

ISAE SUPAERO
INSTITUT SUPÉRIEURE DE L'AÉRONAUTIQUE ET DE
L'ESPACE

Example title

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Internship Report

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Chapter 1

2D steady simulations

The initial goal was to identify the factors that contribute to the VMG's superior efficiency compared to the R1V4 and make the necessary adjustments.

The first step involved identifying the parameters that respond to various flight conditions. Following that, a low-fidelity approach using XFLR5 was employed to compute the 2D aerodynamic coefficients, providing insights into the disparities between the airfoils. Subsequently, Fluent CFD software was utilized to obtain a more precise assessment of the aerodynamic coefficients for each airfoil during actual flight conditions.

This is a reference to an article [?].

1.1 Kite flight modelling

Example

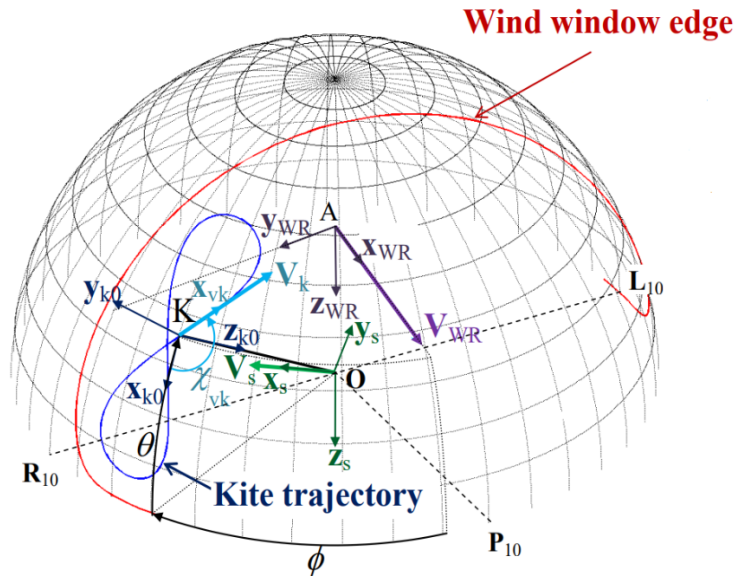


Figure 1.1: Speeds & angles decomposition

1.2 The different phases

Example

1.2.1 The upwind

example

1.2.2 The downwind

Example

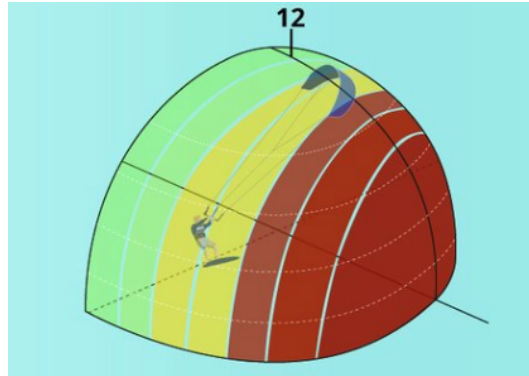


Figure 1.2: The wind window

1.3 Experimental data

| | $\alpha_{s,WT}(^\circ)$ | $V_{WT}(knots)$ | $V_S(knots)$ |
|----------|-------------------------|-----------------|--------------|
| Upwind | 39,5 | 14,0 | 22,5 |
| Downwind | 155,0 | 14,0 | 31,5 |

Table 1.1: Average data from Axel's race

Chapter 2

Título do Anexo

2.1 Secção

Example

2.2 Mais uma secção do Anexo ??

Example