Supplemental Information

Electric Fields Elicit Ballooning in Spiders
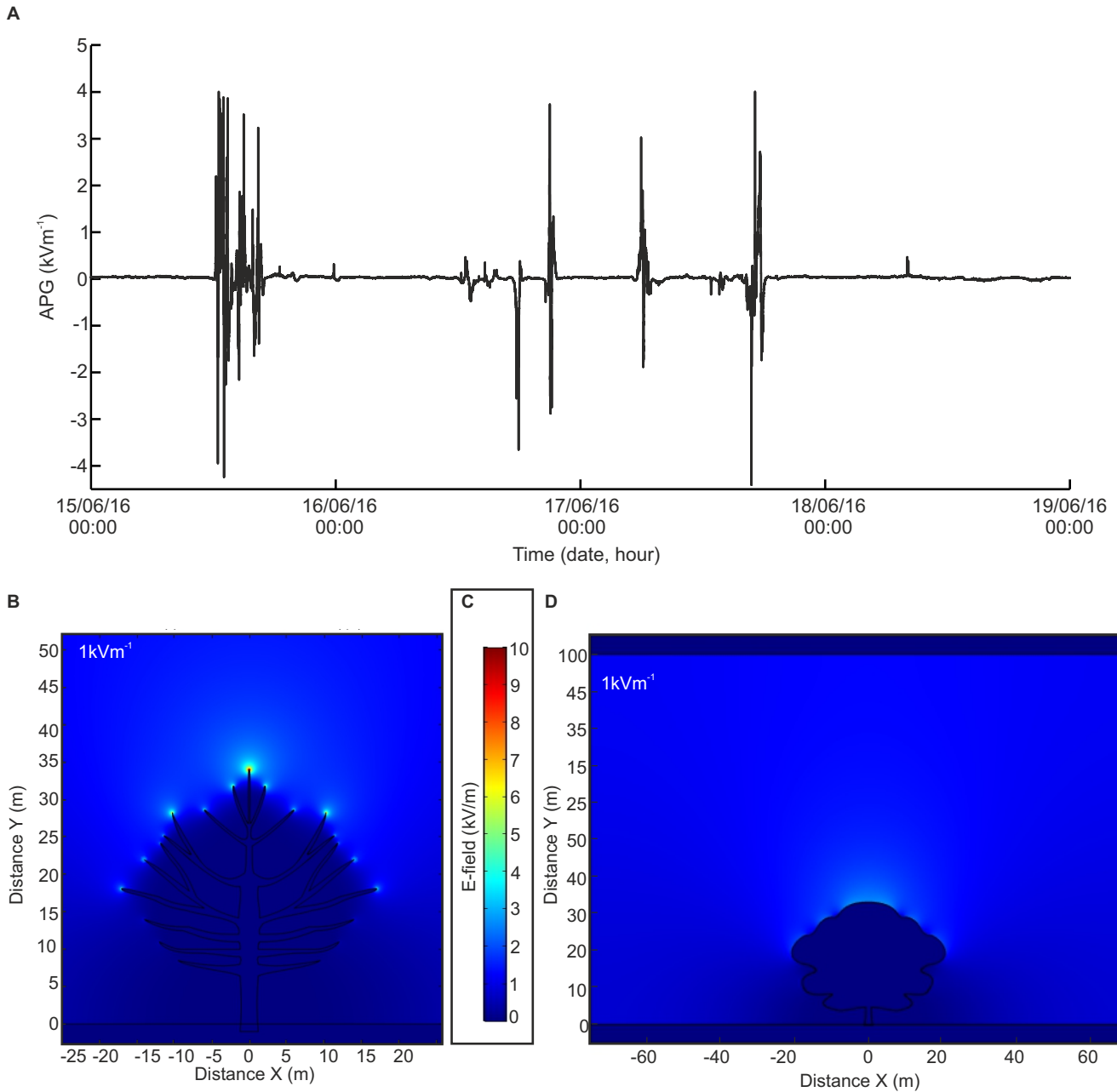
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Figure S1. Further electric field quantifications, related to Figure 1

A) Atmospheric potential gradient (APG) measured across 4 days using a field mill (Chillworth JCI131) at the University of Bristol School of Veterinary Sciences, Langford. B) FEA model detailing the e-field around geometrically sharp tree branches in an APG strength of 1kVm^{-1}. C) Scale bar for (B) and (D). D) FEA model of e-field enhancement around a geometrically domed oak tree in an APG strength of 1kVm^{-1}. The scale in figure S1 B-D are the same as the scale in figure 1B-D, for comparison.

Distribution	Fixed factor	Level	Coefficient estimate	Standard error	Z value	p value
Tiptoes						
Poisson	Field strength (reference $0Vm^{-1}$)	$1.25Vm^{-1}$	1.25	0.8	1.565	0.118
		$6.25Vm^{-1}$	2.91	0.72	4.025	<0.0001***
Dragline drops						
Poisson	Field strength (reference $0Vm^{-1}$)	$1.25Vm^{-1}$	1.04	0.35	2.952	0.003**
		$6.25Vm^{-1}$	1.61	0.33	4.873	<0.0001***

Table S1. GLMM statistical analysis, related to Figure 2
Results of GLMM fits to ballooning behaviour data. All models had spider identification number as a random factor with varied intercept and the same slope (1|spider identification) to prevent pseudoreplication of repeated measurements on the same animal.