Lognormal Model

The error $u_i \sim N(0,1)$.

Simulations:

The error for the censoring times $w_i \sim Gamma(a_C, s_C)$ with $a_C = 3$, and s_C chosen such that the censoring rate is 1/3.

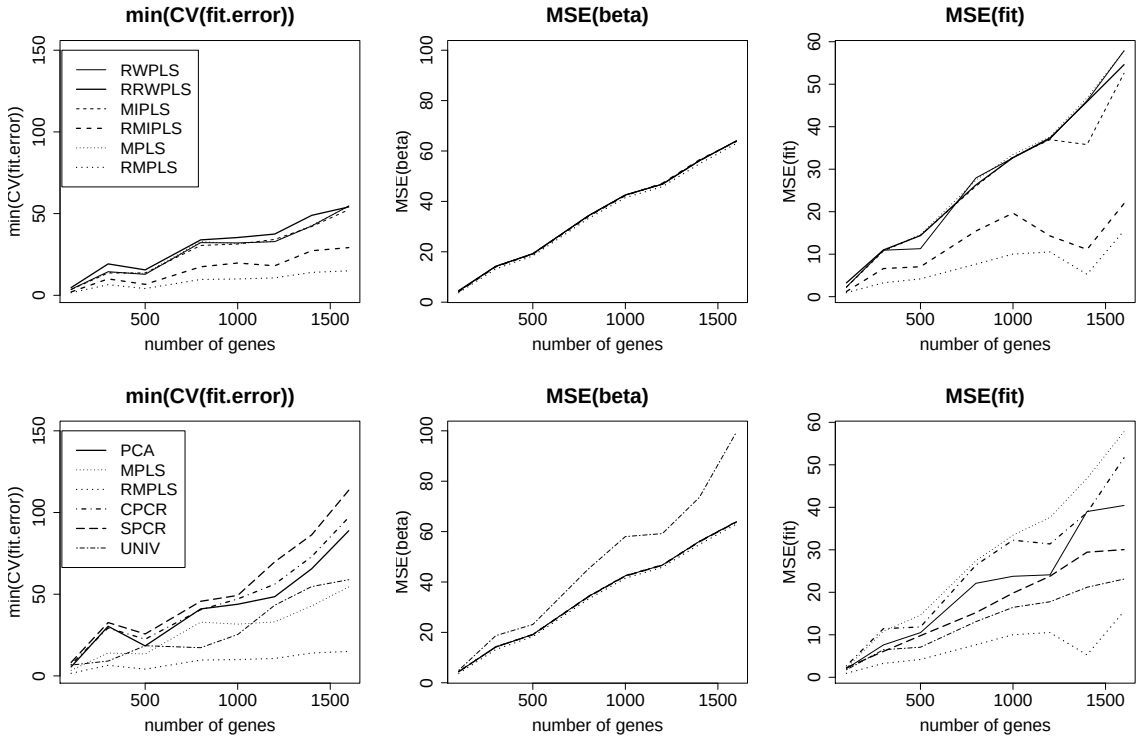

Figure 4: AFT lognormal model: 1/3 censored. K is chosen by CV. $min(CV(fit.error))$, $MSE(\beta)$, and $MSE(fit)$ comparing RWPLS, RRWPLS, MIPLS, RMIPLS, MPLS, and RMPLS (top row), and comparing PCA, MPLS, RMPLS, SPCR, CPCR, and UNIV (bottom row) based on 5000 simulations.

Real Datasets:

Table 4: AFT lognormal model: DLBCL, Harvard, Michigan and Duke datasets. K chosen by CV for the different methods. The $min(CV(fit.error))$ and the standard error of the 1000 repeated runs are shown.

	DLBCL			HARVARD			MICHIGAN			DUKE		
Method	K	error	SE	K	error	SE	K	error	SE	K	error	SE
PCA	5	4.2777	0.613	8	1.6818	0.4334	5	3.0234	0.571	3	7.5555	6.5953
MPLS	3	2.6898	0.3677	1	0.7674	0.1716	2	1.4869	0.5369	1	11.5719	7.6254
RMPLS	3	2.3094	0.3147	1	0.7197	0.1666	3	1.3134	0.4866	2	3.7767	2.7053
RWPLS	1	4.497	0.6638	1	1.4075	0.2928	1	3.7289	0.7274	1	5.7954	1.5946
RRWPLS	1	4.6724	0.6426	1	2.0568	0.4293	1	3.5236	1.1506	1	6.4081	2.5808
MIPLS	3	3.2752	0.3726	1	0.8397	0.1754	1	2.7344	1.2199	2	6.7075	4.358
RMIPLS	3	2.4295	0.3678	1	0.8782	0.2745	1	1.4655	0.4865	1	7.3502	4.3976
CPCR	1	4.9405	1.0879	1	2.0698	0.5926	1	4.5654	2.0616	4	9.8469	8.3316
SPCR	1	4.683	0.934	2	2.9574	1.344	2	4.7596	2.1524	3	15.83	6.4653
UNIV	11	4.8362	1.0441	9	2.4435	1.1892	6	4.6573	2.0643	4	15.1069	8.9731

Log-t Model

The error $u_i \sim t(3)$.

Simulations:

The error for the censoring times $w_i \sim Gamma(a_C, s_C)$ with $a_C = 3$, and s_C chosen such that the censoring rate is 1/3.

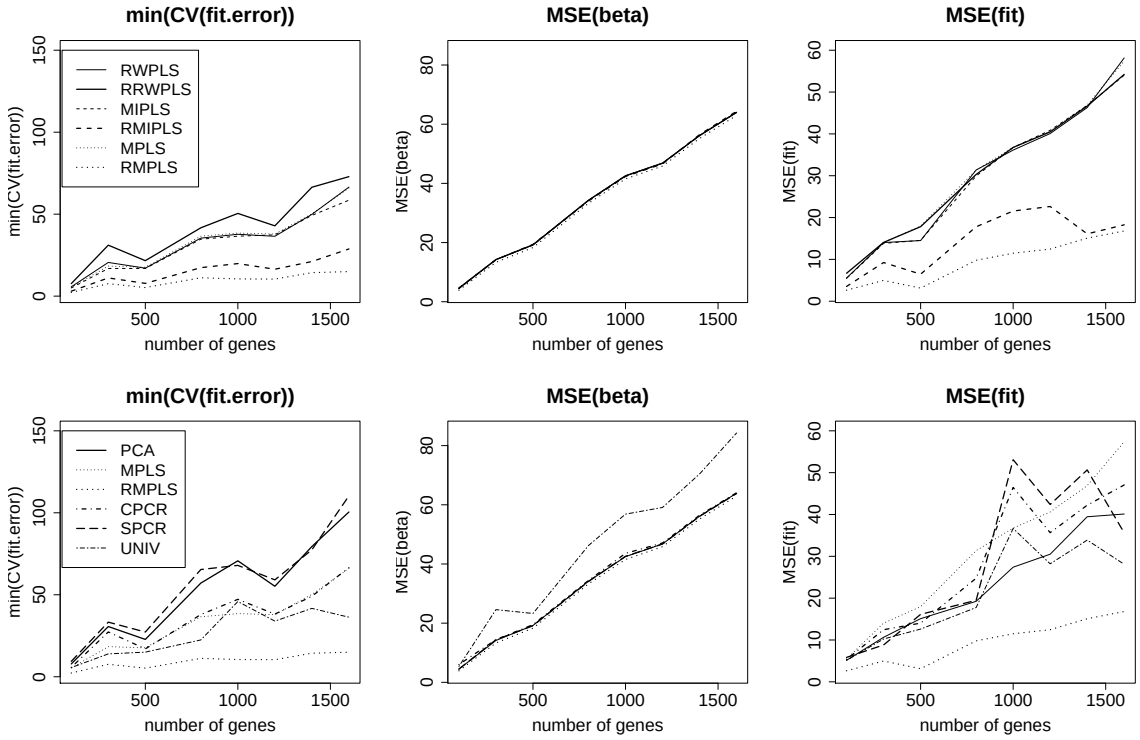

Figure 5: AFT logt model: 1/3 censored. K is chosen by CV. $min(CV(fit.error))$, $MSE(\beta)$, and $MSE(fit)$ comparing RWPLS, RRWPLS, MIPLS, RMIPLS, MPLS, and RMPLS (top row), and comparing PCA, MPLS, RMPLS, SPCR, CPCR, and UNIV (bottom row) based on 5000 simulations.

Real Datasets:

Table 5: AFT log-t model: DLBCL, Harvard, Michigan and Duke datasets. K chosen by CV for the different methods. The $min(CV(fit.error))$ and the standard error of the 1000 repeated runs are shown.

	DLBCL			HARVARD			MICHIGAN			DUKE		
Method	K	error	SE	K	error	SE	K	error	SE	K	error	SE
PCA	4	5.4655	0.772	7	1.7788	0.4683	6	4.8945	0.6511	5	24.3901	7.0841
MPLS	3	2.7872	0.53	3	0.5571	0.2004	3	1.1604	0.4677	1	11.4181	5.6271
RMPLS	6	1.7432	0.3832	4	0.4304	0.1341	3	0.6431	0.2322	2	5.382	3.1963
RWPLS	1	5.8498	0.8737	1	1.8183	0.5998	1	5.4362	0.8935	1	9.819	4.0548
RRWPLS	1	5.7512	0.7406	1	1.9268	0.3576	1	4.6471	1.8023	2	7.1552	2.7309
MIPLS	3	3.0681	0.4645	2	0.6744	0.2211	2	1.8753	0.951	2	9.7551	4.9673
RMIPLS	4	1.948	0.3188	4	0.5926	0.2111	1	1.067	0.3488	1	7.7745	4.783
CPCR	8	4.8893	0.7858	4	1.1819	0.3124	3	3.2976	1.0151	1	9.5548	4.3041
SPCR	1	5.7712	0.8979	1	2.216	0.8825	1	6.4154	2.0608	1	25.7079	9.6766
UNIV	8	4.439	0.6844	4	0.7557	0.2846	7	2.8248	1.0951	5	23.4102	8.7362