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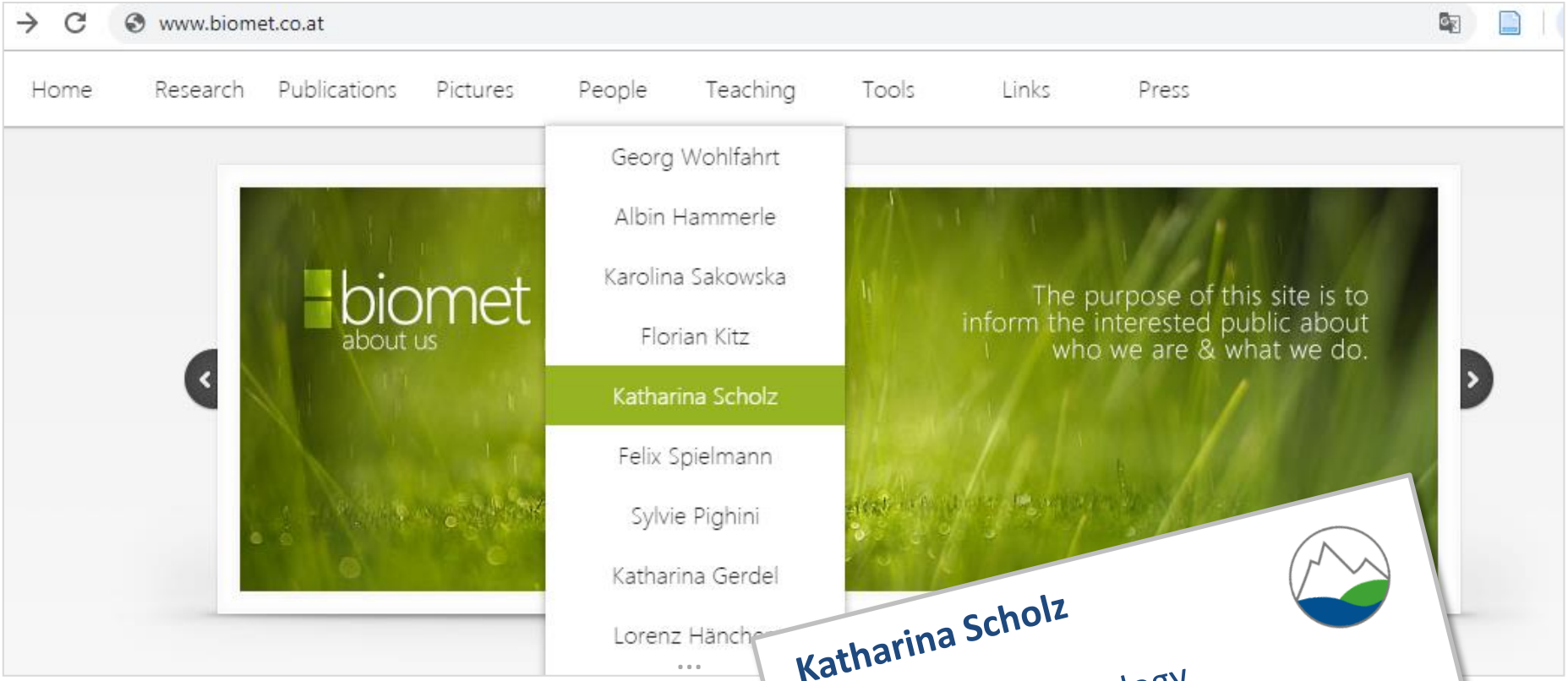

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Research interest

- Lake-atmosphere exchange
  - Lakes play important role in local energy and C budget
  - (Almost) no long-term, direct measurements, especially in the alpine region

- EC measurements at Lake Lunz 2015-2017

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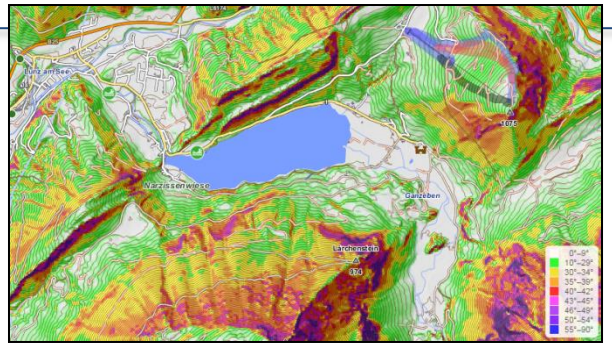
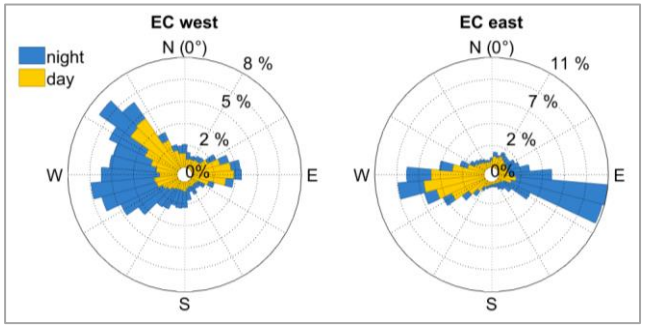
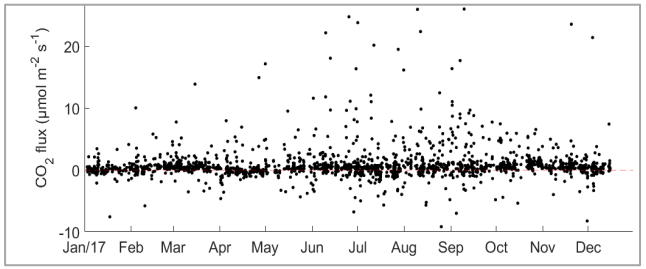
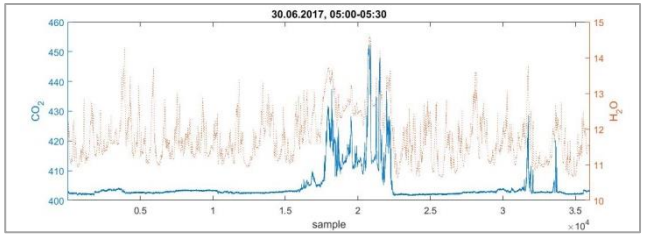
Lake Lunz

- Small (68 ha) pre-alpine lake, surrounded by steep forested slopes
- Wind pattern influenced by lake and surrounding topography
- CO_2 fluxes show inexplicable large scatter
- CO_2 mixing ratios show frequent 'blobs' of increased CO_2 concentrations









Conclusion

- Although the lake presents a large flat surface – a pre-requisite for defensible EC measurements – the measurements were affected by the horizontal heterogeneity between lake and the adjacent land.

- Sudden, short-term increases in CO_2 mixing ratios indicate CO_2 drainage from the surrounding forest slopes.

Next level