

Multi-monitoring greenhouse gases

for mitigation, emission registration and
–verification (in rural areas)

Ronald Hutjes



Multi-GHG monitoring programme: objectives

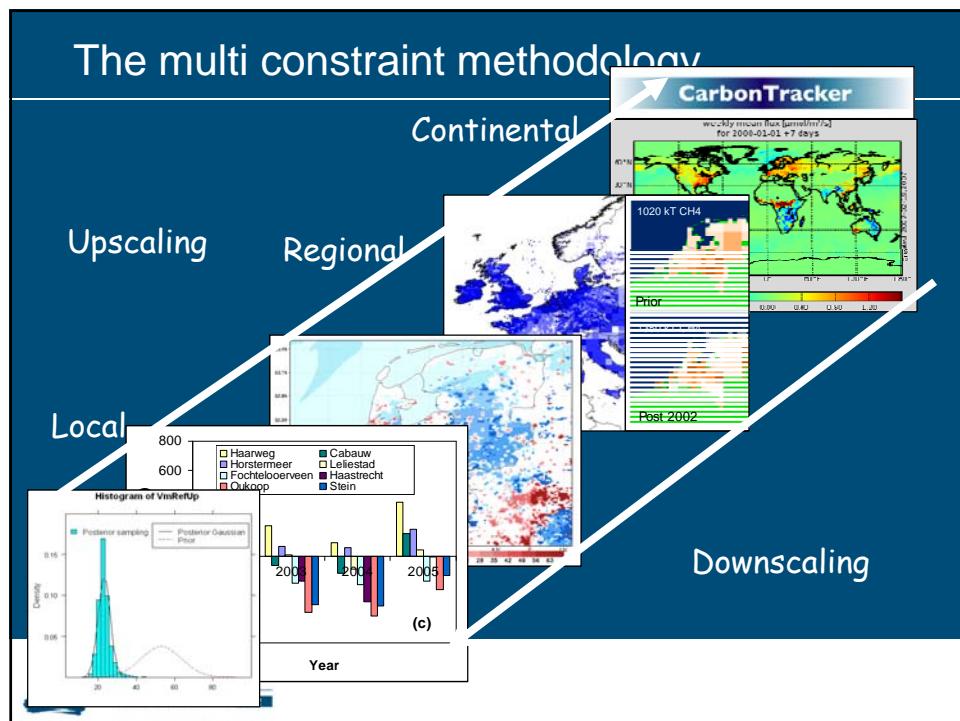
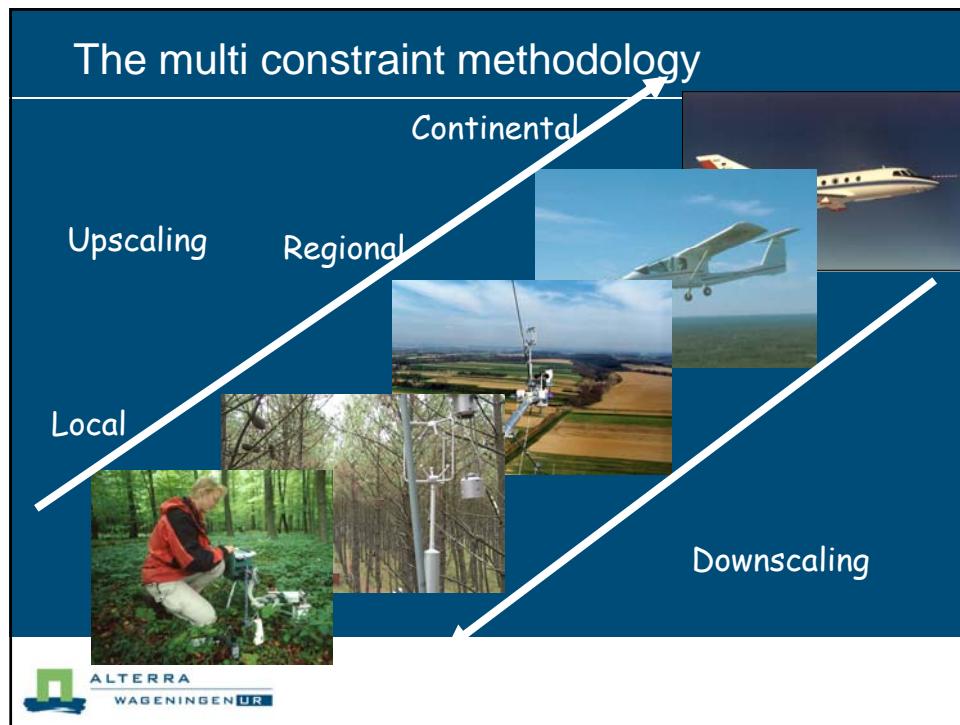
Why biogene fluxes:

- REDD
- KP 3.3, 3.4
- slow in - fast out
- High variability

Why CO₂ & N₂O & CH₄ fluxes:

- Trade offs
- In EU Offsets





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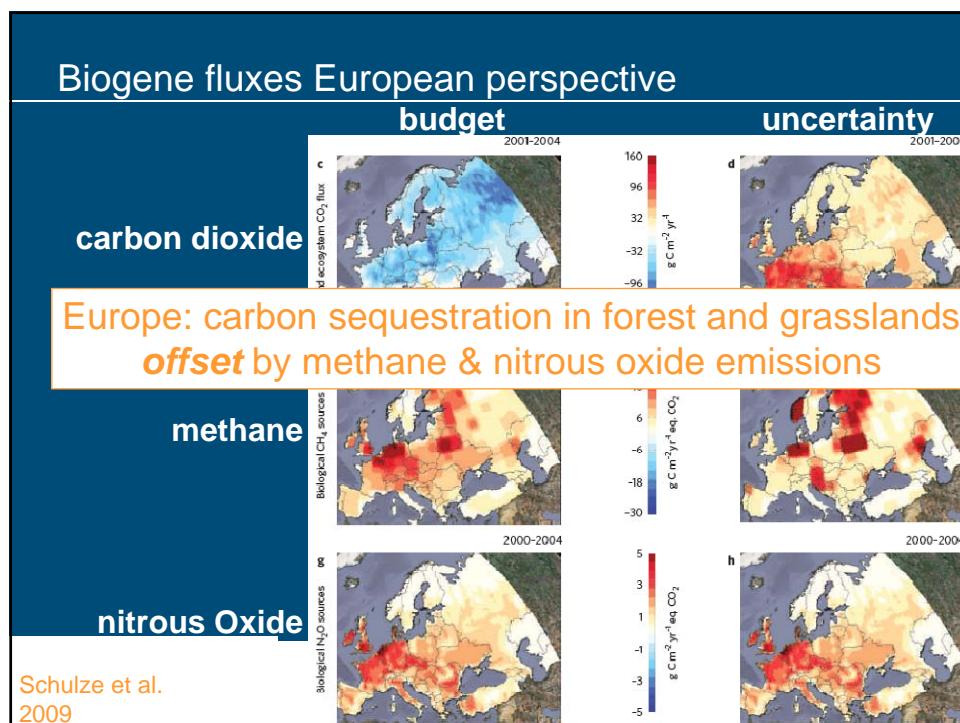
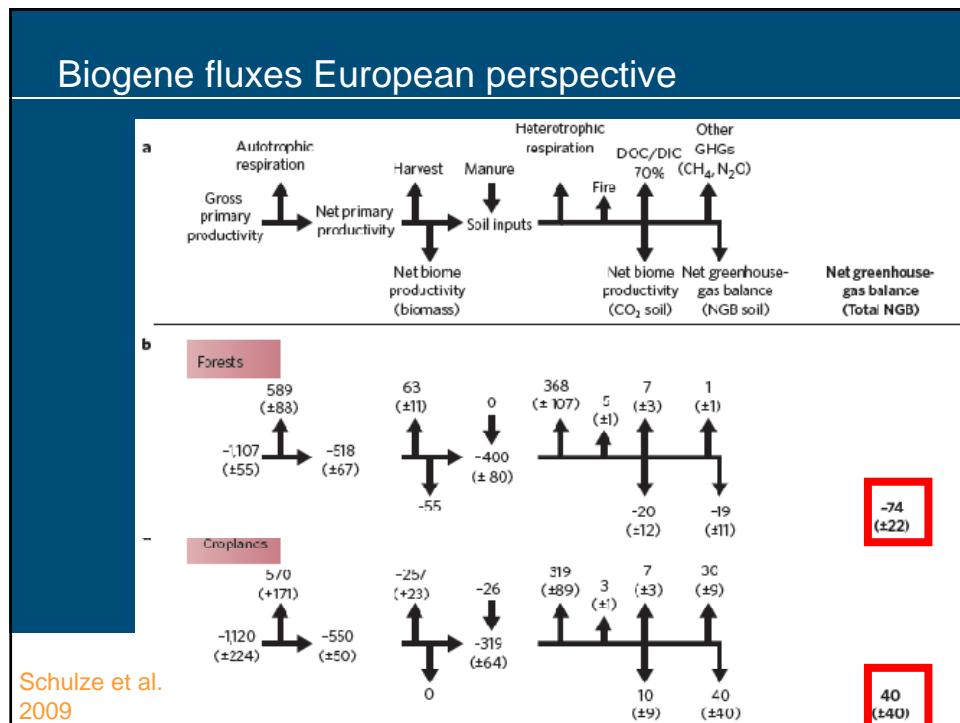
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Biogene fluxes European perspective

CH₄/N₂O offsets C-sequestration

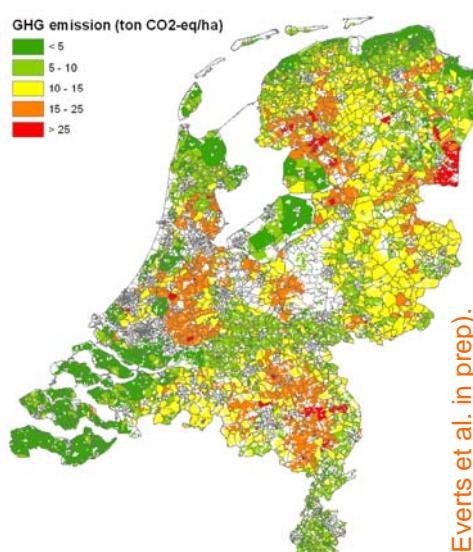
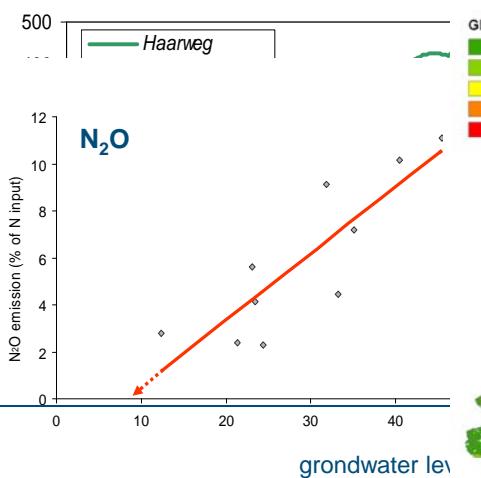




Biogene fluxes Dutch examples all three GHG source



Biogene fluxes Dutch examples all three GHG source on grasslands



(Everts et al. in prep).

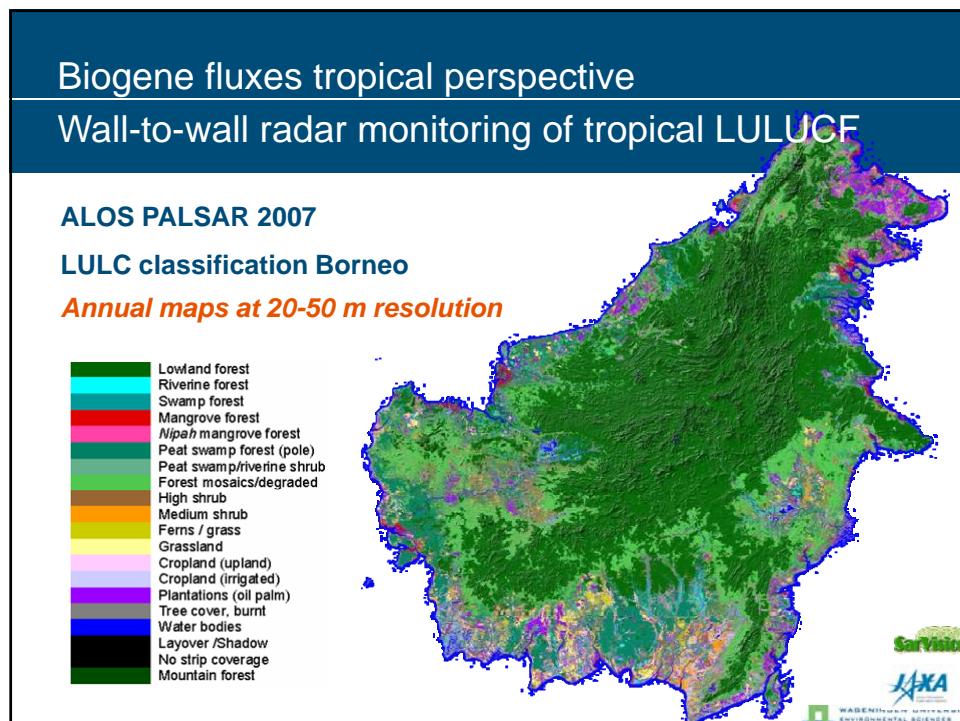
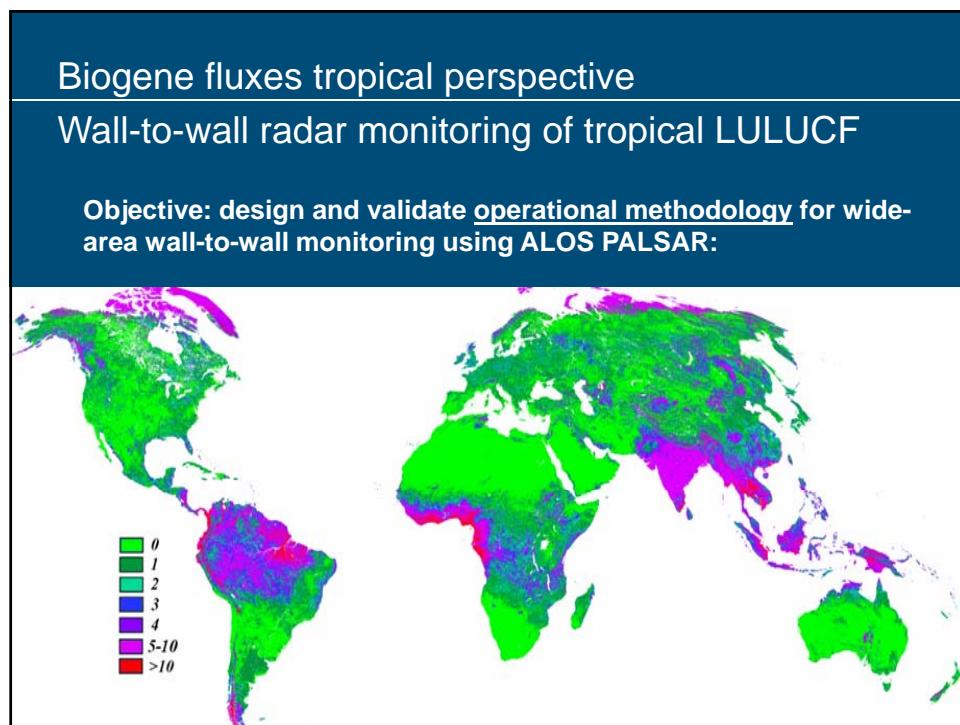


Biogene fluxes Dutch examples
all three source



Biogene fluxes tropical perspective
Wall-to-wall radar monitoring of tropical LULUCF





Multi-GHG monitoring programme: conclusions

Wall to wall monitoring feasible:

- Multi-constraint & multi gas concept
- Well developed scientifically
- Monitoring continuity

- quantification and process understanding emissions
- development reporting methods NIR
- verification reported emission (reductions)



Thanks

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