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Supplement of

Greenhouse gas and energy fluxes in a boreal peatland forest after clear-cutting

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Table S1. Monthly daytime, nighttime and total coverage of EC measurements.

Time	daytime coverage [%]	nighttime coverage [%]	Total coverage [%]
4-2016	48.7	22.8	38.2
5-2016	41.6	3.1	29.8
6-2016	45.5	14.1	37.5
7-2016	12.5	6.5	10.8
8-2016	29.0	9.8	21.8
9-2016	40.2	19.8	30.2
10-2016	21.6	13.4	16.5
11-2016	24.7	32.0	30.1
12-2016	31.5	29.8	30.1
1-2017	31.2	34.5	33.7
2-2017	25.6	19.1	21.3
3-2017	39.7	34.6	37.0
4-2017	24.0	12.5	19.2
5-2017	27.4	6.5	21.2
6-2017	32.5	15.5	28.3
7-2017	38.4	10.5	30.5
8-2017	54.0	24.2	42.5
9-2017	46.6	26.3	36.7
10-2017	30.6	19.1	23.6
11-2017	31.5	30.6	30.8
12-2017	36.0	40.1	39.4
1-2018	30.1	32.6	32.1
2-2018	21.1	21.1	21.1
3-2018	21.8	11.3	16.3
4-2018	24.3	23.1	23.7

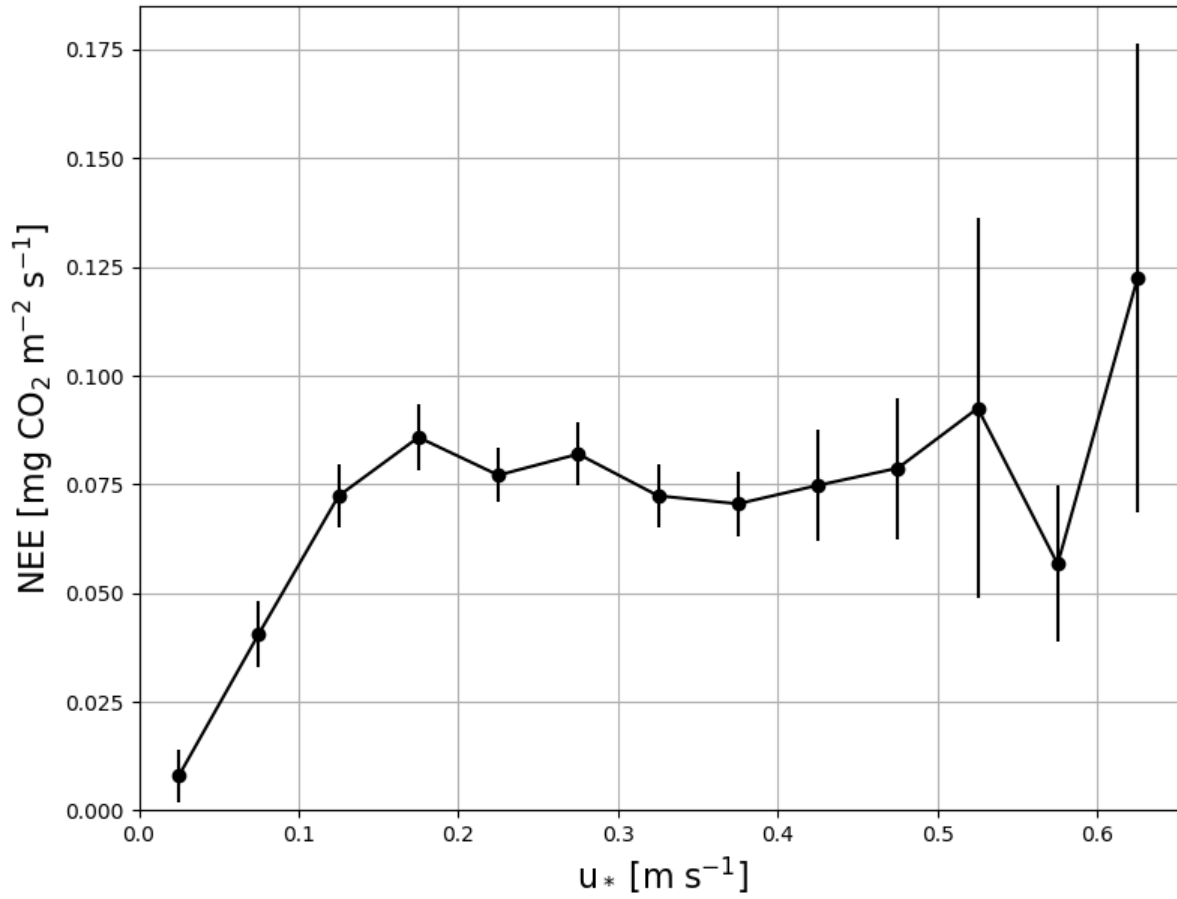


Figure S1. Average night-time (PPFD < $20 \mu\text{mol m}^{-2} \text{ s}^{-1}$) CO_2 flux ($\pm 95\%$ confidence interval) in the whole measurement period (4/2016 – 9/2017) as a function of friction velocity. The data were grouped into u_* bins of 0.05 m s^{-1} . The u_* limit below which the data were rejected for further analysis was set to 0.125 m s^{-1}

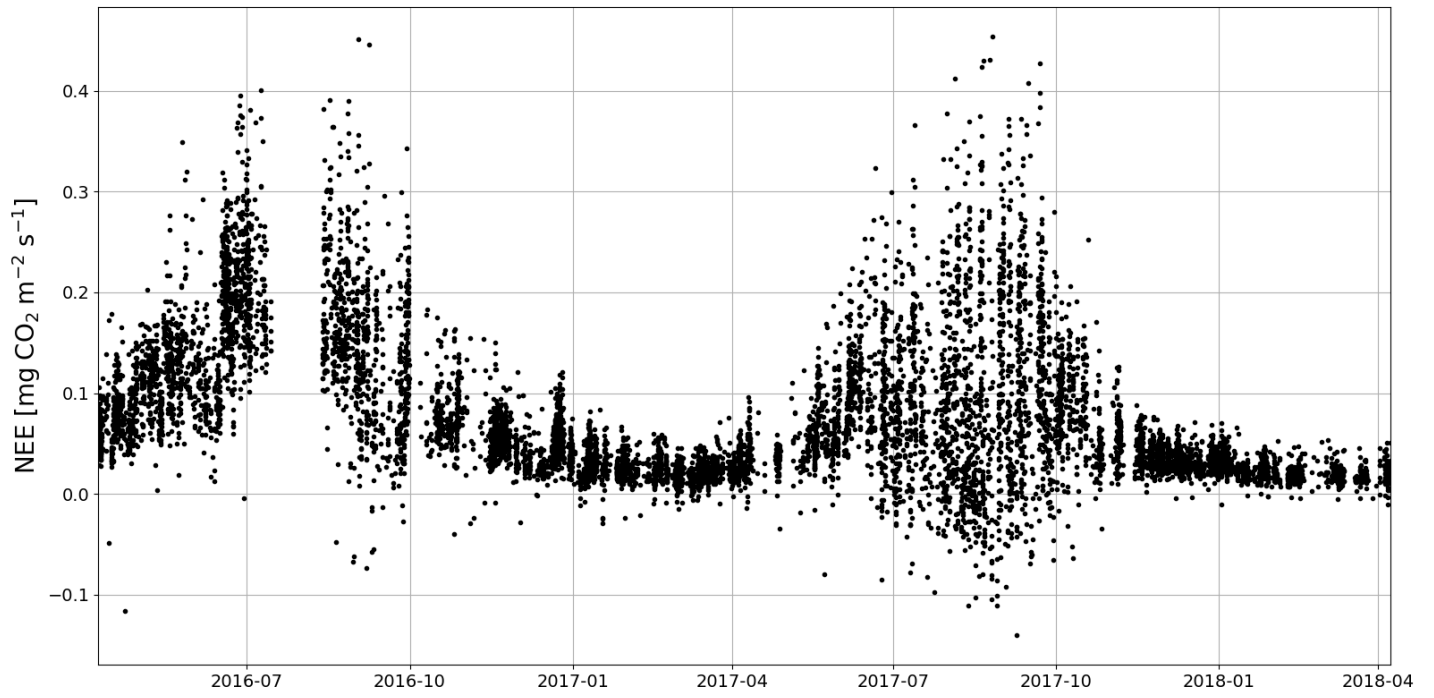


Figure S2. Time series of the accepted half-hourly measurements of NEE in April 2016 – April 2018.

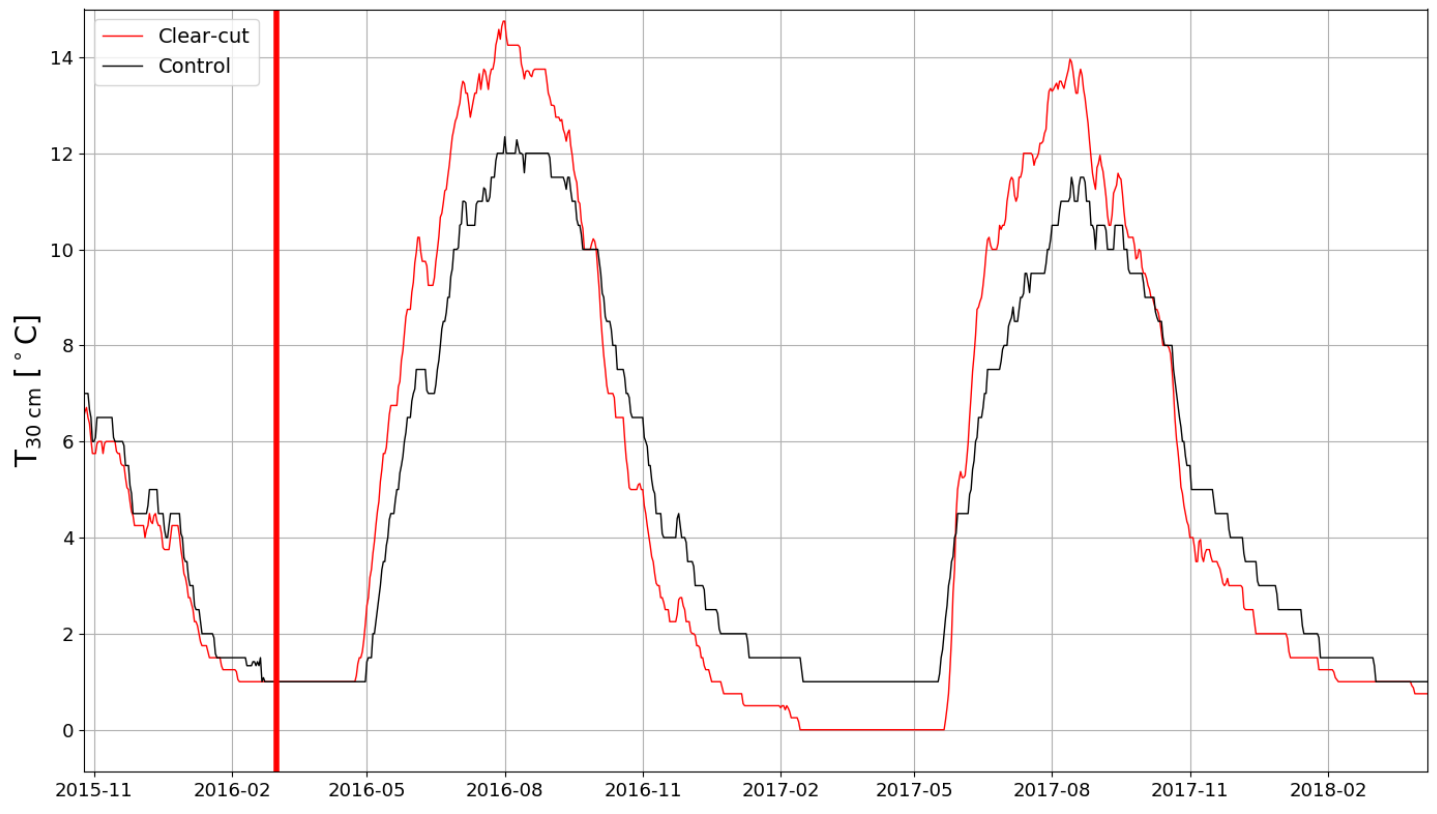


Figure S3. Daily mean soil temperatures at 30 cm depth measured at the clear-cut (red) and the control (black) treatments. The clearcutting (red vertical line) was carried out in February–March 2016.

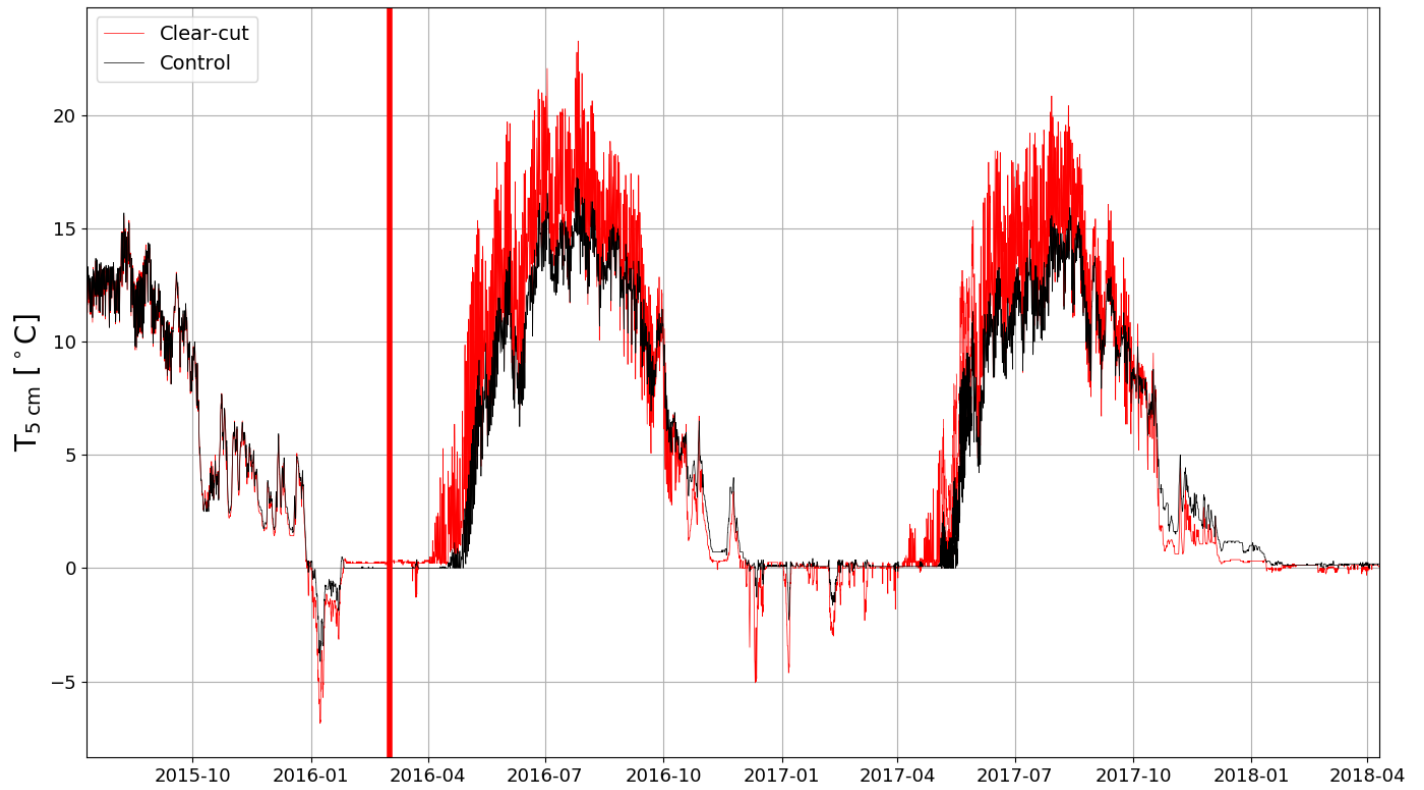


Figure S4. Hourly mean soil temperatures at 5 cm depth measured at the clear-cut (red) and the control (black) treatments. The clearcutting (red vertical line) was carried out in February–March 2016.

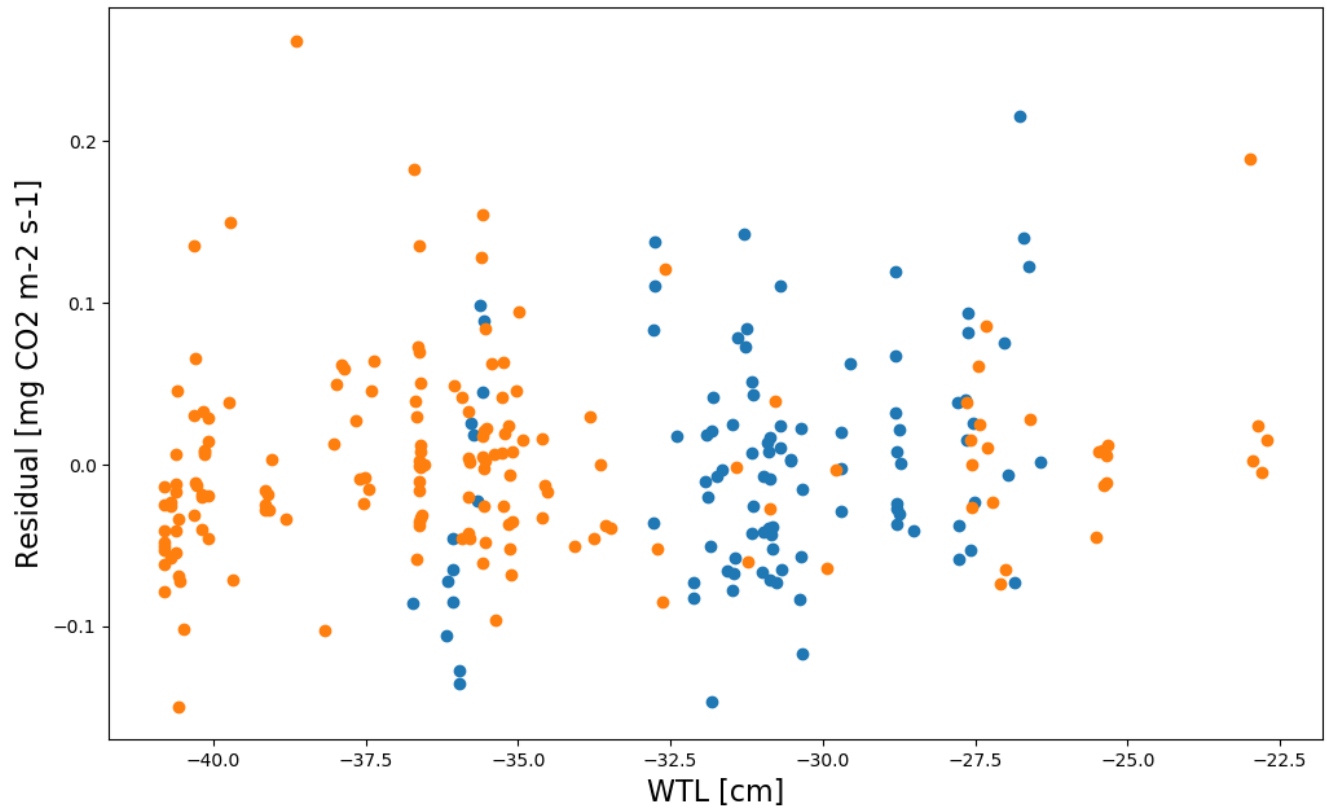


Fig S5. Hourly mean residual of the respiration fit (Eq. A3) vs. hourly mean water table level in Jun-Aug 2016 (blue) and 2017 (orange).