**Supplement Figures**

**Figure 1S:** Soil respiration rate (in μmol CO$_2$ m$^{-2}$ s$^{-1}$) for control (a), PyOM (b) and wood (c). Error bars represent the standard error of the mean (n=3)

**Figure 2S:** Cumulative losses of PyOM-C (a) and wood-C (b) as CO$_2$ in % of the initial C input derived from equation 4. The black line represents losses under ambient N deposition and the grey line losses under increased N. Continuous line represent the mean and the dashed line the standard error of the mean (n=3).

**Figure 3S:** Cumulated losses as DOC for PyOM (a) and Wood (b) expressed as % of initially added organic input-C. Empty symbols represent the ambient N treatment and full symbols represent the increased N treatment. Error bars represent the standard error of the mean (n=3).
Soil respiration rate ($\mu$mol CO$_2$ m$^{-2}$ s$^{-1}$)

2009 2010

0 2 4 6 8
Nov Mar May Jul Sep Nov
● ● ● ● ●
●
●
●
● ●
● ● ● ● ●
●
0 2 4 6 8
Nov Mar May Jul Sep Nov
● ● ●
●... +N
(b)Wood −N
Wood +N
(c)PyOM −N
PyOM +N

Time

Figure 1S
Figure 2S
Figure 3S