

Carbon Balances of Agricultural Ecosystems and their Management: Measurements at Hectare to Farm Scale.

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Conversion of land to agriculture and its subsequent management has led to substantial increases in atmospheric CO₂, in part, from losses of soil carbon. These losses can be ongoing and need to be averted. There is also an opportunity for carbon capture as part of nature-based climate solutions. Accordingly, there is a need to quantify the effects of agricultural management practices on carbon storage in both grazed grasslands and/or croplands on mineral or organic soils, with a focus on those practices that reduce losses or lead to gains of carbon. We welcome presentations that quantify agricultural ecosystem carbon balances measured at hectare to farm scale, such as those determined by coupling micrometeorological measurements of CO₂ exchange with imports and exports of carbon. This session also includes measurements of agricultural CH₄, N₂O and/or GHG budgets measured at the hectare scale.

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