

2. Mandatory assignment MAT2410 Autumn 2017

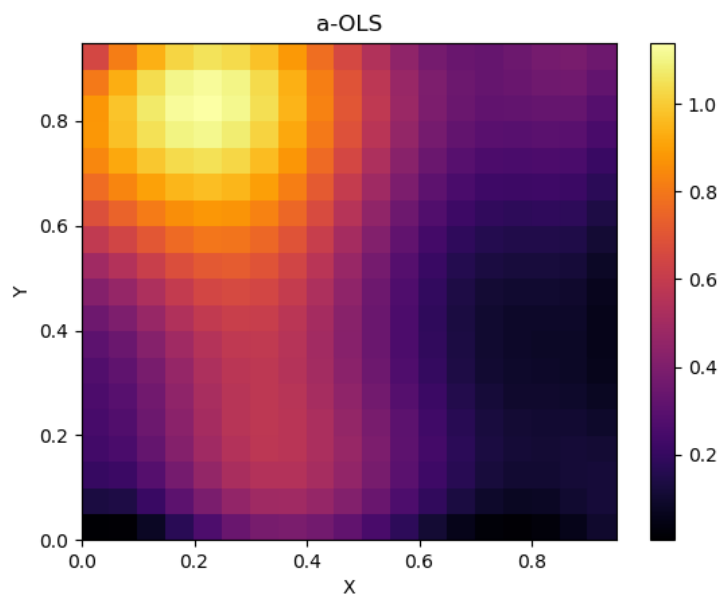
Mikael Ravndal

27. september 2018

All approximation is done with degree equals 5.

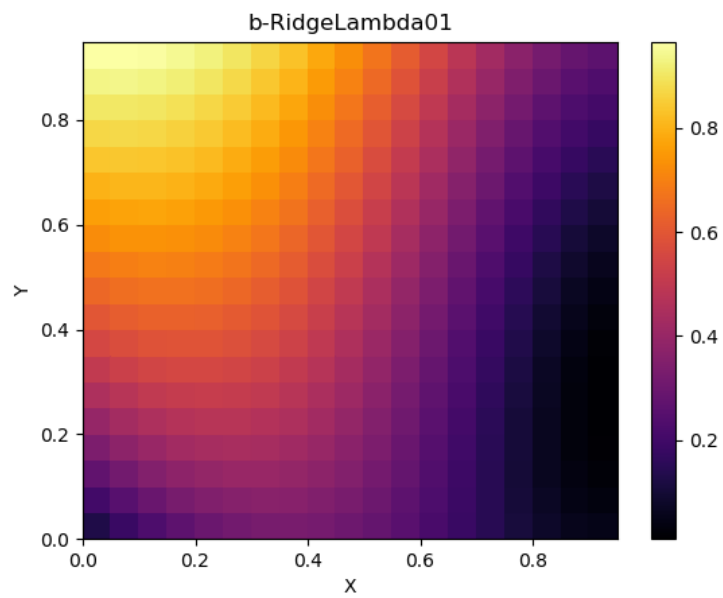
Part a)

Ordinary Least square of the Frankefunction(the same as Ridge with $\lambda = 0$):



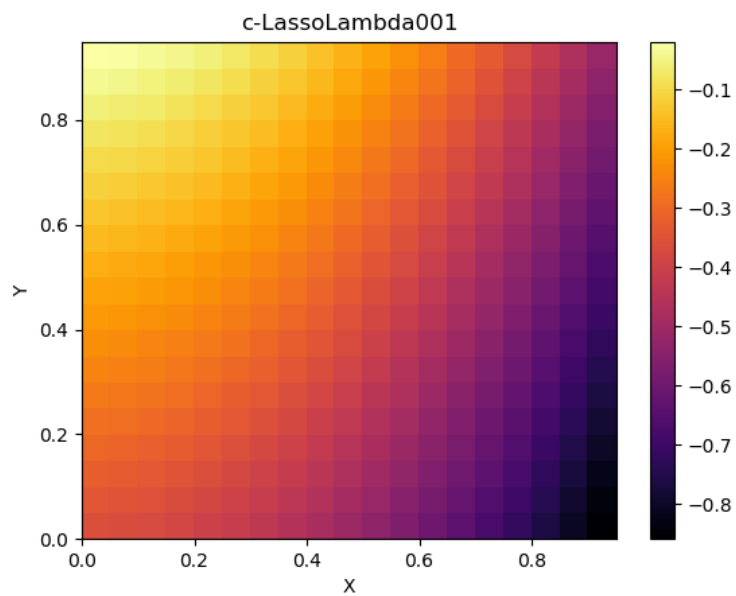
Part b)

Ridge Regression with $\lambda = 0.1$



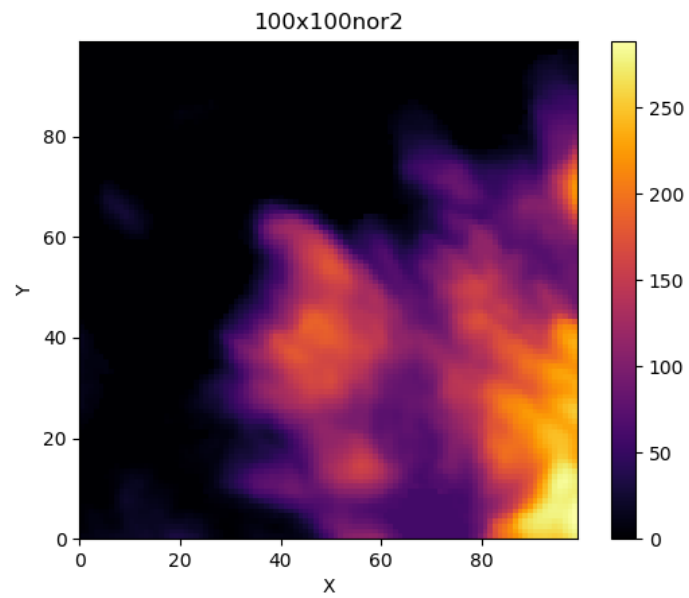
Part c)

Lasso Regression with $\lambda = 0.01$



Part d)

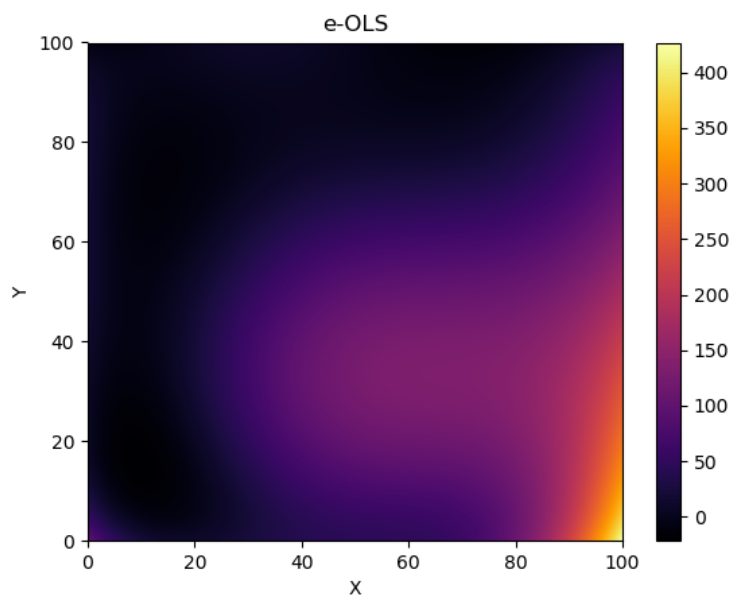
Imports 100x100 chunk of real data from top left corner of dataset nr.1.
Plot of real data



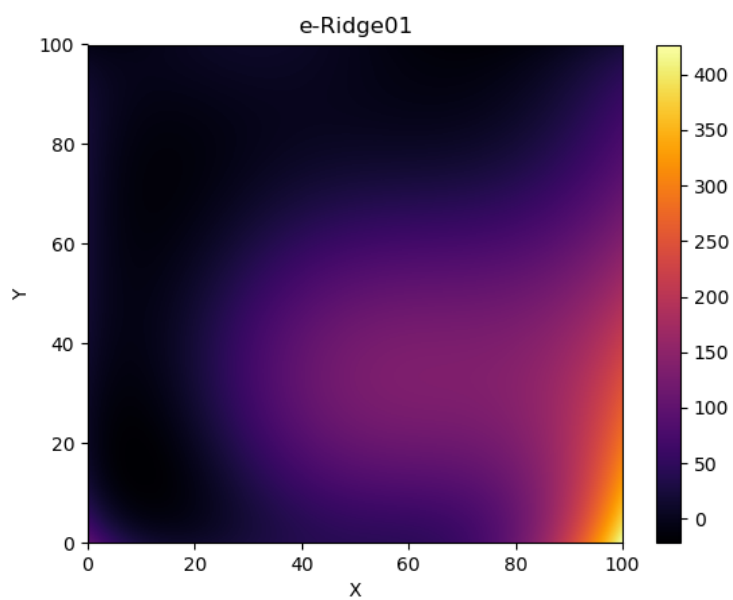
Part e)

Repeat of a-c, but with real data from d)

OLS:



Ridge:



Lasso:

