*** THIS REPORT IS: ***

ENTER REPORT TITLE HERE

Analyst: ***ENTER NAME OF AUTHOR HERE***

Analysis date: **3/14/25, 12:22â€¯AM**

Executive Summary

Assessment Overview
ENTER EXECUTIVE SUMMARY HERE

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Location of Simulation

Description of Location Features
ENTER SIMULATION LOCATION DESCRIPTION HERE

Production Notes

All units are meters and degrees unless otherwise noted.

ENTER SIMULATION PRODUCTION NOTES HERE

Post-Experiment Analysis of Significant Location Features
ENTER SIMULATION LOCATION CONCLUSIONS HERE

Simulation Configuration: Viskit Assembly

The simulation is defined by the Viskit Assembly which collects, lists, initializes and connects all participating entitiy models within a single scenario. The assembly is then ready for repeated simulation replications, either for visual validation of behavior or statistical analysis of Measures of Effectiveness (MoEs).

Assembly Design Considerations
ENTER ASSEMBLY CONFIGURATION DESCRIPTION HERE

Production Notes

All units are meters and degrees unless otherwise noted.

ENTER ASSEMBLY CONFIGURATION PRODUCTION NOTES HERE

Post-Experiment Analysis of Simulation Assembly Design
ENTER ASSEMBLY CONFIGURATION CONCLUSIONS HERE

Summary of SMAL Defined Simulation Entities

Simulation Entity	Behavior Definitions

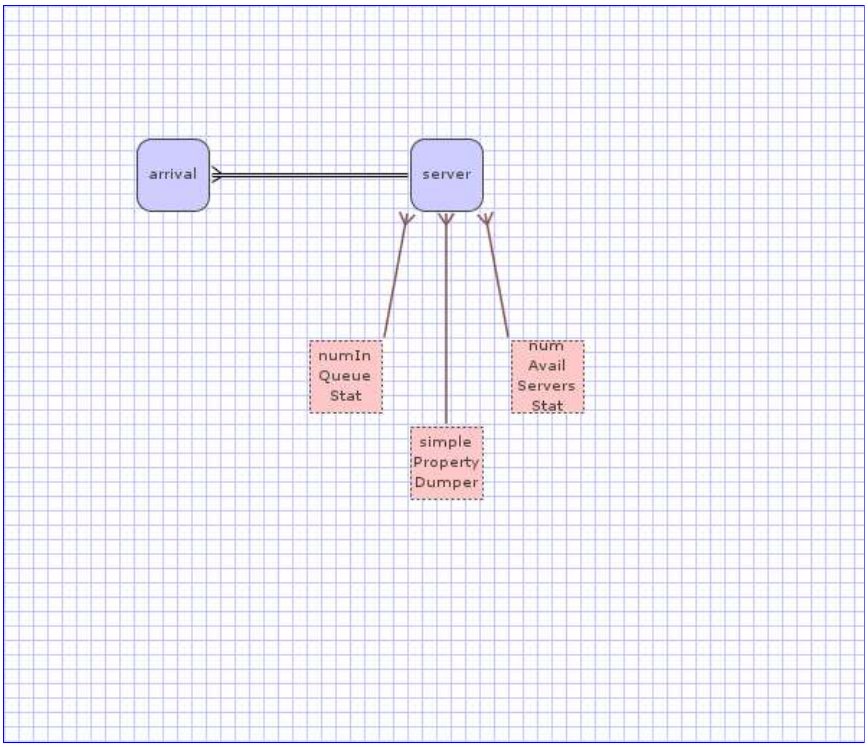

Figure 1: Simulation Assembly Combining all Simulation Entities for this Scenario Experiment

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Entity Initialization Parameters for this Simulation Assembly

Initialization parameters are applied to individualize generic behavior models. These parameters customize the event-graph models.

Entity Parameters Overview
ENTER ENTITY PARAMETER DESCRIPTION HERE

Behavior Descriptions

Description of Behavior Design

Post-Experiment Analysis of Entity Behaviors

Behavior: examples.ArrivalProcess

Description: Getting started: producing customers at random intervals.

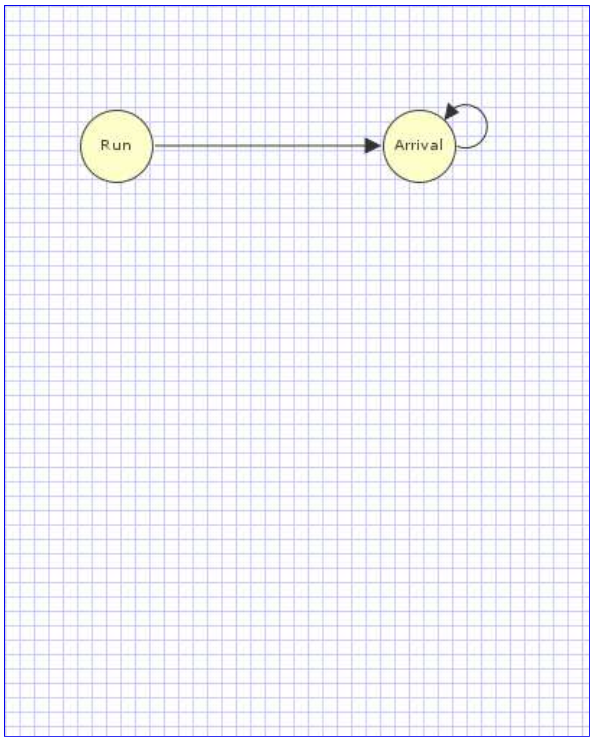

Figure 2: Event Graph for examples.ArrivalProcess

Initialization Parameter	Parameter Type	Description
interarrivalTime	simkit.random.RandomVariate	typical time duration between arrivals

State Variable	Variable Type	Description
numberArrivals	int	how many customers have arrived

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Behavior: examples.SimpleServer

Description: One of the most fundamental examples, a simple server that handles client customers

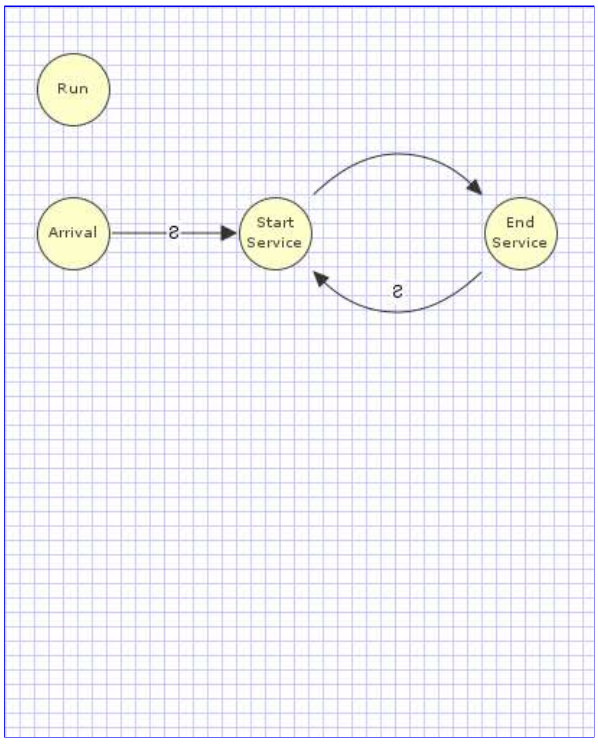

Figure 3: Event Graph for examples.SimpleServer

Initialization Parameter	Parameter Type	Description
serviceTime	simkit.random.RandomVariate	time duration to perform service
totalNumberServers	int	how many servers are provided

State Variable	Variable Type	Description
numberInQueue	int	number of customers in queue
numberAvailableServers	int	number of available servers at a given time

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Statistical Results

Description of Expected Results
ENTER STATISTICAL RESULTS DESCRIPTION HERE

Analysis of Experimental Results
ENTER STATISTICAL RESULTS CONCLUSIONS HERE

Summary Statistics section: Primary Measures of Effectiveness (MoEs) / Measures of Performance (MoPs) and corresponding statistical plots

Replication Report

Measure of Effectiveness (MoE)

Property: numInQueueStat

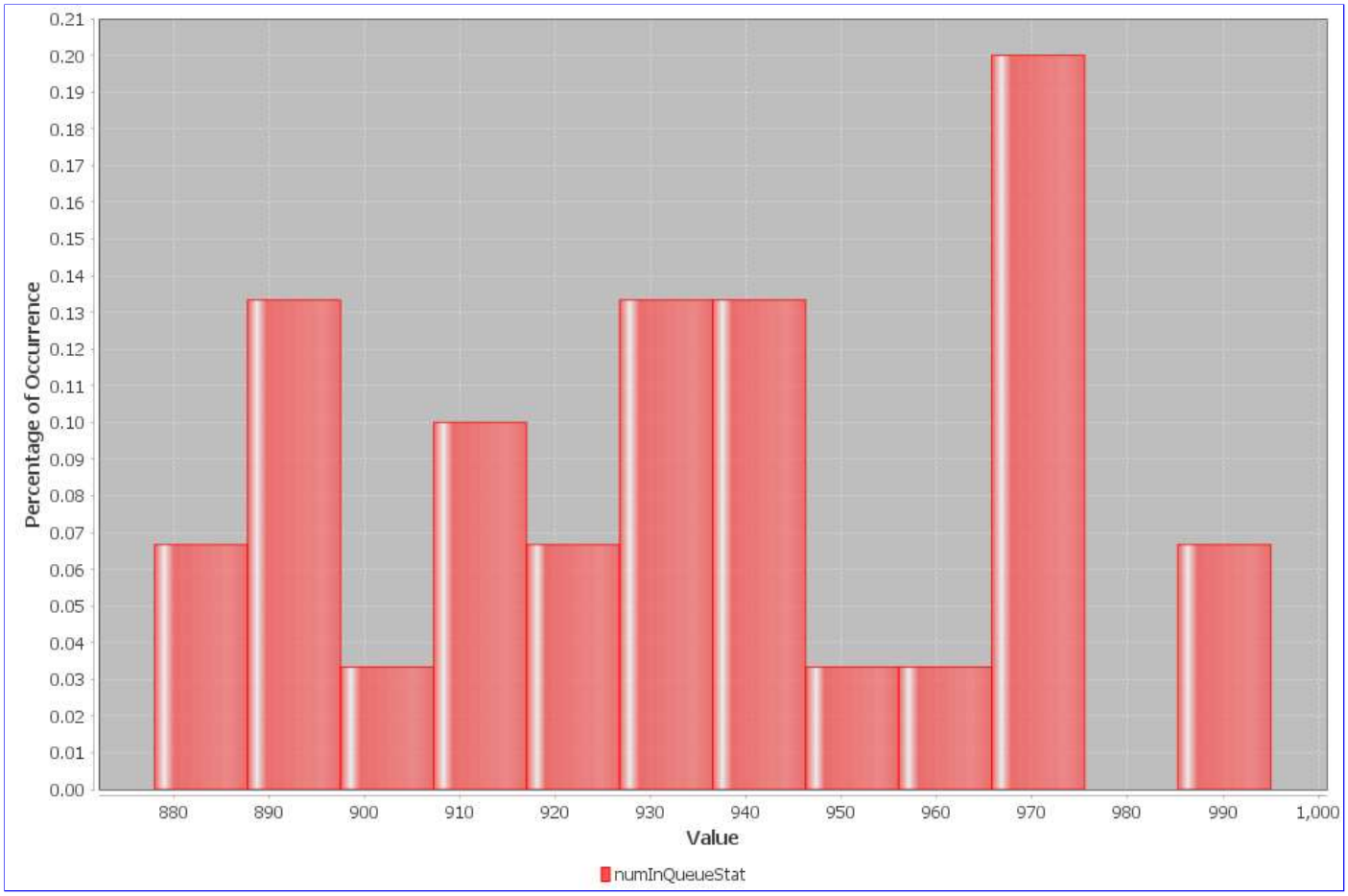

Figure 4: Replications Histogram for numInQueueStat

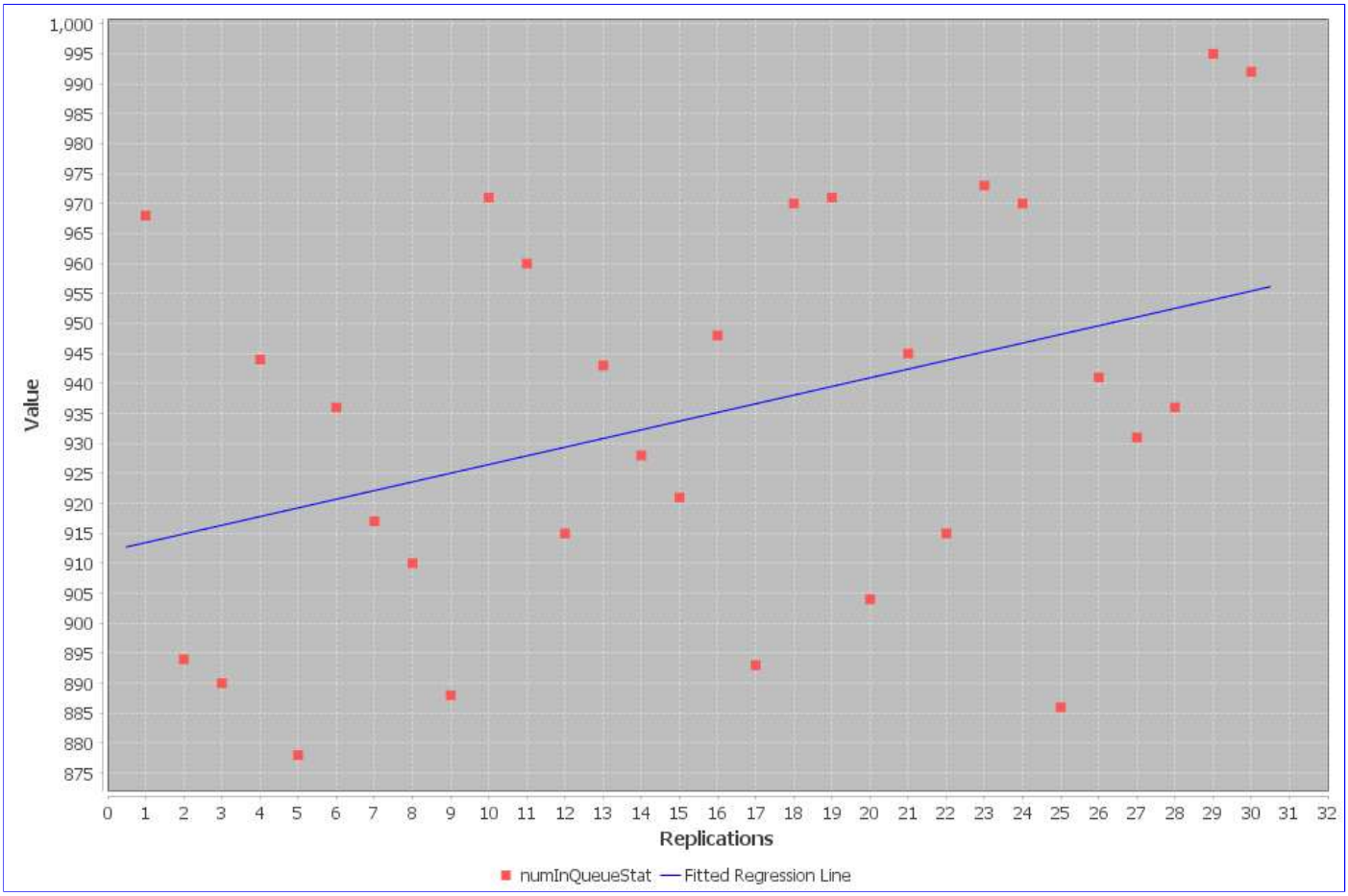

Figure 5: Replications Regression Plot for numInQueueStat

Replication #	numInQueueStat	Min	Max	Mean	StdDev	Variance
1	968	0.	230.	101.074	69.851	4879.203
2	894	0.	216.	100.780	62.982	3966.759
3	890	0.	191.	97.385	57.506	3306.914
4	944	0.	254.	116.041	74.946	5616.896
5	878	0.	180.	103.116	50.715	2571.973
6	936	0.	247.	123.814	68.078	4634.615
7	917	0.	220.	101.417	59.552	3546.467
8	910	0.	212.	100.489	59.236	3508.856
9	888	0.	221.	113.536	65.361	4272.104
10	971	0.	230.	114.992	61.807	3820.074
11	960	0.	242.	116.617	74.103	5491.227
12	915	0.	216.	103.056	56.537	3196.452
13	943	0.	243.	119.449	69.193	4787.701
14	928	0.	236.	122.055	68.603	4706.373
15	921	0.	250.	123.266	73.058	5337.448
16	948	0.	222.	117.480	64.326	4137.852
17	893	0.	219.	105.134	62.096	3855.970
18	970	0.	240.	116.978	69.632	4848.637
19	971	0.	256.	124.967	76.902	5913.989
20	904	0.	225.	109.014	65.122	4240.932
21	945	0.	222.	119.403	63.883	4081.091
22	915	0.	245.	122.113	74.272	5516.386
23	973	0.	261.	126.437	74.934	5615.157
24	970	0.	252.	128.011	74.932	5614.736
25	886	0.	211.	99.612	59.609	3553.280
26	941	0.	237.	121.182	66.850	4468.952

27	931	0.	207.	100.236	60.468	3656.433
28	936	0.	236.	109.676	67.428	4546.484
29	995	0.	253.	120.717	70.677	4995.277
30	992	0.	254.	130.707	74.703	5580.516

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Replication Report

Measure of Effectiveness (MoE)

Property: numAvailServersStat

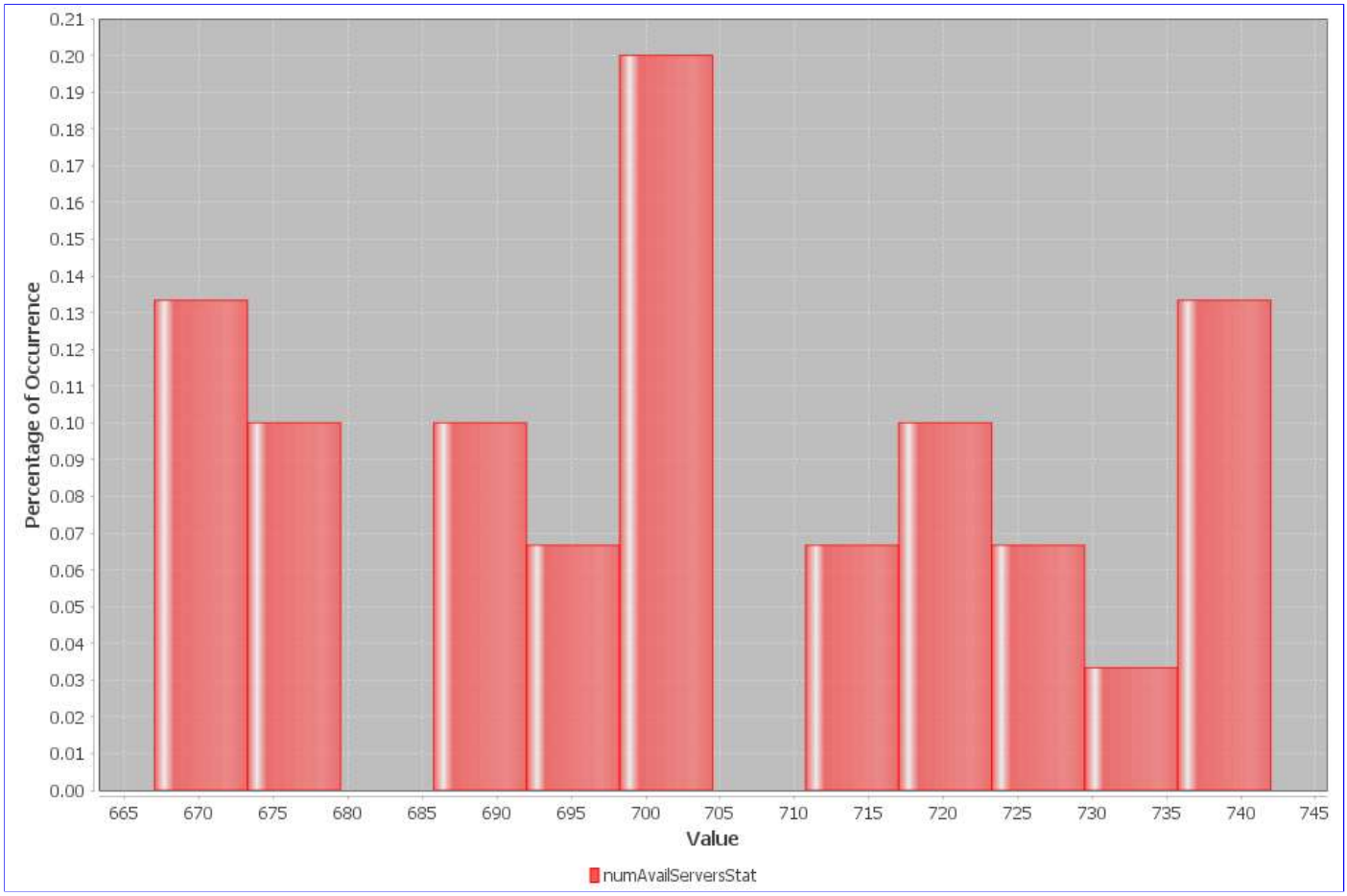

Figure 6: Replications Histogram for numAvailServersStat

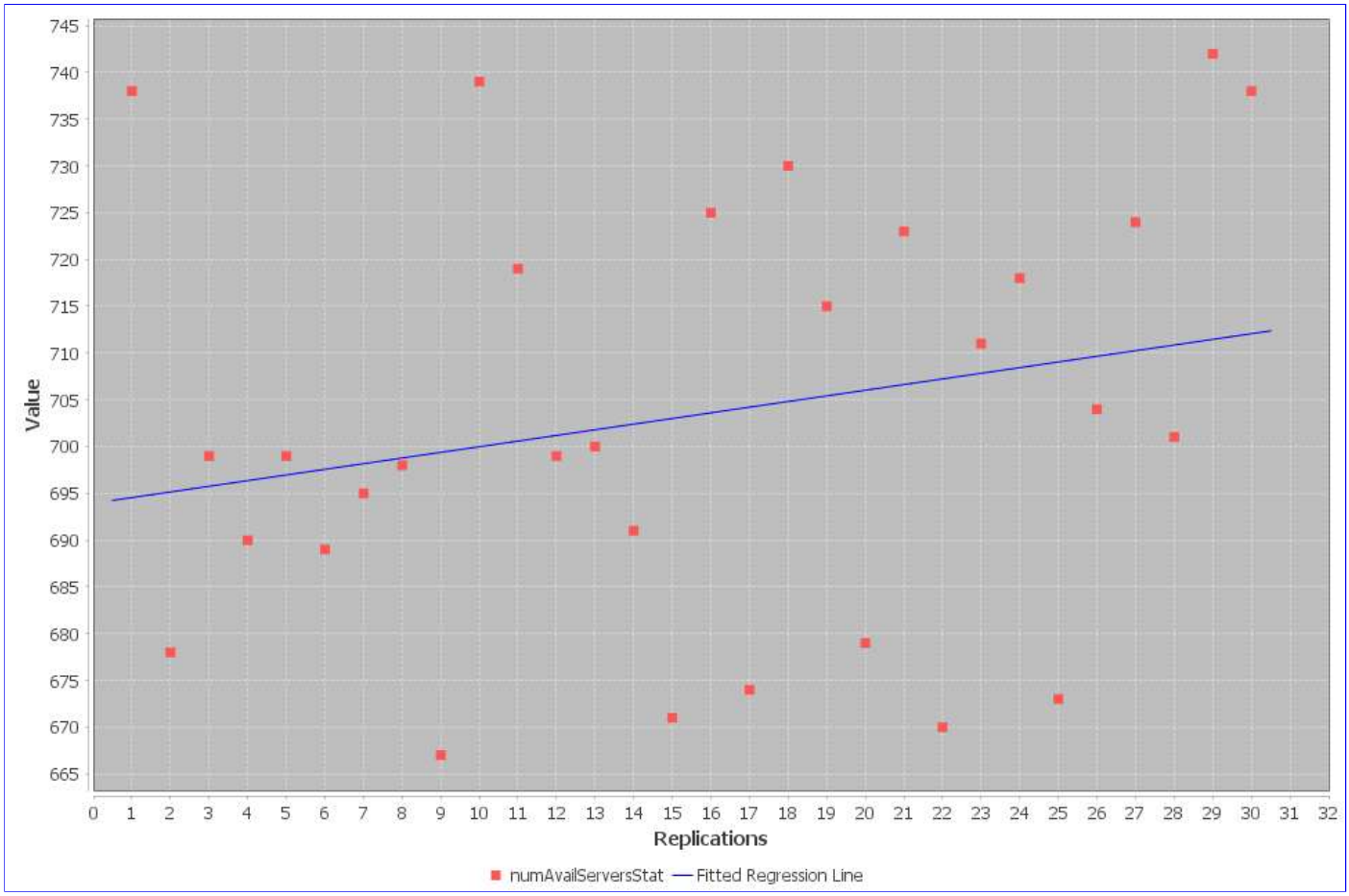

Figure 7: Replications Regression Plot for numAvailServersStat

Replication #	numAvailServersStat	Min	Max	Mean	StdDev	Variance
1	738	0.	2.	0.760	0.748	0.559
2	678	0.	2.	0.812	0.762	0.580
3	699	0.	2.	0.912	0.765	0.585
4	690	0.	2.	0.747	0.739	0.547
5	699	0.	2.	0.939	0.750	0.562
6	689	0.	2.	0.805	0.758	0.574
7	695	0.	2.	0.793	0.728	0.531
8	698	0.	2.	0.840	0.756	0.572
9	667	0.	2.	0.852	0.763	0.583
10	739	0.	2.	0.794	0.752	0.565
11	719	0.	2.	0.794	0.729	0.531
12	699	0.	2.	0.839	0.753	0.567
13	700	0.	2.	0.794	0.737	0.544
14	691	0.	2.	0.848	0.748	0.559
15	671	0.	2.	0.773	0.744	0.554
16	725	0.	2.	0.816	0.757	0.573
17	674	0.	2.	0.850	0.769	0.591
18	730	0.	2.	0.805	0.757	0.573
19	715	0.	2.	0.781	0.756	0.571
20	679	0.	2.	0.821	0.744	0.553
21	723	0.	2.	0.809	0.750	0.563
22	670	0.	2.	0.789	0.751	0.564
23	711	0.	2.	0.765	0.748	0.560
24	718	0.	2.	0.776	0.742	0.551
25	673	0.	2.	0.839	0.768	0.591
26	704	0.	2.	0.817	0.765	0.584

27	724	0.	2.	0.819	0.729	0.532
28	701	0.	2.	0.791	0.745	0.555
29	742	0.	2.	0.751	0.713	0.509
30	738	0.	2.	0.792	0.754	0.568

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Summary Report

Entity	MoE / MoP	# Replications	Min	Max	Mean	StdDev	Variance
	numInQueueStat	30	878.	995.	934.433	33.110	1096.254
	numAvailServersStat	30	667.	742.	703.300	22.757	517.872
	numInQueueStat	30	878.	995.	934.433	33.110	1096.254
	numAvailServersStat	30	667.	742.	703.300	22.757	517.872
	numInQueueStat	30	878.	995.	934.433	33.110	1096.254
	numAvailServersStat	30	667.	742.	703.300	22.757	517.872
	numInQueueStat	30	878.	995.	934.433	33.110	1096.254
	numAvailServersStat	30	667.	742.	703.300	22.757	517.872

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Conclusions and Recommendations

Conclusions
ENTER ANALYST CONCLUSIONS HERE

Recommendations for Future Work
ENTER RECOMMENDATIONS FOR FUTURE WORK HERE
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This report was autogenerated by the Viskit Event Graph and Assembly modeling tool using Simkit discrete-event simulation (DES) libraries. Online at https://diana.nps.edu/Viskit and https://diana.nps.edu/Simkit.