> Search and compute algorithm for wall distance computation  
CFD algorithms that include turbulence models require a wall distance calculation (i.e., the distance from a computational cell to a solid wall). In most algorithms this is done as a preprocessing task before the heavy computation, so an inefficient method doesn’t affect performance significantly. In more complicated algorithms that include grid motion, the wall distance may have to be recomputed at every iteration so an efficient and very fast algorithm is of paramount importance.

Parallel computing algorithms

<http://www.cs.cmu.edu/~scandal/nesl/algorithms.html>