Assignment 4

Literature, Russian Literature



Assignment 4 SUMMARY OUTPUT Regression Statistics Multiple R 0. 728985

R Square 0. 531419 Adjusted R Square

0.511895

Standard Error

11. 88148

Observations

26

ANOVA

df

SS

MS

F

Significance F

Regression

1

3842. 429

3842.429

27.21852

2.4E-05

Residual

24

3388.071

141. 1696

Total

25

7230. 5

Coefficients

Standard Error

t Stat

P-value

Lower 95%

Upper 95%

Lower 95. 0%

Upper 95. 0%

Intercept

- -0.39641
- 3. 68541
- -0. 10756
- 0.915238
- -8. 00272
- 7.209904
- -8. 00272
- 7.209904

0

0.57807

- 0.110802
- 5. 217137
- 2.4E-05
- 0.349385
- 0.806754
- 0.349385
- 0.806754

RESIDUAL OUTPUT

Observation

Predicted 6

Residuals

1

43. 53688

14. 46312

2

4. 228148

-7. 22815

3

7.696565

-4. 69657

4

15. 78954

15. 21046

5

20. 4141

7.585903 6 31.97549 -3.97549 7 15.78954 5.21046 8 3.072009 6.927991 9 11.16498 -29.165 10 15.78954 -22.7895 11 -0.39641 14.39641 12 11.16498 -6.16498 13 35.44391 16. 55609

14
3. 072009
6. 927991
15
11. 16498
-1. 16498
16
23. 88251
-2. 88251
17
23. 88251
-16. 8825
18
38. 91232
-11. 9123
19
3. 072009
6. 927991
20
10. 00884
-4. 00884
21
4. 228148
-8. 22815
22

-0. 39641 3. 396409

23

19. 25796

1.742043

24

16. 94568

5.054321

25

7. 696565

13. 30343

26

-0.39641

1.396409

The coefficient is significantly different from zero. The coefficient 0. 5780696 is considerably larger than the significance level, $\alpha = 0.05$. Therefore, the decision is to reject the null hypothesis. Therefore, the independent variable is held as the explanatory variable. This means that the evidence obtained is sufficient to safely determine that the linear relationship between the variables x and y. this is owing to the fact that the correlation coefficient is sufficiently different from 0

The coefficient is not significantly different from 1. The coefficient 0. 5780696 is considerably larger than the confidence level, $\alpha = 0.05$. With a P values that is significantly less than the confidence level Therefore, the decision is to reject the null hypothesis. Therefore, the independent variable is held as the explanatory variable. This means that the evidence obtained is sufficient to safely determine that the linear relationship between the variables x and y. this is owing to the fact that the correlation coefficient is sufficiently different from 1.

Works Cited

Vogt, Paul W and Burke Johnson. Correlation and regression analysis. Los Angeles: SAGE, 2012. Print.