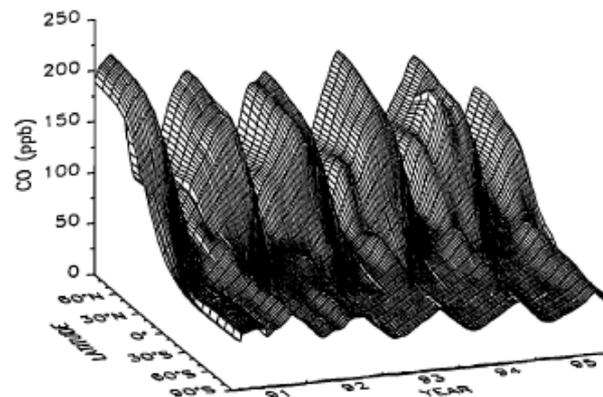
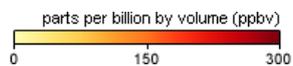
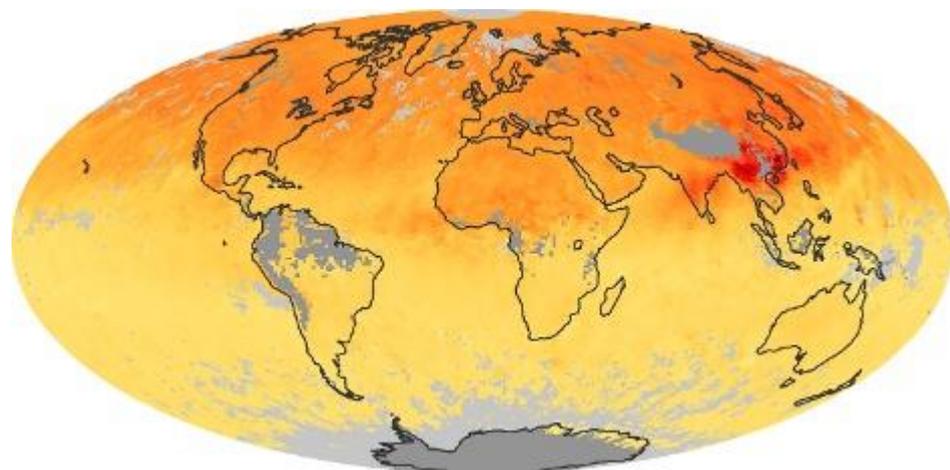




# Carbon monoxide exchange and partitioning of a managed mountain meadow

Hammerle A., Kitz F., Spielmann F., Gerdel K. & Wohlfahrt G. | EGU GA 2016

University of Innsbruck, Institute of Ecology

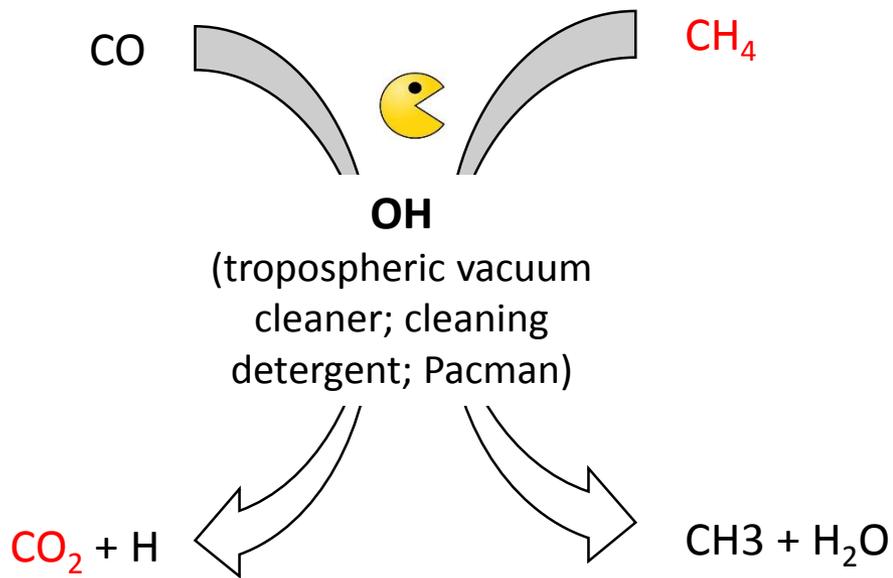


April 2014

**NEO – NASA EARTH OBSERVATIONS**

Images created by Jesse Allen, NASA's Earth Observatory, using data provided by the National Center for Atmospheric Research (NCAR) and the University of Toronto MOPITT Teams.

Novelli et al., 1998



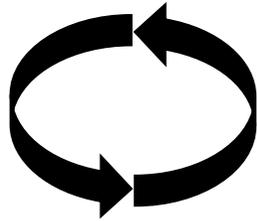


**Elevation:** 970 m a.s.l.

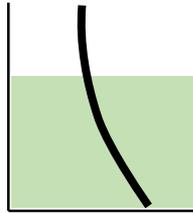
**Average annual temperature:** 6.3 °C

**Average annual precipitation:** 852 mm

**Management:** 2-4 cuts year<sup>-1</sup>



Eddy covariance



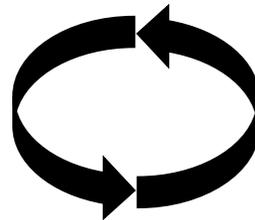
Concentration profiles

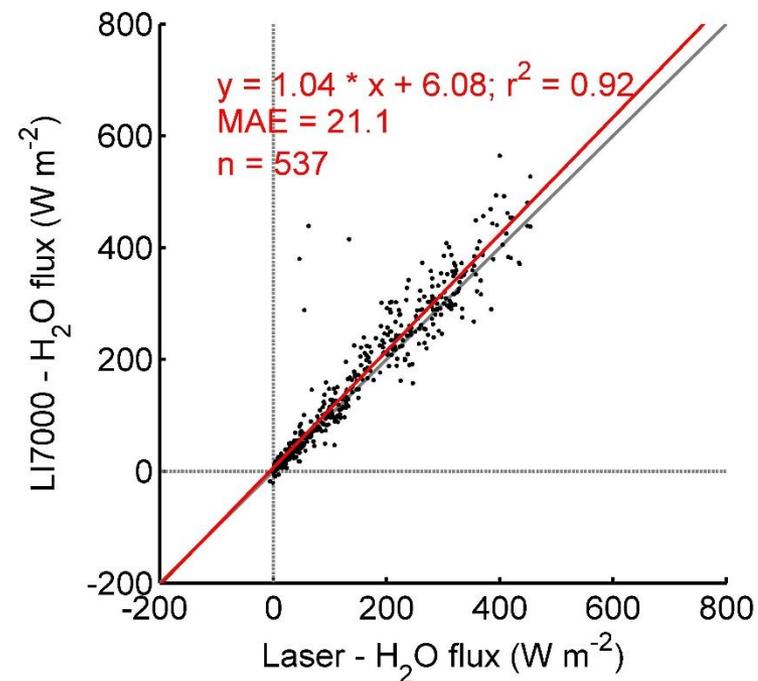
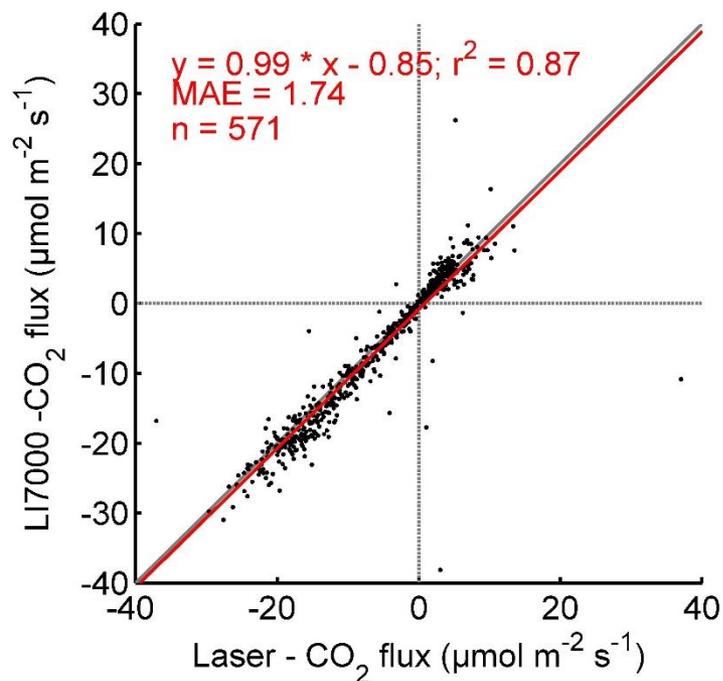


Soil fluxes



# Eddy covariance



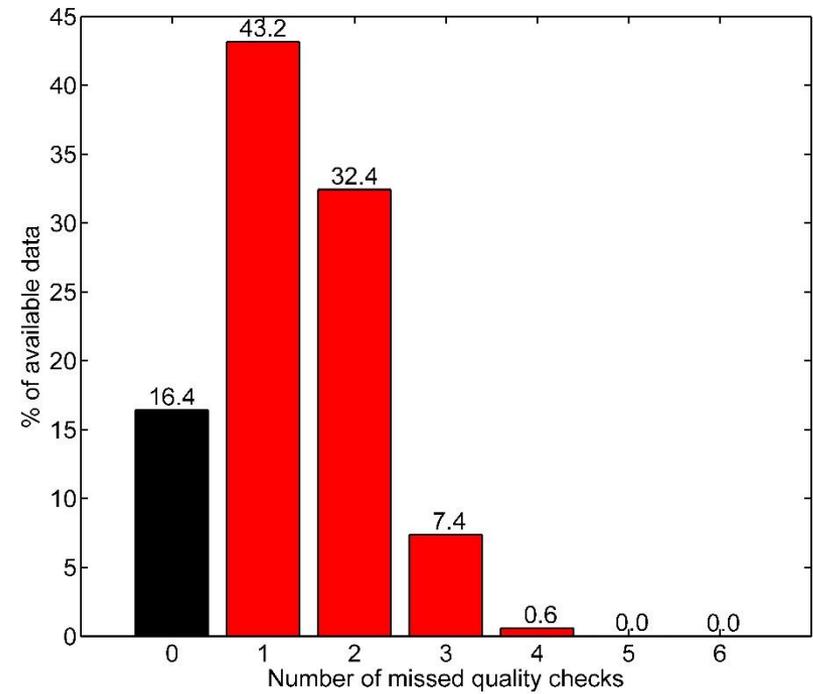
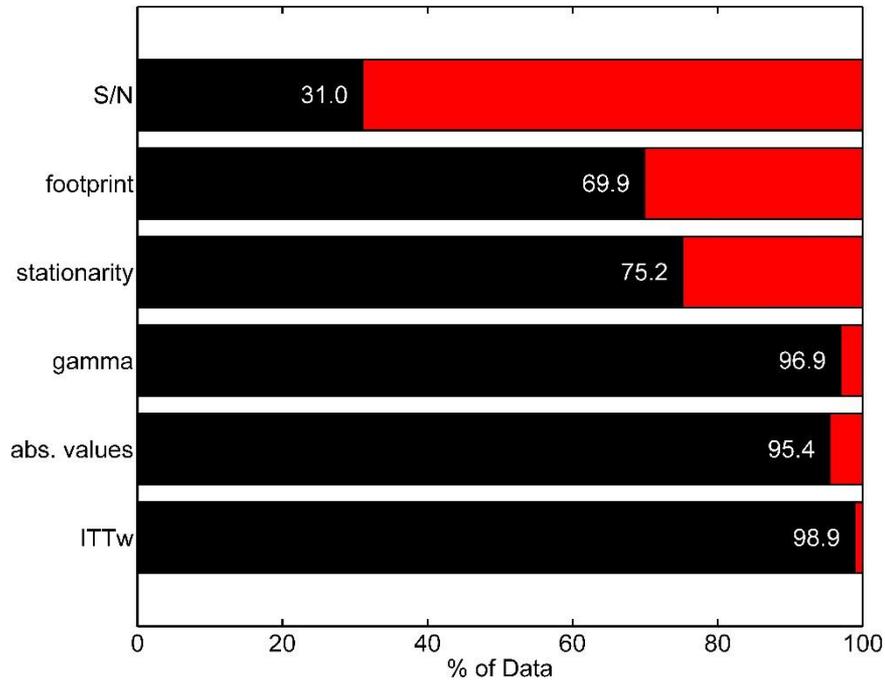


[Thursday: EGU2016-4478](#)

Katharina Gerdel, Felix M. Spielmann, Albin Hammerle, and Georg Wohlfahrt:  
*Eddy covariance carbonyl sulfide flux measurements with a quantum cascade laser absorption spectrometer*. 17:30-19:00, Hall X2.

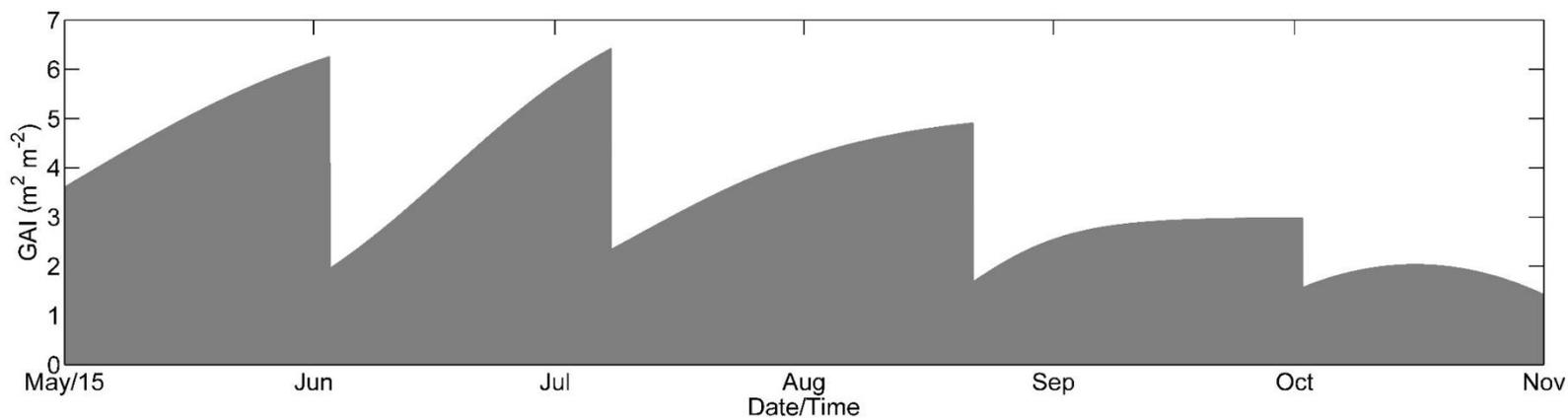
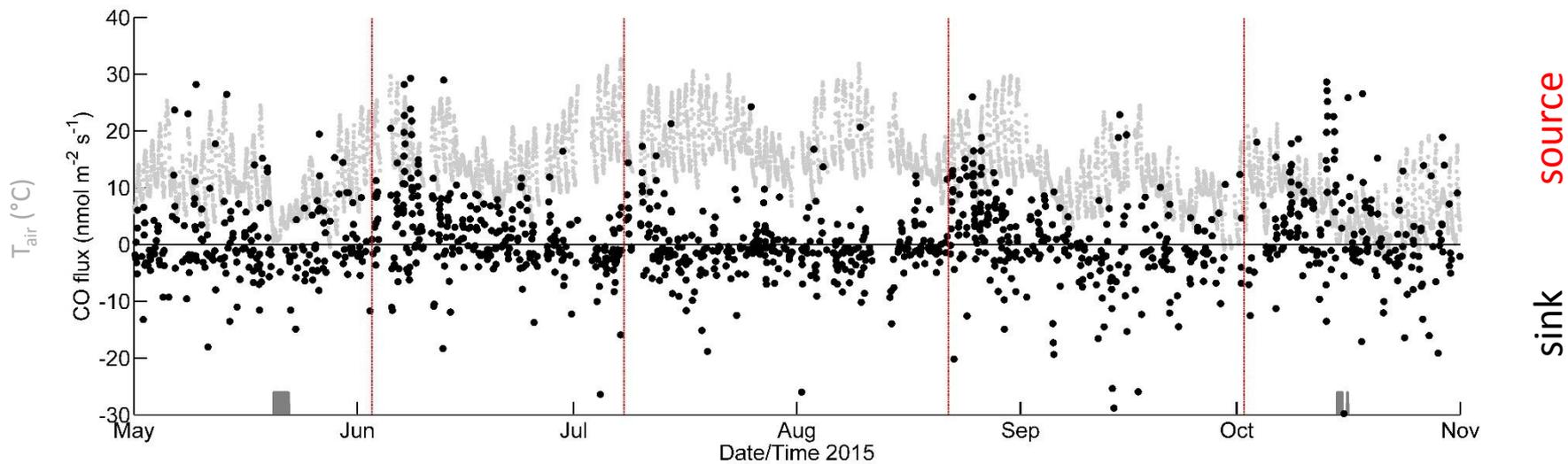


# 1- EddyCovariance





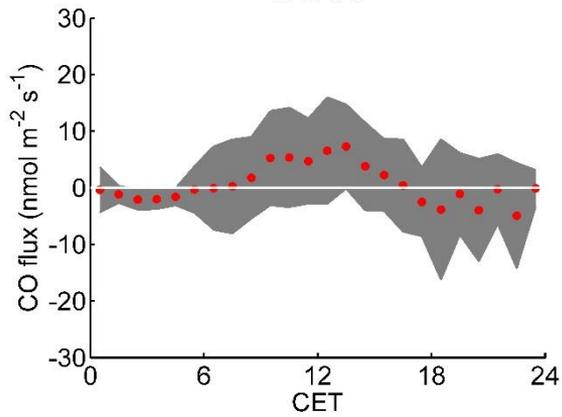
# 1- EddyCovariance



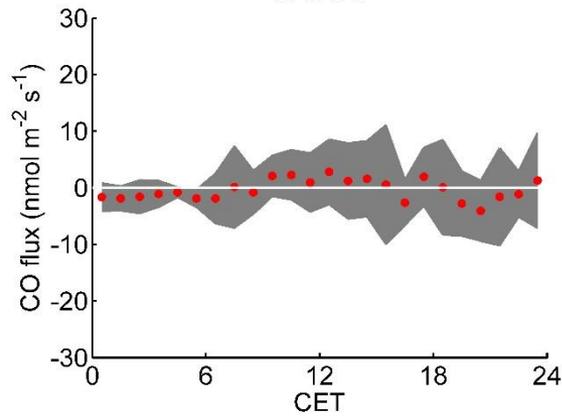


# 1- EddyCovariance

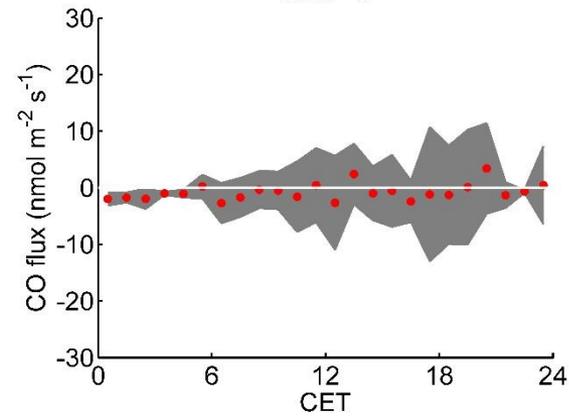
GAI: 0-3



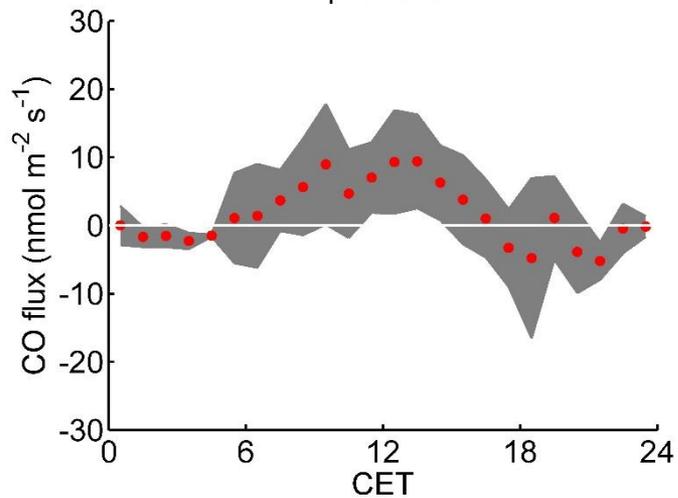
GAI: 3-5



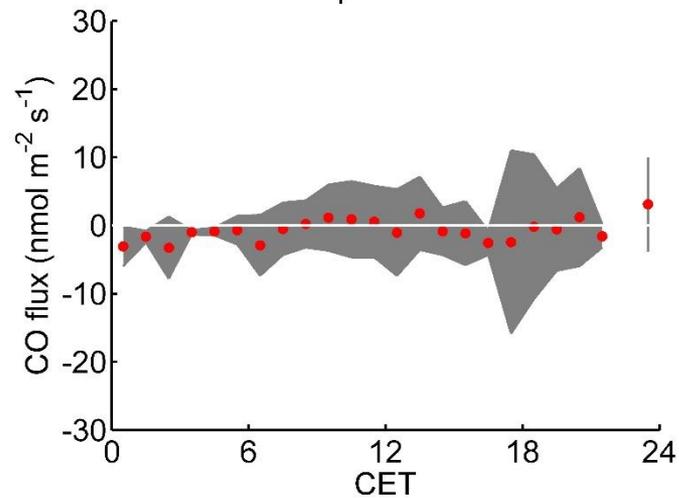
GAI: >5

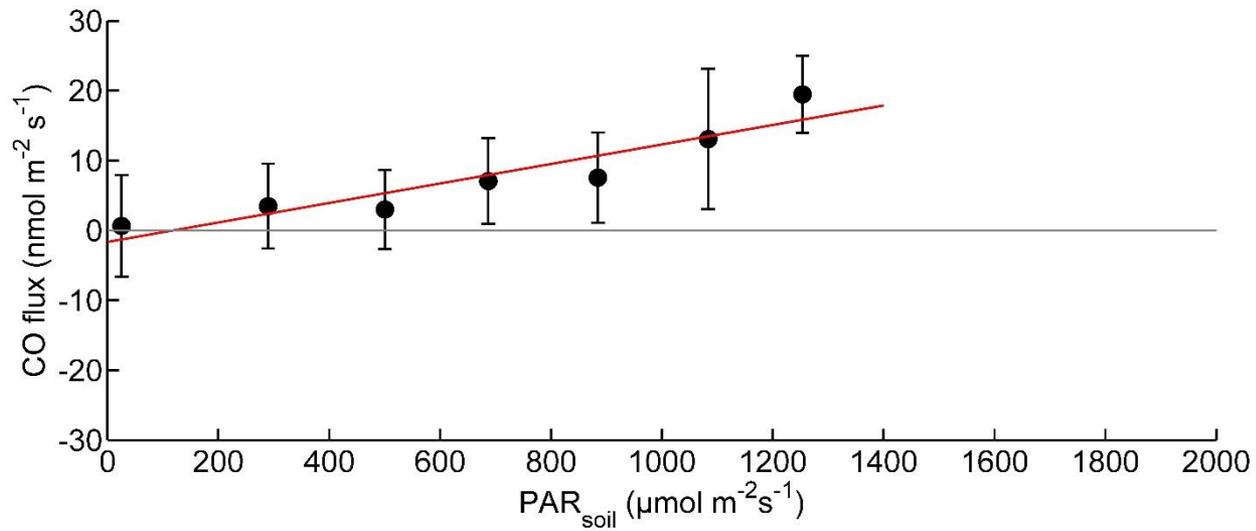
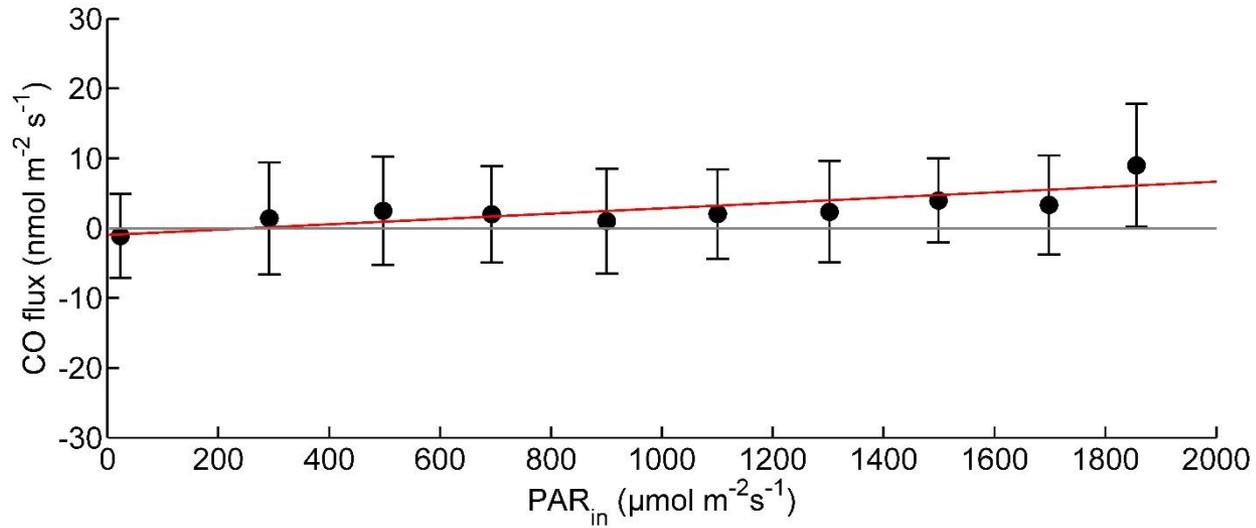


post cut



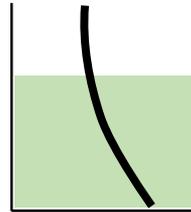
pre cut





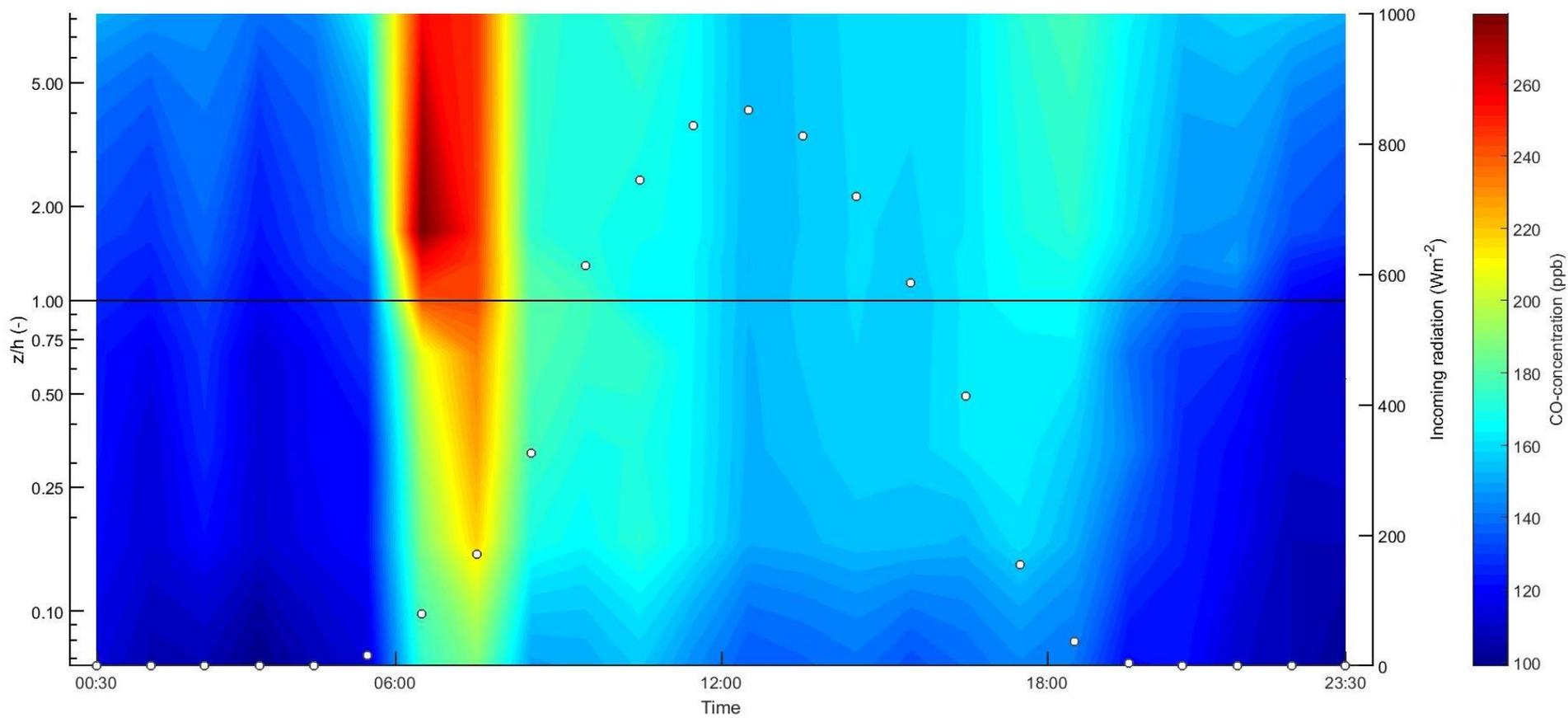


# Concentration profiles



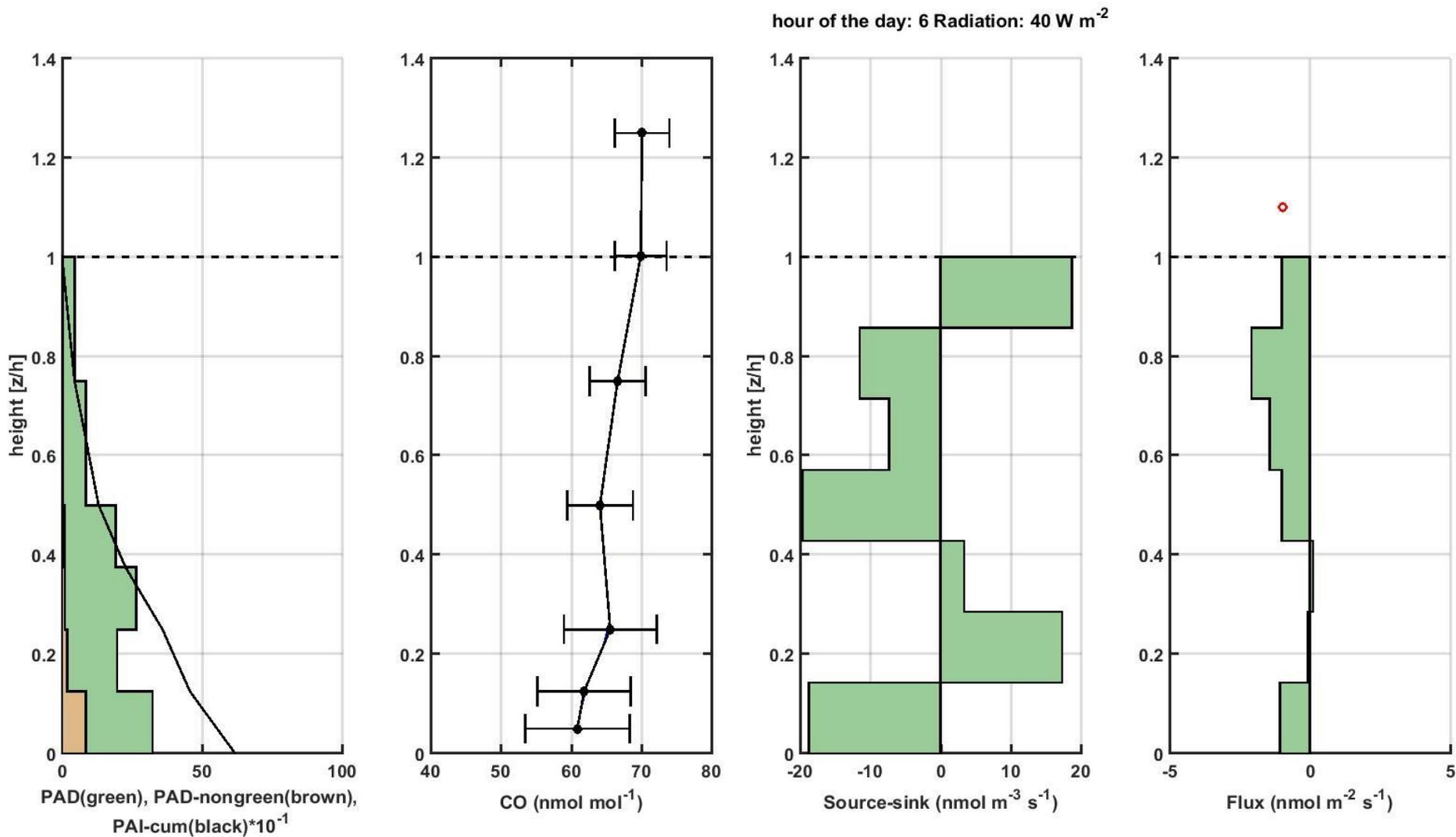


## 2- Concentration profiles





## 2- Concentration profiles



13.08.2015



# Soil fluxes

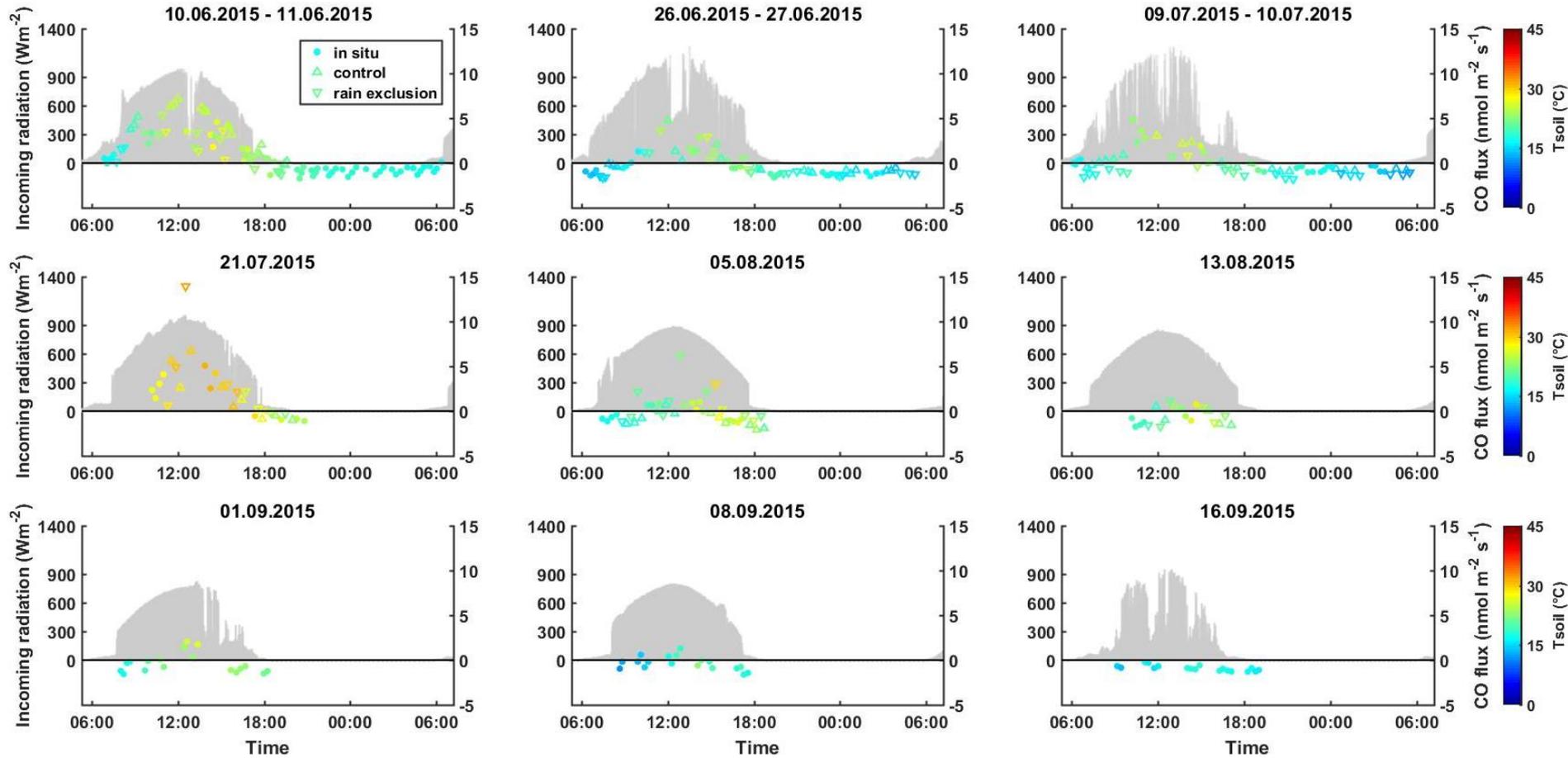


[Thursday: EGU2016-4364](#)

Florian Kitz, Albin Hammerle, Tamara Laterza, Felix M. Spielmann, and Georg Wohlfahrt: Soil emission and uptake of carbonyl sulfide at a temperate mountain grassland. 17:30-19:00 Foyer N.

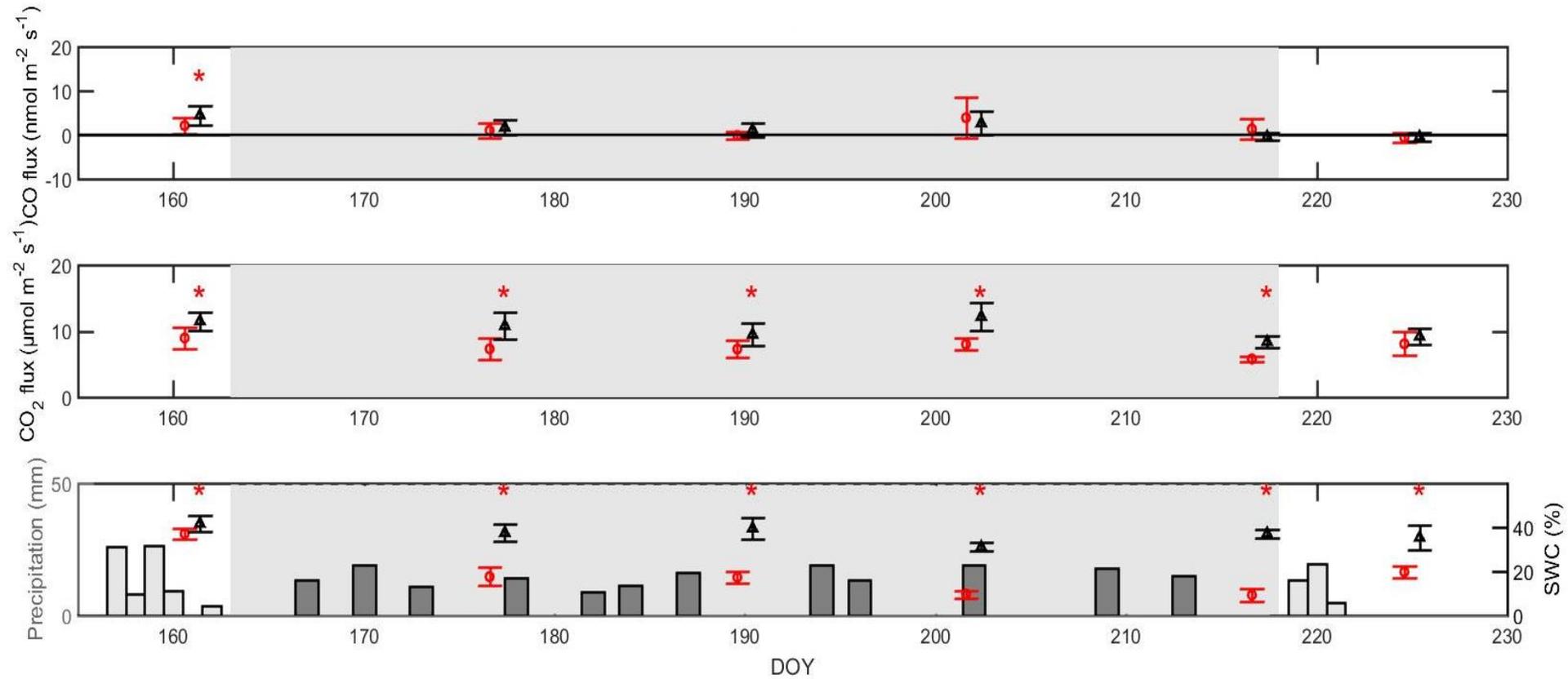


# 3 - Soil fluxes





### 3 - Soil fluxes

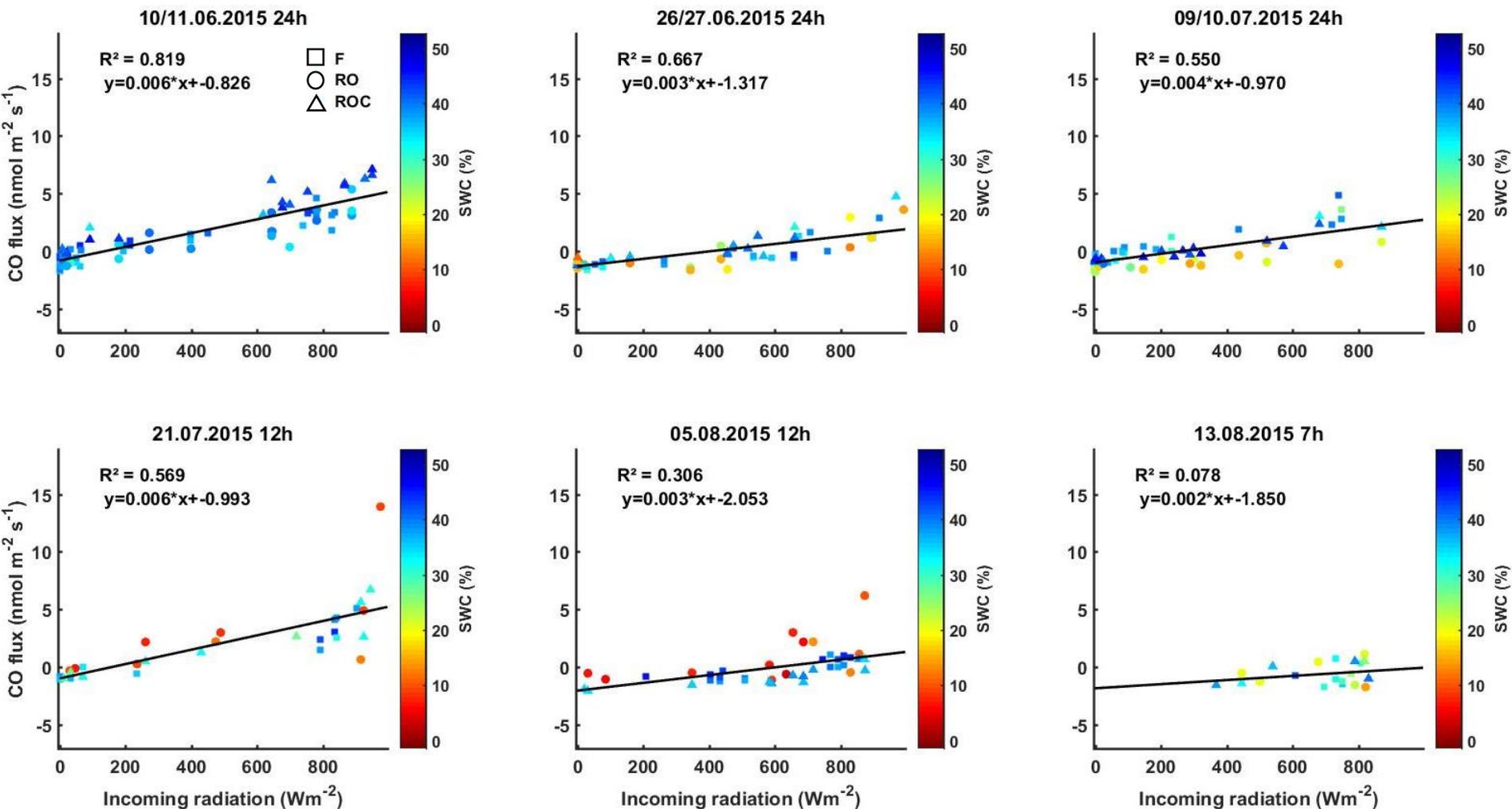


o Rain exclusion

Δ Rain exclusion control



### 3 - Soil fluxes





Sink at night – source by day (soil/litter)

CO-fluxes are light-dependent

Hardly any influence of SWC on soil CO fluxes

---

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