

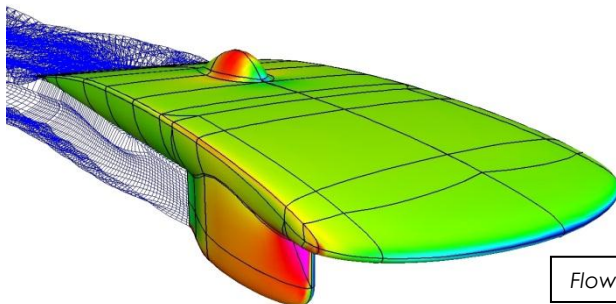
## Racing Down Under

The World Solar Challenge is a celebration of achievement, of courage and the application of scientific knowledge in the field of solar technology. Its entrants will traverse more than 3,000km of the Australian continent from tropical Darwin to balmy Adelaide, in cars powered only by the sun.

The World Solar Challenge promotes and celebrates education and technical excellence and draws attention to the imperatives of sustainable transport. To design and build a car capable of crossing Australia on the power of daylight, comprehends the most innovative research and development of alternative transport technologies. The World Solar Challenge attracts teams and individuals from corporations and universities all over the world.

In 2001 the Alpha Centauri Team was the first Dutch team to build a solar car and to enter The World Solar Challenge. Their car, called NUNA, has been designed and build for speed. The most distinctive part of solar cars are the bodies. A good vehicle shape can save hundreds of watts of power and is essential to building a top solar car. The main goals when designing the body are to minimize the aerodynamic drag, maximize the exposure to solar insolation, minimize weight, and maximize safety. There are many theories on what body shape and size is the most efficient.

In collaboration with the Technical University of Delft and FlowMotion the Alpha Centauri Team has spent countless hours running simulations and wind tunnel tests trying to find the optimal shape. This has resulted in a body design which not only has minimal aerodynamic drag, but also provides stable road holding. During the race, which is held on public roads, the solar cars will encounter so-called road trains. The air displacement of these giant trucks can seriously affect the course of the nimble solar cars.



Flow Simulations



Road Train



Alpha Centauri Team



Wind Tunnel Tests

A budget of 1 million euro and 18 months of back-breaking work by the team and supporting companies and organisations have paid off: on November 21st, after 4 days of racing, the Alpha Centauri Team crossed the finish line in Adelaide in leading position. With this victory the Alpha Centauri team has shattered Honda's eight-year-old speed record, their average speed being 91.8 km/h. The team intends to return in 2003 and defend its title.