

COX-TYPE REGRESSION MODEL WITH TIME-VARYING COEFFICIENTS

RESULTS

```
result1<-  
timecox(Surv(time,status)~x1+x2+x3+x4,datatm,max.time=4,n.sim=100)  
summary(result1)
```

Multiplicative Hazard Model

Test for nonparametric terms

Test for non-significant effects

	Supremum-test of significance	p-value	H_0: B(t)=0
(Intercept)	10.10		0.00
x1	1.73		0.80
x2	3.27		0.04
x3	9.90		0.00
x4	3.65		0.01

Test for time invariant effects

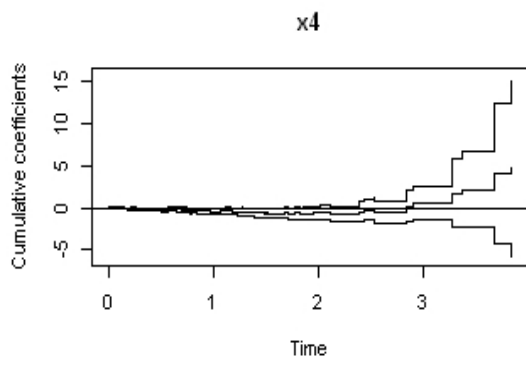
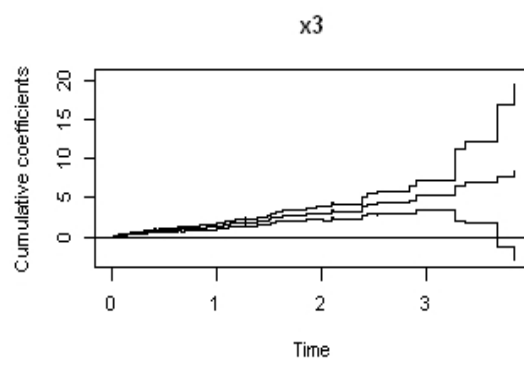
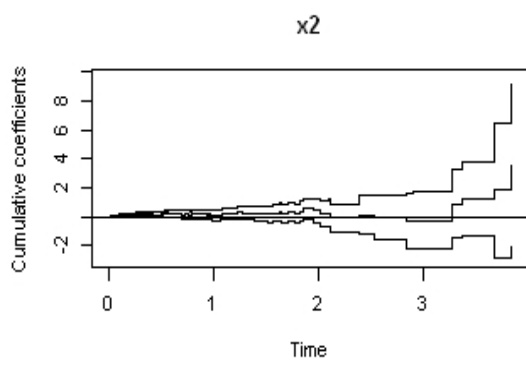
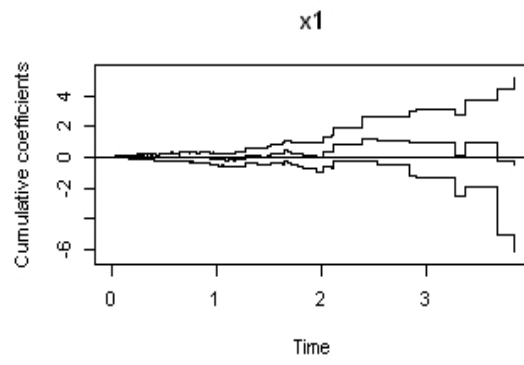
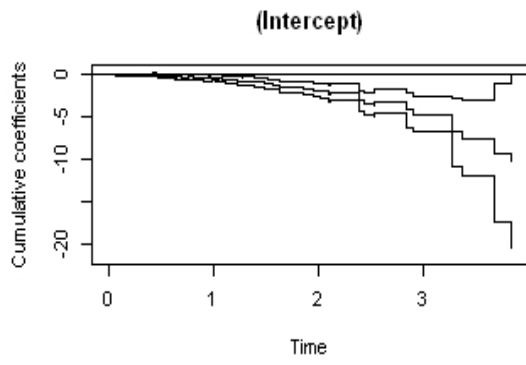
	Kolmogorov-Smirnov test	p-value	H_0:constant effect
(Intercept)	3.58		0.00
x1	1.49		0.27
x2	2.92		0.01
x3	1.40		0.24
x4	3.52		0.00

	Cramer von Mises test	p-value	H_0:constant effect
(Intercept)	21.60		0.00
x1	1.92		0.28
x2	9.66		0.02
x3	2.67		0.12
x4	18.30		0.00

```
Call:  
timecox(Surv(time, status) ~ x1 + x2 + x3 + x4, datatm, max.time = 4,  
        n.sim = 100)
```

here the cumulative parameters are plotted

```
par(mfrow=c(3,2))  
plot(result1)
```



```
# here the test processes for each covariate with 100 randomly choosen
realizations under the null hypothesis of constant effects
```

```
resul2<-
timecox(Surv(time,status)~x1+x2+x3+x4,datatm,max.time=4,n.sim=100,robu
st=1,weighted.test=1)
```

```
summary(resul2)
```

```
Multiplicative Hazard Model
```

```
Test for nonparametric terms
```

```
Test for non-significant effects
```

```
Supremum-test of significance p-value H_0: B(t)=0
```

(Intercept)	10.10	0.00
x1	1.73	0.80
x2	3.27	0.06
x3	9.90	0.00
x4	3.65	0.01

```
Test for time invariant effects
```

```
Kolmogorov-Smirnov test p-value H_0:constant effect
```

(Intercept)	8.66	0.00
x1	1.64	0.71
x2	3.16	0.04
x3	2.78	0.14
x4	5.22	0.00

```
Cramer von Mises test p-value H_0:constant effect
```

(Intercept)	186.00	0.00
x1	2.52	0.46
x2	15.90	0.04
x3	7.96	0.13
x4	64.60	0.00

```
Call:
timecox(Surv(time, status) ~ x1 + x2 + x3 + x4, datatm, max.time = 4,
n.sim = 100, robust = 1, weighted.test = 1)
```

```
par(mfrow=c(3,2))
plot(resul2,score=1)
```

