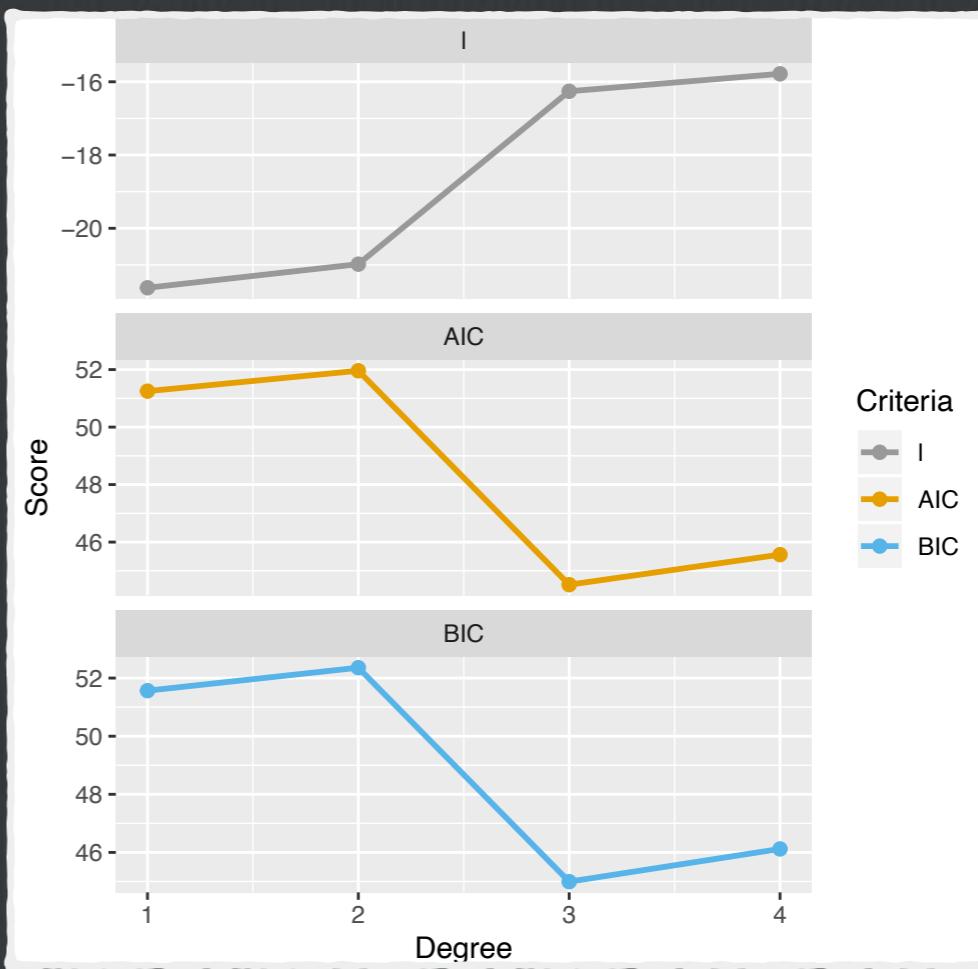
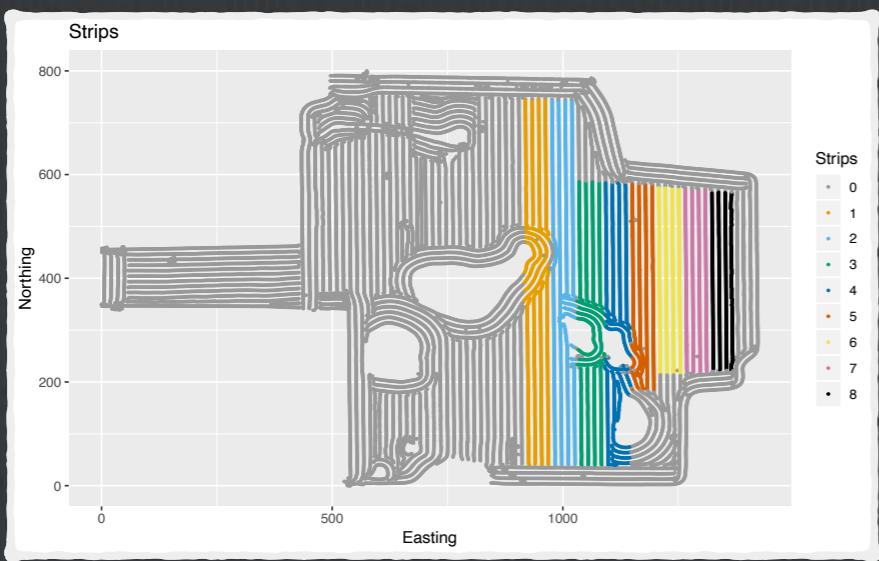
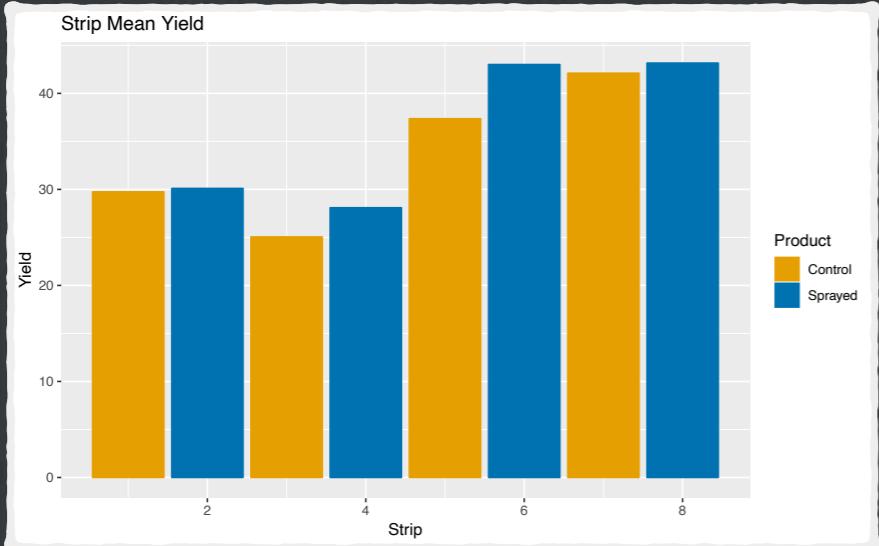
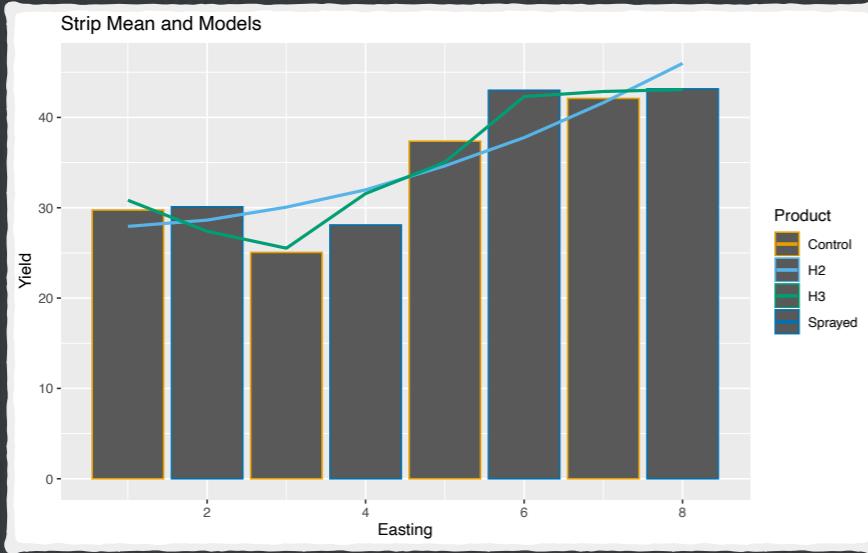


# Model Selection



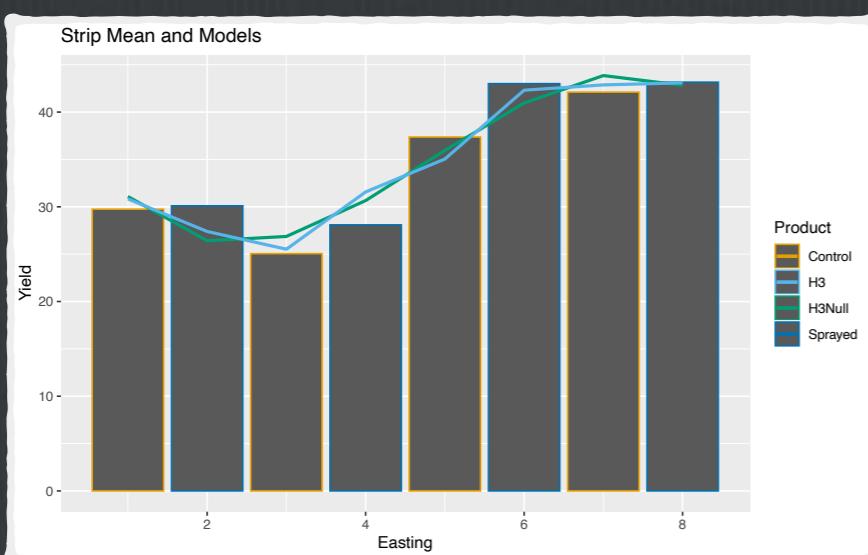
A cubic trend is the likely model

# Model Comparison



- Likelihood test to compare  $H_2$  and  $H_3$
- Model 1: Yield ~ poly(Pass, 2) + Product  
Model 2: Yield ~ poly(Pass, 3) + Product

#Df	LogLik	Df	Chisq	Pr(>Chisq)
1	5	-20.980		
2	6	-16.259	1	9.4428 0.00212 **

- Likelihood ratio test
- Model 1: Yield ~ poly(Pass, 3)  
Model 2: Yield ~ poly(Pass, 3) + Product

#Df	LogLik	Df	Chisq	Pr(>Chisq)
1	5	-17.217		
2	6	-16.259	1	1.9168 0.1662

- and
- $H_3 : \tau = 2.108$
- $LR = 2.61$