

ATEN COBRAVMEC runs

Preliminary Scoping

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8 Initial cases are inspected

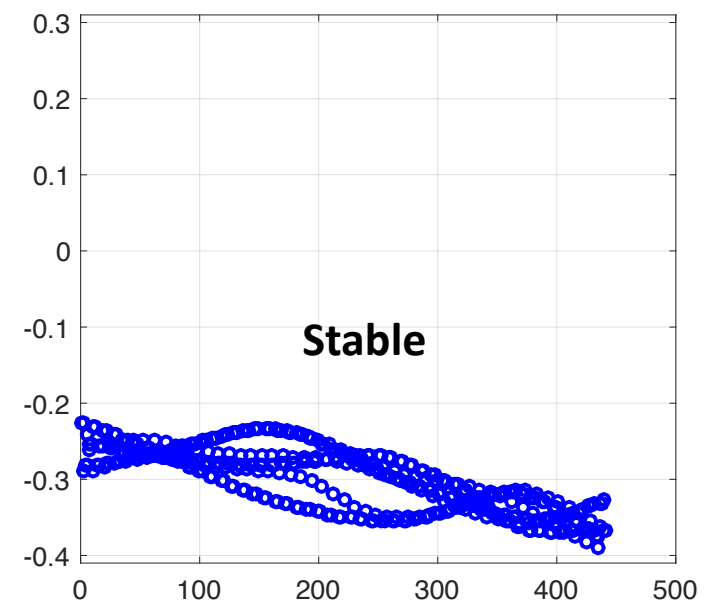
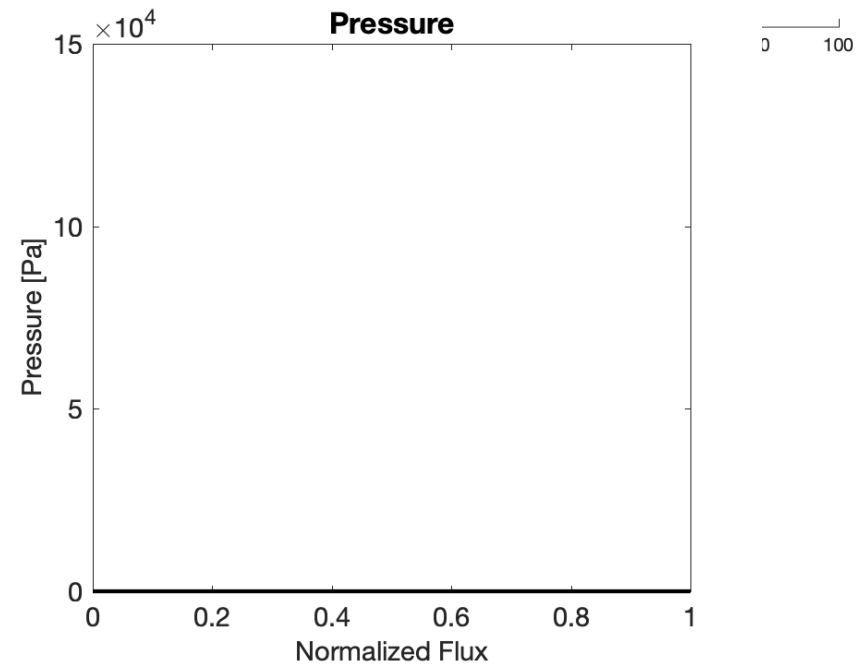
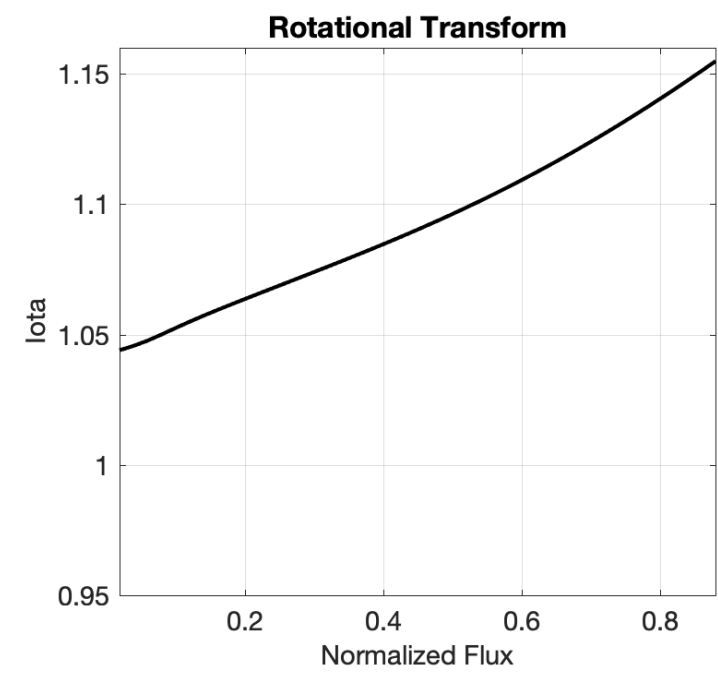
- ATEN, 0 Beta, 0 Current
- ATEN, 0.8% Beta, 0 Current
- ATEN, 0.8% Beta, JBS (SFINCS)
- ATEN, 1.7% Beta, JBS
(Doubling the pressure profile, keeping the original JBS)
- ATEN, 1.7% Beta, 2xJBS
(Doubling both the pressure and current profiles)
- ATEN, 2.5% Beta, 3xJBS
(Tripling both the pressure and current profiles)

The “ATEN_0007_mod_1” configuration has a 16% smaller volume, with a LCFS definition that excludes the 8/7 island chain.

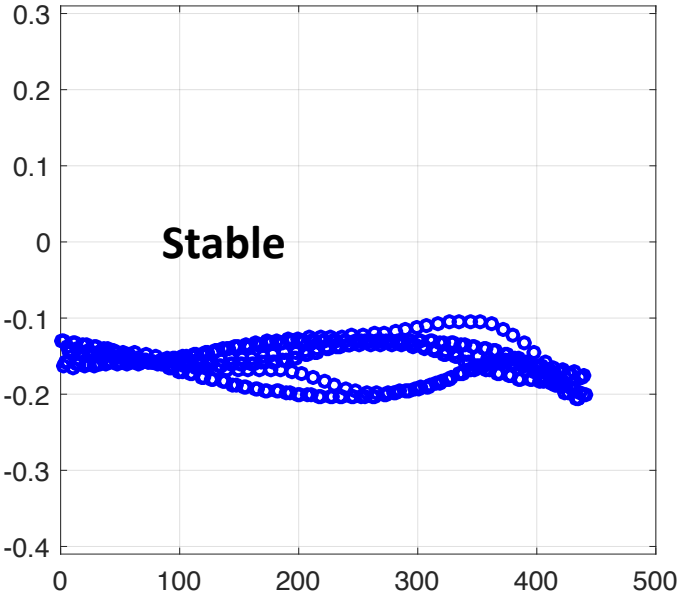
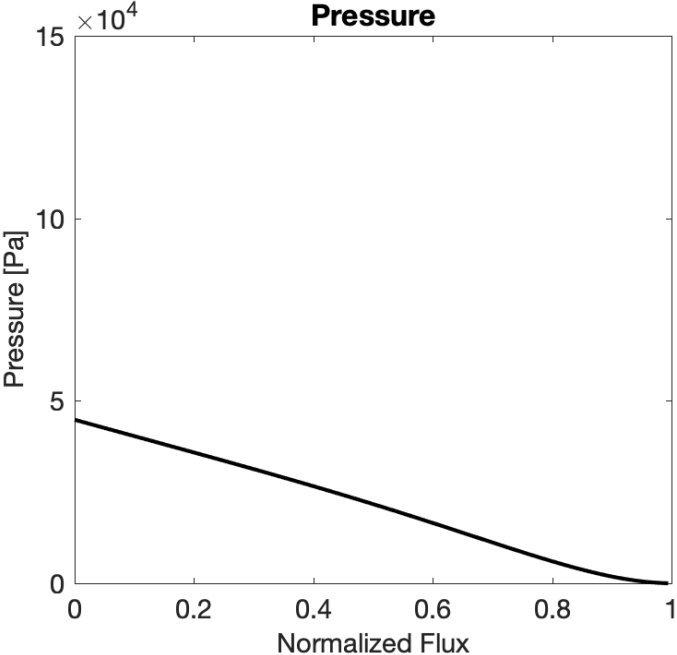
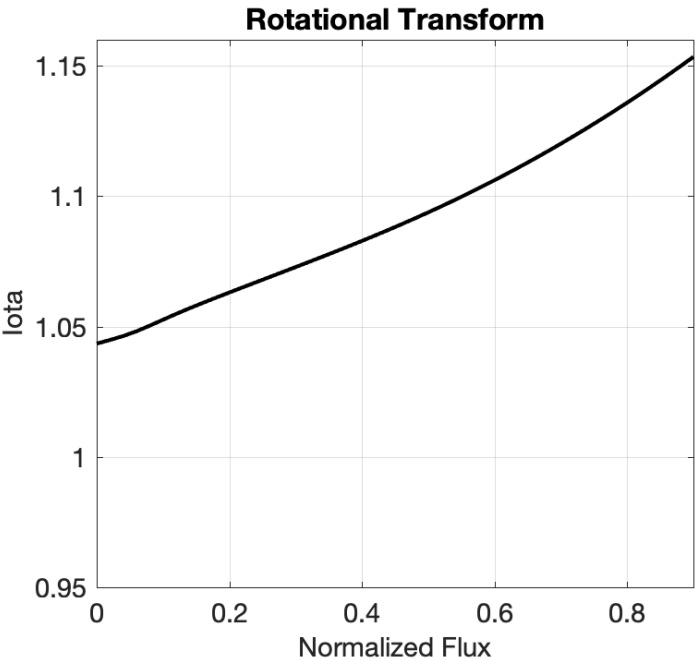
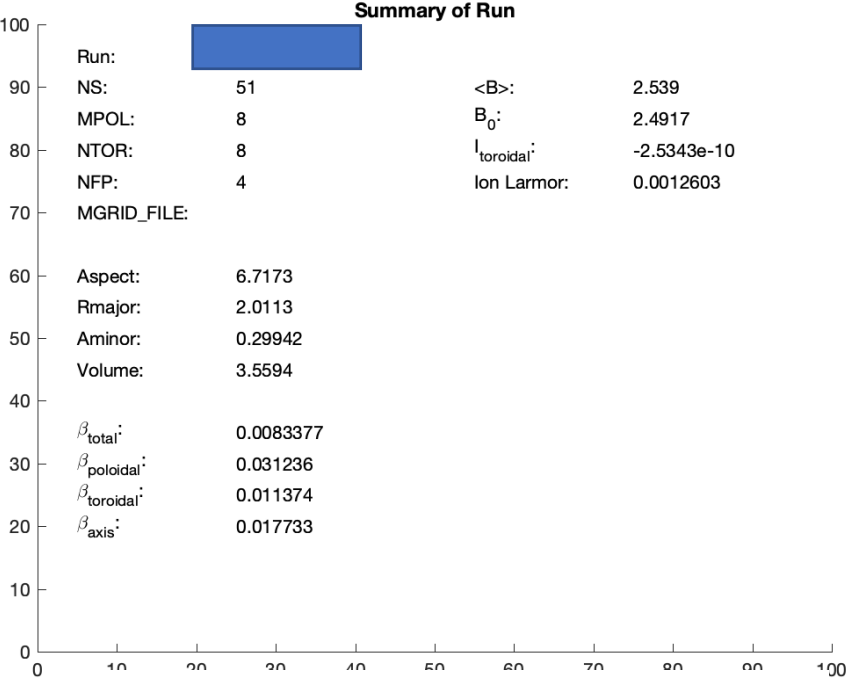
- ATEN_0007_mod_1, 1.8% Beta, 2xJBS
- ATEN_0007_mod_1, 2.7% Beta, 3xJBS

ATEN, 0 Beta, 0 Current

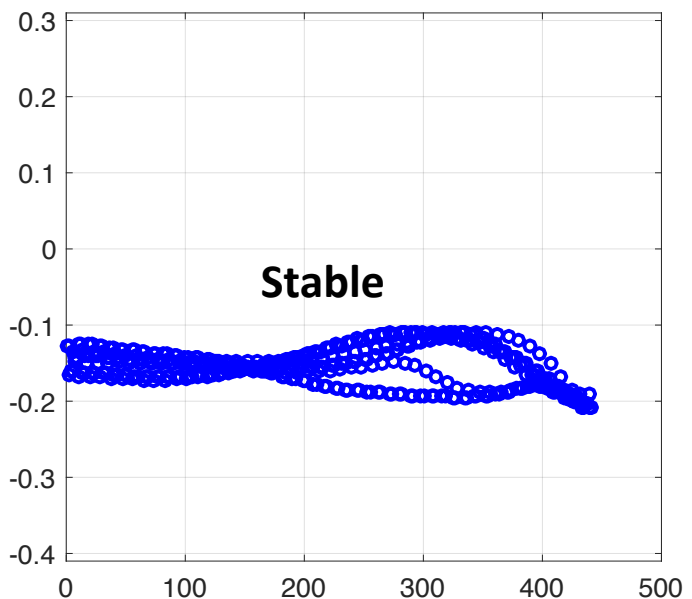
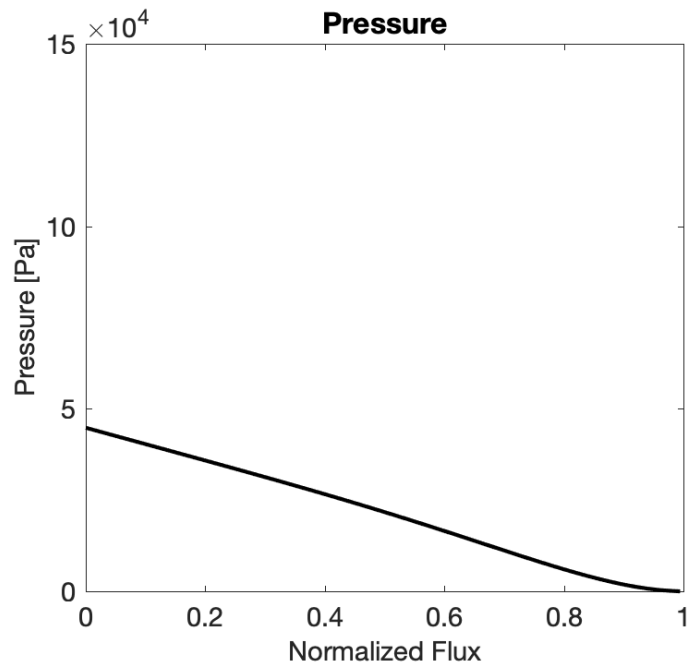
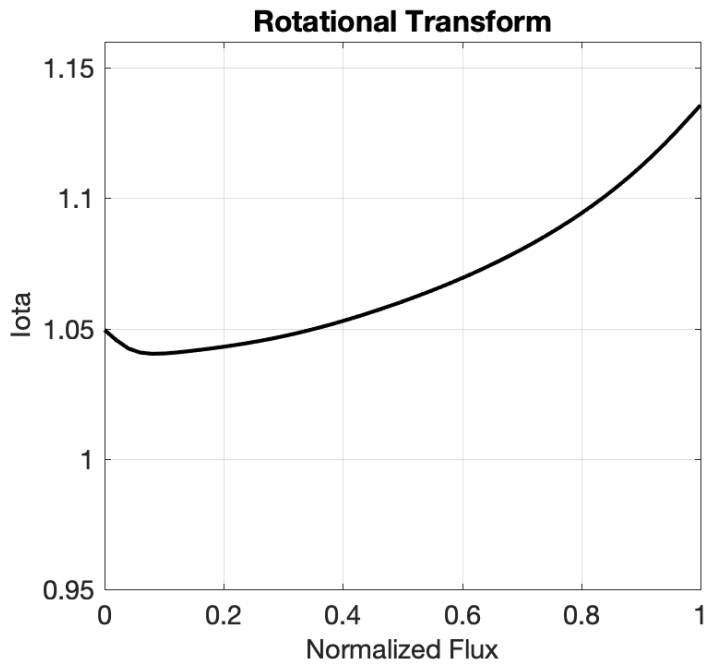
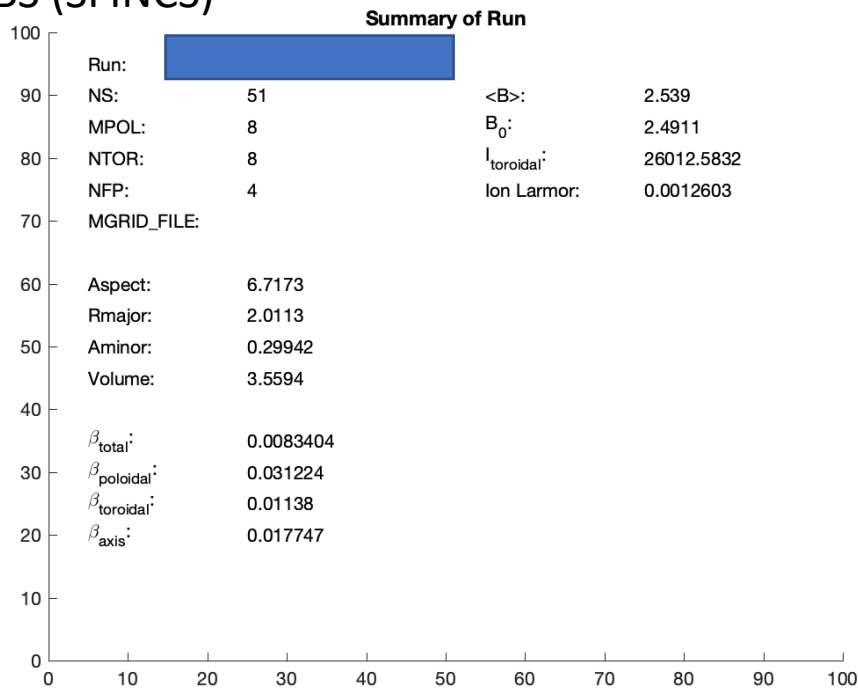
Summary of Run			
Run:			
NS:	51	:	2.539
MPOL:	8	B ₀ :	2.5052
NTOR:	8	I _{toroidal} :	-1.5087e-09
NFP:	4	Ion Larmor:	0.0012603
MGRID_FILE:			
Aspect:	6.7173		
Rmajor:	2.0113		
Aminor:	0.29942		
Volume:	3.5594		
β _{total} :	0		
β _{poloidal} :	0		
β _{toroidal} :	0		
β _{axis} :	0		



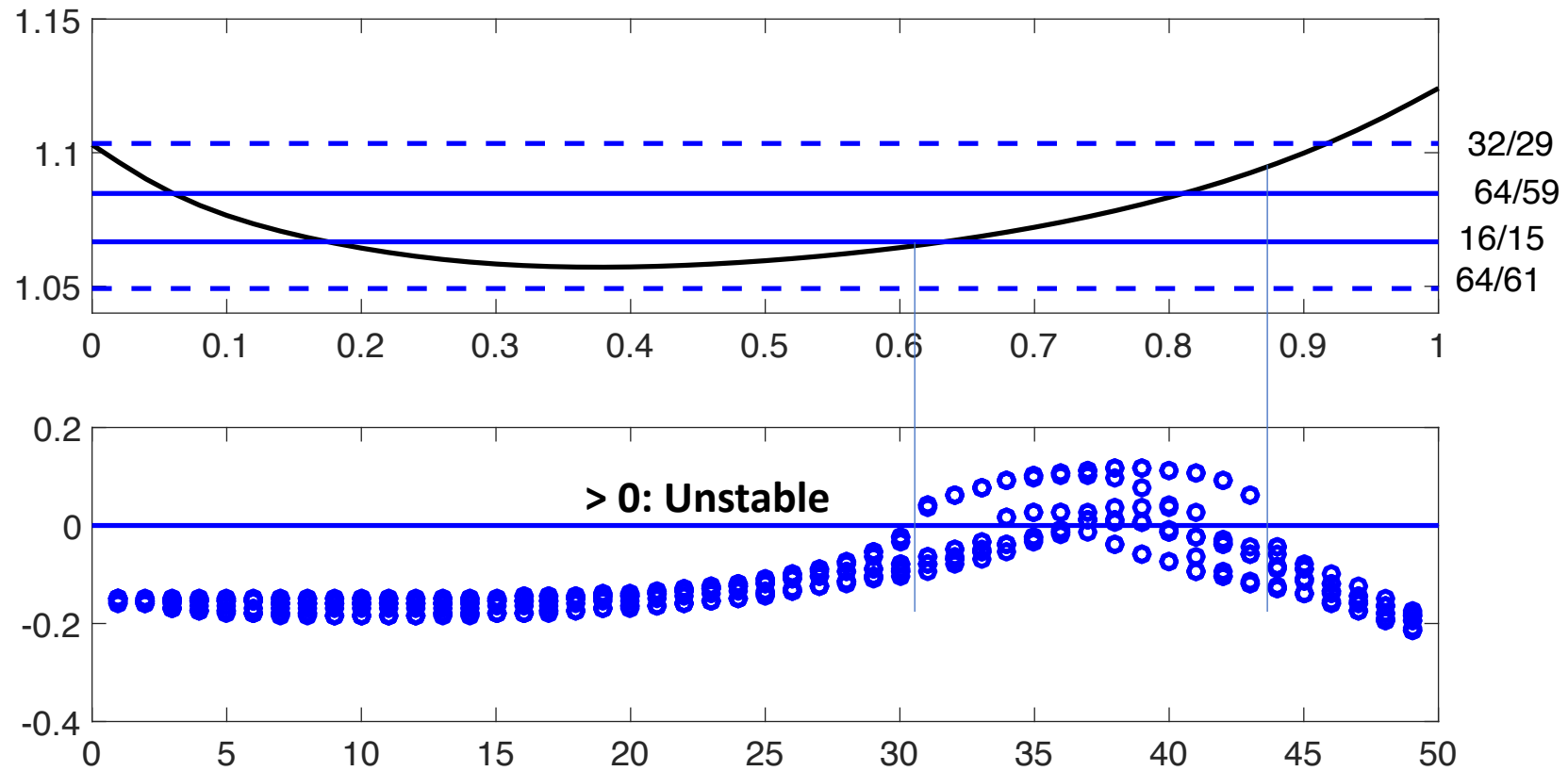
ATEN, 0.8% Beta, 0 Current



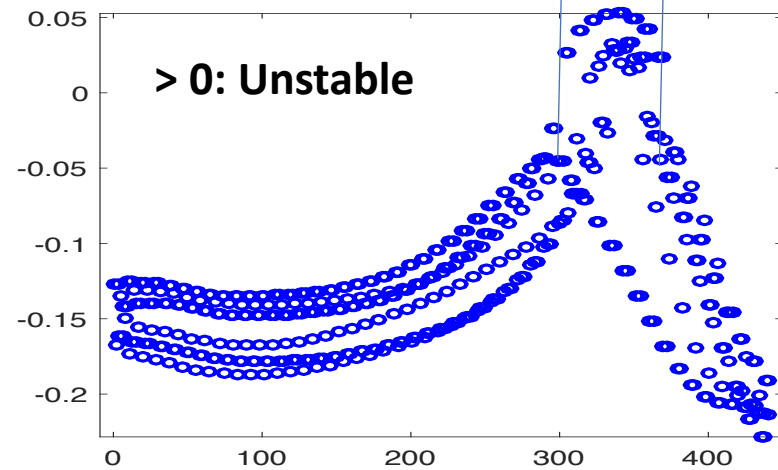
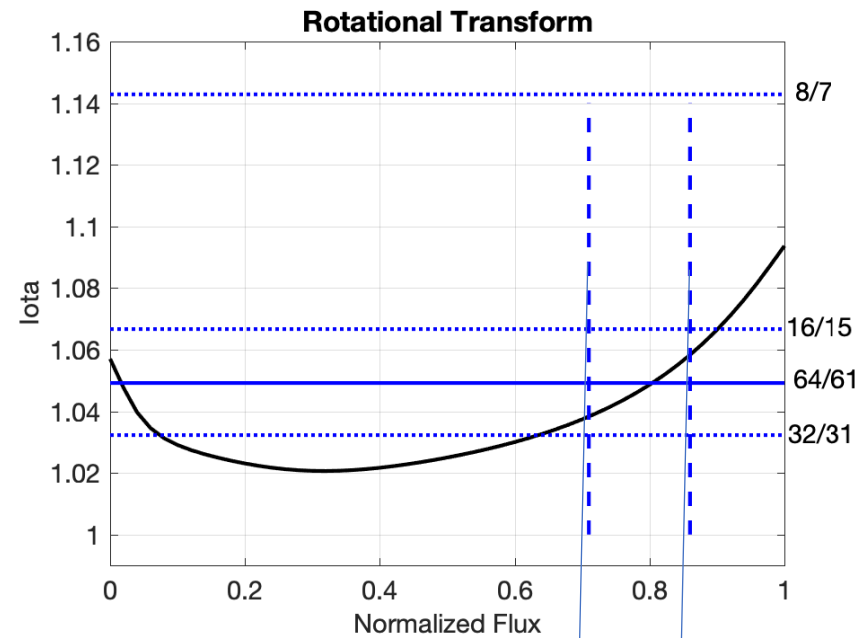
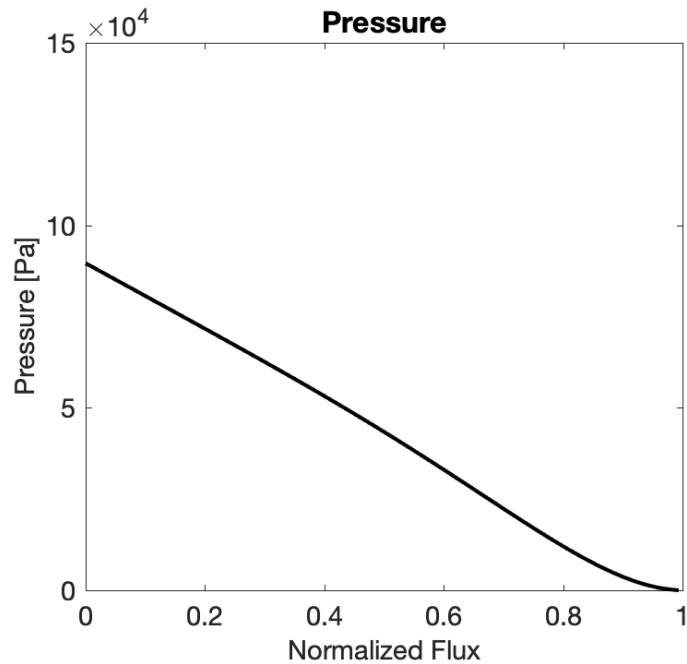
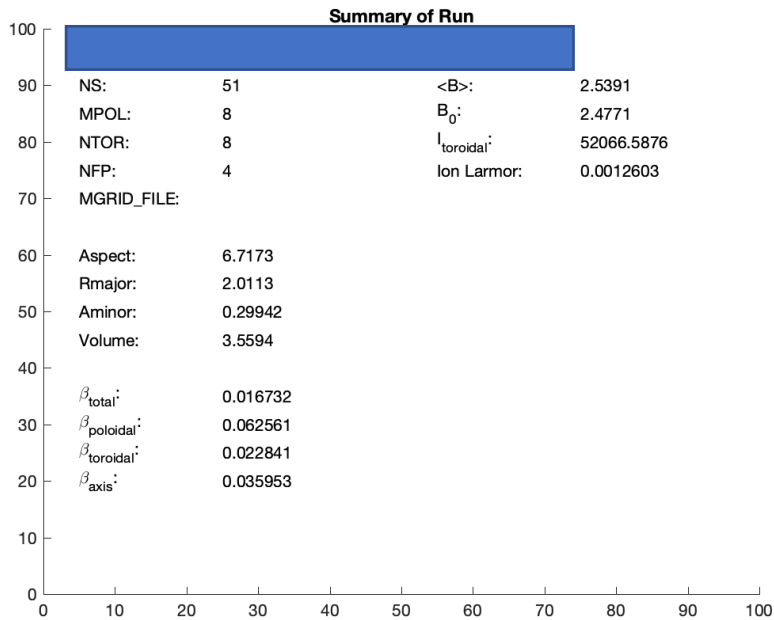
ATEN, 0.8% Beta, JBS (SFINCS)



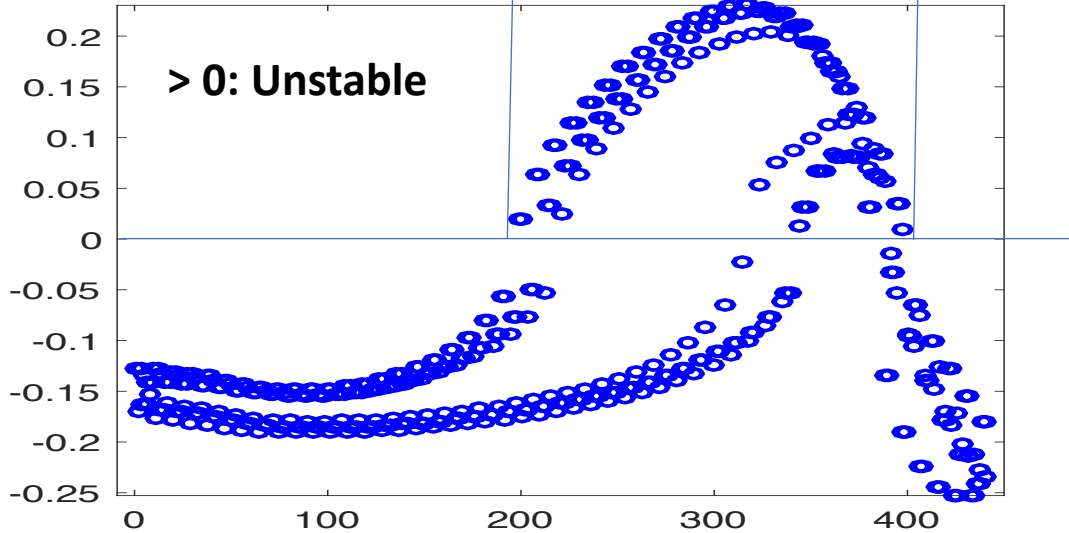
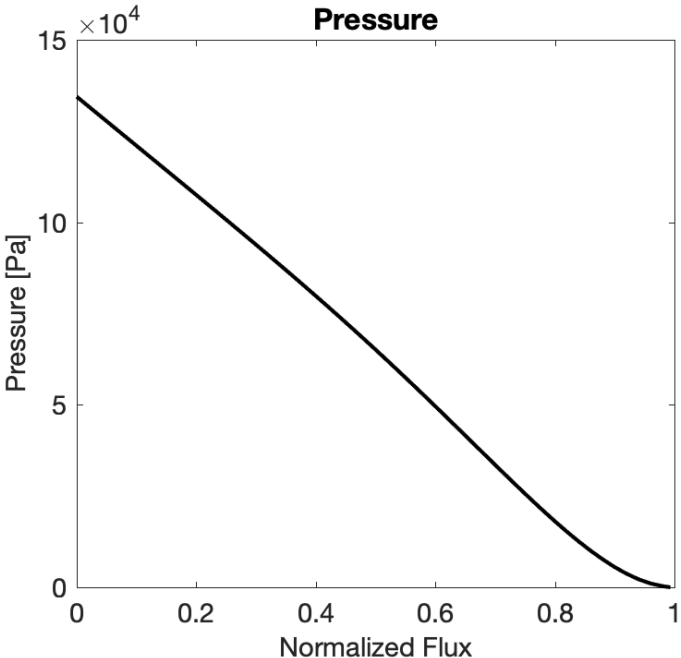
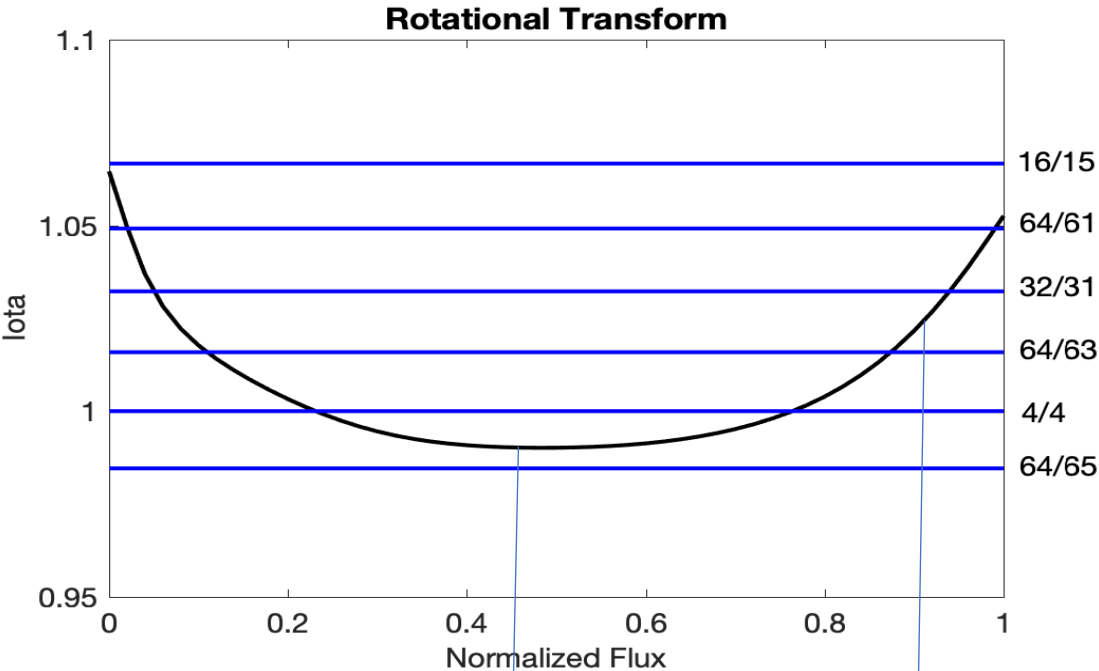
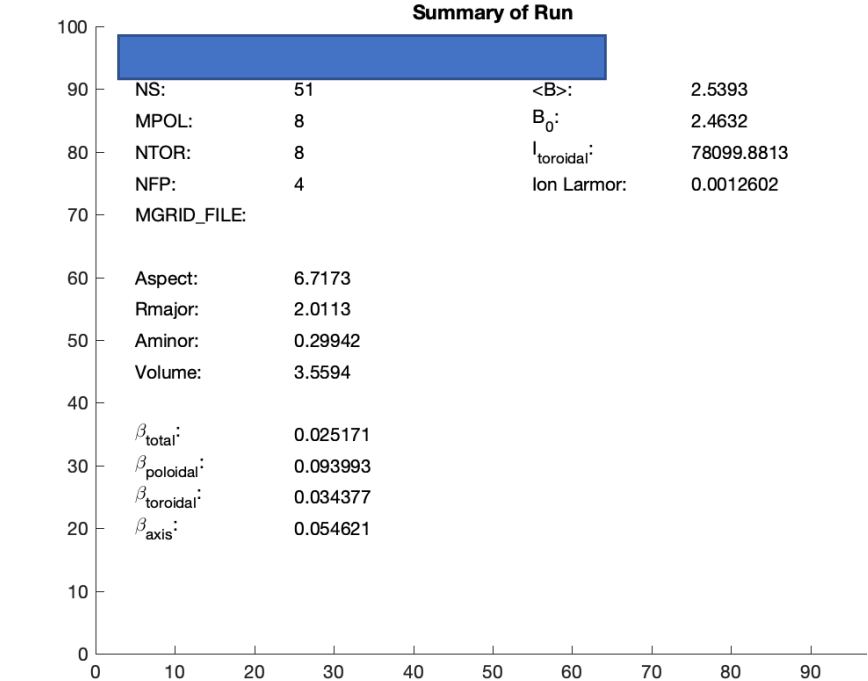
1.7% beta, original SFINCS JBS



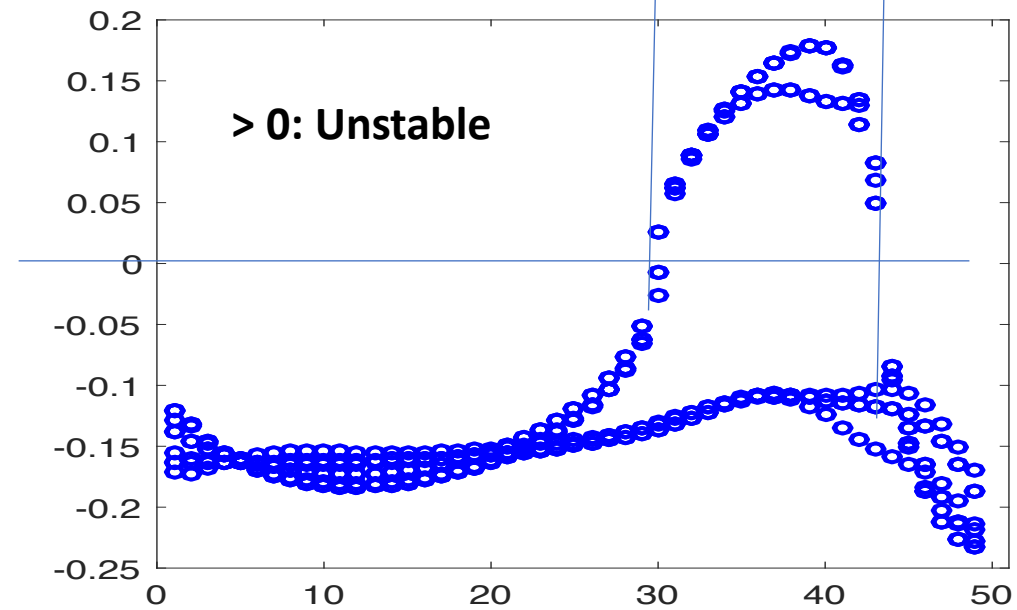
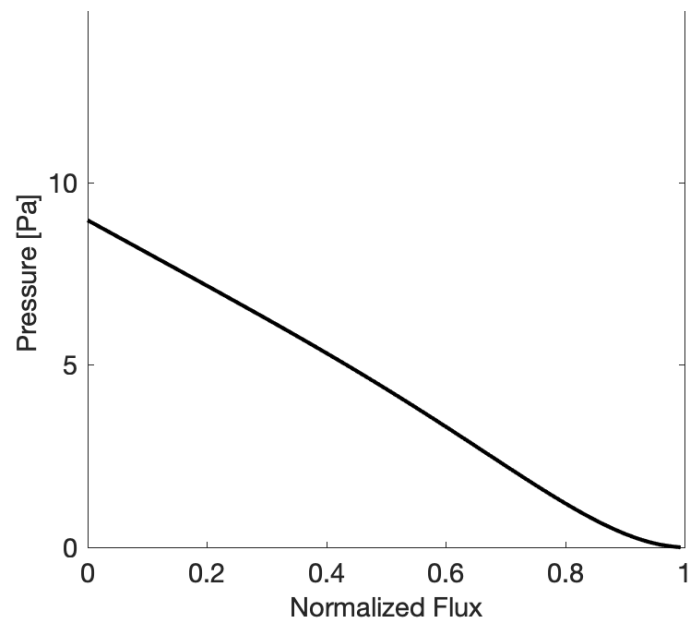
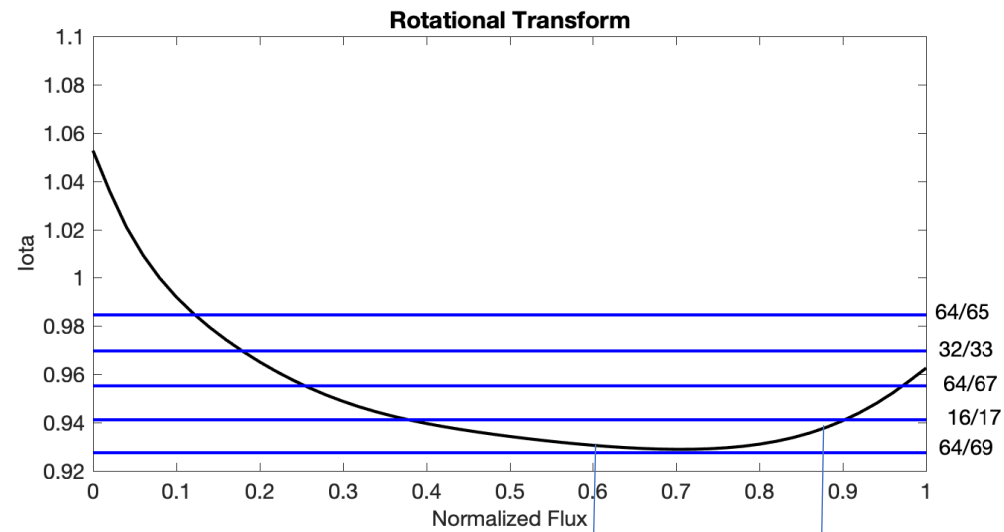
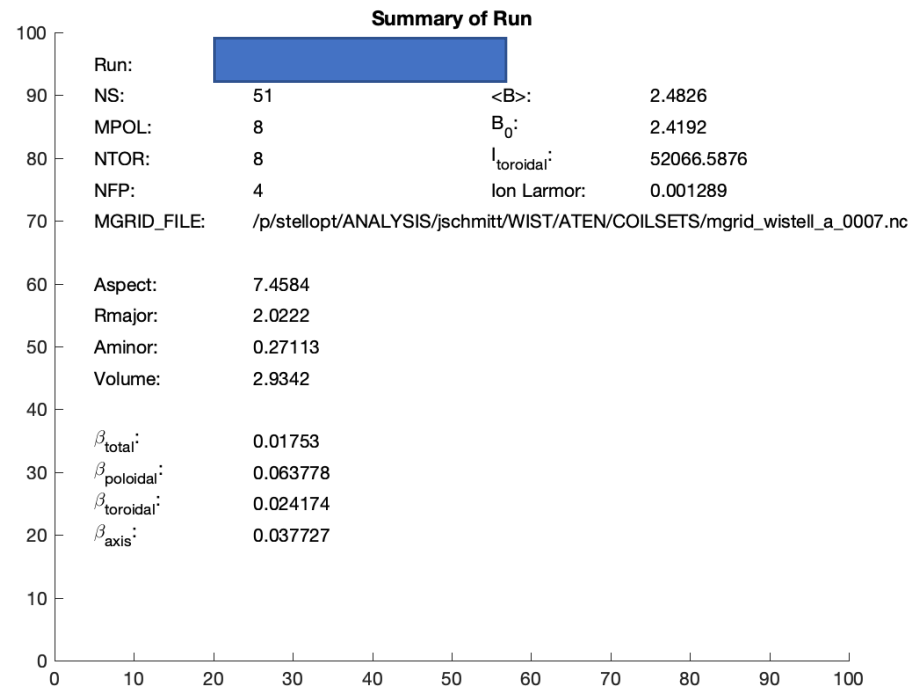
ATEN, 1.7% Beta, 2xJBS



ATEN, 2.5% Beta, 3xJBS



ATEN_0007_mod_1, 1.8% Beta, 2xJBS



ATEN_0007_mod_1, 2.7% Beta, 3xJBS

Summary of Run				
Run:				
NS:	51	:	2.4634	
MPOL:	8	B ₀ :	2.3863	
NTOR:	8	I _{toroidal} :	78099.8813	
NFP:	4	Ion Larmor:	0.001299	
MGRID_FILE:	/p/stellopt/ANALYSIS/jschmitt/WIST/ATEN/COILSETS/mgrid_wistell_a_0007.nc			
Aspect:	7.4311			
Rmajor:	2.0243			
Aminor:	0.27242			
Volume:	2.9653			
β_{total} :	0.026806			
$\beta_{poloidal}$:	0.096265			
$\beta_{toroidal}$:	0.037151			
β_{axis} :	0.058341			

