## Best practice theses carried out at the Earth Observation Lab

| Type | Title | Abstract | Experts |
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| M.Sc. thesis | *Simulating maize yields in Brandenburg with the Scalable Crop Yield Mapper* | In this Master thesis the Scalable Crop Yield Mapper (SCYM) was used to simulate 2017 silage maize yield at pixel and field scale in Brandengburg, Germany. The results of the study helped to understand the feasability of the SCYM and offered a good grounding for further research on the subject. | Patrick Hostert, Daniel Müller |
| B.Sc. thesis | *Using Landsat time series for mapping winter and spring crops in Southeastern Anatolia* | In this Bachelor's thesis, 140 Landsat images were pre-processed in Google Earth Engine to generate spectral-temporal metrics for mapping winter and spring crops in Southeastern Anatolia in 2015. | Patrick Hostert, Dirk Pflugmacher, advisor: Philippe Rufin |
| M.Sc. thesis | *Characterizing Spring Phenology of Broadleaf Forests Across germany Combining Landsat/Sentinel Time Series and Phenological Models* | In this thesis, combined Landsat and Sentinel-2 time series have been used to estimate spring phenology across Germany. Katja compared the results to ground observations and mechanistic phenology models. Thereby the study showed that dense time series can help us to better understand vegetation phenology across large spatial scales. | Dirk Pflugmacher, Cornelius Senf |
| B.Sc. thesis | *Potential of a multi seasonal spectral mixture analysis using Landsat imagery for detecting urbanization patterns in Ouagadougou, Burkina Faso* | This Bachelor's Thesis evaluates a method of a multi seasonal spectral mixture analysis on Landsat imagery for generating sub-pixel information. This method is particularly adequate in regions featuring dry and rain seasons. Franz applies it to detect gradual urbanization processes in Ouagadougou, Burkina Faso. | Sebastian van der Linden, Jonas Ø. Nielsen |