

# Research Results Tables

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## 1 Introduction

This document contains tables presenting the results of computational experiments.

## 2 Toy Example Results

Table 1: Results on Toy Examples.

	SMMD		MMD		Bayesflow		DNN-ABC	W2-ABC
	Original	Refined	Original	Refined	Original	Refined	Original	Original
<b>MMD(n=50)</b>	3.43	1.39	3.91	1.82	2.45	1.71	12.47	10.73
<b>MMD(n=25)</b>	4.15	2.26	3.91	1.92	3.84	3.31	12.57	10
<b>MMD(n=100)</b>	6.26	2.52	4.28	3.02	5.5	3.47	13.76	13.12
<b>Run Time(n=50)</b>	00:05:45	00:03:19	00:04:40	00:03:10	00:25:46	00:03:11	00:06:08	00:47:46
<b>Run Time(n=25)</b>	00:05:40	00:04:01	00:04:49	00:03:57	00:25:41	00:03:57	00:05:58	00:26:28
<b>Run Time(n=100)</b>	00:05:57	00:06:19	00:05:17	00:06:13	00:36:21	00:06:19	00:06:08	02:08:02

*Note:* All values in the table except run time are the original data multiplied by 100, rounded to two decimal places.

## 3 Lotka-Volterra Model Results

Table 2: Results on Lotka-Volterra Model.

	SMMD		MMD		Bayesflow		DNN-ABC	W2-ABC
	Original	Refined	Original	Refined	Original	Refined	Original	Original
<b>Bias</b>	1.47	0.18	1.42	0.13	1.66	0.2	3.37	42.3
<b>95% CI Len (<math>\theta_1</math>)</b>	2.16	1.96	2.94	1.59	1.2	0.85	16.03	22.95
<b>95% CI Len (<math>\theta_2</math>)</b>	2.64	2.29	2.91	2.03	3.45	1.9	11.22	67.67
<b>95% CI Len (<math>\theta_3</math>)</b>	2.15	1.3	3.07	1.48	1.02	0.67	15.77	23.48
<b>95% CI Len (<math>\theta_4</math>)</b>	3.04	2.96	2.74	3	3.69	2.42	13.33	67.95
<b>Run Time</b>	00:14:29	00:16:46	00:13:52	00:16:34	00:26:19	00:14:02	00:28:11	01:47:42

*Note:* All values in the table except run time are the original data multiplied by 10, rounded to two decimal places.

## 4 SIR Model Results

Table 3: Results on SIR Model.

	SMMD		MMD		Bayesflow		DNN-ABC	W2-ABC
	Original	Refined	Original	Refined	Original	Refined	Original	Original
<b>Bias</b>	0.99	0.02	1.2	0.04	0.04	0.03	0.09	0.39
<b>95% CI Len</b> ( $\theta_1$ )	5.95	2.56	8.02	3.65	4.8	4.26	7.78	27.85
<b>95% CI Len</b> ( $\theta_2$ )	6.69	3.16	8.43	4.66	4.88	4.4	7.38	22.43
<b>Run Time</b>	00:07:55	00:03:18	00:07:16	00:03:26	00:36:08	00:03:24	00:05:09	02:53:43

*Note:* Values for "Bias" are the original data multiplied by 10, while values for "95% CI Len" are the original data multiplied by 100. All results are rounded to three decimal places.