Mesh generator for sunfluidh

In the code Sunfluidh, the spatial discretization of equations is carried out on a cartesian staggered grid.
When the grid is regular (cell size is identical over the computational domain), the code build the mesh itself. The user can also build a non-regular grid for sunfluidh by using the in-house software meshgen_doc Meshgen.

More regular is the mesh ore accurate is the simulation. Several basic rules should be respected as it is possible.

- The cell size ratio between two adjoined cells does not generally overcome 5\%, especially in the strong gradient areas.
- For every cell, the aspect ratio should be :
  $0.2 \le \frac {\Delta x_j}{\Delta X_i} \le 5$ with