Case	Subfolder	D	v		trelax=(a**2/D)/abs[1-(Va/D)]	Total execution time	Np	dt	h=1/Np	vh/D	CFL=vdt/h	CFL2 = D dt / h*h	SOLVER	Comments			1
1.1.5	solver3-4-7-10 Np101 dt1e-3	0.1	0		40	50	101	0.001000	0.009901	0.000000	0.000000	1.020100	3 4	OK OK Converges but profiles have a	Pereverzev's conditions marked in y	ellow	
-			1										7	problem on the axis Failed to converge beyond 36s			
													10	(for 50s total time); max nb iterations exceeded			
	_solver3-4-7-10_Np51_dt1e-3	0.1	0				51	0.001000	0.019608	0.000000	0.000000	0.260100	3 4	DK DK			
													7	Converges but profiles have a problem on the axis			
													10	Failed to converge beyond 36s (for 50s total time); max nb			
	solver3-4-7-10_Np101_dt1e-2	0.1	0				101	0.010000	0.009901	0.000000	0.000000	10.201000	3 4	Iterations exceeded  OK  OK			
													7	Converges but profiles have a problem on the axis			
													10	Failed to converge beyond 36s (for 50s total time).			
I.1.5.a	solver3-4-7-10_Np101_dt1e-3	0.1	0.1		40	50	101	0.001000	0.009901	0.009901	0.010100	1.020100	3	Poorly conservative			
													7	Poorly conservative and			
														problem at the axis is not conservative and does not			
	solver3-4-7-10 Np51 dtle-3	0.1	0.1				51	0.001000	0.019609	0.010609	0.005100	0.260100	10	converge to the proper solution			
	20013-97-10 Hp32 ULE-3		0.1				31	0.001000	0.013000	0.013000	0.003100	0.200100	4	OK Failed to converge beyond 20s			
													7	Failed to converge beyond 20s (for 50s total time); max nb iterations exceeded			
													10	is not conservative and does not			
	solver3-4-7-10 Np101 dt1e-2	0.1	0.1				101	0.010000	0.009901	0.009901	0.101000	10.201000	3	converge to the proper solution Poorly conservative			
													7	OK Poorly conservative and problem at the axis			-
													10	is not conservative and does not			
													10	converge to the proper solution			
1.1.5.b	solver3-4-7-10_Np101_dt1e-3	0.1	0.3		8	10	101	0.001000	0.009901	0.029703	0.030300	1.020100	3 4	Poorly conservative OK			
													7	Failed to converge beyond 7s (for 10s total time); max nb			
			1	1										iterations exceeded is not conservative and does not			†
	coher2 4 7.40 No. 40			1				0.001	0.019608	0.00000	0.015	p resser	10	converge to the proper solution	<u> </u>		
	solver3-4-7-10_Np51_dt1e-3	U.1	0.3				51	0.001000	u.U19608	u.U58824	v.U15300	0.260100	3 4	Poorly conservative  OK  Failed to converge beyond 4.4s	<b></b>		
													7	Failed to converge beyond 4.4s (for 10s total time); max nb iterations exceeded			
													10	Is not conservative and does not	:		1
$\vdash$	solver3-4-7-10 Np101 dt1e-2	0.1	0.3	┢			101	0.010000	0.009901	0.029703	0.303000	10.201000	3	converge to the proper solution Poorly conservative	<del></del>		
F			+	H	-	_				H			4	OK Poorly conservative; poor	<del>                                     </del>		1
													7	convetgence, and problem at the axis			
		1		1									10	is not conservative and does not converge to the proper solution			
				-													
			-											Failed to converge beyond 1.4s			
1.1.5.c	_solver3-4-7-10_Np101_dt1e-3	0.1	1.0		2.105263158	4	101	0.001000	0.009901	0.099010	0.101000	1.020100	3	(for 4s total time); max nb			
													4	iterations exceeded Failed to converge beyond 1.4s (for 4s total time); max nb			
														Relations exceeded Failed to converge beyond 1s			
													7	(for 4s total time); max nb iterations exceeded			
													10	Failed to converge beyond 1.5s (for 4s total time); max nb			
														Iterations exceeded Failed to converge beyond 1.3s			-
	_solver3-4-7-10_Np51_dt1e-3	0.1	1.0				51	0.001000	0.019608	0.196078	0.051000	0.260100	3	(for 4s total time); max nb iterations exceeded			
													4	Failed to converge beyond 1.3s (for 4s total time); max nb iterations exceeded			
														Failed to converge beyond 0.28: (for 4s total time); max nb			
													7	iterations exceeded; NO GRAPHS			
													10	Failed to converge beyond 1.32: (for 4s total time); max nb			
			1											iterations exceeded Failed to converge beyond 1s			
	_solver3-4-7-10_Np101_dt1e-2	0.1	1.0				101	0.010000	0.009901	0.099010	1.010000	10.201000	3	(for 4s total time); max nb iterations exceeded			
													4	iterations exceeded Failed to converge beyond 1s (for 4s total time); max nb			
													7	iterations exceeded Failed to converge beyond 1s (for 4s total time); max nb			1
-													· ·	iterations exceeded			
													10	Failed to converge beyond 1s (for 4s total time); max nb iterations exceeded			
														We drop cases with v>2, for which non-conservation issues			
I.1.5.d	_solver3_Np101_dt1e-3	0.1	2.0		1.025641026	2	101	0.001000	0.009901	0.198020	0.202000	1.020100	3	prevent convergence			
	solver3 No51 dtle-3	0.1	2.0				51	0.001000	0.019608	0.392157	0.102000	0.260100	10				
	sowers Nps1 dtie-3	0.1	2.0				51	0.001000	0.019608	0.392157	0.102000	0.260100	3 7 10				
	_solver3_Np101_dt1e-2	0.1	2.0				101	0.010000	0.009901	0.198020	2.020000	10.201000	3 7	1	<b></b>		1
													10				
1.1.5.e	solver3_Np101_dtle-3	0.1	3.0		0.677966102	2	101	0.001000	0.009901	0.297030	0.303000	1.020100	3				
	and the state of t												7 10				
	ANNERS RIPSE OTTO-S		3.0				51	0.001000	0.019608	0.588235	0.153000	0.260100	7 10				1
		0.1	3.0				101	0.010000	0.009901	0.297030	3.030000	10.201000	3 7		-		1
													10				
			-							_							
I1.5.h	solver3-4-7-10_Np101_dt1e-3	0.1	-0.1		13.3333333	20	101	0.001000	0.009901	-0.009901	-0.010100	1.020100	3 4	OK OK	<b></b>		
													7	Problem on axis, poor			1
L			L	L					<u></u>		<u></u>			Problem on axis, poor conservation and does not converge to the proper solution	<u> </u>		
													10	Is not conservative and does not			
	solver3-4-7-10_Np51_dt1e-3	0.1	-0.1				51	0.001000	0.019608	-0.019608	-0.005100	0.260100	3	converge to the proper solution OK			
			<del>                                     </del>										4	UK	<del>                                     </del>		†
													7	Problem on axis, is not conservative and does not converge to the proper solution			
			1										10	Is not conservative and does not			1
-	_solver3-4-7-10_Np101_dt1e-2	0.1	-0.1	1			101	0.010000	0.009901	-0.009901	-0.101000	10.201000	3	converge to the proper solution OK			-
													4	OK Problem on axis, poor	<b>—</b>		1
									1				7	conservation and poor convergence to the proper			
<u> </u>			1	1					-				1	solution	<del>                                     </del>		1
		L											10	is not conservative and does not converge to the proper solution			
I.1.5.i	solver3-4-7-10_Np101_dt1e-3	0.1	-0.3		5.714285714	10	101	0.001000	0.009901	-0.029703	-0.030300	1.020100	3 4	OK OK			1
													7	Failed to converge beyond 9s (for 10s total time); max nb			1
<b> </b>			1	1					-					iterations exceeded	<del> </del>		1
L		L	L	L	<u> </u>	<u></u>			<u>L</u>	L	L	<u></u>	10	is not conservative and does not converge to the proper solution	<u> </u>		
E	solver3_Np51_dt1e-3	0.1	-0.3				51	0.001000	0.019608	-0.058824	-0.015300	0.260100	3 4	OK OK			1
													7	Failed to converge beyond 5s (for 10s total time); max nb			
			t	<u> </u>									10	Iterations exceeded  Is not conservative and does not			1
<u> </u>	solver3-4-7-10 Np101_dt1e-2	0.4	-0.3	1			101	0,010000	0.009901	-0 020202	onene g.	10 201000	3	is not conservative and does not converge to the proper solution OK			
_	represe of 1874	0.1					404			3/03		23.404000	4	DK DK			1

														Problem on axis, poor
													7	conservation and poor
													,	convergence to the proper
														solution
														Falled to converge beyond 6s
													10	(for 10s total time); max nb
													10	Iterations exceeded
			_											iterations exceeded
1														
														Failed to converge beyond 1.4s
I1.5.j	_solver3-4-7-10_Np101_dt1e-3	0.1	-1.0		1.904761905	4	101	0.001000	0.009901	-0.099010	-0.101000	1.020100	3	(for 4s total time); max nb
,								0.002020	0.005500	4.055020			-	Iterations exceeded
_		_	_					_						
														Failed to converge beyond 1.4s
													4	(for 4s total time); max nb
														iterations exceeded
														Failed to converge beyond 1s
1	1	1	1	1	1	1	l	1	l			1	7	(for 4s total time); max nb
1		I	1	1		I	l	1	l			l	l	Iterations exceeded
-		1	1	1				1						Falled to converge beyond 0.9s
1	1	1	1	1	1	1	l	1	l			1	10	(for 4s total time); max nb
1		I	1	1		I	l	1	l			l	10	
⊢			-					1						iterations exceeded
		l												Failed to converge beyond 1.2s
1	_solver3-4-7-10_Np51_dt1e-3	0.1	-1.0	1		I	51	0.001000	0.019608	-0.196078	-0.051000	0.260100	3	(for 4s total time); max nb
1		I	1	1		I	l	1	l			l	l	iterations exceeded
								1						Failed to converge beyond 1.4s
													4	(for 4s total time); max nb
													-	
$\vdash$	<b>+</b>	-	+		<b>+</b>		-	-	-				-	iterations exceeded
1		I	1	1		I	l	1	l			l	l	Failed to converge beyond 0.32s
1	1	1	1	1	1	1	l	1	l			1	7	(for 4s total time); max nb
1		I	1	1		I	l	1	l			l		Iterations exceeded; NO
														GRAPHS
														Failed to converge beyond 0.92s
													10	(for 4s total time); max nb
														Iterations exceeded
_			_	_										Failed to converge beyond 0.9s
							101	0.010000	0.009901		-1.010000		3	rained to converge beyond 0.55
	_solver3-4-7-10_Np101_dt1e-2	0.1	-1.0				101	0.010000	0.009901	-0.099010	-1.010000	10.201000	3	(for 4s total time); max nb
														Iterations exceeded
1 -		1	1 -	1 -	1			1						Failed to converge beyond 1s
1		I	1	1		I	l	1	l			l	4	(for 4s total time); max nb
1	1	1	1	1	1	1	l	1	l			1	l	iterations exceeded
	1													Failed to converge beyond 0.9s
1	1	1	1	1	1	1	l	1	l			1	7	(for 4s total time); max nb
1		I	1	1		I	l	1	l			l		iterations exceeded
$\vdash$	<b>+</b>	-	+		<b>+</b>		-	-	-	-			-	
1	1	1	1	1	1	l	l	1	l	1		l		Failed to converge beyond 0.6s
1		I	1	1		I	l	1	l			l	10	(for 4s total time); max nb
	1	1	1	1	1	1		l						Iterations exceeded
														We drop cases with v<-2, for
1	1	1	1	1	1	1	l	1	l			1	l	which non-conservation issues
1	1	1	1	1	1	1	l	1	l			1	l	prevent convergence
1.1.5.k	solver3-4-7-10 Np101 dt1e-3	0.1	-2.0	+	0.975609756	2	101	0.001000	0.009901	-0.198020	-0.202000	1.020100	3	
******	_aurer3-4-7-10_rep101_dt16-3	0.1	-20		0.373809738		401	0.001000	0.009301	·0.130020	-0.202000	2.020100	4	+ + + + + + + + + + + + + + + + + + + +
-	<b>I</b>		+	-	1	l		<del>                                     </del>						
_		-	-					1					7	1
													10	
	solver3-4-7-10 Np51 dt1e-3	0.1	-2.0	1			51	0.001000	0.019608	-0.392157	-0.102000	0.260100	3	
1								1					4	
													7	
								1					10	
_	solver3-4-7-10 Np101 dt1e-2	0.1	-2.0	+			101	0.010000	0.009901	-0.198020	-2.020000	10.201000	3	<del>                                     </del>
$\vdash$	_aurer3-4-7-10_rep101_dt16-2	0.1	-20		<b>+</b>		101	0.010000	0.009301	-0.150020	-2.020000	40.201000		+ + + + + + + + + + + + + + + + + + + +
$\vdash$		-	-	-									4	
_		-	-					1					7	1
1				1				1					10	