Electronic Supplementary Information (ESI)

A sparse modeling for small data: Case studies in controlled syntheses of 2D materials

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†**Note**: All the training and test datasets in Tables S3–S7 are available as csv file.

Characteristics of objective variables in the datasets

Table S1. Characteristics of objective variables in the datasets.

Datasets		y_1, y_1'' / %	y_2, y_2'' / –	y_3, y_3'' / –
Training	Mean	34.1	0.267	0.266
	SD	21.3	0.115	0.162
	n	30	48	54
Test	Mean	17.4	0.298	0.210
	SD	20.7	0.256	0.167
	n	79	64	43
Merged [a] (Training + Test)	Mean	22.0	0.285	0.241
	SD	22.1	0.208	0.166
	n	109	112	97

[a] The merged dataset was used for the 10-segmentalized validation in Fig. 5.

Table S2. Training dataset for y1 (yield).[25]

No.	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x25	x26	x28	x29	x30	x31	x32	x34	x36	x39	x40	y1
y1_train_1	99.1	0.531	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	213.4	2.80E-39	1.24	72.2	157.4	286.0	1.95	2.90	0.585	0.93	16.1	2.3	4.1	1.78E-39	3.06	47.5	11.1	13.6
y1_train_2	73.1	0.429	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.37	7.23E-40	17.4	13.7	11.3	213.4	2.80E-39	1.24	72.2	157.4	286.0	1.95	2.90	0.585	0.93	16.1	2.3	4.1	2.07E-39	3.14	52.3	13.7	22.5
y1_train_3	18.0	0.149	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.64	0.582	1.27	19.9	7	12.2	1.38E-39	1.17	27.9	32.6	62.1
y1_train_4	41.1	0.319	-43.8	82	0.78	35.9	88.8	0.34	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.64	0.582	1.27	19.9	7	12.2	1.07E-39	2.67	23.7	15.6	10.8
y1_train_5	99.1	0.531	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.64	0.582	1.27	19.9	7	12.2	4.43E-40	3.04	9.2	8.2	12.0
y1_train_6	73.1	0.429	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.37	7.23E-40	17.4	13.7	11.3	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.64	0.582	1.27	19.9	7	12.2	7.40E-40	3.12	14.0	8.4	52.7
y1_train_7	78.1	0.471	18.5	189	1.10	46.5	0.6	1.99	1.48	45.7	20.1	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.64	0.582	1.27	19.9	7	12.2	6.69E-40	3.90	13.8	10.1	36.6
y1_train_8	18.0	0.149	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	121.2	1.50E-39	1.17	33.4	95.2	114.7	0.80	1.70	0.451	0.92	18.8	4.8	6.6	1.41E-39	1.26	27.4	38.0	10.0
y1_train_9	32.0	0.287	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	121.2	1.50E-39	1.17	33.4	95.2	114.7	0.80	1.70	0.451	0.92	18.8	4.8	6.6	1.23E-39	0.94	24.6	18.9	14.1
y1_train_10	32.0	0.287	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	107.2	1.28E-39	1.49	27.4	83.5	96.3	0.70	1.34	0.483	1.41	18.8	4.6	7.1	1.01E-39	0.62	18.6	18.6	21.5
y1_train_11	58.1	0.436	-94.7	58	0.78	20.6	231.1	0.30	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	107.2	1.28E-39	1.49	27.4	83.5	96.3	0.70	1.34	0.483	1.41	18.8	4.6	7.1	6.89E-40	1.74	10.8	8.8	12.2
y1_train_12	99.1	0.531	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	125.2	1.28E-39	3.61	30.6	88.1	91.5	0.72	1.58	0.481	1.15	18.7	6.2	7.3	2.60E-40	0.69	5.9	6.3	25.3
y1_train_13	73.1	0.429	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.37	7.23E-40	17.4	13.7	11.3	125.2	1.28E-39	3.61	30.6	88.1	91.5	0.72	1.58	0.481	1.15	18.7	6.2	7.3	5.56E-40	0.77	10.7	8.9	21.8
y1_train_14	18.0	0.149	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.32	0.451	1.56	19.6	7.2	13.4	1.28E-39	0.60	26.2	31.3	65.8
y1_train_15	32.0	0.287	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.32	0.451	1.56	19.6	7.2	13.4	1.10E-39	0.27	23.4	13.6	48.8
y1_train_16	46.1	0.411	-114.5	78	0.78	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.32	0.451	1.56	19.6	7.2	13.4	9.08E-40	0.11	18.8	9.8	45.4
y1_train_17	99.1	0.531	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.32	0.451	1.56	19.6	7.2	13.4	3.45E-40	2.47	7.5	8.6	57.1
y1_train_18	73.1	0.429	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.37	7.23E-40	17.4	13.7	11.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.32	0.451	1.56	19.6	7.2	13.4	6.42E-40	2.54	12.3	8.1	67.1
y1_train_19	78.1	0.471	18.5	189	1.10	46.5	0.6	1.99	1.48	45.7	20.1	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.32	0.451	1.56	19.6	7.2	13.4	5.71E-40	3.32	12.0	10.0	73.0
y1_train_20	18.0	0.149	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	113.2	1.19E-39	2.09	25.9	83.0	74.7	0.60	1.39	0.437	1.23	19.3	5.6	10.1	1.11E-39	0.34	19.9	34.7	59.7
y1_train_21	32.0	0.287	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	113.2	1.19E-39	2.09	25.9	83.0	74.7	0.60	1.39	0.437	1.23	19.3	5.6	10.1	9.29E-40	0.01	17.2	16.3	21.1
y1_train_22	99.1	0.531	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	113.2	1.19E-39	2.09	25.9	83.0	74.7	0.60	1.39	0.437	1.23	19.3	5.6	10.1	1.74E-40	2.21	1.2	7.7	14.3
y1_train_23	73.1	0.429	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.37	7.23E-40	17.4	13.7	11.3	113.2	1.19E-39	2.09	25.9	83.0	74.7	0.60	1.39	0.437	1.23	19.3	5.6	10.1	4.71E-40	2.28	6.1	9.0	22.1
y1_train_24	78.1	0.471	18.5	189	1.10	46.5	0.6	1.99	1.48	45.7	20.1	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	113.2	1.19E-39	2.09	25.9	83.0	74.7	0.60	1.39	0.437	1.23	19.3	5.6	10.1	4.00E-40	3.07	5.8	10.9	15.4
y1_train_25	18.0	0.149	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.84	0.502	1.26	19.5	4	5.9	2.15E-39	0.98	38.3	39.2	10.4
y1_train_26	32.0	0.287	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.84	0.502	1.26	19.5	4	5.9	1.97E-39	0.66	35.6	20.4	62.1
y1_train_27	46.1	0.411	-114.5	78	0.78	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.84	0.502	1.26	19.5	4	5.9	1.78E-39	0.49	30.9	16.1	32.0
y1_train_28	58.1	0.436	-94.7	58	0.78	20.6	231.1	0.30	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.84	0.502	1.26	19.5	4	5.9	1.64E-39	1.78	27.8	10.3	13.0
y1_train_29	119.4	0.287	-63.5	61	1.48	4.8	194.8	0.54	1.44	29.9	14.3	73.6	15.0	1.53	6.53E-40	17.8	3.1	5.7	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.84	0.502	1.26	19.5	4	5.9	1.58E-39	0.08	30.1	3.5	55.3
y1_train_30	73.1	0.429	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.37	7.23E-40	17.4	13.7	11.3	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.84	0.502	1.26	19.5	4	5.9	1.51E-39	2.93	24.5	11.9	44.1

Table S3. Test dataset of for y_1''(yield).[25]

No.	x1	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x26	x28	x29	x30	x31	x32	x34	x36	x39	x40	y2
y2_train_1	99.1	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	213.4	2.80E-39	1.24	72.2	157.4	286.0	2.90	0.585	0.93	16.1	2.3	4.1	1.78E-39	3.06	47.5	11.14	0.271
y2_train_2	73.1	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	213.4	2.80E-39	1.24	72.2	157.4	286.0	2.90	0.585	0.93	16.1	2.3	4.1	2.07E-39	3.14	52.3	13.73	0.273
y2_train_3	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	213.4	2.80E-39	1.24	72.2	157.4	286.0	2.90	0.585	0.93	16.1	2.3	4.1	2.00E-39	3.92	52.0	16.04	0.241
y2_train_4	18.0	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.64	0.582	1.27	19.9	7	12.2	1.38E-39	1.17	27.9	32.63	0.162
y2_train_5	41.1	-43.8	82	0.78	35.9	88.8	0.34	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.64	0.582	1.27	19.9	7	12.2	1.07E-39	2.67	23.7	15.58	0.302
y2_train_6	99.1	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.64	0.582	1.27	19.9	7	12.2	4.43E-40	3.04	9.2	8.22	0.138
y2_train_7	73.1	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.64	0.582	1.27	19.9	7	12.2	7.40E-40	3.12	14.0	8.41	0.150
y2_train_8	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.64	0.582	1.27	19.9	7	12.2	6.69E-40	3.90	13.8	10.07	0.230
y2_train_9	18.0	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.451	0.92	18.8	4.8	6.6	1.41E-39	1.26	27.4	37.99	0.516
y2_train_10	41.1	-43.8	82	0.78	35.9	88.8	0.34	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.451	0.92	18.8	4.8	6.6	1.41E-39	1.26	27.4	37.99	0.212
y2_train_11	32.0	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.451	0.92	18.8	4.8	6.6	1.23E-39	0.94	24.6	18.91	0.326
y2_train_12	99.1	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.451	0.92	18.8	4.8	6.6	4.81E-40	3.13	8.7	7.69	0.216
y2_train_13	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.451	0.92	18.8	4.8	6.6	7.07E-40	3.99	13.3	12.17	0.202
y2_train_14	32.0	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.34	0.483	1.41	18.8	4.6	7.1	1.01E-39	0.62	18.6	18.58	0.212
y2_train_15	46.1	-114.5	78	0.78	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.34	0.483	1.41	18.8	4.6	7.1	8.23E-40	0.45	13.9	14.32	0.453
y2_train_16	58.1	-94.7	58	0.78	20.6	231.1	0.30	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.34	0.483	1.41	18.8	4.6	7.1	6.89E-40	1.74	10.8	8.79	0.208
y2_train_17	99.1	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.34	0.483	1.41	18.8	4.6	7.1	2.60E-40	2.81	2.7	7.87	0.198
y2_train_18	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.34	0.483	1.41	18.8	4.6	7.1	4.86E-40	3.67	7.2	12.23	0.482
y2_train_19	18.0	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.481	1.15	18.7	6.2	7.3	1.19E-39	1.18	24.6	36.91	0.120
y2_train_20	41.1	-43.8	82	0.78	35.9	88.8	0.34	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.481	1.15	18.7	6.2	7.3	8.90E-40	0.32	20.3	13.67	0.174
y2_train_21	32.0	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.481	1.15	18.7	6.2	7.3	1.01E-39	1.50	21.8	17.72	0.174
y2_train_22	46.1	-114.5	78	0.78	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.481	1.15	18.7	6.2	7.3	8.23E-40	1.67	17.1	13.67	0.300
y2_train_23	73.1	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.481	1.15	18.7	6.2	7.3	5.56E-40	0.77	10.7	8.89	0.168
y2_train_24	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.481	1.15	18.7	6.2	7.3	5.56E-40	0.77	10.7	8.89	0.244
y2_train_25	18.0	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	1.28E-39	0.60	26.2	31.30	0.148
y2_train_26	32.0	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	1.10E-39	0.27	23.4	13.65	0.155
y2_train_27	46.1	-114.5	78	0.78	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	9.08E-40	0.11	18.8	9.81	0.198
y2_train_28	58.1	-94.7	58	0.78	20.6	231.1	0.30	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	7.74E-40	1.39	15.6	10.88	0.345
y2_train_29	72.1	-108.4	66	0.89	7.6	162.1	0.46	1.40	27.0	17.0	71.7	76.4	2.26	7.51E-40	16.8	5.7	8	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	6.13E-40	0.43	15.2	7.92	0.492
y2_train_30	99.1	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	3.45E-40	2.47	7.5	8.64	0.202
y2_train_31	73.1	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	6.42E-40	2.54	12.3	8.13	0.369
y2_train_32	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.451	1.56	19.6	7.2	13.4	5.71E-40	3.32	12.0	10.03	0.157
y2_train_33	18.0	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.437	1.23	19.3	5.6	10.1	1.11E-39	0.34	19.9	34.68	0.179
y2_train_34	32.0	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.437	1.23	19.3	5.6	10.1	9.29E-40	0.01	17.2	16.26	0.248
y2_train_35	46.1	-114.5	78	0.78	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.437	1.23	19.3	5.6	10.1	7.38E-40	0.15	12.5	12.07	0.576
y2_train_36	58.1	-94.7	58	0.78	20.6	231.1	0.30	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.437	1.23	19.3	5.6	10.1	6.03E-40	1.13	9.4	9.51	0.228
y2_train_37	99.1	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.437	1.23	19.3	5.6	10.1	1.74E-40	2.21	1.2	7.75	0.241
y2_train_38	73.1	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.437	1.23	19.3	5.6	10.1	4.71E-40	2.28	6.1	9.03	0.306
y2_train_39	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.437	1.23	19.3	5.6	10.1	4.00E-40	3.07	5.8	10.95	0.222
y2_train_40	18.0	0.0	100	1.00	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	2.15E-39	0.98	38.3	39.15	0.164
y2_train_41	41.1	-43.8	82	0.78	35.9	88.8	0.34	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.85E-39	2.48	34.1	16.33	0.309
y2_train_42	32.0	-97.7	65	0.79	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.97E-39	0.66	35.6	20.38	0.214
y2_train_43	46.1	-114.5	78	0.78	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.78E-39	0.49	30.9	16.13	0.401
y2_train_44	58.1	-94.7	58	0.78	20.6	231.1	0.30	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.64E-39	1.78	27.8	10.30	0.331
y2_train_45	119.4	-63.5	61	1.48	4.8	194.8	0.54	1.44	29.9	14.3	73.6	15.0	1.53	6.53E-40	17.8	3.1	5.7	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.58E-39	0.08	30.1	3.52	0.308
y2_train_46	99.1	-24.4	202	1.03	32.2	0.3	1.67	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.22E-39	2.85	19.6	8.92	0.141
y2_train_47	73.1	-60.4	153	0.94	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.51E-39	2.93	24.5	11.87	0.501
y2_train_48	78.1	18.5	189	1.10	46.5	0.6	1.99	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.502	1.26	19.5	4	5.9	1.44E-39	3.71	24.2	13.31	0.427

Table S4. Training dataset for y2 (lateral size).[26]

No.	x1	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x26	x27	x30	x31	x32	x33	x34	x35	x36	x37	x38	x39	x40	x41	y3
y3_train_1	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.14	1.14	18.8	4.8	6.6	-8.77E-40	8.77E-40	0.32	0.32	1.74	-17.6	17.6	5.80	2.75	0.088
y3_train_2	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	122.2	1.41E-39	2.48	31.5	92.0	107.5	1.94	0.94	18.8	7.3	8.8	-4.61E-40	4.61E-40	-0.14	0.14	5.80	-1.1	1.1	6.12	2.75	0.269
y3_train_3	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	208.3	2.33E-39	3.25	55.9	132.0	173.7	2.72	1.91	18.2	6	10.2	-1.12E-39	1.12E-39	0.43	0.43	11.97	-32.4	32.4	4.69	3.72	0.026
y3_train_4	102.1	-55.0	242.0	1.20	64.9	11.3	2.8	1.42	40.9	22.8	79.5	67.8	6.19	8.24E-40	17.4	18.6	7.4	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.03	1.22	18.8	5.9	11.2	-8.04E-40	8.04E-40	4.33	4.33	11.51	-15.1	15.1	13.55	3.72	0.045
y3_train_5	41.1	-43.8	81.6	0.78	35.9	88.8	0.3	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	252.2	3.20E-39	5.67	63.8	132.6	129.7	2.55	1.74	21.8	18.9	15.5	-2.81E-39	2.81E-39	-1.74	1.74	22.26	-53.6	53.6	16.07	3.72	0.112
y3_train_6	102.1	-55.0	242.0	1.20	64.9	11.3	2.8	1.42	40.9	22.8	79.5	67.8	6.19	8.24E-40	17.4	18.6	7.4	208.3	2.33E-39	3.25	55.9	132.0	173.7	2.71	1.90	18.2	6	10.2	-1.51E-39	1.51E-39	2.94	2.94	20.13	-33.0	33.0	13.01	3.72	0.265
y3_train_7	61.1	10.5	171.1	1.01	37.7	0.5	19.0	1.45	48.9	18.5	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	154.1	1.39E-39	5.15	37.3	96.6	82.5	1.11	0.30	20.6	9.5	18.8	-8.31E-40	8.31E-40	-3.93	3.93	6.26	-18.8	18.8	6.18	3.72	0.266
y3_train_8	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	130.2	1.40E-39	1.93	38.2	106.4	135.4	2.17	1.36	16.3	5.4	11	-4.51E-40	4.51E-40	0.41	0.41	4.52	-7.8	7.8	4.38	3.72	0.286
y3_train_9	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	1.31	18.8	5.9	11.2	-6.83E-40	6.83E-40	0.48	0.48	4.35	-7.5	7.5	7.18	3.72	0.288
y3_train_10	102.1	-55.0	242.0	1.20	64.9	11.3	2.8	1.42	40.9	22.8	79.5	67.8	6.19	8.24E-40	17.4	18.6	7.4	252.2	3.20E-39	5.67	63.8	132.6	129.7	2.55	1.74	21.8	18.9	15.5	-2.37E-39	2.37E-39	0.52	0.52	35.09	-41.0	41.0	11.96	3.72	0.31
y3_train_11	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	1.31	18.8	5.9	11.2	-4.17E-40	4.17E-40	1.82	1.82	6.84	-14.4	14.4	5.43	3.72	0.328
y3_train_12	90.1	-70.0	135.1	0.93	29.6	0.1	1.8	1.41	28.2	26.6	87.6	93.7	0.47	8.98E-40	16.2	8.1	13.9	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.75	1.04	19	6.5	8	-6.88E-40	6.88E-40	-0.87	0.87	0.63	-10.2	10.2	8.29	3.66	0.133
y3_train_13	84.2	6.5	80.7	0.78	2.0	1.3	1.0	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.79	1.08	19	6.5	8	-5.14E-40	5.14E-40	-1.33	1.33	0.00	-14.2	14.2	11.24	3.66	0.139
y3_train_14	88.1	-83.6	77.1	0.89	6.0	94.5	0.4	1.37	26.3	22.6	80.7	78.0	4.95	8.45E-40	15.8	5.3	7.2	269.5	3.57E-39	1.24	91.4	188.0	361.0	3.26	2.55	16	1.8	3.4	-2.72E-39	2.72E-39	3.71	3.71	6.12	-68.9	68.9	5.18	3.66	0.147
y3_train_15	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.76	1.04	18.6	4.5	6.2	-5.59E-40	5.59E-40	1.89	1.89	6.59	-12.7	12.7	3.55	3.66	0.153
y3_train_16	76.1	-85.1	124.5	0.97	16.9	8.3	1.7	1.40	33.3	21.8	79.8	75.0	0.34	7.01E-40	16.4	9.2	15.8	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.15	18.3	8.5	8.3	-6.35E-40	6.35E-40	-4.80	4.80	1.75	-11.2	11.2	8.44	3.66	0.192
y3_train_17	73.1	-60.4	153.0	0.94	36.7	3.7	0.8	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	269.5	3.57E-39	1.24	91.4	188.0	361.0	3.26	2.55	16	1.8	3.4	-2.85E-39	2.85E-39	3.14	3.14	5.41	-71.5	71.5	14.56	3.66	0.204
y3_train_18	108.1	-15.5	205.4	1.04	11.9	0.1	5.6	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.15	18.3	8.5	8.3	-1.28E-40	1.28E-40	-3.08	3.08	10.62	-8.5	8.5	5.83	3.66	0.25
y3_train_19	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.20	1.41	18.8	4.8	6.6	-5.55E-40	5.55E-40	1.17	1.17	2.74	-3.0	3.0	5.73	5.79	0.12
y3_train_20	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.20	1.41	18.8	4.8	6.6	-2.89E-40	2.89E-40	2.51	2.51	4.30	-9.9	9.9	3.23	5.79	0.153
y3_train_21	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	2.84	2.05	18.3	8.5	8.3	-3.90E-40	3.90E-40	-2.80	2.80	12.05	-2.6	2.6	5.47	5.79	0.186
y3_train_22	18.0	0.0	100.0	1.00	78.5	23.8	0.9	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	0.80	0.00	19.4	20.5	14.5	-1.04E-39	1.04E-39	-5.63	5.63	19.59	-23.3	23.3	29.22	5.79	0.705
y3_train_23	60.1	-126.5	97.2	0.80	20.8	19.0	1.9	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.60	0.67	19.9	7	12.2	-8.20E-40	8.20E-40	0.59	0.59	2.32	-15.7	15.7	9.88	1.5	0.038
y3_train_24	74.1	-89.5	117.3	0.81	17.8	0.1	3.0	1.40	27.2	23.0	79.9	90.3	1.88	8.26E-40	16	5.7	15.8	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.60	0.67	19.9	7	12.2	-6.34E-40	6.34E-40	0.62	0.62	2.36	-10.9	10.9	8.69	1.5	0.038
y3_train_25	108.1	-15.5	205.4	1.04	11.9	0.1	5.6	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.60	0.67	19.9	7	12.2	-2.53E-40	2.53E-40	0.81	0.81	2.59	-9.4	9.4	3.43	1.5	0.045
y3_train_26	62.1	-12.6	197.9	1.11	41.4	0.1	23.5	1.43	48.4	17.2	71.6	56.3	0.00	5.03E-40	17.8	13.5	27.4	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.60	0.67	19.9	7	12.2	-9.57E-40	9.57E-40	-1.26	1.26	0.00	-16.7	16.7	17.06	1.5	0.053
y3_train_27	61.1	10.5	171.1	1.01	37.7	0.5	19.0	1.45	48.9	18.5	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.60	0.67	19.9	7	12.2	-8.96E-40	8.96E-40	-0.04	0.04	1.53	-15.5	15.5	10.55	1.5	0.054
y3_train_28	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	101.2	1.26E-39	1.24	33.7	96.0	136.0	1.86	0.93	16	3.9	7.5	-3.19E-40	3.19E-40	1.10	1.10	2.91	-3.4	3.4	2.25	1.5	0.078
y3_train_29	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	137.2	1.54E-39	2.18	42.0	111.4	158.2	2.01	1.08	16.1	5.1	7	-5.91E-40	5.91E-40	0.16	0.16	5.11	-11.6	11.6	0.97	1.5	0.11
y3_train_30	108.1	-15.5	205.4	1.04	11.9	0.1	5.6	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.60	0.67	19.9	7	12.2	-2.53E-40	2.53E-40	0.81	0.81	2.59	-9.4	9.4	3.43	1.5	0.189
y3_train_31	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.53	0.60	19	6.5	8	-6.40E-40	6.40E-40	1.01	1.01	3.12	-6.4	6.4	6.16	1.5	0.215
y3_train_32	76.1	-85.1	124.5	0.97	16.9	8.3	1.7	1.40	33.3	21.8	79.8	75.0	0.34	7.01E-40	16.4	9.2	15.8	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.56	0.63	19	6.5	8	-8.85E-40	8.85E-40	-0.99	0.99	0.46	-15.0	15.0	9.76	1.5	0.241
y3_train_33	78.1	18.5	189.0	1.10	46.5	0.6	2.0	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.77	18.8	4.8	6.6	-7.07E-40	7.07E-40	3.99	3.99	6.03	-13.3	13.3	12.17	1.5	0.279
y3_train_34	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.71	0.78	18.8	4.6	7.1	-6.93E-41	6.93E-41	2.19	2.19	5.48	-3.9	3.9	3.52	1.5	0.281
y3_train_35	73.1	-60.4	153.0	0.94	36.7	3.7	0.8	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	1.32	0.39	19.6	7.2	13.4	-6.37E-40	6.37E-40	2.54	2.54	8.03	-12.3	12.3	8.13	1.5	0.301
y3_train_36	58.1	-94.7	58.1	0.78	20.6	231.1	0.3	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.34	0.41	18.8	4.6	7.1	-6.90E-40	6.90E-40	1.74	1.74	4.80	-10.8	10.8	8.79	1.5	0.302
y3_train_37	32.0	-97.7	64.6	0.79	32.7	127.0	0.6	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.65	18.7	6.2	7.3	-1.02E-39	1.02E-39	-1.50	1.50	7.60	-21.8	21.8	17.72	1.5	0.302
y3_train_38	99.1	-24.4	202.0	1.03	32.2	0.3	1.7	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.77	18.8	4.8	6.6	-4.80E-40	4.80E-40	3.13	3.13	5.03	-8.7	8.7	7.69	1.5	0.305
y3_train_39	41.1	-43.8	81.6	0.78	35.9	88.8	0.3	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.65	18.7	6.2	7.3	-8.91E-40	8.91E-40	0.32	0.32	14.17	-20.3	20.3	13.67	1.5	0.309
y3_train_40	99.1	-24.4	202.0	1.03	32.2	0.3	1.7	1.47	40.8	24.7	81.4	91.7	4.30	1.02E-39	18	12.3	7.2	213.4	2.80E-39	1.24	72.2	157.4	286.0	2.90	1.97	16.1	2.3	4.1	-1.78E-39	1.78E-39	3.06	3.06	5.32	-47.5	47.5	11.14	1.5	0.312
y3_train_41	58.1	-94.7	58.1	0.78	20.6	231.1	0.3	1.36	26.2	16.6	73.8	56.0	3.23	5.90E-40	15.5	10.4	7	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.39	0.46	19.3	5.6	10.1	-6.00E-40	6.00E-40	1.13	1.13	6.76	-9.4	9.4	9.51	1.5	0.317
y3_train_42	119.4	-63.5	61.2	1.48	4.8	194.8	0.5	1.44	29.9	14.3	73.6	15.0	1.53	6.53E-40	17.8	3.1	5.7	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.91	19.5	4	5.9	-1.58E-39	1.58E-39	0.08	0.08	2.21	-30.1	30.1	3.52	1.5	0.331
y3_train_43	78.1	18.5	189.0	1.10	46.5	0.6	2.0	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.34	0.41	18.8	4.6	7.1	-4.87E-40	4.87E-40	3.67	3.67	7.68	-7.2	7.2	12.23	1.5	0.334
y3_train_44	46.1	-114.5	78.3	0.78	24.6	59.0	1.1	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.58	0.65	18.7	6.2	7.3	-8.24E-40	8.24E-40	-1.67	1.67	7.01	-17.1	17.1	13.67	1.5	0.346
y3_train_45	103.1	-13.2	191.1	1.01	25.9	0.7	1.2	1.53	38.8	22.8	78.2	66.3	4.59	1.21E-39	18.8	12	3.3	269.5	3.57E-39	1.24	91.4	188.0	361.0	3.39	2.46	16	1.8	3.4	-2.36E-39	2.36E-39	3.35	3.35	5.68	-68.6	68.6	11.64	1.5	0.35
y3_train_46	73.1	-60.4	153.0	0.94	36.7	3.7	0.8	1.43	37.1	19.9	75.8	68.1	4.38	7.23E-40	17.4	13.7	11.3	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.91	19.5	4	5.9	-1.51E-39	1.51E-39	2.93	2.93	6.34	-24.5	24.5	11.87	1.5	0.352
y3_train_47	41.1	-43.8	81.6	0.78	35.9	88.8	0.3	1.34	31.8	10.3	60.2	30.8	3.93	3.89E-40	15.3	18	6.1	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.91	19.5	4	5.9	-1.84E-39	1.84E-39	2.48	2.48	5.69	-34.1	34.1	16.33	1.5	0.41
y3_train_48	18.0	0.0	100.0	1.00	78.5	23.8	0.9	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.70	0.77	18.8	4.8	6.6	-1.41E-39	1.41E-39	1.26	1.26	2.84	-27.4	27.4	37.99	1.5	0.444
y3_train_49	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.87	0.94	18.8	4.8	6.6	-2.89E-40	2.89E-40	2.51	2.51	4.30	-9.9	9.9	3.23	1.5	0.493
y3_train_50	108.1	-15.5	205.4	1.04	11.9	0.1	5.6	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	1.07	0.14	18.3	8.5	8.3	-1.28E-40	1.28E-40	-3.08	3.08	10.62	-8.5	8.5	5.83	1.5	0.509
y3_train_51	78.1	18.5	189.0	1.10	46.5	0.6	2.0	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.84	0.91	19.5	4	5.9	-1.44E-39	1.44E-39	3.71	3.71	7.47	-24.2	24.2	13.31	1.5	0.532
y3_train_52	78.1	18.5	189.0	1.10	46.5	0.6	2.0	1.48	45.8	20.2	76.5	53.0	5.16	7.93E-40	18.4	16.4	10.2	213.4	2.80E-39	1.24	72.2	157.4	286.0	2.90	1.97	16.1	2.3	4.1	-2.01E-39	2.01E-39	3.92	3.92	6.38	-52.0	52.0	16.04	1.5	0.549
y3_train_53	103.1	-13.2	191.1	1.01	25.9	0.7	1.2	1.53	38.8	22.8	78.2	66.3	4.59	1.21E-39	18.8	12	3.3	213.4	2.80E-39	1.24	72.2	157.4	286.0	2.85	1.92	16.1	2.3	4.1	-1.59E-39	1.59E-39	3.35	3.35	5.68	-49.4	49.4	11.13	1.5	0.61
y3_train_54	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	269.5	3.57E-39	1.24	91.4	188.0	361.0	3.39	2.46	16	1.8	3.4	-2.36E-39	2.36E-39	2.44	2.44	4.55	-67.9	67.9	8.94	1.5	0.627

Table S5. Test dataset of for y_2'' (lateral size).[26]

Sample No.	x1	x2	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x25	x26	x28	x29	x30	x31	x32	x34	x36	x39	x40	y1
y1_test_1	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	1.57E-40	0.23	7.67	2.58	28.12
y1_test_2	61	0.525	10.5	171.1	1.01	37.72	0.53	18.95	1.45	48.9	27.7	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	8.00E-40	0.62	4.48	9.22	65.27
y1_test_3	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.36	0.55	1.27	19.9	7	12.2	2.55E-40	0.81	9.41	3.43	26.46
y1_test_4	61	0.525	10.5	171.1	1.01	37.72	0.53	18.95	1.45	48.9	27.7	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.36	0.55	1.27	19.9	7	12.2	8.98E-40	0.04	6.23	10.55	59.92
y1_test_5	62	0.512	-12.6	197.9	1.11	41.40	0.07	23.50	1.43	48.4	17.2	71.6	56.3	0.00	5.03E-40	17.8	13.5	27.4	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	8.62E-40	1.83	14.94	15.77	74.18
y1_test_6	76	0.637	-85.1	124.5	0.97	16.93	8.3	1.71	1.40	33.3	21.8	79.8	75.0	0.34	7.01E-40	16.4	9.2	15.8	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	6.64E-40	1.49	10.43	7.12	44.17
y1_test_7	62	0.512	-12.6	197.9	1.11	41.40	0.07	23.50	1.43	48.4	17.2	71.6	56.3	0.00	5.03E-40	17.8	13.5	27.4	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.36	0.55	1.27	19.9	7	12.2	9.60E-40	1.26	16.69	17.06	43.82
y1_test_8	60	0.539	-126.5	97.2	0.80	20.80	19	1.95	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	7.25E-40	0.01	13.94	8.77	33.06
y1_test_9	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	1.59	0.86	2.05	19	6.5	8	3.78E-40	0.73	12.27	5.83	18.68
y1_test_10	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	1.07	0.29	1.65	18.3	8.5	8.3	1.28E-40	3.08	8.48	5.83	23.42
y1_test_11	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	1.59	0.86	2.05	19	6.5	8	5.14E-40	1.33	14.22	11.24	0.32
y1_test_12	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	125.2	1.28E-39	3.61	30.6	88.1	91.5	0.72	1.75	0.63	1.15	18.7	6.2	7.3	5.84E-41	3.55	3.23	11.75	0.79
y1_test_13	78	0.489	5.5	80.1	0.88	2.28	133	0.65	1.50	31.5	16.8	68.8	66.1	0.00	9.43E-40	18.4	0	2	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	4.21E-40	1.83	15.40	13.70	1.46
y1_test_14	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	1.07	0.29	1.65	18.3	8.5	8.3	2.64E-40	5.14	10.43	12.22	0.9
y1_test_15	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	1.59	0.86	2.05	19	6.5	8	2.48E-40	1.28	2.99	12.69	0.04
y1_test_16	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	1.07	0.29	1.65	18.3	8.5	8.3	2.13E-42	5.09	0.80	13.31	0.43
y1_test_17	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.36	0.55	1.27	19.9	7	12.2	3.92E-40	1.26	11.36	15.41	3.12
y1_test_18	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	2.94E-40	1.83	9.62	16.23	1.34
y1_test_19	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	1.36	0.55	1.27	19.9	7	12.2	1.25E-40	1.20	0.13	16.81	1.3
y1_test_20	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	1.28	0.58	1.56	19.6	7.2	13.4	2.72E-41	1.77	1.62	17.47	0.04
y1_test_21	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	1.76	0.37	1.43	19	6.5	8	3.78E-40	0.73	12.27	5.83	28.77
y1_test_22	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	1.28E-40	3.08	8.48	5.83	5.51
y1_test_23	76	0.637	-85.1	124.5	0.97	16.93	8.3	1.71	1.40	33.3	21.8	79.8	75.0	0.34	7.01E-40	16.4	9.2	15.8	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	6.35E-40	4.80	11.25	8.44	22.86
y1_test_24	61	0.525	10.5	171.1	1.01	37.72	0.53	18.95	1.45	48.9	27.7	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	7.71E-40	3.93	5.30	13.16	4.58
y1_test_25	90	0.766	-70.0	135.1	0.93	29.60	0.05	1.84	1.41	28.2	26.6	87.6	93.7	0.47	8.98E-40	16.2	8.1	13.9	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	4.38E-40	4.68	6.41	7.01	38.28
y1_test_26	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	121.2	1.50E-39	1.17	33.4	95.2	114.7	0.80	1.68	0.31	0.94	18.8	4.8	6.6	2.93E-40	0.89	8.88	7.30	46.75
y1_test_27	74	0.665	-89.5	117.3	0.81	17.84	0.06	3.00	1.40	27.2	23.0	79.9	90.3	1.88	8.26E-40	16	5.7	15.8	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	5.09E-40	3.27	9.97	9.23	25.26
y1_test_28	60	0.539	-126.5	97.2	0.80	20.80	19	1.95	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	6.95E-40	3.30	14.75	10.62	20.06
y1_test_29	61	0.525	10.5	171.1	1.01	37.72	0.53	18.95	1.45	48.9	27.7	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	1.76	0.37	1.43	19	6.5	8	1.02E-39	0.12	9.09	14.04	3.74
y1_test_30	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	133.2	1.77E-39	1.79	36.2	96.7	118.4	0.92	1.76	0.49	1.43	18.6	4.5	6.2	5.63E-40	0.27	11.68	7.72	43.78
y1_test_31	103	0.627	-13.2	191.1	1.01	25.90	0.7	1.24	1.53	38.8	22.8	78.2	66.3	4.59	1.21E-39	18.8	12	3.3	213.4	2.80E-39	1.24	72.2	157.4	286.0	1.95	2.75	0.41	1.40	16.1	2.3	4.1	1.59E-39	3.35	49.40	11.13	49.08
y1_test_32	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	133.2	1.77E-39	1.79	36.2	96.7	118.4	0.92	1.76	0.49	1.99	18.6	4.5	6.2	6.99E-40	1.79	13.63	8.52	8.98
y1_test_33	78	0.489	5.5	80.1	0.88	2.28	133	0.65	1.50	31.5	16.8	68.8	66.1	0.00	9.43E-40	18.4	0	2	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	3.92E-40	5.14	16.22	10.58	0.32
y1_test_34	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.92	0.44	1.89	19.5	4	5.9	1.16E-39	1.45	21.79	9.08	0.14
y1_test_35	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	133.2	1.77E-39	1.79	36.2	96.7	118.4	0.92	1.76	0.49	1.99	18.6	4.5	6.2	4.33E-40	1.73	2.40	10.11	0.08
y1_test_36	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	171.2	2.23E-39	1.45	44.4	100.9	146.0	0.83	1.92	0.44	1.89	19.5	4	5.9	8.97E-40	1.39	10.55	11.02	0.22
y1_test_37	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	1.76	0.37	1.43	19	6.5	8	5.14E-40	1.33	14.22	11.24	4.7
y1_test_38	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	2.64E-40	5.14	10.43	12.22	0.26
y1_test_39	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	1.76	0.37	1.43	19	6.5	8	2.48E-40	1.28	2.99	12.69	2.41
y1_test_40	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.86	0.26	2.93	18.3	8.5	8.3	2.13E-42	5.09	0.80	13.31	1.53
y1_test_41	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	1.57E-40	0.23	7.67	2.58	41.63
y1_test_42	61	0.525	10.5	171.1	1.01	37.72	0.53	18.95	1.45	48.9	27.7	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	8.00E-40	0.62	4.48	9.22	38.98
y1_test_43	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	0.65	5.71	5.66	19.9	7	12.2	2.55E-40	0.81	9.41	3.43	29.98
y1_test_44	61	0.525	10.5	171.1	1.01	37.72	0.53	18.95	1.45	48.9	27.7	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	0.65	5.71	5.66	19.9	7	12.2	8.98E-40	0.04	6.23	10.55	41.97
y1_test_45	62	0.512	-12.6	197.9	1.11	41.40	0.07	23.50	1.43	48.4	17.2	71.6	56.3	0.00	5.03E-40	17.8	13.5	27.4	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	8.62E-40	1.83	14.94	15.77	55.7
y1_test_46	76	0.637	-85.1	124.5	0.97	16.93	8.3	1.71	1.40	33.3	21.8	79.8	75.0	0.34	7.01E-40	16.4	9.2	15.8	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	6.64E-40	1.49	10.43	7.12	59.22
y1_test_47	62	0.512	-12.6	197.9	1.11	41.40	0.07	23.50	1.43	48.4	17.2	71.6	56.3	0.00	5.03E-40	17.8	13.5	27.4	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	0.65	5.71	5.66	19.9	7	12.2	9.60E-40	1.26	16.69	17.06	32.98
y1_test_48	60	0.539	-126.5	97.2	0.80	20.80	19	1.95	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	7.25E-40	0.01	13.94	8.77	34.1
y1_test_49	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	0.65	1.5	1.67	19	6.5	8	3.78E-40	0.73	12.27	5.83	16.46
y1_test_50	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.65	0.9	0.91	18.3	8.5	8.3	1.28E-40	3.08	8.48	5.83	55.14
y1_test_51	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	0.65	1.5	1.67	19	6.5	8	5.14E-40	1.33	14.22	11.24	0.7
y1_test_52	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	125.2	1.28E-39	3.61	30.6	88.1	91.5	0.72	0.65	0.52	0.53	18.7	6.2	7.3	5.84E-41	3.55	3.23	11.75	0.1
y1_test_53	78	0.489	5.5	80.1	0.88	2.28	133	0.65	1.50	31.5	16.8	68.8	66.1	0.00	9.43E-40	18.4	0	2	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	4.21E-40	1.83	15.40	13.70	1.54
y1_test_54	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.65	0.9	0.91	18.3	8.5	8.3	2.64E-40	5.14	10.43	12.22	1.56
y1_test_55	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	137.2	1.59E-39	1.33	36.8	96.6	118.1	0.79	0.65	1.5	1.67	19	6.5	8	2.48E-40	1.28	2.99	12.69	1.06
y1_test_56	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.86	0.65	0.9	0.91	18.3	8.5	8.3	2.13E-42	5.09	0.80	13.31	0.4
y1_test_57	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	0.65	5.71	5.66	19.9	7	12.2	3.92E-40	1.26	11.36	15.41	0.3
y1_test_58	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	2.94E-40	1.83	9.62	16.23	6.09
y1_test_59	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	122.2	1.46E-39	1.26	33.9	90.7	107.6	0.78	0.65	5.71	5.66	19.9	7	12.2	1.25E-40	1.20	0.13	16.81	0.46
y1_test_60	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	123.2	1.36E-39	1.83	32.2	89.1	99.3	0.77	0.65	4.47	4.47	19.6	7.2	13.4	2.72E-41	1.77	1.62	17.47	0.26
y1_test_61	62	0.512	-12.6	197.9	1.11	41.40	0.07	23.50	1.43	48.4	17.2	71.6	56.3	0.00	5.03E-40	17.8	13.5	27.4	154.1	1.39E-39	5.15	37.3	96.6	82.5	0.66	1.11	0.27	2.44	20.6	9.5	18.8	8.92E-40	5.15	20.04	11.01	8.07
y1_test_62	61	0.525	10.5	171.1	1.01	37.72	0.53	18.95	1.45	48.9	27.7	72.7	64.5	1.22	5.64E-40	17.8	10.3	21.3	154.1	1.39E-39	5.15	37.3	96.6	82.5	0.66	1.11	0.27	2.44	20.6	9.5	18.8	8.31E-40	3.93	9.58	6.18	3.57
y1_test_63	90	0.766	-70.0	135.1	0.93	29.60	0.05	1.84	1.41	28.2	26.6	87.6	93.7	0.47	8.98E-40	16.2	8.1	13.9	266.4	3.05E-39	4.68	79.3	171.6	249.8	1.93	2.67	0.4	1.83	16.6	7.6	11.3	2.15E-39	4.21	52.72	2.77	22.9
y1_test_64	108	0.698	-15.5	205.4	1.04	11.92	0.12	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	150.2	1.63E-39	1.86	37.9	107.2	114.0	0.82	2.10	0.29	1.01	18.8	5.9	11.2	4.21E-40	0.20	13.38	2.66	53.82
y1_test_65	74	0.538	114.7	98.5	0.80	17.26	0.17	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	130.2	1.40E-39	1.93	38.2	106.4	135.4	1.02	2.18	0.18	0.52	16.3	5.4	11	5.71E-40	0.08	14.47	1.81	1.47
y1_test_66	76	0.637	-85.1	124.5	0.97	16.93	8.3	1.71	1.40	33.3	21.8	79.8	75.0	0.34	7.01E-40	16.4	9.2	15.8	266.4	3.05E-39	4.68	79.3	171.6	249.8	1.93	2.67	0.4	1.83	16.6	7.6	11.3	2.35E-39	4.34	57.55	4.79	11.39
y1_test_67	74	0.665	-89.5	117.3	0.81	17.84	0.06	3.00	1.40	27.2	23.0	79.9	90.3	1.88	8.26E-40	16	5.7	15.8	130.2	1.40E-39	1.93	38.2	106.4	135.4	1.02	2.18	0.18	0.52	16.3	5.4	11	5.70E-40	0.05	15.14	4.85	1.26
y1_test_68	74	0.665	-89.5	117.3	0.81	17.84	0.06	3.00	1.40	27.2	23.0	79.9	90.3	1.88	8.26E-40	16	5.7	15.8	266.4	3.05E-39	4.68	79.3	171.6	249.8	1.93	2.67	0.4	1.83	16.6	7.6	11.3	2.22E-39	2.81	56.27	5.03	53.02
y1_test_69	60	0.539	-126.5	97.2	0.80	20.80	19	1.95	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	266.4	3.05E-39	4.68	79.3	171.6	249.8	1.93	2.67	0.4	1.83	16.6	7.6	11.3	2.41E-39	2.84	61.06	6.41	32.38
y1_test_70	60	0.539	-126.5	97.2	0.80	20.80	19	1.95	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	130.2	1.40E-39	1.93	38.2	106.4	135.4	1.02	2.18	0.18	0.52	16.3	5.4	11	7.57E-40	0.09	19.93	6.66	0.55
y1_test_71	113	0.552	-45.0	132.0	1.11	5.69	14.7	0.81	1.52	36.0	20.9	76.4	60.7	2.53	1.12E-39	18.7	3.6	3.5	288.3	3.20E-39	5.67	63.8	132.6	129.7	1.16	2.52	0.92	4.89	21.8	18.9	15.5	2.08E-39	3.14	42.99	20.41	1.25
y1_test_72	78	0.489	5.5	80.1	0.88	2.28	133	0.65	1.50	31.5	16.8	68.8	66.1	0.00	9.43E-40	18.4	0	2	154.1	1.39E-39	5.15	37.3	96.6	82.5	0.66	1.11	0.27	2.44	20.6	9.5	18.8	4.52E-40	5.15	20.50	19.80	1.2
y1_test_73	100	0.672	-83.5	116.7	0.80	13.11	4.2	0.54	1.40	23.6	31.4	93.9	112.2	3.19	1.14E-39	15.6	5.7	3.9	288.3	3.20E-39	5.67	63.8	132.6	129.7	1.16	2.52	0.92	4.89	21.8	18.9	15.5	2.06E-39	2.48	32.44	21.51	2.57
y1_test_74	106	0.727	-95.0	136.2	0.87	2.50	9	0.60	1.50	29.2	25.5	79.2	102.8	0.48	1.34E-39	17.6	2.3	3	288.3	3.20E-39	5.67	63.8	132.6	129.7	1.16	2.52	0.92	4.89	21.8	18.9	15.5	1.86E-39	5.19	38.36	22.41	9.72
y1_test_75	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	154.1	1.39E-39	5.15	37.3	96.6	82.5	0.66	1.11	0.27	2.44	20.6	9.5	18.8	3.24E-40	5.15	14.72	22.41	11.6
y1_test_76	78	0.489	5.5	80.1	0.88	2.28	133	0.65	1.50	31.5	16.8	68.8	66.1	0.00	9.43E-40	18.4	0	2	288.3	3.20E-39	5.67	63.8	132.6	129.7	1.16	2.52	0.92	4.89	21.8	18.9	15.5	2.26E-39	5.67	47.05	24.20	0.53
y1_test_77	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	154.1	1.39E-39	5.15	37.3	96.6	82.5	0.66	1.11	0.27	2.44	20.6	9.5	18.8	5.76E-41	5.09	3.48	23.58	0
y1_test_78	84	0.503	6.5	80.7	0.78	2.02	1.27	0.98	1.43	27.6	22.6	74.6	110.7	0.00	1.07E-39	16.6	0.1	0.1	288.3	3.20E-39	5.67	63.8	132.6	129.7	1.16	2.52	0.92	4.89	21.8	18.9	15.5	2.13E-39	5.67	41.27	26.43	1.01
y1_test_79	100	0.965	-90.6	98.4	0.68	1.92	46	0.42	1.38	22.1	33.8	96.2	143.0	0.06	1.34E-39	15.3	0	0	288.3	3.20E-39	5.67	63.8	132.6	129.7	1.16	2.52	0.92	4.89	21.8	18.9	15.5	1.86E-39	5.61	30.04	27.69	1.78

Table S6. Training dataset for y_3 (lateral-size distribution).[27]

No.	x1	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x26	x28	x29	x30	x31	x32	x34	x36	x39	x40	y2
y2_test_1	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.85	0.25	0.45	18.6	4.5	6.2	1.02E-39	0.47	19.2	4.20	1.13
y2_test_2	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.70	0.55	0.90	18.8	4.6	7.1	6.82E-41	2.19	3.9	3.52	0.182
y2_test_3	106.2	-95.0	136.2	0.87	2.5	9.0	0.6	1.50	29.2	25.5	79.2	102.8	0.48	1.34E-39	17.6	2.3	3	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.85	0.25	0.45	18.6	4.5	6.2	4.27E-40	1.32	10.7	4.37	0.233
y2_test_4	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.81	0.49	1.15	19.5	4	5.9	1.61E-39	0.04	28.5	7.44	0.308
y2_test_5	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	127.2	1.38E-39	2.15	30.9	92.5	93.6	1.53	0.44	1.06	18.9	5.3	9.9	6.34E-40	0.11	13.8	4.63	0.352
y2_test_6	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	113.2	1.19E-39	2.09	25.9	83.0	74.7	1.46	0.46	1.08	19.3	5.6	10.1	1.70E-41	1.59	2.5	4.65	0.434
y2_test_7	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	1.87	0.40	0.62	18.8	4.8	6.6	2.89E-40	2.51	9.9	3.23	0.334
y2_test_8	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	241.5	3.35E-39	1.18	87.3	178.6	342.0	2.20	0.27	0.65	16.1	1.5	3	2.60E-39	1.08	70.2	6.68	0.264
y2_test_9	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	107.2	1.28E-39	1.49	27.4	83.5	96.3	1.70	0.55	0.90	18.8	4.6	7.1	6.56E-40	0.00	11.5	5.78	0.354
y2_test_10	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	122.2	1.46E-39	1.26	33.9	90.7	107.6	1.60	0.57	1.18	19.9	7	12.2	8.40E-40	0.23	18.1	6.54	0.592
y2_test_11	45.0	2.6	210.0	1.14	111.0	0.1	2.9	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	0.92	0.07	0.66	19.4	20.5	14.5	7.87E-40	3.83	19.2	6.63	0.179
y2_test_12	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	1.06	0.20	1.18	18.3	8.5	8.3	3.90E-40	2.80	2.6	5.47	0.163
y2_test_13	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	131.2	1.54E-39	2.18	42.0	111.4	158.2	1.94	0.45	0.72	16.1	5.1	7	5.91E-40	0.16	11.6	0.97	0.31
y2_test_14	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	269.5	3.57E-39	1.24	91.4	188.0	361.0	3.43	0.58	0.85	16	1.8	3.4	2.62E-39	1.10	61.1	5.34	0.312
y2_test_15	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	101.2	1.26E-39	1.24	33.7	96.0	136.0	1.85	0.44	0.58	16	3.9	7.5	3.19E-40	1.10	3.4	2.25	0.189
y2_test_16	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.53	0.46	1.17	19	6.5	8	6.40E-40	1.01	6.4	6.16	0.194
y2_test_17	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.77	0.49	0.88	18.7	6.2	7.3	3.34E-40	1.27	0.2	5.44	0.117
y2_test_18	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	241.5	3.35E-39	1.18	87.3	178.6	342.0	2.20	0.27	0.65	16.1	1.5	3	2.40E-39	1.16	56.9	5.83	0.2
y2_test_19	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	127.2	1.38E-39	2.15	30.9	92.5	93.6	1.53	0.44	1.06	18.9	5.3	9.9	4.40E-40	0.19	0.5	6.66	0.118
y2_test_20	45.0	2.6	210.0	1.14	111.0	0.1	2.9	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	105.1	1.01E-39	3.20	31.1	94.9	105.4	1.01	0.07	0.19	17.6	10.6	20.9	6.65E-40	1.04	21.0	8.28	0.292
y2_test_21	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.90	0.35	1.51	19.5	4	5.9	1.02E-39	2.23	20.9	4.19	0.53
y2_test_22	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.76	0.37	1.38	18.6	4.5	6.2	1.02E-39	0.47	19.2	4.20	0.5
y2_test_23	106.2	-95.0	136.2	0.87	2.5	9.0	0.6	1.50	29.2	25.5	79.2	102.8	0.48	1.34E-39	17.6	2.3	3	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.76	0.37	1.38	18.6	4.5	6.2	4.27E-40	1.32	10.7	4.37	0.284
y2_test_24	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	171.2	2.23E-39	1.45	44.4	100.9	146.0	1.90	0.35	1.51	19.5	4	5.9	1.61E-39	0.04	28.5	7.44	0.817
y2_test_25	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.76	0.37	1.38	18.6	4.5	6.2	5.59E-40	1.89	12.7	3.55	0.153
y2_test_26	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.76	0.37	1.38	18.6	4.5	6.2	1.15E-39	0.31	20.4	6.01	1.175
y2_test_27	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.89	0.24	2.50	18.3	8.5	8.3	3.90E-40	2.80	2.6	5.47	0.034
y2_test_28	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	122.2	1.41E-39	2.48	31.5	92.0	107.5	0.99	0.17	1.42	18.8	7.3	8.8	4.61E-40	0.14	1.1	6.12	0.046
y2_test_29	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	101.2	1.26E-39	1.24	33.7	96.0	136.0	1.00	0.14	0.97	16	3.9	7.5	3.19E-40	1.10	3.4	2.25	0.023
y2_test_30	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	213.4	2.80E-39	1.24	72.2	157.4	286.0	2.81	0.64	2.14	16.1	2.3	4.1	1.85E-39	1.10	41.8	4.53	0.092
y2_test_31	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	133.2	1.77E-39	1.79	36.2	96.7	118.4	1.76	0.37	1.38	18.6	4.5	6.2	8.25E-40	0.55	5.8	5.44	0.221
y2_test_32	45.0	2.6	210.0	1.14	111.0	0.1	2.9	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	168.6	1.57E-39	6.36	33.5	92.9	96.5	1.42	0.34	2.21	19.6	10.2	6.7	1.23E-39	2.12	23.4	15.88	0.151
y2_test_33	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	107.2	1.28E-39	1.49	27.4	83.5	96.3	0.65	0.22	0.19	18.8	4.6	7.1	6.82E-41	2.19	3.9	3.52	0.044
y2_test_34	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	0.65	0.14	0.14	18.8	4.8	6.6	2.89E-40	2.51	9.9	3.23	0.027
y2_test_35	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	133.2	1.77E-39	1.79	36.2	96.7	118.4	0.65	0.67	0.71	18.6	4.5	6.2	5.59E-40	1.89	12.7	3.55	0.035
y2_test_36	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	127.2	1.38E-39	2.15	30.9	92.5	93.6	0.65	0.33	0.33	18.9	5.3	9.9	1.74E-40	1.53	7.4	4.58	0.222
y2_test_37	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	131.2	1.54E-39	2.18	42.0	111.4	158.2	0.65	0.34	0.35	16.1	5.1	7	5.91E-40	0.16	11.6	0.97	0.046
y2_test_38	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.65	0.34	0.34	18.3	8.5	8.3	3.90E-40	2.80	2.6	5.47	0.053
y2_test_39	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	101.2	1.26E-39	1.24	33.7	96.0	136.0	0.65	0.58	0.47	16	3.9	7.5	3.19E-40	1.10	3.4	2.25	0.199
y2_test_40	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	213.4	2.80E-39	1.24	72.2	157.4	286.0	0.65	0.46	0.78	16.1	2.3	4.1	1.85E-39	1.10	41.8	4.53	0.025
y2_test_41	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	127.2	1.38E-39	2.15	30.9	92.5	93.6	0.65	0.33	0.33	18.9	5.3	9.9	4.40E-40	0.19	0.5	6.66	0.234
y2_test_42	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	121.2	1.50E-39	1.17	33.4	95.2	114.7	0.65	0.14	0.14	18.8	4.8	6.6	5.55E-40	1.17	3.0	5.73	0.103
y2_test_43	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.20	1.50	1.47	18.8	4.8	6.6	2.89E-40	2.51	9.9	3.23	0.287
y2_test_44	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	127.2	1.38E-39	2.15	30.9	92.5	93.6	2.16	0.81	0.85	18.9	5.3	9.9	1.74E-40	1.53	7.4	4.58	0.18
y2_test_45	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.20	1.50	1.47	18.8	4.8	6.6	8.77E-40	0.32	17.6	5.80	0.248
y2_test_46	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	101.2	1.26E-39	1.24	33.7	96.0	136.0	2.17	1.02	0.85	16	3.9	7.5	5.13E-40	1.02	16.7	2.46	0.402
y2_test_47	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	127.2	1.38E-39	2.15	30.9	92.5	93.6	2.16	0.81	0.85	18.9	5.3	9.9	7.62E-40	0.67	15.0	5.14	0.387
y2_test_48	45.0	2.6	210.0	1.14	111.0	0.1	2.9	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	0.80	0.87	3.44	19.4	20.5	14.5	7.87E-40	3.83	19.2	6.63	0.025
y2_test_49	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	125.2	1.34E-39	5.14	33.0	96.2	114.8	2.84	0.88	0.65	18.3	8.5	8.3	3.90E-40	2.80	2.6	5.47	0.204
y2_test_50	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	127.2	1.38E-39	2.15	30.9	92.5	93.6	2.16	0.81	0.85	18.9	5.3	9.9	4.40E-40	0.19	0.5	6.66	0.054
y2_test_51	18.0	0.0	100.0	1.00	78.5	23.8	0.9	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	0.80	0.87	3.44	19.4	20.5	14.5	1.04E-39	5.63	23.3	29.22	0.045
y2_test_52	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.20	1.50	1.47	18.8	4.8	6.6	5.55E-40	1.17	3.0	5.73	0.178
y2_test_53	45.0	2.6	210.0	1.14	111.0	0.1	2.9	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	105.1	1.01E-39	3.20	31.1	94.9	105.4	1.62	0.50	0.53	17.6	10.6	20.9	6.65E-40	1.04	21.0	8.28	0.082
y2_test_54	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	133.2	1.77E-39	1.79	36.2	96.7	118.4	2.75	0.35	0.60	18.6	4.5	6.2	1.02E-39	0.47	19.2	4.20	0.756
y2_test_55	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.14	0.53	1.13	18.8	4.8	6.6	2.89E-40	2.51	9.9	3.23	0.462
y2_test_56	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	133.2	1.77E-39	1.79	36.2	96.7	118.4	2.75	0.35	0.60	18.6	4.5	6.2	5.59E-40	1.89	12.7	3.55	0.513
y2_test_57	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	121.2	1.50E-39	1.17	33.4	95.2	114.7	2.14	0.53	1.13	18.8	4.8	6.6	8.77E-40	0.32	17.6	5.80	1.091
y2_test_58	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	125.2	1.28E-39	3.61	30.6	88.1	91.5	2.06	1.08	2.50	18.7	6.2	7.3	6.56E-40	2.12	14.8	4.40	0.375
y2_test_59	45.0	2.6	210.0	1.14	111.0	0.1	2.9	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	1.00	0.15	0.93	19.4	20.5	14.5	7.87E-40	3.83	19.2	6.63	0.185
y2_test_60	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	101.2	1.26E-39	1.24	33.7	96.0	136.0	2.41	0.97	1.48	16	3.9	7.5	3.19E-40	1.10	3.4	2.25	0.09
y2_test_61	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	213.4	2.80E-39	1.24	72.2	157.4	286.0	5.40	0.56	0.70	16.1	2.3	4.1	1.85E-39	1.10	41.8	4.53	0.328
y2_test_62	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	125.2	1.28E-39	3.61	30.6	88.1	91.5	2.06	1.08	2.50	18.7	6.2	7.3	3.34E-40	1.27	0.2	5.44	0.211
y2_test_63	18.0	0.0	100.0	1.00	78.5	23.8	0.9	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	1.00	0.15	0.93	19.4	20.5	14.5	1.04E-39	5.63	23.3	29.22	0.181
y2_test_64	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	0.36	1.00	18.8	5.9	11.2	8.77E-40	0.40	20.9	5.13	0.471
y2_test_65	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	0.36	1.00	18.8	5.9	11.2	4.17E-40	1.82	14.4	5.43	0.135
y2_test_66	74.1	-95.0	78.0	1.06	7.1	107.2	0.6	1.40	31.2	15.8	71.3	60.8	1.49	6.23E-40	17.3	9.2	8.9	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	0.36	1.00	18.8	5.9	11.2	1.01E-39	0.37	22.1	5.02	0.228
y2_test_67	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	130.2	1.40E-39	1.93	38.2	106.4	135.4	2.17	0.31	0.52	16.3	5.4	11	6.45E-40	0.33	21.2	3.18	0.175
y2_test_68	72.1	-108.4	66.0	0.89	7.6	162.1	0.5	1.40	27.0	17.0	71.6	76.4	2.26	7.51E-40	16.8	5.7	8	208.3	2.33E-39	3.25	55.9	132.0	173.7	2.72	0.23	0.80	18.2	6	10.2	1.58E-39	0.99	38.8	3.57	0.21
y2_test_69	106.1	-26.0	178.0	1.05	17.9	1.5	1.4	1.55	40.7	23.5	79.1	73.1	3.68	1.21E-39	18.9	8	6.2	208.3	2.33E-39	3.25	55.9	132.0	173.7	2.72	0.23	0.80	18.2	6	10.2	1.12E-39	0.43	32.4	4.69	0.626
y2_test_70	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	278.1	3.28E-39	4.58	85.4	181.8	284.3	2.87	0.37	1.60	16.7	8.7	10.7	2.34E-39	2.23	55.0	5.02	0.428
y2_test_71	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	208.3	2.33E-39	3.25	55.9	132.0	173.7	2.72	0.23	0.80	18.2	6	10.2	1.39E-39	0.91	25.5	5.62	0.044
y2_test_72	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	130.2	1.40E-39	1.93	38.2	106.4	135.4	2.17	0.31	0.52	16.3	5.4	11	4.51E-40	0.41	7.8	4.38	0.067
y2_test_73	106.1	-11.5	245.0	1.11	31.1	0.0	32.0	1.45	47.0	30.4	94.9	97.3	2.34	9.45E-40	16	6	6.7	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	0.36	1.00	18.8	5.9	11.2	6.83E-40	0.48	7.5	7.18	0.031
y2_test_74	18.0	0.0	100.0	1.00	78.5	23.8	0.9	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	288.3	3.20E-39	5.67	63.8	132.6	129.7	2.54	0.79	4.84	21.8	18.9	15.5	3.11E-39	3.24	57.8	29.76	0.072

Table S7. Test dataset of for y_3'' (lateral-size distribution).[27]

No.	x1	x3	x4	x5	x6	x7	x8	x9	x10	x11	x12	x13	x14	x15	x16	x17	x18	x19	x20	x21	x22	x23	x24	x26	x27	x30	x31	x32	x33	x34	x35	x36	x37	x38	x39	x40	x41	y3
y3_test_1	60.1	-89.5	82.4	0.786	20.2	44.0	2.04	1.38	22.9	18.9	71.2	71.1	1.93	6.46E-40	15.5	7.2	12.8	105.1	1.01E-39	3.20	31.1	94.9	105.4	1.01	0.08	17.6	10.6	20.9	-3.62E-40	3.62E-40	-1.27	1.27	6.2	-12.2	12.2	9.7	1.5	0.033
y3_test_2	74.1	114.7	98.5	0.803	17.3	0.2	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	105.1	1.01E-39	3.20	31.1	94.9	105.4	1.01	0.08	17.6	10.6	20.9	-1.83E-40	1.83E-40	-1.34	1.34	5.9	-7.4	7.4	10.6	1.5	0.044
y3_test_3	46.1	-114.5	78.3	0.785	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	105.1	1.01E-39	3.20	31.1	94.9	105.4	1.01	0.08	17.6	10.6	20.9	-5.52E-40	5.52E-40	-1.25	1.25	6.2	-17.7	17.7	4.3	1.5	0.027
y3_test_4	32.0	-97.7	64.6	0.786	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	105.1	1.01E-39	3.20	31.1	94.9	105.4	1.01	0.08	17.6	10.6	20.9	-7.43E-40	7.43E-40	-1.09	1.09	6.7	-22.3	22.3	5.5	1.5	0.071
y3_test_5	60.1	-126.5	97.2	0.804	20.8	19.0	1.95	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	105.1	1.01E-39	3.20	31.1	94.9	105.4	1.01	0.08	17.6	10.6	20.9	-3.68E-40	3.68E-40	-1.35	1.35	5.9	-12.9	12.9	6.4	1.5	0.05
y3_test_6	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	0.93	0.00	19.4	20.5	14.5	-1.04E-39	1.04E-39	-5.63	5.63	19.6	-23.3	23.3	29.2	1.5	0.36
y3_test_7	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	125.2	1.34E-39	5.14	33.0	96.2	114.8	1.10	0.16	18.3	8.5	8.3	-1.25E-39	1.25E-39	-2.72	2.72	12.5	-27.0	27.0	35.3	1.5	0.281
y3_test_8	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.78	0.85	18.7	6.2	7.3	-1.19E-39	1.19E-39	-1.18	1.18	8.8	-24.6	24.6	36.9	1.5	0.281
y3_test_9	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	131.2	1.54E-39	2.18	42.0	111.4	158.2	1.94	1.01	16.1	5.1	7	-1.45E-39	1.45E-39	0.25	0.25	5.3	-36.0	36.0	37.0	1.5	0.342
y3_test_10	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	70.1	6.96E-40	4.52	20.0	76.6	61.3	0.93	0.00	17.2	14	12.2	-6.09E-40	6.09E-40	-2.09	2.09	11.0	-14.0	14.0	30.4	1.5	0.282
y3_test_11	45.0	2.6	210.0	1.135	111.0	0.1	2.93	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	108.1	1.13E-39	8.06	29.3	89.0	57.1	0.93	0.00	19.4	20.5	14.5	-7.87E-40	7.87E-40	-3.83	3.83	34.2	-19.2	19.2	6.6	1.5	0.271
y3_test_12	60.1	-89.5	82.4	0.786	20.2	44.0	2.04	1.38	22.9	18.9	71.2	71.1	1.93	6.46E-40	15.5	7.2	12.8	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.75	1.03	19	6.5	8	-9.39E-40	9.39E-40	0.59	0.59	2.6	-17.9	17.9	8.5	3.66	0.107
y3_test_13	74.1	114.7	98.5	0.803	17.3	0.2	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.75	1.03	19	6.5	8	-7.60E-40	7.60E-40	0.52	0.52	2.5	-13.1	13.1	7.9	3.66	0.046
y3_test_14	74.1	114.7	98.5	0.803	17.3	0.2	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	101.2	1.26E-39	1.24	33.7	96.0	136.0	1.80	1.09	16	3.9	7.5	-4.39E-40	4.39E-40	0.61	0.61	2.3	-10.0	10.0	5.2	3.66	0.06
y3_test_15	46.1	-114.5	78.3	0.785	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	137.2	1.59E-39	1.33	36.8	96.6	118.1	1.75	1.03	19	6.5	8	-1.13E-39	1.13E-39	0.61	0.61	2.6	-23.4	23.4	13.3	3.66	0.111
y3_test_16	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	168.6	1.57E-39	6.36	33.5	92.9	96.5	1.42	0.71	19.6	10.2	6.7	-1.48E-39	1.48E-39	-3.93	3.93	15.4	-27.4	27.4	37.0	3.66	0.746
y3_test_17	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.82	0.11	18.3	8.5	8.3	-1.25E-39	1.25E-39	-2.72	2.72	12.5	-27.0	27.0	35.3	3.66	0.37
y3_test_18	45.0	2.6	210.0	1.135	111.0	0.1	2.93	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	168.6	1.57E-39	6.36	33.5	92.9	96.5	1.42	0.71	19.6	10.2	6.7	-1.23E-39	1.23E-39	-2.12	2.12	26.9	-23.4	23.4	15.9	3.66	0.284
y3_test_19	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	122.2	1.41E-39	2.48	31.5	92.0	107.5	0.72	0.01	18.8	7.3	8.8	-1.32E-39	1.32E-39	-0.05	0.05	6.0	-25.5	25.5	35.2	3.66	0.283
y3_test_20	45.0	2.6	210.0	1.135	111.0	0.1	2.93	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	125.2	1.34E-39	5.14	33.0	96.2	114.8	0.82	0.11	18.3	8.5	8.3	-9.92E-40	9.92E-40	-0.91	0.91	21.8	-22.9	22.9	15.1	3.66	0.683
y3_test_21	60.1	-89.5	82.4	0.786	20.2	44.0	2.04	1.38	22.9	18.9	71.2	71.1	1.93	6.46E-40	15.5	7.2	12.8	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-3.62E-40	3.62E-40	-1.27	1.27	6.2	-12.2	12.2	9.7	5.79	0.099
y3_test_22	74.1	114.7	98.5	0.803	17.3	0.2	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-1.83E-40	1.83E-40	-1.34	1.34	5.9	-7.4	7.4	10.6	5.79	0.057
y3_test_23	46.1	-114.5	78.3	0.785	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-5.52E-40	5.52E-40	-1.25	1.25	6.2	-17.7	17.7	4.3	5.79	0.118
y3_test_24	32.0	-97.7	64.6	0.786	32.7	127.0	0.55	1.33	24.0	8.8	56.8	34.0	2.11	2.65E-40	15.1	12.3	22.3	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-7.43E-40	7.43E-40	-1.09	1.09	6.7	-22.3	22.3	5.5	5.79	0.247
y3_test_25	60.1	-126.5	97.2	0.804	20.8	19.0	1.95	1.39	25.3	18.3	72.2	71.6	1.84	6.40E-40	15.7	6.8	17.4	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-3.68E-40	3.68E-40	-1.35	1.35	5.9	-12.9	12.9	6.4	5.79	0.113
y3_test_26	74.1	114.7	98.5	0.803	17.3	0.2	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-1.83E-40	1.83E-40	-1.34	1.34	5.9	-7.4	7.4	10.6	5.79	0.075
y3_test_27	90.1	-70.0	135.1	0.930	29.6	0.1	1.84	1.41	28.2	26.6	87.6	93.7	0.47	8.98E-40	16.2	8.1	13.9	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-1.10E-40	1.10E-40	-2.73	2.73	1.5	-4.5	4.5	7.9	5.79	0.162
y3_test_28	76.1	-85.1	124.5	0.965	16.9	8.3	1.71	1.40	33.3	21.8	79.8	75.0	0.34	7.01E-40	16.4	9.2	15.8	105.1	1.01E-39	3.20	31.1	94.9	105.4	2.03	1.21	17.6	10.6	20.9	-3.07E-40	3.07E-40	-2.86	2.86	1.1	-9.4	9.4	5.8	5.79	0.095
y3_test_29	60.1	-89.5	82.4	0.786	20.2	44.0	2.04	1.38	22.9	18.9	71.2	71.1	1.93	6.46E-40	15.5	7.2	12.8	122.2	1.46E-39	1.26	33.9	90.7	107.6	2.48	1.66	19.9	7	12.2	-8.16E-40	8.16E-40	0.67	0.67	2.4	-15.0	15.0	8.8	5.79	0.135
y3_test_30	60.1	-89.5	82.4	0.786	20.2	44.0	2.04	1.38	22.9	18.9	71.2	71.1	1.93	6.46E-40	15.5	7.2	12.8	123.2	1.36E-39	1.83	32.2	89.1	99.3	2.45	1.63	19.6	7.2	13.4	-7.18E-40	7.18E-40	0.09	0.09	3.5	-13.3	13.3	8.2	5.79	0.142
y3_test_31	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	168.6	1.57E-39	6.36	33.5	92.9	96.5	2.75	1.93	19.6	10.2	6.7	-1.48E-39	1.48E-39	-3.93	3.93	15.4	-27.4	27.4	37.0	5.79	0.319
y3_test_32	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	125.2	1.34E-39	5.14	33.0	96.2	114.8	2.15	1.33	18.3	8.5	8.3	-1.25E-39	1.25E-39	-2.72	2.72	12.5	-27.0	27.0	35.3	5.79	0.277
y3_test_33	45.0	2.6	210.0	1.135	111.0	0.1	2.93	1.45	58.2	10.1	60.2	31.1	4.24	3.43E-40	17.3	18.7	19.3	168.6	1.57E-39	6.36	33.5	92.9	96.5	2.75	1.93	19.6	10.2	6.7	-1.23E-39	1.23E-39	-2.12	2.12	26.9	-23.4	23.4	15.9	5.79	0.238
y3_test_34	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	125.2	1.28E-39	3.61	30.6	88.1	91.5	1.86	1.04	18.7	6.2	7.3	-1.19E-39	1.19E-39	-1.18	1.18	8.8	-24.6	24.6	36.9	5.79	0.269
y3_test_35	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	131.2	1.54E-39	2.18	42.0	111.4	158.2	1.86	1.04	16.1	5.1	7	-1.45E-39	1.45E-39	0.25	0.25	5.3	-36.0	36.0	37.0	5.79	0.624
y3_test_36	60.1	-89.5	82.4	0.786	20.2	44.0	2.04	1.38	22.9	18.9	71.2	71.1	1.93	6.46E-40	15.5	7.2	12.8	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	1.31	18.8	5.9	11.2	-9.82E-40	9.82E-40	0.07	0.07	3.6	-19.0	19.0	6.9	3.72	0.127
y3_test_37	74.1	114.7	98.5	0.803	17.3	0.2	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	1.31	18.8	5.9	11.2	-8.03E-40	8.03E-40	-0.01	0.01	3.4	-14.2	14.2	6.3	3.72	0.119
y3_test_38	60.1	-89.5	82.4	0.786	20.2	44.0	2.04	1.38	22.9	18.9	71.2	71.1	1.93	6.46E-40	15.5	7.2	12.8	130.2	1.40E-39	1.93	38.2	106.4	135.4	2.17	1.36	16.3	5.4	11	-7.50E-40	7.50E-40	0.00	0.00	3.7	-19.3	19.3	3.0	3.72	0.126
y3_test_39	74.1	114.7	98.5	0.803	17.3	0.2	4.20	1.40	24.5	23.7	78.6	89.9	1.85	8.25E-40	15.7	5.8	12.3	130.2	1.40E-39	1.93	38.2	106.4	135.4	2.17	1.36	16.3	5.4	11	-5.71E-40	5.71E-40	-0.08	0.08	3.6	-14.5	14.5	1.8	3.72	0.036
y3_test_40	46.1	-114.5	78.3	0.785	24.6	59.0	1.08	1.36	24.0	13.4	64.4	52.8	1.94	4.56E-40	15.8	8.8	19.4	150.2	1.63E-39	1.86	37.9	107.2	114.0	2.12	1.31	18.8	5.9	11.2	-1.17E-39	1.17E-39	0.08	0.08	3.6	-24.5	24.5	10.6	3.72	0.128
y3_test_41	18.0	0.0	100.0	0.997	78.5	23.8	0.89	1.33	72.6	6.0	46.5	14.7	2.43	8.64E-41	15.5	16	42.3	288.3	3.20E-39	5.67	63.8	132.6	129.7	2.89	2.08	21.8	18.9	15.5	-3.11E-39	3.11E-39	-3.24	3.24	13.8	-57.8	57.8	29.8	3.72	0.279
y3_test_42	73.1	-60.4	153.0	0.944	36.7	3.7	0.80	1.43	37.1	19.9	75.8	68.1	4.37	7.23E-40	17.4	13.7	11.3	172.3	1.96E-39	5.61	51.0	123.7	190.7	2.67	1.87	16.3	4.2	8.6	-1.23E-39	1.23E-39	-1.23	1.23	24.5	-31.1	31.1	10.1	3.72	0.237
y3_test_43	108.1	-15.5	205.4	1.042	11.9	0.1	5.58	1.54	38.3	24.5	78.9	87.3	2.06	1.21E-39	18.4	6.3	13.7	172.3	1.96E-39	5.61	51.0	123.7	190.7	2.67	1.87	16.3	4.2	8.6	-7.49E-40	7.49E-40	-3.54	3.54	11.6	-26.5	26.5	6.9	3.72	0.29