

Field scale fluxes and uncertainties of \mathbf{CO}_2 and energy from a managed pasture in Scotland

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A field campaign of eddy covariance measurements was conducted to determine the field scale trace gas and energy exchanges of a representative managed pasture in south west Scotland. To better fit the parent projects goal of multi-scale uncertainty, multiply flux systems were deployed in an attempt to quantify temporal and spatial variability of fluxes from a quasi-uniform site. We briefly discuss the hurdles encountered when synthesizing multiple measurement systems into a coherent dataset and reflect on what this analysis would imply when interpreting singular flux datasets. Data from the campaign provide information on flux estimates with run specific uncertainties over a complete harvest cycle of the pasture. Initial estimates suggest a net uptake of 2 micromol m-2 sec-1 over the 6 week period between harvests. Uncertainties of this estimate and the environmental dependence of uncertainties of half hour estimates will also be presented.