



*Supplement of*

## **Impacts on and damage to European forests from the 2018–2022 heat and drought events**

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## Supplement

**Table S1:** Differences between the study period 2018-2022 (18-22) to reference period 2010-2014 (10-14), where available. Denoted next to the higher average value ( $\bar{x}$ ) in each cell are the results of the statistical tests: n.a. (not applicable), n.s. (not significant), \* significant ( $p < 0.05$ ), \*\* highly significant ( $p < 0.01$ ), \*\*\* very highly significant ( $p < 0.001$ ). Although we found significant differences in crown defoliation of broadleaf trees for the northern zone, these results are not considered valid as the datasets used do not include the same countries in both groups. Consequently, no significant differences can be reliably demonstrated.

Zone	Crown defoliation [%]		Damaged wood by insects [1000m <sup>3</sup> ]	Burnt forest area [ha]	Tree cover loss [%]
	Broadleaves	Conifers			
Northern	$\bar{x}$ (10-14) = 23.3 n = 7 $\bar{x}$ (18-22) = 51.9** n = 3	$\bar{x}$ (10-14) = 16.9 (n.s.) n = 16 $\bar{x}$ (18-22) = 15.9 n = 10	n.a.	$\bar{x}$ (10-14) = 884.12 n = 20 $\bar{x}$ (18-22) = 1750.8 (n.s.) n = 25	$\bar{x}$ (10-14) = 0.70 n = 25 $\bar{x}$ (18-22) = 1.05*** n = 25
Central	$\bar{x}$ (10-14) = 31.29 n = 30 $\bar{x}$ (18-22) = 37.11*** n = 30	$\bar{x}$ (10-14) = 27.9 n = 23 $\bar{x}$ (18-22) = 35.29** n = 24	$\bar{x}$ (10-14) = 739.22 n = 20 $\bar{x}$ (18-22) = 11507.67*** n = 31	$\bar{x}$ (10-14) = 1655.1 n = 27 $\bar{x}$ (18-22) = 1991.1 (n.s.) n = 38	$\bar{x}$ (10-14) = 0.39 n = 40 $\bar{x}$ (18-22) = 0.76** n = 40
Alpine	n.a.	n.a.	n.a.	$\bar{x}$ (10-14) = 62.3 n = 10 $\bar{x}$ (18-22) = 110.6 (n.s.) n = 10	n.a.
Southern	$\bar{x}$ (10-14) = 26.25 n = 10 $\bar{x}$ (18-22) = 34.83* n = 9	$\bar{x}$ (10-14) = 20.02 n = 8 $\bar{x}$ (18-22) = 26.99** n = 8	n.a.	$\bar{x}$ (10-14) = 41510 n = 15 $\bar{x}$ (18-22) = 50630 (n.s.) n = 15	$\bar{x}$ (10-14) = 0.57 n = 15 $\bar{x}$ (18-22) = 0.87* n = 15

