. // Model SP.C.V.2

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

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

Iteration 0: log pseudolikelihood = -19968.426

Iteration 1: log pseudolikelihood = -18517.41

Iteration 2: log pseudolikelihood = -18470.328

Iteration 3: log pseudolikelihood = -18461.64

Iteration 4: log pseudolikelihood = -18460.879

Iteration 5: log pseudolikelihood = -18460.856

Iteration 6: log pseudolikelihood = -18460.851

Iteration 7: log pseudolikelihood = -18460.85

Iteration 8: log pseudolikelihood = -18460.85

Iteration 9: log pseudolikelihood = -18460.85

Iteration 10: log pseudolikelihood = -18460.85

Generalized linear models No. of obs = 26,110

Optimization : ML Residual df = 25,714

Scale parameter = 1

Deviance = 20569.3121 (1/df) Deviance = .7999266

Pearson = 308689.2844 (1/df) Pearson = 12.00472

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

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

AIC = 1.444416

Log pseudolikelihood = -18460.85002 BIC = -240944

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

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| Robust

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

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

sp47\_41\_1lag | .9152284 .0544646 -1.49 0.137 .81447 1.028452

sp48\_11\_1lag | 1.03832 .0583824 0.67 0.504 .929972 1.15929

sp71\_701\_1lag | 4.480373 2.02955 3.31 0.001 1.843873 10.88673

sp75\_1001\_1\_1lag | .792942 .2555992 -0.72 0.472 .4215631 1.49149

sp75\_1001\_1lag | .7724277 .3069336 -0.65 0.516 .354505 1.683035

sp75\_1003\_1\_1lag | .5641877 .1337549 -2.41 0.016 .354507 .8978885

sp75\_1400\_1\_1lag | 1.546977 .3800519 1.78 0.076 .9557974 2.503813

sp75\_1401\_1\_1lag | .9553253 .3946893 -0.11 0.912 .4250895 2.146952

sp75\_1401\_1lag | 1.105057 .1861086 0.59 0.553 .7943813 1.537234

sp75\_1403\_11\_1lag | 1.58921 .3961053 1.86 0.063 .9750396 2.590243

sp75\_1404\_1\_1lag | .5578658 .3760264 -0.87 0.387 .1488614 2.090631

sp75\_1405\_1\_1lag | 1.150459 .1342713 1.20 0.230 .9152219 1.446158

sp75\_1431\_1lag | 1.01e-07 1.02e-07 -15.87 0.000 1.38e-08 7.36e-07

sp75\_151\_1lag | 1.457376 .3706307 1.48 0.139 .8853185 2.399075

sp75\_1721\_1lag | 1.235509 1.122305 0.23 0.816 .2082746 7.329186

sp75\_1731\_1lag | 1.00425 .0061042 0.70 0.485 .9923569 1.016286

sp75\_1911\_1lag | .9791424 .0122524 -1.68 0.092 .9554202 1.003454

sp75\_211\_1lag | 1.023673 .0291871 0.82 0.412 .9680359 1.082507

sp75\_341\_1lag | 1.30575 .4195507 0.83 0.406 .6956016 2.451093

sp75\_506\_1\_1lag | 1.166877 .1000022 1.80 0.072 .986453 1.3803

sp75\_510\_1\_1lag | 1.428952 .9292419 0.55 0.583 .3994703 5.111527

sp75\_511\_1\_1lag | 1.12e-07 9.36e-08 -19.21 0.000 2.20e-08 5.75e-07

sp75\_511\_1lag | 1.084052 .0533684 1.64 0.101 .98434 1.193865

sp75\_512\_1\_1lag | 1.40554 .4929796 0.97 0.332 .706793 2.795078

sp75\_513\_1\_1lag | .9407585 .1335983 -0.43 0.667 .7121934 1.242677

sp75\_516\_1\_1lag | .9628672 .2277565 -0.16 0.873 .6056522 1.530768

sp75\_517\_1\_1lag | .8962487 .1393896 -0.70 0.481 .6607618 1.21566

sp75\_518\_1\_1lag | .9719626 .0341468 -0.81 0.418 .9072882 1.041247

sp75\_523\_1\_1lag | .9945988 .0476403 -0.11 0.910 .9054745 1.092495

sp75\_600\_1\_1lag | .945553 .2205631 -0.24 0.810 .5985928 1.49362

sp75\_601\_1\_1lag | 1.003361 .0169611 0.20 0.843 .9706627 1.037161

sp75\_601\_1lag | .9979533 .0264077 -0.08 0.938 .9475145 1.051077

sp75\_700\_1\_1lag | .8587628 .2352711 -0.56 0.578 .5019652 1.469173

sp75\_701\_1\_1lag | .9454253 .044357 -1.20 0.232 .8623647 1.036486

sp75\_701\_1lag | 1.023999 .0175527 1.38 0.166 .9901682 1.058987

sp75\_702\_1\_1lag | 1.14e-07 9.91e-08 -18.35 0.000 2.06e-08 6.28e-07

sp75\_703\_1\_1lag | .7808005 .2519384 -0.77 0.443 .4148447 1.469585

sp75\_705\_1\_1lag | .6620661 .1362561 -2.00 0.045 .4423034 .9910199

sp75\_801\_1lag | .8050798 .3417569 -0.51 0.610 .350351 1.850012

sp75\_811\_1lag | 1.007965 .0718872 0.11 0.911 .876473 1.159184

sp75\_821\_1lag | 1.113816 .1051966 1.14 0.254 .9255931 1.340315

sp75\_831\_1lag | .7626294 .2920114 -0.71 0.479 .3600707 1.615249

sp75\_901\_1lag | .8882546 .1146975 -0.92 0.359 .6896432 1.144064

sp75\_902\_1\_1lag | 1.065478 .2258981 0.30 0.765 .7031955 1.614405

sp77\_1111\_1lag | .8617615 .1542253 -0.83 0.406 .6068085 1.223834

sp77\_401\_1lag | .9916551 .0814669 -0.10 0.919 .8441747 1.164901

sp77\_403\_1\_1lag | 1.085892 .1741208 0.51 0.607 .7930455 1.486878

sp77\_411\_1lag | 1.055979 .5525299 0.10 0.917 .3786808 2.944676

sp77\_501\_1lag | 1.10386 .0820982 1.33 0.184 .9541288 1.277089

sp77\_502\_1\_1lag | 1.813386 .7717525 1.40 0.162 .7874638 4.1759

sp77\_503\_1\_1lag | 1.255036 .3212761 0.89 0.375 .7599021 2.072788

sp77\_506\_1\_1lag | .9501899 .0662074 -0.73 0.463 .8288967 1.089232

sp77\_508\_1\_1lag | .7681878 .1530307 -1.32 0.186 .5198757 1.135103

sp77\_511\_1lag | .6558467 .1999349 -1.38 0.166 .360839 1.192041

sp77\_601\_1lag | 1.026781 .1421233 0.19 0.849 .7828126 1.346785

sp77\_606\_1\_1lag | .9863224 .2318742 -0.06 0.953 .6221716 1.563607

sp77\_700\_1\_1lag | 1.031089 .1872288 0.17 0.866 .722324 1.471839

sp77\_701\_1\_1lag | .7864654 .2225187 -0.85 0.396 .4516945 1.36935

sp77\_701\_1lag | 1.011513 .0400806 0.29 0.773 .9359297 1.093201

sp77\_704\_1\_1lag | 1.860771 1.017859 1.14 0.256 .6369091 5.436361

sp77\_800\_1\_1lag | .920054 .1971046 -0.39 0.697 .6045874 1.400127

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

sp77\_801\_1lag | 5.16e-07 3.87e-07 -19.30 0.000 1.19e-07 2.25e-06

sp77\_807\_1\_1lag | 1.403754 .5545416 0.86 0.391 .6471884 3.044747

sp77\_900\_1\_1lag | 1.773442 .3590736 2.83 0.005 1.192537 2.637315

sp77\_901\_1\_1lag | 1.102217 .2795635 0.38 0.701 .6704564 1.812023

sp77\_901\_1lag | .858469 .1438857 -0.91 0.363 .6180975 1.192318

sp47\_42\_1lag | .7113457 .132996 -1.82 0.068 .4931019 1.026183

sp75\_1100\_2\_1lag | 1.017477 .0103729 1.70 0.089 .9973486 1.038012

sp75\_1102\_1lag | .890269 .0663671 -1.56 0.119 .7692481 1.030329

sp75\_1106\_2\_1lag | 1.049013 .0526531 0.95 0.340 .9507287 1.157458

sp75\_1400\_2\_1lag | 1.155466 .3201157 0.52 0.602 .6713303 1.98874

sp75\_1402\_2\_1lag | 1.594399 .4184631 1.78 0.076 .9532175 2.66687

sp75\_1432\_1lag | .9441268 .147323 -0.37 0.713 .6953565 1.281897

sp75\_1600\_2\_1lag | .9732741 .0294248 -0.90 0.370 .9172779 1.032689

sp75\_1912\_1lag | 1.075521 .1044736 0.75 0.454 .8890682 1.301076

sp75\_202\_1lag | .9998735 .0045421 -0.03 0.978 .9910106 1.008816

sp75\_212\_1lag | .9460845 .0409636 -1.28 0.201 .8691095 1.029877

sp75\_312\_1lag | 1.067475 .0388467 1.79 0.073 .993989 1.146394

sp75\_342\_1lag | 1.010759 .011547 0.94 0.349 .9883784 1.033646

sp75\_352\_1lag | .8744207 .0585437 -2.00 0.045 .7668869 .9970331

sp75\_382\_1lag | 1.039882 .0515579 0.79 0.430 .9435856 1.146007

sp75\_512\_2\_1lag | 1.019649 .0184052 1.08 0.281 .9842061 1.056368

sp75\_512\_1lag | 1.005296 .0057308 0.93 0.354 .9941259 1.016591

sp75\_516\_2\_1lag | .9992107 .0390633 -0.02 0.984 .9255078 1.078783

sp75\_523\_2\_1lag | .9857492 .0336351 -0.42 0.674 .9219818 1.053927

sp75\_601\_2\_1lag | .3069162 .2868083 -1.26 0.206 .049157 1.916259

sp75\_602\_1lag | 1.073383 .041868 1.82 0.069 .994382 1.158661

sp75\_701\_2\_1lag | .8264855 .0686503 -2.29 0.022 .702315 .9726095

sp75\_702\_1lag | 2.00e-07 1.46e-07 -21.17 0.000 4.81e-08 8.36e-07

sp75\_703\_2\_1lag | .650461 .1153914 -2.42 0.015 .4594293 .9209242

sp75\_705\_2\_1lag | 2.137409 .2966533 5.47 0.000 1.628353 2.805607

sp75\_800\_2\_1lag | 2.020894 .7497198 1.90 0.058 .9767003 4.18144

sp75\_802\_1lag | .6446676 .1306851 -2.17 0.030 .433294 .9591553

sp75\_803\_2\_1lag | 1.47e-07 8.89e-08 -26.00 0.000 4.49e-08 4.81e-07

sp75\_812\_1lag | 1.108552 .2447781 0.47 0.641 .7191231 1.708869

sp75\_832\_1lag | 7.16e-08 5.16e-08 -22.83 0.000 1.74e-08 2.94e-07

sp75\_900\_2\_1lag | .958947 .3645714 -0.11 0.912 .4551827 2.020242

sp75\_902\_2\_1lag | 1.057871 .0638665 0.93 0.351 .9398167 1.190754

sp75\_902\_1lag | .9911956 .0350311 -0.25 0.802 .92486 1.062289

sp77\_1112\_1lag | 1.000274 .1365424 0.00 0.998 .7654652 1.30711

sp77\_1432\_1lag | 1.578959 .4417339 1.63 0.103 .9125072 2.732155

sp77\_1802\_1lag | .8909112 .1413169 -0.73 0.466 .6528543 1.215773

sp77\_202\_1lag | .9620012 .0202363 -1.84 0.066 .9231452 1.002493

sp77\_402\_1lag | .9848366 .0310908 -0.48 0.628 .9257468 1.047698

sp77\_403\_2\_1lag | 3.313563 .9613944 4.13 0.000 1.876413 5.851432

sp77\_412\_1lag | .9078819 .0971027 -0.90 0.366 .7361883 1.119618

sp77\_502\_2\_1lag | 1.050459 .070684 0.73 0.464 .9206674 1.198547

sp77\_502\_1lag | .9908869 .0122287 -0.74 0.458 .9672067 1.015147

sp77\_512\_1lag | .9782833 .020803 -1.03 0.302 .9383481 1.019918

sp77\_602\_1lag | .8925657 .240377 -0.42 0.673 .5265055 1.513134

sp77\_701\_2\_1lag | 1.140598 .2204857 0.68 0.496 .7808888 1.666003

sp77\_702\_1lag | .5571867 .1463491 -2.23 0.026 .3329865 .9323412

sp77\_800\_2\_1lag | 1.104827 .1352964 0.81 0.416 .8690737 1.404533

sp77\_802\_1lag | .4223391 .1191041 -3.06 0.002 .243004 .7340222

sp77\_807\_2\_1lag | .818796 .2221238 -0.74 0.461 .4811283 1.393447

sp77\_900\_2\_1lag | 1.133542 .151407 0.94 0.348 .8724544 1.472761

sp77\_902\_2\_1lag | 8.120997 .5673789 29.98 0.000 7.081733 9.312775

sp77\_902\_1lag | 1.400763 .113729 4.15 0.000 1.194689 1.642383

sp47\_43\_1lag | 1.276005 .4126084 0.75 0.451 .6770306 2.404897

sp72\_503\_1lag | .8074812 .088738 -1.95 0.052 .6510131 1.001556

sp75\_1106\_3\_1lag | 1.019593 .0163879 1.21 0.227 .9879743 1.052224

sp75\_1400\_3\_1lag | 1.110518 .094589 1.23 0.218 .939775 1.312282

sp75\_1403\_3\_1lag | 1.047083 .1879041 0.26 0.798 .736595 1.488447

sp75\_1433\_1lag | 1.032059 .0866525 0.38 0.707 .875461 1.216668

sp75\_153\_1lag | 1.819649 .645363 1.69 0.091 .9080248 3.646513

sp75\_1903\_1lag | .978045 .030455 -0.71 0.476 .9201392 1.039595

sp75\_1913\_1lag | 1.00278 .1063683 0.03 0.979 .8145462 1.234512

sp75\_503\_1lag | .999092 .0053633 -0.17 0.866 .9886353 1.009659

sp75\_513\_1lag | 1.082533 .08159 1.05 0.293 .9338706 1.254862

sp75\_523\_1lag | .9463712 .0388289 -1.34 0.179 .8732475 1.025618

sp75\_601\_3\_1lag | .7778037 .1264576 -1.55 0.122 .5655607 1.069697

sp75\_603\_1lag | 1.020215 .0812019 0.25 0.801 .8728549 1.192453

sp75\_701\_3\_1lag | 1.075697 .0517726 1.52 0.129 .9788639 1.18211

sp75\_703\_3\_1lag | 1.263474 .1197982 2.47 0.014 1.0492 1.521508

sp75\_703\_1lag | 1.045512 .0436464 1.07 0.286 .9633732 1.134655

sp75\_705\_3\_1lag | 1.831972 .3644841 3.04 0.002 1.240412 2.705649

sp75\_800\_3\_1lag | 1.027933 .1324199 0.21 0.831 .7985676 1.323177

sp75\_803\_1lag | 1.00126 .0928302 0.01 0.989 .83489 1.200784

sp75\_900\_3\_1lag | 1.216531 .0962854 2.48 0.013 1.041724 1.420671

sp75\_903\_1lag | 1.02624 .060047 0.44 0.658 .9150477 1.150944

sp77\_103\_1lag | .5745865 .1807376 -1.76 0.078 .3101758 1.064395

sp77\_1103\_1lag | .9839498 .0302051 -0.53 0.598 .9264948 1.044968

sp77\_1403\_1lag | .9215394 .1401032 -0.54 0.591 .684076 1.241434

sp77\_1433\_1lag | .9188841 .1790428 -0.43 0.664 .6271995 1.346219

sp77\_203\_1lag | 1.098607 .1315573 0.79 0.432 .868784 1.389227

sp77\_403\_1lag | 1.422728 .3647781 1.38 0.169 .8607548 2.351605

sp77\_413\_1lag | .9560976 .0551306 -0.78 0.436 .8539258 1.070494

sp77\_503\_1lag | 1.219577 .1761549 1.37 0.169 .9188873 1.618662

sp77\_513\_1lag | .9143777 .0451836 -1.81 0.070 .8299727 1.007366

sp77\_603\_1lag | 1.96872 .4574787 2.92 0.004 1.248496 3.104422

sp77\_701\_3\_1lag | .4150688 .271862 -1.34 0.179 .114974 1.498444

sp77\_703\_1lag | 1.096553 .322529 0.31 0.754 .6161208 1.951612

sp77\_803\_1lag | .76904 .308256 -0.66 0.512 .3505581 1.687089

sp77\_807\_3\_1lag | 1.662707 .1792353 4.72 0.000 1.346042 2.05387

sp77\_902\_3\_1lag | 1.440095 .3997322 1.31 0.189 .835834 2.481202

sp77\_903\_1lag | .9311705 .3713668 -0.18 0.858 .4261431 2.034712

sp47\_44\_1lag | 1.001685 .074806 0.02 0.982 .8652934 1.159576

sp48\_24\_1lag | .0552447 .0110908 -14.43 0.000 .037274 .0818795

sp48\_4\_1lag | 4.75e-07 3.32e-07 -20.79 0.000 1.20e-07 1.87e-06

sp75\_1103\_4\_1lag | 1.024848 .0199105 1.26 0.206 .986558 1.064624

sp75\_1104\_1lag | 1.084291 .0545831 1.61 0.108 .9824186 1.196728

sp75\_1106\_4\_1lag | 1.037825 .1014772 0.38 0.704 .8568299 1.257053

sp75\_1107\_14\_1lag | 1.277696 .5318333 0.59 0.556 .565093 2.888917

sp75\_1400\_4\_1lag | 1.000504 .1051209 0.00 0.996 .8143011 1.229286

sp75\_1403\_4\_1lag | 1.059166 .1434623 0.42 0.671 .8122131 1.381204

sp75\_1404\_1lag | .5906936 .2755022 -1.13 0.259 .236787 1.473556

sp75\_1434\_1lag | .9576593 .1025651 -0.40 0.686 .776332 1.181339

sp75\_1914\_1lag | 1.002431 .0081422 0.30 0.765 .9865992 1.018518

sp75\_214\_1lag | .9713594 .0512437 -0.55 0.582 .8759415 1.077171

sp75\_324\_1lag | .9587605 .0880144 -0.46 0.646 .8008841 1.147759

sp75\_344\_1lag | 1.087909 .1106365 0.83 0.407 .8913094 1.327874

sp75\_504\_1lag | 1.073475 .130622 0.58 0.560 .8457002 1.362597

sp75\_514\_1lag | 1.022298 .0282569 0.80 0.425 .9683894 1.079208

sp75\_604\_1lag | 1.025477 .00939 2.75 0.006 1.007237 1.044047

sp75\_701\_4\_1lag | 1.571999 .4944442 1.44 0.150 .8486373 2.911941

sp75\_703\_4\_1lag | 3.35e-07 2.29e-07 -21.79 0.000 8.78e-08 1.28e-06

sp75\_704\_1lag | 1.040551 .1790433 0.23 0.817 .7426779 1.457894

sp75\_800\_4\_1lag | 1.015237 .1204838 0.13 0.899 .8045452 1.281103

sp75\_804\_1lag | 1.090112 .0832719 1.13 0.259 .9385321 1.266173

sp75\_814\_1lag | .9795388 .1279543 -0.16 0.874 .7582835 1.265353

sp75\_834\_1lag | 9.978787 12.3882 1.85 0.064 .8756899 113.7117

sp75\_900\_4\_1lag | .987705 .0240722 -0.51 0.612 .9416335 1.036031

sp75\_902\_4\_1lag | .9935639 .0642923 -0.10 0.921 .8752168 1.127914

sp75\_904\_1lag | .9818678 .0128035 -1.40 0.161 .9570915 1.007286

sp77\_104\_1lag | 1.89e-07 1.65e-07 -17.76 0.000 3.42e-08 1.04e-06

sp77\_1104\_1lag | 1.003685 .0125772 0.29 0.769 .9793348 1.028641

sp77\_1434\_1lag | .9895352 .1502285 -0.07 0.945 .7348592 1.332473

sp77\_204\_1lag | 1.000394 .0390274 0.01 0.992 .9267527 1.079887

sp77\_314\_1lag | .5728938 .1687038 -1.89 0.059 .3216734 1.020312

sp77\_404\_1lag | .9784074 .014325 -1.49 0.136 .9507299 1.006891

sp77\_504\_1lag | .9469431 .0429701 -1.20 0.230 .8663598 1.035022

sp77\_514\_1lag | .8616116 .100022 -1.28 0.199 .6862747 1.081745

sp77\_604\_1lag | 1.355141 .118075 3.49 0.000 1.1424 1.607498

sp77\_701\_4\_1lag | 1.111309 .3032787 0.39 0.699 .6509382 1.897272

sp77\_704\_1lag | 1.672977 .6697203 1.29 0.199 .7633787 3.666401

sp77\_804\_1lag | 1.01e-06 6.73e-07 -20.77 0.000 2.75e-07 3.73e-06

sp77\_904\_1lag | 1.03078 .0378956 0.82 0.410 .9591186 1.107795

sp48\_25\_1lag | 1.072335 .137068 0.55 0.585 .8346953 1.37763

sp48\_5\_1lag | 1.029917 .1697899 0.18 0.858 .745547 1.422753

sp75\_1106\_5\_1lag | 1.100326 .0624614 1.68 0.092 .9844682 1.229818

sp75\_1403\_5\_1lag | .9934781 .0157829 -0.41 0.680 .9630208 1.024899

sp75\_1405\_1lag | .9632395 .0179857 -2.01 0.045 .9286254 .9991438

sp75\_1435\_1lag | 1.101545 .2036619 0.52 0.601 .7667004 1.582627

sp75\_155\_1lag | .6294172 .1938364 -1.50 0.133 .3441924 1.151002

sp75\_1725\_1lag | 1.001997 .0066109 0.30 0.762 .9891235 1.015038

sp75\_1915\_1lag | 1.061727 .1323786 0.48 0.631 .8315399 1.355635

sp75\_505\_1lag | .9975558 .2151688 -0.01 0.991 .6536366 1.522432

sp75\_515\_1lag | .9624822 .0133723 -2.75 0.006 .9366266 .9890515

sp75\_605\_1lag | 1.001358 .0255754 0.05 0.958 .9524647 1.05276

sp75\_701\_5\_1lag | .9198609 .0611564 -1.26 0.209 .8074778 1.047885

sp75\_705\_1lag | .8615494 .2649448 -0.48 0.628 .471539 1.574138

sp75\_805\_1lag | 1.434588 .2902669 1.78 0.074 .9649388 2.132823

sp75\_815\_1lag | 1.245041 .1232942 2.21 0.027 1.025394 1.511738

sp75\_825\_1lag | 1.338551 .1922766 2.03 0.042 1.010098 1.773806

sp75\_905\_1lag | .9142968 .1455973 -0.56 0.574 .6691716 1.249214

sp77\_1605\_1lag | .9849507 .0130427 -1.15 0.252 .9597164 1.010849

sp77\_1915\_1lag | 1.123319 .1558229 0.84 0.402 .8559088 1.474276

sp77\_205\_1lag | .9987039 .0079935 -0.16 0.871 .9831591 1.014494

sp77\_305\_1lag | 1.005773 .4878156 0.01 0.991 .3887356 2.602232

sp77\_315\_1lag | .1695064 .0971228 -3.10 0.002 .0551404 .5210781

sp77\_405\_1lag | .7773792 .1010234 -1.94 0.053 .6025817 1.002882

sp77\_505\_1lag | 1.007505 .026877 0.28 0.779 .9561809 1.061585

sp77\_515\_1lag | .5583686 .1766535 -1.84 0.065 .3003465 1.038053

sp77\_605\_1lag | .283735 .1944548 -1.84 0.066 .0740544 1.087113

sp77\_705\_1lag | 1.020908 .078125 0.27 0.787 .8787155 1.186109

sp77\_805\_1lag | .8305766 .2196783 -0.70 0.483 .4945911 1.394804

sp48\_26\_1lag | 1.015119 .1134787 0.13 0.893 .8153848 1.263781

sp48\_6\_1lag | 1.023229 .0699982 0.34 0.737 .8948345 1.170045

sp75\_1106\_6\_1lag | 1.895446 2.655382 0.46 0.648 .1216858 29.52453

sp75\_1106\_1lag | 1.080177 .1090055 0.76 0.445 .8863323 1.316417

sp75\_1403\_6\_1lag | .9741922 .0106942 -2.38 0.017 .9534559 .9953796

sp75\_1436\_1lag | .6726498 .4034429 -0.66 0.509 .2076127 2.179335

sp75\_156\_1lag | .9717031 .3428726 -0.08 0.935 .4866098 1.940378

sp75\_1712\_6\_1lag | 1.00876 .0378673 0.23 0.816 .9372054 1.085777

sp75\_1726\_1lag | 1.004548 .1223554 0.04 0.970 .7912122 1.275405

sp75\_506\_1lag | 1.069365 .0388222 1.85 0.065 .9959185 1.148227

sp75\_516\_1lag | 1.024408 .0206952 1.19 0.233 .9846389 1.065784

sp75\_606\_1lag | .986321 .0125595 -1.08 0.279 .9620096 1.011247

sp75\_706\_1lag | .9209362 .0977689 -0.78 0.438 .7479351 1.133953

sp75\_806\_1lag | 1.223098 .3026675 0.81 0.416 .7530492 1.98655

sp75\_816\_1lag | 1.022335 .0463218 0.49 0.626 .9354602 1.117277

sp77\_1106\_1lag | 1.949015 2.335373 0.56 0.578 .1861564 20.40575

sp77\_1606\_1lag | 1.004738 .0200273 0.24 0.813 .9662419 1.044767

sp77\_1906\_1lag | .9370427 .1748305 -0.35 0.727 .6500472 1.350747

sp77\_1916\_1lag | 1.043557 .1973392 0.23 0.822 .7203634 1.511751

sp77\_206\_1lag | .9622158 .0483318 -0.77 0.443 .8720009 1.061764

sp77\_216\_1lag | .9759112 .0508095 -0.47 0.640 .8812388 1.080754

sp77\_506\_1lag | 1.07143 .0311209 2.38 0.018 1.012138 1.134196

sp77\_516\_1lag | .9808586 .0198567 -0.95 0.340 .9427022 1.020559

sp77\_606\_1lag | 3.40e-07 2.59e-07 -19.55 0.000 7.63e-08 1.51e-06

sp77\_906\_1lag | .8324136 .140939 -1.08 0.279 .5973366 1.160003

sp48\_27\_1lag | 1.17127 .1209471 1.53 0.126 .9566671 1.434014

sp48\_7\_1lag | 1.111837 .0712857 1.65 0.098 .9805423 1.260713

sp75\_1403\_7\_1lag | .9410721 .0474022 -1.21 0.228 .8526043 1.03872

sp75\_1437\_1lag | 1.552397 .4507121 1.51 0.130 .8787612 2.742425

sp75\_1727\_1lag | 4.65e-07 3.46e-07 -19.59 0.000 1.08e-07 2.00e-06

sp75\_337\_1lag | .9623324 .0529523 -0.70 0.485 .8639484 1.07192

sp75\_507\_1lag | 1.147045 .0735846 2.14 0.032 1.011521 1.300728

sp75\_517\_1lag | .9928995 .0063567 -1.11 0.266 .9805185 1.005437

sp75\_607\_1lag | 1.071269 .0702778 1.05 0.294 .9420147 1.218258

sp75\_807\_1lag | 1.012313 .0137911 0.90 0.369 .9856408 1.039707

sp75\_827\_1lag | 1.357364 .1937169 2.14 0.032 1.026163 1.795461

sp75\_907\_1lag | .9991772 .1231132 -0.01 0.995 .7848055 1.272105

sp77\_1437\_1lag | .4697391 .1604898 -2.21 0.027 .240457 .9176476

sp77\_207\_1lag | 1.093774 .0507016 1.93 0.053 .9987816 1.197802

sp77\_507\_1lag | .7766501 .0907872 -2.16 0.031 .617623 .9766239

sp77\_807\_1lag | .8024082 .1372408 -1.29 0.198 .5738642 1.121971

sp48\_28\_1lag | .995283 .0657046 -0.07 0.943 .8744877 1.132764

sp48\_8\_1lag | 1.089911 .0948326 0.99 0.322 .9190276 1.292569

sp75\_1403\_8\_1lag | .9637778 .0149811 -2.37 0.018 .9348581 .9935921

sp75\_1438\_1lag | 7.84e-07 9.74e-07 -11.32 0.000 6.88e-08 8.94e-06

sp75\_1728\_1lag | 1.94293 .5833723 2.21 0.027 1.078651 3.499724

sp75\_208\_1lag | .9837699 .0205305 -0.78 0.433 .9443427 1.024843

sp75\_518\_1lag | 1.001747 .020063 0.09 0.931 .9631857 1.041851

sp75\_705\_8\_1lag | 1.367698 .3407538 1.26 0.209 .839302 2.228753

sp75\_808\_1lag | 1.224352 .1498137 1.65 0.098 .9632781 1.556183

sp75\_818\_1lag | .9933501 .1293102 -0.05 0.959 .7696555 1.28206

sp77\_1438\_1lag | .1873629 .1618409 -1.94 0.053 .0344691 1.018444

sp77\_208\_1lag | 1.030815 .0252805 1.24 0.216 .982438 1.081574

sp77\_408\_1lag | .8157421 .0967732 -1.72 0.086 .6465068 1.029278

sp77\_508\_1lag | 1.05154 .1083796 0.49 0.626 .8592005 1.286936

sp77\_704\_8\_1lag | 1.122226 .2318778 0.56 0.577 .7485183 1.682512

sp77\_808\_1lag | 3.175401 .8858739 4.14 0.000 1.837935 5.48614

sp75\_1403\_9\_1lag | .9126084 .0309896 -2.69 0.007 .8538471 .9754137

sp75\_1729\_1lag | 1.092938 .176127 0.55 0.581 .7969372 1.498879

sp75\_1909\_1lag | 1.021587 .0093387 2.34 0.019 1.003447 1.040056

sp75\_519\_1lag | .7941931 .5783523 -0.32 0.752 .1905718 3.309737

sp75\_809\_1lag | .9015862 .0349576 -2.67 0.008 .8356093 .9727725

sp75\_819\_1lag | 1.832429 .5240494 2.12 0.034 1.046153 3.20966

sp77\_309\_1lag | .9609734 .2167197 -0.18 0.860 .6176572 1.495117

sp77\_409\_1lag | 1.134292 .1635813 0.87 0.382 .8550058 1.504805

sp77\_509\_1lag | .9510304 .0539368 -0.89 0.376 .8509799 1.062844

sp77\_704\_9\_1lag | .2910015 .2084769 -1.72 0.085 .0714635 1.184967

sp77\_809\_1lag | .8791097 .0736859 -1.54 0.124 .7459271 1.036072

sp72\_610\_1lag | .9873887 .4247666 -0.03 0.976 .4249209 2.294395

sp72\_620\_1lag | .9037285 .3447001 -0.27 0.791 .42793 1.908549

sp72\_630\_1lag | 1.029096 .0121686 2.43 0.015 1.005521 1.053225

sp75\_100\_1lag | .9419694 .1744592 -0.32 0.747 .6552219 1.354207

sp75\_1101\_20\_1lag | 1.434382 .2902847 1.78 0.075 .9647213 2.13269

sp75\_1400\_1lag | .9159196 .0550631 -1.46 0.144 .8141136 1.030457

sp75\_1403\_10\_1lag | .9998706 .0157856 -0.01 0.993 .9694051 1.031294

sp75\_150\_1lag | 1.17317 .2780157 0.67 0.500 .7373011 1.866711

sp75\_160\_1lag | .9265271 .4317493 -0.16 0.870 .3717145 2.30944

sp75\_1712\_10\_1lag | .8790026 .0789435 -1.44 0.151 .7371289 1.048182

sp75\_1720\_1lag | 1.008631 .0534486 0.16 0.871 .90913 1.119021

sp75\_1730\_1lag | .9687737 .0835356 -0.37 0.713 .8181347 1.147149

sp75\_1910\_1lag | .9970449 .0105848 -0.28 0.780 .9765135 1.018008

sp75\_320\_1lag | .9631811 .0323872 -1.12 0.265 .90175 1.028797

sp75\_340\_1lag | .9955251 .0155049 -0.29 0.773 .9655952 1.026383

sp75\_520\_1lag | 1.038893 .0444899 0.89 0.373 .9552536 1.129856

sp75\_600\_1lag | 1.33395 .7463915 0.51 0.607 .4455151 3.994077

sp75\_700\_1lag | .9410491 .057815 -0.99 0.323 .8342903 1.061469

sp75\_800\_1lag | .9617463 .1272637 -0.29 0.768 .7420355 1.246512

sp75\_810\_1lag | 1.026173 .0616102 0.43 0.667 .9122536 1.154319

sp75\_820\_1lag | .994183 .1654803 -0.04 0.972 .7174391 1.377678

sp75\_900\_1lag | .9403717 .0308386 -1.87 0.061 .8818306 1.002799

sp77\_1710\_1lag | .9455822 .0268837 -1.97 0.049 .8943322 .9997691

sp77\_200\_1lag | 1.03696 .0149623 2.52 0.012 1.008045 1.066704

sp77\_210\_1lag | .9998815 .092591 -0.00 0.999 .8339222 1.198868

sp77\_400\_1lag | 1.025683 .0110359 2.36 0.018 1.004279 1.047542

sp77\_410\_1lag | 1.025539 .0227202 1.14 0.255 .9819609 1.07105

sp77\_500\_1lag | .5669654 .1490892 -2.16 0.031 .3386294 .9492673

sp77\_510\_1lag | .5599405 .119393 -2.72 0.007 .368676 .8504305

sp77\_600\_1lag | 1.392003 .1946003 2.37 0.018 1.058384 1.830784

sp77\_700\_1lag | 1.023273 .1408384 0.17 0.867 .7813334 1.34013

sp77\_800\_1lag | 1.58797 .5261032 1.40 0.163 .8295345 3.039835

sp77\_810\_1lag | .9660169 .2751561 -0.12 0.903 .5527543 1.688252

sp77\_900\_1lag | .9667407 .2155759 -0.15 0.879 .6244512 1.496654

mine\_time | .9987987 .0018417 -0.65 0.514 .9951955 1.002415

onsite\_insp\_hours | .9997754 .0001169 -1.92 0.055 .9995463 1.000004

|

state |

AL | 1.18292 .0907741 2.19 0.029 1.01774 1.37491

AR | 2.178228 .1269722 13.36 0.000 1.943057 2.441863

CO | .7340358 .1183088 -1.92 0.055 .53521 1.006724

IL | 1.131593 .085218 1.64 0.101 .9763107 1.311573

IN | .9036764 .1413296 -0.65 0.517 .6651049 1.227823

MD | 1.030796 .1864611 0.17 0.867 .7231001 1.469423

MT | .9330112 .0625521 -1.03 0.301 .8181249 1.064031

NM | .8525551 .0451115 -3.01 0.003 .7685686 .9457194

OH | 1.216673 .1394591 1.71 0.087 .971866 1.523146

OK | .8573889 .2201626 -0.60 0.549 .5183273 1.418246

PA | .9735761 .0885118 -0.29 0.768 .8146737 1.163472

TN | 1.276049 .1728389 1.80 0.072 .9785286 1.664031

UT | .6173618 .0742618 -4.01 0.000 .4876964 .7815017

VA | .7050636 .057714 -4.27 0.000 .6005538 .8277604

WV | 1.039077 .0552015 0.72 0.471 .9363259 1.153103

WY | 1.123565 .0693383 1.89 0.059 .9955616 1.268026

|

time |

2000.25 | .9711443 .1093056 -0.26 0.795 .7788935 1.210848

2000.5 | 1.176943 .1206824 1.59 0.112 .962663 1.43892

2000.75 | .8291106 .0889105 -1.75 0.081 .6719439 1.023038

2001 | .8817625 .0873144 -1.27 0.204 .726212 1.070631

2001.25 | .7989056 .0861177 -2.08 0.037 .6467561 .9868483

2001.75 | .8508997 .0791156 -1.74 0.082 .7091445 1.020991

2002 | .8618016 .0868378 -1.48 0.140 .7073553 1.04997

2002.25 | .8169824 .0868314 -1.90 0.057 .6633525 1.006192

2002.5 | .9881666 .1031603 -0.11 0.909 .8053199 1.212528

2002.75 | .9033145 .0985575 -0.93 0.351 .7294026 1.118692

2003 | .7083419 .0873564 -2.80 0.005 .5562479 .9020227

2003.25 | .8369289 .0960509 -1.55 0.121 .6683434 1.048039

2003.5 | .874643 .0942311 -1.24 0.214 .70815 1.08028

2003.75 | .6723554 .0710524 -3.76 0.000 .546571 .8270871

2004 | .8245904 .1023498 -1.55 0.120 .6465251 1.051698

2004.25 | .8322282 .0891703 -1.71 0.087 .674589 1.026705

2004.5 | .8167792 .0922257 -1.79 0.073 .6546244 1.019101

2004.75 | .7475272 .0888661 -2.45 0.014 .5921559 .9436652

2005 | .6198097 .0640857 -4.63 0.000 .5061133 .7590475

2005.25 | .7880477 .083994 -2.23 0.025 .6394805 .9711308

2005.5 | .7020285 .0795834 -3.12 0.002 .5621612 .8766953

2005.75 | .6431123 .0750052 -3.78 0.000 .5116965 .8082787

2006 | .6551203 .0779672 -3.55 0.000 .5188213 .8272263

2006.25 | .657383 .0795984 -3.46 0.001 .5185036 .8334608

2006.5 | .7300363 .087299 -2.63 0.009 .5775057 .9228532

2006.75 | .6194805 .074755 -3.97 0.000 .4890012 .7847752

2007 | .6190261 .0733311 -4.05 0.000 .4907654 .7808076

2007.25 | .5958009 .0759789 -4.06 0.000 .464037 .7649794

2007.5 | .6355834 .0715361 -4.03 0.000 .5097628 .7924591

2007.75 | .6246413 .0735856 -3.99 0.000 .4958556 .7868758

2008 | .5506998 .065269 -5.03 0.000 .4365465 .6947033

2008.25 | .5594209 .0636667 -5.10 0.000 .4475741 .6992176

2008.5 | .6472254 .0783261 -3.60 0.000 .5105574 .8204771

2008.75 | .5468318 .0626287 -5.27 0.000 .4368834 .6844505

2009 | .5000308 .0669229 -5.18 0.000 .3846574 .6500093

2009.25 | .4889666 .0622535 -5.62 0.000 .3809844 .627554

2009.5 | .599159 .0738899 -4.15 0.000 .4705108 .7629825

2009.75 | .4402684 .0510253 -7.08 0.000 .3508059 .5525457

2010 | .4683182 .0661699 -5.37 0.000 .3550361 .6177453

2010.25 | .4686077 .0593261 -5.99 0.000 .3656341 .6005819

2010.5 | .5455375 .0686219 -4.82 0.000 .4263379 .6980641

2010.75 | .4465631 .05681 -6.34 0.000 .3480136 .5730195

2011 | .5045967 .0625556 -5.52 0.000 .3957489 .6433823

2011.25 | .4991292 .0609317 -5.69 0.000 .3929179 .6340511

2011.5 | .5467999 .0641424 -5.15 0.000 .4344883 .688143

2011.75 | .4688657 .0612731 -5.80 0.000 .3629195 .6057405

2012 | .5561755 .066487 -4.91 0.000 .4400038 .7030194

2012.25 | .4979885 .0569102 -6.10 0.000 .3980557 .6230096

2012.5 | .5301278 .0626401 -5.37 0.000 .4205351 .6682806

2012.75 | .4557048 .0544981 -6.57 0.000 .3604854 .5760757

2013 | .4921514 .0612065 -5.70 0.000 .3856905 .6279984

2013.25 | .4177081 .059744 -6.10 0.000 .3155928 .5528645

2013.5 | .5592955 .0689028 -4.72 0.000 .439316 .7120422

2013.75 | .4395173 .0592296 -6.10 0.000 .3374951 .57238

2014 | .4193294 .059507 -6.12 0.000 .3175129 .5537954

2014.25 | .4678723 .064085 -5.55 0.000 .3577152 .6119519

2014.5 | .4578137 .0575309 -6.22 0.000 .3578682 .5856721

2014.75 | .4661254 .0583698 -6.10 0.000 .3646805 .5957898

2015 | .4312437 .058466 -6.20 0.000 .3306137 .5625029

2015.25 | .4718316 .0709836 -4.99 0.000 .3513419 .6336423

2015.5 | .6164066 .0851775 -3.50 0.000 .470159 .8081458

2015.75 | .3516992 .0576846 -6.37 0.000 .2550116 .4850458

2016 | .4965075 .0689621 -5.04 0.000 .3781801 .6518579

|

\_cons | .0000177 1.54e-06 -125.53 0.000 .0000149 .000021

ln(hours) | 1 (exposure)

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

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

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

Iteration 0: log pseudolikelihood = -19068.123

Iteration 1: log pseudolikelihood = -18839.851

Iteration 2: log pseudolikelihood = -18838.758

Iteration 3: log pseudolikelihood = -18838.53

Iteration 4: log pseudolikelihood = -18838.478

Iteration 5: log pseudolikelihood = -18838.466

Iteration 6: log pseudolikelihood = -18838.463

Iteration 7: log pseudolikelihood = -18838.463

Iteration 8: log pseudolikelihood = -18838.463

Iteration 9: log pseudolikelihood = -18838.463

Generalized linear models No. of obs = 26,110

Optimization : ML Residual df = 25,707

Scale parameter = 1

Deviance = 14189.27503 (1/df) Deviance = .5519615

Pearson = 274499.9347 (1/df) Pearson = 10.67802

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

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

AIC = 1.473877

Log pseudolikelihood = -18838.4626 BIC = -247252.8

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

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| Robust

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

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

sp47\_41\_1lag | .8897388 .0560854 -1.85 0.064 .7863327 1.006743

sp48\_11\_1lag | 1.048622 .0705754 0.71 0.481 .9190318 1.196485

sp71\_701\_1lag | 3.349635 1.618213 2.50 0.012 1.299514 8.634038

sp75\_1001\_1\_1lag | .748382 .2145088 -1.01 0.312 .4267204 1.312512

sp75\_1001\_1lag | .830616 .3760664 -0.41 0.682 .3419902 2.017376

sp75\_1003\_1\_1lag | .5559978 .1317157 -2.48 0.013 .3494811 .8845502

sp75\_1400\_1\_1lag | 1.412474 .3666652 1.33 0.183 .8492123 2.349332

sp75\_1401\_1\_1lag | .6835163 .2660572 -0.98 0.328 .3187282 1.465808

sp75\_1401\_1lag | 1.214367 .3010786 0.78 0.433 .7469839 1.974189

sp75\_1403\_11\_1lag | 1.496185 .3480484 1.73 0.083 .9483646 2.360451

sp75\_1404\_1\_1lag | .384584 .257691 -1.43 0.154 .103429 1.430012

sp75\_1405\_1\_1lag | 1.166082 .1463305 1.22 0.221 .9118278 1.491234

sp75\_1431\_1lag | 1.03e-07 1.05e-07 -15.80 0.000 1.40e-08 7.59e-07

sp75\_151\_1lag | 1.337209 .4169544 0.93 0.351 .7257491 2.463837

sp75\_1721\_1lag | 1.182242 1.03189 0.19 0.848 .2136762 6.541185

sp75\_1731\_1lag | 1.001877 .0065485 0.29 0.774 .9891236 1.014794

sp75\_1911\_1lag | .9834311 .016298 -1.01 0.313 .9520008 1.015899

sp75\_211\_1lag | 1.0316 .0282752 1.14 0.256 .9776434 1.088534

sp75\_341\_1lag | 1.224044 .4197139 0.59 0.555 .625068 2.396992

sp75\_506\_1\_1lag | 1.24179 .1281944 2.10 0.036 1.014321 1.52027

sp75\_510\_1\_1lag | 1.263889 .8926348 0.33 0.740 .3166205 5.045206

sp75\_511\_1\_1lag | 9.42e-08 7.87e-08 -19.35 0.000 1.83e-08 4.85e-07

sp75\_511\_1lag | 1.034016 .0607978 0.57 0.569 .9214639 1.160315

sp75\_512\_1\_1lag | 1.26712 .4436042 0.68 0.499 .6380014 2.516597

sp75\_513\_1\_1lag | .8964084 .1642167 -0.60 0.551 .625995 1.283633

sp75\_516\_1\_1lag | 1.130538 .3668024 0.38 0.705 .5985679 2.135291

sp75\_517\_1\_1lag | 1.011146 .2586768 0.04 0.965 .6124282 1.669448

sp75\_518\_1\_1lag | .9934567 .0381479 -0.17 0.864 .9214325 1.071111

sp75\_523\_1\_1lag | .9638619 .048564 -0.73 0.465 .873227 1.063904

sp75\_600\_1\_1lag | 1.012036 .2697322 0.04 0.964 .6002469 1.706325

sp75\_601\_1\_1lag | 1.000286 .0186357 0.02 0.988 .96442 1.037487

sp75\_601\_1lag | 1.004281 .0292156 0.15 0.883 .9486211 1.063206

sp75\_700\_1\_1lag | .7095369 .1859486 -1.31 0.190 .4245221 1.185904

sp75\_701\_1\_1lag | .9206959 .052353 -1.45 0.146 .8235971 1.029242

sp75\_701\_1lag | 1.03902 .0194868 2.04 0.041 1.00152 1.077924

sp75\_702\_1\_1lag | 1.04e-07 9.07e-08 -18.42 0.000 1.88e-08 5.75e-07

sp75\_703\_1\_1lag | .6818339 .3421982 -0.76 0.445 .2549637 1.823387

sp75\_705\_1\_1lag | .7141664 .1633356 -1.47 0.141 .4561659 1.118088

sp75\_801\_1lag | .7339831 .2694679 -0.84 0.400 .357424 1.507261

sp75\_811\_1lag | 1.045615 .0693337 0.67 0.501 .9181839 1.190733

sp75\_821\_1lag | 1.168692 .1255741 1.45 0.147 .9467595 1.442647

sp75\_831\_1lag | .723622 .3681231 -0.64 0.525 .2669845 1.96127

sp75\_901\_1lag | .9060392 .1246682 -0.72 0.473 .6918696 1.186505

sp75\_902\_1\_1lag | .8173448 .2355507 -0.70 0.484 .4646195 1.437849

sp77\_1111\_1lag | .8998513 .1543776 -0.62 0.538 .6428941 1.259511

sp77\_401\_1lag | .9416285 .0886271 -0.64 0.523 .7830033 1.132389

sp77\_403\_1\_1lag | .9571107 .1461136 -0.29 0.774 .7096052 1.290945

sp77\_411\_1lag | .8093287 .4577435 -0.37 0.708 .2671153 2.452173

sp77\_501\_1lag | 1.120276 .1185057 1.07 0.283 .9105054 1.378374

sp77\_502\_1\_1lag | 2.771975 1.790836 1.58 0.115 .781394 9.833508

sp77\_503\_1\_1lag | 1.203743 .336759 0.66 0.507 .695668 2.082888

sp77\_506\_1\_1lag | .9245354 .0729137 -0.99 0.320 .7921244 1.07908

sp77\_508\_1\_1lag | .668863 .1152745 -2.33 0.020 .4771311 .9376411

sp77\_511\_1lag | .6881693 .2289118 -1.12 0.261 .3585523 1.320803

sp77\_601\_1lag | .9833054 .2073775 -0.08 0.936 .6503864 1.486639

sp77\_606\_1\_1lag | 1.066007 .2916638 0.23 0.815 .6235448 1.822435

sp77\_700\_1\_1lag | 1.034095 .2073942 0.17 0.867 .6979863 1.532055

sp77\_701\_1\_1lag | .8311834 .1974395 -0.78 0.436 .5217978 1.324011

sp77\_701\_1lag | .9869174 .0421839 -0.31 0.758 .9076069 1.073158

sp77\_704\_1\_1lag | 1.780643 .8365797 1.23 0.219 .7090323 4.471852

sp77\_800\_1\_1lag | .9960534 .2132769 -0.02 0.985 .6546689 1.515457

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

sp77\_801\_1lag | 5.67e-07 4.54e-07 -17.96 0.000 1.18e-07 2.72e-06

sp77\_807\_1\_1lag | 1.468566 .6880387 0.82 0.412 .5862686 3.678666

sp77\_900\_1\_1lag | 1.853106 .3727028 3.07 0.002 1.249407 2.748506

sp77\_901\_1\_1lag | 1.129221 .3679227 0.37 0.709 .5962666 2.13854

sp77\_901\_1lag | .8627845 .2090015 -0.61 0.542 .5366692 1.387069

sp47\_42\_1lag | .6096606 .116304 -2.59 0.009 .4194746 .8860752

sp75\_1100\_2\_1lag | 1.020439 .0114576 1.80 0.072 .9982278 1.043144

sp75\_1102\_1lag | .9260213 .0781137 -0.91 0.362 .7849077 1.092505

sp75\_1106\_2\_1lag | 1.026565 .0578055 0.47 0.642 .9192961 1.14635

sp75\_1400\_2\_1lag | 1.22959 .3556223 0.71 0.475 .6975502 2.16743

sp75\_1402\_2\_1lag | 1.390393 .4280387 1.07 0.284 .7604864 2.542048

sp75\_1432\_1lag | .9903307 .1627516 -0.06 0.953 .7176178 1.366681

sp75\_1600\_2\_1lag | .965701 .0297284 -1.13 0.257 .9091574 1.025761

sp75\_1912\_1lag | 1.075911 .1243592 0.63 0.527 .8578079 1.349467

sp75\_202\_1lag | .9999343 .0051429 -0.01 0.990 .989905 1.010065

sp75\_212\_1lag | .9128489 .0451438 -1.84 0.065 .8285216 1.005759

sp75\_312\_1lag | 1.06227 .0400471 1.60 0.109 .9866088 1.143733

sp75\_342\_1lag | 1.003862 .0114976 0.34 0.736 .9815785 1.026652

sp75\_352\_1lag | .8237771 .0559945 -2.85 0.004 .7210263 .9411705

sp75\_382\_1lag | 1.018304 .053879 0.34 0.732 .9179937 1.129574

sp75\_512\_2\_1lag | 1.019679 .0201293 0.99 0.324 .9809798 1.059905

sp75\_512\_1lag | 1.007931 .006535 1.22 0.223 .995204 1.020822

sp75\_516\_2\_1lag | .9846914 .035935 -0.42 0.672 .91672 1.057703

sp75\_523\_2\_1lag | 1.036618 .0401125 0.93 0.353 .9609064 1.118295

sp75\_601\_2\_1lag | .3527627 .2781258 -1.32 0.186 .0752275 1.654202

sp75\_602\_1lag | 1.05518 .0511316 1.11 0.268 .9595755 1.160309

sp75\_701\_2\_1lag | .8022514 .0777745 -2.27 0.023 .663423 .9701312

sp75\_702\_1lag | 1.96e-07 1.41e-07 -21.40 0.000 4.76e-08 8.06e-07

sp75\_703\_2\_1lag | .5919851 .1008903 -3.08 0.002 .4238801 .8267582

sp75\_705\_2\_1lag | 2.170529 .3283832 5.12 0.000 1.613562 2.919748

sp75\_800\_2\_1lag | 1.794792 .8961165 1.17 0.241 .6745592 4.775382

sp75\_802\_1lag | .5565657 .1127231 -2.89 0.004 .3742138 .8277765

sp75\_803\_2\_1lag | 1.44e-07 8.71e-08 -26.04 0.000 4.40e-08 4.71e-07

sp75\_812\_1lag | 1.07387 .2878448 0.27 0.790 .6350268 1.815982

sp75\_832\_1lag | 6.42e-08 4.63e-08 -22.98 0.000 1.56e-08 2.64e-07

sp75\_900\_2\_1lag | .7383099 .2408696 -0.93 0.352 .389528 1.39939

sp75\_902\_2\_1lag | 1.096519 .0932744 1.08 0.279 .9281311 1.295456

sp75\_902\_1lag | .9937493 .0343968 -0.18 0.856 .9285688 1.063505

sp77\_1112\_1lag | .971565 .1353373 -0.21 0.836 .7394367 1.276564

sp77\_1432\_1lag | 1.633157 .3662932 2.19 0.029 1.052243 2.534779

sp77\_1802\_1lag | .9125345 .1781609 -0.47 0.639 .6223904 1.337937

sp77\_202\_1lag | .9498504 .0212167 -2.30 0.021 .9091635 .9923582

sp77\_402\_1lag | .9909878 .0397532 -0.23 0.821 .9160572 1.072047

sp77\_403\_2\_1lag | 3.37222 1.026731 3.99 0.000 1.856748 6.124617

sp77\_412\_1lag | .9754345 .1030854 -0.24 0.814 .7929427 1.199926

sp77\_502\_2\_1lag | 1.106015 .077948 1.43 0.153 .9633214 1.269845

sp77\_502\_1lag | .9955306 .0142753 -0.31 0.755 .9679409 1.023907

sp77\_512\_1lag | .9471439 .0250986 -2.05 0.040 .8992071 .9976361

sp77\_602\_1lag | .9956359 .2681041 -0.02 0.987 .5873401 1.687763

sp77\_701\_2\_1lag | 1.163481 .221764 0.79 0.427 .8007873 1.690448

sp77\_702\_1lag | .407708 .1223197 -2.99 0.003 .2264506 .7340489

sp77\_800\_2\_1lag | 1.052813 .1644247 0.33 0.742 .7751995 1.429845

sp77\_802\_1lag | .38274 .133283 -2.76 0.006 .1934134 .7573927

sp77\_807\_2\_1lag | .8168226 .2251752 -0.73 0.463 .4758557 1.402104

sp77\_900\_2\_1lag | 1.129788 .1810702 0.76 0.446 .8252313 1.546744

sp77\_902\_2\_1lag | 7.814037 .5692301 28.22 0.000 6.774354 9.013284

sp77\_902\_1lag | 1.390882 .1868338 2.46 0.014 1.068933 1.809798

sp47\_43\_1lag | 1.32725 .5051205 0.74 0.457 .6295134 2.798338

sp72\_503\_1lag | .8037376 .0892384 -1.97 0.049 .6465557 .9991314

sp75\_1106\_3\_1lag | 1.029713 .0197881 1.52 0.128 .9916506 1.069237

sp75\_1400\_3\_1lag | 1.121913 .1044762 1.24 0.217 .9347438 1.34656

sp75\_1403\_3\_1lag | 1.076474 .184705 0.43 0.668 .7690447 1.5068

sp75\_1433\_1lag | 1.038 .0881938 0.44 0.661 .8787691 1.226082

sp75\_153\_1lag | 1.4763 .5446725 1.06 0.291 .7163556 3.04243

sp75\_1903\_1lag | .948687 .0329792 -1.52 0.130 .8862018 1.015578

sp75\_1913\_1lag | .9525384 .1112047 -0.42 0.677 .7577194 1.197448

sp75\_503\_1lag | 1.001027 .0054412 0.19 0.850 .9904188 1.011748

sp75\_513\_1lag | 1.011421 .0864899 0.13 0.894 .8553479 1.195971

sp75\_523\_1lag | .9116935 .0399863 -2.11 0.035 .8365958 .9935323

sp75\_601\_3\_1lag | .8835865 .266187 -0.41 0.681 .4895739 1.594703

sp75\_603\_1lag | .9629509 .0812168 -0.45 0.654 .8162299 1.136046

sp75\_701\_3\_1lag | 1.034833 .0570236 0.62 0.534 .9288923 1.152855

sp75\_703\_3\_1lag | 1.311497 .1306656 2.72 0.006 1.078851 1.594312

sp75\_703\_1lag | 1.014405 .047818 0.30 0.762 .9248821 1.112592

sp75\_705\_3\_1lag | 1.516584 .3037556 2.08 0.038 1.024189 2.245707

sp75\_800\_3\_1lag | 1.082628 .1581625 0.54 0.587 .8130664 1.441559

sp75\_803\_1lag | 1.019639 .1160537 0.17 0.864 .8157626 1.274467

sp75\_900\_3\_1lag | 1.25534 .1185492 2.41 0.016 1.043224 1.510586

sp75\_903\_1lag | 1.03628 .0627454 0.59 0.556 .9203181 1.166853

sp77\_103\_1lag | .6389547 .2224794 -1.29 0.198 .3229147 1.264306

sp77\_1103\_1lag | .9935834 .0335374 -0.19 0.849 .9299785 1.061538

sp77\_1403\_1lag | .9024682 .1293611 -0.72 0.474 .6814272 1.19521

sp77\_1433\_1lag | 1.003281 .2405941 0.01 0.989 .6270441 1.605266

sp77\_203\_1lag | 1.086977 .1587173 0.57 0.568 .8164509 1.447139

sp77\_403\_1lag | 1.484359 .3890681 1.51 0.132 .8880325 2.481127

sp77\_413\_1lag | .9310792 .0839682 -0.79 0.428 .780229 1.111095

sp77\_503\_1lag | 1.211146 .1914641 1.21 0.226 .8884529 1.651045

sp77\_513\_1lag | .8879385 .0467952 -2.26 0.024 .8007994 .9845597

sp77\_603\_1lag | 1.958015 .5194653 2.53 0.011 1.1641 3.293377

sp77\_701\_3\_1lag | .6273608 .7964739 -0.37 0.713 .0521031 7.553899

sp77\_703\_1lag | 1.061051 .3442487 0.18 0.855 .5617862 2.004016

sp77\_803\_1lag | .9845636 .4107604 -0.04 0.970 .4346324 2.230311

sp77\_807\_3\_1lag | 1.671126 .3666203 2.34 0.019 1.087097 2.568918

sp77\_902\_3\_1lag | 1.41574 .5149341 0.96 0.339 .694039 2.887907

sp77\_903\_1lag | .763934 .2913346 -0.71 0.480 .3617769 1.613136

sp47\_44\_1lag | 1.030397 .0862546 0.36 0.721 .8744814 1.214112

sp48\_24\_1lag | .0539952 .010845 -14.53 0.000 .0364243 .0800423

sp48\_4\_1lag | 3.57e-07 2.51e-07 -21.08 0.000 8.97e-08 1.42e-06

sp75\_1103\_4\_1lag | 1.03527 .022258 1.61 0.107 .9925511 1.079827

sp75\_1104\_1lag | 1.114194 .0576015 2.09 0.036 1.006828 1.233009

sp75\_1106\_4\_1lag | 1.052152 .1240817 0.43 0.666 .8350167 1.325751

sp75\_1107\_14\_1lag | 1.104735 .5084632 0.22 0.829 .4482143 2.722893

sp75\_1400\_4\_1lag | .979023 .1035986 -0.20 0.841 .7956466 1.204663

sp75\_1403\_4\_1lag | 1.030121 .1760723 0.17 0.862 .7368814 1.440055

sp75\_1404\_1lag | .7256874 .3911005 -0.59 0.552 .2523509 2.086865

sp75\_1434\_1lag | .9629638 .1104975 -0.33 0.742 .7690187 1.205822

sp75\_1914\_1lag | 1.001725 .0095158 0.18 0.856 .9832467 1.02055

sp75\_214\_1lag | .9768615 .0531904 -0.43 0.667 .8779803 1.086879

sp75\_324\_1lag | .8965837 .0955454 -1.02 0.306 .7275814 1.104842

sp75\_344\_1lag | 1.111178 .117961 0.99 0.321 .9024466 1.368189

sp75\_504\_1lag | 1.081646 .1287674 0.66 0.510 .8565481 1.365899

sp75\_514\_1lag | 1.025598 .0285097 0.91 0.363 .9712147 1.083026

sp75\_604\_1lag | 1.027501 .0095679 2.91 0.004 1.008918 1.046426

sp75\_701\_4\_1lag | 2.201095 .887725 1.96 0.050 .9984821 4.852186

sp75\_703\_4\_1lag | 2.52e-07 2.16e-07 -17.67 0.000 4.66e-08 1.36e-06

sp75\_704\_1lag | 1.044148 .2283343 0.20 0.843 .6801761 1.602887

sp75\_800\_4\_1lag | .997875 .1192026 -0.02 0.986 .7895772 1.261124

sp75\_804\_1lag | 1.104213 .0868747 1.26 0.208 .9464207 1.288314

sp75\_814\_1lag | .9422424 .1469655 -0.38 0.703 .6940601 1.27917

sp75\_834\_1lag | 10.26401 12.76459 1.87 0.061 .8968932 117.461

sp75\_900\_4\_1lag | .9925011 .0306465 -0.24 0.807 .9342166 1.054422

sp75\_902\_4\_1lag | .977206 .069396 -0.32 0.745 .8502336 1.12314

sp75\_904\_1lag | .9807149 .0134522 -1.42 0.156 .9547003 1.007438

sp77\_104\_1lag | 1.47e-07 1.29e-07 -17.87 0.000 2.61e-08 8.23e-07

sp77\_1104\_1lag | .9956935 .0119069 -0.36 0.718 .9726279 1.019306

sp77\_1434\_1lag | 1.06338 .1897887 0.34 0.731 .7494953 1.508719

sp77\_204\_1lag | .9818194 .0444791 -0.41 0.685 .8984002 1.072984

sp77\_314\_1lag | .6368208 .1667088 -1.72 0.085 .3812302 1.063769

sp77\_404\_1lag | .9771817 .0150787 -1.50 0.135 .9480704 1.007187

sp77\_504\_1lag | .964911 .0512484 -0.67 0.501 .8695173 1.07077

sp77\_514\_1lag | .8191976 .1171897 -1.39 0.163 .6189002 1.084318

sp77\_604\_1lag | 1.36077 .1446007 2.90 0.004 1.104925 1.675856

sp77\_701\_4\_1lag | 1.10407 .303384 0.36 0.719 .6443141 1.891889

sp77\_704\_1lag | 1.661548 .7558696 1.12 0.264 .6812169 4.052664

sp77\_804\_1lag | 7.71e-07 5.13e-07 -21.14 0.000 2.09e-07 2.84e-06

sp77\_904\_1lag | 1.029333 .0450895 0.66 0.509 .9446464 1.121611

sp48\_25\_1lag | 1.063502 .1229422 0.53 0.594 .8478877 1.333946

sp48\_5\_1lag | 1.004057 .1643279 0.02 0.980 .7285294 1.383787

sp75\_1106\_5\_1lag | 1.071947 .0657708 1.13 0.257 .9504876 1.208926

sp75\_1403\_5\_1lag | .9870322 .0182502 -0.71 0.480 .9519029 1.023458

sp75\_1405\_1lag | .9508625 .0196698 -2.44 0.015 .9130814 .9902069

sp75\_1435\_1lag | 1.204065 .3560245 0.63 0.530 .6744691 2.149502

sp75\_155\_1lag | .5417952 .1793508 -1.85 0.064 .2831792 1.036595

sp75\_1725\_1lag | 1.002205 .0065719 0.34 0.737 .9894069 1.015169

sp75\_1915\_1lag | 1.084651 .143842 0.61 0.540 .8363867 1.406607

sp75\_505\_1lag | .9763785 .2397954 -0.10 0.922 .6033452 1.580049

sp75\_515\_1lag | .9583342 .013897 -2.93 0.003 .93148 .9859626

sp75\_605\_1lag | 1.000715 .0273712 0.03 0.979 .9484807 1.055825

sp75\_701\_5\_1lag | .9277795 .0617149 -1.13 0.260 .8143737 1.056978

sp75\_705\_1lag | .985827 .4836399 -0.03 0.977 .3768835 2.578661

sp75\_805\_1lag | 1.579856 .4697181 1.54 0.124 .8821466 2.829399

sp75\_815\_1lag | 1.250527 .1233081 2.27 0.023 1.030766 1.51714

sp75\_825\_1lag | 1.382316 .2218752 2.02 0.044 1.009209 1.893361

sp75\_905\_1lag | .8069165 .1566986 -1.10 0.269 .5514804 1.180666

sp77\_1605\_1lag | .9873071 .0156648 -0.81 0.421 .9570771 1.018492

sp77\_1915\_1lag | 1.140543 .1804435 0.83 0.406 .8364583 1.555173

sp77\_205\_1lag | 1.002407 .0109169 0.22 0.825 .9812373 1.024034

sp77\_305\_1lag | .9108393 .4950143 -0.17 0.864 .3139344 2.64268

sp77\_315\_1lag | .1431039 .0948751 -2.93 0.003 .0390231 .5247848

sp77\_405\_1lag | .8394854 .1538635 -0.95 0.340 .5861412 1.202331

sp77\_505\_1lag | 1.006345 .0310959 0.20 0.838 .9472068 1.069175

sp77\_515\_1lag | .5363719 .2226381 -1.50 0.133 .237765 1.209996

sp77\_605\_1lag | .2501544 .172548 -2.01 0.045 .0647259 .9668029

sp77\_705\_1lag | .9964098 .0816542 -0.04 0.965 .8485616 1.170018

sp77\_805\_1lag | .8490889 .2649812 -0.52 0.600 .460588 1.565286

sp48\_26\_1lag | 1.089188 .1451751 0.64 0.522 .8387804 1.414351

sp48\_6\_1lag | .9750521 .0775331 -0.32 0.751 .8343397 1.139496

sp75\_1106\_6\_1lag | 219.801 3066.983 0.39 0.699 2.92e-10 1.66e+14

sp75\_1106\_1lag | 1.125127 .128403 1.03 0.302 .899621 1.407159

sp75\_1403\_6\_1lag | .9788317 .0128361 -1.63 0.103 .953994 1.004316

sp75\_1436\_1lag | .5243153 .4446574 -0.76 0.446 .0994745 2.763587

sp75\_156\_1lag | .8336425 .3503317 -0.43 0.665 .3658214 1.899724

sp75\_1712\_6\_1lag | .9816255 .0405892 -0.45 0.654 .9052104 1.064491

sp75\_1726\_1lag | 1.082957 .1450345 0.60 0.552 .832941 1.408017

sp75\_506\_1lag | 1.054862 .054321 1.04 0.300 .9535916 1.166888

sp75\_516\_1lag | 1.007854 .0219697 0.36 0.720 .9657005 1.051847

sp75\_606\_1lag | .9854926 .0134121 -1.07 0.283 .9595528 1.012134

sp75\_706\_1lag | .8920887 .1020182 -1.00 0.318 .7129608 1.116222

sp75\_806\_1lag | 1.102948 .330347 0.33 0.744 .6132105 1.983814

sp75\_816\_1lag | 1.041737 .0512324 0.83 0.406 .9460107 1.147149

sp77\_1106\_1lag | 3.92026 5.358047 1.00 0.318 .2691091 57.10859

sp77\_1606\_1lag | .9981595 .0249953 -0.07 0.941 .9503525 1.048372

sp77\_1906\_1lag | .8756079 .213326 -0.55 0.586 .5431625 1.411528

sp77\_1916\_1lag | 1.01623 .2177013 0.08 0.940 .6677956 1.546465

sp77\_206\_1lag | .9474762 .053402 -0.96 0.338 .8483841 1.058142

sp77\_216\_1lag | .9737404 .0566737 -0.46 0.648 .8687634 1.091402

sp77\_506\_1lag | 1.061278 .0368285 1.71 0.087 .9914959 1.135972

sp77\_516\_1lag | .99044 .0210908 -0.45 0.652 .9499535 1.032652

sp77\_606\_1lag | 3.24e-07 2.45e-07 -19.72 0.000 7.33e-08 1.43e-06

sp77\_906\_1lag | .7584821 .1596718 -1.31 0.189 .5020589 1.145872

sp48\_27\_1lag | 1.258031 .1369722 2.11 0.035 1.016282 1.557287

sp48\_7\_1lag | 1.119451 .072423 1.74 0.081 .9861354 1.27079

sp75\_1403\_7\_1lag | .9194862 .0505679 -1.53 0.127 .8255297 1.024136

sp75\_1437\_1lag | 1.649531 .5567935 1.48 0.138 .8512168 3.196543

sp75\_1727\_1lag | 4.03e-07 3.03e-07 -19.56 0.000 9.20e-08 1.76e-06

sp75\_337\_1lag | .8864591 .056361 -1.90 0.058 .7825992 1.004102

sp75\_507\_1lag | 1.201706 .0826478 2.67 0.008 1.050162 1.375118

sp75\_517\_1lag | .9969083 .0067875 -0.45 0.649 .9836934 1.010301

sp75\_607\_1lag | 1.087617 .0824196 1.11 0.268 .9375012 1.261769

sp75\_807\_1lag | 1.016366 .0142483 1.16 0.247 .98882 1.04468

sp75\_827\_1lag | 1.211241 .2361288 0.98 0.326 .8265911 1.774886

sp75\_907\_1lag | .988253 .132309 -0.09 0.930 .760165 1.284779

sp77\_1437\_1lag | .5609648 .3287747 -0.99 0.324 .1778512 1.769353

sp77\_207\_1lag | 1.104692 .0570313 1.93 0.054 .9983823 1.222323

sp77\_507\_1lag | .7373509 .0977018 -2.30 0.021 .5687045 .9560084

sp77\_807\_1lag | .8666788 .1758471 -0.71 0.481 .5823061 1.289927

sp48\_28\_1lag | .998184 .073876 -0.02 0.980 .8634015 1.154007

sp48\_8\_1lag | 1.069231 .1110513 0.64 0.519 .8722982 1.310624

sp75\_1403\_8\_1lag | .966394 .0140462 -2.35 0.019 .9392523 .99432

sp75\_1438\_1lag | 8.82e-07 1.11e-06 -11.10 0.000 7.53e-08 .0000103

sp75\_1728\_1lag | 1.80798 .4945332 2.17 0.030 1.057709 3.090446

sp75\_208\_1lag | .996159 .0238126 -0.16 0.872 .9505636 1.043941

sp75\_518\_1lag | 1.015247 .0214138 0.72 0.473 .9741325 1.058097

sp75\_705\_8\_1lag | 1.240761 .3194647 0.84 0.402 .7490745 2.055185

sp75\_808\_1lag | 1.308674 .1717958 2.05 0.040 1.01179 1.692672

sp75\_818\_1lag | .928504 .1332456 -0.52 0.605 .7008604 1.230088

sp77\_1438\_1lag | .113014 .1166616 -2.11 0.035 .0149437 .8546871

sp77\_208\_1lag | 1.048426 .0263001 1.89 0.059 .9981253 1.101261

sp77\_408\_1lag | .8382108 .131743 -1.12 0.261 .6159827 1.140612

sp77\_508\_1lag | 1.176145 .174779 1.09 0.275 .8789611 1.57381

sp77\_704\_8\_1lag | 1.193998 .3356304 0.63 0.528 .6882287 2.071451

sp77\_808\_1lag | 2.698308 .8386957 3.19 0.001 1.4673 4.962087

sp75\_1403\_9\_1lag | .9118733 .0338912 -2.48 0.013 .8478095 .9807779

sp75\_1729\_1lag | 1.03604 .1733077 0.21 0.832 .7464291 1.438019

sp75\_1909\_1lag | 1.022924 .0097745 2.37 0.018 1.003945 1.042263

sp75\_519\_1lag | 1.091302 .8122771 0.12 0.907 .2537344 4.69365

sp75\_809\_1lag | .9121705 .0414427 -2.02 0.043 .8344558 .997123

sp75\_819\_1lag | 1.894227 .5890841 2.05 0.040 1.029716 3.484548

sp77\_309\_1lag | 1.147444 .272348 0.58 0.562 .7206054 1.827115

sp77\_409\_1lag | 1.050365 .1871298 0.28 0.783 .740786 1.489319

sp77\_509\_1lag | .9304374 .0574695 -1.17 0.243 .8243501 1.050177

sp77\_704\_9\_1lag | .272157 .2026623 -1.75 0.081 .0632369 1.171301

sp77\_809\_1lag | .8586589 .0822696 -1.59 0.112 .7116487 1.036038

sp72\_610\_1lag | 1.143495 .7345747 0.21 0.835 .3246591 4.027553

sp72\_620\_1lag | .7433563 .2982404 -0.74 0.460 .338601 1.631946

sp72\_630\_1lag | 1.031841 .0145109 2.23 0.026 1.003788 1.060677

sp75\_100\_1lag | .8776484 .1973332 -0.58 0.562 .5648508 1.363664

sp75\_1101\_20\_1lag | 1.742221 .6471949 1.49 0.135 .8412042 3.608319

sp75\_1400\_1lag | .9231094 .0614456 -1.20 0.229 .8102033 1.05175

sp75\_1403\_10\_1lag | 1.00595 .0202524 0.29 0.768 .967029 1.046438

sp75\_150\_1lag | 1.202149 .3249198 0.68 0.496 .7077725 2.041847

sp75\_160\_1lag | .7755237 .3197709 -0.62 0.538 .3456369 1.740084

sp75\_1712\_10\_1lag | .904697 .0928781 -0.98 0.329 .7398045 1.106342

sp75\_1720\_1lag | .9907765 .0580622 -0.16 0.874 .8832688 1.111369

sp75\_1730\_1lag | .9376224 .0849795 -0.71 0.477 .7850206 1.119889

sp75\_1910\_1lag | .9954987 .0117631 -0.38 0.703 .9727084 1.018823

sp75\_320\_1lag | .959637 .0325258 -1.22 0.224 .8979591 1.025551

sp75\_340\_1lag | .9995155 .0169216 -0.03 0.977 .9668939 1.033238

sp75\_520\_1lag | 1.02772 .0437977 0.64 0.521 .9453658 1.117249

sp75\_600\_1lag | 1.44748 .6804397 0.79 0.431 .5760694 3.637059

sp75\_700\_1lag | .9272998 .0573389 -1.22 0.222 .8214606 1.046776

sp75\_800\_1lag | 1.058635 .1608167 0.38 0.708 .7860332 1.425778

sp75\_810\_1lag | 1.011128 .0637343 0.18 0.861 .8936193 1.144089

sp75\_820\_1lag | .9511155 .1540676 -0.31 0.757 .6923892 1.30652

sp75\_900\_1lag | .9534085 .032841 -1.39 0.166 .891166 1.019998

sp77\_1710\_1lag | .9472903 .03005 -1.71 0.088 .8901869 1.008057

sp77\_200\_1lag | 1.052396 .0169798 3.17 0.002 1.019637 1.086208

sp77\_210\_1lag | .9753849 .1046863 -0.23 0.816 .7903475 1.203744

sp77\_400\_1lag | 1.022114 .0136893 1.63 0.102 .9956326 1.0493

sp77\_410\_1lag | 1.02714 .0247237 1.11 0.266 .9798081 1.076759

sp77\_500\_1lag | .7202283 .1865236 -1.27 0.205 .4335382 1.196501

sp77\_510\_1lag | .4471491 .1219154 -2.95 0.003 .2620427 .7630145

sp77\_600\_1lag | 1.356238 .2303171 1.79 0.073 .9722649 1.891853

sp77\_700\_1lag | 1.090816 .1881052 0.50 0.614 .777976 1.529454

sp77\_800\_1lag | 1.258294 .3707349 0.78 0.436 .7063015 2.241683

sp77\_810\_1lag | 1.051125 .2888779 0.18 0.856 .6133681 1.801308

sp77\_900\_1lag | .9541022 .2170871 -0.21 0.836 .6108307 1.490284

mine\_time | .9991022 .0016464 -0.55 0.586 .9958806 1.002334

onsite\_insp\_hours | .9997887 .000122 -1.73 0.083 .9995496 1.000028

|

state |

AL | 1.285187 .1202915 2.68 0.007 1.069782 1.543965

AR | 2.149818 .1239697 13.27 0.000 1.92007 2.407058

CO | .7896976 .1323587 -1.41 0.159 .5685827 1.096801

IL | 1.181835 .090761 2.18 0.030 1.016688 1.373809

IN | .9329613 .148354 -0.44 0.663 .6831414 1.274139

MD | 1.082699 .2053328 0.42 0.675 .7465834 1.570136

MT | 1.078966 .0712327 1.15 0.250 .9480081 1.228015

NM | .9181732 .0496671 -1.58 0.115 .8258103 1.020866

OH | 1.083368 .1536653 0.56 0.572 .8204294 1.430575

OK | .9034617 .2325368 -0.39 0.693 .5455367 1.49622

PA | 1.089602 .0924797 1.01 0.312 .9226188 1.286807

TN | 1.389612 .1937978 2.36 0.018 1.057264 1.826433

UT | .6659631 .0851639 -3.18 0.001 .5183199 .8556625

VA | .7533976 .0529157 -4.03 0.000 .6565068 .8645882

WV | 1.147254 .0569317 2.77 0.006 1.040924 1.264444

WY | 1.218535 .0909679 2.65 0.008 1.052671 1.410532

|

time |

2000.25 | .9768262 .1077433 -0.21 0.832 .7869196 1.212563

2000.5 | 1.222812 .1310122 1.88 0.060 .9912012 1.508542

2000.75 | .864325 .0990092 -1.27 0.203 .690512 1.08189

2001 | .883554 .0911546 -1.20 0.230 .721799 1.081558

2001.25 | .8678268 .0991219 -1.24 0.215 .6937613 1.085566

2001.75 | .9070452 .0954943 -0.93 0.354 .7379279 1.114921

2002 | .8667859 .0919767 -1.35 0.178 .7040262 1.067173

2002.25 | .8028741 .0878888 -2.01 0.045 .6478409 .9950079

2002.5 | 1.019665 .1089301 0.18 0.855 .8270355 1.25716

2002.75 | .9601337 .1087459 -0.36 0.719 .7689953 1.198781

2003 | .7738901 .0899463 -2.21 0.027 .6162365 .9718767

2003.25 | .8749381 .1081498 -1.08 0.280 .6866914 1.11479

2003.5 | .9263433 .1034257 -0.69 0.493 .7442791 1.152944

2003.75 | .6550083 .0753394 -3.68 0.000 .5228068 .8206395

2004 | .8916958 .1085867 -0.94 0.347 .7023623 1.132067

2004.25 | .8300685 .0909723 -1.70 0.089 .6696155 1.028969

2004.5 | .8280032 .0933192 -1.67 0.094 .6638934 1.03268

2004.75 | .7379257 .0875197 -2.56 0.010 .5848683 .9310375

2005 | .6418441 .0739182 -3.85 0.000 .5121541 .8043748

2005.25 | .8099447 .0854609 -2.00 0.046 .6586297 .9960232

2005.5 | .682577 .0778172 -3.35 0.001 .5458966 .8534791

2005.75 | .663591 .0803704 -3.39 0.001 .5233687 .8413819

2006 | .7131455 .0825193 -2.92 0.003 .5684394 .8946892

2006.25 | .7021036 .0908985 -2.73 0.006 .5447529 .9049047

2006.5 | .7460023 .0895899 -2.44 0.015 .5895445 .9439821

2006.75 | .6369267 .0759773 -3.78 0.000 .5041408 .8046873

2007 | .6236835 .0739788 -3.98 0.000 .4943087 .7869195

2007.25 | .6123969 .0778149 -3.86 0.000 .4773909 .7855826

2007.5 | .6693147 .0773223 -3.48 0.001 .5336981 .8393924

2007.75 | .6425971 .0762845 -3.73 0.000 .5092022 .8109373

2008 | .5478519 .0640029 -5.15 0.000 .435734 .6888188

2008.25 | .5803822 .0678513 -4.65 0.000 .461532 .7298377

2008.5 | .6531368 .0779639 -3.57 0.000 .5168894 .8252979

2008.75 | .5297282 .061413 -5.48 0.000 .4220567 .6648681

2009 | .4952658 .0616448 -5.65 0.000 .3880529 .6320999

2009.25 | .4779694 .0585088 -6.03 0.000 .3760135 .6075706

2009.5 | .5804278 .0724072 -4.36 0.000 .45453 .7411973

2009.75 | .4228061 .0520016 -7.00 0.000 .332239 .5380614

2010 | .4678154 .0625172 -5.68 0.000 .360017 .6078915

2010.25 | .4585489 .0568117 -6.29 0.000 .3596885 .5845812

2010.5 | .5913344 .0750788 -4.14 0.000 .461063 .7584133

2010.75 | .4598293 .0595296 -6.00 0.000 .3567794 .5926434

2011 | .5402321 .0663161 -5.02 0.000 .4247087 .6871784

2011.25 | .5219582 .0639987 -5.30 0.000 .4104569 .6637489

2011.5 | .563599 .0646876 -5.00 0.000 .4500624 .7057773

2011.75 | .4687274 .0596978 -5.95 0.000 .3651827 .6016314

2012 | .5554165 .0653629 -5.00 0.000 .4410086 .6995044

2012.25 | .503741 .0595118 -5.80 0.000 .3996193 .6349917

2012.5 | .5663799 .0701105 -4.59 0.000 .4443652 .7218976

2012.75 | .4487119 .0578369 -6.22 0.000 .3485391 .5776751

2013 | .4572565 .0568559 -6.29 0.000 .3583606 .5834445

2013.25 | .3994956 .0554261 -6.61 0.000 .3043801 .5243337

2013.5 | .5110098 .0640566 -5.36 0.000 .399695 .6533258

2013.75 | .4350682 .0589953 -6.14 0.000 .3335295 .567519

2014 | .3826811 .0550338 -6.68 0.000 .2886854 .5072817

2014.25 | .4403648 .0596021 -6.06 0.000 .3377574 .5741434

2014.5 | .4478641 .058855 -6.11 0.000 .3461685 .5794353

2014.75 | .4510406 .0587159 -6.12 0.000 .3494678 .5821355

2015 | .4192943 .0591384 -6.16 0.000 .3180265 .5528084

2015.25 | .467788 .0717567 -4.95 0.000 .3463207 .6318584

2015.5 | .6098583 .0825552 -3.65 0.000 .467739 .7951595

2015.75 | .3477267 .0564392 -6.51 0.000 .2529766 .4779647

2016 | .4914518 .0712514 -4.90 0.000 .36989 .6529641

|

\_cons | .0000165 1.38e-06 -131.36 0.000 .000014 .0000194

ln(hours) | 1 (exposure)

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

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

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

Fitting Poisson model:

Iteration 0: log pseudolikelihood = -114987.75

Iteration 1: log pseudolikelihood = -68062.362 (backed up)

Iteration 2: log pseudolikelihood = -52145.204 (backed up)

Iteration 3: log pseudolikelihood = -31586.905

Iteration 4: log pseudolikelihood = -24330.918

Iteration 5: log pseudolikelihood = -19178.367

Iteration 6: log pseudolikelihood = -18619.543

Iteration 7: log pseudolikelihood = -18478.595

Iteration 8: log pseudolikelihood = -18461.593

Iteration 9: log pseudolikelihood = -18460.853

Iteration 10: log pseudolikelihood = -18460.85

Iteration 11: log pseudolikelihood = -18460.85

Fitting constant-only model:

Iteration 0: log pseudolikelihood = -19311.72

Iteration 1: log pseudolikelihood = -19057.693

Iteration 2: log pseudolikelihood = -19051.142

Iteration 3: log pseudolikelihood = -19051.138

Iteration 4: log pseudolikelihood = -19051.138

Fitting full model:

Iteration 0: log pseudolikelihood = -18440.791

Iteration 1: log pseudolikelihood = -18382.289

Iteration 2: log pseudolikelihood = -18378.589

Iteration 3: log pseudolikelihood = -18378.545

Iteration 4: log pseudolikelihood = -18378.545

Negative binomial regression Number of obs = 26,110

Wald chi2(392) = .

Dispersion = mean Prob > chi2 = .

Log pseudolikelihood = -18378.545 Pseudo R2 = 0.0353

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

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| Robust

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

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

sp47\_41\_1lag | .9072383 .0542264 -1.63 0.103 .8069458 1.019996

sp48\_11\_1lag | 1.039978 .0621662 0.66 0.512 .9250016 1.169247

sp71\_701\_1lag | 4.050923 1.848759 3.07 0.002 1.656086 9.90889

sp75\_1001\_1\_1lag | .7878037 .2438513 -0.77 0.441 .4294801 1.445084

sp75\_1001\_1lag | .7948213 .3276107 -0.56 0.577 .3543398 1.782867

sp75\_1003\_1\_1lag | .5653727 .1332631 -2.42 0.016 .3562046 .8973672

sp75\_1400\_1\_1lag | 1.501545 .3703484 1.65 0.099 .9259636 2.43491

sp75\_1401\_1\_1lag | .8772314 .3601925 -0.32 0.750 .3922921 1.961638

sp75\_1401\_1lag | 1.127435 .2106808 0.64 0.521 .7816816 1.626123

sp75\_1403\_11\_1lag | 1.600357 .3866765 1.95 0.052 .9966681 2.569705

sp75\_1404\_1\_1lag | .5005389 .3326302 -1.04 0.298 .1360745 1.841191

sp75\_1405\_1\_1lag | 1.155898 .1295973 1.29 0.196 .9278636 1.439974

sp75\_1431\_1lag | 2.50e-12 2.54e-12 -26.30 0.000 3.41e-13 1.83e-11

sp75\_151\_1lag | 1.399843 .3902314 1.21 0.228 .8105721 2.417503

sp75\_1721\_1lag | 1.227141 1.106215 0.23 0.820 .2096875 7.18152

sp75\_1731\_1lag | 1.003813 .006279 0.61 0.543 .9915813 1.016195

sp75\_1911\_1lag | .9813548 .013753 -1.34 0.179 .9547663 1.008684

sp75\_211\_1lag | 1.026112 .0287447 0.92 0.357 .9712924 1.084026

sp75\_341\_1lag | 1.278671 .4158366 0.76 0.450 .6759887 2.418678

sp75\_506\_1\_1lag | 1.193045 .1088077 1.94 0.053 .9977591 1.426552

sp75\_510\_1\_1lag | 1.369509 .902114 0.48 0.633 .3765881 4.980384

sp75\_511\_1\_1lag | 3.01e-12 2.50e-12 -31.85 0.000 5.87e-13 1.54e-11

sp75\_511\_1lag | 1.074935 .0561976 1.38 0.167 .9702454 1.190922

sp75\_512\_1\_1lag | 1.370366 .4775645 0.90 0.366 .6921464 2.71316

sp75\_513\_1\_1lag | .9101429 .138252 -0.62 0.535 .6757887 1.225768

sp75\_516\_1\_1lag | .9860142 .2469547 -0.06 0.955 .6035223 1.610917

sp75\_517\_1\_1lag | .9310111 .1723113 -0.39 0.699 .6477609 1.33812

sp75\_518\_1\_1lag | .9806081 .03562 -0.54 0.590 .9132214 1.052967

sp75\_523\_1\_1lag | .9847154 .0470524 -0.32 0.747 .8966811 1.081393

sp75\_600\_1\_1lag | .9580653 .2275217 -0.18 0.857 .6015219 1.525944

sp75\_601\_1\_1lag | 1.002117 .0173379 0.12 0.903 .9687047 1.036681

sp75\_601\_1lag | 1.001771 .0266379 0.07 0.947 .9508988 1.055365

sp75\_700\_1\_1lag | .8086862 .208363 -0.82 0.410 .4880482 1.339977

sp75\_701\_1\_1lag | .9365806 .047095 -1.30 0.193 .8486788 1.033587

sp75\_701\_1lag | 1.029819 .0180742 1.67 0.094 .9949964 1.06586

sp75\_702\_1\_1lag | 6.53e-12 5.69e-12 -29.55 0.000 1.18e-12 3.61e-11

sp75\_703\_1\_1lag | .7475103 .2850156 -0.76 0.445 .3540507 1.578225

sp75\_705\_1\_1lag | .6801616 .1421821 -1.84 0.065 .4515185 1.024587

sp75\_801\_1lag | .7839231 .3114693 -0.61 0.540 .3598098 1.707945

sp75\_811\_1lag | 1.021679 .0706137 0.31 0.756 .8922435 1.169892

sp75\_821\_1lag | 1.127542 .1101268 1.23 0.219 .931099 1.365429

sp75\_831\_1lag | .751659 .3081991 -0.70 0.486 .3365168 1.678939

sp75\_901\_1lag | .8901377 .1125296 -0.92 0.357 .694784 1.140419

sp75\_902\_1\_1lag | .9960891 .2508695 -0.02 0.988 .6080219 1.631838

sp77\_1111\_1lag | .8922123 .1522095 -0.67 0.504 .6386384 1.246469

sp77\_401\_1lag | .9818089 .0831864 -0.22 0.828 .8315849 1.159171

sp77\_403\_1\_1lag | 1.05567 .1641933 0.35 0.728 .7782817 1.431922

sp77\_411\_1lag | .9683575 .5189605 -0.06 0.952 .3387359 2.768281

sp77\_501\_1lag | 1.100918 .0922211 1.15 0.251 .9342263 1.297353

sp77\_502\_1\_1lag | 2.005668 1.07157 1.30 0.193 .7038608 5.7152

sp77\_503\_1\_1lag | 1.245647 .3254693 0.84 0.401 .7464288 2.078746

sp77\_506\_1\_1lag | .9441973 .068318 -0.79 0.427 .8193576 1.088058

sp77\_508\_1\_1lag | .7378718 .1365477 -1.64 0.100 .513406 1.060476

sp77\_511\_1lag | .673865 .210866 -1.26 0.207 .3649343 1.244317

sp77\_601\_1lag | 1.005436 .1524088 0.04 0.971 .7470076 1.353267

sp77\_606\_1\_1lag | 1.000204 .2419486 0.00 0.999 .6225637 1.606918

sp77\_700\_1\_1lag | 1.045501 .1893238 0.25 0.806 .7331368 1.490952

sp77\_701\_1\_1lag | .8051647 .2047821 -0.85 0.394 .4890957 1.325488

sp77\_701\_1lag | 1.002681 .0397341 0.07 0.946 .9277514 1.083663

sp77\_704\_1\_1lag | 1.870239 .9633048 1.22 0.224 .681504 5.132463

sp77\_800\_1\_1lag | .9434675 .2019782 -0.27 0.786 .6201562 1.435333

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

sp77\_801\_1lag | 1.16e-10 9.23e-11 -28.82 0.000 2.45e-11 5.51e-10

sp77\_807\_1\_1lag | 1.421801 .6018249 0.83 0.406 .6202111 3.259405

sp77\_900\_1\_1lag | 1.826238 .3482638 3.16 0.002 1.256704 2.653882

sp77\_901\_1\_1lag | 1.090944 .2834189 0.34 0.738 .6556419 1.815257

sp77\_901\_1lag | .8420626 .1604969 -0.90 0.367 .5795696 1.223441

sp47\_42\_1lag | .6877339 .1258855 -2.05 0.041 .4804113 .9845271

sp75\_1100\_2\_1lag | 1.017098 .0105546 1.63 0.102 .9966204 1.037996

sp75\_1102\_1lag | .9013465 .0691918 -1.35 0.176 .7754421 1.047693

sp75\_1106\_2\_1lag | 1.045189 .0545868 0.85 0.397 .9434944 1.157845

sp75\_1400\_2\_1lag | 1.172162 .33135 0.56 0.574 .6735468 2.039894

sp75\_1402\_2\_1lag | 1.53582 .4300201 1.53 0.125 .8871749 2.658713

sp75\_1432\_1lag | .961809 .1511184 -0.25 0.804 .7068854 1.308666

sp75\_1600\_2\_1lag | .9686522 .0276635 -1.12 0.265 .9159223 1.024418

sp75\_1912\_1lag | 1.069937 .1098744 0.66 0.510 .8748753 1.308489

sp75\_202\_1lag | .9999003 .0047183 -0.02 0.983 .9906952 1.009191

sp75\_212\_1lag | .9335912 .0421162 -1.52 0.128 .8545889 1.019897

sp75\_312\_1lag | 1.06777 .0388968 1.80 0.072 .994192 1.146794

sp75\_342\_1lag | 1.009112 .0113581 0.81 0.420 .9870939 1.03162

sp75\_352\_1lag | .8575671 .0575214 -2.29 0.022 .7519236 .9780534

sp75\_382\_1lag | 1.031729 .0524244 0.61 0.539 .9339298 1.13977

sp75\_512\_2\_1lag | 1.020475 .0185341 1.12 0.264 .9847879 1.057456

sp75\_512\_1lag | 1.006031 .0058465 1.03 0.301 .9946372 1.017556

sp75\_516\_2\_1lag | .9946088 .0375836 -0.14 0.886 .9236079 1.071068

sp75\_523\_2\_1lag | 1.002028 .0357985 0.06 0.955 .9342645 1.074707

sp75\_601\_2\_1lag | .3239815 .29351 -1.24 0.213 .0548753 1.912773

sp75\_602\_1lag | 1.065228 .0435991 1.54 0.123 .9831133 1.154202

sp75\_701\_2\_1lag | .8168362 .0709628 -2.33 0.020 .6889483 .9684636

sp75\_702\_1lag | 8.39e-12 6.09e-12 -35.14 0.000 2.02e-12 3.48e-11

sp75\_703\_2\_1lag | .6353424 .1109455 -2.60 0.009 .4511992 .8946381

sp75\_705\_2\_1lag | 2.142739 .3010879 5.42 0.000 1.626906 2.822125

sp75\_800\_2\_1lag | 1.968905 .8832868 1.51 0.131 .8172601 4.743396

sp75\_802\_1lag | .6218705 .1237711 -2.39 0.017 .4210029 .9185755

sp75\_803\_2\_1lag | 4.39e-12 2.66e-12 -43.17 0.000 1.34e-12 1.44e-11

sp75\_812\_1lag | 1.103299 .25924 0.42 0.676 .6961263 1.748632

sp75\_832\_1lag | 1.78e-12 1.29e-12 -37.55 0.000 4.35e-13 7.33e-12

sp75\_900\_2\_1lag | .8940198 .3162606 -0.32 0.751 .4469239 1.788384

sp75\_902\_2\_1lag | 1.06613 .0705018 0.97 0.333 .9365287 1.213665

sp75\_902\_1lag | .9900373 .0340348 -0.29 0.771 .9255279 1.059043

sp77\_1112\_1lag | .9918854 .1371356 -0.06 0.953 .7564435 1.300608

sp77\_1432\_1lag | 1.627774 .4081147 1.94 0.052 .9958211 2.660768

sp77\_1802\_1lag | .9090308 .146237 -0.59 0.553 .6632003 1.245984

sp77\_202\_1lag | .9579655 .0201973 -2.04 0.042 .9191863 .9983806

sp77\_402\_1lag | .9868279 .0333272 -0.39 0.695 .9236227 1.054358

sp77\_403\_2\_1lag | 3.334241 .9688372 4.14 0.000 1.886521 5.892945

sp77\_412\_1lag | .9309852 .0964611 -0.69 0.490 .7598856 1.14061

sp77\_502\_2\_1lag | 1.069008 .071454 1.00 0.318 .9377464 1.218643

sp77\_502\_1lag | .9928499 .0125201 -0.57 0.569 .9686116 1.017695

sp77\_512\_1lag | .9674774 .0217327 -1.47 0.141 .9258062 1.011024

sp77\_602\_1lag | .9242571 .2373244 -0.31 0.759 .5587623 1.528828

sp77\_701\_2\_1lag | 1.147958 .2235741 0.71 0.479 .7836957 1.681529

sp77\_702\_1lag | .507198 .1364583 -2.52 0.012 .2993418 .8593848

sp77\_800\_2\_1lag | 1.079455 .1394457 0.59 0.554 .8380016 1.390478

sp77\_802\_1lag | .4143473 .1246822 -2.93 0.003 .2297352 .7473112

sp77\_807\_2\_1lag | .8138521 .2172484 -0.77 0.440 .4823109 1.373295

sp77\_900\_2\_1lag | 1.133676 .1558065 0.91 0.361 .8659724 1.484135

sp77\_902\_2\_1lag | 7.992329 .5712412 29.08 0.000 6.947601 9.194156

sp77\_902\_1lag | 1.394304 .138594 3.34 0.001 1.147487 1.694209

sp47\_43\_1lag | 1.312654 .4445274 0.80 0.422 .6759161 2.549223

sp72\_503\_1lag | .8103012 .0897497 -1.90 0.058 .6521788 1.006761

sp75\_1106\_3\_1lag | 1.023552 .0174523 1.37 0.172 .9899109 1.058336

sp75\_1400\_3\_1lag | 1.114902 .1004366 1.21 0.227 .9344493 1.330202

sp75\_1403\_3\_1lag | 1.05691 .1759675 0.33 0.740 .76264 1.464727

sp75\_1433\_1lag | 1.032861 .0844041 0.40 0.692 .8800003 1.212275

sp75\_153\_1lag | 1.746688 .6137353 1.59 0.112 .8772595 3.477785

sp75\_1903\_1lag | .9688401 .0316088 -0.97 0.332 .9088272 1.032816

sp75\_1913\_1lag | .9864977 .1060379 -0.13 0.899 .7990999 1.217842

sp75\_503\_1lag | .9997625 .0052799 -0.04 0.964 .9894674 1.010165

sp75\_513\_1lag | 1.0553 .0822938 0.69 0.490 .9057284 1.229571

sp75\_523\_1lag | .9350227 .0389183 -1.61 0.106 .8617728 1.014499

sp75\_601\_3\_1lag | .7902907 .1526107 -1.22 0.223 .5412699 1.153878

sp75\_603\_1lag | 1.003637 .0805151 0.05 0.964 .8576112 1.174527

sp75\_701\_3\_1lag | 1.06447 .0524716 1.27 0.205 .966439 1.172444

sp75\_703\_3\_1lag | 1.279083 .1251583 2.52 0.012 1.055866 1.549491

sp75\_703\_1lag | 1.03535 .0446967 0.80 0.421 .9513496 1.126767

sp75\_705\_3\_1lag | 1.728336 .3382124 2.80 0.005 1.177767 2.536279

sp75\_800\_3\_1lag | 1.046118 .1440584 0.33 0.743 .7986633 1.370243

sp75\_803\_1lag | .9988395 .0966902 -0.01 0.990 .8262228 1.20752

sp75\_900\_3\_1lag | 1.224483 .0997962 2.48 0.013 1.043708 1.436568

sp75\_903\_1lag | 1.027391 .0598121 0.46 0.643 .9166023 1.151571

sp77\_103\_1lag | .6024971 .1948585 -1.57 0.117 .3196399 1.135662

sp77\_1103\_1lag | .9876917 .0310322 -0.39 0.693 .9287045 1.050425

sp77\_1403\_1lag | .9152765 .1328401 -0.61 0.542 .6886712 1.216446

sp77\_1433\_1lag | .9357531 .1906317 -0.33 0.744 .6277033 1.394981

sp77\_203\_1lag | 1.088273 .1333581 0.69 0.490 .8559151 1.38371

sp77\_403\_1lag | 1.43157 .3509577 1.46 0.143 .8853922 2.314673

sp77\_413\_1lag | .9487875 .0640366 -0.78 0.436 .8312252 1.082977

sp77\_503\_1lag | 1.219543 .1802021 1.34 0.179 .9128974 1.629192

sp77\_513\_1lag | .9062155 .0452598 -1.97 0.049 .8217113 .9994101

sp77\_603\_1lag | 1.95973 .4855053 2.72 0.007 1.205921 3.184738

sp77\_701\_3\_1lag | .4448743 .3446573 -1.05 0.296 .097451 2.0309

sp77\_703\_1lag | 1.094009 .3305225 0.30 0.766 .6051396 1.977818

sp77\_803\_1lag | .8717852 .3752566 -0.32 0.750 .3749842 2.026777

sp77\_807\_3\_1lag | 1.672846 .2351186 3.66 0.000 1.270046 2.203395

sp77\_902\_3\_1lag | 1.424285 .4113485 1.22 0.221 .8086509 2.508609

sp77\_903\_1lag | .8623905 .3258428 -0.39 0.695 .4112337 1.808503

sp47\_44\_1lag | 1.006134 .0765538 0.08 0.936 .866743 1.167942

sp48\_24\_1lag | .0065713 .0013194 -25.03 0.000 .0044336 .00974

sp48\_4\_1lag | 1.50e-11 1.06e-11 -35.48 0.000 3.79e-12 5.95e-11

sp75\_1103\_4\_1lag | 1.027413 .0203575 1.36 0.172 .988278 1.068098

sp75\_1104\_1lag | 1.094524 .055197 1.79 0.073 .9915144 1.208235

sp75\_1106\_4\_1lag | 1.047988 .1090928 0.45 0.653 .8545714 1.28518

sp75\_1107\_14\_1lag | 1.217628 .5171895 0.46 0.643 .5296215 2.799393

sp75\_1400\_4\_1lag | .9995966 .1041199 -0.00 0.997 .8150083 1.225992

sp75\_1403\_4\_1lag | 1.043223 .1555879 0.28 0.777 .7788028 1.397419

sp75\_1404\_1lag | .6247849 .3046709 -0.96 0.335 .2402423 1.624843

sp75\_1434\_1lag | .9567293 .1052151 -0.40 0.688 .7712218 1.186858

sp75\_1914\_1lag | 1.001444 .0084986 0.17 0.865 .9849248 1.01824

sp75\_214\_1lag | .9736 .0522639 -0.50 0.618 .8763692 1.081618

sp75\_324\_1lag | .9290011 .0891857 -0.77 0.443 .7696608 1.121329

sp75\_344\_1lag | 1.098487 .117032 0.88 0.378 .8914741 1.353572

sp75\_504\_1lag | 1.085109 .1285109 0.69 0.490 .8603285 1.368618

sp75\_514\_1lag | 1.021585 .0277001 0.79 0.431 .9687108 1.077344

sp75\_604\_1lag | 1.02621 .0092445 2.87 0.004 1.008251 1.04449

sp75\_701\_4\_1lag | 1.812105 .6507514 1.66 0.098 .8964072 3.663206

sp75\_703\_4\_1lag | 1.43e-11 1.03e-11 -34.70 0.000 3.48e-12 5.84e-11

sp75\_704\_1lag | 1.037888 .1916015 0.20 0.840 .7227912 1.490351

sp75\_800\_4\_1lag | 1.019099 .1186264 0.16 0.871 .8112112 1.280263

sp75\_804\_1lag | 1.096289 .0824074 1.22 0.221 .9461079 1.270309

sp75\_814\_1lag | .9719763 .133276 -0.21 0.836 .7429167 1.271661

sp75\_834\_1lag | 9.695878 12.04143 1.83 0.067 .8500999 110.5871

sp75\_900\_4\_1lag | .9878485 .0248372 -0.49 0.627 .9403484 1.037748

sp75\_902\_4\_1lag | .987544 .0647209 -0.19 0.848 .8685026 1.122902

sp75\_904\_1lag | .9807437 .012786 -1.49 0.136 .956001 1.006127

sp77\_104\_1lag | 6.53e-12 5.71e-12 -29.41 0.000 1.17e-12 3.63e-11

sp77\_1104\_1lag | 1.000348 .0118693 0.03 0.977 .9773531 1.023884

sp77\_1434\_1lag | 1.026221 .1652648 0.16 0.872 .7484481 1.407085

sp77\_204\_1lag | .9954602 .0394088 -0.11 0.908 .9211409 1.075776

sp77\_314\_1lag | .6002577 .1667946 -1.84 0.066 .3481873 1.034814

sp77\_404\_1lag | .9778964 .0143793 -1.52 0.128 .9501157 1.006489

sp77\_504\_1lag | .9528432 .0440899 -1.04 0.297 .8702312 1.043298

sp77\_514\_1lag | .8492914 .104102 -1.33 0.183 .6679141 1.079923

sp77\_604\_1lag | 1.352393 .1193106 3.42 0.001 1.13765 1.607673

sp77\_701\_4\_1lag | 1.103347 .3071905 0.35 0.724 .639327 1.904149

sp77\_704\_1lag | 1.672415 .7013868 1.23 0.220 .7351272 3.804747

sp77\_804\_1lag | 1.49e-10 1.02e-10 -33.13 0.000 3.92e-11 5.70e-10

sp77\_904\_1lag | 1.028806 .0397755 0.73 0.463 .9537284 1.109795

sp48\_25\_1lag | 1.063859 .1269878 0.52 0.604 .8419384 1.344275

sp48\_5\_1lag | 1.038361 .1710242 0.23 0.819 .7518836 1.433991

sp75\_1106\_5\_1lag | 1.088023 .063372 1.45 0.148 .9706438 1.219597

sp75\_1403\_5\_1lag | .9910064 .0167758 -0.53 0.594 .958666 1.024438

sp75\_1405\_1lag | .9597643 .0181632 -2.17 0.030 .9248172 .9960321

sp75\_1435\_1lag | 1.134749 .2463123 0.58 0.560 .7415414 1.736459

sp75\_155\_1lag | .6008363 .1907414 -1.60 0.109 .3225031 1.119382

sp75\_1725\_1lag | 1.001044 .0062338 0.17 0.867 .9889002 1.013337

sp75\_1915\_1lag | 1.063319 .1330595 0.49 0.624 .8320469 1.358875

sp75\_505\_1lag | .9638934 .2068222 -0.17 0.864 .6329758 1.467814

sp75\_515\_1lag | .9616535 .0133117 -2.82 0.005 .9359138 .9881011

sp75\_605\_1lag | .9992514 .0256852 -0.03 0.977 .9501565 1.050883

sp75\_701\_5\_1lag | .9244441 .0605695 -1.20 0.231 .8130365 1.051118

sp75\_705\_1lag | .8888141 .3405298 -0.31 0.758 .419461 1.883347

sp75\_805\_1lag | 1.459165 .3287607 1.68 0.094 .9382582 2.269271

sp75\_815\_1lag | 1.264158 .1225201 2.42 0.016 1.045452 1.528616

sp75\_825\_1lag | 1.353637 .195473 2.10 0.036 1.019961 1.796472

sp75\_905\_1lag | .875532 .142998 -0.81 0.416 .6356936 1.205858

sp77\_1605\_1lag | .9850811 .0137486 -1.08 0.281 .9584996 1.0124

sp77\_1915\_1lag | 1.136861 .1596857 0.91 0.361 .8632683 1.497162

sp77\_205\_1lag | .9998755 .0089157 -0.01 0.989 .9825528 1.017504

sp77\_305\_1lag | .9904837 .4942271 -0.02 0.985 .3724935 2.633759

sp77\_315\_1lag | .1608199 .0968622 -3.03 0.002 .0493923 .5236248

sp77\_405\_1lag | .7875689 .1155314 -1.63 0.104 .5907757 1.049916

sp77\_505\_1lag | 1.006959 .0275934 0.25 0.800 .954304 1.06252

sp77\_515\_1lag | .5528514 .1862569 -1.76 0.079 .2856516 1.069991

sp77\_605\_1lag | .2738689 .187894 -1.89 0.059 .0713767 1.050821

sp77\_705\_1lag | 1.014982 .0793367 0.19 0.849 .8708107 1.183023

sp77\_805\_1lag | .8372727 .2364602 -0.63 0.529 .4813633 1.456334

sp48\_26\_1lag | 1.035375 .1245857 0.29 0.773 .8178497 1.310757

sp48\_6\_1lag | 1.008843 .0711038 0.12 0.901 .8786792 1.158288

sp75\_1106\_6\_1lag | 2.97946 5.975999 0.54 0.586 .0584595 151.8519

sp75\_1106\_1lag | 1.094567 .113841 0.87 0.385 .8927143 1.34206

sp75\_1403\_6\_1lag | .9755858 .0114311 -2.11 0.035 .9534366 .9982495

sp75\_1436\_1lag | .6480751 .4158464 -0.68 0.499 .1842638 2.279348

sp75\_156\_1lag | .9260714 .3502928 -0.20 0.839 .4412368 1.943646

sp75\_1712\_6\_1lag | .9969109 .0381686 -0.08 0.936 .9248398 1.074598

sp75\_1726\_1lag | 1.031538 .1326469 0.24 0.809 .8017301 1.327219

sp75\_506\_1lag | 1.062464 .042297 1.52 0.128 .9827153 1.148685

sp75\_516\_1lag | 1.019243 .0210581 0.92 0.356 .9787948 1.061364

sp75\_606\_1lag | .9858984 .0126243 -1.11 0.267 .9614631 1.010955

sp75\_706\_1lag | .9175887 .1001538 -0.79 0.431 .7408672 1.136464

sp75\_806\_1lag | 1.192992 .3176608 0.66 0.508 .7079228 2.01043

sp75\_816\_1lag | 1.032133 .0470209 0.69 0.488 .9439679 1.128532

sp77\_1106\_1lag | 2.288296 2.989542 0.63 0.526 .1767912 29.61854

sp77\_1606\_1lag | 1.002359 .0214381 0.11 0.912 .9612098 1.04527

sp77\_1906\_1lag | .9045612 .1863089 -0.49 0.626 .6041146 1.35443

sp77\_1916\_1lag | 1.03444 .2005046 0.17 0.861 .7074854 1.512491

sp77\_206\_1lag | .9595828 .0495424 -0.80 0.424 .8672328 1.061767

sp77\_216\_1lag | .9758737 .0521515 -0.46 0.648 .8788297 1.083634

sp77\_506\_1lag | 1.069352 .0325683 2.20 0.028 1.007387 1.135129

sp77\_516\_1lag | .9837777 .0197653 -0.81 0.416 .9457913 1.02329

sp77\_606\_1lag | 1.19e-11 9.08e-12 -33.08 0.000 2.69e-12 5.30e-11

sp77\_906\_1lag | .808854 .1448367 -1.18 0.236 .5694433 1.14892

sp48\_27\_1lag | 1.20349 .1298883 1.72 0.086 .9740368 1.486995

sp48\_7\_1lag | 1.111755 .0688451 1.71 0.087 .9846882 1.255219

sp75\_1403\_7\_1lag | .9369828 .0478287 -1.28 0.202 .847777 1.035575

sp75\_1437\_1lag | 1.583191 .4649471 1.56 0.118 .8903378 2.815217

sp75\_1727\_1lag | 1.23e-11 9.24e-12 -33.57 0.000 2.85e-12 5.35e-11

sp75\_337\_1lag | .934748 .0534365 -1.18 0.238 .8356687 1.045574

sp75\_507\_1lag | 1.171103 .0752177 2.46 0.014 1.032581 1.328208

sp75\_517\_1lag | .9945667 .0063929 -0.85 0.397 .9821154 1.007176

sp75\_607\_1lag | 1.075946 .0735962 1.07 0.285 .9409511 1.230308

sp75\_807\_1lag | 1.013899 .0138658 1.01 0.313 .9870833 1.041443

sp75\_827\_1lag | 1.298169 .2096705 1.62 0.106 .9459136 1.781603

sp75\_907\_1lag | .9949925 .1270744 -0.04 0.969 .7746572 1.277998

sp77\_1437\_1lag | .4865358 .1938492 -1.81 0.071 .2228295 1.062324

sp77\_207\_1lag | 1.100784 .0531868 1.99 0.047 1.001324 1.210124

sp77\_507\_1lag | .7618513 .0913022 -2.27 0.023 .6023654 .9635636

sp77\_807\_1lag | .8226079 .1547461 -1.04 0.299 .5689418 1.189373

sp48\_28\_1lag | 1.001319 .0686838 0.02 0.985 .8753582 1.145405

sp48\_8\_1lag | 1.079947 .0998504 0.83 0.405 .900952 1.294504

sp75\_1403\_8\_1lag | .9655689 .0142873 -2.37 0.018 .9379685 .9939815

sp75\_1438\_1lag | 2.02e-11 2.52e-11 -19.76 0.000 1.75e-12 2.32e-10

sp75\_1728\_1lag | 1.899488 .5512038 2.21 0.027 1.075549 3.354616

sp75\_208\_1lag | .9895504 .0215935 -0.48 0.630 .9481202 1.032791

sp75\_518\_1lag | 1.006234 .0209842 0.30 0.766 .9659346 1.048214

sp75\_705\_8\_1lag | 1.336353 .3383768 1.15 0.252 .8135596 2.195095

sp75\_808\_1lag | 1.237185 .1532597 1.72 0.086 .9704866 1.577174

sp75\_818\_1lag | .9715006 .1263707 -0.22 0.824 .7528711 1.253619

sp77\_1438\_1lag | .1653559 .1486113 -2.00 0.045 .0284063 .9625539

sp77\_208\_1lag | 1.037238 .0250758 1.51 0.130 .9892365 1.087569

sp77\_408\_1lag | .8267663 .107847 -1.46 0.145 .6402481 1.067621

sp77\_508\_1lag | 1.075188 .1245229 0.63 0.531 .8568453 1.349169

sp77\_704\_8\_1lag | 1.144081 .2681835 0.57 0.566 .7226486 1.811284

sp77\_808\_1lag | 2.992991 .8416069 3.90 0.000 1.72486 5.193463

sp75\_1403\_9\_1lag | .9148253 .0317322 -2.57 0.010 .8546984 .9791821

sp75\_1729\_1lag | 1.072785 .1727389 0.44 0.663 .7824432 1.470864

sp75\_1909\_1lag | 1.022687 .0094245 2.43 0.015 1.004381 1.041327

sp75\_519\_1lag | .8599266 .6398201 -0.20 0.839 .2000475 3.696492

sp75\_809\_1lag | .9066969 .0366823 -2.42 0.015 .8375775 .9815202

sp75\_819\_1lag | 1.825787 .5299902 2.07 0.038 1.033625 3.225056

sp77\_309\_1lag | 1.035971 .2359365 0.16 0.877 .6629659 1.61884

sp77\_409\_1lag | 1.127727 .173505 0.78 0.435 .834149 1.524631

sp77\_509\_1lag | .9445364 .0534748 -1.01 0.314 .8453335 1.055381

sp77\_704\_9\_1lag | .2887424 .2114894 -1.70 0.090 .0687144 1.213314

sp77\_809\_1lag | .8721686 .0756301 -1.58 0.115 .7358486 1.033743

sp72\_610\_1lag | 1.017807 .4868483 0.04 0.971 .3985744 2.59909

sp72\_620\_1lag | .8459625 .3164935 -0.45 0.655 .4063475 1.761184

sp72\_630\_1lag | 1.029808 .0127879 2.37 0.018 1.005047 1.05518

sp75\_100\_1lag | .9219944 .1812369 -0.41 0.679 .6272017 1.355344

sp75\_1101\_20\_1lag | 1.503973 .3742472 1.64 0.101 .9234807 2.449358

sp75\_1400\_1lag | .922145 .0575307 -1.30 0.194 .8160082 1.042087

sp75\_1403\_10\_1lag | 1.002601 .0169898 0.15 0.878 .9698482 1.036459

sp75\_150\_1lag | 1.190307 .3032714 0.68 0.494 .722414 1.961244

sp75\_160\_1lag | .8533366 .4183999 -0.32 0.746 .3264128 2.230866

sp75\_1712\_10\_1lag | .8924424 .083973 -1.21 0.227 .7421432 1.07318

sp75\_1720\_1lag | 1.001554 .0544685 0.03 0.977 .9002903 1.114207

sp75\_1730\_1lag | .9621468 .0827083 -0.45 0.654 .8129618 1.138709

sp75\_1910\_1lag | .9961194 .0107429 -0.36 0.718 .9752846 1.017399

sp75\_320\_1lag | .9623001 .031896 -1.16 0.246 .9017724 1.02689

sp75\_340\_1lag | .9963883 .0156956 -0.23 0.818 .9660954 1.027631

sp75\_520\_1lag | 1.033201 .0427389 0.79 0.430 .9527395 1.120457

sp75\_600\_1lag | 1.386368 .7348201 0.62 0.538 .490585 3.917806

sp75\_700\_1lag | .9317505 .0556991 -1.18 0.237 .828735 1.047571

sp75\_800\_1lag | 1.000804 .1464084 0.01 0.996 .7513216 1.333128

sp75\_810\_1lag | 1.023869 .0612515 0.39 0.693 .9105893 1.151241

sp75\_820\_1lag | .9723875 .1548394 -0.18 0.860 .7117004 1.328561

sp75\_900\_1lag | .9450791 .0312905 -1.71 0.088 .8856984 1.008441

sp77\_1710\_1lag | .9467941 .0273955 -1.89 0.059 .8945941 1.00204

sp77\_200\_1lag | 1.042852 .0155399 2.82 0.005 1.012835 1.073759

sp77\_210\_1lag | .9873988 .0930111 -0.13 0.893 .8209393 1.187611

sp77\_400\_1lag | 1.024134 .0117459 2.08 0.038 1.001369 1.047416

sp77\_410\_1lag | 1.024933 .0228436 1.10 0.269 .9811245 1.070698

sp77\_500\_1lag | .620941 .1601405 -1.85 0.065 .3745637 1.029378

sp77\_510\_1lag | .5324274 .1207163 -2.78 0.005 .3414043 .830332

sp77\_600\_1lag | 1.390894 .2006928 2.29 0.022 1.048271 1.845501

sp77\_700\_1lag | 1.041857 .1510263 0.28 0.777 .7841854 1.384194

sp77\_800\_1lag | 1.444888 .4400611 1.21 0.227 .795406 2.6247

sp77\_810\_1lag | 1.001581 .2826253 0.01 0.996 .5760958 1.741315

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mine\_time | .9988903 .0017319 -0.64 0.522 .9955016 1.00229

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|

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AL | 1.220859 .1008514 2.42 0.016 1.038366 1.435425

AR | 2.18378 .1244033 13.71 0.000 1.953073 2.441739

CO | .7523615 .12353 -1.73 0.083 .5453409 1.037971

IL | 1.145893 .0841748 1.85 0.064 .9922399 1.32334

IN | .9136291 .1427575 -0.58 0.563 .6726156 1.241003

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NM | .8750691 .0458604 -2.55 0.011 .7896467 .9697324

OH | 1.177964 .1446867 1.33 0.182 .925936 1.498592

OK | .8756959 .2231241 -0.52 0.602 .5314597 1.4429

PA | 1.015234 .0911784 0.17 0.866 .8513725 1.210634

TN | 1.308678 .1777813 1.98 0.048 1.002764 1.707917

UT | .632651 .0767938 -3.77 0.000 .4987028 .8025768

VA | .7224967 .0560795 -4.19 0.000 .6205351 .8412117

WV | 1.076708 .0561837 1.42 0.157 .972034 1.192654

WY | 1.155913 .074383 2.25 0.024 1.018944 1.311293

|

time |

2000.25 | .9859228 .1056829 -0.13 0.895 .7990998 1.216423

2000.5 | 1.208382 .1233427 1.85 0.064 .9892813 1.476008

2000.75 | .853725 .0919317 -1.47 0.142 .6912864 1.054334

2001 | .8925083 .0859211 -1.18 0.237 .7390397 1.077846

2001.25 | .8305696 .0879394 -1.75 0.080 .6749198 1.022115

2001.75 | .8753911 .0834289 -1.40 0.163 .7262374 1.055178

2002 | .8756965 .0869087 -1.34 0.181 .7209016 1.06373

2002.25 | .82247 .086098 -1.87 0.062 .6699068 1.009778

2002.5 | 1.007458 .1021626 0.07 0.942 .8258665 1.228978

2002.75 | .9336674 .099131 -0.65 0.518 .7582579 1.149655

2003 | .7442402 .0858721 -2.56 0.010 .5936078 .9330967

2003.25 | .8586434 .09703 -1.35 0.177 .688056 1.071524

2003.5 | .9004868 .0947208 -1.00 0.319 .7327246 1.106659

2003.75 | .6736675 .0711511 -3.74 0.000 .5477014 .8286047

2004 | .8615632 .1012153 -1.27 0.205 .6843671 1.084639

2004.25 | .8501257 .0889945 -1.55 0.121 .6924303 1.043735

2004.5 | .8369459 .0920707 -1.62 0.106 .6746188 1.038332

2004.75 | .7535182 .0875141 -2.44 0.015 .6001153 .9461343

2005 | .6361946 .0661971 -4.35 0.000 .5188251 .7801156

2005.25 | .8056675 .0830978 -2.10 0.036 .6582057 .9861662

2005.5 | .705535 .0777001 -3.17 0.002 .5685599 .8755095

2005.75 | .6620486 .0759208 -3.60 0.000 .5287834 .8288995

2006 | .686887 .0784207 -3.29 0.001 .5491678 .8591432

2006.25 | .6781786 .0825752 -3.19 0.001 .5341971 .8609673

2006.5 | .7477463 .0869146 -2.50 0.012 .5954077 .9390616

2006.75 | .6344764 .0739085 -3.91 0.000 .504965 .7972044

2007 | .6321094 .0725352 -4.00 0.000 .504796 .7915321

2007.25 | .6097422 .0764318 -3.95 0.000 .476922 .7795523

2007.5 | .6549529 .0718656 -3.86 0.000 .5282151 .8120998

2007.75 | .6407799 .0736317 -3.87 0.000 .5115613 .8026385

2008 | .561048 .0639159 -5.07 0.000 .4487755 .7014084

2008.25 | .5719355 .0639767 -4.99 0.000 .4593372 .7121353

2008.5 | .6635564 .077196 -3.53 0.000 .5282649 .8334968

2008.75 | .5491718 .0612694 -5.37 0.000 .4413086 .6833986

2009 | .507847 .0637896 -5.39 0.000 .3970226 .6496068

2009.25 | .4953232 .0599757 -5.80 0.000 .3906805 .6279941

2009.5 | .6022812 .0715452 -4.27 0.000 .4771828 .7601754

2009.75 | .4403562 .0506308 -7.13 0.000 .3515084 .5516614

2010 | .4739176 .063286 -5.59 0.000 .3647834 .615702

2010.25 | .4724826 .0576345 -6.15 0.000 .3720098 .6000913

2010.5 | .5666167 .0693348 -4.64 0.000 .4457906 .7201912

2010.75 | .4540571 .056458 -6.35 0.000 .3558534 .5793617

2011 | .5240207 .0628846 -5.39 0.000 .4141911 .6629734

2011.25 | .5120167 .0606488 -5.65 0.000 .405937 .6458174

2011.5 | .5601201 .0631193 -5.14 0.000 .4491178 .6985573

2011.75 | .4726185 .0586281 -6.04 0.000 .370612 .602701

2012 | .5653655 .0650237 -4.96 0.000 .4512644 .7083168

2012.25 | .5038841 .0560291 -6.16 0.000 .4052115 .6265844

2012.5 | .5497527 .0647765 -5.08 0.000 .4363867 .6925691

2012.75 | .4586752 .0548487 -6.52 0.000 .3628423 .5798192

2013 | .4871278 .0583277 -6.01 0.000 .3852314 .6159764

2013.25 | .4181689 .0573882 -6.35 0.000 .3195475 .5472275

2013.5 | .5497079 .0660258 -4.98 0.000 .4344038 .6956173

2013.75 | .4416832 .0578382 -6.24 0.000 .3417013 .57092

2014 | .4124418 .0572488 -6.38 0.000 .3142043 .5413937

2014.25 | .4616465 .0603979 -5.91 0.000 .3572281 .5965867

2014.5 | .4610458 .0568696 -6.28 0.000 .3620338 .5871364

2014.75 | .4668637 .0568563 -6.25 0.000 .367729 .5927238

2015 | .431121 .0574345 -6.32 0.000 .332048 .5597543

2015.25 | .4724022 .0685661 -5.17 0.000 .3554395 .6278533

2015.5 | .6189236 .0826776 -3.59 0.000 .4763554 .8041611

2015.75 | .3539505 .0568555 -6.47 0.000 .2583527 .4849221

2016 | .503565 .0694852 -4.97 0.000 .3842388 .6599482

|

\_cons | .0000171 1.41e-06 -132.82 0.000 .0000145 .0000201

ln(hours) | 1 (exposure)

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

/lnalpha | -1.73857 .158607 -2.049434 -1.427706

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

alpha | .1757716 .0278786 .1288078 .2398586

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

(est1 stored)

**. lrtest pois nbin, stats force**

Likelihood-ratio test LR chi2(1) = 164.61

(Assumption: pois nested in nbin) Prob > chi2 = 0.0000

Akaike's information criterion and Bayesian information criterion

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

Model | Obs ll(null) ll(model) df AIC BIC

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

pois | 26,110 -19356.43 -18460.85 393 37707.7 40918.54

nbin | 26,110 -19051.14 -18378.54 394 37545.09 40764.1

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

Note: N=Obs used in calculating BIC; see [R] BIC note.

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**. summ MR spcv2\_yhat**

Variable | Obs Mean Std. Dev. Min Max

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

MR | 30,289 .4096207 .9550592 0 14

spcv2\_yhat | 26,110 .4627641 .7212054 9.05e-22 13.27429