| Stats & Inferencing Homework \$2#6 Ali Muhammad Asad aa 07190 P12.1) X 4 6 7 11 14 17 21 |
|---|
| P12-1) X 4 6 7 11 14 17 21 Zx = 80 Y 18 12 15 8 7 7 4 Zy = 69 Y 16 36 49 121 96 789 441 Zx2 = 1148 Y2 24 144 169 64 49 49 16 Zy² = 815 XX 72 72 91 88 98 119 87 Zxy = 624 PPMCC = 2 Z zy - ti(Zx zy) = 1624 - t(80 × 69) [Zx - (2)² / - x (zy z)] PPMCC: = 2 - 0.9270 P12-7) X 140 119 103 91 65 29 24 Y 25 29 46 70 88 112 8128 60 3 4 Simple souther plot Cinegine volum plane 1 |
| P12-1) X 4 6 7 11 14 17 21 Zx 2 80 Y 18 12 13 8 7 7 4 Zy 2 69 X² 16 36 49 121 96 789 441 Zx2 2 1148 Y² 324 144 69 64 49 49 49 16 Zy² 2 815 XY 72 72 91 88 98 119 84 Zx2 2 624 PPMCC 2 Z 2y - ti(Zn Zy) 2 624-7 (80 × 69). (2n - n / 2y n) (149 - 7) (815 - (69)²) PPMCC: 22 - 0.9270 P12-7) X 140 119 103 91 65 29 24 y 25 29 46 70 38 112 1128 (6) > A simple contine plot Cinagine value plane - Zn 2 571 Zy 2498 427 Zn 2 58293 Zny 2 30099 SSny 2 Zny - ti(ZnZy) 2 - 10 52 oy SSny 2 Zny - ti(ZnZy) 2 - 10 52 oy SSny 2 Zny - ti(ZnZy) 2 - 10 52 oy P12-15) Residuals for data postation x 140 119 103 91 65 29 24 Zx2 571 y 25 29 46 70 88 112 128 Zy 2 498 ú 2 144.414 - 0.89822 y 25 29 46 70 88 112 128 Zy 2 498 |
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| V ² 324 144 167 64 49 49 16 Zy ² z 8)5 XY 72 72 91 88 98 119 84 724 2 624 PPMCC 2 Z I y - ti(Σn Σy) z 624 - t (80 × 69). (2n - (2) Zy - (2) Zy - (2) Zy - (30) Zy - (315 - (64) Zy - (2) Z |
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| bi 2 SSmy /SSmn 2-0:8982 bi 2 SSmy /SSnn 2-0:8982 bi 2 SSmy /SSnn 2-0:8982 bi 2 SSmy /SSnn 2-0:8982 g 2 144.414 - 0.8982 P12.15) Residuals for data pertodocon x 140 119 103 91 65 29 24 [x2 57] y 25 29 46 70 88 112 128 [y2 498] û 2 144.414 - 0.89822 |
| 9 2 (44.414 - 0.8932 χ P12.15) Residuals for data portation χ 140 119 103 91 65 29 24 Σχ2 571 y 25 29 46 70 88 112 128 Σγ2 498 μ 2144.414 - 0.8932χ |
| 9 2 144.414 - 0.8932 χ P12.15) Residuals for data posted Con χ 140 119 103 91 65 29 24 Σχ2 571 y 25 29 46. 70 88 112 128 Σy 2 498 μ 2 144.414 - 0.8932 χ |
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| 4 25 29 46. 70 88 112 128 Zy 2 498 |
| y 2 144.414 - 0.898222. |
| |
| Then for values of it we get o following predicted values: |
| Then for values of 2 we get o following predicted values: 18.6597, 37.923, 51.895, 62.674, 86.028, 118.365, 122.856 |
| |
| Our Residuals are liese y-g= |
| 6-3403, -8-5229, -5-895, 7-326, 1-972, -6-3648, 5-1439 |
| A S A CO - M A T A S A S A S A S A S A S A S A S A S |
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| The state of the s |
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| P12.19) 7250.506 - 1.646x 426 |
| x 5 7 11 12 19 25 Zn279 Zn221325 |
| y 47 38 32 24 22 10 Zy 2 173 Zny 2 1809 |
| Tronger of |
| Our predicted Values are: |
| 42.276, 38.934, @ 32.400, 30.754, 19.232, 9.356 |
| |
| Pesiduals: |
| 4.724, -0.984, -0.400, -6.754, 2.768,0644 |
| I(y-q) 2 -0.002 Para eagrand oxidations. |
| Residuals |
| No apparent violations. |
| |
| |
| (8.83) |
| I X SH PH OF |
| |
| P12.25) Determine SSE & Se Por 12.7 |
| 6 Edga Z.(y-g)22 SSE2 272.12. |
| Q Se 2 272.12 2 7.3773. |
| √ 7-2 |
| 6 out of 7 are within ± 15 |
| all 7 out of 7 are within + 25e |
| |
| P12-33) r2 for P12.25 (12.27) @ Zy2245145 |
| SSyy 2 45145 - \(\frac{1}{7}(498)^2 = 9724.9 |
| 12 2 bi SSun 2 0.972 |
| SSyy |
| The high value of 12 shows that the predictor accounts |
| for most of the variability of the dependent |
| Variable 97.2% of variability is implained by variations |
| leaving only 2.8 10 maconted for. |
| |
| 12:39) Slave of regression line for P12-7 & 20.01 |
| biz-0.3982 SEz7.3773 SSxxz1716 |
| Sb2 7.3773 2 0.0682 t2-0.8982-0 2-13.179 |
| 0.0682 |
| 12,420 td12,4-22 = 4.0321 |
| + 2 ton => Reject Ho! |
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| P12.45) 900/ 05 PT P 1 P22 2 0 100 |
|--|
| P12.45) 90% OF PI for y & P12.7 for x2100. |
| 10% Pl for x2 130. x2 0.01 21220.005 |
| to12, u-2 2 + 400000 2.015 g + t.se 1+ 1+ (no-2)2 |
| 9254.5895. N SSAN |
| x = 100: |
| 54.5895-t.7.3773 1+ + (100-81.5714)2 5 E(4100) 5 |
| 38. 4973 200 3800 SE(4100) SEC 70.6817 |
| SE 147 (SE (9 100) = 865 72 100 5 70.6817 |
| |
| x2130: 4.5586 & E(4130) & 59-8430 |
| |
| *2 130: 10.4145 EE (4130) E 44.8698 |
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| For larger value of a 11 1.00 |
| for larger values of re, the difference between |
| _ our interval is greater. |
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