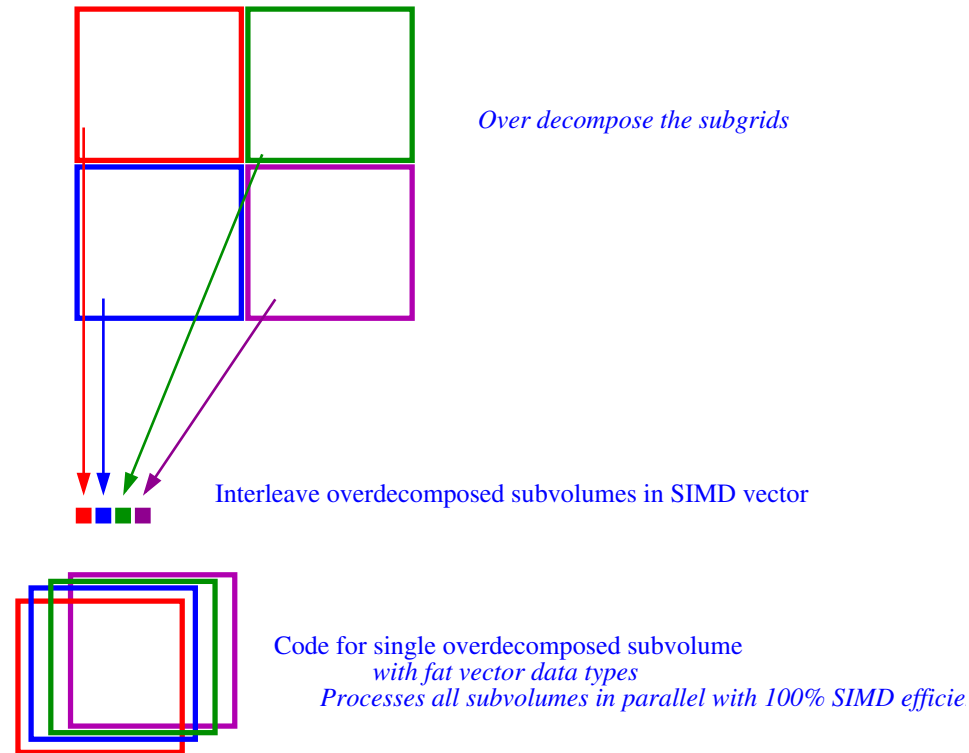- Geometrically decompose cartesian arrays across nodes (MPI)
- Subdivide node volume into smaller *virtual nodes*
- Spread virtual nodes across SIMD lanes
- Use OpenMP+MPI+SIMD to process conformable array operations
- Same instructions executed on many nodes, each node operates on four virtual nodes

Over decompose the subgrids

Interleave overdecomposed subvolumes in SIMD vector

*Code for single overdecomposed subvolume
with fat vector data types
Processes all subvolumes in parallel with 100% SIMD efficie*

- Conclusion: Modify data layout to align data parallel operations to SIMD hardware
- Conformable array operations simple and vectorise perfectly