

How CFD was used to shape the BLOODHOUND SuperSonic Car

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The recently unveiled BLOODHOUND SSC has been developed over the past 18 months and the design evolution of its exterior geometry has been driven largely by the CFD analysis provided by a team at C2EC, Swansea University. The technology employed is a state of the art unstructured grid finite volume compressible fluid solver. The car's aerodynamic behaviour has been considered over a range of Mach numbers from 0.5 up to 1.5 leading to an extremely detailed prediction of how the car will respond during its desert runs scheduled to take place between 2009 and 2011. This analysis has allowed the BLOODHOUND SSC design team to overcome a wide range of problems including drag reduction, pitch and yaw response sensitivity, intake duct design and wheel design.