



# HydroAlp

## 2<sup>nd</sup> year meeting

17 May 2013, EURAC, Bolzano

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# HydroAlp 2<sup>nd</sup> year meeting

## Role of UIBK in HydroAlp

- Conduct eddy covariance measurements of latent and sensible heat fluxes, and CO<sub>2</sub> fluxes at study site Muntatschinig/Monteschino in support of model development, calibration and validation
- Contribute to model development

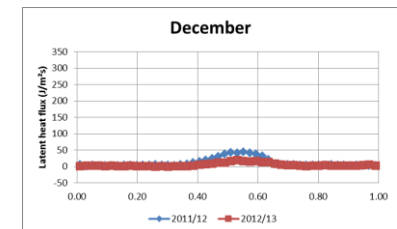
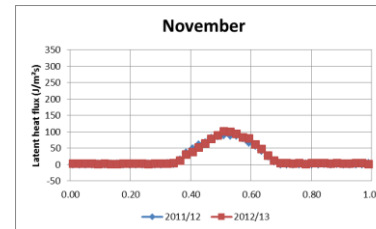
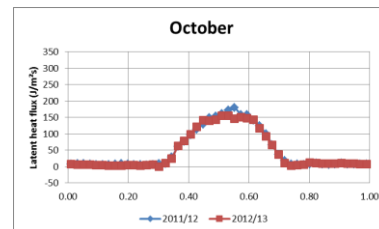
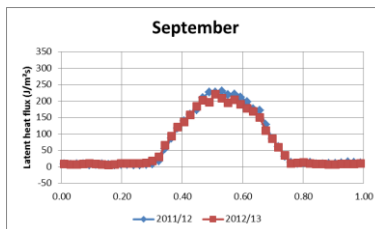
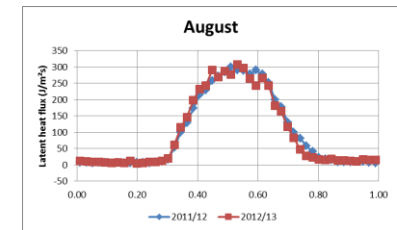
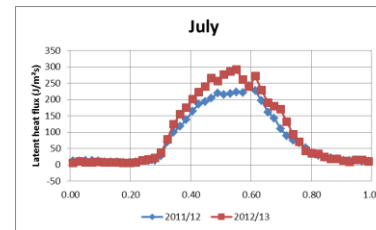
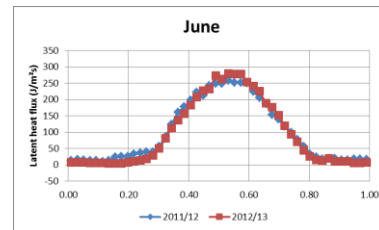
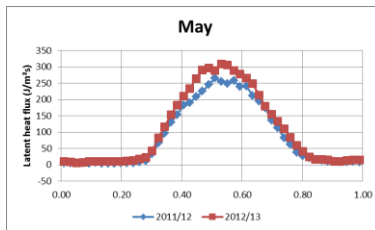
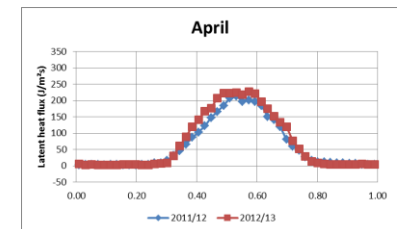
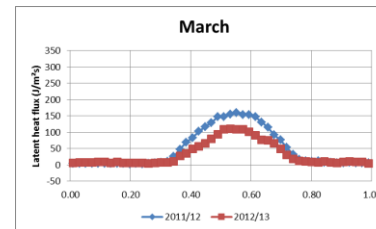
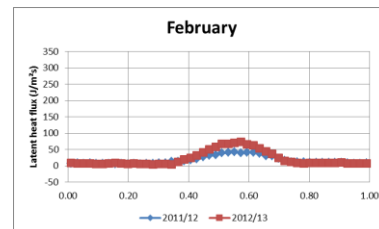
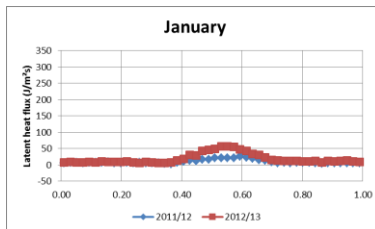
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## What has been done so far?

- Eddy covariance flux measurements at Muntatschinig/Monteschino operational since end of April 2011 and ongoing (=> HiResAlp), i.e. presently 24 months of data available
- Model development ...

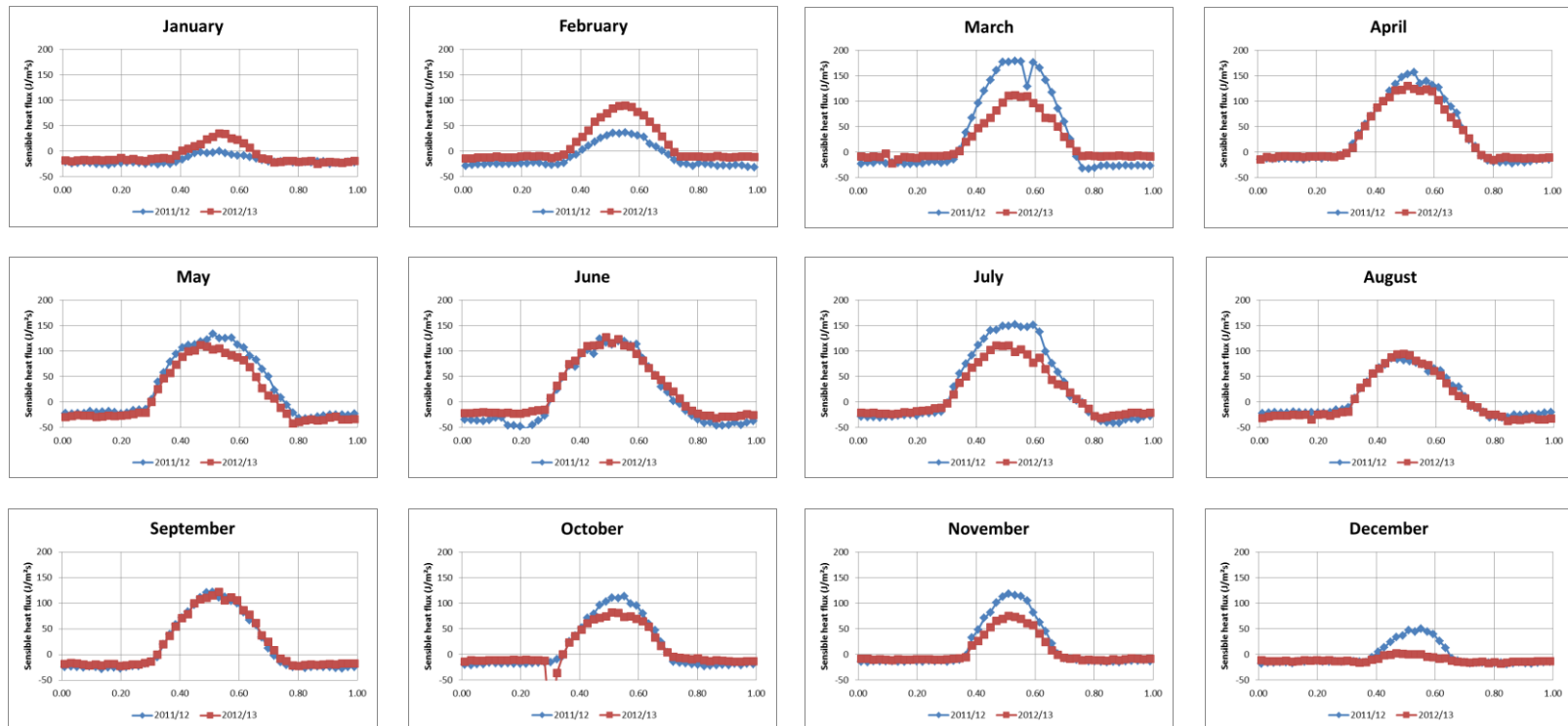
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## Latent heat exchange



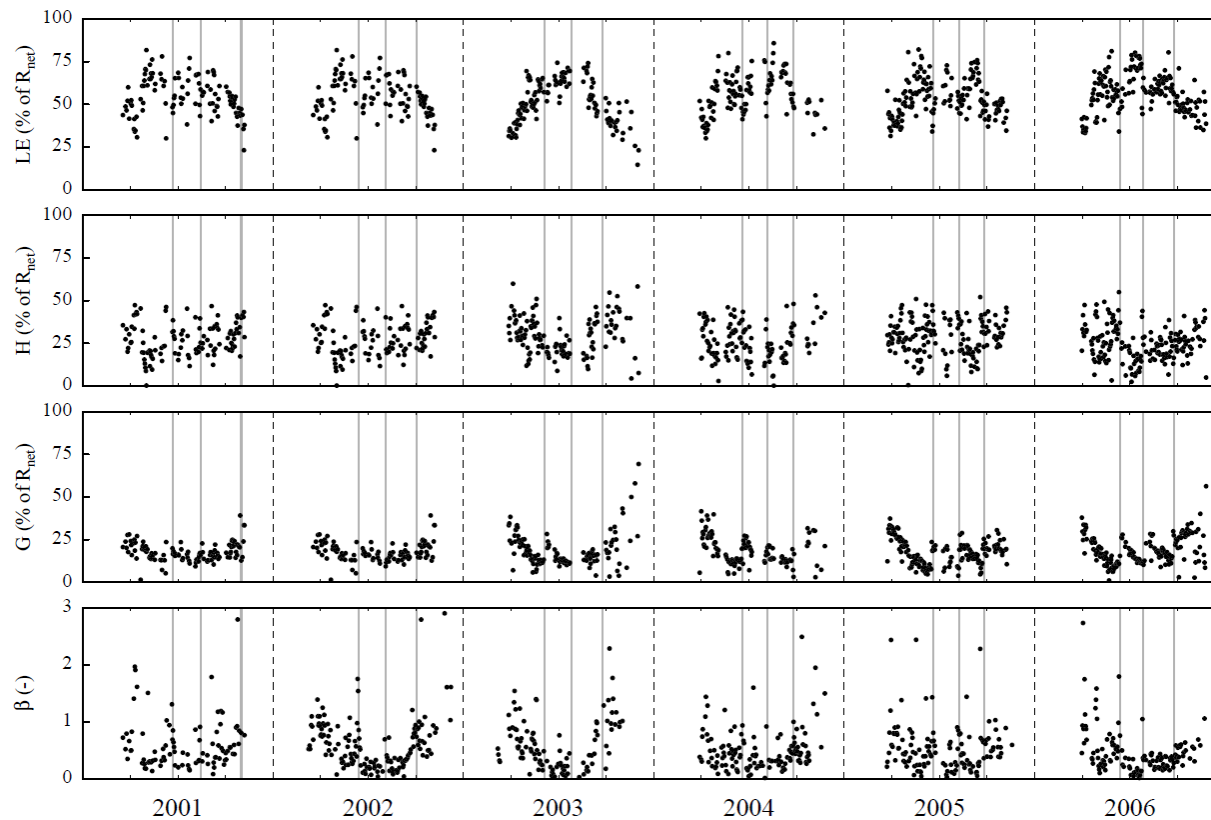
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## Sensible heat exchange



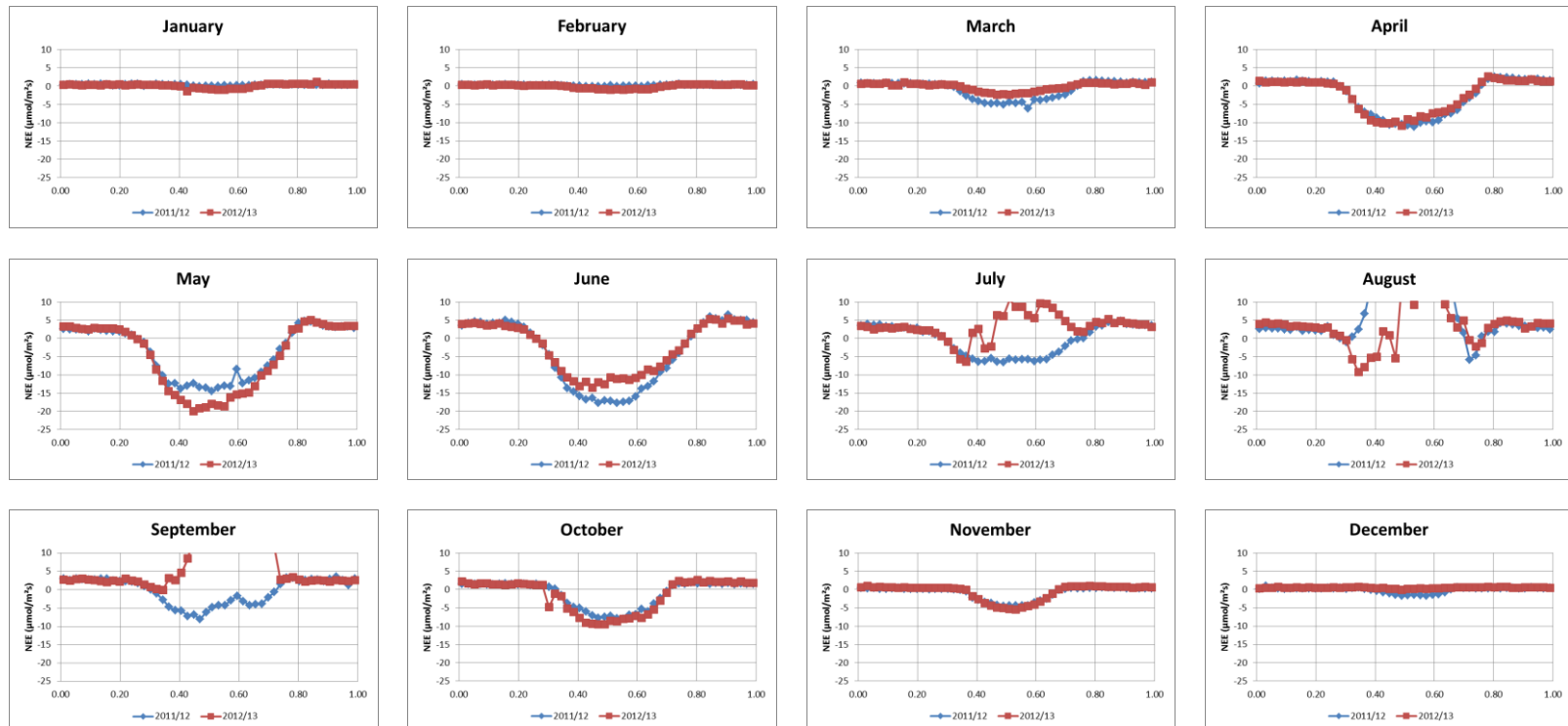
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## Bowen-ratio @ Neustift



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## Net ecosystem CO<sub>2</sub> exchange



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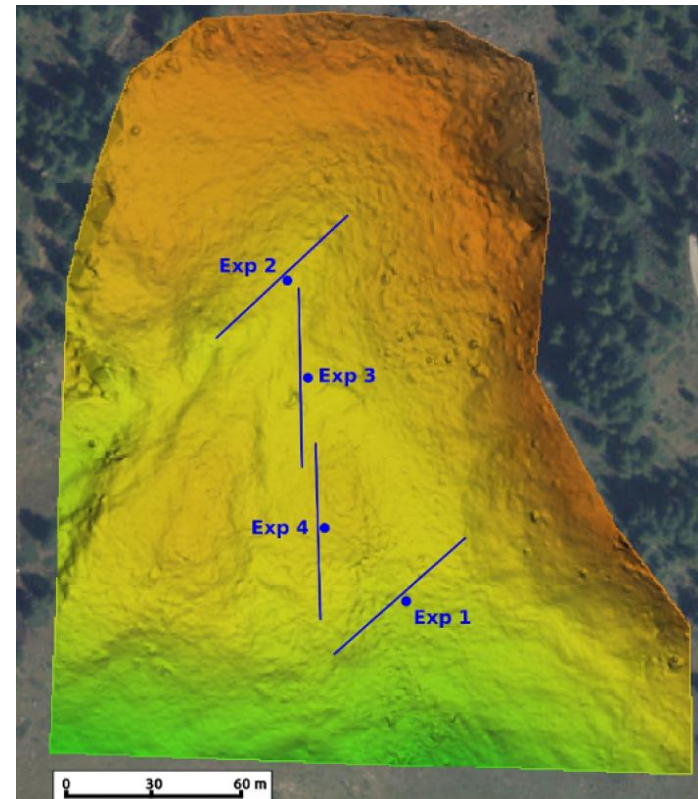
## Future plans, ideas for publications, ...

- Advection of CO<sub>2</sub>



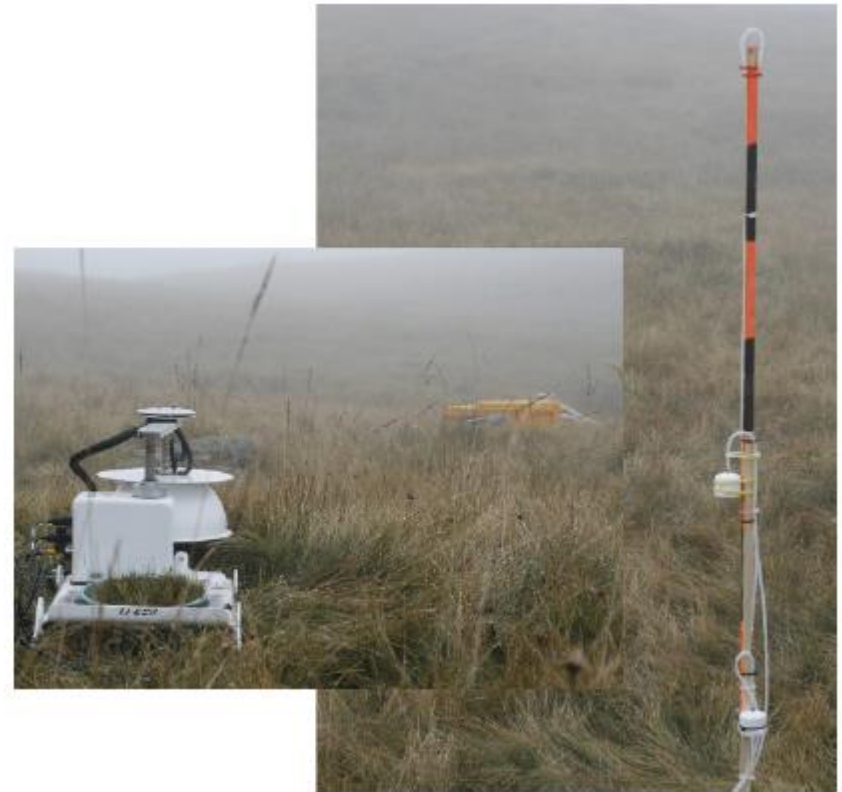
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## Advection experiment @ Torgnon summer 2012



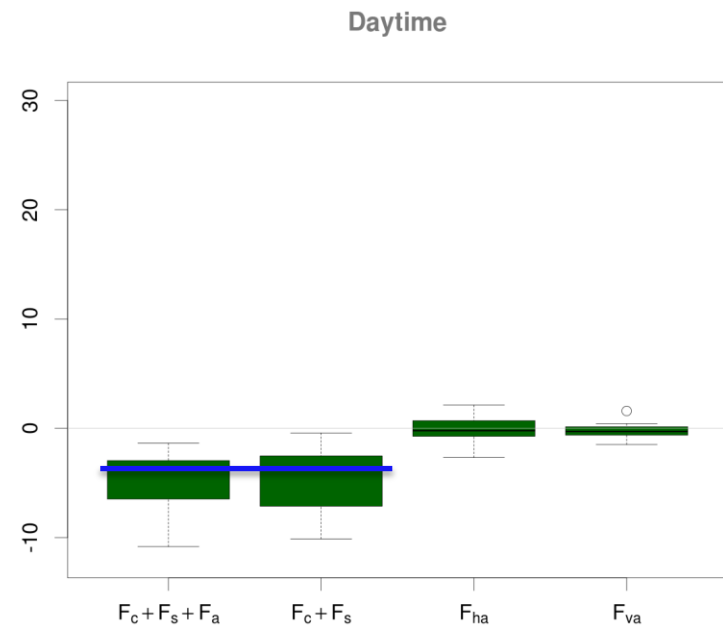
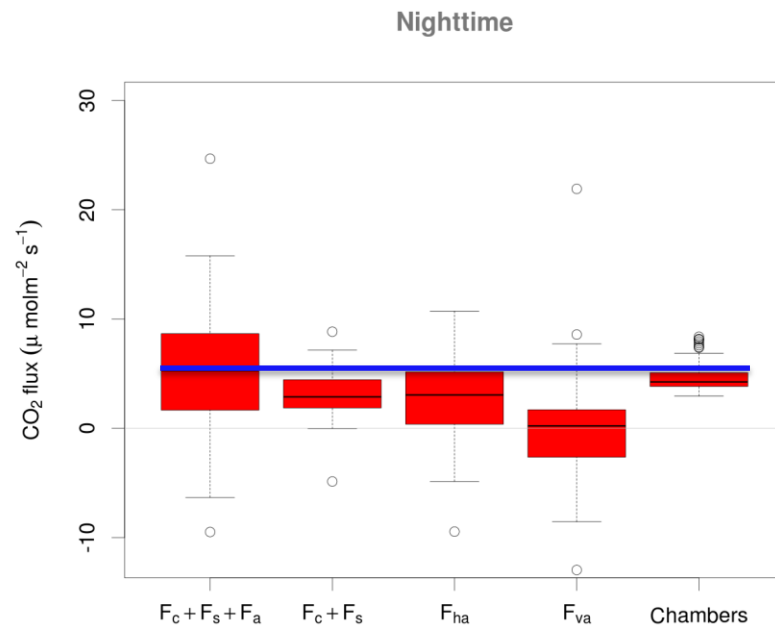
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## Advection experiment @ Torgnon summer 2012



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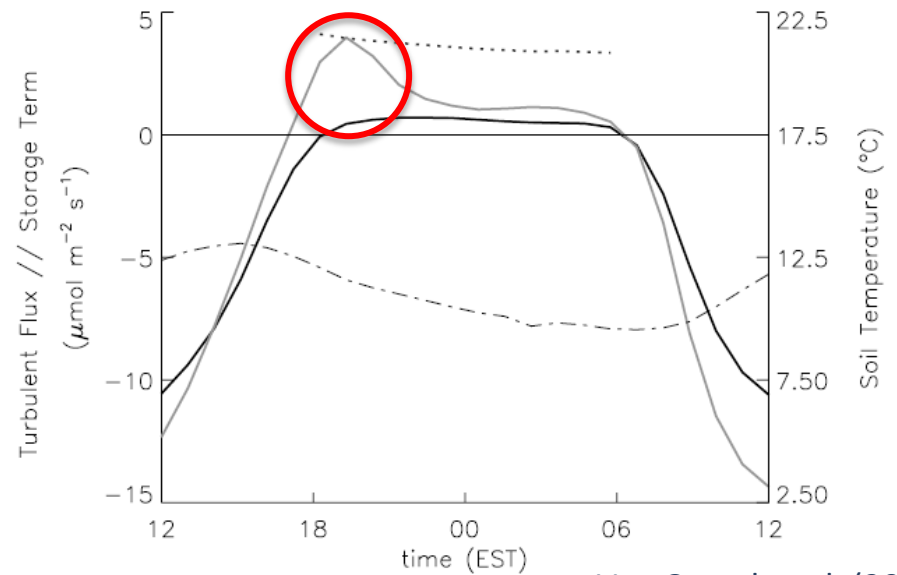
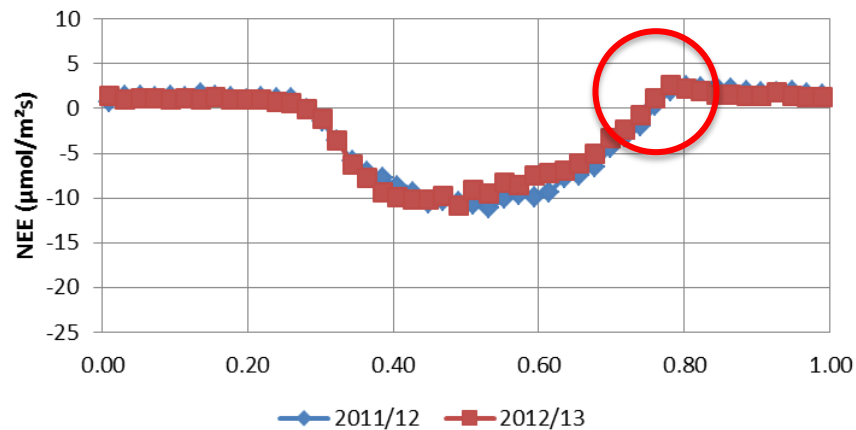
## Advection experiment @ Torgnon summer 2012



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## Advection

April



Van Gorsel et al. (2007)





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### Future plans, ideas for publications, ...

- Advection of CO<sub>2</sub>
- Irrigation effects on evapotranspiration (can we catch the water that is intercepted and evaporates and thus does not feed soil water?)
- HiResAlp: comparative study at non-irrigated grassland