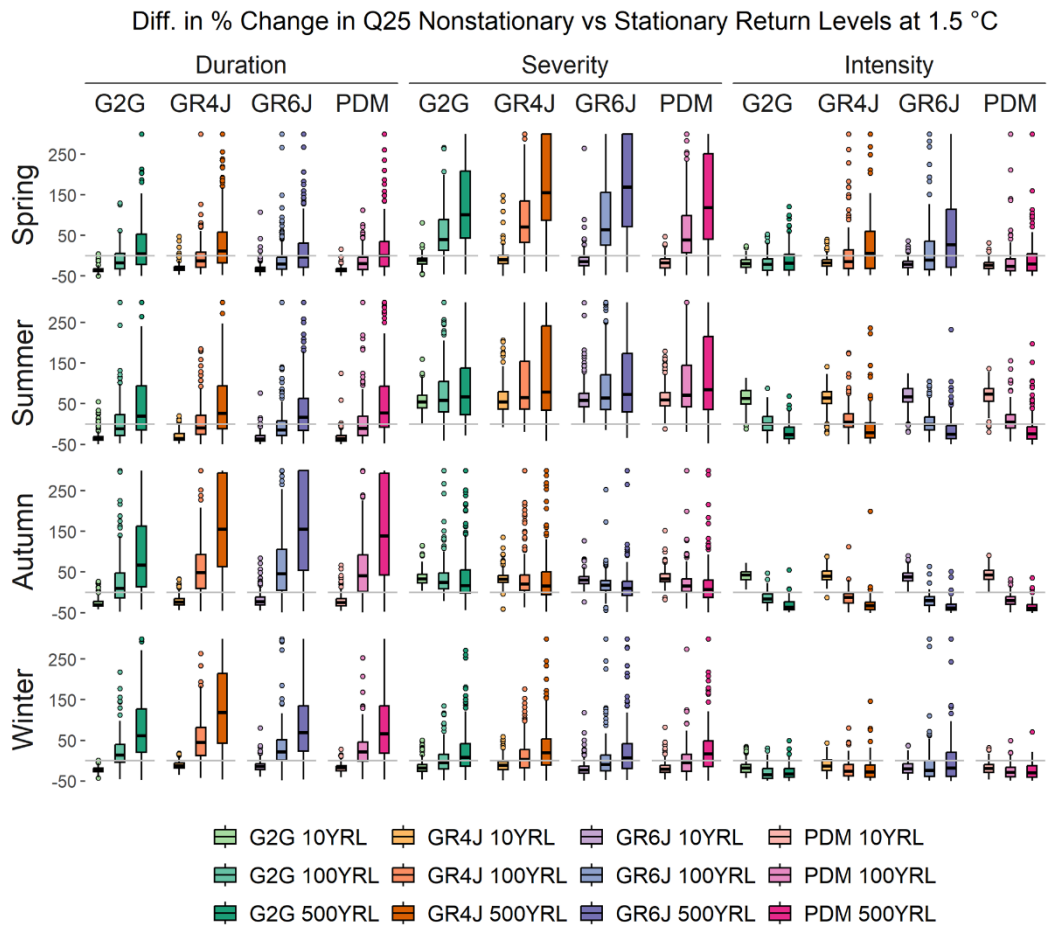
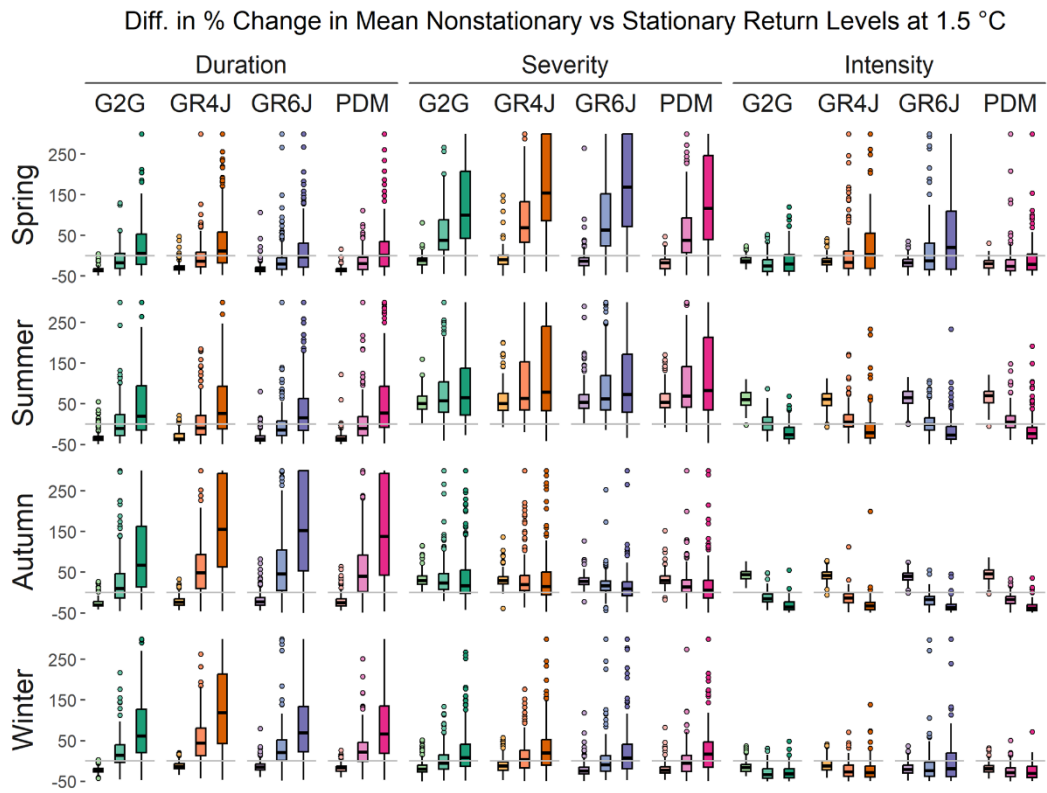


Figure S4a Difference in percentage change in mean and Q25 nonstationary and stationary return levels for different drought characteristics at 1.5°C warming level.

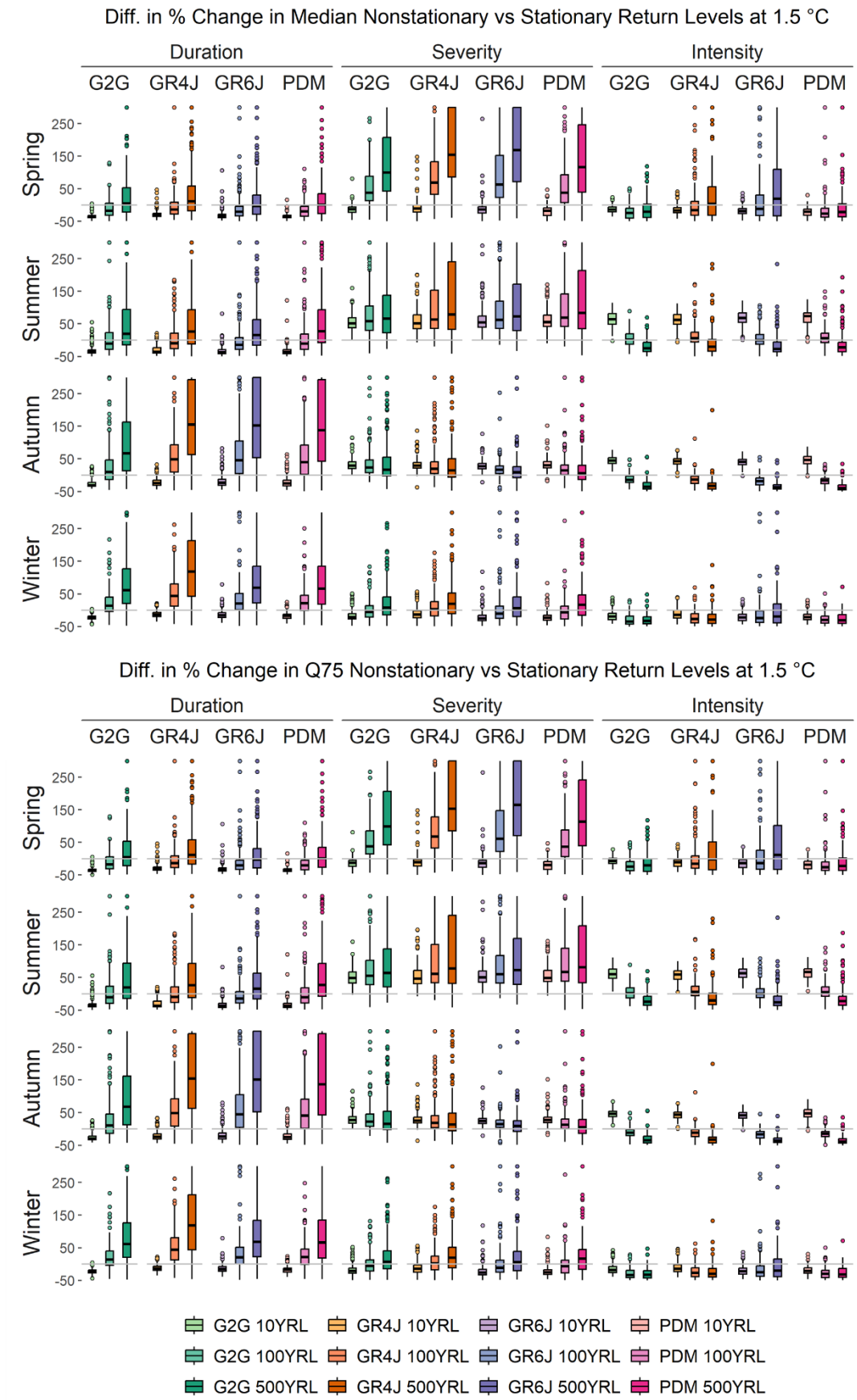


Figure S4b Difference in percentage change in median and Q75 nonstationary and stationary return levels for different drought characteristics at 1.5°C warming level.

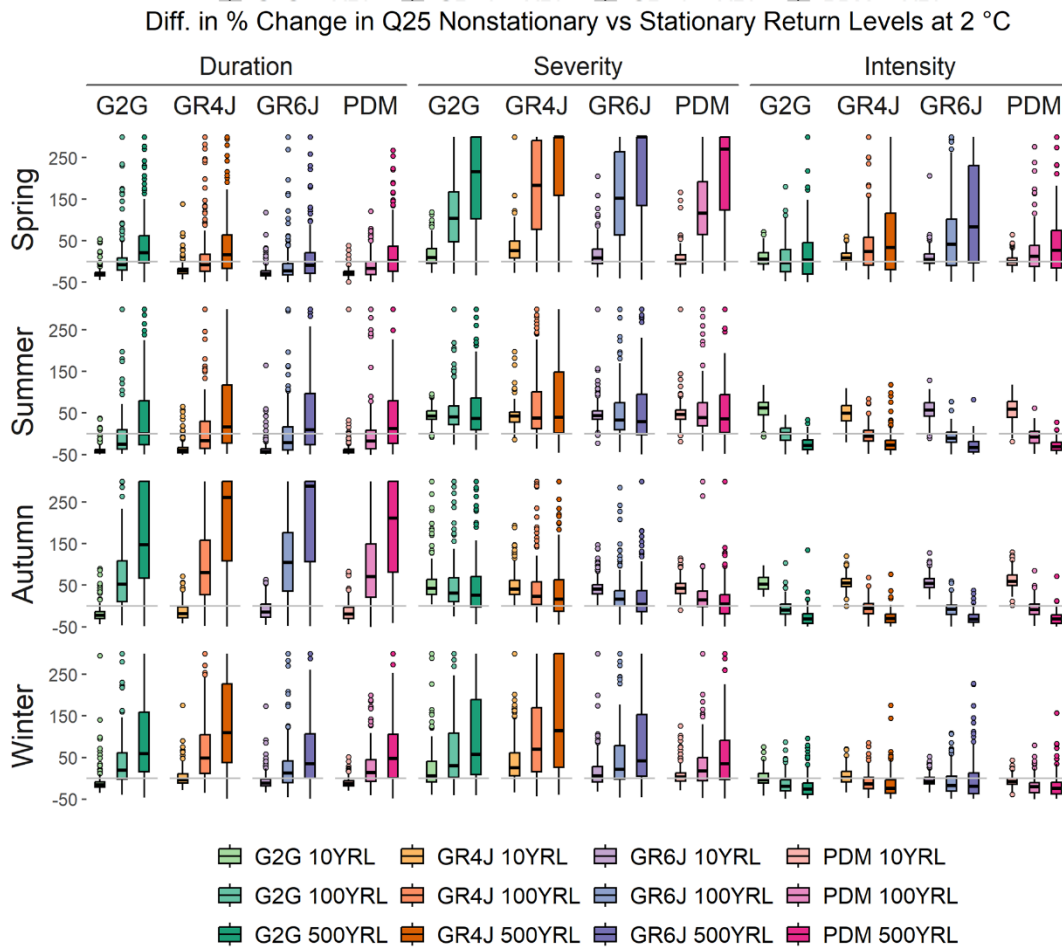
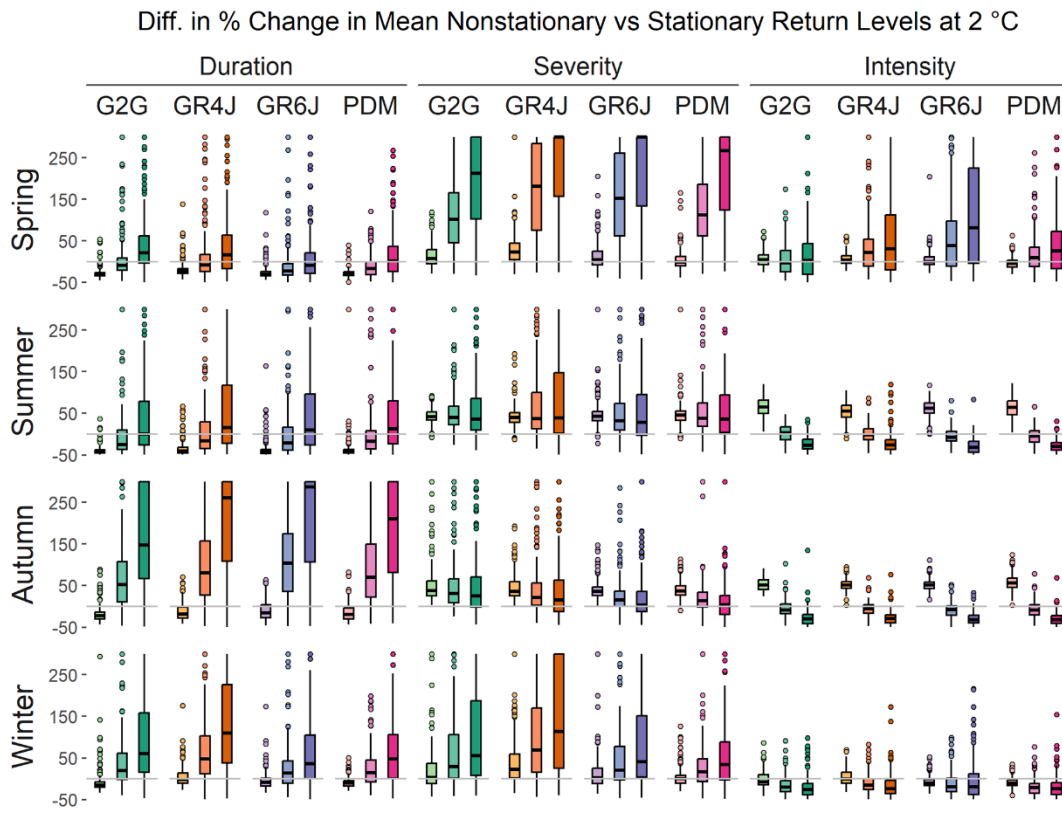


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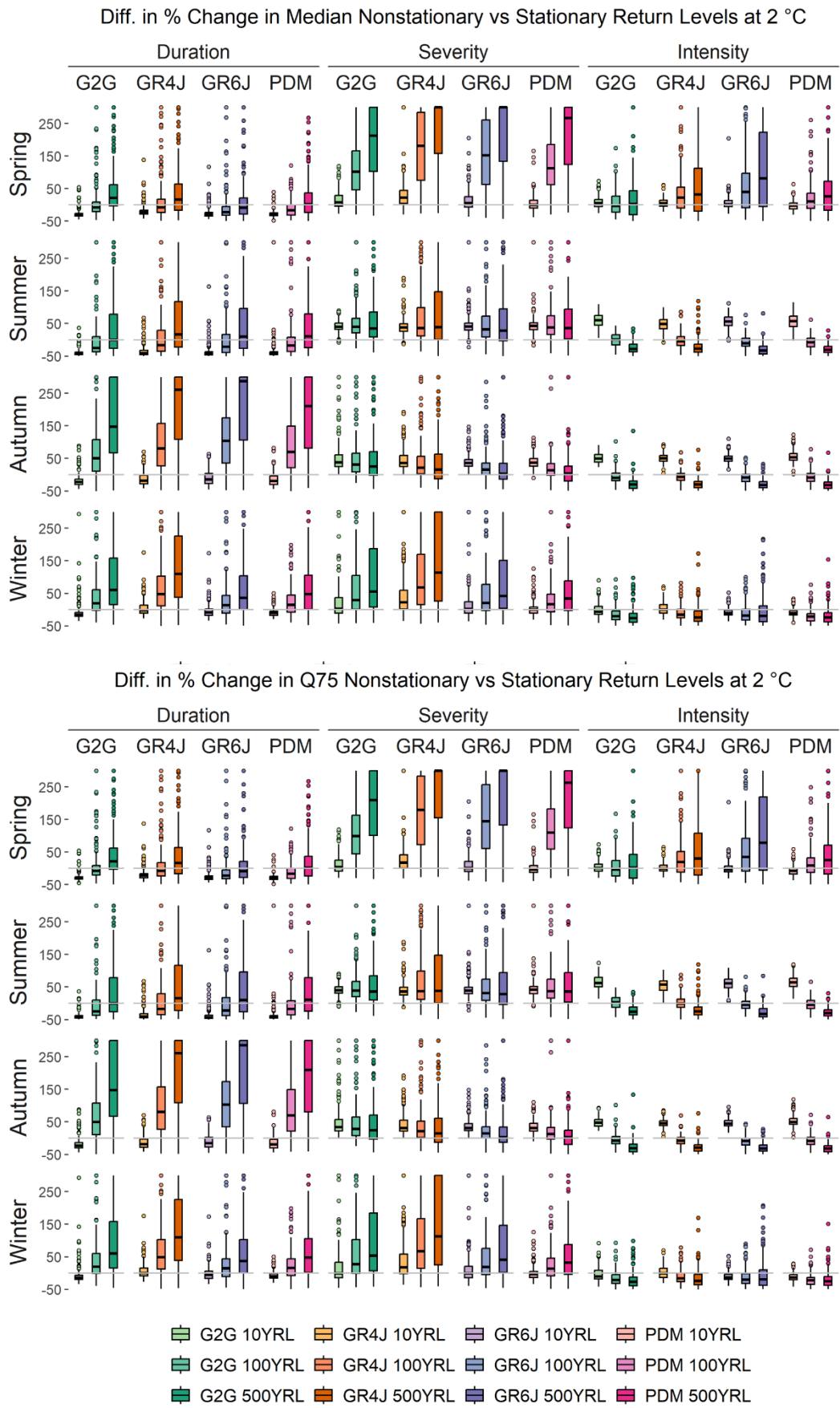


Figure S4d Difference in percentage change in median and Q75 nonstationary and stationary return levels for different drought characteristics at 2°C warming level.

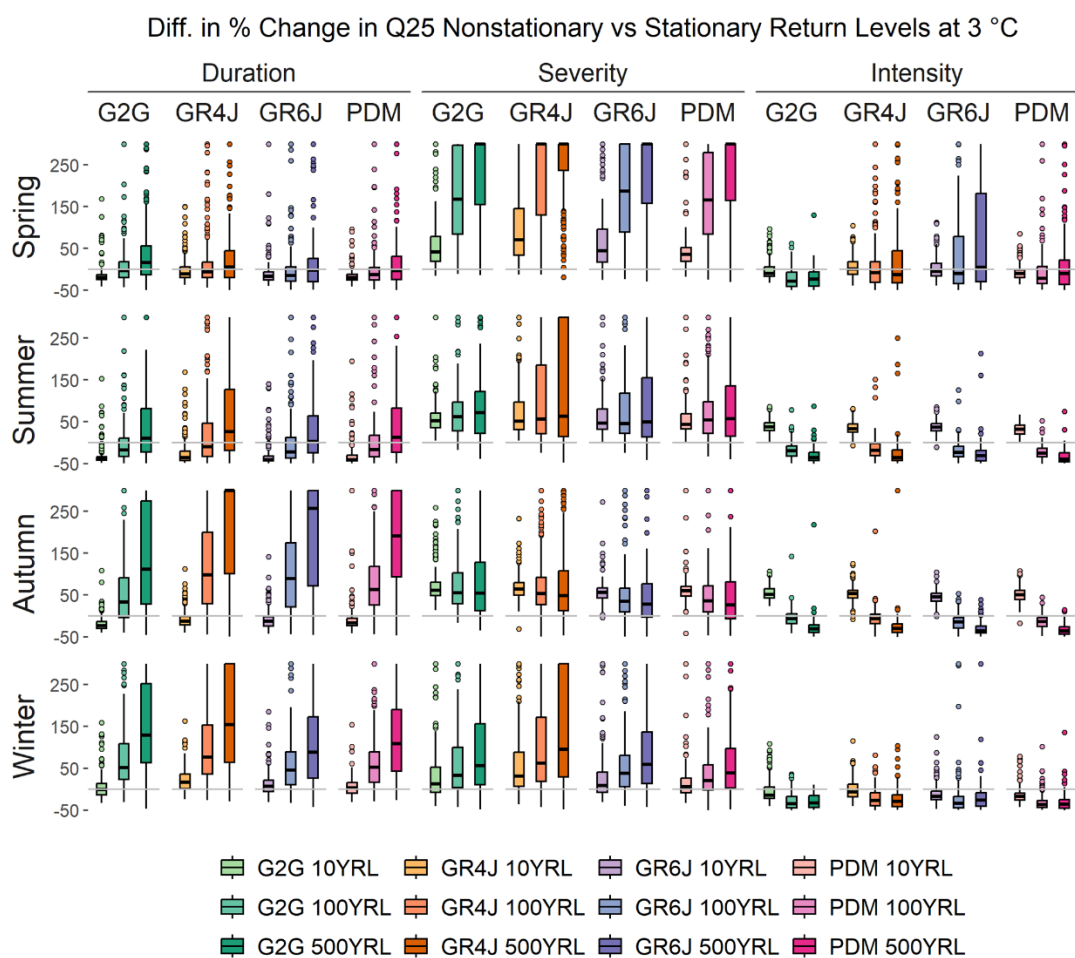
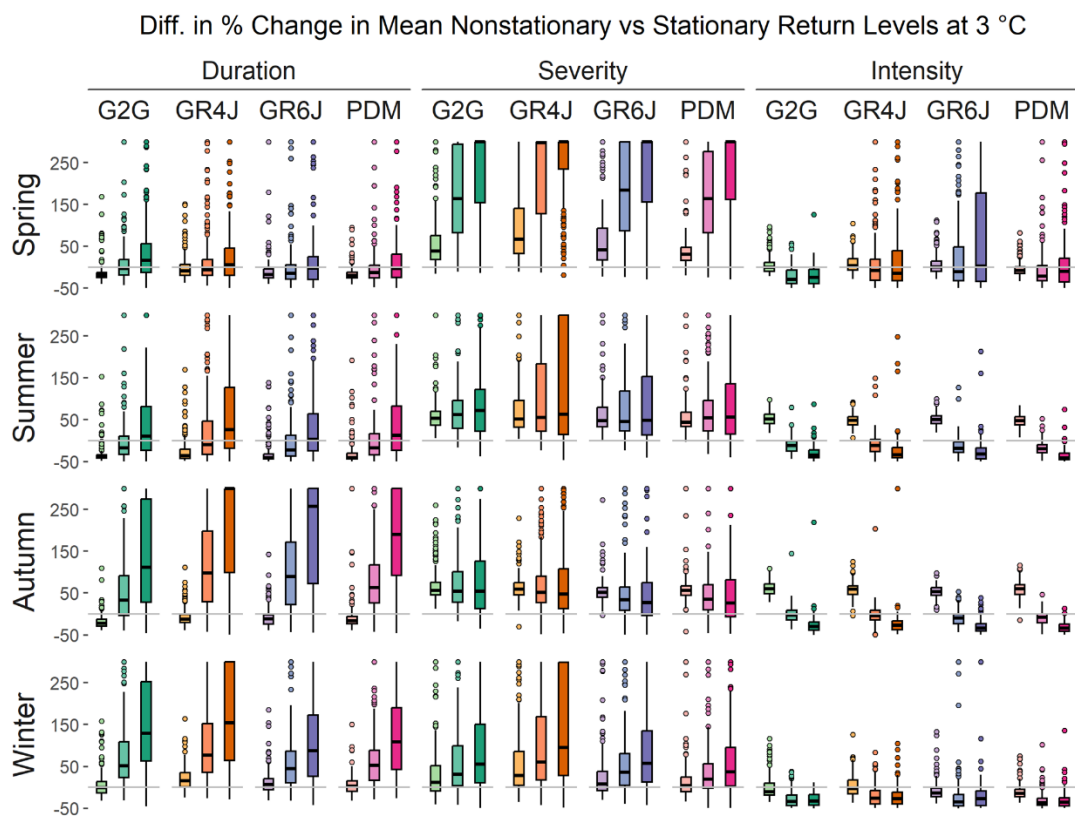


Figure S4e Difference in percentage change in mean and Q25 nonstationary and stationary return levels for different drought characteristics at 3°C warming level.

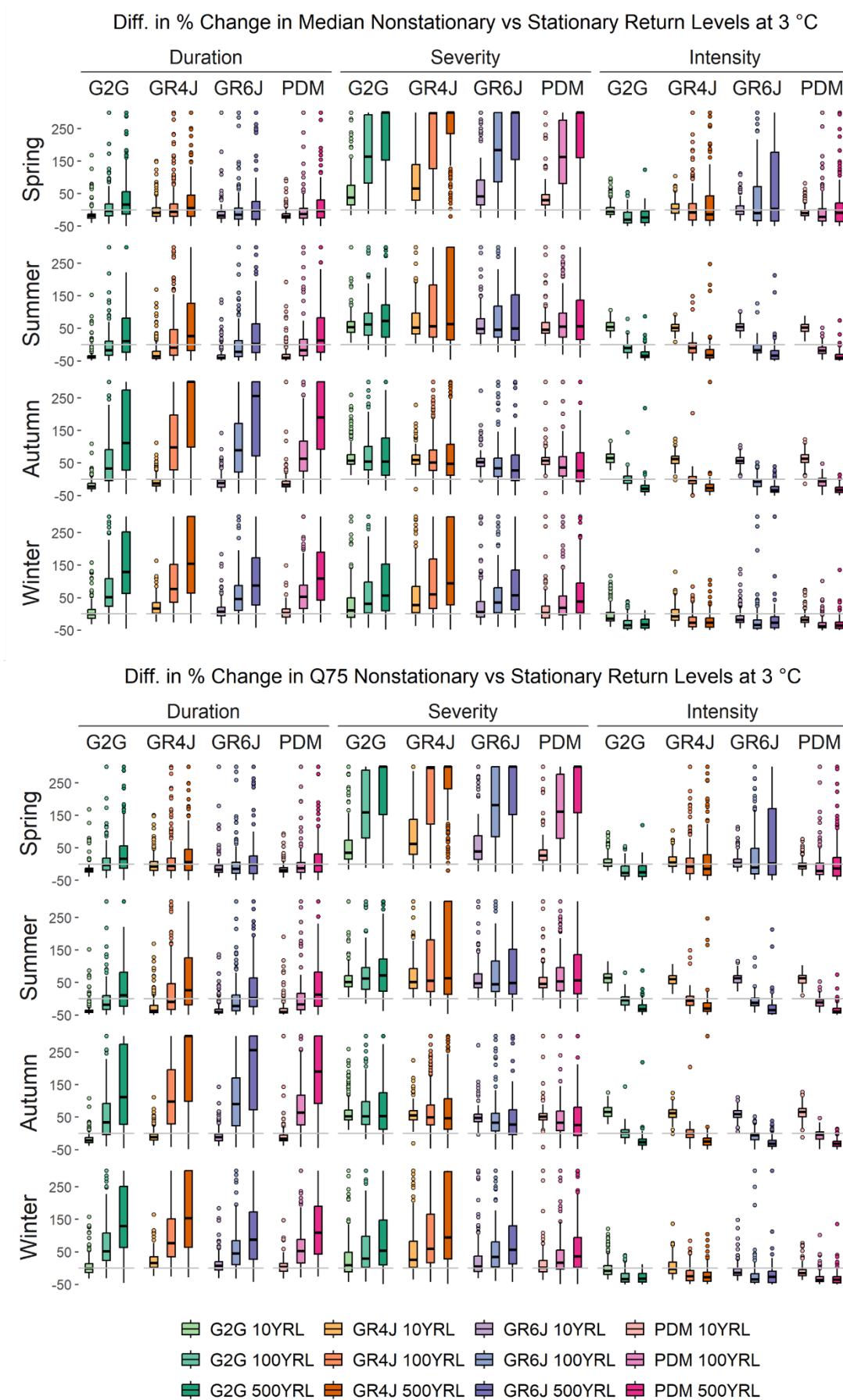


Figure S4f Difference in percentage change in median and Q75 nonstationary and stationary return levels for different drought characteristics at 3°C warming level.