OpenMDAO Optimization Report for Problem RunOAS

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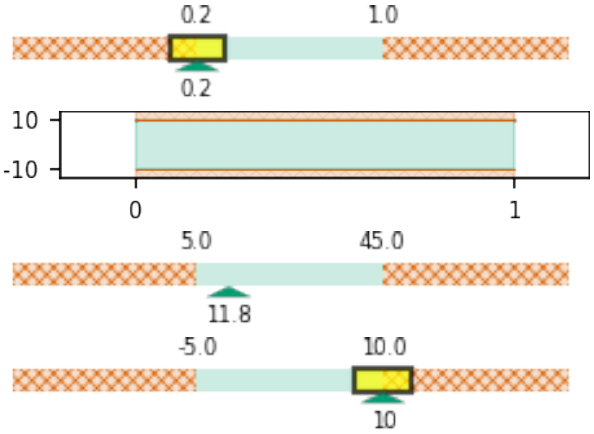
Problem:	RunOAS
Script:	RunOAS.py
Optimizer:	ScipyOptimize_SLSQP
Number of driver iterations:	152
Number of model evals:	152
Number of deriv evals:	26
Execution start time:	2026-02-02 23:38:07
Wall clock run time:	00 hours 00 minutes 03 seconds 534.9 milliseconds
Exit status:	FAIL

Objectives

name	val	ref	ref0	adder	scaler	units
flight_condition_0.wing_perf.CD	[12.20318296]	0.01			100.0	

Design Variables

name	alias	size	min	max	mean	lower	upper	equals	ref	ref0	units	visual
wing.taper		1	(0.2)	0.2	0.2	0.2	1		1	0		
wing.twist_cp		2	|10|	(|10|)	|10|	-10	10		1	0		
wing.sweep		1	11.8	11.8	11.8	5	45		1	0	deg	
alpha		1	10	(10)	10	-5	10		1	0	deg	

Constraints

name	alias	size	min	max	mean	lower	upper	equals	ref	ref0	units	visual
flight_condition_0.wing_perf.CL		1	0.806	0.806	0.806			2	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.
singular_jac_tol	1e-16	Tolerance for zero row/column check.