. // Model SP.C.V.4

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

note: sp71\_701\_c\_lag\_all omitted because of collinearity

note: sp77\_801\_1\_c\_lag\_all omitted because of collinearity

note: sp77\_801\_c\_lag\_all omitted because of collinearity

note: sp75\_705\_3\_c\_lag\_all omitted because of collinearity

note: sp48\_24\_c\_lag\_all omitted because of collinearity

note: sp75\_834\_c\_lag\_all omitted because of collinearity

note: sp77\_606\_c\_lag\_all omitted because of collinearity

note: sp75\_1438\_c\_lag\_all omitted because of collinearity

Iteration 0: log pseudolikelihood = -11895.345

Iteration 1: log pseudolikelihood = -11188.841

Iteration 2: log pseudolikelihood = -11180.459

Iteration 3: log pseudolikelihood = -11180.404

Iteration 4: log pseudolikelihood = -11180.394

Iteration 5: log pseudolikelihood = -11180.391

Iteration 6: log pseudolikelihood = -11180.391

Iteration 7: log pseudolikelihood = -11180.39

Iteration 8: log pseudolikelihood = -11180.39

Generalized linear models No. of obs = 13,797

Optimization : ML Residual df = 13,415

Scale parameter = 1

Deviance = 11115.12987 (1/df) Deviance = .8285598

Pearson = 117701.9354 (1/df) Pearson = 8.773905

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

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

AIC = 1.676073

Log pseudolikelihood = -11180.39046 BIC = -116759.4

(Std. Err. adjusted for 801 clusters in mineid)

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| Robust

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

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

sp47\_41\_c\_lag\_all | 1.038035 .0274741 1.41 0.158 .98556 1.093305

sp48\_11\_c\_lag\_all | 1.024669 .0329465 0.76 0.448 .9620877 1.091321

sp71\_701\_c\_lag\_all | 1 (omitted)

sp75\_1001\_1\_c\_lag\_all | .9136674 .1631388 -0.51 0.613 .6438769 1.296503

sp75\_1001\_c\_lag\_all | .7162579 .0819031 -2.92 0.004 .5724476 .8961963

sp75\_1003\_1\_c\_lag\_all | .8728543 .1152229 -1.03 0.303 .6738716 1.130593

sp75\_1400\_1\_c\_lag\_all | .9115503 .1293126 -0.65 0.514 .6902861 1.203739

sp75\_1401\_1\_c\_lag\_all | .5694066 .1291011 -2.48 0.013 .3651154 .8880037

sp75\_1401\_c\_lag\_all | 1.037724 .1201437 0.32 0.749 .8270524 1.302059

sp75\_1403\_11\_c\_lag\_all | .9462614 .1819914 -0.29 0.774 .649086 1.379495

sp75\_1404\_1\_c\_lag\_all | .5391646 .0952478 -3.50 0.000 .3813728 .7622422

sp75\_1405\_1\_c\_lag\_all | .7510202 .0646879 -3.32 0.001 .6343585 .8891366

sp75\_1431\_c\_lag\_all | .6622855 .3037688 -0.90 0.369 .2695422 1.627285

sp75\_151\_c\_lag\_all | 1.282457 .2353271 1.36 0.175 .895055 1.837536

sp75\_1721\_c\_lag\_all | .423713 .1231489 -2.95 0.003 .2397048 .7489742

sp75\_1731\_c\_lag\_all | 1.001706 .0013849 1.23 0.218 .9989952 1.004424

sp75\_1911\_c\_lag\_all | .9911559 .0065282 -1.35 0.177 .9784431 1.004034

sp75\_211\_c\_lag\_all | 1.00133 .0122886 0.11 0.914 .9775324 1.025707

sp75\_341\_c\_lag\_all | 1.046504 .1769275 0.27 0.788 .7513329 1.457638

sp75\_506\_1\_c\_lag\_all | 1.13477 .0582931 2.46 0.014 1.026081 1.254972

sp75\_510\_1\_c\_lag\_all | 2.196498 1.136112 1.52 0.128 .7969979 6.053472

sp75\_511\_1\_c\_lag\_all | .9335738 .2037186 -0.31 0.753 .608702 1.431834

sp75\_511\_c\_lag\_all | 1.051455 .0337028 1.57 0.117 .9874313 1.119631

sp75\_512\_1\_c\_lag\_all | 1.076482 .2351259 0.34 0.736 .7015957 1.651683

sp75\_513\_1\_c\_lag\_all | 1.050677 .0997443 0.52 0.603 .8722922 1.265543

sp75\_516\_1\_c\_lag\_all | 1.075516 .0911962 0.86 0.391 .9108374 1.269968

sp75\_517\_1\_c\_lag\_all | .9427179 .0888057 -0.63 0.531 .7837852 1.133878

sp75\_518\_1\_c\_lag\_all | .9938893 .0167435 -0.36 0.716 .9616085 1.027254

sp75\_523\_1\_c\_lag\_all | .9796782 .0171738 -1.17 0.242 .9465898 1.013923

sp75\_600\_1\_c\_lag\_all | 1.039921 .1055827 0.39 0.700 .8522719 1.268885

sp75\_601\_1\_c\_lag\_all | 1.000464 .0070851 0.07 0.948 .9866736 1.014448

sp75\_601\_c\_lag\_all | .998078 .0109677 -0.18 0.861 .9768116 1.019807

sp75\_700\_1\_c\_lag\_all | .9389301 .0988294 -0.60 0.549 .7639025 1.154061

sp75\_701\_1\_c\_lag\_all | 1.014709 .0256387 0.58 0.563 .9656822 1.066225

sp75\_701\_c\_lag\_all | 1.009009 .0069034 1.31 0.190 .9955693 1.022631

sp75\_702\_1\_c\_lag\_all | .3737408 .0743824 -4.95 0.000 .2530249 .5520491

sp75\_703\_1\_c\_lag\_all | .7344308 .2278256 -1.00 0.320 .3998546 1.348962

sp75\_705\_1\_c\_lag\_all | 1.077296 .1062698 0.75 0.450 .8879083 1.307079

sp75\_801\_c\_lag\_all | 1.334192 .2163684 1.78 0.075 .9709062 1.833408

sp75\_821\_c\_lag\_all | .9890485 .0436259 -0.25 0.803 .9071351 1.078359

sp75\_831\_c\_lag\_all | 1.524737 .2470264 2.60 0.009 1.109915 2.094595

sp75\_901\_c\_lag\_all | 1.06821 .0535434 1.32 0.188 .9682569 1.178481

sp75\_902\_1\_c\_lag\_all | 1.463546 .2146854 2.60 0.009 1.097855 1.951048

sp77\_1111\_c\_lag\_all | .8885684 .1092594 -0.96 0.337 .6982744 1.130721

sp77\_401\_c\_lag\_all | 1.011724 .0478284 0.25 0.805 .9221944 1.109946

sp77\_403\_1\_c\_lag\_all | .9794451 .0628415 -0.32 0.746 .8637076 1.110692

sp77\_411\_c\_lag\_all | .4961272 .1415693 -2.46 0.014 .2835983 .8679255

sp77\_501\_c\_lag\_all | 1.018226 .0559877 0.33 0.743 .9141988 1.134092

sp77\_502\_1\_c\_lag\_all | 1.574261 .4355254 1.64 0.101 .9153526 2.707478

sp77\_503\_1\_c\_lag\_all | 1.16763 .1721616 1.05 0.293 .8745802 1.558874

sp77\_506\_1\_c\_lag\_all | .978504 .0189541 -1.12 0.262 .942051 1.016368

sp77\_508\_1\_c\_lag\_all | 1.238056 .111546 2.37 0.018 1.037645 1.477174

sp77\_511\_c\_lag\_all | .9170358 .0839565 -0.95 0.344 .7664027 1.097275

sp77\_601\_c\_lag\_all | .9852833 .1441902 -0.10 0.919 .7395933 1.312591

sp77\_606\_1\_c\_lag\_all | .5315443 .187805 -1.79 0.074 .2659458 1.062394

sp77\_700\_1\_c\_lag\_all | 1.075128 .1872385 0.42 0.677 .7642217 1.512519

sp77\_701\_1\_c\_lag\_all | .9824697 .089467 -0.19 0.846 .8218753 1.174444

sp77\_701\_c\_lag\_all | 1.006481 .017295 0.38 0.707 .973148 1.040956

sp75\_811\_c\_lag\_all | 1.027857 .02389 1.18 0.237 .9820843 1.075764

sp77\_704\_1\_c\_lag\_all | 1.357061 .3365738 1.23 0.218 .8346166 2.206539

sp77\_800\_1\_c\_lag\_all | 1.24089 .121292 2.21 0.027 1.024547 1.502917

sp77\_801\_1\_c\_lag\_all | 1 (omitted)

sp77\_801\_c\_lag\_all | 1 (omitted)

sp77\_807\_1\_c\_lag\_all | .8788138 .1810002 -0.63 0.531 .5869265 1.315861

sp77\_900\_1\_c\_lag\_all | 1.159587 .1817274 0.94 0.345 .8529137 1.576527

sp77\_901\_1\_c\_lag\_all | .2507706 .0741603 -4.68 0.000 .1404595 .4477154

sp77\_901\_c\_lag\_all | .9547282 .1211526 -0.37 0.715 .7444995 1.22432

sp47\_42\_c\_lag\_all | .8997828 .0851973 -1.12 0.265 .7473781 1.083266

sp75\_1100\_2\_c\_lag\_all | 1.01198 .003559 3.39 0.001 1.005028 1.018979

sp75\_1102\_c\_lag\_all | .9738395 .034402 -0.75 0.453 .9086941 1.043655

sp75\_1106\_2\_c\_lag\_all | .9495317 .0208883 -2.35 0.019 .9094614 .9913675

sp75\_1400\_2\_c\_lag\_all | .9294481 .0991959 -0.69 0.493 .7540153 1.145698

sp75\_1402\_2\_c\_lag\_all | .91161 .3037468 -0.28 0.781 .4744498 1.751572

sp75\_1432\_c\_lag\_all | .829194 .1075759 -1.44 0.149 .6430208 1.06927

sp75\_1600\_2\_c\_lag\_all | 1.011852 .0154023 0.77 0.439 .9821099 1.042495

sp75\_1912\_c\_lag\_all | 1.099016 .0618931 1.68 0.094 .9841631 1.227273

sp75\_202\_c\_lag\_all | .9994682 .0009327 -0.57 0.569 .9976418 1.001298

sp75\_212\_c\_lag\_all | .9803796 .0195237 -1.00 0.320 .942851 1.019402

sp75\_312\_c\_lag\_all | 1.006705 .0160576 0.42 0.675 .9757198 1.038675

sp75\_342\_c\_lag\_all | .9961896 .0033767 -1.13 0.260 .9895935 1.00283

sp75\_352\_c\_lag\_all | .9544871 .0290367 -1.53 0.126 .8992396 1.013129

sp75\_382\_c\_lag\_all | 1.046617 .0275881 1.73 0.084 .9939181 1.102109

sp75\_512\_2\_c\_lag\_all | .9932333 .009519 -0.71 0.479 .9747506 1.012066

sp75\_512\_c\_lag\_all | 1.002534 .0027164 0.93 0.350 .9972238 1.007872

sp75\_516\_2\_c\_lag\_all | 1.006931 .0161748 0.43 0.667 .975723 1.039138

sp75\_523\_2\_c\_lag\_all | .9866146 .0149006 -0.89 0.372 .9578379 1.016256

sp75\_601\_2\_c\_lag\_all | .7995313 .1036205 -1.73 0.084 .6201809 1.030748

sp75\_602\_c\_lag\_all | 1.006259 .0221392 0.28 0.777 .9637892 1.0506

sp75\_701\_2\_c\_lag\_all | .9204643 .046254 -1.65 0.099 .8341295 1.015735

sp75\_702\_c\_lag\_all | 2.055972 .5119439 2.89 0.004 1.262017 3.349417

sp75\_703\_2\_c\_lag\_all | .9656382 .0774314 -0.44 0.663 .8252002 1.129977

sp75\_705\_2\_c\_lag\_all | 3.915078 1.765335 3.03 0.002 1.617812 9.474425

sp75\_800\_2\_c\_lag\_all | 1.177753 .1936695 0.99 0.320 .8532627 1.625645

sp75\_802\_c\_lag\_all | .9542449 .0725944 -0.62 0.538 .8220618 1.107682

sp75\_803\_2\_c\_lag\_all | .1731551 .0187852 -16.16 0.000 .1399878 .2141808

sp75\_812\_c\_lag\_all | .9829323 .110719 -0.15 0.879 .7882119 1.225757

sp75\_832\_c\_lag\_all | 1.274057 .3362718 0.92 0.359 .7594948 2.13724

sp75\_900\_2\_c\_lag\_all | .4951751 .0569558 -6.11 0.000 .3952322 .6203909

sp75\_902\_2\_c\_lag\_all | .9956102 .0168418 -0.26 0.795 .9631421 1.029173

sp75\_902\_c\_lag\_all | .9969317 .0142849 -0.21 0.830 .9693232 1.025327

sp77\_1112\_c\_lag\_all | .9716365 .0625267 -0.45 0.655 .8565 1.102251

sp77\_1432\_c\_lag\_all | .7604346 .1264325 -1.65 0.100 .5489569 1.053381

sp77\_1802\_c\_lag\_all | .7777709 .1491478 -1.31 0.190 .5340999 1.132611

sp77\_202\_c\_lag\_all | .9971879 .0088702 -0.32 0.752 .9799533 1.014726

sp77\_402\_c\_lag\_all | .9940241 .0194127 -0.31 0.759 .9566949 1.03281

sp77\_403\_2\_c\_lag\_all | .5783607 .1808662 -1.75 0.080 .3133353 1.06755

sp77\_412\_c\_lag\_all | 1.03528 .0544546 0.66 0.510 .9338679 1.147704

sp77\_502\_2\_c\_lag\_all | 1.050521 .0341372 1.52 0.129 .9856994 1.119605

sp77\_502\_c\_lag\_all | .9997256 .0048108 -0.06 0.955 .990341 1.009199

sp77\_512\_c\_lag\_all | .9868212 .0143389 -0.91 0.361 .9591139 1.015329

sp77\_602\_c\_lag\_all | 1.077739 .1506527 0.54 0.592 .8194602 1.417424

sp77\_701\_2\_c\_lag\_all | .9447457 .0854963 -0.63 0.530 .791196 1.128095

sp77\_702\_c\_lag\_all | .3096587 .0801773 -4.53 0.000 .1864184 .5143726

sp77\_800\_2\_c\_lag\_all | .9127549 .0714303 -1.17 0.243 .7829624 1.064063

sp77\_802\_c\_lag\_all | 1.433184 .3880008 1.33 0.184 .8430618 2.436379

sp77\_807\_2\_c\_lag\_all | 1.002522 .112516 0.02 0.982 .8045645 1.249185

sp77\_900\_2\_c\_lag\_all | 1.011846 .0791766 0.15 0.880 .8679765 1.179561

sp77\_902\_2\_c\_lag\_all | .0087408 .0046439 -8.92 0.000 .0030854 .0247622

sp77\_902\_c\_lag\_all | .9438692 .0656032 -0.83 0.406 .8236628 1.081619

sp47\_43\_c\_lag\_all | .3187883 .1404109 -2.60 0.009 .1344587 .7558154

sp72\_503\_c\_lag\_all | 1.014107 .0409567 0.35 0.729 .9369283 1.097643

sp75\_1106\_3\_c\_lag\_all | 1.006695 .0070842 0.95 0.343 .9929059 1.020676

sp75\_1400\_3\_c\_lag\_all | 1.011712 .0282479 0.42 0.677 .957835 1.06862

sp75\_1403\_3\_c\_lag\_all | .6293124 .0870283 -3.35 0.001 .4799021 .8252393

sp75\_1433\_c\_lag\_all | .931302 .048794 -1.36 0.174 .840414 1.032019

sp75\_153\_c\_lag\_all | 1.077734 .2820491 0.29 0.775 .6452784 1.800013

sp75\_1903\_c\_lag\_all | 1.011757 .0184139 0.64 0.521 .9763021 1.048499

sp75\_1913\_c\_lag\_all | .9683114 .049636 -0.63 0.530 .8757541 1.070651

sp75\_503\_c\_lag\_all | 1.000466 .0014534 0.32 0.749 .9976209 1.003318

sp75\_513\_c\_lag\_all | .9459019 .0414125 -1.27 0.204 .8681198 1.030653

sp75\_523\_c\_lag\_all | 1.002801 .0163446 0.17 0.864 .9712721 1.035353

sp75\_601\_3\_c\_lag\_all | 1.120892 .1132634 1.13 0.259 .9195003 1.366393

sp75\_603\_c\_lag\_all | .9923398 .0338907 -0.23 0.822 .9280896 1.061038

sp75\_701\_3\_c\_lag\_all | 1.017332 .036468 0.48 0.632 .9483089 1.091379

sp75\_703\_3\_c\_lag\_all | 1.014094 .0355261 0.40 0.690 .9468007 1.08617

sp75\_703\_c\_lag\_all | 1.042546 .0231234 1.88 0.060 .9981961 1.088867

sp75\_705\_3\_c\_lag\_all | 1 (omitted)

sp75\_800\_3\_c\_lag\_all | 1.015189 .0533476 0.29 0.774 .9158338 1.125322

sp75\_803\_c\_lag\_all | .9221528 .0442743 -1.69 0.091 .8393345 1.013143

sp75\_900\_3\_c\_lag\_all | .9856542 .0385895 -0.37 0.712 .9128492 1.064266

sp75\_903\_c\_lag\_all | .9881451 .0214979 -0.55 0.584 .9468956 1.031191

sp77\_103\_c\_lag\_all | 1.238062 .3213908 0.82 0.411 .7443503 2.059242

sp77\_1103\_c\_lag\_all | 1.010207 .0104469 0.98 0.326 .9899379 1.030892

sp77\_1403\_c\_lag\_all | 1.016832 .071935 0.24 0.813 .8851805 1.168065

sp77\_1433\_c\_lag\_all | .9652883 .1194349 -0.29 0.775 .7574223 1.230201

sp77\_203\_c\_lag\_all | .9588646 .0648703 -0.62 0.535 .8397901 1.094823

sp77\_403\_c\_lag\_all | .9055373 .1425242 -0.63 0.528 .6651723 1.23276

sp77\_413\_c\_lag\_all | .9422091 .0840515 -0.67 0.505 .7910689 1.122226

sp77\_503\_c\_lag\_all | 1.021479 .083598 0.26 0.795 .8700952 1.1992

sp77\_513\_c\_lag\_all | 1.002673 .0206621 0.13 0.897 .9629832 1.043999

sp77\_603\_c\_lag\_all | 1.016057 .1727466 0.09 0.925 .7281141 1.41787

sp77\_703\_c\_lag\_all | .7927928 .3396517 -0.54 0.588 .3423609 1.835841

sp77\_803\_c\_lag\_all | 1.527598 .2070458 3.13 0.002 1.171224 1.992408

sp77\_807\_3\_c\_lag\_all | 1.182256 .2452977 0.81 0.420 .7872308 1.775502

sp77\_903\_c\_lag\_all | 1.046021 .1437814 0.33 0.743 .7989839 1.369439

sp47\_44\_c\_lag\_all | .9792899 .0323445 -0.63 0.526 .9179041 1.044781

sp48\_24\_c\_lag\_all | 1 (omitted)

sp48\_4\_c\_lag\_all | 8.52e-06 8.56e-06 -11.62 0.000 1.19e-06 .0000611

sp75\_1103\_4\_c\_lag\_all | 1.000762 .0066677 0.11 0.909 .9877781 1.013916

sp75\_1104\_c\_lag\_all | .9673882 .0202802 -1.58 0.114 .9284452 1.007965

sp75\_1106\_4\_c\_lag\_all | 1.053667 .0593662 0.93 0.353 .9435055 1.17669

sp75\_1107\_14\_c\_lag\_all | 2.626347 .769455 3.30 0.001 1.479009 4.663728

sp75\_1400\_4\_c\_lag\_all | .9148297 .0470009 -1.73 0.083 .8271959 1.011748

sp75\_1403\_4\_c\_lag\_all | 1.486659 .2154378 2.74 0.006 1.119078 1.974979

sp75\_1404\_c\_lag\_all | 1.085398 .1679995 0.53 0.597 .8013806 1.470074

sp75\_1434\_c\_lag\_all | .9767523 .0420996 -0.55 0.585 .8976279 1.062852

sp75\_1914\_c\_lag\_all | .9961998 .002774 -1.37 0.172 .9907776 1.001652

sp75\_214\_c\_lag\_all | .9668535 .0200269 -1.63 0.104 .9283876 1.006913

sp75\_324\_c\_lag\_all | 1.00186 .0515753 0.04 0.971 .905707 1.108222

sp75\_344\_c\_lag\_all | .9985189 .0474952 -0.03 0.975 .9096374 1.096085

sp75\_504\_c\_lag\_all | .9815184 .053626 -0.34 0.733 .8818453 1.092457

sp75\_514\_c\_lag\_all | .9989615 .0082633 -0.13 0.900 .9828963 1.015289

sp75\_604\_c\_lag\_all | 1.00249 .0024584 1.01 0.310 .9976833 1.00732

sp75\_701\_4\_c\_lag\_all | 1.119837 .1695616 0.75 0.455 .8322791 1.506748

sp75\_703\_4\_c\_lag\_all | 1.901935 .5319915 2.30 0.022 1.099273 3.290681

sp75\_704\_c\_lag\_all | .6540114 .0835293 -3.32 0.001 .5091799 .8400389

sp75\_800\_4\_c\_lag\_all | 1.047738 .0542426 0.90 0.368 .9466399 1.159632

sp75\_814\_c\_lag\_all | .9545086 .0579038 -0.77 0.443 .8475065 1.07502

sp75\_834\_c\_lag\_all | 1 (omitted)

sp75\_900\_4\_c\_lag\_all | .9988326 .0135261 -0.09 0.931 .9726706 1.025698

sp75\_902\_4\_c\_lag\_all | 1.059201 .0279496 2.18 0.029 1.005813 1.115423

sp75\_904\_c\_lag\_all | 1.012159 .0042017 2.91 0.004 1.003957 1.020428

sp77\_104\_c\_lag\_all | .3849833 .0964693 -3.81 0.000 .2355849 .6291242

sp77\_1104\_c\_lag\_all | 1.001035 .0039445 0.26 0.793 .9933337 1.008796

sp77\_1434\_c\_lag\_all | 1.209751 .1392092 1.65 0.098 .9654861 1.515814

sp77\_204\_c\_lag\_all | .9883682 .0191363 -0.60 0.546 .9515645 1.026595

sp77\_314\_c\_lag\_all | 1.442886 .6047387 0.87 0.382 .6345684 3.280843

sp77\_404\_c\_lag\_all | .9887822 .0045043 -2.48 0.013 .9799932 .99765

sp77\_504\_c\_lag\_all | .9491837 .0261114 -1.90 0.058 .8993615 1.001766

sp77\_514\_c\_lag\_all | 1.007796 .0707448 0.11 0.912 .878255 1.156445

sp77\_604\_c\_lag\_all | .9072513 .0941495 -0.94 0.348 .7402777 1.111887

sp75\_804\_c\_lag\_all | .9523753 .0230337 -2.02 0.044 .9082833 .9986077

sp77\_704\_c\_lag\_all | .9563531 .2828017 -0.15 0.880 .5356866 1.707363

sp77\_804\_c\_lag\_all | .7973824 .1418857 -1.27 0.203 .562606 1.130131

sp77\_904\_c\_lag\_all | .963116 .0178446 -2.03 0.043 .9287687 .9987336

sp48\_25\_c\_lag\_all | 1.100444 .0600041 1.76 0.079 .9889041 1.224564

sp48\_5\_c\_lag\_all | 1.060468 .0681992 0.91 0.361 .9348815 1.202926

sp75\_1106\_5\_c\_lag\_all | .9669041 .0232498 -1.40 0.162 .9223925 1.013564

sp75\_1403\_5\_c\_lag\_all | .9993056 .0033971 -0.20 0.838 .9926696 1.005986

sp75\_1405\_c\_lag\_all | .9771496 .0086638 -2.61 0.009 .9603156 .9942786

sp75\_1435\_c\_lag\_all | 1.187647 .1631117 1.25 0.211 .9073677 1.554503

sp75\_155\_c\_lag\_all | .6892407 .1577068 -1.63 0.104 .4401548 1.079286

sp75\_1725\_c\_lag\_all | 1.001718 .0021949 0.78 0.433 .9974249 1.006029

sp75\_1915\_c\_lag\_all | .9209523 .0455177 -1.67 0.096 .8359241 1.014629

sp75\_505\_c\_lag\_all | 1.148028 .0899338 1.76 0.078 .9846259 1.338547

sp75\_515\_c\_lag\_all | .9943938 .0057488 -0.97 0.331 .9831898 1.005725

sp75\_605\_c\_lag\_all | 1.011502 .0120054 0.96 0.335 .9882434 1.035308

sp75\_705\_c\_lag\_all | .9146088 .1119528 -0.73 0.466 .7195218 1.162591

sp75\_815\_c\_lag\_all | .832244 .0645071 -2.37 0.018 .7149475 .9687845

sp75\_825\_c\_lag\_all | .994066 .0748463 -0.08 0.937 .8576807 1.152139

sp75\_905\_c\_lag\_all | .7582505 .0638958 -3.28 0.001 .6428123 .8944193

sp77\_1605\_c\_lag\_all | 1.000675 .0053562 0.13 0.900 .9902315 1.011228

sp77\_1915\_c\_lag\_all | .7656763 .0730459 -2.80 0.005 .6350972 .9231032

sp77\_205\_c\_lag\_all | .9937021 .0055975 -1.12 0.262 .9827915 1.004734

sp77\_305\_c\_lag\_all | .3495825 .1346041 -2.73 0.006 .1643619 .7435297

sp77\_315\_c\_lag\_all | .7435077 .4737291 -0.47 0.642 .2132744 2.591983

sp77\_405\_c\_lag\_all | .9350991 .0564815 -1.11 0.267 .8306989 1.05262

sp77\_505\_c\_lag\_all | 1.001694 .014932 0.11 0.910 .9728515 1.031392

sp77\_515\_c\_lag\_all | .997668 .1485206 -0.02 0.987 .7451943 1.33568

sp77\_605\_c\_lag\_all | .494128 .2962048 -1.18 0.240 .1526114 1.599897

sp75\_805\_c\_lag\_all | 1.19924 .1425769 1.53 0.126 .9499642 1.513927

sp77\_705\_c\_lag\_all | 1.010892 .0431845 0.25 0.800 .9296987 1.099177

sp77\_805\_c\_lag\_all | .8978292 .2246163 -0.43 0.667 .5498479 1.466037

sp48\_26\_c\_lag\_all | 1.089478 .0861908 1.08 0.279 .9329927 1.27221

sp48\_6\_c\_lag\_all | .9811561 .0322737 -0.58 0.563 .9198967 1.046495

sp75\_1106\_6\_c\_lag\_all | 1.382262 .4605317 0.97 0.331 .7194383 2.655751

sp75\_1106\_c\_lag\_all | 1.010365 .0503312 0.21 0.836 .9163809 1.113989

sp75\_1403\_6\_c\_lag\_all | .9991273 .0037652 -0.23 0.817 .9917749 1.006534

sp75\_1436\_c\_lag\_all | 1.393536 .5345778 0.87 0.387 .6570322 2.955628

sp75\_156\_c\_lag\_all | .8309097 .2039768 -0.75 0.451 .5135653 1.344349

sp75\_1712\_6\_c\_lag\_all | .9676573 .0240784 -1.32 0.186 .9215969 1.01602

sp75\_1726\_c\_lag\_all | 1.167623 .0664628 2.72 0.006 1.044362 1.305432

sp75\_506\_c\_lag\_all | .9986575 .0316907 -0.04 0.966 .938437 1.062742

sp75\_516\_c\_lag\_all | .9934735 .0086058 -0.76 0.450 .9767489 1.010485

sp75\_606\_c\_lag\_all | 1.007394 .0038417 1.93 0.053 .9998921 1.014951

sp75\_706\_c\_lag\_all | .9414666 .0428065 -1.33 0.185 .861197 1.029218

sp75\_816\_c\_lag\_all | .9796975 .0161328 -1.25 0.213 .9485826 1.011833

sp77\_1106\_c\_lag\_all | 1.367075 .3780337 1.13 0.258 .795082 2.350568

sp77\_1606\_c\_lag\_all | 1.008822 .007483 1.18 0.236 .9942619 1.023596

sp77\_1906\_c\_lag\_all | 1.107003 .1194749 0.94 0.346 .8959453 1.367779

sp77\_1916\_c\_lag\_all | 1.073984 .1257782 0.61 0.542 .8537106 1.351093

sp77\_206\_c\_lag\_all | 1.058985 .0391148 1.55 0.121 .9850307 1.138492

sp77\_216\_c\_lag\_all | 1.00611 .0173367 0.35 0.724 .9726982 1.04067

sp77\_506\_c\_lag\_all | .9656062 .0165674 -2.04 0.041 .9336747 .9986298

sp77\_516\_c\_lag\_all | .9963154 .0067151 -0.55 0.584 .9832405 1.009564

sp77\_606\_c\_lag\_all | 1 (omitted)

sp75\_806\_c\_lag\_all | 1.197741 .3085571 0.70 0.484 .7229031 1.984477

sp77\_906\_c\_lag\_all | .2101967 .1186055 -2.76 0.006 .0695548 .6352205

sp48\_27\_c\_lag\_all | .932242 .0479495 -1.36 0.173 .8428445 1.031122

sp48\_7\_c\_lag\_all | 1.087418 .0375553 2.43 0.015 1.016247 1.163574

sp75\_1403\_7\_c\_lag\_all | .9964506 .0250484 -0.14 0.888 .9485465 1.046774

sp75\_1437\_c\_lag\_all | 1.481467 .2134357 2.73 0.006 1.117015 1.96483

sp75\_1727\_c\_lag\_all | .9173435 .1103433 -0.72 0.473 .7246772 1.161233

sp75\_337\_c\_lag\_all | 1.01999 .0204824 0.99 0.324 .9806254 1.060936

sp75\_507\_c\_lag\_all | 1.027077 .0298658 0.92 0.358 .9701777 1.087313

sp75\_517\_c\_lag\_all | 1.00093 .0019274 0.48 0.629 .9971591 1.004715

sp75\_607\_c\_lag\_all | .9631751 .0263921 -1.37 0.171 .9128121 1.016317

sp75\_827\_c\_lag\_all | .9489132 .1050045 -0.47 0.636 .7638965 1.178741

sp75\_907\_c\_lag\_all | .9772957 .028713 -0.78 0.434 .922609 1.035224

sp77\_1437\_c\_lag\_all | .7482804 .0868042 -2.50 0.012 .5961023 .9393078

sp77\_207\_c\_lag\_all | 1.022223 .0206254 1.09 0.276 .9825866 1.063458

sp77\_507\_c\_lag\_all | .9977999 .0713449 -0.03 0.975 .8673226 1.147906

sp75\_807\_c\_lag\_all | .9972868 .0046021 -0.59 0.556 .9883074 1.006348

sp77\_807\_c\_lag\_all | .9259372 .0895045 -0.80 0.426 .7661279 1.119082

sp48\_28\_c\_lag\_all | .9505613 .0585602 -0.82 0.410 .8424441 1.072554

sp48\_8\_c\_lag\_all | .9620475 .0485144 -0.77 0.443 .8715091 1.061992

sp75\_1403\_8\_c\_lag\_all | .9999436 .0028696 -0.02 0.984 .9943351 1.005584

sp75\_1438\_c\_lag\_all | 1 (omitted)

sp75\_1728\_c\_lag\_all | 1.283266 .1348325 2.37 0.018 1.044434 1.576711

sp75\_208\_c\_lag\_all | .9919218 .0091252 -0.88 0.378 .974197 1.009969

sp75\_518\_c\_lag\_all | .9961782 .0100987 -0.38 0.706 .9765804 1.016169

sp75\_705\_8\_c\_lag\_all | .8908487 .1892745 -0.54 0.586 .5874259 1.350998

sp75\_818\_c\_lag\_all | .9646889 .1140123 -0.30 0.761 .7652222 1.21615

sp77\_1438\_c\_lag\_all | 1.069319 .6609611 0.11 0.914 .318396 3.59126

sp77\_208\_c\_lag\_all | 1.024339 .0097916 2.52 0.012 1.005326 1.043711

sp77\_408\_c\_lag\_all | 1.0044 .0967654 0.05 0.964 .8315735 1.213145

sp77\_508\_c\_lag\_all | .9743143 .0498999 -0.51 0.611 .8812608 1.077193

sp75\_808\_c\_lag\_all | 1.122811 .069504 1.87 0.061 .9945254 1.267645

sp77\_704\_8\_c\_lag\_all | 1.22663 .148926 1.68 0.092 .9668712 1.556175

sp77\_808\_c\_lag\_all | 1.063362 .2170323 0.30 0.763 .712772 1.586395

sp75\_1403\_9\_c\_lag\_all | .9417089 .021421 -2.64 0.008 .9006467 .9846433

sp75\_1729\_c\_lag\_all | .6518639 .0606367 -4.60 0.000 .5432226 .7822329

sp75\_1909\_c\_lag\_all | .9997191 .0027925 -0.10 0.920 .9942608 1.005207

sp75\_519\_c\_lag\_all | 1.238941 .3180179 0.83 0.404 .7491344 2.048998

sp75\_819\_c\_lag\_all | .7862751 .2330756 -0.81 0.417 .4397975 1.405712

sp77\_309\_c\_lag\_all | .3926482 .1554128 -2.36 0.018 .1807558 .8529329

sp77\_409\_c\_lag\_all | .9212371 .0802711 -0.94 0.346 .7766096 1.092798

sp77\_509\_c\_lag\_all | .9596432 .028477 -1.39 0.165 .9054215 1.017112

sp75\_809\_c\_lag\_all | .9808336 .0219733 -0.86 0.388 .9386986 1.02486

sp77\_704\_9\_c\_lag\_all | .4722858 .1295733 -2.73 0.006 .2758511 .8086027

sp77\_809\_c\_lag\_all | .983016 .0478091 -0.35 0.725 .8936393 1.081332

sp72\_610\_c\_lag\_all | 1.007812 .1966241 0.04 0.968 .6875588 1.477232

sp72\_620\_c\_lag\_all | .9984909 .1525959 -0.01 0.992 .7400447 1.347194

sp72\_630\_c\_lag\_all | .9908834 .0055781 -1.63 0.104 .9800106 1.001877

sp75\_100\_c\_lag\_all | 1.112204 .1197522 0.99 0.323 .9006057 1.373518

sp75\_1101\_20\_c\_lag\_all | 1.209238 .1618154 1.42 0.156 .9302665 1.571868

sp75\_1400\_c\_lag\_all | .9725585 .0265443 -1.02 0.308 .9218997 1.026001

sp75\_1403\_10\_c\_lag\_all | 1.014107 .0070802 2.01 0.045 1.000325 1.02808

sp75\_150\_c\_lag\_all | 1.248815 .1699869 1.63 0.103 .9563875 1.630657

sp75\_160\_c\_lag\_all | .6678763 .1447212 -1.86 0.062 .4367675 1.021273

sp75\_1712\_10\_c\_lag\_all | 1.006328 .0401473 0.16 0.874 .9306389 1.088174

sp75\_1720\_c\_lag\_all | .9975539 .0288285 -0.08 0.932 .9426216 1.055688

sp75\_1730\_c\_lag\_all | 1.016612 .0427271 0.39 0.695 .9362247 1.103901

sp75\_1910\_c\_lag\_all | 1.007643 .0045611 1.68 0.093 .9987435 1.016623

sp75\_320\_c\_lag\_all | .9665488 .0126424 -2.60 0.009 .9420851 .9916477

sp75\_340\_c\_lag\_all | 1.00278 .0045905 0.61 0.544 .9938227 1.011817

sp75\_520\_c\_lag\_all | 1.002711 .0156501 0.17 0.862 .9725013 1.033858

sp75\_600\_c\_lag\_all | .85431 .154287 -0.87 0.383 .599639 1.217142

sp75\_700\_c\_lag\_all | .9715655 .0199567 -1.40 0.160 .9332279 1.011478

sp75\_800\_c\_lag\_all | 1.04864 .0525925 0.95 0.344 .950465 1.156956

sp75\_820\_c\_lag\_all | 1.016744 .1085692 0.16 0.876 .8247439 1.253441

sp75\_900\_c\_lag\_all | 1.000252 .0135658 0.02 0.985 .9740136 1.027197

sp77\_1710\_c\_lag\_all | .9870804 .013724 -0.94 0.350 .960545 1.014349

sp77\_200\_c\_lag\_all | 1.022194 .0069147 3.25 0.001 1.008731 1.035837

sp77\_210\_c\_lag\_all | 1.023224 .0421725 0.56 0.577 .9438182 1.109311

sp77\_400\_c\_lag\_all | 1.002113 .0058577 0.36 0.718 .9906974 1.01366

sp77\_410\_c\_lag\_all | 1.000367 .007594 0.05 0.961 .9855929 1.015362

sp77\_500\_c\_lag\_all | 1.012765 .1313489 0.10 0.922 .7854409 1.305882

sp77\_510\_c\_lag\_all | .9807529 .1376421 -0.14 0.890 .744902 1.291279

sp77\_600\_c\_lag\_all | .9870509 .1054585 -0.12 0.903 .8005628 1.216981

sp77\_700\_c\_lag\_all | 1.161639 .0889223 1.96 0.050 .9997983 1.349676

sp75\_810\_c\_lag\_all | 1.023978 .0234127 1.04 0.300 .9791025 1.070909

sp77\_800\_c\_lag\_all | .9163861 .1562125 -0.51 0.608 .6561116 1.27991

sp77\_810\_c\_lag\_all | .9198603 .0752602 -1.02 0.307 .7835724 1.079853

sp77\_900\_c\_lag\_all | .9701614 .0871477 -0.34 0.736 .8135463 1.156926

mine\_time | .9930902 .0038998 -1.77 0.077 .9854761 1.000763

onsite\_insp\_hours | 1.000029 .0000928 0.32 0.752 .9998474 1.000211

|

state |

AL | 1.014183 .3177718 0.04 0.964 .5487962 1.874224

CO | .77373 .1635309 -1.21 0.225 .5113104 1.170831

IL | 1.159686 .1483743 1.16 0.247 .9024736 1.490205

IN | .8155071 .1615164 -1.03 0.303 .5531486 1.202302

MD | 1.147206 .3391733 0.46 0.642 .6426616 2.047861

NM | 1.103633 .5061613 0.22 0.830 .4491963 2.71152

OH | .7818152 .1665661 -1.16 0.248 .5149383 1.187006

OK | .7972479 .3460846 -0.52 0.602 .3404768 1.866806

PA | 1.334463 .1721764 2.24 0.025 1.036291 1.718427

TN | 1.081594 .2732769 0.31 0.756 .659172 1.77472

UT | 1.642041 .3604514 2.26 0.024 1.067906 2.524846

VA | .8770557 .0917178 -1.25 0.210 .7145179 1.076568

WV | 1.043712 .0834461 0.54 0.593 .8923316 1.220775

WY | .948745 .3640603 -0.14 0.891 .4472182 2.012703

|

time |

2000.25 | 1.1541 .1219455 1.36 0.175 .9382161 1.419658

2000.5 | 1.295831 .1333225 2.52 0.012 1.059185 1.585349

2000.75 | .9573055 .1109046 -0.38 0.706 .7628483 1.201332

2001 | 1.039137 .1054965 0.38 0.705 .8516399 1.267913

2001.25 | .9865367 .1143844 -0.12 0.907 .785996 1.238244

2001.5 | 1.226783 .1368031 1.83 0.067 .9859325 1.526471

2001.75 | .9779869 .1070002 -0.20 0.839 .7892312 1.211886

2002 | 1.071499 .1201749 0.62 0.538 .8600522 1.334932

2002.25 | .9963637 .1249008 -0.03 0.977 .779317 1.27386

2002.5 | 1.145537 .1355386 1.15 0.251 .9084394 1.444516

2002.75 | 1.034661 .1216641 0.29 0.772 .8216873 1.302835

2003 | .8342429 .0981234 -1.54 0.123 .6624826 1.050535

2003.25 | .9384182 .1142811 -0.52 0.602 .7391569 1.191396

2003.5 | 1.113018 .1361489 0.88 0.381 .8757495 1.414571

2003.75 | .8567516 .1007457 -1.31 0.189 .6803961 1.078818

2004 | 1.012001 .1246258 0.10 0.923 .7949818 1.288263

2004.25 | .9976874 .1193895 -0.02 0.985 .7891044 1.261405

2004.5 | .9814603 .1280523 -0.14 0.886 .7600033 1.267448

2004.75 | .9243803 .127648 -0.57 0.569 .705193 1.211695

2005 | .7749527 .0977209 -2.02 0.043 .6052564 .9922271

2005.25 | .9241333 .1201947 -0.61 0.544 .7161855 1.19246

2005.5 | .9545503 .121036 -0.37 0.714 .7445044 1.223856

2005.75 | .7593088 .1024806 -2.04 0.041 .5828214 .9892394

2006 | .8116246 .108356 -1.56 0.118 .6247632 1.054375

2006.25 | .8485613 .1165494 -1.20 0.232 .6482928 1.110696

2006.5 | .9838939 .1367655 -0.12 0.907 .7492515 1.292019

2006.75 | .7544373 .1158026 -1.84 0.066 .5584287 1.019245

2007 | .8923907 .1247018 -0.81 0.415 .6785923 1.173549

2007.25 | .7108296 .1000227 -2.43 0.015 .5394992 .9365701

2007.5 | .8039986 .1054357 -1.66 0.096 .6217696 1.039636

2007.75 | .7867622 .1074872 -1.76 0.079 .6019392 1.028334

2008 | .6573827 .0944884 -2.92 0.004 .4959884 .8712947

2008.25 | .6111376 .0835982 -3.60 0.000 .4674145 .7990535

2008.5 | .6982601 .1030886 -2.43 0.015 .5228161 .9325787

2008.75 | .6972043 .099141 -2.54 0.011 .5276197 .921296

2009 | .6433335 .0944158 -3.01 0.003 .482518 .8577461

2009.25 | .5814794 .0806827 -3.91 0.000 .4430233 .7632067

2009.5 | .6932068 .1033385 -2.46 0.014 .5175729 .9284406

2009.75 | .5048916 .0792398 -4.35 0.000 .3711992 .6867351

2010 | .5951027 .0892274 -3.46 0.001 .443574 .7983949

2010.25 | .6213394 .087522 -3.38 0.001 .4714423 .818897

2010.5 | .6377236 .0908964 -3.16 0.002 .4822903 .8432502

2010.75 | .5618198 .0801914 -4.04 0.000 .4247181 .7431789

2011 | .6013352 .0852775 -3.59 0.000 .4554122 .7940147

2011.25 | .5940956 .0805493 -3.84 0.000 .4554575 .7749344

2011.5 | .674856 .0960645 -2.76 0.006 .5105569 .8920271

2011.75 | .5479904 .0840181 -3.92 0.000 .4057574 .7400814

2012 | .6482877 .0934941 -3.01 0.003 .4886636 .8600536

2012.25 | .540171 .0756025 -4.40 0.000 .4105791 .7106663

2012.5 | .5676752 .0796708 -4.03 0.000 .4311589 .7474162

2012.75 | .5523767 .0842981 -3.89 0.000 .4095752 .7449671

2013 | .556862 .0848931 -3.84 0.000 .4130311 .7507795

2013.25 | .4658512 .0738774 -4.82 0.000 .3413961 .635676

2013.5 | .6864566 .1014698 -2.55 0.011 .5137966 .9171385

2013.75 | .5496913 .0830302 -3.96 0.000 .4088329 .7390807

2014 | .5078472 .0840374 -4.09 0.000 .3671792 .7024056

2014.25 | .5498112 .0886687 -3.71 0.000 .4008106 .7542024

2014.5 | .5794531 .0918701 -3.44 0.001 .4246816 .7906296

2014.75 | .576015 .0909769 -3.49 0.000 .4226623 .7850081

2015 | .566056 .0949082 -3.39 0.001 .4075136 .7862792

2015.25 | .5709119 .0987877 -3.24 0.001 .4067068 .8014137

2015.5 | .7002974 .120827 -2.06 0.039 .4993661 .9820781

2015.75 | .4825663 .0949453 -3.70 0.000 .3281576 .7096292

2016 | .603545 .1170662 -2.60 0.009 .4126738 .8826985

|

\_cons | .0000143 1.29e-06 -123.17 0.000 .000012 .0000171

ln(hours) | 1 (exposure)

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**. estat gof**

Deviance goodness-of-fit = 11115.13

Prob > chi2(13421) = 1.0000

Pearson goodness-of-fit = 117702.4

Prob > chi2(13421) = 0.0000

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

note: sp71\_701\_c\_lag\_all omitted because of collinearity

note: sp77\_801\_1\_c\_lag\_all omitted because of collinearity

note: sp77\_801\_c\_lag\_all omitted because of collinearity

note: sp75\_705\_3\_c\_lag\_all omitted because of collinearity

note: sp48\_24\_c\_lag\_all omitted because of collinearity

note: sp75\_834\_c\_lag\_all omitted because of collinearity

note: sp77\_606\_c\_lag\_all omitted because of collinearity

note: sp75\_1438\_c\_lag\_all omitted because of collinearity

Iteration 0: log pseudolikelihood = -12028.533

Iteration 1: log pseudolikelihood = -11823.939

Iteration 2: log pseudolikelihood = -11822.664

Iteration 3: log pseudolikelihood = -11822.607

Iteration 4: log pseudolikelihood = -11822.601

Iteration 5: log pseudolikelihood = -11822.6

Iteration 6: log pseudolikelihood = -11822.6

Iteration 7: log pseudolikelihood = -11822.6

Iteration 8: log pseudolikelihood = -11822.6

Generalized linear models No. of obs = 13,797

Optimization : ML Residual df = 13,420

Scale parameter = 1

Deviance = 7372.421496 (1/df) Deviance = .5493608

Pearson = 106495.6753 (1/df) Pearson = 7.935594

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

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

AIC = 1.768442

Log pseudolikelihood = -11822.60018 BIC = -120549.8

(Std. Err. adjusted for 801 clusters in mineid)

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| Robust

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

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

sp47\_41\_c\_lag\_all | 1.045698 .0298794 1.56 0.118 .9887454 1.105932

sp48\_11\_c\_lag\_all | 1.017949 .0365673 0.50 0.620 .9487429 1.092203

sp71\_701\_c\_lag\_all | 1 (omitted)

sp75\_1001\_1\_c\_lag\_all | .8996466 .1727804 -0.55 0.582 .6174411 1.310836

sp75\_1001\_c\_lag\_all | .6721727 .0897472 -2.98 0.003 .5174044 .8732362

sp75\_1003\_1\_c\_lag\_all | .9085145 .1478578 -0.59 0.556 .6603916 1.249862

sp75\_1400\_1\_c\_lag\_all | .9622237 .182519 -0.20 0.839 .6634623 1.395519

sp75\_1401\_1\_c\_lag\_all | .5183041 .1498762 -2.27 0.023 .2940666 .9135316

sp75\_1401\_c\_lag\_all | 1.029162 .1446666 0.20 0.838 .7813263 1.35561

sp75\_1403\_11\_c\_lag\_all | .9354893 .2422466 -0.26 0.797 .563143 1.554029

sp75\_1404\_1\_c\_lag\_all | .5810529 .1485613 -2.12 0.034 .3520333 .9590639

sp75\_1405\_1\_c\_lag\_all | .8191465 .1052681 -1.55 0.121 .6367575 1.053778

sp75\_1431\_c\_lag\_all | .7288252 .3650627 -0.63 0.528 .2730633 1.945286

sp75\_151\_c\_lag\_all | 1.382959 .2734215 1.64 0.101 .9386864 2.037504

sp75\_1721\_c\_lag\_all | .4112855 .1208163 -3.02 0.002 .2312599 .7314528

sp75\_1731\_c\_lag\_all | 1.000374 .0016291 0.23 0.818 .9971859 1.003572

sp75\_1911\_c\_lag\_all | .9863166 .0073124 -1.86 0.063 .9720881 1.000753

sp75\_211\_c\_lag\_all | 1.012386 .0140573 0.89 0.375 .9852059 1.040316

sp75\_341\_c\_lag\_all | 1.166951 .2038752 0.88 0.377 .8285933 1.643479

sp75\_506\_1\_c\_lag\_all | 1.139385 .0662929 2.24 0.025 1.016588 1.277015

sp75\_510\_1\_c\_lag\_all | 1.72059 1.059892 0.88 0.378 .5144374 5.754691

sp75\_511\_1\_c\_lag\_all | 1.059557 .232786 0.26 0.792 .6888333 1.6298

sp75\_511\_c\_lag\_all | 1.07746 .0381544 2.11 0.035 1.005215 1.154898

sp75\_512\_1\_c\_lag\_all | 1.044892 .3030398 0.15 0.880 .5918418 1.844748

sp75\_513\_1\_c\_lag\_all | 1.032266 .110448 0.30 0.767 .8369828 1.273111

sp75\_516\_1\_c\_lag\_all | 1.069515 .1007434 0.71 0.476 .889217 1.286371

sp75\_517\_1\_c\_lag\_all | .9358908 .1060072 -0.58 0.559 .7495673 1.16853

sp75\_518\_1\_c\_lag\_all | .9914272 .0179652 -0.48 0.635 .956834 1.027271

sp75\_523\_1\_c\_lag\_all | .9823573 .0185035 -0.95 0.345 .9467524 1.019301

sp75\_600\_1\_c\_lag\_all | .8985998 .1110403 -0.87 0.387 .7053148 1.144853

sp75\_601\_1\_c\_lag\_all | .9999549 .0079672 -0.01 0.995 .9844608 1.015693

sp75\_601\_c\_lag\_all | .9973168 .0120731 -0.22 0.824 .9739324 1.021263

sp75\_700\_1\_c\_lag\_all | .9929131 .1010871 -0.07 0.944 .8133016 1.21219

sp75\_701\_1\_c\_lag\_all | 1.028799 .0317454 0.92 0.358 .9684233 1.092939

sp75\_701\_c\_lag\_all | 1.007263 .0078345 0.93 0.352 .992024 1.022736

sp75\_702\_1\_c\_lag\_all | .3227387 .0856509 -4.26 0.000 .191846 .542937

sp75\_703\_1\_c\_lag\_all | .6207787 .2135778 -1.39 0.166 .3162879 1.218404

sp75\_705\_1\_c\_lag\_all | 1.098171 .1206264 0.85 0.394 .8854653 1.361973

sp75\_801\_c\_lag\_all | 1.244103 .2539988 1.07 0.285 .8338213 1.856263

sp75\_821\_c\_lag\_all | .9920117 .0539148 -0.15 0.883 .8917742 1.103516

sp75\_831\_c\_lag\_all | 1.619347 .2861034 2.73 0.006 1.145384 2.289437

sp75\_901\_c\_lag\_all | 1.061945 .0606519 1.05 0.293 .9494815 1.18773

sp75\_902\_1\_c\_lag\_all | 1.350218 .222531 1.82 0.068 .9774991 1.865054

sp77\_1111\_c\_lag\_all | .8740181 .1248799 -0.94 0.346 .6605422 1.156486

sp77\_401\_c\_lag\_all | .9984868 .0512787 -0.03 0.976 .902875 1.104224

sp77\_403\_1\_c\_lag\_all | 1.026147 .065871 0.40 0.688 .9048336 1.163725

sp77\_411\_c\_lag\_all | .4265863 .1441803 -2.52 0.012 .2199442 .8273731

sp77\_501\_c\_lag\_all | 1.083444 .0731006 1.19 0.235 .9492382 1.236623

sp77\_502\_1\_c\_lag\_all | 1.518279 .4883128 1.30 0.194 .8083252 2.851788

sp77\_503\_1\_c\_lag\_all | 1.070199 .1870958 0.39 0.698 .7597214 1.507559

sp77\_506\_1\_c\_lag\_all | .9731005 .0194867 -1.36 0.173 .9356471 1.012053

sp77\_508\_1\_c\_lag\_all | 1.177515 .1199455 1.60 0.109 .9644065 1.437714

sp77\_511\_c\_lag\_all | .8460283 .0858463 -1.65 0.099 .6934476 1.032182

sp77\_601\_c\_lag\_all | .9041481 .1473149 -0.62 0.536 .6569788 1.244308

sp77\_606\_1\_c\_lag\_all | .5786253 .2520998 -1.26 0.209 .2463427 1.359112

sp77\_700\_1\_c\_lag\_all | 1.020403 .199508 0.10 0.918 .6955777 1.496917

sp77\_701\_1\_c\_lag\_all | 1.034016 .0995321 0.35 0.728 .8562336 1.248711

sp77\_701\_c\_lag\_all | 1.007091 .0211083 0.34 0.736 .9665577 1.049324

sp75\_811\_c\_lag\_all | 1.022821 .0256659 0.90 0.369 .9737336 1.074383

sp77\_704\_1\_c\_lag\_all | 1.493893 .3948963 1.52 0.129 .8898412 2.507994

sp77\_800\_1\_c\_lag\_all | 1.244337 .1442161 1.89 0.059 .9914839 1.561675

sp77\_801\_1\_c\_lag\_all | 1 (omitted)

sp77\_801\_c\_lag\_all | 1 (omitted)

sp77\_807\_1\_c\_lag\_all | .8334205 .197617 -0.77 0.442 .5236378 1.32647

sp77\_900\_1\_c\_lag\_all | 1.25709 .2012458 1.43 0.153 .9185411 1.720418

sp77\_901\_1\_c\_lag\_all | .2188136 .0724102 -4.59 0.000 .1143913 .4185577

sp77\_901\_c\_lag\_all | .9787541 .1366212 -0.15 0.878 .7444869 1.286738

sp47\_42\_c\_lag\_all | .8615175 .090493 -1.42 0.156 .7012206 1.058458

sp75\_1100\_2\_c\_lag\_all | 1.012478 .0039652 3.17 0.002 1.004736 1.02028

sp75\_1102\_c\_lag\_all | .9854298 .0403274 -0.36 0.720 .9094763 1.067726

sp75\_1106\_2\_c\_lag\_all | .9401451 .0245211 -2.37 0.018 .8932923 .9894553

sp75\_1400\_2\_c\_lag\_all | .9344411 .1269949 -0.50 0.618 .7159286 1.219647

sp75\_1402\_2\_c\_lag\_all | .8033975 .3380209 -0.52 0.603 .3522059 1.832586

sp75\_1432\_c\_lag\_all | .7541737 .1065599 -2.00 0.046 .5717446 .9948113

sp75\_1600\_2\_c\_lag\_all | 1.005081 .0166264 0.31 0.759 .9730161 1.038202

sp75\_1912\_c\_lag\_all | 1.107349 .065537 1.72 0.085 .9860693 1.243546

sp75\_202\_c\_lag\_all | .9995013 .0010388 -0.48 0.631 .9974673 1.00154

sp75\_212\_c\_lag\_all | .9695137 .0195564 -1.53 0.125 .9319316 1.008611

sp75\_312\_c\_lag\_all | 1.019505 .0178858 1.10 0.271 .985045 1.05517

sp75\_342\_c\_lag\_all | .9961569 .0039114 -0.98 0.327 .98852 1.003853

sp75\_352\_c\_lag\_all | .94776 .0313579 -1.62 0.105 .8882501 1.011257

sp75\_382\_c\_lag\_all | 1.04993 .0307359 1.66 0.096 .991384 1.111933

sp75\_512\_2\_c\_lag\_all | .9873893 .0097492 -1.29 0.199 .9684649 1.006684

sp75\_512\_c\_lag\_all | 1.002093 .003185 0.66 0.511 .9958699 1.008355

sp75\_516\_2\_c\_lag\_all | 1.004342 .017923 0.24 0.808 .9698207 1.040092

sp75\_523\_2\_c\_lag\_all | .9829142 .0157981 -1.07 0.284 .9524332 1.014371

sp75\_601\_2\_c\_lag\_all | .7423974 .0994441 -2.22 0.026 .5709762 .9652833

sp75\_602\_c\_lag\_all | 1.012688 .0228236 0.56 0.576 .9689283 1.058424

sp75\_701\_2\_c\_lag\_all | .8989212 .0530181 -1.81 0.071 .8007888 1.009079

sp75\_702\_c\_lag\_all | 2.271408 .6895752 2.70 0.007 1.252793 4.118232

sp75\_703\_2\_c\_lag\_all | .9218983 .0806114 -0.93 0.352 .7767002 1.09424

sp75\_705\_2\_c\_lag\_all | 4.254855 2.259012 2.73 0.006 1.503004 12.04507

sp75\_800\_2\_c\_lag\_all | 1.076269 .1771837 0.45 0.655 .7794525 1.486114

sp75\_802\_c\_lag\_all | .8936009 .0674384 -1.49 0.136 .770735 1.036053

sp75\_803\_2\_c\_lag\_all | .1856253 .0225232 -13.88 0.000 .1463373 .2354611

sp75\_812\_c\_lag\_all | 1.040599 .1424273 0.29 0.771 .7957546 1.36078

sp75\_832\_c\_lag\_all | 1.346638 .397295 1.01 0.313 .7553066 2.400925

sp75\_900\_2\_c\_lag\_all | .4523745 .0602585 -5.96 0.000 .3484288 .5873301

sp75\_902\_2\_c\_lag\_all | 1.003165 .0227937 0.14 0.889 .95947 1.048849

sp75\_902\_c\_lag\_all | .9941275 .0152322 -0.38 0.701 .9647168 1.024435

sp77\_1112\_c\_lag\_all | .9568784 .0760331 -0.55 0.579 .8188808 1.118131

sp77\_1432\_c\_lag\_all | .6870345 .1259092 -2.05 0.041 .479715 .9839516

sp77\_1802\_c\_lag\_all | .7224936 .1608429 -1.46 0.144 .4670226 1.117713

sp77\_202\_c\_lag\_all | 1.000271 .0102855 0.03 0.979 .9803131 1.020634

sp77\_402\_c\_lag\_all | .9896651 .0222908 -0.46 0.645 .9469262 1.034333

sp77\_403\_2\_c\_lag\_all | .4538606 .223867 -1.60 0.109 .1726104 1.193378

sp77\_412\_c\_lag\_all | 1.035049 .0597262 0.60 0.551 .9243649 1.158987

sp77\_502\_2\_c\_lag\_all | 1.046399 .0369424 1.28 0.199 .9764412 1.121368

sp77\_502\_c\_lag\_all | .9992043 .0056086 -0.14 0.887 .9882718 1.010258

sp77\_512\_c\_lag\_all | .9839773 .0171935 -0.92 0.355 .9508491 1.01826

sp77\_602\_c\_lag\_all | 1.139011 .1895414 0.78 0.434 .822016 1.578248

sp77\_701\_2\_c\_lag\_all | .909131 .0875548 -0.99 0.323 .7527497 1.098

sp77\_702\_c\_lag\_all | .2794384 .1221648 -2.92 0.004 .11862 .6582851

sp77\_800\_2\_c\_lag\_all | .9144608 .0832049 -0.98 0.326 .7650961 1.092985

sp77\_802\_c\_lag\_all | 1.565804 .4971556 1.41 0.158 .8403764 2.917433

sp77\_807\_2\_c\_lag\_all | 1.015059 .1164315 0.13 0.896 .8106903 1.270948

sp77\_900\_2\_c\_lag\_all | 1.037183 .0747708 0.51 0.613 .9005169 1.194589

sp77\_902\_2\_c\_lag\_all | .0088808 .0048992 -8.56 0.000 .0030121 .0261835

sp77\_902\_c\_lag\_all | .9249129 .0873713 -0.83 0.409 .7685862 1.113036

sp47\_43\_c\_lag\_all | .2927226 .1426389 -2.52 0.012 .1126366 .7607338

sp72\_503\_c\_lag\_all | 1.017338 .0372509 0.47 0.639 .9468854 1.093032

sp75\_1106\_3\_c\_lag\_all | 1.006852 .0078986 0.87 0.384 .991489 1.022452

sp75\_1400\_3\_c\_lag\_all | 1.003575 .034278 0.10 0.917 .9385903 1.073058

sp75\_1403\_3\_c\_lag\_all | .5317745 .1080598 -3.11 0.002 .357074 .7919481

sp75\_1433\_c\_lag\_all | .8923126 .0547132 -1.86 0.063 .7912698 1.006258

sp75\_153\_c\_lag\_all | .8909729 .3090784 -0.33 0.739 .451422 1.758516

sp75\_1903\_c\_lag\_all | 1.004728 .0220855 0.21 0.830 .9623604 1.048961

sp75\_1913\_c\_lag\_all | .9683849 .0525034 -0.59 0.553 .8707591 1.076956

sp75\_503\_c\_lag\_all | 1.002523 .001601 1.58 0.115 .9993904 1.005666

sp75\_513\_c\_lag\_all | .9452966 .0436203 -1.22 0.223 .8635545 1.034776

sp75\_523\_c\_lag\_all | .9895859 .0169203 -0.61 0.540 .9569722 1.023311

sp75\_601\_3\_c\_lag\_all | 1.086955 .1378336 0.66 0.511 .8477607 1.393638

sp75\_603\_c\_lag\_all | .9888182 .0376153 -0.30 0.768 .9177749 1.065361

sp75\_701\_3\_c\_lag\_all | 1.018282 .0432708 0.43 0.670 .9369081 1.106723

sp75\_703\_3\_c\_lag\_all | 1.013557 .0382892 0.36 0.721 .9412228 1.091451

sp75\_703\_c\_lag\_all | 1.045179 .0238042 1.94 0.052 .9995499 1.092892

sp75\_705\_3\_c\_lag\_all | 1 (omitted)

sp75\_800\_3\_c\_lag\_all | .9808824 .055931 -0.34 0.735 .8771635 1.096866

sp75\_803\_c\_lag\_all | .9441232 .0492964 -1.10 0.271 .8522834 1.045859

sp75\_900\_3\_c\_lag\_all | .95846 .0421539 -0.96 0.335 .8793006 1.044746

sp75\_903\_c\_lag\_all | .9982654 .0245744 -0.07 0.944 .9512438 1.047611

sp77\_103\_c\_lag\_all | 1.13161 .2638216 0.53 0.596 .7165545 1.787082

sp77\_1103\_c\_lag\_all | 1.008179 .0115312 0.71 0.476 .9858296 1.031035

sp77\_1403\_c\_lag\_all | .9717876 .0715449 -0.39 0.697 .8412097 1.122635

sp77\_1433\_c\_lag\_all | .8912747 .1539317 -0.67 0.505 .6353323 1.250323

sp77\_203\_c\_lag\_all | .9437125 .0704457 -0.78 0.438 .8152668 1.092395

sp77\_403\_c\_lag\_all | .8750872 .1640252 -0.71 0.477 .6060427 1.26357

sp77\_413\_c\_lag\_all | .9897593 .1189999 -0.09 0.932 .7819674 1.252768

sp77\_503\_c\_lag\_all | .9978012 .0892948 -0.02 0.980 .837276 1.189103

sp77\_513\_c\_lag\_all | 1.00925 .0224451 0.41 0.679 .9662038 1.054215

sp77\_603\_c\_lag\_all | .9652547 .1812629 -0.19 0.851 .6680313 1.39472

sp77\_703\_c\_lag\_all | .5489849 .2407379 -1.37 0.171 .2324321 1.296656

sp77\_803\_c\_lag\_all | 1.405434 .2276165 2.10 0.036 1.023186 1.930485

sp77\_807\_3\_c\_lag\_all | 1.264553 .2970614 1.00 0.318 .7979537 2.003994

sp77\_903\_c\_lag\_all | 1.173452 .1753926 1.07 0.285 .8754642 1.572867

sp47\_44\_c\_lag\_all | 1.001623 .0358816 0.05 0.964 .9337081 1.074477

sp48\_24\_c\_lag\_all | 1 (omitted)

sp48\_4\_c\_lag\_all | 8.61e-06 8.64e-06 -11.62 0.000 1.20e-06 .0000615

sp75\_1103\_4\_c\_lag\_all | .9983623 .0069679 -0.23 0.814 .9847984 1.012113

sp75\_1104\_c\_lag\_all | .9637303 .0230873 -1.54 0.123 .919526 1.01006

sp75\_1106\_4\_c\_lag\_all | 1.016689 .0626332 0.27 0.788 .901052 1.147167

sp75\_1107\_14\_c\_lag\_all | 3.178557 1.126846 3.26 0.001 1.586596 6.367863

sp75\_1400\_4\_c\_lag\_all | .8975567 .0504044 -1.92 0.054 .8040086 1.001989

sp75\_1403\_4\_c\_lag\_all | 1.699032 .3480734 2.59 0.010 1.137155 2.538538

sp75\_1404\_c\_lag\_all | 1.066281 .1837697 0.37 0.710 .7606242 1.494766

sp75\_1434\_c\_lag\_all | .9874368 .0490159 -0.25 0.799 .8958928 1.088335

sp75\_1914\_c\_lag\_all | .9961771 .0033056 -1.15 0.248 .9897193 1.002677

sp75\_214\_c\_lag\_all | .9694989 .021741 -1.38 0.167 .9278102 1.013061

sp75\_324\_c\_lag\_all | 1.001266 .0569212 0.02 0.982 .8956927 1.119282

sp75\_344\_c\_lag\_all | 1.039783 .0556663 0.73 0.466 .9362078 1.154816

sp75\_504\_c\_lag\_all | .9471582 .0479868 -1.07 0.284 .8576247 1.046039

sp75\_514\_c\_lag\_all | 1.004034 .0088108 0.46 0.646 .9869128 1.021452

sp75\_604\_c\_lag\_all | 1.002392 .0028127 0.85 0.395 .9968942 1.00792

sp75\_701\_4\_c\_lag\_all | 1.158709 .2105655 0.81 0.418 .8115035 1.654468

sp75\_703\_4\_c\_lag\_all | 2.045866 .5912549 2.48 0.013 1.161128 3.604743

sp75\_704\_c\_lag\_all | .7155819 .1015412 -2.36 0.018 .5418434 .9450286

sp75\_800\_4\_c\_lag\_all | 1.040779 .0563247 0.74 0.460 .9360372 1.15724

sp75\_814\_c\_lag\_all | .9690706 .0743938 -0.41 0.682 .8337008 1.126421

sp75\_834\_c\_lag\_all | 1 (omitted)

sp75\_900\_4\_c\_lag\_all | .9988999 .0148317 -0.07 0.941 .9702492 1.028397

sp75\_902\_4\_c\_lag\_all | 1.064425 .030201 2.20 0.028 1.006848 1.125295

sp75\_904\_c\_lag\_all | 1.010657 .0045264 2.37 0.018 1.001824 1.019567

sp77\_104\_c\_lag\_all | .4529683 .1182687 -3.03 0.002 .2715324 .7556384

sp77\_1104\_c\_lag\_all | .9998848 .0046318 -0.02 0.980 .9908477 1.009004

sp77\_1434\_c\_lag\_all | 1.298449 .1737934 1.95 0.051 .9988362 1.687935

sp77\_204\_c\_lag\_all | .9909854 .0221227 -0.41 0.685 .9485606 1.035308

sp77\_314\_c\_lag\_all | 1.489959 .7682155 0.77 0.439 .5423744 4.093074

sp77\_404\_c\_lag\_all | .9891989 .0049894 -2.15 0.031 .979468 .9990265

sp77\_504\_c\_lag\_all | .9589375 .0304347 -1.32 0.186 .9011041 1.020483

sp77\_514\_c\_lag\_all | .9005251 .0825898 -1.14 0.253 .7523668 1.077859

sp77\_604\_c\_lag\_all | .9096864 .1177502 -0.73 0.465 .7058489 1.172389

sp75\_804\_c\_lag\_all | .925852 .0261106 -2.73 0.006 .8760648 .9784686

sp77\_704\_c\_lag\_all | 1.033447 .3061054 0.11 0.912 .5783142 1.84677

sp77\_804\_c\_lag\_all | .7415724 .1412168 -1.57 0.116 .5105757 1.077077

sp77\_904\_c\_lag\_all | .9568518 .0202256 -2.09 0.037 .9180202 .9973259

sp48\_25\_c\_lag\_all | 1.086484 .067628 1.33 0.183 .961702 1.227457

sp48\_5\_c\_lag\_all | 1.008317 .0644926 0.13 0.897 .8895161 1.142985

sp75\_1106\_5\_c\_lag\_all | .9742139 .0271491 -0.94 0.349 .9224297 1.028905

sp75\_1403\_5\_c\_lag\_all | .996211 .0038472 -0.98 0.326 .9886991 1.00378

sp75\_1405\_c\_lag\_all | .9810098 .010422 -1.80 0.071 .9607942 1.001651

sp75\_1435\_c\_lag\_all | 1.014932 .1489772 0.10 0.920 .7611896 1.353259

sp75\_155\_c\_lag\_all | .8505144 .2515761 -0.55 0.584 .4763238 1.518662

sp75\_1725\_c\_lag\_all | 1.002181 .0023676 0.92 0.356 .9975518 1.006833

sp75\_1915\_c\_lag\_all | .9200875 .0585449 -1.31 0.191 .8122083 1.042295

sp75\_505\_c\_lag\_all | 1.150223 .104405 1.54 0.123 .9627626 1.374185

sp75\_515\_c\_lag\_all | .990195 .0062721 -1.56 0.120 .9779779 1.002565

sp75\_605\_c\_lag\_all | 1.012077 .0126081 0.96 0.335 .9876653 1.037093

sp75\_705\_c\_lag\_all | .97202 .1431516 -0.19 0.847 .7283109 1.29728

sp75\_815\_c\_lag\_all | .8823043 .0636022 -1.74 0.082 .7660521 1.016198

sp75\_825\_c\_lag\_all | 1.042676 .0968445 0.45 0.653 .8691389 1.250863

sp75\_905\_c\_lag\_all | .7452179 .0815768 -2.69 0.007 .6013187 .923553

sp77\_1605\_c\_lag\_all | 1.002805 .0061216 0.46 0.646 .9908789 1.014876

sp77\_1915\_c\_lag\_all | .7798337 .0851091 -2.28 0.023 .629657 .9658285

sp77\_205\_c\_lag\_all | .9942806 .0066476 -0.86 0.391 .9813364 1.007395

sp77\_305\_c\_lag\_all | .3623138 .131625 -2.79 0.005 .1777673 .7384446

sp77\_315\_c\_lag\_all | .9284378 .6417907 -0.11 0.914 .2395258 3.598764

sp77\_405\_c\_lag\_all | .9046562 .0602977 -1.50 0.133 .7938688 1.030904

sp77\_505\_c\_lag\_all | 1.005787 .0163044 0.36 0.722 .9743333 1.038256

sp77\_515\_c\_lag\_all | .7787363 .1541791 -1.26 0.207 .52828 1.147933

sp77\_605\_c\_lag\_all | .5618816 .3508393 -0.92 0.356 .1652547 1.91045

sp75\_805\_c\_lag\_all | 1.127767 .1636996 0.83 0.407 .8485244 1.498906

sp77\_705\_c\_lag\_all | 1.019524 .0526894 0.37 0.708 .9213127 1.128205

sp77\_805\_c\_lag\_all | .8557958 .2344533 -0.57 0.570 .5002366 1.46408

sp48\_26\_c\_lag\_all | 1.101311 .0908991 1.17 0.242 .9368154 1.29469

sp48\_6\_c\_lag\_all | .9747674 .0377141 -0.66 0.509 .9035822 1.051561

sp75\_1106\_6\_c\_lag\_all | 1.108084 .3937888 0.29 0.773 .5521721 2.223674

sp75\_1106\_c\_lag\_all | 1.043227 .0624841 0.71 0.480 .927676 1.173172

sp75\_1403\_6\_c\_lag\_all | .9974629 .0044786 -0.57 0.572 .9887235 1.00628

sp75\_1436\_c\_lag\_all | 1.276257 .5700336 0.55 0.585 .5318062 3.06283

sp75\_156\_c\_lag\_all | .7150827 .1970286 -1.22 0.224 .416699 1.227129

sp75\_1712\_6\_c\_lag\_all | .9731239 .0262623 -1.01 0.313 .9229884 1.025983

sp75\_1726\_c\_lag\_all | 1.196567 .073296 2.93 0.003 1.061198 1.349204

sp75\_506\_c\_lag\_all | .9627934 .0358133 -1.02 0.308 .8950982 1.035608

sp75\_516\_c\_lag\_all | .9908238 .009222 -0.99 0.322 .9729129 1.009064

sp75\_606\_c\_lag\_all | 1.007983 .0040338 1.99 0.047 1.000108 1.015921

sp75\_706\_c\_lag\_all | .954002 .0483078 -0.93 0.352 .8638673 1.053541

sp75\_816\_c\_lag\_all | .9813545 .0176512 -1.05 0.295 .9473615 1.016567

sp77\_1106\_c\_lag\_all | 1.224054 .3924825 0.63 0.528 .652935 2.294727

sp77\_1606\_c\_lag\_all | 1.007439 .0085101 0.88 0.380 .9908963 1.024257

sp77\_1906\_c\_lag\_all | 1.140265 .1378957 1.09 0.278 .8996369 1.445254

sp77\_1916\_c\_lag\_all | 1.188809 .1818478 1.13 0.258 .8808596 1.604417

sp77\_206\_c\_lag\_all | 1.035372 .0442949 0.81 0.416 .9520962 1.125933

sp77\_216\_c\_lag\_all | 1.009054 .0209324 0.43 0.664 .9688502 1.050926

sp77\_506\_c\_lag\_all | .9624646 .0184728 -1.99 0.046 .9269311 .9993603

sp77\_516\_c\_lag\_all | 1.000463 .0080371 0.06 0.954 .9848341 1.01634

sp77\_606\_c\_lag\_all | 1 (omitted)

sp75\_806\_c\_lag\_all | 1.123443 .3251197 0.40 0.688 .6371137 1.981003

sp77\_906\_c\_lag\_all | .1234172 .1096836 -2.35 0.019 .0216219 .7044614

sp48\_27\_c\_lag\_all | .944218 .0528679 -1.03 0.305 .8460821 1.053737

sp48\_7\_c\_lag\_all | 1.088345 .0424328 2.17 0.030 1.008276 1.174772

sp75\_1403\_7\_c\_lag\_all | .9904272 .0276268 -0.34 0.730 .9377332 1.046082

sp75\_1437\_c\_lag\_all | 1.401696 .2228343 2.12 0.034 1.026441 1.914138

sp75\_1727\_c\_lag\_all | .9266764 .1231568 -0.57 0.567 .7141707 1.202414

sp75\_337\_c\_lag\_all | 1.024018 .022351 1.09 0.277 .9811344 1.068775

sp75\_507\_c\_lag\_all | 1.036677 .0361246 1.03 0.301 .9682378 1.109954

sp75\_517\_c\_lag\_all | 1.000433 .0020772 0.21 0.835 .9963703 1.004513

sp75\_607\_c\_lag\_all | .9524222 .0273014 -1.70 0.089 .9003879 1.007464

sp75\_827\_c\_lag\_all | .8323926 .1071006 -1.43 0.154 .646856 1.071147

sp75\_907\_c\_lag\_all | .9849171 .0325267 -0.46 0.645 .9231854 1.050777

sp77\_1437\_c\_lag\_all | .7522227 .1204241 -1.78 0.075 .5496379 1.029476

sp77\_207\_c\_lag\_all | 1.013677 .0225221 0.61 0.541 .9704816 1.058795

sp77\_507\_c\_lag\_all | .9987218 .0806592 -0.02 0.987 .8525098 1.17001

sp75\_807\_c\_lag\_all | .9983693 .0048687 -0.33 0.738 .9888723 1.007958

sp77\_807\_c\_lag\_all | .9147869 .0916043 -0.89 0.374 .7517663 1.113158

sp48\_28\_c\_lag\_all | .9531012 .0524079 -0.87 0.382 .8557252 1.061558

sp48\_8\_c\_lag\_all | .9237343 .0541584 -1.35 0.176 .8234576 1.036222

sp75\_1403\_8\_c\_lag\_all | .9973344 .0034289 -0.78 0.438 .9906364 1.004078

sp75\_1438\_c\_lag\_all | 1 (omitted)

sp75\_1728\_c\_lag\_all | 1.374401 .1312183 3.33 0.001 1.139848 1.657221

sp75\_208\_c\_lag\_all | .9917265 .010779 -0.76 0.445 .9708236 1.01308

sp75\_518\_c\_lag\_all | .9949171 .0113836 -0.45 0.656 .972854 1.017481

sp75\_705\_8\_c\_lag\_all | .7898646 .2317328 -0.80 0.421 .4444518 1.40372

sp75\_818\_c\_lag\_all | .9088693 .1269008 -0.68 0.494 .6912776 1.194952

sp77\_1438\_c\_lag\_all | 1.052887 .7942897 0.07 0.946 .2400167 4.61872

sp77\_208\_c\_lag\_all | 1.026772 .0113494 2.39 0.017 1.004767 1.049259

sp77\_408\_c\_lag\_all | 1.033621 .1253819 0.27 0.785 .814906 1.311037

sp77\_508\_c\_lag\_all | .9541252 .0621084 -0.72 0.471 .8398404 1.083962

sp75\_808\_c\_lag\_all | 1.182374 .0765483 2.59 0.010 1.04147 1.34234

sp77\_704\_8\_c\_lag\_all | 1.184983 .1558717 1.29 0.197 .915684 1.533481

sp77\_808\_c\_lag\_all | .9766302 .2167597 -0.11 0.915 .6321336 1.508869

sp75\_1403\_9\_c\_lag\_all | .9627029 .0247682 -1.48 0.140 .9153618 1.012492

sp75\_1729\_c\_lag\_all | .6237002 .0641215 -4.59 0.000 .509877 .7629329

sp75\_1909\_c\_lag\_all | .9996532 .0033433 -0.10 0.917 .9931219 1.006228

sp75\_519\_c\_lag\_all | 1.339438 .3895421 1.00 0.315 .7574813 2.3685

sp75\_819\_c\_lag\_all | .712924 .2384628 -1.01 0.312 .3701081 1.373276

sp77\_309\_c\_lag\_all | .3421778 .1354061 -2.71 0.007 .157549 .7431697

sp77\_409\_c\_lag\_all | .9485297 .0987853 -0.51 0.612 .773396 1.163322

sp77\_509\_c\_lag\_all | .9510066 .0306083 -1.56 0.119 .8928684 1.01293

sp75\_809\_c\_lag\_all | .980748 .023898 -0.80 0.425 .9350097 1.028724

sp77\_704\_9\_c\_lag\_all | .5586164 .1562912 -2.08 0.037 .3228213 .9666409

sp77\_809\_c\_lag\_all | .969875 .0483526 -0.61 0.540 .8795885 1.069429

sp72\_610\_c\_lag\_all | .921135 .199475 -0.38 0.704 .6025493 1.408166

sp72\_620\_c\_lag\_all | 1.023469 .1759719 0.13 0.893 .7306711 1.433598

sp72\_630\_c\_lag\_all | .9913371 .0058615 -1.47 0.141 .979915 1.002892

sp75\_100\_c\_lag\_all | 1.154726 .1289993 1.29 0.198 .9276578 1.437376

sp75\_1101\_20\_c\_lag\_all | 1.229657 .1852367 1.37 0.170 .9152885 1.651999

sp75\_1400\_c\_lag\_all | .9948819 .0300252 -0.17 0.865 .9377402 1.055505

sp75\_1403\_10\_c\_lag\_all | 1.019092 .0081307 2.37 0.018 1.00328 1.035153

sp75\_150\_c\_lag\_all | 1.409961 .1885312 2.57 0.010 1.0849 1.832418

sp75\_160\_c\_lag\_all | .7138292 .1772345 -1.36 0.175 .4387852 1.161279

sp75\_1712\_10\_c\_lag\_all | .9810807 .0437303 -0.43 0.668 .8990081 1.070646

sp75\_1720\_c\_lag\_all | 1.006739 .0312989 0.22 0.829 .9472261 1.069991

sp75\_1730\_c\_lag\_all | 1.01995 .0428712 0.47 0.638 .9392925 1.107535

sp75\_1910\_c\_lag\_all | 1.009785 .0054832 1.79 0.073 .9990946 1.020589

sp75\_320\_c\_lag\_all | .9720458 .0138852 -1.98 0.047 .9452088 .9996449

sp75\_340\_c\_lag\_all | 1.00105 .0053422 0.20 0.844 .9906341 1.011575

sp75\_520\_c\_lag\_all | 1.014186 .0171654 0.83 0.405 .9810945 1.048394

sp75\_600\_c\_lag\_all | .8538059 .1624077 -0.83 0.406 .588094 1.239571

sp75\_700\_c\_lag\_all | .9739519 .0213643 -1.20 0.229 .9329659 1.016738

sp75\_800\_c\_lag\_all | .9990303 .0611753 -0.02 0.987 .8860446 1.126424

sp75\_820\_c\_lag\_all | 1.029298 .1128752 0.26 0.792 .830226 1.276103

sp75\_900\_c\_lag\_all | 1.000749 .0151807 0.05 0.961 .9714331 1.030949

sp77\_1710\_c\_lag\_all | .9797662 .0153964 -1.30 0.193 .9500497 1.010412

sp77\_200\_c\_lag\_all | 1.019661 .0073098 2.72 0.007 1.005434 1.034089

sp77\_210\_c\_lag\_all | 1.029422 .0461125 0.65 0.517 .9428974 1.123887

sp77\_400\_c\_lag\_all | 1.007127 .0071311 1.00 0.316 .9932466 1.021201

sp77\_410\_c\_lag\_all | .9997666 .0084384 -0.03 0.978 .9833636 1.016443

sp77\_500\_c\_lag\_all | .9149683 .1298096 -0.63 0.531 .6928565 1.208283

sp77\_510\_c\_lag\_all | 1.12081 .1783232 0.72 0.473 .8205479 1.530946

sp77\_600\_c\_lag\_all | .9573708 .1081242 -0.39 0.700 .7672672 1.194576

sp77\_700\_c\_lag\_all | 1.147366 .0931229 1.69 0.090 .9786253 1.345202

sp75\_810\_c\_lag\_all | 1.022976 .0252497 0.92 0.357 .9746657 1.073681

sp77\_800\_c\_lag\_all | .986357 .1591669 -0.09 0.932 .7189143 1.353291

sp77\_810\_c\_lag\_all | .9344381 .0844533 -0.75 0.453 .7827447 1.115529

sp77\_900\_c\_lag\_all | .9301283 .0993093 -0.68 0.498 .7545021 1.146635

mine\_time | .9929053 .0041476 -1.70 0.088 .9848093 1.001068

onsite\_insp\_hours | 1.000028 .0001135 0.25 0.804 .9998057 1.000251

|

state |

AL | 1.111453 .3135529 0.37 0.708 .6393788 1.932076

CO | .7034876 .1402774 -1.76 0.078 .4759096 1.039893

IL | 1.07443 .1533094 0.50 0.615 .8123083 1.421134

IN | .8143089 .1765746 -0.95 0.343 .5323714 1.245557

MD | 1.033613 .3208487 0.11 0.915 .5625129 1.899256

NM | 1.374814 .6468735 0.68 0.499 .5466876 3.457394

OH | .7112 .1772344 -1.37 0.171 .4363835 1.159085

OK | .8865939 .4693267 -0.23 0.820 .3141473 2.502166

PA | 1.297746 .1766667 1.91 0.056 .9938311 1.694598

TN | 1.088401 .2891863 0.32 0.750 .6465862 1.832111

UT | 1.586163 .3699321 1.98 0.048 1.004215 2.505353

VA | .8500235 .0915364 -1.51 0.131 .688284 1.04977

WV | 1.07119 .0918913 0.80 0.423 .9054133 1.26732

WY | .8846649 .3622617 -0.30 0.765 .3964788 1.973957

|

time |

2000.25 | 1.041447 .124873 0.34 0.735 .8233327 1.317344

2000.5 | 1.27719 .1585424 1.97 0.049 1.001365 1.62899

2000.75 | .8813686 .1223564 -0.91 0.363 .671412 1.15698

2001 | .9421088 .1140264 -0.49 0.622 .7431517 1.194331

2001.25 | .9866506 .1395693 -0.10 0.924 .7477466 1.301884

2001.5 | 1.054654 .1305634 0.43 0.667 .8274341 1.34427

2001.75 | .9172911 .1232651 -0.64 0.521 .7048929 1.193689

2002 | .9606024 .1355142 -0.28 0.776 .7285558 1.266556

2002.25 | .8558786 .1237273 -1.08 0.282 .6447049 1.136222

2002.5 | .9984828 .1344826 -0.01 0.991 .7668225 1.300129

2002.75 | .9720095 .1290149 -0.21 0.831 .74936 1.260813

2003 | .8425975 .1186337 -1.22 0.224 .6394036 1.110364

2003.25 | .8328295 .1165567 -1.31 0.191 .6330357 1.095681

2003.5 | 1.018172 .1440112 0.13 0.899 .7716604 1.343432

2003.75 | .7378755 .1052026 -2.13 0.033 .5579856 .9757603

2004 | .9267921 .133245 -0.53 0.597 .6992057 1.228456

2004.25 | .8450251 .1146792 -1.24 0.215 .6476676 1.102521

2004.5 | .8776014 .1313705 -0.87 0.383 .6544533 1.176836

2004.75 | .7867628 .1172134 -1.61 0.107 .5875301 1.053556

2005 | .7009836 .1026343 -2.43 0.015 .5261134 .9339773

2005.25 | .7798021 .111588 -1.74 0.082 .5890868 1.032261

2005.5 | .8013938 .1137246 -1.56 0.119 .6068108 1.058373

2005.75 | .629176 .0962142 -3.03 0.002 .4662358 .8490605

2006 | .7640223 .1136721 -1.81 0.070 .5707729 1.022701

2006.25 | .7466204 .1099872 -1.98 0.047 .5593793 .9965366

2006.5 | .8960273 .1330902 -0.74 0.460 .6697137 1.198818

2006.75 | .6669499 .1081147 -2.50 0.012 .4854122 .9163802

2007 | .756519 .1112695 -1.90 0.058 .5670539 1.009289

2007.25 | .608693 .094817 -3.19 0.001 .4485443 .8260214

2007.5 | .7103919 .1072652 -2.26 0.024 .5284104 .9550468

2007.75 | .6803335 .1000722 -2.62 0.009 .5099366 .9076691

2008 | .5773264 .0901355 -3.52 0.000 .4251351 .7839996

2008.25 | .5384031 .0851124 -3.92 0.000 .3949545 .7339526

2008.5 | .6142843 .1036157 -2.89 0.004 .4413582 .8549635

2008.75 | .6299232 .0995979 -2.92 0.003 .462065 .8587606

2009 | .5375602 .0881376 -3.79 0.000 .3898212 .7412912

2009.25 | .4918771 .0764895 -4.56 0.000 .3626522 .6671491

2009.5 | .5665378 .0950382 -3.39 0.001 .4077909 .7870823

2009.75 | .4266818 .0722755 -5.03 0.000 .3061394 .5946876

2010 | .5018725 .0804248 -4.30 0.000 .3665969 .6870651

2010.25 | .5472222 .0852224 -3.87 0.000 .4032744 .7425518

2010.5 | .6075087 .0990864 -3.06 0.002 .4412849 .8363459

2010.75 | .5043637 .0815052 -4.24 0.000 .3674427 .692306

2011 | .5594671 .0873257 -3.72 0.000 .4120148 .7596897

2011.25 | .5229986 .0815647 -4.16 0.000 .3852571 .7099871

2011.5 | .6134102 .0968363 -3.10 0.002 .4501691 .8358461

2011.75 | .4876511 .082707 -4.23 0.000 .3497382 .6799475

2012 | .5726706 .092612 -3.45 0.001 .4171085 .7862502

2012.25 | .4695206 .0745165 -4.76 0.000 .3440033 .6408358

2012.5 | .5590479 .0856249 -3.80 0.000 .4140733 .7547806

2012.75 | .5083119 .0862672 -3.99 0.000 .364477 .7089089

2013 | .4662171 .0803026 -4.43 0.000 .3326402 .653434

2013.25 | .3920382 .068956 -5.32 0.000 .2777215 .5534101

2013.5 | .5709168 .0935497 -3.42 0.001 .4140912 .7871358

2013.75 | .5135485 .0890639 -3.84 0.000 .3655603 .7214462

2014 | .4472673 .0805057 -4.47 0.000 .314308 .6364714

2014.25 | .4845627 .0838159 -4.19 0.000 .3452357 .680118

2014.5 | .5342151 .0978342 -3.42 0.001 .3731043 .7648955

2014.75 | .5437655 .0980922 -3.38 0.001 .381821 .7743968

2015 | .5482597 .1000849 -3.29 0.001 .3833533 .7841034

2015.25 | .5439782 .110222 -3.00 0.003 .3656868 .809196

2015.5 | .6355123 .116898 -2.46 0.014 .4431508 .9113736

2015.75 | .4729253 .099933 -3.54 0.000 .3125551 .7155804

2016 | .5961212 .1228013 -2.51 0.012 .3980948 .8926528

|

\_cons | .0000156 1.64e-06 -104.86 0.000 .0000126 .0000191

ln(hours) | 1 (exposure)

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

note: sp71\_701\_c\_lag\_all omitted because of collinearity

note: sp77\_801\_1\_c\_lag\_all omitted because of collinearity

note: sp77\_801\_c\_lag\_all omitted because of collinearity

note: sp75\_705\_3\_c\_lag\_all omitted because of collinearity

note: sp48\_24\_c\_lag\_all omitted because of collinearity

note: sp75\_834\_c\_lag\_all omitted because of collinearity

note: sp77\_606\_c\_lag\_all omitted because of collinearity

note: sp75\_1438\_c\_lag\_all omitted because of collinearity

Fitting Poisson model:

Iteration 0: log pseudolikelihood = -38207.782

Iteration 1: log pseudolikelihood = -22756.605

Iteration 2: log pseudolikelihood = -15642.392

Iteration 3: log pseudolikelihood = -11627.709

Iteration 4: log pseudolikelihood = -11227.533

Iteration 5: log pseudolikelihood = -11180.693

Iteration 6: log pseudolikelihood = -11180.391

Iteration 7: log pseudolikelihood = -11180.39

Iteration 8: log pseudolikelihood = -11180.39

Fitting constant-only model:

Iteration 0: log pseudolikelihood = -12283.308

Iteration 1: log pseudolikelihood = -12028.723

Iteration 2: log pseudolikelihood = -12020.986

Iteration 3: log pseudolikelihood = -12020.98

Iteration 4: log pseudolikelihood = -12020.98

Fitting full model:

Iteration 0: log pseudolikelihood = -11322.959

Iteration 1: log pseudolikelihood = -11204.729

Iteration 2: log pseudolikelihood = -11184.109

Iteration 3: log pseudolikelihood = -11180.059

Iteration 4: log pseudolikelihood = -11179.509

Iteration 5: log pseudolikelihood = -11179.469

Iteration 6: log pseudolikelihood = -11179.469

Negative binomial regression Number of obs = 13,797

Wald chi2(373) = .

Dispersion = mean Prob > chi2 = .

Log pseudolikelihood = -11179.469 Pseudo R2 = 0.0700

(Std. Err. adjusted for 801 clusters in mineid)

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| Robust

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

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

sp47\_41\_c\_lag\_all | 1.038737 .0275934 1.43 0.153 .9860386 1.094252

sp48\_11\_c\_lag\_all | 1.024222 .0328408 0.75 0.455 .961836 1.090654

sp71\_701\_c\_lag\_all | 1 (omitted)

sp75\_1001\_1\_c\_lag\_all | .9123029 .1627628 -0.51 0.607 .6430981 1.294198

sp75\_1001\_c\_lag\_all | .7140463 .081587 -2.95 0.003 .570779 .8932742

sp75\_1003\_1\_c\_lag\_all | .8729866 .1158368 -1.02 0.306 .6730718 1.13228

sp75\_1400\_1\_c\_lag\_all | .9147088 .1309089 -0.62 0.533 .6909757 1.210885

sp75\_1401\_1\_c\_lag\_all | .5665966 .13053 -2.47 0.014 .3607263 .8899591

sp75\_1401\_c\_lag\_all | 1.038818 .1213146 0.33 0.744 .8262952 1.306003

sp75\_1403\_11\_c\_lag\_all | .9467912 .1837068 -0.28 0.778 .6472839 1.384885

sp75\_1404\_1\_c\_lag\_all | .5394263 .0964549 -3.45 0.001 .379952 .7658356

sp75\_1405\_1\_c\_lag\_all | .7530846 .065182 -3.28 0.001 .6355789 .8923147

sp75\_1431\_c\_lag\_all | .6651154 .3053361 -0.89 0.374 .2704792 1.635536

sp75\_151\_c\_lag\_all | 1.284869 .235118 1.37 0.171 .8976309 1.839163

sp75\_1721\_c\_lag\_all | .4234035 .1231275 -2.96 0.003 .2394537 .7486647

sp75\_1731\_c\_lag\_all | 1.001647 .0013964 1.18 0.238 .9989139 1.004388

sp75\_1911\_c\_lag\_all | .9909075 .0065571 -1.38 0.167 .9781388 1.003843

sp75\_211\_c\_lag\_all | 1.001706 .0123338 0.14 0.890 .9778216 1.026174

sp75\_341\_c\_lag\_all | 1.051803 .178132 0.30 0.766 .7547032 1.465861

sp75\_506\_1\_c\_lag\_all | 1.134994 .058438 2.46 0.014 1.026047 1.255509

sp75\_510\_1\_c\_lag\_all | 2.17978 1.128122 1.51 0.132 .790465 6.010946

sp75\_511\_1\_c\_lag\_all | .9382783 .2043215 -0.29 0.770 .6123111 1.437776

sp75\_511\_c\_lag\_all | 1.052913 .0340081 1.60 0.110 .9883245 1.121723

sp75\_512\_1\_c\_lag\_all | 1.074171 .2368742 0.32 0.746 .6972173 1.654927

sp75\_513\_1\_c\_lag\_all | 1.050306 .100086 0.52 0.607 .871371 1.265986

sp75\_516\_1\_c\_lag\_all | 1.075218 .091314 0.85 0.393 .9103478 1.269947

sp75\_517\_1\_c\_lag\_all | .9415541 .0891739 -0.64 0.525 .7820394 1.133606

sp75\_518\_1\_c\_lag\_all | .993944 .0167345 -0.36 0.718 .9616802 1.02729

sp75\_523\_1\_c\_lag\_all | .979595 .017159 -1.18 0.239 .9465347 1.01381

sp75\_600\_1\_c\_lag\_all | 1.033894 .1061661 0.32 0.745 .8454151 1.264394

sp75\_601\_1\_c\_lag\_all | 1.000336 .0070962 0.05 0.962 .986524 1.014341

sp75\_601\_c\_lag\_all | .9980963 .0109757 -0.17 0.862 .9768145 1.019842

sp75\_700\_1\_c\_lag\_all | .94189 .0992112 -0.57 0.570 .7661986 1.157868

sp75\_701\_1\_c\_lag\_all | 1.015108 .0257368 0.59 0.554 .965898 1.066826

sp75\_701\_c\_lag\_all | 1.008891 .0069289 1.29 0.197 .9954017 1.022563

sp75\_702\_1\_c\_lag\_all | .3714249 .074608 -4.93 0.000 .2505476 .5506196

sp75\_703\_1\_c\_lag\_all | .7296986 .2280569 -1.01 0.313 .3954691 1.346401

sp75\_705\_1\_c\_lag\_all | 1.077207 .1064254 0.75 0.452 .88757 1.307362

sp75\_801\_c\_lag\_all | 1.330813 .2181018 1.74 0.081 .9651989 1.83492

sp75\_821\_c\_lag\_all | .989846 .044141 -0.23 0.819 .9070042 1.080254

sp75\_831\_c\_lag\_all | 1.527887 .2476071 2.62 0.009 1.112107 2.099112

sp75\_901\_c\_lag\_all | 1.067937 .0537879 1.31 0.192 .9675511 1.178738

sp75\_902\_1\_c\_lag\_all | 1.459175 .2173388 2.54 0.011 1.089742 1.953848

sp77\_1111\_c\_lag\_all | .8877331 .109702 -0.96 0.335 .6967785 1.131019

sp77\_401\_c\_lag\_all | 1.011045 .0478984 0.23 0.817 .9213926 1.109421

sp77\_403\_1\_c\_lag\_all | .9814644 .062941 -0.29 0.770 .8655402 1.112915

sp77\_411\_c\_lag\_all | .4935102 .1414426 -2.46 0.014 .2814086 .8654759

sp77\_501\_c\_lag\_all | 1.021753 .0573109 0.38 0.701 .9153801 1.140488

sp77\_502\_1\_c\_lag\_all | 1.579021 .4386202 1.64 0.100 .916097 2.721665

sp77\_503\_1\_c\_lag\_all | 1.16321 .1727858 1.02 0.309 .8693981 1.556315

sp77\_506\_1\_c\_lag\_all | .9783013 .0189442 -1.13 0.257 .9418671 1.016145

sp77\_508\_1\_c\_lag\_all | 1.236301 .1119024 2.34 0.019 1.03533 1.476284

sp77\_511\_c\_lag\_all | .9149225 .0840361 -0.97 0.333 .7641894 1.095387

sp77\_601\_c\_lag\_all | .9810261 .1434596 -0.13 0.896 .7365559 1.306638

sp77\_606\_1\_c\_lag\_all | .5335647 .1896142 -1.77 0.077 .2658848 1.070732

sp77\_700\_1\_c\_lag\_all | 1.074036 .1880665 0.41 0.683 .7620287 1.513793

sp77\_701\_1\_c\_lag\_all | .9852272 .0902523 -0.16 0.871 .8233066 1.178993

sp77\_701\_c\_lag\_all | 1.006384 .0174034 0.37 0.713 .9728458 1.041079

sp75\_811\_c\_lag\_all | 1.027812 .0238709 1.18 0.238 .9820746 1.075679

sp77\_704\_1\_c\_lag\_all | 1.362215 .337633 1.25 0.212 .8380512 2.214221

sp77\_800\_1\_c\_lag\_all | 1.24109 .122003 2.20 0.028 1.023594 1.504801

sp77\_801\_1\_c\_lag\_all | 1 (omitted)

sp77\_801\_c\_lag\_all | 1 (omitted)

sp77\_807\_1\_c\_lag\_all | .8767972 .1811675 -0.64 0.525 .5848176 1.314553

sp77\_900\_1\_c\_lag\_all | 1.160191 .1820037 0.95 0.344 .8530961 1.577832

sp77\_901\_1\_c\_lag\_all | .2498797 .0738339 -4.69 0.000 .1400296 .4459049

sp77\_901\_c\_lag\_all | .9556754 .121533 -0.36 0.721 .7448405 1.226189

sp47\_42\_c\_lag\_all | .8975069 .0853884 -1.14 0.256 .744826 1.081486

sp75\_1100\_2\_c\_lag\_all | 1.011958 .0035593 3.38 0.001 1.005006 1.018958

sp75\_1102\_c\_lag\_all | .9742064 .0345771 -0.74 0.462 .9087399 1.044389

sp75\_1106\_2\_c\_lag\_all | .949193 .0209579 -2.36 0.018 .9089924 .9911716

sp75\_1400\_2\_c\_lag\_all | .9285525 .0997285 -0.69 0.490 .7522906 1.146113

sp75\_1402\_2\_c\_lag\_all | .9057894 .3048987 -0.29 0.769 .4682777 1.752068

sp75\_1432\_c\_lag\_all | .8268633 .1073268 -1.46 0.143 .6411325 1.066399

sp75\_1600\_2\_c\_lag\_all | 1.011492 .0154438 0.75 0.454 .9816708 1.042218

sp75\_1912\_c\_lag\_all | 1.098916 .061937 1.67 0.094 .9839867 1.227269

sp75\_202\_c\_lag\_all | .9994681 .0009309 -0.57 0.568 .9976451 1.001294

sp75\_212\_c\_lag\_all | .9799471 .0193791 -1.02 0.306 .9426915 1.018675

sp75\_312\_c\_lag\_all | 1.007132 .0160949 0.44 0.657 .9760753 1.039176

sp75\_342\_c\_lag\_all | .9961918 .0033955 -1.12 0.263 .989559 1.002869

sp75\_352\_c\_lag\_all | .95425 .0290607 -1.54 0.124 .8989586 1.012942

sp75\_382\_c\_lag\_all | 1.047134 .0276734 1.74 0.081 .9942758 1.102802

sp75\_512\_2\_c\_lag\_all | .9929997 .0095316 -0.73 0.464 .9744928 1.011858

sp75\_512\_c\_lag\_all | 1.002562 .0027267 0.94 0.347 .9972324 1.007921

sp75\_516\_2\_c\_lag\_all | 1.006748 .0161939 0.42 0.676 .9755038 1.038993

sp75\_523\_2\_c\_lag\_all | .9862353 .0148855 -0.92 0.358 .9574876 1.015846

sp75\_601\_2\_c\_lag\_all | .7967665 .103185 -1.75 0.079 .6181537 1.026989

sp75\_602\_c\_lag\_all | 1.006604 .0221226 0.30 0.765 .9641655 1.050911

sp75\_701\_2\_c\_lag\_all | .9185284 .0465712 -1.68 0.094 .8316394 1.014496

sp75\_702\_c\_lag\_all | 2.061368 .5154559 2.89 0.004 1.262723 3.365138

sp75\_703\_2\_c\_lag\_all | .9643924 .0772693 -0.45 0.651 .8242398 1.128376

sp75\_705\_2\_c\_lag\_all | 3.918867 1.776369 3.01 0.003 1.611842 9.527929

sp75\_800\_2\_c\_lag\_all | 1.175835 .193144 0.99 0.324 .8521713 1.622429

sp75\_802\_c\_lag\_all | .9517259 .0719212 -0.65 0.513 .8207054 1.103663

sp75\_803\_2\_c\_lag\_all | .1734281 .0188794 -16.09 0.000 .1401064 .2146749

sp75\_812\_c\_lag\_all | .9838064 .1118204 -0.14 0.886 .787338 1.229301

sp75\_832\_c\_lag\_all | 1.283676 .3386281 0.95 0.344 .7654423 2.152775

sp75\_900\_2\_c\_lag\_all | .4940892 .0571127 -6.10 0.000 .3939248 .6197227

sp75\_902\_2\_c\_lag\_all | .9959013 .0169982 -0.24 0.810 .9631366 1.029781

sp75\_902\_c\_lag\_all | .9966709 .0143089 -0.23 0.816 .969017 1.025114

sp77\_1112\_c\_lag\_all | .9711089 .0626531 -0.45 0.650 .8557579 1.102009

sp77\_1432\_c\_lag\_all | .7600224 .126473 -1.65 0.099 .5485049 1.053106

sp77\_1802\_c\_lag\_all | .7771024 .1498692 -1.31 0.191 .5324988 1.134065

sp77\_202\_c\_lag\_all | .9973112 .0088976 -0.30 0.763 .9800238 1.014903

sp77\_402\_c\_lag\_all | .9939196 .0194854 -0.31 0.756 .9564534 1.032853

sp77\_403\_2\_c\_lag\_all | .5777631 .1825047 -1.74 0.082 .3110792 1.073071

sp77\_412\_c\_lag\_all | 1.035159 .0543918 0.66 0.511 .9338592 1.147448

sp77\_502\_2\_c\_lag\_all | 1.04999 .0341209 1.50 0.133 .9851992 1.119041

sp77\_502\_c\_lag\_all | .9996856 .0048239 -0.07 0.948 .9902754 1.009185

sp77\_512\_c\_lag\_all | .9866257 .0144366 -0.92 0.357 .9587324 1.01533

sp77\_602\_c\_lag\_all | 1.079982 .1519101 0.55 0.584 .8197598 1.422808

sp77\_701\_2\_c\_lag\_all | .9432188 .0856507 -0.64 0.520 .7894372 1.126957

sp77\_702\_c\_lag\_all | .3059942 .0802579 -4.51 0.000 .1830018 .5116478

sp77\_800\_2\_c\_lag\_all | .9122777 .0717758 -1.17 0.243 .7819098 1.064382

sp77\_802\_c\_lag\_all | 1.438616 .3906558 1.34 0.180 .8448924 2.449562

sp77\_807\_2\_c\_lag\_all | 1.002791 .1124798 0.02 0.980 .8048853 1.249358

sp77\_900\_2\_c\_lag\_all | 1.013605 .0791519 0.17 0.863 .8697592 1.181242

sp77\_902\_2\_c\_lag\_all | .0002791 .0001484 -15.39 0.000 .0000984 .0007914

sp77\_902\_c\_lag\_all | .9431173 .0666357 -0.83 0.407 .8211533 1.083196

sp47\_43\_c\_lag\_all | .3193148 .1410048 -2.59 0.010 .1343819 .7587474

sp72\_503\_c\_lag\_all | 1.014191 .0406319 0.35 0.725 .9376005 1.097038

sp75\_1106\_3\_c\_lag\_all | 1.006778 .0070914 0.96 0.338 .9929744 1.020773

sp75\_1400\_3\_c\_lag\_all | 1.0116 .0284675 0.41 0.682 .9573153 1.068962

sp75\_1403\_3\_c\_lag\_all | .6239574 .0887383 -3.32 0.001 .47217 .8245396

sp75\_1433\_c\_lag\_all | .9287586 .0490431 -1.40 0.162 .8374428 1.030032

sp75\_153\_c\_lag\_all | 1.072295 .2830708 0.26 0.791 .6391593 1.798952

sp75\_1903\_c\_lag\_all | 1.011506 .0185995 0.62 0.534 .975701 1.048625

sp75\_1913\_c\_lag\_all | .9683932 .0495574 -0.63 0.530 .8759748 1.070562

sp75\_503\_c\_lag\_all | 1.00055 .0014672 0.37 0.708 .9976781 1.00343

sp75\_513\_c\_lag\_all | .9455489 .041381 -1.28 0.201 .8678248 1.030234

sp75\_523\_c\_lag\_all | 1.002273 .0163694 0.14 0.889 .9706973 1.034875

sp75\_601\_3\_c\_lag\_all | 1.119311 .1137627 1.11 0.267 .9171442 1.366041

sp75\_603\_c\_lag\_all | .9923156 .0339696 -0.23 0.822 .927921 1.061179

sp75\_701\_3\_c\_lag\_all | 1.016975 .0366126 0.47 0.640 .947689 1.091327

sp75\_703\_3\_c\_lag\_all | 1.014224 .0355452 0.40 0.687 .9468954 1.08634

sp75\_703\_c\_lag\_all | 1.042498 .0231163 1.88 0.061 .9981617 1.088805

sp75\_705\_3\_c\_lag\_all | 1 (omitted)

sp75\_800\_3\_c\_lag\_all | 1.013634 .0533689 0.26 0.797 .914249 1.123823

sp75\_803\_c\_lag\_all | .9234664 .0444058 -1.66 0.098 .840408 1.014733

sp75\_900\_3\_c\_lag\_all | .9846754 .0388185 -0.39 0.695 .9114576 1.063775

sp75\_903\_c\_lag\_all | .9884673 .0215959 -0.53 0.595 .9470336 1.031714

sp77\_103\_c\_lag\_all | 1.233784 .3198291 0.81 0.418 .7423102 2.050656

sp77\_1103\_c\_lag\_all | 1.010194 .0104438 0.98 0.327 .9899303 1.030872

sp77\_1403\_c\_lag\_all | 1.015604 .071756 0.22 0.827 .8842686 1.166447

sp77\_1433\_c\_lag\_all | .9619821 .1203471 -0.31 0.757 .7527988 1.229292

sp77\_203\_c\_lag\_all | .9578955 .0648561 -0.64 0.525 .8388531 1.093831

sp77\_403\_c\_lag\_all | .9037685 .143217 -0.64 0.523 .6624763 1.232946

sp77\_413\_c\_lag\_all | .9438495 .0854688 -0.64 0.523 .7903574 1.127151

sp77\_503\_c\_lag\_all | 1.019384 .0838258 0.23 0.815 .8676446 1.19766

sp77\_513\_c\_lag\_all | 1.00294 .0206232 0.14 0.886 .9633233 1.044187

sp77\_603\_c\_lag\_all | 1.013731 .1728003 0.08 0.936 .7258172 1.415853

sp77\_703\_c\_lag\_all | .783774 .3311694 -0.58 0.564 .3423979 1.794116

sp77\_803\_c\_lag\_all | 1.51959 .208492 3.05 0.002 1.161286 1.988445

sp77\_807\_3\_c\_lag\_all | 1.184521 .2491324 0.81 0.421 .7843596 1.788835

sp77\_903\_c\_lag\_all | 1.052213 .1446951 0.37 0.711 .8036203 1.377707

sp47\_44\_c\_lag\_all | .9798633 .0322552 -0.62 0.537 .9186404 1.045166

sp48\_24\_c\_lag\_all | 1 (omitted)

sp48\_4\_c\_lag\_all | 8.67e-09 8.72e-09 -18.47 0.000 1.21e-09 6.22e-08

sp75\_1103\_4\_c\_lag\_all | 1.000736 .0066546 0.11 0.912 .9877779 1.013864

sp75\_1104\_c\_lag\_all | .9672588 .0202721 -1.59 0.112 .9283311 1.007819

sp75\_1106\_4\_c\_lag\_all | 1.0517 .0591409 0.90 0.370 .9419453 1.174243

sp75\_1107\_14\_c\_lag\_all | 2.64078 .7752948 3.31 0.001 1.48536 4.694968

sp75\_1400\_4\_c\_lag\_all | .9141943 .046954 -1.75 0.081 .8266465 1.011014

sp75\_1403\_4\_c\_lag\_all | 1.494905 .222985 2.70 0.007 1.115952 2.002542

sp75\_1404\_c\_lag\_all | 1.085634 .1680846 0.53 0.596 .8014845 1.470523

sp75\_1434\_c\_lag\_all | .9769571 .0420918 -0.54 0.588 .897846 1.063039

sp75\_1914\_c\_lag\_all | .9962045 .0027943 -1.36 0.175 .9907428 1.001696

sp75\_214\_c\_lag\_all | .9672081 .0200385 -1.61 0.108 .92872 1.007291

sp75\_324\_c\_lag\_all | 1.001358 .0518564 0.03 0.979 .9047093 1.108332

sp75\_344\_c\_lag\_all | .9994659 .0475937 -0.01 0.991 .9104047 1.09724

sp75\_504\_c\_lag\_all | .9801607 .0535009 -0.37 0.714 .8807151 1.090835

sp75\_514\_c\_lag\_all | .9992078 .0082743 -0.10 0.924 .9831213 1.015557

sp75\_604\_c\_lag\_all | 1.002482 .0024672 1.01 0.314 .9976575 1.007329

sp75\_701\_4\_c\_lag\_all | 1.122125 .1710203 0.76 0.450 .8323614 1.512763

sp75\_703\_4\_c\_lag\_all | 1.908677 .533463 2.31 0.021 1.103639 3.300942

sp75\_704\_c\_lag\_all | .6559449 .0837398 -3.30 0.001 .5107407 .8424308

sp75\_800\_4\_c\_lag\_all | 1.047968 .0541616 0.91 0.365 .9470126 1.159685

sp75\_814\_c\_lag\_all | .954546 .0582251 -0.76 0.446 .8469846 1.075767

sp75\_834\_c\_lag\_all | 1 (omitted)

sp75\_900\_4\_c\_lag\_all | .9986636 .0134924 -0.10 0.921 .9725661 1.025461

sp75\_902\_4\_c\_lag\_all | 1.059241 .0279614 2.18 0.029 1.005831 1.115487

sp75\_904\_c\_lag\_all | 1.012094 .004207 2.89 0.004 1.003882 1.020373

sp77\_104\_c\_lag\_all | .387241 .0969043 -3.79 0.000 .2371233 .632395

sp77\_1104\_c\_lag\_all | 1.00101 .0039643 0.25 0.799 .99327 1.00881

sp77\_1434\_c\_lag\_all | 1.212273 .1403409 1.66 0.096 .9661839 1.521042

sp77\_204\_c\_lag\_all | .9884082 .0191673 -0.60 0.548 .9515459 1.026698

sp77\_314\_c\_lag\_all | 1.439211 .6074652 0.86 0.388 .629285 3.291557

sp77\_404\_c\_lag\_all | .988798 .0045201 -2.46 0.014 .9799785 .997697

sp77\_504\_c\_lag\_all | .9494599 .0261773 -1.88 0.060 .8995151 1.002178

sp77\_514\_c\_lag\_all | 1.003524 .0719989 0.05 0.961 .8718815 1.155043

sp77\_604\_c\_lag\_all | .9073068 .0949849 -0.93 0.353 .7389973 1.113949

sp75\_804\_c\_lag\_all | .951281 .0232454 -2.04 0.041 .9067946 .9979499

sp77\_704\_c\_lag\_all | .9572556 .2835113 -0.15 0.883 .5357063 1.710524

sp77\_804\_c\_lag\_all | .7941889 .1413514 -1.29 0.195 .5603059 1.125699

sp77\_904\_c\_lag\_all | .9629811 .0178668 -2.03 0.042 .9285919 .9986438

sp48\_25\_c\_lag\_all | 1.099113 .0601029 1.73 0.084 .9874065 1.223457

sp48\_5\_c\_lag\_all | 1.059845 .0677705 0.91 0.363 .935004 1.201355

sp75\_1106\_5\_c\_lag\_all | .9669597 .0233356 -1.39 0.164 .9222876 1.013796

sp75\_1403\_5\_c\_lag\_all | .9992015 .0034159 -0.23 0.815 .9925289 1.005919

sp75\_1405\_c\_lag\_all | .9772643 .0087213 -2.58 0.010 .9603195 .9945081

sp75\_1435\_c\_lag\_all | 1.1762 .164166 1.16 0.245 .8946979 1.546273

sp75\_155\_c\_lag\_all | .6944444 .1591065 -1.59 0.111 .4432164 1.088076

sp75\_1725\_c\_lag\_all | 1.001726 .0021945 0.79 0.431 .9974345 1.006037

sp75\_1915\_c\_lag\_all | .9208898 .0461558 -1.64 0.100 .8347275 1.015946

sp75\_505\_c\_lag\_all | 1.147509 .0900223 1.75 0.079 .9839639 1.338237

sp75\_515\_c\_lag\_all | .9941675 .0057782 -1.01 0.314 .9829066 1.005557

sp75\_605\_c\_lag\_all | 1.011455 .0120055 0.96 0.337 .9881962 1.035261

sp75\_705\_c\_lag\_all | .9170201 .1133456 -0.70 0.483 .7197283 1.168394

sp75\_815\_c\_lag\_all | .8340556 .0644882 -2.35 0.019 .7167721 .9705299

sp75\_825\_c\_lag\_all | .9950029 .0753218 -0.07 0.947 .8578046 1.154145

sp75\_905\_c\_lag\_all | .7582136 .0641233 -3.27 0.001 .6423979 .8949092

sp77\_1605\_c\_lag\_all | 1.000752 .0053799 0.14 0.889 .9902628 1.011352

sp77\_1915\_c\_lag\_all | .7663756 .0731251 -2.79 0.005 .6356569 .9239758

sp77\_205\_c\_lag\_all | .9936802 .005616 -1.12 0.262 .9827337 1.004749

sp77\_305\_c\_lag\_all | .3497446 .1342839 -2.74 0.006 .164791 .7422811

sp77\_315\_c\_lag\_all | .7475235 .4772187 -0.46 0.649 .2139036 2.612351

sp77\_405\_c\_lag\_all | .9332571 .056759 -1.14 0.256 .828386 1.051405

sp77\_505\_c\_lag\_all | 1.00188 .0149433 0.13 0.900 .9730153 1.0316

sp77\_515\_c\_lag\_all | .9880045 .150988 -0.08 0.937 .7322803 1.333032

sp77\_605\_c\_lag\_all | .4956238 .2974593 -1.17 0.242 .1528569 1.607012

sp75\_805\_c\_lag\_all | 1.196546 .1433261 1.50 0.134 .9461713 1.513175

sp77\_705\_c\_lag\_all | 1.010589 .0433933 0.25 0.806 .9290197 1.099319

sp77\_805\_c\_lag\_all | .8982359 .2248736 -0.43 0.668 .5499103 1.467199

sp48\_26\_c\_lag\_all | 1.089418 .0860839 1.08 0.278 .9331126 1.271906

sp48\_6\_c\_lag\_all | .9811065 .032413 -0.58 0.564 .9195912 1.046737

sp75\_1106\_6\_c\_lag\_all | 1.373988 .4579308 0.95 0.340 .7149723 2.64044

sp75\_1106\_c\_lag\_all | 1.012004 .0505125 0.24 0.811 .9176894 1.116011

sp75\_1403\_6\_c\_lag\_all | .9990895 .0037853 -0.24 0.810 .9916979 1.006536

sp75\_1436\_c\_lag\_all | 1.390014 .5373964 0.85 0.394 .6515301 2.965542

sp75\_156\_c\_lag\_all | .8262568 .2028538 -0.78 0.437 .5106661 1.336882

sp75\_1712\_6\_c\_lag\_all | .9678514 .0241699 -1.31 0.191 .92162 1.016402

sp75\_1726\_c\_lag\_all | 1.169321 .0665459 2.75 0.006 1.045905 1.307301

sp75\_506\_c\_lag\_all | .997434 .0318913 -0.08 0.936 .9368465 1.06194

sp75\_516\_c\_lag\_all | .9935265 .0086168 -0.75 0.454 .9767807 1.010559

sp75\_606\_c\_lag\_all | 1.007409 .0038356 1.94 0.053 .9999193 1.014955

sp75\_706\_c\_lag\_all | .942072 .0429218 -1.31 0.190 .8615936 1.030068

sp75\_816\_c\_lag\_all | .9797827 .0161671 -1.24 0.216 .9486027 1.011987

sp77\_1106\_c\_lag\_all | 1.361208 .3778806 1.11 0.267 .7899963 2.345437

sp77\_1606\_c\_lag\_all | 1.008759 .0075055 1.17 0.241 .9941555 1.023578

sp77\_1906\_c\_lag\_all | 1.109742 .120017 0.96 0.336 .8977711 1.37176

sp77\_1916\_c\_lag\_all | 1.079531 .1283747 0.64 0.520 .855092 1.36288

sp77\_206\_c\_lag\_all | 1.058476 .0392953 1.53 0.126 .984194 1.138365

sp77\_216\_c\_lag\_all | 1.006354 .017437 0.37 0.715 .9727514 1.041116

sp77\_506\_c\_lag\_all | .9655409 .0165831 -2.04 0.041 .9335796 .9985964

sp77\_516\_c\_lag\_all | .9965041 .0067966 -0.51 0.608 .9832716 1.009915

sp77\_606\_c\_lag\_all | 1 (omitted)

sp75\_806\_c\_lag\_all | 1.198732 .3092149 0.70 0.482 .7230254 1.987426

sp77\_906\_c\_lag\_all | .2047866 .1213482 -2.68 0.007 .0641083 .6541672

sp48\_27\_c\_lag\_all | .9321358 .0480039 -1.36 0.172 .8426424 1.031134

sp48\_7\_c\_lag\_all | 1.087094 .0376705 2.41 0.016 1.015712 1.163492

sp75\_1403\_7\_c\_lag\_all | .9964452 .0250899 -0.14 0.888 .9484636 1.046854

sp75\_1437\_c\_lag\_all | 1.473841 .2127452 2.69 0.007 1.110661 1.955777

sp75\_1727\_c\_lag\_all | .9178602 .1105845 -0.71 0.477 .7248083 1.162331

sp75\_337\_c\_lag\_all | 1.019889 .0204638 0.98 0.326 .9805586 1.060796

sp75\_507\_c\_lag\_all | 1.027484 .029972 0.93 0.353 .9703875 1.08794

sp75\_517\_c\_lag\_all | 1.000929 .0019265 0.48 0.629 .9971607 1.004712

sp75\_607\_c\_lag\_all | .9628924 .0264024 -1.38 0.168 .9125106 1.016056

sp75\_827\_c\_lag\_all | .9431201 .1061709 -0.52 0.603 .7563865 1.175954

sp75\_907\_c\_lag\_all | .9777897 .0287864 -0.76 0.446 .9229662 1.03587

sp77\_1437\_c\_lag\_all | .7461312 .0873672 -2.50 0.012 .5931233 .9386106

sp77\_207\_c\_lag\_all | 1.022076 .0206413 1.08 0.280 .9824103 1.063344

sp77\_507\_c\_lag\_all | .9987193 .0715521 -0.02 0.986 .8678808 1.149283

sp75\_807\_c\_lag\_all | .997334 .004591 -0.58 0.562 .9883763 1.006373

sp77\_807\_c\_lag\_all | .9263869 .0895283 -0.79 0.429 .7665319 1.119579

sp48\_28\_c\_lag\_all | .9508792 .0584563 -0.82 0.413 .8429403 1.07264

sp48\_8\_c\_lag\_all | .9606076 .0486549 -0.79 0.428 .8698263 1.060863

sp75\_1403\_8\_c\_lag\_all | .999862 .0029013 -0.05 0.962 .9941917 1.005565

sp75\_1438\_c\_lag\_all | 1 (omitted)

sp75\_1728\_c\_lag\_all | 1.285251 .1351079 2.39 0.017 1.045944 1.579312

sp75\_208\_c\_lag\_all | .9919695 .0091791 -0.87 0.384 .9741409 1.010124

sp75\_518\_c\_lag\_all | .9960965 .0101331 -0.38 0.701 .9764327 1.016156

sp75\_705\_8\_c\_lag\_all | .887205 .190678 -0.56 0.578 .5822156 1.351961

sp75\_818\_c\_lag\_all | .9643563 .1141634 -0.31 0.759 .7646624 1.216201

sp77\_1438\_c\_lag\_all | 1.060163 .6610947 0.09 0.925 .312307 3.598848

sp77\_208\_c\_lag\_all | 1.024456 .0097983 2.53 0.012 1.005431 1.043841

sp77\_408\_c\_lag\_all | 1.005047 .0977886 0.05 0.959 .8305515 1.216203

sp77\_508\_c\_lag\_all | .9736989 .0502802 -0.52 0.606 .8799744 1.077406

sp75\_808\_c\_lag\_all | 1.124822 .0695929 1.90 0.057 .996368 1.269836

sp77\_704\_8\_c\_lag\_all | 1.225109 .1491384 1.67 0.095 .965059 1.555233

sp77\_808\_c\_lag\_all | 1.059831 .2168709 0.28 0.776 .7096715 1.582764

sp75\_1403\_9\_c\_lag\_all | .9426323 .0214954 -2.59 0.010 .9014296 .9857182

sp75\_1729\_c\_lag\_all | .6503204 .0603422 -4.64 0.000 .5421829 .7800258

sp75\_1909\_c\_lag\_all | .9997146 .0028097 -0.10 0.919 .9942229 1.005237

sp75\_519\_c\_lag\_all | 1.239291 .3187802 0.83 0.404 .7485491 2.051757

sp75\_819\_c\_lag\_all | .7812338 .2317381 -0.83 0.405 .4368057 1.397249

sp77\_309\_c\_lag\_all | .3904341 .1541574 -2.38 0.017 .1800789 .8465109

sp77\_409\_c\_lag\_all | .9225598 .0803914 -0.92 0.355 .7777165 1.094379

sp77\_509\_c\_lag\_all | .9591693 .0284418 -1.41 0.160 .9050134 1.016566

sp75\_809\_c\_lag\_all | .9808717 .021983 -0.86 0.389 .9387184 1.024918

sp77\_704\_9\_c\_lag\_all | .4751613 .1306122 -2.71 0.007 .2772446 .8143651

sp77\_809\_c\_lag\_all | .9826598 .0477188 -0.36 0.719 .8934456 1.080783

sp72\_610\_c\_lag\_all | 1.008377 .1967695 0.04 0.966 .6878973 1.478162

sp72\_620\_c\_lag\_all | .9950154 .1509642 -0.03 0.974 .7390692 1.339598

sp72\_630\_c\_lag\_all | .9908942 .005568 -1.63 0.104 .9800409 1.001868

sp75\_100\_c\_lag\_all | 1.113538 .1199681 1.00 0.318 .9015709 1.37534

sp75\_1101\_20\_c\_lag\_all | 1.2097 .1624584 1.42 0.156 .9297462 1.57395

sp75\_1400\_c\_lag\_all | .9735568 .0268473 -0.97 0.331 .9223338 1.027624

sp75\_1403\_10\_c\_lag\_all | 1.014279 .0070831 2.03 0.042 1.00049 1.028257

sp75\_150\_c\_lag\_all | 1.254415 .1701316 1.67 0.095 .9616037 1.636389

sp75\_160\_c\_lag\_all | .6674276 .1456653 -1.85 0.064 .4351414 1.023712

sp75\_1712\_10\_c\_lag\_all | 1.0053 .0401485 0.13 0.895 .929611 1.087151

sp75\_1720\_c\_lag\_all | .9977748 .0288582 -0.08 0.939 .9427871 1.05597

sp75\_1730\_c\_lag\_all | 1.016566 .0426761 0.39 0.696 .9362714 1.103748

sp75\_1910\_c\_lag\_all | 1.007766 .0045935 1.70 0.090 .998803 1.016809

sp75\_320\_c\_lag\_all | .9666267 .0126248 -2.60 0.009 .9421966 .9916903

sp75\_340\_c\_lag\_all | 1.002661 .0046052 0.58 0.563 .993675 1.011727

sp75\_520\_c\_lag\_all | 1.00312 .0156989 0.20 0.842 .9728175 1.034366

sp75\_600\_c\_lag\_all | .8523844 .1537774 -0.89 0.376 .5985101 1.213946

sp75\_700\_c\_lag\_all | .9716713 .0199689 -1.40 0.162 .9333106 1.011609

sp75\_800\_c\_lag\_all | 1.046513 .0531097 0.90 0.370 .9474299 1.155959

sp75\_820\_c\_lag\_all | 1.017229 .1081611 0.16 0.872 .8258693 1.252929

sp75\_900\_c\_lag\_all | 1.000593 .0135652 0.04 0.965 .9743557 1.027537

sp77\_1710\_c\_lag\_all | .9866471 .0137763 -0.96 0.336 .9600121 1.014021

sp77\_200\_c\_lag\_all | 1.022128 .0069108 3.24 0.001 1.008673 1.035763

sp77\_210\_c\_lag\_all | 1.023547 .0422901 0.56 0.573 .9439272 1.109882

sp77\_400\_c\_lag\_all | 1.002306 .0059146 0.39 0.696 .9907804 1.013966

sp77\_410\_c\_lag\_all | 1.000317 .0076289 0.04 0.967 .9854761 1.015382

sp77\_500\_c\_lag\_all | 1.010531 .1311734 0.08 0.936 .7835352 1.30329

sp77\_510\_c\_lag\_all | .9873579 .1400143 -0.09 0.929 .7477703 1.30371

sp77\_600\_c\_lag\_all | .9860639 .1053065 -0.13 0.895 .7998364 1.215651

sp77\_700\_c\_lag\_all | 1.160556 .0887101 1.95 0.051 .9990849 1.348124

sp75\_810\_c\_lag\_all | 1.024183 .0234107 1.05 0.296 .9793116 1.07111

sp77\_800\_c\_lag\_all | .9199884 .1564777 -0.49 0.624 .6591805 1.283986

sp77\_810\_c\_lag\_all | .9198118 .0753685 -1.02 0.308 .7833437 1.080054

sp77\_900\_c\_lag\_all | .968788 .0872652 -0.35 0.725 .8119988 1.155852

mine\_time | .9931233 .0039043 -1.76 0.079 .9855005 1.000805

onsite\_insp\_hours | 1.000029 .000093 0.31 0.755 .9998467 1.000211

|

state |

AL | 1.01775 .3177992 0.06 0.955 .5518843 1.876871

CO | .770399 .1618611 -1.24 0.214 .5103616 1.16293

IL | 1.155216 .1486794 1.12 0.262 .8976584 1.486672

IN | .8148394 .1619178 -1.03 0.303 .5519867 1.202861

MD | 1.143763 .3382534 0.45 0.650 .6406247 2.042058

NM | 1.109073 .5079904 0.23 0.821 .4519421 2.721681

OH | .7804628 .1671605 -1.16 0.247 .5129095 1.187582

OK | .8012763 .3498698 -0.51 0.612 .3404968 1.885609

PA | 1.334858 .1720512 2.24 0.025 1.036866 1.718491

TN | 1.081698 .2732567 0.31 0.756 .6592909 1.774742

UT | 1.639695 .3607622 2.25 0.025 1.065328 2.523728

VA | .8758196 .0916895 -1.27 0.205 .7133496 1.075293

WV | 1.044517 .083689 0.54 0.587 .89272 1.222125

WY | .9420759 .3637749 -0.15 0.877 .4419788 2.008031

|

time |

2000.25 | 1.151911 .1215389 1.34 0.180 .9367163 1.416543

2000.5 | 1.294728 .1336239 2.50 0.012 1.05762 1.584995

2000.75 | .9545496 .1116282 -0.40 0.691 .7590251 1.200441

2001 | 1.036507 .1059592 0.35 0.726 .8483139 1.266451

2001.25 | .9868297 .1147882 -0.11 0.909 .7856522 1.239522

2001.5 | 1.21613 .1373474 1.73 0.083 .9746461 1.517445

2001.75 | .9736469 .1068515 -0.24 0.808 .7852131 1.207301

2002 | 1.065446 .1202141 0.56 0.574 .8540645 1.329145

2002.25 | .9897625 .1243082 -0.08 0.935 .7737937 1.266009

2002.5 | 1.138806 .1360115 1.09 0.276 .9011303 1.439168

2002.75 | 1.033599 .1213664 0.28 0.778 .8211129 1.301071

2003 | .8355594 .0987246 -1.52 0.128 .6628337 1.053295

2003.25 | .9330959 .1139946 -0.57 0.571 .7344065 1.185539

2003.5 | 1.111099 .1362771 0.86 0.390 .8736799 1.413036

2003.75 | .8517822 .1017097 -1.34 0.179 .6740438 1.076388

2004 | 1.01047 .1244702 0.08 0.933 .7937282 1.286396

2004.25 | .9936475 .1193592 -0.05 0.958 .7852069 1.257421

2004.5 | .9760635 .128179 -0.18 0.854 .7545642 1.262583

2004.75 | .919424 .1275243 -0.61 0.545 .700574 1.20664

2005 | .7718789 .0974155 -2.05 0.040 .6027298 .9884977

2005.25 | .9189916 .1200343 -0.65 0.518 .7114291 1.187111

2005.5 | .9482446 .1216911 -0.41 0.679 .7373659 1.219432

2005.75 | .7536165 .1031921 -2.07 0.039 .5762302 .9856092

2006 | .8099504 .1085224 -1.57 0.116 .6228865 1.053193

2006.25 | .8438783 .1159495 -1.24 0.217 .6446502 1.104678

2006.5 | .9817038 .1364719 -0.13 0.894 .7475675 1.289171

2006.75 | .750457 .1155422 -1.86 0.062 .5549742 1.014796

2007 | .8865574 .1245994 -0.86 0.392 .6730951 1.167716

2007.25 | .7060702 .1002701 -2.45 0.014 .5345242 .9326707

2007.5 | .7990927 .1060516 -1.69 0.091 .6160699 1.036488

2007.75 | .7825101 .1074661 -1.79 0.074 .5978471 1.024212

2008 | .6540761 .09448 -2.94 0.003 .4928036 .8681257

2008.25 | .6075123 .0837526 -3.62 0.000 .4636679 .7959817

2008.5 | .6950223 .1032152 -2.45 0.014 .5195053 .9298385

2008.75 | .6941517 .0992315 -2.55 0.011 .524532 .9186218

2009 | .6384735 .0946035 -3.03 0.002 .4775504 .8536239

2009.25 | .5785558 .0805397 -3.93 0.000 .4404037 .7600453

2009.5 | .6882636 .1032723 -2.49 0.013 .5129015 .9235822

2009.75 | .5017402 .0793161 -4.36 0.000 .3680605 .6839724

2010 | .5912166 .0893213 -3.48 0.001 .43969 .7949624

2010.25 | .6180251 .087709 -3.39 0.001 .4679561 .8162196

2010.5 | .6361278 .0910373 -3.16 0.002 .4805378 .8420952

2010.75 | .5591386 .0800404 -4.06 0.000 .422348 .740233

2011 | .6003226 .0850673 -3.60 0.000 .4547443 .7925053

2011.25 | .5909033 .0809818 -3.84 0.000 .4517117 .7729858

2011.5 | .6724525 .0961514 -2.78 0.006 .5081027 .8899624

2011.75 | .5448095 .0841384 -3.93 0.000 .4025207 .7373967

2012 | .6456233 .0933482 -3.03 0.002 .4863032 .8571389

2012.25 | .5362947 .0760423 -4.39 0.000 .4061719 .7081042

2012.5 | .5676284 .07976 -4.03 0.000 .4309808 .7476017

2012.75 | .5503163 .084269 -3.90 0.000 .407633 .7429429

2013 | .5529137 .0848002 -3.86 0.000 .4093632 .7468027

2013.25 | .4624454 .073578 -4.85 0.000 .3385548 .6316726

2013.5 | .6810662 .1016946 -2.57 0.010 .5082656 .9126157

2013.75 | .5479121 .0831961 -3.96 0.000 .4068765 .7378348

2014 | .5054577 .0840496 -4.10 0.000 .3648744 .7002066

2014.25 | .5465479 .0881757 -3.74 0.000 .3983842 .7498155

2014.5 | .5779143 .0919543 -3.45 0.001 .4230827 .7894081

2014.75 | .5745511 .0911653 -3.49 0.000 .420985 .7841346

2015 | .5653301 .0949675 -3.40 0.001 .4067357 .7857637

2015.25 | .5691682 .0987088 -3.25 0.001 .4051537 .7995791

2015.5 | .6965973 .12051 -2.09 0.037 .4962786 .9777729

2015.75 | .4821742 .0952245 -3.69 0.000 .3274164 .7100805

2016 | .6050789 .1173796 -2.59 0.010 .4137013 .8849874

|

\_cons | .0000143 1.31e-06 -122.39 0.000 .000012 .0000171

ln(hours) | 1 (exposure)

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

/lnalpha | -4.121088 .9507555 -5.984534 -2.257641

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

alpha | .0162269 .0154278 .0025174 .1045969

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(est1 stored)

**. lrtest pois nbin, stats force**

Likelihood-ratio test LR chi2(1) = -1.84

(Assumption: nbin nested in pois) Prob > chi2 = 1.0000

Akaike's information criterion and Bayesian information criterion

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

Model | Obs ll(null) ll(model) df AIC BIC

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

nbin | 13,797 -12020.98 -11179.47 375 23108.94 25933.52

pois | 13,797 -12244.95 -11180.39 376 23112.78 25944.89

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

Note: N=Obs used in calculating BIC; see [R] BIC note.

**. summ MR spcv4\_yhat**

Variable | Obs Mean Std. Dev. Min Max

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

MR | 30,289 .4096207 .9550592 0 14

spcv4\_yhat | 13,797 .6445049 .9307655 1.99e-10 12.36819