

Report about different linear solvers

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1 `scipy.sparse.linalg.spsolve`

```
Reference code time: 0.1636 s
Number of cells: 2209
        660526 function calls (614482 primitive calls) in 0.473 seconds
Batched code time: 0.5056 s
        5409 function calls in 0.042 seconds
Batched code time: 0.0519 s
```

2 `scipy.sparse.linalg.bicg`

```
Reference code time: 0.1815 s
Number of cells: 2209
        660547 function calls (614503 primitive calls) in 0.470 seconds
Batched code time: 0.5017 s
        5409 function calls in 0.045 seconds
Batched code time: 0.0568 s
```

3 `scipy.sparse.linalg.bicgstab`

```
Reference code time: 0.1686 s
Number of cells: 2209
        660619 function calls (614575 primitive calls) in 0.453 seconds
Batched code time: 0.5199 s
        5409 function calls in 0.049 seconds
Batched code time: 0.0598 s
```

4 `scipy.sparse.linalg.cg`

```
Reference code time: 0.1646 s
Number of cells: 2209
        660604 function calls (614560 primitive calls) in 0.513 seconds
Batched code time: 0.5452 s
        5409 function calls in 0.044 seconds
Batched code time: 0.0539 s
```

5 `scipy.sparse.linalg.cgs`

```
Reference code time: 0.1715 s
Number of cells: 2209
        660602 function calls (614558 primitive calls) in 0.453 seconds
Batched code time: 0.4896 s
        5409 function calls in 0.042 seconds
Batched code time: 0.0508 s
```

6 `scipy.sparse.linalg.gmres`

```
Reference code time: 0.1656 s
Number of cells: 2209
        660748 function calls (614704 primitive calls) in 0.457 seconds
Batched code time: 0.5226 s
        5409 function calls in 0.042 seconds
Batched code time: 0.0509 s
```

7 `scipy.sparse.linalg.lgmres`

```
Reference code time: 0.1785 s
Number of cells: 2209
        660628 function calls (614584 primitive calls) in 0.521 seconds
Batched code time: 0.5525 s
        5409 function calls in 0.044 seconds
Batched code time: 0.0529 s
```

8 `scipy.sparse.linalg.minres`

```
Reference code time: 0.1725 s
Number of cells: 2209
        660667 function calls (614623 primitive calls) in 0.463 seconds
Batched code time: 0.5006 s
        5409 function calls in 0.044 seconds
Batched code time: 0.0588 s
```

9 `scipy.sparse.linalg.qmr`

```
Reference code time: 0.1676 s
Number of cells: 2209
        660743 function calls (614699 primitive calls) in 0.506 seconds
Batched code time: 0.5386 s
        5409 function calls in 0.044 seconds
Batched code time: 0.0549 s
```

10 `scipy.sparse.linalg.gcrotmk`

```
Reference code time: 0.1755 s
Number of cells: 2209
    660830 function calls (614786 primitive calls) in 0.484 seconds
Batched code time: 0.5156 s
    5409 function calls in 0.042 seconds
Batched code time: 0.0509 s
```

11 `scipy.sparse.linalg.tfqmr`

```
Reference code time: 0.1845 s
Number of cells: 2209
    660712 function calls (614668 primitive calls) in 0.515 seconds
Batched code time: 0.5489 s
Batched code time: 0.0538 s
```