Effective Programming Practices for Economists

Scientific Computing

Visualizing optimizer histories

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Motivation

- You rarely have a guarantee that an optimizer will work

  - Assumptions of convergence proofs might not hold in practice

  - You might get stuck in local optima

  - Floating point calculations are never exact

- But you can compare the performance of optimizers

  - Which one finds the lower function value?

  - Which one decreases the function more quickly?

- The `criterion_plot` makes this very easy!

Criterion plot

We assume you have done an optimization and the result is called `res`

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