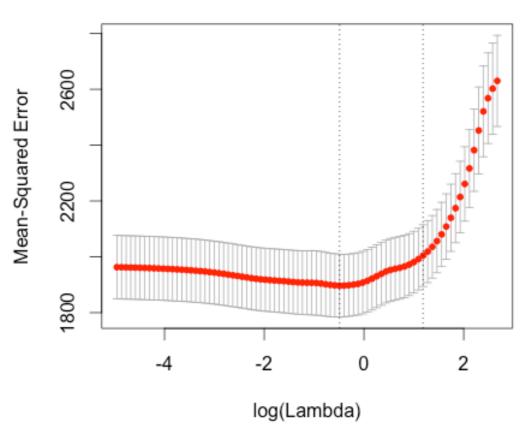
1. Regularization Lambda: 0.6358245 Mean square error: 292.3615

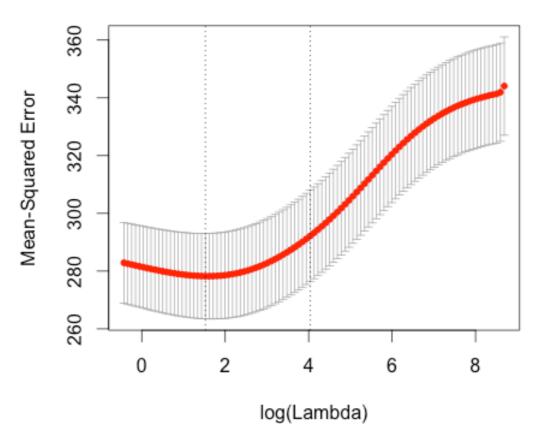
$_{95}$ lasso regression vs longitude $_{5}$



2.

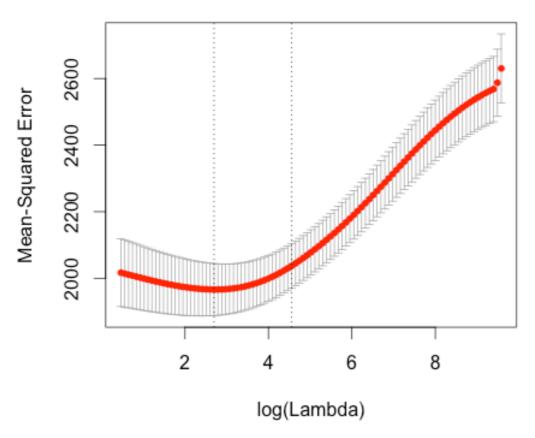
Regularization lambda: 0.803189 Mean square error: 1941.708

116 1ridge regression vs laitude 116



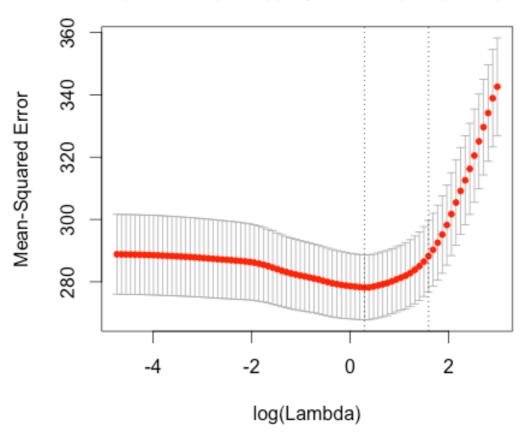
3. Regularization lambda: 9.663966 Mean square error: 291.0583

116 ridge regression vs longitude 16



4. Regularization Lambda: 8.41335 Mean square error: 1889.012

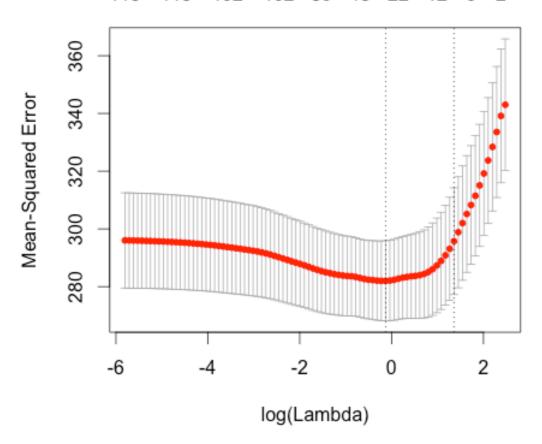
elastic regression vs_laitude (alpha=0.3)



5. Alpha: 0.3

Regularization lambda: 1.759575 Mean square error: 291.5686

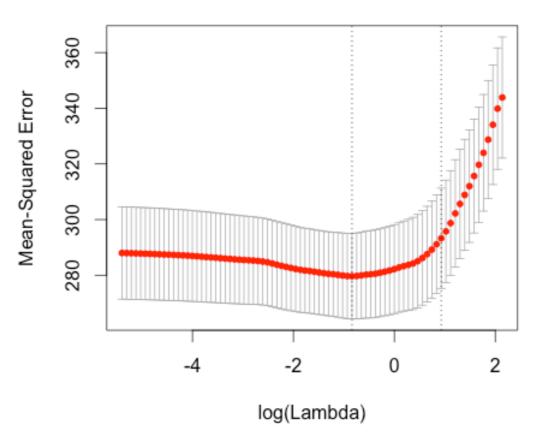
elaştic regression vs $_9$ la $_4$ tude (alpha=0.5)



6. Alpha: 0.5

Regularization Lambda: 1.395633 Mean square error: 292.7855

elastic regression vs. aitude (alpha=0.7)

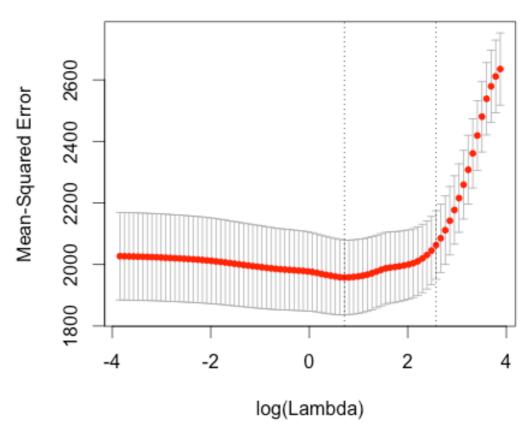


7. Alpha: 0.7

 $Regularization\ Lambda:\ 0.9083207$

Mean square error: 292.3115

elastic regression vs longitude (alpha=0.3)

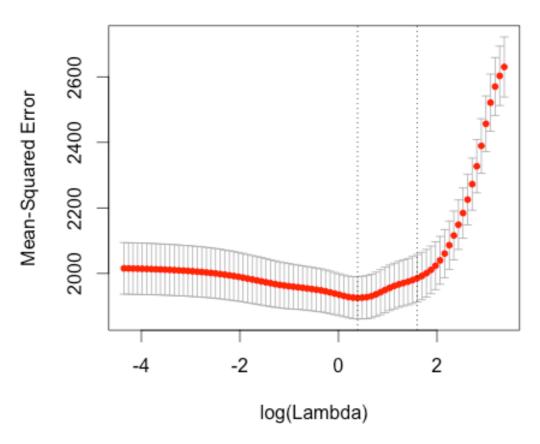


8. Alpha: 0.3

Regularization Lambda: 2.025277

Mean square error: 1927.69

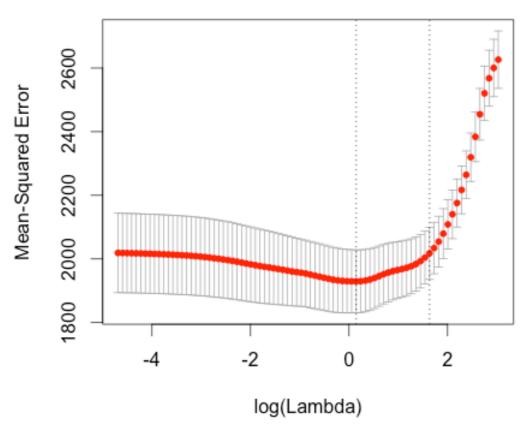
elastic regression vs. Jongitude (alpha=0.5)



9. Alpha: 0.5

Regularization Lambda: 1.463672 Mean square error: 1935.508

elastic regression vs. Jongitude (alpha=0.7)



10. Alpha: 0.7

Regularization Lambda: 1.147413

Mean square error: 1940.48

Conclusion: Each regularized regression performed better than the ones without regularization. Ridge worked better in both latitude and longtitude.