OpenMDAO Optimization Report for Problem RunOAS

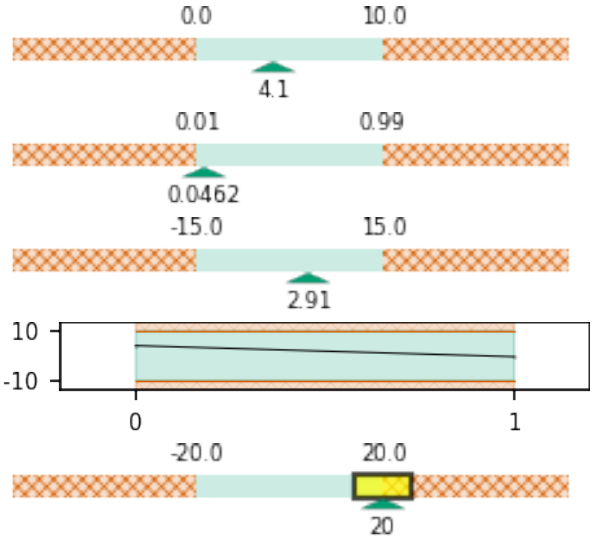
OpenMDAO Optimization Report for Problem RunOAS (All values are in unscaled, physical units)

Problem:	RunOAS
Script:	RunOAS.py
Optimizer:	ScipyOptimize_SLSQP
Number of driver iterations:	18
Number of model evals:	18
Number of deriv evals:	15
Execution start time:	2025-06-08 13:40:57
Wall clock run time:	00 hours 00 minutes 00 seconds 396.5 milliseconds
Exit status:	SUCCESS

Objectives

name	val	ref	ref0	adder	scaler	units
flight_condition_0.wing_perf.CD	[1.0805206]	0.01			100.0	

Design Variables

name	alias	size	min	max	mean	lower	upper	equals	ref	ref0	units	visual
alpha		1	4.1	4.1	4.1	0	10		1	0	deg	
wing.taper		1	0.0462	0.0462	0.0462	0.01	0.99		1	0		
wing.dihedral		1	2.91	2.91	2.91	-15	15		1	0		
wing.twist_cp		2	|-0.2|	|4.33|	|2.07|	-10	10		1	0		
wing.sweep		1	20	(20)	20	-20	20		1	0		

Constraints

name	alias	size	min	max	mean	lower	upper	equals	ref	ref0	units	visual
flight_condition_0.wing_perf.CL		1	0.5	0.5	0.5			0.5	1	0		Both lower and upper bounds are None.

Optimizer settings

Setting	Val	Description
debug_print	[]	List of what type of Driver variables to print at each iteration.
invalid_desvar_behavior	warn	Behavior of driver if the initial value of a design variable exceeds its bounds. The default value may beset using the 'OPENMDAO_INVALID_DESVA
optimizer	SLSQP	Name of optimizer to use
tol	1e-06	Tolerance for termination. For detailed control, use solver-specific options.
maxiter	200	Maximum number of iterations.
disp	True	Set to False to prevent printing of Scipy convergence messages
singular_jac_behavior	warn	Defines behavior of a zero row/col check after first call tocompute_totals:error - raise an error.warn - raise a warning.ignore - don't perform check.

Setting	Val	Description
singular_jac_tol	1e-16	Tolerance for zero row/column check.