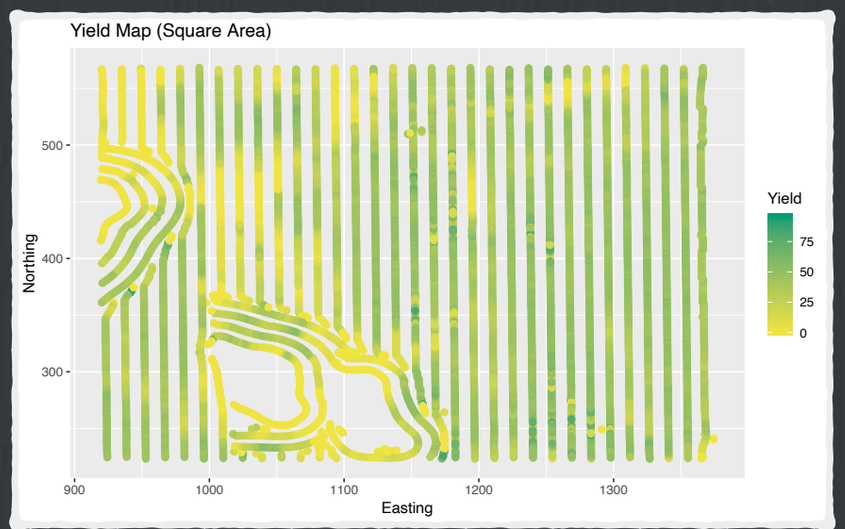
Expanded Square



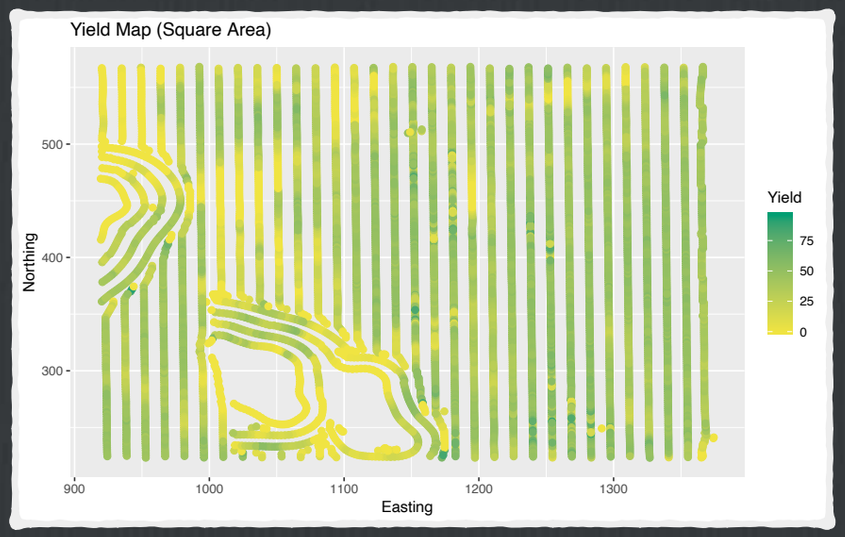
- [ ] **Likelihood test to compare 2D models with and without treatment effect**

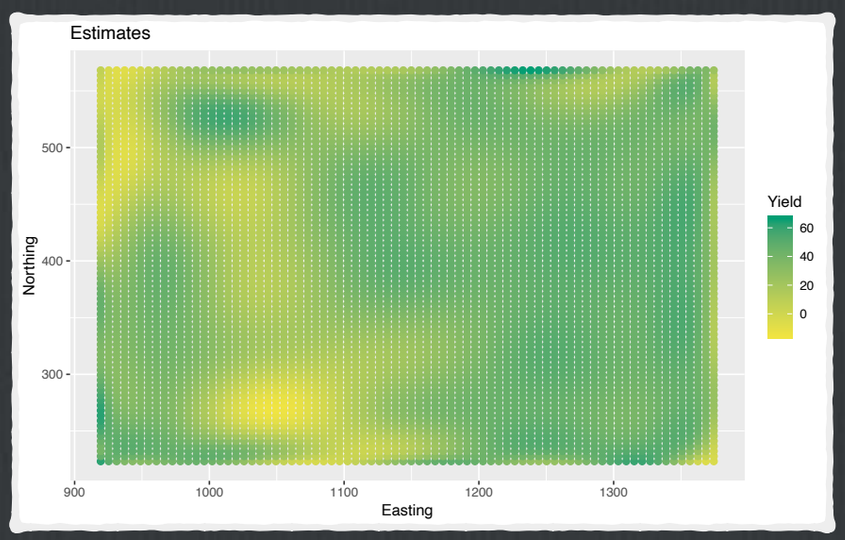
```
Likelihood ratio test
  Model 1: Yield ~ poly(Easting, 17) *
  poly(Northing, 17)
  Model 2: Yield ~ poly(Easting, 17) *
  poly(Northing, 17) + Sprayed
    #Df LogLik Df  Chisq Pr(>Chisq)
  1 325 -21602
  2 326 -21601  1 1.0578     0.3037
```

- [ ] **and**

$$H_{2D} : \tau = 0.648, p(t) = 0.317$$

Expanded Square





- **Likelihood test to compare 2D models with and without treatment effect**

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Likelihood ratio test
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    #Df LogLik Df  Chisq Pr(>Chisq)
  1 325 -21602
  2 326 -21601  1 1.0578     0.3037
```

- **and**
  $H_{2D} : \tau = 0.648, p(t) = 0.317$

- **But we require some degree of interpolation to fill in missing areas.**