

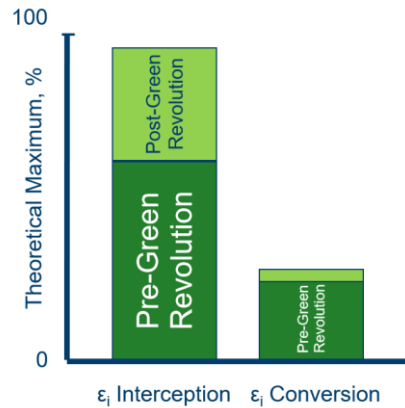
Investigating Chlorophyll Fluorescence of Winter Wheat under current and future atmospheric CO₂ concentrations

Oliver M. Knopf, Shoot Dynamics Group

Supervisors: Onno Muller, Uwe Rascher, Hendrik Poorter

Background

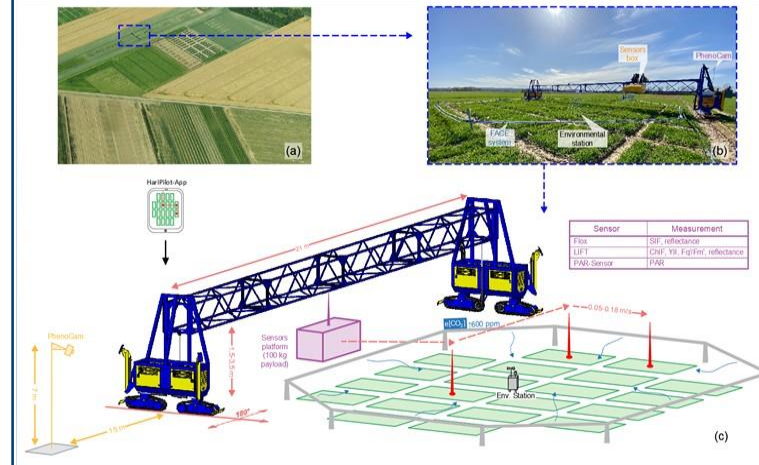
- Rise in atmospheric CO₂ concentration alters Photosynthesis
- Photosynthetic conversion efficiency needs better understanding since it offers a huge potential for improvement.



Adapted from D. Ort.

Material & Methods

- Using LIFT and FloX in combination with the FieldSnake for high-throughput phenotyping of Winter Wheat grown under elevated CO₂ in the BreedFACE.



Results

- PSII operating efficiency varies over the course of the season.
- LIFT detected earlier senescence of plants grown under eCO₂.

