Figures and Tables

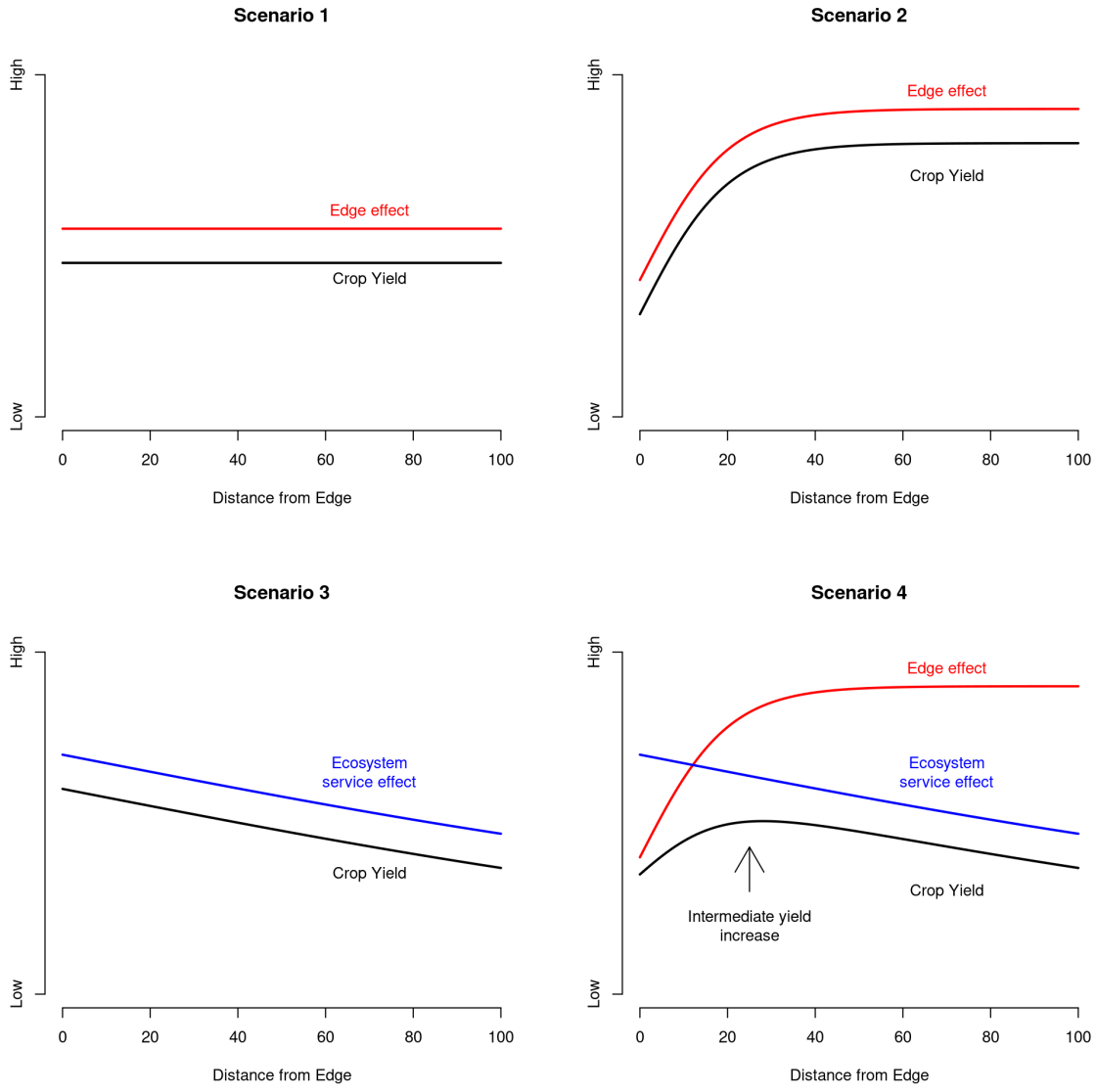

Figure 1: Potential yield patterns, depending on ecosystem service effects with distance. Scenario 1: no effect of boundary. Scenario 2: negative edge effect on yield. Scenario 3: positive ecosystem service effect on yield. Scenario 4: edge effects are shown in red, ecosystem service effect shown blue, leading to an intermediate peak in yield.

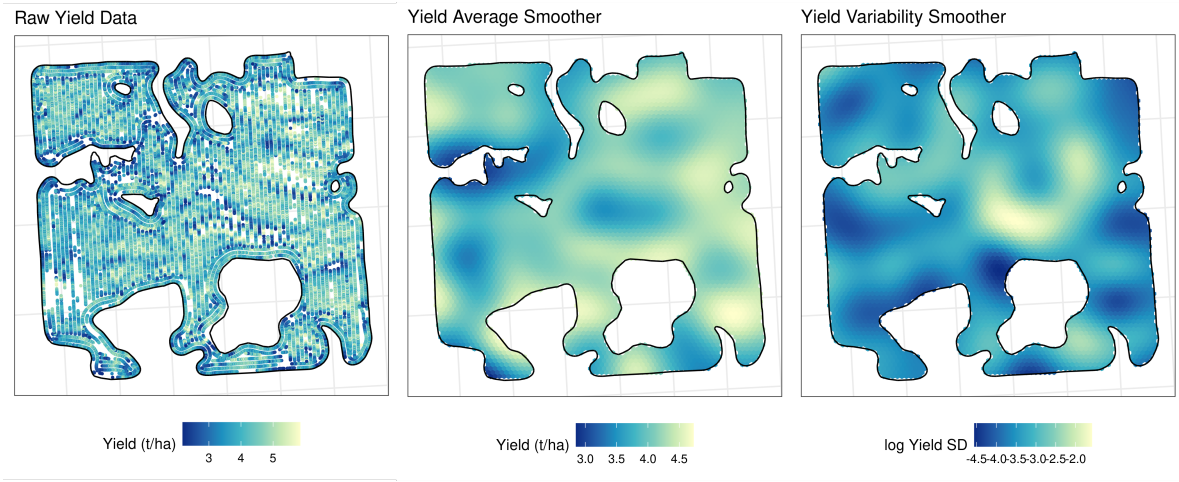

Figure 2: Raw data and spatial smoothers from a single field. Yield averages (means) and variability (log SD) were modeled separately, and both show large spatial dependence within the field. Field dimensions are approximately 800 x 800 m; coordinates are hidden to protect the grower's data privacy.

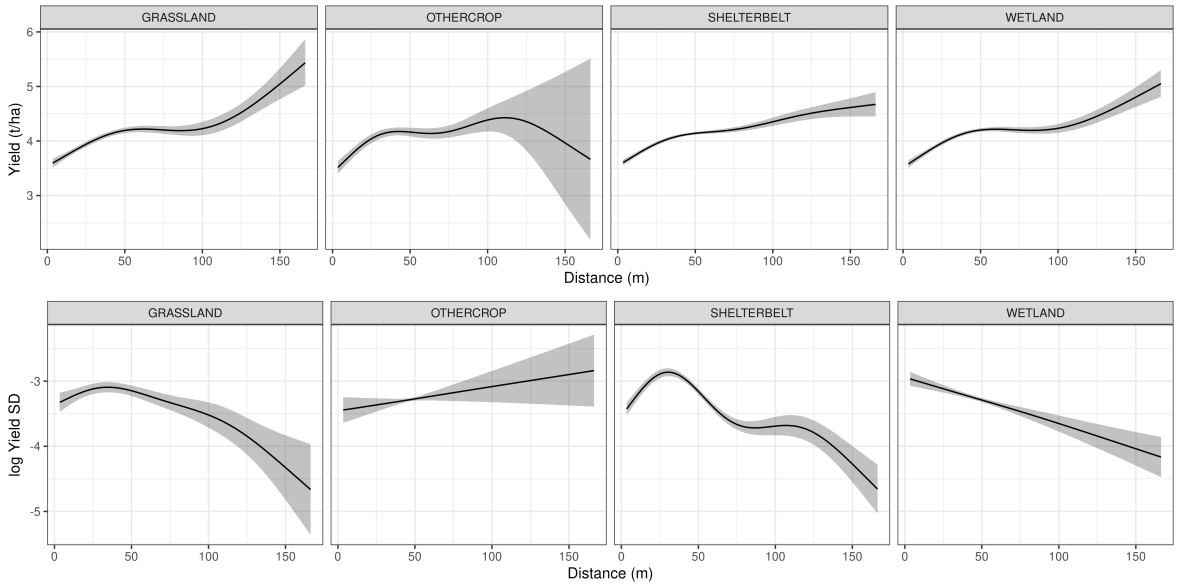

Figure 3: Distance smoothers from a single field, showing a positive saturating effect of distance on average yield (first row), while the variability smoothers show a general decrease in yield SD (second row).

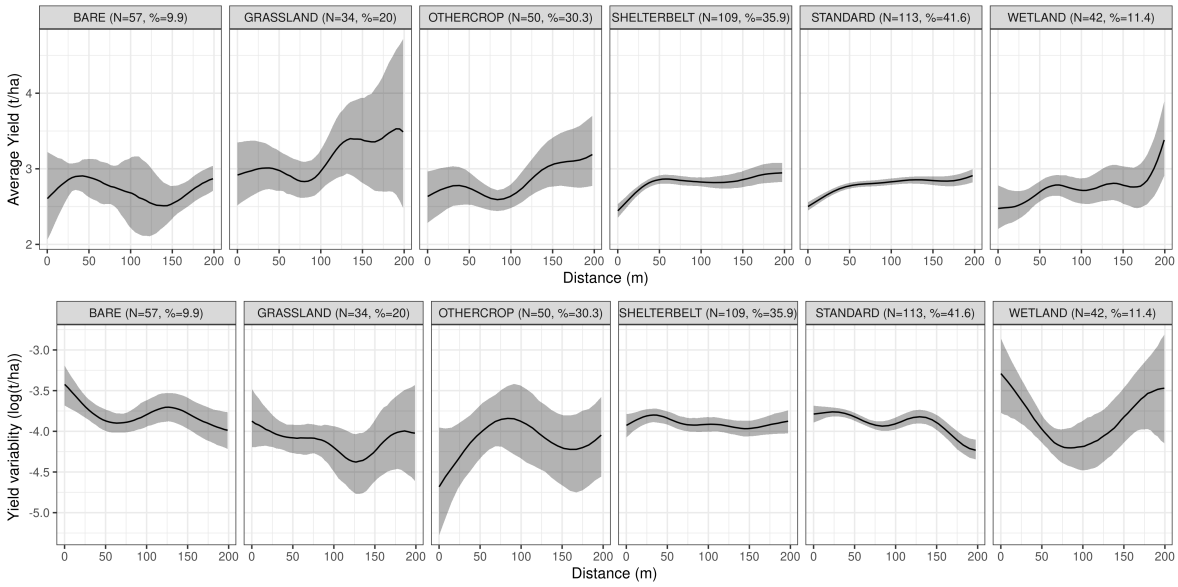

Figure 4: Field boundary effect on canola yield, accounting for the effect of spatial variation. Upper panel represents mean yield, while the lower panel represents yield variation. N refers to number of fields containing this boundary type, and % refers to the average percentage of field boundary accounted for by this boundary type.

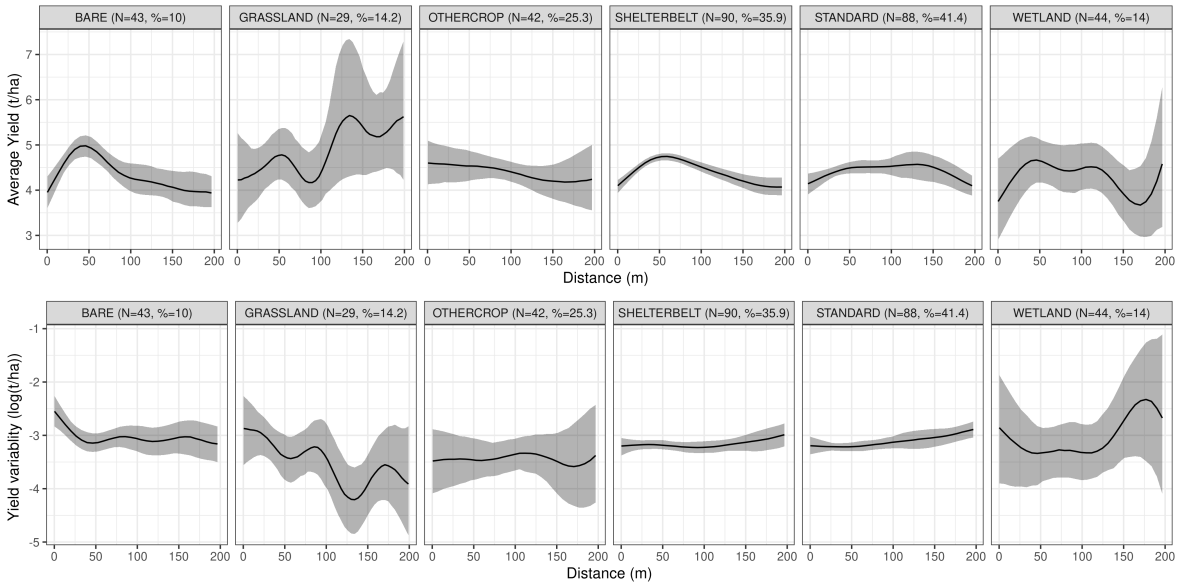

Figure 5: Field boundary effect on wheat yield, accounting for the effect of spatial variation. Upper panel represents mean yield, while the lower panel represents yield variation. N refers to number of fields containing this boundary type, and % refers to the average percentage of field boundary accounted for by this boundary type.

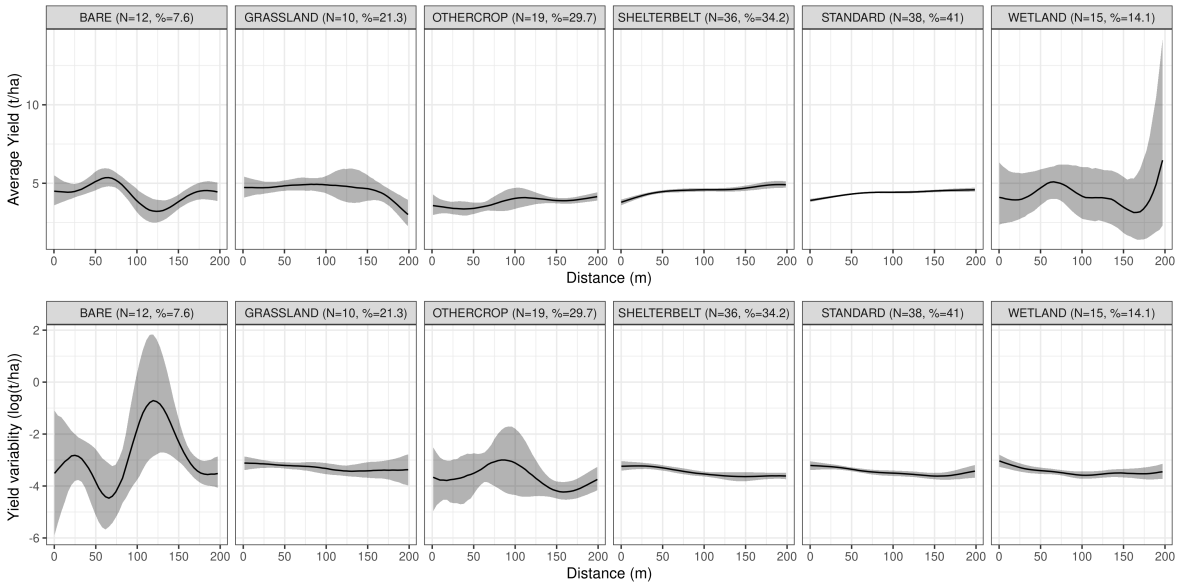

Figure 6: Field boundary effect on pea yield, accounting for the effect of spatial variation. Upper panel represents mean yield, while the lower panel represents yield variation. N refers to number of fields containing this boundary type, and % refers to the average percentage of field boundary accounted for by this boundary type.

Table 1: Mean χ^2, p-values, and proportion of smoother p-values less than 0.05 (after Bonneferoni correction) for mean and variability smoothers across all models.

	Mean Yield			Yield Variability		
Smoother Type	χ^2-value	p-value	Prop. <0.05	χ^2-value	p-value	Prop. <0.05
Bare	154.7	0.036	0.877	121.4	0.054	0.860
Grassland	303.1	0.079	0.794	93.2	0.061	0.794
Other Crop	174.9	0.063	0.860	104.5	0.044	0.840
Shelterbelt	328.1	0.014	0.936	137.6	0.058	0.817
Standard	281.9	0.021	0.938	159.6	0.057	0.832
Wetland	148.9	0.045	0.833	106.7	0.013	0.857
Spatial Smoother	17357.5	0.000	1.000	4739.1	0.000	1.000