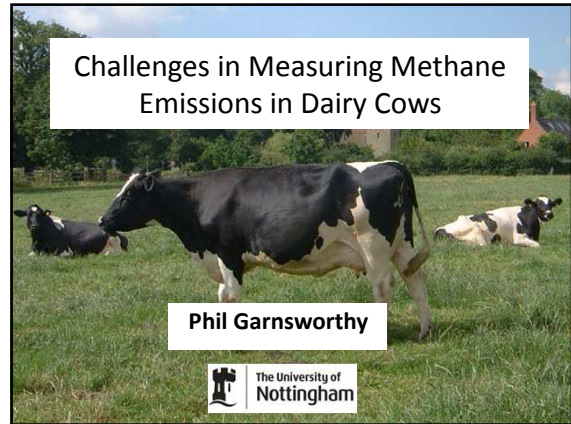


WG2

Aim: to compare methods and look for correlations, harmonisation and equivalence

- Status – planning stage
- Ongoing work
 - inventory
 - individual group activity
- Next steps – plan actions and meetings
- Actions will develop from inventory

Challenges in Measuring Methane Emissions in Dairy Cows

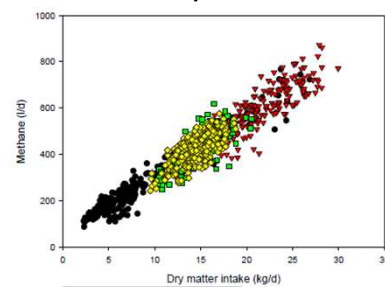


Phil Garnsworthy



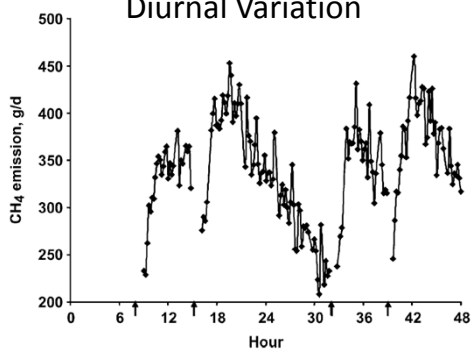
Respiration Chambers
 Gold Standard reference method
 Behaviour not natural
 Controlled feed intake
 Expensive, so low replication

Variability - chambers



Reading University report for DairyCo

Diurnal Variation

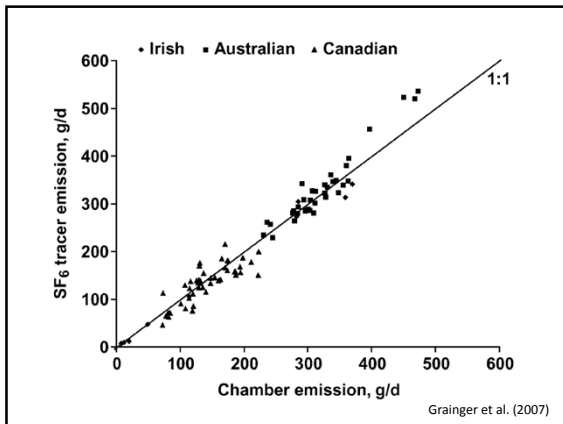


Grainger et al. (2007)

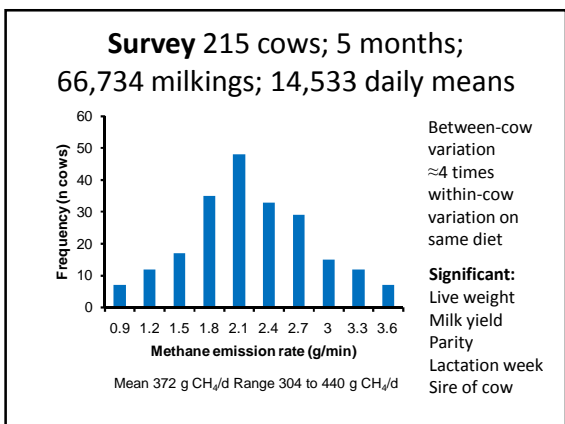
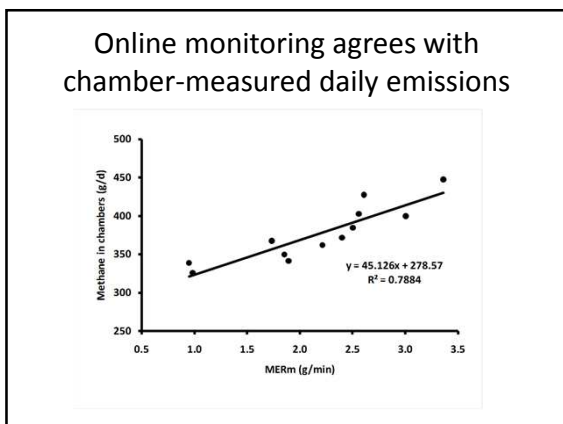
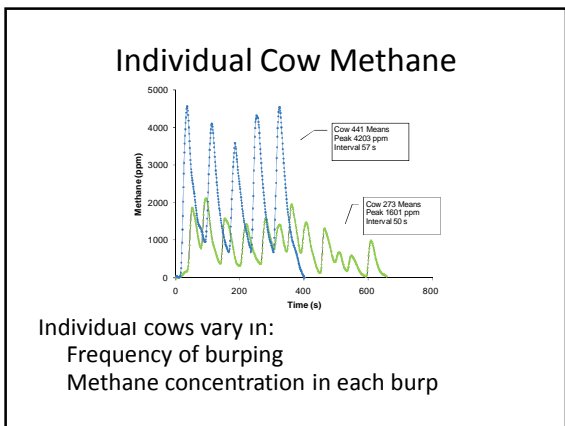
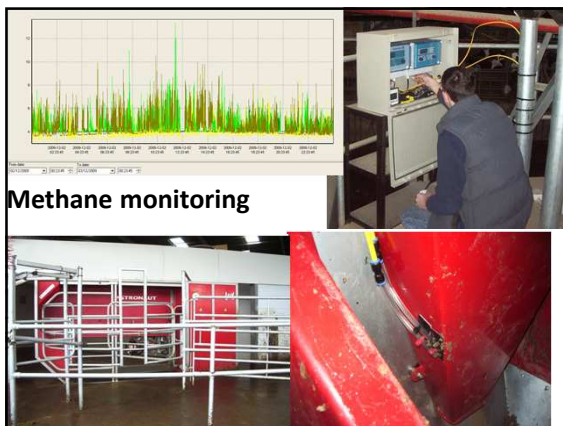


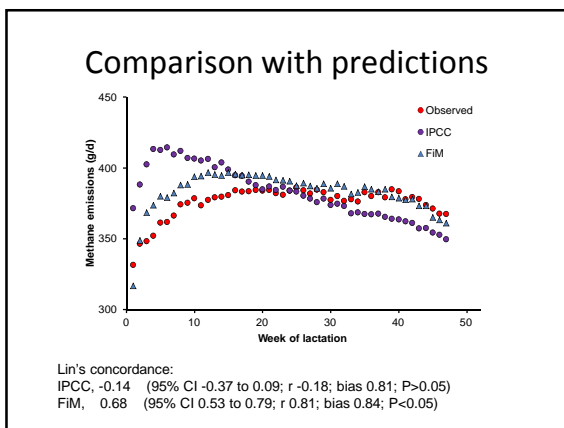
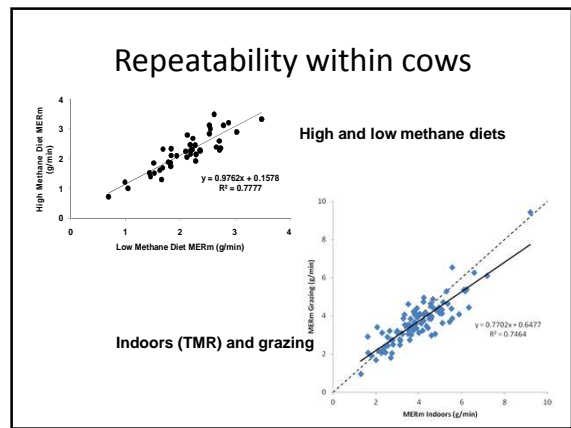
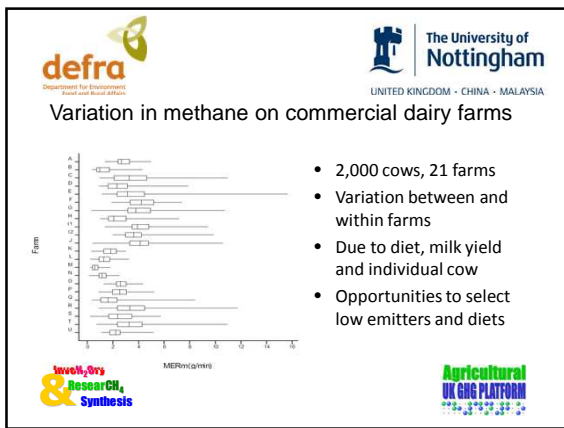
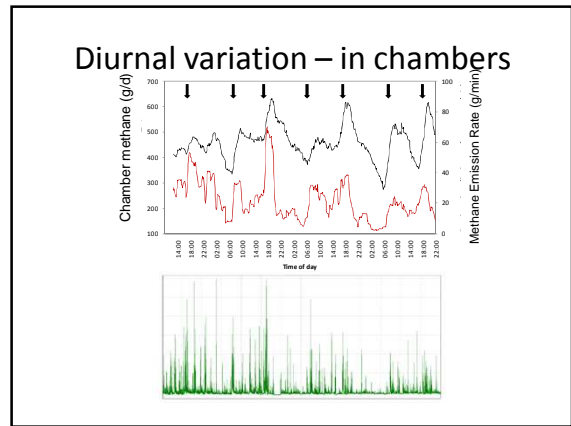
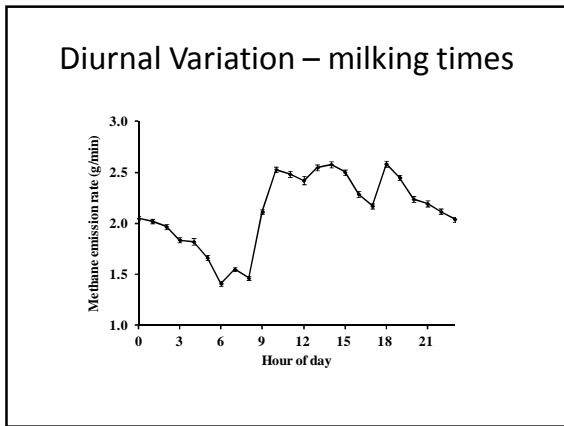
SF₆

- Animals eat naturally
- Indoors or out
- Frequent handling
- Variable SF₆ release rate
- One measurement per day



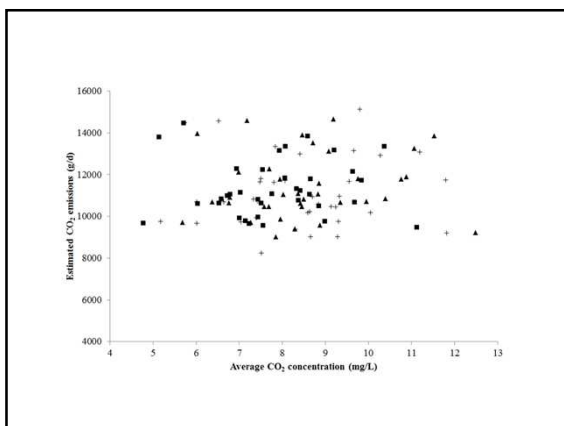
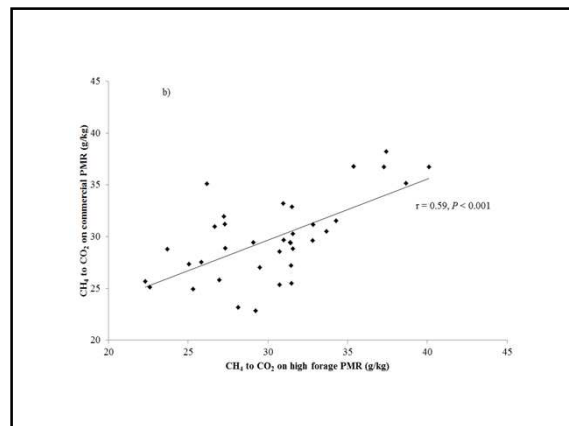
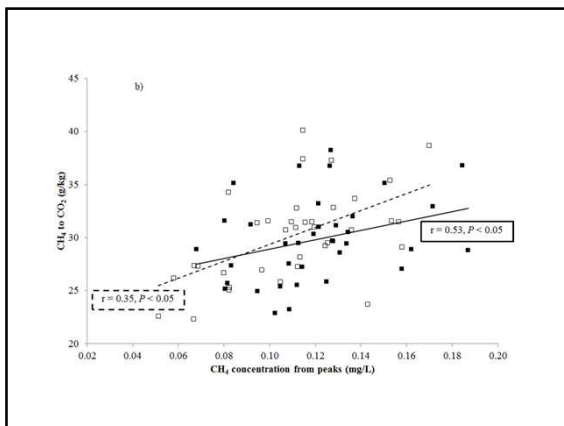
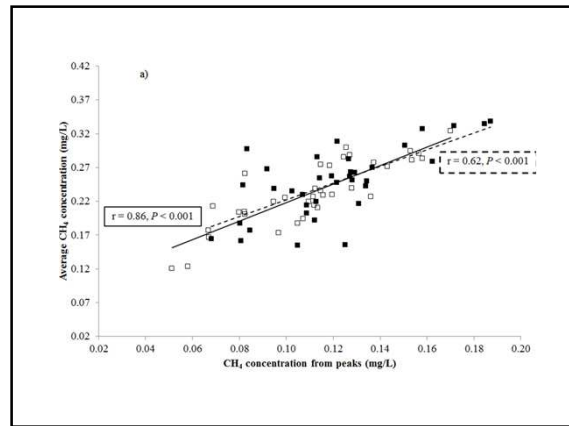
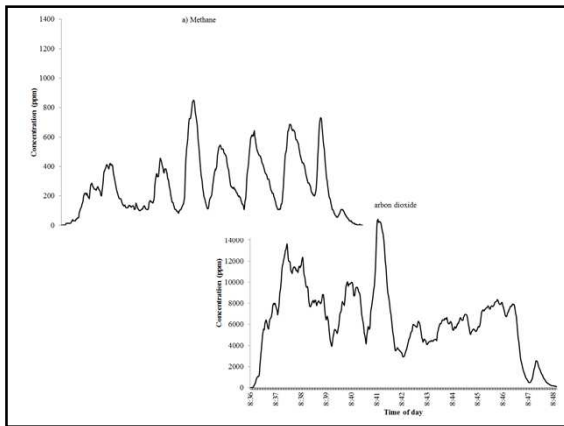
Online methane measurements





Other monitoring methods

- Methane to CO₂ ratio during milking
- GreenFeed
- Hoods over feed bins
- Laser gun detection



WG2

- Next steps – plan actions and meetings
– Granada & ???
- Actions will develop from inventory
- We need to know who has data comparing two methods on the same animals
- This can be used to link methods