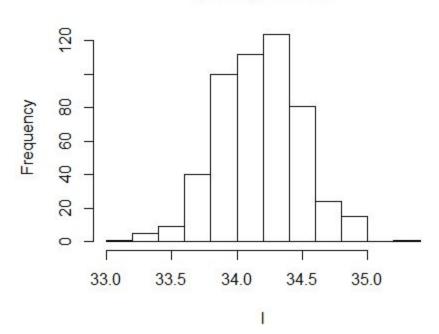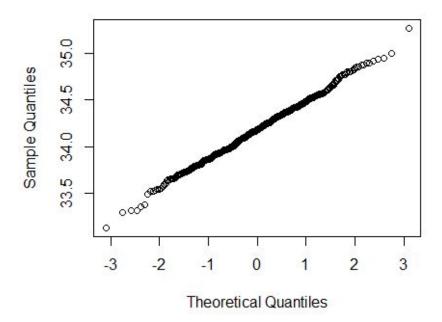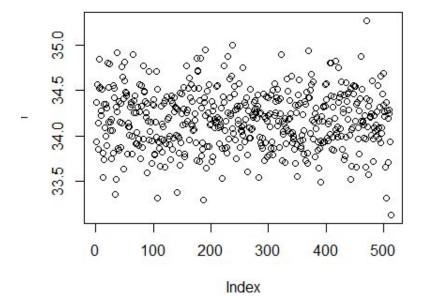1. (34.17899, 34.179013)
2. (0.3415D+02, 0.3420D+02). Yes, it is comparable.

Histogram of I

Normal Q-Q Plot

When looking at the histogram, qq plot, and index plot, we can assume independence of batch means, and approximate normality. In addition, the initial transient period we assumed (100 hours) seems to be a good cutoff.

3.

p/	xp/	CI Half-Width/	CI Relative Precision/	Warmup Length/	Batch Size/	Sample Size/
0.50	29.68	0.23	0.77%	256	512	16640
0.55	30.83	0.26	0.84%	256	728	23552
0.60	32.08	0.18	0.57%	256	1472	47360
0.65	33.69	0.08	0.24%	256	14076	450688
0.70	37.55	0.88	2.33%	309	724	23477
0.75	41.73	0.21	0.51%	309	2784	89397
0.80	44.00	0.32	0.73%	256	612	19840
0.85	46.05	0.22	0.49%	256	2480	79616
0.90	51.22	0.15	0.29%	256	112652	3605120
0.95	87.44	1.21	1.38%	256	1472	47360

0.995	123.53 1.84	1.49%	256	512	16640
0.99	115.47 1.64	1.42%	256	512	16640

4.