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Webcam: <https://phenocam.sr.unh.edu/webcam/sites/millhaft/>

Panoramic view from 40m



Flux Tower primary measurement goals

1. Core meteorological and phenological data
2. Characterization of Net Ecosystem Exchange, Latent heat, and supporting fluxes at the canopy scale
3. CO₂ flux source characterisation using controlled release of carbon dioxide
4. Complimentary above canopy measurements

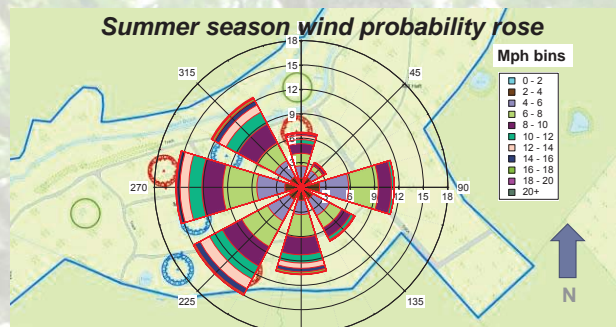
Tower Instruments

Flux Tower (levels at 5, 10, 20 & 40m)

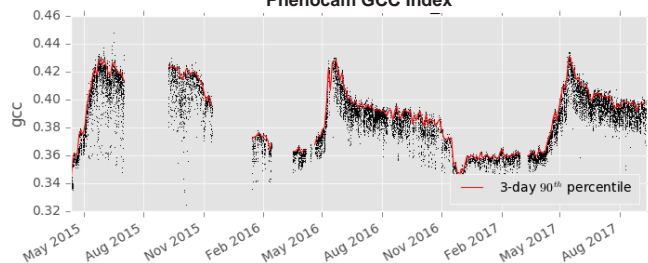
- 3D wind vectors at 20Hz
- Eddy Covariance Fluxes of CO₂/H₂O/CH₄/O₃
- Net radiation
- PAR profiles
- Temperature/RH Profiles
- Rainfall
- Phenology camera
- Intensives: VOC gradients, Nox, O₃, Particulates



1. Meteorology

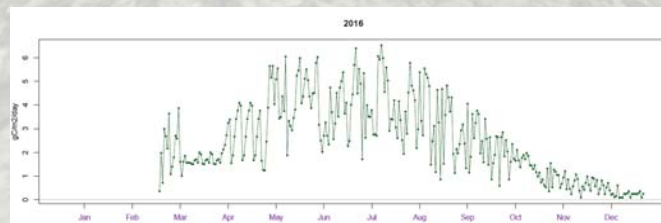


Phenocam GCC Index

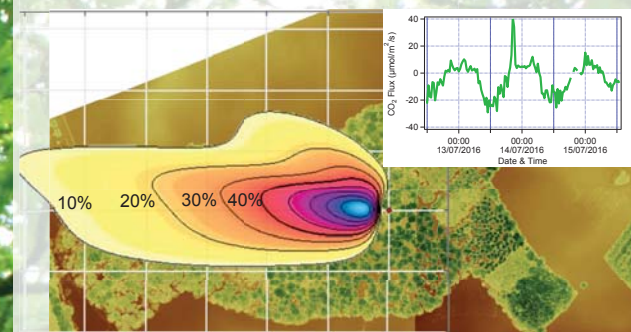


2. Atmospheric CO₂ Drawdown (GPP)

Gross primary productivity (GPP) calculated using the REdDyProcWeb partitioning tool from the Max Plank Institute of Biogeochemistry (Reichstein et al., 2005)



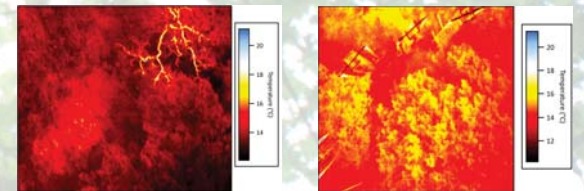
3. Flux Source Characterization



2D – Flux Footprint (N. Kjlun) for 19:30 – 22:30 13/07/2016. Contours are 10% intervals

Measured CO₂ flux (above) containing the footprint period and showing a peak for a CO₂ test release.

4. Canopy Scale Drone Measurements



Thermal Imagery mapping

Reference: Reichstein M, Falge E, Baldocchi D et al. (2005) On the separation of net ecosystem exchange into assimilation and ecosystem respiration: review and improved algorithm. Global Change Biology, 11, 1424-1439.