

## Supporting Information

**Table S1**

Several extracellular enzymes representing soil C, N, P cycling are commonly used in ecoenzymatic stoichiometry models.

Ecoenzymes	Abbreviation	EC <sup>a</sup>	Function
$\beta$ -1, 4-Glucosidase	BG	3.2.1.21	Cellulose degradation: hydrolyses glucose from cellobiose
$\beta$ -D-Cellobiosidase	CBH	3.2.1.91	Cellulose degradation: hydrolyses cellobiose dimers from non-reducing ends of cellulose molecules
$\beta$ -1, 4-N-Acetylglucosaminidase	NAG	3.2.1.14	Chitin and peptidoglycan degradation: hydrolyses glucosamine from chitobiose
L-Leucine aminopeptidase	LAP	3.4.11.1	Proteolysis: hydrolyses leucine and other hydrophobic amino acids from the N terminus of polypeptides
Acid or alkaline phosphatase	AP	3.1.3.1	Hydrolyses phosphate from phosphosaccharides and phospholipids

**Note:** Enzyme commission classification ([Sinsabaugh et al., 2009](#); [Cui et al., 2019a](#)).

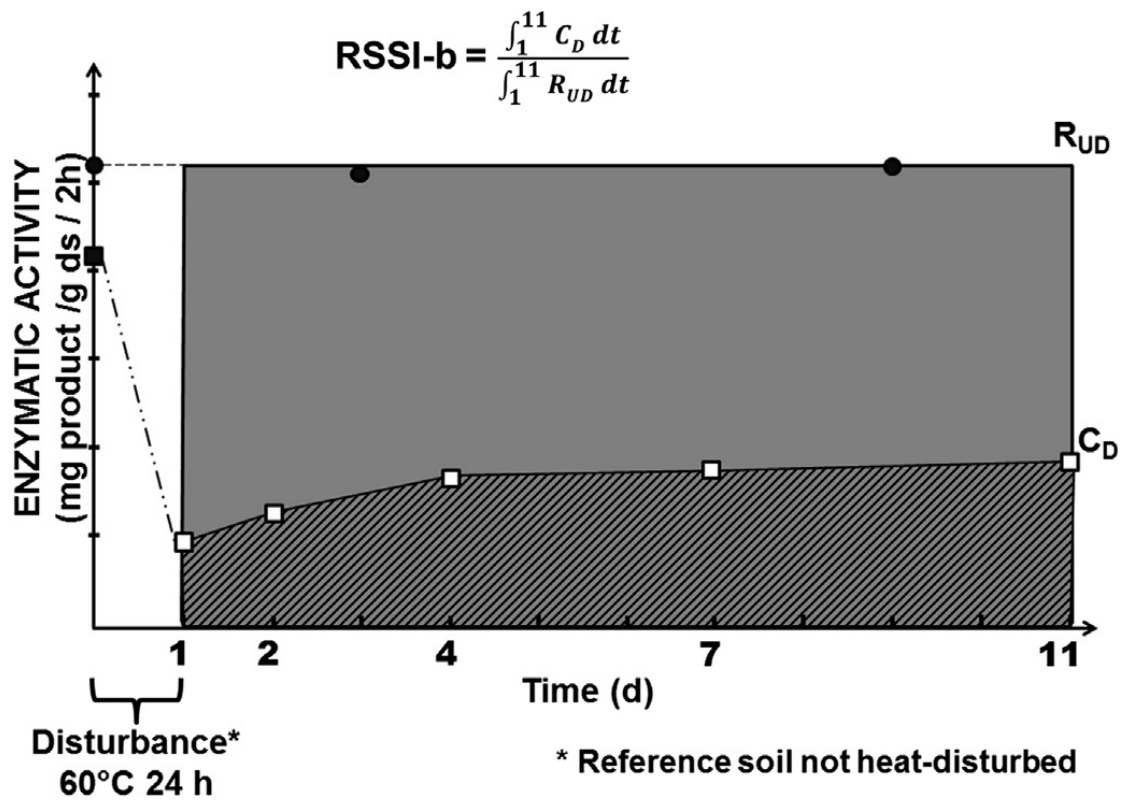


Fig. S1 Schematic example of the calculation of the RSSI-b score from areas under enzyme activities curves over time. The lined area and the white-filled squares are related to the contaminated disturbed ( $C_D$ ) soil, and the gray area and the black-filled circles are the reference undisturbed soil ( $R_{UD}$ ). The ds acronym within the y-axis unit refers to dry soil (Lessard et al., 2014).