. // Model SP.C.SSV.3

**. glm MR `subpart\_ss\_lag\_4\_vars' `covariates' ib(freq).state ib(freq).time, family(poisson) link(log) vce(cl mineid) exposure(hours) iter(50) eform**

note: sp77\_606\_ss\_c\_4lag omitted because of collinearity

note: sp77\_801\_1\_ss\_c\_4lag omitted because of collinearity

Iteration 0: log pseudolikelihood = -17567.89

Iteration 1: log pseudolikelihood = -16490.942

Iteration 2: log pseudolikelihood = -16478.944

Iteration 3: log pseudolikelihood = -16478.588

Iteration 4: log pseudolikelihood = -16478.547

Iteration 5: log pseudolikelihood = -16478.541

Iteration 6: log pseudolikelihood = -16478.54

Iteration 7: log pseudolikelihood = -16478.539

Iteration 8: log pseudolikelihood = -16478.539

Iteration 9: log pseudolikelihood = -16478.539

Generalized linear models No. of obs = 22,446

Optimization : ML Residual df = 22,085

Scale parameter = 1

Deviance = 18004.55279 (1/df) Deviance = .815239

Pearson = 258629.4369 (1/df) Pearson = 11.71064

Variance function: V(u) = u [Poisson]

Link function : g(u) = ln(u) [Log]

AIC = 1.500449

Log pseudolikelihood = -16478.53929 BIC = -203262.1

(Std. Err. adjusted for 1,293 clusters in mineid)

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| Robust

MR | IRR Std. Err. z P>|z| [95% Conf. Interval]

-----------------------+----------------------------------------------------------------

sp47\_41\_ss\_c\_4lag | .6736348 .1077451 -2.47 0.014 .492355 .9216599

sp47\_44\_ss\_c\_4lag | .9198485 .1608564 -0.48 0.633 .6529267 1.29589

sp48\_11\_ss\_c\_4lag | 1.034874 .0551486 0.64 0.520 .9322384 1.14881

sp48\_25\_ss\_c\_4lag | .9485399 .0703974 -0.71 0.477 .8201293 1.097056

sp48\_26\_ss\_c\_4lag | 1.252841 .0765834 3.69 0.000 1.111384 1.412304

sp48\_27\_ss\_c\_4lag | .9692084 .0779107 -0.39 0.697 .827928 1.134597

sp48\_28\_ss\_c\_4lag | .9210279 .079855 -0.95 0.343 .777091 1.091625

sp48\_4\_ss\_c\_4lag | 1.614244 1.137417 0.68 0.497 .4056968 6.42298

sp48\_5\_ss\_c\_4lag | .9302166 .1030601 -0.65 0.514 .7486489 1.15582

sp48\_6\_ss\_c\_4lag | .970658 .0730021 -0.40 0.692 .8376224 1.124823

sp48\_7\_ss\_c\_4lag | 1.143763 .0575021 2.67 0.008 1.036436 1.262205

sp48\_8\_ss\_c\_4lag | .9124971 .1281903 -0.65 0.515 .6928706 1.201741

sp71\_701\_ss\_c\_4lag | 2.124647 .4413536 3.63 0.000 1.414055 3.192325

sp72\_503\_ss\_c\_4lag | .8811369 .1866101 -0.60 0.550 .5817992 1.334485

sp72\_610\_ss\_c\_4lag | .7428531 .1555256 -1.42 0.156 .4928256 1.119728

sp72\_620\_ss\_c\_4lag | 1.638609 .2800103 2.89 0.004 1.172248 2.290504

sp72\_630\_ss\_c\_4lag | 1.020864 .0095074 2.22 0.027 1.002399 1.039669

sp75\_100\_ss\_c\_4lag | 1.140753 .2342478 0.64 0.521 .762784 1.706009

sp75\_1001\_1\_ss\_c\_4lag | 1.256139 .3971115 0.72 0.471 .6759921 2.334176

sp75\_1001\_ss\_c\_4lag | 1.19532 .2857118 0.75 0.455 .7482132 1.909602

sp75\_1003\_1\_ss\_c\_4lag | .584581 .1278176 -2.46 0.014 .3808299 .8973428

sp75\_1100\_2\_ss\_c\_4lag | 1.025181 .0130098 1.96 0.050 .999997 1.051

sp75\_1101\_20\_ss\_c\_4lag | .7965092 .0851853 -2.13 0.033 .6458865 .9822576

sp75\_1102\_ss\_c\_4lag | .9136488 .0554319 -1.49 0.137 .8112153 1.029017

sp75\_1103\_4\_ss\_c\_4lag | 1.046705 .0324499 1.47 0.141 .9849982 1.112278

sp75\_1104\_ss\_c\_4lag | 1.020774 .122049 0.17 0.863 .8075245 1.290339

sp75\_1106\_2\_ss\_c\_4lag | .993709 .0465909 -0.13 0.893 .9064626 1.089353

sp75\_1106\_3\_ss\_c\_4lag | 1.038128 .0243114 1.60 0.110 .9915554 1.086888

sp75\_1106\_4\_ss\_c\_4lag | .9667421 .1233898 -0.27 0.791 .7527795 1.241519

sp75\_1106\_5\_ss\_c\_4lag | .9622126 .0717009 -0.52 0.605 .8314619 1.113525

sp75\_1106\_6\_ss\_c\_4lag | .5983644 .1650011 -1.86 0.063 .348533 1.027277

sp75\_1106\_ss\_c\_4lag | .9571804 .07751 -0.54 0.589 .816706 1.121817

sp75\_1107\_14\_ss\_c\_4lag | 1.555357 .3341305 2.06 0.040 1.02087 2.369682

sp75\_1400\_1\_ss\_c\_4lag | 1.105257 .2032176 0.54 0.586 .7708282 1.584781

sp75\_1400\_2\_ss\_c\_4lag | 1.157316 .3100383 0.55 0.585 .6845732 1.956518

sp75\_1400\_3\_ss\_c\_4lag | 1.074755 .1126515 0.69 0.492 .8751652 1.319863

sp75\_1400\_4\_ss\_c\_4lag | .9686081 .1262422 -0.24 0.807 .7502534 1.250513

sp75\_1400\_ss\_c\_4lag | 1.031318 .0604544 0.53 0.599 .9193831 1.156882

sp75\_1401\_ss\_c\_4lag | .9825445 .1665009 -0.10 0.917 .7048692 1.369607

sp75\_1403\_10\_ss\_c\_4lag | 1.013252 .0155305 0.86 0.390 .9832657 1.044153

sp75\_1403\_11\_ss\_c\_4lag | 1.292415 .3169917 1.05 0.296 .7991481 2.090148

sp75\_1403\_3\_ss\_c\_4lag | .7859653 .2821761 -0.67 0.502 .3888716 1.588549

sp75\_1403\_4\_ss\_c\_4lag | 1.121919 .1805421 0.71 0.475 .8184346 1.537939

sp75\_1403\_5\_ss\_c\_4lag | .9820645 .0105204 -1.69 0.091 .9616598 1.002902

sp75\_1403\_6\_ss\_c\_4lag | .9937428 .0126702 -0.49 0.623 .9692175 1.018889

sp75\_1403\_7\_ss\_c\_4lag | 1.036798 .0443577 0.84 0.398 .9534035 1.127486

sp75\_1403\_8\_ss\_c\_4lag | 1.0014 .0124341 0.11 0.910 .9773233 1.026069

sp75\_1403\_9\_ss\_c\_4lag | .7856294 .0683494 -2.77 0.006 .662466 .9316908

sp75\_1404\_1\_ss\_c\_4lag | .4427935 .1668144 -2.16 0.031 .2116053 .926565

sp75\_1404\_ss\_c\_4lag | .9564114 .4262136 -0.10 0.920 .399316 2.290724

sp75\_1405\_1\_ss\_c\_4lag | .9597134 .2327459 -0.17 0.865 .5966389 1.543731

sp75\_1405\_ss\_c\_4lag | .9966102 .0135299 -0.25 0.803 .9704418 1.023484

sp75\_1431\_ss\_c\_4lag | .7947848 .3112752 -0.59 0.558 .3688747 1.712459

sp75\_1432\_ss\_c\_4lag | 1.71e-06 1.24e-06 -18.30 0.000 4.12e-07 7.08e-06

sp75\_1433\_ss\_c\_4lag | .960162 .1238911 -0.32 0.753 .7456118 1.236449

sp75\_1434\_ss\_c\_4lag | 1.163198 .0867144 2.03 0.043 1.005074 1.346199

sp75\_1435\_ss\_c\_4lag | .9437647 .2849508 -0.19 0.848 .5222285 1.70556

sp75\_1437\_ss\_c\_4lag | 1.189575 .2365905 0.87 0.383 .8055625 1.756647

sp75\_150\_ss\_c\_4lag | 1.452927 .531725 1.02 0.307 .7091387 2.976847

sp75\_151\_ss\_c\_4lag | .3654066 .1101675 -3.34 0.001 .2023696 .6597927

sp75\_153\_ss\_c\_4lag | 1.688223 .7231658 1.22 0.222 .7291378 3.908857

sp75\_155\_ss\_c\_4lag | .8678044 .0961047 -1.28 0.200 .6984831 1.078171

sp75\_156\_ss\_c\_4lag | 1.173584 .397808 0.47 0.637 .6039263 2.280577

sp75\_1600\_2\_ss\_c\_4lag | .8263175 .1094228 -1.44 0.150 .6374249 1.071186

sp75\_1712\_10\_ss\_c\_4lag | .8501022 .1734637 -0.80 0.426 .5698797 1.268116

sp75\_1712\_6\_ss\_c\_4lag | 1.606896 .4171927 1.83 0.068 .966036 2.672897

sp75\_1720\_ss\_c\_4lag | 1.025868 .0349731 0.75 0.454 .959562 1.096756

sp75\_1721\_ss\_c\_4lag | 2.30e-06 1.60e-06 -18.63 0.000 5.88e-07 9.02e-06

sp75\_1725\_ss\_c\_4lag | 1.000994 .0035531 0.28 0.780 .994054 1.007982

sp75\_1726\_ss\_c\_4lag | 1.113183 .0862343 1.38 0.166 .9563726 1.295705

sp75\_1727\_ss\_c\_4lag | 1.953131 .3915829 3.34 0.001 1.318481 2.893267

sp75\_1728\_ss\_c\_4lag | 1.732867 .2985494 3.19 0.001 1.236274 2.428933

sp75\_1729\_ss\_c\_4lag | .8637513 .0852146 -1.48 0.138 .7118888 1.048009

sp75\_1730\_ss\_c\_4lag | .9433617 .1397062 -0.39 0.694 .7057004 1.261061

sp75\_1731\_ss\_c\_4lag | 1.006034 .0040639 1.49 0.136 .9981004 1.014031

sp75\_1903\_ss\_c\_4lag | 1.227238 .1410526 1.78 0.075 .9797063 1.53731

sp75\_1909\_ss\_c\_4lag | 1.020761 .0129943 1.61 0.106 .9956079 1.04655

sp75\_1910\_ss\_c\_4lag | .9942118 .0246496 -0.23 0.815 .9470546 1.043717

sp75\_1911\_ss\_c\_4lag | .8977187 .0309378 -3.13 0.002 .8390844 .9604504

sp75\_1912\_ss\_c\_4lag | 1.618811 .300886 2.59 0.010 1.124565 2.330278

sp75\_1913\_ss\_c\_4lag | 1.176812 .0886151 2.16 0.031 1.015339 1.363966

sp75\_1914\_ss\_c\_4lag | 1.007296 .00989 0.74 0.459 .9880977 1.026868

sp75\_1915\_ss\_c\_4lag | 1.151371 .1070255 1.52 0.129 .9596043 1.381461

sp75\_202\_ss\_c\_4lag | 1.000269 .0024163 0.11 0.911 .9955448 1.005016

sp75\_208\_ss\_c\_4lag | 1.006272 .0169768 0.37 0.711 .9735418 1.040102

sp75\_211\_ss\_c\_4lag | 1.000554 .018384 0.03 0.976 .9651631 1.037243

sp75\_212\_ss\_c\_4lag | .9627 .0408689 -0.90 0.371 .8858404 1.046228

sp75\_214\_ss\_c\_4lag | .8333479 .1187503 -1.28 0.201 .6302777 1.101846

sp75\_312\_ss\_c\_4lag | .9133992 .1444896 -0.57 0.567 .6699 1.245407

sp75\_320\_ss\_c\_4lag | .963743 .0587045 -0.61 0.544 .8552872 1.085952

sp75\_324\_ss\_c\_4lag | .9395013 .0408926 -1.43 0.152 .8626768 1.023167

sp75\_337\_ss\_c\_4lag | 1.076443 .0272217 2.91 0.004 1.02439 1.131141

sp75\_340\_ss\_c\_4lag | 1.002924 .0155495 0.19 0.851 .9729056 1.033868

sp75\_342\_ss\_c\_4lag | 1.006895 .0101191 0.68 0.494 .9872557 1.026924

sp75\_344\_ss\_c\_4lag | .9982444 .066423 -0.03 0.979 .8761896 1.137302

sp75\_352\_ss\_c\_4lag | 1.014021 .0425258 0.33 0.740 .9340054 1.100891

sp75\_382\_ss\_c\_4lag | 1.113947 .1129727 1.06 0.287 .9131429 1.35891

sp75\_503\_ss\_c\_4lag | .9920777 .0043425 -1.82 0.069 .983603 1.000625

sp75\_504\_ss\_c\_4lag | .8426421 .2109632 -0.68 0.494 .515866 1.376415

sp75\_505\_ss\_c\_4lag | .8062828 .1828316 -0.95 0.342 .5169756 1.257491

sp75\_506\_1\_ss\_c\_4lag | 1.070903 .317307 0.23 0.817 .5991565 1.914079

sp75\_506\_ss\_c\_4lag | .9686939 .1284706 -0.24 0.810 .7469614 1.256247

sp75\_507\_ss\_c\_4lag | 1.010564 .0834471 0.13 0.899 .8595602 1.188097

sp75\_511\_1\_ss\_c\_4lag | .2647627 .0563684 -6.24 0.000 .1744353 .401864

sp75\_511\_ss\_c\_4lag | 1.130936 .0448794 3.10 0.002 1.046308 1.222409

sp75\_512\_1\_ss\_c\_4lag | 2.730298 .8794145 3.12 0.002 1.452254 5.133074

sp75\_512\_2\_ss\_c\_4lag | 1.03013 .0428402 0.71 0.475 .9494954 1.117612

sp75\_512\_ss\_c\_4lag | .9952418 .0060494 -0.78 0.433 .9834556 1.007169

sp75\_513\_1\_ss\_c\_4lag | .6963819 .228482 -1.10 0.270 .3660745 1.324724

sp75\_513\_ss\_c\_4lag | .9877323 .1099227 -0.11 0.912 .7941652 1.228479

sp75\_514\_ss\_c\_4lag | 1.001642 .0211804 0.08 0.938 .9609776 1.044027

sp75\_515\_ss\_c\_4lag | .9193308 .022533 -3.43 0.001 .8762109 .9645726

sp75\_516\_1\_ss\_c\_4lag | .6712573 .1294913 -2.07 0.039 .4599227 .9797001

sp75\_516\_2\_ss\_c\_4lag | .7223244 .2516894 -0.93 0.351 .3648685 1.429974

sp75\_516\_ss\_c\_4lag | 1.024365 .0451738 0.55 0.585 .939544 1.116843

sp75\_517\_1\_ss\_c\_4lag | .8208816 .1813086 -0.89 0.372 .5324455 1.265569

sp75\_517\_ss\_c\_4lag | .9999692 .0046417 -0.01 0.995 .990913 1.009108

sp75\_518\_1\_ss\_c\_4lag | .8100445 .0588061 -2.90 0.004 .702611 .9339052

sp75\_518\_ss\_c\_4lag | 1.073869 .0162832 4.70 0.000 1.042424 1.106262

sp75\_519\_ss\_c\_4lag | 1.503828 .678144 0.90 0.366 .621374 3.639514

sp75\_520\_ss\_c\_4lag | .9949452 .0440457 -0.11 0.909 .9122565 1.085129

sp75\_523\_1\_ss\_c\_4lag | .9762178 .0353382 -0.66 0.506 .9093561 1.047996

sp75\_523\_2\_ss\_c\_4lag | 1.009179 .0298603 0.31 0.757 .9523188 1.069435

sp75\_523\_ss\_c\_4lag | .9574821 .0309584 -1.34 0.179 .8986874 1.020123

sp75\_600\_1\_ss\_c\_4lag | .4663733 .1882656 -1.89 0.059 .2114076 1.028838

sp75\_600\_ss\_c\_4lag | .9580235 .132389 -0.31 0.756 .7307164 1.25604

sp75\_601\_1\_ss\_c\_4lag | 1.015984 .0221437 0.73 0.467 .9734969 1.060325

sp75\_601\_2\_ss\_c\_4lag | 1.111334 .1569331 0.75 0.455 .8426464 1.465697

sp75\_601\_3\_ss\_c\_4lag | 1.110157 .2887092 0.40 0.688 .6668364 1.848201

sp75\_601\_ss\_c\_4lag | .9925182 .0207226 -0.36 0.719 .9527224 1.033976

sp75\_602\_ss\_c\_4lag | 1.079504 .0441634 1.87 0.061 .9963246 1.169628

sp75\_603\_ss\_c\_4lag | 1.013313 .0560233 0.24 0.811 .9092491 1.129286

sp75\_604\_ss\_c\_4lag | 1.018352 .0056151 3.30 0.001 1.007406 1.029417

sp75\_605\_ss\_c\_4lag | 1.024077 .0274009 0.89 0.374 .9717563 1.079215

sp75\_606\_ss\_c\_4lag | .9986147 .0145352 -0.10 0.924 .9705287 1.027513

sp75\_607\_ss\_c\_4lag | .9966097 .0549658 -0.06 0.951 .8944972 1.110379

sp75\_700\_1\_ss\_c\_4lag | .7049411 .2136037 -1.15 0.249 .389252 1.276659

sp75\_700\_ss\_c\_4lag | .9331748 .0439862 -1.47 0.142 .8508259 1.023494

sp75\_701\_1\_ss\_c\_4lag | .9643368 .0502708 -0.70 0.486 .8706742 1.068075

sp75\_701\_2\_ss\_c\_4lag | .9887306 .0963229 -0.12 0.907 .8168705 1.196748

sp75\_701\_3\_ss\_c\_4lag | 1.129337 .0919588 1.49 0.135 .9627477 1.324752

sp75\_701\_4\_ss\_c\_4lag | 2.071554 .7289133 2.07 0.038 1.039408 4.128638

sp75\_701\_ss\_c\_4lag | 1.02075 .0227377 0.92 0.357 .9771435 1.066302

sp75\_703\_2\_ss\_c\_4lag | .8475735 .1442435 -0.97 0.331 .6071786 1.183146

sp75\_703\_3\_ss\_c\_4lag | 1.057429 .1231424 0.48 0.632 .8416373 1.328549

sp75\_703\_ss\_c\_4lag | 1.036822 .04206 0.89 0.373 .9575785 1.122624

sp75\_704\_ss\_c\_4lag | 1.398386 .5212884 0.90 0.368 .6734684 2.9036

sp75\_705\_1\_ss\_c\_4lag | .8204279 .0837481 -1.94 0.053 .6716623 1.002143

sp75\_705\_8\_ss\_c\_4lag | 1.00e-06 9.82e-07 -14.11 0.000 1.47e-07 6.83e-06

sp75\_705\_ss\_c\_4lag | 1.203978 .1475078 1.52 0.130 .9469602 1.530753

sp75\_706\_ss\_c\_4lag | .9991214 .0934697 -0.01 0.993 .8317383 1.200189

sp75\_800\_2\_ss\_c\_4lag | 2.80e-07 2.81e-07 -15.01 0.000 3.91e-08 2.01e-06

sp75\_800\_3\_ss\_c\_4lag | 1.422085 .5679814 0.88 0.378 .6500624 3.11097

sp75\_800\_4\_ss\_c\_4lag | 3.771766 2.300416 2.18 0.030 1.141283 12.46511

sp75\_800\_ss\_c\_4lag | 1.013953 .059261 0.24 0.813 .9042091 1.137016

sp75\_801\_ss\_c\_4lag | .9817052 .174389 -0.10 0.917 .693066 1.390553

sp75\_802\_ss\_c\_4lag | .7571491 .1799819 -1.17 0.242 .4751626 1.206481

sp75\_803\_2\_ss\_c\_4lag | 1.454036 .5550669 0.98 0.327 .6880749 3.072662

sp75\_803\_ss\_c\_4lag | .9914401 .0761849 -0.11 0.911 .852821 1.152591

sp75\_804\_ss\_c\_4lag | .9572853 .0608242 -0.69 0.492 .8451963 1.084239

sp75\_805\_ss\_c\_4lag | .8552428 .1201223 -1.11 0.266 .6494335 1.126274

sp75\_806\_ss\_c\_4lag | .9045933 .1355532 -0.67 0.503 .6743742 1.213405

sp75\_807\_ss\_c\_4lag | 1.069634 .0199702 3.61 0.000 1.031201 1.1095

sp75\_808\_ss\_c\_4lag | .9906793 .1251572 -0.07 0.941 .7733869 1.269023

sp75\_809\_ss\_c\_4lag | .9529013 .0487336 -0.94 0.346 .8620163 1.053368

sp75\_810\_ss\_c\_4lag | 1.167761 .1180259 1.53 0.125 .9579063 1.423591

sp75\_811\_ss\_c\_4lag | 1.039425 .1010472 0.40 0.691 .8591004 1.257599

sp75\_812\_ss\_c\_4lag | 1.07655 .1804172 0.44 0.660 .7751445 1.495153

sp75\_814\_ss\_c\_4lag | .8766509 .1308976 -0.88 0.378 .6542279 1.174693

sp75\_815\_ss\_c\_4lag | 2.13104 .4030122 4.00 0.000 1.471013 3.087215

sp75\_816\_ss\_c\_4lag | 1.060131 .0828028 0.75 0.455 .9096525 1.235503

sp75\_818\_ss\_c\_4lag | 1.19988 .1279659 1.71 0.088 .9735498 1.478828

sp75\_819\_ss\_c\_4lag | .5499296 .1464693 -2.25 0.025 .3262845 .9268677

sp75\_820\_ss\_c\_4lag | 1.070691 .0863525 0.85 0.397 .9141426 1.254049

sp75\_821\_ss\_c\_4lag | 1.467207 .4436835 1.27 0.205 .8111253 2.653963

sp75\_825\_ss\_c\_4lag | 1.205256 .1270294 1.77 0.077 .9803159 1.481811

sp75\_827\_ss\_c\_4lag | 1.339335 .1722752 2.27 0.023 1.040882 1.723364

sp75\_831\_ss\_c\_4lag | .9432446 .1347214 -0.41 0.682 .7129338 1.247957

sp75\_900\_2\_ss\_c\_4lag | .6919265 .2125451 -1.20 0.231 .3789561 1.263371

sp75\_900\_3\_ss\_c\_4lag | 1.056887 .1842024 0.32 0.751 .7510596 1.487245

sp75\_900\_4\_ss\_c\_4lag | 1.063821 .143509 0.46 0.647 .8166615 1.385784

sp75\_900\_ss\_c\_4lag | .9661937 .0310181 -1.07 0.284 .9072725 1.028942

sp75\_901\_ss\_c\_4lag | 1.016447 .1303355 0.13 0.899 .7905658 1.306867

sp75\_902\_1\_ss\_c\_4lag | 1.355912 .2065261 2.00 0.046 1.00596 1.827606

sp75\_902\_2\_ss\_c\_4lag | 1.139592 .0434692 3.43 0.001 1.057501 1.228056

sp75\_902\_4\_ss\_c\_4lag | 1.043923 .0602597 0.74 0.456 .9322527 1.168971

sp75\_902\_ss\_c\_4lag | 1.026825 .0298617 0.91 0.363 .9699339 1.087053

sp75\_903\_ss\_c\_4lag | 1.052911 .0632683 0.86 0.391 .9359307 1.184512

sp75\_904\_ss\_c\_4lag | 1.002023 .011376 0.18 0.859 .9799731 1.02457

sp75\_905\_ss\_c\_4lag | 1.433604 .4444989 1.16 0.245 .7807431 2.632389

sp75\_907\_ss\_c\_4lag | .9510658 .1448618 -0.33 0.742 .7056017 1.281922

sp77\_103\_ss\_c\_4lag | 1.053764 .0754177 0.73 0.464 .9158468 1.212449

sp77\_1103\_ss\_c\_4lag | .9554376 .0579843 -0.75 0.453 .8482893 1.07612

sp77\_1104\_ss\_c\_4lag | 1.034901 .0129947 2.73 0.006 1.009743 1.060687

sp77\_1106\_ss\_c\_4lag | 3.09e-07 3.12e-07 -14.87 0.000 4.29e-08 2.23e-06

sp77\_1111\_ss\_c\_4lag | .9739315 .2300275 -0.11 0.911 .6130386 1.54728

sp77\_1112\_ss\_c\_4lag | .9746814 .0747631 -0.33 0.738 .8386313 1.132803

sp77\_1403\_ss\_c\_4lag | .7634117 .1263867 -1.63 0.103 .5518717 1.056038

sp77\_1433\_ss\_c\_4lag | .6185676 .1240977 -2.39 0.017 .4174632 .9165499

sp77\_1434\_ss\_c\_4lag | .7914305 .1369547 -1.35 0.176 .5637867 1.110991

sp77\_1437\_ss\_c\_4lag | .5432438 .0712182 -4.65 0.000 .4201495 .7024019

sp77\_1438\_ss\_c\_4lag | .3973622 .2765213 -1.33 0.185 .1015879 1.554287

sp77\_1605\_ss\_c\_4lag | 1.013855 .0182256 0.77 0.444 .978755 1.050213

sp77\_1606\_ss\_c\_4lag | 1.055846 .02431 2.36 0.018 1.009258 1.104584

sp77\_1710\_ss\_c\_4lag | .9879232 .0257205 -0.47 0.641 .9387765 1.039643

sp77\_1802\_ss\_c\_4lag | .8320851 .1884907 -0.81 0.417 .5337607 1.297146

sp77\_1906\_ss\_c\_4lag | 1.651073 .4991269 1.66 0.097 .9129444 2.985991

sp77\_1915\_ss\_c\_4lag | .7843847 .2724599 -0.70 0.484 .3970635 1.549524

sp77\_1916\_ss\_c\_4lag | 1.165705 .1209302 1.48 0.139 .9512286 1.428539

sp77\_200\_ss\_c\_4lag | .9807685 .0119681 -1.59 0.112 .9575898 1.004508

sp77\_202\_ss\_c\_4lag | .9523791 .0155218 -2.99 0.003 .9224377 .9832924

sp77\_203\_ss\_c\_4lag | .9549278 .1417225 -0.31 0.756 .713908 1.277317

sp77\_204\_ss\_c\_4lag | .9932789 .0226067 -0.30 0.767 .9499444 1.03859

sp77\_205\_ss\_c\_4lag | 1.003869 .0072279 0.54 0.592 .9898016 1.018135

sp77\_206\_ss\_c\_4lag | 1.051284 .0457023 1.15 0.250 .9654192 1.144786

sp77\_207\_ss\_c\_4lag | 1.124226 .0560071 2.35 0.019 1.019643 1.239536

sp77\_208\_ss\_c\_4lag | 1.033648 .0266153 1.29 0.199 .9827777 1.087152

sp77\_210\_ss\_c\_4lag | 1.050162 .0705245 0.73 0.466 .9206469 1.197897

sp77\_216\_ss\_c\_4lag | 1.105284 .1468752 0.75 0.451 .851848 1.434119

sp77\_315\_ss\_c\_4lag | .739904 .3155294 -0.71 0.480 .3207624 1.706739

sp77\_400\_ss\_c\_4lag | 1.008154 .0079719 1.03 0.304 .9926501 1.023901

sp77\_401\_ss\_c\_4lag | 1.000011 .088314 0.00 1.000 .8410705 1.188986

sp77\_402\_ss\_c\_4lag | .9976566 .0463692 -0.05 0.960 .9107913 1.092807

sp77\_403\_1\_ss\_c\_4lag | .8696864 .0985754 -1.23 0.218 .696438 1.086033

sp77\_403\_ss\_c\_4lag | 1.774954 .514949 1.98 0.048 1.005164 3.134277

sp77\_404\_ss\_c\_4lag | .9700854 .0100404 -2.93 0.003 .9506049 .9899652

sp77\_405\_ss\_c\_4lag | .9217825 .0774985 -0.97 0.333 .7817429 1.086908

sp77\_408\_ss\_c\_4lag | .9626472 .1095766 -0.33 0.738 .7701517 1.203256

sp77\_409\_ss\_c\_4lag | .1713196 .1365138 -2.21 0.027 .0359367 .816725

sp77\_410\_ss\_c\_4lag | .9900458 .0167757 -0.59 0.555 .9577061 1.023478

sp77\_411\_ss\_c\_4lag | .6482564 .1088847 -2.58 0.010 .466417 .9009886

sp77\_412\_ss\_c\_4lag | 1.081545 .1240837 0.68 0.494 .8637499 1.354258

sp77\_413\_ss\_c\_4lag | .6440276 .06387 -4.44 0.000 .5302596 .7822048

sp77\_500\_ss\_c\_4lag | .8788225 .0838018 -1.35 0.176 .7290096 1.059422

sp77\_501\_ss\_c\_4lag | 1.084572 .0647359 1.36 0.174 .9648329 1.219172

sp77\_502\_1\_ss\_c\_4lag | 2.043326 .4446199 3.28 0.001 1.333889 3.130083

sp77\_502\_2\_ss\_c\_4lag | .8772412 .0746272 -1.54 0.124 .7425181 1.036409

sp77\_502\_ss\_c\_4lag | .9650525 .0114363 -3.00 0.003 .942896 .9877297

sp77\_503\_1\_ss\_c\_4lag | .4425695 .0570542 -6.32 0.000 .3437544 .5697899

sp77\_503\_ss\_c\_4lag | .9851877 .1476816 -0.10 0.921 .7343823 1.321648

sp77\_504\_ss\_c\_4lag | .9303253 .0507963 -1.32 0.186 .8359084 1.035407

sp77\_505\_ss\_c\_4lag | .8760554 .0425367 -2.73 0.006 .796529 .9635217

sp77\_506\_1\_ss\_c\_4lag | 1.120366 .15466 0.82 0.410 .8547838 1.468464

sp77\_506\_ss\_c\_4lag | 1.126426 .1198936 1.12 0.263 .9143301 1.387721

sp77\_507\_ss\_c\_4lag | 1.097524 .1038806 0.98 0.326 .9116916 1.321236

sp77\_508\_1\_ss\_c\_4lag | 1.922291 .7650521 1.64 0.101 .8811495 4.193616

sp77\_508\_ss\_c\_4lag | 1.232079 .1902628 1.35 0.177 .9103166 1.667572

sp77\_509\_ss\_c\_4lag | .8309984 .0652316 -2.36 0.018 .7124964 .9692096

sp77\_510\_ss\_c\_4lag | .9059389 .1029013 -0.87 0.384 .7251284 1.131834

sp77\_511\_ss\_c\_4lag | 1.297781 .4822886 0.70 0.483 .626431 2.688622

sp77\_512\_ss\_c\_4lag | .9832929 .0385119 -0.43 0.667 .9106353 1.061748

sp77\_513\_ss\_c\_4lag | 1.039339 .0551516 0.73 0.467 .9366755 1.153256

sp77\_514\_ss\_c\_4lag | 1.820737 .3779117 2.89 0.004 1.212194 2.73478

sp77\_515\_ss\_c\_4lag | 1.112301 .5555068 0.21 0.831 .4179403 2.960265

sp77\_516\_ss\_c\_4lag | .9276343 .0295271 -2.36 0.018 .8715306 .9873496

sp77\_600\_ss\_c\_4lag | 1.086763 .1488665 0.61 0.544 .8308756 1.421457

sp77\_601\_ss\_c\_4lag | 1.015722 .1559666 0.10 0.919 .7517452 1.372394

sp77\_602\_ss\_c\_4lag | 1.250234 .1152496 2.42 0.015 1.043579 1.497811

sp77\_603\_ss\_c\_4lag | 2.105298 .5080366 3.09 0.002 1.31192 3.378469

sp77\_604\_ss\_c\_4lag | .78441 .12032 -1.58 0.113 .5807351 1.059518

sp77\_605\_ss\_c\_4lag | .5794291 .4440339 -0.71 0.476 .1290324 2.601966

sp77\_606\_ss\_c\_4lag | 1 (omitted)

sp77\_700\_1\_ss\_c\_4lag | 1.480087 .2849923 2.04 0.042 1.014816 2.158673

sp77\_700\_ss\_c\_4lag | .8865716 .2198628 -0.49 0.627 .5452838 1.441468

sp77\_701\_1\_ss\_c\_4lag | .8335118 .2326552 -0.65 0.514 .4823018 1.440471

sp77\_701\_2\_ss\_c\_4lag | .7665599 .2081055 -0.98 0.327 .4502587 1.305059

sp77\_701\_3\_ss\_c\_4lag | 1.321589 .1813081 2.03 0.042 1.009998 1.729308

sp77\_701\_4\_ss\_c\_4lag | 1.137351 .198052 0.74 0.460 .8084831 1.599993

sp77\_701\_ss\_c\_4lag | .9807496 .0417708 -0.46 0.648 .9022044 1.066133

sp77\_704\_1\_ss\_c\_4lag | 1.249679 .1865699 1.49 0.135 .9326509 1.674473

sp77\_704\_8\_ss\_c\_4lag | .7499276 .3297734 -0.65 0.513 .3167464 1.775526

sp77\_704\_9\_ss\_c\_4lag | 1.731917 .3846372 2.47 0.013 1.120691 2.676507

sp77\_704\_ss\_c\_4lag | 1.613803 .4421024 1.75 0.081 .9433295 2.760818

sp77\_705\_ss\_c\_4lag | .9346028 .1626339 -0.39 0.698 .6645171 1.314462

sp77\_800\_1\_ss\_c\_4lag | .8286789 .3480472 -0.45 0.655 .3638141 1.887526

sp77\_800\_2\_ss\_c\_4lag | 1.989573 .6532366 2.10 0.036 1.045406 3.786474

sp77\_800\_ss\_c\_4lag | .7217117 .3118032 -0.75 0.450 .3094687 1.683104

sp77\_801\_1\_ss\_c\_4lag | 1 (omitted)

sp77\_802\_ss\_c\_4lag | .9309652 .1716876 -0.39 0.698 .6485684 1.336322

sp77\_803\_ss\_c\_4lag | .8537621 .1747429 -0.77 0.440 .5716339 1.275134

sp77\_804\_ss\_c\_4lag | 1.115993 .2332385 0.53 0.600 .7409068 1.680969

sp77\_805\_ss\_c\_4lag | 1.055171 .2481729 0.23 0.819 .6654614 1.673103

sp77\_807\_1\_ss\_c\_4lag | .5259167 .2564144 -1.32 0.187 .2022589 1.367497

sp77\_807\_2\_ss\_c\_4lag | .9533217 .2507972 -0.18 0.856 .5692563 1.596508

sp77\_807\_3\_ss\_c\_4lag | 1.36926 .0855995 5.03 0.000 1.211359 1.547743

sp77\_807\_ss\_c\_4lag | 1.220847 .1505396 1.62 0.106 .9587419 1.554608

sp77\_808\_ss\_c\_4lag | 2.571768 .6403369 3.79 0.000 1.578678 4.189574

sp77\_809\_ss\_c\_4lag | 1.013207 .0992664 0.13 0.893 .8361875 1.2277

sp77\_810\_ss\_c\_4lag | 1.027773 .1782246 0.16 0.874 .7316303 1.443786

sp77\_900\_1\_ss\_c\_4lag | 4.778084 1.554961 4.81 0.000 2.524888 9.042022

sp77\_900\_2\_ss\_c\_4lag | 6.44e-07 6.50e-07 -14.12 0.000 8.90e-08 4.66e-06

sp77\_900\_ss\_c\_4lag | .5885868 .1476407 -2.11 0.035 .3599944 .9623328

sp77\_901\_1\_ss\_c\_4lag | 1.37e-07 1.46e-07 -14.82 0.000 1.69e-08 1.11e-06

sp77\_901\_ss\_c\_4lag | 1.065409 .1312892 0.51 0.607 .8368039 1.356466

sp77\_902\_3\_ss\_c\_4lag | 1.539297 1.606692 0.41 0.679 .1989996 11.90673

sp77\_902\_ss\_c\_4lag | 1.157905 .1510796 1.12 0.261 .8966249 1.495322

sp77\_903\_ss\_c\_4lag | 1.009107 .1955315 0.05 0.963 .690244 1.475271

sp77\_904\_ss\_c\_4lag | 1.022465 .0447316 0.51 0.612 .9384461 1.114006

mine\_time | .9983427 .0016454 -1.01 0.314 .995123 1.001573

onsite\_insp\_hours | .9997165 .0001103 -2.57 0.010 .9995004 .9999327

|

state |

AL | 1.126563 .0879791 1.53 0.127 .9666755 1.312895

AR | 1.734519 .2168645 4.40 0.000 1.357546 2.216173

CO | .7353136 .1162807 -1.94 0.052 .5393437 1.002489

IL | 1.164891 .0869436 2.04 0.041 1.006363 1.348392

IN | .9266226 .1520866 -0.46 0.642 .6717306 1.278235

MD | 1.164435 .2020982 0.88 0.380 .8286695 1.636247

MT | .8991505 .0692451 -1.38 0.167 .7731788 1.045646

NM | .8747091 .0558202 -2.10 0.036 .7718689 .9912512

OH | 1.165599 .1250896 1.43 0.153 .9444956 1.438461

OK | .9475488 .3131744 -0.16 0.871 .4957594 1.811058

PA | .9582312 .0890284 -0.46 0.646 .7987042 1.149621

TN | 1.172972 .1697662 1.10 0.270 .8832665 1.557698

UT | .6192212 .0697426 -4.26 0.000 .4965642 .7721758

VA | .7078197 .0556454 -4.40 0.000 .6067437 .8257337

WV | 1.042898 .0601787 0.73 0.467 .9313754 1.167775

WY | 1.111778 .1090992 1.08 0.280 .9172531 1.347556

|

time |

2000.75 | 1.599172 .2065331 3.64 0.000 1.241545 2.059813

2001 | 1.621936 .2034502 3.86 0.000 1.268417 2.073985

2001.25 | 1.4499 .1821562 2.96 0.003 1.13344 1.854717

2001.5 | 1.828773 .2369918 4.66 0.000 1.418575 2.357586

2001.75 | 1.553716 .1967769 3.48 0.001 1.212181 1.991478

2002 | 1.602486 .198203 3.81 0.000 1.257516 2.04209

2002.25 | 1.436766 .187906 2.77 0.006 1.111892 1.856563

2002.5 | 1.786119 .2170546 4.77 0.000 1.40757 2.266476

2002.75 | 1.655684 .2016573 4.14 0.000 1.304079 2.10209

2003 | 1.389912 .1730285 2.64 0.008 1.088986 1.773995

2003.25 | 1.567404 .1919403 3.67 0.000 1.232948 1.992585

2003.5 | 1.652215 .1834407 4.52 0.000 1.329108 2.053871

2003.75 | 1.272603 .1597347 1.92 0.055 .995066 1.627549

2004 | 1.486714 .1750085 3.37 0.001 1.180398 1.872521

2004.25 | 1.489573 .1748044 3.40 0.001 1.183509 1.874787

2004.5 | 1.47517 .170219 3.37 0.001 1.176583 1.849531

2004.75 | 1.362229 .1615666 2.61 0.009 1.079676 1.718725

2005 | 1.173569 .1415466 1.33 0.185 .9264962 1.486531

2005.25 | 1.454522 .1635498 3.33 0.001 1.166834 1.81314

2005.5 | 1.333618 .1664986 2.31 0.021 1.044146 1.703341

2005.75 | 1.181336 .1480971 1.33 0.184 .923982 1.510371

2006 | 1.191234 .1411512 1.48 0.140 .9443581 1.502648

2006.25 | 1.181419 .141746 1.39 0.165 .9338498 1.494619

2006.5 | 1.391061 .1564485 2.93 0.003 1.115871 1.734116

2006.75 | 1.132627 .1288823 1.09 0.274 .9062083 1.415616

2007 | 1.200322 .1371548 1.60 0.110 .9594782 1.501621

2007.25 | 1.084352 .1317197 0.67 0.505 .8546179 1.375841

2007.5 | 1.173003 .1281585 1.46 0.144 .9468901 1.45311

2007.75 | 1.171496 .1295787 1.43 0.152 .9431696 1.455097

2008 | .967612 .1122984 -0.28 0.777 .7707492 1.214757

2008.25 | 1.035442 .1217089 0.30 0.767 .8223808 1.303702

2008.5 | 1.2194 .1251668 1.93 0.053 .9971801 1.491141

2009 | .9376228 .0955822 -0.63 0.528 .7678136 1.144987

2009.25 | .886226 .1013421 -1.06 0.291 .7082842 1.108872

2009.5 | 1.101788 .1278146 0.84 0.403 .8777137 1.383066

2009.75 | .8082765 .0987532 -1.74 0.081 .636154 1.02697

2010 | .8668387 .1066669 -1.16 0.246 .681076 1.103268

2010.25 | .9076655 .1152609 -0.76 0.446 .707677 1.164171

2010.5 | 1.024188 .1199258 0.20 0.838 .8141597 1.288398

2010.75 | .8120188 .0966654 -1.75 0.080 .6430374 1.025406

2011 | .8977588 .1074177 -0.90 0.367 .7100886 1.135028

2011.25 | .8839991 .0995891 -1.09 0.274 .7088553 1.102417

2011.5 | .9882012 .1176915 -0.10 0.921 .7824743 1.248017

2011.75 | .7764901 .0980886 -2.00 0.045 .6061911 .9946317

2012 | .967309 .1132622 -0.28 0.777 .7689499 1.216837

2012.25 | .8530928 .100595 -1.35 0.178 .6770555 1.0749

2012.5 | .9733299 .1141121 -0.23 0.818 .7735104 1.224768

2012.75 | .8468896 .1075705 -1.31 0.191 .6602502 1.086288

2013 | .8764213 .1000566 -1.16 0.248 .7007056 1.096201

2013.25 | .7356802 .091015 -2.48 0.013 .5772744 .9375531

2013.5 | 1.008214 .1233586 0.07 0.947 .7932412 1.281446

2013.75 | .7996167 .095144 -1.88 0.060 .633286 1.009634

2014 | .7882066 .1036964 -1.81 0.070 .6090544 1.020056

2014.25 | .8607907 .1059471 -1.22 0.223 .6762864 1.095631

2014.5 | .9029648 .1041168 -0.89 0.376 .7203152 1.131929

2014.75 | .873273 .1019383 -1.16 0.246 .6946853 1.097771

2015 | .7973727 .0939013 -1.92 0.055 .6330251 1.004388

2015.25 | .8579187 .1038179 -1.27 0.205 .67677 1.087555

2015.5 | 1.105592 .1359013 0.82 0.414 .8688877 1.40678

2015.75 | .6604459 .0960617 -2.85 0.004 .4966269 .878303

2016 | .8883267 .1205295 -0.87 0.383 .6808954 1.158951

|

\_cons | 9.83e-06 1.02e-06 -111.10 0.000 8.02e-06 .000012

ln(hours) | 1 (exposure)

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**. estat gof**

Deviance goodness-of-fit = 18004.55

Prob > chi2(22100) = 1.0000

Pearson goodness-of-fit = 258627.6

Prob > chi2(22100) = 0.0000

**. glm MR `subpart\_ss\_lag\_4\_vars' `covariates' ib(freq).state ib(freq).time, family(nbinomial) link(log) vce(cl mineid) exposure(hours) iter(50) eform**

note: sp77\_606\_ss\_c\_4lag omitted because of collinearity

note: sp77\_801\_1\_ss\_c\_4lag omitted because of collinearity

Iteration 0: log pseudolikelihood = -17111.834

Iteration 1: log pseudolikelihood = -16912.73

Iteration 2: log pseudolikelihood = -16911.469

Iteration 3: log pseudolikelihood = -16911.216

Iteration 4: log pseudolikelihood = -16911.158

Iteration 5: log pseudolikelihood = -16911.144

Iteration 6: log pseudolikelihood = -16911.141

Iteration 7: log pseudolikelihood = -16911.14

Iteration 8: log pseudolikelihood = -16911.14

Iteration 9: log pseudolikelihood = -16911.14

Generalized linear models No. of obs = 22,446

Optimization : ML Residual df = 22,083

Scale parameter = 1

Deviance = 12325.22297 (1/df) Deviance = .5581317

Pearson = 230863.2597 (1/df) Pearson = 10.45434

Variance function: V(u) = u+(1)u^2 [Neg. Binomial]

Link function : g(u) = ln(u) [Log]

AIC = 1.539173

Log pseudolikelihood = -16911.14042 BIC = -208921.4

(Std. Err. adjusted for 1,293 clusters in mineid)

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| Robust

MR | IRR Std. Err. z P>|z| [95% Conf. Interval]

-----------------------+----------------------------------------------------------------

sp47\_41\_ss\_c\_4lag | .6400506 .1171598 -2.44 0.015 .4470991 .9162727

sp47\_44\_ss\_c\_4lag | .9939677 .1987939 -0.03 0.976 .6716325 1.471001

sp48\_11\_ss\_c\_4lag | 1.080317 .0684461 1.22 0.223 .9541597 1.223154

sp48\_25\_ss\_c\_4lag | .9094606 .0714605 -1.21 0.227 .7796525 1.060881

sp48\_26\_ss\_c\_4lag | 1.286138 .0668865 4.84 0.000 1.161503 1.424147

sp48\_27\_ss\_c\_4lag | .9738002 .0864025 -0.30 0.765 .8183616 1.158763

sp48\_28\_ss\_c\_4lag | .8912082 .0967454 -1.06 0.289 .720405 1.102508

sp48\_4\_ss\_c\_4lag | 1.62832 1.135421 0.70 0.484 .4151455 6.386739

sp48\_5\_ss\_c\_4lag | .8665982 .1063279 -1.17 0.243 .6813637 1.10219

sp48\_6\_ss\_c\_4lag | .9207471 .0791958 -0.96 0.337 .7779046 1.089819

sp48\_7\_ss\_c\_4lag | 1.161945 .0697204 2.50 0.012 1.033025 1.306954

sp48\_8\_ss\_c\_4lag | 1.08747 .1641934 0.56 0.579 .8089041 1.461966

sp71\_701\_ss\_c\_4lag | 2.167637 .4502172 3.72 0.000 1.442755 3.256722

sp72\_503\_ss\_c\_4lag | .9247182 .2094035 -0.35 0.730 .593272 1.441335

sp72\_610\_ss\_c\_4lag | .6664927 .1639772 -1.65 0.099 .4115042 1.079485

sp72\_620\_ss\_c\_4lag | 1.305804 .2707576 1.29 0.198 .8697249 1.960532

sp72\_630\_ss\_c\_4lag | 1.023272 .010311 2.28 0.022 1.003261 1.043682

sp75\_100\_ss\_c\_4lag | 1.00032 .2203649 0.00 0.999 .649567 1.540472

sp75\_1001\_1\_ss\_c\_4lag | 1.062304 .4993362 0.13 0.898 .4228064 2.669047

sp75\_1001\_ss\_c\_4lag | 1.255011 .3917031 0.73 0.467 .6807347 2.313754

sp75\_1003\_1\_ss\_c\_4lag | .5431796 .140675 -2.36 0.018 .3269607 .902384

sp75\_1100\_2\_ss\_c\_4lag | 1.018787 .0144252 1.31 0.189 .9909026 1.047456

sp75\_1101\_20\_ss\_c\_4lag | .8167429 .0911554 -1.81 0.070 .6562723 1.016451

sp75\_1102\_ss\_c\_4lag | .9084505 .056108 -1.55 0.120 .8048763 1.025353

sp75\_1103\_4\_ss\_c\_4lag | 1.062434 .0366472 1.76 0.079 .9929808 1.136745

sp75\_1104\_ss\_c\_4lag | .9500358 .1278182 -0.38 0.703 .7298255 1.23669

sp75\_1106\_2\_ss\_c\_4lag | .9610444 .0473549 -0.81 0.420 .8725715 1.058488

sp75\_1106\_3\_ss\_c\_4lag | 1.054207 .0274628 2.03 0.043 1.001732 1.109431

sp75\_1106\_4\_ss\_c\_4lag | .9514035 .1496358 -0.32 0.751 .6990184 1.294914

sp75\_1106\_5\_ss\_c\_4lag | .9053061 .0757713 -1.19 0.235 .7683384 1.06669

sp75\_1106\_6\_ss\_c\_4lag | .5837854 .1979864 -1.59 0.113 .3003134 1.134833

sp75\_1106\_ss\_c\_4lag | .9826232 .1186738 -0.15 0.885 .7755063 1.245055

sp75\_1107\_14\_ss\_c\_4lag | 1.311793 .3180894 1.12 0.263 .8155715 2.109932

sp75\_1400\_1\_ss\_c\_4lag | 1.008913 .182224 0.05 0.961 .7081328 1.43745

sp75\_1400\_2\_ss\_c\_4lag | .8520897 .288775 -0.47 0.637 .4385421 1.655615

sp75\_1400\_3\_ss\_c\_4lag | 1.074725 .1270583 0.61 0.542 .8524418 1.35497

sp75\_1400\_4\_ss\_c\_4lag | .8237813 .1347366 -1.19 0.236 .5978476 1.135098

sp75\_1400\_ss\_c\_4lag | 1.040739 .0587657 0.71 0.479 .9317049 1.162533

sp75\_1401\_ss\_c\_4lag | 1.087061 .2733431 0.33 0.740 .6640766 1.779467

sp75\_1403\_10\_ss\_c\_4lag | 1.019679 .0196787 1.01 0.313 .98183 1.058987

sp75\_1403\_11\_ss\_c\_4lag | 1.490413 .4467175 1.33 0.183 .828282 2.681853

sp75\_1403\_3\_ss\_c\_4lag | 1.068154 .4439867 0.16 0.874 .472961 2.412362

sp75\_1403\_4\_ss\_c\_4lag | 1.081929 .220355 0.39 0.699 .7258317 1.612731

sp75\_1403\_5\_ss\_c\_4lag | .9801068 .011622 -1.69 0.090 .9575908 1.003152

sp75\_1403\_6\_ss\_c\_4lag | 1.003788 .0139114 0.27 0.785 .9768894 1.031428

sp75\_1403\_7\_ss\_c\_4lag | 1.025049 .0471903 0.54 0.591 .9366081 1.121842

sp75\_1403\_8\_ss\_c\_4lag | 1.002055 .0182127 0.11 0.910 .9669873 1.038395

sp75\_1403\_9\_ss\_c\_4lag | .7922399 .0871126 -2.12 0.034 .638647 .9827715

sp75\_1404\_1\_ss\_c\_4lag | .4283809 .1728352 -2.10 0.036 .1942687 .9446202

sp75\_1404\_ss\_c\_4lag | 1.268714 .6792734 0.44 0.657 .4442503 3.623261

sp75\_1405\_1\_ss\_c\_4lag | 1.203554 .5196642 0.43 0.668 .5163428 2.805388

sp75\_1405\_ss\_c\_4lag | .9889503 .0159475 -0.69 0.491 .9581826 1.020706

sp75\_1431\_ss\_c\_4lag | .8157878 .329659 -0.50 0.614 .3694941 1.801138

sp75\_1432\_ss\_c\_4lag | 1.61e-06 1.17e-06 -18.30 0.000 3.85e-07 6.70e-06

sp75\_1433\_ss\_c\_4lag | .9424084 .1506127 -0.37 0.711 .688974 1.289067

sp75\_1434\_ss\_c\_4lag | 1.116095 .0962692 1.27 0.203 .9424978 1.321666

sp75\_1435\_ss\_c\_4lag | .8500557 .2965143 -0.47 0.641 .4290752 1.684075

sp75\_1437\_ss\_c\_4lag | 1.298505 .3252974 1.04 0.297 .7947003 2.1217

sp75\_150\_ss\_c\_4lag | 1.544118 .5275882 1.27 0.204 .7903968 3.016586

sp75\_151\_ss\_c\_4lag | .3358035 .1175358 -3.12 0.002 .1691037 .6668334

sp75\_153\_ss\_c\_4lag | 1.722613 .964268 0.97 0.331 .5750559 5.160185

sp75\_155\_ss\_c\_4lag | .9348076 .1259582 -0.50 0.617 .7178427 1.217349

sp75\_156\_ss\_c\_4lag | 1.062045 .3583262 0.18 0.858 .5482189 2.057463

sp75\_1600\_2\_ss\_c\_4lag | .8003874 .1092267 -1.63 0.103 .6125465 1.045831

sp75\_1712\_10\_ss\_c\_4lag | .8408684 .171973 -0.85 0.397 .5631728 1.255493

sp75\_1712\_6\_ss\_c\_4lag | 2.054357 .6399159 2.31 0.021 1.115664 3.782844

sp75\_1720\_ss\_c\_4lag | 1.032528 .0348994 0.95 0.344 .9663424 1.103246

sp75\_1721\_ss\_c\_4lag | 1.94e-06 1.34e-06 -19.01 0.000 4.99e-07 7.52e-06

sp75\_1725\_ss\_c\_4lag | 1.00125 .0039287 0.32 0.750 .9935793 1.00898

sp75\_1726\_ss\_c\_4lag | 1.167361 .107994 1.67 0.094 .9737773 1.39943

sp75\_1727\_ss\_c\_4lag | 2.142611 .4111519 3.97 0.000 1.47097 3.120921

sp75\_1728\_ss\_c\_4lag | 1.708743 .3323476 2.75 0.006 1.167131 2.501693

sp75\_1729\_ss\_c\_4lag | .8561167 .0878574 -1.51 0.130 .700132 1.046854

sp75\_1730\_ss\_c\_4lag | .8564307 .1499205 -0.89 0.376 .607697 1.206973

sp75\_1731\_ss\_c\_4lag | 1.003677 .0044974 0.82 0.413 .9949007 1.01253

sp75\_1903\_ss\_c\_4lag | 1.31413 .2099001 1.71 0.087 .9609031 1.797202

sp75\_1909\_ss\_c\_4lag | 1.028699 .015796 1.84 0.065 .9982004 1.060129

sp75\_1910\_ss\_c\_4lag | .9888388 .0257024 -0.43 0.666 .9397247 1.04052

sp75\_1911\_ss\_c\_4lag | .9007187 .0321612 -2.93 0.003 .8398391 .9660116

sp75\_1912\_ss\_c\_4lag | 1.673999 .3415914 2.52 0.012 1.122178 2.497175

sp75\_1913\_ss\_c\_4lag | 1.247747 .0853557 3.24 0.001 1.091184 1.426775

sp75\_1914\_ss\_c\_4lag | 1.005355 .0125142 0.43 0.668 .9811249 1.030184

sp75\_1915\_ss\_c\_4lag | 1.188474 .1294232 1.59 0.113 .9600523 1.471243

sp75\_202\_ss\_c\_4lag | 1.000186 .0026352 0.07 0.944 .9950342 1.005364

sp75\_208\_ss\_c\_4lag | .9991878 .0194081 -0.04 0.967 .9618635 1.03796

sp75\_211\_ss\_c\_4lag | .9967113 .0188128 -0.17 0.861 .9605125 1.034274

sp75\_212\_ss\_c\_4lag | .9317457 .0412587 -1.60 0.110 .8542899 1.016224

sp75\_214\_ss\_c\_4lag | .8622914 .1368685 -0.93 0.351 .6317509 1.176962

sp75\_312\_ss\_c\_4lag | .8761992 .122076 -0.95 0.343 .6668216 1.15132

sp75\_320\_ss\_c\_4lag | .9815306 .0605195 -0.30 0.762 .8698015 1.107612

sp75\_324\_ss\_c\_4lag | .9123513 .0459815 -1.82 0.069 .8265372 1.007075

sp75\_337\_ss\_c\_4lag | 1.087075 .0397546 2.28 0.022 1.011884 1.167853

sp75\_340\_ss\_c\_4lag | .9971842 .0172996 -0.16 0.871 .9638477 1.031674

sp75\_342\_ss\_c\_4lag | 1.001631 .0101573 0.16 0.872 .9819197 1.021738

sp75\_344\_ss\_c\_4lag | .9980276 .0748487 -0.03 0.979 .8615992 1.156058

sp75\_352\_ss\_c\_4lag | 1.025013 .0533218 0.47 0.635 .925655 1.135035

sp75\_382\_ss\_c\_4lag | 1.190075 .1349125 1.54 0.125 .9529676 1.486177

sp75\_503\_ss\_c\_4lag | .9958734 .0048702 -0.85 0.398 .9863736 1.005465

sp75\_504\_ss\_c\_4lag | .7997406 .2200542 -0.81 0.417 .4663749 1.371397

sp75\_505\_ss\_c\_4lag | .8246601 .2145549 -0.74 0.459 .4952388 1.373205

sp75\_506\_1\_ss\_c\_4lag | 1.095244 .2108047 0.47 0.636 .7510654 1.597144

sp75\_506\_ss\_c\_4lag | .9254862 .1517047 -0.47 0.637 .6711845 1.276139

sp75\_507\_ss\_c\_4lag | .9945432 .0810695 -0.07 0.946 .8476929 1.166833

sp75\_511\_1\_ss\_c\_4lag | .2218617 .0539688 -6.19 0.000 .1377286 .3573886

sp75\_511\_ss\_c\_4lag | 1.160615 .0547152 3.16 0.002 1.05818 1.272965

sp75\_512\_1\_ss\_c\_4lag | 2.653815 1.233069 2.10 0.036 1.067501 6.597406

sp75\_512\_2\_ss\_c\_4lag | 1.011338 .0485016 0.24 0.814 .9206071 1.11101

sp75\_512\_ss\_c\_4lag | 1.001672 .0071351 0.23 0.815 .9877845 1.015755

sp75\_513\_1\_ss\_c\_4lag | .8208283 .2994043 -0.54 0.588 .4015773 1.677782

sp75\_513\_ss\_c\_4lag | .9950551 .1254024 -0.04 0.969 .7772737 1.273856

sp75\_514\_ss\_c\_4lag | .9856987 .0245577 -0.58 0.563 .9387227 1.035026

sp75\_515\_ss\_c\_4lag | .9350489 .023672 -2.65 0.008 .889785 .9826155

sp75\_516\_1\_ss\_c\_4lag | .5959525 .1000752 -3.08 0.002 .4288187 .8282272

sp75\_516\_2\_ss\_c\_4lag | .8147787 .350681 -0.48 0.634 .3504954 1.894074

sp75\_516\_ss\_c\_4lag | 1.052466 .0509602 1.06 0.291 .9571788 1.157239

sp75\_517\_1\_ss\_c\_4lag | .9342987 .2103905 -0.30 0.763 .6009074 1.45266

sp75\_517\_ss\_c\_4lag | 1.001721 .0045529 0.38 0.705 .9928373 1.010685

sp75\_518\_1\_ss\_c\_4lag | .7783479 .0598812 -3.26 0.001 .669403 .9050235

sp75\_518\_ss\_c\_4lag | 1.07079 .0198677 3.69 0.000 1.032549 1.110446

sp75\_519\_ss\_c\_4lag | 1.557494 .8282028 0.83 0.405 .549284 4.416271

sp75\_520\_ss\_c\_4lag | .9854696 .0424661 -0.34 0.734 .9056556 1.072317

sp75\_523\_1\_ss\_c\_4lag | .9598882 .0349206 -1.13 0.260 .8938282 1.03083

sp75\_523\_2\_ss\_c\_4lag | 1.042153 .0331748 1.30 0.195 .9791188 1.109246

sp75\_523\_ss\_c\_4lag | .9460302 .0302433 -1.74 0.083 .8885733 1.007202

sp75\_600\_1\_ss\_c\_4lag | .4658523 .1820561 -1.95 0.051 .2165693 1.002074

sp75\_600\_ss\_c\_4lag | .8857512 .1330746 -0.81 0.419 .6598236 1.189038

sp75\_601\_1\_ss\_c\_4lag | 1.004426 .0233289 0.19 0.849 .9597277 1.051207

sp75\_601\_2\_ss\_c\_4lag | 1.047508 .1579416 0.31 0.758 .779497 1.407667

sp75\_601\_3\_ss\_c\_4lag | 1.359309 .4092775 1.02 0.308 .753404 2.452497

sp75\_601\_ss\_c\_4lag | .9940848 .0252454 -0.23 0.815 .945816 1.044817

sp75\_602\_ss\_c\_4lag | 1.056337 .0558684 1.04 0.300 .952321 1.171713

sp75\_603\_ss\_c\_4lag | 1.013255 .0701133 0.19 0.849 .8847465 1.160429

sp75\_604\_ss\_c\_4lag | 1.018172 .0066097 2.77 0.006 1.005299 1.03121

sp75\_605\_ss\_c\_4lag | 1.021077 .0312862 0.68 0.496 .9615625 1.084276

sp75\_606\_ss\_c\_4lag | .9994186 .0168585 -0.03 0.972 .9669167 1.033013

sp75\_607\_ss\_c\_4lag | 1.026687 .0618018 0.44 0.662 .91243 1.155251

sp75\_700\_1\_ss\_c\_4lag | .7329601 .2369663 -0.96 0.337 .3889435 1.381256

sp75\_700\_ss\_c\_4lag | .9175852 .0507515 -1.56 0.120 .823316 1.022648

sp75\_701\_1\_ss\_c\_4lag | .9662477 .0616225 -0.54 0.590 .8527132 1.094899

sp75\_701\_2\_ss\_c\_4lag | 1.028927 .1123896 0.26 0.794 .8306309 1.274563

sp75\_701\_3\_ss\_c\_4lag | 1.06816 .0995544 0.71 0.479 .889821 1.282241

sp75\_701\_4\_ss\_c\_4lag | 3.099562 1.100335 3.19 0.001 1.545705 6.215475

sp75\_701\_ss\_c\_4lag | 1.043011 .0227733 1.93 0.054 .9993176 1.088615

sp75\_703\_2\_ss\_c\_4lag | .8529467 .1865676 -0.73 0.467 .5555665 1.309507

sp75\_703\_3\_ss\_c\_4lag | 1.03993 .1252713 0.33 0.745 .8212348 1.316864

sp75\_703\_ss\_c\_4lag | 1.024762 .0464348 0.54 0.589 .9376763 1.119937

sp75\_704\_ss\_c\_4lag | 1.601871 .6311672 1.20 0.232 .7400108 3.467503

sp75\_705\_1\_ss\_c\_4lag | .8072568 .0979031 -1.77 0.077 .6364717 1.023869

sp75\_705\_8\_ss\_c\_4lag | 6.92e-07 6.69e-07 -14.68 0.000 1.04e-07 4.60e-06

sp75\_705\_ss\_c\_4lag | 1.283908 .1932241 1.66 0.097 .9559407 1.724397

sp75\_706\_ss\_c\_4lag | .9316065 .0983472 -0.67 0.502 .757484 1.145754

sp75\_800\_2\_ss\_c\_4lag | 2.41e-07 2.43e-07 -15.16 0.000 3.37e-08 1.73e-06

sp75\_800\_3\_ss\_c\_4lag | 1.081444 .3729479 0.23 0.820 .5501206 2.125936

sp75\_800\_4\_ss\_c\_4lag | 3.930833 2.274486 2.37 0.018 1.264609 12.21836

sp75\_800\_ss\_c\_4lag | .9542441 .0751478 -0.59 0.552 .8177611 1.113506

sp75\_801\_ss\_c\_4lag | .9083963 .2379611 -0.37 0.714 .5436218 1.517937

sp75\_802\_ss\_c\_4lag | .7297818 .1596692 -1.44 0.150 .4752897 1.120541

sp75\_803\_2\_ss\_c\_4lag | 1.468395 .5180401 1.09 0.276 .7354351 2.931846

sp75\_803\_ss\_c\_4lag | 1.017079 .090808 0.19 0.850 .8538007 1.211581

sp75\_804\_ss\_c\_4lag | .9504026 .0658055 -0.73 0.463 .8297948 1.08854

sp75\_805\_ss\_c\_4lag | .7521552 .1181467 -1.81 0.070 .5528443 1.023322

sp75\_806\_ss\_c\_4lag | .8336514 .1017724 -1.49 0.136 .6562503 1.059009

sp75\_807\_ss\_c\_4lag | 1.068605 .0217696 3.26 0.001 1.026778 1.112136

sp75\_808\_ss\_c\_4lag | 1.022444 .1443417 0.16 0.875 .7753049 1.348361

sp75\_809\_ss\_c\_4lag | .9595293 .051331 -0.77 0.440 .8640171 1.0656

sp75\_810\_ss\_c\_4lag | 1.192691 .1093285 1.92 0.055 .9965573 1.427427

sp75\_811\_ss\_c\_4lag | .9830881 .1067094 -0.16 0.875 .7946917 1.216147

sp75\_812\_ss\_c\_4lag | .9594745 .2122988 -0.19 0.852 .6218587 1.480387

sp75\_814\_ss\_c\_4lag | .8649466 .1230505 -1.02 0.308 .6544766 1.1431

sp75\_815\_ss\_c\_4lag | 2.225105 .5474356 3.25 0.001 1.373827 3.603869

sp75\_816\_ss\_c\_4lag | 1.079226 .0867758 0.95 0.343 .9218724 1.263437

sp75\_818\_ss\_c\_4lag | 1.267419 .261927 1.15 0.251 .8452975 1.900339

sp75\_819\_ss\_c\_4lag | .6412724 .178204 -1.60 0.110 .3719642 1.105564

sp75\_820\_ss\_c\_4lag | 1.038164 .0909644 0.43 0.669 .8743463 1.232676

sp75\_821\_ss\_c\_4lag | 1.215591 .276147 0.86 0.390 .7787882 1.897387

sp75\_825\_ss\_c\_4lag | 1.159905 .1974759 0.87 0.384 .8308137 1.619351

sp75\_827\_ss\_c\_4lag | 1.389777 .1975684 2.32 0.021 1.051816 1.836329

sp75\_831\_ss\_c\_4lag | .8678853 .1399346 -0.88 0.380 .632729 1.190438

sp75\_900\_2\_ss\_c\_4lag | .7154488 .2717208 -0.88 0.378 .33986 1.506111

sp75\_900\_3\_ss\_c\_4lag | .9495225 .1810983 -0.27 0.786 .6533702 1.379911

sp75\_900\_4\_ss\_c\_4lag | 1.167351 .1908595 0.95 0.344 .8472894 1.608315

sp75\_900\_ss\_c\_4lag | .9684309 .0306282 -1.01 0.310 .9102234 1.030361

sp75\_901\_ss\_c\_4lag | 1.026065 .1293907 0.20 0.838 .8013737 1.313756

sp75\_902\_1\_ss\_c\_4lag | 1.23619 .1996 1.31 0.189 .9008384 1.696381

sp75\_902\_2\_ss\_c\_4lag | 1.127837 .0487335 2.78 0.005 1.036254 1.227514

sp75\_902\_4\_ss\_c\_4lag | .9928127 .0727946 -0.10 0.922 .8599158 1.146248

sp75\_902\_ss\_c\_4lag | 1.017482 .0320839 0.55 0.583 .9565023 1.082349

sp75\_903\_ss\_c\_4lag | 1.066215 .0556275 1.23 0.219 .9625766 1.181013

sp75\_904\_ss\_c\_4lag | 1.005106 .0129815 0.39 0.693 .9799821 1.030874

sp75\_905\_ss\_c\_4lag | 1.299527 .4026226 0.85 0.398 .7080498 2.3851

sp75\_907\_ss\_c\_4lag | .9304361 .1574322 -0.43 0.670 .6678225 1.296319

sp77\_103\_ss\_c\_4lag | 1.114454 .089848 1.34 0.179 .9515634 1.305228

sp77\_1103\_ss\_c\_4lag | .904061 .063801 -1.43 0.153 .7872762 1.03817

sp77\_1104\_ss\_c\_4lag | 1.030096 .0133801 2.28 0.022 1.004202 1.056657

sp77\_1106\_ss\_c\_4lag | 3.46e-07 3.52e-07 -14.60 0.000 4.69e-08 2.55e-06

sp77\_1111\_ss\_c\_4lag | .7930613 .2098322 -0.88 0.381 .4721626 1.332054

sp77\_1112\_ss\_c\_4lag | .9498121 .0764431 -0.64 0.522 .8112057 1.112102

sp77\_1403\_ss\_c\_4lag | .7624486 .154328 -1.34 0.180 .5127646 1.133713

sp77\_1433\_ss\_c\_4lag | .572276 .146611 -2.18 0.029 .3463672 .9455279

sp77\_1434\_ss\_c\_4lag | .777824 .1487018 -1.31 0.189 .5347509 1.131387

sp77\_1437\_ss\_c\_4lag | .4997281 .0890075 -3.89 0.000 .3524721 .7085049

sp77\_1438\_ss\_c\_4lag | .5705873 .2334759 -1.37 0.170 .2558721 1.272393

sp77\_1605\_ss\_c\_4lag | 1.020139 .0193407 1.05 0.293 .9829273 1.058759

sp77\_1606\_ss\_c\_4lag | 1.048412 .0249666 1.99 0.047 1.000603 1.098506

sp77\_1710\_ss\_c\_4lag | .982836 .0247686 -0.69 0.492 .9354698 1.032601

sp77\_1802\_ss\_c\_4lag | .7330161 .2125994 -1.07 0.284 .4151799 1.294168

sp77\_1906\_ss\_c\_4lag | 1.287708 .4680652 0.70 0.487 .631563 2.625537

sp77\_1915\_ss\_c\_4lag | .8107334 .2744041 -0.62 0.535 .4176158 1.573907

sp77\_1916\_ss\_c\_4lag | 1.103966 .1530492 0.71 0.476 .8412961 1.448648

sp77\_200\_ss\_c\_4lag | .9764275 .0132175 -1.76 0.078 .9508623 1.00268

sp77\_202\_ss\_c\_4lag | .934727 .0212266 -2.97 0.003 .8940358 .9772702

sp77\_203\_ss\_c\_4lag | .9474893 .1487029 -0.34 0.731 .6965996 1.28874

sp77\_204\_ss\_c\_4lag | 1.005067 .0278747 0.18 0.855 .9518915 1.061212

sp77\_205\_ss\_c\_4lag | 1.007074 .0089018 0.80 0.425 .989777 1.024673

sp77\_206\_ss\_c\_4lag | 1.036431 .0554036 0.67 0.503 .9333367 1.150912

sp77\_207\_ss\_c\_4lag | 1.162259 .0630239 2.77 0.006 1.045072 1.292587

sp77\_208\_ss\_c\_4lag | 1.036869 .0310596 1.21 0.227 .9777459 1.099567

sp77\_210\_ss\_c\_4lag | 1.034076 .0804171 0.43 0.667 .8878854 1.204337

sp77\_216\_ss\_c\_4lag | 1.155185 .2020636 0.82 0.410 .8198987 1.627581

sp77\_315\_ss\_c\_4lag | .6542169 .3145429 -0.88 0.377 .2549588 1.678702

sp77\_400\_ss\_c\_4lag | 1.006729 .0100858 0.67 0.503 .9871539 1.026692

sp77\_401\_ss\_c\_4lag | .9896542 .0986819 -0.10 0.917 .8139677 1.203261

sp77\_402\_ss\_c\_4lag | 1.023092 .0522585 0.45 0.655 .9256277 1.13082

sp77\_403\_1\_ss\_c\_4lag | .8653423 .1044178 -1.20 0.231 .6830877 1.096224

sp77\_403\_ss\_c\_4lag | 1.865206 .5786376 2.01 0.044 1.015455 3.426042

sp77\_404\_ss\_c\_4lag | .9698902 .0099251 -2.99 0.003 .9506311 .9895395

sp77\_405\_ss\_c\_4lag | .9743331 .0919984 -0.28 0.783 .809721 1.17241

sp77\_408\_ss\_c\_4lag | .949769 .0958242 -0.51 0.609 .7793606 1.157437

sp77\_409\_ss\_c\_4lag | .2505368 .2956147 -1.17 0.241 .0248037 2.530614

sp77\_410\_ss\_c\_4lag | .9821593 .0196267 -0.90 0.368 .9444353 1.02139

sp77\_411\_ss\_c\_4lag | .7386222 .1696172 -1.32 0.187 .4709257 1.15849

sp77\_412\_ss\_c\_4lag | 1.140334 .1264964 1.18 0.236 .9175062 1.417279

sp77\_413\_ss\_c\_4lag | .6131518 .0732029 -4.10 0.000 .4852269 .7748027

sp77\_500\_ss\_c\_4lag | .8807443 .0964261 -1.16 0.246 .710654 1.091545

sp77\_501\_ss\_c\_4lag | 1.066944 .083118 0.83 0.406 .9158636 1.242948

sp77\_502\_1\_ss\_c\_4lag | 1.601093 .3975959 1.90 0.058 .9841006 2.604915

sp77\_502\_2\_ss\_c\_4lag | .8461042 .0783825 -1.80 0.071 .7056172 1.014562

sp77\_502\_ss\_c\_4lag | .9634883 .013111 -2.73 0.006 .9381309 .989531

sp77\_503\_1\_ss\_c\_4lag | .4511353 .0682739 -5.26 0.000 .3353418 .6069123

sp77\_503\_ss\_c\_4lag | .7471257 .1442036 -1.51 0.131 .5118023 1.090649

sp77\_504\_ss\_c\_4lag | .9760056 .0581491 -0.41 0.684 .8684382 1.096897

sp77\_505\_ss\_c\_4lag | .8773592 .0452591 -2.54 0.011 .7929899 .9707049

sp77\_506\_1\_ss\_c\_4lag | 1.076658 .1669256 0.48 0.634 .7945235 1.458977

sp77\_506\_ss\_c\_4lag | 1.190029 .1213335 1.71 0.088 .9744745 1.453265

sp77\_507\_ss\_c\_4lag | 1.062815 .1157529 0.56 0.576 .8585229 1.31572

sp77\_508\_1\_ss\_c\_4lag | 2.413514 .732821 2.90 0.004 1.331059 4.37625

sp77\_508\_ss\_c\_4lag | 1.345335 .245629 1.62 0.104 .9406315 1.924161

sp77\_509\_ss\_c\_4lag | .8512824 .0730741 -1.88 0.061 .7194598 1.007258

sp77\_510\_ss\_c\_4lag | .8622344 .1504869 -0.85 0.396 .6124407 1.21391

sp77\_511\_ss\_c\_4lag | .9960093 .4291577 -0.01 0.993 .4280555 2.317537

sp77\_512\_ss\_c\_4lag | .9731164 .0418372 -0.63 0.526 .8944768 1.05867

sp77\_513\_ss\_c\_4lag | 1.003867 .055246 0.07 0.944 .9012226 1.118203

sp77\_514\_ss\_c\_4lag | 1.983181 .4637899 2.93 0.003 1.254005 3.136359

sp77\_515\_ss\_c\_4lag | 1.066414 .5649421 0.12 0.903 .3775676 3.012016

sp77\_516\_ss\_c\_4lag | .9582816 .0388289 -1.05 0.293 .8851219 1.037488

sp77\_600\_ss\_c\_4lag | 1.070728 .1623589 0.45 0.652 .7954407 1.441286

sp77\_601\_ss\_c\_4lag | .9373321 .1729548 -0.35 0.726 .652877 1.345723

sp77\_602\_ss\_c\_4lag | 1.143823 .1234463 1.25 0.213 .9257497 1.413267

sp77\_603\_ss\_c\_4lag | 1.679749 .4112177 2.12 0.034 1.039591 2.714102

sp77\_604\_ss\_c\_4lag | .7415692 .1259898 -1.76 0.078 .5315398 1.034588

sp77\_605\_ss\_c\_4lag | .7058676 .5527425 -0.44 0.656 .1521158 3.275459

sp77\_606\_ss\_c\_4lag | 1 (omitted)

sp77\_700\_1\_ss\_c\_4lag | 1.548824 .3687881 1.84 0.066 .9712341 2.469906

sp77\_700\_ss\_c\_4lag | .8592087 .219605 -0.59 0.553 .5206433 1.417938

sp77\_701\_1\_ss\_c\_4lag | .8383122 .256953 -0.58 0.565 .4597291 1.528655

sp77\_701\_2\_ss\_c\_4lag | .7615436 .1982308 -1.05 0.295 .4572207 1.268422

sp77\_701\_3\_ss\_c\_4lag | 1.372915 .184904 2.35 0.019 1.054397 1.787654

sp77\_701\_4\_ss\_c\_4lag | 1.051926 .1865649 0.29 0.775 .743053 1.489191

sp77\_701\_ss\_c\_4lag | 1.003227 .0516503 0.06 0.950 .9069341 1.109743

sp77\_704\_1\_ss\_c\_4lag | 1.279549 .1976987 1.60 0.111 .9452372 1.732101

sp77\_704\_8\_ss\_c\_4lag | .7792412 .4131428 -0.47 0.638 .2756619 2.20276

sp77\_704\_9\_ss\_c\_4lag | 1.561964 .2346687 2.97 0.003 1.163555 2.096791

sp77\_704\_ss\_c\_4lag | 1.583009 .4733191 1.54 0.124 .8809968 2.844411

sp77\_705\_ss\_c\_4lag | .9397758 .129293 -0.45 0.652 .7176574 1.230641

sp77\_800\_1\_ss\_c\_4lag | 1.047218 .453086 0.11 0.915 .4484962 2.445205

sp77\_800\_2\_ss\_c\_4lag | 2.414338 .9593105 2.22 0.027 1.108109 5.260337

sp77\_800\_ss\_c\_4lag | .996249 .5625044 -0.01 0.995 .3294281 3.012834

sp77\_801\_1\_ss\_c\_4lag | 1 (omitted)

sp77\_802\_ss\_c\_4lag | .9037756 .1764966 -0.52 0.604 .6163553 1.325227

sp77\_803\_ss\_c\_4lag | .8542857 .1728681 -0.78 0.436 .5745914 1.270127

sp77\_804\_ss\_c\_4lag | 1.063832 .220162 0.30 0.765 .7091125 1.595992

sp77\_805\_ss\_c\_4lag | .8947317 .264834 -0.38 0.707 .5008911 1.598241

sp77\_807\_1\_ss\_c\_4lag | .45165 .2183341 -1.64 0.100 .1751132 1.16489

sp77\_807\_2\_ss\_c\_4lag | .9040601 .2399397 -0.38 0.704 .537386 1.520926

sp77\_807\_3\_ss\_c\_4lag | 1.404404 .1644499 2.90 0.004 1.1164 1.766705

sp77\_807\_ss\_c\_4lag | 1.281227 .1914562 1.66 0.097 .9559377 1.717208

sp77\_808\_ss\_c\_4lag | 2.278819 .6401529 2.93 0.003 1.313999 3.952069

sp77\_809\_ss\_c\_4lag | .9409132 .0939111 -0.61 0.542 .7737353 1.144213

sp77\_810\_ss\_c\_4lag | 1.115012 .2495451 0.49 0.627 .7190789 1.728951

sp77\_900\_1\_ss\_c\_4lag | 5.020186 2.327939 3.48 0.001 2.023039 12.45763

sp77\_900\_2\_ss\_c\_4lag | 6.57e-07 6.66e-07 -14.05 0.000 9.02e-08 4.79e-06

sp77\_900\_ss\_c\_4lag | .4769952 .1075369 -3.28 0.001 .3066292 .7420181

sp77\_901\_1\_ss\_c\_4lag | 1.71e-07 1.83e-07 -14.56 0.000 2.10e-08 1.39e-06

sp77\_901\_ss\_c\_4lag | 1.104589 .154879 0.71 0.478 .8391709 1.453956

sp77\_902\_3\_ss\_c\_4lag | 1.83814 2.09858 0.53 0.594 .1961431 17.22598

sp77\_902\_ss\_c\_4lag | 1.268835 .1890505 1.60 0.110 .947502 1.699144

sp77\_903\_ss\_c\_4lag | 1.098016 .2386528 0.43 0.667 .7171346 1.681189

sp77\_904\_ss\_c\_4lag | 1.015989 .0528897 0.30 0.761 .9174396 1.125123

mine\_time | .9983503 .0016422 -1.00 0.315 .9951369 1.001574

onsite\_insp\_hours | .9997176 .0001231 -2.29 0.022 .9994763 .999959

|

state |

AL | 1.224464 .1213619 2.04 0.041 1.008277 1.487005

AR | 1.733799 .1899838 5.02 0.000 1.398708 2.149169

CO | .7999204 .1287163 -1.39 0.165 .5835509 1.096516

IL | 1.229502 .0875327 2.90 0.004 1.069373 1.413609

IN | .9941421 .164804 -0.04 0.972 .7183571 1.375804

MD | 1.229223 .2148581 1.18 0.238 .8726653 1.731465

MT | 1.027793 .0949255 0.30 0.767 .8576106 1.231747

NM | 1.013696 .0764516 0.18 0.857 .8744022 1.175179

OH | 1.052841 .1489762 0.36 0.716 .7978447 1.389335

OK | 1.015848 .3327078 0.05 0.962 .5346202 1.930243

PA | 1.081053 .1010337 0.83 0.404 .9001087 1.298372

TN | 1.270178 .1951065 1.56 0.119 .9399723 1.716382

UT | .6682002 .0816215 -3.30 0.001 .525934 .8489497

VA | .7452909 .0524523 -4.18 0.000 .6492616 .8555234

WV | 1.14103 .0610762 2.46 0.014 1.027388 1.267242

WY | 1.204725 .1044992 2.15 0.032 1.016375 1.42798

|

time |

2000.75 | 1.642604 .2218352 3.67 0.000 1.2606 2.140368

2001 | 1.710335 .2221505 4.13 0.000 1.325932 2.206182

2001.25 | 1.617632 .2227654 3.49 0.000 1.23498 2.118846

2001.5 | 1.826188 .2272282 4.84 0.000 1.430977 2.33055

2001.75 | 1.786013 .2289079 4.53 0.000 1.389277 2.296046

2002 | 1.640316 .2104228 3.86 0.000 1.275656 2.109217

2002.25 | 1.465835 .1943038 2.89 0.004 1.130457 1.900711

2002.5 | 1.897332 .2492009 4.88 0.000 1.46671 2.454384

2002.75 | 1.837103 .234198 4.77 0.000 1.430937 2.358558

2003 | 1.557687 .201517 3.43 0.001 1.208818 2.007242

2003.25 | 1.752201 .2419904 4.06 0.000 1.33668 2.296892

2003.5 | 1.784319 .2153101 4.80 0.000 1.408509 2.2604

2003.75 | 1.29361 .1642918 2.03 0.043 1.008553 1.659236

2004 | 1.636648 .2169087 3.72 0.000 1.262245 2.122105

2004.25 | 1.517751 .1856852 3.41 0.001 1.19416 1.929028

2004.5 | 1.49995 .1866825 3.26 0.001 1.175268 1.914329

2004.75 | 1.390564 .1805593 2.54 0.011 1.078117 1.793562

2005 | 1.202771 .159205 1.39 0.163 .9279261 1.559022

2005.25 | 1.526294 .1927967 3.35 0.001 1.191563 1.955056

2005.5 | 1.316004 .1673084 2.16 0.031 1.025748 1.688393

2005.75 | 1.241736 .1665487 1.61 0.106 .9546878 1.615092

2006 | 1.299723 .1620467 2.10 0.035 1.017946 1.659499

2006.25 | 1.262583 .1670943 1.76 0.078 .974113 1.63648

2006.5 | 1.453311 .1783272 3.05 0.002 1.142649 1.848437

2006.75 | 1.13235 .1350986 1.04 0.298 .8962425 1.430659

2007 | 1.173575 .1438626 1.31 0.192 .9229249 1.492297

2007.25 | 1.10539 .1397154 0.79 0.428 .8628364 1.41613

2007.5 | 1.248179 .150735 1.84 0.066 .9851053 1.581508

2007.75 | 1.224178 .1449274 1.71 0.088 .9706732 1.54389

2008 | .9920433 .1179527 -0.07 0.946 .7858214 1.252384

2008.25 | 1.104518 .1431812 0.77 0.443 .8567012 1.424019

2008.5 | 1.248157 .1394336 1.98 0.047 1.002721 1.553668

2009 | .9008331 .099642 -0.94 0.345 .7252573 1.118914

2009.25 | .8802482 .1060144 -1.06 0.290 .6951669 1.114606

2009.5 | 1.080556 .1350481 0.62 0.535 .8457924 1.380481

2009.75 | .8187539 .1072967 -1.53 0.127 .6332927 1.058528

2010 | .8851328 .1152486 -0.94 0.349 .6857689 1.142455

2010.25 | .9336115 .1182443 -0.54 0.588 .7283821 1.196666

2010.5 | 1.117513 .1466351 0.85 0.397 .8640956 1.445252

2010.75 | .8161254 .106698 -1.55 0.120 .6316451 1.054486

2011 | .9624968 .120652 -0.30 0.760 .7528327 1.230552

2011.25 | .9202703 .1142774 -0.67 0.503 .7214642 1.173859

2011.5 | 1.039329 .1243341 0.32 0.747 .8220993 1.313958

2011.75 | .7971743 .0993048 -1.82 0.069 .6244796 1.017626

2012 | .9850027 .1144438 -0.13 0.897 .7844034 1.236902

2012.25 | .8971375 .1131698 -0.86 0.390 .7006221 1.148773

2012.5 | 1.087625 .1405524 0.65 0.516 .8442661 1.401131

2012.75 | .8535362 .1158171 -1.17 0.243 .6542167 1.113582

2013 | .8537235 .1035455 -1.30 0.192 .673097 1.082822

2013.25 | .7115301 .096367 -2.51 0.012 .5456443 .9278481

2013.5 | .9759539 .122517 -0.19 0.846 .7630854 1.248204

2013.75 | .8338168 .1091811 -1.39 0.165 .6450794 1.077775

2014 | .7440138 .0987795 -2.23 0.026 .5735491 .9651423

2014.25 | .8449109 .1098096 -1.30 0.195 .6549131 1.090029

2014.5 | .9010942 .1155049 -0.81 0.417 .7009075 1.158457

2014.75 | .8811515 .1135871 -0.98 0.326 .6844226 1.134428

2015 | .8089657 .1046042 -1.64 0.101 .6278625 1.042307

2015.25 | .8763597 .1223601 -0.95 0.345 .6665534 1.152205

2015.5 | 1.128098 .1421789 0.96 0.339 .8811834 1.4442

2015.75 | .6802013 .1034073 -2.53 0.011 .5049331 .916307

2016 | .9377673 .1313153 -0.46 0.646 .7126914 1.233925

|

\_cons | 8.97e-06 9.59e-07 -108.70 0.000 7.27e-06 .0000111

ln(hours) | 1 (exposure)

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**. eststo: nbreg MR `subpart\_ss\_lag\_4\_vars' `covariates' ib(freq).state ib(freq).time, vce(cl mineid) exposure(hours) iter(50) irr**

note: sp77\_606\_ss\_c\_4lag omitted because of collinearity

note: sp77\_801\_1\_ss\_c\_4lag omitted because of collinearity

Fitting Poisson model:

Iteration 0: log pseudolikelihood = -73238.318

Iteration 1: log pseudolikelihood = -37812.578 (backed up)

Iteration 2: log pseudolikelihood = -27813.894

Iteration 3: log pseudolikelihood = -19144.828

Iteration 4: log pseudolikelihood = -16819.204

Iteration 5: log pseudolikelihood = -16521.003

Iteration 6: log pseudolikelihood = -16480.469

Iteration 7: log pseudolikelihood = -16478.545

Iteration 8: log pseudolikelihood = -16478.539

Iteration 9: log pseudolikelihood = -16478.539

Fitting constant-only model:

Iteration 0: log pseudolikelihood = -17369.994

Iteration 1: log pseudolikelihood = -17118.971

Iteration 2: log pseudolikelihood = -17112.665

Iteration 3: log pseudolikelihood = -17112.657

Iteration 4: log pseudolikelihood = -17112.657

Fitting full model:

Iteration 0: log pseudolikelihood = -16500.848

Iteration 1: log pseudolikelihood = -16434.89

Iteration 2: log pseudolikelihood = -16429.041

Iteration 3: log pseudolikelihood = -16428.901

Iteration 4: log pseudolikelihood = -16428.901

Negative binomial regression Number of obs = 22,446

Wald chi2(345) = .

Dispersion = mean Prob > chi2 = .

Log pseudolikelihood = -16428.901 Pseudo R2 = 0.0400

(Std. Err. adjusted for 1,293 clusters in mineid)

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| Robust

MR | IRR Std. Err. z P>|z| [95% Conf. Interval]

-----------------------+----------------------------------------------------------------

sp47\_41\_ss\_c\_4lag | .6714692 .1112128 -2.40 0.016 .4853387 .9289819

sp47\_44\_ss\_c\_4lag | .938525 .1638884 -0.36 0.716 .6665091 1.321556

sp48\_11\_ss\_c\_4lag | 1.045505 .056518 0.82 0.410 .9403984 1.16236

sp48\_25\_ss\_c\_4lag | .9372658 .0682702 -0.89 0.374 .8125714 1.081096

sp48\_26\_ss\_c\_4lag | 1.263822 .0723462 4.09 0.000 1.129691 1.413879

sp48\_27\_ss\_c\_4lag | .9731234 .0801065 -0.33 0.741 .8281288 1.143505

sp48\_28\_ss\_c\_4lag | .9122818 .0837906 -1.00 0.318 .7619886 1.092219

sp48\_4\_ss\_c\_4lag | 1.597144 1.143523 0.65 0.513 .3925555 6.498112

sp48\_5\_ss\_c\_4lag | .9167296 .1016041 -0.78 0.433 .737734 1.139155

sp48\_6\_ss\_c\_4lag | .9585624 .0737579 -0.55 0.582 .8243726 1.114595

sp48\_7\_ss\_c\_4lag | 1.148549 .0610521 2.61 0.009 1.034911 1.274664

sp48\_8\_ss\_c\_4lag | .9597894 .1375924 -0.29 0.775 .7246869 1.271164

sp71\_701\_ss\_c\_4lag | 2.134839 .4346919 3.72 0.000 1.432337 3.18189

sp72\_503\_ss\_c\_4lag | .8910252 .1915083 -0.54 0.591 .5847107 1.35781

sp72\_610\_ss\_c\_4lag | .7222712 .1547501 -1.52 0.129 .4745984 1.099194

sp72\_620\_ss\_c\_4lag | 1.539727 .2824584 2.35 0.019 1.074715 2.205942

sp72\_630\_ss\_c\_4lag | 1.021031 .0095799 2.22 0.027 1.002427 1.039981

sp75\_100\_ss\_c\_4lag | 1.102154 .23182 0.46 0.644 .7298037 1.66448

sp75\_1001\_1\_ss\_c\_4lag | 1.203823 .4097459 0.55 0.586 .6177871 2.345776

sp75\_1001\_ss\_c\_4lag | 1.199686 .3030847 0.72 0.471 .7311777 1.968395

sp75\_1003\_1\_ss\_c\_4lag | .5694098 .1284009 -2.50 0.013 .3659996 .8858688

sp75\_1100\_2\_ss\_c\_4lag | 1.023194 .0132929 1.76 0.078 .9974697 1.049582

sp75\_1101\_20\_ss\_c\_4lag | .809236 .0869246 -1.97 0.049 .6556059 .9988667

sp75\_1102\_ss\_c\_4lag | .9121973 .055349 -1.51 0.130 .8099176 1.027393

sp75\_1103\_4\_ss\_c\_4lag | 1.051378 .033196 1.59 0.113 .9882875 1.118496

sp75\_1104\_ss\_c\_4lag | 1.004719 .1245159 0.04 0.970 .7880509 1.280958

sp75\_1106\_2\_ss\_c\_4lag | .9841422 .0469446 -0.34 0.738 .8963025 1.08059

sp75\_1106\_3\_ss\_c\_4lag | 1.042013 .0249685 1.72 0.086 .9942075 1.092118

sp75\_1106\_4\_ss\_c\_4lag | .9633652 .1314361 -0.27 0.784 .7373231 1.258705

sp75\_1106\_5\_ss\_c\_4lag | .9436834 .0711402 -0.77 0.442 .8140628 1.093943

sp75\_1106\_6\_ss\_c\_4lag | .6070369 .1745587 -1.74 0.083 .3454974 1.06656

sp75\_1106\_ss\_c\_4lag | .9560099 .0861142 -0.50 0.617 .8012886 1.140606

sp75\_1107\_14\_ss\_c\_4lag | 1.488467 .3210267 1.84 0.065 .9753387 2.271554

sp75\_1400\_1\_ss\_c\_4lag | 1.076289 .1941269 0.41 0.684 .7557884 1.532701

sp75\_1400\_2\_ss\_c\_4lag | 1.083721 .3039562 0.29 0.774 .6254274 1.877837

sp75\_1400\_3\_ss\_c\_4lag | 1.07332 .1155549 0.66 0.511 .8691361 1.325472

sp75\_1400\_4\_ss\_c\_4lag | .9346821 .1324546 -0.48 0.634 .70801 1.233924

sp75\_1400\_ss\_c\_4lag | 1.032709 .0587598 0.57 0.572 .9237316 1.154543

sp75\_1401\_ss\_c\_4lag | 1.00662 .1975831 0.03 0.973 .685155 1.478913

sp75\_1403\_10\_ss\_c\_4lag | 1.014685 .0165777 0.89 0.372 .9827082 1.047703

sp75\_1403\_11\_ss\_c\_4lag | 1.362712 .3566711 1.18 0.237 .8158564 2.276116

sp75\_1403\_3\_ss\_c\_4lag | .8959741 .3340427 -0.29 0.768 .4314646 1.860569

sp75\_1403\_4\_ss\_c\_4lag | 1.104508 .1894643 0.58 0.562 .7891432 1.545901

sp75\_1403\_5\_ss\_c\_4lag | .9814125 .0106124 -1.74 0.083 .9608314 1.002434

sp75\_1403\_6\_ss\_c\_4lag | .9971679 .0126257 -0.22 0.823 .9727265 1.022223

sp75\_1403\_7\_ss\_c\_4lag | 1.036127 .0444072 0.83 0.408 .9526455 1.126923

sp75\_1403\_8\_ss\_c\_4lag | 1.001843 .0131025 0.14 0.888 .9764888 1.027855

sp75\_1403\_9\_ss\_c\_4lag | .7845377 .0716009 -2.66 0.008 .6560378 .9382073

sp75\_1404\_1\_ss\_c\_4lag | .4392709 .1683839 -2.15 0.032 .2072262 .9311509

sp75\_1404\_ss\_c\_4lag | 1.023613 .4854883 0.05 0.961 .404036 2.593291

sp75\_1405\_1\_ss\_c\_4lag | .9968692 .2755299 -0.01 0.991 .5799227 1.713587

sp75\_1405\_ss\_c\_4lag | .995258 .0141268 -0.33 0.738 .9679515 1.023335

sp75\_1431\_ss\_c\_4lag | .7941288 .3118062 -0.59 0.557 .3678543 1.714376

sp75\_1432\_ss\_c\_4lag | 8.18e-09 5.94e-09 -25.64 0.000 1.97e-09 3.40e-08

sp75\_1433\_ss\_c\_4lag | .9566553 .1299898 -0.33 0.744 .7329844 1.24858

sp75\_1434\_ss\_c\_4lag | 1.143604 .0870914 1.76 0.078 .9850369 1.327698

sp75\_1435\_ss\_c\_4lag | .9427591 .2929582 -0.19 0.850 .5127359 1.733436

sp75\_1437\_ss\_c\_4lag | 1.239867 .2652151 1.01 0.315 .8152631 1.885612

sp75\_150\_ss\_c\_4lag | 1.478923 .5341072 1.08 0.279 .728681 3.001606

sp75\_151\_ss\_c\_4lag | .3550961 .1108476 -3.32 0.001 .1925896 .654725

sp75\_153\_ss\_c\_4lag | 1.739632 .8029621 1.20 0.230 .7039929 4.298793

sp75\_155\_ss\_c\_4lag | .8860259 .1025167 -1.05 0.296 .706251 1.111562

sp75\_156\_ss\_c\_4lag | 1.145698 .3865428 0.40 0.687 .5914072 2.219494

sp75\_1600\_2\_ss\_c\_4lag | .8179266 .1071168 -1.53 0.125 .6327612 1.057277

sp75\_1712\_10\_ss\_c\_4lag | .8499677 .1764216 -0.78 0.434 .5658805 1.276674

sp75\_1712\_6\_ss\_c\_4lag | 1.71239 .486854 1.89 0.059 .9808336 2.989578

sp75\_1720\_ss\_c\_4lag | 1.029888 .0344267 0.88 0.378 .9645761 1.099623

sp75\_1721\_ss\_c\_4lag | 1.40e-08 9.75e-09 -26.00 0.000 3.58e-09 5.48e-08

sp75\_1725\_ss\_c\_4lag | 1.00083 .0035761 0.23 0.816 .9938459 1.007864

sp75\_1726\_ss\_c\_4lag | 1.126457 .0910978 1.47 0.141 .9613397 1.319934

sp75\_1727\_ss\_c\_4lag | 2.003288 .386639 3.60 0.000 1.372333 2.924335

sp75\_1728\_ss\_c\_4lag | 1.726246 .3126993 3.01 0.003 1.210354 2.462027

sp75\_1729\_ss\_c\_4lag | .8614038 .0856996 -1.50 0.134 .7087974 1.046867

sp75\_1730\_ss\_c\_4lag | .9216664 .1405284 -0.53 0.593 .6835799 1.242677

sp75\_1731\_ss\_c\_4lag | 1.005211 .004144 1.26 0.207 .9971221 1.013366

sp75\_1903\_ss\_c\_4lag | 1.246694 .1554586 1.77 0.077 .9763779 1.591849

sp75\_1909\_ss\_c\_4lag | 1.023372 .0137856 1.72 0.086 .9967068 1.050751

sp75\_1910\_ss\_c\_4lag | .9926168 .0247347 -0.30 0.766 .9453025 1.042299

sp75\_1911\_ss\_c\_4lag | .8960599 .0306051 -3.21 0.001 .8380387 .9580982

sp75\_1912\_ss\_c\_4lag | 1.638329 .3166763 2.55 0.011 1.121684 2.39294

sp75\_1913\_ss\_c\_4lag | 1.198394 .0811404 2.67 0.008 1.049462 1.368461

sp75\_1914\_ss\_c\_4lag | 1.006998 .0106151 0.66 0.508 .9864064 1.02802

sp75\_1915\_ss\_c\_4lag | 1.163047 .1115814 1.57 0.115 .9636823 1.403656

sp75\_202\_ss\_c\_4lag | 1.000176 .0024891 0.07 0.944 .9953097 1.005067

sp75\_208\_ss\_c\_4lag | 1.004983 .0175673 0.28 0.776 .9711353 1.040011

sp75\_211\_ss\_c\_4lag | .999775 .0183005 -0.01 0.990 .9645424 1.036295

sp75\_212\_ss\_c\_4lag | .954212 .0408569 -1.09 0.274 .877402 1.037746

sp75\_214\_ss\_c\_4lag | .8343142 .1243928 -1.21 0.224 .6229009 1.117481

sp75\_312\_ss\_c\_4lag | .9061965 .1375929 -0.65 0.517 .6729452 1.220296

sp75\_320\_ss\_c\_4lag | .9660289 .0585181 -0.57 0.568 .8578824 1.087809

sp75\_324\_ss\_c\_4lag | .9317304 .0415116 -1.59 0.112 .8538203 1.01675

sp75\_337\_ss\_c\_4lag | 1.078363 .0293762 2.77 0.006 1.022296 1.137504

sp75\_340\_ss\_c\_4lag | 1.000476 .0159448 0.03 0.976 .9697074 1.03222

sp75\_342\_ss\_c\_4lag | 1.005672 .0099222 0.57 0.566 .9864118 1.025308

sp75\_344\_ss\_c\_4lag | .9961822 .0671866 -0.06 0.955 .8728311 1.136965

sp75\_352\_ss\_c\_4lag | 1.015583 .0441786 0.36 0.722 .9325833 1.10597

sp75\_382\_ss\_c\_4lag | 1.137969 .1237818 1.19 0.235 .9194782 1.408378

sp75\_503\_ss\_c\_4lag | .9930572 .0043744 -1.58 0.114 .9845204 1.001668

sp75\_504\_ss\_c\_4lag | .8257885 .2075275 -0.76 0.446 .5046088 1.351397

sp75\_505\_ss\_c\_4lag | .8069421 .1890764 -0.92 0.360 .5097949 1.277289

sp75\_506\_1\_ss\_c\_4lag | 1.08293 .2708934 0.32 0.750 .6632442 1.768183

sp75\_506\_ss\_c\_4lag | .9535326 .1302825 -0.35 0.728 .7295158 1.24634

sp75\_507\_ss\_c\_4lag | 1.011648 .081188 0.14 0.885 .8644064 1.183972

sp75\_511\_1\_ss\_c\_4lag | .2503888 .0563705 -6.15 0.000 .161058 .3892669

sp75\_511\_ss\_c\_4lag | 1.14107 .0474271 3.18 0.001 1.0518 1.237916

sp75\_512\_1\_ss\_c\_4lag | 2.74047 1.009439 2.74 0.006 1.33134 5.641066

sp75\_512\_2\_ss\_c\_4lag | 1.027494 .0440892 0.63 0.527 .9446151 1.117645

sp75\_512\_ss\_c\_4lag | .9965262 .006313 -0.55 0.583 .9842294 1.008977

sp75\_513\_1\_ss\_c\_4lag | .725903 .2309847 -1.01 0.314 .3890663 1.354359

sp75\_513\_ss\_c\_4lag | .9905256 .1110455 -0.08 0.932 .7951326 1.233934

sp75\_514\_ss\_c\_4lag | .9971424 .0220995 -0.13 0.897 .9547556 1.041411

sp75\_515\_ss\_c\_4lag | .9246617 .0227819 -3.18 0.001 .8810709 .970409

sp75\_516\_1\_ss\_c\_4lag | .6482864 .1196533 -2.35 0.019 .4515043 .9308335

sp75\_516\_2\_ss\_c\_4lag | .7435963 .2683598 -0.82 0.412 .3665585 1.508451

sp75\_516\_ss\_c\_4lag | 1.03321 .0476644 0.71 0.479 .9438884 1.130984

sp75\_517\_1\_ss\_c\_4lag | .8501371 .1881457 -0.73 0.463 .5509443 1.311808

sp75\_517\_ss\_c\_4lag | 1.000524 .0045282 0.12 0.908 .991688 1.009439

sp75\_518\_1\_ss\_c\_4lag | .8016277 .0590686 -3.00 0.003 .6938271 .9261775

sp75\_518\_ss\_c\_4lag | 1.073092 .0169926 4.45 0.000 1.040299 1.106919

sp75\_519\_ss\_c\_4lag | 1.4961 .6867425 0.88 0.380 .6084721 3.678584

sp75\_520\_ss\_c\_4lag | .9926223 .0429412 -0.17 0.864 .9119285 1.080457

sp75\_523\_1\_ss\_c\_4lag | .9709252 .0350914 -0.82 0.414 .9045268 1.042198

sp75\_523\_2\_ss\_c\_4lag | 1.016704 .0306604 0.55 0.583 .9583518 1.078609

sp75\_523\_ss\_c\_4lag | .9562794 .0304956 -1.40 0.161 .8983387 1.017957

sp75\_600\_1\_ss\_c\_4lag | .4707861 .1883958 -1.88 0.060 .2148799 1.031458

sp75\_600\_ss\_c\_4lag | .9445517 .1326829 -0.41 0.685 .7172257 1.243929

sp75\_601\_1\_ss\_c\_4lag | 1.012631 .0221368 0.57 0.566 .97016 1.056961

sp75\_601\_2\_ss\_c\_4lag | 1.111278 .155145 0.76 0.450 .8452538 1.461028

sp75\_601\_3\_ss\_c\_4lag | 1.190508 .3364423 0.62 0.537 .6841937 2.071501

sp75\_601\_ss\_c\_4lag | .9937718 .0215708 -0.29 0.773 .9523804 1.036962

sp75\_602\_ss\_c\_4lag | 1.076691 .0470758 1.69 0.091 .9882671 1.173027

sp75\_603\_ss\_c\_4lag | 1.01581 .0592914 0.27 0.788 .9060021 1.138927

sp75\_604\_ss\_c\_4lag | 1.018243 .005827 3.16 0.002 1.006886 1.029728

sp75\_605\_ss\_c\_4lag | 1.02349 .0277581 0.86 0.392 .9705053 1.079366

sp75\_606\_ss\_c\_4lag | .999539 .0151854 -0.03 0.976 .970215 1.029749

sp75\_607\_ss\_c\_4lag | 1.003345 .0560432 0.06 0.952 .8993017 1.119426

sp75\_700\_1\_ss\_c\_4lag | .7101235 .2170098 -1.12 0.263 .3901318 1.292577

sp75\_700\_ss\_c\_4lag | .927008 .0444443 -1.58 0.114 .8438663 1.018341

sp75\_701\_1\_ss\_c\_4lag | .9653684 .052771 -0.64 0.519 .8672871 1.074542

sp75\_701\_2\_ss\_c\_4lag | 1.000256 .0991221 0.00 0.998 .823683 1.214682

sp75\_701\_3\_ss\_c\_4lag | 1.11232 .0943902 1.25 0.210 .9418849 1.313596

sp75\_701\_4\_ss\_c\_4lag | 2.288913 .7949866 2.38 0.017 1.158749 4.52136

sp75\_701\_ss\_c\_4lag | 1.026622 .0224986 1.20 0.231 .9834587 1.071679

sp75\_703\_2\_ss\_c\_4lag | .8466361 .1523287 -0.93 0.355 .5950407 1.204611

sp75\_703\_3\_ss\_c\_4lag | 1.049276 .1203653 0.42 0.675 .8380043 1.313813

sp75\_703\_ss\_c\_4lag | 1.029749 .0428573 0.70 0.481 .9490851 1.117269

sp75\_704\_ss\_c\_4lag | 1.43953 .5474307 0.96 0.338 .6831593 3.033328

sp75\_705\_1\_ss\_c\_4lag | .8180316 .0860581 -1.91 0.056 .665614 1.005351

sp75\_705\_8\_ss\_c\_4lag | 4.22e-09 4.15e-09 -19.61 0.000 6.14e-10 2.90e-08

sp75\_705\_ss\_c\_4lag | 1.220317 .1600336 1.52 0.129 .9437246 1.577975

sp75\_706\_ss\_c\_4lag | .983641 .0952062 -0.17 0.865 .8136716 1.189116

sp75\_800\_2\_ss\_c\_4lag | 1.09e-09 1.10e-09 -20.53 0.000 1.52e-10 7.84e-09

sp75\_800\_3\_ss\_c\_4lag | 1.326455 .5048923 0.74 0.458 .6290673 2.796969

sp75\_800\_4\_ss\_c\_4lag | 3.786319 2.294738 2.20 0.028 1.15435 12.41929

sp75\_800\_ss\_c\_4lag | .9988915 .0639963 -0.02 0.986 .8810167 1.132537

sp75\_801\_ss\_c\_4lag | .9472767 .1880482 -0.27 0.785 .6419497 1.397825

sp75\_802\_ss\_c\_4lag | .747712 .1739463 -1.25 0.211 .473928 1.179658

sp75\_803\_2\_ss\_c\_4lag | 1.451003 .5456001 0.99 0.322 .6943892 3.03203

sp75\_803\_ss\_c\_4lag | .9983063 .0784256 -0.02 0.983 .8558438 1.164483

sp75\_804\_ss\_c\_4lag | .9545182 .0615294 -0.72 0.470 .84123 1.083063

sp75\_805\_ss\_c\_4lag | .8204585 .1184307 -1.37 0.170 .6182843 1.088742

sp75\_806\_ss\_c\_4lag | .888434 .1210493 -0.87 0.385 .6802191 1.160383

sp75\_807\_ss\_c\_4lag | 1.069236 .0200543 3.57 0.000 1.030644 1.109273

sp75\_808\_ss\_c\_4lag | .9955076 .128982 -0.03 0.972 .7722527 1.283304

sp75\_809\_ss\_c\_4lag | .9567608 .0492637 -0.86 0.391 .864918 1.058356

sp75\_810\_ss\_c\_4lag | 1.177986 .1151703 1.68 0.094 .9725665 1.426794

sp75\_811\_ss\_c\_4lag | 1.027861 .1010843 0.28 0.780 .8476636 1.246365

sp75\_812\_ss\_c\_4lag | 1.040593 .1908774 0.22 0.828 .7263468 1.490796

sp75\_814\_ss\_c\_4lag | .8790524 .1288869 -0.88 0.379 .6594948 1.171705

sp75\_815\_ss\_c\_4lag | 2.15351 .419967 3.93 0.000 1.469433 3.156052

sp75\_816\_ss\_c\_4lag | 1.071951 .0825067 0.90 0.367 .9218477 1.246496

sp75\_818\_ss\_c\_4lag | 1.201327 .1484915 1.48 0.138 .9428605 1.530647

sp75\_819\_ss\_c\_4lag | .573903 .1530531 -2.08 0.037 .3402774 .9679298

sp75\_820\_ss\_c\_4lag | 1.061046 .0888199 0.71 0.479 .9004933 1.250225

sp75\_821\_ss\_c\_4lag | 1.393742 .3726342 1.24 0.214 .8252836 2.353757

sp75\_825\_ss\_c\_4lag | 1.186504 .138826 1.46 0.144 .9433546 1.492325

sp75\_827\_ss\_c\_4lag | 1.352589 .1746797 2.34 0.019 1.050117 1.742184

sp75\_831\_ss\_c\_4lag | .9223048 .132593 -0.56 0.574 .6958304 1.222491

sp75\_900\_2\_ss\_c\_4lag | .6974611 .2267798 -1.11 0.268 .3687665 1.319133

sp75\_900\_3\_ss\_c\_4lag | 1.03652 .1841808 0.20 0.840 .7316885 1.468348

sp75\_900\_4\_ss\_c\_4lag | 1.092315 .158329 0.61 0.542 .822182 1.451202

sp75\_900\_ss\_c\_4lag | .9681503 .0310056 -1.01 0.312 .9092485 1.030868

sp75\_901\_ss\_c\_4lag | 1.018675 .1283408 0.15 0.883 .7957829 1.303998

sp75\_902\_1\_ss\_c\_4lag | 1.315091 .2030528 1.77 0.076 .971692 1.779849

sp75\_902\_2\_ss\_c\_4lag | 1.135351 .0440488 3.27 0.001 1.052218 1.225053

sp75\_902\_4\_ss\_c\_4lag | 1.030242 .062335 0.49 0.622 .9150332 1.159955

sp75\_902\_ss\_c\_4lag | 1.022813 .0300248 0.77 0.442 .9656264 1.083387

sp75\_903\_ss\_c\_4lag | 1.05835 .0608627 0.99 0.324 .9455381 1.184621

sp75\_904\_ss\_c\_4lag | 1.002296 .0117043 0.20 0.844 .979617 1.025501

sp75\_905\_ss\_c\_4lag | 1.396758 .4283315 1.09 0.276 .7657565 2.54772

sp75\_907\_ss\_c\_4lag | .9452769 .147289 -0.36 0.718 .6965118 1.282891

sp77\_103\_ss\_c\_4lag | 1.076407 .0790347 1.00 0.316 .9321322 1.243013

sp77\_1103\_ss\_c\_4lag | .940535 .060354 -0.96 0.339 .8293799 1.066587

sp77\_1104\_ss\_c\_4lag | 1.033295 .0129001 2.62 0.009 1.008318 1.058891

sp77\_1106\_ss\_c\_4lag | 1.40e-09 1.42e-09 -20.18 0.000 1.94e-10 1.02e-08

sp77\_1111\_ss\_c\_4lag | .9265905 .2290158 -0.31 0.758 .5708279 1.504079

sp77\_1112\_ss\_c\_4lag | .9696084 .0738752 -0.41 0.685 .8351081 1.125771

sp77\_1403\_ss\_c\_4lag | .7579609 .132182 -1.59 0.112 .5385232 1.066815

sp77\_1433\_ss\_c\_4lag | .6062844 .1283627 -2.36 0.018 .4003685 .9181063

sp77\_1434\_ss\_c\_4lag | .779807 .1373012 -1.41 0.158 .5522243 1.101181

sp77\_1437\_ss\_c\_4lag | .5338718 .0750679 -4.46 0.000 .4052745 .7032741

sp77\_1438\_ss\_c\_4lag | .4453509 .2610432 -1.38 0.168 .1411787 1.404868

sp77\_1605\_ss\_c\_4lag | 1.015293 .0180666 0.85 0.394 .9804931 1.051327

sp77\_1606\_ss\_c\_4lag | 1.054413 .0241131 2.32 0.021 1.008196 1.102749

sp77\_1710\_ss\_c\_4lag | .9863412 .0246724 -0.55 0.582 .9391504 1.035903

sp77\_1802\_ss\_c\_4lag | .8048045 .1855496 -0.94 0.346 .512205 1.264553

sp77\_1906\_ss\_c\_4lag | 1.607675 .5153845 1.48 0.139 .8576742 3.013522

sp77\_1915\_ss\_c\_4lag | .7984812 .2753676 -0.65 0.514 .4061774 1.569689

sp77\_1916\_ss\_c\_4lag | 1.146883 .1278083 1.23 0.219 .9218527 1.426845

sp77\_200\_ss\_c\_4lag | .9798606 .0122354 -1.63 0.103 .9561707 1.004137

sp77\_202\_ss\_c\_4lag | .9481737 .0167351 -3.02 0.003 .9159344 .9815478

sp77\_203\_ss\_c\_4lag | .9531471 .1425105 -0.32 0.748 .7110365 1.277697

sp77\_204\_ss\_c\_4lag | .9970731 .0238569 -0.12 0.902 .9513939 1.044946

sp77\_205\_ss\_c\_4lag | 1.00486 .007337 0.66 0.507 .9905818 1.019343

sp77\_206\_ss\_c\_4lag | 1.048742 .0468521 1.07 0.287 .9608188 1.14471

sp77\_207\_ss\_c\_4lag | 1.135391 .0575063 2.51 0.012 1.028094 1.253885

sp77\_208\_ss\_c\_4lag | 1.03335 .0277286 1.22 0.221 .9804072 1.089151

sp77\_210\_ss\_c\_4lag | 1.047378 .0731724 0.66 0.508 .9133482 1.201076

sp77\_216\_ss\_c\_4lag | 1.113733 .1625034 0.74 0.460 .8367265 1.482446

sp77\_315\_ss\_c\_4lag | .7207982 .3133288 -0.75 0.451 .3074673 1.689773

sp77\_400\_ss\_c\_4lag | 1.007763 .0084147 0.93 0.354 .9914047 1.024391

sp77\_401\_ss\_c\_4lag | .9980022 .0905644 -0.02 0.982 .8353888 1.192269

sp77\_402\_ss\_c\_4lag | 1.004477 .0468746 0.10 0.924 .9166813 1.100682

sp77\_403\_1\_ss\_c\_4lag | .8761782 .0993963 -1.17 0.244 .7015031 1.094348

sp77\_403\_ss\_c\_4lag | 1.800196 .5279251 2.00 0.045 1.013204 3.198475

sp77\_404\_ss\_c\_4lag | .9695074 .0099672 -3.01 0.003 .9501676 .9892409

sp77\_405\_ss\_c\_4lag | .9357495 .0789778 -0.79 0.431 .7930812 1.104083

sp77\_408\_ss\_c\_4lag | .9571175 .1004905 -0.42 0.676 .7791035 1.175805

sp77\_409\_ss\_c\_4lag | .1823415 .1555452 -2.00 0.046 .0342589 .9705042

sp77\_410\_ss\_c\_4lag | .9885533 .0174255 -0.65 0.514 .9549832 1.023303

sp77\_411\_ss\_c\_4lag | .673423 .1208503 -2.20 0.028 .4737335 .9572862

sp77\_412\_ss\_c\_4lag | 1.096898 .1194666 0.85 0.396 .8860519 1.357917

sp77\_413\_ss\_c\_4lag | .6373788 .065781 -4.36 0.000 .5206537 .7802724

sp77\_500\_ss\_c\_4lag | .8751176 .0863603 -1.35 0.176 .7212175 1.061858

sp77\_501\_ss\_c\_4lag | 1.081429 .0709738 1.19 0.233 .9508979 1.229878

sp77\_502\_1\_ss\_c\_4lag | 1.892124 .4285738 2.82 0.005 1.213805 2.949512

sp77\_502\_2\_ss\_c\_4lag | .869397 .0750406 -1.62 0.105 .7340878 1.029647

sp77\_502\_ss\_c\_4lag | .9641685 .0117552 -2.99 0.003 .9414019 .9874858

sp77\_503\_1\_ss\_c\_4lag | .4485152 .058441 -6.15 0.000 .3474294 .5790122

sp77\_503\_ss\_c\_4lag | .9193301 .1492127 -0.52 0.604 .6688311 1.263649

sp77\_504\_ss\_c\_4lag | .9444047 .0522361 -1.03 0.301 .847378 1.052541

sp77\_505\_ss\_c\_4lag | .8750909 .0421965 -2.77 0.006 .7961751 .9618288

sp77\_506\_1\_ss\_c\_4lag | 1.107717 .1541799 0.73 0.462 .8432424 1.455141

sp77\_506\_ss\_c\_4lag | 1.147066 .1205916 1.31 0.192 .9334715 1.409534

sp77\_507\_ss\_c\_4lag | 1.084448 .1048286 0.84 0.402 .8972778 1.310661

sp77\_508\_1\_ss\_c\_4lag | 2.045554 .7895997 1.85 0.064 .9599322 4.358945

sp77\_508\_ss\_c\_4lag | 1.267455 .2070045 1.45 0.147 .9202623 1.745634

sp77\_509\_ss\_c\_4lag | .8370941 .0670833 -2.22 0.026 .7154189 .9794631

sp77\_510\_ss\_c\_4lag | .8806412 .1010736 -1.11 0.268 .7032412 1.102792

sp77\_511\_ss\_c\_4lag | 1.208572 .4790887 0.48 0.633 .5557105 2.62843

sp77\_512\_ss\_c\_4lag | .9812314 .0394792 -0.47 0.638 .9068258 1.061742

sp77\_513\_ss\_c\_4lag | 1.030496 .054624 0.57 0.571 .9288088 1.143316

sp77\_514\_ss\_c\_4lag | 1.855586 .3911298 2.93 0.003 1.22761 2.804798

sp77\_515\_ss\_c\_4lag | 1.094503 .5485849 0.18 0.857 .4098066 2.923174

sp77\_516\_ss\_c\_4lag | .934642 .0315993 -2.00 0.046 .8747159 .9986736

sp77\_600\_ss\_c\_4lag | 1.082314 .1517052 0.56 0.573 .8223227 1.424505

sp77\_601\_ss\_c\_4lag | 1.004225 .1563059 0.03 0.978 .7401895 1.362445

sp77\_602\_ss\_c\_4lag | 1.223193 .1144473 2.15 0.031 1.018246 1.46939

sp77\_603\_ss\_c\_4lag | 2.013598 .4710307 2.99 0.003 1.273079 3.184857

sp77\_604\_ss\_c\_4lag | .7725638 .1203105 -1.66 0.098 .5693479 1.048313

sp77\_605\_ss\_c\_4lag | .5964036 .4622016 -0.67 0.505 .1305795 2.72399

sp77\_606\_ss\_c\_4lag | 1 (omitted)

sp77\_700\_1\_ss\_c\_4lag | 1.486836 .297185 1.98 0.047 1.00491 2.19988

sp77\_700\_ss\_c\_4lag | .8625108 .2184519 -0.58 0.559 .5250214 1.416942

sp77\_701\_1\_ss\_c\_4lag | .8456843 .2449478 -0.58 0.563 .4793607 1.491949

sp77\_701\_2\_ss\_c\_4lag | .7651478 .2060513 -0.99 0.320 .4513569 1.297091

sp77\_701\_3\_ss\_c\_4lag | 1.320706 .175835 2.09 0.037 1.017371 1.714481

sp77\_701\_4\_ss\_c\_4lag | 1.10401 .191599 0.57 0.569 .7856849 1.551306

sp77\_701\_ss\_c\_4lag | .9866732 .0441907 -0.30 0.765 .9037538 1.077201

sp77\_704\_1\_ss\_c\_4lag | 1.260473 .1870619 1.56 0.119 .9423453 1.685998

sp77\_704\_8\_ss\_c\_4lag | .7654817 .3410404 -0.60 0.549 .3196717 1.833012

sp77\_704\_9\_ss\_c\_4lag | 1.682279 .3405373 2.57 0.010 1.131339 2.501517

sp77\_704\_ss\_c\_4lag | 1.595854 .4592852 1.62 0.104 .9078587 2.805228

sp77\_705\_ss\_c\_4lag | .9385141 .1481092 -0.40 0.688 .6888277 1.278707

sp77\_800\_1\_ss\_c\_4lag | .876345 .3823696 -0.30 0.762 .3726286 2.060981

sp77\_800\_2\_ss\_c\_4lag | 2.078823 .7228864 2.10 0.035 1.051531 4.109726

sp77\_800\_ss\_c\_4lag | .7844385 .3746483 -0.51 0.611 .3076271 2.000291

sp77\_801\_1\_ss\_c\_4lag | 1 (omitted)

sp77\_802\_ss\_c\_4lag | .9238617 .1711414 -0.43 0.669 .6425775 1.328276

sp77\_803\_ss\_c\_4lag | .8670074 .176499 -0.70 0.483 .5817568 1.292124

sp77\_804\_ss\_c\_4lag | 1.095089 .2269353 0.44 0.661 .7295495 1.643781

sp77\_805\_ss\_c\_4lag | 1.017339 .2555767 0.07 0.945 .6217647 1.664582

sp77\_807\_1\_ss\_c\_4lag | .5109356 .2467183 -1.39 0.164 .1983087 1.316408

sp77\_807\_2\_ss\_c\_4lag | .939019 .2456491 -0.24 0.810 .5623394 1.568015

sp77\_807\_3\_ss\_c\_4lag | 1.37465 .0983381 4.45 0.000 1.194813 1.581555

sp77\_807\_ss\_c\_4lag | 1.232214 .1553005 1.66 0.098 .9625115 1.577489

sp77\_808\_ss\_c\_4lag | 2.503296 .6396245 3.59 0.000 1.517117 4.130524

sp77\_809\_ss\_c\_4lag | .9929863 .0987071 -0.07 0.944 .8172035 1.206581

sp77\_810\_ss\_c\_4lag | 1.056435 .1910075 0.30 0.761 .7412113 1.505716

sp77\_900\_1\_ss\_c\_4lag | 4.834863 1.706809 4.46 0.000 2.420427 9.657759

sp77\_900\_2\_ss\_c\_4lag | 3.00e-09 3.03e-09 -19.43 0.000 4.14e-10 2.17e-08

sp77\_900\_ss\_c\_4lag | .5578941 .1296318 -2.51 0.012 .3538076 .8797035

sp77\_901\_1\_ss\_c\_4lag | 5.94e-10 6.28e-10 -20.07 0.000 7.45e-11 4.73e-09

sp77\_901\_ss\_c\_4lag | 1.072562 .13707 0.55 0.584 .8349138 1.377854

sp77\_902\_3\_ss\_c\_4lag | 1.584428 1.678033 0.43 0.664 .1987848 12.62878

sp77\_902\_ss\_c\_4lag | 1.180221 .1647512 1.19 0.235 .8977201 1.55162

sp77\_903\_ss\_c\_4lag | 1.029589 .2075962 0.14 0.885 .6934837 1.528593

sp77\_904\_ss\_c\_4lag | 1.019089 .0463831 0.42 0.678 .9321165 1.114176

mine\_time | .9983588 .0016271 -1.01 0.314 .9951748 1.001553

onsite\_insp\_hours | .9997158 .0001137 -2.50 0.012 .9994929 .9999387

|

state |

AL | 1.153989 .0950349 1.74 0.082 .9819795 1.356129

AR | 1.747424 .2119129 4.60 0.000 1.377754 2.216281

CO | .7522778 .1195616 -1.79 0.073 .5509274 1.027217

IL | 1.179141 .0836023 2.32 0.020 1.026159 1.354929

IN | .9453751 .1560702 -0.34 0.734 .6840391 1.306554

MD | 1.186644 .2063238 0.98 0.325 .8439573 1.668477

MT | .9247218 .0737443 -0.98 0.326 .7909152 1.081166

NM | .9100817 .0600587 -1.43 0.153 .7996636 1.035746

OH | 1.140715 .1324673 1.13 0.257 .908511 1.432268

OK | .9680052 .3181603 -0.10 0.921 .5082858 1.843518

PA | .9928201 .0934365 -0.08 0.939 .8255855 1.19393

TN | 1.197886 .1749406 1.24 0.216 .8997149 1.594872

UT | .6317846 .0717534 -4.04 0.000 .5057035 .7893002

VA | .7201451 .0546275 -4.33 0.000 .6206562 .8355818

WV | 1.070872 .0602322 1.22 0.223 .9590933 1.195678

WY | 1.130999 .1078095 1.29 0.197 .9382614 1.36333

|

time |

2000.75 | 1.606357 .2079743 3.66 0.000 1.246343 2.070365

2001 | 1.640133 .2040787 3.98 0.000 1.285185 2.093112

2001.25 | 1.487044 .1894418 3.11 0.002 1.158471 1.90881

2001.5 | 1.806037 .2251187 4.74 0.000 1.414575 2.305829

2001.75 | 1.60648 .2007871 3.79 0.000 1.25744 2.052406

2002 | 1.613873 .1999534 3.86 0.000 1.265926 2.057455

2002.25 | 1.440651 .1861195 2.83 0.005 1.118384 1.85578

2002.5 | 1.806285 .2219602 4.81 0.000 1.419675 2.298178

2002.75 | 1.710515 .2102427 4.37 0.000 1.344324 2.176455

2003 | 1.43264 .1793503 2.87 0.004 1.120925 1.83104

2003.25 | 1.60016 .201818 3.73 0.000 1.249703 2.048897

2003.5 | 1.686622 .189554 4.65 0.000 1.353175 2.102237

2003.75 | 1.278329 .159464 1.97 0.049 1.00106 1.632394

2004 | 1.534468 .1846569 3.56 0.000 1.212062 1.942634

2004.25 | 1.511803 .1766905 3.54 0.000 1.202297 1.900984

2004.5 | 1.479613 .1731663 3.35 0.001 1.176327 1.861095

2004.75 | 1.367459 .1645395 2.60 0.009 1.080173 1.731151

2005 | 1.179096 .1446109 1.34 0.179 .9271564 1.499496

2005.25 | 1.465802 .1697735 3.30 0.001 1.168118 1.839348

2005.5 | 1.325101 .1650425 2.26 0.024 1.03808 1.69148

2005.75 | 1.199929 .1524877 1.43 0.152 .9353717 1.539312

2006 | 1.222761 .1450571 1.70 0.090 .9690875 1.542838

2006.25 | 1.19885 .1468117 1.48 0.139 .9430321 1.524065

2006.5 | 1.410212 .1625521 2.98 0.003 1.12504 1.767667

2006.75 | 1.12954 .1292584 1.06 0.287 .9025991 1.413542

2007 | 1.193163 .139274 1.51 0.130 .9491655 1.499885

2007.25 | 1.08744 .1344126 0.68 0.498 .8534791 1.385536

2007.5 | 1.189717 .1333751 1.55 0.121 .9550328 1.482071

2007.75 | 1.190211 .1333886 1.55 0.120 .9554951 1.482584

2008 | .9778055 .1138312 -0.19 0.847 .7783231 1.228415

2008.25 | 1.047467 .1259981 0.39 0.700 .827467 1.325959

2008.5 | 1.231573 .1285896 1.99 0.046 1.003657 1.511245

2009 | .9287128 .0968075 -0.71 0.478 .7571006 1.139224

2009.25 | .89042 .102983 -1.00 0.316 .7098192 1.116971

2009.5 | 1.098426 .1299061 0.79 0.427 .8711699 1.384965

2009.75 | .8118076 .1003158 -1.69 0.092 .6371906 1.034277

2010 | .8702111 .107403 -1.13 0.260 .6832314 1.108362

2010.25 | .91751 .1145918 -0.69 0.491 .7182912 1.171982

2010.5 | 1.050427 .1270897 0.41 0.684 .828667 1.331532

2010.75 | .813073 .0987869 -1.70 0.089 .6407816 1.03169

2011 | .9179567 .1106361 -0.71 0.478 .7248225 1.162553

2011.25 | .8916889 .1020116 -1.00 0.316 .71258 1.115817

2011.5 | 1.003285 .1177322 0.03 0.978 .7971474 1.262729

2011.75 | .7813807 .096635 -1.99 0.046 .6131867 .9957094

2012 | .9744903 .1119277 -0.22 0.822 .7780554 1.220519

2012.25 | .8592466 .1021965 -1.28 0.202 .6805784 1.084819

2012.5 | 1.002695 .1193419 0.02 0.982 .7940679 1.266134

2012.75 | .848805 .1082761 -1.29 0.199 .6610374 1.089908

2013 | .8709523 .0993867 -1.21 0.226 .6964044 1.089249

2013.25 | .7284697 .0916123 -2.52 0.012 .5693304 .9320915

2013.5 | .9960438 .1212912 -0.03 0.974 .7845581 1.264538

2013.75 | .8069155 .0978927 -1.77 0.077 .6361546 1.023513

2014 | .7770464 .1003826 -1.95 0.051 .6032323 1.000943

2014.25 | .8515954 .1043067 -1.31 0.190 .6698459 1.082659

2014.5 | .9027952 .1055632 -0.87 0.382 .7178916 1.135324

2014.75 | .8757459 .1039196 -1.12 0.264 .6940184 1.105058

2015 | .7973033 .0950148 -1.90 0.057 .6312273 1.007074

2015.25 | .8549824 .1049261 -1.28 0.202 .6721947 1.087475

2015.5 | 1.107667 .1351195 0.84 0.402 .8721173 1.406837

2015.75 | .6666004 .0976324 -2.77 0.006 .5002601 .88825

2016 | .9124169 .1215868 -0.69 0.492 .7026903 1.184739

|

\_cons | 9.60e-06 9.97e-07 -111.20 0.000 7.83e-06 .0000118

ln(hours) | 1 (exposure)

-----------------------+----------------------------------------------------------------

/lnalpha | -1.97923 .2202325 -2.410877 -1.547582

-----------------------+----------------------------------------------------------------

alpha | .1381757 .0304308 .0897365 .2127619

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**. lrtest pois nbin, stats force**

Likelihood-ratio test LR chi2(1) = 99.28

(Assumption: pois nested in nbin) Prob > chi2 = 0.0000

Akaike's information criterion and Bayesian information criterion

-----------------------------------------------------------------------------

Model | Obs ll(null) ll(model) df AIC BIC

-------------+---------------------------------------------------------------

pois | 22,446 -17381.19 -16478.54 346 33649.08 36423.61

nbin | 22,446 -17112.66 -16428.9 347 33551.8 36334.35

-----------------------------------------------------------------------------

Note: N=Obs used in calculating BIC; see [R] BIC note.

**. summ MR spcssv3\_yhat**

Variable | Obs Mean Std. Dev. Min Max

-------------+---------------------------------------------------------

MR | 30,289 .4096207 .9550592 0 14

spcssv3\_yhat | 22,446 .4947799 .7401863 3.03e-11 11.8285