

**Nonuniform operators:** MOLE is equipped with mimetic operators that act on structured nonuniform staggered grids. Depending on the problem, it is sometimes useful to have more spatial resolution on specific locations of the physical domain.

To obtain nonuniform mimetic operators from MOLE, the user must type:

```
divNonUniform(k, grid);
```

or,

```
gradNonUniform(k, grid);
```

and for higher dimensions,

```
div2DNonUniform(k, grid), div3DNonUniform(k, grid),  
grad2DNonUniform(k, grid), grad3DNonUniform(k, grid);
```

where ‘grid’ is the array that contains the coordinates of each cell center or each edge (depending on the operator being computed). MOLE computes these nonuniform operators by multiplying the corresponding inverted Jacobian matrix to the corresponding uniform operator.

