

California Baptist University: Formula SAE EV

Challenge

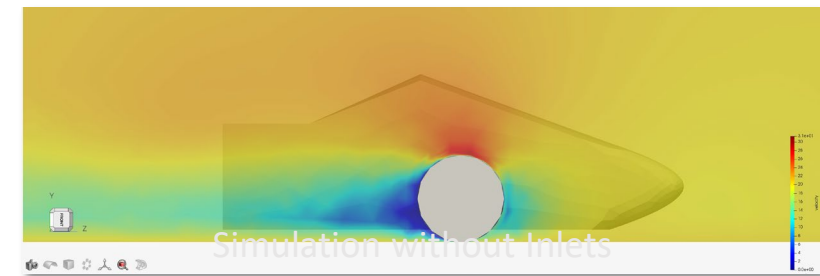
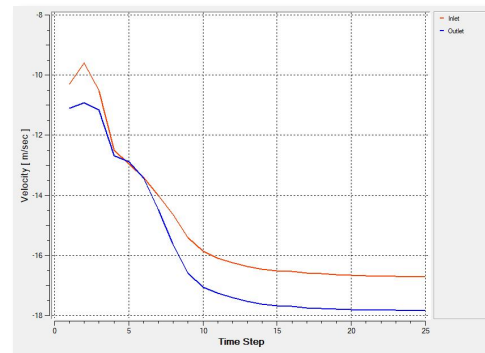
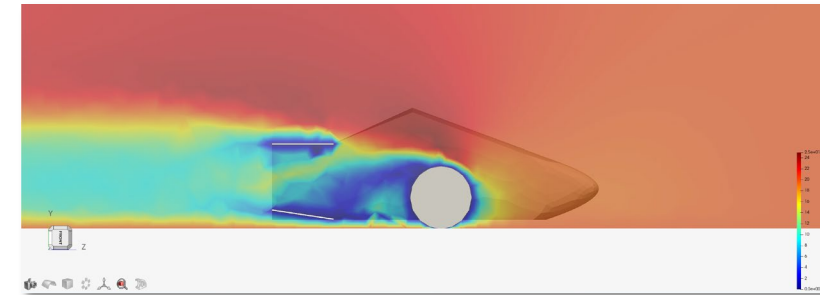
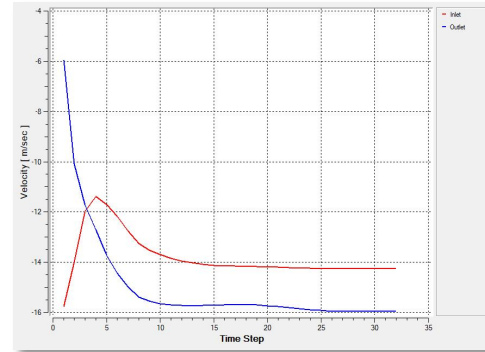
Study the effect of Radiator inlets of the formula student car on the air flow rate through the radiator.

Solution

Simulated car body including the radiator inlets to observe the drag and lift generated as well as the center point inlet and outlet airspeeds using Altair AcuSolve.

Value

- Simulation solution data helped prove that radiator inlet scoops provided a negligible improvement of mass flow rate through the radiators
- Helped to simplify vehicle design and, by extension, manufacturing process



“Altair was a critical tool in the design and validation of our vehicle’s aerodynamic performance, enabling us to optimize performance and vehicle weight.”