

5.5 Ridge and furrow-system identification

For the entirety of the research area, DEM alterations and topographical maps were considered to identify any potential ridge and furrow-systems. As previously described all points that do not belong to group A have their x, y-coordinates recorded for reproducibility and future research endeavors (see appendix 10.6), hence why group A is not represented within the table as these are the remaining points. In total 64 points had their locations recorded. Within the second phase these isolated points had a perpendicular profile drawn to identify any apparent oscillations. If the oscillations periods were smaller than 5m on average this data point was added to group B. If the point was similar enough but the observed pattern was shorter than the proposed 100 meters or the oscillation height did not approach 15cm on average the observed point was added to group C. If length and height are both appropriate the system is added to group D. The results are visualized in appendix 10.8. To illustrate the differences on a map-scale level the three recorded classes are depicted in appendix 10.7 to illustrate visual differences.

5.6 Ridge and furrow-system map

By integrating the class-system for ridge and furrow-systems it is possible to constitute a new map of the Horstwalde area featuring the different potential ridge and furrow-system classes (Figure 10.). For legibility purposes each class will feature its own color. It becomes apparent that many systems that show signs of ridge and furrow-systems lie within the lower areas of the Horstwalde. However, these are also areas of modern-day agriculture which cause ridge and furrow patterns to a degree. Physical fieldwork will have to determine to what extent these findings are in fact ridge and furrow-systems or modern-day agricultural effects on the landscape.

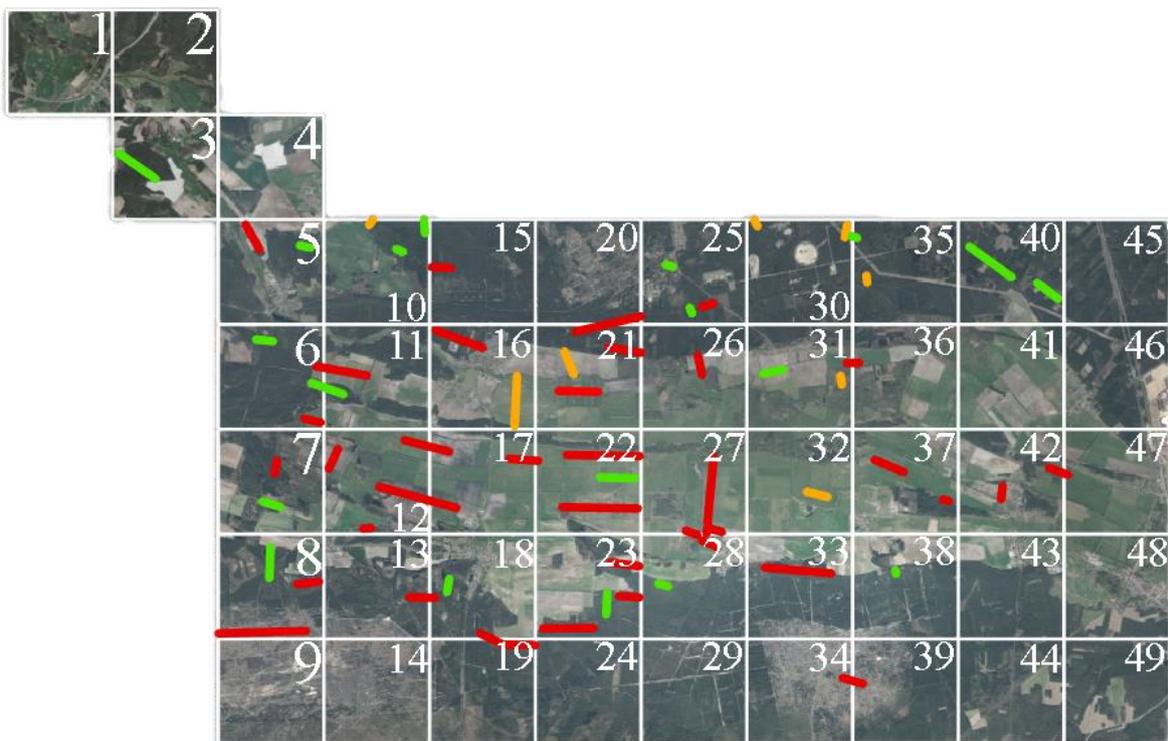


Figure 10. Potential Ridge and furrow-systems in the research area. Classified by color following the identification method. Red: class B, Green: class C, Orange: class D.