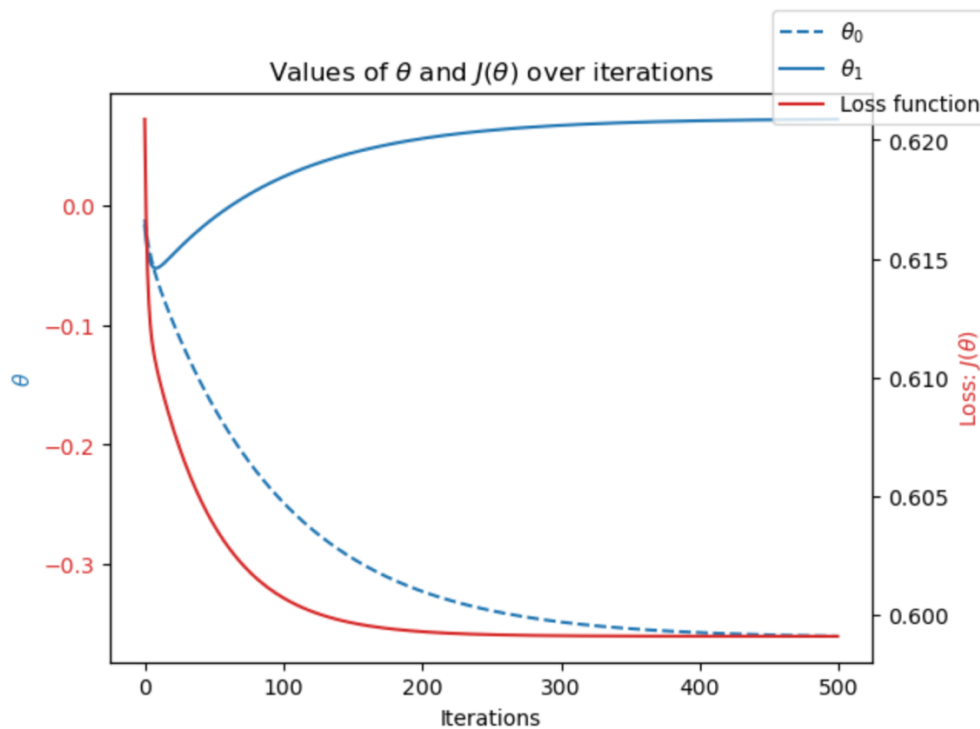


Shaquille Obomeghie
Exercise 1.3

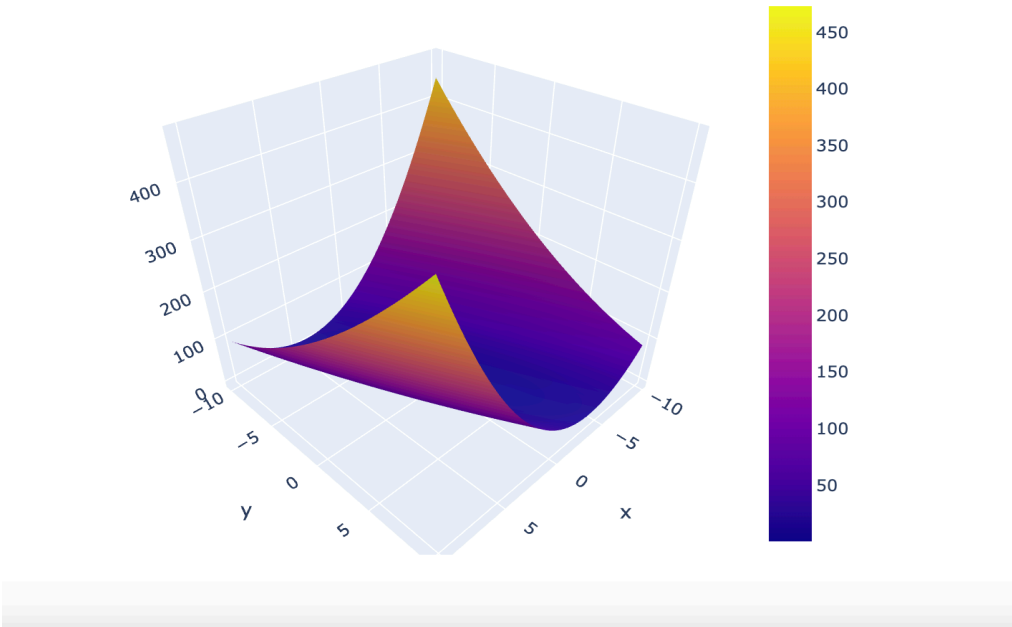
| Weather Station | Year | Thetha0 | Theta1 | Iteration | Step Size |
|-----------------|------|---------|--------|-----------|-----------|
| BASEL | 1962 | 0 | 0 | 500 | 0.01 |
| BASEL | 1990 | 0 | 0 | 600 | 0.05 |
| BASEL | 2020 | 0 | 0 | 500 | 0.05 |
| MADRID | 1960 | 0 | 0 | 500 | 0.05 |
| MADRID | 1990 | 0 | 0 | 500 | 0.02 |
| MADRID | 2020 | 0 | 0 | 500 | 0.01 |
| STOCKHOLM | 1960 | 0 | 0 | 300 | 0.1 |
| STOCKHOLM | 1990 | 0 | 0 | 100 | 0.01 |
| STOCKHOLM | 2020 | 0 | 0 | 150 | 0.1 |

- The mean temperature of all stations increased over time (60 years).
- The minimum temperature of the Basel station drastically dropped from 1962 to 1990 but remained steady from 1990 to 2020.
- Basel had the biggest increase in maximum temperature between the 3 stations.

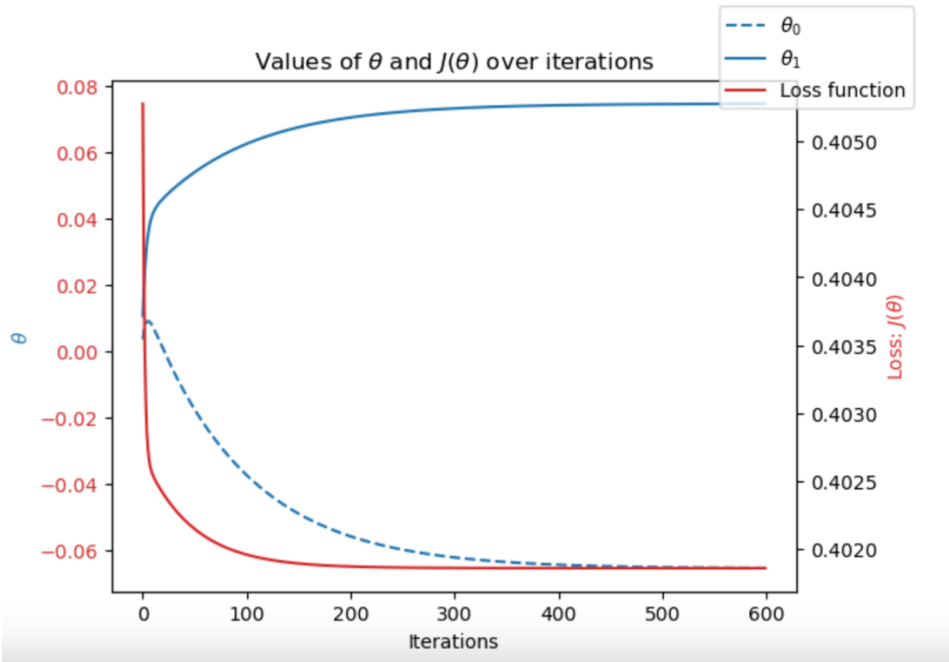
Basel 1962



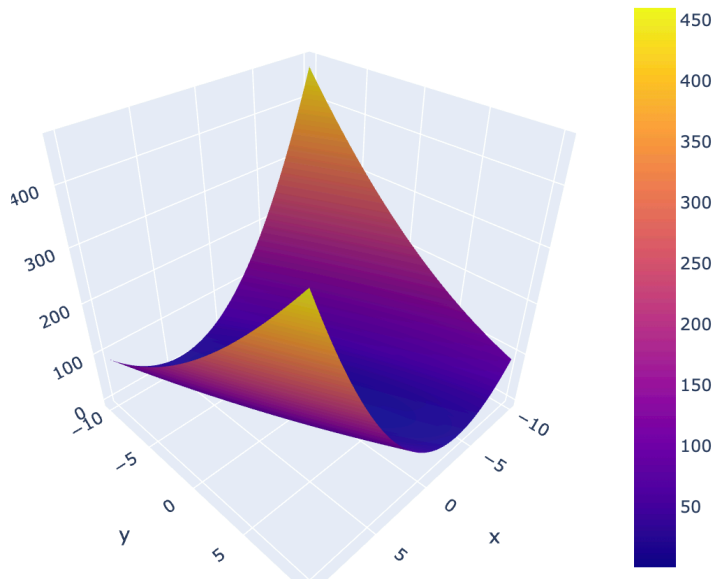
Loss function for different thetas



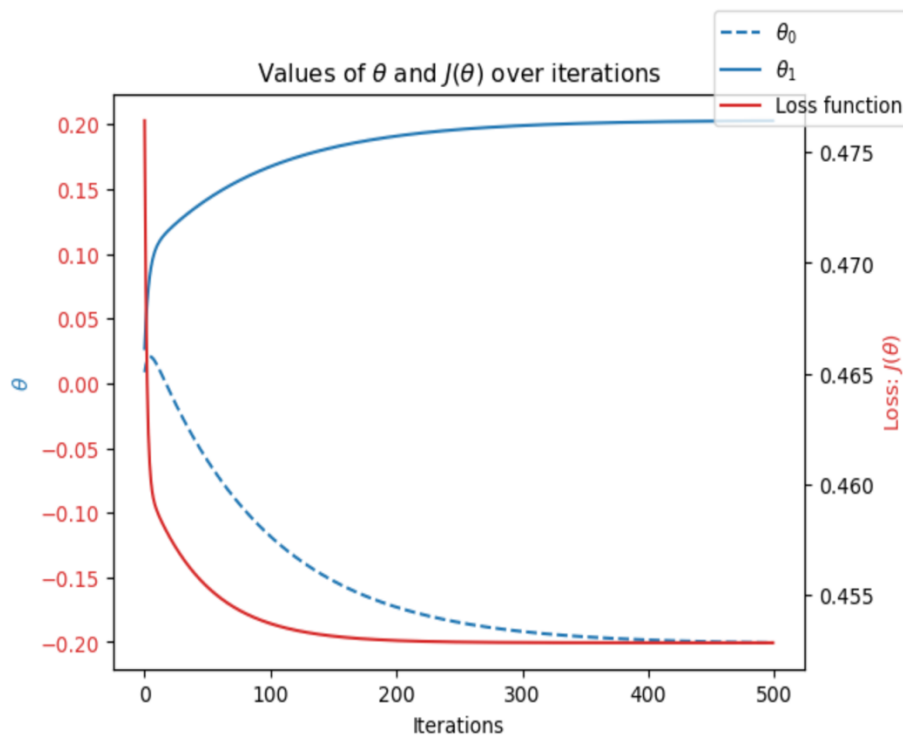
Basel 1990



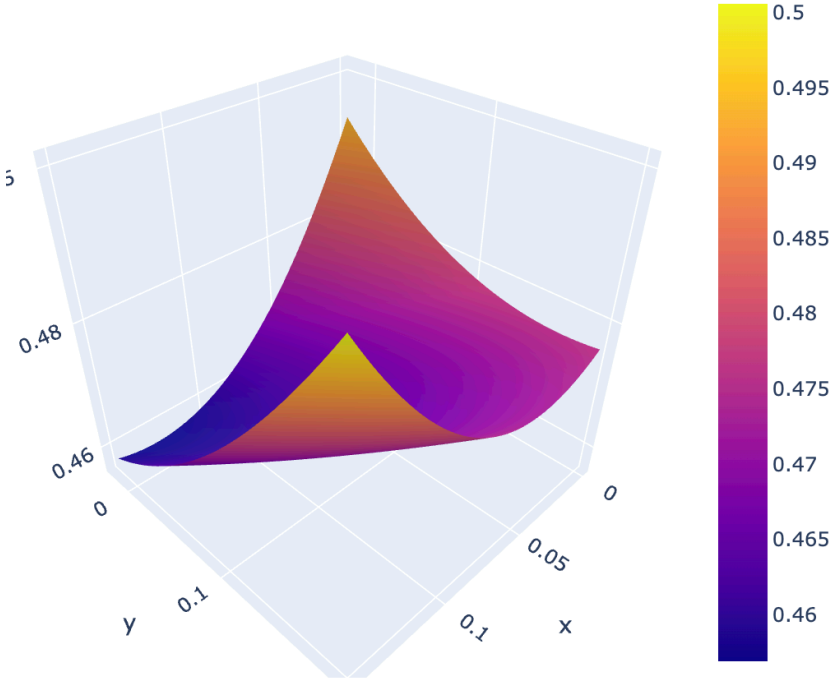
Loss function for different thetas



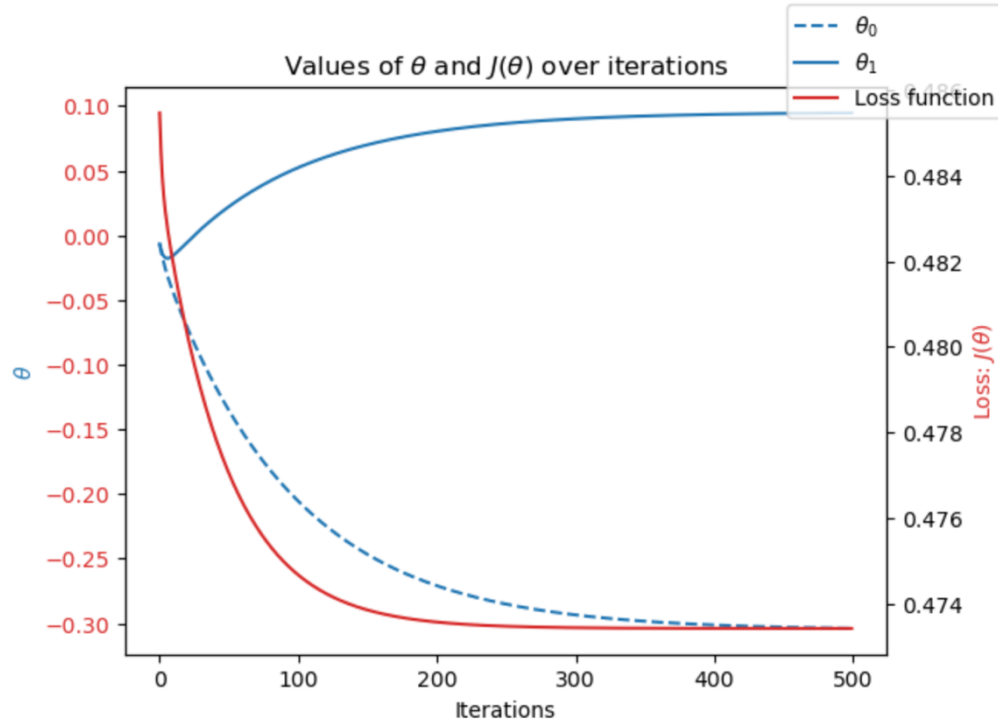
Basel 2020



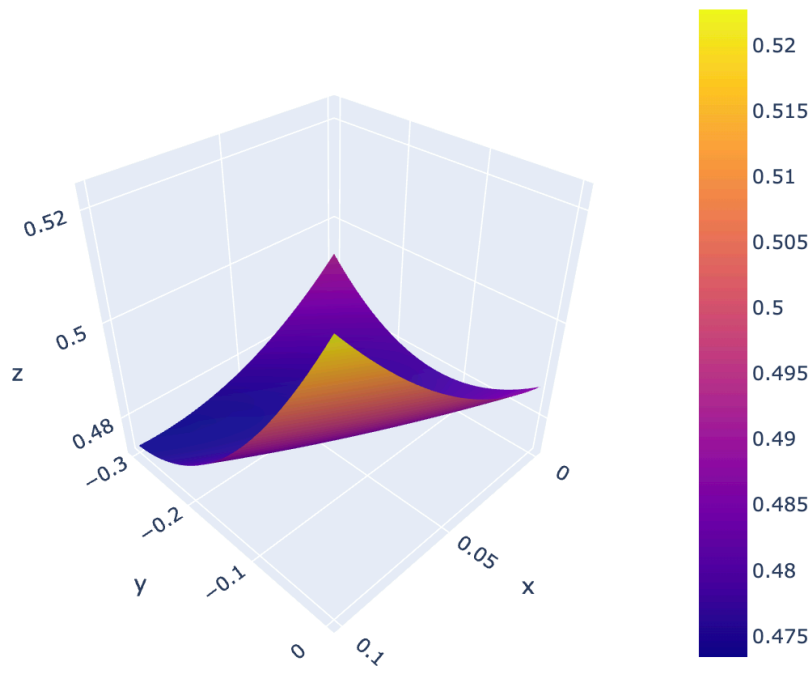
Loss function for different thetas



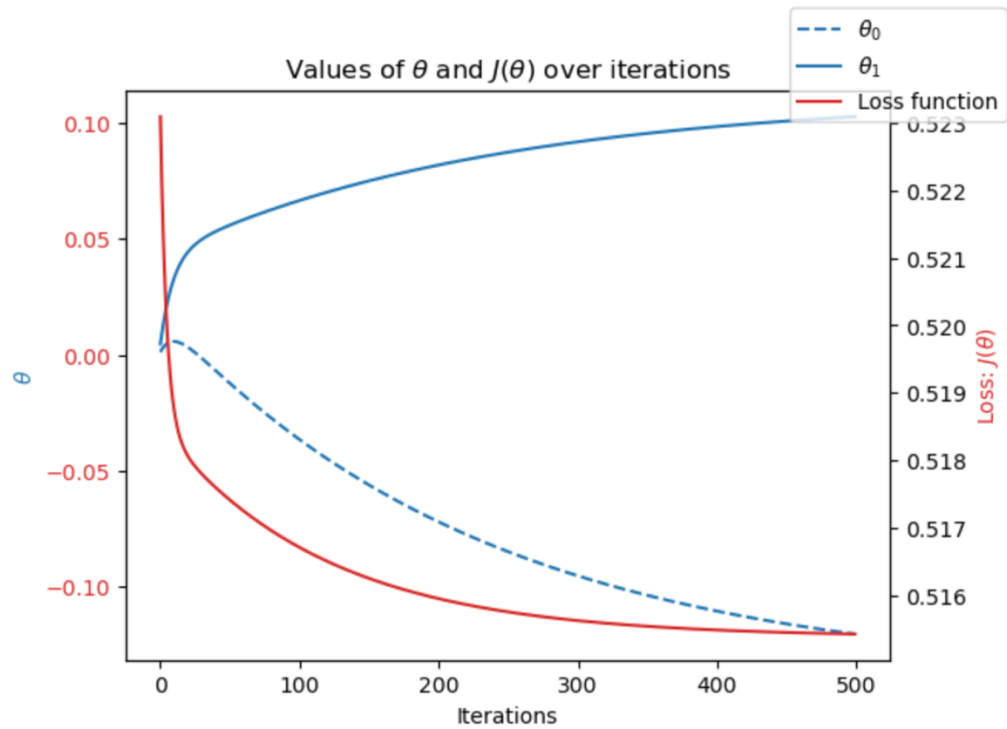
Madrid 1960



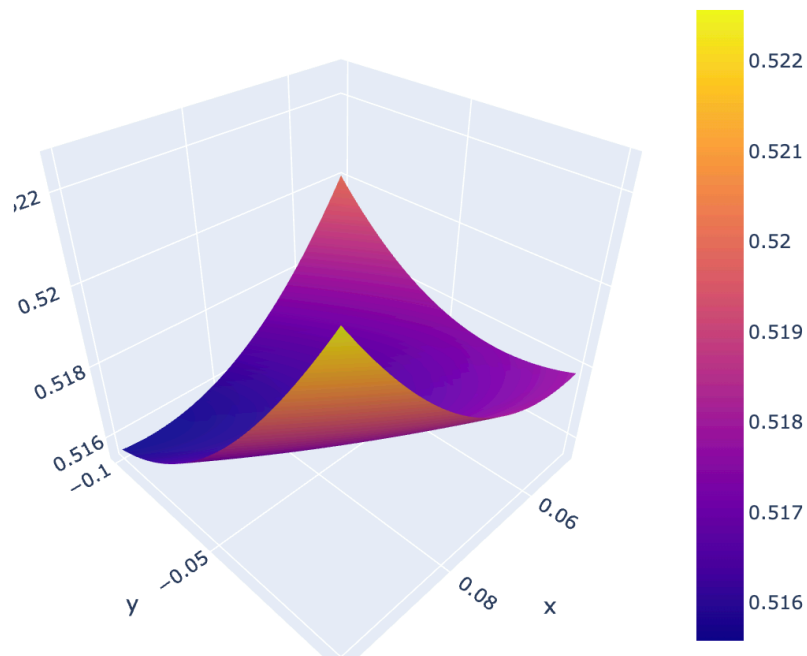
Loss function for different thetas



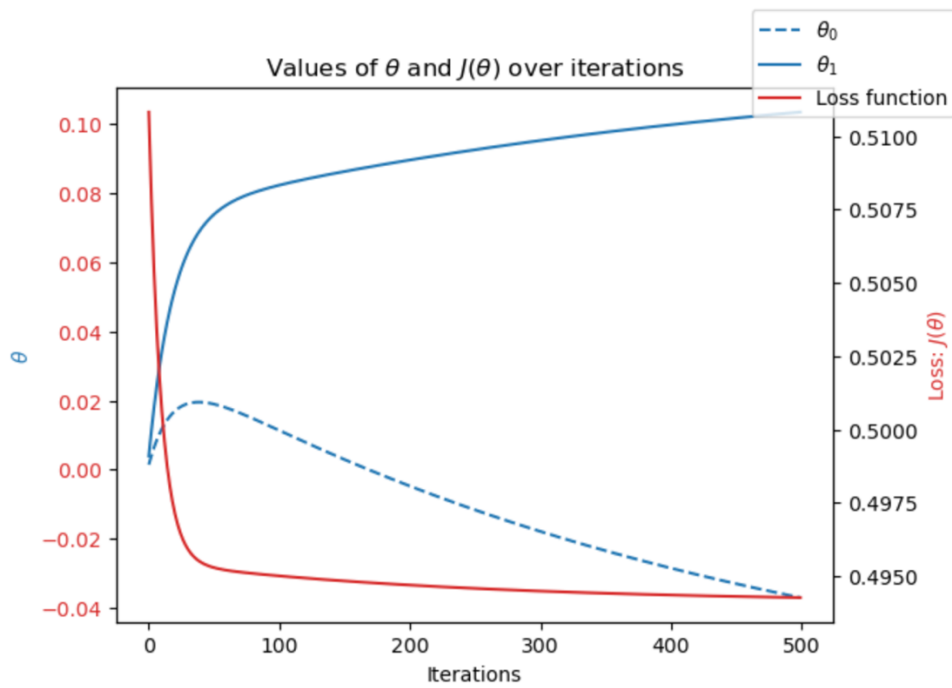
Madrid 1990



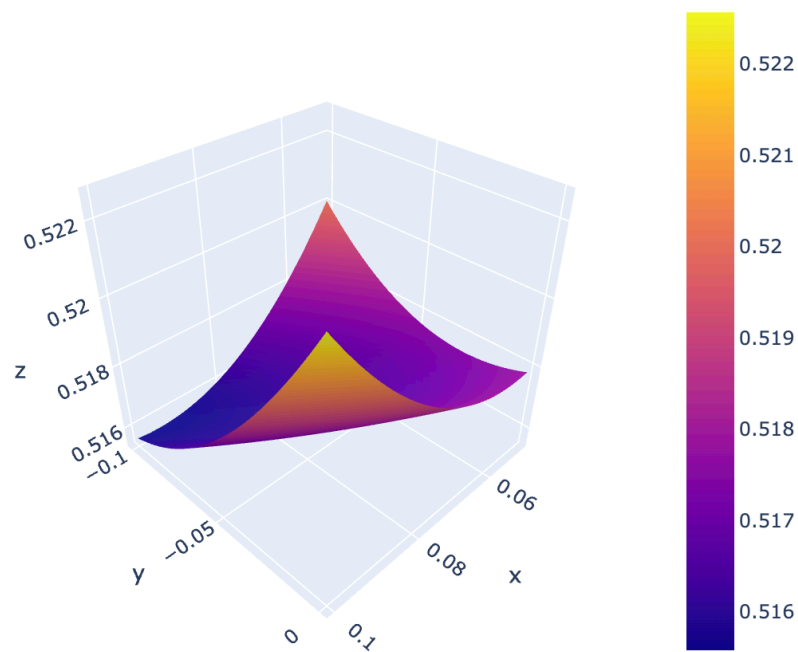
Loss function for different thetas



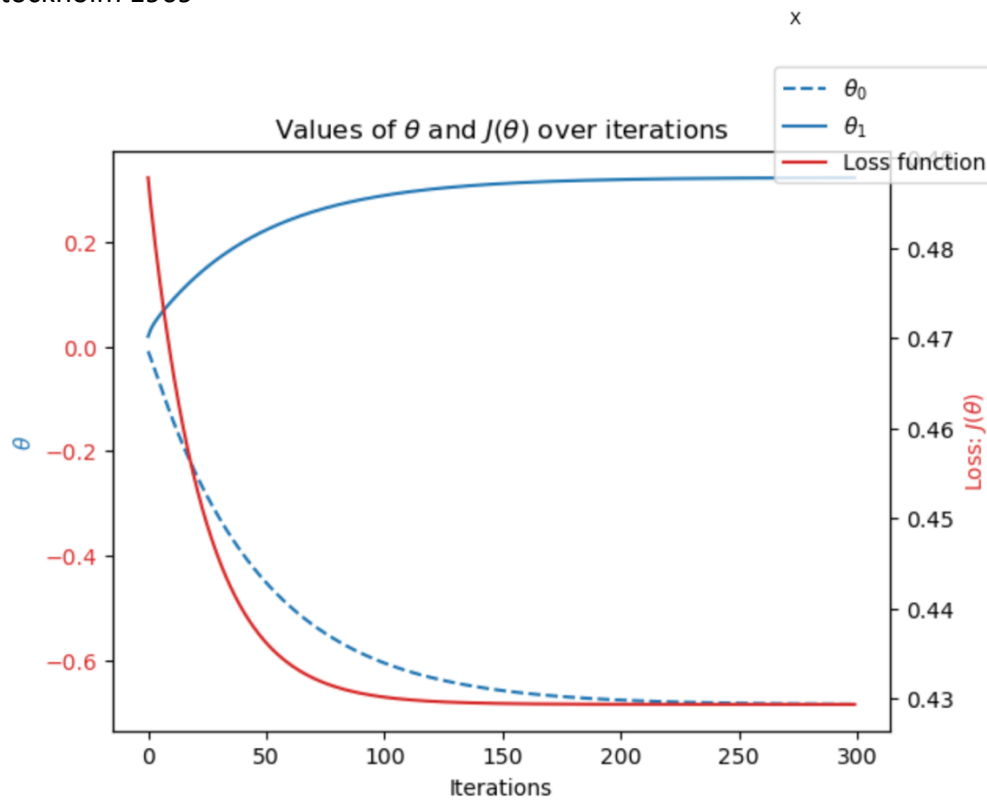
Madrid 2020



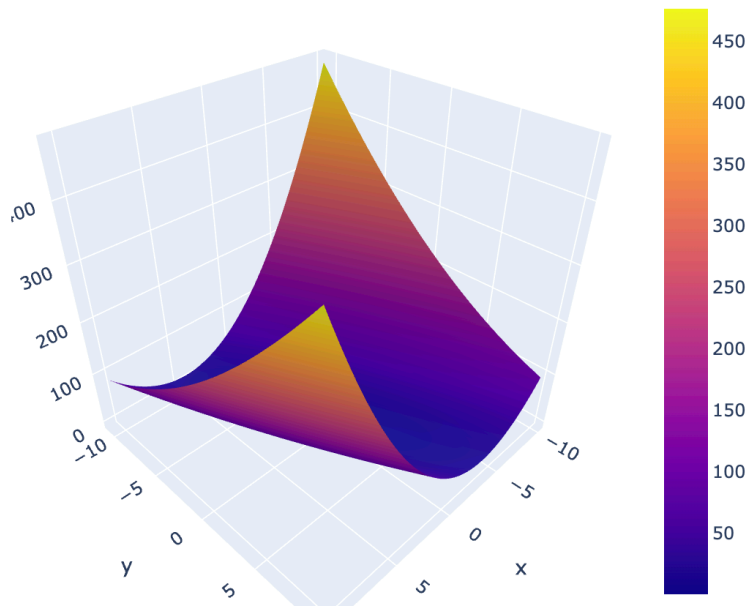
Loss function for different thetas



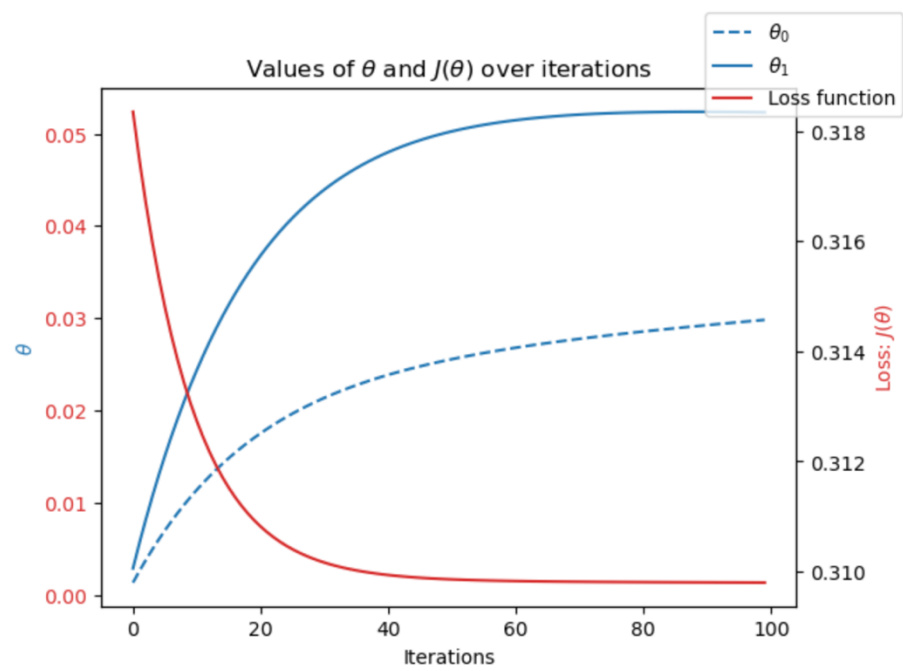
Stockholm 1969



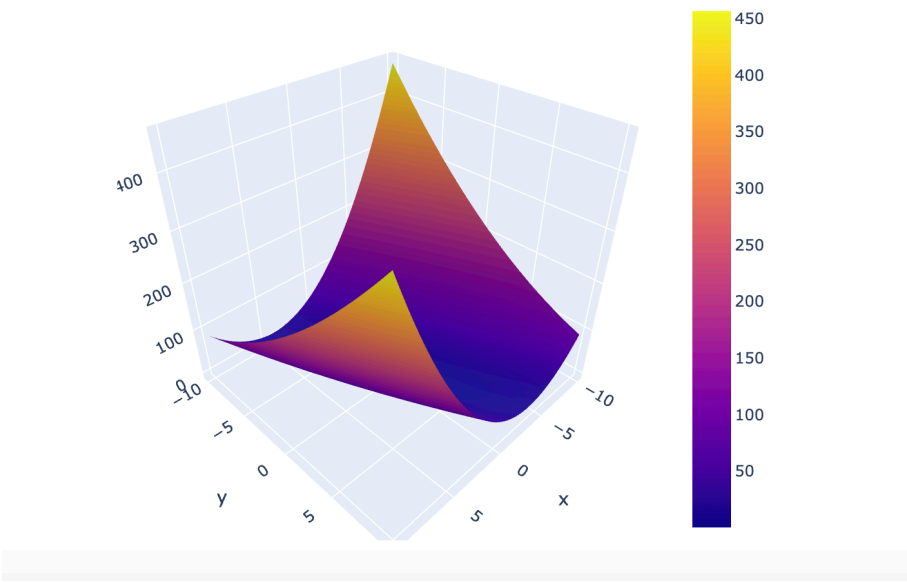
Loss function for different thetas



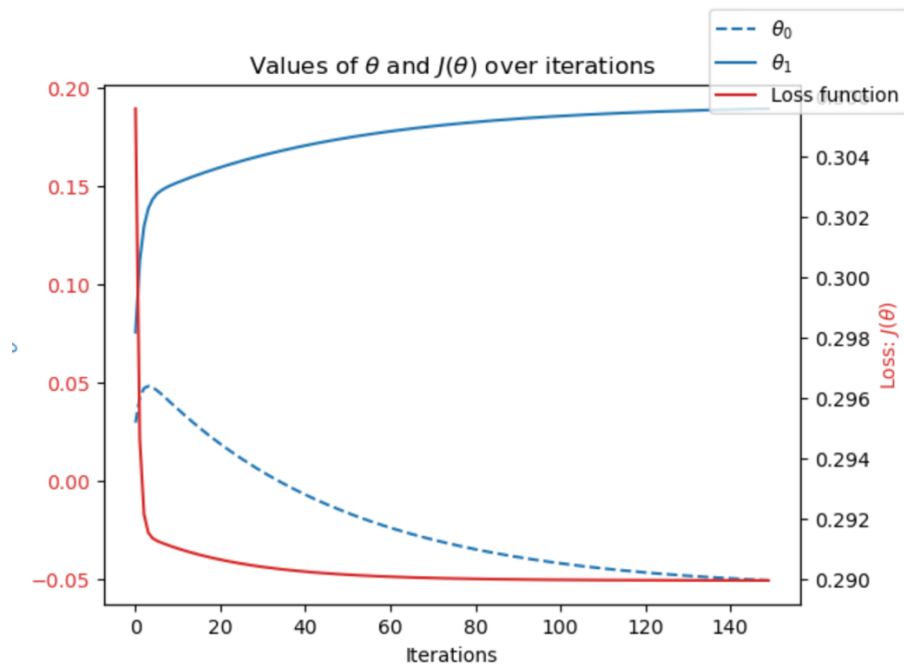
Stockholm 1990



Loss function for different thetas



Stockholm 2020



Loss function for different thetas

