

Welcome to ANSYS Fluent 2023 R2

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Build Time: May 29 2023 07:49:14 EDT Build Id: 10212

Connected License Server List: 27002@ansyslm.coe.neu.edu

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Host spawning Node 0 on machine "A16-059" (win64).

ID Hostname Core O.S. PID Vendor

n3 A16-059 4/4 Windows-x64 9944 Intel(R) Xeon(R) Gold 6348
n2 A16-059 3/4 Windows-x64 1724 Intel(R) Xeon(R) Gold 6348
n1 A16-059 2/4 Windows-x64 11720 Intel(R) Xeon(R) Gold 6348
n0* A16-059 1/4 Windows-x64 17116 Intel(R) Xeon(R) Gold 6348
host A16-059 Windows-x64 2272 Intel(R) Xeon(R) Gold 6348

MPI Option Selected: intel

Selected system interconnect: default

Cleanup script file is \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow
Around a Cylinder\cleanup-fluent-A16-059-2272.bat

Posting ANSYS Product Improvement Program startup data
Done.

> Fast-loading "C:\PROGRA~1\ANSYSI~1\v232\fluent\fluent23.2.0\addons\afd\lib\hdfio.bin"
Done.

Reading setting file in cache:

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set"

Reading from A16-059:"winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow
Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-Setup-Output.cas.h5" in
NODE0 mode ...

Reading mesh ...

58228 cells, 1 cell zone ...

58228 mixed cells, zone id: 8

116806 faces, 6 face zones ...

113866 2D interior faces, zone id: 1

1640 2D interior faces, zone id: 3

200 2D velocity-inlet faces, zone id: 9

200 2D pressure-outlet faces, zone id: 10

600 2D wall faces, zone id: 11

300 2D wall faces, zone id: 30

58578 nodes, 1 node zone ...

Done.

Building...

mesh

distributing mesh

parts.....

faces.....

nodes.....

cells.....

bandwidth reduction using Reverse Cuthill-McKee: $14379/327 = 43.9725$

materials,

interface,

domains,

mixture

zones,

cylinder

wall

outlet

inlet

surface_body

interior-fluid

fluidSetting fluid (mixture) ... Done.

Setting zone id of fluid to 8.

Setting zone id of interior-fluid to 1.

Setting zone id of surface_body to 3.

Setting zone id of inlet to 9.

Setting zone id of outlet to 10.

Setting zone id of wall to 11.

Setting zone id of cylinder to 30.
Done.
Setting fluid (mixture) ... Done.
Setting interior-fluid (mixture) ... Done.
Setting surface_body (mixture) ... Done.
Setting inlet (mixture) ... Done.
Setting outlet (mixture) ... Done.
Setting wall (mixture) ... Done.
Setting cylinder (mixture) ... Done.

parallel,
Done.

Preparing mesh for display...
Done.

Setting Post Processing and Surfaces information ... Done.

Initialize using the hybrid initialization method.

Checking case topology...
-This case has both inlets & outlets
-Pressure information is not available at the boundaries.
Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00
2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow
Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set"...
writing rp variables ... Done.
writing domain variables ... Done.

writing fluid (type fluid) (mixture) ... Done.
writing interior-fluid (type interior) (mixture) ... Done.
writing surface_body (type interior) (mixture) ... Done.
writing inlet (type velocity-inlet) (mixture) ... Done.
writing outlet (type pressure-outlet) (mixture) ... Done.
writing wall (type wall) (mixture) ... Done.
writing cylinder (type wall) (mixture) ... Done.
writing zones map name-id ... Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-10.cas.h5" in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...
116806 faces, 6 zones ...
58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-10-00000.dat.h5" in NODE0 mode and compression level 1 ...

Writing results.

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent"

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

Error: sopenoutputfile: unable to open file for output

Error Object: ".flwb_report_files\report.xml"

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
1	1.0000e+00	2.0471e-04	1.8239e-04	0:00:00 49
2	1.0000e+00	1.2287e-04	7.5372e-05	0:00:00 48
3	6.6542e-01	7.1148e-05	3.9739e-05	0:00:00 47
4	4.6805e-01	4.4739e-05	2.4187e-05	0:00:00 46
5	3.3808e-01	3.0384e-05	1.6471e-05	0:00:00 45
6	2.4738e-01	2.1338e-05	1.1625e-05	0:00:00 44

7	1.8081e-01	1.5548e-05	8.6816e-06	0:00:00	43
8	1.3216e-01	1.1833e-05	6.8333e-06	0:00:42	42
9	9.7235e-02	9.3255e-06	5.5401e-06	0:00:33	41
10	7.1881e-02	7.4936e-06	4.5594e-06	0:00:26	40
11	5.2661e-02	6.2902e-06	3.9637e-06	0:00:20	39

iter	continuity	x-velocity	y-velocity	time/iter	
12	3.8864e-02	5.1328e-06	3.2341e-06	0:00:16	38
13	2.8852e-02	4.3794e-06	2.8184e-06	0:00:12	37
14	2.1732e-02	3.7273e-06	2.4182e-06	0:00:09	36
15	1.6780e-02	3.1644e-06	2.0742e-06	0:00:07	35
16	1.3175e-02	2.6994e-06	1.7948e-06	0:00:06	34
17	1.0154e-02	2.3474e-06	1.5900e-06	0:00:04	33
18	8.0350e-03	2.0287e-06	1.3932e-06	0:00:03	32
19	6.3820e-03	1.7654e-06	1.2221e-06	0:00:03	31
20	5.1433e-03	1.5455e-06	1.0770e-06	0:00:08	30
21	4.2362e-03	1.3595e-06	9.5329e-07	0:00:06	29
22	3.5521e-03	1.2003e-06	8.4690e-07	0:00:05	28

iter	continuity	x-velocity	y-velocity	time/iter	
23	2.9863e-03	1.0611e-06	7.5324e-07	0:00:04	27
24	2.5355e-03	9.3921e-07	6.7070e-07	0:00:03	26
25	2.1683e-03	8.3293e-07	5.9843e-07	0:00:02	25
26	1.8518e-03	7.3932e-07	5.3438e-07	0:00:02	24
27	1.5877e-03	6.5679e-07	4.7721e-07	0:00:01	23
28	1.3837e-03	5.8379e-07	4.2647e-07	0:00:01	22
29	1.2125e-03	5.1938e-07	3.8168e-07	0:00:01	21
30	1.0606e-03	4.6125e-07	3.4067e-07	0:00:01	20
31	9.4015e-04	4.1055e-07	3.0459e-07	0:00:00	19

! 31 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.1000000014901161s, time step = 1

19 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
31	9.4015e-04	4.1055e-07	3.0459e-07	0:00:01	50
! 31 solution is converged					
32	9.5766e-02	7.3170e-05	4.1330e-05	0:00:01	49
33	9.4825e-02	3.9966e-05	2.2944e-05	0:00:01	48
34	7.3010e-02	2.3430e-05	1.4245e-05	0:00:01	47
35	5.4504e-02	1.4902e-05	9.7076e-06	0:00:00	46
36	4.1523e-02	1.0456e-05	7.1485e-06	0:00:00	45
37	3.1835e-02	8.0806e-06	5.6196e-06	0:00:00	44
38	2.4256e-02	6.6372e-06	4.6833e-06	0:00:00	43
39	1.8971e-02	5.5460e-06	3.9826e-06	0:00:00	42
40	1.4967e-02	4.7136e-06	3.4259e-06	0:00:00	41
41	1.1975e-02	4.0411e-06	2.9665e-06	0:00:08	40

iter	continuity	x-velocity	y-velocity	time/iter	
42	9.7391e-03	3.4913e-06	2.5784e-06	0:00:06	39
43	8.0231e-03	3.0307e-06	2.2472e-06	0:00:05	38
44	6.6797e-03	2.6397e-06	1.9622e-06	0:00:04	37
45	5.6531e-03	2.3071e-06	1.7178e-06	0:00:03	36
46	4.8052e-03	2.0232e-06	1.5085e-06	0:00:02	35
47	4.1182e-03	1.7787e-06	1.3277e-06	0:00:02	34
48	3.5694e-03	1.5685e-06	1.1731e-06	0:00:01	33
49	3.0882e-03	1.3849e-06	1.0368e-06	0:00:01	32
50	2.6768e-03	1.2245e-06	9.1883e-07	0:00:01	31
51	2.3146e-03	1.0830e-06	8.1354e-07	0:00:01	30
52	2.0125e-03	9.5806e-07	7.2058e-07	0:00:01	29

iter	continuity	x-velocity	y-velocity	time/iter	
53	1.7882e-03	8.4984e-07	6.4089e-07	0:00:00	28
54	1.5840e-03	7.5384e-07	5.7003e-07	0:00:00	27
55	1.4026e-03	6.6989e-07	5.0803e-07	0:00:00	26
56	1.2337e-03	5.9483e-07	4.5236e-07	0:00:00	25
57	1.1014e-03	5.2897e-07	4.0341e-07	0:00:00	24
58	9.8945e-04	4.7038e-07	3.5966e-07	0:00:00	23

! 58 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.2000000029802322s, time step = 2

18 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
58	9.8945e-04	4.7038e-07	3.5966e-07	0:00:00	50
59	2.9604e-02	3.1347e-05	2.6106e-05	0:00:00	49
60	3.3595e-02	1.8768e-05	1.5513e-05	0:00:00	48
61	2.5006e-02	1.2573e-05	1.0352e-05	0:00:00	47
62	1.7856e-02	9.2452e-06	7.5667e-06	0:00:00	46
63	1.4100e-02	7.2858e-06	5.9181e-06	0:00:00	45
64	1.1895e-02	6.0286e-06	4.8775e-06	0:00:00	44
65	1.0223e-02	5.1905e-06	4.2120e-06	0:00:00	43
66	8.9733e-03	4.5077e-06	3.6526e-06	0:00:00	42
67	8.0116e-03	3.9069e-06	3.1462e-06	0:00:00	41
68	7.0400e-03	3.4247e-06	2.7512e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
69	6.2742e-03	2.9883e-06	2.3842e-06	0:00:00	39
70	5.4769e-03	2.6260e-06	2.0901e-06	0:00:00	38
71	4.8579e-03	2.3002e-06	1.8218e-06	0:00:00	37
72	4.2328e-03	2.0171e-06	1.5914e-06	0:00:00	36
73	3.7236e-03	1.7757e-06	1.3980e-06	0:00:00	35
74	3.2924e-03	1.5663e-06	1.2309e-06	0:00:00	34
75	2.9034e-03	1.3825e-06	1.0850e-06	0:00:00	33
76	2.5493e-03	1.2214e-06	9.5735e-07	0:00:00	32
77	2.2393e-03	1.0801e-06	8.4589e-07	0:00:00	31
78	1.9730e-03	9.5492e-07	7.4686e-07	0:00:00	30
79	1.7489e-03	8.4554e-07	6.6167e-07	0:00:06	29

iter	continuity	x-velocity	y-velocity	time/iter	
80	1.5636e-03	7.4865e-07	5.8626e-07	0:00:04	28
81	1.3966e-03	6.6372e-07	5.1986e-07	0:00:03	27
82	1.2496e-03	5.8858e-07	4.6148e-07	0:00:03	26
83	1.1153e-03	5.2188e-07	4.0955e-07	0:00:02	25
84	9.9909e-04	4.6297e-07	3.6375e-07	0:00:02	24

! 84 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.300000011920929s, time step = 3

17 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
84	9.9909e-04	4.6297e-07	3.6375e-07	0:00:03 50
85	2.6725e-02	2.7188e-05	2.3301e-05	0:00:03 49
86	2.6037e-02	1.6658e-05	1.4466e-05	0:00:02 48
87	1.8640e-02	1.1451e-05	1.0025e-05	0:00:02 47
88	1.3556e-02	8.6124e-06	7.5318e-06	0:00:01 46
89	1.1571e-02	6.9105e-06	5.9925e-06	0:00:01 45
90	1.0412e-02	5.8078e-06	5.0188e-06	0:00:01 44
91	9.4818e-03	5.0001e-06	4.3084e-06	0:00:01 43
92	8.5457e-03	4.3285e-06	3.7050e-06	0:00:00 42
93	7.7418e-03	3.7718e-06	3.2040e-06	0:00:00 41
94	6.9080e-03	3.2910e-06	2.7719e-06	0:00:00 40

iter	continuity	x-velocity	y-velocity	time/iter
95	6.1372e-03	2.8740e-06	2.4008e-06	0:00:00 39
96	5.5020e-03	2.5104e-06	2.0794e-06	0:00:08 38
97	4.7889e-03	2.2039e-06	1.8182e-06	0:00:06 37
98	4.2747e-03	1.9324e-06	1.5824e-06	0:00:05 36
99	3.7240e-03	1.7007e-06	1.3873e-06	0:00:04 35
100	3.3097e-03	1.4926e-06	1.2109e-06	0:00:03 34
101	2.8637e-03	1.3166e-06	1.0665e-06	0:00:02 33
102	2.5296e-03	1.1584e-06	9.3289e-07	0:00:02 32
103	2.2000e-03	1.0234e-06	8.2417e-07	0:00:01 31
104	1.9550e-03	9.0126e-07	7.2288e-07	0:00:01 30
105	1.7055e-03	7.9747e-07	6.3997e-07	0:00:01 29

iter	continuity	x-velocity	y-velocity	time/iter
106	1.5216e-03	7.0337e-07	5.6255e-07	0:00:01 28
107	1.3349e-03	6.2261e-07	4.9876e-07	0:00:00 27


```

108 1.2071e-03 5.4995e-07 4.3898e-07 0:00:00 26
109 1.0816e-03 4.8627e-07 3.8868e-07 0:00:00 25
110 9.8102e-04 4.3081e-07 3.4445e-07 0:00:00 24
! 110 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.4000000059604645s, time step = 4
16 more time steps

Updating solution at time level N...
done.

```

iter	continuity	x-velocity	y-velocity	time/iter	
110	9.8102e-04	4.3081e-07	3.4445e-07	0:00:00	50
111	2.8213e-02	2.7327e-05	2.3779e-05	0:00:00	49
112	2.5207e-02	1.6880e-05	1.5165e-05	0:00:00	48
113	1.7773e-02	1.1668e-05	1.0709e-05	0:00:00	47
114	1.3530e-02	8.7998e-06	8.1204e-06	0:00:00	46
115	1.1736e-02	7.0797e-06	6.4902e-06	0:00:00	45
116	1.0969e-02	5.9296e-06	5.3992e-06	0:00:00	44
117	1.0153e-02	5.0887e-06	4.5979e-06	0:00:00	43
118	9.3482e-03	4.4198e-06	3.9518e-06	0:00:00	42
119	8.4669e-03	3.8378e-06	3.3924e-06	0:00:00	41
120	7.4671e-03	3.3338e-06	2.9114e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
121	6.5990e-03	2.9043e-06	2.5091e-06	0:00:00	39
122	5.8053e-03	2.5331e-06	2.1655e-06	0:00:00	38
123	5.1477e-03	2.2067e-06	1.8682e-06	0:00:00	37
124	4.4721e-03	1.9381e-06	1.6310e-06	0:00:00	36
125	3.9609e-03	1.6968e-06	1.4169e-06	0:00:00	35
126	3.4285e-03	1.4910e-06	1.2383e-06	0:00:00	34
127	3.0366e-03	1.3073e-06	1.0796e-06	0:00:00	33
128	2.6325e-03	1.1511e-06	9.4743e-07	0:00:06	32
129	2.3233e-03	1.0103e-06	8.2724e-07	0:00:05	31
130	2.0308e-03	8.8888e-07	7.2501e-07	0:00:04	30

131 1.7618e-03 7.8602e-07 6.4138e-07 0:00:03 29

iter	continuity	x-velocity	y-velocity	time/iter	
132	1.5556e-03	6.9121e-07	5.6139e-07	0:00:02	28
133	1.3751e-03	6.0893e-07	4.9377e-07	0:00:02	27
134	1.2063e-03	5.3762e-07	4.3562e-07	0:00:01	26
135	1.0951e-03	4.7470e-07	3.8437e-07	0:00:01	25
136	9.8821e-04	4.1947e-07	3.3949e-07	0:00:01	24

! 136 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 5

15 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
136	9.8821e-04	4.1947e-07	3.3949e-07	0:00:02	50
137	3.1155e-02	2.9253e-05	2.5636e-05	0:00:01	49
138	2.6713e-02	1.8021e-05	1.6646e-05	0:00:01	48
139	1.8815e-02	1.2489e-05	1.1880e-05	0:00:01	47
140	1.5011e-02	9.4056e-06	9.0123e-06	0:00:01	46
141	1.3581e-02	7.5605e-06	7.1895e-06	0:00:00	45
142	1.2692e-02	6.3183e-06	5.9547e-06	0:00:00	44
143	1.1666e-02	5.4128e-06	5.0536e-06	0:00:00	43
144	1.0534e-02	4.6842e-06	4.3155e-06	0:00:00	42
145	9.3319e-03	4.0424e-06	3.6715e-06	0:00:00	41
146	8.2825e-03	3.4974e-06	3.1345e-06	0:00:08	40

iter	continuity	x-velocity	y-velocity	time/iter	
147	7.3219e-03	3.0391e-06	2.6868e-06	0:00:06	39
148	6.4492e-03	2.6430e-06	2.3139e-06	0:00:05	38
149	5.6699e-03	2.2935e-06	1.9848e-06	0:00:04	37
150	4.9430e-03	2.0090e-06	1.7243e-06	0:00:03	36
151	4.3482e-03	1.7532e-06	1.4900e-06	0:00:02	35

152	3.7682e-03	1.5368e-06	1.2977e-06	0:00:02	34
153	3.3180e-03	1.3463e-06	1.1286e-06	0:00:01	33
154	2.8758e-03	1.1781e-06	9.8289e-07	0:00:01	32
155	2.5541e-03	1.0370e-06	8.6037e-07	0:00:01	31
156	2.2403e-03	9.1417e-07	7.5668e-07	0:00:01	30
157	1.9782e-03	8.0103e-07	6.6029e-07	0:00:01	29

iter	continuity	x-velocity	y-velocity	time/iter	
158	1.7375e-03	7.0192e-07	5.7631e-07	0:00:00	28
159	1.5387e-03	6.2024e-07	5.0882e-07	0:00:00	27
160	1.3722e-03	5.4550e-07	4.4642e-07	0:00:00	26
161	1.2252e-03	4.7935e-07	3.9140e-07	0:00:00	25
162	1.0940e-03	4.2177e-07	3.4417e-07	0:00:00	24
163	9.9074e-04	3.7228e-07	3.0353e-07	0:00:00	23

! 163 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6000000238418579s, time step = 6

14 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
163	9.9074e-04	3.7228e-07	3.0353e-07	0:00:00	50
164	3.5343e-02	3.2288e-05	2.8350e-05	0:00:00	49
165	2.9504e-02	1.9823e-05	1.8614e-05	0:00:00	48
166	2.0913e-02	1.3693e-05	1.3341e-05	0:00:00	47
167	1.6982e-02	1.0283e-05	1.0115e-05	0:00:00	46
168	1.5669e-02	8.2472e-06	8.0587e-06	0:00:00	45
169	1.4653e-02	6.8606e-06	6.6387e-06	0:00:00	44
170	1.3369e-02	5.8526e-06	5.5811e-06	0:00:00	43
171	1.2006e-02	5.0192e-06	4.7134e-06	0:00:00	42
172	1.0770e-02	4.3296e-06	4.0011e-06	0:00:00	41
173	9.5696e-03	3.7411e-06	3.4081e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
174	8.4828e-03	3.2293e-06	2.8998e-06	0:00:00	39
175	7.5241e-03	2.8199e-06	2.5023e-06	0:00:00	38
176	6.5886e-03	2.4440e-06	2.1442e-06	0:00:00	37
177	5.7630e-03	2.1301e-06	1.8503e-06	0:00:00	36
178	5.0202e-03	1.8580e-06	1.5977e-06	0:00:00	35
179	4.3976e-03	1.6229e-06	1.3840e-06	0:00:00	34
180	3.8546e-03	1.4182e-06	1.2004e-06	0:00:00	33
181	3.3764e-03	1.2389e-06	1.0412e-06	0:00:06	32
182	2.9714e-03	1.0891e-06	9.1102e-07	0:00:05	31
183	2.6203e-03	9.4804e-07	7.8782e-07	0:00:04	30
184	2.3397e-03	8.3705e-07	6.9324e-07	0:00:03	29

iter	continuity	x-velocity	y-velocity	time/iter	
185	2.0705e-03	7.3018e-07	6.0074e-07	0:00:02	28
186	1.8458e-03	6.4512e-07	5.2927e-07	0:00:02	27
187	1.6363e-03	5.6315e-07	4.5962e-07	0:00:01	26
188	1.4651e-03	4.9468e-07	4.0249e-07	0:00:01	25
189	1.3238e-03	4.3856e-07	3.5610e-07	0:00:01	24
190	1.1865e-03	3.8332e-07	3.0961e-07	0:00:01	23
191	1.0764e-03	3.3632e-07	2.7061e-07	0:00:00	22
192	9.7625e-04	2.9629e-07	2.3807e-07	0:00:00	21

! 192 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.699999988079071s, time step = 7

13 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
192	9.7625e-04	2.9629e-07	2.3807e-07	0:00:01	50
193	4.0819e-02	3.6106e-05	3.1682e-05	0:00:01	49
194	3.2477e-02	2.2074e-05	2.0931e-05	0:00:01	48
195	2.3224e-02	1.5173e-05	1.5010e-05	0:00:00	47

196	1.9580e-02	1.1330e-05	1.1365e-05	0:00:00	46
197	1.8402e-02	9.0603e-06	9.0079e-06	0:00:00	45
198	1.7084e-02	7.5044e-06	7.3545e-06	0:00:00	44
199	1.5535e-02	6.3757e-06	6.1477e-06	0:00:09	43
200	1.3850e-02	5.4489e-06	5.1633e-06	0:00:07	42
201	1.2304e-02	4.6964e-06	4.3751e-06	0:00:05	41
202	1.0807e-02	4.0456e-06	3.7054e-06	0:00:04	40

iter	continuity	x-velocity	y-velocity	time/iter	
203	9.4468e-03	3.4946e-06	3.1506e-06	0:00:03	39
204	8.2003e-03	3.0248e-06	2.6905e-06	0:00:03	38
205	7.1512e-03	2.6270e-06	2.3088e-06	0:00:02	37
206	6.2169e-03	2.2752e-06	1.9775e-06	0:00:02	36
207	5.4223e-03	1.9695e-06	1.6925e-06	0:00:01	35
208	4.7850e-03	1.7270e-06	1.4715e-06	0:00:01	34
209	4.2105e-03	1.4972e-06	1.2636e-06	0:00:01	33
210	3.7258e-03	1.3154e-06	1.1021e-06	0:00:01	32
211	3.2465e-03	1.1451e-06	9.5110e-07	0:00:00	31
212	2.8474e-03	1.0011e-06	8.2513e-07	0:00:00	30
213	2.4979e-03	8.7480e-07	7.1560e-07	0:00:00	29

iter	continuity	x-velocity	y-velocity	time/iter	
214	2.2138e-03	7.6424e-07	6.2050e-07	0:00:00	28
215	1.9692e-03	6.6977e-07	5.4043e-07	0:00:00	27
216	1.7626e-03	5.8471e-07	4.6896e-07	0:00:00	26
217	1.5900e-03	5.1037e-07	4.0646e-07	0:00:00	25
218	1.4307e-03	4.4965e-07	3.5713e-07	0:00:05	24
219	1.2878e-03	3.9131e-07	3.0800e-07	0:00:04	23
220	1.1713e-03	3.4270e-07	2.6821e-07	0:00:03	22
221	1.0670e-03	3.0095e-07	2.3455e-07	0:00:02	21
222	9.7271e-04	2.6367e-07	2.0472e-07	0:00:02	20

! 222 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.800000011920929s, time step = 8

12 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
222	9.7271e-04	2.6367e-07	2.0472e-07	0:00:04	50
223	4.6884e-02	4.0376e-05	3.5369e-05	0:00:03	49
224	3.6002e-02	2.4633e-05	2.3451e-05	0:00:03	48
225	2.6984e-02	1.6828e-05	1.6758e-05	0:00:02	47
226	2.2604e-02	1.2506e-05	1.2667e-05	0:00:02	46
227	2.1005e-02	9.9770e-06	9.9567e-06	0:00:01	45
228	1.9383e-02	8.2179e-06	8.1150e-06	0:00:01	44
229	1.7753e-02	6.9492e-06	6.7348e-06	0:00:09	43
230	1.5782e-02	5.9048e-06	5.6033e-06	0:00:07	42
231	1.4017e-02	5.0572e-06	4.7090e-06	0:00:06	41
232	1.2180e-02	4.3228e-06	3.9506e-06	0:00:04	40

iter	continuity	x-velocity	y-velocity	time/iter	
233	1.0632e-02	3.7145e-06	3.3367e-06	0:00:03	39
234	9.2192e-03	3.2011e-06	2.8276e-06	0:00:03	38
235	7.9797e-03	2.7643e-06	2.4055e-06	0:00:02	37
236	6.8895e-03	2.3752e-06	2.0371e-06	0:00:02	36
237	6.0736e-03	2.0811e-06	1.7671e-06	0:00:01	35
238	5.2238e-03	1.7856e-06	1.4931e-06	0:00:01	34
239	4.6013e-03	1.5695e-06	1.3016e-06	0:00:01	33
240	3.9925e-03	1.3516e-06	1.1034e-06	0:00:01	32
241	3.5159e-03	1.1827e-06	9.5781e-07	0:00:00	31
242	3.0919e-03	1.0191e-06	8.1451e-07	0:00:00	30
243	2.7580e-03	8.9225e-07	7.0879e-07	0:00:00	29

iter	continuity	x-velocity	y-velocity	time/iter	
244	2.4547e-03	7.7153e-07	6.0464e-07	0:00:00	28
245	2.1695e-03	6.7194e-07	5.2219e-07	0:00:00	27
246	1.9156e-03	5.8547e-07	4.5085e-07	0:00:00	26
247	1.6948e-03	5.0962e-07	3.8906e-07	0:00:00	25
248	1.4981e-03	4.4322e-07	3.3568e-07	0:00:00	24
249	1.3283e-03	3.8562e-07	2.8983e-07	0:00:05	23
250	1.1878e-03	3.3523e-07	2.4997e-07	0:00:04	22
251	1.0657e-03	2.9082e-07	2.1548e-07	0:00:03	21
252	9.6813e-04	2.5277e-07	1.8564e-07	0:00:02	20

! 252 solution is converged
(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.9000000357627869s, time step = 9

11 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
252	9.6813e-04	2.5277e-07	1.8564e-07	0:00:05	50
253	5.3243e-02	4.4809e-05	3.9170e-05	0:00:04	49
254	4.1483e-02	2.7288e-05	2.5985e-05	0:00:03	48
255	3.1455e-02	1.8611e-05	1.8538e-05	0:00:02	47
256	2.7112e-02	1.3750e-05	1.3894e-05	0:00:02	46
257	2.5091e-02	1.0935e-05	1.0907e-05	0:00:02	45
258	2.2675e-02	8.9271e-06	8.7616e-06	0:00:01	44
259	2.0084e-02	7.4339e-06	7.1588e-06	0:00:01	43
260	1.7804e-02	6.2872e-06	5.9345e-06	0:00:01	42
261	1.5524e-02	5.3184e-06	4.9145e-06	0:00:01	41
262	1.3312e-02	4.4984e-06	4.0713e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
263	1.1385e-02	3.8266e-06	3.3950e-06	0:00:00	39
264	9.8053e-03	3.2693e-06	2.8447e-06	0:00:00	38
265	8.4093e-03	2.7987e-06	2.3873e-06	0:00:00	37
266	7.1736e-03	2.4042e-06	2.0175e-06	0:00:00	36
267	6.1166e-03	2.0670e-06	1.7057e-06	0:00:00	35
268	5.2778e-03	1.7848e-06	1.4511e-06	0:00:07	34
269	4.5565e-03	1.5392e-06	1.2325e-06	0:00:05	33
270	3.9676e-03	1.3307e-06	1.0510e-06	0:00:04	32
271	3.4480e-03	1.1493e-06	8.9506e-07	0:00:03	31
272	3.0366e-03	9.9473e-07	7.6587e-07	0:00:02	30
273	2.6686e-03	8.5970e-07	6.5418e-07	0:00:02	29

iter	continuity	x-velocity	y-velocity	time/iter	
274	2.3691e-03	7.4442e-07	5.6051e-07	0:00:01	28
275	2.0902e-03	6.4335e-07	4.7949e-07	0:00:01	27

276	1.8696e-03	5.5523e-07	4.0916e-07	0:00:01	26
277	1.6640e-03	4.8080e-07	3.5131e-07	0:00:01	25
278	1.4718e-03	4.1605e-07	3.0117e-07	0:00:01	24
279	1.2985e-03	3.5941e-07	2.5758e-07	0:00:00	23
280	1.1688e-03	3.1096e-07	2.2090e-07	0:00:00	22
281	1.0442e-03	2.6890e-07	1.8900e-07	0:00:00	21
282	9.2784e-04	2.3050e-07	1.5952e-07	0:00:00	20

! 282 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1s, time step = 10

10 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
282	9.2784e-04	2.3050e-07	1.5952e-07	0:00:00	50
283	5.9042e-02	4.9125e-05	4.2877e-05	0:00:00	49
284	4.8395e-02	2.9933e-05	2.8424e-05	0:00:10	48
285	3.8226e-02	2.0427e-05	2.0238e-05	0:00:08	47
286	3.3086e-02	1.4933e-05	1.5028e-05	0:00:06	46
287	3.0113e-02	1.1677e-05	1.1584e-05	0:00:05	45
288	2.6719e-02	9.4306e-06	9.1770e-06	0:00:04	44
289	2.3171e-02	7.7940e-06	7.3736e-06	0:00:03	43
290	1.9799e-02	6.4655e-06	5.9906e-06	0:00:02	42
291	1.6923e-02	5.3901e-06	4.8982e-06	0:00:02	41
292	1.4347e-02	4.5154e-06	4.0014e-06	0:00:01	40

iter	continuity	x-velocity	y-velocity	time/iter	
293	1.2144e-02	3.7970e-06	3.2944e-06	0:00:01	39
294	1.0390e-02	3.2110e-06	2.7249e-06	0:00:01	38
295	8.8438e-03	2.7210e-06	2.2612e-06	0:00:01	37
296	7.5573e-03	2.3135e-06	1.8872e-06	0:00:01	36
297	6.4746e-03	1.9715e-06	1.5801e-06	0:00:00	35
298	5.6386e-03	1.6804e-06	1.3212e-06	0:00:00	34

299	4.8486e-03	1.4470e-06	1.1245e-06	0:00:00	33
300	4.2344e-03	1.2358e-06	9.4294e-07	0:00:00	32
301	3.6889e-03	1.0620e-06	7.9851e-07	0:00:00	31
302	3.2205e-03	9.1407e-07	6.7773e-07	0:00:06	30
303	2.8119e-03	7.8787e-07	5.7660e-07	0:00:05	29

iter	continuity	x-velocity	y-velocity	time/iter	
304	2.4692e-03	6.7909e-07	4.9101e-07	0:00:04	28
305	2.1508e-03	5.8450e-07	4.1618e-07	0:00:03	27
306	1.8616e-03	5.0205e-07	3.5279e-07	0:00:02	26
307	1.6278e-03	4.3310e-07	3.0063e-07	0:00:02	25
308	1.4078e-03	3.7239e-07	2.5517e-07	0:00:01	24
309	1.2339e-03	3.2095e-07	2.1723e-07	0:00:01	23
310	1.0926e-03	2.7667e-07	1.8497e-07	0:00:01	22
311	9.4754e-04	2.3627e-07	1.5504e-07	0:00:01	21

! 311 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.100000023841858s, time step = 11

9 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
311	9.4754e-04	2.3627e-07	1.5504e-07	0:00:01	50
312	6.4640e-02	5.2986e-05	4.6207e-05	0:00:01	49
313	5.4813e-02	3.2519e-05	3.0668e-05	0:00:01	48
314	4.5386e-02	2.2049e-05	2.1649e-05	0:00:01	47
315	3.9144e-02	1.5974e-05	1.5846e-05	0:00:01	46
316	3.4858e-02	1.2296e-05	1.2006e-05	0:00:00	45
317	3.0191e-02	9.7341e-06	9.3179e-06	0:00:00	44
318	2.5781e-02	7.8667e-06	7.3590e-06	0:00:00	43
319	2.1818e-02	6.4140e-06	5.8633e-06	0:00:00	42
320	1.8349e-02	5.2554e-06	4.6707e-06	0:00:00	41
321	1.5402e-02	4.3468e-06	3.7557e-06	0:00:08	40

iter	continuity	x-velocity	y-velocity	time/iter	
322	1.2718e-02	3.6020e-06	3.0306e-06	0:00:06	39
323	1.0820e-02	3.0003e-06	2.4654e-06	0:00:05	38
324	9.1423e-03	2.5219e-06	2.0295e-06	0:00:04	37
325	7.7361e-03	2.1283e-06	1.6791e-06	0:00:03	36
326	6.6036e-03	1.8026e-06	1.3957e-06	0:00:02	35
327	5.6327e-03	1.5323e-06	1.1655e-06	0:00:02	34
328	4.8175e-03	1.3051e-06	9.7686e-07	0:00:01	33
329	4.1186e-03	1.1130e-06	8.1937e-07	0:00:01	32
330	3.5113e-03	9.5126e-07	6.9037e-07	0:00:01	31
331	2.9993e-03	8.1437e-07	5.8439e-07	0:00:01	30
332	2.5756e-03	6.9817e-07	4.9444e-07	0:00:01	29

iter	continuity	x-velocity	y-velocity	time/iter	
333	2.2116e-03	5.9838e-07	4.1871e-07	0:00:00	28
334	1.9135e-03	5.1308e-07	3.5396e-07	0:00:00	27
335	1.6426e-03	4.4064e-07	3.0000e-07	0:00:05	26
336	1.4132e-03	3.7853e-07	2.5325e-07	0:00:04	25
337	1.2240e-03	3.2517e-07	2.1540e-07	0:00:03	24
338	1.0682e-03	2.7908e-07	1.8158e-07	0:00:02	23
339	9.2718e-04	2.3857e-07	1.5280e-07	0:00:02	22

! 339 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.200000047683716s, time step = 12

8 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
339	9.2718e-04	2.3857e-07	1.5280e-07	0:00:04	50
340	6.9943e-02	5.6183e-05	4.9013e-05	0:00:03	49
341	5.9100e-02	3.4632e-05	3.2587e-05	0:00:03	48
342	5.1659e-02	2.3417e-05	2.2765e-05	0:00:02	47

343	4.5546e-02	1.6780e-05	1.6401e-05	0:00:02	46
344	3.9886e-02	1.2708e-05	1.2154e-05	0:00:01	45
345	3.3432e-02	9.8604e-06	9.1969e-06	0:00:01	44
346	2.7468e-02	7.8078e-06	7.0959e-06	0:00:01	43
347	2.2649e-02	6.2531e-06	5.5285e-06	0:00:01	42
348	1.8610e-02	5.0403e-06	4.3320e-06	0:00:00	41
349	1.5428e-02	4.1021e-06	3.4264e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
350	1.2889e-02	3.3418e-06	2.7174e-06	0:00:00	39
351	1.0724e-02	2.7764e-06	2.2047e-06	0:00:00	38
352	8.9863e-03	2.2929e-06	1.7708e-06	0:00:00	37
353	7.4995e-03	1.9171e-06	1.4499e-06	0:00:07	36
354	6.2518e-03	1.6105e-06	1.1942e-06	0:00:06	35
355	5.2235e-03	1.3587e-06	9.9043e-07	0:00:04	34
356	4.3707e-03	1.1512e-06	8.2487e-07	0:00:03	33
357	3.6708e-03	9.7791e-07	6.9007e-07	0:00:03	32
358	3.0872e-03	8.3314e-07	5.7877e-07	0:00:02	31
359	2.5998e-03	7.0969e-07	4.8588e-07	0:00:02	30
360	2.2020e-03	6.0593e-07	4.0878e-07	0:00:01	29

iter	continuity	x-velocity	y-velocity	time/iter	
361	1.8733e-03	5.1861e-07	3.4516e-07	0:00:01	28
362	1.6045e-03	4.4446e-07	2.9204e-07	0:00:01	27
363	1.3885e-03	3.8122e-07	2.4745e-07	0:00:01	26
364	1.2103e-03	3.2790e-07	2.1013e-07	0:00:00	25
365	1.0506e-03	2.8130e-07	1.7782e-07	0:00:00	24
366	9.2198e-04	2.3905e-07	1.4813e-07	0:00:00	23

! 366 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.300000071525574s, time step = 13

7 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
366	9.2198e-04	2.3905e-07	1.4813e-07	0:00:01	50
367	7.4195e-02	5.8541e-05	5.1022e-05	0:00:00	49
368	6.3863e-02	3.6316e-05	3.4032e-05	0:00:00	48
369	5.8478e-02	2.4408e-05	2.3559e-05	0:00:00	47
370	5.0864e-02	1.7275e-05	1.6682e-05	0:00:00	46
371	4.3537e-02	1.2882e-05	1.2106e-05	0:00:00	45
372	3.5971e-02	9.7895e-06	8.9251e-06	0:00:09	44
373	2.9119e-02	7.5728e-06	6.7168e-06	0:00:07	43
374	2.3472e-02	5.9243e-06	5.1116e-06	0:00:05	42
375	1.8708e-02	4.6985e-06	3.9221e-06	0:00:04	41
376	1.5113e-02	3.7477e-06	3.0199e-06	0:00:03	40

iter	continuity	x-velocity	y-velocity	time/iter	
377	1.2251e-02	3.0551e-06	2.3845e-06	0:00:03	39
378	9.9409e-03	2.4917e-06	1.8888e-06	0:00:02	38
379	8.2100e-03	2.0375e-06	1.5008e-06	0:00:02	37
380	6.7944e-03	1.6948e-06	1.2203e-06	0:00:01	36
381	5.5932e-03	1.4169e-06	1.0001e-06	0:00:01	35
382	4.6073e-03	1.1897e-06	8.2587e-07	0:00:01	34
383	3.8288e-03	1.0036e-06	6.8536e-07	0:00:01	33
384	3.1969e-03	8.4891e-07	5.7085e-07	0:00:00	32
385	2.6630e-03	7.2023e-07	4.7702e-07	0:00:00	31
386	2.2170e-03	6.1178e-07	3.9898e-07	0:00:00	30
387	1.8724e-03	5.2216e-07	3.3713e-07	0:00:00	29

iter	continuity	x-velocity	y-velocity	time/iter	
388	1.5807e-03	4.4687e-07	2.8505e-07	0:00:00	28
389	1.3567e-03	3.8279e-07	2.4057e-07	0:00:00	27
390	1.1584e-03	3.2796e-07	2.0337e-07	0:00:00	26
391	9.9307e-04	2.7959e-07	1.6999e-07	0:00:00	25

! 391 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 1.399999976158142s, time step = 14

6 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter
391	9.9307e-04	2.7959e-07	1.6999e-07	0:00:00 50
392	7.6608e-02	6.0119e-05	5.2451e-05	0:00:00 49
393	6.9082e-02	3.7513e-05	3.5003e-05	0:00:00 48
394	6.3112e-02	2.5083e-05	2.3929e-05	0:00:00 47
395	5.4025e-02	1.7506e-05	1.6573e-05	0:00:00 46
396	4.5735e-02	1.2840e-05	1.1778e-05	0:00:00 45
397	3.6942e-02	9.5443e-06	8.5133e-06	0:00:00 44
398	2.9437e-02	7.2219e-06	6.2670e-06	0:00:00 43
399	2.3257e-02	5.5366e-06	4.6543e-06	0:00:00 42
400	1.8474e-02	4.2821e-06	3.4721e-06	0:00:00 41
401	1.4852e-02	3.4238e-06	2.6903e-06	0:00:00 40

iter	continuity	x-velocity	y-velocity	time/iter
402	1.1971e-02	2.7105e-06	2.0564e-06	0:00:00 39
403	9.8743e-03	2.1993e-06	1.6162e-06	0:00:00 38
404	8.0831e-03	1.7974e-06	1.2839e-06	0:00:00 37
405	6.5976e-03	1.4813e-06	1.0329e-06	0:00:00 36
406	5.3797e-03	1.2289e-06	8.3913e-07	0:00:00 35
407	4.3696e-03	1.0256e-06	6.8785e-07	0:00:00 34
408	3.5684e-03	8.6067e-07	5.6818e-07	0:00:00 33
409	2.9142e-03	7.2488e-07	4.7050e-07	0:00:00 32
410	2.3993e-03	6.1264e-07	3.9125e-07	0:00:00 31
411	1.9946e-03	5.2141e-07	3.2853e-07	0:00:06 30
412	1.6823e-03	4.4449e-07	2.7639e-07	0:00:05 29

iter	continuity	x-velocity	y-velocity	time/iter
413	1.4228e-03	3.8045e-07	2.3349e-07	0:00:04 28
414	1.2008e-03	3.2437e-07	1.9554e-07	0:00:03 27
415	1.0385e-03	2.7679e-07	1.6427e-07	0:00:02 26
416	9.0220e-04	2.3814e-07	1.4004e-07	0:00:02 25

! 416 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.5s, time step = 15

5 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
416	9.0220e-04	2.3814e-07	1.4004e-07	0:00:03	50
417	7.7423e-02	6.0884e-05	5.3194e-05	0:00:03	49
418	7.1381e-02	3.8298e-05	3.5516e-05	0:00:02	48
419	6.4638e-02	2.5361e-05	2.4069e-05	0:00:02	47
420	5.5637e-02	1.7506e-05	1.6457e-05	0:00:01	46
421	4.5894e-02	1.2615e-05	1.1432e-05	0:00:01	45
422	3.6596e-02	9.2101e-06	8.0566e-06	0:00:01	44
423	2.8475e-02	6.8281e-06	5.7934e-06	0:00:01	43
424	2.2269e-02	5.1542e-06	4.2222e-06	0:00:00	42
425	1.7672e-02	3.9364e-06	3.1110e-06	0:00:00	41
426	1.4199e-02	3.0916e-06	2.3556e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
427	1.1545e-02	2.4278e-06	1.7862e-06	0:00:00	39
428	9.4128e-03	1.9483e-06	1.3898e-06	0:00:00	38
429	7.6771e-03	1.5810e-06	1.0996e-06	0:00:08	37
430	6.2577e-03	1.2955e-06	8.8170e-07	0:00:06	36
431	5.0966e-03	1.0688e-06	7.1451e-07	0:00:05	35
432	4.1433e-03	8.8764e-07	5.8387e-07	0:00:04	34
433	3.3790e-03	7.4128e-07	4.7986e-07	0:00:03	33
434	2.7488e-03	6.2135e-07	3.9505e-07	0:00:02	32
435	2.2571e-03	5.2466e-07	3.2837e-07	0:00:02	31
436	1.8618e-03	4.4461e-07	2.7398e-07	0:00:01	30
437	1.5556e-03	3.7819e-07	2.2973e-07	0:00:01	29

iter	continuity	x-velocity	y-velocity	time/iter	
438	1.3000e-03	3.2311e-07	1.9355e-07	0:00:01	28
439	1.0958e-03	2.7594e-07	1.6243e-07	0:00:01	27
440	9.3859e-04	2.3530e-07	1.3611e-07	0:00:00	26

! 440 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.600000023841858s, time step = 16

4 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
440	9.3859e-04	2.3530e-07	1.3611e-07	0:00:01 50
441	7.7314e-02	6.0890e-05	5.3229e-05	0:00:01 49
442	7.2263e-02	3.8564e-05	3.5637e-05	0:00:01 48
443	6.5238e-02	2.5400e-05	2.3916e-05	0:00:00 47
444	5.6097e-02	1.7409e-05	1.6104e-05	0:00:00 46
445	4.6196e-02	1.2319e-05	1.0924e-05	0:00:00 45
446	3.6482e-02	8.8751e-06	7.6019e-06	0:00:00 44
447	2.8385e-02	6.4822e-06	5.3757e-06	0:00:00 43
448	2.2525e-02	4.7835e-06	3.8363e-06	0:00:00 42
449	1.8233e-02	3.6383e-06	2.8165e-06	0:00:00 41
450	1.4720e-02	2.8057e-06	2.1028e-06	0:00:00 40

iter	continuity	x-velocity	y-velocity	time/iter
451	1.1996e-02	2.1920e-06	1.5912e-06	0:00:00 39
452	9.8001e-03	1.7389e-06	1.2300e-06	0:00:00 38
453	8.0403e-03	1.3840e-06	9.5314e-07	0:00:00 37
454	6.5507e-03	1.1474e-06	7.7659e-07	0:00:00 36
455	5.2877e-03	9.3013e-07	6.1418e-07	0:00:00 35
456	4.2479e-03	7.7910e-07	5.0901e-07	0:00:00 34
457	3.4591e-03	6.4125e-07	4.0957e-07	0:00:00 33
458	2.7771e-03	5.4108e-07	3.4134e-07	0:00:06 32
459	2.3185e-03	4.5403e-07	2.8102e-07	0:00:05 31
460	1.8788e-03	3.8499e-07	2.3438e-07	0:00:04 30
461	1.5804e-03	3.2651e-07	1.9521e-07	0:00:03 29

iter	continuity	x-velocity	y-velocity	time/iter
462	1.3094e-03	2.7740e-07	1.6272e-07	0:00:02 28
463	1.0896e-03	2.3703e-07	1.3646e-07	0:00:02 27

```

464 9.3224e-04 2.0349e-07 1.1555e-07 0:00:01 26
! 464 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 1.700000047683716s, time step = 17
3 more time steps

```

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
464	9.3224e-04	2.0349e-07	1.1555e-07	0:00:03	50
465	7.6311e-02	6.0377e-05	5.2857e-05	0:00:02	49
466	7.1570e-02	3.8398e-05	3.5447e-05	0:00:02	48
467	6.4806e-02	2.5141e-05	2.3623e-05	0:00:01	47
468	5.5355e-02	1.7107e-05	1.5710e-05	0:00:01	46
469	4.4832e-02	1.1977e-05	1.0534e-05	0:00:01	45
470	3.5374e-02	8.4548e-06	7.1643e-06	0:00:01	44
471	2.7537e-02	6.0913e-06	4.9886e-06	0:00:00	43
472	2.1461e-02	4.4396e-06	3.5109e-06	0:00:00	42
473	1.7146e-02	3.3404e-06	2.5406e-06	0:00:00	41
474	1.3543e-02	2.5404e-06	1.8641e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
475	1.0739e-02	1.9676e-06	1.3942e-06	0:00:08	39
476	8.5953e-03	1.5292e-06	1.0485e-06	0:00:06	38
477	6.8741e-03	1.2429e-06	8.3917e-07	0:00:05	37
478	5.5038e-03	9.9170e-07	6.5509e-07	0:00:04	36
479	4.4244e-03	8.1932e-07	5.3586e-07	0:00:03	35
480	3.6214e-03	6.6764e-07	4.2624e-07	0:00:02	34
481	2.9323e-03	5.6014e-07	3.5343e-07	0:00:02	33
482	2.4325e-03	4.6439e-07	2.8605e-07	0:00:01	32
483	1.9586e-03	3.9223e-07	2.3803e-07	0:00:01	31
484	1.6228e-03	3.3175e-07	1.9797e-07	0:00:01	30
485	1.3456e-03	2.8140e-07	1.6472e-07	0:00:01	29


```

iter continuity x-velocity y-velocity time/iter
486 1.1410e-03 2.3904e-07 1.3639e-07 0:00:00 28
487 9.5881e-04 2.0419e-07 1.1428e-07 0:00:00 27
! 487 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 1.800000071525574s, time step = 18
2 more time steps

Updating solution at time level N...
done.

```

```

iter continuity x-velocity y-velocity time/iter
487 9.5881e-04 2.0419e-07 1.1428e-07 0:00:01 50
488 7.4386e-02 5.9443e-05 5.2110e-05 0:00:01 49
489 6.9795e-02 3.7924e-05 3.4969e-05 0:00:00 48
490 6.2841e-02 2.4751e-05 2.3169e-05 0:00:00 47
491 5.3806e-02 1.6720e-05 1.5296e-05 0:00:09 46
492 4.3844e-02 1.1544e-05 1.0083e-05 0:00:07 45
493 3.4707e-02 8.1435e-06 6.8172e-06 0:00:06 44
494 2.7149e-02 5.7857e-06 4.6562e-06 0:00:05 43
495 2.0861e-02 4.2189e-06 3.2936e-06 0:00:04 42
496 1.6366e-02 3.0961e-06 2.3278e-06 0:00:03 41
497 1.2991e-02 2.3382e-06 1.6908e-06 0:00:02 40

```

```

iter continuity x-velocity y-velocity time/iter
498 1.0286e-02 1.7713e-06 1.2365e-06 0:00:02 39
499 8.2513e-03 1.4169e-06 9.7475e-07 0:00:01 38
500 6.5613e-03 1.1075e-06 7.4399e-07 0:00:01 37
501 5.2505e-03 9.0369e-07 6.0081e-07 0:00:01 36
502 4.2037e-03 7.2510e-07 4.7025e-07 0:00:01 35
503 3.3552e-03 6.0294e-07 3.8547e-07 0:00:00 34
504 2.7272e-03 4.9345e-07 3.0778e-07 0:00:00 33
505 2.1839e-03 4.1511e-07 2.5478e-07 0:00:00 32
506 1.7839e-03 3.4759e-07 2.0961e-07 0:00:00 31
507 1.4659e-03 2.9356e-07 1.7404e-07 0:00:00 30

```

508 1.2143e-03 2.4869e-07 1.4440e-07 0:00:00 29

iter	continuity	x-velocity	y-velocity	time/iter	
509	1.0229e-03	2.1074e-07	1.1940e-07	0:00:00	28
510	8.6258e-04	1.7904e-07	9.8761e-08	0:00:00	27

! 510 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.899999976158142s, time step = 19

1 more time step

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
510	8.6258e-04	1.7904e-07	9.8761e-08	0:00:00	50
511	7.1324e-02	5.8302e-05	5.1057e-05	0:00:00	49
512	6.7729e-02	3.7282e-05	3.4262e-05	0:00:00	48
513	6.0113e-02	2.4166e-05	2.2506e-05	0:00:00	47
514	5.1210e-02	1.6196e-05	1.4735e-05	0:00:00	46
515	4.1616e-02	1.1151e-05	9.7211e-06	0:00:00	45
516	3.2589e-02	7.7312e-06	6.5072e-06	0:00:00	44
517	2.5710e-02	5.4524e-06	4.4100e-06	0:00:00	43
518	2.0031e-02	3.9341e-06	3.0580e-06	0:00:00	42
519	1.5658e-02	2.8943e-06	2.1521e-06	0:00:00	41
520	1.2291e-02	2.1729e-06	1.5492e-06	0:00:00	40

iter	continuity	x-velocity	y-velocity	time/iter	
521	9.6820e-03	1.6605e-06	1.1405e-06	0:00:00	39
522	7.6879e-03	1.2793e-06	8.5220e-07	0:00:00	38
523	6.0760e-03	1.0271e-06	6.7590e-07	0:00:00	37
524	4.8292e-03	8.1282e-07	5.2351e-07	0:00:00	36
525	3.8897e-03	6.5972e-07	4.1968e-07	0:00:00	35
526	3.1414e-03	5.4199e-07	3.4089e-07	0:00:00	34
527	2.5485e-03	4.4783e-07	2.7847e-07	0:00:00	33
528	2.0400e-03	3.7404e-07	2.2913e-07	0:00:00	32

```
529 1.7068e-03 3.1280e-07 1.8855e-07 0:00:06 31
530 1.4102e-03 2.6321e-07 1.5570e-07 0:00:05 30
531 1.1632e-03 2.2204e-07 1.2826e-07 0:00:04 29
```

```
iter continuity x-velocity y-velocity time/iter
532 9.8021e-04 1.8938e-07 1.0761e-07 0:00:03 28
```

! 532 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/.//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/.//animation-vel.cxa

()

Flow time = 2s, time step = 20

Writing "| gzip -2cf > SolutionMonitor.gz"...

Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22722 ...

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.

Writing data to \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...

x-coord

y-coord

pressure

x-velocity

y-velocity

hyb_init-0

hyb_init-1

Done.

Calculation complete.

Initialize using the hybrid initialization method.

Checking case topology...

-This case has both inlets & outlets

-Pressure information is not available at the boundaries.

Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00
2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "`\\winfiles.wincoe.coe.neu.edu\\cifs.homedir\\Win10Files\\Desktop\\Flow Around a Cylinder\\cylinder_flow_hw_files\\dp0\\FFF\\Fluent\\FFF.1.set`"...

writing rp variables ... Done.

writing domain variables ... Done.

writing fluid (type fluid) (mixture) ... Done.

writing interior-fluid (type interior) (mixture) ... Done.

writing surface_body (type interior) (mixture) ... Done.

writing inlet (type velocity-inlet) (mixture) ... Done.

writing outlet (type pressure-outlet) (mixture) ... Done.

writing wall (type wall) (mixture) ... Done.

writing cylinder (type wall) (mixture) ... Done.

writing zones map name-id ... Done.

Writing to A16-059:"`\\winfiles.wincoe.coe.neu.edu\\cifs.homedir\\Win10Files\\Desktop\\Flow Around a Cylinder\\cylinder_flow_hw_files\\dp0\\FFF\\Fluent\\FFF.1-11.cas.h5`" in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...

116806 faces, 6 zones ...

58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-11-00000.dat.h5" in NODE0 mode and compression level 1 ...

Writing results.

Done.

'\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

Error: sopenoutputfile: unable to open file for output

Error Object: ".flwb_report_files\report.xml"

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
1	1.0000e+00	2.8003e-04	2.4950e-04	0:00:08 99
2	1.0000e+00	1.5522e-04	8.8371e-05	0:00:06 98
3	6.1895e-01	9.5975e-05	5.0604e-05	0:00:05 97
4	4.4142e-01	6.4821e-05	3.5159e-05	0:00:04 96
5	3.2542e-01	4.7857e-05	2.7108e-05	0:00:03 95
6	2.4299e-01	3.4330e-05	2.1362e-05	0:00:03 94
7	1.7457e-01	2.7598e-05	1.7780e-05	0:00:02 93
8	1.2877e-01	2.3108e-05	1.5379e-05	0:00:02 92
9	9.4178e-02	1.9939e-05	1.3590e-05	0:00:01 91
10	7.0421e-02	1.7648e-05	1.2277e-05	0:00:01 90
11	5.2260e-02	1.6345e-05	1.1522e-05	0:00:01 89

iter	continuity	x-velocity	y-velocity	time/iter
12	4.1387e-02	1.4814e-05	1.0591e-05	0:00:01 88
13	3.1955e-02	1.3766e-05	9.9647e-06	0:00:00 87
14	2.5441e-02	1.2990e-05	9.5826e-06	0:00:18 86
15	2.0981e-02	1.2016e-05	9.0003e-06	0:00:14 85
16	1.6534e-02	1.1367e-05	8.6426e-06	0:00:11 84
17	1.3654e-02	1.0820e-05	8.2939e-06	0:00:09 83
18	1.1633e-02	1.0331e-05	7.9955e-06	0:00:07 82
19	1.0165e-02	9.8947e-06	7.7379e-06	0:00:05 81
20	8.7783e-03	9.5614e-06	7.5556e-06	0:00:04 80
21	7.9655e-03	9.1635e-06	7.3071e-06	0:00:03 79
22	7.2188e-03	8.8698e-06	7.1324e-06	0:00:03 78

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

23	6.7240e-03	8.5777e-06	6.9484e-06	0:00:02	77
24	6.1995e-03	8.3034e-06	6.7808e-06	0:00:02	76
25	5.8001e-03	8.0596e-06	6.6334e-06	0:00:01	75
26	5.5415e-03	7.8304e-06	6.4965e-06	0:00:01	74
27	5.3320e-03	7.6138e-06	6.3667e-06	0:00:01	73
28	5.1208e-03	7.4044e-06	6.2426e-06	0:00:01	72
29	4.8545e-03	7.2081e-06	6.1260e-06	0:00:01	71
30	4.6958e-03	7.0295e-06	6.0184e-06	0:00:00	70
31	4.5956e-03	6.8515e-06	5.9122e-06	0:00:00	69
32	4.5061e-03	6.6835e-06	5.8113e-06	0:00:00	68
33	4.3664e-03	6.5210e-06	5.7128e-06	0:00:14	67

iter	continuity	x-velocity	y-velocity	time/iter	
34	4.2288e-03	6.3669e-06	5.6196e-06	0:00:11	66
35	4.1162e-03	6.2152e-06	5.5259e-06	0:00:08	65
36	4.0576e-03	6.0729e-06	5.4372e-06	0:00:07	64
37	3.9931e-03	5.9318e-06	5.3467e-06	0:00:05	63
38	3.9692e-03	5.7826e-06	5.2455e-06	0:00:04	62
39	3.8357e-03	5.6746e-06	5.1839e-06	0:00:03	61
40	3.7622e-03	5.5448e-06	5.0969e-06	0:00:03	60
41	3.7293e-03	5.4153e-06	5.0070e-06	0:00:02	59
42	3.6909e-03	5.2945e-06	4.9246e-06	0:00:02	58
43	3.6669e-03	5.1735e-06	4.8402e-06	0:00:01	57
44	3.5902e-03	5.0600e-06	4.7603e-06	0:00:01	56

iter	continuity	x-velocity	y-velocity	time/iter	
45	3.5149e-03	4.9469e-06	4.6777e-06	0:00:01	55
46	3.4726e-03	4.8351e-06	4.5939e-06	0:00:01	54
47	3.4291e-03	4.7235e-06	4.5110e-06	0:00:11	53
48	3.3816e-03	4.6182e-06	4.4282e-06	0:00:09	52
49	3.3330e-03	4.5129e-06	4.3482e-06	0:00:07	51
50	3.2612e-03	4.4070e-06	4.2646e-06	0:00:05	50
51	3.1913e-03	4.3034e-06	4.1808e-06	0:00:04	49
52	3.1359e-03	4.1972e-06	4.0916e-06	0:00:03	48
53	3.0988e-03	4.0969e-06	4.0100e-06	0:00:03	47
54	3.0652e-03	3.9981e-06	3.9250e-06	0:00:02	46
55	3.0309e-03	3.9030e-06	3.8431e-06	0:00:02	45

iter	continuity	x-velocity	y-velocity	time/iter	
56	3.0059e-03	3.7908e-06	3.7435e-06	0:00:01	44
57	2.9465e-03	3.7178e-06	3.6826e-06	0:00:01	43
58	2.8908e-03	3.6234e-06	3.5940e-06	0:00:01	42
59	2.8437e-03	3.5192e-06	3.5012e-06	0:00:01	41
60	2.8070e-03	3.4277e-06	3.4165e-06	0:00:00	40

61	2.7537e-03	3.3357e-06	3.3307e-06	0:00:00	39
62	2.7158e-03	3.2476e-06	3.2458e-06	0:00:00	38
63	2.6814e-03	3.1575e-06	3.1607e-06	0:00:00	37
64	2.6684e-03	3.0654e-06	3.0692e-06	0:00:00	36
65	2.5953e-03	2.9849e-06	2.9951e-06	0:00:00	35
66	2.5335e-03	2.8918e-06	2.9008e-06	0:00:07	34

iter	continuity	x-velocity	y-velocity	time/iter	
67	2.4597e-03	2.8238e-06	2.8306e-06	0:00:05	33
68	2.3815e-03	2.7412e-06	2.7441e-06	0:00:04	32
69	2.3351e-03	2.6382e-06	2.6414e-06	0:00:03	31
70	2.3284e-03	2.5796e-06	2.5785e-06	0:00:02	30
71	2.2531e-03	2.4978e-06	2.4940e-06	0:00:02	29
72	2.1866e-03	2.4116e-06	2.4059e-06	0:00:01	28
73	2.1303e-03	2.3348e-06	2.3238e-06	0:00:01	27
74	2.0979e-03	2.2521e-06	2.2369e-06	0:00:01	26
75	2.0614e-03	2.1888e-06	2.1701e-06	0:00:01	25
76	2.0330e-03	2.1081e-06	2.0840e-06	0:00:01	24
77	1.9918e-03	2.0315e-06	2.0042e-06	0:00:00	23

iter	continuity	x-velocity	y-velocity	time/iter	
78	1.9059e-03	1.9621e-06	1.9282e-06	0:00:00	22
79	1.8190e-03	1.8958e-06	1.8538e-06	0:00:00	21
80	1.7407e-03	1.8325e-06	1.7861e-06	0:00:00	20
81	1.6880e-03	1.7584e-06	1.7064e-06	0:00:00	19
82	1.6334e-03	1.6870e-06	1.6312e-06	0:00:00	18
83	1.5828e-03	1.6220e-06	1.5622e-06	0:00:00	17
84	1.5364e-03	1.5599e-06	1.4950e-06	0:00:00	16
85	1.4878e-03	1.4987e-06	1.4306e-06	0:00:00	15
86	1.4320e-03	1.4366e-06	1.3647e-06	0:00:03	14
87	1.3733e-03	1.3754e-06	1.3006e-06	0:00:02	13
88	1.3178e-03	1.3161e-06	1.2384e-06	0:00:02	12

iter	continuity	x-velocity	y-velocity	time/iter	
89	1.2515e-03	1.2586e-06	1.1782e-06	0:00:01	11
90	1.2049e-03	1.2038e-06	1.1210e-06	0:00:01	10
91	1.1715e-03	1.1486e-06	1.0639e-06	0:00:01	9
92	1.1194e-03	1.0944e-06	1.0088e-06	0:00:00	8
93	1.0732e-03	1.0443e-06	9.5707e-07	0:00:00	7
94	1.0278e-03	9.9684e-07	9.0842e-07	0:00:00	6
95	9.7609e-04	9.4697e-07	8.5825e-07	0:00:00	5

! 95 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 1

39 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
95	9.7609e-04	9.4697e-07	8.5825e-07	0:00:03	100
96	6.1735e-02	5.0883e-05	3.5439e-05	0:00:02	99
97	5.8852e-02	2.9123e-05	2.4842e-05	0:00:02	98
98	3.7792e-02	2.2251e-05	2.0844e-05	0:00:01	97
99	2.8678e-02	1.9488e-05	1.8548e-05	0:00:01	96
100	2.4873e-02	1.8128e-05	1.7090e-05	0:00:01	95
101	2.1757e-02	1.7208e-05	1.6035e-05	0:00:01	94
102	1.9263e-02	1.6325e-05	1.5080e-05	0:00:01	93
103	1.7313e-02	1.5523e-05	1.4250e-05	0:00:00	92
104	1.5716e-02	1.4928e-05	1.3592e-05	0:00:00	91
105	1.4454e-02	1.4192e-05	1.2873e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
106	1.3659e-02	1.3756e-05	1.2413e-05	0:00:00	89
107	1.3053e-02	1.3233e-05	1.1906e-05	0:00:00	88
108	1.2436e-02	1.2905e-05	1.1563e-05	0:00:00	87
109	1.1904e-02	1.2545e-05	1.1204e-05	0:00:17	86
110	1.1465e-02	1.2136e-05	1.0815e-05	0:00:14	85
111	1.0926e-02	1.1902e-05	1.0587e-05	0:00:11	84
112	1.0562e-02	1.1630e-05	1.0318e-05	0:00:09	83
113	1.0236e-02	1.1341e-05	1.0047e-05	0:00:07	82
114	9.9904e-03	1.1088e-05	9.8018e-06	0:00:05	81
115	9.8205e-03	1.0851e-05	9.5796e-06	0:00:04	80
116	9.6844e-03	1.0659e-05	9.3962e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
117	9.4675e-03	1.0451e-05	9.2023e-06	0:00:03	78
118	9.2358e-03	1.0237e-05	9.0077e-06	0:00:02	77

119	9.0085e-03	1.0037e-05	8.8260e-06	0:00:02	76
120	8.7863e-03	9.8296e-06	8.6405e-06	0:00:01	75
121	8.6313e-03	9.6634e-06	8.4922e-06	0:00:01	74
122	8.4330e-03	9.4552e-06	8.3117e-06	0:00:01	73
123	8.4227e-03	9.3015e-06	8.1766e-06	0:00:01	72
124	8.3556e-03	9.0925e-06	7.9968e-06	0:00:01	71
125	8.3926e-03	8.9435e-06	7.8622e-06	0:00:00	70
126	8.2575e-03	8.7446e-06	7.6978e-06	0:00:00	69
127	8.2156e-03	8.6064e-06	7.5773e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
128	8.1382e-03	8.3919e-06	7.3948e-06	0:00:14	67
129	8.2099e-03	8.2644e-06	7.2739e-06	0:00:11	66
130	8.1874e-03	8.0990e-06	7.1312e-06	0:00:08	65
131	8.2129e-03	7.8804e-06	6.9425e-06	0:00:07	64
132	8.2582e-03	7.7568e-06	6.8249e-06	0:00:05	63
133	8.2352e-03	7.5974e-06	6.6739e-06	0:00:04	62
134	8.0568e-03	7.4030e-06	6.4928e-06	0:00:03	61
135	8.1011e-03	7.2494e-06	6.3393e-06	0:00:03	60
136	8.1567e-03	7.0751e-06	6.1750e-06	0:00:02	59
137	8.3059e-03	6.9305e-06	6.0317e-06	0:00:02	58
138	8.4376e-03	6.7784e-06	5.8823e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
139	8.3739e-03	6.5890e-06	5.7020e-06	0:00:01	56
140	8.3516e-03	6.3689e-06	5.4887e-06	0:00:01	55
141	8.2302e-03	6.2304e-06	5.3577e-06	0:00:01	54
142	8.2220e-03	6.0722e-06	5.1980e-06	0:00:00	53
143	8.2201e-03	5.8445e-06	4.9846e-06	0:00:00	52
144	8.2907e-03	5.6987e-06	4.8448e-06	0:00:00	51
145	8.1741e-03	5.4483e-06	4.6054e-06	0:00:00	50
146	8.0959e-03	5.3127e-06	4.4684e-06	0:00:00	49
147	7.8663e-03	5.0727e-06	4.2339e-06	0:00:10	48
148	7.7970e-03	4.8840e-06	4.0480e-06	0:00:08	47
149	7.7344e-03	4.6975e-06	3.8712e-06	0:00:06	46

iter	continuity	x-velocity	y-velocity	time/iter	
150	7.5908e-03	4.5070e-06	3.6983e-06	0:00:05	45
151	7.5188e-03	4.3162e-06	3.5283e-06	0:00:04	44
152	7.3785e-03	4.1224e-06	3.3563e-06	0:00:03	43
153	7.1460e-03	3.9266e-06	3.1865e-06	0:00:02	42
154	7.0261e-03	3.6787e-06	2.9706e-06	0:00:02	41
155	6.9121e-03	3.6129e-06	2.9175e-06	0:00:01	40
156	6.5069e-03	3.3339e-06	2.6737e-06	0:00:01	39

157	6.1718e-03	3.1659e-06	2.5339e-06	0:00:01	38
158	5.8301e-03	2.9447e-06	2.3402e-06	0:00:01	37
159	5.5424e-03	2.8573e-06	2.2660e-06	0:00:01	36
160	5.1743e-03	2.6198e-06	2.0694e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
161	4.8898e-03	2.4592e-06	1.9350e-06	0:00:00	34
162	4.7490e-03	2.2802e-06	1.7808e-06	0:00:00	33
163	4.5261e-03	2.1591e-06	1.6731e-06	0:00:00	32
164	4.2763e-03	1.9933e-06	1.5332e-06	0:00:00	31
165	4.0061e-03	1.8783e-06	1.4366e-06	0:00:00	30
166	3.7506e-03	1.7312e-06	1.3158e-06	0:00:06	29
167	3.5071e-03	1.6231e-06	1.2229e-06	0:00:05	28
168	3.2594e-03	1.4931e-06	1.1174e-06	0:00:04	27
169	3.0159e-03	1.3998e-06	1.0396e-06	0:00:03	26
170	2.8204e-03	1.2864e-06	9.4924e-07	0:00:02	25
171	2.6286e-03	1.1914e-06	8.7283e-07	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
172	2.4411e-03	1.1057e-06	8.0357e-07	0:00:01	23
173	2.2579e-03	1.0259e-06	7.3780e-07	0:00:01	22
174	2.0843e-03	9.5119e-07	6.7746e-07	0:00:01	21
175	1.9215e-03	8.8202e-07	6.2163e-07	0:00:01	20
176	1.7689e-03	8.1748e-07	5.7058e-07	0:00:00	19
177	1.6245e-03	7.5810e-07	5.2333e-07	0:00:00	18
178	1.4954e-03	7.0234e-07	4.8025e-07	0:00:00	17
179	1.3756e-03	6.5135e-07	4.4076e-07	0:00:00	16
180	1.2653e-03	6.0419e-07	4.0473e-07	0:00:00	15
181	1.1636e-03	5.6088e-07	3.7147e-07	0:00:00	14
182	1.0726e-03	5.2084e-07	3.4049e-07	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
183	9.9059e-04	4.8369e-07	3.1209e-07	0:00:00	12

! 183 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1s, time step = 2
38 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
183	9.9059e-04	4.8369e-07	3.1209e-07	0:00:00	100
184	8.6136e-02	5.2807e-05	4.1708e-05	0:00:00	99
185	6.9739e-02	3.7395e-05	3.5944e-05	0:00:00	98
186	5.4222e-02	3.1104e-05	3.1494e-05	0:00:00	97
187	4.8349e-02	2.7968e-05	2.8080e-05	0:00:00	96
188	4.5730e-02	2.6325e-05	2.5762e-05	0:00:00	95
189	4.1361e-02	2.4598e-05	2.3421e-05	0:00:00	94
190	3.6934e-02	2.3024e-05	2.1454e-05	0:00:00	93
191	3.3175e-02	2.1610e-05	1.9775e-05	0:00:00	92
192	3.0087e-02	2.0443e-05	1.8431e-05	0:00:00	91
193	2.7750e-02	1.9256e-05	1.7127e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
194	2.5520e-02	1.8493e-05	1.6218e-05	0:00:00	89
195	2.3140e-02	1.7478e-05	1.5120e-05	0:00:18	88
196	2.1349e-02	1.6887e-05	1.4452e-05	0:00:14	87
197	1.9449e-02	1.6026e-05	1.3574e-05	0:00:11	86
198	1.8207e-02	1.5550e-05	1.3024e-05	0:00:09	85
199	1.6485e-02	1.4782e-05	1.2291e-05	0:00:07	84
200	1.5390e-02	1.4395e-05	1.1866e-05	0:00:05	83
201	1.4089e-02	1.3824e-05	1.1330e-05	0:00:04	82
202	1.3319e-02	1.3337e-05	1.0874e-05	0:00:03	81
203	1.2867e-02	1.2895e-05	1.0459e-05	0:00:03	80
204	1.2316e-02	1.2477e-05	1.0063e-05	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
205	1.1878e-02	1.2089e-05	9.7045e-06	0:00:02	78
206	1.1417e-02	1.1713e-05	9.3546e-06	0:00:01	77
207	1.1042e-02	1.1359e-05	9.0286e-06	0:00:01	76
208	1.0737e-02	1.1021e-05	8.7252e-06	0:00:01	75
209	1.0539e-02	1.0685e-05	8.4173e-06	0:00:01	74
210	1.0429e-02	1.0364e-05	8.1202e-06	0:00:01	73
211	1.0405e-02	1.0045e-05	7.8278e-06	0:00:00	72
212	1.0369e-02	9.7348e-06	7.5359e-06	0:00:00	71
213	1.0228e-02	9.4185e-06	7.2561e-06	0:00:00	70
214	1.0088e-02	9.1002e-06	6.9649e-06	0:00:00	69
215	9.9684e-03	8.7892e-06	6.6834e-06	0:00:14	68

iter	continuity	x-velocity	y-velocity	time/iter	
216	9.7955e-03	8.4753e-06	6.4195e-06	0:00:11	67
217	9.7823e-03	8.1710e-06	6.1543e-06	0:00:09	66
218	9.8132e-03	7.8644e-06	5.8913e-06	0:00:07	65
219	1.0058e-02	7.5194e-06	5.6115e-06	0:00:05	64
220	1.0132e-02	7.2700e-06	5.4029e-06	0:00:04	63
221	1.0133e-02	6.9041e-06	5.0816e-06	0:00:03	62
222	1.0187e-02	6.6165e-06	4.8378e-06	0:00:03	61
223	1.0059e-02	6.3105e-06	4.5862e-06	0:00:02	60
224	9.8327e-03	6.0082e-06	4.3529e-06	0:00:02	59
225	9.5969e-03	5.7001e-06	4.1076e-06	0:00:01	58
226	9.3877e-03	5.3994e-06	3.8568e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
227	9.1575e-03	5.1058e-06	3.6307e-06	0:00:01	56
228	8.7773e-03	4.8128e-06	3.4195e-06	0:00:01	55
229	8.4874e-03	4.5366e-06	3.2159e-06	0:00:00	54
230	8.4362e-03	4.2126e-06	2.9721e-06	0:00:00	53
231	8.2408e-03	4.0295e-06	2.8345e-06	0:00:00	52
232	8.0395e-03	3.7228e-06	2.5934e-06	0:00:00	51
233	7.7894e-03	3.5282e-06	2.4457e-06	0:00:00	50
234	7.4976e-03	3.2550e-06	2.2459e-06	0:00:10	49
235	7.2744e-03	3.0346e-06	2.0810e-06	0:00:08	48
236	7.0751e-03	2.8351e-06	1.9292e-06	0:00:06	47
237	6.8343e-03	2.6498e-06	1.7987e-06	0:00:05	46

iter	continuity	x-velocity	y-velocity	time/iter	
238	6.5012e-03	2.4688e-06	1.6695e-06	0:00:04	45
239	6.1138e-03	2.2968e-06	1.5420e-06	0:00:03	44
240	5.6227e-03	2.1289e-06	1.4172e-06	0:00:02	43
241	5.1066e-03	1.9654e-06	1.3012e-06	0:00:02	42
242	4.6289e-03	1.8174e-06	1.1988e-06	0:00:01	41
243	4.1945e-03	1.6822e-06	1.1065e-06	0:00:01	40
244	3.7862e-03	1.5517e-06	1.0176e-06	0:00:01	39
245	3.4134e-03	1.4318e-06	9.3674e-07	0:00:01	38
246	3.0746e-03	1.3191e-06	8.6067e-07	0:00:01	37
247	2.7932e-03	1.2162e-06	7.8940e-07	0:00:00	36
248	2.5367e-03	1.1224e-06	7.2461e-07	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
249	2.2915e-03	1.0324e-06	6.6253e-07	0:00:00	34
250	2.1077e-03	9.4730e-07	6.0629e-07	0:00:00	33
251	1.8909e-03	8.6890e-07	5.5202e-07	0:00:00	32

252	1.7504e-03	7.9917e-07	5.0450e-07	0:00:00	31
253	1.5717e-03	7.3655e-07	4.6052e-07	0:00:00	30
254	1.4283e-03	6.8017e-07	4.2097e-07	0:00:00	29
255	1.3007e-03	6.2684e-07	3.8460e-07	0:00:06	28
256	1.1867e-03	5.7921e-07	3.5172e-07	0:00:04	27
257	1.0838e-03	5.3589e-07	3.2258e-07	0:00:03	26
258	9.8840e-04	4.9644e-07	2.9507e-07	0:00:03	25

! 258 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.5s, time step = 3

37 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
258	9.8840e-04	4.9644e-07	2.9507e-07	0:00:10	100
259	1.0965e-01	6.4377e-05	4.9792e-05	0:00:08	99
260	9.7360e-02	4.9466e-05	4.6584e-05	0:00:06	98
261	8.0980e-02	4.2706e-05	4.1381e-05	0:00:05	97
262	7.4273e-02	3.7454e-05	3.6033e-05	0:00:04	96
263	6.8526e-02	3.4244e-05	3.1890e-05	0:00:03	95
264	6.0083e-02	3.0834e-05	2.8096e-05	0:00:03	94
265	5.3675e-02	2.8746e-05	2.5305e-05	0:00:02	93
266	4.6262e-02	2.5867e-05	2.2382e-05	0:00:02	92
267	4.1084e-02	2.4035e-05	2.0269e-05	0:00:01	91
268	3.6274e-02	2.1822e-05	1.8093e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
269	3.3134e-02	2.0382e-05	1.6536e-05	0:00:01	89
270	3.0366e-02	1.8709e-05	1.4955e-05	0:00:01	88
271	2.8490e-02	1.7365e-05	1.3706e-05	0:00:00	87
272	2.6432e-02	1.6217e-05	1.2656e-05	0:00:00	86
273	2.4532e-02	1.5154e-05	1.1744e-05	0:00:17	85
274	2.2961e-02	1.4206e-05	1.0929e-05	0:00:14	84

275	2.1596e-02	1.3368e-05	1.0218e-05	0:00:11	83
276	2.0272e-02	1.2602e-05	9.5809e-06	0:00:09	82
277	1.8901e-02	1.1882e-05	8.9787e-06	0:00:07	81
278	1.7489e-02	1.1246e-05	8.4572e-06	0:00:05	80
279	1.6265e-02	1.0651e-05	7.9664e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
280	1.5256e-02	1.0103e-05	7.5301e-06	0:00:03	78
281	1.4290e-02	9.6256e-06	7.1424e-06	0:00:03	77
282	1.3349e-02	9.1667e-06	6.7666e-06	0:00:02	76
283	1.2508e-02	8.7216e-06	6.4031e-06	0:00:02	75
284	1.1661e-02	8.3105e-06	6.0579e-06	0:00:01	74
285	1.0910e-02	7.9377e-06	5.7411e-06	0:00:01	73
286	1.0166e-02	7.5662e-06	5.4293e-06	0:00:01	72
287	9.3906e-03	7.2217e-06	5.1422e-06	0:00:01	71
288	8.8616e-03	6.9007e-06	4.8674e-06	0:00:01	70
289	8.3213e-03	6.5783e-06	4.6004e-06	0:00:00	69
290	7.8506e-03	6.2699e-06	4.3477e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
291	7.4364e-03	5.9638e-06	4.1094e-06	0:00:00	67
292	7.0760e-03	5.6691e-06	3.8825e-06	0:00:13	66
293	6.7555e-03	5.3768e-06	3.6650e-06	0:00:11	65
294	6.4750e-03	5.0949e-06	3.4578e-06	0:00:08	64
295	6.2388e-03	4.8219e-06	3.2596e-06	0:00:07	63
296	6.0200e-03	4.5521e-06	3.0649e-06	0:00:05	62
297	5.8312e-03	4.2944e-06	2.8807e-06	0:00:04	61
298	5.7141e-03	4.0154e-06	2.6879e-06	0:00:03	60
299	5.6270e-03	3.8269e-06	2.5531e-06	0:00:03	59
300	5.4289e-03	3.5552e-06	2.3662e-06	0:00:02	58
301	5.2879e-03	3.3647e-06	2.2255e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
302	5.0429e-03	3.1144e-06	2.0546e-06	0:00:01	56
303	4.8439e-03	2.9394e-06	1.9288e-06	0:00:01	55
304	4.6555e-03	2.7163e-06	1.7794e-06	0:00:01	54
305	4.4955e-03	2.5301e-06	1.6497e-06	0:00:01	53
306	4.3021e-03	2.3860e-06	1.5399e-06	0:00:00	52
307	4.0620e-03	2.2004e-06	1.4113e-06	0:00:00	51
308	3.8201e-03	2.0397e-06	1.3021e-06	0:00:00	50
309	3.6122e-03	1.8967e-06	1.2042e-06	0:00:00	49
310	3.4283e-03	1.7821e-06	1.1199e-06	0:00:00	48
311	3.2028e-03	1.6417e-06	1.0310e-06	0:00:00	47
312	3.0004e-03	1.5146e-06	9.5031e-07	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
313	2.8170e-03	1.4005e-06	8.7526e-07	0:00:00	45
314	2.6456e-03	1.3061e-06	8.1115e-07	0:00:09	44
315	2.4675e-03	1.2014e-06	7.4720e-07	0:00:07	43
316	2.2810e-03	1.1079e-06	6.8978e-07	0:00:05	42
317	2.0831e-03	1.0255e-06	6.3545e-07	0:00:04	41
318	1.9518e-03	9.4320e-07	5.8496e-07	0:00:03	40
319	1.7821e-03	8.6979e-07	5.3803e-07	0:00:03	39
320	1.6688e-03	8.0009e-07	4.9516e-07	0:00:02	38
321	1.5122e-03	7.3572e-07	4.5385e-07	0:00:02	37
322	1.4106e-03	6.7521e-07	4.1650e-07	0:00:01	36
323	1.2794e-03	6.2109e-07	3.8106e-07	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
324	1.1934e-03	5.6949e-07	3.4937e-07	0:00:01	34
325	1.0970e-03	5.2216e-07	3.1950e-07	0:00:01	33
326	1.0058e-03	4.7840e-07	2.9110e-07	0:00:00	32
327	9.2244e-04	4.3819e-07	2.6485e-07	0:00:00	31

! 327 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 2s, time step = 4

36 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
327	9.2244e-04	4.3819e-07	2.6485e-07	0:00:01	100
328	1.1764e-01	6.9052e-05	5.2624e-05	0:00:01	99
329	1.0699e-01	5.6672e-05	5.1829e-05	0:00:01	98
330	9.1717e-02	4.8654e-05	4.5796e-05	0:00:01	97
331	8.2877e-02	4.2196e-05	3.9272e-05	0:00:00	96
332	7.3141e-02	3.7284e-05	3.3624e-05	0:00:00	95
333	6.3030e-02	3.3491e-05	2.9194e-05	0:00:00	94

334	5.3889e-02	2.9624e-05	2.5352e-05	0:00:00	93
335	4.7386e-02	2.6626e-05	2.2264e-05	0:00:00	92
336	4.1856e-02	2.3916e-05	1.9579e-05	0:00:00	91
337	3.7767e-02	2.1528e-05	1.7333e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
338	3.4376e-02	1.9386e-05	1.5316e-05	0:00:00	89
339	3.1534e-02	1.7569e-05	1.3703e-05	0:00:00	88
340	2.9078e-02	1.5962e-05	1.2333e-05	0:00:00	87
341	2.6694e-02	1.4563e-05	1.1144e-05	0:00:00	86
342	2.4561e-02	1.3344e-05	1.0133e-05	0:00:00	85
343	2.2760e-02	1.2260e-05	9.2380e-06	0:00:00	84
344	2.0628e-02	1.1290e-05	8.4318e-06	0:00:00	83
345	1.8690e-02	1.0449e-05	7.7425e-06	0:00:16	82
346	1.7099e-02	9.6864e-06	7.1168e-06	0:00:13	81
347	1.5801e-02	8.9921e-06	6.5534e-06	0:00:10	80
348	1.4629e-02	8.3942e-06	6.0745e-06	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
349	1.3533e-02	7.8489e-06	5.6462e-06	0:00:06	78
350	1.2394e-02	7.3292e-06	5.2397e-06	0:00:05	77
351	1.1363e-02	6.8618e-06	4.8748e-06	0:00:04	76
352	1.0352e-02	6.4327e-06	4.5416e-06	0:00:03	75
353	9.3659e-03	6.0357e-06	4.2300e-06	0:00:02	74
354	8.4921e-03	5.6741e-06	3.9464e-06	0:00:02	73
355	7.7001e-03	5.3374e-06	3.6872e-06	0:00:02	72
356	7.0277e-03	5.0182e-06	3.4416e-06	0:00:01	71
357	6.4700e-03	4.7243e-06	3.2178e-06	0:00:01	70
358	5.9844e-03	4.4465e-06	3.0071e-06	0:00:01	69
359	5.5532e-03	4.1879e-06	2.8101e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
360	5.1720e-03	3.9426e-06	2.6292e-06	0:00:00	67
361	4.8307e-03	3.7123e-06	2.4561e-06	0:00:00	66
362	4.5257e-03	3.4951e-06	2.2965e-06	0:00:00	65
363	4.2572e-03	3.2886e-06	2.1469e-06	0:00:00	64
364	4.0060e-03	3.0905e-06	2.0048e-06	0:00:13	63
365	3.7643e-03	2.9014e-06	1.8715e-06	0:00:10	62
366	3.5467e-03	2.7196e-06	1.7462e-06	0:00:08	61
367	3.3440e-03	2.5466e-06	1.6297e-06	0:00:06	60
368	3.1636e-03	2.3822e-06	1.5188e-06	0:00:05	59
369	3.0098e-03	2.2081e-06	1.4045e-06	0:00:04	58
370	2.8826e-03	2.0892e-06	1.3241e-06	0:00:03	57

iter	continuity	x-velocity	y-velocity	time/iter	
371	2.7048e-03	1.9258e-06	1.2193e-06	0:00:02	56
372	2.5994e-03	1.8134e-06	1.1442e-06	0:00:02	55
373	2.4523e-03	1.6670e-06	1.0511e-06	0:00:01	54
374	2.3400e-03	1.5490e-06	9.7340e-07	0:00:01	53
375	2.2508e-03	1.4605e-06	9.1305e-07	0:00:01	52
376	2.1139e-03	1.3413e-06	8.3836e-07	0:00:01	51
377	2.0048e-03	1.2427e-06	7.7461e-07	0:00:01	50
378	1.9068e-03	1.1540e-06	7.1685e-07	0:00:00	49
379	1.8105e-03	1.0731e-06	6.6435e-07	0:00:00	48
380	1.7150e-03	9.9729e-07	6.1589e-07	0:00:00	47
381	1.6226e-03	9.2551e-07	5.6967e-07	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
382	1.5264e-03	8.5762e-07	5.2606e-07	0:00:00	45
383	1.4312e-03	7.9440e-07	4.8598e-07	0:00:00	44
384	1.3381e-03	7.3461e-07	4.4857e-07	0:00:00	43
385	1.2470e-03	6.7899e-07	4.1391e-07	0:00:08	42
386	1.1633e-03	6.2669e-07	3.8189e-07	0:00:07	41
387	1.0838e-03	5.7765e-07	3.5178e-07	0:00:05	40
388	1.0076e-03	5.3205e-07	3.2441e-07	0:00:04	39
389	9.3990e-04	4.8965e-07	2.9878e-07	0:00:03	38

! 389 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.5s, time step = 5

35 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
389	9.3990e-04	4.8965e-07	2.9878e-07	0:00:08	100
390	1.1280e-01	6.8272e-05	5.1781e-05	0:00:07	99
391	1.0084e-01	5.8242e-05	5.2375e-05	0:00:05	98
392	8.5659e-02	4.9957e-05	4.5970e-05	0:00:04	97

393	7.5493e-02	4.2847e-05	3.8979e-05	0:00:03	96
394	6.5889e-02	3.7485e-05	3.3100e-05	0:00:03	95
395	5.7781e-02	3.2877e-05	2.8497e-05	0:00:02	94
396	5.0761e-02	2.9089e-05	2.4631e-05	0:00:02	93
397	4.4767e-02	2.5731e-05	2.1269e-05	0:00:01	92
398	3.9874e-02	2.2781e-05	1.8457e-05	0:00:01	91
399	3.6064e-02	2.0275e-05	1.6093e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
400	3.2659e-02	1.8046e-05	1.4121e-05	0:00:01	89
401	2.9670e-02	1.6106e-05	1.2448e-05	0:00:01	88
402	2.6841e-02	1.4415e-05	1.1061e-05	0:00:18	87
403	2.4326e-02	1.2984e-05	9.8861e-06	0:00:14	86
404	2.2159e-02	1.1721e-05	8.8148e-06	0:00:11	85
405	2.0550e-02	1.0605e-05	7.9268e-06	0:00:09	84
406	1.8547e-02	9.7032e-06	7.0918e-06	0:00:07	83
407	1.6927e-02	8.8143e-06	6.4441e-06	0:00:05	82
408	1.5360e-02	8.1252e-06	5.8364e-06	0:00:04	81
409	1.4073e-02	7.4171e-06	5.2967e-06	0:00:03	80
410	1.2491e-02	6.8583e-06	4.8058e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
411	1.1321e-02	6.2823e-06	4.3802e-06	0:00:02	78
412	1.0233e-02	5.8340e-06	3.9928e-06	0:00:02	77
413	9.4770e-03	5.3560e-06	3.6552e-06	0:00:01	76
414	8.6468e-03	5.0102e-06	3.3808e-06	0:00:01	75
415	8.0221e-03	4.6129e-06	3.1094e-06	0:00:01	74
416	7.2876e-03	4.3301e-06	2.8880e-06	0:00:01	73
417	6.6213e-03	4.0114e-06	2.6655e-06	0:00:01	72
418	5.9815e-03	3.7202e-06	2.4612e-06	0:00:00	71
419	5.3951e-03	3.4625e-06	2.2775e-06	0:00:00	70
420	4.8697e-03	3.2304e-06	2.1150e-06	0:00:00	69
421	4.3999e-03	3.0101e-06	1.9600e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
422	4.0258e-03	2.8103e-06	1.8212e-06	0:00:00	67
423	3.6986e-03	2.6238e-06	1.6903e-06	0:00:13	66
424	3.4143e-03	2.4512e-06	1.5682e-06	0:00:10	65
425	3.1647e-03	2.2911e-06	1.4568e-06	0:00:08	64
426	2.9500e-03	2.1430e-06	1.3531e-06	0:00:07	63
427	2.7601e-03	2.0035e-06	1.2551e-06	0:00:05	62
428	2.5951e-03	1.8749e-06	1.1670e-06	0:00:04	61
429	2.4324e-03	1.7516e-06	1.0838e-06	0:00:03	60
430	2.2507e-03	1.6307e-06	1.0059e-06	0:00:02	59

```
431 2.0824e-03 1.5199e-06 9.3397e-07 0:00:02 58
432 1.9498e-03 1.4086e-06 8.6166e-07 0:00:02 57
```

```
iter continuity x-velocity y-velocity time/iter
433 1.7904e-03 1.3210e-06 8.0750e-07 0:00:01 56
434 1.6922e-03 1.2230e-06 7.4679e-07 0:00:01 55
435 1.5569e-03 1.1384e-06 6.9532e-07 0:00:01 54
436 1.4658e-03 1.0580e-06 6.4661e-07 0:00:01 53
437 1.4023e-03 9.8236e-07 6.0019e-07 0:00:00 52
438 1.3237e-03 9.1225e-07 5.5675e-07 0:00:00 51
439 1.2558e-03 8.4710e-07 5.1616e-07 0:00:00 50
440 1.1927e-03 7.8717e-07 4.7916e-07 0:00:00 49
441 1.1316e-03 7.3012e-07 4.4419e-07 0:00:00 48
442 1.0756e-03 6.7733e-07 4.1166e-07 0:00:00 47
443 1.0224e-03 6.2837e-07 3.8153e-07 0:00:00 46
```

```
iter continuity x-velocity y-velocity time/iter
444 9.7187e-04 5.8256e-07 3.5338e-07 0:00:00 45
```

! 444 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa
()

Flow time = 3s, time step = 6

34 more time steps

Updating solution at time level N...

done.

```
iter continuity x-velocity y-velocity time/iter
444 9.7187e-04 5.8256e-07 3.5338e-07 0:00:00 100
445 9.8109e-02 6.5110e-05 4.8961e-05 0:00:00 99
446 8.6281e-02 5.6756e-05 5.0113e-05 0:00:00 98
447 7.1679e-02 4.8439e-05 4.3851e-05 0:00:00 97
448 6.2401e-02 4.1500e-05 3.7308e-05 0:00:00 96
449 5.4651e-02 3.6017e-05 3.1383e-05 0:00:00 95
450 4.8171e-02 3.1306e-05 2.6894e-05 0:00:00 94
451 4.2757e-02 2.7365e-05 2.2941e-05 0:00:00 93
```

452	3.8309e-02	2.4041e-05	1.9931e-05	0:00:18	92
453	3.4416e-02	2.1151e-05	1.7202e-05	0:00:15	91
454	3.0528e-02	1.8615e-05	1.4896e-05	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
455	2.7095e-02	1.6434e-05	1.2957e-05	0:00:09	89
456	2.4278e-02	1.4563e-05	1.1367e-05	0:00:07	88
457	2.1712e-02	1.2959e-05	9.9960e-06	0:00:06	87
458	1.9586e-02	1.1571e-05	8.8271e-06	0:00:05	86
459	1.7706e-02	1.0343e-05	7.8192e-06	0:00:04	85
460	1.6060e-02	9.2945e-06	6.9645e-06	0:00:03	84
461	1.4978e-02	8.3879e-06	6.2588e-06	0:00:02	83
462	1.3510e-02	7.6104e-06	5.5717e-06	0:00:02	82
463	1.2405e-02	6.9040e-06	5.0097e-06	0:00:01	81
464	1.1079e-02	6.3460e-06	4.5226e-06	0:00:01	80
465	1.0086e-02	5.7842e-06	4.0917e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
466	9.0240e-03	5.3252e-06	3.6980e-06	0:00:01	78
467	8.2916e-03	4.8677e-06	3.3520e-06	0:00:01	77
468	7.4732e-03	4.4972e-06	3.0443e-06	0:00:00	76
469	6.8153e-03	4.1233e-06	2.7656e-06	0:00:00	75
470	6.1541e-03	3.8463e-06	2.5430e-06	0:00:00	74
471	5.5173e-03	3.5522e-06	2.3295e-06	0:00:00	73
472	5.0002e-03	3.2891e-06	2.1388e-06	0:00:15	72
473	4.5449e-03	3.0495e-06	1.9712e-06	0:00:11	71
474	4.1269e-03	2.8299e-06	1.8201e-06	0:00:09	70
475	3.7739e-03	2.6309e-06	1.6862e-06	0:00:07	69
476	3.4476e-03	2.4457e-06	1.5596e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
477	3.1704e-03	2.2738e-06	1.4435e-06	0:00:04	67
478	2.9198e-03	2.1148e-06	1.3359e-06	0:00:04	66
479	2.6921e-03	1.9670e-06	1.2375e-06	0:00:03	65
480	2.4959e-03	1.8303e-06	1.1451e-06	0:00:02	64
481	2.3175e-03	1.7034e-06	1.0598e-06	0:00:02	63
482	2.1609e-03	1.5858e-06	9.7994e-07	0:00:01	62
483	2.0168e-03	1.4773e-06	9.0738e-07	0:00:01	61
484	1.8830e-03	1.3741e-06	8.3957e-07	0:00:01	60
485	1.7578e-03	1.2786e-06	7.7629e-07	0:00:01	59
486	1.6406e-03	1.1882e-06	7.1738e-07	0:00:01	58
487	1.5319e-03	1.1026e-06	6.6166e-07	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter
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488	1.4406e-03	1.0243e-06	6.1228e-07	0:00:00	56
489	1.3538e-03	9.5142e-07	5.6619e-07	0:00:00	55
490	1.2718e-03	8.8281e-07	5.2377e-07	0:00:00	54
491	1.1892e-03	8.1828e-07	4.8404e-07	0:00:00	53
492	1.1143e-03	7.5848e-07	4.4763e-07	0:00:00	52
493	1.0434e-03	7.0217e-07	4.1363e-07	0:00:10	51
494	9.7823e-04	6.5037e-07	3.8189e-07	0:00:08	50

! 494 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.5s, time step = 7

33 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
494	9.7823e-04	6.5037e-07	3.8189e-07	0:00:16	100
495	8.7591e-02	6.1051e-05	4.5494e-05	0:00:13	99
496	7.1838e-02	5.3705e-05	4.6558e-05	0:00:10	98
497	5.9352e-02	4.5808e-05	4.0833e-05	0:00:08	97
498	5.1159e-02	3.9168e-05	3.4569e-05	0:00:06	96
499	4.5785e-02	3.3770e-05	2.9210e-05	0:00:05	95
500	4.0705e-02	2.9281e-05	2.4855e-05	0:00:04	94
501	3.6254e-02	2.5535e-05	2.1353e-05	0:00:03	93
502	3.2340e-02	2.2340e-05	1.8262e-05	0:00:02	92
503	2.8730e-02	1.9612e-05	1.5695e-05	0:00:02	91
504	2.5807e-02	1.7332e-05	1.3642e-05	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
505	2.3179e-02	1.5288e-05	1.1851e-05	0:00:01	89
506	2.0968e-02	1.3536e-05	1.0340e-05	0:00:01	88
507	1.9044e-02	1.2040e-05	9.0743e-06	0:00:01	87
508	1.7294e-02	1.0706e-05	7.9564e-06	0:00:01	86
509	1.5741e-02	9.5894e-06	7.0558e-06	0:00:17	85
510	1.4355e-02	8.6086e-06	6.2833e-06	0:00:14	84

511	1.3118e-02	7.7630e-06	5.6232e-06	0:00:11	83
512	1.1904e-02	7.0337e-06	5.0383e-06	0:00:09	82
513	1.0779e-02	6.3873e-06	4.5295e-06	0:00:07	81
514	9.7533e-03	5.8144e-06	4.0771e-06	0:00:05	80
515	8.8144e-03	5.3008e-06	3.6766e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
516	7.9161e-03	4.8475e-06	3.3302e-06	0:00:03	78
517	7.1471e-03	4.4525e-06	3.0320e-06	0:00:03	77
518	6.4990e-03	4.0898e-06	2.7572e-06	0:00:02	76
519	5.9110e-03	3.7753e-06	2.5184e-06	0:00:02	75
520	5.3715e-03	3.4922e-06	2.3083e-06	0:00:01	74
521	4.8760e-03	3.2317e-06	2.1157e-06	0:00:01	73
522	4.4274e-03	2.9970e-06	1.9495e-06	0:00:01	72
523	4.0086e-03	2.7715e-06	1.7944e-06	0:00:01	71
524	3.6512e-03	2.5686e-06	1.6584e-06	0:00:01	70
525	3.3538e-03	2.3811e-06	1.5338e-06	0:00:00	69
526	3.0719e-03	2.2077e-06	1.4183e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
527	2.8273e-03	2.0486e-06	1.3120e-06	0:00:00	67
528	2.6003e-03	1.9001e-06	1.2148e-06	0:00:00	66
529	2.3876e-03	1.7600e-06	1.1246e-06	0:00:00	65
530	2.1972e-03	1.6320e-06	1.0408e-06	0:00:13	64
531	2.0197e-03	1.5137e-06	9.6204e-07	0:00:10	63
532	1.8554e-03	1.4035e-06	8.8851e-07	0:00:08	62
533	1.7054e-03	1.3000e-06	8.1883e-07	0:00:06	61
534	1.5749e-03	1.2040e-06	7.5515e-07	0:00:05	60
535	1.4647e-03	1.1153e-06	6.9589e-07	0:00:04	59
536	1.3595e-03	1.0327e-06	6.4100e-07	0:00:03	58
537	1.2715e-03	9.5489e-07	5.8949e-07	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
538	1.1836e-03	8.8340e-07	5.4272e-07	0:00:02	56
539	1.1029e-03	8.1679e-07	4.9949e-07	0:00:01	55
540	1.0242e-03	7.5594e-07	4.5907e-07	0:00:01	54
541	9.5605e-04	6.9819e-07	4.2124e-07	0:00:01	53

! 541 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 4s, time step = 8

32 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
541	9.5605e-04	6.9819e-07	4.2124e-07	0:00:02	100
542	7.9388e-02	5.7471e-05	4.2150e-05	0:00:01	99
543	6.0629e-02	5.0662e-05	4.3087e-05	0:00:01	98
544	5.0944e-02	4.3252e-05	3.7629e-05	0:00:01	97
545	4.4923e-02	3.7062e-05	3.2014e-05	0:00:01	96
546	3.9823e-02	3.1931e-05	2.6828e-05	0:00:01	95
547	3.6049e-02	2.7730e-05	2.3000e-05	0:00:00	94
548	3.1925e-02	2.4156e-05	1.9525e-05	0:00:19	93
549	2.8520e-02	2.1173e-05	1.6921e-05	0:00:15	92
550	2.5664e-02	1.8575e-05	1.4546e-05	0:00:12	91
551	2.2993e-02	1.6423e-05	1.2631e-05	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
552	2.0481e-02	1.4505e-05	1.0963e-05	0:00:07	89
553	1.8308e-02	1.2847e-05	9.5752e-06	0:00:06	88
554	1.6359e-02	1.1404e-05	8.4037e-06	0:00:05	87
555	1.4706e-02	1.0174e-05	7.4246e-06	0:00:04	86
556	1.3233e-02	9.1122e-06	6.5824e-06	0:00:03	85
557	1.1962e-02	8.1595e-06	5.8527e-06	0:00:02	84
558	1.0838e-02	7.3316e-06	5.2204e-06	0:00:02	83
559	9.8608e-03	6.6262e-06	4.6731e-06	0:00:01	82
560	8.9729e-03	6.0152e-06	4.2098e-06	0:00:01	81
561	8.1671e-03	5.4711e-06	3.7961e-06	0:00:01	80
562	7.4610e-03	4.9865e-06	3.4304e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
563	6.8243e-03	4.5729e-06	3.1148e-06	0:00:01	78
564	6.1986e-03	4.2060e-06	2.8283e-06	0:00:00	77
565	5.6143e-03	3.8687e-06	2.5737e-06	0:00:00	76
566	5.1041e-03	3.5565e-06	2.3447e-06	0:00:00	75
567	4.6631e-03	3.2831e-06	2.1486e-06	0:00:00	74
568	4.2834e-03	3.0360e-06	1.9737e-06	0:00:00	73
569	3.9412e-03	2.8132e-06	1.8186e-06	0:00:15	72

570	3.6126e-03	2.6039e-06	1.6727e-06	0:00:11	71
571	3.3187e-03	2.4093e-06	1.5444e-06	0:00:09	70
572	3.0597e-03	2.2317e-06	1.4306e-06	0:00:07	69
573	2.8092e-03	2.0640e-06	1.3228e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
574	2.5814e-03	1.9095e-06	1.2237e-06	0:00:04	67
575	2.3826e-03	1.7682e-06	1.1346e-06	0:00:03	66
576	2.1862e-03	1.6360e-06	1.0488e-06	0:00:03	65
577	2.0134e-03	1.5159e-06	9.7335e-07	0:00:02	64
578	1.8454e-03	1.4029e-06	8.9933e-07	0:00:02	63
579	1.7012e-03	1.2977e-06	8.3058e-07	0:00:01	62
580	1.5661e-03	1.1985e-06	7.6416e-07	0:00:01	61
581	1.4433e-03	1.1072e-06	7.0340e-07	0:00:01	60
582	1.3435e-03	1.0232e-06	6.4859e-07	0:00:01	59
583	1.2490e-03	9.4675e-07	5.9768e-07	0:00:01	58
584	1.1541e-03	8.7533e-07	5.4991e-07	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
585	1.0665e-03	8.0827e-07	5.0475e-07	0:00:00	56
586	9.8894e-04	7.4608e-07	4.6340e-07	0:00:11	55

! 586 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 4.5s, time step = 9

31 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
586	9.8894e-04	7.4608e-07	4.6340e-07	0:00:20	100
587	7.2260e-02	5.4513e-05	3.9272e-05	0:00:16	99
588	5.4798e-02	4.8033e-05	4.0087e-05	0:00:13	98
589	4.6700e-02	4.1164e-05	3.5178e-05	0:00:10	97
590	4.0278e-02	3.5167e-05	2.9694e-05	0:00:08	96

591	3.6372e-02	3.0373e-05	2.5118e-05	0:00:06	95
592	3.2521e-02	2.6411e-05	2.1427e-05	0:00:24	94
593	2.8908e-02	2.3094e-05	1.8369e-05	0:00:19	93
594	2.5855e-02	2.0248e-05	1.5858e-05	0:00:15	92
595	2.3156e-02	1.7832e-05	1.3681e-05	0:00:12	91
596	2.0510e-02	1.5727e-05	1.1850e-05	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
597	1.8259e-02	1.3905e-05	1.0293e-05	0:00:07	89
598	1.6035e-02	1.2342e-05	9.0156e-06	0:00:06	88
599	1.4182e-02	1.0972e-05	7.9046e-06	0:00:05	87
600	1.2593e-02	9.7746e-06	6.9682e-06	0:00:04	86
601	1.1258e-02	8.7360e-06	6.1588e-06	0:00:03	85
602	1.0099e-02	7.8269e-06	5.4616e-06	0:00:02	84
603	9.0587e-03	7.0383e-06	4.8737e-06	0:00:02	83
604	8.1396e-03	6.3506e-06	4.3526e-06	0:00:01	82
605	7.4019e-03	5.7480e-06	3.9111e-06	0:00:17	81
606	6.7169e-03	5.2236e-06	3.5302e-06	0:00:14	80
607	6.1275e-03	4.7685e-06	3.1937e-06	0:00:11	79

iter	continuity	x-velocity	y-velocity	time/iter	
608	5.5988e-03	4.3597e-06	2.8865e-06	0:00:09	78
609	5.1407e-03	3.9997e-06	2.6386e-06	0:00:07	77
610	4.7528e-03	3.6789e-06	2.4019e-06	0:00:05	76
611	4.4097e-03	3.4054e-06	2.2031e-06	0:00:04	75
612	4.0819e-03	3.1439e-06	2.0175e-06	0:00:03	74
613	3.7909e-03	2.9039e-06	1.8522e-06	0:00:03	73
614	3.5033e-03	2.6803e-06	1.7059e-06	0:00:02	72
615	3.2357e-03	2.4756e-06	1.5747e-06	0:00:02	71
616	2.9902e-03	2.2894e-06	1.4551e-06	0:00:01	70
617	2.7701e-03	2.1192e-06	1.3477e-06	0:00:01	69
618	2.5700e-03	1.9595e-06	1.2460e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
619	2.3792e-03	1.8140e-06	1.1554e-06	0:00:01	67
620	2.2054e-03	1.6770e-06	1.0709e-06	0:00:00	66
621	2.0477e-03	1.5517e-06	9.9150e-07	0:00:00	65
622	1.9034e-03	1.4368e-06	9.1858e-07	0:00:00	64
623	1.7627e-03	1.3289e-06	8.4697e-07	0:00:00	63
624	1.6305e-03	1.2273e-06	7.8207e-07	0:00:00	62
625	1.5154e-03	1.1343e-06	7.2261e-07	0:00:00	61
626	1.4190e-03	1.0461e-06	6.6558e-07	0:00:12	60
627	1.3163e-03	9.6683e-07	6.1301e-07	0:00:10	59
628	1.2235e-03	8.9203e-07	5.6399e-07	0:00:07	58

629 1.1369e-03 8.2143e-07 5.1732e-07 0:00:06 57

iter continuity x-velocity y-velocity time/iter

630 1.0584e-03 7.5671e-07 4.7512e-07 0:00:05 56

631 9.8307e-04 6.9673e-07 4.3498e-07 0:00:04 55

! 631 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 5s, time step = 10

30 more time steps

Updating solution at time level N...

done.

iter continuity x-velocity y-velocity time/iter

631 9.8307e-04 6.9673e-07 4.3498e-07 0:00:07 100

632 6.6742e-02 5.2098e-05 3.6874e-05 0:00:05 99

633 5.0751e-02 4.5687e-05 3.7538e-05 0:00:04 98

634 4.2435e-02 3.9222e-05 3.2985e-05 0:00:03 97

635 3.7183e-02 3.3668e-05 2.8011e-05 0:00:03 96

636 3.4165e-02 2.9119e-05 2.3814e-05 0:00:02 95

637 3.0225e-02 2.5296e-05 2.0119e-05 0:00:02 94

638 2.7212e-02 2.2126e-05 1.7344e-05 0:00:01 93

639 2.4301e-02 1.9416e-05 1.4916e-05 0:00:01 92

640 2.1675e-02 1.7118e-05 1.2884e-05 0:00:19 91

641 1.9173e-02 1.5134e-05 1.1191e-05 0:00:15 90

iter continuity x-velocity y-velocity time/iter

642 1.6853e-02 1.3334e-05 9.6888e-06 0:00:12 89

643 1.4887e-02 1.1870e-05 8.5165e-06 0:00:27 88

644 1.3064e-02 1.0533e-05 7.4401e-06 0:00:21 87

645 1.1578e-02 9.4070e-06 6.5505e-06 0:00:17 86

646 1.0270e-02 8.4190e-06 5.7920e-06 0:00:13 85

647 9.2008e-03 7.5461e-06 5.1225e-06 0:00:27 84

648 8.2858e-03 6.7869e-06 4.5645e-06 0:00:22 83

649 7.4544e-03 6.1189e-06 4.0788e-06 0:00:17 82

650	6.7661e-03	5.5353e-06	3.6605e-06	0:00:30	81
651	6.1642e-03	5.0336e-06	3.3064e-06	0:00:23	80
652	5.6195e-03	4.5836e-06	2.9809e-06	0:00:19	79

iter	continuity	x-velocity	y-velocity	time/iter	
653	5.1016e-03	4.1944e-06	2.7056e-06	0:00:15	78
654	4.6727e-03	3.8522e-06	2.4768e-06	0:00:12	77
655	4.2852e-03	3.5352e-06	2.2501e-06	0:00:24	76
656	3.9414e-03	3.2561e-06	2.0580e-06	0:00:19	75
657	3.6212e-03	2.9975e-06	1.8826e-06	0:00:15	74
658	3.3522e-03	2.7660e-06	1.7309e-06	0:00:12	73
659	3.1006e-03	2.5549e-06	1.5977e-06	0:00:09	72
660	2.8835e-03	2.3652e-06	1.4770e-06	0:00:22	71
661	2.6726e-03	2.1884e-06	1.3675e-06	0:00:17	70
662	2.4814e-03	2.0240e-06	1.2624e-06	0:00:13	69
663	2.3023e-03	1.8731e-06	1.1712e-06	0:00:11	68

iter	continuity	x-velocity	y-velocity	time/iter	
664	2.1383e-03	1.7309e-06	1.0861e-06	0:00:08	67
665	1.9929e-03	1.6020e-06	1.0086e-06	0:00:20	66
666	1.8486e-03	1.4792e-06	9.3192e-07	0:00:16	65
667	1.7109e-03	1.3664e-06	8.6269e-07	0:00:12	64
668	1.5766e-03	1.2622e-06	7.9819e-07	0:00:10	63
669	1.4492e-03	1.1663e-06	7.3743e-07	0:00:20	62
670	1.3364e-03	1.0742e-06	6.7917e-07	0:00:16	61
671	1.2424e-03	9.9380e-07	6.2814e-07	0:00:12	60
672	1.1469e-03	9.1730e-07	5.7879e-07	0:00:10	59
673	1.0570e-03	8.4548e-07	5.3195e-07	0:00:19	58
674	9.7911e-04	7.7969e-07	4.8821e-07	0:00:15	57

! 674 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 5.5s, time step = 11

29 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
674	9.7911e-04	7.7969e-07	4.8821e-07	0:00:27	100
675	6.2759e-02	5.0064e-05	3.4793e-05	0:00:21	99
676	4.7601e-02	4.3809e-05	3.5343e-05	0:00:36	98
677	3.9281e-02	3.7557e-05	3.1035e-05	0:00:29	97
678	3.4705e-02	3.2361e-05	2.6595e-05	0:00:23	96
679	3.1533e-02	2.7940e-05	2.2388e-05	0:00:18	95
680	2.7994e-02	2.4403e-05	1.8998e-05	0:00:14	94
681	2.5047e-02	2.1348e-05	1.6400e-05	0:00:11	93
682	2.2465e-02	1.8759e-05	1.4127e-05	0:00:09	92
683	1.9931e-02	1.6546e-05	1.2210e-05	0:00:07	91
684	1.7653e-02	1.4620e-05	1.0584e-05	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
685	1.5615e-02	1.2953e-05	9.2166e-06	0:00:04	89
686	1.3721e-02	1.1502e-05	8.0545e-06	0:00:21	88
687	1.2101e-02	1.0229e-05	7.0640e-06	0:00:17	87
688	1.0706e-02	9.1206e-06	6.2035e-06	0:00:13	86
689	9.4857e-03	8.1649e-06	5.4962e-06	0:00:10	85
690	8.4744e-03	7.3294e-06	4.8746e-06	0:00:08	84
691	7.6091e-03	6.5969e-06	4.3369e-06	0:00:07	83
692	6.8583e-03	5.9593e-06	3.8774e-06	0:00:05	82
693	6.2024e-03	5.3971e-06	3.4748e-06	0:00:04	81
694	5.6402e-03	4.9103e-06	3.1343e-06	0:00:03	80
695	5.1217e-03	4.4648e-06	2.8283e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
696	4.6699e-03	4.0711e-06	2.5641e-06	0:00:02	78
697	4.3090e-03	3.7312e-06	2.3403e-06	0:00:02	77
698	3.9889e-03	3.4316e-06	2.1442e-06	0:00:01	76
699	3.6981e-03	3.1582e-06	1.9671e-06	0:00:01	75
700	3.4253e-03	2.9114e-06	1.8062e-06	0:00:16	74
701	3.1811e-03	2.6868e-06	1.6625e-06	0:00:12	73
702	2.9618e-03	2.4817e-06	1.5328e-06	0:00:10	72
703	2.7645e-03	2.2935e-06	1.4171e-06	0:00:08	71
704	2.5681e-03	2.1211e-06	1.3077e-06	0:00:06	70
705	2.3851e-03	1.9636e-06	1.2100e-06	0:00:05	69
706	2.2188e-03	1.8123e-06	1.1209e-06	0:00:04	68

iter	continuity	x-velocity	y-velocity	time/iter	
707	2.0638e-03	1.6784e-06	1.0401e-06	0:00:16	67
708	1.9067e-03	1.5512e-06	9.6449e-07	0:00:13	66

709	1.7629e-03	1.4343e-06	8.9432e-07	0:00:10	65
710	1.6238e-03	1.3259e-06	8.2856e-07	0:00:21	64
711	1.4979e-03	1.2237e-06	7.6687e-07	0:00:16	63
712	1.3986e-03	1.1309e-06	7.0929e-07	0:00:13	62
713	1.2955e-03	1.0452e-06	6.5636e-07	0:00:10	61
714	1.2042e-03	9.6283e-07	6.0635e-07	0:00:08	60
715	1.1176e-03	8.8770e-07	5.5814e-07	0:00:06	59
716	1.0358e-03	8.1827e-07	5.1167e-07	0:00:05	58
717	9.7001e-04	7.5355e-07	4.7226e-07	0:00:04	57

! 717 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 6s, time step = 12

28 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
717	9.7001e-04	7.5355e-07	4.7226e-07	0:00:07	100
718	5.9495e-02	4.8310e-05	3.2966e-05	0:00:05	99
719	4.5095e-02	4.2128e-05	3.3408e-05	0:00:04	98
720	3.7287e-02	3.6164e-05	2.9367e-05	0:00:03	97
721	3.3212e-02	3.1184e-05	2.5166e-05	0:00:03	96
722	3.0248e-02	2.6952e-05	2.1232e-05	0:00:02	95
723	2.7146e-02	2.3535e-05	1.8039e-05	0:00:02	94
724	2.4077e-02	2.0658e-05	1.5639e-05	0:00:01	93
725	2.1352e-02	1.8142e-05	1.3418e-05	0:00:01	92
726	1.8873e-02	1.6006e-05	1.1612e-05	0:00:01	91
727	1.6625e-02	1.4131e-05	1.0069e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
728	1.4627e-02	1.2519e-05	8.7855e-06	0:00:01	89
729	1.2826e-02	1.1103e-05	7.6705e-06	0:00:00	88
730	1.1303e-02	9.8884e-06	6.7354e-06	0:00:00	87
731	1.0013e-02	8.8264e-06	5.9333e-06	0:00:00	86

732	9.0132e-03	7.8846e-06	5.2524e-06	0:00:00	85
733	7.9797e-03	7.0770e-06	4.6358e-06	0:00:17	84
734	7.1738e-03	6.3838e-06	4.1700e-06	0:00:13	83
735	6.3594e-03	5.7792e-06	3.7138e-06	0:00:11	82
736	5.7523e-03	5.2195e-06	3.3374e-06	0:00:08	81
737	5.1491e-03	4.7383e-06	2.9811e-06	0:00:07	80
738	4.7498e-03	4.3062e-06	2.7011e-06	0:00:05	79

iter	continuity	x-velocity	y-velocity	time/iter	
739	4.2914e-03	3.9301e-06	2.4535e-06	0:00:04	78
740	4.0074e-03	3.5872e-06	2.2353e-06	0:00:03	77
741	3.6690e-03	3.3009e-06	2.0473e-06	0:00:03	76
742	3.3780e-03	3.0314e-06	1.8735e-06	0:00:02	75
743	3.1301e-03	2.7884e-06	1.7187e-06	0:00:02	74
744	2.9128e-03	2.5715e-06	1.5851e-06	0:00:01	73
745	2.7135e-03	2.3745e-06	1.4610e-06	0:00:01	72
746	2.5262e-03	2.1911e-06	1.3500e-06	0:00:01	71
747	2.3580e-03	2.0246e-06	1.2480e-06	0:00:01	70
748	2.2004e-03	1.8727e-06	1.1553e-06	0:00:00	69
749	2.0413e-03	1.7315e-06	1.0687e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
750	1.8941e-03	1.6008e-06	9.8953e-07	0:00:00	67
751	1.7506e-03	1.4787e-06	9.1641e-07	0:00:13	66
752	1.6223e-03	1.3671e-06	8.4798e-07	0:00:11	65
753	1.5066e-03	1.2645e-06	7.8569e-07	0:00:08	64
754	1.4093e-03	1.1678e-06	7.2794e-07	0:00:07	63
755	1.3042e-03	1.0798e-06	6.7348e-07	0:00:05	62
756	1.2049e-03	9.9616e-07	6.2190e-07	0:00:04	61
757	1.1137e-03	9.1668e-07	5.7212e-07	0:00:03	60
758	1.0321e-03	8.4445e-07	5.2691e-07	0:00:03	59
759	9.5839e-04	7.7907e-07	4.8593e-07	0:00:02	58

! 759 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 6.5s, time step = 13

27 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
759	9.5839e-04	7.7907e-07	4.8593e-07	0:00:03	100
760	5.6640e-02	4.6644e-05	3.1374e-05	0:00:03	99
761	4.2698e-02	4.0655e-05	3.1822e-05	0:00:02	98
762	3.5013e-02	3.4834e-05	2.8022e-05	0:00:02	97
763	3.0868e-02	2.9970e-05	2.3917e-05	0:00:01	96
764	2.8236e-02	2.6001e-05	2.0285e-05	0:00:20	95
765	2.5529e-02	2.2677e-05	1.7263e-05	0:00:16	94
766	2.2816e-02	1.9894e-05	1.4821e-05	0:00:13	93
767	2.0006e-02	1.7511e-05	1.2798e-05	0:00:10	92
768	1.7730e-02	1.5489e-05	1.1107e-05	0:00:08	91
769	1.5620e-02	1.3716e-05	9.6625e-06	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
770	1.3818e-02	1.2154e-05	8.4005e-06	0:00:05	89
771	1.2169e-02	1.0819e-05	7.3354e-06	0:00:04	88
772	1.0855e-02	9.6467e-06	6.4837e-06	0:00:03	87
773	9.5851e-03	8.6173e-06	5.6716e-06	0:00:02	86
774	8.5652e-03	7.7212e-06	5.0414e-06	0:00:02	85
775	7.5620e-03	6.9403e-06	4.4534e-06	0:00:02	84
776	6.7864e-03	6.2490e-06	3.9866e-06	0:00:01	83
777	6.0304e-03	5.6510e-06	3.5488e-06	0:00:01	82
778	5.4690e-03	5.1103e-06	3.1907e-06	0:00:01	81
779	4.9243e-03	4.6415e-06	2.8667e-06	0:00:01	80
780	4.5449e-03	4.2150e-06	2.5944e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
781	4.1607e-03	3.8698e-06	2.3553e-06	0:00:00	78
782	3.8603e-03	3.5343e-06	2.1454e-06	0:00:16	77
783	3.5165e-03	3.2339e-06	1.9578e-06	0:00:12	76
784	3.2726e-03	2.9673e-06	1.7960e-06	0:00:10	75
785	3.0174e-03	2.7381e-06	1.6507e-06	0:00:08	74
786	2.8492e-03	2.5154e-06	1.5164e-06	0:00:06	73
787	2.6408e-03	2.3266e-06	1.4034e-06	0:00:05	72
788	2.4808e-03	2.1371e-06	1.2875e-06	0:00:04	71
789	2.2960e-03	1.9808e-06	1.2010e-06	0:00:03	70
790	2.1540e-03	1.8239e-06	1.1038e-06	0:00:02	69
791	1.9804e-03	1.6929e-06	1.0280e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
792	1.8614e-03	1.5587e-06	9.4708e-07	0:00:01	67
793	1.7102e-03	1.4495e-06	8.8320e-07	0:00:01	66
794	1.6021e-03	1.3356e-06	8.1326e-07	0:00:01	65
795	1.4626e-03	1.2382e-06	7.5597e-07	0:00:01	64
796	1.3633e-03	1.1427e-06	6.9942e-07	0:00:01	63
797	1.2685e-03	1.0547e-06	6.4703e-07	0:00:00	62
798	1.1782e-03	9.7389e-07	5.9905e-07	0:00:00	61
799	1.0989e-03	8.9827e-07	5.5317e-07	0:00:12	60
800	1.0254e-03	8.2887e-07	5.1061e-07	0:00:10	59
801	9.5926e-04	7.6319e-07	4.7029e-07	0:00:08	58

! 801 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 7s, time step = 14

26 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
801	9.5926e-04	7.6319e-07	4.7029e-07	0:00:13	100
802	5.4238e-02	4.5260e-05	3.0051e-05	0:00:10	99
803	4.0579e-02	3.9374e-05	3.0492e-05	0:00:08	98
804	3.2934e-02	3.3732e-05	2.6819e-05	0:00:07	97
805	2.9017e-02	2.9030e-05	2.2889e-05	0:00:05	96
806	2.6737e-02	2.5202e-05	1.9420e-05	0:00:04	95
807	2.4183e-02	2.2060e-05	1.6626e-05	0:00:03	94
808	2.1277e-02	1.9321e-05	1.4239e-05	0:00:03	93
809	1.8762e-02	1.7024e-05	1.2338e-05	0:00:02	92
810	1.6594e-02	1.5038e-05	1.0681e-05	0:00:02	91
811	1.4604e-02	1.3297e-05	9.2795e-06	0:00:19	90

iter	continuity	x-velocity	y-velocity	time/iter	
812	1.2880e-02	1.1799e-05	8.1096e-06	0:00:15	89
813	1.1340e-02	1.0497e-05	7.1018e-06	0:00:12	88

814	9.9659e-03	9.3492e-06	6.2310e-06	0:00:10	87
815	8.8874e-03	8.3446e-06	5.4998e-06	0:00:08	86
816	7.8009e-03	7.4826e-06	4.8451e-06	0:00:06	85
817	6.9510e-03	6.7262e-06	4.3239e-06	0:00:05	84
818	6.1367e-03	6.0644e-06	3.8391e-06	0:00:04	83
819	5.5273e-03	5.4710e-06	3.4483e-06	0:00:03	82
820	4.9333e-03	4.9601e-06	3.0879e-06	0:00:02	81
821	4.5300e-03	4.4878e-06	2.7739e-06	0:00:02	80
822	4.0723e-03	4.0858e-06	2.5163e-06	0:00:17	79

iter	continuity	x-velocity	y-velocity	time/iter	
823	3.7495e-03	3.7209e-06	2.2769e-06	0:00:14	78
824	3.3779e-03	3.4027e-06	2.0750e-06	0:00:11	77
825	3.1545e-03	3.1092e-06	1.8894e-06	0:00:08	76
826	2.8821e-03	2.8570e-06	1.7323e-06	0:00:07	75
827	2.6993e-03	2.6158e-06	1.5813e-06	0:00:05	74
828	2.4752e-03	2.4149e-06	1.4667e-06	0:00:04	73
829	2.3226e-03	2.2185e-06	1.3461e-06	0:00:03	72
830	2.1410e-03	2.0527e-06	1.2456e-06	0:00:03	71
831	1.9815e-03	1.8906e-06	1.1491e-06	0:00:16	70
832	1.8433e-03	1.7438e-06	1.0619e-06	0:00:13	69
833	1.7268e-03	1.6103e-06	9.8344e-07	0:00:10	68

iter	continuity	x-velocity	y-velocity	time/iter	
834	1.6161e-03	1.4892e-06	9.1053e-07	0:00:08	67
835	1.5143e-03	1.3754e-06	8.4198e-07	0:00:06	66
836	1.4147e-03	1.2732e-06	7.8022e-07	0:00:05	65
837	1.3226e-03	1.1773e-06	7.2214e-07	0:00:04	64
838	1.2338e-03	1.0876e-06	6.6911e-07	0:00:03	63
839	1.1485e-03	1.0048e-06	6.1894e-07	0:00:02	62
840	1.0611e-03	9.2607e-07	5.7210e-07	0:00:02	61
841	9.8301e-04	8.5385e-07	5.2800e-07	0:00:01	60

! 841 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 7.5s, time step = 15

25 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
841	9.8301e-04	8.5385e-07	5.2800e-07	0:00:02	100
842	5.1671e-02	4.3945e-05	2.8942e-05	0:00:02	99
843	3.8451e-02	3.8062e-05	2.9293e-05	0:00:02	98
844	3.1151e-02	3.2579e-05	2.5774e-05	0:00:21	97
845	2.7371e-02	2.8105e-05	2.2124e-05	0:00:16	96
846	2.4934e-02	2.4371e-05	1.8725e-05	0:00:13	95
847	2.2469e-02	2.1311e-05	1.6011e-05	0:00:10	94
848	1.9910e-02	1.8715e-05	1.3770e-05	0:00:08	93
849	1.7686e-02	1.6501e-05	1.1924e-05	0:00:06	92
850	1.5603e-02	1.4600e-05	1.0342e-05	0:00:05	91
851	1.3776e-02	1.2927e-05	8.9991e-06	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
852	1.2121e-02	1.1484e-05	7.8513e-06	0:00:03	89
853	1.0656e-02	1.0218e-05	6.8691e-06	0:00:03	88
854	9.4833e-03	9.1066e-06	6.0635e-06	0:00:02	87
855	8.3514e-03	8.1753e-06	5.3361e-06	0:00:02	86
856	7.4299e-03	7.3288e-06	4.7479e-06	0:00:01	85
857	6.5438e-03	6.5936e-06	4.1965e-06	0:00:01	84
858	5.8676e-03	5.9298e-06	3.7509e-06	0:00:01	83
859	5.2210e-03	5.3548e-06	3.3511e-06	0:00:01	82
860	4.7616e-03	4.8368e-06	3.0046e-06	0:00:00	81
861	4.2394e-03	4.3882e-06	2.7012e-06	0:00:00	80
862	3.8856e-03	3.9854e-06	2.4420e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
863	3.4734e-03	3.6399e-06	2.2101e-06	0:00:16	78
864	3.2268e-03	3.3179e-06	2.0091e-06	0:00:13	77
865	2.9233e-03	3.0425e-06	1.8343e-06	0:00:10	76
866	2.6868e-03	2.7872e-06	1.6742e-06	0:00:08	75
867	2.4859e-03	2.5580e-06	1.5339e-06	0:00:06	74
868	2.3160e-03	2.3506e-06	1.4101e-06	0:00:05	73
869	2.1550e-03	2.1645e-06	1.2975e-06	0:00:04	72
870	2.0126e-03	1.9949e-06	1.1952e-06	0:00:03	71
871	1.8724e-03	1.8396e-06	1.1037e-06	0:00:02	70
872	1.7520e-03	1.6985e-06	1.0204e-06	0:00:02	69
873	1.6483e-03	1.5692e-06	9.4394e-07	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
874	1.5354e-03	1.4517e-06	8.7410e-07	0:00:01	67
875	1.4422e-03	1.3399e-06	8.0844e-07	0:00:01	66
876	1.3456e-03	1.2378e-06	7.4756e-07	0:00:01	65
877	1.2611e-03	1.1444e-06	6.9245e-07	0:00:01	64
878	1.1778e-03	1.0581e-06	6.4081e-07	0:00:00	63
879	1.1011e-03	9.7725e-07	5.9362e-07	0:00:00	62
880	1.0304e-03	9.0320e-07	5.4904e-07	0:00:00	61
881	9.6034e-04	8.3401e-07	5.0780e-07	0:00:00	60

! 881 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 8s, time step = 16

24 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
881	9.6034e-04	8.3401e-07	5.0780e-07	0:00:00	100
882	4.9432e-02	4.2805e-05	2.7985e-05	0:00:00	99
883	3.6508e-02	3.6977e-05	2.8295e-05	0:00:00	98
884	2.9644e-02	3.1650e-05	2.4929e-05	0:00:00	97
885	2.6138e-02	2.7292e-05	2.1353e-05	0:00:00	96
886	2.3813e-02	2.3701e-05	1.8115e-05	0:00:00	95
887	2.1587e-02	2.0762e-05	1.5498e-05	0:00:00	94
888	1.9109e-02	1.8271e-05	1.3360e-05	0:00:00	93
889	1.6863e-02	1.6139e-05	1.1571e-05	0:00:00	92
890	1.4944e-02	1.4286e-05	1.0049e-05	0:00:00	91
891	1.3248e-02	1.2643e-05	8.7167e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
892	1.1660e-02	1.1239e-05	7.6429e-06	0:00:00	89
893	1.0260e-02	1.0009e-05	6.7136e-06	0:00:00	88
894	9.0542e-03	8.9462e-06	5.9211e-06	0:00:00	87
895	7.9833e-03	8.0085e-06	5.2242e-06	0:00:00	86

896	7.1440e-03	7.1728e-06	4.6348e-06	0:00:00	85
897	6.2834e-03	6.4583e-06	4.1060e-06	0:00:00	84
898	5.6620e-03	5.8127e-06	3.6651e-06	0:00:17	83
899	4.9793e-03	5.2467e-06	3.2723e-06	0:00:13	82
900	4.5221e-03	4.7390e-06	2.9376e-06	0:00:10	81
901	4.0253e-03	4.2919e-06	2.6393e-06	0:00:08	80
902	3.7016e-03	3.8953e-06	2.3839e-06	0:00:06	79

iter	continuity	x-velocity	y-velocity	time/iter	
903	3.3386e-03	3.5518e-06	2.1617e-06	0:00:05	78
904	3.1138e-03	3.2373e-06	1.9630e-06	0:00:04	77
905	2.8355e-03	2.9669e-06	1.7889e-06	0:00:03	76
906	2.6372e-03	2.7164e-06	1.6297e-06	0:00:03	75
907	2.3958e-03	2.4975e-06	1.4959e-06	0:00:02	74
908	2.2485e-03	2.2911e-06	1.3700e-06	0:00:02	73
909	2.0568e-03	2.1102e-06	1.2627e-06	0:00:01	72
910	1.9550e-03	1.9401e-06	1.1616e-06	0:00:01	71
911	1.7843e-03	1.7881e-06	1.0734e-06	0:00:01	70
912	1.6861e-03	1.6491e-06	9.9204e-07	0:00:01	69
913	1.5785e-03	1.5232e-06	9.1771e-07	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
914	1.4805e-03	1.4074e-06	8.5041e-07	0:00:00	67
915	1.3874e-03	1.2996e-06	7.8783e-07	0:00:00	66
916	1.2977e-03	1.2025e-06	7.2959e-07	0:00:00	65
917	1.2108e-03	1.1123e-06	6.7526e-07	0:00:13	64
918	1.1277e-03	1.0270e-06	6.2412e-07	0:00:10	63
919	1.0660e-03	9.4787e-07	5.7747e-07	0:00:08	62
920	9.8087e-04	8.7607e-07	5.3606e-07	0:00:06	61

! 920 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 8.5s, time step = 17

23 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
920	9.8087e-04	8.7607e-07	5.3606e-07	0:00:10	100
921	4.7607e-02	4.1827e-05	2.7186e-05	0:00:08	99
922	3.5115e-02	3.6000e-05	2.7419e-05	0:00:07	98
923	2.8268e-02	3.0770e-05	2.4183e-05	0:00:25	97
924	2.4891e-02	2.6487e-05	2.0680e-05	0:00:19	96
925	2.2820e-02	2.3100e-05	1.7639e-05	0:00:15	95
926	2.0598e-02	2.0240e-05	1.5104e-05	0:00:12	94
927	1.8300e-02	1.7817e-05	1.3038e-05	0:00:10	93
928	1.6313e-02	1.5719e-05	1.1256e-05	0:00:08	92
929	1.4386e-02	1.3928e-05	9.8019e-06	0:00:06	91
930	1.2735e-02	1.2361e-05	8.5603e-06	0:00:05	90

iter	continuity	x-velocity	y-velocity	time/iter	
931	1.1274e-02	1.0986e-05	7.4910e-06	0:00:04	89
932	9.9877e-03	9.7886e-06	6.5809e-06	0:00:03	88
933	8.9103e-03	8.7210e-06	5.8029e-06	0:00:02	87
934	7.8257e-03	7.8385e-06	5.1150e-06	0:00:02	86
935	6.9212e-03	7.0208e-06	4.5373e-06	0:00:01	85
936	6.0422e-03	6.3174e-06	4.0278e-06	0:00:01	84
937	5.4119e-03	5.6874e-06	3.5968e-06	0:00:01	83
938	4.7582e-03	5.1261e-06	3.1958e-06	0:00:01	82
939	4.3176e-03	4.6320e-06	2.8740e-06	0:00:01	81
940	3.8407e-03	4.1965e-06	2.5818e-06	0:00:00	80
941	3.5394e-03	3.8054e-06	2.3249e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
942	3.1906e-03	3.4743e-06	2.1090e-06	0:00:00	78
943	2.9608e-03	3.1673e-06	1.9127e-06	0:00:16	77
944	2.6789e-03	2.9001e-06	1.7399e-06	0:00:12	76
945	2.4536e-03	2.6557e-06	1.5899e-06	0:00:10	75
946	2.2570e-03	2.4357e-06	1.4579e-06	0:00:08	74
947	2.0811e-03	2.2367e-06	1.3348e-06	0:00:06	73
948	1.9328e-03	2.0585e-06	1.2285e-06	0:00:05	72
949	1.8091e-03	1.8932e-06	1.1298e-06	0:00:04	71
950	1.6972e-03	1.7457e-06	1.0440e-06	0:00:03	70
951	1.5863e-03	1.6111e-06	9.6728e-07	0:00:02	69
952	1.4806e-03	1.4876e-06	8.9652e-07	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
953	1.3828e-03	1.3741e-06	8.3050e-07	0:00:01	67
954	1.2905e-03	1.2697e-06	7.6980e-07	0:00:01	66

```

955 1.2049e-03 1.1737e-06 7.1371e-07 0:00:01 65
956 1.1299e-03 1.0856e-06 6.6201e-07 0:00:01 64
957 1.0591e-03 1.0039e-06 6.1436e-07 0:00:01 63
958 9.9397e-04 9.2899e-07 5.6920e-07 0:00:00 62
! 958 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa
()
Flow time = 9s, time step = 18
22 more time steps

Updating solution at time level N...
done.

```

iter	continuity	x-velocity	y-velocity	time/iter	
958	9.9397e-04	9.2899e-07	5.6920e-07	0:00:01	100
959	4.6249e-02	4.0912e-05	2.6500e-05	0:00:01	99
960	3.3759e-02	3.5133e-05	2.6706e-05	0:00:00	98
961	2.7158e-02	3.0002e-05	2.3545e-05	0:00:00	97
962	2.3781e-02	2.5867e-05	2.0191e-05	0:00:00	96
963	2.1804e-02	2.2493e-05	1.7175e-05	0:00:00	95
964	1.9729e-02	1.9733e-05	1.4716e-05	0:00:00	94
965	1.7656e-02	1.7399e-05	1.2707e-05	0:00:00	93
966	1.5663e-02	1.5363e-05	1.1040e-05	0:00:00	92
967	1.3910e-02	1.3609e-05	9.6187e-06	0:00:00	91
968	1.2306e-02	1.2074e-05	8.3839e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
969	1.0929e-02	1.0712e-05	7.3340e-06	0:00:00	89
970	9.6056e-03	9.5794e-06	6.4495e-06	0:00:00	88
971	8.4935e-03	8.5496e-06	5.6986e-06	0:00:00	87
972	7.5190e-03	7.6503e-06	5.0290e-06	0:00:00	86
973	6.6206e-03	6.8788e-06	4.4405e-06	0:00:00	85
974	5.8908e-03	6.1766e-06	3.9531e-06	0:00:00	84
975	5.2587e-03	5.5513e-06	3.5183e-06	0:00:00	83
976	4.6790e-03	5.0074e-06	3.1427e-06	0:00:16	82
977	4.1333e-03	4.5332e-06	2.8060e-06	0:00:13	81

```
978 3.7374e-03 4.1069e-06 2.5247e-06 0:00:10 80
979 3.4187e-03 3.7362e-06 2.2847e-06 0:00:08 79
```

```
iter continuity x-velocity y-velocity time/iter
980 3.1290e-03 3.4009e-06 2.0648e-06 0:00:06 78
981 2.8812e-03 3.1040e-06 1.8755e-06 0:00:05 77
982 2.6608e-03 2.8395e-06 1.7074e-06 0:00:04 76
983 2.4093e-03 2.6022e-06 1.5584e-06 0:00:03 75
984 2.2564e-03 2.3875e-06 1.4249e-06 0:00:02 74
985 2.0397e-03 2.1922e-06 1.3060e-06 0:00:02 73
986 1.9333e-03 2.0160e-06 1.2025e-06 0:00:02 72
987 1.7734e-03 1.8573e-06 1.1138e-06 0:00:01 71
988 1.6556e-03 1.7134e-06 1.0267e-06 0:00:01 70
989 1.5449e-03 1.5794e-06 9.4868e-07 0:00:01 69
990 1.4465e-03 1.4570e-06 8.7912e-07 0:00:01 68
```

```
iter continuity x-velocity y-velocity time/iter
991 1.3604e-03 1.3453e-06 8.1635e-07 0:00:00 67
992 1.2792e-03 1.2453e-06 7.5896e-07 0:00:00 66
993 1.2063e-03 1.1524e-06 7.0468e-07 0:00:13 65
994 1.1340e-03 1.0654e-06 6.5361e-07 0:00:10 64
995 1.0810e-03 9.8622e-07 6.0760e-07 0:00:08 63
996 1.0158e-03 9.1211e-07 5.6373e-07 0:00:06 62
997 9.5368e-04 8.4396e-07 5.2272e-07 0:00:05 61
```

! 997 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 9.5s, time step = 19

21 more time steps

Updating solution at time level N...

done.

```
iter continuity x-velocity y-velocity time/iter
997 9.5368e-04 8.4396e-07 5.2272e-07 0:00:08 100
998 4.4908e-02 4.0014e-05 2.5865e-05 0:00:07 99
```

999	3.2690e-02	3.4309e-05	2.6045e-05	0:00:05	98
1000	2.6062e-02	2.9277e-05	2.2952e-05	0:00:04	97
1001	2.2796e-02	2.5233e-05	1.9695e-05	0:00:03	96
1002	2.1032e-02	2.1953e-05	1.6764e-05	0:00:03	95
1003	1.9116e-02	1.9275e-05	1.4389e-05	0:00:02	94
1004	1.7019e-02	1.7000e-05	1.2448e-05	0:00:02	93
1005	1.5065e-02	1.5004e-05	1.0804e-05	0:00:01	92
1006	1.3350e-02	1.3281e-05	9.3953e-06	0:00:01	91
1007	1.1787e-02	1.1791e-05	8.1965e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
1008	1.0363e-02	1.0490e-05	7.1667e-06	0:00:18	89
1009	9.0893e-03	9.3520e-06	6.3040e-06	0:00:15	88
1010	7.9483e-03	8.3534e-06	5.5466e-06	0:00:12	87
1011	6.9997e-03	7.4830e-06	4.8962e-06	0:00:09	86
1012	6.2768e-03	6.7066e-06	4.3405e-06	0:00:07	85
1013	5.5205e-03	6.0331e-06	3.8297e-06	0:00:06	84
1014	4.9660e-03	5.4368e-06	3.4232e-06	0:00:05	83
1015	4.4179e-03	4.9155e-06	3.0513e-06	0:00:04	82
1016	4.0438e-03	4.4513e-06	2.7468e-06	0:00:03	81
1017	3.6156e-03	4.0433e-06	2.4640e-06	0:00:02	80
1018	3.3299e-03	3.6782e-06	2.2277e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
1019	2.9960e-03	3.3583e-06	2.0171e-06	0:00:01	78
1020	2.7674e-03	3.0590e-06	1.8311e-06	0:00:01	77
1021	2.4790e-03	2.8042e-06	1.6663e-06	0:00:01	76
1022	2.3121e-03	2.5691e-06	1.5217e-06	0:00:01	75
1023	2.0966e-03	2.3577e-06	1.3960e-06	0:00:01	74
1024	1.9371e-03	2.1646e-06	1.2824e-06	0:00:00	73
1025	1.8029e-03	1.9913e-06	1.1811e-06	0:00:00	72
1026	1.6713e-03	1.8358e-06	1.0892e-06	0:00:00	71
1027	1.5516e-03	1.6950e-06	1.0097e-06	0:00:14	70
1028	1.4465e-03	1.5647e-06	9.3446e-07	0:00:11	69
1029	1.3459e-03	1.4452e-06	8.6469e-07	0:00:09	68

iter	continuity	x-velocity	y-velocity	time/iter	
1030	1.2551e-03	1.3353e-06	8.0222e-07	0:00:07	67
1031	1.1699e-03	1.2331e-06	7.4479e-07	0:00:05	66
1032	1.0908e-03	1.1405e-06	6.9242e-07	0:00:04	65
1033	1.0222e-03	1.0557e-06	6.4385e-07	0:00:03	64
1034	9.5894e-04	9.7770e-07	5.9847e-07	0:00:03	63

! 1034 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 10s, time step = 20

20 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
1034	9.5894e-04	9.7770e-07	5.9847e-07	0:00:04 100
1035	4.3200e-02	3.9122e-05	2.5266e-05	0:00:03 99
1036	3.1287e-02	3.3494e-05	2.5399e-05	0:00:22 98
1037	2.4708e-02	2.8551e-05	2.2424e-05	0:00:18 97
1038	2.1453e-02	2.4602e-05	1.9224e-05	0:00:14 96
1039	1.9670e-02	2.1423e-05	1.6399e-05	0:00:11 95
1040	1.7782e-02	1.8815e-05	1.4092e-05	0:00:09 94
1041	1.5806e-02	1.6587e-05	1.2156e-05	0:00:07 93
1042	1.4014e-02	1.4656e-05	1.0548e-05	0:00:05 92
1043	1.2446e-02	1.2975e-05	9.1519e-06	0:00:04 91
1044	1.1024e-02	1.1536e-05	7.9970e-06	0:00:03 90

iter	continuity	x-velocity	y-velocity	time/iter
1045	9.7475e-03	1.0268e-05	6.9991e-06	0:00:03 89
1046	8.5882e-03	9.1622e-06	6.1424e-06	0:00:02 88
1047	7.5548e-03	8.1989e-06	5.4162e-06	0:00:02 87
1048	6.6777e-03	7.3532e-06	4.7760e-06	0:00:01 86
1049	5.8997e-03	6.6164e-06	4.2370e-06	0:00:01 85
1050	5.3294e-03	5.9513e-06	3.7741e-06	0:00:01 84
1051	4.7508e-03	5.3887e-06	3.3724e-06	0:00:01 83
1052	4.3015e-03	4.8714e-06	3.0199e-06	0:00:01 82
1053	3.8159e-03	4.4169e-06	2.7059e-06	0:00:17 81
1054	3.4167e-03	4.0125e-06	2.4406e-06	0:00:13 80
1055	3.0986e-03	3.6542e-06	2.2067e-06	0:00:10 79

iter	continuity	x-velocity	y-velocity	time/iter
1056	2.8668e-03	3.3288e-06	2.0035e-06	0:00:08 78
1057	2.5778e-03	3.0492e-06	1.8236e-06	0:00:06 77

1058	2.3516e-03	2.7946e-06	1.6628e-06	0:00:05	76
1059	2.1586e-03	2.5618e-06	1.5242e-06	0:00:04	75
1060	1.9918e-03	2.3516e-06	1.3970e-06	0:00:03	74
1061	1.8384e-03	2.1627e-06	1.2826e-06	0:00:03	73
1062	1.6984e-03	1.9892e-06	1.1815e-06	0:00:02	72
1063	1.5704e-03	1.8321e-06	1.0901e-06	0:00:02	71
1064	1.4631e-03	1.6909e-06	1.0075e-06	0:00:01	70
1065	1.3621e-03	1.5613e-06	9.3283e-07	0:00:01	69
1066	1.2757e-03	1.4441e-06	8.6512e-07	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1067	1.1918e-03	1.3341e-06	8.0184e-07	0:00:01	67
1068	1.1175e-03	1.2333e-06	7.4352e-07	0:00:00	66
1069	1.0512e-03	1.1409e-06	6.8980e-07	0:00:00	65
1070	9.8510e-04	1.0566e-06	6.4134e-07	0:00:00	64

! 1070 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 10.5s, time step = 21

19 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1070	9.8510e-04	1.0566e-06	6.4134e-07	0:00:00	100
1071	4.1464e-02	3.8262e-05	2.4686e-05	0:00:00	99
1072	3.0227e-02	3.2695e-05	2.4858e-05	0:00:00	98
1073	2.3981e-02	2.7898e-05	2.1967e-05	0:00:00	97
1074	2.0741e-02	2.4057e-05	1.8853e-05	0:00:00	96
1075	1.8984e-02	2.0948e-05	1.6070e-05	0:00:00	95
1076	1.7186e-02	1.8402e-05	1.3797e-05	0:00:00	94
1077	1.5401e-02	1.6245e-05	1.1918e-05	0:00:00	93
1078	1.3667e-02	1.4376e-05	1.0330e-05	0:00:00	92
1079	1.2097e-02	1.2762e-05	8.9942e-06	0:00:00	91
1080	1.0669e-02	1.1358e-05	7.8625e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1081	9.3857e-03	1.0138e-05	6.8947e-06	0:00:00	89
1082	8.2691e-03	9.0707e-06	6.0799e-06	0:00:00	88
1083	7.2950e-03	8.1343e-06	5.3644e-06	0:00:00	87
1084	6.4609e-03	7.3205e-06	4.7646e-06	0:00:00	86
1085	5.7378e-03	6.5970e-06	4.2428e-06	0:00:00	85
1086	5.1131e-03	5.9583e-06	3.7904e-06	0:00:00	84
1087	4.5801e-03	5.3904e-06	3.3931e-06	0:00:00	83
1088	4.1016e-03	4.8833e-06	3.0456e-06	0:00:00	82
1089	3.7533e-03	4.4298e-06	2.7427e-06	0:00:16	81
1090	3.3510e-03	4.0382e-06	2.4792e-06	0:00:13	80
1091	3.0703e-03	3.6806e-06	2.2489e-06	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
1092	2.7534e-03	3.3630e-06	2.0374e-06	0:00:08	78
1093	2.4935e-03	3.0752e-06	1.8556e-06	0:00:06	77
1094	2.2771e-03	2.8188e-06	1.6925e-06	0:00:05	76
1095	2.0881e-03	2.5876e-06	1.5483e-06	0:00:04	75
1096	1.9268e-03	2.3783e-06	1.4198e-06	0:00:03	74
1097	1.7891e-03	2.1889e-06	1.3035e-06	0:00:02	73
1098	1.6584e-03	2.0171e-06	1.1988e-06	0:00:02	72
1099	1.5272e-03	1.8603e-06	1.1046e-06	0:00:02	71
1100	1.4141e-03	1.7162e-06	1.0198e-06	0:00:01	70
1101	1.3134e-03	1.5839e-06	9.4291e-07	0:00:01	69
1102	1.2191e-03	1.4620e-06	8.7237e-07	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1103	1.1355e-03	1.3503e-06	8.0789e-07	0:00:01	67
1104	1.0609e-03	1.2473e-06	7.4903e-07	0:00:00	66
1105	9.9069e-04	1.1531e-06	6.9477e-07	0:00:00	65

! 1105 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 11s, time step = 22

18 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
1105	9.9069e-04	1.1531e-06	6.9477e-07	0:00:01	100
1106	3.9985e-02	3.7652e-05	2.4299e-05	0:00:20	99
1107	2.9022e-02	3.2038e-05	2.4507e-05	0:00:16	98
1108	2.2906e-02	2.7388e-05	2.1689e-05	0:00:13	97
1109	1.9989e-02	2.3591e-05	1.8601e-05	0:00:10	96
1110	1.8454e-02	2.0597e-05	1.5919e-05	0:00:08	95
1111	1.6687e-02	1.8191e-05	1.3718e-05	0:00:06	94
1112	1.4837e-02	1.6037e-05	1.1899e-05	0:00:05	93
1113	1.3271e-02	1.4234e-05	1.0343e-05	0:00:04	92
1114	1.1833e-02	1.2692e-05	9.0552e-06	0:00:03	91
1115	1.0502e-02	1.1330e-05	7.9366e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
1116	9.3477e-03	1.0143e-05	6.9919e-06	0:00:02	89
1117	8.2776e-03	9.1091e-06	6.1905e-06	0:00:02	88
1118	7.3073e-03	8.1897e-06	5.4863e-06	0:00:01	87
1119	6.4549e-03	7.3855e-06	4.8951e-06	0:00:01	86
1120	5.7204e-03	6.6707e-06	4.3729e-06	0:00:01	85
1121	5.1677e-03	6.0233e-06	3.9056e-06	0:00:01	84
1122	4.5609e-03	5.4680e-06	3.5031e-06	0:00:17	83
1123	4.1274e-03	4.9612e-06	3.1562e-06	0:00:13	82
1124	3.6789e-03	4.5200e-06	2.8503e-06	0:00:11	81
1125	3.3618e-03	4.1119e-06	2.5771e-06	0:00:08	80
1126	3.0091e-03	3.7536e-06	2.3307e-06	0:00:07	79

iter	continuity	x-velocity	y-velocity	time/iter	
1127	2.7657e-03	3.4251e-06	2.1170e-06	0:00:05	78
1128	2.4831e-03	3.1426e-06	1.9310e-06	0:00:04	77
1129	2.2816e-03	2.8818e-06	1.7590e-06	0:00:03	76
1130	2.0352e-03	2.6473e-06	1.6110e-06	0:00:03	75
1131	1.8626e-03	2.4337e-06	1.4754e-06	0:00:02	74
1132	1.7091e-03	2.2390e-06	1.3548e-06	0:00:02	73
1133	1.5752e-03	2.0624e-06	1.2453e-06	0:00:01	72
1134	1.4540e-03	1.9008e-06	1.1478e-06	0:00:01	71
1135	1.3510e-03	1.7535e-06	1.0582e-06	0:00:01	70
1136	1.2573e-03	1.6173e-06	9.7672e-07	0:00:01	69
1137	1.1751e-03	1.4932e-06	9.0141e-07	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter
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```

1138 1.0983e-03 1.3777e-06 8.3374e-07 0:00:00 67
1139 1.0261e-03 1.2707e-06 7.7107e-07 0:00:00 66
1140 9.6169e-04 1.1724e-06 7.1392e-07 0:00:00 65
! 1140 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 11.5s, time step = 23
17 more time steps

Updating solution at time level N...
done.

```

iter	continuity	x-velocity	y-velocity	time/iter	
1140	9.6169e-04	1.1724e-06	7.1392e-07	0:00:00	100
1141	3.9211e-02	3.7505e-05	2.4360e-05	0:00:00	99
1142	2.8154e-02	3.1685e-05	2.4525e-05	0:00:00	98
1143	2.2250e-02	2.7016e-05	2.1700e-05	0:00:00	97
1144	1.9341e-02	2.3331e-05	1.8690e-05	0:00:00	96
1145	1.7856e-02	2.0423e-05	1.6057e-05	0:00:00	95
1146	1.6287e-02	1.8081e-05	1.3910e-05	0:00:19	94
1147	1.4541e-02	1.6075e-05	1.2105e-05	0:00:15	93
1148	1.2952e-02	1.4277e-05	1.0585e-05	0:00:12	92
1149	1.1573e-02	1.2751e-05	9.2830e-06	0:00:09	91
1150	1.0325e-02	1.1418e-05	8.1751e-06	0:00:07	90

iter	continuity	x-velocity	y-velocity	time/iter	
1151	9.1866e-03	1.0256e-05	7.2356e-06	0:00:06	89
1152	8.1438e-03	9.2277e-06	6.4301e-06	0:00:05	88
1153	7.2292e-03	8.3162e-06	5.7220e-06	0:00:04	87
1154	6.4283e-03	7.5088e-06	5.1000e-06	0:00:03	86
1155	5.7225e-03	6.7954e-06	4.5683e-06	0:00:02	85
1156	5.1119e-03	6.1606e-06	4.1029e-06	0:00:02	84
1157	4.5641e-03	5.5888e-06	3.6841e-06	0:00:01	83
1158	4.0854e-03	5.0819e-06	3.3285e-06	0:00:01	82
1159	3.6674e-03	4.6277e-06	3.0069e-06	0:00:01	81
1160	3.2979e-03	4.2184e-06	2.7227e-06	0:00:01	80

1161 2.9753e-03 3.8562e-06 2.4734e-06 0:00:01 79

iter	continuity	x-velocity	y-velocity	time/iter	
1162	2.6850e-03	3.5275e-06	2.2499e-06	0:00:00	78
1163	2.4349e-03	3.2296e-06	2.0506e-06	0:00:00	77
1164	2.2046e-03	2.9596e-06	1.8715e-06	0:00:00	76
1165	2.0168e-03	2.7185e-06	1.7112e-06	0:00:15	75
1166	1.8510e-03	2.4972e-06	1.5666e-06	0:00:12	74
1167	1.7118e-03	2.2957e-06	1.4355e-06	0:00:09	73
1168	1.5891e-03	2.1133e-06	1.3190e-06	0:00:07	72
1169	1.4809e-03	1.9459e-06	1.2132e-06	0:00:06	71
1170	1.3820e-03	1.7931e-06	1.1186e-06	0:00:05	70
1171	1.2934e-03	1.6527e-06	1.0315e-06	0:00:04	69
1172	1.2081e-03	1.5234e-06	9.5069e-07	0:00:03	68

iter	continuity	x-velocity	y-velocity	time/iter	
1173	1.1295e-03	1.4042e-06	8.7749e-07	0:00:02	67
1174	1.0585e-03	1.2945e-06	8.1050e-07	0:00:02	66
1175	9.9552e-04	1.1930e-06	7.4814e-07	0:00:01	65

! 1175 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 12s, time step = 24

16 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1175	9.9552e-04	1.1930e-06	7.4814e-07	0:00:02	100
1176	3.9671e-02	3.7796e-05	2.4788e-05	0:00:02	99
1177	2.8148e-02	3.1620e-05	2.4861e-05	0:00:01	98
1178	2.2306e-02	2.6939e-05	2.1992e-05	0:00:20	97
1179	1.9502e-02	2.3319e-05	1.8992e-05	0:00:16	96
1180	1.7988e-02	2.0503e-05	1.6359e-05	0:00:13	95
1181	1.6162e-02	1.8212e-05	1.4197e-05	0:00:10	94

1182	1.4458e-02	1.6180e-05	1.2431e-05	0:00:08	93
1183	1.2973e-02	1.4446e-05	1.0913e-05	0:00:06	92
1184	1.1600e-02	1.2939e-05	9.6209e-06	0:00:05	91
1185	1.0338e-02	1.1617e-05	8.5191e-06	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
1186	9.1867e-03	1.0438e-05	7.5648e-06	0:00:03	89
1187	8.1679e-03	9.4016e-06	6.7364e-06	0:00:02	88
1188	7.2405e-03	8.4947e-06	6.0188e-06	0:00:02	87
1189	6.4190e-03	7.6751e-06	5.3925e-06	0:00:02	86
1190	5.7087e-03	6.9612e-06	4.8437e-06	0:00:01	85
1191	5.0818e-03	6.3154e-06	4.3536e-06	0:00:01	84
1192	4.5345e-03	5.7408e-06	3.9272e-06	0:00:01	83
1193	4.0542e-03	5.2228e-06	3.5430e-06	0:00:01	82
1194	3.6242e-03	4.7568e-06	3.2079e-06	0:00:00	81
1195	3.2524e-03	4.3363e-06	2.9078e-06	0:00:00	80
1196	2.9321e-03	3.9615e-06	2.6416e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
1197	2.6580e-03	3.6204e-06	2.4013e-06	0:00:00	78
1198	2.4179e-03	3.3105e-06	2.1848e-06	0:00:16	77
1199	2.2161e-03	3.0321e-06	1.9928e-06	0:00:12	76
1200	2.0360e-03	2.7793e-06	1.8198e-06	0:00:10	75
1201	1.8770e-03	2.5512e-06	1.6651e-06	0:00:08	74
1202	1.7354e-03	2.3470e-06	1.5270e-06	0:00:06	73
1203	1.6122e-03	2.1560e-06	1.4007e-06	0:00:05	72
1204	1.5027e-03	1.9823e-06	1.2892e-06	0:00:04	71
1205	1.4015e-03	1.8242e-06	1.1866e-06	0:00:03	70
1206	1.3130e-03	1.6789e-06	1.0941e-06	0:00:02	69
1207	1.2309e-03	1.5459e-06	1.0097e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
1208	1.1582e-03	1.4238e-06	9.3267e-07	0:00:01	67
1209	1.0874e-03	1.3119e-06	8.6276e-07	0:00:01	66
1210	1.0216e-03	1.2089e-06	7.9837e-07	0:00:01	65
1211	9.7495e-04	1.1135e-06	7.3928e-07	0:00:01	64

! 1211 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 12.5s, time step = 25

15 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1211	9.7495e-04	1.1135e-06	7.3928e-07	0:00:01	100
1212	4.0826e-02	3.8432e-05	2.5518e-05	0:00:01	99
1213	2.8662e-02	3.1846e-05	2.5362e-05	0:00:20	98
1214	2.2763e-02	2.7111e-05	2.2402e-05	0:00:16	97
1215	1.9858e-02	2.3560e-05	1.9453e-05	0:00:13	96
1216	1.8220e-02	2.0759e-05	1.6843e-05	0:00:10	95
1217	1.6483e-02	1.8488e-05	1.4702e-05	0:00:08	94
1218	1.4688e-02	1.6492e-05	1.2910e-05	0:00:06	93
1219	1.3153e-02	1.4750e-05	1.1382e-05	0:00:05	92
1220	1.1707e-02	1.3211e-05	1.0056e-05	0:00:04	91
1221	1.0442e-02	1.1869e-05	8.9332e-06	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
1222	9.2701e-03	1.0695e-05	7.9601e-06	0:00:02	89
1223	8.2059e-03	9.6440e-06	7.1215e-06	0:00:02	88
1224	7.2866e-03	8.7230e-06	6.3835e-06	0:00:02	87
1225	6.4647e-03	7.8979e-06	5.7298e-06	0:00:01	86
1226	5.7768e-03	7.1617e-06	5.1512e-06	0:00:01	85
1227	5.1593e-03	6.5031e-06	4.6343e-06	0:00:01	84
1228	4.6163e-03	5.9079e-06	4.1817e-06	0:00:01	83
1229	4.1547e-03	5.3767e-06	3.7777e-06	0:00:00	82
1230	3.7535e-03	4.8960e-06	3.4162e-06	0:00:00	81
1231	3.4110e-03	4.4635e-06	3.0945e-06	0:00:00	80
1232	3.1026e-03	4.0674e-06	2.8013e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
1233	2.8456e-03	3.7114e-06	2.5448e-06	0:00:16	78
1234	2.6187e-03	3.3926e-06	2.3159e-06	0:00:12	77
1235	2.4467e-03	3.1019e-06	2.1095e-06	0:00:10	76
1236	2.2172e-03	2.8427e-06	1.9256e-06	0:00:08	75
1237	2.0744e-03	2.6043e-06	1.7595e-06	0:00:06	74
1238	1.8750e-03	2.3889e-06	1.6151e-06	0:00:05	73
1239	1.7504e-03	2.1918e-06	1.4837e-06	0:00:04	72

1240	1.6294e-03	2.0122e-06	1.3650e-06	0:00:03	71
1241	1.5179e-03	1.8487e-06	1.2575e-06	0:00:02	70
1242	1.4198e-03	1.7003e-06	1.1600e-06	0:00:02	69
1243	1.3300e-03	1.5645e-06	1.0714e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1244	1.2488e-03	1.4400e-06	9.9103e-07	0:00:01	67
1245	1.1691e-03	1.3259e-06	9.1888e-07	0:00:01	66
1246	1.0986e-03	1.2214e-06	8.5265e-07	0:00:01	65
1247	1.0317e-03	1.1254e-06	7.9080e-07	0:00:01	64
1248	9.7091e-04	1.0374e-06	7.3467e-07	0:00:00	63

! 1248 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 13s, time step = 26

14 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1248	9.7091e-04	1.0374e-06	7.3467e-07	0:00:01	100
1249	4.2066e-02	3.9222e-05	2.6671e-05	0:00:01	99
1250	2.9723e-02	3.2321e-05	2.6093e-05	0:00:20	98
1251	2.3633e-02	2.7558e-05	2.3126e-05	0:00:16	97
1252	2.0412e-02	2.3983e-05	2.0122e-05	0:00:13	96
1253	1.8608e-02	2.1175e-05	1.7459e-05	0:00:10	95
1254	1.6799e-02	1.8861e-05	1.5316e-05	0:00:08	94
1255	1.5041e-02	1.6880e-05	1.3494e-05	0:00:06	93
1256	1.3389e-02	1.5094e-05	1.1894e-05	0:00:05	92
1257	1.1908e-02	1.3551e-05	1.0573e-05	0:00:04	91
1258	1.0618e-02	1.2191e-05	9.4208e-06	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
1259	9.4358e-03	1.0970e-05	8.4056e-06	0:00:02	89
1260	8.3603e-03	9.8887e-06	7.5065e-06	0:00:02	88

1261	7.4156e-03	8.9289e-06	6.7192e-06	0:00:19	87
1262	6.6102e-03	8.0871e-06	6.0310e-06	0:00:15	86
1263	5.9027e-03	7.3228e-06	5.4106e-06	0:00:12	85
1264	5.2872e-03	6.6408e-06	4.8692e-06	0:00:09	84
1265	4.7655e-03	6.0298e-06	4.3780e-06	0:00:07	83
1266	4.3069e-03	5.4765e-06	3.9380e-06	0:00:06	82
1267	3.9100e-03	4.9825e-06	3.5547e-06	0:00:05	81
1268	3.6057e-03	4.5292e-06	3.2084e-06	0:00:04	80
1269	3.2395e-03	4.1343e-06	2.9098e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
1270	3.0016e-03	3.7663e-06	2.6395e-06	0:00:02	78
1271	2.7169e-03	3.4396e-06	2.4020e-06	0:00:02	77
1272	2.5517e-03	3.1408e-06	2.1877e-06	0:00:01	76
1273	2.3132e-03	2.8749e-06	1.9981e-06	0:00:01	75
1274	2.1430e-03	2.6308e-06	1.8270e-06	0:00:01	74
1275	1.9836e-03	2.4100e-06	1.6749e-06	0:00:01	73
1276	1.8464e-03	2.2101e-06	1.5392e-06	0:00:01	72
1277	1.7284e-03	2.0289e-06	1.4183e-06	0:00:00	71
1278	1.6329e-03	1.8637e-06	1.3098e-06	0:00:00	70
1279	1.5235e-03	1.7143e-06	1.2126e-06	0:00:00	69
1280	1.4233e-03	1.5801e-06	1.1230e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
1281	1.3279e-03	1.4562e-06	1.0421e-06	0:00:00	67
1282	1.2432e-03	1.3432e-06	9.6784e-07	0:00:00	66
1283	1.1655e-03	1.2407e-06	9.0042e-07	0:00:13	65
1284	1.0956e-03	1.1454e-06	8.3698e-07	0:00:10	64
1285	1.0220e-03	1.0592e-06	7.7909e-07	0:00:08	63
1286	9.5608e-04	9.8029e-07	7.2604e-07	0:00:06	62

! 1286 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 13.5s, time step = 27

13 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
1286	9.5608e-04	9.8029e-07	7.2604e-07	0:00:10	100
1287	4.2908e-02	3.9863e-05	2.7922e-05	0:00:08	99
1288	3.0654e-02	3.3014e-05	2.6991e-05	0:00:06	98
1289	2.3834e-02	2.8176e-05	2.3898e-05	0:00:05	97
1290	2.0281e-02	2.4538e-05	2.0851e-05	0:00:04	96
1291	1.8360e-02	2.1677e-05	1.8157e-05	0:00:03	95
1292	1.6495e-02	1.9281e-05	1.5901e-05	0:00:03	94
1293	1.4628e-02	1.7229e-05	1.4019e-05	0:00:02	93
1294	1.3003e-02	1.5392e-05	1.2371e-05	0:00:02	92
1295	1.1537e-02	1.3777e-05	1.0951e-05	0:00:01	91
1296	1.0243e-02	1.2379e-05	9.7450e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
1297	9.0630e-03	1.1133e-05	8.6717e-06	0:00:19	89
1298	8.0383e-03	1.0028e-05	7.7239e-06	0:00:15	88
1299	7.1487e-03	9.0421e-06	6.8968e-06	0:00:12	87
1300	6.4082e-03	8.1750e-06	6.1603e-06	0:00:09	86
1301	5.7612e-03	7.3960e-06	5.5142e-06	0:00:07	85
1302	5.1937e-03	6.6993e-06	4.9407e-06	0:00:06	84
1303	4.6910e-03	6.0712e-06	4.4360e-06	0:00:05	83
1304	4.3280e-03	5.5060e-06	3.9915e-06	0:00:04	82
1305	3.8797e-03	5.0063e-06	3.6035e-06	0:00:03	81
1306	3.5975e-03	4.5549e-06	3.2553e-06	0:00:02	80
1307	3.2416e-03	4.1565e-06	2.9486e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
1308	3.0156e-03	3.7923e-06	2.6790e-06	0:00:01	78
1309	2.7332e-03	3.4689e-06	2.4417e-06	0:00:01	77
1310	2.5228e-03	3.1725e-06	2.2299e-06	0:00:01	76
1311	2.3380e-03	2.9029e-06	2.0389e-06	0:00:01	75
1312	2.1717e-03	2.6642e-06	1.8705e-06	0:00:01	74
1313	2.0210e-03	2.4488e-06	1.7217e-06	0:00:00	73
1314	1.8811e-03	2.2519e-06	1.5870e-06	0:00:15	72
1315	1.7596e-03	2.0753e-06	1.4661e-06	0:00:12	71
1316	1.6546e-03	1.9140e-06	1.3565e-06	0:00:09	70
1317	1.5448e-03	1.7688e-06	1.2594e-06	0:00:07	69
1318	1.4412e-03	1.6361e-06	1.1706e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
1319	1.3447e-03	1.5130e-06	1.0884e-06	0:00:04	67

1320	1.2537e-03	1.4013e-06	1.0137e-06	0:00:04	66
1321	1.1691e-03	1.2994e-06	9.4400e-07	0:00:03	65
1322	1.0933e-03	1.2058e-06	8.7885e-07	0:00:02	64
1323	1.0209e-03	1.1201e-06	8.1857e-07	0:00:02	63
1324	9.5550e-04	1.0415e-06	7.6365e-07	0:00:01	62

! 1324 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 14s, time step = 28

12 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1324	9.5550e-04	1.0415e-06	7.6365e-07	0:00:02	100
1325	4.2960e-02	4.0003e-05	2.8803e-05	0:00:02	99
1326	3.1005e-02	3.3335e-05	2.7677e-05	0:00:01	98
1327	2.3335e-02	2.8596e-05	2.4565e-05	0:00:01	97
1328	1.9523e-02	2.4904e-05	2.1408e-05	0:00:01	96
1329	1.7536e-02	2.1930e-05	1.8634e-05	0:00:01	95
1330	1.5762e-02	1.9461e-05	1.6301e-05	0:00:19	94
1331	1.4046e-02	1.7311e-05	1.4292e-05	0:00:15	93
1332	1.2568e-02	1.5450e-05	1.2580e-05	0:00:12	92
1333	1.1230e-02	1.3847e-05	1.1121e-05	0:00:10	91
1334	9.9872e-03	1.2422e-05	9.8285e-06	0:00:08	90

iter	continuity	x-velocity	y-velocity	time/iter	
1335	8.8670e-03	1.1152e-05	8.7057e-06	0:00:06	89
1336	7.8645e-03	1.0053e-05	7.7373e-06	0:00:05	88
1337	7.0424e-03	9.0665e-06	6.8882e-06	0:00:04	87
1338	6.3391e-03	8.1932e-06	6.1490e-06	0:00:03	86
1339	5.7215e-03	7.4193e-06	5.5009e-06	0:00:02	85
1340	5.1860e-03	6.7262e-06	4.9345e-06	0:00:02	84
1341	4.7062e-03	6.1117e-06	4.4452e-06	0:00:01	83
1342	4.2893e-03	5.5669e-06	4.0148e-06	0:00:01	82

1343	3.9017e-03	5.0786e-06	3.6338e-06	0:00:01	81
1344	3.5643e-03	4.6382e-06	3.3007e-06	0:00:01	80
1345	3.2698e-03	4.2427e-06	3.0059e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1346	3.0085e-03	3.8840e-06	2.7421e-06	0:00:00	78
1347	2.7761e-03	3.5630e-06	2.5110e-06	0:00:00	77
1348	2.5732e-03	3.2753e-06	2.3045e-06	0:00:00	76
1349	2.3844e-03	3.0140e-06	2.1183e-06	0:00:00	75
1350	2.2148e-03	2.7801e-06	1.9511e-06	0:00:00	74
1351	2.0567e-03	2.5659e-06	1.8018e-06	0:00:15	73
1352	1.9051e-03	2.3705e-06	1.6663e-06	0:00:12	72
1353	1.7720e-03	2.1935e-06	1.5443e-06	0:00:09	71
1354	1.6500e-03	2.0319e-06	1.4331e-06	0:00:07	70
1355	1.5372e-03	1.8848e-06	1.3312e-06	0:00:06	69
1356	1.4461e-03	1.7502e-06	1.2364e-06	0:00:04	68

iter	continuity	x-velocity	y-velocity	time/iter	
1357	1.3519e-03	1.6261e-06	1.1497e-06	0:00:04	67
1358	1.2637e-03	1.5120e-06	1.0695e-06	0:00:03	66
1359	1.1809e-03	1.4067e-06	9.9470e-07	0:00:02	65
1360	1.1101e-03	1.3084e-06	9.2506e-07	0:00:02	64
1361	1.0423e-03	1.2179e-06	8.6096e-07	0:00:01	63
1362	9.8051e-04	1.1336e-06	8.0101e-07	0:00:01	62

! 1362 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 14.5s, time step = 29

11 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1362	9.8051e-04	1.1336e-06	8.0101e-07	0:00:02	100
1363	4.2845e-02	3.9495e-05	2.9055e-05	0:00:01	99

1364	3.0687e-02	3.3234e-05	2.8111e-05	0:00:01	98
1365	2.2412e-02	2.8532e-05	2.4943e-05	0:00:01	97
1366	1.8581e-02	2.4831e-05	2.1717e-05	0:00:01	96
1367	1.6556e-02	2.1912e-05	1.8831e-05	0:00:01	95
1368	1.4934e-02	1.9403e-05	1.6429e-05	0:00:00	94
1369	1.3432e-02	1.7296e-05	1.4367e-05	0:00:00	93
1370	1.2065e-02	1.5464e-05	1.2619e-05	0:00:00	92
1371	1.0832e-02	1.3856e-05	1.1119e-05	0:00:00	91
1372	9.7180e-03	1.2440e-05	9.8311e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1373	8.7277e-03	1.1212e-05	8.7341e-06	0:00:00	89
1374	7.8385e-03	1.0126e-05	7.7806e-06	0:00:00	88
1375	7.0429e-03	9.1659e-06	6.9569e-06	0:00:00	87
1376	6.3456e-03	8.3334e-06	6.2611e-06	0:00:00	86
1377	5.7227e-03	7.5805e-06	5.6333e-06	0:00:00	85
1378	5.1753e-03	6.9143e-06	5.0938e-06	0:00:00	84
1379	4.6908e-03	6.3126e-06	4.6201e-06	0:00:00	83
1380	4.2756e-03	5.7830e-06	4.2057e-06	0:00:00	82
1381	3.9034e-03	5.2949e-06	3.8337e-06	0:00:16	81
1382	3.5707e-03	4.8574e-06	3.5075e-06	0:00:13	80
1383	3.2854e-03	4.4638e-06	3.2162e-06	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
1384	3.0285e-03	4.1061e-06	2.9538e-06	0:00:08	78
1385	2.8028e-03	3.7857e-06	2.7202e-06	0:00:06	77
1386	2.5948e-03	3.4956e-06	2.5079e-06	0:00:05	76
1387	2.4041e-03	3.2299e-06	2.3151e-06	0:00:04	75
1388	2.2271e-03	2.9878e-06	2.1408e-06	0:00:03	74
1389	2.0674e-03	2.7678e-06	1.9818e-06	0:00:02	73
1390	1.9173e-03	2.5658e-06	1.8362e-06	0:00:02	72
1391	1.7840e-03	2.3816e-06	1.7012e-06	0:00:02	71
1392	1.6585e-03	2.2127e-06	1.5774e-06	0:00:01	70
1393	1.5531e-03	2.0578e-06	1.4634e-06	0:00:01	69
1394	1.4495e-03	1.9131e-06	1.3569e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1395	1.3622e-03	1.7781e-06	1.2565e-06	0:00:01	67
1396	1.2721e-03	1.6544e-06	1.1674e-06	0:00:00	66
1397	1.1890e-03	1.5397e-06	1.0843e-06	0:00:00	65
1398	1.1118e-03	1.4321e-06	1.0059e-06	0:00:00	64
1399	1.0354e-03	1.3318e-06	9.3244e-07	0:00:00	63
1400	9.6587e-04	1.2380e-06	8.6454e-07	0:00:00	62

! 1400 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 15s, time step = 30

10 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
1400	9.6587e-04	1.2380e-06	8.6454e-07	0:00:00 100
1401	4.3422e-02	3.8808e-05	2.9203e-05	0:00:00 99
1402	3.0003e-02	3.2855e-05	2.8460e-05	0:00:00 98
1403	2.1470e-02	2.8311e-05	2.5263e-05	0:00:00 97
1404	1.7834e-02	2.4774e-05	2.2042e-05	0:00:00 96
1405	1.6164e-02	2.1931e-05	1.9182e-05	0:00:00 95
1406	1.4602e-02	1.9539e-05	1.6736e-05	0:00:00 94
1407	1.3185e-02	1.7506e-05	1.4699e-05	0:00:00 93
1408	1.1954e-02	1.5772e-05	1.2994e-05	0:00:00 92
1409	1.0850e-02	1.4269e-05	1.1564e-05	0:00:18 91
1410	9.8963e-03	1.2945e-05	1.0315e-05	0:00:14 90

iter	continuity	x-velocity	y-velocity	time/iter
1411	9.0003e-03	1.1751e-05	9.2354e-06	0:00:11 89
1412	8.1833e-03	1.0711e-05	8.3108e-06	0:00:09 88
1413	7.4345e-03	9.7806e-06	7.5126e-06	0:00:07 87
1414	6.7721e-03	8.9485e-06	6.8201e-06	0:00:06 86
1415	6.1548e-03	8.1855e-06	6.2057e-06	0:00:04 85
1416	5.6043e-03	7.5086e-06	5.6699e-06	0:00:04 84
1417	5.1030e-03	6.9005e-06	5.1936e-06	0:00:03 83
1418	4.6755e-03	6.3403e-06	4.7595e-06	0:00:02 82
1419	4.2851e-03	5.8440e-06	4.3727e-06	0:00:02 81
1420	3.9394e-03	5.3875e-06	4.0238e-06	0:00:01 80
1421	3.6154e-03	4.9704e-06	3.7031e-06	0:00:01 79

iter	continuity	x-velocity	y-velocity	time/iter
1422	3.3189e-03	4.5939e-06	3.4129e-06	0:00:01 78

1423	3.0482e-03	4.2475e-06	3.1469e-06	0:00:01	77
1424	2.8059e-03	3.9303e-06	2.9035e-06	0:00:01	76
1425	2.5777e-03	3.6389e-06	2.6798e-06	0:00:00	75
1426	2.3728e-03	3.3711e-06	2.4733e-06	0:00:00	74
1427	2.1875e-03	3.1254e-06	2.2850e-06	0:00:00	73
1428	2.0168e-03	2.8972e-06	2.1119e-06	0:00:00	72
1429	1.8630e-03	2.6872e-06	1.9513e-06	0:00:14	71
1430	1.7186e-03	2.4918e-06	1.8028e-06	0:00:11	70
1431	1.5895e-03	2.3116e-06	1.6662e-06	0:00:09	69
1432	1.4661e-03	2.1439e-06	1.5394e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
1433	1.3611e-03	1.9881e-06	1.4206e-06	0:00:06	67
1434	1.2599e-03	1.8436e-06	1.3149e-06	0:00:04	66
1435	1.1716e-03	1.7118e-06	1.2168e-06	0:00:03	65
1436	1.0904e-03	1.5887e-06	1.1244e-06	0:00:03	64
1437	1.0157e-03	1.4730e-06	1.0389e-06	0:00:02	63
1438	9.4788e-04	1.3658e-06	9.5992e-07	0:00:02	62

! 1438 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 15.5s, time step = 31

9 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1438	9.4788e-04	1.3658e-06	9.5992e-07	0:00:03	100
1439	4.7048e-02	4.0201e-05	3.0583e-05	0:00:02	99
1440	3.0525e-02	3.3522e-05	2.9721e-05	0:00:02	98
1441	2.2126e-02	2.9073e-05	2.6528e-05	0:00:01	97
1442	1.9105e-02	2.5683e-05	2.3243e-05	0:00:01	96
1443	1.7751e-02	2.3025e-05	2.0357e-05	0:00:01	95
1444	1.6266e-02	2.0887e-05	1.8010e-05	0:00:19	94
1445	1.5019e-02	1.8888e-05	1.6013e-05	0:00:15	93

1446	1.3804e-02	1.7161e-05	1.4327e-05	0:00:12	92
1447	1.2624e-02	1.5643e-05	1.2931e-05	0:00:10	91
1448	1.1528e-02	1.4285e-05	1.1706e-05	0:00:08	90

iter	continuity	x-velocity	y-velocity	time/iter	
1449	1.0491e-02	1.3067e-05	1.0632e-05	0:00:06	89
1450	9.5261e-03	1.1949e-05	9.6753e-06	0:00:05	88
1451	8.6441e-03	1.0964e-05	8.8207e-06	0:00:04	87
1452	7.8287e-03	1.0068e-05	8.0604e-06	0:00:03	86
1453	7.0999e-03	9.2578e-06	7.3752e-06	0:00:02	85
1454	6.4362e-03	8.5141e-06	6.7513e-06	0:00:02	84
1455	5.8363e-03	7.8408e-06	6.1876e-06	0:00:01	83
1456	5.2978e-03	7.2296e-06	5.6711e-06	0:00:01	82
1457	4.8201e-03	6.6699e-06	5.2046e-06	0:00:01	81
1458	4.3914e-03	6.1593e-06	4.7767e-06	0:00:01	80
1459	3.9977e-03	5.6899e-06	4.3836e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1460	3.6449e-03	5.2583e-06	4.0251e-06	0:00:00	78
1461	3.3332e-03	4.8617e-06	3.6978e-06	0:00:00	77
1462	3.0572e-03	4.4972e-06	3.3979e-06	0:00:00	76
1463	2.7942e-03	4.1612e-06	3.1249e-06	0:00:15	75
1464	2.5648e-03	3.8496e-06	2.8740e-06	0:00:12	74
1465	2.3496e-03	3.5601e-06	2.6421e-06	0:00:09	73
1466	2.1520e-03	3.2958e-06	2.4310e-06	0:00:07	72
1467	1.9725e-03	3.0509e-06	2.2365e-06	0:00:06	71
1468	1.8094e-03	2.8240e-06	2.0585e-06	0:00:05	70
1469	1.6693e-03	2.6144e-06	1.8959e-06	0:00:04	69
1470	1.5361e-03	2.4207e-06	1.7465e-06	0:00:03	68

iter	continuity	x-velocity	y-velocity	time/iter	
1471	1.4188e-03	2.2409e-06	1.6072e-06	0:00:02	67
1472	1.3172e-03	2.0755e-06	1.4822e-06	0:00:02	66
1473	1.2214e-03	1.9231e-06	1.3674e-06	0:00:01	65
1474	1.1358e-03	1.7821e-06	1.2617e-06	0:00:01	64
1475	1.0600e-03	1.6510e-06	1.1642e-06	0:00:01	63
1476	9.9262e-04	1.5294e-06	1.0747e-06	0:00:01	62

! 1476 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 16s, time step = 32

8 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1476	9.9262e-04	1.5294e-06	1.0747e-06	0:00:01	100
1477	5.3736e-02	4.4443e-05	3.3950e-05	0:00:01	99
1478	3.3426e-02	3.6506e-05	3.2110e-05	0:00:01	98
1479	2.6406e-02	3.1784e-05	2.8819e-05	0:00:01	97
1480	2.3191e-02	2.8379e-05	2.5647e-05	0:00:00	96
1481	2.1435e-02	2.5709e-05	2.2883e-05	0:00:00	95
1482	1.9374e-02	2.3404e-05	2.0553e-05	0:00:00	94
1483	1.7678e-02	2.1324e-05	1.8514e-05	0:00:00	93
1484	1.6099e-02	1.9503e-05	1.6755e-05	0:00:00	92
1485	1.4723e-02	1.7875e-05	1.5212e-05	0:00:00	91
1486	1.3306e-02	1.6370e-05	1.3811e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1487	1.2078e-02	1.5024e-05	1.2563e-05	0:00:00	89
1488	1.0902e-02	1.3819e-05	1.1447e-05	0:00:00	88
1489	9.8385e-03	1.2711e-05	1.0435e-05	0:00:00	87
1490	8.8840e-03	1.1694e-05	9.5196e-06	0:00:00	86
1491	8.0036e-03	1.0773e-05	8.6956e-06	0:00:17	85
1492	7.2227e-03	9.9257e-06	7.9419e-06	0:00:13	84
1493	6.5322e-03	9.1534e-06	7.2596e-06	0:00:11	83
1494	5.8919e-03	8.4451e-06	6.6374e-06	0:00:08	82
1495	5.3415e-03	7.7969e-06	6.0672e-06	0:00:07	81
1496	4.8452e-03	7.1959e-06	5.5453e-06	0:00:05	80
1497	4.3991e-03	6.6412e-06	5.0726e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
1498	4.0064e-03	6.1311e-06	4.6439e-06	0:00:03	78
1499	3.6623e-03	5.6607e-06	4.2530e-06	0:00:03	77
1500	3.3510e-03	5.2276e-06	3.8962e-06	0:00:02	76
1501	3.0678e-03	4.8273e-06	3.5716e-06	0:00:02	75
1502	2.8118e-03	4.4591e-06	3.2763e-06	0:00:01	74
1503	2.5790e-03	4.1173e-06	3.0047e-06	0:00:01	73
1504	2.3688e-03	3.8027e-06	2.7576e-06	0:00:01	72

1505	2.1841e-03	3.5143e-06	2.5344e-06	0:00:01	71
1506	2.0168e-03	3.2464e-06	2.3298e-06	0:00:00	70
1507	1.8665e-03	2.9987e-06	2.1431e-06	0:00:00	69
1508	1.7331e-03	2.7696e-06	1.9728e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
1509	1.6196e-03	2.5581e-06	1.8178e-06	0:00:00	67
1510	1.5143e-03	2.3646e-06	1.6773e-06	0:00:13	66
1511	1.4264e-03	2.1849e-06	1.5477e-06	0:00:11	65
1512	1.3336e-03	2.0196e-06	1.4297e-06	0:00:08	64
1513	1.2507e-03	1.8668e-06	1.3212e-06	0:00:07	63
1514	1.1918e-03	1.7263e-06	1.2219e-06	0:00:05	62
1515	1.1269e-03	1.5961e-06	1.1309e-06	0:00:04	61
1516	1.0662e-03	1.4760e-06	1.0468e-06	0:00:03	60
1517	1.0171e-03	1.3651e-06	9.6976e-07	0:00:03	59
1518	9.6579e-04	1.2627e-06	8.9891e-07	0:00:02	58

! 1518 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 16.5s, time step = 33

7 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1518	9.6579e-04	1.2627e-06	8.9891e-07	0:00:03	100
1519	6.0739e-02	5.0637e-05	3.9185e-05	0:00:03	99
1520	3.8164e-02	4.1261e-05	3.5990e-05	0:00:02	98
1521	3.0957e-02	3.5986e-05	3.2375e-05	0:00:02	97
1522	2.7231e-02	3.2226e-05	2.9006e-05	0:00:01	96
1523	2.4709e-02	2.9404e-05	2.6095e-05	0:00:01	95
1524	2.2473e-02	2.6823e-05	2.3454e-05	0:00:01	94
1525	2.0145e-02	2.4618e-05	2.1235e-05	0:00:01	93
1526	1.8364e-02	2.2522e-05	1.9192e-05	0:00:19	92
1527	1.6645e-02	2.0679e-05	1.7419e-05	0:00:15	91

1528 1.5086e-02 1.8988e-05 1.5834e-05 0:00:12 90

iter	continuity	x-velocity	y-velocity	time/iter	
1529	1.3600e-02	1.7436e-05	1.4400e-05	0:00:09	89
1530	1.2272e-02	1.6030e-05	1.3105e-05	0:00:07	88
1531	1.1061e-02	1.4730e-05	1.1922e-05	0:00:06	87
1532	9.9250e-03	1.3549e-05	1.0857e-05	0:00:05	86
1533	8.8971e-03	1.2459e-05	9.8856e-06	0:00:04	85
1534	8.0129e-03	1.1460e-05	9.0035e-06	0:00:03	84
1535	7.2154e-03	1.0540e-05	8.2092e-06	0:00:02	83
1536	6.5339e-03	9.6987e-06	7.4861e-06	0:00:02	82
1537	5.9060e-03	8.9249e-06	6.8254e-06	0:00:01	81
1538	5.3421e-03	8.2133e-06	6.2315e-06	0:00:01	80
1539	4.8560e-03	7.5606e-06	5.6891e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1540	4.4329e-03	6.9585e-06	5.1969e-06	0:00:01	78
1541	4.0602e-03	6.4042e-06	4.7444e-06	0:00:01	77
1542	3.7172e-03	5.8953e-06	4.3382e-06	0:00:00	76
1543	3.4063e-03	5.4287e-06	3.9697e-06	0:00:00	75
1544	3.1287e-03	4.9993e-06	3.6366e-06	0:00:00	74
1545	2.8672e-03	4.6062e-06	3.3357e-06	0:00:15	73
1546	2.7001e-03	4.2424e-06	3.0589e-06	0:00:12	72
1547	2.4727e-03	3.9133e-06	2.8154e-06	0:00:09	71
1548	2.3510e-03	3.6041e-06	2.5836e-06	0:00:07	70
1549	2.1667e-03	3.3248e-06	2.3825e-06	0:00:06	69
1550	2.0719e-03	3.0631e-06	2.1913e-06	0:00:05	68

iter	continuity	x-velocity	y-velocity	time/iter	
1551	1.9018e-03	2.8263e-06	2.0236e-06	0:00:04	67
1552	1.8168e-03	2.6062e-06	1.8662e-06	0:00:03	66
1553	1.6764e-03	2.4057e-06	1.7265e-06	0:00:02	65
1554	1.6033e-03	2.2184e-06	1.5938e-06	0:00:02	64
1555	1.4770e-03	2.0484e-06	1.4767e-06	0:00:01	63
1556	1.4127e-03	1.8912e-06	1.3661e-06	0:00:01	62
1557	1.3018e-03	1.7473e-06	1.2683e-06	0:00:01	61
1558	1.2520e-03	1.6143e-06	1.1758e-06	0:00:01	60
1559	1.1535e-03	1.4927e-06	1.0944e-06	0:00:01	59
1560	1.0892e-03	1.3803e-06	1.0166e-06	0:00:00	58
1561	1.0277e-03	1.2768e-06	9.4596e-07	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1562	9.6914e-04	1.1823e-06	8.8100e-07	0:00:00	56

! 1562 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 17s, time step = 34

6 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
1562	9.6914e-04	1.1823e-06	8.8100e-07	0:00:00 100
1563	6.7091e-02	5.7866e-05	4.4687e-05	0:00:00 99
1564	4.2443e-02	4.7214e-05	4.0207e-05	0:00:00 98
1565	3.4071e-02	4.1330e-05	3.6135e-05	0:00:00 97
1566	2.9444e-02	3.7104e-05	3.2416e-05	0:00:00 96
1567	2.6742e-02	3.3756e-05	2.9137e-05	0:00:00 95
1568	2.3956e-02	3.0899e-05	2.6253e-05	0:00:00 94
1569	2.1736e-02	2.8165e-05	2.3627e-05	0:00:00 93
1570	1.9551e-02	2.5766e-05	2.1368e-05	0:00:00 92
1571	1.7544e-02	2.3579e-05	1.9324e-05	0:00:00 91
1572	1.5705e-02	2.1560e-05	1.7502e-05	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
1573	1.4100e-02	1.9734e-05	1.5870e-05	0:00:00 89
1574	1.2633e-02	1.8067e-05	1.4400e-05	0:00:00 88
1575	1.1368e-02	1.6545e-05	1.3073e-05	0:00:00 87
1576	1.0256e-02	1.5151e-05	1.1872e-05	0:00:00 86
1577	9.2880e-03	1.3875e-05	1.0787e-05	0:00:00 85
1578	8.4170e-03	1.2712e-05	9.8089e-06	0:00:00 84
1579	7.6510e-03	1.1649e-05	8.9235e-06	0:00:17 83
1580	6.9867e-03	1.0678e-05	8.1195e-06	0:00:13 82
1581	6.3970e-03	9.7886e-06	7.3897e-06	0:00:10 81
1582	5.8349e-03	8.9788e-06	6.7319e-06	0:00:08 80
1583	5.3376e-03	8.2428e-06	6.1396e-06	0:00:06 79

iter	continuity	x-velocity	y-velocity	time/iter
1584	4.9882e-03	7.5633e-06	5.5972e-06	0:00:05 78

1585	4.4870e-03	6.9501e-06	5.1207e-06	0:00:04	77
1586	4.1878e-03	6.3820e-06	4.6741e-06	0:00:03	76
1587	3.8132e-03	5.8714e-06	4.2860e-06	0:00:03	75
1588	3.5930e-03	5.3937e-06	3.9208e-06	0:00:02	74
1589	3.3379e-03	4.9582e-06	3.5983e-06	0:00:02	73
1590	3.1166e-03	4.5612e-06	3.3030e-06	0:00:01	72
1591	2.9046e-03	4.1953e-06	3.0371e-06	0:00:01	71
1592	2.7118e-03	3.8605e-06	2.7940e-06	0:00:01	70
1593	2.5333e-03	3.5552e-06	2.5756e-06	0:00:14	69
1594	2.3752e-03	3.2747e-06	2.3791e-06	0:00:11	68

iter	continuity	x-velocity	y-velocity	time/iter	
1595	2.1747e-03	3.0195e-06	2.2022e-06	0:00:09	67
1596	2.0944e-03	2.7828e-06	2.0332e-06	0:00:07	66
1597	1.9281e-03	2.5689e-06	1.8889e-06	0:00:06	65
1598	1.8563e-03	2.3712e-06	1.7496e-06	0:00:04	64
1599	1.7022e-03	2.1906e-06	1.6300e-06	0:00:03	63
1600	1.5987e-03	2.0247e-06	1.5149e-06	0:00:03	62
1601	1.4982e-03	1.8728e-06	1.4095e-06	0:00:02	61
1602	1.4015e-03	1.7323e-06	1.3132e-06	0:00:02	60
1603	1.3220e-03	1.6030e-06	1.2226e-06	0:00:01	59
1604	1.2319e-03	1.4845e-06	1.1415e-06	0:00:01	58
1605	1.1473e-03	1.3760e-06	1.0656e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1606	1.0718e-03	1.2761e-06	9.9490e-07	0:00:01	56
1607	1.0017e-03	1.1836e-06	9.2924e-07	0:00:01	55
1608	9.3774e-04	1.0993e-06	8.6817e-07	0:00:00	54

! 1608 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 17.5s, time step = 35

5 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1608	9.3774e-04	1.0993e-06	8.6817e-07	0:00:01	100
1609	7.1688e-02	6.4816e-05	4.9774e-05	0:00:20	99
1610	4.5999e-02	5.3617e-05	4.4698e-05	0:00:16	98
1611	3.5754e-02	4.6861e-05	3.9861e-05	0:00:13	97
1612	3.0564e-02	4.1888e-05	3.5509e-05	0:00:10	96
1613	2.7540e-02	3.7858e-05	3.1688e-05	0:00:08	95
1614	2.4724e-02	3.4366e-05	2.8390e-05	0:00:06	94
1615	2.2111e-02	3.1208e-05	2.5471e-05	0:00:05	93
1616	1.9778e-02	2.8358e-05	2.2902e-05	0:00:04	92
1617	1.7685e-02	2.5796e-05	2.0654e-05	0:00:03	91
1618	1.5904e-02	2.3463e-05	1.8635e-05	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
1619	1.4289e-02	2.1367e-05	1.6839e-05	0:00:02	89
1620	1.2844e-02	1.9454e-05	1.5223e-05	0:00:02	88
1621	1.1554e-02	1.7736e-05	1.3785e-05	0:00:01	87
1622	1.0409e-02	1.6184e-05	1.2502e-05	0:00:01	86
1623	9.4142e-03	1.4781e-05	1.1343e-05	0:00:01	85
1624	8.5376e-03	1.3506e-05	1.0290e-05	0:00:01	84
1625	7.7734e-03	1.2339e-05	9.3387e-06	0:00:00	83
1626	7.0992e-03	1.1287e-05	8.4840e-06	0:00:17	82
1627	6.4881e-03	1.0336e-05	7.7171e-06	0:00:13	81
1628	6.0786e-03	9.4667e-06	7.0251e-06	0:00:10	80
1629	5.5193e-03	8.6829e-06	6.4170e-06	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
1630	5.1924e-03	7.9627e-06	5.8520e-06	0:00:07	78
1631	4.7328e-03	7.3141e-06	5.3611e-06	0:00:05	77
1632	4.3860e-03	6.7157e-06	4.9064e-06	0:00:04	76
1633	4.0728e-03	6.1688e-06	4.5007e-06	0:00:03	75
1634	3.7862e-03	5.6704e-06	4.1368e-06	0:00:03	74
1635	3.5363e-03	5.2153e-06	3.8079e-06	0:00:02	73
1636	3.3129e-03	4.7984e-06	3.5093e-06	0:00:02	72
1637	3.1037e-03	4.4169e-06	3.2382e-06	0:00:01	71
1638	2.9104e-03	4.0698e-06	2.9924e-06	0:00:01	70
1639	2.7404e-03	3.7522e-06	2.7692e-06	0:00:01	69
1640	2.5817e-03	3.4602e-06	2.5649e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1641	2.4301e-03	3.1936e-06	2.3784e-06	0:00:00	67
1642	2.2807e-03	2.9491e-06	2.2082e-06	0:00:00	66
1643	2.1383e-03	2.7254e-06	2.0519e-06	0:00:00	65

1644	2.0050e-03	2.5197e-06	1.9098e-06	0:00:00	64
1645	1.8789e-03	2.3315e-06	1.7784e-06	0:00:00	63
1646	1.7506e-03	2.1578e-06	1.6571e-06	0:00:00	62
1647	1.6288e-03	1.9982e-06	1.5447e-06	0:00:12	61
1648	1.5183e-03	1.8515e-06	1.4403e-06	0:00:10	60
1649	1.4150e-03	1.7165e-06	1.3439e-06	0:00:08	59
1650	1.3213e-03	1.5922e-06	1.2541e-06	0:00:06	58
1651	1.2457e-03	1.4787e-06	1.1683e-06	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
1652	1.1617e-03	1.3733e-06	1.0909e-06	0:00:04	56
1653	1.0843e-03	1.2769e-06	1.0181e-06	0:00:03	55
1654	1.0136e-03	1.1879e-06	9.4994e-07	0:00:02	54
1655	9.4837e-04	1.1057e-06	8.8636e-07	0:00:02	53

! 1655 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 18s, time step = 36

4 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1655	9.4837e-04	1.1057e-06	8.8636e-07	0:00:03	100
1656	7.4413e-02	7.0058e-05	5.3670e-05	0:00:03	99
1657	4.9979e-02	5.8489e-05	4.8585e-05	0:00:02	98
1658	3.6314e-02	5.0941e-05	4.3168e-05	0:00:02	97
1659	2.9898e-02	4.5210e-05	3.8283e-05	0:00:01	96
1660	2.6459e-02	4.0549e-05	3.3960e-05	0:00:01	95
1661	2.3887e-02	3.6464e-05	3.0252e-05	0:00:01	94
1662	2.1518e-02	3.2916e-05	2.7040e-05	0:00:19	93
1663	1.9348e-02	2.9741e-05	2.4230e-05	0:00:15	92
1664	1.7456e-02	2.6895e-05	2.1765e-05	0:00:12	91
1665	1.5786e-02	2.4372e-05	1.9587e-05	0:00:10	90

iter	continuity	x-velocity	y-velocity	time/iter	
1666	1.4240e-02	2.2139e-05	1.7656e-05	0:00:08	89
1667	1.2856e-02	2.0146e-05	1.5939e-05	0:00:06	88
1668	1.1611e-02	1.8358e-05	1.4394e-05	0:00:05	87
1669	1.0530e-02	1.6753e-05	1.3009e-05	0:00:04	86
1670	9.5870e-03	1.5311e-05	1.1783e-05	0:00:03	85
1671	8.7641e-03	1.4002e-05	1.0691e-05	0:00:02	84
1672	8.0384e-03	1.2817e-05	9.7175e-06	0:00:02	83
1673	7.3946e-03	1.1744e-05	8.8478e-06	0:00:01	82
1674	6.8113e-03	1.0772e-05	8.0769e-06	0:00:01	81
1675	6.3021e-03	9.8876e-06	7.3829e-06	0:00:01	80
1676	5.8426e-03	9.0861e-06	6.7634e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1677	5.4336e-03	8.3505e-06	6.2053e-06	0:00:01	78
1678	5.0542e-03	7.6761e-06	5.6960e-06	0:00:00	77
1679	4.7110e-03	7.0612e-06	5.2343e-06	0:00:00	76
1680	4.3933e-03	6.4957e-06	4.8148e-06	0:00:00	75
1681	4.1066e-03	5.9839e-06	4.4361e-06	0:00:15	74
1682	3.8470e-03	5.5150e-06	4.0935e-06	0:00:12	73
1683	3.6021e-03	5.0882e-06	3.7794e-06	0:00:09	72
1684	3.3719e-03	4.6957e-06	3.4953e-06	0:00:07	71
1685	3.1649e-03	4.3359e-06	3.2360e-06	0:00:06	70
1686	2.9678e-03	4.0080e-06	2.9992e-06	0:00:05	69
1687	2.7880e-03	3.7084e-06	2.7822e-06	0:00:04	68

iter	continuity	x-velocity	y-velocity	time/iter	
1688	2.6183e-03	3.4320e-06	2.5845e-06	0:00:03	67
1689	2.4496e-03	3.1787e-06	2.4043e-06	0:00:02	66
1690	2.2875e-03	2.9476e-06	2.2387e-06	0:00:02	65
1691	2.1358e-03	2.7342e-06	2.0852e-06	0:00:01	64
1692	1.9967e-03	2.5384e-06	1.9426e-06	0:00:01	63
1693	1.8670e-03	2.3593e-06	1.8101e-06	0:00:01	62
1694	1.7456e-03	2.1946e-06	1.6867e-06	0:00:01	61
1695	1.6342e-03	2.0427e-06	1.5716e-06	0:00:01	60
1696	1.5244e-03	1.9012e-06	1.4651e-06	0:00:00	59
1697	1.4229e-03	1.7698e-06	1.3659e-06	0:00:00	58
1698	1.3319e-03	1.6484e-06	1.2730e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1699	1.2426e-03	1.5350e-06	1.1864e-06	0:00:00	56
1700	1.1691e-03	1.4294e-06	1.1035e-06	0:00:11	55
1701	1.0866e-03	1.3317e-06	1.0294e-06	0:00:09	54
1702	1.0121e-03	1.2411e-06	9.5960e-07	0:00:07	53

```

1703 9.4190e-04 1.1570e-06 8.9365e-07 0:00:05 52
! 1703 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 18.5s, time step = 37
3 more time steps

```

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
1703	9.4190e-04	1.1570e-06	8.9365e-07	0:00:10	100
1704	7.7560e-02	7.2267e-05	5.6622e-05	0:00:08	99
1705	5.2696e-02	6.1217e-05	5.1795e-05	0:00:07	98
1706	3.7317e-02	5.3232e-05	4.6054e-05	0:00:05	97
1707	2.9487e-02	4.7035e-05	4.0965e-05	0:00:04	96
1708	2.6130e-02	4.1825e-05	3.6316e-05	0:00:22	95
1709	2.3601e-02	3.7463e-05	3.2291e-05	0:00:18	94
1710	2.1321e-02	3.3724e-05	2.8806e-05	0:00:14	93
1711	1.9334e-02	3.0526e-05	2.5818e-05	0:00:11	92
1712	1.7563e-02	2.7691e-05	2.3205e-05	0:00:09	91
1713	1.5935e-02	2.5190e-05	2.0915e-05	0:00:07	90

iter	continuity	x-velocity	y-velocity	time/iter	
1714	1.4536e-02	2.2937e-05	1.8893e-05	0:00:05	89
1715	1.3282e-02	2.0917e-05	1.7100e-05	0:00:04	88
1716	1.2184e-02	1.9106e-05	1.5517e-05	0:00:03	87
1717	1.1217e-02	1.7472e-05	1.4105e-05	0:00:03	86
1718	1.0335e-02	1.6012e-05	1.2867e-05	0:00:02	85
1719	9.5300e-03	1.4681e-05	1.1753e-05	0:00:02	84
1720	8.7993e-03	1.3473e-05	1.0753e-05	0:00:01	83
1721	8.1483e-03	1.2372e-05	9.8490e-06	0:00:01	82
1722	7.5368e-03	1.1376e-05	9.0300e-06	0:00:01	81
1723	6.9708e-03	1.0471e-05	8.2921e-06	0:00:01	80
1724	6.4394e-03	9.6421e-06	7.6225e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1725	5.9563e-03	8.8851e-06	7.0123e-06	0:00:00	78
1726	5.5140e-03	8.1948e-06	6.4578e-06	0:00:00	77
1727	5.1224e-03	7.5669e-06	5.9516e-06	0:00:15	76
1728	4.7596e-03	6.9901e-06	5.4895e-06	0:00:12	75
1729	4.4271e-03	6.4607e-06	5.0628e-06	0:00:10	74
1730	4.1199e-03	5.9768e-06	4.6771e-06	0:00:08	73
1731	3.8362e-03	5.5311e-06	4.3237e-06	0:00:06	72
1732	3.5798e-03	5.1251e-06	4.0015e-06	0:00:05	71
1733	3.3407e-03	4.7490e-06	3.7051e-06	0:00:04	70
1734	3.1198e-03	4.4103e-06	3.4351e-06	0:00:03	69
1735	2.9068e-03	4.0978e-06	3.1859e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
1736	2.7108e-03	3.8099e-06	2.9559e-06	0:00:02	67
1737	2.5320e-03	3.5445e-06	2.7444e-06	0:00:01	66
1738	2.3650e-03	3.3009e-06	2.5482e-06	0:00:01	65
1739	2.2113e-03	3.0753e-06	2.3666e-06	0:00:01	64
1740	2.0617e-03	2.8643e-06	2.1983e-06	0:00:01	63
1741	1.9278e-03	2.6682e-06	2.0401e-06	0:00:01	62
1742	1.7983e-03	2.4868e-06	1.8938e-06	0:00:00	61
1743	1.6799e-03	2.3175e-06	1.7585e-06	0:00:00	60
1744	1.5666e-03	2.1602e-06	1.6317e-06	0:00:00	59
1745	1.4599e-03	2.0132e-06	1.5149e-06	0:00:00	58
1746	1.3590e-03	1.8756e-06	1.4058e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1747	1.2715e-03	1.7467e-06	1.3022e-06	0:00:00	56
1748	1.1813e-03	1.6272e-06	1.2092e-06	0:00:11	55
1749	1.0992e-03	1.5164e-06	1.1224e-06	0:00:09	54
1750	1.0237e-03	1.4126e-06	1.0410e-06	0:00:07	53
1751	9.5101e-04	1.3151e-06	9.6503e-07	0:00:05	52

! 1751 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 19s, time step = 38

2 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
1751	9.5101e-04	1.3151e-06	9.6503e-07	0:00:10	100
1752	8.4666e-02	7.3131e-05	6.0272e-05	0:00:08	99
1753	5.4678e-02	6.2492e-05	5.6138e-05	0:00:06	98
1754	3.7067e-02	5.4490e-05	5.0327e-05	0:00:05	97
1755	2.9730e-02	4.8340e-05	4.4872e-05	0:00:04	96
1756	2.6808e-02	4.3232e-05	3.9997e-05	0:00:03	95
1757	2.4444e-02	3.8930e-05	3.5832e-05	0:00:03	94
1758	2.2443e-02	3.5201e-05	3.2194e-05	0:00:02	93
1759	2.0687e-02	3.1921e-05	2.9030e-05	0:00:02	92
1760	1.9191e-02	2.9057e-05	2.6244e-05	0:00:01	91
1761	1.7823e-02	2.6514e-05	2.3802e-05	0:00:19	90

iter	continuity	x-velocity	y-velocity	time/iter	
1762	1.6559e-02	2.4221e-05	2.1638e-05	0:00:15	89
1763	1.5319e-02	2.2175e-05	1.9717e-05	0:00:12	88
1764	1.4178e-02	2.0330e-05	1.7987e-05	0:00:09	87
1765	1.3128e-02	1.8674e-05	1.6427e-05	0:00:07	86
1766	1.2146e-02	1.7191e-05	1.5028e-05	0:00:06	85
1767	1.1222e-02	1.5831e-05	1.3760e-05	0:00:05	84
1768	1.0366e-02	1.4582e-05	1.2608e-05	0:00:04	83
1769	9.5652e-03	1.3459e-05	1.1568e-05	0:00:03	82
1770	8.7651e-03	1.2425e-05	1.0615e-05	0:00:02	81
1771	8.0515e-03	1.1481e-05	9.7482e-06	0:00:02	80
1772	7.3971e-03	1.0621e-05	8.9591e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1773	6.8086e-03	9.8253e-06	8.2377e-06	0:00:01	78
1774	6.2754e-03	9.1027e-06	7.5824e-06	0:00:01	77
1775	5.7830e-03	8.4393e-06	6.9826e-06	0:00:01	76
1776	5.3408e-03	7.8345e-06	6.4296e-06	0:00:01	75
1777	4.9278e-03	7.2786e-06	5.9298e-06	0:00:00	74
1778	4.5487e-03	6.7673e-06	5.4702e-06	0:00:00	73
1779	4.2113e-03	6.2962e-06	5.0495e-06	0:00:00	72
1780	3.8967e-03	5.8607e-06	4.6642e-06	0:00:00	71
1781	3.5926e-03	5.4543e-06	4.3094e-06	0:00:00	70
1782	3.3161e-03	5.0758e-06	3.9821e-06	0:00:14	69
1783	3.0609e-03	4.7250e-06	3.6845e-06	0:00:11	68

iter	continuity	x-velocity	y-velocity	time/iter	
1784	2.8397e-03	4.3986e-06	3.4086e-06	0:00:09	67
1785	2.6352e-03	4.0926e-06	3.1530e-06	0:00:07	66
1786	2.4438e-03	3.8094e-06	2.9175e-06	0:00:05	65
1787	2.2681e-03	3.5454e-06	2.6991e-06	0:00:04	64
1788	2.0999e-03	3.2994e-06	2.4975e-06	0:00:03	63
1789	1.9458e-03	3.0705e-06	2.3092e-06	0:00:03	62
1790	1.8038e-03	2.8569e-06	2.1354e-06	0:00:02	61
1791	1.6672e-03	2.6583e-06	1.9750e-06	0:00:02	60
1792	1.5448e-03	2.4733e-06	1.8263e-06	0:00:01	59
1793	1.4300e-03	2.3011e-06	1.6898e-06	0:00:01	58
1794	1.3357e-03	2.1396e-06	1.5601e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1795	1.2427e-03	1.9895e-06	1.4439e-06	0:00:01	56
1796	1.1560e-03	1.8507e-06	1.3364e-06	0:00:00	55
1797	1.0757e-03	1.7208e-06	1.2364e-06	0:00:00	54
1798	1.0062e-03	1.5993e-06	1.1436e-06	0:00:00	53
1799	9.4181e-04	1.4860e-06	1.0579e-06	0:00:00	52

! 1799 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 19.5s, time step = 39

1 more time step

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
1799	9.4181e-04	1.4860e-06	1.0579e-06	0:00:00	100
1800	9.9842e-02	7.5593e-05	6.8185e-05	0:00:00	99
1801	6.0335e-02	6.4485e-05	6.3599e-05	0:00:00	98
1802	4.0836e-02	5.6527e-05	5.7369e-05	0:00:00	97
1803	3.3791e-02	5.0601e-05	5.1463e-05	0:00:00	96
1804	3.1537e-02	4.5828e-05	4.6229e-05	0:00:00	95
1805	2.9731e-02	4.1811e-05	4.1629e-05	0:00:00	94

1806	2.7838e-02	3.8242e-05	3.7613e-05	0:00:00	93
1807	2.5926e-02	3.5070e-05	3.4050e-05	0:00:00	92
1808	2.4002e-02	3.2219e-05	3.0914e-05	0:00:00	91
1809	2.2249e-02	2.9659e-05	2.8105e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1810	2.0550e-02	2.7344e-05	2.5590e-05	0:00:00	89
1811	1.8966e-02	2.5202e-05	2.3324e-05	0:00:00	88
1812	1.7412e-02	2.3255e-05	2.1289e-05	0:00:00	87
1813	1.6017e-02	2.1492e-05	1.9449e-05	0:00:00	86
1814	1.4643e-02	1.9866e-05	1.7780e-05	0:00:00	85
1815	1.3401e-02	1.8387e-05	1.6275e-05	0:00:00	84
1816	1.2235e-02	1.7021e-05	1.4900e-05	0:00:17	83
1817	1.1210e-02	1.5776e-05	1.3651e-05	0:00:13	82
1818	1.0217e-02	1.4625e-05	1.2517e-05	0:00:10	81
1819	9.3171e-03	1.3571e-05	1.1485e-05	0:00:08	80
1820	8.5067e-03	1.2614e-05	1.0542e-05	0:00:06	79

iter	continuity	x-velocity	y-velocity	time/iter	
1821	7.7627e-03	1.1723e-05	9.6789e-06	0:00:05	78
1822	7.0501e-03	1.0892e-05	8.8905e-06	0:00:04	77
1823	6.4232e-03	1.0130e-05	8.1736e-06	0:00:03	76
1824	5.8719e-03	9.4138e-06	7.5160e-06	0:00:03	75
1825	5.3630e-03	8.7485e-06	6.9125e-06	0:00:02	74
1826	4.8946e-03	8.1289e-06	6.3611e-06	0:00:02	73
1827	4.4651e-03	7.5528e-06	5.8556e-06	0:00:01	72
1828	4.0977e-03	7.0175e-06	5.3915e-06	0:00:15	71
1829	3.7684e-03	6.5225e-06	4.9688e-06	0:00:12	70
1830	3.4671e-03	6.0561e-06	4.5784e-06	0:00:09	69
1831	3.1882e-03	5.6271e-06	4.2200e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
1832	2.9292e-03	5.2247e-06	3.8906e-06	0:00:06	67
1833	2.6975e-03	4.8521e-06	3.5880e-06	0:00:05	66
1834	2.4865e-03	4.5057e-06	3.3096e-06	0:00:04	65
1835	2.2947e-03	4.1824e-06	3.0530e-06	0:00:03	64
1836	2.1185e-03	3.8817e-06	2.8182e-06	0:00:02	63
1837	1.9641e-03	3.6024e-06	2.6015e-06	0:00:02	62
1838	1.8225e-03	3.3442e-06	2.4028e-06	0:00:01	61
1839	1.6934e-03	3.1030e-06	2.2187e-06	0:00:01	60
1840	1.5807e-03	2.8785e-06	2.0476e-06	0:00:01	59
1841	1.4705e-03	2.6715e-06	1.8932e-06	0:00:01	58
1842	1.3751e-03	2.4783e-06	1.7501e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter
1843	1.2903e-03	2.2985e-06	1.6181e-06	0:00:00 56
1844	1.2277e-03	2.1316e-06	1.4963e-06	0:00:00 55
1845	1.1467e-03	1.9765e-06	1.3832e-06	0:00:00 54
1846	1.0947e-03	1.8330e-06	1.2792e-06	0:00:00 53
1847	1.0376e-03	1.6992e-06	1.1847e-06	0:00:00 52
1848	9.8740e-04	1.5757e-06	1.0964e-06	0:00:10 51

! 1848 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa
()
Flow time = 20s, time step = 40
Writing "| gzip -2cf > SolutionMonitor.gz"...
Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22723 ...
Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent"
CMD.EXE was started with the above path as the current directory.
UNC paths are not supported. Defaulting to Windows directory.
Access is denied.
CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.
CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.
Writing data to \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...
x-coord
y-coord
pressure
x-velocity
y-velocity
hyb_init-0
hyb_init-1
Done.

Calculation complete.

Initialize using the hybrid initialization method.

Checking case topology...

-This case has both inlets & outlets

-Pressure information is not available at the boundaries.

Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00
2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set"...

writing rp variables ... Done.

writing domain variables ... Done.

writing fluid (type fluid) (mixture) ... Done.

writing interior-fluid (type interior) (mixture) ... Done.

writing surface_body (type interior) (mixture) ... Done.

writing inlet (type velocity-inlet) (mixture) ... Done.

writing outlet (type pressure-outlet) (mixture) ... Done.

writing wall (type wall) (mixture) ... Done.

writing cylinder (type wall) (mixture) ... Done.

writing zones map name-id ... Done.

Writing to A16-059:"winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-12.cas.h5" in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...

116806 faces, 6 zones ...

58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-12-00000.dat.h5" in NODE0 mode and compression level 1 ...

Writing results.

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

Error: sopenoutputfile: unable to open file for output

Error Object: ".flwb_report_files\report.xml"

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
1	1.0000e+00	2.8003e-04	2.4950e-04	0:00:16 99
2	1.0000e+00	1.5522e-04	8.8371e-05	0:00:13 98
3	6.1895e-01	9.5975e-05	5.0604e-05	0:00:10 97
4	4.4142e-01	6.4821e-05	3.5159e-05	0:00:08 96
5	3.2542e-01	4.7857e-05	2.7108e-05	0:00:06 95
6	2.4299e-01	3.4330e-05	2.1362e-05	0:00:24 94
7	1.7457e-01	2.7598e-05	1.7780e-05	0:00:19 93
8	1.2877e-01	2.3108e-05	1.5379e-05	0:00:15 92
9	9.4178e-02	1.9939e-05	1.3590e-05	0:00:12 91
10	7.0421e-02	1.7648e-05	1.2277e-05	0:00:09 90
11	5.2260e-02	1.6345e-05	1.1522e-05	0:00:07 89

iter	continuity	x-velocity	y-velocity	time/iter
12	4.1387e-02	1.4814e-05	1.0591e-05	0:00:06 88
13	3.1955e-02	1.3766e-05	9.9647e-06	0:00:05 87
14	2.5441e-02	1.2990e-05	9.5826e-06	0:00:04 86
15	2.0981e-02	1.2016e-05	9.0003e-06	0:00:03 85
16	1.6534e-02	1.1367e-05	8.6426e-06	0:00:02 84
17	1.3654e-02	1.0820e-05	8.2939e-06	0:00:02 83
18	1.1633e-02	1.0331e-05	7.9955e-06	0:00:01 82
19	1.0165e-02	9.8947e-06	7.7379e-06	0:00:01 81
20	8.7783e-03	9.5614e-06	7.5556e-06	0:00:01 80
21	7.9655e-03	9.1635e-06	7.3071e-06	0:00:01 79
22	7.2188e-03	8.8698e-06	7.1324e-06	0:00:01 78

iter	continuity	x-velocity	y-velocity	time/iter	
23	6.7240e-03	8.5777e-06	6.9484e-06	0:00:00	77
24	6.1995e-03	8.3034e-06	6.7808e-06	0:00:00	76
25	5.8001e-03	8.0596e-06	6.6334e-06	0:00:15	75
26	5.5415e-03	7.8304e-06	6.4965e-06	0:00:12	74
27	5.3320e-03	7.6138e-06	6.3667e-06	0:00:10	73
28	5.1208e-03	7.4044e-06	6.2426e-06	0:00:08	72
29	4.8545e-03	7.2081e-06	6.1260e-06	0:00:06	71
30	4.6958e-03	7.0295e-06	6.0184e-06	0:00:05	70
31	4.5956e-03	6.8515e-06	5.9122e-06	0:00:04	69
32	4.5061e-03	6.6835e-06	5.8113e-06	0:00:03	68
33	4.3664e-03	6.5210e-06	5.7128e-06	0:00:02	67

iter	continuity	x-velocity	y-velocity	time/iter	
34	4.2288e-03	6.3669e-06	5.6196e-06	0:00:02	66
35	4.1162e-03	6.2152e-06	5.5259e-06	0:00:01	65
36	4.0576e-03	6.0729e-06	5.4372e-06	0:00:01	64
37	3.9931e-03	5.9318e-06	5.3467e-06	0:00:01	63
38	3.9692e-03	5.7826e-06	5.2455e-06	0:00:01	62
39	3.8357e-03	5.6746e-06	5.1839e-06	0:00:01	61
40	3.7622e-03	5.5448e-06	5.0969e-06	0:00:00	60
41	3.7293e-03	5.4153e-06	5.0070e-06	0:00:00	59
42	3.6909e-03	5.2945e-06	4.9246e-06	0:00:00	58
43	3.6669e-03	5.1735e-06	4.8402e-06	0:00:00	57
44	3.5902e-03	5.0600e-06	4.7603e-06	0:00:11	56

iter	continuity	x-velocity	y-velocity	time/iter	
45	3.5149e-03	4.9469e-06	4.6777e-06	0:00:09	55
46	3.4726e-03	4.8351e-06	4.5939e-06	0:00:07	54
47	3.4291e-03	4.7235e-06	4.5110e-06	0:00:06	53
48	3.3816e-03	4.6182e-06	4.4282e-06	0:00:04	52
49	3.3330e-03	4.5129e-06	4.3482e-06	0:00:03	51
50	3.2612e-03	4.4070e-06	4.2646e-06	0:00:03	50
51	3.1913e-03	4.3034e-06	4.1808e-06	0:00:02	49
52	3.1359e-03	4.1972e-06	4.0916e-06	0:00:02	48
53	3.0988e-03	4.0969e-06	4.0100e-06	0:00:01	47
54	3.0652e-03	3.9981e-06	3.9250e-06	0:00:01	46
55	3.0309e-03	3.9030e-06	3.8431e-06	0:00:01	45

iter	continuity	x-velocity	y-velocity	time/iter	
56	3.0059e-03	3.7908e-06	3.7435e-06	0:00:01	44
57	2.9465e-03	3.7178e-06	3.6826e-06	0:00:00	43
58	2.8908e-03	3.6234e-06	3.5940e-06	0:00:00	42
59	2.8437e-03	3.5192e-06	3.5012e-06	0:00:00	41

60	2.8070e-03	3.4277e-06	3.4165e-06	0:00:00	40
61	2.7537e-03	3.3357e-06	3.3307e-06	0:00:00	39
62	2.7158e-03	3.2476e-06	3.2458e-06	0:00:00	38
63	2.6814e-03	3.1575e-06	3.1607e-06	0:00:00	37
64	2.6684e-03	3.0654e-06	3.0692e-06	0:00:07	36
65	2.5953e-03	2.9849e-06	2.9951e-06	0:00:06	35
66	2.5335e-03	2.8918e-06	2.9008e-06	0:00:04	34

iter	continuity	x-velocity	y-velocity	time/iter	
67	2.4597e-03	2.8238e-06	2.8306e-06	0:00:03	33
68	2.3815e-03	2.7412e-06	2.7441e-06	0:00:03	32
69	2.3351e-03	2.6382e-06	2.6414e-06	0:00:02	31
70	2.3284e-03	2.5796e-06	2.5785e-06	0:00:02	30
71	2.2531e-03	2.4978e-06	2.4940e-06	0:00:01	29
72	2.1866e-03	2.4116e-06	2.4059e-06	0:00:01	28
73	2.1303e-03	2.3348e-06	2.3238e-06	0:00:01	27
74	2.0979e-03	2.2521e-06	2.2369e-06	0:00:01	26
75	2.0614e-03	2.1888e-06	2.1701e-06	0:00:00	25
76	2.0330e-03	2.1081e-06	2.0840e-06	0:00:00	24
77	1.9918e-03	2.0315e-06	2.0042e-06	0:00:00	23

iter	continuity	x-velocity	y-velocity	time/iter	
78	1.9059e-03	1.9621e-06	1.9282e-06	0:00:00	22
79	1.8190e-03	1.8958e-06	1.8538e-06	0:00:00	21
80	1.7407e-03	1.8325e-06	1.7861e-06	0:00:00	20
81	1.6880e-03	1.7584e-06	1.7064e-06	0:00:00	19
82	1.6334e-03	1.6870e-06	1.6312e-06	0:00:00	18
83	1.5828e-03	1.6220e-06	1.5622e-06	0:00:00	17
84	1.5364e-03	1.5599e-06	1.4950e-06	0:00:00	16
85	1.4878e-03	1.4987e-06	1.4306e-06	0:00:03	15
86	1.4320e-03	1.4366e-06	1.3647e-06	0:00:02	14
87	1.3733e-03	1.3754e-06	1.3006e-06	0:00:02	13
88	1.3178e-03	1.3161e-06	1.2384e-06	0:00:01	12

iter	continuity	x-velocity	y-velocity	time/iter	
89	1.2515e-03	1.2586e-06	1.1782e-06	0:00:01	11
90	1.2049e-03	1.2038e-06	1.1210e-06	0:00:01	10
91	1.1715e-03	1.1486e-06	1.0639e-06	0:00:00	9
92	1.1194e-03	1.0944e-06	1.0088e-06	0:00:00	8
93	1.0732e-03	1.0443e-06	9.5707e-07	0:00:00	7
94	1.0278e-03	9.9684e-07	9.0842e-07	0:00:00	6
95	9.7609e-04	9.4697e-07	8.5825e-07	0:00:00	5

! 95 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 1

19 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
95	9.7609e-04	9.4697e-07	8.5825e-07	0:00:02	100
96	6.1735e-02	5.0883e-05	3.5439e-05	0:00:02	99
97	5.8852e-02	2.9123e-05	2.4842e-05	0:00:01	98
98	3.7792e-02	2.2251e-05	2.0844e-05	0:00:01	97
99	2.8678e-02	1.9488e-05	1.8548e-05	0:00:01	96
100	2.4873e-02	1.8128e-05	1.7090e-05	0:00:01	95
101	2.1757e-02	1.7208e-05	1.6035e-05	0:00:01	94
102	1.9263e-02	1.6325e-05	1.5080e-05	0:00:00	93
103	1.7313e-02	1.5523e-05	1.4250e-05	0:00:19	92
104	1.5716e-02	1.4928e-05	1.3592e-05	0:00:15	91
105	1.4454e-02	1.4192e-05	1.2873e-05	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
106	1.3659e-02	1.3756e-05	1.2413e-05	0:00:09	89
107	1.3053e-02	1.3233e-05	1.1906e-05	0:00:07	88
108	1.2436e-02	1.2905e-05	1.1563e-05	0:00:06	87
109	1.1904e-02	1.2545e-05	1.1204e-05	0:00:05	86
110	1.1465e-02	1.2136e-05	1.0815e-05	0:00:04	85
111	1.0926e-02	1.1902e-05	1.0587e-05	0:00:03	84
112	1.0562e-02	1.1630e-05	1.0318e-05	0:00:02	83
113	1.0236e-02	1.1341e-05	1.0047e-05	0:00:02	82
114	9.9904e-03	1.1088e-05	9.8018e-06	0:00:01	81
115	9.8205e-03	1.0851e-05	9.5796e-06	0:00:01	80
116	9.6844e-03	1.0659e-05	9.3962e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
117	9.4675e-03	1.0451e-05	9.2023e-06	0:00:01	78
118	9.2358e-03	1.0237e-05	9.0077e-06	0:00:01	77

119	9.0085e-03	1.0037e-05	8.8260e-06	0:00:00	76
120	8.7863e-03	9.8296e-06	8.6405e-06	0:00:00	75
121	8.6313e-03	9.6634e-06	8.4922e-06	0:00:00	74
122	8.4330e-03	9.4552e-06	8.3117e-06	0:00:00	73
123	8.4227e-03	9.3015e-06	8.1766e-06	0:00:15	72
124	8.3556e-03	9.0925e-06	7.9968e-06	0:00:11	71
125	8.3926e-03	8.9435e-06	7.8622e-06	0:00:09	70
126	8.2575e-03	8.7446e-06	7.6978e-06	0:00:07	69
127	8.2156e-03	8.6064e-06	7.5773e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
128	8.1382e-03	8.3919e-06	7.3948e-06	0:00:04	67
129	8.2099e-03	8.2644e-06	7.2739e-06	0:00:04	66
130	8.1874e-03	8.0990e-06	7.1312e-06	0:00:03	65
131	8.2129e-03	7.8804e-06	6.9425e-06	0:00:02	64
132	8.2582e-03	7.7568e-06	6.8249e-06	0:00:02	63
133	8.2352e-03	7.5974e-06	6.6739e-06	0:00:01	62
134	8.0568e-03	7.4030e-06	6.4928e-06	0:00:01	61
135	8.1011e-03	7.2494e-06	6.3393e-06	0:00:01	60
136	8.1567e-03	7.0751e-06	6.1750e-06	0:00:01	59
137	8.3059e-03	6.9305e-06	6.0317e-06	0:00:01	58
138	8.4376e-03	6.7784e-06	5.8823e-06	0:00:12	57

iter	continuity	x-velocity	y-velocity	time/iter	
139	8.3739e-03	6.5890e-06	5.7020e-06	0:00:09	56
140	8.3516e-03	6.3689e-06	5.4887e-06	0:00:07	55
141	8.2302e-03	6.2304e-06	5.3577e-06	0:00:06	54
142	8.2220e-03	6.0722e-06	5.1980e-06	0:00:04	53
143	8.2201e-03	5.8445e-06	4.9846e-06	0:00:04	52
144	8.2907e-03	5.6987e-06	4.8448e-06	0:00:03	51
145	8.1741e-03	5.4483e-06	4.6054e-06	0:00:02	50
146	8.0959e-03	5.3127e-06	4.4684e-06	0:00:02	49
147	7.8663e-03	5.0727e-06	4.2339e-06	0:00:01	48
148	7.7970e-03	4.8840e-06	4.0480e-06	0:00:01	47
149	7.7344e-03	4.6975e-06	3.8712e-06	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
150	7.5908e-03	4.5070e-06	3.6983e-06	0:00:01	45
151	7.5188e-03	4.3162e-06	3.5283e-06	0:00:01	44
152	7.3785e-03	4.1224e-06	3.3563e-06	0:00:00	43
153	7.1460e-03	3.9266e-06	3.1865e-06	0:00:00	42
154	7.0261e-03	3.6787e-06	2.9706e-06	0:00:00	41
155	6.9121e-03	3.6129e-06	2.9175e-06	0:00:00	40
156	6.5069e-03	3.3339e-06	2.6737e-06	0:00:00	39

157	6.1718e-03	3.1659e-06	2.5339e-06	0:00:00	38
158	5.8301e-03	2.9447e-06	2.3402e-06	0:00:07	37
159	5.5424e-03	2.8573e-06	2.2660e-06	0:00:06	36
160	5.1743e-03	2.6198e-06	2.0694e-06	0:00:05	35

iter	continuity	x-velocity	y-velocity	time/iter	
161	4.8898e-03	2.4592e-06	1.9350e-06	0:00:04	34
162	4.7490e-03	2.2802e-06	1.7808e-06	0:00:03	33
163	4.5261e-03	2.1591e-06	1.6731e-06	0:00:02	32
164	4.2763e-03	1.9933e-06	1.5332e-06	0:00:02	31
165	4.0061e-03	1.8783e-06	1.4366e-06	0:00:01	30
166	3.7506e-03	1.7312e-06	1.3158e-06	0:00:01	29
167	3.5071e-03	1.6231e-06	1.2229e-06	0:00:01	28
168	3.2594e-03	1.4931e-06	1.1174e-06	0:00:01	27
169	3.0159e-03	1.3998e-06	1.0396e-06	0:00:00	26
170	2.8204e-03	1.2864e-06	9.4924e-07	0:00:00	25
171	2.6286e-03	1.1914e-06	8.7283e-07	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
172	2.4411e-03	1.1057e-06	8.0357e-07	0:00:00	23
173	2.2579e-03	1.0259e-06	7.3780e-07	0:00:00	22
174	2.0843e-03	9.5119e-07	6.7746e-07	0:00:00	21
175	1.9215e-03	8.8202e-07	6.2163e-07	0:00:00	20
176	1.7689e-03	8.1748e-07	5.7058e-07	0:00:00	19
177	1.6245e-03	7.5810e-07	5.2333e-07	0:00:00	18
178	1.4954e-03	7.0234e-07	4.8025e-07	0:00:00	17
179	1.3756e-03	6.5135e-07	4.4076e-07	0:00:00	16
180	1.2653e-03	6.0419e-07	4.0473e-07	0:00:03	15
181	1.1636e-03	5.6088e-07	3.7147e-07	0:00:02	14
182	1.0726e-03	5.2084e-07	3.4049e-07	0:00:02	13

iter	continuity	x-velocity	y-velocity	time/iter	
183	9.9059e-04	4.8369e-07	3.1209e-07	0:00:01	12

! 183 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1s, time step = 2
18 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
183	9.9059e-04	4.8369e-07	3.1209e-07	0:00:10	100
184	8.6136e-02	5.2807e-05	4.1708e-05	0:00:08	99
185	6.9739e-02	3.7395e-05	3.5944e-05	0:00:06	98
186	5.4222e-02	3.1104e-05	3.1494e-05	0:00:05	97
187	4.8349e-02	2.7968e-05	2.8080e-05	0:00:04	96
188	4.5730e-02	2.6325e-05	2.5762e-05	0:00:03	95
189	4.1361e-02	2.4598e-05	2.3421e-05	0:00:03	94
190	3.6934e-02	2.3024e-05	2.1454e-05	0:00:02	93
191	3.3175e-02	2.1610e-05	1.9775e-05	0:00:02	92
192	3.0087e-02	2.0443e-05	1.8431e-05	0:00:01	91
193	2.7750e-02	1.9256e-05	1.7127e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
194	2.5520e-02	1.8493e-05	1.6218e-05	0:00:01	89
195	2.3140e-02	1.7478e-05	1.5120e-05	0:00:01	88
196	2.1349e-02	1.6887e-05	1.4452e-05	0:00:00	87
197	1.9449e-02	1.6026e-05	1.3574e-05	0:00:18	86
198	1.8207e-02	1.5550e-05	1.3024e-05	0:00:14	85
199	1.6485e-02	1.4782e-05	1.2291e-05	0:00:11	84
200	1.5390e-02	1.4395e-05	1.1866e-05	0:00:09	83
201	1.4089e-02	1.3824e-05	1.1330e-05	0:00:07	82
202	1.3319e-02	1.3337e-05	1.0874e-05	0:00:05	81
203	1.2867e-02	1.2895e-05	1.0459e-05	0:00:04	80
204	1.2316e-02	1.2477e-05	1.0063e-05	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
205	1.1878e-02	1.2089e-05	9.7045e-06	0:00:03	78
206	1.1417e-02	1.1713e-05	9.3546e-06	0:00:02	77
207	1.1042e-02	1.1359e-05	9.0286e-06	0:00:02	76
208	1.0737e-02	1.1021e-05	8.7252e-06	0:00:01	75
209	1.0539e-02	1.0685e-05	8.4173e-06	0:00:01	74
210	1.0429e-02	1.0364e-05	8.1202e-06	0:00:01	73
211	1.0405e-02	1.0045e-05	7.8278e-06	0:00:01	72
212	1.0369e-02	9.7348e-06	7.5359e-06	0:00:01	71
213	1.0228e-02	9.4185e-06	7.2561e-06	0:00:00	70
214	1.0088e-02	9.1002e-06	6.9649e-06	0:00:00	69
215	9.9684e-03	8.7892e-06	6.6834e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
216	9.7955e-03	8.4753e-06	6.4195e-06	0:00:14	67
217	9.7823e-03	8.1710e-06	6.1543e-06	0:00:11	66
218	9.8132e-03	7.8644e-06	5.8913e-06	0:00:08	65
219	1.0058e-02	7.5194e-06	5.6115e-06	0:00:07	64
220	1.0132e-02	7.2700e-06	5.4029e-06	0:00:05	63
221	1.0133e-02	6.9041e-06	5.0816e-06	0:00:04	62
222	1.0187e-02	6.6165e-06	4.8378e-06	0:00:03	61
223	1.0059e-02	6.3105e-06	4.5862e-06	0:00:03	60
224	9.8327e-03	6.0082e-06	4.3529e-06	0:00:02	59
225	9.5969e-03	5.7001e-06	4.1076e-06	0:00:02	58
226	9.3877e-03	5.3994e-06	3.8568e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
227	9.1575e-03	5.1058e-06	3.6307e-06	0:00:01	56
228	8.7773e-03	4.8128e-06	3.4195e-06	0:00:01	55
229	8.4874e-03	4.5366e-06	3.2159e-06	0:00:01	54
230	8.4362e-03	4.2126e-06	2.9721e-06	0:00:00	53
231	8.2408e-03	4.0295e-06	2.8345e-06	0:00:00	52
232	8.0395e-03	3.7228e-06	2.5934e-06	0:00:00	51
233	7.7894e-03	3.5282e-06	2.4457e-06	0:00:00	50
234	7.4976e-03	3.2550e-06	2.2459e-06	0:00:00	49
235	7.2744e-03	3.0346e-06	2.0810e-06	0:00:00	48
236	7.0751e-03	2.8351e-06	1.9292e-06	0:00:00	47
237	6.8343e-03	2.6498e-06	1.7987e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
238	6.5012e-03	2.4688e-06	1.6695e-06	0:00:09	45
239	6.1138e-03	2.2968e-06	1.5420e-06	0:00:07	44
240	5.6227e-03	2.1289e-06	1.4172e-06	0:00:06	43
241	5.1066e-03	1.9654e-06	1.3012e-06	0:00:04	42
242	4.6289e-03	1.8174e-06	1.1988e-06	0:00:03	41
243	4.1945e-03	1.6822e-06	1.1065e-06	0:00:03	40
244	3.7862e-03	1.5517e-06	1.0176e-06	0:00:02	39
245	3.4134e-03	1.4318e-06	9.3674e-07	0:00:02	38
246	3.0746e-03	1.3191e-06	8.6067e-07	0:00:01	37
247	2.7932e-03	1.2162e-06	7.8940e-07	0:00:01	36
248	2.5367e-03	1.1224e-06	7.2461e-07	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
249	2.2915e-03	1.0324e-06	6.6253e-07	0:00:01	34
250	2.1077e-03	9.4730e-07	6.0629e-07	0:00:00	33
251	1.8909e-03	8.6890e-07	5.5202e-07	0:00:00	32

252	1.7504e-03	7.9917e-07	5.0450e-07	0:00:00	31
253	1.5717e-03	7.3655e-07	4.6052e-07	0:00:00	30
254	1.4283e-03	6.8017e-07	4.2097e-07	0:00:00	29
255	1.3007e-03	6.2684e-07	3.8460e-07	0:00:00	28
256	1.1867e-03	5.7921e-07	3.5172e-07	0:00:00	27
257	1.0838e-03	5.3589e-07	3.2258e-07	0:00:00	26
258	9.8840e-04	4.9644e-07	2.9507e-07	0:00:00	25

! 258 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.5s, time step = 3

17 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
258	9.8840e-04	4.9644e-07	2.9507e-07	0:00:00	100
259	1.0965e-01	6.4377e-05	4.9792e-05	0:00:00	99
260	9.7360e-02	4.9466e-05	4.6584e-05	0:00:00	98
261	8.0980e-02	4.2706e-05	4.1381e-05	0:00:00	97
262	7.4273e-02	3.7454e-05	3.6033e-05	0:00:00	96
263	6.8526e-02	3.4244e-05	3.1890e-05	0:00:00	95
264	6.0083e-02	3.0834e-05	2.8096e-05	0:00:00	94
265	5.3675e-02	2.8746e-05	2.5305e-05	0:00:00	93
266	4.6262e-02	2.5867e-05	2.2382e-05	0:00:00	92
267	4.1084e-02	2.4035e-05	2.0269e-05	0:00:00	91
268	3.6274e-02	2.1822e-05	1.8093e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
269	3.3134e-02	2.0382e-05	1.6536e-05	0:00:00	89
270	3.0366e-02	1.8709e-05	1.4955e-05	0:00:00	88
271	2.8490e-02	1.7365e-05	1.3706e-05	0:00:17	87
272	2.6432e-02	1.6217e-05	1.2656e-05	0:00:14	86
273	2.4532e-02	1.5154e-05	1.1744e-05	0:00:11	85
274	2.2961e-02	1.4206e-05	1.0929e-05	0:00:09	84

275	2.1596e-02	1.3368e-05	1.0218e-05	0:00:07	83
276	2.0272e-02	1.2602e-05	9.5809e-06	0:00:05	82
277	1.8901e-02	1.1882e-05	8.9787e-06	0:00:04	81
278	1.7489e-02	1.1246e-05	8.4572e-06	0:00:03	80
279	1.6265e-02	1.0651e-05	7.9664e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
280	1.5256e-02	1.0103e-05	7.5301e-06	0:00:02	78
281	1.4290e-02	9.6256e-06	7.1424e-06	0:00:02	77
282	1.3349e-02	9.1667e-06	6.7666e-06	0:00:01	76
283	1.2508e-02	8.7216e-06	6.4031e-06	0:00:01	75
284	1.1661e-02	8.3105e-06	6.0579e-06	0:00:01	74
285	1.0910e-02	7.9377e-06	5.7411e-06	0:00:01	73
286	1.0166e-02	7.5662e-06	5.4293e-06	0:00:01	72
287	9.3906e-03	7.2217e-06	5.1422e-06	0:00:00	71
288	8.8616e-03	6.9007e-06	4.8674e-06	0:00:00	70
289	8.3213e-03	6.5783e-06	4.6004e-06	0:00:00	69
290	7.8506e-03	6.2699e-06	4.3477e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
291	7.4364e-03	5.9638e-06	4.1094e-06	0:00:00	67
292	7.0760e-03	5.6691e-06	3.8825e-06	0:00:13	66
293	6.7555e-03	5.3768e-06	3.6650e-06	0:00:10	65
294	6.4750e-03	5.0949e-06	3.4578e-06	0:00:08	64
295	6.2388e-03	4.8219e-06	3.2596e-06	0:00:07	63
296	6.0200e-03	4.5521e-06	3.0649e-06	0:00:05	62
297	5.8312e-03	4.2944e-06	2.8807e-06	0:00:04	61
298	5.7141e-03	4.0154e-06	2.6879e-06	0:00:03	60
299	5.6270e-03	3.8269e-06	2.5531e-06	0:00:02	59
300	5.4289e-03	3.5552e-06	2.3662e-06	0:00:02	58
301	5.2879e-03	3.3647e-06	2.2255e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
302	5.0429e-03	3.1144e-06	2.0546e-06	0:00:01	56
303	4.8439e-03	2.9394e-06	1.9288e-06	0:00:01	55
304	4.6555e-03	2.7163e-06	1.7794e-06	0:00:01	54
305	4.4955e-03	2.5301e-06	1.6497e-06	0:00:01	53
306	4.3021e-03	2.3860e-06	1.5399e-06	0:00:00	52
307	4.0620e-03	2.2004e-06	1.4113e-06	0:00:00	51
308	3.8201e-03	2.0397e-06	1.3021e-06	0:00:00	50
309	3.6122e-03	1.8967e-06	1.2042e-06	0:00:00	49
310	3.4283e-03	1.7821e-06	1.1199e-06	0:00:00	48
311	3.2028e-03	1.6417e-06	1.0310e-06	0:00:00	47
312	3.0004e-03	1.5146e-06	9.5031e-07	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
313	2.8170e-03	1.4005e-06	8.7526e-07	0:00:09	45
314	2.6456e-03	1.3061e-06	8.1115e-07	0:00:07	44
315	2.4675e-03	1.2014e-06	7.4720e-07	0:00:06	43
316	2.2810e-03	1.1079e-06	6.8978e-07	0:00:04	42
317	2.0831e-03	1.0255e-06	6.3545e-07	0:00:03	41
318	1.9518e-03	9.4320e-07	5.8496e-07	0:00:03	40
319	1.7821e-03	8.6979e-07	5.3803e-07	0:00:02	39
320	1.6688e-03	8.0009e-07	4.9516e-07	0:00:02	38
321	1.5122e-03	7.3572e-07	4.5385e-07	0:00:01	37
322	1.4106e-03	6.7521e-07	4.1650e-07	0:00:01	36
323	1.2794e-03	6.2109e-07	3.8106e-07	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
324	1.1934e-03	5.6949e-07	3.4937e-07	0:00:01	34
325	1.0970e-03	5.2216e-07	3.1950e-07	0:00:00	33
326	1.0058e-03	4.7840e-07	2.9110e-07	0:00:00	32
327	9.2244e-04	4.3819e-07	2.6485e-07	0:00:00	31

! 327 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 2s, time step = 4

16 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
327	9.2244e-04	4.3819e-07	2.6485e-07	0:00:01	100
328	1.1764e-01	6.9052e-05	5.2624e-05	0:00:01	99
329	1.0699e-01	5.6672e-05	5.1829e-05	0:00:01	98
330	9.1717e-02	4.8654e-05	4.5796e-05	0:00:00	97
331	8.2877e-02	4.2196e-05	3.9272e-05	0:00:00	96
332	7.3141e-02	3.7284e-05	3.3624e-05	0:00:19	95
333	6.3030e-02	3.3491e-05	2.9194e-05	0:00:15	94

334	5.3889e-02	2.9624e-05	2.5352e-05	0:00:12	93
335	4.7386e-02	2.6626e-05	2.2264e-05	0:00:10	92
336	4.1856e-02	2.3916e-05	1.9579e-05	0:00:08	91
337	3.7767e-02	2.1528e-05	1.7333e-05	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
338	3.4376e-02	1.9386e-05	1.5316e-05	0:00:05	89
339	3.1534e-02	1.7569e-05	1.3703e-05	0:00:04	88
340	2.9078e-02	1.5962e-05	1.2333e-05	0:00:03	87
341	2.6694e-02	1.4563e-05	1.1144e-05	0:00:02	86
342	2.4561e-02	1.3344e-05	1.0133e-05	0:00:02	85
343	2.2760e-02	1.2260e-05	9.2380e-06	0:00:01	84
344	2.0628e-02	1.1290e-05	8.4318e-06	0:00:01	83
345	1.8690e-02	1.0449e-05	7.7425e-06	0:00:01	82
346	1.7099e-02	9.6864e-06	7.1168e-06	0:00:01	81
347	1.5801e-02	8.9921e-06	6.5534e-06	0:00:01	80
348	1.4629e-02	8.3942e-06	6.0745e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
349	1.3533e-02	7.8489e-06	5.6462e-06	0:00:00	78
350	1.2394e-02	7.3292e-06	5.2397e-06	0:00:00	77
351	1.1363e-02	6.8618e-06	4.8748e-06	0:00:00	76
352	1.0352e-02	6.4327e-06	4.5416e-06	0:00:15	75
353	9.3659e-03	6.0357e-06	4.2300e-06	0:00:12	74
354	8.4921e-03	5.6741e-06	3.9464e-06	0:00:09	73
355	7.7001e-03	5.3374e-06	3.6872e-06	0:00:07	72
356	7.0277e-03	5.0182e-06	3.4416e-06	0:00:06	71
357	6.4700e-03	4.7243e-06	3.2178e-06	0:00:05	70
358	5.9844e-03	4.4465e-06	3.0071e-06	0:00:04	69
359	5.5532e-03	4.1879e-06	2.8101e-06	0:00:03	68

iter	continuity	x-velocity	y-velocity	time/iter	
360	5.1720e-03	3.9426e-06	2.6292e-06	0:00:02	67
361	4.8307e-03	3.7123e-06	2.4561e-06	0:00:02	66
362	4.5257e-03	3.4951e-06	2.2965e-06	0:00:01	65
363	4.2572e-03	3.2886e-06	2.1469e-06	0:00:01	64
364	4.0060e-03	3.0905e-06	2.0048e-06	0:00:01	63
365	3.7643e-03	2.9014e-06	1.8715e-06	0:00:01	62
366	3.5467e-03	2.7196e-06	1.7462e-06	0:00:01	61
367	3.3440e-03	2.5466e-06	1.6297e-06	0:00:00	60
368	3.1636e-03	2.3822e-06	1.5188e-06	0:00:00	59
369	3.0098e-03	2.2081e-06	1.4045e-06	0:00:00	58
370	2.8826e-03	2.0892e-06	1.3241e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
371	2.7048e-03	1.9258e-06	1.2193e-06	0:00:11	56
372	2.5994e-03	1.8134e-06	1.1442e-06	0:00:09	55
373	2.4523e-03	1.6670e-06	1.0511e-06	0:00:07	54
374	2.3400e-03	1.5490e-06	9.7340e-07	0:00:06	53
375	2.2508e-03	1.4605e-06	9.1305e-07	0:00:04	52
376	2.1139e-03	1.3413e-06	8.3836e-07	0:00:03	51
377	2.0048e-03	1.2427e-06	7.7461e-07	0:00:03	50
378	1.9068e-03	1.1540e-06	7.1685e-07	0:00:02	49
379	1.8105e-03	1.0731e-06	6.6435e-07	0:00:02	48
380	1.7150e-03	9.9729e-07	6.1589e-07	0:00:01	47
381	1.6226e-03	9.2551e-07	5.6967e-07	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
382	1.5264e-03	8.5762e-07	5.2606e-07	0:00:01	45
383	1.4312e-03	7.9440e-07	4.8598e-07	0:00:01	44
384	1.3381e-03	7.3461e-07	4.4857e-07	0:00:00	43
385	1.2470e-03	6.7899e-07	4.1391e-07	0:00:00	42
386	1.1633e-03	6.2669e-07	3.8189e-07	0:00:00	41
387	1.0838e-03	5.7765e-07	3.5178e-07	0:00:00	40
388	1.0076e-03	5.3205e-07	3.2441e-07	0:00:00	39
389	9.3990e-04	4.8965e-07	2.9878e-07	0:00:00	38

! 389 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.5s, time step = 5

15 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
389	9.3990e-04	4.8965e-07	2.9878e-07	0:00:00	100
390	1.1280e-01	6.8272e-05	5.1781e-05	0:00:20	99
391	1.0084e-01	5.8242e-05	5.2375e-05	0:00:16	98
392	8.5659e-02	4.9957e-05	4.5970e-05	0:00:13	97

393	7.5493e-02	4.2847e-05	3.8979e-05	0:00:10	96
394	6.5889e-02	3.7485e-05	3.3100e-05	0:00:08	95
395	5.7781e-02	3.2877e-05	2.8497e-05	0:00:06	94
396	5.0761e-02	2.9089e-05	2.4631e-05	0:00:05	93
397	4.4767e-02	2.5731e-05	2.1269e-05	0:00:04	92
398	3.9874e-02	2.2781e-05	1.8457e-05	0:00:03	91
399	3.6064e-02	2.0275e-05	1.6093e-05	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
400	3.2659e-02	1.8046e-05	1.4121e-05	0:00:02	89
401	2.9670e-02	1.6106e-05	1.2448e-05	0:00:02	88
402	2.6841e-02	1.4415e-05	1.1061e-05	0:00:01	87
403	2.4326e-02	1.2984e-05	9.8861e-06	0:00:01	86
404	2.2159e-02	1.1721e-05	8.8148e-06	0:00:18	85
405	2.0550e-02	1.0605e-05	7.9268e-06	0:00:14	84
406	1.8547e-02	9.7032e-06	7.0918e-06	0:00:11	83
407	1.6927e-02	8.8143e-06	6.4441e-06	0:00:09	82
408	1.5360e-02	8.1252e-06	5.8364e-06	0:00:07	81
409	1.4073e-02	7.4171e-06	5.2967e-06	0:00:05	80
410	1.2491e-02	6.8583e-06	4.8058e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
411	1.1321e-02	6.2823e-06	4.3802e-06	0:00:03	78
412	1.0233e-02	5.8340e-06	3.9928e-06	0:00:03	77
413	9.4770e-03	5.3560e-06	3.6552e-06	0:00:02	76
414	8.6468e-03	5.0102e-06	3.3808e-06	0:00:02	75
415	8.0221e-03	4.6129e-06	3.1094e-06	0:00:01	74
416	7.2876e-03	4.3301e-06	2.8880e-06	0:00:01	73
417	6.6213e-03	4.0114e-06	2.6655e-06	0:00:01	72
418	5.9815e-03	3.7202e-06	2.4612e-06	0:00:01	71
419	5.3951e-03	3.4625e-06	2.2775e-06	0:00:01	70
420	4.8697e-03	3.2304e-06	2.1150e-06	0:00:00	69
421	4.3999e-03	3.0101e-06	1.9600e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
422	4.0258e-03	2.8103e-06	1.8212e-06	0:00:00	67
423	3.6986e-03	2.6238e-06	1.6903e-06	0:00:00	66
424	3.4143e-03	2.4512e-06	1.5682e-06	0:00:00	65
425	3.1647e-03	2.2911e-06	1.4568e-06	0:00:00	64
426	2.9500e-03	2.1430e-06	1.3531e-06	0:00:13	63
427	2.7601e-03	2.0035e-06	1.2551e-06	0:00:10	62
428	2.5951e-03	1.8749e-06	1.1670e-06	0:00:08	61
429	2.4324e-03	1.7516e-06	1.0838e-06	0:00:06	60
430	2.2507e-03	1.6307e-06	1.0059e-06	0:00:05	59

```
431 2.0824e-03 1.5199e-06 9.3397e-07 0:00:04 58
432 1.9498e-03 1.4086e-06 8.6166e-07 0:00:03 57
```

```
iter continuity x-velocity y-velocity time/iter
433 1.7904e-03 1.3210e-06 8.0750e-07 0:00:02 56
434 1.6922e-03 1.2230e-06 7.4679e-07 0:00:02 55
435 1.5569e-03 1.1384e-06 6.9532e-07 0:00:01 54
436 1.4658e-03 1.0580e-06 6.4661e-07 0:00:01 53
437 1.4023e-03 9.8236e-07 6.0019e-07 0:00:01 52
438 1.3237e-03 9.1225e-07 5.5675e-07 0:00:01 51
439 1.2558e-03 8.4710e-07 5.1616e-07 0:00:01 50
440 1.1927e-03 7.8717e-07 4.7916e-07 0:00:00 49
441 1.1316e-03 7.3012e-07 4.4419e-07 0:00:00 48
442 1.0756e-03 6.7733e-07 4.1166e-07 0:00:00 47
443 1.0224e-03 6.2837e-07 3.8153e-07 0:00:00 46
```

```
iter continuity x-velocity y-velocity time/iter
444 9.7187e-04 5.8256e-07 3.5338e-07 0:00:00 45
```

! 444 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 3s, time step = 6

14 more time steps

Updating solution at time level N...

done.

```
iter continuity x-velocity y-velocity time/iter
444 9.7187e-04 5.8256e-07 3.5338e-07 0:00:00 100
445 9.8109e-02 6.5110e-05 4.8961e-05 0:00:00 99
446 8.6281e-02 5.6756e-05 5.0113e-05 0:00:00 98
447 7.1679e-02 4.8439e-05 4.3851e-05 0:00:00 97
448 6.2401e-02 4.1500e-05 3.7308e-05 0:00:00 96
449 5.4651e-02 3.6017e-05 3.1383e-05 0:00:00 95
450 4.8171e-02 3.1306e-05 2.6894e-05 0:00:00 94
451 4.2757e-02 2.7365e-05 2.2941e-05 0:00:00 93
```

452	3.8309e-02	2.4041e-05	1.9931e-05	0:00:00	92
453	3.4416e-02	2.1151e-05	1.7202e-05	0:00:00	91
454	3.0528e-02	1.8615e-05	1.4896e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
455	2.7095e-02	1.6434e-05	1.2957e-05	0:00:00	89
456	2.4278e-02	1.4563e-05	1.1367e-05	0:00:00	88
457	2.1712e-02	1.2959e-05	9.9960e-06	0:00:00	87
458	1.9586e-02	1.1571e-05	8.8271e-06	0:00:00	86
459	1.7706e-02	1.0343e-05	7.8192e-06	0:00:00	85
460	1.6060e-02	9.2945e-06	6.9645e-06	0:00:00	84
461	1.4978e-02	8.3879e-06	6.2588e-06	0:00:00	83
462	1.3510e-02	7.6104e-06	5.5717e-06	0:00:00	82
463	1.2405e-02	6.9040e-06	5.0097e-06	0:00:00	81
464	1.1079e-02	6.3460e-06	4.5226e-06	0:00:00	80
465	1.0086e-02	5.7842e-06	4.0917e-06	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
466	9.0240e-03	5.3252e-06	3.6980e-06	0:00:12	78
467	8.2916e-03	4.8677e-06	3.3520e-06	0:00:10	77
468	7.4732e-03	4.4972e-06	3.0443e-06	0:00:08	76
469	6.8153e-03	4.1233e-06	2.7656e-06	0:00:06	75
470	6.1541e-03	3.8463e-06	2.5430e-06	0:00:05	74
471	5.5173e-03	3.5522e-06	2.3295e-06	0:00:04	73
472	5.0002e-03	3.2891e-06	2.1388e-06	0:00:03	72
473	4.5449e-03	3.0495e-06	1.9712e-06	0:00:02	71
474	4.1269e-03	2.8299e-06	1.8201e-06	0:00:02	70
475	3.7739e-03	2.6309e-06	1.6862e-06	0:00:01	69
476	3.4476e-03	2.4457e-06	1.5596e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
477	3.1704e-03	2.2738e-06	1.4435e-06	0:00:01	67
478	2.9198e-03	2.1148e-06	1.3359e-06	0:00:01	66
479	2.6921e-03	1.9670e-06	1.2375e-06	0:00:01	65
480	2.4959e-03	1.8303e-06	1.1451e-06	0:00:00	64
481	2.3175e-03	1.7034e-06	1.0598e-06	0:00:00	63
482	2.1609e-03	1.5858e-06	9.7994e-07	0:00:00	62
483	2.0168e-03	1.4773e-06	9.0738e-07	0:00:00	61
484	1.8830e-03	1.3741e-06	8.3957e-07	0:00:00	60
485	1.7578e-03	1.2786e-06	7.7629e-07	0:00:00	59
486	1.6406e-03	1.1882e-06	7.1738e-07	0:00:12	58
487	1.5319e-03	1.1026e-06	6.6166e-07	0:00:09	57

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

488	1.4406e-03	1.0243e-06	6.1228e-07	0:00:07	56
489	1.3538e-03	9.5142e-07	5.6619e-07	0:00:06	55
490	1.2718e-03	8.8281e-07	5.2377e-07	0:00:04	54
491	1.1892e-03	8.1828e-07	4.8404e-07	0:00:04	53
492	1.1143e-03	7.5848e-07	4.4763e-07	0:00:03	52
493	1.0434e-03	7.0217e-07	4.1363e-07	0:00:02	51
494	9.7823e-04	6.5037e-07	3.8189e-07	0:00:02	50

! 494 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.5s, time step = 7

13 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
494	9.7823e-04	6.5037e-07	3.8189e-07	0:00:03	100
495	8.7591e-02	6.1051e-05	4.5494e-05	0:00:03	99
496	7.1838e-02	5.3705e-05	4.6558e-05	0:00:02	98
497	5.9352e-02	4.5808e-05	4.0833e-05	0:00:02	97
498	5.1159e-02	3.9168e-05	3.4569e-05	0:00:01	96
499	4.5785e-02	3.3770e-05	2.9210e-05	0:00:01	95
500	4.0705e-02	2.9281e-05	2.4855e-05	0:00:01	94
501	3.6254e-02	2.5535e-05	2.1353e-05	0:00:01	93
502	3.2340e-02	2.2340e-05	1.8262e-05	0:00:01	92
503	2.8730e-02	1.9612e-05	1.5695e-05	0:00:00	91
504	2.5807e-02	1.7332e-05	1.3642e-05	0:00:18	90

iter	continuity	x-velocity	y-velocity	time/iter	
505	2.3179e-02	1.5288e-05	1.1851e-05	0:00:14	89
506	2.0968e-02	1.3536e-05	1.0340e-05	0:00:11	88
507	1.9044e-02	1.2040e-05	9.0743e-06	0:00:09	87
508	1.7294e-02	1.0706e-05	7.9564e-06	0:00:07	86
509	1.5741e-02	9.5894e-06	7.0558e-06	0:00:06	85
510	1.4355e-02	8.6086e-06	6.2833e-06	0:00:04	84

511	1.3118e-02	7.7630e-06	5.6232e-06	0:00:04	83
512	1.1904e-02	7.0337e-06	5.0383e-06	0:00:03	82
513	1.0779e-02	6.3873e-06	4.5295e-06	0:00:02	81
514	9.7533e-03	5.8144e-06	4.0771e-06	0:00:02	80
515	8.8144e-03	5.3008e-06	3.6766e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
516	7.9161e-03	4.8475e-06	3.3302e-06	0:00:01	78
517	7.1471e-03	4.4525e-06	3.0320e-06	0:00:01	77
518	6.4990e-03	4.0898e-06	2.7572e-06	0:00:01	76
519	5.9110e-03	3.7753e-06	2.5184e-06	0:00:01	75
520	5.3715e-03	3.4922e-06	2.3083e-06	0:00:00	74
521	4.8760e-03	3.2317e-06	2.1157e-06	0:00:00	73
522	4.4274e-03	2.9970e-06	1.9495e-06	0:00:00	72
523	4.0086e-03	2.7715e-06	1.7944e-06	0:00:14	71
524	3.6512e-03	2.5686e-06	1.6584e-06	0:00:11	70
525	3.3538e-03	2.3811e-06	1.5338e-06	0:00:09	69
526	3.0719e-03	2.2077e-06	1.4183e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
527	2.8273e-03	2.0486e-06	1.3120e-06	0:00:06	67
528	2.6003e-03	1.9001e-06	1.2148e-06	0:00:04	66
529	2.3876e-03	1.7600e-06	1.1246e-06	0:00:03	65
530	2.1972e-03	1.6320e-06	1.0408e-06	0:00:03	64
531	2.0197e-03	1.5137e-06	9.6204e-07	0:00:02	63
532	1.8554e-03	1.4035e-06	8.8851e-07	0:00:02	62
533	1.7054e-03	1.3000e-06	8.1883e-07	0:00:01	61
534	1.5749e-03	1.2040e-06	7.5515e-07	0:00:01	60
535	1.4647e-03	1.1153e-06	6.9589e-07	0:00:01	59
536	1.3595e-03	1.0327e-06	6.4100e-07	0:00:01	58
537	1.2715e-03	9.5489e-07	5.8949e-07	0:00:12	57

iter	continuity	x-velocity	y-velocity	time/iter	
538	1.1836e-03	8.8340e-07	5.4272e-07	0:00:09	56
539	1.1029e-03	8.1679e-07	4.9949e-07	0:00:07	55
540	1.0242e-03	7.5594e-07	4.5907e-07	0:00:06	54
541	9.5605e-04	6.9819e-07	4.2124e-07	0:00:05	53

! 541 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 4s, time step = 8

12 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
541	9.5605e-04	6.9819e-07	4.2124e-07	0:00:09	100
542	7.9388e-02	5.7471e-05	4.2150e-05	0:00:07	99
543	6.0629e-02	5.0662e-05	4.3087e-05	0:00:05	98
544	5.0944e-02	4.3252e-05	3.7629e-05	0:00:04	97
545	4.4923e-02	3.7062e-05	3.2014e-05	0:00:03	96
546	3.9823e-02	3.1931e-05	2.6828e-05	0:00:03	95
547	3.6049e-02	2.7730e-05	2.3000e-05	0:00:02	94
548	3.1925e-02	2.4156e-05	1.9525e-05	0:00:02	93
549	2.8520e-02	2.1173e-05	1.6921e-05	0:00:01	92
550	2.5664e-02	1.8575e-05	1.4546e-05	0:00:01	91
551	2.2993e-02	1.6423e-05	1.2631e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
552	2.0481e-02	1.4505e-05	1.0963e-05	0:00:01	89
553	1.8308e-02	1.2847e-05	9.5752e-06	0:00:01	88
554	1.6359e-02	1.1404e-05	8.4037e-06	0:00:18	87
555	1.4706e-02	1.0174e-05	7.4246e-06	0:00:14	86
556	1.3233e-02	9.1122e-06	6.5824e-06	0:00:11	85
557	1.1962e-02	8.1595e-06	5.8527e-06	0:00:09	84
558	1.0838e-02	7.3316e-06	5.2204e-06	0:00:07	83
559	9.8608e-03	6.6262e-06	4.6731e-06	0:00:06	82
560	8.9729e-03	6.0152e-06	4.2098e-06	0:00:04	81
561	8.1671e-03	5.4711e-06	3.7961e-06	0:00:03	80
562	7.4610e-03	4.9865e-06	3.4304e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
563	6.8243e-03	4.5729e-06	3.1148e-06	0:00:02	78
564	6.1986e-03	4.2060e-06	2.8283e-06	0:00:02	77
565	5.6143e-03	3.8687e-06	2.5737e-06	0:00:01	76
566	5.1041e-03	3.5565e-06	2.3447e-06	0:00:01	75
567	4.6631e-03	3.2831e-06	2.1486e-06	0:00:01	74
568	4.2834e-03	3.0360e-06	1.9737e-06	0:00:01	73
569	3.9412e-03	2.8132e-06	1.8186e-06	0:00:01	72

570	3.6126e-03	2.6039e-06	1.6727e-06	0:00:00	71
571	3.3187e-03	2.4093e-06	1.5444e-06	0:00:00	70
572	3.0597e-03	2.2317e-06	1.4306e-06	0:00:00	69
573	2.8092e-03	2.0640e-06	1.3228e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
574	2.5814e-03	1.9095e-06	1.2237e-06	0:00:14	67
575	2.3826e-03	1.7682e-06	1.1346e-06	0:00:11	66
576	2.1862e-03	1.6360e-06	1.0488e-06	0:00:08	65
577	2.0134e-03	1.5159e-06	9.7335e-07	0:00:07	64
578	1.8454e-03	1.4029e-06	8.9933e-07	0:00:05	63
579	1.7012e-03	1.2977e-06	8.3058e-07	0:00:04	62
580	1.5661e-03	1.1985e-06	7.6416e-07	0:00:03	61
581	1.4433e-03	1.1072e-06	7.0340e-07	0:00:03	60
582	1.3435e-03	1.0232e-06	6.4859e-07	0:00:02	59
583	1.2490e-03	9.4675e-07	5.9768e-07	0:00:02	58
584	1.1541e-03	8.7533e-07	5.4991e-07	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
585	1.0665e-03	8.0827e-07	5.0475e-07	0:00:01	56
586	9.8894e-04	7.4608e-07	4.6340e-07	0:00:01	55

! 586 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 4.5s, time step = 9

11 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
586	9.8894e-04	7.4608e-07	4.6340e-07	0:00:01	100
587	7.2260e-02	5.4513e-05	3.9272e-05	0:00:01	99
588	5.4798e-02	4.8033e-05	4.0087e-05	0:00:01	98
589	4.6700e-02	4.1164e-05	3.5178e-05	0:00:01	97
590	4.0278e-02	3.5167e-05	2.9694e-05	0:00:01	96

591	3.6372e-02	3.0373e-05	2.5118e-05	0:00:00	95
592	3.2521e-02	2.6411e-05	2.1427e-05	0:00:19	94
593	2.8908e-02	2.3094e-05	1.8369e-05	0:00:15	93
594	2.5855e-02	2.0248e-05	1.5858e-05	0:00:12	92
595	2.3156e-02	1.7832e-05	1.3681e-05	0:00:09	91
596	2.0510e-02	1.5727e-05	1.1850e-05	0:00:08	90

iter	continuity	x-velocity	y-velocity	time/iter	
597	1.8259e-02	1.3905e-05	1.0293e-05	0:00:06	89
598	1.6035e-02	1.2342e-05	9.0156e-06	0:00:05	88
599	1.4182e-02	1.0972e-05	7.9046e-06	0:00:04	87
600	1.2593e-02	9.7746e-06	6.9682e-06	0:00:03	86
601	1.1258e-02	8.7360e-06	6.1588e-06	0:00:02	85
602	1.0099e-02	7.8269e-06	5.4616e-06	0:00:02	84
603	9.0587e-03	7.0383e-06	4.8737e-06	0:00:01	83
604	8.1396e-03	6.3506e-06	4.3526e-06	0:00:01	82
605	7.4019e-03	5.7480e-06	3.9111e-06	0:00:01	81
606	6.7169e-03	5.2236e-06	3.5302e-06	0:00:01	80
607	6.1275e-03	4.7685e-06	3.1937e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
608	5.5988e-03	4.3597e-06	2.8865e-06	0:00:00	78
609	5.1407e-03	3.9997e-06	2.6386e-06	0:00:00	77
610	4.7528e-03	3.6789e-06	2.4019e-06	0:00:00	76
611	4.4097e-03	3.4054e-06	2.2031e-06	0:00:00	75
612	4.0819e-03	3.1439e-06	2.0175e-06	0:00:00	74
613	3.7909e-03	2.9039e-06	1.8522e-06	0:00:15	73
614	3.5033e-03	2.6803e-06	1.7059e-06	0:00:12	72
615	3.2357e-03	2.4756e-06	1.5747e-06	0:00:09	71
616	2.9902e-03	2.2894e-06	1.4551e-06	0:00:07	70
617	2.7701e-03	2.1192e-06	1.3477e-06	0:00:06	69
618	2.5700e-03	1.9595e-06	1.2460e-06	0:00:04	68

iter	continuity	x-velocity	y-velocity	time/iter	
619	2.3792e-03	1.8140e-06	1.1554e-06	0:00:04	67
620	2.2054e-03	1.6770e-06	1.0709e-06	0:00:03	66
621	2.0477e-03	1.5517e-06	9.9150e-07	0:00:02	65
622	1.9034e-03	1.4368e-06	9.1858e-07	0:00:02	64
623	1.7627e-03	1.3289e-06	8.4697e-07	0:00:01	63
624	1.6305e-03	1.2273e-06	7.8207e-07	0:00:01	62
625	1.5154e-03	1.1343e-06	7.2261e-07	0:00:01	61
626	1.4190e-03	1.0461e-06	6.6558e-07	0:00:01	60
627	1.3163e-03	9.6683e-07	6.1301e-07	0:00:01	59
628	1.2235e-03	8.9203e-07	5.6399e-07	0:00:00	58

629 1.1369e-03 8.2143e-07 5.1732e-07 0:00:00 57

iter continuity x-velocity y-velocity time/iter

630 1.0584e-03 7.5671e-07 4.7512e-07 0:00:00 56

631 9.8307e-04 6.9673e-07 4.3498e-07 0:00:00 55

! 631 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 5s, time step = 10

10 more time steps

Updating solution at time level N...

done.

iter continuity x-velocity y-velocity time/iter

631 9.8307e-04 6.9673e-07 4.3498e-07 0:00:00 100

632 6.6742e-02 5.2098e-05 3.6874e-05 0:00:20 99

633 5.0751e-02 4.5687e-05 3.7538e-05 0:00:16 98

634 4.2435e-02 3.9222e-05 3.2985e-05 0:00:13 97

635 3.7183e-02 3.3668e-05 2.8011e-05 0:00:10 96

636 3.4165e-02 2.9119e-05 2.3814e-05 0:00:08 95

637 3.0225e-02 2.5296e-05 2.0119e-05 0:00:06 94

638 2.7212e-02 2.2126e-05 1.7344e-05 0:00:05 93

639 2.4301e-02 1.9416e-05 1.4916e-05 0:00:04 92

640 2.1675e-02 1.7118e-05 1.2884e-05 0:00:03 91

641 1.9173e-02 1.5134e-05 1.1191e-05 0:00:02 90

iter continuity x-velocity y-velocity time/iter

642 1.6853e-02 1.3334e-05 9.6888e-06 0:00:02 89

643 1.4887e-02 1.1870e-05 8.5165e-06 0:00:02 88

644 1.3064e-02 1.0533e-05 7.4401e-06 0:00:01 87

645 1.1578e-02 9.4070e-06 6.5505e-06 0:00:01 86

646 1.0270e-02 8.4190e-06 5.7920e-06 0:00:18 85

647 9.2008e-03 7.5461e-06 5.1225e-06 0:00:14 84

648 8.2858e-03 6.7869e-06 4.5645e-06 0:00:11 83

649 7.4544e-03 6.1189e-06 4.0788e-06 0:00:09 82

650	6.7661e-03	5.5353e-06	3.6605e-06	0:00:07	81
651	6.1642e-03	5.0336e-06	3.3064e-06	0:00:05	80
652	5.6195e-03	4.5836e-06	2.9809e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
653	5.1016e-03	4.1944e-06	2.7056e-06	0:00:03	78
654	4.6727e-03	3.8522e-06	2.4768e-06	0:00:03	77
655	4.2852e-03	3.5352e-06	2.2501e-06	0:00:02	76
656	3.9414e-03	3.2561e-06	2.0580e-06	0:00:02	75
657	3.6212e-03	2.9975e-06	1.8826e-06	0:00:01	74
658	3.3522e-03	2.7660e-06	1.7309e-06	0:00:01	73
659	3.1006e-03	2.5549e-06	1.5977e-06	0:00:01	72
660	2.8835e-03	2.3652e-06	1.4770e-06	0:00:01	71
661	2.6726e-03	2.1884e-06	1.3675e-06	0:00:01	70
662	2.4814e-03	2.0240e-06	1.2624e-06	0:00:00	69
663	2.3023e-03	1.8731e-06	1.1712e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
664	2.1383e-03	1.7309e-06	1.0861e-06	0:00:00	67
665	1.9929e-03	1.6020e-06	1.0086e-06	0:00:00	66
666	1.8486e-03	1.4792e-06	9.3192e-07	0:00:00	65
667	1.7109e-03	1.3664e-06	8.6269e-07	0:00:13	64
668	1.5766e-03	1.2622e-06	7.9819e-07	0:00:10	63
669	1.4492e-03	1.1663e-06	7.3743e-07	0:00:08	62
670	1.3364e-03	1.0742e-06	6.7917e-07	0:00:06	61
671	1.2424e-03	9.9380e-07	6.2814e-07	0:00:05	60
672	1.1469e-03	9.1730e-07	5.7879e-07	0:00:04	59
673	1.0570e-03	8.4548e-07	5.3195e-07	0:00:03	58
674	9.7911e-04	7.7969e-07	4.8821e-07	0:00:02	57

! 674 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 5.5s, time step = 11

9 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
674	9.7911e-04	7.7969e-07	4.8821e-07	0:00:04	100
675	6.2759e-02	5.0064e-05	3.4793e-05	0:00:03	99
676	4.7601e-02	4.3809e-05	3.5343e-05	0:00:03	98
677	3.9281e-02	3.7557e-05	3.1035e-05	0:00:02	97
678	3.4705e-02	3.2361e-05	2.6595e-05	0:00:02	96
679	3.1533e-02	2.7940e-05	2.2388e-05	0:00:01	95
680	2.7994e-02	2.4403e-05	1.8998e-05	0:00:01	94
681	2.5047e-02	2.1348e-05	1.6400e-05	0:00:01	93
682	2.2465e-02	1.8759e-05	1.4127e-05	0:00:01	92
683	1.9931e-02	1.6546e-05	1.2210e-05	0:00:01	91
684	1.7653e-02	1.4620e-05	1.0584e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
685	1.5615e-02	1.2953e-05	9.2166e-06	0:00:18	89
686	1.3721e-02	1.1502e-05	8.0545e-06	0:00:14	88
687	1.2101e-02	1.0229e-05	7.0640e-06	0:00:11	87
688	1.0706e-02	9.1206e-06	6.2035e-06	0:00:09	86
689	9.4857e-03	8.1649e-06	5.4962e-06	0:00:07	85
690	8.4744e-03	7.3294e-06	4.8746e-06	0:00:06	84
691	7.6091e-03	6.5969e-06	4.3369e-06	0:00:04	83
692	6.8583e-03	5.9593e-06	3.8774e-06	0:00:04	82
693	6.2024e-03	5.3971e-06	3.4748e-06	0:00:03	81
694	5.6402e-03	4.9103e-06	3.1343e-06	0:00:02	80
695	5.1217e-03	4.4648e-06	2.8283e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
696	4.6699e-03	4.0711e-06	2.5641e-06	0:00:01	78
697	4.3090e-03	3.7312e-06	2.3403e-06	0:00:01	77
698	3.9889e-03	3.4316e-06	2.1442e-06	0:00:01	76
699	3.6981e-03	3.1582e-06	1.9671e-06	0:00:01	75
700	3.4253e-03	2.9114e-06	1.8062e-06	0:00:01	74
701	3.1811e-03	2.6868e-06	1.6625e-06	0:00:00	73
702	2.9618e-03	2.4817e-06	1.5328e-06	0:00:15	72
703	2.7645e-03	2.2935e-06	1.4171e-06	0:00:12	71
704	2.5681e-03	2.1211e-06	1.3077e-06	0:00:09	70
705	2.3851e-03	1.9636e-06	1.2100e-06	0:00:07	69
706	2.2188e-03	1.8123e-06	1.1209e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
707	2.0638e-03	1.6784e-06	1.0401e-06	0:00:04	67
708	1.9067e-03	1.5512e-06	9.6449e-07	0:00:04	66

709	1.7629e-03	1.4343e-06	8.9432e-07	0:00:03	65
710	1.6238e-03	1.3259e-06	8.2856e-07	0:00:02	64
711	1.4979e-03	1.2237e-06	7.6687e-07	0:00:02	63
712	1.3986e-03	1.1309e-06	7.0929e-07	0:00:01	62
713	1.2955e-03	1.0452e-06	6.5636e-07	0:00:01	61
714	1.2042e-03	9.6283e-07	6.0635e-07	0:00:01	60
715	1.1176e-03	8.8770e-07	5.5814e-07	0:00:01	59
716	1.0358e-03	8.1827e-07	5.1167e-07	0:00:01	58
717	9.7001e-04	7.5355e-07	4.7226e-07	0:00:00	57

! 717 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 6s, time step = 12

8 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
717	9.7001e-04	7.5355e-07	4.7226e-07	0:00:01	100
718	5.9495e-02	4.8310e-05	3.2966e-05	0:00:01	99
719	4.5095e-02	4.2128e-05	3.3408e-05	0:00:20	98
720	3.7287e-02	3.6164e-05	2.9367e-05	0:00:16	97
721	3.3212e-02	3.1184e-05	2.5166e-05	0:00:13	96
722	3.0248e-02	2.6952e-05	2.1232e-05	0:00:10	95
723	2.7146e-02	2.3535e-05	1.8039e-05	0:00:08	94
724	2.4077e-02	2.0658e-05	1.5639e-05	0:00:06	93
725	2.1352e-02	1.8142e-05	1.3418e-05	0:00:05	92
726	1.8873e-02	1.6006e-05	1.1612e-05	0:00:04	91
727	1.6625e-02	1.4131e-05	1.0069e-05	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
728	1.4627e-02	1.2519e-05	8.7855e-06	0:00:02	89
729	1.2826e-02	1.1103e-05	7.6705e-06	0:00:02	88
730	1.1303e-02	9.8884e-06	6.7354e-06	0:00:02	87
731	1.0013e-02	8.8264e-06	5.9333e-06	0:00:01	86

732	9.0132e-03	7.8846e-06	5.2524e-06	0:00:01	85
733	7.9797e-03	7.0770e-06	4.6358e-06	0:00:01	84
734	7.1738e-03	6.3838e-06	4.1700e-06	0:00:01	83
735	6.3594e-03	5.7792e-06	3.7138e-06	0:00:00	82
736	5.7523e-03	5.2195e-06	3.3374e-06	0:00:00	81
737	5.1491e-03	4.7383e-06	2.9811e-06	0:00:00	80
738	4.7498e-03	4.3062e-06	2.7011e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
739	4.2914e-03	3.9301e-06	2.4535e-06	0:00:00	78
740	4.0074e-03	3.5872e-06	2.2353e-06	0:00:16	77
741	3.6690e-03	3.3009e-06	2.0473e-06	0:00:12	76
742	3.3780e-03	3.0314e-06	1.8735e-06	0:00:10	75
743	3.1301e-03	2.7884e-06	1.7187e-06	0:00:08	74
744	2.9128e-03	2.5715e-06	1.5851e-06	0:00:06	73
745	2.7135e-03	2.3745e-06	1.4610e-06	0:00:05	72
746	2.5262e-03	2.1911e-06	1.3500e-06	0:00:04	71
747	2.3580e-03	2.0246e-06	1.2480e-06	0:00:03	70
748	2.2004e-03	1.8727e-06	1.1553e-06	0:00:02	69
749	2.0413e-03	1.7315e-06	1.0687e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
750	1.8941e-03	1.6008e-06	9.8953e-07	0:00:01	67
751	1.7506e-03	1.4787e-06	9.1641e-07	0:00:01	66
752	1.6223e-03	1.3671e-06	8.4798e-07	0:00:01	65
753	1.5066e-03	1.2645e-06	7.8569e-07	0:00:01	64
754	1.4093e-03	1.1678e-06	7.2794e-07	0:00:01	63
755	1.3042e-03	1.0798e-06	6.7348e-07	0:00:00	62
756	1.2049e-03	9.9616e-07	6.2190e-07	0:00:13	61
757	1.1137e-03	9.1668e-07	5.7212e-07	0:00:10	60
758	1.0321e-03	8.4445e-07	5.2691e-07	0:00:08	59
759	9.5839e-04	7.7907e-07	4.8593e-07	0:00:06	58

! 759 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 6.5s, time step = 13

7 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
759	9.5839e-04	7.7907e-07	4.8593e-07	0:00:11	100
760	5.6640e-02	4.6644e-05	3.1374e-05	0:00:08	99
761	4.2698e-02	4.0655e-05	3.1822e-05	0:00:07	98
762	3.5013e-02	3.4834e-05	2.8022e-05	0:00:05	97
763	3.0868e-02	2.9970e-05	2.3917e-05	0:00:04	96
764	2.8236e-02	2.6001e-05	2.0285e-05	0:00:03	95
765	2.5529e-02	2.2677e-05	1.7263e-05	0:00:03	94
766	2.2816e-02	1.9894e-05	1.4821e-05	0:00:02	93
767	2.0006e-02	1.7511e-05	1.2798e-05	0:00:02	92
768	1.7730e-02	1.5489e-05	1.1107e-05	0:00:19	91
769	1.5620e-02	1.3716e-05	9.6625e-06	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
770	1.3818e-02	1.2154e-05	8.4005e-06	0:00:12	89
771	1.2169e-02	1.0819e-05	7.3354e-06	0:00:10	88
772	1.0855e-02	9.6467e-06	6.4837e-06	0:00:08	87
773	9.5851e-03	8.6173e-06	5.6716e-06	0:00:06	86
774	8.5652e-03	7.7212e-06	5.0414e-06	0:00:05	85
775	7.5620e-03	6.9403e-06	4.4534e-06	0:00:04	84
776	6.7864e-03	6.2490e-06	3.9866e-06	0:00:03	83
777	6.0304e-03	5.6510e-06	3.5488e-06	0:00:02	82
778	5.4690e-03	5.1103e-06	3.1907e-06	0:00:02	81
779	4.9243e-03	4.6415e-06	2.8667e-06	0:00:01	80
780	4.5449e-03	4.2150e-06	2.5944e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
781	4.1607e-03	3.8698e-06	2.3553e-06	0:00:01	78
782	3.8603e-03	3.5343e-06	2.1454e-06	0:00:01	77
783	3.5165e-03	3.2339e-06	1.9578e-06	0:00:01	76
784	3.2726e-03	2.9673e-06	1.7960e-06	0:00:00	75
785	3.0174e-03	2.7381e-06	1.6507e-06	0:00:00	74
786	2.8492e-03	2.5154e-06	1.5164e-06	0:00:00	73
787	2.6408e-03	2.3266e-06	1.4034e-06	0:00:00	72
788	2.4808e-03	2.1371e-06	1.2875e-06	0:00:14	71
789	2.2960e-03	1.9808e-06	1.2010e-06	0:00:11	70
790	2.1540e-03	1.8239e-06	1.1038e-06	0:00:09	69
791	1.9804e-03	1.6929e-06	1.0280e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
792	1.8614e-03	1.5587e-06	9.4708e-07	0:00:06	67
793	1.7102e-03	1.4495e-06	8.8320e-07	0:00:04	66
794	1.6021e-03	1.3356e-06	8.1326e-07	0:00:03	65
795	1.4626e-03	1.2382e-06	7.5597e-07	0:00:03	64
796	1.3633e-03	1.1427e-06	6.9942e-07	0:00:02	63
797	1.2685e-03	1.0547e-06	6.4703e-07	0:00:02	62
798	1.1782e-03	9.7389e-07	5.9905e-07	0:00:01	61
799	1.0989e-03	8.9827e-07	5.5317e-07	0:00:01	60
800	1.0254e-03	8.2887e-07	5.1061e-07	0:00:01	59
801	9.5926e-04	7.6319e-07	4.7029e-07	0:00:01	58

! 801 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 7s, time step = 14

6 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
801	9.5926e-04	7.6319e-07	4.7029e-07	0:00:01	100
802	5.4238e-02	4.5260e-05	3.0051e-05	0:00:01	99
803	4.0579e-02	3.9374e-05	3.0492e-05	0:00:01	98
804	3.2934e-02	3.3732e-05	2.6819e-05	0:00:01	97
805	2.9017e-02	2.9030e-05	2.2889e-05	0:00:00	96
806	2.6737e-02	2.5202e-05	1.9420e-05	0:00:19	95
807	2.4183e-02	2.2060e-05	1.6626e-05	0:00:15	94
808	2.1277e-02	1.9321e-05	1.4239e-05	0:00:12	93
809	1.8762e-02	1.7024e-05	1.2338e-05	0:00:10	92
810	1.6594e-02	1.5038e-05	1.0681e-05	0:00:08	91
811	1.4604e-02	1.3297e-05	9.2795e-06	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
812	1.2880e-02	1.1799e-05	8.1096e-06	0:00:05	89
813	1.1340e-02	1.0497e-05	7.1018e-06	0:00:04	88

814	9.9659e-03	9.3492e-06	6.2310e-06	0:00:03	87
815	8.8874e-03	8.3446e-06	5.4998e-06	0:00:02	86
816	7.8009e-03	7.4826e-06	4.8451e-06	0:00:02	85
817	6.9510e-03	6.7262e-06	4.3239e-06	0:00:01	84
818	6.1367e-03	6.0644e-06	3.8391e-06	0:00:01	83
819	5.5273e-03	5.4710e-06	3.4483e-06	0:00:01	82
820	4.9333e-03	4.9601e-06	3.0879e-06	0:00:01	81
821	4.5300e-03	4.4878e-06	2.7739e-06	0:00:01	80
822	4.0723e-03	4.0858e-06	2.5163e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
823	3.7495e-03	3.7209e-06	2.2769e-06	0:00:00	78
824	3.3779e-03	3.4027e-06	2.0750e-06	0:00:00	77
825	3.1545e-03	3.1092e-06	1.8894e-06	0:00:15	76
826	2.8821e-03	2.8570e-06	1.7323e-06	0:00:12	75
827	2.6993e-03	2.6158e-06	1.5813e-06	0:00:10	74
828	2.4752e-03	2.4149e-06	1.4667e-06	0:00:08	73
829	2.3226e-03	2.2185e-06	1.3461e-06	0:00:06	72
830	2.1410e-03	2.0527e-06	1.2456e-06	0:00:05	71
831	1.9815e-03	1.8906e-06	1.1491e-06	0:00:04	70
832	1.8433e-03	1.7438e-06	1.0619e-06	0:00:03	69
833	1.7268e-03	1.6103e-06	9.8344e-07	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
834	1.6161e-03	1.4892e-06	9.1053e-07	0:00:02	67
835	1.5143e-03	1.3754e-06	8.4198e-07	0:00:01	66
836	1.4147e-03	1.2732e-06	7.8022e-07	0:00:01	65
837	1.3226e-03	1.1773e-06	7.2214e-07	0:00:01	64
838	1.2338e-03	1.0876e-06	6.6911e-07	0:00:01	63
839	1.1485e-03	1.0048e-06	6.1894e-07	0:00:01	62
840	1.0611e-03	9.2607e-07	5.7210e-07	0:00:00	61
841	9.8301e-04	8.5385e-07	5.2800e-07	0:00:00	60

! 841 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 7.5s, time step = 15

5 more time steps

Updating solution at time level N...
done.

iter	continuity	x-velocity	y-velocity	time/iter	
841	9.8301e-04	8.5385e-07	5.2800e-07	0:00:01	100
842	5.1671e-02	4.3945e-05	2.8942e-05	0:00:00	99
843	3.8451e-02	3.8062e-05	2.9293e-05	0:00:00	98
844	3.1151e-02	3.2579e-05	2.5774e-05	0:00:00	97
845	2.7371e-02	2.8105e-05	2.2124e-05	0:00:00	96
846	2.4934e-02	2.4371e-05	1.8725e-05	0:00:00	95
847	2.2469e-02	2.1311e-05	1.6011e-05	0:00:00	94
848	1.9910e-02	1.8715e-05	1.3770e-05	0:00:00	93
849	1.7686e-02	1.6501e-05	1.1924e-05	0:00:00	92
850	1.5603e-02	1.4600e-05	1.0342e-05	0:00:00	91
851	1.3776e-02	1.2927e-05	8.9991e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
852	1.2121e-02	1.1484e-05	7.8513e-06	0:00:00	89
853	1.0656e-02	1.0218e-05	6.8691e-06	0:00:00	88
854	9.4833e-03	9.1066e-06	6.0635e-06	0:00:00	87
855	8.3514e-03	8.1753e-06	5.3361e-06	0:00:00	86
856	7.4299e-03	7.3288e-06	4.7479e-06	0:00:00	85
857	6.5438e-03	6.5936e-06	4.1965e-06	0:00:00	84
858	5.8676e-03	5.9298e-06	3.7509e-06	0:00:00	83
859	5.2210e-03	5.3548e-06	3.3511e-06	0:00:16	82
860	4.7616e-03	4.8368e-06	3.0046e-06	0:00:13	81
861	4.2394e-03	4.3882e-06	2.7012e-06	0:00:10	80
862	3.8856e-03	3.9854e-06	2.4420e-06	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
863	3.4734e-03	3.6399e-06	2.2101e-06	0:00:06	78
864	3.2268e-03	3.3179e-06	2.0091e-06	0:00:05	77
865	2.9233e-03	3.0425e-06	1.8343e-06	0:00:04	76
866	2.6868e-03	2.7872e-06	1.6742e-06	0:00:03	75
867	2.4859e-03	2.5580e-06	1.5339e-06	0:00:02	74
868	2.3160e-03	2.3506e-06	1.4101e-06	0:00:02	73
869	2.1550e-03	2.1645e-06	1.2975e-06	0:00:02	72
870	2.0126e-03	1.9949e-06	1.1952e-06	0:00:01	71
871	1.8724e-03	1.8396e-06	1.1037e-06	0:00:01	70
872	1.7520e-03	1.6985e-06	1.0204e-06	0:00:01	69
873	1.6483e-03	1.5692e-06	9.4394e-07	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter
874	1.5354e-03	1.4517e-06	8.7410e-07	0:00:14 67
875	1.4422e-03	1.3399e-06	8.0844e-07	0:00:11 66
876	1.3456e-03	1.2378e-06	7.4756e-07	0:00:09 65
877	1.2611e-03	1.1444e-06	6.9245e-07	0:00:07 64
878	1.1778e-03	1.0581e-06	6.4081e-07	0:00:05 63
879	1.1011e-03	9.7725e-07	5.9362e-07	0:00:04 62
880	1.0304e-03	9.0320e-07	5.4904e-07	0:00:03 61
881	9.6034e-04	8.3401e-07	5.0780e-07	0:00:03 60

! 881 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 8s, time step = 16

4 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter
881	9.6034e-04	8.3401e-07	5.0780e-07	0:00:04 100
882	4.9432e-02	4.2805e-05	2.7985e-05	0:00:03 99
883	3.6508e-02	3.6977e-05	2.8295e-05	0:00:03 98
884	2.9644e-02	3.1650e-05	2.4929e-05	0:00:02 97
885	2.6138e-02	2.7292e-05	2.1353e-05	0:00:02 96
886	2.3813e-02	2.3701e-05	1.8115e-05	0:00:01 95
887	2.1587e-02	2.0762e-05	1.5498e-05	0:00:01 94
888	1.9109e-02	1.8271e-05	1.3360e-05	0:00:01 93
889	1.6863e-02	1.6139e-05	1.1571e-05	0:00:01 92
890	1.4944e-02	1.4286e-05	1.0049e-05	0:00:19 91
891	1.3248e-02	1.2643e-05	8.7167e-06	0:00:15 90

iter	continuity	x-velocity	y-velocity	time/iter
892	1.1660e-02	1.1239e-05	7.6429e-06	0:00:12 89
893	1.0260e-02	1.0009e-05	6.7136e-06	0:00:09 88
894	9.0542e-03	8.9462e-06	5.9211e-06	0:00:07 87
895	7.9833e-03	8.0085e-06	5.2242e-06	0:00:06 86

896	7.1440e-03	7.1728e-06	4.6348e-06	0:00:05	85
897	6.2834e-03	6.4583e-06	4.1060e-06	0:00:04	84
898	5.6620e-03	5.8127e-06	3.6651e-06	0:00:03	83
899	4.9793e-03	5.2467e-06	3.2723e-06	0:00:02	82
900	4.5221e-03	4.7390e-06	2.9376e-06	0:00:02	81
901	4.0253e-03	4.2919e-06	2.6393e-06	0:00:01	80
902	3.7016e-03	3.8953e-06	2.3839e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
903	3.3386e-03	3.5518e-06	2.1617e-06	0:00:01	78
904	3.1138e-03	3.2373e-06	1.9630e-06	0:00:01	77
905	2.8355e-03	2.9669e-06	1.7889e-06	0:00:01	76
906	2.6372e-03	2.7164e-06	1.6297e-06	0:00:00	75
907	2.3958e-03	2.4975e-06	1.4959e-06	0:00:00	74
908	2.2485e-03	2.2911e-06	1.3700e-06	0:00:00	73
909	2.0568e-03	2.1102e-06	1.2627e-06	0:00:00	72
910	1.9550e-03	1.9401e-06	1.1616e-06	0:00:00	71
911	1.7843e-03	1.7881e-06	1.0734e-06	0:00:14	70
912	1.6861e-03	1.6491e-06	9.9204e-07	0:00:11	69
913	1.5785e-03	1.5232e-06	9.1771e-07	0:00:09	68

iter	continuity	x-velocity	y-velocity	time/iter	
914	1.4805e-03	1.4074e-06	8.5041e-07	0:00:07	67
915	1.3874e-03	1.2996e-06	7.8783e-07	0:00:05	66
916	1.2977e-03	1.2025e-06	7.2959e-07	0:00:04	65
917	1.2108e-03	1.1123e-06	6.7526e-07	0:00:03	64
918	1.1277e-03	1.0270e-06	6.2412e-07	0:00:03	63
919	1.0660e-03	9.4787e-07	5.7747e-07	0:00:02	62
920	9.8087e-04	8.7607e-07	5.3606e-07	0:00:02	61

! 920 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 8.5s, time step = 17

3 more time steps

Updating solution at time level N...

done.

iter	continuity	x-velocity	y-velocity	time/iter	
920	9.8087e-04	8.7607e-07	5.3606e-07	0:00:03	100
921	4.7607e-02	4.1827e-05	2.7186e-05	0:00:02	99
922	3.5115e-02	3.6000e-05	2.7419e-05	0:00:02	98
923	2.8268e-02	3.0770e-05	2.4183e-05	0:00:01	97
924	2.4891e-02	2.6487e-05	2.0680e-05	0:00:01	96
925	2.2820e-02	2.3100e-05	1.7639e-05	0:00:01	95
926	2.0598e-02	2.0240e-05	1.5104e-05	0:00:01	94
927	1.8300e-02	1.7817e-05	1.3038e-05	0:00:19	93
928	1.6313e-02	1.5719e-05	1.1256e-05	0:00:15	92
929	1.4386e-02	1.3928e-05	9.8019e-06	0:00:12	91
930	1.2735e-02	1.2361e-05	8.5603e-06	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
931	1.1274e-02	1.0986e-05	7.4910e-06	0:00:07	89
932	9.9877e-03	9.7886e-06	6.5809e-06	0:00:06	88
933	8.9103e-03	8.7210e-06	5.8029e-06	0:00:05	87
934	7.8257e-03	7.8385e-06	5.1150e-06	0:00:04	86
935	6.9212e-03	7.0208e-06	4.5373e-06	0:00:03	85
936	6.0422e-03	6.3174e-06	4.0278e-06	0:00:02	84
937	5.4119e-03	5.6874e-06	3.5968e-06	0:00:02	83
938	4.7582e-03	5.1261e-06	3.1958e-06	0:00:01	82
939	4.3176e-03	4.6320e-06	2.8740e-06	0:00:01	81
940	3.8407e-03	4.1965e-06	2.5818e-06	0:00:01	80
941	3.5394e-03	3.8054e-06	2.3249e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
942	3.1906e-03	3.4743e-06	2.1090e-06	0:00:01	78
943	2.9608e-03	3.1673e-06	1.9127e-06	0:00:00	77
944	2.6789e-03	2.9001e-06	1.7399e-06	0:00:00	76
945	2.4536e-03	2.6557e-06	1.5899e-06	0:00:00	75
946	2.2570e-03	2.4357e-06	1.4579e-06	0:00:00	74
947	2.0811e-03	2.2367e-06	1.3348e-06	0:00:15	73
948	1.9328e-03	2.0585e-06	1.2285e-06	0:00:12	72
949	1.8091e-03	1.8932e-06	1.1298e-06	0:00:09	71
950	1.6972e-03	1.7457e-06	1.0440e-06	0:00:07	70
951	1.5863e-03	1.6111e-06	9.6728e-07	0:00:06	69
952	1.4806e-03	1.4876e-06	8.9652e-07	0:00:05	68

iter	continuity	x-velocity	y-velocity	time/iter	
953	1.3828e-03	1.3741e-06	8.3050e-07	0:00:04	67
954	1.2905e-03	1.2697e-06	7.6980e-07	0:00:03	66

```

955 1.2049e-03 1.1737e-06 7.1371e-07 0:00:02 65
956 1.1299e-03 1.0856e-06 6.6201e-07 0:00:02 64
957 1.0591e-03 1.0039e-06 6.1436e-07 0:00:01 63
958 9.9397e-04 9.2899e-07 5.6920e-07 0:00:01 62
! 958 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa
()
Flow time = 9s, time step = 18
2 more time steps

Updating solution at time level N...
done.

```

iter	continuity	x-velocity	y-velocity	time/iter	
958	9.9397e-04	9.2899e-07	5.6920e-07	0:00:02	100
959	4.6249e-02	4.0912e-05	2.6500e-05	0:00:01	99
960	3.3759e-02	3.5133e-05	2.6706e-05	0:00:01	98
961	2.7158e-02	3.0002e-05	2.3545e-05	0:00:20	97
962	2.3781e-02	2.5867e-05	2.0191e-05	0:00:16	96
963	2.1804e-02	2.2493e-05	1.7175e-05	0:00:13	95
964	1.9729e-02	1.9733e-05	1.4716e-05	0:00:10	94
965	1.7656e-02	1.7399e-05	1.2707e-05	0:00:08	93
966	1.5663e-02	1.5363e-05	1.1040e-05	0:00:06	92
967	1.3910e-02	1.3609e-05	9.6187e-06	0:00:05	91
968	1.2306e-02	1.2074e-05	8.3839e-06	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
969	1.0929e-02	1.0712e-05	7.3340e-06	0:00:03	89
970	9.6056e-03	9.5794e-06	6.4495e-06	0:00:02	88
971	8.4935e-03	8.5496e-06	5.6986e-06	0:00:02	87
972	7.5190e-03	7.6503e-06	5.0290e-06	0:00:02	86
973	6.6206e-03	6.8788e-06	4.4405e-06	0:00:01	85
974	5.8908e-03	6.1766e-06	3.9531e-06	0:00:01	84
975	5.2587e-03	5.5513e-06	3.5183e-06	0:00:01	83
976	4.6790e-03	5.0074e-06	3.1427e-06	0:00:17	82
977	4.1333e-03	4.5332e-06	2.8060e-06	0:00:13	81

```
978 3.7374e-03 4.1069e-06 2.5247e-06 0:00:11 80
979 3.4187e-03 3.7362e-06 2.2847e-06 0:00:08 79
```

```
iter continuity x-velocity y-velocity time/iter
980 3.1290e-03 3.4009e-06 2.0648e-06 0:00:07 78
981 2.8812e-03 3.1040e-06 1.8755e-06 0:00:05 77
982 2.6608e-03 2.8395e-06 1.7074e-06 0:00:04 76
983 2.4093e-03 2.6022e-06 1.5584e-06 0:00:03 75
984 2.2564e-03 2.3875e-06 1.4249e-06 0:00:03 74
985 2.0397e-03 2.1922e-06 1.3060e-06 0:00:02 73
986 1.9333e-03 2.0160e-06 1.2025e-06 0:00:02 72
987 1.7734e-03 1.8573e-06 1.1138e-06 0:00:01 71
988 1.6556e-03 1.7134e-06 1.0267e-06 0:00:01 70
989 1.5449e-03 1.5794e-06 9.4868e-07 0:00:01 69
990 1.4465e-03 1.4570e-06 8.7912e-07 0:00:01 68
```

```
iter continuity x-velocity y-velocity time/iter
991 1.3604e-03 1.3453e-06 8.1635e-07 0:00:00 67
992 1.2792e-03 1.2453e-06 7.5896e-07 0:00:00 66
993 1.2063e-03 1.1524e-06 7.0468e-07 0:00:00 65
994 1.1340e-03 1.0654e-06 6.5361e-07 0:00:00 64
995 1.0810e-03 9.8622e-07 6.0760e-07 0:00:00 63
996 1.0158e-03 9.1211e-07 5.6373e-07 0:00:00 62
997 9.5368e-04 8.4396e-07 5.2272e-07 0:00:12 61
```

! 997 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 9.5s, time step = 19

1 more time step

Updating solution at time level N...

done.

```
iter continuity x-velocity y-velocity time/iter
997 9.5368e-04 8.4396e-07 5.2272e-07 0:00:20 100
998 4.4908e-02 4.0014e-05 2.5865e-05 0:00:16 99
```

999	3.2690e-02	3.4309e-05	2.6045e-05	0:00:13	98
1000	2.6062e-02	2.9277e-05	2.2952e-05	0:00:10	97
1001	2.2796e-02	2.5233e-05	1.9695e-05	0:00:08	96
1002	2.1032e-02	2.1953e-05	1.6764e-05	0:00:06	95
1003	1.9116e-02	1.9275e-05	1.4389e-05	0:00:05	94
1004	1.7019e-02	1.7000e-05	1.2448e-05	0:00:04	93
1005	1.5065e-02	1.5004e-05	1.0804e-05	0:00:03	92
1006	1.3350e-02	1.3281e-05	9.3953e-06	0:00:02	91
1007	1.1787e-02	1.1791e-05	8.1965e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
1008	1.0363e-02	1.0490e-05	7.1667e-06	0:00:02	89
1009	9.0893e-03	9.3520e-06	6.3040e-06	0:00:19	88
1010	7.9483e-03	8.3534e-06	5.5466e-06	0:00:15	87
1011	6.9997e-03	7.4830e-06	4.8962e-06	0:00:12	86
1012	6.2768e-03	6.7066e-06	4.3405e-06	0:00:09	85
1013	5.5205e-03	6.0331e-06	3.8297e-06	0:00:07	84
1014	4.9660e-03	5.4368e-06	3.4232e-06	0:00:06	83
1015	4.4179e-03	4.9155e-06	3.0513e-06	0:00:05	82
1016	4.0438e-03	4.4513e-06	2.7468e-06	0:00:04	81
1017	3.6156e-03	4.0433e-06	2.4640e-06	0:00:03	80
1018	3.3299e-03	3.6782e-06	2.2277e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
1019	2.9960e-03	3.3583e-06	2.0171e-06	0:00:02	78
1020	2.7674e-03	3.0590e-06	1.8311e-06	0:00:01	77
1021	2.4790e-03	2.8042e-06	1.6663e-06	0:00:01	76
1022	2.3121e-03	2.5691e-06	1.5217e-06	0:00:01	75
1023	2.0966e-03	2.3577e-06	1.3960e-06	0:00:01	74
1024	1.9371e-03	2.1646e-06	1.2824e-06	0:00:01	73
1025	1.8029e-03	1.9913e-06	1.1811e-06	0:00:00	72
1026	1.6713e-03	1.8358e-06	1.0892e-06	0:00:00	71
1027	1.5516e-03	1.6950e-06	1.0097e-06	0:00:00	70
1028	1.4465e-03	1.5647e-06	9.3446e-07	0:00:00	69
1029	1.3459e-03	1.4452e-06	8.6469e-07	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
1030	1.2551e-03	1.3353e-06	8.0222e-07	0:00:14	67
1031	1.1699e-03	1.2331e-06	7.4479e-07	0:00:11	66
1032	1.0908e-03	1.1405e-06	6.9242e-07	0:00:08	65
1033	1.0222e-03	1.0557e-06	6.4385e-07	0:00:07	64
1034	9.5894e-04	9.7770e-07	5.9847e-07	0:00:05	63

! 1034 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 10s, time step = 20

Writing "| gzip -2cf > SolutionMonitor.gz"...

Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22724 ...

Done.

"\\winfiles.wincoe.coe.neu.edu/cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent"

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.

Writing data to \\winfiles.wincoe.coe.neu.edu/cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...

x-coord

y-coord

pressure

x-velocity

y-velocity

hyb_init-0

hyb_init-1

Done.

Calculation complete.

Initialize using the hybrid initialization method.

Checking case topology...

-This case has both inlets & outlets

-Pressure information is not available at the boundaries.

Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00

2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set"...

writing rp variables ... Done.
 writing domain variables ... Done.
 writing fluid (type fluid) (mixture) ... Done.
 writing interior-fluid (type interior) (mixture) ... Done.
 writing surface_body (type interior) (mixture) ... Done.
 writing inlet (type velocity-inlet) (mixture) ... Done.
 writing outlet (type pressure-outlet) (mixture) ... Done.
 writing wall (type wall) (mixture) ... Done.
 writing cylinder (type wall) (mixture) ... Done.
 writing zones map name-id ... Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-13.cas.h5" in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...
 116806 faces, 6 zones ...
 58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-13-00000.dat.h5" in NODE0 mode and compression level 1 ...

Writing results.

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'
 CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.
Access is denied.

Error: sopenoutputfile: unable to open file for output
Error Object: ".flwb_report_files\report.xml"

Updating solution at time level N...
done.
physical-dt 5.0000e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1	1.0000e+00	2.8003e-04	2.4950e-04	0:00:07	99
2	1.0000e+00	1.5522e-04	8.8371e-05	0:00:05	98
3	6.1895e-01	9.5975e-05	5.0604e-05	0:00:24	97
4	4.4142e-01	6.4821e-05	3.5159e-05	0:00:19	96
5	3.2542e-01	4.7857e-05	2.7108e-05	0:00:15	95
6	2.4299e-01	3.4330e-05	2.1362e-05	0:00:12	94
7	1.7457e-01	2.7598e-05	1.7780e-05	0:00:09	93
8	1.2877e-01	2.3108e-05	1.5379e-05	0:00:07	92
9	9.4178e-02	1.9939e-05	1.3590e-05	0:00:06	91
10	7.0421e-02	1.7648e-05	1.2277e-05	0:00:05	90
11	5.2260e-02	1.6345e-05	1.1522e-05	0:00:04	89

iter	continuity	x-velocity	y-velocity	time/iter	
12	4.1387e-02	1.4814e-05	1.0591e-05	0:00:03	88
13	3.1955e-02	1.3766e-05	9.9647e-06	0:00:02	87
14	2.5441e-02	1.2990e-05	9.5826e-06	0:00:02	86
15	2.0981e-02	1.2016e-05	9.0003e-06	0:00:01	85
16	1.6534e-02	1.1367e-05	8.6426e-06	0:00:01	84
17	1.3654e-02	1.0820e-05	8.2939e-06	0:00:01	83
18	1.1633e-02	1.0331e-05	7.9955e-06	0:00:01	82
19	1.0165e-02	9.8947e-06	7.7379e-06	0:00:01	81
20	8.7783e-03	9.5614e-06	7.5556e-06	0:00:00	80
21	7.9655e-03	9.1635e-06	7.3071e-06	0:00:00	79
22	7.2188e-03	8.8698e-06	7.1324e-06	0:00:00	78

iter	continuity	x-velocity	y-velocity	time/iter	
23	6.7240e-03	8.5777e-06	6.9484e-06	0:00:00	77
24	6.1995e-03	8.3034e-06	6.7808e-06	0:00:15	76
25	5.8001e-03	8.0596e-06	6.6334e-06	0:00:12	75
26	5.5415e-03	7.8304e-06	6.4965e-06	0:00:10	74
27	5.3320e-03	7.6138e-06	6.3667e-06	0:00:08	73
28	5.1208e-03	7.4044e-06	6.2426e-06	0:00:06	72
29	4.8545e-03	7.2081e-06	6.1260e-06	0:00:05	71

30	4.6958e-03	7.0295e-06	6.0184e-06	0:00:04	70
31	4.5956e-03	6.8515e-06	5.9122e-06	0:00:03	69
32	4.5061e-03	6.6835e-06	5.8113e-06	0:00:02	68
33	4.3664e-03	6.5210e-06	5.7128e-06	0:00:02	67

iter	continuity	x-velocity	y-velocity	time/iter	
34	4.2288e-03	6.3669e-06	5.6196e-06	0:00:01	66
35	4.1162e-03	6.2152e-06	5.5259e-06	0:00:01	65
36	4.0576e-03	6.0729e-06	5.4372e-06	0:00:01	64
37	3.9931e-03	5.9318e-06	5.3467e-06	0:00:01	63
38	3.9692e-03	5.7826e-06	5.2455e-06	0:00:01	62
39	3.8357e-03	5.6746e-06	5.1839e-06	0:00:00	61
40	3.7622e-03	5.5448e-06	5.0969e-06	0:00:00	60
41	3.7293e-03	5.4153e-06	5.0070e-06	0:00:00	59
42	3.6909e-03	5.2945e-06	4.9246e-06	0:00:00	58
43	3.6669e-03	5.1735e-06	4.8402e-06	0:00:00	57
44	3.5902e-03	5.0600e-06	4.7603e-06	0:00:11	56

iter	continuity	x-velocity	y-velocity	time/iter	
45	3.5149e-03	4.9469e-06	4.6777e-06	0:00:09	55
46	3.4726e-03	4.8351e-06	4.5939e-06	0:00:07	54
47	3.4291e-03	4.7235e-06	4.5110e-06	0:00:05	53
48	3.3816e-03	4.6182e-06	4.4282e-06	0:00:04	52
49	3.3330e-03	4.5129e-06	4.3482e-06	0:00:03	51
50	3.2612e-03	4.4070e-06	4.2646e-06	0:00:03	50
51	3.1913e-03	4.3034e-06	4.1808e-06	0:00:02	49
52	3.1359e-03	4.1972e-06	4.0916e-06	0:00:02	48
53	3.0988e-03	4.0969e-06	4.0100e-06	0:00:01	47
54	3.0652e-03	3.9981e-06	3.9250e-06	0:00:01	46
55	3.0309e-03	3.9030e-06	3.8431e-06	0:00:01	45

iter	continuity	x-velocity	y-velocity	time/iter	
56	3.0059e-03	3.7908e-06	3.7435e-06	0:00:01	44
57	2.9465e-03	3.7178e-06	3.6826e-06	0:00:00	43
58	2.8908e-03	3.6234e-06	3.5940e-06	0:00:09	42
59	2.8437e-03	3.5192e-06	3.5012e-06	0:00:07	41
60	2.8070e-03	3.4277e-06	3.4165e-06	0:00:05	40
61	2.7537e-03	3.3357e-06	3.3307e-06	0:00:04	39
62	2.7158e-03	3.2476e-06	3.2458e-06	0:00:03	38
63	2.6814e-03	3.1575e-06	3.1607e-06	0:00:03	37
64	2.6684e-03	3.0654e-06	3.0692e-06	0:00:02	36
65	2.5953e-03	2.9849e-06	2.9951e-06	0:00:02	35
66	2.5335e-03	2.8918e-06	2.9008e-06	0:00:01	34

iter	continuity	x-velocity	y-velocity	time/iter	
67	2.4597e-03	2.8238e-06	2.8306e-06	0:00:01	33
68	2.3815e-03	2.7412e-06	2.7441e-06	0:00:01	32
69	2.3351e-03	2.6382e-06	2.6414e-06	0:00:01	31
70	2.3284e-03	2.5796e-06	2.5785e-06	0:00:00	30
71	2.2531e-03	2.4978e-06	2.4940e-06	0:00:00	29
72	2.1866e-03	2.4116e-06	2.4059e-06	0:00:00	28
73	2.1303e-03	2.3348e-06	2.3238e-06	0:00:00	27
74	2.0979e-03	2.2521e-06	2.2369e-06	0:00:00	26
75	2.0614e-03	2.1888e-06	2.1701e-06	0:00:00	25
76	2.0330e-03	2.1081e-06	2.0840e-06	0:00:00	24
77	1.9918e-03	2.0315e-06	2.0042e-06	0:00:00	23

iter	continuity	x-velocity	y-velocity	time/iter	
78	1.9059e-03	1.9621e-06	1.9282e-06	0:00:04	22
79	1.8190e-03	1.8958e-06	1.8538e-06	0:00:03	21
80	1.7407e-03	1.8325e-06	1.7861e-06	0:00:03	20
81	1.6880e-03	1.7584e-06	1.7064e-06	0:00:02	19
82	1.6334e-03	1.6870e-06	1.6312e-06	0:00:01	18
83	1.5828e-03	1.6220e-06	1.5622e-06	0:00:01	17
84	1.5364e-03	1.5599e-06	1.4950e-06	0:00:01	16
85	1.4878e-03	1.4987e-06	1.4306e-06	0:00:01	15
86	1.4320e-03	1.4366e-06	1.3647e-06	0:00:00	14
87	1.3733e-03	1.3754e-06	1.3006e-06	0:00:00	13
88	1.3178e-03	1.3161e-06	1.2384e-06	0:00:00	12

iter	continuity	x-velocity	y-velocity	time/iter	
89	1.2515e-03	1.2586e-06	1.1782e-06	0:00:00	11
90	1.2049e-03	1.2038e-06	1.1210e-06	0:00:00	10
91	1.1715e-03	1.1486e-06	1.0639e-06	0:00:00	9
92	1.1194e-03	1.0944e-06	1.0088e-06	0:00:00	8
93	1.0732e-03	1.0443e-06	9.5707e-07	0:00:00	7
94	1.0278e-03	9.9684e-07	9.0842e-07	0:00:00	6
95	9.7609e-04	9.4697e-07	8.5825e-07	0:00:00	5

! 95 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 1

49 more time steps

Truncation Error (computed)=0.023083 > Truncation error tolerance

Repeating the time step: time step size = 0.250000

in update prediction domain id = 1

physical-dt 2.5000e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
95	9.7609e-04	9.4697e-07	8.5825e-07	0:00:00 100
96	8.7592e-01	2.8093e-04	2.2129e-04	0:00:20 99
97	7.3696e-01	1.3429e-04	8.9645e-05	0:00:16 98
98	4.7836e-01	7.8099e-05	4.6411e-05	0:00:13 97
99	3.1630e-01	5.0877e-05	2.9228e-05	0:00:10 96
100	2.3764e-01	3.5109e-05	2.0237e-05	0:00:08 95
101	1.7636e-01	2.6001e-05	1.5301e-05	0:00:06 94
102	1.3155e-01	1.9097e-05	1.2563e-05	0:00:05 93
103	9.4441e-02	1.5537e-05	1.0365e-05	0:00:04 92
104	6.9285e-02	1.3334e-05	9.2568e-06	0:00:03 91
105	5.1965e-02	1.1480e-05	8.0426e-06	0:00:02 90

iter	continuity	x-velocity	y-velocity	time/iter
106	3.8490e-02	1.0408e-05	7.3578e-06	0:00:02 89
107	3.0222e-02	9.1906e-06	6.5416e-06	0:00:02 88
108	2.2798e-02	8.4995e-06	6.1386e-06	0:00:01 87
109	1.8652e-02	7.6751e-06	5.6092e-06	0:00:01 86
110	1.4795e-02	7.0302e-06	5.2071e-06	0:00:01 85
111	1.1927e-02	6.4385e-06	4.8294e-06	0:00:01 84
112	9.7305e-03	5.9451e-06	4.5081e-06	0:00:00 83
113	8.0806e-03	5.5305e-06	4.2325e-06	0:00:00 82
114	6.8636e-03	5.1688e-06	3.9879e-06	0:00:00 81
115	5.9523e-03	4.8486e-06	3.7707e-06	0:00:16 80
116	5.0748e-03	4.5826e-06	3.5906e-06	0:00:13 79

iter	continuity	x-velocity	y-velocity	time/iter
117	4.4973e-03	4.3005e-06	3.3872e-06	0:00:10 78
118	3.9370e-03	4.0627e-06	3.2216e-06	0:00:08 77

119	3.5758e-03	3.8349e-06	3.0577e-06	0:00:06	76
120	3.2762e-03	3.6196e-06	2.9020e-06	0:00:05	75
121	3.0429e-03	3.4245e-06	2.7621e-06	0:00:04	74
122	2.8161e-03	3.2430e-06	2.6332e-06	0:00:03	73
123	2.5851e-03	3.0741e-06	2.5126e-06	0:00:02	72
124	2.3776e-03	2.9140e-06	2.3969e-06	0:00:02	71
125	2.2271e-03	2.7637e-06	2.2878e-06	0:00:02	70
126	2.0997e-03	2.6189e-06	2.1813e-06	0:00:01	69
127	1.9833e-03	2.4868e-06	2.0850e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
128	1.8872e-03	2.3605e-06	1.9913e-06	0:00:01	67
129	1.7990e-03	2.2415e-06	1.9037e-06	0:00:01	66
130	1.7055e-03	2.1293e-06	1.8192e-06	0:00:00	65
131	1.6257e-03	2.0222e-06	1.7379e-06	0:00:00	64
132	1.5364e-03	1.9203e-06	1.6602e-06	0:00:00	63
133	1.4623e-03	1.8235e-06	1.5865e-06	0:00:00	62
134	1.3903e-03	1.7315e-06	1.5151e-06	0:00:12	61
135	1.3394e-03	1.6397e-06	1.4434e-06	0:00:10	60
136	1.2649e-03	1.5615e-06	1.3835e-06	0:00:08	59
137	1.2374e-03	1.4792e-06	1.3178e-06	0:00:06	58
138	1.1742e-03	1.4068e-06	1.2607e-06	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
139	1.1336e-03	1.3316e-06	1.2000e-06	0:00:04	56
140	1.0631e-03	1.2638e-06	1.1455e-06	0:00:03	55
141	1.0153e-03	1.1999e-06	1.0931e-06	0:00:02	54
142	9.6820e-04	1.1361e-06	1.0402e-06	0:00:02	53

! 142 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.25s, time step = 1

48 more time steps

Truncation Error (computed)=0.016671 > Truncation error tolerance

Repeating the time step: time step size = 0.125000

in update prediction domain id = 1
physical-dt 1.2500e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
142	9.6820e-04	1.1361e-06	1.0402e-06	0:00:03	100
143	7.5333e-01	2.4407e-04	1.9235e-04	0:00:03	99
144	6.1285e-01	1.1721e-04	8.0543e-05	0:00:02	98
145	4.1051e-01	6.6278e-05	4.0856e-05	0:00:02	97
146	2.7584e-01	4.1614e-05	2.4622e-05	0:00:01	96
147	2.0048e-01	2.8173e-05	1.6204e-05	0:00:01	95
148	1.4852e-01	2.0113e-05	1.1402e-05	0:00:01	94
149	1.1012e-01	1.4759e-05	8.5080e-06	0:00:01	93
150	8.1254e-02	1.1300e-05	6.7816e-06	0:00:01	92
151	5.9454e-02	9.0054e-06	5.6272e-06	0:00:00	91
152	4.3603e-02	7.5655e-06	5.0542e-06	0:00:18	90

iter	continuity	x-velocity	y-velocity	time/iter	
153	3.1918e-02	6.4554e-06	4.3310e-06	0:00:15	89
154	2.4287e-02	5.4268e-06	3.6224e-06	0:00:11	88
155	1.7935e-02	4.8187e-06	3.2338e-06	0:00:09	87
156	1.4202e-02	4.1622e-06	2.8191e-06	0:00:07	86
157	1.1082e-02	3.6230e-06	2.4732e-06	0:00:06	85
158	8.5274e-03	3.2093e-06	2.2245e-06	0:00:04	84
159	6.8406e-03	2.8268e-06	1.9868e-06	0:00:04	83
160	5.5539e-03	2.5051e-06	1.7762e-06	0:00:03	82
161	4.5864e-03	2.2349e-06	1.5950e-06	0:00:02	81
162	3.8588e-03	2.0042e-06	1.4392e-06	0:00:02	80
163	3.2750e-03	1.8025e-06	1.3027e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
164	2.8198e-03	1.6243e-06	1.1805e-06	0:00:01	78
165	2.4357e-03	1.4673e-06	1.0716e-06	0:00:01	77
166	2.0758e-03	1.3269e-06	9.7364e-07	0:00:01	76
167	1.7382e-03	1.2051e-06	8.9094e-07	0:00:01	75
168	1.5497e-03	1.0872e-06	8.0555e-07	0:00:00	74
169	1.3618e-03	9.8353e-07	7.3310e-07	0:00:00	73
170	1.1853e-03	8.9541e-07	6.7263e-07	0:00:00	72
171	1.0738e-03	8.1087e-07	6.1076e-07	0:00:14	71

```

172 9.4960e-04 7.3472e-07 5.5676e-07 0:00:11 70
! 172 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.125s, time step = 1
47 more time steps
Truncation Error (computed)=0.012790 > Truncation error tolerance
Repeating the time step: time step size = 0.062500

```

```

in update prediction domain id = 1
physical-dt 6.2500e-02

```

```

in update prediction domain id = 1

```

```

in update prediction domain id = 1

```

```

in update prediction domain id = 1

```

iter	continuity	x-velocity	y-velocity	time/iter	
172	9.4960e-04	7.3472e-07	5.5676e-07	0:00:16	100
173	6.1158e-01	1.9072e-04	1.5046e-04	0:00:13	99
174	4.7797e-01	9.6790e-05	6.8124e-05	0:00:10	98
175	3.2880e-01	5.4860e-05	3.4881e-05	0:00:08	97
176	2.2841e-01	3.3620e-05	2.0419e-05	0:00:06	96
177	1.6289e-01	2.2026e-05	1.2724e-05	0:00:05	95
178	1.1987e-01	1.4831e-05	8.1972e-06	0:00:04	94
179	8.8691e-02	1.0165e-05	5.4887e-06	0:00:03	93
180	6.5515e-02	7.3971e-06	3.9362e-06	0:00:03	92
181	4.7071e-02	5.7444e-06	3.0281e-06	0:00:20	91
182	3.4971e-02	4.2685e-06	2.2784e-06	0:00:16	90

iter	continuity	x-velocity	y-velocity	time/iter	
183	2.6157e-02	3.2710e-06	1.7834e-06	0:00:13	89
184	1.9098e-02	2.6075e-06	1.4573e-06	0:00:10	88
185	1.4484e-02	2.0284e-06	1.1500e-06	0:00:08	87
186	1.0749e-02	1.6361e-06	9.5387e-07	0:00:06	86

187	8.1873e-03	1.2948e-06	7.6486e-07	0:00:05	85
188	6.0682e-03	1.0675e-06	6.4277e-07	0:00:04	84
189	4.5722e-03	8.7628e-07	5.3122e-07	0:00:03	83
190	3.4774e-03	7.2017e-07	4.3903e-07	0:00:02	82
191	2.6739e-03	5.9454e-07	3.6435e-07	0:00:02	81
192	2.0964e-03	4.9385e-07	3.0387e-07	0:00:02	80
193	1.6513e-03	4.1166e-07	2.5448e-07	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
194	1.3081e-03	3.4497e-07	2.1387e-07	0:00:01	78
195	1.0451e-03	2.8958e-07	1.8034e-07	0:00:01	77
196	8.4821e-04	2.4411e-07	1.5244e-07	0:00:01	76

! 196 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0625s, time step = 1

46 more time steps

Updating solution at time level N...

done.

physical-dt 6.3296e-02

iter	continuity	x-velocity	y-velocity	time/iter	
196	8.4821e-04	2.4411e-07	1.5244e-07	0:00:01	100
197	8.1237e-02	6.8848e-05	3.5653e-05	0:00:20	99
198	7.6224e-02	3.8486e-05	1.9774e-05	0:00:16	98
199	5.8315e-02	2.2213e-05	1.1692e-05	0:00:13	97
200	4.2232e-02	1.3362e-05	7.3133e-06	0:00:10	96
201	3.1279e-02	8.4252e-06	4.8739e-06	0:00:08	95
202	2.3219e-02	5.8326e-06	3.4853e-06	0:00:06	94
203	1.7479e-02	4.2789e-06	2.6366e-06	0:00:05	93
204	1.3263e-02	3.2688e-06	2.1048e-06	0:00:04	92
205	1.0237e-02	2.5985e-06	1.7226e-06	0:00:03	91
206	7.9786e-03	2.1042e-06	1.4214e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

207	6.2867e-03	1.7139e-06	1.1760e-06	0:00:02	89
208	5.0081e-03	1.4072e-06	9.7446e-07	0:00:02	88
209	3.9363e-03	1.1699e-06	8.1680e-07	0:00:01	87
210	3.1734e-03	9.5647e-07	6.6799e-07	0:00:01	86
211	2.5029e-03	8.0366e-07	5.6402e-07	0:00:01	85
212	1.9919e-03	6.6695e-07	4.6780e-07	0:00:01	84
213	1.6018e-03	5.5690e-07	3.9064e-07	0:00:00	83
214	1.2954e-03	4.6645e-07	3.2719e-07	0:00:00	82
215	1.0648e-03	3.9228e-07	2.7504e-07	0:00:00	81
216	8.8426e-04	3.3006e-07	2.3107e-07	0:00:16	80

! 216 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.1257960498332977s, time step = 2

45 more time steps

Updating solution at time level N...

done.

physical-dt 1.1288e-01

iter	continuity	x-velocity	y-velocity	time/iter	
216	8.8426e-04	3.3006e-07	2.3107e-07	0:00:20	100
217	5.3198e-02	2.5735e-05	1.9804e-05	0:00:16	99
218	4.8603e-02	1.5999e-05	1.2473e-05	0:00:13	98
219	2.5644e-02	1.1008e-05	8.9240e-06	0:00:10	97
220	1.4935e-02	7.6586e-06	6.3312e-06	0:00:08	96
221	1.1489e-02	5.5431e-06	4.5481e-06	0:00:06	95
222	9.1369e-03	4.2289e-06	3.4052e-06	0:00:05	94
223	7.2094e-03	3.3783e-06	2.6760e-06	0:00:04	93
224	5.6574e-03	2.7707e-06	2.2168e-06	0:00:03	92
225	4.5192e-03	2.3125e-06	1.8824e-06	0:00:02	91
226	3.6655e-03	1.9610e-06	1.6203e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
227	3.0266e-03	1.6816e-06	1.4070e-06	0:00:02	89
228	2.5406e-03	1.4572e-06	1.2300e-06	0:00:01	88

229	2.1715e-03	1.2705e-06	1.0803e-06	0:00:01	87
230	1.8883e-03	1.1138e-06	9.5280e-07	0:00:01	86
231	1.6483e-03	9.8019e-07	8.4334e-07	0:00:01	85
232	1.4342e-03	8.6476e-07	7.4746e-07	0:00:00	84
233	1.2553e-03	7.6478e-07	6.6416e-07	0:00:17	83
234	1.1005e-03	6.7693e-07	5.8999e-07	0:00:13	82
235	9.7636e-04	6.0015e-07	5.2497e-07	0:00:11	81

! 235 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.2386751472949982s, time step = 3

44 more time steps

Updating solution at time level N...

done.

physical-dt 1.6638e-01

iter	continuity	x-velocity	y-velocity	time/iter	
235	9.7636e-04	6.0015e-07	5.2497e-07	0:00:13	100
236	4.4610e-02	1.7215e-05	1.5478e-05	0:00:10	99
237	3.8537e-02	1.1870e-05	1.0064e-05	0:00:08	98
238	2.1302e-02	8.6451e-06	7.2738e-06	0:00:07	97
239	1.2535e-02	6.6692e-06	5.7248e-06	0:00:05	96
240	9.4793e-03	5.4602e-06	4.6894e-06	0:00:04	95
241	7.7805e-03	4.7170e-06	4.0259e-06	0:00:03	94
242	6.5252e-03	4.1518e-06	3.5828e-06	0:00:03	93
243	5.5408e-03	3.6985e-06	3.2339e-06	0:00:02	92
244	4.8013e-03	3.3253e-06	2.9351e-06	0:00:02	91
245	4.1784e-03	3.0074e-06	2.6745e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
246	3.6919e-03	2.7274e-06	2.4416e-06	0:00:19	89
247	3.3097e-03	2.4860e-06	2.2359e-06	0:00:15	88
248	2.9609e-03	2.2692e-06	2.0521e-06	0:00:12	87
249	2.6693e-03	2.0738e-06	1.8846e-06	0:00:09	86
250	2.4385e-03	1.8972e-06	1.7315e-06	0:00:07	85

251	2.2424e-03	1.7376e-06	1.5925e-06	0:00:06	84
252	2.0452e-03	1.5892e-06	1.4637e-06	0:00:05	83
253	1.8721e-03	1.4563e-06	1.3473e-06	0:00:04	82
254	1.7278e-03	1.3382e-06	1.2437e-06	0:00:03	81
255	1.5734e-03	1.2238e-06	1.1410e-06	0:00:02	80
256	1.4454e-03	1.1202e-06	1.0489e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
257	1.3348e-03	1.0260e-06	9.6486e-07	0:00:01	78
258	1.2417e-03	9.3980e-07	8.8746e-07	0:00:01	77
259	1.1535e-03	8.6138e-07	8.1612e-07	0:00:01	76
260	1.0661e-03	7.8836e-07	7.4999e-07	0:00:01	75
261	9.8586e-04	7.2154e-07	6.8864e-07	0:00:15	74

! 261 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.4050580859184265s, time step = 4

43 more time steps

Updating solution at time level N...

done.

physical-dt 2.8051e-01

iter	continuity	x-velocity	y-velocity	time/iter	
261	9.8586e-04	7.2154e-07	6.8864e-07	0:00:21	100
262	6.2927e-02	2.3238e-05	2.3123e-05	0:00:16	99
263	5.8305e-02	1.7696e-05	1.5277e-05	0:00:13	98
264	3.7160e-02	1.2134e-05	1.0222e-05	0:00:10	97
265	2.2124e-02	9.7391e-06	8.5211e-06	0:00:08	96
266	1.5055e-02	8.6986e-06	7.7783e-06	0:00:06	95
267	1.1826e-02	8.0774e-06	7.2474e-06	0:00:24	94
268	1.0001e-02	7.5402e-06	6.8006e-06	0:00:19	93
269	8.8059e-03	7.0773e-06	6.4273e-06	0:00:15	92
270	7.9152e-03	6.6843e-06	6.1024e-06	0:00:12	91
271	7.2830e-03	6.3299e-06	5.8135e-06	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
272	6.8160e-03	6.0040e-06	5.5501e-06	0:00:07	89
273	6.4267e-03	5.6929e-06	5.2998e-06	0:00:06	88
274	6.0666e-03	5.4038e-06	5.0575e-06	0:00:05	87
275	5.7321e-03	5.1330e-06	4.8364e-06	0:00:04	86
276	5.4773e-03	4.8692e-06	4.6243e-06	0:00:03	85
277	5.2741e-03	4.6373e-06	4.4429e-06	0:00:02	84
278	5.1071e-03	4.4013e-06	4.2456e-06	0:00:02	83
279	5.0150e-03	4.1469e-06	4.0235e-06	0:00:01	82
280	4.8773e-03	3.9600e-06	3.8762e-06	0:00:01	81
281	4.7572e-03	3.7595e-06	3.7082e-06	0:00:01	80
282	4.7313e-03	3.5544e-06	3.5270e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
283	4.6298e-03	3.3795e-06	3.3832e-06	0:00:01	78
284	4.5963e-03	3.1951e-06	3.2234e-06	0:00:00	77
285	4.4115e-03	3.0251e-06	3.0709e-06	0:00:16	76
286	4.2787e-03	2.8688e-06	2.9347e-06	0:00:12	75
287	4.2150e-03	2.7188e-06	2.7994e-06	0:00:10	74
288	4.1420e-03	2.5772e-06	2.6703e-06	0:00:08	73
289	4.0451e-03	2.4322e-06	2.5348e-06	0:00:06	72
290	3.9734e-03	2.2936e-06	2.4043e-06	0:00:05	71
291	3.9097e-03	2.1624e-06	2.2789e-06	0:00:04	70
292	3.8268e-03	2.0327e-06	2.1522e-06	0:00:03	69
293	3.6881e-03	1.9112e-06	2.0334e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
294	3.5397e-03	1.7976e-06	1.9175e-06	0:00:02	67
295	3.3505e-03	1.6899e-06	1.8082e-06	0:00:01	66
296	3.2126e-03	1.5745e-06	1.6890e-06	0:00:01	65
297	3.1019e-03	1.4870e-06	1.5949e-06	0:00:01	64
298	2.9991e-03	1.3828e-06	1.4845e-06	0:00:01	63
299	2.8785e-03	1.2987e-06	1.3959e-06	0:00:01	62
300	2.7368e-03	1.1998e-06	1.2917e-06	0:00:00	61
301	2.5676e-03	1.1182e-06	1.2048e-06	0:00:00	60
302	2.4057e-03	1.0415e-06	1.1220e-06	0:00:00	59
303	2.2314e-03	9.6800e-07	1.0446e-06	0:00:00	58
304	2.0792e-03	9.0055e-07	9.7326e-07	0:00:12	57

iter	continuity	x-velocity	y-velocity	time/iter	
305	1.9378e-03	8.3779e-07	9.0833e-07	0:00:09	56
306	1.7996e-03	7.8356e-07	8.5329e-07	0:00:07	55
307	1.6954e-03	7.2502e-07	7.9338e-07	0:00:06	54
308	1.5901e-03	6.7815e-07	7.4997e-07	0:00:04	53

309	1.5020e-03	6.3067e-07	7.0007e-07	0:00:03	52
310	1.4210e-03	5.9788e-07	6.6501e-07	0:00:03	51
311	1.3450e-03	5.6252e-07	6.2548e-07	0:00:02	50
312	1.2804e-03	5.2992e-07	5.9013e-07	0:00:02	49
313	1.2248e-03	4.9976e-07	5.5687e-07	0:00:01	48
314	1.1713e-03	4.7250e-07	5.2693e-07	0:00:01	47
315	1.1169e-03	4.4750e-07	4.9875e-07	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
316	1.0586e-03	4.2399e-07	4.7159e-07	0:00:01	45
317	1.0095e-03	4.0158e-07	4.4482e-07	0:00:00	44
318	9.6146e-04	3.8187e-07	4.2151e-07	0:00:00	43

! 318 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6855726838111877s, time step = 5

42 more time steps

Updating solution at time level N...

done.

physical-dt 3.6657e-01

iter	continuity	x-velocity	y-velocity	time/iter	
318	9.6146e-04	3.8187e-07	4.2151e-07	0:00:01	100
319	9.9455e-02	3.4300e-05	3.3339e-05	0:00:01	99
320	1.1010e-01	2.9654e-05	2.3942e-05	0:00:01	98
321	7.6494e-02	1.9944e-05	1.4911e-05	0:00:20	97
322	4.9501e-02	1.6087e-05	1.2753e-05	0:00:16	96
323	3.3120e-02	1.4258e-05	1.1547e-05	0:00:12	95
324	2.5632e-02	1.3079e-05	1.0624e-05	0:00:10	94
325	2.0725e-02	1.2271e-05	9.9705e-06	0:00:08	93
326	1.7425e-02	1.1852e-05	9.6264e-06	0:00:06	92
327	1.5065e-02	1.1164e-05	9.0865e-06	0:00:05	91
328	1.4119e-02	1.0835e-05	8.9133e-06	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

329	1.3362e-02	1.0384e-05	8.5659e-06	0:00:03	89
330	1.3194e-02	9.9828e-06	8.2682e-06	0:00:02	88
331	1.3064e-02	9.6275e-06	8.0197e-06	0:00:02	87
332	1.3018e-02	9.2836e-06	7.7792e-06	0:00:02	86
333	1.3126e-02	8.9560e-06	7.5509e-06	0:00:01	85
334	1.3385e-02	8.6623e-06	7.3497e-06	0:00:01	84
335	1.3580e-02	8.3560e-06	7.1074e-06	0:00:01	83
336	1.3831e-02	8.0346e-06	6.8762e-06	0:00:01	82
337	1.3719e-02	7.7137e-06	6.6346e-06	0:00:00	81
338	1.3895e-02	7.4248e-06	6.4209e-06	0:00:00	80
339	1.4055e-02	7.1331e-06	6.1996e-06	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
340	1.4219e-02	6.7799e-06	5.9273e-06	0:00:13	78
341	1.4496e-02	6.5651e-06	5.8001e-06	0:00:10	77
342	1.4465e-02	6.2513e-06	5.5608e-06	0:00:08	76
343	1.4285e-02	5.8982e-06	5.3014e-06	0:00:06	75
344	1.3470e-02	5.6493e-06	5.1608e-06	0:00:05	74
345	1.3174e-02	5.2941e-06	4.9191e-06	0:00:04	73
346	1.3162e-02	5.0119e-06	4.7410e-06	0:00:03	72
347	1.3103e-02	4.7326e-06	4.5559e-06	0:00:02	71
348	1.2886e-02	4.4549e-06	4.3739e-06	0:00:02	70
349	1.2537e-02	4.1924e-06	4.1831e-06	0:00:02	69
350	1.1845e-02	3.9303e-06	3.9837e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
351	1.1160e-02	3.7230e-06	3.8513e-06	0:00:01	67
352	1.0794e-02	3.4697e-06	3.6510e-06	0:00:01	66
353	1.0318e-02	3.3098e-06	3.5324e-06	0:00:01	65
354	9.8275e-03	3.1451e-06	3.4066e-06	0:00:00	64
355	9.3729e-03	2.9944e-06	3.2793e-06	0:00:00	63
356	8.9750e-03	2.8650e-06	3.1562e-06	0:00:00	62
357	8.4418e-03	2.7450e-06	3.0296e-06	0:00:12	61
358	7.9123e-03	2.6346e-06	2.9019e-06	0:00:10	60
359	7.3753e-03	2.5261e-06	2.7856e-06	0:00:08	59
360	6.8350e-03	2.4170e-06	2.6581e-06	0:00:06	58
361	6.3474e-03	2.3046e-06	2.5280e-06	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
362	5.9076e-03	2.1919e-06	2.3986e-06	0:00:04	56
363	5.5053e-03	2.0775e-06	2.2678e-06	0:00:03	55
364	5.0882e-03	1.9861e-06	2.1578e-06	0:00:02	54
365	4.7700e-03	1.8570e-06	2.0004e-06	0:00:02	53
366	4.4851e-03	1.7544e-06	1.8686e-06	0:00:01	52

367	4.2076e-03	1.6568e-06	1.7452e-06	0:00:01	51
368	3.9354e-03	1.5628e-06	1.6247e-06	0:00:01	50
369	3.6907e-03	1.4725e-06	1.5096e-06	0:00:01	49
370	3.3934e-03	1.3887e-06	1.4014e-06	0:00:01	48
371	3.1699e-03	1.2860e-06	1.2788e-06	0:00:00	47
372	2.9696e-03	1.1954e-06	1.1693e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
373	2.7802e-03	1.1105e-06	1.0691e-06	0:00:00	45
374	2.6412e-03	1.0321e-06	9.7752e-07	0:00:00	44
375	2.4968e-03	9.5628e-07	8.9047e-07	0:00:00	43
376	2.3613e-03	8.7202e-07	8.0140e-07	0:00:00	42
377	2.1921e-03	8.2384e-07	7.4238e-07	0:00:08	41
378	2.0781e-03	7.4111e-07	6.6177e-07	0:00:06	40
379	1.9442e-03	6.7416e-07	5.9283e-07	0:00:05	39
380	1.8163e-03	6.1665e-07	5.3485e-07	0:00:04	38
381	1.7017e-03	5.6539e-07	4.8378e-07	0:00:03	37
382	1.5852e-03	5.1795e-07	4.3775e-07	0:00:02	36
383	1.4673e-03	4.7346e-07	3.9626e-07	0:00:02	35

iter	continuity	x-velocity	y-velocity	time/iter	
384	1.3530e-03	4.3194e-07	3.5874e-07	0:00:01	34
385	1.2490e-03	3.9333e-07	3.2467e-07	0:00:01	33
386	1.1585e-03	3.5737e-07	2.9331e-07	0:00:01	32
387	1.0728e-03	3.2348e-07	2.6505e-07	0:00:01	31
388	9.9615e-04	2.9232e-07	2.3962e-07	0:00:01	30

! 388 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.052141189575195s, time step = 6

41 more time steps

Updating solution at time level N...

done.

physical-dt 4.3829e-01

iter	continuity	x-velocity	y-velocity	time/iter	
388	9.9615e-04	2.9232e-07	2.3962e-07	0:00:02	100
389	1.6550e-01	5.0568e-05	4.6940e-05	0:00:01	99
390	2.0972e-01	4.7579e-05	3.5725e-05	0:00:01	98
391	1.4489e-01	3.3344e-05	2.2360e-05	0:00:01	97
392	9.7841e-02	2.6708e-05	1.8546e-05	0:00:01	96
393	6.9191e-02	2.3924e-05	1.6893e-05	0:00:01	95
394	5.6283e-02	2.1816e-05	1.5354e-05	0:00:00	94
395	4.8961e-02	2.0213e-05	1.4134e-05	0:00:00	93
396	4.3702e-02	1.8995e-05	1.3134e-05	0:00:00	92
397	4.0070e-02	1.8229e-05	1.2631e-05	0:00:00	91
398	3.7374e-02	1.7041e-05	1.1783e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
399	3.5254e-02	1.6198e-05	1.1332e-05	0:00:00	89
400	3.4629e-02	1.5294e-05	1.0741e-05	0:00:00	88
401	3.4150e-02	1.4358e-05	1.0076e-05	0:00:17	87
402	3.3722e-02	1.3536e-05	9.5990e-06	0:00:14	86
403	3.3320e-02	1.2756e-05	9.2192e-06	0:00:11	85
404	3.3181e-02	1.1961e-05	8.8482e-06	0:00:09	84
405	3.2601e-02	1.1230e-05	8.5380e-06	0:00:07	83
406	3.1576e-02	1.0469e-05	8.1842e-06	0:00:05	82
407	3.0297e-02	9.7475e-06	7.8253e-06	0:00:04	81
408	2.8797e-02	9.0874e-06	7.4605e-06	0:00:03	80
409	2.7265e-02	8.5054e-06	7.1453e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
410	2.5738e-02	7.9869e-06	6.8755e-06	0:00:02	78
411	2.4191e-02	7.4918e-06	6.6036e-06	0:00:02	77
412	2.2445e-02	7.0726e-06	6.3302e-06	0:00:01	76
413	2.0907e-02	6.7029e-06	6.1017e-06	0:00:01	75
414	1.9464e-02	6.3624e-06	5.8876e-06	0:00:01	74
415	1.8195e-02	6.0927e-06	5.7200e-06	0:00:01	73
416	1.6976e-02	5.8417e-06	5.5529e-06	0:00:01	72
417	1.5836e-02	5.6243e-06	5.3997e-06	0:00:00	71
418	1.4550e-02	5.3948e-06	5.2197e-06	0:00:00	70
419	1.3415e-02	5.2861e-06	5.1412e-06	0:00:00	69
420	1.2222e-02	5.0186e-06	4.8976e-06	0:00:14	68

iter	continuity	x-velocity	y-velocity	time/iter	
421	1.1295e-02	4.8723e-06	4.7717e-06	0:00:11	67
422	1.0455e-02	4.6373e-06	4.5442e-06	0:00:09	66
423	9.7648e-03	4.5072e-06	4.4224e-06	0:00:07	65
424	9.0454e-03	4.2665e-06	4.1912e-06	0:00:05	64

425	8.4950e-03	4.1258e-06	4.0578e-06	0:00:04	63
426	7.8897e-03	3.9242e-06	3.8440e-06	0:00:03	62
427	7.4177e-03	3.7252e-06	3.6424e-06	0:00:03	61
428	6.9978e-03	3.5378e-06	3.4499e-06	0:00:02	60
429	6.6456e-03	3.3523e-06	3.2566e-06	0:00:02	59
430	6.2976e-03	3.1714e-06	3.0721e-06	0:00:01	58
431	5.9430e-03	2.9951e-06	2.8868e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
432	5.5854e-03	2.8272e-06	2.6988e-06	0:00:01	56
433	5.2275e-03	2.6639e-06	2.5126e-06	0:00:01	55
434	4.8812e-03	2.5035e-06	2.3400e-06	0:00:00	54
435	4.5755e-03	2.3497e-06	2.1779e-06	0:00:00	53
436	4.3815e-03	2.1777e-06	2.0041e-06	0:00:00	52
437	4.1432e-03	2.0476e-06	1.8728e-06	0:00:00	51
438	3.9897e-03	1.8838e-06	1.7119e-06	0:00:10	50
439	3.8385e-03	1.7446e-06	1.5768e-06	0:00:08	49
440	3.6571e-03	1.6088e-06	1.4475e-06	0:00:06	48
441	3.4614e-03	1.4784e-06	1.3246e-06	0:00:05	47
442	3.3127e-03	1.3392e-06	1.1926e-06	0:00:04	46

iter	continuity	x-velocity	y-velocity	time/iter	
443	3.1106e-03	1.2488e-06	1.1045e-06	0:00:03	45
444	2.9548e-03	1.1251e-06	9.9040e-07	0:00:02	44
445	2.7501e-03	1.0382e-06	9.0790e-07	0:00:02	43
446	2.6202e-03	9.3546e-07	8.1425e-07	0:00:01	42
447	2.4059e-03	8.5731e-07	7.4080e-07	0:00:01	41
448	2.3069e-03	7.7388e-07	6.6482e-07	0:00:01	40
449	2.1178e-03	7.0629e-07	6.0272e-07	0:00:01	39
450	2.0207e-03	6.3844e-07	5.4241e-07	0:00:01	38
451	1.8751e-03	5.7975e-07	4.8898e-07	0:00:00	37
452	1.7323e-03	5.2704e-07	4.4148e-07	0:00:00	36
453	1.5887e-03	4.7860e-07	3.9873e-07	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
454	1.4549e-03	4.3477e-07	3.5946e-07	0:00:00	34
455	1.3014e-03	3.9410e-07	3.2227e-07	0:00:00	33
456	1.2016e-03	3.5699e-07	2.8987e-07	0:00:00	32
457	1.0888e-03	3.2300e-07	2.6036e-07	0:00:00	31
458	9.7742e-04	2.9175e-07	2.3159e-07	0:00:06	30

! 458 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.490429878234863s, time step = 7

40 more time steps

Updating solution at time level N...

done.

physical-dt 5.1175e-01

iter	continuity	x-velocity	y-velocity	time/iter	
458	9.7742e-04	2.9175e-07	2.3159e-07	0:00:20	100
459	2.3413e-01	6.8367e-05	5.8813e-05	0:00:16	99
460	3.1364e-01	6.2715e-05	4.4063e-05	0:00:13	98
461	2.0998e-01	4.0117e-05	2.4766e-05	0:00:10	97
462	1.3795e-01	3.0481e-05	1.8994e-05	0:00:08	96
463	9.4388e-02	2.6043e-05	1.6059e-05	0:00:06	95
464	7.5949e-02	2.2776e-05	1.3955e-05	0:00:05	94
465	6.3606e-02	2.0019e-05	1.2257e-05	0:00:04	93
466	5.6177e-02	1.7950e-05	1.1112e-05	0:00:03	92
467	5.0827e-02	1.6533e-05	1.0472e-05	0:00:02	91
468	4.6243e-02	1.5341e-05	1.0025e-05	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
469	4.2351e-02	1.4237e-05	9.7734e-06	0:00:02	89
470	4.0788e-02	1.3203e-05	9.4494e-06	0:00:01	88
471	3.7723e-02	1.2449e-05	9.3087e-06	0:00:01	87
472	3.5730e-02	1.1727e-05	9.0642e-06	0:00:01	86
473	3.3874e-02	1.1038e-05	8.7803e-06	0:00:18	85
474	3.2212e-02	1.0403e-05	8.5000e-06	0:00:14	84
475	3.0685e-02	9.8103e-06	8.2410e-06	0:00:11	83
476	2.9018e-02	9.2509e-06	7.9356e-06	0:00:09	82
477	2.6874e-02	8.7329e-06	7.6329e-06	0:00:07	81
478	2.5112e-02	8.2819e-06	7.3380e-06	0:00:05	80
479	2.3538e-02	7.8578e-06	7.0455e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
480	2.1731e-02	7.4737e-06	6.7502e-06	0:00:03	78

481	1.9936e-02	7.1049e-06	6.4646e-06	0:00:03	77
482	1.8307e-02	6.7984e-06	6.1854e-06	0:00:02	76
483	1.6502e-02	6.4870e-06	5.9080e-06	0:00:02	75
484	1.4995e-02	6.1878e-06	5.6443e-06	0:00:01	74
485	1.3640e-02	5.9698e-06	5.4425e-06	0:00:01	73
486	1.2390e-02	5.6410e-06	5.1366e-06	0:00:01	72
487	1.1357e-02	5.4042e-06	4.9183e-06	0:00:01	71
488	1.0300e-02	5.1909e-06	4.7242e-06	0:00:01	70
489	9.4002e-03	4.9100e-06	4.4667e-06	0:00:00	69
490	8.5357e-03	4.7021e-06	4.2738e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
491	7.9322e-03	4.4510e-06	4.0466e-06	0:00:14	67
492	7.2511e-03	4.2803e-06	3.8797e-06	0:00:11	66
493	6.7688e-03	4.0356e-06	3.6571e-06	0:00:08	65
494	6.2727e-03	3.8590e-06	3.4908e-06	0:00:07	64
495	5.9110e-03	3.6400e-06	3.2831e-06	0:00:05	63
496	5.5032e-03	3.4699e-06	3.1226e-06	0:00:04	62
497	5.2491e-03	3.2677e-06	2.9247e-06	0:00:03	61
498	4.9132e-03	3.1163e-06	2.7671e-06	0:00:03	60
499	4.6846e-03	2.9386e-06	2.5899e-06	0:00:02	59
500	4.4026e-03	2.7840e-06	2.4321e-06	0:00:02	58
501	4.2075e-03	2.6108e-06	2.2651e-06	0:00:13	57

iter	continuity	x-velocity	y-velocity	time/iter	
502	4.0105e-03	2.4572e-06	2.1194e-06	0:00:10	56
503	3.8203e-03	2.3022e-06	1.9768e-06	0:00:08	55
504	3.6335e-03	2.1524e-06	1.8428e-06	0:00:06	54
505	3.4649e-03	2.0062e-06	1.7139e-06	0:00:05	53
506	3.3240e-03	1.8671e-06	1.5928e-06	0:00:04	52
507	3.2325e-03	1.7237e-06	1.4733e-06	0:00:03	51
508	3.0571e-03	1.6087e-06	1.3715e-06	0:00:02	50
509	2.9683e-03	1.4756e-06	1.2653e-06	0:00:02	49
510	2.8475e-03	1.3605e-06	1.1668e-06	0:00:01	48
511	2.7253e-03	1.2539e-06	1.0741e-06	0:00:01	47
512	2.6085e-03	1.1541e-06	9.8700e-07	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
513	2.4867e-03	1.0617e-06	9.0560e-07	0:00:01	45
514	2.3531e-03	9.7601e-07	8.2770e-07	0:00:09	44
515	2.2227e-03	8.9408e-07	7.5477e-07	0:00:07	43
516	2.0938e-03	8.2248e-07	6.8914e-07	0:00:06	42
517	1.9725e-03	7.5405e-07	6.2789e-07	0:00:04	41
518	1.8527e-03	6.9032e-07	5.7184e-07	0:00:03	40

519	1.7324e-03	6.3094e-07	5.1980e-07	0:00:03	39
520	1.6139e-03	5.7691e-07	4.7224e-07	0:00:02	38
521	1.5008e-03	5.2618e-07	4.2791e-07	0:00:02	37
522	1.3906e-03	4.7948e-07	3.8719e-07	0:00:01	36
523	1.2877e-03	4.3750e-07	3.5067e-07	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
524	1.1916e-03	3.9867e-07	3.1727e-07	0:00:01	34
525	1.1015e-03	3.6329e-07	2.8714e-07	0:00:01	33
526	1.0160e-03	3.3109e-07	2.5998e-07	0:00:00	32
527	9.3689e-04	3.0062e-07	2.3485e-07	0:00:00	31

! 527 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.002181768417358s, time step = 8

39 more time steps

Updating solution at time level N...

done.

physical-dt 6.5807e-01

iter	continuity	x-velocity	y-velocity	time/iter	
527	9.3689e-04	3.0062e-07	2.3485e-07	0:00:01	100
528	2.8834e-01	9.0248e-05	7.1795e-05	0:00:01	99
529	4.0745e-01	7.7482e-05	5.3234e-05	0:00:20	98
530	2.5579e-01	4.3319e-05	2.6433e-05	0:00:16	97
531	1.5521e-01	2.9421e-05	1.7566e-05	0:00:13	96
532	1.1115e-01	2.4324e-05	1.4502e-05	0:00:10	95
533	9.1218e-02	2.0903e-05	1.2740e-05	0:00:08	94
534	7.7722e-02	1.8490e-05	1.1447e-05	0:00:06	93
535	6.7632e-02	1.6674e-05	1.0711e-05	0:00:05	92
536	5.9552e-02	1.5218e-05	1.0187e-05	0:00:04	91
537	5.3396e-02	1.4046e-05	9.9623e-06	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
538	4.8428e-02	1.3163e-05	1.0019e-05	0:00:02	89

539	4.3917e-02	1.2362e-05	9.6801e-06	0:00:02	88
540	4.0658e-02	1.1784e-05	9.5331e-06	0:00:02	87
541	3.8446e-02	1.1434e-05	9.3982e-06	0:00:01	86
542	3.5152e-02	1.0800e-05	9.0024e-06	0:00:01	85
543	3.2444e-02	1.0329e-05	8.7325e-06	0:00:01	84
544	2.9943e-02	9.7982e-06	8.3459e-06	0:00:01	83
545	2.7111e-02	9.4276e-06	8.1199e-06	0:00:00	82
546	2.4890e-02	8.9570e-06	7.7321e-06	0:00:00	81
547	2.2762e-02	8.5325e-06	7.3884e-06	0:00:16	80
548	2.0661e-02	8.1283e-06	7.0597e-06	0:00:13	79

iter	continuity	x-velocity	y-velocity	time/iter	
549	1.8658e-02	7.7474e-06	6.7460e-06	0:00:10	78
550	1.6924e-02	7.3816e-06	6.4389e-06	0:00:08	77
551	1.5432e-02	7.0287e-06	6.1387e-06	0:00:06	76
552	1.4041e-02	6.7050e-06	5.8459e-06	0:00:05	75
553	1.2759e-02	6.4136e-06	5.5826e-06	0:00:04	74
554	1.1616e-02	6.1191e-06	5.3225e-06	0:00:03	73
555	1.0618e-02	5.8447e-06	5.0694e-06	0:00:02	72
556	9.7391e-03	5.5784e-06	4.8311e-06	0:00:02	71
557	8.9501e-03	5.3268e-06	4.6015e-06	0:00:02	70
558	8.2727e-03	5.0878e-06	4.3869e-06	0:00:01	69
559	7.6684e-03	4.8524e-06	4.1715e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
560	7.0770e-03	4.6509e-06	3.9841e-06	0:00:01	67
561	6.6499e-03	4.4129e-06	3.7639e-06	0:00:01	66
562	6.2406e-03	4.2414e-06	3.6040e-06	0:00:00	65
563	5.9264e-03	4.0196e-06	3.4012e-06	0:00:00	64
564	5.6036e-03	3.8633e-06	3.2484e-06	0:00:00	63
565	5.3692e-03	3.6640e-06	3.0623e-06	0:00:13	62
566	5.1270e-03	3.5198e-06	2.9169e-06	0:00:10	61
567	4.9529e-03	3.3279e-06	2.7426e-06	0:00:08	60
568	4.6994e-03	3.1860e-06	2.6048e-06	0:00:06	59
569	4.5153e-03	3.0041e-06	2.4447e-06	0:00:05	58
570	4.3341e-03	2.8507e-06	2.3039e-06	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter	
571	4.1241e-03	2.6987e-06	2.1690e-06	0:00:03	56
572	3.9261e-03	2.5484e-06	2.0379e-06	0:00:02	55
573	3.7208e-03	2.4013e-06	1.9147e-06	0:00:02	54
574	3.5306e-03	2.2543e-06	1.7952e-06	0:00:01	53
575	3.3501e-03	2.1125e-06	1.6821e-06	0:00:01	52
576	3.1920e-03	1.9781e-06	1.5761e-06	0:00:01	51

577	3.0481e-03	1.8481e-06	1.4763e-06	0:00:01	50
578	2.9426e-03	1.7135e-06	1.3746e-06	0:00:01	49
579	2.7928e-03	1.6101e-06	1.2930e-06	0:00:00	48
580	2.7059e-03	1.4906e-06	1.2019e-06	0:00:00	47
581	2.5980e-03	1.3843e-06	1.1181e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
582	2.4998e-03	1.2865e-06	1.0400e-06	0:00:09	45
583	2.4013e-03	1.1960e-06	9.6810e-07	0:00:07	44
584	2.2996e-03	1.1112e-06	8.9934e-07	0:00:06	43
585	2.1977e-03	1.0321e-06	8.3396e-07	0:00:04	42
586	2.0923e-03	9.5788e-07	7.7103e-07	0:00:03	41
587	1.9875e-03	8.8863e-07	7.1273e-07	0:00:03	40
588	1.8851e-03	8.2371e-07	6.5873e-07	0:00:02	39
589	1.7830e-03	7.6276e-07	6.0819e-07	0:00:02	38
590	1.6832e-03	7.0439e-07	5.6068e-07	0:00:01	37
591	1.5844e-03	6.5107e-07	5.1738e-07	0:00:01	36
592	1.4873e-03	6.0203e-07	4.7725e-07	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
593	1.3938e-03	5.5654e-07	4.4036e-07	0:00:01	34
594	1.3032e-03	5.1420e-07	4.0626e-07	0:00:00	33
595	1.2152e-03	4.7493e-07	3.7483e-07	0:00:00	32
596	1.1324e-03	4.3903e-07	3.4643e-07	0:00:00	31
597	1.0525e-03	4.0573e-07	3.2012e-07	0:00:00	30
598	9.7918e-04	3.7557e-07	2.9672e-07	0:00:00	29

! 598 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.66024923324585s, time step = 9

38 more time steps

Updating solution at time level N...

done.

physical-dt 9.4613e-01

iter	continuity	x-velocity	y-velocity	time/iter	
598	9.7918e-04	3.7557e-07	2.9672e-07	0:00:01	100
599	3.7030e-01	1.1706e-04	8.8765e-05	0:00:20	99
600	5.0831e-01	9.7332e-05	6.7035e-05	0:00:16	98
601	3.0263e-01	5.1702e-05	3.3521e-05	0:00:13	97
602	1.8268e-01	3.6484e-05	2.5038e-05	0:00:10	96
603	1.4164e-01	3.1673e-05	2.1118e-05	0:00:08	95
604	1.2405e-01	2.6594e-05	1.7188e-05	0:00:06	94
605	1.0655e-01	2.1932e-05	1.3914e-05	0:00:05	93
606	9.2628e-02	1.8979e-05	1.2410e-05	0:00:04	92
607	8.0761e-02	1.6605e-05	1.1953e-05	0:00:03	91
608	7.2128e-02	1.5144e-05	1.1498e-05	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
609	6.5901e-02	1.4519e-05	1.1696e-05	0:00:02	89
610	6.0754e-02	1.3703e-05	1.1398e-05	0:00:02	88
611	5.6421e-02	1.3515e-05	1.1638e-05	0:00:01	87
612	5.1947e-02	1.2865e-05	1.1235e-05	0:00:01	86
613	4.7822e-02	1.2458e-05	1.1056e-05	0:00:01	85
614	4.3695e-02	1.2170e-05	1.0895e-05	0:00:01	84
615	3.9226e-02	1.1788e-05	1.0609e-05	0:00:00	83
616	3.5403e-02	1.1375e-05	1.0274e-05	0:00:00	82
617	3.2052e-02	1.0979e-05	9.9535e-06	0:00:16	81
618	2.8974e-02	1.0563e-05	9.5832e-06	0:00:13	80
619	2.6204e-02	1.0176e-05	9.2224e-06	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
620	2.3337e-02	9.7890e-06	8.8354e-06	0:00:08	78
621	2.1272e-02	9.3117e-06	8.3929e-06	0:00:06	77
622	1.9185e-02	8.9634e-06	8.0537e-06	0:00:05	76
623	1.7745e-02	8.5401e-06	7.6293e-06	0:00:04	75
624	1.5878e-02	8.2089e-06	7.2940e-06	0:00:03	74
625	1.4646e-02	7.8070e-06	6.8862e-06	0:00:02	73
626	1.3179e-02	7.5102e-06	6.5785e-06	0:00:02	72
627	1.2299e-02	7.1507e-06	6.2092e-06	0:00:02	71
628	1.1091e-02	6.8383e-06	5.8796e-06	0:00:01	70
629	1.0219e-02	6.5228e-06	5.5608e-06	0:00:01	69
630	9.4311e-03	6.2126e-06	5.2520e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
631	8.7516e-03	5.9216e-06	4.9625e-06	0:00:01	67
632	8.1624e-03	5.6573e-06	4.7037e-06	0:00:00	66
633	7.6297e-03	5.3910e-06	4.4465e-06	0:00:00	65
634	7.1265e-03	5.1321e-06	4.2041e-06	0:00:13	64

635	6.7082e-03	4.8948e-06	3.9803e-06	0:00:10	63
636	6.3512e-03	4.6683e-06	3.7692e-06	0:00:08	62
637	6.0433e-03	4.4550e-06	3.5708e-06	0:00:06	61
638	5.7603e-03	4.2502e-06	3.3831e-06	0:00:05	60
639	5.5188e-03	4.0539e-06	3.2031e-06	0:00:04	59
640	5.2901e-03	3.8664e-06	3.0299e-06	0:00:03	58
641	5.0889e-03	3.6900e-06	2.8744e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
642	4.8967e-03	3.5114e-06	2.7152e-06	0:00:02	56
643	4.6939e-03	3.3389e-06	2.5645e-06	0:00:02	55
644	4.4987e-03	3.1759e-06	2.4245e-06	0:00:01	54
645	4.3068e-03	3.0192e-06	2.2909e-06	0:00:01	53
646	4.1100e-03	2.8675e-06	2.1643e-06	0:00:01	52
647	3.9034e-03	2.7220e-06	2.0464e-06	0:00:01	51
648	3.7064e-03	2.5807e-06	1.9323e-06	0:00:10	50
649	3.5248e-03	2.4511e-06	1.8309e-06	0:00:08	49
650	3.3574e-03	2.3284e-06	1.7349e-06	0:00:06	48
651	3.2017e-03	2.2109e-06	1.6436e-06	0:00:05	47
652	3.0657e-03	2.0984e-06	1.5577e-06	0:00:04	46

iter	continuity	x-velocity	y-velocity	time/iter	
653	2.9412e-03	1.9937e-06	1.4789e-06	0:00:03	45
654	2.8146e-03	1.8934e-06	1.4035e-06	0:00:02	44
655	2.7037e-03	1.7983e-06	1.3322e-06	0:00:02	43
656	2.5939e-03	1.7087e-06	1.2650e-06	0:00:01	42
657	2.5239e-03	1.6183e-06	1.1962e-06	0:00:01	41
658	2.3930e-03	1.5462e-06	1.1444e-06	0:00:01	40
659	2.3144e-03	1.4634e-06	1.0809e-06	0:00:01	39
660	2.1987e-03	1.3956e-06	1.0342e-06	0:00:01	38
661	2.1242e-03	1.3195e-06	9.7625e-07	0:00:00	37
662	2.0117e-03	1.2570e-06	9.3644e-07	0:00:00	36
663	1.9490e-03	1.1884e-06	8.8482e-07	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
664	1.8316e-03	1.1305e-06	8.4914e-07	0:00:00	34
665	1.7757e-03	1.0680e-06	8.0216e-07	0:00:00	33
666	1.6573e-03	1.0146e-06	7.6896e-07	0:00:00	32
667	1.6139e-03	9.5897e-07	7.2845e-07	0:00:06	31
668	1.5020e-03	9.1190e-07	6.9824e-07	0:00:05	30
669	1.4646e-03	8.6211e-07	6.6217e-07	0:00:04	29
670	1.3582e-03	8.2065e-07	6.3471e-07	0:00:03	28
671	1.3286e-03	7.7740e-07	6.0332e-07	0:00:02	27
672	1.2319e-03	7.4151e-07	5.7917e-07	0:00:02	26

673	1.2090e-03	7.0348e-07	5.5287e-07	0:00:01	25
674	1.1262e-03	6.7197e-07	5.3196e-07	0:00:01	24

iter	continuity	x-velocity	y-velocity	time/iter	
675	1.1088e-03	6.3942e-07	5.0906e-07	0:00:01	23
676	1.0372e-03	6.1237e-07	4.8998e-07	0:00:01	22
677	1.0022e-03	5.8574e-07	4.7096e-07	0:00:00	21
678	9.6712e-04	5.6087e-07	4.5313e-07	0:00:00	20

! 678 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.606383800506592s, time step = 10

37 more time steps

Updating solution at time level N...

done.

physical-dt 1.4358e+00

iter	continuity	x-velocity	y-velocity	time/iter	
678	9.6712e-04	5.6087e-07	4.5313e-07	0:00:02	100
679	4.1003e-01	1.3954e-04	1.0408e-04	0:00:01	99
680	5.3766e-01	1.1715e-04	7.9816e-05	0:00:01	98
681	3.2490e-01	6.3582e-05	4.4049e-05	0:00:01	97
682	2.0566e-01	5.1183e-05	3.6805e-05	0:00:20	96
683	1.6650e-01	4.4079e-05	3.0940e-05	0:00:16	95
684	1.4600e-01	3.7889e-05	2.5754e-05	0:00:12	94
685	1.2805e-01	3.1544e-05	2.1090e-05	0:00:10	93
686	1.1106e-01	2.7987e-05	1.9553e-05	0:00:08	92
687	1.0084e-01	2.4275e-05	1.7541e-05	0:00:06	91
688	8.9564e-02	2.1975e-05	1.6480e-05	0:00:05	90

iter	continuity	x-velocity	y-velocity	time/iter	
689	8.3383e-02	1.9843e-05	1.5391e-05	0:00:04	89
690	7.7377e-02	1.8567e-05	1.4972e-05	0:00:03	88
691	7.1540e-02	1.7432e-05	1.4763e-05	0:00:02	87
692	6.6791e-02	1.6405e-05	1.4325e-05	0:00:02	86

693	6.0294e-02	1.5740e-05	1.4451e-05	0:00:02	85
694	5.5329e-02	1.5128e-05	1.4340e-05	0:00:01	84
695	5.1676e-02	1.4649e-05	1.4142e-05	0:00:01	83
696	4.7519e-02	1.4309e-05	1.3930e-05	0:00:01	82
697	4.4017e-02	1.3992e-05	1.3720e-05	0:00:01	81
698	4.1102e-02	1.3704e-05	1.3414e-05	0:00:00	80
699	3.8449e-02	1.3458e-05	1.3073e-05	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
700	3.5976e-02	1.3156e-05	1.2662e-05	0:00:16	78
701	3.3755e-02	1.2870e-05	1.2227e-05	0:00:13	77
702	3.1141e-02	1.2548e-05	1.1830e-05	0:00:10	76
703	2.8940e-02	1.2194e-05	1.1383e-05	0:00:08	75
704	2.6630e-02	1.1846e-05	1.0956e-05	0:00:06	74
705	2.4624e-02	1.1477e-05	1.0475e-05	0:00:05	73
706	2.2667e-02	1.1156e-05	1.0086e-05	0:00:04	72
707	2.0921e-02	1.0786e-05	9.6781e-06	0:00:03	71
708	1.9271e-02	1.0425e-05	9.2652e-06	0:00:02	70
709	1.7774e-02	1.0078e-05	8.8679e-06	0:00:02	69
710	1.6235e-02	9.7340e-06	8.4777e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
711	1.5066e-02	9.3835e-06	8.0899e-06	0:00:01	67
712	1.3933e-02	9.0426e-06	7.7201e-06	0:00:01	66
713	1.2931e-02	8.7025e-06	7.3670e-06	0:00:01	65
714	1.2061e-02	8.3759e-06	7.0430e-06	0:00:01	64
715	1.1312e-02	8.0638e-06	6.7250e-06	0:00:00	63
716	1.0483e-02	7.7604e-06	6.4179e-06	0:00:00	62
717	9.8475e-03	7.4587e-06	6.1303e-06	0:00:12	61
718	9.2421e-03	7.1686e-06	5.8532e-06	0:00:10	60
719	8.7060e-03	6.8867e-06	5.5893e-06	0:00:08	59
720	8.2505e-03	6.6084e-06	5.3297e-06	0:00:06	58
721	7.8200e-03	6.3333e-06	5.0761e-06	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
722	7.4213e-03	6.0731e-06	4.8470e-06	0:00:04	56
723	7.0702e-03	5.8198e-06	4.6209e-06	0:00:03	55
724	6.7556e-03	5.5744e-06	4.3954e-06	0:00:02	54
725	6.4471e-03	5.3341e-06	4.1833e-06	0:00:02	53
726	6.1466e-03	5.1071e-06	3.9807e-06	0:00:01	52
727	5.8571e-03	4.8836e-06	3.7783e-06	0:00:01	51
728	5.5851e-03	4.6692e-06	3.5842e-06	0:00:01	50
729	5.3198e-03	4.4595e-06	3.4016e-06	0:00:01	49
730	5.0753e-03	4.2650e-06	3.2245e-06	0:00:01	48

731	4.8345e-03	4.0743e-06	3.0517e-06	0:00:00	47
732	4.6059e-03	3.8902e-06	2.8860e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
733	4.3798e-03	3.7119e-06	2.7288e-06	0:00:00	45
734	4.1702e-03	3.5457e-06	2.5812e-06	0:00:00	44
735	3.9682e-03	3.3847e-06	2.4389e-06	0:00:00	43
736	3.7780e-03	3.2313e-06	2.3052e-06	0:00:09	42
737	3.6592e-03	3.0851e-06	2.1809e-06	0:00:07	41
738	3.4419e-03	2.9436e-06	2.0652e-06	0:00:05	40
739	3.3380e-03	2.8135e-06	1.9607e-06	0:00:04	39
740	3.1466e-03	2.6872e-06	1.8611e-06	0:00:03	38
741	3.0613e-03	2.5732e-06	1.7759e-06	0:00:02	37
742	2.9043e-03	2.4599e-06	1.6949e-06	0:00:02	36
743	2.8365e-03	2.3560e-06	1.6232e-06	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
744	2.6809e-03	2.2548e-06	1.5593e-06	0:00:01	34
745	2.6303e-03	2.1674e-06	1.5035e-06	0:00:01	33
746	2.4951e-03	2.0809e-06	1.4547e-06	0:00:01	32
747	2.4153e-03	2.0060e-06	1.4115e-06	0:00:01	31
748	2.3423e-03	1.9344e-06	1.3717e-06	0:00:00	30
749	2.2805e-03	1.8687e-06	1.3366e-06	0:00:00	29
750	2.2342e-03	1.8105e-06	1.3066e-06	0:00:00	28
751	2.1955e-03	1.7527e-06	1.2774e-06	0:00:00	27
752	2.1563e-03	1.6985e-06	1.2507e-06	0:00:00	26
753	2.1240e-03	1.6486e-06	1.2259e-06	0:00:00	25
754	2.0974e-03	1.6012e-06	1.2022e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
755	2.0653e-03	1.5574e-06	1.1798e-06	0:00:05	23
756	2.0304e-03	1.5141e-06	1.1566e-06	0:00:04	22
757	1.9968e-03	1.4729e-06	1.1346e-06	0:00:03	21
758	1.9580e-03	1.4314e-06	1.1104e-06	0:00:02	20
759	1.9195e-03	1.3934e-06	1.0884e-06	0:00:02	19
760	1.8829e-03	1.3568e-06	1.0667e-06	0:00:01	18
761	1.8420e-03	1.3193e-06	1.0427e-06	0:00:01	17
762	1.8018e-03	1.2814e-06	1.0172e-06	0:00:01	16
763	1.7583e-03	1.2445e-06	9.9286e-07	0:00:01	15
764	1.7143e-03	1.2080e-06	9.6825e-07	0:00:00	14
765	1.6697e-03	1.1732e-06	9.4297e-07	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
766	1.6233e-03	1.1383e-06	9.1865e-07	0:00:00	12

767	1.5783e-03	1.1048e-06	8.9271e-07	0:00:00	11
768	1.5314e-03	1.0710e-06	8.6696e-07	0:00:00	10
769	1.4863e-03	1.0381e-06	8.4149e-07	0:00:00	9
770	1.4367e-03	1.0067e-06	8.1678e-07	0:00:00	8
771	1.3922e-03	9.7574e-07	7.9193e-07	0:00:01	7
772	1.3473e-03	9.4453e-07	7.6559e-07	0:00:01	6
773	1.2935e-03	9.1502e-07	7.4272e-07	0:00:01	5
774	1.2490e-03	8.8787e-07	7.1925e-07	0:00:00	4
775	1.2006e-03	8.6073e-07	6.9601e-07	0:00:00	3
776	1.1534e-03	8.3424e-07	6.7254e-07	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
777	1.1224e-03	8.0905e-07	6.4987e-07	0:00:00	1
778	1.0754e-03	7.8449e-07	6.2902e-07	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 5.04218578338623s, time step = 11

36 more time steps

Updating solution at time level N...

done.

physical-dt 7.1790e-01

iter	continuity	x-velocity	y-velocity	time/iter	
778	1.0754e-03	7.8449e-07	6.2902e-07	0:00:04	100
779	1.2904e-01	4.8790e-05	3.6914e-05	0:00:03	99
780	1.5864e-01	3.6876e-05	2.5692e-05	0:00:03	98
781	9.9431e-02	1.9107e-05	1.3010e-05	0:00:02	97
782	6.2233e-02	1.2871e-05	8.9731e-06	0:00:21	96
783	4.7015e-02	1.0963e-05	7.6183e-06	0:00:17	95
784	3.9189e-02	9.5752e-06	6.7325e-06	0:00:13	94
785	3.3019e-02	8.2889e-06	5.8770e-06	0:00:10	93
786	2.7533e-02	7.0808e-06	5.0327e-06	0:00:08	92
787	2.3723e-02	6.3079e-06	4.5821e-06	0:00:06	91
788	2.0730e-02	5.6587e-06	4.2074e-06	0:00:05	90

iter	continuity	x-velocity	y-velocity	time/iter	
789	1.8199e-02	5.1275e-06	3.9446e-06	0:00:04	89
790	1.6490e-02	4.7101e-06	3.7186e-06	0:00:03	88
791	1.4543e-02	4.3828e-06	3.5926e-06	0:00:03	87
792	1.3493e-02	4.0571e-06	3.4303e-06	0:00:02	86
793	1.2042e-02	3.8158e-06	3.3637e-06	0:00:02	85
794	1.0972e-02	3.5786e-06	3.2358e-06	0:00:01	84
795	1.0041e-02	3.3793e-06	3.1194e-06	0:00:01	83
796	9.1539e-03	3.1958e-06	3.0018e-06	0:00:01	82
797	8.3065e-03	3.0343e-06	2.8723e-06	0:00:01	81
798	7.5682e-03	2.8833e-06	2.7450e-06	0:00:00	80
799	6.8677e-03	2.7454e-06	2.6126e-06	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
800	6.2749e-03	2.6163e-06	2.4831e-06	0:00:13	78
801	5.7644e-03	2.5015e-06	2.3545e-06	0:00:10	77
802	5.2327e-03	2.3791e-06	2.2208e-06	0:00:08	76
803	4.7972e-03	2.2609e-06	2.0946e-06	0:00:06	75
804	4.3882e-03	2.1515e-06	1.9740e-06	0:00:05	74
805	3.9968e-03	2.0441e-06	1.8548e-06	0:00:04	73
806	3.6367e-03	1.9433e-06	1.7445e-06	0:00:03	72
807	3.2979e-03	1.8385e-06	1.6307e-06	0:00:02	71
808	2.9923e-03	1.7370e-06	1.5248e-06	0:00:02	70
809	2.7113e-03	1.6386e-06	1.4240e-06	0:00:02	69
810	2.4542e-03	1.5442e-06	1.3291e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
811	2.2193e-03	1.4538e-06	1.2372e-06	0:00:01	67
812	2.0056e-03	1.3662e-06	1.1500e-06	0:00:01	66
813	1.8193e-03	1.2817e-06	1.0683e-06	0:00:01	65
814	1.6472e-03	1.2016e-06	9.9209e-07	0:00:00	64
815	1.4956e-03	1.1260e-06	9.2073e-07	0:00:00	63
816	1.3589e-03	1.0530e-06	8.5373e-07	0:00:00	62
817	1.2357e-03	9.8409e-07	7.9174e-07	0:00:12	61
818	1.1284e-03	9.1885e-07	7.3281e-07	0:00:10	60
819	1.0372e-03	8.5604e-07	6.7749e-07	0:00:08	59
820	9.4774e-04	7.9779e-07	6.2756e-07	0:00:06	58

! 820 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wince.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 5.760087013244629s, time step = 12

35 more time steps

Updating solution at time level N...

done.

physical-dt 2.3269e+00

iter	continuity	x-velocity	y-velocity	time/iter	
820	9.4774e-04	7.9779e-07	6.2756e-07	0:00:10	100
821	4.2139e-01	1.5241e-04	1.1859e-04	0:00:08	99
822	5.3160e-01	1.2901e-04	8.7843e-05	0:00:07	98
823	3.2737e-01	6.9154e-05	4.7900e-05	0:00:05	97
824	2.1460e-01	5.4918e-05	3.8572e-05	0:00:04	96
825	1.6793e-01	5.0032e-05	3.5630e-05	0:00:03	95
826	1.4079e-01	4.6095e-05	3.3235e-05	0:00:03	94
827	1.2287e-01	4.1829e-05	3.0301e-05	0:00:02	93
828	1.0734e-01	3.7582e-05	2.6880e-05	0:00:02	92
829	9.7233e-02	3.4913e-05	2.5426e-05	0:00:01	91
830	8.9830e-02	3.2363e-05	2.3767e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
831	8.2257e-02	3.0128e-05	2.2373e-05	0:00:01	89
832	7.9298e-02	2.8570e-05	2.1574e-05	0:00:18	88
833	7.2985e-02	2.6476e-05	2.0604e-05	0:00:14	87
834	7.1387e-02	2.5167e-05	2.0185e-05	0:00:11	86
835	6.6779e-02	2.3821e-05	1.9913e-05	0:00:09	85
836	6.4426e-02	2.2817e-05	1.9729e-05	0:00:07	84
837	6.1228e-02	2.1921e-05	1.9632e-05	0:00:06	83
838	5.8747e-02	2.1239e-05	1.9648e-05	0:00:04	82
839	5.7316e-02	2.0884e-05	1.9788e-05	0:00:04	81
840	5.5786e-02	2.0549e-05	1.9841e-05	0:00:03	80
841	5.4884e-02	2.0206e-05	1.9660e-05	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
842	5.3540e-02	1.9968e-05	1.9491e-05	0:00:02	78
843	5.1905e-02	1.9681e-05	1.9232e-05	0:00:01	77
844	5.0254e-02	1.9358e-05	1.8891e-05	0:00:01	76
845	4.8898e-02	1.9080e-05	1.8552e-05	0:00:01	75
846	4.6979e-02	1.8751e-05	1.8105e-05	0:00:01	74
847	4.4962e-02	1.8480e-05	1.7628e-05	0:00:01	73

848	4.3513e-02	1.8152e-05	1.7144e-05	0:00:00	72
849	4.1770e-02	1.7863e-05	1.6628e-05	0:00:00	71
850	4.1015e-02	1.7511e-05	1.6153e-05	0:00:14	70
851	3.7608e-02	1.7164e-05	1.5704e-05	0:00:11	69
852	3.5963e-02	1.6697e-05	1.5189e-05	0:00:09	68

iter	continuity	x-velocity	y-velocity	time/iter	
853	3.4182e-02	1.6271e-05	1.4731e-05	0:00:07	67
854	3.2225e-02	1.5802e-05	1.4267e-05	0:00:06	66
855	3.0418e-02	1.5372e-05	1.3792e-05	0:00:04	65
856	2.8692e-02	1.4883e-05	1.3285e-05	0:00:03	64
857	2.6888e-02	1.4508e-05	1.2887e-05	0:00:03	63
858	2.5273e-02	1.4087e-05	1.2449e-05	0:00:02	62
859	2.3712e-02	1.3653e-05	1.2036e-05	0:00:02	61
860	2.2176e-02	1.3246e-05	1.1611e-05	0:00:01	60
861	2.0893e-02	1.2871e-05	1.1216e-05	0:00:01	59
862	1.9595e-02	1.2505e-05	1.0816e-05	0:00:01	58
863	1.8426e-02	1.2160e-05	1.0465e-05	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
864	1.7270e-02	1.1802e-05	1.0077e-05	0:00:01	56
865	1.6325e-02	1.1499e-05	9.7754e-06	0:00:00	55
866	1.5408e-02	1.1173e-05	9.4287e-06	0:00:00	54
867	1.4600e-02	1.0852e-05	9.1133e-06	0:00:00	53
868	1.3886e-02	1.0539e-05	8.8008e-06	0:00:11	52
869	1.3177e-02	1.0265e-05	8.5220e-06	0:00:08	51
870	1.2501e-02	9.9905e-06	8.2293e-06	0:00:07	50
871	1.1891e-02	9.7527e-06	7.9760e-06	0:00:05	49
872	1.1329e-02	9.4782e-06	7.6966e-06	0:00:04	48
873	1.0843e-02	9.2311e-06	7.4356e-06	0:00:03	47
874	1.0377e-02	8.9950e-06	7.2097e-06	0:00:02	46

iter	continuity	x-velocity	y-velocity	time/iter	
875	9.9641e-03	8.7686e-06	6.9670e-06	0:00:02	45
876	9.5225e-03	8.5406e-06	6.7409e-06	0:00:02	44
877	9.1141e-03	8.3237e-06	6.5204e-06	0:00:01	43
878	8.7578e-03	8.1162e-06	6.3070e-06	0:00:01	42
879	8.4391e-03	7.9132e-06	6.1078e-06	0:00:01	41
880	8.0856e-03	7.7099e-06	5.9109e-06	0:00:01	40
881	7.7487e-03	7.5097e-06	5.7234e-06	0:00:00	39
882	7.4257e-03	7.3173e-06	5.5549e-06	0:00:00	38
883	7.1176e-03	7.1293e-06	5.3926e-06	0:00:00	37
884	6.8425e-03	6.9461e-06	5.2451e-06	0:00:00	36
885	6.5790e-03	6.7716e-06	5.1062e-06	0:00:07	35

iter	continuity	x-velocity	y-velocity	time/iter	
886	6.3418e-03	6.6017e-06	4.9837e-06	0:00:06	34
887	6.1172e-03	6.4380e-06	4.8712e-06	0:00:04	33
888	5.9193e-03	6.2814e-06	4.7685e-06	0:00:03	32
889	5.7722e-03	6.1364e-06	4.6774e-06	0:00:03	31
890	5.6163e-03	6.0062e-06	4.5992e-06	0:00:02	30
891	5.4752e-03	5.8856e-06	4.5216e-06	0:00:02	29
892	5.3501e-03	5.7755e-06	4.4555e-06	0:00:01	28
893	5.2245e-03	5.6728e-06	4.3947e-06	0:00:01	27
894	5.1540e-03	5.5873e-06	4.3519e-06	0:00:01	26
895	5.0892e-03	5.5031e-06	4.3005e-06	0:00:06	25
896	5.0631e-03	5.4260e-06	4.2539e-06	0:00:04	24

iter	continuity	x-velocity	y-velocity	time/iter	
897	5.0603e-03	5.3609e-06	4.2168e-06	0:00:03	23
898	5.0497e-03	5.3003e-06	4.1877e-06	0:00:03	22
899	5.0446e-03	5.2427e-06	4.1661e-06	0:00:02	21
900	5.0509e-03	5.1912e-06	4.1457e-06	0:00:01	20
901	5.0497e-03	5.1441e-06	4.1303e-06	0:00:01	19
902	5.0330e-03	5.0891e-06	4.1100e-06	0:00:01	18
903	5.0368e-03	5.0487e-06	4.1021e-06	0:00:01	17
904	5.0321e-03	5.0109e-06	4.0950e-06	0:00:00	16
905	5.0119e-03	4.9741e-06	4.0862e-06	0:00:00	15
906	4.9905e-03	4.9388e-06	4.0794e-06	0:00:00	14
907	4.9750e-03	4.8995e-06	4.0647e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
908	4.9440e-03	4.8576e-06	4.0482e-06	0:00:00	12
909	4.9319e-03	4.8237e-06	4.0394e-06	0:00:00	11
910	4.9157e-03	4.8010e-06	4.0337e-06	0:00:00	10
911	4.8760e-03	4.7690e-06	4.0150e-06	0:00:00	9
912	4.8378e-03	4.7283e-06	3.9913e-06	0:00:02	8
913	4.7924e-03	4.6936e-06	3.9706e-06	0:00:01	7
914	4.7485e-03	4.6570e-06	3.9456e-06	0:00:01	6
915	4.7235e-03	4.6292e-06	3.9271e-06	0:00:01	5
916	4.6903e-03	4.5971e-06	3.9002e-06	0:00:00	4
917	4.6401e-03	4.5653e-06	3.8696e-06	0:00:00	3
918	4.5739e-03	4.5283e-06	3.8338e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
919	4.5160e-03	4.4954e-06	3.7995e-06	0:00:00	1
920	4.4401e-03	4.4597e-06	3.7617e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 8.087005615234375s, time step = 13

34 more time steps

Updating solution at time level N...

done.

physical-dt 1.1635e+00

iter	continuity	x-velocity	y-velocity	time/iter	
920	4.4401e-03	4.4597e-06	3.7617e-06	0:00:03	100
921	1.3713e-01	5.5778e-05	4.2182e-05	0:00:03	99
922	1.6496e-01	4.1866e-05	3.0310e-05	0:00:02	98
923	1.0495e-01	2.2215e-05	1.5208e-05	0:00:02	97
924	6.9272e-02	1.6158e-05	1.1308e-05	0:00:01	96
925	5.1980e-02	1.4493e-05	1.0360e-05	0:00:01	95
926	4.2713e-02	1.3174e-05	9.7409e-06	0:00:01	94
927	3.6357e-02	1.2101e-05	9.1185e-06	0:00:19	93
928	3.0830e-02	1.1161e-05	8.4656e-06	0:00:15	92
929	2.5983e-02	1.0379e-05	7.9111e-06	0:00:12	91
930	2.2936e-02	9.7239e-06	7.4756e-06	0:00:10	90

iter	continuity	x-velocity	y-velocity	time/iter	
931	1.9919e-02	9.1821e-06	7.0914e-06	0:00:08	89
932	1.8718e-02	8.6944e-06	6.7949e-06	0:00:06	88
933	1.6860e-02	8.2602e-06	6.5703e-06	0:00:05	87
934	1.5770e-02	7.8453e-06	6.3614e-06	0:00:04	86
935	1.5004e-02	7.4834e-06	6.2296e-06	0:00:03	85
936	1.4349e-02	7.1794e-06	6.1288e-06	0:00:02	84
937	1.3693e-02	6.8969e-06	6.0309e-06	0:00:02	83
938	1.3187e-02	6.6405e-06	5.9338e-06	0:00:01	82
939	1.2745e-02	6.4079e-06	5.8484e-06	0:00:01	81
940	1.2374e-02	6.1877e-06	5.7443e-06	0:00:01	80
941	1.2034e-02	5.9905e-06	5.6334e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
942	1.1587e-02	5.7894e-06	5.5074e-06	0:00:01	78

943	1.1085e-02	5.6002e-06	5.3866e-06	0:00:00	77
944	1.0674e-02	5.4138e-06	5.2416e-06	0:00:16	76
945	1.0315e-02	5.2404e-06	5.1032e-06	0:00:12	75
946	9.8839e-03	5.0626e-06	4.9534e-06	0:00:10	74
947	9.3844e-03	4.9088e-06	4.8087e-06	0:00:08	73
948	8.8987e-03	4.7553e-06	4.6615e-06	0:00:06	72
949	8.4973e-03	4.6078e-06	4.5117e-06	0:00:05	71
950	8.0951e-03	4.4637e-06	4.3628e-06	0:00:04	70
951	7.6918e-03	4.3247e-06	4.2056e-06	0:00:03	69
952	7.3061e-03	4.1993e-06	4.0645e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
953	6.8882e-03	4.0677e-06	3.8958e-06	0:00:02	67
954	6.4720e-03	3.9418e-06	3.7460e-06	0:00:01	66
955	6.0588e-03	3.7992e-06	3.5796e-06	0:00:01	65
956	5.6726e-03	3.6760e-06	3.4346e-06	0:00:01	64
957	5.3301e-03	3.5581e-06	3.2948e-06	0:00:01	63
958	5.0117e-03	3.4409e-06	3.1567e-06	0:00:01	62
959	4.7036e-03	3.3211e-06	3.0292e-06	0:00:00	61
960	4.3489e-03	3.2017e-06	2.8922e-06	0:00:00	60
961	4.0565e-03	3.0908e-06	2.7757e-06	0:00:00	59
962	3.7945e-03	2.9750e-06	2.6578e-06	0:00:12	58
963	3.5258e-03	2.8727e-06	2.5505e-06	0:00:09	57

iter	continuity	x-velocity	y-velocity	time/iter	
964	3.2834e-03	2.7701e-06	2.4445e-06	0:00:07	56
965	3.0686e-03	2.6752e-06	2.3461e-06	0:00:06	55
966	2.8753e-03	2.5795e-06	2.2537e-06	0:00:05	54
967	2.6955e-03	2.4887e-06	2.1580e-06	0:00:04	53
968	2.5206e-03	2.4028e-06	2.0709e-06	0:00:03	52
969	2.3613e-03	2.3175e-06	1.9884e-06	0:00:02	51
970	2.2255e-03	2.2361e-06	1.9078e-06	0:00:02	50
971	2.0964e-03	2.1586e-06	1.8322e-06	0:00:01	49
972	1.9769e-03	2.0829e-06	1.7588e-06	0:00:01	48
973	1.8696e-03	2.0100e-06	1.6888e-06	0:00:01	47
974	1.7646e-03	1.9392e-06	1.6208e-06	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
975	1.6657e-03	1.8708e-06	1.5559e-06	0:00:01	45
976	1.5785e-03	1.8071e-06	1.4960e-06	0:00:00	44
977	1.4967e-03	1.7422e-06	1.4355e-06	0:00:00	43
978	1.4176e-03	1.6801e-06	1.3773e-06	0:00:00	42
979	1.3442e-03	1.6211e-06	1.3229e-06	0:00:00	41
980	1.2833e-03	1.5637e-06	1.2695e-06	0:00:08	40


```

981 1.2171e-03 1.5091e-06 1.2196e-06 0:00:06 39
982 1.1579e-03 1.4575e-06 1.1726e-06 0:00:05 38
983 1.1006e-03 1.4074e-06 1.1268e-06 0:00:04 37
984 1.0454e-03 1.3573e-06 1.0806e-06 0:00:03 36
985 9.9795e-04 1.3098e-06 1.0383e-06 0:00:02 35
! 985 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 9.250465393066406s, time step = 14
33 more time steps

Updating solution at time level N...
done.
physical-dt 3.1825e+00

```

iter	continuity	x-velocity	y-velocity	time/iter	
985	9.9795e-04	1.3098e-06	1.0383e-06	0:00:07	100
986	3.5568e-01	1.4338e-04	1.0965e-04	0:00:05	99
987	4.2209e-01	1.1450e-04	8.0935e-05	0:00:04	98
988	2.6781e-01	5.9236e-05	3.9325e-05	0:00:03	97
989	1.6976e-01	4.7813e-05	3.3205e-05	0:00:03	96
990	1.2631e-01	4.4878e-05	3.2363e-05	0:00:02	95
991	1.0992e-01	4.2056e-05	3.0910e-05	0:00:02	94
992	9.5189e-02	3.9512e-05	2.9200e-05	0:00:01	93
993	8.2289e-02	3.7079e-05	2.7129e-05	0:00:01	92
994	7.1556e-02	3.4859e-05	2.5257e-05	0:00:01	91
995	6.4231e-02	3.3113e-05	2.3802e-05	0:00:19	90

iter	continuity	x-velocity	y-velocity	time/iter	
996	5.9869e-02	3.1829e-05	2.2810e-05	0:00:15	89
997	5.6898e-02	3.0472e-05	2.1770e-05	0:00:12	88
998	5.3650e-02	2.9193e-05	2.0833e-05	0:00:09	87
999	5.3200e-02	2.8248e-05	2.0368e-05	0:00:07	86
1000	5.0878e-02	2.7030e-05	1.9821e-05	0:00:06	85
1001	4.9684e-02	2.6307e-05	1.9680e-05	0:00:05	84
1002	4.8821e-02	2.5376e-05	1.9501e-05	0:00:04	83

1003	4.8375e-02	2.4619e-05	1.9461e-05	0:00:03	82
1004	4.7113e-02	2.4024e-05	1.9595e-05	0:00:18	81
1005	4.6617e-02	2.3570e-05	1.9813e-05	0:00:15	80
1006	4.6061e-02	2.3187e-05	2.0070e-05	0:00:12	79

iter	continuity	x-velocity	y-velocity	time/iter	
1007	4.5981e-02	2.2859e-05	2.0371e-05	0:00:09	78
1008	4.5710e-02	2.2738e-05	2.0704e-05	0:00:07	77
1009	4.5862e-02	2.2615e-05	2.0930e-05	0:00:06	76
1010	4.5594e-02	2.2488e-05	2.1122e-05	0:00:04	75
1011	4.5548e-02	2.2459e-05	2.1307e-05	0:00:04	74
1012	4.5568e-02	2.2383e-05	2.1400e-05	0:00:03	73
1013	4.5505e-02	2.2344e-05	2.1501e-05	0:00:02	72
1014	4.5232e-02	2.2377e-05	2.1579e-05	0:00:02	71
1015	4.4564e-02	2.2357e-05	2.1635e-05	0:00:01	70
1016	4.3892e-02	2.2329e-05	2.1568e-05	0:00:01	69
1017	4.3370e-02	2.2283e-05	2.1516e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1018	4.2513e-02	2.2264e-05	2.1404e-05	0:00:01	67
1019	4.1721e-02	2.2162e-05	2.1235e-05	0:00:01	66
1020	4.0688e-02	2.2137e-05	2.1107e-05	0:00:00	65
1021	4.0274e-02	2.2059e-05	2.0884e-05	0:00:00	64
1022	3.9394e-02	2.1945e-05	2.0621e-05	0:00:00	63
1023	3.8364e-02	2.1881e-05	2.0494e-05	0:00:00	62
1024	3.7288e-02	2.1721e-05	2.0282e-05	0:00:12	61
1025	3.6360e-02	2.1614e-05	2.0055e-05	0:00:10	60
1026	3.5180e-02	2.1520e-05	1.9853e-05	0:00:08	59
1027	3.4000e-02	2.1419e-05	1.9666e-05	0:00:06	58
1028	3.2799e-02	2.1291e-05	1.9447e-05	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
1029	3.1318e-02	2.1180e-05	1.9247e-05	0:00:04	56
1030	3.0012e-02	2.1124e-05	1.9065e-05	0:00:03	55
1031	2.8515e-02	2.1031e-05	1.8847e-05	0:00:02	54
1032	2.7401e-02	2.0922e-05	1.8592e-05	0:00:02	53
1033	2.6253e-02	2.0865e-05	1.8406e-05	0:00:01	52
1034	2.5229e-02	2.0795e-05	1.8224e-05	0:00:01	51
1035	2.4004e-02	2.0687e-05	1.8024e-05	0:00:01	50
1036	2.3028e-02	2.0655e-05	1.7857e-05	0:00:01	49
1037	2.2101e-02	2.0625e-05	1.7679e-05	0:00:01	48
1038	2.1203e-02	2.0537e-05	1.7448e-05	0:00:00	47
1039	2.0485e-02	2.0502e-05	1.7286e-05	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
1040	1.9720e-02	2.0428e-05	1.7080e-05	0:00:00	45
1041	1.9145e-02	2.0390e-05	1.6893e-05	0:00:00	44
1042	1.8484e-02	2.0339e-05	1.6709e-05	0:00:00	43
1043	1.7953e-02	2.0292e-05	1.6536e-05	0:00:09	42
1044	1.7415e-02	2.0170e-05	1.6332e-05	0:00:07	41
1045	1.6930e-02	2.0112e-05	1.6186e-05	0:00:05	40
1046	1.6450e-02	2.0042e-05	1.6057e-05	0:00:04	39
1047	1.6073e-02	1.9939e-05	1.5944e-05	0:00:03	38
1048	1.5708e-02	1.9848e-05	1.5853e-05	0:00:02	37
1049	1.5427e-02	1.9757e-05	1.5776e-05	0:00:02	36
1050	1.5212e-02	1.9685e-05	1.5725e-05	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
1051	1.5131e-02	1.9639e-05	1.5689e-05	0:00:01	34
1052	1.5074e-02	1.9623e-05	1.5675e-05	0:00:01	33
1053	1.4946e-02	1.9631e-05	1.5676e-05	0:00:01	32
1054	1.5006e-02	1.9641e-05	1.5705e-05	0:00:01	31
1055	1.4826e-02	1.9667e-05	1.5754e-05	0:00:00	30
1056	1.4881e-02	1.9697e-05	1.5832e-05	0:00:00	29
1057	1.5001e-02	1.9730e-05	1.5914e-05	0:00:00	28
1058	1.5075e-02	1.9779e-05	1.6010e-05	0:00:00	27
1059	1.5203e-02	1.9819e-05	1.6121e-05	0:00:00	26
1060	1.5511e-02	1.9882e-05	1.6249e-05	0:00:00	25
1061	1.5612e-02	1.9949e-05	1.6386e-05	0:00:05	24

iter	continuity	x-velocity	y-velocity	time/iter	
1062	1.5859e-02	2.0018e-05	1.6537e-05	0:00:04	23
1063	1.6154e-02	2.0117e-05	1.6718e-05	0:00:03	22
1064	1.6402e-02	2.0225e-05	1.6905e-05	0:00:02	21
1065	1.6638e-02	2.0318e-05	1.7093e-05	0:00:02	20
1066	1.6963e-02	2.0449e-05	1.7307e-05	0:00:01	19
1067	1.7301e-02	2.0583e-05	1.7543e-05	0:00:01	18
1068	1.7572e-02	2.0751e-05	1.7814e-05	0:00:01	17
1069	1.7884e-02	2.0927e-05	1.8094e-05	0:00:01	16
1070	1.8185e-02	2.1124e-05	1.8386e-05	0:00:00	15
1071	1.8445e-02	2.1363e-05	1.8694e-05	0:00:00	14
1072	1.8736e-02	2.1596e-05	1.8984e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1073	1.9005e-02	2.1876e-05	1.9297e-05	0:00:00	12
1074	1.9240e-02	2.2162e-05	1.9604e-05	0:00:00	11
1075	1.9436e-02	2.2466e-05	1.9911e-05	0:00:00	10
1076	1.9606e-02	2.2772e-05	2.0205e-05	0:00:00	9

1077	1.9867e-02	2.3083e-05	2.0479e-05	0:00:00	8
1078	2.0089e-02	2.3364e-05	2.0734e-05	0:00:00	7
1079	2.0295e-02	2.3693e-05	2.1013e-05	0:00:00	6
1080	2.0648e-02	2.4025e-05	2.1271e-05	0:00:01	5
1081	2.0774e-02	2.4320e-05	2.1511e-05	0:00:01	4
1082	2.0937e-02	2.4637e-05	2.1737e-05	0:00:00	3
1083	2.1023e-02	2.4936e-05	2.1942e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1084	2.1123e-02	2.5242e-05	2.2150e-05	0:00:00	1
1085	2.1146e-02	2.5539e-05	2.2324e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 12.43301391601563s, time step = 15

32 more time steps

Updating solution at time level N...

done.

physical-dt 1.5913e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1085	2.1146e-02	2.5539e-05	2.2324e-05	0:00:07	100
1086	1.3715e-01	6.9529e-05	5.1525e-05	0:00:05	99
1087	1.4901e-01	5.4894e-05	4.2452e-05	0:00:04	98
1088	9.8222e-02	4.0118e-05	3.2796e-05	0:00:03	97
1089	6.7202e-02	3.6571e-05	3.0090e-05	0:00:03	96
1090	5.2656e-02	3.5434e-05	2.9204e-05	0:00:02	95
1091	4.6769e-02	3.4649e-05	2.8553e-05	0:00:02	94
1092	4.0853e-02	3.4088e-05	2.8321e-05	0:00:01	93
1093	3.6717e-02	3.3558e-05	2.7906e-05	0:00:01	92
1094	3.3488e-02	3.3028e-05	2.7521e-05	0:00:01	91
1095	3.1311e-02	3.2566e-05	2.7165e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
1096	2.9581e-02	3.2034e-05	2.6801e-05	0:00:18	89
1097	2.8296e-02	3.1544e-05	2.6445e-05	0:00:14	88

1098	2.7094e-02	3.1077e-05	2.6110e-05	0:00:11	87
1099	2.6126e-02	3.0662e-05	2.5809e-05	0:00:09	86
1100	2.5131e-02	3.0209e-05	2.5492e-05	0:00:07	85
1101	2.4532e-02	2.9773e-05	2.5186e-05	0:00:06	84
1102	2.3996e-02	2.9345e-05	2.4853e-05	0:00:04	83
1103	2.3527e-02	2.8874e-05	2.4456e-05	0:00:04	82
1104	2.2984e-02	2.8432e-05	2.4070e-05	0:00:03	81
1105	2.2453e-02	2.8010e-05	2.3729e-05	0:00:02	80
1106	2.1979e-02	2.7575e-05	2.3359e-05	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
1107	2.1626e-02	2.7139e-05	2.2989e-05	0:00:01	78
1108	2.1230e-02	2.6671e-05	2.2589e-05	0:00:01	77
1109	2.0761e-02	2.6257e-05	2.2247e-05	0:00:01	76
1110	2.0471e-02	2.5820e-05	2.1860e-05	0:00:01	75
1111	2.0298e-02	2.5355e-05	2.1481e-05	0:00:01	74
1112	1.9906e-02	2.4919e-05	2.1136e-05	0:00:00	73
1113	1.9658e-02	2.4505e-05	2.0774e-05	0:00:00	72
1114	1.9306e-02	2.4066e-05	2.0419e-05	0:00:00	71
1115	1.9172e-02	2.3596e-05	2.0042e-05	0:00:14	70
1116	1.8844e-02	2.3183e-05	1.9725e-05	0:00:11	69
1117	1.8453e-02	2.2788e-05	1.9436e-05	0:00:09	68

iter	continuity	x-velocity	y-velocity	time/iter	
1118	1.8214e-02	2.2391e-05	1.9145e-05	0:00:07	67
1119	1.7861e-02	2.1997e-05	1.8849e-05	0:00:05	66
1120	1.7532e-02	2.1681e-05	1.8580e-05	0:00:04	65
1121	1.7220e-02	2.1373e-05	1.8320e-05	0:00:03	64
1122	1.6923e-02	2.1116e-05	1.8079e-05	0:00:03	63
1123	1.6663e-02	2.0865e-05	1.7851e-05	0:00:02	62
1124	1.6434e-02	2.0650e-05	1.7646e-05	0:00:02	61
1125	1.6233e-02	2.0456e-05	1.7471e-05	0:00:01	60
1126	1.6024e-02	2.0255e-05	1.7303e-05	0:00:01	59
1127	1.5797e-02	2.0081e-05	1.7155e-05	0:00:01	58
1128	1.5489e-02	1.9908e-05	1.7008e-05	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1129	1.5308e-02	1.9746e-05	1.6890e-05	0:00:00	56
1130	1.5267e-02	1.9640e-05	1.6807e-05	0:00:00	55
1131	1.4942e-02	1.9468e-05	1.6716e-05	0:00:00	54
1132	1.4820e-02	1.9335e-05	1.6664e-05	0:00:00	53
1133	1.4621e-02	1.9236e-05	1.6631e-05	0:00:00	52
1134	1.4488e-02	1.9111e-05	1.6601e-05	0:00:10	51
1135	1.4419e-02	1.9022e-05	1.6596e-05	0:00:08	50

1136	1.4374e-02	1.8941e-05	1.6608e-05	0:00:06	49
1137	1.4399e-02	1.8866e-05	1.6629e-05	0:00:05	48
1138	1.4446e-02	1.8791e-05	1.6663e-05	0:00:04	47
1139	1.4459e-02	1.8745e-05	1.6703e-05	0:00:03	46

iter	continuity	x-velocity	y-velocity	time/iter	
1140	1.4460e-02	1.8717e-05	1.6767e-05	0:00:02	45
1141	1.4535e-02	1.8690e-05	1.6831e-05	0:00:02	44
1142	1.4617e-02	1.8674e-05	1.6907e-05	0:00:01	43
1143	1.4691e-02	1.8658e-05	1.6967e-05	0:00:01	42
1144	1.4759e-02	1.8652e-05	1.7041e-05	0:00:01	41
1145	1.4789e-02	1.8644e-05	1.7105e-05	0:00:01	40
1146	1.4833e-02	1.8648e-05	1.7172e-05	0:00:08	39
1147	1.4855e-02	1.8646e-05	1.7226e-05	0:00:07	38
1148	1.4953e-02	1.8659e-05	1.7272e-05	0:00:05	37
1149	1.5022e-02	1.8688e-05	1.7319e-05	0:00:04	36
1150	1.4999e-02	1.8694e-05	1.7344e-05	0:00:03	35

iter	continuity	x-velocity	y-velocity	time/iter	
1151	1.4965e-02	1.8724e-05	1.7379e-05	0:00:02	34
1152	1.4929e-02	1.8730e-05	1.7377e-05	0:00:02	33
1153	1.4662e-02	1.8773e-05	1.7426e-05	0:00:01	32
1154	1.4811e-02	1.8740e-05	1.7335e-05	0:00:01	31
1155	1.4479e-02	1.8787e-05	1.7376e-05	0:00:01	30
1156	1.4502e-02	1.8755e-05	1.7271e-05	0:00:01	29
1157	1.4154e-02	1.8797e-05	1.7293e-05	0:00:01	28
1158	1.4192e-02	1.8739e-05	1.7151e-05	0:00:00	27
1159	1.3823e-02	1.8768e-05	1.7147e-05	0:00:00	26
1160	1.3878e-02	1.8710e-05	1.6988e-05	0:00:00	25
1161	1.3532e-02	1.8730e-05	1.6948e-05	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
1162	1.3585e-02	1.8668e-05	1.6771e-05	0:00:00	23
1163	1.3115e-02	1.8630e-05	1.6677e-05	0:00:05	22
1164	1.3177e-02	1.8554e-05	1.6478e-05	0:00:03	21
1165	1.2684e-02	1.8494e-05	1.6354e-05	0:00:03	20
1166	1.2666e-02	1.8387e-05	1.6135e-05	0:00:02	19
1167	1.2262e-02	1.8327e-05	1.6007e-05	0:00:02	18
1168	1.2200e-02	1.8181e-05	1.5765e-05	0:00:01	17
1169	1.1891e-02	1.8074e-05	1.5583e-05	0:00:01	16
1170	1.1657e-02	1.7960e-05	1.5381e-05	0:00:01	15
1171	1.1354e-02	1.7819e-05	1.5169e-05	0:00:00	14
1172	1.1084e-02	1.7670e-05	1.4956e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1173	1.0835e-02	1.7505e-05	1.4736e-05	0:00:00	12
1174	1.0593e-02	1.7330e-05	1.4514e-05	0:00:00	11
1175	1.0365e-02	1.7150e-05	1.4290e-05	0:00:00	10
1176	1.0077e-02	1.6947e-05	1.4063e-05	0:00:00	9
1177	9.7784e-03	1.6742e-05	1.3834e-05	0:00:00	8
1178	9.4620e-03	1.6532e-05	1.3611e-05	0:00:00	7
1179	9.1850e-03	1.6335e-05	1.3396e-05	0:00:00	6
1180	8.9794e-03	1.6099e-05	1.3173e-05	0:00:00	5
1181	8.7429e-03	1.5859e-05	1.2950e-05	0:00:00	4
1182	8.5460e-03	1.5626e-05	1.2734e-05	0:00:01	3
1183	8.3166e-03	1.5414e-05	1.2533e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1184	8.1504e-03	1.5188e-05	1.2327e-05	0:00:00	1
1185	8.0333e-03	1.4982e-05	1.2123e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 14.02428817749023s, time step = 16

31 more time steps

Updating solution at time level N...

done.

physical-dt 7.9564e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1185	8.0333e-03	1.4982e-05	1.2123e-05	0:00:10	100
1186	7.3162e-02	3.7448e-05	3.0300e-05	0:00:08	99
1187	7.8694e-02	2.8722e-05	2.3548e-05	0:00:07	98
1188	5.0421e-02	2.0607e-05	1.7152e-05	0:00:05	97
1189	3.1393e-02	1.7767e-05	1.5043e-05	0:00:04	96
1190	2.2870e-02	1.6589e-05	1.4088e-05	0:00:03	95
1191	1.9229e-02	1.5671e-05	1.3234e-05	0:00:03	94
1192	1.6221e-02	1.4891e-05	1.2541e-05	0:00:02	93
1193	1.4046e-02	1.4151e-05	1.1814e-05	0:00:02	92
1194	1.2018e-02	1.3515e-05	1.1217e-05	0:00:01	91

1195 1.0528e-02 1.2872e-05 1.0607e-05 0:00:01 90

iter	continuity	x-velocity	y-velocity	time/iter	
1196	9.4296e-03	1.2282e-05	1.0047e-05	0:00:01	89
1197	8.5866e-03	1.1721e-05	9.5324e-06	0:00:18	88
1198	7.9075e-03	1.1183e-05	9.0472e-06	0:00:14	87
1199	7.3434e-03	1.0667e-05	8.5917e-06	0:00:11	86
1200	6.8453e-03	1.0177e-05	8.1573e-06	0:00:09	85
1201	6.3890e-03	9.6975e-06	7.7451e-06	0:00:07	84
1202	6.0281e-03	9.2392e-06	7.3529e-06	0:00:06	83
1203	5.6907e-03	8.7957e-06	6.9782e-06	0:00:04	82
1204	5.4026e-03	8.3767e-06	6.6277e-06	0:00:04	81
1205	5.1486e-03	7.9741e-06	6.2970e-06	0:00:03	80
1206	4.9554e-03	7.5901e-06	5.9845e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
1207	4.7900e-03	7.2217e-06	5.6940e-06	0:00:02	78
1208	4.6263e-03	6.8777e-06	5.4198e-06	0:00:01	77
1209	4.5070e-03	6.5523e-06	5.1648e-06	0:00:01	76
1210	4.3558e-03	6.2417e-06	4.9289e-06	0:00:01	75
1211	4.2392e-03	5.9519e-06	4.7075e-06	0:00:01	74
1212	4.0971e-03	5.6741e-06	4.5022e-06	0:00:01	73
1213	3.9376e-03	5.4160e-06	4.3109e-06	0:00:00	72
1214	3.8054e-03	5.1658e-06	4.1306e-06	0:00:00	71
1215	3.6668e-03	4.9307e-06	3.9612e-06	0:00:14	70
1216	3.5322e-03	4.7112e-06	3.8021e-06	0:00:11	69
1217	3.4121e-03	4.5017e-06	3.6507e-06	0:00:09	68

iter	continuity	x-velocity	y-velocity	time/iter	
1218	3.3055e-03	4.3045e-06	3.5081e-06	0:00:07	67
1219	3.1898e-03	4.1171e-06	3.3732e-06	0:00:06	66
1220	3.0752e-03	3.9416e-06	3.2469e-06	0:00:04	65
1221	2.9753e-03	3.7751e-06	3.1261e-06	0:00:03	64
1222	2.8715e-03	3.6180e-06	3.0128e-06	0:00:03	63
1223	2.7705e-03	3.4694e-06	2.9062e-06	0:00:02	62
1224	2.6734e-03	3.3317e-06	2.8065e-06	0:00:02	61
1225	2.5759e-03	3.1999e-06	2.7098e-06	0:00:01	60
1226	2.4748e-03	3.0744e-06	2.6155e-06	0:00:01	59
1227	2.3879e-03	2.9620e-06	2.5287e-06	0:00:01	58
1228	2.2984e-03	2.8560e-06	2.4442e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1229	2.2090e-03	2.7550e-06	2.3628e-06	0:00:01	56
1230	2.1367e-03	2.6606e-06	2.2858e-06	0:00:00	55

1231	2.0552e-03	2.5689e-06	2.2086e-06	0:00:11	54
1232	1.9784e-03	2.4810e-06	2.1340e-06	0:00:09	53
1233	1.9054e-03	2.3971e-06	2.0623e-06	0:00:07	52
1234	1.8335e-03	2.3167e-06	1.9928e-06	0:00:05	51
1235	1.7631e-03	2.2392e-06	1.9254e-06	0:00:04	50
1236	1.6954e-03	2.1642e-06	1.8594e-06	0:00:03	49
1237	1.6312e-03	2.0914e-06	1.7949e-06	0:00:03	48
1238	1.5707e-03	2.0201e-06	1.7320e-06	0:00:02	47
1239	1.5102e-03	1.9522e-06	1.6711e-06	0:00:02	46

iter	continuity	x-velocity	y-velocity	time/iter	
1240	1.4548e-03	1.8854e-06	1.6115e-06	0:00:01	45
1241	1.3985e-03	1.8198e-06	1.5536e-06	0:00:01	44
1242	1.3424e-03	1.7563e-06	1.4972e-06	0:00:01	43
1243	1.2872e-03	1.6946e-06	1.4419e-06	0:00:01	42
1244	1.2338e-03	1.6340e-06	1.3878e-06	0:00:00	41
1245	1.1777e-03	1.5755e-06	1.3356e-06	0:00:00	40
1246	1.1254e-03	1.5189e-06	1.2847e-06	0:00:00	39
1247	1.0823e-03	1.4629e-06	1.2327e-06	0:00:00	38
1248	1.0339e-03	1.4096e-06	1.1862e-06	0:00:00	37
1249	9.8644e-04	1.3568e-06	1.1394e-06	0:00:07	36

! 1249 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 14.81992530822754s, time step = 17

30 more time steps

Updating solution at time level N...

done.

physical-dt 1.7685e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1249	9.8644e-04	1.3568e-06	1.1394e-06	0:00:20	100
1250	1.4770e-01	6.0692e-05	4.9042e-05	0:00:16	99
1251	1.5353e-01	4.5223e-05	3.5495e-05	0:00:13	98
1252	9.5482e-02	2.6151e-05	2.0222e-05	0:00:10	97

1253	5.9513e-02	2.0740e-05	1.5831e-05	0:00:08	96
1254	4.3110e-02	1.9454e-05	1.4661e-05	0:00:06	95
1255	3.6326e-02	1.8604e-05	1.4001e-05	0:00:05	94
1256	3.0530e-02	1.7831e-05	1.3543e-05	0:00:04	93
1257	2.5768e-02	1.7145e-05	1.3208e-05	0:00:03	92
1258	2.2531e-02	1.6512e-05	1.2899e-05	0:00:21	91
1259	1.9640e-02	1.5946e-05	1.2665e-05	0:00:16	90

iter	continuity	x-velocity	y-velocity	time/iter	
1260	1.8045e-02	1.5422e-05	1.2403e-05	0:00:13	89
1261	1.6506e-02	1.4962e-05	1.2213e-05	0:00:10	88
1262	1.5834e-02	1.4516e-05	1.1987e-05	0:00:08	87
1263	1.4827e-02	1.4134e-05	1.1810e-05	0:00:06	86
1264	1.4273e-02	1.3743e-05	1.1618e-05	0:00:05	85
1265	1.3778e-02	1.3389e-05	1.1459e-05	0:00:04	84
1266	1.3410e-02	1.3064e-05	1.1319e-05	0:00:03	83
1267	1.3113e-02	1.2768e-05	1.1199e-05	0:00:03	82
1268	1.2855e-02	1.2515e-05	1.1100e-05	0:00:02	81
1269	1.2658e-02	1.2291e-05	1.1018e-05	0:00:02	80
1270	1.2470e-02	1.2080e-05	1.0940e-05	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1271	1.2290e-02	1.1879e-05	1.0882e-05	0:00:01	78
1272	1.2122e-02	1.1713e-05	1.0822e-05	0:00:01	77
1273	1.1960e-02	1.1563e-05	1.0758e-05	0:00:01	76
1274	1.1888e-02	1.1434e-05	1.0700e-05	0:00:00	75
1275	1.1788e-02	1.1330e-05	1.0649e-05	0:00:00	74
1276	1.1712e-02	1.1255e-05	1.0599e-05	0:00:00	73
1277	1.1499e-02	1.1185e-05	1.0529e-05	0:00:15	72
1278	1.1277e-02	1.1115e-05	1.0453e-05	0:00:12	71
1279	1.1147e-02	1.1071e-05	1.0369e-05	0:00:09	70
1280	1.0928e-02	1.1027e-05	1.0285e-05	0:00:07	69
1281	1.0786e-02	1.0993e-05	1.0193e-05	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
1282	1.0528e-02	1.0942e-05	1.0086e-05	0:00:04	67
1283	1.0299e-02	1.0907e-05	9.9892e-06	0:00:04	66
1284	1.0080e-02	1.0855e-05	9.8753e-06	0:00:03	65
1285	9.8286e-03	1.0825e-05	9.7639e-06	0:00:02	64
1286	9.6009e-03	1.0781e-05	9.6466e-06	0:00:02	63
1287	9.3440e-03	1.0745e-05	9.5361e-06	0:00:01	62
1288	9.1285e-03	1.0700e-05	9.4183e-06	0:00:01	61
1289	8.8347e-03	1.0652e-05	9.2990e-06	0:00:01	60
1290	8.5778e-03	1.0613e-05	9.1926e-06	0:00:01	59

1291	8.3211e-03	1.0564e-05	9.0714e-06	0:00:01	58
1292	8.0582e-03	1.0520e-05	8.9608e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1293	7.7782e-03	1.0476e-05	8.8501e-06	0:00:00	56
1294	7.5051e-03	1.0423e-05	8.7378e-06	0:00:11	55
1295	7.2285e-03	1.0369e-05	8.6313e-06	0:00:09	54
1296	6.9519e-03	1.0319e-05	8.5214e-06	0:00:07	53
1297	6.7101e-03	1.0267e-05	8.4049e-06	0:00:05	52
1298	6.4594e-03	1.0216e-05	8.2934e-06	0:00:04	51
1299	6.2467e-03	1.0166e-05	8.1869e-06	0:00:03	50
1300	5.9975e-03	1.0119e-05	8.0893e-06	0:00:03	49
1301	5.7685e-03	1.0062e-05	7.9957e-06	0:00:02	48
1302	5.5982e-03	1.0003e-05	7.9082e-06	0:00:02	47
1303	5.4497e-03	9.9376e-06	7.8287e-06	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
1304	5.3207e-03	9.8794e-06	7.7560e-06	0:00:01	45
1305	5.2187e-03	9.8111e-06	7.6884e-06	0:00:01	44
1306	5.1384e-03	9.7430e-06	7.6235e-06	0:00:01	43
1307	5.0704e-03	9.6709e-06	7.5684e-06	0:00:00	42
1308	4.9946e-03	9.5957e-06	7.5156e-06	0:00:00	41
1309	4.9612e-03	9.5162e-06	7.4672e-06	0:00:00	40
1310	4.9317e-03	9.4392e-06	7.4232e-06	0:00:00	39
1311	4.9034e-03	9.3570e-06	7.3835e-06	0:00:00	38
1312	4.9009e-03	9.2712e-06	7.3412e-06	0:00:08	37
1313	4.9278e-03	9.1895e-06	7.2999e-06	0:00:06	36
1314	4.9262e-03	9.1084e-06	7.2599e-06	0:00:05	35

iter	continuity	x-velocity	y-velocity	time/iter	
1315	4.9615e-03	9.0308e-06	7.2225e-06	0:00:04	34
1316	4.9781e-03	8.9448e-06	7.1815e-06	0:00:03	33
1317	5.0105e-03	8.8683e-06	7.1458e-06	0:00:02	32
1318	5.0291e-03	8.7928e-06	7.1119e-06	0:00:02	31
1319	5.0544e-03	8.7184e-06	7.0824e-06	0:00:01	30
1320	5.0759e-03	8.6489e-06	7.0584e-06	0:00:01	29
1321	5.0902e-03	8.5855e-06	7.0373e-06	0:00:01	28
1322	5.1191e-03	8.5272e-06	7.0183e-06	0:00:01	27
1323	5.1332e-03	8.4760e-06	7.0001e-06	0:00:00	26
1324	5.1420e-03	8.4297e-06	6.9784e-06	0:00:00	25
1325	5.1334e-03	8.3829e-06	6.9543e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
1326	5.1444e-03	8.3479e-06	6.9297e-06	0:00:00	23

1327	5.1573e-03	8.3161e-06	6.9018e-06	0:00:00	22
1328	5.1532e-03	8.2896e-06	6.8731e-06	0:00:00	21
1329	5.1254e-03	8.2563e-06	6.8359e-06	0:00:00	20
1330	5.1242e-03	8.2257e-06	6.8000e-06	0:00:04	19
1331	5.0339e-03	8.2085e-06	6.7740e-06	0:00:03	18
1332	5.1004e-03	8.1721e-06	6.7080e-06	0:00:02	17
1333	4.9733e-03	8.1400e-06	6.6753e-06	0:00:02	16
1334	5.0295e-03	8.1035e-06	6.6038e-06	0:00:01	15
1335	4.9011e-03	8.0770e-06	6.5705e-06	0:00:01	14
1336	4.9312e-03	8.0291e-06	6.4931e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
1337	4.8077e-03	8.0067e-06	6.4574e-06	0:00:01	12
1338	4.8151e-03	7.9482e-06	6.3736e-06	0:00:00	11
1339	4.6693e-03	7.9136e-06	6.3262e-06	0:00:00	10
1340	4.6848e-03	7.8584e-06	6.2420e-06	0:00:00	9
1341	4.6142e-03	7.8112e-06	6.1805e-06	0:00:00	8
1342	4.5315e-03	7.7619e-06	6.1142e-06	0:00:00	7
1343	4.4498e-03	7.7094e-06	6.0475e-06	0:00:00	6
1344	4.3557e-03	7.6495e-06	5.9774e-06	0:00:00	5
1345	4.2543e-03	7.5817e-06	5.9034e-06	0:00:00	4
1346	4.1591e-03	7.5149e-06	5.8347e-06	0:00:00	3
1347	4.0736e-03	7.4488e-06	5.7675e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1348	3.9855e-03	7.3685e-06	5.6934e-06	0:00:00	1
1349	3.9017e-03	7.2920e-06	5.6260e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 16.58845901489258s, time step = 18

29 more time steps

Updating solution at time level N...

done.

physical-dt 8.8427e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1349	3.9017e-03	7.2920e-06	5.6260e-06	0:00:16	100
1350	5.8330e-02	2.7403e-05	2.0400e-05	0:00:13	99
1351	6.2325e-02	1.9482e-05	1.4501e-05	0:00:10	98
1352	4.0283e-02	1.2175e-05	8.6830e-06	0:00:08	97
1353	2.5805e-02	9.9423e-06	6.9239e-06	0:00:06	96
1354	1.8278e-02	9.1988e-06	6.3790e-06	0:00:05	95
1355	1.4712e-02	8.6457e-06	5.9612e-06	0:00:04	94
1356	1.2008e-02	8.1465e-06	5.5681e-06	0:00:03	93
1357	9.8967e-03	7.7078e-06	5.2491e-06	0:00:03	92
1358	8.2982e-03	7.2811e-06	4.9403e-06	0:00:02	91
1359	7.1266e-03	6.8871e-06	4.6756e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
1360	6.1905e-03	6.5327e-06	4.4445e-06	0:00:01	89
1361	5.4674e-03	6.1892e-06	4.2353e-06	0:00:01	88
1362	4.7933e-03	5.8795e-06	4.0563e-06	0:00:01	87
1363	4.4386e-03	5.5892e-06	3.8734e-06	0:00:18	86
1364	3.9996e-03	5.3122e-06	3.7168e-06	0:00:14	85
1365	3.6924e-03	5.0561e-06	3.5596e-06	0:00:11	84
1366	3.4514e-03	4.8166e-06	3.4120e-06	0:00:09	83
1367	3.2334e-03	4.5947e-06	3.2762e-06	0:00:07	82
1368	3.0634e-03	4.3866e-06	3.1471e-06	0:00:05	81
1369	2.9188e-03	4.1899e-06	3.0279e-06	0:00:04	80
1370	2.8018e-03	4.0041e-06	2.9153e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
1371	2.7038e-03	3.8306e-06	2.8090e-06	0:00:03	78
1372	2.6147e-03	3.6663e-06	2.7076e-06	0:00:02	77
1373	2.5373e-03	3.5109e-06	2.6102e-06	0:00:02	76
1374	2.4714e-03	3.3628e-06	2.5164e-06	0:00:01	75
1375	2.4072e-03	3.2223e-06	2.4252e-06	0:00:01	74
1376	2.3447e-03	3.0892e-06	2.3374e-06	0:00:01	73
1377	2.2751e-03	2.9623e-06	2.2530e-06	0:00:01	72
1378	2.2097e-03	2.8414e-06	2.1710e-06	0:00:01	71
1379	2.1474e-03	2.7266e-06	2.0926e-06	0:00:00	70
1380	2.0822e-03	2.6162e-06	2.0176e-06	0:00:00	69
1381	2.0264e-03	2.5125e-06	1.9448e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
1382	1.9725e-03	2.4141e-06	1.8758e-06	0:00:14	67
1383	1.9240e-03	2.3199e-06	1.8098e-06	0:00:11	66
1384	1.8755e-03	2.2304e-06	1.7465e-06	0:00:08	65
1385	1.8202e-03	2.1450e-06	1.6850e-06	0:00:07	64

1386	1.7689e-03	2.0644e-06	1.6279e-06	0:00:05	63
1387	1.7156e-03	1.9883e-06	1.5737e-06	0:00:04	62
1388	1.6656e-03	1.9166e-06	1.5229e-06	0:00:03	61
1389	1.6158e-03	1.8477e-06	1.4739e-06	0:00:03	60
1390	1.5616e-03	1.7826e-06	1.4289e-06	0:00:02	59
1391	1.5116e-03	1.7212e-06	1.3867e-06	0:00:02	58
1392	1.4604e-03	1.6630e-06	1.3462e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1393	1.4083e-03	1.6082e-06	1.3064e-06	0:00:12	56
1394	1.3620e-03	1.5572e-06	1.2688e-06	0:00:10	55
1395	1.3083e-03	1.5089e-06	1.2315e-06	0:00:08	54
1396	1.2572e-03	1.4621e-06	1.1951e-06	0:00:06	53
1397	1.2035e-03	1.4180e-06	1.1607e-06	0:00:05	52
1398	1.1688e-03	1.3744e-06	1.1223e-06	0:00:04	51
1399	1.1164e-03	1.3330e-06	1.0906e-06	0:00:03	50
1400	1.0677e-03	1.2939e-06	1.0585e-06	0:00:02	49
1401	1.0220e-03	1.2557e-06	1.0261e-06	0:00:02	48
1402	9.7812e-04	1.2189e-06	9.9505e-07	0:00:01	47

! 1402 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 17.47272491455078s, time step = 19

28 more time steps

Updating solution at time level N...

done.

physical-dt 2.9205e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1402	9.7812e-04	1.2189e-06	9.9505e-07	0:00:03	100
1403	2.2408e-01	8.9417e-05	7.4399e-05	0:00:02	99
1404	2.3339e-01	6.6882e-05	5.2408e-05	0:00:02	98
1405	1.4564e-01	4.0287e-05	2.7021e-05	0:00:01	97
1406	9.0650e-02	3.2694e-05	2.2035e-05	0:00:01	96
1407	6.5014e-02	3.0851e-05	2.1324e-05	0:00:01	95

1408	5.4305e-02	3.0024e-05	2.0848e-05	0:00:20	94
1409	4.5958e-02	2.9234e-05	2.0438e-05	0:00:15	93
1410	3.9594e-02	2.8524e-05	2.0059e-05	0:00:12	92
1411	3.4330e-02	2.8005e-05	1.9901e-05	0:00:10	91
1412	3.0443e-02	2.7662e-05	1.9867e-05	0:00:08	90

iter	continuity	x-velocity	y-velocity	time/iter	
1413	2.7444e-02	2.7468e-05	1.9942e-05	0:00:06	89
1414	2.5896e-02	2.7342e-05	2.0057e-05	0:00:05	88
1415	2.4787e-02	2.7260e-05	2.0226e-05	0:00:04	87
1416	2.4606e-02	2.7244e-05	2.0436e-05	0:00:03	86
1417	2.4574e-02	2.7279e-05	2.0683e-05	0:00:02	85
1418	2.4901e-02	2.7372e-05	2.0964e-05	0:00:02	84
1419	2.5107e-02	2.7463e-05	2.1230e-05	0:00:01	83
1420	2.5467e-02	2.7571e-05	2.1544e-05	0:00:01	82
1421	2.5843e-02	2.7731e-05	2.1895e-05	0:00:01	81
1422	2.6273e-02	2.7873e-05	2.2274e-05	0:00:01	80
1423	2.6748e-02	2.8053e-05	2.2677e-05	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1424	2.7184e-02	2.8221e-05	2.3070e-05	0:00:16	78
1425	2.7576e-02	2.8435e-05	2.3484e-05	0:00:13	77
1426	2.8019e-02	2.8660e-05	2.3935e-05	0:00:10	76
1427	2.8285e-02	2.8895e-05	2.4340e-05	0:00:08	75
1428	2.8434e-02	2.9158e-05	2.4780e-05	0:00:06	74
1429	2.8883e-02	2.9467e-05	2.5194e-05	0:00:05	73
1430	2.9306e-02	2.9763e-05	2.5621e-05	0:00:04	72
1431	2.9661e-02	3.0130e-05	2.6033e-05	0:00:03	71
1432	3.0052e-02	3.0492e-05	2.6461e-05	0:00:02	70
1433	3.0469e-02	3.0907e-05	2.6905e-05	0:00:02	69
1434	3.0924e-02	3.1370e-05	2.7325e-05	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
1435	3.1461e-02	3.1913e-05	2.7774e-05	0:00:01	67
1436	3.1743e-02	3.2458e-05	2.8208e-05	0:00:01	66
1437	3.2231e-02	3.3016e-05	2.8626e-05	0:00:01	65
1438	3.2602e-02	3.3621e-05	2.9119e-05	0:00:01	64
1439	3.3020e-02	3.4237e-05	2.9567e-05	0:00:00	63
1440	3.3156e-02	3.4808e-05	2.9975e-05	0:00:00	62
1441	3.3551e-02	3.5413e-05	3.0403e-05	0:00:00	61
1442	3.3901e-02	3.6017e-05	3.0833e-05	0:00:12	60
1443	3.4063e-02	3.6623e-05	3.1221e-05	0:00:10	59
1444	3.4378e-02	3.7298e-05	3.1591e-05	0:00:08	58
1445	3.4839e-02	3.7979e-05	3.1966e-05	0:00:06	57

iter	continuity	x-velocity	y-velocity	time/iter	
1446	3.4883e-02	3.8685e-05	3.2330e-05	0:00:05	56
1447	3.5051e-02	3.9409e-05	3.2736e-05	0:00:04	55
1448	3.5044e-02	4.0055e-05	3.3042e-05	0:00:03	54
1449	3.5043e-02	4.0788e-05	3.3394e-05	0:00:02	53
1450	3.5106e-02	4.1513e-05	3.3770e-05	0:00:02	52
1451	3.5162e-02	4.2189e-05	3.4116e-05	0:00:01	51
1452	3.4955e-02	4.2873e-05	3.4464e-05	0:00:01	50
1453	3.4732e-02	4.3567e-05	3.4801e-05	0:00:01	49
1454	3.4463e-02	4.4239e-05	3.5127e-05	0:00:01	48
1455	3.4255e-02	4.4874e-05	3.5428e-05	0:00:01	47
1456	3.3953e-02	4.5498e-05	3.5689e-05	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
1457	3.3623e-02	4.6039e-05	3.5920e-05	0:00:00	45
1458	3.2913e-02	4.6658e-05	3.6186e-05	0:00:00	44
1459	3.2526e-02	4.7191e-05	3.6412e-05	0:00:00	43
1460	3.2070e-02	4.7761e-05	3.6627e-05	0:00:09	42
1461	3.1652e-02	4.8331e-05	3.6855e-05	0:00:07	41
1462	3.1249e-02	4.8891e-05	3.7082e-05	0:00:05	40
1463	3.0860e-02	4.9426e-05	3.7313e-05	0:00:04	39
1464	3.0581e-02	4.9932e-05	3.7577e-05	0:00:03	38
1465	3.0454e-02	5.0403e-05	3.7867e-05	0:00:02	37
1466	3.0263e-02	5.0869e-05	3.8179e-05	0:00:02	36
1467	3.0308e-02	5.1289e-05	3.8481e-05	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
1468	2.9965e-02	5.1626e-05	3.8714e-05	0:00:01	34
1469	3.0114e-02	5.2021e-05	3.9049e-05	0:00:01	33
1470	2.9915e-02	5.2325e-05	3.9315e-05	0:00:01	32
1471	3.0145e-02	5.2606e-05	3.9597e-05	0:00:01	31
1472	3.0068e-02	5.2872e-05	3.9872e-05	0:00:00	30
1473	3.0264e-02	5.3112e-05	4.0184e-05	0:00:00	29
1474	3.0207e-02	5.3309e-05	4.0456e-05	0:00:00	28
1475	3.0502e-02	5.3497e-05	4.0752e-05	0:00:00	27
1476	3.0546e-02	5.3615e-05	4.1008e-05	0:00:00	26
1477	3.0857e-02	5.3780e-05	4.1296e-05	0:00:00	25
1478	3.0898e-02	5.3844e-05	4.1541e-05	0:00:05	24

iter	continuity	x-velocity	y-velocity	time/iter	
1479	3.1024e-02	5.3967e-05	4.1818e-05	0:00:04	23
1480	3.1191e-02	5.4087e-05	4.2096e-05	0:00:03	22
1481	3.1257e-02	5.4185e-05	4.2326e-05	0:00:02	21

1482	3.1401e-02	5.4277e-05	4.2593e-05	0:00:02	20
1483	3.1711e-02	5.4389e-05	4.2873e-05	0:00:01	19
1484	3.2111e-02	5.4472e-05	4.3123e-05	0:00:01	18
1485	3.2278e-02	5.4551e-05	4.3401e-05	0:00:01	17
1486	3.2775e-02	5.4737e-05	4.3717e-05	0:00:01	16
1487	3.3010e-02	5.4802e-05	4.3984e-05	0:00:00	15
1488	3.3498e-02	5.4966e-05	4.4313e-05	0:00:00	14
1489	3.3934e-02	5.5110e-05	4.4633e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1490	3.4350e-02	5.5286e-05	4.5002e-05	0:00:00	12
1491	3.4922e-02	5.5485e-05	4.5350e-05	0:00:00	11
1492	3.5118e-02	5.5635e-05	4.5701e-05	0:00:00	10
1493	3.4986e-02	5.5852e-05	4.6113e-05	0:00:00	9
1494	3.5966e-02	5.5995e-05	4.6394e-05	0:00:00	8
1495	3.5822e-02	5.6267e-05	4.6911e-05	0:00:00	7
1496	3.6755e-02	5.6452e-05	4.7157e-05	0:00:00	6
1497	3.6634e-02	5.6756e-05	4.7605e-05	0:00:01	5
1498	3.7779e-02	5.7041e-05	4.7885e-05	0:00:01	4
1499	3.7472e-02	5.7385e-05	4.8363e-05	0:00:00	3
1500	3.8129e-02	5.7764e-05	4.8695e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1501	3.8566e-02	5.8168e-05	4.9096e-05	0:00:00	1
1502	3.9043e-02	5.8565e-05	4.9437e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 20.39326477050781s, time step = 20

27 more time steps

Updating solution at time level N...

done.

physical-dt 1.4603e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1502	3.9043e-02	5.8565e-05	4.9437e-05	0:00:07	100

1503	1.4215e-01	1.0145e-04	8.1150e-05	0:00:05	99
1504	1.5569e-01	9.5697e-05	7.2632e-05	0:00:04	98
1505	1.0483e-01	8.4387e-05	6.6280e-05	0:00:03	97
1506	7.6976e-02	8.0103e-05	6.4405e-05	0:00:03	96
1507	6.6232e-02	7.8232e-05	6.3548e-05	0:00:21	95
1508	6.1763e-02	7.7061e-05	6.2756e-05	0:00:17	94
1509	5.8141e-02	7.6116e-05	6.2182e-05	0:00:13	93
1510	5.5661e-02	7.5143e-05	6.1425e-05	0:00:10	92
1511	5.3798e-02	7.4250e-05	6.0753e-05	0:00:08	91
1512	5.1772e-02	7.3344e-05	6.0168e-05	0:00:07	90

iter	continuity	x-velocity	y-velocity	time/iter	
1513	5.0459e-02	7.2563e-05	5.9587e-05	0:00:05	89
1514	4.9337e-02	7.1630e-05	5.8914e-05	0:00:04	88
1515	4.8391e-02	7.0774e-05	5.8227e-05	0:00:03	87
1516	4.8092e-02	6.9992e-05	5.7623e-05	0:00:03	86
1517	4.6733e-02	6.9139e-05	5.6990e-05	0:00:02	85
1518	4.6838e-02	6.8327e-05	5.6214e-05	0:00:02	84
1519	4.5560e-02	6.7550e-05	5.5585e-05	0:00:01	83
1520	4.5087e-02	6.6653e-05	5.4750e-05	0:00:01	82
1521	4.4480e-02	6.5850e-05	5.3997e-05	0:00:01	81
1522	4.3323e-02	6.5053e-05	5.3257e-05	0:00:01	80
1523	4.2478e-02	6.4342e-05	5.2576e-05	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
1524	4.1576e-02	6.3482e-05	5.1765e-05	0:00:13	78
1525	4.0944e-02	6.2712e-05	5.1015e-05	0:00:10	77
1526	4.0068e-02	6.1915e-05	5.0258e-05	0:00:08	76
1527	3.9295e-02	6.1106e-05	4.9502e-05	0:00:06	75
1528	3.8469e-02	6.0260e-05	4.8746e-05	0:00:05	74
1529	3.7913e-02	5.9490e-05	4.8065e-05	0:00:04	73
1530	3.7146e-02	5.8700e-05	4.7374e-05	0:00:03	72
1531	3.6357e-02	5.7851e-05	4.6634e-05	0:00:02	71
1532	3.5637e-02	5.7039e-05	4.5985e-05	0:00:02	70
1533	3.4885e-02	5.6276e-05	4.5332e-05	0:00:02	69
1534	3.4017e-02	5.5466e-05	4.4674e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1535	3.3464e-02	5.4663e-05	4.4008e-05	0:00:01	67
1536	3.2490e-02	5.3866e-05	4.3411e-05	0:00:01	66
1537	3.1853e-02	5.3144e-05	4.2813e-05	0:00:01	65
1538	3.1262e-02	5.2375e-05	4.2226e-05	0:00:00	64
1539	3.0709e-02	5.1653e-05	4.1616e-05	0:00:00	63
1540	3.0053e-02	5.0975e-05	4.1061e-05	0:00:00	62

1541	2.9249e-02	5.0329e-05	4.0474e-05	0:00:12	61
1542	2.8761e-02	4.9704e-05	3.9912e-05	0:00:10	60
1543	2.8342e-02	4.9096e-05	3.9390e-05	0:00:08	59
1544	2.7951e-02	4.8564e-05	3.8838e-05	0:00:06	58
1545	2.7369e-02	4.8001e-05	3.8357e-05	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
1546	2.6938e-02	4.7424e-05	3.7887e-05	0:00:04	56
1547	2.6645e-02	4.6870e-05	3.7423e-05	0:00:03	55
1548	2.6226e-02	4.6348e-05	3.6991e-05	0:00:02	54
1549	2.5950e-02	4.5801e-05	3.6552e-05	0:00:02	53
1550	2.5604e-02	4.5228e-05	3.6127e-05	0:00:01	52
1551	2.5279e-02	4.4664e-05	3.5725e-05	0:00:01	51
1552	2.5155e-02	4.4172e-05	3.5362e-05	0:00:01	50
1553	2.4891e-02	4.3601e-05	3.4973e-05	0:00:01	49
1554	2.4620e-02	4.3047e-05	3.4624e-05	0:00:01	48
1555	2.4486e-02	4.2492e-05	3.4261e-05	0:00:00	47
1556	2.4325e-02	4.1945e-05	3.3919e-05	0:00:10	46

iter	continuity	x-velocity	y-velocity	time/iter	
1557	2.4123e-02	4.1439e-05	3.3615e-05	0:00:07	45
1558	2.3901e-02	4.0838e-05	3.3291e-05	0:00:06	44
1559	2.3784e-02	4.0309e-05	3.2996e-05	0:00:05	43
1560	2.3594e-02	3.9786e-05	3.2701e-05	0:00:04	42
1561	2.3287e-02	3.9294e-05	3.2421e-05	0:00:03	41
1562	2.3059e-02	3.8800e-05	3.2140e-05	0:00:02	40
1563	2.2877e-02	3.8299e-05	3.1861e-05	0:00:02	39
1564	2.2634e-02	3.7823e-05	3.1585e-05	0:00:01	38
1565	2.2604e-02	3.7364e-05	3.1307e-05	0:00:01	37
1566	2.2500e-02	3.6913e-05	3.1043e-05	0:00:01	36
1567	2.2292e-02	3.6491e-05	3.0795e-05	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
1568	2.2097e-02	3.6059e-05	3.0521e-05	0:00:00	34
1569	2.1917e-02	3.5635e-05	3.0258e-05	0:00:00	33
1570	2.1731e-02	3.5222e-05	2.9994e-05	0:00:00	32
1571	2.1555e-02	3.4844e-05	2.9736e-05	0:00:00	31
1572	2.1487e-02	3.4460e-05	2.9475e-05	0:00:00	30
1573	2.1307e-02	3.4063e-05	2.9214e-05	0:00:06	29
1574	2.1204e-02	3.3679e-05	2.8955e-05	0:00:05	28
1575	2.0965e-02	3.3327e-05	2.8691e-05	0:00:04	27
1576	2.0842e-02	3.2966e-05	2.8429e-05	0:00:03	26
1577	2.0650e-02	3.2560e-05	2.8132e-05	0:00:02	25
1578	2.0548e-02	3.2250e-05	2.7884e-05	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
1579	2.0291e-02	3.1891e-05	2.7589e-05	0:00:01	23
1580	2.0061e-02	3.1551e-05	2.7317e-05	0:00:01	22
1581	1.9897e-02	3.1240e-05	2.7030e-05	0:00:01	21
1582	1.9653e-02	3.0902e-05	2.6729e-05	0:00:01	20
1583	1.9400e-02	3.0587e-05	2.6434e-05	0:00:00	19
1584	1.9170e-02	3.0279e-05	2.6142e-05	0:00:00	18
1585	1.8943e-02	2.9998e-05	2.5858e-05	0:00:00	17
1586	1.8626e-02	2.9707e-05	2.5561e-05	0:00:00	16
1587	1.8213e-02	2.9414e-05	2.5260e-05	0:00:00	15
1588	1.7930e-02	2.9118e-05	2.4938e-05	0:00:00	14
1589	1.7672e-02	2.8870e-05	2.4642e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1590	1.7320e-02	2.8572e-05	2.4325e-05	0:00:00	12
1591	1.7092e-02	2.8323e-05	2.4022e-05	0:00:02	11
1592	1.6768e-02	2.8059e-05	2.3713e-05	0:00:02	10
1593	1.6467e-02	2.7795e-05	2.3396e-05	0:00:01	9
1594	1.6139e-02	2.7523e-05	2.3089e-05	0:00:01	8
1595	1.5801e-02	2.7235e-05	2.2767e-05	0:00:01	7
1596	1.5638e-02	2.6978e-05	2.2463e-05	0:00:00	6
1597	1.5388e-02	2.6678e-05	2.2179e-05	0:00:00	5
1598	1.5084e-02	2.6391e-05	2.1862e-05	0:00:00	4
1599	1.4735e-02	2.6107e-05	2.1570e-05	0:00:00	3
1600	1.4432e-02	2.5805e-05	2.1279e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1601	1.4030e-02	2.5527e-05	2.0983e-05	0:00:00	1
1602	1.3703e-02	2.5216e-05	2.0687e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 21.85353469848633s, time step = 21

26 more time steps

Truncation Error (computed)=0.011656 > Truncation error tolerance

Repeating the time step: time step size = 0.730135

in update prediction domain id = 1
physical-dt 7.3013e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
1602	1.3703e-02	2.5216e-05	2.0687e-05	0:00:02	100
1603	3.6952e-01	1.4769e-04	7.4222e-05	0:00:01	99
1604	2.3398e-01	7.9644e-05	7.6615e-05	0:00:01	98
1605	1.3306e-01	6.6561e-05	5.6989e-05	0:00:20	97
1606	9.7271e-02	5.7961e-05	4.9654e-05	0:00:16	96
1607	7.3837e-02	5.3959e-05	4.6399e-05	0:00:13	95
1608	6.0907e-02	5.0960e-05	4.3789e-05	0:00:10	94
1609	5.0364e-02	4.8486e-05	4.1492e-05	0:00:08	93
1610	4.2986e-02	4.6126e-05	3.9122e-05	0:00:06	92
1611	3.7703e-02	4.3999e-05	3.7049e-05	0:00:05	91
1612	3.3778e-02	4.1936e-05	3.5162e-05	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
1613	3.0674e-02	3.9919e-05	3.3378e-05	0:00:03	89
1614	2.8289e-02	3.8078e-05	3.1727e-05	0:00:02	88
1615	2.6461e-02	3.6291e-05	3.0108e-05	0:00:02	87
1616	2.4621e-02	3.4611e-05	2.8649e-05	0:00:02	86
1617	2.3009e-02	3.3014e-05	2.7230e-05	0:00:01	85
1618	2.1495e-02	3.1468e-05	2.5874e-05	0:00:01	84
1619	2.0183e-02	2.9991e-05	2.4554e-05	0:00:01	83
1620	1.8948e-02	2.8642e-05	2.3352e-05	0:00:01	82
1621	1.7786e-02	2.7309e-05	2.2192e-05	0:00:00	81
1622	1.6690e-02	2.6021e-05	2.1061e-05	0:00:00	80
1623	1.5712e-02	2.4845e-05	1.9999e-05	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
1624	1.4755e-02	2.3669e-05	1.8969e-05	0:00:13	78
1625	1.3872e-02	2.2575e-05	1.8011e-05	0:00:10	77
1626	1.2984e-02	2.1524e-05	1.7091e-05	0:00:08	76
1627	1.2243e-02	2.0520e-05	1.6211e-05	0:00:06	75
1628	1.1552e-02	1.9562e-05	1.5379e-05	0:00:05	74
1629	1.0849e-02	1.8632e-05	1.4577e-05	0:00:04	73
1630	1.0230e-02	1.7750e-05	1.3829e-05	0:00:03	72

1631	9.6582e-03	1.6906e-05	1.3119e-05	0:00:02	71
1632	9.1245e-03	1.6102e-05	1.2453e-05	0:00:02	70
1633	8.6044e-03	1.5327e-05	1.1821e-05	0:00:02	69
1634	8.1564e-03	1.4598e-05	1.1220e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1635	7.6847e-03	1.3884e-05	1.0647e-05	0:00:01	67
1636	7.2847e-03	1.3217e-05	1.0112e-05	0:00:01	66
1637	6.9198e-03	1.2576e-05	9.6063e-06	0:00:01	65
1638	6.5667e-03	1.1961e-05	9.1280e-06	0:00:00	64
1639	6.2232e-03	1.1376e-05	8.6740e-06	0:00:00	63
1640	5.9089e-03	1.0822e-05	8.2472e-06	0:00:13	62
1641	5.6179e-03	1.0297e-05	7.8451e-06	0:00:10	61
1642	5.3378e-03	9.7955e-06	7.4654e-06	0:00:08	60
1643	5.0655e-03	9.3154e-06	7.1005e-06	0:00:06	59
1644	4.8342e-03	8.8575e-06	6.7521e-06	0:00:05	58
1645	4.6005e-03	8.4271e-06	6.4244e-06	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter	
1646	4.3826e-03	8.0168e-06	6.1124e-06	0:00:03	56
1647	4.1646e-03	7.6272e-06	5.8176e-06	0:00:02	55
1648	3.9762e-03	7.2607e-06	5.5367e-06	0:00:02	54
1649	3.8137e-03	6.9135e-06	5.2699e-06	0:00:01	53
1650	3.6596e-03	6.5814e-06	5.0221e-06	0:00:01	52
1651	3.5132e-03	6.2691e-06	4.7858e-06	0:00:11	51
1652	3.3822e-03	5.9679e-06	4.5649e-06	0:00:09	50
1653	3.2552e-03	5.6809e-06	4.3563e-06	0:00:07	49
1654	3.1399e-03	5.4099e-06	4.1585e-06	0:00:05	48
1655	3.0203e-03	5.1494e-06	3.9704e-06	0:00:04	47
1656	2.9180e-03	4.9045e-06	3.7923e-06	0:00:03	46

iter	continuity	x-velocity	y-velocity	time/iter	
1657	2.8167e-03	4.6689e-06	3.6230e-06	0:00:03	45
1658	2.7057e-03	4.4465e-06	3.4627e-06	0:00:02	44
1659	2.6069e-03	4.2339e-06	3.3098e-06	0:00:02	43
1660	2.5099e-03	4.0340e-06	3.1652e-06	0:00:01	42
1661	2.4190e-03	3.8441e-06	3.0280e-06	0:00:01	41
1662	2.3407e-03	3.6629e-06	2.8977e-06	0:00:01	40
1663	2.2659e-03	3.4920e-06	2.7737e-06	0:00:01	39
1664	2.1855e-03	3.3301e-06	2.6550e-06	0:00:00	38
1665	2.1040e-03	3.1755e-06	2.5429e-06	0:00:00	37
1666	2.0228e-03	3.0293e-06	2.4362e-06	0:00:00	36
1667	1.9437e-03	2.8897e-06	2.3341e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
1668	1.8715e-03	2.7570e-06	2.2371e-06	0:00:00	34
1669	1.7971e-03	2.6324e-06	2.1446e-06	0:00:07	33
1670	1.7243e-03	2.5140e-06	2.0559e-06	0:00:05	32
1671	1.6514e-03	2.4020e-06	1.9711e-06	0:00:04	31
1672	1.5822e-03	2.2957e-06	1.8892e-06	0:00:03	30
1673	1.5157e-03	2.1957e-06	1.8105e-06	0:00:02	29
1674	1.4519e-03	2.1020e-06	1.7355e-06	0:00:02	28
1675	1.3866e-03	2.0130e-06	1.6634e-06	0:00:01	27
1676	1.3405e-03	1.9284e-06	1.5917e-06	0:00:01	26
1677	1.2762e-03	1.8485e-06	1.5258e-06	0:00:01	25
1678	1.2196e-03	1.7723e-06	1.4619e-06	0:00:01	24

iter	continuity	x-velocity	y-velocity	time/iter	
1679	1.1665e-03	1.6992e-06	1.3998e-06	0:00:01	23
1680	1.1139e-03	1.6292e-06	1.3401e-06	0:00:00	22
1681	1.0640e-03	1.5617e-06	1.2823e-06	0:00:00	21
1682	1.0174e-03	1.4971e-06	1.2263e-06	0:00:00	20
1683	9.7329e-04	1.4351e-06	1.1729e-06	0:00:00	19

! 1683 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 21.12339985370636s, time step = 21

25 more time steps

Updating solution at time level N...

done.

physical-dt 9.6129e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1683	9.7329e-04	1.4351e-06	1.1729e-06	0:00:01	100
1684	1.3139e-01	5.7869e-05	5.4669e-05	0:00:01	99
1685	1.3601e-01	6.0338e-05	4.5729e-05	0:00:01	98
1686	9.4291e-02	5.5494e-05	4.2709e-05	0:00:00	97
1687	6.8229e-02	5.2226e-05	4.1197e-05	0:00:00	96
1688	5.3399e-02	4.9785e-05	3.9733e-05	0:00:00	95

1689	4.5006e-02	4.7751e-05	3.8185e-05	0:00:00	94
1690	3.9297e-02	4.5853e-05	3.6740e-05	0:00:00	93
1691	3.4994e-02	4.4039e-05	3.5349e-05	0:00:00	92
1692	3.1610e-02	4.2309e-05	3.4063e-05	0:00:00	91
1693	2.8842e-02	4.0685e-05	3.2863e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1694	2.6536e-02	3.9145e-05	3.1747e-05	0:00:00	89
1695	2.4538e-02	3.7659e-05	3.0650e-05	0:00:00	88
1696	2.2965e-02	3.6272e-05	2.9632e-05	0:00:00	87
1697	2.1639e-02	3.4917e-05	2.8642e-05	0:00:00	86
1698	2.0620e-02	3.3626e-05	2.7650e-05	0:00:00	85
1699	1.9608e-02	3.2404e-05	2.6710e-05	0:00:17	84
1700	1.8735e-02	3.1262e-05	2.5781e-05	0:00:13	83
1701	1.7886e-02	3.0196e-05	2.4881e-05	0:00:11	82
1702	1.7182e-02	2.9197e-05	2.4007e-05	0:00:08	81
1703	1.6710e-02	2.8278e-05	2.3154e-05	0:00:07	80
1704	1.6293e-02	2.7374e-05	2.2310e-05	0:00:05	79

iter	continuity	x-velocity	y-velocity	time/iter	
1705	1.5863e-02	2.6522e-05	2.1502e-05	0:00:04	78
1706	1.5459e-02	2.5707e-05	2.0726e-05	0:00:03	77
1707	1.5089e-02	2.4917e-05	1.9979e-05	0:00:03	76
1708	1.4729e-02	2.4150e-05	1.9267e-05	0:00:02	75
1709	1.4369e-02	2.3399e-05	1.8585e-05	0:00:02	74
1710	1.4112e-02	2.2703e-05	1.7940e-05	0:00:01	73
1711	1.3787e-02	2.2022e-05	1.7322e-05	0:00:01	72
1712	1.3468e-02	2.1336e-05	1.6742e-05	0:00:01	71
1713	1.3146e-02	2.0675e-05	1.6188e-05	0:00:01	70
1714	1.2890e-02	2.0034e-05	1.5684e-05	0:00:00	69
1715	1.2534e-02	1.9410e-05	1.5212e-05	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
1716	1.2251e-02	1.8799e-05	1.4767e-05	0:00:14	67
1717	1.1985e-02	1.8201e-05	1.4348e-05	0:00:11	66
1718	1.1713e-02	1.7618e-05	1.3953e-05	0:00:09	65
1719	1.1479e-02	1.7058e-05	1.3575e-05	0:00:07	64
1720	1.1228e-02	1.6531e-05	1.3222e-05	0:00:05	63
1721	1.1011e-02	1.6022e-05	1.2872e-05	0:00:04	62
1722	1.0745e-02	1.5533e-05	1.2545e-05	0:00:03	61
1723	1.0501e-02	1.5057e-05	1.2225e-05	0:00:03	60
1724	1.0289e-02	1.4600e-05	1.1913e-05	0:00:02	59
1725	1.0064e-02	1.4164e-05	1.1610e-05	0:00:02	58
1726	9.8561e-03	1.3747e-05	1.1320e-05	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1727	9.6744e-03	1.3343e-05	1.1031e-05	0:00:01	56
1728	9.4728e-03	1.2953e-05	1.0761e-05	0:00:01	55
1729	9.2780e-03	1.2580e-05	1.0494e-05	0:00:01	54
1730	9.0043e-03	1.2220e-05	1.0233e-05	0:00:00	53
1731	8.7272e-03	1.1876e-05	9.9779e-06	0:00:00	52
1732	8.4627e-03	1.1539e-05	9.7294e-06	0:00:00	51
1733	8.2270e-03	1.1214e-05	9.4925e-06	0:00:10	50
1734	8.0152e-03	1.0910e-05	9.2567e-06	0:00:08	49
1735	7.7849e-03	1.0606e-05	9.0228e-06	0:00:06	48
1736	7.5302e-03	1.0315e-05	8.7990e-06	0:00:05	47
1737	7.2794e-03	1.0036e-05	8.5740e-06	0:00:04	46

iter	continuity	x-velocity	y-velocity	time/iter	
1738	7.0163e-03	9.7623e-06	8.3522e-06	0:00:03	45
1739	6.7928e-03	9.5059e-06	8.1385e-06	0:00:02	44
1740	6.5666e-03	9.2485e-06	7.9241e-06	0:00:02	43
1741	6.3401e-03	9.0033e-06	7.7113e-06	0:00:01	42
1742	6.1075e-03	8.7665e-06	7.5014e-06	0:00:01	41
1743	5.8944e-03	8.5339e-06	7.2971e-06	0:00:01	40
1744	5.6764e-03	8.3068e-06	7.0959e-06	0:00:01	39
1745	5.4805e-03	8.0914e-06	6.8965e-06	0:00:01	38
1746	5.2890e-03	7.8836e-06	6.7065e-06	0:00:00	37
1747	5.0936e-03	7.6768e-06	6.5095e-06	0:00:00	36
1748	4.9054e-03	7.4753e-06	6.3153e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
1749	4.7330e-03	7.2821e-06	6.1271e-06	0:00:00	34
1750	4.5477e-03	7.0928e-06	5.9405e-06	0:00:00	33
1751	4.3720e-03	6.9098e-06	5.7596e-06	0:00:07	32
1752	4.1962e-03	6.7274e-06	5.5809e-06	0:00:05	31
1753	4.0355e-03	6.5541e-06	5.4087e-06	0:00:04	30
1754	3.8755e-03	6.3796e-06	5.2345e-06	0:00:03	29
1755	3.7223e-03	6.2098e-06	5.0673e-06	0:00:02	28
1756	3.5793e-03	6.0409e-06	4.9003e-06	0:00:02	27
1757	3.4345e-03	5.8761e-06	4.7398e-06	0:00:01	26
1758	3.2921e-03	5.7136e-06	4.5828e-06	0:00:01	25
1759	3.1644e-03	5.5559e-06	4.4293e-06	0:00:01	24

iter	continuity	x-velocity	y-velocity	time/iter	
1760	3.0516e-03	5.3991e-06	4.2806e-06	0:00:01	23
1761	2.9224e-03	5.2458e-06	4.1365e-06	0:00:00	22
1762	2.7965e-03	5.0948e-06	3.9958e-06	0:00:00	21

1763	2.6773e-03	4.9434e-06	3.8586e-06	0:00:00	20
1764	2.5739e-03	4.7962e-06	3.7263e-06	0:00:00	19
1765	2.4809e-03	4.6548e-06	3.5999e-06	0:00:00	18
1766	2.4019e-03	4.5164e-06	3.4788e-06	0:00:00	17
1767	2.3210e-03	4.3767e-06	3.3626e-06	0:00:00	16
1768	2.2488e-03	4.2433e-06	3.2524e-06	0:00:03	15
1769	2.1803e-03	4.1131e-06	3.1462e-06	0:00:02	14
1770	2.1126e-03	3.9841e-06	3.0442e-06	0:00:02	13

iter	continuity	x-velocity	y-velocity	time/iter	
1771	2.0555e-03	3.8594e-06	2.9474e-06	0:00:01	12
1772	1.9938e-03	3.7381e-06	2.8535e-06	0:00:01	11
1773	1.9365e-03	3.6225e-06	2.7651e-06	0:00:01	10
1774	1.8827e-03	3.5090e-06	2.6786e-06	0:00:00	9
1775	1.8264e-03	3.3986e-06	2.5957e-06	0:00:00	8
1776	1.7771e-03	3.2926e-06	2.5167e-06	0:00:00	7
1777	1.7257e-03	3.1933e-06	2.4429e-06	0:00:00	6
1778	1.6784e-03	3.0936e-06	2.3709e-06	0:00:00	5
1779	1.6324e-03	2.9999e-06	2.3021e-06	0:00:01	4
1780	1.5937e-03	2.9103e-06	2.2370e-06	0:00:01	3
1781	1.5547e-03	2.8242e-06	2.1754e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1782	1.5166e-03	2.7410e-06	2.1165e-06	0:00:00	1
1783	1.5016e-03	2.6598e-06	2.0578e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 22.08468818664551s, time step = 22

24 more time steps

Updating solution at time level N...

done.

physical-dt 4.8064e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1783	1.5016e-03	2.6598e-06	2.0578e-06	0:00:09	100

1784	8.6983e-02	3.6291e-05	3.7436e-05	0:00:07	99
1785	1.0014e-01	3.5238e-05	2.6913e-05	0:00:06	98
1786	6.3558e-02	2.7660e-05	1.7586e-05	0:00:04	97
1787	3.9233e-02	2.2575e-05	1.5614e-05	0:00:04	96
1788	2.6986e-02	1.9595e-05	1.4439e-05	0:00:03	95
1789	2.1004e-02	1.7582e-05	1.3294e-05	0:00:02	94
1790	1.7289e-02	1.5951e-05	1.2202e-05	0:00:02	93
1791	1.4705e-02	1.4499e-05	1.1132e-05	0:00:01	92
1792	1.2497e-02	1.3238e-05	1.0215e-05	0:00:01	91
1793	1.0944e-02	1.2105e-05	9.3357e-06	0:00:19	90

iter	continuity	x-velocity	y-velocity	time/iter	
1794	9.7141e-03	1.1092e-05	8.5553e-06	0:00:15	89
1795	8.7055e-03	1.0173e-05	7.8570e-06	0:00:12	88
1796	7.9106e-03	9.3409e-06	7.2217e-06	0:00:09	87
1797	7.1993e-03	8.5820e-06	6.6370e-06	0:00:07	86
1798	6.6173e-03	7.8889e-06	6.1072e-06	0:00:06	85
1799	6.0795e-03	7.2562e-06	5.6212e-06	0:00:05	84
1800	5.5895e-03	6.6801e-06	5.1789e-06	0:00:04	83
1801	5.1438e-03	6.1534e-06	4.7785e-06	0:00:03	82
1802	4.7172e-03	5.6689e-06	4.4143e-06	0:00:02	81
1803	4.3449e-03	5.2261e-06	4.0798e-06	0:00:02	80
1804	4.0099e-03	4.8221e-06	3.7727e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1805	3.7000e-03	4.4487e-06	3.4881e-06	0:00:01	78
1806	3.4250e-03	4.1085e-06	3.2277e-06	0:00:01	77
1807	3.1612e-03	3.7946e-06	2.9867e-06	0:00:01	76
1808	2.9174e-03	3.5055e-06	2.7642e-06	0:00:01	75
1809	2.6885e-03	3.2403e-06	2.5587e-06	0:00:00	74
1810	2.4790e-03	2.9961e-06	2.3683e-06	0:00:15	73
1811	2.2797e-03	2.7724e-06	2.1925e-06	0:00:12	72
1812	2.1007e-03	2.5670e-06	2.0290e-06	0:00:09	71
1813	1.9335e-03	2.3775e-06	1.8780e-06	0:00:07	70
1814	1.7766e-03	2.2034e-06	1.7375e-06	0:00:06	69
1815	1.6355e-03	2.0421e-06	1.6045e-06	0:00:05	68

iter	continuity	x-velocity	y-velocity	time/iter	
1816	1.5071e-03	1.8962e-06	1.4883e-06	0:00:04	67
1817	1.3873e-03	1.7607e-06	1.3788e-06	0:00:03	66
1818	1.2815e-03	1.6361e-06	1.2770e-06	0:00:02	65
1819	1.1862e-03	1.5207e-06	1.1835e-06	0:00:02	64
1820	1.1032e-03	1.4139e-06	1.0970e-06	0:00:01	63
1821	1.0223e-03	1.3153e-06	1.0163e-06	0:00:01	62

```

1822 9.5370e-04 1.2232e-06 9.4209e-07 0:00:01 61
! 1822 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 22.56533241271973s, time step = 23
23 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 1.2731e+00

```

iter	continuity	x-velocity	y-velocity	time/iter	
1822	9.5370e-04	1.2232e-06	9.4209e-07	0:00:01	100
1823	2.7654e-01	1.1109e-04	1.1238e-04	0:00:01	99
1824	3.2380e-01	1.1517e-04	8.9649e-05	0:00:01	98
1825	2.0402e-01	9.3897e-05	6.4992e-05	0:00:20	97
1826	1.2913e-01	8.4151e-05	6.3221e-05	0:00:16	96
1827	9.7164e-02	7.9746e-05	6.2909e-05	0:00:13	95
1828	8.2314e-02	7.7006e-05	6.2221e-05	0:00:10	94
1829	7.2290e-02	7.4829e-05	6.1479e-05	0:00:08	93
1830	6.3988e-02	7.3039e-05	6.0664e-05	0:00:06	92
1831	5.8634e-02	7.1446e-05	5.9889e-05	0:00:05	91
1832	5.4357e-02	7.0067e-05	5.9104e-05	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
1833	5.1040e-02	6.8880e-05	5.8391e-05	0:00:03	89
1834	4.8542e-02	6.7718e-05	5.7610e-05	0:00:02	88
1835	4.6988e-02	6.6789e-05	5.6808e-05	0:00:02	87
1836	4.5109e-02	6.5890e-05	5.6011e-05	0:00:02	86
1837	4.3629e-02	6.5023e-05	5.5191e-05	0:00:01	85
1838	4.2226e-02	6.4093e-05	5.4368e-05	0:00:01	84
1839	4.1194e-02	6.3193e-05	5.3592e-05	0:00:01	83
1840	3.9658e-02	6.2305e-05	5.2932e-05	0:00:01	82
1841	3.9348e-02	6.1288e-05	5.2070e-05	0:00:17	81
1842	3.7959e-02	6.0422e-05	5.1494e-05	0:00:13	80
1843	3.8329e-02	5.9445e-05	5.0663e-05	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
1844	3.7235e-02	5.8520e-05	5.0045e-05	0:00:08	78
1845	3.7066e-02	5.7574e-05	4.9287e-05	0:00:06	77
1846	3.6946e-02	5.6639e-05	4.8552e-05	0:00:05	76
1847	3.6712e-02	5.5737e-05	4.7790e-05	0:00:04	75
1848	3.6573e-02	5.4861e-05	4.7027e-05	0:00:03	74
1849	3.6211e-02	5.3990e-05	4.6244e-05	0:00:03	73
1850	3.6448e-02	5.3085e-05	4.5392e-05	0:00:02	72
1851	3.5816e-02	5.2383e-05	4.4692e-05	0:00:02	71
1852	3.5836e-02	5.1575e-05	4.3770e-05	0:00:01	70
1853	3.4851e-02	5.0828e-05	4.3034e-05	0:00:01	69
1854	3.4944e-02	5.0039e-05	4.2102e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1855	3.4279e-02	4.9343e-05	4.1313e-05	0:00:01	67
1856	3.3050e-02	4.8651e-05	4.0552e-05	0:00:00	66
1857	3.2777e-02	4.7846e-05	3.9597e-05	0:00:00	65
1858	3.1884e-02	4.7110e-05	3.8816e-05	0:00:13	64
1859	3.1044e-02	4.6404e-05	3.7984e-05	0:00:10	63
1860	3.0096e-02	4.5666e-05	3.7164e-05	0:00:08	62
1861	2.9273e-02	4.4901e-05	3.6332e-05	0:00:06	61
1862	2.8238e-02	4.4179e-05	3.5525e-05	0:00:05	60
1863	2.7164e-02	4.3365e-05	3.4730e-05	0:00:04	59
1864	2.6110e-02	4.2645e-05	3.3959e-05	0:00:03	58
1865	2.5183e-02	4.1866e-05	3.3222e-05	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
1866	2.4136e-02	4.1075e-05	3.2507e-05	0:00:02	56
1867	2.3115e-02	4.0273e-05	3.1801e-05	0:00:02	55
1868	2.2192e-02	3.9481e-05	3.1134e-05	0:00:01	54
1869	2.1452e-02	3.8690e-05	3.0492e-05	0:00:01	53
1870	2.0632e-02	3.7896e-05	2.9867e-05	0:00:01	52
1871	1.9963e-02	3.7106e-05	2.9265e-05	0:00:01	51
1872	1.9091e-02	3.6311e-05	2.8661e-05	0:00:00	50
1873	1.8521e-02	3.5533e-05	2.8087e-05	0:00:00	49
1874	1.8040e-02	3.4799e-05	2.7532e-05	0:00:00	48
1875	1.7580e-02	3.4028e-05	2.6975e-05	0:00:10	47
1876	1.7051e-02	3.3275e-05	2.6413e-05	0:00:08	46

iter	continuity	x-velocity	y-velocity	time/iter	
1877	1.6676e-02	3.2555e-05	2.5870e-05	0:00:06	45
1878	1.6164e-02	3.1870e-05	2.5349e-05	0:00:05	44
1879	1.5812e-02	3.1192e-05	2.4822e-05	0:00:04	43

1880	1.5512e-02	3.0545e-05	2.4312e-05	0:00:03	42
1881	1.5268e-02	2.9930e-05	2.3822e-05	0:00:02	41
1882	1.4973e-02	2.9345e-05	2.3356e-05	0:00:02	40
1883	1.4631e-02	2.8791e-05	2.2914e-05	0:00:01	39
1884	1.4346e-02	2.8287e-05	2.2499e-05	0:00:01	38
1885	1.4012e-02	2.7792e-05	2.2093e-05	0:00:01	37
1886	1.3804e-02	2.7316e-05	2.1709e-05	0:00:01	36
1887	1.3606e-02	2.6857e-05	2.1358e-05	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
1888	1.3390e-02	2.6419e-05	2.1024e-05	0:00:00	34
1889	1.3195e-02	2.6000e-05	2.0713e-05	0:00:00	33
1890	1.3038e-02	2.5581e-05	2.0402e-05	0:00:07	32
1891	1.2870e-02	2.5173e-05	2.0122e-05	0:00:05	31
1892	1.2690e-02	2.4792e-05	1.9851e-05	0:00:04	30
1893	1.2556e-02	2.4400e-05	1.9573e-05	0:00:03	29
1894	1.2404e-02	2.4021e-05	1.9322e-05	0:00:02	28
1895	1.2051e-02	2.3662e-05	1.9097e-05	0:00:02	27
1896	1.2057e-02	2.3296e-05	1.8815e-05	0:00:01	26
1897	1.1849e-02	2.2928e-05	1.8587e-05	0:00:01	25
1898	1.1707e-02	2.2591e-05	1.8363e-05	0:00:01	24

iter	continuity	x-velocity	y-velocity	time/iter	
1899	1.1541e-02	2.2251e-05	1.8125e-05	0:00:01	23
1900	1.1246e-02	2.1933e-05	1.7917e-05	0:00:05	22
1901	1.1224e-02	2.1590e-05	1.7645e-05	0:00:04	21
1902	1.0946e-02	2.1279e-05	1.7440e-05	0:00:03	20
1903	1.0822e-02	2.0960e-05	1.7201e-05	0:00:02	19
1904	1.0694e-02	2.0653e-05	1.6972e-05	0:00:02	18
1905	1.0563e-02	2.0362e-05	1.6752e-05	0:00:01	17
1906	1.0400e-02	2.0050e-05	1.6519e-05	0:00:01	16
1907	1.0355e-02	1.9779e-05	1.6292e-05	0:00:01	15
1908	1.0209e-02	1.9478e-05	1.6063e-05	0:00:01	14
1909	1.0132e-02	1.9208e-05	1.5848e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1910	1.0008e-02	1.8936e-05	1.5621e-05	0:00:00	12
1911	9.9342e-03	1.8652e-05	1.5406e-05	0:00:00	11
1912	9.9766e-03	1.8375e-05	1.5164e-05	0:00:00	10
1913	9.7251e-03	1.8115e-05	1.4987e-05	0:00:00	9
1914	9.8449e-03	1.7842e-05	1.4733e-05	0:00:00	8
1915	9.5662e-03	1.7581e-05	1.4545e-05	0:00:00	7
1916	9.4413e-03	1.7308e-05	1.4323e-05	0:00:01	6
1917	9.4571e-03	1.7035e-05	1.4086e-05	0:00:01	5

1918	9.2920e-03	1.6774e-05	1.3887e-05	0:00:01	4
1919	9.0043e-03	1.6529e-05	1.3694e-05	0:00:00	3
1920	9.0211e-03	1.6254e-05	1.3445e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1921	8.8435e-03	1.5995e-05	1.3239e-05	0:00:00	1
1922	8.5389e-03	1.5750e-05	1.3043e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 23.83842086791992s, time step = 24

22 more time steps

Truncation Error (computed)=0.010825 > Truncation error tolerance

Repeating the time step: time step size = 0.636545

in update prediction domain id = 1
physical-dt 6.3654e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
1922	8.5389e-03	1.5750e-05	1.3043e-05	0:00:05	100
1923	3.8393e-01	1.2621e-04	7.6208e-05	0:00:04	99
1924	2.3690e-01	5.7954e-05	5.7655e-05	0:00:03	98
1925	1.2423e-01	4.5086e-05	4.2151e-05	0:00:03	97
1926	9.4582e-02	3.5809e-05	3.2179e-05	0:00:02	96
1927	7.2734e-02	3.1278e-05	2.7939e-05	0:00:02	95
1928	5.5948e-02	2.8271e-05	2.5235e-05	0:00:01	94
1929	4.2525e-02	2.6109e-05	2.3266e-05	0:00:01	93
1930	3.2714e-02	2.4316e-05	2.1614e-05	0:00:01	92
1931	2.5794e-02	2.2729e-05	2.0149e-05	0:00:19	91
1932	2.1239e-02	2.1198e-05	1.8764e-05	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
1933	1.7948e-02	1.9880e-05	1.7546e-05	0:00:12	89
1934	1.5572e-02	1.8674e-05	1.6451e-05	0:00:09	88
1935	1.3894e-02	1.7549e-05	1.5421e-05	0:00:07	87
1936	1.2529e-02	1.6523e-05	1.4469e-05	0:00:06	86
1937	1.1443e-02	1.5576e-05	1.3587e-05	0:00:05	85
1938	1.0562e-02	1.4696e-05	1.2778e-05	0:00:04	84
1939	9.7695e-03	1.3862e-05	1.2009e-05	0:00:03	83
1940	9.1473e-03	1.3101e-05	1.1311e-05	0:00:02	82
1941	8.5770e-03	1.2372e-05	1.0642e-05	0:00:02	81
1942	8.0794e-03	1.1690e-05	1.0026e-05	0:00:01	80
1943	7.6316e-03	1.1048e-05	9.4477e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1944	7.2062e-03	1.0443e-05	8.9074e-06	0:00:01	78
1945	6.8435e-03	9.8699e-06	8.3993e-06	0:00:01	77
1946	6.4724e-03	9.3298e-06	7.9194e-06	0:00:01	76
1947	6.1287e-03	8.8253e-06	7.4666e-06	0:00:15	75
1948	5.7731e-03	8.3497e-06	7.0409e-06	0:00:12	74
1949	5.4544e-03	7.9079e-06	6.6383e-06	0:00:10	73
1950	5.1620e-03	7.4909e-06	6.2578e-06	0:00:08	72
1951	4.8686e-03	7.0981e-06	5.8960e-06	0:00:06	71
1952	4.5872e-03	6.7305e-06	5.5562e-06	0:00:05	70
1953	4.3170e-03	6.3845e-06	5.2331e-06	0:00:04	69
1954	4.0449e-03	6.0590e-06	4.9273e-06	0:00:03	68

iter	continuity	x-velocity	y-velocity	time/iter	
1955	3.7911e-03	5.7539e-06	4.6397e-06	0:00:02	67
1956	3.5568e-03	5.4651e-06	4.3680e-06	0:00:02	66
1957	3.3446e-03	5.1884e-06	4.1102e-06	0:00:01	65
1958	3.1436e-03	4.9239e-06	3.8679e-06	0:00:01	64
1959	2.9564e-03	4.6709e-06	3.6409e-06	0:00:01	63
1960	2.7832e-03	4.4292e-06	3.4283e-06	0:00:01	62
1961	2.6229e-03	4.2001e-06	3.2289e-06	0:00:01	61
1962	2.4700e-03	3.9800e-06	3.0412e-06	0:00:00	60
1963	2.3264e-03	3.7703e-06	2.8630e-06	0:00:12	59
1964	2.1871e-03	3.5715e-06	2.6962e-06	0:00:10	58
1965	2.0533e-03	3.3819e-06	2.5392e-06	0:00:08	57

iter	continuity	x-velocity	y-velocity	time/iter	
1966	1.9298e-03	3.2018e-06	2.3915e-06	0:00:06	56
1967	1.8127e-03	3.0306e-06	2.2527e-06	0:00:05	55
1968	1.7041e-03	2.8651e-06	2.1193e-06	0:00:04	54
1969	1.6007e-03	2.7098e-06	2.0000e-06	0:00:03	53

	iter	continuity	x-velocity	y-velocity	time/iter	
1970	1.5006e-03	2.5615e-06	1.8875e-06	0:00:02	52	
1971	1.4129e-03	2.4201e-06	1.7810e-06	0:00:02	51	
1972	1.3318e-03	2.2849e-06	1.6808e-06	0:00:01	50	
1973	1.2572e-03	2.1565e-06	1.5858e-06	0:00:01	49	
1974	1.1881e-03	2.0342e-06	1.4964e-06	0:00:01	48	
1975	1.1237e-03	1.9182e-06	1.4119e-06	0:00:01	47	
1976	1.0641e-03	1.8093e-06	1.3333e-06	0:00:01	46	

	iter	continuity	x-velocity	y-velocity	time/iter	
1977	1.0096e-03	1.7046e-06	1.2584e-06	0:00:00	45	
1978	9.5960e-04	1.6061e-06	1.1884e-06	0:00:00	44	

! 1978 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 23.20187628269196s, time step = 24

21 more time steps

Updating solution at time level N...

done.

physical-dt 1.1298e+00

	iter	continuity	x-velocity	y-velocity	time/iter	
1978	9.5960e-04	1.6061e-06	1.1884e-06	0:00:01	100	
1979	1.6398e-01	7.5982e-05	7.3080e-05	0:00:01	99	
1980	1.8606e-01	8.0928e-05	6.4509e-05	0:00:00	98	
1981	1.2979e-01	7.2912e-05	6.0589e-05	0:00:00	97	
1982	8.7393e-02	6.7932e-05	6.1621e-05	0:00:00	96	
1983	6.6751e-02	6.5080e-05	6.0898e-05	0:00:00	95	
1984	5.6414e-02	6.2724e-05	5.9438e-05	0:00:00	94	
1985	4.9932e-02	6.0801e-05	5.7726e-05	0:00:00	93	
1986	4.5082e-02	5.9089e-05	5.6012e-05	0:00:00	92	
1987	4.1431e-02	5.7552e-05	5.4373e-05	0:00:00	91	
1988	3.8687e-02	5.6138e-05	5.2788e-05	0:00:00	90	

	iter	continuity	x-velocity	y-velocity	time/iter	
1989	3.6351e-02	5.4759e-05	5.1266e-05	0:00:00	89	

1990	3.4822e-02	5.3561e-05	4.9838e-05	0:00:00	88
1991	3.3326e-02	5.2428e-05	4.8460e-05	0:00:00	87
1992	3.2080e-02	5.1265e-05	4.7065e-05	0:00:00	86
1993	3.0756e-02	5.0260e-05	4.5854e-05	0:00:00	85
1994	3.0110e-02	4.9165e-05	4.4489e-05	0:00:17	84
1995	2.9207e-02	4.8129e-05	4.3323e-05	0:00:13	83
1996	2.8141e-02	4.7206e-05	4.2233e-05	0:00:11	82
1997	2.7837e-02	4.6171e-05	4.1028e-05	0:00:08	81
1998	2.6990e-02	4.5254e-05	4.0036e-05	0:00:07	80
1999	2.6467e-02	4.4289e-05	3.8965e-05	0:00:05	79

iter	continuity	x-velocity	y-velocity	time/iter	
2000	2.5828e-02	4.3343e-05	3.7952e-05	0:00:04	78
2001	2.5286e-02	4.2456e-05	3.6959e-05	0:00:03	77
2002	2.4742e-02	4.1571e-05	3.6001e-05	0:00:03	76
2003	2.4292e-02	4.0739e-05	3.5066e-05	0:00:02	75
2004	2.4032e-02	3.9884e-05	3.4085e-05	0:00:02	74
2005	2.3195e-02	3.9128e-05	3.3274e-05	0:00:01	73
2006	2.2736e-02	3.8355e-05	3.2352e-05	0:00:15	72
2007	2.2227e-02	3.7585e-05	3.1488e-05	0:00:12	71
2008	2.1977e-02	3.6810e-05	3.0589e-05	0:00:10	70
2009	2.1110e-02	3.6140e-05	2.9813e-05	0:00:08	69
2010	2.0778e-02	3.5352e-05	2.8919e-05	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
2011	2.0120e-02	3.4618e-05	2.8127e-05	0:00:05	67
2012	1.9535e-02	3.3908e-05	2.7342e-05	0:00:04	66
2013	1.8915e-02	3.3168e-05	2.6566e-05	0:00:03	65
2014	1.8308e-02	3.2463e-05	2.5822e-05	0:00:02	64
2015	1.7689e-02	3.1739e-05	2.5101e-05	0:00:02	63
2016	1.7134e-02	3.0992e-05	2.4394e-05	0:00:01	62
2017	1.6560e-02	3.0290e-05	2.3738e-05	0:00:01	61
2018	1.6071e-02	2.9594e-05	2.3118e-05	0:00:01	60
2019	1.5549e-02	2.8883e-05	2.2521e-05	0:00:01	59
2020	1.5053e-02	2.8183e-05	2.1935e-05	0:00:01	58
2021	1.4535e-02	2.7482e-05	2.1379e-05	0:00:12	57

iter	continuity	x-velocity	y-velocity	time/iter	
2022	1.4141e-02	2.6805e-05	2.0854e-05	0:00:09	56
2023	1.3786e-02	2.6122e-05	2.0340e-05	0:00:07	55
2024	1.3347e-02	2.5457e-05	1.9833e-05	0:00:06	54
2025	1.2961e-02	2.4810e-05	1.9366e-05	0:00:05	53
2026	1.2648e-02	2.4172e-05	1.8909e-05	0:00:04	52
2027	1.2396e-02	2.3539e-05	1.8456e-05	0:00:03	51

2028	1.2020e-02	2.2906e-05	1.8009e-05	0:00:02	50
2029	1.1712e-02	2.2310e-05	1.7581e-05	0:00:02	49
2030	1.1335e-02	2.1743e-05	1.7167e-05	0:00:01	48
2031	1.1057e-02	2.1168e-05	1.6752e-05	0:00:01	47
2032	1.0783e-02	2.0627e-05	1.6345e-05	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
2033	1.0503e-02	2.0114e-05	1.5953e-05	0:00:01	45
2034	1.0216e-02	1.9621e-05	1.5559e-05	0:00:01	44
2035	9.9671e-03	1.9158e-05	1.5185e-05	0:00:00	43
2036	9.7113e-03	1.8706e-05	1.4827e-05	0:00:00	42
2037	9.4374e-03	1.8281e-05	1.4489e-05	0:00:00	41
2038	9.2047e-03	1.7874e-05	1.4169e-05	0:00:08	40
2039	8.9820e-03	1.7480e-05	1.3868e-05	0:00:06	39
2040	8.7936e-03	1.7103e-05	1.3566e-05	0:00:05	38
2041	8.5682e-03	1.6737e-05	1.3278e-05	0:00:04	37
2042	8.3446e-03	1.6380e-05	1.3006e-05	0:00:03	36
2043	8.1114e-03	1.6035e-05	1.2738e-05	0:00:02	35

iter	continuity	x-velocity	y-velocity	time/iter	
2044	7.9657e-03	1.5696e-05	1.2475e-05	0:00:02	34
2045	7.7577e-03	1.5366e-05	1.2227e-05	0:00:01	33
2046	7.5717e-03	1.5046e-05	1.1987e-05	0:00:01	32
2047	7.4162e-03	1.4735e-05	1.1751e-05	0:00:01	31
2048	7.2519e-03	1.4423e-05	1.1523e-05	0:00:01	30
2049	7.1150e-03	1.4120e-05	1.1302e-05	0:00:01	29
2050	6.9824e-03	1.3833e-05	1.1089e-05	0:00:00	28
2051	6.8228e-03	1.3550e-05	1.0882e-05	0:00:00	27
2052	6.6912e-03	1.3272e-05	1.0679e-05	0:00:00	26
2053	6.5684e-03	1.3003e-05	1.0484e-05	0:00:00	25
2054	6.4285e-03	1.2731e-05	1.0289e-05	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2055	6.3242e-03	1.2478e-05	1.0099e-05	0:00:00	23
2056	6.2181e-03	1.2228e-05	9.9129e-06	0:00:00	22
2057	6.0943e-03	1.1979e-05	9.7306e-06	0:00:04	21
2058	6.0118e-03	1.1751e-05	9.5540e-06	0:00:03	20
2059	5.8932e-03	1.1522e-05	9.3782e-06	0:00:02	19
2060	5.7841e-03	1.1294e-05	9.2041e-06	0:00:02	18
2061	5.6739e-03	1.1072e-05	9.0321e-06	0:00:01	17
2062	5.5742e-03	1.0865e-05	8.8632e-06	0:00:01	16
2063	5.4734e-03	1.0662e-05	8.6970e-06	0:00:01	15
2064	5.3576e-03	1.0454e-05	8.5333e-06	0:00:01	14
2065	5.2630e-03	1.0260e-05	8.3713e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
2066	5.1595e-03	1.0062e-05	8.2126e-06	0:00:00	12
2067	5.0677e-03	9.8741e-06	8.0529e-06	0:00:00	11
2068	4.9619e-03	9.6872e-06	7.8981e-06	0:00:00	10
2069	4.8819e-03	9.4933e-06	7.7436e-06	0:00:00	9
2070	4.8222e-03	9.3102e-06	7.5950e-06	0:00:00	8
2071	4.7233e-03	9.1293e-06	7.4465e-06	0:00:00	7
2072	4.6224e-03	8.9471e-06	7.3028e-06	0:00:00	6
2073	4.5293e-03	8.7721e-06	7.1617e-06	0:00:00	5
2074	4.3976e-03	8.6035e-06	7.0316e-06	0:00:00	4
2075	4.3784e-03	8.4192e-06	6.8785e-06	0:00:00	3
2076	4.2909e-03	8.2517e-06	6.7490e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2077	4.2047e-03	8.0814e-06	6.6139e-06	0:00:00	1
2078	4.1240e-03	7.9163e-06	6.4799e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 24.33166885375977s, time step = 25

20 more time steps

Updating solution at time level N...

done.

physical-dt 5.6490e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2078	4.1240e-03	7.9163e-06	6.4799e-06	0:00:13	100
2079	1.3197e-01	6.0461e-05	5.6411e-05	0:00:10	99
2080	1.4020e-01	4.9344e-05	3.9561e-05	0:00:08	98
2081	8.9228e-02	3.9337e-05	2.7000e-05	0:00:06	97
2082	5.9993e-02	3.3422e-05	2.4533e-05	0:00:05	96
2083	4.4633e-02	2.9638e-05	2.2680e-05	0:00:04	95
2084	3.5719e-02	2.6730e-05	2.0769e-05	0:00:03	94
2085	2.9646e-02	2.4308e-05	1.8935e-05	0:00:03	93
2086	2.4710e-02	2.2218e-05	1.7327e-05	0:00:02	92

2087	2.0912e-02	2.0361e-05	1.5898e-05	0:00:02	91
2088	1.7550e-02	1.8723e-05	1.4625e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
2089	1.5110e-02	1.7256e-05	1.3462e-05	0:00:01	89
2090	1.3086e-02	1.5907e-05	1.2388e-05	0:00:01	88
2091	1.1606e-02	1.4677e-05	1.1380e-05	0:00:18	87
2092	1.0092e-02	1.3573e-05	1.0500e-05	0:00:14	86
2093	8.9321e-03	1.2564e-05	9.6769e-06	0:00:11	85
2094	7.9735e-03	1.1643e-05	8.9280e-06	0:00:09	84
2095	7.1535e-03	1.0791e-05	8.2314e-06	0:00:07	83
2096	6.4429e-03	1.0005e-05	7.5879e-06	0:00:06	82
2097	5.8419e-03	9.2842e-06	7.0005e-06	0:00:04	81
2098	5.3539e-03	8.6154e-06	6.4569e-06	0:00:03	80
2099	4.9242e-03	7.9935e-06	5.9545e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
2100	4.5414e-03	7.4188e-06	5.4909e-06	0:00:02	78
2101	4.1731e-03	6.8884e-06	5.0672e-06	0:00:02	77
2102	3.8616e-03	6.3946e-06	4.6764e-06	0:00:01	76
2103	3.5928e-03	5.9394e-06	4.3198e-06	0:00:01	75
2104	3.3429e-03	5.5181e-06	3.9939e-06	0:00:01	74
2105	3.1190e-03	5.1258e-06	3.6966e-06	0:00:01	73
2106	2.9169e-03	4.7633e-06	3.4262e-06	0:00:01	72
2107	2.7444e-03	4.4282e-06	3.1790e-06	0:00:00	71
2108	2.5738e-03	4.1182e-06	2.9533e-06	0:00:14	70
2109	2.4254e-03	3.8308e-06	2.7441e-06	0:00:11	69
2110	2.2847e-03	3.5649e-06	2.5535e-06	0:00:09	68

iter	continuity	x-velocity	y-velocity	time/iter	
2111	2.1619e-03	3.3182e-06	2.3745e-06	0:00:07	67
2112	2.0320e-03	3.0943e-06	2.2159e-06	0:00:06	66
2113	1.9213e-03	2.8841e-06	2.0675e-06	0:00:04	65
2114	1.8127e-03	2.6897e-06	1.9305e-06	0:00:03	64
2115	1.7148e-03	2.5089e-06	1.8032e-06	0:00:03	63
2116	1.6178e-03	2.3414e-06	1.6863e-06	0:00:02	62
2117	1.5278e-03	2.1855e-06	1.5778e-06	0:00:02	61
2118	1.4470e-03	2.0407e-06	1.4775e-06	0:00:01	60
2119	1.3690e-03	1.9066e-06	1.3846e-06	0:00:01	59
2120	1.2963e-03	1.7822e-06	1.2986e-06	0:00:01	58
2121	1.2302e-03	1.6665e-06	1.2184e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
2122	1.1645e-03	1.5573e-06	1.1434e-06	0:00:01	56

```

2123 1.1054e-03 1.4573e-06 1.0731e-06 0:00:00 55
2124 1.0418e-03 1.3634e-06 1.0077e-06 0:00:00 54
2125 9.8868e-04 1.2767e-06 9.4678e-07 0:00:00 53
! 2125 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 24.89656639099121s, time step = 26
19 more time steps

Updating solution at time level N...
done.
physical-dt 1.2140e+00

```

iter	continuity	x-velocity	y-velocity	time/iter
2125	9.8868e-04	1.2767e-06	9.4678e-07	0:00:00 100
2126	3.4336e-01	1.3840e-04	1.3661e-04	0:00:00 99
2127	3.4935e-01	1.2913e-04	1.0175e-04	0:00:00 98
2128	2.1788e-01	1.1134e-04	7.6569e-05	0:00:00 97
2129	1.4828e-01	1.0164e-04	7.2867e-05	0:00:00 96
2130	1.1288e-01	9.6071e-05	7.0465e-05	0:00:00 95
2131	9.3820e-02	9.1880e-05	6.7779e-05	0:00:00 94
2132	7.7179e-02	8.8436e-05	6.5825e-05	0:00:00 93
2133	6.7622e-02	8.5230e-05	6.3641e-05	0:00:00 92
2134	5.8926e-02	8.2446e-05	6.1885e-05	0:00:18 91
2135	5.2803e-02	7.9757e-05	5.9988e-05	0:00:14 90

iter	continuity	x-velocity	y-velocity	time/iter
2136	4.8491e-02	7.7194e-05	5.8186e-05	0:00:11 89
2137	4.5270e-02	7.4766e-05	5.6399e-05	0:00:09 88
2138	4.2402e-02	7.2514e-05	5.4733e-05	0:00:07 87
2139	4.0207e-02	7.0391e-05	5.3149e-05	0:00:06 86
2140	3.8336e-02	6.8340e-05	5.1516e-05	0:00:04 85
2141	3.6834e-02	6.6394e-05	4.9976e-05	0:00:04 84
2142	3.5528e-02	6.4522e-05	4.8535e-05	0:00:03 83
2143	3.4280e-02	6.2724e-05	4.7171e-05	0:00:02 82
2144	3.3177e-02	6.1013e-05	4.5929e-05	0:00:02 81

2145	3.2082e-02	5.9330e-05	4.4730e-05	0:00:01	80
2146	3.1267e-02	5.7654e-05	4.3598e-05	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
2147	3.0525e-02	5.6043e-05	4.2550e-05	0:00:01	78
2148	2.9843e-02	5.4467e-05	4.1546e-05	0:00:01	77
2149	2.9213e-02	5.3033e-05	4.0605e-05	0:00:01	76
2150	2.8484e-02	5.1579e-05	3.9672e-05	0:00:00	75
2151	2.7932e-02	5.0193e-05	3.8782e-05	0:00:00	74
2152	2.7436e-02	4.8803e-05	3.7907e-05	0:00:00	73
2153	2.7032e-02	4.7520e-05	3.7029e-05	0:00:15	72
2154	2.6597e-02	4.6257e-05	3.6213e-05	0:00:12	71
2155	2.6225e-02	4.5005e-05	3.5413e-05	0:00:09	70
2156	2.5984e-02	4.3809e-05	3.4625e-05	0:00:07	69
2157	2.5872e-02	4.2658e-05	3.3881e-05	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
2158	2.5621e-02	4.1552e-05	3.3153e-05	0:00:04	67
2159	2.5490e-02	4.0470e-05	3.2453e-05	0:00:04	66
2160	2.5352e-02	3.9451e-05	3.1780e-05	0:00:03	65
2161	2.5101e-02	3.8485e-05	3.1131e-05	0:00:02	64
2162	2.4960e-02	3.7537e-05	3.0494e-05	0:00:02	63
2163	2.4619e-02	3.6649e-05	2.9876e-05	0:00:01	62
2164	2.4359e-02	3.5753e-05	2.9269e-05	0:00:01	61
2165	2.4033e-02	3.4943e-05	2.8683e-05	0:00:01	60
2166	2.3705e-02	3.4117e-05	2.8084e-05	0:00:01	59
2167	2.3268e-02	3.3358e-05	2.7533e-05	0:00:01	58
2168	2.2792e-02	3.2561e-05	2.6954e-05	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
2169	2.2368e-02	3.1834e-05	2.6404e-05	0:00:00	56
2170	2.1862e-02	3.1111e-05	2.5844e-05	0:00:00	55
2171	2.1395e-02	3.0432e-05	2.5313e-05	0:00:11	54
2172	2.0907e-02	2.9792e-05	2.4794e-05	0:00:09	53
2173	2.0350e-02	2.9166e-05	2.4259e-05	0:00:07	52
2174	1.9834e-02	2.8550e-05	2.3748e-05	0:00:05	51
2175	1.9307e-02	2.8003e-05	2.3260e-05	0:00:04	50
2176	1.8786e-02	2.7453e-05	2.2777e-05	0:00:03	49
2177	1.8243e-02	2.6921e-05	2.2312e-05	0:00:03	48
2178	1.7743e-02	2.6412e-05	2.1864e-05	0:00:02	47
2179	1.7263e-02	2.5928e-05	2.1410e-05	0:00:02	46

iter	continuity	x-velocity	y-velocity	time/iter	
2180	1.6783e-02	2.5441e-05	2.0965e-05	0:00:01	45

2181	1.6335e-02	2.4973e-05	2.0528e-05	0:00:01	44
2182	1.5869e-02	2.4535e-05	2.0093e-05	0:00:01	43
2183	1.5391e-02	2.4091e-05	1.9665e-05	0:00:01	42
2184	1.4909e-02	2.3663e-05	1.9223e-05	0:00:00	41
2185	1.4488e-02	2.3240e-05	1.8790e-05	0:00:00	40
2186	1.4015e-02	2.2818e-05	1.8368e-05	0:00:00	39
2187	1.3432e-02	2.2434e-05	1.7977e-05	0:00:00	38
2188	1.3165e-02	2.2004e-05	1.7505e-05	0:00:00	37
2189	1.2758e-02	2.1615e-05	1.7103e-05	0:00:07	36
2190	1.2344e-02	2.1224e-05	1.6701e-05	0:00:06	35

iter	continuity	x-velocity	y-velocity	time/iter	
2191	1.1921e-02	2.0834e-05	1.6301e-05	0:00:04	34
2192	1.1538e-02	2.0446e-05	1.5891e-05	0:00:03	33
2193	1.1178e-02	2.0065e-05	1.5498e-05	0:00:03	32
2194	1.0791e-02	1.9682e-05	1.5117e-05	0:00:02	31
2195	1.0424e-02	1.9293e-05	1.4724e-05	0:00:02	30
2196	1.0068e-02	1.8918e-05	1.4356e-05	0:00:01	29
2197	9.6968e-03	1.8523e-05	1.3979e-05	0:00:01	28
2198	9.3238e-03	1.8138e-05	1.3616e-05	0:00:01	27
2199	8.9664e-03	1.7755e-05	1.3256e-05	0:00:01	26
2200	8.6186e-03	1.7378e-05	1.2919e-05	0:00:00	25
2201	8.3302e-03	1.7002e-05	1.2594e-05	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2202	8.0040e-03	1.6622e-05	1.2273e-05	0:00:00	23
2203	7.7292e-03	1.6245e-05	1.1963e-05	0:00:00	22
2204	7.4473e-03	1.5868e-05	1.1668e-05	0:00:00	21
2205	7.2344e-03	1.5506e-05	1.1393e-05	0:00:00	20
2206	6.9844e-03	1.5127e-05	1.1119e-05	0:00:00	19
2207	6.7770e-03	1.4771e-05	1.0865e-05	0:00:04	18
2208	6.5930e-03	1.4414e-05	1.0619e-05	0:00:03	17
2209	6.4163e-03	1.4059e-05	1.0380e-05	0:00:02	16
2210	6.2822e-03	1.3710e-05	1.0148e-05	0:00:02	15
2211	6.1202e-03	1.3369e-05	9.9258e-06	0:00:01	14
2212	6.0206e-03	1.3038e-05	9.7161e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2213	5.8930e-03	1.2723e-05	9.5204e-06	0:00:01	12
2214	5.7774e-03	1.2415e-05	9.3294e-06	0:00:00	11
2215	5.6916e-03	1.2104e-05	9.1362e-06	0:00:00	10
2216	5.6077e-03	1.1809e-05	8.9563e-06	0:00:00	9
2217	5.5072e-03	1.1532e-05	8.7869e-06	0:00:00	8
2218	5.4534e-03	1.1263e-05	8.6249e-06	0:00:00	7

2219	5.3856e-03	1.1004e-05	8.4644e-06	0:00:00	6
2220	5.3304e-03	1.0750e-05	8.3051e-06	0:00:00	5
2221	5.2769e-03	1.0512e-05	8.1570e-06	0:00:00	4
2222	5.2201e-03	1.0285e-05	8.0162e-06	0:00:00	3
2223	5.1717e-03	1.0065e-05	7.8832e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2224	5.1228e-03	9.8534e-06	7.7564e-06	0:00:00	1
2225	5.1234e-03	9.6473e-06	7.6314e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 26.11054229736328s, time step = 27

18 more time steps

Truncation Error (computed)=0.011127 > Truncation error tolerance

Repeating the time step: time step size = 0.606988

in update prediction domain id = 1
physical-dt 6.0699e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
2225	5.1234e-03	9.6473e-06	7.6314e-06	0:00:13	100
2226	4.0256e-01	1.5205e-04	8.4020e-05	0:00:10	99
2227	2.2462e-01	6.4467e-05	6.1075e-05	0:00:08	98
2228	1.1931e-01	4.6398e-05	4.2583e-05	0:00:07	97
2229	8.9392e-02	3.7712e-05	3.4002e-05	0:00:05	96
2230	6.7347e-02	3.3146e-05	2.9715e-05	0:00:04	95
2231	5.1931e-02	3.0005e-05	2.6723e-05	0:00:03	94
2232	4.0278e-02	2.7592e-05	2.4303e-05	0:00:03	93
2233	3.2022e-02	2.5596e-05	2.2231e-05	0:00:02	92
2234	2.5915e-02	2.3802e-05	2.0395e-05	0:00:02	91

2235	2.1389e-02	2.2146e-05	1.8750e-05	0:00:01	90
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iter	continuity	x-velocity	y-velocity	time/iter	
2236	1.7606e-02	2.0599e-05	1.7272e-05	0:00:01	89
2237	1.5415e-02	1.9182e-05	1.5903e-05	0:00:01	88
2238	1.3168e-02	1.7855e-05	1.4667e-05	0:00:18	87
2239	1.1776e-02	1.6644e-05	1.3518e-05	0:00:14	86
2240	1.0291e-02	1.5523e-05	1.2471e-05	0:00:11	85
2241	9.1251e-03	1.4487e-05	1.1513e-05	0:00:09	84
2242	8.2007e-03	1.3512e-05	1.0628e-05	0:00:07	83
2243	7.4392e-03	1.2600e-05	9.8069e-06	0:00:06	82
2244	6.8012e-03	1.1759e-05	9.0606e-06	0:00:04	81
2245	6.2799e-03	1.0969e-05	8.3723e-06	0:00:03	80
2246	5.8043e-03	1.0246e-05	7.7463e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
2247	5.3840e-03	9.5774e-06	7.1777e-06	0:00:02	78
2248	5.0513e-03	8.9521e-06	6.6562e-06	0:00:02	77
2249	4.7527e-03	8.3684e-06	6.1807e-06	0:00:01	76
2250	4.4780e-03	7.8261e-06	5.7492e-06	0:00:01	75
2251	4.2275e-03	7.3197e-06	5.3548e-06	0:00:01	74
2252	4.0015e-03	6.8467e-06	4.9905e-06	0:00:01	73
2253	3.7929e-03	6.4056e-06	4.6577e-06	0:00:01	72
2254	3.6111e-03	5.9921e-06	4.3496e-06	0:00:00	71
2255	3.4238e-03	5.6074e-06	4.0699e-06	0:00:00	70
2256	3.2576e-03	5.2468e-06	3.8111e-06	0:00:14	69
2257	3.0994e-03	4.9129e-06	3.5746e-06	0:00:11	68

iter	continuity	x-velocity	y-velocity	time/iter	
2258	2.9475e-03	4.5999e-06	3.3556e-06	0:00:09	67
2259	2.8020e-03	4.3099e-06	3.1531e-06	0:00:07	66
2260	2.6692e-03	4.0406e-06	2.9660e-06	0:00:05	65
2261	2.5455e-03	3.7885e-06	2.7926e-06	0:00:04	64
2262	2.4259e-03	3.5549e-06	2.6326e-06	0:00:03	63
2263	2.3111e-03	3.3384e-06	2.4836e-06	0:00:03	62
2264	2.1974e-03	3.1350e-06	2.3448e-06	0:00:02	61
2265	2.0877e-03	2.9456e-06	2.2149e-06	0:00:02	60
2266	1.9833e-03	2.7684e-06	2.0931e-06	0:00:01	59
2267	1.8864e-03	2.6038e-06	1.9786e-06	0:00:13	58
2268	1.7949e-03	2.4507e-06	1.8712e-06	0:00:10	57

iter	continuity	x-velocity	y-velocity	time/iter	
2269	1.7008e-03	2.3079e-06	1.7691e-06	0:00:08	56
2270	1.6059e-03	2.1752e-06	1.6720e-06	0:00:06	55

2271	1.5320e-03	2.0504e-06	1.5786e-06	0:00:05	54
2272	1.4544e-03	1.9369e-06	1.4943e-06	0:00:04	53
2273	1.3752e-03	1.8313e-06	1.4133e-06	0:00:03	52
2274	1.3004e-03	1.7312e-06	1.3358e-06	0:00:02	51
2275	1.2289e-03	1.6372e-06	1.2620e-06	0:00:02	50
2276	1.1585e-03	1.5488e-06	1.1914e-06	0:00:01	49
2277	1.0954e-03	1.4653e-06	1.1248e-06	0:00:01	48
2278	1.0317e-03	1.3865e-06	1.0607e-06	0:00:01	47
2279	9.7568e-04	1.3121e-06	1.0008e-06	0:00:01	46

! 2279 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 25.50355392694473s, time step = 27

17 more time steps

Updating solution at time level N...

done.

physical-dt 1.0934e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2279	9.7568e-04	1.3121e-06	1.0008e-06	0:00:01	100
2280	2.0598e-01	8.7885e-05	8.6316e-05	0:00:01	99
2281	2.0204e-01	9.4178e-05	7.5365e-05	0:00:01	98
2282	1.3906e-01	8.8885e-05	7.0184e-05	0:00:20	97
2283	9.9869e-02	8.5077e-05	6.8413e-05	0:00:16	96
2284	7.7405e-02	8.2155e-05	6.6601e-05	0:00:13	95
2285	6.4461e-02	7.9443e-05	6.4185e-05	0:00:10	94
2286	5.5888e-02	7.6894e-05	6.1804e-05	0:00:08	93
2287	4.9990e-02	7.4447e-05	5.9493e-05	0:00:06	92
2288	4.5341e-02	7.2110e-05	5.7315e-05	0:00:05	91
2289	4.1508e-02	6.9812e-05	5.5262e-05	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
2290	3.8497e-02	6.7591e-05	5.3309e-05	0:00:03	89
2291	3.6045e-02	6.5400e-05	5.1410e-05	0:00:02	88
2292	3.4146e-02	6.3319e-05	4.9619e-05	0:00:02	87

2293	3.2321e-02	6.1268e-05	4.7873e-05	0:00:02	86
2294	3.0941e-02	5.9290e-05	4.6197e-05	0:00:01	85
2295	2.9679e-02	5.7329e-05	4.4560e-05	0:00:01	84
2296	2.8442e-02	5.5527e-05	4.3035e-05	0:00:01	83
2297	2.7373e-02	5.3748e-05	4.1527e-05	0:00:01	82
2298	2.6418e-02	5.2039e-05	4.0083e-05	0:00:00	81
2299	2.5728e-02	5.0406e-05	3.8688e-05	0:00:16	80
2300	2.4898e-02	4.8856e-05	3.7396e-05	0:00:13	79

iter	continuity	x-velocity	y-velocity	time/iter	
2301	2.4305e-02	4.7354e-05	3.6138e-05	0:00:10	78
2302	2.3629e-02	4.5907e-05	3.4969e-05	0:00:08	77
2303	2.3193e-02	4.4514e-05	3.3854e-05	0:00:06	76
2304	2.2766e-02	4.3158e-05	3.2798e-05	0:00:05	75
2305	2.2427e-02	4.1877e-05	3.1800e-05	0:00:04	74
2306	2.1894e-02	4.0602e-05	3.0865e-05	0:00:03	73
2307	2.1565e-02	3.9406e-05	2.9961e-05	0:00:02	72
2308	2.1157e-02	3.8225e-05	2.9141e-05	0:00:02	71
2309	2.0732e-02	3.7093e-05	2.8360e-05	0:00:02	70
2310	2.0544e-02	3.5982e-05	2.7643e-05	0:00:01	69
2311	2.0213e-02	3.4892e-05	2.6941e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2312	2.0080e-02	3.3862e-05	2.6284e-05	0:00:01	67
2313	1.9822e-02	3.2861e-05	2.5669e-05	0:00:01	66
2314	1.9484e-02	3.1885e-05	2.5076e-05	0:00:00	65
2315	1.9186e-02	3.0976e-05	2.4490e-05	0:00:00	64
2316	1.8883e-02	3.0084e-05	2.3922e-05	0:00:00	63
2317	1.8561e-02	2.9232e-05	2.3387e-05	0:00:13	62
2318	1.8138e-02	2.8409e-05	2.2841e-05	0:00:10	61
2319	1.7795e-02	2.7620e-05	2.2302e-05	0:00:08	60
2320	1.7422e-02	2.6850e-05	2.1781e-05	0:00:06	59
2321	1.7068e-02	2.6083e-05	2.1262e-05	0:00:05	58
2322	1.6516e-02	2.5414e-05	2.0803e-05	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter	
2323	1.6360e-02	2.4701e-05	2.0248e-05	0:00:03	56
2324	1.5816e-02	2.4036e-05	1.9802e-05	0:00:02	55
2325	1.5648e-02	2.3387e-05	1.9286e-05	0:00:02	54
2326	1.5092e-02	2.2794e-05	1.8860e-05	0:00:01	53
2327	1.4830e-02	2.2180e-05	1.8355e-05	0:00:01	52
2328	1.4400e-02	2.1606e-05	1.7908e-05	0:00:01	51
2329	1.3972e-02	2.1043e-05	1.7466e-05	0:00:01	50
2330	1.3537e-02	2.0527e-05	1.7024e-05	0:00:01	49

2331	1.3067e-02	1.9985e-05	1.6595e-05	0:00:00	48
2332	1.2713e-02	1.9510e-05	1.6176e-05	0:00:00	47
2333	1.2150e-02	1.9056e-05	1.5771e-05	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
2334	1.1926e-02	1.8556e-05	1.5324e-05	0:00:00	45
2335	1.1565e-02	1.8124e-05	1.4941e-05	0:00:09	44
2336	1.1193e-02	1.7692e-05	1.4548e-05	0:00:07	43
2337	1.0848e-02	1.7275e-05	1.4159e-05	0:00:05	42
2338	1.0350e-02	1.6886e-05	1.3800e-05	0:00:04	41
2339	1.0112e-02	1.6463e-05	1.3382e-05	0:00:03	40
2340	9.7856e-03	1.6093e-05	1.3028e-05	0:00:03	39
2341	9.3068e-03	1.5738e-05	1.2687e-05	0:00:02	38
2342	9.0556e-03	1.5349e-05	1.2298e-05	0:00:02	37
2343	8.7192e-03	1.4996e-05	1.1953e-05	0:00:01	36
2344	8.3943e-03	1.4659e-05	1.1612e-05	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
2345	8.0860e-03	1.4324e-05	1.1276e-05	0:00:01	34
2346	7.7809e-03	1.3985e-05	1.0941e-05	0:00:01	33
2347	7.5202e-03	1.3663e-05	1.0615e-05	0:00:00	32
2348	7.2593e-03	1.3341e-05	1.0300e-05	0:00:00	31
2349	7.0028e-03	1.3027e-05	9.9908e-06	0:00:00	30
2350	6.7600e-03	1.2713e-05	9.6866e-06	0:00:00	29
2351	6.5267e-03	1.2405e-05	9.3889e-06	0:00:00	28
2352	6.2562e-03	1.2102e-05	9.1057e-06	0:00:00	27
2353	6.0382e-03	1.1806e-05	8.8249e-06	0:00:05	26
2354	5.8217e-03	1.1511e-05	8.5556e-06	0:00:04	25
2355	5.6333e-03	1.1225e-05	8.2979e-06	0:00:03	24

iter	continuity	x-velocity	y-velocity	time/iter	
2356	5.4270e-03	1.0937e-05	8.0438e-06	0:00:02	23
2357	5.2446e-03	1.0654e-05	7.8055e-06	0:00:02	22
2358	5.0642e-03	1.0376e-05	7.5786e-06	0:00:01	21
2359	4.8917e-03	1.0106e-05	7.3623e-06	0:00:01	20
2360	4.7415e-03	9.8337e-06	7.1564e-06	0:00:01	19
2361	4.5696e-03	9.5703e-06	6.9617e-06	0:00:01	18
2362	4.4393e-03	9.3054e-06	6.7704e-06	0:00:00	17
2363	4.3082e-03	9.0477e-06	6.5908e-06	0:00:00	16
2364	4.1781e-03	8.7957e-06	6.4163e-06	0:00:00	15
2365	4.0630e-03	8.5490e-06	6.2493e-06	0:00:00	14
2366	3.9043e-03	8.3119e-06	6.0961e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter
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2367	3.8677e-03	8.0619e-06	5.9271e-06	0:00:00	12
2368	3.7037e-03	7.8365e-06	5.7871e-06	0:00:00	11
2369	3.6803e-03	7.5997e-06	5.6286e-06	0:00:00	10
2370	3.5412e-03	7.3908e-06	5.5015e-06	0:00:00	9
2371	3.5186e-03	7.1678e-06	5.3515e-06	0:00:00	8
2372	3.4327e-03	6.9642e-06	5.2208e-06	0:00:01	7
2373	3.3586e-03	6.7687e-06	5.0998e-06	0:00:01	6
2374	3.3069e-03	6.5716e-06	4.9769e-06	0:00:01	5
2375	3.2343e-03	6.3831e-06	4.8562e-06	0:00:00	4
2376	3.1649e-03	6.2044e-06	4.7408e-06	0:00:00	3
2377	3.1040e-03	6.0278e-06	4.6274e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2378	3.0458e-03	5.8616e-06	4.5204e-06	0:00:00	1
2379	2.9822e-03	5.7034e-06	4.4146e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 26.59694862365723s, time step = 28

16 more time steps

Updating solution at time level N...

done.

physical-dt 5.4670e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2379	2.9822e-03	5.7034e-06	4.4146e-06	0:00:04	100
2380	1.2603e-01	5.4983e-05	5.5340e-05	0:00:23	99
2381	1.4136e-01	5.6519e-05	4.3187e-05	0:00:18	98
2382	9.2554e-02	4.6620e-05	3.4227e-05	0:00:15	97
2383	5.7511e-02	3.9601e-05	3.2504e-05	0:00:12	96
2384	4.0172e-02	3.5156e-05	3.0190e-05	0:00:09	95
2385	3.2340e-02	3.1767e-05	2.7801e-05	0:00:07	94
2386	2.7719e-02	2.9044e-05	2.5459e-05	0:00:06	93
2387	2.4075e-02	2.6642e-05	2.3208e-05	0:00:05	92
2388	2.1059e-02	2.4495e-05	2.1190e-05	0:00:04	91
2389	1.8712e-02	2.2588e-05	1.9382e-05	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
2390	1.6803e-02	2.0845e-05	1.7764e-05	0:00:02	89
2391	1.5142e-02	1.9267e-05	1.6297e-05	0:00:02	88
2392	1.3669e-02	1.7848e-05	1.4972e-05	0:00:01	87
2393	1.2364e-02	1.6541e-05	1.3776e-05	0:00:01	86
2394	1.1213e-02	1.5337e-05	1.2695e-05	0:00:01	85
2395	1.0217e-02	1.4247e-05	1.1710e-05	0:00:01	84
2396	9.3356e-03	1.3225e-05	1.0807e-05	0:00:01	83
2397	8.5413e-03	1.2290e-05	9.9875e-06	0:00:17	82
2398	7.8345e-03	1.1431e-05	9.2357e-06	0:00:13	81
2399	7.1965e-03	1.0643e-05	8.5452e-06	0:00:11	80
2400	6.6257e-03	9.9116e-06	7.9102e-06	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
2401	6.0945e-03	9.2395e-06	7.3264e-06	0:00:07	78
2402	5.6395e-03	8.6204e-06	6.7901e-06	0:00:05	77
2403	5.2261e-03	8.0497e-06	6.2938e-06	0:00:04	76
2404	4.8263e-03	7.5150e-06	5.8336e-06	0:00:03	75
2405	4.4675e-03	7.0249e-06	5.4090e-06	0:00:03	74
2406	4.1237e-03	6.5687e-06	5.0153e-06	0:00:02	73
2407	3.8077e-03	6.1486e-06	4.6510e-06	0:00:02	72
2408	3.5333e-03	5.7589e-06	4.3130e-06	0:00:01	71
2409	3.2679e-03	5.3940e-06	4.0014e-06	0:00:01	70
2410	3.0200e-03	5.0513e-06	3.7138e-06	0:00:01	69
2411	2.7973e-03	4.7327e-06	3.4492e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2412	2.5946e-03	4.4346e-06	3.2036e-06	0:00:00	67
2413	2.3983e-03	4.1527e-06	2.9766e-06	0:00:14	66
2414	2.2134e-03	3.8895e-06	2.7656e-06	0:00:11	65
2415	2.0456e-03	3.6433e-06	2.5692e-06	0:00:08	64
2416	1.8909e-03	3.4115e-06	2.3865e-06	0:00:07	63
2417	1.7469e-03	3.1923e-06	2.2158e-06	0:00:05	62
2418	1.6307e-03	2.9867e-06	2.0572e-06	0:00:04	61
2419	1.5213e-03	2.7942e-06	1.9122e-06	0:00:03	60
2420	1.4165e-03	2.6125e-06	1.7777e-06	0:00:03	59
2421	1.3225e-03	2.4415e-06	1.6527e-06	0:00:02	58
2422	1.2367e-03	2.2808e-06	1.5360e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
2423	1.1611e-03	2.1302e-06	1.4277e-06	0:00:01	56
2424	1.0861e-03	1.9884e-06	1.3270e-06	0:00:01	55
2425	1.0205e-03	1.8561e-06	1.2338e-06	0:00:01	54

```

2426 9.6174e-04 1.7315e-06 1.1471e-06 0:00:01 53
! 2426 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 27.14364624023438s, time step = 29
15 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 1.0159e+00

```

iter	continuity	x-velocity	y-velocity	time/iter	
2426	9.6174e-04	1.7315e-06	1.1471e-06	0:00:01	100
2427	2.7842e-01	1.2304e-04	1.1627e-04	0:00:01	99
2428	3.1815e-01	1.2698e-04	9.6243e-05	0:00:20	98
2429	2.0004e-01	1.0901e-04	8.1370e-05	0:00:16	97
2430	1.2470e-01	9.8821e-05	8.1195e-05	0:00:13	96
2431	9.3366e-02	9.2711e-05	7.9525e-05	0:00:10	95
2432	8.0648e-02	8.8500e-05	7.6599e-05	0:00:08	94
2433	7.1653e-02	8.5177e-05	7.3437e-05	0:00:06	93
2434	6.4832e-02	8.2102e-05	7.0173e-05	0:00:05	92
2435	5.9080e-02	7.9273e-05	6.7107e-05	0:00:04	91
2436	5.4445e-02	7.6719e-05	6.4418e-05	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
2437	5.0803e-02	7.4313e-05	6.1900e-05	0:00:02	89
2438	4.7241e-02	7.1978e-05	5.9607e-05	0:00:02	88
2439	4.4773e-02	6.9876e-05	5.7449e-05	0:00:02	87
2440	4.2282e-02	6.7743e-05	5.5398e-05	0:00:01	86
2441	4.0270e-02	6.5707e-05	5.3436e-05	0:00:01	85
2442	3.8443e-02	6.3785e-05	5.1544e-05	0:00:01	84
2443	3.6912e-02	6.1910e-05	4.9703e-05	0:00:01	83
2444	3.5100e-02	6.0086e-05	4.7936e-05	0:00:00	82
2445	3.3670e-02	5.8337e-05	4.6257e-05	0:00:17	81
2446	3.2221e-02	5.6677e-05	4.4632e-05	0:00:13	80
2447	3.0828e-02	5.5088e-05	4.3077e-05	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
2448	2.9528e-02	5.3514e-05	4.1583e-05	0:00:08	78
2449	2.8371e-02	5.1952e-05	4.0164e-05	0:00:06	77
2450	2.7076e-02	5.0474e-05	3.8807e-05	0:00:05	76
2451	2.6191e-02	4.9050e-05	3.7532e-05	0:00:04	75
2452	2.5119e-02	4.7611e-05	3.6291e-05	0:00:03	74
2453	2.3991e-02	4.6224e-05	3.5089e-05	0:00:03	73
2454	2.3008e-02	4.4895e-05	3.3966e-05	0:00:02	72
2455	2.2076e-02	4.3580e-05	3.2843e-05	0:00:02	71
2456	2.1107e-02	4.2246e-05	3.1736e-05	0:00:01	70
2457	2.0348e-02	4.0992e-05	3.0661e-05	0:00:01	69
2458	1.9521e-02	3.9732e-05	2.9604e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2459	1.8916e-02	3.8507e-05	2.8577e-05	0:00:01	67
2460	1.8089e-02	3.7275e-05	2.7539e-05	0:00:00	66
2461	1.7460e-02	3.6099e-05	2.6541e-05	0:00:00	65
2462	1.6789e-02	3.4911e-05	2.5552e-05	0:00:00	64
2463	1.6100e-02	3.3779e-05	2.4605e-05	0:00:00	63
2464	1.5433e-02	3.2672e-05	2.3668e-05	0:00:13	62
2465	1.4775e-02	3.1577e-05	2.2783e-05	0:00:10	61
2466	1.4241e-02	3.0518e-05	2.1927e-05	0:00:08	60
2467	1.3699e-02	2.9460e-05	2.1095e-05	0:00:06	59
2468	1.3156e-02	2.8434e-05	2.0295e-05	0:00:05	58
2469	1.2605e-02	2.7448e-05	1.9534e-05	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter	
2470	1.2157e-02	2.6485e-05	1.8799e-05	0:00:03	56
2471	1.1651e-02	2.5574e-05	1.8104e-05	0:00:02	55
2472	1.1279e-02	2.4679e-05	1.7437e-05	0:00:02	54
2473	1.0919e-02	2.3816e-05	1.6808e-05	0:00:01	53
2474	1.0554e-02	2.2983e-05	1.6220e-05	0:00:01	52
2475	1.0235e-02	2.2167e-05	1.5663e-05	0:00:01	51
2476	9.9673e-03	2.1390e-05	1.5140e-05	0:00:01	50
2477	9.6606e-03	2.0640e-05	1.4656e-05	0:00:01	49
2478	9.4191e-03	1.9923e-05	1.4204e-05	0:00:00	48
2479	9.1254e-03	1.9234e-05	1.3772e-05	0:00:00	47
2480	8.9255e-03	1.8574e-05	1.3370e-05	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
2481	8.6765e-03	1.7947e-05	1.2990e-05	0:00:09	45
2482	8.4675e-03	1.7336e-05	1.2625e-05	0:00:07	44
2483	8.2514e-03	1.6747e-05	1.2271e-05	0:00:06	43

2484	8.0314e-03	1.6204e-05	1.1934e-05	0:00:04	42
2485	7.8729e-03	1.5675e-05	1.1606e-05	0:00:03	41
2486	7.6519e-03	1.5165e-05	1.1289e-05	0:00:03	40
2487	7.4887e-03	1.4689e-05	1.0992e-05	0:00:02	39
2488	7.3018e-03	1.4229e-05	1.0697e-05	0:00:02	38
2489	7.1609e-03	1.3798e-05	1.0413e-05	0:00:01	37
2490	6.9645e-03	1.3375e-05	1.0144e-05	0:00:01	36
2491	6.7875e-03	1.2969e-05	9.8838e-06	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
2492	6.6597e-03	1.2579e-05	9.6291e-06	0:00:01	34
2493	6.4875e-03	1.2196e-05	9.3826e-06	0:00:00	33
2494	6.3417e-03	1.1841e-05	9.1491e-06	0:00:00	32
2495	6.1779e-03	1.1493e-05	8.9173e-06	0:00:00	31
2496	5.9901e-03	1.1146e-05	8.6895e-06	0:00:00	30
2497	5.8253e-03	1.0813e-05	8.4665e-06	0:00:00	29
2498	5.6922e-03	1.0494e-05	8.2477e-06	0:00:06	28
2499	5.5171e-03	1.0181e-05	8.0355e-06	0:00:04	27
2500	5.3448e-03	9.8786e-06	7.8231e-06	0:00:03	26
2501	5.1953e-03	9.5797e-06	7.6120e-06	0:00:03	25
2502	5.0667e-03	9.2965e-06	7.4073e-06	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
2503	4.9259e-03	9.0186e-06	7.2036e-06	0:00:02	23
2504	4.7780e-03	8.7450e-06	7.0002e-06	0:00:01	22
2505	4.6196e-03	8.4780e-06	6.7998e-06	0:00:01	21
2506	4.4390e-03	8.2252e-06	6.6177e-06	0:00:01	20
2507	4.3481e-03	7.9642e-06	6.4088e-06	0:00:01	19
2508	4.1995e-03	7.7147e-06	6.2213e-06	0:00:04	18
2509	4.0576e-03	7.4749e-06	6.0364e-06	0:00:03	17
2510	3.9205e-03	7.2403e-06	5.8493e-06	0:00:02	16
2511	3.7882e-03	7.0126e-06	5.6663e-06	0:00:02	15
2512	3.6441e-03	6.7880e-06	5.4882e-06	0:00:01	14
2513	3.5328e-03	6.5672e-06	5.3119e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2514	3.3980e-03	6.3593e-06	5.1433e-06	0:00:01	12
2515	3.2214e-03	6.1504e-06	4.9811e-06	0:00:01	11
2516	3.1436e-03	5.9423e-06	4.8050e-06	0:00:00	10
2517	2.9917e-03	5.7460e-06	4.6515e-06	0:00:00	9
2518	2.9154e-03	5.5502e-06	4.4852e-06	0:00:00	8
2519	2.8016e-03	5.3621e-06	4.3352e-06	0:00:00	7
2520	2.6845e-03	5.1855e-06	4.1877e-06	0:00:00	6
2521	2.5678e-03	5.0107e-06	4.0424e-06	0:00:00	5

2522	2.4553e-03	4.8411e-06	3.9033e-06	0:00:00	4
2523	2.3485e-03	4.6762e-06	3.7653e-06	0:00:00	3
2524	2.2448e-03	4.5166e-06	3.6320e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2525	2.1478e-03	4.3672e-06	3.5041e-06	0:00:00	1
2526	2.0540e-03	4.2194e-06	3.3788e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 28.15950012207031s, time step = 30

14 more time steps

Updating solution at time level N...

done.

physical-dt 5.0793e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2526	2.0540e-03	4.2194e-06	3.3788e-06	0:00:20	100
2527	1.3546e-01	6.4374e-05	5.7507e-05	0:00:16	99
2528	1.3534e-01	5.7025e-05	4.3422e-05	0:00:13	98
2529	8.7151e-02	4.6784e-05	3.4131e-05	0:00:10	97
2530	5.8910e-02	4.0368e-05	3.1409e-05	0:00:08	96
2531	4.5203e-02	3.5633e-05	2.8692e-05	0:00:06	95
2532	3.7517e-02	3.2026e-05	2.6031e-05	0:00:05	94
2533	3.1950e-02	2.9021e-05	2.3526e-05	0:00:04	93
2534	2.7329e-02	2.6298e-05	2.1246e-05	0:00:03	92
2535	2.3405e-02	2.3902e-05	1.9215e-05	0:00:02	91
2536	2.0165e-02	2.1812e-05	1.7436e-05	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
2537	1.7456e-02	1.9923e-05	1.5841e-05	0:00:02	89
2538	1.5231e-02	1.8228e-05	1.4389e-05	0:00:01	88
2539	1.3329e-02	1.6696e-05	1.3080e-05	0:00:01	87
2540	1.1700e-02	1.5306e-05	1.1891e-05	0:00:18	86
2541	1.0331e-02	1.4056e-05	1.0822e-05	0:00:14	85
2542	9.1744e-03	1.2904e-05	9.8515e-06	0:00:11	84

2543	8.1666e-03	1.1863e-05	8.9725e-06	0:00:09	83
2544	7.2839e-03	1.0910e-05	8.1769e-06	0:00:07	82
2545	6.5166e-03	1.0048e-05	7.4531e-06	0:00:06	81
2546	5.8525e-03	9.2526e-06	6.7975e-06	0:00:04	80
2547	5.2888e-03	8.5206e-06	6.2011e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
2548	4.7670e-03	7.8492e-06	5.6649e-06	0:00:03	78
2549	4.3095e-03	7.2326e-06	5.1767e-06	0:00:02	77
2550	3.9113e-03	6.6661e-06	4.7375e-06	0:00:02	76
2551	3.5606e-03	6.1446e-06	4.3375e-06	0:00:01	75
2552	3.2493e-03	5.6645e-06	3.9747e-06	0:00:01	74
2553	2.9809e-03	5.2252e-06	3.6451e-06	0:00:01	73
2554	2.7418e-03	4.8186e-06	3.3446e-06	0:00:01	72
2555	2.5281e-03	4.4453e-06	3.0707e-06	0:00:15	71
2556	2.3358e-03	4.1035e-06	2.8221e-06	0:00:12	70
2557	2.1637e-03	3.7883e-06	2.5941e-06	0:00:09	69
2558	2.0241e-03	3.4976e-06	2.3831e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
2559	1.8810e-03	3.2304e-06	2.1954e-06	0:00:06	67
2560	1.7535e-03	2.9859e-06	2.0250e-06	0:00:04	66
2561	1.6388e-03	2.7605e-06	1.8687e-06	0:00:04	65
2562	1.5318e-03	2.5542e-06	1.7271e-06	0:00:03	64
2563	1.4320e-03	2.3611e-06	1.5977e-06	0:00:02	63
2564	1.3385e-03	2.1856e-06	1.4790e-06	0:00:02	62
2565	1.2552e-03	2.0232e-06	1.3705e-06	0:00:01	61
2566	1.1818e-03	1.8725e-06	1.2716e-06	0:00:01	60
2567	1.1139e-03	1.7350e-06	1.1808e-06	0:00:01	59
2568	1.0494e-03	1.6077e-06	1.0971e-06	0:00:01	58
2569	9.9037e-04	1.4895e-06	1.0202e-06	0:00:01	57

! 2569 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 28.66742706298828s, time step = 31

13 more time steps

Updating solution at time level N...

done.

physical-dt 1.0074e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2569	9.9037e-04	1.4895e-06	1.0202e-06	0:00:01	100
2570	3.3850e-01	1.5580e-04	1.3810e-04	0:00:21	99
2571	3.3474e-01	1.4771e-04	1.1185e-04	0:00:16	98
2572	2.0436e-01	1.2914e-04	9.2840e-05	0:00:13	97
2573	1.4150e-01	1.1854e-04	8.8782e-05	0:00:10	96
2574	1.1102e-01	1.1131e-04	8.4704e-05	0:00:08	95
2575	9.3299e-02	1.0591e-04	8.0929e-05	0:00:06	94
2576	8.0844e-02	1.0128e-04	7.7372e-05	0:00:05	93
2577	7.1086e-02	9.7010e-05	7.4107e-05	0:00:04	92
2578	6.3806e-02	9.3022e-05	7.0978e-05	0:00:03	91
2579	5.8026e-02	8.9236e-05	6.7976e-05	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
2580	5.2890e-02	8.5733e-05	6.5215e-05	0:00:02	89
2581	4.8935e-02	8.2393e-05	6.2541e-05	0:00:02	88
2582	4.5760e-02	7.9263e-05	6.0018e-05	0:00:01	87
2583	4.2741e-02	7.6222e-05	5.7602e-05	0:00:01	86
2584	4.0160e-02	7.3355e-05	5.5282e-05	0:00:01	85
2585	3.7870e-02	7.0595e-05	5.3027e-05	0:00:01	84
2586	3.5647e-02	6.7936e-05	5.0892e-05	0:00:00	83
2587	3.3620e-02	6.5372e-05	4.8843e-05	0:00:17	82
2588	3.2076e-02	6.2935e-05	4.6887e-05	0:00:13	81
2589	3.0665e-02	6.0579e-05	4.5011e-05	0:00:10	80
2590	2.9209e-02	5.8310e-05	4.3270e-05	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
2591	2.8061e-02	5.6104e-05	4.1559e-05	0:00:07	78
2592	2.6878e-02	5.4010e-05	4.0010e-05	0:00:05	77
2593	2.5788e-02	5.1971e-05	3.8482e-05	0:00:04	76
2594	2.4745e-02	5.0020e-05	3.7077e-05	0:00:03	75
2595	2.3737e-02	4.8109e-05	3.5719e-05	0:00:03	74
2596	2.2846e-02	4.6294e-05	3.4433e-05	0:00:02	73
2597	2.1937e-02	4.4545e-05	3.3190e-05	0:00:02	72
2598	2.1036e-02	4.2866e-05	3.2002e-05	0:00:01	71
2599	2.0313e-02	4.1251e-05	3.0852e-05	0:00:01	70
2600	1.9660e-02	3.9697e-05	2.9749e-05	0:00:01	69
2601	1.9032e-02	3.8201e-05	2.8688e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2602	1.8474e-02	3.6753e-05	2.7666e-05	0:00:00	67
2603	1.8029e-02	3.5400e-05	2.6694e-05	0:00:00	66
2604	1.7565e-02	3.4063e-05	2.5764e-05	0:00:00	65
2605	1.7157e-02	3.2836e-05	2.4898e-05	0:00:13	64
2606	1.6792e-02	3.1652e-05	2.4055e-05	0:00:10	63
2607	1.6445e-02	3.0528e-05	2.3258e-05	0:00:08	62
2608	1.6121e-02	2.9476e-05	2.2506e-05	0:00:06	61
2609	1.5781e-02	2.8475e-05	2.1787e-05	0:00:05	60
2610	1.5311e-02	2.7518e-05	2.1082e-05	0:00:04	59
2611	1.4911e-02	2.6590e-05	2.0415e-05	0:00:03	58
2612	1.4535e-02	2.5716e-05	1.9769e-05	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
2613	1.4182e-02	2.4859e-05	1.9156e-05	0:00:02	56
2614	1.3821e-02	2.4069e-05	1.8563e-05	0:00:02	55
2615	1.3399e-02	2.3282e-05	1.7989e-05	0:00:01	54
2616	1.2973e-02	2.2535e-05	1.7432e-05	0:00:01	53
2617	1.2644e-02	2.1837e-05	1.6901e-05	0:00:11	52
2618	1.2290e-02	2.1156e-05	1.6386e-05	0:00:09	51
2619	1.1900e-02	2.0502e-05	1.5884e-05	0:00:07	50
2620	1.1521e-02	1.9890e-05	1.5405e-05	0:00:05	49
2621	1.1110e-02	1.9298e-05	1.4938e-05	0:00:04	48
2622	1.0731e-02	1.8746e-05	1.4495e-05	0:00:03	47
2623	1.0290e-02	1.8204e-05	1.4059e-05	0:00:03	46

iter	continuity	x-velocity	y-velocity	time/iter	
2624	9.9244e-03	1.7694e-05	1.3640e-05	0:00:02	45
2625	9.5534e-03	1.7196e-05	1.3228e-05	0:00:02	44
2626	9.1894e-03	1.6714e-05	1.2840e-05	0:00:01	43
2627	8.8309e-03	1.6259e-05	1.2456e-05	0:00:01	42
2628	8.4714e-03	1.5807e-05	1.2086e-05	0:00:01	41
2629	8.1507e-03	1.5370e-05	1.1726e-05	0:00:01	40
2630	7.8375e-03	1.4951e-05	1.1383e-05	0:00:00	39
2631	7.5160e-03	1.4536e-05	1.1053e-05	0:00:00	38
2632	7.2083e-03	1.4133e-05	1.0728e-05	0:00:00	37
2633	6.9511e-03	1.3738e-05	1.0414e-05	0:00:07	36
2634	6.7032e-03	1.3359e-05	1.0113e-05	0:00:06	35

iter	continuity	x-velocity	y-velocity	time/iter	
2635	6.4579e-03	1.2984e-05	9.8165e-06	0:00:04	34
2636	6.2111e-03	1.2621e-05	9.5376e-06	0:00:03	33
2637	5.9928e-03	1.2270e-05	9.2732e-06	0:00:03	32
2638	5.7595e-03	1.1919e-05	9.0162e-06	0:00:02	31

2639	5.5447e-03	1.1580e-05	8.7619e-06	0:00:02	30
2640	5.3375e-03	1.1239e-05	8.5127e-06	0:00:01	29
2641	5.1262e-03	1.0911e-05	8.2760e-06	0:00:01	28
2642	4.9320e-03	1.0598e-05	8.0402e-06	0:00:01	27
2643	4.7641e-03	1.0283e-05	7.8055e-06	0:00:01	26
2644	4.5888e-03	9.9799e-06	7.5813e-06	0:00:00	25
2645	4.4263e-03	9.6809e-06	7.3635e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2646	4.2523e-03	9.3861e-06	7.1441e-06	0:00:00	23
2647	4.0959e-03	9.0991e-06	6.9352e-06	0:00:00	22
2648	3.9511e-03	8.8194e-06	6.7311e-06	0:00:00	21
2649	3.8084e-03	8.5437e-06	6.5300e-06	0:00:00	20
2650	3.6845e-03	8.2767e-06	6.3416e-06	0:00:00	19
2651	3.5427e-03	8.0170e-06	6.1544e-06	0:00:04	18
2652	3.4103e-03	7.7673e-06	5.9794e-06	0:00:03	17
2653	3.2895e-03	7.5224e-06	5.8074e-06	0:00:02	16
2654	3.1856e-03	7.2789e-06	5.6380e-06	0:00:02	15
2655	3.0793e-03	7.0463e-06	5.4735e-06	0:00:01	14
2656	2.9852e-03	6.8210e-06	5.3171e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2657	2.8907e-03	6.6017e-06	5.1637e-06	0:00:01	12
2658	2.7894e-03	6.3877e-06	5.0131e-06	0:00:00	11
2659	2.6945e-03	6.1843e-06	4.8703e-06	0:00:00	10
2660	2.6161e-03	5.9864e-06	4.7287e-06	0:00:00	9
2661	2.5430e-03	5.7943e-06	4.5928e-06	0:00:00	8
2662	2.4793e-03	5.6105e-06	4.4574e-06	0:00:00	7
2663	2.4214e-03	5.4317e-06	4.3305e-06	0:00:00	6
2664	2.3669e-03	5.2613e-06	4.2071e-06	0:00:00	5
2665	2.3177e-03	5.0959e-06	4.0855e-06	0:00:00	4
2666	2.2623e-03	4.9358e-06	3.9708e-06	0:00:00	3
2667	2.2020e-03	4.7831e-06	3.8625e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2668	2.1505e-03	4.6337e-06	3.7550e-06	0:00:00	1
2669	2.1076e-03	4.4904e-06	3.6524e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 29.67486953735352s, time step = 32

12 more time steps

Truncation Error (computed)=0.010679 > Truncation error tolerance

Repeating the time step: time step size = 0.503721

in update prediction domain id = 1

physical-dt 5.0372e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
2669	2.1076e-03	4.4904e-06	3.6524e-06	0:00:20 100
2670	4.0397e-01	1.7361e-04	8.2632e-05	0:00:16 99
2671	2.2296e-01	7.1828e-05	6.6556e-05	0:00:13 98
2672	1.1365e-01	5.0470e-05	4.9390e-05	0:00:10 97
2673	8.4739e-02	4.1050e-05	3.8982e-05	0:00:08 96
2674	6.8589e-02	3.5590e-05	3.3104e-05	0:00:06 95
2675	5.5359e-02	3.1830e-05	2.9010e-05	0:00:05 94
2676	4.3479e-02	2.8924e-05	2.5818e-05	0:00:04 93
2677	3.4336e-02	2.6395e-05	2.3155e-05	0:00:03 92
2678	2.6816e-02	2.4150e-05	2.0867e-05	0:00:02 91
2679	2.2349e-02	2.2082e-05	1.8783e-05	0:00:02 90

iter	continuity	x-velocity	y-velocity	time/iter
2680	1.8260e-02	2.0237e-05	1.6982e-05	0:00:02 89
2681	1.5300e-02	1.8551e-05	1.5360e-05	0:00:01 88
2682	1.3081e-02	1.7035e-05	1.3896e-05	0:00:01 87
2683	1.1305e-02	1.5642e-05	1.2576e-05	0:00:18 86
2684	9.8601e-03	1.4375e-05	1.1387e-05	0:00:14 85
2685	8.6309e-03	1.3213e-05	1.0320e-05	0:00:11 84
2686	7.6314e-03	1.2147e-05	9.3549e-06	0:00:09 83
2687	6.8123e-03	1.1170e-05	8.4877e-06	0:00:07 82
2688	6.1349e-03	1.0272e-05	7.7006e-06	0:00:06 81
2689	5.5497e-03	9.4516e-06	6.9940e-06	0:00:04 80
2690	5.0284e-03	8.6944e-06	6.3594e-06	0:00:03 79

iter	continuity	x-velocity	y-velocity	time/iter	
2691	4.5672e-03	7.9988e-06	5.7912e-06	0:00:03	78
2692	4.1679e-03	7.3624e-06	5.2854e-06	0:00:02	77
2693	3.8098e-03	6.7765e-06	4.8364e-06	0:00:02	76
2694	3.4870e-03	6.2415e-06	4.4306e-06	0:00:01	75
2695	3.1989e-03	5.7493e-06	4.0633e-06	0:00:01	74
2696	2.9584e-03	5.2984e-06	3.7334e-06	0:00:01	73
2697	2.7487e-03	4.8823e-06	3.4328e-06	0:00:01	72
2698	2.5554e-03	4.5017e-06	3.1612e-06	0:00:01	71
2699	2.3807e-03	4.1502e-06	2.9115e-06	0:00:00	70
2700	2.2203e-03	3.8296e-06	2.6862e-06	0:00:00	69
2701	2.0750e-03	3.5350e-06	2.4806e-06	0:00:14	68

iter	continuity	x-velocity	y-velocity	time/iter	
2702	1.9362e-03	3.2637e-06	2.2923e-06	0:00:11	67
2703	1.8183e-03	3.0125e-06	2.1193e-06	0:00:09	66
2704	1.6917e-03	2.7836e-06	1.9623e-06	0:00:07	65
2705	1.5805e-03	2.5727e-06	1.8175e-06	0:00:05	64
2706	1.4768e-03	2.3789e-06	1.6844e-06	0:00:04	63
2707	1.3795e-03	2.2007e-06	1.5618e-06	0:00:03	62
2708	1.2911e-03	2.0356e-06	1.4486e-06	0:00:03	61
2709	1.2087e-03	1.8845e-06	1.3448e-06	0:00:02	60
2710	1.1326e-03	1.7449e-06	1.2490e-06	0:00:02	59
2711	1.0619e-03	1.6162e-06	1.1603e-06	0:00:01	58
2712	9.9684e-04	1.4976e-06	1.0787e-06	0:00:01	57

! 2712 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 29.17114812135696s, time step = 32

11 more time steps

Updating solution at time level N...

done.

physical-dt 9.2394e-01

iter	continuity	x-velocity	y-velocity	time/iter
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2712	9.9684e-04	1.4976e-06	1.0787e-06	0:00:02	100
2713	2.3866e-01	1.1027e-04	1.0524e-04	0:00:01	99
2714	2.0573e-01	1.1141e-04	9.7579e-05	0:00:01	98
2715	1.3904e-01	1.0318e-04	9.4236e-05	0:00:20	97
2716	1.0093e-01	9.8373e-05	9.0848e-05	0:00:16	96
2717	8.1313e-02	9.4387e-05	8.7028e-05	0:00:13	95
2718	6.9632e-02	9.0856e-05	8.2851e-05	0:00:10	94
2719	6.1474e-02	8.7657e-05	7.8799e-05	0:00:08	93
2720	5.4938e-02	8.4524e-05	7.4929e-05	0:00:06	92
2721	4.9549e-02	8.1531e-05	7.1312e-05	0:00:05	91
2722	4.5784e-02	7.8694e-05	6.7953e-05	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
2723	4.2465e-02	7.5908e-05	6.4787e-05	0:00:03	89
2724	3.9766e-02	7.3243e-05	6.1822e-05	0:00:02	88
2725	3.7390e-02	7.0645e-05	5.8982e-05	0:00:02	87
2726	3.5155e-02	6.8117e-05	5.6321e-05	0:00:02	86
2727	3.3119e-02	6.5697e-05	5.3785e-05	0:00:01	85
2728	3.1189e-02	6.3328e-05	5.1392e-05	0:00:01	84
2729	2.9518e-02	6.1026e-05	4.9090e-05	0:00:01	83
2730	2.7937e-02	5.8770e-05	4.6904e-05	0:00:01	82
2731	2.6620e-02	5.6554e-05	4.4824e-05	0:00:17	81
2732	2.5490e-02	5.4425e-05	4.2861e-05	0:00:13	80
2733	2.4350e-02	5.2338e-05	4.0997e-05	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
2734	2.3263e-02	5.0350e-05	3.9190e-05	0:00:08	78
2735	2.2189e-02	4.8390e-05	3.7496e-05	0:00:06	77
2736	2.1190e-02	4.6508e-05	3.5886e-05	0:00:05	76
2737	2.0372e-02	4.4669e-05	3.4328e-05	0:00:04	75
2738	1.9545e-02	4.2941e-05	3.2849e-05	0:00:03	74
2739	1.8739e-02	4.1227e-05	3.1442e-05	0:00:03	73
2740	1.8062e-02	3.9621e-05	3.0099e-05	0:00:02	72
2741	1.7431e-02	3.8067e-05	2.8824e-05	0:00:02	71
2742	1.6726e-02	3.6557e-05	2.7605e-05	0:00:01	70
2743	1.6192e-02	3.5124e-05	2.6458e-05	0:00:15	69
2744	1.5675e-02	3.3743e-05	2.5365e-05	0:00:12	68

iter	continuity	x-velocity	y-velocity	time/iter	
2745	1.5140e-02	3.2411e-05	2.4333e-05	0:00:09	67
2746	1.4695e-02	3.1133e-05	2.3347e-05	0:00:07	66
2747	1.4316e-02	2.9913e-05	2.2414e-05	0:00:06	65
2748	1.3927e-02	2.8731e-05	2.1530e-05	0:00:04	64
2749	1.3535e-02	2.7611e-05	2.0698e-05	0:00:04	63

2750	1.3173e-02	2.6534e-05	1.9899e-05	0:00:03	62
2751	1.2793e-02	2.5504e-05	1.9154e-05	0:00:02	61
2752	1.2455e-02	2.4512e-05	1.8448e-05	0:00:02	60
2753	1.2043e-02	2.3560e-05	1.7774e-05	0:00:01	59
2754	1.1676e-02	2.2640e-05	1.7134e-05	0:00:01	58
2755	1.1364e-02	2.1767e-05	1.6533e-05	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
2756	1.1045e-02	2.0947e-05	1.5942e-05	0:00:01	56
2757	1.0695e-02	2.0152e-05	1.5381e-05	0:00:01	55
2758	1.0434e-02	1.9406e-05	1.4846e-05	0:00:00	54
2759	1.0112e-02	1.8684e-05	1.4328e-05	0:00:00	53
2760	9.7796e-03	1.8005e-05	1.3834e-05	0:00:00	52
2761	9.4462e-03	1.7357e-05	1.3345e-05	0:00:10	51
2762	9.1121e-03	1.6732e-05	1.2880e-05	0:00:08	50
2763	8.7506e-03	1.6130e-05	1.2428e-05	0:00:06	49
2764	8.4358e-03	1.5549e-05	1.1999e-05	0:00:05	48
2765	8.1779e-03	1.4993e-05	1.1580e-05	0:00:04	47
2766	7.9145e-03	1.4467e-05	1.1177e-05	0:00:03	46

iter	continuity	x-velocity	y-velocity	time/iter	
2767	7.6510e-03	1.3968e-05	1.0781e-05	0:00:02	45
2768	7.3675e-03	1.3475e-05	1.0408e-05	0:00:02	44
2769	7.0802e-03	1.3003e-05	1.0043e-05	0:00:01	43
2770	6.8207e-03	1.2553e-05	9.6903e-06	0:00:01	42
2771	6.5694e-03	1.2124e-05	9.3520e-06	0:00:01	41
2772	6.3236e-03	1.1707e-05	9.0202e-06	0:00:01	40
2773	6.0875e-03	1.1308e-05	8.7007e-06	0:00:01	39
2774	5.8303e-03	1.0923e-05	8.3875e-06	0:00:00	38
2775	5.6004e-03	1.0555e-05	8.0884e-06	0:00:00	37
2776	5.3939e-03	1.0208e-05	7.7951e-06	0:00:00	36
2777	5.1863e-03	9.8676e-06	7.5137e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
2778	4.9894e-03	9.5394e-06	7.2434e-06	0:00:07	34
2779	4.7239e-03	9.2350e-06	6.9837e-06	0:00:05	33
2780	4.5816e-03	8.9246e-06	6.7131e-06	0:00:04	32
2781	4.3889e-03	8.6358e-06	6.4678e-06	0:00:03	31
2782	4.2105e-03	8.3570e-06	6.2292e-06	0:00:03	30
2783	4.0264e-03	8.0820e-06	5.9985e-06	0:00:02	29
2784	3.8627e-03	7.8172e-06	5.7779e-06	0:00:02	28
2785	3.7125e-03	7.5616e-06	5.5648e-06	0:00:01	27
2786	3.5713e-03	7.3149e-06	5.3614e-06	0:00:01	26
2787	3.4290e-03	7.0748e-06	5.1657e-06	0:00:01	25

2788 3.2927e-03 6.8387e-06 4.9810e-06 0:00:01 24

	iter	continuity	x-velocity	y-velocity	time/iter	
	2789	3.1698e-03	6.6130e-06	4.8052e-06	0:00:00	23
	2790	3.0517e-03	6.3926e-06	4.6371e-06	0:00:00	22
	2791	2.9357e-03	6.1774e-06	4.4783e-06	0:00:00	21
	2792	2.8311e-03	5.9700e-06	4.3295e-06	0:00:00	20
	2793	2.7286e-03	5.7631e-06	4.1853e-06	0:00:00	19
	2794	2.6301e-03	5.5681e-06	4.0500e-06	0:00:00	18
	2795	2.5328e-03	5.3747e-06	3.9165e-06	0:00:00	17
	2796	2.4486e-03	5.1895e-06	3.7870e-06	0:00:03	16
	2797	2.3640e-03	5.0085e-06	3.6645e-06	0:00:02	15
	2798	2.2841e-03	4.8330e-06	3.5470e-06	0:00:02	14
	2799	2.2055e-03	4.6621e-06	3.4308e-06	0:00:01	13

	iter	continuity	x-velocity	y-velocity	time/iter	
	2800	2.1325e-03	4.4989e-06	3.3200e-06	0:00:01	12
	2801	2.0617e-03	4.3384e-06	3.2132e-06	0:00:01	11
	2802	1.9894e-03	4.1835e-06	3.1097e-06	0:00:01	10
	2803	1.9190e-03	4.0323e-06	3.0090e-06	0:00:00	9
	2804	1.8566e-03	3.8865e-06	2.9115e-06	0:00:00	8
	2805	1.7998e-03	3.7455e-06	2.8181e-06	0:00:00	7
	2806	1.7392e-03	3.6093e-06	2.7272e-06	0:00:00	6
	2807	1.6781e-03	3.4769e-06	2.6383e-06	0:00:00	5
	2808	1.6298e-03	3.3495e-06	2.5522e-06	0:00:00	4
	2809	1.5775e-03	3.2256e-06	2.4689e-06	0:00:00	3
	2810	1.5280e-03	3.1077e-06	2.3877e-06	0:00:00	2

	iter	continuity	x-velocity	y-velocity	time/iter	
	2811	1.4812e-03	2.9937e-06	2.3082e-06	0:00:00	1
	2812	1.4358e-03	2.8831e-06	2.2315e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 30.0950927734375s, time step = 33

10 more time steps

Updating solution at time level N...

done.

physical-dt 4.6197e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2812	1.4358e-03	2.8831e-06	2.2315e-06	0:00:01	100
2813	1.3499e-01	6.7751e-05	6.3706e-05	0:00:00	99
2814	1.3983e-01	7.0284e-05	4.9771e-05	0:00:00	98
2815	9.0861e-02	5.8877e-05	4.0564e-05	0:00:00	97
2816	5.9332e-02	4.9809e-05	3.7042e-05	0:00:00	96
2817	4.1484e-02	4.3223e-05	3.3490e-05	0:00:00	95
2818	3.2614e-02	3.8232e-05	3.0072e-05	0:00:00	94
2819	2.7098e-02	3.4139e-05	2.6893e-05	0:00:00	93
2820	2.3010e-02	3.0567e-05	2.4043e-05	0:00:00	92
2821	1.9726e-02	2.7428e-05	2.1520e-05	0:00:00	91
2822	1.7121e-02	2.4678e-05	1.9304e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
2823	1.5031e-02	2.2261e-05	1.7340e-05	0:00:00	89
2824	1.3278e-02	2.0114e-05	1.5598e-05	0:00:00	88
2825	1.1837e-02	1.8211e-05	1.4049e-05	0:00:00	87
2826	1.0607e-02	1.6503e-05	1.2678e-05	0:00:00	86
2827	9.5737e-03	1.4985e-05	1.1453e-05	0:00:17	85
2828	8.6399e-03	1.3616e-05	1.0357e-05	0:00:13	84
2829	7.8061e-03	1.2390e-05	9.3836e-06	0:00:11	83
2830	7.0876e-03	1.1285e-05	8.5080e-06	0:00:08	82
2831	6.4560e-03	1.0292e-05	7.7290e-06	0:00:07	81
2832	5.9042e-03	9.3943e-06	7.0363e-06	0:00:05	80
2833	5.4045e-03	8.5861e-06	6.4117e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
2834	4.9501e-03	7.8527e-06	5.8510e-06	0:00:03	78
2835	4.5361e-03	7.1908e-06	5.3454e-06	0:00:03	77
2836	4.1678e-03	6.5910e-06	4.8893e-06	0:00:02	76
2837	3.8501e-03	6.0425e-06	4.4777e-06	0:00:02	75
2838	3.5646e-03	5.5414e-06	4.1037e-06	0:00:01	74
2839	3.3073e-03	5.0912e-06	3.7672e-06	0:00:01	73
2840	3.0454e-03	4.6799e-06	3.4599e-06	0:00:01	72
2841	2.7953e-03	4.3018e-06	3.1824e-06	0:00:01	71
2842	2.5696e-03	3.9618e-06	2.9269e-06	0:00:00	70
2843	2.3641e-03	3.6507e-06	2.6930e-06	0:00:00	69
2844	2.1678e-03	3.3618e-06	2.4793e-06	0:00:14	68

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

2845	1.9999e-03	3.1011e-06	2.2837e-06	0:00:11	67
2846	1.8369e-03	2.8588e-06	2.1048e-06	0:00:09	66
2847	1.6877e-03	2.6412e-06	1.9399e-06	0:00:07	65
2848	1.5625e-03	2.4389e-06	1.7862e-06	0:00:05	64
2849	1.4318e-03	2.2537e-06	1.6492e-06	0:00:04	63
2850	1.3096e-03	2.0834e-06	1.5225e-06	0:00:03	62
2851	1.2036e-03	1.9241e-06	1.4055e-06	0:00:03	61
2852	1.1105e-03	1.7795e-06	1.2976e-06	0:00:02	60
2853	1.0280e-03	1.6461e-06	1.1973e-06	0:00:02	59
2854	9.5380e-04	1.5226e-06	1.1048e-06	0:00:01	58

! 2854 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 30.55706405639648s, time step = 34

9 more time steps

Updating solution at time level N...

done.

physical-dt 8.6360e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2854	9.5380e-04	1.5226e-06	1.1048e-06	0:00:02	100
2855	3.0894e-01	1.4619e-04	1.3306e-04	0:00:02	99
2856	3.3200e-01	1.5674e-04	1.1400e-04	0:00:01	98
2857	2.1399e-01	1.3699e-04	1.0018e-04	0:00:01	97
2858	1.3758e-01	1.2416e-04	9.7496e-05	0:00:01	96
2859	1.0000e-01	1.1536e-04	9.3641e-05	0:00:01	95
2860	8.2521e-02	1.0858e-04	8.9011e-05	0:00:01	94
2861	7.1522e-02	1.0274e-04	8.4354e-05	0:00:00	93
2862	6.3084e-02	9.7328e-05	7.9935e-05	0:00:00	92
2863	5.6478e-02	9.2347e-05	7.5838e-05	0:00:00	91
2864	5.1401e-02	8.7762e-05	7.2011e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
2865	4.7913e-02	8.3500e-05	6.8441e-05	0:00:00	89
2866	4.4639e-02	7.9639e-05	6.5117e-05	0:00:00	88

2867	4.1795e-02	7.5935e-05	6.2011e-05	0:00:18	87
2868	3.9350e-02	7.2524e-05	5.9043e-05	0:00:14	86
2869	3.7349e-02	6.9317e-05	5.6283e-05	0:00:11	85
2870	3.5480e-02	6.6327e-05	5.3678e-05	0:00:09	84
2871	3.3824e-02	6.3475e-05	5.1202e-05	0:00:07	83
2872	3.2332e-02	6.0796e-05	4.8902e-05	0:00:05	82
2873	3.0897e-02	5.8302e-05	4.6742e-05	0:00:04	81
2874	2.9622e-02	5.5885e-05	4.4690e-05	0:00:03	80
2875	2.8001e-02	5.3663e-05	4.2805e-05	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
2876	2.7318e-02	5.1518e-05	4.0921e-05	0:00:02	78
2877	2.5978e-02	4.9469e-05	3.9218e-05	0:00:02	77
2878	2.4638e-02	4.7602e-05	3.7634e-05	0:00:01	76
2879	2.3949e-02	4.5772e-05	3.6021e-05	0:00:01	75
2880	2.3016e-02	4.4043e-05	3.4572e-05	0:00:01	74
2881	2.1753e-02	4.2466e-05	3.3241e-05	0:00:01	73
2882	2.1023e-02	4.0846e-05	3.1884e-05	0:00:01	72
2883	1.9806e-02	3.9386e-05	3.0722e-05	0:00:00	71
2884	1.9159e-02	3.7924e-05	2.9488e-05	0:00:00	70
2885	1.8388e-02	3.6590e-05	2.8365e-05	0:00:14	69
2886	1.7523e-02	3.5285e-05	2.7291e-05	0:00:11	68

iter	continuity	x-velocity	y-velocity	time/iter	
2887	1.6801e-02	3.4015e-05	2.6213e-05	0:00:09	67
2888	1.6050e-02	3.2810e-05	2.5177e-05	0:00:07	66
2889	1.5396e-02	3.1619e-05	2.4173e-05	0:00:05	65
2890	1.4813e-02	3.0486e-05	2.3181e-05	0:00:04	64
2891	1.4184e-02	2.9380e-05	2.2235e-05	0:00:03	63
2892	1.3517e-02	2.8286e-05	2.1309e-05	0:00:03	62
2893	1.2989e-02	2.7232e-05	2.0423e-05	0:00:02	61
2894	1.2385e-02	2.6194e-05	1.9545e-05	0:00:02	60
2895	1.1843e-02	2.5193e-05	1.8704e-05	0:00:01	59
2896	1.1327e-02	2.4215e-05	1.7889e-05	0:00:01	58
2897	1.0765e-02	2.3252e-05	1.7110e-05	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
2898	1.0325e-02	2.2320e-05	1.6354e-05	0:00:01	56
2899	9.8705e-03	2.1426e-05	1.5629e-05	0:00:00	55
2900	9.3933e-03	2.0551e-05	1.4934e-05	0:00:00	54
2901	8.9624e-03	1.9698e-05	1.4265e-05	0:00:11	53
2902	8.5700e-03	1.8876e-05	1.3616e-05	0:00:09	52
2903	8.1950e-03	1.8086e-05	1.3004e-05	0:00:07	51
2904	7.8313e-03	1.7317e-05	1.2417e-05	0:00:05	50

2905	7.4911e-03	1.6577e-05	1.1850e-05	0:00:04	49
2906	7.1692e-03	1.5858e-05	1.1313e-05	0:00:03	48
2907	6.8626e-03	1.5174e-05	1.0806e-05	0:00:03	47
2908	6.5778e-03	1.4512e-05	1.0340e-05	0:00:02	46

iter	continuity	x-velocity	y-velocity	time/iter	
2909	6.3039e-03	1.3877e-05	9.8950e-06	0:00:02	45
2910	6.0276e-03	1.3271e-05	9.4825e-06	0:00:01	44
2911	5.7741e-03	1.2691e-05	9.0926e-06	0:00:01	43
2912	5.5359e-03	1.2133e-05	8.7215e-06	0:00:01	42
2913	5.3133e-03	1.1605e-05	8.3752e-06	0:00:01	41
2914	5.1034e-03	1.1097e-05	8.0508e-06	0:00:00	40
2915	4.8724e-03	1.0611e-05	7.7442e-06	0:00:00	39
2916	4.6717e-03	1.0146e-05	7.4531e-06	0:00:00	38
2917	4.4749e-03	9.7013e-06	7.1718e-06	0:00:00	37
2918	4.3023e-03	9.2715e-06	6.9066e-06	0:00:07	36
2919	4.1103e-03	8.8665e-06	6.6479e-06	0:00:06	35

iter	continuity	x-velocity	y-velocity	time/iter	
2920	3.9199e-03	8.4759e-06	6.3967e-06	0:00:04	34
2921	3.7446e-03	8.1013e-06	6.1560e-06	0:00:03	33
2922	3.5705e-03	7.7411e-06	5.9236e-06	0:00:03	32
2923	3.4102e-03	7.4028e-06	5.6999e-06	0:00:02	31
2924	3.2505e-03	7.0805e-06	5.4801e-06	0:00:02	30
2925	3.1112e-03	6.7706e-06	5.2703e-06	0:00:01	29
2926	2.9507e-03	6.4691e-06	5.0656e-06	0:00:01	28
2927	2.8532e-03	6.1854e-06	4.8673e-06	0:00:01	27
2928	2.7213e-03	5.9148e-06	4.6776e-06	0:00:01	26
2929	2.5757e-03	5.6573e-06	4.4939e-06	0:00:00	25
2930	2.4866e-03	5.4096e-06	4.3166e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2931	2.3447e-03	5.1699e-06	4.1441e-06	0:00:00	23
2932	2.2403e-03	4.9455e-06	3.9800e-06	0:00:00	22
2933	2.1588e-03	4.7245e-06	3.8193e-06	0:00:00	21
2934	2.0619e-03	4.5149e-06	3.6648e-06	0:00:00	20
2935	1.9698e-03	4.3153e-06	3.5158e-06	0:00:04	19
2936	1.8815e-03	4.1233e-06	3.3714e-06	0:00:03	18
2937	1.7945e-03	3.9406e-06	3.2319e-06	0:00:02	17
2938	1.7163e-03	3.7653e-06	3.0966e-06	0:00:02	16
2939	1.6390e-03	3.5984e-06	2.9659e-06	0:00:01	15
2940	1.5646e-03	3.4379e-06	2.8388e-06	0:00:01	14
2941	1.4893e-03	3.2842e-06	2.7150e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2942	1.4286e-03	3.1382e-06	2.5975e-06	0:00:01	12
2943	1.3680e-03	2.9989e-06	2.4844e-06	0:00:00	11
2944	1.3094e-03	2.8652e-06	2.3754e-06	0:00:00	10
2945	1.2452e-03	2.7362e-06	2.2672e-06	0:00:00	9
2946	1.1934e-03	2.6149e-06	2.1653e-06	0:00:00	8
2947	1.1448e-03	2.4991e-06	2.0651e-06	0:00:00	7
2948	1.0866e-03	2.3888e-06	1.9715e-06	0:00:00	6
2949	1.0342e-03	2.2838e-06	1.8805e-06	0:00:00	5
2950	9.8991e-04	2.1843e-06	1.7928e-06	0:00:00	4

! 2950 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 31.42066383361816s, time step = 35

8 more time steps

Truncation Error (computed)=0.010554 > Truncation error tolerance

Repeating the time step: time step size = 0.431800

in update prediction domain id = 1

physical-dt 4.3180e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
2950	9.8991e-04	2.1843e-06	1.7928e-06	0:00:01	100
2951	4.0313e-01	1.7068e-04	9.0040e-05	0:00:01	99
2952	2.0417e-01	7.2927e-05	7.1879e-05	0:00:00	98
2953	1.1219e-01	5.3122e-05	5.3537e-05	0:00:00	97
2954	7.7714e-02	4.2767e-05	3.9580e-05	0:00:00	96
2955	5.7814e-02	3.6821e-05	3.2735e-05	0:00:00	95
2956	4.3451e-02	3.2330e-05	2.8012e-05	0:00:00	94
2957	3.2900e-02	2.8699e-05	2.4452e-05	0:00:00	93

2958	2.5566e-02	2.5649e-05	2.1597e-05	0:00:00	92
2959	2.0497e-02	2.2990e-05	1.9156e-05	0:00:00	91
2960	1.6931e-02	2.0656e-05	1.7037e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
2961	1.3918e-02	1.8626e-05	1.5216e-05	0:00:00	89
2962	1.1884e-02	1.6808e-05	1.3606e-05	0:00:00	88
2963	1.0324e-02	1.5187e-05	1.2185e-05	0:00:00	87
2964	9.1296e-03	1.3752e-05	1.0927e-05	0:00:00	86
2965	8.0821e-03	1.2468e-05	9.8237e-06	0:00:00	85
2966	7.1906e-03	1.1318e-05	8.8506e-06	0:00:17	84
2967	6.4421e-03	1.0285e-05	7.9887e-06	0:00:13	83
2968	5.7878e-03	9.3527e-06	7.2220e-06	0:00:11	82
2969	5.2180e-03	8.5234e-06	6.5406e-06	0:00:08	81
2970	4.7148e-03	7.7727e-06	5.9293e-06	0:00:07	80
2971	4.2695e-03	7.0992e-06	5.3826e-06	0:00:05	79

iter	continuity	x-velocity	y-velocity	time/iter	
2972	3.8837e-03	6.4880e-06	4.8921e-06	0:00:04	78
2973	3.5367e-03	5.9405e-06	4.4517e-06	0:00:03	77
2974	3.2130e-03	5.4366e-06	4.0565e-06	0:00:03	76
2975	2.9232e-03	4.9830e-06	3.7011e-06	0:00:02	75
2976	2.6592e-03	4.5694e-06	3.3794e-06	0:00:16	74
2977	2.4360e-03	4.1936e-06	3.0903e-06	0:00:13	73
2978	2.2293e-03	3.8489e-06	2.8280e-06	0:00:10	72
2979	2.0474e-03	3.5345e-06	2.5896e-06	0:00:08	71
2980	1.8755e-03	3.2489e-06	2.3714e-06	0:00:06	70
2981	1.7216e-03	2.9868e-06	2.1717e-06	0:00:05	69
2982	1.5925e-03	2.7424e-06	1.9885e-06	0:00:04	68

iter	continuity	x-velocity	y-velocity	time/iter	
2983	1.4630e-03	2.5222e-06	1.8248e-06	0:00:03	67
2984	1.3463e-03	2.3208e-06	1.6734e-06	0:00:02	66
2985	1.2380e-03	2.1337e-06	1.5343e-06	0:00:02	65
2986	1.1469e-03	1.9632e-06	1.4072e-06	0:00:02	64
2987	1.0652e-03	1.8061e-06	1.2903e-06	0:00:01	63
2988	9.8685e-04	1.6608e-06	1.1833e-06	0:00:01	62

! 2988 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 30.98886349797249s, time step = 35

7 more time steps

Updating solution at time level N...

done.

physical-dt 7.9955e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2988	9.8685e-04	1.6608e-06	1.1833e-06	0:00:02	100
2989	2.1840e-01	1.3156e-04	1.1663e-04	0:00:21	99
2990	2.1348e-01	1.3757e-04	1.1112e-04	0:00:17	98
2991	1.5147e-01	1.2832e-04	1.0743e-04	0:00:13	97
2992	1.0709e-01	1.1972e-04	1.0440e-04	0:00:10	96
2993	8.2706e-02	1.1240e-04	9.9398e-05	0:00:08	95
2994	7.0303e-02	1.0601e-04	9.3633e-05	0:00:07	94
2995	6.1948e-02	1.0018e-04	8.8044e-05	0:00:05	93
2996	5.5957e-02	9.4775e-05	8.2748e-05	0:00:04	92
2997	5.1037e-02	8.9745e-05	7.7952e-05	0:00:03	91
2998	4.7118e-02	8.5066e-05	7.3458e-05	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
2999	4.3979e-02	8.0679e-05	6.9355e-05	0:00:02	89
3000	4.0951e-02	7.6581e-05	6.5569e-05	0:00:02	88
3001	3.8486e-02	7.2761e-05	6.2018e-05	0:00:01	87
3002	3.6282e-02	6.9176e-05	5.8693e-05	0:00:01	86
3003	3.4169e-02	6.5800e-05	5.5597e-05	0:00:01	85
3004	3.2247e-02	6.2667e-05	5.2700e-05	0:00:01	84
3005	3.0492e-02	5.9681e-05	4.9965e-05	0:00:17	83
3006	2.9022e-02	5.6875e-05	4.7406e-05	0:00:14	82
3007	2.7599e-02	5.4239e-05	4.4984e-05	0:00:11	81
3008	2.6233e-02	5.1766e-05	4.2712e-05	0:00:08	80
3009	2.4981e-02	4.9429e-05	4.0579e-05	0:00:07	79

iter	continuity	x-velocity	y-velocity	time/iter	
3010	2.3827e-02	4.7220e-05	3.8573e-05	0:00:05	78
3011	2.2779e-02	4.5146e-05	3.6675e-05	0:00:04	77
3012	2.1684e-02	4.3139e-05	3.4879e-05	0:00:03	76
3013	2.0738e-02	4.1258e-05	3.3234e-05	0:00:03	75
3014	1.9816e-02	3.9486e-05	3.1672e-05	0:00:02	74
3015	1.8718e-02	3.7827e-05	3.0236e-05	0:00:02	73

3016	1.8106e-02	3.6199e-05	2.8811e-05	0:00:01	72
3017	1.6944e-02	3.4660e-05	2.7580e-05	0:00:01	71
3018	1.6333e-02	3.3185e-05	2.6327e-05	0:00:01	70
3019	1.5592e-02	3.1834e-05	2.5202e-05	0:00:01	69
3020	1.4801e-02	3.0515e-05	2.4136e-05	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
3021	1.4229e-02	2.9243e-05	2.3134e-05	0:00:00	67
3022	1.3547e-02	2.8030e-05	2.2171e-05	0:00:00	66
3023	1.2913e-02	2.6884e-05	2.1250e-05	0:00:13	65
3024	1.2349e-02	2.5811e-05	2.0369e-05	0:00:10	64
3025	1.1742e-02	2.4764e-05	1.9516e-05	0:00:08	63
3026	1.1215e-02	2.3790e-05	1.8700e-05	0:00:06	62
3027	1.0696e-02	2.2830e-05	1.7908e-05	0:00:05	61
3028	1.0193e-02	2.1900e-05	1.7151e-05	0:00:04	60
3029	9.7012e-03	2.1008e-05	1.6416e-05	0:00:03	59
3030	9.2471e-03	2.0154e-05	1.5707e-05	0:00:02	58
3031	8.8388e-03	1.9328e-05	1.5021e-05	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
3032	8.3960e-03	1.8521e-05	1.4366e-05	0:00:02	56
3033	7.9559e-03	1.7734e-05	1.3725e-05	0:00:01	55
3034	7.5865e-03	1.6979e-05	1.3116e-05	0:00:01	54
3035	7.2374e-03	1.6261e-05	1.2527e-05	0:00:01	53
3036	6.8854e-03	1.5556e-05	1.1956e-05	0:00:01	52
3037	6.5690e-03	1.4877e-05	1.1414e-05	0:00:00	51
3038	6.2558e-03	1.4227e-05	1.0889e-05	0:00:00	50
3039	5.9561e-03	1.3599e-05	1.0388e-05	0:00:00	49
3040	5.6791e-03	1.2998e-05	9.9081e-06	0:00:00	48
3041	5.3952e-03	1.2417e-05	9.4443e-06	0:00:00	47
3042	5.1174e-03	1.1855e-05	8.9988e-06	0:00:09	46

iter	continuity	x-velocity	y-velocity	time/iter	
3043	4.8742e-03	1.1317e-05	8.5776e-06	0:00:07	45
3044	4.6361e-03	1.0803e-05	8.1721e-06	0:00:06	44
3045	4.4166e-03	1.0307e-05	7.7856e-06	0:00:04	43
3046	4.1882e-03	9.8355e-06	7.4182e-06	0:00:03	42
3047	3.9917e-03	9.3778e-06	7.0705e-06	0:00:03	41
3048	3.8016e-03	8.9442e-06	6.7380e-06	0:00:02	40
3049	3.6153e-03	8.5305e-06	6.4287e-06	0:00:02	39
3050	3.4482e-03	8.1372e-06	6.1382e-06	0:00:01	38
3051	3.2840e-03	7.7595e-06	5.8623e-06	0:00:01	37
3052	3.1446e-03	7.3981e-06	5.6063e-06	0:00:01	36
3053	3.0052e-03	7.0607e-06	5.3642e-06	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
3054	2.8621e-03	6.7343e-06	5.1331e-06	0:00:00	34
3055	2.7287e-03	6.4243e-06	4.9132e-06	0:00:00	33
3056	2.6070e-03	6.1293e-06	4.7034e-06	0:00:00	32
3057	2.4862e-03	5.8436e-06	4.5018e-06	0:00:00	31
3058	2.3749e-03	5.5737e-06	4.3120e-06	0:00:00	30
3059	2.2732e-03	5.3148e-06	4.1280e-06	0:00:00	29
3060	2.1753e-03	5.0679e-06	3.9533e-06	0:00:00	28
3061	2.0781e-03	4.8330e-06	3.7840e-06	0:00:05	27
3062	1.9807e-03	4.6045e-06	3.6228e-06	0:00:04	26
3063	1.8705e-03	4.3867e-06	3.4674e-06	0:00:03	25
3064	1.7889e-03	4.1802e-06	3.3162e-06	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
3065	1.7151e-03	3.9846e-06	3.1740e-06	0:00:02	23
3066	1.6496e-03	3.7947e-06	3.0362e-06	0:00:01	22
3067	1.5795e-03	3.6119e-06	2.9038e-06	0:00:01	21
3068	1.5128e-03	3.4416e-06	2.7771e-06	0:00:01	20
3069	1.4443e-03	3.2740e-06	2.6543e-06	0:00:01	19
3070	1.3752e-03	3.1170e-06	2.5372e-06	0:00:00	18
3071	1.3308e-03	2.9638e-06	2.4206e-06	0:00:00	17
3072	1.2567e-03	2.8215e-06	2.3144e-06	0:00:00	16
3073	1.1961e-03	2.6837e-06	2.2105e-06	0:00:00	15
3074	1.1391e-03	2.5516e-06	2.1091e-06	0:00:00	14
3075	1.0866e-03	2.4252e-06	2.0115e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
3076	1.0330e-03	2.3066e-06	1.9184e-06	0:00:00	12
3077	9.8524e-04	2.1935e-06	1.8285e-06	0:00:00	11

! 3077 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 31.78841781616211s, time step = 36

6 more time steps

Truncation Error (computed)=0.010640 > Truncation error tolerance

Repeating the time step: time step size = 0.399777

in update prediction domain id = 1
physical-dt 3.9978e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
3077	9.8524e-04	2.1935e-06	1.8285e-06	0:00:01	100
3078	4.0277e-01	1.8986e-04	1.1324e-04	0:00:00	99
3079	2.1073e-01	1.0880e-04	1.0413e-04	0:00:00	98
3080	1.1457e-01	8.7900e-05	8.2453e-05	0:00:00	97
3081	8.0800e-02	7.2602e-05	6.6035e-05	0:00:00	96
3082	6.4208e-02	6.2299e-05	5.5534e-05	0:00:00	95
3083	5.2661e-02	5.4317e-05	4.7619e-05	0:00:00	94
3084	4.1452e-02	4.7890e-05	4.1311e-05	0:00:00	93
3085	3.3479e-02	4.2475e-05	3.6125e-05	0:00:00	92
3086	2.7602e-02	3.7765e-05	3.1744e-05	0:00:00	91
3087	2.3323e-02	3.3637e-05	2.7947e-05	0:00:18	90

iter	continuity	x-velocity	y-velocity	time/iter	
3088	1.9893e-02	3.0010e-05	2.4669e-05	0:00:14	89
3089	1.7166e-02	2.6828e-05	2.1822e-05	0:00:11	88
3090	1.4950e-02	2.3998e-05	1.9342e-05	0:00:09	87
3091	1.3079e-02	2.1497e-05	1.7188e-05	0:00:07	86
3092	1.1522e-02	1.9267e-05	1.5292e-05	0:00:06	85
3093	1.0201e-02	1.7290e-05	1.3631e-05	0:00:04	84
3094	9.0488e-03	1.5524e-05	1.2163e-05	0:00:03	83
3095	8.0408e-03	1.3953e-05	1.0870e-05	0:00:03	82
3096	7.1671e-03	1.2549e-05	9.7263e-06	0:00:02	81
3097	6.4141e-03	1.1299e-05	8.7154e-06	0:00:02	80
3098	5.7445e-03	1.0182e-05	7.8186e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
3099	5.1519e-03	9.1798e-06	7.0201e-06	0:00:01	78
3100	4.6201e-03	8.2849e-06	6.3112e-06	0:00:01	77
3101	4.1515e-03	7.4853e-06	5.6818e-06	0:00:01	76
3102	3.7413e-03	6.7675e-06	5.1209e-06	0:00:01	75
3103	3.3769e-03	6.1228e-06	4.6203e-06	0:00:00	74
3104	3.0595e-03	5.5451e-06	4.1735e-06	0:00:00	73

3105	2.7721e-03	5.0256e-06	3.7724e-06	0:00:15	72
3106	2.5141e-03	4.5565e-06	3.4131e-06	0:00:12	71
3107	2.2770e-03	4.1341e-06	3.0898e-06	0:00:09	70
3108	2.0615e-03	3.7524e-06	2.7993e-06	0:00:07	69
3109	1.8733e-03	3.4108e-06	2.5371e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
3110	1.7036e-03	3.0995e-06	2.3005e-06	0:00:04	67
3111	1.5694e-03	2.8202e-06	2.0852e-06	0:00:04	66
3112	1.4344e-03	2.5674e-06	1.8946e-06	0:00:03	65
3113	1.3135e-03	2.3388e-06	1.7217e-06	0:00:02	64
3114	1.2052e-03	2.1296e-06	1.5644e-06	0:00:02	63
3115	1.1054e-03	1.9414e-06	1.4227e-06	0:00:01	62
3116	1.0169e-03	1.7697e-06	1.2936e-06	0:00:01	61
3117	9.3535e-04	1.6135e-06	1.1776e-06	0:00:01	60

! 3117 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 31.38864067196846s, time step = 36

5 more time steps

Updating solution at time level N...

done.

physical-dt 5.8849e-01

iter	continuity	x-velocity	y-velocity	time/iter	
3117	9.3535e-04	1.6135e-06	1.1776e-06	0:00:01	100
3118	1.9170e-01	1.2791e-04	1.1278e-04	0:00:01	99
3119	1.7179e-01	1.2632e-04	1.0754e-04	0:00:01	98
3120	1.1997e-01	1.1561e-04	1.0200e-04	0:00:20	97
3121	8.6315e-02	1.0572e-04	9.5953e-05	0:00:16	96
3122	6.8521e-02	9.7128e-05	8.8722e-05	0:00:13	95
3123	5.9271e-02	8.9601e-05	8.1290e-05	0:00:10	94
3124	5.2645e-02	8.2822e-05	7.4314e-05	0:00:08	93
3125	4.7551e-02	7.6633e-05	6.8019e-05	0:00:06	92
3126	4.3291e-02	7.0987e-05	6.2407e-05	0:00:05	91

3127 3.9546e-02 6.5838e-05 5.7369e-05 0:00:04 90

iter	continuity	x-velocity	y-velocity	time/iter	
3128	3.6251e-02	6.1141e-05	5.2795e-05	0:00:03	89
3129	3.3286e-02	5.6792e-05	4.8671e-05	0:00:02	88
3130	3.0703e-02	5.2821e-05	4.4903e-05	0:00:02	87
3131	2.8297e-02	4.9184e-05	4.1488e-05	0:00:02	86
3132	2.6049e-02	4.5824e-05	3.8377e-05	0:00:01	85
3133	2.4060e-02	4.2765e-05	3.5534e-05	0:00:01	84
3134	2.2190e-02	3.9901e-05	3.2940e-05	0:00:01	83
3135	2.0506e-02	3.7285e-05	3.0543e-05	0:00:01	82
3136	1.9010e-02	3.4839e-05	2.8367e-05	0:00:00	81
3137	1.7624e-02	3.2577e-05	2.6357e-05	0:00:00	80
3138	1.6338e-02	3.0479e-05	2.4514e-05	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
3139	1.5125e-02	2.8531e-05	2.2814e-05	0:00:16	78
3140	1.4055e-02	2.6725e-05	2.1252e-05	0:00:13	77
3141	1.2960e-02	2.5046e-05	1.9817e-05	0:00:10	76
3142	1.1999e-02	2.3477e-05	1.8491e-05	0:00:08	75
3143	1.1097e-02	2.2010e-05	1.7276e-05	0:00:06	74
3144	1.0242e-02	2.0650e-05	1.6146e-05	0:00:05	73
3145	9.5157e-03	1.9392e-05	1.5117e-05	0:00:04	72
3146	8.8495e-03	1.8217e-05	1.4167e-05	0:00:03	71
3147	8.2117e-03	1.7109e-05	1.3281e-05	0:00:02	70
3148	7.6257e-03	1.6080e-05	1.2462e-05	0:00:02	69
3149	7.0977e-03	1.5119e-05	1.1704e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
3150	6.6139e-03	1.4219e-05	1.1003e-05	0:00:01	67
3151	6.1877e-03	1.3377e-05	1.0343e-05	0:00:01	66
3152	5.7730e-03	1.2596e-05	9.7219e-06	0:00:01	65
3153	5.3811e-03	1.1850e-05	9.1366e-06	0:00:01	64
3154	5.0180e-03	1.1148e-05	8.5861e-06	0:00:00	63
3155	4.6893e-03	1.0491e-05	8.0682e-06	0:00:00	62
3156	4.3923e-03	9.8665e-06	7.5830e-06	0:00:00	61
3157	4.1139e-03	9.2778e-06	7.1233e-06	0:00:12	60
3158	3.8641e-03	8.7232e-06	6.6884e-06	0:00:10	59
3159	3.6346e-03	8.2023e-06	6.2805e-06	0:00:08	58
3160	3.4178e-03	7.7073e-06	5.8957e-06	0:00:06	57

iter	continuity	x-velocity	y-velocity	time/iter	
3161	3.2059e-03	7.2427e-06	5.5347e-06	0:00:05	56
3162	3.0128e-03	6.8026e-06	5.1950e-06	0:00:04	55

3163	2.8301e-03	6.3893e-06	4.8735e-06	0:00:03	54
3164	2.6663e-03	5.9994e-06	4.5720e-06	0:00:02	53
3165	2.5115e-03	5.6344e-06	4.2879e-06	0:00:02	52
3166	2.3764e-03	5.2893e-06	4.0217e-06	0:00:01	51
3167	2.2406e-03	4.9618e-06	3.7707e-06	0:00:01	50
3168	2.1138e-03	4.6574e-06	3.5351e-06	0:00:01	49
3169	1.9907e-03	4.3697e-06	3.3136e-06	0:00:01	48
3170	1.8727e-03	4.0983e-06	3.1054e-06	0:00:01	47
3171	1.7639e-03	3.8442e-06	2.9113e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
3172	1.6559e-03	3.6063e-06	2.7295e-06	0:00:00	45
3173	1.5592e-03	3.3829e-06	2.5576e-06	0:00:00	44
3174	1.4867e-03	3.1731e-06	2.3945e-06	0:00:00	43
3175	1.3951e-03	2.9746e-06	2.2482e-06	0:00:00	42
3176	1.3113e-03	2.7903e-06	2.1099e-06	0:00:08	41
3177	1.2359e-03	2.6169e-06	1.9809e-06	0:00:06	40
3178	1.1677e-03	2.4544e-06	1.8602e-06	0:00:05	39
3179	1.1039e-03	2.3025e-06	1.7482e-06	0:00:04	38
3180	1.0461e-03	2.1601e-06	1.6431e-06	0:00:03	37
3181	9.9298e-04	2.0244e-06	1.5436e-06	0:00:02	36

! 3181 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 31.97713279724121s, time step = 37

4 more time steps

Updating solution at time level N...

done.

physical-dt 6.5452e-01

iter	continuity	x-velocity	y-velocity	time/iter	
3181	9.9298e-04	2.0244e-06	1.5436e-06	0:00:07	100
3182	3.0143e-01	1.6438e-04	1.3756e-04	0:00:05	99
3183	3.0488e-01	1.6096e-04	1.1621e-04	0:00:04	98
3184	1.8689e-01	1.3694e-04	1.0254e-04	0:00:03	97

3185	1.1875e-01	1.2163e-04	9.7969e-05	0:00:03	96
3186	9.3709e-02	1.1088e-04	9.1243e-05	0:00:02	95
3187	8.0696e-02	1.0201e-04	8.4396e-05	0:00:02	94
3188	7.0780e-02	9.4626e-05	7.8055e-05	0:00:01	93
3189	6.2611e-02	8.8061e-05	7.2263e-05	0:00:01	92
3190	5.5300e-02	8.2040e-05	6.7077e-05	0:00:01	91
3191	4.9017e-02	7.6564e-05	6.2414e-05	0:00:19	90

iter	continuity	x-velocity	y-velocity	time/iter	
3192	4.4157e-02	7.1615e-05	5.8155e-05	0:00:15	89
3193	4.0016e-02	6.7088e-05	5.4254e-05	0:00:12	88
3194	3.6455e-02	6.2929e-05	5.0674e-05	0:00:09	87
3195	3.3175e-02	5.9083e-05	4.7366e-05	0:00:07	86
3196	3.0332e-02	5.5529e-05	4.4331e-05	0:00:06	85
3197	2.7753e-02	5.2250e-05	4.1522e-05	0:00:05	84
3198	2.5509e-02	4.9164e-05	3.8901e-05	0:00:04	83
3199	2.3505e-02	4.6270e-05	3.6491e-05	0:00:19	82
3200	2.1720e-02	4.3509e-05	3.4259e-05	0:00:15	81
3201	2.0153e-02	4.0957e-05	3.2205e-05	0:00:12	80
3202	1.8611e-02	3.8564e-05	3.0285e-05	0:00:09	79

iter	continuity	x-velocity	y-velocity	time/iter	
3203	1.7334e-02	3.6303e-05	2.8478e-05	0:00:08	78
3204	1.6244e-02	3.4167e-05	2.6770e-05	0:00:06	77
3205	1.5152e-02	3.2157e-05	2.5177e-05	0:00:05	76
3206	1.4208e-02	3.0268e-05	2.3656e-05	0:00:04	75
3207	1.3352e-02	2.8480e-05	2.2226e-05	0:00:03	74
3208	1.2465e-02	2.6809e-05	2.0885e-05	0:00:02	73
3209	1.1738e-02	2.5241e-05	1.9618e-05	0:00:02	72
3210	1.1068e-02	2.3758e-05	1.8427e-05	0:00:01	71
3211	1.0465e-02	2.2373e-05	1.7306e-05	0:00:01	70
3212	9.8462e-03	2.1067e-05	1.6261e-05	0:00:01	69
3213	9.3024e-03	1.9860e-05	1.5275e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
3214	8.7178e-03	1.8721e-05	1.4357e-05	0:00:01	67
3215	8.2456e-03	1.7659e-05	1.3504e-05	0:00:00	66
3216	7.7993e-03	1.6658e-05	1.2704e-05	0:00:00	65
3217	7.3932e-03	1.5713e-05	1.1959e-05	0:00:13	64
3218	6.9413e-03	1.4848e-05	1.1274e-05	0:00:10	63
3219	6.6502e-03	1.4010e-05	1.0609e-05	0:00:08	62
3220	6.2353e-03	1.3242e-05	1.0017e-05	0:00:06	61
3221	5.9872e-03	1.2500e-05	9.4377e-06	0:00:05	60
3222	5.5736e-03	1.1825e-05	8.9240e-06	0:00:04	59

3223	5.3210e-03	1.1165e-05	8.4138e-06	0:00:03	58
3224	4.9655e-03	1.0565e-05	7.9668e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
3225	4.7735e-03	9.9759e-06	7.5209e-06	0:00:02	56
3226	4.4566e-03	9.4476e-06	7.1289e-06	0:00:02	55
3227	4.2831e-03	8.9193e-06	6.7315e-06	0:00:01	54
3228	3.9954e-03	8.4429e-06	6.3831e-06	0:00:01	53
3229	3.7905e-03	7.9759e-06	6.0364e-06	0:00:01	52
3230	3.5787e-03	7.5355e-06	5.7117e-06	0:00:01	51
3231	3.3845e-03	7.1211e-06	5.4043e-06	0:00:00	50
3232	3.2550e-03	6.7236e-06	5.1088e-06	0:00:00	49
3233	3.0631e-03	6.3488e-06	4.8389e-06	0:00:00	48
3234	2.8877e-03	5.9925e-06	4.5770e-06	0:00:00	47
3235	2.7230e-03	5.6618e-06	4.3311e-06	0:00:09	46

iter	continuity	x-velocity	y-velocity	time/iter	
3236	2.5383e-03	5.3451e-06	4.0967e-06	0:00:07	45
3237	2.3974e-03	5.0440e-06	3.8731e-06	0:00:06	44
3238	2.2612e-03	4.7588e-06	3.6621e-06	0:00:04	43
3239	2.1567e-03	4.4901e-06	3.4621e-06	0:00:04	42
3240	2.0344e-03	4.2326e-06	3.2731e-06	0:00:03	41
3241	1.9294e-03	3.9911e-06	3.0944e-06	0:00:02	40
3242	1.8186e-03	3.7620e-06	2.9256e-06	0:00:02	39
3243	1.7171e-03	3.5458e-06	2.7661e-06	0:00:01	38
3244	1.6168e-03	3.3378e-06	2.6148e-06	0:00:01	37
3245	1.5162e-03	3.1429e-06	2.4723e-06	0:00:01	36
3246	1.4440e-03	2.9571e-06	2.3338e-06	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
3247	1.3562e-03	2.7863e-06	2.2089e-06	0:00:00	34
3248	1.2738e-03	2.6225e-06	2.0881e-06	0:00:00	33
3249	1.1964e-03	2.4672e-06	1.9712e-06	0:00:00	32
3250	1.1259e-03	2.3204e-06	1.8606e-06	0:00:00	31
3251	1.0562e-03	2.1825e-06	1.7562e-06	0:00:00	30
3252	9.9396e-04	2.0520e-06	1.6566e-06	0:00:00	29

! 3252 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 32.63165283203125s, time step = 38

3 more time steps

Updating solution at time level N...

done.

physical-dt 6.9903e-01

iter	continuity	x-velocity	y-velocity	time/iter
3252	9.9396e-04	2.0520e-06	1.6566e-06	0:00:00 100
3253	3.5686e-01	1.8828e-04	1.6288e-04	0:00:00 99
3254	3.5442e-01	1.8703e-04	1.3899e-04	0:00:00 98
3255	2.2071e-01	1.6102e-04	1.2180e-04	0:00:00 97
3256	1.4158e-01	1.4319e-04	1.1491e-04	0:00:00 96
3257	1.1041e-01	1.3090e-04	1.0723e-04	0:00:00 95
3258	9.3383e-02	1.2079e-04	1.0002e-04	0:00:00 94
3259	8.0558e-02	1.1218e-04	9.3247e-05	0:00:00 93
3260	7.1093e-02	1.0441e-04	8.7022e-05	0:00:00 92
3261	6.2851e-02	9.7382e-05	8.1307e-05	0:00:00 91
3262	5.6662e-02	9.0884e-05	7.6056e-05	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
3263	5.1624e-02	8.4962e-05	7.1199e-05	0:00:00 89
3264	4.7327e-02	7.9420e-05	6.6657e-05	0:00:00 88
3265	4.3652e-02	7.4353e-05	6.2441e-05	0:00:00 87
3266	4.0436e-02	6.9610e-05	5.8462e-05	0:00:17 86
3267	3.7176e-02	6.5223e-05	5.4773e-05	0:00:14 85
3268	3.4611e-02	6.1173e-05	5.1311e-05	0:00:11 84
3269	3.2072e-02	5.7397e-05	4.8081e-05	0:00:09 83
3270	2.9768e-02	5.3850e-05	4.5035e-05	0:00:07 82
3271	2.7743e-02	5.0577e-05	4.2196e-05	0:00:05 81
3272	2.5847e-02	4.7528e-05	3.9552e-05	0:00:04 80
3273	2.4191e-02	4.4680e-05	3.7082e-05	0:00:03 79

iter	continuity	x-velocity	y-velocity	time/iter
3274	2.2506e-02	4.2043e-05	3.4788e-05	0:00:03 78
3275	2.1061e-02	3.9597e-05	3.2639e-05	0:00:02 77
3276	1.9779e-02	3.7305e-05	3.0648e-05	0:00:02 76
3277	1.8618e-02	3.5163e-05	2.8791e-05	0:00:01 75
3278	1.7472e-02	3.3196e-05	2.7066e-05	0:00:01 74
3279	1.6555e-02	3.1338e-05	2.5444e-05	0:00:01 73

3280	1.5643e-02	2.9608e-05	2.3940e-05	0:00:01	72
3281	1.4757e-02	2.7981e-05	2.2533e-05	0:00:01	71
3282	1.3986e-02	2.6485e-05	2.1231e-05	0:00:00	70
3283	1.3241e-02	2.5051e-05	2.0016e-05	0:00:00	69
3284	1.2614e-02	2.3715e-05	1.8882e-05	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
3285	1.1963e-02	2.2480e-05	1.7837e-05	0:00:14	67
3286	1.1334e-02	2.1306e-05	1.6849e-05	0:00:11	66
3287	1.0699e-02	2.0180e-05	1.5921e-05	0:00:08	65
3288	1.0138e-02	1.9143e-05	1.5056e-05	0:00:07	64
3289	9.5131e-03	1.8167e-05	1.4252e-05	0:00:05	63
3290	9.1225e-03	1.7202e-05	1.3453e-05	0:00:04	62
3291	8.6692e-03	1.6322e-05	1.2739e-05	0:00:03	61
3292	8.1169e-03	1.5500e-05	1.2077e-05	0:00:03	60
3293	7.7589e-03	1.4690e-05	1.1410e-05	0:00:02	59
3294	7.3775e-03	1.3936e-05	1.0808e-05	0:00:02	58
3295	6.9905e-03	1.3225e-05	1.0241e-05	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
3296	6.6300e-03	1.2544e-05	9.7012e-06	0:00:01	56
3297	6.2645e-03	1.1892e-05	9.1905e-06	0:00:01	55
3298	5.9304e-03	1.1271e-05	8.7084e-06	0:00:01	54
3299	5.5937e-03	1.0675e-05	8.2495e-06	0:00:00	53
3300	5.2888e-03	1.0113e-05	7.8185e-06	0:00:00	52
3301	4.9817e-03	9.5676e-06	7.4012e-06	0:00:00	51
3302	4.7013e-03	9.0611e-06	7.0142e-06	0:00:00	50
3303	4.4352e-03	8.5749e-06	6.6454e-06	0:00:10	49
3304	4.1771e-03	8.1085e-06	6.2931e-06	0:00:08	48
3305	3.9420e-03	7.6674e-06	5.9580e-06	0:00:06	47
3306	3.7037e-03	7.2474e-06	5.6423e-06	0:00:05	46

iter	continuity	x-velocity	y-velocity	time/iter	
3307	3.4815e-03	6.8473e-06	5.3431e-06	0:00:04	45
3308	3.2660e-03	6.4642e-06	5.0552e-06	0:00:03	44
3309	3.0613e-03	6.1023e-06	4.7826e-06	0:00:02	43
3310	2.8785e-03	5.7569e-06	4.5261e-06	0:00:02	42
3311	2.7089e-03	5.4283e-06	4.2808e-06	0:00:01	41
3312	2.5464e-03	5.1180e-06	4.0471e-06	0:00:01	40
3313	2.3909e-03	4.8264e-06	3.8280e-06	0:00:01	39
3314	2.2450e-03	4.5494e-06	3.6183e-06	0:00:01	38
3315	2.1054e-03	4.2850e-06	3.4169e-06	0:00:01	37
3316	1.9783e-03	4.0338e-06	3.2276e-06	0:00:00	36
3317	1.8549e-03	3.7971e-06	3.0465e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter
3318	1.7438e-03	3.5752e-06	2.8770e-06	0:00:00 34
3319	1.6383e-03	3.3630e-06	2.7146e-06	0:00:00 33
3320	1.5446e-03	3.1650e-06	2.5614e-06	0:00:00 32
3321	1.4573e-03	2.9763e-06	2.4154e-06	0:00:06 31
3322	1.3630e-03	2.8001e-06	2.2783e-06	0:00:05 30
3323	1.2811e-03	2.6336e-06	2.1476e-06	0:00:04 29
3324	1.2021e-03	2.4756e-06	2.0244e-06	0:00:03 28
3325	1.1310e-03	2.3267e-06	1.9080e-06	0:00:02 27
3326	1.0612e-03	2.1869e-06	1.7982e-06	0:00:02 26
3327	9.9866e-04	2.0567e-06	1.6948e-06	0:00:01 25

! 3327 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 33.33068466186523s, time step = 39

2 more time steps

Truncation Error (computed)=0.010563 > Truncation error tolerance

Repeating the time step: time step size = 0.349515

in update prediction domain id = 1

physical-dt 3.4952e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
3327	9.9866e-04	2.0567e-06	1.6948e-06	0:00:05 100
3328	4.2696e-01	2.0638e-04	9.4047e-05	0:00:04 99
3329	2.0896e-01	8.3399e-05	7.8050e-05	0:00:03 98
3330	1.1587e-01	5.6101e-05	5.7916e-05	0:00:03 97
3331	8.1057e-02	4.3820e-05	4.3286e-05	0:00:02 96
3332	6.0767e-02	3.6482e-05	3.4884e-05	0:00:02 95

3333	4.6763e-02	3.1156e-05	2.9128e-05	0:00:01	94
3334	3.5970e-02	2.6985e-05	2.4763e-05	0:00:01	93
3335	2.7685e-02	2.3481e-05	2.1270e-05	0:00:01	92
3336	2.1362e-02	2.0511e-05	1.8351e-05	0:00:01	91
3337	1.7079e-02	1.7925e-05	1.5835e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
3338	1.3898e-02	1.5718e-05	1.3710e-05	0:00:00	89
3339	1.1460e-02	1.3807e-05	1.1895e-05	0:00:00	88
3340	9.5836e-03	1.2156e-05	1.0335e-05	0:00:00	87
3341	8.0947e-03	1.0715e-05	8.9937e-06	0:00:17	86
3342	6.8778e-03	9.4555e-06	7.8398e-06	0:00:14	85
3343	5.8802e-03	8.3550e-06	6.8473e-06	0:00:11	84
3344	5.0402e-03	7.3926e-06	5.9934e-06	0:00:09	83
3345	4.3600e-03	6.5490e-06	5.2604e-06	0:00:07	82
3346	3.7917e-03	5.8047e-06	4.6272e-06	0:00:05	81
3347	3.3177e-03	5.1520e-06	4.0759e-06	0:00:04	80
3348	2.9056e-03	4.5784e-06	3.5977e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
3349	2.5521e-03	4.0705e-06	3.1804e-06	0:00:03	78
3350	2.2596e-03	3.6231e-06	2.8149e-06	0:00:02	77
3351	2.0095e-03	3.2298e-06	2.4961e-06	0:00:02	76
3352	1.7930e-03	2.8819e-06	2.2163e-06	0:00:01	75
3353	1.5876e-03	2.5728e-06	1.9714e-06	0:00:01	74
3354	1.4129e-03	2.2983e-06	1.7553e-06	0:00:01	73
3355	1.2639e-03	2.0555e-06	1.5642e-06	0:00:01	72
3356	1.1312e-03	1.8381e-06	1.3946e-06	0:00:01	71
3357	1.0161e-03	1.6446e-06	1.2459e-06	0:00:00	70
3358	9.1385e-04	1.4728e-06	1.1120e-06	0:00:00	69

! 3358 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 32.98116937279701s, time step = 39

1 more time step

Updating solution at time level N...

done.

physical-dt 6.6363e-01

iter	continuity	x-velocity	y-velocity	time/iter
3358	9.1385e-04	1.4728e-06	1.1120e-06	0:00:00 100
3359	2.9065e-01	1.6198e-04	1.5899e-04	0:00:00 99
3360	2.3412e-01	1.6031e-04	1.5048e-04	0:00:00 98
3361	1.6146e-01	1.4766e-04	1.4228e-04	0:00:00 97
3362	1.1254e-01	1.3667e-04	1.3482e-04	0:00:00 96
3363	9.2743e-02	1.2715e-04	1.2526e-04	0:00:00 95
3364	8.1085e-02	1.1916e-04	1.1631e-04	0:00:00 94
3365	7.2627e-02	1.1167e-04	1.0783e-04	0:00:00 93
3366	6.5359e-02	1.0476e-04	1.0007e-04	0:00:00 92
3367	5.9110e-02	9.8290e-05	9.3012e-05	0:00:00 91
3368	5.3998e-02	9.2289e-05	8.6495e-05	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
3369	4.9603e-02	8.6643e-05	8.0487e-05	0:00:00 89
3370	4.5512e-02	8.1422e-05	7.4989e-05	0:00:00 88
3371	4.2082e-02	7.6521e-05	6.9903e-05	0:00:00 87
3372	3.8774e-02	7.1942e-05	6.5206e-05	0:00:00 86
3373	3.5793e-02	6.7664e-05	6.0838e-05	0:00:00 85
3374	3.3116e-02	6.3609e-05	5.6815e-05	0:00:17 84
3375	3.0820e-02	5.9832e-05	5.3072e-05	0:00:13 83
3376	2.8603e-02	5.6249e-05	4.9584e-05	0:00:11 82
3377	2.6667e-02	5.2908e-05	4.6334e-05	0:00:08 81
3378	2.4886e-02	4.9781e-05	4.3347e-05	0:00:07 80
3379	2.3184e-02	4.6815e-05	4.0537e-05	0:00:05 79

iter	continuity	x-velocity	y-velocity	time/iter
3380	2.1695e-02	4.4024e-05	3.7917e-05	0:00:04 78
3381	2.0291e-02	4.1432e-05	3.5491e-05	0:00:03 77
3382	1.8907e-02	3.8978e-05	3.3220e-05	0:00:03 76
3383	1.7793e-02	3.6692e-05	3.1122e-05	0:00:02 75
3384	1.6704e-02	3.4527e-05	2.9146e-05	0:00:02 74
3385	1.5658e-02	3.2509e-05	2.7304e-05	0:00:01 73
3386	1.4742e-02	3.0614e-05	2.5602e-05	0:00:01 72
3387	1.3848e-02	2.8831e-05	2.4005e-05	0:00:01 71
3388	1.3038e-02	2.7173e-05	2.2526e-05	0:00:01 70
3389	1.2245e-02	2.5606e-05	2.1145e-05	0:00:00 69
3390	1.1595e-02	2.4151e-05	1.9855e-05	0:00:00 68

iter	continuity	x-velocity	y-velocity	time/iter
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3391	1.0961e-02	2.2772e-05	1.8660e-05	0:00:00	67
3392	1.0300e-02	2.1480e-05	1.7537e-05	0:00:13	66
3393	9.7301e-03	2.0274e-05	1.6475e-05	0:00:11	65
3394	9.1973e-03	1.9135e-05	1.5497e-05	0:00:08	64
3395	8.7138e-03	1.8064e-05	1.4568e-05	0:00:07	63
3396	8.2244e-03	1.7066e-05	1.3698e-05	0:00:05	62
3397	7.7881e-03	1.6110e-05	1.2889e-05	0:00:04	61
3398	7.3390e-03	1.5210e-05	1.2127e-05	0:00:03	60
3399	6.9500e-03	1.4361e-05	1.1415e-05	0:00:03	59
3400	6.5495e-03	1.3561e-05	1.0745e-05	0:00:02	58
3401	6.1855e-03	1.2809e-05	1.0122e-05	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
3402	5.8457e-03	1.2099e-05	9.5376e-06	0:00:01	56
3403	5.5106e-03	1.1431e-05	8.9856e-06	0:00:01	55
3404	5.2034e-03	1.0801e-05	8.4711e-06	0:00:01	54
3405	4.9163e-03	1.0201e-05	7.9884e-06	0:00:01	53
3406	4.6449e-03	9.6357e-06	7.5333e-06	0:00:00	52
3407	4.3805e-03	9.1047e-06	7.1057e-06	0:00:00	51
3408	4.1394e-03	8.6014e-06	6.7077e-06	0:00:00	50
3409	3.8958e-03	8.1174e-06	6.3269e-06	0:00:00	49
3410	3.6731e-03	7.6656e-06	5.9711e-06	0:00:10	48
3411	3.4670e-03	7.2355e-06	5.6355e-06	0:00:08	47
3412	3.2778e-03	6.8313e-06	5.3200e-06	0:00:06	46

iter	continuity	x-velocity	y-velocity	time/iter	
3413	3.0925e-03	6.4460e-06	5.0230e-06	0:00:05	45
3414	2.9236e-03	6.0828e-06	4.7430e-06	0:00:04	44
3415	2.7632e-03	5.7378e-06	4.4765e-06	0:00:03	43
3416	2.6105e-03	5.4144e-06	4.2282e-06	0:00:02	42
3417	2.4537e-03	5.1067e-06	3.9944e-06	0:00:02	41
3418	2.3022e-03	4.8136e-06	3.7709e-06	0:00:01	40
3419	2.1770e-03	4.5364e-06	3.5609e-06	0:00:01	39
3420	2.0523e-03	4.2736e-06	3.3599e-06	0:00:01	38
3421	1.9322e-03	4.0246e-06	3.1703e-06	0:00:01	37
3422	1.8133e-03	3.7899e-06	2.9931e-06	0:00:01	36
3423	1.7038e-03	3.5679e-06	2.8244e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
3424	1.6067e-03	3.3587e-06	2.6644e-06	0:00:00	34
3425	1.5326e-03	3.1571e-06	2.5086e-06	0:00:00	33
3426	1.4348e-03	2.9705e-06	2.3664e-06	0:00:00	32
3427	1.3483e-03	2.7941e-06	2.2299e-06	0:00:00	31
3428	1.2667e-03	2.6256e-06	2.1001e-06	0:00:06	30

3429 1.1905e-03 2.4652e-06 1.9765e-06 0:00:05 29
3430 1.1203e-03 2.3147e-06 1.8583e-06 0:00:04 28
3431 1.0527e-03 2.1738e-06 1.7480e-06 0:00:03 27
3432 9.9003e-04 2.0412e-06 1.6446e-06 0:00:02 26

! 3432 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 33.64479827880859s, time step = 40

Writing "| gzip -2cf > SolutionMonitor.gz"...

Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22725 ...

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.

Writing data to \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...

x-coord

y-coord

pressure

x-velocity

y-velocity

hyb_init-0

hyb_init-1

Done.

Calculation complete.

Initialize using the hybrid initialization method.

Checking case topology...

-This case has both inlets & outlets

-Pressure information is not available at the boundaries.
Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00
2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "`winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set`"...

writing rp variables ... Done.
writing domain variables ... Done.
writing fluid (type fluid) (mixture) ... Done.
writing interior-fluid (type interior) (mixture) ... Done.
writing surface_body (type interior) (mixture) ... Done.
writing inlet (type velocity-inlet) (mixture) ... Done.
writing outlet (type pressure-outlet) (mixture) ... Done.
writing wall (type wall) (mixture) ... Done.
writing cylinder (type wall) (mixture) ... Done.
writing zones map name-id ... Done.

Writing to A16-059:"`winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-14.cas.h5`" in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...
116806 faces, 6 zones ...
58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-14-00000.dat.h5" in NODE0 mode and compression level 1 ...

Writing results.

Done.

'\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

Error: sopenoutputfile: unable to open file for output

Error Object: ".flwb_report_files\report.xml"

Updating solution at time level N...

done.

physical-dt 5.0000e-01

iter	continuity	x-velocity	y-velocity	time/iter
1	1.0000e+00	2.8003e-04	2.4950e-04	0:00:07 99
2	1.0000e+00	1.5522e-04	8.8371e-05	0:00:05 98
3	6.1892e-01	9.6023e-05	5.0598e-05	0:00:04 97
4	4.4150e-01	6.4891e-05	3.5165e-05	0:00:03 96
5	3.2603e-01	4.7745e-05	2.7133e-05	0:00:03 95
6	2.4289e-01	3.4250e-05	2.1327e-05	0:00:02 94
7	1.7433e-01	2.7587e-05	1.7753e-05	0:00:02 93
8	1.2877e-01	2.3112e-05	1.5346e-05	0:00:01 92
9	9.4088e-02	1.9940e-05	1.3583e-05	0:00:01 91
10	7.0371e-02	1.7634e-05	1.2261e-05	0:00:01 90
11	5.2262e-02	1.6316e-05	1.1488e-05	0:00:01 89

iter	continuity	x-velocity	y-velocity	time/iter
12	4.1378e-02	1.4796e-05	1.0566e-05	0:00:01 88
13	3.1925e-02	1.3770e-05	9.9577e-06	0:00:00 87
14	2.5425e-02	1.2990e-05	9.5863e-06	0:00:00 86
15	2.0955e-02	1.2018e-05	9.0051e-06	0:00:00 85
16	1.6520e-02	1.1368e-05	8.6416e-06	0:00:00 84
17	1.3635e-02	1.0818e-05	8.2899e-06	0:00:00 83
18	1.1620e-02	1.0327e-05	7.9934e-06	0:00:00 82
19	1.0154e-02	9.8907e-06	7.7352e-06	0:00:16 81
20	8.7731e-03	9.5587e-06	7.5545e-06	0:00:13 80
21	7.9678e-03	9.1640e-06	7.3081e-06	0:00:10 79
22	7.2229e-03	8.8714e-06	7.1328e-06	0:00:08 78

iter	continuity	x-velocity	y-velocity	time/iter	
23	6.8713e-03	8.5572e-06	6.9305e-06	0:00:06	77
24	6.2256e-03	8.3123e-06	6.7917e-06	0:00:05	76
25	5.8133e-03	8.0711e-06	6.6423e-06	0:00:04	75
26	5.5441e-03	7.8334e-06	6.4975e-06	0:00:03	74
27	5.3284e-03	7.6125e-06	6.3671e-06	0:00:02	73
28	5.1214e-03	7.4055e-06	6.2427e-06	0:00:02	72
29	4.8578e-03	7.2065e-06	6.1248e-06	0:00:02	71
30	4.6996e-03	7.0306e-06	6.0193e-06	0:00:01	70
31	4.5962e-03	6.8524e-06	5.9141e-06	0:00:01	69
32	4.5093e-03	6.6841e-06	5.8103e-06	0:00:01	68
33	4.3691e-03	6.5209e-06	5.7129e-06	0:00:01	67

iter	continuity	x-velocity	y-velocity	time/iter	
34	4.2288e-03	6.3671e-06	5.6195e-06	0:00:00	66
35	4.1176e-03	6.2160e-06	5.5259e-06	0:00:13	65
36	4.0591e-03	6.0729e-06	5.4369e-06	0:00:11	64
37	3.9967e-03	5.9342e-06	5.3467e-06	0:00:08	63
38	3.9149e-03	5.7984e-06	5.2612e-06	0:00:07	62
39	3.8197e-03	5.6663e-06	5.1753e-06	0:00:05	61
40	3.7550e-03	5.5366e-06	5.0908e-06	0:00:04	60
41	3.7308e-03	5.4148e-06	5.0072e-06	0:00:03	59
42	3.6994e-03	5.2954e-06	4.9251e-06	0:00:03	58
43	3.6676e-03	5.1735e-06	4.8403e-06	0:00:02	57
44	3.5914e-03	5.0598e-06	4.7594e-06	0:00:02	56

iter	continuity	x-velocity	y-velocity	time/iter	
45	3.5158e-03	4.9468e-06	4.6778e-06	0:00:01	55
46	3.4686e-03	4.8343e-06	4.5940e-06	0:00:01	54
47	3.4274e-03	4.7238e-06	4.5106e-06	0:00:01	53
48	3.3829e-03	4.6180e-06	4.4286e-06	0:00:01	52
49	3.3370e-03	4.5132e-06	4.3484e-06	0:00:00	51
50	3.2583e-03	4.4074e-06	4.2650e-06	0:00:00	50
51	3.1867e-03	4.3027e-06	4.1800e-06	0:00:00	49
52	3.1378e-03	4.1974e-06	4.0917e-06	0:00:00	48
53	3.0993e-03	4.0975e-06	4.0102e-06	0:00:00	47
54	3.0644e-03	3.9976e-06	3.9243e-06	0:00:00	46
55	3.0329e-03	3.9027e-06	3.8431e-06	0:00:00	45

iter	continuity	x-velocity	y-velocity	time/iter	
56	3.0019e-03	3.7907e-06	3.7443e-06	0:00:00	44
57	2.9459e-03	3.7181e-06	3.6823e-06	0:00:09	43
58	2.8842e-03	3.6220e-06	3.5934e-06	0:00:07	42
59	2.8448e-03	3.5192e-06	3.5011e-06	0:00:05	41

60	2.8075e-03	3.4281e-06	3.4170e-06	0:00:04	40
61	2.7566e-03	3.3368e-06	3.3310e-06	0:00:03	39
62	2.7153e-03	3.2461e-06	3.2446e-06	0:00:03	38
63	2.6838e-03	3.1591e-06	3.1621e-06	0:00:02	37
64	2.6611e-03	3.0636e-06	3.0695e-06	0:00:02	36
65	2.5946e-03	2.9841e-06	2.9938e-06	0:00:01	35
66	2.5314e-03	2.8908e-06	2.8997e-06	0:00:01	34

iter	continuity	x-velocity	y-velocity	time/iter	
67	2.4619e-03	2.8246e-06	2.8312e-06	0:00:01	33
68	2.3853e-03	2.7266e-06	2.7315e-06	0:00:01	32
69	2.3547e-03	2.6603e-06	2.6616e-06	0:00:00	31
70	2.3068e-03	2.5779e-06	2.5767e-06	0:00:00	30
71	2.2514e-03	2.4799e-06	2.4776e-06	0:00:00	29
72	2.2178e-03	2.4186e-06	2.4123e-06	0:00:00	28
73	2.1379e-03	2.3394e-06	2.3287e-06	0:00:00	27
74	2.0979e-03	2.2526e-06	2.2366e-06	0:00:00	26
75	2.0608e-03	2.1889e-06	2.1703e-06	0:00:00	25
76	2.0328e-03	2.1065e-06	2.0831e-06	0:00:00	24
77	1.9938e-03	2.0314e-06	2.0042e-06	0:00:00	23

iter	continuity	x-velocity	y-velocity	time/iter	
78	1.9068e-03	1.9630e-06	1.9293e-06	0:00:00	22
79	1.8202e-03	1.8956e-06	1.8542e-06	0:00:04	21
80	1.7466e-03	1.8258e-06	1.7795e-06	0:00:03	20
81	1.6904e-03	1.7581e-06	1.7067e-06	0:00:02	19
82	1.6386e-03	1.6908e-06	1.6352e-06	0:00:02	18
83	1.5860e-03	1.6250e-06	1.5641e-06	0:00:01	17
84	1.5345e-03	1.5607e-06	1.4958e-06	0:00:01	16
85	1.4881e-03	1.4991e-06	1.4304e-06	0:00:01	15
86	1.4325e-03	1.4364e-06	1.3645e-06	0:00:01	14
87	1.3725e-03	1.3751e-06	1.3004e-06	0:00:00	13
88	1.3184e-03	1.3161e-06	1.2382e-06	0:00:00	12

iter	continuity	x-velocity	y-velocity	time/iter	
89	1.2503e-03	1.2583e-06	1.1784e-06	0:00:00	11
90	1.2046e-03	1.2038e-06	1.1209e-06	0:00:00	10
91	1.1716e-03	1.1485e-06	1.0640e-06	0:00:00	9
92	1.1208e-03	1.0947e-06	1.0091e-06	0:00:00	8
93	1.0727e-03	1.0439e-06	9.5687e-07	0:00:00	7
94	1.0290e-03	9.9675e-07	9.0817e-07	0:00:00	6
95	9.7352e-04	9.4700e-07	8.5831e-07	0:00:00	5

! 95 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 1

49 more time steps

Truncation Error (computed)=0.023083 > Truncation error tolerance

Repeating the time step: time step size = 0.250000

in update prediction domain id = 1

physical-dt 2.5000e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
95	9.7352e-04	9.4700e-07	8.5831e-07	0:00:01 100
96	8.7592e-01	2.8093e-04	2.2129e-04	0:00:00 99
97	7.3693e-01	1.3429e-04	8.9618e-05	0:00:20 98
98	4.7820e-01	7.8138e-05	4.6354e-05	0:00:16 97
99	3.1620e-01	5.0907e-05	2.9267e-05	0:00:13 96
100	2.3775e-01	3.4986e-05	2.0267e-05	0:00:10 95
101	1.7612e-01	2.5910e-05	1.5309e-05	0:00:08 94
102	1.3142e-01	1.9030e-05	1.2469e-05	0:00:06 93
103	9.4381e-02	1.5502e-05	1.0312e-05	0:00:05 92
104	6.9213e-02	1.3308e-05	9.1924e-06	0:00:04 91
105	5.1917e-02	1.1459e-05	8.0093e-06	0:00:03 90

iter	continuity	x-velocity	y-velocity	time/iter
106	3.8501e-02	1.0395e-05	7.3508e-06	0:00:02 89
107	3.0229e-02	9.1805e-06	6.5458e-06	0:00:02 88
108	2.2803e-02	8.5031e-06	6.1592e-06	0:00:02 87
109	1.8674e-02	7.6785e-06	5.6231e-06	0:00:01 86
110	1.4784e-02	7.0306e-06	5.2099e-06	0:00:18 85
111	1.1922e-02	6.4381e-06	4.8300e-06	0:00:14 84
112	9.7245e-03	5.9446e-06	4.5085e-06	0:00:11 83

113	8.0776e-03	5.5295e-06	4.2322e-06	0:00:09	82
114	6.8608e-03	5.1682e-06	3.9893e-06	0:00:07	81
115	5.9484e-03	4.8491e-06	3.7705e-06	0:00:06	80
116	5.0668e-03	4.5813e-06	3.5902e-06	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
117	4.4931e-03	4.2998e-06	3.3857e-06	0:00:03	78
118	3.9363e-03	4.0629e-06	3.2213e-06	0:00:03	77
119	3.5753e-03	3.8339e-06	3.0567e-06	0:00:02	76
120	3.2740e-03	3.6195e-06	2.9021e-06	0:00:02	75
121	3.0446e-03	3.4236e-06	2.7620e-06	0:00:01	74
122	2.8170e-03	3.2439e-06	2.6341e-06	0:00:01	73
123	2.5828e-03	3.0741e-06	2.5125e-06	0:00:01	72
124	2.3773e-03	2.9137e-06	2.3959e-06	0:00:01	71
125	2.2302e-03	2.7637e-06	2.2879e-06	0:00:01	70
126	2.0984e-03	2.6190e-06	2.1815e-06	0:00:00	69
127	1.9838e-03	2.4871e-06	2.0851e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
128	1.8870e-03	2.3605e-06	1.9912e-06	0:00:00	67
129	1.7982e-03	2.2414e-06	1.9033e-06	0:00:00	66
130	1.7093e-03	2.1300e-06	1.8201e-06	0:00:00	65
131	1.6264e-03	2.0223e-06	1.7377e-06	0:00:13	64
132	1.5365e-03	1.9207e-06	1.6607e-06	0:00:10	63
133	1.4620e-03	1.8234e-06	1.5865e-06	0:00:08	62
134	1.3919e-03	1.7318e-06	1.5149e-06	0:00:06	61
135	1.3385e-03	1.6399e-06	1.4435e-06	0:00:05	60
136	1.2651e-03	1.5614e-06	1.3833e-06	0:00:04	59
137	1.2363e-03	1.4793e-06	1.3181e-06	0:00:03	58
138	1.1742e-03	1.4064e-06	1.2605e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
139	1.1328e-03	1.3312e-06	1.1998e-06	0:00:02	56
140	1.0603e-03	1.2636e-06	1.1456e-06	0:00:01	55
141	1.0138e-03	1.1999e-06	1.0931e-06	0:00:01	54
142	9.6935e-04	1.1361e-06	1.0403e-06	0:00:01	53

! 142 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.25s, time step = 1

48 more time steps

Truncation Error (computed)=0.016671 > Truncation error tolerance

Repeating the time step: time step size = 0.125000

in update prediction domain id = 1

physical-dt 1.2500e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
142	9.6935e-04	1.1361e-06	1.0403e-06	0:00:02	100
143	7.5333e-01	2.4407e-04	1.9235e-04	0:00:01	99
144	6.1299e-01	1.1716e-04	8.0565e-05	0:00:01	98
145	4.1073e-01	6.6321e-05	4.0899e-05	0:00:01	97
146	2.7594e-01	4.1638e-05	2.4605e-05	0:00:01	96
147	2.0046e-01	2.8148e-05	1.6204e-05	0:00:01	95
148	1.4843e-01	2.0096e-05	1.1398e-05	0:00:00	94
149	1.1000e-01	1.4774e-05	8.5037e-06	0:00:00	93
150	8.1221e-02	1.1314e-05	6.7709e-06	0:00:00	92
151	5.9528e-02	9.0116e-06	5.6287e-06	0:00:00	91
152	4.3442e-02	7.5676e-06	5.0353e-06	0:00:18	90

iter	continuity	x-velocity	y-velocity	time/iter	
153	3.1967e-02	6.4550e-06	4.3238e-06	0:00:14	89
154	2.4299e-02	5.4275e-06	3.6213e-06	0:00:11	88
155	1.7937e-02	4.8171e-06	3.2379e-06	0:00:09	87
156	1.4200e-02	4.1574e-06	2.8220e-06	0:00:07	86
157	1.1076e-02	3.6188e-06	2.4722e-06	0:00:06	85
158	8.5246e-03	3.2059e-06	2.2244e-06	0:00:04	84
159	6.8395e-03	2.8248e-06	1.9879e-06	0:00:04	83
160	5.5518e-03	2.5040e-06	1.7763e-06	0:00:03	82
161	4.5882e-03	2.2345e-06	1.5954e-06	0:00:02	81
162	3.8560e-03	2.0041e-06	1.4394e-06	0:00:02	80
163	3.2771e-03	1.8021e-06	1.3025e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter
164	2.8173e-03	1.6244e-06	1.1807e-06	0:00:01 78
165	2.4327e-03	1.4670e-06	1.0714e-06	0:00:01 77
166	2.0768e-03	1.3269e-06	9.7354e-07	0:00:01 76
167	1.7797e-03	1.2001e-06	8.8499e-07	0:00:01 75
168	1.5198e-03	1.0914e-06	8.1096e-07	0:00:00 74
169	1.3625e-03	9.8550e-07	7.3476e-07	0:00:00 73
170	1.2070e-03	8.9213e-07	6.6845e-07	0:00:00 72
171	1.0786e-03	8.1011e-07	6.1042e-07	0:00:00 71
172	9.5395e-04	7.3578e-07	5.5792e-07	0:00:00 70

! 172 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.125s, time step = 1

47 more time steps

Truncation Error (computed)=0.012790 > Truncation error tolerance

Repeating the time step: time step size = 0.062500

in update prediction domain id = 1

physical-dt 6.2500e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
172	9.5395e-04	7.3578e-07	5.5792e-07	0:00:00 100
173	6.1158e-01	1.9072e-04	1.5046e-04	0:00:00 99
174	4.7792e-01	9.6797e-05	6.8139e-05	0:00:00 98
175	3.2897e-01	5.4937e-05	3.4870e-05	0:00:00 97
176	2.2833e-01	3.3635e-05	2.0401e-05	0:00:00 96
177	1.6263e-01	2.1929e-05	1.2710e-05	0:00:00 95
178	1.1982e-01	1.4791e-05	8.1924e-06	0:00:00 94
179	8.8652e-02	1.0142e-05	5.4812e-06	0:00:00 93

180	6.5495e-02	7.3839e-06	3.9253e-06	0:00:00	92
181	4.6903e-02	5.6853e-06	3.0249e-06	0:00:00	91
182	3.5016e-02	4.2670e-06	2.2776e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
183	2.6165e-02	3.2763e-06	1.7824e-06	0:00:00	89
184	1.9105e-02	2.6142e-06	1.4580e-06	0:00:00	88
185	1.4484e-02	2.0312e-06	1.1503e-06	0:00:00	87
186	1.0751e-02	1.6379e-06	9.5490e-07	0:00:00	86
187	8.1907e-03	1.2955e-06	7.6511e-07	0:00:00	85
188	6.0710e-03	1.0690e-06	6.4247e-07	0:00:00	84
189	4.5719e-03	8.7539e-07	5.3085e-07	0:00:00	83
190	3.4778e-03	7.2127e-07	4.3878e-07	0:00:00	82
191	2.6786e-03	5.9535e-07	3.6425e-07	0:00:00	81
192	2.0960e-03	4.9448e-07	3.0394e-07	0:00:00	80
193	1.6536e-03	4.1212e-07	2.5448e-07	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
194	1.3090e-03	3.4488e-07	2.1391e-07	0:00:12	78
195	1.0483e-03	2.8990e-07	1.8055e-07	0:00:10	77
196	8.4816e-04	2.4409e-07	1.5250e-07	0:00:08	76

! 196 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0625s, time step = 1

46 more time steps

Truncation Error (computed)=0.009750 > Truncation error tolerance

Repeating the time step: time step size = 0.031250

in update prediction domain id = 1

physical-dt 3.1250e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
196	8.4816e-04	2.4409e-07	1.5250e-07	0:00:10	100
197	4.7195e-01	1.3221e-04	1.0442e-04	0:00:08	99
198	3.5745e-01	7.3958e-05	5.2648e-05	0:00:06	98
199	2.4868e-01	4.4526e-05	2.8647e-05	0:00:05	97
200	1.7876e-01	2.8329e-05	1.7025e-05	0:00:04	96
201	1.3161e-01	1.9002e-05	1.0542e-05	0:00:03	95
202	9.5934e-02	1.2970e-05	6.4714e-06	0:00:03	94
203	6.9446e-02	8.8182e-06	3.9956e-06	0:00:02	93
204	4.9859e-02	5.9466e-06	2.5013e-06	0:00:02	92
205	3.6487e-02	3.9860e-06	1.5919e-06	0:00:01	91
206	2.6552e-02	2.4870e-06	1.0163e-06	0:00:19	90

iter	continuity	x-velocity	y-velocity	time/iter	
207	1.8964e-02	1.9204e-06	7.1690e-07	0:00:15	89
208	1.4463e-02	1.0878e-06	4.4872e-07	0:00:12	88
209	1.0446e-02	9.4471e-07	3.5852e-07	0:00:09	87
210	7.6985e-03	6.4779e-07	2.5181e-07	0:00:07	86
211	5.5416e-03	5.2394e-07	1.8962e-07	0:00:06	85
212	4.2413e-03	3.0894e-07	1.2597e-07	0:00:05	84
213	3.0924e-03	2.7596e-07	1.0318e-07	0:00:04	83
214	2.2953e-03	1.9187e-07	7.5515e-08	0:00:03	82
215	1.6737e-03	1.4511e-07	5.7099e-08	0:00:02	81
216	1.2614e-03	1.0347e-07	4.2103e-08	0:00:02	80
217	9.3153e-04	7.1855e-08	3.1052e-08	0:00:01	79

! 217 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.03125s, time step = 1

45 more time steps

Truncation Error (computed)=0.007089 > Truncation error tolerance

Repeating the time step: time step size = 0.015625

in update prediction domain id = 1

physical-dt 1.5625e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
217	9.3153e-04	7.1855e-08	3.1052e-08	0:00:02	100
218	3.5816e-01	8.1850e-05	6.4696e-05	0:00:01	99
219	2.6604e-01	5.4005e-05	3.7624e-05	0:00:01	98
220	1.8617e-01	3.5775e-05	2.2293e-05	0:00:01	97
221	1.3307e-01	2.6473e-05	1.4310e-05	0:00:01	96
222	9.7377e-02	1.9567e-05	9.1761e-06	0:00:01	95
223	7.2624e-02	1.4061e-05	5.7949e-06	0:00:00	94
224	5.4024e-02	1.0013e-05	3.6000e-06	0:00:19	93
225	3.9919e-02	6.9475e-06	2.2166e-06	0:00:15	92
226	2.9372e-02	4.7956e-06	1.3871e-06	0:00:12	91
227	2.1508e-02	3.2782e-06	8.8532e-07	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
228	1.5700e-02	2.2452e-06	5.6840e-07	0:00:07	89
229	1.1431e-02	1.5394e-06	3.7322e-07	0:00:06	88
230	8.3118e-03	1.0624e-06	2.5131e-07	0:00:05	87
231	6.0386e-03	7.3223e-07	1.7070e-07	0:00:04	86
232	4.3887e-03	5.1148e-07	1.1809e-07	0:00:03	85
233	3.1960e-03	3.5656e-07	8.3043e-08	0:00:02	84
234	2.3338e-03	2.4746e-07	5.9625e-08	0:00:02	83
235	1.7256e-03	1.6813e-07	4.2216e-08	0:00:01	82
236	1.2522e-03	1.0510e-07	3.1022e-08	0:00:01	81
237	9.2765e-04	6.2330e-08	2.4537e-08	0:00:01	80

! 237 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.015625s, time step = 1

44 more time steps

Updating solution at time level N...

done.

physical-dt 1.5901e-02

iter	continuity	x-velocity	y-velocity	time/iter	
237	9.2765e-04	6.2330e-08	2.4537e-08	0:00:01	100
238	1.1680e-01	8.7577e-05	3.4545e-05	0:00:01	99
239	9.7675e-02	4.8696e-05	1.8581e-05	0:00:01	98
240	7.6527e-02	2.9786e-05	1.0528e-05	0:00:01	97
241	5.7608e-02	1.9685e-05	6.1314e-06	0:00:00	96
242	4.2442e-02	1.1999e-05	3.4955e-06	0:00:19	95
243	3.1184e-02	7.7444e-06	2.1286e-06	0:00:15	94
244	2.2969e-02	5.2975e-06	1.3584e-06	0:00:12	93
245	1.7267e-02	3.3824e-06	8.7882e-07	0:00:10	92
246	1.2779e-02	2.2608e-06	5.9204e-07	0:00:08	91
247	9.4623e-03	1.5019e-06	4.0640e-07	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
248	6.9472e-03	9.8966e-07	2.8239e-07	0:00:05	89
249	5.1528e-03	6.9563e-07	1.9780e-07	0:00:04	88
250	3.7853e-03	4.6891e-07	1.3935e-07	0:00:03	87
251	2.7907e-03	3.2845e-07	9.7157e-08	0:00:02	86
252	2.0408e-03	2.1973e-07	6.9193e-08	0:00:02	85
253	1.5060e-03	1.5722e-07	4.8992e-08	0:00:01	84
254	1.1307e-03	1.0139e-07	3.4104e-08	0:00:01	83
255	8.4129e-04	6.9468e-08	2.4723e-08	0:00:01	82

! 255 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 0.03152607753872871s, time step = 2

43 more time steps

Updating solution at time level N...

done.

physical-dt 2.1473e-02

iter	continuity	x-velocity	y-velocity	time/iter	
255	8.4129e-04	6.9468e-08	2.4723e-08	0:00:01	100
256	2.3725e-02	9.9857e-06	6.9893e-06	0:00:01	99
257	3.3074e-02	5.2827e-06	3.8168e-06	0:00:01	98
258	2.0941e-02	3.2068e-06	2.4457e-06	0:00:01	97
259	1.3151e-02	2.2397e-06	1.6694e-06	0:00:00	96
260	8.6735e-03	1.3502e-06	9.9898e-07	0:00:19	95
261	5.9907e-03	8.4732e-07	6.0290e-07	0:00:15	94
262	4.1995e-03	5.2720e-07	3.5284e-07	0:00:12	93
263	2.9896e-03	3.4119e-07	2.0803e-07	0:00:10	92
264	2.1387e-03	1.9439e-07	1.1614e-07	0:00:08	91
265	1.5115e-03	1.3509e-07	7.1314e-08	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
266	1.1048e-03	8.7519e-08	4.3733e-08	0:00:05	89
267	8.0128e-04	5.8031e-08	2.8896e-08	0:00:04	88

! 267 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.05299873650074005s, time step = 3

42 more time steps

Updating solution at time level N...

done.

physical-dt 3.3846e-02

iter	continuity	x-velocity	y-velocity	time/iter	
267	8.0128e-04	5.8031e-08	2.8896e-08	0:00:04	100
268	2.4591e-02	1.0146e-05	7.4210e-06	0:00:03	99
269	2.9248e-02	5.6138e-06	4.0858e-06	0:00:03	98
270	1.7393e-02	3.4947e-06	2.6099e-06	0:00:02	97
271	1.0077e-02	2.2392e-06	1.6660e-06	0:00:02	96
272	6.4616e-03	1.4702e-06	1.0681e-06	0:00:01	95
273	4.7455e-03	9.4546e-07	6.7675e-07	0:00:01	94

274	3.4820e-03	6.2721e-07	4.3587e-07	0:00:01	93
275	2.5248e-03	4.1996e-07	2.8405e-07	0:00:01	92
276	1.8296e-03	2.8352e-07	1.8870e-07	0:00:01	91
277	1.3327e-03	1.9489e-07	1.2914e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
278	9.7744e-04	1.3769e-07	9.1138e-08	0:00:00	89

! 278 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.08684456348419189s, time step = 4

41 more time steps

Updating solution at time level N...

done.

physical-dt 5.5724e-02

iter	continuity	x-velocity	y-velocity	time/iter	
278	9.7744e-04	1.3769e-07	9.1138e-08	0:00:00	100
279	2.8130e-02	1.0565e-05	8.3570e-06	0:00:00	99
280	3.0646e-02	6.3307e-06	4.9277e-06	0:00:00	98
281	1.7462e-02	4.2264e-06	3.2765e-06	0:00:00	97
282	9.5446e-03	2.9223e-06	2.2653e-06	0:00:00	96
283	6.5651e-03	2.0557e-06	1.5830e-06	0:00:00	95
284	4.9174e-03	1.4711e-06	1.1226e-06	0:00:00	94
285	3.7162e-03	1.0901e-06	8.2158e-07	0:00:00	93
286	2.8185e-03	8.2748e-07	6.1878e-07	0:00:00	92
287	2.1628e-03	6.3519e-07	4.7684e-07	0:00:00	91
288	1.6782e-03	4.9439e-07	3.7359e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
289	1.3173e-03	3.9088e-07	2.9686e-07	0:00:00	89
290	1.0493e-03	3.1337e-07	2.3859e-07	0:00:00	88
291	8.4572e-04	2.5338e-07	1.9291e-07	0:00:17	87

! 291 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.1425690352916718s, time step = 5

40 more time steps

Updating solution at time level N...

done.

physical-dt 9.2417e-02

iter	continuity	x-velocity	y-velocity	time/iter
291	8.4572e-04	2.5338e-07	1.9291e-07	0:00:20 100
292	3.1817e-02	1.1372e-05	9.9117e-06	0:00:16 99
293	3.0075e-02	7.4238e-06	6.2217e-06	0:00:13 98
294	1.6066e-02	5.2789e-06	4.4206e-06	0:00:10 97
295	8.8750e-03	3.9579e-06	3.2988e-06	0:00:08 96
296	6.5261e-03	3.0903e-06	2.5547e-06	0:00:06 95
297	5.1873e-03	2.4640e-06	2.0287e-06	0:00:05 94
298	4.1500e-03	2.0184e-06	1.6550e-06	0:00:04 93
299	3.3426e-03	1.6825e-06	1.3863e-06	0:00:03 92
300	2.7044e-03	1.4154e-06	1.1749e-06	0:00:02 91
301	2.2303e-03	1.2013e-06	1.0049e-06	0:00:02 90

iter	continuity	x-velocity	y-velocity	time/iter
302	1.8784e-03	1.0272e-06	8.6375e-07	0:00:02 89
303	1.6007e-03	8.8195e-07	7.4544e-07	0:00:01 88
304	1.3840e-03	7.6011e-07	6.4547e-07	0:00:01 87
305	1.2044e-03	6.5727e-07	5.6008e-07	0:00:01 86
306	1.0485e-03	5.6930e-07	4.8684e-07	0:00:01 85
307	9.1489e-04	4.9418e-07	4.2353e-07	0:00:00 84

! 307 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.2349865138530731s, time step = 6

39 more time steps

Updating solution at time level N...

done.

physical-dt 1.4483e-01

iter	continuity	x-velocity	y-velocity	time/iter	
307	9.1489e-04	4.9418e-07	4.2353e-07	0:00:01	100
308	3.6533e-02	1.2860e-05	1.2321e-05	0:00:00	99
309	3.2040e-02	8.8666e-06	7.9437e-06	0:00:00	98
310	1.7606e-02	6.3489e-06	5.5535e-06	0:00:00	97
311	1.0161e-02	4.9745e-06	4.4065e-06	0:00:00	96
312	7.5531e-03	4.1622e-06	3.6756e-06	0:00:00	95
313	6.1924e-03	3.6315e-06	3.1884e-06	0:00:00	94
314	5.1648e-03	3.2079e-06	2.8365e-06	0:00:00	93
315	4.4095e-03	2.8512e-06	2.5488e-06	0:00:00	92
316	3.7894e-03	2.5521e-06	2.3010e-06	0:00:00	91
317	3.2958e-03	2.2923e-06	2.0786e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
318	2.9059e-03	2.0672e-06	1.8846e-06	0:00:00	89
319	2.5823e-03	1.8683e-06	1.7107e-06	0:00:00	88
320	2.3115e-03	1.6898e-06	1.5539e-06	0:00:00	87
321	2.0698e-03	1.5296e-06	1.4134e-06	0:00:00	86
322	1.8623e-03	1.3860e-06	1.2866e-06	0:00:00	85
323	1.6996e-03	1.2569e-06	1.1715e-06	0:00:00	84
324	1.5539e-03	1.1389e-06	1.0658e-06	0:00:00	83
325	1.4157e-03	1.0325e-06	9.6972e-07	0:00:00	82
326	1.2908e-03	9.3656e-07	8.8239e-07	0:00:16	81
327	1.1773e-03	8.4859e-07	8.0251e-07	0:00:13	80
328	1.0794e-03	7.6890e-07	7.2983e-07	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
329	9.9188e-04	6.9744e-07	6.6413e-07	0:00:08	78

! 329 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```

()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.3798159956932068s, time step = 7
38 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 2.0265e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
329	9.9188e-04	6.9744e-07	6.6413e-07	0:00:10	100
330	4.3454e-02	1.5927e-05	1.6164e-05	0:00:08	99
331	3.9767e-02	1.1571e-05	1.0543e-05	0:00:06	98
332	2.4200e-02	7.8053e-06	7.0239e-06	0:00:05	97
333	1.4480e-02	6.0910e-06	5.6352e-06	0:00:04	96
334	1.0077e-02	5.3678e-06	5.0081e-06	0:00:03	95
335	7.9445e-03	4.9124e-06	4.6024e-06	0:00:03	94
336	6.6367e-03	4.5178e-06	4.2498e-06	0:00:02	93
337	5.7335e-03	4.1805e-06	3.9475e-06	0:00:02	92
338	5.0782e-03	3.8851e-06	3.6853e-06	0:00:01	91
339	4.5832e-03	3.6057e-06	3.4332e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
340	4.1829e-03	3.3522e-06	3.2091e-06	0:00:01	89
341	3.8523e-03	3.1152e-06	2.9985e-06	0:00:01	88
342	3.5956e-03	2.8997e-06	2.8040e-06	0:00:18	87
343	3.3959e-03	2.6981e-06	2.6205e-06	0:00:14	86
344	3.2013e-03	2.5074e-06	2.4513e-06	0:00:11	85
345	3.0189e-03	2.3329e-06	2.2942e-06	0:00:09	84
346	2.8580e-03	2.1698e-06	2.1445e-06	0:00:07	83
347	2.6953e-03	2.0165e-06	2.0027e-06	0:00:06	82
348	2.5429e-03	1.8754e-06	1.8739e-06	0:00:04	81
349	2.4181e-03	1.7391e-06	1.7471e-06	0:00:03	80
350	2.3122e-03	1.6117e-06	1.6267e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
351	2.2121e-03	1.4939e-06	1.5171e-06	0:00:02	78
352	2.1099e-03	1.3815e-06	1.4128e-06	0:00:02	77
353	1.9961e-03	1.2783e-06	1.3136e-06	0:00:01	76
354	1.8784e-03	1.1823e-06	1.2209e-06	0:00:01	75

355	1.7897e-03	1.0939e-06	1.1361e-06	0:00:01	74
356	1.6966e-03	1.0146e-06	1.0597e-06	0:00:01	73
357	1.6348e-03	9.3508e-07	9.7855e-07	0:00:01	72
358	1.5636e-03	8.6065e-07	9.0483e-07	0:00:15	71
359	1.4835e-03	7.9303e-07	8.3669e-07	0:00:12	70
360	1.3969e-03	7.3204e-07	7.7392e-07	0:00:09	69
361	1.3094e-03	6.7412e-07	7.1382e-07	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
362	1.2145e-03	6.1979e-07	6.5745e-07	0:00:06	67
363	1.1473e-03	5.6971e-07	6.0483e-07	0:00:04	66
364	1.0752e-03	5.2263e-07	5.5518e-07	0:00:04	65
365	1.0035e-03	4.7901e-07	5.0929e-07	0:00:03	64
366	9.3491e-04	4.3934e-07	4.6616e-07	0:00:02	63

! 366 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 0.5824630260467529s, time step = 8

37 more time steps

Updating solution at time level N...

done.

physical-dt 2.3917e-01

iter	continuity	x-velocity	y-velocity	time/iter	
366	9.3491e-04	4.3934e-07	4.6616e-07	0:00:03	100
367	5.7532e-02	2.0656e-05	2.0979e-05	0:00:03	99
368	6.0117e-02	1.6270e-05	1.3980e-05	0:00:02	98
369	4.0626e-02	1.0859e-05	8.9734e-06	0:00:02	97
370	2.5121e-02	8.1680e-06	7.1259e-06	0:00:01	96
371	1.6724e-02	7.0947e-06	6.3617e-06	0:00:01	95
372	1.2726e-02	6.5141e-06	5.8339e-06	0:00:01	94
373	1.0394e-02	6.0399e-06	5.3874e-06	0:00:01	93
374	8.7927e-03	5.6011e-06	5.0118e-06	0:00:01	92
375	7.6641e-03	5.2257e-06	4.6939e-06	0:00:19	91
376	6.8117e-03	4.8708e-06	4.4028e-06	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
377	6.2669e-03	4.5576e-06	4.1438e-06	0:00:12	89
378	5.9431e-03	4.2797e-06	3.9112e-06	0:00:09	88
379	5.6776e-03	4.0085e-06	3.6848e-06	0:00:07	87
380	5.4525e-03	3.7630e-06	3.4816e-06	0:00:06	86
381	5.1596e-03	3.5297e-06	3.2825e-06	0:00:05	85
382	4.9088e-03	3.3078e-06	3.0923e-06	0:00:04	84
383	4.7631e-03	3.1014e-06	2.9152e-06	0:00:03	83
384	4.6126e-03	2.9046e-06	2.7462e-06	0:00:02	82
385	4.4180e-03	2.7166e-06	2.5808e-06	0:00:02	81
386	4.3213e-03	2.5422e-06	2.4298e-06	0:00:01	80
387	4.2227e-03	2.3769e-06	2.2820e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
388	4.1315e-03	2.2171e-06	2.1433e-06	0:00:01	78
389	4.0019e-03	2.0659e-06	2.0091e-06	0:00:01	77
390	3.8435e-03	1.9244e-06	1.8820e-06	0:00:01	76
391	3.6842e-03	1.7877e-06	1.7606e-06	0:00:00	75
392	3.6267e-03	1.6569e-06	1.6431e-06	0:00:00	74
393	3.5460e-03	1.5226e-06	1.5213e-06	0:00:00	73
394	3.3963e-03	1.4269e-06	1.4297e-06	0:00:00	72
395	3.1014e-03	1.3058e-06	1.3142e-06	0:00:14	71
396	2.9451e-03	1.2144e-06	1.2317e-06	0:00:11	70
397	2.7069e-03	1.1083e-06	1.1309e-06	0:00:09	69
398	2.5701e-03	1.0179e-06	1.0493e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
399	2.4530e-03	9.4167e-07	9.8517e-07	0:00:06	67
400	2.3298e-03	8.6039e-07	9.1284e-07	0:00:04	66
401	2.2045e-03	7.9013e-07	8.5158e-07	0:00:03	65
402	2.0821e-03	7.2664e-07	7.9270e-07	0:00:03	64
403	1.9747e-03	6.6866e-07	7.4120e-07	0:00:02	63
404	1.8459e-03	6.1909e-07	6.9953e-07	0:00:02	62
405	1.7277e-03	5.6961e-07	6.5158e-07	0:00:01	61
406	1.6308e-03	5.3276e-07	6.1694e-07	0:00:01	60
407	1.5233e-03	4.9428e-07	5.7664e-07	0:00:01	59
408	1.4393e-03	4.6138e-07	5.4178e-07	0:00:01	58
409	1.3563e-03	4.3204e-07	5.0989e-07	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
410	1.2812e-03	4.0541e-07	4.7888e-07	0:00:00	56
411	1.2120e-03	3.8074e-07	4.5057e-07	0:00:00	55
412	1.1484e-03	3.5716e-07	4.2350e-07	0:00:00	54

```

413 1.0717e-03 3.3440e-07 3.9539e-07 0:00:00 53
414 1.0016e-03 3.1260e-07 3.6742e-07 0:00:00 52
415 9.3917e-04 2.9219e-07 3.4097e-07 0:00:00 51
! 415 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.8216342926025391s, time step = 9
36 more time steps

Updating solution at time level N...
done.
physical-dt 2.6719e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
415	9.3917e-04	2.9219e-07	3.4097e-07	0:00:00	100
416	8.6217e-02	2.8214e-05	2.7309e-05	0:00:00	99
417	9.6192e-02	2.3816e-05	1.9353e-05	0:00:00	98
418	6.7758e-02	1.5902e-05	1.1835e-05	0:00:00	97
419	4.3514e-02	1.1850e-05	8.9563e-06	0:00:00	96
420	2.9577e-02	1.0237e-05	7.9616e-06	0:00:00	95
421	2.2185e-02	9.1615e-06	7.1214e-06	0:00:00	94
422	1.7667e-02	8.4143e-06	6.5004e-06	0:00:00	93
423	1.4920e-02	7.9351e-06	6.1542e-06	0:00:00	92
424	1.2855e-02	7.2603e-06	5.6416e-06	0:00:00	91
425	1.1878e-02	6.8250e-06	5.3431e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
426	1.1253e-02	6.2986e-06	4.9562e-06	0:00:00	89
427	1.1070e-02	5.9844e-06	4.7579e-06	0:00:00	88
428	1.0729e-02	5.5132e-06	4.3970e-06	0:00:00	87
429	1.0577e-02	5.1951e-06	4.1656e-06	0:00:00	86
430	1.0036e-02	4.7708e-06	3.8280e-06	0:00:00	85
431	9.5179e-03	4.4857e-06	3.6301e-06	0:00:00	84
432	8.8911e-03	4.1106e-06	3.3406e-06	0:00:00	83
433	8.4450e-03	3.8377e-06	3.1669e-06	0:00:00	82
434	8.1871e-03	3.5137e-06	2.9344e-06	0:00:00	81

435	8.0542e-03	3.2417e-06	2.7431e-06	0:00:00	80
436	7.6797e-03	2.9912e-06	2.5672e-06	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
437	7.2760e-03	2.7546e-06	2.4132e-06	0:00:12	78
438	6.9028e-03	2.5310e-06	2.2577e-06	0:00:10	77
439	6.5330e-03	2.3262e-06	2.1232e-06	0:00:08	76
440	6.1498e-03	2.1409e-06	2.0043e-06	0:00:06	75
441	5.7345e-03	1.9768e-06	1.8931e-06	0:00:05	74
442	5.3653e-03	1.8209e-06	1.7838e-06	0:00:04	73
443	4.9735e-03	1.6851e-06	1.6797e-06	0:00:03	72
444	4.7178e-03	1.5556e-06	1.5784e-06	0:00:02	71
445	4.4015e-03	1.4636e-06	1.5139e-06	0:00:02	70
446	4.1057e-03	1.3714e-06	1.4347e-06	0:00:01	69
447	3.8369e-03	1.2914e-06	1.3655e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
448	3.5792e-03	1.2160e-06	1.2983e-06	0:00:01	67
449	3.3280e-03	1.1476e-06	1.2336e-06	0:00:01	66
450	3.0963e-03	1.0836e-06	1.1723e-06	0:00:01	65
451	2.8699e-03	1.0213e-06	1.1129e-06	0:00:00	64
452	2.6428e-03	9.6137e-07	1.0517e-06	0:00:00	63
453	2.4314e-03	9.0483e-07	9.9050e-07	0:00:00	62
454	2.2265e-03	8.5543e-07	9.3675e-07	0:00:00	61
455	2.0817e-03	7.9313e-07	8.6743e-07	0:00:00	60
456	1.9213e-03	7.4484e-07	8.1224e-07	0:00:00	59
457	1.8089e-03	6.9626e-07	7.5631e-07	0:00:00	58
458	1.7317e-03	6.4405e-07	6.9494e-07	0:00:11	57

iter	continuity	x-velocity	y-velocity	time/iter	
459	1.6089e-03	6.0294e-07	6.4431e-07	0:00:09	56
460	1.5302e-03	5.5890e-07	5.9030e-07	0:00:07	55
461	1.4376e-03	5.1756e-07	5.3913e-07	0:00:06	54
462	1.3529e-03	4.7884e-07	4.9183e-07	0:00:04	53
463	1.2629e-03	4.4060e-07	4.4677e-07	0:00:03	52
464	1.1762e-03	4.0452e-07	4.0456e-07	0:00:03	51
465	1.0886e-03	3.7002e-07	3.6541e-07	0:00:02	50
466	1.0006e-03	3.3665e-07	3.2830e-07	0:00:02	49
467	9.1904e-04	3.0481e-07	2.9357e-07	0:00:01	48

! 467 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
```

```
()
Flow time = 1.088829040527344s, time step = 10
35 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 2.9055e-01
```

iter	continuity	x-velocity	y-velocity	time/iter	
467	9.1904e-04	3.0481e-07	2.9357e-07	0:00:03	100
468	1.2209e-01	3.6763e-05	3.4463e-05	0:00:22	99
469	1.5057e-01	3.2574e-05	2.4734e-05	0:00:17	98
470	1.0198e-01	2.1758e-05	1.4988e-05	0:00:14	97
471	6.8995e-02	1.6413e-05	1.1341e-05	0:00:11	96
472	4.6826e-02	1.3466e-05	9.5140e-06	0:00:09	95
473	3.5518e-02	1.1895e-05	8.3467e-06	0:00:07	94
474	2.9254e-02	1.0536e-05	7.2815e-06	0:00:05	93
475	2.4811e-02	9.4797e-06	6.4717e-06	0:00:04	92
476	2.2034e-02	8.6209e-06	5.9227e-06	0:00:03	91
477	2.0231e-02	7.9004e-06	5.5031e-06	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
478	1.8569e-02	7.2492e-06	5.0990e-06	0:00:02	89
479	1.7286e-02	6.6160e-06	4.7219e-06	0:00:02	88
480	1.6321e-02	6.1017e-06	4.4833e-06	0:00:01	87
481	1.5846e-02	5.4802e-06	4.0987e-06	0:00:01	86
482	1.4613e-02	4.9942e-06	3.8706e-06	0:00:01	85
483	1.3834e-02	4.4850e-06	3.5476e-06	0:00:01	84
484	1.2547e-02	4.0969e-06	3.3419e-06	0:00:01	83
485	1.1715e-02	3.7290e-06	3.1180e-06	0:00:00	82
486	1.0947e-02	3.4041e-06	2.9182e-06	0:00:00	81
487	1.0198e-02	3.1289e-06	2.7528e-06	0:00:00	80
488	9.4761e-03	2.8915e-06	2.6036e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
489	8.7205e-03	2.6852e-06	2.4644e-06	0:00:16	78
490	7.9757e-03	2.5042e-06	2.3338e-06	0:00:12	77
491	7.2602e-03	2.3343e-06	2.2130e-06	0:00:10	76
492	6.5456e-03	2.1862e-06	2.1036e-06	0:00:08	75

493	5.9032e-03	2.0537e-06	2.0007e-06	0:00:06	74
494	5.3077e-03	1.9500e-06	1.9193e-06	0:00:05	73
495	4.7811e-03	1.8019e-06	1.7910e-06	0:00:04	72
496	4.3775e-03	1.7149e-06	1.7138e-06	0:00:03	71
497	3.9589e-03	1.5918e-06	1.6035e-06	0:00:02	70
498	3.6376e-03	1.4953e-06	1.5115e-06	0:00:02	69
499	3.3364e-03	1.4182e-06	1.4371e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
500	3.0243e-03	1.3106e-06	1.3308e-06	0:00:01	67
501	2.7823e-03	1.2393e-06	1.2564e-06	0:00:01	66
502	2.5418e-03	1.1439e-06	1.1597e-06	0:00:01	65
503	2.3551e-03	1.0805e-06	1.0900e-06	0:00:01	64
504	2.1794e-03	9.9773e-07	1.0028e-06	0:00:00	63
505	2.0529e-03	9.4114e-07	9.3703e-07	0:00:00	62
506	1.9117e-03	8.6574e-07	8.5703e-07	0:00:00	61
507	1.8072e-03	8.1344e-07	7.9601e-07	0:00:00	60
508	1.6930e-03	7.4561e-07	7.2454e-07	0:00:00	59
509	1.6042e-03	6.9140e-07	6.6402e-07	0:00:00	58
510	1.4957e-03	6.4268e-07	6.0992e-07	0:00:12	57

iter	continuity	x-velocity	y-velocity	time/iter	
511	1.4222e-03	5.8700e-07	5.5222e-07	0:00:09	56
512	1.3396e-03	5.3738e-07	5.0186e-07	0:00:07	55
513	1.2618e-03	4.9089e-07	4.5545e-07	0:00:06	54
514	1.1903e-03	4.4531e-07	4.1147e-07	0:00:04	53
515	1.1482e-03	3.9932e-07	3.6837e-07	0:00:03	52
516	1.0794e-03	3.6546e-07	3.3484e-07	0:00:03	51
517	1.0327e-03	3.2542e-07	2.9818e-07	0:00:02	50
518	9.7599e-04	2.9216e-07	2.6646e-07	0:00:02	49

! 518 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.379377961158752s, time step = 11

34 more time steps

Updating solution at time level N...

done.

physical-dt 3.2089e-01

iter	continuity	x-velocity	y-velocity	time/iter	
518	9.7599e-04	2.9216e-07	2.6646e-07	0:00:03	100
519	1.5948e-01	4.6531e-05	4.0833e-05	0:00:03	99
520	2.0348e-01	4.0177e-05	2.9333e-05	0:00:02	98
521	1.4023e-01	2.5191e-05	1.6675e-05	0:00:02	97
522	8.8281e-02	1.7499e-05	1.1502e-05	0:00:01	96
523	5.8528e-02	1.4055e-05	9.2002e-06	0:00:01	95
524	4.5692e-02	1.1992e-05	7.7415e-06	0:00:01	94
525	3.7578e-02	1.0512e-05	6.6996e-06	0:00:01	93
526	3.1938e-02	9.2432e-06	5.9596e-06	0:00:01	92
527	2.7712e-02	8.1796e-06	5.4411e-06	0:00:00	91
528	2.4343e-02	7.2714e-06	5.0792e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
529	2.1918e-02	6.5531e-06	4.7721e-06	0:00:18	89
530	2.0008e-02	5.9516e-06	4.5174e-06	0:00:14	88
531	1.8166e-02	5.4570e-06	4.3187e-06	0:00:11	87
532	1.6947e-02	4.9373e-06	4.0202e-06	0:00:09	86
533	1.5292e-02	4.5501e-06	3.8296e-06	0:00:07	85
534	1.3953e-02	4.1872e-06	3.6158e-06	0:00:06	84
535	1.2451e-02	3.8451e-06	3.4069e-06	0:00:04	83
536	1.1205e-02	3.5472e-06	3.2137e-06	0:00:03	82
537	1.0055e-02	3.2840e-06	3.0285e-06	0:00:03	81
538	9.0420e-03	3.0692e-06	2.8592e-06	0:00:02	80
539	8.1867e-03	2.8599e-06	2.6962e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
540	7.4029e-03	2.6638e-06	2.5335e-06	0:00:01	78
541	6.6992e-03	2.4869e-06	2.3821e-06	0:00:01	77
542	5.9730e-03	2.3186e-06	2.2354e-06	0:00:01	76
543	5.4145e-03	2.1715e-06	2.0997e-06	0:00:01	75
544	4.8596e-03	2.0218e-06	1.9595e-06	0:00:01	74
545	4.3386e-03	1.8974e-06	1.8409e-06	0:00:00	73
546	3.9118e-03	1.7467e-06	1.6922e-06	0:00:00	72
547	3.5159e-03	1.6436e-06	1.5932e-06	0:00:00	71
548	3.1869e-03	1.5159e-06	1.4665e-06	0:00:00	70
549	2.9080e-03	1.4250e-06	1.3768e-06	0:00:14	69
550	2.6594e-03	1.3120e-06	1.2617e-06	0:00:11	68

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

551	2.4548e-03	1.2342e-06	1.1826e-06	0:00:09	67
552	2.2712e-03	1.1375e-06	1.0812e-06	0:00:07	66
553	2.0804e-03	1.0662e-06	1.0076e-06	0:00:05	65
554	1.9255e-03	9.8917e-07	9.2583e-07	0:00:04	64
555	1.7909e-03	9.1842e-07	8.5059e-07	0:00:03	63
556	1.6669e-03	8.5144e-07	7.8111e-07	0:00:03	62
557	1.5618e-03	7.8843e-07	7.1648e-07	0:00:02	61
558	1.4952e-03	7.2805e-07	6.5509e-07	0:00:02	60
559	1.4003e-03	6.7103e-07	5.9925e-07	0:00:01	59
560	1.3138e-03	6.1673e-07	5.4713e-07	0:00:01	58
561	1.2341e-03	5.6550e-07	4.9916e-07	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
562	1.1599e-03	5.1580e-07	4.5374e-07	0:00:01	56
563	1.0962e-03	4.7058e-07	4.1352e-07	0:00:00	55
564	1.0300e-03	4.2686e-07	3.7556e-07	0:00:00	54
565	9.8742e-04	3.8436e-07	3.3933e-07	0:00:00	53

! 565 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.700271129608154s, time step = 12

33 more time steps

Updating solution at time level N...

done.

physical-dt 3.8146e-01

iter	continuity	x-velocity	y-velocity	time/iter	
565	9.8742e-04	3.8436e-07	3.3933e-07	0:00:01	100
566	1.9818e-01	5.9194e-05	4.8630e-05	0:00:00	99
567	2.5960e-01	4.8412e-05	3.4937e-05	0:00:00	98
568	1.6873e-01	2.7784e-05	1.8642e-05	0:00:00	97
569	1.0600e-01	1.7180e-05	1.1166e-05	0:00:00	96
570	7.2926e-02	1.3267e-05	8.6844e-06	0:00:00	95
571	5.7299e-02	1.1173e-05	7.4773e-06	0:00:00	94
572	4.7002e-02	9.7904e-06	6.6592e-06	0:00:00	93

573	3.9079e-02	8.6615e-06	6.0460e-06	0:00:00	92
574	3.2779e-02	7.7259e-06	5.5981e-06	0:00:00	91
575	2.7606e-02	6.9823e-06	5.2858e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
576	2.4043e-02	6.3987e-06	5.0838e-06	0:00:00	89
577	2.1412e-02	5.8140e-06	4.7521e-06	0:00:00	88
578	1.9132e-02	5.3852e-06	4.5306e-06	0:00:00	87
579	1.7317e-02	4.9177e-06	4.2147e-06	0:00:00	86
580	1.5681e-02	4.6119e-06	4.0246e-06	0:00:00	85
581	1.4005e-02	4.2322e-06	3.7338e-06	0:00:00	84
582	1.2564e-02	3.9684e-06	3.5159e-06	0:00:17	83
583	1.1090e-02	3.6447e-06	3.2548e-06	0:00:13	82
584	9.9389e-03	3.4476e-06	3.0992e-06	0:00:10	81
585	8.8079e-03	3.1630e-06	2.8601e-06	0:00:08	80
586	7.8182e-03	3.0406e-06	2.7493e-06	0:00:06	79

iter	continuity	x-velocity	y-velocity	time/iter	
587	6.8706e-03	2.7784e-06	2.5146e-06	0:00:05	78
588	6.0593e-03	2.6428e-06	2.3992e-06	0:00:04	77
589	5.4102e-03	2.4350e-06	2.2202e-06	0:00:03	76
590	4.8948e-03	2.2795e-06	2.0827e-06	0:00:03	75
591	4.3097e-03	2.1361e-06	1.9502e-06	0:00:02	74
592	3.9237e-03	1.9829e-06	1.8088e-06	0:00:02	73
593	3.5081e-03	1.8631e-06	1.6952e-06	0:00:01	72
594	3.2394e-03	1.7343e-06	1.5737e-06	0:00:01	71
595	2.9219e-03	1.6291e-06	1.4737e-06	0:00:01	70
596	2.6867e-03	1.5195e-06	1.3689e-06	0:00:01	69
597	2.4955e-03	1.4222e-06	1.2738e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
598	2.3258e-03	1.3309e-06	1.1845e-06	0:00:00	67
599	2.1766e-03	1.2460e-06	1.1004e-06	0:00:00	66
600	2.0885e-03	1.1642e-06	1.0200e-06	0:00:00	65
601	1.9238e-03	1.0917e-06	9.4844e-07	0:00:00	64
602	1.8423e-03	1.0177e-06	8.7702e-07	0:00:00	63
603	1.7412e-03	9.4949e-07	8.1186e-07	0:00:13	62
604	1.6407e-03	8.8276e-07	7.4957e-07	0:00:10	61
605	1.5498e-03	8.1849e-07	6.9081e-07	0:00:08	60
606	1.4651e-03	7.5713e-07	6.3630e-07	0:00:06	59
607	1.3829e-03	6.9918e-07	5.8515e-07	0:00:05	58
608	1.3006e-03	6.4280e-07	5.3602e-07	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter
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```

609 1.2222e-03 5.9140e-07 4.9112e-07 0:00:03 56
610 1.1567e-03 5.4322e-07 4.5075e-07 0:00:02 55
611 1.0897e-03 4.9698e-07 4.1326e-07 0:00:02 54
612 1.0318e-03 4.5374e-07 3.7861e-07 0:00:01 53
613 9.9275e-04 4.1278e-07 3.4599e-07 0:00:01 52
! 613 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 2.081732988357544s, time step = 13
32 more time steps

Updating solution at time level N...
done.
physical-dt 4.8894e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
613	9.9275e-04	4.1278e-07	3.4599e-07	0:00:02	100
614	2.3586e-01	7.4401e-05	5.8583e-05	0:00:02	99
615	3.2096e-01	5.8442e-05	4.1363e-05	0:00:01	98
616	1.9642e-01	3.0959e-05	2.1229e-05	0:00:01	97
617	1.1832e-01	1.8218e-05	1.2689e-05	0:00:01	96
618	8.5130e-02	1.4355e-05	9.8978e-06	0:00:01	95
619	7.0555e-02	1.2142e-05	8.4947e-06	0:00:01	94
620	5.8821e-02	1.0714e-05	7.7072e-06	0:00:00	93
621	4.9607e-02	9.4519e-06	7.0152e-06	0:00:00	92
622	4.1413e-02	8.4629e-06	6.4751e-06	0:00:18	91
623	3.4884e-02	7.6959e-06	6.2060e-06	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
624	3.0322e-02	7.0963e-06	5.9815e-06	0:00:12	89
625	2.7175e-02	6.6883e-06	5.7066e-06	0:00:09	88
626	2.3747e-02	6.1083e-06	5.2652e-06	0:00:07	87
627	2.1070e-02	5.6342e-06	4.9337e-06	0:00:06	86
628	1.8859e-02	5.2514e-06	4.6248e-06	0:00:05	85
629	1.6894e-02	4.9505e-06	4.3024e-06	0:00:04	84
630	1.4586e-02	4.5510e-06	3.9555e-06	0:00:03	83

631	1.2788e-02	4.2260e-06	3.6859e-06	0:00:02	82
632	1.1470e-02	4.0126e-06	3.4601e-06	0:00:02	81
633	9.9187e-03	3.6971e-06	3.1864e-06	0:00:01	80
634	8.7345e-03	3.4868e-06	3.0010e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
635	7.7754e-03	3.2247e-06	2.7760e-06	0:00:01	78
636	6.8976e-03	3.0862e-06	2.6316e-06	0:00:01	77
637	6.2259e-03	2.8299e-06	2.4143e-06	0:00:01	76
638	5.5515e-03	2.6584e-06	2.2706e-06	0:00:00	75
639	5.0216e-03	2.4964e-06	2.1214e-06	0:00:00	74
640	4.5263e-03	2.3386e-06	1.9777e-06	0:00:00	73
641	4.1067e-03	2.1900e-06	1.8438e-06	0:00:00	72
642	3.7387e-03	2.0525e-06	1.7170e-06	0:00:14	71
643	3.4234e-03	1.9253e-06	1.6008e-06	0:00:11	70
644	3.1431e-03	1.8031e-06	1.4901e-06	0:00:09	69
645	2.8993e-03	1.6866e-06	1.3860e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
646	2.6754e-03	1.5785e-06	1.2887e-06	0:00:06	67
647	2.4886e-03	1.4794e-06	1.2006e-06	0:00:04	66
648	2.3285e-03	1.3871e-06	1.1170e-06	0:00:03	65
649	2.1901e-03	1.2985e-06	1.0382e-06	0:00:03	64
650	2.0739e-03	1.2170e-06	9.6686e-07	0:00:02	63
651	1.9721e-03	1.1389e-06	8.9981e-07	0:00:02	62
652	1.8829e-03	1.0662e-06	8.3645e-07	0:00:01	61
653	1.7967e-03	9.9720e-07	7.7726e-07	0:00:01	60
654	1.7160e-03	9.3178e-07	7.2191e-07	0:00:01	59
655	1.6379e-03	8.6869e-07	6.6901e-07	0:00:01	58
656	1.5650e-03	8.0947e-07	6.2000e-07	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
657	1.5066e-03	7.4651e-07	5.6860e-07	0:00:00	56
658	1.4232e-03	7.0260e-07	5.3432e-07	0:00:00	55
659	1.3521e-03	6.4382e-07	4.8950e-07	0:00:00	54
660	1.2624e-03	5.9939e-07	4.5647e-07	0:00:00	53
661	1.2078e-03	5.4851e-07	4.1885e-07	0:00:00	52
662	1.1494e-03	5.0536e-07	3.8664e-07	0:00:00	51
663	1.0934e-03	4.6623e-07	3.5756e-07	0:00:10	50
664	1.0428e-03	4.2917e-07	3.3039e-07	0:00:08	49
665	9.9133e-04	3.9462e-07	3.0461e-07	0:00:06	48

! 665 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.570676803588867s, time step = 14

31 more time steps

Updating solution at time level N...

done.

physical-dt 6.5732e-01

iter	continuity	x-velocity	y-velocity	time/iter	
665	9.9133e-04	3.9462e-07	3.0461e-07	0:00:13	100
666	2.8114e-01	8.8668e-05	6.7990e-05	0:00:10	99
667	3.7435e-01	6.9636e-05	4.9603e-05	0:00:08	98
668	2.1570e-01	3.4957e-05	2.5048e-05	0:00:06	97
669	1.2995e-01	2.2603e-05	1.7039e-05	0:00:05	96
670	1.0093e-01	1.8363e-05	1.3011e-05	0:00:04	95
671	8.8506e-02	1.5083e-05	1.0388e-05	0:00:22	94
672	7.5675e-02	1.2474e-05	8.6553e-06	0:00:17	93
673	6.4332e-02	1.0891e-05	7.9586e-06	0:00:14	92
674	5.4836e-02	9.7404e-06	7.6831e-06	0:00:11	91
675	4.8096e-02	8.8775e-06	7.4737e-06	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
676	4.2520e-02	8.2759e-06	7.2085e-06	0:00:07	89
677	3.7945e-02	7.8017e-06	6.9182e-06	0:00:05	88
678	3.3592e-02	7.4021e-06	6.6558e-06	0:00:04	87
679	2.9838e-02	7.0127e-06	6.3719e-06	0:00:03	86
680	2.6720e-02	6.6290e-06	6.0594e-06	0:00:03	85
681	2.3535e-02	6.2095e-06	5.7028e-06	0:00:02	84
682	2.0766e-02	5.8364e-06	5.3453e-06	0:00:02	83
683	1.8258e-02	5.4755e-06	4.9893e-06	0:00:01	82
684	1.5951e-02	5.1367e-06	4.6406e-06	0:00:01	81
685	1.4050e-02	4.8255e-06	4.3147e-06	0:00:01	80
686	1.2323e-02	4.5530e-06	4.0331e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
687	1.0988e-02	4.2431e-06	3.7264e-06	0:00:01	78

688	9.6545e-03	3.9616e-06	3.4490e-06	0:00:00	77
689	8.5148e-03	3.7008e-06	3.1939e-06	0:00:00	76
690	7.4957e-03	3.4909e-06	2.9744e-06	0:00:00	75
691	6.7084e-03	3.2424e-06	2.7385e-06	0:00:00	74
692	5.9037e-03	3.0472e-06	2.5447e-06	0:00:00	73
693	5.3978e-03	2.8345e-06	2.3477e-06	0:00:15	72
694	4.8868e-03	2.6748e-06	2.1913e-06	0:00:11	71
695	4.4913e-03	2.4818e-06	2.0166e-06	0:00:09	70
696	4.0835e-03	2.3356e-06	1.8749e-06	0:00:07	69
697	3.7891e-03	2.1684e-06	1.7288e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
698	3.4749e-03	2.0407e-06	1.6087e-06	0:00:04	67
699	3.2308e-03	1.8984e-06	1.4846e-06	0:00:03	66
700	2.9723e-03	1.7956e-06	1.3869e-06	0:00:03	65
701	2.7449e-03	1.6804e-06	1.2867e-06	0:00:02	64
702	2.5640e-03	1.5746e-06	1.1966e-06	0:00:02	63
703	2.4073e-03	1.4777e-06	1.1152e-06	0:00:01	62
704	2.2699e-03	1.3879e-06	1.0397e-06	0:00:01	61
705	2.1423e-03	1.3047e-06	9.7153e-07	0:00:01	60
706	2.0249e-03	1.2259e-06	9.0848e-07	0:00:01	59
707	1.9180e-03	1.1514e-06	8.4951e-07	0:00:01	58
708	1.8189e-03	1.0822e-06	7.9475e-07	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
709	1.7247e-03	1.0172e-06	7.4487e-07	0:00:00	56
710	1.6304e-03	9.5425e-07	6.9788e-07	0:00:00	55
711	1.5650e-03	8.9168e-07	6.5096e-07	0:00:00	54
712	1.4640e-03	8.4156e-07	6.1494e-07	0:00:00	53
713	1.4008e-03	7.8488e-07	5.7238e-07	0:00:00	52
714	1.3129e-03	7.3840e-07	5.3879e-07	0:00:10	51
715	1.2652e-03	6.8872e-07	5.0150e-07	0:00:08	50
716	1.2024e-03	6.4390e-07	4.6904e-07	0:00:06	49
717	1.1379e-03	6.0154e-07	4.3730e-07	0:00:05	48
718	1.0779e-03	5.6134e-07	4.0729e-07	0:00:04	47
719	1.0229e-03	5.2271e-07	3.7875e-07	0:00:03	46

iter	continuity	x-velocity	y-velocity	time/iter	
720	9.6961e-04	4.8654e-07	3.5220e-07	0:00:02	45

! 720 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa


```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
```

```
()
Flow time = 3.227995634078979s, time step = 15
30 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 9.1498e-01
```

iter	continuity	x-velocity	y-velocity	time/iter	
720	9.6961e-04	4.8654e-07	3.5220e-07	0:00:05	100
721	3.0271e-01	1.0096e-04	7.6229e-05	0:00:04	99
722	3.7594e-01	7.8587e-05	5.6016e-05	0:00:03	98
723	2.2073e-01	4.0557e-05	2.9840e-05	0:00:03	97
724	1.3913e-01	2.9116e-05	2.2278e-05	0:00:02	96
725	1.1207e-01	2.4233e-05	1.6964e-05	0:00:02	95
726	9.8779e-02	2.0209e-05	1.3522e-05	0:00:01	94
727	8.4864e-02	1.6749e-05	1.0809e-05	0:00:01	93
728	7.1436e-02	1.4463e-05	9.8406e-06	0:00:01	92
729	6.3461e-02	1.2442e-05	9.2326e-06	0:00:01	91
730	5.6133e-02	1.1118e-05	8.7323e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
731	5.0859e-02	1.0092e-05	8.4428e-06	0:00:00	89
732	4.6108e-02	9.3885e-06	8.3798e-06	0:00:18	88
733	4.1573e-02	8.8352e-06	8.3086e-06	0:00:14	87
734	3.7383e-02	8.4545e-06	8.1537e-06	0:00:11	86
735	3.4031e-02	8.1205e-06	7.9570e-06	0:00:09	85
736	3.0823e-02	7.7889e-06	7.7238e-06	0:00:07	84
737	2.7665e-02	7.5051e-06	7.4698e-06	0:00:06	83
738	2.4696e-02	7.2144e-06	7.1493e-06	0:00:04	82
739	2.2014e-02	7.0123e-06	6.8747e-06	0:00:03	81
740	1.9960e-02	6.6563e-06	6.4398e-06	0:00:03	80
741	1.7873e-02	6.3774e-06	6.0722e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
742	1.5935e-02	6.1899e-06	5.7953e-06	0:00:02	78
743	1.4514e-02	5.8622e-06	5.4155e-06	0:00:01	77
744	1.2858e-02	5.6218e-06	5.1153e-06	0:00:01	76
745	1.1579e-02	5.3550e-06	4.8068e-06	0:00:01	75

746	1.0452e-02	5.1012e-06	4.5208e-06	0:00:01	74
747	9.4550e-03	4.8444e-06	4.2410e-06	0:00:01	73
748	8.5888e-03	4.6022e-06	3.9801e-06	0:00:00	72
749	7.9827e-03	4.3545e-06	3.7300e-06	0:00:00	71
750	7.1286e-03	4.1420e-06	3.5102e-06	0:00:00	70
751	6.5023e-03	3.9234e-06	3.2923e-06	0:00:00	69
752	5.9571e-03	3.7132e-06	3.0857e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
753	5.4591e-03	3.5119e-06	2.8927e-06	0:00:14	67
754	5.0215e-03	3.3217e-06	2.7090e-06	0:00:11	66
755	4.6401e-03	3.1388e-06	2.5370e-06	0:00:08	65
756	4.2977e-03	2.9623e-06	2.3744e-06	0:00:07	64
757	3.9891e-03	2.7974e-06	2.2259e-06	0:00:05	63
758	3.7050e-03	2.6406e-06	2.0858e-06	0:00:04	62
759	3.4544e-03	2.4943e-06	1.9550e-06	0:00:03	61
760	3.2405e-03	2.3540e-06	1.8314e-06	0:00:03	60
761	3.0502e-03	2.2211e-06	1.7157e-06	0:00:02	59
762	2.8815e-03	2.0963e-06	1.6078e-06	0:00:02	58
763	2.7210e-03	1.9791e-06	1.5080e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
764	2.5672e-03	1.8682e-06	1.4124e-06	0:00:01	56
765	2.4292e-03	1.7657e-06	1.3257e-06	0:00:01	55
766	2.2939e-03	1.6677e-06	1.2430e-06	0:00:01	54
767	2.1959e-03	1.5711e-06	1.1635e-06	0:00:00	53
768	2.0616e-03	1.4889e-06	1.0924e-06	0:00:00	52
769	1.9693e-03	1.4006e-06	1.0220e-06	0:00:00	51
770	1.8472e-03	1.3255e-06	9.5849e-07	0:00:00	50
771	1.7750e-03	1.2474e-06	8.9638e-07	0:00:00	49
772	1.6629e-03	1.1816e-06	8.4129e-07	0:00:00	48
773	1.5966e-03	1.1128e-06	7.8696e-07	0:00:00	47
774	1.5108e-03	1.0502e-06	7.3654e-07	0:00:09	46

iter	continuity	x-velocity	y-velocity	time/iter	
775	1.4311e-03	9.9215e-07	6.9226e-07	0:00:07	45
776	1.3641e-03	9.3725e-07	6.5129e-07	0:00:06	44
777	1.3003e-03	8.8592e-07	6.1339e-07	0:00:04	43
778	1.2416e-03	8.3703e-07	5.7801e-07	0:00:03	42
779	1.1889e-03	7.9158e-07	5.4581e-07	0:00:03	41
780	1.1370e-03	7.4852e-07	5.1619e-07	0:00:02	40
781	1.0893e-03	7.0869e-07	4.8886e-07	0:00:02	39
782	1.0458e-03	6.7071e-07	4.6345e-07	0:00:01	38
783	1.0057e-03	6.3541e-07	4.4083e-07	0:00:01	37

```

784 9.7103e-04 6.0246e-07 4.1968e-07 0:00:01 36
! 784 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 4.142973899841309s, time step = 16
29 more time steps

Updating solution at time level N...
done.
physical-dt 1.2437e+00

```

iter	continuity	x-velocity	y-velocity	time/iter	
784	9.7103e-04	6.0246e-07	4.1968e-07	0:00:02	100
785	2.9950e-01	1.0776e-04	8.1048e-05	0:00:22	99
786	3.8141e-01	8.4543e-05	5.8660e-05	0:00:17	98
787	2.3106e-01	4.3677e-05	3.1345e-05	0:00:13	97
788	1.4582e-01	3.3253e-05	2.3908e-05	0:00:11	96
789	1.1616e-01	2.8929e-05	2.0241e-05	0:00:08	95
790	9.9634e-02	2.4923e-05	1.7298e-05	0:00:07	94
791	8.7160e-02	2.0960e-05	1.4360e-05	0:00:05	93
792	7.6406e-02	1.8587e-05	1.3142e-05	0:00:04	92
793	6.7709e-02	1.6442e-05	1.1864e-05	0:00:03	91
794	6.1771e-02	1.4973e-05	1.1145e-05	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
795	5.5858e-02	1.3402e-05	1.0360e-05	0:00:02	89
796	5.1569e-02	1.2411e-05	9.9826e-06	0:00:02	88
797	4.6065e-02	1.1516e-05	9.7749e-06	0:00:01	87
798	4.3088e-02	1.0793e-05	9.5493e-06	0:00:01	86
799	3.8114e-02	1.0284e-05	9.5791e-06	0:00:01	85
800	3.4948e-02	9.8477e-06	9.4693e-06	0:00:01	84
801	3.2177e-02	9.4763e-06	9.3144e-06	0:00:01	83
802	2.9807e-02	9.1950e-06	9.1573e-06	0:00:00	82
803	2.7738e-02	8.9547e-06	8.9607e-06	0:00:17	81
804	2.5750e-02	8.7478e-06	8.7398e-06	0:00:13	80
805	2.3700e-02	8.5651e-06	8.5201e-06	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
806	2.2118e-02	8.3628e-06	8.2473e-06	0:00:08	78
807	2.0558e-02	8.1836e-06	7.9596e-06	0:00:06	77
808	1.9220e-02	7.9868e-06	7.6684e-06	0:00:05	76
809	1.7794e-02	7.7867e-06	7.3944e-06	0:00:04	75
810	1.6554e-02	7.5656e-06	7.0811e-06	0:00:03	74
811	1.5316e-02	7.3722e-06	6.8122e-06	0:00:02	73
812	1.3988e-02	7.1214e-06	6.5124e-06	0:00:02	72
813	1.2888e-02	6.8947e-06	6.2425e-06	0:00:02	71
814	1.1890e-02	6.6646e-06	5.9743e-06	0:00:01	70
815	1.1002e-02	6.4307e-06	5.7119e-06	0:00:01	69
816	1.0124e-02	6.1978e-06	5.4572e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
817	9.2730e-03	5.9614e-06	5.2063e-06	0:00:01	67
818	8.5358e-03	5.7321e-06	4.9649e-06	0:00:00	66
819	7.9054e-03	5.5075e-06	4.7293e-06	0:00:00	65
820	7.2643e-03	5.2925e-06	4.5034e-06	0:00:00	64
821	6.6920e-03	5.0745e-06	4.2827e-06	0:00:00	63
822	6.1735e-03	4.8580e-06	4.0685e-06	0:00:00	62
823	5.7159e-03	4.6514e-06	3.8663e-06	0:00:00	61
824	5.3462e-03	4.4507e-06	3.6728e-06	0:00:12	60
825	4.9885e-03	4.2551e-06	3.4882e-06	0:00:10	59
826	4.6687e-03	4.0626e-06	3.3093e-06	0:00:07	58
827	4.3814e-03	3.8792e-06	3.1437e-06	0:00:06	57

iter	continuity	x-velocity	y-velocity	time/iter	
828	4.1153e-03	3.7041e-06	2.9848e-06	0:00:05	56
829	3.8733e-03	3.5331e-06	2.8293e-06	0:00:04	55
830	3.6575e-03	3.3674e-06	2.6801e-06	0:00:03	54
831	3.4611e-03	3.2063e-06	2.5378e-06	0:00:02	53
832	3.2649e-03	3.0548e-06	2.4036e-06	0:00:02	52
833	3.0849e-03	2.9108e-06	2.2744e-06	0:00:01	51
834	2.9244e-03	2.7766e-06	2.1536e-06	0:00:01	50
835	2.7692e-03	2.6440e-06	2.0351e-06	0:00:01	49
836	2.6256e-03	2.5163e-06	1.9222e-06	0:00:01	48
837	2.4985e-03	2.3965e-06	1.8173e-06	0:00:01	47
838	2.3697e-03	2.2816e-06	1.7199e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
839	2.2482e-03	2.1704e-06	1.6259e-06	0:00:00	45
840	2.1322e-03	2.0639e-06	1.5389e-06	0:00:00	44
841	2.0249e-03	1.9642e-06	1.4576e-06	0:00:00	43

842	1.9216e-03	1.8706e-06	1.3803e-06	0:00:00	42
843	1.8297e-03	1.7826e-06	1.3097e-06	0:00:00	41
844	1.7441e-03	1.6968e-06	1.2422e-06	0:00:00	40
845	1.6668e-03	1.6153e-06	1.1803e-06	0:00:08	39
846	1.6025e-03	1.5392e-06	1.1234e-06	0:00:06	38
847	1.5458e-03	1.4680e-06	1.0707e-06	0:00:05	37
848	1.4934e-03	1.4013e-06	1.0226e-06	0:00:04	36
849	1.4484e-03	1.3391e-06	9.7882e-07	0:00:03	35

iter	continuity	x-velocity	y-velocity	time/iter	
850	1.4079e-03	1.2814e-06	9.3898e-07	0:00:02	34
851	1.3710e-03	1.2277e-06	9.0230e-07	0:00:02	33
852	1.3419e-03	1.1782e-06	8.6959e-07	0:00:01	32
853	1.3154e-03	1.1322e-06	8.3978e-07	0:00:01	31
854	1.2898e-03	1.0900e-06	8.1344e-07	0:00:01	30
855	1.2695e-03	1.0517e-06	7.8909e-07	0:00:01	29
856	1.2459e-03	1.0167e-06	7.6642e-07	0:00:00	28
857	1.2270e-03	9.8473e-07	7.4635e-07	0:00:00	27
858	1.2076e-03	9.5477e-07	7.2822e-07	0:00:00	26
859	1.1883e-03	9.2566e-07	7.1024e-07	0:00:00	25
860	1.1690e-03	8.9802e-07	6.9361e-07	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
861	1.1523e-03	8.7221e-07	6.7711e-07	0:00:00	23
862	1.1281e-03	8.4638e-07	6.6154e-07	0:00:00	22
863	1.1112e-03	8.2183e-07	6.4559e-07	0:00:00	21
864	1.0881e-03	7.9774e-07	6.3034e-07	0:00:00	20
865	1.0658e-03	7.7404e-07	6.1503e-07	0:00:00	19
866	1.0428e-03	7.5116e-07	5.9960e-07	0:00:04	18
867	1.0179e-03	7.2840e-07	5.8382e-07	0:00:03	17
868	9.9682e-04	7.0620e-07	5.6783e-07	0:00:02	16

! 868 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 5.386692523956299s, time step = 17

28 more time steps

Updating solution at time level N...

done.

physical-dt 1.6356e+00

iter	continuity	x-velocity	y-velocity	time/iter	
868	9.9682e-04	7.0620e-07	5.6783e-07	0:00:13	100
869	3.0665e-01	1.1150e-04	8.3693e-05	0:00:10	99
870	3.8908e-01	8.8322e-05	6.0643e-05	0:00:08	98
871	2.3273e-01	4.5192e-05	3.1981e-05	0:00:06	97
872	1.5290e-01	3.5407e-05	2.5309e-05	0:00:05	96
873	1.2324e-01	3.2057e-05	2.2872e-05	0:00:04	95
874	1.0605e-01	2.8975e-05	2.1096e-05	0:00:03	94
875	9.0370e-02	2.6166e-05	1.9397e-05	0:00:03	93
876	7.7565e-02	2.2984e-05	1.6604e-05	0:00:02	92
877	6.8553e-02	2.1142e-05	1.5602e-05	0:00:02	91
878	6.2388e-02	1.9269e-05	1.4373e-05	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
879	5.8018e-02	1.7760e-05	1.3467e-05	0:00:01	89
880	5.4166e-02	1.6472e-05	1.2846e-05	0:00:01	88
881	5.0944e-02	1.5369e-05	1.2409e-05	0:00:01	87
882	4.5834e-02	1.4412e-05	1.2087e-05	0:00:00	86
883	4.4566e-02	1.3627e-05	1.1788e-05	0:00:00	85
884	3.9620e-02	1.3013e-05	1.1671e-05	0:00:17	84
885	3.7317e-02	1.2474e-05	1.1431e-05	0:00:14	83
886	3.5110e-02	1.1980e-05	1.1242e-05	0:00:11	82
887	3.2672e-02	1.1680e-05	1.1111e-05	0:00:08	81
888	3.1059e-02	1.1401e-05	1.0949e-05	0:00:07	80
889	2.9257e-02	1.1186e-05	1.0827e-05	0:00:05	79

iter	continuity	x-velocity	y-velocity	time/iter	
890	2.8070e-02	1.1017e-05	1.0659e-05	0:00:04	78
891	2.6947e-02	1.0840e-05	1.0492e-05	0:00:03	77
892	2.5922e-02	1.0697e-05	1.0334e-05	0:00:03	76
893	2.4784e-02	1.0514e-05	1.0127e-05	0:00:02	75
894	2.3772e-02	1.0310e-05	9.8863e-06	0:00:02	74
895	2.2638e-02	1.0162e-05	9.6549e-06	0:00:01	73
896	2.1473e-02	1.0018e-05	9.3490e-06	0:00:01	72
897	2.0254e-02	9.8586e-06	9.0945e-06	0:00:01	71
898	1.9232e-02	9.6376e-06	8.8090e-06	0:00:01	70
899	1.8051e-02	9.3727e-06	8.5193e-06	0:00:00	69
900	1.6781e-02	9.1287e-06	8.2301e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
901	1.5710e-02	8.8545e-06	7.9313e-06	0:00:00	67
902	1.4696e-02	8.6284e-06	7.6733e-06	0:00:00	66
903	1.3615e-02	8.3630e-06	7.3725e-06	0:00:13	65
904	1.2558e-02	8.1207e-06	7.1087e-06	0:00:10	64
905	1.1608e-02	7.8640e-06	6.8308e-06	0:00:08	63
906	1.0711e-02	7.6141e-06	6.5552e-06	0:00:06	62
907	9.9851e-03	7.3554e-06	6.2789e-06	0:00:05	61
908	9.3718e-03	7.1169e-06	6.0365e-06	0:00:04	60
909	8.6921e-03	6.8886e-06	5.8114e-06	0:00:03	59
910	8.0823e-03	6.6415e-06	5.5619e-06	0:00:02	58
911	7.5233e-03	6.4233e-06	5.3438e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
912	7.0393e-03	6.1955e-06	5.1124e-06	0:00:02	56
913	6.5937e-03	5.9745e-06	4.8951e-06	0:00:01	55
914	6.1724e-03	5.7645e-06	4.6935e-06	0:00:01	54
915	5.7903e-03	5.5549e-06	4.4989e-06	0:00:01	53
916	5.4691e-03	5.3521e-06	4.3013e-06	0:00:01	52
917	5.1477e-03	5.1526e-06	4.1142e-06	0:00:00	51
918	4.8717e-03	4.9622e-06	3.9381e-06	0:00:10	50
919	4.6315e-03	4.7738e-06	3.7636e-06	0:00:08	49
920	4.3823e-03	4.5914e-06	3.5951e-06	0:00:06	48
921	4.1753e-03	4.4145e-06	3.4336e-06	0:00:05	47
922	3.9753e-03	4.2526e-06	3.2782e-06	0:00:04	46

iter	continuity	x-velocity	y-velocity	time/iter	
923	3.7899e-03	4.0950e-06	3.1337e-06	0:00:03	45
924	3.6004e-03	3.9358e-06	2.9915e-06	0:00:02	44
925	3.4296e-03	3.7824e-06	2.8551e-06	0:00:02	43
926	3.2653e-03	3.6384e-06	2.7282e-06	0:00:01	42
927	3.1104e-03	3.4956e-06	2.6029e-06	0:00:01	41
928	2.9658e-03	3.3619e-06	2.4898e-06	0:00:01	40
929	2.8357e-03	3.2328e-06	2.3802e-06	0:00:01	39
930	2.7104e-03	3.1074e-06	2.2752e-06	0:00:01	38
931	2.5923e-03	2.9867e-06	2.1793e-06	0:00:00	37
932	2.4847e-03	2.8731e-06	2.0898e-06	0:00:00	36
933	2.3878e-03	2.7642e-06	2.0061e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
934	2.2976e-03	2.6579e-06	1.9273e-06	0:00:00	34
935	2.2139e-03	2.5595e-06	1.8572e-06	0:00:00	33
936	2.1438e-03	2.4656e-06	1.7928e-06	0:00:00	32
937	2.0748e-03	2.3763e-06	1.7331e-06	0:00:00	31

938	2.0184e-03	2.2938e-06	1.6780e-06	0:00:00	30
939	1.9678e-03	2.2159e-06	1.6277e-06	0:00:06	29
940	1.9264e-03	2.1411e-06	1.5805e-06	0:00:05	28
941	1.8909e-03	2.0716e-06	1.5389e-06	0:00:03	27
942	1.8609e-03	2.0083e-06	1.4999e-06	0:00:03	26
943	1.8352e-03	1.9501e-06	1.4652e-06	0:00:02	25
944	1.8087e-03	1.8971e-06	1.4335e-06	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
945	1.7888e-03	1.8508e-06	1.4068e-06	0:00:01	23
946	1.7682e-03	1.8056e-06	1.3788e-06	0:00:01	22
947	1.7468e-03	1.7616e-06	1.3543e-06	0:00:01	21
948	1.7277e-03	1.7197e-06	1.3315e-06	0:00:01	20
949	1.7126e-03	1.6810e-06	1.3102e-06	0:00:00	19
950	1.6959e-03	1.6442e-06	1.2897e-06	0:00:00	18
951	1.6742e-03	1.6101e-06	1.2704e-06	0:00:00	17
952	1.6511e-03	1.5764e-06	1.2499e-06	0:00:00	16
953	1.6336e-03	1.5455e-06	1.2318e-06	0:00:00	15
954	1.6164e-03	1.5166e-06	1.2138e-06	0:00:00	14
955	1.5952e-03	1.4876e-06	1.1949e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
956	1.5749e-03	1.4590e-06	1.1758e-06	0:00:00	12
957	1.5551e-03	1.4308e-06	1.1575e-06	0:00:00	11
958	1.5353e-03	1.4040e-06	1.1384e-06	0:00:00	10
959	1.5137e-03	1.3764e-06	1.1191e-06	0:00:00	9
960	1.4894e-03	1.3496e-06	1.0998e-06	0:00:02	8
961	1.4628e-03	1.3240e-06	1.0802e-06	0:00:01	7
962	1.4357e-03	1.2990e-06	1.0602e-06	0:00:01	6
963	1.4082e-03	1.2734e-06	1.0401e-06	0:00:01	5
964	1.3788e-03	1.2477e-06	1.0192e-06	0:00:00	4
965	1.3478e-03	1.2228e-06	9.9776e-07	0:00:00	3
966	1.3184e-03	1.1981e-06	9.7681e-07	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
967	1.2845e-03	1.1738e-06	9.5483e-07	0:00:00	1
968	1.2520e-03	1.1508e-06	9.3302e-07	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 7.022340297698975s, time step = 18

27 more time steps

Updating solution at time level N...

done.

physical-dt 8.1782e-01

iter	continuity	x-velocity	y-velocity	time/iter	
968	1.2520e-03	1.1508e-06	9.3302e-07	0:00:03	100
969	1.1023e-01	4.3100e-05	3.2626e-05	0:00:03	99
970	1.3404e-01	3.1441e-05	2.2532e-05	0:00:02	98
971	8.4857e-02	1.5437e-05	1.0370e-05	0:00:02	97
972	5.4130e-02	1.0429e-05	7.1984e-06	0:00:01	96
973	3.9164e-02	9.1697e-06	6.4130e-06	0:00:01	95
974	3.2015e-02	8.2569e-06	5.8561e-06	0:00:01	94
975	2.6860e-02	7.3504e-06	5.2560e-06	0:00:01	93
976	2.2409e-02	6.5099e-06	4.6478e-06	0:00:01	92
977	1.8962e-02	5.7971e-06	4.1406e-06	0:00:19	91
978	1.6206e-02	5.2574e-06	3.7864e-06	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
979	1.4079e-02	4.8325e-06	3.5285e-06	0:00:12	89
980	1.2414e-02	4.4851e-06	3.3458e-06	0:00:09	88
981	1.0895e-02	4.1747e-06	3.2063e-06	0:00:07	87
982	1.0267e-02	3.9136e-06	3.0760e-06	0:00:06	86
983	9.1165e-03	3.6974e-06	3.0172e-06	0:00:05	85
984	8.4657e-03	3.4870e-06	2.9281e-06	0:00:04	84
985	7.9523e-03	3.2945e-06	2.8527e-06	0:00:03	83
986	7.4576e-03	3.1247e-06	2.7784e-06	0:00:02	82
987	6.9730e-03	2.9709e-06	2.7018e-06	0:00:02	81
988	6.4934e-03	2.8316e-06	2.6198e-06	0:00:01	80
989	6.0759e-03	2.7009e-06	2.5309e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
990	5.6988e-03	2.5802e-06	2.4412e-06	0:00:01	78
991	5.3587e-03	2.4681e-06	2.3528e-06	0:00:01	77
992	5.0421e-03	2.3645e-06	2.2660e-06	0:00:01	76
993	4.6855e-03	2.2650e-06	2.1738e-06	0:00:00	75
994	4.3694e-03	2.1596e-06	2.0787e-06	0:00:00	74
995	4.0706e-03	2.0634e-06	1.9836e-06	0:00:00	73

996	3.7495e-03	1.9698e-06	1.8883e-06	0:00:15	72
997	3.4680e-03	1.8842e-06	1.7946e-06	0:00:12	71
998	3.2154e-03	1.7957e-06	1.6980e-06	0:00:09	70
999	2.9833e-03	1.7139e-06	1.6094e-06	0:00:07	69
1000	2.7556e-03	1.6304e-06	1.5188e-06	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
1001	2.5525e-03	1.5479e-06	1.4327e-06	0:00:04	67
1002	2.3509e-03	1.4741e-06	1.3513e-06	0:00:04	66
1003	2.1606e-03	1.4010e-06	1.2709e-06	0:00:03	65
1004	1.9821e-03	1.3284e-06	1.1925e-06	0:00:02	64
1005	1.8265e-03	1.2594e-06	1.1179e-06	0:00:02	63
1006	1.6746e-03	1.1926e-06	1.0468e-06	0:00:01	62
1007	1.5387e-03	1.1289e-06	9.8139e-07	0:00:01	61
1008	1.4092e-03	1.0667e-06	9.1856e-07	0:00:01	60
1009	1.2861e-03	1.0070e-06	8.5892e-07	0:00:01	59
1010	1.1751e-03	9.4996e-07	8.0227e-07	0:00:01	58
1011	1.0717e-03	8.9515e-07	7.4792e-07	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1012	9.8692e-04	8.4209e-07	6.9684e-07	0:00:00	56

! 1012 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 7.840164184570313s, time step = 19

26 more time steps

Updating solution at time level N...

done.

physical-dt 2.1705e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1012	9.8692e-04	8.4209e-07	6.9684e-07	0:00:01	100
1013	2.9898e-01	1.1293e-04	8.6849e-05	0:00:00	99
1014	3.6040e-01	8.5943e-05	6.2097e-05	0:00:00	98
1015	2.1985e-01	4.2554e-05	2.9047e-05	0:00:00	97

1016	1.4079e-01	3.1786e-05	2.2683e-05	0:00:00	96
1017	1.0550e-01	2.9678e-05	2.1310e-05	0:00:00	95
1018	8.9090e-02	2.7650e-05	2.0065e-05	0:00:00	94
1019	7.6397e-02	2.5521e-05	1.8532e-05	0:00:00	93
1020	6.5075e-02	2.2825e-05	1.6150e-05	0:00:00	92
1021	5.6735e-02	2.1158e-05	1.5123e-05	0:00:00	91
1022	5.0815e-02	1.9803e-05	1.4125e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1023	4.6312e-02	1.8617e-05	1.3173e-05	0:00:00	89
1024	4.4287e-02	1.7826e-05	1.2866e-05	0:00:00	88
1025	4.1133e-02	1.6826e-05	1.2373e-05	0:00:00	87
1026	4.0151e-02	1.6230e-05	1.2227e-05	0:00:17	86
1027	3.7564e-02	1.5476e-05	1.2114e-05	0:00:14	85
1028	3.7293e-02	1.4930e-05	1.2048e-05	0:00:11	84
1029	3.4724e-02	1.4461e-05	1.2195e-05	0:00:09	83
1030	3.3889e-02	1.4148e-05	1.2332e-05	0:00:07	82
1031	3.2571e-02	1.3859e-05	1.2420e-05	0:00:05	81
1032	3.1842e-02	1.3673e-05	1.2533e-05	0:00:04	80
1033	3.1003e-02	1.3498e-05	1.2623e-05	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
1034	3.0456e-02	1.3344e-05	1.2675e-05	0:00:03	78
1035	2.9926e-02	1.3225e-05	1.2649e-05	0:00:02	77
1036	2.9274e-02	1.3070e-05	1.2608e-05	0:00:02	76
1037	2.8465e-02	1.2955e-05	1.2580e-05	0:00:01	75
1038	2.7858e-02	1.2823e-05	1.2460e-05	0:00:01	74
1039	2.7049e-02	1.2699e-05	1.2325e-05	0:00:01	73
1040	2.6299e-02	1.2536e-05	1.2204e-05	0:00:01	72
1041	2.5713e-02	1.2370e-05	1.1964e-05	0:00:01	71
1042	2.5005e-02	1.2183e-05	1.1704e-05	0:00:00	70
1043	2.4180e-02	1.2025e-05	1.1473e-05	0:00:00	69
1044	2.3288e-02	1.1817e-05	1.1197e-05	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
1045	2.2555e-02	1.1594e-05	1.0928e-05	0:00:00	67
1046	2.1702e-02	1.1388e-05	1.0654e-05	0:00:00	66
1047	2.0897e-02	1.1166e-05	1.0394e-05	0:00:13	65
1048	1.9891e-02	1.0901e-05	1.0071e-05	0:00:10	64
1049	1.8878e-02	1.0652e-05	9.7372e-06	0:00:08	63
1050	1.7820e-02	1.0422e-05	9.4104e-06	0:00:06	62
1051	1.6856e-02	1.0182e-05	9.1150e-06	0:00:05	61
1052	1.5813e-02	9.8993e-06	8.8155e-06	0:00:04	60
1053	1.4809e-02	9.6339e-06	8.5128e-06	0:00:03	59

1054	1.3708e-02	9.3828e-06	8.2002e-06	0:00:02	58
1055	1.2789e-02	9.1435e-06	7.9178e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
1056	1.1945e-02	8.8972e-06	7.6182e-06	0:00:02	56
1057	1.1194e-02	8.6573e-06	7.3517e-06	0:00:01	55
1058	1.0443e-02	8.4222e-06	7.0693e-06	0:00:01	54
1059	9.7413e-03	8.1933e-06	6.8177e-06	0:00:01	53
1060	9.0746e-03	7.9865e-06	6.5783e-06	0:00:01	52
1061	8.5314e-03	7.7773e-06	6.3443e-06	0:00:00	51
1062	8.0317e-03	7.5613e-06	6.1176e-06	0:00:00	50
1063	7.6190e-03	7.3700e-06	5.9152e-06	0:00:00	49
1064	7.2687e-03	7.1889e-06	5.7356e-06	0:00:00	48
1065	6.9267e-03	7.0063e-06	5.5612e-06	0:00:00	47
1066	6.6448e-03	6.8255e-06	5.4132e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
1067	6.4417e-03	6.6532e-06	5.2631e-06	0:00:00	45
1068	6.2562e-03	6.4996e-06	5.1408e-06	0:00:09	44
1069	6.0762e-03	6.3510e-06	5.0221e-06	0:00:07	43
1070	5.9155e-03	6.2039e-06	4.9096e-06	0:00:05	42
1071	5.7758e-03	6.0699e-06	4.8161e-06	0:00:04	41
1072	5.6556e-03	5.9438e-06	4.7210e-06	0:00:03	40
1073	5.5470e-03	5.8381e-06	4.6454e-06	0:00:03	39
1074	5.4477e-03	5.7406e-06	4.5781e-06	0:00:02	38
1075	5.3523e-03	5.6553e-06	4.5117e-06	0:00:02	37
1076	5.2567e-03	5.5737e-06	4.4555e-06	0:00:01	36
1077	5.1725e-03	5.5006e-06	4.4032e-06	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
1078	5.1094e-03	5.4367e-06	4.3584e-06	0:00:01	34
1079	5.0638e-03	5.3807e-06	4.3191e-06	0:00:01	33
1080	5.0363e-03	5.3275e-06	4.2836e-06	0:00:00	32
1081	4.9996e-03	5.2814e-06	4.2563e-06	0:00:00	31
1082	4.9866e-03	5.2429e-06	4.2320e-06	0:00:00	30
1083	4.9758e-03	5.2059e-06	4.2105e-06	0:00:00	29
1084	4.9504e-03	5.1759e-06	4.1955e-06	0:00:00	28
1085	4.9244e-03	5.1462e-06	4.1790e-06	0:00:00	27
1086	4.8979e-03	5.1206e-06	4.1645e-06	0:00:00	26
1087	4.8612e-03	5.0967e-06	4.1512e-06	0:00:00	25
1088	4.8139e-03	5.0775e-06	4.1372e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
1089	4.7574e-03	5.0594e-06	4.1225e-06	0:00:00	23

1090	4.7016e-03	5.0439e-06	4.1049e-06	0:00:04	22
1091	4.6531e-03	5.0281e-06	4.0869e-06	0:00:03	21
1092	4.5910e-03	5.0111e-06	4.0677e-06	0:00:03	20
1093	4.5198e-03	4.9929e-06	4.0465e-06	0:00:02	19
1094	4.4504e-03	4.9747e-06	4.0227e-06	0:00:01	18
1095	4.3753e-03	4.9555e-06	3.9971e-06	0:00:01	17
1096	4.3019e-03	4.9346e-06	3.9708e-06	0:00:01	16
1097	4.2224e-03	4.9086e-06	3.9387e-06	0:00:01	15
1098	4.1453e-03	4.8772e-06	3.9006e-06	0:00:00	14
1099	4.0655e-03	4.8445e-06	3.8619e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1100	3.9993e-03	4.8119e-06	3.8239e-06	0:00:00	12
1101	3.9356e-03	4.7768e-06	3.7825e-06	0:00:00	11
1102	3.8678e-03	4.7380e-06	3.7395e-06	0:00:00	10
1103	3.7842e-03	4.6919e-06	3.6873e-06	0:00:00	9
1104	3.7098e-03	4.6500e-06	3.6425e-06	0:00:00	8
1105	3.6274e-03	4.5980e-06	3.5894e-06	0:00:00	7
1106	3.5480e-03	4.5452e-06	3.5345e-06	0:00:00	6
1107	3.4645e-03	4.4903e-06	3.4778e-06	0:00:00	5
1108	3.3905e-03	4.4333e-06	3.4193e-06	0:00:00	4
1109	3.3117e-03	4.3737e-06	3.3611e-06	0:00:01	3
1110	3.2257e-03	4.3106e-06	3.2997e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1111	3.1568e-03	4.2508e-06	3.2433e-06	0:00:00	1
1112	3.0986e-03	4.1850e-06	3.1814e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 10.01067161560059s, time step = 20

25 more time steps

Updating solution at time level N...

done.

physical-dt 1.0853e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1112	3.0986e-03	4.1850e-06	3.1814e-06	0:00:10	100
1113	1.0634e-01	4.4666e-05	3.3146e-05	0:00:08	99
1114	1.2727e-01	3.2117e-05	2.3620e-05	0:00:07	98
1115	8.2786e-02	1.6005e-05	1.1241e-05	0:00:05	97
1116	5.1157e-02	1.1324e-05	7.8089e-06	0:00:04	96
1117	3.7269e-02	1.0167e-05	7.3036e-06	0:00:03	95
1118	3.0327e-02	9.4279e-06	6.8426e-06	0:00:03	94
1119	2.5144e-02	8.7412e-06	6.3847e-06	0:00:02	93
1120	2.0892e-02	8.1362e-06	5.9679e-06	0:00:02	92
1121	1.7549e-02	7.5942e-06	5.5777e-06	0:00:01	91
1122	1.5107e-02	7.0966e-06	5.2335e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
1123	1.3342e-02	6.6788e-06	4.9442e-06	0:00:01	89
1124	1.2000e-02	6.3180e-06	4.7081e-06	0:00:01	88
1125	1.1033e-02	5.9911e-06	4.5066e-06	0:00:00	87
1126	1.0237e-02	5.6996e-06	4.3454e-06	0:00:00	86
1127	9.5707e-03	5.4413e-06	4.2200e-06	0:00:00	85
1128	9.0178e-03	5.1913e-06	4.1082e-06	0:00:17	84
1129	8.4814e-03	4.9714e-06	4.0169e-06	0:00:13	83
1130	7.9203e-03	4.7689e-06	3.9605e-06	0:00:11	82
1131	7.8959e-03	4.5664e-06	3.8546e-06	0:00:08	81
1132	7.3577e-03	4.4005e-06	3.8207e-06	0:00:07	80
1133	7.1397e-03	4.2332e-06	3.7373e-06	0:00:05	79

iter	continuity	x-velocity	y-velocity	time/iter	
1134	6.9469e-03	4.0765e-06	3.6629e-06	0:00:04	78
1135	6.7104e-03	3.9272e-06	3.5839e-06	0:00:03	77
1136	6.4958e-03	3.7880e-06	3.5070e-06	0:00:03	76
1137	6.2682e-03	3.6657e-06	3.4415e-06	0:00:02	75
1138	6.0720e-03	3.5381e-06	3.3616e-06	0:00:02	74
1139	5.8482e-03	3.4224e-06	3.2797e-06	0:00:01	73
1140	5.6696e-03	3.3124e-06	3.1968e-06	0:00:01	72
1141	5.4645e-03	3.2104e-06	3.1060e-06	0:00:15	71
1142	5.2548e-03	3.1099e-06	3.0191e-06	0:00:12	70
1143	5.0000e-03	3.0149e-06	2.9292e-06	0:00:09	69
1144	4.8037e-03	2.9276e-06	2.8388e-06	0:00:07	68

iter	continuity	x-velocity	y-velocity	time/iter	
1145	4.5644e-03	2.8401e-06	2.7473e-06	0:00:06	67
1146	4.3623e-03	2.7574e-06	2.6598e-06	0:00:05	66
1147	4.1535e-03	2.6785e-06	2.5679e-06	0:00:04	65
1148	3.9241e-03	2.5956e-06	2.4762e-06	0:00:03	64

1149	3.7149e-03	2.5216e-06	2.3904e-06	0:00:02	63
1150	3.5041e-03	2.4479e-06	2.3042e-06	0:00:02	62
1151	3.2966e-03	2.3774e-06	2.2214e-06	0:00:01	61
1152	3.1088e-03	2.3042e-06	2.1370e-06	0:00:01	60
1153	2.9374e-03	2.2343e-06	2.0574e-06	0:00:01	59
1154	2.7653e-03	2.1645e-06	1.9784e-06	0:00:01	58
1155	2.6043e-03	2.0984e-06	1.9023e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1156	2.4440e-03	2.0329e-06	1.8282e-06	0:00:00	56
1157	2.2880e-03	1.9700e-06	1.7560e-06	0:00:00	55
1158	2.1407e-03	1.9072e-06	1.6865e-06	0:00:00	54
1159	2.0029e-03	1.8455e-06	1.6182e-06	0:00:00	53
1160	1.8757e-03	1.7855e-06	1.5543e-06	0:00:00	52
1161	1.7556e-03	1.7274e-06	1.4921e-06	0:00:00	51
1162	1.6461e-03	1.6706e-06	1.4309e-06	0:00:00	50
1163	1.5379e-03	1.6148e-06	1.3709e-06	0:00:10	49
1164	1.4383e-03	1.5595e-06	1.3138e-06	0:00:08	48
1165	1.3454e-03	1.5069e-06	1.2603e-06	0:00:06	47
1166	1.2652e-03	1.4539e-06	1.2061e-06	0:00:05	46

iter	continuity	x-velocity	y-velocity	time/iter	
1167	1.2007e-03	1.4031e-06	1.1554e-06	0:00:04	45
1168	1.1239e-03	1.3543e-06	1.1080e-06	0:00:03	44
1169	1.0560e-03	1.3060e-06	1.0610e-06	0:00:02	43
1170	9.9540e-04	1.2586e-06	1.0157e-06	0:00:02	42

! 1170 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 11.09592533111572s, time step = 21

24 more time steps

Updating solution at time level N...

done.

physical-dt 2.5098e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1170	9.9540e-04	1.2586e-06	1.0157e-06	0:00:04	100
1171	2.4779e-01	9.9246e-05	7.7079e-05	0:00:03	99
1172	2.8602e-01	7.4392e-05	5.6145e-05	0:00:03	98
1173	1.7786e-01	3.6389e-05	2.5388e-05	0:00:02	97
1174	1.0752e-01	2.6962e-05	1.8659e-05	0:00:02	96
1175	8.0845e-02	2.5489e-05	1.8175e-05	0:00:01	95
1176	6.7733e-02	2.4176e-05	1.7451e-05	0:00:01	94
1177	5.7605e-02	2.2789e-05	1.6580e-05	0:00:01	93
1178	4.9154e-02	2.1408e-05	1.5509e-05	0:00:01	92
1179	4.1972e-02	2.0229e-05	1.4597e-05	0:00:19	91
1180	3.7207e-02	1.9249e-05	1.3871e-05	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
1181	3.4103e-02	1.8428e-05	1.3312e-05	0:00:12	89
1182	3.2288e-02	1.7678e-05	1.2922e-05	0:00:09	88
1183	3.0566e-02	1.6983e-05	1.2610e-05	0:00:07	87
1184	2.9213e-02	1.6404e-05	1.2433e-05	0:00:06	86
1185	2.7716e-02	1.5842e-05	1.2321e-05	0:00:05	85
1186	2.7468e-02	1.5417e-05	1.2264e-05	0:00:04	84
1187	2.5889e-02	1.5077e-05	1.2404e-05	0:00:03	83
1188	2.5319e-02	1.4766e-05	1.2463e-05	0:00:02	82
1189	2.4735e-02	1.4526e-05	1.2576e-05	0:00:02	81
1190	2.4536e-02	1.4351e-05	1.2717e-05	0:00:01	80
1191	2.4218e-02	1.4192e-05	1.2834e-05	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1192	2.3851e-02	1.4038e-05	1.2957e-05	0:00:01	78
1193	2.3517e-02	1.3948e-05	1.3047e-05	0:00:01	77
1194	2.3319e-02	1.3906e-05	1.3148e-05	0:00:01	76
1195	2.3222e-02	1.3838e-05	1.3221e-05	0:00:00	75
1196	2.3260e-02	1.3811e-05	1.3279e-05	0:00:00	74
1197	2.2692e-02	1.3788e-05	1.3366e-05	0:00:00	73
1198	2.2572e-02	1.3775e-05	1.3414e-05	0:00:00	72
1199	2.2263e-02	1.3779e-05	1.3435e-05	0:00:00	71
1200	2.2271e-02	1.3779e-05	1.3419e-05	0:00:14	70
1201	2.2029e-02	1.3756e-05	1.3409e-05	0:00:11	69
1202	2.1771e-02	1.3730e-05	1.3368e-05	0:00:09	68

iter	continuity	x-velocity	y-velocity	time/iter	
1203	2.1523e-02	1.3701e-05	1.3284e-05	0:00:07	67
1204	2.1204e-02	1.3691e-05	1.3194e-05	0:00:05	66
1205	2.0942e-02	1.3646e-05	1.3060e-05	0:00:04	65
1206	2.0624e-02	1.3580e-05	1.2913e-05	0:00:03	64

1207	2.0020e-02	1.3531e-05	1.2755e-05	0:00:03	63
1208	1.9720e-02	1.3487e-05	1.2582e-05	0:00:02	62
1209	1.9039e-02	1.3405e-05	1.2421e-05	0:00:02	61
1210	1.8487e-02	1.3349e-05	1.2246e-05	0:00:01	60
1211	1.7722e-02	1.3245e-05	1.2012e-05	0:00:01	59
1212	1.7023e-02	1.3177e-05	1.1817e-05	0:00:01	58
1213	1.6386e-02	1.3058e-05	1.1618e-05	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
1214	1.5663e-02	1.2951e-05	1.1409e-05	0:00:00	56
1215	1.4869e-02	1.2822e-05	1.1197e-05	0:00:00	55
1216	1.4165e-02	1.2688e-05	1.0985e-05	0:00:00	54
1217	1.3401e-02	1.2550e-05	1.0768e-05	0:00:00	53
1218	1.2729e-02	1.2408e-05	1.0571e-05	0:00:00	52
1219	1.2080e-02	1.2273e-05	1.0398e-05	0:00:00	51
1220	1.1454e-02	1.2135e-05	1.0223e-05	0:00:00	50
1221	1.0903e-02	1.1992e-05	1.0060e-05	0:00:10	49
1222	1.0365e-02	1.1845e-05	9.8860e-06	0:00:08	48
1223	9.8772e-03	1.1706e-05	9.7425e-06	0:00:06	47
1224	9.4679e-03	1.1599e-05	9.6073e-06	0:00:05	46

iter	continuity	x-velocity	y-velocity	time/iter	
1225	9.1216e-03	1.1484e-05	9.4829e-06	0:00:04	45
1226	8.8395e-03	1.1391e-05	9.3698e-06	0:00:03	44
1227	8.5800e-03	1.1308e-05	9.2768e-06	0:00:02	43
1228	8.4117e-03	1.1234e-05	9.2089e-06	0:00:02	42
1229	8.3317e-03	1.1176e-05	9.1600e-06	0:00:01	41
1230	8.2808e-03	1.1114e-05	9.1246e-06	0:00:01	40
1231	8.2250e-03	1.1058e-05	9.1052e-06	0:00:01	39
1232	8.2328e-03	1.1023e-05	9.1041e-06	0:00:01	38
1233	8.2336e-03	1.0968e-05	9.1063e-06	0:00:01	37
1234	8.2592e-03	1.0926e-05	9.1176e-06	0:00:00	36
1235	8.3046e-03	1.0899e-05	9.1447e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
1236	8.3478e-03	1.0865e-05	9.1739e-06	0:00:00	34
1237	8.4058e-03	1.0856e-05	9.2165e-06	0:00:00	33
1238	8.4691e-03	1.0864e-05	9.2703e-06	0:00:00	32
1239	8.5150e-03	1.0874e-05	9.3320e-06	0:00:00	31
1240	8.5620e-03	1.0887e-05	9.3985e-06	0:00:00	30
1241	8.6514e-03	1.0915e-05	9.4825e-06	0:00:06	29
1242	8.7269e-03	1.0957e-05	9.5701e-06	0:00:05	28
1243	8.8107e-03	1.1019e-05	9.6706e-06	0:00:03	27
1244	8.8901e-03	1.1092e-05	9.7745e-06	0:00:03	26

1245	8.9455e-03	1.1165e-05	9.8727e-06	0:00:02	25
1246	9.0225e-03	1.1244e-05	9.9721e-06	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
1247	9.0914e-03	1.1330e-05	1.0073e-05	0:00:01	23
1248	9.1555e-03	1.1423e-05	1.0167e-05	0:00:01	22
1249	9.2321e-03	1.1527e-05	1.0266e-05	0:00:01	21
1250	9.3298e-03	1.1633e-05	1.0356e-05	0:00:01	20
1251	9.3926e-03	1.1736e-05	1.0438e-05	0:00:00	19
1252	9.4614e-03	1.1842e-05	1.0513e-05	0:00:00	18
1253	9.4775e-03	1.1950e-05	1.0587e-05	0:00:00	17
1254	9.4835e-03	1.2049e-05	1.0643e-05	0:00:00	16
1255	9.5218e-03	1.2148e-05	1.0699e-05	0:00:00	15
1256	9.5586e-03	1.2251e-05	1.0748e-05	0:00:00	14
1257	9.5553e-03	1.2334e-05	1.0780e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1258	9.4424e-03	1.2437e-05	1.0823e-05	0:00:00	12
1259	9.5325e-03	1.2492e-05	1.0804e-05	0:00:00	11
1260	9.4280e-03	1.2600e-05	1.0868e-05	0:00:02	10
1261	9.4874e-03	1.2658e-05	1.0837e-05	0:00:01	9
1262	9.4441e-03	1.2727e-05	1.0845e-05	0:00:01	8
1263	9.4063e-03	1.2796e-05	1.0843e-05	0:00:01	7
1264	9.2658e-03	1.2883e-05	1.0866e-05	0:00:00	6
1265	9.2826e-03	1.2893e-05	1.0797e-05	0:00:00	5
1266	9.2467e-03	1.2946e-05	1.0787e-05	0:00:00	4
1267	9.0840e-03	1.2971e-05	1.0756e-05	0:00:00	3
1268	8.9536e-03	1.2996e-05	1.0726e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1269	8.8047e-03	1.3003e-05	1.0670e-05	0:00:00	1
1270	8.6501e-03	1.3000e-05	1.0622e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 13.60573196411133s, time step = 22

23 more time steps

Updating solution at time level N...

done.

physical-dt 1.2549e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1270	8.6501e-03	1.3000e-05	1.0622e-05	0:00:02	100
1271	9.5890e-02	4.5836e-05	3.3294e-05	0:00:02	99
1272	1.0446e-01	3.3916e-05	2.5364e-05	0:00:21	98
1273	6.8475e-02	2.2065e-05	1.7057e-05	0:00:17	97
1274	4.4595e-02	1.9066e-05	1.4743e-05	0:00:13	96
1275	3.2747e-02	1.7969e-05	1.4057e-05	0:00:10	95
1276	2.7483e-02	1.7276e-05	1.3481e-05	0:00:08	94
1277	2.3312e-02	1.6700e-05	1.3051e-05	0:00:07	93
1278	1.9987e-02	1.6175e-05	1.2658e-05	0:00:05	92
1279	1.7184e-02	1.5693e-05	1.2325e-05	0:00:04	91
1280	1.5424e-02	1.5174e-05	1.1934e-05	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
1281	1.4009e-02	1.4764e-05	1.1622e-05	0:00:03	89
1282	1.2911e-02	1.4325e-05	1.1312e-05	0:00:02	88
1283	1.2013e-02	1.3874e-05	1.0999e-05	0:00:02	87
1284	1.1252e-02	1.3468e-05	1.0699e-05	0:00:01	86
1285	1.0587e-02	1.3088e-05	1.0432e-05	0:00:01	85
1286	1.0107e-02	1.2688e-05	1.0150e-05	0:00:01	84
1287	9.6640e-03	1.2317e-05	9.8824e-06	0:00:01	83
1288	9.2468e-03	1.1959e-05	9.6276e-06	0:00:00	82
1289	8.9267e-03	1.1612e-05	9.3855e-06	0:00:00	81
1290	8.6468e-03	1.1286e-05	9.1364e-06	0:00:00	80
1291	8.4138e-03	1.0969e-05	8.9085e-06	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
1292	8.2581e-03	1.0664e-05	8.6790e-06	0:00:00	78
1293	8.0478e-03	1.0382e-05	8.4670e-06	0:00:16	77
1294	7.8992e-03	1.0111e-05	8.2676e-06	0:00:12	76
1295	7.7656e-03	9.8460e-06	8.0770e-06	0:00:10	75
1296	7.6769e-03	9.6050e-06	7.8974e-06	0:00:08	74
1297	7.5863e-03	9.3714e-06	7.7268e-06	0:00:06	73
1298	7.4913e-03	9.1597e-06	7.5645e-06	0:00:05	72
1299	7.3916e-03	8.9475e-06	7.4075e-06	0:00:04	71
1300	7.3149e-03	8.7524e-06	7.2609e-06	0:00:03	70
1301	7.2280e-03	8.5519e-06	7.1085e-06	0:00:02	69
1302	7.1842e-03	8.3652e-06	6.9735e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
1303	7.1064e-03	8.1866e-06	6.8405e-06	0:00:01	67
1304	7.0436e-03	8.0240e-06	6.7178e-06	0:00:01	66
1305	6.9109e-03	7.8568e-06	6.5997e-06	0:00:01	65
1306	6.8167e-03	7.7007e-06	6.4894e-06	0:00:01	64
1307	6.7207e-03	7.5525e-06	6.3902e-06	0:00:01	63
1308	6.6216e-03	7.4133e-06	6.2994e-06	0:00:00	62
1309	6.5201e-03	7.2809e-06	6.2116e-06	0:00:00	61
1310	6.3989e-03	7.1554e-06	6.1260e-06	0:00:00	60
1311	6.2510e-03	7.0367e-06	6.0500e-06	0:00:00	59
1312	6.1390e-03	6.9319e-06	5.9820e-06	0:00:00	58
1313	6.0258e-03	6.8298e-06	5.9221e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1314	5.9041e-03	6.7353e-06	5.8694e-06	0:00:00	56
1315	5.7885e-03	6.6524e-06	5.8203e-06	0:00:11	55
1316	5.6678e-03	6.5673e-06	5.7721e-06	0:00:09	54
1317	5.5545e-03	6.4936e-06	5.7293e-06	0:00:07	53
1318	5.4463e-03	6.4255e-06	5.6893e-06	0:00:05	52
1319	5.3518e-03	6.3668e-06	5.6532e-06	0:00:04	51
1320	5.2590e-03	6.3053e-06	5.6084e-06	0:00:03	50
1321	5.1959e-03	6.2563e-06	5.5737e-06	0:00:03	49
1322	5.0841e-03	6.2062e-06	5.5356e-06	0:00:02	48
1323	4.9974e-03	6.1553e-06	5.4923e-06	0:00:02	47
1324	4.9102e-03	6.1032e-06	5.4472e-06	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
1325	4.8352e-03	6.0560e-06	5.4032e-06	0:00:01	45
1326	4.7431e-03	6.0016e-06	5.3514e-06	0:00:01	44
1327	4.6732e-03	5.9473e-06	5.2965e-06	0:00:01	43
1328	4.5969e-03	5.8923e-06	5.2396e-06	0:00:00	42
1329	4.5261e-03	5.8340e-06	5.1768e-06	0:00:00	41
1330	4.4415e-03	5.7781e-06	5.1156e-06	0:00:00	40
1331	4.3521e-03	5.7190e-06	5.0503e-06	0:00:00	39
1332	4.2519e-03	5.6551e-06	4.9793e-06	0:00:08	38
1333	4.1674e-03	5.5923e-06	4.9068e-06	0:00:06	37
1334	4.0654e-03	5.5262e-06	4.8346e-06	0:00:05	36
1335	3.9552e-03	5.4624e-06	4.7585e-06	0:00:04	35

iter	continuity	x-velocity	y-velocity	time/iter	
1336	3.8487e-03	5.3927e-06	4.6792e-06	0:00:03	34
1337	3.7488e-03	5.3235e-06	4.5993e-06	0:00:02	33
1338	3.6468e-03	5.2540e-06	4.5196e-06	0:00:02	32
1339	3.5428e-03	5.1833e-06	4.4382e-06	0:00:01	31

1340	3.4322e-03	5.1100e-06	4.3538e-06	0:00:01	30
1341	3.3228e-03	5.0364e-06	4.2691e-06	0:00:01	29
1342	3.2151e-03	4.9583e-06	4.1838e-06	0:00:01	28
1343	3.1120e-03	4.8797e-06	4.0972e-06	0:00:00	27
1344	3.0154e-03	4.8023e-06	4.0119e-06	0:00:00	26
1345	2.9142e-03	4.7208e-06	3.9260e-06	0:00:00	25
1346	2.8203e-03	4.6365e-06	3.8387e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
1347	2.7341e-03	4.5540e-06	3.7547e-06	0:00:00	23
1348	2.6409e-03	4.4661e-06	3.6682e-06	0:00:00	22
1349	2.5565e-03	4.3764e-06	3.5811e-06	0:00:00	21
1350	2.4707e-03	4.2891e-06	3.4973e-06	0:00:00	20
1351	2.3815e-03	4.1994e-06	3.4142e-06	0:00:00	19
1352	2.3010e-03	4.1077e-06	3.3315e-06	0:00:04	18
1353	2.2223e-03	4.0185e-06	3.2513e-06	0:00:03	17
1354	2.1435e-03	3.9304e-06	3.1720e-06	0:00:02	16
1355	2.0749e-03	3.8419e-06	3.0948e-06	0:00:02	15
1356	2.0021e-03	3.7561e-06	3.0180e-06	0:00:01	14
1357	1.9424e-03	3.6719e-06	2.9430e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
1358	1.8865e-03	3.5928e-06	2.8712e-06	0:00:01	12
1359	1.8323e-03	3.5160e-06	2.8018e-06	0:00:00	11
1360	1.7840e-03	3.4414e-06	2.7348e-06	0:00:00	10
1361	1.7419e-03	3.3683e-06	2.6719e-06	0:00:00	9
1362	1.7130e-03	3.2956e-06	2.6113e-06	0:00:00	8
1363	1.6897e-03	3.2252e-06	2.5527e-06	0:00:00	7
1364	1.6718e-03	3.1577e-06	2.4964e-06	0:00:00	6
1365	1.6582e-03	3.0902e-06	2.4411e-06	0:00:00	5
1366	1.6530e-03	3.0281e-06	2.3898e-06	0:00:00	4
1367	1.6501e-03	2.9660e-06	2.3392e-06	0:00:00	3
1368	1.6470e-03	2.9045e-06	2.2903e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1369	1.6486e-03	2.8452e-06	2.2446e-06	0:00:00	1
1370	1.6470e-03	2.7868e-06	2.2007e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 14.86063575744629s, time step = 23

22 more time steps

Updating solution at time level N...

done.

physical-dt 6.2745e-01

iter	continuity	x-velocity	y-velocity	time/iter
1370	1.6470e-03	2.7868e-06	2.2007e-06	0:00:00 100
1371	4.6456e-02	2.0334e-05	1.6678e-05	0:00:00 99
1372	5.1383e-02	1.4678e-05	1.1450e-05	0:00:00 98
1373	3.3743e-02	7.7946e-06	5.8148e-06	0:00:00 97
1374	2.1089e-02	5.3607e-06	4.0940e-06	0:00:00 96
1375	1.4362e-02	4.7390e-06	3.6474e-06	0:00:00 95
1376	1.1149e-02	4.3126e-06	3.3214e-06	0:00:00 94
1377	8.8953e-03	3.9476e-06	3.0484e-06	0:00:00 93
1378	7.1313e-03	3.6251e-06	2.8099e-06	0:00:00 92
1379	5.7745e-03	3.3433e-06	2.6005e-06	0:00:00 91
1380	4.7644e-03	3.0909e-06	2.4186e-06	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
1381	4.0249e-03	2.8666e-06	2.2613e-06	0:00:00 89
1382	3.4855e-03	2.6672e-06	2.1195e-06	0:00:00 88
1383	3.0740e-03	2.4870e-06	1.9915e-06	0:00:17 87
1384	2.7455e-03	2.3205e-06	1.8734e-06	0:00:14 86
1385	2.4463e-03	2.1702e-06	1.7696e-06	0:00:11 85
1386	2.2548e-03	2.0298e-06	1.6592e-06	0:00:09 84
1387	2.0299e-03	1.8965e-06	1.5674e-06	0:00:07 83
1388	1.9012e-03	1.7759e-06	1.4698e-06	0:00:05 82
1389	1.7285e-03	1.6652e-06	1.3892e-06	0:00:04 81
1390	1.6308e-03	1.5611e-06	1.3022e-06	0:00:03 80
1391	1.4870e-03	1.4635e-06	1.2286e-06	0:00:03 79

iter	continuity	x-velocity	y-velocity	time/iter
1392	1.3894e-03	1.3725e-06	1.1535e-06	0:00:02 78
1393	1.3041e-03	1.2867e-06	1.0833e-06	0:00:02 77
1394	1.2233e-03	1.2073e-06	1.0176e-06	0:00:01 76
1395	1.1604e-03	1.1321e-06	9.5449e-07	0:00:01 75
1396	1.0901e-03	1.0619e-06	8.9718e-07	0:00:01 74
1397	1.0216e-03	9.9619e-07	8.4264e-07	0:00:01 73

```

1398 9.6053e-04 9.3453e-07 7.9094e-07 0:00:01 72
! 1398 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 15.48808765411377s, time step = 24
21 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 2.2657e+00

```

iter	continuity	x-velocity	y-velocity	time/iter	
1398	9.6053e-04	9.3453e-07	7.9094e-07	0:00:01	100
1399	1.8602e-01	7.4558e-05	6.1432e-05	0:00:01	99
1400	1.9988e-01	5.4914e-05	4.3572e-05	0:00:00	98
1401	1.2128e-01	2.9085e-05	2.2659e-05	0:00:20	97
1402	7.4223e-02	2.2373e-05	1.7814e-05	0:00:16	96
1403	5.3508e-02	2.1416e-05	1.7038e-05	0:00:12	95
1404	4.4771e-02	2.0715e-05	1.6452e-05	0:00:10	94
1405	3.7894e-02	2.0095e-05	1.6059e-05	0:00:08	93
1406	3.1808e-02	1.9661e-05	1.5860e-05	0:00:06	92
1407	2.8251e-02	1.9295e-05	1.5681e-05	0:00:05	91
1408	2.4759e-02	1.9009e-05	1.5659e-05	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
1409	2.2557e-02	1.8749e-05	1.5636e-05	0:00:03	89
1410	2.1117e-02	1.8508e-05	1.5643e-05	0:00:02	88
1411	2.0207e-02	1.8348e-05	1.5725e-05	0:00:02	87
1412	1.9571e-02	1.8203e-05	1.5810e-05	0:00:02	86
1413	1.9188e-02	1.8109e-05	1.5932e-05	0:00:01	85
1414	1.9051e-02	1.8064e-05	1.6056e-05	0:00:01	84
1415	1.8953e-02	1.8031e-05	1.6168e-05	0:00:01	83
1416	1.8947e-02	1.8052e-05	1.6274e-05	0:00:01	82
1417	1.8915e-02	1.8060e-05	1.6339e-05	0:00:00	81
1418	1.8914e-02	1.8132e-05	1.6444e-05	0:00:00	80
1419	1.8881e-02	1.8190e-05	1.6506e-05	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
1420	1.8752e-02	1.8219e-05	1.6529e-05	0:00:00	78
1421	1.8684e-02	1.8280e-05	1.6536e-05	0:00:00	77
1422	1.8581e-02	1.8339e-05	1.6557e-05	0:00:15	76
1423	1.8455e-02	1.8406e-05	1.6575e-05	0:00:12	75
1424	1.8341e-02	1.8447e-05	1.6569e-05	0:00:10	74
1425	1.8217e-02	1.8467e-05	1.6553e-05	0:00:08	73
1426	1.8053e-02	1.8499e-05	1.6542e-05	0:00:06	72
1427	1.7781e-02	1.8507e-05	1.6538e-05	0:00:05	71
1428	1.7600e-02	1.8523e-05	1.6535e-05	0:00:04	70
1429	1.7320e-02	1.8515e-05	1.6525e-05	0:00:03	69
1430	1.7157e-02	1.8507e-05	1.6512e-05	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
1431	1.6912e-02	1.8499e-05	1.6503e-05	0:00:02	67
1432	1.6730e-02	1.8462e-05	1.6491e-05	0:00:01	66
1433	1.6478e-02	1.8447e-05	1.6475e-05	0:00:01	65
1434	1.6269e-02	1.8426e-05	1.6451e-05	0:00:01	64
1435	1.5986e-02	1.8392e-05	1.6410e-05	0:00:01	63
1436	1.5785e-02	1.8364e-05	1.6373e-05	0:00:01	62
1437	1.5473e-02	1.8345e-05	1.6308e-05	0:00:00	61
1438	1.5185e-02	1.8323e-05	1.6247e-05	0:00:00	60
1439	1.4999e-02	1.8332e-05	1.6194e-05	0:00:00	59
1440	1.4691e-02	1.8345e-05	1.6131e-05	0:00:00	58
1441	1.4425e-02	1.8388e-05	1.6094e-05	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1442	1.4195e-02	1.8446e-05	1.6043e-05	0:00:00	56
1443	1.3933e-02	1.8512e-05	1.6002e-05	0:00:11	55
1444	1.3638e-02	1.8589e-05	1.5976e-05	0:00:09	54
1445	1.3381e-02	1.8662e-05	1.5962e-05	0:00:07	53
1446	1.3155e-02	1.8729e-05	1.5960e-05	0:00:05	52
1447	1.2945e-02	1.8812e-05	1.5970e-05	0:00:04	51
1448	1.2767e-02	1.8902e-05	1.5988e-05	0:00:03	50
1449	1.2547e-02	1.8986e-05	1.6008e-05	0:00:03	49
1450	1.2297e-02	1.9096e-05	1.6049e-05	0:00:02	48
1451	1.2129e-02	1.9193e-05	1.6102e-05	0:00:02	47
1452	1.2030e-02	1.9276e-05	1.6158e-05	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
1453	1.1998e-02	1.9358e-05	1.6231e-05	0:00:01	45
1454	1.1968e-02	1.9450e-05	1.6319e-05	0:00:01	44
1455	1.2027e-02	1.9523e-05	1.6400e-05	0:00:01	43

1456	1.2029e-02	1.9582e-05	1.6488e-05	0:00:00	42
1457	1.2193e-02	1.9653e-05	1.6591e-05	0:00:00	41
1458	1.2413e-02	1.9718e-05	1.6706e-05	0:00:00	40
1459	1.2661e-02	1.9800e-05	1.6816e-05	0:00:00	39
1460	1.2887e-02	1.9855e-05	1.6932e-05	0:00:00	38
1461	1.3086e-02	1.9918e-05	1.7051e-05	0:00:00	37
1462	1.3331e-02	1.9980e-05	1.7176e-05	0:00:00	36
1463	1.3606e-02	2.0037e-05	1.7307e-05	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
1464	1.3818e-02	2.0096e-05	1.7451e-05	0:00:07	34
1465	1.4054e-02	2.0167e-05	1.7614e-05	0:00:05	33
1466	1.4218e-02	2.0243e-05	1.7780e-05	0:00:04	32
1467	1.4389e-02	2.0329e-05	1.7949e-05	0:00:03	31
1468	1.4514e-02	2.0413e-05	1.8113e-05	0:00:02	30
1469	1.4680e-02	2.0507e-05	1.8272e-05	0:00:02	29
1470	1.4829e-02	2.0623e-05	1.8436e-05	0:00:01	28
1471	1.4971e-02	2.0758e-05	1.8591e-05	0:00:01	27
1472	1.5103e-02	2.0877e-05	1.8726e-05	0:00:01	26
1473	1.4947e-02	2.1042e-05	1.8918e-05	0:00:01	25
1474	1.5234e-02	2.1156e-05	1.8965e-05	0:00:01	24

iter	continuity	x-velocity	y-velocity	time/iter	
1475	1.5096e-02	2.1335e-05	1.9152e-05	0:00:00	23
1476	1.5178e-02	2.1471e-05	1.9215e-05	0:00:00	22
1477	1.5242e-02	2.1624e-05	1.9304e-05	0:00:00	21
1478	1.5286e-02	2.1769e-05	1.9366e-05	0:00:00	20
1479	1.5287e-02	2.1913e-05	1.9431e-05	0:00:00	19
1480	1.5267e-02	2.2050e-05	1.9482e-05	0:00:00	18
1481	1.5284e-02	2.2186e-05	1.9510e-05	0:00:00	17
1482	1.5268e-02	2.2303e-05	1.9544e-05	0:00:00	16
1483	1.5224e-02	2.2417e-05	1.9557e-05	0:00:00	15
1484	1.5195e-02	2.2517e-05	1.9559e-05	0:00:00	14
1485	1.5197e-02	2.2625e-05	1.9548e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1486	1.5105e-02	2.2700e-05	1.9537e-05	0:00:02	12
1487	1.5028e-02	2.2809e-05	1.9532e-05	0:00:02	11
1488	1.4902e-02	2.2871e-05	1.9500e-05	0:00:01	10
1489	1.4808e-02	2.2935e-05	1.9468e-05	0:00:01	9
1490	1.4692e-02	2.2970e-05	1.9424e-05	0:00:01	8
1491	1.4615e-02	2.3003e-05	1.9383e-05	0:00:00	7
1492	1.4438e-02	2.3026e-05	1.9334e-05	0:00:00	6
1493	1.4283e-02	2.3026e-05	1.9283e-05	0:00:00	5

1494	1.4122e-02	2.3023e-05	1.9225e-05	0:00:00	4
1495	1.4200e-02	2.2992e-05	1.9134e-05	0:00:00	3
1496	1.3842e-02	2.2961e-05	1.9106e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1497	1.3918e-02	2.2923e-05	1.8996e-05	0:00:00	1
1498	1.3695e-02	2.2845e-05	1.8923e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 17.75383377075195s, time step = 25

20 more time steps

Updating solution at time level N...

done.

physical-dt 1.1329e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1498	1.3695e-02	2.2845e-05	1.8923e-05	0:00:21	100
1499	7.8723e-02	4.7592e-05	3.4754e-05	0:00:17	99
1500	7.8827e-02	3.8704e-05	2.9934e-05	0:00:13	98
1501	5.2193e-02	3.1089e-05	2.5522e-05	0:00:11	97
1502	3.6759e-02	2.8606e-05	2.3861e-05	0:00:08	96
1503	2.8691e-02	2.7490e-05	2.2998e-05	0:00:07	95
1504	2.4827e-02	2.6636e-05	2.2295e-05	0:00:05	94
1505	2.1914e-02	2.5817e-05	2.1688e-05	0:00:04	93
1506	1.9620e-02	2.5073e-05	2.1120e-05	0:00:03	92
1507	1.7793e-02	2.4366e-05	2.0555e-05	0:00:03	91
1508	1.6347e-02	2.3698e-05	2.0009e-05	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
1509	1.5279e-02	2.3085e-05	1.9499e-05	0:00:02	89
1510	1.4412e-02	2.2464e-05	1.8971e-05	0:00:01	88
1511	1.3642e-02	2.1873e-05	1.8463e-05	0:00:01	87
1512	1.2868e-02	2.1337e-05	1.7988e-05	0:00:01	86
1513	1.2302e-02	2.0803e-05	1.7514e-05	0:00:01	85
1514	1.1917e-02	2.0283e-05	1.7060e-05	0:00:01	84

1515	1.1524e-02	1.9778e-05	1.6620e-05	0:00:00	83
1516	1.1142e-02	1.9283e-05	1.6187e-05	0:00:17	82
1517	1.0880e-02	1.8820e-05	1.5763e-05	0:00:13	81
1518	1.0618e-02	1.8358e-05	1.5351e-05	0:00:10	80
1519	1.0325e-02	1.7897e-05	1.4946e-05	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
1520	1.0155e-02	1.7450e-05	1.4557e-05	0:00:07	78
1521	9.8997e-03	1.7020e-05	1.4174e-05	0:00:05	77
1522	9.7389e-03	1.6598e-05	1.3803e-05	0:00:04	76
1523	9.6113e-03	1.6196e-05	1.3450e-05	0:00:03	75
1524	9.4900e-03	1.5812e-05	1.3116e-05	0:00:03	74
1525	9.3166e-03	1.5432e-05	1.2785e-05	0:00:02	73
1526	9.1609e-03	1.5072e-05	1.2474e-05	0:00:02	72
1527	9.0017e-03	1.4711e-05	1.2176e-05	0:00:01	71
1528	8.8694e-03	1.4367e-05	1.1892e-05	0:00:01	70
1529	8.7476e-03	1.4030e-05	1.1625e-05	0:00:01	69
1530	8.6241e-03	1.3700e-05	1.1361e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1531	8.5203e-03	1.3378e-05	1.1113e-05	0:00:00	67
1532	8.3914e-03	1.3073e-05	1.0874e-05	0:00:00	66
1533	8.2668e-03	1.2774e-05	1.0643e-05	0:00:00	65
1534	8.1680e-03	1.2484e-05	1.0421e-05	0:00:00	64
1535	8.0750e-03	1.2219e-05	1.0220e-05	0:00:00	63
1536	7.9545e-03	1.1945e-05	1.0022e-05	0:00:00	62
1537	7.8640e-03	1.1689e-05	9.8332e-06	0:00:12	61
1538	7.7788e-03	1.1452e-05	9.6564e-06	0:00:10	60
1539	7.6337e-03	1.1213e-05	9.4838e-06	0:00:08	59
1540	7.4931e-03	1.0988e-05	9.3278e-06	0:00:06	58
1541	7.3309e-03	1.0770e-05	9.1773e-06	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
1542	7.1790e-03	1.0559e-05	9.0386e-06	0:00:04	56
1543	7.0624e-03	1.0372e-05	8.9061e-06	0:00:03	55
1544	6.9204e-03	1.0181e-05	8.7730e-06	0:00:02	54
1545	6.8046e-03	9.9991e-06	8.6403e-06	0:00:02	53
1546	6.6839e-03	9.8280e-06	8.5205e-06	0:00:01	52
1547	6.5422e-03	9.6592e-06	8.3998e-06	0:00:01	51
1548	6.4256e-03	9.5008e-06	8.2813e-06	0:00:01	50
1549	6.3009e-03	9.3459e-06	8.1623e-06	0:00:01	49
1550	6.1968e-03	9.1978e-06	8.0506e-06	0:00:01	48
1551	6.0907e-03	9.0544e-06	7.9358e-06	0:00:00	47
1552	5.9778e-03	8.9169e-06	7.8201e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
1553	5.8668e-03	8.7825e-06	7.7051e-06	0:00:00	45
1554	5.7489e-03	8.6469e-06	7.5900e-06	0:00:00	44
1555	5.6347e-03	8.5182e-06	7.4750e-06	0:00:00	43
1556	5.5285e-03	8.3895e-06	7.3592e-06	0:00:00	42
1557	5.4474e-03	8.2669e-06	7.2406e-06	0:00:00	41
1558	5.3148e-03	8.1314e-06	7.1205e-06	0:00:08	40
1559	5.2078e-03	8.0014e-06	6.9965e-06	0:00:06	39
1560	5.0396e-03	7.8842e-06	6.8875e-06	0:00:05	38
1561	5.0115e-03	7.7378e-06	6.7398e-06	0:00:04	37
1562	4.8276e-03	7.6257e-06	6.6396e-06	0:00:03	36
1563	4.7918e-03	7.4831e-06	6.4920e-06	0:00:02	35

iter	continuity	x-velocity	y-velocity	time/iter	
1564	4.6372e-03	7.3641e-06	6.3837e-06	0:00:02	34
1565	4.5910e-03	7.2259e-06	6.2399e-06	0:00:01	33
1566	4.4629e-03	7.0996e-06	6.1232e-06	0:00:01	32
1567	4.2989e-03	6.9849e-06	6.0138e-06	0:00:01	31
1568	4.2467e-03	6.8481e-06	5.8729e-06	0:00:01	30
1569	4.1258e-03	6.7257e-06	5.7550e-06	0:00:01	29
1570	3.9881e-03	6.6030e-06	5.6363e-06	0:00:00	28
1571	3.8734e-03	6.4828e-06	5.5150e-06	0:00:00	27
1572	3.7531e-03	6.3599e-06	5.3946e-06	0:00:00	26
1573	3.6482e-03	6.2361e-06	5.2753e-06	0:00:00	25
1574	3.5430e-03	6.1123e-06	5.1548e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
1575	3.4450e-03	5.9905e-06	5.0356e-06	0:00:00	23
1576	3.3442e-03	5.8677e-06	4.9182e-06	0:00:00	22
1577	3.2380e-03	5.7470e-06	4.8023e-06	0:00:00	21
1578	3.1374e-03	5.6278e-06	4.6866e-06	0:00:00	20
1579	3.0366e-03	5.5083e-06	4.5719e-06	0:00:04	19
1580	2.9306e-03	5.3884e-06	4.4598e-06	0:00:03	18
1581	2.8310e-03	5.2743e-06	4.3490e-06	0:00:02	17
1582	2.7354e-03	5.1579e-06	4.2400e-06	0:00:02	16
1583	2.6472e-03	5.0448e-06	4.1314e-06	0:00:01	15
1584	2.5644e-03	4.9351e-06	4.0252e-06	0:00:01	14
1585	2.4807e-03	4.8282e-06	3.9217e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
1586	2.4123e-03	4.7237e-06	3.8209e-06	0:00:01	12
1587	2.3462e-03	4.6212e-06	3.7239e-06	0:00:00	11
1588	2.2896e-03	4.5202e-06	3.6293e-06	0:00:00	10

1589	2.2417e-03	4.4250e-06	3.5414e-06	0:00:00	9
1590	2.1804e-03	4.3262e-06	3.4527e-06	0:00:00	8
1591	2.1269e-03	4.2297e-06	3.3682e-06	0:00:00	7
1592	2.0852e-03	4.1357e-06	3.2866e-06	0:00:00	6
1593	2.0356e-03	4.0413e-06	3.2070e-06	0:00:00	5
1594	2.0004e-03	3.9502e-06	3.1314e-06	0:00:00	4
1595	1.9686e-03	3.8621e-06	3.0592e-06	0:00:00	3
1596	1.9419e-03	3.7687e-06	2.9863e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1597	1.9181e-03	3.6831e-06	2.9194e-06	0:00:00	1
1598	1.8848e-03	3.5987e-06	2.8544e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 18.8867073059082s, time step = 26

19 more time steps

Updating solution at time level N...

done.

physical-dt 5.6644e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1598	1.8848e-03	3.5987e-06	2.8544e-06	0:00:00	100
1599	4.4980e-02	2.1372e-05	1.8453e-05	0:00:00	99
1600	4.9728e-02	1.6239e-05	1.2833e-05	0:00:00	98
1601	3.2322e-02	1.0479e-05	7.5545e-06	0:00:00	97
1602	1.9998e-02	8.2774e-06	6.2167e-06	0:00:00	96
1603	1.3731e-02	7.3502e-06	5.7108e-06	0:00:00	95
1604	1.1032e-02	6.7591e-06	5.2936e-06	0:00:00	94
1605	9.0971e-03	6.2368e-06	4.9013e-06	0:00:00	93
1606	7.4489e-03	5.7884e-06	4.6016e-06	0:00:00	92
1607	6.3699e-03	5.3621e-06	4.2808e-06	0:00:00	91
1608	5.3875e-03	4.9769e-06	4.0051e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1609	4.6694e-03	4.6289e-06	3.7439e-06	0:00:00	89

1610	4.1307e-03	4.3087e-06	3.5017e-06	0:00:18	88
1611	3.6910e-03	4.0099e-06	3.2755e-06	0:00:14	87
1612	3.3504e-03	3.7349e-06	3.0642e-06	0:00:11	86
1613	3.0588e-03	3.4819e-06	2.8662e-06	0:00:09	85
1614	2.7985e-03	3.2474e-06	2.6811e-06	0:00:07	84
1615	2.5707e-03	3.0303e-06	2.5070e-06	0:00:05	83
1616	2.3586e-03	2.8295e-06	2.3435e-06	0:00:04	82
1617	2.1766e-03	2.6440e-06	2.1898e-06	0:00:03	81
1618	2.0135e-03	2.4706e-06	2.0446e-06	0:00:03	80
1619	1.8676e-03	2.3103e-06	1.9098e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
1620	1.7363e-03	2.1599e-06	1.7826e-06	0:00:02	78
1621	1.6134e-03	2.0190e-06	1.6623e-06	0:00:01	77
1622	1.5018e-03	1.8884e-06	1.5506e-06	0:00:01	76
1623	1.4041e-03	1.7645e-06	1.4426e-06	0:00:01	75
1624	1.3039e-03	1.6510e-06	1.3465e-06	0:00:01	74
1625	1.2136e-03	1.5455e-06	1.2567e-06	0:00:01	73
1626	1.1328e-03	1.4452e-06	1.1722e-06	0:00:00	72
1627	1.0595e-03	1.3519e-06	1.0934e-06	0:00:00	71
1628	9.9166e-04	1.2645e-06	1.0200e-06	0:00:00	70

! 1628 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 19.45314407348633s, time step = 27

18 more time steps

Updating solution at time level N...

done.

physical-dt 1.6631e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1628	9.9166e-04	1.2645e-06	1.0200e-06	0:00:00	100
1629	1.4498e-01	6.2263e-05	5.4804e-05	0:00:00	99
1630	1.5710e-01	5.0607e-05	4.0654e-05	0:00:00	98
1631	9.6030e-02	3.4376e-05	2.7109e-05	0:00:00	97

1632	6.0544e-02	3.0177e-05	2.5479e-05	0:00:00	96
1633	4.4793e-02	2.8963e-05	2.5141e-05	0:00:00	95
1634	3.7908e-02	2.8460e-05	2.4926e-05	0:00:00	94
1635	3.3501e-02	2.8095e-05	2.4666e-05	0:00:00	93
1636	2.9576e-02	2.7891e-05	2.4653e-05	0:00:00	92
1637	2.6678e-02	2.7594e-05	2.4435e-05	0:00:00	91
1638	2.4592e-02	2.7373e-05	2.4312e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1639	2.3257e-02	2.7195e-05	2.4224e-05	0:00:00	89
1640	2.2243e-02	2.6976e-05	2.4117e-05	0:00:00	88
1641	2.1427e-02	2.6844e-05	2.4067e-05	0:00:00	87
1642	2.0848e-02	2.6628e-05	2.3954e-05	0:00:00	86
1643	2.0650e-02	2.6469e-05	2.3858e-05	0:00:00	85
1644	2.0391e-02	2.6314e-05	2.3759e-05	0:00:00	84
1645	2.0183e-02	2.6179e-05	2.3651e-05	0:00:00	83
1646	1.9961e-02	2.6062e-05	2.3516e-05	0:00:16	82
1647	1.9857e-02	2.5969e-05	2.3390e-05	0:00:13	81
1648	1.9673e-02	2.5888e-05	2.3234e-05	0:00:10	80
1649	1.9554e-02	2.5819e-05	2.3062e-05	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
1650	1.9363e-02	2.5753e-05	2.2867e-05	0:00:06	78
1651	1.9101e-02	2.5679e-05	2.2677e-05	0:00:05	77
1652	1.8831e-02	2.5631e-05	2.2475e-05	0:00:04	76
1653	1.8512e-02	2.5535e-05	2.2243e-05	0:00:03	75
1654	1.8269e-02	2.5461e-05	2.2023e-05	0:00:02	74
1655	1.7881e-02	2.5371e-05	2.1792e-05	0:00:02	73
1656	1.7547e-02	2.5257e-05	2.1567e-05	0:00:02	72
1657	1.7225e-02	2.5145e-05	2.1324e-05	0:00:01	71
1658	1.6843e-02	2.5015e-05	2.1084e-05	0:00:01	70
1659	1.6520e-02	2.4886e-05	2.0860e-05	0:00:01	69
1660	1.6080e-02	2.4740e-05	2.0628e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1661	1.5719e-02	2.4587e-05	2.0393e-05	0:00:00	67
1662	1.5275e-02	2.4436e-05	2.0172e-05	0:00:00	66
1663	1.4851e-02	2.4277e-05	1.9954e-05	0:00:00	65
1664	1.4444e-02	2.4116e-05	1.9740e-05	0:00:13	64
1665	1.4036e-02	2.3963e-05	1.9530e-05	0:00:10	63
1666	1.3702e-02	2.3796e-05	1.9314e-05	0:00:08	62
1667	1.3379e-02	2.3656e-05	1.9105e-05	0:00:06	61
1668	1.3088e-02	2.3494e-05	1.8908e-05	0:00:05	60
1669	1.2839e-02	2.3329e-05	1.8721e-05	0:00:04	59

1670	1.2593e-02	2.3186e-05	1.8546e-05	0:00:03	58
1671	1.2364e-02	2.3045e-05	1.8380e-05	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
1672	1.2079e-02	2.2883e-05	1.8214e-05	0:00:02	56
1673	1.1889e-02	2.2731e-05	1.8059e-05	0:00:02	55
1674	1.1698e-02	2.2585e-05	1.7909e-05	0:00:01	54
1675	1.1459e-02	2.2430e-05	1.7759e-05	0:00:01	53
1676	1.1379e-02	2.2277e-05	1.7620e-05	0:00:01	52
1677	1.1319e-02	2.2137e-05	1.7484e-05	0:00:01	51
1678	1.1161e-02	2.1974e-05	1.7349e-05	0:00:00	50
1679	1.1053e-02	2.1793e-05	1.7215e-05	0:00:00	49
1680	1.0967e-02	2.1617e-05	1.7086e-05	0:00:00	48
1681	1.0922e-02	2.1437e-05	1.6967e-05	0:00:00	47
1682	1.0941e-02	2.1277e-05	1.6858e-05	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
1683	1.0862e-02	2.1086e-05	1.6749e-05	0:00:00	45
1684	1.0937e-02	2.0904e-05	1.6647e-05	0:00:09	44
1685	1.0943e-02	2.0732e-05	1.6550e-05	0:00:07	43
1686	1.1028e-02	2.0561e-05	1.6456e-05	0:00:05	42
1687	1.1083e-02	2.0391e-05	1.6367e-05	0:00:04	41
1688	1.1162e-02	2.0213e-05	1.6281e-05	0:00:03	40
1689	1.1300e-02	2.0047e-05	1.6195e-05	0:00:03	39
1690	1.1405e-02	1.9888e-05	1.6123e-05	0:00:02	38
1691	1.1533e-02	1.9734e-05	1.6061e-05	0:00:02	37
1692	1.1626e-02	1.9579e-05	1.6005e-05	0:00:01	36
1693	1.1747e-02	1.9431e-05	1.5963e-05	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
1694	1.1848e-02	1.9297e-05	1.5931e-05	0:00:01	34
1695	1.1887e-02	1.9160e-05	1.5897e-05	0:00:01	33
1696	1.1718e-02	1.9049e-05	1.5892e-05	0:00:00	32
1697	1.1874e-02	1.8908e-05	1.5805e-05	0:00:00	31
1698	1.1703e-02	1.8818e-05	1.5813e-05	0:00:00	30
1699	1.1667e-02	1.8731e-05	1.5761e-05	0:00:00	29
1700	1.1647e-02	1.8649e-05	1.5716e-05	0:00:00	28
1701	1.1730e-02	1.8575e-05	1.5648e-05	0:00:00	27
1702	1.1508e-02	1.8538e-05	1.5642e-05	0:00:00	26
1703	1.1645e-02	1.8444e-05	1.5525e-05	0:00:00	25
1704	1.1358e-02	1.8407e-05	1.5509e-05	0:00:05	24

iter	continuity	x-velocity	y-velocity	time/iter	
1705	1.1470e-02	1.8314e-05	1.5387e-05	0:00:04	23

1706	1.1204e-02	1.8284e-05	1.5354e-05	0:00:03	22
1707	1.1244e-02	1.8185e-05	1.5213e-05	0:00:02	21
1708	1.1103e-02	1.8126e-05	1.5141e-05	0:00:02	20
1709	1.0857e-02	1.8075e-05	1.5077e-05	0:00:01	19
1710	1.0900e-02	1.7970e-05	1.4921e-05	0:00:01	18
1711	1.0761e-02	1.7872e-05	1.4822e-05	0:00:01	17
1712	1.0674e-02	1.7797e-05	1.4715e-05	0:00:01	16
1713	1.0563e-02	1.7710e-05	1.4604e-05	0:00:00	15
1714	1.0432e-02	1.7619e-05	1.4486e-05	0:00:00	14
1715	1.0338e-02	1.7534e-05	1.4371e-05	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1716	1.0210e-02	1.7420e-05	1.4245e-05	0:00:00	12
1717	1.0051e-02	1.7316e-05	1.4129e-05	0:00:00	11
1718	9.9258e-03	1.7208e-05	1.4014e-05	0:00:00	10
1719	9.7699e-03	1.7083e-05	1.3887e-05	0:00:02	9
1720	9.4457e-03	1.6959e-05	1.3782e-05	0:00:01	8
1721	9.4820e-03	1.6814e-05	1.3621e-05	0:00:01	7
1722	9.3223e-03	1.6673e-05	1.3501e-05	0:00:01	6
1723	9.1690e-03	1.6529e-05	1.3365e-05	0:00:00	5
1724	8.9832e-03	1.6389e-05	1.3235e-05	0:00:00	4
1725	8.8132e-03	1.6238e-05	1.3099e-05	0:00:00	3
1726	8.6287e-03	1.6075e-05	1.2961e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1727	8.4392e-03	1.5912e-05	1.2815e-05	0:00:00	1
1728	8.2316e-03	1.5758e-05	1.2674e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 21.11625289916992s, time step = 28

17 more time steps

Updating solution at time level N...

done.

physical-dt 8.3155e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1728	8.2316e-03	1.5758e-05	1.2674e-05	0:00:03	100
1729	5.0648e-02	3.0686e-05	2.3416e-05	0:00:02	99
1730	5.2388e-02	2.1493e-05	1.7712e-05	0:00:02	98
1731	3.3700e-02	1.5434e-05	1.2567e-05	0:00:01	97
1732	2.0982e-02	1.3559e-05	1.0755e-05	0:00:01	96
1733	1.5220e-02	1.2783e-05	9.9658e-06	0:00:01	95
1734	1.2427e-02	1.2144e-05	9.4408e-06	0:00:19	94
1735	1.0539e-02	1.1548e-05	9.0095e-06	0:00:15	93
1736	8.9107e-03	1.1017e-05	8.6388e-06	0:00:12	92
1737	7.7414e-03	1.0518e-05	8.2702e-06	0:00:10	91
1738	6.8753e-03	1.0047e-05	7.9187e-06	0:00:08	90

iter	continuity	x-velocity	y-velocity	time/iter	
1739	6.2326e-03	9.6094e-06	7.5821e-06	0:00:06	89
1740	5.7344e-03	9.1989e-06	7.2585e-06	0:00:05	88
1741	5.3152e-03	8.8045e-06	6.9503e-06	0:00:04	87
1742	4.9567e-03	8.4282e-06	6.6570e-06	0:00:03	86
1743	4.6489e-03	8.0751e-06	6.3811e-06	0:00:02	85
1744	4.4115e-03	7.7406e-06	6.1243e-06	0:00:02	84
1745	4.1850e-03	7.4155e-06	5.8770e-06	0:00:01	83
1746	3.9843e-03	7.1116e-06	5.6462e-06	0:00:01	82
1747	3.7933e-03	6.8213e-06	5.4249e-06	0:00:01	81
1748	3.6123e-03	6.5419e-06	5.2141e-06	0:00:01	80
1749	3.4377e-03	6.2757e-06	5.0142e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1750	3.2773e-03	6.0213e-06	4.8224e-06	0:00:00	78
1751	3.1229e-03	5.7785e-06	4.6391e-06	0:00:00	77
1752	2.9913e-03	5.5487e-06	4.4625e-06	0:00:00	76
1753	2.8752e-03	5.3298e-06	4.2938e-06	0:00:00	75
1754	2.7683e-03	5.1207e-06	4.1291e-06	0:00:00	74
1755	2.6673e-03	4.9197e-06	3.9723e-06	0:00:15	73
1756	2.5738e-03	4.7278e-06	3.8216e-06	0:00:12	72
1757	2.4870e-03	4.5446e-06	3.6781e-06	0:00:09	71
1758	2.4221e-03	4.3694e-06	3.5392e-06	0:00:07	70
1759	2.3624e-03	4.2016e-06	3.4072e-06	0:00:06	69
1760	2.3087e-03	4.0396e-06	3.2806e-06	0:00:04	68

iter	continuity	x-velocity	y-velocity	time/iter	
1761	2.2586e-03	3.8847e-06	3.1589e-06	0:00:04	67
1762	2.2008e-03	3.7367e-06	3.0425e-06	0:00:03	66
1763	2.1405e-03	3.5955e-06	2.9306e-06	0:00:02	65
1764	2.0786e-03	3.4604e-06	2.8248e-06	0:00:02	64

1765	2.0139e-03	3.3322e-06	2.7232e-06	0:00:01	63
1766	1.9482e-03	3.2085e-06	2.6255e-06	0:00:01	62
1767	1.8852e-03	3.0898e-06	2.5318e-06	0:00:01	61
1768	1.8295e-03	2.9743e-06	2.4400e-06	0:00:01	60
1769	1.7538e-03	2.8653e-06	2.3578e-06	0:00:01	59
1770	1.6942e-03	2.7600e-06	2.2750e-06	0:00:00	58
1771	1.6400e-03	2.6597e-06	2.1960e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1772	1.5856e-03	2.5630e-06	2.1214e-06	0:00:00	56
1773	1.5390e-03	2.4704e-06	2.0498e-06	0:00:00	55
1774	1.4932e-03	2.3813e-06	1.9810e-06	0:00:00	54
1775	1.4439e-03	2.2967e-06	1.9158e-06	0:00:11	53
1776	1.4001e-03	2.2151e-06	1.8528e-06	0:00:08	52
1777	1.3583e-03	2.1369e-06	1.7921e-06	0:00:07	51
1778	1.3225e-03	2.0626e-06	1.7344e-06	0:00:05	50
1779	1.2819e-03	1.9923e-06	1.6805e-06	0:00:04	49
1780	1.2561e-03	1.9242e-06	1.6237e-06	0:00:03	48
1781	1.2134e-03	1.8606e-06	1.5740e-06	0:00:02	47
1782	1.1713e-03	1.8009e-06	1.5260e-06	0:00:02	46

iter	continuity	x-velocity	y-velocity	time/iter	
1783	1.1361e-03	1.7438e-06	1.4785e-06	0:00:02	45
1784	1.1034e-03	1.6891e-06	1.4325e-06	0:00:01	44
1785	1.0675e-03	1.6368e-06	1.3877e-06	0:00:01	43
1786	1.0376e-03	1.5867e-06	1.3440e-06	0:00:01	42
1787	1.0038e-03	1.5378e-06	1.3015e-06	0:00:01	41
1788	9.7429e-04	1.4912e-06	1.2600e-06	0:00:00	40

! 1788 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 21.94780731201172s, time step = 29

16 more time steps

Updating solution at time level N...

done.

physical-dt 1.5952e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1788	9.7429e-04	1.4912e-06	1.2600e-06	0:00:01	100
1789	9.9690e-02	4.3047e-05	3.5552e-05	0:00:01	99
1790	1.0406e-01	3.0364e-05	2.5028e-05	0:00:01	98
1791	6.4139e-02	1.8130e-05	1.3847e-05	0:00:01	97
1792	3.9987e-02	1.4793e-05	1.1367e-05	0:00:00	96
1793	2.8635e-02	1.3888e-05	1.0892e-05	0:00:00	95
1794	2.3376e-02	1.3303e-05	1.0530e-05	0:00:00	94
1795	1.9495e-02	1.2818e-05	1.0267e-05	0:00:00	93
1796	1.6391e-02	1.2457e-05	1.0049e-05	0:00:00	92
1797	1.4128e-02	1.2167e-05	9.8493e-06	0:00:00	91
1798	1.2170e-02	1.1931e-05	9.7504e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
1799	1.1181e-02	1.1731e-05	9.6278e-06	0:00:00	89
1800	1.0002e-02	1.1541e-05	9.6374e-06	0:00:00	88
1801	9.3674e-03	1.1375e-05	9.5880e-06	0:00:00	87
1802	8.8918e-03	1.1229e-05	9.5620e-06	0:00:00	86
1803	8.5426e-03	1.1095e-05	9.5359e-06	0:00:00	85
1804	8.2479e-03	1.0968e-05	9.5096e-06	0:00:00	84
1805	8.0207e-03	1.0852e-05	9.4823e-06	0:00:00	83
1806	7.8968e-03	1.0738e-05	9.4449e-06	0:00:16	82
1807	7.8270e-03	1.0632e-05	9.4086e-06	0:00:13	81
1808	7.8011e-03	1.0547e-05	9.3650e-06	0:00:10	80
1809	7.7716e-03	1.0464e-05	9.3195e-06	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
1810	7.7522e-03	1.0385e-05	9.2627e-06	0:00:06	78
1811	7.6881e-03	1.0306e-05	9.2030e-06	0:00:05	77
1812	7.5994e-03	1.0238e-05	9.1417e-06	0:00:04	76
1813	7.5173e-03	1.0155e-05	9.0783e-06	0:00:03	75
1814	7.4324e-03	1.0083e-05	9.0109e-06	0:00:02	74
1815	7.3059e-03	1.0013e-05	8.9455e-06	0:00:02	73
1816	7.1999e-03	9.9444e-06	8.8974e-06	0:00:02	72
1817	7.0642e-03	9.8679e-06	8.8601e-06	0:00:01	71
1818	6.9404e-03	9.7978e-06	8.8281e-06	0:00:01	70
1819	6.8161e-03	9.7240e-06	8.7944e-06	0:00:01	69
1820	6.6687e-03	9.6596e-06	8.7550e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
1821	6.5775e-03	9.5943e-06	8.7138e-06	0:00:00	67
1822	6.4318e-03	9.5344e-06	8.6662e-06	0:00:00	66

1823	6.3246e-03	9.4745e-06	8.6121e-06	0:00:00	65
1824	6.2248e-03	9.4172e-06	8.5564e-06	0:00:13	64
1825	6.1099e-03	9.3651e-06	8.4937e-06	0:00:10	63
1826	6.0262e-03	9.3145e-06	8.4241e-06	0:00:08	62
1827	5.9490e-03	9.2753e-06	8.3485e-06	0:00:06	61
1828	5.8829e-03	9.2371e-06	8.2745e-06	0:00:05	60
1829	5.7876e-03	9.2112e-06	8.1978e-06	0:00:04	59
1830	5.7248e-03	9.1863e-06	8.1199e-06	0:00:03	58
1831	5.6403e-03	9.1591e-06	8.0355e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
1832	5.5326e-03	9.1385e-06	7.9625e-06	0:00:02	56
1833	5.4098e-03	9.1125e-06	7.8823e-06	0:00:02	55
1834	5.2909e-03	9.0866e-06	7.8007e-06	0:00:01	54
1835	5.1594e-03	9.0619e-06	7.7239e-06	0:00:01	53
1836	5.0381e-03	9.0339e-06	7.6475e-06	0:00:01	52
1837	4.9066e-03	9.0039e-06	7.5686e-06	0:00:01	51
1838	4.8008e-03	8.9711e-06	7.4936e-06	0:00:10	50
1839	4.6998e-03	8.9344e-06	7.4188e-06	0:00:08	49
1840	4.5791e-03	8.8897e-06	7.3446e-06	0:00:06	48
1841	4.4655e-03	8.8423e-06	7.2710e-06	0:00:05	47
1842	4.3738e-03	8.7827e-06	7.1951e-06	0:00:04	46

iter	continuity	x-velocity	y-velocity	time/iter	
1843	4.2962e-03	8.7281e-06	7.1256e-06	0:00:03	45
1844	4.2100e-03	8.6602e-06	7.0517e-06	0:00:02	44
1845	4.1335e-03	8.5962e-06	6.9805e-06	0:00:02	43
1846	4.0545e-03	8.5225e-06	6.9060e-06	0:00:01	42
1847	3.9796e-03	8.4479e-06	6.8365e-06	0:00:01	41
1848	3.9123e-03	8.3734e-06	6.7672e-06	0:00:01	40
1849	3.8394e-03	8.2934e-06	6.6978e-06	0:00:01	39
1850	3.7826e-03	8.2098e-06	6.6280e-06	0:00:01	38
1851	3.7558e-03	8.1277e-06	6.5603e-06	0:00:00	37
1852	3.7426e-03	8.0468e-06	6.4938e-06	0:00:00	36
1853	3.7188e-03	7.9617e-06	6.4270e-06	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
1854	3.7114e-03	7.8705e-06	6.3558e-06	0:00:00	34
1855	3.7188e-03	7.7878e-06	6.2890e-06	0:00:00	33
1856	3.7265e-03	7.7042e-06	6.2261e-06	0:00:00	32
1857	3.7282e-03	7.6225e-06	6.1644e-06	0:00:00	31
1858	3.7284e-03	7.5383e-06	6.1016e-06	0:00:00	30
1859	3.7293e-03	7.4527e-06	6.0390e-06	0:00:06	29
1860	3.7368e-03	7.3693e-06	5.9800e-06	0:00:05	28

1861	3.7356e-03	7.2876e-06	5.9219e-06	0:00:03	27
1862	3.7280e-03	7.2102e-06	5.8681e-06	0:00:03	26
1863	3.7254e-03	7.1352e-06	5.8180e-06	0:00:02	25
1864	3.6746e-03	7.0638e-06	5.7778e-06	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
1865	3.7280e-03	6.9891e-06	5.7220e-06	0:00:01	23
1866	3.6760e-03	6.9250e-06	5.6894e-06	0:00:01	22
1867	3.7164e-03	6.8577e-06	5.6375e-06	0:00:01	21
1868	3.6625e-03	6.8000e-06	5.6130e-06	0:00:01	20
1869	3.7125e-03	6.7411e-06	5.5652e-06	0:00:00	19
1870	3.6639e-03	6.6963e-06	5.5414e-06	0:00:00	18
1871	3.7049e-03	6.6456e-06	5.4897e-06	0:00:00	17
1872	3.6386e-03	6.6040e-06	5.4662e-06	0:00:00	16
1873	3.6965e-03	6.5591e-06	5.4144e-06	0:00:00	15
1874	3.6158e-03	6.5251e-06	5.3916e-06	0:00:00	14
1875	3.6622e-03	6.4815e-06	5.3375e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
1876	3.5874e-03	6.4465e-06	5.3100e-06	0:00:00	12
1877	3.6319e-03	6.4056e-06	5.2560e-06	0:00:00	11
1878	3.5509e-03	6.3715e-06	5.2272e-06	0:00:02	10
1879	3.5257e-03	6.3357e-06	5.1790e-06	0:00:01	9
1880	3.5036e-03	6.2971e-06	5.1336e-06	0:00:01	8
1881	3.5444e-03	6.2577e-06	5.0812e-06	0:00:01	7
1882	3.4503e-03	6.2242e-06	5.0517e-06	0:00:00	6
1883	3.4824e-03	6.1830e-06	4.9956e-06	0:00:00	5
1884	3.3855e-03	6.1453e-06	4.9643e-06	0:00:00	4
1885	3.4081e-03	6.0992e-06	4.9051e-06	0:00:00	3
1886	3.3229e-03	6.0640e-06	4.8738e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
1887	3.3335e-03	6.0171e-06	4.8148e-06	0:00:00	1
1888	3.2798e-03	5.9708e-06	4.7752e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 23.54305458068848s, time step = 30
15 more time steps

Updating solution at time level N...

done.

physical-dt 7.9762e-01

iter	continuity	x-velocity	y-velocity	time/iter	
1888	3.2798e-03	5.9708e-06	4.7752e-06	0:00:02	100
1889	4.2880e-02	1.8930e-05	1.6949e-05	0:00:02	99
1890	4.7035e-02	1.3199e-05	1.1744e-05	0:00:01	98
1891	2.9907e-02	7.4489e-06	6.1989e-06	0:00:01	97
1892	1.8366e-02	5.7627e-06	4.7965e-06	0:00:01	96
1893	1.2612e-02	5.3665e-06	4.3448e-06	0:00:01	95
1894	9.8241e-03	5.0367e-06	4.0151e-06	0:00:01	94
1895	7.8924e-03	4.7414e-06	3.7629e-06	0:00:19	93
1896	6.4011e-03	4.4847e-06	3.5404e-06	0:00:15	92
1897	5.2370e-03	4.2562e-06	3.3386e-06	0:00:12	91
1898	4.2957e-03	4.0528e-06	3.1663e-06	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
1899	3.7123e-03	3.8624e-06	2.9964e-06	0:00:07	89
1900	3.1938e-03	3.6937e-06	2.8627e-06	0:00:06	88
1901	2.8291e-03	3.5329e-06	2.7297e-06	0:00:05	87
1902	2.5524e-03	3.3813e-06	2.6093e-06	0:00:04	86
1903	2.3453e-03	3.2391e-06	2.4964e-06	0:00:03	85
1904	2.1900e-03	3.1039e-06	2.3888e-06	0:00:02	84
1905	2.0567e-03	2.9752e-06	2.2843e-06	0:00:02	83
1906	1.9503e-03	2.8525e-06	2.1845e-06	0:00:01	82
1907	1.8532e-03	2.7347e-06	2.0883e-06	0:00:01	81
1908	1.7674e-03	2.6220e-06	1.9958e-06	0:00:01	80
1909	1.6832e-03	2.5118e-06	1.9059e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1910	1.6015e-03	2.4085e-06	1.8191e-06	0:00:01	78
1911	1.5272e-03	2.3089e-06	1.7334e-06	0:00:00	77
1912	1.4507e-03	2.2134e-06	1.6561e-06	0:00:00	76
1913	1.3748e-03	2.1216e-06	1.5810e-06	0:00:00	75
1914	1.3058e-03	2.0341e-06	1.5081e-06	0:00:00	74
1915	1.2364e-03	1.9494e-06	1.4393e-06	0:00:15	73
1916	1.1737e-03	1.8673e-06	1.3735e-06	0:00:12	72
1917	1.1105e-03	1.7880e-06	1.3118e-06	0:00:09	71
1918	1.0526e-03	1.7110e-06	1.2532e-06	0:00:07	70
1919	9.9679e-04	1.6374e-06	1.1979e-06	0:00:06	69

! 1919 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 24.34067726135254s, time step = 31

14 more time steps

Updating solution at time level N...

done.

physical-dt 2.6107e+00

iter	continuity	x-velocity	y-velocity	time/iter	
1919	9.9679e-04	1.6374e-06	1.1979e-06	0:00:08	100
1920	1.4520e-01	5.8916e-05	4.8136e-05	0:00:07	99
1921	1.5268e-01	3.9954e-05	3.3433e-05	0:00:05	98
1922	9.2585e-02	1.9266e-05	1.5398e-05	0:00:04	97
1923	5.6358e-02	1.3567e-05	1.0908e-05	0:00:03	96
1924	4.0666e-02	1.2849e-05	1.0167e-05	0:00:03	95
1925	3.2098e-02	1.2505e-05	9.8809e-06	0:00:02	94
1926	2.6235e-02	1.2114e-05	9.5827e-06	0:00:02	93
1927	2.1691e-02	1.1770e-05	9.3007e-06	0:00:20	92
1928	1.8198e-02	1.1494e-05	9.0478e-06	0:00:16	91
1929	1.5404e-02	1.1320e-05	8.8652e-06	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
1930	1.3712e-02	1.1142e-05	8.6947e-06	0:00:10	89
1931	1.2030e-02	1.1025e-05	8.6268e-06	0:00:08	88
1932	1.1020e-02	1.0923e-05	8.5550e-06	0:00:06	87
1933	1.0333e-02	1.0828e-05	8.5137e-06	0:00:05	86
1934	9.8832e-03	1.0751e-05	8.4936e-06	0:00:04	85
1935	9.6146e-03	1.0683e-05	8.4893e-06	0:00:03	84
1936	9.4557e-03	1.0631e-05	8.5004e-06	0:00:02	83
1937	9.3307e-03	1.0585e-05	8.5185e-06	0:00:02	82
1938	9.2492e-03	1.0557e-05	8.5464e-06	0:00:01	81
1939	9.1827e-03	1.0531e-05	8.5651e-06	0:00:01	80
1940	9.1739e-03	1.0503e-05	8.5758e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
1941	9.1424e-03	1.0488e-05	8.5873e-06	0:00:01	78
1942	9.1517e-03	1.0485e-05	8.6073e-06	0:00:01	77
1943	9.1160e-03	1.0478e-05	8.6176e-06	0:00:16	76
1944	9.0763e-03	1.0473e-05	8.6216e-06	0:00:12	75
1945	9.0241e-03	1.0473e-05	8.6180e-06	0:00:10	74
1946	8.9480e-03	1.0475e-05	8.6079e-06	0:00:08	73
1947	8.8923e-03	1.0476e-05	8.5853e-06	0:00:06	72
1948	8.8108e-03	1.0470e-05	8.5620e-06	0:00:05	71
1949	8.7236e-03	1.0474e-05	8.5335e-06	0:00:04	70
1950	8.6408e-03	1.0480e-05	8.4985e-06	0:00:03	69
1951	8.5377e-03	1.0466e-05	8.4597e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
1952	8.4333e-03	1.0446e-05	8.4128e-06	0:00:02	67
1953	8.3242e-03	1.0425e-05	8.3630e-06	0:00:01	66
1954	8.2302e-03	1.0390e-05	8.2941e-06	0:00:01	65
1955	8.1082e-03	1.0349e-05	8.2298e-06	0:00:01	64
1956	7.9644e-03	1.0307e-05	8.1608e-06	0:00:01	63
1957	7.8200e-03	1.0256e-05	8.0832e-06	0:00:01	62
1958	7.6909e-03	1.0204e-05	7.9996e-06	0:00:00	61
1959	7.5345e-03	1.0143e-05	7.9213e-06	0:00:00	60
1960	7.4335e-03	1.0077e-05	7.8318e-06	0:00:00	59
1961	7.2818e-03	1.0011e-05	7.7430e-06	0:00:00	58
1962	7.1427e-03	9.9518e-06	7.6523e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
1963	7.0126e-03	9.8862e-06	7.5599e-06	0:00:00	56
1964	6.8746e-03	9.8160e-06	7.4695e-06	0:00:00	55
1965	6.7463e-03	9.7489e-06	7.3802e-06	0:00:11	54
1966	6.6301e-03	9.6823e-06	7.2918e-06	0:00:09	53
1967	6.4982e-03	9.6157e-06	7.2105e-06	0:00:07	52
1968	6.3855e-03	9.5558e-06	7.1314e-06	0:00:05	51
1969	6.2537e-03	9.4920e-06	7.0613e-06	0:00:04	50
1970	6.1472e-03	9.4170e-06	6.9841e-06	0:00:03	49
1971	6.0617e-03	9.3470e-06	6.9180e-06	0:00:03	48
1972	5.9767e-03	9.2738e-06	6.8509e-06	0:00:02	47
1973	5.8835e-03	9.1981e-06	6.7885e-06	0:00:02	46

iter	continuity	x-velocity	y-velocity	time/iter	
1974	5.8031e-03	9.1268e-06	6.7313e-06	0:00:01	45
1975	5.6877e-03	9.0474e-06	6.6742e-06	0:00:01	44
1976	5.5987e-03	8.9733e-06	6.6169e-06	0:00:01	43
1977	5.5035e-03	8.8911e-06	6.5676e-06	0:00:01	42

1978	5.4004e-03	8.8133e-06	6.5203e-06	0:00:00	41
1979	5.3247e-03	8.7323e-06	6.4766e-06	0:00:00	40
1980	5.2639e-03	8.6561e-06	6.4366e-06	0:00:00	39
1981	5.1969e-03	8.5823e-06	6.3980e-06	0:00:00	38
1982	5.1374e-03	8.5095e-06	6.3613e-06	0:00:08	37
1983	5.0779e-03	8.4376e-06	6.3248e-06	0:00:06	36
1984	5.0447e-03	8.3641e-06	6.2903e-06	0:00:05	35

iter	continuity	x-velocity	y-velocity	time/iter	
1985	5.0010e-03	8.2886e-06	6.2549e-06	0:00:04	34
1986	4.9565e-03	8.2161e-06	6.2224e-06	0:00:03	33
1987	4.9235e-03	8.1420e-06	6.1880e-06	0:00:02	32
1988	4.8939e-03	8.0745e-06	6.1545e-06	0:00:02	31
1989	4.8601e-03	8.0066e-06	6.1237e-06	0:00:01	30
1990	4.8356e-03	7.9454e-06	6.0925e-06	0:00:01	29
1991	4.7980e-03	7.8818e-06	6.0597e-06	0:00:01	28
1992	4.7763e-03	7.8198e-06	6.0287e-06	0:00:01	27
1993	4.7552e-03	7.7624e-06	5.9966e-06	0:00:00	26
1994	4.7469e-03	7.7113e-06	5.9652e-06	0:00:00	25
1995	4.7250e-03	7.6659e-06	5.9378e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
1996	4.6987e-03	7.6238e-06	5.9123e-06	0:00:00	23
1997	4.6821e-03	7.5850e-06	5.8890e-06	0:00:00	22
1998	4.6576e-03	7.5504e-06	5.8718e-06	0:00:00	21
1999	4.5820e-03	7.5268e-06	5.8736e-06	0:00:00	20
2000	4.6565e-03	7.5041e-06	5.8575e-06	0:00:00	19
2001	4.5783e-03	7.4884e-06	5.8701e-06	0:00:00	18
2002	4.6234e-03	7.4698e-06	5.8603e-06	0:00:03	17
2003	4.6319e-03	7.4695e-06	5.8743e-06	0:00:03	16
2004	4.5722e-03	7.4859e-06	5.8951e-06	0:00:02	15
2005	4.6520e-03	7.4941e-06	5.8916e-06	0:00:01	14
2006	4.5679e-03	7.5204e-06	5.9266e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2007	4.6581e-03	7.5426e-06	5.9273e-06	0:00:01	12
2008	4.5886e-03	7.5788e-06	5.9666e-06	0:00:01	11
2009	4.6771e-03	7.6062e-06	5.9674e-06	0:00:00	10
2010	4.6104e-03	7.6463e-06	6.0068e-06	0:00:00	9
2011	4.6196e-03	7.6829e-06	6.0217e-06	0:00:00	8
2012	4.6379e-03	7.7161e-06	6.0415e-06	0:00:00	7
2013	4.6444e-03	7.7566e-06	6.0666e-06	0:00:00	6
2014	4.6504e-03	7.7983e-06	6.0955e-06	0:00:00	5
2015	4.6592e-03	7.8374e-06	6.1207e-06	0:00:00	4

2016	4.6704e-03	7.8768e-06	6.1522e-06	0:00:00	3
2017	4.7668e-03	7.9034e-06	6.1686e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2018	4.6810e-03	7.9537e-06	6.2261e-06	0:00:00	1
2019	4.6978e-03	7.9883e-06	6.2524e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 26.95138549804688s, time step = 32

13 more time steps

Updating solution at time level N...

done.

physical-dt 1.3054e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2019	4.6978e-03	7.9883e-06	6.2524e-06	0:00:00	100
2020	5.8612e-02	2.9722e-05	2.1130e-05	0:00:00	99
2021	6.0275e-02	2.1236e-05	1.5832e-05	0:00:00	98
2022	3.8467e-02	1.3687e-05	1.0480e-05	0:00:00	97
2023	2.4369e-02	1.1810e-05	9.2904e-06	0:00:00	96
2024	1.7537e-02	1.1207e-05	8.9987e-06	0:00:00	95
2025	1.4470e-02	1.0914e-05	8.7784e-06	0:00:00	94
2026	1.2180e-02	1.0677e-05	8.5775e-06	0:00:00	93
2027	1.0332e-02	1.0472e-05	8.4445e-06	0:00:00	92
2028	8.7934e-03	1.0291e-05	8.3271e-06	0:00:00	91
2029	7.8055e-03	1.0115e-05	8.1912e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
2030	7.0735e-03	9.9091e-06	8.0534e-06	0:00:00	89
2031	6.5343e-03	9.7271e-06	7.9328e-06	0:00:00	88
2032	6.1344e-03	9.5644e-06	7.8171e-06	0:00:00	87
2033	5.8344e-03	9.3966e-06	7.7030e-06	0:00:00	86
2034	5.5921e-03	9.2270e-06	7.5912e-06	0:00:00	85
2035	5.3940e-03	9.0700e-06	7.4816e-06	0:00:00	84
2036	5.2196e-03	8.9224e-06	7.3751e-06	0:00:00	83

2037	5.0681e-03	8.7690e-06	7.2675e-06	0:00:00	82
2038	4.9423e-03	8.6309e-06	7.1633e-06	0:00:00	81
2039	4.8184e-03	8.4871e-06	7.0589e-06	0:00:00	80
2040	4.6977e-03	8.3547e-06	6.9591e-06	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
2041	4.5875e-03	8.2238e-06	6.8609e-06	0:00:12	78
2042	4.4905e-03	8.0968e-06	6.7659e-06	0:00:10	77
2043	4.4016e-03	7.9753e-06	6.6720e-06	0:00:08	76
2044	4.3346e-03	7.8590e-06	6.5799e-06	0:00:06	75
2045	4.2471e-03	7.7443e-06	6.4910e-06	0:00:05	74
2046	4.1588e-03	7.6363e-06	6.4042e-06	0:00:04	73
2047	4.0807e-03	7.5271e-06	6.3172e-06	0:00:03	72
2048	4.0176e-03	7.4212e-06	6.2323e-06	0:00:02	71
2049	3.9464e-03	7.3166e-06	6.1461e-06	0:00:02	70
2050	3.8714e-03	7.2139e-06	6.0587e-06	0:00:01	69
2051	3.8085e-03	7.1126e-06	5.9728e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2052	3.7330e-03	7.0166e-06	5.8909e-06	0:00:14	67
2053	3.6673e-03	6.9208e-06	5.8117e-06	0:00:11	66
2054	3.5817e-03	6.8251e-06	5.7305e-06	0:00:09	65
2055	3.5106e-03	6.7274e-06	5.6497e-06	0:00:07	64
2056	3.4518e-03	6.6323e-06	5.5712e-06	0:00:06	63
2057	3.3946e-03	6.5481e-06	5.4949e-06	0:00:04	62
2058	3.3332e-03	6.4586e-06	5.4203e-06	0:00:03	61
2059	3.2860e-03	6.3708e-06	5.3467e-06	0:00:03	60
2060	3.2382e-03	6.2840e-06	5.2715e-06	0:00:02	59
2061	3.1790e-03	6.1965e-06	5.1997e-06	0:00:02	58
2062	3.1188e-03	6.1117e-06	5.1286e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
2063	3.0674e-03	6.0317e-06	5.0600e-06	0:00:01	56
2064	3.0227e-03	5.9483e-06	4.9917e-06	0:00:01	55
2065	2.9740e-03	5.8677e-06	4.9248e-06	0:00:01	54
2066	2.9359e-03	5.7882e-06	4.8590e-06	0:00:00	53
2067	2.8979e-03	5.7122e-06	4.7953e-06	0:00:00	52
2068	2.8615e-03	5.6342e-06	4.7316e-06	0:00:00	51
2069	2.8192e-03	5.5588e-06	4.6706e-06	0:00:00	50
2070	2.7847e-03	5.4860e-06	4.6110e-06	0:00:00	49
2071	2.7570e-03	5.4131e-06	4.5523e-06	0:00:00	48
2072	2.7369e-03	5.3420e-06	4.4944e-06	0:00:00	47
2073	2.6985e-03	5.2687e-06	4.4361e-06	0:00:09	46

iter	continuity	x-velocity	y-velocity	time/iter	
2074	2.6807e-03	5.1997e-06	4.3799e-06	0:00:07	45
2075	2.6538e-03	5.1316e-06	4.3239e-06	0:00:06	44
2076	2.6273e-03	5.0631e-06	4.2703e-06	0:00:04	43
2077	2.5949e-03	4.9968e-06	4.2168e-06	0:00:03	42
2078	2.5572e-03	4.9281e-06	4.1649e-06	0:00:03	41
2079	2.5250e-03	4.8615e-06	4.1120e-06	0:00:02	40
2080	2.4933e-03	4.8002e-06	4.0613e-06	0:00:02	39
2081	2.4672e-03	4.7351e-06	4.0112e-06	0:00:01	38
2082	2.4442e-03	4.6697e-06	3.9617e-06	0:00:01	37
2083	2.4235e-03	4.6121e-06	3.9159e-06	0:00:01	36
2084	2.4021e-03	4.5500e-06	3.8692e-06	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
2085	2.3836e-03	4.4917e-06	3.8243e-06	0:00:00	34
2086	2.3733e-03	4.4364e-06	3.7794e-06	0:00:00	33
2087	2.3386e-03	4.3784e-06	3.7354e-06	0:00:00	32
2088	2.3173e-03	4.3274e-06	3.6942e-06	0:00:00	31
2089	2.2993e-03	4.2803e-06	3.6534e-06	0:00:00	30
2090	2.2854e-03	4.2312e-06	3.6108e-06	0:00:00	29
2091	2.2263e-03	4.1840e-06	3.5702e-06	0:00:00	28
2092	2.2335e-03	4.1387e-06	3.5273e-06	0:00:00	27
2093	2.2160e-03	4.0946e-06	3.4857e-06	0:00:00	26
2094	2.2015e-03	4.0518e-06	3.4448e-06	0:00:05	25
2095	2.1832e-03	4.0081e-06	3.4038e-06	0:00:04	24

iter	continuity	x-velocity	y-velocity	time/iter	
2096	2.1574e-03	3.9671e-06	3.3628e-06	0:00:03	23
2097	2.1421e-03	3.9254e-06	3.3217e-06	0:00:02	22
2098	2.1196e-03	3.8850e-06	3.2804e-06	0:00:02	21
2099	2.0967e-03	3.8441e-06	3.2395e-06	0:00:01	20
2100	2.0672e-03	3.8021e-06	3.1972e-06	0:00:01	19
2101	2.0435e-03	3.7632e-06	3.1559e-06	0:00:01	18
2102	2.0193e-03	3.7205e-06	3.1145e-06	0:00:01	17
2103	1.9912e-03	3.6784e-06	3.0733e-06	0:00:00	16
2104	1.9668e-03	3.6402e-06	3.0328e-06	0:00:00	15
2105	1.9372e-03	3.5979e-06	2.9919e-06	0:00:00	14
2106	1.9067e-03	3.5553e-06	2.9515e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
2107	1.8759e-03	3.5135e-06	2.9112e-06	0:00:00	12
2108	1.8492e-03	3.4693e-06	2.8704e-06	0:00:00	11
2109	1.8191e-03	3.4277e-06	2.8301e-06	0:00:00	10
2110	1.7871e-03	3.3863e-06	2.7902e-06	0:00:00	9

2111	1.7515e-03	3.3421e-06	2.7495e-06	0:00:00	8
2112	1.7174e-03	3.2978e-06	2.7097e-06	0:00:00	7
2113	1.6895e-03	3.2557e-06	2.6695e-06	0:00:00	6
2114	1.6553e-03	3.2107e-06	2.6289e-06	0:00:00	5
2115	1.6181e-03	3.1664e-06	2.5883e-06	0:00:01	4
2116	1.5866e-03	3.1232e-06	2.5476e-06	0:00:00	3
2117	1.5562e-03	3.0796e-06	2.5072e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2118	1.5236e-03	3.0370e-06	2.4665e-06	0:00:00	1
2119	1.4892e-03	2.9952e-06	2.4266e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 28.25674057006836s, time step = 33

12 more time steps

Updating solution at time level N...

done.

physical-dt 6.5268e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2119	1.4892e-03	2.9952e-06	2.4266e-06	0:00:08	100
2120	2.9546e-02	1.5086e-05	1.2323e-05	0:00:07	99
2121	3.2882e-02	1.0781e-05	8.4871e-06	0:00:05	98
2122	2.1545e-02	6.6175e-06	4.7251e-06	0:00:04	97
2123	1.3563e-02	5.1492e-06	3.8806e-06	0:00:03	96
2124	9.4239e-03	4.6092e-06	3.5607e-06	0:00:03	95
2125	7.4739e-03	4.2797e-06	3.2931e-06	0:00:02	94
2126	6.0508e-03	3.9992e-06	3.0801e-06	0:00:02	93
2127	4.9279e-03	3.7511e-06	2.8888e-06	0:00:01	92
2128	4.0791e-03	3.5255e-06	2.7110e-06	0:00:01	91
2129	3.3388e-03	3.3124e-06	2.5543e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
2130	2.8293e-03	3.1178e-06	2.4042e-06	0:00:01	89
2131	2.4454e-03	2.9356e-06	2.2661e-06	0:00:01	88

iter	continuity	x-velocity	y-velocity	time/iter	
2132	2.1543e-03	2.7692e-06	2.1411e-06	0:00:00	87
2133	1.9226e-03	2.6135e-06	2.0240e-06	0:00:18	86
2134	1.7371e-03	2.4676e-06	1.9146e-06	0:00:14	85
2135	1.5899e-03	2.3303e-06	1.8130e-06	0:00:11	84
2136	1.4644e-03	2.2019e-06	1.7165e-06	0:00:09	83
2137	1.3641e-03	2.0816e-06	1.6246e-06	0:00:07	82
2138	1.2777e-03	1.9683e-06	1.5372e-06	0:00:05	81
2139	1.1988e-03	1.8606e-06	1.4557e-06	0:00:04	80
2140	1.1341e-03	1.7615e-06	1.3780e-06	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
2141	1.0733e-03	1.6670e-06	1.3032e-06	0:00:03	78
2142	1.0173e-03	1.5780e-06	1.2316e-06	0:00:02	77
2143	9.6493e-04	1.4939e-06	1.1635e-06	0:00:02	76

! 2143 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 28.9094181060791s, time step = 34

11 more time steps

Updating solution at time level N...

done.

physical-dt 2.5631e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2143	9.6493e-04	1.4939e-06	1.1635e-06	0:00:02	100
2144	1.3311e-01	5.9195e-05	4.9548e-05	0:00:02	99
2145	1.4440e-01	4.3294e-05	3.5081e-05	0:00:01	98
2146	9.0390e-02	2.6012e-05	1.9586e-05	0:00:01	97
2147	5.4840e-02	2.1168e-05	1.7490e-05	0:00:01	96
2148	4.0262e-02	2.0295e-05	1.7081e-05	0:00:01	95
2149	3.2804e-02	2.0019e-05	1.7099e-05	0:00:01	94
2150	2.7620e-02	1.9976e-05	1.7100e-05	0:00:19	93
2151	2.3098e-02	2.0020e-05	1.7253e-05	0:00:15	92
2152	2.0044e-02	2.0099e-05	1.7329e-05	0:00:12	91
2153	1.7933e-02	2.0202e-05	1.7392e-05	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
2154	1.6348e-02	2.0316e-05	1.7473e-05	0:00:07	89
2155	1.5462e-02	2.0438e-05	1.7554e-05	0:00:06	88
2156	1.4796e-02	2.0560e-05	1.7653e-05	0:00:05	87
2157	1.4352e-02	2.0694e-05	1.7775e-05	0:00:04	86
2158	1.4031e-02	2.0840e-05	1.7897e-05	0:00:03	85
2159	1.3945e-02	2.0995e-05	1.8037e-05	0:00:02	84
2160	1.3876e-02	2.1147e-05	1.8181e-05	0:00:02	83
2161	1.3887e-02	2.1294e-05	1.8344e-05	0:00:01	82
2162	1.3832e-02	2.1415e-05	1.8515e-05	0:00:01	81
2163	1.3876e-02	2.1585e-05	1.8695e-05	0:00:17	80
2164	1.3929e-02	2.1703e-05	1.8871e-05	0:00:13	79

iter	continuity	x-velocity	y-velocity	time/iter	
2165	1.4052e-02	2.1854e-05	1.9063e-05	0:00:11	78
2166	1.4201e-02	2.1989e-05	1.9232e-05	0:00:08	77
2167	1.4412e-02	2.2147e-05	1.9396e-05	0:00:07	76
2168	1.4520e-02	2.2307e-05	1.9564e-05	0:00:05	75
2169	1.4650e-02	2.2493e-05	1.9739e-05	0:00:04	74
2170	1.4857e-02	2.2710e-05	1.9903e-05	0:00:03	73
2171	1.5031e-02	2.2897e-05	2.0055e-05	0:00:03	72
2172	1.5245e-02	2.3095e-05	2.0203e-05	0:00:02	71
2173	1.5378e-02	2.3313e-05	2.0360e-05	0:00:02	70
2174	1.5516e-02	2.3553e-05	2.0516e-05	0:00:01	69
2175	1.5631e-02	2.3766e-05	2.0659e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2176	1.5735e-02	2.3980e-05	2.0804e-05	0:00:01	67
2177	1.5838e-02	2.4204e-05	2.0937e-05	0:00:01	66
2178	1.5907e-02	2.4448e-05	2.1076e-05	0:00:00	65
2179	1.5927e-02	2.4676e-05	2.1211e-05	0:00:00	64
2180	1.6003e-02	2.4927e-05	2.1343e-05	0:00:00	63
2181	1.5950e-02	2.5200e-05	2.1460e-05	0:00:00	62
2182	1.5911e-02	2.5461e-05	2.1581e-05	0:00:00	61
2183	1.5962e-02	2.5749e-05	2.1701e-05	0:00:00	60
2184	1.5931e-02	2.6033e-05	2.1831e-05	0:00:12	59
2185	1.5850e-02	2.6328e-05	2.1973e-05	0:00:09	58
2186	1.5906e-02	2.6616e-05	2.2123e-05	0:00:07	57

iter	continuity	x-velocity	y-velocity	time/iter	
2187	1.5946e-02	2.6897e-05	2.2282e-05	0:00:06	56
2188	1.5964e-02	2.7193e-05	2.2455e-05	0:00:05	55
2189	1.5976e-02	2.7487e-05	2.2620e-05	0:00:04	54

2190	1.6037e-02	2.7775e-05	2.2795e-05	0:00:03	53
2191	1.5980e-02	2.8072e-05	2.2966e-05	0:00:02	52
2192	1.6023e-02	2.8372e-05	2.3143e-05	0:00:02	51
2193	1.6046e-02	2.8641e-05	2.3292e-05	0:00:01	50
2194	1.5999e-02	2.8920e-05	2.3467e-05	0:00:01	49
2195	1.5985e-02	2.9206e-05	2.3645e-05	0:00:01	48
2196	1.6013e-02	2.9483e-05	2.3811e-05	0:00:01	47
2197	1.5956e-02	2.9711e-05	2.3958e-05	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
2198	1.5936e-02	2.9977e-05	2.4126e-05	0:00:00	45
2199	1.5936e-02	3.0222e-05	2.4291e-05	0:00:00	44
2200	1.5957e-02	3.0461e-05	2.4453e-05	0:00:00	43
2201	1.5929e-02	3.0677e-05	2.4596e-05	0:00:00	42
2202	1.5887e-02	3.0879e-05	2.4745e-05	0:00:00	41
2203	1.5886e-02	3.1095e-05	2.4903e-05	0:00:00	40
2204	1.5903e-02	3.1292e-05	2.5056e-05	0:00:00	39
2205	1.5921e-02	3.1479e-05	2.5207e-05	0:00:08	38
2206	1.6000e-02	3.1678e-05	2.5366e-05	0:00:06	37
2207	1.5954e-02	3.1846e-05	2.5496e-05	0:00:05	36
2208	1.5838e-02	3.1982e-05	2.5622e-05	0:00:04	35

iter	continuity	x-velocity	y-velocity	time/iter	
2209	1.5889e-02	3.2128e-05	2.5765e-05	0:00:03	34
2210	1.5836e-02	3.2271e-05	2.5911e-05	0:00:02	33
2211	1.5947e-02	3.2436e-05	2.6036e-05	0:00:02	32
2212	1.5930e-02	3.2538e-05	2.6151e-05	0:00:01	31
2213	1.5970e-02	3.2669e-05	2.6267e-05	0:00:01	30
2214	1.5914e-02	3.2778e-05	2.6390e-05	0:00:01	29
2215	1.6125e-02	3.2896e-05	2.6501e-05	0:00:01	28
2216	1.6230e-02	3.2996e-05	2.6613e-05	0:00:00	27
2217	1.6269e-02	3.3086e-05	2.6719e-05	0:00:00	26
2218	1.6234e-02	3.3205e-05	2.6848e-05	0:00:00	25
2219	1.6638e-02	3.3289e-05	2.6905e-05	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2220	1.6766e-02	3.3367e-05	2.7013e-05	0:00:00	23
2221	1.6779e-02	3.3471e-05	2.7149e-05	0:00:00	22
2222	1.7090e-02	3.3532e-05	2.7196e-05	0:00:00	21
2223	1.7083e-02	3.3632e-05	2.7339e-05	0:00:00	20
2224	1.7394e-02	3.3727e-05	2.7406e-05	0:00:00	19
2225	1.7472e-02	3.3824e-05	2.7513e-05	0:00:00	18
2226	1.7542e-02	3.3907e-05	2.7620e-05	0:00:03	17
2227	1.7660e-02	3.4007e-05	2.7729e-05	0:00:03	16

2228	1.7587e-02	3.4118e-05	2.7863e-05	0:00:02	15
2229	1.7948e-02	3.4241e-05	2.7925e-05	0:00:01	14
2230	1.7855e-02	3.4398e-05	2.8116e-05	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2231	1.8241e-02	3.4521e-05	2.8172e-05	0:00:01	12
2232	1.8074e-02	3.4674e-05	2.8367e-05	0:00:01	11
2233	1.8248e-02	3.4837e-05	2.8466e-05	0:00:00	10
2234	1.8462e-02	3.5001e-05	2.8597e-05	0:00:00	9
2235	1.8639e-02	3.5187e-05	2.8746e-05	0:00:00	8
2236	1.8834e-02	3.5371e-05	2.8884e-05	0:00:00	7
2237	1.9208e-02	3.5523e-05	2.8994e-05	0:00:00	6
2238	1.9045e-02	3.5747e-05	2.9210e-05	0:00:00	5
2239	1.9588e-02	3.5916e-05	2.9270e-05	0:00:00	4
2240	1.9344e-02	3.6108e-05	2.9479e-05	0:00:00	3
2241	1.9569e-02	3.6320e-05	2.9602e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2242	1.9802e-02	3.6510e-05	2.9749e-05	0:00:00	1
2243	2.0349e-02	3.6686e-05	2.9849e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 31.47248649597168s, time step = 35

10 more time steps

Truncation Error (computed)=0.007357 > Truncation error tolerance

Repeating the time step: time step size = 1.281534

in update prediction domain id = 1
physical-dt 1.2815e+00

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
2243	2.0349e-02	3.6686e-05	2.9849e-05	0:00:00	100
2244	3.0803e-01	9.6867e-05	4.7331e-05	0:00:00	99
2245	2.2564e-01	3.5439e-05	4.3308e-05	0:00:00	98
2246	1.1699e-01	2.2419e-05	2.2508e-05	0:00:00	97
2247	9.2854e-02	1.4173e-05	1.2949e-05	0:00:00	96
2248	7.4684e-02	1.1383e-05	1.1227e-05	0:00:00	95
2249	5.5696e-02	1.0382e-05	1.0382e-05	0:00:00	94
2250	4.2529e-02	9.7953e-06	9.4890e-06	0:00:00	93
2251	3.1276e-02	9.4123e-06	8.8669e-06	0:00:00	92
2252	2.3694e-02	9.1296e-06	8.2948e-06	0:00:00	91
2253	1.8859e-02	8.8486e-06	7.8420e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
2254	1.5274e-02	8.6120e-06	7.5126e-06	0:00:00	89
2255	1.2747e-02	8.4040e-06	7.2523e-06	0:00:00	88
2256	1.1008e-02	8.2059e-06	7.0252e-06	0:00:00	87
2257	9.5202e-03	8.0508e-06	6.8421e-06	0:00:00	86
2258	8.5770e-03	7.8613e-06	6.6234e-06	0:00:00	85
2259	7.6201e-03	7.7100e-06	6.4957e-06	0:00:00	84
2260	6.9448e-03	7.5477e-06	6.3553e-06	0:00:00	83
2261	6.4698e-03	7.4022e-06	6.2345e-06	0:00:00	82
2262	6.0916e-03	7.2571e-06	6.1209e-06	0:00:00	81
2263	5.7999e-03	7.1197e-06	6.0148e-06	0:00:16	80
2264	5.5364e-03	6.9812e-06	5.9113e-06	0:00:13	79

iter	continuity	x-velocity	y-velocity	time/iter	
2265	5.3046e-03	6.8529e-06	5.8111e-06	0:00:10	78
2266	5.0990e-03	6.7254e-06	5.7110e-06	0:00:08	77
2267	4.9243e-03	6.6044e-06	5.6131e-06	0:00:06	76
2268	4.7718e-03	6.4895e-06	5.5130e-06	0:00:05	75
2269	4.6549e-03	6.3785e-06	5.4124e-06	0:00:04	74
2270	4.5412e-03	6.2720e-06	5.3122e-06	0:00:03	73
2271	4.4335e-03	6.1711e-06	5.2126e-06	0:00:02	72
2272	4.3287e-03	6.0785e-06	5.1129e-06	0:00:02	71
2273	4.2140e-03	5.9906e-06	5.0119e-06	0:00:02	70
2274	4.1056e-03	5.9066e-06	4.9100e-06	0:00:01	69
2275	3.9840e-03	5.8271e-06	4.8069e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2276	3.8638e-03	5.7468e-06	4.7033e-06	0:00:14	67
2277	3.7562e-03	5.6704e-06	4.5999e-06	0:00:11	66
2278	3.6385e-03	5.5936e-06	4.4960e-06	0:00:09	65
2279	3.5209e-03	5.5134e-06	4.3919e-06	0:00:07	64

2280	3.4023e-03	5.4320e-06	4.2936e-06	0:00:05	63
2281	3.2787e-03	5.3503e-06	4.1909e-06	0:00:04	62
2282	3.1523e-03	5.2643e-06	4.0917e-06	0:00:03	61
2283	3.0348e-03	5.1783e-06	3.9944e-06	0:00:03	60
2284	2.9050e-03	5.0900e-06	3.8973e-06	0:00:02	59
2285	2.7843e-03	5.0019e-06	3.8019e-06	0:00:02	58
2286	2.6704e-03	4.9112e-06	3.7073e-06	0:00:01	57

iter	continuity	x-velocity	y-velocity	time/iter	
2287	2.5607e-03	4.8203e-06	3.6151e-06	0:00:01	56
2288	2.4562e-03	4.7282e-06	3.5238e-06	0:00:01	55
2289	2.3582e-03	4.6356e-06	3.4339e-06	0:00:01	54
2290	2.2613e-03	4.5424e-06	3.3462e-06	0:00:00	53
2291	2.1715e-03	4.4489e-06	3.2583e-06	0:00:00	52
2292	2.0824e-03	4.3531e-06	3.1732e-06	0:00:00	51
2293	2.0015e-03	4.2579e-06	3.0907e-06	0:00:00	50
2294	1.9264e-03	4.1614e-06	3.0097e-06	0:00:00	49
2295	1.8616e-03	4.0649e-06	2.9300e-06	0:00:00	48
2296	1.8038e-03	3.9688e-06	2.8511e-06	0:00:00	47
2297	1.7437e-03	3.8699e-06	2.7736e-06	0:00:09	46

iter	continuity	x-velocity	y-velocity	time/iter	
2298	1.6846e-03	3.7751e-06	2.6995e-06	0:00:07	45
2299	1.6302e-03	3.6808e-06	2.6266e-06	0:00:06	44
2300	1.5802e-03	3.5872e-06	2.5542e-06	0:00:04	43
2301	1.5252e-03	3.4952e-06	2.4846e-06	0:00:03	42
2302	1.4812e-03	3.4060e-06	2.4171e-06	0:00:03	41
2303	1.4407e-03	3.3189e-06	2.3519e-06	0:00:02	40
2304	1.4011e-03	3.2333e-06	2.2892e-06	0:00:02	39
2305	1.3643e-03	3.1490e-06	2.2300e-06	0:00:01	38
2306	1.3338e-03	3.0666e-06	2.1738e-06	0:00:01	37
2307	1.3010e-03	2.9857e-06	2.1194e-06	0:00:01	36
2308	1.2739e-03	2.9086e-06	2.0664e-06	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
2309	1.2474e-03	2.8360e-06	2.0159e-06	0:00:00	34
2310	1.2236e-03	2.7634e-06	1.9666e-06	0:00:00	33
2311	1.1985e-03	2.6942e-06	1.9188e-06	0:00:00	32
2312	1.1778e-03	2.6267e-06	1.8730e-06	0:00:00	31
2313	1.1566e-03	2.5617e-06	1.8281e-06	0:00:00	30
2314	1.1357e-03	2.4977e-06	1.7848e-06	0:00:00	29
2315	1.1194e-03	2.4339e-06	1.7425e-06	0:00:06	28
2316	1.1028e-03	2.3727e-06	1.7018e-06	0:00:04	27
2317	1.0853e-03	2.3132e-06	1.6618e-06	0:00:03	26

2318	1.0712e-03	2.2554e-06	1.6229e-06	0:00:03	25
2319	1.0553e-03	2.1989e-06	1.5853e-06	0:00:02	24

iter	continuity	x-velocity	y-velocity	time/iter	
2320	1.0420e-03	2.1445e-06	1.5494e-06	0:00:02	23
2321	1.0288e-03	2.0913e-06	1.5137e-06	0:00:01	22
2322	1.0179e-03	2.0407e-06	1.4800e-06	0:00:01	21
2323	1.0057e-03	1.9915e-06	1.4480e-06	0:00:01	20
2324	9.9201e-04	1.9435e-06	1.4176e-06	0:00:01	19

! 2324 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 30.19095242023468s, time step = 35

9 more time steps

Updating solution at time level N...

done.

physical-dt 2.2844e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2324	9.9201e-04	1.9435e-06	1.4176e-06	0:00:03	100
2325	6.3153e-02	2.7925e-05	2.2963e-05	0:00:02	99
2326	6.6425e-02	2.2011e-05	1.7834e-05	0:00:02	98
2327	4.4594e-02	1.7148e-05	1.3988e-05	0:00:01	97
2328	3.0235e-02	1.6268e-05	1.3101e-05	0:00:01	96
2329	2.2846e-02	1.5908e-05	1.2757e-05	0:00:01	95
2330	1.8810e-02	1.5654e-05	1.2488e-05	0:00:01	94
2331	1.5986e-02	1.5428e-05	1.2300e-05	0:00:01	93
2332	1.3961e-02	1.5228e-05	1.2175e-05	0:00:19	92
2333	1.2475e-02	1.5075e-05	1.2082e-05	0:00:15	91
2334	1.1426e-02	1.4943e-05	1.2010e-05	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
2335	1.0690e-02	1.4832e-05	1.1966e-05	0:00:09	89
2336	1.0186e-02	1.4707e-05	1.1929e-05	0:00:07	88
2337	9.8135e-03	1.4618e-05	1.1914e-05	0:00:06	87

2338	9.5031e-03	1.4537e-05	1.1911e-05	0:00:05	86
2339	9.3242e-03	1.4466e-05	1.1899e-05	0:00:04	85
2340	9.1904e-03	1.4419e-05	1.1902e-05	0:00:03	84
2341	9.0116e-03	1.4423e-05	1.1910e-05	0:00:02	83
2342	8.9970e-03	1.4385e-05	1.1869e-05	0:00:02	82
2343	8.9376e-03	1.4391e-05	1.1857e-05	0:00:01	81
2344	8.9142e-03	1.4418e-05	1.1829e-05	0:00:01	80
2345	8.8902e-03	1.4466e-05	1.1811e-05	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
2346	8.9177e-03	1.4523e-05	1.1789e-05	0:00:01	78
2347	8.8915e-03	1.4605e-05	1.1786e-05	0:00:01	77
2348	9.0771e-03	1.4681e-05	1.1749e-05	0:00:00	76
2349	9.1566e-03	1.4742e-05	1.1763e-05	0:00:00	75
2350	9.1741e-03	1.4807e-05	1.1760e-05	0:00:00	74
2351	9.2333e-03	1.4876e-05	1.1762e-05	0:00:00	73
2352	9.2843e-03	1.4939e-05	1.1757e-05	0:00:15	72
2353	9.3455e-03	1.4994e-05	1.1743e-05	0:00:11	71
2354	9.4410e-03	1.5019e-05	1.1748e-05	0:00:09	70
2355	9.3443e-03	1.5059e-05	1.1766e-05	0:00:07	69
2356	9.5227e-03	1.5061e-05	1.1730e-05	0:00:06	68

iter	continuity	x-velocity	y-velocity	time/iter	
2357	9.5106e-03	1.5060e-05	1.1741e-05	0:00:04	67
2358	9.4973e-03	1.5060e-05	1.1751e-05	0:00:04	66
2359	9.4578e-03	1.5065e-05	1.1755e-05	0:00:03	65
2360	9.3656e-03	1.5039e-05	1.1753e-05	0:00:02	64
2361	9.2716e-03	1.5012e-05	1.1747e-05	0:00:02	63
2362	9.2264e-03	1.4958e-05	1.1746e-05	0:00:01	62
2363	9.1546e-03	1.4902e-05	1.1746e-05	0:00:01	61
2364	9.0429e-03	1.4844e-05	1.1745e-05	0:00:01	60
2365	8.9526e-03	1.4792e-05	1.1743e-05	0:00:01	59
2366	8.8531e-03	1.4735e-05	1.1741e-05	0:00:01	58
2367	8.7143e-03	1.4690e-05	1.1741e-05	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
2368	8.5791e-03	1.4622e-05	1.1730e-05	0:00:00	56
2369	8.4725e-03	1.4546e-05	1.1717e-05	0:00:00	55
2370	8.3760e-03	1.4479e-05	1.1703e-05	0:00:00	54
2371	8.2887e-03	1.4422e-05	1.1689e-05	0:00:00	53
2372	8.2426e-03	1.4364e-05	1.1669e-05	0:00:00	52
2373	8.1757e-03	1.4299e-05	1.1648e-05	0:00:00	51
2374	8.1118e-03	1.4258e-05	1.1635e-05	0:00:10	50
2375	8.1180e-03	1.4205e-05	1.1607e-05	0:00:08	49

2376	8.1203e-03	1.4157e-05	1.1587e-05	0:00:06	48
2377	8.1196e-03	1.4114e-05	1.1564e-05	0:00:05	47
2378	8.1291e-03	1.4082e-05	1.1541e-05	0:00:04	46

iter	continuity	x-velocity	y-velocity	time/iter	
2379	8.1475e-03	1.4059e-05	1.1531e-05	0:00:03	45
2380	8.1643e-03	1.4024e-05	1.1510e-05	0:00:02	44
2381	8.1744e-03	1.4003e-05	1.1498e-05	0:00:02	43
2382	8.1970e-03	1.3990e-05	1.1495e-05	0:00:01	42
2383	8.2388e-03	1.3975e-05	1.1494e-05	0:00:01	41
2384	8.2768e-03	1.3978e-05	1.1495e-05	0:00:01	40
2385	8.3111e-03	1.3981e-05	1.1498e-05	0:00:01	39
2386	8.3569e-03	1.3998e-05	1.1517e-05	0:00:01	38
2387	8.3502e-03	1.4007e-05	1.1528e-05	0:00:00	37
2388	8.2302e-03	1.4047e-05	1.1561e-05	0:00:00	36
2389	8.2128e-03	1.4067e-05	1.1570e-05	0:00:00	35

iter	continuity	x-velocity	y-velocity	time/iter	
2390	8.1921e-03	1.4107e-05	1.1593e-05	0:00:00	34
2391	8.2655e-03	1.4136e-05	1.1593e-05	0:00:00	33
2392	8.1218e-03	1.4185e-05	1.1648e-05	0:00:00	32
2393	8.1147e-03	1.4230e-05	1.1665e-05	0:00:00	31
2394	8.2528e-03	1.4271e-05	1.1680e-05	0:00:06	30
2395	8.1365e-03	1.4318e-05	1.1735e-05	0:00:05	29
2396	8.1668e-03	1.4373e-05	1.1748e-05	0:00:04	28
2397	8.1599e-03	1.4423e-05	1.1784e-05	0:00:03	27
2398	8.1496e-03	1.4472e-05	1.1808e-05	0:00:02	26
2399	8.1439e-03	1.4523e-05	1.1841e-05	0:00:02	25
2400	8.1701e-03	1.4577e-05	1.1872e-05	0:00:01	24

iter	continuity	x-velocity	y-velocity	time/iter	
2401	8.1487e-03	1.4626e-05	1.1907e-05	0:00:01	23
2402	8.1936e-03	1.4695e-05	1.1954e-05	0:00:01	22
2403	8.2244e-03	1.4738e-05	1.1988e-05	0:00:01	21
2404	8.2167e-03	1.4785e-05	1.2024e-05	0:00:00	20
2405	8.2301e-03	1.4847e-05	1.2076e-05	0:00:00	19
2406	8.2636e-03	1.4898e-05	1.2123e-05	0:00:00	18
2407	8.2802e-03	1.4946e-05	1.2165e-05	0:00:04	17
2408	8.2738e-03	1.4986e-05	1.2207e-05	0:00:03	16
2409	8.2875e-03	1.5033e-05	1.2251e-05	0:00:02	15
2410	8.4514e-03	1.5067e-05	1.2280e-05	0:00:02	14
2411	8.4470e-03	1.5113e-05	1.2337e-05	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter
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2412	8.2950e-03	1.5158e-05	1.2400e-05	0:00:01	12
2413	8.4973e-03	1.5188e-05	1.2417e-05	0:00:01	11
2414	8.3776e-03	1.5215e-05	1.2471e-05	0:00:00	10
2415	8.5424e-03	1.5270e-05	1.2495e-05	0:00:00	9
2416	8.5085e-03	1.5292e-05	1.2540e-05	0:00:00	8
2417	8.4877e-03	1.5347e-05	1.2593e-05	0:00:00	7
2418	8.3610e-03	1.5405e-05	1.2655e-05	0:00:00	6
2419	8.5299e-03	1.5458e-05	1.2665e-05	0:00:00	5
2420	8.3535e-03	1.5527e-05	1.2730e-05	0:00:00	4
2421	8.5551e-03	1.5600e-05	1.2751e-05	0:00:00	3
2422	8.5708e-03	1.5675e-05	1.2808e-05	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2423	8.4193e-03	1.5748e-05	1.2877e-05	0:00:00	1
2424	8.6229e-03	1.5828e-05	1.2916e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 32.47539138793945s, time step = 36

8 more time steps

Updating solution at time level N...

done.

physical-dt 1.1422e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2424	8.6229e-03	1.5828e-05	1.2916e-05	0:00:00	100
2425	5.6939e-02	3.6795e-05	2.7932e-05	0:00:00	99
2426	5.8688e-02	2.9436e-05	2.3886e-05	0:00:00	98
2427	3.7367e-02	2.4641e-05	2.0393e-05	0:00:00	97
2428	2.5443e-02	2.3091e-05	1.9214e-05	0:00:00	96
2429	2.0012e-02	2.2337e-05	1.8576e-05	0:00:00	95
2430	1.7405e-02	2.1787e-05	1.8165e-05	0:00:00	94
2431	1.5450e-02	2.1332e-05	1.7823e-05	0:00:00	93
2432	1.3876e-02	2.0882e-05	1.7448e-05	0:00:00	92
2433	1.2728e-02	2.0454e-05	1.7089e-05	0:00:00	91
2434	1.1883e-02	2.0025e-05	1.6736e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
2435	1.1211e-02	1.9605e-05	1.6390e-05	0:00:00	89
2436	1.0618e-02	1.9207e-05	1.6058e-05	0:00:00	88
2437	1.0126e-02	1.8814e-05	1.5726e-05	0:00:00	87
2438	9.7096e-03	1.8431e-05	1.5401e-05	0:00:00	86
2439	9.4120e-03	1.8075e-05	1.5081e-05	0:00:00	85
2440	9.0530e-03	1.7718e-05	1.4764e-05	0:00:00	84
2441	8.7865e-03	1.7360e-05	1.4459e-05	0:00:00	83
2442	8.5128e-03	1.7015e-05	1.4163e-05	0:00:00	82
2443	8.3258e-03	1.6685e-05	1.3881e-05	0:00:16	81
2444	8.1427e-03	1.6364e-05	1.3601e-05	0:00:13	80
2445	7.9704e-03	1.6035e-05	1.3317e-05	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
2446	7.8303e-03	1.5724e-05	1.3050e-05	0:00:08	78
2447	7.6398e-03	1.5413e-05	1.2784e-05	0:00:06	77
2448	7.4440e-03	1.5099e-05	1.2513e-05	0:00:05	76
2449	7.2828e-03	1.4791e-05	1.2254e-05	0:00:04	75
2450	7.1483e-03	1.4496e-05	1.2000e-05	0:00:03	74
2451	6.9716e-03	1.4195e-05	1.1746e-05	0:00:02	73
2452	6.8232e-03	1.3892e-05	1.1496e-05	0:00:02	72
2453	6.6563e-03	1.3597e-05	1.1252e-05	0:00:02	71
2454	6.5271e-03	1.3313e-05	1.1010e-05	0:00:01	70
2455	6.3783e-03	1.3023e-05	1.0773e-05	0:00:01	69
2456	6.2353e-03	1.2739e-05	1.0539e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2457	6.1341e-03	1.2469e-05	1.0313e-05	0:00:01	67
2458	6.0188e-03	1.2203e-05	1.0094e-05	0:00:00	66
2459	5.9001e-03	1.1937e-05	9.8774e-06	0:00:00	65
2460	5.7626e-03	1.1679e-05	9.6676e-06	0:00:00	64
2461	5.6073e-03	1.1426e-05	9.4629e-06	0:00:00	63
2462	5.4679e-03	1.1177e-05	9.2636e-06	0:00:00	62
2463	5.3421e-03	1.0942e-05	9.0704e-06	0:00:12	61
2464	5.1920e-03	1.0700e-05	8.8787e-06	0:00:10	60
2465	5.1040e-03	1.0463e-05	8.6937e-06	0:00:08	59
2466	5.0411e-03	1.0240e-05	8.5133e-06	0:00:06	58
2467	4.9747e-03	1.0022e-05	8.3369e-06	0:00:05	57

iter	continuity	x-velocity	y-velocity	time/iter	
2468	4.9042e-03	9.8076e-06	8.1644e-06	0:00:04	56
2469	4.8037e-03	9.5907e-06	7.9944e-06	0:00:03	55
2470	4.7191e-03	9.3872e-06	7.8308e-06	0:00:02	54

2471	4.6256e-03	9.1847e-06	7.6700e-06	0:00:02	53
2472	4.5493e-03	8.9884e-06	7.5124e-06	0:00:01	52
2473	4.4852e-03	8.7987e-06	7.3605e-06	0:00:01	51
2474	4.4201e-03	8.6084e-06	7.2126e-06	0:00:01	50
2475	4.3451e-03	8.4266e-06	7.0686e-06	0:00:01	49
2476	4.2573e-03	8.2498e-06	6.9291e-06	0:00:01	48
2477	4.1979e-03	8.0811e-06	6.7952e-06	0:00:00	47
2478	4.1354e-03	7.9153e-06	6.6663e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
2479	4.0947e-03	7.7579e-06	6.5420e-06	0:00:00	45
2480	4.0354e-03	7.6000e-06	6.4192e-06	0:00:00	44
2481	3.9749e-03	7.4524e-06	6.3022e-06	0:00:00	43
2482	3.9078e-03	7.3116e-06	6.1903e-06	0:00:00	42
2483	3.8402e-03	7.1738e-06	6.0778e-06	0:00:08	41
2484	3.7810e-03	7.0462e-06	5.9685e-06	0:00:06	40
2485	3.7222e-03	6.9157e-06	5.8604e-06	0:00:05	39
2486	3.6560e-03	6.7927e-06	5.7567e-06	0:00:04	38
2487	3.5804e-03	6.6765e-06	5.6538e-06	0:00:03	37
2488	3.5208e-03	6.5647e-06	5.5546e-06	0:00:02	36
2489	3.4503e-03	6.4552e-06	5.4570e-06	0:00:02	35

iter	continuity	x-velocity	y-velocity	time/iter	
2490	3.3778e-03	6.3446e-06	5.3594e-06	0:00:01	34
2491	3.3017e-03	6.2395e-06	5.2654e-06	0:00:01	33
2492	3.2406e-03	6.1383e-06	5.1713e-06	0:00:01	32
2493	3.1780e-03	6.0389e-06	5.0816e-06	0:00:01	31
2494	3.1124e-03	5.9405e-06	4.9929e-06	0:00:01	30
2495	3.0404e-03	5.8431e-06	4.9047e-06	0:00:00	29
2496	2.9819e-03	5.7473e-06	4.8195e-06	0:00:00	28
2497	2.9220e-03	5.6540e-06	4.7356e-06	0:00:00	27
2498	2.8598e-03	5.5600e-06	4.6525e-06	0:00:00	26
2499	2.8003e-03	5.4685e-06	4.5702e-06	0:00:00	25
2500	2.7442e-03	5.3764e-06	4.4898e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2501	2.6866e-03	5.2855e-06	4.4102e-06	0:00:00	23
2502	2.6263e-03	5.1942e-06	4.3320e-06	0:00:00	22
2503	2.5766e-03	5.1039e-06	4.2544e-06	0:00:00	21
2504	2.5181e-03	5.0141e-06	4.1753e-06	0:00:04	20
2505	2.4666e-03	4.9253e-06	4.1001e-06	0:00:03	19
2506	2.4112e-03	4.8374e-06	4.0227e-06	0:00:02	18
2507	2.3607e-03	4.7529e-06	3.9470e-06	0:00:02	17
2508	2.3090e-03	4.6644e-06	3.8718e-06	0:00:01	16

2509	2.2522e-03	4.5806e-06	3.7972e-06	0:00:01	15
2510	2.1986e-03	4.4976e-06	3.7241e-06	0:00:01	14
2511	2.1486e-03	4.4172e-06	3.6508e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2512	2.0999e-03	4.3378e-06	3.5792e-06	0:00:00	12
2513	2.0512e-03	4.2595e-06	3.5078e-06	0:00:00	11
2514	2.0021e-03	4.1820e-06	3.4367e-06	0:00:00	10
2515	1.9561e-03	4.1071e-06	3.3682e-06	0:00:00	9
2516	1.9045e-03	4.0327e-06	3.2981e-06	0:00:00	8
2517	1.8615e-03	3.9607e-06	3.2310e-06	0:00:00	7
2518	1.8137e-03	3.8892e-06	3.1646e-06	0:00:01	6
2519	1.7692e-03	3.8188e-06	3.0999e-06	0:00:01	5
2520	1.7330e-03	3.7501e-06	3.0371e-06	0:00:01	4
2521	1.6894e-03	3.6824e-06	2.9759e-06	0:00:00	3
2522	1.6454e-03	3.6141e-06	2.9154e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2523	1.6065e-03	3.5471e-06	2.8557e-06	0:00:00	1
2524	1.5684e-03	3.4800e-06	2.7983e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 33.61761093139648s, time step = 37

7 more time steps

Updating solution at time level N...

done.

physical-dt 5.7111e-01

iter	continuity	x-velocity	y-velocity	time/iter	
2524	1.5684e-03	3.4800e-06	2.7983e-06	0:00:05	100
2525	3.1249e-02	1.7075e-05	1.4920e-05	0:00:04	99
2526	3.5543e-02	1.2581e-05	1.0263e-05	0:00:03	98
2527	2.3412e-02	8.9446e-06	6.4858e-06	0:00:03	97
2528	1.4878e-02	7.1681e-06	5.7098e-06	0:00:02	96
2529	1.0332e-02	6.3554e-06	5.2935e-06	0:00:02	95

2530	8.2674e-03	5.8252e-06	4.8944e-06	0:00:01	94
2531	6.7519e-03	5.3939e-06	4.5476e-06	0:00:20	93
2532	5.5703e-03	5.0271e-06	4.2308e-06	0:00:16	92
2533	4.6486e-03	4.6860e-06	3.9344e-06	0:00:12	91
2534	3.8691e-03	4.3725e-06	3.6724e-06	0:00:10	90

iter	continuity	x-velocity	y-velocity	time/iter	
2535	3.4223e-03	4.0739e-06	3.4150e-06	0:00:08	89
2536	2.9767e-03	3.7992e-06	3.1914e-06	0:00:06	88
2537	2.6606e-03	3.5462e-06	2.9803e-06	0:00:05	87
2538	2.4101e-03	3.3109e-06	2.7849e-06	0:00:04	86
2539	2.2012e-03	3.0945e-06	2.6043e-06	0:00:03	85
2540	2.0223e-03	2.8928e-06	2.4359e-06	0:00:02	84
2541	1.8710e-03	2.7055e-06	2.2801e-06	0:00:02	83
2542	1.7427e-03	2.5315e-06	2.1355e-06	0:00:01	82
2543	1.6271e-03	2.3698e-06	2.0006e-06	0:00:01	81
2544	1.5212e-03	2.2191e-06	1.8740e-06	0:00:01	80
2545	1.4302e-03	2.0787e-06	1.7567e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
2546	1.3497e-03	1.9470e-06	1.6445e-06	0:00:01	78
2547	1.2655e-03	1.8241e-06	1.5420e-06	0:00:00	77
2548	1.1899e-03	1.7092e-06	1.4449e-06	0:00:00	76
2549	1.1185e-03	1.6021e-06	1.3534e-06	0:00:00	75
2550	1.0523e-03	1.5031e-06	1.2666e-06	0:00:00	74
2551	9.8844e-04	1.4109e-06	1.1847e-06	0:00:00	73

! 2551 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 34.188720703125s, time step = 38

6 more time steps

Updating solution at time level N...

done.

physical-dt 1.8505e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2551	9.8844e-04	1.4109e-06	1.1847e-06	0:00:00	100
2552	1.1995e-01	5.4611e-05	5.0536e-05	0:00:00	99
2553	1.3367e-01	4.4545e-05	3.7667e-05	0:00:00	98
2554	8.5684e-02	3.3595e-05	2.6841e-05	0:00:00	97
2555	5.4338e-02	2.9844e-05	2.6148e-05	0:00:00	96
2556	3.9308e-02	2.8642e-05	2.6123e-05	0:00:00	95
2557	3.3215e-02	2.8143e-05	2.6025e-05	0:00:00	94
2558	2.8555e-02	2.7925e-05	2.5917e-05	0:00:00	93
2559	2.4308e-02	2.7791e-05	2.5939e-05	0:00:00	92
2560	2.1435e-02	2.7732e-05	2.5839e-05	0:00:00	91
2561	1.9478e-02	2.7681e-05	2.5759e-05	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
2562	1.8123e-02	2.7660e-05	2.5655e-05	0:00:00	89
2563	1.7225e-02	2.7619e-05	2.5552e-05	0:00:00	88
2564	1.6701e-02	2.7633e-05	2.5454e-05	0:00:00	87
2565	1.6336e-02	2.7642e-05	2.5343e-05	0:00:00	86
2566	1.6101e-02	2.7673e-05	2.5236e-05	0:00:00	85
2567	1.5889e-02	2.7688e-05	2.5114e-05	0:00:00	84
2568	1.5752e-02	2.7719e-05	2.4998e-05	0:00:17	83
2569	1.5646e-02	2.7753e-05	2.4854e-05	0:00:13	82
2570	1.5563e-02	2.7748e-05	2.4739e-05	0:00:10	81
2571	1.5565e-02	2.7745e-05	2.4610e-05	0:00:08	80
2572	1.5566e-02	2.7752e-05	2.4488e-05	0:00:06	79

iter	continuity	x-velocity	y-velocity	time/iter	
2573	1.5528e-02	2.7759e-05	2.4364e-05	0:00:05	78
2574	1.5449e-02	2.7736e-05	2.4243e-05	0:00:04	77
2575	1.5235e-02	2.7738e-05	2.4158e-05	0:00:03	76
2576	1.5436e-02	2.7666e-05	2.3981e-05	0:00:03	75
2577	1.5416e-02	2.7634e-05	2.3896e-05	0:00:02	74
2578	1.5390e-02	2.7628e-05	2.3813e-05	0:00:02	73
2579	1.5308e-02	2.7595e-05	2.3721e-05	0:00:01	72
2580	1.5230e-02	2.7579e-05	2.3619e-05	0:00:01	71
2581	1.5194e-02	2.7593e-05	2.3540e-05	0:00:01	70
2582	1.5170e-02	2.7601e-05	2.3462e-05	0:00:01	69
2583	1.5145e-02	2.7612e-05	2.3369e-05	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
2584	1.5029e-02	2.7653e-05	2.3290e-05	0:00:00	67
2585	1.4989e-02	2.7693e-05	2.3220e-05	0:00:00	66
2586	1.4857e-02	2.7709e-05	2.3116e-05	0:00:00	65
2587	1.4737e-02	2.7738e-05	2.3035e-05	0:00:00	64

2588	1.4624e-02	2.7763e-05	2.2929e-05	0:00:00	63
2589	1.4470e-02	2.7776e-05	2.2827e-05	0:00:13	62
2590	1.4331e-02	2.7764e-05	2.2706e-05	0:00:10	61
2591	1.4141e-02	2.7759e-05	2.2590e-05	0:00:08	60
2592	1.3965e-02	2.7772e-05	2.2459e-05	0:00:06	59
2593	1.3813e-02	2.7743e-05	2.2322e-05	0:00:05	58
2594	1.3655e-02	2.7720e-05	2.2181e-05	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter	
2595	1.3510e-02	2.7702e-05	2.2023e-05	0:00:03	56
2596	1.3347e-02	2.7698e-05	2.1877e-05	0:00:02	55
2597	1.3195e-02	2.7666e-05	2.1715e-05	0:00:02	54
2598	1.2972e-02	2.7654e-05	2.1558e-05	0:00:01	53
2599	1.2868e-02	2.7637e-05	2.1401e-05	0:00:01	52
2600	1.2702e-02	2.7617e-05	2.1254e-05	0:00:01	51
2601	1.2617e-02	2.7598e-05	2.1104e-05	0:00:01	50
2602	1.2438e-02	2.7568e-05	2.0964e-05	0:00:01	49
2603	1.2369e-02	2.7522e-05	2.0822e-05	0:00:00	48
2604	1.2294e-02	2.7469e-05	2.0700e-05	0:00:00	47
2605	1.2145e-02	2.7413e-05	2.0574e-05	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
2606	1.1984e-02	2.7347e-05	2.0466e-05	0:00:00	45
2607	1.1806e-02	2.7255e-05	2.0336e-05	0:00:00	44
2608	1.1694e-02	2.7152e-05	2.0214e-05	0:00:00	43
2609	1.1654e-02	2.7048e-05	2.0107e-05	0:00:08	42
2610	1.1539e-02	2.6917e-05	1.9993e-05	0:00:07	41
2611	1.1471e-02	2.6782e-05	1.9880e-05	0:00:05	40
2612	1.1390e-02	2.6647e-05	1.9777e-05	0:00:04	39
2613	1.1208e-02	2.6477e-05	1.9677e-05	0:00:03	38
2614	1.1186e-02	2.6325e-05	1.9576e-05	0:00:02	37
2615	1.1111e-02	2.6173e-05	1.9469e-05	0:00:02	36
2616	1.1042e-02	2.6003e-05	1.9373e-05	0:00:01	35

iter	continuity	x-velocity	y-velocity	time/iter	
2617	1.0994e-02	2.5820e-05	1.9264e-05	0:00:01	34
2618	1.0893e-02	2.5636e-05	1.9159e-05	0:00:01	33
2619	1.0842e-02	2.5457e-05	1.9060e-05	0:00:01	32
2620	1.0803e-02	2.5266e-05	1.8944e-05	0:00:01	31
2621	1.0767e-02	2.5072e-05	1.8833e-05	0:00:00	30
2622	1.0698e-02	2.4875e-05	1.8719e-05	0:00:06	29
2623	1.0621e-02	2.4677e-05	1.8612e-05	0:00:05	28
2624	1.0555e-02	2.4476e-05	1.8499e-05	0:00:04	27
2625	1.0497e-02	2.4291e-05	1.8392e-05	0:00:03	26

2626	1.0388e-02	2.4081e-05	1.8270e-05	0:00:02	25
2627	1.0393e-02	2.3884e-05	1.8151e-05	0:00:02	24

	iter	continuity	x-velocity	y-velocity	time/iter	
	2628	1.0350e-02	2.3680e-05	1.8032e-05	0:00:01	23
	2629	1.0257e-02	2.3469e-05	1.7907e-05	0:00:01	22
	2630	1.0186e-02	2.3270e-05	1.7783e-05	0:00:01	21
	2631	1.0181e-02	2.3090e-05	1.7664e-05	0:00:01	20
	2632	1.0183e-02	2.2899e-05	1.7538e-05	0:00:00	19
	2633	1.0203e-02	2.2702e-05	1.7410e-05	0:00:00	18
	2634	1.0206e-02	2.2526e-05	1.7290e-05	0:00:00	17
	2635	1.0219e-02	2.2336e-05	1.7163e-05	0:00:00	16
	2636	1.0194e-02	2.2179e-05	1.7066e-05	0:00:00	15
	2637	1.0363e-02	2.2006e-05	1.6925e-05	0:00:00	14
	2638	1.0316e-02	2.1857e-05	1.6845e-05	0:00:00	13

	iter	continuity	x-velocity	y-velocity	time/iter	
	2639	1.0494e-02	2.1706e-05	1.6713e-05	0:00:00	12
	2640	1.0324e-02	2.1563e-05	1.6649e-05	0:00:02	11
	2641	1.0535e-02	2.1443e-05	1.6534e-05	0:00:02	10
	2642	1.0458e-02	2.1295e-05	1.6458e-05	0:00:01	9
	2643	1.0446e-02	2.1211e-05	1.6396e-05	0:00:01	8
	2644	1.0432e-02	2.1103e-05	1.6321e-05	0:00:01	7
	2645	1.0326e-02	2.1024e-05	1.6269e-05	0:00:00	6
	2646	1.0519e-02	2.0921e-05	1.6164e-05	0:00:00	5
	2647	1.0346e-02	2.0844e-05	1.6140e-05	0:00:00	4
	2648	1.0354e-02	2.0772e-05	1.6070e-05	0:00:00	3
	2649	1.0331e-02	2.0696e-05	1.6011e-05	0:00:00	2

	iter	continuity	x-velocity	y-velocity	time/iter	
	2650	1.0294e-02	2.0624e-05	1.5956e-05	0:00:00	1
	2651	1.0253e-02	2.0549e-05	1.5896e-05	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 36.03921508789063s, time step = 39

5 more time steps

Truncation Error (computed)=0.006711 > Truncation error tolerance
Repeating the time step: time step size = 0.925247

in update prediction domain id = 1
physical-dt 9.2525e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
2651	1.0253e-02	2.0549e-05	1.5896e-05	0:00:02	100
2652	1.9931e-01	6.9495e-05	3.8422e-05	0:00:01	99
2653	1.6051e-01	2.8224e-05	3.5731e-05	0:00:01	98
2654	8.7206e-02	2.0735e-05	2.0547e-05	0:00:01	97
2655	7.2999e-02	1.5529e-05	1.4803e-05	0:00:01	96
2656	5.4313e-02	1.3521e-05	1.3255e-05	0:00:01	95
2657	4.0833e-02	1.2445e-05	1.2356e-05	0:00:00	94
2658	3.1025e-02	1.1861e-05	1.1627e-05	0:00:19	93
2659	2.3372e-02	1.1434e-05	1.0980e-05	0:00:15	92
2660	1.8019e-02	1.1039e-05	1.0414e-05	0:00:12	91
2661	1.4483e-02	1.0656e-05	9.9191e-06	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
2662	1.1946e-02	1.0271e-05	9.4762e-06	0:00:07	89
2663	1.0025e-02	9.9215e-06	9.0981e-06	0:00:06	88
2664	8.7421e-03	9.5661e-06	8.6996e-06	0:00:05	87
2665	7.7319e-03	9.2264e-06	8.3443e-06	0:00:04	86
2666	6.9417e-03	8.9141e-06	8.0163e-06	0:00:03	85
2667	6.2957e-03	8.6140e-06	7.7133e-06	0:00:02	84
2668	5.7647e-03	8.3231e-06	7.4215e-06	0:00:02	83
2669	5.3652e-03	8.0468e-06	7.1437e-06	0:00:01	82
2670	5.0148e-03	7.7803e-06	6.8812e-06	0:00:01	81
2671	4.7322e-03	7.5317e-06	6.6305e-06	0:00:01	80
2672	4.4945e-03	7.2864e-06	6.3874e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
2673	4.2903e-03	7.0499e-06	6.1550e-06	0:00:01	78
2674	4.0997e-03	6.8224e-06	5.9312e-06	0:00:00	77
2675	3.9241e-03	6.6027e-06	5.7194e-06	0:00:00	76
2676	3.7627e-03	6.3935e-06	5.5120e-06	0:00:00	75
2677	3.6090e-03	6.1911e-06	5.3107e-06	0:00:00	74

2678	3.4595e-03	5.9969e-06	5.1151e-06	0:00:15	73
2679	3.3114e-03	5.8129e-06	4.9247e-06	0:00:12	72
2680	3.1707e-03	5.6373e-06	4.7391e-06	0:00:09	71
2681	3.0340e-03	5.4681e-06	4.5593e-06	0:00:07	70
2682	2.9162e-03	5.3105e-06	4.3836e-06	0:00:06	69
2683	2.7922e-03	5.1588e-06	4.2147e-06	0:00:05	68

iter	continuity	x-velocity	y-velocity	time/iter	
2684	2.6823e-03	5.0163e-06	4.0531e-06	0:00:04	67
2685	2.5700e-03	4.8761e-06	3.8986e-06	0:00:03	66
2686	2.4515e-03	4.7411e-06	3.7496e-06	0:00:02	65
2687	2.3416e-03	4.6078e-06	3.6077e-06	0:00:02	64
2688	2.2353e-03	4.4765e-06	3.4714e-06	0:00:01	63
2689	2.1344e-03	4.3476e-06	3.3402e-06	0:00:01	62
2690	2.0418e-03	4.2196e-06	3.2150e-06	0:00:01	61
2691	1.9531e-03	4.0930e-06	3.0946e-06	0:00:01	60
2692	1.8623e-03	3.9687e-06	2.9790e-06	0:00:01	59
2693	1.7817e-03	3.8459e-06	2.8676e-06	0:00:00	58
2694	1.7049e-03	3.7254e-06	2.7590e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
2695	1.6327e-03	3.6055e-06	2.6550e-06	0:00:00	56
2696	1.5660e-03	3.4884e-06	2.5540e-06	0:00:00	55
2697	1.5058e-03	3.3725e-06	2.4555e-06	0:00:00	54
2698	1.4431e-03	3.2593e-06	2.3625e-06	0:00:11	53
2699	1.3839e-03	3.1493e-06	2.2719e-06	0:00:08	52
2700	1.3264e-03	3.0412e-06	2.1840e-06	0:00:07	51
2701	1.2753e-03	2.9350e-06	2.1001e-06	0:00:05	50
2702	1.2198e-03	2.8310e-06	2.0182e-06	0:00:04	49
2703	1.1756e-03	2.7287e-06	1.9401e-06	0:00:03	48
2704	1.1267e-03	2.6301e-06	1.8652e-06	0:00:02	47
2705	1.0839e-03	2.5340e-06	1.7927e-06	0:00:02	46

iter	continuity	x-velocity	y-velocity	time/iter	
2706	1.0433e-03	2.4408e-06	1.7224e-06	0:00:02	45
2707	1.0059e-03	2.3502e-06	1.6554e-06	0:00:01	44
2708	9.7079e-04	2.2625e-06	1.5908e-06	0:00:01	43

! 2708 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 35.11396819353104s, time step = 39

4 more time steps

Updating solution at time level N...

done.

physical-dt 1.5820e+00

iter	continuity	x-velocity	y-velocity	time/iter	
2708	9.7079e-04	2.2625e-06	1.5908e-06	0:00:02	100
2709	6.7275e-02	3.0893e-05	2.8612e-05	0:00:02	99
2710	7.0566e-02	2.9678e-05	2.3873e-05	0:00:01	98
2711	4.7230e-02	2.6042e-05	2.3021e-05	0:00:01	97
2712	3.2888e-02	2.4802e-05	2.3111e-05	0:00:01	96
2713	2.5781e-02	2.4182e-05	2.2859e-05	0:00:01	95
2714	2.1835e-02	2.3866e-05	2.2425e-05	0:00:01	94
2715	1.9169e-02	2.3641e-05	2.2009e-05	0:00:19	93
2716	1.7162e-02	2.3442e-05	2.1600e-05	0:00:15	92
2717	1.5753e-02	2.3248e-05	2.1201e-05	0:00:12	91
2718	1.4797e-02	2.3059e-05	2.0850e-05	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
2719	1.4048e-02	2.2875e-05	2.0507e-05	0:00:07	89
2720	1.3486e-02	2.2685e-05	2.0176e-05	0:00:06	88
2721	1.3054e-02	2.2497e-05	1.9862e-05	0:00:05	87
2722	1.2680e-02	2.2317e-05	1.9571e-05	0:00:04	86
2723	1.2394e-02	2.2122e-05	1.9288e-05	0:00:03	85
2724	1.2106e-02	2.1919e-05	1.9023e-05	0:00:02	84
2725	1.1840e-02	2.1735e-05	1.8779e-05	0:00:02	83
2726	1.1586e-02	2.1535e-05	1.8532e-05	0:00:01	82
2727	1.1388e-02	2.1355e-05	1.8307e-05	0:00:01	81
2728	1.1237e-02	2.1153e-05	1.8084e-05	0:00:17	80
2729	1.1007e-02	2.0963e-05	1.7864e-05	0:00:13	79

iter	continuity	x-velocity	y-velocity	time/iter	
2730	1.0870e-02	2.0787e-05	1.7650e-05	0:00:11	78
2731	1.0637e-02	2.0608e-05	1.7424e-05	0:00:08	77
2732	1.0451e-02	2.0425e-05	1.7197e-05	0:00:07	76
2733	1.0264e-02	2.0267e-05	1.6982e-05	0:00:05	75
2734	1.0088e-02	2.0103e-05	1.6758e-05	0:00:04	74
2735	9.9261e-03	1.9957e-05	1.6531e-05	0:00:03	73

2736	9.7908e-03	1.9799e-05	1.6305e-05	0:00:03	72
2737	9.7039e-03	1.9647e-05	1.6076e-05	0:00:02	71
2738	9.5834e-03	1.9498e-05	1.5839e-05	0:00:02	70
2739	9.4180e-03	1.9349e-05	1.5591e-05	0:00:01	69
2740	9.2268e-03	1.9194e-05	1.5365e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2741	9.0961e-03	1.9042e-05	1.5125e-05	0:00:01	67
2742	8.9148e-03	1.8883e-05	1.4894e-05	0:00:01	66
2743	8.7693e-03	1.8734e-05	1.4670e-05	0:00:00	65
2744	8.6314e-03	1.8575e-05	1.4446e-05	0:00:00	64
2745	8.5218e-03	1.8422e-05	1.4231e-05	0:00:00	63
2746	8.4002e-03	1.8260e-05	1.4028e-05	0:00:00	62
2747	8.2740e-03	1.8097e-05	1.3830e-05	0:00:00	61
2748	8.1940e-03	1.7922e-05	1.3643e-05	0:00:00	60
2749	8.1025e-03	1.7744e-05	1.3464e-05	0:00:12	59
2750	8.0402e-03	1.7565e-05	1.3291e-05	0:00:09	58
2751	7.9434e-03	1.7378e-05	1.3121e-05	0:00:07	57

iter	continuity	x-velocity	y-velocity	time/iter	
2752	7.8028e-03	1.7191e-05	1.2952e-05	0:00:06	56
2753	7.6717e-03	1.6985e-05	1.2792e-05	0:00:05	55
2754	7.6086e-03	1.6789e-05	1.2640e-05	0:00:04	54
2755	7.4806e-03	1.6591e-05	1.2486e-05	0:00:03	53
2756	7.3114e-03	1.6378e-05	1.2334e-05	0:00:02	52
2757	7.1937e-03	1.6175e-05	1.2191e-05	0:00:02	51
2758	7.0424e-03	1.5970e-05	1.2050e-05	0:00:01	50
2759	6.9097e-03	1.5769e-05	1.1913e-05	0:00:01	49
2760	6.8187e-03	1.5560e-05	1.1775e-05	0:00:01	48
2761	6.7276e-03	1.5357e-05	1.1645e-05	0:00:01	47
2762	6.6541e-03	1.5156e-05	1.1514e-05	0:00:01	46

iter	continuity	x-velocity	y-velocity	time/iter	
2763	6.5942e-03	1.4957e-05	1.1384e-05	0:00:00	45
2764	6.5045e-03	1.4750e-05	1.1256e-05	0:00:00	44
2765	6.4189e-03	1.4557e-05	1.1134e-05	0:00:00	43
2766	6.3491e-03	1.4373e-05	1.1012e-05	0:00:00	42
2767	6.2424e-03	1.4183e-05	1.0889e-05	0:00:00	41
2768	6.1614e-03	1.3985e-05	1.0767e-05	0:00:00	40
2769	6.1030e-03	1.3797e-05	1.0649e-05	0:00:00	39
2770	6.0367e-03	1.3618e-05	1.0530e-05	0:00:08	38
2771	5.9811e-03	1.3439e-05	1.0415e-05	0:00:06	37
2772	5.9390e-03	1.3260e-05	1.0298e-05	0:00:05	36
2773	5.9046e-03	1.3090e-05	1.0184e-05	0:00:04	35

iter	continuity	x-velocity	y-velocity	time/iter	
2774	5.8486e-03	1.2917e-05	1.0072e-05	0:00:03	34
2775	5.8085e-03	1.2750e-05	9.9640e-06	0:00:02	33
2776	5.7512e-03	1.2585e-05	9.8550e-06	0:00:02	32
2777	5.7177e-03	1.2418e-05	9.7462e-06	0:00:01	31
2778	5.6874e-03	1.2262e-05	9.6390e-06	0:00:01	30
2779	5.6565e-03	1.2105e-05	9.5302e-06	0:00:01	29
2780	5.6229e-03	1.1955e-05	9.4304e-06	0:00:01	28
2781	5.5587e-03	1.1806e-05	9.3290e-06	0:00:00	27
2782	5.4710e-03	1.1673e-05	9.2445e-06	0:00:00	26
2783	5.5142e-03	1.1535e-05	9.1357e-06	0:00:00	25
2784	5.4892e-03	1.1402e-05	9.0515e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2785	5.4159e-03	1.1283e-05	8.9738e-06	0:00:00	23
2786	5.4712e-03	1.1160e-05	8.8767e-06	0:00:00	22
2787	5.3840e-03	1.1058e-05	8.8182e-06	0:00:00	21
2788	5.4510e-03	1.0947e-05	8.7235e-06	0:00:00	20
2789	5.3370e-03	1.0849e-05	8.6682e-06	0:00:00	19
2790	5.4076e-03	1.0753e-05	8.5803e-06	0:00:00	18
2791	5.3160e-03	1.0676e-05	8.5341e-06	0:00:03	17
2792	5.2936e-03	1.0596e-05	8.4605e-06	0:00:03	16
2793	5.2534e-03	1.0513e-05	8.3951e-06	0:00:02	15
2794	5.2818e-03	1.0433e-05	8.3250e-06	0:00:01	14
2795	5.1738e-03	1.0376e-05	8.2871e-06	0:00:01	13

iter	continuity	x-velocity	y-velocity	time/iter	
2796	5.2299e-03	1.0304e-05	8.2124e-06	0:00:01	12
2797	5.1040e-03	1.0240e-05	8.1750e-06	0:00:01	11
2798	5.1620e-03	1.0169e-05	8.1013e-06	0:00:00	10
2799	5.0501e-03	1.0117e-05	8.0685e-06	0:00:00	9
2800	5.0878e-03	1.0050e-05	8.0070e-06	0:00:00	8
2801	4.9796e-03	9.9929e-06	7.9761e-06	0:00:00	7
2802	4.9680e-03	9.9302e-06	7.9224e-06	0:00:00	6
2803	4.9306e-03	9.8660e-06	7.8794e-06	0:00:00	5
2804	4.8955e-03	9.8051e-06	7.8358e-06	0:00:00	4
2805	4.8612e-03	9.7454e-06	7.7937e-06	0:00:00	3
2806	4.8964e-03	9.6805e-06	7.7467e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2807	4.7843e-03	9.6243e-06	7.7208e-06	0:00:00	1
2808	4.8296e-03	9.5565e-06	7.6647e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 36.69592666625977s, time step = 40

3 more time steps

Updating solution at time level N...

done.

physical-dt 7.9098e-01

iter	continuity	x-velocity	y-velocity	time/iter
2808	4.8296e-03	9.5565e-06	7.6647e-06	0:00:00 100
2809	5.2481e-02	2.9045e-05	2.6966e-05	0:00:00 99
2810	5.9432e-02	2.3280e-05	2.0344e-05	0:00:00 98
2811	3.7915e-02	1.8552e-05	1.4614e-05	0:00:00 97
2812	2.4322e-02	1.5935e-05	1.3488e-05	0:00:00 96
2813	1.7240e-02	1.4518e-05	1.2788e-05	0:00:00 95
2814	1.4055e-02	1.3675e-05	1.2156e-05	0:00:00 94
2815	1.1785e-02	1.3005e-05	1.1558e-05	0:00:00 93
2816	9.7687e-03	1.2418e-05	1.1036e-05	0:00:00 92
2817	8.4630e-03	1.1875e-05	1.0503e-05	0:00:00 91
2818	7.5219e-03	1.1358e-05	9.9960e-06	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
2819	6.8144e-03	1.0870e-05	9.5244e-06	0:00:00 89
2820	6.3170e-03	1.0402e-05	9.0856e-06	0:00:00 88
2821	5.9173e-03	9.9592e-06	8.6738e-06	0:00:00 87
2822	5.5740e-03	9.5311e-06	8.2860e-06	0:00:00 86
2823	5.2831e-03	9.1268e-06	7.9199e-06	0:00:00 85
2824	5.0358e-03	8.7409e-06	7.5748e-06	0:00:00 84
2825	4.8099e-03	8.3698e-06	7.2480e-06	0:00:00 83
2826	4.6054e-03	8.0243e-06	6.9349e-06	0:00:00 82
2827	4.4144e-03	7.6889e-06	6.6367e-06	0:00:00 81
2828	4.2454e-03	7.3701e-06	6.3512e-06	0:00:16 80
2829	4.0756e-03	7.0662e-06	6.0760e-06	0:00:13 79

iter	continuity	x-velocity	y-velocity	time/iter
2830	3.9083e-03	6.7767e-06	5.8132e-06	0:00:10 78

2831	3.7481e-03	6.4984e-06	5.5626e-06	0:00:08	77
2832	3.5917e-03	6.2357e-06	5.3227e-06	0:00:06	76
2833	3.4393e-03	5.9818e-06	5.0915e-06	0:00:05	75
2834	3.2911e-03	5.7424e-06	4.8699e-06	0:00:04	74
2835	3.1567e-03	5.5136e-06	4.6567e-06	0:00:03	73
2836	3.0235e-03	5.2976e-06	4.4517e-06	0:00:02	72
2837	2.8870e-03	5.0916e-06	4.2545e-06	0:00:02	71
2838	2.7486e-03	4.8949e-06	4.0647e-06	0:00:02	70
2839	2.6249e-03	4.7088e-06	3.8830e-06	0:00:01	69
2840	2.5049e-03	4.5304e-06	3.7087e-06	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2841	2.3878e-03	4.3590e-06	3.5428e-06	0:00:01	67
2842	2.2668e-03	4.1957e-06	3.3858e-06	0:00:01	66
2843	2.1560e-03	4.0379e-06	3.2401e-06	0:00:00	65
2844	2.0512e-03	3.8879e-06	3.1009e-06	0:00:00	64
2845	1.9478e-03	3.7429e-06	2.9697e-06	0:00:00	63
2846	1.8556e-03	3.6009e-06	2.8467e-06	0:00:13	62
2847	1.7615e-03	3.4668e-06	2.7308e-06	0:00:10	61
2848	1.6730e-03	3.3363e-06	2.6194e-06	0:00:08	60
2849	1.5920e-03	3.2106e-06	2.5127e-06	0:00:06	59
2850	1.5173e-03	3.0885e-06	2.4110e-06	0:00:05	58
2851	1.4500e-03	2.9702e-06	2.3113e-06	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter	
2852	1.3871e-03	2.8560e-06	2.2164e-06	0:00:03	56
2853	1.3323e-03	2.7461e-06	2.1246e-06	0:00:02	55
2854	1.2712e-03	2.6409e-06	2.0371e-06	0:00:02	54
2855	1.2137e-03	2.5378e-06	1.9521e-06	0:00:01	53
2856	1.1646e-03	2.4393e-06	1.8698e-06	0:00:01	52
2857	1.1149e-03	2.3437e-06	1.7906e-06	0:00:01	51
2858	1.0700e-03	2.2525e-06	1.7146e-06	0:00:01	50
2859	1.0258e-03	2.1646e-06	1.6412e-06	0:00:01	49
2860	9.8556e-04	2.0808e-06	1.5709e-06	0:00:00	48

! 2860 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 37.48690414428711s, time step = 41

2 more time steps

Updating solution at time level N...

done.

physical-dt 1.4004e+00

iter	continuity	x-velocity	y-velocity	time/iter
2860	9.8556e-04	2.0808e-06	1.5709e-06	0:00:01 100
2861	9.3353e-02	4.3825e-05	4.1600e-05	0:00:01 99
2862	1.0551e-01	3.6415e-05	3.2119e-05	0:00:01 98
2863	6.8591e-02	2.8987e-05	2.3831e-05	0:00:00 97
2864	4.3519e-02	2.5670e-05	2.3529e-05	0:00:00 96
2865	3.1459e-02	2.4250e-05	2.3326e-05	0:00:00 95
2866	2.6494e-02	2.3646e-05	2.2910e-05	0:00:00 94
2867	2.2487e-02	2.3237e-05	2.2481e-05	0:00:00 93
2868	1.9510e-02	2.2881e-05	2.2005e-05	0:00:00 92
2869	1.7386e-02	2.2534e-05	2.1541e-05	0:00:00 91
2870	1.5824e-02	2.2214e-05	2.1075e-05	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
2871	1.4715e-02	2.1928e-05	2.0617e-05	0:00:00 89
2872	1.3882e-02	2.1653e-05	2.0176e-05	0:00:00 88
2873	1.3240e-02	2.1419e-05	1.9739e-05	0:00:00 87
2874	1.2677e-02	2.1156e-05	1.9318e-05	0:00:00 86
2875	1.2258e-02	2.0921e-05	1.8899e-05	0:00:00 85
2876	1.1891e-02	2.0672e-05	1.8484e-05	0:00:00 84
2877	1.1517e-02	2.0412e-05	1.8079e-05	0:00:00 83
2878	1.1193e-02	2.0166e-05	1.7692e-05	0:00:16 82
2879	1.0932e-02	1.9927e-05	1.7319e-05	0:00:13 81
2880	1.0661e-02	1.9660e-05	1.6952e-05	0:00:10 80
2881	1.0346e-02	1.9399e-05	1.6611e-05	0:00:08 79

iter	continuity	x-velocity	y-velocity	time/iter
2882	1.0105e-02	1.9153e-05	1.6287e-05	0:00:06 78
2883	9.8783e-03	1.8899e-05	1.5978e-05	0:00:05 77
2884	9.6490e-03	1.8660e-05	1.5678e-05	0:00:04 76
2885	9.4382e-03	1.8423e-05	1.5388e-05	0:00:03 75
2886	9.2550e-03	1.8180e-05	1.5091e-05	0:00:02 74
2887	9.0426e-03	1.7945e-05	1.4805e-05	0:00:02 73
2888	8.8889e-03	1.7740e-05	1.4526e-05	0:00:02 72
2889	8.7235e-03	1.7537e-05	1.4253e-05	0:00:01 71
2890	8.5484e-03	1.7353e-05	1.3986e-05	0:00:01 70

2891	8.3713e-03	1.7167e-05	1.3723e-05	0:00:01	69
2892	8.2186e-03	1.6974e-05	1.3466e-05	0:00:01	68

iter	continuity	x-velocity	y-velocity	time/iter	
2893	8.0508e-03	1.6794e-05	1.3212e-05	0:00:00	67
2894	7.8375e-03	1.6606e-05	1.2957e-05	0:00:00	66
2895	7.6754e-03	1.6413e-05	1.2706e-05	0:00:00	65
2896	7.5144e-03	1.6211e-05	1.2456e-05	0:00:00	64
2897	7.3236e-03	1.5998e-05	1.2207e-05	0:00:00	63
2898	7.1845e-03	1.5794e-05	1.1965e-05	0:00:13	62
2899	6.9886e-03	1.5576e-05	1.1721e-05	0:00:10	61
2900	6.8044e-03	1.5343e-05	1.1477e-05	0:00:08	60
2901	6.6350e-03	1.5112e-05	1.1233e-05	0:00:06	59
2902	6.4514e-03	1.4880e-05	1.0995e-05	0:00:05	58
2903	6.2765e-03	1.4643e-05	1.0757e-05	0:00:04	57

iter	continuity	x-velocity	y-velocity	time/iter	
2904	6.0836e-03	1.4409e-05	1.0527e-05	0:00:03	56
2905	5.9182e-03	1.4174e-05	1.0292e-05	0:00:02	55
2906	5.7855e-03	1.3934e-05	1.0062e-05	0:00:02	54
2907	5.6229e-03	1.3708e-05	9.8386e-06	0:00:01	53
2908	5.4817e-03	1.3475e-05	9.6224e-06	0:00:01	52
2909	5.3484e-03	1.3247e-05	9.4080e-06	0:00:01	51
2910	5.1836e-03	1.3027e-05	9.2045e-06	0:00:01	50
2911	5.0533e-03	1.2802e-05	9.0058e-06	0:00:01	49
2912	4.9372e-03	1.2580e-05	8.8154e-06	0:00:00	48
2913	4.8404e-03	1.2353e-05	8.6352e-06	0:00:00	47
2914	4.7372e-03	1.2132e-05	8.4591e-06	0:00:00	46

iter	continuity	x-velocity	y-velocity	time/iter	
2915	4.6463e-03	1.1907e-05	8.2894e-06	0:00:00	45
2916	4.5508e-03	1.1685e-05	8.1254e-06	0:00:00	44
2917	4.4554e-03	1.1463e-05	7.9665e-06	0:00:00	43
2918	4.3671e-03	1.1241e-05	7.8135e-06	0:00:00	42
2919	4.3086e-03	1.1023e-05	7.6650e-06	0:00:08	41
2920	4.2297e-03	1.0806e-05	7.5202e-06	0:00:06	40
2921	4.1509e-03	1.0593e-05	7.3813e-06	0:00:05	39
2922	4.0738e-03	1.0387e-05	7.2468e-06	0:00:04	38
2923	3.9994e-03	1.0185e-05	7.1172e-06	0:00:03	37
2924	3.9382e-03	9.9844e-06	6.9900e-06	0:00:02	36
2925	3.8876e-03	9.8006e-06	6.8678e-06	0:00:02	35

iter	continuity	x-velocity	y-velocity	time/iter	
2926	3.8197e-03	9.6098e-06	6.7499e-06	0:00:01	34

2927	3.7645e-03	9.4237e-06	6.6354e-06	0:00:01	33
2928	3.7061e-03	9.2420e-06	6.5228e-06	0:00:01	32
2929	3.6446e-03	9.0649e-06	6.4138e-06	0:00:01	31
2930	3.5716e-03	8.8875e-06	6.3067e-06	0:00:01	30
2931	3.5236e-03	8.7164e-06	6.2022e-06	0:00:00	29
2932	3.4597e-03	8.5471e-06	6.0987e-06	0:00:00	28
2933	3.4243e-03	8.3784e-06	5.9966e-06	0:00:00	27
2934	3.3680e-03	8.2124e-06	5.8963e-06	0:00:00	26
2935	3.3347e-03	8.0522e-06	5.7977e-06	0:00:00	25
2936	3.2935e-03	7.8947e-06	5.6990e-06	0:00:00	24

iter	continuity	x-velocity	y-velocity	time/iter	
2937	3.2689e-03	7.7407e-06	5.6012e-06	0:00:00	23
2938	3.2337e-03	7.5885e-06	5.5065e-06	0:00:00	22
2939	3.2059e-03	7.4415e-06	5.4118e-06	0:00:04	21
2940	3.1810e-03	7.2968e-06	5.3197e-06	0:00:03	20
2941	3.1413e-03	7.1560e-06	5.2305e-06	0:00:02	19
2942	3.1179e-03	7.0231e-06	5.1430e-06	0:00:02	18
2943	3.0943e-03	6.8932e-06	5.0597e-06	0:00:01	17
2944	3.0719e-03	6.7637e-06	4.9778e-06	0:00:01	16
2945	3.0428e-03	6.6434e-06	4.9047e-06	0:00:01	15
2946	2.9794e-03	6.5297e-06	4.8404e-06	0:00:01	14
2947	3.0001e-03	6.4157e-06	4.7594e-06	0:00:00	13

iter	continuity	x-velocity	y-velocity	time/iter	
2948	2.9694e-03	6.3121e-06	4.6968e-06	0:00:00	12
2949	2.9404e-03	6.2180e-06	4.6372e-06	0:00:00	11
2950	2.9036e-03	6.1291e-06	4.5762e-06	0:00:00	10
2951	2.8777e-03	6.0411e-06	4.5157e-06	0:00:00	9
2952	2.8524e-03	5.9573e-06	4.4592e-06	0:00:00	8
2953	2.8207e-03	5.8789e-06	4.4047e-06	0:00:00	7
2954	2.7862e-03	5.8054e-06	4.3517e-06	0:00:00	6
2955	2.7618e-03	5.7309e-06	4.3010e-06	0:00:00	5
2956	2.7279e-03	5.6593e-06	4.2506e-06	0:00:00	4
2957	2.7062e-03	5.5875e-06	4.2008e-06	0:00:00	3
2958	2.6806e-03	5.5190e-06	4.1518e-06	0:00:00	2

iter	continuity	x-velocity	y-velocity	time/iter	
2959	2.6470e-03	5.4509e-06	4.1070e-06	0:00:00	1
2960	2.6196e-03	5.3882e-06	4.0650e-06	0:00:00	0

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
```

```
()
Flow time = 38.88726806640625s, time step = 42
1 more time step
```

```
Updating solution at time level N...
done.
physical-dt 7.0018e-01
```

iter	continuity	x-velocity	y-velocity	time/iter
2960	2.6196e-03	5.3882e-06	4.0650e-06	0:00:20 100
2961	4.1956e-02	2.0061e-05	1.7327e-05	0:00:16 99
2962	4.3565e-02	1.4106e-05	1.2105e-05	0:00:13 98
2963	2.8169e-02	1.0776e-05	8.6828e-06	0:00:10 97
2964	1.8891e-02	9.3724e-06	7.8234e-06	0:00:27 96
2965	1.3862e-02	8.5434e-06	7.2723e-06	0:00:21 95
2966	1.0959e-02	7.9030e-06	6.7397e-06	0:00:17 94
2967	8.8035e-03	7.3616e-06	6.2840e-06	0:00:13 93
2968	7.1611e-03	6.8770e-06	5.8655e-06	0:00:11 92
2969	5.9076e-03	6.4321e-06	5.4737e-06	0:00:08 91
2970	4.9729e-03	6.0259e-06	5.1195e-06	0:00:07 90

iter	continuity	x-velocity	y-velocity	time/iter
2971	4.2470e-03	5.6567e-06	4.7933e-06	0:00:05 89
2972	3.6740e-03	5.3178e-06	4.4898e-06	0:00:04 88
2973	3.2345e-03	5.0089e-06	4.2083e-06	0:00:03 87
2974	2.8760e-03	4.7186e-06	3.9446e-06	0:00:03 86
2975	2.5285e-03	4.4498e-06	3.7025e-06	0:00:02 85
2976	2.2770e-03	4.1977e-06	3.4694e-06	0:00:02 84
2977	2.0874e-03	3.9605e-06	3.2485e-06	0:00:01 83
2978	1.9416e-03	3.7379e-06	3.0398e-06	0:00:01 82
2979	1.8095e-03	3.5332e-06	2.8492e-06	0:00:01 81
2980	1.6993e-03	3.3404e-06	2.6694e-06	0:00:01 80
2981	1.6064e-03	3.1588e-06	2.4997e-06	0:00:01 79

iter	continuity	x-velocity	y-velocity	time/iter
2982	1.5325e-03	2.9875e-06	2.3421e-06	0:00:00 78
2983	1.4607e-03	2.8253e-06	2.1954e-06	0:00:16 77
2984	1.3942e-03	2.6726e-06	2.0584e-06	0:00:12 76
2985	1.3321e-03	2.5275e-06	1.9306e-06	0:00:10 75

2986	1.2787e-03	2.3905e-06	1.8116e-06	0:00:08	74
2987	1.2237e-03	2.2611e-06	1.7007e-06	0:00:06	73
2988	1.1742e-03	2.1385e-06	1.5979e-06	0:00:05	72
2989	1.1254e-03	2.0223e-06	1.5028e-06	0:00:04	71
2990	1.0759e-03	1.9121e-06	1.4156e-06	0:00:03	70
2991	1.0664e-03	1.8056e-06	1.3333e-06	0:00:02	69
2992	9.8416e-04	1.7104e-06	1.2692e-06	0:00:02	68

! 2992 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 39.58744812011719s, time step = 43

Writing "| gzip -2cf > SolutionMonitor.gz"...

Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22726 ...

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.

Writing data to \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...

x-coord

y-coord

pressure

x-velocity

y-velocity

hyb_init-0

hyb_init-1

Done.

Calculation complete.

Initialize using the hybrid initialization method.

Checking case topology...

-This case has both inlets & outlets

-Pressure information is not available at the boundaries.

Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00
2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set"...

writing rp variables ... Done.

writing domain variables ... Done.

writing fluid (type fluid) (mixture) ... Done.

writing interior-fluid (type interior) (mixture) ... Done.

writing surface_body (type interior) (mixture) ... Done.

writing inlet (type velocity-inlet) (mixture) ... Done.

writing outlet (type pressure-outlet) (mixture) ... Done.

writing wall (type wall) (mixture) ... Done.

writing cylinder (type wall) (mixture) ... Done.

writing zones map name-id ... Done.

Writing to A16-059:"winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-15.cas.h5" in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...

116806 faces, 6 zones ...

58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-15-00000.dat.h5" in NODE0 mode and compression level 1 ...

Writing results.

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

Error: sopenoutputfile: unable to open file for output

Error Object: ".flwb_report_files\report.xml"

Updating solution at time level N...

done.

physical-dt 5.0000e-01

iter	continuity	x-velocity	y-velocity	time/iter
1	1.0000e+00	2.8003e-04	2.4950e-04	0:00:02 99
2	1.0000e+00	1.5523e-04	8.8371e-05	0:00:02 98
3	6.1901e-01	9.6048e-05	5.0623e-05	0:00:01 97
4	4.4172e-01	6.4978e-05	3.5127e-05	0:00:01 96
5	3.2612e-01	4.7826e-05	2.7140e-05	0:00:20 95
6	2.4344e-01	3.4317e-05	2.1464e-05	0:00:16 94
7	1.7450e-01	2.7630e-05	1.7858e-05	0:00:12 93
8	1.2872e-01	2.3142e-05	1.5414e-05	0:00:10 92
9	9.4284e-02	1.9957e-05	1.3609e-05	0:00:08 91
10	7.0444e-02	1.7643e-05	1.2266e-05	0:00:06 90
11	5.2419e-02	1.6328e-05	1.1500e-05	0:00:05 89

iter	continuity	x-velocity	y-velocity	time/iter
12	4.1412e-02	1.4791e-05	1.0566e-05	0:00:04 88
13	3.1947e-02	1.3764e-05	9.9478e-06	0:00:03 87
14	2.5425e-02	1.2979e-05	9.5765e-06	0:00:02 86
15	2.0957e-02	1.2009e-05	9.0017e-06	0:00:02 85
16	1.6566e-02	1.1368e-05	8.6508e-06	0:00:02 84
17	1.3660e-02	1.0816e-05	8.2944e-06	0:00:01 83
18	1.1633e-02	1.0327e-05	7.9936e-06	0:00:01 82
19	1.0165e-02	9.8915e-06	7.7345e-06	0:00:01 81
20	8.7747e-03	9.5582e-06	7.5528e-06	0:00:01 80
21	7.9709e-03	9.1639e-06	7.3067e-06	0:00:00 79
22	7.2252e-03	8.8710e-06	7.1325e-06	0:00:00 78

iter	continuity	x-velocity	y-velocity	time/iter	
23	6.8804e-03	8.5599e-06	6.9352e-06	0:00:00	77
24	6.2255e-03	8.3113e-06	6.7886e-06	0:00:00	76
25	5.8116e-03	8.0697e-06	6.6408e-06	0:00:00	75
26	5.5422e-03	7.8318e-06	6.4970e-06	0:00:00	74
27	5.3290e-03	7.6123e-06	6.3670e-06	0:00:15	73
28	5.1192e-03	7.4054e-06	6.2427e-06	0:00:12	72
29	4.8574e-03	7.2085e-06	6.1246e-06	0:00:09	71
30	4.6948e-03	7.0288e-06	6.0190e-06	0:00:07	70
31	4.5962e-03	6.8516e-06	5.9125e-06	0:00:06	69
32	4.5097e-03	6.6843e-06	5.8114e-06	0:00:04	68
33	4.3670e-03	6.5214e-06	5.7129e-06	0:00:04	67

iter	continuity	x-velocity	y-velocity	time/iter	
34	4.2295e-03	6.3670e-06	5.6197e-06	0:00:03	66
35	4.1222e-03	6.2180e-06	5.5250e-06	0:00:02	65
36	4.0591e-03	6.0724e-06	5.4375e-06	0:00:02	64
37	3.9948e-03	5.9326e-06	5.3474e-06	0:00:01	63
38	3.9744e-03	5.7840e-06	5.2453e-06	0:00:01	62
39	3.8336e-03	5.6722e-06	5.1828e-06	0:00:01	61
40	3.7628e-03	5.5443e-06	5.0979e-06	0:00:13	60
41	3.7274e-03	5.4154e-06	5.0080e-06	0:00:10	59
42	3.6989e-03	5.2963e-06	4.9258e-06	0:00:08	58
43	3.6671e-03	5.1726e-06	4.8383e-06	0:00:06	57
44	3.5908e-03	5.0602e-06	4.7604e-06	0:00:05	56

iter	continuity	x-velocity	y-velocity	time/iter	
45	3.5141e-03	4.9470e-06	4.6776e-06	0:00:04	55
46	3.4667e-03	4.8341e-06	4.5936e-06	0:00:03	54
47	3.4320e-03	4.7245e-06	4.5103e-06	0:00:02	53
48	3.3797e-03	4.6184e-06	4.4298e-06	0:00:02	52
49	3.3346e-03	4.5133e-06	4.3480e-06	0:00:01	51
50	3.2607e-03	4.4070e-06	4.2648e-06	0:00:01	50
51	3.1892e-03	4.3022e-06	4.1791e-06	0:00:01	49
52	3.1300e-03	4.1954e-06	4.0913e-06	0:00:01	48
53	3.1000e-03	4.0982e-06	4.0109e-06	0:00:01	47
54	3.0634e-03	3.9975e-06	3.9249e-06	0:00:00	46
55	3.0313e-03	3.9020e-06	3.8419e-06	0:00:00	45

iter	continuity	x-velocity	y-velocity	time/iter	
56	3.0027e-03	3.7902e-06	3.7436e-06	0:00:00	44
57	2.9466e-03	3.7187e-06	3.6833e-06	0:00:00	43
58	2.8853e-03	3.6231e-06	3.5945e-06	0:00:00	42

59	2.8449e-03	3.5198e-06	3.5014e-06	0:00:00	41
60	2.8095e-03	3.4287e-06	3.4169e-06	0:00:00	40
61	2.7537e-03	3.3349e-06	3.3292e-06	0:00:00	39
62	2.7168e-03	3.2473e-06	3.2469e-06	0:00:08	38
63	2.6780e-03	3.1574e-06	3.1604e-06	0:00:06	37
64	2.6630e-03	3.0637e-06	3.0691e-06	0:00:05	36
65	2.5916e-03	2.9845e-06	2.9945e-06	0:00:04	35
66	2.5337e-03	2.8918e-06	2.9006e-06	0:00:03	34

iter	continuity	x-velocity	y-velocity	time/iter	
67	2.4590e-03	2.8243e-06	2.8307e-06	0:00:02	33
68	2.3823e-03	2.7412e-06	2.7444e-06	0:00:02	32
69	2.3362e-03	2.6381e-06	2.6416e-06	0:00:01	31
70	2.3267e-03	2.5795e-06	2.5783e-06	0:00:01	30
71	2.2530e-03	2.4976e-06	2.4940e-06	0:00:01	29
72	2.1845e-03	2.4112e-06	2.4056e-06	0:00:01	28
73	2.1295e-03	2.3342e-06	2.3235e-06	0:00:00	27
74	2.1002e-03	2.2523e-06	2.2370e-06	0:00:00	26
75	2.0597e-03	2.1886e-06	2.1703e-06	0:00:00	25
76	2.0365e-03	2.1064e-06	2.0824e-06	0:00:00	24
77	1.9929e-03	2.0322e-06	2.0053e-06	0:00:00	23

iter	continuity	x-velocity	y-velocity	time/iter	
78	1.9083e-03	1.9639e-06	1.9297e-06	0:00:00	22
79	1.8172e-03	1.8950e-06	1.8539e-06	0:00:00	21
80	1.7469e-03	1.8256e-06	1.7791e-06	0:00:00	20
81	1.6813e-03	1.7644e-06	1.7129e-06	0:00:00	19
82	1.6338e-03	1.6903e-06	1.6333e-06	0:00:04	18
83	1.5808e-03	1.6215e-06	1.5614e-06	0:00:03	17
84	1.5321e-03	1.5578e-06	1.4935e-06	0:00:02	16
85	1.4859e-03	1.4982e-06	1.4300e-06	0:00:02	15
86	1.4322e-03	1.4359e-06	1.3650e-06	0:00:01	14
87	1.3737e-03	1.3754e-06	1.3005e-06	0:00:01	13
88	1.3196e-03	1.3163e-06	1.2384e-06	0:00:01	12

iter	continuity	x-velocity	y-velocity	time/iter	
89	1.2505e-03	1.2588e-06	1.1783e-06	0:00:00	11
90	1.2041e-03	1.2039e-06	1.1211e-06	0:00:00	10
91	1.1725e-03	1.1483e-06	1.0638e-06	0:00:00	9
92	1.1199e-03	1.0943e-06	1.0090e-06	0:00:00	8
93	1.0715e-03	1.0438e-06	9.5690e-07	0:00:00	7
94	1.0288e-03	9.9689e-07	9.0828e-07	0:00:00	6
95	9.7386e-04	9.4681e-07	8.5838e-07	0:00:00	5

! 95 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 1

49 more time steps

Truncation Error (computed)=0.023083 > Truncation error tolerance

Repeating the time step: time step size = 0.250000

in update prediction domain id = 1

physical-dt 2.5000e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
95	9.7386e-04	9.4681e-07	8.5838e-07	0:00:01	100
96	8.7592e-01	2.8093e-04	2.2129e-04	0:00:01	99
97	7.3671e-01	1.3421e-04	8.9598e-05	0:00:01	98
98	4.7839e-01	7.8137e-05	4.6405e-05	0:00:01	97
99	3.1625e-01	5.0933e-05	2.9257e-05	0:00:00	96
100	2.3793e-01	3.5122e-05	2.0238e-05	0:00:00	95
101	1.7617e-01	2.6042e-05	1.5294e-05	0:00:19	94
102	1.3187e-01	1.9070e-05	1.2521e-05	0:00:15	93
103	9.4575e-02	1.5504e-05	1.0334e-05	0:00:12	92
104	6.9382e-02	1.3329e-05	9.2329e-06	0:00:09	91
105	5.1991e-02	1.1490e-05	8.0314e-06	0:00:07	90

iter	continuity	x-velocity	y-velocity	time/iter	
106	3.8503e-02	1.0414e-05	7.3550e-06	0:00:06	89
107	3.0253e-02	9.1959e-06	6.5422e-06	0:00:05	88
108	2.2827e-02	8.5039e-06	6.1457e-06	0:00:04	87
109	1.8680e-02	7.6775e-06	5.6165e-06	0:00:03	86
110	1.4806e-02	7.0281e-06	5.2098e-06	0:00:02	85
111	1.1930e-02	6.4390e-06	4.8313e-06	0:00:02	84

112	9.7293e-03	5.9462e-06	4.5070e-06	0:00:01	83
113	8.0808e-03	5.5278e-06	4.2294e-06	0:00:01	82
114	6.8683e-03	5.1674e-06	3.9867e-06	0:00:01	81
115	5.9499e-03	4.8484e-06	3.7702e-06	0:00:01	80
116	5.0773e-03	4.5824e-06	3.5923e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
117	4.4995e-03	4.3005e-06	3.3878e-06	0:00:00	78
118	3.9393e-03	4.0633e-06	3.2215e-06	0:00:00	77
119	3.5749e-03	3.8347e-06	3.0575e-06	0:00:00	76
120	3.2776e-03	3.6196e-06	2.9024e-06	0:00:00	75
121	3.0453e-03	3.4244e-06	2.7626e-06	0:00:00	74
122	2.8159e-03	3.2435e-06	2.6341e-06	0:00:15	73
123	2.5808e-03	3.0737e-06	2.5117e-06	0:00:12	72
124	2.3773e-03	2.9134e-06	2.3960e-06	0:00:09	71
125	2.2273e-03	2.7638e-06	2.2877e-06	0:00:07	70
126	2.0976e-03	2.6192e-06	2.1814e-06	0:00:06	69
127	1.9846e-03	2.4871e-06	2.0851e-06	0:00:04	68

iter	continuity	x-velocity	y-velocity	time/iter	
128	1.8830e-03	2.3605e-06	1.9915e-06	0:00:04	67
129	1.8007e-03	2.2417e-06	1.9037e-06	0:00:03	66
130	1.7074e-03	2.1296e-06	1.8194e-06	0:00:02	65
131	1.6253e-03	2.0220e-06	1.7377e-06	0:00:02	64
132	1.5360e-03	1.9203e-06	1.6606e-06	0:00:01	63
133	1.4604e-03	1.8231e-06	1.5862e-06	0:00:01	62
134	1.3932e-03	1.7319e-06	1.5154e-06	0:00:01	61
135	1.3389e-03	1.6399e-06	1.4435e-06	0:00:01	60
136	1.2637e-03	1.5612e-06	1.3832e-06	0:00:01	59
137	1.2378e-03	1.4792e-06	1.3181e-06	0:00:00	58
138	1.1741e-03	1.4065e-06	1.2606e-06	0:00:00	57

iter	continuity	x-velocity	y-velocity	time/iter	
139	1.1317e-03	1.3314e-06	1.1999e-06	0:00:00	56
140	1.0625e-03	1.2638e-06	1.1454e-06	0:00:00	55
141	1.0146e-03	1.1996e-06	1.0929e-06	0:00:00	54
142	9.6985e-04	1.1363e-06	1.0405e-06	0:00:11	53

! 142 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.25s, time step = 1

48 more time steps

Truncation Error (computed)=0.016671 > Truncation error tolerance

Repeating the time step: time step size = 0.125000

in update prediction domain id = 1

physical-dt 1.2500e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
142	9.6985e-04	1.1363e-06	1.0405e-06	0:00:20	100
143	7.5332e-01	2.4407e-04	1.9235e-04	0:00:16	99
144	6.1300e-01	1.1715e-04	8.0552e-05	0:00:13	98
145	4.1063e-01	6.6307e-05	4.0896e-05	0:00:10	97
146	2.7591e-01	4.1638e-05	2.4599e-05	0:00:08	96
147	2.0046e-01	2.8167e-05	1.6216e-05	0:00:06	95
148	1.4847e-01	2.0099e-05	1.1405e-05	0:00:05	94
149	1.1005e-01	1.4771e-05	8.5038e-06	0:00:04	93
150	8.1191e-02	1.1325e-05	6.7694e-06	0:00:03	92
151	5.9664e-02	9.0166e-06	5.6491e-06	0:00:02	91
152	4.3503e-02	7.5603e-06	5.0409e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
153	3.1987e-02	6.4634e-06	4.3365e-06	0:00:19	89
154	2.4316e-02	5.4343e-06	3.6278e-06	0:00:15	88
155	1.7947e-02	4.8216e-06	3.2362e-06	0:00:12	87
156	1.4199e-02	4.1580e-06	2.8185e-06	0:00:10	86
157	1.1079e-02	3.6190e-06	2.4729e-06	0:00:08	85
158	8.5267e-03	3.2064e-06	2.2248e-06	0:00:06	84
159	6.8414e-03	2.8252e-06	1.9869e-06	0:00:05	83
160	5.5499e-03	2.5038e-06	1.7755e-06	0:00:04	82
161	4.5874e-03	2.2344e-06	1.5953e-06	0:00:03	81
162	3.8581e-03	2.0040e-06	1.4394e-06	0:00:02	80
163	3.2766e-03	1.8027e-06	1.3030e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
164	2.8190e-03	1.6246e-06	1.1806e-06	0:00:01	78
165	2.4331e-03	1.4671e-06	1.0711e-06	0:00:01	77
166	2.0773e-03	1.3270e-06	9.7366e-07	0:00:01	76
167	1.7377e-03	1.2052e-06	8.9093e-07	0:00:01	75
168	1.5515e-03	1.0871e-06	8.0572e-07	0:00:01	74
169	1.3597e-03	9.8347e-07	7.3285e-07	0:00:00	73
170	1.2072e-03	8.9259e-07	6.6896e-07	0:00:00	72
171	1.0782e-03	8.1072e-07	6.1112e-07	0:00:00	71
172	9.5704e-04	7.3588e-07	5.5807e-07	0:00:00	70

! 172 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.125s, time step = 1

47 more time steps

Truncation Error (computed)=0.012790 > Truncation error tolerance

Repeating the time step: time step size = 0.062500

in update prediction domain id = 1

physical-dt 6.2500e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
172	9.5704e-04	7.3588e-07	5.5807e-07	0:00:00	100
173	6.1157e-01	1.9072e-04	1.5046e-04	0:00:00	99
174	4.7817e-01	9.6860e-05	6.8158e-05	0:00:00	98
175	3.2891e-01	5.4969e-05	3.4877e-05	0:00:00	97
176	2.2839e-01	3.3658e-05	2.0417e-05	0:00:00	96
177	1.6274e-01	2.1950e-05	1.2713e-05	0:00:00	95
178	1.1950e-01	1.4728e-05	8.1919e-06	0:00:00	94
179	8.8665e-02	1.0133e-05	5.4888e-06	0:00:00	93

180	6.5381e-02	7.3677e-06	3.9347e-06	0:00:00	92
181	4.7027e-02	5.7402e-06	3.0252e-06	0:00:00	91
182	3.4931e-02	4.2643e-06	2.2771e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
183	2.6123e-02	3.2672e-06	1.7831e-06	0:00:00	89
184	1.9084e-02	2.6064e-06	1.4564e-06	0:00:00	88
185	1.4468e-02	2.0268e-06	1.1497e-06	0:00:00	87
186	1.0741e-02	1.6348e-06	9.5451e-07	0:00:00	86
187	8.1722e-03	1.2930e-06	7.6429e-07	0:00:00	85
188	6.0616e-03	1.0661e-06	6.4250e-07	0:00:00	84
189	4.5676e-03	8.7465e-07	5.3107e-07	0:00:00	83
190	3.4730e-03	7.1961e-07	4.3901e-07	0:00:00	82
191	2.6749e-03	5.9471e-07	3.6422e-07	0:00:00	81
192	2.0920e-03	4.9373e-07	3.0379e-07	0:00:16	80
193	1.6513e-03	4.1134e-07	2.5434e-07	0:00:13	79

iter	continuity	x-velocity	y-velocity	time/iter	
194	1.3068e-03	3.4461e-07	2.1382e-07	0:00:10	78
195	1.0449e-03	2.8972e-07	1.8035e-07	0:00:08	77
196	8.4907e-04	2.4400e-07	1.5248e-07	0:00:06	76

! 196 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0625s, time step = 1

46 more time steps

Truncation Error (computed)=0.009750 > Truncation error tolerance

Repeating the time step: time step size = 0.031250

in update prediction domain id = 1

physical-dt 3.1250e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
196	8.4907e-04	2.4400e-07	1.5248e-07	0:00:08	100
197	4.7195e-01	1.3221e-04	1.0442e-04	0:00:06	99
198	3.5735e-01	7.3936e-05	5.2632e-05	0:00:05	98
199	2.4853e-01	4.4378e-05	2.8631e-05	0:00:04	97
200	1.7869e-01	2.8199e-05	1.7016e-05	0:00:03	96
201	1.3168e-01	1.9150e-05	1.0551e-05	0:00:03	95
202	9.6010e-02	1.3108e-05	6.4825e-06	0:00:02	94
203	6.9506e-02	8.8469e-06	3.9986e-06	0:00:02	93
204	4.9916e-02	5.9670e-06	2.5053e-06	0:00:01	92
205	3.6539e-02	4.0053e-06	1.5934e-06	0:00:01	91
206	2.6569e-02	2.4876e-06	1.0181e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
207	1.8993e-02	1.9274e-06	7.1850e-07	0:00:01	89
208	1.4483e-02	1.0905e-06	4.4924e-07	0:00:00	88
209	1.0468e-02	9.4819e-07	3.6030e-07	0:00:00	87
210	7.7042e-03	6.4651e-07	2.5200e-07	0:00:00	86
211	5.5505e-03	5.2343e-07	1.9003e-07	0:00:00	85
212	4.2479e-03	3.0888e-07	1.2610e-07	0:00:17	84
213	3.0985e-03	2.7888e-07	1.0335e-07	0:00:13	83
214	2.2961e-03	1.9249e-07	7.5540e-08	0:00:11	82
215	1.6799e-03	1.4791e-07	5.6993e-08	0:00:08	81
216	1.2642e-03	1.0427e-07	4.2293e-08	0:00:07	80
217	9.3155e-04	7.1597e-08	3.1003e-08	0:00:05	79

! 217 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.03125s, time step = 1

45 more time steps

Truncation Error (computed)=0.007089 > Truncation error tolerance

Repeating the time step: time step size = 0.015625

in update prediction domain id = 1

physical-dt 1.5625e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
217	9.3155e-04	7.1597e-08	3.1003e-08	0:00:07	100
218	3.5816e-01	8.1850e-05	6.4696e-05	0:00:05	99
219	2.6595e-01	5.3751e-05	3.7599e-05	0:00:04	98
220	1.8642e-01	3.6011e-05	2.2271e-05	0:00:03	97
221	1.3284e-01	2.6267e-05	1.4304e-05	0:00:03	96
222	9.7428e-02	1.9594e-05	9.2051e-06	0:00:02	95
223	7.2591e-02	1.4224e-05	5.8127e-06	0:00:02	94
224	5.4021e-02	1.0059e-05	3.6103e-06	0:00:01	93
225	3.9925e-02	6.9069e-06	2.2252e-06	0:00:01	92
226	2.9369e-02	4.7755e-06	1.3906e-06	0:00:19	91
227	2.1513e-02	3.2781e-06	8.8360e-07	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
228	1.5708e-02	2.2511e-06	5.6511e-07	0:00:12	89
229	1.1434e-02	1.5461e-06	3.7260e-07	0:00:09	88
230	8.3191e-03	1.0663e-06	2.4854e-07	0:00:07	87
231	6.0459e-03	7.3971e-07	1.6946e-07	0:00:06	86
232	4.3910e-03	5.1114e-07	1.1858e-07	0:00:05	85
233	3.1995e-03	3.5778e-07	8.3315e-08	0:00:04	84
234	2.3352e-03	2.5026e-07	5.9628e-08	0:00:03	83
235	1.6961e-03	1.5844e-07	4.3261e-08	0:00:02	82
236	1.2449e-03	1.0919e-07	3.1160e-08	0:00:02	81
237	9.2138e-04	8.2060e-08	2.2544e-08	0:00:01	80

! 237 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.015625s, time step = 1

44 more time steps

Updating solution at time level N...

done.

physical-dt 7.8125e-03

iter	continuity	x-velocity	y-velocity	time/iter	
237	9.2138e-04	8.2060e-08	2.2544e-08	0:00:02	100
238	6.7162e-02	4.9047e-05	1.9359e-05	0:00:01	99
239	5.5256e-02	2.7307e-05	9.8771e-06	0:00:01	98
240	4.3213e-02	1.6586e-05	5.4349e-06	0:00:01	97
241	3.2698e-02	1.0690e-05	3.1435e-06	0:00:01	96
242	2.4428e-02	7.1907e-06	1.9529e-06	0:00:01	95
243	1.8013e-02	4.7900e-06	1.2507e-06	0:00:00	94
244	1.3275e-02	3.3500e-06	8.2671e-07	0:00:00	93
245	9.9835e-03	2.3045e-06	5.6515e-07	0:00:00	92
246	7.3783e-03	1.6384e-06	3.9272e-07	0:00:00	91
247	5.4624e-03	1.1261e-06	2.7515e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
248	4.0505e-03	7.9850e-07	1.9557e-07	0:00:00	89
249	3.0043e-03	5.5811e-07	1.4074e-07	0:00:00	88
250	2.2323e-03	4.0658e-07	1.0092e-07	0:00:00	87
251	1.6621e-03	2.9148e-07	7.3407e-08	0:00:00	86
252	1.2443e-03	2.1436e-07	5.2883e-08	0:00:00	85
253	9.2274e-04	1.4842e-07	3.8181e-08	0:00:00	84

! 253 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0234375s, time step = 2

43 more time steps

Truncation Error (computed)=0.001675 > Truncation error tolerance

Repeating the time step: time step size = 0.003906

in update prediction domain id = 1

physical-dt 3.9063e-03

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
253	9.2274e-04	1.4842e-07	3.8181e-08	0:00:00 100
254	4.4765e-02	2.6315e-05	1.1041e-05	0:00:00 99
255	3.3348e-02	1.3960e-05	5.2518e-06	0:00:20 98
256	2.1648e-02	9.0552e-06	2.8581e-06	0:00:16 97
257	1.7049e-02	5.9476e-06	1.6867e-06	0:00:12 96
258	1.2850e-02	3.8509e-06	1.0366e-06	0:00:10 95
259	9.5343e-03	2.6865e-06	7.0121e-07	0:00:08 94
260	7.0411e-03	1.9297e-06	4.8572e-07	0:00:06 93
261	5.1956e-03	1.3804e-06	3.4966e-07	0:00:05 92
262	3.8396e-03	1.0029e-06	2.5079e-07	0:00:04 91
263	2.8474e-03	7.2734e-07	1.7876e-07	0:00:03 90

iter	continuity	x-velocity	y-velocity	time/iter
264	2.1185e-03	5.5364e-07	1.3448e-07	0:00:02 89
265	1.6103e-03	3.7864e-07	9.4183e-08	0:00:02 88
266	1.1997e-03	2.6858e-07	6.8766e-08	0:00:01 87
267	9.1815e-04	1.9832e-07	5.0743e-08	0:00:01 86

! 267 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.01953125s, time step = 2

42 more time steps

Updating solution at time level N...

done.

physical-dt 3.9752e-03

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

267	9.1815e-04	1.9832e-07	5.0743e-08	0:00:01	100
268	2.8598e-03	5.0370e-06	3.9643e-06	0:00:01	99
269	4.9861e-03	2.1652e-06	1.6642e-06	0:00:01	98
270	4.1004e-03	9.5945e-07	7.1916e-07	0:00:01	97
271	3.1015e-03	4.9921e-07	3.4400e-07	0:00:01	96
272	2.2632e-03	2.8047e-07	1.7673e-07	0:00:19	95
273	1.6414e-03	1.7777e-07	9.9408e-08	0:00:15	94
274	1.1916e-03	1.1867e-07	6.0146e-08	0:00:12	93
275	8.6867e-04	7.9582e-08	3.8353e-08	0:00:10	92

! 275 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.02350645698606968s, time step = 3

41 more time steps

Updating solution at time level N...

done.

physical-dt 6.7761e-03

iter	continuity	x-velocity	y-velocity	time/iter	
275	8.6867e-04	7.9582e-08	3.8353e-08	0:00:10	100
276	6.1921e-03	1.6628e-06	1.1329e-06	0:00:08	99
277	9.9385e-03	1.0216e-06	7.6578e-07	0:00:07	98
278	7.0596e-03	6.6775e-07	5.3198e-07	0:00:05	97
279	4.9382e-03	4.9310e-07	3.9341e-07	0:00:04	96
280	3.4311e-03	3.3114e-07	2.6523e-07	0:00:03	95
281	2.4260e-03	2.3109e-07	1.7851e-07	0:00:03	94
282	1.7270e-03	1.5138e-07	1.1432e-07	0:00:02	93
283	1.2618e-03	1.0796e-07	7.5838e-08	0:00:02	92
284	9.2966e-04	7.6526e-08	4.9107e-08	0:00:01	91

! 284 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.03028259985148907s, time step = 4

40 more time steps

Updating solution at time level N...

done.

physical-dt 1.0625e-02

iter	continuity	x-velocity	y-velocity	time/iter	
284	9.2966e-04	7.6526e-08	4.9107e-08	0:00:01	100
285	8.8070e-03	2.5237e-06	1.8112e-06	0:00:01	99
286	1.5796e-02	1.5948e-06	1.2015e-06	0:00:01	98
287	1.1026e-02	1.0363e-06	8.1144e-07	0:00:01	97
288	7.5635e-03	7.1354e-07	5.6426e-07	0:00:01	96
289	5.1805e-03	4.6639e-07	3.6571e-07	0:00:00	95
290	3.5992e-03	3.0446e-07	2.3154e-07	0:00:00	94
291	2.5735e-03	1.7774e-07	1.3363e-07	0:00:00	93
292	1.8223e-03	1.2962e-07	9.0906e-08	0:00:00	92
293	1.3174e-03	7.6627e-08	5.2855e-08	0:00:00	91
294	9.6051e-04	5.1492e-08	3.3169e-08	0:00:00	90

! 294 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.04090769961476326s, time step = 5

39 more time steps

Updating solution at time level N...

done.

physical-dt 1.3760e-02

iter	continuity	x-velocity	y-velocity	time/iter	
294	9.6051e-04	5.1492e-08	3.3169e-08	0:00:00	100

295	8.9128e-03	2.7215e-06	1.9813e-06	0:00:00	99
296	1.4535e-02	1.6267e-06	1.2285e-06	0:00:00	98
297	1.0017e-02	1.0502e-06	8.2078e-07	0:00:00	97
298	6.6653e-03	7.0495e-07	5.5396e-07	0:00:00	96
299	4.4483e-03	4.6157e-07	3.5518e-07	0:00:00	95
300	3.0364e-03	2.9513e-07	2.2222e-07	0:00:19	94
301	2.1375e-03	1.9122e-07	1.3510e-07	0:00:15	93
302	1.5413e-03	1.0885e-07	7.5454e-08	0:00:12	92
303	1.1045e-03	7.6704e-08	4.8670e-08	0:00:09	91
304	8.1040e-04	4.6231e-08	2.8008e-08	0:00:07	90

! 304 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.05466815084218979s, time step = 6

38 more time steps

Updating solution at time level N...

done.

physical-dt 1.8298e-02

iter	continuity	x-velocity	y-velocity	time/iter	
304	8.1040e-04	4.6231e-08	2.8008e-08	0:00:08	100
305	9.9479e-03	2.9198e-06	2.2188e-06	0:00:07	99
306	1.3995e-02	1.7296e-06	1.3157e-06	0:00:05	98
307	9.1343e-03	1.1408e-06	8.8057e-07	0:00:04	97
308	5.9294e-03	7.2309e-07	5.5759e-07	0:00:03	96
309	3.7548e-03	4.9708e-07	3.6998e-07	0:00:03	95
310	2.5619e-03	3.0670e-07	2.2229e-07	0:00:02	94
311	1.8077e-03	1.9442e-07	1.3536e-07	0:00:02	93
312	1.3066e-03	1.1152e-07	7.6350e-08	0:00:01	92
313	9.3998e-04	7.5586e-08	4.7800e-08	0:00:01	91

! 313 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.07296660542488098s, time step = 7
37 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 2.4759e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
313	9.3998e-04	7.5586e-08	4.7800e-08	0:00:01 100
314	1.1241e-02	3.2093e-06	2.5594e-06	0:00:01 99
315	1.5490e-02	1.8867e-06	1.4808e-06	0:00:01 98
316	9.9635e-03	1.2497e-06	9.7252e-07	0:00:01 97
317	6.1031e-03	8.3992e-07	6.3549e-07	0:00:20 96
318	3.9578e-03	5.3854e-07	4.0164e-07	0:00:16 95
319	2.7334e-03	3.5882e-07	2.5924e-07	0:00:12 94
320	1.9439e-03	2.3642e-07	1.6509e-07	0:00:10 93
321	1.4019e-03	1.4569e-07	1.0096e-07	0:00:08 92
322	9.9786e-04	1.0273e-07	6.7356e-08	0:00:06 91

```
! 322 solution is converged
```

```
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.09772516787052155s, time step = 8
36 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 3.3374e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
322	9.9786e-04	1.0273e-07	6.7356e-08	0:00:07 100

```

323 1.2237e-02 3.5325e-06 2.9728e-06 0:00:05 99
324 1.5292e-02 2.1466e-06 1.7381e-06 0:00:04 98
325 9.3663e-03 1.4156e-06 1.1094e-06 0:00:03 97
326 5.5242e-03 9.7037e-07 7.3993e-07 0:00:03 96
327 3.5042e-03 6.7041e-07 4.9925e-07 0:00:02 95
328 2.5122e-03 4.5343e-07 3.3481e-07 0:00:02 94
329 1.8230e-03 3.1754e-07 2.3055e-07 0:00:01 93
330 1.3277e-03 2.2224e-07 1.6044e-07 0:00:01 92
331 9.7386e-04 1.5751e-07 1.1300e-07 0:00:01 91
! 331 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.1310995221138s, time step = 9
35 more time steps

Updating solution at time level N...
done.
physical-dt 4.4224e-02

iter continuity x-velocity y-velocity time/iter
331 9.7386e-04 1.5751e-07 1.1300e-07 0:00:01 100
332 1.3332e-02 3.8846e-06 3.4733e-06 0:00:01 99
333 1.4312e-02 2.4368e-06 2.0827e-06 0:00:01 98
334 8.4666e-03 1.6133e-06 1.3296e-06 0:00:00 97
335 4.6844e-03 1.1506e-06 9.1903e-07 0:00:00 96
336 3.0121e-03 8.3921e-07 6.5667e-07 0:00:00 95
337 2.2170e-03 6.0770e-07 4.7467e-07 0:00:00 94
338 1.6689e-03 4.5378e-07 3.5159e-07 0:00:00 93
339 1.2686e-03 3.4150e-07 2.6366e-07 0:00:00 92
340 9.7834e-04 2.5884e-07 1.9941e-07 0:00:00 91
! 340 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

```

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.1753232777118683s, time step = 10

34 more time steps

Updating solution at time level N...

done.

physical-dt 5.7090e-02

iter	continuity	x-velocity	y-velocity	time/iter
340	9.7834e-04	2.5884e-07	1.9941e-07	0:00:00 100
341	1.4257e-02	4.3339e-06	4.0658e-06	0:00:00 99
342	1.4444e-02	2.7826e-06	2.5118e-06	0:00:00 98
343	8.3389e-03	1.8792e-06	1.6282e-06	0:00:19 97
344	4.5669e-03	1.3796e-06	1.1710e-06	0:00:15 96
345	3.0707e-03	1.0549e-06	8.8302e-07	0:00:12 95
346	2.2865e-03	8.1634e-07	6.7775e-07	0:00:10 94
347	1.7875e-03	6.3722e-07	5.2952e-07	0:00:08 93
348	1.3796e-03	5.0982e-07	4.2410e-07	0:00:06 92
349	1.0904e-03	4.0778e-07	3.3965e-07	0:00:05 91
350	8.8006e-04	3.2959e-07	2.7421e-07	0:00:04 90

! 350 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.2324136793613434s, time step = 11

33 more time steps

Updating solution at time level N...

done.

physical-dt 7.0653e-02

iter	continuity	x-velocity	y-velocity	time/iter
350	8.8006e-04	3.2959e-07	2.7421e-07	0:00:04 100

	iter	continuity	x-velocity	y-velocity	time/iter	
351	1.5037e-02	4.7993e-06	4.7400e-06	0:00:03	99	
352	1.4460e-02	3.1722e-06	2.9833e-06	0:00:03	98	
353	8.1705e-03	2.1326e-06	1.9421e-06	0:00:02	97	
354	4.4950e-03	1.5785e-06	1.4186e-06	0:00:02	96	
355	3.0360e-03	1.2454e-06	1.1089e-06	0:00:01	95	
356	2.3266e-03	1.0110e-06	8.9291e-07	0:00:01	94	
357	1.8570e-03	8.2823e-07	7.3295e-07	0:00:01	93	
358	1.5122e-03	6.8660e-07	6.0901e-07	0:00:01	92	
359	1.2520e-03	5.7402e-07	5.0898e-07	0:00:01	91	
360	1.0451e-03	4.8235e-07	4.2717e-07	0:00:00	90	

	iter	continuity	x-velocity	y-velocity	time/iter	
	361	8.8234e-04	4.0563e-07	3.5866e-07	0:00:00	89

! 361 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.3030668795108795s, time step = 12

32 more time steps

Updating solution at time level N...

done.

physical-dt 8.4341e-02

	iter	continuity	x-velocity	y-velocity	time/iter	
361	8.8234e-04	4.0563e-07	3.5866e-07	0:00:00	100	
362	1.6126e-02	5.4597e-06	5.5801e-06	0:00:00	99	
363	1.5074e-02	3.6720e-06	3.5380e-06	0:00:00	98	
364	8.8228e-03	2.4356e-06	2.2946e-06	0:00:00	97	
365	5.0577e-03	1.7871e-06	1.6909e-06	0:00:00	96	
366	3.4676e-03	1.4371e-06	1.3603e-06	0:00:00	95	
367	2.7043e-03	1.2021e-06	1.1329e-06	0:00:00	94	
368	2.2048e-03	1.0211e-06	9.6049e-07	0:00:00	93	
369	1.8410e-03	8.7483e-07	8.2109e-07	0:00:00	92	
370	1.5644e-03	7.5078e-07	7.0471e-07	0:00:00	91	
371	1.3516e-03	6.4562e-07	6.0593e-07	0:00:00	90	

```

iter continuity x-velocity y-velocity time/iter
372 1.1750e-03 5.5636e-07 5.2191e-07 0:00:00 89
373 1.0234e-03 4.7965e-07 4.4969e-07 0:00:00 88
374 8.9605e-04 4.1337e-07 3.8748e-07 0:00:00 87
! 374 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.3874075412750244s, time step = 13
31 more time steps

Updating solution at time level N...
done.
physical-dt 9.4828e-02

```

```

iter continuity x-velocity y-velocity time/iter
374 8.9605e-04 4.1337e-07 3.8748e-07 0:00:00 100
375 1.7311e-02 6.1668e-06 6.4169e-06 0:00:20 99
376 1.7180e-02 4.2108e-06 4.0646e-06 0:00:16 98
377 1.0842e-02 2.7302e-06 2.6020e-06 0:00:12 97
378 6.6101e-03 1.9786e-06 1.9315e-06 0:00:10 96
379 4.4600e-03 1.5924e-06 1.5722e-06 0:00:08 95
380 3.3591e-03 1.3440e-06 1.3272e-06 0:00:06 94
381 2.6917e-03 1.1602e-06 1.1395e-06 0:00:05 93
382 2.2063e-03 1.0072e-06 9.8572e-07 0:00:04 92
383 1.8446e-03 8.7724e-07 8.5722e-07 0:00:03 91
384 1.5779e-03 7.6297e-07 7.4574e-07 0:00:02 90

```

```

iter continuity x-velocity y-velocity time/iter
385 1.3734e-03 6.6380e-07 6.4916e-07 0:00:02 89
386 1.2053e-03 5.7809e-07 5.6611e-07 0:00:02 88
387 1.0610e-03 5.0325e-07 4.9404e-07 0:00:19 87
388 9.4029e-04 4.3860e-07 4.3096e-07 0:00:15 86
! 388 solution is converged
(update-animation-object "animation-vorticity")

```


Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.4822357296943665s, time step = 14

30 more time steps

Updating solution at time level N...

done.

physical-dt 1.0269e-01

iter	continuity	x-velocity	y-velocity	time/iter	
388	9.4029e-04	4.3860e-07	4.3096e-07	0:00:17	100
389	1.9344e-02	7.1075e-06	7.4132e-06	0:00:14	99
390	2.0257e-02	4.9659e-06	4.6838e-06	0:00:11	98
391	1.3557e-02	3.2061e-06	2.9746e-06	0:00:08	97
392	8.6101e-03	2.2934e-06	2.2173e-06	0:00:07	96
393	5.7427e-03	1.8359e-06	1.8260e-06	0:00:05	95
394	4.2825e-03	1.5559e-06	1.5500e-06	0:00:04	94
395	3.3996e-03	1.3460e-06	1.3338e-06	0:00:03	93
396	2.7843e-03	1.1714e-06	1.1584e-06	0:00:03	92
397	2.3182e-03	1.0224e-06	1.0115e-06	0:00:02	91
398	1.9592e-03	8.9532e-07	8.8687e-07	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
399	1.6842e-03	7.8518e-07	7.7890e-07	0:00:01	89
400	1.4700e-03	6.8747e-07	6.8419e-07	0:00:01	88
401	1.3007e-03	6.0242e-07	6.0104e-07	0:00:01	87
402	1.1574e-03	5.2748e-07	5.2762e-07	0:00:01	86
403	1.0320e-03	4.6159e-07	4.6288e-07	0:00:01	85
404	9.3215e-04	4.0391e-07	4.0588e-07	0:00:17	84

! 404 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5849239826202393s, time step = 15

29 more time steps

Updating solution at time level N...

done.

physical-dt 1.0451e-01

iter	continuity	x-velocity	y-velocity	time/iter	
404	9.3215e-04	4.0391e-07	4.0588e-07	0:00:20	100
405	2.1926e-02	7.9211e-06	8.2421e-06	0:00:16	99
406	2.4050e-02	5.7109e-06	5.1976e-06	0:00:13	98
407	1.6402e-02	3.6681e-06	3.2456e-06	0:00:10	97
408	1.0459e-02	2.5660e-06	2.3661e-06	0:00:08	96
409	7.0102e-03	2.0351e-06	1.9559e-06	0:00:06	95
410	5.1880e-03	1.7368e-06	1.6729e-06	0:00:05	94
411	4.0287e-03	1.4859e-06	1.4267e-06	0:00:04	93
412	3.2553e-03	1.2826e-06	1.2293e-06	0:00:03	92
413	2.7052e-03	1.1170e-06	1.0702e-06	0:00:03	91
414	2.3075e-03	9.7395e-07	9.3651e-07	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
415	1.9937e-03	8.5079e-07	8.2087e-07	0:00:02	89
416	1.7603e-03	7.4340e-07	7.1933e-07	0:00:01	88
417	1.5783e-03	6.4891e-07	6.3082e-07	0:00:01	87
418	1.4273e-03	5.6688e-07	5.5357e-07	0:00:01	86
419	1.2874e-03	4.9472e-07	4.8492e-07	0:00:01	85
420	1.1613e-03	4.3165e-07	4.2477e-07	0:00:00	84
421	1.0516e-03	3.7651e-07	3.7157e-07	0:00:17	83
422	9.5039e-04	3.2815e-07	3.2465e-07	0:00:13	82

! 422 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6894307732582092s, time step = 16
28 more time steps
Truncation Error (computed)=0.001023 > Truncation error tolerance
Repeating the time step: time step size = 0.052253

in update prediction domain id = 1
physical-dt 5.2253e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
422	9.5039e-04	3.2815e-07	3.2465e-07	0:00:16 100
423	3.5702e-02	6.8106e-06	5.6751e-06	0:00:13 99
424	2.2132e-02	2.7049e-06	3.2817e-06	0:00:10 98
425	9.9543e-03	1.2221e-06	1.6194e-06	0:00:08 97
426	7.8114e-03	7.8779e-07	9.0801e-07	0:00:06 96
427	5.7587e-03	5.5096e-07	5.6672e-07	0:00:05 95
428	4.1882e-03	3.9971e-07	3.8922e-07	0:00:04 94
429	2.9791e-03	3.1536e-07	2.9249e-07	0:00:03 93
430	2.1593e-03	2.3779e-07	2.1609e-07	0:00:03 92
431	1.5559e-03	1.9066e-07	1.6880e-07	0:00:02 91
432	1.1611e-03	1.4762e-07	1.2783e-07	0:00:02 90

iter	continuity	x-velocity	y-velocity	time/iter
433	8.6749e-04	1.1949e-07	1.0094e-07	0:00:01 89

! 433 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6371773742139339s, time step = 16

27 more time steps

Updating solution at time level N...

done.

physical-dt 9.4568e-02

iter	continuity	x-velocity	y-velocity	time/iter	
433	8.6749e-04	1.1949e-07	1.0094e-07	0:00:01	100
434	1.8916e-02	1.7229e-05	1.5606e-05	0:00:01	99
435	1.9070e-02	1.1231e-05	1.0728e-05	0:00:01	98
436	1.4040e-02	7.8293e-06	7.8095e-06	0:00:01	97
437	1.0512e-02	5.9280e-06	6.0011e-06	0:00:01	96
438	8.6019e-03	4.7843e-06	4.7760e-06	0:00:19	95
439	7.4073e-03	3.9718e-06	3.9219e-06	0:00:15	94
440	6.3958e-03	3.3655e-06	3.2685e-06	0:00:12	93
441	5.6088e-03	2.8778e-06	2.7507e-06	0:00:10	92
442	4.8681e-03	2.4604e-06	2.3108e-06	0:00:08	91
443	4.3060e-03	2.1155e-06	1.9562e-06	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
444	3.7657e-03	1.8155e-06	1.6555e-06	0:00:05	89
445	3.2867e-03	1.5624e-06	1.4062e-06	0:00:04	88
446	2.8622e-03	1.3446e-06	1.1952e-06	0:00:20	87
447	2.5001e-03	1.1592e-06	1.0174e-06	0:00:16	86
448	2.1878e-03	1.0018e-06	8.7031e-07	0:00:13	85
449	1.9123e-03	8.6562e-07	7.4673e-07	0:00:10	84
450	1.6809e-03	7.5036e-07	6.4188e-07	0:00:08	83
451	1.4703e-03	6.5086e-07	5.5233e-07	0:00:06	82
452	1.2926e-03	5.6047e-07	4.7141e-07	0:00:05	81
453	1.1551e-03	4.9045e-07	4.1122e-07	0:00:04	80
454	1.0205e-03	4.2275e-07	3.5156e-07	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
455	9.1176e-04	3.6710e-07	3.0394e-07	0:00:18	78

! 455 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
(

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
(

Flow time = 0.731745183467865s, time step = 17

26 more time steps

Truncation Error (computed)=0.002057 > Truncation error tolerance
Repeating the time step: time step size = 0.047284

in update prediction domain id = 1
physical-dt 4.7284e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
455	9.1176e-04	3.6710e-07	3.0394e-07	0:00:23	100
456	3.3334e-02	1.5788e-05	1.3765e-05	0:00:18	99
457	2.1023e-02	8.2247e-06	8.4731e-06	0:00:15	98
458	9.6322e-03	4.4142e-06	4.7630e-06	0:00:11	97
459	7.6549e-03	2.5964e-06	2.8029e-06	0:00:09	96
460	5.9638e-03	1.6383e-06	1.7300e-06	0:00:07	95
461	4.7593e-03	1.1574e-06	1.1995e-06	0:00:06	94
462	3.8036e-03	8.8548e-07	8.7159e-07	0:00:05	93
463	3.0187e-03	6.9250e-07	6.4517e-07	0:00:04	92
464	2.3918e-03	5.4201e-07	4.8275e-07	0:00:03	91
465	1.8957e-03	4.2249e-07	3.6305e-07	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
466	1.5052e-03	3.2867e-07	2.7404e-07	0:00:20	89
467	1.1998e-03	2.5496e-07	2.0719e-07	0:00:15	88
468	9.5942e-04	1.9753e-07	1.5782e-07	0:00:12	87

! 468 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6844612658023834s, time step = 17

25 more time steps

Updating solution at time level N...

done.

physical-dt 4.7397e-02

iter	continuity	x-velocity	y-velocity	time/iter	
468	9.5942e-04	1.9753e-07	1.5782e-07	0:00:14	100
469	9.8229e-03	1.3346e-05	1.1974e-05	0:00:31	99
470	9.3173e-03	7.8259e-06	7.2869e-06	0:00:25	98
471	7.1050e-03	4.7221e-06	4.5403e-06	0:00:19	97
472	5.6029e-03	3.0209e-06	2.9393e-06	0:00:15	96
473	4.7274e-03	2.0534e-06	1.9744e-06	0:00:12	95
474	4.1053e-03	1.5254e-06	1.4347e-06	0:00:10	94
475	3.4809e-03	1.1864e-06	1.0658e-06	0:00:08	93
476	2.9289e-03	9.3024e-07	8.0167e-07	0:00:06	92
477	2.4437e-03	7.2726e-07	6.0683e-07	0:00:05	91
478	2.0226e-03	5.6932e-07	4.6188e-07	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
479	1.6703e-03	4.4109e-07	3.4982e-07	0:00:03	89
480	1.3734e-03	3.4584e-07	2.6888e-07	0:00:02	88
481	1.1260e-03	2.7232e-07	2.0778e-07	0:00:02	87
482	9.2330e-04	2.1489e-07	1.6114e-07	0:00:01	86

! 482 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.7318580150604248s, time step = 18

24 more time steps

Truncation Error (computed)=0.001023 > Truncation error tolerance

Repeating the time step: time step size = 0.023698

in update prediction domain id = 1

physical-dt 2.3698e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
482	9.2330e-04	2.1489e-07	1.6114e-07	0:00:02	100
483	1.4777e-02	1.0013e-05	8.9587e-06	0:00:01	99
484	9.9336e-03	4.7464e-06	4.6994e-06	0:00:01	98
485	4.3475e-03	2.1965e-06	2.2596e-06	0:00:01	97
486	3.7451e-03	1.0448e-06	1.0956e-06	0:00:01	96
487	2.9680e-03	5.1555e-07	5.4975e-07	0:00:01	95
488	2.3178e-03	3.5711e-07	3.3543e-07	0:00:00	94
489	1.7827e-03	2.7018e-07	2.2826e-07	0:00:00	93
490	1.3684e-03	2.0692e-07	1.6259e-07	0:00:00	92
491	1.0520e-03	1.5524e-07	1.1727e-07	0:00:00	91
492	8.1003e-04	1.1377e-07	8.3409e-08	0:00:00	90

! 492 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.7081596180796623s, time step = 18

23 more time steps

Updating solution at time level N...

done.

physical-dt 3.3315e-02

iter	continuity	x-velocity	y-velocity	time/iter	
492	8.1003e-04	1.1377e-07	8.3409e-08	0:00:00	100
493	6.9041e-03	1.1239e-05	1.0081e-05	0:00:00	99
494	6.3869e-03	6.1531e-06	5.6624e-06	0:00:00	98
495	5.1122e-03	3.3985e-06	3.2105e-06	0:00:00	97
496	4.0719e-03	1.9622e-06	1.8613e-06	0:00:00	96
497	3.4182e-03	1.1926e-06	1.1174e-06	0:00:00	95
498	2.8909e-03	8.6087e-07	7.5473e-07	0:00:19	94
499	2.3990e-03	6.5394e-07	5.3440e-07	0:00:15	93
500	1.9665e-03	4.9361e-07	3.8476e-07	0:00:12	92
501	1.6093e-03	3.6787e-07	2.7671e-07	0:00:09	91
502	1.2868e-03	2.7455e-07	2.0175e-07	0:00:07	90

```

iter continuity x-velocity y-velocity time/iter
503 1.0334e-03 2.0220e-07 1.4568e-07 0:00:06 89
504 8.2858e-04 1.5032e-07 1.0614e-07 0:00:05 88
! 504 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.7414746284484863s, time step = 19
22 more time steps

Updating solution at time level N...
done.
physical-dt 3.9331e-02

```

```

iter continuity x-velocity y-velocity time/iter
504 8.2858e-04 1.5032e-07 1.0614e-07 0:00:05 100
505 7.9408e-03 2.3491e-06 2.4072e-06 0:00:04 99
506 9.1258e-03 1.7451e-06 1.4093e-06 0:00:03 98
507 6.6618e-03 1.1609e-06 8.1470e-07 0:00:03 97
508 4.7052e-03 7.6521e-07 5.1877e-07 0:00:02 96
509 3.3065e-03 5.1395e-07 3.5783e-07 0:00:02 95
510 2.4036e-03 3.5997e-07 2.5566e-07 0:00:01 94
511 1.8119e-03 2.5960e-07 1.8482e-07 0:00:01 93
512 1.3977e-03 1.9056e-07 1.3432e-07 0:00:01 92
513 1.1017e-03 1.3798e-07 9.6435e-08 0:00:01 91
514 8.4756e-04 1.0409e-07 7.1501e-08 0:00:01 90
! 514 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

```


()

Flow time = 0.780805766582489s, time step = 20

21 more time steps

Updating solution at time level N...

done.

physical-dt 9.8992e-02

iter	continuity	x-velocity	y-velocity	time/iter	
514	8.4756e-04	1.0409e-07	7.1501e-08	0:00:01	100
515	2.8981e-02	9.4800e-06	9.7299e-06	0:00:00	99
516	3.0951e-02	7.1144e-06	6.2048e-06	0:00:00	98
517	2.1442e-02	4.5197e-06	3.6510e-06	0:00:00	97
518	1.4167e-02	3.0581e-06	2.4872e-06	0:00:00	96
519	9.5843e-03	2.3378e-06	1.9845e-06	0:00:00	95
520	7.0165e-03	1.9187e-06	1.6417e-06	0:00:00	94
521	5.3746e-03	1.5989e-06	1.3619e-06	0:00:00	93
522	4.3032e-03	1.3259e-06	1.1281e-06	0:00:00	92
523	3.5664e-03	1.1401e-06	9.8185e-07	0:00:00	91
524	3.0141e-03	9.6603e-07	8.4166e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
525	2.5910e-03	8.2147e-07	7.2243e-07	0:00:00	89
526	2.2537e-03	7.0037e-07	6.2083e-07	0:00:00	88
527	1.9759e-03	5.9723e-07	5.3366e-07	0:00:00	87
528	1.7419e-03	5.0965e-07	4.5606e-07	0:00:00	86
529	1.5396e-03	4.3373e-07	3.8980e-07	0:00:00	85
530	1.3634e-03	3.6625e-07	3.3037e-07	0:00:17	84
531	1.1979e-03	3.1454e-07	2.8528e-07	0:00:13	83
532	1.0590e-03	2.6474e-07	2.4120e-07	0:00:11	82
533	9.3720e-04	2.2489e-07	2.0496e-07	0:00:08	81

! 533 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.8797973990440369s, time step = 21

20 more time steps

Updating solution at time level N...
done.

physical-dt 1.0129e-01

iter	continuity	x-velocity	y-velocity	time/iter
533	9.3720e-04	2.2489e-07	2.0496e-07	0:00:10 100
534	3.5809e-02	1.1186e-05	1.1321e-05	0:00:08 99
535	3.7902e-02	8.5271e-06	7.2596e-06	0:00:06 98
536	2.6682e-02	5.4567e-06	4.2881e-06	0:00:05 97
537	1.7410e-02	3.6936e-06	2.8640e-06	0:00:04 96
538	1.1894e-02	2.7648e-06	2.2027e-06	0:00:03 95
539	8.6013e-03	2.2098e-06	1.7664e-06	0:00:03 94
540	6.5962e-03	1.7904e-06	1.4314e-06	0:00:02 93
541	5.2181e-03	1.4872e-06	1.1952e-06	0:00:02 92
542	4.2601e-03	1.2470e-06	1.0104e-06	0:00:01 91
543	3.5819e-03	1.0501e-06	8.5859e-07	0:00:19 90

iter	continuity	x-velocity	y-velocity	time/iter
544	3.0438e-03	8.8226e-07	7.2845e-07	0:00:15 89
545	2.6128e-03	7.3974e-07	6.1694e-07	0:00:12 88
546	2.2271e-03	6.2022e-07	5.1973e-07	0:00:09 87
547	1.8823e-03	5.1970e-07	4.3835e-07	0:00:07 86
548	1.5978e-03	4.3451e-07	3.7014e-07	0:00:06 85
549	1.3697e-03	3.6342e-07	3.1279e-07	0:00:05 84
550	1.1846e-03	3.0424e-07	2.6472e-07	0:00:04 83
551	1.0349e-03	2.5473e-07	2.2458e-07	0:00:03 82
552	9.0653e-04	2.1421e-07	1.9171e-07	0:00:02 81

! 552 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 0.9810842275619507s, time step = 22

19 more time steps

Truncation Error (computed)=0.001041 > Truncation error tolerance

Repeating the time step: time step size = 0.050643

in update prediction domain id = 1
physical-dt 5.0643e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
552	9.0653e-04	2.1421e-07	1.9171e-07	0:00:03 100
553	4.8140e-02	9.2591e-06	7.0911e-06	0:00:02 99
554	2.6162e-02	3.5192e-06	3.8101e-06	0:00:02 98
555	1.2904e-02	1.6488e-06	1.8920e-06	0:00:01 97
556	9.6469e-03	9.8034e-07	1.0207e-06	0:00:01 96
557	7.0356e-03	6.3892e-07	6.0440e-07	0:00:01 95
558	4.9904e-03	4.3148e-07	3.8824e-07	0:00:01 94
559	3.5405e-03	3.0613e-07	2.6671e-07	0:00:01 93
560	2.5104e-03	2.2493e-07	1.8945e-07	0:00:00 92
561	1.8016e-03	1.7020e-07	1.3857e-07	0:00:00 91
562	1.3103e-03	1.3095e-07	1.0258e-07	0:00:18 90

iter	continuity	x-velocity	y-velocity	time/iter
563	9.6548e-04	1.0166e-07	7.6781e-08	0:00:14 89

! 563 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.9304408207535744s, time step = 22

18 more time steps

Updating solution at time level N...

done.

physical-dt 9.4086e-02

iter	continuity	x-velocity	y-velocity	time/iter
563	9.6548e-04	1.0166e-07	7.6781e-08	0:00:16 100

564	3.0434e-02	2.3976e-05	2.1593e-05	0:00:13	99
565	2.8747e-02	1.5853e-05	1.4797e-05	0:00:10	98
566	2.2759e-02	1.0879e-05	1.0603e-05	0:00:08	97
567	1.7686e-02	8.0218e-06	7.9363e-06	0:00:06	96
568	1.4285e-02	6.2654e-06	6.1203e-06	0:00:05	95
569	1.1685e-02	5.0199e-06	4.8421e-06	0:00:04	94
570	9.8107e-03	4.1146e-06	3.8912e-06	0:00:22	93
571	8.2999e-03	3.3988e-06	3.1422e-06	0:00:17	92
572	7.0639e-03	2.8122e-06	2.5461e-06	0:00:14	91
573	6.0647e-03	2.3447e-06	2.0753e-06	0:00:11	90

iter	continuity	x-velocity	y-velocity	time/iter	
574	5.2037e-03	1.9479e-06	1.6840e-06	0:00:09	89
575	4.4757e-03	1.6437e-06	1.3924e-06	0:00:07	88
576	3.8769e-03	1.3735e-06	1.1359e-06	0:00:05	87
577	3.3370e-03	1.1569e-06	9.3491e-07	0:00:04	86
578	2.8826e-03	9.7645e-07	7.7454e-07	0:00:03	85
579	2.4711e-03	8.2502e-07	6.4235e-07	0:00:03	84
580	2.1197e-03	6.9809e-07	5.3479e-07	0:00:02	83
581	1.8266e-03	5.9106e-07	4.4688e-07	0:00:02	82
582	1.5763e-03	5.0144e-07	3.7327e-07	0:00:01	81
583	1.3498e-03	4.2590e-07	3.1210e-07	0:00:01	80
584	1.1620e-03	3.6208e-07	2.6091e-07	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
585	1.0094e-03	3.0829e-07	2.1914e-07	0:00:01	78
586	8.7459e-04	2.6269e-07	1.8407e-07	0:00:01	77

! 586 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 1.024526715278625s, time step = 23

17 more time steps

Truncation Error (computed)=0.001880 > Truncation error tolerance

Repeating the time step: time step size = 0.047043

in update prediction domain id = 1

physical-dt 4.7043e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
586	8.7459e-04	2.6269e-07	1.8407e-07	0:00:01	100
587	4.8216e-02	2.1738e-05	1.8129e-05	0:00:20	99
588	2.5511e-02	1.0719e-05	1.0818e-05	0:00:16	98
589	1.2375e-02	5.6134e-06	6.1446e-06	0:00:13	97
590	9.4766e-03	3.2482e-06	3.6048e-06	0:00:10	96
591	7.3784e-03	2.0062e-06	2.1696e-06	0:00:08	95
592	5.8766e-03	1.3676e-06	1.4484e-06	0:00:06	94
593	4.6520e-03	1.0387e-06	1.0183e-06	0:00:05	93
594	3.6422e-03	8.0402e-07	7.3063e-07	0:00:04	92
595	2.8465e-03	6.1807e-07	5.2890e-07	0:00:03	91
596	2.2234e-03	4.7241e-07	3.8548e-07	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
597	1.7385e-03	3.6069e-07	2.8295e-07	0:00:02	89
598	1.3644e-03	2.7507e-07	2.0914e-07	0:00:02	88
599	1.0738e-03	2.1019e-07	1.5541e-07	0:00:01	87
600	8.4825e-04	1.6198e-07	1.1619e-07	0:00:01	86

! 600 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.9774837642908096s, time step = 23

16 more time steps

Updating solution at time level N...

done.

physical-dt 4.7491e-02

iter	continuity	x-velocity	y-velocity	time/iter	
600	8.4825e-04	1.6198e-07	1.1619e-07	0:00:01	100
601	1.5717e-02	1.8348e-05	1.6407e-05	0:00:01	99
602	1.4442e-02	1.0634e-05	9.7532e-06	0:00:20	98
603	1.1712e-02	6.3026e-06	5.9392e-06	0:00:16	97
604	9.2139e-03	3.9826e-06	3.7551e-06	0:00:13	96
605	7.4014e-03	2.6333e-06	2.4412e-06	0:00:10	95
606	6.0898e-03	1.8880e-06	1.7110e-06	0:00:08	94
607	4.9706e-03	1.4205e-06	1.2267e-06	0:00:06	93
608	4.0245e-03	1.0734e-06	8.8691e-07	0:00:05	92
609	3.2765e-03	8.1684e-07	6.4839e-07	0:00:04	91
610	2.6640e-03	6.2090e-07	4.7653e-07	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
611	2.1621e-03	4.6491e-07	3.4792e-07	0:00:02	89
612	1.7377e-03	3.5508e-07	2.5801e-07	0:00:02	88
613	1.3997e-03	2.7371e-07	1.9438e-07	0:00:02	87
614	1.1228e-03	2.1230e-07	1.4722e-07	0:00:01	86
615	9.0696e-04	1.6419e-07	1.1152e-07	0:00:01	85

! 615 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 1.024974465370178s, time step = 24

15 more time steps

Updating solution at time level N...

done.

physical-dt 4.8166e-02

iter	continuity	x-velocity	y-velocity	time/iter	
615	9.0696e-04	1.6419e-07	1.1152e-07	0:00:01	100
616	1.7463e-02	4.6697e-06	4.6362e-06	0:00:01	99
617	1.9036e-02	3.5543e-06	2.7637e-06	0:00:01	98
618	1.4237e-02	2.3369e-06	1.5989e-06	0:00:20	97
619	9.8118e-03	1.4763e-06	9.6939e-07	0:00:16	96
620	6.7874e-03	9.5805e-07	6.3784e-07	0:00:13	95

621	4.8544e-03	6.4370e-07	4.3066e-07	0:00:10	94
622	3.5441e-03	4.3243e-07	2.8796e-07	0:00:08	93
623	2.6183e-03	3.0426e-07	1.9993e-07	0:00:06	92
624	1.9514e-03	2.2111e-07	1.4332e-07	0:00:05	91
625	1.4755e-03	1.5770e-07	1.0214e-07	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
626	1.1140e-03	1.2610e-07	7.9398e-08	0:00:03	89
627	8.6489e-04	9.0424e-08	5.6474e-08	0:00:02	88

! 627 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.073140859603882s, time step = 25

14 more time steps

Updating solution at time level N...

done.

physical-dt 9.5480e-02

iter	continuity	x-velocity	y-velocity	time/iter	
627	8.6489e-04	9.0424e-08	5.6474e-08	0:00:03	100
628	4.6950e-02	1.3265e-05	1.3093e-05	0:00:02	99
629	5.2676e-02	1.0226e-05	8.3487e-06	0:00:02	98
630	3.7193e-02	6.5772e-06	4.9676e-06	0:00:01	97
631	2.4337e-02	4.2157e-06	3.1227e-06	0:00:01	96
632	1.6575e-02	2.8906e-06	2.2253e-06	0:00:01	95
633	1.1978e-02	2.0874e-06	1.6505e-06	0:00:01	94
634	8.9476e-03	1.5918e-06	1.2822e-06	0:00:01	93
635	6.6766e-03	1.2499e-06	1.0198e-06	0:00:00	92
636	5.1624e-03	9.9597e-07	8.3220e-07	0:00:00	91
637	4.1912e-03	7.9947e-07	6.8802e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
638	3.4750e-03	6.4706e-07	5.7314e-07	0:00:00	89
639	2.9203e-03	5.2728e-07	4.8131e-07	0:00:00	88
640	2.4651e-03	4.3119e-07	4.0672e-07	0:00:00	87

641	2.0932e-03	3.5480e-07	3.4704e-07	0:00:00	86
642	1.7788e-03	2.9432e-07	2.9708e-07	0:00:00	85
643	1.5121e-03	2.4598e-07	2.5437e-07	0:00:17	84
644	1.2840e-03	2.0719e-07	2.1826e-07	0:00:13	83
645	1.0903e-03	1.7467e-07	1.8729e-07	0:00:11	82
646	9.2245e-04	1.4764e-07	1.6062e-07	0:00:08	81

! 646 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.168620705604553s, time step = 26

13 more time steps

Updating solution at time level N...

done.

physical-dt 1.0010e-01

iter	continuity	x-velocity	y-velocity	time/iter	
646	9.2245e-04	1.4764e-07	1.6062e-07	0:00:10	100
647	5.4678e-02	1.5291e-05	1.4659e-05	0:00:08	99
648	6.3189e-02	1.1860e-05	9.3018e-06	0:00:06	98
649	4.4724e-02	7.4514e-06	5.5183e-06	0:00:05	97
650	2.9553e-02	4.7235e-06	3.4707e-06	0:00:04	96
651	1.9551e-02	3.1316e-06	2.4535e-06	0:00:03	95
652	1.3901e-02	2.1808e-06	1.8233e-06	0:00:03	94
653	1.0586e-02	1.6340e-06	1.4018e-06	0:00:02	93
654	8.1439e-03	1.2799e-06	1.1188e-06	0:00:02	92
655	6.3919e-03	1.0291e-06	9.1886e-07	0:00:01	91
656	5.0213e-03	8.3519e-07	7.5611e-07	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
657	3.9847e-03	6.8247e-07	6.3625e-07	0:00:01	89
658	3.1869e-03	5.6720e-07	5.4733e-07	0:00:01	88
659	2.5622e-03	4.6043e-07	4.5803e-07	0:00:00	87
660	2.1165e-03	3.8611e-07	3.9778e-07	0:00:18	86
661	1.7543e-03	3.1734e-07	3.3573e-07	0:00:14	85
662	1.4601e-03	2.6992e-07	2.9256e-07	0:00:11	84


```

663 1.2113e-03 2.2537e-07 2.4882e-07 0:00:09 83
664 1.0112e-03 1.8850e-07 2.1184e-07 0:00:07 82
665 8.5216e-04 1.5888e-07 1.8092e-07 0:00:05 81
! 665 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 1.268719911575317s, time step = 27
12 more time steps

Updating solution at time level N...
done.
physical-dt 1.0499e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
665	8.5216e-04	1.5888e-07	1.8092e-07	0:00:07	100
666	6.2270e-02	1.7097e-05	1.5972e-05	0:00:05	99
667	7.3649e-02	1.3310e-05	1.0100e-05	0:00:04	98
668	5.1915e-02	8.0234e-06	5.8010e-06	0:00:03	97
669	3.2867e-02	4.9383e-06	3.6501e-06	0:00:03	96
670	2.1176e-02	3.1903e-06	2.5371e-06	0:00:02	95
671	1.4984e-02	2.2237e-06	1.8636e-06	0:00:02	94
672	1.1181e-02	1.6518e-06	1.4168e-06	0:00:01	93
673	8.5405e-03	1.3007e-06	1.1430e-06	0:00:01	92
674	6.5506e-03	1.0423e-06	9.4715e-07	0:00:01	91
675	5.1015e-03	8.4761e-07	7.9378e-07	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
676	4.0220e-03	6.9513e-07	6.7232e-07	0:00:01	89
677	3.2276e-03	5.8224e-07	5.8291e-07	0:00:00	88
678	2.5987e-03	4.7213e-07	4.8579e-07	0:00:18	87
679	2.1338e-03	3.9960e-07	4.2043e-07	0:00:14	86
680	1.7515e-03	3.2788e-07	3.5300e-07	0:00:11	85
681	1.4571e-03	2.7982e-07	3.0720e-07	0:00:09	84
682	1.2146e-03	2.3450e-07	2.6165e-07	0:00:07	83
683	1.0169e-03	1.9739e-07	2.2303e-07	0:00:05	82
684	8.5929e-04	1.6665e-07	1.9043e-07	0:00:04	81

```

! 684 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 1.373710989952087s, time step = 28
11 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 1.1306e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
684	8.5929e-04	1.6665e-07	1.9043e-07	0:00:05	100
685	7.1237e-02	1.9695e-05	1.7625e-05	0:00:04	99
686	8.6603e-02	1.5034e-05	1.1238e-05	0:00:23	98
687	6.1863e-02	9.0028e-06	6.3764e-06	0:00:18	97
688	3.9435e-02	5.2973e-06	3.9055e-06	0:00:14	96
689	2.5028e-02	3.3067e-06	2.6591e-06	0:00:11	95
690	1.7258e-02	2.2891e-06	1.9818e-06	0:00:09	94
691	1.2668e-02	1.7310e-06	1.5475e-06	0:00:07	93
692	9.6738e-03	1.3602e-06	1.2411e-06	0:00:06	92
693	7.4854e-03	1.1018e-06	1.0330e-06	0:00:04	91
694	5.9178e-03	9.1936e-07	8.9409e-07	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
695	4.5606e-03	7.3080e-07	7.3147e-07	0:00:03	89
696	3.6771e-03	6.1184e-07	6.3063e-07	0:00:02	88
697	2.8728e-03	4.9603e-07	5.2557e-07	0:00:02	87
698	2.3363e-03	4.2129e-07	4.5566e-07	0:00:01	86
699	1.8742e-03	3.4590e-07	3.8222e-07	0:00:01	85
700	1.5559e-03	2.9810e-07	3.3279e-07	0:00:01	84
701	1.2797e-03	2.5052e-07	2.8337e-07	0:00:01	83
702	1.0725e-03	2.1171e-07	2.4180e-07	0:00:01	82
703	9.0214e-04	1.7962e-07	2.0675e-07	0:00:00	81

```

! 703 solution is converged
(update-animation-object "animation-vorticity")

```

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.486770629882813s, time step = 29

10 more time steps

Updating solution at time level N...

done.

physical-dt 1.2401e-01

iter	continuity	x-velocity	y-velocity	time/iter	
703	9.0214e-04	1.7962e-07	2.0675e-07	0:00:01	100
704	8.0619e-02	2.2500e-05	1.9602e-05	0:00:20	99
705	9.8746e-02	1.6937e-05	1.2416e-05	0:00:16	98
706	6.9667e-02	9.8830e-06	7.0295e-06	0:00:13	97
707	4.3746e-02	5.6588e-06	4.2466e-06	0:00:10	96
708	2.7923e-02	3.5274e-06	2.9090e-06	0:00:08	95
709	1.9311e-02	2.4504e-06	2.1642e-06	0:00:06	94
710	1.4385e-02	1.8548e-06	1.6920e-06	0:00:05	93
711	1.1116e-02	1.4781e-06	1.3851e-06	0:00:04	92
712	8.6312e-03	1.2135e-06	1.1797e-06	0:00:03	91
713	6.5738e-03	9.5424e-07	9.5544e-07	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
714	5.1264e-03	7.7968e-07	8.0014e-07	0:00:02	89
715	4.0509e-03	6.5330e-07	6.8715e-07	0:00:02	88
716	3.1799e-03	5.3093e-07	5.7421e-07	0:00:01	87
717	2.5721e-03	4.5140e-07	4.9382e-07	0:00:01	86
718	2.0883e-03	3.7541e-07	4.1592e-07	0:00:01	85
719	1.7166e-03	3.2337e-07	3.6040e-07	0:00:01	84
720	1.4145e-03	2.7089e-07	3.0444e-07	0:00:00	83
721	1.1779e-03	2.3494e-07	2.6524e-07	0:00:00	82
722	9.7892e-04	1.9896e-07	2.2565e-07	0:00:00	81

! 722 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa
()
Flow time = 1.610783576965332s, time step = 30
9 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 1.3808e-01
```

iter	continuity	x-velocity	y-velocity	time/iter
722	9.7892e-04	1.9896e-07	2.2565e-07	0:00:00 100
723	9.0011e-02	2.5255e-05	2.1900e-05	0:00:00 99
724	1.1231e-01	1.8987e-05	1.3853e-05	0:00:00 98
725	7.7720e-02	1.0838e-05	7.6362e-06	0:00:00 97
726	4.8708e-02	6.0559e-06	4.5627e-06	0:00:00 96
727	3.1687e-02	3.8098e-06	3.1573e-06	0:00:00 95
728	2.2261e-02	2.6665e-06	2.3609e-06	0:00:00 94
729	1.6586e-02	2.0118e-06	1.8319e-06	0:00:00 93
730	1.2710e-02	1.5774e-06	1.4834e-06	0:00:00 92
731	9.7966e-03	1.3042e-06	1.2800e-06	0:00:00 91
732	7.4760e-03	1.0285e-06	1.0435e-06	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
733	5.8595e-03	8.4353e-07	8.7600e-07	0:00:00 89
734	4.6048e-03	7.0890e-07	7.5409e-07	0:00:00 88
735	3.6252e-03	5.7836e-07	6.2615e-07	0:00:00 87
736	2.9045e-03	4.9381e-07	5.3866e-07	0:00:00 86
737	2.3405e-03	4.0987e-07	4.5068e-07	0:00:00 85
738	1.9210e-03	3.5675e-07	3.9063e-07	0:00:00 84
739	1.5774e-03	2.9944e-07	3.2815e-07	0:00:00 83
740	1.3236e-03	2.6242e-07	2.8486e-07	0:00:00 82
741	1.1111e-03	2.2172e-07	2.4066e-07	0:00:00 81
742	9.4833e-04	1.9512e-07	2.0994e-07	0:00:00 80

```
! 742 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa
()
(update-animation-object "animation-vel")
```

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.748865842819214s, time step = 31

8 more time steps

Updating solution at time level N...

done.

physical-dt 1.5473e-01

iter	continuity	x-velocity	y-velocity	time/iter	
742	9.4833e-04	1.9512e-07	2.0994e-07	0:00:00	100
743	9.9092e-02	2.8127e-05	2.4030e-05	0:00:00	99
744	1.2465e-01	2.1040e-05	1.5023e-05	0:00:00	98
745	8.3456e-02	1.1872e-05	8.1125e-06	0:00:00	97
746	5.1570e-02	6.5277e-06	4.7486e-06	0:00:00	96
747	3.4116e-02	4.0593e-06	3.2692e-06	0:00:00	95
748	2.4984e-02	2.8217e-06	2.4618e-06	0:00:00	94
749	1.8989e-02	2.1298e-06	1.9235e-06	0:00:00	93
750	1.4605e-02	1.6674e-06	1.5454e-06	0:00:00	92
751	1.1378e-02	1.4069e-06	1.3462e-06	0:00:00	91
752	8.4823e-03	1.1084e-06	1.0934e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
753	6.5785e-03	9.0871e-07	9.1381e-07	0:00:00	89
754	5.1957e-03	7.6059e-07	7.7394e-07	0:00:00	88
755	4.1880e-03	6.5095e-07	6.7188e-07	0:00:00	87
756	3.3120e-03	5.3080e-07	5.5501e-07	0:00:00	86
757	2.6928e-03	4.4579e-07	4.6521e-07	0:00:00	85
758	2.2247e-03	3.8766e-07	4.0362e-07	0:00:00	84
759	1.7927e-03	3.2070e-07	3.3481e-07	0:00:00	83
760	1.4891e-03	2.8003e-07	2.8833e-07	0:00:16	82
761	1.2292e-03	2.3533e-07	2.4174e-07	0:00:13	81
762	1.0335e-03	2.0687e-07	2.0932e-07	0:00:10	80
763	8.7356e-04	1.7539e-07	1.7672e-07	0:00:08	79

! 763 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.903592467308044s, time step = 32

7 more time steps

Updating solution at time level N...

done.

physical-dt 1.7736e-01

iter	continuity	x-velocity	y-velocity	time/iter	
763	8.7356e-04	1.7539e-07	1.7672e-07	0:00:10	100
764	1.0900e-01	3.1605e-05	2.6592e-05	0:00:08	99
765	1.3552e-01	2.3538e-05	1.6830e-05	0:00:06	98
766	8.8844e-02	1.2964e-05	8.7382e-06	0:00:05	97
767	5.4663e-02	6.9619e-06	4.9480e-06	0:00:04	96
768	3.5819e-02	4.2934e-06	3.4082e-06	0:00:03	95
769	2.6800e-02	3.0783e-06	2.5801e-06	0:00:21	94
770	2.1084e-02	2.3404e-06	2.0238e-06	0:00:17	93
771	1.6516e-02	1.8195e-06	1.6340e-06	0:00:13	92
772	1.2859e-02	1.4579e-06	1.3600e-06	0:00:11	91
773	9.9550e-03	1.2020e-06	1.1498e-06	0:00:08	90

iter	continuity	x-velocity	y-velocity	time/iter	
774	7.7247e-03	1.0035e-06	9.7723e-07	0:00:07	89
775	6.0514e-03	8.4163e-07	8.2413e-07	0:00:05	88
776	4.8046e-03	7.0809e-07	6.9304e-07	0:00:04	87
777	3.8534e-03	5.9607e-07	5.8216e-07	0:00:03	86
778	3.1099e-03	5.0130e-07	4.8961e-07	0:00:03	85
779	2.5190e-03	4.2066e-07	4.1256e-07	0:00:02	84
780	2.0494e-03	3.5457e-07	3.4809e-07	0:00:02	83
781	1.6758e-03	3.0103e-07	2.9420e-07	0:00:01	82
782	1.3804e-03	2.5801e-07	2.4955e-07	0:00:01	81
783	1.1462e-03	2.2167e-07	2.1156e-07	0:00:01	80
784	9.6413e-04	1.9087e-07	1.7979e-07	0:00:01	79

! 784 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.080949783325195s, time step = 33

6 more time steps

Updating solution at time level N...

done.

physical-dt 2.0799e-01

iter	continuity	x-velocity	y-velocity	time/iter	
784	9.6413e-04	1.9087e-07	1.7979e-07	0:00:01	100
785	1.1968e-01	3.5682e-05	2.9326e-05	0:00:01	99
786	1.5036e-01	2.6358e-05	1.8898e-05	0:00:20	98
787	9.6887e-02	1.3869e-05	9.7283e-06	0:00:16	97
788	5.8831e-02	7.4056e-06	5.4608e-06	0:00:13	96
789	4.0234e-02	4.7649e-06	3.8174e-06	0:00:10	95
790	3.0719e-02	3.5066e-06	2.8723e-06	0:00:08	94
791	2.4462e-02	2.6888e-06	2.2579e-06	0:00:06	93
792	1.9526e-02	2.1120e-06	1.7991e-06	0:00:05	92
793	1.4751e-02	1.7106e-06	1.5290e-06	0:00:04	91
794	1.1268e-02	1.4383e-06	1.3007e-06	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
795	8.7105e-03	1.2006e-06	1.0909e-06	0:00:02	89
796	6.8808e-03	1.0011e-06	9.1754e-07	0:00:02	88
797	5.5162e-03	8.4420e-07	7.7645e-07	0:00:02	87
798	4.4434e-03	7.0836e-07	6.5561e-07	0:00:01	86
799	3.6014e-03	5.9998e-07	5.5233e-07	0:00:01	85
800	2.9436e-03	5.0776e-07	4.6515e-07	0:00:01	84
801	2.4116e-03	4.2918e-07	3.9190e-07	0:00:01	83
802	1.9873e-03	3.6460e-07	3.3009e-07	0:00:00	82
803	1.6541e-03	3.1273e-07	2.7831e-07	0:00:17	81
804	1.3831e-03	2.6880e-07	2.3565e-07	0:00:13	80
805	1.1633e-03	2.3147e-07	2.0015e-07	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
806	9.8398e-04	1.9979e-07	1.7027e-07	0:00:08	78

! 806 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 2.288937330245972s, time step = 34
5 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 2.4351e-01
```

iter	continuity	x-velocity	y-velocity	time/iter	
806	9.8398e-04	1.9979e-07	1.7027e-07	0:00:10	100
807	1.2717e-01	3.8846e-05	3.1068e-05	0:00:08	99
808	1.5973e-01	2.8277e-05	2.0310e-05	0:00:07	98
809	1.0042e-01	1.4568e-05	1.0635e-05	0:00:05	97
810	5.9031e-02	7.6815e-06	6.0353e-06	0:00:04	96
811	4.2259e-02	5.1585e-06	4.1820e-06	0:00:03	95
812	3.3978e-02	3.9254e-06	3.1257e-06	0:00:03	94
813	2.7889e-02	3.1022e-06	2.4542e-06	0:00:02	93
814	2.1627e-02	2.4817e-06	2.0658e-06	0:00:02	92
815	1.7145e-02	2.0294e-06	1.7029e-06	0:00:01	91
816	1.3183e-02	1.7012e-06	1.4780e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
817	1.0434e-02	1.4351e-06	1.2506e-06	0:00:01	89
818	8.4382e-03	1.2165e-06	1.0601e-06	0:00:01	88
819	6.8671e-03	1.0330e-06	9.0187e-07	0:00:01	87
820	5.6212e-03	8.7726e-07	7.6757e-07	0:00:00	86
821	4.6018e-03	7.4342e-07	6.5132e-07	0:00:17	85
822	3.7793e-03	6.3165e-07	5.5072e-07	0:00:14	84
823	3.1110e-03	5.3881e-07	4.6495e-07	0:00:11	83
824	2.5614e-03	4.6050e-07	3.9225e-07	0:00:09	82
825	2.1045e-03	3.9480e-07	3.3125e-07	0:00:07	81
826	1.7423e-03	3.3995e-07	2.8090e-07	0:00:05	80
827	1.4539e-03	2.9359e-07	2.3896e-07	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
828	1.2204e-03	2.5399e-07	2.0401e-07	0:00:03	78
829	1.0422e-03	2.2027e-07	1.7473e-07	0:00:03	77
830	8.9512e-04	1.9137e-07	1.5011e-07	0:00:02	76

! 830 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.53244686126709s, time step = 35

4 more time steps

Updating solution at time level N...

done.

physical-dt 2.8617e-01

iter	continuity	x-velocity	y-velocity	time/iter	
830	8.9512e-04	1.9137e-07	1.5011e-07	0:00:03	100
831	1.3152e-01	4.1202e-05	3.2142e-05	0:00:02	99
832	1.6630e-01	2.9936e-05	2.1356e-05	0:00:02	98
833	1.0042e-01	1.5333e-05	1.1565e-05	0:00:01	97
834	6.0569e-02	8.0290e-06	6.5203e-06	0:00:01	96
835	4.5069e-02	5.7339e-06	4.7141e-06	0:00:01	95
836	3.7670e-02	4.3945e-06	3.5449e-06	0:00:01	94
837	2.9648e-02	3.4640e-06	2.7661e-06	0:00:01	93
838	2.2922e-02	2.8167e-06	2.2880e-06	0:00:00	92
839	1.7793e-02	2.3398e-06	1.9454e-06	0:00:00	91
840	1.3995e-02	1.9697e-06	1.6698e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
841	1.1125e-02	1.6718e-06	1.4415e-06	0:00:00	89
842	8.9786e-03	1.4270e-06	1.2448e-06	0:00:00	88
843	7.2899e-03	1.2224e-06	1.0721e-06	0:00:00	87
844	5.9414e-03	1.0487e-06	9.2182e-07	0:00:00	86
845	4.8520e-03	8.9873e-07	7.9094e-07	0:00:00	85
846	3.9786e-03	7.7257e-07	6.7957e-07	0:00:00	84
847	3.2966e-03	6.6432e-07	5.8190e-07	0:00:00	83
848	2.7455e-03	5.7342e-07	4.9759e-07	0:00:00	82
849	2.3170e-03	4.9717e-07	4.2650e-07	0:00:00	81
850	1.9549e-03	4.3298e-07	3.6598e-07	0:00:16	80
851	1.6587e-03	3.7772e-07	3.1494e-07	0:00:13	79

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

852	1.4097e-03	3.3073e-07	2.7153e-07	0:00:10	78
853	1.2077e-03	2.8990e-07	2.3452e-07	0:00:08	77
854	1.0399e-03	2.5449e-07	2.0319e-07	0:00:06	76
855	9.0365e-04	2.2350e-07	1.7667e-07	0:00:05	75

! 855 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.818617820739746s, time step = 36

3 more time steps

Updating solution at time level N...

done.

physical-dt 3.4145e-01

iter	continuity	x-velocity	y-velocity	time/iter	
855	9.0365e-04	2.2350e-07	1.7667e-07	0:00:07	100
856	1.3331e-01	4.4221e-05	3.3435e-05	0:00:05	99
857	1.6321e-01	3.1505e-05	2.2552e-05	0:00:04	98
858	9.7337e-02	1.5044e-05	1.1538e-05	0:00:03	97
859	5.8165e-02	8.6793e-06	7.2730e-06	0:00:03	96
860	4.4737e-02	6.2800e-06	5.1679e-06	0:00:02	95
861	3.8206e-02	4.9430e-06	3.9837e-06	0:00:02	94
862	3.0420e-02	3.8986e-06	2.9988e-06	0:00:01	93
863	2.4250e-02	3.2535e-06	2.5513e-06	0:00:01	92
864	1.9325e-02	2.7843e-06	2.2608e-06	0:00:01	91
865	1.5563e-02	2.3947e-06	2.0044e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
866	1.2812e-02	2.0635e-06	1.7745e-06	0:00:01	89
867	1.0563e-02	1.7862e-06	1.5672e-06	0:00:00	88
868	8.7035e-03	1.5527e-06	1.3786e-06	0:00:00	87
869	7.1237e-03	1.3542e-06	1.2095e-06	0:00:17	86
870	5.8547e-03	1.1835e-06	1.0605e-06	0:00:14	85
871	4.8519e-03	1.0368e-06	9.3114e-07	0:00:11	84
872	4.0294e-03	9.1105e-07	8.1933e-07	0:00:09	83
873	3.3753e-03	8.0364e-07	7.2060e-07	0:00:07	82

874	2.8336e-03	7.1161e-07	6.3306e-07	0:00:05	81
875	2.3919e-03	6.3125e-07	5.5540e-07	0:00:04	80
876	2.0296e-03	5.6073e-07	4.8700e-07	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
877	1.7274e-03	4.9834e-07	4.2667e-07	0:00:03	78
878	1.4796e-03	4.4437e-07	3.7438e-07	0:00:02	77
879	1.2754e-03	3.9651e-07	3.2874e-07	0:00:02	76
880	1.1059e-03	3.5479e-07	2.8927e-07	0:00:01	75
881	9.6476e-04	3.1822e-07	2.5499e-07	0:00:01	74

! 881 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.160072803497314s, time step = 37

2 more time steps

Updating solution at time level N...

done.

physical-dt 4.0715e-01

iter	continuity	x-velocity	y-velocity	time/iter	
881	9.6476e-04	3.1822e-07	2.5499e-07	0:00:01	100
882	1.3297e-01	4.6716e-05	3.5017e-05	0:00:01	99
883	1.6314e-01	3.2884e-05	2.3528e-05	0:00:01	98
884	9.8065e-02	1.5450e-05	1.1983e-05	0:00:01	97
885	6.1293e-02	9.3739e-06	7.8256e-06	0:00:20	96
886	4.7778e-02	7.1429e-06	5.7345e-06	0:00:16	95
887	3.9198e-02	5.6878e-06	4.2939e-06	0:00:12	94
888	3.1701e-02	4.4947e-06	3.2748e-06	0:00:10	93
889	2.5349e-02	3.7512e-06	2.7583e-06	0:00:08	92
890	2.0558e-02	3.2014e-06	2.4757e-06	0:00:06	91
891	1.6868e-02	2.7848e-06	2.2493e-06	0:00:05	90

iter	continuity	x-velocity	y-velocity	time/iter	
892	1.3911e-02	2.4676e-06	2.0556e-06	0:00:04	89
893	1.1525e-02	2.1928e-06	1.8670e-06	0:00:03	88

894	9.5337e-03	1.9559e-06	1.6904e-06	0:00:02	87
895	7.9462e-03	1.7528e-06	1.5343e-06	0:00:02	86
896	6.6721e-03	1.5753e-06	1.3929e-06	0:00:02	85
897	5.6297e-03	1.4206e-06	1.2604e-06	0:00:01	84
898	4.7469e-03	1.2863e-06	1.1405e-06	0:00:01	83
899	4.0046e-03	1.1636e-06	1.0271e-06	0:00:01	82
900	3.4047e-03	1.0560e-06	9.2574e-07	0:00:01	81
901	2.9098e-03	9.5824e-07	8.3275e-07	0:00:00	80
902	2.5048e-03	8.6974e-07	7.4859e-07	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
903	2.1764e-03	7.8924e-07	6.7234e-07	0:00:00	78
904	1.8972e-03	7.1589e-07	6.0303e-07	0:00:00	77
905	1.6607e-03	6.4997e-07	5.4075e-07	0:00:00	76
906	1.4584e-03	5.8919e-07	4.8495e-07	0:00:15	75
907	1.2870e-03	5.3480e-07	4.3488e-07	0:00:12	74
908	1.1363e-03	4.8577e-07	3.9020e-07	0:00:09	73
909	1.0082e-03	4.4154e-07	3.5046e-07	0:00:07	72
910	8.9794e-04	4.0143e-07	3.1523e-07	0:00:06	71

! 910 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 3.567226648330688s, time step = 38

1 more time step

Updating solution at time level N...

done.

physical-dt 4.7993e-01

iter	continuity	x-velocity	y-velocity	time/iter	
910	8.9794e-04	4.0143e-07	3.1523e-07	0:00:08	100
911	1.3548e-01	4.9322e-05	3.6640e-05	0:00:07	99
912	1.6723e-01	3.4084e-05	2.4574e-05	0:00:05	98
913	1.0312e-01	1.5914e-05	1.2078e-05	0:00:04	97
914	6.5683e-02	9.7066e-06	7.9625e-06	0:00:03	96
915	4.8128e-02	7.6588e-06	5.7091e-06	0:00:03	95

916	3.8651e-02	6.1406e-06	4.3077e-06	0:00:02	94
917	3.1479e-02	4.8365e-06	3.2705e-06	0:00:02	93
918	2.5726e-02	4.0064e-06	2.7496e-06	0:00:01	92
919	2.1250e-02	3.4486e-06	2.5052e-06	0:00:01	91
920	1.7704e-02	3.0555e-06	2.3475e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
921	1.4966e-02	2.7368e-06	2.2068e-06	0:00:01	89
922	1.2758e-02	2.4732e-06	2.0736e-06	0:00:01	88
923	1.0880e-02	2.2561e-06	1.9532e-06	0:00:00	87
924	9.2880e-03	2.0667e-06	1.8321e-06	0:00:00	86
925	7.9142e-03	1.9006e-06	1.7167e-06	0:00:00	85
926	6.7601e-03	1.7534e-06	1.6023e-06	0:00:00	84
927	5.7243e-03	1.6182e-06	1.4863e-06	0:00:00	83
928	4.8746e-03	1.4937e-06	1.3719e-06	0:00:17	82
929	4.1809e-03	1.3777e-06	1.2612e-06	0:00:13	81
930	3.6112e-03	1.2711e-06	1.1561e-06	0:00:10	80
931	3.1513e-03	1.1716e-06	1.0572e-06	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
932	2.7644e-03	1.0805e-06	9.6775e-07	0:00:06	78
933	2.4311e-03	9.9499e-07	8.8418e-07	0:00:05	77
934	2.1477e-03	9.1753e-07	8.0850e-07	0:00:04	76
935	1.8996e-03	8.4486e-07	7.3709e-07	0:00:03	75
936	1.6858e-03	7.7861e-07	6.7240e-07	0:00:03	74
937	1.4921e-03	7.1799e-07	6.1349e-07	0:00:02	73
938	1.3020e-03	6.6329e-07	5.6122e-07	0:00:02	72
939	1.1722e-03	6.0781e-07	5.0908e-07	0:00:01	71
940	1.0354e-03	5.6027e-07	4.6597e-07	0:00:01	70
941	9.5394e-04	5.1468e-07	4.2401e-07	0:00:01	69

! 941 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 4.047153472900391s, time step = 39

Writing "| gzip -2cf > SolutionMonitor.gz"...

Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22727 ...

Done.

\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.

Writing data to \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...

x-coord

y-coord

pressure

x-velocity

y-velocity

hyb_init-0

hyb_init-1

Done.

Calculation complete.

Opening input/output transcript to file "C:/Users/azgars/hello_word".

```
-----  
ID   Hostname  Core O.S.      PID   Vendor  
-----  
n3   A16-059    4/4  Windows-x64  9944  Intel(R) Xeon(R) Gold 6348  
n2   A16-059    3/4  Windows-x64  1724  Intel(R) Xeon(R) Gold 6348  
n1   A16-059    2/4  Windows-x64  11720 Intel(R) Xeon(R) Gold 6348  
n0*  A16-059    1/4  Windows-x64  17116 Intel(R) Xeon(R) Gold 6348  
host A16-059      Windows-x64  2272  Intel(R) Xeon(R) Gold 6348
```

MPI Option Selected: intel

Selected system interconnect: default

Initialize using the hybrid initialization method.

Checking case topology...

-This case has both inlets & outlets

-Pressure information is not available at the boundaries.

Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00
2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "`"\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set"`...

writing rp variables ... Done.
 writing domain variables ... Done.
 writing fluid (type fluid) (mixture) ... Done.
 writing interior-fluid (type interior) (mixture) ... Done.
 writing surface_body (type interior) (mixture) ... Done.
 writing inlet (type velocity-inlet) (mixture) ... Done.
 writing outlet (type pressure-outlet) (mixture) ... Done.
 writing wall (type wall) (mixture) ... Done.
 writing cylinder (type wall) (mixture) ... Done.
 writing zones map name-id ... Done.

Writing to A16-059:"`"\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-16.cas.h5"` in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...
 116806 faces, 6 zones ...
 58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"`"\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-16-00000.dat.h5"` in NODE0 mode and compression level 1 ...

Writing results.

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

Error: sopenoutputfile: unable to open file for output

Error Object: ".flwb_report_files\report.xml"

Updating solution at time level N...

done.

physical-dt 5.0000e-01

iter	continuity	x-velocity	y-velocity	time/iter
1	1.0000e+00	2.8003e-04	2.4950e-04	0:00:01 99
2	1.0000e+00	1.5522e-04	8.8370e-05	0:00:01 98
3	6.1904e-01	9.6002e-05	5.0644e-05	0:00:01 97
4	4.4150e-01	6.4966e-05	3.5073e-05	0:00:00 96
5	3.2580e-01	4.7844e-05	2.7073e-05	0:00:00 95
6	2.4181e-01	3.5529e-05	2.1276e-05	0:00:00 94
7	1.7928e-01	2.7731e-05	1.7995e-05	0:00:00 93
8	1.2893e-01	2.3164e-05	1.5318e-05	0:00:00 92
9	9.5073e-02	2.0095e-05	1.3541e-05	0:00:00 91
10	6.8928e-02	1.8305e-05	1.2481e-05	0:00:00 90
11	5.3900e-02	1.6326e-05	1.1388e-05	0:00:00 89

iter	continuity	x-velocity	y-velocity	time/iter
12	4.0514e-02	1.4942e-05	1.0657e-05	0:00:00 88
13	3.2130e-02	1.3783e-05	1.0007e-05	0:00:00 87
14	2.5762e-02	1.2777e-05	9.4334e-06	0:00:00 86
15	2.0849e-02	1.2156e-05	9.0536e-06	0:00:00 85
16	1.7016e-02	1.1358e-05	8.5664e-06	0:00:00 84
17	1.3666e-02	1.0845e-05	8.2942e-06	0:00:00 83
18	1.1634e-02	1.0358e-05	8.0143e-06	0:00:16 82
19	1.0168e-02	9.9040e-06	7.7508e-06	0:00:13 81
20	8.8471e-03	9.5151e-06	7.5239e-06	0:00:10 80
21	7.8937e-03	9.2054e-06	7.3458e-06	0:00:08 79
22	7.3563e-03	8.8462e-06	7.1174e-06	0:00:06 78

iter	continuity	x-velocity	y-velocity	time/iter
23	6.7425e-03	8.5779e-06	6.9536e-06	0:00:05 77
24	6.2156e-03	8.3104e-06	6.7895e-06	0:00:04 76
25	5.8018e-03	8.0611e-06	6.6366e-06	0:00:03 75
26	5.5411e-03	7.8293e-06	6.4967e-06	0:00:02 74

27	5.3303e-03	7.6117e-06	6.3677e-06	0:00:02	73
28	5.1177e-03	7.4030e-06	6.2431e-06	0:00:02	72
29	4.8563e-03	7.2074e-06	6.1246e-06	0:00:01	71
30	4.6948e-03	7.0288e-06	6.0202e-06	0:00:01	70
31	4.5962e-03	6.8505e-06	5.9131e-06	0:00:01	69
32	4.5056e-03	6.6824e-06	5.8115e-06	0:00:01	68
33	4.3670e-03	6.5198e-06	5.7129e-06	0:00:00	67

iter	continuity	x-velocity	y-velocity	time/iter	
34	4.2290e-03	6.3661e-06	5.6196e-06	0:00:00	66
35	4.1178e-03	6.2151e-06	5.5257e-06	0:00:00	65
36	4.0594e-03	6.0721e-06	5.4372e-06	0:00:00	64
37	3.9936e-03	5.9314e-06	5.3474e-06	0:00:00	63
38	3.9712e-03	5.7823e-06	5.2447e-06	0:00:00	62
39	3.8343e-03	5.6726e-06	5.1837e-06	0:00:00	61
40	3.7640e-03	5.5446e-06	5.0981e-06	0:00:12	60
41	3.7285e-03	5.4141e-06	5.0081e-06	0:00:10	59
42	3.6964e-03	5.2953e-06	4.9254e-06	0:00:07	58
43	3.6683e-03	5.1718e-06	4.8389e-06	0:00:06	57
44	3.5916e-03	5.0604e-06	4.7608e-06	0:00:05	56

iter	continuity	x-velocity	y-velocity	time/iter	
45	3.5156e-03	4.9462e-06	4.6776e-06	0:00:04	55
46	3.4668e-03	4.8344e-06	4.5946e-06	0:00:03	54
47	3.4333e-03	4.7241e-06	4.5105e-06	0:00:02	53
48	3.3764e-03	4.6173e-06	4.4293e-06	0:00:02	52
49	3.3363e-03	4.5126e-06	4.3472e-06	0:00:01	51
50	3.2590e-03	4.4060e-06	4.2640e-06	0:00:01	50
51	3.1890e-03	4.3025e-06	4.1807e-06	0:00:01	49
52	3.1302e-03	4.1951e-06	4.0916e-06	0:00:01	48
53	3.1029e-03	4.0979e-06	4.0101e-06	0:00:01	47
54	3.0673e-03	3.9974e-06	3.9247e-06	0:00:00	46
55	3.0311e-03	3.9020e-06	3.8430e-06	0:00:00	45

iter	continuity	x-velocity	y-velocity	time/iter	
56	3.0044e-03	3.7912e-06	3.7448e-06	0:00:00	44
57	2.9451e-03	3.7173e-06	3.6813e-06	0:00:00	43
58	2.8849e-03	3.6211e-06	3.5931e-06	0:00:00	42
59	2.8445e-03	3.5187e-06	3.5017e-06	0:00:00	41
60	2.8068e-03	3.4272e-06	3.4161e-06	0:00:00	40
61	2.7524e-03	3.3356e-06	3.3302e-06	0:00:08	39
62	2.7209e-03	3.2476e-06	3.2460e-06	0:00:06	38
63	2.6821e-03	3.1573e-06	3.1613e-06	0:00:05	37
64	2.6628e-03	3.0637e-06	3.0697e-06	0:00:04	36

65	2.5920e-03	2.9850e-06	2.9937e-06	0:00:03	35
66	2.5352e-03	2.8917e-06	2.8996e-06	0:00:02	34

iter	continuity	x-velocity	y-velocity	time/iter	
67	2.4588e-03	2.8243e-06	2.8310e-06	0:00:02	33
68	2.3793e-03	2.7402e-06	2.7432e-06	0:00:01	32
69	2.3354e-03	2.6380e-06	2.6415e-06	0:00:01	31
70	2.3279e-03	2.5789e-06	2.5781e-06	0:00:01	30
71	2.2531e-03	2.4975e-06	2.4937e-06	0:00:01	29
72	2.1860e-03	2.4111e-06	2.4055e-06	0:00:00	28
73	2.1306e-03	2.3350e-06	2.3238e-06	0:00:00	27
74	2.0988e-03	2.2517e-06	2.2365e-06	0:00:00	26
75	2.0579e-03	2.1881e-06	2.1695e-06	0:00:00	25
76	2.0358e-03	2.1069e-06	2.0834e-06	0:00:00	24
77	1.9921e-03	2.0312e-06	2.0046e-06	0:00:00	23

iter	continuity	x-velocity	y-velocity	time/iter	
78	1.9041e-03	1.9620e-06	1.9281e-06	0:00:00	22
79	1.8169e-03	1.8947e-06	1.8539e-06	0:00:00	21
80	1.7474e-03	1.8260e-06	1.7793e-06	0:00:00	20
81	1.6823e-03	1.7645e-06	1.7129e-06	0:00:00	19
82	1.6348e-03	1.6903e-06	1.6332e-06	0:00:04	18
83	1.5799e-03	1.6211e-06	1.5609e-06	0:00:03	17
84	1.5326e-03	1.5578e-06	1.4933e-06	0:00:02	16
85	1.4868e-03	1.4976e-06	1.4294e-06	0:00:02	15
86	1.4305e-03	1.4359e-06	1.3645e-06	0:00:01	14
87	1.3745e-03	1.3754e-06	1.3005e-06	0:00:01	13
88	1.3197e-03	1.3160e-06	1.2381e-06	0:00:01	12

iter	continuity	x-velocity	y-velocity	time/iter	
89	1.2524e-03	1.2586e-06	1.1781e-06	0:00:00	11
90	1.2045e-03	1.2034e-06	1.1207e-06	0:00:00	10
91	1.1708e-03	1.1482e-06	1.0637e-06	0:00:00	9
92	1.1249e-03	1.0954e-06	1.0097e-06	0:00:00	8
93	1.0699e-03	1.0431e-06	9.5635e-07	0:00:00	7
94	1.0266e-03	9.9604e-07	9.0774e-07	0:00:00	6
95	9.7541e-04	9.4698e-07	8.5787e-07	0:00:00	5

! 95 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 1

49 more time steps

Truncation Error (computed)=0.023083 > Truncation error tolerance

Repeating the time step: time step size = 0.250000

in update prediction domain id = 1

physical-dt 2.5000e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
95	9.7541e-04	9.4698e-07	8.5787e-07	0:00:01 100
96	8.7592e-01	2.8093e-04	2.2129e-04	0:00:01 99
97	7.3705e-01	1.3429e-04	8.9650e-05	0:00:01 98
98	4.7826e-01	7.8098e-05	4.6370e-05	0:00:01 97
99	3.1620e-01	5.0898e-05	2.9262e-05	0:00:00 96
100	2.3779e-01	3.5125e-05	2.0255e-05	0:00:00 95
101	1.7637e-01	2.6001e-05	1.5286e-05	0:00:00 94
102	1.3178e-01	1.9082e-05	1.2538e-05	0:00:00 93
103	9.4714e-02	1.5512e-05	1.0359e-05	0:00:00 92
104	6.9420e-02	1.3334e-05	9.2393e-06	0:00:00 91
105	5.2004e-02	1.1495e-05	8.0398e-06	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
106	3.8501e-02	1.0431e-05	7.3637e-06	0:00:00 89
107	3.0248e-02	9.2038e-06	6.5460e-06	0:00:00 88
108	2.2830e-02	8.5076e-06	6.1445e-06	0:00:00 87
109	1.8678e-02	7.6760e-06	5.6136e-06	0:00:00 86
110	1.4813e-02	7.0298e-06	5.2093e-06	0:00:17 85
111	1.1933e-02	6.4380e-06	4.8298e-06	0:00:13 84
112	9.7305e-03	5.9462e-06	4.5071e-06	0:00:11 83
113	8.0836e-03	5.5285e-06	4.2311e-06	0:00:08 82
114	6.8681e-03	5.1685e-06	3.9884e-06	0:00:07 81
115	5.9546e-03	4.8487e-06	3.7713e-06	0:00:05 80
116	5.0724e-03	4.5821e-06	3.5906e-06	0:00:04 79

iter	continuity	x-velocity	y-velocity	time/iter	
117	4.4982e-03	4.2985e-06	3.3853e-06	0:00:03	78
118	3.9401e-03	4.0628e-06	3.2223e-06	0:00:03	77
119	3.5761e-03	3.8341e-06	3.0575e-06	0:00:02	76
120	3.2748e-03	3.6194e-06	2.9017e-06	0:00:02	75
121	3.0474e-03	3.4241e-06	2.7623e-06	0:00:01	74
122	2.8166e-03	3.2434e-06	2.6335e-06	0:00:01	73
123	2.5844e-03	3.0743e-06	2.5129e-06	0:00:01	72
124	2.3777e-03	2.9136e-06	2.3964e-06	0:00:01	71
125	2.2279e-03	2.7636e-06	2.2877e-06	0:00:00	70
126	2.0982e-03	2.6193e-06	2.1814e-06	0:00:00	69
127	1.9828e-03	2.4869e-06	2.0849e-06	0:00:00	68

iter	continuity	x-velocity	y-velocity	time/iter	
128	1.8847e-03	2.3603e-06	1.9914e-06	0:00:00	67
129	1.8002e-03	2.2416e-06	1.9035e-06	0:00:13	66
130	1.7105e-03	2.1310e-06	1.8198e-06	0:00:11	65
131	1.6278e-03	2.0222e-06	1.7382e-06	0:00:08	64
132	1.5358e-03	1.9201e-06	1.6606e-06	0:00:07	63
133	1.4629e-03	1.8232e-06	1.5863e-06	0:00:05	62
134	1.3895e-03	1.7311e-06	1.5148e-06	0:00:04	61
135	1.3394e-03	1.6400e-06	1.4438e-06	0:00:03	60
136	1.2646e-03	1.5614e-06	1.3835e-06	0:00:03	59
137	1.2378e-03	1.4794e-06	1.3182e-06	0:00:02	58
138	1.1735e-03	1.4064e-06	1.2604e-06	0:00:02	57

iter	continuity	x-velocity	y-velocity	time/iter	
139	1.1318e-03	1.3314e-06	1.1996e-06	0:00:01	56
140	1.0636e-03	1.2640e-06	1.1459e-06	0:00:01	55
141	1.0124e-03	1.1995e-06	1.0927e-06	0:00:01	54
142	9.7060e-04	1.1363e-06	1.0404e-06	0:00:01	53

! 142 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.25s, time step = 1

48 more time steps

Truncation Error (computed)=0.016671 > Truncation error tolerance
Repeating the time step: time step size = 0.125000

in update prediction domain id = 1
physical-dt 1.2500e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
142	9.7060e-04	1.1363e-06	1.0404e-06	0:00:01	100
143	7.5333e-01	2.4407e-04	1.9235e-04	0:00:01	99
144	6.1288e-01	1.1715e-04	8.0557e-05	0:00:01	98
145	4.1060e-01	6.6249e-05	4.0881e-05	0:00:01	97
146	2.7588e-01	4.1575e-05	2.4613e-05	0:00:00	96
147	2.0044e-01	2.8119e-05	1.6193e-05	0:00:00	95
148	1.4847e-01	2.0085e-05	1.1393e-05	0:00:00	94
149	1.1004e-01	1.4765e-05	8.5092e-06	0:00:00	93
150	8.1180e-02	1.1329e-05	6.7799e-06	0:00:19	92
151	5.9510e-02	9.0354e-06	5.6377e-06	0:00:15	91
152	4.3382e-02	7.5819e-06	5.0402e-06	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
153	3.1900e-02	6.4498e-06	4.3334e-06	0:00:09	89
154	2.4276e-02	5.4197e-06	3.6268e-06	0:00:07	88
155	1.7917e-02	4.8051e-06	3.2344e-06	0:00:06	87
156	1.4187e-02	4.1487e-06	2.8195e-06	0:00:05	86
157	1.1067e-02	3.6125e-06	2.4728e-06	0:00:04	85
158	8.5218e-03	3.2020e-06	2.2249e-06	0:00:03	84
159	6.8350e-03	2.8224e-06	1.9874e-06	0:00:02	83
160	5.5484e-03	2.5019e-06	1.7753e-06	0:00:02	82
161	4.5843e-03	2.2326e-06	1.5946e-06	0:00:01	81
162	3.8583e-03	2.0038e-06	1.4396e-06	0:00:01	80
163	3.2736e-03	1.8021e-06	1.3027e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
164	2.8174e-03	1.6243e-06	1.1805e-06	0:00:01	78
165	2.4333e-03	1.4671e-06	1.0716e-06	0:00:01	77
166	2.0734e-03	1.3269e-06	9.7356e-07	0:00:00	76
167	1.7810e-03	1.1999e-06	8.8476e-07	0:00:00	75
168	1.5200e-03	1.0913e-06	8.1130e-07	0:00:00	74

```

169 1.3614e-03 9.8559e-07 7.3448e-07 0:00:00 73
170 1.2083e-03 8.9195e-07 6.6827e-07 0:00:15 72
171 1.0762e-03 8.0993e-07 6.1026e-07 0:00:11 71
172 9.5440e-04 7.3571e-07 5.5796e-07 0:00:09 70
! 172 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.125s, time step = 1
47 more time steps
Truncation Error (computed)=0.012790 > Truncation error tolerance
Repeating the time step: time step size = 0.062500

in update prediction domain id = 1
physical-dt 6.2500e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter continuity x-velocity y-velocity time/iter
172 9.5440e-04 7.3571e-07 5.5796e-07 0:00:13 100
173 6.1158e-01 1.9072e-04 1.5046e-04 0:00:10 99
174 4.7801e-01 9.6809e-05 6.8116e-05 0:00:08 98
175 3.2877e-01 5.4817e-05 3.4874e-05 0:00:06 97
176 2.2827e-01 3.3590e-05 2.0409e-05 0:00:05 96
177 1.6283e-01 2.2009e-05 1.2723e-05 0:00:04 95
178 1.1975e-01 1.4805e-05 8.1961e-06 0:00:03 94
179 8.8755e-02 1.0170e-05 5.4924e-06 0:00:03 93
180 6.5571e-02 7.4080e-06 3.9396e-06 0:00:02 92
181 4.7110e-02 5.7651e-06 3.0277e-06 0:00:02 91
182 3.4983e-02 4.2730e-06 2.2802e-06 0:00:01 90

iter continuity x-velocity y-velocity time/iter
183 2.6163e-02 3.2732e-06 1.7836e-06 0:00:01 89

```

184	1.9112e-02	2.6089e-06	1.4588e-06	0:00:01	88
185	1.4481e-02	2.0282e-06	1.1499e-06	0:00:18	87
186	1.0755e-02	1.6364e-06	9.5470e-07	0:00:14	86
187	8.1905e-03	1.2953e-06	7.6462e-07	0:00:11	85
188	6.0712e-03	1.0684e-06	6.4244e-07	0:00:09	84
189	4.5709e-03	8.7505e-07	5.3079e-07	0:00:07	83
190	3.4768e-03	7.1955e-07	4.3863e-07	0:00:06	82
191	2.6753e-03	5.9439e-07	3.6397e-07	0:00:04	81
192	2.0939e-03	4.9359e-07	3.0377e-07	0:00:03	80
193	1.6552e-03	4.1191e-07	2.5461e-07	0:00:03	79

iter	continuity	x-velocity	y-velocity	time/iter	
194	1.3078e-03	3.4478e-07	2.1394e-07	0:00:02	78
195	1.0460e-03	2.8972e-07	1.8044e-07	0:00:02	77
196	8.4579e-04	2.4407e-07	1.5247e-07	0:00:01	76

! 196 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0625s, time step = 1

46 more time steps

Truncation Error (computed)=0.009750 > Truncation error tolerance

Repeating the time step: time step size = 0.031250

in update prediction domain id = 1

physical-dt 3.1250e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
196	8.4579e-04	2.4407e-07	1.5247e-07	0:00:02	100
197	4.7195e-01	1.3221e-04	1.0442e-04	0:00:01	99
198	3.5745e-01	7.3980e-05	5.2648e-05	0:00:01	98

199	2.4857e-01	4.4402e-05	2.8611e-05	0:00:20	97
200	1.7857e-01	2.8142e-05	1.6996e-05	0:00:16	96
201	1.3168e-01	1.9080e-05	1.0552e-05	0:00:13	95
202	9.5975e-02	1.3071e-05	6.4843e-06	0:00:10	94
203	6.9509e-02	8.8712e-06	4.0045e-06	0:00:08	93
204	4.9919e-02	5.9729e-06	2.5090e-06	0:00:06	92
205	3.6529e-02	4.0004e-06	1.5955e-06	0:00:05	91
206	2.6553e-02	2.4851e-06	1.0176e-06	0:00:04	90

iter	continuity	x-velocity	y-velocity	time/iter	
207	1.8989e-02	1.9332e-06	7.1656e-07	0:00:03	89
208	1.4481e-02	1.0925e-06	4.4869e-07	0:00:02	88
209	1.0463e-02	9.5126e-07	3.5854e-07	0:00:02	87
210	7.7062e-03	6.4868e-07	2.5266e-07	0:00:02	86
211	5.5510e-03	5.2454e-07	1.9006e-07	0:00:01	85
212	4.2503e-03	3.0924e-07	1.2615e-07	0:00:01	84
213	3.0990e-03	2.7797e-07	1.0408e-07	0:00:01	83
214	2.3031e-03	1.9459e-07	7.5288e-08	0:00:01	82
215	1.6806e-03	1.4729e-07	5.7134e-08	0:00:00	81
216	1.2756e-03	1.0754e-07	4.1959e-08	0:00:00	80
217	9.4044e-04	7.3690e-08	3.1277e-08	0:00:00	79

! 217 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.03125s, time step = 1

45 more time steps

Truncation Error (computed)=0.007089 > Truncation error tolerance

Repeating the time step: time step size = 0.015625

in update prediction domain id = 1

physical-dt 1.5625e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
217	9.4044e-04	7.3690e-08	3.1277e-08	0:00:00 100
218	3.5816e-01	8.1850e-05	6.4696e-05	0:00:00 99
219	2.6600e-01	5.3906e-05	3.7631e-05	0:00:00 98
220	1.8617e-01	3.5738e-05	2.2226e-05	0:00:00 97
221	1.3289e-01	2.6321e-05	1.4315e-05	0:00:00 96
222	9.7477e-02	1.9671e-05	9.2359e-06	0:00:00 95
223	7.2637e-02	1.4283e-05	5.8020e-06	0:00:00 94
224	5.4006e-02	9.9951e-06	3.5888e-06	0:00:00 93
225	3.9935e-02	6.9610e-06	2.2243e-06	0:00:00 92
226	2.9361e-02	4.7967e-06	1.3942e-06	0:00:00 91
227	2.1508e-02	3.2799e-06	8.7791e-07	0:00:00 90

iter	continuity	x-velocity	y-velocity	time/iter
228	1.5699e-02	2.2381e-06	5.6506e-07	0:00:00 89
229	1.1429e-02	1.5394e-06	3.7306e-07	0:00:00 88
230	8.3109e-03	1.0621e-06	2.5027e-07	0:00:17 87
231	6.0382e-03	7.3286e-07	1.7091e-07	0:00:14 86
232	4.3898e-03	5.0914e-07	1.1891e-07	0:00:11 85
233	3.1977e-03	3.5310e-07	8.3747e-08	0:00:09 84
234	2.3324e-03	2.4848e-07	5.9868e-08	0:00:07 83
235	1.7093e-03	1.5648e-07	4.2544e-08	0:00:05 82
236	1.2451e-03	1.0853e-07	3.1312e-08	0:00:04 81
237	9.2237e-04	8.1676e-08	2.2759e-08	0:00:03 80

! 237 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.015625s, time step = 1

44 more time steps

Updating solution at time level N...

done.

physical-dt 7.8125e-03

iter	continuity	x-velocity	y-velocity	time/iter	
237	9.2237e-04	8.1676e-08	2.2759e-08	0:00:04	100
238	6.7164e-02	4.9045e-05	1.9359e-05	0:00:03	99
239	5.5392e-02	2.7428e-05	9.9106e-06	0:00:03	98
240	4.3260e-02	1.6720e-05	5.4277e-06	0:00:02	97
241	3.2702e-02	1.0604e-05	3.1375e-06	0:00:02	96
242	2.4386e-02	7.1336e-06	1.9445e-06	0:00:01	95
243	1.7987e-02	4.7572e-06	1.2388e-06	0:00:01	94
244	1.3541e-02	3.3084e-06	8.2973e-07	0:00:01	93
245	9.9982e-03	2.3310e-06	5.6852e-07	0:00:01	92
246	7.4031e-03	1.5841e-06	3.9296e-07	0:00:19	91
247	5.4762e-03	1.1165e-06	2.7733e-07	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
248	4.0670e-03	7.9751e-07	1.9150e-07	0:00:12	89
249	3.0013e-03	5.6026e-07	1.3776e-07	0:00:09	88
250	2.2309e-03	4.0117e-07	1.0002e-07	0:00:07	87
251	1.6628e-03	2.9178e-07	7.3250e-08	0:00:06	86
252	1.2414e-03	2.0991e-07	5.3194e-08	0:00:05	85
253	9.3784e-04	1.5796e-07	3.8964e-08	0:00:04	84

! 253 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0234375s, time step = 2

43 more time steps

Truncation Error (computed)=0.001675 > Truncation error tolerance

Repeating the time step: time step size = 0.003906

in update prediction domain id = 1
physical-dt 3.9063e-03

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
253	9.3784e-04	1.5796e-07	3.8964e-08	0:00:04	100
254	4.4766e-02	2.6314e-05	1.1040e-05	0:00:03	99
255	3.3350e-02	1.4019e-05	5.2664e-06	0:00:22	98
256	2.1648e-02	9.0432e-06	2.8483e-06	0:00:18	97
257	1.7041e-02	5.7471e-06	1.6288e-06	0:00:14	96
258	1.2869e-02	4.0793e-06	1.0866e-06	0:00:11	95
259	9.5477e-03	2.7061e-06	6.9607e-07	0:00:09	94
260	7.0466e-03	2.0037e-06	5.0619e-07	0:00:07	93
261	5.2014e-03	1.4180e-06	3.5473e-07	0:00:05	92
262	3.8308e-03	9.4609e-07	2.4458e-07	0:00:04	91
263	2.8317e-03	6.7695e-07	1.7642e-07	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
264	2.1413e-03	5.0258e-07	1.2864e-07	0:00:03	89
265	1.5971e-03	3.6741e-07	9.3587e-08	0:00:02	88
266	1.2029e-03	2.6318e-07	6.8924e-08	0:00:02	87
267	8.9759e-04	1.7923e-07	5.0278e-08	0:00:01	86

! 267 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.01953125s, time step = 2

42 more time steps

Updating solution at time level N...

done.

physical-dt 3.9752e-03

iter	continuity	x-velocity	y-velocity	time/iter	
267	8.9759e-04	1.7923e-07	5.0278e-08	0:00:02	100
268	2.8271e-03	5.0397e-06	3.9645e-06	0:00:01	99
269	4.9660e-03	2.1528e-06	1.6642e-06	0:00:01	98
270	4.0837e-03	9.4993e-07	7.1975e-07	0:00:01	97
271	3.0948e-03	4.9867e-07	3.4452e-07	0:00:01	96
272	2.2559e-03	2.7968e-07	1.7641e-07	0:00:00	95

```

273 1.6361e-03 1.7577e-07 9.9571e-08 0:00:00 94
274 1.1861e-03 1.1434e-07 5.9754e-08 0:00:19 93
275 8.6600e-04 7.9061e-08 3.8495e-08 0:00:15 92
! 275 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.02350645512342453s, time step = 3
41 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 6.7762e-03

```

	iter	continuity	x-velocity	y-velocity	time/iter	
	275	8.6600e-04	7.9061e-08	3.8495e-08	0:00:16	100
	276	6.2147e-03	1.6477e-06	1.1324e-06	0:00:13	99
	277	9.9509e-03	1.0230e-06	7.6761e-07	0:00:10	98
	278	7.0734e-03	6.7386e-07	5.3158e-07	0:00:08	97
	279	4.9456e-03	4.9043e-07	3.9504e-07	0:00:06	96
	280	3.4388e-03	3.3540e-07	2.6554e-07	0:00:05	95
	281	2.4359e-03	2.3309e-07	1.7849e-07	0:00:04	94
	282	1.7356e-03	1.5253e-07	1.1345e-07	0:00:03	93
	283	1.2663e-03	1.0930e-07	7.5444e-08	0:00:03	92
	284	9.2402e-04	7.4645e-08	4.8704e-08	0:00:02	91

```

! 284 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.03028262406587601s, time step = 4

```

40 more time steps

Updating solution at time level N...

done.

physical-dt 1.0625e-02

iter	continuity	x-velocity	y-velocity	time/iter	
284	9.2402e-04	7.4645e-08	4.8704e-08	0:00:02	100
285	8.7961e-03	2.5231e-06	1.8110e-06	0:00:02	99
286	1.5791e-02	1.5926e-06	1.2007e-06	0:00:01	98
287	1.1023e-02	1.0349e-06	8.1157e-07	0:00:20	97
288	7.5584e-03	7.0904e-07	5.6149e-07	0:00:16	96
289	5.1790e-03	4.6608e-07	3.6575e-07	0:00:13	95
290	3.5985e-03	3.0612e-07	2.3168e-07	0:00:10	94
291	2.5728e-03	1.7873e-07	1.3335e-07	0:00:08	93
292	1.8176e-03	1.2940e-07	9.0997e-08	0:00:06	92
293	1.3183e-03	7.7544e-08	5.3019e-08	0:00:05	91
294	9.5746e-04	5.1676e-08	3.3489e-08	0:00:04	90

! 294 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.04090774804353714s, time step = 5

39 more time steps

Updating solution at time level N...

done.

physical-dt 1.3760e-02

iter	continuity	x-velocity	y-velocity	time/iter	
294	9.5746e-04	5.1676e-08	3.3489e-08	0:00:04	100
295	8.9156e-03	2.7211e-06	1.9812e-06	0:00:04	99
296	1.4536e-02	1.6266e-06	1.2287e-06	0:00:03	98
297	1.0017e-02	1.0484e-06	8.1976e-07	0:00:02	97
298	6.6666e-03	7.0577e-07	5.5365e-07	0:00:21	96
299	4.4498e-03	4.5989e-07	3.5539e-07	0:00:17	95
300	3.0379e-03	2.9631e-07	2.2189e-07	0:00:13	94

```

301 2.1376e-03 1.9104e-07 1.3547e-07 0:00:10 93
302 1.5382e-03 1.0778e-07 7.5038e-08 0:00:08 92
303 1.1038e-03 7.6014e-08 4.9086e-08 0:00:07 91
304 8.0931e-04 4.6150e-08 2.7690e-08 0:00:05 90
! 304 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.05466818809509277s, time step = 6
38 more time steps

Updating solution at time level N...
done.
physical-dt 1.8298e-02

iter continuity x-velocity y-velocity time/iter
304 8.0931e-04 4.6150e-08 2.7690e-08 0:00:06 100
305 9.9477e-03 2.9194e-06 2.2188e-06 0:00:05 99
306 1.3994e-02 1.7286e-06 1.3159e-06 0:00:04 98
307 9.1377e-03 1.1405e-06 8.8046e-07 0:00:03 97
308 5.9265e-03 7.2129e-07 5.5741e-07 0:00:02 96
309 3.7562e-03 4.9766e-07 3.7060e-07 0:00:02 95
310 2.5606e-03 3.0735e-07 2.2215e-07 0:00:01 94
311 1.8101e-03 1.9302e-07 1.3529e-07 0:00:01 93
312 1.3090e-03 1.1203e-07 7.6761e-08 0:00:01 92
313 9.4195e-04 7.6224e-08 4.7812e-08 0:00:01 91
! 313 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

```

Flow time = 0.07296665012836456s, time step = 7
37 more time steps

Updating solution at time level N...
done.
physical-dt 2.4759e-02

iter	continuity	x-velocity	y-velocity	time/iter	
313	9.4195e-04	7.6224e-08	4.7812e-08	0:00:01	100
314	1.1242e-02	3.2094e-06	2.5595e-06	0:00:01	99
315	1.5487e-02	1.8855e-06	1.4801e-06	0:00:00	98
316	9.9636e-03	1.2494e-06	9.7284e-07	0:00:00	97
317	6.1040e-03	8.4044e-07	6.3565e-07	0:00:00	96
318	3.9571e-03	5.3855e-07	4.0146e-07	0:00:00	95
319	2.7313e-03	3.5851e-07	2.5919e-07	0:00:00	94
320	1.9488e-03	2.3782e-07	1.6525e-07	0:00:00	93
321	1.4012e-03	1.4601e-07	1.0092e-07	0:00:00	92
322	9.9854e-04	1.0345e-07	6.7496e-08	0:00:00	91

! 322 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.09772524237632751s, time step = 8
36 more time steps

Updating solution at time level N...
done.
physical-dt 3.3374e-02

iter	continuity	x-velocity	y-velocity	time/iter	
322	9.9854e-04	1.0345e-07	6.7496e-08	0:00:00	100
323	1.2233e-02	3.5326e-06	2.9727e-06	0:00:00	99
324	1.5292e-02	2.1487e-06	1.7383e-06	0:00:00	98
325	9.3645e-03	1.4161e-06	1.1091e-06	0:00:00	97
326	5.5226e-03	9.6752e-07	7.3997e-07	0:00:00	96
327	3.5028e-03	6.7060e-07	4.9953e-07	0:00:00	95
328	2.5109e-03	4.5355e-07	3.3474e-07	0:00:00	94

```

329 1.8206e-03 3.1619e-07 2.3059e-07 0:00:00 93
330 1.3289e-03 2.2220e-07 1.6042e-07 0:00:00 92
331 9.7808e-04 1.5824e-07 1.1308e-07 0:00:18 91
! 331 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.1310995817184448s, time step = 9
35 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 4.4224e-02

```

	iter	continuity	x-velocity	y-velocity	time/iter	
	331	9.7808e-04	1.5824e-07	1.1308e-07	0:00:20	100
	332	1.3333e-02	3.8849e-06	3.4732e-06	0:00:16	99
	333	1.4312e-02	2.4367e-06	2.0827e-06	0:00:13	98
	334	8.4689e-03	1.6142e-06	1.3298e-06	0:00:10	97
	335	4.6838e-03	1.1484e-06	9.1776e-07	0:00:08	96
	336	3.0085e-03	8.3839e-07	6.5703e-07	0:00:06	95
	337	2.2169e-03	6.0860e-07	4.7526e-07	0:00:05	94
	338	1.6686e-03	4.5337e-07	3.5169e-07	0:00:04	93
	339	1.2664e-03	3.4024e-07	2.6349e-07	0:00:03	92
	340	9.7686e-04	2.5764e-07	1.9915e-07	0:00:02	91

```

! 340 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.1753233373165131s, time step = 10

```


34 more time steps

Updating solution at time level N...

done.

physical-dt 5.7090e-02

iter	continuity	x-velocity	y-velocity	time/iter	
340	9.7686e-04	2.5764e-07	1.9915e-07	0:00:03	100
341	1.4256e-02	4.3340e-06	4.0658e-06	0:00:02	99
342	1.4446e-02	2.7830e-06	2.5120e-06	0:00:02	98
343	8.3419e-03	1.8792e-06	1.6281e-06	0:00:01	97
344	4.5706e-03	1.3799e-06	1.1714e-06	0:00:01	96
345	3.0785e-03	1.0559e-06	8.8297e-07	0:00:01	95
346	2.2900e-03	8.1772e-07	6.7782e-07	0:00:01	94
347	1.7882e-03	6.3720e-07	5.2951e-07	0:00:01	93
348	1.3793e-03	5.1005e-07	4.2412e-07	0:00:00	92
349	1.0919e-03	4.0844e-07	3.3966e-07	0:00:00	91
350	8.8049e-04	3.2947e-07	2.7424e-07	0:00:00	90

! 350 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.2324137389659882s, time step = 11

33 more time steps

Updating solution at time level N...

done.

physical-dt 7.0653e-02

iter	continuity	x-velocity	y-velocity	time/iter	
350	8.8049e-04	3.2947e-07	2.7424e-07	0:00:00	100
351	1.5038e-02	4.7987e-06	4.7401e-06	0:00:00	99
352	1.4462e-02	3.1731e-06	2.9824e-06	0:00:00	98
353	8.1699e-03	2.1343e-06	1.9420e-06	0:00:00	97
354	4.4882e-03	1.5795e-06	1.4190e-06	0:00:00	96
355	3.0347e-03	1.2455e-06	1.1081e-06	0:00:00	95
356	2.3237e-03	1.0095e-06	8.9243e-07	0:00:00	94

357	1.8518e-03	8.2686e-07	7.3268e-07	0:00:00	93
358	1.5116e-03	6.8634e-07	6.0868e-07	0:00:18	92
359	1.2512e-03	5.7435e-07	5.0915e-07	0:00:15	91
360	1.0434e-03	4.8207e-07	4.2676e-07	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
361	8.8506e-04	4.0555e-07	3.5872e-07	0:00:09	89

! 361 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.3030669987201691s, time step = 12

32 more time steps

Updating solution at time level N...

done.

physical-dt 8.4341e-02

iter	continuity	x-velocity	y-velocity	time/iter	
361	8.8506e-04	4.0555e-07	3.5872e-07	0:00:10	100
362	1.6128e-02	5.4586e-06	5.5800e-06	0:00:08	99
363	1.5075e-02	3.6720e-06	3.5383e-06	0:00:06	98
364	8.8222e-03	2.4354e-06	2.2948e-06	0:00:05	97
365	5.0579e-03	1.7873e-06	1.6908e-06	0:00:04	96
366	3.4711e-03	1.4364e-06	1.3605e-06	0:00:22	95
367	2.7051e-03	1.2004e-06	1.1328e-06	0:00:18	94
368	2.2082e-03	1.0215e-06	9.6044e-07	0:00:14	93
369	1.8438e-03	8.7467e-07	8.2112e-07	0:00:11	92
370	1.5667e-03	7.5089e-07	7.0466e-07	0:00:09	91
371	1.3530e-03	6.4622e-07	6.0601e-07	0:00:07	90

iter	continuity	x-velocity	y-velocity	time/iter	
372	1.1786e-03	5.5677e-07	5.2197e-07	0:00:05	89
373	1.0263e-03	4.7991e-07	4.4977e-07	0:00:04	88
374	8.9694e-04	4.1339e-07	3.8745e-07	0:00:03	87

! 374 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.3874076008796692s, time step = 13

31 more time steps

Updating solution at time level N...

done.

physical-dt 9.4828e-02

iter	continuity	x-velocity	y-velocity	time/iter	
374	8.9694e-04	4.1339e-07	3.8745e-07	0:00:04	100
375	1.7308e-02	6.1669e-06	6.4170e-06	0:00:03	99
376	1.7184e-02	4.2111e-06	4.0659e-06	0:00:02	98
377	1.0843e-02	2.7314e-06	2.6016e-06	0:00:02	97
378	6.6097e-03	1.9770e-06	1.9318e-06	0:00:02	96
379	4.4506e-03	1.5901e-06	1.5705e-06	0:00:01	95
380	3.3592e-03	1.3425e-06	1.3263e-06	0:00:01	94
381	2.6964e-03	1.1597e-06	1.1404e-06	0:00:01	93
382	2.2083e-03	1.0080e-06	9.8626e-07	0:00:01	92
383	1.8470e-03	8.7781e-07	8.5800e-07	0:00:00	91
384	1.5778e-03	7.6312e-07	7.4555e-07	0:00:18	90

iter	continuity	x-velocity	y-velocity	time/iter	
385	1.3748e-03	6.6402e-07	6.4915e-07	0:00:15	89
386	1.2041e-03	5.7841e-07	5.6637e-07	0:00:12	88
387	1.0623e-03	5.0336e-07	4.9423e-07	0:00:09	87
388	9.4068e-04	4.3876e-07	4.3114e-07	0:00:07	86

! 388 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.4822359681129456s, time step = 14
30 more time steps

Updating solution at time level N...

done.

physical-dt 1.0269e-01

iter	continuity	x-velocity	y-velocity	time/iter	
388	9.4068e-04	4.3876e-07	4.3114e-07	0:00:08	100
389	1.9344e-02	7.1077e-06	7.4131e-06	0:00:07	99
390	2.0251e-02	4.9630e-06	4.6836e-06	0:00:05	98
391	1.3540e-02	3.2069e-06	2.9771e-06	0:00:24	97
392	8.6020e-03	2.2906e-06	2.2162e-06	0:00:19	96
393	5.7312e-03	1.8353e-06	1.8238e-06	0:00:15	95
394	4.2754e-03	1.5532e-06	1.5487e-06	0:00:12	94
395	3.3965e-03	1.3436e-06	1.3327e-06	0:00:09	93
396	2.7831e-03	1.1692e-06	1.1577e-06	0:00:07	92
397	2.3175e-03	1.0216e-06	1.0117e-06	0:00:06	91
398	1.9609e-03	8.9418e-07	8.8684e-07	0:00:05	90

iter	continuity	x-velocity	y-velocity	time/iter	
399	1.6853e-03	7.8382e-07	7.7863e-07	0:00:04	89
400	1.4696e-03	6.8717e-07	6.8392e-07	0:00:03	88
401	1.3020e-03	6.0235e-07	6.0068e-07	0:00:02	87
402	1.1567e-03	5.2765e-07	5.2774e-07	0:00:02	86
403	1.0334e-03	4.6142e-07	4.6261e-07	0:00:01	85
404	9.3088e-04	4.0395e-07	4.0604e-07	0:00:01	84

! 404 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa

()

Flow time = 0.5849243402481079s, time step = 15
29 more time steps

Updating solution at time level N...

done.

physical-dt 1.0451e-01

iter	continuity	x-velocity	y-velocity	time/iter	
404	9.3088e-04	4.0395e-07	4.0604e-07	0:00:01	100
405	2.1926e-02	7.9209e-06	8.2419e-06	0:00:21	99
406	2.4038e-02	5.7085e-06	5.1989e-06	0:00:17	98
407	1.6393e-02	3.6696e-06	3.2445e-06	0:00:13	97
408	1.0452e-02	2.5626e-06	2.3668e-06	0:00:10	96
409	7.0008e-03	2.0341e-06	1.9553e-06	0:00:08	95
410	5.1762e-03	1.7293e-06	1.6705e-06	0:00:06	94
411	4.0311e-03	1.4853e-06	1.4268e-06	0:00:05	93
412	3.2547e-03	1.2820e-06	1.2291e-06	0:00:04	92
413	2.7044e-03	1.1153e-06	1.0696e-06	0:00:03	91
414	2.3067e-03	9.7354e-07	9.3645e-07	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
415	1.9960e-03	8.5085e-07	8.2106e-07	0:00:02	89
416	1.7601e-03	7.4340e-07	7.1952e-07	0:00:02	88
417	1.5803e-03	6.4933e-07	6.3128e-07	0:00:01	87
418	1.4289e-03	5.6691e-07	5.5363e-07	0:00:01	86
419	1.2872e-03	4.9464e-07	4.8467e-07	0:00:01	85
420	1.1596e-03	4.3160e-07	4.2449e-07	0:00:01	84
421	1.0510e-03	3.7663e-07	3.7153e-07	0:00:00	83
422	9.5188e-04	3.2802e-07	3.2493e-07	0:00:00	82

! 422 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6894310712814331s, time step = 16

28 more time steps

Truncation Error (computed)=0.001023 > Truncation error tolerance

Repeating the time step: time step size = 0.052253

in update prediction domain id = 1

physical-dt 5.2253e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
422	9.5188e-04	3.2802e-07	3.2493e-07	0:00:00 100
423	3.5694e-02	6.8101e-06	5.6721e-06	0:00:20 99
424	2.2126e-02	2.7045e-06	3.2798e-06	0:00:16 98
425	9.9739e-03	1.2218e-06	1.6182e-06	0:00:13 97
426	7.8136e-03	7.8872e-07	9.0852e-07	0:00:10 96
427	5.7614e-03	5.5222e-07	5.6729e-07	0:00:08 95
428	4.1842e-03	3.9967e-07	3.8907e-07	0:00:06 94
429	2.9794e-03	3.1553e-07	2.9267e-07	0:00:05 93
430	2.1603e-03	2.3820e-07	2.1626e-07	0:00:04 92
431	1.5531e-03	1.9085e-07	1.6867e-07	0:00:03 91
432	1.1588e-03	1.4734e-07	1.2783e-07	0:00:02 90

iter	continuity	x-velocity	y-velocity	time/iter
433	8.6840e-04	1.1947e-07	1.0098e-07	0:00:02 89

! 433 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6371776908636093s, time step = 16

27 more time steps

Updating solution at time level N...

done.

physical-dt 9.4568e-02

iter	continuity	x-velocity	y-velocity	time/iter
433	8.6840e-04	1.1947e-07	1.0098e-07	0:00:02 100
434	1.8915e-02	1.7229e-05	1.5607e-05	0:00:02 99
435	1.9078e-02	1.1232e-05	1.0729e-05	0:00:01 98
436	1.4069e-02	7.8347e-06	7.8060e-06	0:00:01 97
437	1.0520e-02	5.9248e-06	6.0040e-06	0:00:01 96

438	8.6171e-03	4.7852e-06	4.7766e-06	0:00:01	95
439	7.4218e-03	3.9741e-06	3.9229e-06	0:00:01	94
440	6.3932e-03	3.3657e-06	3.2685e-06	0:00:00	93
441	5.6134e-03	2.8794e-06	2.7517e-06	0:00:19	92
442	4.8755e-03	2.4621e-06	2.3128e-06	0:00:15	91
443	4.3049e-03	2.1152e-06	1.9556e-06	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
444	3.7648e-03	1.8144e-06	1.6551e-06	0:00:09	89
445	3.2864e-03	1.5625e-06	1.4056e-06	0:00:07	88
446	2.8616e-03	1.3446e-06	1.1953e-06	0:00:06	87
447	2.5034e-03	1.1528e-06	1.0115e-06	0:00:05	86
448	2.1979e-03	1.0043e-06	8.7459e-07	0:00:04	85
449	1.9165e-03	8.6752e-07	7.4808e-07	0:00:03	84
450	1.6790e-03	7.5139e-07	6.4229e-07	0:00:02	83
451	1.4693e-03	6.5081e-07	5.5213e-07	0:00:02	82
452	1.2992e-03	5.6110e-07	4.7194e-07	0:00:01	81
453	1.1498e-03	4.9047e-07	4.1114e-07	0:00:01	80
454	1.0221e-03	4.2285e-07	3.5176e-07	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
455	9.1204e-04	3.6762e-07	3.0426e-07	0:00:01	78

! 455 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.7317456007003784s, time step = 17

26 more time steps

Truncation Error (computed)=0.002057 > Truncation error tolerance

Repeating the time step: time step size = 0.047284

in update prediction domain id = 1
physical-dt 4.7284e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
455	9.1204e-04	3.6762e-07	3.0426e-07	0:00:01	100
456	3.3336e-02	1.5788e-05	1.3767e-05	0:00:01	99
457	2.1022e-02	8.2236e-06	8.4736e-06	0:00:01	98
458	9.6248e-03	4.4124e-06	4.7629e-06	0:00:00	97
459	7.6473e-03	2.5937e-06	2.8031e-06	0:00:00	96
460	5.9736e-03	1.6439e-06	1.7308e-06	0:00:00	95
461	4.7583e-03	1.1561e-06	1.1991e-06	0:00:00	94
462	3.8016e-03	8.8580e-07	8.7167e-07	0:00:00	93
463	3.0218e-03	6.9289e-07	6.4521e-07	0:00:00	92
464	2.3927e-03	5.4206e-07	4.8252e-07	0:00:00	91
465	1.8944e-03	4.2283e-07	3.6324e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
466	1.5090e-03	3.2821e-07	2.7416e-07	0:00:00	89
467	1.1989e-03	2.5354e-07	2.0709e-07	0:00:00	88
468	9.6170e-04	1.9705e-07	1.5774e-07	0:00:00	87

! 468 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6844616681337357s, time step = 17

25 more time steps

Updating solution at time level N...

done.

physical-dt 4.7397e-02

iter	continuity	x-velocity	y-velocity	time/iter	
468	9.6170e-04	1.9705e-07	1.5774e-07	0:00:00	100
469	9.8248e-03	1.3343e-05	1.1974e-05	0:00:20	99
470	9.3143e-03	7.8197e-06	7.2870e-06	0:00:16	98
471	7.1071e-03	4.7212e-06	4.5400e-06	0:00:12	97
472	5.6119e-03	3.0299e-06	2.9399e-06	0:00:10	96

473	4.7366e-03	2.0464e-06	1.9746e-06	0:00:08	95
474	4.1110e-03	1.5260e-06	1.4362e-06	0:00:06	94
475	3.4836e-03	1.1890e-06	1.0665e-06	0:00:05	93
476	2.9321e-03	9.3192e-07	8.0177e-07	0:00:04	92
477	2.4454e-03	7.2869e-07	6.0744e-07	0:00:03	91
478	2.0251e-03	5.6930e-07	4.6197e-07	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
479	1.6700e-03	4.4119e-07	3.4999e-07	0:00:02	89
480	1.3743e-03	3.4567e-07	2.6872e-07	0:00:02	88
481	1.1278e-03	2.7271e-07	2.0777e-07	0:00:01	87
482	9.2479e-04	2.1499e-07	1.6111e-07	0:00:01	86

! 482 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.7318584322929382s, time step = 18

24 more time steps

Truncation Error (computed)=0.001023 > Truncation error tolerance

Repeating the time step: time step size = 0.023698

in update prediction domain id = 1
physical-dt 2.3698e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
482	9.2479e-04	2.1499e-07	1.6111e-07	0:00:01	100
483	1.4795e-02	1.0012e-05	8.9647e-06	0:00:01	99
484	9.9552e-03	4.7507e-06	4.7056e-06	0:00:01	98
485	4.3528e-03	2.1978e-06	2.2617e-06	0:00:01	97
486	3.7518e-03	1.0438e-06	1.0956e-06	0:00:20	96
487	2.9760e-03	5.1364e-07	5.5034e-07	0:00:16	95

```

488 2.3217e-03 3.5563e-07 3.3524e-07 0:00:12 94
489 1.7912e-03 2.7316e-07 2.2895e-07 0:00:10 93
490 1.3730e-03 2.0852e-07 1.6315e-07 0:00:08 92
491 1.0528e-03 1.5561e-07 1.1751e-07 0:00:06 91
492 8.1175e-04 1.1429e-07 8.3195e-08 0:00:05 90
! 492 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.7081600334495306s, time step = 18
23 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 3.3314e-02

```

iter	continuity	x-velocity	y-velocity	time/iter	
492	8.1175e-04	1.1429e-07	8.3195e-08	0:00:05	100
493	6.8995e-03	1.1238e-05	1.0080e-05	0:00:04	99
494	6.3804e-03	6.1529e-06	5.6615e-06	0:00:03	98
495	5.1043e-03	3.3940e-06	3.2080e-06	0:00:03	97
496	4.0703e-03	1.9612e-06	1.8604e-06	0:00:02	96
497	3.4115e-03	1.1880e-06	1.1165e-06	0:00:02	95
498	2.8878e-03	8.5941e-07	7.5434e-07	0:00:01	94
499	2.3977e-03	6.5421e-07	5.3443e-07	0:00:01	93
500	1.9692e-03	4.9600e-07	3.8559e-07	0:00:01	92
501	1.5968e-03	3.7133e-07	2.7910e-07	0:00:01	91
502	1.2909e-03	2.7185e-07	2.0019e-07	0:00:19	90

```

iter continuity x-velocity y-velocity time/iter
503 1.0375e-03 2.0143e-07 1.4520e-07 0:00:15 89
504 8.2805e-04 1.5114e-07 1.0586e-07 0:00:12 88
! 504 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.7414743900299072s, time step = 19
22 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 3.9332e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
504	8.2805e-04	1.5114e-07	1.0586e-07	0:00:13 100
505	7.9369e-03	2.3488e-06	2.4072e-06	0:00:10 99
506	9.1233e-03	1.7450e-06	1.4091e-06	0:00:08 98
507	6.6603e-03	1.1611e-06	8.1445e-07	0:00:07 97
508	4.7061e-03	7.6724e-07	5.1926e-07	0:00:05 96
509	3.3031e-03	5.1374e-07	3.5779e-07	0:00:04 95
510	2.4004e-03	3.5981e-07	2.5562e-07	0:00:03 94
511	1.8109e-03	2.5860e-07	1.8452e-07	0:00:21 93
512	1.3954e-03	1.8979e-07	1.3405e-07	0:00:17 92
513	1.0998e-03	1.3769e-07	9.5914e-08	0:00:13 91
514	8.5055e-04	1.0416e-07	7.1587e-08	0:00:10 90

```
! 514 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.7808064222335815s, time step = 20
21 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 9.8991e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

514	8.5055e-04	1.0416e-07	7.1587e-08	0:00:12	100
515	2.8981e-02	9.4803e-06	9.7298e-06	0:00:09	99
516	3.0982e-02	7.1219e-06	6.2054e-06	0:00:07	98
517	2.1449e-02	4.5232e-06	3.6503e-06	0:00:06	97
518	1.4142e-02	3.0515e-06	2.4863e-06	0:00:05	96
519	9.5996e-03	2.3391e-06	1.9828e-06	0:00:04	95
520	7.0423e-03	1.9240e-06	1.6436e-06	0:00:03	94
521	5.3885e-03	1.6034e-06	1.3637e-06	0:00:02	93
522	4.3072e-03	1.3280e-06	1.1289e-06	0:00:02	92
523	3.5696e-03	1.1395e-06	9.8200e-07	0:00:01	91
524	3.0163e-03	9.6559e-07	8.4167e-07	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
525	2.5913e-03	8.2160e-07	7.2260e-07	0:00:01	89
526	2.2544e-03	7.0054e-07	6.2077e-07	0:00:01	88
527	1.9771e-03	5.9750e-07	5.3369e-07	0:00:01	87
528	1.7499e-03	5.0561e-07	4.5228e-07	0:00:00	86
529	1.5532e-03	4.3704e-07	3.9318e-07	0:00:00	85
530	1.3642e-03	3.6728e-07	3.3108e-07	0:00:17	84
531	1.1988e-03	3.1456e-07	2.8512e-07	0:00:13	83
532	1.0616e-03	2.6507e-07	2.4116e-07	0:00:11	82
533	9.3702e-04	2.2498e-07	2.0490e-07	0:00:08	81

! 533 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.8797969818115234s, time step = 21

20 more time steps

Updating solution at time level N...

done.

physical-dt 1.0129e-01

iter	continuity	x-velocity	y-velocity	time/iter	
533	9.3702e-04	2.2498e-07	2.0490e-07	0:00:10	100
534	3.5806e-02	1.1187e-05	1.1320e-05	0:00:08	99
535	3.7941e-02	8.5264e-06	7.2611e-06	0:00:07	98

536	2.6641e-02	5.4582e-06	4.2886e-06	0:00:05	97
537	1.7386e-02	3.6941e-06	2.8568e-06	0:00:04	96
538	1.1902e-02	2.7691e-06	2.1988e-06	0:00:03	95
539	8.6243e-03	2.2104e-06	1.7710e-06	0:00:03	94
540	6.6103e-03	1.7929e-06	1.4358e-06	0:00:02	93
541	5.2193e-03	1.4882e-06	1.1962e-06	0:00:02	92
542	4.2628e-03	1.2458e-06	1.0104e-06	0:00:01	91
543	3.5778e-03	1.0474e-06	8.5747e-07	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
544	3.0478e-03	8.8066e-07	7.2846e-07	0:00:01	89
545	2.6153e-03	7.3928e-07	6.1733e-07	0:00:01	88
546	2.2282e-03	6.1974e-07	5.1956e-07	0:00:18	87
547	1.8823e-03	5.1897e-07	4.3849e-07	0:00:14	86
548	1.5965e-03	4.3419e-07	3.7006e-07	0:00:11	85
549	1.3701e-03	3.6322e-07	3.1270e-07	0:00:09	84
550	1.1855e-03	3.0419e-07	2.6469e-07	0:00:07	83
551	1.0359e-03	2.5464e-07	2.2452e-07	0:00:06	82
552	9.0819e-04	2.1427e-07	1.9164e-07	0:00:04	81

! 552 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.981083869934082s, time step = 22

19 more time steps

Truncation Error (computed)=0.001041 > Truncation error tolerance

Repeating the time step: time step size = 0.050643

in update prediction domain id = 1

physical-dt 5.0643e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
552	9.0819e-04	2.1427e-07	1.9164e-07	0:00:05 100
553	4.8144e-02	9.2594e-06	7.0931e-06	0:00:04 99
554	2.6126e-02	3.4989e-06	3.8086e-06	0:00:03 98
555	1.2896e-02	1.6510e-06	1.8916e-06	0:00:03 97
556	9.6386e-03	9.7784e-07	1.0202e-06	0:00:02 96
557	7.0301e-03	6.3543e-07	6.0363e-07	0:00:02 95
558	4.9878e-03	4.2972e-07	3.8794e-07	0:00:01 94
559	3.5357e-03	3.0476e-07	2.6630e-07	0:00:01 93
560	2.5082e-03	2.2401e-07	1.8901e-07	0:00:01 92
561	1.7980e-03	1.6944e-07	1.3826e-07	0:00:19 91
562	1.3099e-03	1.3087e-07	1.0259e-07	0:00:15 90

iter	continuity	x-velocity	y-velocity	time/iter
563	9.6173e-04	1.0172e-07	7.6661e-08	0:00:12 89

! 563 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.9304404146969318s, time step = 22

18 more time steps

Updating solution at time level N...

done.

physical-dt 9.4086e-02

iter	continuity	x-velocity	y-velocity	time/iter
563	9.6173e-04	1.0172e-07	7.6661e-08	0:00:13 100
564	3.0435e-02	2.3975e-05	2.1593e-05	0:00:11 99
565	2.8718e-02	1.5842e-05	1.4798e-05	0:00:08 98
566	2.2747e-02	1.0871e-05	1.0602e-05	0:00:07 97
567	1.7688e-02	8.0247e-06	7.9355e-06	0:00:05 96
568	1.4253e-02	6.2755e-06	6.1197e-06	0:00:04 95
569	1.1688e-02	5.0275e-06	4.8423e-06	0:00:03 94
570	9.8166e-03	4.1168e-06	3.8927e-06	0:00:03 93
571	8.3015e-03	3.3913e-06	3.1400e-06	0:00:02 92
572	7.0673e-03	2.8125e-06	2.5470e-06	0:00:02 91

573 6.0643e-03 2.3473e-06 2.0758e-06 0:00:01 90

iter	continuity	x-velocity	y-velocity	time/iter	
574	5.1793e-03	1.9576e-06	1.6945e-06	0:00:19	89
575	4.4728e-03	1.6307e-06	1.3784e-06	0:00:15	88
576	3.8600e-03	1.3803e-06	1.1435e-06	0:00:12	87
577	3.3161e-03	1.1535e-06	9.3284e-07	0:00:09	86
578	2.8711e-03	9.7517e-07	7.7293e-07	0:00:07	85
579	2.4685e-03	8.2462e-07	6.4150e-07	0:00:06	84
580	2.1152e-03	6.9791e-07	5.3502e-07	0:00:05	83
581	1.8225e-03	5.9132e-07	4.4660e-07	0:00:04	82
582	1.5762e-03	5.0165e-07	3.7371e-07	0:00:03	81
583	1.3492e-03	4.2587e-07	3.1213e-07	0:00:02	80
584	1.1639e-03	3.6178e-07	2.6111e-07	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
585	1.0055e-03	3.0807e-07	2.1900e-07	0:00:01	78
586	8.7594e-04	2.6279e-07	1.8405e-07	0:00:01	77

! 586 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 1.024526000022888s, time step = 23

17 more time steps

Truncation Error (computed)=0.001880 > Truncation error tolerance

Repeating the time step: time step size = 0.047043

in update prediction domain id = 1
physical-dt 4.7043e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

586	8.7594e-04	2.6279e-07	1.8405e-07	0:00:01	100
587	4.8226e-02	2.1738e-05	1.8133e-05	0:00:01	99
588	2.5502e-02	1.0720e-05	1.0819e-05	0:00:01	98
589	1.2392e-02	5.6149e-06	6.1469e-06	0:00:01	97
590	9.4717e-03	3.2484e-06	3.6051e-06	0:00:01	96
591	7.3858e-03	2.0080e-06	2.1703e-06	0:00:19	95
592	5.8816e-03	1.3683e-06	1.4487e-06	0:00:15	94
593	4.6499e-03	1.0365e-06	1.0183e-06	0:00:12	93
594	3.6433e-03	8.0427e-07	7.2970e-07	0:00:10	92
595	2.8465e-03	6.1808e-07	5.2867e-07	0:00:08	91
596	2.2264e-03	4.7242e-07	3.8592e-07	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
597	1.7379e-03	3.6040e-07	2.8343e-07	0:00:05	89
598	1.3644e-03	2.7503e-07	2.0926e-07	0:00:04	88
599	1.0716e-03	2.1003e-07	1.5542e-07	0:00:03	87
600	8.4586e-04	1.6168e-07	1.1630e-07	0:00:02	86

! 600 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a

Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a

Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.9774832092225552s, time step = 23

16 more time steps

Updating solution at time level N...

done.

physical-dt 4.7491e-02

iter	continuity	x-velocity	y-velocity	time/iter	
600	8.4586e-04	1.6168e-07	1.1630e-07	0:00:03	100
601	1.5716e-02	1.8349e-05	1.6407e-05	0:00:02	99
602	1.4456e-02	1.0656e-05	9.7527e-06	0:00:02	98
603	1.1719e-02	6.3046e-06	5.9389e-06	0:00:01	97
604	9.2383e-03	3.9846e-06	3.7568e-06	0:00:01	96
605	7.4032e-03	2.6324e-06	2.4411e-06	0:00:01	95
606	6.0892e-03	1.8865e-06	1.7109e-06	0:00:01	94
607	4.9683e-03	1.4199e-06	1.2272e-06	0:00:01	93

608	4.0255e-03	1.0717e-06	8.8626e-07	0:00:00	92
609	3.2725e-03	8.1563e-07	6.4745e-07	0:00:19	91
610	2.6623e-03	6.2153e-07	4.7661e-07	0:00:15	90

iter	continuity	x-velocity	y-velocity	time/iter	
611	2.1607e-03	4.6543e-07	3.4790e-07	0:00:12	89
612	1.7339e-03	3.5402e-07	2.5833e-07	0:00:09	88
613	1.4017e-03	2.7320e-07	1.9481e-07	0:00:07	87
614	1.1271e-03	2.1165e-07	1.4691e-07	0:00:06	86
615	9.0867e-04	1.6587e-07	1.1168e-07	0:00:05	85

! 615 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.024973750114441s, time step = 24

15 more time steps

Updating solution at time level N...

done.

physical-dt 4.8166e-02

iter	continuity	x-velocity	y-velocity	time/iter	
615	9.0867e-04	1.6587e-07	1.1168e-07	0:00:05	100
616	1.7462e-02	4.6695e-06	4.6362e-06	0:00:04	99
617	1.9036e-02	3.5562e-06	2.7644e-06	0:00:03	98
618	1.4231e-02	2.3356e-06	1.5984e-06	0:00:03	97
619	9.8147e-03	1.4741e-06	9.6842e-07	0:00:02	96
620	6.7868e-03	9.5853e-07	6.3804e-07	0:00:02	95
621	4.8466e-03	6.4278e-07	4.2978e-07	0:00:01	94
622	3.5427e-03	4.3139e-07	2.8760e-07	0:00:01	93
623	2.6202e-03	3.0431e-07	2.0012e-07	0:00:01	92
624	1.9527e-03	2.2157e-07	1.4394e-07	0:00:01	91
625	1.4742e-03	1.5782e-07	1.0239e-07	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
626	1.1126e-03	1.2630e-07	7.9383e-08	0:00:00	89
627	8.6380e-04	9.0447e-08	5.6468e-08	0:00:00	88

! 627 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.073140144348145s, time step = 25

14 more time steps

Updating solution at time level N...

done.

physical-dt 9.5480e-02

iter	continuity	x-velocity	y-velocity	time/iter	
627	8.6380e-04	9.0447e-08	5.6468e-08	0:00:00	100
628	4.6952e-02	1.3264e-05	1.3093e-05	0:00:00	99
629	5.2679e-02	1.0223e-05	8.3485e-06	0:00:20	98
630	3.7179e-02	6.5704e-06	4.9655e-06	0:00:16	97
631	2.4334e-02	4.2160e-06	3.1249e-06	0:00:12	96
632	1.6568e-02	2.8885e-06	2.2210e-06	0:00:10	95
633	1.1964e-02	2.0894e-06	1.6527e-06	0:00:08	94
634	8.9414e-03	1.5934e-06	1.2836e-06	0:00:06	93
635	6.6749e-03	1.2498e-06	1.0185e-06	0:00:05	92
636	5.1631e-03	9.9575e-07	8.3139e-07	0:00:04	91
637	4.1925e-03	7.9943e-07	6.8827e-07	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
638	3.4723e-03	6.4681e-07	5.7350e-07	0:00:02	89
639	2.9177e-03	5.2669e-07	4.8193e-07	0:00:02	88
640	2.4632e-03	4.3077e-07	4.0677e-07	0:00:02	87
641	2.0914e-03	3.5464e-07	3.4712e-07	0:00:01	86
642	1.7789e-03	2.9422e-07	2.9700e-07	0:00:01	85
643	1.5116e-03	2.4609e-07	2.5428e-07	0:00:01	84
644	1.2831e-03	2.0699e-07	2.1832e-07	0:00:01	83
645	1.0911e-03	1.7470e-07	1.8730e-07	0:00:00	82
646	9.2378e-04	1.4781e-07	1.6075e-07	0:00:00	81

! 646 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.168619871139526s, time step = 26

13 more time steps

Updating solution at time level N...

done.

physical-dt 1.0010e-01

iter	continuity	x-velocity	y-velocity	time/iter	
646	9.2378e-04	1.4781e-07	1.6075e-07	0:00:00	100
647	5.4676e-02	1.5291e-05	1.4659e-05	0:00:00	99
648	6.3187e-02	1.1856e-05	9.2982e-06	0:00:20	98
649	4.4702e-02	7.4152e-06	5.5228e-06	0:00:16	97
650	2.9529e-02	4.7097e-06	3.4755e-06	0:00:12	96
651	1.9528e-02	3.1336e-06	2.4534e-06	0:00:10	95
652	1.3893e-02	2.1850e-06	1.8238e-06	0:00:08	94
653	1.0588e-02	1.6336e-06	1.4030e-06	0:00:06	93
654	8.1485e-03	1.2752e-06	1.1192e-06	0:00:05	92
655	6.4184e-03	1.0279e-06	9.1953e-07	0:00:04	91
656	5.0298e-03	8.3453e-07	7.5676e-07	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
657	3.9869e-03	6.8250e-07	6.3580e-07	0:00:02	89
658	3.1897e-03	5.6752e-07	5.4683e-07	0:00:02	88
659	2.5651e-03	4.6021e-07	4.5791e-07	0:00:02	87
660	2.1166e-03	3.8595e-07	3.9730e-07	0:00:01	86
661	1.7553e-03	3.1724e-07	3.3588e-07	0:00:01	85
662	1.4587e-03	2.6987e-07	2.9208e-07	0:00:01	84
663	1.2113e-03	2.2521e-07	2.4878e-07	0:00:01	83
664	1.0102e-03	1.8829e-07	2.1159e-07	0:00:00	82
665	8.5234e-04	1.5871e-07	1.8093e-07	0:00:00	81

! 665 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
```

```
()
Flow time = 1.268718719482422s, time step = 27
12 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 1.0499e-01
```

iter	continuity	x-velocity	y-velocity	time/iter	
665	8.5234e-04	1.5871e-07	1.8093e-07	0:00:00	100
666	6.2269e-02	1.7097e-05	1.5972e-05	0:00:00	99
667	7.3652e-02	1.3304e-05	1.0102e-05	0:00:00	98
668	5.1954e-02	8.0422e-06	5.7951e-06	0:00:00	97
669	3.2904e-02	4.9414e-06	3.6473e-06	0:00:00	96
670	2.1213e-02	3.1943e-06	2.5436e-06	0:00:00	95
671	1.4984e-02	2.2231e-06	1.8663e-06	0:00:00	94
672	1.1204e-02	1.6572e-06	1.4188e-06	0:00:00	93
673	8.5709e-03	1.3083e-06	1.1449e-06	0:00:00	92
674	6.5691e-03	1.0494e-06	9.4848e-07	0:00:00	91
675	5.1156e-03	8.5265e-07	7.9470e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
676	4.0372e-03	7.0957e-07	6.8623e-07	0:00:00	89
677	3.1943e-03	5.7219e-07	5.6970e-07	0:00:00	88
678	2.6108e-03	4.8026e-07	4.9138e-07	0:00:17	87
679	2.1203e-03	3.9284e-07	4.1275e-07	0:00:14	86
680	1.7564e-03	3.3376e-07	3.5921e-07	0:00:11	85
681	1.4462e-03	2.7818e-07	3.0557e-07	0:00:09	84
682	1.2074e-03	2.3336e-07	2.6058e-07	0:00:07	83
683	1.0172e-03	1.9696e-07	2.2282e-07	0:00:05	82
684	8.6011e-04	1.6659e-07	1.9065e-07	0:00:04	81

```
! 684 solution is converged
```

```
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
```

```
()
(update-animation-object "animation-vel")
```

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.373709440231323s, time step = 28

11 more time steps

Updating solution at time level N...

done.

physical-dt 1.1306e-01

iter	continuity	x-velocity	y-velocity	time/iter	
684	8.6011e-04	1.6659e-07	1.9065e-07	0:00:05	100
685	7.1240e-02	1.9694e-05	1.7625e-05	0:00:04	99
686	8.6611e-02	1.5033e-05	1.1238e-05	0:00:03	98
687	6.1764e-02	8.9915e-06	6.3750e-06	0:00:03	97
688	3.9417e-02	5.3008e-06	3.9037e-06	0:00:02	96
689	2.5007e-02	3.3058e-06	2.6516e-06	0:00:02	95
690	1.7253e-02	2.2844e-06	1.9808e-06	0:00:01	94
691	1.2664e-02	1.7272e-06	1.5480e-06	0:00:20	93
692	9.6740e-03	1.3574e-06	1.2448e-06	0:00:16	92
693	7.4932e-03	1.1020e-06	1.0345e-06	0:00:12	91
694	5.9187e-03	9.1832e-07	8.9469e-07	0:00:10	90

iter	continuity	x-velocity	y-velocity	time/iter	
695	4.5637e-03	7.3021e-07	7.3142e-07	0:00:08	89
696	3.6804e-03	6.1272e-07	6.3048e-07	0:00:06	88
697	2.8779e-03	4.9649e-07	5.2558e-07	0:00:05	87
698	2.3359e-03	4.2130e-07	4.5551e-07	0:00:04	86
699	1.8765e-03	3.4605e-07	3.8218e-07	0:00:03	85
700	1.5549e-03	2.9791e-07	3.3291e-07	0:00:02	84
701	1.2855e-03	2.4752e-07	2.8008e-07	0:00:02	83
702	1.0833e-03	2.1412e-07	2.4423e-07	0:00:01	82
703	9.0709e-04	1.8063e-07	2.0776e-07	0:00:01	81

! 703 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.486769199371338s, time step = 29

10 more time steps

Updating solution at time level N...

done.

physical-dt 1.2401e-01

iter	continuity	x-velocity	y-velocity	time/iter
703	9.0709e-04	1.8063e-07	2.0776e-07	0:00:01 100
704	8.0620e-02	2.2500e-05	1.9602e-05	0:00:01 99
705	9.8709e-02	1.6935e-05	1.2417e-05	0:00:01 98
706	6.9704e-02	9.9123e-06	7.0233e-06	0:00:01 97
707	4.3799e-02	5.6670e-06	4.2510e-06	0:00:20 96
708	2.7919e-02	3.5198e-06	2.9146e-06	0:00:16 95
709	1.9307e-02	2.4509e-06	2.1698e-06	0:00:12 94
710	1.4401e-02	1.8603e-06	1.6902e-06	0:00:10 93
711	1.1116e-02	1.4813e-06	1.3866e-06	0:00:08 92
712	8.6384e-03	1.2168e-06	1.1800e-06	0:00:06 91
713	6.5751e-03	9.5448e-07	9.5668e-07	0:00:05 90

iter	continuity	x-velocity	y-velocity	time/iter
714	5.1239e-03	7.7837e-07	8.0177e-07	0:00:04 89
715	4.0532e-03	6.5366e-07	6.8843e-07	0:00:03 88
716	3.1805e-03	5.3071e-07	5.7428e-07	0:00:02 87
717	2.5715e-03	4.5141e-07	4.9398e-07	0:00:02 86
718	2.0892e-03	3.7498e-07	4.1591e-07	0:00:02 85
719	1.7118e-03	3.2297e-07	3.6039e-07	0:00:01 84
720	1.4118e-03	2.7056e-07	3.0423e-07	0:00:01 83
721	1.1794e-03	2.3480e-07	2.6505e-07	0:00:01 82
722	9.7766e-04	1.9896e-07	2.2569e-07	0:00:01 81

! 722 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.610781908035278s, time step = 30

9 more time steps

Updating solution at time level N...

done.

physical-dt 1.3808e-01

iter	continuity	x-velocity	y-velocity	time/iter
722	9.7766e-04	1.9896e-07	2.2569e-07	0:00:01 100
723	9.0012e-02	2.5255e-05	2.1900e-05	0:00:01 99
724	1.1233e-01	1.8988e-05	1.3859e-05	0:00:00 98
725	7.7719e-02	1.0836e-05	7.6145e-06	0:00:00 97
726	4.8835e-02	6.0876e-06	4.5534e-06	0:00:19 96
727	3.1756e-02	3.8198e-06	3.1458e-06	0:00:15 95
728	2.2322e-02	2.6747e-06	2.3705e-06	0:00:12 94
729	1.6636e-02	2.0197e-06	1.8446e-06	0:00:10 93
730	1.2740e-02	1.5941e-06	1.4854e-06	0:00:08 92
731	9.8401e-03	1.3259e-06	1.2702e-06	0:00:06 91
732	7.4949e-03	1.0434e-06	1.0392e-06	0:00:05 90

iter	continuity	x-velocity	y-velocity	time/iter
733	5.8770e-03	8.5339e-07	8.7568e-07	0:00:04 89
734	4.6287e-03	7.1569e-07	7.5846e-07	0:00:03 88
735	3.6348e-03	5.8263e-07	6.2894e-07	0:00:02 87
736	2.9108e-03	4.9659e-07	5.4004e-07	0:00:02 86
737	2.3468e-03	4.1151e-07	4.5123e-07	0:00:01 85
738	1.9266e-03	3.5736e-07	3.9111e-07	0:00:01 84
739	1.5804e-03	2.9952e-07	3.2830e-07	0:00:01 83
740	1.3266e-03	2.6292e-07	2.8584e-07	0:00:01 82
741	1.1102e-03	2.2188e-07	2.4056e-07	0:00:01 81
742	9.4611e-04	1.9508e-07	2.0992e-07	0:00:00 80

! 742 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.748863816261292s, time step = 31

8 more time steps

Updating solution at time level N...

done.

physical-dt 1.5473e-01

iter	continuity	x-velocity	y-velocity	time/iter	
742	9.4611e-04	1.9508e-07	2.0992e-07	0:00:01	100
743	9.9086e-02	2.8128e-05	2.4031e-05	0:00:00	99
744	1.2465e-01	2.1043e-05	1.5020e-05	0:00:00	98
745	8.3364e-02	1.1818e-05	8.0746e-06	0:00:00	97
746	5.1570e-02	6.5222e-06	4.7620e-06	0:00:00	96
747	3.4110e-02	4.0614e-06	3.2847e-06	0:00:00	95
748	2.4962e-02	2.8249e-06	2.4686e-06	0:00:00	94
749	1.9013e-02	2.1362e-06	1.9292e-06	0:00:00	93
750	1.4571e-02	1.6668e-06	1.5448e-06	0:00:00	92
751	1.1216e-02	1.3517e-06	1.2995e-06	0:00:00	91
752	8.5988e-03	1.1104e-06	1.1042e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
753	6.6413e-03	9.1574e-07	9.3216e-07	0:00:00	89
754	5.2208e-03	7.6326e-07	7.8518e-07	0:00:00	88
755	4.1594e-03	6.3954e-07	6.6215e-07	0:00:17	87
756	3.3536e-03	5.3815e-07	5.5818e-07	0:00:14	86
757	2.7493e-03	4.6367e-07	4.8179e-07	0:00:11	85
758	2.2037e-03	3.8081e-07	3.9783e-07	0:00:09	84
759	1.8023e-03	3.2165e-07	3.3402e-07	0:00:07	83
760	1.4971e-03	2.8166e-07	2.8955e-07	0:00:05	82
761	1.2339e-03	2.3556e-07	2.4191e-07	0:00:04	81
762	1.0372e-03	2.0620e-07	2.0902e-07	0:00:03	80
763	8.7701e-04	1.7527e-07	1.7655e-07	0:00:03	79

! 763 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.903591275215149s, time step = 32

7 more time steps

Updating solution at time level N...

done.

physical-dt 1.7736e-01

iter	continuity	x-velocity	y-velocity	time/iter	
763	8.7701e-04	1.7527e-07	1.7655e-07	0:00:03	100
764	1.0900e-01	3.1604e-05	2.6591e-05	0:00:03	99
765	1.3551e-01	2.3528e-05	1.6806e-05	0:00:02	98
766	8.8808e-02	1.2948e-05	8.7359e-06	0:00:02	97
767	5.4553e-02	6.9527e-06	4.9539e-06	0:00:01	96
768	3.5814e-02	4.2900e-06	3.4072e-06	0:00:01	95
769	2.6732e-02	3.0741e-06	2.5750e-06	0:00:01	94
770	2.1051e-02	2.3306e-06	2.0209e-06	0:00:01	93
771	1.6482e-02	1.8059e-06	1.6315e-06	0:00:01	92
772	1.2849e-02	1.4503e-06	1.3592e-06	0:00:00	91
773	9.9547e-03	1.1967e-06	1.1499e-06	0:00:18	90

iter	continuity	x-velocity	y-velocity	time/iter	
774	7.7215e-03	1.0008e-06	9.7658e-07	0:00:14	89
775	6.0566e-03	8.4209e-07	8.2352e-07	0:00:11	88
776	4.8080e-03	7.0744e-07	6.9334e-07	0:00:09	87
777	3.8552e-03	5.9631e-07	5.8250e-07	0:00:07	86
778	3.1109e-03	5.0158e-07	4.8994e-07	0:00:06	85
779	2.5192e-03	4.2184e-07	4.1254e-07	0:00:04	84
780	2.0508e-03	3.5650e-07	3.4783e-07	0:00:04	83
781	1.6777e-03	3.0220e-07	2.9434e-07	0:00:03	82
782	1.3809e-03	2.5821e-07	2.4970e-07	0:00:02	81
783	1.1492e-03	2.2161e-07	2.1175e-07	0:00:02	80
784	9.6383e-04	1.9103e-07	1.7993e-07	0:00:01	79

! 784 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 2.080946445465088s, time step = 33

6 more time steps

Updating solution at time level N...

done.

physical-dt 2.0799e-01

iter	continuity	x-velocity	y-velocity	time/iter	
784	9.6383e-04	1.9103e-07	1.7993e-07	0:00:02	100
785	1.1968e-01	3.5681e-05	2.9326e-05	0:00:01	99
786	1.5041e-01	2.6369e-05	1.8908e-05	0:00:01	98
787	9.6806e-02	1.3852e-05	9.7234e-06	0:00:01	97
788	5.8804e-02	7.4058e-06	5.4625e-06	0:00:01	96
789	4.0173e-02	4.7694e-06	3.8180e-06	0:00:01	95
790	3.0711e-02	3.5010e-06	2.8644e-06	0:00:00	94
791	2.4457e-02	2.6948e-06	2.2578e-06	0:00:00	93
792	1.9519e-02	2.1182e-06	1.7996e-06	0:00:00	92
793	1.4732e-02	1.7117e-06	1.5285e-06	0:00:00	91
794	1.1254e-02	1.4369e-06	1.2984e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
795	8.6922e-03	1.1922e-06	1.0898e-06	0:00:00	89
796	6.8804e-03	9.9960e-07	9.1722e-07	0:00:00	88
797	5.5072e-03	8.3770e-07	7.7623e-07	0:00:00	87
798	4.4393e-03	7.0492e-07	6.5540e-07	0:00:00	86
799	3.6002e-03	5.9853e-07	5.5231e-07	0:00:00	85
800	2.9413e-03	5.0572e-07	4.6512e-07	0:00:00	84
801	2.4098e-03	4.2865e-07	3.9187e-07	0:00:00	83
802	1.9874e-03	3.6583e-07	3.2985e-07	0:00:00	82
803	1.6544e-03	3.1290e-07	2.7836e-07	0:00:00	81
804	1.3808e-03	2.6907e-07	2.3577e-07	0:00:00	80
805	1.1622e-03	2.3167e-07	2.0015e-07	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
806	9.8370e-04	1.9970e-07	1.7028e-07	0:00:12	78

! 806 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.288931846618652s, time step = 34

5 more time steps

Updating solution at time level N...

done.

physical-dt 2.4351e-01

iter	continuity	x-velocity	y-velocity	time/iter	
806	9.8370e-04	1.9970e-07	1.7028e-07	0:00:16	100
807	1.2718e-01	3.8846e-05	3.1068e-05	0:00:13	99
808	1.5969e-01	2.8267e-05	2.0309e-05	0:00:10	98
809	1.0047e-01	1.4565e-05	1.0635e-05	0:00:08	97
810	5.8889e-02	7.6697e-06	6.0341e-06	0:00:06	96
811	4.2192e-02	5.1500e-06	4.1790e-06	0:00:05	95
812	3.3949e-02	3.9215e-06	3.1215e-06	0:00:04	94
813	2.7875e-02	3.0979e-06	2.4520e-06	0:00:03	93
814	2.1613e-02	2.4768e-06	2.0649e-06	0:00:02	92
815	1.7142e-02	2.0245e-06	1.7029e-06	0:00:20	91
816	1.3191e-02	1.6970e-06	1.4782e-06	0:00:16	90

iter	continuity	x-velocity	y-velocity	time/iter	
817	1.0437e-02	1.4339e-06	1.2515e-06	0:00:13	89
818	8.4376e-03	1.2167e-06	1.0605e-06	0:00:10	88
819	6.8671e-03	1.0334e-06	9.0170e-07	0:00:08	87
820	5.6195e-03	8.7715e-07	7.6715e-07	0:00:06	86
821	4.6003e-03	7.4401e-07	6.5129e-07	0:00:05	85
822	3.7781e-03	6.3207e-07	5.5102e-07	0:00:04	84
823	3.1091e-03	5.3825e-07	4.6542e-07	0:00:03	83
824	2.5602e-03	4.5970e-07	3.9260e-07	0:00:02	82
825	2.1057e-03	3.9463e-07	3.3141e-07	0:00:02	81
826	1.7416e-03	3.3976e-07	2.8088e-07	0:00:02	80
827	1.4544e-03	2.9340e-07	2.3883e-07	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
828	1.2237e-03	2.5405e-07	2.0396e-07	0:00:01	78
829	1.0432e-03	2.1999e-07	1.7470e-07	0:00:01	77
830	8.9598e-04	1.9135e-07	1.5014e-07	0:00:01	76

! 830 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.532440662384033s, time step = 35
4 more time steps

Updating solution at time level N...

done.

physical-dt 2.8617e-01

iter	continuity	x-velocity	y-velocity	time/iter	
830	8.9598e-04	1.9135e-07	1.5014e-07	0:00:01	100
831	1.3152e-01	4.1202e-05	3.2142e-05	0:00:01	99
832	1.6630e-01	2.9936e-05	2.1356e-05	0:00:20	98
833	1.0041e-01	1.5308e-05	1.1590e-05	0:00:16	97
834	6.0641e-02	8.0455e-06	6.5494e-06	0:00:13	96
835	4.5014e-02	5.7281e-06	4.7029e-06	0:00:10	95
836	3.7643e-02	4.3845e-06	3.5401e-06	0:00:08	94
837	2.9606e-02	3.4581e-06	2.7606e-06	0:00:06	93
838	2.2910e-02	2.8168e-06	2.2860e-06	0:00:05	92
839	1.7795e-02	2.3445e-06	1.9437e-06	0:00:04	91
840	1.3999e-02	1.9783e-06	1.6682e-06	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
841	1.1135e-02	1.6842e-06	1.4408e-06	0:00:02	89
842	8.9845e-03	1.4385e-06	1.2449e-06	0:00:02	88
843	7.2947e-03	1.2295e-06	1.0719e-06	0:00:02	87
844	5.9419e-03	1.0517e-06	9.2122e-07	0:00:01	86
845	4.8556e-03	9.0029e-07	7.9100e-07	0:00:01	85
846	3.9866e-03	7.7229e-07	6.7970e-07	0:00:01	84
847	3.2986e-03	6.6450e-07	5.8170e-07	0:00:01	83
848	2.7488e-03	5.7396e-07	4.9738e-07	0:00:00	82
849	2.3172e-03	4.9790e-07	4.2639e-07	0:00:00	81
850	1.9578e-03	4.3408e-07	3.6595e-07	0:00:00	80
851	1.6602e-03	3.7901e-07	3.1487e-07	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
852	1.4120e-03	3.3144e-07	2.7145e-07	0:00:00	78
853	1.2077e-03	2.9014e-07	2.3443e-07	0:00:16	77
854	1.0410e-03	2.5486e-07	2.0323e-07	0:00:12	76
855	9.0309e-04	2.2351e-07	1.7671e-07	0:00:10	75

! 855 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.818611621856689s, time step = 36

3 more time steps

Updating solution at time level N...

done.

physical-dt 3.4146e-01

iter	continuity	x-velocity	y-velocity	time/iter	
855	9.0309e-04	2.2351e-07	1.7671e-07	0:00:13	100
856	1.3331e-01	4.4221e-05	3.3435e-05	0:00:10	99
857	1.6321e-01	3.1503e-05	2.2552e-05	0:00:08	98
858	9.7523e-02	1.5061e-05	1.1540e-05	0:00:06	97
859	5.8273e-02	8.6871e-06	7.2521e-06	0:00:05	96
860	4.4854e-02	6.2265e-06	5.1596e-06	0:00:04	95
861	3.8194e-02	4.8991e-06	3.9860e-06	0:00:03	94
862	3.0353e-02	3.8967e-06	3.0174e-06	0:00:03	93
863	2.4189e-02	3.2470e-06	2.5459e-06	0:00:02	92
864	1.9293e-02	2.7705e-06	2.2502e-06	0:00:02	91
865	1.5586e-02	2.3783e-06	2.0047e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
866	1.2821e-02	2.0450e-06	1.7783e-06	0:00:01	89
867	1.0568e-02	1.7742e-06	1.5702e-06	0:00:01	88
868	8.7132e-03	1.5427e-06	1.3807e-06	0:00:01	87
869	7.1257e-03	1.3477e-06	1.2108e-06	0:00:00	86
870	5.8494e-03	1.1791e-06	1.0600e-06	0:00:00	85
871	4.8477e-03	1.0338e-06	9.3015e-07	0:00:17	84
872	4.0256e-03	9.0908e-07	8.1896e-07	0:00:14	83
873	3.3718e-03	8.0219e-07	7.2034e-07	0:00:11	82
874	2.8318e-03	7.1124e-07	6.3293e-07	0:00:08	81
875	2.3899e-03	6.3115e-07	5.5532e-07	0:00:07	80
876	2.0280e-03	5.5980e-07	4.8673e-07	0:00:05	79

iter	continuity	x-velocity	y-velocity	time/iter	
877	1.7270e-03	4.9765e-07	4.2675e-07	0:00:04	78
878	1.4779e-03	4.4364e-07	3.7455e-07	0:00:03	77
879	1.2748e-03	3.9648e-07	3.2899e-07	0:00:03	76
880	1.1048e-03	3.5480e-07	2.8941e-07	0:00:02	75
881	9.6519e-04	3.1774e-07	2.5503e-07	0:00:02	74

! 881 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.160067558288574s, time step = 37

2 more time steps

Updating solution at time level N...

done.

physical-dt 4.0715e-01

iter	continuity	x-velocity	y-velocity	time/iter	
881	9.6519e-04	3.1774e-07	2.5503e-07	0:00:02	100
882	1.3297e-01	4.6716e-05	3.5017e-05	0:00:02	99
883	1.6312e-01	3.2883e-05	2.3526e-05	0:00:01	98
884	9.8165e-02	1.5436e-05	1.1966e-05	0:00:01	97
885	6.1281e-02	9.3992e-06	7.8569e-06	0:00:01	96
886	4.7730e-02	7.1382e-06	5.7301e-06	0:00:01	95
887	3.9212e-02	5.6781e-06	4.2894e-06	0:00:01	94
888	3.1700e-02	4.4921e-06	3.2736e-06	0:00:00	93
889	2.5326e-02	3.7516e-06	2.7617e-06	0:00:00	92
890	2.0558e-02	3.2056e-06	2.4734e-06	0:00:00	91
891	1.6898e-02	2.7836e-06	2.2516e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
892	1.3911e-02	2.4663e-06	2.0581e-06	0:00:00	89
893	1.1527e-02	2.1939e-06	1.8680e-06	0:00:00	88
894	9.5336e-03	1.9566e-06	1.6903e-06	0:00:00	87
895	7.9475e-03	1.7525e-06	1.5333e-06	0:00:00	86
896	6.6675e-03	1.5753e-06	1.3921e-06	0:00:00	85
897	5.6312e-03	1.4209e-06	1.2596e-06	0:00:00	84
898	4.7466e-03	1.2858e-06	1.1386e-06	0:00:00	83
899	4.0032e-03	1.1643e-06	1.0268e-06	0:00:00	82
900	3.4058e-03	1.0566e-06	9.2534e-07	0:00:16	81
901	2.9071e-03	9.5752e-07	8.3309e-07	0:00:13	80
902	2.5049e-03	8.6983e-07	7.4855e-07	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
903	2.1761e-03	7.8943e-07	6.7252e-07	0:00:08	78
904	1.8958e-03	7.1605e-07	6.0277e-07	0:00:06	77
905	1.6592e-03	6.4946e-07	5.4068e-07	0:00:05	76
906	1.4593e-03	5.8973e-07	4.8478e-07	0:00:04	75
907	1.2869e-03	5.3535e-07	4.3460e-07	0:00:03	74
908	1.1390e-03	4.8594e-07	3.9020e-07	0:00:02	73
909	1.0097e-03	4.4150e-07	3.5057e-07	0:00:02	72
910	9.0091e-04	4.0152e-07	3.1510e-07	0:00:02	71

! 910 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.567219257354736s, time step = 38

1 more time step

Updating solution at time level N...

done.

physical-dt 4.7993e-01

iter	continuity	x-velocity	y-velocity	time/iter	
910	9.0091e-04	4.0152e-07	3.1510e-07	0:00:02	100
911	1.3548e-01	4.9322e-05	3.6639e-05	0:00:02	99
912	1.6723e-01	3.4084e-05	2.4569e-05	0:00:01	98
913	1.0319e-01	1.5918e-05	1.2084e-05	0:00:01	97
914	6.5454e-02	9.7349e-06	7.9962e-06	0:00:01	96
915	4.8116e-02	7.6492e-06	5.6994e-06	0:00:01	95
916	4.0012e-02	6.1876e-06	4.4454e-06	0:00:01	94
917	3.1690e-02	4.8330e-06	3.2197e-06	0:00:00	93
918	2.5780e-02	4.0278e-06	2.7754e-06	0:00:19	92
919	2.1234e-02	3.4726e-06	2.5238e-06	0:00:15	91
920	1.7722e-02	3.0677e-06	2.3531e-06	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
921	1.4979e-02	2.7356e-06	2.2008e-06	0:00:09	89
922	1.2769e-02	2.4703e-06	2.0660e-06	0:00:07	88
923	1.0890e-02	2.2551e-06	1.9474e-06	0:00:06	87

924	9.2958e-03	2.0671e-06	1.8287e-06	0:00:05	86
925	7.9203e-03	1.9010e-06	1.7164e-06	0:00:04	85
926	6.7624e-03	1.7539e-06	1.6033e-06	0:00:03	84
927	5.7271e-03	1.6185e-06	1.4872e-06	0:00:02	83
928	4.8773e-03	1.4937e-06	1.3730e-06	0:00:02	82
929	4.1819e-03	1.3772e-06	1.2621e-06	0:00:01	81
930	3.6103e-03	1.2710e-06	1.1564e-06	0:00:01	80
931	3.1505e-03	1.1711e-06	1.0572e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
932	2.7644e-03	1.0803e-06	9.6677e-07	0:00:01	78
933	2.4332e-03	9.9528e-07	8.8378e-07	0:00:01	77
934	2.1474e-03	9.1786e-07	8.0743e-07	0:00:00	76
935	1.9013e-03	8.4548e-07	7.3701e-07	0:00:00	75
936	1.6874e-03	7.7944e-07	6.7280e-07	0:00:00	74
937	1.4907e-03	7.1800e-07	6.1405e-07	0:00:00	73
938	1.3008e-03	6.6303e-07	5.6104e-07	0:00:00	72
939	1.1716e-03	6.0778e-07	5.0925e-07	0:00:14	71
940	1.0338e-03	5.6063e-07	4.6639e-07	0:00:11	70
941	9.5355e-04	5.1488e-07	4.2431e-07	0:00:09	69

! 941 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 4.047145366668701s, time step = 39

Writing "| gzip -2cf > SolutionMonitor.gz"...

Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22728 ...

Done.

"\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a
Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.

Writing data to \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...

x-coord
y-coord
pressure
x-velocity
y-velocity
hyb_init-0
hyb_init-1

Done.

Calculation complete.

Performance Timer for 941 iterations on 4 compute nodes

Average wall-clock time per iteration:	0.024 sec
Global reductions per iteration:	84 ops
Global reductions time per iteration:	0.000 sec (0.0%)
Message count per iteration:	953 messages
Data transfer per iteration:	0.271 MB
LE solves per iteration:	3 solves
LE wall-clock time per iteration:	0.011 sec (46.2%)
LE global solves per iteration:	3 solves
LE global wall-clock time per iteration:	0.000 sec (0.9%)
LE global matrix maximum size:	24
AMG cycles per iteration:	5.796 cycles
Relaxation sweeps per iteration:	333 sweeps
Relaxation exchanges per iteration:	0 exchanges
LE early protections (stall) per iteration:	0.051 times
LE early protections (divergence) per iteration:	0.000 times
Total SVARS touched:	380
Time-step updates per iteration:	0.05 updates
Time-step wall-clock time per iteration:	0.001 sec (4.2%)

Total wall-clock time: 22.635 sec

Transcript closed.

Opening input/output transcript to file "C:/Users/azgars/Test".

Initialize using the hybrid initialization method.

Checking case topology...

-This case has both inlets & outlets

-Pressure information is not available at the boundaries.
Case will be initialized with constant pressure

iter	scalar-0
1	1.000000e+00
2	7.669872e-05
3	1.147248e-05
4	2.768085e-06
5	6.045716e-07
6	1.562299e-07
7	5.306616e-08
8	3.501222e-08
9	3.153266e-08
10	3.074803e-08

Hybrid initialization is done.

Writing Settings file "`winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.set`"...

writing rp variables ... Done.
writing domain variables ... Done.
writing fluid (type fluid) (mixture) ... Done.
writing interior-fluid (type interior) (mixture) ... Done.
writing surface_body (type interior) (mixture) ... Done.
writing inlet (type velocity-inlet) (mixture) ... Done.
writing outlet (type pressure-outlet) (mixture) ... Done.
writing wall (type wall) (mixture) ... Done.
writing cylinder (type wall) (mixture) ... Done.
writing zones map name-id ... Done.

Writing to A16-059:"`winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1-17.cas.h5`" in NODE0 mode and compression level 1 ...

Grouping cells for Laplace smoothing ...

58228 cells, 1 zone ...
116806 faces, 6 zones ...
58578 nodes, 1 zone ...

Done.

Done.

Writing to A16-059:"\\winfiles.wincoe.coe.neu.edu\\cifs.homedir\\Win10Files\\Desktop\\Flow Around a Cylinder\\cylinder_flow_hw_files\\dp0\\FFF\\Fluent\\FFF.1-17-00000.dat.h5" in NODE0 mode and compression level 1 ...

Writing results.

Done.

'\\winfiles.wincoe.coe.neu.edu\\cifs.homedir\\Win10Files\\Desktop\\Flow Around a Cylinder\\cylinder_flow_hw_files\\dp0\\FFF\\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

Error: sopenoutputfile: unable to open file for output

Error Object: ".flwb_report_files\\report.xml"

Updating solution at time level N...

done.

physical-dt 5.0000e-01

iter	continuity	x-velocity	y-velocity	time/iter
1	1.0000e+00	2.8003e-04	2.4950e-04	0:00:10 99
2	1.0000e+00	1.5522e-04	8.8371e-05	0:00:08 98
3	6.1899e-01	9.6026e-05	5.0626e-05	0:00:06 97
4	4.4167e-01	6.5000e-05	3.5185e-05	0:00:05 96
5	3.2563e-01	4.7937e-05	2.7107e-05	0:00:04 95
6	2.4350e-01	3.4345e-05	2.1455e-05	0:00:03 94
7	1.7462e-01	2.7617e-05	1.7813e-05	0:00:03 93
8	1.2874e-01	2.3110e-05	1.5365e-05	0:00:02 92
9	9.4211e-02	1.9927e-05	1.3566e-05	0:00:20 91
10	7.0445e-02	1.7656e-05	1.2272e-05	0:00:16 90
11	5.2330e-02	1.6369e-05	1.1546e-05	0:00:12 89

iter	continuity	x-velocity	y-velocity	time/iter
12	4.1398e-02	1.4833e-05	1.0601e-05	0:00:10 88
13	3.1976e-02	1.3777e-05	9.9589e-06	0:00:08 87
14	2.5441e-02	1.2974e-05	9.5867e-06	0:00:06 86
15	2.0959e-02	1.2006e-05	9.0048e-06	0:00:05 85
16	1.6537e-02	1.1364e-05	8.6469e-06	0:00:04 84
17	1.3650e-02	1.0820e-05	8.2926e-06	0:00:03 83
18	1.1626e-02	1.0328e-05	7.9939e-06	0:00:02 82
19	1.0161e-02	9.8939e-06	7.7374e-06	0:00:02 81
20	8.7743e-03	9.5606e-06	7.5550e-06	0:00:01 80
21	7.9687e-03	9.1645e-06	7.3074e-06	0:00:01 79
22	7.2251e-03	8.8719e-06	7.1331e-06	0:00:01 78

iter	continuity	x-velocity	y-velocity	time/iter	
23	6.7226e-03	8.5788e-06	6.9498e-06	0:00:16	77
24	6.2014e-03	8.3047e-06	6.7814e-06	0:00:13	76
25	5.7995e-03	8.0596e-06	6.6328e-06	0:00:10	75
26	5.5426e-03	7.8306e-06	6.4963e-06	0:00:08	74
27	5.3308e-03	7.6133e-06	6.3665e-06	0:00:06	73
28	5.1190e-03	7.4050e-06	6.2429e-06	0:00:05	72
29	4.8582e-03	7.2088e-06	6.1248e-06	0:00:04	71
30	4.6936e-03	7.0300e-06	6.0190e-06	0:00:03	70
31	4.5974e-03	6.8516e-06	5.9131e-06	0:00:02	69
32	4.5095e-03	6.6823e-06	5.8101e-06	0:00:02	68
33	4.3710e-03	6.5219e-06	5.7139e-06	0:00:02	67

iter	continuity	x-velocity	y-velocity	time/iter	
34	4.2267e-03	6.3671e-06	5.6193e-06	0:00:01	66
35	4.1181e-03	6.2162e-06	5.5259e-06	0:00:01	65
36	4.0591e-03	6.0724e-06	5.4367e-06	0:00:01	64
37	3.9946e-03	5.9326e-06	5.3476e-06	0:00:01	63
38	3.9690e-03	5.7822e-06	5.2441e-06	0:00:00	62
39	3.8376e-03	5.6739e-06	5.1841e-06	0:00:00	61
40	3.7658e-03	5.5461e-06	5.0977e-06	0:00:00	60
41	3.7303e-03	5.4157e-06	5.0075e-06	0:00:00	59
42	3.6986e-03	5.2959e-06	4.9245e-06	0:00:00	58
43	3.6700e-03	5.1733e-06	4.8405e-06	0:00:00	57
44	3.5942e-03	5.0603e-06	4.7609e-06	0:00:11	56

iter	continuity	x-velocity	y-velocity	time/iter	
45	3.5164e-03	4.9471e-06	4.6781e-06	0:00:09	55
46	3.4651e-03	4.8346e-06	4.5941e-06	0:00:07	54
47	3.4259e-03	4.7237e-06	4.5098e-06	0:00:05	53
48	3.3801e-03	4.6181e-06	4.4288e-06	0:00:04	52
49	3.3413e-03	4.5141e-06	4.3474e-06	0:00:03	51
50	3.2592e-03	4.4070e-06	4.2651e-06	0:00:03	50
51	3.1908e-03	4.3038e-06	4.1807e-06	0:00:02	49
52	3.1330e-03	4.1958e-06	4.0914e-06	0:00:02	48
53	3.0994e-03	4.0980e-06	4.0107e-06	0:00:01	47
54	3.0699e-03	3.9989e-06	3.9238e-06	0:00:01	46
55	3.0334e-03	3.9018e-06	3.8420e-06	0:00:01	45

iter	continuity	x-velocity	y-velocity	time/iter	
56	3.0034e-03	3.7912e-06	3.7453e-06	0:00:01	44
57	2.9463e-03	3.7175e-06	3.6824e-06	0:00:00	43
58	2.8857e-03	3.6220e-06	3.5939e-06	0:00:00	42
59	2.8443e-03	3.5192e-06	3.5014e-06	0:00:00	41

60	2.8101e-03	3.4286e-06	3.4167e-06	0:00:00	40
61	2.7517e-03	3.3344e-06	3.3294e-06	0:00:00	39
62	2.7168e-03	3.2468e-06	3.2456e-06	0:00:00	38
63	2.6817e-03	3.1586e-06	3.1630e-06	0:00:00	37
64	2.6662e-03	3.0647e-06	3.0684e-06	0:00:00	36
65	2.5946e-03	2.9848e-06	2.9943e-06	0:00:07	35
66	2.5345e-03	2.8917e-06	2.9011e-06	0:00:05	34

iter	continuity	x-velocity	y-velocity	time/iter	
67	2.4584e-03	2.8248e-06	2.8311e-06	0:00:04	33
68	2.3808e-03	2.7407e-06	2.7434e-06	0:00:03	32
69	2.3374e-03	2.6385e-06	2.6415e-06	0:00:03	31
70	2.3265e-03	2.5795e-06	2.5790e-06	0:00:02	30
71	2.2522e-03	2.4978e-06	2.4936e-06	0:00:02	29
72	2.1854e-03	2.4116e-06	2.4057e-06	0:00:01	28
73	2.1323e-03	2.3351e-06	2.3240e-06	0:00:01	27
74	2.0979e-03	2.2521e-06	2.2371e-06	0:00:01	26
75	2.0629e-03	2.1890e-06	2.1702e-06	0:00:01	25
76	2.0359e-03	2.1066e-06	2.0825e-06	0:00:00	24
77	1.9950e-03	2.0319e-06	2.0049e-06	0:00:00	23

iter	continuity	x-velocity	y-velocity	time/iter	
78	1.9060e-03	1.9625e-06	1.9289e-06	0:00:00	22
79	1.8180e-03	1.8945e-06	1.8537e-06	0:00:00	21
80	1.7415e-03	1.8331e-06	1.7863e-06	0:00:00	20
81	1.6853e-03	1.7585e-06	1.7061e-06	0:00:00	19
82	1.6352e-03	1.6867e-06	1.6314e-06	0:00:00	18
83	1.5836e-03	1.6218e-06	1.5620e-06	0:00:00	17
84	1.5241e-03	1.5647e-06	1.4998e-06	0:00:00	16
85	1.4834e-03	1.4978e-06	1.4292e-06	0:00:03	15
86	1.4276e-03	1.4336e-06	1.3623e-06	0:00:02	14
87	1.3723e-03	1.3741e-06	1.2994e-06	0:00:02	13
88	1.3186e-03	1.3157e-06	1.2378e-06	0:00:01	12

iter	continuity	x-velocity	y-velocity	time/iter	
89	1.2529e-03	1.2587e-06	1.1784e-06	0:00:01	11
90	1.2057e-03	1.2040e-06	1.1214e-06	0:00:01	10
91	1.1721e-03	1.1484e-06	1.0640e-06	0:00:00	9
92	1.1198e-03	1.0944e-06	1.0091e-06	0:00:00	8
93	1.0719e-03	1.0439e-06	9.5693e-07	0:00:00	7
94	1.0270e-03	9.9682e-07	9.0856e-07	0:00:00	6
95	9.7527e-04	9.4687e-07	8.5838e-07	0:00:00	5

! 95 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5s, time step = 1

49 more time steps

Truncation Error (computed)=0.023083 > Truncation error tolerance

Repeating the time step: time step size = 0.250000

in update prediction domain id = 1

physical-dt 2.5000e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter
95	9.7527e-04	9.4687e-07	8.5838e-07	0:00:02 100
96	8.7592e-01	2.8093e-04	2.2129e-04	0:00:02 99
97	7.3707e-01	1.3442e-04	8.9620e-05	0:00:01 98
98	4.7812e-01	7.8102e-05	4.6368e-05	0:00:01 97
99	3.1612e-01	5.0836e-05	2.9232e-05	0:00:01 96
100	2.3744e-01	3.5012e-05	2.0249e-05	0:00:01 95
101	1.7590e-01	2.6003e-05	1.5276e-05	0:00:01 94
102	1.3205e-01	1.9077e-05	1.2487e-05	0:00:00 93
103	9.4503e-02	1.5519e-05	1.0321e-05	0:00:19 92
104	6.9573e-02	1.3319e-05	9.2618e-06	0:00:15 91
105	5.2002e-02	1.1487e-05	8.0379e-06	0:00:12 90

iter	continuity	x-velocity	y-velocity	time/iter
106	3.8529e-02	1.0425e-05	7.3437e-06	0:00:09 89
107	3.0254e-02	9.2058e-06	6.5315e-06	0:00:07 88
108	2.2828e-02	8.5135e-06	6.1355e-06	0:00:06 87
109	1.8676e-02	7.6841e-06	5.6112e-06	0:00:05 86
110	1.4827e-02	7.0402e-06	5.2111e-06	0:00:04 85
111	1.1956e-02	6.4434e-06	4.8331e-06	0:00:03 84
112	9.7362e-03	5.9473e-06	4.5078e-06	0:00:02 83

113	8.0886e-03	5.5288e-06	4.2297e-06	0:00:02	82
114	6.8699e-03	5.1690e-06	3.9885e-06	0:00:01	81
115	5.9558e-03	4.8500e-06	3.7708e-06	0:00:01	80
116	5.0744e-03	4.5821e-06	3.5914e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
117	4.4967e-03	4.2985e-06	3.3848e-06	0:00:16	78
118	3.9388e-03	4.0625e-06	3.2210e-06	0:00:13	77
119	3.5773e-03	3.8354e-06	3.0582e-06	0:00:10	76
120	3.2748e-03	3.6195e-06	2.9021e-06	0:00:08	75
121	3.0465e-03	3.4242e-06	2.7628e-06	0:00:06	74
122	2.8162e-03	3.2430e-06	2.6327e-06	0:00:05	73
123	2.5837e-03	3.0740e-06	2.5127e-06	0:00:04	72
124	2.3755e-03	2.9137e-06	2.3962e-06	0:00:03	71
125	2.2269e-03	2.7639e-06	2.2877e-06	0:00:02	70
126	2.1004e-03	2.6195e-06	2.1821e-06	0:00:02	69
127	1.9834e-03	2.4869e-06	2.0849e-06	0:00:02	68

iter	continuity	x-velocity	y-velocity	time/iter	
128	1.8838e-03	2.3603e-06	1.9915e-06	0:00:01	67
129	1.7994e-03	2.2417e-06	1.9035e-06	0:00:01	66
130	1.7067e-03	2.1297e-06	1.8196e-06	0:00:01	65
131	1.6256e-03	2.0219e-06	1.7378e-06	0:00:01	64
132	1.5370e-03	1.9206e-06	1.6605e-06	0:00:00	63
133	1.4637e-03	1.8235e-06	1.5864e-06	0:00:00	62
134	1.3928e-03	1.7320e-06	1.5154e-06	0:00:00	61
135	1.3368e-03	1.6400e-06	1.4438e-06	0:00:00	60
136	1.2649e-03	1.5611e-06	1.3830e-06	0:00:12	59
137	1.2370e-03	1.4793e-06	1.3182e-06	0:00:09	58
138	1.1724e-03	1.4062e-06	1.2606e-06	0:00:07	57

iter	continuity	x-velocity	y-velocity	time/iter	
139	1.1334e-03	1.3313e-06	1.2000e-06	0:00:06	56
140	1.0636e-03	1.2640e-06	1.1455e-06	0:00:05	55
141	1.0154e-03	1.1996e-06	1.0928e-06	0:00:04	54
142	9.7038e-04	1.1365e-06	1.0406e-06	0:00:03	53

! 142 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.25s, time step = 1

48 more time steps

Truncation Error (computed)=0.016671 > Truncation error tolerance

Repeating the time step: time step size = 0.125000

in update prediction domain id = 1

physical-dt 1.2500e-01

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
142	9.7038e-04	1.1365e-06	1.0406e-06	0:00:05	100
143	7.5333e-01	2.4407e-04	1.9235e-04	0:00:04	99
144	6.1292e-01	1.1714e-04	8.0546e-05	0:00:03	98
145	4.1067e-01	6.6289e-05	4.0874e-05	0:00:03	97
146	2.7591e-01	4.1632e-05	2.4618e-05	0:00:02	96
147	2.0050e-01	2.8163e-05	1.6219e-05	0:00:02	95
148	1.4846e-01	2.0107e-05	1.1410e-05	0:00:01	94
149	1.1006e-01	1.4769e-05	8.5154e-06	0:00:01	93
150	8.1216e-02	1.1323e-05	6.7671e-06	0:00:01	92
151	5.9564e-02	9.0179e-06	5.6267e-06	0:00:01	91
152	4.3658e-02	7.5815e-06	5.0534e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
153	3.2056e-02	6.4672e-06	4.3367e-06	0:00:18	89
154	2.4335e-02	5.4376e-06	3.6286e-06	0:00:14	88
155	1.7962e-02	4.8246e-06	3.2375e-06	0:00:11	87
156	1.4220e-02	4.1627e-06	2.8196e-06	0:00:09	86
157	1.1091e-02	3.6220e-06	2.4738e-06	0:00:07	85
158	8.5374e-03	3.2087e-06	2.2256e-06	0:00:06	84
159	6.8472e-03	2.8265e-06	1.9884e-06	0:00:04	83
160	5.5579e-03	2.5038e-06	1.7757e-06	0:00:04	82
161	4.5897e-03	2.2343e-06	1.5950e-06	0:00:03	81
162	3.8601e-03	2.0038e-06	1.4389e-06	0:00:02	80
163	3.2748e-03	1.8016e-06	1.3022e-06	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
164	2.8197e-03	1.6242e-06	1.1804e-06	0:00:01	78
165	2.4376e-03	1.4674e-06	1.0719e-06	0:00:01	77
166	2.0762e-03	1.3271e-06	9.7385e-07	0:00:01	76
167	1.7370e-03	1.2053e-06	8.9089e-07	0:00:01	75
168	1.5479e-03	1.0871e-06	8.0559e-07	0:00:01	74
169	1.3617e-03	9.8350e-07	7.3282e-07	0:00:00	73
170	1.1852e-03	8.9554e-07	6.7252e-07	0:00:00	72
171	1.0735e-03	8.1098e-07	6.1091e-07	0:00:00	71
172	9.4974e-04	7.3469e-07	5.5666e-07	0:00:00	70

! 172 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.125s, time step = 1

47 more time steps

Truncation Error (computed)=0.012790 > Truncation error tolerance

Repeating the time step: time step size = 0.062500

in update prediction domain id = 1

physical-dt 6.2500e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
172	9.4974e-04	7.3469e-07	5.5666e-07	0:00:00	100
173	6.1158e-01	1.9072e-04	1.5046e-04	0:00:20	99
174	4.7806e-01	9.6794e-05	6.8154e-05	0:00:16	98
175	3.2890e-01	5.4860e-05	3.4849e-05	0:00:13	97
176	2.2840e-01	3.3621e-05	2.0409e-05	0:00:10	96
177	1.6273e-01	2.1979e-05	1.2715e-05	0:00:08	95
178	1.1958e-01	1.4779e-05	8.1917e-06	0:00:06	94
179	8.8757e-02	1.0164e-05	5.4887e-06	0:00:05	93

180	6.4227e-02	7.6626e-06	4.0194e-06	0:00:04	92
181	4.7444e-02	5.5737e-06	2.9502e-06	0:00:03	91
182	3.5162e-02	4.2069e-06	2.2619e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
183	2.5538e-02	3.3176e-06	1.8242e-06	0:00:02	89
184	1.9264e-02	2.5561e-06	1.4236e-06	0:00:02	88
185	1.4232e-02	2.0431e-06	1.1708e-06	0:00:01	87
186	1.0850e-02	1.6031e-06	9.3240e-07	0:00:01	86
187	8.0385e-03	1.3052e-06	7.7865e-07	0:00:01	85
188	6.0185e-03	1.0622e-06	6.4023e-07	0:00:01	84
189	4.5428e-03	8.6953e-07	5.2753e-07	0:00:00	83
190	3.4536e-03	7.1499e-07	4.3606e-07	0:00:00	82
191	2.6634e-03	5.9268e-07	3.6288e-07	0:00:00	81
192	2.0849e-03	4.9261e-07	3.0318e-07	0:00:00	80
193	1.6478e-03	4.1146e-07	2.5415e-07	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter	
194	1.3041e-03	3.4436e-07	2.1372e-07	0:00:00	78
195	1.0411e-03	2.8916e-07	1.8020e-07	0:00:16	77
196	8.4447e-04	2.4379e-07	1.5239e-07	0:00:12	76

! 196 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0625s, time step = 1

46 more time steps

Truncation Error (computed)=0.009750 > Truncation error tolerance

Repeating the time step: time step size = 0.031250

in update prediction domain id = 1

physical-dt 3.1250e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
196	8.4447e-04	2.4379e-07	1.5239e-07	0:00:16	100
197	4.7195e-01	1.3221e-04	1.0442e-04	0:00:13	99
198	3.5746e-01	7.4061e-05	5.2639e-05	0:00:10	98
199	2.4858e-01	4.4422e-05	2.8627e-05	0:00:08	97
200	1.7880e-01	2.8229e-05	1.7024e-05	0:00:06	96
201	1.3156e-01	1.9050e-05	1.0543e-05	0:00:05	95
202	9.5871e-02	1.2966e-05	6.4819e-06	0:00:04	94
203	6.9422e-02	8.8090e-06	3.9992e-06	0:00:03	93
204	4.9858e-02	5.9485e-06	2.5075e-06	0:00:21	92
205	3.6470e-02	3.9750e-06	1.5918e-06	0:00:17	91
206	2.6567e-02	2.4882e-06	1.0162e-06	0:00:13	90

iter	continuity	x-velocity	y-velocity	time/iter	
207	1.8965e-02	1.9168e-06	7.1581e-07	0:00:10	89
208	1.4463e-02	1.0864e-06	4.4836e-07	0:00:08	88
209	1.0222e-02	9.6906e-07	3.6079e-07	0:00:06	87
210	7.6509e-03	6.5591e-07	2.5441e-07	0:00:05	86
211	5.5972e-03	5.0828e-07	1.8682e-07	0:00:04	85
212	4.1371e-03	3.4259e-07	1.3406e-07	0:00:03	84
213	3.0808e-03	2.4893e-07	9.8433e-08	0:00:03	83
214	2.2944e-03	1.8527e-07	7.2831e-08	0:00:02	82
215	1.7051e-03	1.3645e-07	5.4732e-08	0:00:02	81
216	1.2587e-03	9.7990e-08	4.1268e-08	0:00:01	80
217	9.3318e-04	7.1482e-08	3.0889e-08	0:00:01	79

! 217 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 0.03125s, time step = 1

45 more time steps

Truncation Error (computed)=0.007089 > Truncation error tolerance

Repeating the time step: time step size = 0.015625

in update prediction domain id = 1

physical-dt 1.5625e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
217	9.3318e-04	7.1482e-08	3.0889e-08	0:00:01	100
218	3.5816e-01	8.1850e-05	6.4696e-05	0:00:01	99
219	2.6621e-01	5.4166e-05	3.7649e-05	0:00:01	98
220	1.8617e-01	3.5902e-05	2.2227e-05	0:00:01	97
221	1.3299e-01	2.6201e-05	1.4316e-05	0:00:00	96
222	9.7456e-02	1.9574e-05	9.2359e-06	0:00:00	95
223	7.2599e-02	1.4188e-05	5.8020e-06	0:00:00	94
224	5.3980e-02	9.9970e-06	3.5971e-06	0:00:19	93
225	3.9894e-02	6.9212e-06	2.2139e-06	0:00:15	92
226	2.9334e-02	4.7591e-06	1.3858e-06	0:00:12	91
227	2.1475e-02	3.2644e-06	8.7645e-07	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
228	1.5675e-02	2.2296e-06	5.6606e-07	0:00:07	89
229	1.1410e-02	1.5288e-06	3.7049e-07	0:00:06	88
230	8.2948e-03	1.0595e-06	2.4728e-07	0:00:05	87
231	6.0289e-03	7.3178e-07	1.6891e-07	0:00:04	86
232	4.3802e-03	5.0813e-07	1.1751e-07	0:00:03	85
233	3.1903e-03	3.5593e-07	8.2776e-08	0:00:02	84
234	2.3292e-03	2.4819e-07	5.9014e-08	0:00:02	83
235	1.7228e-03	1.6873e-07	4.1897e-08	0:00:01	82
236	1.2774e-03	1.0219e-07	3.0773e-08	0:00:01	81
237	9.3326e-04	6.1311e-08	2.4354e-08	0:00:01	80

! 237 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.015625s, time step = 1

44 more time steps

Updating solution at time level N...

done.

physical-dt 7.8125e-03

iter	continuity	x-velocity	y-velocity	time/iter	
237	9.3326e-04	6.1311e-08	2.4354e-08	0:00:01	100
238	6.7164e-02	4.9037e-05	1.9359e-05	0:00:01	99
239	5.4992e-02	2.6755e-05	9.8206e-06	0:00:01	98
240	4.3209e-02	1.6809e-05	5.4617e-06	0:00:01	97
241	3.2757e-02	1.0863e-05	3.1621e-06	0:00:20	96
242	2.4372e-02	7.1061e-06	1.9443e-06	0:00:16	95
243	1.8057e-02	4.9308e-06	1.2579e-06	0:00:12	94
244	1.3309e-02	3.3525e-06	8.3439e-07	0:00:10	93
245	9.9988e-03	2.3000e-06	5.6870e-07	0:00:08	92
246	7.3813e-03	1.6155e-06	3.9341e-07	0:00:06	91
247	5.4904e-03	1.1284e-06	2.7907e-07	0:00:05	90

iter	continuity	x-velocity	y-velocity	time/iter	
248	4.0700e-03	8.0503e-07	1.9812e-07	0:00:04	89
249	3.0173e-03	5.6826e-07	1.3986e-07	0:00:03	88
250	2.2406e-03	4.0675e-07	1.0024e-07	0:00:02	87
251	1.6715e-03	2.9886e-07	7.3127e-08	0:00:02	86
252	1.2441e-03	2.1475e-07	5.3460e-08	0:00:01	85
253	9.3314e-04	1.5558e-07	3.9109e-08	0:00:01	84

! 253 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.0234375s, time step = 2

43 more time steps

Truncation Error (computed)=0.001675 > Truncation error tolerance

Repeating the time step: time step size = 0.003906

in update prediction domain id = 1

physical-dt 3.9063e-03

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
253	9.3314e-04	1.5558e-07	3.9109e-08	0:00:01	100
254	4.4765e-02	2.6310e-05	1.1040e-05	0:00:21	99
255	3.3342e-02	1.3954e-05	5.2558e-06	0:00:17	98
256	2.1618e-02	8.5892e-06	2.7892e-06	0:00:13	97
257	1.7053e-02	6.0797e-06	1.7047e-06	0:00:10	96
258	1.2878e-02	4.1233e-06	1.0793e-06	0:00:08	95
259	9.5592e-03	2.8588e-06	7.1805e-07	0:00:07	94
260	7.0530e-03	1.9901e-06	4.9869e-07	0:00:05	93
261	5.1999e-03	1.3926e-06	3.4956e-07	0:00:04	92
262	3.8290e-03	9.3352e-07	2.4199e-07	0:00:03	91
263	2.8905e-03	6.7992e-07	1.7547e-07	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
264	2.1478e-03	4.9903e-07	1.2741e-07	0:00:02	89
265	1.6065e-03	3.4664e-07	9.3661e-08	0:00:02	88
266	1.1885e-03	2.4689e-07	6.7002e-08	0:00:01	87
267	9.1336e-04	1.9392e-07	5.0031e-08	0:00:01	86

! 267 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.01953125s, time step = 2

42 more time steps

Updating solution at time level N...

done.

physical-dt 3.9752e-03

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

267	9.1336e-04	1.9392e-07	5.0031e-08	0:00:01	100
268	2.8430e-03	5.0452e-06	3.9632e-06	0:00:01	99
269	4.9871e-03	2.1785e-06	1.6618e-06	0:00:01	98
270	4.1044e-03	9.7307e-07	7.1761e-07	0:00:01	97
271	3.1058e-03	5.0839e-07	3.4359e-07	0:00:20	96
272	2.2674e-03	2.8726e-07	1.7626e-07	0:00:16	95
273	1.6430e-03	1.7880e-07	9.8656e-08	0:00:12	94
274	1.1942e-03	1.1950e-07	6.0351e-08	0:00:10	93
275	8.7163e-04	8.2882e-08	3.8624e-08	0:00:08	92

! 275 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.02350645884871483s, time step = 3

41 more time steps

Updating solution at time level N...

done.

physical-dt 6.7761e-03

iter	continuity	x-velocity	y-velocity	time/iter	
275	8.7163e-04	8.2882e-08	3.8624e-08	0:00:08	100
276	6.1977e-03	1.6540e-06	1.1329e-06	0:00:07	99
277	9.9405e-03	1.0213e-06	7.6660e-07	0:00:05	98
278	7.0627e-03	6.6558e-07	5.3079e-07	0:00:04	97
279	4.9384e-03	4.9062e-07	3.9474e-07	0:00:03	96
280	3.4339e-03	3.3290e-07	2.6508e-07	0:00:03	95
281	2.4289e-03	2.3112e-07	1.7783e-07	0:00:02	94
282	1.7372e-03	1.5613e-07	1.1396e-07	0:00:02	93
283	1.2604e-03	1.0916e-07	7.6029e-08	0:00:01	92
284	9.1438e-04	6.8507e-08	4.8631e-08	0:00:01	91

! 284 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.03028260543942451s, time step = 4

40 more time steps

Updating solution at time level N...

done.

physical-dt 1.0625e-02

iter	continuity	x-velocity	y-velocity	time/iter	
284	9.1438e-04	6.8507e-08	4.8631e-08	0:00:01	100
285	8.7917e-03	2.5238e-06	1.8112e-06	0:00:21	99
286	1.5793e-02	1.5953e-06	1.2023e-06	0:00:16	98
287	1.1020e-02	1.0356e-06	8.1078e-07	0:00:13	97
288	7.5597e-03	7.1264e-07	5.6377e-07	0:00:10	96
289	5.1764e-03	4.6523e-07	3.6569e-07	0:00:08	95
290	3.5979e-03	3.0401e-07	2.3181e-07	0:00:06	94
291	2.5705e-03	1.7741e-07	1.3342e-07	0:00:05	93
292	1.8382e-03	1.1532e-07	8.4172e-08	0:00:04	92
293	1.3320e-03	7.9184e-08	5.3957e-08	0:00:03	91
294	9.7347e-04	5.5940e-08	3.5390e-08	0:00:03	90

! 294 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.04090772569179535s, time step = 5

39 more time steps

Updating solution at time level N...

done.

physical-dt 1.3760e-02

iter	continuity	x-velocity	y-velocity	time/iter	
294	9.7347e-04	5.5940e-08	3.5390e-08	0:00:03	100

295	8.9249e-03	2.7217e-06	1.9811e-06	0:00:02	99
296	1.4546e-02	1.6291e-06	1.2290e-06	0:00:02	98
297	1.0029e-02	1.0508e-06	8.2038e-07	0:00:21	97
298	6.6769e-03	7.0772e-07	5.5513e-07	0:00:16	96
299	4.4542e-03	4.6070e-07	3.5603e-07	0:00:13	95
300	3.0444e-03	2.9698e-07	2.2228e-07	0:00:10	94
301	2.1404e-03	1.8904e-07	1.3517e-07	0:00:08	93
302	1.5408e-03	1.0726e-07	7.5170e-08	0:00:06	92
303	1.1108e-03	7.7926e-08	4.9146e-08	0:00:05	91
304	8.1035e-04	4.5684e-08	2.8132e-08	0:00:04	90

! 304 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.05466814339160919s, time step = 6

38 more time steps

Updating solution at time level N...

done.

physical-dt 1.8299e-02

iter	continuity	x-velocity	y-velocity	time/iter	
304	8.1035e-04	4.5684e-08	2.8132e-08	0:00:04	100
305	9.9463e-03	2.9207e-06	2.2189e-06	0:00:04	99
306	1.3998e-02	1.7283e-06	1.3153e-06	0:00:03	98
307	9.1320e-03	1.1413e-06	8.7902e-07	0:00:02	97
308	5.9259e-03	7.2486e-07	5.5855e-07	0:00:02	96
309	3.8384e-03	4.8091e-07	3.6338e-07	0:00:01	95
310	2.5720e-03	3.0598e-07	2.2634e-07	0:00:01	94
311	1.8183e-03	1.9557e-07	1.3768e-07	0:00:01	93
312	1.3180e-03	1.1381e-07	7.7859e-08	0:00:19	92
313	9.4278e-04	7.5866e-08	4.8675e-08	0:00:15	91

! 313 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.07296670973300934s, time step = 7
37 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 2.4758e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
313	9.4278e-04	7.5866e-08	4.8675e-08	0:00:17 100
314	1.1243e-02	3.2093e-06	2.5594e-06	0:00:13 99
315	1.5490e-02	1.8863e-06	1.4805e-06	0:00:10 98
316	9.9641e-03	1.2484e-06	9.7299e-07	0:00:08 97
317	6.1052e-03	8.4149e-07	6.3466e-07	0:00:07 96
318	3.9604e-03	5.3887e-07	4.0151e-07	0:00:05 95
319	2.7324e-03	3.5874e-07	2.5957e-07	0:00:04 94
320	1.9465e-03	2.3721e-07	1.6501e-07	0:00:03 93
321	1.4040e-03	1.4642e-07	1.0096e-07	0:00:03 92
322	1.0005e-03	1.0336e-07	6.7383e-08	0:00:02 91
323	7.3797e-04	6.9108e-08	4.3511e-08	0:00:02 90

```
! 323 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.09772518277168274s, time step = 8
36 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 3.3327e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

```

323 7.3797e-04 6.9108e-08 4.3511e-08 0:00:02 100
324 1.2168e-02 3.5085e-06 2.9571e-06 0:00:01 99
325 1.5200e-02 2.1255e-06 1.7248e-06 0:00:01 98
326 9.3009e-03 1.3954e-06 1.0979e-06 0:00:01 97
327 5.4781e-03 9.5668e-07 7.3351e-07 0:00:01 96
328 3.4727e-03 6.6332e-07 4.9523e-07 0:00:20 95
329 2.4884e-03 4.4913e-07 3.3163e-07 0:00:15 94
330 1.7991e-03 3.1075e-07 2.2782e-07 0:00:12 93
331 1.3168e-03 2.2000e-07 1.5904e-07 0:00:10 92
332 9.6621e-04 1.5568e-07 1.1181e-07 0:00:08 91
! 332 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.1310523450374603s, time step = 9
35 more time steps

Updating solution at time level N...
done.
physical-dt 4.4327e-02

iter continuity x-velocity y-velocity time/iter
332 9.6621e-04 1.5568e-07 1.1181e-07 0:00:08 100
333 1.3374e-02 3.8985e-06 3.4860e-06 0:00:07 99
334 1.4357e-02 2.4474e-06 2.0913e-06 0:00:05 98
335 8.4920e-03 1.6222e-06 1.3357e-06 0:00:04 97
336 4.6984e-03 1.1539e-06 9.2268e-07 0:00:03 96
337 3.0263e-03 8.4436e-07 6.5922e-07 0:00:03 95
338 2.2231e-03 6.1081e-07 4.7555e-07 0:00:02 94
339 1.6725e-03 4.5551e-07 3.5304e-07 0:00:02 93
340 1.2684e-03 3.4175e-07 2.6504e-07 0:00:01 92
341 9.7979e-04 2.5962e-07 2.0051e-07 0:00:01 91
! 341 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.1753790080547333s, time step = 10
34 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 5.7109e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
341	9.7979e-04	2.5962e-07	2.0051e-07	0:00:01 100
342	1.4261e-02	4.3365e-06	4.0678e-06	0:00:01 99
343	1.4453e-02	2.7855e-06	2.5137e-06	0:00:01 98
344	8.3557e-03	1.8829e-06	1.6302e-06	0:00:01 97
345	4.5654e-03	1.3822e-06	1.1720e-06	0:00:00 96
346	3.0766e-03	1.0558e-06	8.8336e-07	0:00:00 95
347	2.2935e-03	8.1972e-07	6.7801e-07	0:00:00 94
348	1.7646e-03	6.4394e-07	5.3214e-07	0:00:00 93
349	1.3995e-03	5.0671e-07	4.2124e-07	0:00:00 92
350	1.0929e-03	4.0793e-07	3.4047e-07	0:00:00 91
351	8.7791e-04	3.2929e-07	2.7422e-07	0:00:00 90

```
! 351 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.2324875593185425s, time step = 11
33 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 7.0647e-02
```

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

	iter	continuity	x-velocity	y-velocity	time/iter	
351	8.7791e-04	3.2929e-07	2.7422e-07	0:00:00	100	
352	1.5033e-02	4.7986e-06	4.7390e-06	0:00:00	99	
353	1.4453e-02	3.1718e-06	2.9818e-06	0:00:20	98	
354	8.1685e-03	2.1304e-06	1.9418e-06	0:00:16	97	
355	4.4895e-03	1.5781e-06	1.4181e-06	0:00:12	96	
356	3.0324e-03	1.2454e-06	1.1079e-06	0:00:10	95	
357	2.3218e-03	1.0084e-06	8.9230e-07	0:00:08	94	
358	1.8537e-03	8.2624e-07	7.3230e-07	0:00:06	93	
359	1.5104e-03	6.8614e-07	6.0860e-07	0:00:05	92	
360	1.2510e-03	5.7377e-07	5.0881e-07	0:00:04	91	
361	1.0430e-03	4.8196e-07	4.2678e-07	0:00:03	90	

```

iter continuity x-velocity y-velocity  time/iter
362 8.8427e-04 4.0593e-07 3.5870e-07 0:00:02 89
! 362 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa
()
Flow time = 0.3031345009803772s, time step = 12
32 more time steps

```

Updating solution at time level N...
done.
physical-dt 8.4344e-02

	iter	continuity	x-velocity	y-velocity	time/iter	
362	8.8427e-04	4.0593e-07	3.5870e-07	0:00:03	100	
363	1.6126e-02	5.4591e-06	5.5796e-06	0:00:02	99	
364	1.5073e-02	3.6702e-06	3.5380e-06	0:00:02	98	
365	8.8225e-03	2.4362e-06	2.2946e-06	0:00:01	97	
366	5.0576e-03	1.7871e-06	1.6909e-06	0:00:01	96	
367	3.4664e-03	1.4361e-06	1.3602e-06	0:00:01	95	
368	2.7078e-03	1.2018e-06	1.1328e-06	0:00:01	94	
369	2.2075e-03	1.0212e-06	9.6036e-07	0:00:01	93	
370	1.8417e-03	8.7388e-07	8.2081e-07	0:00:00	92	
371	1.5675e-03	7.5054e-07	7.0441e-07	0:00:00	91	
372	1.3517e-03	6.4613e-07	6.0588e-07	0:00:00	90	

```

iter continuity x-velocity y-velocity time/iter
373 1.1782e-03 5.5643e-07 5.2176e-07 0:00:18 89
374 1.0258e-03 4.7979e-07 4.4958e-07 0:00:14 88
375 8.9809e-04 4.1327e-07 3.8741e-07 0:00:11 87
! 375 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.3874787390232086s, time step = 13
31 more time steps

Updating solution at time level N...
done.
physical-dt 9.4842e-02

```

```

iter continuity x-velocity y-velocity time/iter
375 8.9809e-04 4.1327e-07 3.8741e-07 0:00:13 100
376 1.7310e-02 6.1676e-06 6.4177e-06 0:00:10 99
377 1.7190e-02 4.2107e-06 4.0655e-06 0:00:08 98
378 1.0858e-02 2.7312e-06 2.6004e-06 0:00:06 97
379 6.6103e-03 1.9807e-06 1.9318e-06 0:00:05 96
380 4.4604e-03 1.5924e-06 1.5724e-06 0:00:04 95
381 3.3646e-03 1.3457e-06 1.3283e-06 0:00:03 94
382 2.6913e-03 1.1603e-06 1.1394e-06 0:00:03 93
383 2.2044e-03 1.0065e-06 9.8519e-07 0:00:02 92
384 1.8472e-03 8.7677e-07 8.5706e-07 0:00:02 91
385 1.5782e-03 7.6265e-07 7.4535e-07 0:00:01 90

```

```

iter continuity x-velocity y-velocity time/iter
386 1.3752e-03 6.6394e-07 6.4940e-07 0:00:19 89
387 1.2040e-03 5.7812e-07 5.6626e-07 0:00:15 88
388 1.0631e-03 5.0356e-07 4.9417e-07 0:00:12 87
389 9.3916e-04 4.3847e-07 4.3105e-07 0:00:09 86
! 389 solution is converged
(update-animation-object "animation-vorticity")

```

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.4823207259178162s, time step = 14

30 more time steps

Updating solution at time level N...

done.

physical-dt 1.0270e-01

iter	continuity	x-velocity	y-velocity	time/iter	
389	9.3916e-04	4.3847e-07	4.3105e-07	0:00:11	100
390	1.9347e-02	7.1088e-06	7.4141e-06	0:00:09	99
391	2.0254e-02	4.9651e-06	4.6848e-06	0:00:07	98
392	1.3565e-02	3.2082e-06	2.9742e-06	0:00:05	97
393	8.6125e-03	2.2917e-06	2.2170e-06	0:00:04	96
394	5.7399e-03	1.8354e-06	1.8255e-06	0:00:03	95
395	4.2807e-03	1.5549e-06	1.5502e-06	0:00:03	94
396	3.3974e-03	1.3445e-06	1.3342e-06	0:00:02	93
397	2.7865e-03	1.1699e-06	1.1581e-06	0:00:20	92
398	2.3184e-03	1.0223e-06	1.0118e-06	0:00:16	91
399	1.9586e-03	8.9529e-07	8.8695e-07	0:00:13	90

iter	continuity	x-velocity	y-velocity	time/iter	
400	1.6840e-03	7.8443e-07	7.7892e-07	0:00:10	89
401	1.4707e-03	6.8727e-07	6.8415e-07	0:00:08	88
402	1.3002e-03	6.0220e-07	6.0079e-07	0:00:06	87
403	1.1574e-03	5.2759e-07	5.2780e-07	0:00:05	86
404	1.0315e-03	4.6155e-07	4.6294e-07	0:00:04	85
405	9.3404e-04	4.0400e-07	4.0607e-07	0:00:03	84

! 405 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.5850209593772888s, time step = 15

29 more time steps

Updating solution at time level N...

done.

physical-dt 1.0451e-01

iter	continuity	x-velocity	y-velocity	time/iter	
405	9.3404e-04	4.0400e-07	4.0607e-07	0:00:04	100
406	2.1930e-02	7.9221e-06	8.2427e-06	0:00:03	99
407	2.4033e-02	5.7101e-06	5.1994e-06	0:00:02	98
408	1.6399e-02	3.6677e-06	3.2464e-06	0:00:02	97
409	1.0456e-02	2.5659e-06	2.3634e-06	0:00:01	96
410	7.0092e-03	2.0348e-06	1.9549e-06	0:00:01	95
411	5.1828e-03	1.7307e-06	1.6716e-06	0:00:01	94
412	4.0327e-03	1.4868e-06	1.4271e-06	0:00:01	93
413	3.2574e-03	1.2829e-06	1.2295e-06	0:00:01	92
414	2.7066e-03	1.1163e-06	1.0703e-06	0:00:00	91
415	2.3045e-03	9.7404e-07	9.3638e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
416	1.9968e-03	8.5114e-07	8.2097e-07	0:00:18	89
417	1.7610e-03	7.4383e-07	7.1965e-07	0:00:14	88
418	1.5810e-03	6.4948e-07	6.3129e-07	0:00:11	87
419	1.4269e-03	5.6710e-07	5.5369e-07	0:00:09	86
420	1.2875e-03	4.9480e-07	4.8483e-07	0:00:07	85
421	1.1619e-03	4.3183e-07	4.2472e-07	0:00:06	84
422	1.0510e-03	3.7660e-07	3.7150e-07	0:00:04	83
423	9.5053e-04	3.2822e-07	3.2498e-07	0:00:03	82

! 423 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.689532458782196s, time step = 16
28 more time steps
Truncation Error (computed)=0.001023 > Truncation error tolerance
Repeating the time step: time step size = 0.052256

in update prediction domain id = 1
physical-dt 5.2256e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
423	9.5053e-04	3.2822e-07	3.2498e-07	0:00:04	100
424	3.5702e-02	6.8114e-06	5.6744e-06	0:00:03	99
425	2.2099e-02	2.6929e-06	3.2787e-06	0:00:03	98
426	9.9424e-03	1.2232e-06	1.6196e-06	0:00:02	97
427	7.8040e-03	7.8543e-07	9.0751e-07	0:00:02	96
428	5.7523e-03	5.4826e-07	5.6628e-07	0:00:01	95
429	4.1803e-03	3.9763e-07	3.8869e-07	0:00:01	94
430	3.0137e-03	3.0427e-07	2.8609e-07	0:00:01	93
431	2.1546e-03	2.4391e-07	2.2103e-07	0:00:01	92
432	1.5504e-03	1.9172e-07	1.6926e-07	0:00:01	91
433	1.1620e-03	1.4745e-07	1.2796e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
434	8.6661e-04	1.1979e-07	1.0102e-07	0:00:00	89

! 434 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6372767053544521s, time step = 16

27 more time steps

Updating solution at time level N...

done.

physical-dt 9.4564e-02

iter	continuity	x-velocity	y-velocity	time/iter	
434	8.6661e-04	1.1979e-07	1.0102e-07	0:00:00	100
435	1.8914e-02	1.7229e-05	1.5608e-05	0:00:00	99
436	1.9083e-02	1.1234e-05	1.0731e-05	0:00:00	98
437	1.4061e-02	7.8340e-06	7.8075e-06	0:00:00	97
438	1.0508e-02	5.9268e-06	6.0023e-06	0:00:00	96
439	8.6105e-03	4.7887e-06	4.7806e-06	0:00:00	95
440	7.3985e-03	3.9811e-06	3.9224e-06	0:00:00	94
441	6.3720e-03	3.3619e-06	3.2642e-06	0:00:00	93
442	5.6082e-03	2.8790e-06	2.7510e-06	0:00:00	92
443	4.8704e-03	2.4551e-06	2.3100e-06	0:00:00	91
444	4.3059e-03	2.1131e-06	1.9562e-06	0:00:18	90

iter	continuity	x-velocity	y-velocity	time/iter	
445	3.7636e-03	1.8136e-06	1.6543e-06	0:00:14	89
446	3.2870e-03	1.5620e-06	1.4062e-06	0:00:11	88
447	2.8636e-03	1.3445e-06	1.1954e-06	0:00:09	87
448	2.5064e-03	1.1524e-06	1.0112e-06	0:00:07	86
449	2.1996e-03	1.0043e-06	8.7533e-07	0:00:06	85
450	1.9154e-03	8.6740e-07	7.4775e-07	0:00:04	84
451	1.6783e-03	7.5141e-07	6.4244e-07	0:00:03	83
452	1.4694e-03	6.5104e-07	5.5229e-07	0:00:03	82
453	1.2951e-03	5.6111e-07	4.7181e-07	0:00:02	81
454	1.1530e-03	4.9048e-07	4.1077e-07	0:00:02	80
455	1.0275e-03	4.2325e-07	3.5183e-07	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
456	9.1502e-04	3.6785e-07	3.0454e-07	0:00:01	78

! 456 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.7318411469459534s, time step = 17

26 more time steps

Truncation Error (computed)=0.002057 > Truncation error tolerance
Repeating the time step: time step size = 0.047282

in update prediction domain id = 1
physical-dt 4.7282e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
456	9.1502e-04	3.6785e-07	3.0454e-07	0:00:01	100
457	3.3351e-02	1.5790e-05	1.3773e-05	0:00:01	99
458	2.1044e-02	8.2254e-06	8.4778e-06	0:00:01	98
459	9.6343e-03	4.4149e-06	4.7655e-06	0:00:01	97
460	7.6613e-03	2.5972e-06	2.8041e-06	0:00:01	96
461	5.9745e-03	1.6376e-06	1.7303e-06	0:00:00	95
462	4.7674e-03	1.1576e-06	1.2002e-06	0:00:00	94
463	3.8089e-03	8.8389e-07	8.7143e-07	0:00:19	93
464	3.0241e-03	6.9307e-07	6.4519e-07	0:00:15	92
465	2.3943e-03	5.4278e-07	4.8274e-07	0:00:12	91
466	1.8982e-03	4.2276e-07	3.6304e-07	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
467	1.5064e-03	3.2779e-07	2.7377e-07	0:00:07	89
468	1.1995e-03	2.5389e-07	2.0729e-07	0:00:06	88
469	9.5945e-04	1.9680e-07	1.5750e-07	0:00:05	87

! 469 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.6845589242875576s, time step = 17

25 more time steps

Updating solution at time level N...

done.

physical-dt 4.7397e-02

iter	continuity	x-velocity	y-velocity	time/iter	
469	9.5945e-04	1.9680e-07	1.5750e-07	0:00:05	100
470	9.8243e-03	1.3347e-05	1.1975e-05	0:00:04	99
471	9.3103e-03	7.8248e-06	7.2872e-06	0:00:03	98
472	7.1058e-03	4.7247e-06	4.5406e-06	0:00:03	97
473	5.6126e-03	3.0300e-06	2.9406e-06	0:00:02	96
474	4.7425e-03	2.0454e-06	1.9754e-06	0:00:02	95
475	4.1177e-03	1.5277e-06	1.4362e-06	0:00:01	94
476	3.4893e-03	1.1905e-06	1.0672e-06	0:00:01	93
477	2.9324e-03	9.3216e-07	8.0215e-07	0:00:01	92
478	2.4464e-03	7.2899e-07	6.0722e-07	0:00:01	91
479	2.0261e-03	5.6978e-07	4.6220e-07	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
480	1.6734e-03	4.4115e-07	3.5001e-07	0:00:00	89
481	1.3742e-03	3.4593e-07	2.6888e-07	0:00:18	88
482	1.1251e-03	2.7192e-07	2.0764e-07	0:00:14	87
483	9.2414e-04	2.1504e-07	1.6133e-07	0:00:11	86

! 483 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.7319554686546326s, time step = 18

24 more time steps

Truncation Error (computed)=0.001023 > Truncation error tolerance

Repeating the time step: time step size = 0.023698

in update prediction domain id = 1

physical-dt 2.3698e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
483	9.2414e-04	2.1504e-07	1.6133e-07	0:00:13	100
484	1.4783e-02	1.0014e-05	8.9604e-06	0:00:10	99
485	9.9428e-03	4.7513e-06	4.7024e-06	0:00:08	98
486	4.3440e-03	2.1960e-06	2.2597e-06	0:00:06	97
487	3.7463e-03	1.0449e-06	1.0957e-06	0:00:05	96
488	2.9712e-03	5.1639e-07	5.5008e-07	0:00:04	95
489	2.3176e-03	3.5691e-07	3.3564e-07	0:00:03	94
490	1.7860e-03	2.7179e-07	2.2851e-07	0:00:21	93
491	1.3727e-03	2.0881e-07	1.6334e-07	0:00:17	92
492	1.0535e-03	1.5618e-07	1.1765e-07	0:00:13	91
493	8.1039e-04	1.1434e-07	8.3337e-08	0:00:10	90

! 493 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.7082572095096111s, time step = 18

23 more time steps

Updating solution at time level N...

done.

physical-dt 3.3315e-02

iter	continuity	x-velocity	y-velocity	time/iter	
493	8.1039e-04	1.1434e-07	8.3337e-08	0:00:12	100
494	6.9076e-03	1.1242e-05	1.0083e-05	0:00:09	99
495	6.3784e-03	6.1408e-06	5.6636e-06	0:00:07	98
496	5.1177e-03	3.4031e-06	3.2120e-06	0:00:06	97
497	4.0763e-03	1.9646e-06	1.8615e-06	0:00:05	96
498	3.4146e-03	1.1848e-06	1.1163e-06	0:00:04	95
499	2.8870e-03	8.5959e-07	7.5491e-07	0:00:03	94
500	2.3976e-03	6.5429e-07	5.3436e-07	0:00:02	93
501	1.9673e-03	4.9528e-07	3.8478e-07	0:00:02	92
502	1.5958e-03	3.7231e-07	2.7878e-07	0:00:01	91
503	1.2896e-03	2.7046e-07	1.9980e-07	0:00:01	90

```

iter continuity x-velocity y-velocity time/iter
504 1.0401e-03 2.0202e-07 1.4558e-07 0:00:01 89
505 8.3135e-04 1.5034e-07 1.0621e-07 0:00:01 88
! 505 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 0.7415721416473389s, time step = 19
22 more time steps

Updating solution at time level N...
done.
physical-dt 3.9331e-02

```

```

iter continuity x-velocity y-velocity time/iter
505 8.3135e-04 1.5034e-07 1.0621e-07 0:00:01 100
506 7.9401e-03 2.3496e-06 2.4073e-06 0:00:01 99
507 9.1273e-03 1.7457e-06 1.4093e-06 0:00:01 98
508 6.6618e-03 1.1625e-06 8.1508e-07 0:00:00 97
509 4.7093e-03 7.6776e-07 5.1969e-07 0:00:00 96
510 3.3067e-03 5.1396e-07 3.5783e-07 0:00:00 95
511 2.4025e-03 3.5968e-07 2.5552e-07 0:00:00 94
512 1.8147e-03 2.5930e-07 1.8466e-07 0:00:00 93
513 1.3993e-03 1.9055e-07 1.3405e-07 0:00:00 92
514 1.0995e-03 1.3732e-07 9.5996e-08 0:00:00 91
515 8.4753e-04 1.0389e-07 7.1746e-08 0:00:00 90
! 515 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

```

()

Flow time = 0.7809030413627625s, time step = 20

21 more time steps

Updating solution at time level N...

done.

physical-dt 9.8990e-02

iter	continuity	x-velocity	y-velocity	time/iter	
515	8.4753e-04	1.0389e-07	7.1746e-08	0:00:00	100
516	2.8985e-02	9.4814e-06	9.7304e-06	0:00:00	99
517	3.0978e-02	7.1217e-06	6.2054e-06	0:00:00	98
518	2.1437e-02	4.5309e-06	3.6533e-06	0:00:00	97
519	1.4129e-02	3.0487e-06	2.4870e-06	0:00:00	96
520	9.5839e-03	2.3386e-06	1.9840e-06	0:00:00	95
521	7.0248e-03	1.9226e-06	1.6426e-06	0:00:00	94
522	5.3683e-03	1.6010e-06	1.3632e-06	0:00:00	93
523	4.3035e-03	1.3273e-06	1.1288e-06	0:00:18	92
524	3.5668e-03	1.1396e-06	9.8216e-07	0:00:15	91
525	3.0147e-03	9.6655e-07	8.4183e-07	0:00:12	90

iter	continuity	x-velocity	y-velocity	time/iter	
526	2.5874e-03	8.2222e-07	7.2259e-07	0:00:09	89
527	2.2545e-03	7.0103e-07	6.2092e-07	0:00:07	88
528	1.9758e-03	5.9766e-07	5.3340e-07	0:00:06	87
529	1.7436e-03	5.0986e-07	4.5628e-07	0:00:05	86
530	1.5382e-03	4.3391e-07	3.8990e-07	0:00:04	85
531	1.3634e-03	3.6628e-07	3.3039e-07	0:00:03	84
532	1.1988e-03	3.1472e-07	2.8512e-07	0:00:02	83
533	1.0610e-03	2.6501e-07	2.4120e-07	0:00:02	82
534	9.3571e-04	2.2497e-07	2.0500e-07	0:00:01	81

! 534 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.8798933029174805s, time step = 21

20 more time steps

Updating solution at time level N...
done.

physical-dt 1.0129e-01

iter	continuity	x-velocity	y-velocity	time/iter	
534	9.3571e-04	2.2497e-07	2.0500e-07	0:00:02	100
535	3.5813e-02	1.1187e-05	1.1322e-05	0:00:21	99
536	3.7946e-02	8.5324e-06	7.2604e-06	0:00:17	98
537	2.6675e-02	5.4575e-06	4.2900e-06	0:00:13	97
538	1.7418e-02	3.6925e-06	2.8621e-06	0:00:11	96
539	1.1910e-02	2.7652e-06	2.2003e-06	0:00:08	95
540	8.6511e-03	2.2151e-06	1.7708e-06	0:00:07	94
541	6.6090e-03	1.7992e-06	1.4346e-06	0:00:05	93
542	5.2166e-03	1.4895e-06	1.1945e-06	0:00:04	92
543	4.2770e-03	1.2515e-06	1.0110e-06	0:00:03	91
544	3.5860e-03	1.0522e-06	8.5872e-07	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
545	3.0499e-03	8.8400e-07	7.2854e-07	0:00:02	89
546	2.6176e-03	7.4080e-07	6.1668e-07	0:00:02	88
547	2.2246e-03	6.2026e-07	5.1968e-07	0:00:01	87
548	1.8790e-03	5.1919e-07	4.3810e-07	0:00:01	86
549	1.5947e-03	4.3409e-07	3.6988e-07	0:00:01	85
550	1.3709e-03	3.6345e-07	3.1279e-07	0:00:01	84
551	1.1852e-03	3.0406e-07	2.6453e-07	0:00:00	83
552	1.0375e-03	2.5473e-07	2.2458e-07	0:00:17	82
553	9.0479e-04	2.1413e-07	1.9173e-07	0:00:13	81

! 553 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.9811810255050659s, time step = 22

19 more time steps

Truncation Error (computed)=0.001041 > Truncation error tolerance

Repeating the time step: time step size = 0.050644

in update prediction domain id = 1
physical-dt 5.0644e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
553	9.0479e-04	2.1413e-07	1.9173e-07	0:00:16	100
554	4.8145e-02	9.2595e-06	7.0917e-06	0:00:13	99
555	2.6169e-02	3.5175e-06	3.8099e-06	0:00:10	98
556	1.2918e-02	1.6504e-06	1.8927e-06	0:00:08	97
557	9.6530e-03	9.8261e-07	1.0216e-06	0:00:06	96
558	7.0403e-03	6.4093e-07	6.0464e-07	0:00:05	95
559	4.9938e-03	4.3275e-07	3.8862e-07	0:00:04	94
560	3.5420e-03	3.0637e-07	2.6666e-07	0:00:03	93
561	2.5138e-03	2.2558e-07	1.8964e-07	0:00:03	92
562	1.8021e-03	1.7003e-07	1.3854e-07	0:00:02	91
563	1.3104e-03	1.3089e-07	1.0255e-07	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
564	9.6613e-04	1.0189e-07	7.6838e-08	0:00:01	89

! 564 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.9305371679365635s, time step = 22

18 more time steps

Updating solution at time level N...

done.

physical-dt 9.4087e-02

iter	continuity	x-velocity	y-velocity	time/iter	
564	9.6613e-04	1.0189e-07	7.6838e-08	0:00:01	100

565	3.0439e-02	2.3978e-05	2.1595e-05	0:00:21	99
566	2.8760e-02	1.5859e-05	1.4796e-05	0:00:17	98
567	2.2781e-02	1.0877e-05	1.0615e-05	0:00:13	97
568	1.7659e-02	8.0316e-06	7.9383e-06	0:00:10	96
569	1.4231e-02	6.2724e-06	6.1194e-06	0:00:08	95
570	1.1695e-02	5.0246e-06	4.8415e-06	0:00:07	94
571	9.8191e-03	4.1194e-06	3.8924e-06	0:00:05	93
572	8.2969e-03	3.3924e-06	3.1399e-06	0:00:04	92
573	7.0654e-03	2.8102e-06	2.5457e-06	0:00:03	91
574	6.0637e-03	2.3439e-06	2.0755e-06	0:00:03	90

iter	continuity	x-velocity	y-velocity	time/iter	
575	5.2078e-03	1.9470e-06	1.6837e-06	0:00:02	89
576	4.4791e-03	1.6425e-06	1.3911e-06	0:00:02	88
577	3.8788e-03	1.3726e-06	1.1346e-06	0:00:01	87
578	3.3421e-03	1.1562e-06	9.3502e-07	0:00:01	86
579	2.8841e-03	9.7618e-07	7.7480e-07	0:00:01	85
580	2.4730e-03	8.2481e-07	6.4191e-07	0:00:01	84
581	2.1196e-03	6.9788e-07	5.3512e-07	0:00:00	83
582	1.8248e-03	5.9082e-07	4.4665e-07	0:00:00	82
583	1.5810e-03	5.0200e-07	3.7395e-07	0:00:00	81
584	1.3472e-03	4.2538e-07	3.1116e-07	0:00:00	80
585	1.1638e-03	3.6182e-07	2.6089e-07	0:00:16	79

iter	continuity	x-velocity	y-velocity	time/iter	
586	1.0050e-03	3.0785e-07	2.1895e-07	0:00:13	78
587	8.7825e-04	2.6257e-07	1.8386e-07	0:00:10	77

! 587 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 1.024624109268188s, time step = 23

17 more time steps

Truncation Error (computed)=0.001880 > Truncation error tolerance

Repeating the time step: time step size = 0.047043

in update prediction domain id = 1

physical-dt 4.7043e-02

in update prediction domain id = 1

in update prediction domain id = 1

in update prediction domain id = 1

iter	continuity	x-velocity	y-velocity	time/iter	
587	8.7825e-04	2.6257e-07	1.8386e-07	0:00:13	100
588	4.8231e-02	2.1740e-05	1.8133e-05	0:00:10	99
589	2.5496e-02	1.0719e-05	1.0819e-05	0:00:08	98
590	1.2391e-02	5.6124e-06	6.1457e-06	0:00:06	97
591	9.5002e-03	3.2570e-06	3.6078e-06	0:00:05	96
592	7.3829e-03	2.0103e-06	2.1705e-06	0:00:04	95
593	5.8788e-03	1.3701e-06	1.4467e-06	0:00:03	94
594	4.6538e-03	1.0409e-06	1.0201e-06	0:00:21	93
595	3.6495e-03	8.0700e-07	7.3139e-07	0:00:17	92
596	2.8485e-03	6.1859e-07	5.2916e-07	0:00:13	91
597	2.2255e-03	4.7275e-07	3.8575e-07	0:00:10	90

iter	continuity	x-velocity	y-velocity	time/iter	
598	1.7412e-03	3.6049e-07	2.8319e-07	0:00:08	89
599	1.3646e-03	2.7558e-07	2.0928e-07	0:00:07	88
600	1.0724e-03	2.1028e-07	1.5554e-07	0:00:05	87
601	8.4691e-04	1.6137e-07	1.1618e-07	0:00:04	86

! 601 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 0.9775806628167629s, time step = 23

16 more time steps

Updating solution at time level N...

done.

physical-dt 4.7493e-02

iter	continuity	x-velocity	y-velocity	time/iter	
601	8.4691e-04	1.6137e-07	1.1618e-07	0:00:05	100
602	1.5719e-02	1.8349e-05	1.6408e-05	0:00:04	99
603	1.4437e-02	1.0637e-05	9.7536e-06	0:00:03	98
604	1.1735e-02	6.3037e-06	5.9433e-06	0:00:02	97
605	9.2374e-03	3.9859e-06	3.7563e-06	0:00:02	96
606	7.4146e-03	2.6346e-06	2.4438e-06	0:00:01	95
607	6.1146e-03	1.8945e-06	1.7131e-06	0:00:01	94
608	4.9848e-03	1.4207e-06	1.2274e-06	0:00:01	93
609	4.0401e-03	1.0797e-06	8.8948e-07	0:00:01	92
610	3.2787e-03	8.1577e-07	6.4766e-07	0:00:01	91
611	2.6680e-03	6.2113e-07	4.7666e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
612	2.1635e-03	4.6500e-07	3.4803e-07	0:00:18	89
613	1.7412e-03	3.5373e-07	2.5832e-07	0:00:14	88
614	1.4022e-03	2.7338e-07	1.9466e-07	0:00:11	87
615	1.1277e-03	2.1229e-07	1.4725e-07	0:00:09	86
616	9.0205e-04	1.6436e-07	1.1131e-07	0:00:07	85

! 616 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()

Flow time = 1.025073647499084s, time step = 24

15 more time steps

Updating solution at time level N...

done.

physical-dt 4.8171e-02

iter	continuity	x-velocity	y-velocity	time/iter	
616	9.0205e-04	1.6436e-07	1.1131e-07	0:00:08	100
617	1.7468e-02	4.6713e-06	4.6372e-06	0:00:07	99
618	1.9042e-02	3.5560e-06	2.7645e-06	0:00:05	98
619	1.4230e-02	2.3347e-06	1.5985e-06	0:00:04	97
620	9.8110e-03	1.4749e-06	9.6866e-07	0:00:03	96
621	6.7796e-03	9.5833e-07	6.3823e-07	0:00:03	95

622	4.8499e-03	6.4323e-07	4.2995e-07	0:00:02	94
623	3.5390e-03	4.3135e-07	2.8720e-07	0:00:02	93
624	2.6160e-03	3.0449e-07	1.9968e-07	0:00:01	92
625	1.9517e-03	2.2162e-07	1.4337e-07	0:00:01	91
626	1.4733e-03	1.5801e-07	1.0229e-07	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
627	1.1130e-03	1.2662e-07	7.9286e-08	0:00:01	89
628	8.6265e-04	9.0644e-08	5.6480e-08	0:00:01	88

! 628 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.073244571685791s, time step = 25

14 more time steps

Updating solution at time level N...

done.

physical-dt 9.5483e-02

iter	continuity	x-velocity	y-velocity	time/iter	
628	8.6265e-04	9.0644e-08	5.6480e-08	0:00:01	100
629	4.6958e-02	1.3265e-05	1.3094e-05	0:00:00	99
630	5.2726e-02	1.0224e-05	8.3501e-06	0:00:00	98
631	3.7160e-02	6.5743e-06	4.9552e-06	0:00:00	97
632	2.4369e-02	4.2136e-06	3.1238e-06	0:00:00	96
633	1.6610e-02	2.8968e-06	2.2316e-06	0:00:00	95
634	1.1989e-02	2.0942e-06	1.6586e-06	0:00:00	94
635	8.9569e-03	1.5952e-06	1.2843e-06	0:00:00	93
636	6.6802e-03	1.2522e-06	1.0202e-06	0:00:00	92
637	5.1643e-03	9.9706e-07	8.3200e-07	0:00:00	91
638	4.1965e-03	8.0074e-07	6.8803e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
639	3.4797e-03	6.4761e-07	5.7303e-07	0:00:00	89
640	2.9245e-03	5.2768e-07	4.8140e-07	0:00:00	88
641	2.4690e-03	4.3164e-07	4.0678e-07	0:00:00	87

```

642 2.0938e-03 3.5490e-07 3.4717e-07 0:00:00 86
643 1.7803e-03 2.9427e-07 2.9726e-07 0:00:00 85
644 1.5130e-03 2.4616e-07 2.5454e-07 0:00:00 84
645 1.2839e-03 2.0717e-07 2.1835e-07 0:00:00 83
646 1.0903e-03 1.7459e-07 1.8733e-07 0:00:00 82
647 9.2038e-04 1.4745e-07 1.6061e-07 0:00:16 81
! 647 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 1.168727159500122s, time step = 26
13 more time steps

Updating solution at time level N...
done.
physical-dt 1.0011e-01

```

	iter	continuity	x-velocity	y-velocity	time/iter	
	647	9.2038e-04	1.4745e-07	1.6061e-07	0:00:20	100
	648	5.4688e-02	1.5293e-05	1.4661e-05	0:00:16	99
	649	6.3192e-02	1.1863e-05	9.3039e-06	0:00:13	98
	650	4.4722e-02	7.4217e-06	5.5214e-06	0:00:10	97
	651	2.9537e-02	4.7120e-06	3.4724e-06	0:00:08	96
	652	1.9533e-02	3.1322e-06	2.4515e-06	0:00:06	95
	653	1.3889e-02	2.1816e-06	1.8242e-06	0:00:05	94
	654	1.0580e-02	1.6327e-06	1.4022e-06	0:00:04	93
	655	8.1413e-03	1.2771e-06	1.1176e-06	0:00:21	92
	656	6.4008e-03	1.0284e-06	9.1653e-07	0:00:17	91
	657	5.0268e-03	8.3453e-07	7.5613e-07	0:00:13	90

	iter	continuity	x-velocity	y-velocity	time/iter	
	658	3.9773e-03	6.8170e-07	6.3389e-07	0:00:11	89
	659	3.1952e-03	5.6797e-07	5.4817e-07	0:00:08	88
	660	2.5653e-03	4.6074e-07	4.5838e-07	0:00:07	87
	661	2.1173e-03	3.8637e-07	3.9735e-07	0:00:05	86
	662	1.7555e-03	3.1743e-07	3.3586e-07	0:00:04	85
	663	1.4609e-03	2.6975e-07	2.9235e-07	0:00:03	84

```

664 1.2124e-03 2.2521e-07 2.4880e-07 0:00:03 83
665 1.0112e-03 1.8849e-07 2.1158e-07 0:00:02 82
666 8.5270e-04 1.5888e-07 1.8081e-07 0:00:02 81
! 666 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 1.268832445144653s, time step = 27
12 more time steps

Updating solution at time level N...
done.
physical-dt 1.0500e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
666	8.5270e-04	1.5888e-07	1.8081e-07	0:00:02	100
667	6.2280e-02	1.7100e-05	1.5974e-05	0:00:02	99
668	7.3656e-02	1.3313e-05	1.0102e-05	0:00:01	98
669	5.1897e-02	8.0749e-06	5.8172e-06	0:00:01	97
670	3.2904e-02	4.9203e-06	3.6330e-06	0:00:01	96
671	2.1228e-02	3.1834e-06	2.5398e-06	0:00:01	95
672	1.4996e-02	2.2224e-06	1.8697e-06	0:00:00	94
673	1.1222e-02	1.6603e-06	1.4206e-06	0:00:19	93
674	8.5742e-03	1.3099e-06	1.1455e-06	0:00:15	92
675	6.5785e-03	1.0507e-06	9.4961e-07	0:00:12	91
676	5.1195e-03	8.5389e-07	7.9493e-07	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
677	4.0353e-03	6.9929e-07	6.7309e-07	0:00:07	89
678	3.2412e-03	5.8482e-07	5.8352e-07	0:00:06	88
679	2.6058e-03	4.7360e-07	4.8607e-07	0:00:05	87
680	2.1377e-03	4.0047e-07	4.2098e-07	0:00:04	86
681	1.7531e-03	3.2822e-07	3.5302e-07	0:00:03	85
682	1.4617e-03	2.7994e-07	3.0722e-07	0:00:02	84
683	1.2114e-03	2.3411e-07	2.6137e-07	0:00:02	83
684	1.0206e-03	1.9735e-07	2.2314e-07	0:00:01	82
685	8.6324e-04	1.6659e-07	1.9080e-07	0:00:01	81

```

! 685 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 1.373833179473877s, time step = 28
11 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 1.1307e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
685	8.6324e-04	1.6659e-07	1.9080e-07	0:00:01	100
686	7.1250e-02	1.9698e-05	1.7627e-05	0:00:01	99
687	8.6615e-02	1.5036e-05	1.1239e-05	0:00:01	98
688	6.1765e-02	8.9920e-06	6.3764e-06	0:00:01	97
689	3.9469e-02	5.3004e-06	3.9065e-06	0:00:01	96
690	2.5028e-02	3.3118e-06	2.6572e-06	0:00:00	95
691	1.7261e-02	2.2874e-06	1.9829e-06	0:00:19	94
692	1.2673e-02	1.7284e-06	1.5498e-06	0:00:15	93
693	9.6845e-03	1.3581e-06	1.2467e-06	0:00:12	92
694	7.4989e-03	1.1029e-06	1.0368e-06	0:00:09	91
695	5.9267e-03	9.2174e-07	8.9611e-07	0:00:08	90

iter	continuity	x-velocity	y-velocity	time/iter	
696	4.5679e-03	7.3238e-07	7.3199e-07	0:00:06	89
697	3.6784e-03	6.1268e-07	6.3049e-07	0:00:05	88
698	2.8748e-03	4.9646e-07	5.2528e-07	0:00:04	87
699	2.3367e-03	4.2172e-07	4.5565e-07	0:00:03	86
700	1.8761e-03	3.4608e-07	3.8208e-07	0:00:02	85
701	1.5561e-03	2.9790e-07	3.3295e-07	0:00:02	84
702	1.2846e-03	2.4752e-07	2.8015e-07	0:00:01	83
703	1.0859e-03	2.1435e-07	2.4436e-07	0:00:01	82
704	9.0648e-04	1.8061e-07	2.0756e-07	0:00:01	81

```

! 704 solution is converged
(update-animation-object "animation-vorticity")

```


Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.486905932426453s, time step = 29

10 more time steps

Updating solution at time level N...

done.

physical-dt 1.2403e-01

iter	continuity	x-velocity	y-velocity	time/iter	
704	9.0648e-04	1.8061e-07	2.0756e-07	0:00:01	100
705	8.0629e-02	2.2505e-05	1.9605e-05	0:00:01	99
706	9.8772e-02	1.6940e-05	1.2421e-05	0:00:01	98
707	6.9746e-02	9.9131e-06	7.0381e-06	0:00:01	97
708	4.3791e-02	5.6699e-06	4.2482e-06	0:00:00	96
709	2.7934e-02	3.5284e-06	2.9081e-06	0:00:00	95
710	1.9338e-02	2.4486e-06	2.1638e-06	0:00:00	94
711	1.4421e-02	1.8550e-06	1.6920e-06	0:00:00	93
712	1.1150e-02	1.5220e-06	1.4174e-06	0:00:00	92
713	8.5149e-03	1.1856e-06	1.1404e-06	0:00:00	91
714	6.6347e-03	9.5756e-07	9.5073e-07	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
715	5.1824e-03	7.9853e-07	8.1569e-07	0:00:00	89
716	4.0090e-03	6.4331e-07	6.7722e-07	0:00:00	88
717	3.1927e-03	5.4060e-07	5.8162e-07	0:00:00	87
718	2.5689e-03	4.4532e-07	4.8826e-07	0:00:00	86
719	2.0952e-03	3.8201e-07	4.2234e-07	0:00:17	85
720	1.7137e-03	3.1831e-07	3.5567e-07	0:00:13	84
721	1.4143e-03	2.7500e-07	3.0881e-07	0:00:11	83
722	1.1697e-03	2.3347e-07	2.6362e-07	0:00:08	82
723	9.7751e-04	1.9827e-07	2.2503e-07	0:00:07	81

! 723 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vel.cxa
()
Flow time = 1.610936403274536s, time step = 30
9 more time steps
```

```
Updating solution at time level N...
done.
physical-dt 1.3810e-01
```

iter	continuity	x-velocity	y-velocity	time/iter	
723	9.7751e-04	1.9827e-07	2.2503e-07	0:00:08	100
724	9.0020e-02	2.5259e-05	2.1903e-05	0:00:07	99
725	1.1237e-01	1.8990e-05	1.3863e-05	0:00:05	98
726	7.7649e-02	1.0838e-05	7.6415e-06	0:00:04	97
727	4.8741e-02	6.0854e-06	4.5278e-06	0:00:03	96
728	3.1690e-02	3.8169e-06	3.1441e-06	0:00:03	95
729	2.2283e-02	2.6708e-06	2.3654e-06	0:00:02	94
730	1.6621e-02	2.0134e-06	1.8382e-06	0:00:02	93
731	1.2736e-02	1.5856e-06	1.4751e-06	0:00:01	92
732	9.8468e-03	1.3173e-06	1.2686e-06	0:00:01	91
733	7.4971e-03	1.0399e-06	1.0361e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
734	5.8817e-03	8.5357e-07	8.7290e-07	0:00:01	89
735	4.6364e-03	7.1873e-07	7.5690e-07	0:00:00	88
736	3.6405e-03	5.8542e-07	6.2813e-07	0:00:00	87
737	2.9122e-03	4.9846e-07	5.3911e-07	0:00:18	86
738	2.3516e-03	4.1351e-07	4.5106e-07	0:00:14	85
739	1.9290e-03	3.5833e-07	3.9120e-07	0:00:11	84
740	1.5828e-03	3.0003e-07	3.2824e-07	0:00:09	83
741	1.3252e-03	2.6248e-07	2.8548e-07	0:00:07	82
742	1.1133e-03	2.2169e-07	2.4093e-07	0:00:05	81
743	9.4626e-04	1.9509e-07	2.1011e-07	0:00:04	80

```
! 743 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent//animation-vorticity.cxa
()
(update-animation-object "animation-vel")
```

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.749038696289063s, time step = 31

8 more time steps

Updating solution at time level N...

done.

physical-dt 1.5475e-01

iter	continuity	x-velocity	y-velocity	time/iter	
743	9.4626e-04	1.9509e-07	2.1011e-07	0:00:05	100
744	9.9103e-02	2.8132e-05	2.4034e-05	0:00:04	99
745	1.2470e-01	2.1041e-05	1.5016e-05	0:00:03	98
746	8.3418e-02	1.1854e-05	8.1082e-06	0:00:03	97
747	5.1617e-02	6.5357e-06	4.7631e-06	0:00:02	96
748	3.4143e-02	4.0650e-06	3.2774e-06	0:00:02	95
749	2.4990e-02	2.8262e-06	2.4646e-06	0:00:01	94
750	1.9015e-02	2.1317e-06	1.9287e-06	0:00:01	93
751	1.4658e-02	1.6785e-06	1.5500e-06	0:00:01	92
752	1.1252e-02	1.3603e-06	1.3018e-06	0:00:01	91
753	8.6117e-03	1.1160e-06	1.1027e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
754	6.6585e-03	9.2081e-07	9.3144e-07	0:00:00	89
755	5.2326e-03	7.6793e-07	7.8495e-07	0:00:00	88
756	4.1662e-03	6.4356e-07	6.6111e-07	0:00:18	87
757	3.3939e-03	5.5063e-07	5.6996e-07	0:00:14	86
758	2.7109e-03	4.5102e-07	4.7040e-07	0:00:11	85
759	2.2043e-03	3.7947e-07	3.9403e-07	0:00:09	84
760	1.8222e-03	3.2983e-07	3.4093e-07	0:00:07	83
761	1.4858e-03	2.7426e-07	2.8411e-07	0:00:05	82
762	1.2351e-03	2.3952e-07	2.4510e-07	0:00:04	81
763	1.0346e-03	2.0212e-07	2.0582e-07	0:00:03	80
764	8.7048e-04	1.7751e-07	1.7861e-07	0:00:03	79

! 764 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 1.903793334960938s, time step = 32

7 more time steps

Updating solution at time level N...

done.

physical-dt 1.7739e-01

iter	continuity	x-velocity	y-velocity	time/iter	
764	8.7048e-04	1.7751e-07	1.7861e-07	0:00:03	100
765	1.0901e-01	3.1610e-05	2.6595e-05	0:00:03	99
766	1.3551e-01	2.3545e-05	1.6845e-05	0:00:02	98
767	8.8830e-02	1.2937e-05	8.7679e-06	0:00:02	97
768	5.4537e-02	6.9603e-06	4.9423e-06	0:00:01	96
769	3.5865e-02	4.3045e-06	3.4198e-06	0:00:01	95
770	2.6800e-02	3.0842e-06	2.5957e-06	0:00:01	94
771	2.1106e-02	2.3391e-06	2.0386e-06	0:00:01	93
772	1.6526e-02	1.8144e-06	1.6401e-06	0:00:01	92
773	1.2869e-02	1.4543e-06	1.3613e-06	0:00:00	91
774	9.9626e-03	1.1967e-06	1.1542e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
775	7.7265e-03	9.9944e-07	9.8021e-07	0:00:00	89
776	6.0519e-03	8.3811e-07	8.2643e-07	0:00:00	88
777	4.8074e-03	7.0685e-07	6.9408e-07	0:00:00	87
778	3.8506e-03	5.9564e-07	5.8210e-07	0:00:00	86
779	3.1073e-03	5.0154e-07	4.8916e-07	0:00:00	85
780	2.5190e-03	4.2194e-07	4.1302e-07	0:00:00	84
781	2.0477e-03	3.5560e-07	3.4835e-07	0:00:00	83
782	1.6771e-03	3.0159e-07	2.9420e-07	0:00:00	82
783	1.3783e-03	2.5739e-07	2.4906e-07	0:00:00	81
784	1.1469e-03	2.2094e-07	2.1124e-07	0:00:16	80
785	9.6230e-04	1.9043e-07	1.7964e-07	0:00:13	79

! 785 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincocoe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.081183910369873s, time step = 33

6 more time steps

Updating solution at time level N...

done.

physical-dt 2.0803e-01

iter	continuity	x-velocity	y-velocity	time/iter	
785	9.6230e-04	1.9043e-07	1.7964e-07	0:00:16	100
786	1.1969e-01	3.5686e-05	2.9329e-05	0:00:13	99
787	1.5042e-01	2.6361e-05	1.8916e-05	0:00:10	98
788	9.6897e-02	1.3872e-05	9.7244e-06	0:00:08	97
789	5.8878e-02	7.4080e-06	5.4828e-06	0:00:06	96
790	4.0230e-02	4.7620e-06	3.8225e-06	0:00:05	95
791	3.0740e-02	3.4940e-06	2.8610e-06	0:00:04	94
792	2.4472e-02	2.6927e-06	2.2618e-06	0:00:03	93
793	1.9498e-02	2.1059e-06	1.8024e-06	0:00:02	92
794	1.4706e-02	1.6998e-06	1.5251e-06	0:00:02	91
795	1.1312e-02	1.4399e-06	1.2950e-06	0:00:02	90

iter	continuity	x-velocity	y-velocity	time/iter	
796	8.7128e-03	1.2026e-06	1.0864e-06	0:00:01	89
797	6.8806e-03	1.0023e-06	9.1723e-07	0:00:01	88
798	5.5108e-03	8.4070e-07	7.7659e-07	0:00:01	87
799	4.4437e-03	7.1191e-07	6.5414e-07	0:00:01	86
800	3.6009e-03	6.0063e-07	5.5163e-07	0:00:00	85
801	2.9442e-03	5.0742e-07	4.6441e-07	0:00:00	84
802	2.4116e-03	4.3144e-07	3.9104e-07	0:00:00	83
803	1.9876e-03	3.6640e-07	3.2961e-07	0:00:17	82
804	1.6545e-03	3.1345e-07	2.7843e-07	0:00:13	81
805	1.3852e-03	2.6925e-07	2.3559e-07	0:00:10	80
806	1.1623e-03	2.3191e-07	2.0003e-07	0:00:08	79

iter	continuity	x-velocity	y-velocity	time/iter	
807	9.8317e-04	1.9976e-07	1.7025e-07	0:00:06	78

! 807 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

```

()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 2.289214849472046s, time step = 34
5 more time steps

```

```

Updating solution at time level N...
done.
physical-dt 2.4356e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
807	9.8317e-04	1.9976e-07	1.7025e-07	0:00:08	100
808	1.2718e-01	3.8851e-05	3.1071e-05	0:00:07	99
809	1.5971e-01	2.8273e-05	2.0309e-05	0:00:05	98
810	1.0043e-01	1.4562e-05	1.0636e-05	0:00:04	97
811	5.8919e-02	7.6916e-06	6.0472e-06	0:00:03	96
812	4.2232e-02	5.1410e-06	4.1723e-06	0:00:03	95
813	3.3959e-02	3.9237e-06	3.1249e-06	0:00:02	94
814	2.7880e-02	3.1036e-06	2.4555e-06	0:00:02	93
815	2.1632e-02	2.4781e-06	2.0638e-06	0:00:01	92
816	1.7146e-02	2.0253e-06	1.7010e-06	0:00:01	91
817	1.3191e-02	1.7032e-06	1.4762e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
818	1.0445e-02	1.4394e-06	1.2499e-06	0:00:01	89
819	8.4407e-03	1.2201e-06	1.0601e-06	0:00:18	88
820	6.8715e-03	1.0339e-06	9.0280e-07	0:00:14	87
821	5.6234e-03	8.7757e-07	7.6897e-07	0:00:11	86
822	4.6022e-03	7.4411e-07	6.5217e-07	0:00:09	85
823	3.7816e-03	6.3214e-07	5.5132e-07	0:00:07	84
824	3.1098e-03	5.3834e-07	4.6504e-07	0:00:06	83
825	2.5604e-03	4.6008e-07	3.9226e-07	0:00:04	82
826	2.1022e-03	3.9484e-07	3.3117e-07	0:00:03	81
827	1.7422e-03	3.4015e-07	2.8066e-07	0:00:03	80
828	1.4555e-03	2.9399e-07	2.3894e-07	0:00:02	79

iter	continuity	x-velocity	y-velocity	time/iter	
829	1.2229e-03	2.5453e-07	2.0407e-07	0:00:02	78
830	1.0421e-03	2.2064e-07	1.7475e-07	0:00:01	77
831	8.9747e-04	1.9172e-07	1.5011e-07	0:00:01	76

```
! 831 solution is converged
```

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 2.532778024673462s, time step = 35

4 more time steps

Updating solution at time level N...

done.

physical-dt 2.8624e-01

iter	continuity	x-velocity	y-velocity	time/iter	
831	8.9747e-04	1.9172e-07	1.5011e-07	0:00:01	100
832	1.3153e-01	4.1206e-05	3.2143e-05	0:00:01	99
833	1.6629e-01	2.9940e-05	2.1342e-05	0:00:01	98
834	1.0037e-01	1.5338e-05	1.1562e-05	0:00:01	97
835	6.0489e-02	8.0277e-06	6.5281e-06	0:00:01	96
836	4.4881e-02	5.6928e-06	4.6844e-06	0:00:19	95
837	3.7590e-02	4.3667e-06	3.5217e-06	0:00:15	94
838	2.9543e-02	3.4496e-06	2.7497e-06	0:00:12	93
839	2.3635e-02	2.7678e-06	2.2414e-06	0:00:10	92
840	1.7906e-02	2.3441e-06	1.9588e-06	0:00:08	91
841	1.4064e-02	1.9923e-06	1.6934e-06	0:00:06	90

iter	continuity	x-velocity	y-velocity	time/iter	
842	1.1161e-02	1.6872e-06	1.4559e-06	0:00:05	89
843	9.0059e-03	1.4355e-06	1.2504e-06	0:00:04	88
844	7.3084e-03	1.2253e-06	1.0735e-06	0:00:03	87
845	5.9506e-03	1.0479e-06	9.2118e-07	0:00:02	86
846	4.8582e-03	8.9947e-07	7.9006e-07	0:00:02	85
847	3.9870e-03	7.7212e-07	6.7885e-07	0:00:01	84
848	3.2986e-03	6.6462e-07	5.8178e-07	0:00:01	83
849	2.7546e-03	5.7438e-07	4.9782e-07	0:00:01	82
850	2.3205e-03	4.9852e-07	4.2691e-07	0:00:01	81
851	1.9594e-03	4.3435e-07	3.6622e-07	0:00:01	80
852	1.6623e-03	3.7954e-07	3.1524e-07	0:00:00	79

iter	continuity	x-velocity	y-velocity	time/iter
------	------------	------------	------------	-----------

```

853 1.4136e-03 3.3182e-07 2.7165e-07 0:00:16 78
854 1.2074e-03 2.9103e-07 2.3454e-07 0:00:13 77
855 1.0403e-03 2.5505e-07 2.0326e-07 0:00:10 76
856 9.0512e-04 2.2395e-07 1.7681e-07 0:00:08 75
! 856 solution is converged
(update-animation-object "animation-vorticity")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa
()
(update-animation-object "animation-vel")
Creating animation sequence file:
//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa
()
Flow time = 2.819014072418213s, time step = 36
3 more time steps

Updating solution at time level N...
done.
physical-dt 3.4153e-01

```

iter	continuity	x-velocity	y-velocity	time/iter	
856	9.0512e-04	2.2395e-07	1.7681e-07	0:00:10	100
857	1.3330e-01	4.4224e-05	3.3436e-05	0:00:08	99
858	1.6322e-01	3.1505e-05	2.2557e-05	0:00:07	98
859	9.7401e-02	1.5175e-05	1.1557e-05	0:00:05	97
860	5.8238e-02	8.6700e-06	7.2686e-06	0:00:04	96
861	4.4809e-02	6.2606e-06	5.1845e-06	0:00:03	95
862	3.8227e-02	4.9288e-06	3.9976e-06	0:00:03	94
863	3.0407e-02	3.8907e-06	3.0010e-06	0:00:02	93
864	2.4258e-02	3.2630e-06	2.5504e-06	0:00:02	92
865	1.9305e-02	2.7874e-06	2.2648e-06	0:00:01	91
866	1.5571e-02	2.4039e-06	2.0113e-06	0:00:01	90

iter	continuity	x-velocity	y-velocity	time/iter	
867	1.2817e-02	2.0646e-06	1.7771e-06	0:00:01	89
868	1.0572e-02	1.7853e-06	1.5676e-06	0:00:01	88
869	8.7080e-03	1.5502e-06	1.3774e-06	0:00:01	87
870	7.1231e-03	1.3531e-06	1.2082e-06	0:00:00	86
871	5.8582e-03	1.1828e-06	1.0598e-06	0:00:17	85
872	4.8552e-03	1.0365e-06	9.3058e-07	0:00:14	84
873	4.0330e-03	9.1129e-07	8.1978e-07	0:00:11	83
874	3.3716e-03	8.0408e-07	7.2105e-07	0:00:09	82

875	2.8301e-03	7.1101e-07	6.3325e-07	0:00:07	81
876	2.3934e-03	6.3173e-07	5.5593e-07	0:00:05	80
877	2.0277e-03	5.6020e-07	4.8707e-07	0:00:04	79

iter	continuity	x-velocity	y-velocity	time/iter	
878	1.7275e-03	4.9835e-07	4.2703e-07	0:00:03	78
879	1.4784e-03	4.4421e-07	3.7491e-07	0:00:03	77
880	1.2729e-03	3.9657e-07	3.2903e-07	0:00:02	76
881	1.1037e-03	3.5509e-07	2.8960e-07	0:00:02	75
882	9.6518e-04	3.1799e-07	2.5515e-07	0:00:01	74

! 882 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.160547494888306s, time step = 37

2 more time steps

Updating solution at time level N...

done.

physical-dt 4.0725e-01

iter	continuity	x-velocity	y-velocity	time/iter	
882	9.6518e-04	3.1799e-07	2.5515e-07	0:00:02	100
883	1.3297e-01	4.6720e-05	3.5020e-05	0:00:01	99
884	1.6317e-01	3.2878e-05	2.3526e-05	0:00:01	98
885	9.7871e-02	1.5534e-05	1.2018e-05	0:00:01	97
886	6.1361e-02	9.3683e-06	7.8673e-06	0:00:01	96
887	4.7795e-02	7.1506e-06	5.7206e-06	0:00:01	95
888	3.9176e-02	5.6799e-06	4.2786e-06	0:00:00	94
889	3.1695e-02	4.4927e-06	3.2671e-06	0:00:00	93
890	2.5300e-02	3.7558e-06	2.7540e-06	0:00:00	92
891	2.0571e-02	3.2167e-06	2.4711e-06	0:00:00	91
892	1.6894e-02	2.7984e-06	2.2535e-06	0:00:00	90

iter	continuity	x-velocity	y-velocity	time/iter	
893	1.3914e-02	2.4754e-06	2.0575e-06	0:00:00	89
894	1.1531e-02	2.1980e-06	1.8654e-06	0:00:00	88

895	9.5405e-03	1.9598e-06	1.6881e-06	0:00:00	87
896	7.9600e-03	1.7552e-06	1.5329e-06	0:00:00	86
897	6.6779e-03	1.5773e-06	1.3913e-06	0:00:00	85
898	5.6340e-03	1.4228e-06	1.2599e-06	0:00:00	84
899	4.7522e-03	1.2875e-06	1.1391e-06	0:00:00	83
900	4.0074e-03	1.1662e-06	1.0269e-06	0:00:00	82
901	3.4064e-03	1.0572e-06	9.2565e-07	0:00:16	81
902	2.9090e-03	9.5744e-07	8.3389e-07	0:00:13	80
903	2.5080e-03	8.6954e-07	7.4930e-07	0:00:10	79

iter	continuity	x-velocity	y-velocity	time/iter	
904	2.1783e-03	7.8935e-07	6.7283e-07	0:00:08	78
905	1.8989e-03	7.1583e-07	6.0322e-07	0:00:06	77
906	1.6615e-03	6.4989e-07	5.4089e-07	0:00:05	76
907	1.4596e-03	5.9004e-07	4.8488e-07	0:00:04	75
908	1.2875e-03	5.3535e-07	4.3495e-07	0:00:03	74
909	1.1364e-03	4.8614e-07	3.9051e-07	0:00:02	73
910	1.0077e-03	4.4154e-07	3.5071e-07	0:00:02	72
911	8.9683e-04	4.0176e-07	3.1540e-07	0:00:02	71

! 911 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 3.56779670715332s, time step = 38

1 more time step

Updating solution at time level N...

done.

physical-dt 4.8003e-01

iter	continuity	x-velocity	y-velocity	time/iter	
911	8.9683e-04	4.0176e-07	3.1540e-07	0:00:02	100
912	1.3549e-01	4.9325e-05	3.6641e-05	0:00:02	99
913	1.6482e-01	3.3512e-05	2.4138e-05	0:00:01	98
914	1.0192e-01	1.6205e-05	1.2274e-05	0:00:01	97
915	6.5327e-02	9.7597e-06	7.9179e-06	0:00:01	96
916	4.8065e-02	7.5597e-06	5.6101e-06	0:00:01	95

917	3.9823e-02	6.1335e-06	4.3998e-06	0:00:01	94
918	3.1464e-02	4.8028e-06	3.2281e-06	0:00:19	93
919	2.5663e-02	3.9953e-06	2.7563e-06	0:00:15	92
920	2.1184e-02	3.4445e-06	2.5074e-06	0:00:12	91
921	1.7667e-02	3.0506e-06	2.3443e-06	0:00:09	90

iter	continuity	x-velocity	y-velocity	time/iter	
922	1.4938e-02	2.7335e-06	2.2056e-06	0:00:07	89
923	1.2737e-02	2.4713e-06	2.0741e-06	0:00:06	88
924	1.0871e-02	2.2581e-06	1.9557e-06	0:00:05	87
925	9.2856e-03	2.0672e-06	1.8331e-06	0:00:04	86
926	7.9322e-03	1.9012e-06	1.7183e-06	0:00:03	85
927	6.7362e-03	1.7541e-06	1.6026e-06	0:00:02	84
928	5.7167e-03	1.6178e-06	1.4871e-06	0:00:02	83
929	4.8685e-03	1.4927e-06	1.3722e-06	0:00:01	82
930	4.1764e-03	1.3781e-06	1.2628e-06	0:00:01	81
931	3.6064e-03	1.2712e-06	1.1570e-06	0:00:01	80
932	3.1452e-03	1.1718e-06	1.0576e-06	0:00:01	79

iter	continuity	x-velocity	y-velocity	time/iter	
933	2.7599e-03	1.0803e-06	9.6834e-07	0:00:01	78
934	2.4349e-03	9.9561e-07	8.8366e-07	0:00:00	77
935	2.1502e-03	9.1800e-07	8.0709e-07	0:00:00	76
936	1.9022e-03	8.4614e-07	7.3727e-07	0:00:00	75
937	1.6890e-03	7.7973e-07	6.7301e-07	0:00:00	74
938	1.4924e-03	7.1875e-07	6.1452e-07	0:00:00	73
939	1.2975e-03	6.6369e-07	5.6208e-07	0:00:00	72
940	1.1744e-03	6.0816e-07	5.0946e-07	0:00:14	71
941	1.0334e-03	5.6085e-07	4.6658e-07	0:00:11	70
942	9.5494e-04	5.1527e-07	4.2453e-07	0:00:09	69

! 942 solution is converged

(update-animation-object "animation-vorticity")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vorticity.cxa

()

(update-animation-object "animation-vel")

Creating animation sequence file:

//winfiles.wincoe.coe.neu.edu/cifs.homedir/Win10Files/Desktop/Flow Around a
Cylinder/cylinder_flow_hw_files/dp0/FFF/Fluent/./animation-vel.cxa

()

Flow time = 4.047823429107666s, time step = 39

Writing "| gzip -2cf > SolutionMonitor.gz"...

Writing temporary file C:\Users\azgars\AppData\Local\Temp\flntgz-22729 ...

Done.

'\\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent'

CMD.EXE was started with the above path as the current directory.

UNC paths are not supported. Defaulting to Windows directory.

Access is denied.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vorticity.png.

CX_Hardcopy_Window: error opening PNG file .flwb_report_files\contour-vel.png.

Writing data to \\winfiles.wincoe.coe.neu.edu\cifs.homedir\Win10Files\Desktop\Flow Around a Cylinder\cylinder_flow_hw_files\dp0\FFF\Fluent\FFF.1.ip ...

x-coord

y-coord

pressure

x-velocity

y-velocity

hyb_init-0

hyb_init-1

Done.

Calculation complete.

Performance Timer for 942 iterations on 4 compute nodes

Average wall-clock time per iteration:	0.023 sec
Global reductions per iteration:	84 ops
Global reductions time per iteration:	0.000 sec (0.0%)
Message count per iteration:	951 messages
Data transfer per iteration:	0.271 MB
LE solves per iteration:	3 solves
LE wall-clock time per iteration:	0.011 sec (46.1%)
LE global solves per iteration:	3 solves
LE global wall-clock time per iteration:	0.000 sec (0.6%)
LE global matrix maximum size:	24
AMG cycles per iteration:	5.796 cycles
Relaxation sweeps per iteration:	333 sweeps
Relaxation exchanges per iteration:	0 exchanges
LE early protections (stall) per iteration:	0.049 times
LE early protections (divergence) per iteration:	0.000 times
Total SVARS touched:	380
Time-step updates per iteration:	0.05 updates
Time-step wall-clock time per iteration:	0.001 sec (4.2%)

Total wall-clock time: 22.096 sec

Transcript closed.