

# Predicted Soil Greenhouse Gas Emissions from Climate × Management Interactions in Temperate Grassland

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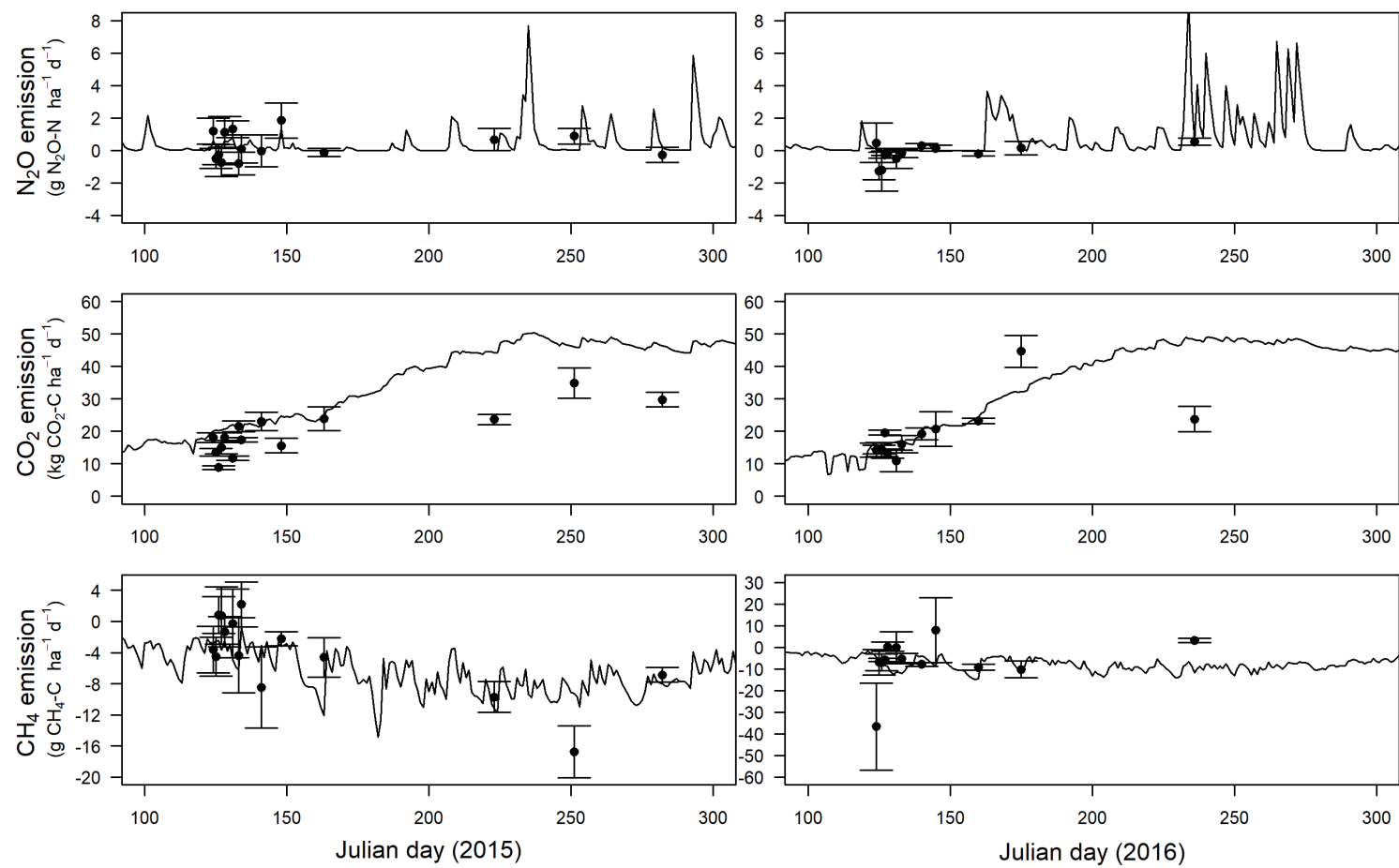
**Figure S1** Measured (filled circle) and simulated (solid line) N<sub>2</sub>O, CO<sub>2</sub> and CH<sub>4</sub> emissions from soils of the control treatments from the growing season of 2015 and 2016. Error bars are standard deviations for 5 replicates.

**Figure S2** Measured (filled circle) and simulated (solid line) N<sub>2</sub>O, CO<sub>2</sub> and CH<sub>4</sub> emissions from soils of the interaction between nitrogen and cutting treatment from the growing season of 2015 and 2016. Error bars are standard deviations for 5 replicates.

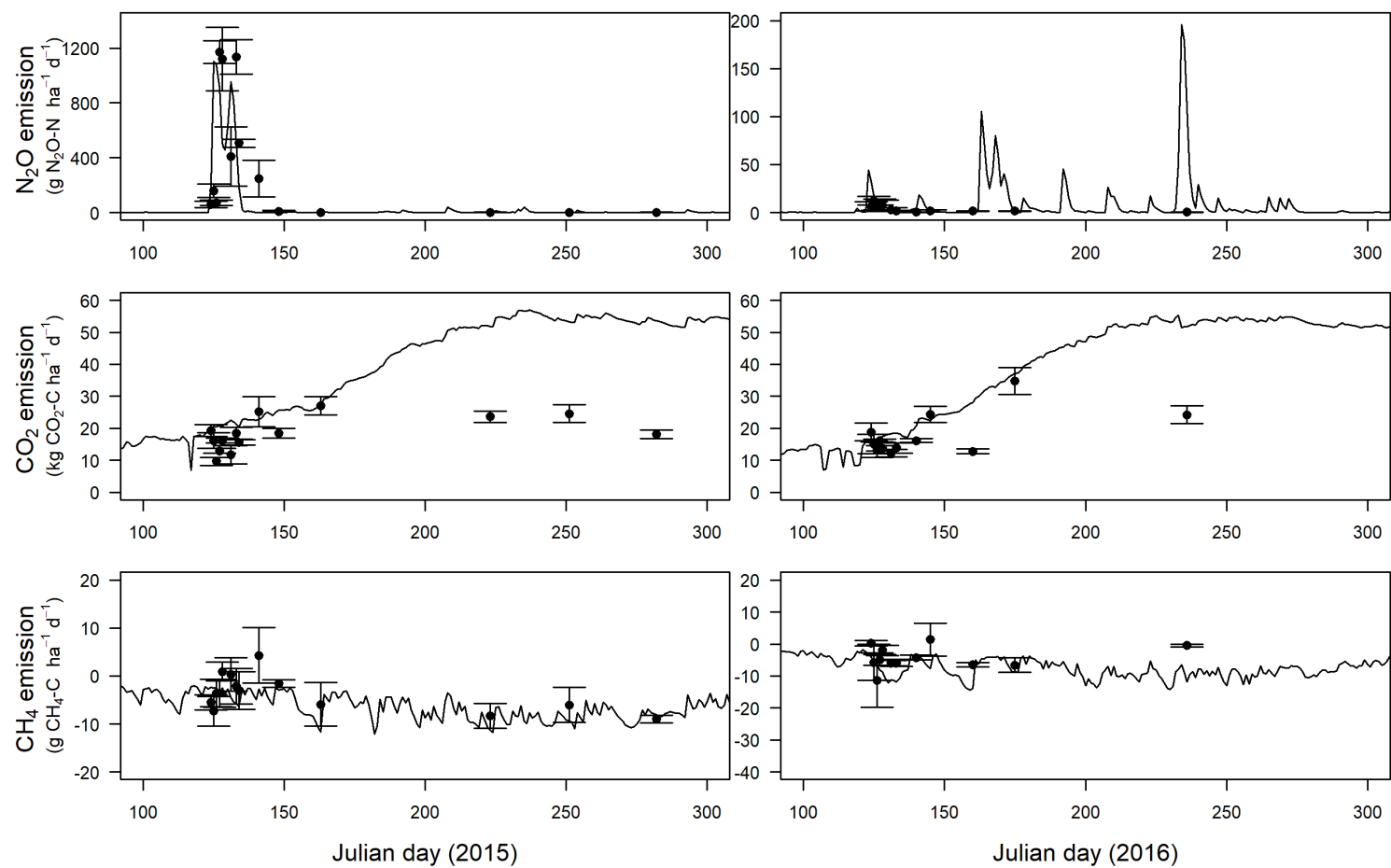
**Figure S3** Measured (filled circle) and simulated (solid line) N<sub>2</sub>O, CO<sub>2</sub> and CH<sub>4</sub> emissions from soils of the interaction between warming and cutting treatment from the growing season of 2015 and 2016. Error bars are standard deviations for 5 replicates

**Figure S4** Measured (filled circle) and simulated (solid line) N<sub>2</sub>O, CO<sub>2</sub> and CH<sub>4</sub> emissions from soils of the interaction between warming, cutting and nitrogen treatment from the growing season of 2015. Error bars are standard deviations for 5 replicates

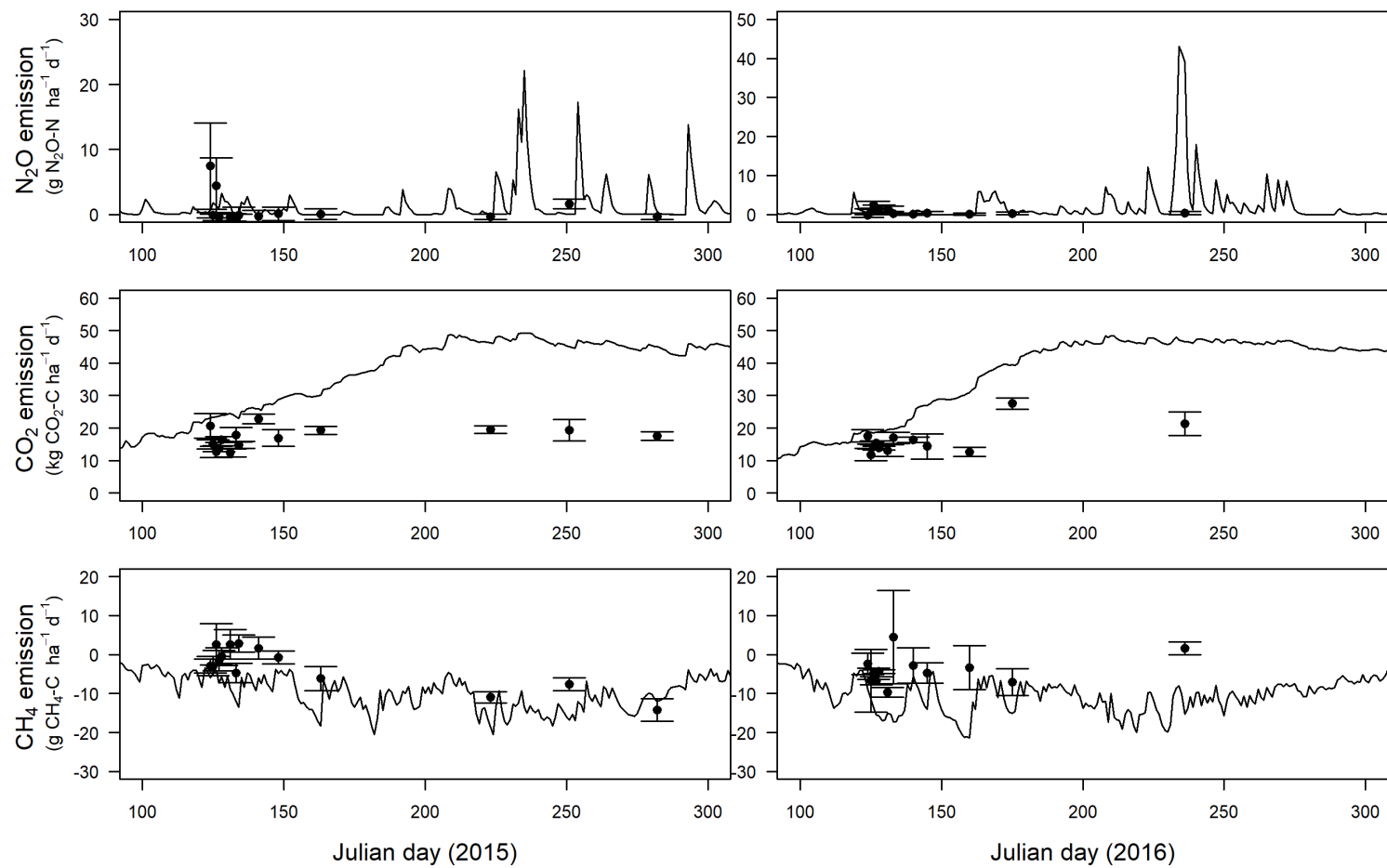
**Table S1** Measured and DNDC-simulated WFPS (%) for the full factorial experiment over two growing seasons.



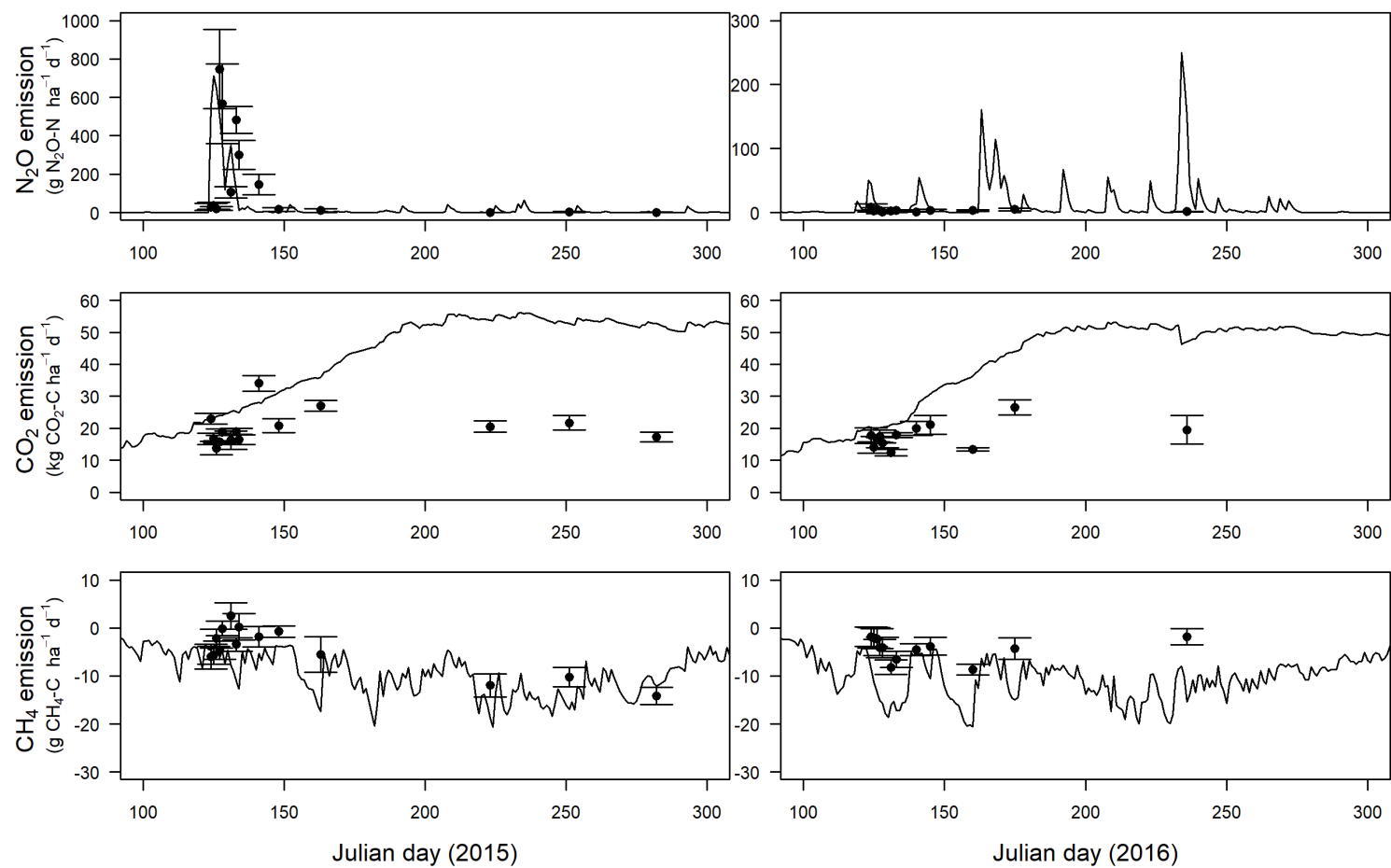
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**Figure S3** Measured (filled circle) and simulated (solid line)  $\text{N}_2\text{O}$ ,  $\text{CO}_2$  and  $\text{CH}_4$  emissions from soils of the interaction between warming and cutting treatment from the growing season of 2015 and 2016. Error bars are standard deviations for 5 replicates.



**Figure S4** Measured (filled circle) and simulated (solid line)  $\text{N}_2\text{O}$ ,  $\text{CO}_2$  and  $\text{CH}_4$  emissions from soils of the interaction between warming, cutting and nitrogen treatment from the growing season of 2015. Error bars are standard deviations for 5 replicates.

**Table S1** Measured and DNDC-simulated WFPS (%) for the full factorial experiment over two growing seasons.

Treatments	WFPS (%)			Relative deviation between measured and simulated WFPS (%)
	Measured	Simulated	Difference	
<i>2015 season</i>				
Control	0.06	0.003	0.05	88
Cutting (D)	0.06	0.003	0.05	88
Warming (W)	0.05	0.003	0.04	90
Nitrogen (N)	0.06	0.003	0.06	89
N x W	0.05	0.003	0.05	89
D x N	0.06	0.003	0.05	89
D x W	0.06	0.003	0.06	88
D x N x W	0.05	0.003	0.04	90
<i>2016 season</i>				
Control	0.04	0.008	0.03	91
Cutting	0.04	0.009	0.03	90
Warming	0.03	0.008	0.02	92
Nitrogen	0.04	0.01	0.03	91
N x W	0.04	0.009	0.03	92
D x N	0.05	0.01	0.04	90
D x W	0.04	0.008	0.03	91
D x N x W	0.04	0.009	0.03	91