

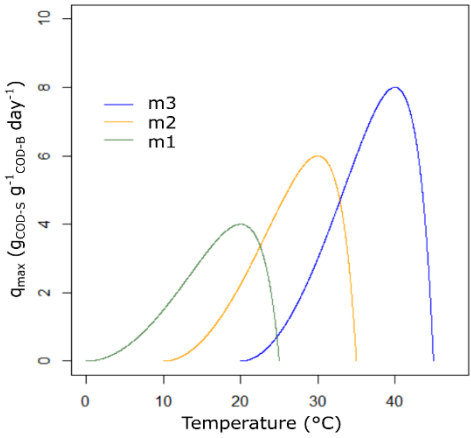
The Anaerobic Biodegradation Model (ABM): A flexible tool for predicting methane emission from livestock manure

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hydrolysis
first order

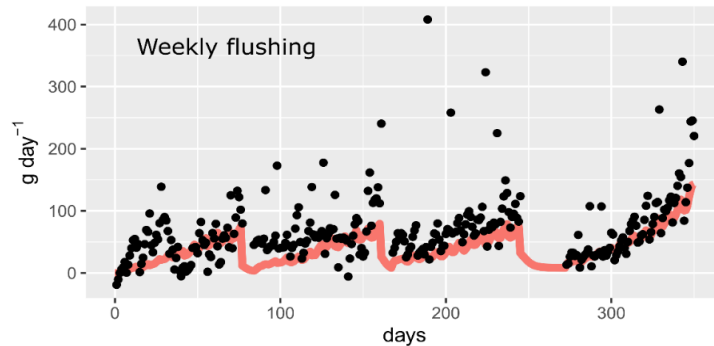
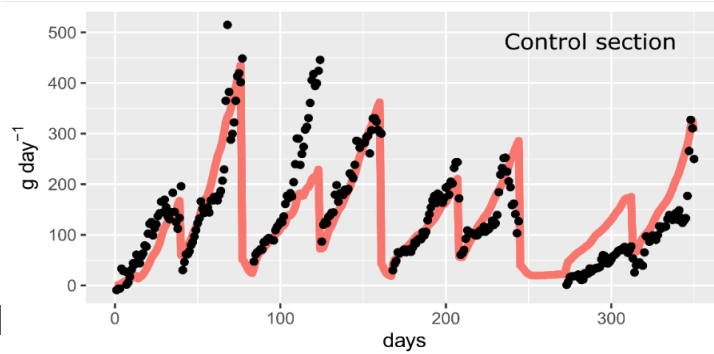
methanogenesis
Monod kinetics



Include any number of methanogen groups
With different sensitivity

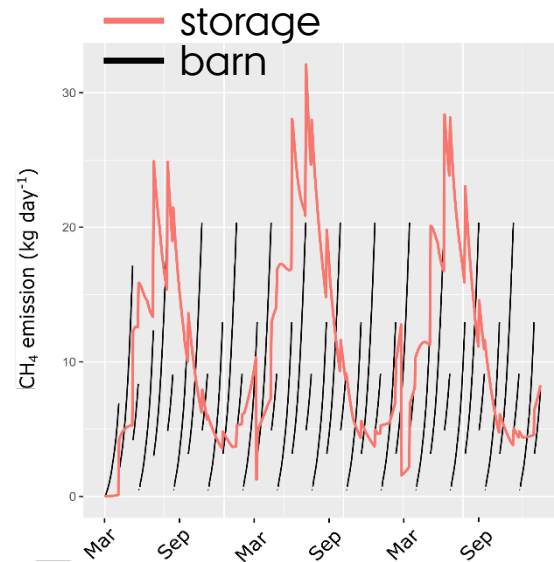
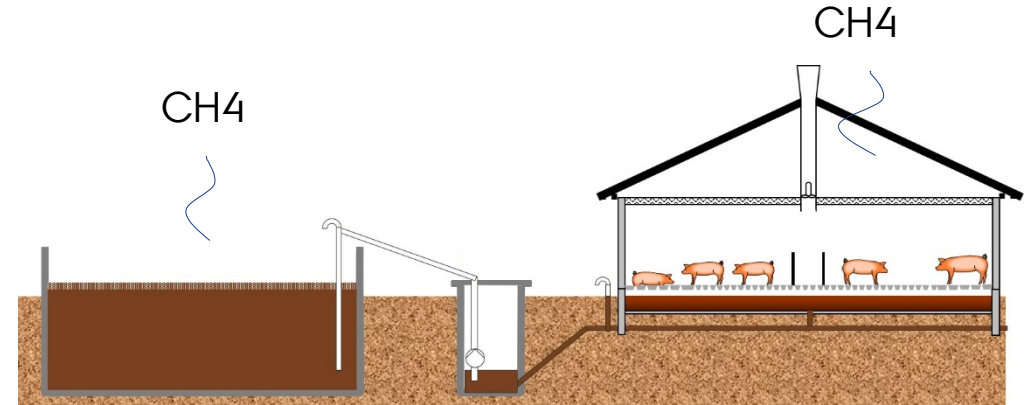
- capture adaptation mechanisms

Parameterization



— model data
● data

Simulate whole farm emission
Include management parameters



Reference situation

5.6 kg CH₄ animal place/year
61 % external storage
39 % barn

Weekly flushing

4.7 kg CH₄ animal place/year
87 % external storage
13 % barn