

Supplementary Materials:

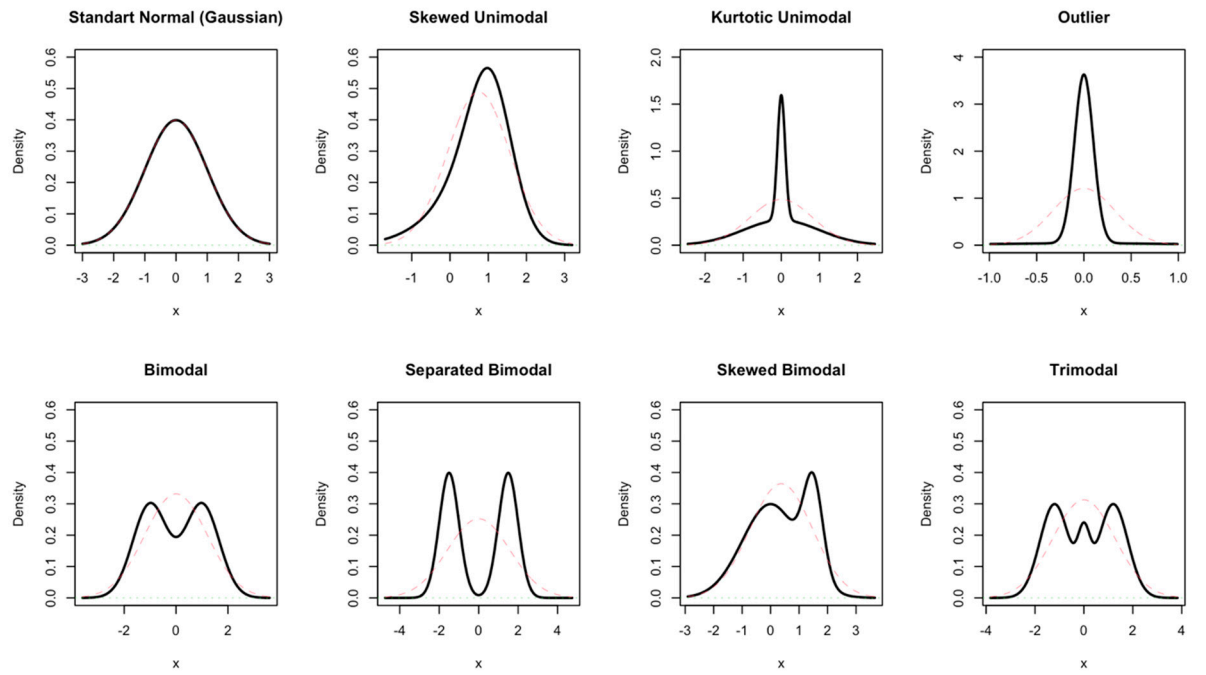


Figure S1. Plots of Mixture of Normal densities.

Comprehensive simulation results presented Table S1-S8.

Table S1. The simulation results of Gaussian distribution for 7 bandwidth methods.

n=5 $h_{MISE}=0.903$					n=10 $h_{MISE}=0.758$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.521	0.295	-0.382	0.233	NS	0.547	0.176	-0.212	0.076
SRT	0.442	0.250	-0.461	0.275	SRT	0.464	0.149	-0.294	0.109
DPI	0.485	0.291	-0.418	0.259	DPI	0.529	0.196	-0.230	0.091
STE	0.397	0.292	-0.506	0.341	STE	0.479	0.218	-0.279	0.125
LSCV	0.673	0.327	-0.230	0.160	LSCV	0.611	0.216	-0.147	0.069
BCV	0.768	0.288	-0.135	0.101	BCV	0.696	0.166	-0.062	0.031
SCV	0.708	0.320	-0.195	0.140	SCV	0.641	0.197	-0.118	0.053
n=25 $h_{MISE}=0.609$					n=50 $h_{MISE}=0.520$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.497	0.098	-0.112	0.022	NS	0.453	0.061	-0.067	0.008
SRT	0.422	0.083	-0.187	0.042	SRT	0.384	0.052	-0.136	0.021
DPI	0.491	0.120	-0.118	0.028	DPI	0.447	0.082	-0.073	0.012
STE	0.465	0.142	-0.144	0.041	STE	0.431	0.098	-0.089	0.017
LSCV	0.514	0.157	-0.096	0.034	LSCV	0.444	0.128	-0.076	0.022
BCV	0.596	0.085	-0.014	0.007	BCV	0.517	0.052	-0.003	0.003
SCV	0.547	0.112	-0.063	0.016	SCV	0.477	0.078	-0.043	0.008
n=100 $h_{MISE}=0.445$					n=200 $h_{MISE}=0.383$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.404	0.038	-0.042	0.003	NS	0.358	0.023	-0.025	0.001
SRT	0.343	0.032	-0.103	0.012	SRT	0.304	0.019	-0.079	0.007
DPI	0.400	0.056	-0.045	0.005	DPI	0.356	0.037	-0.027	0.002
STE	0.391	0.067	-0.054	0.007	STE	0.351	0.043	-0.032	0.003
LSCV	0.389	0.105	-0.056	0.014	LSCV	0.346	0.082	-0.037	0.008
BCV	0.449	0.034	0.003	0.001	BCV	0.391	0.022	0.008	0.001
SCV	0.418	0.054	-0.027	0.004	SCV	0.367	0.035	-0.016	0.001

Tablo S2. The simulation results of Skewed Unimodal distribution for 7 bandwidth methods.

n=5 $h_{MISE}=0.898$					n=10 $h_{MISE}=0.743$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.537	0.300	-0.362	0.220	NS	0.558	0.187	-0.185	0.069
SRT	0.456	0.254	-0.443	0.261	SRT	0.474	0.159	-0.269	0.098
DPI	0.498	0.293	-0.401	0.246	DPI	0.535	0.201	-0.208	0.084
STE	0.410	0.292	-0.488	0.324	STE	0.483	0.223	-0.260	0.117
LSCV	0.692	0.341	-0.206	0.159	LSCV	0.632	0.231	-0.111	0.066
BCV	0.793	0.313	-0.105	0.109	BCV	0.733	0.185	-0.009	0.034
SCV	0.723	0.329	-0.175	0.139	SCV	0.658	0.202	-0.084	0.048
n=25 $h_{MISE}=0.584$					n=50 $h_{MISE}=0.492$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.506	0.109	-0.078	0.018	NS	0.464	0.069	-0.027	0.005
SRT	0.430	0.092	-0.154	0.032	SRT	0.394	0.058	-0.097	0.013
DPI	0.489	0.125	-0.096	0.025	DPI	0.443	0.085	-0.048	0.010
STE	0.460	0.143	-0.124	0.036	STE	0.424	0.100	-0.068	0.015
LSCV	0.528	0.162	-0.056	0.029	LSCV	0.453	0.133	-0.038	0.019
BCV	0.622	0.094	0.038	0.010	BCV	0.541	0.061	0.049	0.006
SCV	0.550	0.117	-0.035	0.015	SCV	0.476	0.080	-0.016	0.007
n=100 $h_{MISE}=0.417$					n=200 $h_{MISE}=0.355$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.410	0.044	-0.007	0.002	NS	0.366	0.028	0.012	0.001
SRT	0.348	0.037	-0.069	0.006	SRT	0.311	0.023	-0.044	0.002
DPI	0.390	0.057	-0.027	0.004	DPI	0.344	0.038	-0.011	0.002
STE	0.379	0.066	-0.038	0.006	STE	0.336	0.045	-0.019	0.002
LSCV	0.394	0.106	-0.022	0.012	LSCV	0.340	0.088	-0.014	0.008
BCV	0.461	0.042	0.044	0.004	BCV	0.393	0.033	0.038	0.003
SCV	0.410	0.054	-0.006	0.003	SCV	0.367	0.037	0.002	0.001

Tablo S3. The simulation results of Kurtotic Unimodal distribution for 7 bandwidth methods.

n=5 $h_{MISE}=0.374$					n=10 $h_{MISE}=0.198$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.335	0.248	-0.038	0.063	NS	0.336	0.175	0.138	0.050
SRT	0.285	0.211	-0.089	0.052	SRT	0.285	0.149	0.087	0.030
DPI	0.305	0.241	-0.069	0.063	DPI	0.297	0.177	0.099	0.041
STE	0.240	0.223	-0.134	0.068	STE	0.249	0.173	0.051	0.033
LSCV	0.467	0.310	0.093	0.104	LSCV	0.355	0.227	0.157	0.076
BCV	0.591	0.294	0.217	0.133	BCV	0.558	0.180	0.360	0.161
SCV	0.513	0.304	0.139	0.112	SCV	0.436	0.184	0.238	0.090
n=25 $h_{MISE}=0.124$					n=50 $h_{MISE}=0.097$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.277	0.116	0.153	0.037	NS	0.241	0.078	0.144	0.027
SRT	0.235	0.099	0.111	0.022	SRT	0.204	0.066	0.108	0.016
DPI	0.225	0.111	0.101	0.023	DPI	0.172	0.066	0.075	0.010
STE	0.186	0.105	0.062	0.015	STE	0.134	0.054	0.037	0.004
LSCV	0.208	0.139	0.084	0.026	LSCV	0.116	0.059	0.020	0.004
BCV	0.483	0.092	0.359	0.137	BCV	0.421	0.061	0.324	0.109
SCV	0.321	0.100	0.197	0.049	SCV	0.243	0.059	0.146	0.025
n=100 $h_{MISE}=0.079$					n=200 $h_{MISE}=0.065$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.202	0.050	0.123	0.018	NS	0.177	0.034	0.112	0.014
SRT	0.171	0.042	0.093	0.010	SRT	0.150	0.029	0.085	0.008
DPI	0.125	0.033	0.047	0.003	DPI	0.098	0.018	0.033	0.001
STE	0.098	0.024	0.020	0.001	STE	0.077	0.012	0.012	0.000
LSCV	0.081	0.026	0.003	0.001	LSCV	0.065	0.015	0.000	0.000
BCV	0.357	0.062	0.279	0.081	BCV	0.267	0.100	0.202	0.051
SCV	0.178	0.029	0.100	0.011	SCV	0.135	0.016	0.070	0.005

Tablo S4. The simulation results of Outlier distribution for 7 bandwidth methods.

n=5 $h_{MISE}=0.804$					n=10 $h_{MISE}=0.654$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.464	0.281	-0.340	0.195	NS	0.482	0.180	-0.172	0.062
SRT	0.394	0.239	-0.410	0.225	SRT	0.410	0.153	-0.245	0.083
DPI	0.433	0.280	-0.371	0.216	DPI	0.465	0.197	-0.189	0.075
STE	0.354	0.277	-0.450	0.279	STE	0.419	0.214	-0.235	0.101
LSCV	0.621	0.325	-0.183	0.139	LSCV	0.551	0.219	-0.103	0.058
BCV	0.718	0.292	-0.086	0.093	BCV	0.655	0.167	0.001	0.028
SCV	0.656	0.322	-0.148	0.125	SCV	0.588	0.193	-0.066	0.042
n=25 $h_{MISE}=0.483$					n=50 $h_{MISE}=0.351$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.437	0.105	-0.046	0.013	NS	0.402	0.071	0.051	0.008
SRT	0.371	0.089	-0.112	0.020	SRT	0.342	0.060	-0.010	0.004
DPI	0.422	0.128	-0.061	0.020	DPI	0.376	0.092	0.025	0.009
STE	0.394	0.147	-0.089	0.030	STE	0.350	0.108	-0.001	0.012
LSCV	0.443	0.172	-0.040	0.031	LSCV	0.354	0.148	0.003	0.022
BCV	0.564	0.086	0.081	0.014	BCV	0.488	0.055	0.137	0.022
SCV	0.491	0.114	0.008	0.013	SCV	0.415	0.082	0.064	0.011
n=100 $h_{MISE}=0.218$					n=200 $h_{MISE}=0.146$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.358	0.046	0.139	0.022	NS	0.318	0.030	0.172	0.031
SRT	0.304	0.039	0.085	0.009	SRT	0.270	0.025	0.124	0.016
DPI	0.319	0.067	0.101	0.015	DPI	0.268	0.047	0.122	0.017
STE	0.294	0.082	0.076	0.012	STE	0.243	0.059	0.097	0.013
LSCV	0.259	0.123	0.041	0.017	LSCV	0.182	0.092	0.036	0.010
BCV	0.422	0.040	0.203	0.043	BCV	0.363	0.032	0.217	0.048
SCV	0.346	0.061	0.127	0.020	SCV	0.287	0.044	0.141	0.022

Table S5. The simulation results of Biomodal Normal mixture distribution for 7 bandwidth methods.

n=5 $h_{MISE}=1.149$					n=10 $h_{MISE}=0.899$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.698	0.333	-0.452	0.315	NS	0.742	0.183	-0.156	0.058
SRT	0.592	0.283	-0.557	0.390	SRT	0.630	0.156	-0.268	0.096
DPI	0.624	0.302	-0.525	0.367	DPI	0.670	0.195	-0.229	0.090
STE	0.492	0.302	-0.657	0.523	STE	0.584	0.231	-0.315	0.152
LSCV	0.802	0.340	-0.348	0.236	LSCV	0.724	0.245	-0.175	0.090
BCV	0.945	0.279	-0.204	0.120	BCV	0.858	0.153	-0.041	0.025
SCV	0.848	0.308	-0.302	0.185	SCV	0.754	0.200	-0.145	0.061
n=25 $h_{MISE}=0.603$					n=50 $h_{MISE}=0.472$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.654	0.084	0.051	0.010	NS	0.581	0.045	0.109	0.014
SRT	0.555	0.072	-0.048	0.007	SRT	0.493	0.038	0.021	0.002
DPI	0.580	0.115	-0.023	0.014	DPI	0.500	0.080	0.027	0.007
STE	0.522	0.149	-0.081	0.029	STE	0.456	0.105	-0.016	0.011
LSCV	0.570	0.183	-0.032	0.034	LSCV	0.474	0.153	0.002	0.023
BCV	0.713	0.078	0.111	0.018	BCV	0.624	0.048	0.152	0.025
SCV	0.606	0.125	0.003	0.016	SCV	0.510	0.090	0.038	0.009
n=100 $h_{MISE}=0.385$					n=200 $h_{MISE}=0.322$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.506	0.027	0.121	0.015	NS	0.441	0.016	0.120	0.015
SRT	0.430	0.023	0.044	0.002	SRT	0.375	0.014	0.053	0.003
DPI	0.420	0.058	0.034	0.005	DPI	0.344	0.038	-0.011	0.002
STE	0.388	0.073	0.002	0.005	STE	0.328	0.047	0.007	0.002
LSCV	0.395	0.118	0.010	0.014	LSCV	0.332	0.086	0.010	0.008
BCV	0.535	0.044	0.149	0.024	BCV	0.425	0.059	0.103	0.014
SCV	0.424	0.064	0.038	0.006	SCV	0.352	0.043	0.030	0.003

Tablo S6. The simulation results of Spered Biomodal Normal mixture distribution for 7 bandwidth methods.

n=5 $h_{MISE}=0.586$					n=10 $h_{MISE}=0.469$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.929	0.498	0.344	0.366	NS	1.005	0.235	0.535	0.341
SRT	0.789	0.423	0.203	0.220	SRT	0.853	0.199	0.383	0.187
DPI	0.700	0.355	0.115	0.139	DPI	0.658	0.153	0.189	0.059
STE	0.465	0.255	-0.120	0.080	STE	0.477	0.128	0.008	0.016
LSCV	0.804	0.423	0.218	0.226	LSCV	0.576	0.238	0.107	0.068
BCV	1.261	0.315	0.675	0.555	BCV	1.136	0.140	0.666	0.464
SCV	0.899	0.282	0.314	0.178	SCV	0.689	0.132	0.219	0.066
n=25 $h_{MISE}=0.366$					n=50 $h_{MISE}=0.308$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.870	0.086	0.503	0.261	NS	0.766	0.036	0.458	0.211
SRT	0.738	0.073	0.372	0.144	SRT	0.651	0.030	0.342	0.118
DPI	0.492	0.054	0.126	0.019	DPI	0.394	0.028	0.086	0.008
STE	0.388	0.053	0.022	0.003	STE	0.330	0.032	0.021	0.001
LSCV	0.384	0.113	0.018	0.013	LSCV	0.312	0.082	0.004	0.007
BCV	0.920	0.121	0.554	0.321	BCV	0.436	0.141	0.128	0.036
SCV	0.482	0.053	0.116	0.016	SCV	0.381	0.028	0.073	0.006
n=100 $h_{MISE}=0.262$					n=200 $h_{MISE}=0.224$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.667	0.022	0.405	0.164	NS	0.581	0.013	0.357	0.128
SRT	0.566	0.018	0.304	0.093	SRT	0.493	0.011	0.269	0.073
DPI	0.319	0.017	0.057	0.004	DPI	0.262	0.011	0.039	0.002
STE	0.278	0.021	0.017	0.001	STE	0.237	0.014	0.014	0.000
LSCV	0.261	0.060	-0.001	0.004	LSCV	0.223	0.046	-0.001	0.002
BCV	0.304	0.028	0.043	0.003	BCV	0.247	0.019	0.023	0.001
SCV	0.307	0.017	0.046	0.002	SCV	0.253	0.011	0.030	0.001

Tablo S7. The simulation results of Skewed Biomodal Normal mixture distribution for 7 bandwidth methods.

n=5 $h_{MISE}=1.017$					n=10 $h_{MISE}=0.817$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.619	0.309	-0.398	0.254	NS	0.651	0.181	-0.166	0.061
SRT	0.525	0.262	-0.492	0.310	SRT	0.553	0.154	-0.265	0.094
DPI	0.558	0.292	-0.459	0.296	DPI	0.599	0.193	-0.218	0.085
STE	0.445	0.294	-0.571	0.413	STE	0.524	0.221	-0.293	0.135
LSCV	0.739	0.332	-0.278	0.188	LSCV	0.641	0.236	-0.176	0.087
BCV	0.850	0.284	-0.167	0.108	BCV	0.771	0.164	-0.046	0.029
SCV	0.768	0.315	-0.249	0.161	SCV	0.687	0.195	-0.130	0.055
n=25 $h_{MISE}=0.555$					n=50 $h_{MISE}=0.408$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.587	0.089	0.032	0.009	NS	0.525	0.047	0.117	0.016
SRT	0.498	0.076	-0.057	0.009	SRT	0.446	0.040	0.038	0.003
DPI	0.533	0.110	-0.022	0.013	DPI	0.459	0.073	0.050	0.008
STE	0.482	0.142	-0.073	0.025	STE	0.415	0.099	0.007	0.010
LSCV	0.515	0.176	-0.040	0.033	LSCV	0.421	0.146	0.013	0.021
BCV	0.653	0.082	0.098	0.016	BCV	0.568	0.050	0.159	0.028
SCV	0.565	0.116	0.011	0.014	SCV	0.472	0.081	0.064	0.011
n=100 $h_{MISE}=0.318$					n=200 $h_{MISE}=0.258$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.461	0.029	0.143	0.021	NS	0.403	0.017	0.146	0.022
SRT	0.391	0.024	0.073	0.006	SRT	0.342	0.014	0.085	0.007
DPI	0.380	0.052	0.062	0.007	DPI	0.314	0.036	0.056	0.005
STE	0.342	0.069	0.024	0.005	STE	0.283	0.046	0.026	0.003
LSCV	0.333	0.109	0.015	0.012	LSCV	0.266	0.081	0.009	0.007
BCV	0.493	0.034	0.176	0.032	BCV	0.416	0.046	0.159	0.027
SCV	0.386	0.058	0.068	0.008	SCV	0.316	0.041	0.059	0.005

Tablo S8. The simulation results of Triomodal Normal mixture distribution for 7 bandwidth methods.

n=5 $h_{MISE}=0.926$					n=10 $h_{MISE}=0.778$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.549	0.279	-0.378	0.220	NS	0.573	0.172	-0.205	0.071
SRT	0.466	0.237	-0.460	0.268	SRT	0.486	0.146	-0.291	0.106
DPI	0.495	0.256	-0.431	0.251	DPI	0.546	0.184	-0.231	0.087
STE	0.394	0.251	-0.533	0.347	STE	0.487	0.212	-0.291	0.129
LSCV	0.668	0.293	-0.258	0.152	LSCV	0.610	0.205	-0.167	0.070
BCV	0.766	0.251	-0.161	0.089	BCV	0.694	0.146	-0.084	0.028
SCV	0.698	0.266	-0.229	0.123	SCV	0.645	0.179	-0.133	0.050
n=25 $h_{MISE}=0.617$					n=50 $h_{MISE}=0.512$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.511	0.089	-0.106	0.019	NS	0.459	0.048	-0.053	0.005
SRT	0.433	0.075	-0.183	0.039	SRT	0.390	0.041	-0.122	0.017
DPI	0.496	0.108	-0.121	0.026	DPI	0.449	0.071	-0.063	0.009
STE	0.463	0.133	-0.153	0.041	STE	0.426	0.093	-0.085	0.016
LSCV	0.495	0.151	-0.122	0.038	LSCV	0.422	0.126	-0.089	0.024
BCV	0.580	0.071	-0.036	0.006	BCV	0.505	0.043	-0.007	0.002
SCV	0.537	0.105	-0.080	0.018	SCV	0.471	0.071	-0.041	0.007
n=100 $h_{MISE}=0.415$					n=200 $h_{MISE}=0.328$				
METHOD	h_{AVE}	S	Bias	MSE	METHOD	h_{AVE}	S	Bias	MSE
NS	0.406	0.028	-0.009	0.001	NS	0.356	0.016	0.028	0.001
SRT	0.345	0.024	-0.070	0.006	SRT	0.302	0.013	-0.026	0.001
DPI	0.393	0.050	-0.022	0.003	DPI	0.341	0.034	0.013	0.001
STE	0.377	0.067	-0.038	0.006	STE	0.328	0.046	-0.000	0.002
LSCV	0.363	0.103	-0.052	0.013	LSCV	0.307	0.086	-0.021	0.008
BCV	0.440	0.027	0.025	0.001	BCV	0.382	0.018	0.054	0.003
SCV	0.406	0.051	-0.010	0.003	SCV	0.349	0.036	0.021	0.002

Density plots of the kernel density estimates, based on the simulation results, are presented in Figures S2 –S9.

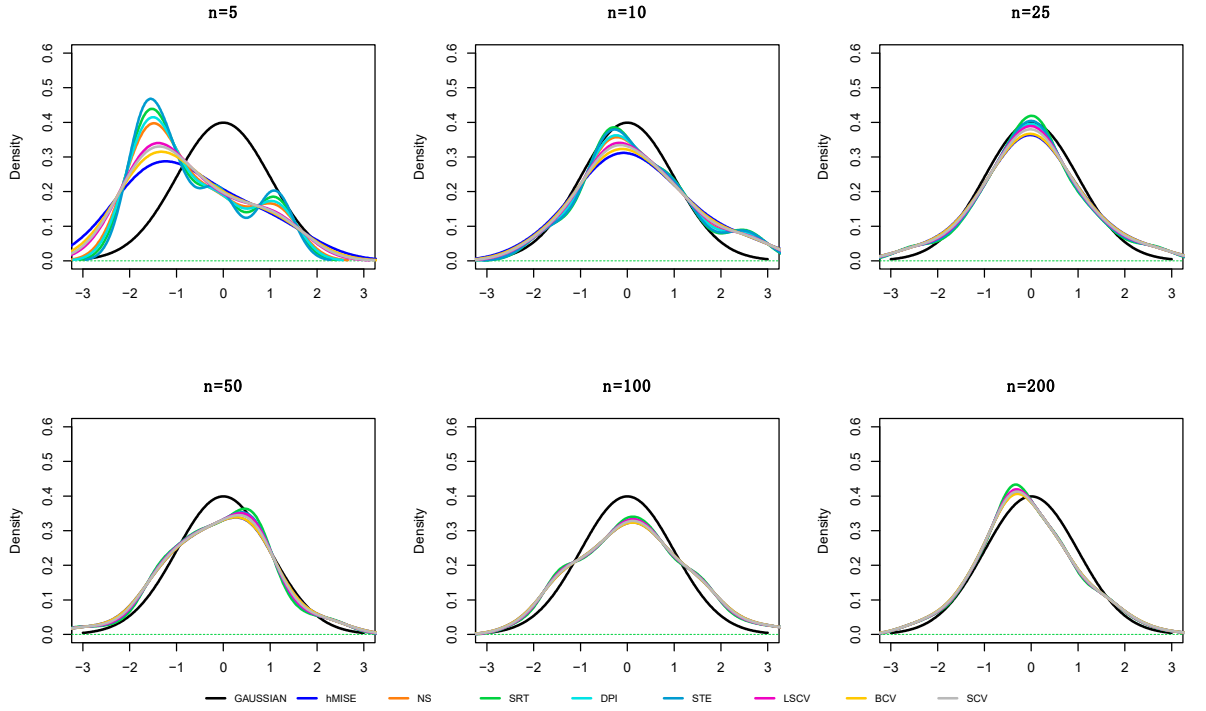


Figure S2. Kernel Density Estimates of a Gaussian distribution using the optimal bandwidth and 7 different bandwidth methods.

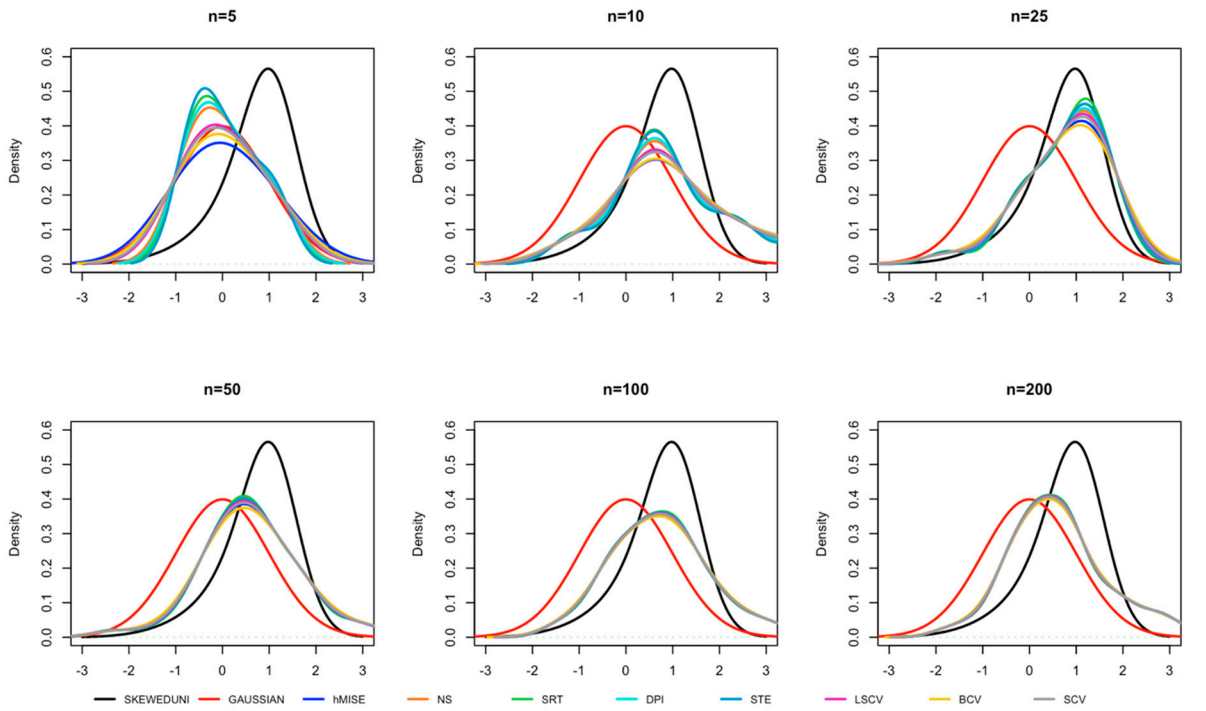


Figure S3. Kernel Density Estimates of a skewed unimodal density

$\left[\frac{1}{5}N(0,1) + \frac{1}{5}N\left(\frac{1}{2}, \left(\frac{2}{3}\right)^2\right) + \frac{3}{5}N\left(\frac{13}{12}, \left(\frac{5}{9}\right)^2\right) \right]$ using the optimal bandwidth and 7 different bandwidth methods.

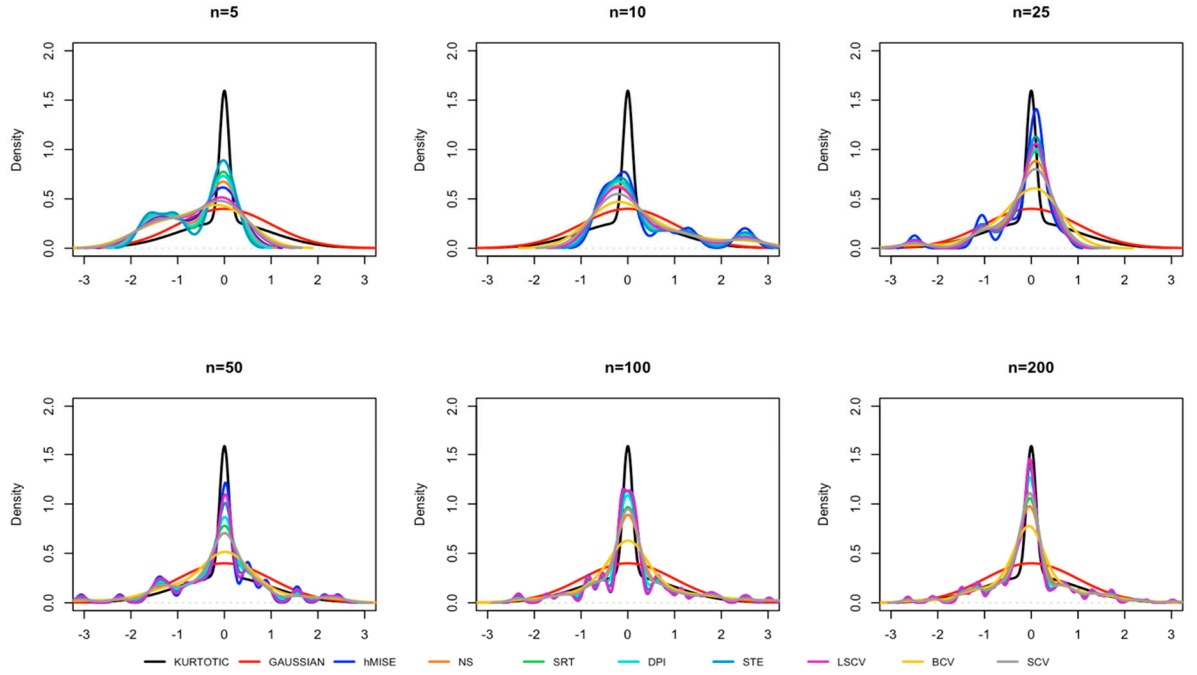


Figure S4. Kernel Density Estimates of a kurtotic unimodal distribution

$\left[\frac{2}{3}N(0,1) + \frac{1}{3}N\left(0, \left(\frac{1}{10}\right)^2\right) \right]$ using the optimal bandwidth and 7 different bandwidth methods.

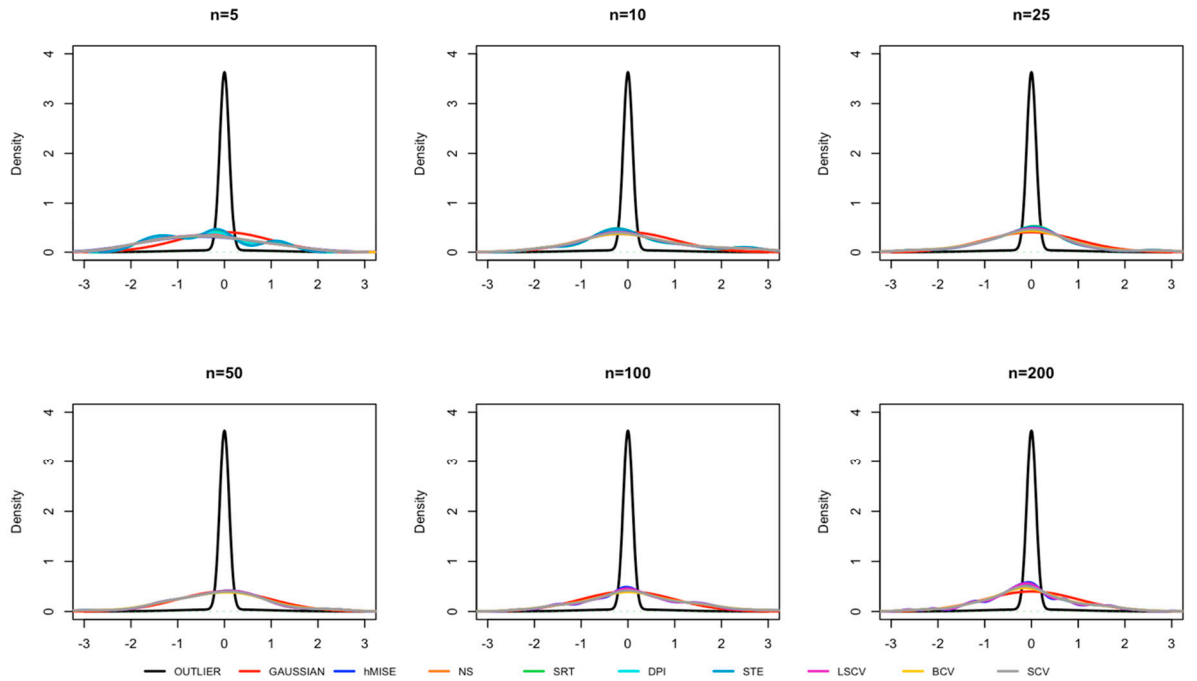


Figure S5. Kernel Density Estimates of a normal mixture distribution

$\left[\frac{1}{10}N(0,1) + \frac{9}{10}N\left(0, \left(\frac{1}{10}\right)^2\right) \right]$ using the optimal bandwidth and 7 different bandwidth methods.

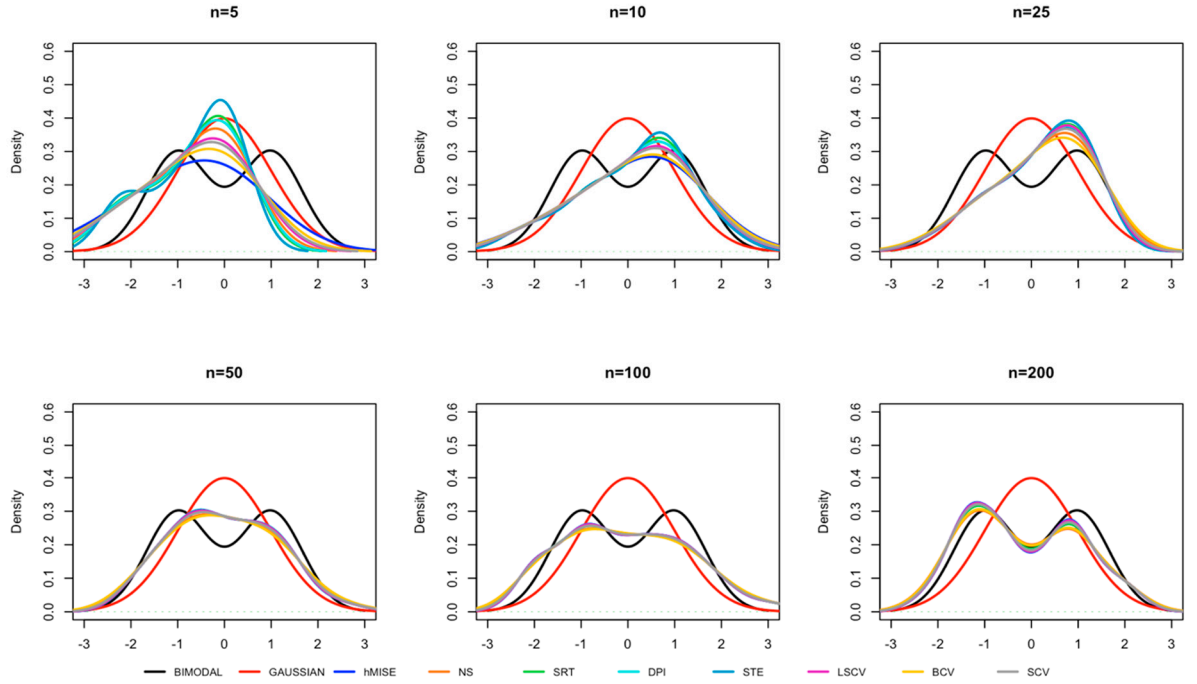


Figure S6. Kernel Density Estimates of a bimodal normal mixture distribution

$\left[\frac{1}{2} N\left(-1, \left(\frac{2}{3}\right)^2\right) + \frac{1}{2} N\left(1, \left(\frac{2}{3}\right)^2\right) \right]$ using the optimal bandwidth and 7 different bandwidth methods.

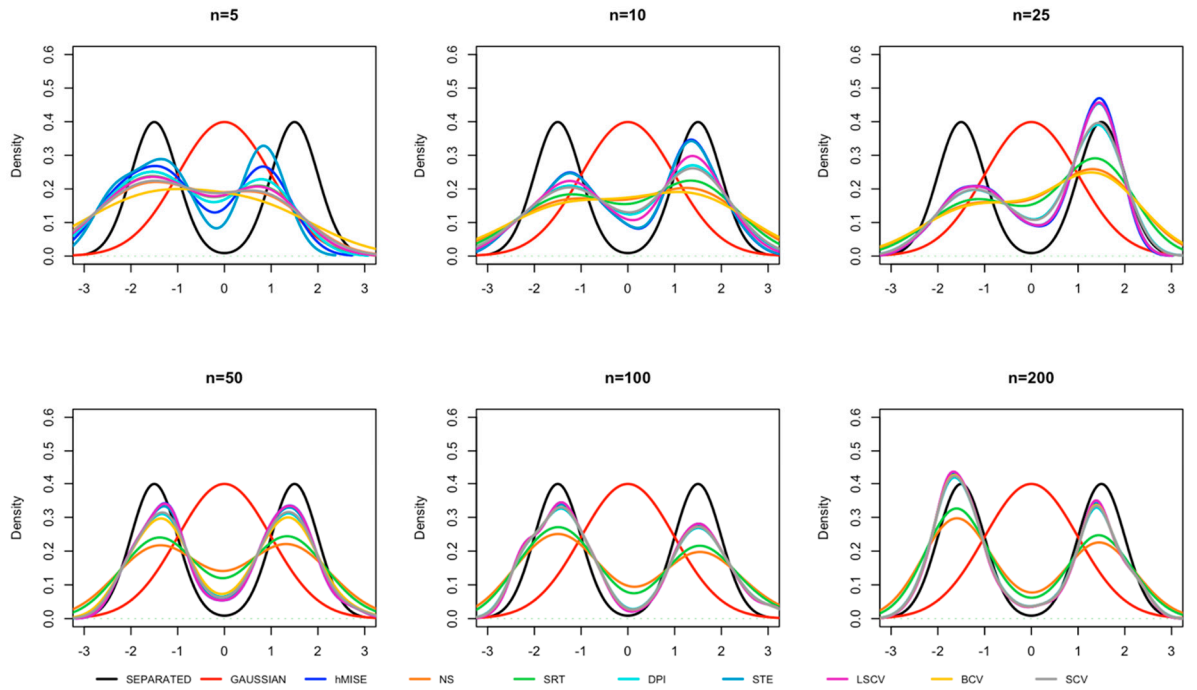


Figure S7. Kernel Density Estimates of a separated bimodal normal mixture distribution

$\left[\frac{1}{2} N\left(-\frac{3}{2}, \left(\frac{1}{2}\right)^2\right) + \frac{1}{2} N\left(\frac{3}{2}, \left(\frac{1}{2}\right)^2\right) \right]$ using the optimal bandwidth and 7 different bandwidth methods.

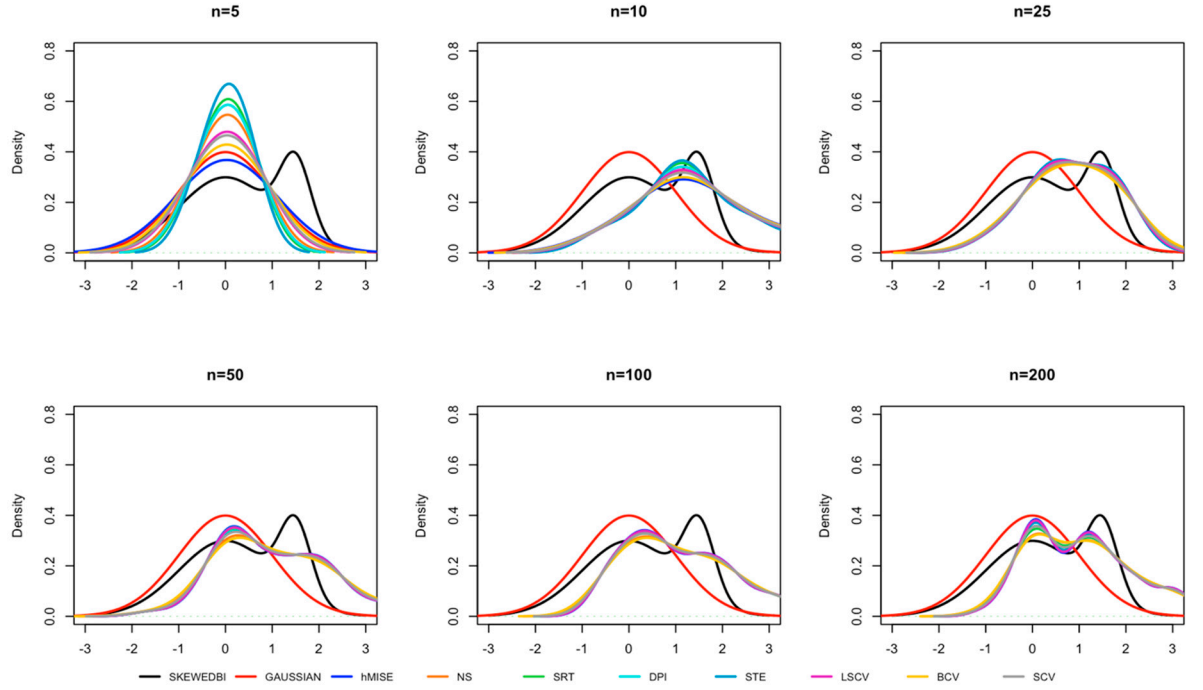


Figure S8. Kernel Density Estimates of a skewed bimodal normal mixture distribution $\left[\frac{3}{4}N(0,1) + \frac{1}{4}N\left(\frac{3}{2}, \left(\frac{1}{3}\right)^2\right) \right]$ using the optimal bandwidth and 7 different bandwidth methods.

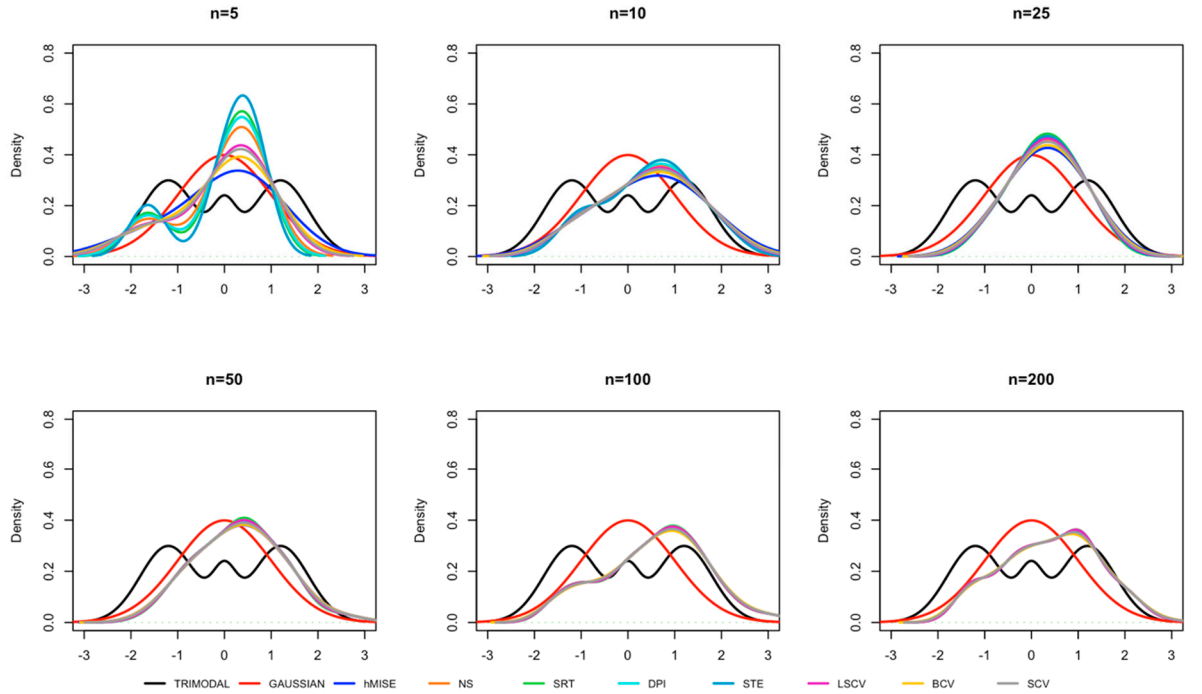


Figure S9. Kernel Density Estimates of a trimodal normal mixture distribution $\left[\frac{9}{20}N\left(-\frac{6}{5}, \left(\frac{3}{5}\right)^2\right) + \frac{9}{20}N\left(\frac{6}{5}, \left(\frac{3}{5}\right)^2\right) + \frac{1}{10}N\left(0, \left(\frac{1}{4}\right)^2\right) \right]$ using the optimal bandwidth and 7 different bandwidth methods.