



Analysis of Variance Table

Response: marriages

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
time	1	916.90	916.90	280.3	< 2.2e-16 ***
Residuals	44	143.93	3.27		

Residuals:

Min	1Q	Median	3Q	Max
-3.6610	-1.3976	-0.2554	1.0550	4.4494

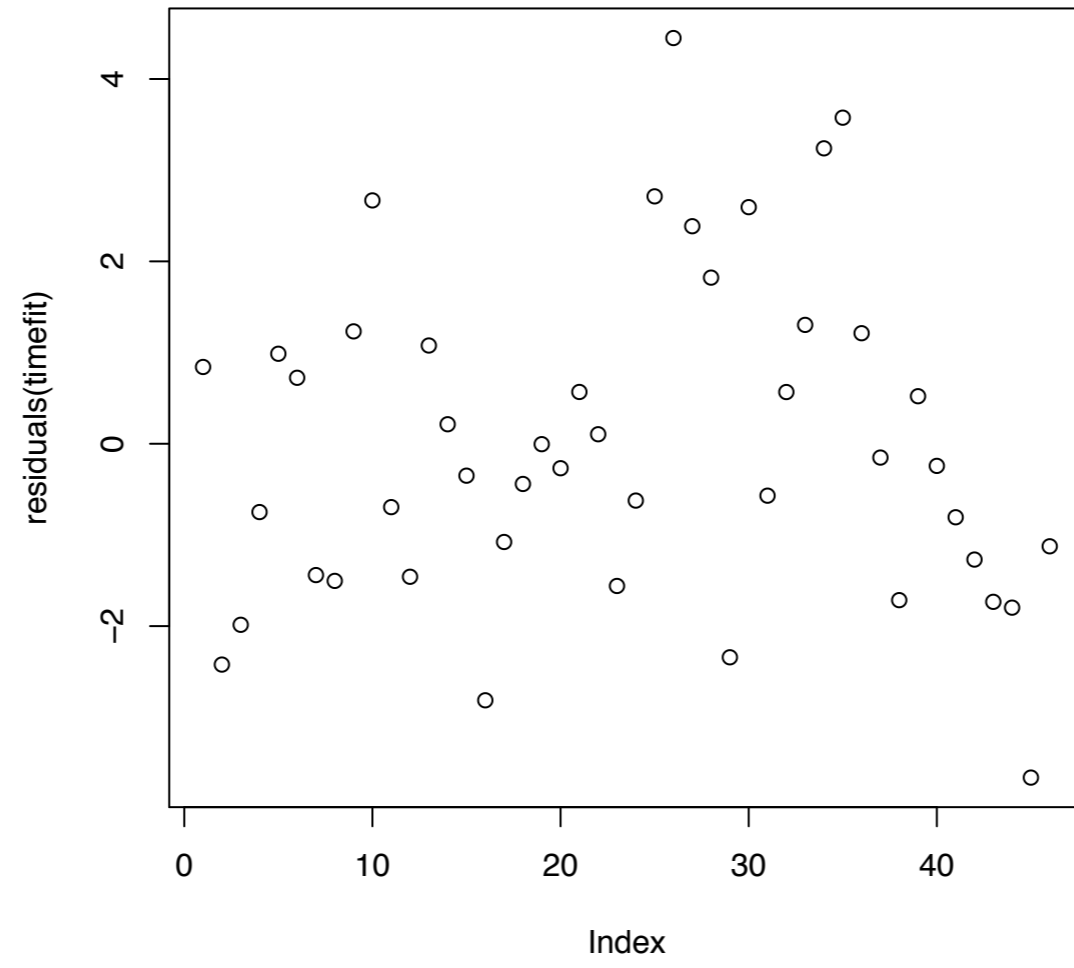
Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	704.78168	37.93471	18.58	<2e-16 ***
time	-0.33629	0.02009	-16.74	<2e-16 ***

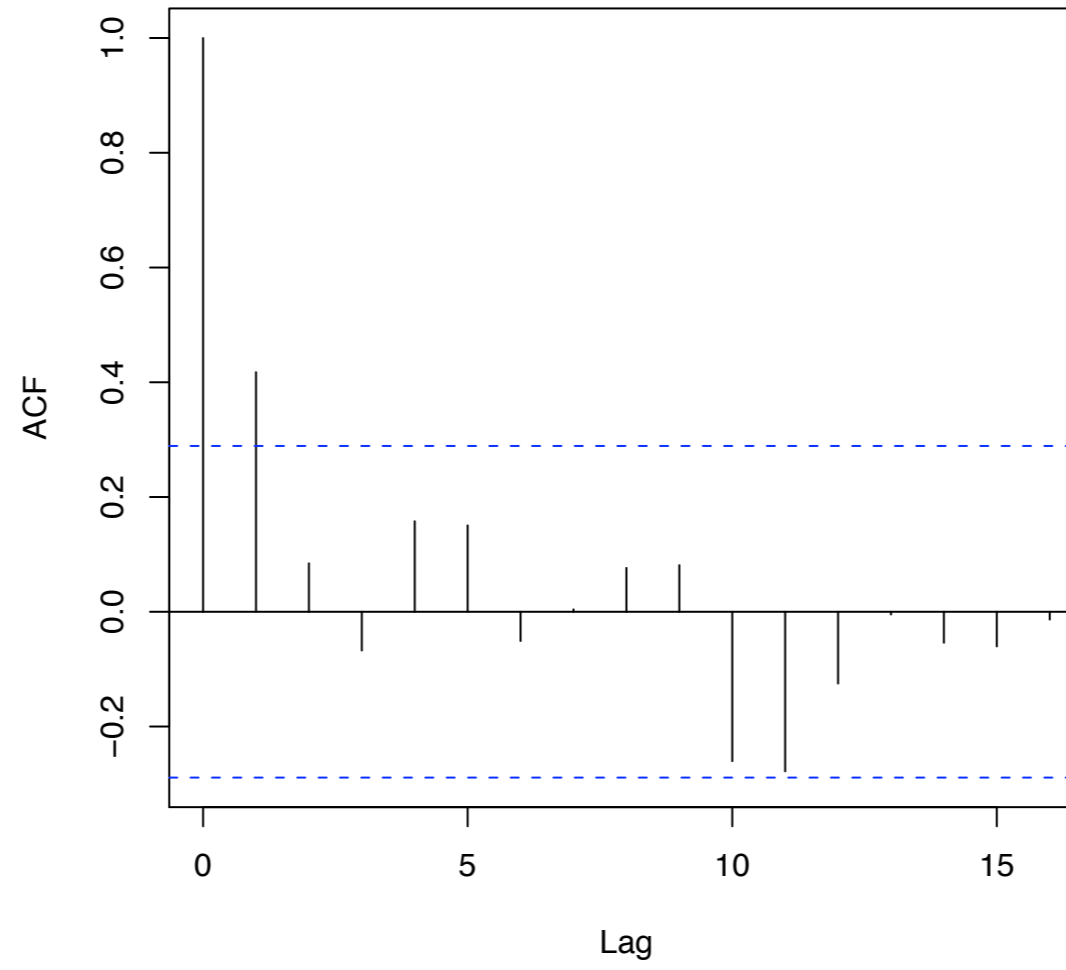
Residual standard error: 1.809 on 44 degrees of freedom
Multiple R-Squared: 0.8643, Adjusted R-squared: 0.8612
F-statistic: 280.3 on 1 and 44 DF, p-value: < 2.2e-16

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> AIC(timefit)
[1] 189.0146
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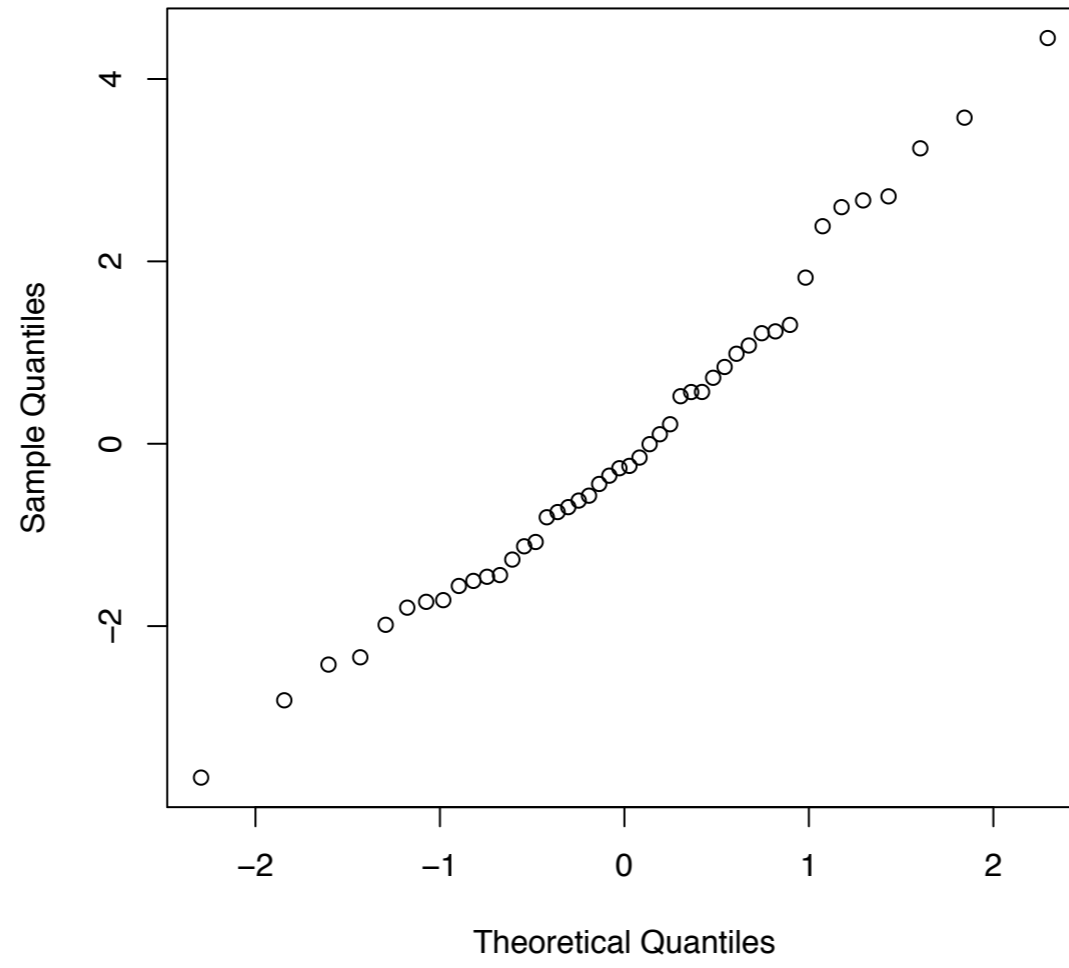




Series residuals(timefit)



Normal Q-Q Plot



Analysis of Variance Table

Response: marriages

	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
time	1	916.90	916.90	324.6874	< 2.2e-16	***
timesq	1	22.50	22.50	7.9682	0.007182	**
Residuals	43	121.43	2.82			

Residuals:

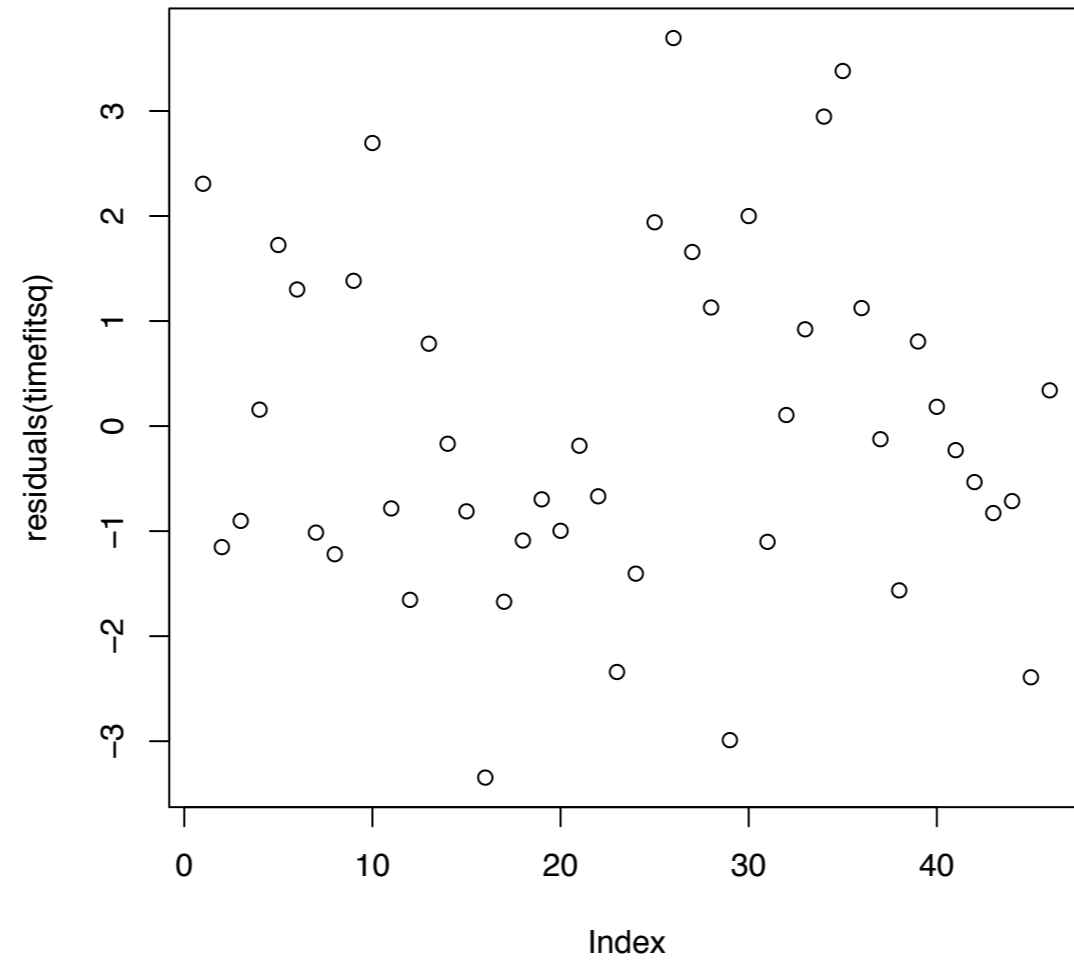
Min	1Q	Median	3Q	Max
-3.3463	-1.0703	-0.2079	1.1279	3.6947

Coefficients:

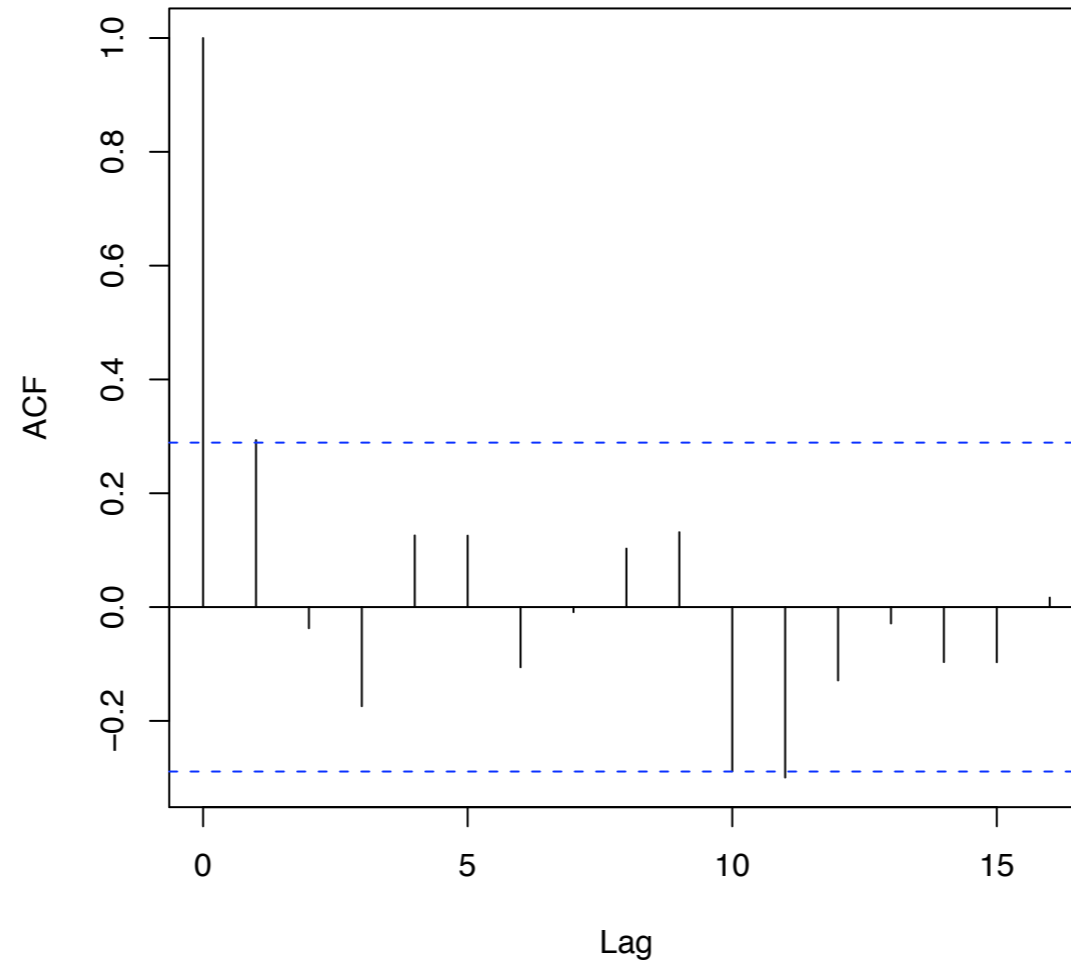
	Estimate	Std. Error	t value	Pr(> t)	
(Intercept)	-1.513e+04	5.609e+03	-2.697	0.00995	**
time	1.643e+01	5.941e+00	2.766	0.00833	**
timesq	-4.440e-03	1.573e-03	-2.823	0.00718	**

Residual standard error: 1.68 on 43 degrees of freedom
Multiple R-Squared: 0.8855, Adjusted R-squared: 0.8802
F-statistic: 166.3 on 2 and 43 DF, p-value: < 2.2e-16

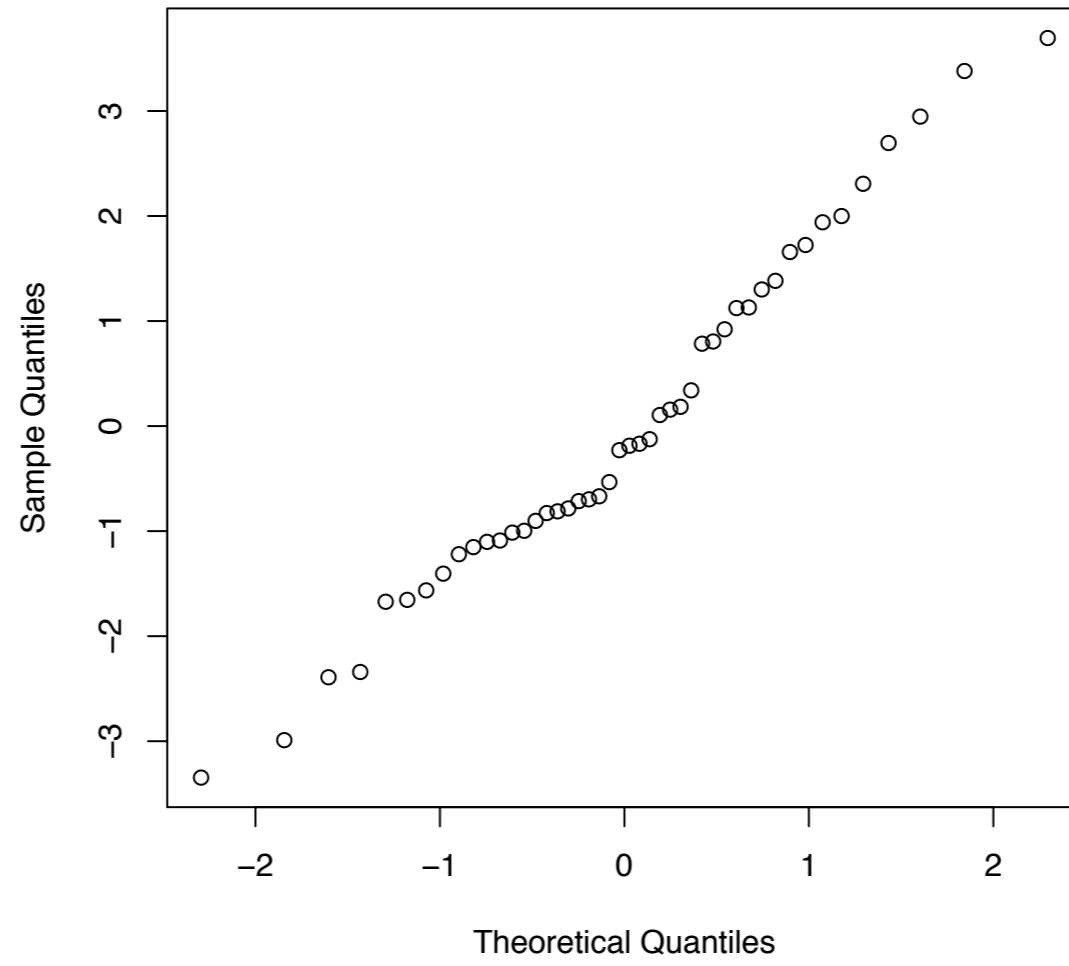
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> AIC(timefitsq)
[1] 183.1945
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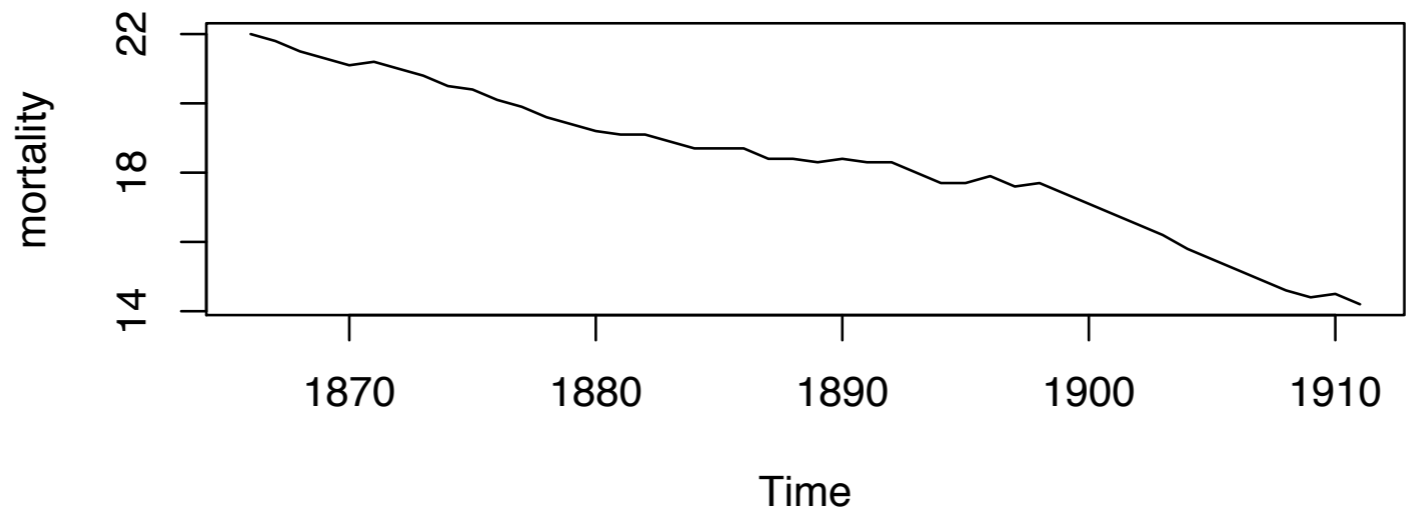
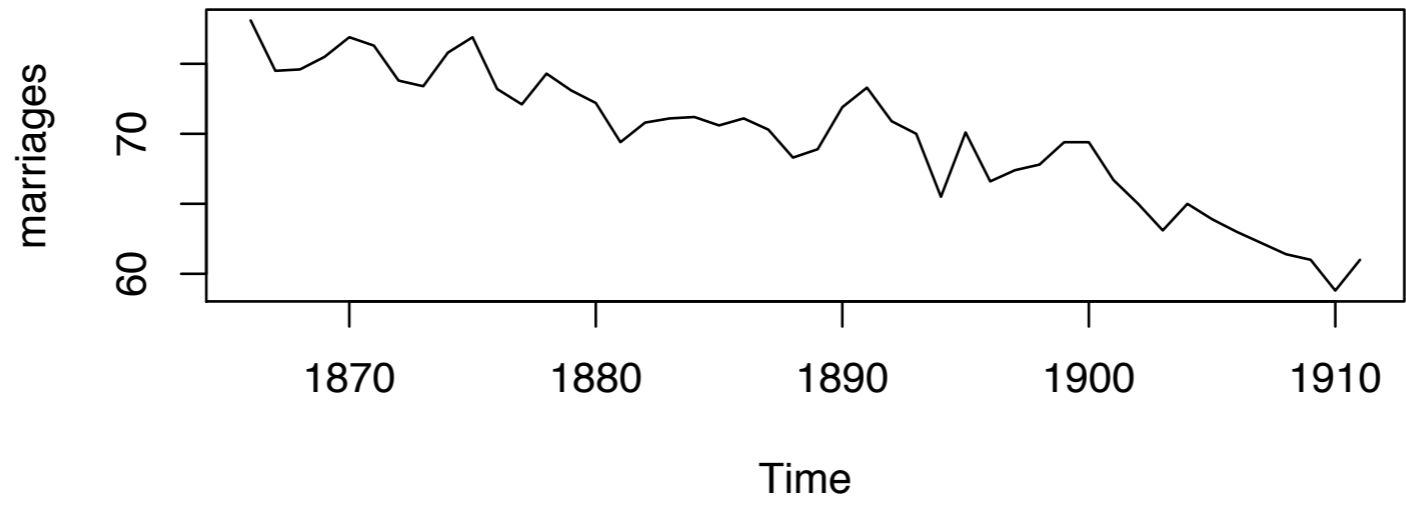


Series residuals(timefitsq)



Normal Q-Q Plot





Analysis of Variance Table

Response: marriages

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
mortality	1	960.52	960.52	421.28	< 2.2e-16 ***
Residuals	44	100.32	2.28		

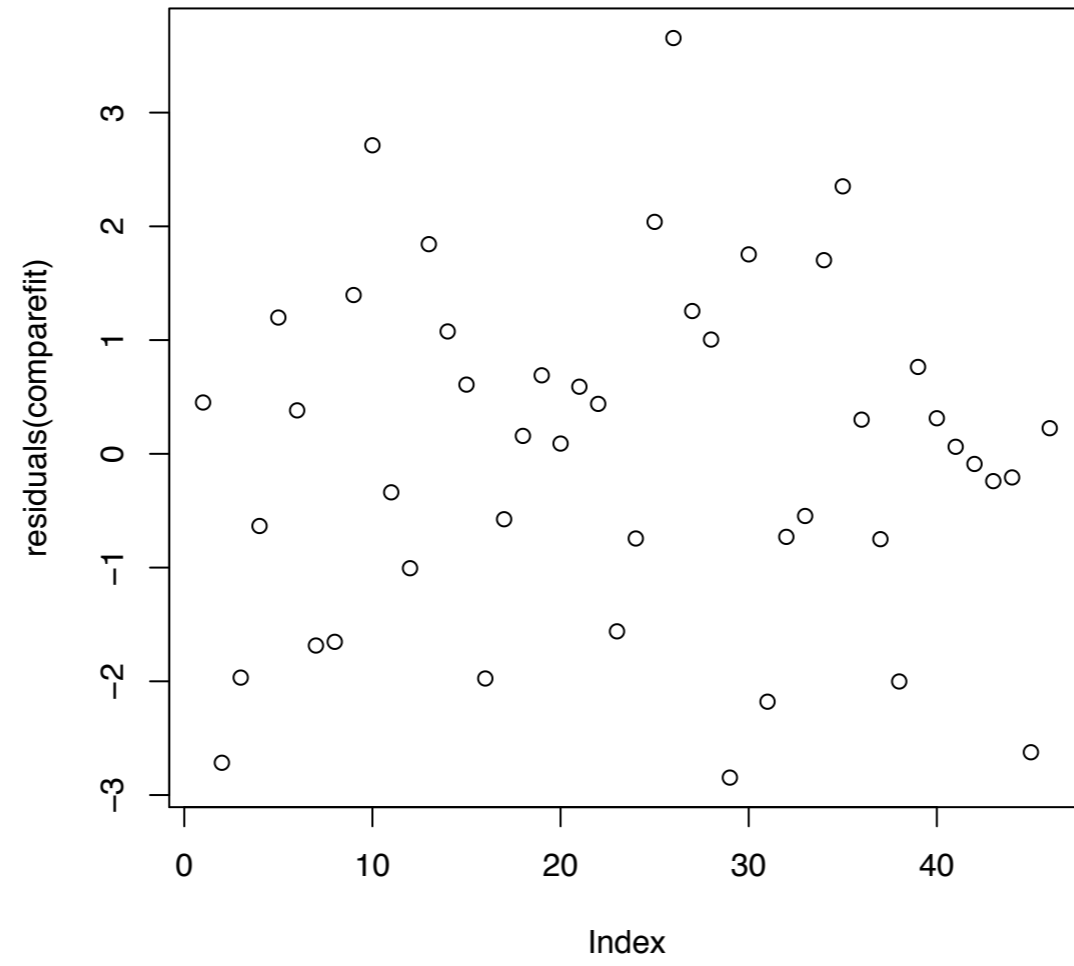
	Min	1Q	Median	3Q	Max
	-2.8463	-0.7488	0.1241	0.9446	3.6557

Coefficients:

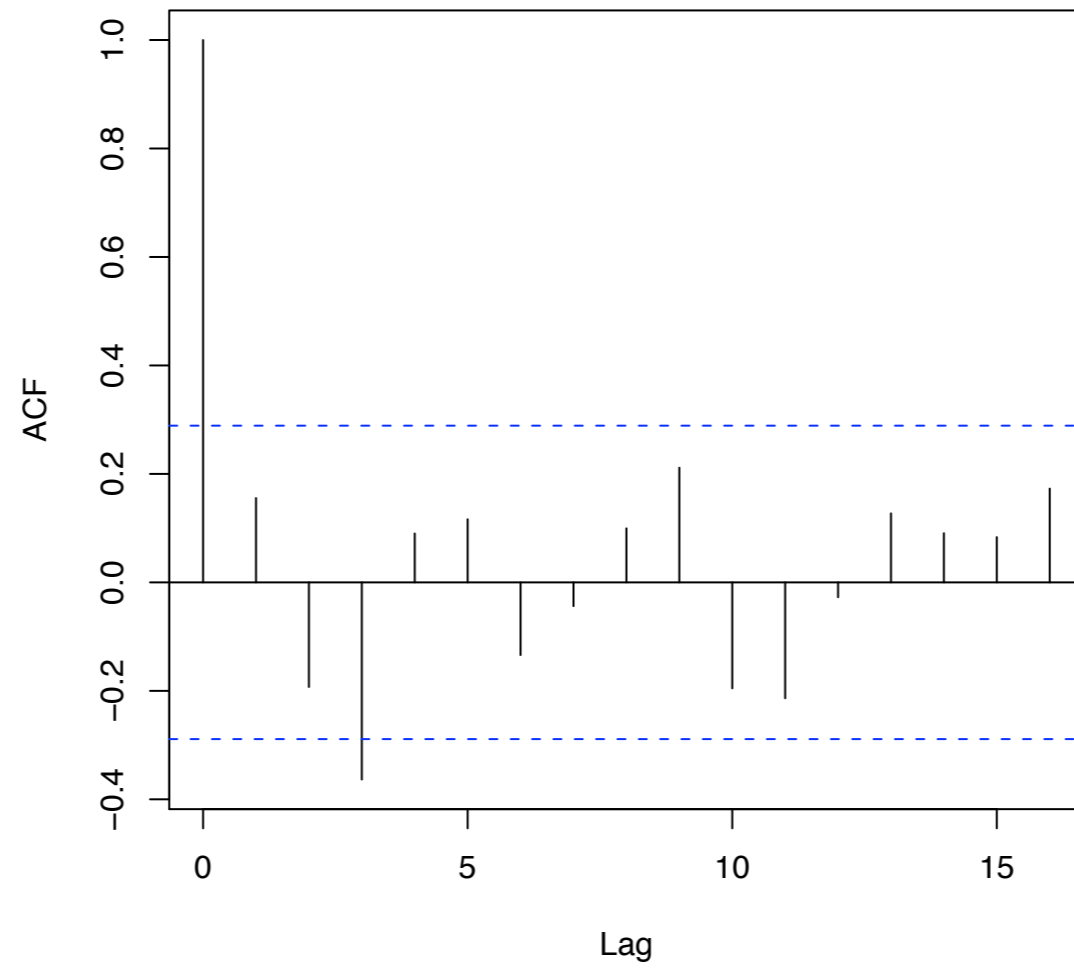
	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	30.0553	1.9439	15.46	<2e-16 ***
mortality	2.1633	0.1054	20.52	<2e-16 ***

Residual standard error: 1.51 on 44 degrees of freedom
Multiple R-Squared: 0.9054, Adjusted R-squared: 0.9033
F-statistic: 421.3 on 1 and 44 DF, p-value: < 2.2e-16

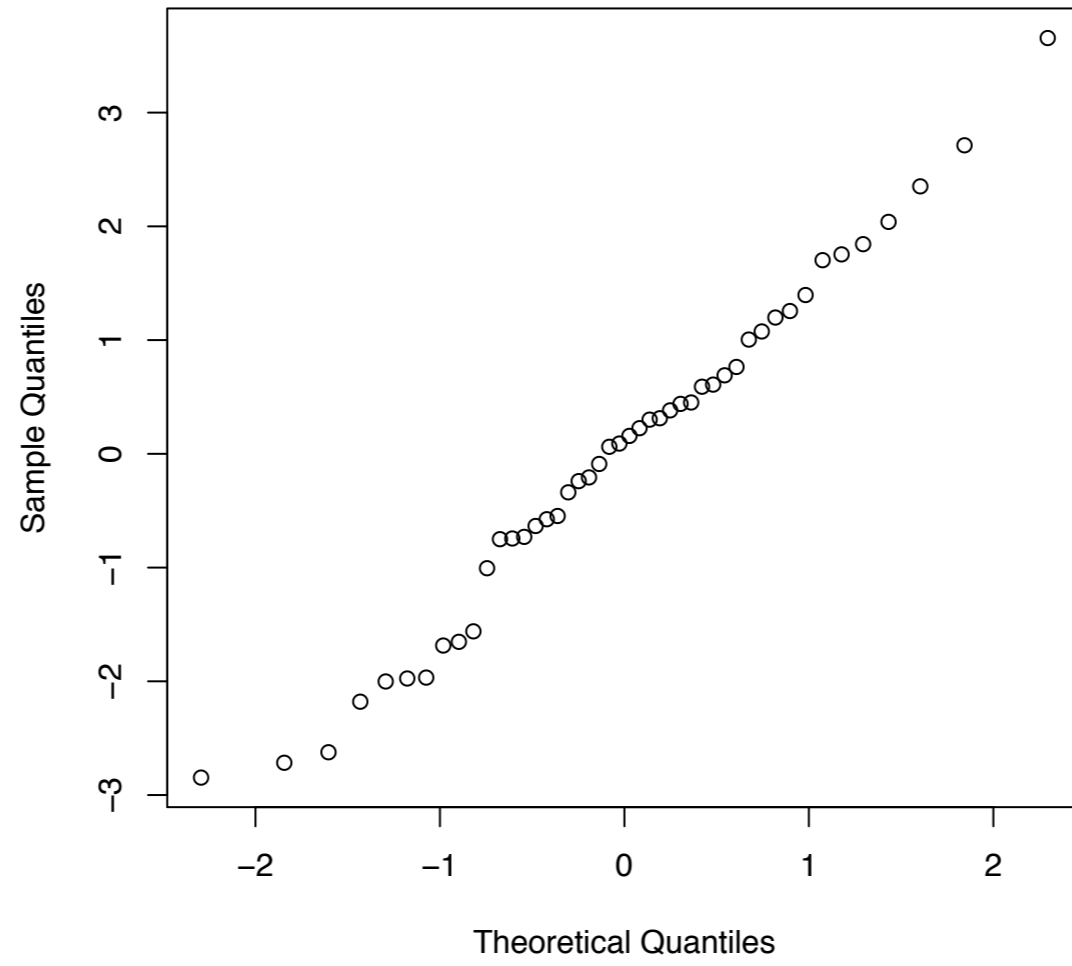
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> AIC(comparefit)
[1] 172.4094
```



Series residuals(comparefit)



Normal Q-Q Plot



Analysis of Variance Table

Response: marriages

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
mortality	1	960.52	960.52	416.149	<2e-16 ***
time	1	1.07	1.07	0.464	0.4994
Residuals	43	99.25	2.31		

Residuals:

Min	1Q	Median	3Q	Max
-2.9505	-0.9004	0.1690	0.8417	3.5070

Coefficients:

	Estimate	Std. Error	t value	Pr(> t)
(Intercept)	-95.75892	184.71305	-0.518	0.607
mortality	2.55171	0.57994	4.400	7.02e-05 ***
time	0.06285	0.09227	0.681	0.499

Residual standard error: 1.519 on 43 degrees of freedom

Multiple R-Squared: 0.9064, Adjusted R-squared: 0.9021

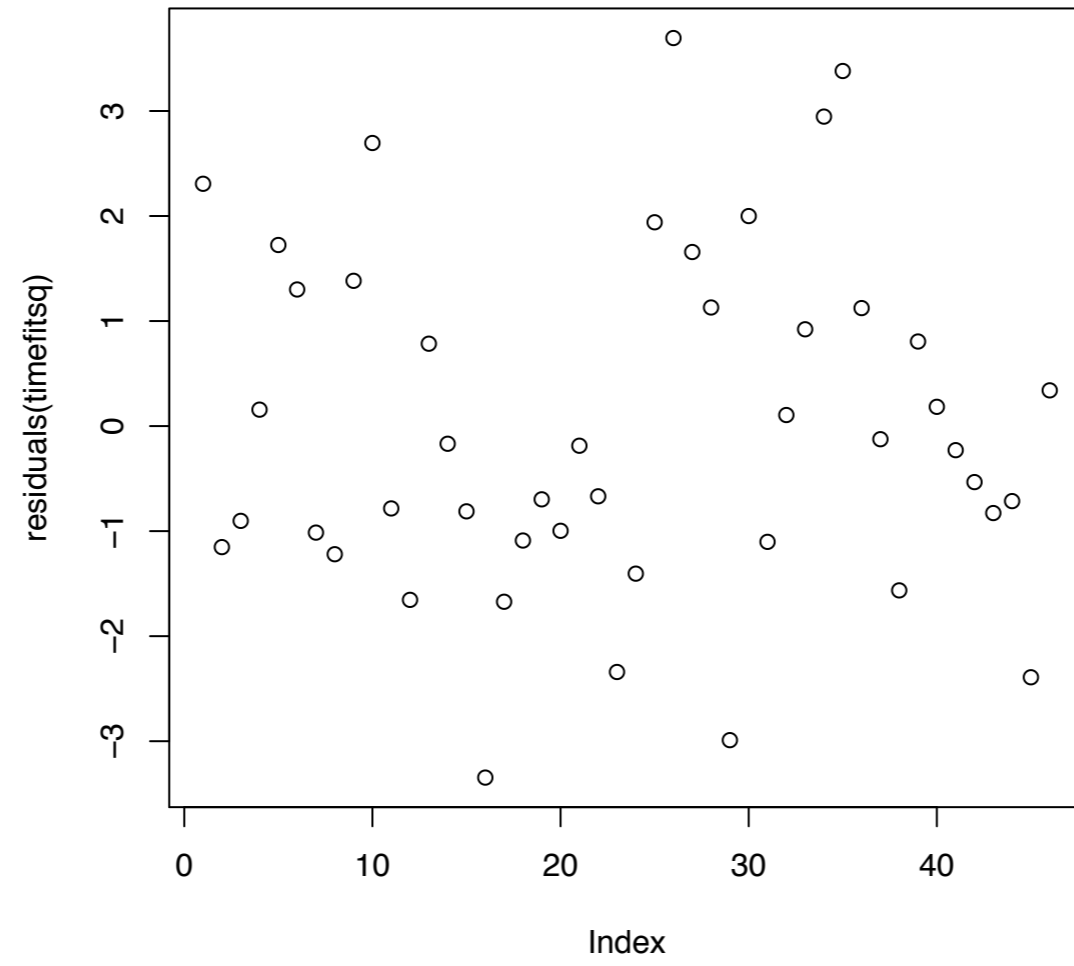
F-statistic: 208.3 on 2 and 43 DF, p-value: < 2.2e-16

```
> AIC(comparetimefit)
```

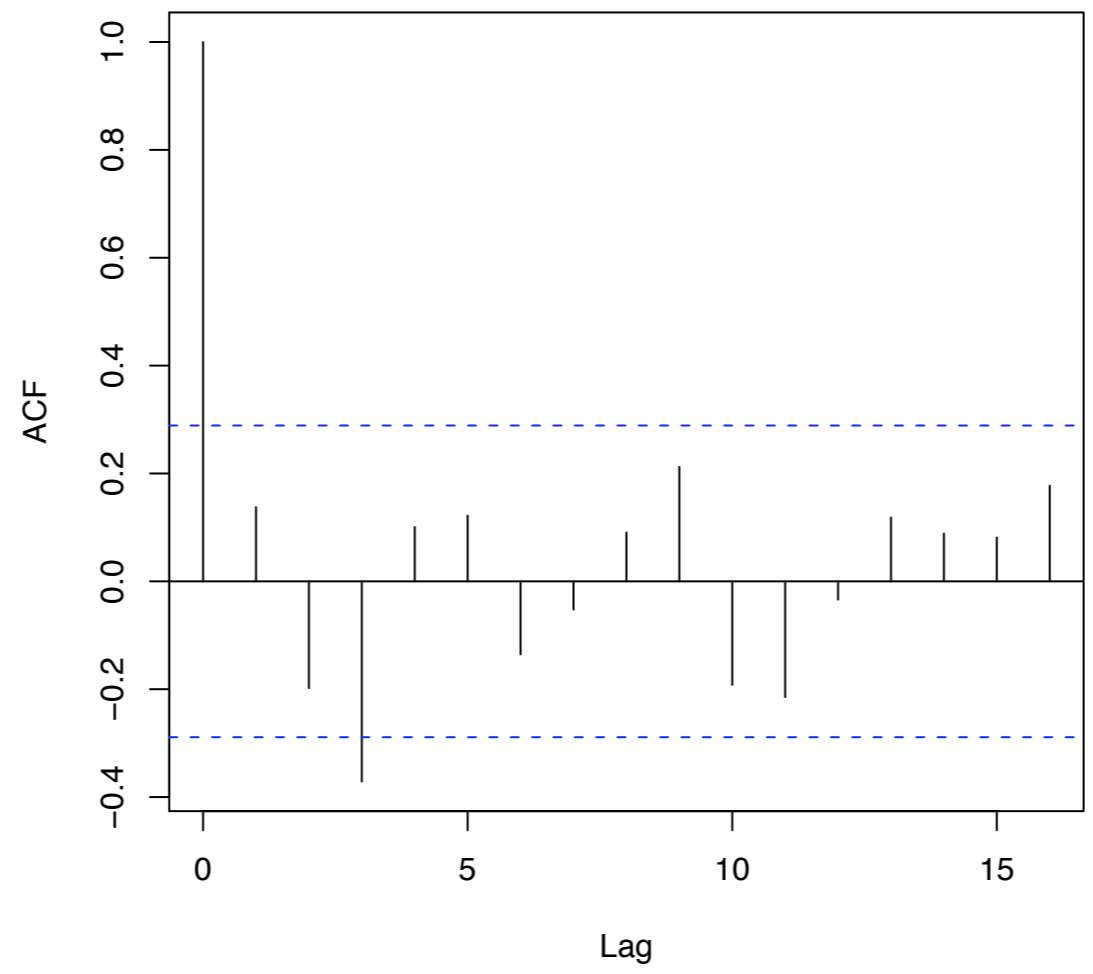
```
[1] 173.9157
```

Response: marriages

	Df	Sum Sq	Mean Sq	F value	Pr(>F)
time	1	916.90	916.90	397.254	< 2.2e-16 ***
mortality	1	44.68	44.68	19.359	7.023e-05 ***
Residuals	43	99.25	2.31		



Series residuals(comparetimefit)



Normal Q-Q Plot

