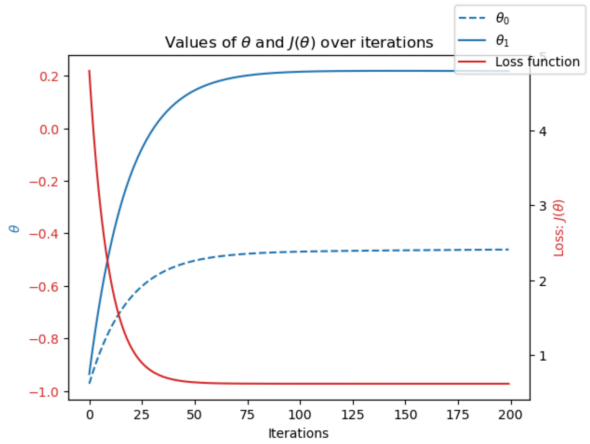
Kirsten Currie
Career Foundry
Machine Learning | 1.3
2.15.25

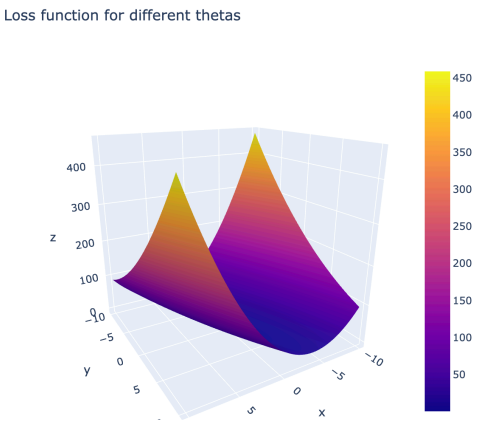
Station	Year	Theta0	Theta1	Iteration	Step Size	Mean Min	Mean Max
Valentia	1960	-1	-1	200	0.01	-2.95	2.61
Valentia	1991	-1	-1	300	0.01	-3.01	3.72
Valentia	2019	-1	-1	500	0.01	-7.29	-7.29
Debilt	1960	-1	-1	200	0.01	-2.65	1.84
Debilt	1991	-1	-1	300	0.01	-2.93	2.29
Debilt	2019	-1	-1	500	0.01	-2.00	2.97
Kassel	1960	-1	-1	200	0.01	-3.45	2.00
Kassel	1991	-1	-1	300	0.01	-3.17	2.56
Kassel	2019	-1	-1	500	0.01	-5.71	-5.71

Observations:

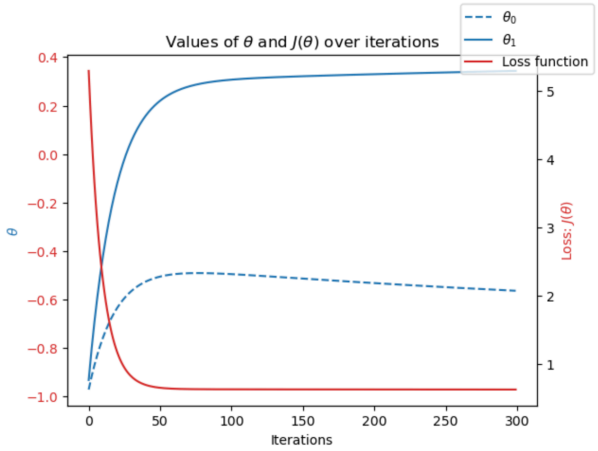
1. After manipulating the Theta values, Iterations, and Step Sizes, I found that the *number of iterations* should be increased in order for the values to stabilize (reach convergence?). Could this indicate temperatures becoming more extreme over time?
2. For all three cities, min and max temperature means tend to increase in extremes over time.
3. Debilt (Netherlands) appears to mostly have increased max temperatures, while min temps varied over 60 years.
4. Kassel & Valentia max means (highlighted red) seem off and need to be reevaluated.

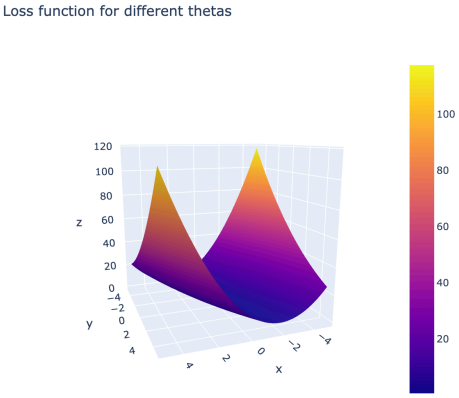
Valencia, 1960



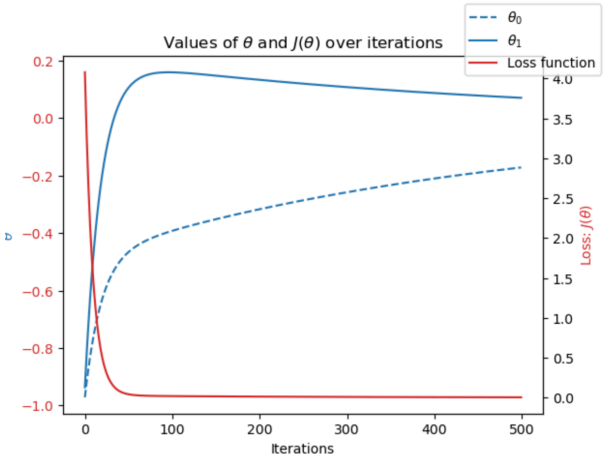


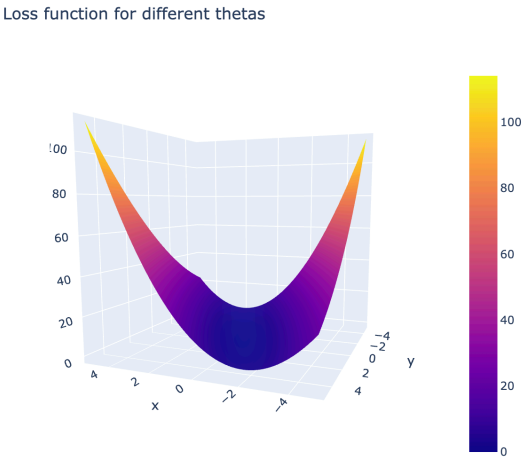
Valencia, 1991



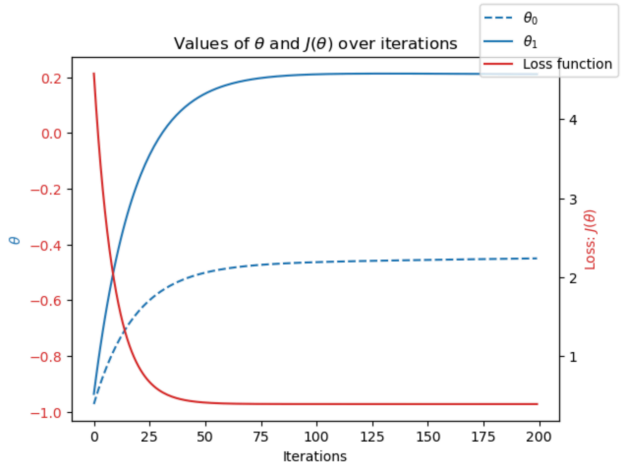


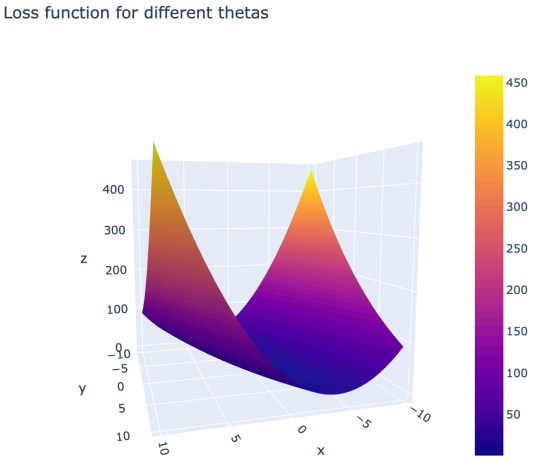
Valencia, 2019



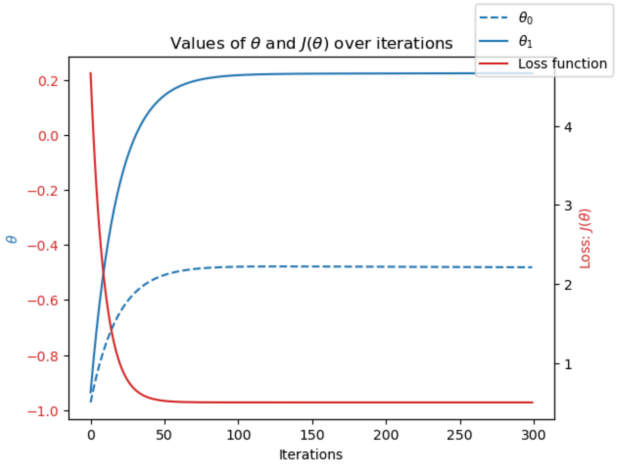


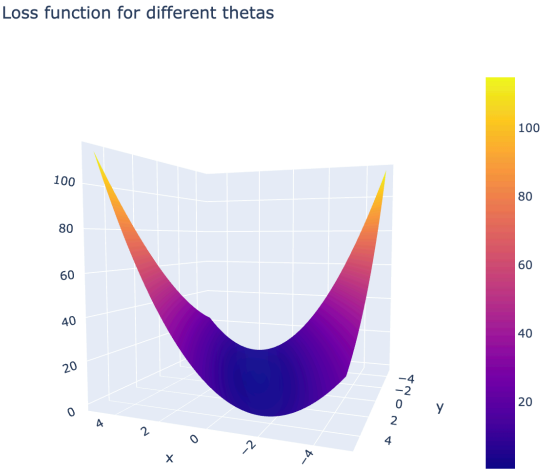
Debilt, 1960



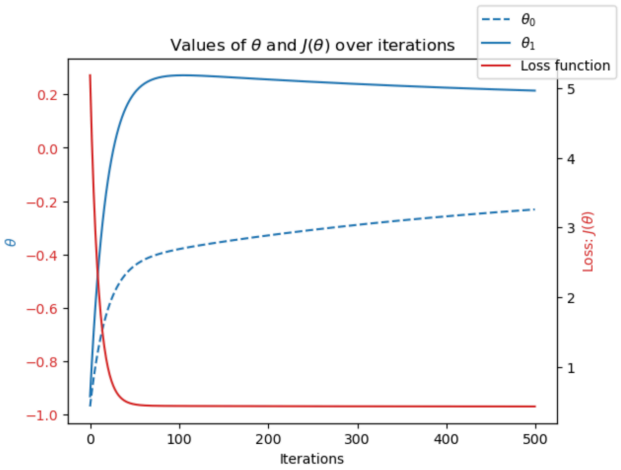


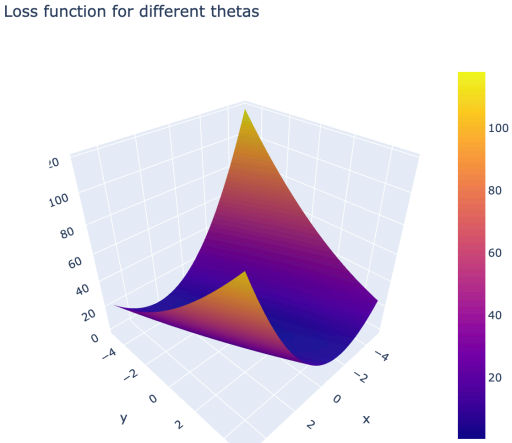
Debilt, 1991



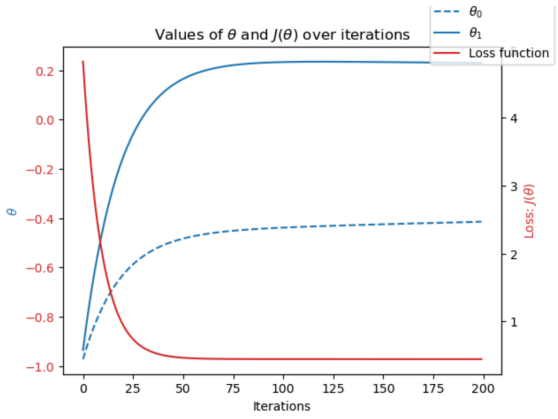


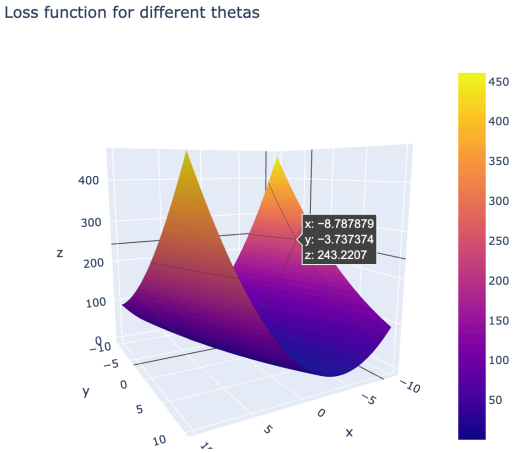
Debilt, 2019



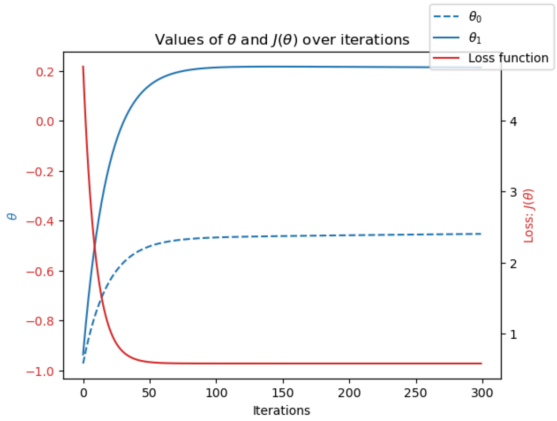


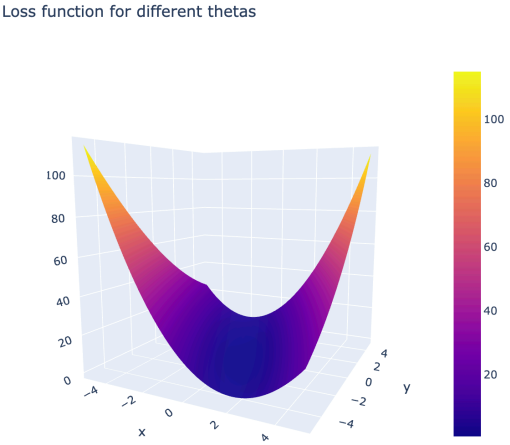
Kassel, 1960





Kassel, 1991





Kassel, 2019