

**Supplemental Material to the article**  
**“Metastability During Loss of a Morphological**  
**Atability of a Moving Fluid Interface”**

**Table 1.** Relative errors of the numerically computed critical sizes of stability (spinodals)  $R_s$  in comparison with the sizes  $R_s^*$ , obtained with Eq. (6),  $(R_s^* - R_s)/R_s^*$

$k$	$b$ , mm	$Q_1 = 250$ , mm <sup>2</sup> /s	$Q_2 = 500$ , mm <sup>2</sup> /s	$Q_3 = 800$ , mm <sup>2</sup> /s	$Q_4 = 1000$ , mm <sup>2</sup> /s	$Q_5 = 1200$ , mm <sup>2</sup> /s	$Q_6 = 1200$ , mm <sup>2</sup> /s
2	0.6	0.06	-0.07	0.00	0.00	0.00	0.00
	0.9	0.00	0.00	-0.01	-0.04	0.00	0.01
3	0.6	-0.07	0.00	-0.01	-0.05	0.06	0.00
	0.9	0.01	-0.01	0.11	0.04	0.03	0.00
4	0.6	0.00	0.02	0.01	-0.01	-0.17	-0.08
	0.9	0.00	0.00	0.02	0.03	0.03	0.06
5	0.6	0.00	0.02	0.02	0.04	-0.10	-0.03
	0.9		0.00	0.01	0.02	0.02	0.03
6	0.6	0.00	0.00	0.02	0.03	0.00	0.02
	0.9		0.00	0.02	0.01	0.01	0.02

**Table 2.** Binodals  $R_b^*$  (are obtained with Eq. (7)) and  $R_b$  (are numerically calculated by the finite-element method), and their relative errors

		$b = 0.6$ mm			$b = 0.9$ mm		
$Q$ , mm <sup>2</sup> /s	$k$	$R_b^*$ , mm	$R_b$ , mm	$\frac{R_b^* - R_b}{R_b^*}$	$R_b^*$ , mm	$R_b$ , mm	$\frac{R_b^* - R_b}{R_b^*}$
250	2	9.9	8.8	0.12	22.2	18.3	0.17
	3	23.7	20.6	0.13	52.9	43.1	0.19
	4	42.3	35.7	0.16	88.3	74.4	0.16
	5	65.6	60.7	0.07			
	6	90.4	81.0	0.10			
500	2	5.5	6.4	-0.16	11.1	9.4	0.15
	3	11.8	11.1	0.07	26.7	23.1	0.13
	4	21.1	18.5	0.13	47.5	41.0	0.14
	5	32.9	32.2	0.02	73.3	64.5	0.12
	6	47.1	42.5	0.10	98.0	87.2	0.11
800	2	5.5	5.6	-0.01	7.0	7.6	-0.08
	3	7.4	7.1	0.04	16.7	15.4	0.07
	4	13.2	11.7	0.11	29.7	26.8	0.10
	5	20.6	19.2	0.07	46.2	41.9	0.09
	6	29.4	27.3	0.07	66.1	62.1	0.06
1000	2	5.5	5.5	0.00	5.7	6.8	-0.20
	3	5.9	6.3	-0.0	6 13.3	12.7	0.05
	4	10.6	9.7	0.08	23.8	21.3	0.10
	5	16.4	15.7	0.05	37.0	34.6	0.06
	6	23.5	22.5	0.04	53.0	48.8	0.08
1200	2	5.5	5.5	0.00	5.5	6.2	-0.12
	3	5.5	5.9	-0.06	11.1	10.3	0.07
	4	8.8	9.5	-0.08	19.8	17.5	0.12
	5	13.7	14.9	-0.09	30.8	28.6	0.07
	6	19.6	18.4	0.06	44.1	40.8	0.08
1500	2	5.5	5.5	0.00	5.5	5.7	-0.03
	3	5.5	5.5	-0.01	8.9	8.2	0.07
	4	7.1	6.8	0.03	15.9	14.7	0.07
	5	11.0	10.2	0.07	24.7	23.0	0.07
	6	15.7	15.0	0.05	35.3	33.2	0.06