**Body Fz Lift** as a Function of **AoA, Skew and Airspeed**

Completed on 7/03/2023

Using lift\_body.m

## Wind Tunnels Test Data Used:

* Aicraft without wing, pusher, elevator, hover props --> LP4

## Modifications to data

* Removing entries with non-zero control surfaces
* Removing entries with non-zero pusher motor
* Removing entries with non-zero hover motor command
* Removing entries with angle of attack higher than 15 deg --> Remove stall condition (non-linear)

## Fit

% Fz = -1.569286184145456E-3\*cos(skew)+5.989835400355119E-3+-2.346715949355502E-1\*alpha+6.611857425073364E-2\*alpha^2)\*V^2

