

ZeroInflatedPoisson Regression Results

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=====
Dep. Variable:      cluster10  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:              MLE  Df Model:      2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      4.116e-06
Time:               19:30:28  Log-Likelihood:      -34.555
converged:          True  LL-Null:      -34.555
Covariance Type:    nonrobust  LLR p-value:      0.9999
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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept  -16.9171  728.773  -0.023  0.981 -1445.286  1411.452
inflate_caste[T.mid] -4.9931  1e+04  -0.000  1.000 -1.96e+04  1.96e+04
inflate_caste[T.min] -3.8286  6606.259  -0.001  1.000 -1.3e+04  1.29e+04
Intercept          -2.0446  0.424  -4.824  0.000  -2.875  -1.214
caste[T.mid]        -0.0061  0.639  -0.009  0.992  -1.258  1.246
caste[T.min]         0.0065  0.689  0.009  0.992  -1.344  1.357
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=====
Dep. Variable:      cluster13  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:              MLE  Df Model:      2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      0.0005493
Time:               19:30:28  Log-Likelihood:      -46.244
converged:          True  LL-Null:      -46.269
Covariance Type:    nonrobust  LLR p-value:      0.9749
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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept  -16.3870  559.624  -0.029  0.977 -1113.230  1080.456
inflate_caste[T.mid] -4.8848  7289.415  -0.001  0.999 -1.43e+04  1.43e+04
inflate_caste[T.min] -3.5754  4615.703  -0.001  0.999 -9050.186  9043.035
Intercept          -1.6329  0.345  -4.733  0.000  -2.309  -0.957
caste[T.mid]         0.0717  0.509  0.141  0.888  -0.926  1.070
caste[T.min]         0.1189  0.542  0.219  0.826  -0.944  1.181
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=====
Dep. Variable:      cluster19  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:              MLE  Df Model:      2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      0.008688
Time:               19:30:28  Log-Likelihood:      -10.384
converged:          False  LL-Null:      -10.475
Covariance Type:    nonrobust  LLR p-value:      0.9130
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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -23.9061  2.59e+04  -0.001  0.999  -5.09e+04  5.08e+04
inflate_caste[T.mid] -5.1045  5.91e+05  -8.63e-06  1.000  -1.16e+06  1.16e+06
inflate_caste[T.min] -1.7059  1.91e+05  -8.93e-06  1.000  -3.74e+05  3.74e+05
Intercept          -3.6250  0.934  -3.880  0.000  -5.456  -1.794
caste[T.mid]         0.0306  1.394  0.022  0.982  -2.701  2.763
caste[T.min]         -0.7117  1.953  -0.364  0.716  -4.539  3.116
=====

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=====
Dep. Variable:      cluster28  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:              MLE  Df Model:      2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      0.1001
Time:               19:30:28  Log-Likelihood:      -2.4900
converged:          False  LL-Null:      -2.7670
Covariance Type:    nonrobust  LLR p-value:      0.7580
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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -50.8831  1.54e+07  -3.3e-06  1.000  -3.02e+07  3.02e+07
inflate_caste[T.mid] -4.4793  5.49e+07  -8.16e-08  1.000  -1.08e+08  1.08e+08
inflate_caste[T.min] -2.1989  6.92e+07  -3.18e-08  1.000  -1.36e+08  1.36e+08
Intercept          -6.6005  4.136  -1.596  0.110  -14.706  1.505
caste[T.mid]         2.1550  4.428  0.487  0.627  -6.525  10.834
caste[T.min]         -1.1503  10.318  -0.111  0.911  -21.374  19.073
=====

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=====
Dep. Variable:      cluster32  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:             MLE  Df Model:      2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      0.1410
Time:               19:30:29  Log-Likelihood:      -1.4800
converged:          False  LL-Null:      -1.7230
Covariance Type:    nonrobust  LLR p-value:      0.7843
=====

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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -22.9084  6.71e+04  -0.000  1.000  -1.32e+05  1.32e+05
inflate_caste[T.mid] -9.8167  7.38e+06  -1.33e-06  1.000  -1.45e+07  1.45e+07
inflate_caste[T.min] -6.5368  1.86e+06  -3.52e-06  1.000  -3.64e+06  3.64e+06
Intercept          -7.3585   6.041  -1.218  0.223  -19.200   4.483
caste[T.mid]        -1.5639   16.032  -0.098  0.922  -32.986  29.858
caste[T.min]         2.6701   6.378   0.419  0.675  -9.831  15.171
=====

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ZeroInflatedPoisson Regression Results

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=====
Dep. Variable:      cluster35  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:             MLE  Df Model:      2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      0.007154
Time:               19:30:29  Log-Likelihood:      -2.4926
converged:          False  LL-Null:      -2.5106
Covariance Type:    nonrobust  LLR p-value:      0.9822
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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -33.1570  4.11e+06  -8.07e-06  1.000  -8.06e+06  8.06e+06
inflate_caste[T.mid] -5.2005  3.95e+07  -1.32e-07  1.000  -7.73e+07  7.73e+07
inflate_caste[T.min] -1.6320  3.86e+07  -4.22e-08  1.000  -7.57e+07  7.57e+07
Intercept          -5.3548   2.218  -2.414  0.016  -9.703  -1.007
caste[T.mid]        -0.6666   4.128  -0.161  0.872  -8.758  7.425
caste[T.min]         0.0950   3.510   0.027  0.978  -6.785  6.975
=====

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ZeroInflatedPoisson Regression Results

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=====
Dep. Variable:      cluster38  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:             MLE      Df Model:              2
Date:              Tue, 13 Jul 2021  Pseudo R-squ.:      0.01836
Time:              19:30:29  Log-Likelihood:      -15.664
converged:         True      LL-Null:              -15.957
Covariance Type:   nonrobust  LLR p-value:      0.7460
=====

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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -19.4172  2920.618  -0.007  0.995 -5743.723  5704.888
inflate_caste[T.mid] -5.9486  7.34e+04  -8.1e-05  1.000 -1.44e+05  1.44e+05
inflate_caste[T.min] -2.1809  2.02e+04  -0.000  1.000 -3.97e+04  3.97e+04
Intercept         -3.8222   1.031  -3.707  0.000  -5.843  -1.802
caste[T.mid]       0.8187   1.287   0.636  0.525  -1.703  3.341
caste[T.min]       0.8771   1.339   0.655  0.513  -1.748  3.502
=====

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ZeroInflatedPoisson Regression Results

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=====
Dep. Variable:      cluster44  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:             MLE      Df Model:              2
Date:              Tue, 13 Jul 2021  Pseudo R-squ.:      0.01340
Time:              19:30:29  Log-Likelihood:      -8.4296
converged:         False      LL-Null:              -8.5441
Covariance Type:   nonrobust  LLR p-value:      0.8918
=====

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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -30.7678  7.91e+05  -3.89e-05  1.000 -1.55e+06  1.55e+06
inflate_caste[T.mid] -6.4941  1.96e+07  -3.31e-07  1.000 -3.85e+07  3.85e+07
inflate_caste[T.min] -2.2003  7.51e+06  -2.93e-07  1.000 -1.47e+07  1.47e+07
Intercept         -3.6492   0.946  -3.859  0.000  -5.502  -1.796
caste[T.mid]      -0.6552   1.752  -0.374  0.709  -4.090  2.780
caste[T.min]      -0.7525   2.008  -0.375  0.708  -4.688  3.183
=====

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ZeroInflatedPoisson Regression Results

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=====
Dep. Variable:      cluster46  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:              MLE      Df Model:              2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      0.003255
Time:               19:30:29  Log-Likelihood:      -7.4575
converged:          False  LL-Null:              -7.4818
Covariance Type:    nonrobust  LLR p-value:      0.9759
=====

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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -21.4341  8885.240  -0.002  0.998 -1.74e+04  1.74e+04
inflate_caste[T.mid] -4.5754  1.62e+05 -2.82e-05  1.000 -3.18e+05  3.18e+05
inflate_caste[T.min] -1.0485  6.07e+04 -1.73e-05  1.000 -1.19e+05  1.19e+05
Intercept         -4.3746   1.359  -3.219  0.001  -7.038  -1.711
caste[T.mid]       0.3852   1.854   0.208  0.835  -3.248   4.018
caste[T.min]       0.2404   2.061   0.117  0.907  -3.799   4.280
=====

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ZeroInflatedPoisson Regression Results

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=====
Dep. Variable:      cluster48  No. Observations:      103
Model:              ZeroInflatedPoisson  Df Residuals:      100
Method:              MLE      Df Model:              2
Date:               Tue, 13 Jul 2021  Pseudo R-squ.:      0.03930
Time:               19:30:29  Log-Likelihood:      -3.6944
converged:          False  LL-Null:              -3.8455
Covariance Type:    nonrobust  LLR p-value:      0.8597
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=====
              coef  std err      z  P>|z|  [0.025  0.975]
-----
inflate_Intercept -48.0465  1.23e+07 -3.91e-06  1.000 -2.41e+07  2.41e+07
inflate_caste[T.mid] -11.0823  2.47e+07 -4.5e-07  1.000 -4.83e+07  4.83e+07
inflate_caste[T.min] -1.1155  6.95e+07 -1.61e-08  1.000 -1.36e+08  1.36e+08
Intercept         -4.4407   1.405  -3.162  0.002  -7.194  -1.688
caste[T.mid]      -0.7100   2.655  -0.267  0.789  -5.913   4.493
caste[T.min]      -2.0877   5.319  -0.392  0.695 -12.513   8.337
=====

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ZeroInflatedPoisson Regression Results

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|------------------|---------------------|-------------------|----------|
| Dep. Variable: | cluster51 | No. Observations: | 103 |
| Model: | ZeroInflatedPoisson | Df Residuals: | 100 |
| Method: | MLE | Df Model: | 2 |
| Date: | Tue, 13 Jul 2021 | Pseudo R-squ.: | 0.002890 |
| Time: | 19:30:29 | Log-Likelihood: | -42.839 |
| converged: | False | LL-Null: | -42.963 |
| Covariance Type: | nonrobust | LLR p-value: | 0.8833 |

| | coef | std err | z | P> z | [0.025 | 0.975] |
|----------------------|----------|----------|--------|-------|-----------|----------|
| ----- | | | | | | |
| inflate_Intercept | -15.6970 | 396.157 | -0.040 | 0.968 | -792.151 | 760.757 |
| inflate_caste[T.mid] | -4.5939 | 4465.149 | -0.001 | 0.999 | -8756.126 | 8746.938 |
| inflate_caste[T.min] | -3.6502 | 3218.558 | -0.001 | 0.999 | -6311.907 | 6304.607 |
| Intercept | -1.7993 | 0.375 | -4.799 | 0.000 | -2.534 | -1.064 |
| caste[T.mid] | 0.0598 | 0.555 | 0.108 | 0.914 | -1.028 | 1.148 |
| caste[T.min] | 0.2760 | 0.563 | 0.490 | 0.624 | -0.828 | 1.380 |

ZeroInflatedPoisson Regression Results

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|------------------|---------------------|-------------------|-----------|
| Dep. Variable: | cluster55 | No. Observations: | 103 |
| Model: | ZeroInflatedPoisson | Df Residuals: | 100 |
| Method: | MLE | Df Model: | 2 |
| Date: | Tue, 13 Jul 2021 | Pseudo R-squ.: | 0.0006618 |
| Time: | 19:30:30 | Log-Likelihood: | -39.557 |
| converged: | False | LL-Null: | -39.583 |
| Covariance Type: | nonrobust | LLR p-value: | 0.9741 |

| | coef | std err | z | P> z | [0.025 | 0.975] |
|----------------------|----------|----------|--------|-------|-----------|----------|
| ----- | | | | | | |
| inflate_Intercept | -17.6062 | 1028.902 | -0.017 | 0.986 | -2034.217 | 1999.005 |
| inflate_caste[T.mid] | -5.1921 | 1.59e+04 | -0.000 | 1.000 | -3.12e+04 | 3.11e+04 |
| inflate_caste[T.min] | -3.7569 | 9502.899 | -0.000 | 1.000 | -1.86e+04 | 1.86e+04 |
| Intercept | -1.8831 | 0.391 | -4.816 | 0.000 | -2.649 | -1.117 |
| caste[T.mid] | -0.0070 | 0.590 | -0.012 | 0.991 | -1.162 | 1.149 |
| caste[T.min] | 0.1248 | 0.613 | 0.204 | 0.839 | -1.077 | 1.327 |

ZeroInflatedPoisson Regression Results

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|------------------|---------------------|-------------------|----------|
| Dep. Variable: | cluster56 | No. Observations: | 103 |
| Model: | ZeroInflatedPoisson | Df Residuals: | 100 |
| Method: | MLE | Df Model: | 2 |
| Date: | Tue, 13 Jul 2021 | Pseudo R-squ.: | 0.002571 |
| Time: | 19:30:30 | Log-Likelihood: | -41.219 |
| converged: | False | LL-Null: | -41.325 |
| Covariance Type: | nonrobust | LLR p-value: | 0.8992 |

| | coef | std err | z | P> z | [0.025 | 0.975] |
|----------------------|----------|----------|--------|-------|-----------|----------|
| inflate_Intercept | -15.0985 | 293.792 | -0.051 | 0.959 | -590.921 | 560.724 |
| inflate_caste[T.mid] | -4.1462 | 2921.449 | -0.001 | 0.999 | -5730.081 | 5721.788 |
| inflate_caste[T.min] | -3.0994 | 2069.318 | -0.001 | 0.999 | -4058.888 | 4052.690 |
| Intercept | -1.6762 | 0.353 | -4.754 | 0.000 | -2.367 | -0.985 |
| caste[T.mid] | -0.1774 | 0.559 | -0.318 | 0.751 | -1.272 | 0.917 |
| caste[T.min] | -0.2656 | 0.626 | -0.424 | 0.672 | -1.493 | 0.962 |

GOOD CLUSTERS: [10, 13, 19, 28, 32, 35, 38, 44, 46, 48, 51, 55, 56]