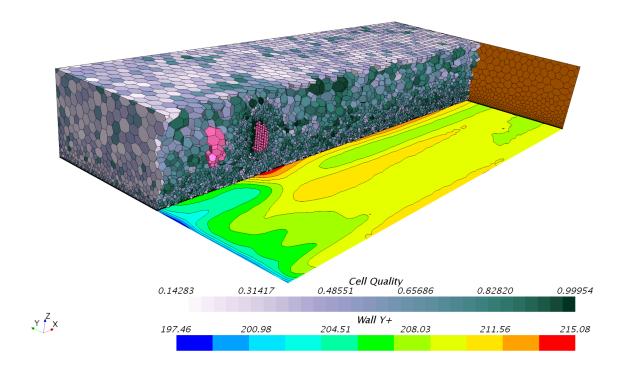
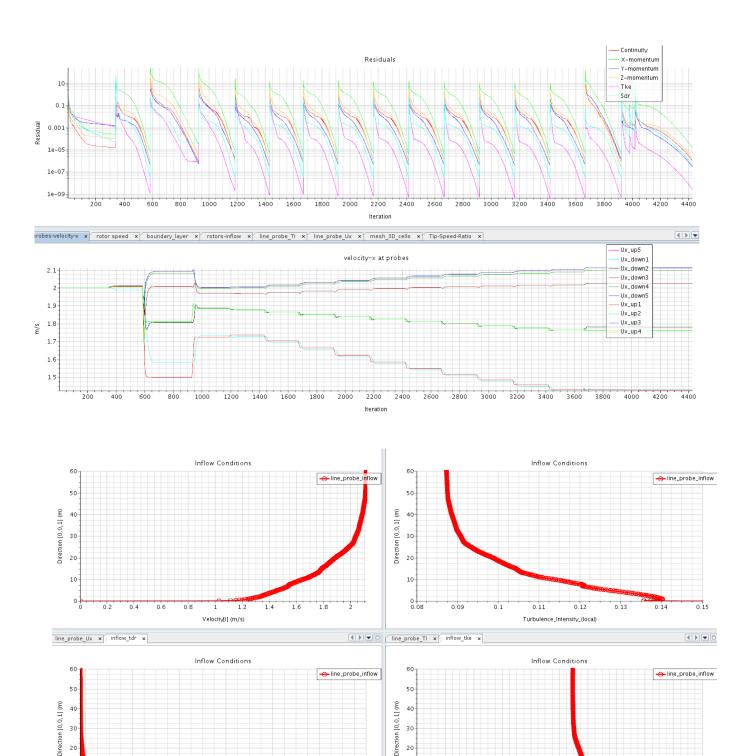
Source code at: https://github.com/nnmrec/TidalChannel

Summary: simulation of single turbine (the DOE RM1), and ABL inflow profile is prescribed, then 10 iterations of precursor simulation, the turbine is then added to the simulation, and finally the rotor speed is adjusted iteratively to match the target tip-speed-ratio





10

0.052 0.054

Turbulent Kinetic Energy (J/kg)

0.056

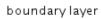
0.058

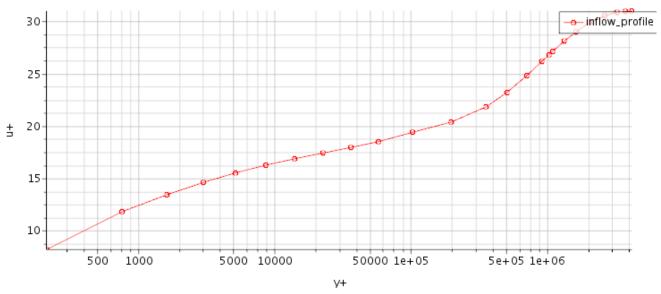
20

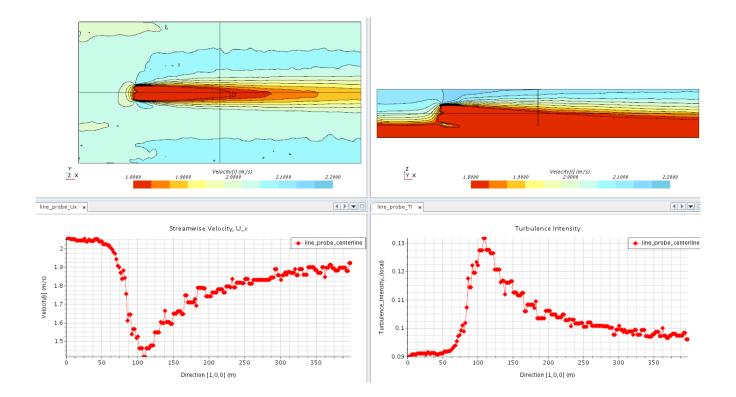
0.75

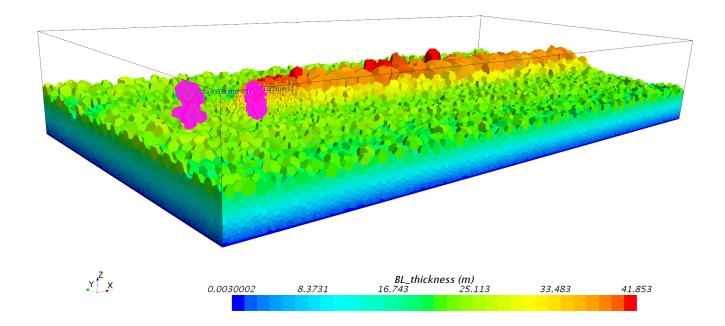
0.85

Specific Dissipation Rate (/s)









Adjoint study: the OpenTidalFarm code has been run for 2 cases: 32 turbines in grid arrangement, and then adjoint solution. Problem is that turbines overlap in the adjoint solution, so need to add some overlapping constraint to make sensible simulations in STAR-CCM+

