

# Spatial assessment of atmosphere-ecosystem exchanges via micrometeorological measurements and footprint modelling

Preliminary results of eddy covariance measurement at Haean, 2010

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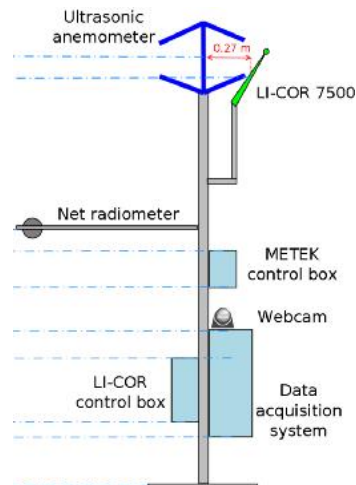
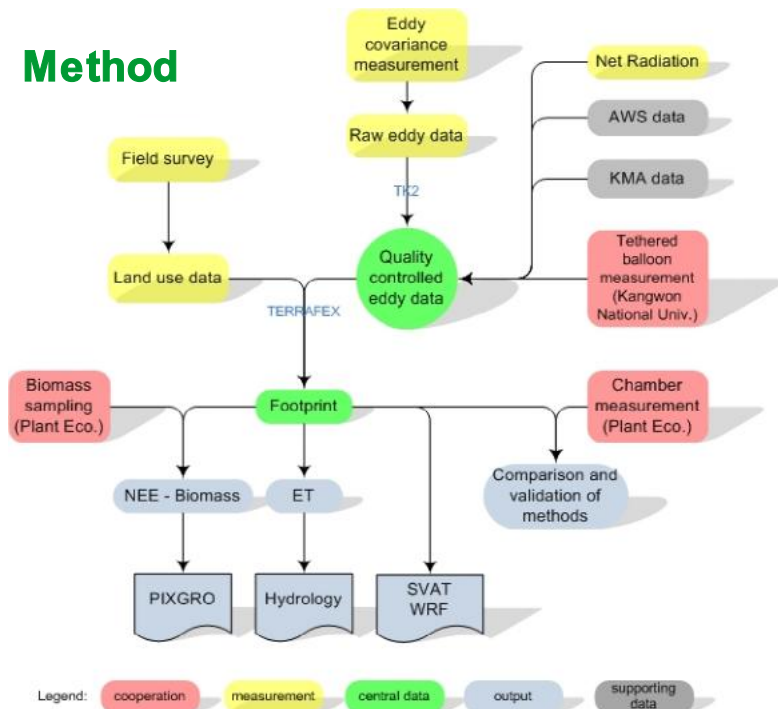


## Objectives

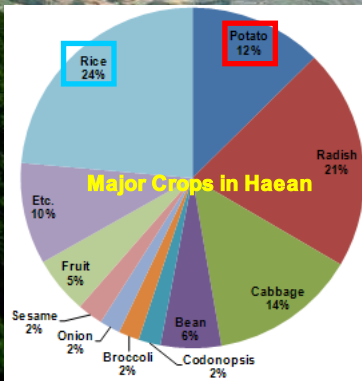
- To understand the sensible and latent heat fluxes in such a complex terrain as Haean Basin, South Korea
- To better understand the energy exchange above farmlands (flooded and unflooded fields) during the whole growing period including monsoon seasons in Korea
- To determine reliable evapotranspiration and net ecosystem exchange (NEE) of carbon above farmlands
- To determine reliable information about near surface atmospheric stratification conditions, including convective events in Haean Basin

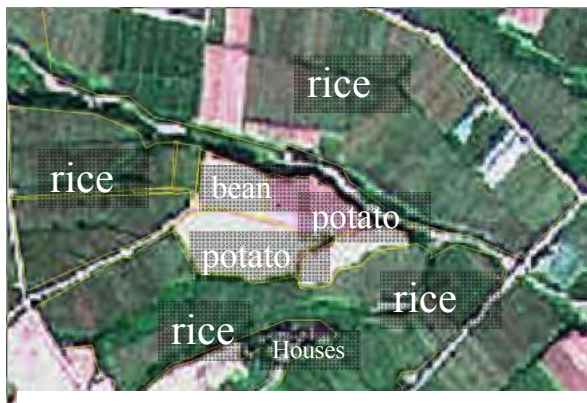


## Method

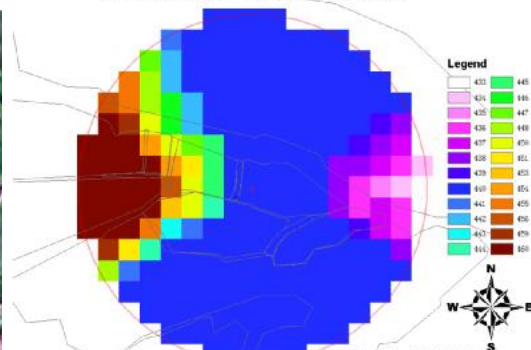


## Site Selection

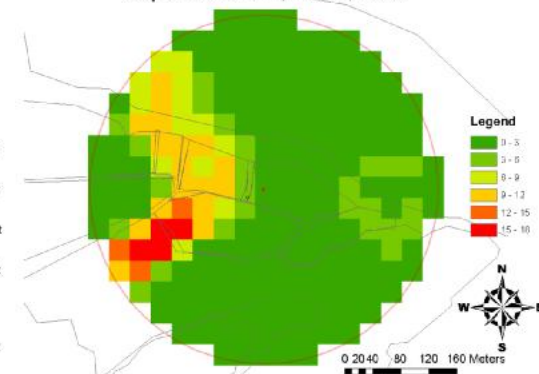




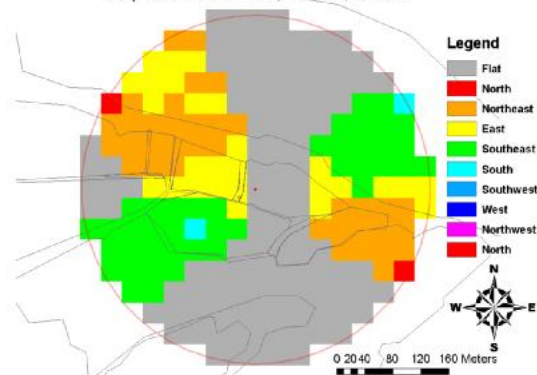
Altitude Potato Field, Haean, Korea



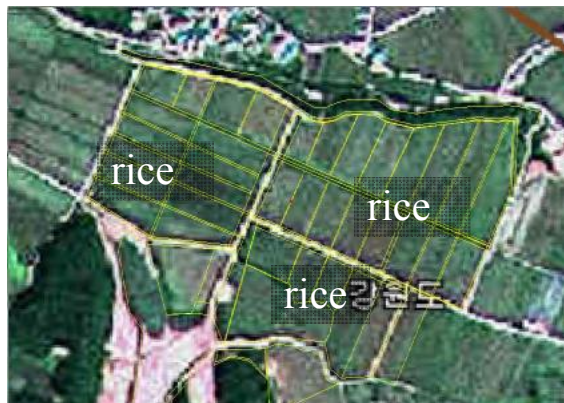
Slope Potato Field, Haean, Korea



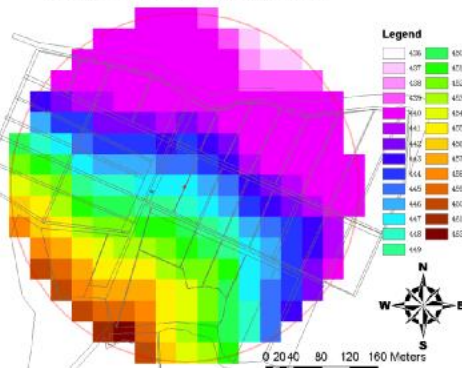
Aspect Potato Field, Haean, Korea



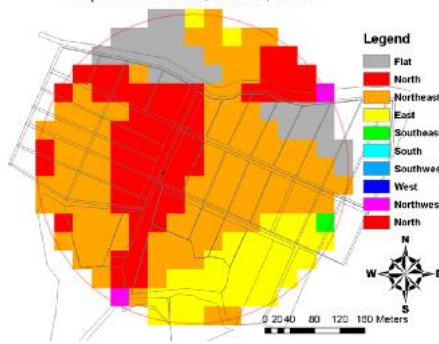




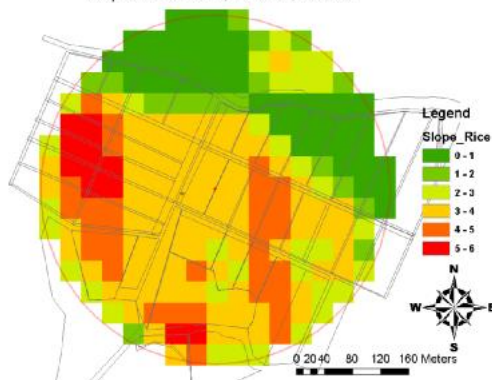
Altitude Rice Field, Haean, Korea

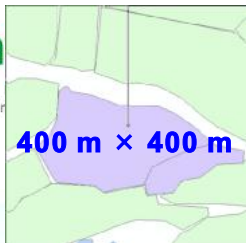


Aspect Rice Field, Haean, Korea

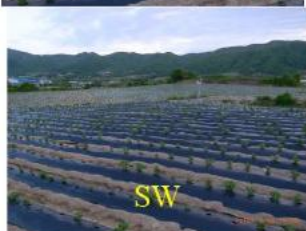


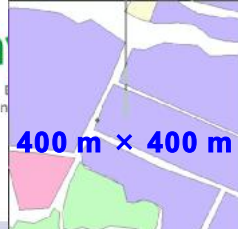
Slope Rice Field, Haean, Korea





# Potato field





## Rice field



NW



N



NE



W



E



SE



SW

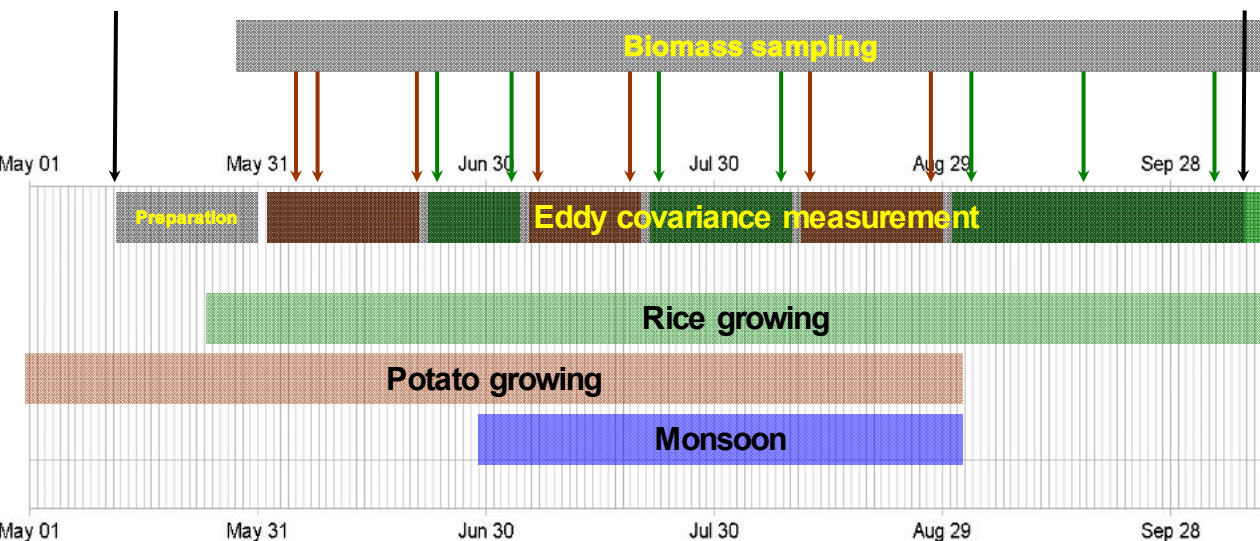


S





# Schedule



May 01

May 31

Jun 30

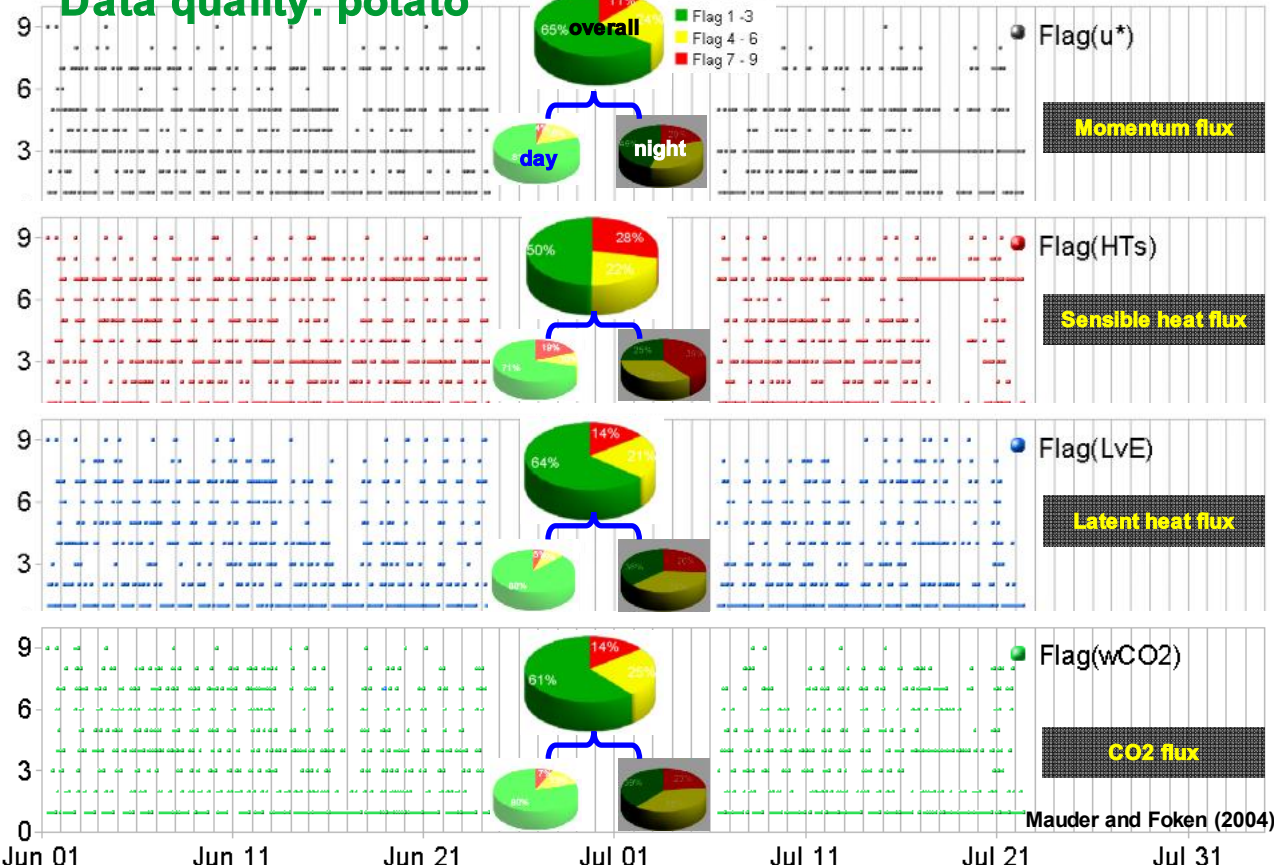
Jul 30

Aug 29

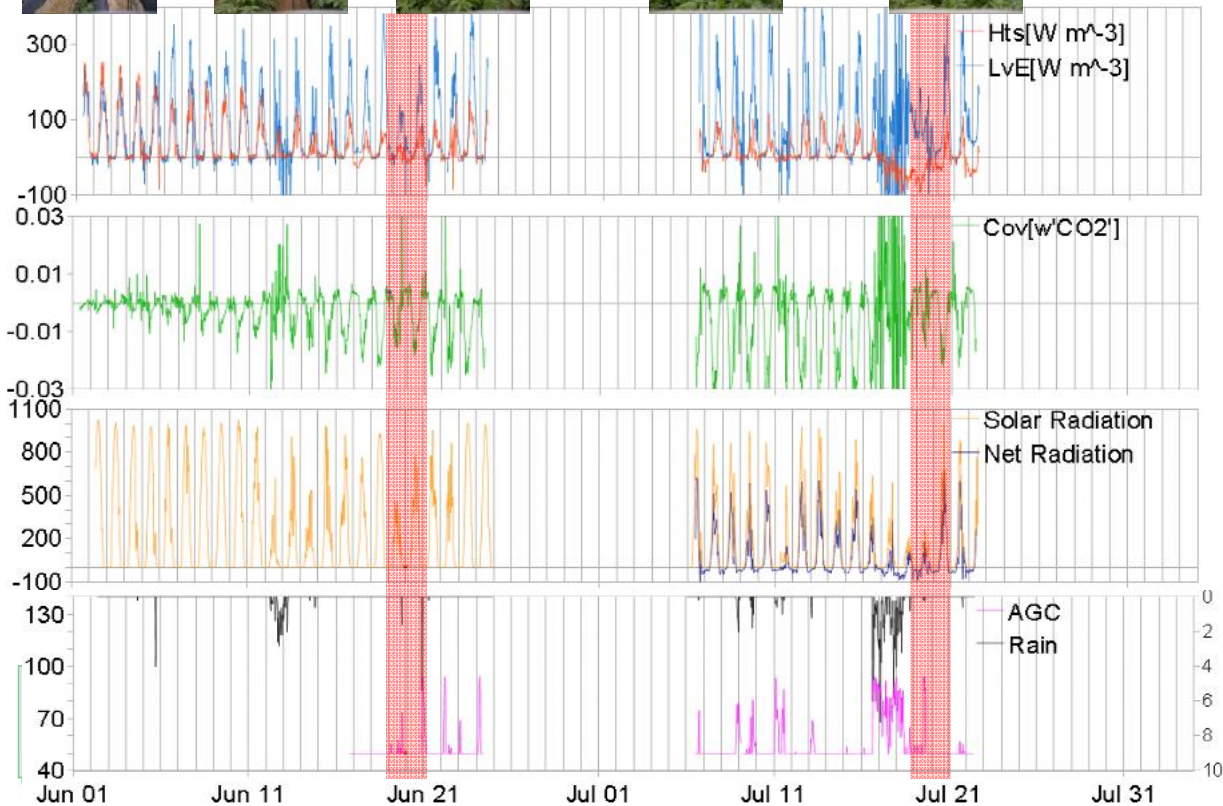
Sep 28



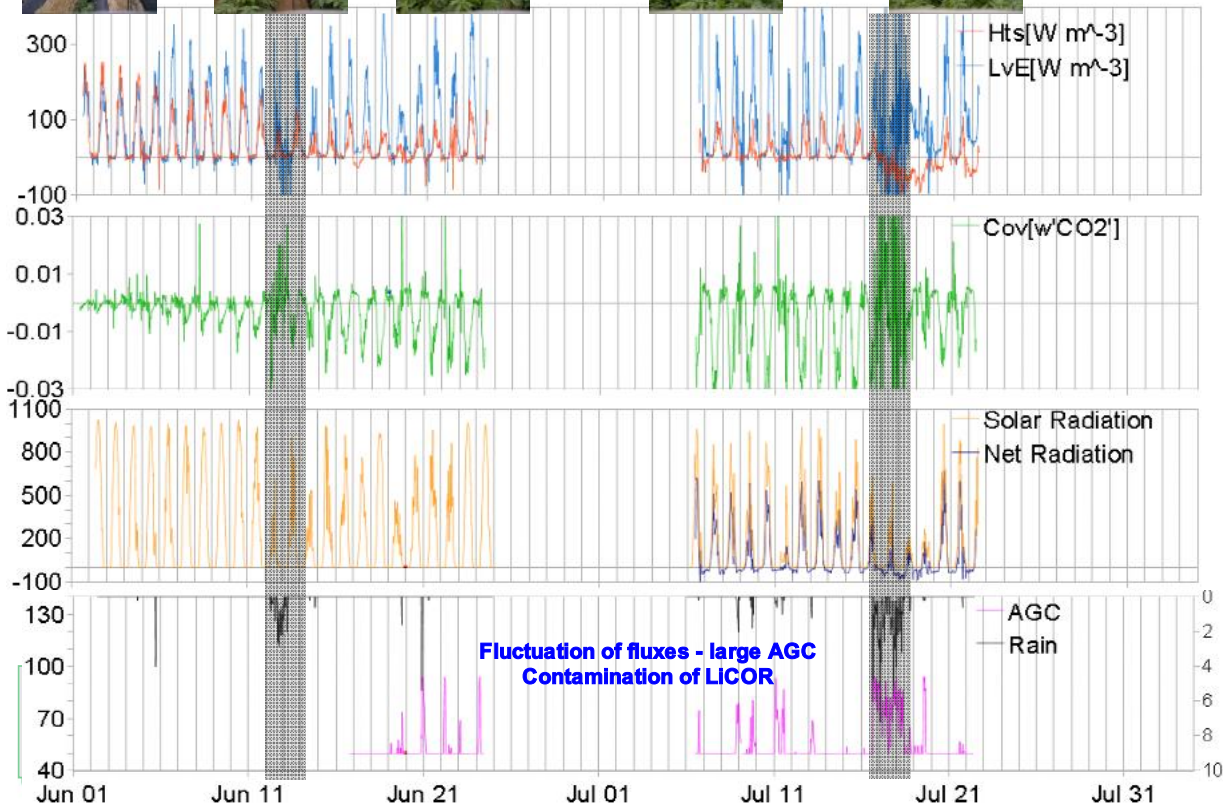
# Data quality: potato



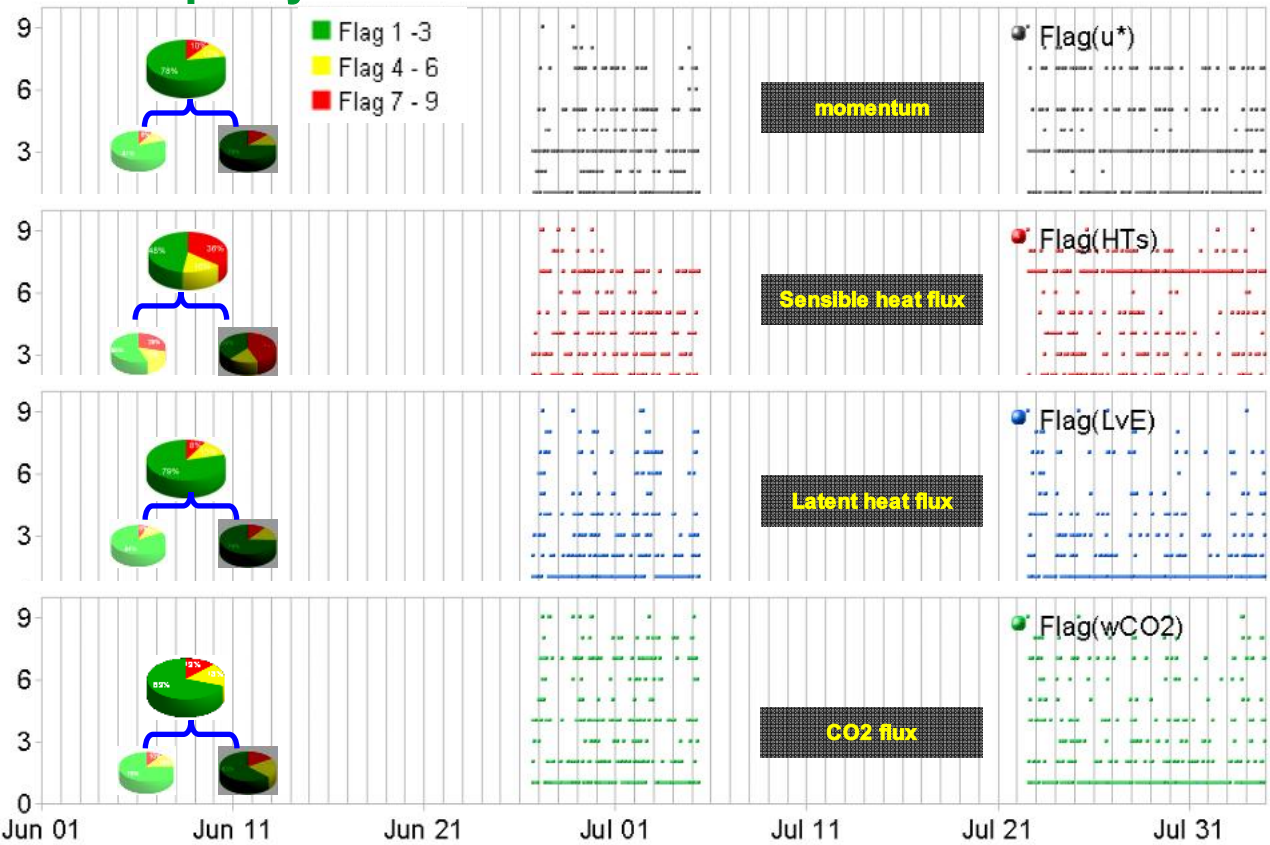
# Potato field



# Potato field

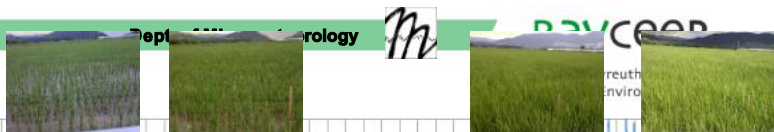


# Data quality: rice





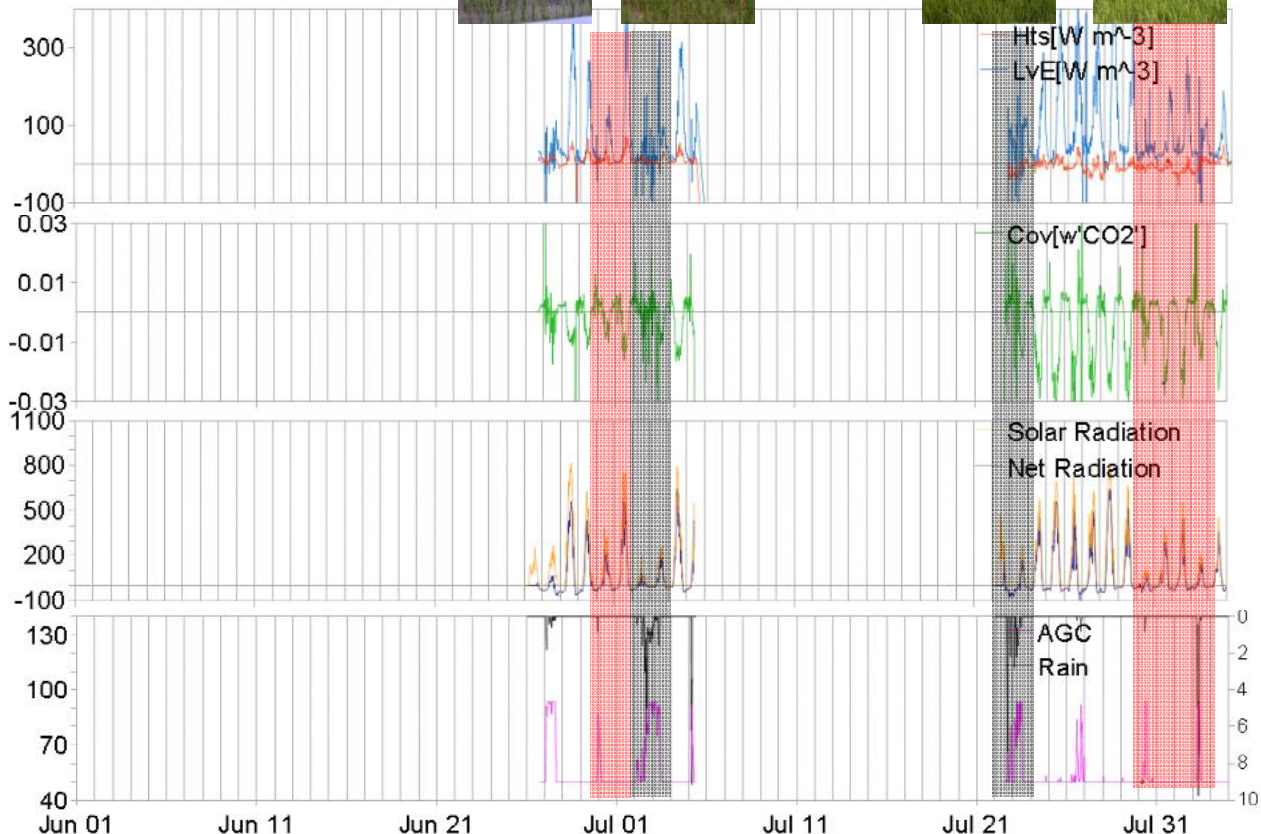
# Rice field



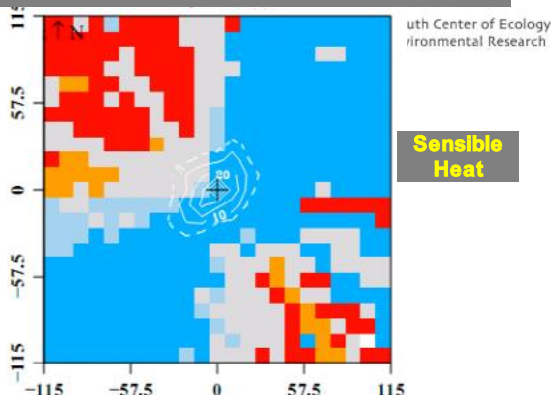
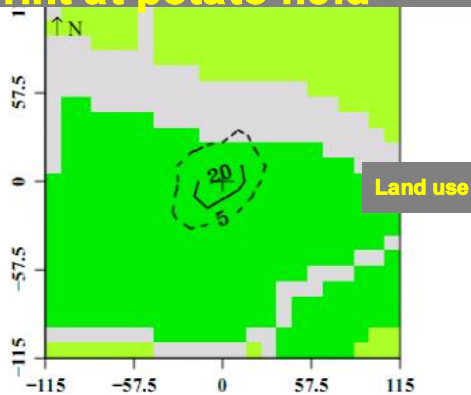
Dept. of Plant Biology



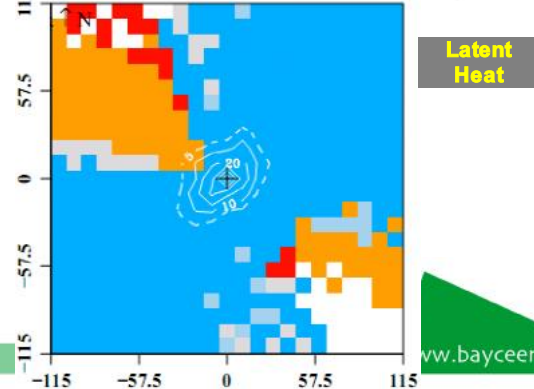
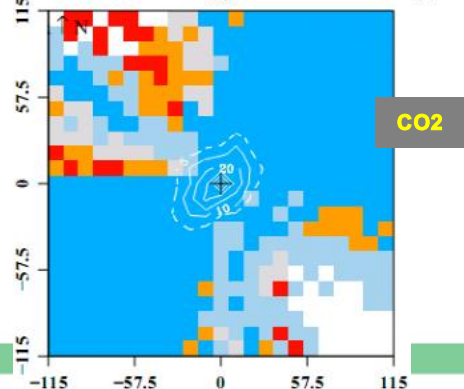
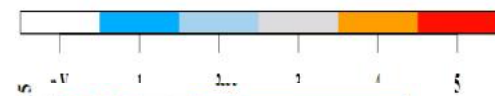
Bayreuth  
University  
Environmental



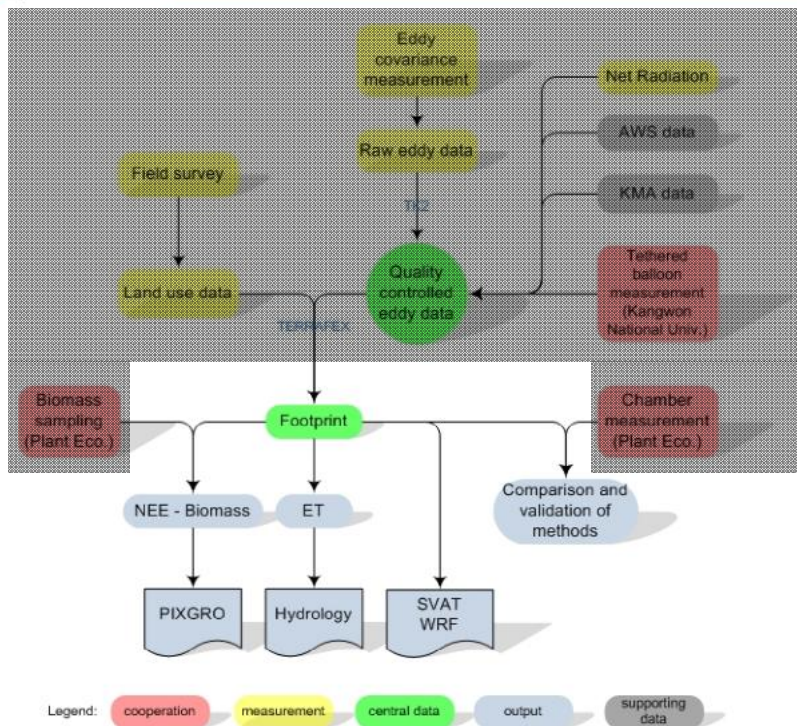
# Footprint at potato field



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ironmental Research



## Future work





# Thank You

