. // Model SP.C.SSV.2

**. glm MR `subpart\_sigsub\_lag\_1\_vars' `covariates' ib(freq).state ib(freq).time, family(poisson) link(log) vce(cl mineid) exposure(hours) iter(50) eform**

note: sp77\_801\_1\_ss\_1lag omitted because of collinearity

Iteration 0: log pseudolikelihood = -20004.905

Iteration 1: log pseudolikelihood = -18557.879

Iteration 2: log pseudolikelihood = -18510.701

Iteration 3: log pseudolikelihood = -18502.077

Iteration 4: log pseudolikelihood = -18501.298

Iteration 5: log pseudolikelihood = -18501.257

Iteration 6: log pseudolikelihood = -18501.247

Iteration 7: log pseudolikelihood = -18501.245

Iteration 8: log pseudolikelihood = -18501.245

Iteration 9: log pseudolikelihood = -18501.245

Iteration 10: log pseudolikelihood = -18501.245

Generalized linear models No. of obs = 26,110

Optimization : ML Residual df = 25,751

Scale parameter = 1

Deviance = 20650.10117 (1/df) Deviance = .8019145

Pearson = 324214.8905 (1/df) Pearson = 12.59038

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

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

AIC = 1.444676

Log pseudolikelihood = -18501.24456 BIC = -241239.5

(Std. Err. adjusted for 1,475 clusters in mineid)

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| Robust

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

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

sp47\_41\_ss\_1lag | .4692754 .0729915 -4.86 0.000 .3459642 .636538

sp47\_44\_ss\_1lag | 1.036752 .1324745 0.28 0.778 .8070668 1.331803

sp48\_11\_ss\_1lag | .9900636 .0891414 -0.11 0.912 .8298972 1.181141

sp48\_25\_ss\_1lag | 1.046209 .1447189 0.33 0.744 .7977642 1.372027

sp48\_26\_ss\_1lag | 1.111651 .2167712 0.54 0.587 .7585514 1.629117

sp48\_27\_ss\_1lag | 1.133367 .1615485 0.88 0.380 .8571201 1.498648

sp48\_28\_ss\_1lag | .9992303 .1254372 -0.01 0.995 .7812878 1.277969

sp48\_4\_ss\_1lag | 2.07e-07 1.53e-07 -20.80 0.000 4.86e-08 8.83e-07

sp48\_5\_ss\_1lag | .8897977 .1690924 -0.61 0.539 .6131031 1.291365

sp48\_6\_ss\_1lag | .9612871 .1362967 -0.28 0.781 .7280563 1.269233

sp48\_7\_ss\_1lag | 1.059884 .0869681 0.71 0.478 .90243 1.24481

sp48\_8\_ss\_1lag | 1.097543 .2108437 0.48 0.628 .7531848 1.599344

sp71\_701\_ss\_1lag | 8.564612 1.852074 9.93 0.000 5.605801 13.08512

sp72\_503\_ss\_1lag | .7910589 .2031846 -0.91 0.361 .4781636 1.308703

sp72\_610\_ss\_1lag | 5.17e-08 5.36e-08 -16.17 0.000 6.76e-09 3.95e-07

sp72\_620\_ss\_1lag | 1.128158 .3445409 0.39 0.693 .6200289 2.052712

sp72\_630\_ss\_1lag | 1.052371 .0196735 2.73 0.006 1.01451 1.091645

sp75\_100\_ss\_1lag | .9675874 .3793034 -0.08 0.933 .448757 2.086264

sp75\_1001\_1\_ss\_1lag | 1.428577 1.038249 0.49 0.624 .3437753 5.936531

sp75\_1001\_ss\_1lag | 1.021303 .4929939 0.04 0.965 .3965251 2.630503

sp75\_1003\_1\_ss\_1lag | .5485446 .1195691 -2.75 0.006 .3578255 .8409162

sp75\_1100\_2\_ss\_1lag | 1.018245 .0314704 0.59 0.559 .9583956 1.081833

sp75\_1101\_20\_ss\_1lag | 1.78e-07 1.81e-07 -15.27 0.000 2.42e-08 1.31e-06

sp75\_1102\_ss\_1lag | .9075989 .0975994 -0.90 0.367 .7351218 1.120543

sp75\_1103\_4\_ss\_1lag | 1.032293 .0682206 0.48 0.631 .9068809 1.175049

sp75\_1104\_ss\_1lag | 1.175841 .2011739 0.95 0.344 .8408471 1.644296

sp75\_1106\_2\_ss\_1lag | 1.116736 .0870237 1.42 0.157 .9585597 1.301014

sp75\_1106\_3\_ss\_1lag | 1.110538 .0403835 2.88 0.004 1.034142 1.192577

sp75\_1106\_4\_ss\_1lag | .8371887 .1498743 -0.99 0.321 .5894412 1.189067

sp75\_1106\_5\_ss\_1lag | 1.05058 .0953407 0.54 0.587 .8793913 1.255094

sp75\_1106\_6\_ss\_1lag | 2.059965 2.74344 0.54 0.587 .1514393 28.02083

sp75\_1106\_ss\_1lag | .997414 .1352166 -0.02 0.985 .7646814 1.300979

sp75\_1107\_14\_ss\_1lag | 2.872501 .4772896 6.35 0.000 2.074083 3.978271

sp75\_1400\_1\_ss\_1lag | 1.251987 .476269 0.59 0.555 .5940102 2.638796

sp75\_1400\_2\_ss\_1lag | 1.189715 .2418988 0.85 0.393 .798679 1.772203

sp75\_1400\_3\_ss\_1lag | 1.08988 .1481236 0.63 0.527 .835013 1.422538

sp75\_1400\_4\_ss\_1lag | 1.218397 .1937686 1.24 0.214 .8921083 1.664027

sp75\_1400\_ss\_1lag | 1.0709 .0988818 0.74 0.458 .8936206 1.283349

sp75\_1401\_ss\_1lag | 1.357543 .3213824 1.29 0.197 .8535749 2.159064

sp75\_1403\_10\_ss\_1lag | 1.032592 .0289959 1.14 0.253 .9772966 1.091016

sp75\_1403\_11\_ss\_1lag | 1.787236 .392173 2.65 0.008 1.162526 2.747647

sp75\_1403\_3\_ss\_1lag | .9341497 .5341675 -0.12 0.905 .3045654 2.865183

sp75\_1403\_4\_ss\_1lag | 1.045496 .2882925 0.16 0.872 .6089839 1.794894

sp75\_1403\_5\_ss\_1lag | .9691943 .024507 -1.24 0.216 .9223323 1.018437

sp75\_1403\_6\_ss\_1lag | .9581649 .0208765 -1.96 0.050 .918109 .9999683

sp75\_1403\_7\_ss\_1lag | 1.033832 .090332 0.38 0.703 .8711146 1.226943

sp75\_1403\_8\_ss\_1lag | .9748766 .0182512 -1.36 0.174 .9397532 1.011313

sp75\_1403\_9\_ss\_1lag | .6658323 .0801704 -3.38 0.001 .5258657 .8430529

sp75\_1404\_1\_ss\_1lag | 1.34e-07 7.56e-08 -28.06 0.000 4.44e-08 4.05e-07

sp75\_1404\_ss\_1lag | .6451163 .6538642 -0.43 0.665 .08849 4.703076

sp75\_1405\_1\_ss\_1lag | 1.04557 .2110829 0.22 0.825 .7038982 1.553089

sp75\_1405\_ss\_1lag | .9516427 .0212535 -2.22 0.026 .9108851 .994224

sp75\_1431\_ss\_1lag | 5.27e-08 5.96e-08 -14.81 0.000 5.74e-09 4.84e-07

sp75\_1432\_ss\_1lag | 1.49e-06 1.12e-06 -17.83 0.000 3.42e-07 6.53e-06

sp75\_1433\_ss\_1lag | .9737611 .2307565 -0.11 0.911 .611983 1.549407

sp75\_1434\_ss\_1lag | 1.067285 .1994205 0.35 0.727 .7400053 1.53931

sp75\_1435\_ss\_1lag | .8804739 .2756539 -0.41 0.684 .4766802 1.62632

sp75\_1437\_ss\_1lag | .9953958 .2769684 -0.02 0.987 .5769649 1.717284

sp75\_150\_ss\_1lag | 2.545539 1.649028 1.44 0.149 .7150925 9.061444

sp75\_151\_ss\_1lag | 1.188721 .734361 0.28 0.780 .3541848 3.989607

sp75\_153\_ss\_1lag | 4.184358 2.303018 2.60 0.009 1.422781 12.30607

sp75\_155\_ss\_1lag | .8100469 .1276243 -1.34 0.181 .5948423 1.103109

sp75\_156\_ss\_1lag | 2.31e-07 1.87e-07 -18.92 0.000 4.74e-08 1.12e-06

sp75\_1600\_2\_ss\_1lag | .9753224 .2136736 -0.11 0.909 .6348439 1.498406

sp75\_1712\_10\_ss\_1lag | 1.520695 .4152221 1.54 0.125 .8904787 2.596932

sp75\_1712\_6\_ss\_1lag | 1.447745 .8382499 0.64 0.523 .465418 4.503405

sp75\_1720\_ss\_1lag | .9506616 .0585972 -0.82 0.412 .8424795 1.072735

sp75\_1721\_ss\_1lag | 1.44e-06 9.27e-07 -20.89 0.000 4.08e-07 5.09e-06

sp75\_1725\_ss\_1lag | .9960037 .0071722 -0.56 0.578 .9820451 1.010161

sp75\_1726\_ss\_1lag | 1.086544 .1558218 0.58 0.563 .8203068 1.439192

sp75\_1727\_ss\_1lag | 2.90e-07 2.93e-07 -14.90 0.000 4.01e-08 2.10e-06

sp75\_1728\_ss\_1lag | 2.131029 .6879966 2.34 0.019 1.131831 4.012337

sp75\_1729\_ss\_1lag | 1.128563 .1866483 0.73 0.465 .8161111 1.560639

sp75\_1730\_ss\_1lag | .6992579 .2201121 -1.14 0.256 .3773084 1.29592

sp75\_1731\_ss\_1lag | 1.022267 .0104908 2.15 0.032 1.001911 1.043037

sp75\_1903\_ss\_1lag | .8231429 .1743062 -0.92 0.358 .543535 1.246588

sp75\_1909\_ss\_1lag | 1.015693 .0297008 0.53 0.594 .9591169 1.075606

sp75\_1910\_ss\_1lag | 1.022821 .0573702 0.40 0.687 .916338 1.141678

sp75\_1911\_ss\_1lag | .893195 .0496214 -2.03 0.042 .8010467 .9959436

sp75\_1912\_ss\_1lag | 2.119073 .5729622 2.78 0.005 1.24737 3.599952

sp75\_1913\_ss\_1lag | 1.125962 .1981439 0.67 0.500 .7975014 1.589703

sp75\_1914\_ss\_1lag | 1.012715 .0203587 0.63 0.530 .9735888 1.053414

sp75\_1915\_ss\_1lag | 1.500459 .2622207 2.32 0.020 1.06529 2.113394

sp75\_202\_ss\_1lag | 1.001687 .0060443 0.28 0.780 .98991 1.013604

sp75\_208\_ss\_1lag | 1.011731 .0294904 0.40 0.689 .9555511 1.071214

sp75\_211\_ss\_1lag | 1.05053 .0350096 1.48 0.139 .9841053 1.121438

sp75\_212\_ss\_1lag | .9448001 .0850872 -0.63 0.528 .7919213 1.127192

sp75\_214\_ss\_1lag | .6753548 .1269231 -2.09 0.037 .4672627 .9761193

sp75\_312\_ss\_1lag | .9920241 .2037758 -0.04 0.969 .6632441 1.483785

sp75\_320\_ss\_1lag | .9851498 .076974 -0.19 0.848 .8452676 1.148181

sp75\_324\_ss\_1lag | .9387351 .0984033 -0.60 0.546 .7643908 1.152844

sp75\_337\_ss\_1lag | .9692317 .0809309 -0.37 0.708 .8229099 1.141571

sp75\_340\_ss\_1lag | 1.042642 .0235892 1.85 0.065 .9974184 1.089917

sp75\_342\_ss\_1lag | 1.004046 .0197042 0.21 0.837 .96616 1.043418

sp75\_344\_ss\_1lag | 1.135736 .1831091 0.79 0.430 .8280233 1.557803

sp75\_352\_ss\_1lag | 1.004178 .076686 0.05 0.956 .8645834 1.166311

sp75\_382\_ss\_1lag | .9579979 .0889085 -0.46 0.644 .7986701 1.14911

sp75\_503\_ss\_1lag | .9802428 .0093092 -2.10 0.036 .962166 .9986593

sp75\_504\_ss\_1lag | .7898904 .3533427 -0.53 0.598 .3286984 1.898174

sp75\_505\_ss\_1lag | .9446862 .3231168 -0.17 0.868 .4832211 1.84684

sp75\_506\_1\_ss\_1lag | .9082748 .4585128 -0.19 0.849 .3376883 2.442972

sp75\_506\_ss\_1lag | 1.100283 .2794545 0.38 0.707 .6688257 1.810074

sp75\_507\_ss\_1lag | 1.137111 .1016351 1.44 0.151 .9543824 1.354826

sp75\_511\_1\_ss\_1lag | 1.14e-07 9.61e-08 -18.93 0.000 2.17e-08 5.95e-07

sp75\_511\_ss\_1lag | 1.119126 .0725235 1.74 0.082 .9856395 1.270691

sp75\_512\_1\_ss\_1lag | 3.186003 .7269357 5.08 0.000 2.037189 4.982656

sp75\_512\_2\_ss\_1lag | 1.161592 .0725984 2.40 0.017 1.027671 1.312964

sp75\_512\_ss\_1lag | 1.011454 .009967 1.16 0.248 .9921065 1.031179

sp75\_513\_1\_ss\_1lag | 2.07162 .6571584 2.30 0.022 1.11248 3.857695

sp75\_513\_ss\_1lag | 1.025342 .1043534 0.25 0.806 .8399206 1.251697

sp75\_514\_ss\_1lag | .9563241 .0418616 -1.02 0.308 .8776979 1.041994

sp75\_515\_ss\_1lag | .9483233 .0341336 -1.47 0.140 .883728 1.01764

sp75\_516\_1\_ss\_1lag | .706436 .1493663 -1.64 0.100 .4667645 1.069173

sp75\_516\_2\_ss\_1lag | .4935085 .2852284 -1.22 0.222 .1589769 1.531988

sp75\_516\_ss\_1lag | 1.133988 .0587786 2.43 0.015 1.024443 1.255247

sp75\_517\_1\_ss\_1lag | .7848173 .1835701 -1.04 0.300 .4962164 1.241269

sp75\_517\_ss\_1lag | .9907933 .0086916 -1.05 0.292 .9739038 1.007976

sp75\_518\_1\_ss\_1lag | .7428642 .0910183 -2.43 0.015 .5842749 .9444992

sp75\_518\_ss\_1lag | 1.087353 .0449218 2.03 0.043 1.002778 1.179061

sp75\_519\_ss\_1lag | .4736043 .3912589 -0.90 0.366 .093802 2.391218

sp75\_520\_ss\_1lag | .9297251 .0583995 -1.16 0.246 .8220295 1.05153

sp75\_523\_1\_ss\_1lag | .990669 .0652271 -0.14 0.887 .8707313 1.127127

sp75\_523\_2\_ss\_1lag | 1.054445 .054577 1.02 0.306 .9527232 1.167028

sp75\_523\_ss\_1lag | .8772724 .0522716 -2.20 0.028 .780578 .9859448

sp75\_600\_1\_ss\_1lag | 8.35e-07 4.71e-07 -24.81 0.000 2.76e-07 2.52e-06

sp75\_600\_ss\_1lag | 1.693857 .3749917 2.38 0.017 1.097576 2.614078

sp75\_601\_1\_ss\_1lag | 1.06929 .0370853 1.93 0.053 .9990197 1.144503

sp75\_601\_2\_ss\_1lag | 3.96e-07 3.19e-07 -18.28 0.000 8.15e-08 1.92e-06

sp75\_601\_3\_ss\_1lag | 1.079245 .2933449 0.28 0.779 .6335174 1.838575

sp75\_601\_ss\_1lag | .9716424 .0494281 -0.57 0.572 .8794381 1.073514

sp75\_602\_ss\_1lag | 1.122832 .075856 1.71 0.086 .98358 1.2818

sp75\_603\_ss\_1lag | 1.00032 .1034602 0.00 0.998 .8167733 1.225113

sp75\_604\_ss\_1lag | 1.049138 .0118405 4.25 0.000 1.026185 1.072603

sp75\_605\_ss\_1lag | 1.015133 .0512004 0.30 0.766 .9195826 1.120612

sp75\_606\_ss\_1lag | .9983257 .0245765 -0.07 0.946 .9513003 1.047676

sp75\_607\_ss\_1lag | 1.046412 .126128 0.38 0.707 .8262359 1.32526

sp75\_700\_1\_ss\_1lag | .7057744 .3632812 -0.68 0.498 .2573531 1.935541

sp75\_700\_ss\_1lag | .8022286 .0856074 -2.07 0.039 .6508258 .9888526

sp75\_701\_1\_ss\_1lag | .9030384 .0896542 -1.03 0.304 .7433586 1.097019

sp75\_701\_2\_ss\_1lag | 1.059112 .1504154 0.40 0.686 .8017773 1.399039

sp75\_701\_3\_ss\_1lag | 1.092401 .1308971 0.74 0.461 .8637469 1.381584

sp75\_701\_4\_ss\_1lag | 2.220198 2.757089 0.64 0.521 .1946935 25.31815

sp75\_701\_5\_ss\_1lag | .9149698 .0695462 -1.17 0.242 .7883291 1.061955

sp75\_701\_ss\_1lag | 1.019943 .0393496 0.51 0.609 .9456626 1.100057

sp75\_703\_2\_ss\_1lag | .624628 .188785 -1.56 0.119 .3454282 1.129497

sp75\_703\_3\_ss\_1lag | 1.201743 .1741901 1.27 0.205 .9045479 1.596582

sp75\_703\_ss\_1lag | 1.051963 .084013 0.63 0.526 .8995408 1.230212

sp75\_704\_ss\_1lag | 2.177049 1.2451 1.36 0.174 .7096567 6.678643

sp75\_705\_1\_ss\_1lag | .6526278 .2141071 -1.30 0.193 .3430936 1.24142

sp75\_705\_8\_ss\_1lag | 1.01e-06 9.38e-07 -14.81 0.000 1.62e-07 6.26e-06

sp75\_705\_ss\_1lag | .7764232 .2297551 -0.86 0.392 .4347258 1.386697

sp75\_706\_ss\_1lag | 1.136661 .2307767 0.63 0.528 .7635037 1.692196

sp75\_800\_2\_ss\_1lag | 1.02e-06 1.03e-06 -13.73 0.000 1.43e-07 7.33e-06

sp75\_800\_3\_ss\_1lag | 1.291885 .7806976 0.42 0.672 .3952164 4.222917

sp75\_800\_4\_ss\_1lag | 4.39e-07 2.85e-07 -22.55 0.000 1.23e-07 1.57e-06

sp75\_800\_ss\_1lag | .8741278 .1351067 -0.87 0.384 .6456718 1.183418

sp75\_801\_ss\_1lag | 1.011134 .399144 0.03 0.978 .4664426 2.191894

sp75\_802\_ss\_1lag | .7117629 .2611475 -0.93 0.354 .3467588 1.460977

sp75\_803\_2\_ss\_1lag | 1.34e-07 9.57e-08 -22.16 0.000 3.30e-08 5.43e-07

sp75\_803\_ss\_1lag | 1.085687 .1128001 0.79 0.429 .8856596 1.33089

sp75\_804\_ss\_1lag | 1.206566 .1292609 1.75 0.080 .9780493 1.488474

sp75\_805\_ss\_1lag | .6851191 .2172867 -1.19 0.233 .3679645 1.275634

sp75\_806\_ss\_1lag | 2.112485 .5163719 3.06 0.002 1.308361 3.410827

sp75\_807\_ss\_1lag | 1.046156 .0340933 1.38 0.166 .9814233 1.115157

sp75\_808\_ss\_1lag | 1.408337 .2946029 1.64 0.102 .9346482 2.122097

sp75\_809\_ss\_1lag | 1.126233 .0835438 1.60 0.109 .9738365 1.302477

sp75\_810\_ss\_1lag | .9104395 .2431097 -0.35 0.725 .5394602 1.536536

sp75\_811\_ss\_1lag | 1.128911 .2048444 0.67 0.504 .7910549 1.611065

sp75\_812\_ss\_1lag | .9624039 .23452 -0.16 0.875 .5969464 1.551599

sp75\_814\_ss\_1lag | .8590245 .0783208 -1.67 0.096 .7184524 1.027101

sp75\_815\_ss\_1lag | .6369775 .4043369 -0.71 0.477 .1835707 2.210268

sp75\_816\_ss\_1lag | 1.131421 .2004017 0.70 0.486 .7995696 1.601004

sp75\_818\_ss\_1lag | .9899802 .1030843 -0.10 0.923 .8072218 1.214116

sp75\_819\_ss\_1lag | 2.212207 .6737025 2.61 0.009 1.217873 4.018366

sp75\_820\_ss\_1lag | .9829391 .2542999 -0.07 0.947 .5919827 1.63209

sp75\_821\_ss\_1lag | 1.258072 .5282319 0.55 0.585 .5524692 2.864858

sp75\_825\_ss\_1lag | 1.256695 .2573126 1.12 0.264 .8412857 1.877225

sp75\_827\_ss\_1lag | 1.081095 .1056279 0.80 0.425 .8926842 1.309273

sp75\_831\_ss\_1lag | 1.670147 .1852138 4.63 0.000 1.343876 2.075631

sp75\_900\_2\_ss\_1lag | .3303979 .1962323 -1.86 0.062 .1031538 1.058252

sp75\_900\_3\_ss\_1lag | 1.141658 .1953711 0.77 0.439 .8163389 1.59662

sp75\_900\_4\_ss\_1lag | 1.279412 .2301641 1.37 0.171 .8992502 1.820288

sp75\_900\_ss\_1lag | .9450244 .0402083 -1.33 0.184 .8694141 1.02721

sp75\_901\_ss\_1lag | .9894618 .172017 -0.06 0.951 .7037501 1.391168

sp75\_902\_1\_ss\_1lag | 1.492742 .3382327 1.77 0.077 .9574487 2.32731

sp75\_902\_2\_ss\_1lag | 1.223137 .1456233 1.69 0.091 .9685755 1.544603

sp75\_902\_4\_ss\_1lag | 1.058286 .114157 0.53 0.599 .8566116 1.30744

sp75\_902\_ss\_1lag | .9958988 .057657 -0.07 0.943 .8890689 1.115565

sp75\_903\_ss\_1lag | 1.048935 .1102741 0.45 0.650 .8536154 1.288947

sp75\_904\_ss\_1lag | 1.016176 .0255971 0.64 0.524 .967225 1.067605

sp75\_905\_ss\_1lag | 1.330711 .3582312 1.06 0.289 .7851233 2.255432

sp75\_907\_ss\_1lag | .7344736 .1848245 -1.23 0.220 .4485161 1.202747

sp77\_103\_ss\_1lag | .000541 .0002758 -14.76 0.000 .0001992 .0014692

sp77\_1103\_ss\_1lag | .9344822 .1140935 -0.56 0.579 .7356064 1.187125

sp77\_1104\_ss\_1lag | 1.032045 .0269425 1.21 0.227 .9805666 1.086225

sp77\_1106\_ss\_1lag | 2.66e-07 2.67e-07 -15.11 0.000 3.73e-08 1.90e-06

sp77\_1111\_ss\_1lag | 1.380618 .468538 0.95 0.342 .7099089 2.685

sp77\_1112\_ss\_1lag | 1.076189 .1841605 0.43 0.668 .7695356 1.505042

sp77\_1403\_ss\_1lag | .6169296 .3431555 -0.87 0.385 .2073818 1.835272

sp77\_1433\_ss\_1lag | .3716809 .1313023 -2.80 0.005 .1859814 .7427986

sp77\_1434\_ss\_1lag | .6789091 .2016239 -1.30 0.192 .3793324 1.215076

sp77\_1437\_ss\_1lag | .359115 .0479463 -7.67 0.000 .2764316 .4665298

sp77\_1438\_ss\_1lag | .2925669 .2769238 -1.30 0.194 .0457653 1.870313

sp77\_1605\_ss\_1lag | .9844174 .0265395 -0.58 0.560 .9337512 1.037833

sp77\_1606\_ss\_1lag | 1.056387 .0408263 1.42 0.156 .9793244 1.139513

sp77\_1710\_ss\_1lag | .9481946 .0285583 -1.77 0.077 .8938415 1.005853

sp77\_1802\_ss\_1lag | 1.056914 .1888395 0.31 0.757 .7446549 1.500115

sp77\_1906\_ss\_1lag | 3.603123 1.546197 2.99 0.003 1.553837 8.355116

sp77\_1915\_ss\_1lag | 2.084116 1.098685 1.39 0.164 .7416398 5.856669

sp77\_1916\_ss\_1lag | 1.11071 .1158775 1.01 0.314 .9053091 1.362713

sp77\_200\_ss\_1lag | .9760215 .0284251 -0.83 0.405 .9218695 1.033354

sp77\_202\_ss\_1lag | .9433665 .0312411 -1.76 0.078 .88408 1.006629

sp77\_203\_ss\_1lag | 1.014994 .1762379 0.09 0.932 .7222134 1.426466

sp77\_204\_ss\_1lag | 1.012351 .046664 0.27 0.790 .924901 1.10807

sp77\_205\_ss\_1lag | 1.017377 .0134232 1.31 0.192 .9914053 1.044029

sp77\_206\_ss\_1lag | .9242635 .0751039 -0.97 0.332 .7881861 1.083834

sp77\_207\_ss\_1lag | 1.004564 .0903196 0.05 0.960 .8422612 1.198143

sp77\_208\_ss\_1lag | .9678314 .0454467 -0.70 0.486 .8827335 1.061133

sp77\_210\_ss\_1lag | 1.024767 .1480792 0.17 0.866 .7720163 1.360267

sp77\_216\_ss\_1lag | 1.37433 .2794683 1.56 0.118 .9225724 2.047302

sp77\_315\_ss\_1lag | .3117672 .1178925 -3.08 0.002 .148578 .6541935

sp77\_400\_ss\_1lag | 1.016594 .0169298 0.99 0.323 .9839477 1.050323

sp77\_401\_ss\_1lag | .8822468 .11907 -0.93 0.353 .6771892 1.149397

sp77\_402\_ss\_1lag | .9924323 .0610751 -0.12 0.902 .8796648 1.119656

sp77\_403\_1\_ss\_1lag | .6030185 .1320058 -2.31 0.021 .3926409 .9261168

sp77\_403\_ss\_1lag | 2.013193 .7469802 1.89 0.059 .972867 4.165982

sp77\_404\_ss\_1lag | .9878027 .0176185 -0.69 0.491 .9538677 1.022945

sp77\_405\_ss\_1lag | .6500619 .1451452 -1.93 0.054 .4196616 1.006955

sp77\_408\_ss\_1lag | .6511386 .093854 -2.98 0.003 .4908884 .8637024

sp77\_409\_ss\_1lag | .3498839 .163013 -2.25 0.024 .1403926 .8719745

sp77\_410\_ss\_1lag | 1.021101 .0302847 0.70 0.481 .9634361 1.082217

sp77\_411\_ss\_1lag | 6.67e-08 6.71e-08 -16.43 0.000 9.29e-09 4.79e-07

sp77\_412\_ss\_1lag | .9525642 .193844 -0.24 0.811 .6392595 1.419421

sp77\_413\_ss\_1lag | .9227966 .1191069 -0.62 0.534 .7165392 1.188426

sp77\_500\_ss\_1lag | .8162511 .1936392 -0.86 0.392 .5127354 1.299434

sp77\_501\_ss\_1lag | 1.151194 .1010634 1.60 0.109 .9692185 1.367337

sp77\_502\_1\_ss\_1lag | 1.188919 .1656958 1.24 0.214 .9047384 1.562361

sp77\_502\_2\_ss\_1lag | 1.016439 .1200756 0.14 0.890 .8063539 1.281258

sp77\_502\_ss\_1lag | .9903304 .0182701 -0.53 0.598 .9551613 1.026794

sp77\_503\_1\_ss\_1lag | 1.216992 .5210795 0.46 0.646 .52581 2.81674

sp77\_503\_ss\_1lag | 1.143918 .3172343 0.48 0.628 .6642588 1.969937

sp77\_504\_ss\_1lag | .9085239 .0693684 -1.26 0.209 .7822483 1.055184

sp77\_505\_ss\_1lag | .8365887 .0741057 -2.01 0.044 .7032535 .995204

sp77\_506\_1\_ss\_1lag | .9101684 .2482276 -0.35 0.730 .5333054 1.553344

sp77\_506\_ss\_1lag | 1.128402 .1646632 0.83 0.408 .8477184 1.502022

sp77\_507\_ss\_1lag | 1.124664 .1656983 0.80 0.425 .8425855 1.501175

sp77\_508\_1\_ss\_1lag | 2.73e-07 1.45e-07 -28.52 0.000 9.65e-08 7.71e-07

sp77\_508\_ss\_1lag | 1.106225 .2660188 0.42 0.675 .6904807 1.772294

sp77\_509\_ss\_1lag | .7668103 .0943914 -2.16 0.031 .6024323 .9760399

sp77\_510\_ss\_1lag | .5339607 .0800918 -4.18 0.000 .3979539 .7164499

sp77\_511\_ss\_1lag | 1.126555 .5128618 0.26 0.794 .4615773 2.74954

sp77\_512\_ss\_1lag | .9449373 .0497895 -1.07 0.282 .8522216 1.04774

sp77\_513\_ss\_1lag | 1.009431 .0928009 0.10 0.919 .8429904 1.208735

sp77\_514\_ss\_1lag | 4.672327 1.609387 4.48 0.000 2.37868 9.177625

sp77\_515\_ss\_1lag | 3.631562 2.119947 2.21 0.027 1.156642 11.40218

sp77\_516\_ss\_1lag | .8799167 .0548021 -2.05 0.040 .7788035 .9941576

sp77\_600\_ss\_1lag | 1.198887 .2689627 0.81 0.419 .7723543 1.860972

sp77\_601\_ss\_1lag | .9821293 .2997369 -0.06 0.953 .539995 1.786272

sp77\_602\_ss\_1lag | .7754053 .2426291 -0.81 0.416 .4199354 1.431776

sp77\_603\_ss\_1lag | 5.438362 1.755545 5.25 0.000 2.888642 10.23865

sp77\_604\_ss\_1lag | 1.478525 .1445995 4.00 0.000 1.220622 1.79092

sp77\_605\_ss\_1lag | 2.28e-07 1.54e-07 -22.64 0.000 6.07e-08 8.58e-07

sp77\_606\_ss\_1lag | 5.62e-07 5.65e-07 -14.31 0.000 7.83e-08 4.03e-06

sp77\_700\_1\_ss\_1lag | 2.265146 1.211561 1.53 0.126 .7939864 6.462184

sp77\_700\_ss\_1lag | 1.222802 .382307 0.64 0.520 .6625667 2.256747

sp77\_701\_1\_ss\_1lag | .6391791 .2463517 -1.16 0.246 .3002987 1.360478

sp77\_701\_2\_ss\_1lag | 1.089228 .3991294 0.23 0.816 .5311413 2.233713

sp77\_701\_3\_ss\_1lag | .4485208 .0644968 -5.58 0.000 .3383613 .5945447

sp77\_701\_4\_ss\_1lag | .6578192 .1804051 -1.53 0.127 .3842968 1.12602

sp77\_701\_ss\_1lag | .9211448 .0674238 -1.12 0.262 .7980381 1.063242

sp77\_704\_1\_ss\_1lag | 1.092112 .7600471 0.13 0.899 .2791769 4.272229

sp77\_704\_8\_ss\_1lag | 1.095225 .329771 0.30 0.763 .607026 1.976055

sp77\_704\_9\_ss\_1lag | 4.74e-07 3.92e-07 -17.60 0.000 9.37e-08 2.40e-06

sp77\_704\_ss\_1lag | 1.844608 .7100346 1.59 0.112 .8674725 3.922404

sp77\_705\_ss\_1lag | .9257406 .1549274 -0.46 0.645 .6668626 1.285116

sp77\_800\_1\_ss\_1lag | .357064 .3800589 -0.97 0.333 .044333 2.875842

sp77\_800\_2\_ss\_1lag | 1.835466 2.15964 0.52 0.606 .1828976 18.41978

sp77\_800\_ss\_1lag | 1.974714 .8233559 1.63 0.103 .8721597 4.471078

sp77\_801\_1\_ss\_1lag | 1 (omitted)

sp77\_802\_ss\_1lag | .6415879 .1728074 -1.65 0.099 .3784345 1.087731

sp77\_803\_ss\_1lag | .7504476 .3457245 -0.62 0.533 .3042141 1.851234

sp77\_804\_ss\_1lag | 6.71e-07 4.59e-07 -20.77 0.000 1.76e-07 2.57e-06

sp77\_805\_ss\_1lag | .6183924 .277159 -1.07 0.284 .2568986 1.48856

sp77\_807\_1\_ss\_1lag | .8000733 .3048038 -0.59 0.558 .3791819 1.688153

sp77\_807\_2\_ss\_1lag | .9851466 .3766994 -0.04 0.969 .4656067 2.084407

sp77\_807\_3\_ss\_1lag | 1.744429 .1385763 7.00 0.000 1.492912 2.038319

sp77\_807\_ss\_1lag | 1.331503 .4147677 0.92 0.358 .7230856 2.451852

sp77\_808\_ss\_1lag | 2.658021 .9891609 2.63 0.009 1.281713 5.512215

sp77\_809\_ss\_1lag | 1.220121 .1639722 1.48 0.139 .9375836 1.587801

sp77\_810\_ss\_1lag | 1.33e-07 1.12e-07 -18.80 0.000 2.54e-08 6.91e-07

sp77\_900\_1\_ss\_1lag | 2.445302 1.266993 1.73 0.084 .8857202 6.751008

sp77\_900\_2\_ss\_1lag | 5.52e-07 5.64e-07 -14.12 0.000 7.47e-08 4.08e-06

sp77\_900\_ss\_1lag | .9693992 .6936189 -0.04 0.965 .2384821 3.940483

sp77\_901\_1\_ss\_1lag | 1.284773 1.153795 0.28 0.780 .2210049 7.468799

sp77\_901\_ss\_1lag | .9645193 .2362989 -0.15 0.883 .5967245 1.559007

sp77\_902\_3\_ss\_1lag | 3.275634 3.419399 1.14 0.256 .4233849 25.34285

sp77\_902\_ss\_1lag | 1.138837 .2399089 0.62 0.537 .7536091 1.720984

sp77\_903\_ss\_1lag | 1.144849 .5978818 0.26 0.796 .4113577 3.186227

sp77\_904\_ss\_1lag | 1.075832 .0943017 0.83 0.404 .9060096 1.277486

mine\_time | .9981573 .001791 -1.03 0.304 .9946532 1.001674

onsite\_insp\_hours | .9997408 .0001127 -2.30 0.021 .99952 .9999616

|

state |

AL | 1.142147 .0865083 1.75 0.079 .9845791 1.324932

AR | 1.967789 .2212063 6.02 0.000 1.578672 2.452817

CO | .6990262 .110442 -2.27 0.023 .5128716 .9527484

IL | 1.211452 .1059338 2.19 0.028 1.020644 1.437932

IN | .9242264 .1439599 -0.51 0.613 .6810719 1.254191

MD | 1.038627 .1735703 0.23 0.821 .7485331 1.441147

MT | .8558979 .0542022 -2.46 0.014 .7559919 .9690067

NM | .7906759 .0424545 -4.37 0.000 .7116954 .8784213

OH | 1.160333 .1246847 1.38 0.166 .9399746 1.432351

OK | .9145887 .2453219 -0.33 0.739 .5406378 1.547196

PA | .9402216 .0917974 -0.63 0.528 .7764691 1.138509

TN | 1.218745 .1589206 1.52 0.129 .9438842 1.573645

UT | .6189448 .0778567 -3.81 0.000 .4837041 .7919978

VA | .689776 .0613278 -4.18 0.000 .579466 .8210852

WV | 1.017704 .0553354 0.32 0.747 .9148274 1.132149

WY | 1.028213 .0566735 0.50 0.614 .9229248 1.145513

|

time |

2000.25 | .9696436 .1118629 -0.27 0.789 .7734163 1.215657

2000.5 | 1.124653 .1177165 1.12 0.262 .9160602 1.380744

2000.75 | .8654331 .090236 -1.39 0.166 .7054746 1.06166

2001 | .8747808 .0838404 -1.40 0.163 .7249677 1.055552

2001.25 | .795766 .0841361 -2.16 0.031 .646827 .9789999

2001.75 | .8182363 .077887 -2.11 0.035 .678975 .9860607

2002 | .8662884 .0836064 -1.49 0.137 .7169884 1.046677

2002.25 | .798513 .0847968 -2.12 0.034 .6484702 .9832725

2002.5 | 1.002697 .0984198 0.03 0.978 .827218 1.215401

2002.75 | .8662573 .0985576 -1.26 0.207 .6931101 1.082659

2003 | .725783 .0854468 -2.72 0.006 .5762281 .9141535

2003.25 | .860568 .0918455 -1.41 0.159 .6981349 1.060794

2003.5 | .9000094 .1006057 -0.94 0.346 .7229316 1.120461

2003.75 | .6755405 .0746846 -3.55 0.000 .5439345 .8389889

2004 | .8520407 .0996537 -1.37 0.171 .677493 1.071558

2004.25 | .8203221 .0907957 -1.79 0.074 .660345 1.019056

2004.5 | .8245502 .0930636 -1.71 0.087 .6609148 1.0287

2004.75 | .7313036 .0889352 -2.57 0.010 .5762109 .9281409

2005 | .6309157 .0670603 -4.33 0.000 .5122675 .7770445

2005.25 | .8020182 .086514 -2.05 0.041 .6491795 .9908403

2005.5 | .6992956 .0799988 -3.13 0.002 .5588356 .8750593

2005.75 | .6467306 .0765561 -3.68 0.000 .512818 .8156118

2006 | .677908 .0760183 -3.47 0.001 .5441517 .8445426

2006.25 | .6746583 .0816501 -3.25 0.001 .5321913 .8552635

2006.5 | .7428037 .092726 -2.38 0.017 .5815894 .948706

2006.75 | .6213056 .0788174 -3.75 0.000 .4845335 .7966852

2007 | .6427132 .0724294 -3.92 0.000 .5153384 .8015708

2007.25 | .6061286 .0793608 -3.82 0.000 .4689391 .7834533

2007.5 | .6425248 .0740063 -3.84 0.000 .5126821 .8052516

2007.75 | .6432645 .0766052 -3.70 0.000 .5093561 .8123771

2008 | .5502956 .0659014 -4.99 0.000 .4351703 .6958777

2008.25 | .5609341 .0651423 -4.98 0.000 .4467455 .7043095

2008.5 | .6595612 .0772542 -3.55 0.000 .524269 .8297667

2008.75 | .5321622 .0613348 -5.47 0.000 .424559 .667037

2009 | .5211329 .0683549 -4.97 0.000 .4029951 .6739028

2009.25 | .4819436 .0635222 -5.54 0.000 .3722239 .6240052

2009.5 | .5987909 .0754271 -4.07 0.000 .4677922 .7664739

2009.75 | .4363094 .0525029 -6.89 0.000 .3446402 .5523611

2010 | .466974 .0641355 -5.54 0.000 .3567684 .6112222

2010.25 | .4751302 .061239 -5.77 0.000 .3690644 .6116784

2010.5 | .561053 .0689337 -4.70 0.000 .4409822 .7138166

2010.75 | .4434227 .0570458 -6.32 0.000 .3445973 .5705897

2011 | .5006982 .0614985 -5.63 0.000 .3935743 .6369792

2011.25 | .5084427 .0624259 -5.51 0.000 .3996986 .6467722

2011.5 | .5593232 .0665373 -4.88 0.000 .4429999 .7061908

2011.75 | .4508769 .058672 -6.12 0.000 .3493754 .5818669

2012 | .5495062 .0652456 -5.04 0.000 .4354168 .6934896

2012.25 | .5040935 .0580107 -5.95 0.000 .402305 .6316358

2012.5 | .5653997 .0690969 -4.67 0.000 .4449703 .7184227

2012.75 | .475942 .0575232 -6.14 0.000 .3755573 .603159

2013 | .4966643 .0646254 -5.38 0.000 .3848625 .6409444

2013.25 | .4269205 .0610259 -5.95 0.000 .322606 .564965

2013.5 | .5688037 .0746766 -4.30 0.000 .4397549 .7357227

2013.75 | .4594914 .0629676 -5.67 0.000 .3512616 .6010686

2014 | .4448492 .0652063 -5.53 0.000 .3337667 .5929016

2014.25 | .4928744 .0682834 -5.11 0.000 .3756729 .6466402

2014.5 | .4923609 .0629165 -5.54 0.000 .3832767 .6324914

2014.75 | .5083571 .0672202 -5.12 0.000 .3922964 .6587544

2015 | .4743199 .0646254 -5.47 0.000 .3631586 .6195071

2015.25 | .5006616 .0736732 -4.70 0.000 .3752223 .6680362

2015.5 | .6371881 .0884313 -3.25 0.001 .4854392 .836374

2015.75 | .3758531 .0596298 -6.17 0.000 .2754059 .5129357

2016 | .5224291 .0752574 -4.51 0.000 .3939213 .6928597

|

\_cons | .0000183 1.62e-06 -123.38 0.000 .0000154 .0000218

ln(hours) | 1 (exposure)

--------------------------------------------------------------------------------------

**. estat gof**

Deviance goodness-of-fit = 20650.1

Prob > chi2(25753) = 1.0000

Pearson goodness-of-fit = 324219

Prob > chi2(25753) = 0.0000

**. glm MR `subpart\_sigsub\_lag\_1\_vars' `covariates' ib(freq).state ib(freq).time, family(nbinomial) link(log) vce(cl mineid) exposure(hours) iter(50) eform**

note: sp77\_801\_1\_ss\_1lag omitted because of collinearity

Iteration 0: log pseudolikelihood = -19084.942

Iteration 1: log pseudolikelihood = -18865.663

Iteration 2: log pseudolikelihood = -18863.789

Iteration 3: log pseudolikelihood = -18863.334

Iteration 4: log pseudolikelihood = -18863.241

Iteration 5: log pseudolikelihood = -18863.221

Iteration 6: log pseudolikelihood = -18863.217

Iteration 7: log pseudolikelihood = -18863.216

Iteration 8: log pseudolikelihood = -18863.215

Iteration 9: log pseudolikelihood = -18863.215

Iteration 10: log pseudolikelihood = -18863.215

Generalized linear models No. of obs = 26,110

Optimization : ML Residual df = 25,741

Scale parameter = 1

Deviance = 14238.78062 (1/df) Deviance = .5531557

Pearson = 289404.0366 (1/df) Pearson = 11.24292

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

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

AIC = 1.473169

Log pseudolikelihood = -18863.21539 BIC = -247549.1

(Std. Err. adjusted for 1,475 clusters in mineid)

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| Robust

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

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

sp47\_41\_ss\_1lag | .4300778 .081277 -4.46 0.000 .2969513 .6228863

sp47\_44\_ss\_1lag | 1.115914 .1496759 0.82 0.414 .8579464 1.451447

sp48\_11\_ss\_1lag | 1.009797 .1006215 0.10 0.922 .830646 1.227587

sp48\_25\_ss\_1lag | 1.03335 .1372432 0.25 0.805 .7965191 1.340599

sp48\_26\_ss\_1lag | 1.161988 .1712361 1.02 0.308 .8704913 1.551096

sp48\_27\_ss\_1lag | 1.249744 .1803085 1.55 0.122 .9419177 1.658171

sp48\_28\_ss\_1lag | .90552 .1223052 -0.73 0.462 .6949114 1.179958

sp48\_4\_ss\_1lag | 5.82e-08 4.34e-08 -22.37 0.000 1.35e-08 2.51e-07

sp48\_5\_ss\_1lag | .7845594 .1731348 -1.10 0.272 .5090783 1.209113

sp48\_6\_ss\_1lag | .9277336 .1608469 -0.43 0.665 .6604579 1.303171

sp48\_7\_ss\_1lag | 1.129013 .1018129 1.35 0.178 .9461032 1.347284

sp48\_8\_ss\_1lag | 1.0389 .2167592 0.18 0.855 .6902029 1.563764

sp71\_701\_ss\_1lag | 8.937642 2.256779 8.67 0.000 5.448691 14.66067

sp72\_503\_ss\_1lag | .8431725 .2374824 -0.61 0.545 .4854815 1.464402

sp72\_610\_ss\_1lag | 1.77e-08 1.85e-08 -17.09 0.000 2.28e-09 1.37e-07

sp72\_620\_ss\_1lag | .7454977 .246135 -0.89 0.374 .390312 1.423904

sp72\_630\_ss\_1lag | 1.060169 .0216097 2.87 0.004 1.018649 1.10338

sp75\_100\_ss\_1lag | .9010722 .3568858 -0.26 0.793 .4145968 1.958363

sp75\_1001\_1\_ss\_1lag | 1.201828 1.277981 0.17 0.863 .1495218 9.660062

sp75\_1001\_ss\_1lag | .9796655 .6734874 -0.03 0.976 .2546274 3.769212

sp75\_1003\_1\_ss\_1lag | .5348468 .1255118 -2.67 0.008 .3376596 .8471878

sp75\_1100\_2\_ss\_1lag | 1.020666 .0381756 0.55 0.584 .9485198 1.098299

sp75\_1101\_20\_ss\_1lag | 5.39e-08 5.50e-08 -16.42 0.000 7.32e-09 3.97e-07

sp75\_1102\_ss\_1lag | .9515875 .1120085 -0.42 0.673 .7555381 1.198508

sp75\_1103\_4\_ss\_1lag | 1.046286 .0745453 0.64 0.525 .9099228 1.203085

sp75\_1104\_ss\_1lag | 1.088614 .1939474 0.48 0.634 .7677572 1.543561

sp75\_1106\_2\_ss\_1lag | 1.035261 .0931437 0.39 0.700 .8678928 1.234905

sp75\_1106\_3\_ss\_1lag | 1.115957 .0460446 2.66 0.008 1.029264 1.209953

sp75\_1106\_4\_ss\_1lag | .7753127 .160569 -1.23 0.219 .5166437 1.16349

sp75\_1106\_5\_ss\_1lag | 1.008683 .101427 0.09 0.931 .8282527 1.228418

sp75\_1106\_6\_ss\_1lag | 206.1253 2803.197 0.39 0.695 5.47e-10 7.76e+13

sp75\_1106\_ss\_1lag | .9723031 .1417926 -0.19 0.847 .7305829 1.293999

sp75\_1107\_14\_ss\_1lag | 2.818993 .5321579 5.49 0.000 1.947187 4.081129

sp75\_1400\_1\_ss\_1lag | 1.038299 .3978295 0.10 0.922 .4899819 2.200212

sp75\_1400\_2\_ss\_1lag | .9584465 .2267878 -0.18 0.858 .6027765 1.52398

sp75\_1400\_3\_ss\_1lag | 1.028738 .163472 0.18 0.858 .7534322 1.404641

sp75\_1400\_4\_ss\_1lag | 1.07577 .1963999 0.40 0.689 .7521736 1.538582

sp75\_1400\_ss\_1lag | 1.064258 .0887889 0.75 0.455 .9037183 1.253317

sp75\_1401\_ss\_1lag | 1.639054 .6417092 1.26 0.207 .7609178 3.530603

sp75\_1403\_10\_ss\_1lag | 1.037912 .0360703 1.07 0.284 .9695697 1.111072

sp75\_1403\_11\_ss\_1lag | 1.744189 .3519749 2.76 0.006 1.174417 2.590388

sp75\_1403\_3\_ss\_1lag | .7764318 .4739333 -0.41 0.678 .2347094 2.568479

sp75\_1403\_4\_ss\_1lag | .7957641 .2751401 -0.66 0.509 .4040884 1.567084

sp75\_1403\_5\_ss\_1lag | .96573 .0277587 -1.21 0.225 .9128282 1.021698

sp75\_1403\_6\_ss\_1lag | .9670603 .0205074 -1.58 0.114 .9276903 1.008101

sp75\_1403\_7\_ss\_1lag | 1.042596 .1015042 0.43 0.668 .8614801 1.261788

sp75\_1403\_8\_ss\_1lag | .9776226 .0239467 -0.92 0.356 .9317967 1.025702

sp75\_1403\_9\_ss\_1lag | .6721658 .0775155 -3.44 0.001 .5361844 .8426334

sp75\_1404\_1\_ss\_1lag | 3.30e-08 1.77e-08 -32.18 0.000 1.16e-08 9.43e-08

sp75\_1404\_ss\_1lag | .8686838 .8965288 -0.14 0.892 .1149147 6.56671

sp75\_1405\_1\_ss\_1lag | 1.226773 .6039993 0.42 0.678 .4673869 3.219968

sp75\_1405\_ss\_1lag | .9489206 .027798 -1.79 0.073 .8959722 1.004998

sp75\_1431\_ss\_1lag | 1.67e-08 1.90e-08 -15.68 0.000 1.78e-09 1.56e-07

sp75\_1432\_ss\_1lag | 4.75e-07 3.75e-07 -18.44 0.000 1.01e-07 2.23e-06

sp75\_1433\_ss\_1lag | .9563587 .3136223 -0.14 0.892 .5029017 1.818689

sp75\_1434\_ss\_1lag | 1.165681 .1722858 1.04 0.300 .8725165 1.557349

sp75\_1435\_ss\_1lag | .7349592 .2180794 -1.04 0.299 .4108583 1.314724

sp75\_1437\_ss\_1lag | 1.020677 .3128253 0.07 0.947 .5597639 1.861107

sp75\_150\_ss\_1lag | 2.39753 1.599164 1.31 0.190 .6486471 8.861752

sp75\_151\_ss\_1lag | .872534 .8241313 -0.14 0.885 .1370251 5.55603

sp75\_153\_ss\_1lag | 4.402699 2.720769 2.40 0.016 1.31128 14.78232

sp75\_155\_ss\_1lag | .7407464 .1201338 -1.85 0.064 .5390415 1.017928

sp75\_156\_ss\_1lag | 7.03e-08 5.76e-08 -20.08 0.000 1.41e-08 3.51e-07

sp75\_1600\_2\_ss\_1lag | .9007042 .221569 -0.43 0.671 .5561484 1.458726

sp75\_1712\_10\_ss\_1lag | 1.56392 .3787845 1.85 0.065 .9728634 2.514069

sp75\_1712\_6\_ss\_1lag | 1.690069 1.117521 0.79 0.427 .4624509 6.176508

sp75\_1720\_ss\_1lag | .9394032 .0645006 -0.91 0.363 .8211215 1.074723

sp75\_1721\_ss\_1lag | 3.97e-07 2.59e-07 -22.61 0.000 1.11e-07 1.42e-06

sp75\_1725\_ss\_1lag | 1.000019 .0081998 0.00 0.998 .9840761 1.01622

sp75\_1726\_ss\_1lag | 1.1497 .1863153 0.86 0.389 .8368401 1.579525

sp75\_1727\_ss\_1lag | 9.13e-08 9.26e-08 -15.98 0.000 1.25e-08 6.67e-07

sp75\_1728\_ss\_1lag | 1.867199 .5430182 2.15 0.032 1.055952 3.301693

sp75\_1729\_ss\_1lag | 1.093844 .2036164 0.48 0.630 .759462 1.575449

sp75\_1730\_ss\_1lag | .6419387 .2155924 -1.32 0.187 .3323695 1.239841

sp75\_1731\_ss\_1lag | 1.01886 .0114181 1.67 0.095 .9967253 1.041487

sp75\_1903\_ss\_1lag | .9451368 .283694 -0.19 0.851 .5248031 1.702131

sp75\_1909\_ss\_1lag | 1.013206 .0328213 0.40 0.685 .9508766 1.07962

sp75\_1910\_ss\_1lag | .9741686 .0533085 -0.48 0.632 .8750938 1.08446

sp75\_1911\_ss\_1lag | .9135057 .0521457 -1.58 0.113 .816812 1.021646

sp75\_1912\_ss\_1lag | 1.78189 .5688939 1.81 0.070 .9530648 3.331495

sp75\_1913\_ss\_1lag | 1.076353 .2425466 0.33 0.744 .6920603 1.674038

sp75\_1914\_ss\_1lag | 1.022564 .0276601 0.82 0.409 .969763 1.07824

sp75\_1915\_ss\_1lag | 1.498673 .2561095 2.37 0.018 1.072122 2.094929

sp75\_202\_ss\_1lag | 1.002025 .0063304 0.32 0.749 .9896938 1.014509

sp75\_208\_ss\_1lag | 1.004364 .031169 0.14 0.888 .9450945 1.06735

sp75\_211\_ss\_1lag | 1.033922 .0341967 1.01 0.313 .9690242 1.103167

sp75\_212\_ss\_1lag | .8788127 .0768819 -1.48 0.140 .7403378 1.043188

sp75\_214\_ss\_1lag | .6604228 .1381419 -1.98 0.047 .4383031 .9951064

sp75\_312\_ss\_1lag | 1.019431 .2469752 0.08 0.937 .6340732 1.638991

sp75\_320\_ss\_1lag | .9934725 .0984963 -0.07 0.947 .8180216 1.206555

sp75\_324\_ss\_1lag | .9020954 .1177661 -0.79 0.430 .6984421 1.16513

sp75\_337\_ss\_1lag | .9055817 .0899871 -1.00 0.318 .7453226 1.1003

sp75\_340\_ss\_1lag | 1.033703 .0277751 1.23 0.217 .9806737 1.0896

sp75\_342\_ss\_1lag | .9967937 .0199218 -0.16 0.872 .9585025 1.036615

sp75\_344\_ss\_1lag | 1.130141 .1737155 0.80 0.426 .8361673 1.527467

sp75\_352\_ss\_1lag | .9770093 .0806308 -0.28 0.778 .8310948 1.148542

sp75\_382\_ss\_1lag | 1.038592 .1364674 0.29 0.773 .8027865 1.343662

sp75\_503\_ss\_1lag | .9902459 .0103459 -0.94 0.348 .9701746 1.010733

sp75\_504\_ss\_1lag | .9018543 .3949027 -0.24 0.813 .382308 2.12745

sp75\_505\_ss\_1lag | .9366713 .4441534 -0.14 0.890 .3697959 2.372533

sp75\_506\_1\_ss\_1lag | .7407906 .3595197 -0.62 0.536 .2861484 1.917784

sp75\_506\_ss\_1lag | 1.359719 .4397472 0.95 0.342 .7213764 2.562929

sp75\_507\_ss\_1lag | 1.167066 .1239591 1.45 0.146 .9477322 1.43716

sp75\_511\_1\_ss\_1lag | 2.73e-08 2.09e-08 -22.68 0.000 6.06e-09 1.23e-07

sp75\_511\_ss\_1lag | 1.040641 .0820833 0.51 0.614 .8915798 1.214624

sp75\_512\_1\_ss\_1lag | 2.912077 .7617108 4.09 0.000 1.744032 4.862407

sp75\_512\_2\_ss\_1lag | 1.074359 .0786191 0.98 0.327 .9308086 1.240047

sp75\_512\_ss\_1lag | 1.018047 .0125422 1.45 0.147 .993759 1.042928

sp75\_513\_1\_ss\_1lag | 1.553897 .6619394 1.03 0.301 .6742515 3.581152

sp75\_513\_ss\_1lag | .9315692 .1313739 -0.50 0.615 .7066022 1.228161

sp75\_514\_ss\_1lag | .9668486 .0482041 -0.68 0.499 .8768396 1.066097

sp75\_515\_ss\_1lag | .9624149 .0374167 -0.99 0.324 .8918039 1.038617

sp75\_516\_1\_ss\_1lag | .6705469 .1771039 -1.51 0.130 .3995866 1.125246

sp75\_516\_2\_ss\_1lag | .6206149 .6153704 -0.48 0.630 .088882 4.333419

sp75\_516\_ss\_1lag | 1.146722 .0699912 2.24 0.025 1.017429 1.292444

sp75\_517\_1\_ss\_1lag | .8397781 .2468932 -0.59 0.553 .4719683 1.494226

sp75\_517\_ss\_1lag | .9940803 .009404 -0.63 0.530 .9758185 1.012684

sp75\_518\_1\_ss\_1lag | .7169465 .0981953 -2.43 0.015 .548155 .9377132

sp75\_518\_ss\_1lag | 1.101259 .0456412 2.33 0.020 1.015341 1.194448

sp75\_519\_ss\_1lag | .4890207 .4406294 -0.79 0.427 .083629 2.85955

sp75\_520\_ss\_1lag | .8850476 .0627692 -1.72 0.085 .77019 1.017034

sp75\_523\_1\_ss\_1lag | .9513362 .0621837 -0.76 0.445 .8369424 1.081365

sp75\_523\_2\_ss\_1lag | 1.119836 .0599772 2.11 0.035 1.008243 1.243781

sp75\_523\_ss\_1lag | .8557021 .0490136 -2.72 0.007 .7648333 .9573668

sp75\_600\_1\_ss\_1lag | 2.99e-07 1.41e-07 -31.89 0.000 1.19e-07 7.53e-07

sp75\_600\_ss\_1lag | 1.554338 .3785091 1.81 0.070 .9644118 2.505118

sp75\_601\_1\_ss\_1lag | 1.048512 .038337 1.30 0.195 .9760015 1.126409

sp75\_601\_2\_ss\_1lag | 1.39e-07 9.15e-08 -23.96 0.000 3.81e-08 5.05e-07

sp75\_601\_3\_ss\_1lag | 1.266657 .6222187 0.48 0.630 .4836419 3.31737

sp75\_601\_ss\_1lag | .9893105 .0506033 -0.21 0.834 .8949394 1.093633

sp75\_602\_ss\_1lag | 1.052691 .0776771 0.70 0.486 .9109433 1.216494

sp75\_603\_ss\_1lag | .9763084 .1057628 -0.22 0.825 .7895452 1.20725

sp75\_604\_ss\_1lag | 1.04893 .0135667 3.69 0.000 1.022674 1.07586

sp75\_605\_ss\_1lag | 1.004632 .0549005 0.08 0.933 .902591 1.118209

sp75\_606\_ss\_1lag | 1.001987 .0288884 0.07 0.945 .9469368 1.060238

sp75\_607\_ss\_1lag | 1.076236 .1451565 0.54 0.586 .826233 1.401886

sp75\_700\_1\_ss\_1lag | .6809744 .389701 -0.67 0.502 .2218267 2.090488

sp75\_700\_ss\_1lag | .7583339 .093614 -2.24 0.025 .5953636 .9659145

sp75\_701\_1\_ss\_1lag | .9375525 .1187152 -0.51 0.611 .7315 1.201647

sp75\_701\_2\_ss\_1lag | 1.084624 .1854867 0.48 0.635 .7757315 1.516517

sp75\_701\_3\_ss\_1lag | .9983196 .1210722 -0.01 0.989 .787117 1.266193

sp75\_701\_4\_ss\_1lag | 4.100998 4.496664 1.29 0.198 .4781494 35.17349

sp75\_701\_5\_ss\_1lag | .8797868 .0720852 -1.56 0.118 .7492632 1.033048

sp75\_701\_ss\_1lag | 1.056275 .0406217 1.42 0.155 .979585 1.13897

sp75\_703\_2\_ss\_1lag | .6341229 .1904354 -1.52 0.129 .3520031 1.142353

sp75\_703\_3\_ss\_1lag | 1.379283 .2762238 1.61 0.108 .931508 2.042304

sp75\_703\_ss\_1lag | .9689466 .0781192 -0.39 0.696 .8273201 1.134818

sp75\_704\_ss\_1lag | 2.378491 1.305093 1.58 0.114 .8114127 6.972062

sp75\_705\_1\_ss\_1lag | .642532 .2042809 -1.39 0.164 .3445651 1.198169

sp75\_705\_8\_ss\_1lag | 2.59e-07 2.20e-07 -17.89 0.000 4.92e-08 1.36e-06

sp75\_705\_ss\_1lag | .9185167 .4733742 -0.16 0.869 .3345068 2.52214

sp75\_706\_ss\_1lag | 1.118759 .2534299 0.50 0.620 .7176554 1.744044

sp75\_800\_2\_ss\_1lag | 3.15e-07 3.16e-07 -14.90 0.000 4.39e-08 2.25e-06

sp75\_800\_3\_ss\_1lag | .9709589 .5137033 -0.06 0.956 .3442368 2.738699

sp75\_800\_4\_ss\_1lag | 1.33e-07 8.54e-08 -24.62 0.000 3.77e-08 4.68e-07

sp75\_800\_ss\_1lag | .9058455 .1739132 -0.52 0.607 .6217733 1.319703

sp75\_801\_ss\_1lag | .9931672 .4317612 -0.02 0.987 .4236216 2.328448

sp75\_802\_ss\_1lag | .6269795 .2184675 -1.34 0.180 .3167065 1.241223

sp75\_803\_2\_ss\_1lag | 4.16e-08 2.97e-08 -23.79 0.000 1.02e-08 1.69e-07

sp75\_803\_ss\_1lag | 1.110555 .1572312 0.74 0.459 .8414489 1.465724

sp75\_804\_ss\_1lag | 1.196977 .148916 1.45 0.148 .9379678 1.52751

sp75\_805\_ss\_1lag | .5094748 .1920809 -1.79 0.074 .2433352 1.066696

sp75\_806\_ss\_1lag | 1.960408 .4725605 2.79 0.005 1.222256 3.144346

sp75\_807\_ss\_1lag | 1.06469 .0412704 1.62 0.106 .9867976 1.14873

sp75\_808\_ss\_1lag | 1.459386 .3514782 1.57 0.117 .9102636 2.339771

sp75\_809\_ss\_1lag | 1.175995 .1071115 1.78 0.075 .9837316 1.405834

sp75\_810\_ss\_1lag | .9703889 .2452813 -0.12 0.905 .5912771 1.592578

sp75\_811\_ss\_1lag | 1.138573 .2494182 0.59 0.554 .7411311 1.74915

sp75\_812\_ss\_1lag | .7514909 .2021428 -1.06 0.288 .4435676 1.273173

sp75\_814\_ss\_1lag | .8008392 .0810985 -2.19 0.028 .6566694 .976661

sp75\_815\_ss\_1lag | .59351 .3574785 -0.87 0.386 .1822799 1.932491

sp75\_816\_ss\_1lag | 1.170922 .1886 0.98 0.327 .8539356 1.605575

sp75\_818\_ss\_1lag | .9002175 .0978639 -0.97 0.334 .727465 1.113994

sp75\_819\_ss\_1lag | 2.546069 .8935017 2.66 0.008 1.279837 5.065071

sp75\_820\_ss\_1lag | .9666324 .1782583 -0.18 0.854 .6734259 1.387499

sp75\_821\_ss\_1lag | 1.39047 .6450938 0.71 0.477 .5600873 3.451974

sp75\_825\_ss\_1lag | 1.500297 .5959271 1.02 0.307 .6887709 3.267982

sp75\_827\_ss\_1lag | 1.199518 .2043317 1.07 0.286 .8590313 1.674961

sp75\_831\_ss\_1lag | 1.625505 .2039395 3.87 0.000 1.271144 2.078653

sp75\_900\_2\_ss\_1lag | .299801 .1804826 -2.00 0.045 .0921304 .9755806

sp75\_900\_3\_ss\_1lag | .9794816 .1756508 -0.12 0.908 .6892076 1.392011

sp75\_900\_4\_ss\_1lag | 1.429669 .3159984 1.62 0.106 .927033 2.204834

sp75\_900\_ss\_1lag | .9527883 .0394115 -1.17 0.242 .8785915 1.033251

sp75\_901\_ss\_1lag | 1.072092 .2020615 0.37 0.712 .7409736 1.551177

sp75\_902\_1\_ss\_1lag | 1.11903 .3299147 0.38 0.703 .6278974 1.994319

sp75\_902\_2\_ss\_1lag | 1.343109 .2096913 1.89 0.059 .9890501 1.823913

sp75\_902\_4\_ss\_1lag | 1.007945 .1537108 0.05 0.959 .7475311 1.359078

sp75\_902\_ss\_1lag | 1.00673 .0597181 0.11 0.910 .8962326 1.130851

sp75\_903\_ss\_1lag | 1.069595 .1017224 0.71 0.479 .8877012 1.288759

sp75\_904\_ss\_1lag | 1.024005 .0287936 0.84 0.399 .9690976 1.082024

sp75\_905\_ss\_1lag | 1.162677 .3575505 0.49 0.624 .6363478 2.124338

sp75\_907\_ss\_1lag | .7659904 .2022408 -1.01 0.313 .4565461 1.285174

sp77\_103\_ss\_1lag | .0003506 .0001793 -15.56 0.000 .0001287 .0009552

sp77\_1103\_ss\_1lag | .9163186 .094732 -0.85 0.398 .7482497 1.122139

sp77\_1104\_ss\_1lag | 1.023351 .0262322 0.90 0.368 .9732068 1.076078

sp77\_1106\_ss\_1lag | 1.01e-07 1.01e-07 -16.05 0.000 1.41e-08 7.20e-07

sp77\_1111\_ss\_1lag | 1.805189 .7731579 1.38 0.168 .7797498 4.179171

sp77\_1112\_ss\_1lag | 1.062994 .177141 0.37 0.714 .7668031 1.473595

sp77\_1403\_ss\_1lag | .601571 .3198987 -0.96 0.339 .2121493 1.705816

sp77\_1433\_ss\_1lag | .3362769 .1024669 -3.58 0.000 .1850664 .6110356

sp77\_1434\_ss\_1lag | .7051869 .2147975 -1.15 0.251 .3881782 1.281083

sp77\_1437\_ss\_1lag | .3028261 .0474677 -7.62 0.000 .2227246 .4117356

sp77\_1438\_ss\_1lag | .2052255 .2394019 -1.36 0.175 .0208583 2.019223

sp77\_1605\_ss\_1lag | .9880385 .0299137 -0.40 0.691 .9311144 1.048443

sp77\_1606\_ss\_1lag | 1.039471 .0459111 0.88 0.381 .9532717 1.133465

sp77\_1710\_ss\_1lag | .9499241 .0350966 -1.39 0.164 .8835677 1.021264

sp77\_1802\_ss\_1lag | .9570074 .198415 -0.21 0.832 .6374363 1.436791

sp77\_1906\_ss\_1lag | 2.350577 1.09526 1.83 0.067 .943092 5.858613

sp77\_1915\_ss\_1lag | 2.191751 1.200884 1.43 0.152 .7488736 6.414661

sp77\_1916\_ss\_1lag | 1.152071 .2055527 0.79 0.428 .8120969 1.634372

sp77\_200\_ss\_1lag | .95828 .030226 -1.35 0.177 .9008322 1.019391

sp77\_202\_ss\_1lag | .9171737 .0324604 -2.44 0.015 .8557089 .9830533

sp77\_203\_ss\_1lag | .9365341 .1797776 -0.34 0.733 .6428749 1.364334

sp77\_204\_ss\_1lag | 1.007679 .0496162 0.16 0.877 .9149776 1.109772

sp77\_205\_ss\_1lag | 1.028149 .0197075 1.45 0.148 .99024 1.06751

sp77\_206\_ss\_1lag | .9507551 .0913465 -0.53 0.599 .7875661 1.147758

sp77\_207\_ss\_1lag | 1.052902 .1183042 0.46 0.646 .844786 1.312287

sp77\_208\_ss\_1lag | .9704647 .0479879 -0.61 0.544 .8808241 1.069228

sp77\_210\_ss\_1lag | 1.011997 .1516511 0.08 0.937 .7544384 1.357484

sp77\_216\_ss\_1lag | 1.543472 .401927 1.67 0.096 .9264932 2.571316

sp77\_315\_ss\_1lag | .2662899 .1208876 -2.91 0.004 .1093792 .6482979

sp77\_400\_ss\_1lag | 1.014742 .0197733 0.75 0.453 .9767172 1.054246

sp77\_401\_ss\_1lag | .9124923 .1417149 -0.59 0.555 .673028 1.237158

sp77\_402\_ss\_1lag | 1.011911 .0883518 0.14 0.892 .8527514 1.200777

sp77\_403\_1\_ss\_1lag | .6035561 .1722169 -1.77 0.077 .3450153 1.055837

sp77\_403\_ss\_1lag | 1.928002 .8593902 1.47 0.141 .8048069 4.618736

sp77\_404\_ss\_1lag | .982779 .0182167 -0.94 0.349 .9477157 1.01914

sp77\_405\_ss\_1lag | .7621761 .1835394 -1.13 0.259 .4754203 1.221892

sp77\_408\_ss\_1lag | .6125775 .1163873 -2.58 0.010 .4221202 .8889676

sp77\_409\_ss\_1lag | .2275566 .1294453 -2.60 0.009 .074625 .693896

sp77\_410\_ss\_1lag | .9983308 .0318113 -0.05 0.958 .9378889 1.062668

sp77\_411\_ss\_1lag | 2.45e-08 2.47e-08 -17.40 0.000 3.41e-09 1.76e-07

sp77\_412\_ss\_1lag | 1.011777 .2002414 0.06 0.953 .6864723 1.491237

sp77\_413\_ss\_1lag | .8484191 .1352297 -1.03 0.302 .6207793 1.159534

sp77\_500\_ss\_1lag | .9657023 .2698815 -0.12 0.901 .55842 1.670035

sp77\_501\_ss\_1lag | 1.166077 .1497174 1.20 0.231 .906647 1.499742

sp77\_502\_1\_ss\_1lag | 1.072681 .1703386 0.44 0.659 .785782 1.464329

sp77\_502\_2\_ss\_1lag | 1 .1429918 0.00 1.000 .7555885 1.323473

sp77\_502\_ss\_1lag | .9902712 .022059 -0.44 0.661 .9479665 1.034464

sp77\_503\_1\_ss\_1lag | 2.160978 2.18442 0.76 0.446 .2979993 15.6706

sp77\_503\_ss\_1lag | .9492099 .3181298 -0.16 0.876 .4921303 1.830815

sp77\_504\_ss\_1lag | .9505387 .0915404 -0.53 0.598 .7870385 1.148005

sp77\_505\_ss\_1lag | .8380271 .0830486 -1.78 0.075 .690087 1.017682

sp77\_506\_1\_ss\_1lag | .8817524 .2221394 -0.50 0.617 .5381507 1.444739

sp77\_506\_ss\_1lag | 1.202468 .2175893 1.02 0.308 .8434258 1.714354

sp77\_507\_ss\_1lag | 1.022679 .1718285 0.13 0.894 .7357365 1.421532

sp77\_508\_1\_ss\_1lag | 7.04e-08 3.22e-08 -35.99 0.000 2.87e-08 1.73e-07

sp77\_508\_ss\_1lag | 1.494071 .6908284 0.87 0.385 .6036606 3.697853

sp77\_509\_ss\_1lag | .7416787 .1035607 -2.14 0.032 .5641082 .975145

sp77\_510\_ss\_1lag | .5094691 .0804167 -4.27 0.000 .3739045 .6941847

sp77\_511\_ss\_1lag | .7706697 .4516125 -0.44 0.657 .2443792 2.43037

sp77\_512\_ss\_1lag | .9244944 .0563317 -1.29 0.198 .8204242 1.041766

sp77\_513\_ss\_1lag | .8957109 .08649 -1.14 0.254 .7412687 1.082331

sp77\_514\_ss\_1lag | 4.692697 1.744466 4.16 0.000 2.264625 9.724084

sp77\_515\_ss\_1lag | 2.950451 1.73063 1.84 0.065 .9345524 9.31479

sp77\_516\_ss\_1lag | .9151141 .0606623 -1.34 0.181 .803618 1.042079

sp77\_600\_ss\_1lag | 1.070821 .2545462 0.29 0.773 .6720118 1.706307

sp77\_601\_ss\_1lag | .9921781 .3716506 -0.02 0.983 .4761525 2.067441

sp77\_602\_ss\_1lag | .8739841 .2308228 -0.51 0.610 .520832 1.466592

sp77\_603\_ss\_1lag | 4.482046 1.730258 3.89 0.000 2.103181 9.551596

sp77\_604\_ss\_1lag | 1.477736 .2139077 2.70 0.007 1.112711 1.962508

sp77\_605\_ss\_1lag | 5.25e-08 3.30e-08 -26.67 0.000 1.53e-08 1.80e-07

sp77\_606\_ss\_1lag | 1.73e-07 1.74e-07 -15.47 0.000 2.40e-08 1.24e-06

sp77\_700\_1\_ss\_1lag | 2.200446 1.210704 1.43 0.152 .7484665 6.469179

sp77\_700\_ss\_1lag | 1.366261 .4832724 0.88 0.378 .6830425 2.732875

sp77\_701\_1\_ss\_1lag | .437359 .2077154 -1.74 0.082 .1724153 1.109431

sp77\_701\_2\_ss\_1lag | 1.086477 .3505314 0.26 0.797 .5772933 2.044771

sp77\_701\_3\_ss\_1lag | .4384169 .0643577 -5.62 0.000 .3288022 .5845746

sp77\_701\_4\_ss\_1lag | .681085 .2541846 -1.03 0.303 .3277392 1.415384

sp77\_701\_ss\_1lag | .9372341 .0771335 -0.79 0.431 .7976181 1.101289

sp77\_704\_1\_ss\_1lag | 1.054953 .5764899 0.10 0.922 .3614807 3.078796

sp77\_704\_8\_ss\_1lag | 1.030667 .3177107 0.10 0.922 .5632861 1.885851

sp77\_704\_9\_ss\_1lag | 1.22e-07 9.97e-08 -19.45 0.000 2.45e-08 6.06e-07

sp77\_704\_ss\_1lag | 1.633907 .6613632 1.21 0.225 .7390657 3.612199

sp77\_705\_ss\_1lag | .9287957 .2145217 -0.32 0.749 .5906365 1.460562

sp77\_800\_1\_ss\_1lag | .4203896 .4696316 -0.78 0.438 .0470702 3.754553

sp77\_800\_2\_ss\_1lag | 3.548642 5.023888 0.89 0.371 .2213085 56.90185

sp77\_800\_ss\_1lag | 1.790044 .6449903 1.62 0.106 .883401 3.627182

sp77\_801\_1\_ss\_1lag | 1 (omitted)

sp77\_802\_ss\_1lag | .7095897 .208345 -1.17 0.243 .3991013 1.261628

sp77\_803\_ss\_1lag | .665848 .3315069 -0.82 0.414 .2509493 1.766706

sp77\_804\_ss\_1lag | 1.98e-07 1.40e-07 -21.80 0.000 4.93e-08 7.92e-07

sp77\_805\_ss\_1lag | .7717077 .4577352 -0.44 0.662 .2413049 2.467968

sp77\_807\_1\_ss\_1lag | .6260474 .2717428 -1.08 0.281 .267383 1.46582

sp77\_807\_2\_ss\_1lag | 1.066664 .3986604 0.17 0.863 .512738 2.219014

sp77\_807\_3\_ss\_1lag | 1.95691 .4929611 2.67 0.008 1.19439 3.206234

sp77\_807\_ss\_1lag | 1.264057 .4061239 0.73 0.466 .6734225 2.372717

sp77\_808\_ss\_1lag | 1.971526 .9417761 1.42 0.155 .773024 5.028194

sp77\_809\_ss\_1lag | 1.156212 .1631355 1.03 0.304 .8768742 1.524535

sp77\_810\_ss\_1lag | 3.61e-08 2.73e-08 -22.64 0.000 8.20e-09 1.59e-07

sp77\_900\_1\_ss\_1lag | 2.749095 1.764465 1.58 0.115 .7813735 9.672098

sp77\_900\_2\_ss\_1lag | 1.87e-07 1.92e-07 -15.07 0.000 2.49e-08 1.40e-06

sp77\_900\_ss\_1lag | .9218153 .5336563 -0.14 0.888 .2963925 2.866953

sp77\_901\_1\_ss\_1lag | 1.295173 1.040247 0.32 0.747 .2683284 6.251571

sp77\_901\_ss\_1lag | 1.126698 .3793528 0.35 0.723 .5823884 2.179728

sp77\_902\_3\_ss\_1lag | 3.85932 4.456234 1.17 0.242 .401472 37.09934

sp77\_902\_ss\_1lag | .9876797 .286988 -0.04 0.966 .5588359 1.745613

sp77\_903\_ss\_1lag | .8990034 .4695099 -0.20 0.838 .3230101 2.50211

sp77\_904\_ss\_1lag | 1.079395 .1098458 0.75 0.453 .8842133 1.317662

mine\_time | .9984165 .0016143 -0.98 0.327 .9952575 1.001585

onsite\_insp\_hours | .999763 .0001205 -1.97 0.049 .9995268 .9999993

|

state |

AL | 1.219966 .1029195 2.36 0.018 1.034042 1.43932

AR | 1.961114 .1166496 11.32 0.000 1.745309 2.203604

CO | .7604047 .1231073 -1.69 0.091 .5536531 1.044364

IL | 1.249792 .097563 2.86 0.004 1.072482 1.456416

IN | .9738511 .1545089 -0.17 0.867 .7135805 1.329053

MD | 1.103182 .1876119 0.58 0.564 .790475 1.539594

MT | .9462779 .0552867 -0.95 0.345 .8438921 1.061086

NM | .8616057 .0432142 -2.97 0.003 .7809374 .9506068

OH | 1.040361 .1435908 0.29 0.774 .7937819 1.363538

OK | .9688906 .2505024 -0.12 0.903 .5837143 1.608234

PA | 1.065298 .0938098 0.72 0.473 .8964267 1.265983

TN | 1.324909 .1753862 2.13 0.034 1.022133 1.717373

UT | .6655543 .0892108 -3.04 0.002 .5117862 .8655226

VA | .7411474 .0532395 -4.17 0.000 .6438126 .8531978

WV | 1.126486 .0554541 2.42 0.016 1.022877 1.24059

WY | 1.114586 .0561623 2.15 0.031 1.009771 1.230281

|

time |

2000.25 | .9738318 .1072762 -0.24 0.810 .7847234 1.208513

2000.5 | 1.211366 .1286135 1.81 0.071 .9837879 1.49159

2000.75 | .8803956 .097366 -1.15 0.249 .7088274 1.093491

2001 | .8836381 .0903184 -1.21 0.226 .7232217 1.079636

2001.25 | .857793 .0962664 -1.37 0.172 .6884238 1.068831

2001.75 | .883097 .0917758 -1.20 0.232 .7203562 1.082604

2002 | .8757321 .087396 -1.33 0.184 .7201506 1.064925

2002.25 | .8036479 .0887714 -1.98 0.048 .6472046 .9979068

2002.5 | 1.02796 .1068482 0.27 0.791 .8384954 1.260236

2002.75 | .9415149 .1059068 -0.54 0.592 .7552301 1.173749

2003 | .7792577 .0890551 -2.18 0.029 .6228796 .9748955

2003.25 | .8866671 .1074757 -0.99 0.321 .6991716 1.124443

2003.5 | .9561176 .1047897 -0.41 0.682 .7712947 1.185229

2003.75 | .6550752 .0758396 -3.65 0.000 .5220903 .8219336

2004 | .8954954 .1058556 -0.93 0.350 .7103031 1.128972

2004.25 | .8152392 .0866528 -1.92 0.055 .6619266 1.004061

2004.5 | .8310627 .0939069 -1.64 0.101 .6659649 1.03709

2004.75 | .7312436 .0873619 -2.62 0.009 .5785872 .9241774

2005 | .6400477 .0731787 -3.90 0.000 .5115544 .8008163

2005.25 | .817647 .084233 -1.95 0.051 .6681532 1.000589

2005.5 | .6805154 .0771617 -3.39 0.001 .5449073 .8498716

2005.75 | .6674059 .0805245 -3.35 0.001 .5268537 .8454541

2006 | .716196 .0805309 -2.97 0.003 .5745404 .8927774

2006.25 | .723673 .0911219 -2.57 0.010 .5654089 .9262369

2006.5 | .7557751 .0892945 -2.37 0.018 .5995473 .9527122

2006.75 | .6381121 .0771137 -3.72 0.000 .503538 .8086522

2007 | .6337307 .0730614 -3.96 0.000 .5055588 .7943974

2007.25 | .6298806 .0798507 -3.65 0.000 .4913042 .8075437

2007.5 | .6691239 .0764814 -3.52 0.000 .5348272 .837143

2007.75 | .6579044 .0775196 -3.55 0.000 .5222366 .8288162

2008 | .539979 .0623586 -5.34 0.000 .4306032 .677137

2008.25 | .5899028 .0682538 -4.56 0.000 .4702118 .7400609

2008.5 | .6609561 .0766584 -3.57 0.000 .5265618 .8296519

2008.75 | .5163266 .0598217 -5.71 0.000 .4114377 .6479551

2009 | .5051176 .061958 -5.57 0.000 .3971766 .6423939

2009.25 | .4737976 .0582628 -6.07 0.000 .3723237 .6029275

2009.5 | .5907398 .073803 -4.21 0.000 .4624374 .7546394

2009.75 | .4330381 .0539905 -6.71 0.000 .3391561 .5529076

2010 | .4636487 .0600142 -5.94 0.000 .359758 .597541

2010.25 | .4786242 .0599362 -5.88 0.000 .3744571 .6117687

2010.5 | .5966901 .0727791 -4.23 0.000 .4698148 .7578286

2010.75 | .4518462 .0574182 -6.25 0.000 .3522284 .5796379

2011 | .5434604 .0661482 -5.01 0.000 .4281169 .6898796

2011.25 | .5212883 .0625774 -5.43 0.000 .4119994 .6595676

2011.5 | .5684341 .0646385 -4.97 0.000 .4548699 .7103511

2011.75 | .4588296 .0583827 -6.12 0.000 .3575544 .5887903

2012 | .5425124 .0631301 -5.26 0.000 .4318755 .681492

2012.25 | .5070887 .0592164 -5.82 0.000 .4033509 .6375068

2012.5 | .6086127 .0756717 -3.99 0.000 .4769877 .7765598

2012.75 | .4608075 .0587783 -6.07 0.000 .358876 .5916905

2013 | .4667859 .0579802 -6.13 0.000 .3659221 .5954521

2013.25 | .4032218 .0547543 -6.69 0.000 .3089994 .5261753

2013.5 | .5220657 .0663296 -5.12 0.000 .4069848 .6696874

2013.75 | .4509446 .0604181 -5.94 0.000 .3467993 .5863651

2014 | .4064123 .0575454 -6.36 0.000 .307923 .5364035

2014.25 | .4570833 .0609256 -5.87 0.000 .3519953 .5935453

2014.5 | .4697513 .0605005 -5.87 0.000 .3649551 .6046395

2014.75 | .4838993 .0629132 -5.58 0.000 .3750488 .6243416

2015 | .4555728 .0627394 -5.71 0.000 .3478036 .5967349

2015.25 | .4904127 .073054 -4.78 0.000 .3662376 .65669

2015.5 | .6260584 .0830472 -3.53 0.000 .4827277 .8119468

2015.75 | .3683806 .0584784 -6.29 0.000 .2698815 .5028291

2016 | .5234346 .0771889 -4.39 0.000 .3920477 .6988531

|

\_cons | .000017 1.39e-06 -134.56 0.000 .0000145 .00002

ln(hours) | 1 (exposure)

--------------------------------------------------------------------------------------

**. eststo: nbreg MR `subpart\_sigsub\_lag\_1\_vars' `covariates' ib(freq).state ib(freq).time, vce(cl mineid) exposure(hours) iter(50) irr**

note: sp77\_801\_1\_ss\_1lag omitted because of collinearity

Fitting Poisson model:

Iteration 0: log pseudolikelihood = -87009.458

Iteration 1: log pseudolikelihood = -52672.566 (backed up)

Iteration 2: log pseudolikelihood = -32752.533

Iteration 3: log pseudolikelihood = -24357.856

Iteration 4: log pseudolikelihood = -19217.664

Iteration 5: log pseudolikelihood = -18643.091

Iteration 6: log pseudolikelihood = -18517.499

Iteration 7: log pseudolikelihood = -18501.563

Iteration 8: log pseudolikelihood = -18501.245

Iteration 9: log pseudolikelihood = -18501.245

Fitting constant-only model:

Iteration 0: log pseudolikelihood = -19311.72

Iteration 1: log pseudolikelihood = -19057.693

Iteration 2: log pseudolikelihood = -19051.142

Iteration 3: log pseudolikelihood = -19051.138

Iteration 4: log pseudolikelihood = -19051.138

Fitting full model:

Iteration 0: log pseudolikelihood = -18473.61

Iteration 1: log pseudolikelihood = -18417.405

Iteration 2: log pseudolikelihood = -18414.13

Iteration 3: log pseudolikelihood = -18414.1

Iteration 4: log pseudolikelihood = -18414.1

Negative binomial regression Number of obs = 26,110

Wald chi2(356) = .

Dispersion = mean Prob > chi2 = .

Log pseudolikelihood = -18414.1 Pseudo R2 = 0.0334

(Std. Err. adjusted for 1,475 clusters in mineid)

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| Robust

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

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

sp47\_41\_ss\_1lag | .4597224 .0743107 -4.81 0.000 .3348923 .6310824

sp47\_44\_ss\_1lag | 1.048408 .1354827 0.37 0.715 .8138271 1.350606

sp48\_11\_ss\_1lag | .9949211 .0922896 -0.05 0.956 .8295271 1.193292

sp48\_25\_ss\_1lag | 1.034052 .1367146 0.25 0.800 .7980002 1.339929

sp48\_26\_ss\_1lag | 1.147131 .196343 0.80 0.423 .8202031 1.604371

sp48\_27\_ss\_1lag | 1.182874 .1752288 1.13 0.257 .8847961 1.581372

sp48\_28\_ss\_1lag | .9786419 .124675 -0.17 0.865 .7624023 1.256213

sp48\_4\_ss\_1lag | 1.40e-09 1.04e-09 -27.53 0.000 3.28e-10 5.98e-09

sp48\_5\_ss\_1lag | .852818 .1723485 -0.79 0.431 .5738978 1.267296

sp48\_6\_ss\_1lag | .9432364 .1394296 -0.40 0.693 .7059851 1.260218

sp48\_7\_ss\_1lag | 1.084904 .0890899 0.99 0.321 .9236179 1.274354

sp48\_8\_ss\_1lag | 1.063901 .2019248 0.33 0.744 .7334089 1.543322

sp71\_701\_ss\_1lag | 8.566352 1.942274 9.47 0.000 5.492885 13.35953

sp72\_503\_ss\_1lag | .803612 .2095781 -0.84 0.402 .4820113 1.339787

sp72\_610\_ss\_1lag | 2.98e-10 3.10e-10 -21.09 0.000 3.88e-11 2.29e-09

sp72\_620\_ss\_1lag | .9818689 .3048051 -0.06 0.953 .5343329 1.804243

sp72\_630\_ss\_1lag | 1.055516 .0201338 2.83 0.005 1.016783 1.095724

sp75\_100\_ss\_1lag | .955153 .3686828 -0.12 0.905 .4482442 2.035313

sp75\_1001\_1\_ss\_1lag | 1.343399 1.081728 0.37 0.714 .2772059 6.510396

sp75\_1001\_ss\_1lag | 1.000095 .5337663 0.00 1.000 .3513513 2.846694

sp75\_1003\_1\_ss\_1lag | .5473916 .1209711 -2.73 0.006 .3549656 .8441311

sp75\_1100\_2\_ss\_1lag | 1.015714 .0335538 0.47 0.637 .9520333 1.083654

sp75\_1101\_20\_ss\_1lag | 9.69e-10 9.86e-10 -20.40 0.000 1.32e-10 7.12e-09

sp75\_1102\_ss\_1lag | .9230568 .1019989 -0.72 0.469 .7433094 1.146271

sp75\_1103\_4\_ss\_1lag | 1.037887 .0696374 0.55 0.579 .9099937 1.183755

sp75\_1104\_ss\_1lag | 1.15819 .1987703 0.86 0.392 .8273617 1.621304

sp75\_1106\_2\_ss\_1lag | 1.08913 .0872819 1.07 0.287 .930819 1.274366

sp75\_1106\_3\_ss\_1lag | 1.113099 .0419372 2.84 0.004 1.033865 1.198405

sp75\_1106\_4\_ss\_1lag | .8223684 .1544623 -1.04 0.298 .5690998 1.18835

sp75\_1106\_5\_ss\_1lag | 1.03933 .0965387 0.42 0.678 .8663415 1.24686

sp75\_1106\_6\_ss\_1lag | 3.198776 6.275747 0.59 0.553 .0683901 149.6147

sp75\_1106\_ss\_1lag | .9891898 .1397773 -0.08 0.939 .7498956 1.304844

sp75\_1107\_14\_ss\_1lag | 2.892507 .4921132 6.24 0.000 2.072318 4.037315

sp75\_1400\_1\_ss\_1lag | 1.180086 .4452392 0.44 0.661 .5633269 2.472104

sp75\_1400\_2\_ss\_1lag | 1.11994 .2379179 0.53 0.594 .738528 1.698331

sp75\_1400\_3\_ss\_1lag | 1.068141 .1506861 0.47 0.640 .8101155 1.408349

sp75\_1400\_4\_ss\_1lag | 1.163682 .1930592 0.91 0.361 .8406535 1.610838

sp75\_1400\_ss\_1lag | 1.067142 .0932611 0.74 0.457 .8991512 1.266518

sp75\_1401\_ss\_1lag | 1.426413 .4130221 1.23 0.220 .808681 2.516015

sp75\_1403\_10\_ss\_1lag | 1.033215 .0304159 1.11 0.267 .9752886 1.094583

sp75\_1403\_11\_ss\_1lag | 1.819273 .3761738 2.89 0.004 1.213092 2.728363

sp75\_1403\_3\_ss\_1lag | .8984363 .525729 -0.18 0.855 .2853633 2.828632

sp75\_1403\_4\_ss\_1lag | .9449541 .2958465 -0.18 0.856 .5115833 1.745441

sp75\_1403\_5\_ss\_1lag | .967284 .0256111 -1.26 0.209 .9183674 1.018806

sp75\_1403\_6\_ss\_1lag | .9628182 .0206201 -1.77 0.077 .9232401 1.004093

sp75\_1403\_7\_ss\_1lag | 1.039214 .0941415 0.42 0.671 .8701521 1.241122

sp75\_1403\_8\_ss\_1lag | .9764468 .0189482 -1.23 0.219 .9400065 1.0143

sp75\_1403\_9\_ss\_1lag | .6697328 .0788635 -3.40 0.001 .5317034 .8435945

sp75\_1404\_1\_ss\_1lag | 9.51e-10 5.41e-10 -36.51 0.000 3.12e-10 2.90e-09

sp75\_1404\_ss\_1lag | .7054403 .7343973 -0.34 0.737 .0916892 5.427528

sp75\_1405\_1\_ss\_1lag | 1.070626 .279228 0.26 0.794 .6421513 1.784999

sp75\_1405\_ss\_1lag | .9511225 .0229578 -2.08 0.038 .9071739 .9972003

sp75\_1431\_ss\_1lag | 2.91e-10 3.29e-10 -19.38 0.000 3.15e-11 2.68e-09

sp75\_1432\_ss\_1lag | 1.02e-08 7.74e-09 -24.19 0.000 2.29e-09 4.52e-08

sp75\_1433\_ss\_1lag | .9590803 .2511834 -0.16 0.873 .5740174 1.602451

sp75\_1434\_ss\_1lag | 1.122864 .1894062 0.69 0.492 .8067614 1.56282

sp75\_1435\_ss\_1lag | .827248 .2452461 -0.64 0.522 .4626881 1.479051

sp75\_1437\_ss\_1lag | 1.060066 .3152285 0.20 0.844 .591853 1.898681

sp75\_150\_ss\_1lag | 2.505336 1.615716 1.42 0.154 .7078116 8.867766

sp75\_151\_ss\_1lag | 1.031795 .7396829 0.04 0.965 .2531486 4.205434

sp75\_153\_ss\_1lag | 4.2221 2.397451 2.54 0.011 1.387355 12.849

sp75\_155\_ss\_1lag | .7895873 .1233922 -1.51 0.131 .5812717 1.072559

sp75\_156\_ss\_1lag | 1.26e-09 1.02e-09 -25.24 0.000 2.56e-10 6.17e-09

sp75\_1600\_2\_ss\_1lag | .9268316 .2019285 -0.35 0.727 .6047137 1.420535

sp75\_1712\_10\_ss\_1lag | 1.581263 .4290645 1.69 0.091 .9290447 2.691359

sp75\_1712\_6\_ss\_1lag | 1.527497 .9690506 0.67 0.504 .4405291 5.296466

sp75\_1720\_ss\_1lag | .9453108 .0608016 -0.87 0.382 .8333473 1.072317

sp75\_1721\_ss\_1lag | 1.45e-08 9.41e-09 -27.75 0.000 4.04e-09 5.17e-08

sp75\_1725\_ss\_1lag | .996449 .0073004 -0.49 0.627 .9822427 1.010861

sp75\_1726\_ss\_1lag | 1.108275 .1680855 0.68 0.498 .8232864 1.491916

sp75\_1727\_ss\_1lag | 1.59e-09 1.61e-09 -20.03 0.000 2.19e-10 1.16e-08

sp75\_1728\_ss\_1lag | 2.032678 .6375337 2.26 0.024 1.099248 3.758732

sp75\_1729\_ss\_1lag | 1.122838 .1898147 0.69 0.493 .8061616 1.56391

sp75\_1730\_ss\_1lag | .6764352 .2169351 -1.22 0.223 .3607804 1.268263

sp75\_1731\_ss\_1lag | 1.021758 .010977 2.00 0.045 1.000468 1.0435

sp75\_1903\_ss\_1lag | .8702024 .2111823 -0.57 0.567 .5408155 1.400204

sp75\_1909\_ss\_1lag | 1.01552 .0306558 0.51 0.610 .9571789 1.077417

sp75\_1910\_ss\_1lag | 1.000559 .0541399 0.01 0.992 .8998796 1.112502

sp75\_1911\_ss\_1lag | .9026742 .0496495 -1.86 0.063 .8104247 1.005424

sp75\_1912\_ss\_1lag | 2.021025 .5823067 2.44 0.015 1.149 3.55487

sp75\_1913\_ss\_1lag | 1.115483 .2086107 0.58 0.559 .7731725 1.609345

sp75\_1914\_ss\_1lag | 1.016806 .0226584 0.75 0.455 .9733524 1.0622

sp75\_1915\_ss\_1lag | 1.484681 .2589901 2.27 0.023 1.054747 2.089864

sp75\_202\_ss\_1lag | 1.001617 .0061209 0.26 0.792 .9896913 1.013685

sp75\_208\_ss\_1lag | 1.010618 .0298214 0.36 0.720 .9538276 1.070791

sp75\_211\_ss\_1lag | 1.043868 .0345791 1.30 0.195 .9782476 1.11389

sp75\_212\_ss\_1lag | .9225122 .0817357 -0.91 0.363 .7754515 1.097462

sp75\_214\_ss\_1lag | .6710314 .1302796 -2.05 0.040 .4586522 .9817529

sp75\_312\_ss\_1lag | .9965773 .2121955 -0.02 0.987 .6565526 1.512699

sp75\_320\_ss\_1lag | .9791404 .0784259 -0.26 0.792 .8368864 1.145575

sp75\_324\_ss\_1lag | .9156575 .1015949 -0.79 0.427 .7366984 1.138089

sp75\_337\_ss\_1lag | .9483334 .0820533 -0.61 0.540 .800409 1.123596

sp75\_340\_ss\_1lag | 1.037918 .0245655 1.57 0.116 .9908705 1.0872

sp75\_342\_ss\_1lag | 1.00191 .0193817 0.10 0.921 .9646338 1.040627

sp75\_344\_ss\_1lag | 1.143172 .1837932 0.83 0.405 .8341806 1.566619

sp75\_352\_ss\_1lag | .9957164 .077309 -0.06 0.956 .8551592 1.159376

sp75\_382\_ss\_1lag | .986416 .0899823 -0.15 0.881 .8249209 1.179527

sp75\_503\_ss\_1lag | .9838871 .0096109 -1.66 0.096 .9652292 1.002906

sp75\_504\_ss\_1lag | .8292803 .3799595 -0.41 0.683 .3378298 2.035657

sp75\_505\_ss\_1lag | .9125321 .3360965 -0.25 0.804 .4433436 1.878261

sp75\_506\_1\_ss\_1lag | .8342972 .3987187 -0.38 0.705 .3269816 2.128719

sp75\_506\_ss\_1lag | 1.162932 .3275829 0.54 0.592 .6695483 2.019886

sp75\_507\_ss\_1lag | 1.148574 .1094968 1.45 0.146 .9528214 1.384543

sp75\_511\_1\_ss\_1lag | 7.04e-10 5.96e-10 -24.89 0.000 1.34e-10 3.70e-09

sp75\_511\_ss\_1lag | 1.098422 .0766907 1.34 0.179 .9579423 1.259503

sp75\_512\_1\_ss\_1lag | 3.060113 .7078597 4.84 0.000 1.944639 4.815438

sp75\_512\_2\_ss\_1lag | 1.138392 .0754596 1.96 0.051 .999698 1.296327

sp75\_512\_ss\_1lag | 1.013255 .0104963 1.27 0.204 .9928899 1.034037

sp75\_513\_1\_ss\_1lag | 1.865361 .6506298 1.79 0.074 .9416021 3.695373

sp75\_513\_ss\_1lag | 1.000204 .1143232 0.00 0.999 .7994589 1.251355

sp75\_514\_ss\_1lag | .9585208 .0436354 -0.93 0.352 .8767015 1.047976

sp75\_515\_ss\_1lag | .9509005 .0348634 -1.37 0.170 .8849669 1.021746

sp75\_516\_1\_ss\_1lag | .6967809 .1551807 -1.62 0.105 .4503233 1.078122

sp75\_516\_2\_ss\_1lag | .515543 .3373348 -1.01 0.311 .1429878 1.858792

sp75\_516\_ss\_1lag | 1.138717 .0628446 2.35 0.019 1.021972 1.268799

sp75\_517\_1\_ss\_1lag | .8074142 .1987044 -0.87 0.385 .4984434 1.307907

sp75\_517\_ss\_1lag | .9920629 .0088597 -0.89 0.372 .9748492 1.00958

sp75\_518\_1\_ss\_1lag | .7356646 .0923507 -2.45 0.014 .5752087 .9408801

sp75\_518\_ss\_1lag | 1.092827 .0453041 2.14 0.032 1.007544 1.185329

sp75\_519\_ss\_1lag | .471071 .3954318 -0.90 0.370 .0908994 2.441247

sp75\_520\_ss\_1lag | .9139378 .0592284 -1.39 0.165 .8049222 1.037718

sp75\_523\_1\_ss\_1lag | .9791687 .0636379 -0.32 0.746 .8620578 1.112189

sp75\_523\_2\_ss\_1lag | 1.079534 .0571761 1.44 0.148 .9730916 1.197621

sp75\_523\_ss\_1lag | .86977 .0505417 -2.40 0.016 .776143 .9746913

sp75\_600\_1\_ss\_1lag | 3.15e-08 2.01e-08 -27.14 0.000 9.05e-09 1.10e-07

sp75\_600\_ss\_1lag | 1.667148 .3805698 2.24 0.025 1.065774 2.607852

sp75\_601\_1\_ss\_1lag | 1.058957 .0365395 1.66 0.097 .9897089 1.13305

sp75\_601\_2\_ss\_1lag | 4.37e-09 3.78e-09 -22.26 0.000 8.02e-10 2.38e-08

sp75\_601\_3\_ss\_1lag | 1.118845 .3901281 0.32 0.747 .564893 2.216021

sp75\_601\_ss\_1lag | .9794196 .0501106 -0.41 0.684 .8859685 1.082728

sp75\_602\_ss\_1lag | 1.103807 .0765948 1.42 0.155 .9634451 1.264618

sp75\_603\_ss\_1lag | .9990985 .1027204 -0.01 0.993 .8167584 1.222146

sp75\_604\_ss\_1lag | 1.048308 .0124093 3.99 0.000 1.024267 1.072914

sp75\_605\_ss\_1lag | 1.008802 .0511115 0.17 0.863 .9134385 1.114121

sp75\_606\_ss\_1lag | .998469 .0253689 -0.06 0.952 .9499646 1.04945

sp75\_607\_ss\_1lag | 1.05305 .131497 0.41 0.679 .8244362 1.345057

sp75\_700\_1\_ss\_1lag | .7015207 .3674629 -0.68 0.499 .251289 1.958428

sp75\_700\_ss\_1lag | .7903029 .0865985 -2.15 0.032 .6375613 .9796369

sp75\_701\_1\_ss\_1lag | .9141796 .1009737 -0.81 0.417 .7362307 1.135139

sp75\_701\_2\_ss\_1lag | 1.074958 .1599393 0.49 0.627 .8030527 1.438927

sp75\_701\_3\_ss\_1lag | 1.063835 .1276484 0.52 0.606 .8408907 1.345888

sp75\_701\_4\_ss\_1lag | 2.634785 3.034946 0.84 0.400 .2755919 25.18975

sp75\_701\_5\_ss\_1lag | .901391 .068812 -1.36 0.174 .7761268 1.046872

sp75\_701\_ss\_1lag | 1.034904 .0400152 0.89 0.375 .959374 1.116381

sp75\_703\_2\_ss\_1lag | .6249487 .1846604 -1.59 0.112 .3502116 1.115214

sp75\_703\_3\_ss\_1lag | 1.244189 .2015884 1.35 0.178 .9056729 1.709233

sp75\_703\_ss\_1lag | 1.01899 .0818434 0.23 0.815 .8705686 1.192715

sp75\_704\_ss\_1lag | 2.258612 1.283103 1.43 0.152 .7417869 6.877078

sp75\_705\_1\_ss\_1lag | .6512469 .210956 -1.32 0.186 .3451589 1.228775

sp75\_705\_8\_ss\_1lag | 4.88e-09 4.56e-09 -20.49 0.000 7.83e-10 3.04e-08

sp75\_705\_ss\_1lag | .8093421 .3083683 -0.56 0.579 .3835437 1.707849

sp75\_706\_ss\_1lag | 1.134987 .2394993 0.60 0.548 .7505414 1.716356

sp75\_800\_2\_ss\_1lag | 5.55e-09 5.57e-09 -18.92 0.000 7.75e-10 3.97e-08

sp75\_800\_3\_ss\_1lag | 1.148454 .658118 0.24 0.809 .3735381 3.530954

sp75\_800\_4\_ss\_1lag | 4.55e-09 2.95e-09 -29.66 0.000 1.28e-09 1.62e-08

sp75\_800\_ss\_1lag | .8832792 .1532156 -0.72 0.474 .6287046 1.240936

sp75\_801\_ss\_1lag | .9948472 .3962518 -0.01 0.990 .4557422 2.171668

sp75\_802\_ss\_1lag | .687781 .249008 -1.03 0.301 .3382801 1.398375

sp75\_803\_2\_ss\_1lag | 7.31e-10 5.22e-10 -29.46 0.000 1.80e-10 2.96e-09

sp75\_803\_ss\_1lag | 1.086413 .123129 0.73 0.465 .8700088 1.356645

sp75\_804\_ss\_1lag | 1.203885 .1347138 1.66 0.097 .9667995 1.499111

sp75\_805\_ss\_1lag | .6255625 .2113708 -1.39 0.165 .322596 1.21306

sp75\_806\_ss\_1lag | 2.065222 .5022727 2.98 0.003 1.282183 3.326468

sp75\_807\_ss\_1lag | 1.051733 .0363897 1.46 0.145 .9827749 1.125529

sp75\_808\_ss\_1lag | 1.397677 .3113275 1.50 0.133 .9032433 2.162763

sp75\_809\_ss\_1lag | 1.146717 .0927125 1.69 0.090 .9786704 1.34362

sp75\_810\_ss\_1lag | .9311654 .2455767 -0.27 0.787 .5553145 1.561401

sp75\_811\_ss\_1lag | 1.148961 .2194551 0.73 0.467 .7901745 1.670657

sp75\_812\_ss\_1lag | .8772037 .2288144 -0.50 0.615 .5261003 1.462623

sp75\_814\_ss\_1lag | .8419403 .0809562 -1.79 0.074 .6973239 1.016548

sp75\_815\_ss\_1lag | .6293881 .3907406 -0.75 0.456 .1864105 2.125038

sp75\_816\_ss\_1lag | 1.161925 .1965283 0.89 0.375 .8340759 1.618641

sp75\_818\_ss\_1lag | .9642968 .0992337 -0.35 0.724 .7881619 1.179794

sp75\_819\_ss\_1lag | 2.280689 .7221286 2.60 0.009 1.226175 4.242089

sp75\_820\_ss\_1lag | .9834359 .2125838 -0.08 0.938 .6437936 1.502261

sp75\_821\_ss\_1lag | 1.310019 .5721294 0.62 0.536 .5565818 3.083372

sp75\_825\_ss\_1lag | 1.31444 .3187649 1.13 0.260 .8171762 2.114295

sp75\_827\_ss\_1lag | 1.118597 .1275929 0.98 0.326 .8945018 1.398834

sp75\_831\_ss\_1lag | 1.68421 .1907657 4.60 0.000 1.348911 2.102856

sp75\_900\_2\_ss\_1lag | .3249754 .193168 -1.89 0.059 .1013653 1.041865

sp75\_900\_3\_ss\_1lag | 1.087778 .1862089 0.49 0.623 .7777307 1.521428

sp75\_900\_4\_ss\_1lag | 1.359364 .2694299 1.55 0.121 .9217751 2.004686

sp75\_900\_ss\_1lag | .9493149 .0397235 -1.24 0.214 .8745654 1.030453

sp75\_901\_ss\_1lag | 1.017397 .1788437 0.10 0.922 .7208777 1.435884

sp75\_902\_1\_ss\_1lag | 1.347403 .3342236 1.20 0.229 .8286229 2.190979

sp75\_902\_2\_ss\_1lag | 1.264371 .1738239 1.71 0.088 .965723 1.655376

sp75\_902\_4\_ss\_1lag | 1.036456 .123052 0.30 0.763 .8212837 1.308003

sp75\_902\_ss\_1lag | .9972864 .05842 -0.05 0.963 .889114 1.118619

sp75\_903\_ss\_1lag | 1.059178 .1080194 0.56 0.573 .8672815 1.293535

sp75\_904\_ss\_1lag | 1.017761 .0267945 0.67 0.504 .9665763 1.071655

sp75\_905\_ss\_1lag | 1.275819 .3524408 0.88 0.378 .742416 2.192455

sp75\_907\_ss\_1lag | .7446038 .1862712 -1.18 0.238 .4560236 1.215803

sp77\_103\_ss\_1lag | .0000419 .0000214 -19.77 0.000 .0000154 .0001139

sp77\_1103\_ss\_1lag | .9367067 .104324 -0.59 0.557 .7530132 1.165211

sp77\_1104\_ss\_1lag | 1.029246 .025915 1.14 0.252 .9796867 1.081313

sp77\_1106\_ss\_1lag | 1.54e-09 1.54e-09 -20.24 0.000 2.16e-10 1.10e-08

sp77\_1111\_ss\_1lag | 1.513647 .5770978 1.09 0.277 .7169565 3.195629

sp77\_1112\_ss\_1lag | 1.075809 .18427 0.43 0.670 .769019 1.504989

sp77\_1403\_ss\_1lag | .6194006 .3427802 -0.87 0.387 .2093685 1.832449

sp77\_1433\_ss\_1lag | .3466683 .1154417 -3.18 0.001 .1804933 .6658358

sp77\_1434\_ss\_1lag | .6860245 .1985396 -1.30 0.193 .3890423 1.209713

sp77\_1437\_ss\_1lag | .3394264 .0484622 -7.57 0.000 .2565748 .4490321

sp77\_1438\_ss\_1lag | .2626235 .2658409 -1.32 0.187 .0361164 1.909691

sp77\_1605\_ss\_1lag | .9835105 .0273275 -0.60 0.550 .9313818 1.038557

sp77\_1606\_ss\_1lag | 1.052008 .04201 1.27 0.204 .9728099 1.137654

sp77\_1710\_ss\_1lag | .9495869 .030488 -1.61 0.107 .8916729 1.011263

sp77\_1802\_ss\_1lag | 1.020148 .1848033 0.11 0.912 .7152618 1.454994

sp77\_1906\_ss\_1lag | 2.976401 1.341193 2.42 0.015 1.230644 7.198641

sp77\_1915\_ss\_1lag | 2.110648 1.116638 1.41 0.158 .7483208 5.95311

sp77\_1916\_ss\_1lag | 1.113211 .136749 0.87 0.383 .8750122 1.416252

sp77\_200\_ss\_1lag | .9702541 .0286254 -1.02 0.306 .9157407 1.028013

sp77\_202\_ss\_1lag | .9368088 .0305312 -2.00 0.045 .8788399 .9986014

sp77\_203\_ss\_1lag | .9859283 .1736982 -0.08 0.936 .6980442 1.39254

sp77\_204\_ss\_1lag | 1.0129 .047095 0.28 0.783 .9246761 1.109541

sp77\_205\_ss\_1lag | 1.019895 .0150825 1.33 0.183 .9907586 1.049889

sp77\_206\_ss\_1lag | .932641 .0796988 -0.82 0.414 .7888149 1.102691

sp77\_207\_ss\_1lag | 1.026567 .1007846 0.27 0.789 .846875 1.244386

sp77\_208\_ss\_1lag | .9678926 .0452845 -0.70 0.485 .8830845 1.060845

sp77\_210\_ss\_1lag | 1.0213 .1486195 0.14 0.885 .7678675 1.358376

sp77\_216\_ss\_1lag | 1.426218 .3250959 1.56 0.119 .9123482 2.229518

sp77\_315\_ss\_1lag | .3005312 .1160768 -3.11 0.002 .1409686 .6407028

sp77\_400\_ss\_1lag | 1.014895 .0176391 0.85 0.395 .9809053 1.050063

sp77\_401\_ss\_1lag | .894617 .1268309 -0.79 0.432 .6775811 1.181172

sp77\_402\_ss\_1lag | 1.000463 .0688108 0.01 0.995 .8742911 1.144842

sp77\_403\_1\_ss\_1lag | .6033084 .1439608 -2.12 0.034 .3779432 .9630574

sp77\_403\_ss\_1lag | 1.971035 .7762447 1.72 0.085 .9108968 4.265005

sp77\_404\_ss\_1lag | .9858783 .0176121 -0.80 0.426 .9519565 1.021009

sp77\_405\_ss\_1lag | .672654 .1558458 -1.71 0.087 .4271482 1.059265

sp77\_408\_ss\_1lag | .6420457 .1018957 -2.79 0.005 .4704097 .8763058

sp77\_409\_ss\_1lag | .3074164 .1566289 -2.32 0.021 .1132502 .8344782

sp77\_410\_ss\_1lag | 1.01152 .0300611 0.39 0.700 .9542848 1.072189

sp77\_411\_ss\_1lag | 3.86e-10 3.89e-10 -21.54 0.000 5.38e-11 2.77e-09

sp77\_412\_ss\_1lag | .972397 .1912949 -0.14 0.887 .6612885 1.429869

sp77\_413\_ss\_1lag | .8977139 .1267427 -0.76 0.445 .68071 1.183897

sp77\_500\_ss\_1lag | .8587114 .2128638 -0.61 0.539 .5282567 1.395884

sp77\_501\_ss\_1lag | 1.156972 .1222335 1.38 0.168 .9405757 1.423154

sp77\_502\_1\_ss\_1lag | 1.150677 .1669002 0.97 0.333 .8659453 1.52903

sp77\_502\_2\_ss\_1lag | 1.011663 .1236519 0.09 0.924 .7961532 1.285509

sp77\_502\_ss\_1lag | .9897727 .019055 -0.53 0.593 .9531215 1.027833

sp77\_503\_1\_ss\_1lag | 1.374302 .7916387 0.55 0.581 .4443909 4.250103

sp77\_503\_ss\_1lag | 1.074684 .3133912 0.25 0.805 .6068199 1.903276

sp77\_504\_ss\_1lag | .9240552 .0751159 -0.97 0.331 .7879602 1.083656

sp77\_505\_ss\_1lag | .8370216 .0761888 -1.95 0.051 .7002565 1.000498

sp77\_506\_1\_ss\_1lag | .9153281 .2557954 -0.32 0.752 .5293002 1.582893

sp77\_506\_ss\_1lag | 1.152739 .1789387 0.92 0.360 .8503538 1.562652

sp77\_507\_ss\_1lag | 1.095622 .164112 0.61 0.542 .8168837 1.469472

sp77\_508\_1\_ss\_1lag | 3.51e-09 1.91e-09 -35.71 0.000 1.21e-09 1.02e-08

sp77\_508\_ss\_1lag | 1.167779 .3574032 0.51 0.612 .6409838 2.127522

sp77\_509\_ss\_1lag | .7599633 .0964461 -2.16 0.031 .592608 .9745804

sp77\_510\_ss\_1lag | .5287176 .0749517 -4.50 0.000 .4004574 .6980575

sp77\_511\_ss\_1lag | .9944534 .4961057 -0.01 0.991 .3740617 2.643782

sp77\_512\_ss\_1lag | .9366713 .0523378 -1.17 0.242 .8395087 1.045079

sp77\_513\_ss\_1lag | .9722648 .0886275 -0.31 0.758 .8131912 1.162456

sp77\_514\_ss\_1lag | 4.693598 1.650527 4.40 0.000 2.356007 9.350507

sp77\_515\_ss\_1lag | 3.412973 1.963351 2.13 0.033 1.105273 10.53892

sp77\_516\_ss\_1lag | .8969101 .0566751 -1.72 0.085 .7924321 1.015163

sp77\_600\_ss\_1lag | 1.156548 .2629849 0.64 0.522 .7406459 1.805994

sp77\_601\_ss\_1lag | .9938688 .3248995 -0.02 0.985 .5236824 1.88621

sp77\_602\_ss\_1lag | .8061562 .2351019 -0.74 0.460 .4551773 1.427769

sp77\_603\_ss\_1lag | 5.132879 1.736298 4.84 0.000 2.644998 9.96086

sp77\_604\_ss\_1lag | 1.471122 .1565795 3.63 0.000 1.194127 1.812369

sp77\_605\_ss\_1lag | 3.36e-09 2.29e-09 -28.63 0.000 8.85e-10 1.28e-08

sp77\_606\_ss\_1lag | 3.06e-09 3.07e-09 -19.50 0.000 4.26e-10 2.19e-08

sp77\_700\_1\_ss\_1lag | 2.227382 1.202407 1.48 0.138 .7731979 6.416508

sp77\_700\_ss\_1lag | 1.265548 .4428462 0.67 0.501 .6374155 2.512667

sp77\_701\_1\_ss\_1lag | .568974 .2392637 -1.34 0.180 .249544 1.297292

sp77\_701\_2\_ss\_1lag | 1.100464 .3872186 0.27 0.786 .5521603 2.193244

sp77\_701\_3\_ss\_1lag | .4476982 .0636445 -5.65 0.000 .3388278 .5915503

sp77\_701\_4\_ss\_1lag | .6480251 .1936686 -1.45 0.147 .3607463 1.164077

sp77\_701\_ss\_1lag | .9302566 .0681249 -0.99 0.324 .8058742 1.073837

sp77\_704\_1\_ss\_1lag | 1.094078 .7024294 0.14 0.889 .310851 3.850739

sp77\_704\_8\_ss\_1lag | 1.061753 .3192457 0.20 0.842 .5889602 1.914084

sp77\_704\_9\_ss\_1lag | 2.49e-09 2.06e-09 -23.91 0.000 4.90e-10 1.26e-08

sp77\_704\_ss\_1lag | 1.787365 .6799415 1.53 0.127 .8480135 3.767242

sp77\_705\_ss\_1lag | .9171852 .1673283 -0.47 0.636 .6414557 1.311437

sp77\_800\_1\_ss\_1lag | .369881 .4049911 -0.91 0.364 .0432576 3.162728

sp77\_800\_2\_ss\_1lag | 2.14929 2.791374 0.59 0.556 .1685791 27.40226

sp77\_800\_ss\_1lag | 1.870887 .7332326 1.60 0.110 .867855 4.033184

sp77\_801\_1\_ss\_1lag | 1 (omitted)

sp77\_802\_ss\_1lag | .6623477 .1877748 -1.45 0.146 .3799893 1.154518

sp77\_803\_ss\_1lag | .7320966 .343504 -0.66 0.506 .2918634 1.836357

sp77\_804\_ss\_1lag | 3.75e-08 2.59e-08 -24.76 0.000 9.69e-09 1.45e-07

sp77\_805\_ss\_1lag | .6553188 .3345121 -0.83 0.408 .2409633 1.782192

sp77\_807\_1\_ss\_1lag | .7381525 .294915 -0.76 0.447 .3373374 1.615205

sp77\_807\_2\_ss\_1lag | 1.018048 .3787633 0.05 0.962 .4909981 2.110846

sp77\_807\_3\_ss\_1lag | 1.790923 .206456 5.05 0.000 1.428734 2.244929

sp77\_807\_ss\_1lag | 1.320353 .4103754 0.89 0.371 .7180099 2.428006

sp77\_808\_ss\_1lag | 2.445306 .986479 2.22 0.027 1.109031 5.391663

sp77\_809\_ss\_1lag | 1.195477 .1629866 1.31 0.190 .9151485 1.561675

sp77\_810\_ss\_1lag | 1.80e-09 1.52e-09 -23.88 0.000 3.44e-10 9.39e-09

sp77\_900\_1\_ss\_1lag | 2.587612 1.441761 1.71 0.088 .8682163 7.712058

sp77\_900\_2\_ss\_1lag | 3.09e-09 3.16e-09 -19.17 0.000 4.17e-10 2.29e-08

sp77\_900\_ss\_1lag | .9547211 .616249 -0.07 0.943 .2694306 3.383033

sp77\_901\_1\_ss\_1lag | 1.293133 1.093636 0.30 0.761 .246468 6.784629

sp77\_901\_ss\_1lag | 1.000582 .2697871 0.00 0.998 .589852 1.697314

sp77\_902\_3\_ss\_1lag | 3.369363 3.619573 1.13 0.258 .4103323 27.66686

sp77\_902\_ss\_1lag | 1.083477 .2571304 0.34 0.735 .6804756 1.725148

sp77\_903\_ss\_1lag | 1.046286 .5245209 0.09 0.928 .3916772 2.794938

sp77\_904\_ss\_1lag | 1.0785 .0997864 0.82 0.414 .89963 1.292933

mine\_time | .9982401 .0016937 -1.04 0.299 .9949261 1.001565

onsite\_insp\_hours | .9997433 .0001147 -2.24 0.025 .9995186 .9999681

|

state |

AL | 1.167685 .0905259 2.00 0.046 1.003079 1.359302

AR | 1.969587 .1831471 7.29 0.000 1.641436 2.36334

CO | .7185276 .1152122 -2.06 0.039 .5247563 .9838507

IL | 1.21865 .0986231 2.44 0.015 1.039903 1.428121

IN | .9421839 .1471779 -0.38 0.703 .6936974 1.27968

MD | 1.061498 .1788413 0.35 0.723 .7629724 1.476828

MT | .8791229 .054992 -2.06 0.039 .7776859 .9937909

NM | .8148689 .0421271 -3.96 0.000 .7363467 .9017645

OH | 1.122495 .1321692 0.98 0.326 .8911669 1.413872

OK | .9350512 .2464742 -0.25 0.799 .5577806 1.567499

PA | .9843809 .0939693 -0.16 0.869 .816408 1.186914

TN | 1.249556 .1624799 1.71 0.087 .9684426 1.612269

UT | .6329299 .0805195 -3.60 0.000 .4932513 .8121626

VA | .7089884 .0586904 -4.15 0.000 .6028042 .8338771

WV | 1.055716 .055463 1.03 0.302 .9524203 1.170216

WY | 1.05021 .055222 0.93 0.351 .9473677 1.164217

|

time |

2000.25 | .9836521 .106559 -0.15 0.879 .7954829 1.216332

2000.5 | 1.167355 .1192332 1.51 0.130 .9555679 1.426082

2000.75 | .8813482 .0911052 -1.22 0.222 .7197118 1.079286

2001 | .8867915 .0834564 -1.28 0.202 .7374193 1.066421

2001.25 | .8233166 .085509 -1.87 0.061 .6716791 1.009188

2001.75 | .8454232 .0803721 -1.77 0.077 .701702 1.018581

2002 | .8838017 .0832658 -1.31 0.190 .7347852 1.063039

2002.25 | .8101773 .0859 -1.99 0.047 .6581584 .9973089

2002.5 | 1.019139 .0986761 0.20 0.845 .8429802 1.232109

2002.75 | .9056006 .0981023 -0.92 0.360 .7323646 1.119814

2003 | .7533269 .0840794 -2.54 0.011 .6053132 .9375334

2003.25 | .8742887 .0944313 -1.24 0.214 .7074849 1.08042

2003.5 | .9299219 .099054 -0.68 0.495 .7547058 1.145817

2003.75 | .6755034 .0733542 -3.61 0.000 .5460017 .8357207

2004 | .8750382 .0981964 -1.19 0.234 .7022723 1.090306

2004.25 | .8346898 .0862903 -1.75 0.080 .6815972 1.022168

2004.5 | .8393816 .0918483 -1.60 0.110 .6773572 1.040162

2004.75 | .7387113 .0869041 -2.57 0.010 .5865932 .9302774

2005 | .6403476 .0671395 -4.25 0.000 .5213971 .7864353

2005.25 | .8155618 .0829705 -2.00 0.045 .6681294 .9955274

2005.5 | .7014744 .0769556 -3.23 0.001 .5657574 .8697478

2005.75 | .6640259 .0768124 -3.54 0.000 .5293229 .8330083

2006 | .6997256 .0758465 -3.29 0.001 .5657988 .8653534

2006.25 | .6981477 .0841479 -2.98 0.003 .5512541 .8841843

2006.5 | .7601433 .0897063 -2.32 0.020 .6031748 .9579609

2006.75 | .634804 .0765156 -3.77 0.000 .5012342 .8039678

2007 | .6502592 .0716977 -3.90 0.000 .5238814 .8071238

2007.25 | .6228993 .0791332 -3.73 0.000 .4856027 .7990144

2007.5 | .6582379 .072906 -3.78 0.000 .5297908 .8178269

2007.75 | .658975 .0757384 -3.63 0.000 .5260624 .8254687

2008 | .5547445 .0629734 -5.19 0.000 .4440854 .6929781

2008.25 | .5765607 .0646971 -4.91 0.000 .4627324 .7183899

2008.5 | .6719736 .0752216 -3.55 0.000 .5395947 .8368291

2008.75 | .5324385 .0594768 -5.64 0.000 .4277449 .6627568

2009 | .5231369 .0643497 -5.27 0.000 .4110657 .6657627

2009.25 | .4897223 .0602325 -5.80 0.000 .3848203 .6232206

2009.5 | .6064694 .0730319 -4.15 0.000 .4789675 .7679125

2009.75 | .4407338 .0522287 -6.91 0.000 .3493861 .5559645

2010 | .4711108 .0605519 -5.86 0.000 .3661998 .6060774

2010.25 | .4843907 .0599176 -5.86 0.000 .3801061 .6172865

2010.5 | .5790895 .0682605 -4.63 0.000 .4596315 .7295946

2010.75 | .4507943 .0555044 -6.47 0.000 .3541388 .5738301

2011 | .521268 .0621162 -5.47 0.000 .4126946 .6584054

2011.25 | .5166783 .0603126 -5.66 0.000 .4110155 .6495046

2011.5 | .5698522 .0642598 -4.99 0.000 .4568524 .7108018

2011.75 | .4567908 .0564681 -6.34 0.000 .3585028 .5820257

2012 | .5543509 .0626557 -5.22 0.000 .4441988 .6918184

2012.25 | .5079403 .0560651 -6.14 0.000 .4091281 .6306176

2012.5 | .5873779 .0700941 -4.46 0.000 .4648795 .7421553

2012.75 | .4753637 .0572771 -6.17 0.000 .3753737 .6019885

2013 | .4939948 .0608734 -5.72 0.000 .3879998 .6289459

2013.25 | .4243867 .0569811 -6.38 0.000 .3261921 .5521411

2013.5 | .559322 .0702709 -4.62 0.000 .4372406 .7154897

2013.75 | .4611744 .0602519 -5.92 0.000 .3569906 .5957632

2014 | .4385739 .0616009 -5.87 0.000 .3330315 .5775641

2014.25 | .4845192 .0631964 -5.56 0.000 .3752215 .625654

2014.5 | .4923071 .0605617 -5.76 0.000 .3868339 .6265383

2014.75 | .5057801 .0635786 -5.42 0.000 .3953322 .6470849

2015 | .4711959 .0620696 -5.71 0.000 .3639775 .6099981

2015.25 | .4988969 .0704417 -4.92 0.000 .3782906 .6579549

2015.5 | .6394964 .0842824 -3.39 0.001 .4939171 .8279845

2015.75 | .3773649 .0586893 -6.27 0.000 .2782141 .5118513

2016 | .533338 .0758131 -4.42 0.000 .4036506 .7046922

|

\_cons | .0000177 1.45e-06 -133.71 0.000 .0000151 .0000208

ln(hours) | 1 (exposure)

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

/lnalpha | -1.70464 .1649387 -2.027914 -1.381366

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

alpha | .1818379 .0299921 .1316098 .2512352

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(est1 stored)

**. lrtest pois nbin, stats force**

Likelihood-ratio test LR chi2(1) = 174.29

(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 | 26,110 -19356.43 -18501.24 357 37716.49 40633.21

nbin | 26,110 -19051.14 -18414.1 358 37544.2 40469.09

-----------------------------------------------------------------------------

Note: N=Obs used in calculating BIC; see [R] BIC note.

**.**

**. summ MR spcssv2\_yhat**

Variable | Obs Mean Std. Dev. Min Max

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

MR | 30,289 .4096207 .9550592 0 14

spcssv2\_yhat | 26,110 .4621778 .7083966 3.11e-23 14.78283