## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: bacitracinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 12 |

**Analysis of Variance**

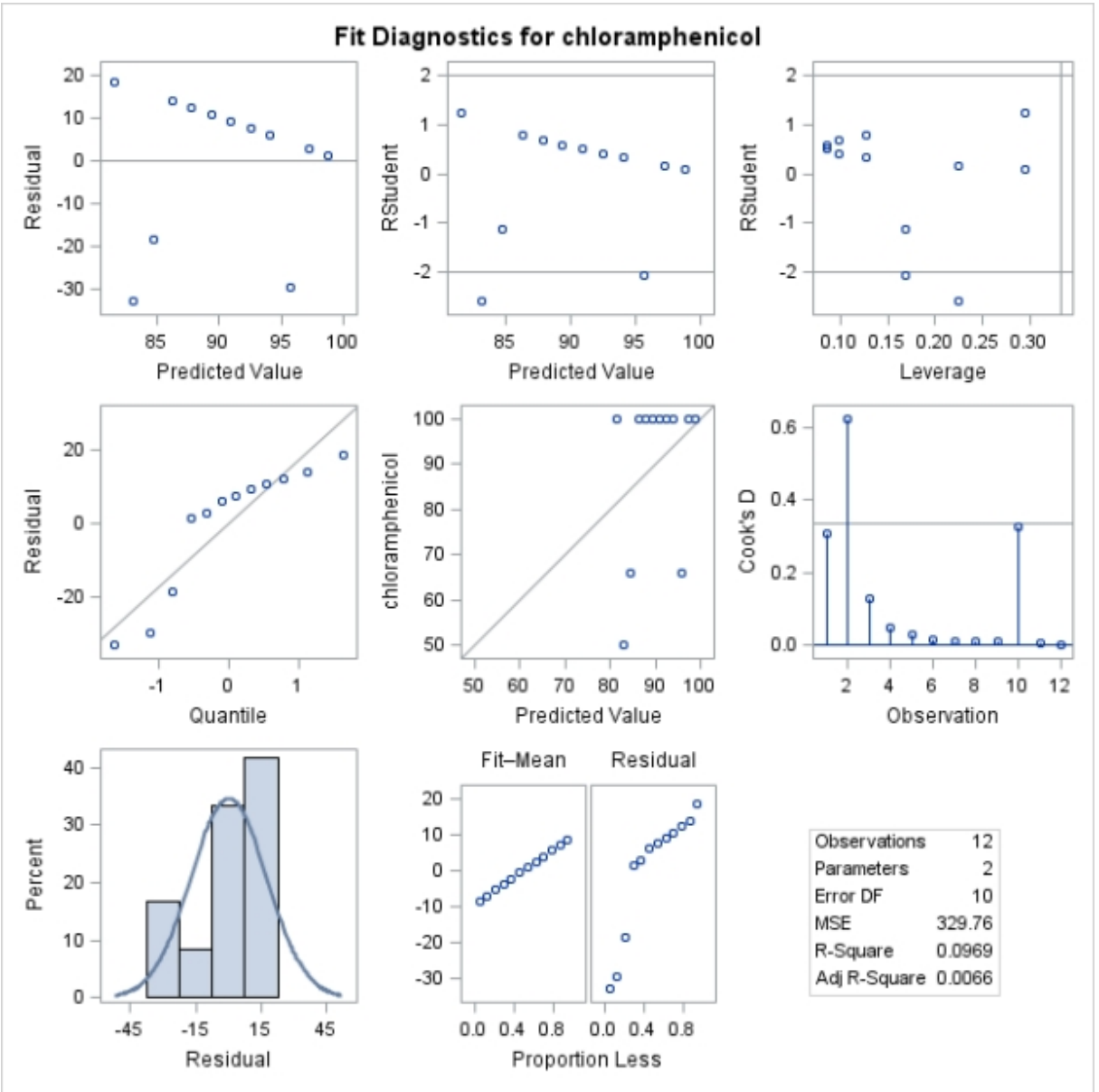
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 354.02098 | 354.02098 | 1.07 | 0.3245 |
| Error | 10 | 3297.64569 | 329.76457 | | |
| Corrected Total | 11 | 3651.66667 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 18.15942 | R-Square | 0.0969 |
| Dependent Mean | 90.16667 | Adj R-Sq | 0.0066 |
| Coeff Var | 20.13984 | | |

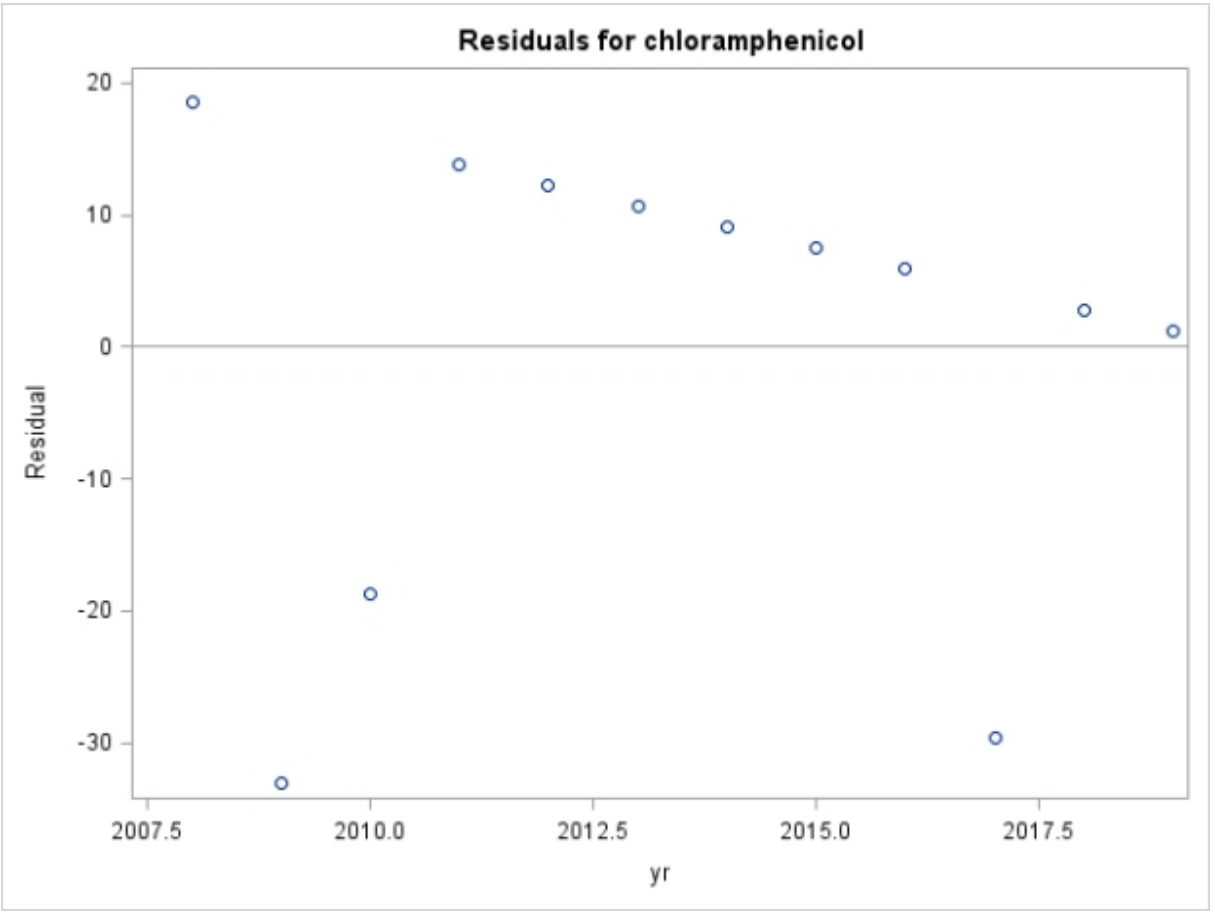
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -3077.92774 | 3057.63928 | -1.01 | 0.3378 |
| yr | 1 | 1.57343 | 1.51857 | 1.04 | 0.3245 |

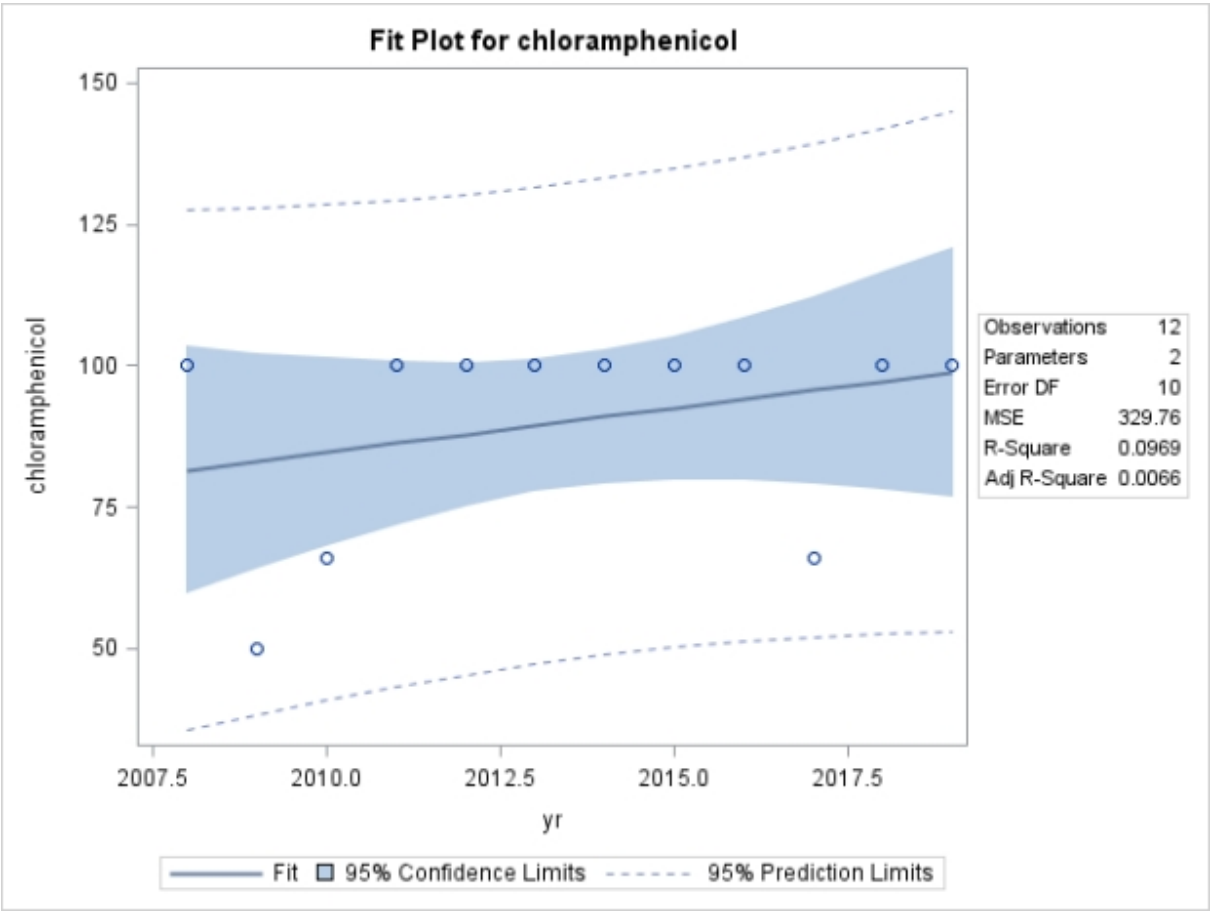
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The UNIVARIATE Procedure**
**Variable: chloramphenicolr (Studentized Residual without Current Obs)**

| Moments | | | |
|---|---|---|---|
| N | 12 | Sum Weights | 12 |
| Mean | -0.0832383 | Sum Observations | -0.9988599 |
| Std Deviation | 1.19867312 | Variance | 1.43681725 |
| Skewness | -1.3074869 | Kurtosis | 0.62776736 |
| Uncorrected SS | 15.8881332 | Corrected SS | 15.8049898 |
| Coeff Variation | -1440.0495 | Std Error Mean | 0.34602712 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.08324 | Std Deviation | 1.19867 |
| Median | 0.37357 | Variance | 1.43682 |
| Mode | . | Range | 3.84199 |
| | | Interquartile Range | 1.17545 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.24055 | Pr > \|t\| | 0.8143 |
| Sign | M | 3 | Pr >= \|M\| | 0.1460 |
| Signed Rank | S | 7 | Pr >= \|S\| | 0.6221 |

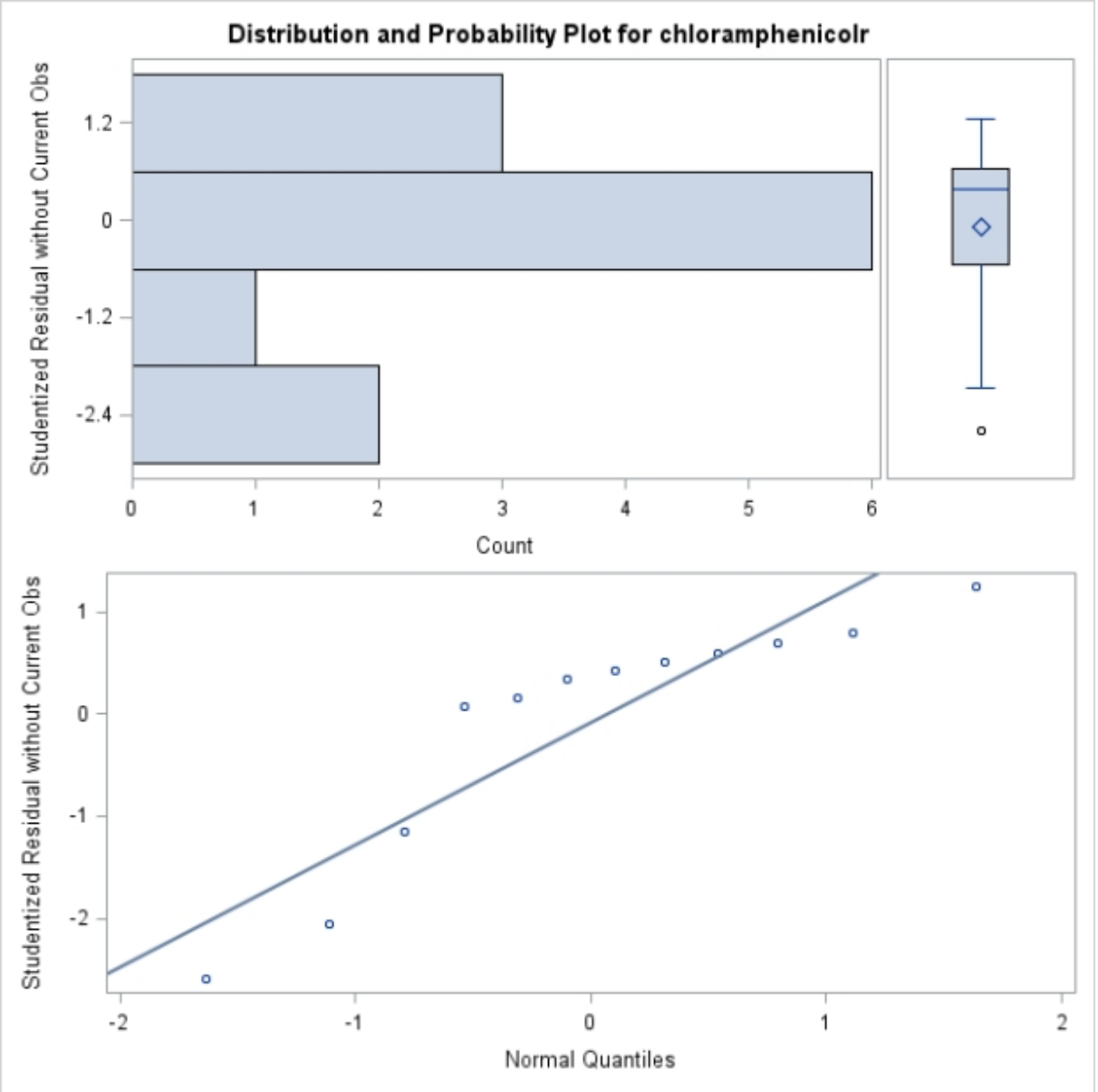
| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.820234 | Pr < W | 0.0161 |
| Kolmogorov-Smirnov | D | 0.301985 | Pr > D | <0.0100 |
| Cramer-von Mises | W-Sq | 0.196136 | Pr > W-Sq | <0.0050 |
| Anderson-Darling | A-Sq | 1.02125 | Pr > A-Sq | 0.0073 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.245309 |
| 99% | 1.245309 |
| 95% | 1.245309 |
| 90% | 0.796429 |
| 75% Q3 | 0.639881 |
| 50% Median | 0.373567 |
| 25% Q1 | -0.535567 |
| 10% | -2.064222 |
| 5% | -2.596682 |
| 1% | -2.596682 |
| 0% Min | -2.596682 |

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -2.5966817 | 2 | 0.500940 | 7 |
| -2.0642215 | 10 | 0.591191 | 6 |
| -1.1445360 | 3 | 0.688571 | 5 |

**The UNIVARIATE Procedure**
**Variable: chloramphenicolr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| 0.0734021 | 12 | 0.796429 | 4 |
| 0.1636023 | 11 | 1.245309 | 1 |



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 11 |
| Number of Observations with Missing Values | 1 |

**Analysis of Variance**

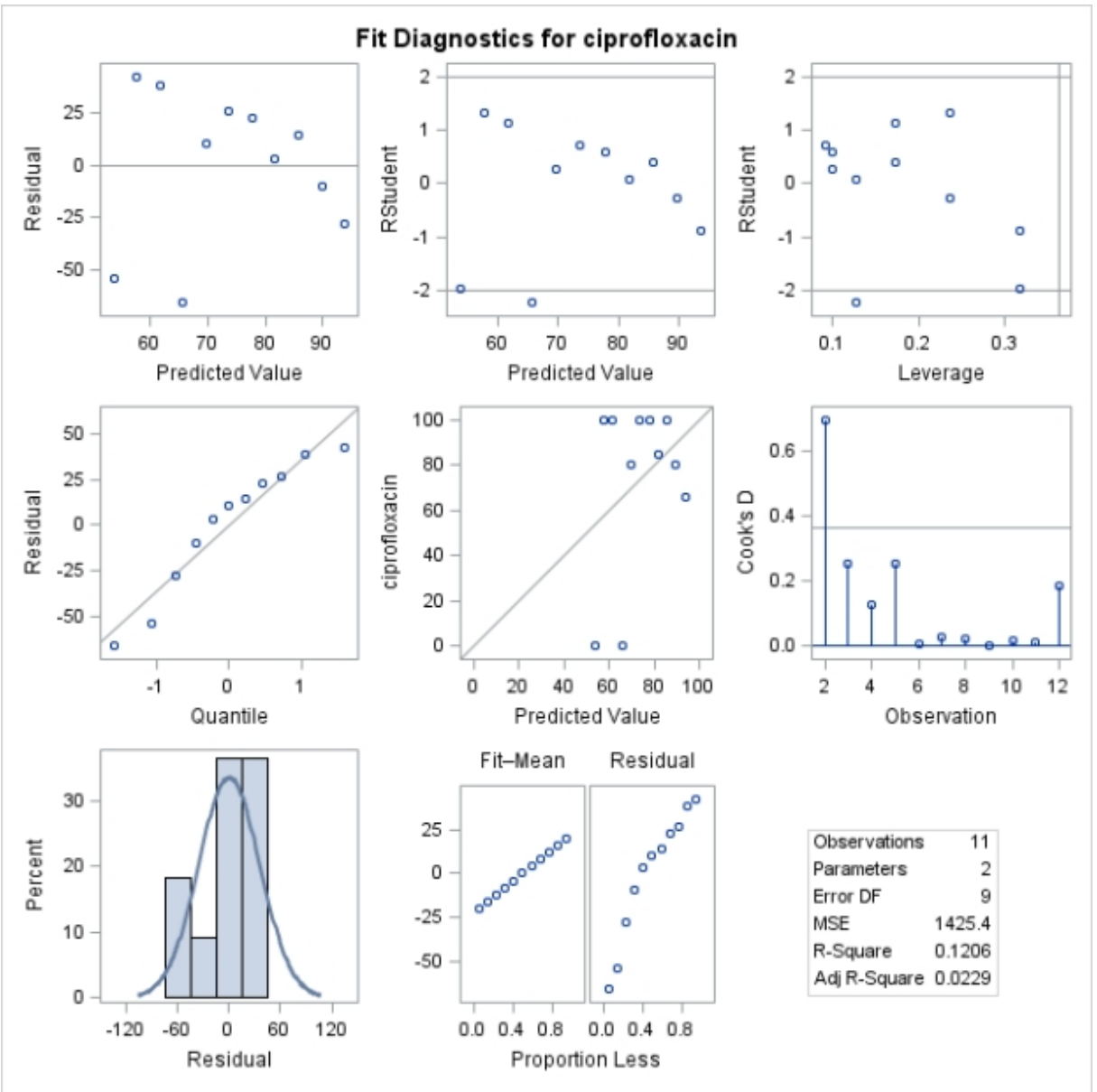
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 1760.00000 | 1760.00000 | 1.23 | 0.2953 |
| Error | 9 | 12828 | 1425.35354 | | |
| Corrected Total | 10 | 14588 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 37.75385 | R-Square | 0.1206 |
| Dependent Mean | 73.72727 | Adj R-Sq | 0.0229 |
| Coeff Var | 51.20745 | | |

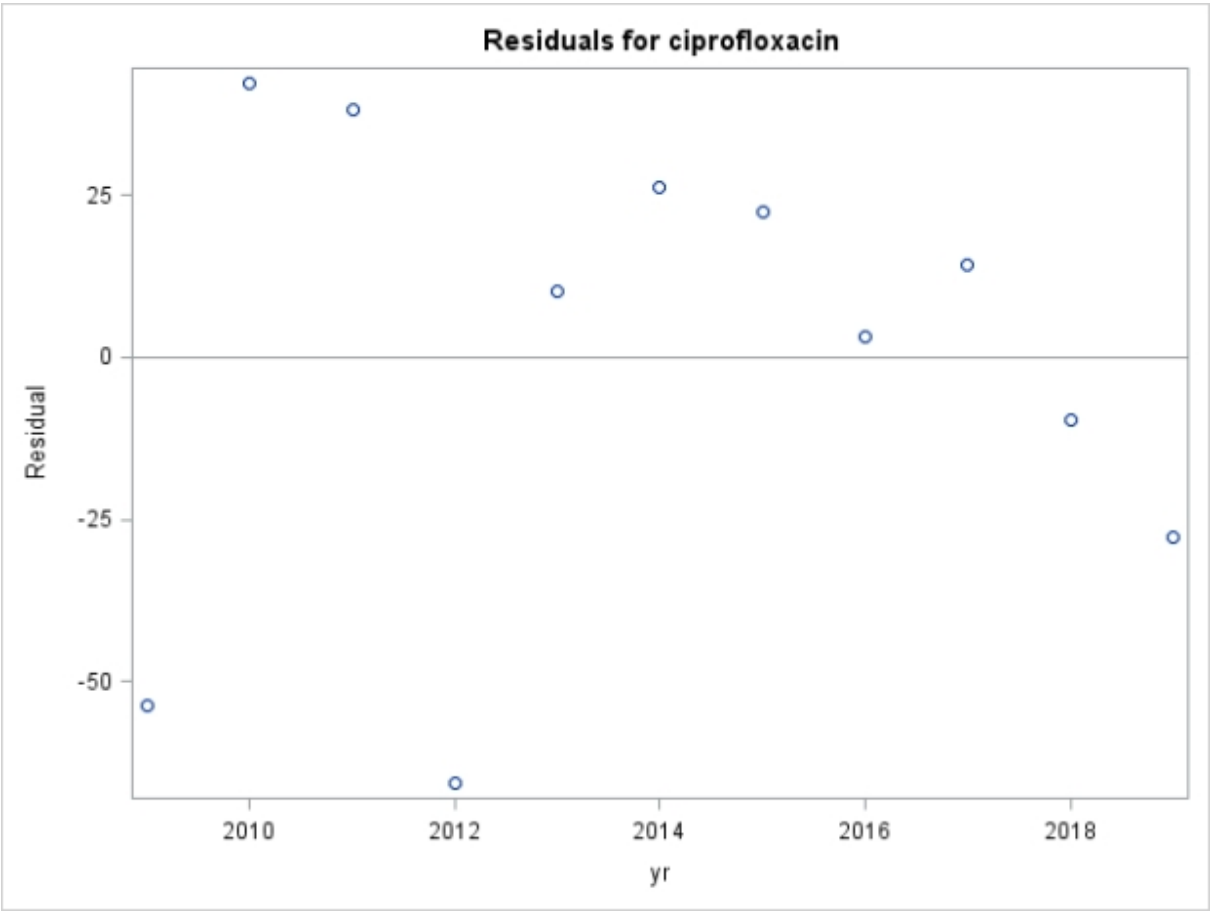
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -7982.27273 | 7249.78217 | -1.10 | 0.2995 |
| yr | 1 | 4.00000 | 3.59969 | 1.11 | 0.2953 |

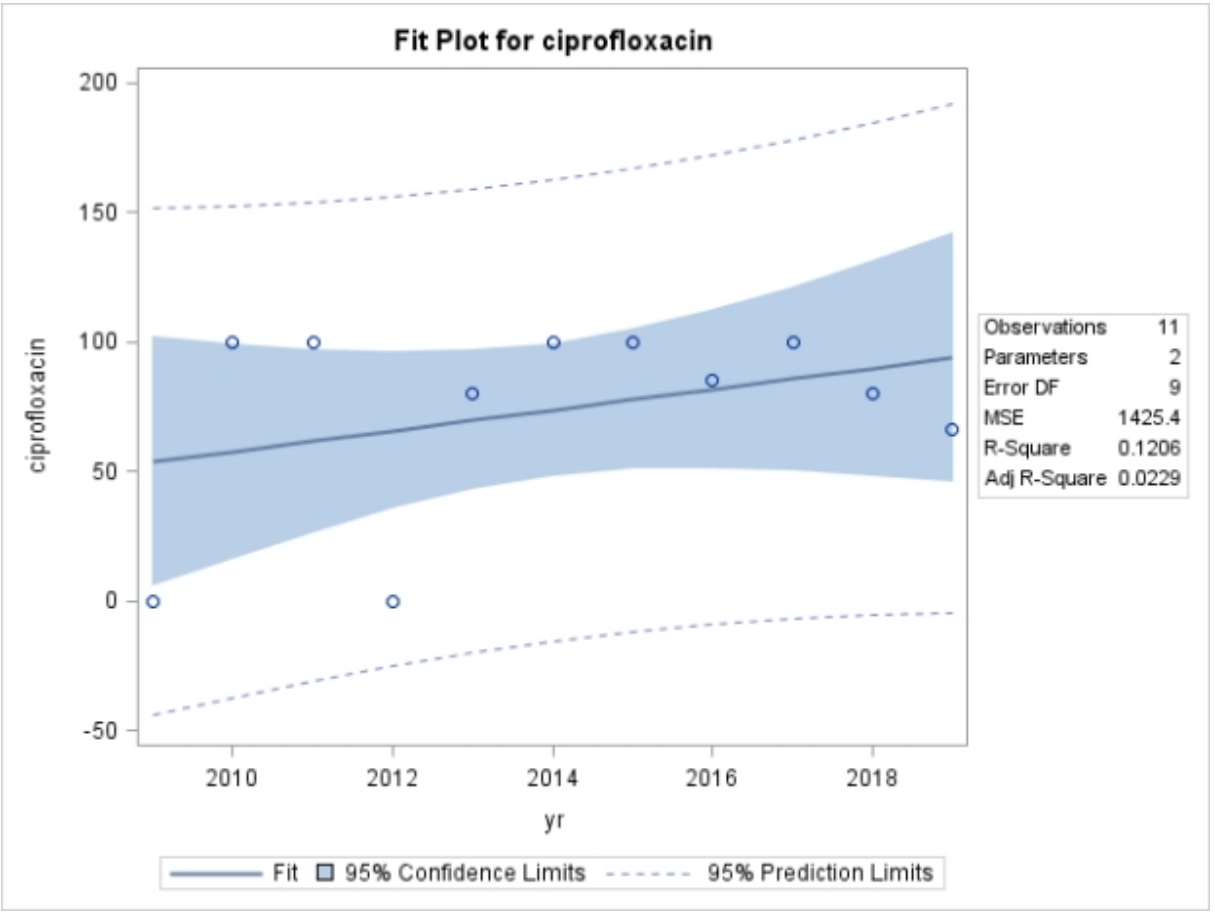
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



## The UNIVARIATE Procedure
## Variable: ciprofloxacinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 11 | Sum Weights | 11 |
| Mean | -0.0775534 | Sum Observations | -0.8530879 |
| Std Deviation | 1.17969731 | Variance | 1.39168574 |
| Skewness | -0.8977574 | Kurtosis | -0.1536904 |
| Uncorrected SS | 13.9830173 | Corrected SS | 13.9168574 |
| Coeff Variation | -1521.1411 | Std Error Mean | 0.35569212 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.07755 | Std Deviation | 1.17970 |
| Median | 0.27166 | Variance | 1.39169 |
| Mode | . | Range | 3.57805 |
| | | Interquartile Range | 1.58747 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.21804 | Pr > \|t\| | 0.8318 |
| Sign | M | 1.5 | Pr >= \|M\| | 0.5488 |
| Signed Rank | S | 2 | Pr >= \|S\| | 0.8984 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.902122 | Pr < W | 0.1962 |
| Kolmogorov-Smirnov | D | 0.192008 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.074383 | Pr > W-Sq | 0.2279 |
| Anderson-Darling | A-Sq | 0.463363 | Pr > A-Sq | 0.2131 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.336023 |
| 99% | 1.336023 |
| 95% | 1.336023 |
| 90% | 1.131829 |
| 75% Q3 | 0.709435 |
| 50% Median | 0.271657 |
| 25% Q1 | -0.878039 |
| 10% | -1.985162 |
| 5% | -2.242026 |
| 1% | -2.242026 |
| 0% Min | -2.242026 |

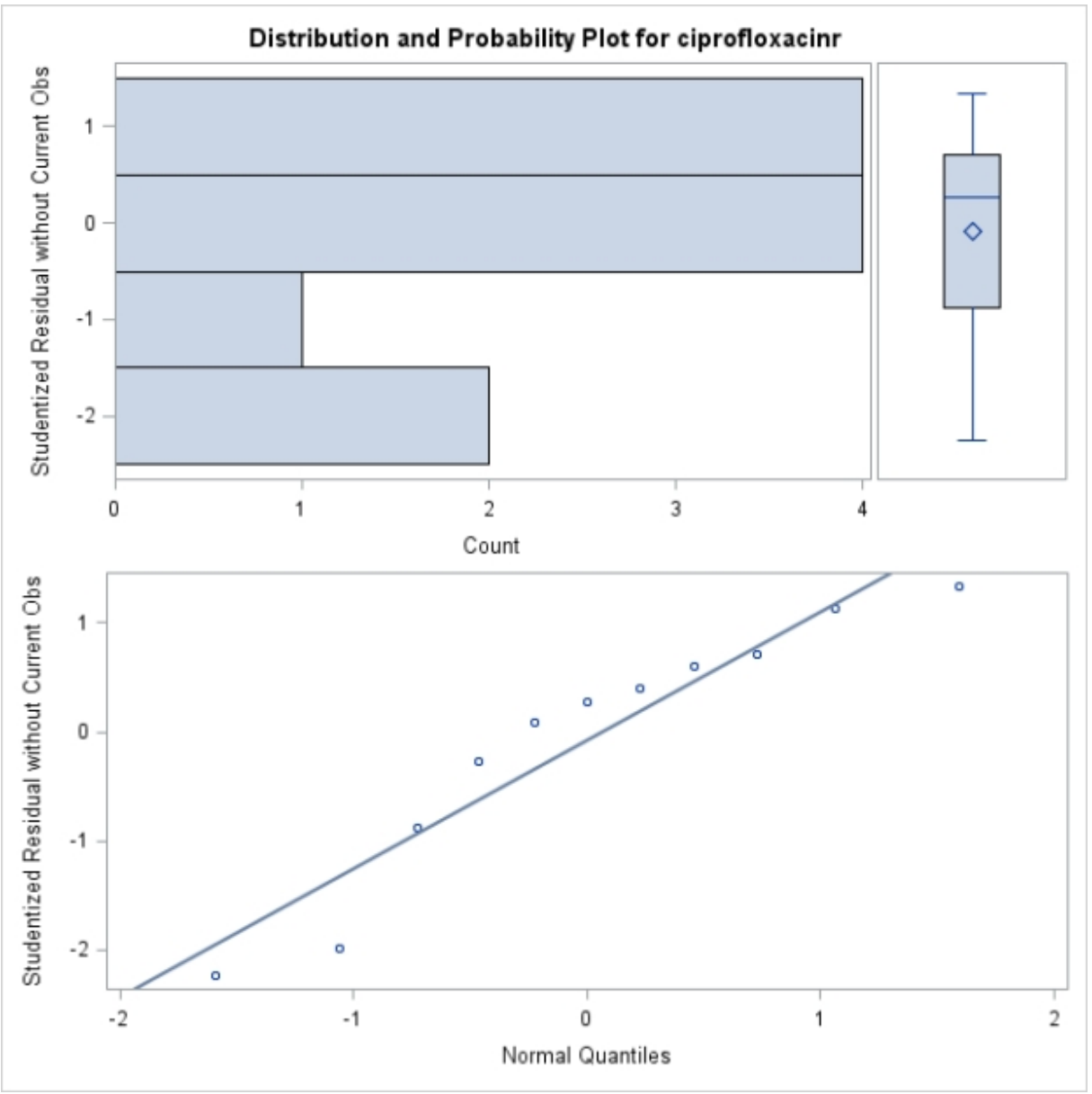
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -2.2420262 | 5 | 0.395689 | 10 |
| -1.9851617 | 2 | 0.599310 | 8 |
| -0.8780387 | 12 | 0.709435 | 7 |

**The UNIVARIATE Procedure**
**Variable: ciprofloxacinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.2793302 | 11 | 1.131829 | 4 |
| 0.0875268 | 9 | 1.336023 | 3 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 1 | 8.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: ciprofloxacinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 12 |

**Analysis of Variance**

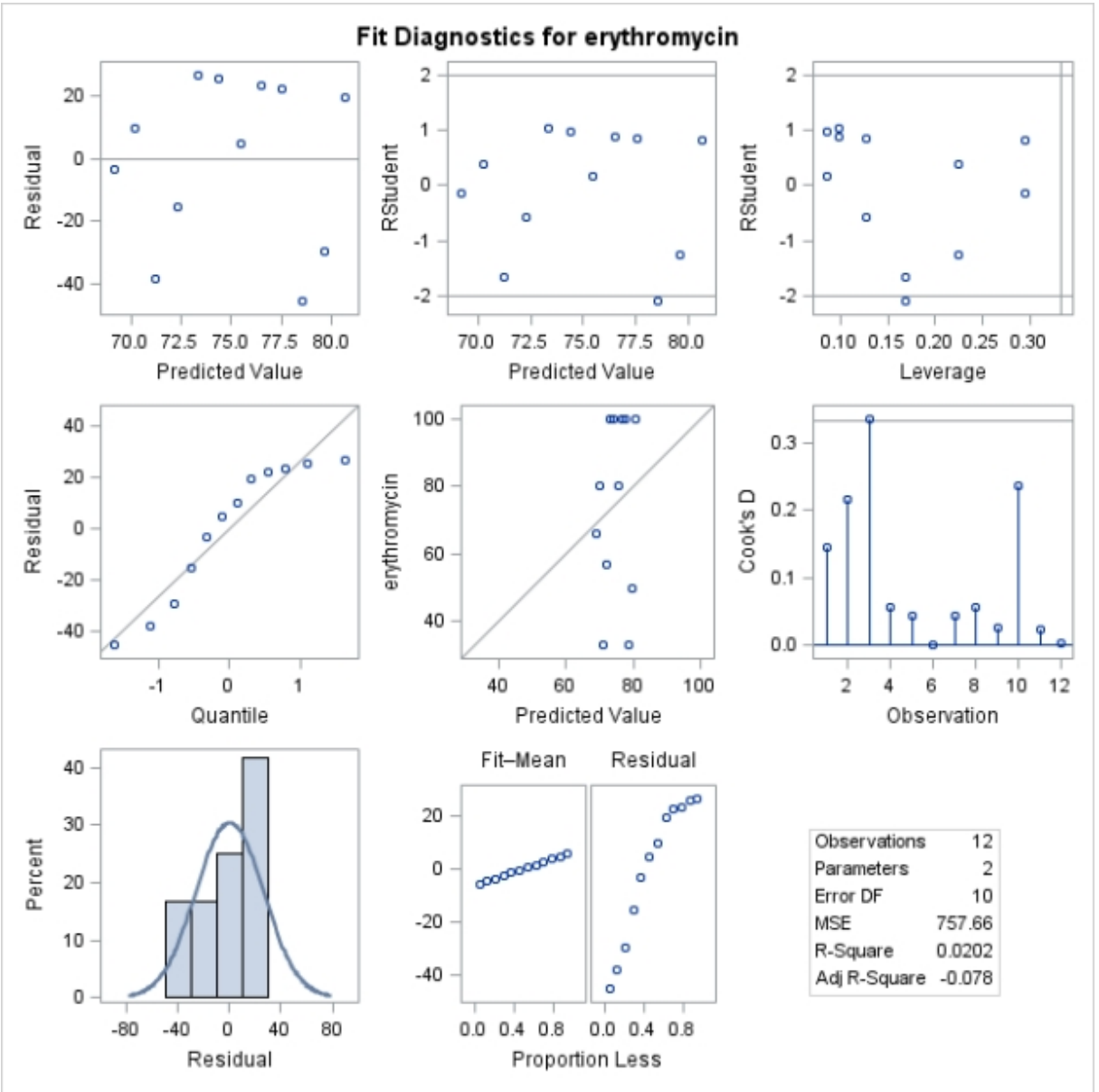
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 156.29545 | 156.29545 | 0.21 | 0.6594 |
| Error | 10 | 7576.62121 | 757.66212 | | |
| Corrected Total | 11 | 7732.91667 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 27.52566 | R-Square | 0.0202 |
| Dependent Mean | 74.91667 | Adj R-Sq | -0.0778 |
| Coeff Var | 36.74171 | | |

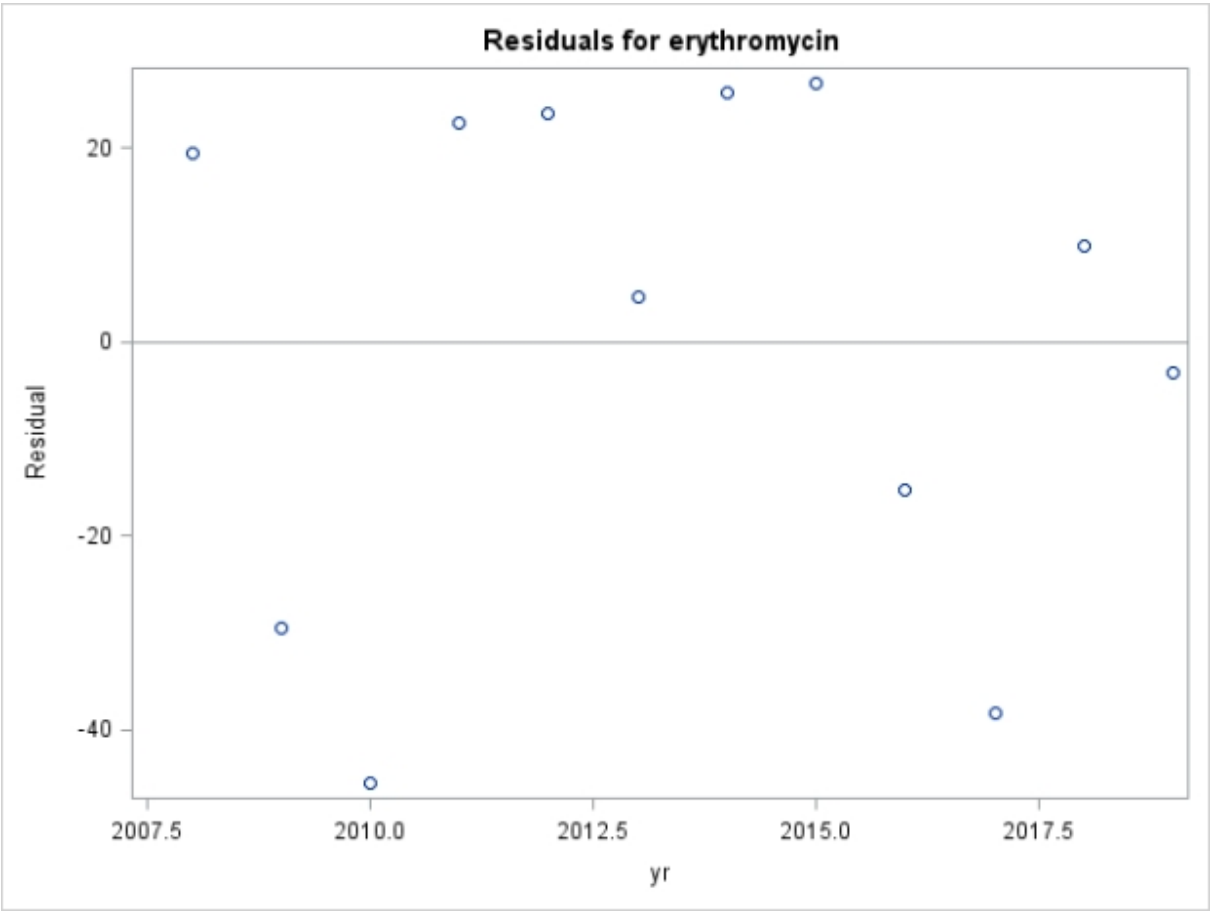
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 2179.93939 | 4634.70441 | 0.47 | 0.6482 |
| yr | 1 | -1.04545 | 2.30181 | -0.45 | 0.6594 |

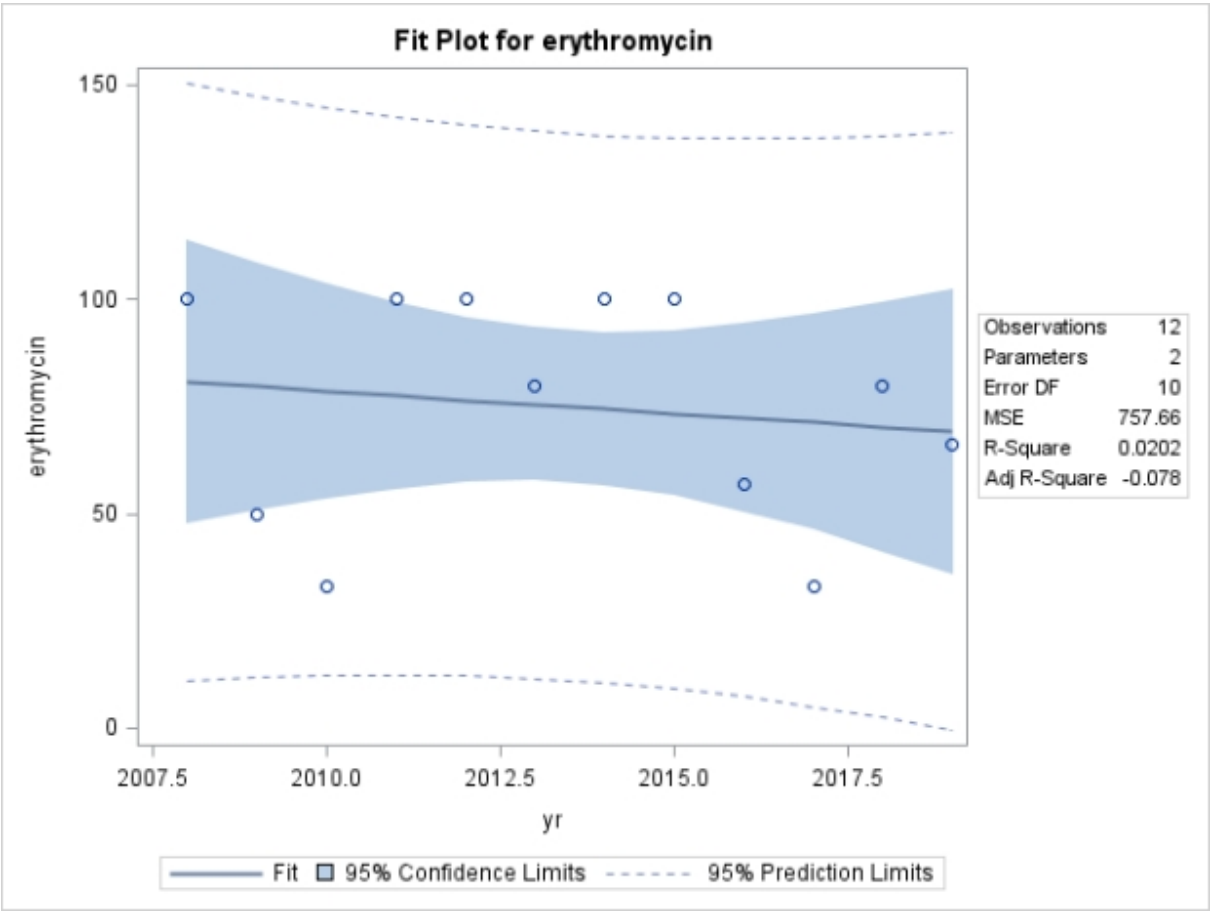
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**



## The UNIVARIATE Procedure
## Variable: erythromycinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 12 | Sum Weights | 12 |
| Mean | -0.0499421 | Sum Observations | -0.5993049 |
| Std Deviation | 1.1049937 | Variance | 1.22101107 |
| Skewness | -0.8122647 | Kurtosis | -0.7457122 |
| Uncorrected SS | 13.4610523 | Corrected SS | 13.4311218 |
| Coeff Variation | -2212.5508 | Std Error Mean | 0.3189842 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.04994 | Std Deviation | 1.10499 |
| Median | 0.27546 | Variance | 1.22101 |
| Mode | . | Range | 3.12738 |
| | | Interquartile Range | 1.79263 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.15657 | Pr > \|t\| | 0.8784 |
| Sign | M | 1 | Pr >= \|M\| | 0.7744 |
| Signed Rank | S | 1 | Pr >= \|S\| | 0.9697 |

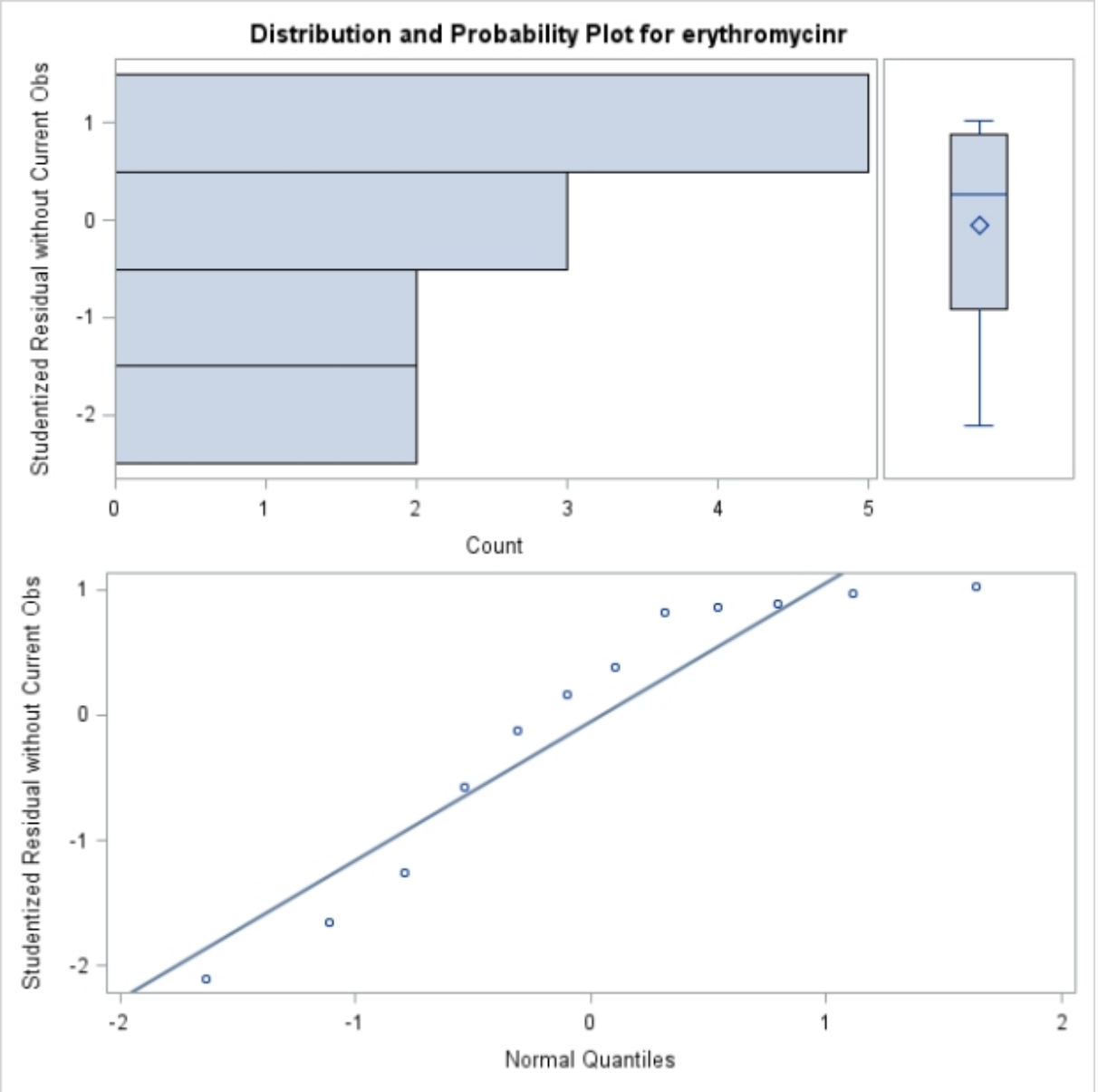
| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.866023 | Pr < W | 0.0582 |
| Kolmogorov-Smirnov | D | 0.201855 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.102849 | Pr > W-Sq | 0.0929 |
| Anderson-Darling | A-Sq | 0.638308 | Pr > A-Sq | 0.0764 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.022396 |
| 99% | 1.022396 |
| 95% | 1.022396 |
| 90% | 0.969642 |
| 75% Q3 | 0.876565 |
| 50% Median | 0.275461 |
| 25% Q1 | -0.916064 |
| 10% | -1.651013 |
| 5% | -2.104982 |
| 1% | -2.104982 |
| 0% Min | -2.104982 |

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -2.104982 | 3 | 0.822822 | 1 |
| -1.651013 | 10 | 0.862435 | 4 |
| -1.257362 | 2 | 0.890696 | 5 |

**The UNIVARIATE Procedure**
**Variable: erythromycinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.574767 | 9 | 0.969642 | 7 |
| -0.130095 | 12 | 1.022396 | 8 |



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 12 |

**Analysis of Variance**

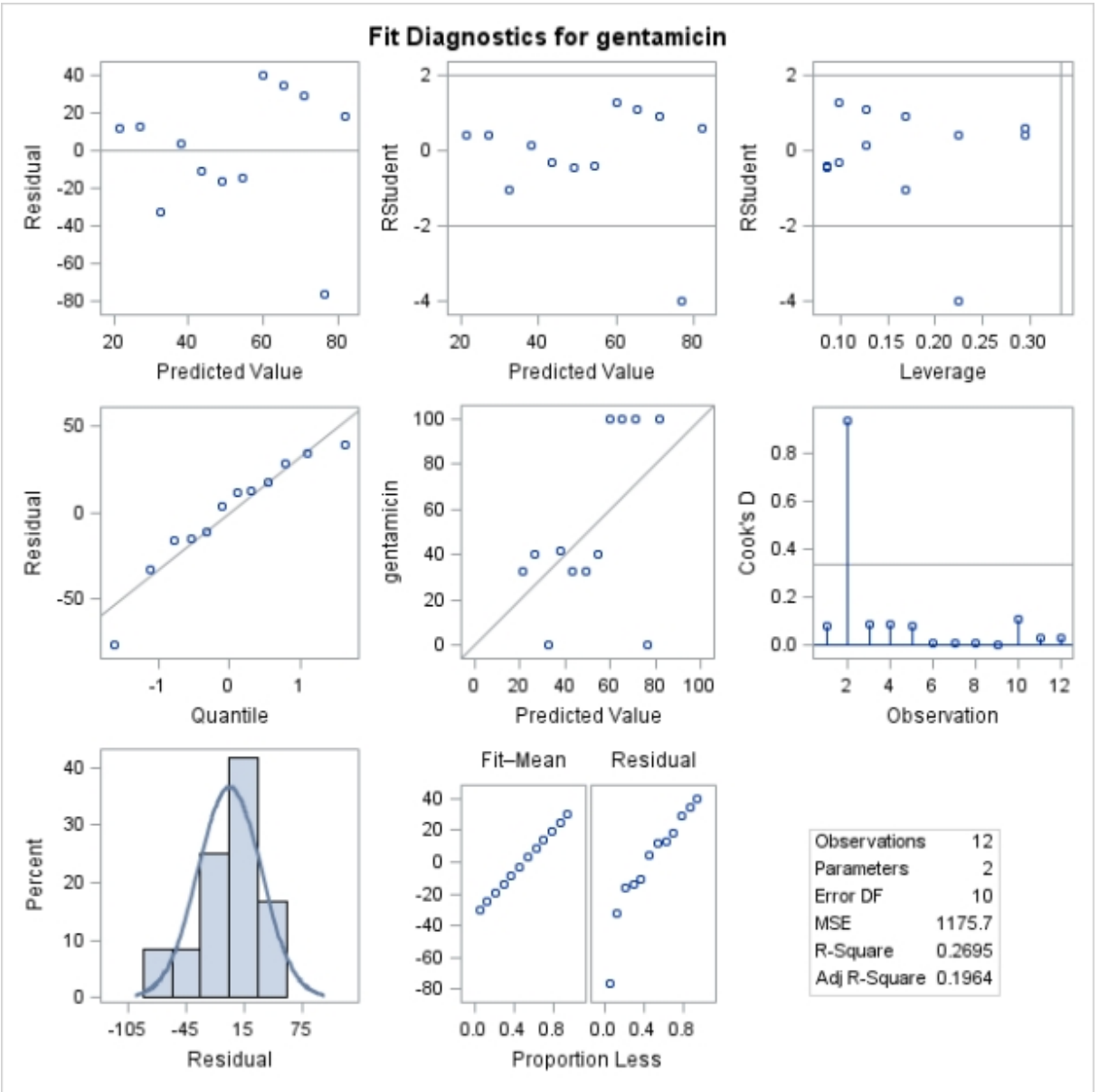
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 4336.75699 | 4336.75699 | 3.69 | 0.0837 |
| Error | 10 | 11757 | 1175.74930 | | |
| Corrected Total | 11 | 16094 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 34.28920 | R-Square | 0.2695 |
| Dependent Mean | 51.75000 | Adj R-Sq | 0.1964 |
| Coeff Var | 66.25933 | | |

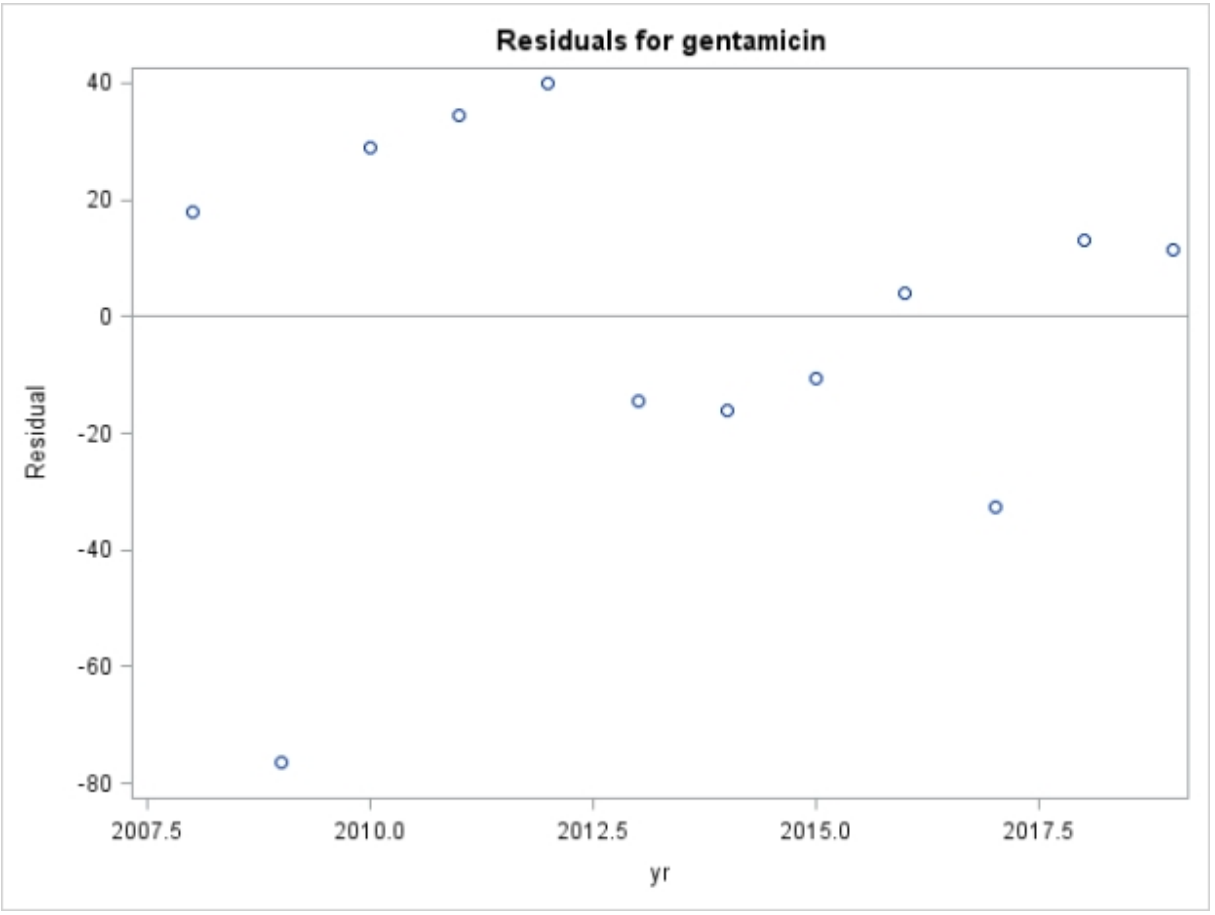
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 11140 | 5773.53254 | 1.93 | 0.0825 |
| yr | 1 | -5.50699 | 2.86741 | -1.92 | 0.0837 |

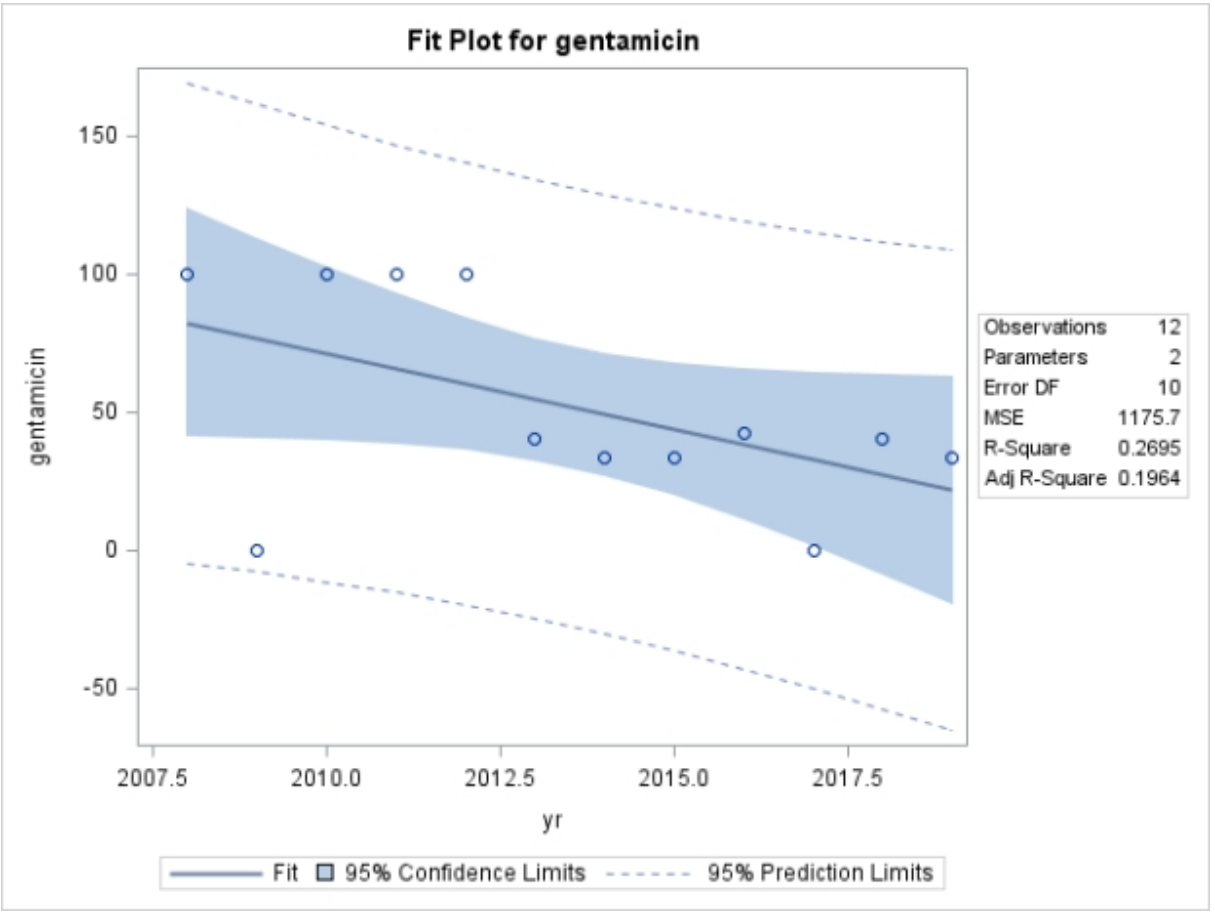
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**



## The UNIVARIATE Procedure
## Variable: gentamicinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 12 | Sum Weights | 12 |
| Mean | -0.1230479 | Sum Observations | -1.4765751 |
| Std Deviation | 1.41144399 | Variance | 1.99217414 |
| Skewness | -2.0931657 | Kurtosis | 5.48516004 |
| Uncorrected SS | 22.0956051 | Corrected SS | 21.9139156 |
| Coeff Variation | -1147.0685 | Std Error Mean | 0.40744878 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.12305 | Std Deviation | 1.41144 |
| Median | 0.25116 | Variance | 1.99217 |
| Mode | . | Range | 5.28887 |
| | | Interquartile Range | 1.20773 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.302 | Pr > \|t\| | 0.7683 |
| Sign | M | 1 | Pr >= \|M\| | 0.7744 |
| Signed Rank | S | 5 | Pr >= \|S\| | 0.7334 |

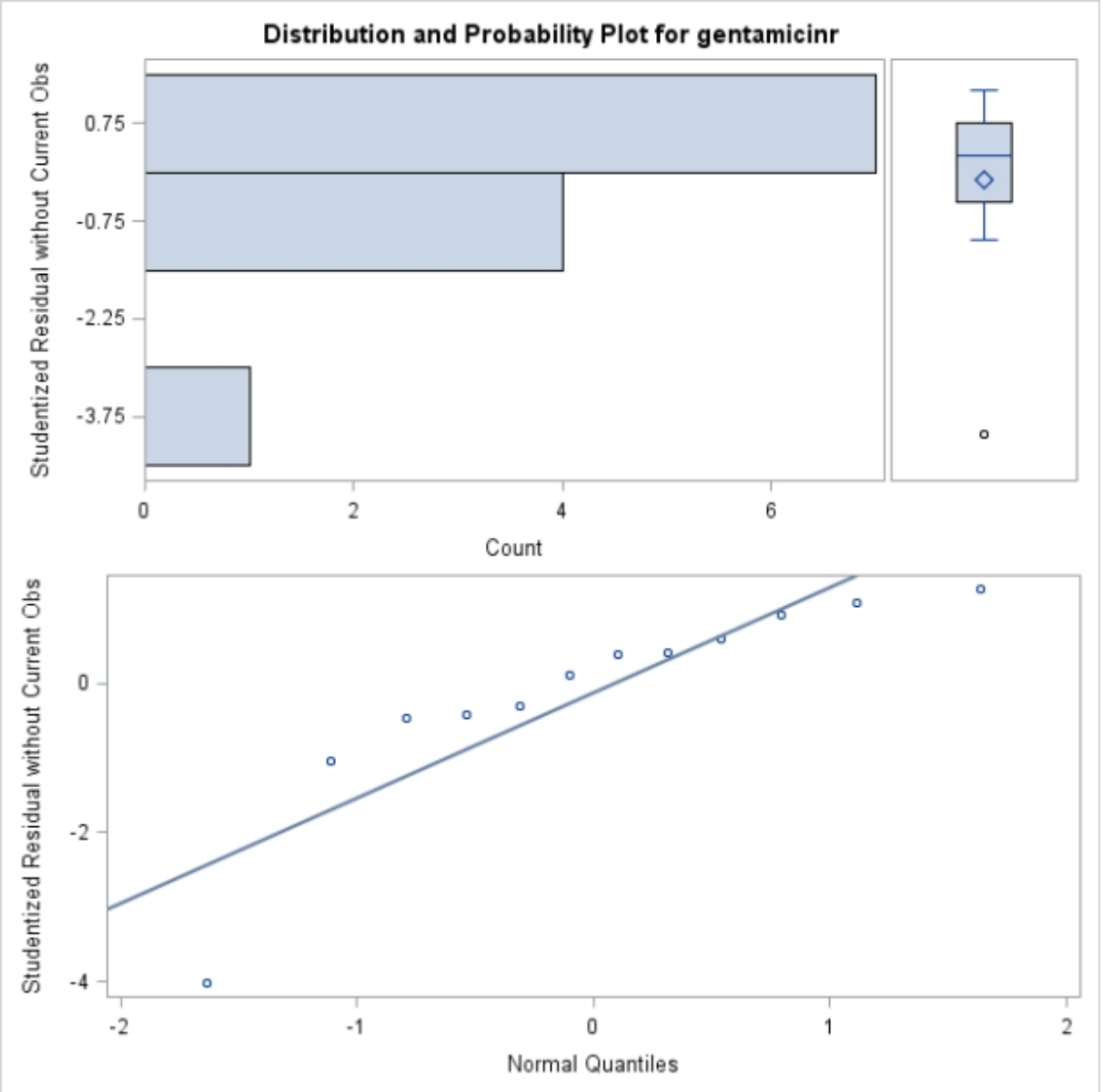
| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.792344 | Pr < W | 0.0077 |
| Kolmogorov-Smirnov | D | 0.236712 | Pr > D | 0.0627 |
| Cramer-von Mises | W-Sq | 0.127207 | Pr > W-Sq | 0.0426 |
| Anderson-Darling | A-Sq | 0.855819 | Pr > A-Sq | 0.0204 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.265033 |
| 99% | 1.265033 |
| 95% | 1.265033 |
| 90% | 1.085931 |
| 75% Q3 | 0.761742 |
| 50% Median | 0.251159 |
| 25% Q1 | -0.445989 |
| 10% | -1.043573 |
| 5% | -4.023840 |
| 1% | -4.023840 |
| 0% Min | -4.023840 |

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -4.023840 | 2 | 0.413404 | 11 |
| -1.043573 | 10 | 0.603660 | 1 |
| -0.468302 | 7 | 0.919823 | 3 |

**The UNIVARIATE Procedure**
**Variable: gentamicinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.423676 | 6 | 1.085931 | 4 |
| -0.307355 | 8 | 1.265033 | 5 |



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 11 |
| Number of Observations with Missing Values | 1 |

**Analysis of Variance**

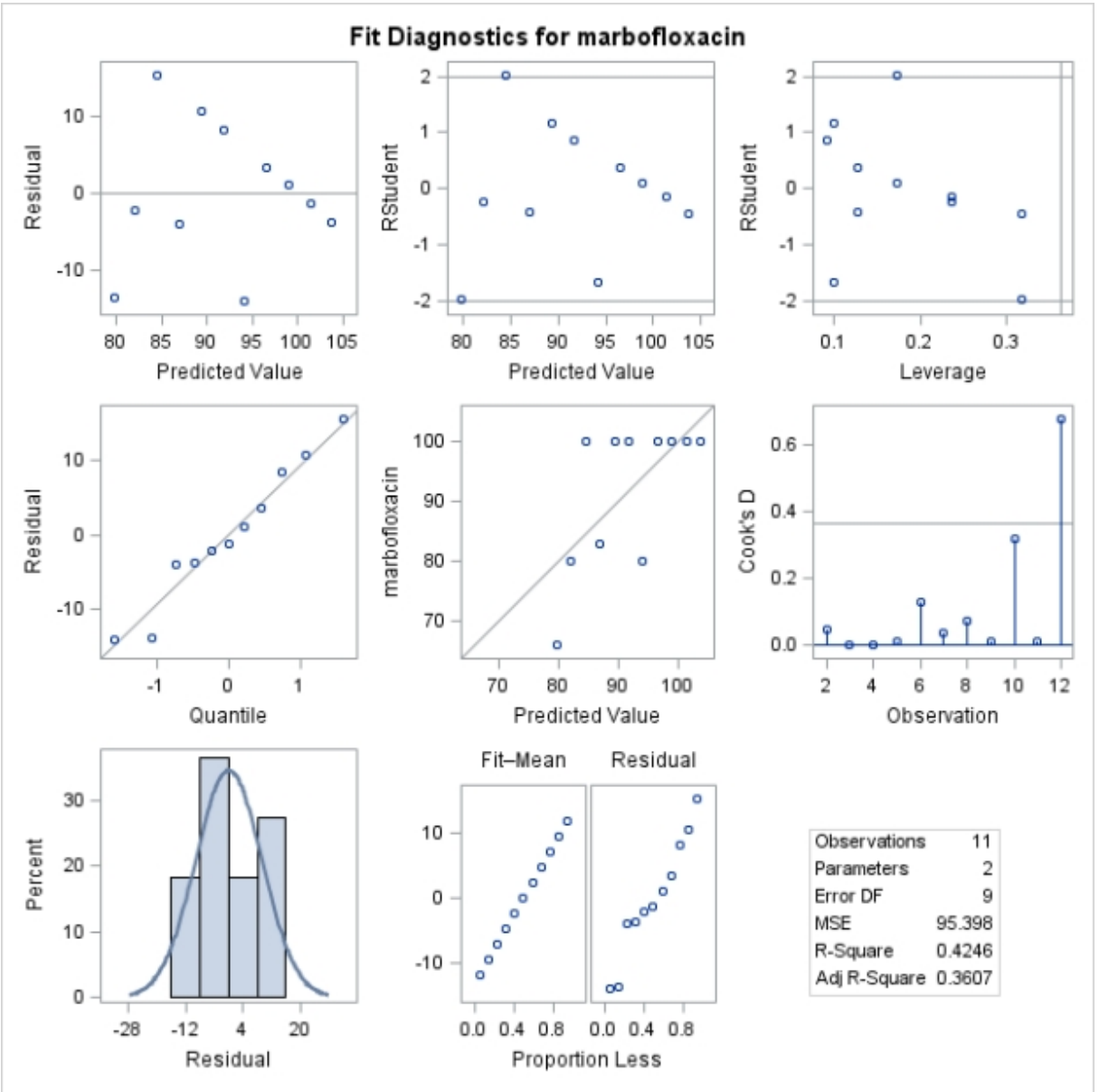
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 633.60000 | 633.60000 | 6.64 | 0.0298 |
| Error | 9 | 858.58182 | 95.39798 | | |
| Corrected Total | 10 | 1492.18182 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 9.76719 | R-Square | 0.4246 |
| Dependent Mean | 91.72727 | Adj R-Sq | 0.3607 |
| Coeff Var | 10.64808 | | |

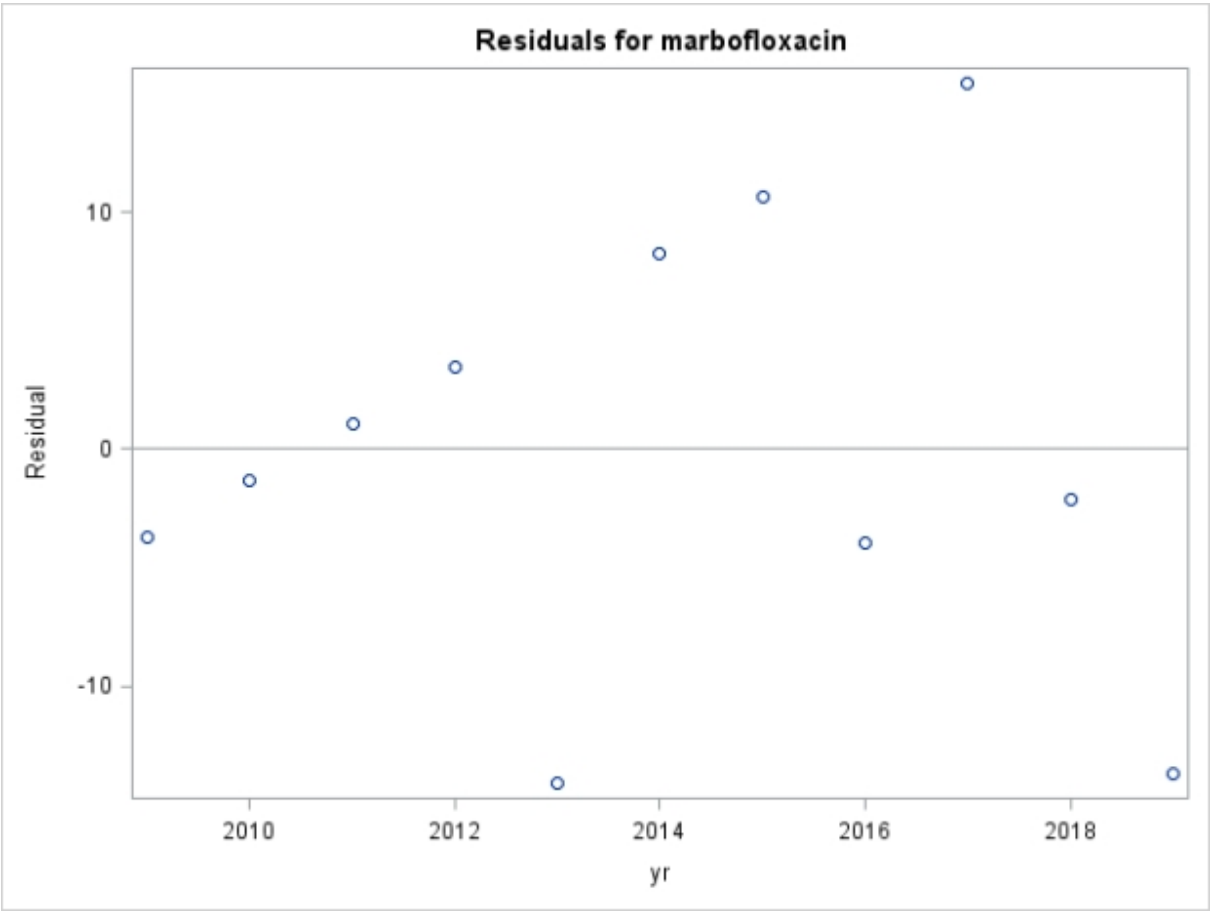
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 4925.32727 | 1875.56987 | 2.63 | 0.0275 |
| yr | 1 | -2.40000 | 0.93126 | -2.58 | 0.0298 |

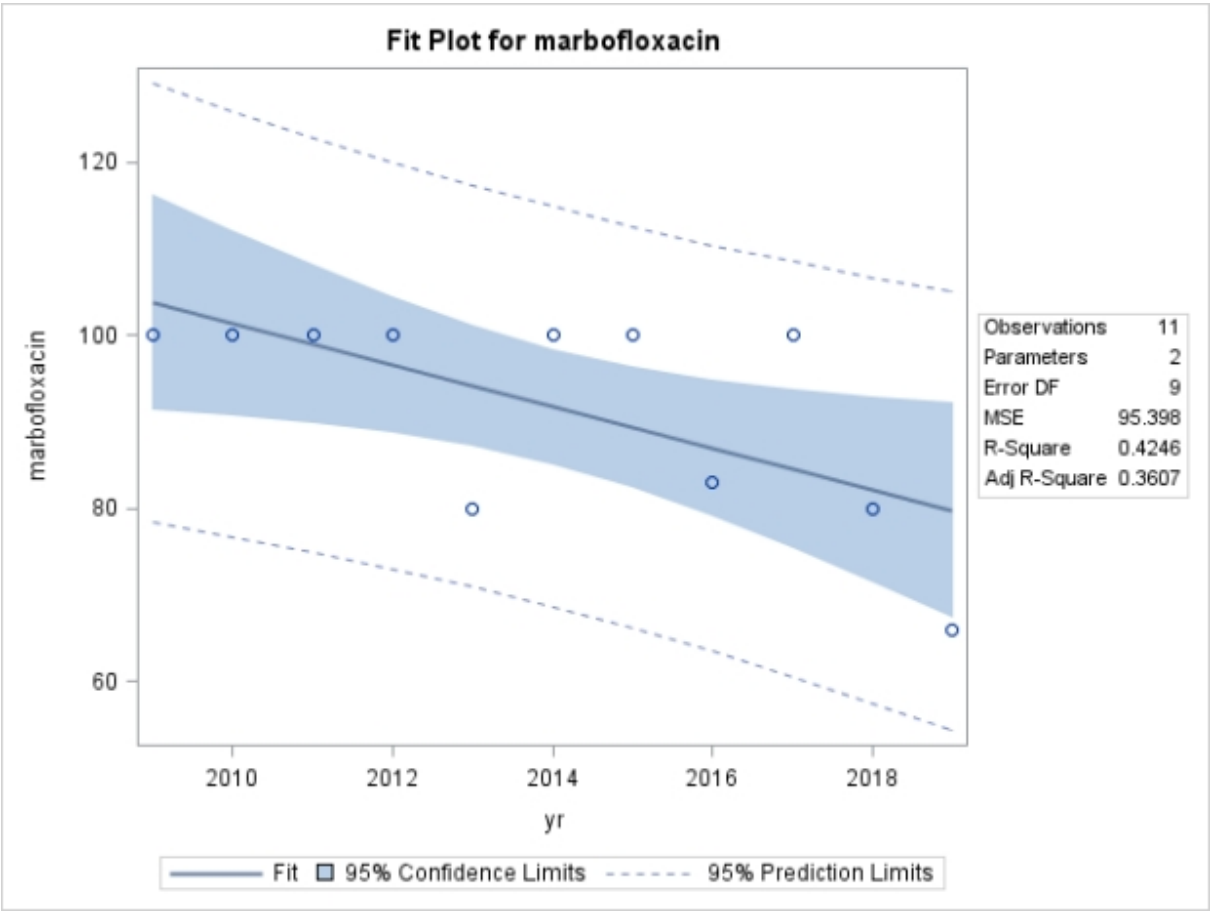
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



## The UNIVARIATE Procedure
## Variable: marbofloxacinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 11 | Sum Weights | 11 |
| Mean | -0.0278216 | Sum Observations | -0.3060371 |
| Std Deviation | 1.1566295 | Variance | 1.33779179 |
| Skewness | -0.0435708 | Kurtosis | 0.05319282 |
| Uncorrected SS | 13.3864323 | Corrected SS | 13.3779179 |
| Coeff Variation | -4157.3143 | Std Error Mean | 0.34873691 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.02782 | Std Deviation | 1.15663 |
| Median | -0.14681 | Variance | 1.33779 |
| Mode | . | Range | 3.96553 |
| | | Interquartile Range | 1.31784 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.07978 | Pr > \|t\| | 0.9380 |
| Sign | M | -0.5 | Pr >= \|M\| | 1.0000 |
| Signed Rank | S | -2 | Pr >= \|S\| | 0.8984 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.967036 | Pr < W | 0.8551 |
| Kolmogorov-Smirnov | D | 0.178647 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.038118 | Pr > W-Sq | >0.2500 |
| Anderson-Darling | A-Sq | 0.235038 | Pr > A-Sq | >0.2500 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 2.016780 |
| 99% | 2.016780 |
| 95% | 2.016780 |
| 90% | 1.176084 |
| 75% Q3 | 0.876851 |
| 50% Median | -0.146810 |
| 25% Q1 | -0.440988 |
| 10% | -1.669058 |
| 5% | -1.948752 |
| 1% | -1.948752 |
| 0% Min | -1.948752 |

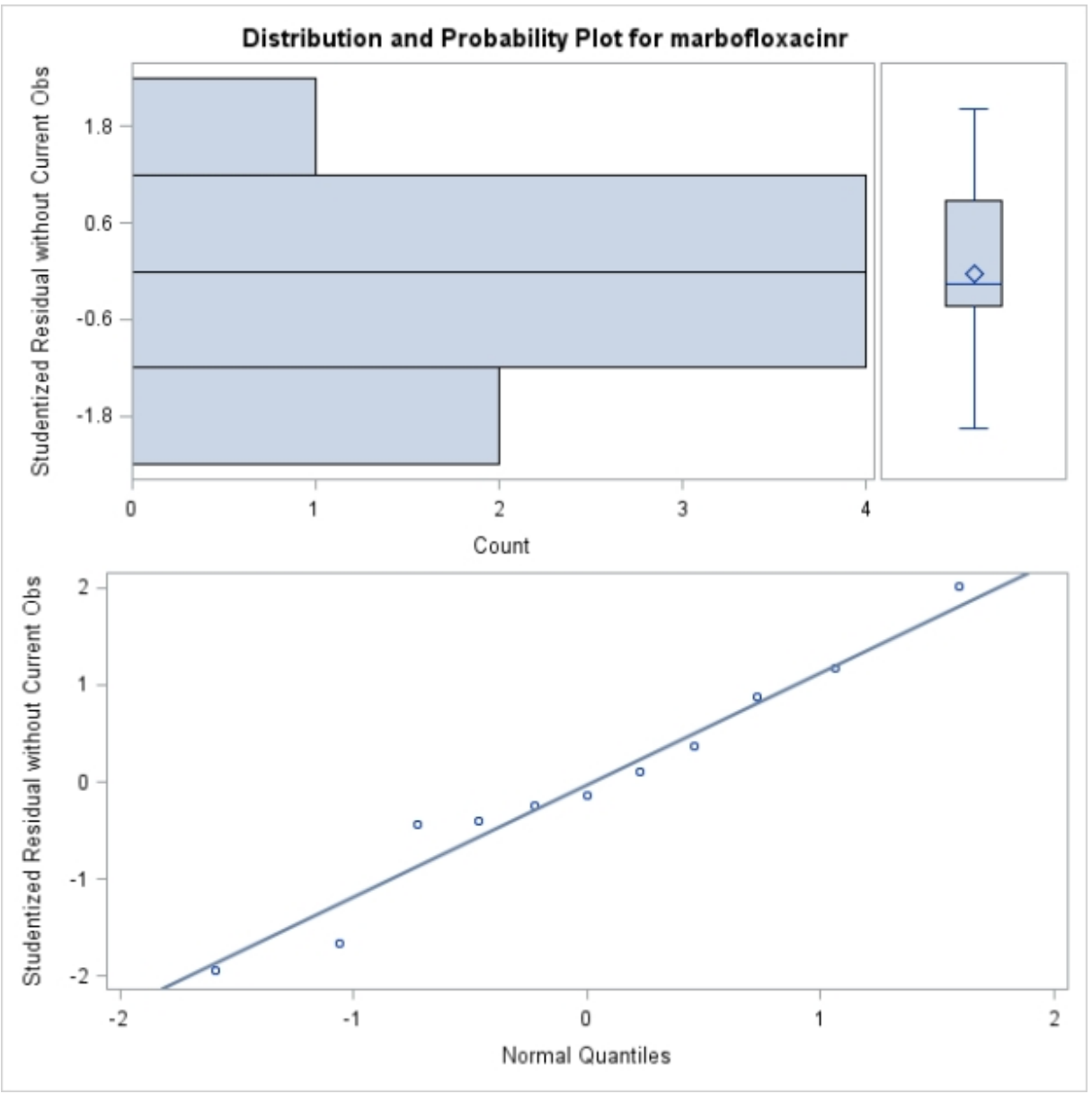
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -1.948752 | 12 | 0.113939 | 4 |
| -1.669058 | 6 | 0.361750 | 5 |
| -0.440988 | 2 | 0.876851 | 7 |

**The UNIVARIATE Procedure**
**Variable: marbofloxacinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.410036 | 9 | 1.176084 | 8 |
| -0.235797 | 11 | 2.016780 | 10 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 1 | 8.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: marbofloxacinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 11 |
| Number of Observations with Missing Values | 1 |

**Analysis of Variance**

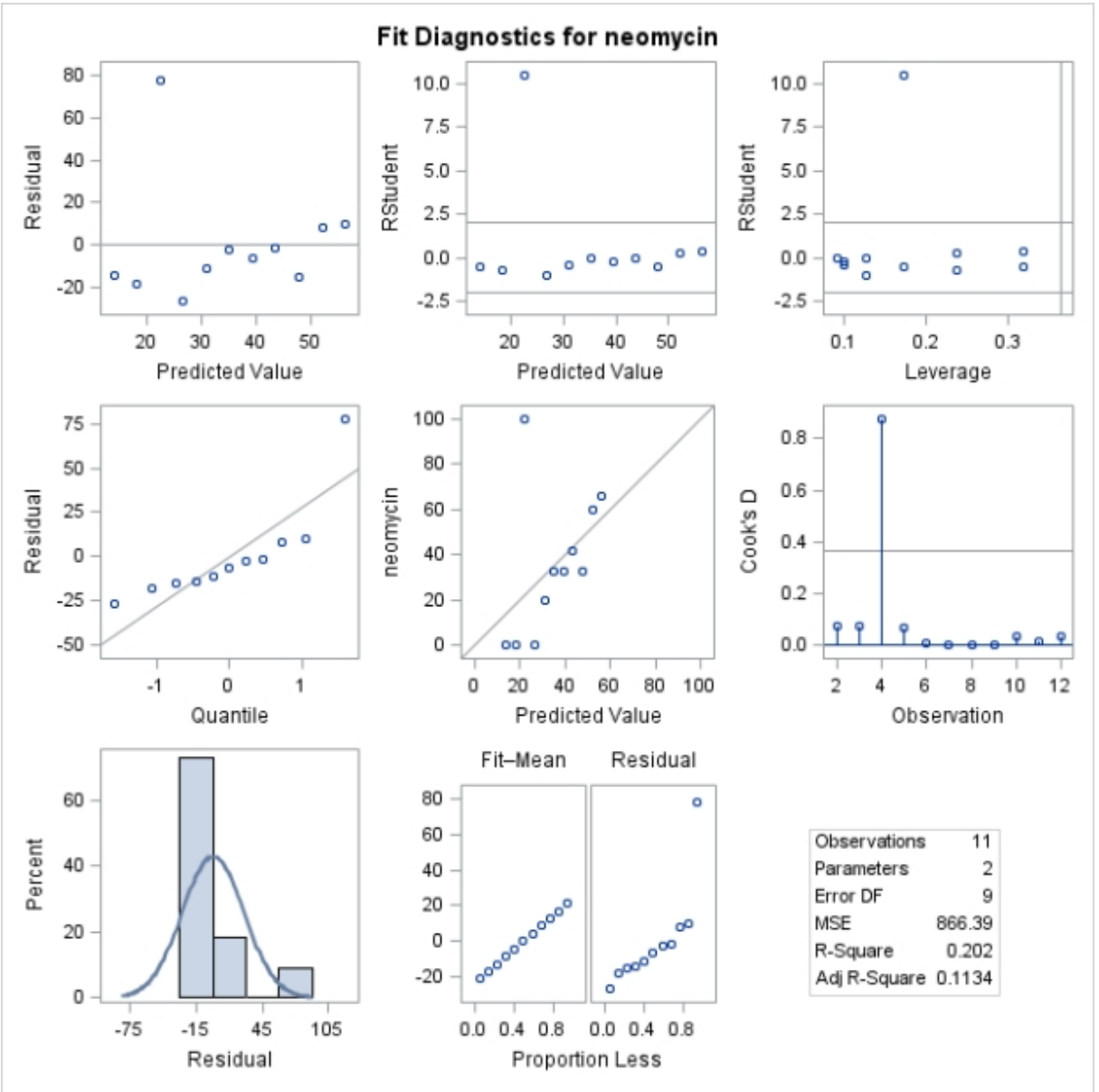
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 1974.14545 | 1974.14545 | 2.28 | 0.1654 |
| Error | 9 | 7797.49091 | 866.38788 | | |
| Corrected Total | 10 | 9771.63636 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 29.43447 | R-Square | 0.2020 |
| Dependent Mean | 35.18182 | Adj R-Sq | 0.1134 |
| Coeff Var | 83.66386 | | |

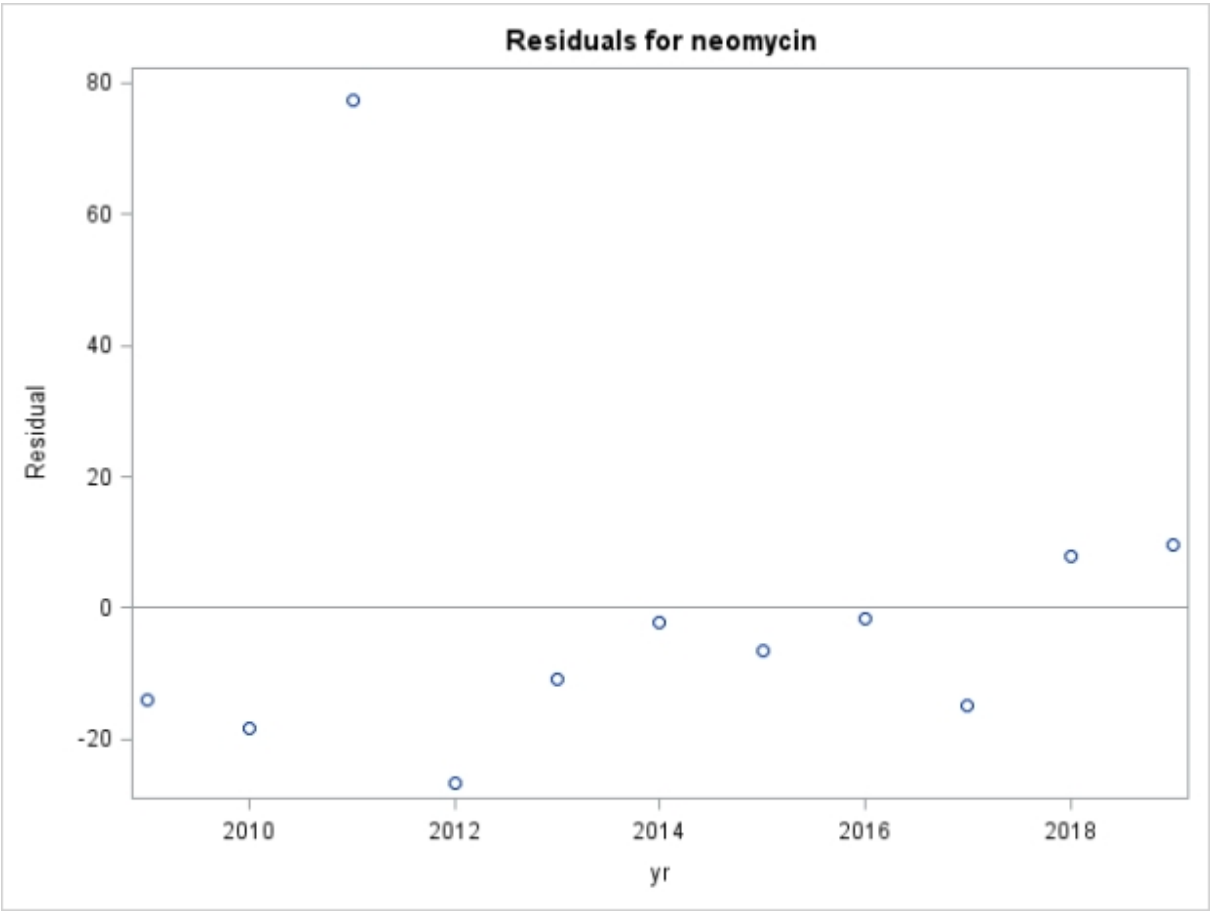
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -8496.85455 | 5652.23022 | -1.50 | 0.1670 |
| yr | 1 | 4.23636 | 2.80647 | 1.51 | 0.1654 |

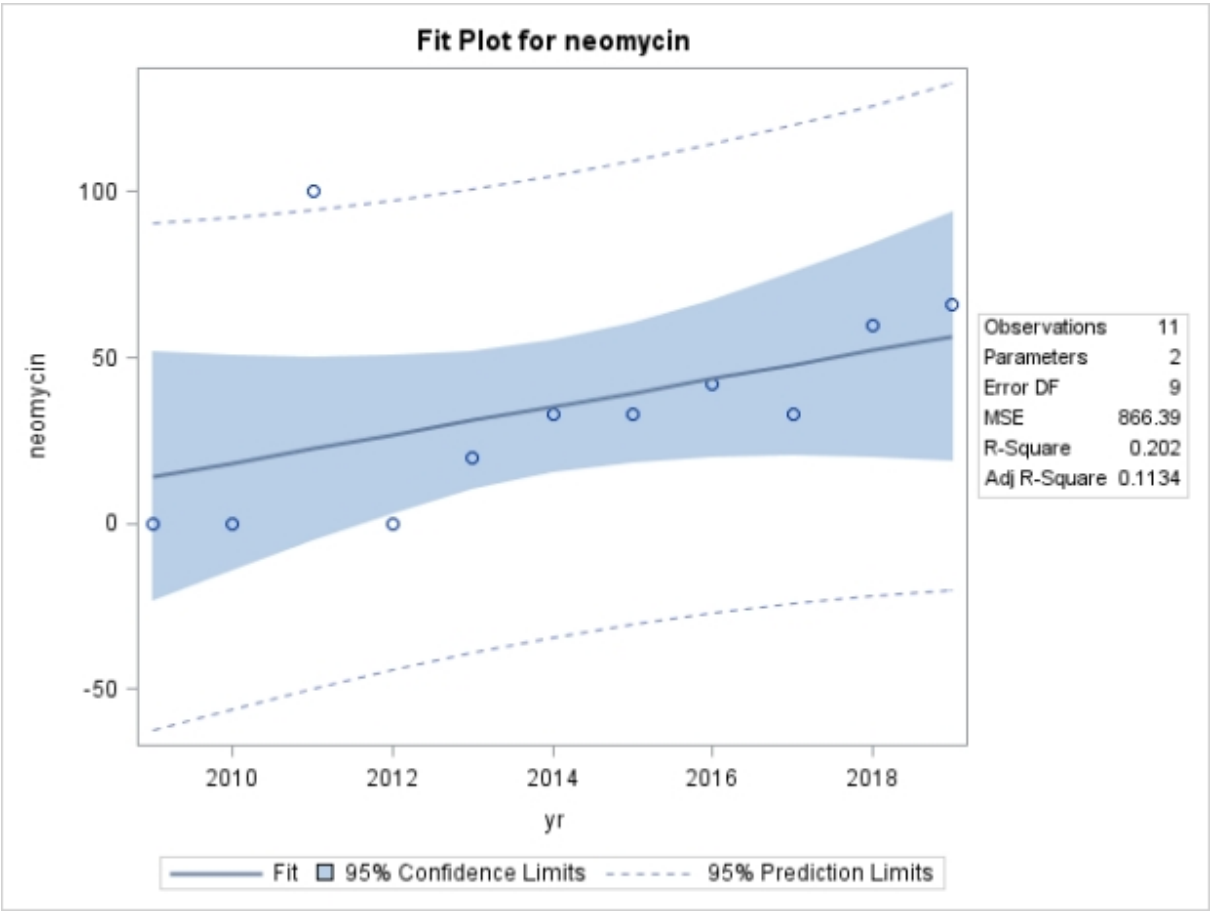
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**



## The UNIVARIATE Procedure
## Variable: neomycinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 11 | Sum Weights | 11 |
| Mean | 0.69599053 | Sum Observations | 7.65589578 |
| Std Deviation | 3.2608609 | Variance | 10.6332138 |
| Skewness | 3.22343727 | Kurtosis | 10.5513427 |
| Uncorrected SS | 111.660569 | Corrected SS | 106.332138 |
| Coeff Variation | 468.520875 | Std Error Mean | 0.98318655 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | 0.69599 | Std Deviation | 3.26086 |
| Median | -0.21734 | Variance | 10.63321 |
| Mode | . | Range | 11.41962 |
| | | Interquartile Range | 0.84346 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | 0.707893 | Pr > \|t\| | 0.4952 |
| Sign | M | -2.5 | Pr >= \|M\| | 0.2266 |
| Signed Rank | S | -12 | Pr >= \|S\| | 0.3203 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.46454 | Pr < W | <0.0001 |
| Kolmogorov-Smirnov | D | 0.448041 | Pr > D | <0.0100 |
| Cramer-von Mises | W-Sq | 0.521033 | Pr > W-Sq | <0.0050 |
| Anderson-Darling | A-Sq | 2.658058 | Pr > A-Sq | <0.0050 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 10.451714 |
| 99% | 10.451714 |
| 95% | 10.451714 |
| 90% | 0.377114 |
| 75% Q3 | 0.290083 |
| 50% Median | -0.217339 |
| 25% Q1 | -0.553373 |
| 10% | -0.687927 |
| 5% | -0.967909 |
| 1% | -0.967909 |
| 0% Min | -0.967909 |

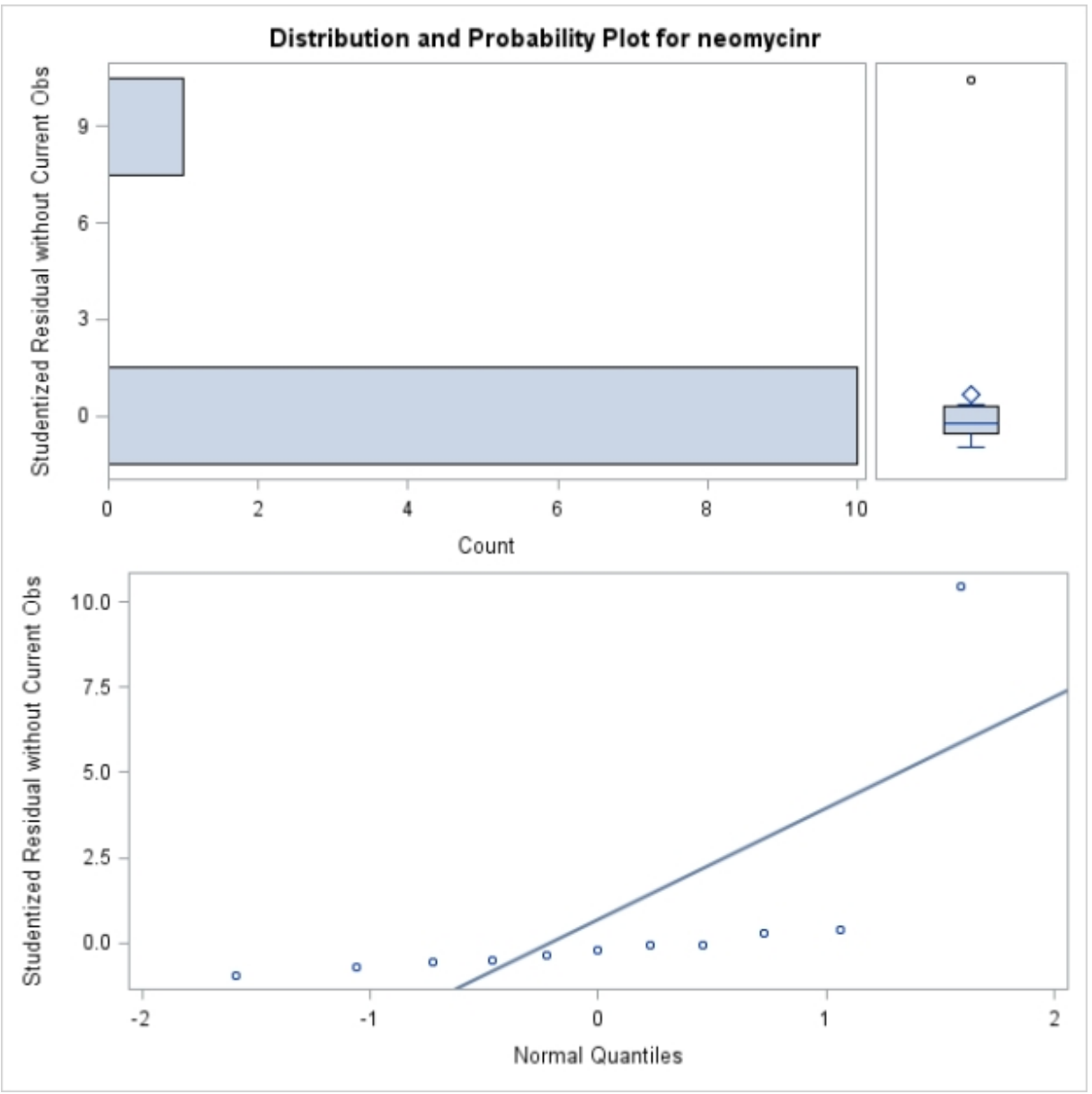
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.967909 | 5 | -0.0733210 | 7 |
| -0.687927 | 3 | -0.0567407 | 9 |
| -0.553373 | 2 | 0.2900825 | 11 |

**The UNIVARIATE Procedure**
**Variable: neomycinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.533654 | 10 | 0.3771141 | 12 |
| -0.372751 | 6 | 10.4517142 | 4 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 1 | 8.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: neomycinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 11 |
| Number of Observations with Missing Values | 1 |

**Analysis of Variance**

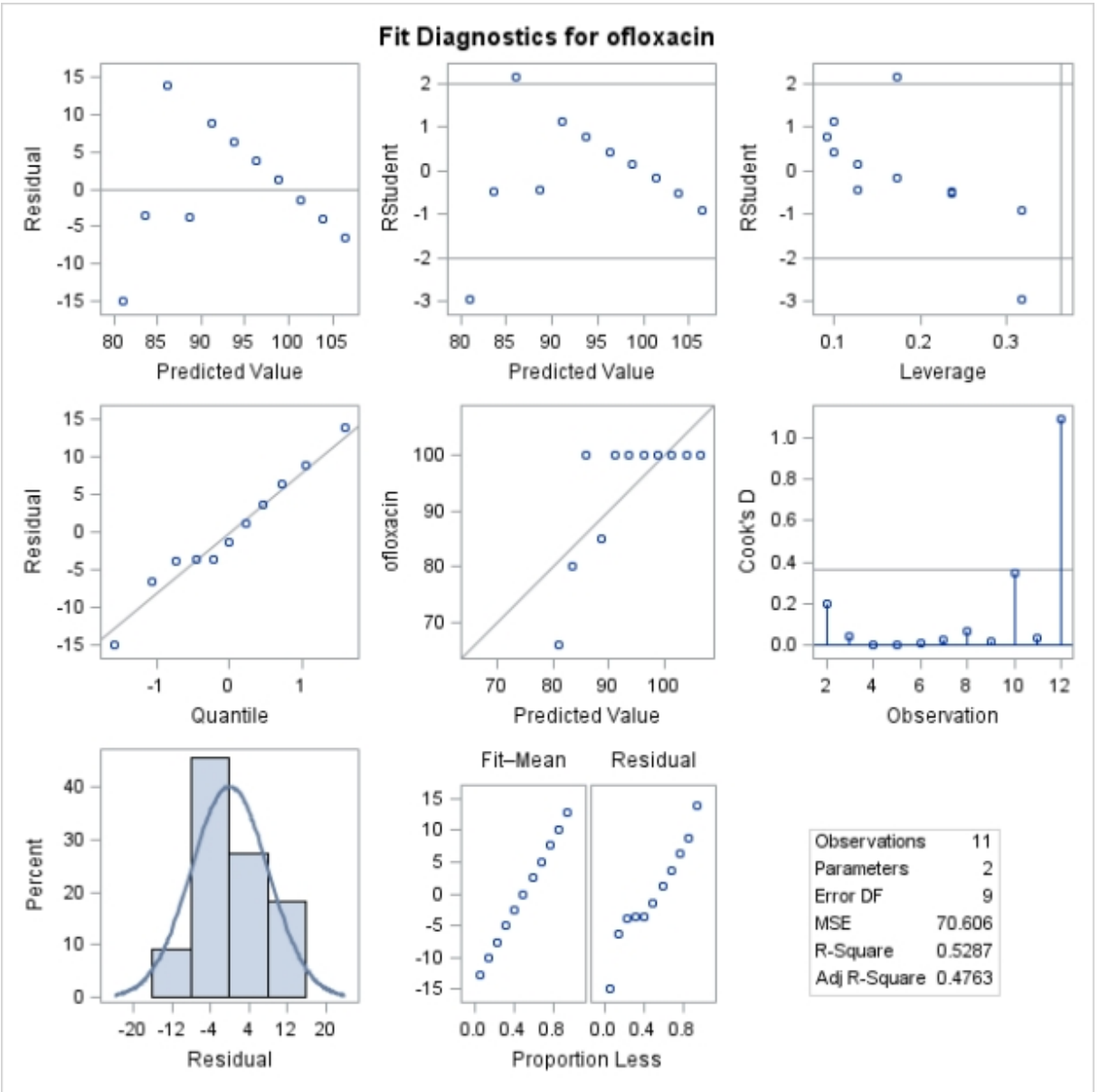
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 712.72727 | 712.72727 | 10.09 | 0.0112 |
| Error | 9 | 635.45455 | 70.60606 | | |
| Corrected Total | 10 | 1348.18182 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 8.40274 | R-Square | 0.5287 |
| Dependent Mean | 93.72727 | Adj R-Sq | 0.4763 |
| Coeff Var | 8.96510 | | |

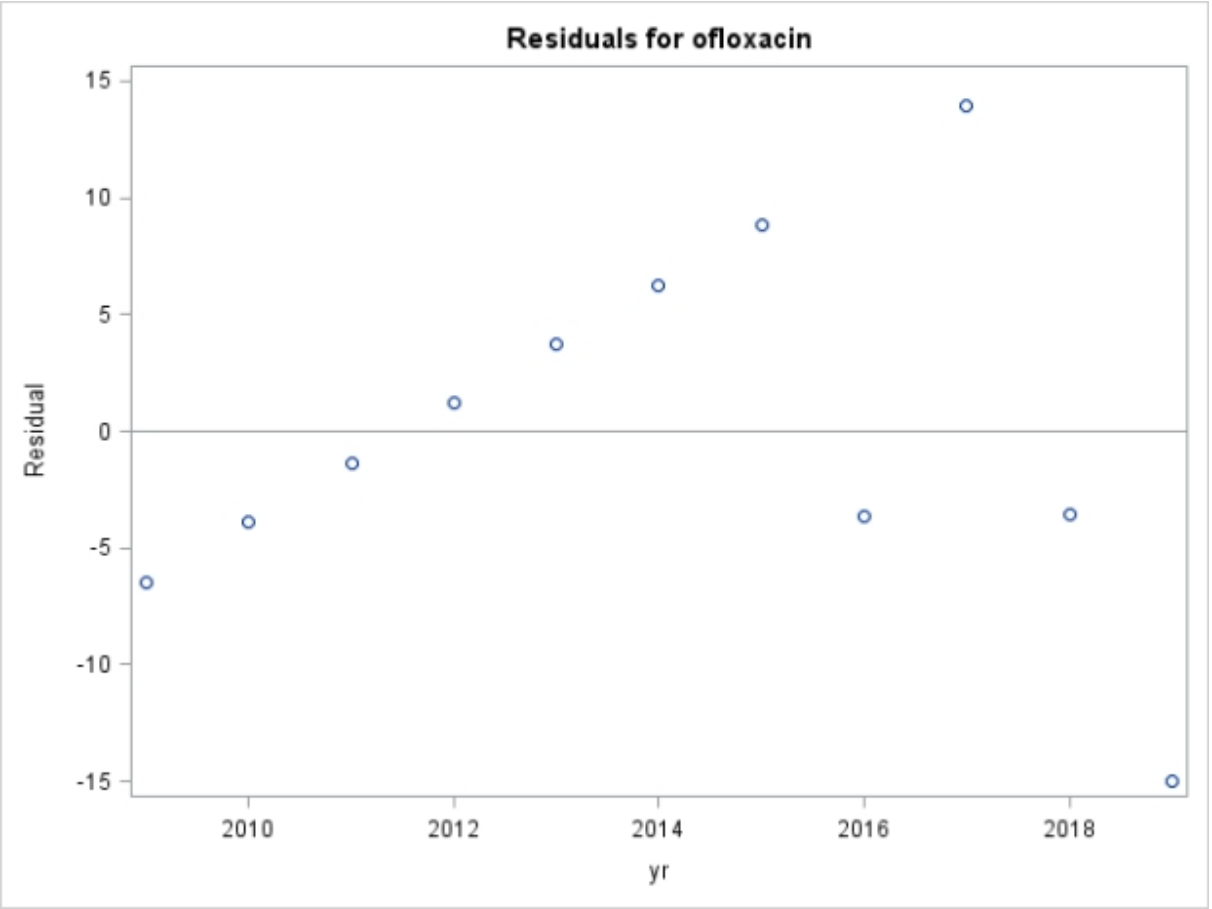
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 5220.27273 | 1613.55826 | 3.24 | 0.0102 |
| yr | 1 | -2.54545 | 0.80117 | -3.18 | 0.0112 |

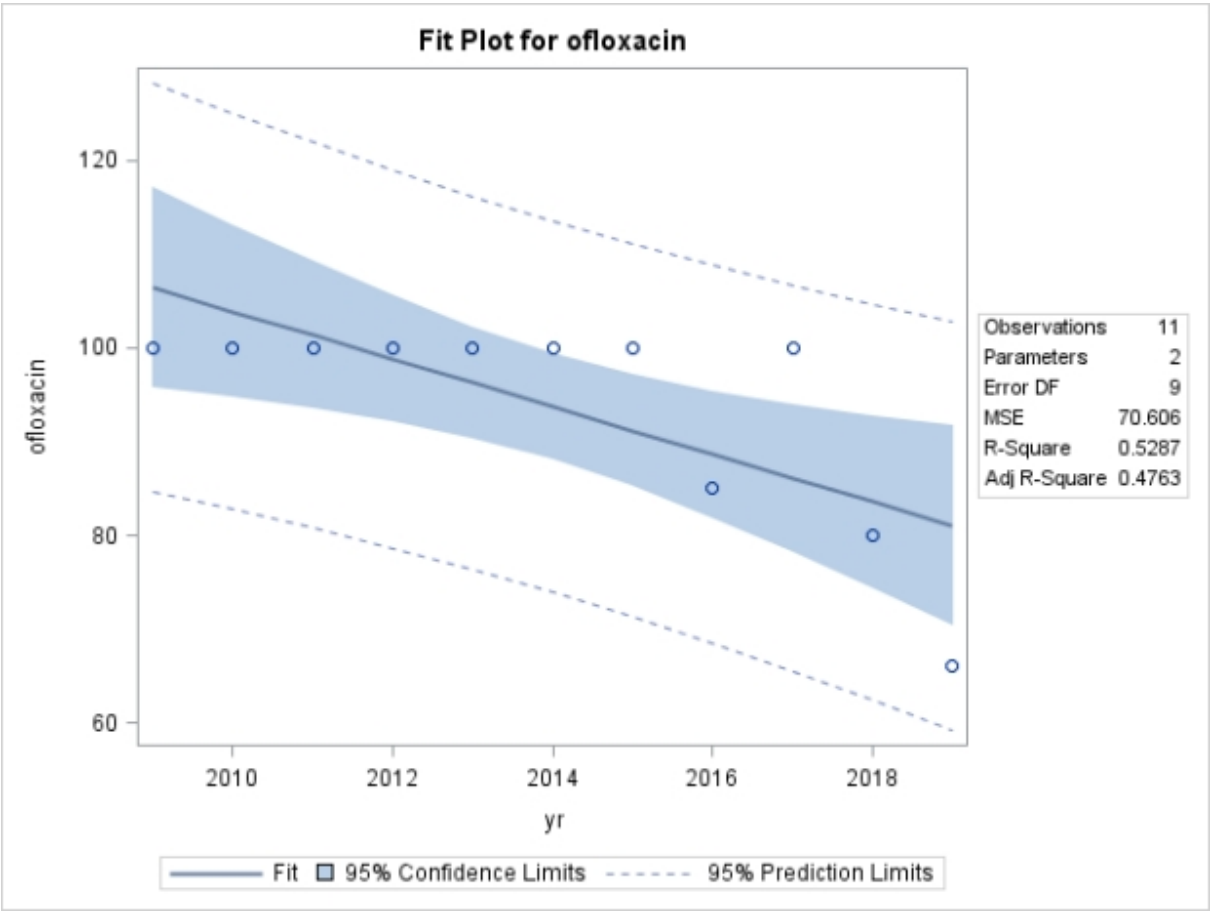
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**



## The UNIVARIATE Procedure
## Variable: ofloxacinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 11 | Sum Weights | 11 |
| Mean | -0.0737096 | Sum Observations | -0.8108053 |
| Std Deviation | 1.29816574 | Variance | 1.6852343 |
| Skewness | -0.6021965 | Kurtosis | 1.99923937 |
| Uncorrected SS | 16.9121071 | Corrected SS | 16.852343 |
| Coeff Variation | -1761.1902 | Std Error Mean | 0.3914117 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.07371 | Std Deviation | 1.29817 |
| Median | -0.16852 | Variance | 1.68523 |
| Mode | . | Range | 5.09823 |
| | | Interquartile Range | 1.27468 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.18832 | Pr > \|t\| | 0.8544 |
| Sign | M | -0.5 | Pr >= \|M\| | 1.0000 |
| Signed Rank | S | -2 | Pr >= \|S\| | 0.8984 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.94553 | Pr < W | 0.5875 |
| Kolmogorov-Smirnov | D | 0.186582 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.052505 | Pr > W-Sq | >0.2500 |
| Anderson-Darling | A-Sq | 0.344055 | Pr > A-Sq | >0.2500 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 2.158358 |
| 99% | 2.158358 |
| 95% | 2.158358 |
| 90% | 1.122006 |
| 75% Q3 | 0.764669 |
| 50% Median | -0.168518 |
| 25% Q1 | -0.510015 |
| 10% | -0.922545 |
| 5% | -2.939874 |
| 1% | -2.939874 |
| 0% Min | -2.939874 |

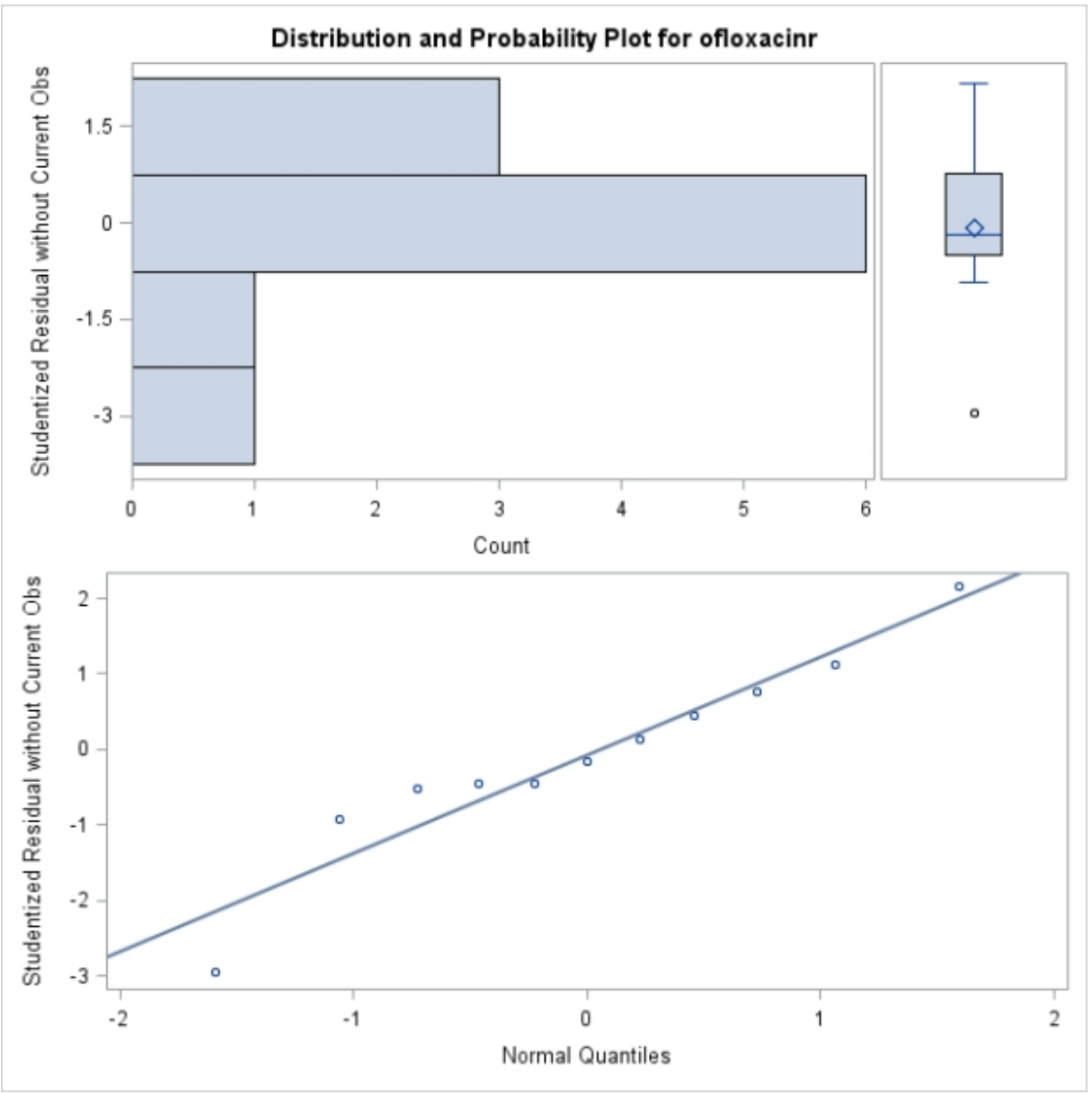
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -2.939874 | 12 | 0.142122 | 5 |
| -0.922545 | 2 | 0.446285 | 6 |
| -0.510015 | 3 | 0.764669 | 7 |

**The UNIVARIATE Procedure**
**Variable: ofloxacinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.461244 | 11 | 1.122006 | 8 |
| -0.442050 | 9 | 2.158358 | 10 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 1 | 8.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: ofloxacinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 12 |

**Analysis of Variance**

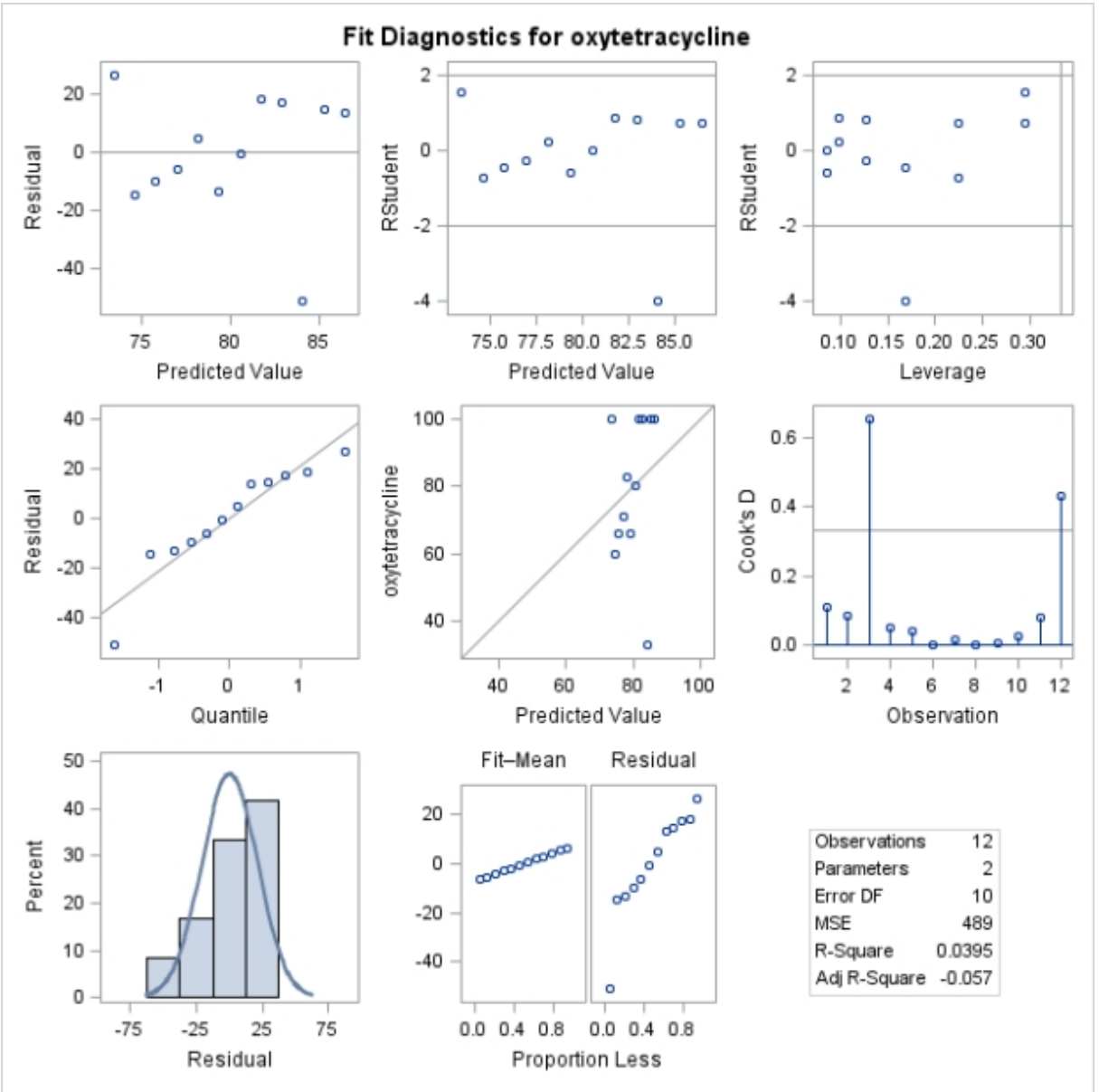
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 200.91084 | 200.91084 | 0.41 | 0.5359 |
| Error | 10 | 4890.00583 | 489.00058 | | |
| Corrected Total | 11 | 5090.91667 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 22.11336 | R-Square | 0.0395 |
| Dependent Mean | 79.91667 | Adj R-Sq | -0.0566 |
| Coeff Var | 27.67052 | | |

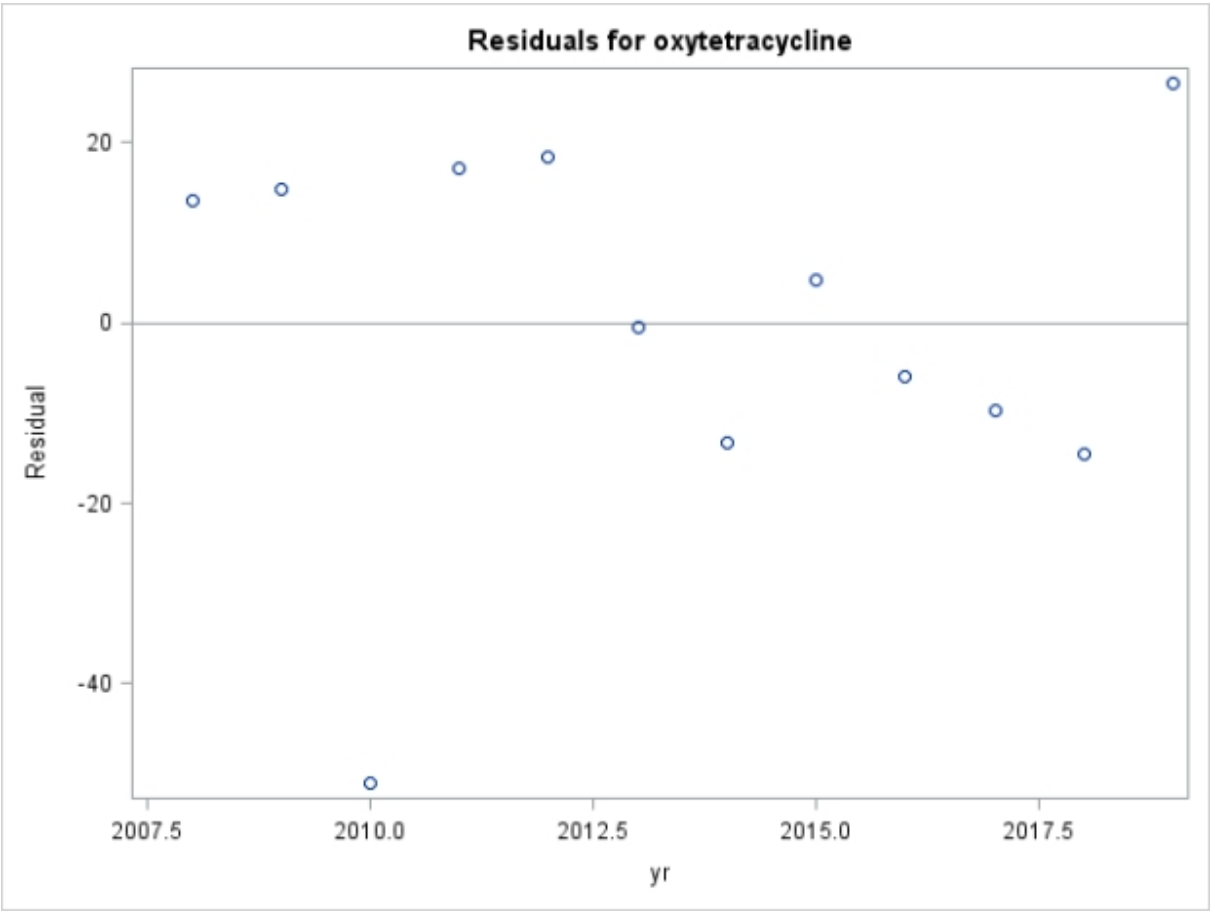
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 2466.54779 | 3723.39355 | 0.66 | 0.5227 |
| yr | 1 | -1.18531 | 1.84921 | -0.64 | 0.5359 |

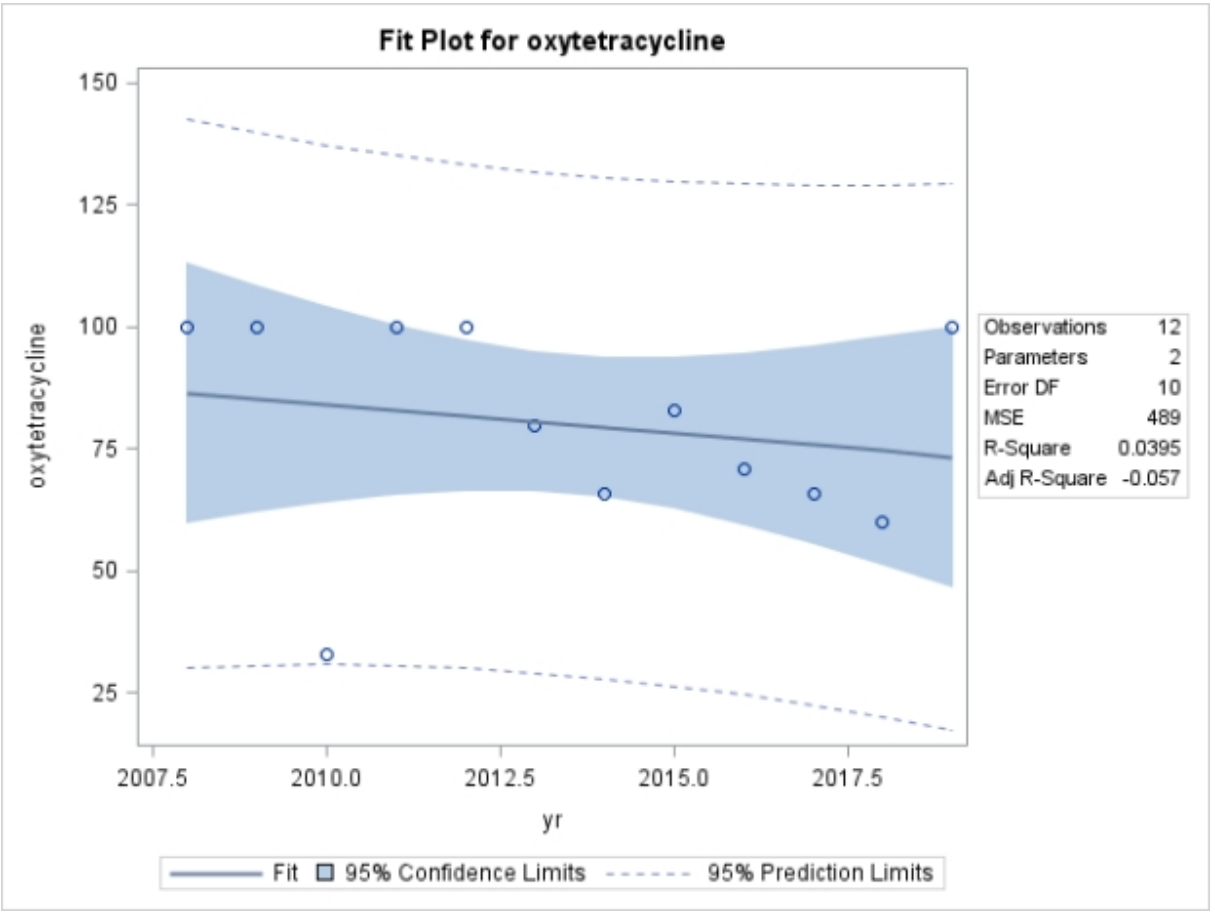
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



## The UNIVARIATE Procedure
## Variable: oxytetracycliner (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 12 | Sum Weights | 12 |
| Mean | -0.1038321 | Sum Observations | -1.2459855 |
| Std Deviation | 1.41491043 | Variance | 2.00197154 |
| Skewness | -2.0444286 | Kurtosis | 5.55160055 |
| Uncorrected SS | 22.1510603 | Corrected SS | 22.0216869 |
| Coeff Variation | -1362.6904 | Std Error Mean | 0.40844946 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.10383 | Std Deviation | 1.41491 |
| Median | 0.09873 | Variance | 2.00197 |
| Mode | . | Range | 5.53944 |
| | | Interquartile Range | 1.31494 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.25421 | Pr > \|t\| | 0.8040 |
| Sign | M | 0 | Pr >= \|M\| | 1.0000 |
| Signed Rank | S | 7 | Pr >= \|S\| | 0.6221 |

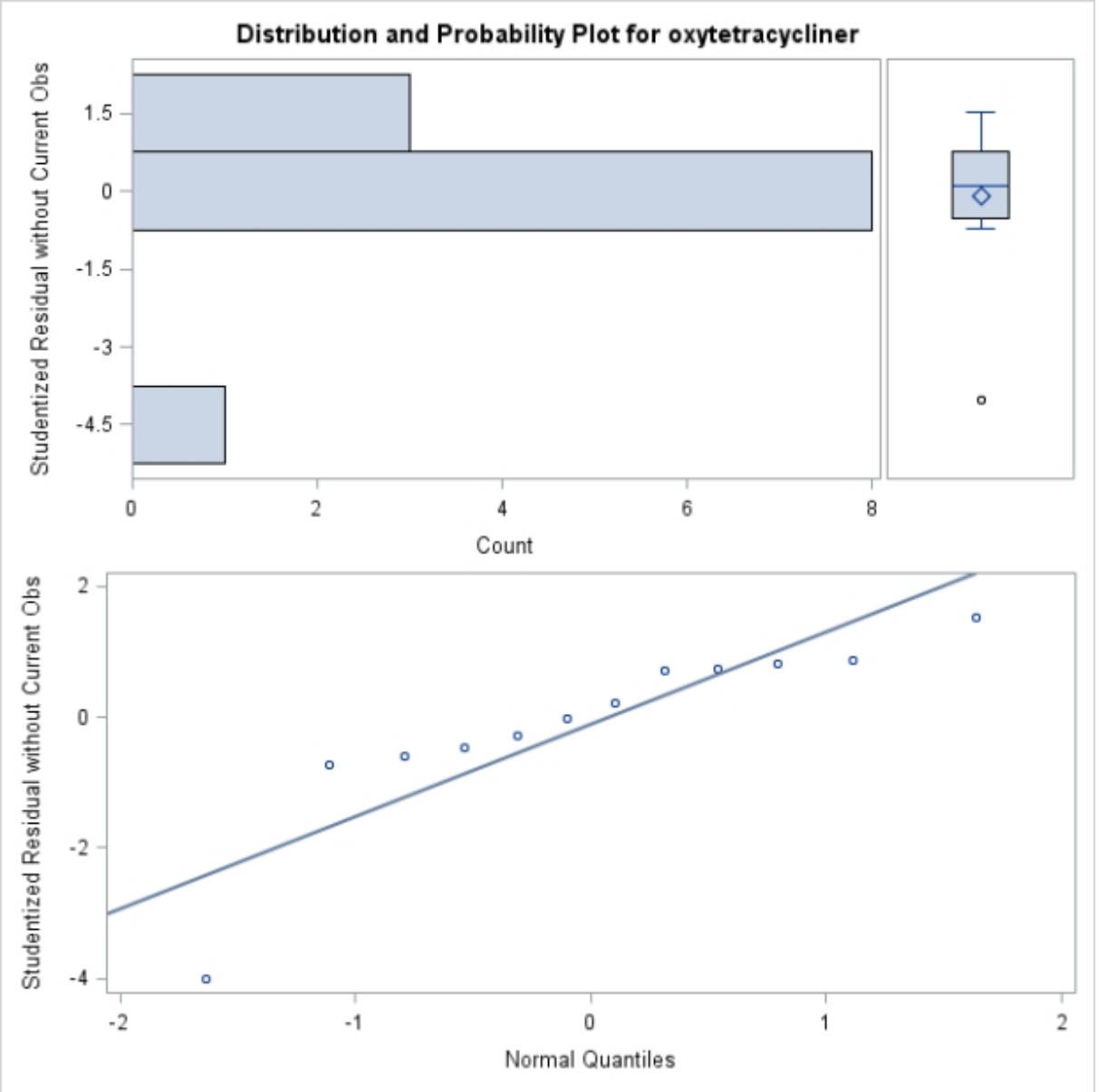
| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.795755 | Pr < W | 0.0084 |
| Kolmogorov-Smirnov | D | 0.245345 | Pr > D | 0.0447 |
| Cramer-von Mises | W-Sq | 0.130452 | Pr > W-Sq | 0.0388 |
| Anderson-Darling | A-Sq | 0.877153 | Pr > A-Sq | 0.0183 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.5245406 |
| 99% | 1.5245406 |
| 95% | 1.5245406 |
| 90% | 0.8607496 |
| 75% Q3 | 0.7774295 |
| 50% Median | 0.0987345 |
| 25% Q1 | -0.5375072 |
| 10% | -0.7314388 |
| 5% | -4.0148973 |
| 1% | -4.0148973 |
| 0% Min | -4.0148973 |

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -4.014897 | 3 | 0.712247 | 1 |
| -0.731439 | 11 | 0.740304 | 2 |
| -0.609821 | 7 | 0.814555 | 4 |

**The UNIVARIATE Procedure**
**Variable: oxytetracycliner (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.465193 | 10 | 0.860750 | 5 |
| -0.274501 | 9 | 1.524541 | 12 |



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 2 |
| Number of Observations with Missing Values | 10 |

**Analysis of Variance**

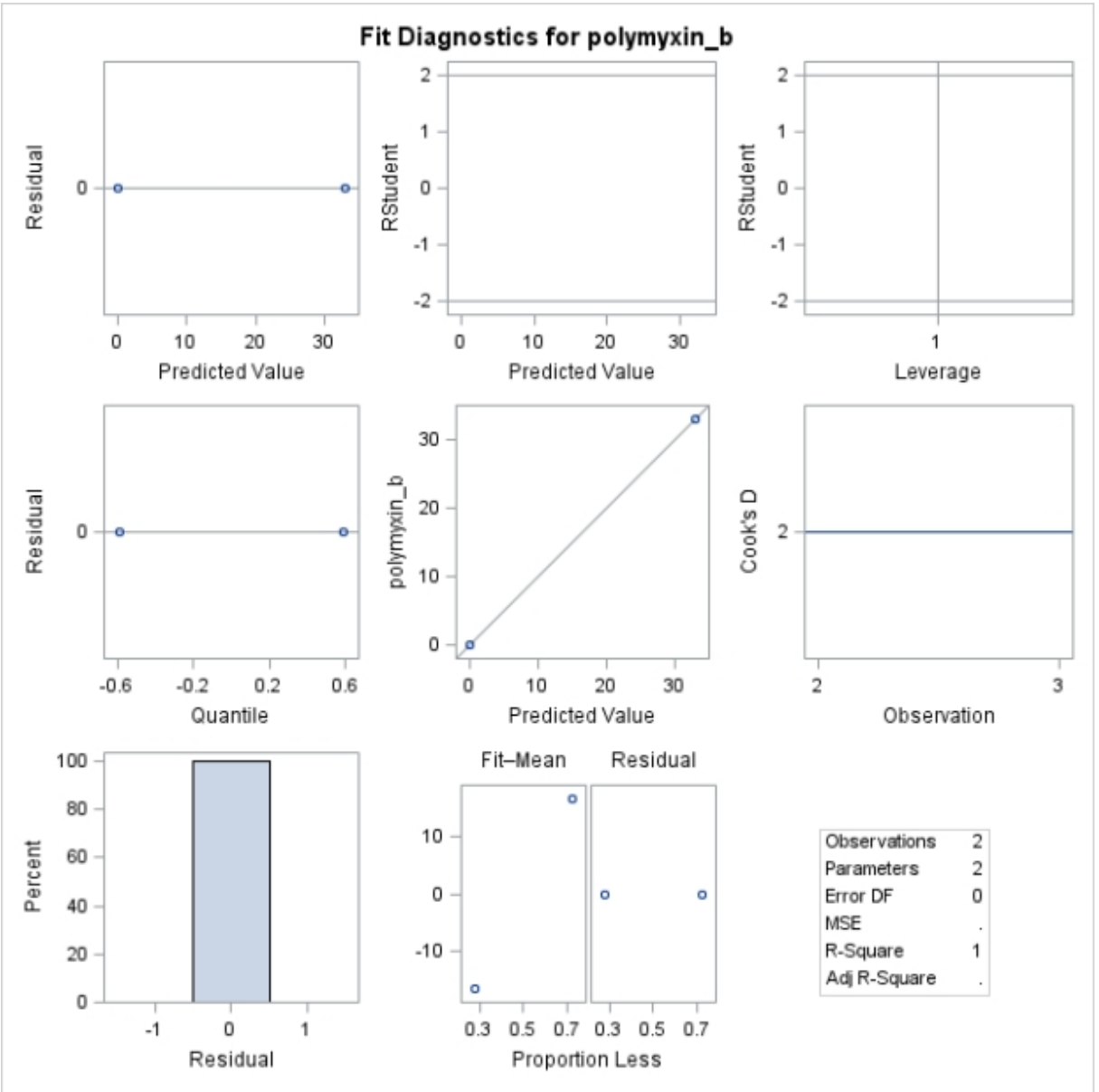
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 544.50000 | 544.50000 | . | . |
| Error | 0 | 0 | . | | |
| Corrected Total | 1 | 544.50000 | | | |

| | | | |
|---|---|---|---|
| Root MSE | . | R-Square | 1.0000 |
| Dependent Mean | 16.50000 | Adj R-Sq | . |
| Coeff Var | . | | |

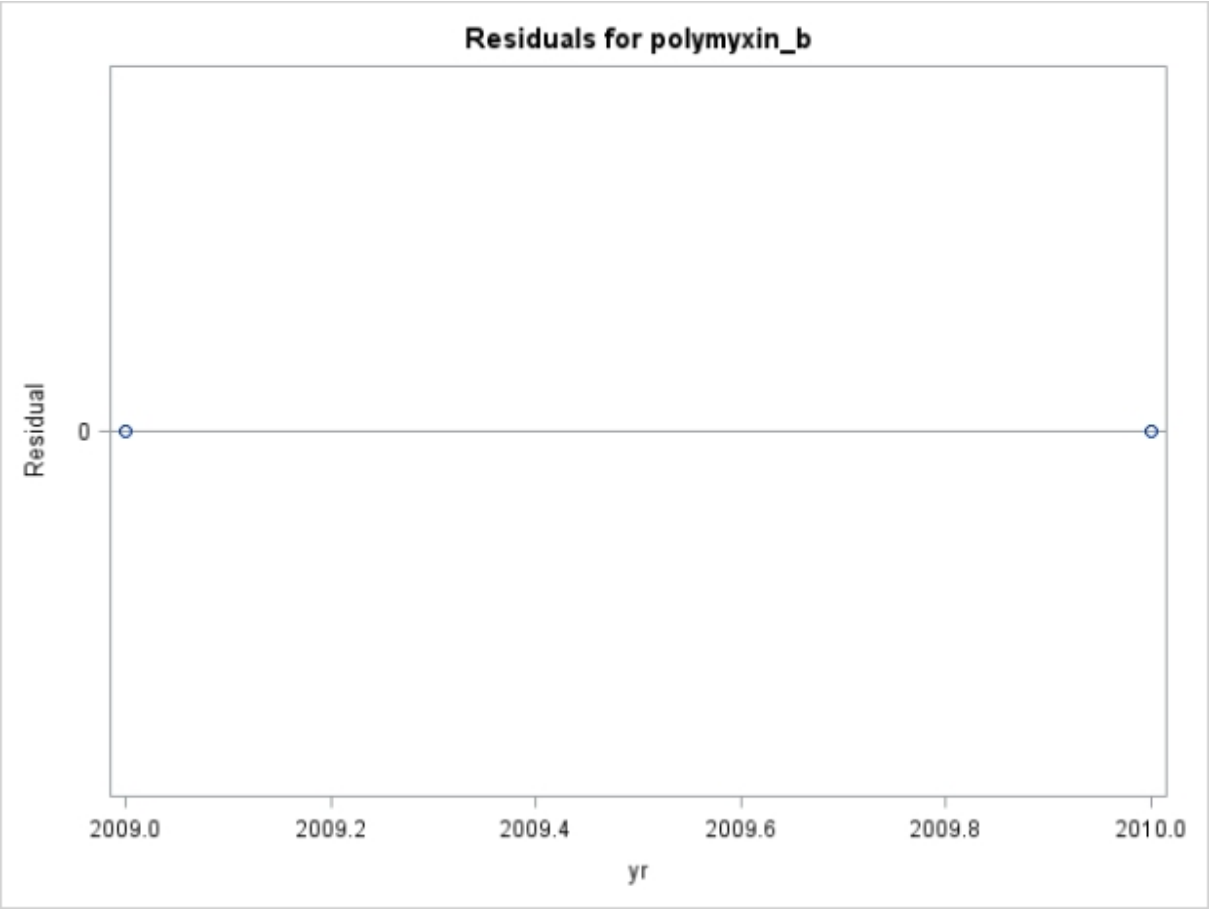
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -66297 | . | . | . |
| yr | 1 | 33.00000 | . | . | . |

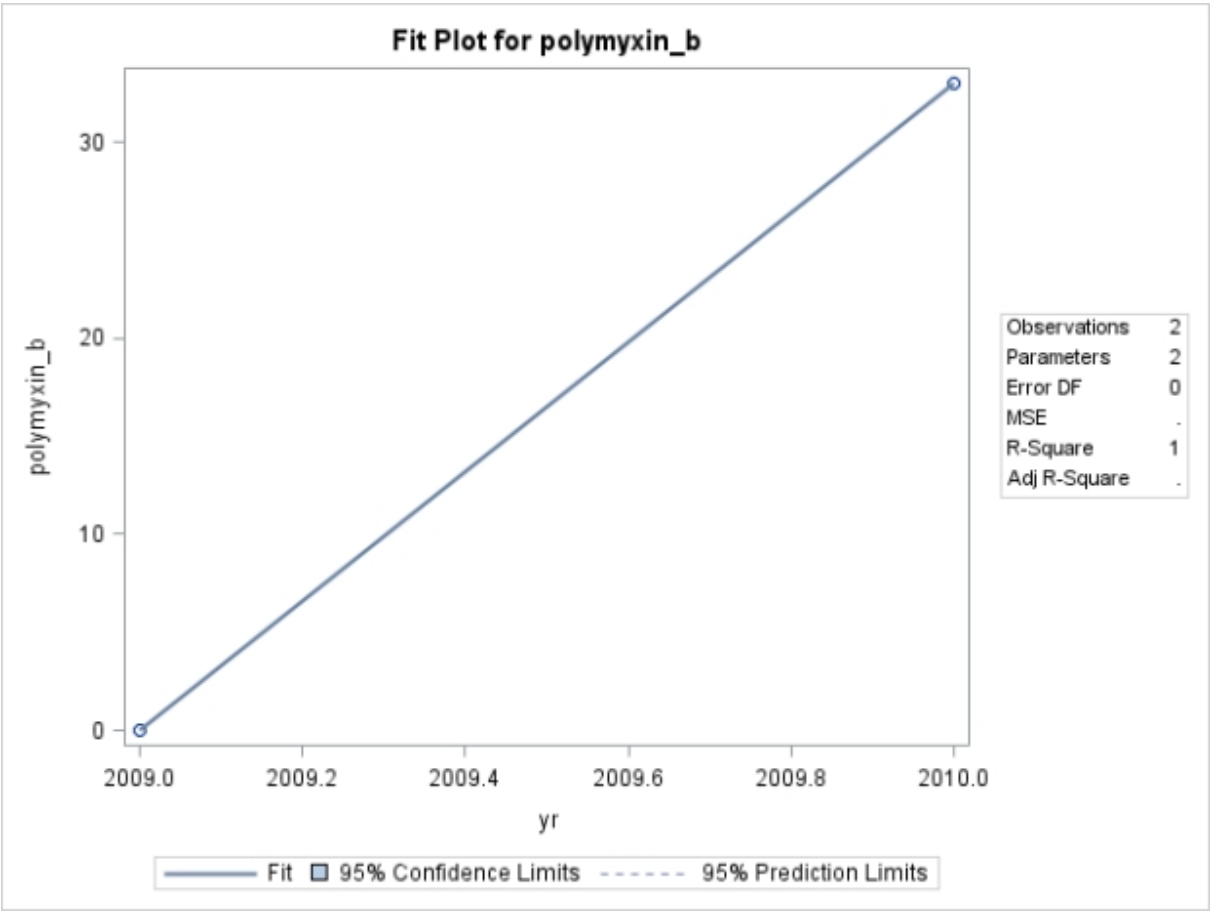
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**



**The UNIVARIATE Procedure**
**Variable: polymyxin_br (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 11 |
| Number of Observations with Missing Values | 1 |

**Analysis of Variance**

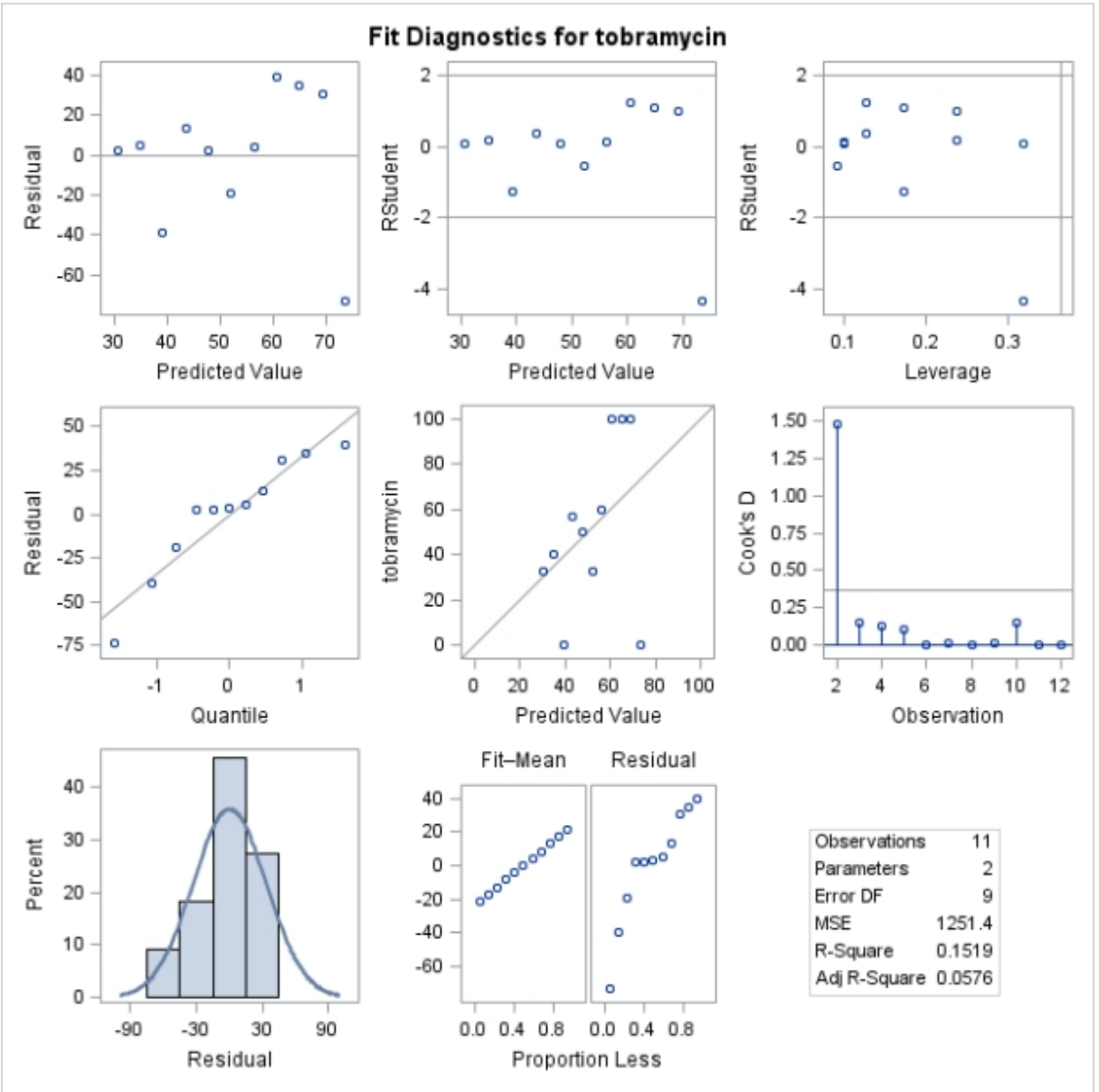
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 2016.73636 | 2016.73636 | 1.61 | 0.2361 |
| Error | 9 | 11262 | 1251.35253 | | |
| Corrected Total | 10 | 13279 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 35.37446 | R-Square | 0.1519 |
| Dependent Mean | 52.09091 | Adj R-Sq | 0.0576 |
| Coeff Var | 67.90909 | | |

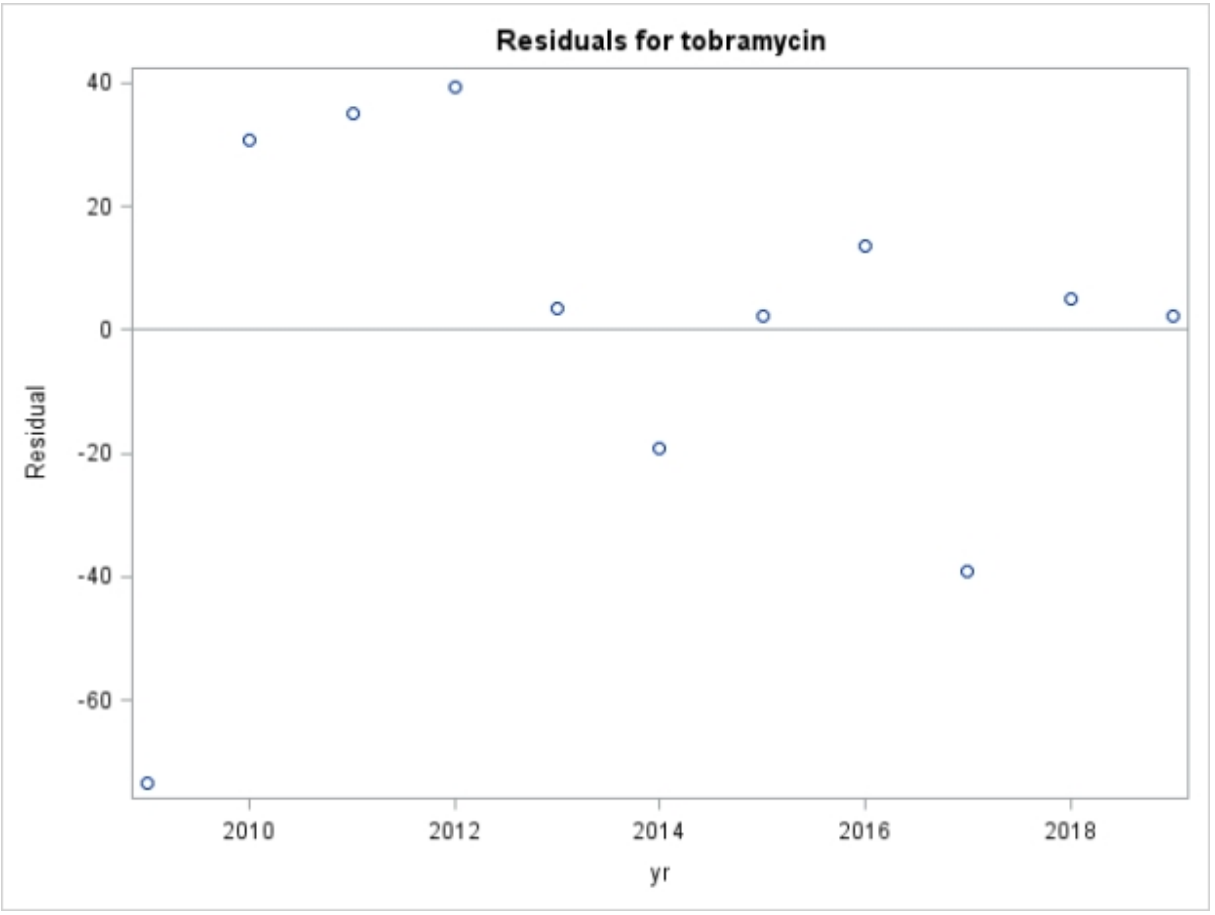
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 8675.67273 | 6792.87302 | 1.28 | 0.2335 |
| yr | 1 | -4.28182 | 3.37282 | -1.27 | 0.2361 |

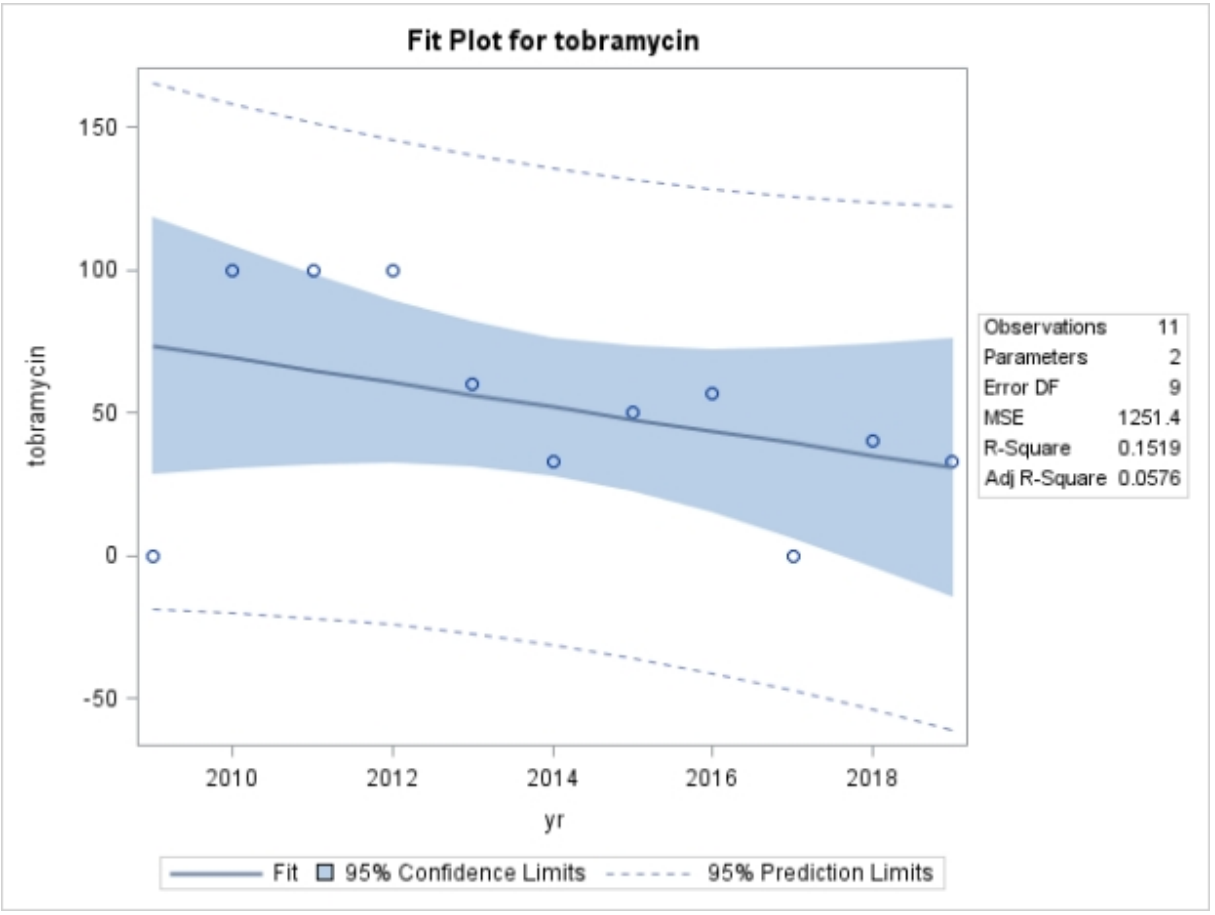
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**



## The UNIVARIATE Procedure
## Variable: tobramycinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 11 | Sum Weights | 11 |
| Mean | -0.1870981 | Sum Observations | -2.0580793 |
| Std Deviation | 1.56125866 | Variance | 2.43752859 |
| Skewness | -2.148525 | Kurtosis | 5.47665879 |
| Uncorrected SS | 24.7603487 | Corrected SS | 24.3752859 |
| Coeff Variation | -834.45982 | Std Error Mean | 0.4707372 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.18710 | Std Deviation | 1.56126 |
| Median | 0.10197 | Variance | 2.43753 |
| Mode | . | Range | 5.58005 |
| | | Interquartile Range | 1.53866 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.39746 | Pr > \|t\| | 0.6994 |
| Sign | M | 2.5 | Pr >= \|M\| | 0.2266 |
| Signed Rank | S | 6 | Pr >= \|S\| | 0.6377 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.761328 | Pr < W | 0.0029 |
| Kolmogorov-Smirnov | D | 0.290545 | Pr > D | <0.0100 |
| Cramer-von Mises | W-Sq | 0.170041 | Pr > W-Sq | 0.0101 |
| Anderson-Darling | A-Sq | 1.012188 | Pr > A-Sq | 0.0074 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.222940 |
| 99% | 1.222940 |
| 95% | 1.222940 |
| 90% | 1.102800 |
| 75% Q3 | 0.995250 |
| 50% Median | 0.101971 |
| 25% Q1 | -0.543410 |
| 10% | -1.258743 |
| 5% | -4.357106 |
| 1% | -4.357106 |
| 0% Min | -4.357106 |

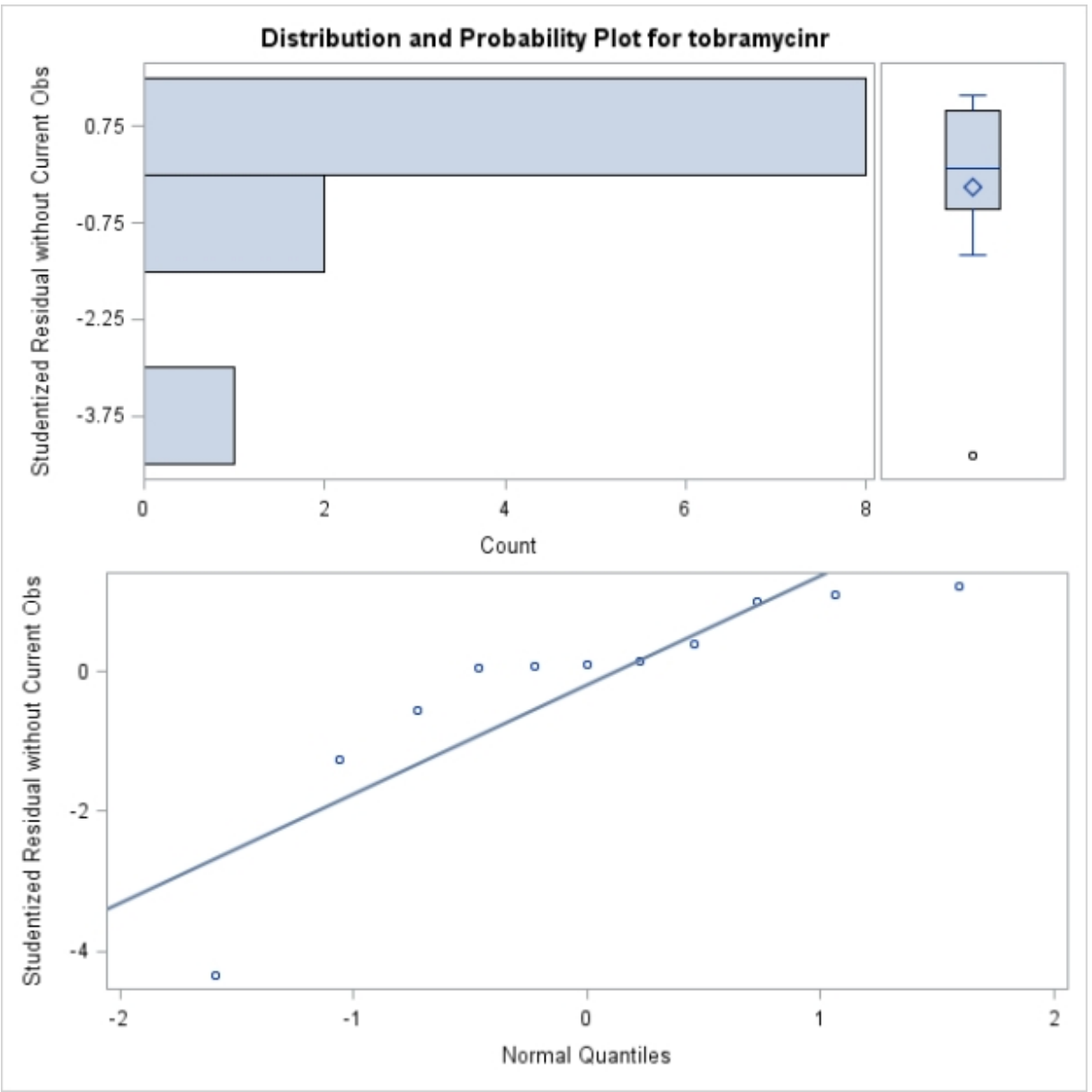
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -4.3571059 | 2 | 0.153833 | 11 |
| -1.2587433 | 10 | 0.387970 | 9 |
| -0.5434102 | 7 | 0.995250 | 3 |

**The UNIVARIATE Procedure**
**Variable: tobramycinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| 0.0615658 | 8 | 1.102800 | 4 |
| 0.0748513 | 12 | 1.222940 | 5 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 1 | 8.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: tobramycinr (Studentized Residual without Current Obs)**



## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: bacitracinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 8 |
| Number of Observations with Missing Values | 4 |

**Analysis of Variance**

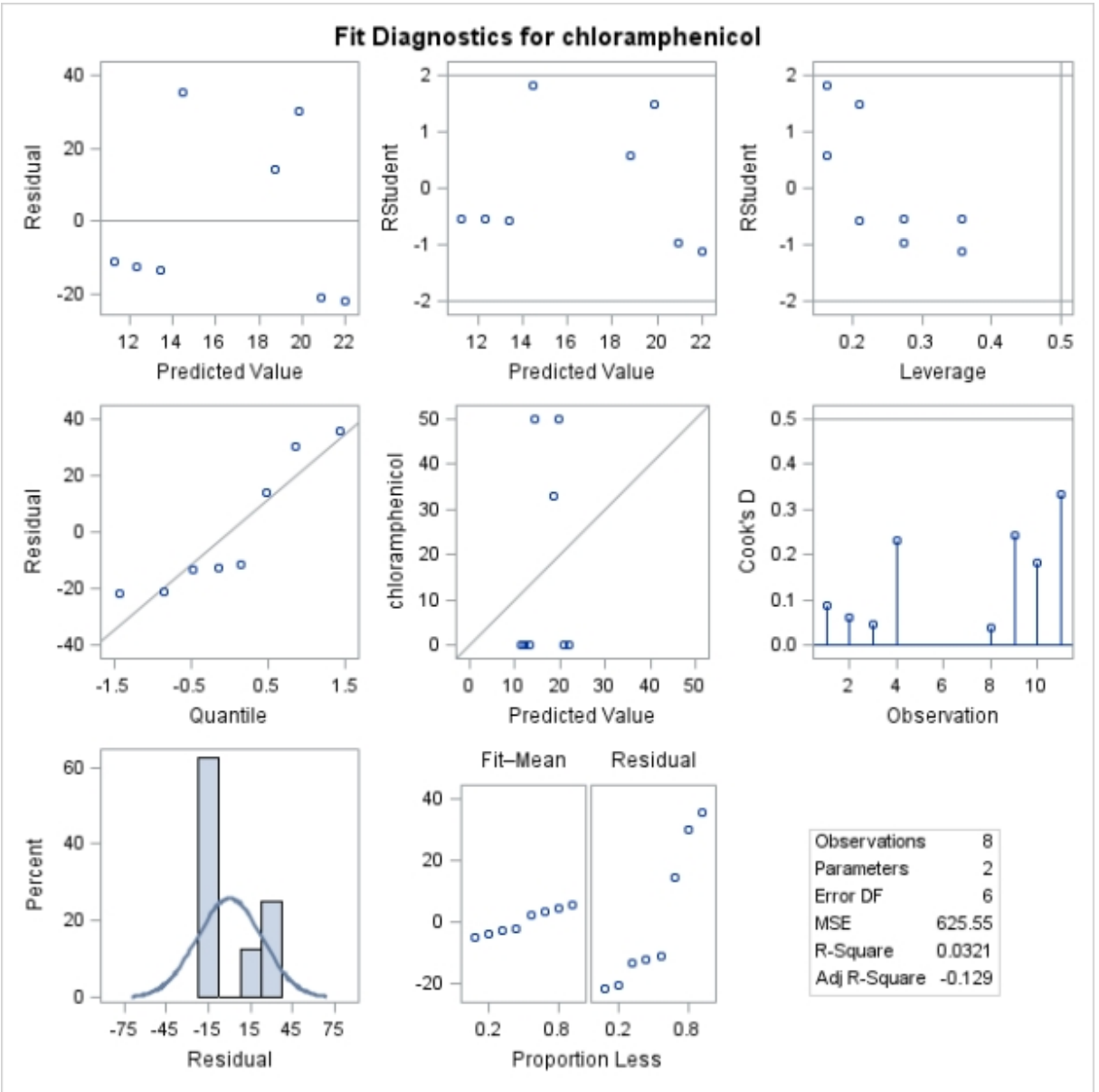
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 124.59259 | 124.59259 | 0.20 | 0.6710 |
| Error | 6 | 3753.28241 | 625.54707 | | |
| Corrected Total | 7 | 3877.87500 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 25.01094 | R-Square | 0.0321 |
| Dependent Mean | 16.62500 | Adj R-Sq | -0.1292 |
| Coeff Var | 150.44174 | | |

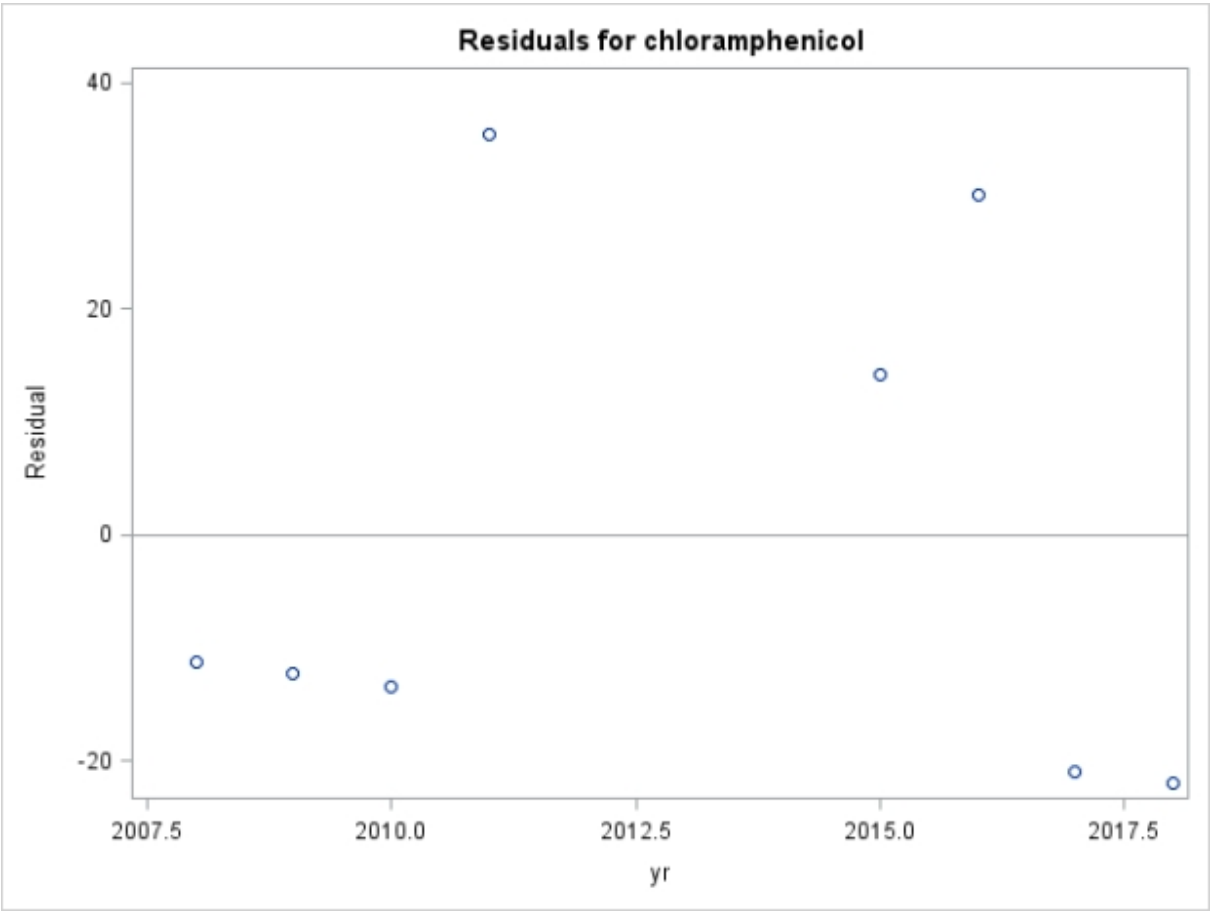
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -2145.48611 | 4844.65234 | -0.44 | 0.6734 |
| yr | 1 | 1.07407 | 2.40668 | 0.45 | 0.6710 |

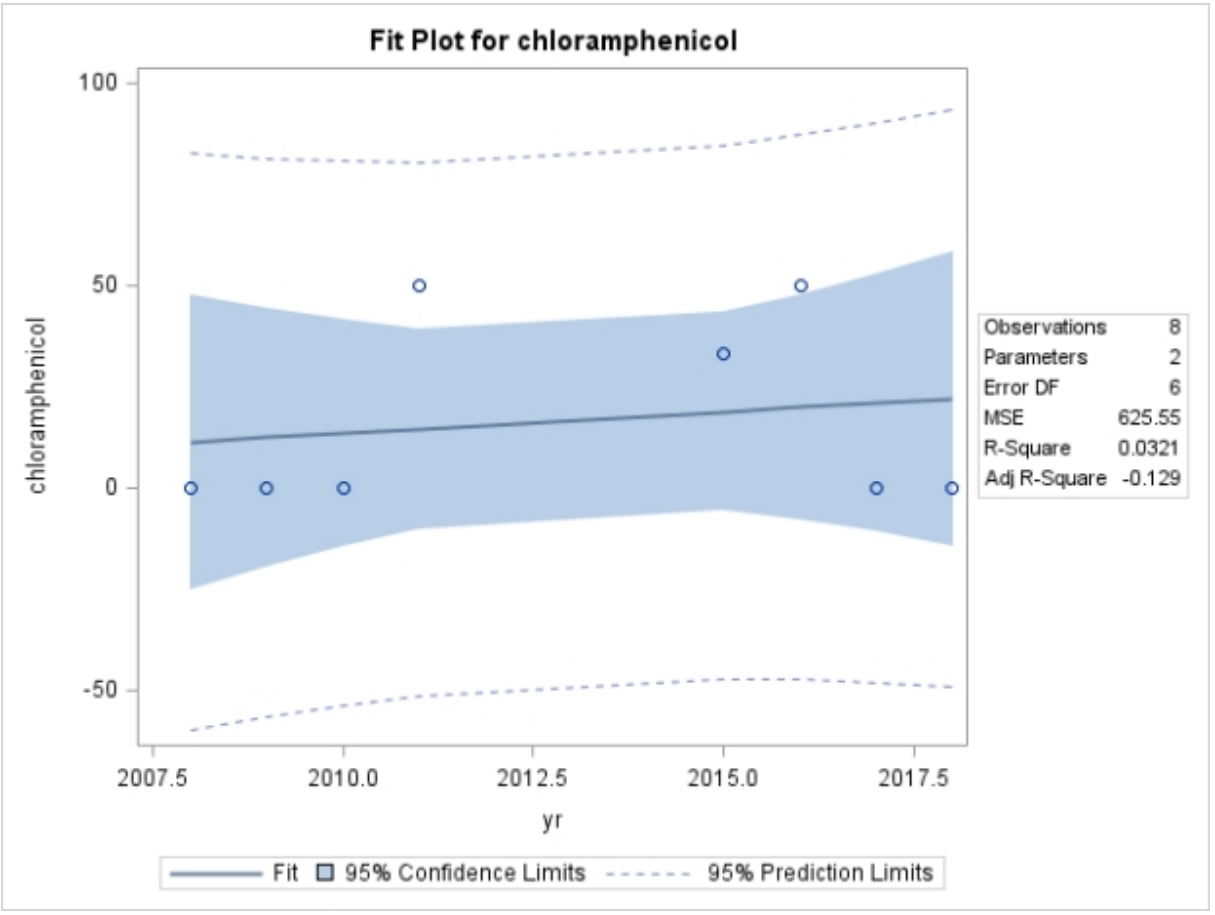
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



## The UNIVARIATE Procedure
## Variable: chloramphenicolr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 8 | Sum Weights | 8 |
| Mean | 0.0210701 | Sum Observations | 0.16856078 |
| Std Deviation | 1.13367636 | Variance | 1.28522209 |
| Skewness | 0.81243693 | Kurtosis | -1.0800044 |
| Uncorrected SS | 9.00010622 | Corrected SS | 8.99655463 |
| Coeff Variation | 5380.49895 | Std Error Mean | 0.40081512 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | 0.02107 | Std Deviation | 1.13368 |
| Median | -0.53460 | Variance | 1.28522 |
| Mode | . | Range | 2.94950 |
| | | Interquartile Range | 1.80795 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | 0.052568 | Pr > \|t\| | 0.9595 |
| Sign | M | -1 | Pr >= \|M\| | 0.7266 |
| Signed Rank | S | 1 | Pr >= \|S\| | 0.9453 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.85067 | Pr < W | 0.0968 |
| Kolmogorov-Smirnov | D | 0.310313 | Pr > D | 0.0226 |
| Cramer-von Mises | W-Sq | 0.105362 | Pr > W-Sq | 0.0819 |
| Anderson-Darling | A-Sq | 0.583037 | Pr > A-Sq | 0.0888 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.830401 |
| 99% | 1.830401 |
| 95% | 1.830401 |
| 90% | 1.830401 |
| 75% Q3 | 1.035589 |
| 50% Median | -0.534602 |
| 25% Q1 | -0.772359 |
| 10% | -1.119097 |
| 5% | -1.119097 |
| 1% | -1.119097 |
| 0% Min | -1.119097 |

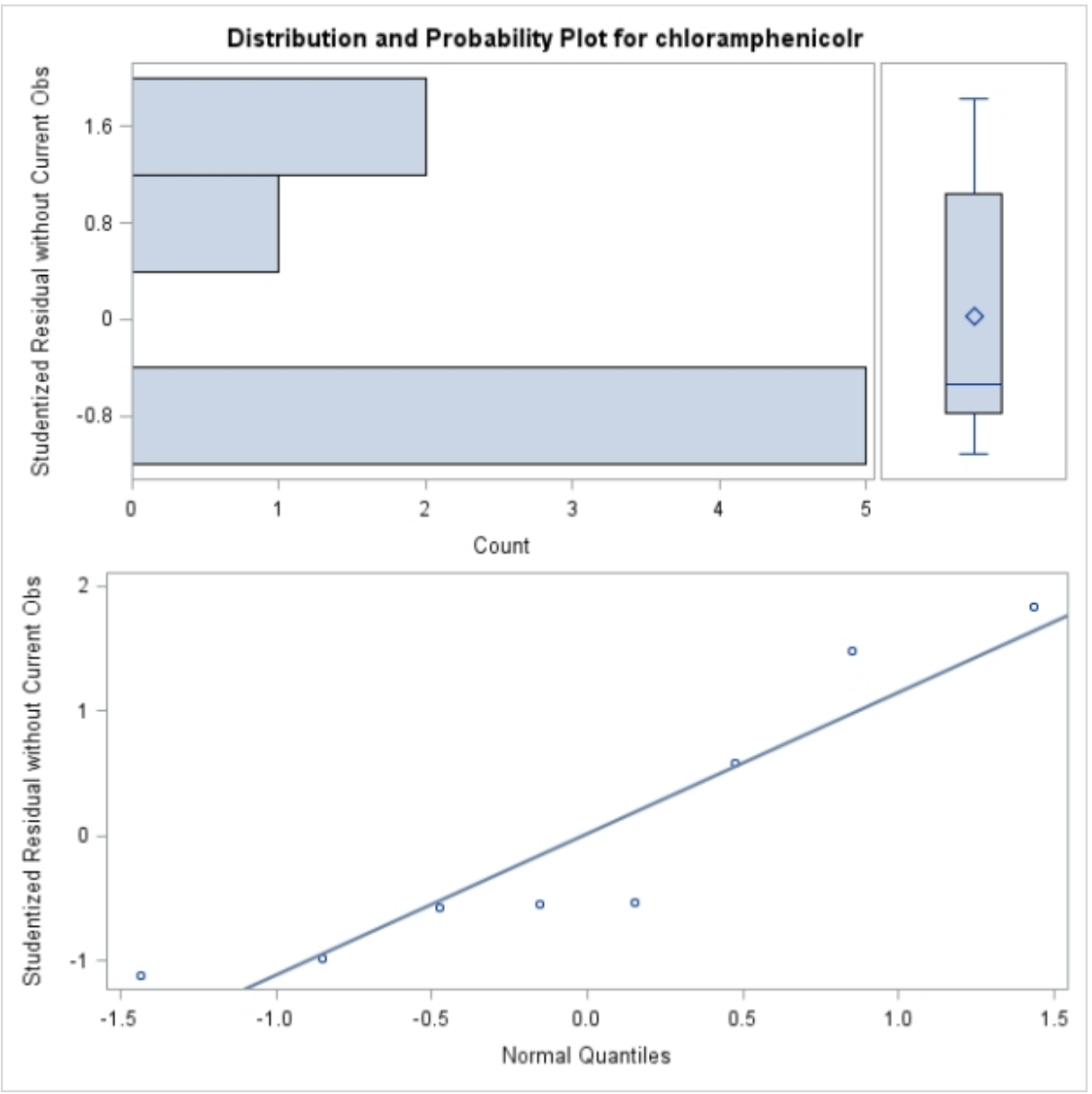
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -1.119097 | 11 | -0.543153 | 2 |
| -0.977507 | 10 | -0.526051 | 1 |
| -0.567211 | 3 | 0.586435 | 8 |

**The UNIVARIATE Procedure**
**Variable: chloramphenicolr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.543153 | 2 | 1.484743 | 9 |
| -0.526051 | 1 | 1.830401 | 4 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 4 | 33.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: chloramphenicolr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 9 |
| Number of Observations with Missing Values | 3 |

**Analysis of Variance**

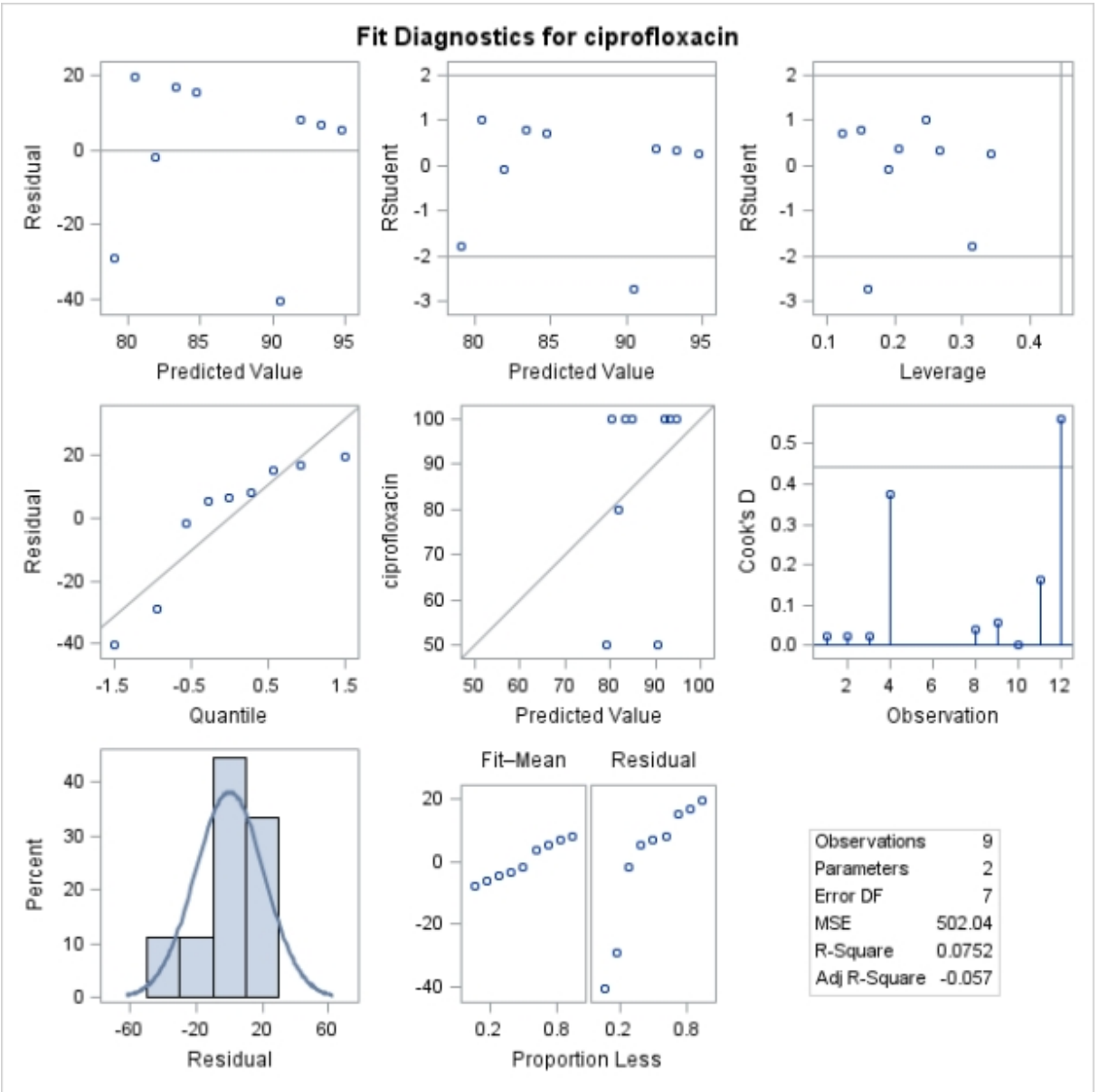
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 285.71429 | 285.71429 | 0.57 | 0.4752 |
| Error | 7 | 3514.28571 | 502.04082 | | |
| Corrected Total | 8 | 3800.00000 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 22.40627 | R-Square | 0.0752 |
| Dependent Mean | 86.66667 | Adj R-Sq | -0.0569 |
| Coeff Var | 25.85339 | | |

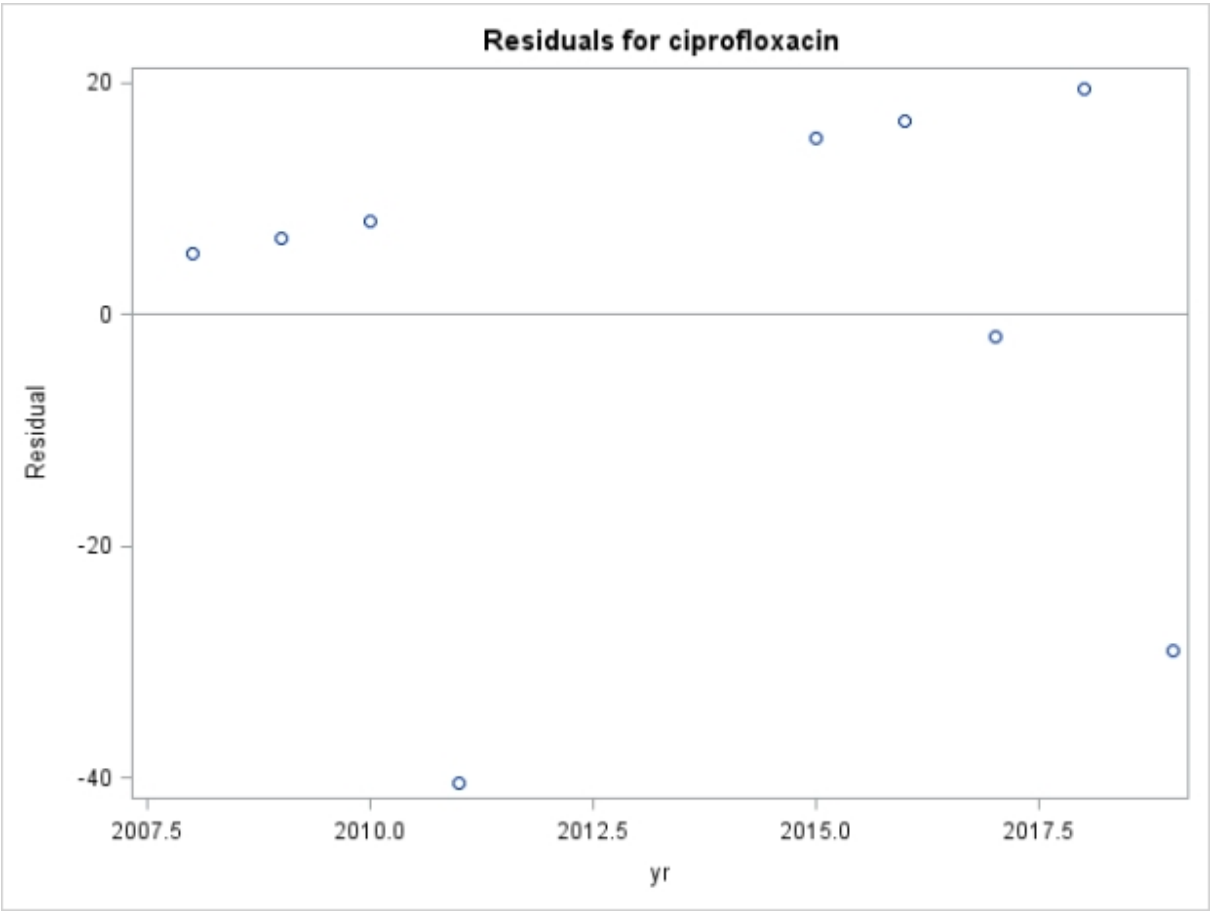
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 2963.33333 | 3813.23798 | 0.78 | 0.4625 |
| yr | 1 | -1.42857 | 1.89368 | -0.75 | 0.4752 |

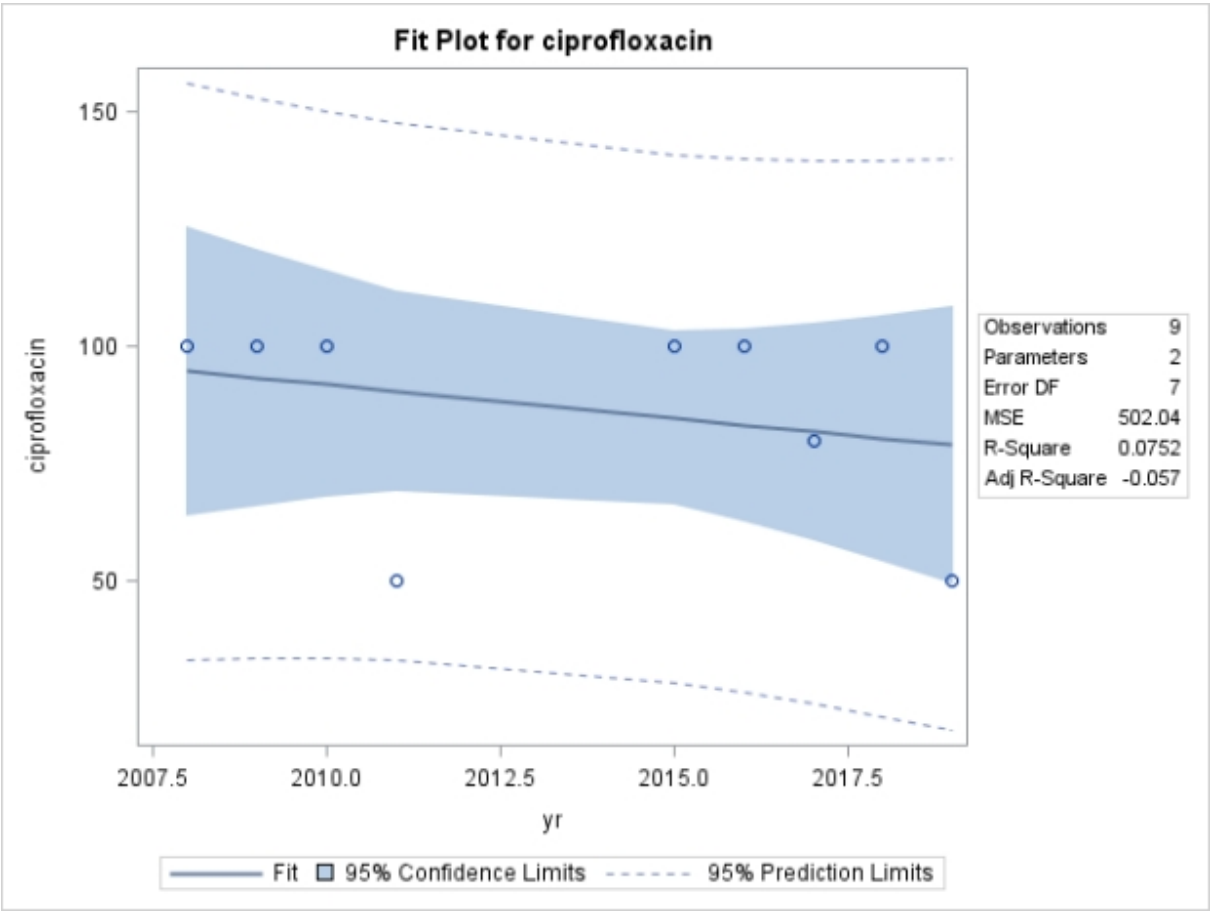
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



## The UNIVARIATE Procedure
## Variable: ciprofloxacinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 9 | Sum Weights | 9 |
| Mean | -0.1297672 | Sum Observations | -1.1679048 |
| Std Deviation | 1.27686556 | Variance | 1.63038566 |
| Skewness | -1.4975592 | Kurtosis | 1.20226098 |
| Uncorrected SS | 13.194641 | Corrected SS | 13.0430853 |
| Coeff Variation | -983.96631 | Std Error Mean | 0.42562185 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.12977 | Std Deviation | 1.27687 |
| Median | 0.32448 | Variance | 1.63039 |
| Mode | . | Range | 3.74593 |
| | | Interquartile Range | 0.78707 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.30489 | Pr > \|t\| | 0.7682 |
| Sign | M | 1.5 | Pr >= \|M\| | 0.5078 |
| Signed Rank | S | 4.5 | Pr >= \|S\| | 0.6523 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.789573 | Pr < W | 0.0155 |
| Kolmogorov-Smirnov | D | 0.290972 | Pr > D | 0.0261 |
| Cramer-von Mises | W-Sq | 0.169434 | Pr > W-Sq | 0.0098 |
| Anderson-Darling | A-Sq | 0.89494 | Pr > A-Sq | 0.0138 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.0034733 |
| 99% | 1.0034733 |
| 95% | 1.0034733 |
| 90% | 1.0034733 |
| 75% Q3 | 0.6995420 |
| 50% Median | 0.3244835 |
| 25% Q1 | -0.0875306 |
| 10% | -2.7424587 |
| 5% | -2.7424587 |
| 1% | -2.7424587 |
| 0% Min | -2.7424587 |

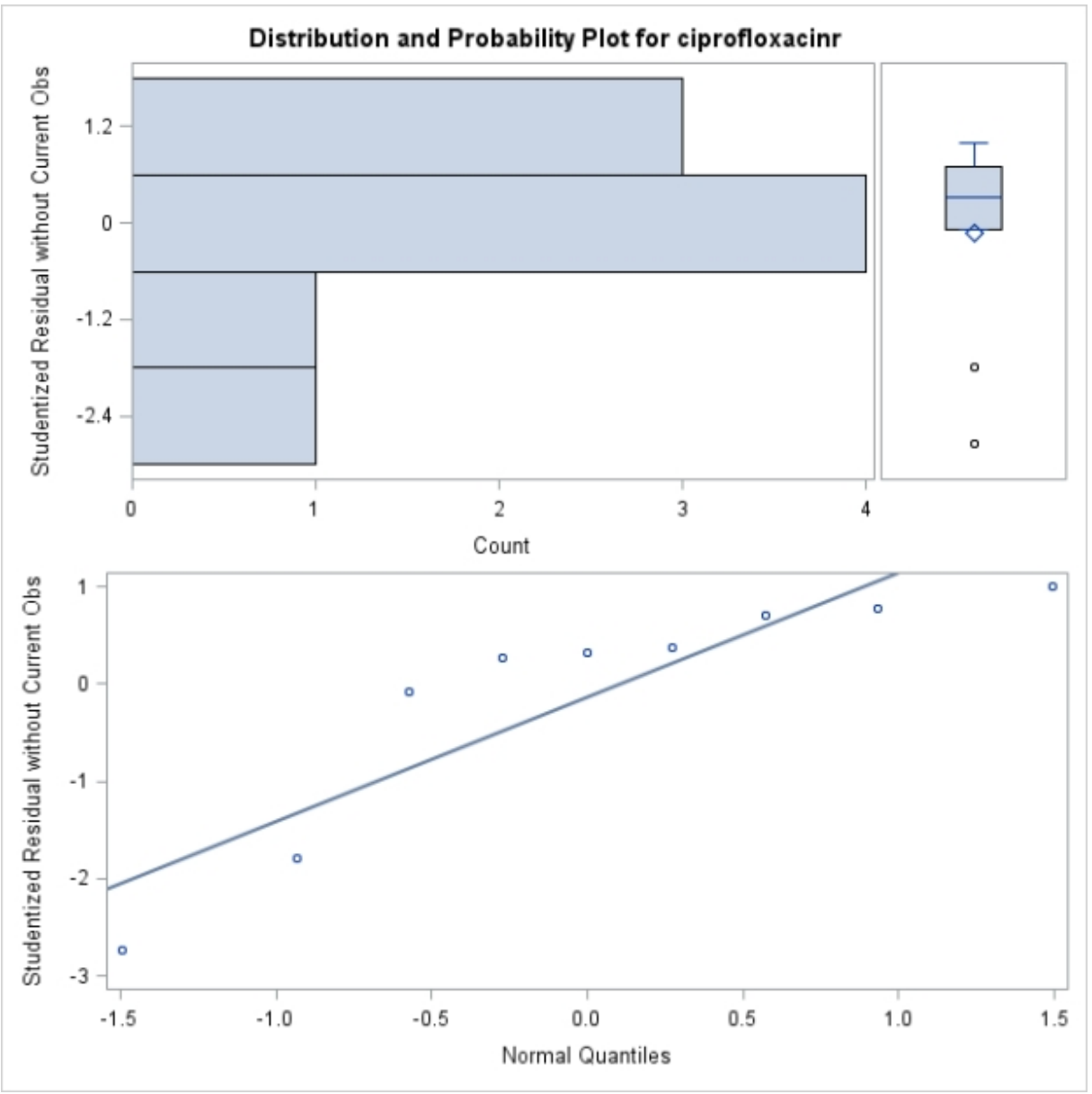
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -2.7424587 | 4 | 0.324484 | 2 |
| -1.7979843 | 12 | 0.380152 | 3 |
| -0.0875306 | 10 | 0.699542 | 8 |

**The UNIVARIATE Procedure**
**Variable: ciprofloxacinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| 0.2681027 | 1 | 0.784315 | 9 |
| 0.3244835 | 2 | 1.003473 | 11 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 3 | 25.00 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: ciprofloxacinr (Studentized Residual without Current Obs)**



## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: erythromycinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 9 |
| Number of Observations with Missing Values | 3 |

**Analysis of Variance**

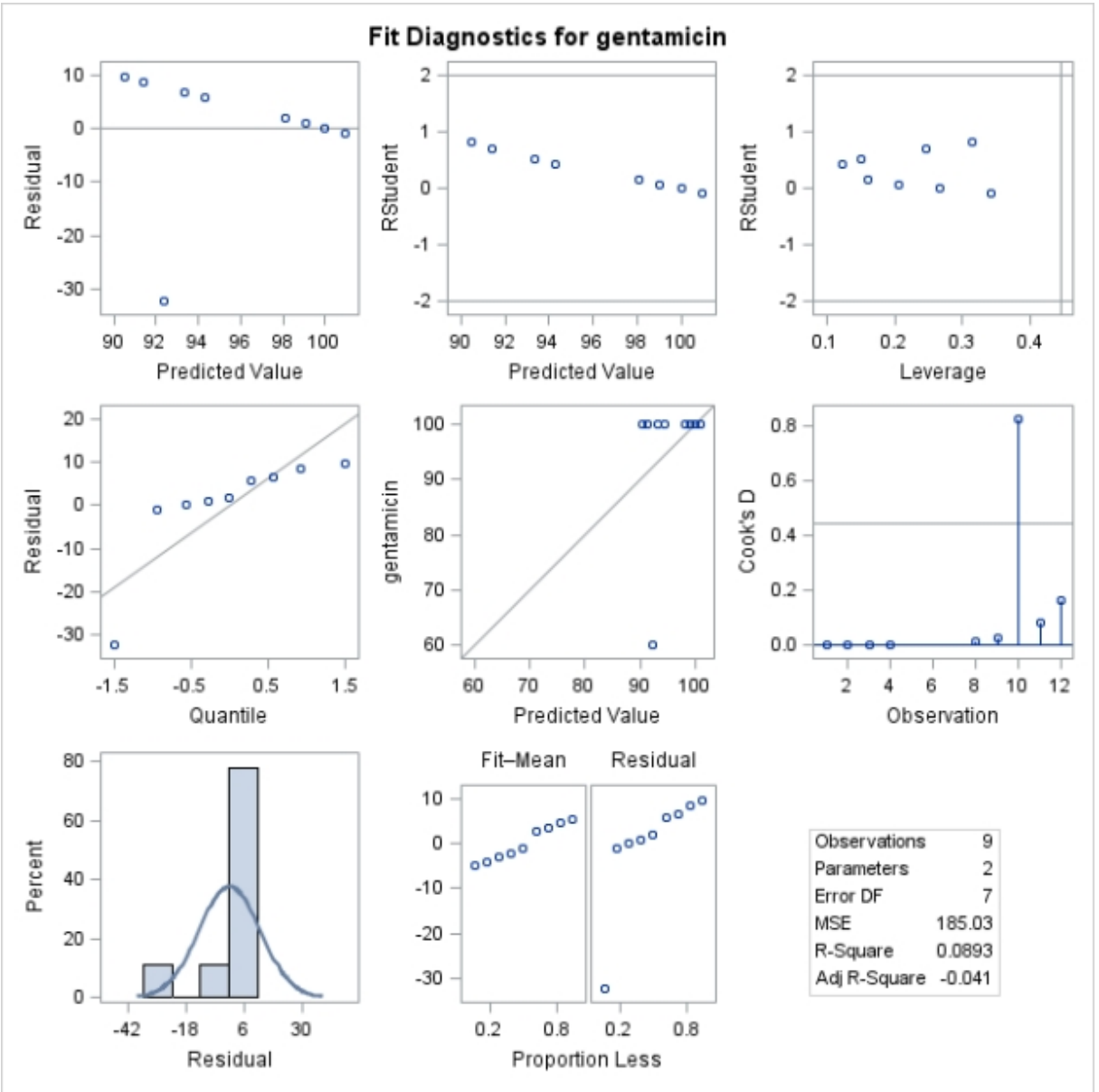
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 126.98413 | 126.98413 | 0.69 | 0.4348 |
| Error | 7 | 1295.23810 | 185.03401 | | |
| Corrected Total | 8 | 1422.22222 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 13.60272 | R-Square | 0.0893 |
| Dependent Mean | 95.55556 | Adj R-Sq | -0.0408 |
| Coeff Var | 14.23541 | | |

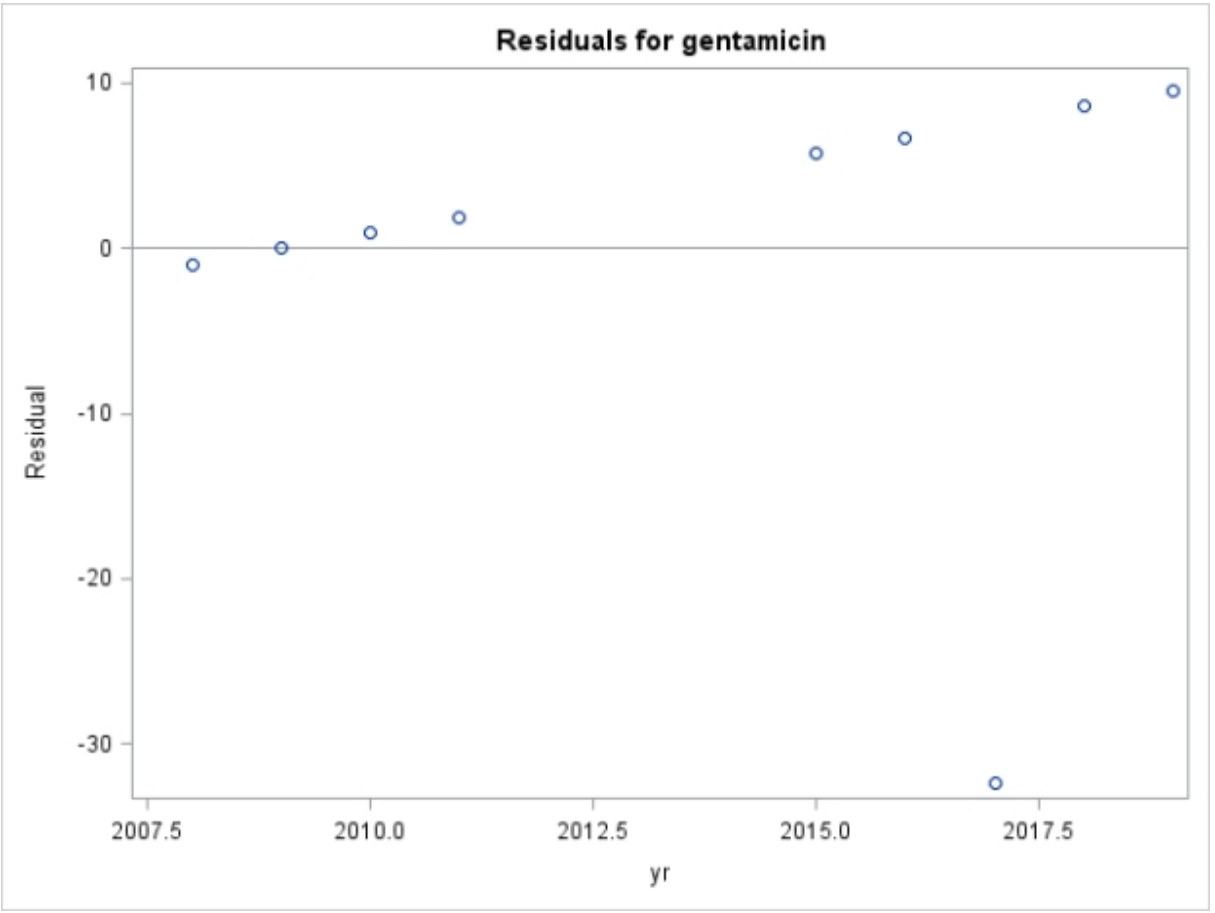
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 2013.33333 | 2314.99566 | 0.87 | 0.4133 |
| yr | 1 | -0.95238 | 1.14964 | -0.83 | 0.4348 |

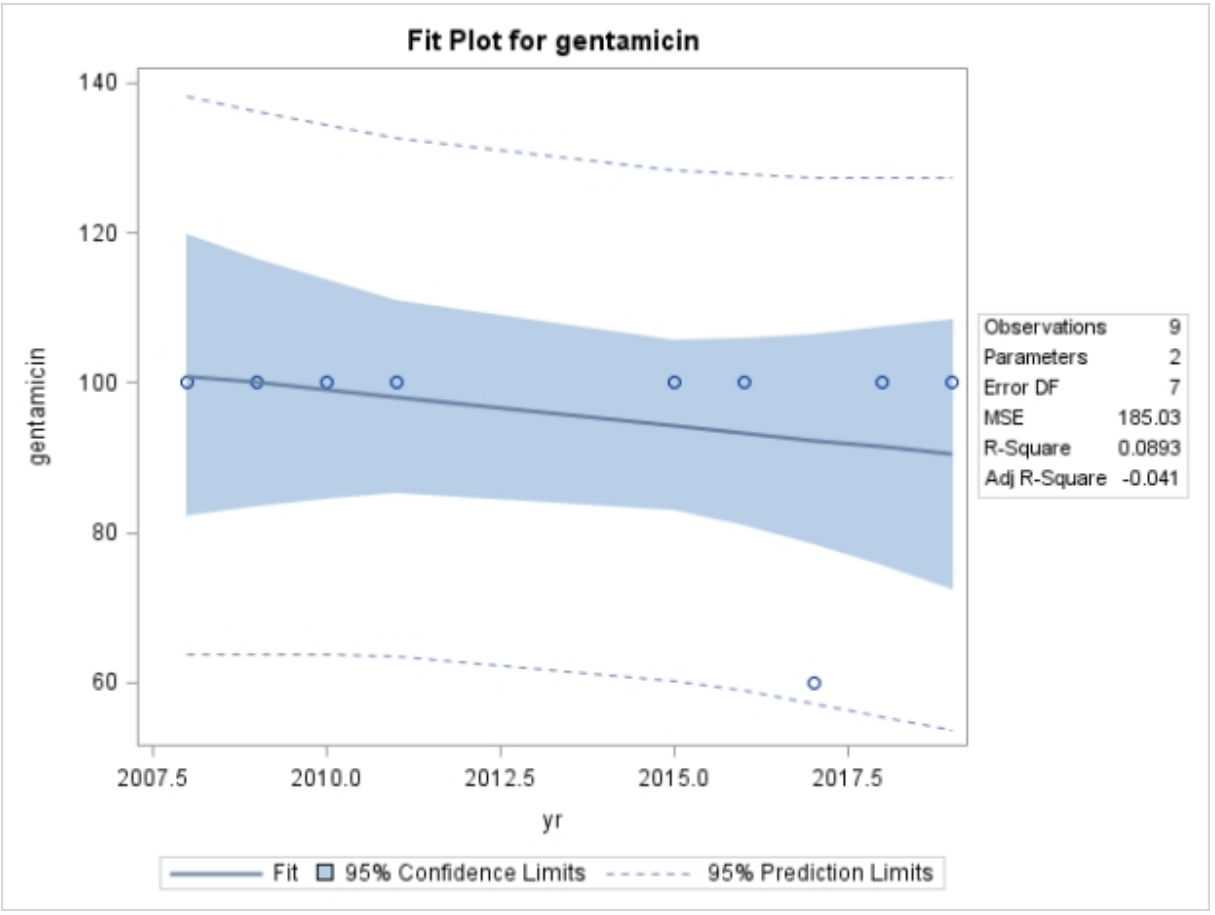
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: gentamicin**



**The UNIVARIATE Procedure**
**Variable: gentamicinr (Studentized Residual without Current Obs)**

| Moments | | | |
|---|---|---|---|
| N | 8 | Sum Weights | 8 |
| Mean | 0.3228964 | Sum Observations | 2.58317117 |
| Std Deviation | 0.33760858 | Variance | 0.11397955 |
| Skewness | 0.32906319 | Kurtosis | -1.5412157 |
| Uncorrected SS | 1.63195352 | Corrected SS | 0.79785686 |
| Coeff Variation | 104.556316 | Std Error Mean | 0.11936266 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | 0.322896 | Std Deviation | 0.33761 |
| Median | 0.281725 | Variance | 0.11398 |
| Mode | . | Range | 0.90596 |
| | | Interquartile Range | 0.56391 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | 2.705171 | Pr > \|t\| | 0.0304 |
| Sign | M | 3 | Pr >= \|M\| | 0.0703 |
| Signed Rank | S | 15 | Pr >= \|S\| | 0.0391 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.927077 | Pr < W | 0.4899 |
| Kolmogorov-Smirnov | D | 0.204114 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.046578 | Pr > W-Sq | >0.2500 |
| Anderson-Darling | A-Sq | 0.288765 | Pr > A-Sq | >0.2500 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 0.8260984 |
| 99% | 0.8260984 |
| 95% | 0.8260984 |
| 90% | 0.8260984 |
| 75% Q3 | 0.6003266 |
| 50% Median | 0.2817249 |
| 25% Q1 | 0.0364146 |
| 10% | -0.0798596 |
| 5% | -0.0798596 |
| 1% | -0.0798596 |
| 0% Min | -0.0798596 |

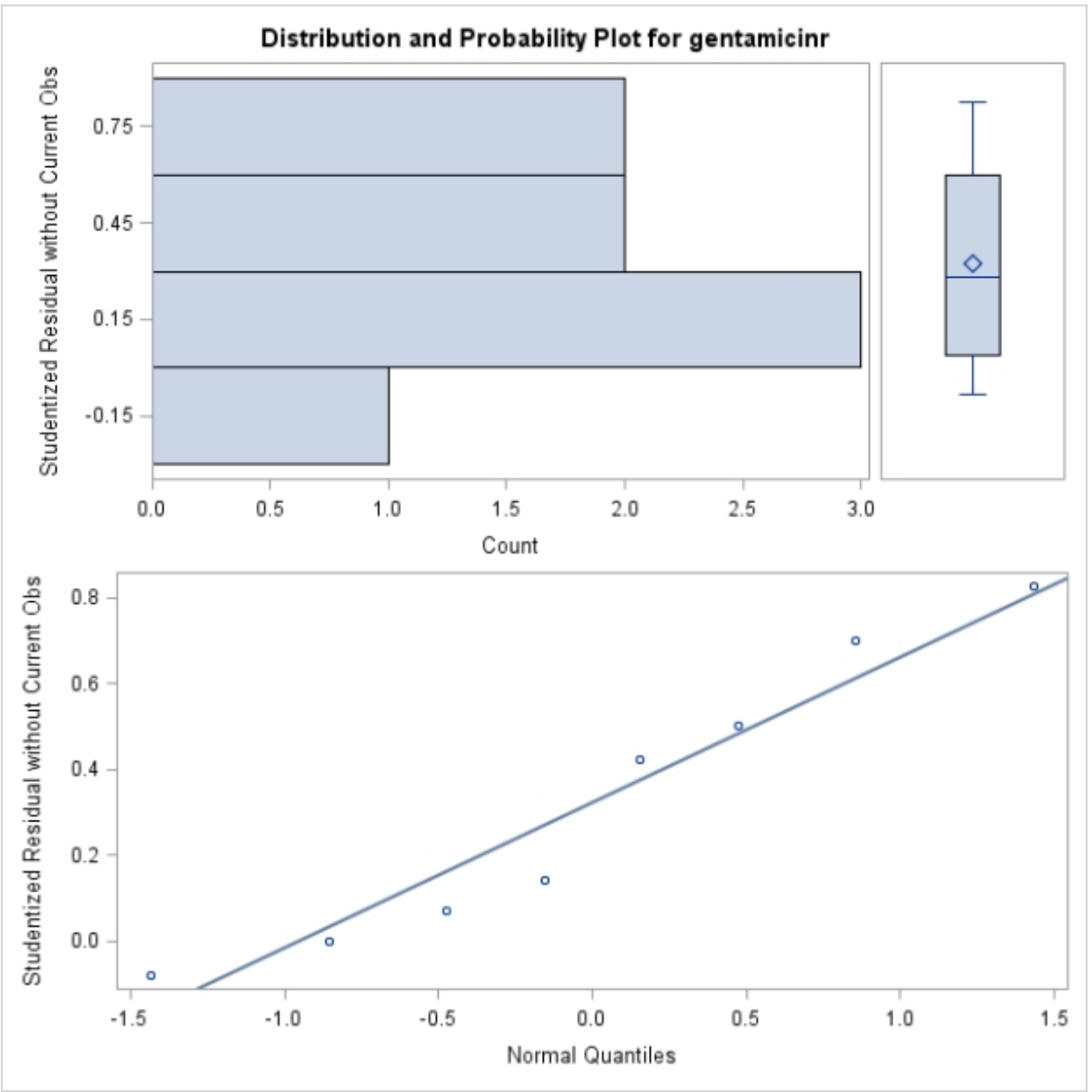
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.0798596 | 1 | 0.141848 | 4 |
| 0.0000000 | 2 | 0.421602 | 8 |
| 0.0728293 | 3 | 0.502398 | 9 |

**The UNIVARIATE Procedure**
**Variable: gentamicinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| 0.1418475 | 4 | 0.698255 | 11 |
| 0.4216023 | 8 | 0.826098 | 12 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 4 | 33.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: gentamicinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 7 |
| Number of Observations with Missing Values | 5 |

**Analysis of Variance**

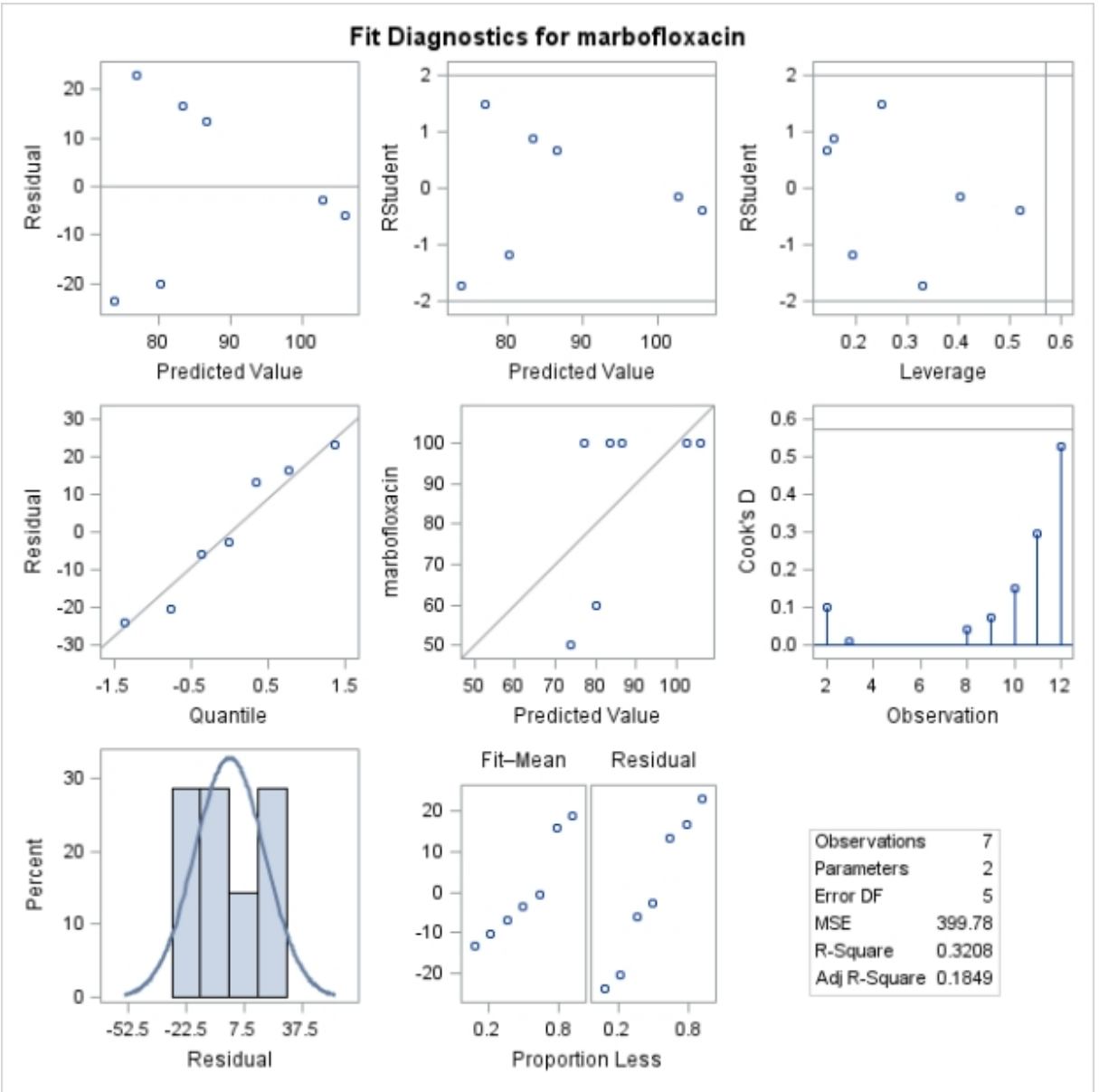
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 943.95777 | 943.95777 | 2.36 | 0.1850 |
| Error | 5 | 1998.89937 | 399.77987 | | |
| Corrected Total | 6 | 2942.85714 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 19.99450 | R-Square | 0.3208 |
| Dependent Mean | 87.14286 | Adj R-Sq | 0.1849 |
| Coeff Var | 22.94450 | | |

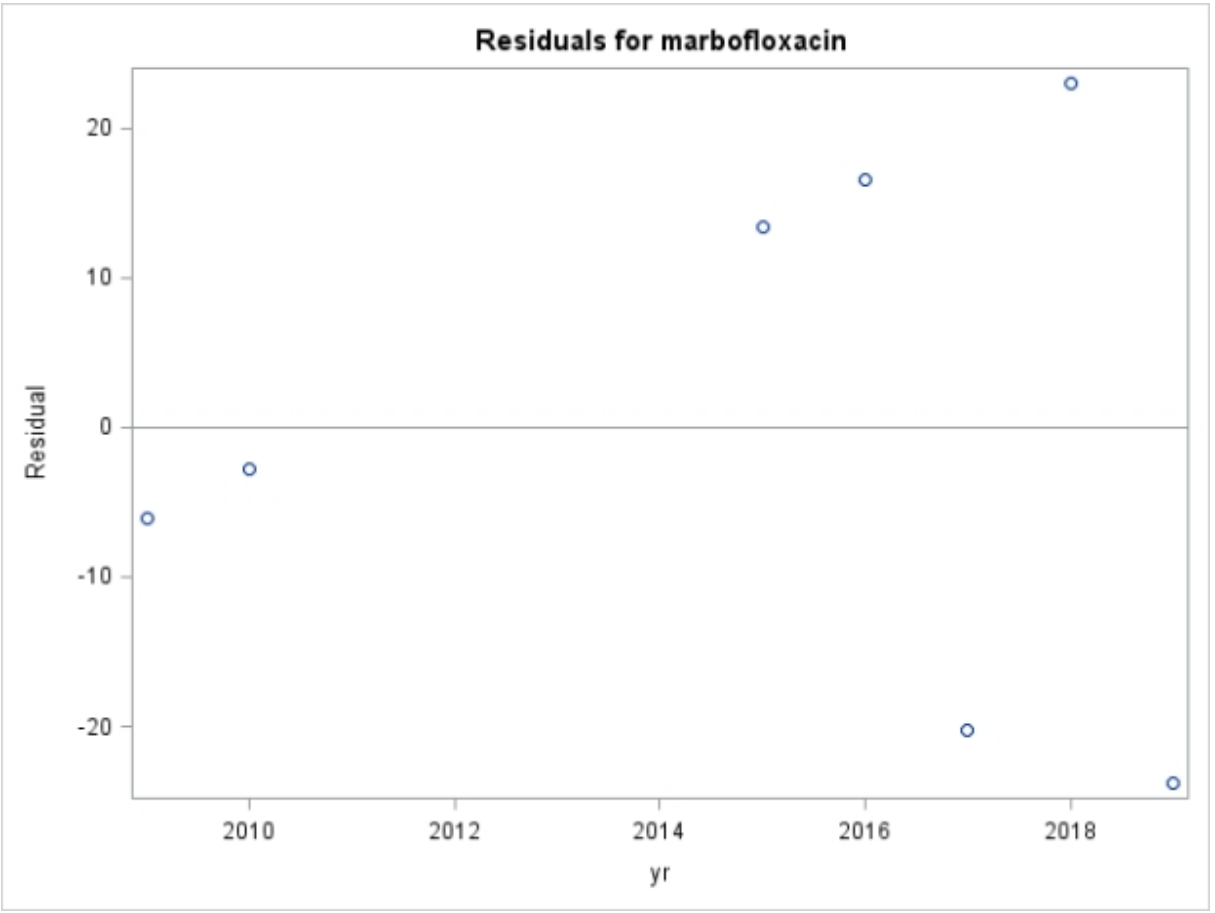
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 6581.57233 | 4226.45140 | 1.56 | 0.1801 |
| yr | 1 | -3.22327 | 2.09764 | -1.54 | 0.1850 |

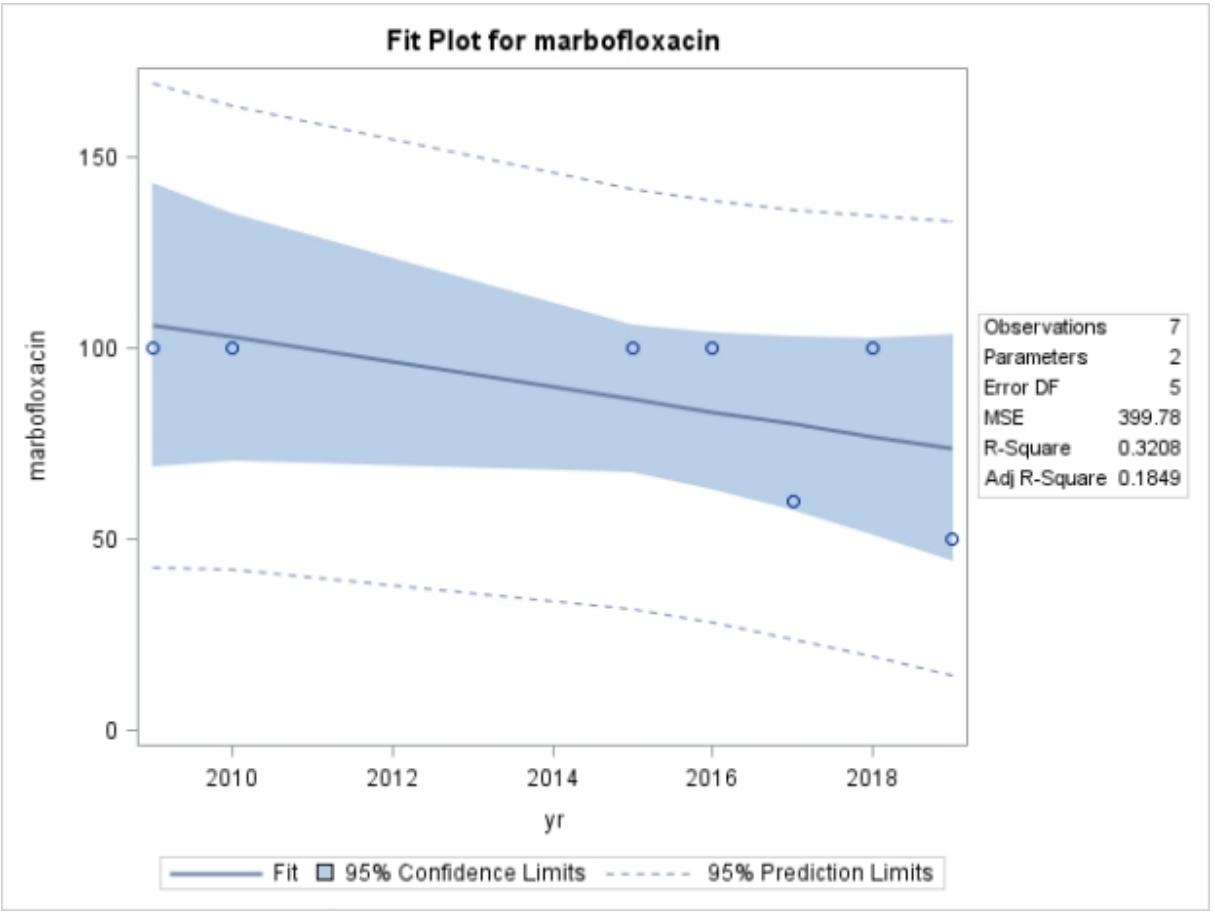
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The UNIVARIATE Procedure**
**Variable: marbofloxacinr (Studentized Residual without Current Obs)**

| Moments | | | |
|---|---|---|---|
| N | 7 | Sum Weights | 7 |
| Mean | -0.0574938 | Sum Observations | -0.4024568 |
| Std Deviation | 1.14637036 | Variance | 1.31416501 |
| Skewness | -0.1721316 | Kurtosis | -1.1571524 |
| Uncorrected SS | 7.90812885 | Corrected SS | 7.88499007 |
| Coeff Variation | -1993.9016 | Std Error Mean | 0.43328727 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.05749 | Std Deviation | 1.14637 |
| Median | -0.16250 | Variance | 1.31417 |
| Mode | . | Range | 3.19281 |
| | | Interquartile Range | 2.04763 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.13269 | Pr > \|t\| | 0.8988 |
| Sign | M | -0.5 | Pr >= \|M\| | 1.0000 |
| Signed Rank | S | -1 | Pr >= \|S\| | 0.9375 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.967371 | Pr < W | 0.8789 |
| Kolmogorov-Smirnov | D | 0.168485 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.026058 | Pr > W-Sq | >0.2500 |
| Anderson-Darling | A-Sq | 0.175371 | Pr > A-Sq | >0.2500 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.477985 |
| 99% | 1.477985 |
| 95% | 1.477985 |
| 90% | 1.477985 |
| 75% Q3 | 0.880692 |
| 50% Median | -0.162504 |
| 25% Q1 | -1.166942 |
| 10% | -1.714824 |
| 5% | -1.714824 |
| 1% | -1.714824 |
| 0% Min | -1.714824 |

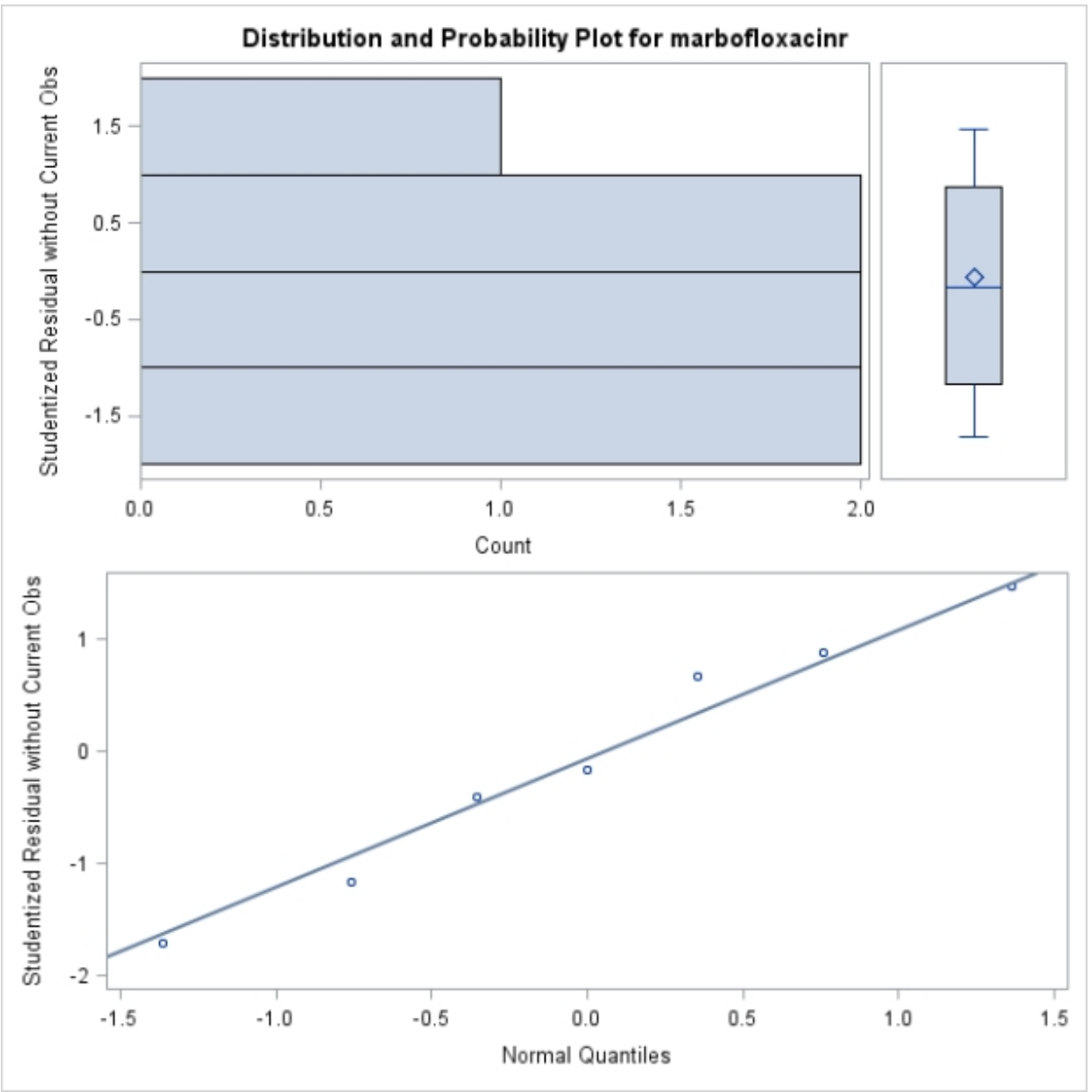
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -1.714824 | 12 | -0.396579 | 2 |
| -1.166942 | 10 | -0.162504 | 3 |
| -0.396579 | 2 | 0.679714 | 8 |

**The UNIVARIATE Procedure**
**Variable: marbofloxacinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.162504 | 3 | 0.880692 | 9 |
| 0.679714 | 8 | 1.477985 | 11 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 5 | 41.67 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: marbofloxacinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 8 |
| Number of Observations with Missing Values | 4 |

**Analysis of Variance**

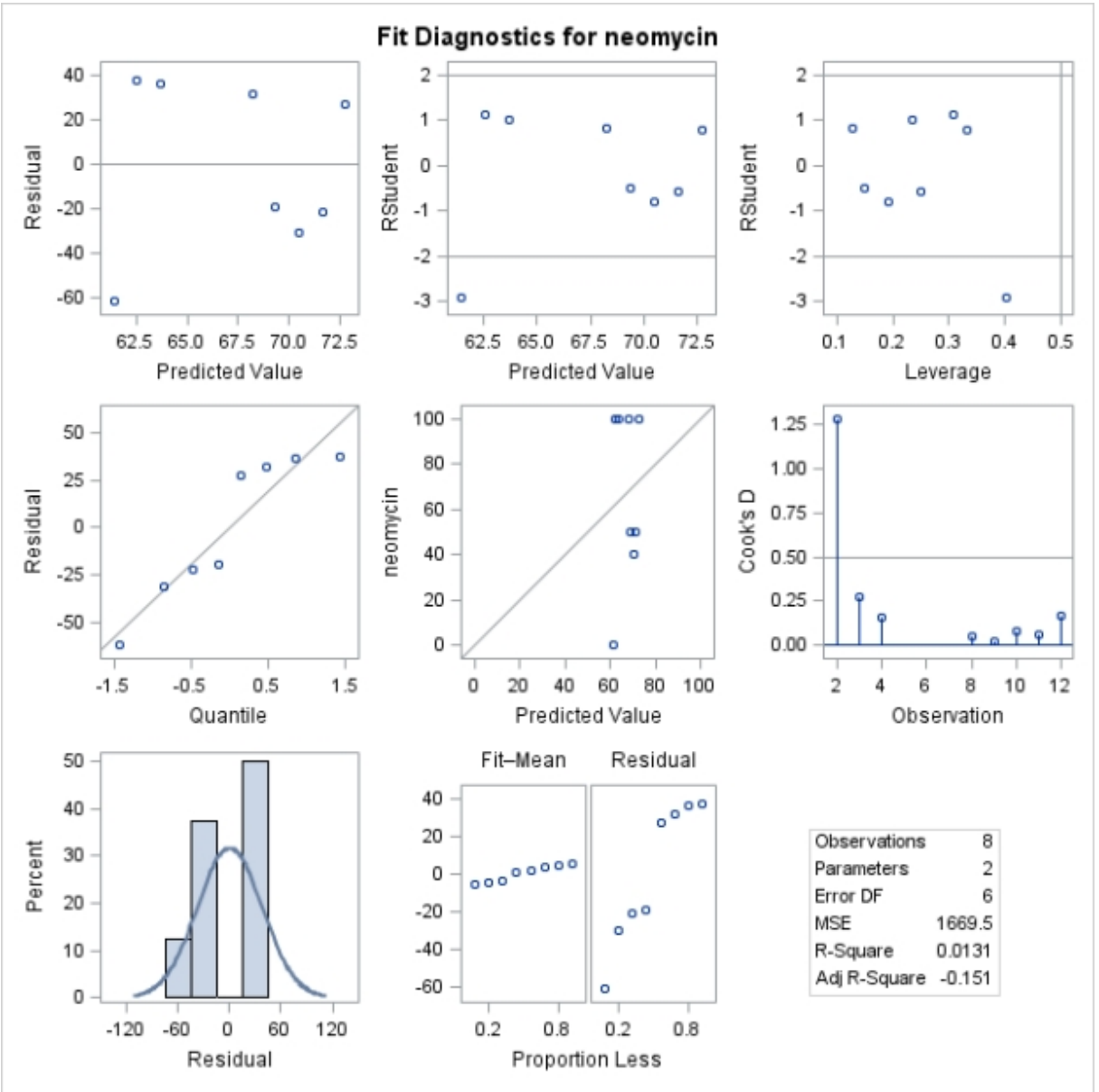
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 132.91215 | 132.91215 | 0.08 | 0.7873 |
| Error | 6 | 10017 | 1669.51464 | | |
| Corrected Total | 7 | 10150 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 40.85969 | R-Square | 0.0131 |
| Dependent Mean | 67.50000 | Adj R-Sq | -0.1514 |
| Coeff Var | 60.53288 | | |

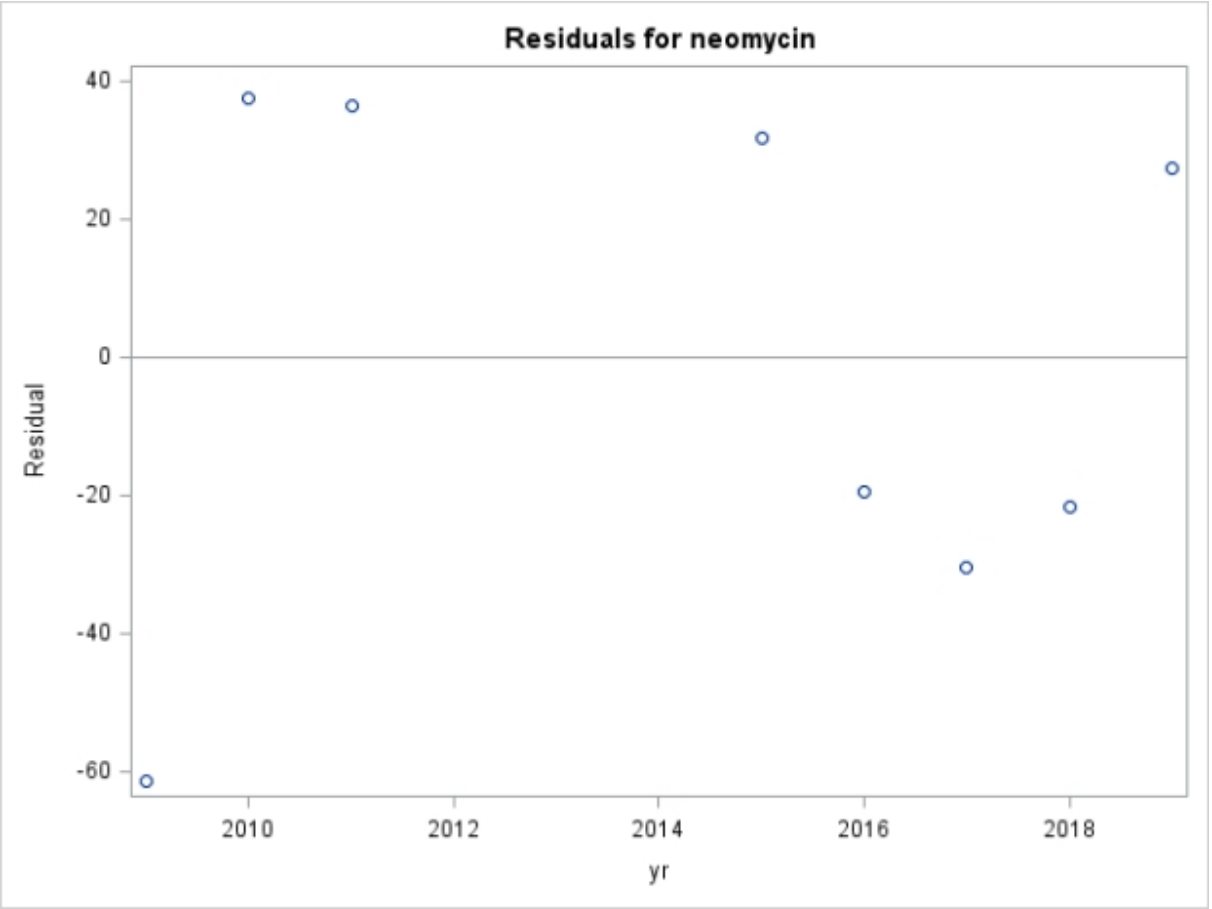
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -2211.09507 | 8075.70815 | -0.27 | 0.7934 |
| yr | 1 | 1.13117 | 4.00903 | 0.28 | 0.7873 |

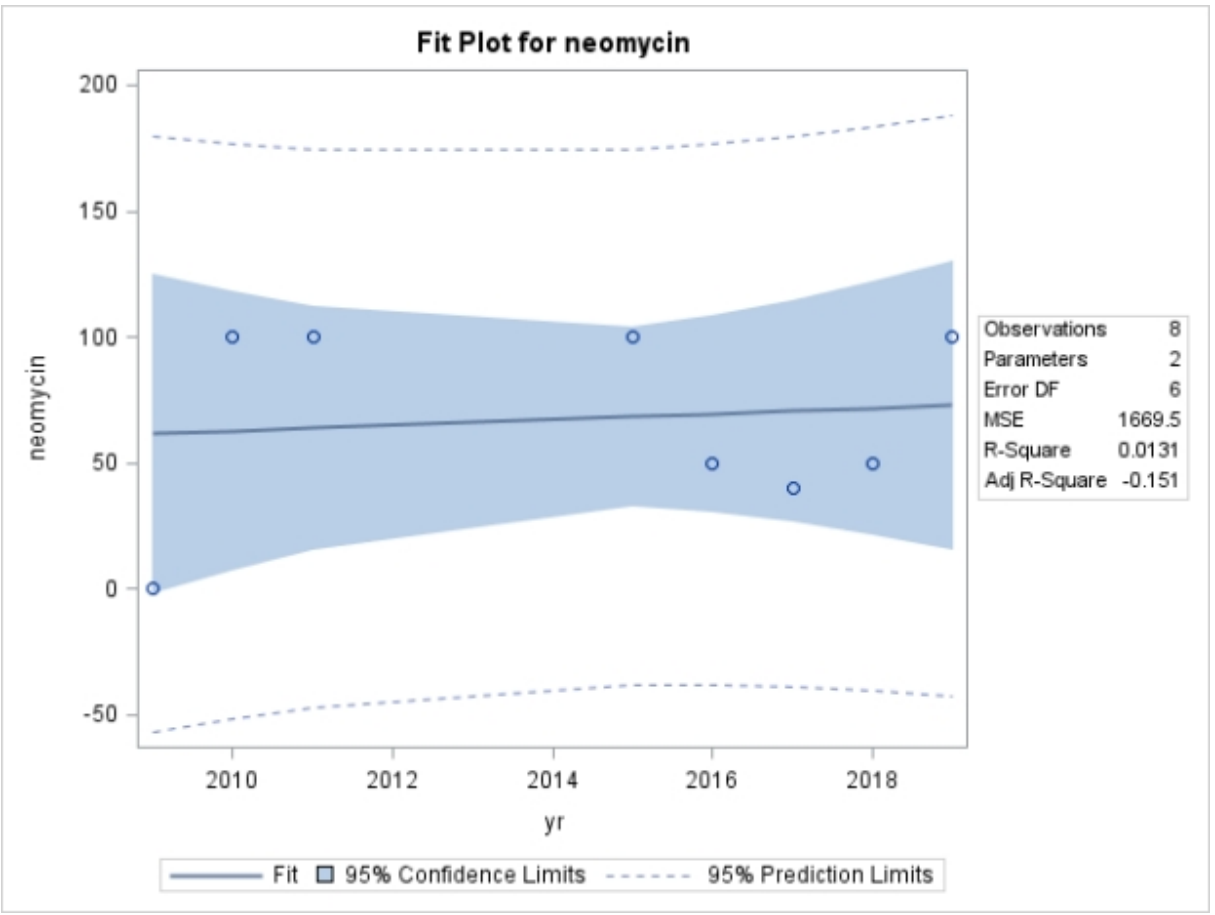
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: neomycin**



## The UNIVARIATE Procedure
## Variable: neomycinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 8 | Sum Weights | 8 |
| Mean | -0.1297205 | Sum Observations | -1.0377642 |
| Std Deviation | 1.37381353 | Variance | 1.88736362 |
| Skewness | -1.2592509 | Kurtosis | 1.54297878 |
| Uncorrected SS | 13.3461646 | Corrected SS | 13.2115453 |
| Coeff Variation | -1059.0564 | Std Error Mean | 0.48571643 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.12972 | Std Deviation | 1.37381 |
| Median | 0.15526 | Variance | 1.88736 |
| Mode | . | Range | 4.05118 |
| | | Interquartile Range | 1.60455 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.26707 | Pr > \|t\| | 0.7971 |
| Sign | M | 0 | Pr >= \|M\| | 1.0000 |
| Signed Rank | S | 3 | Pr >= \|S\| | 0.7422 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.845576 | Pr < W | 0.0859 |
| Kolmogorov-Smirnov | D | 0.248377 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.085454 | Pr > W-Sq | 0.1512 |
| Anderson-Darling | A-Sq | 0.551781 | Pr > A-Sq | 0.1058 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.127412 |
| 99% | 1.127412 |
| 95% | 1.127412 |
| 90% | 1.127412 |
| 75% Q3 | 0.914296 |
| 50% Median | 0.155257 |
| 25% Q1 | -0.690257 |
| 10% | -2.923768 |
| 5% | -2.923768 |
| 1% | -2.923768 |
| 0% Min | -2.923768 |

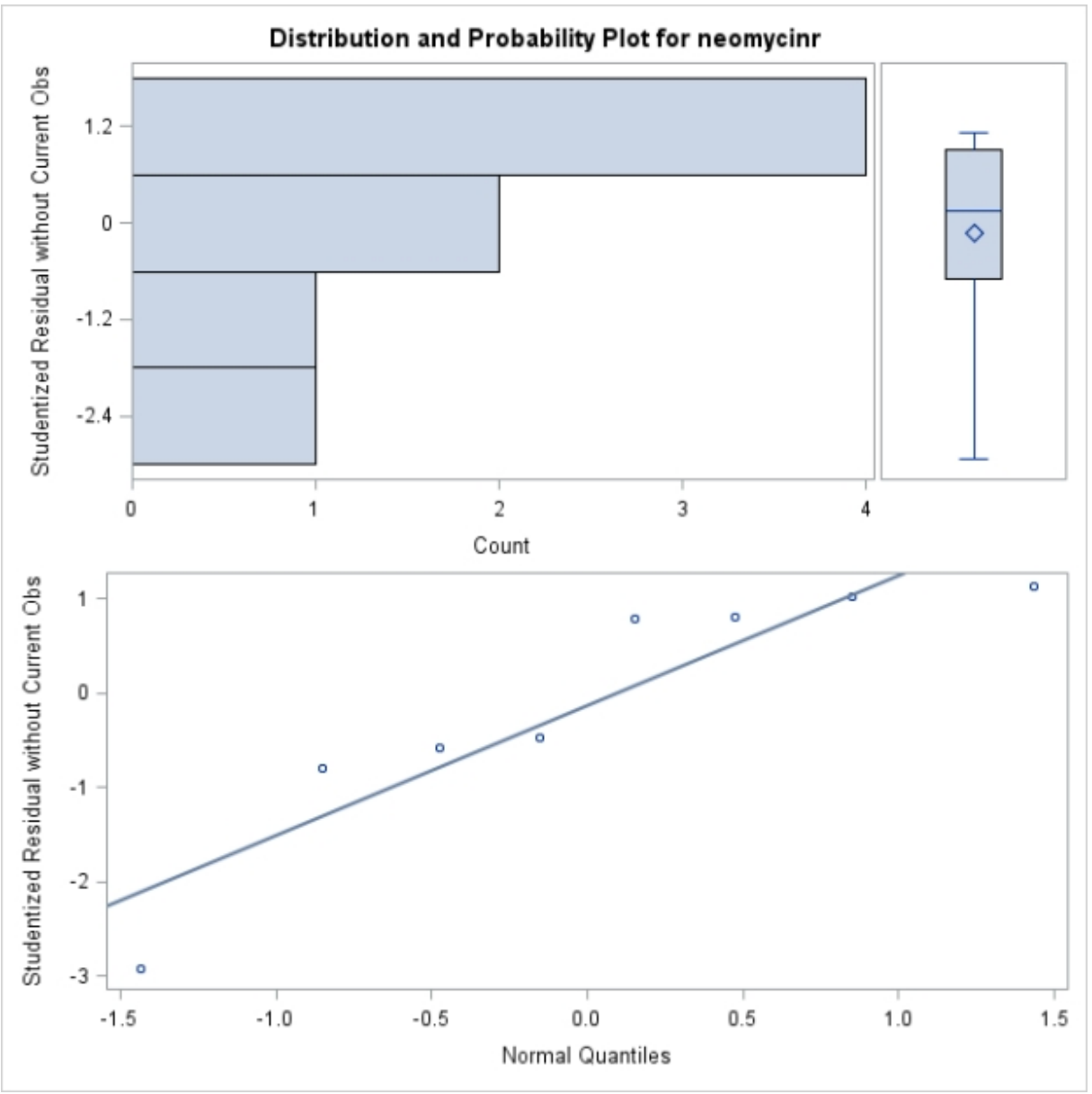
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -2.923768 | 2 | -0.479386 | 9 |
| -0.804498 | 10 | 0.789899 | 12 |
| -0.576016 | 11 | 0.809295 | 8 |

**The UNIVARIATE Procedure**
**Variable: neomycinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.479386 | 9 | 1.019297 | 4 |
| 0.789899 | 12 | 1.127412 | 3 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 4 | 33.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: neomycinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 8 |
| Number of Observations with Missing Values | 4 |

**Analysis of Variance**

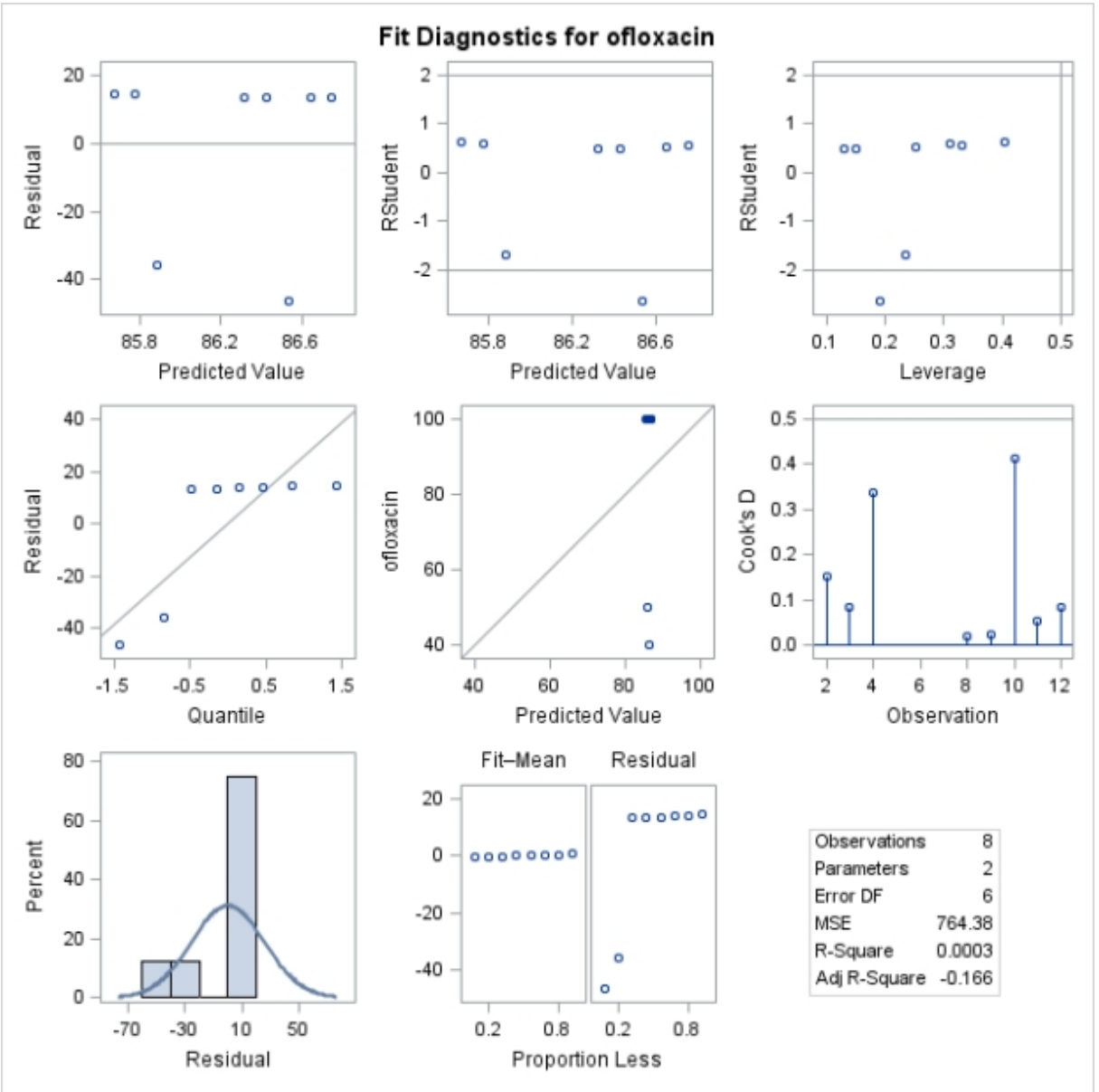
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 1.21841 | 1.21841 | 0.00 | 0.9694 |
| Error | 6 | 4586.28159 | 764.38026 | | |
| Corrected Total | 7 | 4587.50000 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 27.64743 | R-Square | 0.0003 |
| Dependent Mean | 86.25000 | Adj R-Sq | -0.1664 |
| Coeff Var | 32.05499 | | |

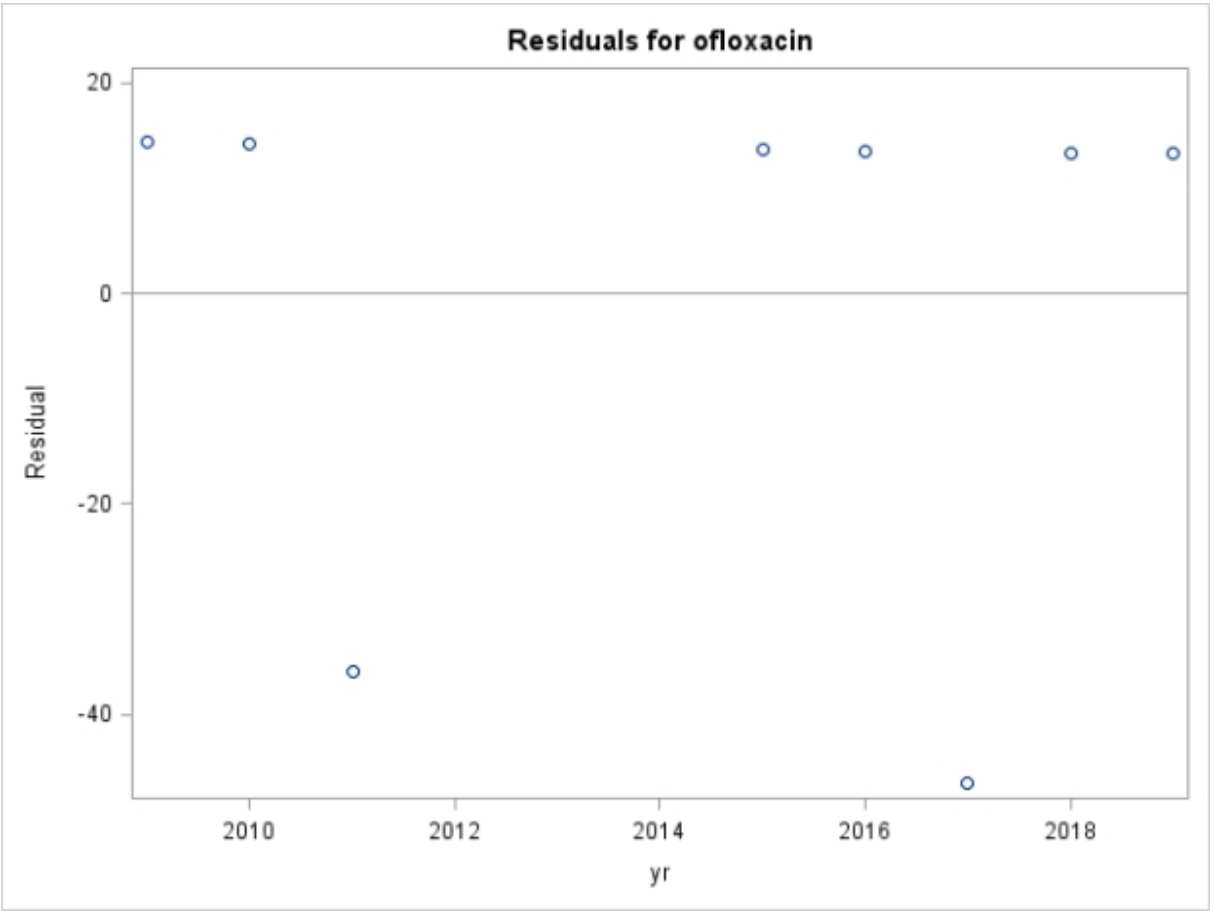
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -131.91336 | 5464.37168 | -0.02 | 0.9815 |
| yr | 1 | 0.10830 | 2.71268 | 0.04 | 0.9694 |

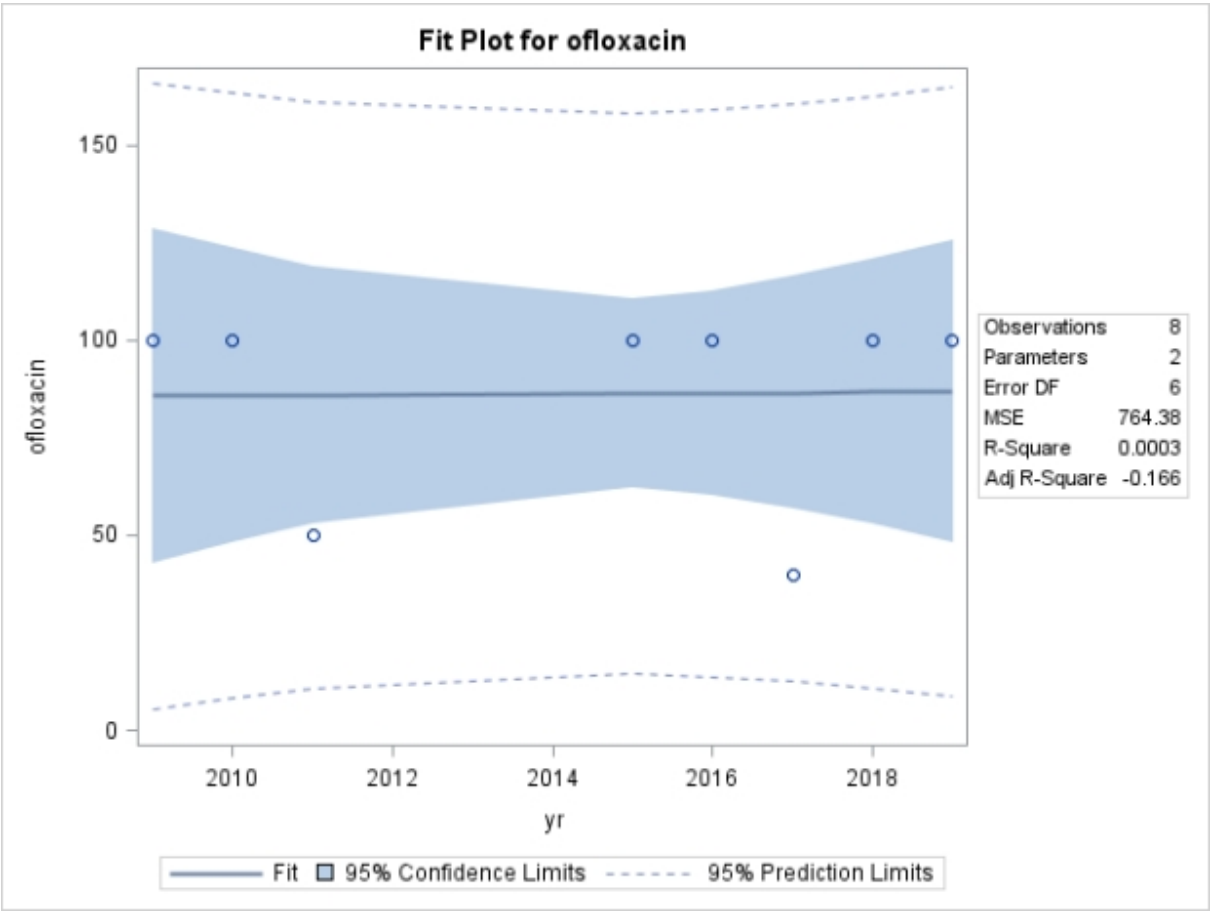
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ofloxacin**



## The UNIVARIATE Procedure
## Variable: ofloxacinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 8 | Sum Weights | 8 |
| Mean | -0.1326931 | Sum Observations | -1.0615444 |
| Std Deviation | 1.2867431 | Variance | 1.6557078 |
| Skewness | -1.597407 | Kurtosis | 1.03705413 |
| Uncorrected SS | 11.7308142 | Corrected SS | 11.5899546 |
| Coeff Variation | -969.71398 | Std Error Mean | 0.45493238 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.13269 | Std Deviation | 1.28674 |
| Median | 0.51087 | Variance | 1.65571 |
| Mode | . | Range | 3.28557 |
| | | Interquartile Range | 1.17059 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.29168 | Pr > \|t\| | 0.7790 |
| Sign | M | 2 | Pr >= \|M\| | 0.2891 |
| Signed Rank | S | 3 | Pr >= \|S\| | 0.7422 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.639358 | Pr < W | 0.0005 |
| Kolmogorov-Smirnov | D | 0.437367 | Pr > D | <0.0100 |
| Cramer-von Mises | W-Sq | 0.294036 | Pr > W-Sq | <0.0050 |
| Anderson-Darling | A-Sq | 1.468674 | Pr > A-Sq | <0.0050 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 0.636888 |
| 99% | 0.636888 |
| 95% | 0.636888 |
| 90% | 0.636888 |
| 75% Q3 | 0.567424 |
| 50% Median | 0.510870 |
| 25% Q1 | -0.603168 |
| 10% | -2.648683 |
| 5% | -2.648683 |
| 1% | -2.648683 |
| 0% Min | -2.648683 |

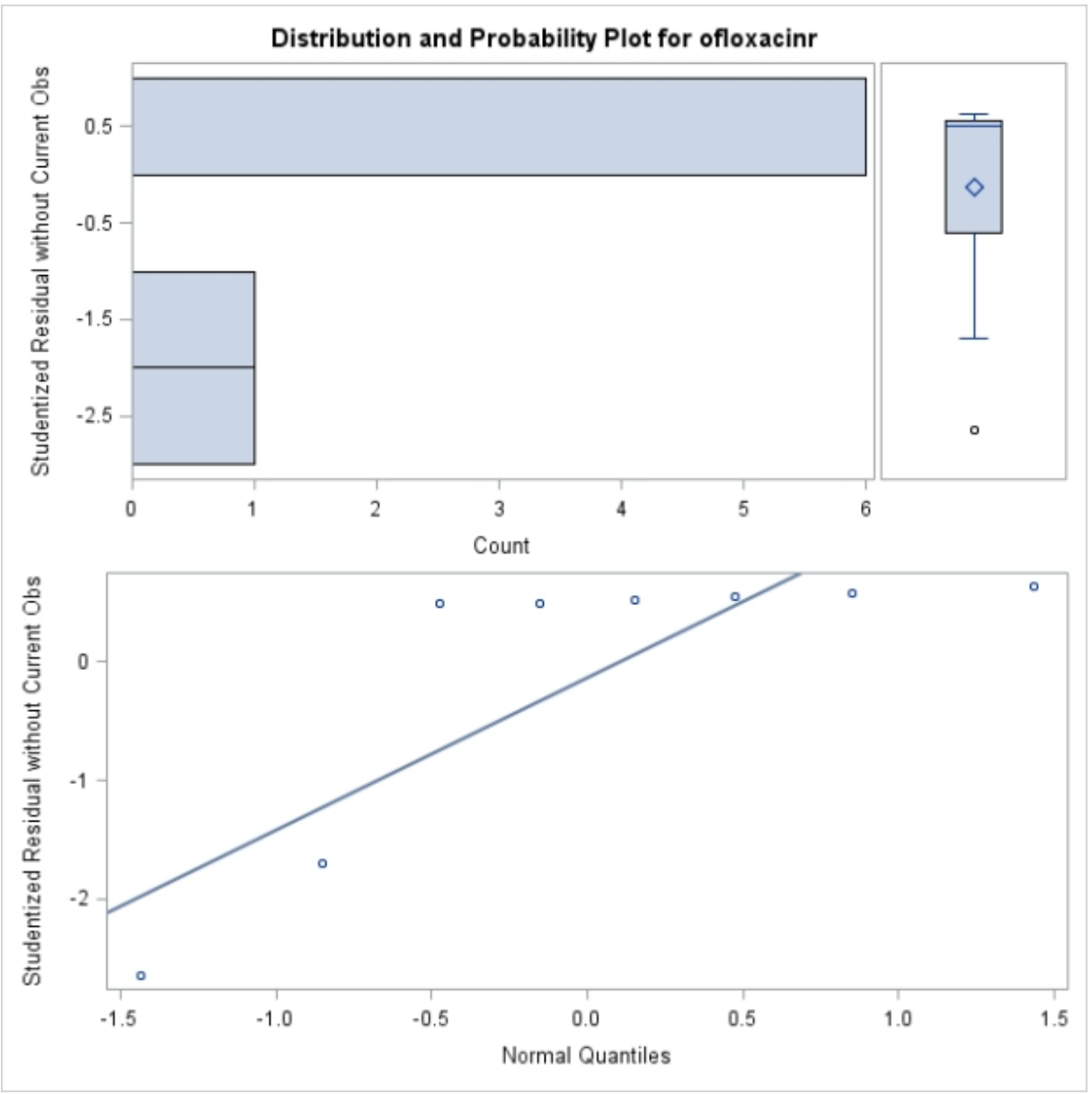
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -2.648683 | 10 | 0.498173 | 9 |
| -1.702089 | 4 | 0.523567 | 11 |
| 0.495753 | 8 | 0.550802 | 12 |

**The UNIVARIATE Procedure**
**Variable: ofloxacinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| 0.498173 | 9 | 0.584045 | 3 |
| 0.523567 | 11 | 0.636888 | 2 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 4 | 33.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: ofloxacinr (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 5 |
| Number of Observations with Missing Values | 7 |

**Analysis of Variance**

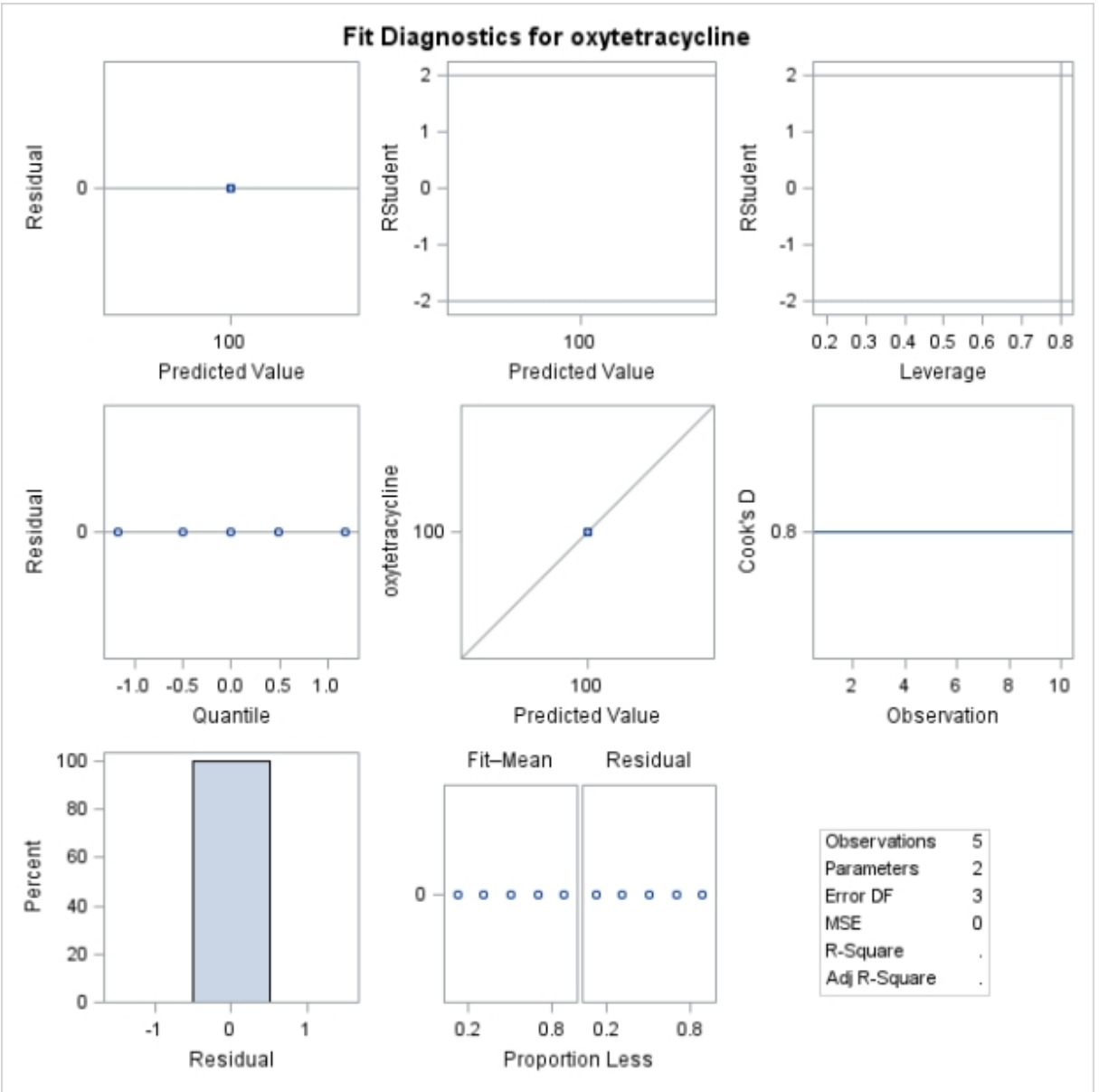
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 0 | 0 | . | . |
| Error | 3 | 0 | 0 | | |
| Corrected Total | 4 | 0 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 0 | R-Square | . |
| Dependent Mean | 100.00000 | Adj R-Sq | . |
| Coeff Var | 0 | | |

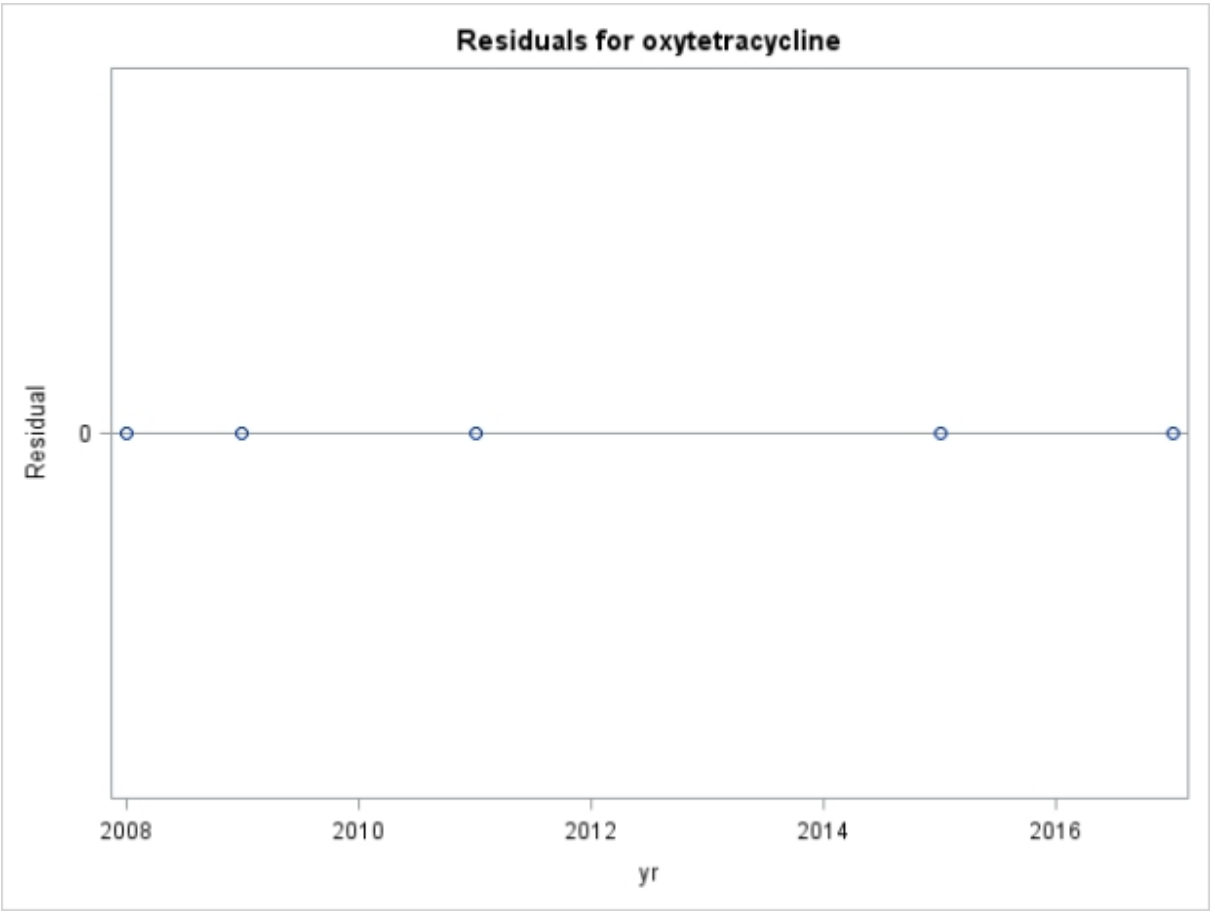
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 100.00000 | 0 | Infty | <.0001 |
| yr | 1 | 0 | 0 | . | . |

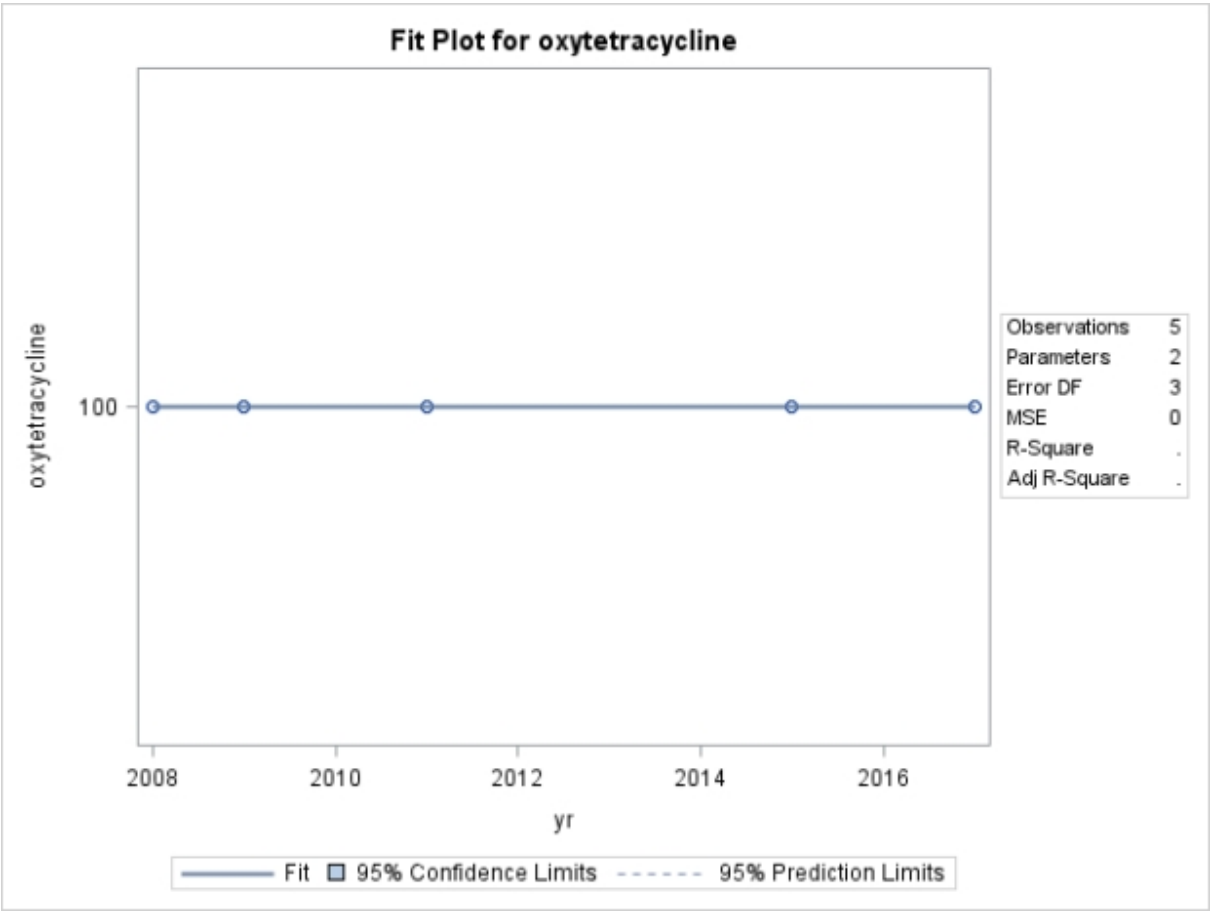
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The UNIVARIATE Procedure**
**Variable: oxytetracycliner (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 8 |
| Number of Observations with Missing Values | 4 |

**Analysis of Variance**

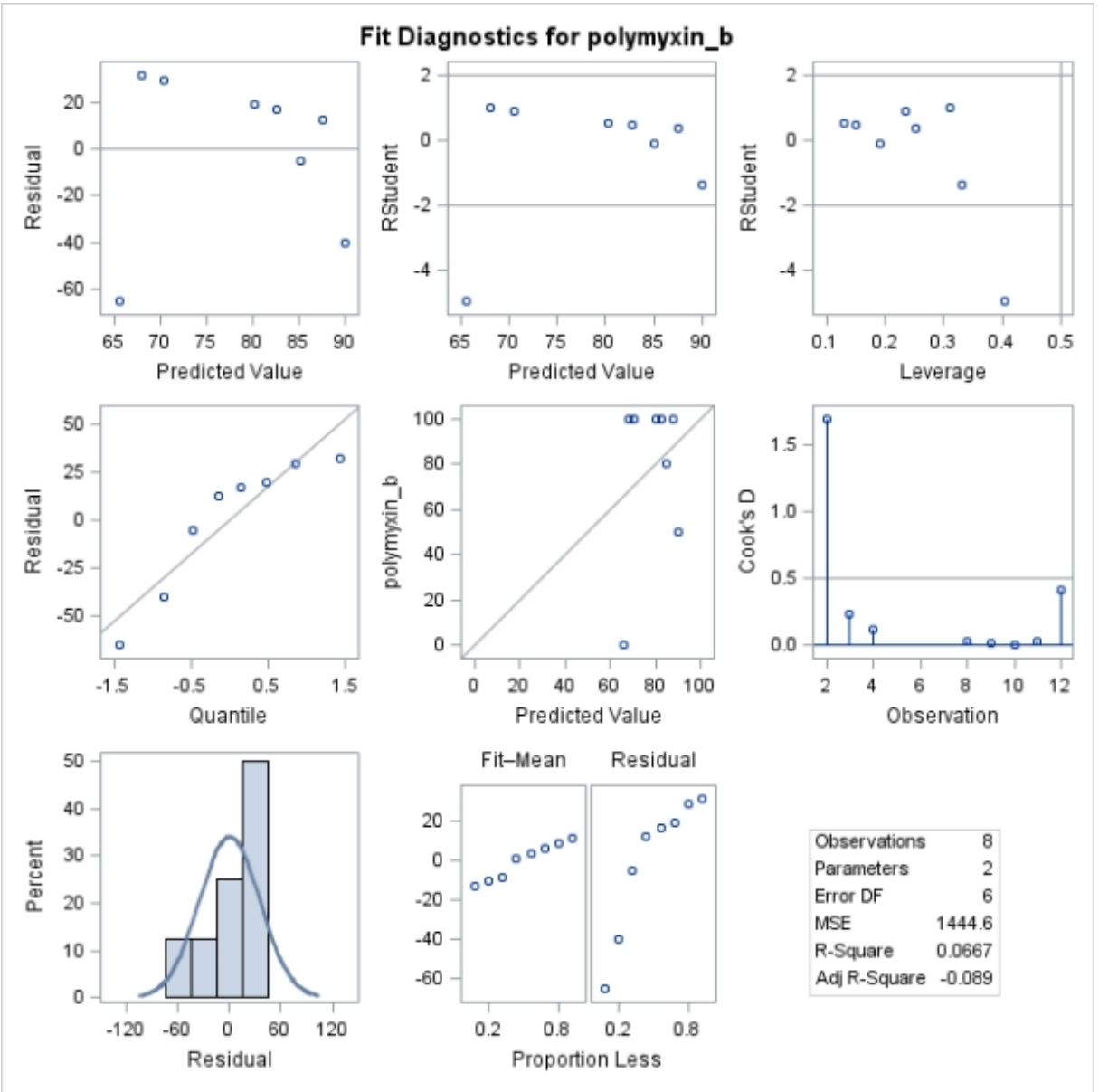
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 619.87064 | 619.87064 | 0.43 | 0.5367 |
| Error | 6 | 8667.62936 | 1444.60489 | | |
| Corrected Total | 7 | 9287.50000 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 38.00796 | R-Square | 0.0667 |
| Dependent Mean | 78.75000 | Adj R-Sq | -0.0888 |
| Coeff Var | 48.26407 | | |

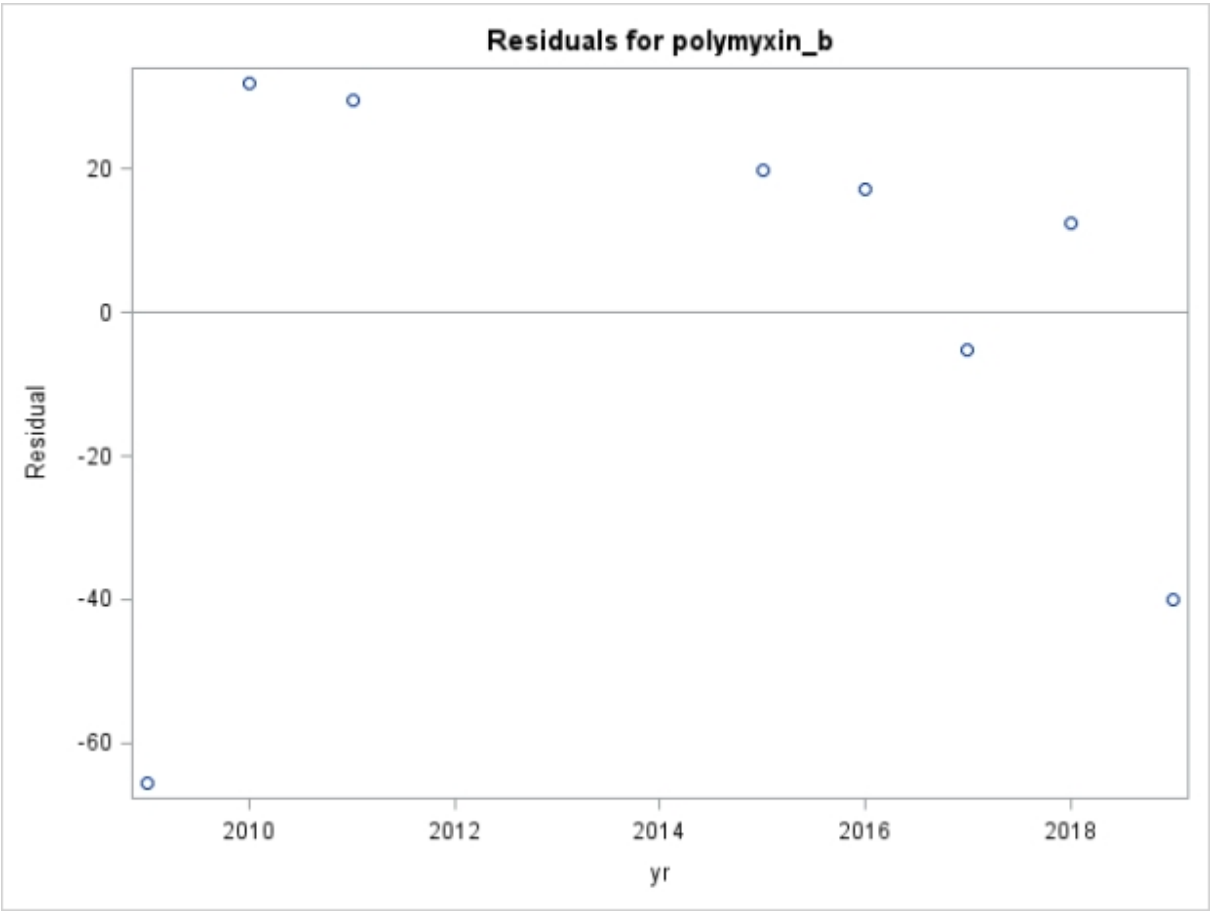
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | -4842.04573 | 7512.07716 | -0.64 | 0.5430 |
| yr | 1 | 2.44284 | 3.72923 | 0.66 | 0.5367 |

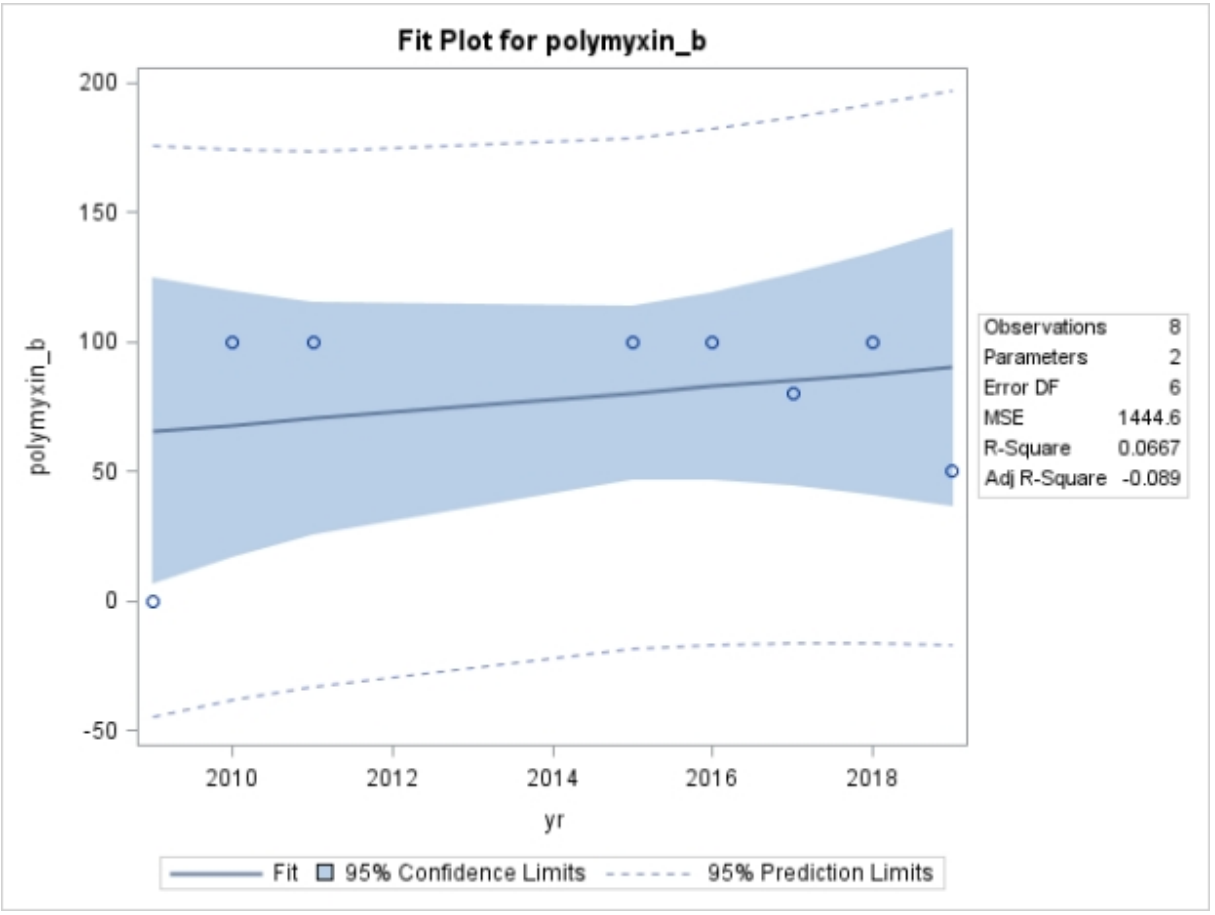
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: polymyxin_b**



## The UNIVARIATE Procedure
## Variable: polymyxin_br (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 8 | Sum Weights | 8 |
| Mean | -0.4114238 | Sum Observations | -3.2913904 |
| Std Deviation | 1.99212118 | Variance | 3.96854679 |
| Skewness | -2.1553753 | Kurtosis | 4.80209004 |
| Uncorrected SS | 29.1339838 | Corrected SS | 27.7798275 |
| Coeff Variation | -484.20174 | Std Error Mean | 0.7043212 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | -0.41142 | Std Deviation | 1.99212 |
| Median | 0.40397 | Variance | 3.96855 |
| Mode | . | Range | 5.99505 |
| | | Interquartile Range | 1.45525 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | -0.58414 | Pr > \|t\| | 0.5775 |
| Sign | M | 1 | Pr >= \|M\| | 0.7266 |
| Signed Rank | S | 2 | Pr >= \|S\| | 0.8438 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.716426 | Pr < W | 0.0035 |
| Kolmogorov-Smirnov | D | 0.304556 | Pr > D | 0.0271 |
| Cramer-von Mises | W-Sq | 0.179177 | Pr > W-Sq | 0.0073 |
| Anderson-Darling | A-Sq | 1.011163 | Pr > A-Sq | 0.0057 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 1.013297 |
| 99% | 1.013297 |
| 95% | 1.013297 |
| 90% | 1.013297 |
| 75% Q3 | 0.694908 |
| 50% Median | 0.403971 |
| 25% Q1 | -0.760345 |
| 10% | -4.981756 |
| 5% | -4.981756 |
| 1% | -4.981756 |
| 0% Min | -4.981756 |

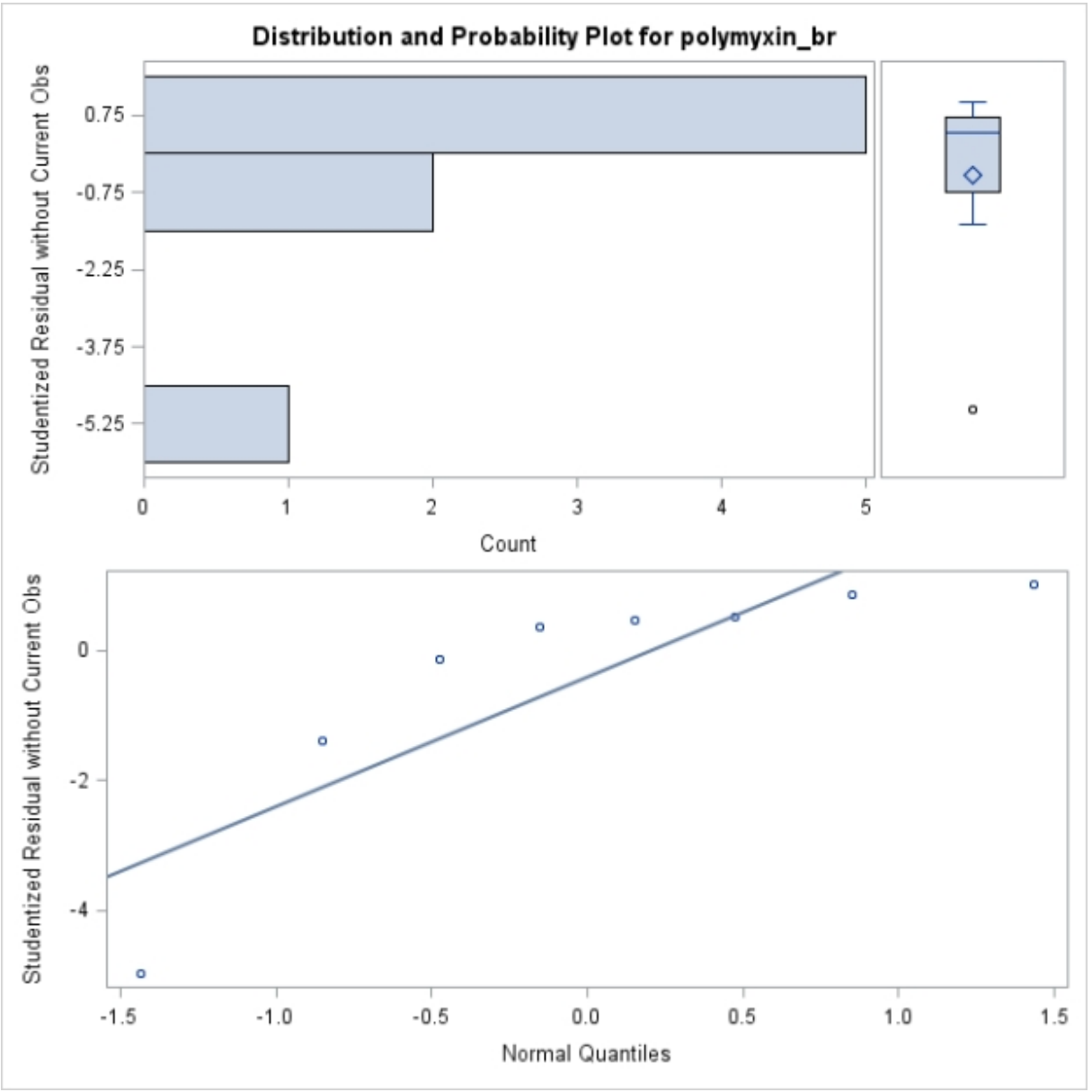
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -4.981756 | 2 | 0.348241 | 11 |
| -1.382545 | 12 | 0.459701 | 9 |
| -0.138145 | 10 | 0.521109 | 8 |

**The UNIVARIATE Procedure**
**Variable: polymyxin_br (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| 0.348241 | 11 | 0.868708 | 4 |
| 0.459701 | 9 | 1.013297 | 3 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 4 | 33.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: polymyxin_br (Studentized Residual without Current Obs)**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 9 |
| Number of Observations with Missing Values | 3 |

**Analysis of Variance**

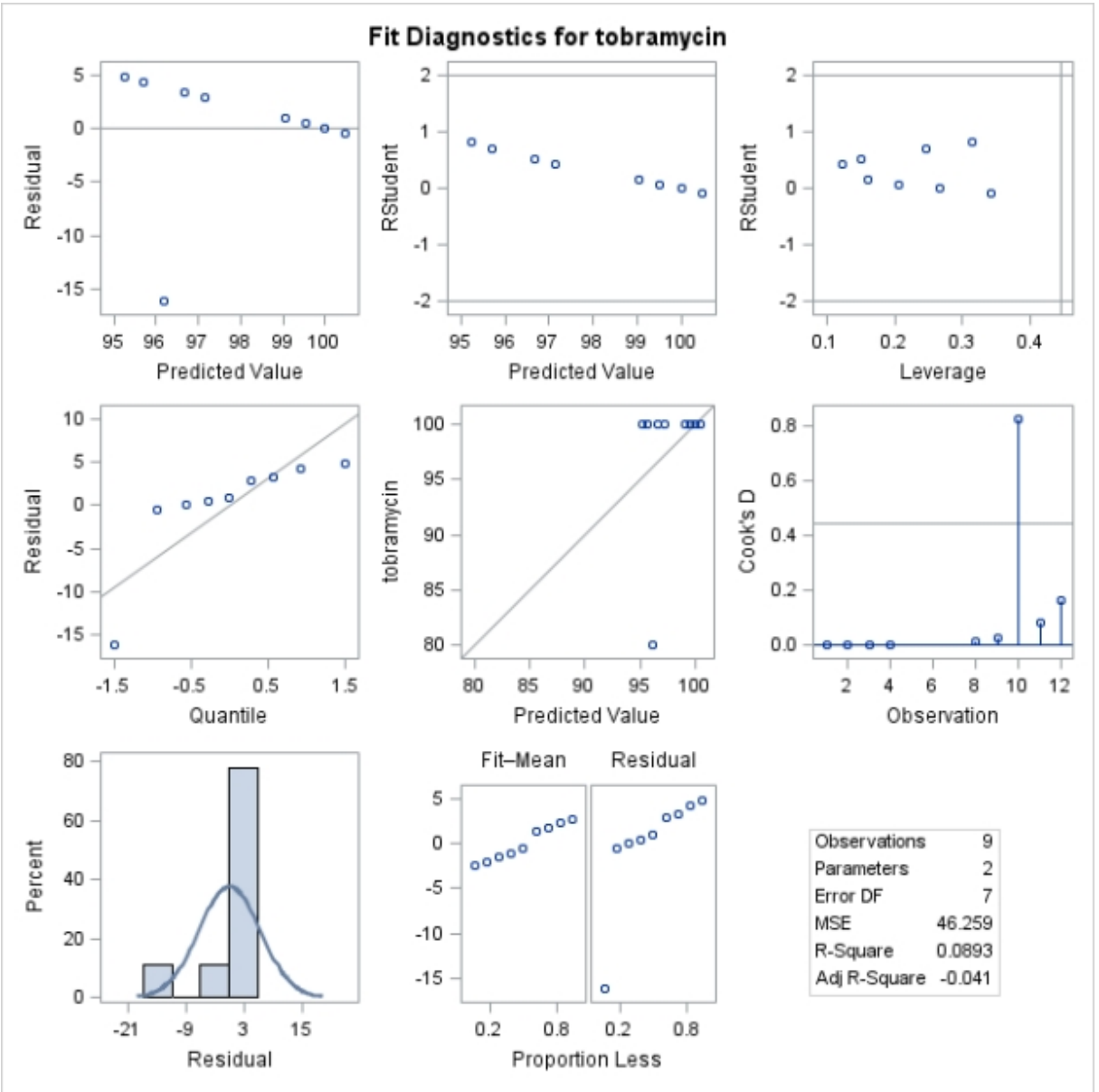
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 31.74603 | 31.74603 | 0.69 | 0.4348 |
| Error | 7 | 323.80952 | 46.25850 | | |
| Corrected Total | 8 | 355.55556 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 6.80136 | R-Square | 0.0893 |
| Dependent Mean | 97.77778 | Adj R-Sq | -0.0408 |
| Coeff Var | 6.95594 | | |

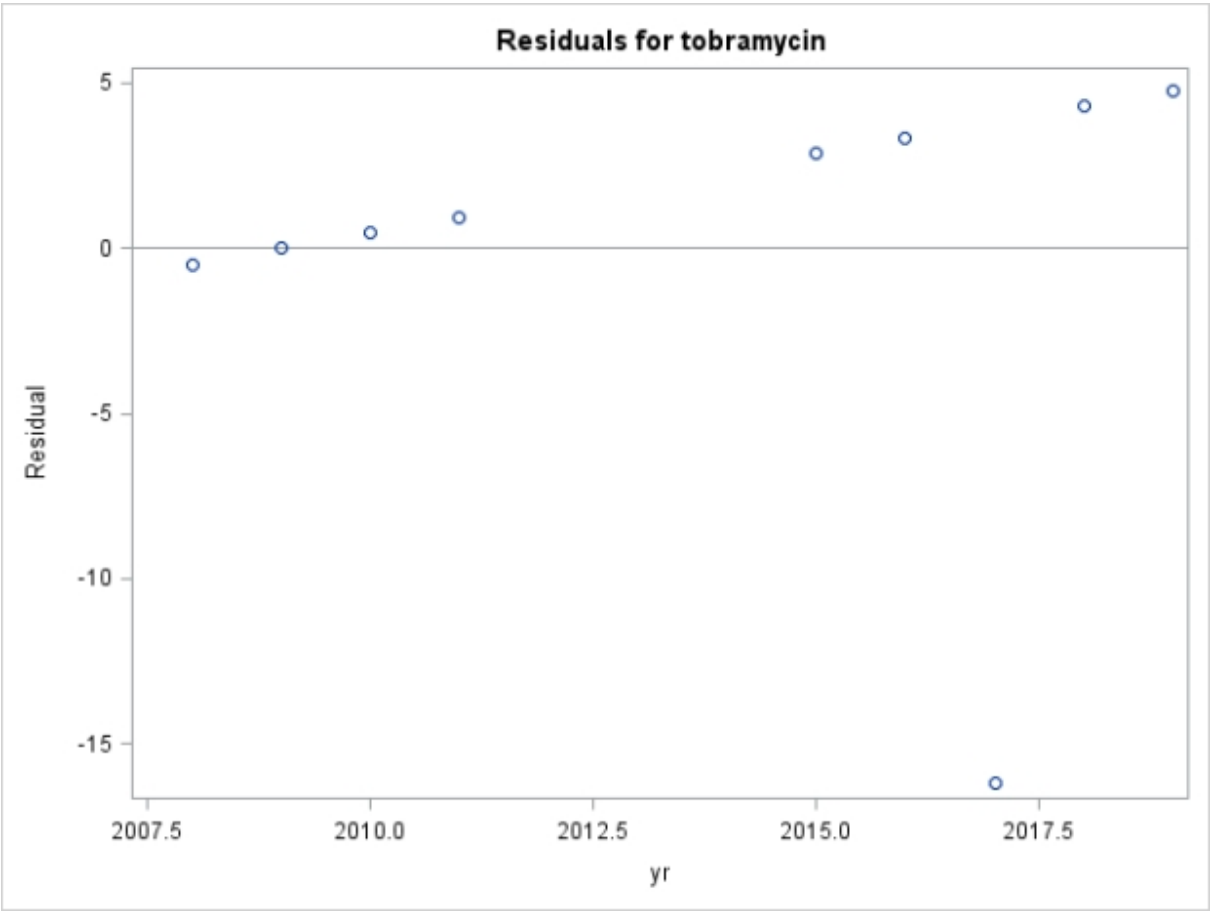
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 1056.66667 | 1157.49783 | 0.91 | 0.3917 |
| yr | 1 | -0.47619 | 0.57482 | -0.83 | 0.4348 |

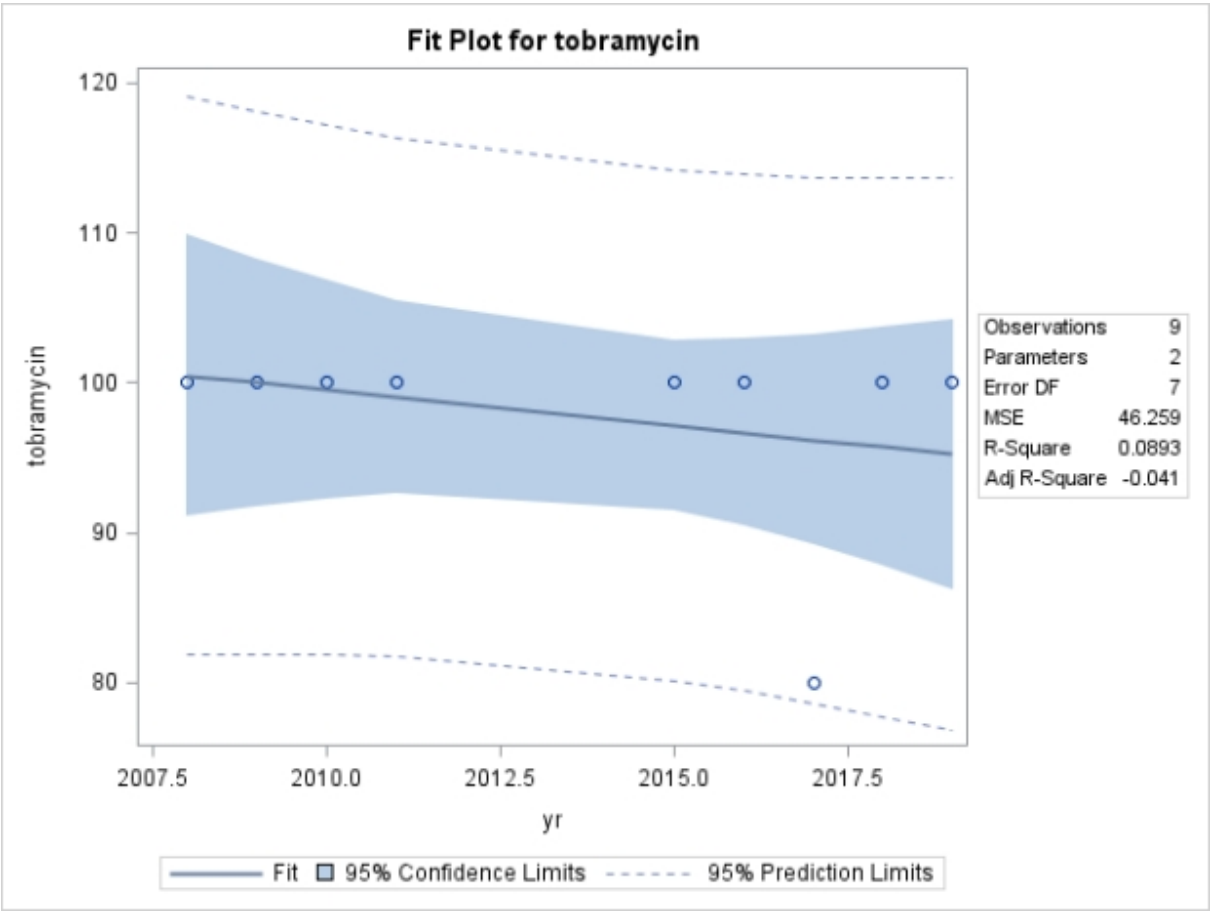
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: tobramycin**



## The UNIVARIATE Procedure
## Variable: tobramycinr (Studentized Residual without Current Obs)

| Moments | | | |
|---|---|---|---|
| N | 8 | Sum Weights | 8 |
| Mean | 0.3228964 | Sum Observations | 2.58317117 |
| Std Deviation | 0.33760858 | Variance | 0.11397955 |
| Skewness | 0.32906319 | Kurtosis | -1.5412157 |
| Uncorrected SS | 1.63195352 | Corrected SS | 0.79785686 |
| Coeff Variation | 104.556316 | Std Error Mean | 0.11936266 |

| Basic Statistical Measures | | | |
|---|---|---|---|
| Location | | Variability | |
| Mean | 0.322896 | Std Deviation | 0.33761 |
| Median | 0.281725 | Variance | 0.11398 |
| Mode | . | Range | 0.90596 |
| | | Interquartile Range | 0.56391 |

| Tests for Location: Mu0=0 | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Student's t | t | 2.705171 | Pr > \|t\| | 0.0304 |
| Sign | M | 3 | Pr >= \|M\| | 0.0703 |
| Signed Rank | S | 15 | Pr >= \|S\| | 0.0391 |

| Tests for Normality | | | | |
|---|---|---|---|---|
| Test | Statistic | | p Value | |
| Shapiro-Wilk | W | 0.927077 | Pr < W | 0.4899 |
| Kolmogorov-Smirnov | D | 0.204114 | Pr > D | >0.1500 |
| Cramer-von Mises | W-Sq | 0.046578 | Pr > W-Sq | >0.2500 |
| Anderson-Darling | A-Sq | 0.288765 | Pr > A-Sq | >0.2500 |

| Quantiles (Definition 5) | |
|---|---|
| Level | Quantile |
| 100% Max | 0.8260984 |
| 99% | 0.8260984 |
| 95% | 0.8260984 |
| 90% | 0.8260984 |
| 75% Q3 | 0.6003266 |
| 50% Median | 0.2817249 |
| 25% Q1 | 0.0364146 |
| 10% | -0.0798596 |
| 5% | -0.0798596 |
| 1% | -0.0798596 |
| 0% Min | -0.0798596 |

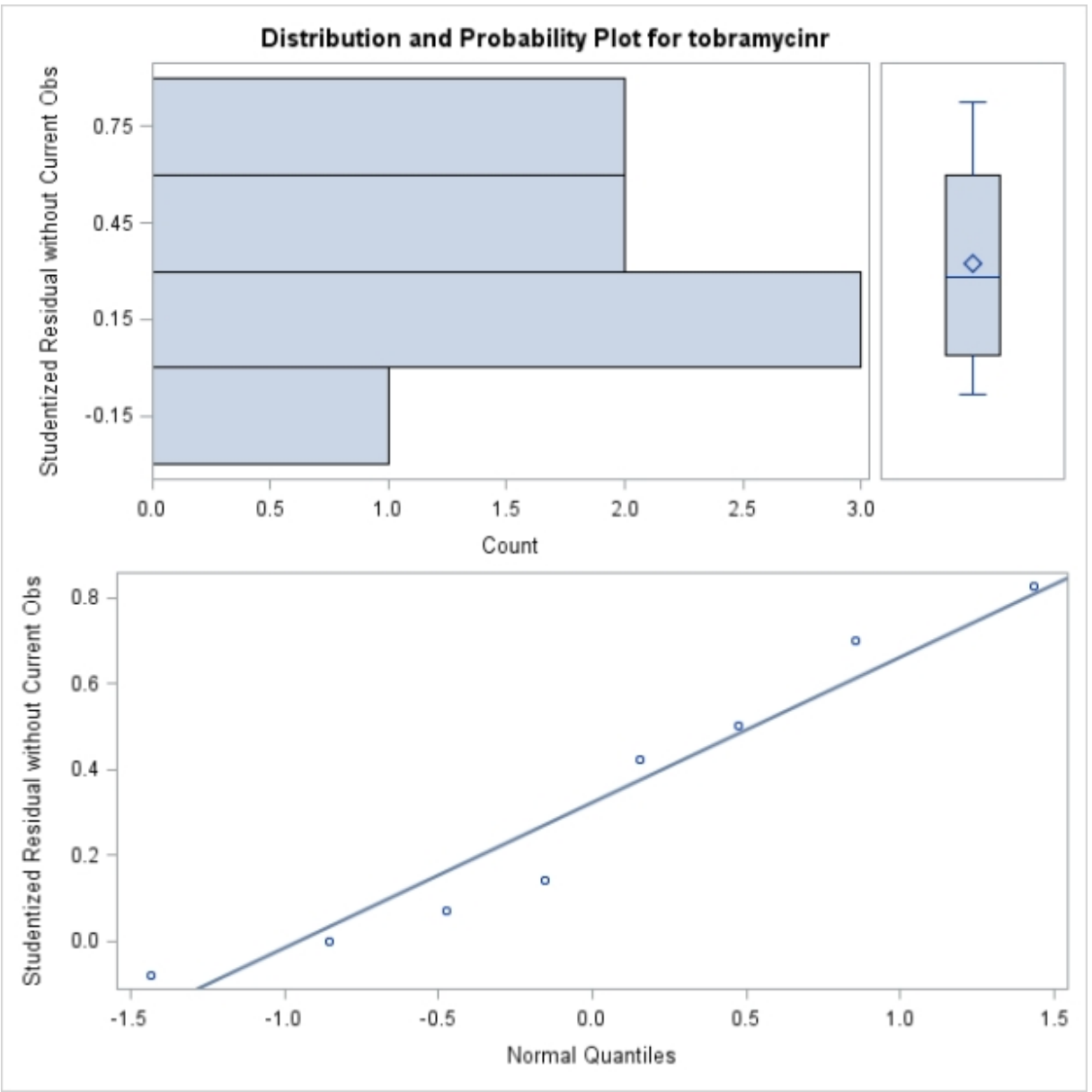
| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| -0.0798596 | 1 | 0.141848 | 4 |
| 0.0000000 | 2 | 0.421602 | 8 |
| 0.0728293 | 3 | 0.502398 | 9 |

**The UNIVARIATE Procedure**
**Variable: tobramycinr (Studentized Residual without Current Obs)**

| Extreme Observations | | | |
|---|---|---|---|
| Lowest | | Highest | |
| Value | Obs | Value | Obs |
| 0.1418475 | 4 | 0.698255 | 11 |
| 0.4216023 | 8 | 0.826098 | 12 |

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of | |
| | | All Obs | Missing Obs |
| . | 4 | 33.33 | 100.00 |

**The UNIVARIATE Procedure**
**Variable: tobramycinr (Studentized Residual without Current Obs)**



## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: bacitracinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 10 |
| Number of Observations with Missing Values | 2 |

**Analysis of Variance**

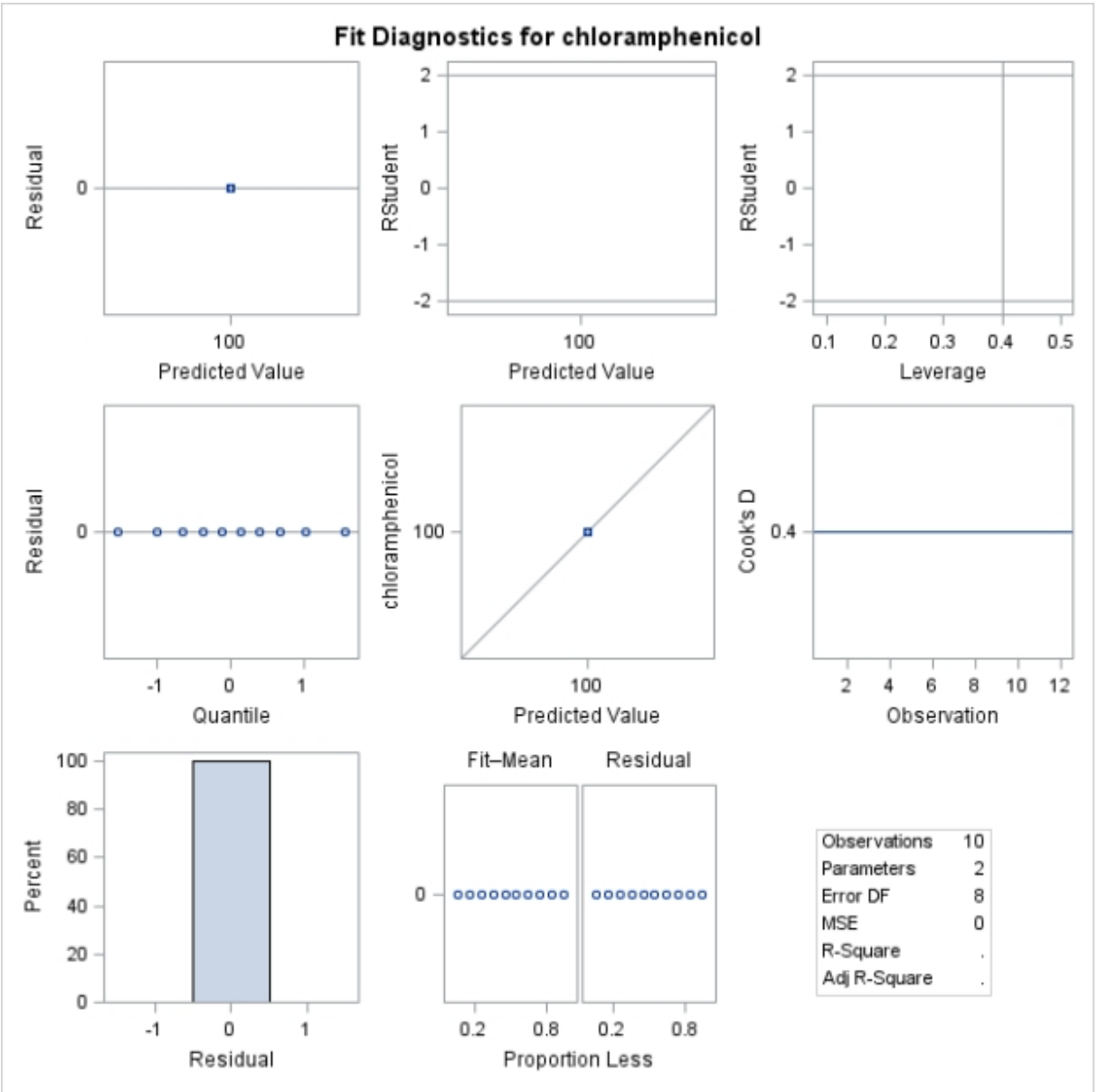
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 0 | 0 | . | . |
| Error | 8 | 0 | 0 | | |
| Corrected Total | 9 | 0 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 0 | R-Square | . |
| Dependent Mean | 100.00000 | Adj R-Sq | . |
| Coeff Var | 0 | | |

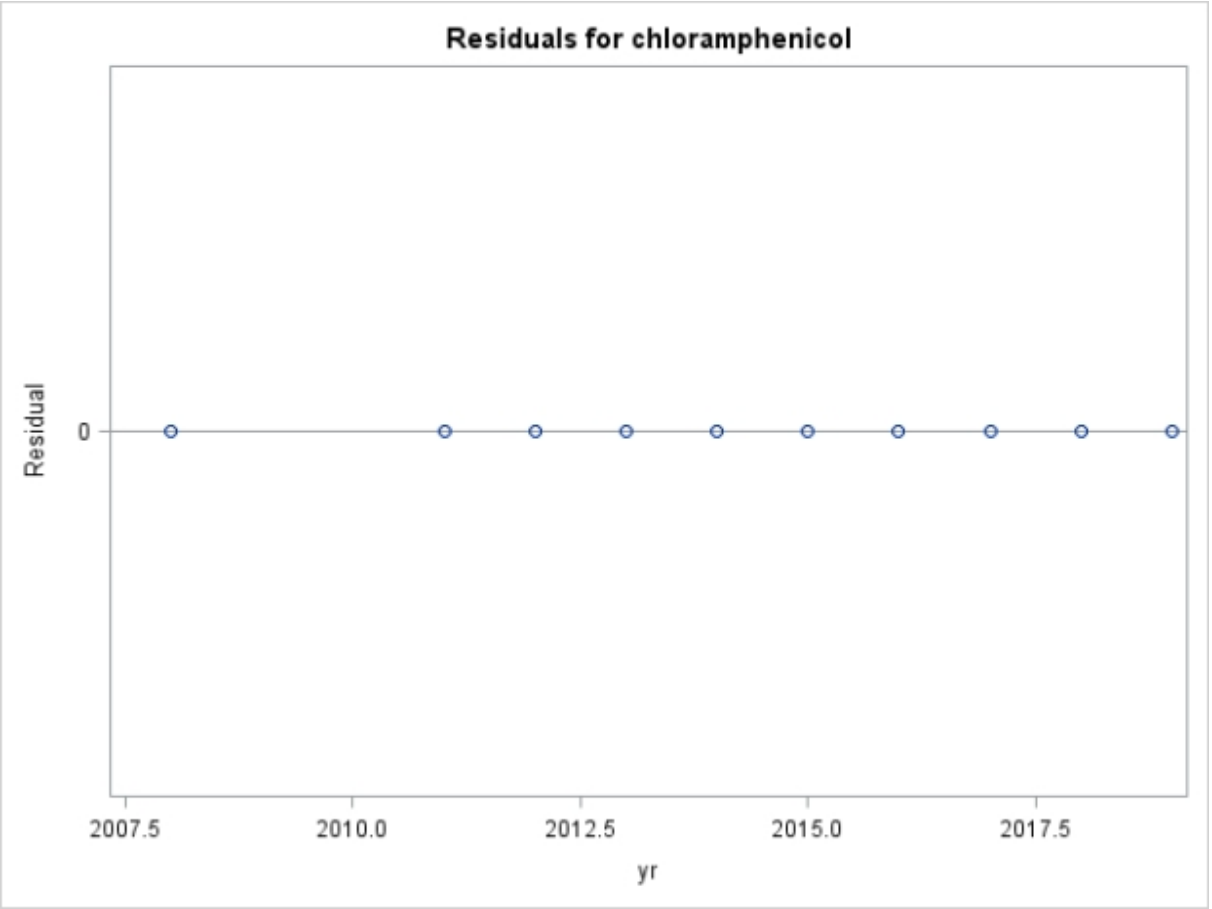
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 100.00000 | 0 | Infty | <.0001 |
| yr | 1 | 0 | 0 | . | . |

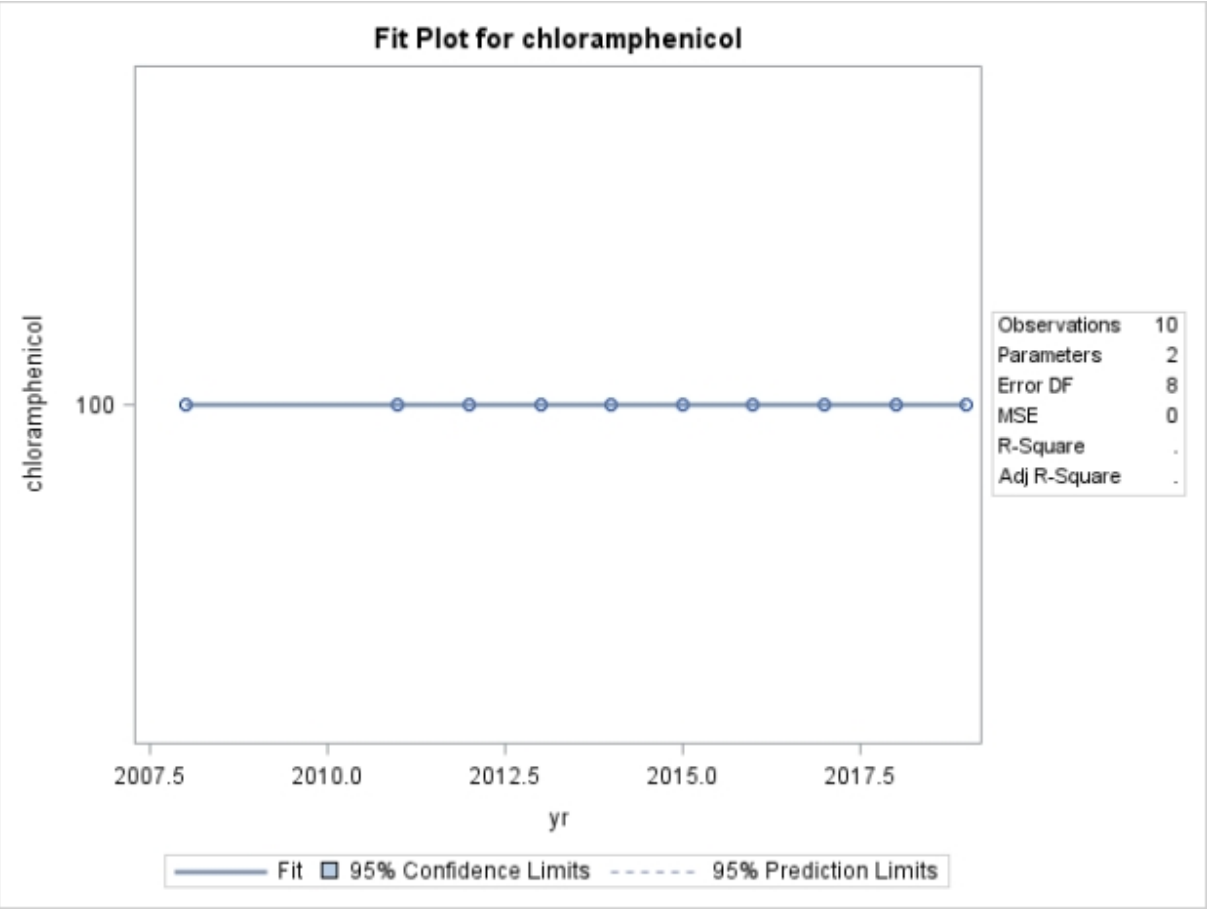
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: chloramphenicol**



**The UNIVARIATE Procedure**
**Variable: chloramphenicolr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 8 |
| Number of Observations with Missing Values | 4 |

**Analysis of Variance**

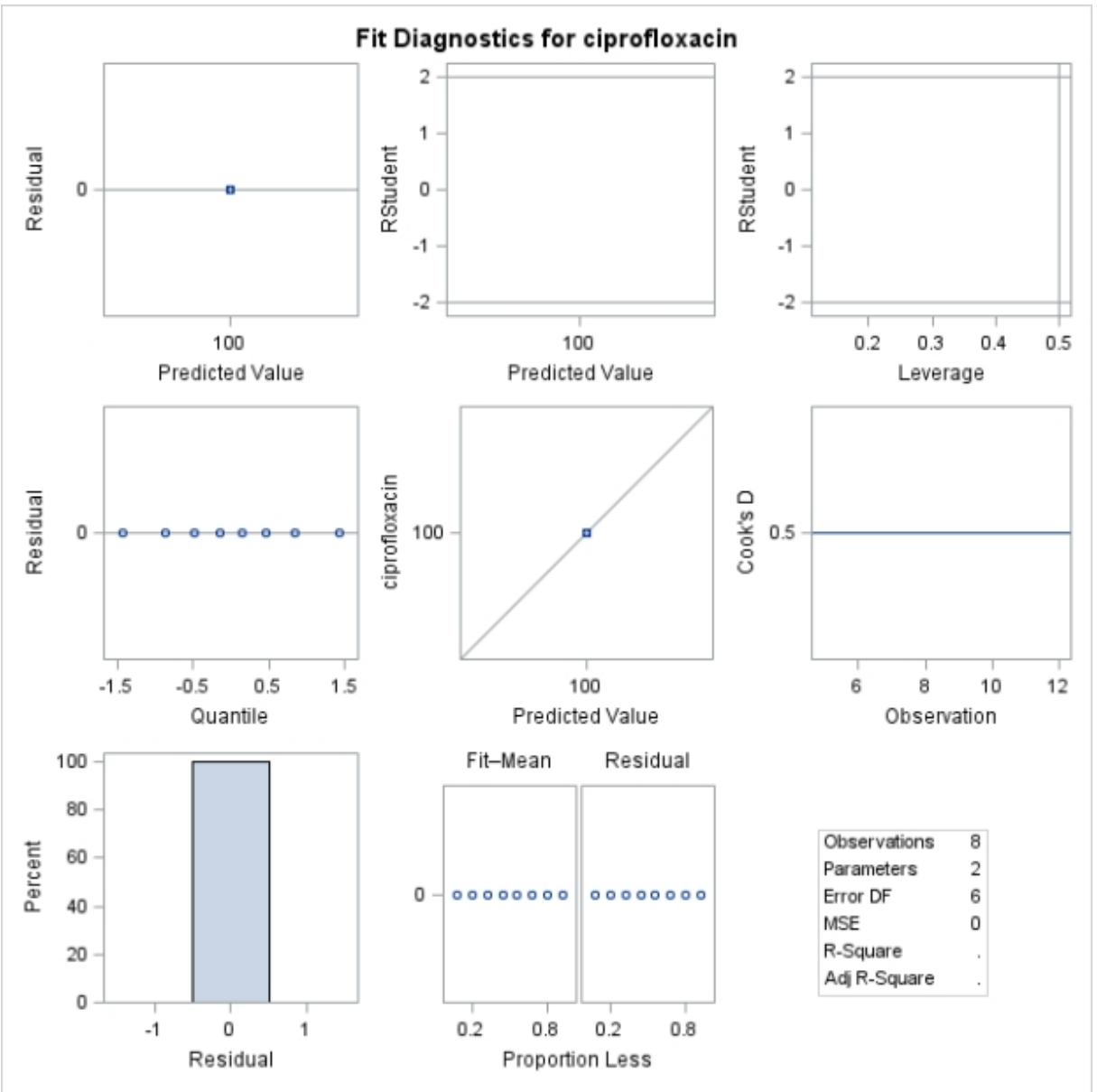
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 0 | 0 | . | . |
| Error | 6 | 0 | 0 | | |
| Corrected Total | 7 | 0 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 0 | R-Square | . |
| Dependent Mean | 100.00000 | Adj R-Sq | . |
| Coeff Var | 0 | | |

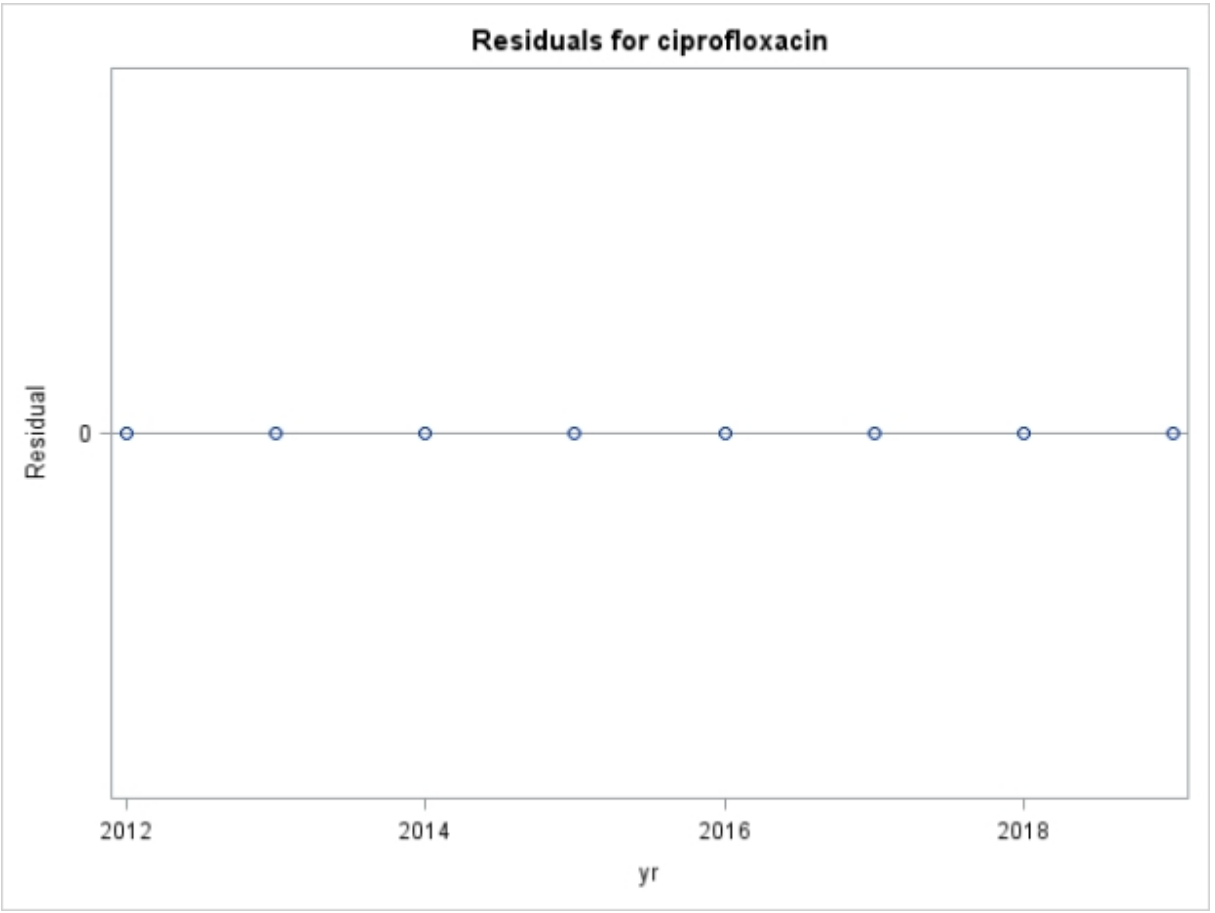
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 100.00000 | 0 | Infty | <.0001 |
| yr | 1 | 0 | 0 | . | . |

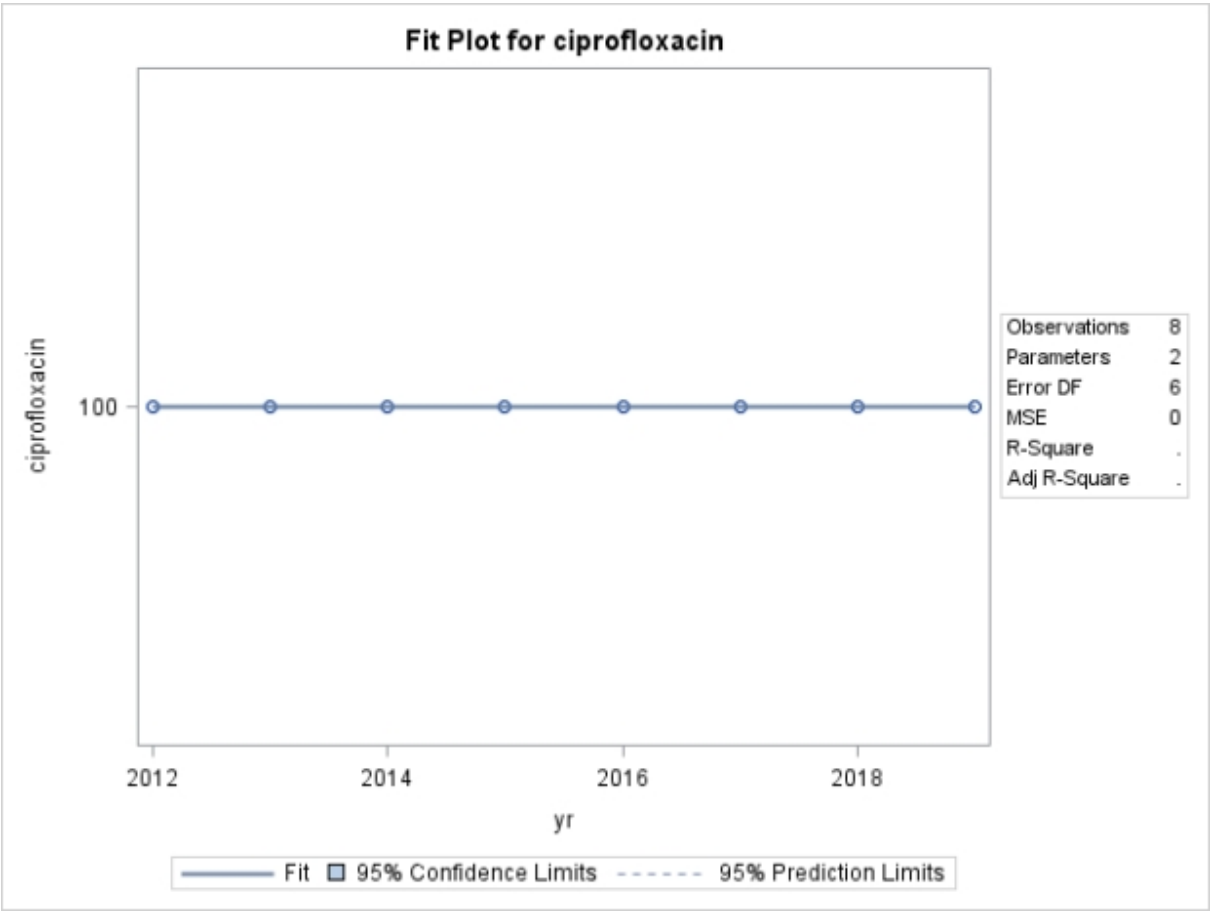
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: ciprofloxacin**



**The UNIVARIATE Procedure**
**Variable: ciprofloxacinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 3 |
| Number of Observations with Missing Values | 9 |

**Analysis of Variance**

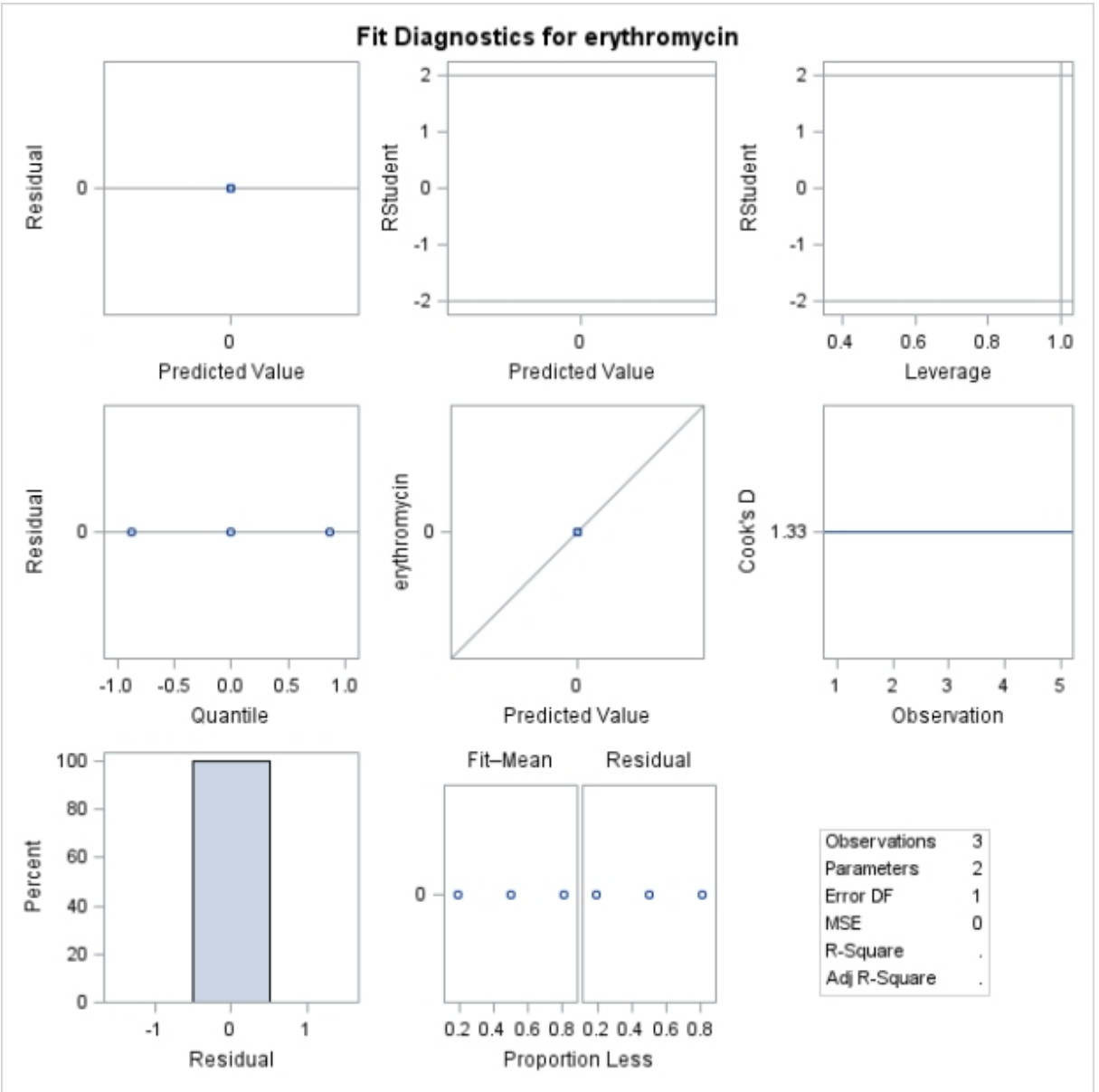
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 0 | 0 | . | . |
| Error | 1 | 0 | 0 | | |
| Corrected Total | 2 | 0 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 0 | R-Square | . |
| Dependent Mean | 0 | Adj R-Sq | . |
| Coeff Var | . | | |

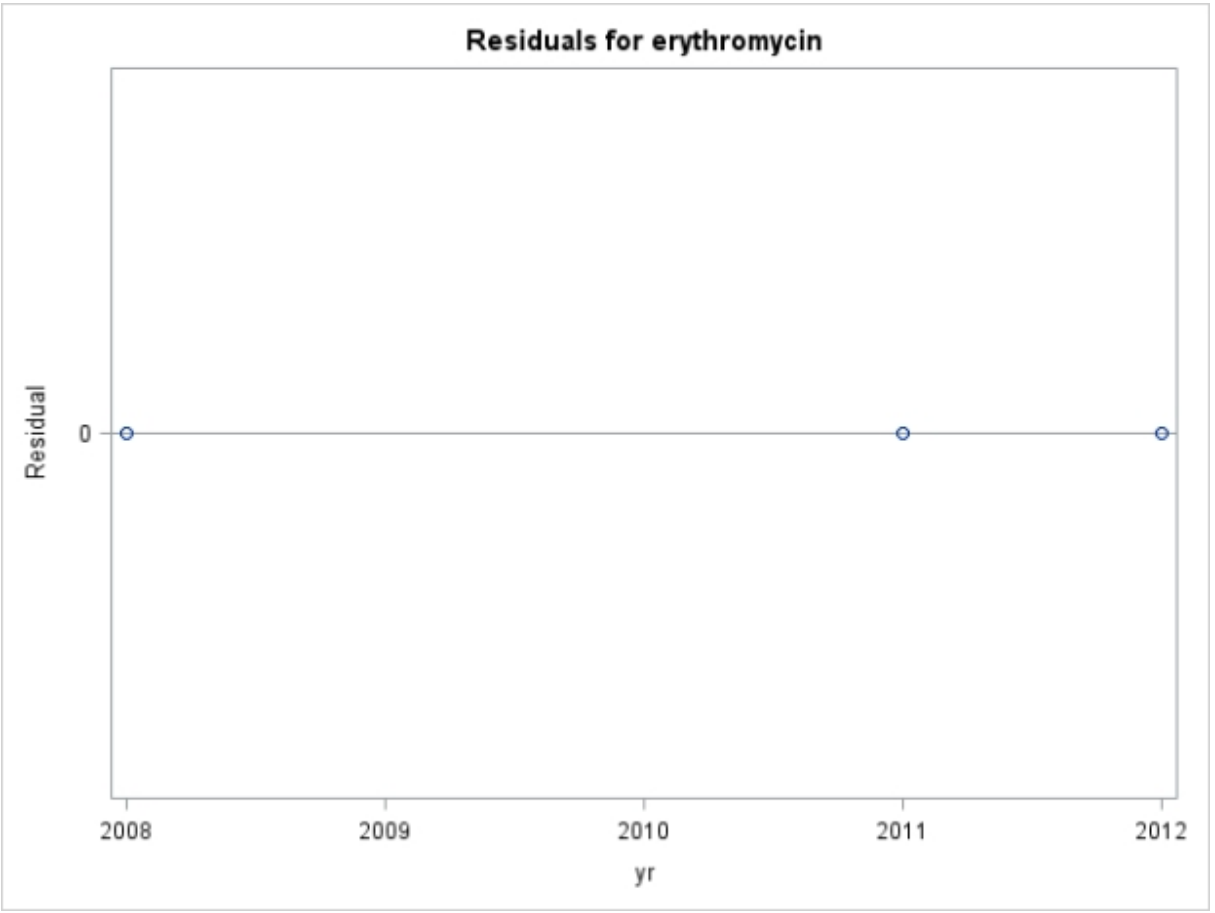
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 0 | 0 | . | . |
| yr | 1 | 0 | 0 | . | . |

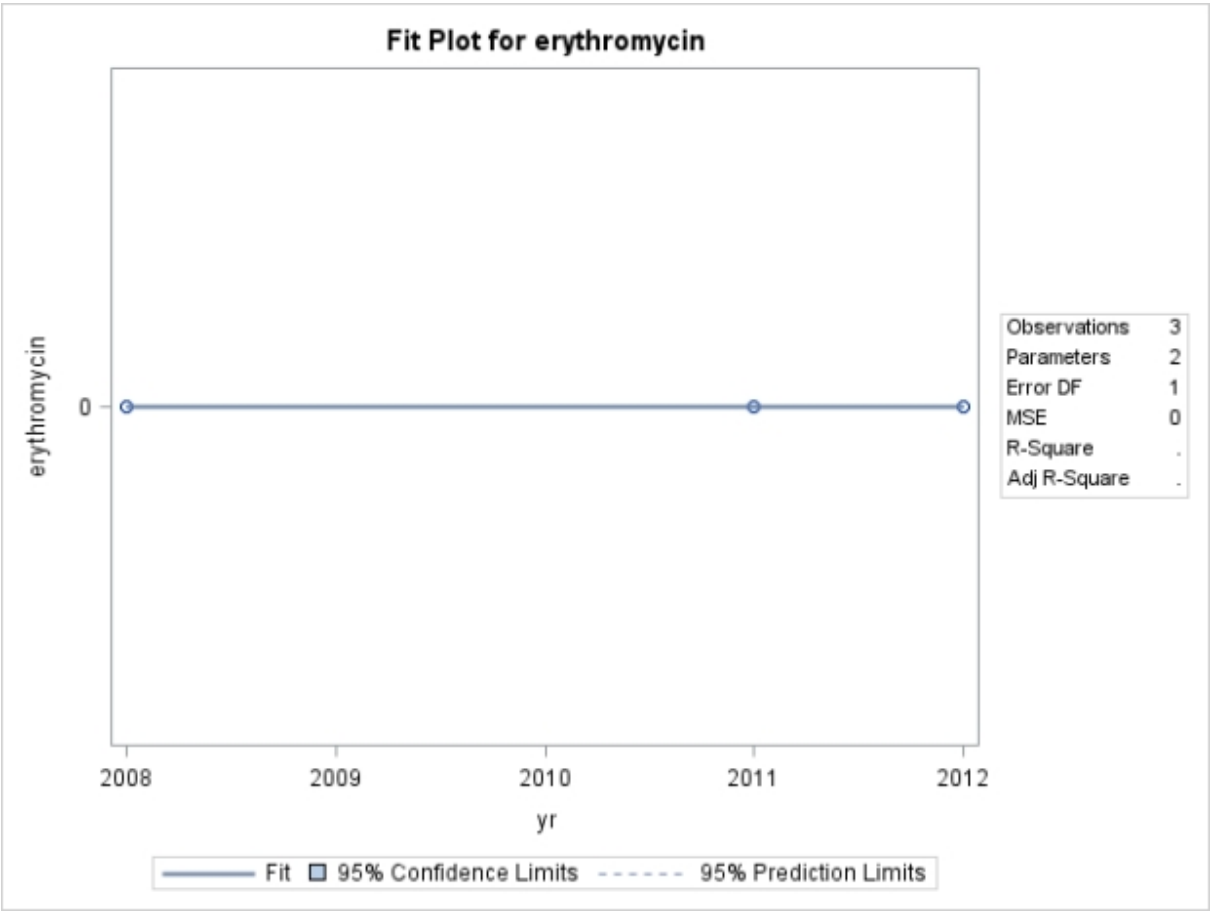
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: erythromycin**



**The UNIVARIATE Procedure**
**Variable: erythromycinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: gentamicinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 8 |
| Number of Observations with Missing Values | 4 |

**Analysis of Variance**

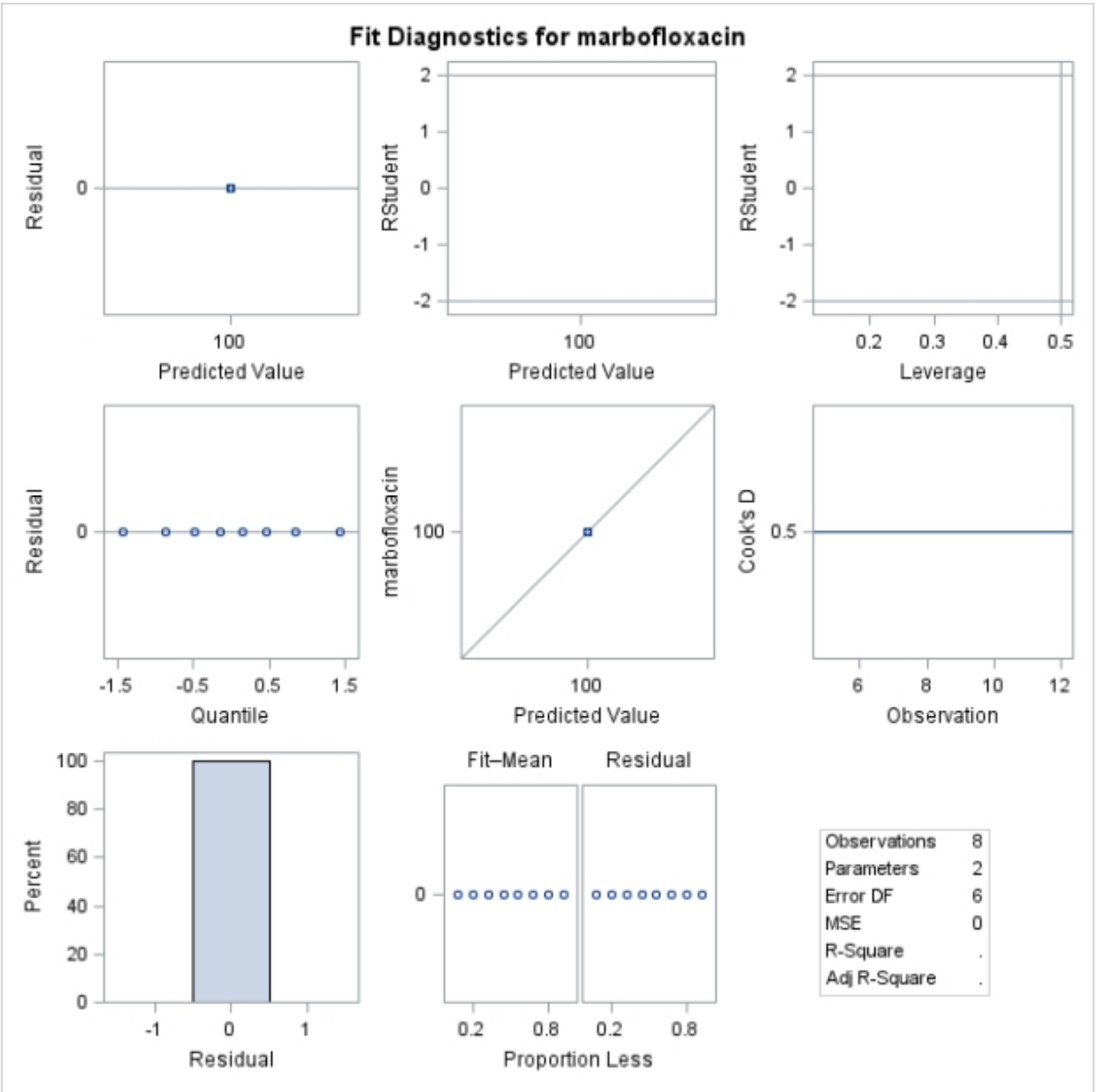
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 0 | 0 | . | . |
| Error | 6 | 0 | 0 | | |
| Corrected Total | 7 | 0 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 0 | R-Square | . |
| Dependent Mean | 100.00000 | Adj R-Sq | . |
| Coeff Var | 0 | | |

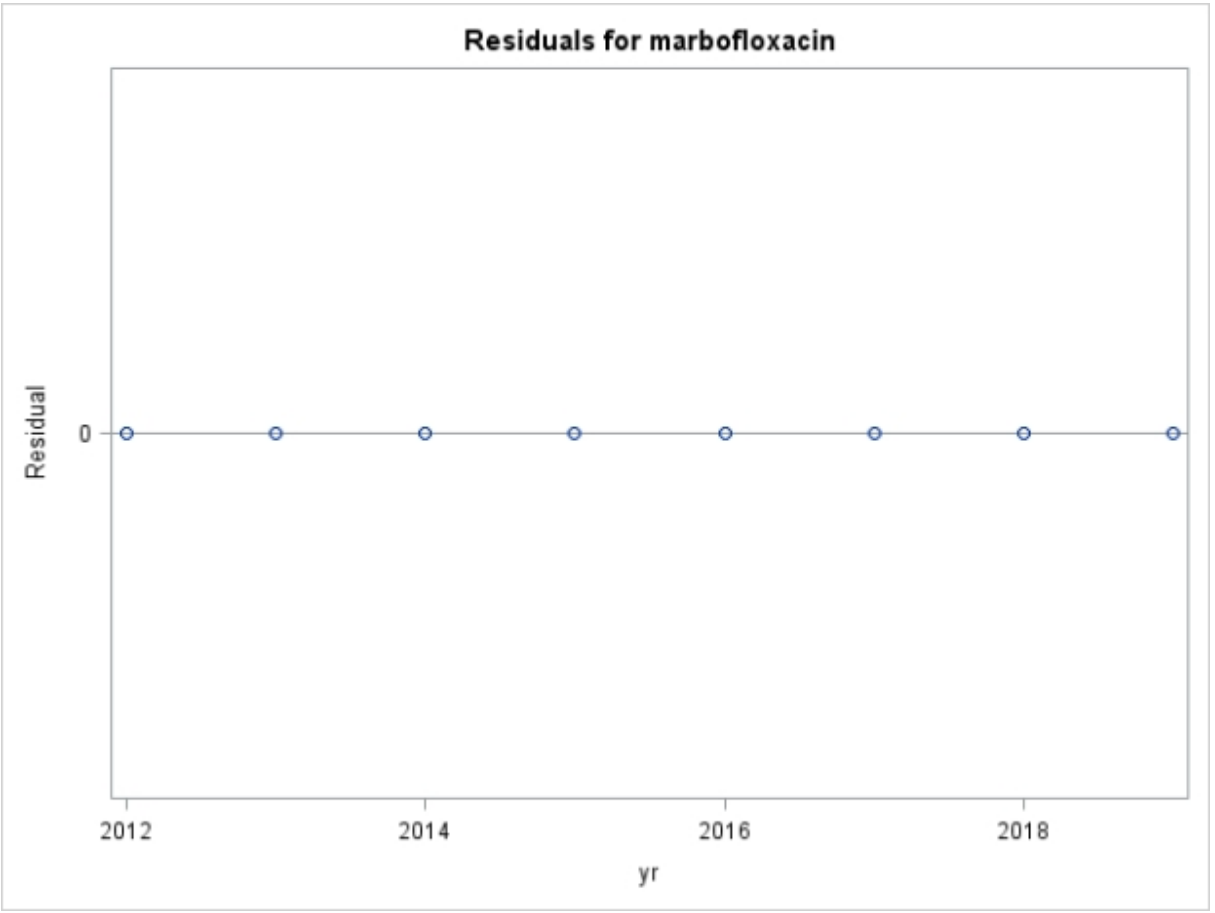
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 100.00000 | 0 | Infty | <.0001 |
| yr | 1 | 0 | 0 | . | . |

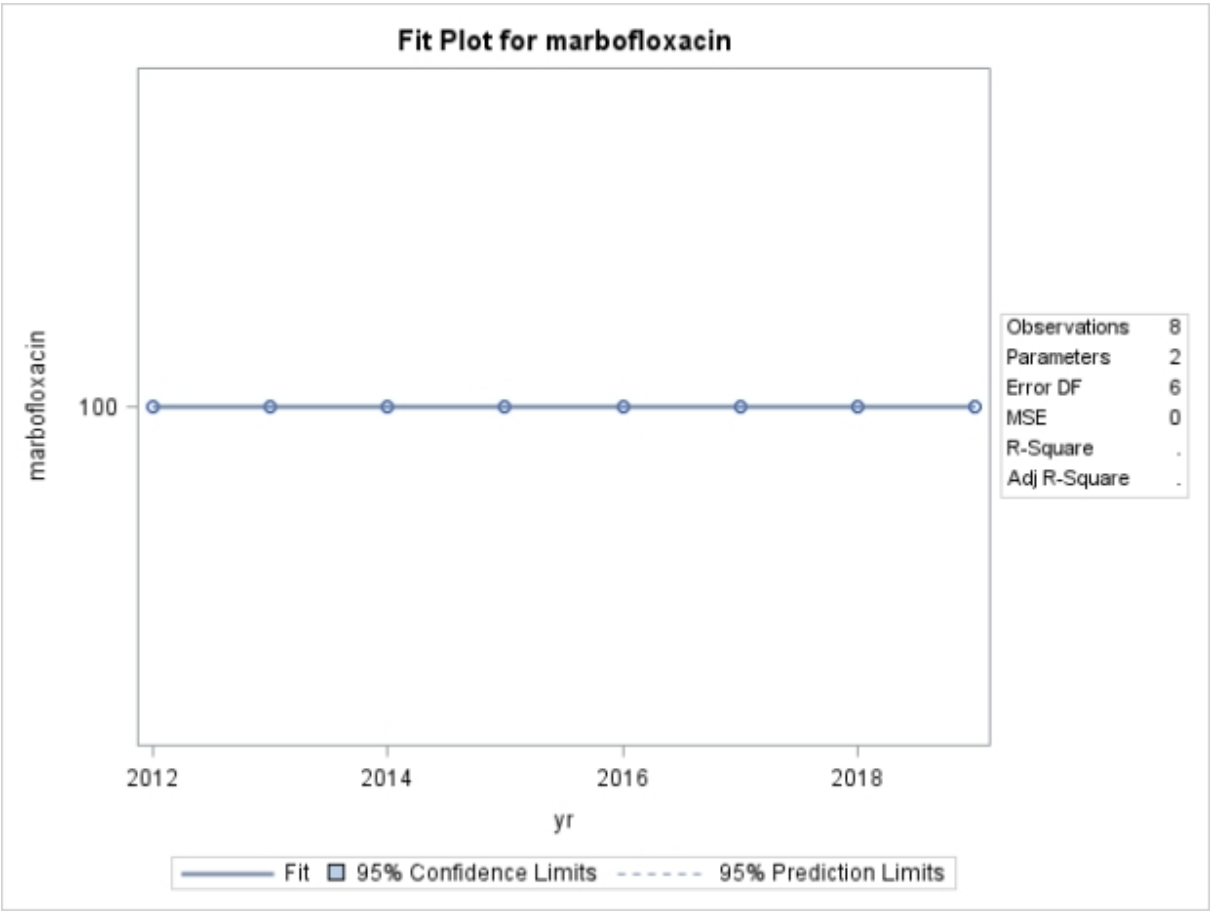
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: marbofloxacin**



**The UNIVARIATE Procedure**
**Variable: marbofloxacinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: neomycinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: ofloxacinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**

| | |
|---|---|
| Number of Observations Read | 12 |
| Number of Observations Used | 9 |
| Number of Observations with Missing Values | 3 |

**Analysis of Variance**

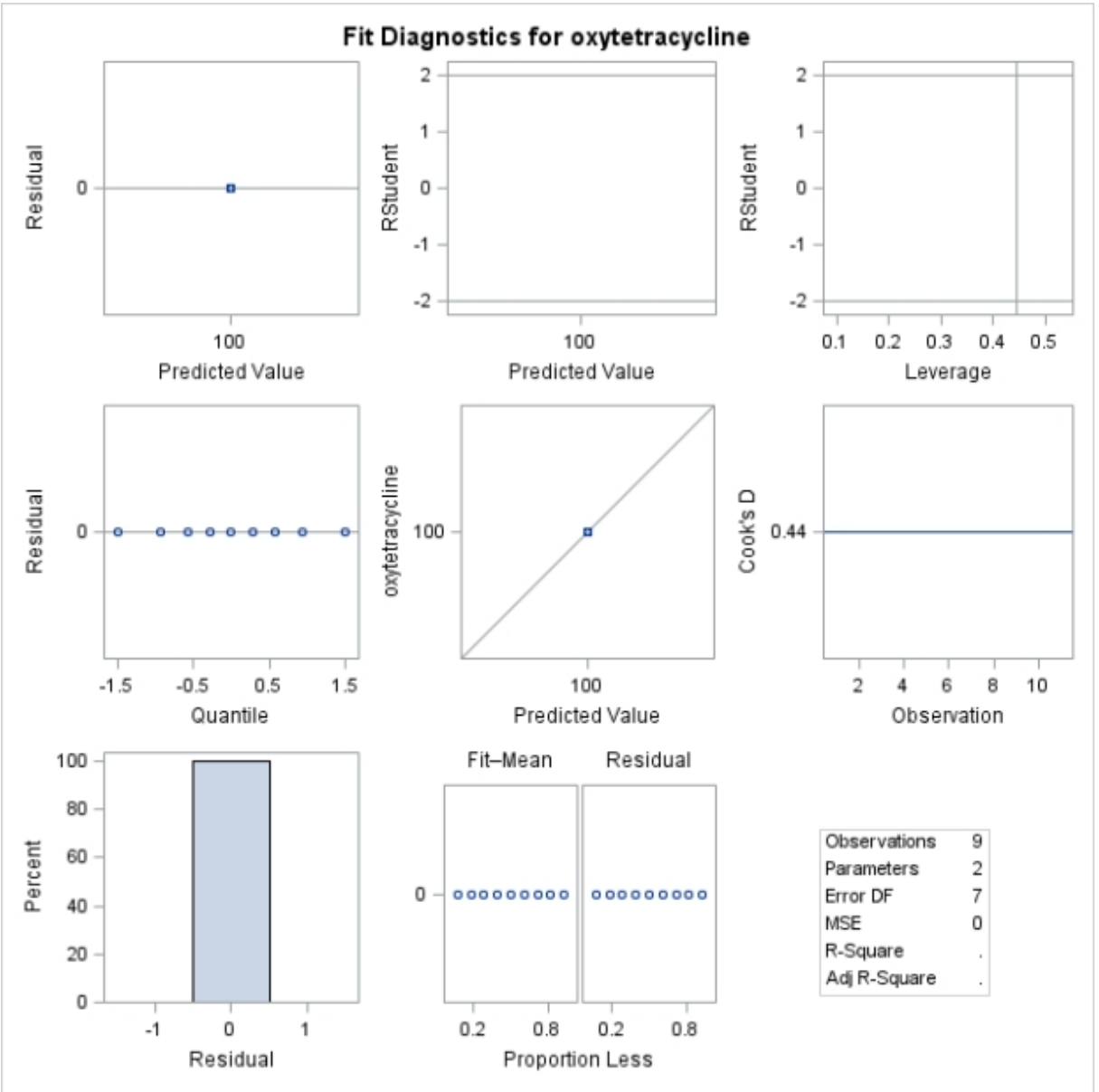
| Source | DF | Sum of Squares | Mean Square | F Value | Pr > F |
|---|---|---|---|---|---|
| Model | 1 | 0 | 0 | . | . |
| Error | 7 | 0 | 0 | | |
| Corrected Total | 8 | 0 | | | |

| | | | |
|---|---|---|---|
| Root MSE | 0 | R-Square | . |
| Dependent Mean | 100.00000 | Adj R-Sq | . |
| Coeff Var | 0 | | |

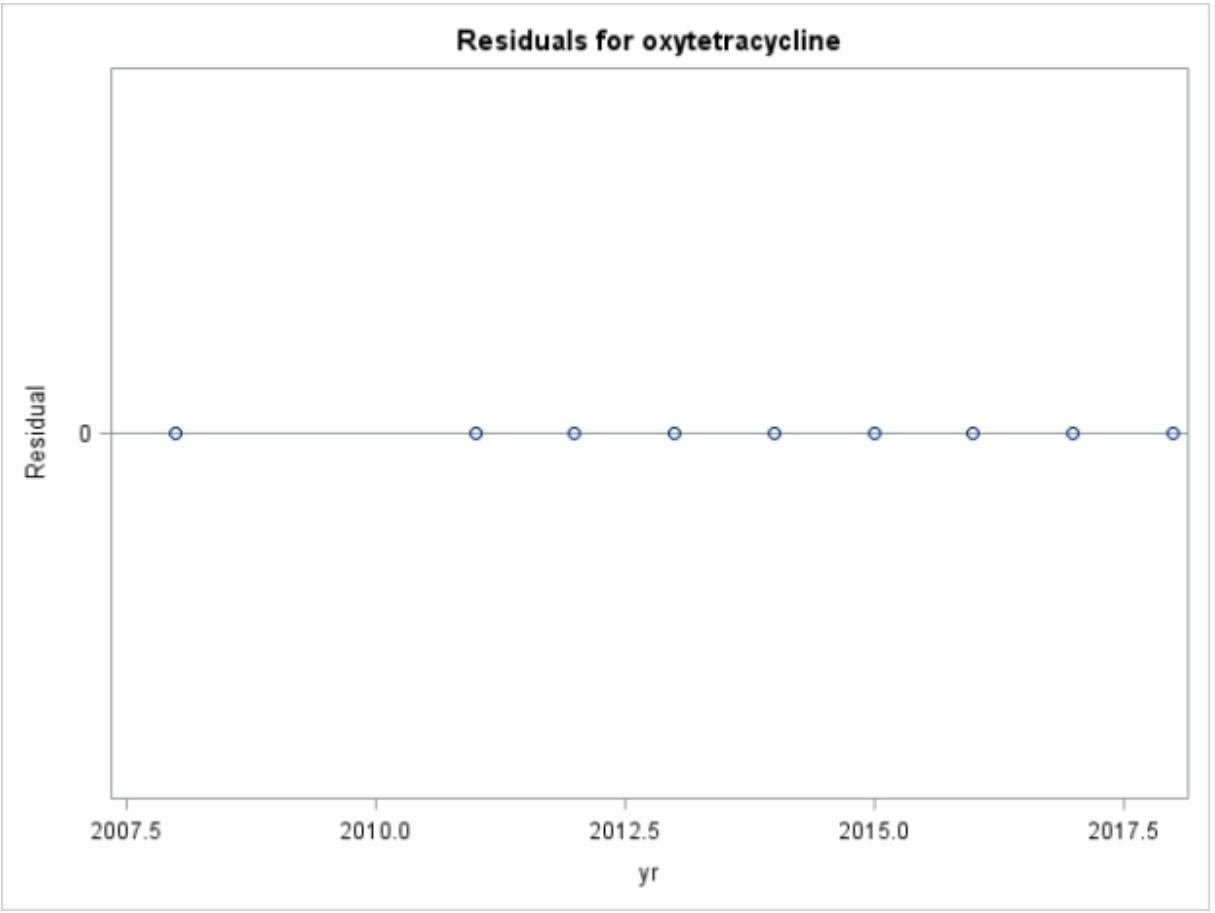
**Parameter Estimates**

| Variable | DF | Parameter Estimate | Standard Error | t Value | Pr > \|t\| |
|---|---|---|---|---|---|
| Intercept | 1 | 100.00000 | 0 | Infty | <.0001 |
| yr | 1 | 0 | 0 | . | . |

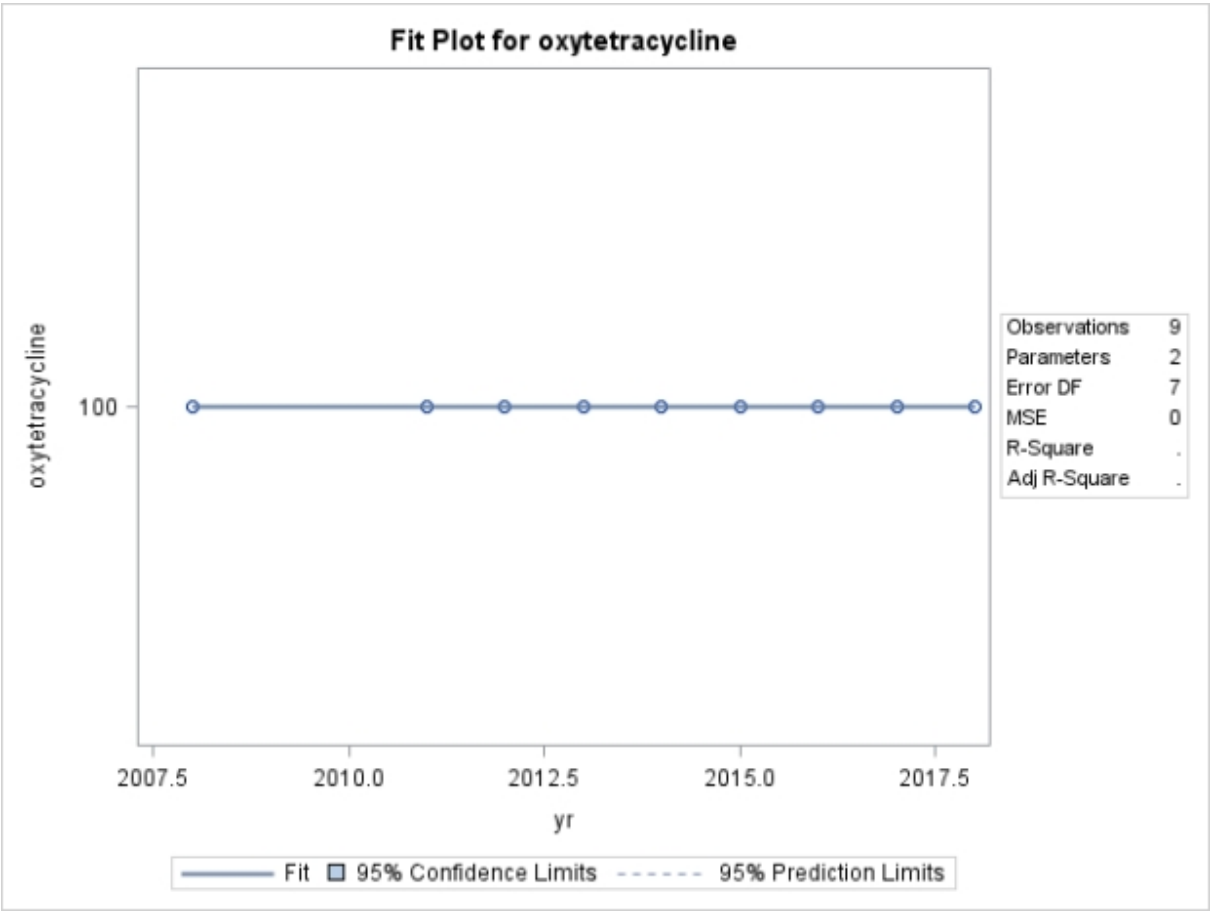
**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The REG Procedure**
**Model: MODEL1**
**Dependent Variable: oxytetracycline**



**The UNIVARIATE Procedure**
**Variable: oxytetracycliner (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: polymyxin_br (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |

## The REG Procedure

| | |
|---|---|
| **Number of Observations Read** | 12 |
| **Number of Observations Used** | 0 |
| **Number of Observations with Missing Values** | 12 |

**The UNIVARIATE Procedure**
**Variable: tobramycinr (Studentized Residual without Current Obs)**

| Missing Values | | | |
|---|---|---|---|
| Missing Value | Count | Percent Of All Obs | Percent Of Missing Obs |
| . | 12 | 100.00 | 100.00 |