

Fresh restart Julia:

```
julia> include("/Users/rob/.julia/dev/DiffEqBayes/test/perf_turing.jl");
```

Four parameter case (250 warmups, 250 samples)

```
[ Info: Found initial step size
  ε = 0.037500000000000006
[ Warning: The current proposal will be rejected due to numerical error(s).
  isfinite.((θ, r, ℓπ, ℓκ)) = (true, false, false, false)
@ AdvancedHMC ~/.julia/packages/AdvancedHMC/WJCQA/src/hamiltonian.jl:47
27.710160 seconds (99.25 M allocations: 5.013 GiB, 5.93% gc time) (first run)
12.608040 seconds (44.32 M allocations: 2.275 GiB, 6.29% gc time) (second run)
13.270747 seconds (43.83 M allocations: 2.229 GiB, 5.61% gc time) (third run)
```

```
julia> include("/Users/rob/.julia/dev/DiffEqBayes/test/perf_turing.jl");
```

Four parameter case (1000 warmups, 1000 samples)

```
[ Info: Found initial step size
  ε = 0.0125
[ Warning: The current proposal will be rejected due to numerical error(s).
  isfinite.((θ, r, ℓπ, ℓκ)) = (true, false, false, false)
@ AdvancedHMC ~/.julia/packages/AdvancedHMC/WJCQA/src/hamiltonian.jl:47
13.185623 seconds (49.59 M allocations: 2.641 GiB, 9.74% gc time) (fourth run)
```

Fresh restart Julia:

```
julia> include("/Users/rob/.julia/dev/Stan/Examples_DiffEqBayes/diffeqbayes_tests/four_parameters/perf_stan.jl");
```

Four parameter case (1000 warmups, 1000 samples)

```
/Users/rob/.julia/dev/Stan/Examples_DiffEqBayes/diffeqbayes_tests/four_parameters/tmp/pem.stan updated.
27.513764 seconds (16.80 M allocations: 829.035 MiB, 1.06% gc time) (first run)
10.291851 seconds (1.17 M allocations: 60.583 MiB) (second run)
```

Fresh restart Julia:

```
julia> include("/Users/rob/.julia/dev/Stan/Examples_DiffEqBayes/diffeqbayes_tests/four_parameters/perf_stan.jl");
```

Four parameter case

```
/Users/rob/.julia/dev/Stan/Examples_DiffEqBayes/diffeqbayes_tests/four_parameters/tmp/pem.stan updated.
27.177715 seconds (16.75 M allocations: 828.650 MiB, 0.90% gc time) (first run)
11.350288 seconds (1.17 M allocations: 60.541 MiB, 0.24% gc time) (second run)
```

Fresh restart Julia:

```
julia> include("/Users/rob/.julia/dev/Stan/Examples_DiffEqBayes/diffeqbayes_tests/four_parameters/perf_stan.jl");
```

Four parameter case (250 warmups, 250 samples)

```
/Users/rob/.julia/dev/Stan/Examples_DiffEqBayes/diffeqbayes_tests/four_parameters/tmp/pem.stan updated.
18.677937 seconds (16.57 M allocations: 820.812 MiB, 1.18% gc time) (first run)
3.204159 seconds (963.26 k allocations: 51.251 MiB) (second run)
```