

Online Resource 3 for Design of Experiment (DOE) Applied to Artificial Neural Network Architecture Enables Rapid Bioprocess Improvement

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	Summary Statistics	R ² Training	R ² Delta	SSE Training	SSE Delta
	Mean	0.92	0.07	5.24	4.37
	Standard Deviation	0.08	0.04	5.70	3.82
	Standard Error Mean	0.01	0.01	1.01	0.68
	Upper 95% Mean	0.95	0.08	7.29	5.75
	Lower 95% Mean	0.89	0.05	3.18	2.99
	N	32.00	32.00	32.00	32.00
	Quantiles	R ² Training	R ² Delta	SSE Training	SSE Delta
maximum	100.00%	1.00	0.18	15.49	11.24
	99.50%	1.00	0.18	15.49	11.24
	97.50%	1.00	0.18	15.49	11.24
	90.00%	1.00	0.10	15.49	11.05
quartile	75.00%	1.00	0.09	7.74	6.54
median	50.00%	0.95	0.07	3.24	2.70
quartile	25.00%	0.89	0.04	0.11	1.62
	10.00%	0.78	0.02	0.02	0.52
	2.50%	0.78	0.00	0.02	0.05
	0.50%	0.78	0.00	0.02	0.05
minimum	0.00%	0.78	0.00	0.02	0.05

Online Resource 3 Table of ANN Quantile Summary Statistics The number here shows the values which complement quantile box plots within manuscript Fig 2: ANN Models Quality Distribution. The numbers from online Resource 3 were created using JMP Pro v. 14