

$$\Delta t := 0.01 \text{ min}$$

$$\Delta x := 5 \text{ m}$$

$$v := 268.17 \text{ m/min}$$

$$D := 0.17 \cdot 10^{-4} \frac{\text{m}^2}{\text{min}}$$

$$T_{\text{vv}} := 2000$$

$$X := 4000$$

$$t := 0 \dots T - 1$$

$$x := 1 \dots X - 1$$

$$f_{0,X} := 0$$

$$f_{0,2000} := 1$$

$$f_{t+1,x} := f_{t,x} - \left( \frac{v \cdot \Delta t}{2 \cdot \Delta x} \right) \cdot (f_{t,x+1} - f_{t,x-1}) + \left[ \frac{D \cdot \Delta t}{(\Delta x)^2} \right] \cdot (f_{t,x-1} - 2 \cdot f_{t,x} + f_{t,x+1})$$

	1998	1999	2000	2001	2002
0	0	0	1	0	0
1	0	-0.024	1	0.024	0
2	$5.825 \cdot 10^{-4}$	-0.048	0.999	0.048	$5.825 \cdot 10^{-4}$
3	$1.748 \cdot 10^{-3}$	-0.072	0.997	0.072	$1.748 \cdot 10^{-3}$
4	$3.494 \cdot 10^{-3}$	-0.096	0.993	0.096	$3.494 \cdot 10^{-3}$
5	$5.818 \cdot 10^{-3}$	-0.12	0.988	0.12	$5.818 \cdot 10^{-3}$
6	$8.717 \cdot 10^{-3}$	-0.144	0.983	0.144	$8.717 \cdot 10^{-3}$
f = 7	0.012	-0.167	0.976	0.167	0.012
8	0.016	-0.191	0.968	0.191	0.016
9	0.021	-0.214	0.958	0.214	0.021
10	0.026	-0.236	0.948	0.236	0.026
11	0.032	-0.259	0.937	0.259	0.032
12	0.038	-0.28	0.924	0.28	0.038
13	0.044	-0.302	0.911	0.302	0.044
14	0.052	-0.322	0.896	0.322	0.052

14	0.052	-0.323	0.070	0.323	0.052
15	0.059	-0.343	0.88	0.343	...