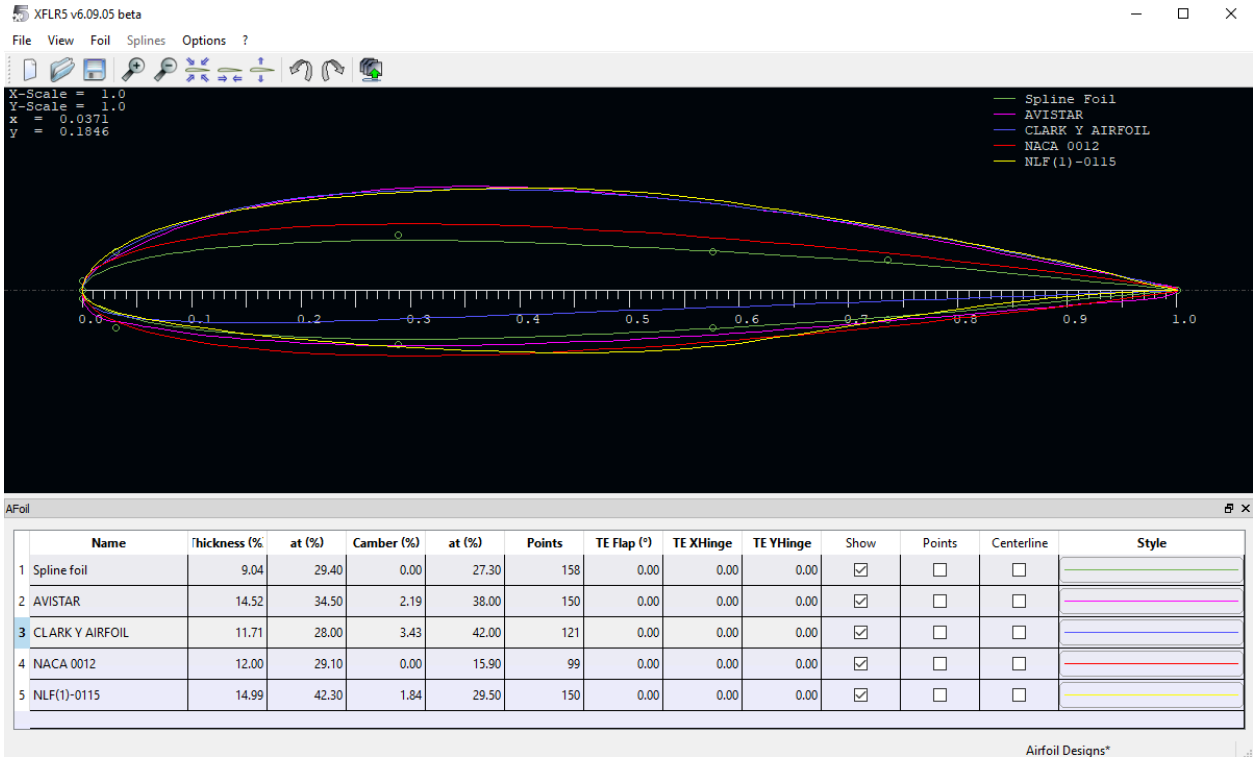
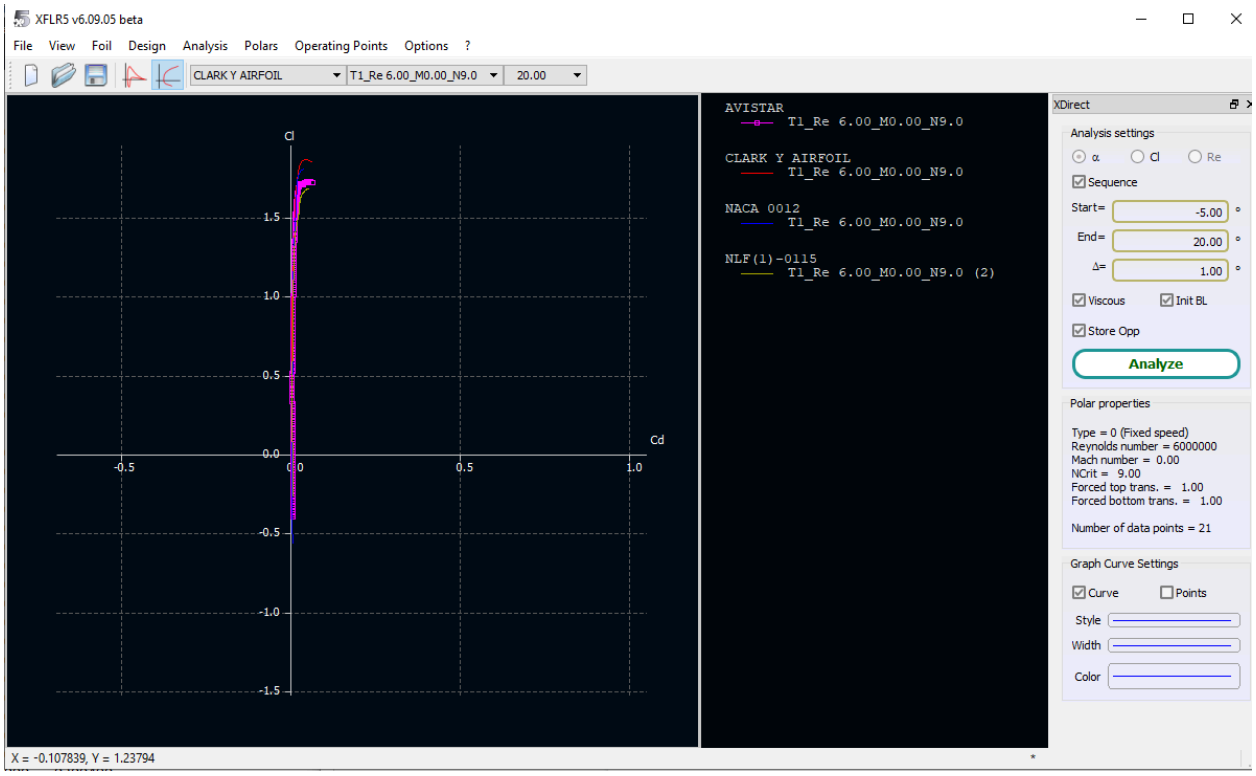
Airfoil Design

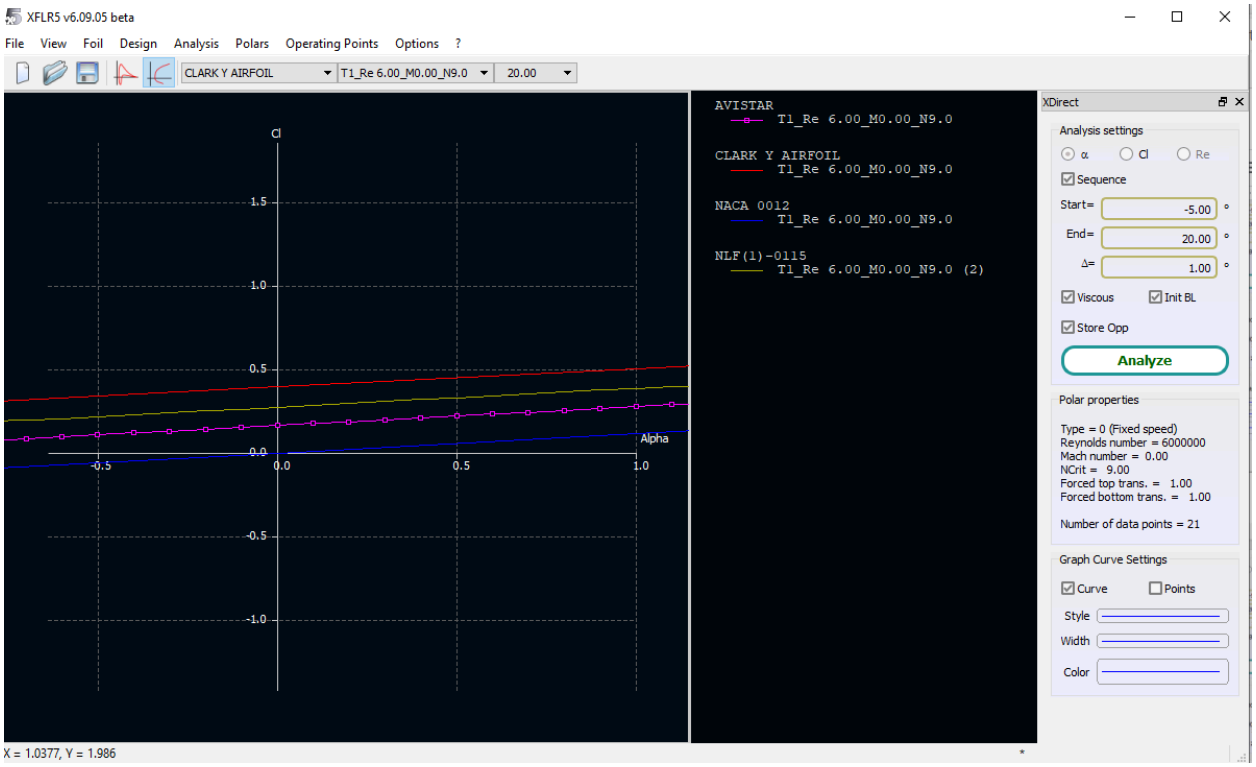


	Name	Thickness (%	at (%)	Camber (%)	at (%)	Points	TE Flap (°)	TE XHinge	TE YHinge	Show	Points	Centerline	Style
1	Spline foil	9.04	29.40	0.00	27.30	158	0.00	0.00	0.00	☑	☐	☐	
2	AVISTAR	14.52	34.50	2.19	38.00	150	0.00	0.00	0.00	☑	☐	☐	
3	CLARK Y AIRFOIL	11.71	28.00	3.43	42.00	121	0.00	0.00	0.00	☑	☐	☐	
4	NACA 0012	12.00	29.10	0.00	15.90	99	0.00	0.00	0.00	☑	☐	☐	
5	NLF(1)-0115	14.99	42.30	1.84	29.50	150	0.00	0.00	0.00	☑	☐	☐	

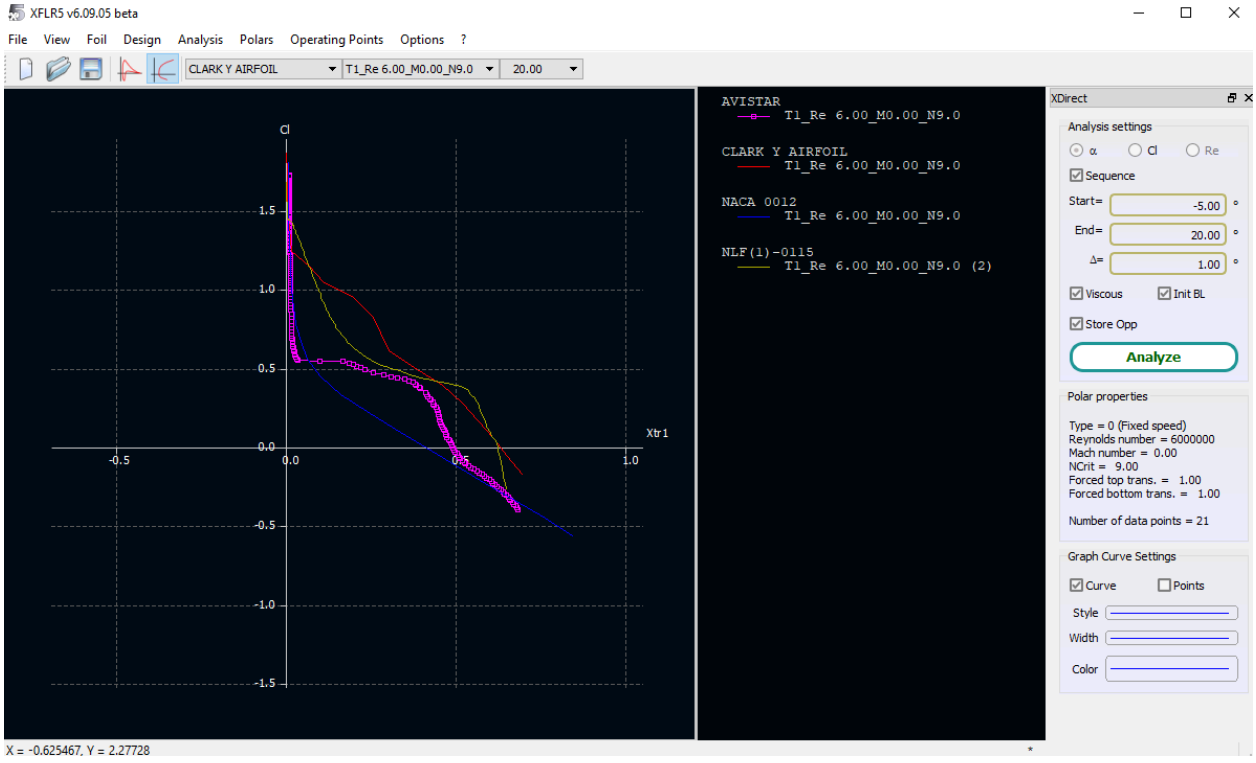
Cl vs Cd



Cl vs Alpha



Cl vs Xtr.



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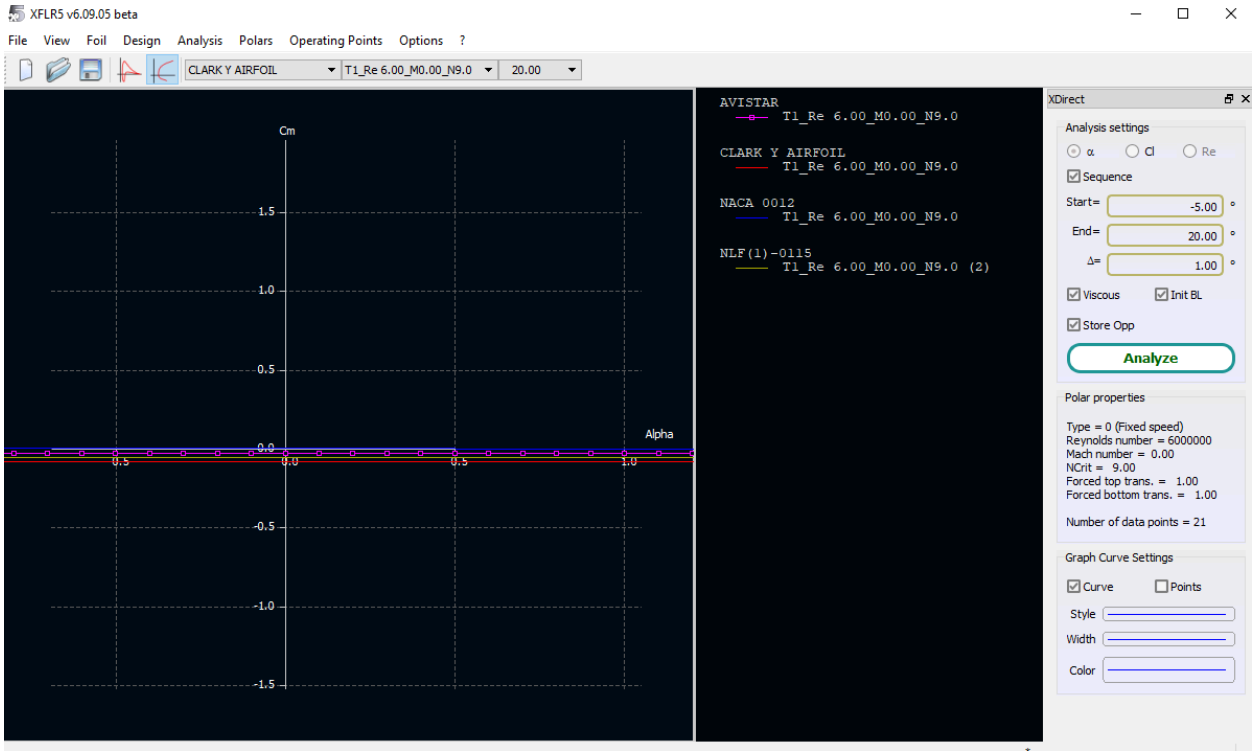
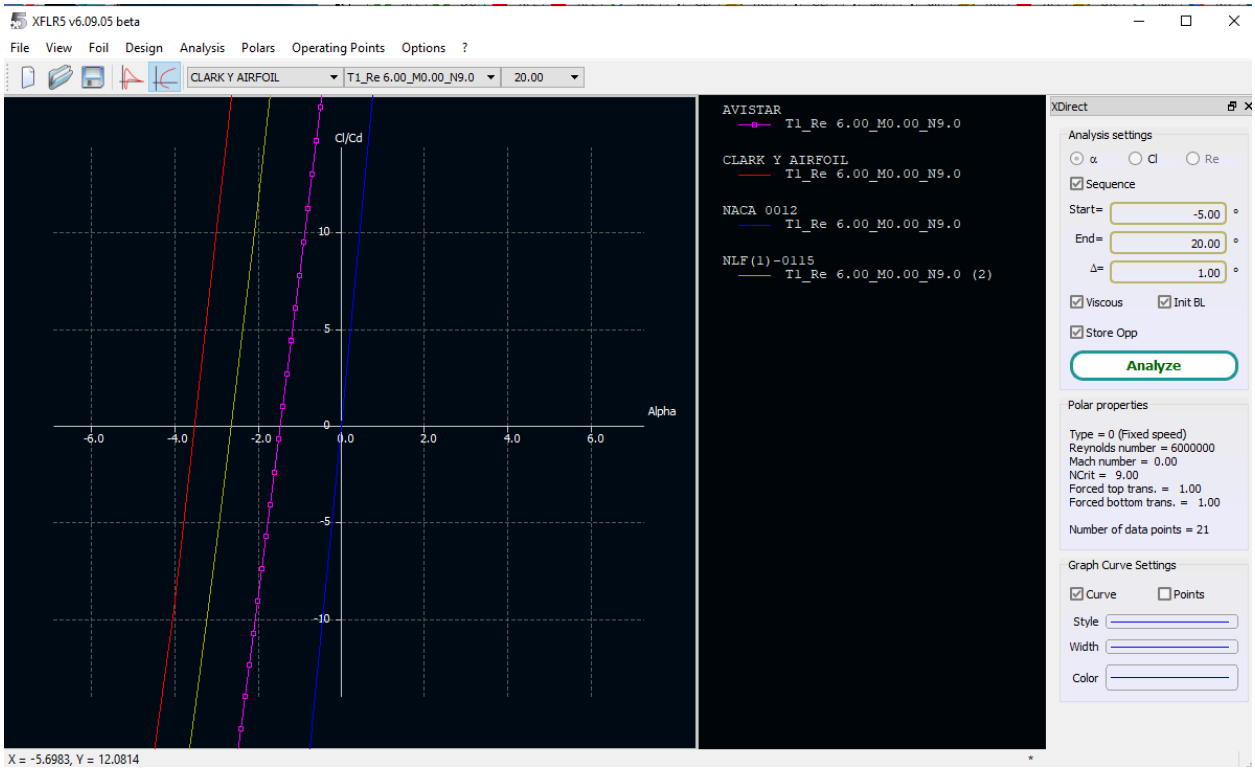
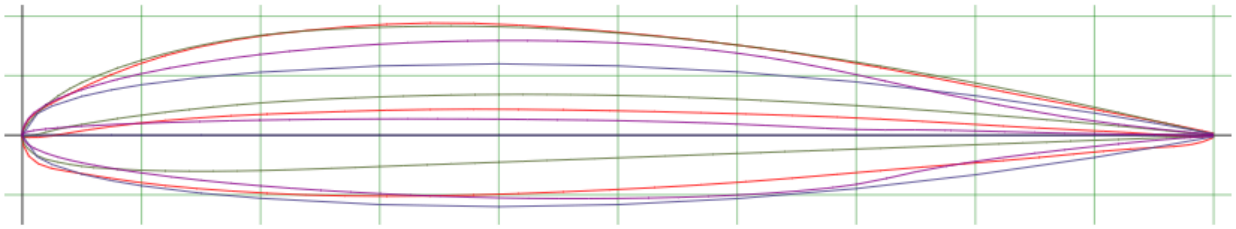
Cm vs Alpha



Glide ratio vs Alpha





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2032c-il - 20-32(Add airfoil

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SVG image as text file

Clear all

(avistar-il) AVISTAR
Hobbico R/C Avistar trainer airfoil
Max thickness 14.5% at 34.2% chord
Max camber 2.3% at 37.9% chord
Remove
Airfoil details
Airfoil plotter

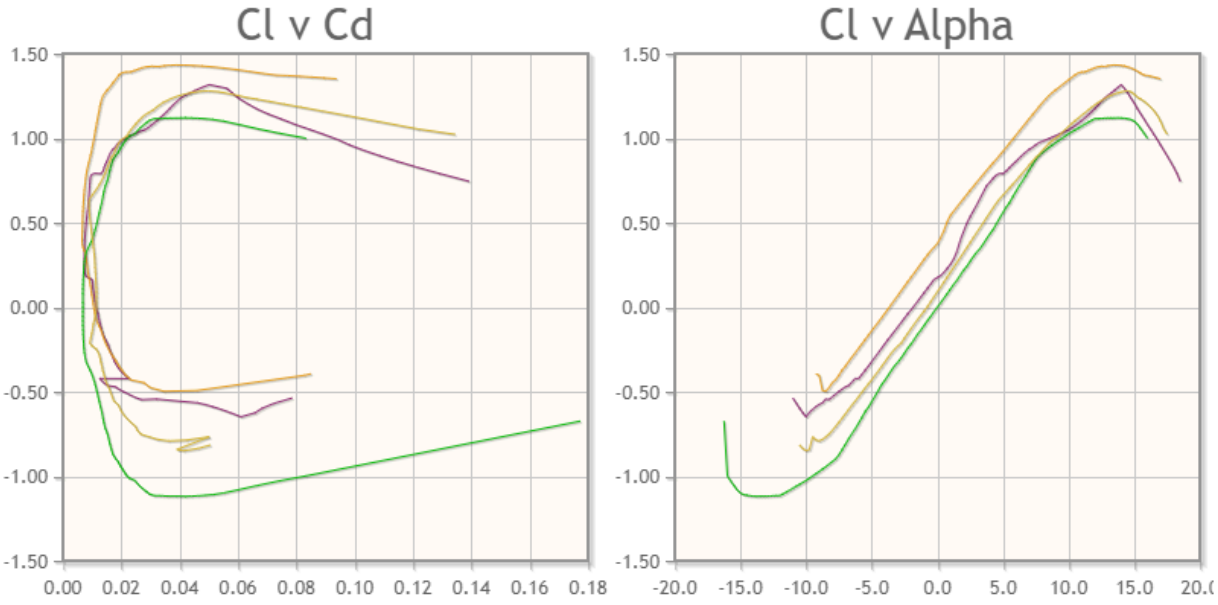
(clarky-il) CLARK Y AIRFOIL
CLARK Y airfoil
Max thickness 11.7% at 28% chord
Max camber 3.4% at 42% chord
Remove
Airfoil details
Airfoil plotter

(naca001264-il) NACA 0012-64
NACA 0012-64 airfoil
Max thickness 12% at 40% chord
Max camber 0% at 0% chord
Remove
Airfoil details
Airfoil plotter

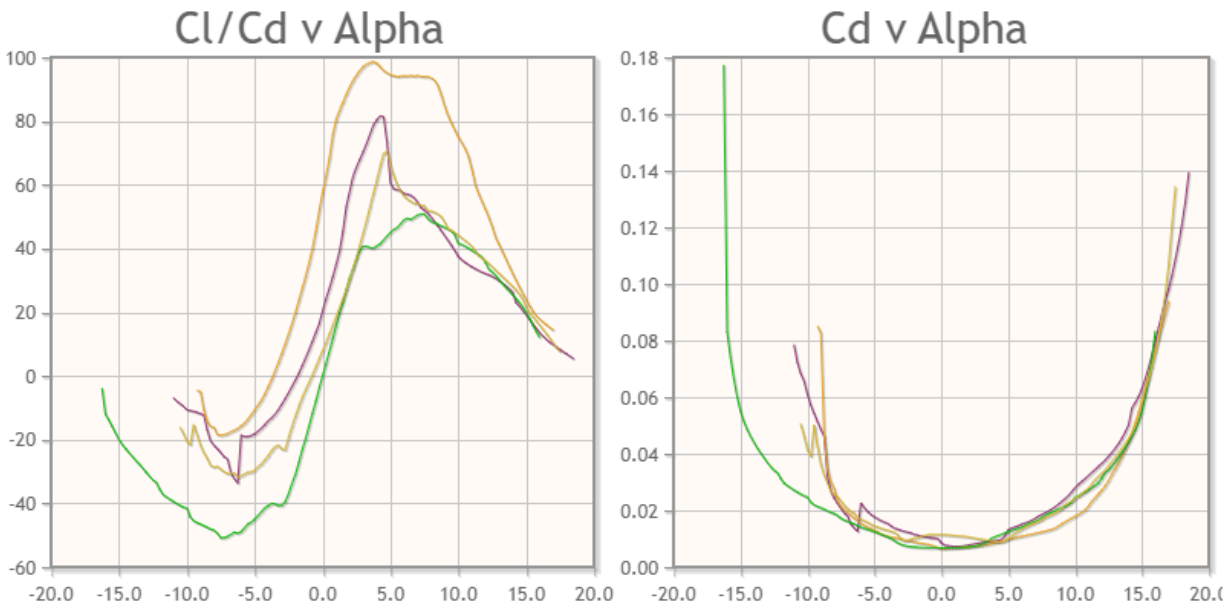
(hsnlf213-il) HSNLF(1)-0213 AIRFOIL
NASA/Langley HSNLF(1)-0213 high speed natural laminar flow airfoil
Max thickness 13.3% at 42.4% chord
Max camber 1.4% at 32.4% chord
Remove
Airfoil details
Airfoil plotter

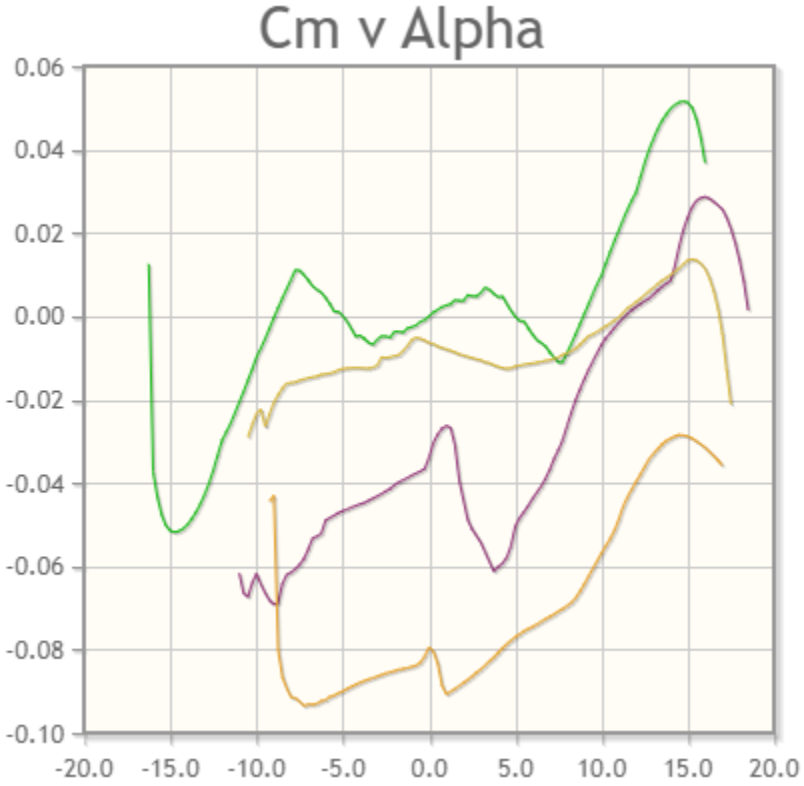
Graph Color Key

O = Avistar
O = Clark Y
O = Symmetric
O = Laminar



- Clark Y -> highest coefficient of lift for coefficient of drag, highest coefficient of lift for aoa


Cl/Cd v Alpha
100
80
60
40
20
0
-20
-40
-60
-20.0 -15.0 -10.0 -5.0 0.0 5.0 10.0 15.0 20.0
Cd v Alpha
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
-20.0 -15.0 -10.0 -5.0 0.0 5.0 10.0 15.0 20.0


Cm v Alpha
0.06
0.04
0.02
0.00
-0.02
-0.04
-0.06
-0.08
-0.10
-20.0 -15.0 -10.0 -5.0 0.0 5.0 10.0 15.0 20.0